



Full wwPDB EM Validation Report ⓘ

Mar 9, 2026 – 08:05 PM UTC

PDB ID : 6O7W / pdb_00006o7w
EMDB ID : EMD-0647
Title : Saccharomyces cerevisiae V-ATPase Stv1-V1VO State 2
Authors : Vasanthakumar, T.; Bueler, S.A.; Wu, D.; Beilsten-Edmands, V.; Robinson, C.V.; Rubinstein, J.L.
Deposited on : 2019-03-08
Resolution : 7.00 Å(reported)

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

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

A user guide is available at

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

The types of validation reports are described at

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

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

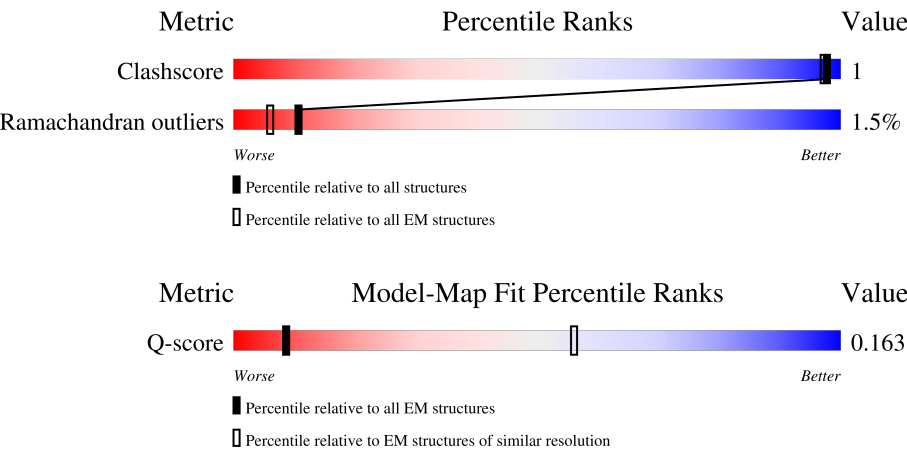
EMDB validation analysis : 0.0.1.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDb archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh &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

1 Overall quality at a glance i

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

The reported resolution of this entry is 7.00 Å.

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





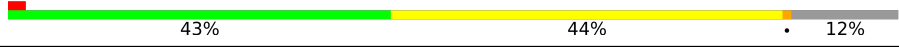





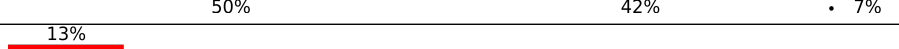
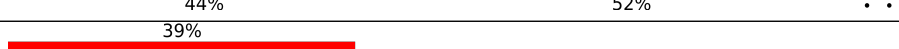
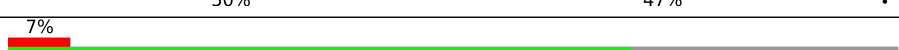

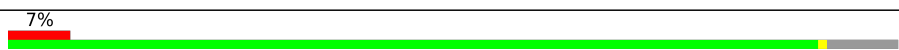
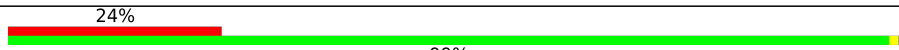
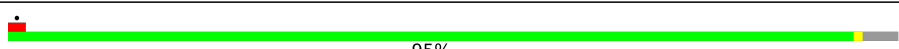

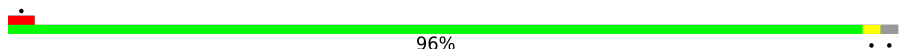
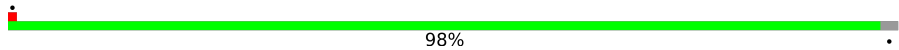
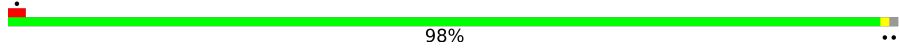
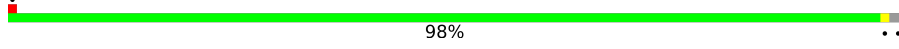
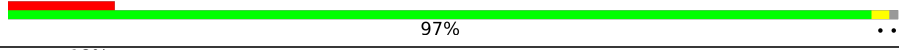
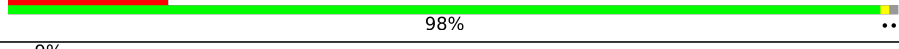
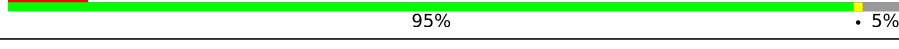


Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Q-score	-	25397	483 (6.50 - 7.50)

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

Mol	Chain	Length	Quality of chain
1	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	<div><div></div><div>71%</div><div></div><div>•</div><div>28%</div></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	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		
3	A	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
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

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

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Chain	Residue	Modelled	Actual	Comment	Reference
A	626	LYS	-	SEE REMARK 999	UNP B3LH69
A	627	ASP	-	SEE REMARK 999	UNP B3LH69
A	628	HIS	-	SEE REMARK 999	UNP B3LH69
A	629	ASP	-	SEE REMARK 999	UNP B3LH69
A	630	ILE	-	SEE REMARK 999	UNP B3LH69
A	631	ASP	-	SEE REMARK 999	UNP B3LH69
A	632	TYR	-	SEE REMARK 999	UNP B3LH69
A	633	LYS	-	SEE REMARK 999	UNP B3LH69
A	634	ASP	-	SEE REMARK 999	UNP B3LH69
A	635	ASP	-	SEE REMARK 999	UNP B3LH69
A	636	ASP	-	SEE REMARK 999	UNP B3LH69
A	637	ASP	-	SEE REMARK 999	UNP B3LH69
A	638	LYS	-	SEE REMARK 999	UNP B3LH69

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

Mol	Chain	Residues	Atoms				AltConf	Trace
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		
4	B	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		

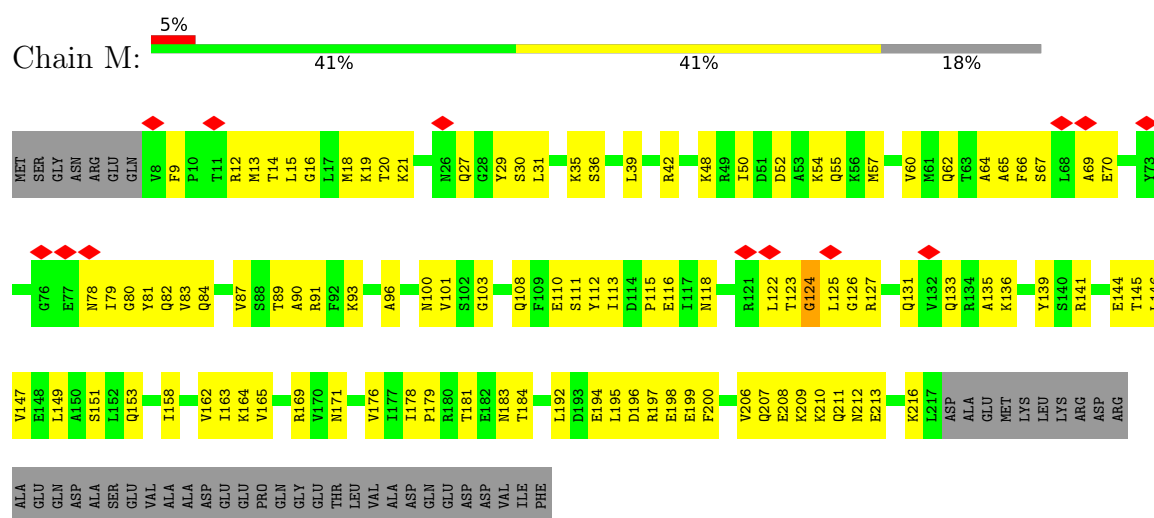
- Molecule 16 is a protein called Putative protein YPR170W-B.

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

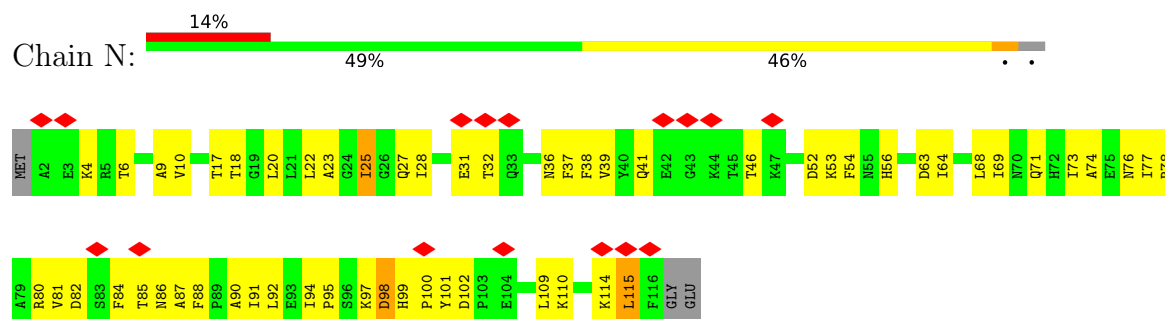
3 Residue-property plots

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.

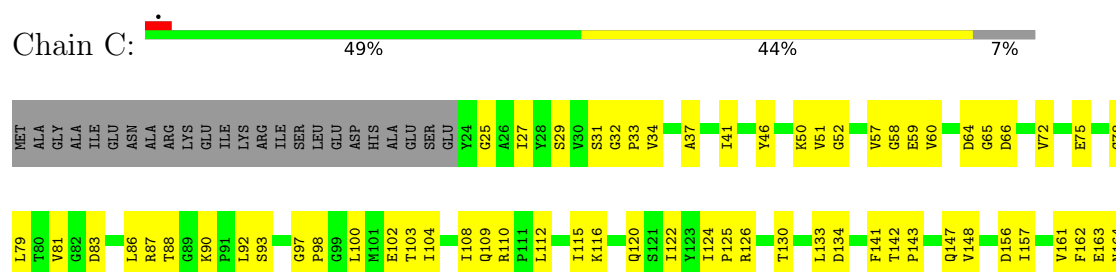
• Molecule 1: V-type proton ATPase subunit D

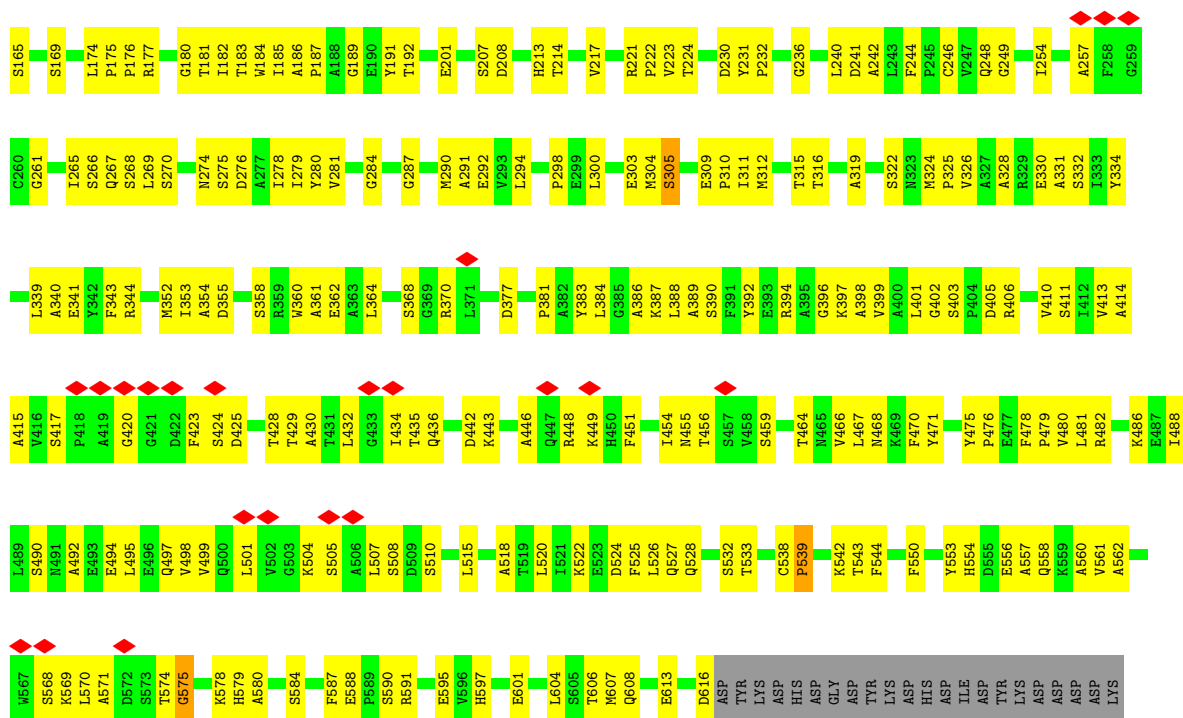


• Molecule 2: V-type proton ATPase subunit F

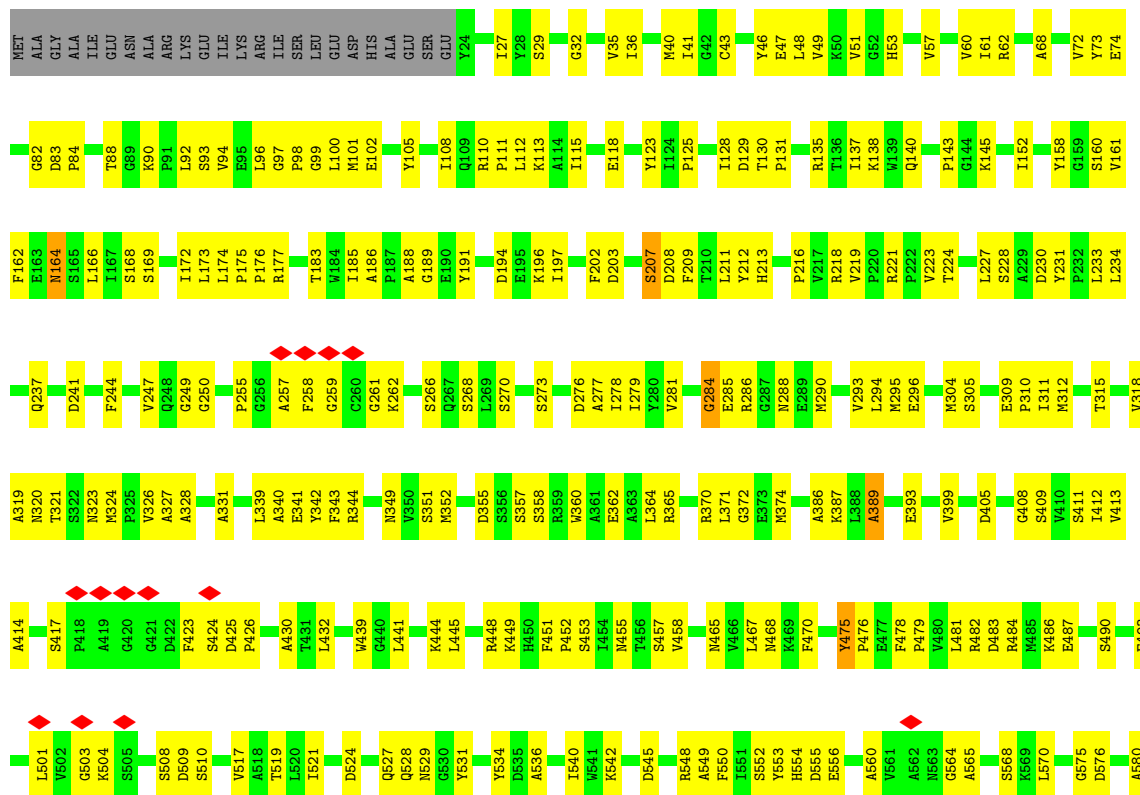


• Molecule 3: Vacuolar ATP synthase catalytic subunit A





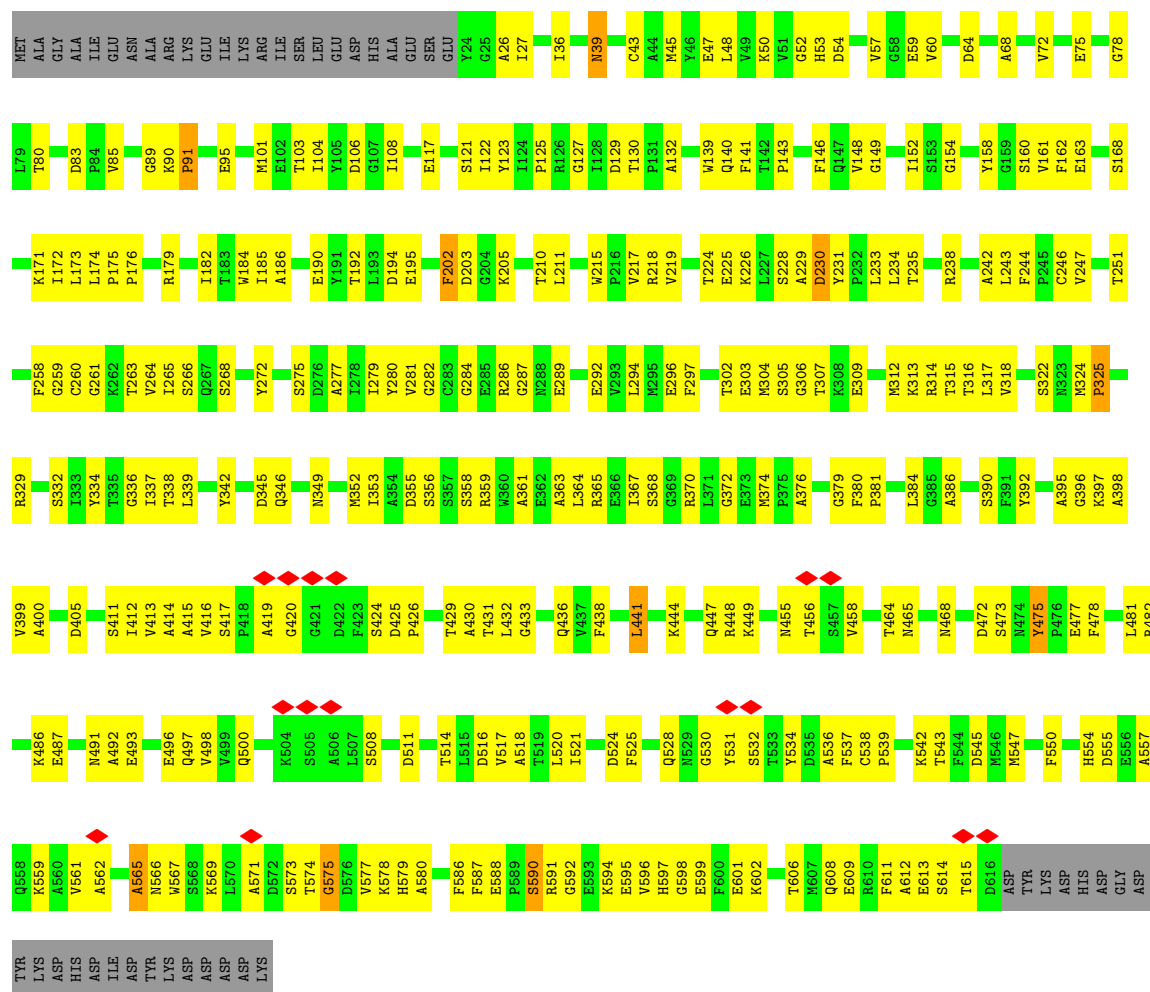
• Molecule 3: Vacuolar ATP synthase catalytic subunit A





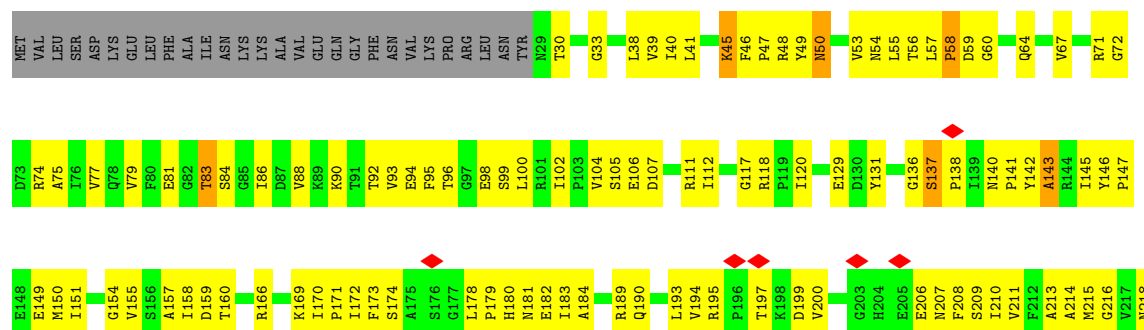
• Molecule 3: Vacuolar ATP synthase catalytic subunit A

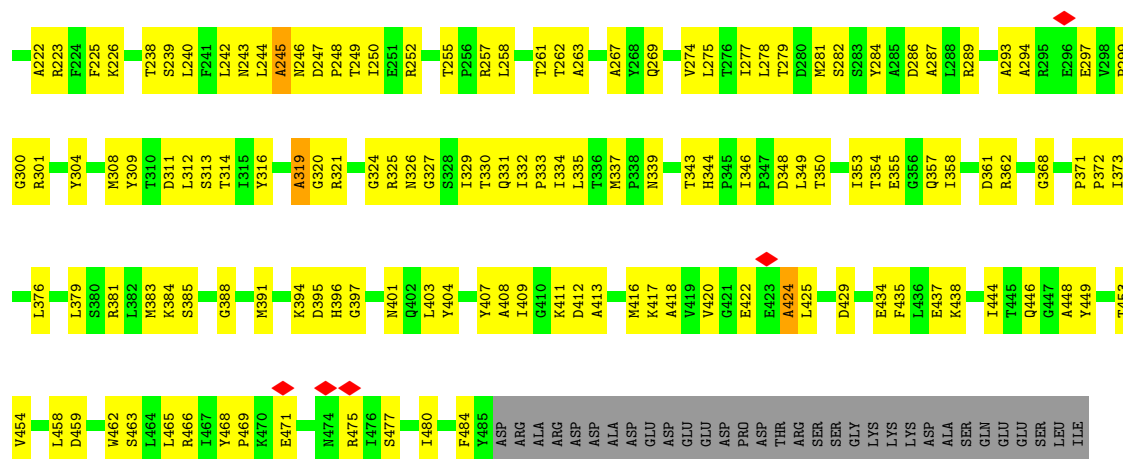
Chain A: 48% 44% 7%



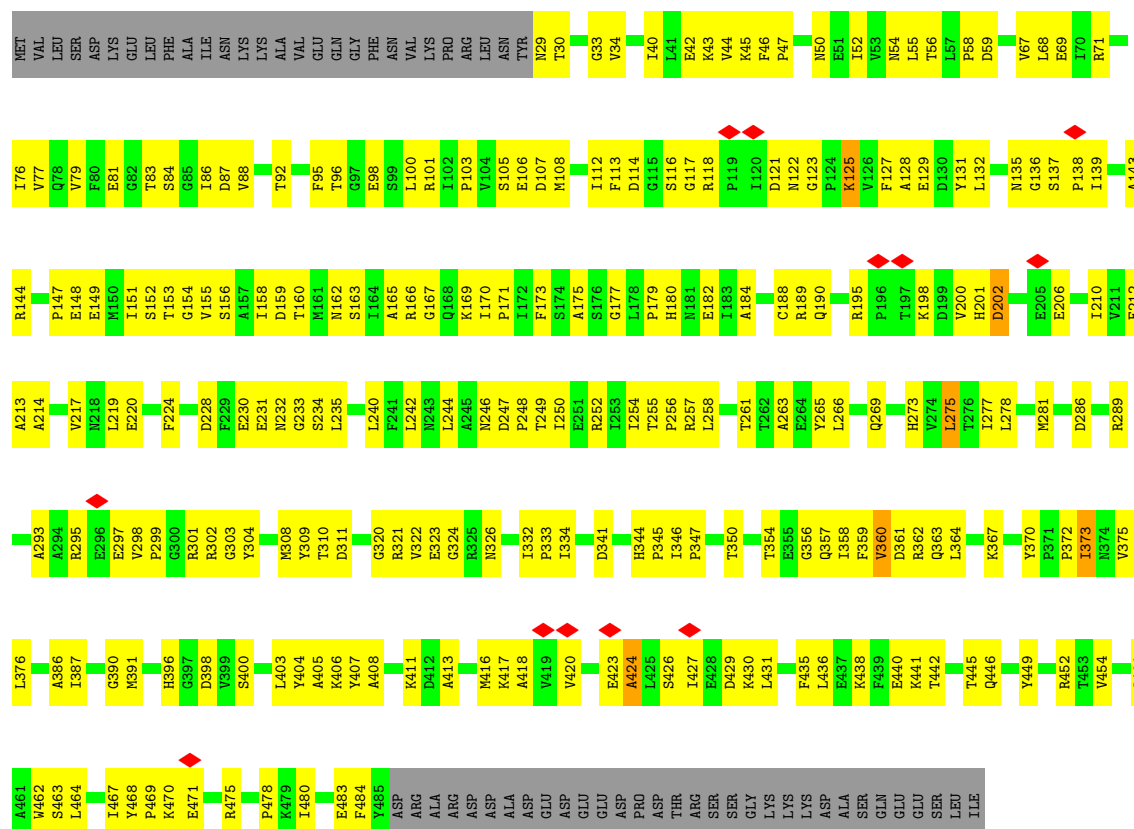
• Molecule 4: V-type proton ATPase subunit B

Chain D: 42% 45% 12%

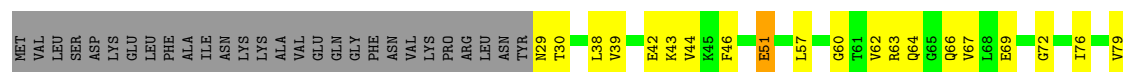


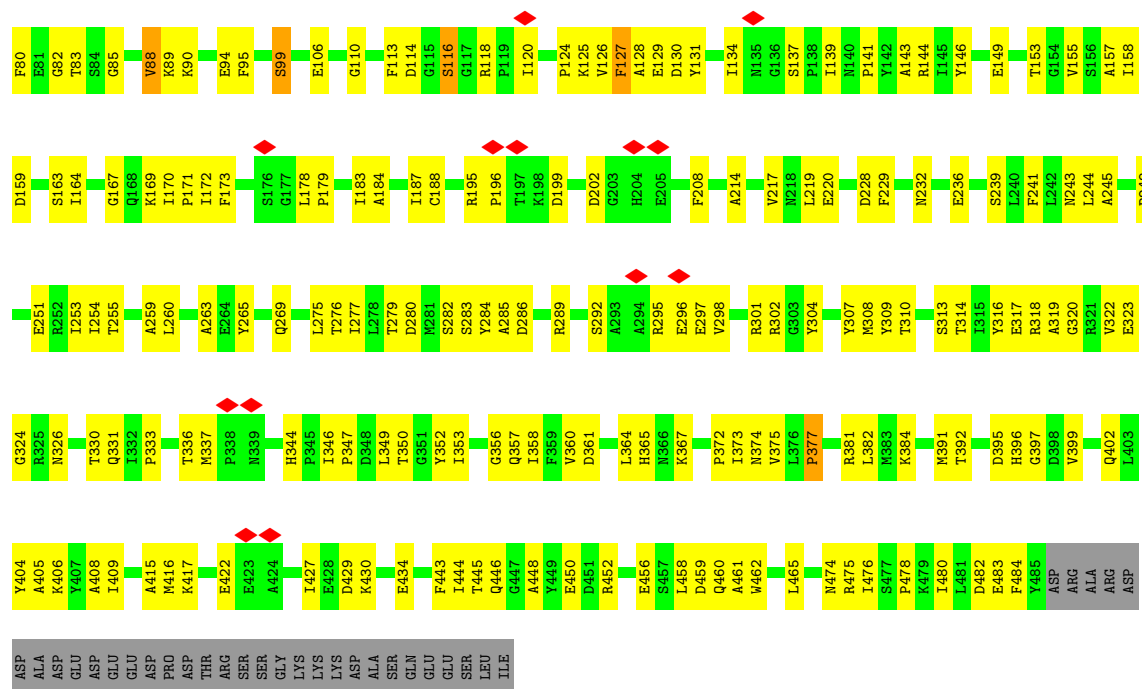


• Molecule 4: V-type proton ATPase subunit B

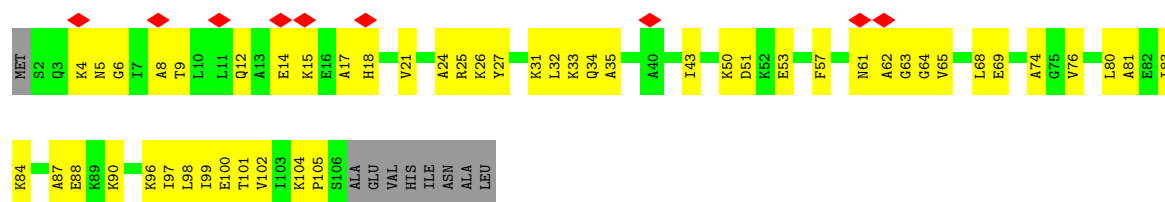


• Molecule 4: V-type proton ATPase subunit B

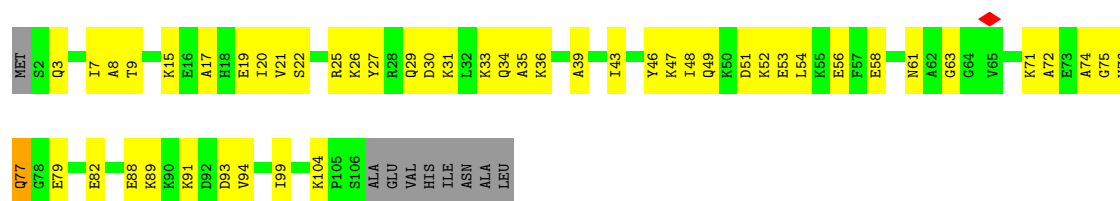




• Molecule 5: V-type proton ATPase subunit G

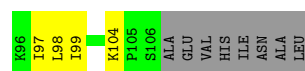


• Molecule 5: V-type proton ATPase subunit G

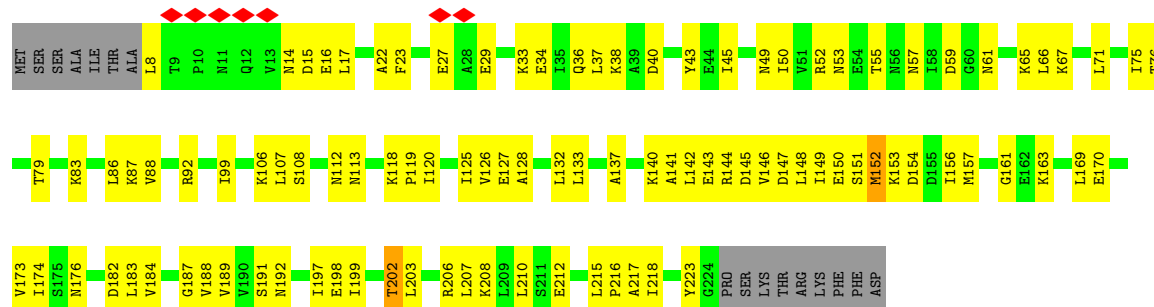


• Molecule 5: V-type proton ATPase subunit G

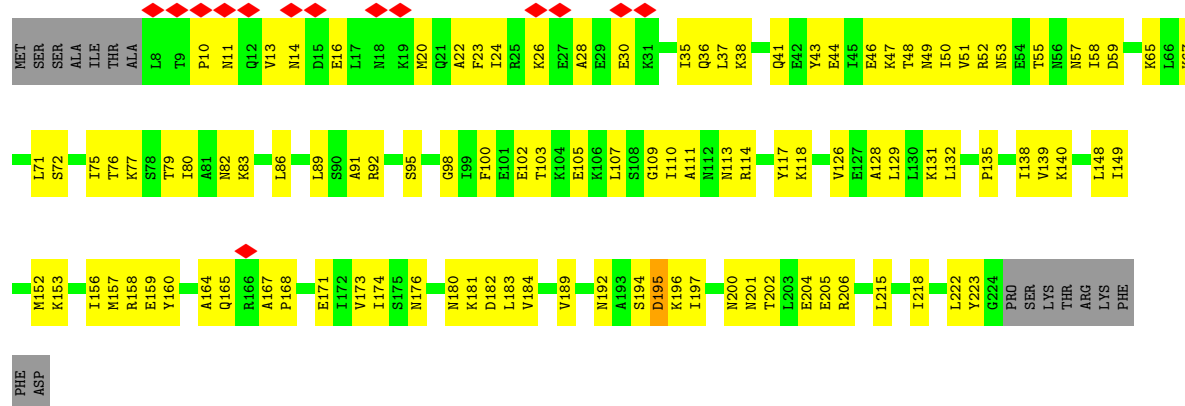




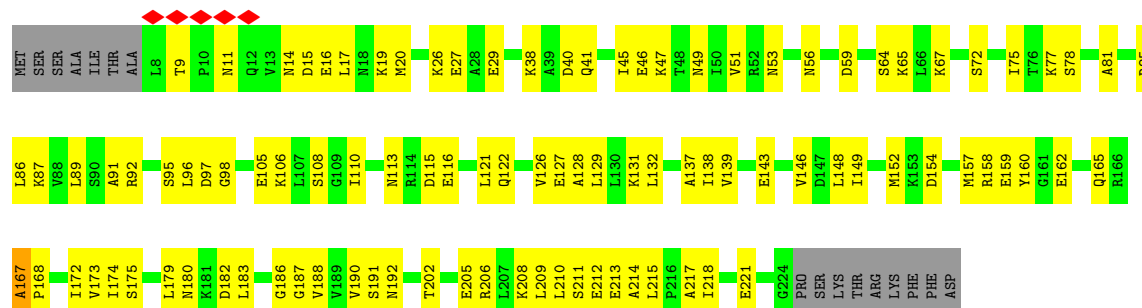
• Molecule 6: V-type proton ATPase subunit E



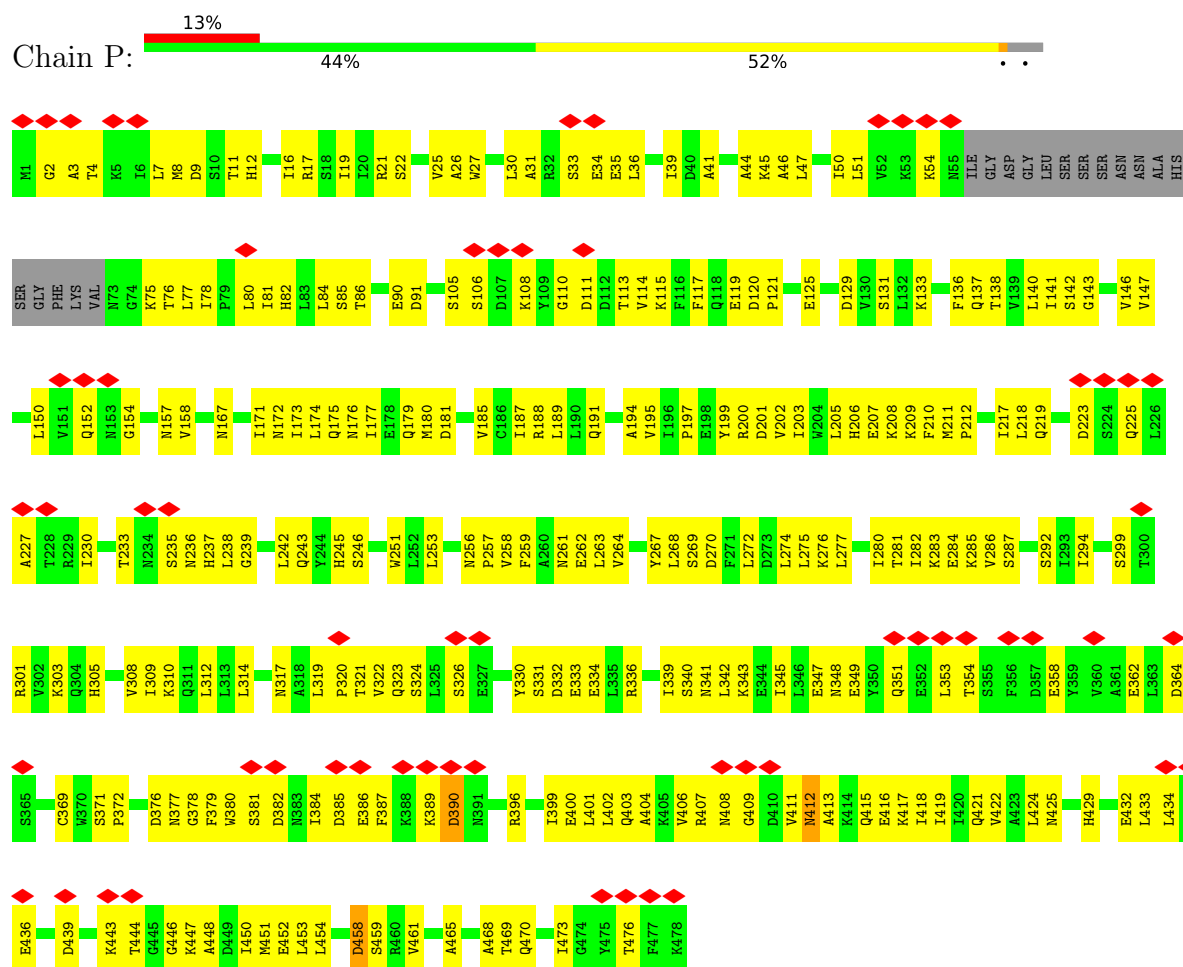
• Molecule 6: V-type proton ATPase subunit E



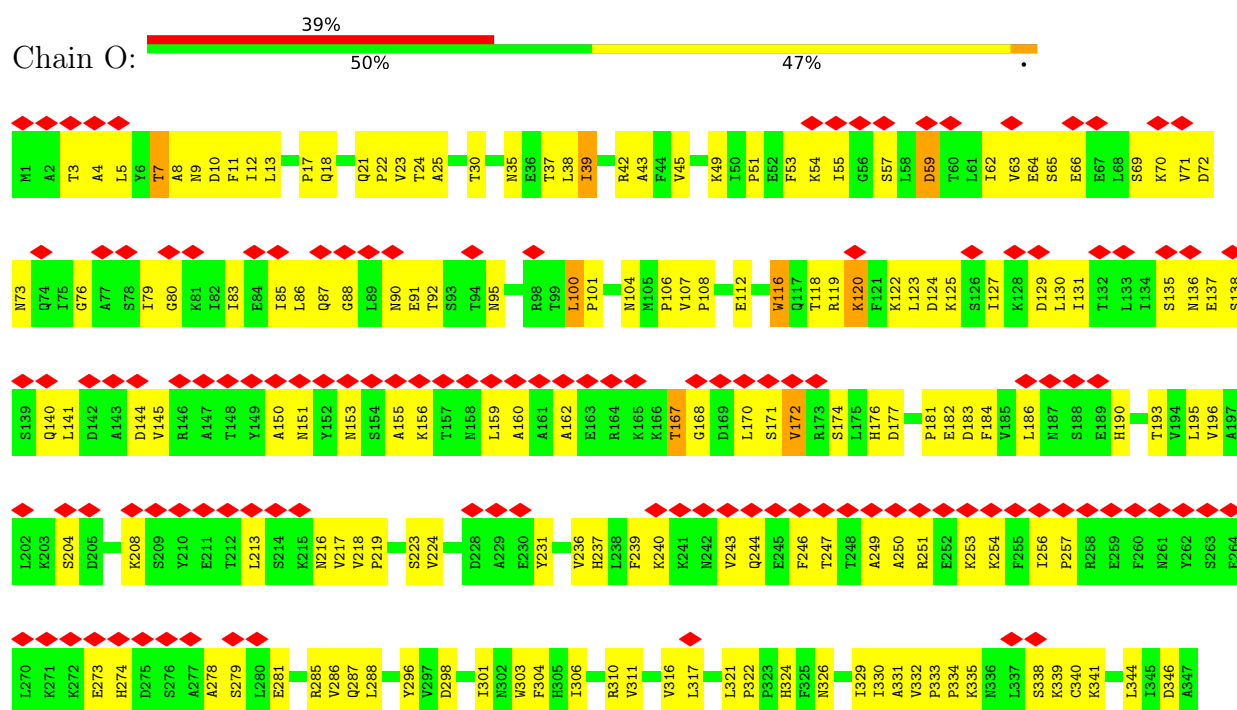
• Molecule 6: V-type proton ATPase subunit E

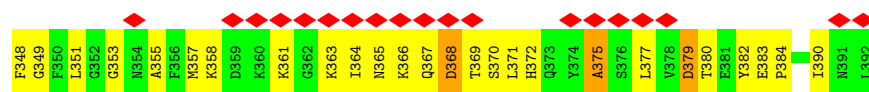


• Molecule 7: V-type proton ATPase subunit H

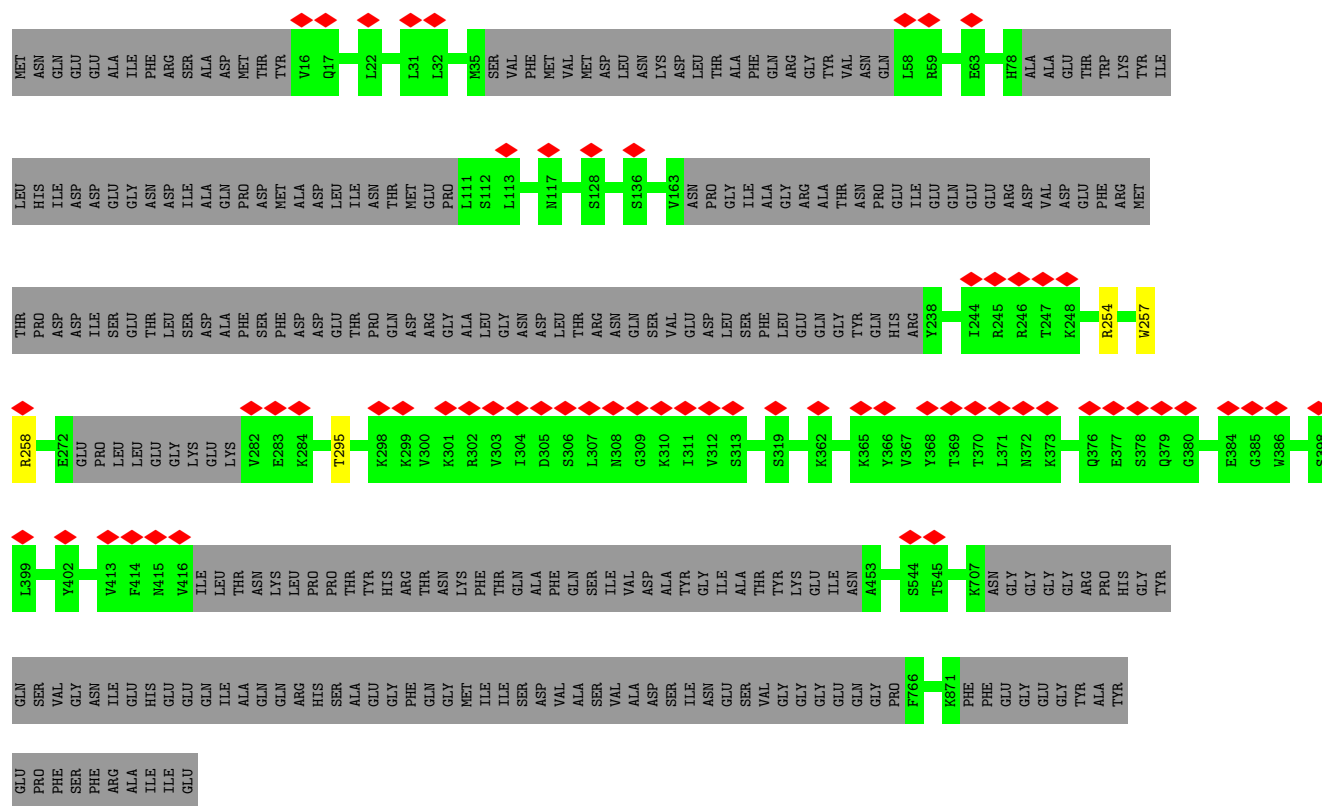


• Molecule 8: V-type proton ATPase subunit C

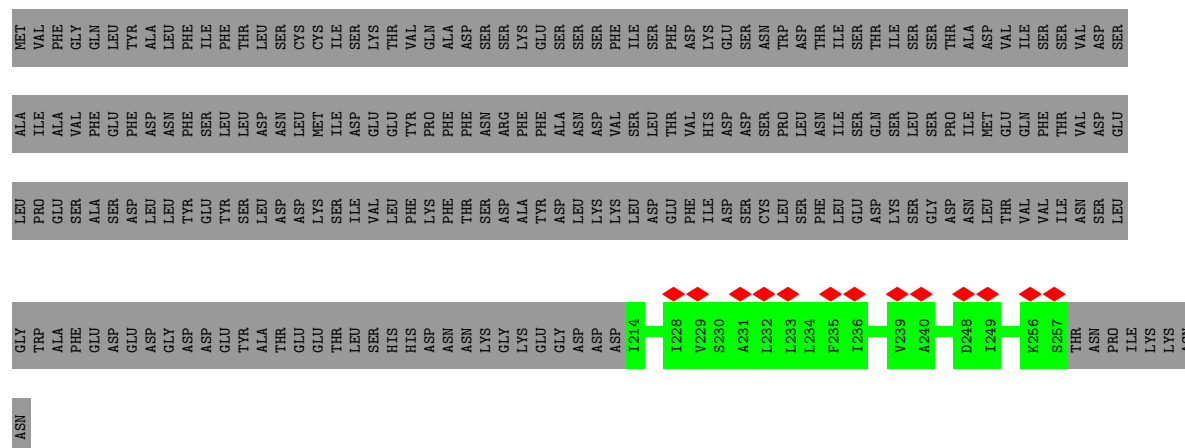




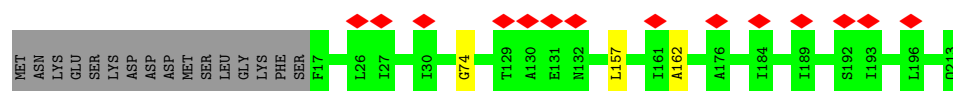
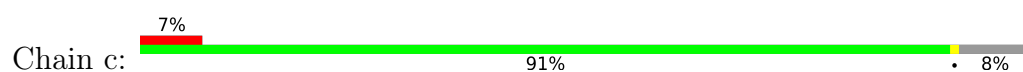
• Molecule 9: V-type proton ATPase subunit a, Golgi isoform



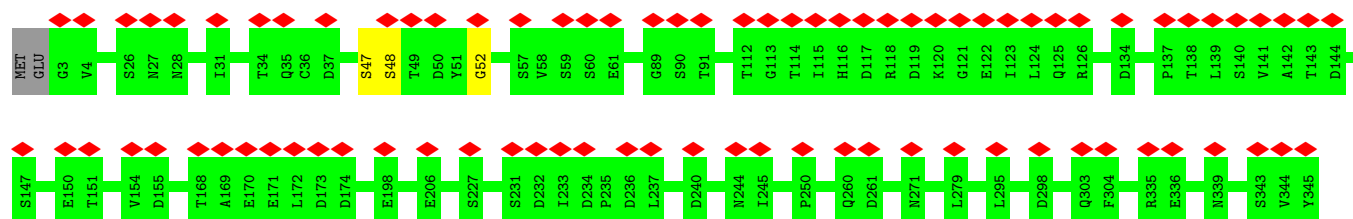
• Molecule 10: V0 assembly protein 1



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



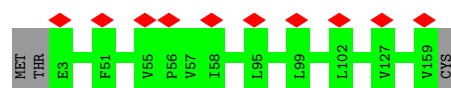
- Molecule 12: V-type proton ATPase subunit d



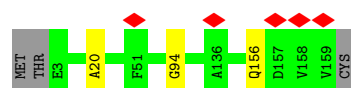
- Molecule 13: V-type proton ATPase subunit c



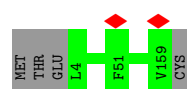
- Molecule 13: V-type proton ATPase subunit c



- Molecule 13: V-type proton ATPase subunit c

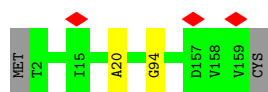


- Molecule 13: V-type proton ATPase subunit c



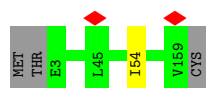
- Molecule 13: V-type proton ATPase subunit c

Chain k:  98% ..



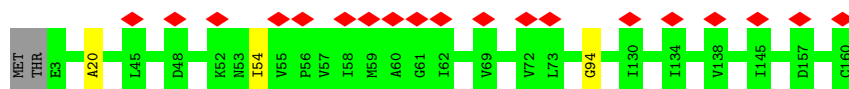
- Molecule 13: V-type proton ATPase subunit c

Chain l:  98% ..



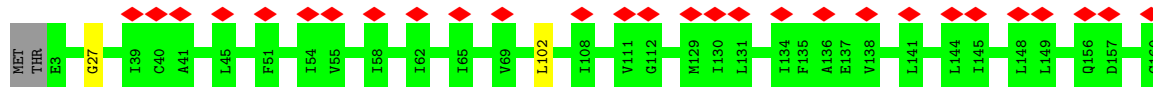
- Molecule 13: V-type proton ATPase subunit c

Chain m:  12% 97% ..



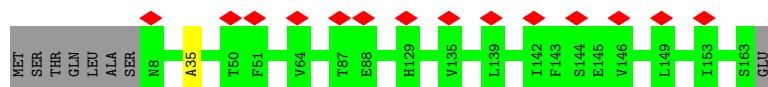
- Molecule 13: V-type proton ATPase subunit c

Chain n:  18% 98% ..




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

Chain o:  9% 95% • 5%



- Molecule 15: V-type proton ATPase subunit e

Chain e:  88% 12%



- Molecule 16: Putative protein YPR170W-B

Chain f:  71% 28%



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	19265	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	0.482	Depositor
Minimum map value	-0.145	Depositor
Average map value	0.004	Depositor
Map value standard deviation	0.043	Depositor
Recommended contour level	0.16	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	2.57	56/1038 (5.4%)	2.95	138/1445 (9.6%)
2	N	2.67	37/570 (6.5%)	2.66	49/794 (6.2%)
3	A	2.59	163/2914 (5.6%)	2.75	257/4048 (6.3%)
3	C	2.51	147/2914 (5.0%)	2.70	254/4048 (6.3%)
3	E	2.52	126/2914 (4.3%)	2.69	245/4048 (6.1%)
4	B	2.45	95/2249 (4.2%)	2.68	204/3126 (6.5%)
4	D	2.54	115/2249 (5.1%)	2.77	240/3126 (7.7%)
4	F	2.62	136/2249 (6.0%)	2.76	222/3126 (7.1%)
5	H	2.40	18/518 (3.5%)	2.78	57/720 (7.9%)
5	J	2.41	20/518 (3.9%)	2.65	40/720 (5.6%)
5	L	2.50	28/518 (5.4%)	2.77	55/720 (7.6%)
6	G	2.55	52/1077 (4.8%)	2.89	128/1502 (8.5%)
6	I	2.56	64/1077 (5.9%)	2.79	110/1502 (7.3%)
6	K	2.59	65/1077 (6.0%)	2.65	100/1502 (6.7%)
7	P	2.60	129/2290 (5.6%)	3.06	321/3195 (10.0%)
8	O	2.57	105/1946 (5.4%)	2.82	216/2715 (8.0%)
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	0.23	0/762	0.66	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	1356/39540 (3.4%)	2.29	2645/54928 (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
4	B	0	1

All (1356) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	346	ILE	CA-CB	-12.33	1.47	1.54
7	P	372	PRO	CA-C	-12.23	1.40	1.52
4	F	431	LEU	CA-C	-10.57	1.39	1.52
3	E	94	VAL	CA-C	-10.52	1.40	1.52
4	F	139	ILE	CA-CB	-10.26	1.48	1.55
3	E	36	ILE	CA-C	-10.19	1.40	1.52
3	A	185	ILE	CA-C	-10.06	1.39	1.52
6	I	137	ALA	CA-C	-10.01	1.40	1.52
3	E	72	VAL	CA-CB	-9.91	1.42	1.54
3	A	219	VAL	CA-C	9.88	1.60	1.53
3	A	397	LYS	C-N	9.74	1.46	1.33
7	P	351	GLN	CA-C	9.60	1.65	1.52
4	D	424	ALA	CA-C	-9.42	1.40	1.52
1	M	178	ILE	CA-CB	-9.28	1.49	1.54
4	F	43	LYS	N-CA	-9.27	1.35	1.46
4	F	420	VAL	C-N	9.26	1.40	1.33
3	C	436	GLN	CA-C	9.06	1.64	1.52
3	A	215	TRP	CA-CB	9.04	1.67	1.53
3	A	352	MET	CA-C	-9.03	1.41	1.52
8	O	181	PRO	N-CA	-8.96	1.35	1.47
3	E	231	TYR	CA-CB	8.87	1.65	1.53
3	C	428	THR	CA-C	-8.80	1.41	1.52
7	P	349	GLU	N-CA	-8.78	1.35	1.46
6	I	174	ILE	CA-C	-8.74	1.43	1.53
3	A	64	ASP	CA-C	-8.71	1.42	1.53
8	O	112	GLU	C-N	8.70	1.45	1.33
4	B	374	ASN	CA-CB	8.61	1.65	1.53
3	E	508	SER	CA-C	-8.57	1.42	1.52
3	A	45	MET	CA-C	-8.55	1.42	1.52
8	O	367	GLN	N-CA	-8.55	1.38	1.46
8	O	213	LEU	CA-C	-8.55	1.41	1.52
4	D	320	GLY	CA-C	-8.53	1.43	1.52
4	D	112	ILE	CA-CB	8.53	1.64	1.54
3	A	281	VAL	C-N	8.51	1.38	1.33
3	A	358	SER	N-CA	-8.51	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	F	373	ILE	CA-C	-8.47	1.42	1.52
3	C	436	GLN	N-CA	-8.45	1.34	1.45
4	B	304	TYR	CA-C	-8.45	1.41	1.52
3	C	59	GLU	CA-C	-8.44	1.42	1.52
2	N	6	THR	N-CA	-8.42	1.35	1.46
3	A	430	ALA	CA-C	-8.40	1.41	1.52
4	F	128	ALA	CA-C	-8.40	1.42	1.52
3	C	133	LEU	CA-C	-8.39	1.42	1.52
4	D	104	VAL	CA-C	-8.39	1.42	1.52
7	P	417	LYS	C-N	8.38	1.44	1.33
2	N	76	ASN	CA-C	-8.36	1.42	1.52
8	O	71	VAL	CA-CB	-8.30	1.44	1.54
3	A	336	GLY	N-CA	-8.28	1.35	1.45
3	A	574	THR	C-N	8.26	1.45	1.33
3	A	542	LYS	N-CA	-8.26	1.36	1.46
3	C	411	SER	CA-C	-8.24	1.42	1.52
1	M	163	ILE	CA-CB	-8.23	1.44	1.54
5	H	7	ILE	CA-CB	-8.23	1.44	1.54
3	E	321	THR	CA-C	-8.17	1.41	1.53
4	B	284	TYR	CA-C	-8.12	1.42	1.52
4	D	41	LEU	CA-C	-8.11	1.43	1.52
6	K	174	ILE	C-N	8.08	1.44	1.33
1	M	200	PHE	C-N	8.08	1.45	1.33
4	D	289	ARG	CA-CB	8.07	1.65	1.53
3	A	455	ASN	CA-C	-8.03	1.42	1.52
6	G	182	ASP	CA-C	8.03	1.63	1.52
3	C	37	ALA	CA-C	-8.01	1.42	1.52
3	E	258	PHE	CA-C	-7.99	1.46	1.53
3	A	57	VAL	CA-C	-7.96	1.43	1.52
3	A	194	ASP	C-N	7.95	1.43	1.33
4	F	81	GLU	CA-C	-7.94	1.43	1.52
3	A	184	TRP	C-N	7.93	1.43	1.33
6	K	67	LYS	C-N	7.87	1.44	1.34
1	M	184	THR	N-CA	-7.87	1.36	1.46
3	A	370	ARG	C-N	7.85	1.44	1.34
3	A	325	PRO	N-CA	-7.84	1.37	1.47
1	M	21	LYS	CA-C	-7.84	1.42	1.52
4	F	103	PRO	CA-C	-7.83	1.45	1.52
6	G	152	MET	CA-C	-7.83	1.41	1.52
3	E	258	PHE	CA-CB	7.82	1.64	1.53
4	F	376	LEU	C-N	7.82	1.41	1.33
3	C	148	VAL	CA-C	-7.80	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	P	404	ALA	C-N	7.80	1.44	1.33
1	M	135	ALA	C-N	7.80	1.44	1.33
5	H	56	GLU	CA-C	-7.77	1.42	1.52
4	B	172	ILE	CA-CB	-7.77	1.45	1.54
4	D	208	PHE	CA-C	-7.75	1.43	1.52
4	F	160	THR	N-CA	7.75	1.55	1.46
3	E	92	LEU	CA-CB	7.74	1.63	1.53
3	E	602	LYS	CA-C	-7.74	1.42	1.52
5	J	52	LYS	CA-C	7.73	1.62	1.52
4	D	263	ALA	CA-C	-7.71	1.42	1.52
7	P	267	TYR	CA-C	-7.71	1.41	1.52
1	M	96	ALA	CA-C	-7.70	1.42	1.52
3	E	237	GLN	C-N	7.70	1.44	1.33
3	C	201	GLU	CA-CB	7.70	1.63	1.53
6	K	33	LYS	N-CA	-7.69	1.36	1.46
6	K	203	LEU	CA-C	-7.68	1.42	1.52
6	I	110	ILE	N-CA	-7.67	1.37	1.46
4	D	190	GLN	C-N	7.67	1.43	1.33
7	P	140	LEU	CA-CB	7.67	1.65	1.53
3	C	505	SER	CA-C	-7.66	1.42	1.52
7	P	245	HIS	C-N	7.66	1.44	1.33
1	M	179	PRO	N-CA	-7.66	1.37	1.47
4	D	226	LYS	C-N	7.66	1.44	1.33
3	A	161	VAL	N-CA	-7.65	1.37	1.46
6	K	143	GLU	C-N	7.65	1.43	1.33
4	F	55	LEU	CA-CB	7.65	1.63	1.53
3	A	190	GLU	C-N	7.64	1.43	1.33
8	O	22	PRO	CA-C	-7.63	1.44	1.52
4	F	233	GLY	CA-C	-7.63	1.41	1.51
4	F	170	ILE	N-CA	-7.63	1.40	1.45
2	N	27	GLN	CA-C	-7.63	1.43	1.52
5	L	18	HIS	CA-C	-7.62	1.43	1.52
7	P	201	ASP	C-N	7.62	1.43	1.33
6	I	190	VAL	CA-CB	-7.61	1.45	1.54
3	A	534	TYR	CA-C	-7.61	1.43	1.52
5	H	49	GLN	N-CA	-7.60	1.37	1.46
8	O	216	ASN	CA-C	-7.59	1.44	1.53
6	I	126	VAL	CA-CB	-7.56	1.45	1.54
6	I	47	LYS	N-CA	-7.55	1.37	1.46
3	E	49	VAL	CA-C	-7.55	1.43	1.52
3	C	104	ILE	CA-CB	-7.55	1.45	1.54
7	P	84	LEU	N-CA	-7.54	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	F	217	VAL	CA-CB	-7.53	1.46	1.54
6	K	140	LYS	CA-C	-7.53	1.43	1.52
7	P	147	VAL	N-CA	-7.53	1.37	1.46
8	O	195	LEU	CA-C	-7.52	1.43	1.52
4	D	47	PRO	CA-C	-7.51	1.44	1.52
6	I	51	VAL	CA-CB	-7.50	1.45	1.54
3	E	599	GLU	CA-CB	7.50	1.65	1.53
4	D	174	SER	CA-C	-7.50	1.42	1.52
8	O	21	GLN	N-CA	-7.46	1.38	1.45
4	B	356	GLY	N-CA	-7.46	1.37	1.45
3	C	90	LYS	N-CA	-7.46	1.38	1.46
4	D	286	ASP	CA-CB	7.45	1.65	1.53
4	B	405	ALA	C-N	7.44	1.44	1.34
8	O	254	LYS	N-CA	-7.41	1.34	1.46
6	G	57	ASN	C-N	7.40	1.43	1.33
8	O	379	ASP	CA-C	-7.39	1.43	1.52
3	C	270	SER	N-CA	-7.39	1.37	1.46
8	O	123	LEU	CA-CB	7.36	1.66	1.53
3	A	152	ILE	CA-C	-7.34	1.44	1.52
7	P	108	LYS	C-N	7.31	1.43	1.33
6	G	50	ILE	C-N	7.31	1.43	1.33
6	G	92	ARG	N-CA	-7.31	1.36	1.46
3	C	481	LEU	C-N	7.30	1.43	1.33
4	D	118	ARG	CA-C	-7.30	1.44	1.53
3	E	595	GLU	CA-C	-7.29	1.43	1.52
4	F	117	GLY	C-N	7.29	1.42	1.32
6	I	182	ASP	CA-C	-7.29	1.44	1.53
1	M	31	LEU	C-N	7.29	1.44	1.34
4	F	206	GLU	CA-C	-7.28	1.43	1.52
4	F	118	ARG	CA-C	7.27	1.59	1.52
2	N	87	ALA	N-CA	-7.26	1.36	1.46
2	N	92	LEU	CA-C	-7.26	1.44	1.52
7	P	301	ARG	N-CA	-7.25	1.37	1.46
6	I	115	ASP	N-CA	-7.25	1.36	1.46
1	M	16	GLY	N-CA	7.22	1.54	1.45
3	E	417	SER	CA-CB	7.22	1.64	1.54
3	A	521	ILE	CA-CB	-7.21	1.45	1.54
6	I	46	GLU	CA-C	-7.21	1.43	1.52
4	F	170	ILE	CA-C	7.20	1.58	1.52
4	B	214	ALA	CA-C	-7.20	1.44	1.52
8	O	273	GLU	C-O	7.20	1.32	1.24
1	M	89	THR	C-N	7.20	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	O	223	SER	C-N	7.19	1.41	1.33
7	P	408	ASN	CA-C	-7.19	1.43	1.52
3	E	309	GLU	C-O	-7.18	1.20	1.23
3	A	205	LYS	C-N	7.18	1.43	1.33
4	D	30	THR	CA-C	-7.18	1.43	1.53
7	P	415	GLN	CA-C	-7.18	1.43	1.52
7	P	235	SER	N-CA	-7.17	1.36	1.46
4	B	331	GLN	CA-C	-7.17	1.44	1.52
3	E	123	TYR	CA-C	-7.15	1.43	1.52
3	A	380	PHE	C-N	7.14	1.42	1.33
6	G	58	ILE	CA-CB	-7.14	1.45	1.54
6	K	170	GLU	N-CA	-7.14	1.37	1.46
1	M	108	GLN	C-N	7.14	1.44	1.33
8	O	135	SER	CA-C	7.14	1.62	1.52
4	B	125	LYS	CA-C	-7.13	1.43	1.52
5	J	46	TYR	N-CA	-7.13	1.36	1.46
4	D	245	ALA	C-N	7.12	1.43	1.33
6	G	53	ASN	CA-CB	7.12	1.64	1.53
3	A	229	ALA	CA-C	-7.12	1.43	1.52
3	C	587	PHE	CA-CB	7.11	1.64	1.53
3	E	172	ILE	CA-C	-7.09	1.44	1.52
3	A	353	ILE	CA-C	-7.09	1.43	1.52
3	A	538	CYS	CA-CB	7.07	1.62	1.53
1	M	144	GLU	N-CA	-7.07	1.37	1.46
4	D	178	LEU	CA-CB	7.07	1.64	1.54
4	D	379	LEU	CA-C	-7.06	1.43	1.52
8	O	174	SER	N-CA	-7.06	1.37	1.46
8	O	363	LYS	CA-C	-7.06	1.43	1.52
8	O	138	SER	CA-C	-7.06	1.43	1.52
7	P	187	ILE	CA-CB	-7.05	1.45	1.54
4	F	341	ASP	CA-C	-7.05	1.44	1.52
3	C	482	ARG	CA-C	-7.04	1.43	1.52
8	O	330	ILE	C-O	-7.03	1.16	1.24
7	P	39	ILE	C-N	7.01	1.43	1.33
8	O	324	HIS	N-CA	-7.01	1.37	1.45
3	A	433	GLY	CA-C	-7.00	1.44	1.52
6	K	169	LEU	CA-C	-7.00	1.44	1.52
4	D	157	ALA	C-N	7.00	1.42	1.33
4	B	169	LYS	C-N	7.00	1.41	1.33
5	J	41	LYS	N-CA	6.98	1.55	1.46
6	G	180	ASN	CA-C	-6.97	1.44	1.52
3	C	424	SER	C-N	6.97	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	156	ASP	N-CA	-6.96	1.37	1.45
5	L	74	ALA	C-N	6.96	1.42	1.33
3	A	309	GLU	C-O	6.96	1.27	1.23
6	G	149	ILE	N-CA	6.94	1.54	1.46
4	F	468	TYR	CA-C	-6.93	1.44	1.52
7	P	199	TYR	C-N	6.92	1.43	1.33
3	A	363	ALA	CA-C	-6.91	1.43	1.52
3	E	209	PHE	CA-C	-6.90	1.44	1.52
6	K	49	ASN	CA-C	-6.90	1.44	1.52
5	L	99	ILE	N-CA	6.89	1.54	1.46
5	J	66	GLY	CA-C	-6.89	1.42	1.51
3	C	134	ASP	CA-C	-6.88	1.43	1.52
6	I	89	LEU	CA-C	-6.88	1.43	1.52
8	O	298	ASP	C-N	6.88	1.42	1.33
6	I	187	GLY	CA-C	-6.88	1.42	1.52
3	A	104	ILE	C-N	6.87	1.42	1.33
8	O	49	LYS	C-N	6.87	1.41	1.33
7	P	12	HIS	C-N	6.87	1.43	1.33
1	M	207	GLN	N-CA	6.86	1.54	1.46
7	P	439	ASP	N-CA	6.86	1.54	1.46
6	G	200	ASN	CA-CB	6.85	1.61	1.52
8	O	130	LEU	C-N	6.85	1.42	1.33
4	B	289	ARG	N-CA	-6.84	1.38	1.46
6	K	108	SER	CA-CB	6.83	1.64	1.53
8	O	69	SER	N-CA	-6.83	1.38	1.46
7	P	387	PHE	CA-CB	6.82	1.64	1.53
4	F	440	GLU	CA-CB	6.81	1.64	1.53
7	P	120	ASP	CA-CB	6.81	1.61	1.53
4	D	354	THR	C-N	6.81	1.42	1.33
6	I	96	LEU	N-CA	-6.80	1.38	1.46
3	A	441	LEU	N-CA	-6.80	1.37	1.46
4	D	449	TYR	CA-C	-6.79	1.44	1.52
4	F	166	ARG	CA-C	-6.79	1.43	1.52
4	D	252	ARG	C-N	6.79	1.41	1.33
7	P	294	ILE	N-CA	6.79	1.54	1.46
3	A	85	VAL	C-N	6.78	1.42	1.33
3	C	162	PHE	CA-C	-6.78	1.44	1.52
6	G	113	ASN	CA-C	-6.77	1.44	1.52
3	E	606	THR	CA-CB	-6.77	1.42	1.53
3	E	524	ASP	CA-CB	6.77	1.64	1.53
3	C	353	ILE	CA-CB	-6.77	1.46	1.54
6	G	197	ILE	CA-C	-6.77	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	189	GLY	N-CA	-6.75	1.39	1.45
3	C	75	GLU	CA-C	-6.74	1.43	1.52
3	A	537	PHE	CA-CB	6.73	1.65	1.53
7	P	236	ASN	CA-C	-6.73	1.44	1.52
4	F	55	LEU	N-CA	-6.72	1.38	1.46
6	K	184	VAL	CA-C	-6.72	1.44	1.52
3	C	116	LYS	N-CA	-6.71	1.38	1.46
2	N	17	THR	N-CA	6.71	1.54	1.46
3	C	398	ALA	C-N	6.70	1.42	1.33
3	C	103	THR	C-N	6.70	1.42	1.33
3	C	401	LEU	CA-C	-6.68	1.44	1.52
8	O	118	THR	CA-C	-6.68	1.44	1.52
3	E	186	ALA	CA-C	6.68	1.61	1.52
3	C	368	SER	CA-C	-6.67	1.44	1.52
8	O	145	VAL	N-CA	-6.67	1.38	1.46
3	A	433	GLY	N-CA	-6.67	1.37	1.45
4	D	437	GLU	C-N	6.67	1.43	1.33
3	A	458	VAL	N-CA	-6.66	1.38	1.46
6	K	145	ASP	CA-CB	6.66	1.64	1.54
6	K	133	LEU	N-CA	-6.65	1.36	1.46
4	B	360	VAL	C-N	6.65	1.42	1.33
5	H	104	LYS	C-N	6.63	1.41	1.33
3	E	255	PRO	C-N	6.63	1.43	1.33
4	F	354	THR	CA-C	-6.63	1.44	1.52
2	N	53	LYS	C-N	6.62	1.42	1.33
6	G	72	SER	C-N	6.62	1.43	1.34
6	I	217	ALA	CA-C	-6.61	1.44	1.52
3	C	222	PRO	N-CA	-6.61	1.39	1.46
3	A	160	SER	C-N	6.61	1.42	1.33
4	B	444	ILE	C-N	6.61	1.42	1.33
3	C	510	SER	C-N	6.60	1.43	1.34
3	A	322	SER	CA-CB	6.60	1.64	1.53
6	K	150	GLU	N-CA	-6.60	1.38	1.46
2	N	69	ILE	CA-CB	-6.59	1.45	1.54
3	E	166	LEU	C-N	6.59	1.39	1.33
2	N	97	LYS	CA-CB	6.58	1.61	1.53
6	G	160	TYR	CA-C	-6.58	1.44	1.52
2	N	27	GLN	C-N	6.58	1.42	1.33
4	B	67	VAL	N-CA	-6.57	1.38	1.46
5	L	5	ASN	CA-C	-6.57	1.44	1.52
3	A	567	TRP	CA-C	-6.57	1.44	1.52
2	N	68	LEU	CA-C	-6.56	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	475	TYR	CA-C	-6.56	1.44	1.52
3	E	111	PRO	CA-C	-6.56	1.46	1.52
1	M	116	GLU	CA-C	-6.56	1.44	1.52
6	G	192	ASN	CA-C	-6.55	1.44	1.53
3	A	272	TYR	N-CA	-6.55	1.37	1.46
4	B	304	TYR	CA-CB	6.55	1.62	1.53
2	N	90	ALA	C-O	-6.55	1.15	1.23
4	F	242	LEU	C-N	6.54	1.42	1.33
3	C	478	PHE	CA-CB	6.54	1.60	1.54
4	D	297	GLU	C-N	6.54	1.38	1.33
3	E	162	PHE	CA-CB	6.54	1.61	1.53
3	E	203	ASP	CA-CB	6.54	1.63	1.53
5	H	76	VAL	C-N	6.53	1.42	1.33
7	P	324	SER	C-N	6.53	1.42	1.33
3	C	507	LEU	CA-C	-6.53	1.44	1.52
4	F	334	ILE	CA-CB	-6.53	1.46	1.54
3	A	521	ILE	C-N	6.53	1.42	1.33
8	O	250	ALA	N-CA	-6.53	1.38	1.46
3	C	560	ALA	C-N	6.52	1.41	1.33
3	C	443	LYS	CA-C	-6.52	1.44	1.52
3	C	402	GLY	N-CA	-6.51	1.39	1.45
6	G	44	GLU	C-N	6.50	1.42	1.33
3	E	152	ILE	C-N	6.50	1.41	1.33
8	O	236	VAL	N-CA	-6.50	1.38	1.46
2	N	77	ILE	C-O	-6.49	1.16	1.24
4	B	172	ILE	CA-C	-6.48	1.44	1.52
4	B	409	ILE	N-CA	-6.48	1.38	1.46
8	O	344	LEU	CA-CB	6.48	1.63	1.53
3	C	116	LYS	C-N	6.46	1.42	1.33
4	D	349	LEU	CA-C	-6.46	1.44	1.52
8	O	37	THR	C-N	6.46	1.42	1.33
5	H	58	GLU	C-N	6.45	1.42	1.34
3	A	195	GLU	CA-C	6.45	1.61	1.52
3	E	295	MET	CA-C	-6.44	1.44	1.52
4	D	308	MET	CA-C	-6.44	1.44	1.52
7	P	459	SER	N-CA	-6.44	1.38	1.46
4	D	33	GLY	C-N	6.43	1.42	1.33
6	I	205	GLU	CA-C	-6.43	1.44	1.52
3	C	520	LEU	CA-C	6.43	1.61	1.52
6	I	122	GLN	N-CA	-6.42	1.38	1.46
3	A	146	PHE	CA-CB	6.42	1.62	1.53
3	C	544	PHE	C-N	6.42	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	57	VAL	C-N	6.41	1.42	1.33
3	A	282	GLY	CA-C	-6.41	1.46	1.51
4	B	417	LYS	C-N	6.41	1.42	1.33
3	C	87	ARG	CA-CB	6.40	1.63	1.53
3	E	588	GLU	CA-C	-6.40	1.44	1.52
8	O	170	LEU	CA-C	-6.40	1.44	1.52
3	C	92	LEU	C-O	-6.39	1.16	1.24
7	P	46	ALA	C-N	6.39	1.42	1.33
3	C	34	VAL	CA-C	6.39	1.60	1.52
3	C	147	GLN	C-N	6.39	1.41	1.33
4	F	52	ILE	C-N	6.39	1.42	1.33
8	O	24	THR	N-CA	6.39	1.54	1.46
4	F	58	PRO	N-CA	-6.39	1.39	1.47
6	G	16	GLU	N-CA	-6.39	1.38	1.46
3	C	281	VAL	CA-C	-6.38	1.44	1.52
5	J	41	LYS	CA-CB	6.38	1.64	1.53
1	M	15	LEU	CA-C	-6.38	1.44	1.52
3	C	27	ILE	CA-C	6.38	1.59	1.52
3	A	172	ILE	C-N	6.38	1.42	1.33
4	D	284	TYR	CA-C	6.38	1.61	1.52
4	D	333	PRO	C-N	6.37	1.41	1.33
4	B	265	TYR	N-CA	-6.37	1.38	1.46
3	C	527	GLN	CA-C	-6.37	1.46	1.53
3	A	117	GLU	N-CA	-6.37	1.38	1.46
3	C	490	SER	CA-C	-6.37	1.44	1.52
3	C	29	SER	CA-C	-6.37	1.44	1.52
2	N	114	LYS	CA-CB	6.36	1.62	1.53
4	F	212	PHE	CA-C	-6.36	1.45	1.52
4	F	69	GLU	C-N	6.36	1.42	1.33
4	B	130	ASP	CA-C	6.35	1.60	1.52
1	M	55	GLN	C-N	6.35	1.42	1.33
3	C	454	ILE	CA-C	-6.34	1.45	1.52
7	P	268	LEU	CA-C	-6.34	1.44	1.52
6	K	202	THR	CA-C	-6.34	1.44	1.53
7	P	171	ILE	C-N	6.33	1.42	1.33
5	J	42	GLU	N-CA	-6.33	1.37	1.46
4	D	269	GLN	N-CA	-6.33	1.38	1.46
6	G	95	SER	CA-C	-6.33	1.44	1.52
4	F	464	LEU	CA-C	-6.33	1.44	1.52
7	P	129	ASP	C-N	6.33	1.40	1.34
3	C	189	GLY	N-CA	-6.32	1.39	1.45
7	P	380	TRP	CA-C	-6.32	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	202	PHE	CA-CB	6.32	1.64	1.53
4	D	182	GLU	CA-C	-6.32	1.44	1.52
7	P	25	VAL	CA-C	-6.32	1.44	1.52
2	N	20	LEU	CA-CB	6.31	1.63	1.53
3	C	65	GLY	CA-C	-6.31	1.44	1.52
3	C	528	GLN	N-CA	-6.31	1.38	1.45
3	C	501	LEU	N-CA	-6.31	1.38	1.46
4	F	56	THR	CA-CB	-6.31	1.44	1.53
6	G	128	ALA	N-CA	-6.30	1.38	1.46
4	F	84	SER	C-N	6.30	1.43	1.33
4	F	148	GLU	C-N	6.30	1.42	1.33
4	F	256	PRO	N-CA	-6.29	1.39	1.47
4	B	333	PRO	CA-C	-6.29	1.44	1.52
7	P	105	SER	CA-CB	6.29	1.63	1.53
1	M	163	ILE	N-CA	-6.29	1.39	1.46
3	A	312	MET	CA-C	-6.29	1.43	1.52
4	B	482	ASP	CA-CB	6.28	1.63	1.53
7	P	341	ASN	CA-C	6.28	1.60	1.52
8	O	156	LYS	N-CA	-6.28	1.38	1.46
4	F	59	ASP	C-N	6.28	1.42	1.33
4	B	79	VAL	CA-C	-6.27	1.45	1.52
6	I	53	ASN	CA-C	-6.27	1.44	1.52
6	I	167	ALA	CA-CB	6.27	1.63	1.53
2	N	98	ASP	CA-CB	6.27	1.64	1.53
4	B	253	ILE	C-N	6.27	1.41	1.33
2	N	39	VAL	N-CA	-6.26	1.38	1.46
1	M	208	GLU	CA-CB	6.26	1.63	1.53
6	K	113	ASN	N-CA	-6.26	1.38	1.46
1	M	212	ASN	C-N	6.26	1.42	1.33
6	G	215	LEU	N-CA	-6.26	1.40	1.46
3	A	449	LYS	CA-C	-6.26	1.44	1.52
3	C	361	ALA	CA-C	-6.25	1.44	1.52
4	B	323	GLU	C-N	6.25	1.40	1.34
3	A	123	TYR	CA-CB	6.25	1.63	1.53
6	G	10	PRO	N-CA	-6.25	1.39	1.47
6	G	75	ILE	N-CA	-6.25	1.38	1.46
3	E	92	LEU	N-CA	-6.24	1.38	1.46
7	P	452	GLU	CA-CB	6.24	1.63	1.53
8	O	355	ALA	CA-CB	6.24	1.63	1.53
6	G	86	LEU	CA-CB	6.24	1.63	1.53
4	F	182	GLU	N-CA	-6.24	1.38	1.46
3	A	539	PRO	C-N	6.24	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	35	ILE	N-CA	-6.23	1.39	1.46
6	I	16	GLU	C-N	6.23	1.42	1.33
8	O	288	LEU	N-CA	-6.23	1.38	1.46
1	M	55	GLN	CA-C	-6.23	1.44	1.52
3	E	529	ASN	N-CA	-6.22	1.38	1.46
4	B	188	CYS	CA-C	-6.22	1.44	1.52
3	A	342	TYR	C-N	6.22	1.42	1.34
7	P	76	THR	N-CA	-6.22	1.37	1.46
3	E	244	PHE	CA-C	-6.21	1.45	1.52
7	P	407	ARG	N-CA	-6.21	1.39	1.46
3	A	139	TRP	N-CA	-6.21	1.38	1.45
6	I	128	ALA	CA-C	-6.21	1.44	1.52
4	B	269	GLN	C-N	6.20	1.42	1.33
6	I	202	THR	CA-C	-6.20	1.44	1.53
4	F	71	ARG	CA-C	-6.20	1.44	1.52
3	A	171	LYS	CA-C	-6.19	1.45	1.52
6	K	27	GLU	C-N	6.19	1.42	1.33
3	E	158	TYR	C-N	6.19	1.40	1.32
4	D	250	ILE	CA-C	-6.19	1.45	1.52
3	E	521	ILE	CA-C	-6.19	1.45	1.52
8	O	303	TRP	CA-CB	6.18	1.63	1.53
4	B	458	LEU	N-CA	-6.18	1.38	1.46
7	P	119	GLU	CA-C	-6.18	1.45	1.52
3	E	48	LEU	CA-C	-6.18	1.44	1.52
6	K	192	ASN	CA-CB	6.18	1.64	1.53
2	N	69	ILE	CA-C	-6.17	1.44	1.52
3	A	72	VAL	CA-CB	-6.17	1.46	1.54
4	B	347	PRO	C-N	6.17	1.42	1.33
3	C	330	GLU	CA-CB	6.17	1.63	1.53
8	O	72	ASP	N-CA	-6.17	1.38	1.46
3	C	394	ARG	C-N	6.16	1.42	1.33
8	O	153	ASN	C-N	6.16	1.42	1.33
3	E	470	PHE	N-CA	-6.16	1.39	1.46
4	F	390	GLY	C-N	6.16	1.42	1.33
6	K	206	ARG	N-CA	-6.16	1.39	1.46
3	E	211	LEU	C-N	6.16	1.41	1.33
4	B	239	SER	CA-C	-6.16	1.45	1.52
7	P	285	LYS	CA-C	-6.16	1.44	1.52
6	I	19	LYS	CA-CB	6.15	1.63	1.53
4	F	132	LEU	C-N	6.15	1.41	1.33
4	F	454	VAL	CA-C	6.14	1.61	1.52
6	K	217	ALA	C-N	6.14	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	O	92	THR	CA-C	-6.14	1.44	1.52
8	O	129	ASP	CA-C	-6.14	1.44	1.52
4	D	50	ASN	CA-CB	6.14	1.63	1.53
3	E	570	LEU	C-O	-6.14	1.16	1.24
3	E	568	SER	N-CA	-6.13	1.38	1.46
8	O	274	HIS	CA-C	-6.13	1.45	1.52
1	M	124	GLY	CA-C	-6.13	1.43	1.51
3	A	246	CYS	C-N	6.13	1.42	1.33
5	L	68	LEU	CA-CB	6.13	1.63	1.53
3	C	192	THR	CA-C	-6.13	1.44	1.53
7	P	312	LEU	CA-C	-6.12	1.45	1.52
7	P	407	ARG	C-N	6.12	1.42	1.33
6	K	61	ASN	C-N	6.12	1.42	1.33
8	O	177	ASP	CA-C	-6.12	1.44	1.52
8	O	217	VAL	CA-CB	-6.12	1.46	1.54
4	F	40	ILE	CA-CB	6.11	1.61	1.54
3	E	174	LEU	C-N	6.11	1.40	1.33
6	I	40	ASP	C-N	6.10	1.42	1.33
2	N	95	PRO	CA-CB	-6.10	1.45	1.53
3	C	248	GLN	C-O	-6.10	1.16	1.24
3	A	602	LYS	C-N	6.10	1.42	1.34
3	C	478	PHE	C-N	6.10	1.43	1.33
5	L	32	LEU	N-CA	-6.10	1.38	1.46
6	G	153	LYS	CA-CB	6.10	1.62	1.53
3	C	183	THR	C-N	6.09	1.41	1.33
3	C	274	ASN	CA-CB	6.09	1.61	1.53
4	F	54	ASN	N-CA	-6.09	1.38	1.46
4	F	190	GLN	N-CA	-6.09	1.38	1.46
4	D	484	PHE	CA-C	-6.08	1.45	1.52
6	I	179	LEU	CA-CB	6.08	1.62	1.53
6	K	107	LEU	C-N	6.08	1.42	1.33
5	J	14	GLU	C-O	-6.08	1.17	1.24
4	D	213	ALA	CA-C	-6.08	1.45	1.52
4	F	431	LEU	C-O	-6.08	1.17	1.24
3	E	414	ALA	N-CA	-6.08	1.38	1.46
7	P	322	VAL	CA-CB	-6.07	1.46	1.54
7	P	270	ASP	CA-C	6.07	1.60	1.52
3	A	384	LEU	N-CA	-6.07	1.39	1.46
3	E	309	GLU	CA-CB	6.07	1.57	1.52
3	A	234	LEU	CA-CB	6.06	1.61	1.53
3	A	231	TYR	CA-C	-6.06	1.45	1.52
1	M	115	PRO	CA-C	-6.06	1.48	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	43	CYS	CA-C	-6.06	1.45	1.52
4	F	167	GLY	C-N	6.06	1.42	1.33
3	A	266	SER	CA-C	-6.06	1.45	1.52
3	A	215	TRP	CA-C	6.06	1.58	1.52
2	N	53	LYS	CA-C	-6.06	1.45	1.52
4	F	182	GLU	CA-CB	6.05	1.62	1.53
4	F	436	LEU	N-CA	-6.05	1.39	1.46
2	N	77	ILE	N-CA	-6.05	1.38	1.46
3	E	90	LYS	N-CA	6.04	1.51	1.45
3	E	315	THR	C-N	6.04	1.42	1.33
3	A	53	HIS	N-CA	-6.03	1.38	1.46
3	A	106	ASP	N-CA	-6.03	1.38	1.45
3	A	565	ALA	C-N	6.03	1.42	1.33
5	L	102	VAL	N-CA	-6.03	1.38	1.46
6	G	65	LYS	CA-C	-6.03	1.45	1.52
1	M	158	ILE	CA-CB	6.03	1.62	1.54
4	F	367	LYS	C-N	6.03	1.42	1.33
6	K	61	ASN	N-CA	-6.03	1.38	1.46
3	E	393	GLU	C-N	6.03	1.42	1.34
4	B	483	GLU	C-N	6.03	1.41	1.33
5	L	6	GLY	N-CA	-6.02	1.38	1.45
3	E	74	GLU	CA-C	-6.02	1.45	1.52
7	P	402	LEU	CA-CB	6.02	1.62	1.53
4	F	370	TYR	CA-CB	6.02	1.63	1.53
4	B	39	VAL	CA-CB	-6.02	1.47	1.54
4	F	375	VAL	CA-C	-6.01	1.44	1.52
5	J	36	LYS	CA-CB	6.01	1.62	1.53
3	E	293	VAL	C-N	6.01	1.41	1.33
5	L	14	GLU	CA-CB	6.01	1.62	1.53
7	P	326	SER	CA-C	-6.01	1.45	1.52
4	B	90	LYS	CA-C	-6.01	1.44	1.52
4	F	244	LEU	N-CA	-6.00	1.38	1.45
8	O	71	VAL	N-CA	-6.00	1.39	1.46
8	O	160	ALA	C-N	6.00	1.41	1.33
4	D	170	ILE	N-CA	-6.00	1.40	1.46
1	M	42	ARG	CA-C	-6.00	1.45	1.52
4	D	215	MET	CA-C	-6.00	1.45	1.52
6	G	140	LYS	CA-C	-6.00	1.45	1.52
3	E	183	THR	CA-C	6.00	1.60	1.52
4	F	257	ARG	CA-CB	6.00	1.62	1.53
4	F	442	THR	C-N	6.00	1.41	1.33
7	P	264	VAL	C-O	-6.00	1.17	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	P	470	GLN	C-N	6.00	1.41	1.33
2	N	115	LEU	N-CA	-6.00	1.38	1.46
4	F	438	LYS	C-N	6.00	1.41	1.33
6	I	209	LEU	N-CA	-5.99	1.39	1.46
6	I	215	LEU	N-CA	-5.99	1.41	1.46
3	E	409	SER	N-CA	-5.99	1.38	1.46
4	F	255	THR	CA-C	5.99	1.59	1.52
7	P	280	ILE	C-N	5.99	1.41	1.33
3	E	41	ILE	C-N	5.99	1.41	1.33
3	E	339	LEU	CA-C	-5.99	1.45	1.52
6	K	154	ASP	CA-C	-5.98	1.45	1.52
8	O	124	ASP	CA-CB	5.98	1.62	1.53
4	B	302	ARG	C-N	5.98	1.41	1.33
1	M	178	ILE	CA-C	5.98	1.58	1.52
6	G	118	LYS	N-CA	-5.97	1.41	1.46
4	F	261	THR	CA-C	-5.97	1.45	1.52
4	B	116	SER	C-N	5.97	1.42	1.33
7	P	336	ARG	CA-CB	5.97	1.62	1.53
3	A	141	PHE	N-CA	-5.97	1.38	1.46
3	A	182	ILE	N-CA	-5.96	1.39	1.46
1	M	52	ASP	CA-C	-5.96	1.45	1.52
5	L	34	GLN	C-O	-5.96	1.17	1.24
4	F	40	ILE	CA-C	5.96	1.60	1.52
7	P	459	SER	C-N	5.96	1.42	1.33
3	E	40	MET	CA-C	-5.96	1.45	1.52
6	G	30	GLU	N-CA	-5.95	1.39	1.46
3	A	158	TYR	C-N	5.95	1.39	1.33
6	K	152	MET	C-N	5.95	1.41	1.33
6	I	180	ASN	CA-C	-5.95	1.45	1.53
4	F	59	ASP	N-CA	-5.95	1.38	1.46
6	K	29	GLU	CA-C	5.95	1.60	1.52
7	P	195	VAL	C-O	-5.95	1.17	1.24
4	D	261	THR	N-CA	-5.94	1.39	1.46
4	D	407	TYR	CA-CB	5.94	1.63	1.53
3	A	543	THR	N-CA	-5.94	1.39	1.46
7	P	207	GLU	CA-C	-5.94	1.45	1.52
3	C	236	GLY	C-N	5.94	1.41	1.33
3	E	457	SER	N-CA	-5.93	1.39	1.46
4	D	469	PRO	C-N	5.93	1.42	1.33
4	F	411	LYS	N-CA	-5.93	1.39	1.46
6	I	208	LYS	N-CA	5.93	1.53	1.46
2	N	84	PHE	N-CA	5.92	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	P	9	ASP	C-N	5.92	1.41	1.33
6	G	89	LEU	C-N	5.92	1.42	1.33
4	F	277	ILE	CA-CB	-5.92	1.47	1.54
3	E	161	VAL	C-N	5.92	1.41	1.33
7	P	141	ILE	CA-C	-5.91	1.45	1.52
3	A	599	GLU	CA-CB	5.91	1.62	1.53
7	P	403	GLN	CA-CB	5.91	1.62	1.53
5	L	104	LYS	C-N	5.91	1.41	1.33
8	O	155	ALA	N-CA	-5.91	1.38	1.46
4	B	364	LEU	C-N	5.91	1.41	1.33
3	E	288	ASN	CA-C	5.90	1.60	1.52
4	B	461	ALA	N-CA	-5.90	1.39	1.46
7	P	12	HIS	CA-CB	5.90	1.62	1.53
7	P	340	SER	C-N	5.90	1.41	1.33
4	F	346	ILE	C-O	-5.90	1.19	1.24
4	B	170	ILE	N-CA	-5.89	1.39	1.46
8	O	330	ILE	CA-C	-5.89	1.45	1.52
3	C	169	SER	CA-C	-5.89	1.47	1.53
4	D	137	SER	C-N	-5.89	1.28	1.33
3	A	525	PHE	CA-CB	5.89	1.62	1.53
8	O	326	ASN	CA-C	-5.89	1.45	1.52
1	M	169	ARG	CA-CB	5.88	1.62	1.53
4	F	101	ARG	N-CA	-5.88	1.38	1.45
4	B	38	LEU	N-CA	-5.88	1.38	1.46
4	F	363	GLN	C-N	5.87	1.41	1.33
4	B	350	THR	N-CA	-5.87	1.39	1.46
3	C	142	THR	CA-C	-5.87	1.46	1.52
3	E	166	LEU	N-CA	-5.87	1.38	1.46
3	A	380	PHE	CA-CB	5.87	1.61	1.53
3	C	27	ILE	N-CA	-5.86	1.39	1.46
3	C	100	LEU	CA-C	-5.86	1.45	1.52
4	F	435	PHE	N-CA	-5.86	1.39	1.46
8	O	369	THR	C-N	5.86	1.41	1.33
3	C	57	VAL	C-N	5.86	1.41	1.33
2	N	32	THR	N-CA	-5.86	1.38	1.46
3	C	34	VAL	CA-CB	-5.86	1.47	1.54
8	O	91	GLU	CA-C	-5.86	1.45	1.52
3	E	598	GLY	C-N	5.86	1.41	1.33
1	M	83	VAL	C-N	5.85	1.41	1.33
4	D	299	PRO	CA-CB	-5.85	1.45	1.53
6	K	198	GLU	CA-C	-5.85	1.45	1.52
3	C	518	ALA	CA-C	-5.85	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	P	277	LEU	N-CA	-5.85	1.39	1.46
5	J	35	ALA	C-N	5.85	1.41	1.33
3	C	456	THR	N-CA	-5.85	1.38	1.46
3	E	196	LYS	C-O	-5.85	1.16	1.23
4	B	452	ARG	C-N	5.85	1.41	1.33
6	K	17	LEU	N-CA	-5.85	1.39	1.46
4	D	211	VAL	CA-CB	-5.84	1.47	1.54
3	A	275	SER	CA-C	-5.84	1.45	1.52
3	C	330	GLU	CA-C	5.84	1.60	1.52
4	F	129	GLU	C-N	5.84	1.40	1.33
5	L	24	ALA	C-N	5.84	1.41	1.33
3	E	286	ARG	N-CA	-5.84	1.39	1.46
4	F	430	LYS	C-N	5.84	1.41	1.33
4	B	171	PRO	C-N	5.84	1.41	1.33
3	C	72	VAL	CA-C	-5.83	1.45	1.52
3	C	213	HIS	CA-C	-5.83	1.45	1.52
4	D	106	GLU	N-CA	-5.83	1.39	1.46
8	O	122	LYS	N-CA	-5.83	1.38	1.46
6	I	188	VAL	N-CA	-5.83	1.40	1.46
5	L	4	LYS	C-N	5.83	1.41	1.33
1	M	164	LYS	CA-C	-5.83	1.45	1.52
7	P	409	GLY	C-N	5.83	1.39	1.33
3	C	352	MET	CA-C	-5.82	1.45	1.52
3	C	448	ARG	CA-C	5.82	1.60	1.52
4	F	240	LEU	CA-C	-5.82	1.45	1.52
3	E	277	ALA	CA-C	-5.82	1.45	1.52
8	O	5	LEU	N-CA	-5.82	1.39	1.46
6	I	59	ASP	CA-C	-5.82	1.45	1.52
4	D	463	SER	C-N	5.81	1.41	1.33
4	D	435	PHE	CA-CB	5.81	1.62	1.53
4	F	240	LEU	CA-CB	5.81	1.62	1.53
6	G	173	VAL	C-N	5.81	1.40	1.33
3	C	413	VAL	CA-CB	-5.81	1.46	1.54
3	A	542	LYS	CA-C	-5.80	1.45	1.52
5	L	88	GLU	CA-C	-5.80	1.45	1.52
8	O	11	PHE	CA-C	-5.80	1.45	1.52
4	F	132	LEU	CA-C	-5.80	1.45	1.52
7	P	199	TYR	CA-CB	5.80	1.62	1.53
4	D	357	GLN	C-N	5.80	1.40	1.33
4	F	79	VAL	CA-C	-5.80	1.46	1.52
3	A	414	ALA	CA-C	5.80	1.59	1.52
3	E	323	ASN	C-N	5.80	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	482	ARG	CA-C	-5.79	1.45	1.52
5	H	27	TYR	N-CA	-5.79	1.39	1.46
4	D	274	VAL	N-CA	-5.79	1.39	1.46
8	O	286	VAL	N-CA	-5.79	1.39	1.46
4	F	359	PHE	CA-CB	5.79	1.62	1.53
7	P	106	SER	C-N	5.79	1.41	1.33
5	H	15	LYS	CA-C	5.79	1.60	1.52
6	I	149	ILE	C-N	5.79	1.41	1.33
3	E	486	LYS	C-N	5.78	1.41	1.33
3	A	349	ASN	C-N	5.78	1.41	1.33
3	A	127	GLY	C-N	5.78	1.41	1.33
3	A	412	ILE	CA-C	-5.78	1.45	1.52
4	F	418	ALA	CA-C	-5.77	1.45	1.52
3	C	340	ALA	C-N	5.77	1.41	1.33
3	A	419	ALA	C-N	5.77	1.41	1.33
4	B	361	ASP	C-N	5.77	1.41	1.33
4	B	391	MET	C-N	5.77	1.40	1.33
6	I	139	VAL	CA-C	-5.77	1.45	1.52
4	F	400	SER	CA-C	-5.76	1.45	1.52
8	O	372	HIS	C-N	5.76	1.40	1.33
3	A	48	LEU	CA-CB	5.76	1.62	1.53
4	F	413	ALA	C-N	5.75	1.41	1.33
3	A	224	THR	N-CA	-5.75	1.39	1.46
6	K	192	ASN	CA-C	-5.75	1.45	1.52
3	E	504	LYS	N-CA	-5.75	1.39	1.46
1	M	183	ASN	C-N	5.75	1.41	1.33
4	D	193	LEU	CA-CB	5.74	1.63	1.53
4	F	471	GLU	CA-C	-5.74	1.44	1.52
3	C	464	THR	CA-C	-5.74	1.45	1.52
4	D	248	PRO	CA-C	-5.74	1.46	1.52
7	P	282	ILE	C-N	5.74	1.41	1.33
7	P	345	ILE	C-N	5.74	1.41	1.33
4	D	140	ASN	CA-C	5.74	1.60	1.52
5	H	71	LYS	N-CA	-5.73	1.38	1.46
4	D	146	TYR	CA-CB	5.73	1.61	1.53
4	B	408	ALA	C-N	5.73	1.41	1.33
8	O	7	THR	N-CA	-5.73	1.38	1.46
6	G	98	GLY	C-N	5.73	1.41	1.33
2	N	63	ASP	CA-CB	5.73	1.62	1.53
4	F	131	TYR	CA-CB	5.73	1.62	1.53
7	P	453	LEU	CA-CB	5.72	1.63	1.53
7	P	111	ASP	C-N	5.72	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	590	SER	N-CA	-5.72	1.38	1.46
3	A	376	ALA	C-N	5.72	1.41	1.33
3	C	554	HIS	CA-CB	5.71	1.62	1.53
4	F	309	TYR	CA-CB	5.71	1.62	1.53
7	P	362	GLU	CA-C	-5.71	1.45	1.52
4	F	470	LYS	CA-CB	5.71	1.62	1.53
3	A	224	THR	C-N	5.71	1.40	1.33
6	K	120	ILE	CA-CB	-5.71	1.47	1.54
8	O	120	LYS	CA-C	-5.71	1.45	1.52
3	C	241	ASP	CA-CB	5.71	1.62	1.53
7	P	330	TYR	CA-C	-5.70	1.46	1.52
4	F	311	ASP	CA-C	-5.70	1.45	1.52
3	E	145	LYS	CA-C	-5.70	1.45	1.52
7	P	36	LEU	N-CA	-5.70	1.39	1.46
4	B	195	ARG	C-N	-5.70	1.27	1.34
4	F	364	LEU	CA-C	-5.70	1.45	1.52
6	G	80	ILE	CA-C	-5.70	1.45	1.52
3	C	248	GLN	C-N	5.69	1.40	1.33
1	M	100	ASN	C-N	5.69	1.40	1.33
4	F	86	ILE	N-CA	-5.68	1.40	1.46
3	A	431	THR	C-N	5.68	1.41	1.34
4	F	357	GLN	N-CA	-5.68	1.38	1.46
3	A	317	LEU	CA-C	-5.68	1.45	1.52
7	P	343	LYS	N-CA	-5.68	1.39	1.46
4	D	206	GLU	CA-C	-5.68	1.45	1.52
6	K	50	ILE	C-N	5.68	1.41	1.33
6	I	92	ARG	CA-CB	5.67	1.62	1.53
3	A	59	GLU	N-CA	-5.67	1.38	1.45
4	B	66	GLN	C-N	5.67	1.39	1.33
7	P	276	LYS	C-N	5.67	1.41	1.33
3	C	217	VAL	CA-CB	-5.67	1.47	1.54
4	F	76	ILE	CA-C	5.67	1.59	1.52
4	F	114	ASP	N-CA	-5.67	1.38	1.45
3	E	125	PRO	CA-C	-5.67	1.47	1.52
3	E	224	THR	C-N	5.67	1.40	1.33
4	B	57	LEU	CA-C	-5.67	1.45	1.52
6	G	184	VAL	CA-CB	-5.67	1.46	1.55
3	C	467	LEU	N-CA	-5.67	1.39	1.46
4	F	405	ALA	C-N	5.66	1.41	1.33
6	I	183	LEU	N-CA	-5.66	1.38	1.46
2	N	102	ASP	N-CA	-5.66	1.39	1.46
3	C	459	SER	C-N	5.66	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	19	LYS	CA-CB	5.66	1.62	1.53
3	A	520	LEU	C-N	5.66	1.41	1.33
7	P	136	PHE	C-N	5.66	1.41	1.33
7	P	286	VAL	C-N	5.66	1.41	1.33
4	D	361	ASP	CA-CB	5.66	1.61	1.53
3	A	579	HIS	CA-C	-5.66	1.45	1.52
3	A	400	ALA	C-N	5.65	1.41	1.33
6	I	160	TYR	CA-C	-5.65	1.45	1.52
3	C	304	MET	C-N	5.65	1.41	1.33
8	O	150	ALA	CA-CB	5.65	1.62	1.53
6	G	46	GLU	N-CA	-5.65	1.39	1.46
6	I	172	ILE	CA-CB	-5.65	1.47	1.54
3	A	161	VAL	C-N	5.64	1.41	1.33
3	A	400	ALA	CA-CB	5.64	1.62	1.53
6	I	154	ASP	N-CA	-5.64	1.39	1.46
3	C	143	PRO	CA-C	5.64	1.59	1.52
6	G	102	GLU	N-CA	-5.64	1.39	1.46
1	M	81	TYR	C-N	5.64	1.41	1.33
2	N	54	PHE	CA-C	-5.64	1.45	1.52
3	C	125	PRO	C-N	5.64	1.40	1.33
4	F	165	ALA	C-N	5.63	1.41	1.33
4	D	96	THR	C-N	5.63	1.42	1.33
4	F	362	ARG	CA-C	-5.63	1.45	1.52
3	A	152	ILE	N-CA	-5.63	1.40	1.46
3	C	184	TRP	CA-C	-5.63	1.46	1.52
3	E	517	VAL	C-N	5.62	1.41	1.34
3	E	527	GLN	CA-C	-5.62	1.45	1.52
4	F	246	ASN	CA-CB	5.62	1.62	1.54
6	G	153	LYS	CA-C	-5.62	1.45	1.52
4	F	445	THR	N-CA	-5.62	1.39	1.46
7	P	470	GLN	N-CA	5.62	1.53	1.46
1	M	111	SER	N-CA	-5.62	1.38	1.46
4	F	34	VAL	N-CA	-5.62	1.39	1.46
5	J	18	HIS	CA-CB	5.62	1.62	1.53
4	B	149	GLU	CA-C	-5.61	1.46	1.52
4	F	136	GLY	C-N	5.61	1.41	1.33
6	K	53	ASN	C-O	5.61	1.30	1.24
3	A	500	GLN	CA-CB	5.61	1.62	1.53
3	E	96	LEU	CA-C	-5.61	1.46	1.52
3	E	208	ASP	N-CA	-5.61	1.38	1.45
3	A	121	SER	CA-CB	-5.61	1.45	1.52
2	N	80	ARG	C-N	5.60	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	B	392	THR	C-N	5.60	1.40	1.33
5	L	43	ILE	N-CA	-5.60	1.39	1.46
3	E	596	VAL	CA-CB	-5.60	1.47	1.54
1	M	64	ALA	CA-C	-5.59	1.45	1.52
3	E	35	VAL	N-CA	-5.59	1.39	1.46
3	E	221	ARG	CA-C	-5.59	1.46	1.53
5	L	80	LEU	CA-C	-5.59	1.44	1.52
3	C	532	SER	C-N	5.59	1.42	1.33
4	F	265	TYR	C-N	5.59	1.41	1.33
3	A	438	PHE	CA-C	-5.59	1.45	1.52
4	F	417	LYS	CA-CB	5.58	1.62	1.53
4	F	95	PHE	C-N	5.58	1.41	1.33
6	K	128	ALA	CA-C	-5.58	1.45	1.52
6	I	127	GLU	CA-CB	5.58	1.62	1.53
1	M	91	ARG	C-N	5.58	1.41	1.33
3	A	294	LEU	CA-C	-5.58	1.45	1.52
3	A	411	SER	C-N	5.58	1.40	1.33
6	K	14	ASN	CA-C	-5.58	1.45	1.52
7	P	267	TYR	CA-CB	5.58	1.61	1.53
5	L	57	PHE	CA-CB	5.57	1.62	1.53
3	E	101	MET	CA-C	-5.57	1.45	1.52
6	G	205	GLU	CA-C	-5.57	1.45	1.52
3	A	162	PHE	CA-C	-5.57	1.45	1.52
4	D	189	ARG	CA-C	-5.57	1.45	1.52
7	P	436	GLU	C-N	-5.57	1.26	1.33
4	D	88	VAL	CA-CB	-5.56	1.48	1.54
6	I	64	SER	N-CA	-5.56	1.39	1.46
5	H	31	LYS	C-N	5.56	1.41	1.33
6	I	108	SER	CA-C	-5.56	1.45	1.52
4	B	118	ARG	C-N	-5.55	1.27	1.33
4	D	413	ALA	CA-C	-5.55	1.45	1.52
3	A	244	PHE	C-N	-5.55	1.26	1.33
7	P	85	SER	CA-CB	5.55	1.62	1.53
5	H	47	LYS	CA-C	-5.55	1.46	1.52
1	M	207	GLN	CA-C	-5.54	1.45	1.52
3	C	429	THR	C-O	-5.54	1.17	1.24
3	A	539	PRO	CA-C	-5.54	1.46	1.53
2	N	37	PHE	N-CA	-5.54	1.39	1.45
4	B	82	GLY	CA-C	-5.54	1.44	1.51
8	O	384	PRO	CA-C	-5.54	1.44	1.52
3	C	276	ASP	CA-C	-5.54	1.45	1.52
4	F	135	ASN	C-N	5.54	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	F	424	ALA	C-N	5.54	1.41	1.33
3	A	436	GLN	N-CA	-5.54	1.38	1.45
1	M	91	ARG	CA-CB	5.53	1.62	1.53
4	D	158	ILE	C-O	-5.53	1.18	1.24
3	A	39	ASN	CA-C	-5.53	1.45	1.52
4	B	475	ARG	C-N	5.53	1.40	1.33
5	H	3	GLN	N-CA	-5.53	1.39	1.46
1	M	195	LEU	C-O	-5.53	1.17	1.24
3	A	264	VAL	C-N	5.53	1.40	1.33
6	K	118	LYS	CA-CB	5.53	1.60	1.53
4	D	396	HIS	CA-C	-5.53	1.45	1.52
7	P	259	PHE	CA-C	-5.53	1.45	1.52
3	A	205	LYS	N-CA	5.53	1.53	1.46
3	C	562	ALA	C-N	5.53	1.42	1.33
3	C	579	HIS	N-CA	-5.53	1.39	1.46
3	C	606	THR	N-CA	-5.53	1.39	1.46
3	E	351	SER	CA-C	-5.53	1.46	1.52
7	P	246	SER	N-CA	-5.53	1.39	1.46
3	A	80	THR	N-CA	-5.52	1.39	1.45
4	B	320	GLY	CA-C	-5.52	1.44	1.51
8	O	122	LYS	CA-C	-5.52	1.45	1.52
7	P	412	ASN	CA-CB	5.52	1.62	1.53
7	P	181	ASP	CA-C	-5.52	1.45	1.52
4	F	408	ALA	CA-CB	5.52	1.61	1.53
3	A	562	ALA	C-O	-5.51	1.17	1.24
6	K	188	VAL	N-CA	-5.51	1.40	1.46
4	F	420	VAL	CA-C	-5.51	1.45	1.52
8	O	321	LEU	CA-CB	5.51	1.62	1.53
3	A	247	VAL	C-N	5.51	1.41	1.33
6	G	82	ASN	CA-CB	5.51	1.62	1.53
6	K	67	LYS	CA-C	-5.50	1.45	1.52
7	P	292	SER	CA-CB	5.50	1.61	1.53
4	B	42	GLU	CA-C	-5.50	1.46	1.52
6	I	95	SER	N-CA	-5.50	1.39	1.46
3	E	409	SER	CA-C	-5.50	1.45	1.52
7	P	154	GLY	C-N	5.50	1.40	1.33
5	H	52	LYS	CA-CB	5.50	1.61	1.53
6	G	20	MET	N-CA	-5.50	1.39	1.46
3	C	449	LYS	C-N	5.49	1.41	1.33
4	F	44	VAL	N-CA	-5.49	1.38	1.46
6	K	182	ASP	C-N	5.49	1.40	1.33
3	C	344	ARG	N-CA	5.49	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	F	269	GLN	N-CA	5.49	1.53	1.46
6	I	190	VAL	C-N	5.49	1.40	1.33
6	K	188	VAL	C-N	5.49	1.40	1.33
4	D	287	ALA	C-N	5.49	1.41	1.33
3	E	586	PHE	CA-CB	5.49	1.60	1.53
6	G	117	TYR	CA-CB	5.49	1.62	1.53
8	O	167	THR	C-N	5.49	1.38	1.33
7	P	85	SER	N-CA	-5.48	1.39	1.46
3	C	423	PHE	N-CA	-5.48	1.40	1.46
4	D	353	ILE	CA-C	-5.48	1.45	1.52
4	F	462	TRP	CA-C	-5.48	1.45	1.52
1	M	90	ALA	CA-C	-5.48	1.46	1.52
4	D	304	TYR	CA-CB	5.48	1.62	1.52
3	E	138	LYS	CA-CB	5.48	1.61	1.53
5	L	34	GLN	N-CA	-5.48	1.39	1.46
8	O	184	PHE	CA-CB	5.48	1.63	1.53
4	F	398	ASP	CA-C	-5.48	1.45	1.52
5	J	54	LEU	CA-C	-5.48	1.45	1.52
3	A	424	SER	CA-C	-5.48	1.45	1.52
6	K	16	GLU	C-N	5.47	1.40	1.33
4	D	362	ARG	CA-C	-5.47	1.45	1.52
4	B	298	VAL	N-CA	-5.47	1.41	1.46
4	D	255	THR	CA-C	5.47	1.58	1.52
1	M	82	GLN	C-O	-5.46	1.17	1.24
8	O	361	LYS	CA-CB	5.46	1.62	1.53
7	P	16	ILE	CA-C	5.46	1.59	1.52
3	E	476	PRO	CA-C	-5.46	1.46	1.52
5	J	26	LYS	CA-C	-5.46	1.45	1.52
3	A	472	ASP	C-N	5.46	1.40	1.33
4	F	184	ALA	CA-CB	5.45	1.61	1.53
7	P	219	GLN	CA-CB	5.45	1.61	1.53
4	F	184	ALA	C-N	5.45	1.40	1.33
3	E	168	SER	CA-C	-5.45	1.45	1.52
3	A	192	THR	CA-CB	-5.45	1.45	1.53
3	C	180	GLY	N-CA	-5.45	1.39	1.45
3	E	241	ASP	C-N	5.45	1.40	1.33
6	G	91	ALA	N-CA	-5.45	1.39	1.46
3	C	607	MET	N-CA	5.45	1.52	1.46
4	D	327	GLY	CA-C	-5.45	1.45	1.51
4	B	245	ALA	C-N	5.45	1.41	1.34
7	P	167	ASN	N-CA	-5.44	1.39	1.46
5	J	73	GLU	N-CA	-5.44	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	I	78	SER	C-N	5.44	1.41	1.33
3	C	311	ILE	N-CA	-5.44	1.39	1.46
5	L	64	GLY	CA-C	-5.44	1.44	1.51
3	C	280	TYR	C-N	5.44	1.40	1.33
8	O	140	GLN	CA-C	-5.44	1.45	1.52
3	E	140	GLN	N-CA	-5.43	1.39	1.46
3	E	355	ASP	N-CA	-5.43	1.39	1.46
5	J	104	LYS	CA-C	-5.43	1.45	1.52
6	K	191	SER	CA-C	-5.43	1.45	1.52
5	J	38	ASP	C-N	5.43	1.41	1.33
3	C	417	SER	C-N	5.43	1.40	1.33
4	B	450	GLU	C-N	5.43	1.40	1.33
5	L	98	LEU	CA-CB	5.43	1.61	1.53
8	O	204	SER	N-CA	5.43	1.53	1.46
4	F	214	ALA	CA-C	-5.42	1.46	1.52
3	A	559	LYS	CA-CB	5.42	1.61	1.53
4	D	49	TYR	CA-C	-5.42	1.45	1.52
3	C	182	ILE	CA-C	-5.42	1.46	1.52
7	P	239	GLY	CA-C	-5.42	1.46	1.52
4	D	278	LEU	N-CA	-5.42	1.40	1.46
2	N	109	LEU	C-N	5.42	1.40	1.33
4	F	147	PRO	CA-C	-5.42	1.46	1.52
3	C	498	VAL	C-O	-5.42	1.17	1.24
4	D	320	GLY	N-CA	-5.42	1.40	1.45
3	A	569	LYS	CA-C	-5.42	1.45	1.52
8	O	66	GLU	CA-C	-5.42	1.46	1.52
4	D	337	MET	CA-C	5.41	1.59	1.52
4	B	118	ARG	N-CA	-5.41	1.40	1.46
5	L	101	THR	CA-C	5.41	1.59	1.52
6	I	206	ARG	CA-C	-5.41	1.45	1.52
3	E	174	LEU	CA-C	5.40	1.59	1.52
6	I	221	GLU	CA-C	-5.40	1.45	1.52
4	D	98	GLU	C-N	5.40	1.40	1.33
3	A	244	PHE	N-CA	-5.40	1.38	1.46
2	N	64	ILE	N-CA	-5.40	1.39	1.46
4	D	287	ALA	CA-CB	5.39	1.61	1.53
4	F	295	ARG	N-CA	5.39	1.52	1.45
4	F	407	TYR	C-N	5.39	1.40	1.33
4	B	283	SER	CA-C	-5.39	1.45	1.52
7	P	283	LYS	CA-C	-5.39	1.45	1.52
3	A	226	LYS	CA-CB	5.39	1.61	1.53
6	I	45	ILE	N-CA	-5.39	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	I	168	PRO	CA-CB	5.39	1.61	1.53
8	O	124	ASP	C-N	5.39	1.40	1.33
3	C	315	THR	CA-C	-5.39	1.46	1.52
3	A	211	LEU	CA-C	-5.38	1.45	1.52
6	K	36	GLN	C-N	5.38	1.41	1.33
3	C	396	GLY	CA-C	-5.38	1.46	1.51
4	B	285	ALA	C-N	5.38	1.41	1.34
5	L	31	LYS	C-N	5.38	1.41	1.33
3	C	79	LEU	N-CA	-5.38	1.39	1.46
3	E	610	ARG	CA-CB	5.38	1.61	1.53
8	O	281	GLU	CA-CB	5.37	1.61	1.53
8	O	246	PHE	C-N	5.37	1.40	1.33
6	I	186	GLY	CA-C	-5.37	1.45	1.51
4	F	426	SER	C-N	5.37	1.40	1.33
7	P	476	THR	C-N	5.37	1.40	1.33
5	H	26	LYS	N-CA	-5.37	1.39	1.46
3	C	578	LYS	N-CA	-5.37	1.39	1.46
4	B	69	GLU	CA-C	-5.37	1.45	1.52
4	B	316	TYR	CA-C	5.37	1.59	1.52
8	O	332	VAL	C-N	5.37	1.39	1.33
5	J	18	HIS	C-N	5.37	1.41	1.33
4	B	446	GLN	CA-C	-5.36	1.46	1.52
4	B	128	ALA	CA-C	-5.36	1.45	1.52
8	O	358	LYS	CA-CB	5.36	1.64	1.53
4	D	282	SER	C-N	5.36	1.41	1.33
3	E	374	MET	C-N	5.36	1.40	1.33
6	K	76	THR	N-CA	-5.36	1.39	1.46
4	F	484	PHE	N-CA	-5.35	1.39	1.46
7	P	263	LEU	CA-C	-5.35	1.46	1.52
7	P	389	LYS	CA-CB	5.35	1.62	1.53
8	O	125	LYS	C-N	5.35	1.40	1.33
6	K	151	SER	CA-CB	5.35	1.61	1.53
6	G	71	LEU	CA-C	-5.35	1.45	1.52
3	C	557	ALA	N-CA	-5.35	1.40	1.46
4	B	208	PHE	CA-C	-5.35	1.46	1.52
7	P	333	GLU	CA-C	-5.35	1.45	1.52
6	G	109	GLY	C-N	5.35	1.40	1.33
3	A	550	PHE	CA-CB	5.34	1.61	1.53
4	B	282	SER	N-CA	5.34	1.52	1.46
4	D	311	ASP	CA-C	-5.34	1.46	1.52
4	D	361	ASP	CA-C	-5.34	1.46	1.52
3	A	91	PRO	N-CA	-5.34	1.40	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	P	384	ILE	N-CA	5.34	1.52	1.46
8	O	8	ALA	CA-CB	5.34	1.60	1.53
5	H	93	ASP	CA-CB	-5.34	1.44	1.53
8	O	85	ILE	CA-C	5.34	1.59	1.52
4	B	125	LYS	C-N	5.34	1.40	1.33
3	E	128	ILE	CA-CB	-5.33	1.47	1.54
3	A	346	GLN	C-N	5.33	1.40	1.33
3	E	29	SER	CA-C	-5.33	1.45	1.52
7	P	251	TRP	CA-C	-5.33	1.45	1.52
3	A	414	ALA	N-CA	5.33	1.52	1.46
3	A	561	VAL	C-N	5.33	1.41	1.33
4	F	105	SER	CA-C	-5.33	1.46	1.52
3	C	504	LYS	C-N	5.33	1.41	1.33
4	D	391	MET	C-N	5.33	1.41	1.33
1	M	171	ASN	N-CA	-5.33	1.40	1.46
4	D	325	ARG	CA-C	5.33	1.59	1.52
3	A	185	ILE	CA-CB	5.33	1.60	1.54
3	C	397	LYS	C-N	5.32	1.40	1.33
4	F	424	ALA	CA-CB	-5.32	1.44	1.53
6	I	179	LEU	N-CA	-5.32	1.39	1.45
3	A	315	THR	CA-CB	-5.32	1.44	1.53
7	P	323	GLN	C-N	5.32	1.41	1.33
8	O	357	MET	C-N	5.32	1.41	1.33
4	D	242	LEU	N-CA	-5.32	1.39	1.46
3	E	68	ALA	C-N	5.32	1.40	1.33
3	A	26	ALA	N-CA	-5.32	1.39	1.46
7	P	347	GLU	C-N	5.32	1.40	1.33
3	C	362	GLU	C-O	-5.32	1.17	1.24
3	A	297	PHE	CA-C	5.32	1.59	1.52
4	B	313	SER	CA-CB	5.32	1.61	1.53
8	O	298	ASP	N-CA	-5.32	1.39	1.46
3	A	280	TYR	CA-C	-5.32	1.46	1.52
3	A	530	GLY	CA-C	-5.31	1.44	1.52
3	C	316	THR	N-CA	-5.31	1.39	1.46
3	C	334	TYR	CA-C	-5.31	1.45	1.52
3	C	186	ALA	CA-C	-5.31	1.47	1.53
4	D	462	TRP	CA-CB	5.31	1.61	1.53
3	E	130	THR	CA-CB	5.31	1.60	1.53
7	P	108	LYS	N-CA	-5.31	1.39	1.46
8	O	253	LYS	C-N	5.31	1.41	1.33
3	C	291	ALA	N-CA	-5.31	1.39	1.46
4	D	195	ARG	CA-CB	5.31	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	O	317	LEU	N-CA	-5.31	1.40	1.46
6	I	143	GLU	C-N	5.31	1.41	1.33
4	D	145	ILE	CA-C	-5.31	1.45	1.52
4	B	397	GLY	CA-C	-5.31	1.45	1.51
8	O	251	ARG	C-N	5.31	1.40	1.33
7	P	208	LYS	CA-C	-5.30	1.45	1.52
8	O	112	GLU	CA-C	-5.30	1.45	1.52
7	P	476	THR	N-CA	5.30	1.52	1.46
3	A	289	GLU	N-CA	5.30	1.52	1.46
8	O	88	GLY	CA-C	-5.30	1.46	1.52
3	E	177	ARG	CA-C	-5.30	1.45	1.53
3	A	176	PRO	CA-C	-5.30	1.45	1.52
3	A	554	HIS	N-CA	-5.30	1.40	1.46
3	C	524	ASP	N-CA	-5.29	1.40	1.46
3	A	302	THR	C-N	5.29	1.41	1.33
5	H	9	THR	CA-C	5.29	1.59	1.52
4	D	67	VAL	CA-C	5.29	1.58	1.52
3	A	68	ALA	CA-C	-5.29	1.46	1.52
3	C	525	PHE	CA-CB	5.29	1.62	1.53
3	C	442	ASP	N-CA	-5.29	1.39	1.46
4	D	434	GLU	C-N	5.28	1.40	1.33
3	E	510	SER	C-O	-5.28	1.18	1.24
8	O	304	PHE	CA-C	5.28	1.59	1.52
5	J	3	GLN	N-CA	-5.28	1.40	1.46
6	K	156	ILE	C-N	5.28	1.41	1.34
3	C	290	MET	CA-C	-5.28	1.46	1.52
4	F	127	PHE	C-N	5.28	1.40	1.33
6	K	147	ASP	C-N	5.28	1.41	1.33
8	O	159	LEU	CA-CB	5.27	1.61	1.53
7	P	180	MET	C-N	5.27	1.40	1.33
3	C	515	LEU	CA-CB	5.27	1.61	1.53
3	E	115	ILE	CA-CB	5.27	1.61	1.54
1	M	108	GLN	CA-C	-5.27	1.46	1.52
3	E	339	LEU	CA-CB	5.27	1.61	1.53
3	A	395	ALA	C-N	5.26	1.39	1.32
4	B	275	LEU	CA-C	-5.26	1.46	1.52
4	F	113	PHE	C-N	5.26	1.40	1.33
7	P	137	GLN	CA-C	5.26	1.59	1.52
2	N	91	ILE	CA-CB	-5.26	1.47	1.54
3	C	86	LEU	CA-C	-5.26	1.46	1.52
4	B	459	ASP	N-CA	-5.26	1.39	1.46
6	I	97	ASP	N-CA	-5.26	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	B	244	LEU	CA-CB	5.25	1.61	1.53
3	C	83	ASP	N-CA	5.25	1.53	1.45
7	P	376	ASP	CA-C	5.25	1.59	1.52
2	N	28	ILE	CA-C	5.25	1.59	1.52
1	M	27	GLN	C-N	5.25	1.40	1.33
4	B	29	ASN	C-N	5.24	1.40	1.33
7	P	17	ARG	C-N	5.24	1.40	1.33
7	P	80	LEU	C-O	-5.24	1.17	1.24
6	I	210	LEU	CA-CB	5.24	1.61	1.53
4	B	134	ILE	CA-C	-5.24	1.45	1.52
4	B	159	ASP	CA-CB	5.24	1.61	1.53
4	D	83	THR	N-CA	-5.24	1.39	1.46
3	C	455	ASN	CA-C	-5.24	1.46	1.52
3	A	395	ALA	CA-C	-5.24	1.45	1.52
4	B	131	TYR	CA-CB	5.24	1.61	1.53
5	L	105	PRO	CA-C	5.24	1.59	1.52
5	H	35	ALA	CA-C	-5.24	1.46	1.52
3	C	574	THR	CA-C	5.23	1.59	1.52
4	D	388	GLY	CA-C	-5.23	1.44	1.51
3	E	318	VAL	CA-C	5.23	1.59	1.52
4	F	121	ASP	N-CA	-5.23	1.39	1.46
3	A	514	THR	N-CA	5.23	1.52	1.46
4	B	95	PHE	N-CA	5.23	1.52	1.46
8	O	70	LYS	CA-CB	5.23	1.61	1.53
7	P	203	ILE	C-N	5.23	1.41	1.34
6	G	59	ASP	CA-CB	5.23	1.61	1.53
4	D	458	LEU	N-CA	-5.22	1.40	1.46
6	I	214	ALA	CA-C	-5.22	1.46	1.52
4	F	460	GLN	N-CA	-5.22	1.40	1.46
6	K	126	VAL	CA-C	-5.22	1.46	1.52
3	E	194	ASP	CA-C	-5.22	1.45	1.52
3	E	458	VAL	N-CA	-5.22	1.39	1.46
7	P	194	ALA	N-CA	5.22	1.52	1.46
4	B	367	LYS	N-CA	-5.22	1.39	1.46
6	G	11	ASN	CA-C	-5.22	1.46	1.52
3	E	614	SER	CA-C	-5.22	1.46	1.52
3	A	425	ASP	N-CA	-5.22	1.38	1.45
7	P	413	ALA	CA-C	-5.22	1.46	1.52
4	F	266	LEU	CA-C	-5.21	1.46	1.52
5	L	53	GLU	CA-CB	5.21	1.62	1.53
4	D	154	GLY	CA-C	-5.21	1.44	1.51
3	C	86	LEU	C-N	5.21	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	225	GLU	CA-C	-5.21	1.45	1.52
7	P	44	ALA	CA-C	5.21	1.59	1.52
7	P	310	LYS	N-CA	5.21	1.52	1.46
3	E	560	ALA	CA-C	-5.21	1.46	1.52
6	K	132	LEU	CA-C	-5.21	1.48	1.53
6	G	100	PHE	CA-C	-5.21	1.45	1.52
7	P	4	THR	C-N	5.21	1.41	1.33
3	C	177	ARG	N-CA	-5.21	1.39	1.46
8	O	135	SER	C-N	5.21	1.40	1.33
3	A	307	THR	C-O	-5.20	1.18	1.24
7	P	34	GLU	CA-C	-5.20	1.45	1.52
4	F	232	ASN	C-O	-5.20	1.17	1.24
6	K	92	ARG	C-N	5.20	1.41	1.33
6	G	132	LEU	C-N	5.20	1.40	1.33
3	A	314	ARG	N-CA	-5.20	1.39	1.46
3	C	275	SER	C-N	5.20	1.40	1.33
3	A	493	GLU	CA-CB	5.20	1.61	1.53
3	E	319	ALA	N-CA	-5.19	1.40	1.46
1	M	139	TYR	C-N	5.19	1.40	1.33
4	B	346	ILE	C-N	5.19	1.41	1.34
6	K	34	GLU	CA-C	5.19	1.59	1.52
3	C	429	THR	CA-C	5.19	1.59	1.52
4	B	353	ILE	C-N	5.19	1.40	1.33
3	C	597	HIS	CA-C	-5.19	1.46	1.52
3	A	234	LEU	CA-C	-5.19	1.46	1.52
4	D	335	LEU	C-O	-5.19	1.17	1.24
3	E	160	SER	CA-CB	5.18	1.62	1.53
4	F	118	ARG	N-CA	-5.18	1.41	1.45
4	F	224	PHE	CA-CB	5.18	1.61	1.53
4	B	51	GLU	C-N	5.18	1.40	1.33
4	B	127	PHE	CA-C	5.18	1.59	1.52
1	M	211	GLN	CA-C	5.18	1.59	1.52
4	D	207	ASN	C-N	5.18	1.41	1.33
4	D	218	ASN	N-CA	-5.18	1.39	1.45
1	M	90	ALA	N-CA	-5.18	1.40	1.46
3	E	481	LEU	CA-C	-5.18	1.45	1.52
4	F	47	PRO	CA-CB	5.17	1.60	1.53
3	A	303	GLU	C-N	5.17	1.41	1.33
7	P	175	GLN	C-N	5.17	1.40	1.33
3	E	549	ALA	N-CA	-5.17	1.40	1.46
5	J	97	ILE	CA-C	-5.17	1.46	1.52
3	A	130	THR	CA-C	5.17	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	K	8	LEU	N-CA	5.17	1.56	1.46
3	A	122	ILE	C-O	-5.17	1.17	1.24
3	E	509	ASP	CA-C	-5.16	1.45	1.52
6	I	106	LYS	CA-C	-5.16	1.46	1.52
6	I	27	GLU	CA-C	-5.16	1.45	1.52
4	D	56	THR	CA-C	-5.16	1.46	1.52
6	K	148	LEU	C-N	5.16	1.40	1.33
1	M	81	TYR	CA-C	-5.16	1.46	1.52
3	C	97	GLY	CA-C	-5.16	1.44	1.51
3	C	58	GLY	CA-C	-5.16	1.46	1.51
6	I	53	ASN	CA-CB	5.16	1.61	1.53
6	I	56	ASN	CA-C	5.16	1.59	1.52
4	D	321	ARG	CA-CB	5.15	1.61	1.53
8	O	7	THR	CA-CB	5.15	1.62	1.53
4	D	218	ASN	CA-C	-5.15	1.45	1.53
4	F	400	SER	CA-CB	5.15	1.61	1.53
4	D	131	TYR	N-CA	5.15	1.52	1.46
6	I	14	ASN	C-O	-5.15	1.17	1.24
6	I	15	ASP	N-CA	5.15	1.52	1.46
4	F	228	ASP	CA-C	-5.15	1.46	1.52
4	D	72	GLY	CA-C	-5.14	1.44	1.51
4	F	88	VAL	CA-CB	-5.14	1.49	1.55
5	L	84	LYS	CA-CB	5.14	1.62	1.53
1	M	210	LYS	C-N	5.14	1.40	1.33
3	E	219	VAL	CA-C	5.14	1.57	1.52
3	A	148	VAL	CA-C	-5.14	1.47	1.52
4	B	308	MET	C-N	5.14	1.40	1.33
8	O	251	ARG	CA-CB	5.14	1.61	1.53
4	D	214	ALA	CA-C	-5.14	1.46	1.52
3	E	357	SER	CA-C	-5.14	1.45	1.52
5	L	27	TYR	CA-CB	5.14	1.61	1.53
6	K	144	ARG	CA-C	-5.14	1.45	1.52
6	K	153	LYS	CA-C	-5.14	1.46	1.52
7	P	305	HIS	CA-CB	5.14	1.61	1.53
8	O	288	LEU	C-N	5.14	1.40	1.33
3	C	550	PHE	CA-CB	5.13	1.61	1.53
4	D	244	LEU	N-CA	-5.13	1.39	1.45
5	J	14	GLU	C-N	5.13	1.41	1.33
3	E	191	TYR	CA-CB	5.13	1.63	1.54
3	A	27	ILE	CA-CB	-5.13	1.47	1.53
7	P	110	GLY	CA-C	5.13	1.59	1.51
8	O	365	ASN	N-CA	-5.13	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	I	77	LYS	CA-CB	5.13	1.61	1.53
3	E	262	LYS	CA-CB	5.12	1.61	1.53
4	D	385	SER	N-CA	-5.12	1.41	1.46
4	F	333	PRO	CA-CB	-5.12	1.47	1.53
3	A	329	ARG	N-CA	-5.12	1.40	1.46
6	G	48	THR	CA-C	-5.12	1.46	1.52
4	B	317	GLU	C-N	5.12	1.40	1.33
3	E	194	ASP	C-N	5.12	1.40	1.33
7	P	447	LYS	CA-CB	5.12	1.61	1.53
8	O	306	ILE	N-CA	-5.12	1.40	1.46
2	N	85	THR	CA-CB	-5.12	1.46	1.54
3	C	108	ILE	C-N	5.12	1.40	1.33
6	K	161	GLY	CA-C	5.12	1.58	1.51
3	C	597	HIS	CA-CB	5.11	1.60	1.53
4	D	54	ASN	CA-C	-5.11	1.46	1.52
6	G	95	SER	C-N	5.11	1.40	1.33
4	B	478	PRO	C-N	5.11	1.40	1.33
3	C	27	ILE	C-O	-5.11	1.19	1.24
3	E	479	PRO	C-O	-5.11	1.17	1.24
3	A	89	GLY	CA-C	5.11	1.58	1.51
5	L	99	ILE	C-N	5.11	1.40	1.33
4	D	403	LEU	CA-C	-5.10	1.46	1.52
7	P	177	ILE	CA-CB	-5.10	1.48	1.54
7	P	331	SER	N-CA	-5.10	1.40	1.46
8	O	53	PHE	C-N	5.10	1.40	1.33
3	C	325	PRO	N-CA	-5.10	1.41	1.47
4	B	404	TYR	N-CA	-5.10	1.40	1.46
1	M	158	ILE	CA-C	5.10	1.59	1.52
1	M	216	LYS	C-N	5.10	1.40	1.33
3	A	261	GLY	CA-C	-5.10	1.44	1.51
3	A	338	THR	C-N	5.10	1.40	1.33
6	K	183	LEU	CA-C	-5.10	1.46	1.52
3	C	177	ARG	CA-CB	5.10	1.61	1.53
4	B	220	GLU	C-N	5.10	1.40	1.33
7	P	320	PRO	N-CA	-5.09	1.40	1.47
4	D	117	GLY	CA-C	-5.09	1.44	1.51
2	N	18	THR	CA-CB	-5.09	1.45	1.53
3	C	303	GLU	N-CA	-5.09	1.40	1.46
3	C	570	LEU	CA-CB	5.09	1.61	1.53
3	E	576	ASP	CA-CB	5.09	1.61	1.53
7	P	331	SER	CA-CB	5.09	1.61	1.53
3	A	392	TYR	CA-C	-5.09	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	412	ASP	N-CA	5.08	1.52	1.46
4	D	429	ASP	C-O	-5.08	1.17	1.24
7	P	323	GLN	CA-C	-5.08	1.46	1.52
7	P	432	GLU	CA-CB	5.08	1.61	1.53
3	C	267	GLN	CA-C	-5.08	1.46	1.52
4	D	267	ALA	C-N	5.08	1.40	1.33
4	F	463	SER	C-N	5.08	1.40	1.33
7	P	177	ILE	N-CA	-5.08	1.41	1.46
8	O	42	ARG	C-N	5.08	1.40	1.33
6	I	20	MET	CA-CB	5.08	1.61	1.53
3	C	309	GLU	CA-CB	5.08	1.61	1.53
6	K	206	ARG	C-N	5.08	1.40	1.33
3	A	275	SER	N-CA	5.08	1.52	1.46
3	A	103	THR	CA-C	-5.08	1.46	1.52
5	H	82	GLU	C-N	5.08	1.40	1.33
6	K	59	ASP	CA-CB	5.07	1.61	1.53
6	I	47	LYS	CA-CB	5.07	1.61	1.53
4	D	332	ILE	N-CA	-5.07	1.41	1.46
6	K	88	VAL	CA-C	-5.07	1.46	1.52
8	O	53	PHE	CA-C	-5.07	1.46	1.52
3	E	389	ALA	C-N	5.07	1.40	1.33
4	F	403	LEU	CA-C	-5.07	1.46	1.52
8	O	371	LEU	CA-CB	5.06	1.61	1.53
8	O	390	ILE	CA-CB	5.06	1.60	1.54
3	C	208	ASP	CA-CB	5.06	1.61	1.53
3	C	590	SER	C-N	5.06	1.40	1.33
6	G	110	ILE	CA-CB	-5.06	1.48	1.54
1	M	183	ASN	CA-CB	5.06	1.61	1.53
2	N	101	TYR	C-N	5.06	1.39	1.33
4	F	88	VAL	CA-C	-5.06	1.46	1.52
2	N	22	LEU	N-CA	5.06	1.52	1.46
4	D	75	ALA	C-N	5.06	1.39	1.33
3	A	95	GLU	C-N	5.06	1.40	1.33
3	A	586	PHE	CA-CB	5.06	1.61	1.53
5	L	26	LYS	CA-CB	5.06	1.61	1.53
7	P	11	THR	N-CA	-5.06	1.40	1.46
4	D	334	ILE	N-CA	5.06	1.52	1.46
6	K	43	TYR	CA-CB	5.06	1.61	1.53
6	K	55	THR	C-N	5.06	1.40	1.33
4	F	152	SER	CA-CB	5.05	1.61	1.53
4	B	243	ASN	C-N	5.05	1.40	1.33
4	D	331	GLN	C-N	5.05	1.37	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	371	LEU	N-CA	5.05	1.52	1.46
4	F	244	LEU	C-N	5.05	1.40	1.33
4	B	375	VAL	N-CA	5.05	1.52	1.46
3	A	595	GLU	CA-CB	5.05	1.61	1.53
3	C	249	GLY	N-CA	-5.05	1.37	1.44
7	P	150	LEU	CA-C	-5.04	1.46	1.52
4	D	100	LEU	CA-CB	5.04	1.61	1.53
4	D	316	TYR	N-CA	-5.04	1.39	1.46
4	F	302	ARG	CA-CB	-5.04	1.46	1.53
8	O	43	ALA	CA-C	-5.04	1.46	1.52
8	O	104	ASN	C-O	5.04	1.30	1.23
5	J	39	ALA	C-N	5.04	1.40	1.34
4	B	279	THR	C-N	5.04	1.40	1.33
4	B	373	ILE	C-N	5.04	1.40	1.33
8	O	17	PRO	CA-CB	-5.04	1.46	1.53
8	O	172	VAL	CA-C	-5.04	1.46	1.52
1	M	65	ALA	C-N	-5.04	1.27	1.33
3	A	60	VAL	N-CA	-5.04	1.40	1.46
3	A	230	ASP	CA-C	-5.04	1.46	1.52
6	K	34	GLU	N-CA	-5.04	1.40	1.46
4	D	138	PRO	N-CA	-5.03	1.41	1.47
4	D	173	PHE	CA-CB	5.03	1.60	1.53
7	P	411	VAL	CA-C	-5.03	1.46	1.52
8	O	13	LEU	N-CA	-5.03	1.40	1.46
8	O	151	ASN	N-CA	-5.03	1.39	1.46
7	P	47	LEU	N-CA	-5.03	1.40	1.46
1	M	42	ARG	C-N	5.03	1.40	1.33
3	A	358	SER	C-N	5.03	1.41	1.33
3	C	278	ILE	N-CA	-5.03	1.40	1.46
3	E	88	THR	CA-C	-5.03	1.45	1.52
4	D	454	VAL	CA-CB	-5.03	1.47	1.54
1	M	192	LEU	CA-CB	5.02	1.61	1.53
3	E	135	ARG	CA-C	-5.02	1.46	1.52
4	F	438	LYS	CA-C	-5.02	1.46	1.52
6	K	137	ALA	N-CA	-5.02	1.39	1.46
3	A	397	LYS	CA-CB	5.02	1.60	1.53
3	A	518	ALA	C-O	-5.02	1.18	1.24
4	B	357	GLN	CA-C	-5.02	1.46	1.52
7	P	199	TYR	CA-C	-5.02	1.46	1.52
4	B	164	ILE	CA-C	-5.02	1.46	1.52
8	O	54	LYS	CA-CB	5.02	1.61	1.53
3	E	430	ALA	CA-C	5.02	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	F	321	ARG	CA-C	-5.02	1.46	1.52
4	D	72	GLY	C-N	5.01	1.40	1.33
3	E	261	GLY	CA-C	-5.01	1.44	1.51
3	E	172	ILE	CA-CB	5.01	1.59	1.54
6	K	197	ILE	CA-C	5.01	1.58	1.52
7	P	432	GLU	CA-C	5.01	1.59	1.52
8	O	12	ILE	N-CA	-5.01	1.40	1.46
3	C	300	LEU	CA-C	5.01	1.60	1.53
6	G	222	LEU	C-N	5.01	1.40	1.33
6	I	138	ILE	C-N	-5.01	1.27	1.33
4	F	162	ASN	C-N	5.00	1.40	1.33
4	B	183	ILE	C-N	5.00	1.40	1.33
6	K	223	TYR	N-CA	-5.00	1.39	1.46
6	I	75	ILE	CA-CB	-5.00	1.48	1.54
3	C	31	SER	CA-C	-5.00	1.47	1.53
3	C	267	GLN	CA-CB	5.00	1.61	1.53
3	E	556	GLU	N-CA	5.00	1.52	1.46
4	F	163	SER	CA-CB	5.00	1.60	1.53
3	A	154	GLY	C-N	5.00	1.40	1.33

All (2645) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	346	ILE	CA-C-O	-11.54	110.95	118.69
6	G	165	GLN	CA-C-N	11.50	137.17	120.38
6	G	165	GLN	C-N-CA	11.50	137.17	120.38
7	P	211	MET	CA-C-O	-11.13	107.54	118.34
3	C	425	ASP	CA-C-N	11.00	132.23	119.47
3	C	425	ASP	C-N-CA	11.00	132.23	119.47
8	O	331	ALA	CA-C-N	10.91	133.08	123.04
8	O	331	ALA	C-N-CA	10.91	133.08	123.04
5	H	79	GLU	N-CA-C	-10.82	98.73	112.90
4	F	156	SER	CA-C-N	10.75	134.68	120.28
4	F	156	SER	C-N-CA	10.75	134.68	120.28
3	E	290	MET	N-CA-C	-10.58	99.54	111.82
3	A	432	LEU	CA-C-N	10.36	131.44	119.94
3	A	432	LEU	C-N-CA	10.36	131.44	119.94
3	E	304	MET	N-CA-C	-10.25	99.47	112.90
8	O	183	ASP	N-CA-C	-10.19	101.91	114.75
6	I	165	GLN	CA-C-N	10.05	137.50	120.71
6	I	165	GLN	C-N-CA	10.05	137.50	120.71
4	B	324	GLY	N-CA-C	-9.99	102.89	113.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	O	198	VAL	CA-C-N	9.96	130.04	119.78
8	O	198	VAL	C-N-CA	9.96	130.04	119.78
3	A	542	LYS	CA-C-N	9.91	133.56	120.28
3	A	542	LYS	C-N-CA	9.91	133.56	120.28
1	M	15	LEU	CA-C-O	-9.91	110.42	120.82
3	E	612	ALA	CA-C-N	9.82	133.44	120.28
3	E	612	ALA	C-N-CA	9.82	133.44	120.28
3	E	331	ALA	CA-C-N	9.79	133.75	120.54
3	E	331	ALA	C-N-CA	9.79	133.75	120.54
6	K	45	ILE	N-CA-C	9.78	119.81	110.42
7	P	282	ILE	N-CA-C	-9.76	102.00	113.42
6	G	53	ASN	CA-C-N	9.73	137.23	120.68
6	G	53	ASN	C-N-CA	9.73	137.23	120.68
8	O	62	ILE	CA-C-N	9.63	133.65	120.46
8	O	62	ILE	C-N-CA	9.63	133.65	120.46
5	H	29	GLN	CA-C-N	9.56	132.87	120.44
5	H	29	GLN	C-N-CA	9.56	132.87	120.44
7	P	143	GLY	CA-C-N	9.55	133.43	120.54
7	P	143	GLY	C-N-CA	9.55	133.43	120.54
4	B	462	TRP	CA-C-N	9.49	133.00	120.28
4	B	462	TRP	C-N-CA	9.49	133.00	120.28
7	P	8	MET	N-CA-C	-9.42	103.88	114.62
8	O	322	PRO	CA-C-N	9.39	129.61	119.28
8	O	322	PRO	C-N-CA	9.39	129.61	119.28
3	E	453	SER	CA-C-N	9.39	134.39	120.69
3	E	453	SER	C-N-CA	9.39	134.39	120.69
4	F	179	PRO	CA-C-N	9.37	133.77	120.28
4	F	179	PRO	C-N-CA	9.37	133.77	120.28
6	I	91	ALA	CA-C-N	9.26	132.69	120.28
6	I	91	ALA	C-N-CA	9.26	132.69	120.28
8	O	349	GLY	CA-C-N	9.25	133.60	120.28
8	O	349	GLY	C-N-CA	9.25	133.60	120.28
3	C	434	ILE	CA-C-N	9.23	134.68	120.75
3	C	434	ILE	C-N-CA	9.23	134.68	120.75
7	P	434	LEU	CA-C-N	9.22	128.95	119.64
7	P	434	LEU	C-N-CA	9.22	128.95	119.64
4	D	74	ARG	N-CA-CB	9.19	126.02	110.49
6	I	154	ASP	CA-C-N	9.19	132.59	120.28
6	I	154	ASP	C-N-CA	9.19	132.59	120.28
3	C	377	ASP	CA-C-N	9.18	137.46	123.05
3	C	377	ASP	C-N-CA	9.18	137.46	123.05
1	M	178	ILE	CA-C-O	-9.18	112.54	118.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	453	THR	N-CA-C	-9.13	96.55	109.69
4	F	158	ILE	CA-C-N	9.12	132.29	120.44
4	F	158	ILE	C-N-CA	9.12	132.29	120.44
3	E	185	ILE	CA-C-O	9.09	130.25	120.53
3	E	194	ASP	N-CA-C	-9.08	101.17	112.88
6	K	210	LEU	CA-C-N	9.07	132.43	120.28
6	K	210	LEU	C-N-CA	9.07	132.43	120.28
4	F	344	HIS	CA-C-O	-9.06	111.31	120.64
6	I	213	GLU	N-CA-C	-9.03	102.41	113.97
6	G	196	LYS	N-CA-C	-9.00	101.86	113.12
7	P	26	ALA	CA-C-N	8.99	132.33	120.28
7	P	26	ALA	C-N-CA	8.99	132.33	120.28
4	B	120	ILE	N-CA-C	-8.98	103.64	112.17
4	D	257	ARG	CA-C-N	8.97	133.03	120.29
4	D	257	ARG	C-N-CA	8.97	133.03	120.29
3	E	278	ILE	CB-CA-C	8.97	123.43	110.33
4	B	352	TYR	CA-C-N	8.97	133.15	120.42
4	B	352	TYR	C-N-CA	8.97	133.15	120.42
4	B	110	GLY	CA-C-N	8.95	135.34	122.09
4	B	110	GLY	C-N-CA	8.95	135.34	122.09
4	F	350	THR	CA-C-N	8.95	131.32	120.14
4	F	350	THR	C-N-CA	8.95	131.32	120.14
7	P	418	ILE	CA-C-N	8.94	132.71	120.46
7	P	418	ILE	C-N-CA	8.94	132.71	120.46
7	P	450	ILE	CA-C-O	-8.94	111.66	120.95
1	M	199	GLU	CA-C-N	8.94	132.98	120.29
1	M	199	GLU	C-N-CA	8.94	132.98	120.29
3	A	399	VAL	CA-C-N	8.92	133.38	120.71
3	A	399	VAL	C-N-CA	8.92	133.38	120.71
8	O	250	ALA	N-CA-C	8.92	121.00	111.28
7	P	197	PRO	CA-C-N	8.90	132.20	120.28
7	P	197	PRO	C-N-CA	8.90	132.20	120.28
6	I	46	GLU	CA-C-N	8.87	131.97	120.44
6	I	46	GLU	C-N-CA	8.87	131.97	120.44
4	F	249	THR	N-CA-C	8.86	120.94	111.28
3	C	46	TYR	CA-C-N	8.85	133.70	121.05
3	C	46	TYR	C-N-CA	8.85	133.70	121.05
7	P	267	TYR	CA-C-N	8.83	132.46	120.54
7	P	267	TYR	C-N-CA	8.83	132.46	120.54
8	O	341	LYS	CA-C-N	8.76	131.83	120.44
8	O	341	LYS	C-N-CA	8.76	131.83	120.44
4	B	130	ASP	N-CA-C	-8.76	96.02	109.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	81	ILE	CA-C-N	8.74	131.80	120.44
7	P	81	ILE	C-N-CA	8.74	131.80	120.44
7	P	114	VAL	CA-C-N	8.72	131.96	120.28
7	P	114	VAL	C-N-CA	8.72	131.96	120.28
3	C	432	LEU	O-C-N	8.71	131.35	122.12
4	D	129	GLU	N-CA-C	-8.70	103.09	114.31
5	L	87	ALA	CA-C-O	8.68	129.88	120.24
7	P	321	THR	CA-C-N	8.64	132.69	120.42
7	P	321	THR	C-N-CA	8.64	132.69	120.42
4	F	153	THR	N-CA-C	-8.63	102.51	113.72
4	D	206	GLU	CA-C-N	8.62	133.02	120.95
4	D	206	GLU	C-N-CA	8.62	133.02	120.95
7	P	274	LEU	CA-C-N	8.62	131.83	120.28
7	P	274	LEU	C-N-CA	8.62	131.83	120.28
3	A	260	CYS	CA-C-O	8.62	128.19	118.97
1	M	18	MET	N-CA-C	8.61	121.61	111.71
4	F	30	THR	CA-C-N	8.61	132.69	120.98
4	F	30	THR	C-N-CA	8.61	132.69	120.98
3	A	508	SER	N-CA-CB	8.60	123.51	110.70
4	F	219	LEU	N-CA-C	8.58	120.63	111.28
4	D	57	LEU	N-CA-C	-8.55	99.28	110.39
3	C	553	TYR	CA-C-O	-8.54	111.37	120.42
7	P	209	LYS	N-CA-C	8.53	121.81	111.40
3	A	272	TYR	CA-C-N	8.50	133.20	121.05
3	A	272	TYR	C-N-CA	8.50	133.20	121.05
6	G	195	ASP	N-CA-CB	8.50	124.85	110.49
4	D	334	ILE	N-CA-C	-8.49	96.23	108.11
7	P	269	SER	CA-C-N	8.48	131.64	120.28
7	P	269	SER	C-N-CA	8.48	131.64	120.28
3	C	390	SER	CA-C-N	8.48	131.97	120.44
3	C	390	SER	C-N-CA	8.48	131.97	120.44
7	P	179	GLN	CA-C-N	8.47	131.45	120.44
7	P	179	GLN	C-N-CA	8.47	131.45	120.44
4	B	282	SER	CA-C-N	8.45	132.29	120.29
4	B	282	SER	C-N-CA	8.45	132.29	120.29
4	D	94	GLU	N-CA-C	-8.45	96.14	109.23
8	O	10	ASP	N-CA-C	-8.44	97.06	110.14
1	M	146	LEU	CA-C-N	8.43	131.35	120.56
1	M	146	LEU	C-N-CA	8.43	131.35	120.56
3	E	324	MET	CA-C-O	-8.42	111.17	120.69
3	C	181	THR	N-CA-C	-8.39	95.73	109.40
6	G	55	THR	CA-C-O	8.38	129.31	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	348	ASN	CA-C-N	8.37	131.49	120.28
7	P	348	ASN	C-N-CA	8.37	131.49	120.28
6	G	153	LYS	N-CA-C	8.36	120.39	111.28
3	A	36	ILE	N-CA-C	-8.35	96.09	108.12
3	A	101	MET	CA-C-N	8.35	133.96	122.19
3	A	101	MET	C-N-CA	8.35	133.96	122.19
3	A	309	GLU	CA-C-O	-8.34	114.06	120.48
8	O	137	GLU	CA-C-N	8.33	132.12	120.29
8	O	137	GLU	C-N-CA	8.33	132.12	120.29
3	A	359	ARG	CA-C-N	8.33	132.12	120.29
3	A	359	ARG	C-N-CA	8.33	132.12	120.29
3	A	287	GLY	CA-C-N	8.29	132.91	120.31
3	A	287	GLY	C-N-CA	8.29	132.91	120.31
3	E	476	PRO	N-CA-C	8.29	124.24	111.15
3	C	100	LEU	N-CA-C	8.28	121.51	111.40
4	F	195	ARG	CA-C-O	-8.28	110.31	118.34
4	B	322	VAL	N-CA-C	-8.28	96.56	108.48
7	P	113	THR	CA-C-N	8.28	132.17	120.42
7	P	113	THR	C-N-CA	8.28	132.17	120.42
3	E	341	GLU	CA-C-N	8.25	131.17	120.44
3	E	341	GLU	C-N-CA	8.25	131.17	120.44
7	P	78	ILE	CA-C-O	-8.25	113.16	118.69
2	N	36	ASN	N-CA-C	-8.24	100.33	110.88
4	B	72	GLY	O-C-N	8.23	130.07	122.99
8	O	339	LYS	N-CA-C	-8.23	102.39	111.36
7	P	400	GLU	CA-C-N	8.21	131.29	120.28
7	P	400	GLU	C-N-CA	8.21	131.29	120.28
6	I	217	ALA	CA-C-N	8.21	132.08	120.42
6	I	217	ALA	C-N-CA	8.21	132.08	120.42
4	F	483	GLU	CA-C-O	8.20	129.11	120.42
3	C	246	CYS	N-CA-C	-8.19	96.41	109.59
7	P	152	GLN	N-CA-CB	8.18	122.00	109.97
4	B	322	VAL	CA-C-N	8.17	132.73	121.05
4	B	322	VAL	C-N-CA	8.17	132.73	121.05
6	K	215	LEU	CA-C-O	-8.17	110.73	118.73
13	I	54	ILE	CA-C-N	8.16	125.38	120.24
13	I	54	ILE	C-N-CA	8.16	125.38	120.24
3	A	345	ASP	N-CA-CB	8.15	123.92	110.39
6	G	103	THR	CA-C-O	-8.14	111.92	120.55
4	B	126	VAL	N-CA-C	8.10	118.91	110.72
4	F	400	SER	O-C-N	8.09	130.70	122.12
4	D	409	ILE	CA-C-N	8.09	128.90	120.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	409	ILE	C-N-CA	8.09	128.90	120.00
8	O	244	GLN	CA-C-N	8.08	131.11	120.28
8	O	244	GLN	C-N-CA	8.08	131.11	120.28
4	D	383	MET	N-CA-C	-8.08	104.57	114.75
7	P	41	ALA	CA-C-N	8.08	131.10	120.28
7	P	41	ALA	C-N-CA	8.08	131.10	120.28
7	P	120	ASP	CB-CA-C	-8.07	98.83	110.13
4	F	354	THR	N-CA-CB	8.06	122.55	110.29
7	P	270	ASP	CA-C-N	8.05	131.07	120.28
7	P	270	ASP	C-N-CA	8.05	131.07	120.28
4	D	155	VAL	CA-C-N	8.05	131.06	120.28
4	D	155	VAL	C-N-CA	8.05	131.06	120.28
4	D	261	THR	O-C-N	-8.05	112.97	122.15
4	D	401	ASN	N-CA-C	8.03	119.66	111.07
8	O	267	ILE	CA-C-N	8.02	131.68	120.29
8	O	267	ILE	C-N-CA	8.02	131.68	120.29
6	K	66	LEU	N-CA-C	-8.02	102.48	111.14
3	E	553	TYR	O-C-N	8.01	130.61	122.12
4	D	46	PHE	O-C-N	-8.01	113.18	120.71
6	K	173	VAL	N-CA-CB	8.01	120.58	111.21
6	G	49	ASN	CA-C-O	-8.00	112.60	121.00
3	E	424	SER	N-CA-C	-7.99	100.12	112.99
3	E	266	SER	CB-CA-C	-7.98	97.28	110.85
3	C	185	ILE	CB-CA-C	7.98	121.36	110.99
6	K	36	GLN	CA-C-N	7.96	131.59	120.29
6	K	36	GLN	C-N-CA	7.96	131.59	120.29
8	O	353	GLY	O-C-N	7.95	133.04	122.70
3	E	360	TRP	CA-C-N	7.95	131.58	120.29
3	E	360	TRP	C-N-CA	7.95	131.58	120.29
7	P	243	GLN	CA-C-N	7.94	130.92	120.28
7	P	243	GLN	C-N-CA	7.94	130.92	120.28
6	K	67	LYS	CA-C-O	-7.94	112.14	120.55
5	H	54	LEU	N-CA-C	-7.93	101.93	111.69
7	P	284	GLU	CA-C-N	7.93	131.55	120.29
7	P	284	GLU	C-N-CA	7.93	131.55	120.29
3	A	182	ILE	N-CA-CB	7.93	120.04	111.00
8	O	196	VAL	N-CA-C	-7.92	96.71	108.12
3	C	97	GLY	CA-C-N	7.92	129.74	119.84
3	C	97	GLY	C-N-CA	7.92	129.74	119.84
4	F	234	SER	N-CA-C	-7.92	102.92	112.59
6	I	215	LEU	CA-C-O	-7.91	111.35	118.63
3	A	259	GLY	N-CA-C	-7.90	103.11	115.67

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	F	255	THR	CA-C-O	-7.90	110.99	118.73
5	J	12	GLN	CA-C-N	7.89	130.70	120.44
5	J	12	GLN	C-N-CA	7.89	130.70	120.44
7	P	75	LYS	CA-C-N	7.88	134.93	121.14
7	P	75	LYS	C-N-CA	7.88	134.93	121.14
3	C	98	PRO	N-CA-CB	7.88	111.52	103.25
3	C	490	SER	CA-C-N	7.87	130.82	120.28
3	C	490	SER	C-N-CA	7.87	130.82	120.28
3	A	90	LYS	O-C-N	-7.87	115.91	121.65
3	A	575	GLY	CA-C-N	7.87	131.46	120.29
3	A	575	GLY	C-N-CA	7.87	131.46	120.29
6	K	146	VAL	N-CA-CB	7.86	121.23	110.54
6	I	11	ASN	CA-C-N	7.86	130.81	120.28
6	I	11	ASN	C-N-CA	7.86	130.81	120.28
3	A	297	PHE	O-C-N	-7.86	113.49	120.48
4	B	63	ARG	CA-C-O	-7.86	111.92	121.11
3	C	141	PHE	O-C-N	7.85	132.17	123.22
7	P	189	LEU	CA-C-N	7.83	130.61	120.44
7	P	189	LEU	C-N-CA	7.83	130.61	120.44
4	D	183	ILE	N-CA-C	-7.82	102.83	110.72
4	F	475	ARG	N-CA-C	-7.81	102.81	112.88
4	D	407	TYR	CA-C-N	7.79	131.35	120.29
4	D	407	TYR	C-N-CA	7.79	131.35	120.29
7	P	343	LYS	CA-C-N	7.79	131.03	120.44
7	P	343	LYS	C-N-CA	7.79	131.03	120.44
3	E	137	ILE	N-CA-CB	7.79	120.33	110.99
7	P	404	ALA	CA-C-N	7.76	130.68	120.28
7	P	404	ALA	C-N-CA	7.76	130.68	120.28
5	H	46	TYR	CA-C-N	7.76	131.19	120.63
5	H	46	TYR	C-N-CA	7.76	131.19	120.63
3	E	270	SER	CB-CA-C	-7.76	97.92	110.79
3	E	326	VAL	CA-C-N	7.75	130.67	120.28
3	E	326	VAL	C-N-CA	7.75	130.67	120.28
3	E	399	VAL	CA-C-N	7.75	131.82	120.90
3	E	399	VAL	C-N-CA	7.75	131.82	120.90
5	H	22	SER	N-CA-CB	7.74	121.50	110.12
3	C	322	SER	CA-C-N	7.74	131.28	120.29
3	C	322	SER	C-N-CA	7.74	131.28	120.29
6	G	167	ALA	CA-C-N	7.74	128.20	119.92
6	G	167	ALA	C-N-CA	7.74	128.20	119.92
7	P	342	LEU	CA-C-N	7.74	130.65	120.28
7	P	342	LEU	C-N-CA	7.74	130.65	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	H	99	ILE	CA-C-O	-7.73	112.98	121.17
7	P	281	THR	CA-C-N	7.72	131.04	121.85
7	P	281	THR	C-N-CA	7.72	131.04	121.85
4	B	314	THR	O-C-N	7.71	130.29	122.12
7	P	185	VAL	CA-C-N	7.71	130.61	120.28
7	P	185	VAL	C-N-CA	7.71	130.61	120.28
6	G	189	VAL	CA-C-N	7.71	133.93	122.91
6	G	189	VAL	C-N-CA	7.71	133.93	122.91
3	A	478	PHE	CA-C-O	-7.70	111.20	118.44
4	F	423	GLU	CA-C-O	-7.68	112.78	120.70
4	B	415	ALA	CA-C-N	7.68	131.19	120.29
4	B	415	ALA	C-N-CA	7.68	131.19	120.29
4	D	216	GLY	O-C-N	7.67	129.55	122.57
7	P	413	ALA	N-CA-C	-7.67	96.89	109.40
3	A	45	MET	CA-C-O	7.67	129.01	120.43
1	M	39	LEU	CA-C-N	7.65	131.94	120.31
1	M	39	LEU	C-N-CA	7.65	131.94	120.31
3	C	157	ILE	CA-C-N	7.65	133.68	120.68
3	C	157	ILE	C-N-CA	7.65	133.68	120.68
6	K	75	ILE	N-CA-C	-7.64	103.01	110.72
4	D	417	LYS	CA-C-O	7.63	128.84	120.82
3	A	132	ALA	N-CA-C	7.62	119.59	111.28
3	A	464	THR	CA-C-N	7.61	130.69	120.65
3	A	464	THR	C-N-CA	7.61	130.69	120.65
2	N	74	ALA	CA-C-N	7.61	130.47	120.28
2	N	74	ALA	C-N-CA	7.61	130.47	120.28
3	C	518	ALA	CA-C-N	7.60	130.47	120.28
3	C	518	ALA	C-N-CA	7.60	130.47	120.28
3	E	284	GLY	N-CA-C	-7.59	95.19	113.18
3	C	399	VAL	N-CA-C	-7.59	96.62	108.23
4	B	304	TYR	N-CA-C	-7.59	99.84	110.31
1	M	151	SER	CA-C-N	7.58	131.20	120.28
1	M	151	SER	C-N-CA	7.58	131.20	120.28
3	C	430	ALA	N-CA-C	7.58	119.55	111.28
7	P	385	ASP	CA-C-N	7.58	130.44	120.28
7	P	385	ASP	C-N-CA	7.58	130.44	120.28
8	O	141	LEU	CA-C-N	7.58	130.29	120.44
8	O	141	LEU	C-N-CA	7.58	130.29	120.44
4	B	113	PHE	O-C-N	-7.55	113.44	122.96
7	P	152	GLN	N-CA-C	-7.55	99.11	110.28
8	O	316	VAL	O-C-N	-7.54	114.55	121.87
4	F	151	ILE	CA-C-N	7.54	132.20	121.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	F	151	ILE	C-N-CA	7.54	132.20	121.42
5	L	81	ALA	N-CA-C	-7.54	104.21	113.41
3	E	46	TYR	CB-CA-C	-7.54	96.94	110.35
3	E	118	GLU	N-CA-C	7.53	119.39	111.03
1	M	122	LEU	CB-CA-C	-7.53	98.78	110.37
6	I	113	ASN	CA-C-N	7.53	131.12	120.28
6	I	113	ASN	C-N-CA	7.53	131.12	120.28
3	A	468	ASN	CB-CA-C	7.53	123.28	110.79
7	P	77	LEU	CA-C-N	7.53	126.35	120.33
7	P	77	LEU	C-N-CA	7.53	126.35	120.33
5	J	5	ASN	N-CA-C	-7.52	101.99	112.45
6	I	86	LEU	CA-C-N	7.52	130.22	120.44
6	I	86	LEU	C-N-CA	7.52	130.22	120.44
6	I	157	MET	CA-C-N	7.52	130.58	120.65
6	I	157	MET	C-N-CA	7.52	130.58	120.65
4	F	67	VAL	O-C-N	-7.52	114.48	122.68
4	F	308	MET	CA-C-N	7.51	130.35	120.28
4	F	308	MET	C-N-CA	7.51	130.35	120.28
3	C	185	ILE	CA-C-N	7.51	130.83	120.39
3	C	185	ILE	C-N-CA	7.51	130.83	120.39
6	G	102	GLU	CA-C-N	7.50	130.33	120.28
6	G	102	GLU	C-N-CA	7.50	130.33	120.28
4	F	255	THR	CA-C-N	7.50	127.53	119.28
4	F	255	THR	C-N-CA	7.50	127.53	119.28
3	A	263	THR	CA-C-N	7.50	130.01	120.56
3	A	263	THR	C-N-CA	7.50	130.01	120.56
4	D	480	ILE	CA-C-N	7.49	130.32	120.28
4	D	480	ILE	C-N-CA	7.49	130.32	120.28
4	D	477	SER	CA-C-N	7.48	127.19	119.56
4	D	477	SER	C-N-CA	7.48	127.19	119.56
3	C	533	THR	N-CA-C	-7.48	104.00	113.72
4	D	40	ILE	CA-C-N	7.48	133.77	122.93
4	D	40	ILE	C-N-CA	7.48	133.77	122.93
5	J	88	GLU	CA-C-N	7.48	130.80	120.63
5	J	88	GLU	C-N-CA	7.48	130.80	120.63
2	N	73	ILE	CA-C-N	7.47	130.29	120.28
2	N	73	ILE	C-N-CA	7.47	130.29	120.28
5	J	65	VAL	N-CA-C	-7.47	104.03	113.22
3	E	164	ASN	N-CA-CB	7.47	123.11	110.49
5	L	8	ALA	CA-C-N	7.47	130.90	120.29
5	L	8	ALA	C-N-CA	7.47	130.90	120.29
4	F	92	THR	N-CA-C	-7.47	97.97	109.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	B	42	GLU	N-CA-C	-7.47	96.56	108.73
6	G	215	LEU	O-C-N	-7.47	113.46	120.55
3	C	478	PHE	O-C-N	-7.46	113.57	120.51
3	C	51	VAL	N-CA-CB	7.46	122.80	110.86
3	C	93	SER	N-CA-C	-7.46	98.59	109.18
8	O	135	SER	CA-C-N	7.45	130.27	120.28
8	O	135	SER	C-N-CA	7.45	130.27	120.28
8	O	306	ILE	N-CA-CB	7.45	119.27	110.55
3	E	285	GLU	CA-C-N	7.42	130.23	120.28
3	E	285	GLU	C-N-CA	7.42	130.23	120.28
3	A	511	ASP	O-C-N	-7.42	113.14	122.27
3	E	452	PRO	N-CA-CB	7.42	110.76	102.60
7	P	129	ASP	N-CA-CB	7.41	120.76	110.01
3	C	355	ASP	CB-CA-C	-7.39	100.51	110.79
4	F	250	ILE	N-CA-CB	7.39	121.67	110.58
6	G	23	PHE	CA-C-N	7.39	129.87	120.56
6	G	23	PHE	C-N-CA	7.39	129.87	120.56
6	G	182	ASP	N-CA-C	-7.39	102.52	113.61
3	E	161	VAL	N-CA-C	-7.39	97.48	108.12
7	P	411	VAL	CB-CA-C	7.38	122.06	111.80
6	I	17	LEU	N-CA-C	-7.37	103.33	111.36
3	A	279	ILE	CA-C-O	7.37	128.05	120.39
8	O	332	VAL	N-CA-C	-7.37	99.36	108.05
3	E	212	TYR	N-CA-CB	7.36	120.77	110.17
4	B	422	GLU	N-CA-C	-7.36	103.38	112.88
4	D	102	ILE	CA-C-N	7.36	129.04	119.84
4	D	102	ILE	C-N-CA	7.36	129.04	119.84
3	E	455	ASN	CA-C-N	7.36	130.14	120.28
3	E	455	ASN	C-N-CA	7.36	130.14	120.28
5	L	83	ILE	N-CA-CB	-7.36	99.54	110.58
1	M	149	LEU	CA-C-N	7.36	130.87	120.28
1	M	149	LEU	C-N-CA	7.36	130.87	120.28
6	G	158	ARG	N-CA-C	7.36	119.08	111.14
3	C	435	THR	CB-CA-C	7.35	122.78	109.62
8	O	9	ASN	N-CA-C	-7.35	98.59	108.74
3	C	164	ASN	N-CA-C	-7.35	98.14	109.24
4	F	156	SER	CA-C-O	-7.35	112.63	120.42
5	L	76	VAL	CA-C-N	7.35	130.73	120.29
5	L	76	VAL	C-N-CA	7.35	130.73	120.29
3	E	294	LEU	O-C-N	-7.34	114.51	122.07
7	P	384	ILE	O-C-N	7.34	128.99	121.87
4	F	234	SER	CA-C-O	-7.34	111.29	119.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	B	365	HIS	CA-C-N	7.34	130.11	120.28
4	B	365	HIS	C-N-CA	7.34	130.11	120.28
4	F	293	ALA	N-CA-C	-7.33	104.36	112.72
4	B	353	ILE	N-CA-C	7.33	118.13	110.72
7	P	406	VAL	CA-C-O	-7.33	112.91	121.05
3	E	97	GLY	CA-C-N	7.32	127.08	119.76
3	E	97	GLY	C-N-CA	7.32	127.08	119.76
6	I	214	ALA	N-CA-C	-7.32	103.38	111.36
5	H	72	ALA	CA-C-N	7.32	132.93	120.71
5	H	72	ALA	C-N-CA	7.32	132.93	120.71
3	E	138	LYS	O-C-N	-7.30	114.88	123.06
3	A	143	PRO	CA-C-N	7.30	132.56	122.04
3	A	143	PRO	C-N-CA	7.30	132.56	122.04
4	D	279	THR	N-CA-C	-7.30	97.05	109.24
4	F	387	ILE	O-C-N	7.30	130.14	122.62
4	B	248	PRO	CA-C-N	7.30	130.65	120.29
4	B	248	PRO	C-N-CA	7.30	130.65	120.29
3	E	173	LEU	N-CA-C	-7.29	98.05	109.72
4	F	108	MET	CA-C-N	7.29	131.76	120.75
4	F	108	MET	C-N-CA	7.29	131.76	120.75
4	B	60	GLY	N-CA-C	-7.29	105.14	115.43
3	E	97	GLY	O-C-N	-7.29	114.48	121.77
1	M	165	VAL	O-C-N	7.28	128.93	121.87
4	B	79	VAL	N-CA-CB	7.28	118.66	110.72
3	E	423	PHE	N-CA-C	-7.28	101.49	113.50
3	A	477	GLU	CA-C-N	7.27	133.03	121.62
3	A	477	GLU	C-N-CA	7.27	133.03	121.62
3	E	174	LEU	CA-C-N	7.27	127.86	120.38
3	E	174	LEU	C-N-CA	7.27	127.86	120.38
5	J	27	TYR	N-CA-CB	7.26	120.54	110.01
3	E	270	SER	CA-C-N	7.26	130.00	120.28
3	E	270	SER	C-N-CA	7.26	130.00	120.28
3	E	615	THR	N-CA-C	7.25	118.82	111.07
4	F	256	PRO	N-CA-CB	7.25	111.22	103.39
3	E	224	THR	N-CA-C	-7.23	103.33	111.14
6	I	106	LYS	CA-C-N	7.23	129.96	120.28
6	I	106	LYS	C-N-CA	7.23	129.96	120.28
3	C	27	ILE	N-CA-CB	7.23	118.84	110.82
4	D	477	SER	CA-C-O	-7.23	112.66	120.17
4	D	95	PHE	O-C-N	-7.22	115.11	123.27
7	P	206	HIS	CA-C-N	7.22	130.29	120.54
7	P	206	HIS	C-N-CA	7.22	130.29	120.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	434	ILE	N-CA-C	-7.21	103.14	111.00
6	I	182	ASP	N-CA-C	-7.21	101.38	112.99
4	F	180	HIS	CA-C-N	7.21	129.94	120.28
4	F	180	HIS	C-N-CA	7.21	129.94	120.28
7	P	76	THR	CA-C-N	7.21	129.81	120.44
7	P	76	THR	C-N-CA	7.21	129.81	120.44
4	D	111	ARG	CA-C-N	7.20	132.00	122.93
4	D	111	ARG	C-N-CA	7.20	132.00	122.93
6	G	41	GLN	CA-C-O	7.20	128.05	120.42
7	P	174	LEU	CA-C-N	7.20	129.80	120.44
7	P	174	LEU	C-N-CA	7.20	129.80	120.44
4	B	430	LYS	CA-C-N	7.17	130.48	120.29
4	B	430	LYS	C-N-CA	7.17	130.48	120.29
7	P	25	VAL	N-CA-C	-7.17	98.08	108.11
6	G	126	VAL	N-CA-C	7.16	117.92	110.62
3	C	231	TYR	CA-C-N	7.15	128.78	119.84
3	C	231	TYR	C-N-CA	7.15	128.78	119.84
4	D	286	ASP	CA-C-N	7.15	129.86	120.28
4	D	286	ASP	C-N-CA	7.15	129.86	120.28
7	P	9	ASP	N-CA-C	-7.14	102.87	112.94
5	L	87	ALA	O-C-N	-7.14	112.95	122.23
1	M	20	THR	N-CA-CB	-7.14	99.31	110.30
3	E	61	ILE	N-CA-C	-7.14	103.22	111.00
3	A	268	SER	N-CA-C	-7.13	103.50	111.28
6	K	76	THR	CA-C-N	7.13	129.84	120.28
6	K	76	THR	C-N-CA	7.13	129.84	120.28
3	A	609	GLU	O-C-N	-7.13	114.39	122.09
5	L	17	ALA	N-CA-C	7.13	119.05	111.28
8	O	30	THR	CA-C-N	7.13	129.70	120.44
8	O	30	THR	C-N-CA	7.13	129.70	120.44
8	O	131	ILE	N-CA-C	-7.12	103.36	110.62
6	I	126	VAL	O-C-N	7.12	128.78	121.87
3	E	84	PRO	CA-C-O	-7.12	113.18	121.86
1	M	27	GLN	CA-C-N	7.11	127.87	119.98
1	M	27	GLN	C-N-CA	7.11	127.87	119.98
6	G	55	THR	O-C-N	-7.11	114.05	122.15
2	N	28	ILE	N-CA-C	-7.11	96.85	107.37
8	O	119	ARG	N-CA-C	-7.10	103.84	114.64
1	M	212	ASN	CA-C-N	7.10	130.37	120.29
1	M	212	ASN	C-N-CA	7.10	130.37	120.29
3	C	279	ILE	N-CA-C	-7.10	97.39	107.75
4	D	142	TYR	CA-C-N	7.09	135.08	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	142	TYR	C-N-CA	7.09	135.08	121.54
6	K	34	GLU	N-CA-CB	7.09	120.66	110.16
6	I	29	GLU	CA-C-N	7.09	129.78	120.28
6	I	29	GLU	C-N-CA	7.09	129.78	120.28
5	H	17	ALA	CA-C-N	7.09	129.78	120.28
5	H	17	ALA	C-N-CA	7.09	129.78	120.28
5	L	50	LYS	N-CA-CB	7.09	120.65	110.16
4	F	139	ILE	N-CA-C	-7.08	99.06	107.70
3	A	396	GLY	N-CA-C	-7.08	100.92	110.56
8	O	160	ALA	CB-CA-C	-7.08	98.81	110.85
1	M	207	GLN	CA-C-N	7.08	129.76	120.28
1	M	207	GLN	C-N-CA	7.08	129.76	120.28
3	C	467	LEU	N-CA-C	7.06	118.98	111.28
4	D	480	ILE	O-C-N	7.06	128.83	121.91
1	M	60	VAL	N-CA-C	-7.06	103.59	110.72
4	D	222	ALA	O-C-N	7.06	129.72	122.09
6	K	87	LYS	CA-C-N	7.05	129.44	120.56
6	K	87	LYS	C-N-CA	7.05	129.44	120.56
6	I	41	GLN	CA-C-N	7.05	130.30	120.29
6	I	41	GLN	C-N-CA	7.05	130.30	120.29
3	C	176	PRO	N-CA-CB	7.05	109.48	103.35
3	A	386	ALA	N-CA-CB	7.05	120.59	110.16
4	F	322	VAL	CA-C-N	7.04	130.72	120.71
4	F	322	VAL	C-N-CA	7.04	130.72	120.71
7	P	341	ASN	N-CA-C	-7.04	103.53	111.14
3	C	112	LEU	N-CA-C	-7.03	103.70	111.36
3	C	561	VAL	CA-C-N	7.03	130.27	120.29
3	C	561	VAL	C-N-CA	7.03	130.27	120.29
4	D	93	VAL	O-C-N	-7.03	115.48	123.00
4	D	179	PRO	CA-C-N	7.02	129.69	120.28
4	D	179	PRO	C-N-CA	7.02	129.69	120.28
5	L	90	LYS	CA-C-N	7.02	129.98	120.44
5	L	90	LYS	C-N-CA	7.02	129.98	120.44
7	P	176	ASN	CA-C-N	7.00	130.49	122.36
7	P	176	ASN	C-N-CA	7.00	130.49	122.36
1	M	206	VAL	CA-C-N	7.00	129.66	120.28
1	M	206	VAL	C-N-CA	7.00	129.66	120.28
3	A	528	GLN	N-CA-C	-7.00	102.84	113.89
4	B	124	PRO	CA-C-N	6.99	131.31	120.75
4	B	124	PRO	C-N-CA	6.99	131.31	120.75
4	F	320	GLY	N-CA-C	-6.99	103.60	111.63
8	O	244	GLN	N-CA-C	6.99	118.89	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	O	250	ALA	CA-C-N	6.98	129.63	120.28
8	O	250	ALA	C-N-CA	6.98	129.63	120.28
4	F	386	ALA	O-C-N	6.98	129.62	122.09
1	M	145	THR	N-CA-C	-6.97	103.68	111.28
5	J	29	GLN	CA-C-N	6.97	129.62	120.28
5	J	29	GLN	C-N-CA	6.97	129.62	120.28
4	B	282	SER	CA-C-O	-6.96	112.23	120.10
4	D	40	ILE	CB-CA-C	6.96	121.12	110.96
4	D	182	GLU	CA-C-N	6.96	130.30	120.42
4	D	182	GLU	C-N-CA	6.96	130.30	120.42
4	B	374	ASN	N-CA-CB	6.95	121.76	110.43
3	C	120	GLN	N-CA-C	-6.95	101.62	111.56
3	E	213	HIS	N-CA-C	-6.95	98.75	109.52
3	E	486	LYS	CA-C-N	6.94	129.47	120.44
3	E	486	LYS	C-N-CA	6.94	129.47	120.44
5	H	26	LYS	CA-C-N	6.94	129.46	120.44
5	H	26	LYS	C-N-CA	6.94	129.46	120.44
6	K	120	ILE	CA-C-N	6.94	129.58	120.28
6	K	120	ILE	C-N-CA	6.94	129.58	120.28
3	E	478	PHE	CA-C-N	6.94	127.23	119.32
3	E	478	PHE	C-N-CA	6.94	127.23	119.32
3	C	389	ALA	CA-C-N	6.93	130.13	120.29
3	C	389	ALA	C-N-CA	6.93	130.13	120.29
7	P	19	ILE	O-C-N	6.92	128.69	121.91
4	F	367	LYS	O-C-N	6.92	130.04	122.15
7	P	364	ASP	N-CA-C	6.92	118.47	111.07
3	C	174	LEU	CA-C-N	6.91	127.50	120.38
3	C	174	LEU	C-N-CA	6.91	127.50	120.38
3	E	218	ARG	N-CA-C	-6.91	104.82	113.18
6	G	26	LYS	CA-C-N	6.91	130.81	120.31
6	G	26	LYS	C-N-CA	6.91	130.81	120.31
3	A	296	GLU	CA-C-O	-6.90	112.03	119.97
1	M	131	GLN	CA-C-O	-6.90	113.23	120.55
3	E	48	LEU	N-CA-C	-6.89	99.31	110.20
3	C	492	ALA	CA-C-O	-6.89	113.25	120.55
3	A	123	TYR	N-CA-C	-6.89	100.02	110.14
1	M	70	GLU	CA-C-N	6.88	129.89	120.46
1	M	70	GLU	C-N-CA	6.88	129.89	120.46
6	G	37	LEU	CA-C-N	6.88	130.19	120.28
6	G	37	LEU	C-N-CA	6.88	130.19	120.28
4	B	159	ASP	CB-CA-C	-6.88	100.03	110.90
7	P	371	SER	CB-CA-C	-6.88	102.36	110.76

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	230	ILE	N-CA-C	-6.88	99.19	108.96
3	C	340	ALA	CA-C-N	6.88	129.50	120.28
3	C	340	ALA	C-N-CA	6.88	129.50	120.28
3	A	612	ALA	CA-C-N	6.88	129.49	120.28
3	A	612	ALA	C-N-CA	6.88	129.49	120.28
4	F	301	ARG	CA-C-N	6.88	132.37	122.40
4	F	301	ARG	C-N-CA	6.88	132.37	122.40
3	E	339	LEU	CA-C-N	6.87	129.49	120.28
3	E	339	LEU	C-N-CA	6.87	129.49	120.28
5	H	91	LYS	O-C-N	6.87	129.15	122.07
6	I	16	GLU	N-CA-CB	6.87	120.88	110.30
4	B	220	GLU	CA-C-O	6.87	127.83	120.55
4	B	85	GLY	N-CA-C	-6.86	105.40	115.63
1	M	54	LYS	CA-C-N	6.86	130.03	120.29
1	M	54	LYS	C-N-CA	6.86	130.03	120.29
3	A	185	ILE	N-CA-CB	6.86	120.10	111.46
6	I	49	ASN	CB-CA-C	-6.85	100.12	110.88
3	C	435	THR	N-CA-C	-6.85	101.03	110.35
3	E	174	LEU	N-CA-C	-6.85	101.02	109.65
3	E	417	SER	O-C-N	-6.84	117.06	121.85
7	P	390	ASP	N-CA-C	-6.84	96.22	110.80
3	E	83	ASP	CA-C-O	6.84	126.76	120.60
4	B	255	THR	O-C-N	-6.84	114.39	120.48
8	O	340	CYS	N-CA-C	6.83	118.38	111.07
5	L	35	ALA	CA-C-N	6.83	130.69	120.31
5	L	35	ALA	C-N-CA	6.83	130.69	120.31
3	C	174	LEU	N-CA-C	-6.82	101.05	109.65
6	I	210	LEU	CA-C-N	6.82	129.73	120.38
6	I	210	LEU	C-N-CA	6.82	129.73	120.38
3	C	90	LYS	CA-C-O	-6.82	113.14	119.76
3	A	374	MET	O-C-N	6.82	128.65	121.42
1	M	67	SER	N-CA-CB	6.82	120.14	110.12
6	I	53	ASN	CB-CA-C	-6.81	99.48	110.79
7	P	269	SER	O-C-N	6.81	129.18	122.09
6	I	211	SER	N-CA-CB	6.81	120.28	110.06
3	C	60	VAL	CB-CA-C	6.81	119.89	111.25
3	A	175	PRO	CA-C-N	6.81	126.57	119.76
3	A	175	PRO	C-N-CA	6.81	126.57	119.76
3	A	517	VAL	N-CA-C	-6.80	103.85	110.72
4	B	144	ARG	N-CA-CB	6.80	120.94	110.80
4	F	400	SER	N-CA-CB	-6.80	99.86	110.06
4	B	310	THR	CA-C-N	6.80	129.28	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	B	310	THR	C-N-CA	6.80	129.28	120.44
5	H	39	ALA	N-CA-C	-6.80	104.00	112.90
3	A	381	PRO	CA-C-N	6.80	133.03	121.14
3	A	381	PRO	C-N-CA	6.80	133.03	121.14
4	B	229	PHE	CA-C-N	6.79	129.27	120.44
4	B	229	PHE	C-N-CA	6.79	129.27	120.44
6	K	148	LEU	CA-C-N	6.79	129.12	120.56
6	K	148	LEU	C-N-CA	6.79	129.12	120.56
1	M	93	LYS	N-CA-C	-6.79	99.55	109.18
8	O	23	VAL	CA-C-N	6.78	129.92	120.29
8	O	23	VAL	C-N-CA	6.78	129.92	120.29
3	A	516	ASP	CB-CA-C	-6.78	100.19	110.90
8	O	249	ALA	O-C-N	-6.78	114.93	122.12
3	A	292	GLU	N-CA-C	6.78	118.46	111.14
4	F	198	LYS	N-CA-C	6.78	119.68	111.82
7	P	332	ASP	CA-C-N	6.78	129.36	120.28
7	P	332	ASP	C-N-CA	6.78	129.36	120.28
3	A	374	MET	CA-C-O	-6.77	113.73	119.76
6	G	24	ILE	CA-C-O	-6.77	113.99	121.17
7	P	125	GLU	N-CA-C	-6.76	103.91	111.28
4	D	249	THR	CA-C-N	6.76	129.72	120.46
4	D	249	THR	C-N-CA	6.76	129.72	120.46
3	A	168	SER	N-CA-CB	6.76	120.43	109.95
3	E	145	LYS	CA-C-O	6.75	126.57	119.14
7	P	180	MET	N-CA-C	-6.75	103.85	111.07
5	J	8	ALA	CA-C-N	6.75	129.87	120.29
5	J	8	ALA	C-N-CA	6.75	129.87	120.29
3	C	388	LEU	N-CA-C	6.75	118.63	111.28
3	E	552	SER	CA-C-O	-6.74	113.27	120.42
4	B	304	TYR	CA-C-N	6.74	128.27	119.84
4	B	304	TYR	C-N-CA	6.74	128.27	119.84
4	D	329	ILE	N-CA-C	-6.74	97.91	107.75
5	L	99	ILE	N-CA-C	-6.74	104.20	110.53
8	O	76	GLY	CA-C-N	6.73	129.19	120.44
8	O	76	GLY	C-N-CA	6.73	129.19	120.44
4	F	248	PRO	CA-C-N	6.73	129.30	120.28
4	F	248	PRO	C-N-CA	6.73	129.30	120.28
3	C	479	PRO	CA-C-N	6.73	129.97	120.42
3	C	479	PRO	C-N-CA	6.73	129.97	120.42
8	O	219	PRO	CA-C-N	6.72	131.67	122.19
8	O	219	PRO	C-N-CA	6.72	131.67	122.19
5	H	61	ASN	CA-C-N	6.72	131.94	120.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	H	61	ASN	C-N-CA	6.72	131.94	120.71
5	J	2	SER	CA-C-N	6.72	129.58	120.44
5	J	2	SER	C-N-CA	6.72	129.58	120.44
8	O	236	VAL	N-CA-C	-6.72	98.50	108.45
8	O	236	VAL	O-C-N	-6.72	115.59	123.05
3	E	62	ARG	CA-C-N	6.71	132.49	122.75
3	E	62	ARG	C-N-CA	6.71	132.49	122.75
7	P	158	VAL	CA-C-N	6.71	129.27	120.28
7	P	158	VAL	C-N-CA	6.71	129.27	120.28
6	K	38	LYS	CA-C-N	6.71	129.82	120.29
6	K	38	LYS	C-N-CA	6.71	129.82	120.29
4	B	158	ILE	O-C-N	6.71	129.12	121.94
8	O	365	ASN	N-CA-CB	6.71	122.08	110.81
7	P	121	PRO	CA-C-N	6.71	129.81	120.29
7	P	121	PRO	C-N-CA	6.71	129.81	120.29
8	O	224	VAL	CA-C-O	6.70	128.88	121.04
5	L	51	ASP	CA-C-N	6.70	129.15	120.44
5	L	51	ASP	C-N-CA	6.70	129.15	120.44
6	I	190	VAL	N-CA-C	-6.70	98.78	108.36
6	K	127	GLU	CA-C-N	6.70	129.80	120.29
6	K	127	GLU	C-N-CA	6.70	129.80	120.29
5	H	43	ILE	N-CA-CB	6.70	120.17	110.52
3	E	586	PHE	N-CA-C	-6.69	103.43	112.26
4	F	159	ASP	N-CA-CB	6.69	119.71	110.01
3	A	429	THR	N-CA-CB	6.69	119.95	110.12
1	M	65	ALA	N-CA-CB	6.68	120.05	110.16
3	A	286	ARG	CB-CA-C	-6.68	99.49	110.85
7	P	450	ILE	CA-C-N	6.68	129.24	120.28
7	P	450	ILE	C-N-CA	6.68	129.24	120.28
7	P	147	VAL	CA-C-O	-6.68	113.77	120.85
2	N	82	ASP	CA-C-O	6.68	127.63	120.55
3	C	601	GLU	CB-CA-C	-6.68	99.49	110.85
8	O	35	ASN	CA-C-O	-6.68	113.82	120.70
4	F	361	ASP	CA-C-N	6.67	129.77	120.29
4	F	361	ASP	C-N-CA	6.67	129.77	120.29
8	O	30	THR	N-CA-C	-6.67	104.09	111.36
3	E	545	ASP	CB-CA-C	-6.67	99.72	110.79
3	E	324	MET	O-C-N	6.67	128.90	121.43
7	P	294	ILE	CA-C-N	6.66	129.21	120.28
7	P	294	ILE	C-N-CA	6.66	129.21	120.28
3	E	110	ARG	CA-C-O	-6.66	112.84	120.03
3	A	608	GLN	CA-C-N	6.66	129.50	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	608	GLN	C-N-CA	6.66	129.50	120.44
8	O	107	VAL	N-CA-CB	-6.66	106.31	110.50
4	B	196	PRO	N-CA-CB	6.65	110.57	103.52
3	A	384	LEU	CA-C-N	6.65	127.36	119.98
3	A	384	LEU	C-N-CA	6.65	127.36	119.98
7	P	157	ASN	CB-CA-C	-6.65	100.53	110.24
8	O	101	PRO	N-CA-CB	6.65	109.25	103.27
8	O	219	PRO	N-CA-CB	6.65	109.52	103.34
7	P	51	LEU	CA-C-O	6.65	127.47	120.42
3	E	83	ASP	N-CA-CB	6.65	118.07	110.03
7	P	377	ASN	CA-C-N	6.64	128.45	120.14
7	P	377	ASN	C-N-CA	6.64	128.45	120.14
4	D	344	HIS	CA-C-N	6.64	127.17	119.47
4	D	344	HIS	C-N-CA	6.64	127.17	119.47
8	O	85	ILE	CA-C-O	-6.63	114.05	120.95
5	L	25	ARG	N-CA-C	-6.63	104.14	111.36
4	D	243	ASN	N-CA-C	-6.63	98.10	108.90
3	A	224	THR	N-CA-CB	6.63	119.81	110.07
7	P	85	SER	CA-C-N	6.62	129.45	120.44
7	P	85	SER	C-N-CA	6.62	129.45	120.44
2	N	31	GLU	N-CA-C	-6.62	105.11	113.72
2	N	38	PHE	CA-C-N	6.62	130.65	122.37
2	N	38	PHE	C-N-CA	6.62	130.65	122.37
7	P	382	ASP	CA-C-O	-6.62	113.41	120.42
4	B	94	GLU	N-CA-C	-6.61	97.82	109.06
6	K	216	PRO	CA-C-N	6.61	129.14	120.28
6	K	216	PRO	C-N-CA	6.61	129.14	120.28
6	I	208	LYS	N-CA-CB	6.61	119.94	110.16
3	C	442	ASP	CA-C-O	-6.61	113.18	120.38
3	A	493	GLU	CA-C-N	6.61	129.13	120.28
3	A	493	GLU	C-N-CA	6.61	129.13	120.28
3	A	599	GLU	N-CA-C	6.61	118.48	111.28
1	M	64	ALA	CA-C-N	6.61	129.67	120.29
1	M	64	ALA	C-N-CA	6.61	129.67	120.29
3	C	448	ARG	N-CA-CB	6.61	121.12	110.42
4	B	427	ILE	CA-C-N	6.61	129.13	120.28
4	B	427	ILE	C-N-CA	6.61	129.13	120.28
7	P	301	ARG	N-CA-C	6.61	118.48	111.28
2	N	85	THR	N-CA-C	-6.60	103.46	113.89
8	O	79	ILE	N-CA-CB	6.60	119.52	110.54
1	M	213	GLU	N-CA-C	-6.60	104.17	111.36
6	K	153	LYS	CA-C-N	6.59	129.01	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	K	153	LYS	C-N-CA	6.59	129.01	120.44
4	F	112	ILE	CA-C-N	6.59	133.90	122.82
4	F	112	ILE	C-N-CA	6.59	133.90	122.82
8	O	281	GLU	CA-C-N	6.59	129.12	120.28
8	O	281	GLU	C-N-CA	6.59	129.12	120.28
3	A	538	CYS	CA-C-O	-6.59	113.42	119.62
4	F	463	SER	N-CA-CB	6.59	119.80	110.12
4	F	137	SER	CA-C-O	-6.58	111.95	118.34
4	F	79	VAL	CA-C-N	6.58	131.87	120.68
4	F	79	VAL	C-N-CA	6.58	131.87	120.68
3	A	486	LYS	CA-C-N	6.56	129.07	120.28
3	A	486	LYS	C-N-CA	6.56	129.07	120.28
3	C	360	TRP	CA-C-N	6.56	129.07	120.28
3	C	360	TRP	C-N-CA	6.56	129.07	120.28
7	P	333	GLU	CA-C-O	6.56	127.50	120.55
1	M	162	VAL	CA-C-O	-6.55	113.90	120.85
5	L	100	GLU	N-CA-C	6.55	118.42	111.28
4	B	199	ASP	O-C-N	6.55	129.06	122.12
4	D	247	ASP	N-CA-C	-6.54	101.88	110.39
1	M	110	GLU	CA-C-O	-6.53	113.07	120.32
3	E	542	LYS	CA-C-N	6.53	129.03	120.28
3	E	542	LYS	C-N-CA	6.53	129.03	120.28
7	P	22	SER	N-CA-CB	6.53	119.71	110.12
3	A	337	ILE	O-C-N	6.52	128.55	121.83
3	E	475	TYR	O-C-N	-6.52	113.82	121.32
7	P	310	LYS	CA-C-N	6.52	128.92	120.44
7	P	310	LYS	C-N-CA	6.52	128.92	120.44
6	G	76	THR	CA-C-N	6.52	129.67	120.28
6	G	76	THR	C-N-CA	6.52	129.67	120.28
1	M	210	LYS	O-C-N	6.52	128.78	122.07
3	C	328	ALA	CA-C-O	-6.51	112.48	119.97
6	K	145	ASP	O-C-N	-6.51	114.34	122.35
3	E	591	ARG	N-CA-C	-6.51	103.85	113.61
4	B	277	ILE	N-CA-CB	6.50	120.09	111.64
4	D	77	VAL	N-CA-C	-6.50	99.12	108.48
6	G	118	LYS	CA-C-N	6.50	126.08	119.19
6	G	118	LYS	C-N-CA	6.50	126.08	119.19
6	G	218	ILE	CA-C-N	6.50	128.98	120.28
6	G	218	ILE	C-N-CA	6.50	128.98	120.28
4	D	210	ILE	CB-CA-C	-6.49	100.85	110.33
6	K	83	LYS	CB-CA-C	-6.49	98.20	110.67
7	P	242	LEU	N-CA-CB	6.49	119.42	110.01

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	179	ARG	CA-C-O	-6.49	114.50	121.38
5	H	46	TYR	CA-C-O	6.48	127.44	119.79
1	M	181	THR	CA-C-O	-6.48	113.55	120.42
4	F	357	GLN	N-CA-CB	6.48	121.41	111.56
7	P	425	ASN	CA-C-N	6.48	128.97	120.28
7	P	425	ASN	C-N-CA	6.48	128.97	120.28
3	C	539	PRO	CA-C-N	6.48	130.71	120.47
3	C	539	PRO	C-N-CA	6.48	130.71	120.47
8	O	3	THR	N-CA-C	-6.48	104.79	114.64
5	J	56	GLU	N-CA-C	6.48	118.42	111.36
3	C	100	LEU	CB-CA-C	-6.48	99.91	110.79
7	P	117	PHE	CA-C-N	6.47	128.96	120.28
7	P	117	PHE	C-N-CA	6.47	128.96	120.28
7	P	419	ILE	CA-C-N	6.47	128.72	120.56
7	P	419	ILE	C-N-CA	6.47	128.72	120.56
3	A	108	ILE	CA-C-N	6.47	132.19	122.68
3	A	108	ILE	C-N-CA	6.47	132.19	122.68
4	D	339	ASN	N-CA-CB	6.46	121.41	110.49
8	O	127	ILE	N-CA-C	6.46	117.21	110.62
4	F	356	GLY	N-CA-C	-6.46	102.53	111.76
4	F	107	ASP	CA-C-N	6.45	129.22	120.38
4	F	107	ASP	C-N-CA	6.45	129.22	120.38
3	A	491	ASN	CA-C-O	-6.45	113.58	120.42
8	O	42	ARG	CA-C-N	6.45	129.92	120.82
8	O	42	ARG	C-N-CA	6.45	129.92	120.82
4	D	223	ARG	CA-C-N	6.45	128.93	120.28
4	D	223	ARG	C-N-CA	6.45	128.93	120.28
1	M	57	MET	CA-C-N	6.45	127.28	119.99
1	M	57	MET	C-N-CA	6.45	127.28	119.99
3	A	353	ILE	CB-CA-C	6.45	120.37	110.96
7	P	120	ASP	CA-C-N	6.45	126.14	119.56
7	P	120	ASP	C-N-CA	6.45	126.14	119.56
8	O	266	LEU	CA-C-N	6.45	128.69	120.56
8	O	266	LEU	C-N-CA	6.45	128.69	120.56
4	D	267	ALA	O-C-N	6.45	128.71	122.07
3	C	575	GLY	CA-C-N	6.44	129.43	120.29
3	C	575	GLY	C-N-CA	6.44	129.43	120.29
3	E	273	SER	N-CA-CB	6.44	119.19	109.34
6	G	43	TYR	CA-C-N	6.43	128.81	120.44
6	G	43	TYR	C-N-CA	6.43	128.81	120.44
7	P	339	ILE	N-CA-CB	6.43	118.08	110.55
8	O	71	VAL	N-CA-CB	6.43	119.29	110.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	90	ALA	CA-C-N	6.43	129.18	120.44
1	M	90	ALA	C-N-CA	6.43	129.18	120.44
3	C	569	LYS	CA-C-N	6.43	128.89	120.28
3	C	569	LYS	C-N-CA	6.43	128.89	120.28
7	P	11	THR	N-CA-C	6.43	118.36	111.36
4	D	304	TYR	CA-C-N	6.42	127.87	119.84
4	D	304	TYR	C-N-CA	6.42	127.87	119.84
4	D	343	THR	CA-C-N	6.42	129.28	120.67
4	D	343	THR	C-N-CA	6.42	129.28	120.67
7	P	108	LYS	N-CA-C	-6.42	105.98	113.88
8	O	168	GLY	CA-C-N	6.42	129.83	120.71
8	O	168	GLY	C-N-CA	6.42	129.83	120.71
3	C	466	VAL	O-C-N	6.42	128.44	121.83
7	P	263	LEU	N-CA-CB	6.41	119.31	110.01
6	I	105	GLU	CA-C-N	6.41	128.87	120.28
6	I	105	GLU	C-N-CA	6.41	128.87	120.28
1	M	207	GLN	O-C-N	-6.41	115.33	122.12
5	J	17	ALA	N-CA-C	6.40	118.26	111.28
2	N	9	ALA	CA-C-N	-6.40	114.04	122.94
2	N	9	ALA	C-N-CA	-6.40	114.04	122.94
3	C	414	ALA	N-CA-CB	6.40	121.43	110.68
4	B	396	HIS	CA-C-N	6.40	128.35	120.22
4	B	396	HIS	C-N-CA	6.40	128.35	120.22
4	B	459	ASP	N-CA-CB	6.40	119.63	110.16
3	C	588	GLU	CA-C-N	6.40	126.08	119.56
3	C	588	GLU	C-N-CA	6.40	126.08	119.56
4	B	301	ARG	CA-C-N	6.39	131.21	122.07
4	B	301	ARG	C-N-CA	6.39	131.21	122.07
7	P	7	LEU	CA-C-O	-6.39	113.79	121.40
3	C	508	SER	CA-C-N	6.39	130.02	120.31
3	C	508	SER	C-N-CA	6.39	130.02	120.31
4	D	300	GLY	CA-C-O	-6.39	115.16	121.93
8	O	278	ALA	CA-C-N	6.39	128.84	120.28
8	O	278	ALA	C-N-CA	6.39	128.84	120.28
5	J	95	VAL	CB-CA-C	-6.39	103.67	112.04
4	D	293	ALA	CA-C-N	6.38	129.12	120.44
4	D	293	ALA	C-N-CA	6.38	129.12	120.44
8	O	256	ILE	CA-C-N	6.38	126.30	119.85
8	O	256	ILE	C-N-CA	6.38	126.30	119.85
3	A	534	TYR	N-CA-CB	6.38	119.46	109.83
7	P	82	HIS	CA-C-N	6.38	128.82	120.28
7	P	82	HIS	C-N-CA	6.38	128.82	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	25	ILE	N-CA-CB	6.37	121.75	111.23
4	D	267	ALA	CA-C-O	-6.37	114.13	120.82
6	G	28	ALA	O-C-N	6.37	129.41	122.15
6	G	14	ASN	CA-C-N	6.37	128.82	120.28
6	G	14	ASN	C-N-CA	6.37	128.82	120.28
3	E	207	SER	N-CA-CB	6.37	121.25	110.49
4	F	235	LEU	CA-C-N	6.37	128.81	120.28
4	F	235	LEU	C-N-CA	6.37	128.81	120.28
4	F	364	LEU	CA-C-N	6.37	128.81	120.28
4	F	364	LEU	C-N-CA	6.37	128.81	120.28
8	O	316	VAL	CA-C-O	6.37	127.57	120.95
4	B	276	THR	N-CA-CB	6.36	120.55	110.57
8	O	64	GLU	CA-C-N	6.36	128.80	120.28
8	O	64	GLU	C-N-CA	6.36	128.80	120.28
6	I	132	LEU	CA-C-N	6.36	131.63	122.35
6	I	132	LEU	C-N-CA	6.36	131.63	122.35
3	C	468	ASN	N-CA-CB	6.35	119.46	110.12
3	E	131	PRO	CA-C-O	-6.35	114.14	121.96
4	F	184	ALA	CA-C-N	6.35	128.70	120.44
4	F	184	ALA	C-N-CA	6.35	128.70	120.44
3	A	243	LEU	N-CA-C	6.35	121.19	112.04
3	A	324	MET	CA-C-N	6.35	127.78	119.84
3	A	324	MET	C-N-CA	6.35	127.78	119.84
3	C	122	ILE	N-CA-C	-6.35	104.66	110.82
5	L	97	ILE	CB-CA-C	-6.35	103.46	112.22
3	C	102	GLU	CB-CA-C	-6.35	103.69	111.82
7	P	225	GLN	N-CA-CB	6.35	119.42	109.83
1	M	212	ASN	N-CA-C	-6.34	104.29	111.14
4	D	309	TYR	CA-C-N	6.34	128.78	120.28
4	D	309	TYR	C-N-CA	6.34	128.78	120.28
3	A	174	LEU	N-CA-C	-6.34	101.78	109.83
4	B	314	THR	CA-C-O	-6.34	113.83	120.55
7	P	19	ILE	CA-C-O	-6.34	114.45	121.17
4	F	406	LYS	CA-C-N	6.34	128.77	120.28
4	F	406	LYS	C-N-CA	6.34	128.77	120.28
7	P	308	VAL	CA-C-N	6.34	129.14	120.46
7	P	308	VAL	C-N-CA	6.34	129.14	120.46
8	O	355	ALA	CA-C-O	6.33	126.11	119.14
6	I	9	THR	N-CA-CB	6.33	119.59	110.03
2	N	88	PHE	CB-CA-C	-6.33	101.65	110.13
3	C	613	GLU	O-C-N	6.33	129.37	122.15
4	F	121	ASP	N-CA-C	-6.33	104.01	112.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	E	417	SER	CA-C-N	6.33	127.75	119.84
3	E	417	SER	C-N-CA	6.33	127.75	119.84
3	C	331	ALA	CA-C-N	6.33	129.08	120.54
3	C	331	ALA	C-N-CA	6.33	129.08	120.54
3	C	526	LEU	CA-C-O	-6.32	113.72	120.42
8	O	351	LEU	CB-CA-C	-6.32	100.30	110.79
4	D	294	ALA	N-CA-C	-6.32	104.31	111.14
3	A	420	GLY	N-CA-C	-6.32	104.71	115.08
7	P	381	SER	N-CA-C	6.32	118.17	111.28
6	I	78	SER	N-CA-C	6.32	118.25	111.36
2	N	98	ASP	N-CA-CB	6.32	121.17	110.49
6	K	150	GLU	N-CA-C	6.32	118.17	111.28
7	P	429	HIS	CA-C-N	6.32	128.52	120.56
7	P	429	HIS	C-N-CA	6.32	128.52	120.56
4	B	309	TYR	N-CA-CB	6.32	119.17	110.01
7	P	275	LEU	CA-C-N	6.31	128.74	120.28
7	P	275	LEU	C-N-CA	6.31	128.74	120.28
8	O	144	ASP	CA-C-O	-6.31	114.20	120.70
8	O	249	ALA	CA-C-O	6.31	127.24	120.55
5	H	51	ASP	N-CA-CB	6.30	120.05	110.28
3	A	536	ALA	O-C-N	6.30	130.12	123.06
3	E	112	LEU	O-C-N	6.30	128.80	122.12
3	E	468	ASN	N-CA-CB	6.30	120.04	110.28
3	A	186	ALA	CA-C-O	-6.30	113.84	120.70
8	O	375	ALA	N-CA-CB	6.30	121.13	110.49
4	D	475	ARG	CA-C-N	6.29	131.22	123.10
4	D	475	ARG	C-N-CA	6.29	131.22	123.10
6	K	119	PRO	CA-C-N	6.29	128.62	120.56
6	K	119	PRO	C-N-CA	6.29	128.62	120.56
3	C	451	PHE	CB-CA-C	-6.29	101.79	110.16
8	O	329	ILE	N-CA-C	-6.29	98.46	107.77
3	E	598	GLY	CA-C-N	6.29	128.70	120.28
3	E	598	GLY	C-N-CA	6.29	128.70	120.28
3	A	334	TYR	CA-C-N	6.29	128.70	120.28
3	A	334	TYR	C-N-CA	6.29	128.70	120.28
8	O	4	ALA	CA-C-N	6.29	133.00	121.94
8	O	4	ALA	C-N-CA	6.29	133.00	121.94
4	D	281	MET	N-CA-CB	6.28	120.02	110.28
4	B	153	THR	N-CA-C	-6.28	105.25	113.17
6	I	72	SER	CA-C-O	6.28	127.11	119.38
4	B	364	LEU	CA-C-N	6.28	128.69	120.28
4	B	364	LEU	C-N-CA	6.28	128.69	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	16	GLY	CA-C-N	6.28	128.98	120.44
1	M	16	GLY	C-N-CA	6.28	128.98	120.44
7	P	433	LEU	O-C-N	-6.27	115.61	122.07
3	C	558	GLN	CA-C-N	6.27	128.59	120.44
3	C	558	GLN	C-N-CA	6.27	128.59	120.44
4	B	456	GLU	CA-C-N	6.27	128.97	120.38
4	B	456	GLU	C-N-CA	6.27	128.97	120.38
8	O	383	GLU	CA-C-O	-6.27	113.53	119.80
6	G	111	ALA	N-CA-C	6.27	118.92	111.71
4	D	84	SER	CA-C-O	-6.27	113.99	120.89
3	A	413	VAL	N-CA-CB	6.27	119.79	111.64
7	P	345	ILE	CB-CA-C	-6.27	103.94	111.97
3	E	444	LYS	O-C-N	6.27	129.29	122.15
1	M	118	ASN	N-CA-CB	6.26	120.36	110.84
3	C	224	THR	CB-CA-C	-6.26	101.05	110.88
8	O	273	GLU	CA-C-N	6.26	128.96	120.44
8	O	273	GLU	C-N-CA	6.26	128.96	120.44
2	N	41	GLN	O-C-N	6.25	130.93	123.24
4	F	463	SER	CA-C-N	6.25	128.66	120.28
4	F	463	SER	C-N-CA	6.25	128.66	120.28
5	J	91	LYS	O-C-N	6.25	128.78	122.03
4	B	382	LEU	CA-C-N	6.25	129.28	120.28
4	B	382	LEU	C-N-CA	6.25	129.28	120.28
7	P	299	SER	N-CA-C	6.25	118.85	110.35
6	I	127	GLU	N-CA-C	6.25	118.09	111.28
3	E	493	GLU	CA-C-N	6.25	129.16	120.29
3	E	493	GLU	C-N-CA	6.25	129.16	120.29
8	O	301	ILE	CA-C-N	6.24	129.16	120.29
8	O	301	ILE	C-N-CA	6.24	129.16	120.29
4	D	395	ASP	CA-C-N	6.24	128.55	120.44
4	D	395	ASP	C-N-CA	6.24	128.55	120.44
3	E	606	THR	CA-C-N	6.24	128.64	120.28
3	E	606	THR	C-N-CA	6.24	128.64	120.28
4	B	402	GLN	CA-C-N	6.24	128.64	120.28
4	B	402	GLN	C-N-CA	6.24	128.64	120.28
7	P	275	LEU	N-CA-CB	6.24	119.29	110.12
7	P	458	ASP	CA-C-N	6.24	128.55	120.44
7	P	458	ASP	C-N-CA	6.24	128.55	120.44
3	C	494	GLU	CB-CA-C	-6.23	100.25	110.85
4	D	172	ILE	N-CA-C	-6.23	98.77	107.80
1	M	126	GLY	CA-C-N	6.23	128.63	120.28
1	M	126	GLY	C-N-CA	6.23	128.63	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	282	GLY	O-C-N	6.23	127.27	123.35
4	B	430	LYS	N-CA-CB	6.23	119.38	110.16
7	P	386	GLU	CA-C-N	6.23	128.62	120.28
7	P	386	GLU	C-N-CA	6.23	128.62	120.28
4	F	478	PRO	N-CA-CB	6.22	109.70	103.48
7	P	322	VAL	O-C-N	6.22	128.24	121.83
7	P	454	LEU	CA-C-N	6.22	132.03	121.14
7	P	454	LEU	C-N-CA	6.22	132.03	121.14
3	A	511	ASP	CA-C-N	6.22	129.13	120.29
3	A	511	ASP	C-N-CA	6.22	129.13	120.29
3	E	529	ASN	N-CA-C	-6.22	98.14	108.34
7	P	446	GLY	CA-C-O	-6.22	113.68	120.40
6	I	202	THR	CA-C-N	6.21	128.61	120.28
6	I	202	THR	C-N-CA	6.21	128.61	120.28
6	K	156	ILE	CB-CA-C	-6.21	103.88	112.02
7	P	261	ASN	CA-C-N	6.21	128.60	120.28
7	P	261	ASN	C-N-CA	6.21	128.60	120.28
5	H	33	LYS	CA-C-N	6.21	128.60	120.28
5	H	33	LYS	C-N-CA	6.21	128.60	120.28
3	C	332	SER	O-C-N	6.21	128.55	122.09
4	F	424	ALA	N-CA-C	-6.21	105.28	112.92
4	F	81	GLU	CA-C-N	6.21	132.36	120.07
4	F	81	GLU	C-N-CA	6.21	132.36	120.07
7	P	443	LYS	CA-C-N	6.21	129.11	120.29
7	P	443	LYS	C-N-CA	6.21	129.11	120.29
2	N	115	LEU	CA-C-O	6.21	129.38	120.51
6	G	11	ASN	CA-C-O	-6.20	114.31	120.70
4	B	39	VAL	CA-C-O	-6.20	113.88	120.39
3	C	287	GLY	N-CA-C	-6.20	107.10	114.48
6	K	157	MET	CA-C-N	6.20	128.87	120.44
6	K	157	MET	C-N-CA	6.20	128.87	120.44
6	I	15	ASP	CB-CA-C	-6.20	100.50	110.79
3	C	52	GLY	CA-C-N	6.20	131.98	121.14
3	C	52	GLY	C-N-CA	6.20	131.98	121.14
6	G	168	PRO	CA-C-O	-6.19	114.21	121.95
7	P	235	SER	N-CA-C	-6.19	105.31	112.92
7	P	7	LEU	N-CA-CB	6.19	122.15	112.25
4	B	381	ARG	N-CA-C	-6.19	105.77	113.38
3	E	430	ALA	O-C-N	6.18	129.19	122.15
2	N	56	HIS	O-C-N	6.17	128.66	122.12
3	E	176	PRO	CA-C-N	6.17	131.63	122.74
3	E	176	PRO	C-N-CA	6.17	131.63	122.74

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	210	THR	N-CA-C	-6.17	100.41	109.18
4	B	46	PHE	CA-C-N	6.17	127.55	119.84
4	B	46	PHE	C-N-CA	6.17	127.55	119.84
4	B	282	SER	N-CA-C	-6.17	104.61	111.71
6	K	16	GLU	CB-CA-C	-6.17	98.82	110.67
3	C	542	LYS	CA-C-N	6.17	129.04	120.29
3	C	542	LYS	C-N-CA	6.17	129.04	120.29
3	E	413	VAL	N-CA-CB	6.17	119.23	111.46
2	N	10	VAL	N-CA-C	-6.16	99.28	108.46
3	C	415	ALA	CA-C-O	6.16	128.76	121.36
6	G	35	ILE	CB-CA-C	-6.16	104.08	111.97
4	F	273	HIS	N-CA-C	-6.16	99.17	108.96
6	K	37	LEU	N-CA-C	-6.16	104.65	111.36
4	D	246	ASN	N-CA-CB	6.15	120.89	110.49
4	D	466	ARG	CA-C-N	6.15	128.89	120.46
4	D	466	ARG	C-N-CA	6.15	128.89	120.46
5	H	20	ILE	CA-C-O	-6.15	114.55	120.95
6	G	79	THR	N-CA-C	-6.15	104.66	111.36
3	C	102	GLU	N-CA-CB	6.15	122.09	112.25
6	G	174	ILE	CB-CA-C	6.15	119.06	111.25
3	A	508	SER	CB-CA-C	-6.15	99.42	110.36
4	B	236	GLU	N-CA-CB	6.14	119.25	110.16
8	O	116	TRP	CA-C-N	6.14	130.58	120.94
8	O	116	TRP	C-N-CA	6.14	130.58	120.94
3	C	399	VAL	O-C-N	6.14	130.43	122.94
6	I	9	THR	CA-C-O	-6.14	113.75	120.69
3	E	60	VAL	N-CA-C	-6.13	98.17	107.73
1	M	54	LYS	CA-C-O	-6.13	114.05	120.55
3	E	125	PRO	CA-C-N	6.13	130.56	120.94
3	E	125	PRO	C-N-CA	6.13	130.56	120.94
3	C	116	LYS	CA-C-N	6.13	128.77	120.44
3	C	116	LYS	C-N-CA	6.13	128.77	120.44
4	B	157	ALA	CA-C-N	6.13	128.19	120.72
4	B	157	ALA	C-N-CA	6.13	128.19	120.72
4	B	208	PHE	N-CA-C	-6.13	99.42	109.40
8	O	321	LEU	O-C-N	-6.12	114.57	121.43
7	P	433	LEU	N-CA-C	6.12	117.62	111.07
4	D	71	ARG	N-CA-C	-6.12	100.23	108.86
6	I	56	ASN	N-CA-CB	6.12	119.11	110.12
3	A	473	SER	CA-C-N	6.12	129.61	120.31
3	A	473	SER	C-N-CA	6.12	129.61	120.31
4	B	255	THR	CA-C-N	6.12	126.01	119.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	B	255	THR	C-N-CA	6.12	126.01	119.28
3	A	60	VAL	N-CA-CB	6.11	118.83	111.31
3	C	312	MET	O-C-N	6.11	128.59	122.12
7	P	121	PRO	N-CA-CB	6.11	109.59	103.48
3	C	556	GLU	CA-C-N	6.11	128.74	120.44
3	C	556	GLU	C-N-CA	6.11	128.74	120.44
4	F	404	TYR	CB-CA-C	-6.10	100.66	110.79
4	F	254	ILE	CA-C-O	-6.10	113.88	120.47
4	F	435	PHE	CA-C-N	6.10	128.45	120.28
4	F	435	PHE	C-N-CA	6.10	128.45	120.28
1	M	62	GLN	N-CA-C	6.10	117.92	111.28
4	B	217	VAL	O-C-N	6.10	127.79	122.12
8	O	79	ILE	O-C-N	-6.09	115.96	121.87
4	D	181	ASN	N-CA-C	6.09	117.92	111.28
6	G	55	THR	N-CA-CB	6.09	119.17	110.16
3	A	414	ALA	CA-C-N	6.09	131.10	122.09
3	A	414	ALA	C-N-CA	6.09	131.10	122.09
1	M	179	PRO	CB-CA-C	-6.08	101.52	111.31
7	P	30	LEU	CA-C-N	6.08	128.71	120.44
7	P	30	LEU	C-N-CA	6.08	128.71	120.44
7	P	468	ALA	N-CA-C	-6.08	104.73	111.36
7	P	31	ALA	CA-C-N	6.08	128.34	120.44
7	P	31	ALA	C-N-CA	6.08	128.34	120.44
4	F	33	GLY	O-C-N	-6.08	116.39	123.44
6	G	28	ALA	CA-C-N	6.08	128.71	120.44
6	G	28	ALA	C-N-CA	6.08	128.71	120.44
3	C	141	PHE	CA-C-O	-6.08	113.67	120.54
3	E	448	ARG	N-CA-C	-6.07	105.83	113.18
8	O	87	GLN	CA-C-N	6.07	126.68	120.00
8	O	87	GLN	C-N-CA	6.07	126.68	120.00
8	O	346	ASP	N-CA-CB	6.07	119.05	110.12
6	K	34	GLU	CB-CA-C	-6.07	100.53	110.85
8	O	25	ALA	CA-C-N	6.07	127.43	119.84
8	O	25	ALA	C-N-CA	6.07	127.43	119.84
8	O	335	LYS	CA-C-N	6.07	131.72	122.37
8	O	335	LYS	C-N-CA	6.07	131.72	122.37
3	C	249	GLY	N-CA-C	-6.07	106.02	115.67
4	F	34	VAL	N-CA-C	-6.07	99.31	108.17
7	P	180	MET	CA-C-N	6.06	128.32	120.44
7	P	180	MET	C-N-CA	6.06	128.32	120.44
7	P	317	ASN	N-CA-C	-6.06	105.19	112.58
7	P	256	ASN	CA-C-N	6.06	125.77	119.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	256	ASN	C-N-CA	6.06	125.77	119.05
8	O	100	LEU	O-C-N	6.06	128.28	121.32
3	E	364	LEU	O-C-N	6.06	129.05	122.15
3	A	140	GLN	CA-C-O	6.05	126.84	120.54
4	B	285	ALA	N-CA-C	6.05	117.96	111.36
7	P	287	SER	CA-C-O	-6.05	114.46	120.82
1	M	27	GLN	N-CA-CB	6.05	119.12	110.16
4	B	195	ARG	CA-C-N	6.05	125.60	119.19
4	B	195	ARG	C-N-CA	6.05	125.60	119.19
3	A	545	ASP	CA-C-O	6.04	126.95	120.55
6	G	13	VAL	N-CA-C	6.04	116.82	110.72
3	E	510	SER	CB-CA-C	-6.04	100.76	110.79
7	P	212	PRO	CA-C-N	6.04	128.29	120.44
7	P	212	PRO	C-N-CA	6.04	128.29	120.44
7	P	142	SER	N-CA-CB	6.04	118.76	110.01
7	P	469	THR	N-CA-CB	6.03	119.09	110.16
3	C	25	GLY	N-CA-C	-6.03	103.36	112.89
4	D	107	ASP	N-CA-C	-6.03	105.78	113.02
4	D	150	MET	CA-C-N	6.03	131.04	123.14
4	D	150	MET	C-N-CA	6.03	131.04	123.14
3	A	108	ILE	N-CA-C	-6.03	105.49	111.88
4	B	392	THR	N-CA-C	-6.03	99.91	109.07
4	B	113	PHE	CA-C-O	6.03	128.26	121.51
6	K	142	LEU	CA-C-O	-6.03	114.99	121.56
6	K	212	GLU	CA-C-O	-6.02	114.12	120.63
3	E	475	TYR	N-CA-CB	6.02	121.08	110.37
1	M	118	ASN	O-C-N	-6.02	115.18	123.12
3	E	490	SER	CB-CA-C	-6.02	101.39	110.90
3	E	249	GLY	N-CA-C	-6.02	106.79	115.27
4	B	460	GLN	N-CA-C	6.02	117.92	111.36
3	C	33	PRO	N-CA-C	-6.01	106.26	114.80
4	B	474	ASN	CA-C-O	6.01	125.75	119.14
4	F	298	VAL	CA-C-N	6.01	127.36	119.84
4	F	298	VAL	C-N-CA	6.01	127.36	119.84
7	P	303	LYS	CA-C-N	6.01	130.69	122.34
7	P	303	LYS	C-N-CA	6.01	130.69	122.34
3	A	492	ALA	CA-C-N	6.01	128.61	120.44
3	A	492	ALA	C-N-CA	6.01	128.61	120.44
6	I	158	ARG	CA-C-N	6.01	128.33	120.28
6	I	158	ARG	C-N-CA	6.01	128.33	120.28
4	D	151	ILE	N-CA-C	-6.01	99.70	108.11
8	O	332	VAL	CA-C-O	6.01	123.09	119.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	I	64	SER	CA-C-O	-6.00	113.58	120.24
5	L	26	LYS	CA-C-N	6.00	128.32	120.28
5	L	26	LYS	C-N-CA	6.00	128.32	120.28
6	K	146	VAL	CB-CA-C	-6.00	104.03	112.14
7	P	400	GLU	N-CA-CB	6.00	118.95	110.12
4	D	157	ALA	O-C-N	6.00	128.99	122.15
4	F	175	ALA	O-C-N	6.00	130.00	123.10
3	E	281	VAL	O-C-N	6.00	129.56	123.20
3	C	383	TYR	N-CA-C	-6.00	105.22	112.54
4	F	201	HIS	N-CA-CB	5.99	119.57	110.28
3	A	219	VAL	CA-C-O	-5.99	114.83	119.20
6	G	113	ASN	N-CA-C	-5.99	97.95	108.20
6	G	181	LYS	N-CA-C	-5.99	105.55	112.92
2	N	110	LYS	N-CA-CB	5.99	118.70	110.01
4	D	346	ILE	N-CA-CB	5.99	115.12	110.45
4	D	468	TYR	CA-C-N	5.99	125.96	120.21
4	D	468	TYR	C-N-CA	5.99	125.96	120.21
4	B	280	ASP	CA-C-N	5.99	128.80	120.29
4	B	280	ASP	C-N-CA	5.99	128.80	120.29
7	P	276	LYS	N-CA-C	5.99	117.81	111.28
3	A	592	GLY	N-CA-C	-5.99	98.99	113.18
8	O	375	ALA	N-CA-C	-5.99	98.04	110.80
3	A	591	ARG	N-CA-C	-5.99	104.83	113.21
8	O	45	VAL	N-CA-C	-5.98	99.86	108.48
5	H	30	ASP	N-CA-CB	5.98	118.69	110.01
6	I	152	MET	CA-C-O	-5.98	111.96	120.51
6	K	141	ALA	O-C-N	5.98	129.98	123.10
5	H	34	GLN	CA-C-N	5.98	128.29	120.28
5	H	34	GLN	C-N-CA	5.98	128.29	120.28
6	G	223	TYR	CA-C-N	-5.98	110.94	121.70
6	G	223	TYR	C-N-CA	-5.98	110.94	121.70
3	C	470	PHE	O-C-N	-5.98	115.91	122.07
4	D	81	GLU	CA-C-O	5.98	126.85	120.46
6	G	167	ALA	N-CA-CB	5.98	121.01	110.37
3	E	408	GLY	CA-C-O	-5.97	114.62	121.49
7	P	309	ILE	CA-C-O	5.97	127.16	120.95
6	I	129	LEU	N-CA-CB	5.97	119.54	110.28
7	P	351	GLN	N-CA-C	-5.97	104.85	111.36
4	D	411	LYS	N-CA-CB	5.97	118.89	110.12
4	F	310	THR	CA-C-N	5.97	128.28	120.28
4	F	310	THR	C-N-CA	5.97	128.28	120.28
1	M	66	PHE	CA-C-N	5.97	128.28	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	66	PHE	C-N-CA	5.97	128.28	120.28
6	K	52	ARG	CA-C-N	5.96	128.59	120.54
6	K	52	ARG	C-N-CA	5.96	128.59	120.54
3	E	340	ALA	CA-C-O	5.96	126.87	120.55
3	E	501	LEU	CA-C-O	-5.96	114.76	120.90
6	K	15	ASP	O-C-N	5.96	128.43	122.12
3	C	186	ALA	N-CA-CB	5.95	119.33	109.98
4	D	420	VAL	CA-C-N	5.95	133.07	121.41
4	D	420	VAL	C-N-CA	5.95	133.07	121.41
3	C	606	THR	CA-C-N	5.95	128.25	120.28
3	C	606	THR	C-N-CA	5.95	128.25	120.28
3	A	306	GLY	CA-C-N	5.95	131.56	123.11
3	A	306	GLY	C-N-CA	5.95	131.56	123.11
7	P	345	ILE	N-CA-CB	5.95	117.51	110.55
8	O	338	SER	CA-C-N	5.95	128.73	120.29
8	O	338	SER	C-N-CA	5.95	128.73	120.29
2	N	95	PRO	CA-C-O	-5.95	114.84	121.32
3	E	564	GLY	CA-C-N	5.95	132.90	121.54
3	E	564	GLY	C-N-CA	5.95	132.90	121.54
2	N	71	GLN	N-CA-C	5.94	118.52	111.33
4	F	347	PRO	N-CA-CB	5.94	110.10	103.44
4	B	172	ILE	N-CA-C	-5.94	99.31	107.99
7	P	210	PHE	CA-C-N	5.94	127.52	120.09
7	P	210	PHE	C-N-CA	5.94	127.52	120.09
6	I	87	LYS	N-CA-CB	5.94	118.63	110.01
1	M	80	GLY	CA-C-N	5.94	128.16	120.44
1	M	80	GLY	C-N-CA	5.94	128.16	120.44
2	N	46	THR	CA-C-N	5.94	128.52	120.38
2	N	46	THR	C-N-CA	5.94	128.52	120.38
3	E	445	LEU	CA-C-N	5.94	128.83	120.28
3	E	445	LEU	C-N-CA	5.94	128.83	120.28
4	B	144	ARG	N-CA-C	-5.94	104.70	113.61
3	A	316	THR	CA-C-O	-5.93	114.29	120.70
7	P	33	SER	N-CA-CB	5.93	120.03	110.42
3	C	334	TYR	O-C-N	5.93	128.41	122.12
4	D	381	ARG	N-CA-C	-5.93	99.53	108.96
3	A	309	GLU	O-C-N	5.93	128.14	121.32
1	M	29	TYR	CA-C-N	5.93	128.15	120.44
1	M	29	TYR	C-N-CA	5.93	128.15	120.44
4	B	146	TYR	CA-C-N	5.93	125.95	119.90
4	B	146	TYR	C-N-CA	5.93	125.95	119.90
6	I	131	LYS	N-CA-C	-5.92	106.21	113.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	I	218	ILE	N-CA-C	-5.92	104.74	110.72
4	D	193	LEU	N-CA-C	-5.92	106.10	113.38
2	N	100	PRO	CA-C-N	5.92	129.78	121.02
2	N	100	PRO	C-N-CA	5.92	129.78	121.02
6	K	161	GLY	CA-C-O	-5.92	113.79	120.30
5	J	99	ILE	CA-C-N	5.92	128.21	120.28
5	J	99	ILE	C-N-CA	5.92	128.21	120.28
1	M	211	GLN	CA-C-O	5.91	126.82	120.55
4	D	422	GLU	N-CA-C	-5.91	106.68	114.31
4	F	45	LYS	N-CA-C	5.91	118.91	110.10
4	B	476	ILE	CA-C-O	-5.91	115.67	121.58
7	P	50	ILE	CA-C-N	5.91	128.68	120.29
7	P	50	ILE	C-N-CA	5.91	128.68	120.29
4	D	98	GLU	CA-C-N	5.91	130.22	120.94
4	D	98	GLU	C-N-CA	5.91	130.22	120.94
3	E	227	LEU	O-C-N	-5.91	115.47	123.15
1	M	15	LEU	CA-C-N	5.91	126.50	119.94
1	M	15	LEU	C-N-CA	5.91	126.50	119.94
4	D	60	GLY	N-CA-C	-5.90	107.11	115.43
7	P	331	SER	CA-C-O	-5.90	114.62	120.82
8	O	218	VAL	CA-C-N	5.90	125.66	119.76
8	O	218	VAL	C-N-CA	5.90	125.66	119.76
8	O	256	ILE	N-CA-CB	5.90	119.47	111.21
6	G	200	ASN	N-CA-CB	5.90	118.80	110.24
5	J	9	THR	CA-C-N	5.90	128.67	120.29
5	J	9	THR	C-N-CA	5.90	128.67	120.29
3	A	545	ASP	O-C-N	-5.90	115.87	122.12
3	C	81	VAL	N-CA-CB	-5.90	104.10	110.53
7	P	27	TRP	CA-C-N	5.90	128.10	120.44
7	P	27	TRP	C-N-CA	5.90	128.10	120.44
3	A	492	ALA	O-C-N	-5.89	115.87	122.12
8	O	311	VAL	CA-C-O	-5.89	114.60	120.85
8	O	366	LYS	CA-C-O	-5.89	114.22	121.11
8	O	4	ALA	CA-C-O	5.89	126.79	119.78
3	A	130	THR	CA-C-N	5.89	127.20	119.84
3	A	130	THR	C-N-CA	5.89	127.20	119.84
7	P	21	ARG	CA-C-N	5.89	128.17	120.28
7	P	21	ARG	C-N-CA	5.89	128.17	120.28
1	M	36	SER	CA-C-N	5.88	128.16	120.28
1	M	36	SER	C-N-CA	5.88	128.16	120.28
4	D	263	ALA	CA-C-N	5.88	128.65	120.29
4	D	263	ALA	C-N-CA	5.88	128.65	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	K	106	LYS	CA-C-N	5.88	128.65	120.29
6	K	106	LYS	C-N-CA	5.88	128.65	120.29
1	M	198	GLU	CA-C-N	5.88	128.16	120.28
1	M	198	GLU	C-N-CA	5.88	128.16	120.28
8	O	317	LEU	N-CA-C	5.88	117.69	111.28
6	I	15	ASP	N-CA-CB	5.88	118.76	110.12
6	I	110	ILE	CA-C-N	5.88	129.25	120.31
6	I	110	ILE	C-N-CA	5.88	129.25	120.31
1	M	144	GLU	CA-C-N	5.88	128.16	120.28
1	M	144	GLU	C-N-CA	5.88	128.16	120.28
3	A	83	ASP	O-C-N	-5.88	113.70	121.34
4	B	384	LYS	CA-C-N	5.88	128.64	120.29
4	B	384	LYS	C-N-CA	5.88	128.64	120.29
3	C	446	ALA	CA-C-N	5.88	129.24	120.31
3	C	446	ALA	C-N-CA	5.88	129.24	120.31
3	E	228	SER	CB-CA-C	-5.88	99.60	109.65
4	B	260	LEU	CA-C-O	5.88	126.78	120.55
3	E	548	ARG	CA-C-N	5.87	128.63	120.29
3	E	548	ARG	C-N-CA	5.87	128.63	120.29
4	D	143	ALA	N-CA-C	5.87	123.31	110.80
3	A	313	LYS	CB-CA-C	-5.87	99.77	110.63
3	E	312	MET	CA-C-N	5.87	128.15	120.28
3	E	312	MET	C-N-CA	5.87	128.15	120.28
4	F	171	PRO	CA-C-N	5.87	130.41	122.90
4	F	171	PRO	C-N-CA	5.87	130.41	122.90
4	D	277	ILE	O-C-N	-5.87	116.98	123.20
6	K	148	LEU	CA-C-O	5.87	126.64	120.42
5	H	74	ALA	CA-C-N	5.87	126.34	119.94
5	H	74	ALA	C-N-CA	5.87	126.34	119.94
6	G	192	ASN	O-C-N	-5.87	115.81	122.68
4	D	184	ALA	CA-C-O	-5.87	114.20	120.42
4	D	239	SER	N-CA-C	-5.86	99.84	109.40
4	B	324	GLY	CA-C-N	5.86	130.91	122.35
4	B	324	GLY	C-N-CA	5.86	130.91	122.35
3	A	91	PRO	N-CA-C	5.86	119.71	111.33
3	A	524	ASP	CA-C-O	-5.86	112.88	119.79
7	P	334	GLU	CA-C-N	5.86	128.13	120.28
7	P	334	GLU	C-N-CA	5.86	128.13	120.28
7	P	219	GLN	O-C-N	5.86	128.33	122.12
6	I	128	ALA	CA-C-O	-5.86	114.21	120.42
1	M	208	GLU	N-CA-CB	5.85	118.72	110.12
6	K	126	VAL	N-CA-CB	5.85	119.36	110.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	O	21	GLN	CB-CA-C	-5.85	100.90	109.97
6	G	46	GLU	O-C-N	-5.85	115.48	122.15
4	F	231	GLU	CB-CA-C	-5.85	101.69	110.88
3	A	613	GLU	N-CA-C	-5.85	104.91	111.28
3	A	238	ARG	O-C-N	5.85	128.32	122.12
7	P	191	GLN	CA-C-N	5.85	128.11	120.28
7	P	191	GLN	C-N-CA	5.85	128.11	120.28
4	B	445	THR	N-CA-C	-5.84	99.00	108.52
3	C	163	GLU	N-CA-C	-5.84	103.86	113.50
4	F	297	GLU	O-C-N	-5.84	116.05	123.06
7	P	205	LEU	N-CA-C	5.84	117.65	111.28
3	C	266	SER	CA-C-N	5.84	128.58	120.29
3	C	266	SER	C-N-CA	5.84	128.58	120.29
3	A	304	MET	N-CA-C	-5.84	104.82	112.41
6	K	66	LEU	CA-C-N	5.84	128.10	120.28
6	K	66	LEU	C-N-CA	5.84	128.10	120.28
7	P	432	GLU	CA-C-O	5.84	126.74	120.55
6	G	95	SER	CA-C-N	5.84	128.10	120.28
6	G	95	SER	C-N-CA	5.84	128.10	120.28
4	D	391	MET	CA-C-N	5.84	133.40	123.01
4	D	391	MET	C-N-CA	5.84	133.40	123.01
4	B	460	GLN	CA-C-O	5.84	126.61	120.42
6	G	72	SER	CA-C-O	-5.84	113.26	119.97
7	P	115	LYS	CA-C-N	5.83	128.10	120.28
7	P	115	LYS	C-N-CA	5.83	128.10	120.28
8	O	257	PRO	CA-C-N	5.83	131.59	123.07
8	O	257	PRO	C-N-CA	5.83	131.59	123.07
3	E	234	LEU	CA-C-N	5.83	128.57	120.29
3	E	234	LEU	C-N-CA	5.83	128.57	120.29
3	E	439	TRP	N-CA-C	-5.83	99.50	109.24
6	G	86	LEU	CA-C-O	5.83	126.60	120.42
1	M	136	LYS	CA-C-N	5.83	128.09	120.28
1	M	136	LYS	C-N-CA	5.83	128.09	120.28
4	B	219	LEU	N-CA-C	-5.83	105.00	111.36
3	E	451	PHE	N-CA-CB	5.83	118.36	110.14
3	E	99	GLY	CA-C-N	5.83	128.56	120.29
3	E	99	GLY	C-N-CA	5.83	128.56	120.29
3	A	75	GLU	N-CA-CB	5.83	118.25	109.34
2	N	31	GLU	CA-C-O	-5.82	112.64	119.05
4	F	42	GLU	N-CA-C	-5.82	99.75	109.24
3	C	486	LYS	O-C-N	5.82	128.38	122.09
5	J	31	LYS	CA-C-N	5.82	128.55	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	J	31	LYS	C-N-CA	5.82	128.55	120.29
3	E	552	SER	CA-C-N	5.82	128.08	120.28
3	E	552	SER	C-N-CA	5.82	128.08	120.28
7	P	2	GLY	O-C-N	5.82	129.13	122.33
3	E	108	ILE	CA-C-O	5.81	124.44	119.38
4	B	188	CYS	N-CA-C	5.81	117.69	111.36
4	D	319	ALA	N-CA-C	-5.81	98.43	110.80
3	A	577	VAL	CB-CA-C	-5.81	104.30	112.14
5	L	74	ALA	N-CA-C	5.81	118.39	111.71
7	P	262	GLU	CA-C-N	5.81	127.99	120.44
7	P	262	GLU	C-N-CA	5.81	127.99	120.44
4	B	184	ALA	N-CA-C	5.81	117.28	111.07
4	D	169	LYS	CA-C-O	-5.81	115.08	121.58
7	P	274	LEU	N-CA-CB	5.80	118.65	110.12
3	C	110	ARG	N-CA-CB	5.80	120.70	110.37
4	D	319	ALA	N-CA-CB	5.80	120.30	110.49
6	K	127	GLU	N-CA-C	5.80	117.60	111.28
3	A	361	ALA	CA-C-N	5.80	129.12	120.31
3	A	361	ALA	C-N-CA	5.80	129.12	120.31
3	E	519	THR	CA-C-N	5.80	128.05	120.28
3	E	519	THR	C-N-CA	5.80	128.05	120.28
4	F	326	ASN	CB-CA-C	-5.80	101.45	111.30
3	A	325	PRO	N-CA-C	5.80	124.41	112.47
3	A	337	ILE	CA-C-O	-5.80	114.71	120.85
3	A	370	ARG	O-C-N	5.79	128.35	122.09
2	N	74	ALA	CB-CA-C	-5.79	101.17	110.79
4	F	98	GLU	CA-C-O	5.79	126.75	120.32
3	A	106	ASP	CA-C-O	-5.79	114.53	121.89
6	I	116	GLU	N-CA-C	-5.79	105.31	112.90
1	M	163	ILE	N-CA-CB	5.79	118.42	110.54
4	F	202	ASP	N-CA-CB	5.79	120.28	110.49
4	B	279	THR	O-C-N	-5.79	116.54	123.31
4	B	377	PRO	O-C-N	5.79	130.46	122.64
4	D	350	THR	CA-C-N	5.79	127.38	120.14
4	D	350	THR	C-N-CA	5.79	127.38	120.14
3	E	143	PRO	CA-C-O	-5.79	114.67	122.08
5	L	15	LYS	N-CA-CB	5.79	118.46	110.07
8	O	18	GLN	N-CA-C	-5.79	105.98	113.16
1	M	176	VAL	N-CA-C	5.78	116.83	111.45
4	D	308	MET	O-C-N	5.78	128.74	122.15
6	K	40	ASP	CB-CA-C	-5.78	101.19	110.79
7	P	189	LEU	N-CA-C	-5.78	104.88	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	J	72	ALA	N-CA-C	-5.78	105.32	112.90
3	C	399	VAL	N-CA-CB	5.78	117.59	111.00
7	P	417	LYS	O-C-N	-5.78	115.16	122.27
3	C	403	SER	O-C-N	-5.78	115.25	120.92
4	D	240	LEU	CB-CA-C	-5.78	99.13	109.71
4	F	358	ILE	N-CA-C	-5.78	98.09	107.28
7	P	421	GLN	CA-C-N	5.78	127.84	120.56
7	P	421	GLN	C-N-CA	5.78	127.84	120.56
8	O	116	TRP	N-CA-CB	5.78	120.26	110.49
3	A	475	TYR	CA-C-N	5.78	127.06	119.84
3	A	475	TYR	C-N-CA	5.78	127.06	119.84
4	D	102	ILE	CA-C-O	-5.77	114.08	119.62
4	F	449	TYR	N-CA-C	-5.77	104.42	113.02
5	L	14	GLU	CA-C-O	-5.77	114.43	120.55
3	C	495	LEU	CA-C-N	5.77	128.01	120.28
3	C	495	LEU	C-N-CA	5.77	128.01	120.28
3	A	148	VAL	N-CA-CB	5.77	117.41	110.31
7	P	188	ARG	N-CA-C	5.77	117.57	111.28
3	C	175	PRO	N-CA-CB	5.77	108.68	103.08
4	D	120	ILE	N-CA-C	-5.77	106.69	112.17
3	E	570	LEU	N-CA-C	5.77	117.65	111.36
3	A	590	SER	CA-C-N	5.77	129.04	119.35
3	A	590	SER	C-N-CA	5.77	129.04	119.35
3	C	32	GLY	O-C-N	-5.76	116.01	121.77
3	C	66	ASP	CA-C-N	5.76	130.32	122.19
3	C	66	ASP	C-N-CA	5.76	130.32	122.19
6	K	145	ASP	CA-C-N	5.76	128.36	120.46
6	K	145	ASP	C-N-CA	5.76	128.36	120.46
7	P	461	VAL	CA-C-O	-5.76	115.06	121.17
6	K	43	TYR	CA-C-O	-5.76	114.73	120.90
3	A	511	ASP	CA-C-O	5.76	126.59	119.97
5	L	62	ALA	N-CA-C	-5.76	103.61	111.56
7	P	146	VAL	CA-C-N	5.76	128.60	120.42
7	P	146	VAL	C-N-CA	5.76	128.60	120.42
3	A	372	GLY	O-C-N	-5.76	115.21	122.41
5	H	7	ILE	N-CA-C	-5.76	105.12	110.53
7	P	173	ILE	CA-C-N	5.75	127.99	120.28
7	P	173	ILE	C-N-CA	5.75	127.99	120.28
8	O	243	VAL	CA-C-O	-5.75	115.07	121.17
5	H	21	VAL	CA-C-N	5.75	127.99	120.28
5	H	21	VAL	C-N-CA	5.75	127.99	120.28
6	G	194	SER	CA-C-N	5.75	132.53	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	G	194	SER	C-N-CA	5.75	132.53	121.54
6	I	115	ASP	N-CA-C	-5.75	106.09	113.23
3	C	191	TYR	N-CA-C	-5.75	100.55	109.24
8	O	145	VAL	N-CA-CB	5.75	119.21	110.58
4	D	38	LEU	N-CA-CB	5.75	118.86	109.95
4	D	79	VAL	N-CA-CB	5.75	118.49	110.56
4	F	143	ALA	N-CA-C	5.75	119.50	111.74
6	K	79	THR	N-CA-C	-5.75	105.09	111.36
4	B	336	THR	CB-CA-C	5.75	119.61	110.19
8	O	285	ARG	N-CA-C	5.75	117.54	111.28
6	G	49	ASN	O-C-N	5.75	128.00	122.03
3	C	352	MET	N-CA-C	-5.74	99.37	108.73
13	m	54	ILE	CA-C-N	5.74	123.86	120.24
13	m	54	ILE	C-N-CA	5.74	123.86	120.24
3	C	294	LEU	CB-CA-C	-5.74	101.83	110.90
6	G	71	LEU	CA-C-N	5.74	129.03	120.31
6	G	71	LEU	C-N-CA	5.74	129.03	120.31
4	F	347	PRO	O-C-N	-5.74	115.06	122.23
3	C	386	ALA	CA-C-O	-5.74	114.47	120.55
4	F	324	GLY	CA-C-N	5.74	130.27	122.07
4	F	324	GLY	C-N-CA	5.74	130.27	122.07
3	A	609	GLU	N-CA-C	-5.74	104.95	111.14
7	P	77	LEU	N-CA-CB	5.74	118.33	110.01
4	F	408	ALA	CA-C-N	5.73	128.32	120.46
4	F	408	ALA	C-N-CA	5.73	128.32	120.46
4	B	429	ASP	CA-C-N	5.73	128.43	120.29
4	B	429	ASP	C-N-CA	5.73	128.43	120.29
3	C	341	GLU	O-C-N	-5.73	116.04	122.12
4	D	484	PHE	CA-C-N	5.73	132.02	121.70
4	D	484	PHE	C-N-CA	5.73	132.02	121.70
5	H	91	LYS	N-CA-C	5.73	117.20	111.07
6	G	24	ILE	O-C-N	5.73	127.53	121.91
3	A	129	ASP	CB-CA-C	5.73	119.37	111.23
3	A	379	GLY	CA-C-O	5.73	126.59	119.25
3	A	444	LYS	O-C-N	5.73	128.19	122.12
8	O	30	THR	N-CA-CB	5.73	118.64	110.16
4	D	90	LYS	N-CA-C	-5.73	105.62	113.30
7	P	199	TYR	CA-C-N	5.73	128.23	120.38
7	P	199	TYR	C-N-CA	5.73	128.23	120.38
8	O	213	LEU	O-C-N	-5.73	115.62	122.15
6	I	45	ILE	N-CA-C	-5.73	104.92	110.42
3	C	222	PRO	CB-CA-C	5.73	118.50	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	314	LEU	CA-C-O	5.73	126.80	120.90
4	B	260	LEU	CB-CA-C	-5.73	101.29	110.79
1	M	69	ALA	N-CA-C	5.72	117.52	111.28
3	C	332	SER	CA-C-O	-5.72	114.77	120.90
4	F	256	PRO	CB-CA-C	-5.72	103.28	112.21
6	G	59	ASP	CA-C-N	5.72	126.29	119.94
6	G	59	ASP	C-N-CA	5.72	126.29	119.94
6	I	175	SER	N-CA-C	-5.72	101.99	110.46
8	O	333	PRO	N-CA-C	-5.72	103.72	110.70
3	C	50	LYS	O-C-N	-5.72	116.64	123.27
4	D	194	VAL	CA-C-N	5.72	127.24	120.09
4	D	194	VAL	C-N-CA	5.72	127.24	120.09
6	G	105	GLU	CA-C-N	5.72	127.94	120.28
6	G	105	GLU	C-N-CA	5.72	127.94	120.28
7	P	47	LEU	CA-C-O	5.72	126.61	120.55
3	A	500	GLN	N-CA-C	5.72	117.19	111.07
3	A	611	PHE	CA-C-N	5.72	128.41	120.29
3	A	611	PHE	C-N-CA	5.72	128.41	120.29
2	N	52	ASP	CA-C-N	5.71	127.87	120.44
2	N	52	ASP	C-N-CA	5.71	127.87	120.44
3	C	269	LEU	CA-C-N	5.71	127.94	120.28
3	C	269	LEU	C-N-CA	5.71	127.94	120.28
6	K	132	LEU	CA-C-N	5.71	130.69	122.35
6	K	132	LEU	C-N-CA	5.71	130.69	122.35
4	D	208	PHE	N-CA-C	-5.71	100.09	109.40
3	E	510	SER	N-CA-C	5.71	117.51	111.28
3	A	251	THR	N-CA-C	-5.71	99.35	109.06
3	C	232	PRO	N-CA-C	-5.71	100.71	112.47
4	F	122	ASN	O-C-N	-5.71	116.07	123.32
4	F	429	ASP	CA-C-N	5.71	128.99	120.31
4	F	429	ASP	C-N-CA	5.71	128.99	120.31
6	K	99	ILE	N-CA-C	-5.71	104.95	110.72
3	A	172	ILE	N-CA-CB	5.71	117.51	111.00
2	N	81	VAL	N-CA-CB	5.71	117.88	110.57
4	D	326	ASN	N-CA-CB	5.71	120.56	111.66
3	A	349	ASN	N-CA-C	-5.71	99.99	109.46
3	C	488	ILE	N-CA-C	5.71	116.44	110.62
4	F	416	MET	N-CA-C	-5.71	105.20	111.82
5	J	27	TYR	CB-CA-C	-5.71	101.92	110.88
8	O	208	LYS	CA-C-O	-5.70	114.38	120.42
7	P	287	SER	N-CA-C	5.70	117.17	111.07
3	C	254	ILE	N-CA-CB	5.70	119.19	111.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	O	182	GLU	N-CA-C	-5.70	103.81	112.99
4	D	48	ARG	N-CA-CB	5.70	118.59	110.44
4	D	209	SER	CA-C-O	5.70	127.84	121.40
4	F	252	ARG	CA-C-O	-5.70	114.84	120.82
2	N	99	HIS	CB-CA-C	-5.70	102.25	109.65
3	C	442	ASP	N-CA-CB	5.70	119.51	110.57
3	A	359	ARG	O-C-N	5.70	129.96	122.33
6	G	107	LEU	CA-C-N	5.70	128.97	120.31
6	G	107	LEU	C-N-CA	5.70	128.97	120.31
3	E	441	LEU	N-CA-C	-5.69	98.68	110.80
8	O	361	LYS	N-CA-C	-5.69	98.81	108.26
4	B	349	LEU	O-C-N	5.69	128.64	122.15
5	J	84	LYS	CA-C-O	5.69	126.37	119.31
6	K	149	ILE	N-CA-C	-5.69	104.96	110.42
3	C	522	LYS	N-CA-CB	5.69	118.26	110.01
3	E	175	PRO	CB-CA-C	5.69	117.86	110.92
3	A	364	LEU	N-CA-C	5.69	117.56	111.36
4	B	76	ILE	O-C-N	5.69	129.40	123.26
7	P	172	ASN	CA-C-N	5.69	128.50	120.42
7	P	172	ASN	C-N-CA	5.69	128.50	120.42
3	E	411	SER	CA-C-O	-5.69	114.23	120.43
1	M	153	GLN	CA-C-N	5.68	127.90	120.28
1	M	153	GLN	C-N-CA	5.68	127.90	120.28
4	D	247	ASP	CA-C-N	5.68	125.68	119.89
4	D	247	ASP	C-N-CA	5.68	125.68	119.89
4	D	404	TYR	N-CA-CB	5.68	118.31	110.07
4	D	417	LYS	CA-C-N	5.68	127.82	120.44
4	D	417	LYS	C-N-CA	5.68	127.82	120.44
4	D	55	LEU	O-C-N	-5.68	116.75	123.22
3	E	576	ASP	N-CA-CB	5.68	118.30	110.07
4	F	88	VAL	N-CA-C	-5.68	106.68	111.56
3	A	598	GLY	CA-C-N	5.68	127.89	120.28
3	A	598	GLY	C-N-CA	5.68	127.89	120.28
4	B	129	GLU	CA-C-O	-5.68	112.39	120.51
6	G	183	LEU	N-CA-C	-5.68	107.35	114.56
3	E	318	VAL	N-CA-C	-5.67	99.57	107.80
3	E	588	GLU	N-CA-C	-5.67	103.11	108.22
1	M	164	LYS	N-CA-C	5.67	117.46	111.28
5	L	43	ILE	CA-C-O	-5.67	114.21	120.96
3	C	340	ALA	CA-C-O	5.67	126.56	120.55
4	D	92	THR	N-CA-C	-5.67	100.74	109.52
4	D	466	ARG	CA-C-O	5.67	126.50	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	F	106	GLU	CB-CA-C	-5.67	100.98	110.56
3	A	265	ILE	O-C-N	-5.67	115.40	121.80
3	E	51	VAL	N-CA-C	-5.67	100.24	108.17
4	B	326	ASN	N-CA-C	-5.66	106.03	114.64
7	P	227	ALA	CA-C-O	5.66	126.41	119.05
3	A	318	VAL	N-CA-C	-5.66	99.59	107.80
6	G	171	GLU	N-CA-CB	-5.66	100.99	111.52
3	E	602	LYS	N-CA-C	5.66	118.22	111.71
4	F	188	CYS	N-CA-CB	5.66	118.44	110.12
3	E	110	ARG	N-CA-CB	5.66	123.68	110.95
7	P	444	THR	CB-CA-C	-5.66	101.23	110.85
6	K	65	LYS	CA-C-O	-5.66	114.56	120.55
8	O	288	LEU	N-CA-C	5.66	117.25	111.14
8	O	334	PRO	N-CA-C	5.66	120.48	111.26
3	C	161	VAL	N-CA-C	-5.65	100.04	108.46
4	D	199	ASP	N-CA-C	-5.65	105.12	111.28
5	L	102	VAL	O-C-N	-5.65	115.42	121.80
1	M	14	THR	N-CA-C	-5.65	105.89	112.89
4	D	358	ILE	CA-C-O	-5.65	114.52	120.39
3	C	326	VAL	N-CA-C	5.64	118.14	111.09
4	D	425	LEU	O-C-N	-5.64	116.58	122.96
4	F	101	ARG	N-CA-C	-5.64	100.72	109.24
5	J	87	ALA	CA-C-O	-5.64	114.44	120.42
3	E	596	VAL	N-CA-C	-5.64	99.42	107.77
6	K	120	ILE	N-CA-C	-5.64	105.22	110.53
4	D	50	ASN	N-CA-CB	5.64	120.02	110.49
4	D	282	SER	CA-C-N	5.64	127.84	120.28
4	D	282	SER	C-N-CA	5.64	127.84	120.28
8	O	351	LEU	CA-C-N	5.64	126.20	120.00
8	O	351	LEU	C-N-CA	5.64	126.20	120.00
3	E	344	ARG	CA-C-N	5.64	130.14	120.72
3	E	344	ARG	C-N-CA	5.64	130.14	120.72
3	A	557	ALA	CB-CA-C	-5.64	101.26	110.85
4	B	320	GLY	N-CA-C	-5.64	104.13	111.52
7	P	111	ASP	CA-C-N	5.64	127.84	120.28
7	P	111	ASP	C-N-CA	5.64	127.84	120.28
4	F	246	ASN	CA-C-O	5.64	125.10	118.90
3	A	498	VAL	CA-C-O	-5.64	115.09	120.95
4	B	318	ARG	N-CA-C	-5.64	101.17	109.62
4	F	247	ASP	CA-C-O	-5.63	115.04	119.66
6	K	22	ALA	CA-C-N	5.63	127.76	120.44
6	K	22	ALA	C-N-CA	5.63	127.76	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	378	GLY	CA-C-N	5.63	127.76	120.44
7	P	378	GLY	C-N-CA	5.63	127.76	120.44
3	E	100	LEU	CA-C-O	5.63	126.39	120.42
4	B	409	ILE	CA-C-N	5.63	127.18	120.14
4	B	409	ILE	C-N-CA	5.63	127.18	120.14
7	P	342	LEU	CA-C-O	5.63	126.46	120.10
6	I	85	ARG	N-CA-CB	5.63	119.73	110.39
4	D	384	LYS	N-CA-C	-5.63	106.18	113.16
5	L	53	GLU	O-C-N	-5.63	114.22	122.43
5	L	87	ALA	CA-C-N	5.63	128.86	120.31
5	L	87	ALA	C-N-CA	5.63	128.86	120.31
3	A	597	HIS	O-C-N	-5.62	116.76	123.06
4	B	319	ALA	CB-CA-C	-5.62	99.87	110.16
5	L	12	GLN	CA-C-N	5.62	127.81	120.28
5	L	12	GLN	C-N-CA	5.62	127.81	120.28
5	H	39	ALA	CA-C-N	5.62	128.85	120.31
5	H	39	ALA	C-N-CA	5.62	128.85	120.31
3	A	235	THR	CA-C-N	5.62	131.13	121.07
3	A	235	THR	C-N-CA	5.62	131.13	121.07
8	O	25	ALA	CB-CA-C	-5.62	103.67	110.81
6	I	47	LYS	O-C-N	-5.62	116.28	122.07
3	E	279	ILE	O-C-N	5.61	129.15	123.20
7	P	294	ILE	N-CA-C	5.61	116.35	110.62
3	E	202	PHE	N-CA-C	-5.61	98.85	110.80
4	B	465	LEU	N-CA-C	5.61	118.33	111.82
3	C	497	GLN	CA-C-N	5.61	128.39	120.42
3	C	497	GLN	C-N-CA	5.61	128.39	120.42
1	M	110	GLU	N-CA-C	-5.61	99.28	108.76
3	C	217	VAL	CA-C-N	5.61	131.76	122.73
3	C	217	VAL	C-N-CA	5.61	131.76	122.73
3	A	602	LYS	N-CA-C	5.61	118.32	111.82
3	C	354	ALA	N-CA-C	-5.60	100.27	109.40
4	D	368	GLY	N-CA-C	-5.60	106.82	116.01
3	C	425	ASP	CA-C-O	-5.60	114.71	120.87
7	P	238	LEU	CB-CA-C	-5.60	102.09	110.88
3	E	534	TYR	N-CA-C	-5.60	106.45	113.28
6	K	156	ILE	N-CA-C	-5.60	105.27	110.53
4	F	200	VAL	CB-CA-C	-5.60	104.50	112.22
3	A	392	TYR	O-C-N	-5.60	115.77	122.15
3	C	406	ARG	N-CA-C	-5.59	100.97	108.86
6	I	51	VAL	CB-CA-C	5.59	119.13	111.97
4	F	322	VAL	O-C-N	-5.59	117.44	123.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	B	416	MET	N-CA-CB	5.59	118.43	110.16
7	P	369	CYS	O-C-N	-5.59	117.22	123.48
8	O	287	GLN	CA-C-N	5.59	128.04	120.44
8	O	287	GLN	C-N-CA	5.59	128.04	120.44
4	D	49	TYR	CB-CA-C	5.59	118.64	110.26
4	D	64	GLN	N-CA-C	-5.59	100.78	109.72
4	D	355	GLU	CB-CA-C	-5.59	103.55	111.76
4	F	67	VAL	CA-C-O	5.59	127.63	120.76
3	E	247	VAL	CA-C-N	5.58	130.71	123.00
3	E	247	VAL	C-N-CA	5.58	130.71	123.00
4	F	148	GLU	O-C-N	-5.58	115.16	122.59
4	F	426	SER	N-CA-C	-5.58	100.84	108.38
7	P	390	ASP	N-CA-CB	5.58	119.93	110.49
1	M	113	ILE	O-C-N	5.58	129.04	123.18
1	M	181	THR	O-C-N	5.58	128.51	122.15
8	O	303	TRP	CA-C-O	5.58	126.45	120.70
6	I	183	LEU	O-C-N	-5.58	115.16	122.59
4	D	53	VAL	N-CA-C	-5.58	99.74	108.95
4	F	228	ASP	N-CA-C	5.58	117.36	111.28
4	F	347	PRO	N-CA-C	-5.58	105.92	113.40
8	O	160	ALA	CA-C-O	5.58	126.34	120.42
5	H	53	GLU	N-CA-C	5.58	119.71	113.01
3	E	250	GLY	O-C-N	5.58	128.90	122.60
7	P	336	ARG	N-CA-CB	5.58	118.32	110.12
8	O	136	ASN	CB-CA-C	-5.58	101.53	110.79
3	E	123	TYR	CA-C-N	5.57	132.44	122.13
3	E	123	TYR	C-N-CA	5.57	132.44	122.13
4	F	116	SER	N-CA-C	-5.57	106.61	113.41
6	I	75	ILE	N-CA-C	-5.57	105.09	110.72
4	F	170	ILE	CB-CA-C	-5.57	104.53	110.16
3	A	472	ASP	CA-C-N	5.57	127.68	120.44
3	A	472	ASP	C-N-CA	5.57	127.68	120.44
7	P	237	HIS	N-CA-CB	5.57	118.42	110.06
7	P	354	THR	CA-C-N	5.57	128.20	120.29
7	P	354	THR	C-N-CA	5.57	128.20	120.29
4	D	287	ALA	CA-C-N	5.57	127.74	120.28
4	D	287	ALA	C-N-CA	5.57	127.74	120.28
4	F	112	ILE	N-CA-CB	5.57	118.83	111.25
8	O	155	ALA	CA-C-N	5.57	128.20	120.29
8	O	155	ALA	C-N-CA	5.57	128.20	120.29
5	H	89	LYS	CA-C-O	5.57	126.64	120.90
1	M	35	LYS	CB-CA-C	-5.57	101.55	110.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	E	102	GLU	CB-CA-C	-5.57	103.83	111.73
5	L	98	LEU	N-CA-CB	5.57	118.30	110.12
3	E	223	VAL	N-CA-C	-5.56	99.67	108.90
8	O	73	ASN	CA-C-N	5.56	127.73	120.28
8	O	73	ASN	C-N-CA	5.56	127.73	120.28
4	F	311	ASP	CA-C-N	5.56	127.66	120.44
4	F	311	ASP	C-N-CA	5.56	127.66	120.44
3	E	233	LEU	N-CA-C	-5.56	99.96	109.24
4	F	404	TYR	CA-C-O	-5.55	114.66	120.55
3	A	601	GLU	CA-C-N	5.55	128.75	120.31
3	A	601	GLU	C-N-CA	5.55	128.75	120.31
3	A	613	GLU	O-C-N	5.55	128.01	122.12
4	B	286	ASP	CA-C-N	5.55	127.72	120.28
4	B	286	ASP	C-N-CA	5.55	127.72	120.28
8	O	330	ILE	N-CA-C	-5.55	100.33	108.11
8	O	368	ASP	CA-C-N	5.55	132.15	121.54
8	O	368	ASP	C-N-CA	5.55	132.15	121.54
5	J	81	ALA	N-CA-C	-5.55	104.73	112.45
6	I	212	GLU	CA-C-O	-5.55	114.63	120.63
3	E	362	GLU	CA-C-N	5.55	127.72	120.28
3	E	362	GLU	C-N-CA	5.55	127.72	120.28
3	A	52	GLY	O-C-N	-5.55	117.50	122.77
5	H	47	LYS	N-CA-C	-5.55	104.87	111.03
4	D	180	HIS	CA-C-O	5.55	126.43	120.55
6	G	77	LYS	CA-C-O	-5.55	113.83	120.10
3	A	50	LYS	N-CA-C	-5.55	99.37	108.41
3	C	115	ILE	CA-C-N	5.55	127.71	120.28
3	C	115	ILE	C-N-CA	5.55	127.71	120.28
3	E	73	TYR	N-CA-C	-5.55	106.10	112.92
4	F	344	HIS	CA-C-N	5.55	125.01	119.24
4	F	344	HIS	C-N-CA	5.55	125.01	119.24
8	O	286	VAL	CB-CA-C	5.55	119.29	112.02
6	G	204	GLU	CA-C-N	5.55	127.98	120.44
6	G	204	GLU	C-N-CA	5.55	127.98	120.44
6	G	114	ARG	O-C-N	5.54	128.47	122.15
4	F	426	SER	CA-C-O	5.54	127.24	121.31
8	O	63	VAL	N-CA-CB	5.54	118.08	110.54
3	E	113	LYS	N-CA-CB	5.54	118.27	110.12
6	K	16	GLU	CA-C-N	5.54	127.64	120.44
6	K	16	GLU	C-N-CA	5.54	127.64	120.44
7	P	473	ILE	CA-C-N	5.54	126.09	120.00
7	P	473	ILE	C-N-CA	5.54	126.09	120.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	F	334	ILE	CA-C-N	5.54	130.80	122.99
4	F	334	ILE	C-N-CA	5.54	130.80	122.99
6	K	163	LYS	N-CA-CB	5.54	118.67	110.53
8	O	358	LYS	N-CA-C	-5.54	101.10	109.85
1	M	147	VAL	N-CA-CB	5.54	117.66	110.57
4	F	173	PHE	N-CA-C	-5.54	100.22	109.24
4	F	138	PRO	O-C-N	5.53	128.42	122.17
4	F	275	LEU	N-CA-C	-5.53	99.39	108.41
3	A	587	PHE	O-C-N	-5.53	116.34	122.86
4	F	159	ASP	O-C-N	-5.53	116.38	122.07
4	F	445	THR	CA-C-N	5.53	130.90	122.11
4	F	445	THR	C-N-CA	5.53	130.90	122.11
3	E	40	MET	CA-C-N	5.53	128.30	122.11
3	E	40	MET	C-N-CA	5.53	128.30	122.11
3	E	484	ARG	CA-C-O	-5.52	113.62	119.97
5	L	104	LYS	N-CA-CB	5.52	120.27	110.39
7	P	465	ALA	CA-C-N	5.52	127.95	120.44
7	P	465	ALA	C-N-CA	5.52	127.95	120.44
5	J	99	ILE	N-CA-C	-5.52	105.12	110.42
4	F	265	TYR	N-CA-C	5.52	116.98	111.07
6	I	98	GLY	CA-C-N	5.52	127.63	120.56
6	I	98	GLY	C-N-CA	5.52	127.63	120.56
3	C	478	PHE	N-CA-C	5.52	121.06	113.77
4	F	201	HIS	CA-C-N	5.52	132.08	121.54
4	F	201	HIS	C-N-CA	5.52	132.08	121.54
3	C	543	THR	CA-C-N	5.52	128.12	120.29
3	C	543	THR	C-N-CA	5.52	128.12	120.29
3	C	571	ALA	CA-C-N	5.52	128.70	120.31
3	C	571	ALA	C-N-CA	5.52	128.70	120.31
3	C	499	VAL	N-CA-C	5.52	116.25	110.62
5	L	15	LYS	CA-C-N	5.52	127.67	120.28
5	L	15	LYS	C-N-CA	5.52	127.67	120.28
7	P	82	HIS	CB-CA-C	5.52	119.54	110.88
3	A	615	THR	N-CA-CB	5.51	118.01	110.01
7	P	448	ALA	CA-C-N	5.51	127.67	120.28
7	P	448	ALA	C-N-CA	5.51	127.67	120.28
1	M	84	GLN	CA-C-N	5.51	128.12	120.29
1	M	84	GLN	C-N-CA	5.51	128.12	120.29
5	J	82	GLU	CA-C-O	-5.51	112.47	119.31
3	E	580	ALA	N-CA-C	5.51	117.29	111.28
4	B	286	ASP	N-CA-CB	5.51	118.71	110.22
7	P	7	LEU	O-C-N	5.51	128.90	122.67

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	298	PRO	CB-CA-C	-5.51	103.64	111.68
4	D	45	LYS	N-CA-C	-5.51	99.07	110.80
4	D	258	LEU	CB-CA-C	-5.51	101.49	110.85
4	D	394	LYS	N-CA-C	-5.51	106.56	113.28
3	E	358	SER	N-CA-C	-5.51	105.43	111.82
3	C	34	VAL	N-CA-C	-5.50	100.65	108.58
3	C	221	ARG	CA-C-O	-5.50	114.61	120.23
4	D	90	LYS	N-CA-CB	5.50	118.92	110.61
6	K	88	VAL	CA-C-O	-5.50	115.33	121.17
8	O	344	LEU	N-CA-C	5.50	117.28	111.28
3	C	165	SER	N-CA-C	-5.50	106.27	114.64
3	C	579	HIS	CA-C-N	5.50	128.10	120.29
3	C	579	HIS	C-N-CA	5.50	128.10	120.29
4	B	195	ARG	O-C-N	-5.50	115.54	120.71
7	P	256	ASN	CA-C-O	-5.50	114.30	119.80
6	I	159	GLU	CA-C-N	5.50	127.65	120.28
6	I	159	GLU	C-N-CA	5.50	127.65	120.28
3	A	578	LYS	N-CA-CB	5.50	118.30	110.16
7	P	133	LYS	CA-C-N	5.50	132.19	121.41
7	P	133	LYS	C-N-CA	5.50	132.19	121.41
1	M	48	LYS	N-CA-C	5.50	117.35	111.36
4	D	337	MET	N-CA-C	-5.50	103.20	110.40
4	F	50	ASN	CA-C-N	5.50	129.36	121.50
4	F	50	ASN	C-N-CA	5.50	129.36	121.50
7	P	269	SER	CA-C-O	-5.50	115.02	120.90
4	D	147	PRO	N-CA-C	5.49	119.49	111.03
3	E	129	ASP	N-CA-C	-5.49	100.72	109.07
4	B	297	GLU	CA-C-N	5.49	128.81	121.23
4	B	297	GLU	C-N-CA	5.49	128.81	121.23
5	H	48	ILE	CA-C-N	5.49	128.09	120.29
5	H	48	ILE	C-N-CA	5.49	128.09	120.29
4	D	159	ASP	N-CA-C	5.49	116.94	111.07
4	F	230	GLU	CA-C-N	5.49	127.58	120.44
4	F	230	GLU	C-N-CA	5.49	127.58	120.44
4	B	232	ASN	N-CA-C	-5.49	105.38	111.36
4	D	218	ASN	N-CA-C	-5.49	102.40	110.52
3	E	188	ALA	CA-C-N	5.49	128.58	121.23
3	E	188	ALA	C-N-CA	5.49	128.58	121.23
8	O	53	PHE	CA-C-O	-5.49	114.91	121.11
16	f	39	VAL	N-CA-C	-5.48	108.16	113.53
3	A	228	SER	N-CA-CB	5.48	118.10	110.04
4	B	251	GLU	CA-C-N	5.48	128.08	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	B	251	GLU	C-N-CA	5.48	128.08	120.29
4	F	56	THR	CA-C-O	5.48	126.35	120.32
5	L	61	ASN	N-CA-C	-5.48	106.50	114.12
7	P	379	PHE	CA-C-N	5.48	128.07	120.29
7	P	379	PHE	C-N-CA	5.48	128.07	120.29
4	F	96	THR	N-CA-C	-5.48	104.95	111.69
6	K	189	VAL	N-CA-C	-5.48	98.57	107.28
4	D	172	ILE	CA-C-O	5.47	126.39	120.53
3	C	568	SER	CA-C-N	5.47	128.06	120.29
3	C	568	SER	C-N-CA	5.47	128.06	120.29
3	E	528	GLN	CA-C-N	5.47	130.49	122.77
3	E	528	GLN	C-N-CA	5.47	130.49	122.77
6	G	52	ARG	N-CA-CB	-5.47	102.06	110.16
4	B	337	MET	CA-C-O	-5.47	115.17	119.66
3	C	384	LEU	CA-C-O	-5.47	115.08	120.82
6	G	51	VAL	CA-C-O	-5.47	115.37	121.17
4	F	56	THR	N-CA-C	-5.47	99.61	108.52
6	K	49	ASN	CB-CA-C	-5.47	102.30	110.88
8	O	136	ASN	N-CA-CB	5.47	118.16	110.12
3	E	585	LYS	N-CA-CB	5.47	118.58	110.49
4	F	275	LEU	N-CA-CB	5.47	119.18	110.65
6	K	212	GLU	O-C-N	5.46	127.91	122.12
4	D	301	ARG	N-CA-CB	5.46	118.38	109.69
6	I	45	ILE	CB-CA-C	5.46	118.96	111.97
4	B	155	VAL	CA-C-N	5.46	127.60	120.28
4	B	155	VAL	C-N-CA	5.46	127.60	120.28
1	M	164	LYS	CA-C-N	5.46	127.94	120.46
1	M	164	LYS	C-N-CA	5.46	127.94	120.46
3	E	32	GLY	CA-C-N	5.46	126.51	120.45
3	E	32	GLY	C-N-CA	5.46	126.51	120.45
4	B	399	VAL	CA-C-N	5.46	127.60	120.28
4	B	399	VAL	C-N-CA	5.46	127.60	120.28
3	A	447	GLN	O-C-N	-5.46	116.34	122.12
4	F	213	ALA	N-CA-C	-5.46	99.39	108.34
4	B	214	ALA	CA-C-O	5.46	126.33	120.38
3	C	616	ASP	N-CA-CB	5.45	119.77	110.50
5	L	21	VAL	CA-C-N	5.45	127.59	120.28
5	L	21	VAL	C-N-CA	5.45	127.59	120.28
3	C	324	MET	CA-C-N	5.45	125.46	119.90
3	C	324	MET	C-N-CA	5.45	125.46	119.90
3	A	416	VAL	N-CA-C	-5.45	100.75	108.65
4	B	254	ILE	O-C-N	-5.45	115.64	121.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	142	SER	CA-C-N	5.45	126.03	119.98
7	P	142	SER	C-N-CA	5.45	126.03	119.98
1	M	12	ARG	CA-C-O	5.45	126.02	120.24
4	B	480	ILE	CA-C-N	5.45	128.03	120.29
4	B	480	ILE	C-N-CA	5.45	128.03	120.29
7	P	358	GLU	CA-C-N	5.45	127.52	120.44
7	P	358	GLU	C-N-CA	5.45	127.52	120.44
3	E	487	GLU	N-CA-CB	5.44	117.90	110.01
4	B	263	ALA	N-CA-C	5.44	117.29	111.36
4	B	289	ARG	N-CA-C	-5.44	105.43	111.36
7	P	45	LYS	N-CA-C	5.44	117.21	111.28
7	P	301	ARG	CA-C-N	5.44	128.38	120.98
7	P	301	ARG	C-N-CA	5.44	128.38	120.98
3	A	390	SER	CB-CA-C	-5.43	101.61	110.85
3	A	426	PRO	N-CA-CB	5.43	109.45	103.26
5	H	36	LYS	CA-C-N	5.43	127.83	120.44
5	H	36	LYS	C-N-CA	5.43	127.83	120.44
6	G	117	TYR	N-CA-CB	5.43	118.67	110.30
6	I	128	ALA	CA-C-N	5.43	128.57	120.31
6	I	128	ALA	C-N-CA	5.43	128.57	120.31
4	F	76	ILE	N-CA-CB	5.43	118.91	111.41
3	A	448	ARG	N-CA-C	-5.43	106.61	113.18
7	P	416	GLU	CA-C-N	5.43	128.57	120.31
7	P	416	GLU	C-N-CA	5.43	128.57	120.31
3	E	393	GLU	CA-C-N	5.43	128.57	120.31
3	E	393	GLU	C-N-CA	5.43	128.57	120.31
3	A	588	GLU	CA-C-N	5.43	125.41	120.03
3	A	588	GLU	C-N-CA	5.43	125.41	120.03
1	M	122	LEU	CA-C-N	-5.43	114.56	122.65
1	M	122	LEU	C-N-CA	-5.43	114.56	122.65
6	G	202	THR	CA-C-N	5.43	128.00	120.29
6	G	202	THR	C-N-CA	5.43	128.00	120.29
6	I	67	LYS	CA-C-N	5.43	127.56	120.28
6	I	67	LYS	C-N-CA	5.43	127.56	120.28
4	B	395	ASP	CA-C-N	5.43	127.50	120.44
4	B	395	ASP	C-N-CA	5.43	127.50	120.44
3	C	595	GLU	N-CA-C	-5.43	107.31	114.04
4	D	397	GLY	CA-C-O	5.43	126.41	120.66
4	F	323	GLU	CB-CA-C	-5.43	100.71	109.72
4	B	313	SER	CB-CA-C	-5.43	101.46	110.68
7	P	402	LEU	CA-C-O	5.43	126.17	120.42
6	G	157	MET	O-C-N	5.43	128.94	122.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	312	LEU	CA-C-N	5.42	128.09	120.28
4	D	312	LEU	C-N-CA	5.42	128.09	120.28
8	O	59	ASP	CA-C-N	5.42	128.55	120.31
8	O	59	ASP	C-N-CA	5.42	128.55	120.31
3	C	108	ILE	CA-C-N	5.42	131.89	121.54
3	C	108	ILE	C-N-CA	5.42	131.89	121.54
3	C	370	ARG	CA-C-N	5.42	127.99	120.29
3	C	370	ARG	C-N-CA	5.42	127.99	120.29
4	D	408	ALA	CA-C-N	5.42	128.12	120.42
4	D	408	ALA	C-N-CA	5.42	128.12	120.42
5	L	18	HIS	N-CA-CB	5.42	118.19	110.16
3	C	343	PHE	N-CA-CB	5.42	118.68	110.28
4	B	241	PHE	CA-C-O	-5.42	114.50	120.30
6	K	125	ILE	CA-C-N	5.42	128.11	120.42
6	K	125	ILE	C-N-CA	5.42	128.11	120.42
6	G	157	MET	CA-C-N	5.42	127.81	120.44
6	G	157	MET	C-N-CA	5.42	127.81	120.44
3	E	550	PHE	O-C-N	5.42	127.65	122.07
3	A	272	TYR	N-CA-C	5.42	119.05	112.23
4	B	254	ILE	CA-C-N	5.42	127.52	120.26
4	B	254	ILE	C-N-CA	5.42	127.52	120.26
7	P	259	PHE	CA-C-N	5.42	127.98	120.29
7	P	259	PHE	C-N-CA	5.42	127.98	120.29
1	M	209	LYS	CA-C-N	5.42	127.48	120.44
1	M	209	LYS	C-N-CA	5.42	127.48	120.44
3	C	110	ARG	N-CA-C	-5.42	97.84	109.81
4	F	131	TYR	N-CA-C	-5.42	100.35	109.07
3	C	130	THR	CA-C-O	-5.41	116.00	120.71
8	O	79	ILE	CB-CA-C	-5.41	104.83	112.14
4	F	87	ASP	CA-C-N	-5.41	117.62	123.08
4	F	87	ASP	C-N-CA	-5.41	117.62	123.08
4	F	278	LEU	N-CA-C	-5.41	98.39	108.02
6	G	139	VAL	CA-C-O	5.41	126.07	120.39
6	G	22	ALA	CA-C-N	5.41	127.53	120.28
6	G	22	ALA	C-N-CA	5.41	127.53	120.28
3	A	332	SER	CB-CA-C	5.41	119.37	110.88
8	O	39	ILE	N-CA-C	5.41	120.58	109.34
4	D	371	PRO	N-CA-CB	5.40	108.54	102.60
3	C	214	THR	N-CA-C	-5.40	101.47	110.17
3	E	105	TYR	CA-C-O	-5.40	115.31	121.68
6	G	38	LYS	N-CA-CB	5.40	118.54	110.22
6	G	148	LEU	O-C-N	5.40	128.31	122.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	543	THR	CA-C-N	5.40	127.52	120.28
3	A	543	THR	C-N-CA	5.40	127.52	120.28
3	C	64	ASP	CA-C-O	-5.40	114.73	120.40
4	F	144	ARG	N-CA-CB	5.40	118.72	110.95
4	F	323	GLU	O-C-N	-5.40	116.23	122.87
4	F	480	ILE	CA-C-N	5.40	128.05	120.28
4	F	480	ILE	C-N-CA	5.40	128.05	120.28
7	P	451	MET	N-CA-C	-5.40	105.40	111.28
4	D	334	ILE	N-CA-CB	5.39	118.85	111.41
4	F	326	ASN	CA-C-O	5.39	126.53	120.92
6	K	149	ILE	CA-C-N	5.39	127.50	120.28
6	K	149	ILE	C-N-CA	5.39	127.50	120.28
6	G	36	GLN	N-CA-CB	5.39	119.19	110.40
7	P	50	ILE	CA-C-O	-5.39	114.94	120.71
4	D	39	VAL	N-CA-C	-5.39	100.57	108.11
6	G	53	ASN	CA-C-O	-5.39	115.16	120.82
8	O	79	ILE	CA-C-N	5.38	125.96	119.98
8	O	79	ILE	C-N-CA	5.38	125.96	119.98
4	F	303	GLY	CA-C-O	5.38	125.00	119.02
6	I	91	ALA	CA-C-O	5.38	126.57	120.00
7	P	91	ASP	CA-C-O	-5.38	114.72	120.42
3	A	594	LYS	CA-C-O	5.38	126.12	120.42
7	P	272	LEU	CA-C-N	5.38	129.70	120.72
7	P	272	LEU	C-N-CA	5.38	129.70	120.72
7	P	317	ASN	N-CA-CB	5.38	120.64	112.47
5	L	57	PHE	CA-C-O	5.37	126.11	120.42
3	E	425	ASP	CA-C-N	5.37	125.19	119.28
3	E	425	ASP	C-N-CA	5.37	125.19	119.28
5	L	97	ILE	CA-C-N	5.37	127.48	120.28
5	L	97	ILE	C-N-CA	5.37	127.48	120.28
5	H	8	ALA	CB-CA-C	-5.37	101.87	110.79
3	A	43	CYS	N-CA-CB	5.37	119.57	110.49
6	I	95	SER	CA-C-O	-5.37	114.28	120.24
13	g	54	ILE	CA-C-N	5.37	123.62	120.24
13	g	54	ILE	C-N-CA	5.37	123.62	120.24
4	B	446	GLN	CA-C-O	5.37	127.00	120.99
4	B	283	SER	CA-C-N	5.37	127.91	120.29
4	B	283	SER	C-N-CA	5.37	127.91	120.29
4	B	236	GLU	CA-C-N	5.36	128.21	120.38
4	B	236	GLU	C-N-CA	5.36	128.21	120.38
8	O	181	PRO	O-C-N	-5.36	115.40	122.64
7	P	200	ARG	CA-C-N	5.36	127.73	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	P	200	ARG	C-N-CA	5.36	127.73	120.44
1	M	113	ILE	N-CA-C	-5.36	100.67	108.17
2	N	63	ASP	N-CA-C	-5.36	106.12	113.30
4	F	430	LYS	CA-C-N	5.36	127.46	120.28
4	F	430	LYS	C-N-CA	5.36	127.46	120.28
3	C	364	LEU	N-CA-CB	5.36	118.00	110.12
3	C	124	ILE	O-C-N	-5.36	117.28	121.46
4	D	376	LEU	CA-C-O	-5.36	112.82	120.16
7	P	195	VAL	CA-C-O	5.36	126.48	120.64
7	P	185	VAL	N-CA-CB	5.36	116.82	110.55
3	C	133	LEU	N-CA-C	-5.35	101.04	109.50
3	E	586	PHE	CA-C-O	-5.35	114.07	120.55
6	G	11	ASN	CA-C-N	5.35	127.45	120.28
6	G	11	ASN	C-N-CA	5.35	127.45	120.28
4	F	332	ILE	CA-C-N	5.35	125.81	120.14
4	F	332	ILE	C-N-CA	5.35	125.81	120.14
4	D	262	THR	CA-C-N	5.35	127.45	120.28
4	D	262	THR	C-N-CA	5.35	127.45	120.28
5	L	64	GLY	O-C-N	5.35	129.60	122.27
7	P	202	VAL	N-CA-CB	5.35	119.49	110.56
3	E	83	ASP	CB-CA-C	-5.35	101.16	108.86
3	E	352	MET	N-CA-C	-5.35	99.80	108.52
3	C	305	SER	N-CA-CB	5.34	119.52	110.49
7	P	258	VAL	CA-C-N	5.34	127.44	120.28
7	P	258	VAL	C-N-CA	5.34	127.44	120.28
8	O	87	GLN	N-CA-CB	5.34	118.07	110.16
5	J	62	ALA	N-CA-C	-5.34	106.82	113.55
7	P	422	VAL	N-CA-C	5.34	115.55	110.42
1	M	103	GLY	CA-C-N	5.34	132.09	122.43
1	M	103	GLY	C-N-CA	5.34	132.09	122.43
3	C	417	SER	CA-C-N	5.34	125.35	119.90
3	C	417	SER	C-N-CA	5.34	125.35	119.90
4	D	300	GLY	O-C-N	5.34	128.02	122.79
8	O	310	ARG	O-C-N	-5.34	116.06	122.15
6	I	138	ILE	N-CA-C	-5.34	100.72	108.36
3	E	555	ASP	CA-C-N	5.34	127.87	120.29
3	E	555	ASP	C-N-CA	5.34	127.87	120.29
7	P	403	GLN	O-C-N	5.34	128.23	122.15
6	G	159	GLU	O-C-N	5.34	127.78	122.12
2	N	78	ARG	N-CA-C	5.33	117.78	111.33
3	C	268	SER	CB-CA-C	-5.33	101.78	110.85
6	G	176	ASN	N-CA-C	-5.33	106.64	112.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	F	177	GLY	N-CA-C	-5.33	107.89	115.30
1	M	101	VAL	N-CA-C	-5.33	99.97	107.75
1	M	141	ARG	N-CA-C	5.33	117.17	111.36
4	F	138	PRO	CA-C-N	-5.33	116.64	121.97
4	F	138	PRO	C-N-CA	-5.33	116.64	121.97
3	E	288	ASN	CA-C-N	5.33	127.85	120.29
3	E	288	ASN	C-N-CA	5.33	127.85	120.29
2	N	64	ILE	N-CA-CB	5.33	116.53	110.72
6	I	81	ALA	N-CA-C	5.33	118.88	112.38
1	M	78	ASN	CA-C-N	5.32	127.75	120.46
1	M	78	ASN	C-N-CA	5.32	127.75	120.46
1	M	100	ASN	CA-C-N	5.32	130.18	123.10
1	M	100	ASN	C-N-CA	5.32	130.18	123.10
4	D	308	MET	CA-C-N	5.32	127.36	120.44
4	D	308	MET	C-N-CA	5.32	127.36	120.44
3	E	268	SER	N-CA-C	-5.32	105.56	111.36
3	E	295	MET	O-C-N	-5.32	116.08	122.15
5	L	96	LYS	CA-C-N	5.32	127.98	120.42
5	L	96	LYS	C-N-CA	5.32	127.98	120.42
3	E	343	PHE	CA-C-N	5.32	127.84	120.29
3	E	343	PHE	C-N-CA	5.32	127.84	120.29
4	B	80	PHE	CA-C-N	5.32	129.69	122.19
4	B	80	PHE	C-N-CA	5.32	129.69	122.19
3	A	242	ALA	N-CA-CB	5.32	117.78	110.07
5	J	55	LYS	N-CA-C	-5.32	105.65	111.82
2	N	17	THR	CB-CA-C	-5.32	101.97	110.79
4	F	220	GLU	CA-C-N	5.31	128.39	120.31
4	F	220	GLU	C-N-CA	5.31	128.39	120.31
3	A	465	ASN	CB-CA-C	-5.31	102.78	110.96
2	N	39	VAL	N-CA-CB	5.31	117.06	111.00
4	B	295	ARG	N-CA-CB	5.31	119.02	111.05
7	P	141	ILE	CB-CA-C	-5.31	105.06	112.02
3	A	475	TYR	CA-C-O	-5.31	112.88	120.16
8	O	108	PRO	CB-CA-C	-5.31	104.58	112.55
1	M	87	VAL	N-CA-CB	5.31	117.36	110.99
4	D	178	LEU	N-CA-C	-5.31	99.85	108.82
4	D	343	THR	N-CA-C	-5.31	105.54	112.23
3	E	328	ALA	CB-CA-C	-5.31	101.82	110.85
4	F	160	THR	CA-C-N	5.31	127.83	120.29
4	F	160	THR	C-N-CA	5.31	127.83	120.29
3	A	163	GLU	N-CA-CB	-5.31	101.48	110.51
1	M	123	THR	N-CA-C	-5.31	101.06	109.76

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	E	412	ILE	N-CA-CB	5.31	117.42	111.21
3	E	467	LEU	CA-C-O	-5.31	114.92	120.55
7	P	353	LEU	CA-C-N	5.31	128.25	120.71
7	P	353	LEU	C-N-CA	5.31	128.25	120.71
7	P	454	LEU	N-CA-C	-5.31	105.49	111.28
7	P	202	VAL	CA-C-N	5.31	127.73	120.46
7	P	202	VAL	C-N-CA	5.31	127.73	120.46
4	D	446	GLN	O-C-N	-5.30	117.74	123.42
3	A	413	VAL	N-CA-C	-5.30	100.00	107.75
3	A	497	GLN	CA-C-O	-5.30	114.80	120.42
7	P	239	GLY	N-CA-C	5.30	119.09	112.73
6	G	86	LEU	CA-C-N	5.30	127.39	120.28
6	G	86	LEU	C-N-CA	5.30	127.39	120.28
3	A	305	SER	N-CA-CB	5.30	119.45	110.49
2	N	109	LEU	CA-C-N	5.30	127.33	120.44
2	N	109	LEU	C-N-CA	5.30	127.33	120.44
3	C	584	SER	N-CA-C	5.30	117.06	111.28
6	G	67	LYS	CA-C-N	5.30	127.38	120.28
6	G	67	LYS	C-N-CA	5.30	127.38	120.28
4	D	438	LYS	N-CA-C	5.30	117.14	111.36
4	B	358	ILE	CA-C-N	5.30	130.31	123.00
4	B	358	ILE	C-N-CA	5.30	130.31	123.00
4	D	299	PRO	CA-C-N	5.30	129.26	122.85
4	D	299	PRO	C-N-CA	5.30	129.26	122.85
3	E	372	GLY	CA-C-N	5.30	130.50	121.29
3	E	372	GLY	C-N-CA	5.30	130.50	121.29
4	B	187	ILE	CB-CA-C	5.30	119.29	112.14
8	O	162	ALA	CA-C-O	-5.30	114.81	120.42
6	I	65	LYS	CA-C-O	5.30	126.06	119.97
3	A	121	SER	N-CA-C	-5.29	98.39	107.23
4	D	140	ASN	N-CA-C	5.29	121.50	109.81
4	D	182	GLU	N-CA-C	5.29	117.13	111.36
6	G	156	ILE	N-CA-C	-5.29	105.38	110.72
3	A	217	VAL	CA-C-O	-5.29	114.17	120.78
3	C	78	GLY	CA-C-O	-5.29	113.14	119.06
3	C	476	PRO	N-CA-CB	-5.29	98.42	103.39
4	B	251	GLU	N-CA-C	5.29	117.05	111.28
8	O	239	PHE	CA-C-O	5.29	127.08	121.16
6	G	138	ILE	N-CA-CB	-5.29	105.02	111.21
6	I	191	SER	O-C-N	5.29	129.57	123.17
6	I	205	GLU	CA-C-N	5.29	127.37	120.28
6	I	205	GLU	C-N-CA	5.29	127.37	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	410	VAL	CB-CA-C	-5.29	104.44	110.73
4	F	441	LYS	CB-CA-C	-5.29	101.26	110.09
8	O	65	SER	CA-C-N	5.29	127.31	120.44
8	O	65	SER	C-N-CA	5.29	127.31	120.44
3	E	98	PRO	N-CA-CB	5.28	108.25	103.34
4	F	170	ILE	CA-C-N	5.28	126.42	120.66
4	F	170	ILE	C-N-CA	5.28	126.42	120.66
3	A	365	ARG	N-CA-C	5.28	117.04	111.28
7	P	253	LEU	CA-C-O	5.28	126.15	120.55
8	O	201	SER	CA-C-N	5.28	131.88	121.58
8	O	201	SER	C-N-CA	5.28	131.88	121.58
7	P	90	GLU	N-CA-CB	5.28	118.36	110.22
3	A	289	GLU	CA-C-N	5.28	129.66	120.68
3	A	289	GLU	C-N-CA	5.28	129.66	120.68
3	A	496	GLU	N-CA-C	5.28	117.78	111.71
6	K	208	LYS	N-CA-C	5.28	117.03	111.28
8	O	123	LEU	O-C-N	5.28	129.20	122.39
6	G	48	THR	CA-C-N	5.28	127.62	120.65
6	G	48	THR	C-N-CA	5.28	127.62	120.65
1	M	200	PHE	N-CA-C	-5.28	105.61	111.36
4	D	211	VAL	N-CA-CB	5.28	118.43	111.25
3	A	277	ALA	N-CA-C	-5.28	101.05	109.23
6	I	154	ASP	N-CA-C	5.28	117.03	111.28
4	D	160	THR	N-CA-C	-5.28	104.96	111.40
3	A	578	LYS	CB-CA-C	-5.28	101.88	110.85
3	C	246	CYS	CA-C-O	5.27	126.30	120.71
3	C	449	LYS	O-C-N	-5.27	116.71	122.67
6	K	57	ASN	CB-CA-C	-5.27	101.89	110.85
6	K	99	ILE	CA-C-O	-5.27	115.26	120.85
8	O	237	HIS	CA-C-O	-5.27	115.12	120.71
6	I	121	LEU	N-CA-C	5.27	117.03	111.28
4	B	99	SER	N-CA-C	-5.27	103.07	110.50
8	O	348	PHE	N-CA-C	5.27	119.98	113.50
3	C	568	SER	N-CA-C	5.27	117.10	111.36
4	F	469	PRO	N-CA-CB	5.27	108.78	103.25
3	A	53	HIS	CA-C-N	5.27	127.77	120.29
3	A	53	HIS	C-N-CA	5.27	127.77	120.29
4	B	88	VAL	CA-C-O	-5.27	114.20	120.78
4	B	296	GLU	N-CA-C	-5.27	106.53	113.17
7	P	446	GLY	O-C-N	5.27	127.82	122.24
4	D	348	ASP	CB-CA-C	-5.27	102.58	110.90
6	K	108	SER	CB-CA-C	-5.27	101.90	110.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	E	478	PHE	N-CA-C	5.26	121.44	109.81
4	F	311	ASP	N-CA-C	5.26	117.02	111.28
4	B	64	GLN	O-C-N	5.26	129.15	123.10
1	M	79	ILE	N-CA-C	5.26	115.98	110.62
3	C	538	CYS	CA-C-N	5.26	126.42	119.84
3	C	538	CYS	C-N-CA	5.26	126.42	119.84
4	B	62	VAL	N-CA-CB	5.26	120.94	111.21
3	E	386	ALA	CA-C-O	-5.26	114.85	120.42
3	A	566	ASN	CA-C-N	5.26	127.76	120.29
3	A	566	ASN	C-N-CA	5.26	127.76	120.29
5	H	48	ILE	CA-C-O	-5.26	113.33	119.85
2	N	78	ARG	CA-C-N	5.26	127.27	120.44
2	N	78	ARG	C-N-CA	5.26	127.27	120.44
3	C	355	ASP	CA-C-N	5.26	131.16	121.70
3	C	355	ASP	C-N-CA	5.26	131.16	121.70
4	D	416	MET	CA-C-N	5.26	127.27	120.44
4	D	416	MET	C-N-CA	5.26	127.27	120.44
5	L	104	LYS	O-C-N	-5.26	116.88	121.35
3	E	531	TYR	CB-CA-C	-5.25	101.29	110.17
3	A	481	LEU	CA-C-N	5.25	127.32	120.28
3	A	481	LEU	C-N-CA	5.25	127.32	120.28
4	B	248	PRO	O-C-N	5.25	129.02	122.71
3	A	580	ALA	CA-C-N	5.25	127.88	120.42
3	A	580	ALA	C-N-CA	5.25	127.88	120.42
4	B	173	PHE	N-CA-C	-5.25	100.17	108.73
4	D	58	PRO	N-CA-C	-5.25	101.66	112.47
4	B	406	LYS	CA-C-O	-5.25	113.94	119.97
8	O	296	TYR	CA-C-N	5.25	127.87	120.42
8	O	296	TYR	C-N-CA	5.25	127.87	120.42
6	G	47	LYS	CA-C-N	5.25	127.26	120.44
6	G	47	LYS	C-N-CA	5.25	127.26	120.44
2	N	94	ILE	CA-C-N	5.25	125.54	119.93
2	N	94	ILE	C-N-CA	5.25	125.54	119.93
4	D	170	ILE	CA-C-O	-5.25	115.47	119.98
8	O	83	ILE	CA-C-N	5.25	127.31	120.28
8	O	83	ILE	C-N-CA	5.25	127.31	120.28
3	E	370	ARG	CA-C-O	-5.25	115.30	120.70
4	D	330	THR	N-CA-C	-5.24	101.15	109.59
4	D	112	ILE	N-CA-C	-5.24	100.87	108.36
8	O	332	VAL	CB-CA-C	5.24	116.08	110.53
6	I	38	LYS	N-CA-CB	5.24	118.40	110.28
4	D	171	PRO	CA-C-N	5.24	129.93	123.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	171	PRO	C-N-CA	5.24	129.93	123.12
4	F	77	VAL	N-CA-C	-5.23	100.79	108.85
7	P	399	ILE	CA-C-N	5.23	127.29	120.28
7	P	399	ILE	C-N-CA	5.23	127.29	120.28
3	E	173	LEU	CA-C-N	5.23	130.88	120.94
3	E	173	LEU	C-N-CA	5.23	130.88	120.94
3	A	184	TRP	CA-C-N	5.23	129.92	123.12
3	A	184	TRP	C-N-CA	5.23	129.92	123.12
7	P	131	SER	N-CA-CB	5.23	118.24	110.29
8	O	236	VAL	CA-C-O	5.23	126.51	120.76
4	D	314	THR	N-CA-C	-5.23	105.58	111.28
3	E	360	TRP	O-C-N	-5.23	116.19	122.15
4	F	100	LEU	N-CA-CB	5.23	117.64	109.85
8	O	329	ILE	CB-CA-C	5.23	117.48	110.42
6	G	206	ARG	N-CA-CB	5.23	117.81	110.12
3	E	327	ALA	N-CA-C	-5.23	105.58	111.28
4	F	266	LEU	CA-C-O	-5.23	115.32	120.70
3	C	292	GLU	CB-CA-C	-5.22	101.97	110.85
8	O	247	THR	CA-C-N	5.22	127.23	120.44
8	O	247	THR	C-N-CA	5.22	127.23	120.44
6	G	139	VAL	O-C-N	-5.22	117.62	123.26
4	D	182	GLU	N-CA-CB	5.22	117.89	110.16
3	E	554	HIS	CA-C-O	-5.22	115.02	120.55
3	A	614	SER	CA-C-N	5.22	127.23	120.44
3	A	614	SER	C-N-CA	5.22	127.23	120.44
8	O	193	THR	N-CA-C	-5.22	100.52	109.24
6	I	128	ALA	O-C-N	5.22	128.10	122.15
3	C	291	ALA	CA-C-N	5.22	127.70	120.29
3	C	291	ALA	C-N-CA	5.22	127.70	120.29
3	C	358	SER	CA-C-N	5.22	129.55	120.68
3	C	358	SER	C-N-CA	5.22	129.55	120.68
4	F	189	ARG	O-C-N	5.22	128.10	122.15
4	B	106	GLU	N-CA-C	-5.22	106.15	112.88
7	P	218	LEU	CA-C-N	5.22	127.27	120.28
7	P	218	LEU	C-N-CA	5.22	127.27	120.28
5	H	46	TYR	N-CA-CB	-5.22	102.26	110.30
6	I	148	LEU	CA-C-N	5.22	127.61	120.46
6	I	148	LEU	C-N-CA	5.22	127.61	120.46
3	C	580	ALA	CA-C-N	5.22	127.83	120.42
3	C	580	ALA	C-N-CA	5.22	127.83	120.42
3	E	111	PRO	CA-C-N	5.22	127.27	120.28
3	E	111	PRO	C-N-CA	5.22	127.27	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	571	ALA	CA-C-N	5.22	128.24	120.31
3	A	571	ALA	C-N-CA	5.22	128.24	120.31
6	K	154	ASP	CB-CA-C	-5.22	102.69	110.88
1	M	133	GLN	CA-C-N	5.21	127.27	120.28
1	M	133	GLN	C-N-CA	5.21	127.27	120.28
2	N	114	LYS	CA-C-N	5.21	131.50	121.54
2	N	114	LYS	C-N-CA	5.21	131.50	121.54
3	C	104	ILE	CB-CA-C	5.21	118.60	110.83
4	D	238	THR	CA-C-N	5.21	130.76	122.94
4	D	238	THR	C-N-CA	5.21	130.76	122.94
7	P	217	ILE	O-C-N	-5.21	116.81	121.87
4	D	418	ALA	CB-CA-C	-5.21	102.70	110.88
1	M	197	ARG	N-CA-CB	5.21	117.87	110.16
3	A	184	TRP	N-CA-CB	5.21	119.57	110.81
4	B	137	SER	CA-C-O	-5.21	113.02	120.16
3	E	465	ASN	CA-C-O	-5.21	115.35	120.82
4	F	345	PRO	N-CA-C	5.21	122.22	113.78
4	B	63	ARG	O-C-N	5.21	129.65	123.24
8	O	382	TYR	CA-C-O	5.21	125.61	120.56
1	M	139	TYR	CA-C-O	-5.21	114.90	120.42
3	C	360	TRP	N-CA-C	-5.21	105.68	111.36
3	E	432	LEU	N-CA-C	-5.21	105.78	111.82
6	K	149	ILE	N-CA-CB	5.21	116.64	110.55
5	H	94	VAL	N-CA-C	-5.21	105.32	111.00
3	E	82	GLY	N-CA-C	-5.21	108.04	115.64
3	A	413	VAL	CA-C-N	-5.21	114.72	122.74
3	A	413	VAL	C-N-CA	-5.21	114.72	122.74
4	F	286	ASP	CA-C-N	5.21	127.25	120.28
4	F	286	ASP	C-N-CA	5.21	127.25	120.28
4	F	454	VAL	N-CA-CB	5.20	120.19	110.77
7	P	424	LEU	N-CA-C	5.20	117.86	111.82
6	I	173	VAL	CB-CA-C	5.20	118.11	110.98
3	C	244	PHE	CA-C-N	5.20	126.34	119.84
3	C	244	PHE	C-N-CA	5.20	126.34	119.84
7	P	233	THR	N-CA-C	-5.20	99.72	110.80
3	C	41	ILE	N-CA-CB	5.20	121.55	111.93
4	D	93	VAL	CA-C-N	5.20	130.87	122.29
4	D	93	VAL	C-N-CA	5.20	130.87	122.29
3	E	90	LYS	CA-C-N	5.20	126.34	119.84
3	E	90	LYS	C-N-CA	5.20	126.34	119.84
3	E	175	PRO	CA-C-N	5.20	125.20	119.90
3	E	175	PRO	C-N-CA	5.20	125.20	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	F	149	GLU	CA-C-N	5.20	129.10	120.94
4	F	149	GLU	C-N-CA	5.20	129.10	120.94
3	E	145	LYS	CA-C-N	5.20	130.96	122.07
3	E	145	LYS	C-N-CA	5.20	130.96	122.07
4	B	443	PHE	CA-C-O	5.20	125.93	120.42
4	D	225	PHE	CB-CA-C	-5.20	102.02	110.85
3	C	520	LEU	CA-C-N	5.19	127.11	120.56
3	C	520	LEU	C-N-CA	5.19	127.11	120.56
5	L	69	GLU	CB-CA-C	-5.19	100.15	109.24
6	I	64	SER	CA-C-N	5.19	128.21	120.31
6	I	64	SER	C-N-CA	5.19	128.21	120.31
3	E	426	PRO	CA-C-N	5.19	127.10	120.56
3	E	426	PRO	C-N-CA	5.19	127.10	120.56
4	B	344	HIS	N-CA-CB	-5.19	102.82	110.14
8	O	80	GLY	N-CA-C	-5.19	106.50	112.73
3	C	240	LEU	CA-C-N	5.19	127.50	120.44
3	C	240	LEU	C-N-CA	5.19	127.50	120.44
3	C	481	LEU	O-C-N	-5.19	115.48	122.23
3	A	465	ASN	O-C-N	-5.19	116.63	122.03
6	G	114	ARG	CA-C-N	5.19	127.66	120.29
6	G	114	ARG	C-N-CA	5.19	127.66	120.29
3	C	126	ARG	O-C-N	-5.19	116.43	122.81
3	A	264	VAL	CA-C-N	5.19	128.81	120.30
3	A	264	VAL	C-N-CA	5.19	128.81	120.30
5	L	33	LYS	CA-C-N	5.19	127.23	120.28
5	L	33	LYS	C-N-CA	5.19	127.23	120.28
4	D	385	SER	N-CA-C	-5.19	104.64	112.99
3	A	547	MET	CA-C-O	-5.19	115.05	120.55
4	D	99	SER	CA-C-N	5.18	128.69	121.02
4	D	99	SER	C-N-CA	5.18	128.69	121.02
3	A	562	ALA	N-CA-C	-5.18	105.63	111.28
4	B	158	ILE	CA-C-N	5.18	127.48	120.44
4	B	158	ILE	C-N-CA	5.18	127.48	120.44
6	K	154	ASP	N-CA-C	-5.18	105.53	111.07
4	D	200	VAL	CB-CA-C	-5.18	105.15	112.14
8	O	51	PRO	O-C-N	5.18	129.28	122.86
8	O	344	LEU	CA-C-N	5.18	127.08	120.56
8	O	344	LEU	C-N-CA	5.18	127.08	120.56
1	M	194	GLU	CB-CA-C	-5.18	102.05	110.85
5	H	29	GLN	CB-CA-C	-5.18	102.20	110.79
6	G	194	SER	N-CA-C	-5.17	105.33	111.69
1	M	127	ARG	CA-C-N	5.17	126.61	120.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	127	ARG	C-N-CA	5.17	126.61	120.14
3	C	604	LEU	N-CA-C	5.17	116.92	111.28
4	F	396	HIS	N-CA-C	5.17	116.60	111.07
3	A	415	ALA	N-CA-C	-5.17	101.27	109.96
7	P	371	SER	O-C-N	-5.17	116.44	121.56
8	O	9	ASN	N-CA-CB	5.17	119.85	111.21
6	G	201	ASN	O-C-N	5.17	129.47	122.59
4	D	324	GLY	N-CA-C	-5.17	100.93	113.18
3	C	242	ALA	N-CA-C	5.17	116.72	111.14
6	I	27	GLU	N-CA-C	-5.17	105.83	111.82
3	C	292	GLU	N-CA-C	5.17	116.99	111.36
4	D	465	LEU	CA-C-N	5.17	127.72	120.28
4	D	465	LEU	C-N-CA	5.17	127.72	120.28
4	F	446	GLN	CA-C-N	5.17	129.06	121.67
4	F	446	GLN	C-N-CA	5.17	129.06	121.67
1	M	9	PHE	CA-C-N	5.17	126.30	119.84
1	M	9	PHE	C-N-CA	5.17	126.30	119.84
3	A	233	LEU	N-CA-C	-5.16	99.99	108.41
7	P	257	PRO	O-C-N	-5.16	116.03	122.23
6	G	160	TYR	CA-C-N	5.16	126.78	120.22
6	G	160	TYR	C-N-CA	5.16	126.78	120.22
5	L	76	VAL	CB-CA-C	-5.16	102.83	111.29
8	O	198	VAL	CB-CA-C	-5.16	101.97	111.36
3	C	223	VAL	CA-C-O	-5.16	116.28	121.49
4	D	208	PHE	CA-C-O	5.16	126.27	120.70
8	O	324	HIS	N-CA-C	-5.16	101.75	109.95
5	H	3	GLN	N-CA-C	5.16	116.59	111.07
3	E	311	ILE	CA-C-N	5.16	127.61	120.29
3	E	311	ILE	C-N-CA	5.16	127.61	120.29
4	F	169	LYS	CA-C-O	5.16	125.99	120.32
1	M	30	SER	CA-C-N	5.16	127.19	120.28
1	M	30	SER	C-N-CA	5.16	127.19	120.28
4	B	178	LEU	N-CA-C	-5.16	103.45	110.36
3	E	349	ASN	N-CA-C	-5.15	100.84	109.24
3	C	316	THR	N-CA-C	-5.15	100.05	108.76
7	P	54	LYS	CA-C-N	5.15	130.97	121.70
7	P	54	LYS	C-N-CA	5.15	130.97	121.70
7	P	396	ARG	CA-C-N	5.15	127.19	120.28
7	P	396	ARG	C-N-CA	5.15	127.19	120.28
7	P	450	ILE	O-C-N	5.15	126.87	121.87
6	I	206	ARG	CA-C-N	5.15	127.19	120.28
6	I	206	ARG	C-N-CA	5.15	127.19	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	86	ASN	O-C-N	5.15	128.71	122.68
7	P	269	SER	N-CA-C	5.15	117.29	111.11
6	I	26	LYS	N-CA-C	5.15	116.89	111.28
1	M	13	MET	CB-CA-C	5.15	119.04	111.73
7	P	268	LEU	CA-C-O	-5.15	115.39	120.90
4	D	255	THR	CA-C-N	5.15	124.65	119.19
4	D	255	THR	C-N-CA	5.15	124.65	119.19
5	J	28	ARG	CA-C-N	5.15	127.49	120.54
5	J	28	ARG	C-N-CA	5.15	127.49	120.54
3	A	149	GLY	CA-C-O	5.14	124.83	119.07
4	F	68	LEU	CA-C-N	5.14	131.21	122.37
4	F	68	LEU	C-N-CA	5.14	131.21	122.37
5	H	26	LYS	N-CA-C	5.14	116.88	111.28
4	F	107	ASP	N-CA-C	-5.14	106.42	113.30
3	A	339	LEU	CA-C-N	5.14	127.16	120.28
3	A	339	LEU	C-N-CA	5.14	127.16	120.28
3	E	540	ILE	CA-C-O	-5.13	115.61	120.95
3	A	482	ARG	N-CA-C	-5.13	105.68	111.28
3	C	608	GLN	CA-C-N	5.13	127.58	120.29
3	C	608	GLN	C-N-CA	5.13	127.58	120.29
4	B	284	TYR	CA-C-N	5.13	127.58	120.29
4	B	284	TYR	C-N-CA	5.13	127.58	120.29
3	C	429	THR	O-C-N	5.13	128.00	122.15
6	K	197	ILE	N-CA-C	-5.13	101.09	108.53
4	D	311	ASP	CA-C-N	5.13	127.16	120.28
4	D	311	ASP	C-N-CA	5.13	127.16	120.28
3	E	444	LYS	CA-C-N	5.13	127.57	120.29
3	E	444	LYS	C-N-CA	5.13	127.57	120.29
2	N	23	ALA	N-CA-C	5.13	117.61	111.71
3	A	158	TYR	N-CA-C	-5.13	106.53	112.89
1	M	90	ALA	N-CA-C	-5.13	100.05	108.41
3	C	265	ILE	CA-C-N	5.13	127.15	120.28
3	C	265	ILE	C-N-CA	5.13	127.15	120.28
3	C	557	ALA	CA-C-O	-5.13	115.42	120.70
3	A	417	SER	CA-C-O	-5.13	115.06	119.72
3	A	611	PHE	O-C-N	5.13	127.99	122.15
13	i	156	GLN	CA-C-N	5.12	131.33	121.54
13	i	156	GLN	C-N-CA	5.12	131.33	121.54
4	D	275	LEU	N-CA-CB	5.12	118.59	110.55
4	F	258	LEU	CA-C-N	5.12	127.56	120.29
4	F	258	LEU	C-N-CA	5.12	127.56	120.29
4	F	304	TYR	CA-C-N	5.12	126.25	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	F	304	TYR	C-N-CA	5.12	126.25	119.84
4	B	114	ASP	N-CA-C	-5.12	101.52	109.72
4	B	253	ILE	N-CA-C	5.12	115.89	110.72
5	L	9	THR	O-C-N	5.12	127.99	122.15
7	P	401	LEU	N-CA-CB	5.12	117.65	110.12
8	O	377	LEU	O-C-N	5.12	127.56	122.03
4	B	307	TYR	N-CA-C	-5.12	106.34	112.59
8	O	243	VAL	CB-CA-C	-5.12	105.42	111.97
3	E	389	ALA	CA-C-O	-5.12	114.99	120.42
4	B	46	PHE	O-C-N	-5.12	115.44	121.32
6	K	218	ILE	CB-CA-C	-5.12	105.16	112.22
7	P	138	THR	CB-CA-C	-5.12	102.85	110.88
5	H	19	GLU	N-CA-CB	5.12	117.64	110.12
5	H	77	GLN	N-CA-CB	5.12	119.14	110.49
1	M	62	GLN	O-C-N	5.11	127.54	122.12
3	C	387	LYS	N-CA-CB	5.11	117.73	110.16
4	D	413	ALA	CA-C-N	5.11	127.09	120.44
4	D	413	ALA	C-N-CA	5.11	127.09	120.44
3	A	54	ASP	CB-CA-C	-5.11	102.16	110.85
4	B	448	ALA	CB-CA-C	-5.11	99.30	109.99
7	P	269	SER	CB-CA-C	-5.11	102.63	110.81
8	O	12	ILE	N-CA-C	-5.11	100.95	108.11
3	A	125	PRO	N-CA-C	-5.11	101.94	112.47
4	B	304	TYR	N-CA-CB	5.11	118.55	110.11
7	P	158	VAL	N-CA-C	5.11	115.83	110.62
4	F	169	LYS	CA-C-N	5.11	127.30	122.85
4	F	169	LYS	C-N-CA	5.11	127.30	122.85
3	A	368	SER	CA-C-N	-5.11	114.38	120.00
3	A	368	SER	C-N-CA	-5.11	114.38	120.00
3	A	449	LYS	N-CA-CB	5.11	119.13	110.49
3	C	398	ALA	CA-C-O	-5.11	115.81	121.33
4	B	330	THR	CA-C-O	-5.11	115.29	120.71
1	M	21	LYS	N-CA-C	5.11	116.93	111.36
2	N	25	ILE	CB-CA-C	-5.11	102.92	111.29
3	E	342	TYR	N-CA-C	-5.11	105.61	111.07
6	K	207	LEU	CB-CA-C	-5.11	102.31	110.79
3	E	108	ILE	N-CA-C	-5.10	108.15	113.10
3	C	319	ALA	CA-C-N	-5.10	115.28	122.94
3	C	319	ALA	C-N-CA	-5.10	115.28	122.94
3	E	47	GLU	N-CA-CB	5.10	117.53	109.83
3	A	324	MET	CA-C-O	-5.10	114.93	120.69
6	K	112	ASN	N-CA-CB	5.10	118.68	110.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	I	95	SER	CA-C-N	5.10	127.53	120.29
6	I	95	SER	C-N-CA	5.10	127.53	120.29
3	C	471	TYR	CB-CA-C	-5.10	100.88	110.67
4	D	448	ALA	CB-CA-C	5.10	119.51	109.72
6	K	183	LEU	N-CA-C	-5.10	105.90	112.68
6	I	146	VAL	CA-C-N	5.10	127.53	120.29
6	I	146	VAL	C-N-CA	5.10	127.53	120.29
4	F	427	ILE	N-CA-C	-5.10	105.57	110.72
7	P	385	ASP	N-CA-CB	-5.10	102.62	110.16
6	G	107	LEU	N-CA-CB	5.10	117.70	110.16
6	I	149	ILE	CB-CA-C	-5.10	105.26	112.14
1	M	110	GLU	O-C-N	5.10	129.27	123.31
5	J	74	ALA	N-CA-CB	5.10	118.18	110.28
3	C	221	ARG	CA-C-N	5.09	125.30	120.31
3	C	221	ARG	C-N-CA	5.09	125.30	120.31
4	D	171	PRO	CB-CA-C	-5.09	103.16	111.56
7	P	86	THR	CA-C-N	5.09	128.94	120.94
7	P	86	THR	C-N-CA	5.09	128.94	120.94
7	P	223	ASP	N-CA-CB	5.09	118.18	110.28
3	E	84	PRO	N-CA-CB	5.09	108.09	103.15
3	C	392	TYR	CA-C-O	-5.09	115.15	120.55
4	D	105	SER	N-CA-C	-5.09	101.71	108.74
4	B	241	PHE	CB-CA-C	-5.09	101.71	110.16
6	K	176	ASN	N-CA-C	-5.09	106.91	113.02
6	G	202	THR	N-CA-CB	5.09	118.61	110.46
5	J	104	LYS	CA-C-O	-5.09	115.48	119.66
4	D	358	ILE	CA-C-N	5.09	129.74	122.72
4	D	358	ILE	C-N-CA	5.09	129.74	122.72
4	B	228	ASP	CA-C-N	5.09	127.10	120.28
4	B	228	ASP	C-N-CA	5.09	127.10	120.28
6	K	23	PHE	CA-C-N	5.09	126.97	120.56
6	K	23	PHE	C-N-CA	5.09	126.97	120.56
3	C	339	LEU	O-C-N	5.09	127.95	122.15
4	F	281	MET	N-CA-CB	5.09	118.17	110.28
6	I	162	GLU	N-CA-C	-5.09	106.58	112.89
1	M	196	ASP	N-CA-CB	5.09	117.69	110.16
3	E	365	ARG	CA-C-N	5.09	127.10	120.28
3	E	365	ARG	C-N-CA	5.09	127.10	120.28
4	F	163	SER	N-CA-CB	5.09	118.71	110.42
5	J	98	LEU	N-CA-C	5.08	116.82	111.28
1	M	60	VAL	O-C-N	-5.08	116.59	121.83
1	M	125	LEU	CA-C-N	5.08	127.66	119.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	125	LEU	C-N-CA	5.08	127.66	119.98
4	D	86	ILE	O-C-N	-5.08	117.96	123.14
7	P	319	LEU	N-CA-CB	5.08	117.43	110.11
5	H	88	GLU	N-CA-CB	5.08	118.15	110.28
6	K	86	LEU	CA-C-N	5.08	127.04	120.44
6	K	86	LEU	C-N-CA	5.08	127.04	120.44
8	O	190	HIS	N-CA-CB	5.08	117.73	110.67
8	O	285	ARG	CA-C-N	5.08	127.06	120.56
8	O	285	ARG	C-N-CA	5.08	127.06	120.56
3	E	553	TYR	CA-C-O	-5.07	115.17	120.55
4	B	484	PHE	N-CA-CB	5.07	119.33	110.81
8	O	69	SER	CB-CA-C	-5.07	102.89	110.90
8	O	279	SER	O-C-N	5.07	127.50	122.12
6	G	83	LYS	CA-C-N	5.07	127.49	120.29
6	G	83	LYS	C-N-CA	5.07	127.49	120.29
3	C	430	ALA	O-C-N	5.07	127.50	122.12
4	D	444	ILE	CA-C-N	5.07	128.53	121.02
4	D	444	ILE	C-N-CA	5.07	128.53	121.02
8	O	107	VAL	CA-C-O	-5.07	114.54	118.85
8	O	240	LYS	CA-C-N	5.07	127.07	120.28
8	O	240	LYS	C-N-CA	5.07	127.07	120.28
5	H	25	ARG	CA-C-N	5.07	127.07	120.28
5	H	25	ARG	C-N-CA	5.07	127.07	120.28
3	E	169	SER	N-CA-CB	5.07	117.72	110.67
4	F	132	LEU	N-CA-C	-5.07	101.61	109.72
7	P	172	ASN	CB-CA-C	-5.07	102.38	110.79
1	M	16	GLY	N-CA-C	5.07	118.38	112.50
3	E	320	ASN	N-CA-C	-5.07	100.78	109.24
6	I	168	PRO	N-CA-CB	5.07	108.70	103.38
8	O	273	GLU	N-CA-C	5.06	116.88	111.36
3	C	29	SER	CA-C-N	5.06	130.09	123.11
3	C	29	SER	C-N-CA	5.06	130.09	123.11
3	C	580	ALA	N-CA-CB	5.06	117.65	110.16
4	D	269	GLN	N-CA-CB	5.06	118.10	110.30
4	F	263	ALA	CA-C-N	5.06	127.48	120.29
4	F	263	ALA	C-N-CA	5.06	127.48	120.29
4	B	43	LYS	N-CA-CB	5.06	119.05	110.49
8	O	86	LEU	CA-C-N	5.06	127.48	120.29
8	O	86	LEU	C-N-CA	5.06	127.48	120.29
8	O	279	SER	CA-C-N	5.06	127.02	120.44
8	O	279	SER	C-N-CA	5.06	127.02	120.44
1	M	87	VAL	CA-C-O	5.06	125.98	120.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	E	276	ASP	O-C-N	-5.06	116.05	122.27
7	P	175	GLN	N-CA-CB	5.06	117.34	110.01
6	G	139	VAL	CA-C-N	5.06	129.98	123.00
6	G	139	VAL	C-N-CA	5.06	129.98	123.00
3	A	543	THR	N-CA-C	-5.05	105.77	111.28
3	A	215	TRP	CA-C-N	5.05	124.81	119.76
3	A	215	TRP	C-N-CA	5.05	124.81	119.76
5	H	56	GLU	CB-CA-C	-5.05	102.26	110.85
1	M	67	SER	CA-C-N	5.05	127.46	120.29
1	M	67	SER	C-N-CA	5.05	127.46	120.29
3	C	187	PRO	N-CA-CB	5.05	108.55	103.25
3	C	428	THR	N-CA-CB	5.05	117.39	110.07
4	F	217	VAL	N-CA-C	-5.05	104.50	110.21
8	O	364	ILE	N-CA-CB	5.05	116.03	110.53
3	A	596	VAL	N-CA-C	-5.05	100.80	108.17
4	B	391	MET	CA-C-N	5.05	130.48	121.75
4	B	391	MET	C-N-CA	5.05	130.48	121.75
5	J	73	GLU	CA-C-N	5.04	127.98	120.31
5	J	73	GLU	C-N-CA	5.04	127.98	120.31
3	E	60	VAL	CA-C-O	-5.04	114.60	120.75
3	E	508	SER	N-CA-C	-5.04	103.50	110.35
7	P	243	GLN	O-C-N	5.04	127.46	122.12
6	G	164	ALA	CA-C-N	5.04	129.96	121.14
6	G	164	ALA	C-N-CA	5.04	129.96	121.14
3	C	88	THR	N-CA-C	-5.04	106.64	112.89
4	D	166	ARG	O-C-N	5.04	129.29	122.59
7	P	152	GLN	O-C-N	-5.04	116.74	122.89
7	P	253	LEU	CA-C-N	5.04	129.13	120.72
7	P	253	LEU	C-N-CA	5.04	129.13	120.72
6	G	129	LEU	O-C-N	-5.04	116.32	122.22
5	J	72	ALA	N-CA-CB	5.04	117.89	110.33
3	A	367	ILE	O-C-N	-5.04	116.97	121.91
1	M	50	ILE	CA-C-N	5.04	127.03	120.28
1	M	50	ILE	C-N-CA	5.04	127.03	120.28
4	D	197	THR	CA-C-N	5.04	127.03	120.28
4	D	197	THR	C-N-CA	5.04	127.03	120.28
8	O	231	TYR	N-CA-C	-5.04	101.64	109.24
3	E	483	ASP	N-CA-CB	5.03	117.52	110.12
4	B	39	VAL	CA-C-N	5.03	129.34	122.90
4	B	39	VAL	C-N-CA	5.03	129.34	122.90
4	B	434	GLU	CA-C-N	5.03	126.98	120.44
4	B	434	GLU	C-N-CA	5.03	126.98	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	O	380	THR	CA-C-O	5.03	124.75	119.51
5	H	63	GLY	N-CA-C	-5.03	108.72	115.32
4	D	182	GLU	O-C-N	5.03	127.89	122.15
6	K	71	LEU	N-CA-CB	5.03	117.76	110.26
8	O	57	SER	CB-CA-C	-5.03	99.97	111.95
4	D	373	ILE	CA-C-N	5.03	129.94	123.00
4	D	373	ILE	C-N-CA	5.03	129.94	123.00
3	A	398	ALA	O-C-N	5.03	128.89	123.10
3	A	606	THR	CA-C-N	5.03	127.02	120.28
3	A	606	THR	C-N-CA	5.03	127.02	120.28
5	H	75	GLY	CA-C-O	-5.03	115.27	120.90
4	D	313	SER	CB-CA-C	-5.03	101.33	110.63
3	E	53	HIS	N-CA-C	-5.03	106.83	113.17
3	A	481	LEU	O-C-N	-5.03	116.42	122.15
4	B	259	ALA	O-C-N	5.03	127.45	122.12
5	L	65	VAL	CB-CA-C	-5.03	105.46	111.85
8	O	91	GLU	N-CA-C	-5.03	99.22	108.02
4	D	166	ARG	CA-C-N	5.03	130.69	121.85
4	D	166	ARG	C-N-CA	5.03	130.69	121.85
3	E	296	GLU	CA-C-N	5.03	126.37	120.09
3	E	296	GLU	C-N-CA	5.03	126.37	120.09
3	E	387	LYS	CA-C-O	-5.03	115.09	120.42
3	A	266	SER	N-CA-C	5.03	116.84	111.36
6	G	131	LYS	CB-CA-C	-5.03	101.50	110.70
4	F	155	VAL	N-CA-C	-5.02	101.08	108.11
4	B	89	LYS	CA-C-N	5.02	130.50	121.66
4	B	89	LYS	C-N-CA	5.02	130.50	121.66
7	P	333	GLU	N-CA-CB	5.02	117.50	110.12
8	O	38	LEU	CA-C-O	-5.02	114.92	120.70
6	G	13	VAL	N-CA-CB	5.02	118.11	110.58
3	A	573	SER	CA-C-N	5.02	126.97	120.44
3	A	573	SER	C-N-CA	5.02	126.97	120.44
1	M	112	TYR	N-CA-CB	5.02	120.50	111.37
3	A	218	ARG	CA-C-N	5.02	128.24	123.02
3	A	218	ARG	C-N-CA	5.02	128.24	123.02
6	K	199	ILE	N-CA-C	-5.02	100.42	107.75
7	P	267	TYR	O-C-N	-5.02	116.18	122.35
4	D	459	ASP	O-C-N	5.02	127.44	122.12
6	K	128	ALA	CA-C-N	5.02	127.93	120.31
6	K	128	ALA	C-N-CA	5.02	127.93	120.31
4	D	471	GLU	N-CA-C	-5.01	106.94	113.16
4	F	478	PRO	O-C-N	5.01	128.96	122.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A	364	LEU	CA-C-N	5.01	127.00	120.28
3	A	364	LEU	C-N-CA	5.01	127.00	120.28
3	A	555	ASP	CA-C-N	5.01	127.41	120.29
3	A	555	ASP	C-N-CA	5.01	127.41	120.29
3	A	567	TRP	O-C-N	5.01	127.87	122.15
5	L	17	ALA	O-C-N	5.01	127.44	122.12
8	O	18	GLN	CA-C-N	5.01	130.94	122.26
8	O	18	GLN	C-N-CA	5.01	130.94	122.26
8	O	100	LEU	CA-C-N	5.01	125.25	119.83
8	O	100	LEU	C-N-CA	5.01	125.25	119.83
7	P	372	PRO	CA-C-O	-5.01	113.29	120.56
3	A	487	GLU	CB-CA-C	-5.01	102.47	110.79
8	O	42	ARG	N-CA-C	-5.01	107.02	113.23
1	M	125	LEU	N-CA-C	-5.01	106.91	112.57
3	C	480	VAL	CA-C-O	5.01	126.16	120.85
4	F	125	LYS	N-CA-CB	5.01	118.95	110.49
3	A	173	LEU	N-CA-CB	5.01	118.86	110.85
4	B	30	THR	N-CA-C	-5.01	101.46	109.07
8	O	55	ILE	N-CA-C	-5.01	100.36	107.77
3	E	27	ILE	CA-C-O	5.00	126.65	120.74
4	F	29	ASN	N-CA-C	-5.00	96.99	111.00
4	F	289	ARG	CB-CA-C	-5.00	102.49	110.79

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
4	B	44	VAL	Peptide

5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	M	1039	0	475	0	0
2	N	571	0	255	0	0
3	A	2915	0	1343	2	0
3	C	2915	0	1343	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	E	2915	0	1343	3	0
4	B	2250	0	1016	1	0
4	D	2250	0	1016	1	0
4	F	2250	0	1016	4	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	1	0
7	P	2292	0	993	0	0
8	O	1947	0	876	13	0
9	a	3092	0	1352	10	0
10	b	218	0	98	0	0
11	c	962	0	477	2	0
12	d	1699	0	752	4	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	1	0
13	l	763	0	387	0	0
13	m	768	0	389	1	0
13	n	768	0	389	1	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	30	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 1.

All (30) 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:O	9:a:257:TRP:CB	1.92	1.16
8:O:59:ASP:CA	9:a:295:THR:CB	2.28	1.11
8:O:59:ASP:HA	9:a:295:THR:CB	1.86	1.04
8:O:368:ASP:CB	12:d:48:SER:CB	2.44	0.95
8:O:370:SER:O	9:a:254:ARG:CB	2.14	0.95
8:O:59:ASP:CB	9:a:295:THR:CB	2.45	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:O:59:ASP:O	9:a:295:THR:CB	2.21	0.87
8:O:59:ASP:C	9:a:295:THR:CB	2.54	0.79
8:O:379:ASP:H	9:a:258:ARG:N	1.79	0.74
8:O:368:ASP:CA	12:d:48:SER:CB	2.71	0.68
8:O:379:ASP:H	9:a:257:TRP:C	2.10	0.59
11:c:74:GLY:HA3	11:c:157:LEU:HA	1.85	0.59
3:E:503:GLY:HA2	4:F:424:ALA:HB2	1.87	0.55
13:m:20:ALA:HB2	13:m:94:GLY:HA2	1.90	0.54
13:i:20:ALA:HB2	13:i:94:GLY:HA2	1.88	0.54
8:O:368:ASP:HA	12:d:48:SER:CB	2.38	0.52
3:A:47:GLU:HA	3:A:91:PRO:HA	1.95	0.47
3:E:93:SER:HA	3:E:216:PRO:HA	1.99	0.45
4:B:51:GLU:HA	4:B:99:SER:HA	1.99	0.44
4:D:245:ALA:HB1	3:E:389:ALA:HB1	1.99	0.43
11:c:162:ALA:HB2	14:o:35:ALA:HB1	2.01	0.43
4:F:154:GLY:HA2	4:F:452:ARG:H	1.83	0.43
12:d:47:SER:HA	12:d:52:GLY:HA2	2.01	0.42
8:O:379:ASP:O	9:a:257:TRP:C	2.63	0.42
6:K:187:GLY:HA3	6:K:202:THR:HA	2.03	0.41
4:F:360:VAL:HA	4:F:373:ILE:HA	2.01	0.41
13:k:20:ALA:HB2	13:k:94:GLY:HA2	2.03	0.41
4:F:210:ILE:HA	4:F:275:LEU:O	2.21	0.41
3:A:355:ASP:HA	3:A:356:SER:HA	1.92	0.40
13:n:27:GLY:HA3	13:n:102:LEU:HA	2.03	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%)	202 (97%)	5 (2%)	1 (0%)	24 63

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	N	113/118 (96%)	102 (90%)	7 (6%)	4 (4%)	3	20
3	A	591/639 (92%)	551 (93%)	23 (4%)	17 (3%)	3	23
3	C	591/639 (92%)	545 (92%)	31 (5%)	15 (2%)	4	26
3	E	591/639 (92%)	544 (92%)	31 (5%)	16 (3%)	4	25
4	B	455/517 (88%)	415 (91%)	26 (6%)	14 (3%)	3	22
4	D	455/517 (88%)	410 (90%)	32 (7%)	13 (3%)	3	23
4	F	455/517 (88%)	425 (93%)	20 (4%)	10 (2%)	5	29
5	H	103/114 (90%)	102 (99%)	0	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%)	206 (96%)	7 (3%)	2 (1%)	14	51
6	I	215/233 (92%)	207 (96%)	6 (3%)	2 (1%)	14	51
6	K	215/233 (92%)	206 (96%)	8 (4%)	1 (0%)	24	63
7	P	457/478 (96%)	434 (95%)	18 (4%)	5 (1%)	11	46
8	O	390/392 (100%)	350 (90%)	26 (7%)	14 (4%)	2	20
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%)	7539 (95%)	307 (4%)	116 (2%)	11	40

All (116) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	C	475	TYR
4	D	45	LYS
4	D	59	ASP
4	D	143	ALA
3	E	475	TYR
3	E	565	ALA
3	E	575	GLY
4	F	46	PHE
3	A	202	PHE
3	A	475	TYR
4	B	141	PRO
4	B	372	PRO
8	O	120	LYS
8	O	186	LEU
5	H	77	GLN
6	I	167	ALA
6	I	192	ASN
2	N	115	LEU
3	C	230	ASP
3	C	575	GLY
4	D	319	ALA
4	D	372	PRO
3	E	164	ASN
4	F	467	ILE
3	A	230	ASP
3	A	258	PHE
3	A	532	SER
3	A	575	GLY
4	B	139	ILE
4	B	377	PRO
7	P	3	ALA
8	O	39	ILE
8	O	172	VAL
8	O	375	ALA
1	M	124	GLY
2	N	98	ASP
3	C	261	GLY
3	C	310	PRO
4	D	58	PRO
4	D	141	PRO
4	D	149	GLU
3	E	405	ASP

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Mol	Chain	Res	Type
3	E	449	LYS
3	E	536	ALA
4	F	299	PRO
3	A	39	ASN
3	A	203	ASP
3	A	284	GLY
3	A	441	LEU
3	A	565	ALA
5	L	63	GLY
7	P	35	GLU
8	O	90	ASN
8	O	167	THR
8	O	176	HIS
3	C	257	ALA
3	C	305	SER
3	C	591	ARG
4	D	136	GLY
4	D	424	ALA
3	E	207	SER
3	E	257	ALA
4	F	83	THR
4	F	202	ASP
4	F	372	PRO
4	F	391	MET
3	A	325	PRO
3	A	405	ASP
3	A	531	TYR
3	A	590	SER
4	B	83	THR
4	B	116	SER
4	B	127	PHE
4	B	163	SER
4	B	167	GLY
4	B	292	SER
8	O	171	SER
6	G	195	ASP
3	C	207	SER
3	C	420	GLY
4	D	83	THR
3	E	230	ASP
3	E	305	SER
3	E	590	SER

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Mol	Chain	Res	Type
4	F	123	GLY
4	F	125	LYS
4	F	360	VAL
4	B	143	ALA
4	B	202	ASP
6	K	152	MET
7	P	458	ASP
8	O	7	THR
8	O	95	ASN
8	O	100	LEU
8	O	116	TRP
6	G	135	PRO
2	N	4	LYS
3	C	109	GLN
3	C	405	ASP
4	D	50	ASN
4	D	137	SER
3	E	259	GLY
3	A	456	THR
7	P	390	ASP
7	P	412	ASN
3	E	310	PRO
3	A	78	GLY
4	B	88	VAL
3	E	284	GLY
2	N	25	ILE
3	C	284	GLY
8	O	106	PRO
3	C	381	PRO
3	C	539	PRO
3	E	197	ILE
4	B	179	PRO

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.

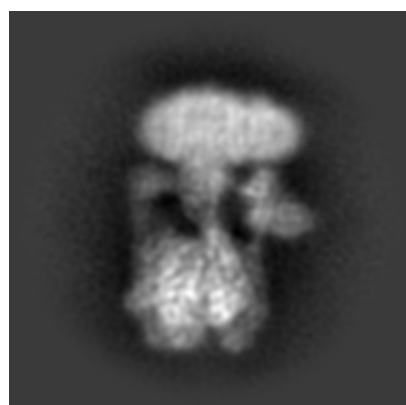
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-0647. These allow visual inspection of the internal detail of the map and identification of artifacts.

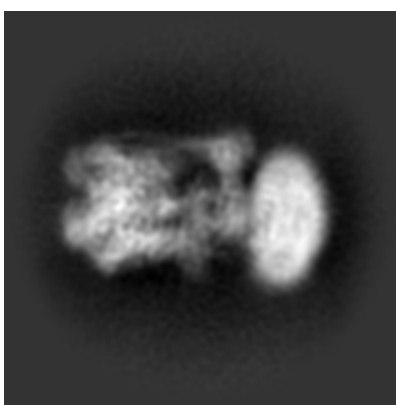
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

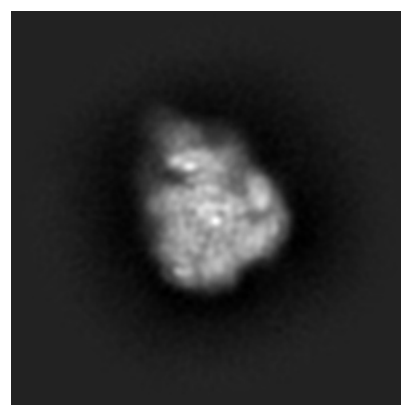
6.1.1 Primary map



X



Y

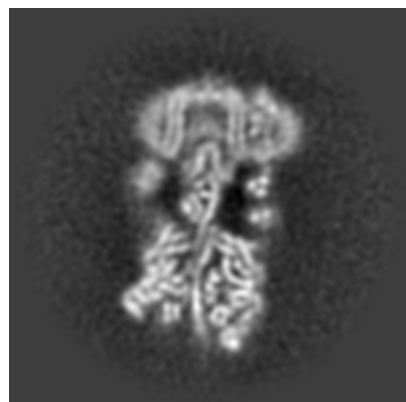


Z

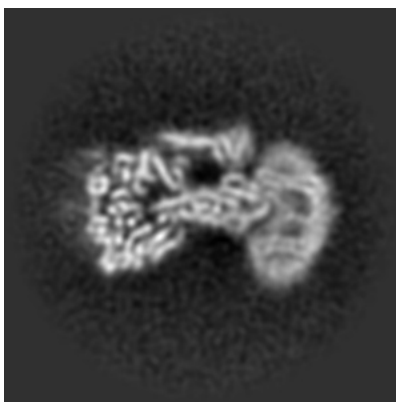
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

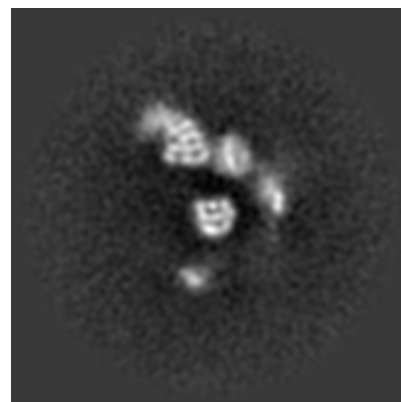
6.2.1 Primary map



X Index: 128



Y Index: 128

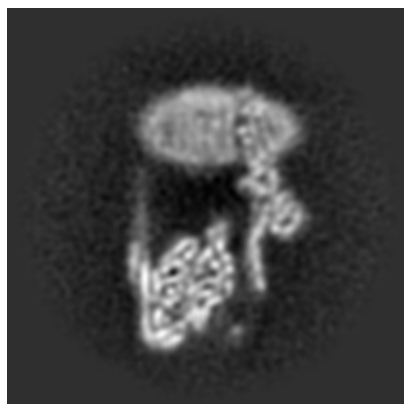


Z Index: 128

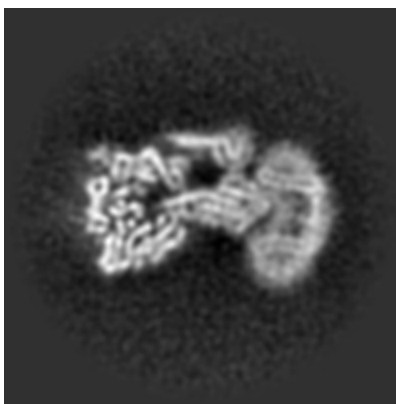
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

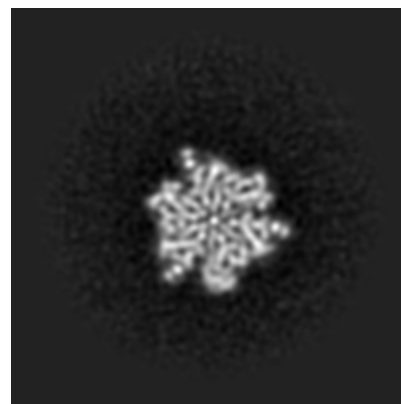
6.3.1 Primary map



X Index: 108



Y Index: 130



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](#)

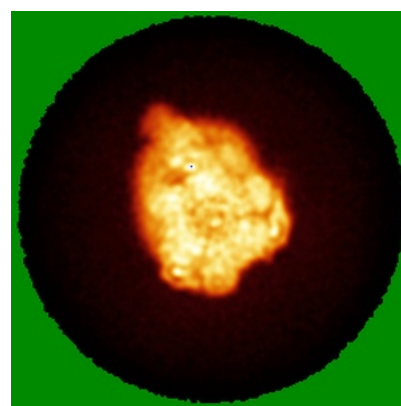
6.4.1 Primary map



X



Y

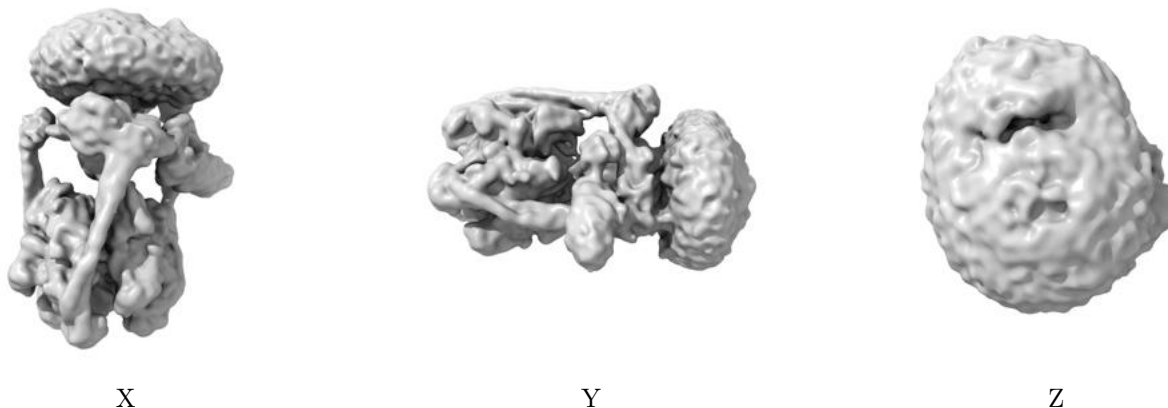


Z

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

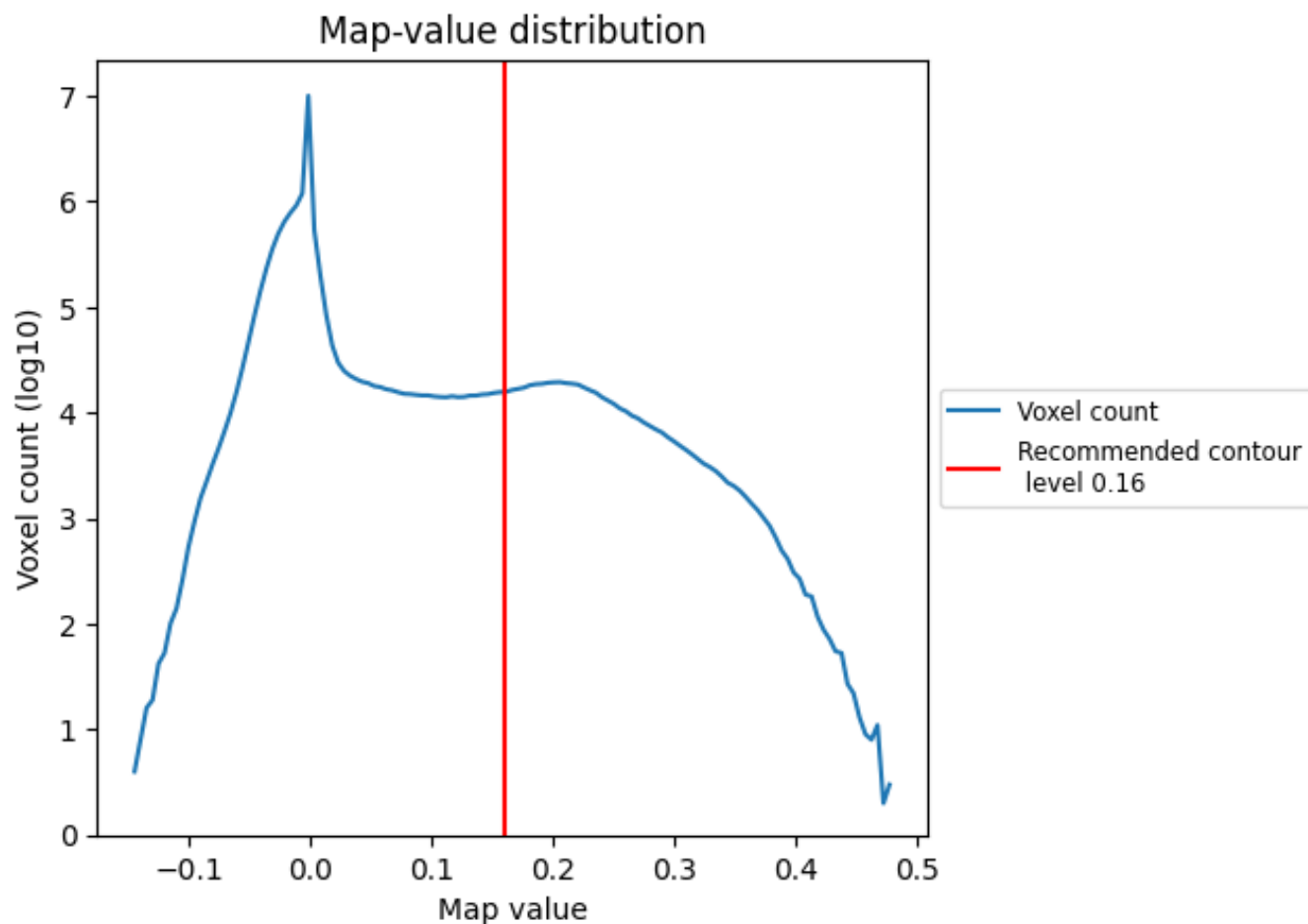
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

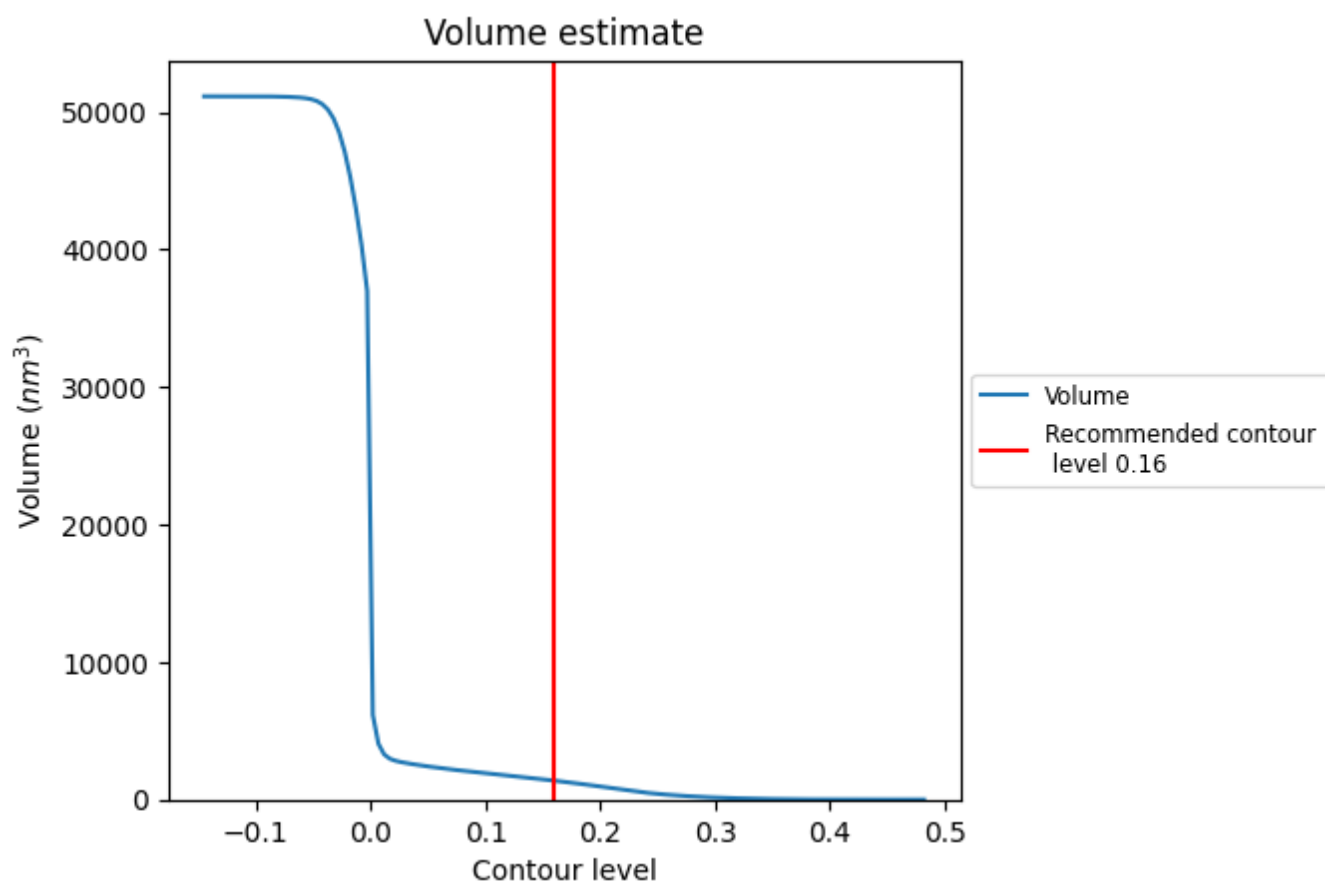
This section contains the results of statistical analysis of the map.

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.

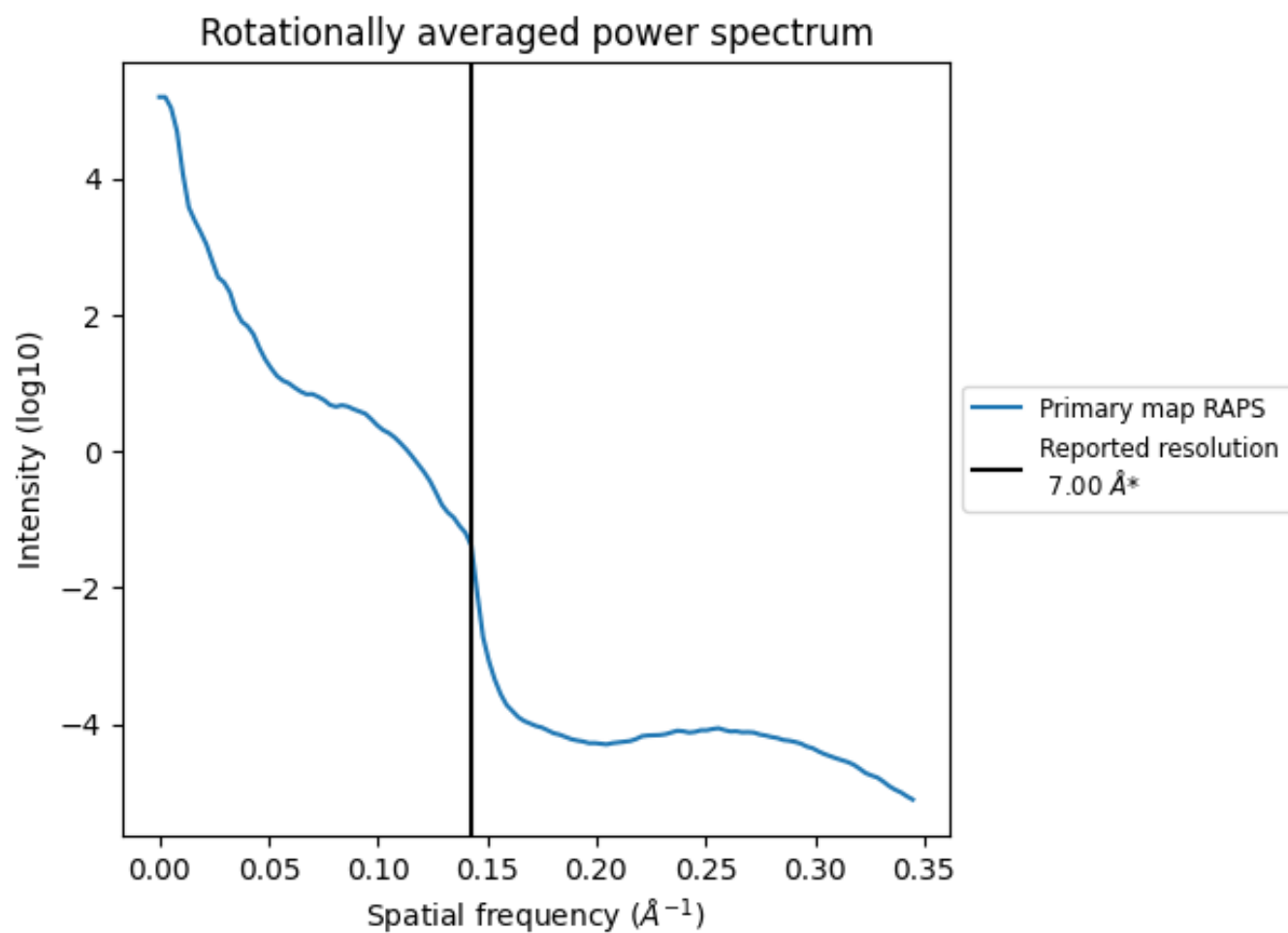
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1377 nm³; this corresponds to an approximate mass of 1244 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 0.143 Å⁻¹

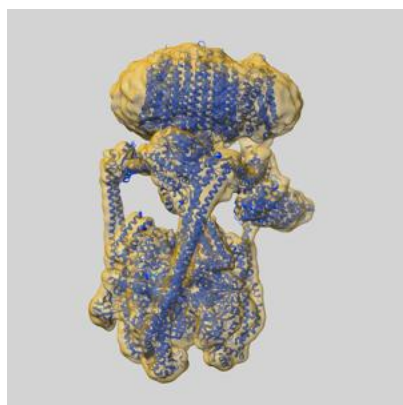
8 Fourier-Shell correlation

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

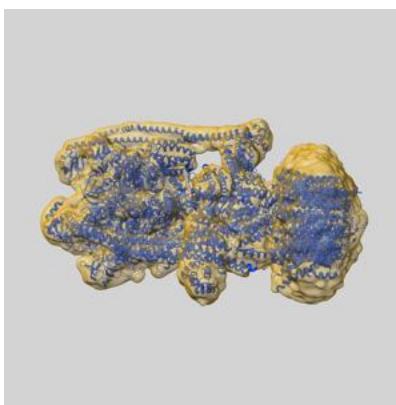
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-0647 and PDB model 6O7W. Per-residue inclusion information can be found in section [3](#) on page [10](#).

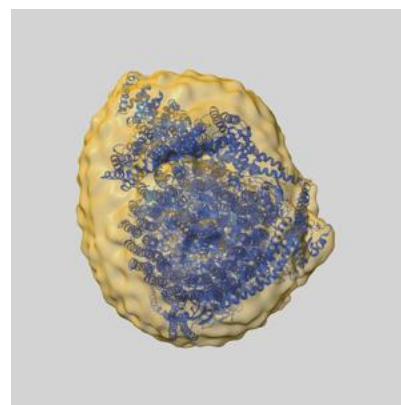
9.1 Map-model overlay [i](#)



X



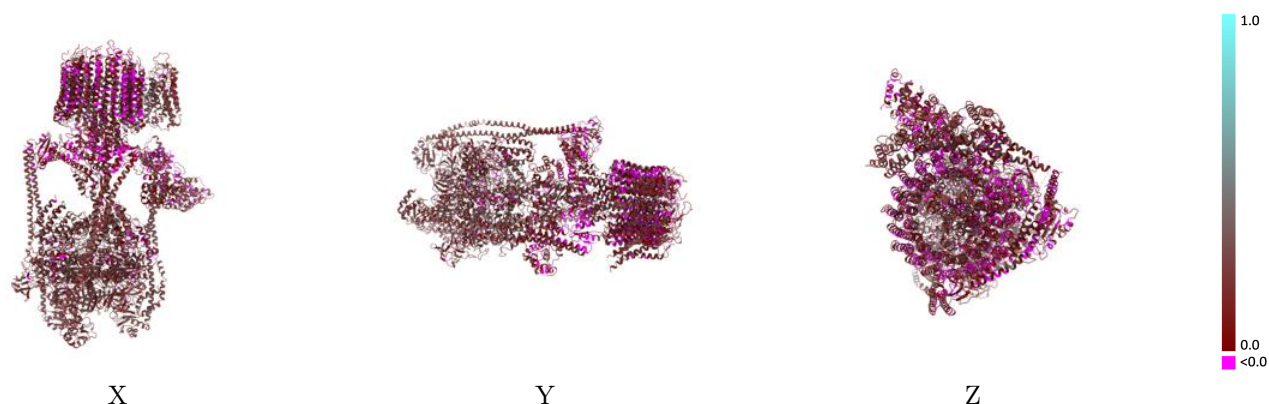
Y



Z

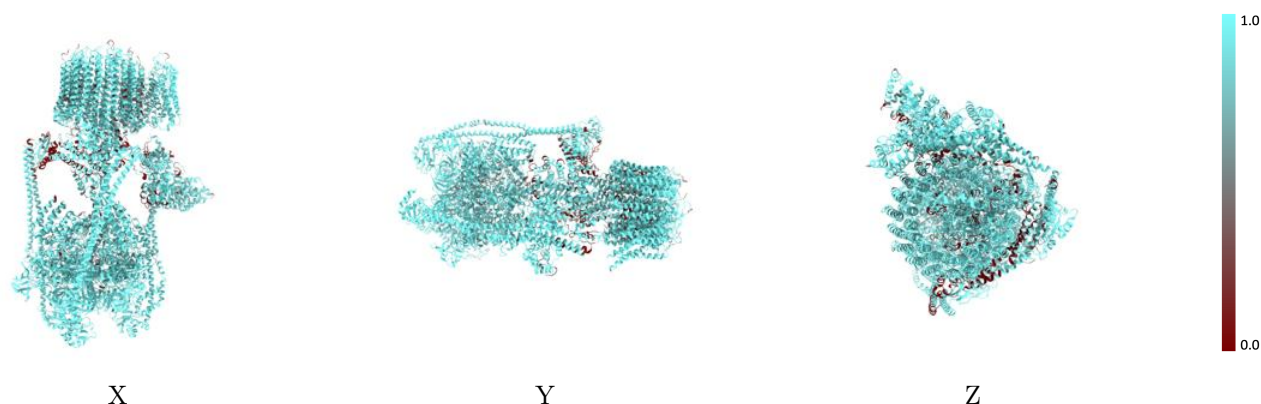
The images above show the 3D surface view of the map at the recommended contour level 0.16 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



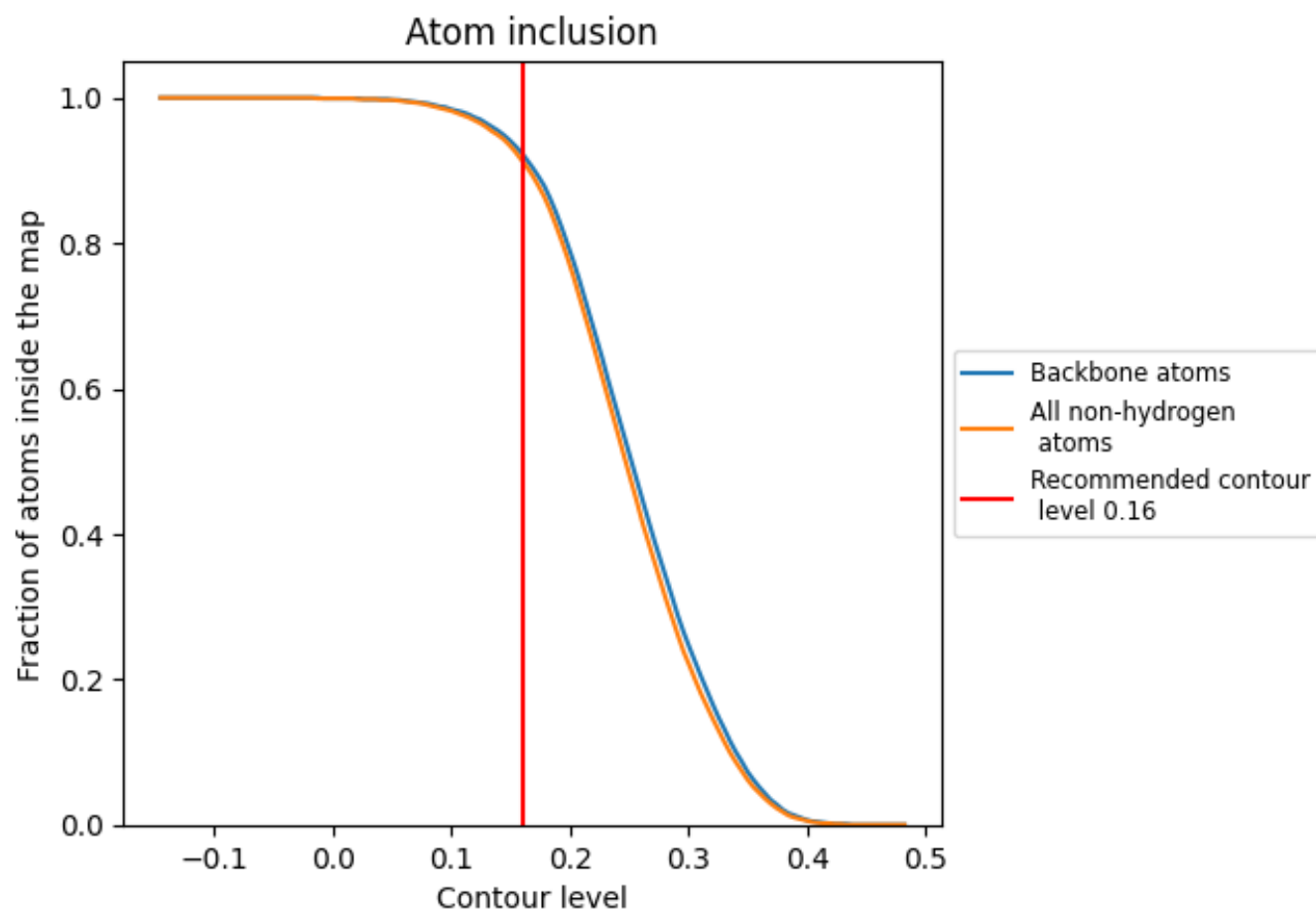
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.16).

































































9.4 Atom inclusion [i](#)



At the recommended contour level, 92% of all backbone atoms, 91% 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 (0.16) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.9130	 0.1630
A	 0.9630	 0.2060
B	 0.9620	 0.2130
C	 0.9490	 0.2010
D	 0.9620	 0.2000
E	 0.9630	 0.2030
F	 0.9610	 0.2110
G	 0.9300	 0.2090
H	 0.9880	 0.1990
I	 0.9770	 0.2260
J	 0.9830	 0.2170
K	 0.9580	 0.2150
L	 0.9170	 0.2060
M	 0.9250	 0.2000
N	 0.8460	 0.1930
O	 0.6180	 0.0800
P	 0.8570	 0.1310
a	 0.8880	 0.1460
b	 0.7110	 0.0980
c	 0.9180	 0.0670
d	 0.7520	 0.1440
e	 0.9940	 0.1760
f	 0.9970	 0.1910
g	 0.9720	 0.0820
h	 0.9340	 0.0760
i	 0.9530	 0.1230
j	 0.9760	 0.1140
k	 0.9770	 0.1070
l	 0.9760	 0.0890
m	 0.8700	 0.0390
n	 0.8160	 0.0510
o	 0.9180	 0.0600

