



Full wwPDB EM Validation Report ⓘ

Mar 12, 2026 – 10:25 PM UTC

PDB ID : 7TKN / pdb_00007tkn
EMDB ID : EMD-25975
Title : Yeast ATP synthase State 3binding(c) with 10 mM ATP backbone model
Authors : Guo, H.; Rubinstein, J.L.
Deposited on : 2022-01-17
Resolution : 7.10 Å(reported)
Based on initial model : 2HLD

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

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

A user guide is available at

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

The types of validation reports are described at

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

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

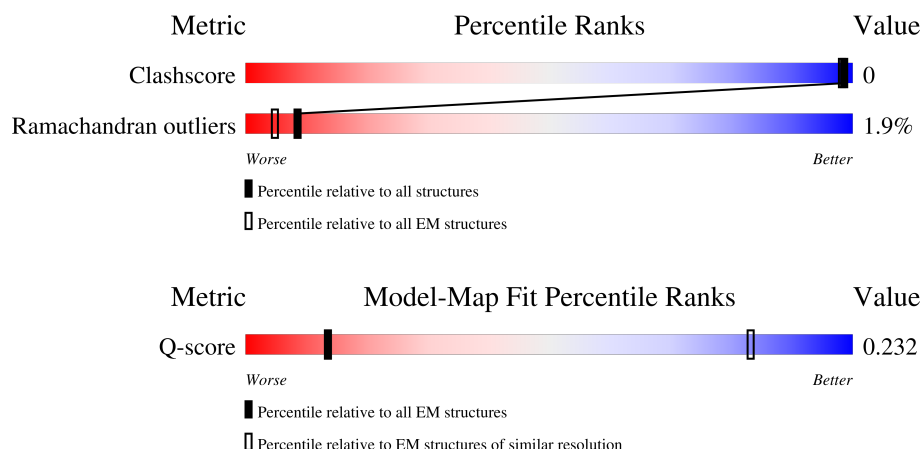
EMDB validation analysis : 0.0.1.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh &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

1 Overall quality at a glance

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

The reported resolution of this entry is 7.10 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	464 (6.60 - 7.60)

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	0	76	25% 53% 46%
1	1	76	26% 50% 47%
1	2	76	26% 51% 47%
1	3	76	36% 49% 47%
1	4	76	37% 51% 46%

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Mol	Chain	Length	Quality of chain
1	5	76	
1	6	76	
1	7	76	
1	8	76	
1	9	76	
2	A	510	
2	B	510	
2	C	510	
3	D	478	
3	E	478	
3	F	478	
4	G	278	
5	H	138	
6	I	61	
7	O	195	
8	T	249	
9	U	209	
10	V	173	
11	W	95	
12	X	92	
13	Y	59	
14	Z	48	

2 Entry composition

There are 14 unique types of molecules in this entry. The entry contains 20225 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 ATP synthase subunit 9.

Mol	Chain	Residues	Atoms				AltConf	Trace
1	0	75	Total	C	N	O	0	0
			300	150	75	75		
1	1	75	Total	C	N	O	0	0
			300	150	75	75		
1	2	75	Total	C	N	O	0	0
			300	150	75	75		
1	3	74	Total	C	N	O	0	0
			296	148	74	74		
1	4	75	Total	C	N	O	0	0
			300	150	75	75		
1	5	75	Total	C	N	O	0	0
			300	150	75	75		
1	6	74	Total	C	N	O	0	0
			296	148	74	74		
1	7	73	Total	C	N	O	0	0
			292	146	73	73		
1	8	75	Total	C	N	O	0	0
			300	150	75	75		
1	9	74	Total	C	N	O	0	0
			296	148	74	74		

- Molecule 2 is a protein called ATP synthase subunit alpha.

Mol	Chain	Residues	Atoms				AltConf	Trace
2	A	499	Total	C	N	O	0	0
			1996	998	499	499		
2	B	507	Total	C	N	O	0	0
			2028	1014	507	507		
2	C	496	Total	C	N	O	0	0
			1984	992	496	496		

- Molecule 3 is a protein called ATP synthase subunit beta.

Mol	Chain	Residues	Atoms				AltConf	Trace
3	D	468	Total	C	N	O	0	0
			1872	936	468	468		
3	E	469	Total	C	N	O	0	0
			1876	938	469	469		
3	F	470	Total	C	N	O	0	0
			1880	940	470	470		

- Molecule 4 is a protein called ATP synthase subunit gamma.

Mol	Chain	Residues	Atoms				AltConf	Trace
4	G	265	Total	C	N	O	0	0
			1059	530	265	264		

- Molecule 5 is a protein called ATP synthase subunit delta.

Mol	Chain	Residues	Atoms				AltConf	Trace
5	H	120	Total	C	N	O	0	0
			478	240	120	118		

- Molecule 6 is a protein called ATP synthase subunit epsilon.

Mol	Chain	Residues	Atoms				AltConf	Trace
6	I	48	Total	C	N	O	0	0
			193	96	48	49		

- Molecule 7 is a protein called ATP synthase subunit 5.

Mol	Chain	Residues	Atoms				AltConf	Trace
7	O	187	Total	C	N	O	0	0
			748	374	187	187		

- Molecule 8 is a protein called ATP synthase subunit a.

Mol	Chain	Residues	Atoms				AltConf	Trace
8	T	224	Total	C	N	O	0	0
			897	448	224	225		

- Molecule 9 is a protein called ATP synthase subunit 4.

Mol	Chain	Residues	Atoms				AltConf	Trace
9	U	155	Total	C	N	O	0	0
			620	310	155	155		

- Molecule 10 is a protein called ATP synthase subunit d.

Mol	Chain	Residues	Atoms				AltConf	Trace
10	V	171	Total	C	N	O	0	0
			685	342	171	172		

- Molecule 11 is a protein called ATP synthase subunit f.

Mol	Chain	Residues	Atoms				AltConf	Trace
11	W	85	Total	C	N	O	0	0
			340	170	85	85		

- Molecule 12 is a protein called ATP synthase subunit H.

Mol	Chain	Residues	Atoms				AltConf	Trace
12	X	62	Total	C	N	O	0	0
			248	124	62	62		

- Molecule 13 is a protein called ATP synthase subunit J.

Mol	Chain	Residues	Atoms				AltConf	Trace
13	Y	37	Total	C	N	O	0	0
			148	74	37	37		

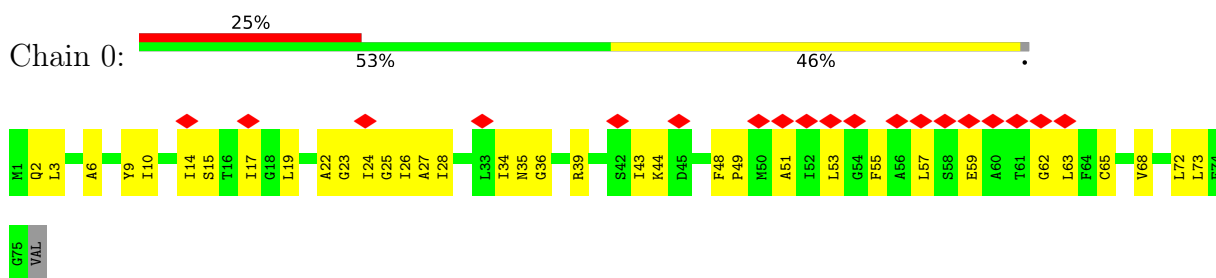
- Molecule 14 is a protein called ATP synthase protein 8.

Mol	Chain	Residues	Atoms				AltConf	Trace
14	Z	48	Total	C	N	O	0	0
			193	96	48	49		

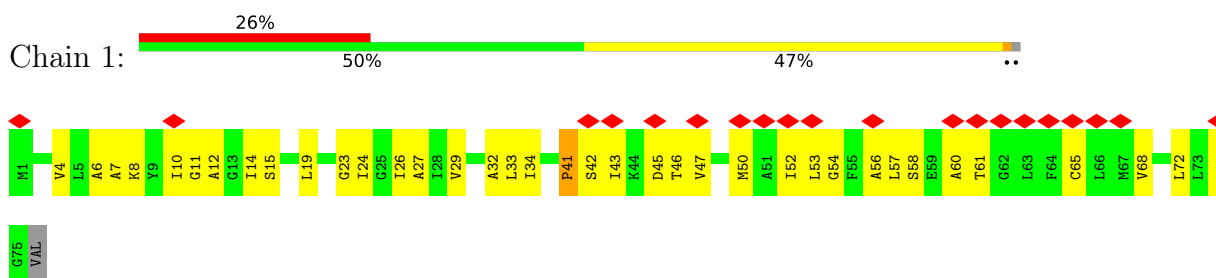
3 Residue-property plots [i](#)

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

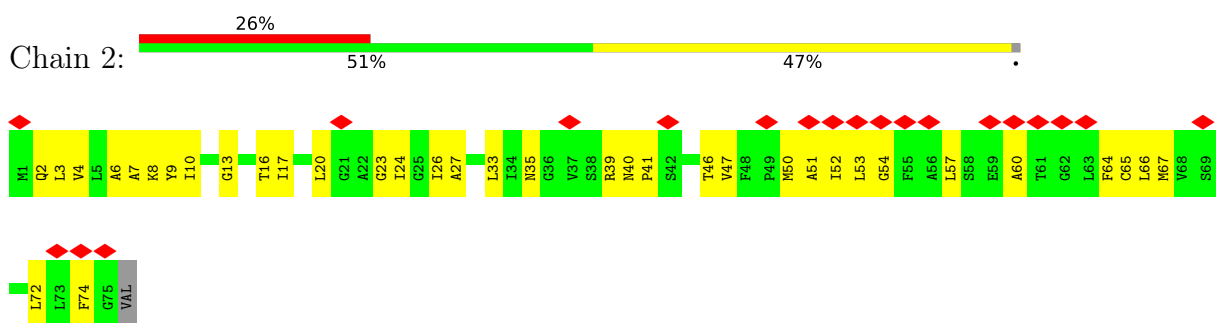
- Molecule 1: ATP synthase subunit 9



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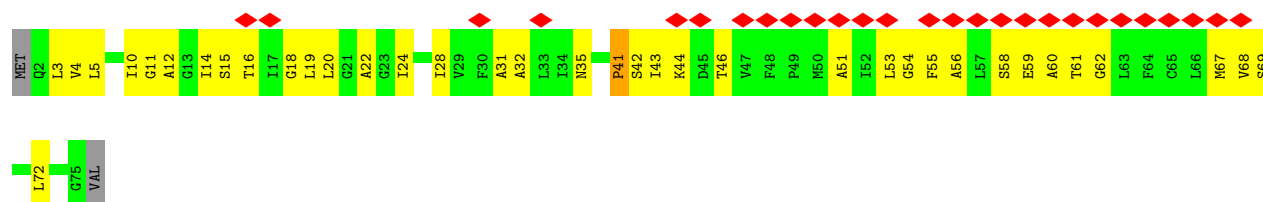


- Molecule 1: ATP synthase subunit 9

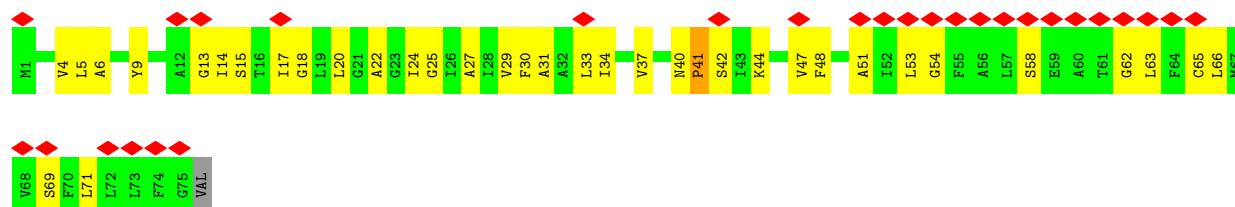


- Molecule 1: ATP synthase subunit 9

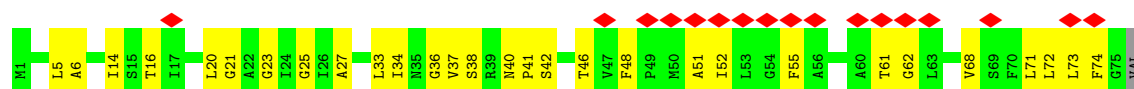




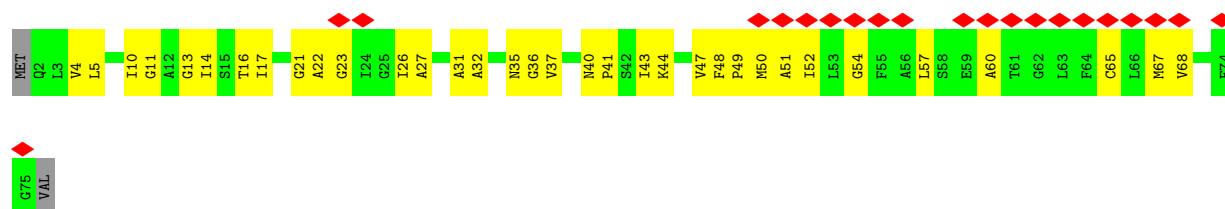
• Molecule 1: ATP synthase subunit 9



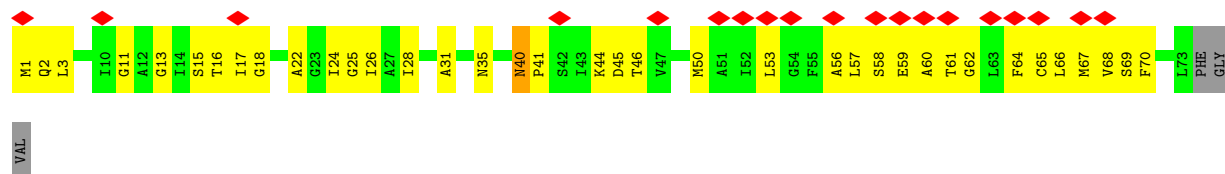
• Molecule 1: ATP synthase subunit 9



• Molecule 1: ATP synthase subunit 9

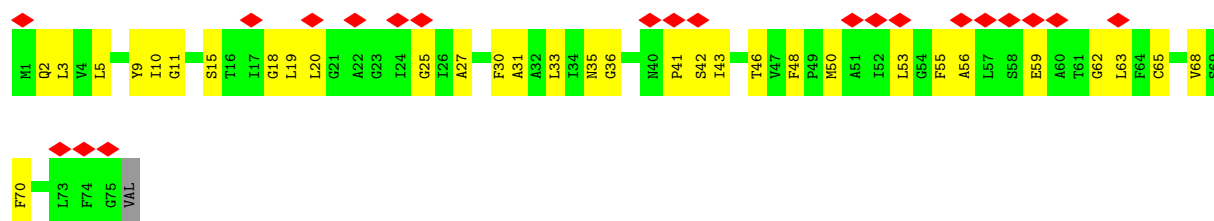


• Molecule 1: ATP synthase subunit 9

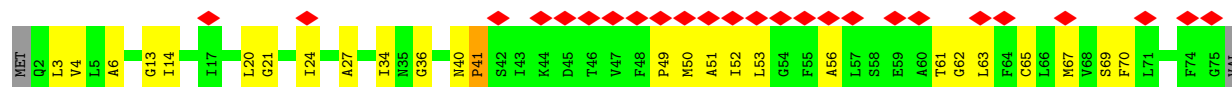


• Molecule 1: ATP synthase subunit 9

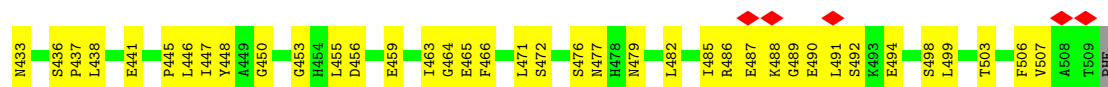
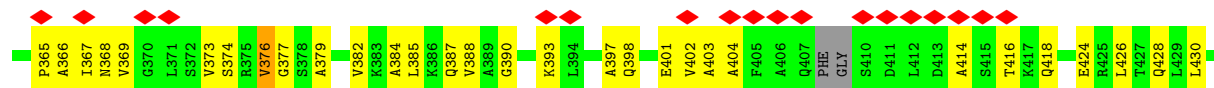
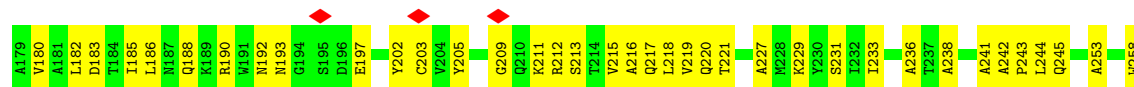
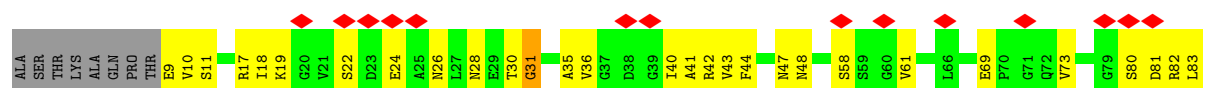




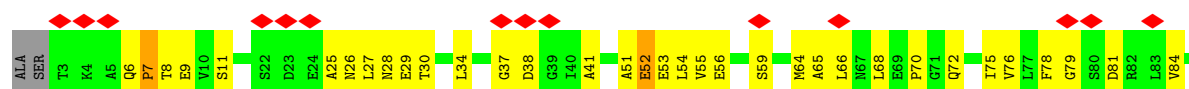
- Molecule 1: ATP synthase subunit 9

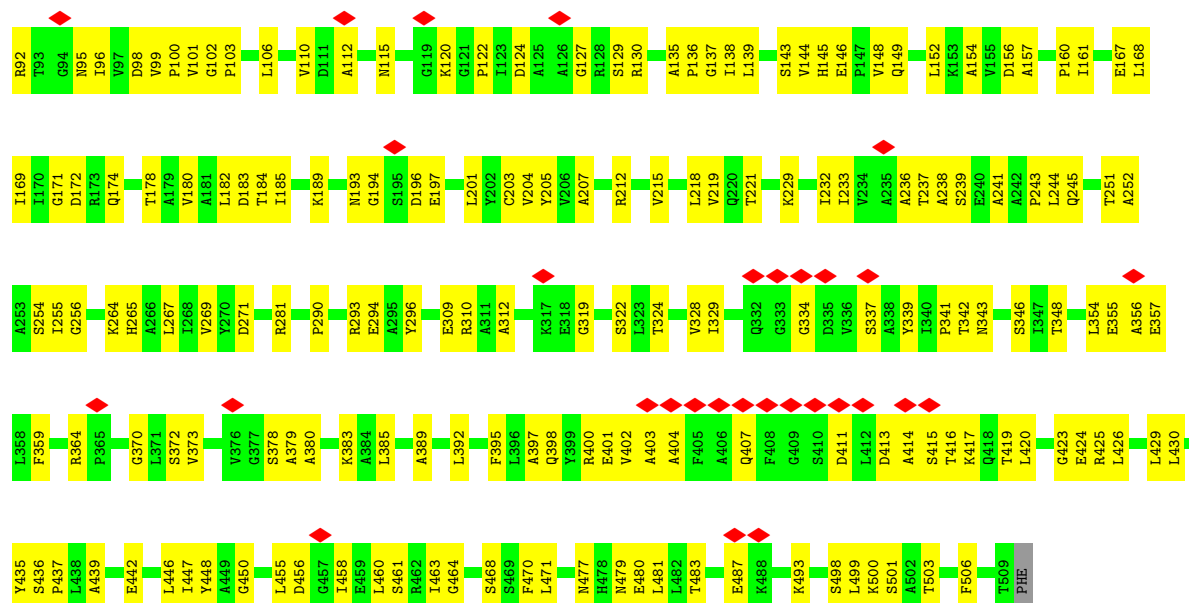


- Molecule 2: ATP synthase subunit alpha

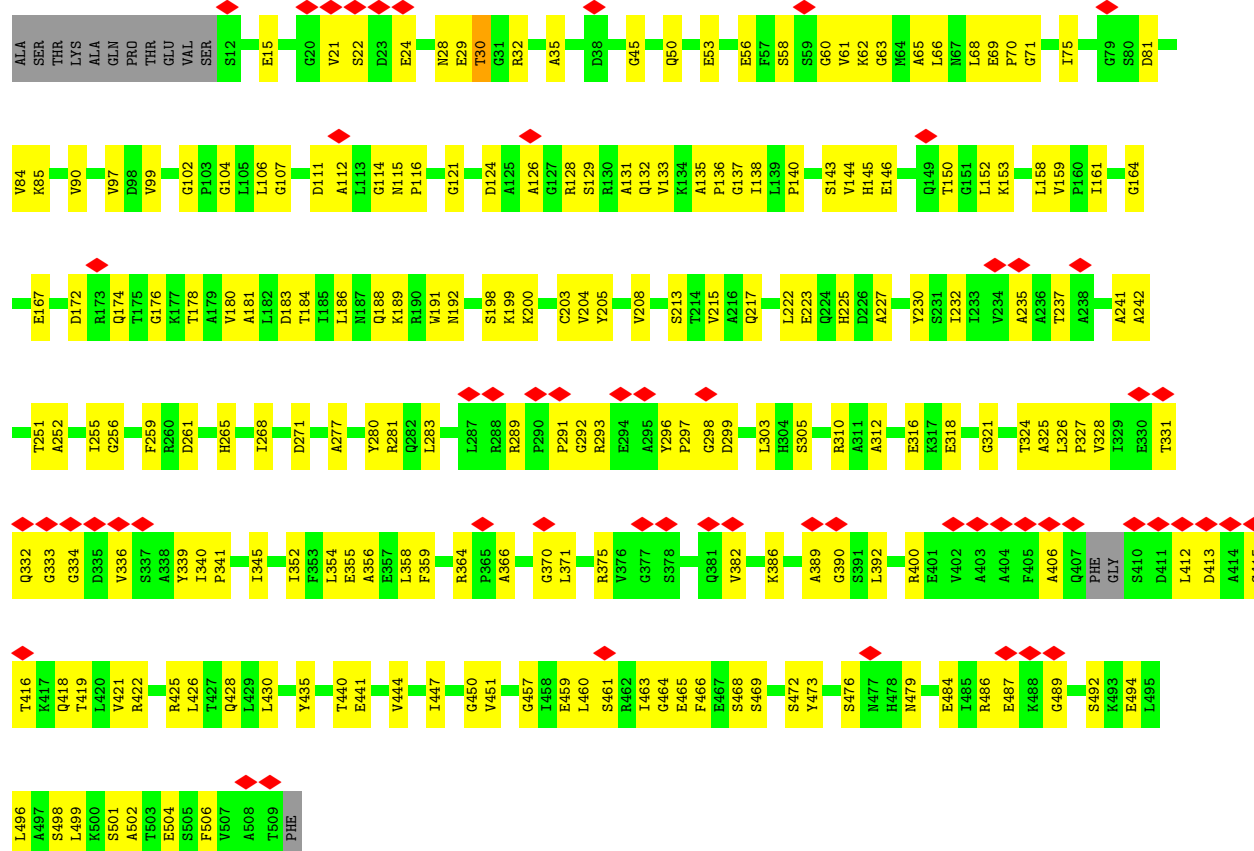


- Molecule 2: ATP synthase subunit alpha

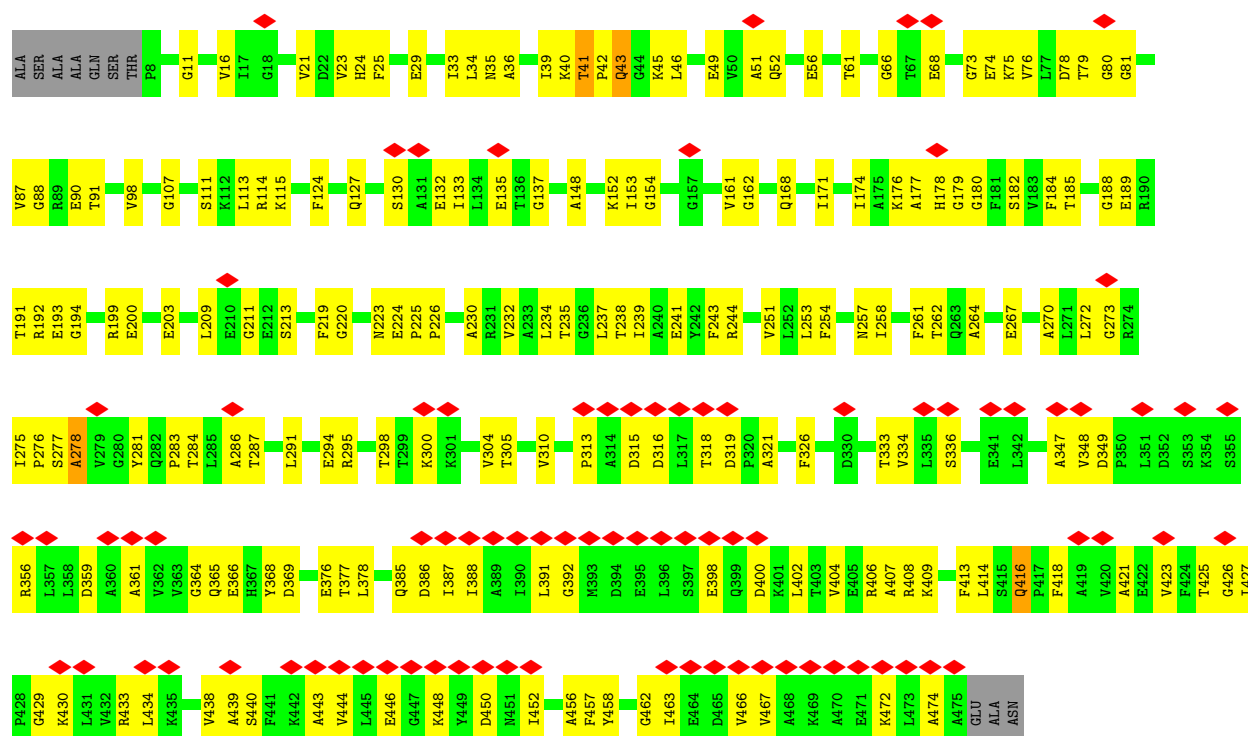




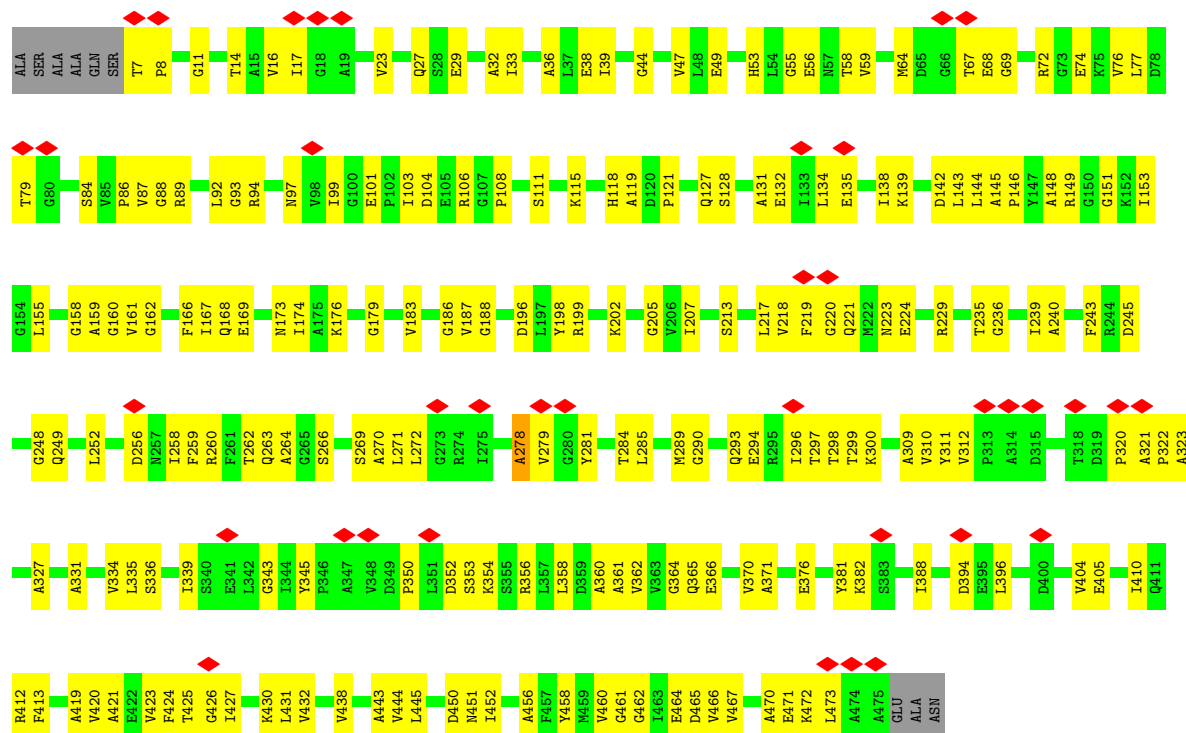
• Molecule 2: ATP synthase subunit alpha



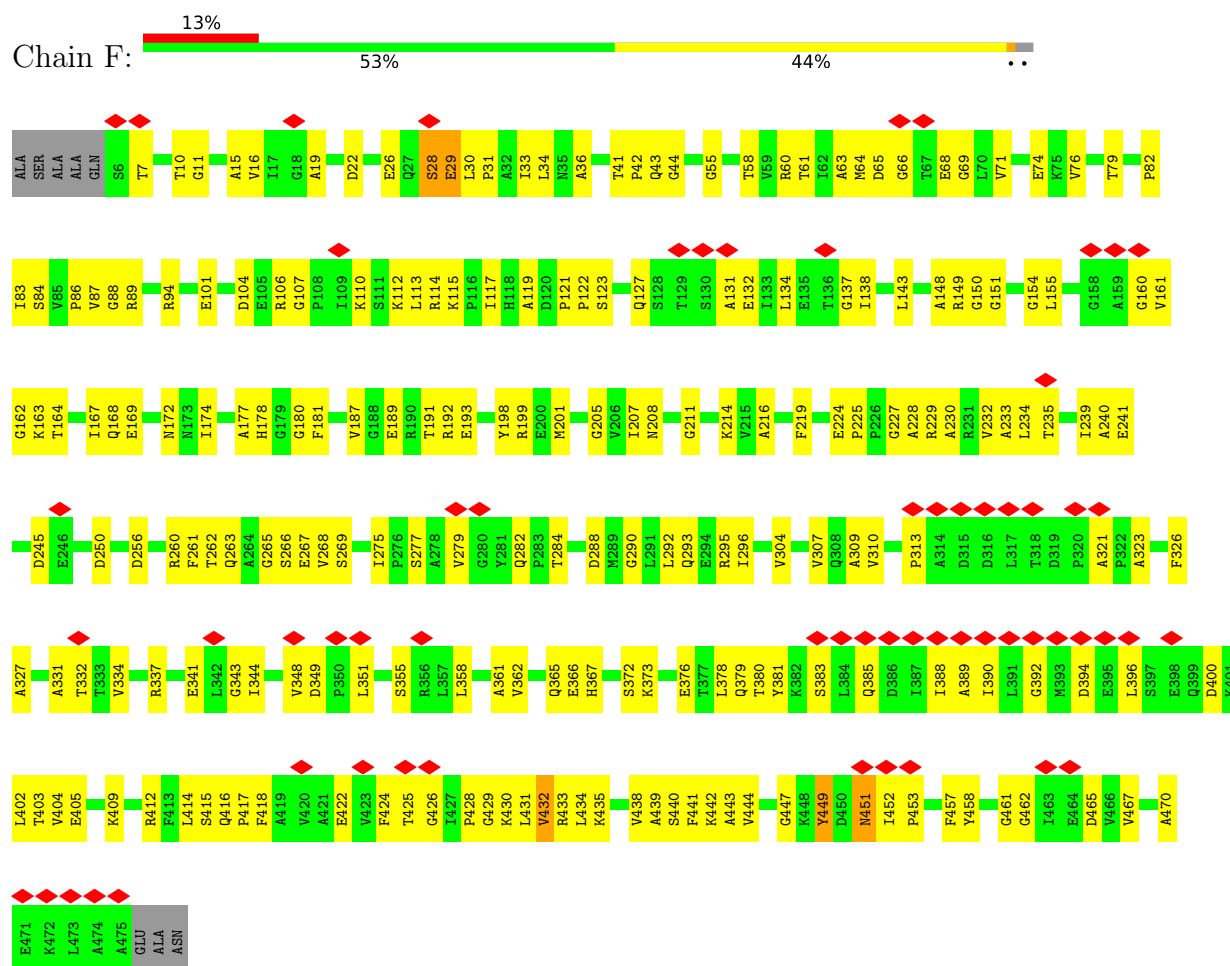
• Molecule 3: ATP synthase subunit beta



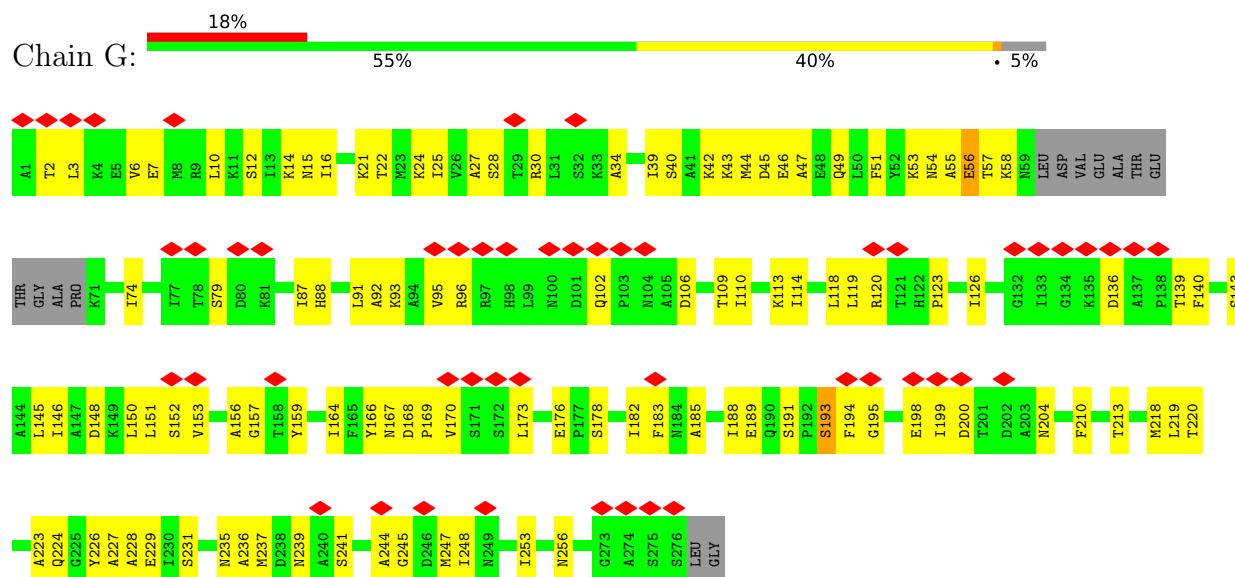
• Molecule 3: ATP synthase subunit beta



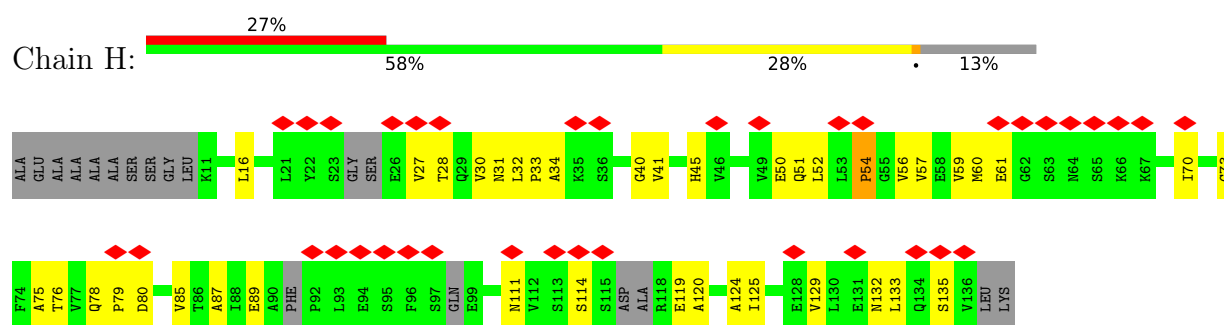
- Molecule 3: ATP synthase subunit beta



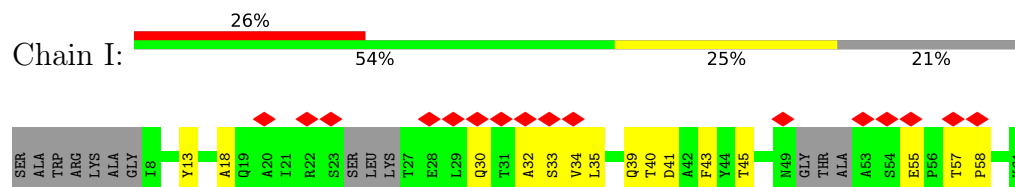
- Molecule 4: ATP synthase subunit gamma



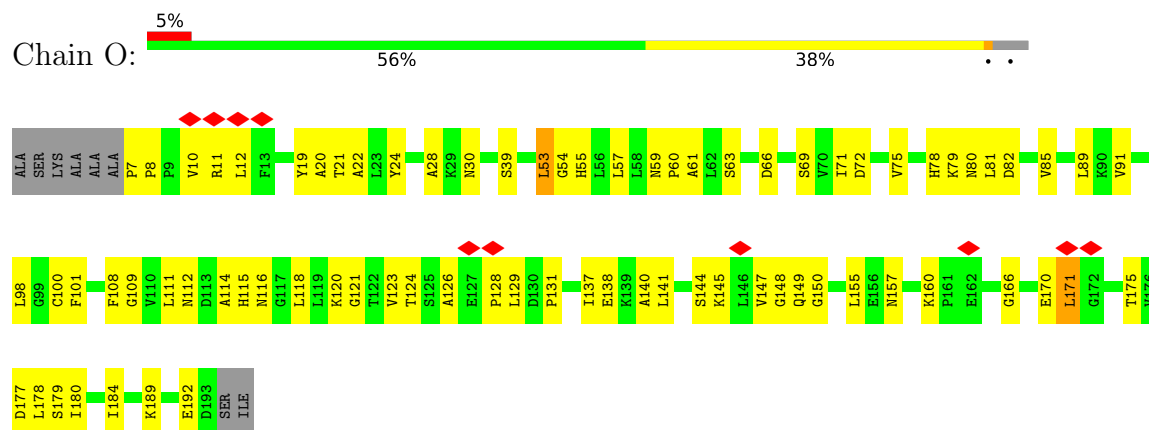
- Molecule 5: ATP synthase subunit delta



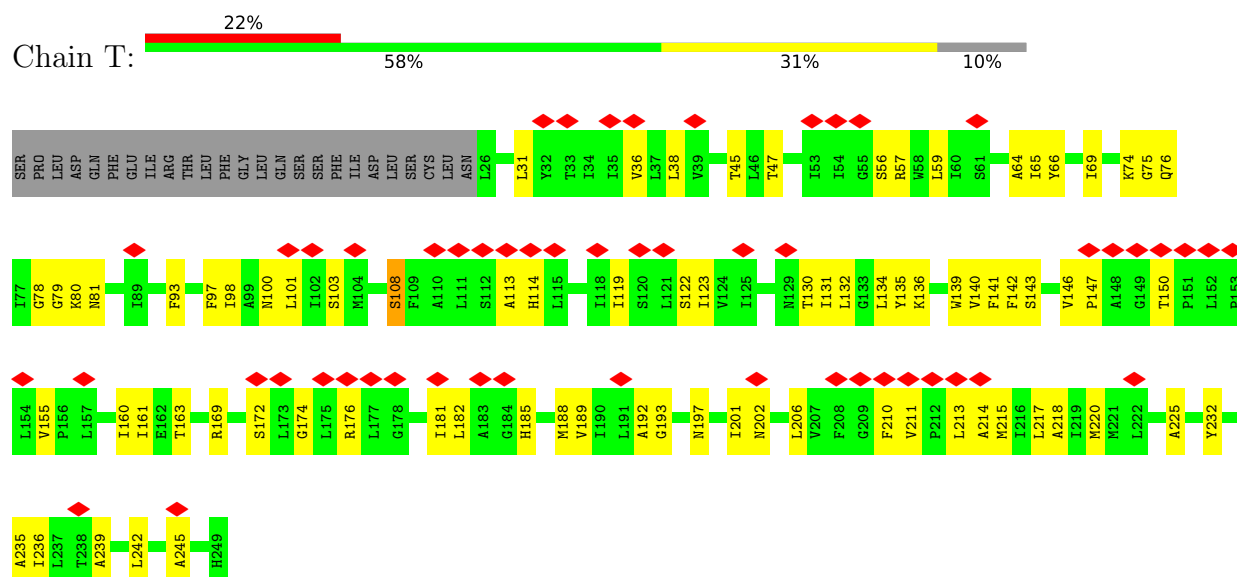
• Molecule 6: ATP synthase subunit epsilon



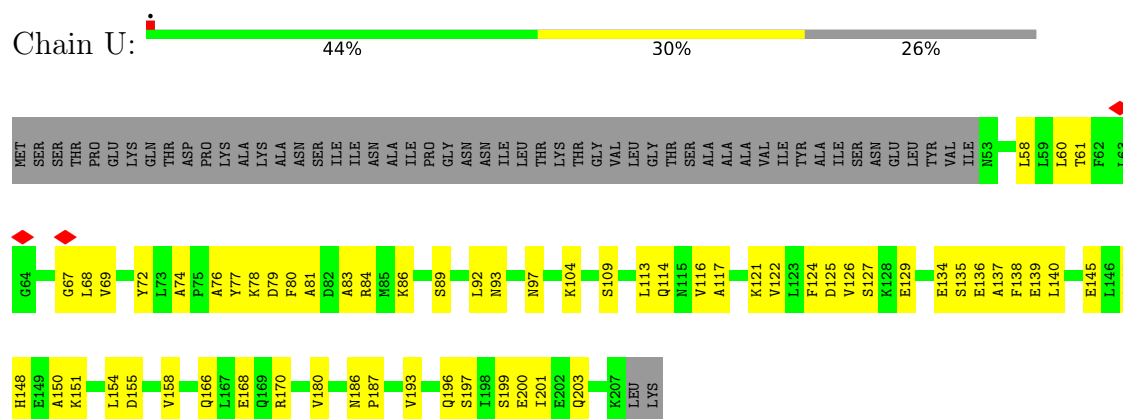
• Molecule 7: ATP synthase subunit 5



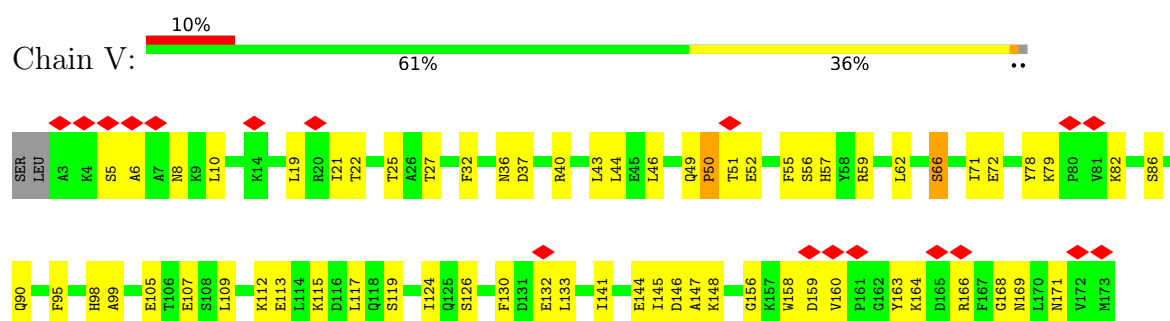
• Molecule 8: ATP synthase subunit a



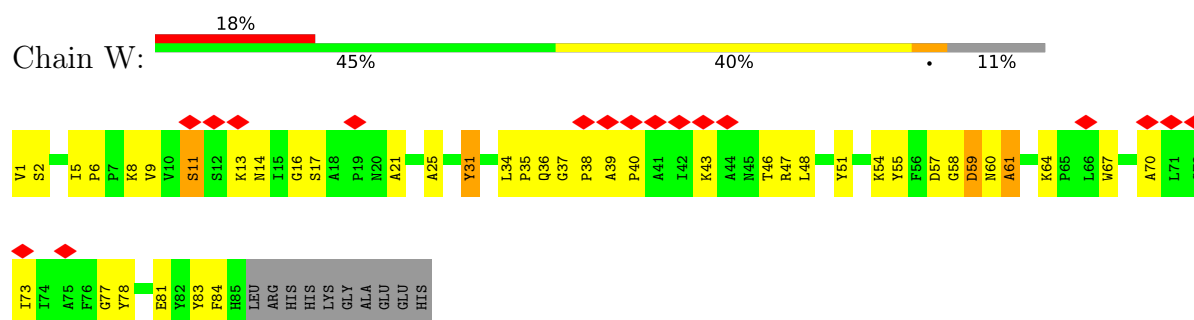
- Molecule 9: ATP synthase subunit 4



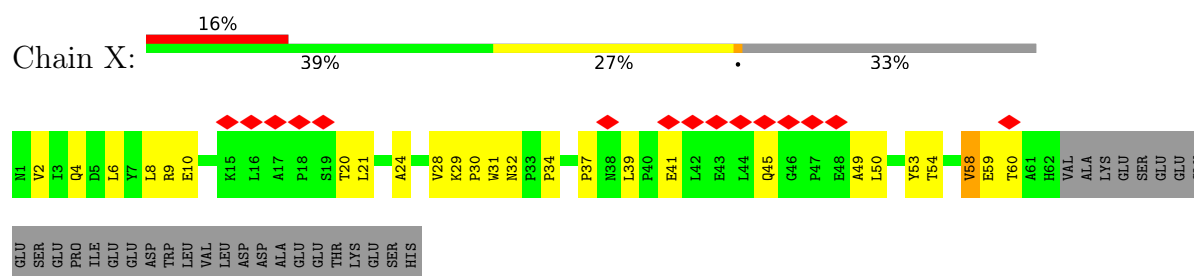
- Molecule 10: ATP synthase subunit d



- Molecule 11: ATP synthase subunit f

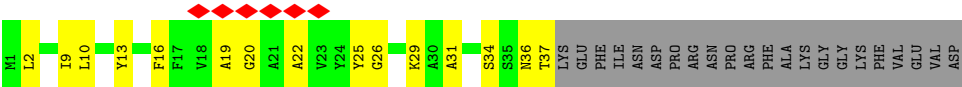


- Molecule 12: ATP synthase subunit H

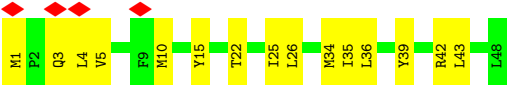


- Molecule 13: ATP synthase subunit J





• Molecule 14: ATP synthase protein 8



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	16301	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	40	Depositor
Minimum defocus (nm)	1100	Depositor
Maximum defocus (nm)	2000	Depositor
Magnification	103896	Depositor
Image detector	FEI FALCON IV (4k x 4k)	Depositor
Maximum map value	1.527	Depositor
Minimum map value	-0.416	Depositor
Average map value	0.002	Depositor
Map value standard deviation	0.104	Depositor
Recommended contour level	0.61	Depositor
Map size (Å)	344.96, 344.96, 344.96	wwPDB
Map dimensions	256, 256, 256	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.3475, 1.3475, 1.3475	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	0	2.65	17/299 (5.7%)	3.19	39/372 (10.5%)
1	1	2.55	18/299 (6.0%)	3.32	44/372 (11.8%)
1	2	2.41	11/299 (3.7%)	3.26	48/372 (12.9%)
1	3	2.38	9/295 (3.1%)	3.26	55/367 (15.0%)
1	4	2.49	18/299 (6.0%)	3.15	45/372 (12.1%)
1	5	2.45	14/299 (4.7%)	3.13	33/372 (8.9%)
1	6	2.49	14/295 (4.7%)	3.39	51/367 (13.9%)
1	7	2.55	17/291 (5.8%)	3.29	42/362 (11.6%)
1	8	2.42	11/299 (3.7%)	3.21	38/372 (10.2%)
1	9	2.55	15/295 (5.1%)	3.07	39/367 (10.6%)
2	A	2.53	97/1994 (4.9%)	2.88	206/2489 (8.3%)
2	B	2.44	90/2027 (4.4%)	2.86	207/2532 (8.2%)
2	C	2.58	106/1982 (5.3%)	2.86	203/2474 (8.2%)
3	D	2.52	84/1871 (4.5%)	2.86	192/2337 (8.2%)
3	E	2.60	117/1875 (6.2%)	2.81	175/2342 (7.5%)
3	F	2.58	113/1879 (6.0%)	2.85	204/2347 (8.7%)
4	G	2.50	50/1057 (4.7%)	2.85	116/1318 (8.8%)
5	H	2.30	20/473 (4.2%)	2.58	32/583 (5.5%)
6	I	2.33	4/190 (2.1%)	2.78	17/231 (7.4%)
7	O	2.43	34/747 (4.6%)	2.85	72/932 (7.7%)
8	T	2.52	39/896 (4.4%)	2.73	71/1117 (6.4%)
9	U	2.63	33/619 (5.3%)	2.93	63/772 (8.2%)
10	V	2.47	31/684 (4.5%)	2.77	52/852 (6.1%)
11	W	2.57	23/339 (6.8%)	2.81	40/422 (9.5%)
12	X	2.56	12/247 (4.9%)	3.09	31/307 (10.1%)
13	Y	2.51	10/147 (6.8%)	2.42	10/182 (5.5%)
14	Z	2.51	8/192 (4.2%)	2.86	15/237 (6.3%)
All	All	2.52	1015/20189 (5.0%)	2.90	2140/25169 (8.5%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	4	0	1
1	5	0	1
1	6	0	1
1	7	0	1
1	9	0	1
2	A	0	1
2	B	0	1
3	E	0	1
3	F	0	1
5	H	0	2
10	V	0	1
All	All	0	12

All (1015) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	F	424	PHE	CA-C	-10.91	1.45	1.52
2	C	60	GLY	C-N	10.89	1.46	1.33
2	C	159	VAL	N-CA	-10.27	1.38	1.46
2	A	30	THR	N-CA	9.96	1.57	1.46
3	E	294	GLU	CA-C	-9.87	1.38	1.52
2	C	203	CYS	N-CA	-9.45	1.33	1.45
3	E	354	LYS	C-N	9.31	1.45	1.33
1	8	55	PHE	C-N	9.30	1.45	1.33
1	2	8	LYS	N-CA	-9.19	1.35	1.46
2	A	351	GLN	CA-C	-8.85	1.42	1.52
3	F	106	ARG	CA-C	-8.85	1.40	1.52
3	D	46	LEU	CA-C	-8.83	1.42	1.52
3	D	443	ALA	C-N	8.82	1.44	1.33
8	T	201	ILE	CA-C	-8.81	1.41	1.52
2	A	17	ARG	C-N	8.80	1.45	1.33
3	D	243	PHE	N-CA	-8.71	1.36	1.46
1	6	67	MET	N-CA	-8.68	1.35	1.46
2	B	203	CYS	CA-C	-8.67	1.42	1.52
2	B	322	SER	CA-C	-8.66	1.42	1.52
2	A	127	GLY	CA-C	-8.64	1.41	1.51
8	T	150	THR	N-CA	8.62	1.53	1.45
4	G	198	GLU	N-CA	-8.60	1.35	1.46
1	0	17	ILE	N-CA	-8.59	1.36	1.46
2	A	488	LYS	CA-C	-8.58	1.42	1.52
3	E	443	ALA	C-N	8.56	1.44	1.33
3	D	321	ALA	N-CA	-8.55	1.38	1.46
3	D	219	PHE	CA-C	-8.52	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	T	135	TYR	N-CA	-8.51	1.35	1.46
2	B	346	SER	CA-C	-8.42	1.42	1.52
9	U	196	GLN	C-N	8.37	1.44	1.33
3	D	272	LEU	CA-C	-8.37	1.41	1.52
2	C	352	ILE	CA-C	-8.35	1.42	1.52
9	U	86	LYS	CA-C	8.32	1.63	1.52
3	F	378	LEU	CA-C	-8.31	1.42	1.52
2	B	493	LYS	N-CA	-8.27	1.36	1.46
2	A	35	ALA	N-CA	-8.22	1.35	1.46
3	D	244	ARG	N-CA	-8.20	1.36	1.46
11	W	5	ILE	C-N	8.14	1.43	1.33
3	E	79	THR	N-CA	8.13	1.56	1.46
2	C	128	ARG	CA-C	-8.12	1.43	1.52
1	9	14	ILE	CA-C	8.11	1.63	1.52
2	B	342	THR	CA-C	-8.11	1.42	1.52
3	D	188	GLY	CA-C	-8.08	1.41	1.51
2	C	131	ALA	CA-C	-8.07	1.44	1.53
2	B	481	LEU	CA-C	-8.07	1.42	1.52
3	F	405	GLU	CA-C	-8.06	1.42	1.52
3	E	119	ALA	CA-C	-8.05	1.42	1.52
2	B	183	ASP	CA-C	-7.98	1.42	1.52
3	F	207	ILE	CA-C	-7.98	1.42	1.52
3	D	291	LEU	CA-C	-7.96	1.42	1.52
3	D	61	THR	CA-C	-7.93	1.42	1.52
4	G	14	LYS	CA-C	7.92	1.63	1.52
5	H	79	PRO	CA-C	7.91	1.60	1.53
2	C	389	ALA	CA-C	-7.83	1.43	1.52
4	G	247	MET	N-CA	-7.81	1.36	1.46
2	B	65	ALA	CA-C	-7.80	1.43	1.52
3	F	282	GLN	N-CA	7.77	1.54	1.45
5	H	135	SER	N-CA	-7.76	1.36	1.46
1	4	51	ALA	CA-C	-7.76	1.42	1.52
1	7	22	ALA	CA-C	-7.75	1.42	1.52
9	U	139	GLU	CA-C	-7.74	1.42	1.52
3	F	349	ASP	C-N	7.71	1.42	1.34
10	V	119	SER	CA-C	-7.70	1.42	1.52
2	C	318	GLU	CA-C	-7.70	1.41	1.52
3	D	161	VAL	N-CA	-7.70	1.36	1.46
4	G	113	LYS	C-N	7.69	1.42	1.34
3	F	161	VAL	C-N	7.69	1.41	1.33
2	C	457	GLY	C-N	7.67	1.41	1.33
2	B	236	ALA	CA-C	-7.66	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	Z	15	TYR	N-CA	-7.66	1.36	1.46
7	O	78	HIS	N-CA	-7.61	1.36	1.46
3	F	28	SER	N-CA	-7.61	1.36	1.46
2	C	241	ALA	N-CA	-7.60	1.36	1.46
3	D	36	ALA	CA-C	-7.59	1.43	1.52
3	D	209	LEU	C-N	7.58	1.43	1.33
2	A	11	SER	N-CA	-7.56	1.37	1.46
3	E	309	ALA	CA-C	-7.56	1.43	1.52
1	1	32	ALA	C-N	7.55	1.43	1.33
7	O	101	PHE	CA-C	-7.55	1.45	1.52
2	A	136	PRO	C-N	7.55	1.43	1.33
3	F	379	GLN	CA-C	-7.55	1.43	1.52
3	E	388	ILE	CA-C	-7.53	1.43	1.52
8	T	185	HIS	CA-C	-7.53	1.43	1.52
11	W	39	ALA	CA-C	-7.52	1.43	1.52
2	C	140	PRO	N-CA	-7.51	1.37	1.47
3	F	351	LEU	CA-C	-7.51	1.42	1.52
2	C	251	THR	CA-C	-7.50	1.43	1.52
3	D	368	TYR	N-CA	-7.47	1.37	1.46
8	T	81	ASN	CA-C	-7.44	1.41	1.52
3	F	344	ILE	N-CA	-7.44	1.37	1.46
2	A	85	LYS	CA-C	-7.42	1.43	1.52
5	H	41	VAL	C-N	7.41	1.43	1.33
1	9	20	LEU	C-N	7.40	1.42	1.33
3	E	14	THR	CA-C	-7.38	1.43	1.52
4	G	10	LEU	N-CA	-7.37	1.37	1.46
3	D	298	THR	CA-C	-7.35	1.43	1.52
1	6	32	ALA	C-O	-7.33	1.15	1.24
12	X	58	VAL	CA-C	-7.31	1.43	1.52
2	B	312	ALA	CA-C	-7.28	1.43	1.52
13	Y	20	GLY	C-O	-7.28	1.15	1.23
2	A	314	LEU	CA-C	-7.28	1.43	1.52
3	F	169	GLU	CA-C	7.28	1.62	1.52
4	G	166	TYR	CA-C	-7.28	1.43	1.52
5	H	85	VAL	CA-C	-7.27	1.44	1.52
2	A	289	ARG	CA-C	-7.26	1.43	1.52
11	W	60	ASN	N-CA	-7.25	1.41	1.46
9	U	197	SER	CA-C	-7.25	1.43	1.52
2	C	502	ALA	N-CA	-7.24	1.37	1.46
3	D	423	VAL	N-CA	-7.24	1.37	1.46
2	A	377	GLY	CA-C	-7.23	1.42	1.51
4	G	53	LYS	C-N	7.22	1.44	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	315	ASP	C-N	7.22	1.43	1.33
3	F	162	GLY	CA-C	7.20	1.60	1.51
3	E	388	ILE	N-CA	-7.20	1.38	1.46
3	F	33	ILE	CA-C	-7.19	1.44	1.52
1	1	27	ALA	N-CA	-7.18	1.37	1.46
2	A	369	VAL	N-CA	7.17	1.54	1.46
2	C	356	ALA	CA-C	-7.16	1.43	1.52
3	F	435	LYS	CA-C	-7.15	1.43	1.52
4	G	109	THR	C-N	7.15	1.41	1.33
2	B	254	SER	N-CA	-7.15	1.37	1.46
3	D	440	SER	CA-C	-7.15	1.43	1.52
2	B	102	GLY	N-CA	7.14	1.54	1.44
2	A	178	THR	N-CA	-7.13	1.37	1.46
2	C	124	ASP	N-CA	7.12	1.54	1.46
1	8	19	LEU	C-N	7.12	1.43	1.33
2	C	174	GLN	C-N	7.12	1.42	1.33
2	C	299	ASP	C-N	7.12	1.42	1.33
3	E	339	ILE	CA-C	7.10	1.63	1.52
1	5	42	SER	C-N	7.09	1.41	1.34
3	E	162	GLY	CA-C	7.09	1.61	1.51
2	C	129	SER	CA-C	-7.09	1.44	1.52
3	E	158	GLY	C-N	7.08	1.42	1.33
3	E	205	GLY	C-N	7.08	1.42	1.33
2	A	126	ALA	CA-C	-7.07	1.43	1.52
1	0	51	ALA	C-N	7.07	1.42	1.33
9	U	166	GLN	CA-C	-7.06	1.43	1.52
3	E	279	VAL	C-N	7.06	1.41	1.33
2	B	64	MET	CA-C	-7.05	1.43	1.53
2	C	418	GLN	CA-C	-7.04	1.43	1.52
2	A	95	ASN	CA-C	-7.04	1.44	1.52
3	D	425	THR	CA-C	-7.04	1.42	1.52
13	Y	34	SER	CA-C	-7.03	1.42	1.52
1	3	5	LEU	N-CA	-7.03	1.37	1.46
3	F	112	LYS	CA-C	-7.02	1.43	1.52
1	1	61	THR	C-N	7.02	1.43	1.33
2	B	477	ASN	C-N	7.02	1.42	1.33
3	F	160	GLY	C-N	7.02	1.41	1.33
2	A	343	ASN	CA-C	-7.01	1.43	1.52
10	V	145	ILE	N-CA	-7.00	1.38	1.46
1	1	29	VAL	C-N	6.99	1.43	1.34
2	B	27	LEU	CA-C	-6.99	1.45	1.52
2	A	466	PHE	CA-C	-6.98	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	261	PHE	CA-C	6.97	1.61	1.52
2	A	48	ASN	C-N	6.97	1.41	1.33
10	V	117	LEU	N-CA	-6.97	1.37	1.46
2	B	370	GLY	CA-C	-6.96	1.44	1.52
1	5	16	THR	C-N	6.96	1.42	1.34
2	C	50	GLN	CA-C	-6.96	1.44	1.52
3	F	449	TYR	N-CA	-6.95	1.38	1.46
1	4	62	GLY	CA-C	6.94	1.59	1.52
1	0	39	ARG	CA-C	-6.94	1.43	1.52
3	E	473	LEU	CA-C	-6.93	1.43	1.52
3	D	33	ILE	CA-C	-6.93	1.44	1.52
3	E	143	LEU	C-N	6.92	1.43	1.33
12	X	20	THR	CA-C	6.92	1.61	1.52
9	U	78	LYS	CA-C	-6.91	1.43	1.52
2	A	397	ALA	CA-C	-6.90	1.44	1.52
12	X	34	PRO	CA-C	-6.90	1.44	1.52
2	A	455	LEU	N-CA	-6.89	1.38	1.46
2	C	316	GLU	CA-C	-6.89	1.43	1.52
3	E	8	PRO	C-N	6.88	1.42	1.33
1	5	27	ALA	C-N	6.88	1.42	1.33
2	C	213	SER	C-N	6.87	1.43	1.33
3	F	198	TYR	CA-C	-6.87	1.43	1.52
10	V	171	ASN	N-CA	6.87	1.54	1.46
1	6	27	ALA	N-CA	-6.86	1.37	1.46
1	6	68	VAL	C-N	6.86	1.42	1.33
3	E	159	ALA	C-N	6.86	1.43	1.33
3	E	76	VAL	N-CA	-6.85	1.38	1.46
3	E	148	ALA	CA-C	-6.84	1.44	1.52
2	C	106	LEU	N-CA	-6.84	1.37	1.46
2	C	235	ALA	N-CA	-6.84	1.38	1.46
4	G	244	ALA	C-N	6.84	1.42	1.33
9	U	168	GLU	CA-C	-6.84	1.43	1.52
8	T	202	ASN	C-O	-6.83	1.15	1.24
1	2	60	ALA	C-N	6.83	1.42	1.33
3	F	134	LEU	C-N	6.83	1.42	1.33
3	E	298	THR	N-CA	-6.82	1.37	1.46
10	V	159	ASP	N-CA	-6.82	1.37	1.46
3	E	461	GLY	C-N	6.81	1.41	1.33
1	7	62	GLY	CA-C	-6.81	1.44	1.52
11	W	47	ARG	N-CA	-6.81	1.37	1.46
1	7	17	ILE	C-N	6.81	1.42	1.33
9	U	145	GLU	CA-C	-6.80	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	I	57	THR	C-N	6.80	1.42	1.33
3	D	281	TYR	CA-C	-6.79	1.44	1.52
3	E	27	GLN	CA-C	-6.79	1.44	1.52
4	G	236	ALA	CA-C	-6.79	1.44	1.52
3	D	137	GLY	C-N	6.79	1.41	1.33
2	C	426	LEU	CA-C	-6.78	1.44	1.52
2	B	149	GLN	CA-C	-6.77	1.44	1.52
3	E	426	GLY	C-N	6.77	1.41	1.33
1	1	4	VAL	CA-C	-6.76	1.44	1.52
3	F	337	ARG	N-CA	-6.76	1.38	1.46
2	C	32	ARG	CA-C	-6.75	1.44	1.52
2	B	329	ILE	C-N	6.74	1.42	1.33
3	E	358	LEU	N-CA	-6.74	1.37	1.46
8	T	242	LEU	N-CA	-6.74	1.37	1.46
3	E	84	SER	C-N	6.74	1.41	1.33
3	D	450	ASP	CA-C	6.73	1.61	1.52
2	A	344	VAL	C-N	6.73	1.42	1.33
12	X	30	PRO	N-CA	-6.72	1.39	1.47
2	C	66	LEU	C-N	6.71	1.43	1.33
1	3	35	ASN	CA-C	-6.71	1.44	1.52
11	W	14	ASN	CA-C	-6.71	1.46	1.53
7	O	112	ASN	N-CA	-6.71	1.38	1.46
2	B	359	PHE	CA-C	6.70	1.61	1.52
1	0	25	GLY	CA-C	-6.70	1.44	1.51
3	D	171	ILE	CA-C	-6.70	1.44	1.52
3	D	66	GLY	C-N	6.70	1.42	1.33
3	D	135	GLU	C-N	6.70	1.42	1.33
9	U	61	THR	N-CA	6.68	1.54	1.46
1	5	33	LEU	N-CA	-6.68	1.38	1.46
2	A	132	GLN	CA-C	-6.68	1.44	1.52
4	G	256	ASN	N-CA	-6.68	1.38	1.46
2	A	299	ASP	CA-C	-6.67	1.43	1.52
8	T	114	HIS	CA-C	-6.67	1.44	1.52
2	A	332	GLN	C-O	6.66	1.32	1.24
10	V	169	ASN	CA-C	-6.66	1.46	1.53
1	2	67	MET	CA-C	-6.65	1.43	1.52
2	A	127	GLY	C-N	6.65	1.43	1.33
3	D	41	THR	C-N	6.65	1.39	1.33
11	W	46	THR	N-CA	-6.65	1.40	1.46
8	T	131	ILE	CA-C	-6.64	1.44	1.52
2	B	357	GLU	N-CA	-6.64	1.38	1.46
2	B	144	VAL	CA-C	-6.64	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	114	ARG	CA-C	-6.63	1.44	1.52
1	6	22	ALA	C-N	6.63	1.42	1.33
3	E	23	VAL	N-CA	-6.63	1.38	1.46
14	Z	35	ILE	C-N	6.62	1.43	1.34
2	C	164	GLY	C-N	6.62	1.41	1.33
3	F	31	PRO	CA-C	-6.62	1.46	1.53
4	G	140	PHE	CA-C	-6.61	1.44	1.52
2	C	486	ARG	C-N	6.61	1.43	1.33
13	Y	2	LEU	CA-C	-6.60	1.44	1.52
7	O	79	LYS	CA-C	-6.59	1.44	1.52
8	T	74	LYS	CA-C	-6.58	1.43	1.52
2	B	103	PRO	N-CA	-6.58	1.38	1.47
3	E	118	HIS	CA-C	-6.58	1.44	1.52
2	A	220	GLN	C-N	6.57	1.42	1.33
7	O	123	VAL	CA-C	-6.57	1.44	1.52
2	C	354	LEU	CA-C	-6.57	1.45	1.52
3	E	458	TYR	CA-C	-6.55	1.44	1.52
12	X	54	THR	C-N	6.54	1.42	1.33
9	U	58	LEU	CA-C	-6.54	1.44	1.52
3	E	432	VAL	N-CA	-6.53	1.38	1.46
1	9	70	PHE	CA-C	-6.53	1.44	1.52
3	F	426	GLY	C-N	6.53	1.40	1.33
2	A	282	GLN	C-N	6.52	1.42	1.33
5	H	27	VAL	CA-C	-6.52	1.46	1.53
2	A	154	ALA	N-CA	-6.51	1.38	1.46
2	C	90	VAL	N-CA	-6.51	1.39	1.46
4	G	12	SER	N-CA	-6.50	1.38	1.46
2	C	104	GLY	C-N	6.50	1.42	1.33
3	E	219	PHE	CA-C	-6.50	1.44	1.52
3	F	69	GLY	N-CA	-6.49	1.35	1.45
3	D	276	PRO	N-CA	6.48	1.53	1.47
2	B	379	ALA	CA-C	-6.48	1.45	1.53
14	Z	34	MET	C-N	6.48	1.41	1.33
3	D	91	THR	C-N	6.47	1.42	1.33
2	A	424	GLU	N-CA	-6.47	1.38	1.46
8	T	108	SER	CA-C	-6.47	1.44	1.52
8	T	45	THR	CA-C	-6.46	1.44	1.52
3	F	341	GLU	CA-C	-6.46	1.44	1.52
11	W	11	SER	CA-C	6.45	1.61	1.52
8	T	236	ILE	CA-C	-6.44	1.44	1.53
8	T	245	ALA	C-N	6.44	1.42	1.33
4	G	237	MET	CA-C	-6.43	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	W	54	LYS	CA-C	-6.43	1.43	1.52
2	A	186	LEU	C-N	6.43	1.42	1.33
9	U	84	ARG	CA-C	6.43	1.60	1.52
10	V	145	ILE	CA-C	6.43	1.60	1.52
2	A	366	ALA	CA-C	-6.43	1.44	1.52
2	A	217	GLN	C-N	6.42	1.42	1.33
2	A	163	ARG	C-N	6.42	1.40	1.33
2	A	426	LEU	C-N	6.42	1.42	1.33
2	A	503	THR	N-CA	-6.42	1.38	1.46
2	B	161	ILE	N-CA	-6.41	1.38	1.46
5	H	125	ILE	CA-C	-6.41	1.44	1.52
2	C	283	LEU	N-CA	6.40	1.54	1.46
1	0	49	PRO	N-CA	-6.39	1.39	1.47
3	F	61	THR	N-CA	-6.39	1.37	1.45
3	D	277	SER	CA-C	6.39	1.59	1.52
7	O	53	LEU	CA-C	-6.38	1.44	1.52
5	H	76	THR	C-N	6.38	1.40	1.33
2	A	384	ALA	CA-C	6.37	1.61	1.52
2	B	137	GLY	C-O	6.37	1.29	1.23
9	U	84	ARG	N-CA	-6.37	1.38	1.46
2	B	499	LEU	CA-C	-6.37	1.44	1.52
3	E	97	ASN	C-N	6.37	1.41	1.33
4	G	231	SER	N-CA	-6.36	1.38	1.46
2	B	255	ILE	CA-C	-6.34	1.44	1.52
4	G	46	GLU	CA-C	-6.34	1.44	1.52
1	7	56	ALA	CA-C	-6.34	1.44	1.52
2	C	504	GLU	C-N	6.33	1.42	1.33
2	A	91	LYS	CA-C	-6.33	1.45	1.52
3	D	238	THR	CA-C	-6.33	1.44	1.52
2	B	456	ASP	C-N	6.32	1.42	1.34
2	B	221	THR	N-CA	-6.32	1.38	1.46
1	1	12	ALA	CA-C	-6.32	1.44	1.52
2	C	255	ILE	C-N	6.32	1.42	1.33
3	E	127	GLN	CA-C	-6.31	1.44	1.52
2	A	487	GLU	C-N	6.31	1.42	1.33
6	I	39	GLN	CA-C	-6.31	1.44	1.52
7	O	178	LEU	CA-C	-6.31	1.44	1.53
1	8	48	PHE	C-N	-6.30	1.26	1.34
1	7	3	LEU	C-N	6.30	1.41	1.33
4	G	182	ILE	C-N	6.29	1.42	1.33
4	G	150	LEU	N-CA	-6.29	1.38	1.46
1	0	28	ILE	CA-C	-6.28	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	132	GLU	CA-C	-6.28	1.44	1.52
1	5	55	PHE	C-N	6.27	1.41	1.33
3	D	130	SER	C-N	6.27	1.41	1.33
3	F	115	LYS	CA-C	-6.27	1.45	1.52
2	A	310	ARG	C-N	6.26	1.42	1.33
1	8	46	THR	N-CA	-6.26	1.38	1.46
11	W	84	PHE	CA-C	-6.26	1.44	1.52
3	D	474	ALA	CA-C	-6.25	1.44	1.52
4	G	218	MET	CA-C	-6.25	1.44	1.52
3	E	167	ILE	CA-C	-6.25	1.44	1.52
2	A	145	HIS	N-CA	-6.25	1.38	1.46
2	B	193	ASN	C-N	6.24	1.39	1.33
3	D	423	VAL	C-N	6.24	1.42	1.33
7	O	11	ARG	C-N	6.24	1.43	1.33
3	F	358	LEU	C-N	6.24	1.42	1.33
1	0	55	PHE	N-CA	-6.24	1.39	1.46
2	B	355	GLU	CA-C	-6.24	1.45	1.52
2	B	145	HIS	CA-C	-6.23	1.44	1.52
2	B	196	ASP	C-N	6.23	1.42	1.33
2	A	166	ARG	N-CA	-6.23	1.38	1.46
2	C	68	LEU	CA-C	-6.23	1.45	1.52
2	C	293	ARG	CA-C	-6.23	1.45	1.52
4	G	7	GLU	CA-C	-6.23	1.44	1.52
1	7	18	GLY	CA-C	6.22	1.59	1.52
3	E	72	ARG	N-CA	-6.22	1.38	1.46
1	4	63	LEU	N-CA	-6.21	1.38	1.46
3	F	113	LEU	CA-C	-6.21	1.45	1.52
3	E	456	ALA	C-N	6.20	1.43	1.33
3	F	155	LEU	CA-C	-6.20	1.46	1.53
9	U	69	VAL	CA-C	-6.20	1.44	1.52
1	2	39	ARG	CA-C	-6.20	1.44	1.52
2	C	143	SER	CA-C	-6.20	1.44	1.52
3	F	261	PHE	C-N	6.20	1.42	1.33
3	D	191	THR	C-N	6.19	1.42	1.33
2	C	133	VAL	C-N	6.19	1.41	1.33
1	4	15	SER	N-CA	-6.19	1.38	1.46
1	9	61	THR	N-CA	-6.18	1.38	1.46
2	B	458	ILE	CA-C	-6.18	1.45	1.52
3	E	360	ALA	CA-C	-6.18	1.43	1.52
2	B	243	PRO	C-N	6.18	1.42	1.33
8	T	215	MET	C-N	6.18	1.41	1.33
10	V	52	GLU	CA-C	-6.18	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	F	332	THR	C-N	6.18	1.42	1.33
3	E	196	ASP	N-CA	6.17	1.53	1.46
3	D	200	GLU	C-N	6.17	1.42	1.33
3	F	313	PRO	CA-C	-6.16	1.45	1.52
9	U	68	LEU	CA-C	-6.16	1.44	1.52
3	D	225	PRO	C-N	6.16	1.41	1.33
3	F	180	GLY	C-N	6.16	1.41	1.33
1	0	36	GLY	CA-C	-6.15	1.45	1.52
1	9	65	CYS	C-N	6.15	1.42	1.33
3	F	458	TYR	C-N	6.15	1.41	1.33
2	B	34	LEU	C-N	6.14	1.41	1.33
2	A	209	GLY	C-N	6.14	1.42	1.33
2	A	44	PHE	CA-C	-6.14	1.45	1.52
3	E	56	GLU	C-N	6.14	1.42	1.33
3	D	376	GLU	C-N	6.13	1.42	1.33
3	F	277	SER	CA-C	-6.13	1.46	1.53
2	B	329	ILE	N-CA	-6.13	1.39	1.46
11	W	16	GLY	C-N	6.13	1.41	1.33
3	E	169	GLU	C-N	6.13	1.42	1.33
2	C	97	VAL	C-N	6.12	1.41	1.33
3	E	155	LEU	N-CA	-6.12	1.38	1.45
9	U	200	GLU	CA-C	6.11	1.60	1.52
3	F	172	ASN	N-CA	-6.11	1.39	1.46
9	U	58	LEU	C-O	-6.11	1.17	1.24
3	F	63	ALA	N-CA	-6.10	1.38	1.45
2	B	75	ILE	C-O	-6.10	1.17	1.24
8	T	232	TYR	N-CA	-6.09	1.38	1.46
10	V	50	PRO	N-CA	-6.09	1.39	1.47
1	1	6	ALA	CA-C	-6.08	1.44	1.52
2	C	203	CYS	C-N	6.08	1.41	1.33
5	H	124	ALA	CA-C	-6.08	1.45	1.52
11	W	1	VAL	C-N	6.07	1.42	1.33
1	9	3	LEU	N-CA	-6.07	1.39	1.46
3	D	184	PHE	CA-C	-6.07	1.45	1.52
2	B	252	ALA	N-CA	-6.06	1.39	1.46
3	F	187	VAL	C-N	6.06	1.42	1.33
7	O	85	VAL	C-N	6.04	1.41	1.33
10	V	86	SER	CA-C	-6.04	1.45	1.52
2	B	100	PRO	N-CA	-6.03	1.40	1.47
3	F	326	PHE	CA-C	-6.03	1.45	1.52
1	2	13	GLY	N-CA	6.02	1.53	1.45
1	1	7	ALA	C-N	6.02	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	C	416	THR	C-N	6.01	1.42	1.34
11	W	25	ALA	C-N	6.01	1.42	1.33
1	8	36	GLY	N-CA	-6.01	1.38	1.45
2	A	183	ASP	C-N	6.01	1.41	1.33
3	F	467	VAL	CA-C	-6.01	1.45	1.52
1	6	51	ALA	N-CA	6.00	1.53	1.46
3	E	219	PHE	N-CA	-6.00	1.38	1.46
3	F	365	GLN	CA-C	-6.00	1.45	1.52
2	B	28	ASN	N-CA	-6.00	1.38	1.46
1	2	39	ARG	N-CA	-6.00	1.38	1.46
2	B	415	SER	N-CA	-6.00	1.39	1.46
1	4	51	ALA	C-N	6.00	1.41	1.33
3	E	465	ASP	C-O	-6.00	1.17	1.24
2	C	116	PRO	C-N	5.99	1.40	1.34
3	F	55	GLY	C-N	5.99	1.42	1.33
10	V	78	TYR	N-CA	-5.99	1.39	1.46
4	G	139	THR	CA-C	5.98	1.59	1.52
6	I	13	TYR	CA-C	-5.98	1.45	1.52
1	2	74	PHE	N-CA	-5.98	1.38	1.46
3	F	295	ARG	C-O	-5.98	1.17	1.24
3	F	439	ALA	CA-C	-5.98	1.45	1.52
7	O	179	SER	N-CA	-5.98	1.37	1.45
2	B	212	ARG	N-CA	-5.97	1.39	1.46
3	D	76	VAL	N-CA	-5.97	1.39	1.46
1	0	62	GLY	CA-C	5.96	1.58	1.52
1	1	50	MET	C-N	5.96	1.41	1.33
2	A	446	LEU	CA-C	-5.96	1.45	1.52
3	E	419	ALA	C-N	5.96	1.40	1.33
4	G	21	LYS	C-N	5.96	1.41	1.33
3	F	373	LYS	C-O	-5.95	1.17	1.24
9	U	129	GLU	C-N	5.95	1.41	1.33
3	D	180	GLY	CA-C	-5.94	1.44	1.51
7	O	114	ALA	C-N	5.94	1.41	1.33
2	B	136	PRO	C-N	5.94	1.41	1.33
11	W	60	ASN	C-O	5.94	1.27	1.23
3	D	273	GLY	CA-C	-5.94	1.43	1.51
2	C	152	LEU	C-N	5.93	1.41	1.33
3	E	445	LEU	CA-C	-5.93	1.44	1.52
1	2	67	MET	C-N	5.93	1.41	1.33
2	A	433	ASN	CA-C	-5.93	1.45	1.52
1	5	52	ILE	C-N	5.93	1.41	1.33
2	A	218	LEU	CA-C	-5.93	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	C	35	ALA	N-CA	-5.93	1.38	1.46
3	E	235	THR	CA-C	-5.92	1.45	1.52
3	F	178	HIS	CA-C	-5.92	1.45	1.52
1	0	14	ILE	CA-C	5.92	1.60	1.52
4	G	173	LEU	CA-C	-5.92	1.45	1.52
8	T	142	PHE	CA-C	-5.92	1.44	1.52
3	D	334	VAL	CA-C	-5.92	1.45	1.52
2	A	85	LYS	C-N	5.91	1.41	1.33
2	A	18	ILE	C-N	5.91	1.42	1.34
3	F	15	ALA	CA-C	-5.91	1.45	1.52
3	D	174	ILE	CA-C	-5.90	1.45	1.52
1	8	56	ALA	CA-C	-5.89	1.45	1.52
2	C	496	LEU	CA-C	-5.89	1.44	1.52
3	F	31	PRO	N-CA	-5.89	1.41	1.46
2	A	490	GLU	N-CA	-5.88	1.38	1.46
2	B	154	ALA	CA-C	-5.88	1.45	1.52
3	F	409	LYS	CA-C	-5.88	1.45	1.52
2	B	52	GLU	CA-C	-5.88	1.44	1.52
3	E	249	GLN	C-N	5.88	1.41	1.33
3	E	424	PHE	CA-C	-5.88	1.45	1.52
1	9	3	LEU	CA-C	-5.88	1.45	1.52
3	E	365	GLN	CA-C	-5.88	1.45	1.52
3	F	193	GLU	N-CA	-5.87	1.39	1.46
2	A	134	LYS	N-CA	-5.87	1.38	1.46
1	0	19	LEU	CA-C	5.87	1.60	1.52
3	E	174	ILE	N-CA	-5.87	1.39	1.46
3	F	293	GLN	CA-C	-5.87	1.45	1.52
12	X	60	THR	C-N	5.86	1.41	1.33
2	A	388	VAL	CA-C	-5.86	1.44	1.52
9	U	81	ALA	C-N	5.86	1.41	1.33
2	C	340	ILE	CA-C	5.86	1.57	1.52
2	C	208	VAL	C-N	5.85	1.40	1.33
10	V	141	ILE	CA-C	-5.85	1.45	1.52
3	E	187	VAL	C-N	5.85	1.39	1.33
2	C	386	LYS	C-N	5.84	1.41	1.33
1	1	56	ALA	C-N	5.84	1.41	1.33
1	0	2	GLN	N-CA	-5.84	1.39	1.46
2	A	106	LEU	N-CA	5.84	1.53	1.46
4	G	51	PHE	N-CA	-5.84	1.39	1.46
2	A	492	SER	CA-C	-5.84	1.45	1.53
3	E	427	ILE	N-CA	-5.83	1.39	1.46
10	V	158	TRP	C-N	5.83	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	W	31	TYR	C-N	5.83	1.41	1.33
3	D	88	GLY	N-CA	-5.82	1.37	1.44
9	U	147	ALA	N-CA	-5.82	1.39	1.46
2	C	489	GLY	C-N	5.82	1.41	1.33
8	T	97	PHE	C-N	5.82	1.41	1.33
3	F	201	MET	CA-C	-5.81	1.44	1.52
8	T	174	GLY	CA-C	-5.81	1.43	1.51
12	X	58	VAL	N-CA	-5.81	1.39	1.46
2	C	111	ASP	C-N	5.80	1.42	1.33
3	F	404	VAL	CA-C	-5.80	1.45	1.52
3	E	207	ILE	CA-C	-5.80	1.45	1.52
2	C	355	GLU	C-N	5.80	1.41	1.33
2	C	106	LEU	C-N	5.80	1.39	1.33
3	E	331	ALA	C-N	5.80	1.41	1.33
5	H	34	ALA	N-CA	-5.80	1.38	1.45
10	V	133	LEU	N-CA	-5.79	1.39	1.46
5	H	28	THR	CA-C	-5.79	1.45	1.52
12	X	28	VAL	CA-C	-5.79	1.48	1.52
2	A	167	GLU	CA-C	-5.79	1.45	1.52
14	Z	26	LEU	C-N	5.79	1.41	1.33
3	D	79	THR	C-N	5.78	1.40	1.33
3	E	104	ASP	CA-C	-5.78	1.45	1.52
3	E	186	GLY	N-CA	-5.78	1.36	1.45
2	C	159	VAL	CA-C	5.78	1.58	1.53
3	E	256	ASP	C-N	5.78	1.41	1.33
3	E	376	GLU	CA-C	-5.78	1.45	1.52
1	6	54	GLY	N-CA	-5.77	1.38	1.45
3	E	151	GLY	N-CA	5.77	1.50	1.44
3	F	7	THR	N-CA	-5.77	1.37	1.46
7	O	131	PRO	CA-C	-5.77	1.44	1.52
2	B	337	SER	C-N	5.76	1.41	1.33
2	B	356	ALA	N-CA	-5.76	1.39	1.46
2	B	373	VAL	CA-C	5.76	1.59	1.52
4	G	248	ILE	C-N	5.76	1.41	1.33
5	H	125	ILE	C-N	5.76	1.41	1.33
11	W	57	ASP	C-N	5.76	1.42	1.33
2	A	180	VAL	CA-C	-5.76	1.45	1.52
1	3	15	SER	C-N	5.76	1.41	1.34
7	O	57	LEU	C-N	5.75	1.41	1.33
3	F	434	LEU	CA-C	-5.75	1.45	1.52
3	F	148	ALA	CA-C	-5.75	1.45	1.52
3	F	428	PRO	C-O	5.75	1.30	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	194	GLY	C-N	5.75	1.41	1.33
7	O	91	VAL	C-N	5.75	1.41	1.34
7	O	116	ASN	CA-C	-5.75	1.45	1.52
3	E	99	ILE	N-CA	-5.75	1.38	1.46
2	A	17	ARG	N-CA	-5.75	1.39	1.46
2	A	241	ALA	C-N	5.72	1.42	1.33
1	1	46	THR	N-CA	-5.72	1.39	1.46
3	F	123	SER	C-N	5.72	1.41	1.34
7	O	137	ILE	CA-C	-5.72	1.45	1.52
2	C	498	SER	N-CA	5.72	1.53	1.46
3	D	261	PHE	C-N	5.71	1.41	1.33
3	E	218	VAL	N-CA	-5.71	1.39	1.46
10	V	164	LYS	CA-C	-5.71	1.44	1.52
2	B	182	LEU	C-N	5.71	1.41	1.33
2	C	468	SER	C-N	5.71	1.41	1.33
3	E	420	VAL	C-N	5.71	1.41	1.33
11	W	40	PRO	N-CA	5.71	1.54	1.47
2	C	291	PRO	N-CA	-5.71	1.40	1.47
7	O	63	SER	CA-C	-5.71	1.47	1.53
10	V	146	ASP	C-N	5.71	1.41	1.33
2	C	63	GLY	N-CA	5.70	1.51	1.45
2	A	441	GLU	CA-C	5.70	1.60	1.52
2	A	376	VAL	CA-C	-5.70	1.45	1.52
3	F	168	GLN	C-N	5.69	1.41	1.33
3	E	174	ILE	CA-C	-5.69	1.45	1.52
2	C	167	GLU	CA-C	-5.69	1.45	1.52
2	A	98	ASP	CA-C	-5.69	1.45	1.52
3	E	111	SER	N-CA	-5.68	1.38	1.45
9	U	126	VAL	CA-C	-5.68	1.45	1.52
1	5	72	LEU	N-CA	-5.68	1.39	1.46
7	O	72	ASP	C-N	5.68	1.41	1.33
2	A	136	PRO	CA-C	5.68	1.60	1.52
3	D	365	GLN	N-CA	-5.68	1.39	1.46
2	A	126	ALA	C-N	5.68	1.40	1.33
1	8	27	ALA	C-N	5.67	1.41	1.33
2	B	334	GLY	CA-C	-5.67	1.44	1.51
7	O	24	TYR	N-CA	-5.67	1.39	1.46
3	D	438	VAL	N-CA	-5.67	1.40	1.46
1	6	36	GLY	CA-C	-5.67	1.46	1.52
3	F	361	ALA	N-CA	-5.66	1.39	1.46
3	E	88	GLY	CA-C	-5.66	1.46	1.51
1	9	27	ALA	N-CA	-5.66	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	24	HIS	C-O	5.66	1.30	1.24
5	H	52	LEU	C-O	-5.66	1.17	1.24
3	F	131	ALA	N-CA	-5.66	1.38	1.45
2	C	494	GLU	N-CA	-5.66	1.39	1.46
1	0	73	LEU	N-CA	-5.65	1.39	1.46
3	E	464	GLU	N-CA	-5.65	1.39	1.46
3	E	362	VAL	C-N	5.65	1.41	1.33
2	C	425	ARG	CA-C	-5.64	1.45	1.52
7	O	144	SER	C-O	-5.64	1.16	1.23
3	E	236	GLY	CA-C	5.64	1.58	1.52
7	O	54	GLY	C-N	5.64	1.41	1.33
2	A	385	LEU	CA-C	-5.64	1.44	1.52
2	B	245	GLN	N-CA	-5.64	1.39	1.46
1	3	22	ALA	CA-C	-5.63	1.45	1.52
2	A	203	CYS	CA-C	-5.63	1.46	1.52
2	C	268	ILE	C-N	5.63	1.40	1.33
1	7	28	ILE	N-CA	-5.62	1.39	1.46
12	X	6	LEU	CA-C	-5.62	1.45	1.52
3	F	192	ARG	N-CA	5.62	1.53	1.46
1	5	48	PHE	N-CA	-5.62	1.41	1.46
2	B	370	GLY	N-CA	5.62	1.52	1.45
1	7	67	MET	C-N	5.62	1.41	1.33
2	A	166	ARG	CA-C	-5.62	1.45	1.52
10	V	82	LYS	CA-C	-5.62	1.45	1.52
3	E	115	LYS	C-N	5.61	1.41	1.33
3	F	321	ALA	N-CA	-5.61	1.40	1.46
7	O	53	LEU	C-N	5.61	1.41	1.33
2	C	465	GLU	C-N	5.61	1.41	1.33
2	B	167	GLU	CA-C	-5.61	1.46	1.52
2	B	168	LEU	CA-C	-5.61	1.46	1.52
1	4	44	LYS	CA-C	-5.60	1.44	1.52
2	C	255	ILE	CA-C	-5.60	1.45	1.52
1	1	32	ALA	N-CA	-5.60	1.39	1.46
1	5	74	PHE	C-N	5.60	1.41	1.33
3	D	74	GLU	C-N	5.60	1.40	1.33
11	W	55	TYR	CA-C	-5.60	1.45	1.52
13	Y	22	ALA	N-CA	5.59	1.53	1.46
1	0	23	GLY	C-N	5.59	1.41	1.33
3	E	361	ALA	CA-C	-5.59	1.46	1.52
3	F	367	HIS	C-N	5.59	1.41	1.33
2	C	506	PHE	N-CA	-5.59	1.39	1.46
3	D	148	ALA	N-CA	-5.59	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	59	VAL	C-N	5.59	1.41	1.33
9	U	127	SER	C-N	5.58	1.41	1.33
3	F	331	ALA	C-N	5.58	1.40	1.33
2	B	54	LEU	CA-C	-5.58	1.46	1.52
3	D	182	SER	CA-C	-5.58	1.45	1.52
7	O	157	ASN	CA-C	-5.58	1.45	1.52
8	T	225	ALA	N-CA	-5.58	1.39	1.46
10	V	144	GLU	N-CA	-5.58	1.39	1.46
13	Y	37	THR	CA-C	5.58	1.64	1.52
1	1	26	ILE	CA-C	-5.57	1.46	1.52
1	4	6	ALA	CA-C	-5.57	1.45	1.52
1	2	66	LEU	CA-C	-5.56	1.45	1.52
7	O	155	LEU	CA-C	-5.56	1.45	1.52
3	F	143	LEU	N-CA	-5.56	1.39	1.46
5	H	70	ILE	C-O	-5.56	1.18	1.24
2	C	473	TYR	C-O	-5.55	1.17	1.24
3	E	370	VAL	N-CA	5.55	1.53	1.46
3	F	16	VAL	CA-C	-5.55	1.45	1.52
14	Z	5	VAL	N-CA	5.55	1.50	1.46
3	E	350	PRO	CA-C	-5.55	1.44	1.52
2	C	498	SER	CA-C	5.55	1.59	1.52
3	F	84	SER	CA-C	-5.55	1.46	1.52
7	O	124	THR	C-N	5.55	1.41	1.33
1	9	53	LEU	CA-C	-5.55	1.45	1.52
10	V	147	ALA	N-CA	-5.55	1.39	1.46
1	6	10	ILE	C-N	5.54	1.41	1.33
4	G	54	ASN	C-N	5.54	1.41	1.33
2	C	227	ALA	C-N	5.54	1.41	1.33
2	C	298	GLY	CA-C	-5.54	1.44	1.51
10	V	72	GLU	CA-C	-5.54	1.45	1.52
1	2	41	PRO	C-N	5.54	1.42	1.33
1	1	68	VAL	C-N	5.53	1.41	1.33
2	B	95	ASN	N-CA	-5.53	1.39	1.46
3	E	139	LYS	C-N	5.53	1.40	1.33
3	F	402	LEU	N-CA	-5.53	1.39	1.46
2	B	68	LEU	CA-C	-5.52	1.46	1.52
3	D	361	ALA	C-N	5.52	1.40	1.33
4	G	28	SER	C-N	5.52	1.41	1.33
4	G	195	GLY	C-N	5.52	1.41	1.33
1	4	66	LEU	CA-C	-5.52	1.45	1.52
4	G	43	LYS	N-CA	-5.51	1.39	1.46
13	Y	29	LYS	C-N	5.51	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	5	62	GLY	N-CA	-5.50	1.38	1.45
3	F	348	VAL	C-N	5.50	1.42	1.33
3	F	334	VAL	N-CA	-5.50	1.39	1.46
2	B	417	LYS	N-CA	-5.49	1.38	1.46
2	A	28	ASN	C-N	5.49	1.40	1.33
2	B	354	LEU	N-CA	-5.49	1.39	1.46
3	E	67	THR	N-CA	-5.49	1.40	1.46
4	G	231	SER	C-N	5.48	1.41	1.34
2	C	345	ILE	CA-C	-5.48	1.45	1.52
3	E	144	LEU	CA-C	-5.48	1.45	1.52
2	B	148	VAL	N-CA	-5.48	1.39	1.46
2	C	358	LEU	C-O	-5.47	1.17	1.24
3	E	269	SER	CA-C	-5.47	1.45	1.52
1	2	51	ALA	C-N	5.47	1.40	1.33
3	D	472	LYS	CA-C	-5.47	1.45	1.52
3	E	135	GLU	C-N	5.47	1.40	1.33
7	O	57	LEU	N-CA	-5.47	1.39	1.46
3	F	307	VAL	N-CA	-5.47	1.38	1.46
7	O	128	PRO	CA-C	-5.47	1.45	1.52
11	W	35	PRO	N-CA	-5.47	1.40	1.47
1	8	53	LEU	C-N	5.46	1.41	1.33
3	E	103	ILE	N-CA	5.46	1.51	1.46
12	X	37	PRO	C-O	-5.46	1.17	1.24
2	C	115	ASN	N-CA	-5.46	1.38	1.45
2	A	308	LEU	CA-C	5.45	1.60	1.52
2	B	429	LEU	C-N	5.45	1.41	1.33
3	E	55	GLY	C-N	5.45	1.41	1.33
3	F	418	PHE	N-CA	-5.45	1.39	1.46
1	4	71	LEU	N-CA	-5.45	1.39	1.46
2	A	490	GLU	CA-C	-5.45	1.46	1.52
4	G	55	ALA	N-CA	-5.45	1.39	1.46
4	G	146	ILE	C-N	5.45	1.41	1.33
5	H	120	ALA	N-CA	-5.44	1.39	1.46
1	6	67	MET	C-N	5.44	1.40	1.33
2	C	457	GLY	CA-C	-5.44	1.44	1.51
4	G	2	THR	CA-C	-5.43	1.46	1.52
14	Z	36	LEU	C-O	-5.43	1.17	1.24
10	V	6	ALA	C-N	5.43	1.40	1.33
4	G	229	GLU	CA-C	-5.43	1.46	1.52
3	D	56	GLU	C-N	5.42	1.41	1.33
9	U	83	ALA	C-O	-5.42	1.17	1.24
8	T	76	GLN	C-N	5.42	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	254	PHE	CA-C	-5.41	1.45	1.52
3	E	138	ILE	CA-C	-5.41	1.46	1.52
1	0	3	LEU	N-CA	-5.41	1.39	1.46
11	W	43	LYS	C-N	5.41	1.40	1.33
1	6	37	VAL	C-N	5.41	1.41	1.34
10	V	156	GLY	C-N	5.41	1.41	1.33
1	4	17	ILE	CA-C	-5.40	1.45	1.52
3	D	68	GLU	N-CA	-5.40	1.39	1.46
3	E	16	VAL	C-N	5.40	1.40	1.33
13	Y	31	ALA	N-CA	-5.40	1.39	1.46
1	4	41	PRO	C-N	5.40	1.41	1.33
2	B	124	ASP	N-CA	-5.39	1.39	1.46
7	O	109	GLY	C-N	5.39	1.40	1.33
8	T	101	LEU	CA-C	-5.39	1.47	1.52
2	C	479	ASN	C-N	5.39	1.41	1.33
2	A	499	LEU	C-N	5.38	1.40	1.33
3	F	241	GLU	N-CA	-5.38	1.39	1.46
3	E	271	LEU	C-N	5.38	1.41	1.33
1	8	30	PHE	N-CA	5.38	1.52	1.46
2	C	111	ASP	N-CA	5.38	1.52	1.45
1	9	69	SER	N-CA	-5.37	1.40	1.46
10	V	168	GLY	C-N	5.37	1.41	1.34
2	A	402	VAL	N-CA	-5.37	1.40	1.46
2	B	477	ASN	CA-C	-5.37	1.47	1.53
3	F	181	PHE	CA-C	-5.37	1.46	1.52
1	7	24	ILE	CA-C	5.37	1.59	1.52
3	D	294	GLU	C-N	5.37	1.40	1.33
2	A	479	ASN	N-CA	5.36	1.53	1.46
2	C	441	GLU	CA-C	-5.36	1.45	1.52
1	1	11	GLY	N-CA	5.36	1.52	1.45
2	B	146	GLU	CA-C	-5.36	1.45	1.52
2	C	172	ASP	CA-C	5.36	1.59	1.52
9	U	113	LEU	CA-C	5.35	1.59	1.52
3	D	23	VAL	C-N	5.35	1.40	1.33
1	4	37	VAL	N-CA	5.35	1.53	1.46
2	C	192	ASN	C-N	5.34	1.41	1.34
3	F	65	ASP	C-N	5.34	1.38	1.33
14	Z	39	TYR	N-CA	-5.34	1.40	1.46
2	C	364	ARG	CA-C	-5.34	1.47	1.52
3	E	248	GLY	N-CA	-5.34	1.37	1.45
3	E	431	LEU	CA-C	5.34	1.58	1.52
3	F	164	THR	C-N	5.34	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	185	THR	CA-C	-5.33	1.46	1.52
3	F	41	THR	CA-C	-5.33	1.47	1.52
2	A	219	VAL	N-CA	-5.33	1.40	1.46
3	D	446	GLU	N-CA	-5.33	1.39	1.46
7	O	100	CYS	CA-C	-5.33	1.45	1.52
3	D	239	ILE	C-N	5.33	1.40	1.33
3	E	166	PHE	CA-C	-5.33	1.46	1.52
8	T	197	ASN	N-CA	-5.33	1.39	1.46
10	V	66	SER	C-N	5.33	1.40	1.33
2	B	265	HIS	N-CA	-5.33	1.38	1.45
2	C	261	ASP	C-N	5.33	1.41	1.33
1	8	68	VAL	C-N	5.32	1.41	1.33
1	5	21	GLY	C-N	5.32	1.41	1.33
1	4	47	VAL	C-N	5.32	1.41	1.33
2	C	444	VAL	C-N	5.32	1.40	1.34
1	7	59	GLU	N-CA	-5.32	1.40	1.46
2	B	76	VAL	C-N	5.32	1.40	1.33
3	E	229	ARG	N-CA	-5.32	1.39	1.46
3	E	269	SER	N-CA	-5.32	1.40	1.46
3	E	450	ASP	CA-C	-5.32	1.46	1.53
2	C	204	VAL	C-N	5.32	1.40	1.33
2	C	412	LEU	C-O	-5.32	1.18	1.24
3	D	336	SER	CA-C	-5.31	1.46	1.52
3	E	160	GLY	CA-C	5.31	1.59	1.51
8	T	189	VAL	C-O	-5.31	1.17	1.24
2	A	238	ALA	CA-C	-5.31	1.45	1.52
3	D	56	GLU	CA-C	5.31	1.59	1.52
8	T	31	LEU	C-N	5.31	1.41	1.34
3	E	159	ALA	CA-C	-5.30	1.45	1.52
3	D	392	GLY	C-O	-5.30	1.20	1.23
3	F	442	LYS	CA-C	-5.30	1.45	1.52
10	V	99	ALA	CA-C	-5.30	1.46	1.52
10	V	132	GLU	C-N	5.30	1.40	1.33
4	G	120	ARG	CA-C	-5.30	1.46	1.52
3	E	278	ALA	CA-C	-5.30	1.45	1.52
10	V	66	SER	N-CA	-5.30	1.39	1.46
2	A	73	VAL	N-CA	-5.30	1.40	1.46
3	F	134	LEU	N-CA	-5.30	1.39	1.45
3	F	429	GLY	C-N	5.30	1.41	1.33
4	G	145	LEU	C-O	5.30	1.30	1.24
11	W	21	ALA	C-N	5.29	1.41	1.33
2	A	354	LEU	C-N	5.29	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	404	ALA	C-N	5.29	1.41	1.34
3	E	92	LEU	N-CA	-5.29	1.39	1.46
4	G	193	SER	CA-C	-5.29	1.45	1.52
2	B	99	VAL	N-CA	-5.29	1.40	1.46
2	B	101	VAL	CA-C	-5.29	1.46	1.52
7	O	179	SER	CA-C	-5.29	1.45	1.53
3	D	107	GLY	C-N	-5.29	1.26	1.33
3	F	58	THR	CA-C	-5.28	1.46	1.52
2	A	233	ILE	CA-C	-5.28	1.46	1.52
3	E	47	VAL	C-N	5.28	1.41	1.33
3	F	193	GLU	CA-C	-5.28	1.46	1.52
1	1	33	LEU	C-N	5.28	1.40	1.33
3	E	145	ALA	N-CA	-5.28	1.41	1.46
2	C	415	SER	N-CA	5.27	1.52	1.46
3	F	296	ILE	C-N	5.27	1.40	1.33
3	E	142	ASP	C-N	5.27	1.41	1.33
3	F	388	ILE	C-O	-5.27	1.17	1.24
2	C	237	THR	N-CA	5.27	1.52	1.45
1	4	53	LEU	C-N	5.26	1.40	1.33
2	B	207	ALA	N-CA	-5.26	1.40	1.46
2	B	436	SER	CA-C	-5.26	1.46	1.52
3	E	285	LEU	N-CA	-5.26	1.39	1.46
2	B	218	LEU	CA-C	-5.26	1.46	1.52
2	C	501	SER	CA-C	-5.26	1.46	1.52
7	O	184	ILE	N-CA	5.26	1.52	1.46
2	A	258	TRP	CA-C	-5.26	1.46	1.52
1	4	31	ALA	CA-C	-5.26	1.46	1.52
3	E	243	PHE	C-O	-5.26	1.17	1.24
5	H	73	GLY	C-N	5.26	1.40	1.33
2	B	426	LEU	C-N	5.25	1.40	1.33
3	E	39	ILE	CA-C	-5.25	1.46	1.52
8	T	218	ALA	CA-C	5.25	1.59	1.52
1	5	23	GLY	CA-C	-5.25	1.46	1.52
2	B	256	GLY	CA-C	5.25	1.58	1.52
2	C	355	GLU	N-CA	-5.25	1.39	1.45
2	B	397	ALA	C-N	5.25	1.41	1.33
2	C	107	GLY	C-N	5.25	1.40	1.33
2	A	476	SER	CA-C	-5.25	1.46	1.52
2	B	122	PRO	CA-C	5.24	1.58	1.53
10	V	113	GLU	CA-C	-5.24	1.45	1.52
3	F	87	VAL	CA-C	-5.24	1.46	1.52
1	4	48	PHE	N-CA	5.24	1.51	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	52	GLN	C-N	5.24	1.40	1.33
3	F	11	GLY	N-CA	-5.24	1.39	1.45
3	F	214	LYS	C-N	5.24	1.38	1.33
2	C	435	TYR	CA-C	-5.24	1.45	1.52
4	G	39	ILE	N-CA	-5.24	1.40	1.46
9	U	187	PRO	N-CA	-5.24	1.40	1.47
2	A	211	LYS	C-N	5.23	1.41	1.34
8	T	143	SER	C-N	5.23	1.41	1.33
8	T	176	ARG	CA-C	-5.23	1.46	1.52
3	E	58	THR	CA-C	-5.23	1.46	1.52
3	D	133	ILE	CA-C	-5.23	1.46	1.52
3	E	471	GLU	CA-C	-5.23	1.46	1.52
3	F	415	SER	N-CA	-5.23	1.39	1.46
4	G	143	SER	CA-C	-5.23	1.46	1.52
2	C	56	GLU	C-O	-5.22	1.17	1.24
2	C	116	PRO	CA-C	5.22	1.58	1.52
3	D	409	LYS	CA-C	-5.22	1.46	1.52
8	T	182	LEU	CA-C	5.22	1.59	1.52
4	G	200	ASP	N-CA	-5.22	1.39	1.46
5	H	40	GLY	N-CA	-5.22	1.40	1.45
3	E	32	ALA	CA-C	-5.22	1.46	1.53
1	7	46	THR	CA-C	-5.22	1.46	1.52
5	H	129	VAL	C-N	5.22	1.40	1.33
2	A	216	ALA	N-CA	-5.21	1.40	1.46
5	H	135	SER	C-O	-5.21	1.17	1.24
13	Y	13	TYR	C-N	5.21	1.40	1.33
3	F	117	ILE	CA-C	-5.21	1.44	1.52
1	1	8	LYS	C-O	-5.21	1.18	1.24
3	D	51	ALA	C-N	5.21	1.39	1.33
10	V	5	SER	N-CA	-5.21	1.39	1.46
1	9	67	MET	C-N	5.21	1.40	1.33
3	F	211	GLY	C-N	5.21	1.41	1.33
3	E	272	LEU	C-N	5.21	1.41	1.33
3	E	11	GLY	CA-C	-5.20	1.45	1.51
1	3	56	ALA	CA-C	-5.20	1.46	1.52
9	U	154	LEU	CA-C	-5.20	1.46	1.52
2	A	346	SER	CA-C	-5.20	1.45	1.52
3	F	288	ASP	N-CA	-5.20	1.40	1.46
9	U	86	LYS	N-CA	-5.20	1.40	1.46
1	7	35	ASN	C-N	5.20	1.40	1.33
1	7	44	LYS	CA-C	-5.20	1.45	1.52
2	B	239	SER	CA-C	-5.20	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	F	268	VAL	C-N	5.20	1.40	1.33
7	O	118	LEU	CA-C	5.20	1.59	1.52
2	A	341	PRO	CA-C	-5.19	1.44	1.52
3	F	309	ALA	C-N	5.19	1.40	1.33
1	0	26	ILE	C-O	-5.19	1.18	1.24
2	A	314	LEU	N-CA	5.19	1.52	1.45
2	B	464	GLY	CA-C	-5.19	1.46	1.52
3	D	283	PRO	C-O	-5.19	1.17	1.24
3	F	227	GLY	CA-C	5.19	1.58	1.52
1	6	21	GLY	N-CA	-5.18	1.39	1.45
2	C	225	HIS	C-N	5.18	1.40	1.33
7	O	177	ASP	N-CA	-5.18	1.40	1.46
2	A	450	GLY	CA-C	-5.18	1.46	1.52
5	H	87	ALA	C-N	5.18	1.39	1.33
2	B	506	PHE	N-CA	-5.18	1.40	1.46
2	C	484	GLU	CA-C	-5.18	1.46	1.52
3	D	414	LEU	CA-C	-5.18	1.46	1.52
14	Z	1	MET	N-CA	5.18	1.56	1.46
2	A	120	LYS	CA-C	5.17	1.59	1.52
3	D	253	LEU	N-CA	-5.17	1.39	1.46
3	E	106	ARG	C-N	5.17	1.41	1.33
2	C	112	ALA	C-N	5.17	1.41	1.33
10	V	109	LEU	CA-C	-5.17	1.46	1.52
3	D	275	ILE	N-CA	-5.17	1.42	1.46
1	8	18	GLY	N-CA	-5.17	1.39	1.45
2	C	332	GLN	CA-C	-5.17	1.46	1.52
3	D	387	ILE	C-O	-5.17	1.19	1.24
4	G	228	ALA	CA-C	-5.17	1.46	1.52
1	9	70	PHE	C-N	5.17	1.40	1.33
3	F	127	GLN	CA-C	-5.16	1.46	1.52
8	T	97	PHE	N-CA	-5.16	1.40	1.46
4	G	145	LEU	C-N	5.16	1.40	1.33
2	A	212	ARG	C-N	5.16	1.40	1.33
2	C	430	LEU	C-N	5.16	1.40	1.33
9	U	80	PHE	CA-C	-5.16	1.46	1.52
1	5	5	LEU	N-CA	-5.15	1.40	1.46
3	F	229	ARG	CA-C	-5.15	1.46	1.52
1	3	5	LEU	C-O	-5.15	1.18	1.24
2	A	205	TYR	N-CA	-5.15	1.40	1.46
8	T	113	ALA	N-CA	-5.15	1.39	1.46
4	G	136	ASP	C-N	5.15	1.40	1.33
6	I	35	LEU	C-N	5.15	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	E	148	ALA	C-N	5.15	1.40	1.33
5	H	57	VAL	CA-C	-5.15	1.46	1.52
11	W	2	SER	N-CA	5.14	1.52	1.45
9	U	203	GLN	C-N	5.14	1.41	1.33
2	A	26	ASN	CA-C	-5.14	1.45	1.52
3	F	174	ILE	C-O	-5.14	1.18	1.24
8	T	146	VAL	CA-C	-5.14	1.47	1.52
1	9	24	ILE	N-CA	-5.13	1.40	1.46
8	T	78	GLY	CA-C	-5.13	1.46	1.52
9	U	124	PHE	C-O	-5.13	1.18	1.24
1	0	34	ILE	C-N	5.13	1.40	1.34
1	3	28	ILE	CA-C	-5.12	1.46	1.52
8	T	235	ALA	N-CA	-5.12	1.39	1.46
1	3	41	PRO	CA-C	5.12	1.59	1.52
2	B	341	PRO	N-CA	-5.12	1.41	1.47
2	C	71	GLY	CA-C	-5.12	1.46	1.52
1	4	54	GLY	N-CA	5.11	1.52	1.45
1	9	20	LEU	CA-C	-5.11	1.46	1.52
9	U	148	HIS	N-CA	-5.11	1.40	1.46
1	1	15	SER	C-N	5.11	1.40	1.34
3	E	294	GLU	N-CA	5.11	1.52	1.46
3	E	161	VAL	CA-C	-5.11	1.46	1.52
3	F	284	THR	CA-C	-5.11	1.46	1.52
1	4	24	ILE	N-CA	-5.11	1.40	1.46
2	C	158	LEU	C-N	5.11	1.38	1.33
1	7	17	ILE	CA-C	-5.10	1.46	1.52
2	A	335	ASP	CA-C	-5.10	1.46	1.52
1	3	31	ALA	CA-C	-5.10	1.46	1.52
2	A	216	ALA	CA-C	5.10	1.59	1.52
9	U	147	ALA	CA-C	-5.10	1.46	1.52
3	E	312	VAL	CA-C	-5.09	1.47	1.52
2	B	157	ALA	N-CA	-5.09	1.40	1.46
4	G	56	GLU	N-CA	-5.09	1.39	1.46
2	C	200	LYS	CA-C	-5.09	1.46	1.53
3	D	444	VAL	N-CA	-5.09	1.39	1.46
3	E	179	GLY	C-N	5.08	1.40	1.33
1	7	2	GLN	C-N	5.08	1.40	1.33
3	D	66	GLY	CA-C	-5.08	1.44	1.51
2	B	416	THR	C-N	5.08	1.41	1.33
1	6	50	MET	CA-C	-5.08	1.46	1.52
7	O	170	GLU	C-N	5.08	1.40	1.33
2	B	322	SER	N-CA	-5.08	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	W	13	LYS	C-N	5.08	1.40	1.33
3	D	234	LEU	C-N	5.08	1.40	1.33
1	7	66	LEU	N-CA	-5.07	1.40	1.46
8	T	36	VAL	C-N	5.07	1.40	1.33
8	T	220	MET	C-N	5.07	1.40	1.33
2	B	139	LEU	CA-C	-5.07	1.46	1.52
9	U	121	LYS	C-N	5.07	1.40	1.33
10	V	112	LYS	C-N	5.07	1.41	1.34
3	F	462	GLY	C-N	5.07	1.40	1.33
2	B	429	LEU	CA-C	-5.07	1.46	1.52
13	Y	36	ASN	CA-C	-5.07	1.45	1.52
4	G	146	ILE	CA-C	5.07	1.59	1.52
12	X	10	GLU	C-N	5.07	1.40	1.33
1	5	51	ALA	CA-C	-5.06	1.46	1.52
2	C	327	PRO	CA-C	-5.06	1.45	1.52
4	G	88	HIS	N-CA	-5.06	1.40	1.46
4	G	178	SER	N-CA	-5.06	1.39	1.45
8	T	161	ILE	C-N	5.06	1.40	1.33
9	U	97	ASN	C-N	5.06	1.40	1.33
2	B	229	LYS	CA-C	-5.06	1.46	1.52
3	F	68	GLU	C-N	5.06	1.40	1.33
13	Y	10	LEU	N-CA	-5.06	1.40	1.46
2	A	482	LEU	CA-C	-5.06	1.46	1.52
1	9	49	PRO	CA-C	5.05	1.60	1.52
3	F	327	ALA	N-CA	-5.05	1.40	1.46
12	X	28	VAL	C-N	5.05	1.42	1.33
3	F	438	VAL	CA-C	5.05	1.59	1.52
2	C	321	GLY	CA-C	-5.05	1.46	1.52
3	F	265	GLY	C-O	-5.05	1.17	1.23
4	G	74	ILE	N-CA	-5.05	1.40	1.46
2	C	440	THR	C-N	5.05	1.40	1.33
3	F	245	ASP	N-CA	-5.05	1.39	1.46
2	B	205	TYR	N-CA	-5.05	1.40	1.46
2	C	144	VAL	C-N	5.05	1.40	1.33
1	6	57	LEU	N-CA	-5.05	1.40	1.46
3	F	104	ASP	N-CA	5.04	1.52	1.46
3	D	11	GLY	CA-C	-5.04	1.46	1.51
3	E	361	ALA	C-N	5.04	1.39	1.33
2	C	62	LYS	N-CA	-5.04	1.39	1.45
2	C	180	VAL	CA-C	-5.04	1.46	1.52
8	T	69	ILE	CA-C	-5.04	1.45	1.52
2	A	404	ALA	C-N	5.04	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	F	29	GLU	C-N	5.03	1.41	1.33
2	A	353	PHE	C-N	5.03	1.40	1.33
3	E	128	SER	CA-C	-5.03	1.46	1.52
3	F	191	THR	C-N	5.03	1.40	1.33
3	D	241	GLU	C-N	5.03	1.40	1.33
2	A	448	TYR	C-N	5.02	1.40	1.33
3	F	115	LYS	N-CA	5.02	1.50	1.45
3	F	425	THR	CA-C	5.02	1.59	1.52
3	E	336	SER	C-N	5.02	1.40	1.34
4	G	143	SER	N-CA	-5.02	1.40	1.46
1	7	40	ASN	N-CA	-5.02	1.39	1.46
11	W	25	ALA	CA-C	5.02	1.59	1.52
2	C	215	VAL	C-O	-5.01	1.17	1.24
8	T	65	ILE	C-N	5.01	1.40	1.33
3	E	198	TYR	C-N	5.01	1.40	1.33
3	E	199	ARG	N-CA	-5.01	1.40	1.46
3	F	205	GLY	C-N	5.01	1.40	1.33
3	E	127	GLN	C-N	5.01	1.39	1.33
2	A	465	GLU	C-N	5.00	1.40	1.33
2	B	450	GLY	C-N	5.00	1.40	1.33
3	D	434	LEU	CA-C	5.00	1.59	1.52
4	G	140	PHE	C-N	5.00	1.40	1.33

All (2140) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	O	8	PRO	CA-C-O	-13.23	111.37	120.90
8	T	47	THR	N-CA-C	-11.72	98.67	113.43
3	F	79	THR	N-CA-C	-11.54	98.69	113.12
12	X	49	ALA	CA-C-N	11.46	135.34	120.44
12	X	49	ALA	C-N-CA	11.46	135.34	120.44
4	G	156	ALA	CA-C-N	11.43	132.63	119.94
4	G	156	ALA	C-N-CA	11.43	132.63	119.94
14	Z	5	VAL	O-C-N	11.16	128.40	121.37
3	E	296	ILE	N-CA-C	-10.97	102.39	113.47
1	6	57	LEU	N-CA-C	10.96	123.31	111.36
1	3	61	THR	CA-C-N	10.89	132.07	119.98
1	3	61	THR	C-N-CA	10.89	132.07	119.98
2	C	153	LYS	N-CA-C	10.84	122.67	111.07
2	B	148	VAL	N-CA-C	-10.76	92.63	108.12
1	7	11	GLY	CA-C-N	10.65	134.55	120.28
1	7	11	GLY	C-N-CA	10.65	134.55	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	403	ALA	CA-C-O	-10.44	109.48	120.55
1	2	35	ASN	CA-C-N	10.43	131.52	119.94
1	2	35	ASN	C-N-CA	10.43	131.52	119.94
3	D	452	ILE	CA-C-O	-10.20	111.21	119.98
1	3	51	ALA	N-CA-C	9.99	122.25	111.36
3	E	362	VAL	N-CA-C	-9.98	101.00	111.58
2	A	403	ALA	CA-C-N	9.97	133.65	120.28
2	A	403	ALA	C-N-CA	9.97	133.65	120.28
1	1	24	ILE	CA-C-N	9.96	131.00	119.94
1	1	24	ILE	C-N-CA	9.96	131.00	119.94
3	F	288	ASP	N-CA-C	9.93	122.19	111.36
3	D	258	ILE	N-CA-C	-9.89	101.06	113.22
3	F	275	ILE	N-CA-C	-9.86	99.85	109.02
3	F	11	GLY	O-C-N	-9.76	114.78	123.37
2	A	10	VAL	CA-C-N	9.74	133.33	120.28
2	A	10	VAL	C-N-CA	9.74	133.33	120.28
3	F	10	THR	CA-C-N	9.68	129.06	121.61
3	F	10	THR	C-N-CA	9.68	129.06	121.61
2	B	233	ILE	N-CA-C	-9.64	93.67	107.75
8	T	192	ALA	CA-C-N	9.61	130.57	120.00
8	T	192	ALA	C-N-CA	9.61	130.57	120.00
1	6	27	ALA	N-CA-C	9.52	122.66	111.71
3	F	138	ILE	CA-C-O	9.49	129.64	120.25
1	3	46	THR	CA-C-N	9.48	133.89	120.42
1	3	46	THR	C-N-CA	9.48	133.89	120.42
14	Z	10	MET	CA-C-O	-9.46	109.09	119.97
3	F	224	GLU	CA-C-N	9.45	130.12	120.38
3	F	224	GLU	C-N-CA	9.45	130.12	120.38
2	A	340	ILE	O-C-N	-9.30	114.47	120.42
7	O	7	PRO	CA-C-N	9.28	126.43	119.66
7	O	7	PRO	C-N-CA	9.28	126.43	119.66
1	3	3	LEU	N-CA-C	9.24	121.35	111.28
1	8	10	ILE	CA-C-N	9.24	130.38	120.03
1	8	10	ILE	C-N-CA	9.24	130.38	120.03
2	B	59	SER	N-CA-C	-9.21	102.55	113.88
3	E	17	ILE	N-CA-C	-9.15	93.83	107.37
4	G	244	ALA	CA-C-N	9.14	130.09	119.94
4	G	244	ALA	C-N-CA	9.14	130.09	119.94
2	A	463	ILE	CA-C-N	9.11	130.02	120.00
2	A	463	ILE	C-N-CA	9.11	130.02	120.00
2	B	6	GLN	O-C-N	9.09	127.53	121.71
7	O	63	SER	CA-C-O	-9.09	111.19	119.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	W	6	PRO	N-CA-C	9.04	121.73	110.70
3	F	132	GLU	N-CA-C	-8.97	95.59	108.96
1	6	5	LEU	CA-C-N	8.95	132.08	120.44
1	6	5	LEU	C-N-CA	8.95	132.08	120.44
3	D	107	GLY	CA-C-N	8.94	128.97	119.76
3	D	107	GLY	C-N-CA	8.94	128.97	119.76
3	E	168	GLN	CA-C-N	8.91	132.22	120.28
3	E	168	GLN	C-N-CA	8.91	132.22	120.28
8	T	217	LEU	CA-C-N	8.90	132.21	120.28
8	T	217	LEU	C-N-CA	8.90	132.21	120.28
2	B	364	ARG	CA-C-O	-8.90	112.65	119.59
2	A	360	TYR	N-CA-C	-8.87	101.69	111.36
1	1	12	ALA	CA-C-N	8.86	129.81	119.98
1	1	12	ALA	C-N-CA	8.86	129.81	119.98
8	T	140	VAL	CA-C-N	8.83	132.11	120.28
8	T	140	VAL	C-N-CA	8.83	132.11	120.28
1	8	2	GLN	CA-C-N	8.82	132.10	120.28
1	8	2	GLN	C-N-CA	8.82	132.10	120.28
3	E	198	TYR	CA-C-N	8.74	131.80	120.44
3	E	198	TYR	C-N-CA	8.74	131.80	120.44
1	0	24	ILE	CA-C-N	8.73	129.85	119.99
1	0	24	ILE	C-N-CA	8.73	129.85	119.99
2	A	465	GLU	CA-C-N	8.71	131.95	120.28
2	A	465	GLU	C-N-CA	8.71	131.95	120.28
14	Z	10	MET	O-C-N	8.71	132.98	122.27
2	A	479	ASN	N-CA-C	-8.70	102.67	113.28
9	U	104	LYS	O-C-N	-8.69	112.24	122.15
4	G	194	PHE	N-CA-C	-8.66	102.08	114.12
1	0	17	ILE	CA-C-N	8.61	130.90	120.14
1	0	17	ILE	C-N-CA	8.61	130.90	120.14
1	8	20	LEU	CA-C-N	8.60	129.46	120.00
1	8	20	LEU	C-N-CA	8.60	129.46	120.00
3	F	385	GLN	CA-C-N	8.60	131.80	120.28
3	F	385	GLN	C-N-CA	8.60	131.80	120.28
3	D	177	ALA	N-CA-C	8.59	120.26	111.07
3	E	284	THR	N-CA-C	-8.59	102.86	112.57
1	1	10	ILE	CA-C-N	8.56	129.48	119.98
1	1	10	ILE	C-N-CA	8.56	129.48	119.98
2	C	232	ILE	N-CA-C	-8.55	95.72	108.46
2	B	392	LEU	CA-C-N	8.54	132.06	120.44
2	B	392	LEU	C-N-CA	8.54	132.06	120.44
9	U	134	GLU	CA-C-N	8.53	131.53	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	U	134	GLU	C-N-CA	8.53	131.53	120.44
2	A	471	LEU	CA-C-N	8.51	131.68	120.28
2	A	471	LEU	C-N-CA	8.51	131.68	120.28
2	C	70	PRO	CA-C-N	8.51	129.39	119.94
2	C	70	PRO	C-N-CA	8.51	129.39	119.94
5	H	45	HIS	N-CA-C	-8.50	96.48	109.14
3	D	235	THR	CA-C-N	8.45	129.29	120.00
3	D	235	THR	C-N-CA	8.45	129.29	120.00
7	O	39	SER	CA-C-O	8.43	129.36	120.42
3	E	23	VAL	N-CA-C	-8.42	95.88	108.85
3	E	438	VAL	O-C-N	8.42	130.04	121.87
2	B	178	THR	CA-C-N	8.41	133.10	120.31
2	B	178	THR	C-N-CA	8.41	133.10	120.31
3	D	450	ASP	N-CA-C	-8.41	101.08	112.94
3	D	364	GLY	CA-C-N	8.41	131.88	120.44
3	D	364	GLY	C-N-CA	8.41	131.88	120.44
2	B	78	PHE	N-CA-C	-8.40	102.84	113.43
8	T	119	ILE	CA-C-N	8.39	131.53	120.28
8	T	119	ILE	C-N-CA	8.39	131.53	120.28
10	V	158	TRP	N-CA-C	-8.39	101.89	114.64
11	W	67	TRP	CA-C-N	8.36	131.31	120.44
11	W	67	TRP	C-N-CA	8.36	131.31	120.44
5	H	59	VAL	N-CA-C	-8.29	96.18	108.12
3	E	146	PRO	CA-C-O	-8.29	111.99	121.36
2	B	455	LEU	N-CA-C	-8.27	103.21	113.38
2	A	130	ARG	CA-C-N	8.26	131.35	120.28
2	A	130	ARG	C-N-CA	8.26	131.35	120.28
3	E	252	LEU	N-CA-C	-8.24	96.68	108.96
2	C	468	SER	N-CA-C	8.24	120.34	111.36
2	C	29	GLU	CA-C-N	8.23	136.51	121.70
2	C	29	GLU	C-N-CA	8.23	136.51	121.70
2	C	289	ARG	CA-C-N	8.23	125.58	119.66
2	C	289	ARG	C-N-CA	8.23	125.58	119.66
1	2	10	ILE	O-C-N	8.21	130.29	121.83
1	4	65	CYS	N-CA-C	8.21	120.31	111.36
8	T	103	SER	CA-C-N	8.21	132.78	120.31
8	T	103	SER	C-N-CA	8.21	132.78	120.31
10	V	59	ARG	N-CA-C	-8.20	103.79	113.88
1	2	23	GLY	CA-C-N	8.20	132.06	120.42
1	2	23	GLY	C-N-CA	8.20	132.06	120.42
5	H	132	ASN	CA-C-N	8.19	131.92	120.29
5	H	132	ASN	C-N-CA	8.19	131.92	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	G	42	LYS	CA-C-N	8.19	131.08	120.44
4	G	42	LYS	C-N-CA	8.19	131.08	120.44
1	1	53	LEU	CA-C-N	8.18	129.06	119.98
1	1	53	LEU	C-N-CA	8.18	129.06	119.98
3	E	108	PRO	CA-C-N	8.18	131.46	120.50
3	E	108	PRO	C-N-CA	8.18	131.46	120.50
13	Y	10	LEU	N-CA-C	-8.17	104.46	114.75
9	U	77	TYR	CA-C-N	8.17	131.22	120.28
9	U	77	TYR	C-N-CA	8.17	131.22	120.28
2	B	130	ARG	CA-C-N	8.16	134.35	120.72
2	B	130	ARG	C-N-CA	8.16	134.35	120.72
8	T	206	LEU	N-CA-C	-8.16	101.65	111.69
3	D	361	ALA	N-CA-C	-8.16	103.15	113.43
3	E	217	LEU	CA-C-N	8.16	134.33	122.99
3	E	217	LEU	C-N-CA	8.16	134.33	122.99
1	7	22	ALA	CA-C-N	8.15	129.03	119.98
1	7	22	ALA	C-N-CA	8.15	129.03	119.98
2	B	463	ILE	CA-C-N	8.15	129.03	119.98
2	B	463	ILE	C-N-CA	8.15	129.03	119.98
2	A	36	VAL	N-CA-C	-8.13	97.65	108.06
3	F	310	VAL	N-CA-C	-8.10	95.70	108.81
2	B	501	SER	N-CA-C	-8.09	102.46	111.28
2	A	185	ILE	CA-C-N	8.08	131.77	120.29
2	A	185	ILE	C-N-CA	8.08	131.77	120.29
12	X	8	LEU	CA-C-N	8.08	130.94	120.44
12	X	8	LEU	C-N-CA	8.08	130.94	120.44
1	2	16	THR	CA-C-N	8.07	131.91	120.53
1	2	16	THR	C-N-CA	8.07	131.91	120.53
2	A	193	ASN	CA-C-N	8.07	131.54	121.06
2	A	193	ASN	C-N-CA	8.07	131.54	121.06
4	G	248	ILE	N-CA-C	8.06	118.16	110.42
2	C	461	SER	O-C-N	8.04	132.16	122.27
3	D	75	LYS	CA-C-O	-8.03	112.81	121.56
2	C	241	ALA	CA-C-N	8.02	129.61	120.06
2	C	241	ALA	C-N-CA	8.02	129.61	120.06
2	C	416	THR	N-CA-C	-8.01	102.63	111.36
3	F	104	ASP	N-CA-C	-8.00	102.42	112.90
1	4	22	ALA	CA-C-N	7.98	128.64	119.94
1	4	22	ALA	C-N-CA	7.98	128.64	119.94
1	1	45	ASP	O-C-N	7.97	130.57	122.12
1	5	61	THR	CA-C-N	7.97	128.83	119.98
1	5	61	THR	C-N-CA	7.97	128.83	119.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	9	52	ILE	CA-C-N	7.97	130.96	120.28
1	9	52	ILE	C-N-CA	7.97	130.96	120.28
1	6	54	GLY	CA-C-N	7.94	130.76	120.44
1	6	54	GLY	C-N-CA	7.94	130.76	120.44
3	E	103	ILE	N-CA-C	-7.93	105.58	113.20
1	6	14	ILE	CA-C-N	7.93	131.70	120.28
1	6	14	ILE	C-N-CA	7.93	131.70	120.28
2	C	222	LEU	CA-C-O	-7.93	112.15	120.55
3	E	263	GLN	CA-C-N	7.93	130.91	120.28
3	E	263	GLN	C-N-CA	7.93	130.91	120.28
7	O	39	SER	N-CA-C	7.92	120.00	111.36
2	A	414	ALA	N-CA-C	7.92	120.82	111.71
2	B	129	SER	N-CA-C	-7.92	97.70	108.86
2	B	385	LEU	CA-C-N	7.91	131.52	120.29
2	B	385	LEU	C-N-CA	7.91	131.52	120.29
3	F	321	ALA	CA-C-N	7.90	127.46	118.85
3	F	321	ALA	C-N-CA	7.90	127.46	118.85
10	V	163	TYR	N-CA-C	-7.89	103.15	114.12
3	D	81	GLY	CA-C-N	7.89	127.94	119.89
3	D	81	GLY	C-N-CA	7.89	127.94	119.89
1	0	35	ASN	CA-C-N	7.89	128.54	119.94
1	0	35	ASN	C-N-CA	7.89	128.54	119.94
2	A	61	VAL	N-CA-C	-7.89	96.01	108.86
1	6	35	ASN	CA-C-N	7.88	128.53	119.94
1	6	35	ASN	C-N-CA	7.88	128.53	119.94
3	F	389	ALA	N-CA-C	7.87	119.49	111.07
3	D	213	SER	N-CA-C	-7.87	96.58	109.40
5	H	133	LEU	CA-C-O	-7.86	112.09	120.42
2	A	86	GLU	N-CA-C	-7.86	97.52	110.17
1	5	33	LEU	N-CA-C	7.86	119.48	111.07
2	C	451	VAL	O-C-N	7.85	129.48	121.87
3	E	53	HIS	N-CA-C	-7.84	96.12	108.90
3	D	111	SER	CA-C-N	7.80	130.59	120.44
3	D	111	SER	C-N-CA	7.80	130.59	120.44
2	A	456	ASP	CA-C-O	7.77	128.43	119.18
4	G	91	LEU	CA-C-N	7.77	130.69	120.28
4	G	91	LEU	C-N-CA	7.77	130.69	120.28
7	O	192	GLU	N-CA-C	-7.77	103.62	113.72
1	5	20	LEU	CA-C-N	7.76	128.54	120.00
1	5	20	LEU	C-N-CA	7.76	128.54	120.00
3	E	213	SER	N-CA-C	-7.76	97.61	109.41
3	D	457	PHE	N-CA-C	-7.76	104.71	114.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	413	ASP	CA-C-N	7.75	130.67	120.28
2	C	413	ASP	C-N-CA	7.75	130.67	120.28
3	E	364	GLY	CA-C-O	-7.75	117.18	122.22
2	B	460	LEU	CA-C-N	7.74	130.66	120.28
2	B	460	LEU	C-N-CA	7.74	130.66	120.28
3	F	267	GLU	N-CA-C	7.73	119.34	111.07
2	A	507	VAL	O-C-N	7.71	129.35	121.87
10	V	37	ASP	CA-C-N	7.71	131.25	120.29
10	V	37	ASP	C-N-CA	7.71	131.25	120.29
3	D	404	VAL	N-CA-C	7.69	118.47	110.62
3	D	230	ALA	N-CA-C	7.68	119.65	111.28
2	A	494	GLU	CA-C-N	7.66	131.17	120.29
2	A	494	GLU	C-N-CA	7.66	131.17	120.29
2	C	69	GLU	N-CA-C	-7.66	99.36	108.25
7	O	114	ALA	CA-C-N	7.66	130.55	120.28
7	O	114	ALA	C-N-CA	7.66	130.55	120.28
2	C	191	TRP	CA-C-N	7.66	131.16	120.29
2	C	191	TRP	C-N-CA	7.66	131.16	120.29
1	2	4	VAL	CA-C-O	-7.65	112.74	120.85
4	G	227	ALA	N-CA-C	7.65	119.69	111.36
1	4	30	PHE	CA-C-N	7.62	130.49	120.28
1	4	30	PHE	C-N-CA	7.62	130.49	120.28
8	T	214	ALA	CA-C-N	7.62	130.34	120.44
8	T	214	ALA	C-N-CA	7.62	130.34	120.44
3	F	11	GLY	CA-C-O	7.62	128.20	121.57
3	F	30	LEU	CA-C-O	-7.61	113.60	119.46
2	B	271	ASP	N-CA-C	-7.59	96.03	108.41
1	4	34	ILE	CA-C-N	7.59	130.45	120.28
1	4	34	ILE	C-N-CA	7.59	130.45	120.28
3	F	22	ASP	N-CA-C	-7.59	97.88	109.95
2	C	22	SER	CA-C-N	7.58	131.06	120.29
2	C	22	SER	C-N-CA	7.58	131.06	120.29
2	C	205	TYR	N-CA-C	-7.58	96.87	109.07
1	7	61	THR	N-CA-C	-7.57	103.03	111.28
1	7	25	GLY	CA-C-N	7.56	130.09	120.56
1	7	25	GLY	C-N-CA	7.56	130.09	120.56
11	W	81	GLU	CA-C-O	7.55	128.56	120.55
1	3	58	SER	CA-C-N	7.53	130.37	120.28
1	3	58	SER	C-N-CA	7.53	130.37	120.28
2	A	418	GLN	CA-C-N	7.51	130.96	120.29
2	A	418	GLN	C-N-CA	7.51	130.96	120.29
2	C	390	GLY	CA-C-N	7.51	130.35	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	390	GLY	C-N-CA	7.51	130.35	120.28
3	F	107	GLY	CA-C-N	7.51	129.23	119.84
3	F	107	GLY	C-N-CA	7.51	129.23	119.84
2	C	61	VAL	CA-C-O	-7.50	114.08	121.58
6	I	33	SER	CA-C-O	7.50	128.50	120.55
4	G	25	ILE	N-CA-C	-7.50	103.48	110.53
1	9	34	ILE	CA-C-N	7.50	130.33	120.28
1	9	34	ILE	C-N-CA	7.50	130.33	120.28
4	G	139	THR	N-CA-C	-7.49	97.66	108.60
3	E	64	MET	N-CA-C	-7.49	104.17	113.38
9	U	136	GLU	CA-C-N	7.47	130.29	120.28
9	U	136	GLU	C-N-CA	7.47	130.29	120.28
1	6	13	GLY	CA-C-N	7.47	130.69	120.46
1	6	13	GLY	C-N-CA	7.47	130.69	120.46
9	U	138	PHE	CA-C-N	7.46	130.88	120.29
9	U	138	PHE	C-N-CA	7.46	130.88	120.29
8	T	80	LYS	N-CA-C	-7.46	104.03	113.72
1	7	65	CYS	CA-C-N	7.45	130.26	120.28
1	7	65	CYS	C-N-CA	7.45	130.26	120.28
2	C	336	VAL	N-CA-C	-7.44	105.32	113.43
5	H	27	VAL	CA-C-N	7.43	130.54	120.44
5	H	27	VAL	C-N-CA	7.43	130.54	120.44
3	E	423	VAL	CA-C-N	7.42	130.08	120.44
3	E	423	VAL	C-N-CA	7.42	130.08	120.44
3	F	417	PRO	CA-C-O	-7.41	112.86	122.19
1	1	26	ILE	CA-C-N	7.40	130.20	120.28
1	1	26	ILE	C-N-CA	7.40	130.20	120.28
3	D	427	ILE	CA-C-N	7.40	129.09	119.84
3	D	427	ILE	C-N-CA	7.40	129.09	119.84
2	B	110	VAL	O-C-N	7.40	130.92	123.00
2	B	402	VAL	CA-C-N	7.38	130.18	120.28
2	B	402	VAL	C-N-CA	7.38	130.18	120.28
3	D	284	THR	N-CA-C	-7.38	104.23	112.57
11	W	9	VAL	N-CA-C	-7.38	97.50	108.12
4	G	188	ILE	CA-C-N	7.37	130.16	120.28
4	G	188	ILE	C-N-CA	7.37	130.16	120.28
2	A	258	TRP	N-CA-C	-7.37	103.33	111.36
7	O	148	GLY	N-CA-C	7.36	121.04	112.50
1	4	13	GLY	CA-C-N	7.35	130.53	120.46
1	4	13	GLY	C-N-CA	7.35	130.53	120.46
2	A	436	SER	O-C-N	7.35	127.88	121.34
7	O	129	LEU	N-CA-C	-7.34	98.57	109.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	120	LYS	CA-C-N	7.33	133.38	121.87
2	A	120	LYS	C-N-CA	7.33	133.38	121.87
1	6	48	PHE	CA-C-N	7.32	127.17	119.05
1	6	48	PHE	C-N-CA	7.32	127.17	119.05
2	A	96	ILE	N-CA-C	-7.32	102.07	110.05
7	O	120	LYS	O-C-N	-7.32	115.06	123.33
14	Z	5	VAL	CA-C-O	-7.31	113.69	119.25
10	V	46	LEU	CA-C-O	-7.30	111.17	119.79
3	F	150	GLY	CA-C-N	7.30	130.55	121.06
3	F	150	GLY	C-N-CA	7.30	130.55	121.06
2	C	222	LEU	O-C-N	7.29	129.84	122.12
2	C	178	THR	CA-C-N	7.28	130.62	120.29
2	C	178	THR	C-N-CA	7.28	130.62	120.29
3	D	448	LYS	N-CA-C	-7.28	104.40	113.28
1	2	17	ILE	O-C-N	-7.27	114.76	121.89
8	T	134	LEU	N-CA-C	-7.27	103.43	111.36
3	E	444	VAL	CA-C-N	7.27	130.74	120.28
3	E	444	VAL	C-N-CA	7.27	130.74	120.28
1	2	51	ALA	CA-C-O	-7.26	112.85	120.55
3	F	441	PHE	CA-C-N	7.26	130.01	120.28
3	F	441	PHE	C-N-CA	7.26	130.01	120.28
2	A	31	GLY	O-C-N	-7.25	117.29	123.60
3	D	402	LEU	CA-C-N	7.25	130.00	120.28
3	D	402	LEU	C-N-CA	7.25	130.00	120.28
2	C	305	SER	CA-C-N	7.25	129.99	120.28
2	C	305	SER	C-N-CA	7.25	129.99	120.28
1	9	20	LEU	N-CA-C	7.24	119.17	111.28
3	F	115	LYS	CA-C-O	-7.24	113.68	120.34
1	8	11	GLY	CA-C-N	7.24	129.85	120.44
1	8	11	GLY	C-N-CA	7.24	129.85	120.44
4	G	87	ILE	CA-C-N	7.24	129.98	120.28
4	G	87	ILE	C-N-CA	7.24	129.98	120.28
9	U	135	SER	N-CA-C	-7.24	103.33	111.07
3	E	371	ALA	CA-C-N	7.23	129.84	120.44
3	E	371	ALA	C-N-CA	7.23	129.84	120.44
2	A	416	THR	CA-C-N	7.22	130.55	120.29
2	A	416	THR	C-N-CA	7.22	130.55	120.29
1	1	23	GLY	CA-C-O	-7.22	113.01	120.66
2	A	323	LEU	N-CA-C	-7.22	96.28	108.26
2	B	425	ARG	CA-C-N	7.21	129.95	120.28
2	B	425	ARG	C-N-CA	7.21	129.95	120.28
1	1	74	PHE	N-CA-C	-7.21	102.60	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	233	ALA	CA-C-N	7.20	130.51	120.29
3	F	233	ALA	C-N-CA	7.20	130.51	120.29
9	U	158	VAL	CA-C-N	7.20	129.80	120.44
9	U	158	VAL	C-N-CA	7.20	129.80	120.44
1	8	59	GLU	CA-C-O	-7.19	112.92	120.55
12	X	29	LYS	N-CA-C	-7.19	95.74	108.69
2	A	385	LEU	N-CA-C	-7.19	104.25	113.16
2	C	152	LEU	N-CA-C	-7.18	96.63	108.76
3	E	320	PRO	CA-C-N	7.17	128.67	119.78
3	E	320	PRO	C-N-CA	7.17	128.67	119.78
2	A	218	LEU	CA-C-N	7.17	129.59	120.56
2	A	218	LEU	C-N-CA	7.17	129.59	120.56
8	T	188	MET	N-CA-C	7.16	118.73	111.07
3	D	98	VAL	O-C-N	-7.16	114.64	121.87
12	X	50	LEU	O-C-N	7.16	129.44	122.07
1	5	48	PHE	CA-C-N	7.15	126.67	119.24
1	5	48	PHE	C-N-CA	7.15	126.67	119.24
8	T	130	THR	CA-C-N	7.13	130.23	120.46
8	T	130	THR	C-N-CA	7.13	130.23	120.46
3	F	452	ILE	N-CA-C	-7.12	99.65	108.05
3	E	153	ILE	N-CA-C	-7.12	97.89	108.85
8	T	38	LEU	CA-C-N	7.11	129.67	120.56
8	T	38	LEU	C-N-CA	7.11	129.67	120.56
4	G	164	ILE	N-CA-C	-7.11	97.87	108.46
2	B	127	GLY	N-CA-C	-7.10	98.90	110.55
2	B	171	GLY	CA-C-O	-7.10	113.51	122.39
3	F	239	ILE	O-C-N	7.10	129.15	121.83
11	W	57	ASP	N-CA-C	-7.10	100.01	110.52
4	G	96	ARG	O-C-N	-7.10	114.06	122.15
3	E	290	GLY	CA-C-N	7.09	129.78	120.28
3	E	290	GLY	C-N-CA	7.09	129.78	120.28
3	F	403	THR	CA-C-N	7.09	130.18	120.46
3	F	403	THR	C-N-CA	7.09	130.18	120.46
3	D	319	ASP	CA-C-N	7.08	126.56	118.85
3	D	319	ASP	C-N-CA	7.08	126.56	118.85
7	O	19	TYR	N-CA-C	7.08	119.00	111.28
2	A	245	GLN	N-CA-C	7.07	119.07	111.36
6	I	41	ASP	CA-C-N	7.07	131.43	120.75
6	I	41	ASP	C-N-CA	7.07	131.43	120.75
1	3	4	VAL	O-C-N	7.07	128.73	121.87
3	F	444	VAL	CA-C-O	7.07	128.30	120.95
3	D	318	THR	CA-C-O	7.07	128.04	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	G	159	TYR	CA-C-N	7.06	126.78	119.64
4	G	159	TYR	C-N-CA	7.06	126.78	119.64
3	D	40	LYS	N-CA-C	-7.06	99.37	109.96
2	A	58	SER	CA-C-N	7.05	133.68	122.11
2	A	58	SER	C-N-CA	7.05	133.68	122.11
3	E	335	LEU	N-CA-C	-7.05	97.41	108.90
2	A	507	VAL	N-CA-C	7.04	117.80	110.62
2	C	217	GLN	CA-C-N	7.04	129.59	120.44
2	C	217	GLN	C-N-CA	7.04	129.59	120.44
9	U	199	SER	CA-C-O	-7.04	112.96	120.42
2	A	17	ARG	N-CA-C	7.04	118.95	111.28
1	4	18	GLY	CA-C-O	-7.03	113.28	120.45
5	H	85	VAL	CA-C-O	7.03	127.93	120.48
3	F	412	ARG	N-CA-C	-7.03	104.31	113.17
1	5	16	THR	N-CA-C	7.03	119.79	111.71
1	9	4	VAL	N-CA-C	7.01	117.80	110.72
2	B	215	VAL	N-CA-C	-7.01	103.47	110.62
1	1	23	GLY	O-C-N	7.00	128.98	122.19
1	5	16	THR	CA-C-O	7.00	128.01	120.10
3	F	465	ASP	N-CA-C	7.00	118.99	111.36
7	O	179	SER	CA-C-N	6.99	132.00	121.65
7	O	179	SER	C-N-CA	6.99	132.00	121.65
9	U	76	ALA	CA-C-N	6.99	130.93	120.31
9	U	76	ALA	C-N-CA	6.99	130.93	120.31
2	A	271	ASP	CA-C-N	6.98	134.27	121.70
2	A	271	ASP	C-N-CA	6.98	134.27	121.70
1	3	35	ASN	CA-C-N	6.97	127.72	119.98
1	3	35	ASN	C-N-CA	6.97	127.72	119.98
4	G	49	GLN	CA-C-N	6.97	129.50	120.44
4	G	49	GLN	C-N-CA	6.97	129.50	120.44
1	9	50	MET	O-C-N	6.97	129.51	122.12
4	G	15	ASN	N-CA-C	-6.97	103.77	111.36
1	5	71	LEU	CA-C-N	6.96	129.49	120.44
1	5	71	LEU	C-N-CA	6.96	129.49	120.44
2	C	359	PHE	CA-C-O	-6.96	113.51	120.82
1	8	36	GLY	O-C-N	6.96	128.86	122.18
2	B	180	VAL	CA-C-N	6.95	130.16	120.29
2	B	180	VAL	C-N-CA	6.95	130.16	120.29
1	3	72	LEU	CA-C-N	6.95	129.89	120.44
1	3	72	LEU	C-N-CA	6.95	129.89	120.44
3	F	409	LYS	CA-C-N	6.94	130.28	120.42
3	F	409	LYS	C-N-CA	6.94	130.28	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	10	VAL	CA-C-O	-6.94	113.73	120.95
2	A	227	ALA	CA-C-N	6.94	130.27	120.28
2	A	227	ALA	C-N-CA	6.94	130.27	120.28
9	U	137	ALA	N-CA-C	6.93	118.83	111.28
3	D	224	GLU	CA-C-N	6.92	127.51	120.38
3	D	224	GLU	C-N-CA	6.92	127.51	120.38
10	V	115	LYS	CA-C-N	6.92	130.12	120.29
10	V	115	LYS	C-N-CA	6.92	130.12	120.29
3	E	166	PHE	CA-C-O	6.92	128.08	120.82
2	C	421	VAL	O-C-N	6.92	128.58	121.87
12	X	32	ASN	CA-C-N	6.91	127.50	120.38
12	X	32	ASN	C-N-CA	6.91	127.50	120.38
1	3	67	MET	O-C-N	-6.91	113.77	122.27
2	A	398	GLN	N-CA-C	-6.91	104.98	113.41
6	I	18	ALA	CA-C-N	6.90	129.41	120.44
6	I	18	ALA	C-N-CA	6.90	129.41	120.44
2	B	9	GLU	CA-C-N	6.88	129.79	120.63
2	B	9	GLU	C-N-CA	6.88	129.79	120.63
1	7	15	SER	CA-C-N	6.88	130.19	120.28
1	7	15	SER	C-N-CA	6.88	130.19	120.28
2	A	245	GLN	CA-C-N	6.88	130.06	120.29
2	A	245	GLN	C-N-CA	6.88	130.06	120.29
3	D	132	GLU	N-CA-C	-6.88	98.56	109.23
1	2	3	LEU	CA-C-N	6.88	130.19	120.42
1	2	3	LEU	C-N-CA	6.88	130.19	120.42
8	T	139	TRP	N-CA-C	-6.88	104.80	112.57
3	E	115	LYS	CA-C-N	6.87	126.63	119.76
3	E	115	LYS	C-N-CA	6.87	126.63	119.76
2	B	237	THR	CA-C-N	6.86	129.48	120.28
2	B	237	THR	C-N-CA	6.86	129.48	120.28
3	F	269	SER	N-CA-C	-6.86	103.73	111.14
1	9	36	GLY	CA-C-N	6.86	129.86	120.46
1	9	36	GLY	C-N-CA	6.86	129.86	120.46
2	A	438	LEU	CA-C-N	6.86	131.71	120.94
2	A	438	LEU	C-N-CA	6.86	131.71	120.94
3	E	239	ILE	N-CA-C	-6.86	103.79	110.72
1	0	9	TYR	N-CA-C	6.86	118.83	111.36
4	G	6	VAL	CA-C-N	6.85	130.02	120.29
4	G	6	VAL	C-N-CA	6.85	130.02	120.29
3	D	452	ILE	CA-C-N	6.85	128.40	119.84
3	D	452	ILE	C-N-CA	6.85	128.40	119.84
3	F	74	GLU	CA-C-N	6.85	130.44	120.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	74	GLU	C-N-CA	6.85	130.44	120.71
7	O	59	ASN	CA-C-N	6.84	127.24	119.92
7	O	59	ASN	C-N-CA	6.84	127.24	119.92
1	7	64	PHE	CA-C-N	6.83	129.32	120.44
1	7	64	PHE	C-N-CA	6.83	129.32	120.44
10	V	59	ARG	CA-C-N	6.83	129.43	120.28
10	V	59	ARG	C-N-CA	6.83	129.43	120.28
11	W	6	PRO	CA-C-O	-6.83	110.65	120.56
2	C	181	ALA	CA-C-O	-6.83	113.65	120.82
3	D	79	THR	O-C-N	6.83	129.35	122.12
2	C	321	GLY	N-CA-C	-6.82	103.81	112.54
1	9	3	LEU	N-CA-C	6.82	118.71	111.28
3	E	471	GLU	CA-C-O	6.82	127.78	120.55
2	A	472	SER	N-CA-C	-6.82	103.85	111.28
1	2	20	LEU	CA-C-N	6.81	127.54	119.98
1	2	20	LEU	C-N-CA	6.81	127.54	119.98
2	B	342	THR	CA-C-N	6.81	129.30	120.44
2	B	342	THR	C-N-CA	6.81	129.30	120.44
2	B	9	GLU	CA-C-O	6.80	127.72	119.49
11	W	36	GLN	CA-C-N	6.80	132.55	121.87
11	W	36	GLN	C-N-CA	6.80	132.55	121.87
3	D	223	ASN	N-CA-C	-6.80	105.01	113.38
4	G	157	GLY	O-C-N	6.80	128.71	122.18
1	8	62	GLY	O-C-N	6.80	128.72	122.19
3	D	189	GLU	N-CA-C	6.79	120.15	109.96
2	A	387	GLN	CA-C-O	-6.79	113.69	120.82
1	4	44	LYS	N-CA-C	6.79	120.44	111.75
2	C	390	GLY	O-C-N	6.79	128.78	122.19
3	E	321	ALA	O-C-N	-6.79	115.02	120.38
3	E	430	LYS	N-CA-C	-6.79	98.71	109.23
11	W	83	TYR	N-CA-C	-6.78	103.35	111.69
3	F	465	ASP	CA-C-N	6.78	129.75	120.46
3	F	465	ASP	C-N-CA	6.78	129.75	120.46
2	A	503	THR	CA-C-N	6.78	129.36	120.28
2	A	503	THR	C-N-CA	6.78	129.36	120.28
8	T	213	LEU	CA-C-N	6.77	129.35	120.28
8	T	213	LEU	C-N-CA	6.77	129.35	120.28
2	C	428	GLN	CA-C-N	6.77	129.35	120.28
2	C	428	GLN	C-N-CA	6.77	129.35	120.28
2	B	232	ILE	N-CA-C	-6.77	98.38	108.12
2	A	436	SER	CA-C-O	-6.76	112.37	121.02
2	B	84	VAL	CA-C-N	6.75	133.15	122.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	84	VAL	C-N-CA	6.75	133.15	122.21
3	D	434	LEU	CA-C-O	-6.75	113.27	120.42
5	H	56	VAL	N-CA-C	-6.74	98.67	108.11
2	C	111	ASP	N-CA-C	-6.74	101.05	110.35
2	B	414	ALA	CA-C-N	6.74	129.31	120.28
2	B	414	ALA	C-N-CA	6.74	129.31	120.28
2	B	470	PHE	CA-C-N	6.74	129.31	120.28
2	B	470	PHE	C-N-CA	6.74	129.31	120.28
1	8	43	ILE	CA-C-N	6.73	129.60	120.38
1	8	43	ILE	C-N-CA	6.73	129.60	120.38
3	E	405	GLU	CA-C-N	6.73	129.30	120.28
3	E	405	GLU	C-N-CA	6.73	129.30	120.28
3	F	260	ARG	CA-C-N	6.72	129.84	120.29
3	F	260	ARG	C-N-CA	6.72	129.84	120.29
8	T	98	ILE	CA-C-O	6.72	127.90	120.71
3	D	25	PHE	N-CA-C	-6.72	98.97	109.72
3	E	410	ILE	CA-C-N	6.72	129.18	120.44
3	E	410	ILE	C-N-CA	6.72	129.18	120.44
2	B	135	ALA	CA-C-N	6.72	126.63	119.85
2	B	135	ALA	C-N-CA	6.72	126.63	119.85
7	O	81	LEU	N-CA-C	-6.72	102.49	111.96
3	D	364	GLY	N-CA-C	-6.71	104.21	112.33
1	1	47	VAL	N-CA-C	6.71	119.47	111.09
1	4	51	ALA	N-CA-C	6.71	118.59	111.28
2	B	98	ASP	CA-C-O	-6.70	114.09	121.33
3	D	184	PHE	N-CA-C	-6.70	98.31	109.24
3	F	422	GLU	CA-C-N	6.70	131.62	120.64
3	F	422	GLU	C-N-CA	6.70	131.62	120.64
1	3	28	ILE	CA-C-N	6.69	129.13	120.56
1	3	28	ILE	C-N-CA	6.69	129.13	120.56
1	4	6	ALA	CA-C-N	6.69	129.91	120.28
1	4	6	ALA	C-N-CA	6.69	129.91	120.28
10	V	27	THR	CA-C-N	6.69	130.48	120.31
10	V	27	THR	C-N-CA	6.69	130.48	120.31
3	D	154	GLY	O-C-N	6.68	127.56	123.35
3	E	343	GLY	CA-C-O	6.68	127.34	119.46
3	F	208	ASN	CA-C-N	6.68	129.23	120.28
3	F	208	ASN	C-N-CA	6.68	129.23	120.28
1	8	10	ILE	O-C-N	-6.68	115.37	121.91
5	H	111	ASN	CA-C-N	6.68	131.25	120.30
5	H	111	ASN	C-N-CA	6.68	131.25	120.30
2	B	96	ILE	N-CA-C	-6.67	100.93	109.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	404	ALA	CA-C-O	-6.67	113.83	120.70
2	C	444	VAL	CA-C-N	6.67	126.12	118.85
2	C	444	VAL	C-N-CA	6.67	126.12	118.85
1	7	60	ALA	CA-C-N	6.67	129.21	120.28
1	7	60	ALA	C-N-CA	6.67	129.21	120.28
1	7	70	PHE	CA-C-O	6.67	127.62	120.55
2	B	37	GLY	CA-C-N	6.67	134.27	121.54
2	B	37	GLY	C-N-CA	6.67	134.27	121.54
3	D	418	PHE	CA-C-N	6.67	129.11	120.44
3	D	418	PHE	C-N-CA	6.67	129.11	120.44
3	D	220	GLY	CA-C-N	6.66	132.12	120.87
3	D	220	GLY	C-N-CA	6.66	132.12	120.87
2	C	271	ASP	N-CA-C	-6.65	97.21	108.26
3	E	183	VAL	N-CA-C	-6.65	98.55	108.46
1	2	57	LEU	CA-C-N	6.65	129.09	120.44
1	2	57	LEU	C-N-CA	6.65	129.09	120.44
1	6	10	ILE	CA-C-N	6.65	127.36	119.98
1	6	10	ILE	C-N-CA	6.65	127.36	119.98
1	9	6	ALA	N-CA-C	6.64	118.52	111.28
3	D	251	VAL	N-CA-C	-6.63	99.03	108.65
4	G	93	LYS	CA-C-O	-6.63	113.39	120.42
2	A	10	VAL	O-C-N	6.63	128.30	121.87
2	C	183	ASP	CA-C-N	6.63	129.16	120.28
2	C	183	ASP	C-N-CA	6.63	129.16	120.28
2	B	401	GLU	CA-C-N	6.62	128.91	120.56
2	B	401	GLU	C-N-CA	6.62	128.91	120.56
3	E	87	VAL	N-CA-C	-6.62	99.13	108.80
2	C	70	PRO	N-CA-C	-6.62	104.53	113.40
1	1	72	LEU	CA-C-N	6.61	129.03	120.44
1	1	72	LEU	C-N-CA	6.61	129.03	120.44
3	F	313	PRO	CA-C-N	6.61	131.79	122.08
3	F	313	PRO	C-N-CA	6.61	131.79	122.08
2	B	413	ASP	N-CA-C	-6.60	101.19	110.50
2	C	336	VAL	CA-C-O	6.60	125.23	118.96
1	4	25	GLY	CA-C-O	6.59	127.84	121.05
2	B	201	LEU	N-CA-C	-6.59	99.17	109.72
1	0	6	ALA	CA-C-N	6.59	129.11	120.28
1	0	6	ALA	C-N-CA	6.59	129.11	120.28
3	E	145	ALA	CA-C-N	6.58	126.62	119.90
3	E	145	ALA	C-N-CA	6.58	126.62	119.90
4	G	199	ILE	N-CA-C	-6.58	98.40	107.75
1	5	46	THR	CA-C-O	6.58	127.48	120.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	238	ALA	O-C-N	6.58	129.09	122.12
2	C	422	ARG	CA-C-N	6.57	127.27	119.98
2	C	422	ARG	C-N-CA	6.57	127.27	119.98
2	B	66	LEU	N-CA-C	-6.57	105.84	114.31
12	X	2	VAL	N-CA-C	-6.57	102.88	111.09
3	E	424	PHE	O-C-N	6.56	128.82	122.07
3	E	202	LYS	O-C-N	6.55	129.62	122.15
1	3	14	ILE	O-C-N	-6.55	115.52	121.87
1	5	55	PHE	CA-C-N	6.55	128.96	120.44
1	5	55	PHE	C-N-CA	6.55	128.96	120.44
4	G	30	ARG	CA-C-N	6.55	129.06	120.28
4	G	30	ARG	C-N-CA	6.55	129.06	120.28
1	8	53	LEU	CA-C-O	6.55	127.69	120.82
3	E	224	GLU	CA-C-N	6.55	127.12	120.38
3	E	224	GLU	C-N-CA	6.55	127.12	120.38
1	0	65	CYS	O-C-N	6.54	129.06	122.12
3	D	270	ALA	O-C-N	6.54	129.61	122.15
12	X	59	GLU	CA-C-N	6.54	130.85	121.50
12	X	59	GLU	C-N-CA	6.54	130.85	121.50
1	3	44	LYS	CA-C-O	-6.54	112.88	120.20
2	C	137	GLY	CA-C-N	6.54	129.70	120.42
2	C	137	GLY	C-N-CA	6.54	129.70	120.42
3	D	416	GLN	CA-C-N	6.53	126.55	119.89
3	D	416	GLN	C-N-CA	6.53	126.55	119.89
2	C	325	ALA	CA-C-N	-6.53	115.67	122.85
2	C	325	ALA	C-N-CA	-6.53	115.67	122.85
4	G	153	VAL	CA-C-O	-6.53	113.80	121.05
1	0	2	GLN	CA-C-N	6.53	129.32	120.44
1	0	2	GLN	C-N-CA	6.53	129.32	120.44
2	B	92	ARG	CA-C-N	6.53	128.93	120.44
2	B	92	ARG	C-N-CA	6.53	128.93	120.44
6	I	34	VAL	CA-C-N	6.53	129.68	120.28
6	I	34	VAL	C-N-CA	6.53	129.68	120.28
2	B	328	VAL	N-CA-C	-6.53	98.79	108.45
2	A	291	PRO	CA-C-O	-6.52	113.80	121.95
3	D	326	PHE	CA-C-N	6.52	129.02	120.28
3	D	326	PHE	C-N-CA	6.52	129.02	120.28
3	F	277	SER	O-C-N	-6.52	113.23	121.78
1	0	72	LEU	N-CA-C	6.52	118.47	111.36
2	B	70	PRO	N-CA-C	-6.52	105.47	114.27
2	B	424	GLU	N-CA-C	6.52	118.39	111.28
1	8	2	GLN	N-CA-C	6.51	118.38	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	167	ILE	O-C-N	-6.50	115.13	121.83
2	B	189	LYS	O-C-N	6.50	129.01	122.12
3	E	260	ARG	CA-C-N	6.50	128.89	120.44
3	E	260	ARG	C-N-CA	6.50	128.89	120.44
2	C	99	VAL	CA-C-O	-6.50	111.25	119.95
3	D	49	GLU	CA-C-N	6.49	130.92	121.18
3	D	49	GLU	C-N-CA	6.49	130.92	121.18
2	A	123	ILE	N-CA-C	-6.49	99.02	108.11
3	D	310	VAL	N-CA-C	-6.49	99.03	108.11
3	E	413	PHE	CA-C-N	6.49	129.62	120.28
3	E	413	PHE	C-N-CA	6.49	129.62	120.28
3	F	453	PRO	CA-C-N	6.48	129.50	120.29
3	F	453	PRO	C-N-CA	6.48	129.50	120.29
3	F	428	PRO	CA-C-N	6.48	129.48	121.06
3	F	428	PRO	C-N-CA	6.48	129.48	121.06
4	G	27	ALA	CA-C-O	6.48	127.42	120.55
3	D	87	VAL	CA-C-O	-6.48	115.29	121.64
2	B	329	ILE	N-CA-C	-6.46	98.73	108.17
1	6	65	CYS	CA-C-N	6.46	129.47	120.29
1	6	65	CYS	C-N-CA	6.46	129.47	120.29
2	B	324	THR	CA-C-O	-6.46	113.86	121.16
1	6	60	ALA	CA-C-N	6.46	128.84	120.44
1	6	60	ALA	C-N-CA	6.46	128.84	120.44
2	C	146	GLU	CA-C-O	-6.46	112.62	120.05
1	8	9	TYR	N-CA-C	6.45	118.39	111.36
2	B	468	SER	CA-C-N	6.45	129.45	120.29
2	B	468	SER	C-N-CA	6.45	129.45	120.29
2	A	9	GLU	CA-C-N	6.44	129.28	120.46
2	A	9	GLU	C-N-CA	6.44	129.28	120.46
10	V	71	ILE	CA-C-N	6.44	128.91	120.28
10	V	71	ILE	C-N-CA	6.44	128.91	120.28
3	E	353	SER	N-CA-C	-6.43	98.89	108.99
1	2	46	THR	CA-C-N	6.43	130.85	120.30
1	2	46	THR	C-N-CA	6.43	130.85	120.30
2	C	400	ARG	CA-C-O	-6.43	114.07	120.82
10	V	113	GLU	CA-C-N	6.43	128.90	120.28
10	V	113	GLU	C-N-CA	6.43	128.90	120.28
2	A	47	ASN	N-CA-C	-6.43	105.36	113.72
3	E	311	TYR	N-CA-C	-6.43	99.82	110.17
4	G	204	ASN	CA-C-O	-6.42	114.98	122.37
4	G	44	MET	CA-C-N	6.42	128.89	120.28
4	G	44	MET	C-N-CA	6.42	128.89	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	216	ALA	CA-C-O	-6.42	113.61	120.42
4	G	45	ASP	N-CA-C	6.42	118.28	111.28
3	F	66	GLY	CA-C-N	6.41	131.30	122.77
3	F	66	GLY	C-N-CA	6.41	131.30	122.77
3	E	93	GLY	N-CA-C	-6.41	106.28	115.64
1	4	71	LEU	CA-C-N	6.41	128.87	120.28
1	4	71	LEU	C-N-CA	6.41	128.87	120.28
3	E	264	ALA	N-CA-C	-6.41	104.30	111.28
2	A	448	TYR	CA-C-N	6.40	128.76	120.44
2	A	448	TYR	C-N-CA	6.40	128.76	120.44
2	A	30	THR	CA-C-N	6.40	127.20	121.82
2	A	30	THR	C-N-CA	6.40	127.20	121.82
3	D	467	VAL	O-C-N	6.40	128.43	121.83
3	F	432	VAL	N-CA-C	-6.40	98.90	108.12
2	B	204	VAL	O-C-N	-6.40	116.42	123.20
10	V	56	SER	N-CA-C	-6.39	105.06	112.92
3	F	440	SER	O-C-N	6.39	130.13	122.27
4	G	170	VAL	N-CA-C	-6.38	104.11	110.62
11	W	64	LYS	CA-C-N	6.38	126.30	119.28
11	W	64	LYS	C-N-CA	6.38	126.30	119.28
1	6	68	VAL	N-CA-C	-6.38	104.28	110.72
2	C	461	SER	CA-C-O	-6.37	112.64	119.97
2	A	274	SER	CA-C-N	6.37	131.36	120.72
2	A	274	SER	C-N-CA	6.37	131.36	120.72
3	E	310	VAL	N-CA-C	-6.37	99.31	108.48
1	4	37	VAL	CA-C-N	6.37	129.99	120.31
1	4	37	VAL	C-N-CA	6.37	129.99	120.31
3	F	282	GLN	CA-C-N	6.36	128.19	120.94
3	F	282	GLN	C-N-CA	6.36	128.19	120.94
4	G	3	LEU	O-C-N	6.36	128.62	122.07
1	3	4	VAL	N-CA-C	6.35	117.10	110.62
3	F	433	ARG	N-CA-C	-6.35	102.59	110.41
3	F	177	ALA	N-CA-C	-6.35	104.36	111.28
4	G	189	GLU	O-C-N	6.35	128.85	122.12
8	T	123	ILE	O-C-N	-6.35	115.29	121.83
3	F	19	ALA	CA-C-N	6.34	129.60	120.98
3	F	19	ALA	C-N-CA	6.34	129.60	120.98
1	3	59	GLU	CA-C-N	6.34	128.77	120.28
1	3	59	GLU	C-N-CA	6.34	128.77	120.28
3	E	323	ALA	CA-C-O	-6.34	113.83	120.55
2	A	285	LEU	CA-C-O	-6.34	113.83	120.55
3	E	176	LYS	N-CA-C	-6.34	105.20	113.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	430	LYS	N-CA-C	-6.33	99.67	109.24
3	F	60	ARG	N-CA-C	-6.33	97.95	108.34
3	F	295	ARG	CA-C-N	6.33	129.50	122.22
3	F	295	ARG	C-N-CA	6.33	129.50	122.22
2	C	181	ALA	O-C-N	6.33	128.59	122.07
2	C	425	ARG	CA-C-N	6.33	128.66	120.44
2	C	425	ARG	C-N-CA	6.33	128.66	120.44
3	E	179	GLY	CA-C-N	-6.33	116.01	122.27
3	E	179	GLY	C-N-CA	-6.33	116.01	122.27
9	U	86	LYS	N-CA-C	6.33	117.84	111.07
9	U	150	ALA	N-CA-C	6.33	118.17	111.28
1	3	41	PRO	N-CA-C	6.32	125.50	112.47
2	B	309	GLU	N-CA-C	-6.32	105.32	113.16
3	F	430	LYS	CA-C-O	6.32	128.18	120.60
3	D	474	ALA	N-CA-C	6.31	118.24	111.36
3	E	221	GLN	N-CA-C	-6.31	99.99	109.96
2	C	355	GLU	CA-C-O	6.31	128.24	121.11
3	E	101	GLU	CA-C-O	-6.31	114.14	120.64
6	I	55	GLU	CA-C-N	6.30	126.27	119.78
6	I	55	GLU	C-N-CA	6.30	126.27	119.78
1	7	57	LEU	N-CA-C	6.30	118.23	111.36
7	O	75	VAL	CA-C-N	6.30	129.89	120.31
7	O	75	VAL	C-N-CA	6.30	129.89	120.31
2	B	84	VAL	CA-C-O	-6.30	114.49	121.23
3	F	225	PRO	CA-C-N	6.30	126.21	119.28
3	F	225	PRO	C-N-CA	6.30	126.21	119.28
1	4	41	PRO	N-CA-C	6.30	125.44	112.47
2	B	446	LEU	CA-C-N	6.30	130.63	120.30
2	B	446	LEU	C-N-CA	6.30	130.63	120.30
3	D	457	PHE	CA-C-O	6.29	125.72	118.55
2	A	492	SER	CA-C-O	-6.29	114.54	121.89
2	C	280	TYR	CA-C-N	6.29	128.70	120.28
2	C	280	TYR	C-N-CA	6.29	128.70	120.28
2	B	8	THR	CA-C-O	6.28	126.70	119.35
1	1	68	VAL	CA-C-N	6.28	128.61	120.44
1	1	68	VAL	C-N-CA	6.28	128.61	120.44
1	3	32	ALA	CA-C-O	6.28	127.08	120.42
2	B	172	ASP	N-CA-C	6.28	119.09	110.24
10	V	79	LYS	CA-C-N	6.27	126.60	119.83
10	V	79	LYS	C-N-CA	6.27	126.60	119.83
2	A	441	GLU	CA-C-N	6.27	129.31	120.28
2	A	441	GLU	C-N-CA	6.27	129.31	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	463	ILE	N-CA-C	6.26	117.01	110.62
12	X	41	GLU	CA-C-N	6.26	132.38	122.36
12	X	41	GLU	C-N-CA	6.26	132.38	122.36
4	G	220	THR	CA-C-N	6.26	128.67	120.28
4	G	220	THR	C-N-CA	6.26	128.67	120.28
4	G	245	GLY	CA-C-N	6.26	128.67	120.28
4	G	245	GLY	C-N-CA	6.26	128.67	120.28
3	D	286	ALA	CA-C-N	6.26	128.67	120.28
3	D	286	ALA	C-N-CA	6.26	128.67	120.28
3	E	467	VAL	N-CA-C	-6.26	104.41	110.42
3	F	216	ALA	N-CA-C	-6.26	99.96	109.85
11	W	43	LYS	CA-C-O	-6.26	113.94	120.70
1	4	62	GLY	CA-C-O	-6.26	114.31	120.75
1	6	14	ILE	O-C-N	-6.26	115.80	121.87
3	F	149	ARG	CA-C-N	6.25	131.52	123.08
3	F	149	ARG	C-N-CA	6.25	131.52	123.08
2	B	498	SER	CA-C-N	6.25	129.17	120.29
2	B	498	SER	C-N-CA	6.25	129.17	120.29
3	D	168	GLN	O-C-N	6.25	128.75	122.12
2	B	72	GLN	CA-C-N	6.25	130.28	121.66
2	B	72	GLN	C-N-CA	6.25	130.28	121.66
2	C	324	THR	CA-C-O	-6.25	114.75	121.56
4	G	92	ALA	O-C-N	6.24	128.74	122.12
3	D	386	ASP	N-CA-C	6.24	117.75	111.07
7	O	111	LEU	O-C-N	6.24	129.26	122.15
7	O	160	LYS	CA-C-N	6.24	127.05	120.12
7	O	160	LYS	C-N-CA	6.24	127.05	120.12
11	W	77	GLY	CA-C-N	6.24	128.64	120.28
11	W	77	GLY	C-N-CA	6.24	128.64	120.28
2	A	390	GLY	CA-C-N	6.24	131.25	122.08
2	A	390	GLY	C-N-CA	6.24	131.25	122.08
1	6	57	LEU	CA-C-N	6.23	128.63	120.28
1	6	57	LEU	C-N-CA	6.23	128.63	120.28
4	G	223	ALA	CA-C-N	6.23	129.14	120.29
4	G	223	ALA	C-N-CA	6.23	129.14	120.29
1	6	23	GLY	CA-C-N	6.23	128.53	120.56
1	6	23	GLY	C-N-CA	6.23	128.53	120.56
2	B	271	ASP	O-C-N	-6.23	116.05	123.27
9	U	139	GLU	CA-C-N	6.23	128.53	120.44
9	U	139	GLU	C-N-CA	6.23	128.53	120.44
1	3	54	GLY	CA-C-N	6.22	128.91	120.44
1	3	54	GLY	C-N-CA	6.22	128.91	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	9	27	ALA	N-CA-C	6.22	118.06	111.28
3	D	199	ARG	N-CA-C	6.22	118.14	111.36
1	6	54	GLY	N-CA-C	6.22	120.19	112.73
8	T	163	THR	CA-C-N	6.21	128.60	120.28
8	T	163	THR	C-N-CA	6.21	128.60	120.28
14	Z	22	THR	O-C-N	6.21	128.79	122.09
3	D	91	THR	N-CA-C	-6.21	103.12	111.87
3	E	33	ILE	N-CA-C	-6.20	99.44	108.87
3	F	383	SER	N-CA-C	6.20	118.04	111.28
9	U	80	PHE	CA-C-N	6.20	128.87	120.44
9	U	80	PHE	C-N-CA	6.20	128.87	120.44
2	A	278	VAL	CA-C-O	-6.20	113.78	120.47
3	E	218	VAL	N-CA-C	-6.20	99.19	108.12
3	D	347	ALA	CA-C-N	6.20	128.87	120.63
3	D	347	ALA	C-N-CA	6.20	128.87	120.63
1	5	27	ALA	N-CA-C	6.20	118.03	111.28
1	3	53	LEU	CA-C-N	6.19	126.85	119.98
1	3	53	LEU	C-N-CA	6.19	126.85	119.98
1	9	3	LEU	CA-C-O	6.19	127.11	120.55
1	4	18	GLY	N-CA-C	6.18	121.49	113.27
2	C	466	PHE	CA-C-N	6.18	128.48	120.44
2	C	466	PHE	C-N-CA	6.18	128.48	120.44
3	F	241	GLU	CA-C-N	6.18	128.57	120.28
3	F	241	GLU	C-N-CA	6.18	128.57	120.28
3	D	466	VAL	O-C-N	-6.18	114.57	122.17
3	E	142	ASP	N-CA-C	6.18	117.81	111.14
2	A	283	LEU	CA-C-O	-6.18	114.33	120.82
9	U	186	ASN	CA-C-O	-6.18	113.70	120.87
3	D	176	LYS	CA-C-N	6.18	128.47	120.44
3	D	176	LYS	C-N-CA	6.18	128.47	120.44
1	8	65	CYS	CA-C-N	6.17	128.55	120.28
1	8	65	CYS	C-N-CA	6.17	128.55	120.28
4	G	239	ASN	CA-C-N	6.17	128.83	120.44
4	G	239	ASN	C-N-CA	6.17	128.83	120.44
11	W	17	SER	CA-C-N	6.17	127.80	120.09
11	W	17	SER	C-N-CA	6.17	127.80	120.09
1	5	25	GLY	CA-C-N	6.17	128.91	120.46
1	5	25	GLY	C-N-CA	6.17	128.91	120.46
3	D	319	ASP	O-C-N	-6.17	114.23	121.32
2	B	389	ALA	N-CA-C	-6.17	105.69	112.72
3	E	236	GLY	O-C-N	6.16	128.11	122.19
11	W	14	ASN	N-CA-C	-6.16	103.27	111.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	8	3	LEU	O-C-N	6.16	128.65	122.12
2	C	204	VAL	O-C-N	-6.16	116.55	123.20
6	I	43	PHE	N-CA-C	-6.16	99.97	109.52
2	A	242	ALA	CA-C-O	-6.16	112.70	118.73
3	F	121	PRO	CA-C-N	6.16	126.48	119.83
3	F	121	PRO	C-N-CA	6.16	126.48	119.83
3	D	304	VAL	N-CA-C	-6.15	101.06	109.55
3	D	124	PHE	N-CA-C	6.15	117.98	111.28
11	W	59	ASP	CA-C-N	6.15	130.57	121.84
11	W	59	ASP	C-N-CA	6.15	130.57	121.84
2	A	447	ILE	CA-C-O	6.15	127.11	120.47
3	F	230	ALA	CA-C-O	-6.15	114.37	120.82
3	F	189	GLU	N-CA-C	-6.14	100.14	109.85
2	C	334	GLY	O-C-N	-6.14	115.65	122.47
1	1	61	THR	CA-C-N	6.14	126.80	119.98
1	1	61	THR	C-N-CA	6.14	126.80	119.98
1	3	43	ILE	CA-C-N	6.13	129.34	120.38
1	3	43	ILE	C-N-CA	6.13	129.34	120.38
4	G	213	THR	N-CA-C	-6.13	105.83	113.38
12	X	6	LEU	O-C-N	-6.13	115.62	122.12
7	O	30	ASN	N-CA-C	-6.13	104.41	113.61
2	A	19	LYS	N-CA-C	6.13	118.93	111.82
2	A	137	GLY	CA-C-O	-6.13	116.15	122.28
5	H	129	VAL	N-CA-C	6.13	116.87	110.62
2	A	80	SER	O-C-N	6.13	130.19	122.65
4	G	152	SER	N-CA-C	6.13	118.87	111.40
7	O	147	VAL	CA-C-N	6.13	126.74	119.94
7	O	147	VAL	C-N-CA	6.13	126.74	119.94
3	E	366	GLU	CA-C-N	6.12	128.49	120.28
3	E	366	GLU	C-N-CA	6.12	128.49	120.28
3	D	388	ILE	CA-C-N	6.12	128.40	120.44
3	D	388	ILE	C-N-CA	6.12	128.40	120.44
2	B	420	LEU	N-CA-C	-6.12	104.52	111.07
9	U	114	GLN	CA-C-N	6.12	128.97	120.29
9	U	114	GLN	C-N-CA	6.12	128.97	120.29
2	A	377	GLY	N-CA-C	6.11	121.56	113.37
3	F	266	SER	N-CA-C	-6.11	104.61	111.28
3	F	284	THR	CA-C-N	6.11	128.39	120.44
3	F	284	THR	C-N-CA	6.11	128.39	120.44
3	D	39	ILE	N-CA-C	-6.11	98.94	107.80
3	D	29	GLU	N-CA-C	-6.11	98.12	108.26
3	F	304	VAL	N-CA-C	-6.11	99.25	108.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	310	ARG	CA-C-O	6.11	126.67	119.28
2	A	139	LEU	CA-C-O	-6.11	111.79	120.16
1	7	26	ILE	CA-C-N	6.10	128.96	120.29
1	7	26	ILE	C-N-CA	6.10	128.96	120.29
3	F	61	THR	CA-C-N	6.10	130.97	123.10
3	F	61	THR	C-N-CA	6.10	130.97	123.10
3	F	376	GLU	N-CA-C	6.10	117.93	111.28
2	C	484	GLU	CA-C-N	6.09	128.81	120.46
2	C	484	GLU	C-N-CA	6.09	128.81	120.46
3	F	240	ALA	CA-C-N	6.09	128.44	120.28
3	F	240	ALA	C-N-CA	6.09	128.44	120.28
3	F	76	VAL	CA-C-O	6.08	126.27	120.31
1	0	68	VAL	CA-C-O	6.08	127.04	120.47
2	A	276	GLN	N-CA-C	-6.08	104.21	111.69
3	D	257	ASN	O-C-N	6.08	130.49	122.95
9	U	117	ALA	CA-C-N	6.08	128.71	120.44
9	U	117	ALA	C-N-CA	6.08	128.71	120.44
5	H	119	GLU	CA-C-O	-6.08	114.11	120.55
2	A	24	GLU	CA-C-N	6.07	130.10	121.42
2	A	24	GLU	C-N-CA	6.07	130.10	121.42
3	D	300	LYS	CA-C-O	6.07	126.66	119.56
2	A	175	THR	N-CA-C	-6.07	105.45	112.92
1	6	27	ALA	CA-C-N	6.07	128.21	120.56
1	6	27	ALA	C-N-CA	6.07	128.21	120.56
2	C	58	SER	N-CA-C	-6.07	104.75	111.36
3	F	107	GLY	CA-C-O	-6.06	112.85	121.52
4	G	34	ALA	CA-C-N	6.06	128.69	120.44
4	G	34	ALA	C-N-CA	6.06	128.69	120.44
1	4	33	LEU	N-CA-C	6.06	117.56	111.07
8	T	185	HIS	N-CA-C	6.06	117.97	111.36
3	E	245	ASP	CA-C-N	6.06	128.32	120.44
3	E	245	ASP	C-N-CA	6.06	128.32	120.44
2	B	106	LEU	O-C-N	6.06	130.59	122.96
3	D	359	ASP	N-CA-C	-6.05	100.55	109.81
3	E	258	ILE	N-CA-C	-6.05	106.84	112.83
2	B	185	ILE	N-CA-C	-6.05	104.45	110.62
2	C	339	TYR	CA-C-N	6.05	124.05	120.24
2	C	339	TYR	C-N-CA	6.05	124.05	120.24
2	A	99	VAL	N-CA-C	-6.05	104.23	109.19
2	B	479	ASN	CA-C-O	6.05	126.35	119.27
3	E	394	ASP	N-CA-C	-6.05	105.39	112.89
11	W	70	ALA	CA-C-N	6.05	129.50	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	W	70	ALA	C-N-CA	6.05	129.50	120.31
2	C	184	THR	N-CA-C	-6.04	104.69	111.28
2	A	441	GLU	CA-C-O	6.04	127.16	120.82
7	O	138	GLU	CA-C-N	6.04	128.29	120.44
7	O	138	GLU	C-N-CA	6.04	128.29	120.44
1	2	24	ILE	N-CA-C	-6.04	104.62	110.72
2	C	428	GLN	N-CA-C	6.04	118.82	111.82
3	E	38	GLU	CA-C-O	6.04	126.76	120.30
1	4	29	VAL	CA-C-N	6.03	128.86	120.29
1	4	29	VAL	C-N-CA	6.03	128.86	120.29
2	A	486	ARG	N-CA-C	6.03	117.52	111.07
11	W	61	ALA	N-CA-C	-6.03	97.96	110.80
10	V	107	GLU	CA-C-N	6.02	128.35	120.28
10	V	107	GLU	C-N-CA	6.02	128.35	120.28
3	E	99	ILE	N-CA-C	-6.02	106.45	112.17
3	F	388	ILE	CA-C-N	6.02	128.27	120.44
3	F	388	ILE	C-N-CA	6.02	128.27	120.44
2	A	182	LEU	CA-C-N	6.02	128.95	120.28
2	A	182	LEU	C-N-CA	6.02	128.95	120.28
3	F	307	VAL	N-CA-C	-6.02	97.71	107.28
4	G	210	PHE	CA-C-N	6.02	128.34	120.28
4	G	210	PHE	C-N-CA	6.02	128.34	120.28
14	Z	4	LEU	N-CA-C	-6.02	103.84	108.78
1	8	11	GLY	CA-C-O	-6.01	114.91	120.80
2	A	479	ASN	CA-C-N	6.01	128.34	120.28
2	A	479	ASN	C-N-CA	6.01	128.34	120.28
4	G	148	ASP	CA-C-O	-6.01	114.51	120.70
1	4	14	ILE	CA-C-N	6.01	128.33	120.28
1	4	14	ILE	C-N-CA	6.01	128.33	120.28
2	C	268	ILE	O-C-N	-6.01	116.77	123.26
1	2	3	LEU	N-CA-C	6.01	118.60	111.33
3	E	89	ARG	N-CA-C	-6.00	105.54	112.92
3	F	10	THR	CA-C-O	6.00	126.97	120.43
1	6	16	THR	CA-C-N	6.00	128.68	120.46
1	6	16	THR	C-N-CA	6.00	128.68	120.46
2	C	386	LYS	CA-C-N	6.00	128.32	120.28
2	C	386	LYS	C-N-CA	6.00	128.32	120.28
4	G	241	SER	CA-C-N	6.00	128.81	120.29
4	G	241	SER	C-N-CA	6.00	128.81	120.29
14	Z	25	ILE	N-CA-C	-6.00	104.50	110.62
7	O	100	CYS	CA-C-N	6.00	132.98	122.79
7	O	100	CYS	C-N-CA	6.00	132.98	122.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	88	GLY	N-CA-C	-5.99	102.66	110.45
10	V	171	ASN	N-CA-C	-5.99	99.03	108.14
14	Z	22	THR	CA-C-O	-5.99	114.53	120.70
2	A	430	LEU	N-CA-C	-5.99	104.75	111.28
1	3	11	GLY	CA-C-N	5.99	128.31	120.28
1	3	11	GLY	C-N-CA	5.99	128.31	120.28
2	A	236	ALA	N-CA-C	-5.99	96.64	107.60
1	2	27	ALA	CA-C-N	5.99	128.66	120.46
1	2	27	ALA	C-N-CA	5.99	128.66	120.46
1	5	68	VAL	CA-C-O	-5.98	114.73	120.95
2	A	171	GLY	O-C-N	-5.98	118.18	123.92
3	D	262	THR	CA-C-N	5.98	128.79	120.29
3	D	262	THR	C-N-CA	5.98	128.79	120.29
3	F	362	VAL	O-C-N	5.98	127.99	121.83
2	B	448	TYR	O-C-N	5.98	128.22	122.07
3	E	220	GLY	N-CA-C	-5.98	99.02	113.18
1	5	21	GLY	CA-C-N	5.97	128.77	120.29
1	5	21	GLY	C-N-CA	5.97	128.77	120.29
2	A	294	GLU	CA-C-O	-5.97	113.41	120.81
3	F	277	SER	N-CA-C	-5.97	100.83	109.31
3	F	154	GLY	CA-C-N	5.96	130.95	122.24
3	F	154	GLY	C-N-CA	5.96	130.95	122.24
2	A	401	GLU	N-CA-C	5.96	117.78	111.28
3	F	66	GLY	N-CA-C	-5.96	103.43	111.54
2	B	398	GLN	CA-C-N	5.96	128.54	120.38
2	B	398	GLN	C-N-CA	5.96	128.54	120.38
2	B	26	ASN	O-C-N	-5.96	115.02	122.35
2	C	370	GLY	CA-C-O	-5.96	112.42	119.45
3	F	228	ALA	CA-C-N	5.96	128.26	120.28
3	F	228	ALA	C-N-CA	5.96	128.26	120.28
1	3	16	THR	CA-C-N	5.95	129.88	120.47
1	3	16	THR	C-N-CA	5.95	129.88	120.47
14	Z	35	ILE	CA-C-O	5.95	126.89	120.47
1	0	10	ILE	CA-C-N	5.95	127.57	120.14
1	0	10	ILE	C-N-CA	5.95	127.57	120.14
7	O	39	SER	O-C-N	-5.94	115.37	122.15
2	C	176	GLY	N-CA-C	-5.94	104.66	114.76
2	C	352	ILE	N-CA-C	-5.94	99.56	108.12
9	U	125	ASP	CA-C-N	5.94	128.60	120.46
9	U	125	ASP	C-N-CA	5.94	128.60	120.46
2	B	197	GLU	CA-C-O	5.94	126.46	119.28
3	D	398	GLU	CA-C-O	5.94	126.71	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	V	8	ASN	N-CA-C	-5.94	104.75	112.23
1	3	19	LEU	CA-C-N	5.94	128.51	120.38
1	3	19	LEU	C-N-CA	5.94	128.51	120.38
2	A	343	ASN	CA-C-N	5.94	128.85	120.42
2	A	343	ASN	C-N-CA	5.94	128.85	120.42
3	F	355	SER	CA-C-N	5.93	128.82	120.28
3	F	355	SER	C-N-CA	5.93	128.82	120.28
4	G	151	LEU	N-CA-C	5.93	117.75	111.28
2	C	476	SER	N-CA-C	5.93	117.54	111.14
7	O	28	ALA	CA-C-O	5.93	126.70	120.42
2	A	231	SER	CA-C-O	-5.93	114.51	121.44
3	D	237	LEU	CA-C-O	5.93	126.70	120.42
2	B	264	LYS	N-CA-C	-5.92	99.74	109.40
2	C	412	LEU	N-CA-C	-5.92	98.75	108.41
2	C	189	LYS	CA-C-N	5.92	128.22	120.28
2	C	189	LYS	C-N-CA	5.92	128.22	120.28
1	3	10	ILE	CA-C-N	5.92	126.55	119.98
1	3	10	ILE	C-N-CA	5.92	126.55	119.98
2	B	487	GLU	N-CA-C	5.92	117.81	111.36
3	D	316	ASP	N-CA-C	-5.92	99.64	109.46
9	U	151	LYS	CA-C-N	5.92	128.49	120.44
9	U	151	LYS	C-N-CA	5.92	128.49	120.44
1	0	43	ILE	CA-C-N	5.92	128.48	120.38
1	0	43	ILE	C-N-CA	5.92	128.48	120.38
13	Y	13	TYR	N-CA-C	-5.92	104.72	112.41
1	6	22	ALA	CA-C-N	5.91	126.54	119.98
1	6	22	ALA	C-N-CA	5.91	126.54	119.98
3	E	29	GLU	O-C-N	5.91	130.02	123.16
3	E	272	LEU	CA-C-O	5.91	126.81	120.55
2	A	287	LEU	CA-C-N	5.91	130.55	122.34
2	A	287	LEU	C-N-CA	5.91	130.55	122.34
2	C	237	THR	O-C-N	-5.91	115.77	122.68
3	E	270	ALA	O-C-N	5.91	128.16	122.07
3	E	44	GLY	N-CA-C	-5.91	99.18	113.18
3	D	349	ASP	O-C-N	5.91	126.78	121.35
1	5	73	LEU	N-CA-C	5.90	117.39	111.07
2	A	428	GLN	CA-C-N	5.90	128.19	120.28
2	A	428	GLN	C-N-CA	5.90	128.19	120.28
2	B	184	THR	CA-C-N	5.90	128.55	120.46
2	B	184	THR	C-N-CA	5.90	128.55	120.46
1	7	53	LEU	CA-C-N	5.90	126.53	119.98
1	7	53	LEU	C-N-CA	5.90	126.53	119.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	503	THR	N-CA-C	5.90	117.38	111.07
2	C	136	PRO	N-CA-C	5.90	120.49	111.34
1	2	6	ALA	CA-C-O	-5.89	114.30	120.55
1	7	50	MET	CA-C-N	5.89	128.66	120.29
1	7	50	MET	C-N-CA	5.89	128.66	120.29
2	A	229	LYS	CA-C-N	5.89	132.08	122.65
2	A	229	LYS	C-N-CA	5.89	132.08	122.65
2	B	471	LEU	CA-C-O	5.89	126.80	120.55
3	E	142	ASP	O-C-N	-5.89	115.73	122.09
2	C	65	ALA	CA-C-N	5.89	128.17	120.28
2	C	65	ALA	C-N-CA	5.89	128.17	120.28
2	C	463	ILE	CA-C-O	5.89	127.08	120.95
3	D	235	THR	CA-C-O	-5.89	114.31	120.55
4	G	118	LEU	N-CA-C	5.89	118.65	111.82
1	9	20	LEU	CA-C-N	5.89	126.48	120.00
1	9	20	LEU	C-N-CA	5.89	126.48	120.00
9	U	180	VAL	CA-C-O	5.89	127.08	120.95
2	A	192	ASN	N-CA-C	-5.89	105.86	113.16
1	8	50	MET	CA-C-N	5.89	128.17	120.28
1	8	50	MET	C-N-CA	5.89	128.17	120.28
1	8	27	ALA	CA-C-N	5.88	128.52	120.46
1	8	27	ALA	C-N-CA	5.88	128.52	120.46
3	D	439	ALA	CA-C-N	5.88	128.16	120.28
3	D	439	ALA	C-N-CA	5.88	128.16	120.28
3	E	452	ILE	N-CA-C	-5.88	101.31	107.84
3	E	334	VAL	CA-C-O	-5.88	114.31	121.13
2	A	424	GLU	CA-C-N	5.88	128.64	120.29
2	A	424	GLU	C-N-CA	5.88	128.64	120.29
2	A	426	LEU	CA-C-N	5.88	128.16	120.28
2	A	426	LEU	C-N-CA	5.88	128.16	120.28
8	T	56	SER	CA-C-O	-5.88	115.15	121.56
3	E	356	ARG	N-CA-C	-5.88	105.76	113.17
2	A	115	ASN	CA-C-O	-5.88	114.22	119.86
2	B	180	VAL	O-C-N	-5.88	115.78	121.83
6	I	40	THR	N-CA-C	-5.88	99.37	108.42
1	3	18	GLY	CA-C-N	5.87	128.96	120.38
1	3	18	GLY	C-N-CA	5.87	128.96	120.38
2	B	53	GLU	O-C-N	-5.87	115.43	122.65
1	2	26	ILE	CA-C-N	5.86	128.14	120.28
1	2	26	ILE	C-N-CA	5.86	128.14	120.28
3	D	45	LYS	N-CA-C	-5.86	100.41	109.14
3	F	343	GLY	N-CA-C	-5.86	106.43	114.64

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	5	5	LEU	CA-C-N	5.86	128.06	120.44
1	5	5	LEU	C-N-CA	5.86	128.06	120.44
3	E	77	LEU	CA-C-N	5.86	130.56	122.77
3	E	77	LEU	C-N-CA	5.86	130.56	122.77
2	B	483	THR	CA-C-N	5.85	128.60	120.29
2	B	483	THR	C-N-CA	5.85	128.60	120.29
2	B	383	LYS	CA-C-O	-5.85	114.35	120.55
3	F	403	THR	CA-C-O	-5.85	114.35	120.55
1	9	13	GLY	CA-C-N	5.84	128.47	120.46
1	9	13	GLY	C-N-CA	5.84	128.47	120.46
11	W	37	GLY	CA-C-O	-5.84	113.16	121.52
2	C	102	GLY	CA-C-N	5.84	127.14	119.84
2	C	102	GLY	C-N-CA	5.84	127.14	119.84
3	F	443	ALA	CA-C-N	5.84	128.46	120.46
3	F	443	ALA	C-N-CA	5.84	128.46	120.46
13	Y	19	ALA	CA-C-N	5.84	126.42	120.00
13	Y	19	ALA	C-N-CA	5.84	126.42	120.00
2	A	182	LEU	O-C-N	5.84	128.31	122.12
2	A	43	VAL	CA-C-N	5.83	131.22	122.99
2	A	43	VAL	C-N-CA	5.83	131.22	122.99
2	A	233	ILE	CA-C-N	5.83	130.63	123.10
2	A	233	ILE	C-N-CA	5.83	130.63	123.10
2	B	407	GLN	CA-C-N	5.83	129.18	120.31
2	B	407	GLN	C-N-CA	5.83	129.18	120.31
12	X	9	ARG	O-C-N	5.83	128.08	122.07
7	O	8	PRO	O-C-N	5.83	123.99	121.31
1	0	36	GLY	CA-C-N	5.83	128.70	120.42
1	0	36	GLY	C-N-CA	5.83	128.70	120.42
1	6	17	ILE	CA-C-N	5.83	127.47	120.13
1	6	17	ILE	C-N-CA	5.83	127.47	120.13
3	D	153	ILE	N-CA-C	-5.83	97.45	107.24
9	U	93	ASN	CA-C-N	5.82	128.01	120.44
9	U	93	ASN	C-N-CA	5.82	128.01	120.44
2	C	121	GLY	CA-C-N	5.82	127.11	119.84
2	C	121	GLY	C-N-CA	5.82	127.11	119.84
3	E	432	VAL	CA-C-O	5.82	126.53	120.36
1	4	5	LEU	O-C-N	-5.82	115.96	122.12
3	F	380	THR	CA-C-O	-5.82	114.71	120.82
12	X	45	GLN	CA-C-N	5.82	131.00	121.87
12	X	45	GLN	C-N-CA	5.82	131.00	121.87
4	G	226	TYR	N-CA-C	-5.81	105.02	111.36
9	U	140	LEU	CA-C-N	5.81	128.07	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	U	140	LEU	C-N-CA	5.81	128.07	120.28
3	D	114	ARG	N-CA-C	-5.81	100.51	109.52
2	B	81	ASP	N-CA-C	-5.81	105.08	111.82
3	E	321	ALA	CA-C-N	5.81	125.18	118.85
3	E	321	ALA	C-N-CA	5.81	125.18	118.85
3	D	347	ALA	N-CA-C	-5.81	105.78	112.92
2	C	305	SER	N-CA-C	5.81	117.61	111.28
2	A	243	PRO	CA-C-N	5.80	128.53	120.29
2	A	243	PRO	C-N-CA	5.80	128.53	120.29
3	E	472	LYS	CA-C-N	5.80	128.52	120.29
3	E	472	LYS	C-N-CA	5.80	128.52	120.29
6	I	41	ASP	N-CA-C	-5.80	106.25	113.38
10	V	98	HIS	CA-C-N	5.80	127.97	120.44
10	V	98	HIS	C-N-CA	5.80	127.97	120.44
3	F	290	GLY	O-C-N	-5.79	116.63	122.19
3	F	26	GLU	CA-C-O	5.79	128.66	121.89
3	D	232	VAL	N-CA-C	-5.79	104.72	110.62
3	D	407	ALA	CA-C-O	5.78	126.66	120.70
2	A	87	GLY	CA-C-O	5.78	126.41	119.82
2	B	423	GLY	CA-C-O	-5.78	114.53	120.66
1	4	20	LEU	N-CA-C	5.78	117.58	111.28
1	6	31	ALA	CA-C-N	5.78	128.02	120.28
1	6	31	ALA	C-N-CA	5.78	128.02	120.28
3	D	267	GLU	CA-C-N	5.78	128.62	120.42
3	D	267	GLU	C-N-CA	5.78	128.62	120.42
1	2	47	VAL	CA-C-N	5.77	127.31	120.09
1	2	47	VAL	C-N-CA	5.77	127.31	120.09
2	C	296	TYR	CA-C-N	5.77	127.06	119.84
2	C	296	TYR	C-N-CA	5.77	127.06	119.84
14	Z	4	LEU	CA-C-O	5.77	121.29	117.94
4	G	96	ARG	CA-C-O	5.77	126.53	120.42
1	8	18	GLY	CA-C-N	5.76	128.58	120.28
1	8	18	GLY	C-N-CA	5.76	128.58	120.28
10	V	52	GLU	CA-C-N	5.76	128.36	120.35
10	V	52	GLU	C-N-CA	5.76	128.36	120.35
2	B	30	THR	N-CA-C	-5.76	100.66	109.41
3	D	377	THR	O-C-N	5.76	128.23	122.12
11	W	13	LYS	CA-C-O	-5.76	113.06	119.34
2	A	477	ASN	N-CA-C	5.76	117.36	111.14
3	E	412	ARG	CA-C-N	5.75	128.56	120.28
3	E	412	ARG	C-N-CA	5.75	128.56	120.28
1	0	27	ALA	CA-C-N	5.75	128.59	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	0	27	ALA	C-N-CA	5.75	128.59	120.42
3	F	326	PHE	CA-C-N	5.75	128.46	120.29
3	F	326	PHE	C-N-CA	5.75	128.46	120.29
3	D	90	GLU	N-CA-C	-5.75	105.85	112.92
7	O	101	PHE	N-CA-C	-5.75	105.29	112.93
8	T	64	ALA	CA-C-O	-5.75	114.33	120.42
8	T	136	LYS	N-CA-C	5.74	118.48	111.82
3	E	352	ASP	N-CA-C	-5.74	99.02	108.49
2	A	190	ARG	CA-C-N	5.74	129.03	120.31
2	A	190	ARG	C-N-CA	5.74	129.03	120.31
3	F	33	ILE	CA-C-N	5.73	132.49	121.54
3	F	33	ILE	C-N-CA	5.73	132.49	121.54
10	V	119	SER	CA-C-N	5.73	128.43	120.29
10	V	119	SER	C-N-CA	5.73	128.43	120.29
11	W	13	LYS	O-C-N	5.73	129.42	122.20
12	X	8	LEU	N-CA-C	-5.73	104.94	111.07
2	A	81	ASP	N-CA-C	-5.73	99.07	108.41
3	E	106	ARG	N-CA-C	-5.73	106.19	112.72
5	H	51	GLN	CA-C-O	-5.73	114.22	120.81
2	A	69	GLU	CA-C-O	-5.73	114.97	120.64
2	C	135	ALA	CA-C-N	5.72	126.04	119.92
2	C	135	ALA	C-N-CA	5.72	126.04	119.92
12	X	2	VAL	CA-C-O	-5.72	114.29	120.47
3	F	68	GLU	N-CA-C	-5.72	99.82	108.52
10	V	36	ASN	N-CA-C	5.72	117.19	111.07
2	C	469	SER	CA-C-N	5.72	127.94	120.28
2	C	469	SER	C-N-CA	5.72	127.94	120.28
3	F	148	ALA	CA-C-N	5.72	130.01	121.72
3	F	148	ALA	C-N-CA	5.72	130.01	121.72
7	O	141	LEU	CA-C-N	5.72	128.41	120.29
7	O	141	LEU	C-N-CA	5.72	128.41	120.29
7	O	189	LYS	CA-C-O	-5.72	114.49	120.55
3	D	385	GLN	N-CA-C	5.72	118.28	111.71
9	U	155	ASP	CA-C-N	5.72	127.94	120.28
9	U	155	ASP	C-N-CA	5.72	127.94	120.28
1	0	15	SER	O-C-N	5.71	128.18	122.12
1	5	34	ILE	N-CA-C	-5.71	104.95	110.72
10	V	19	LEU	N-CA-C	5.71	118.23	111.33
3	F	390	ILE	N-CA-C	-5.71	106.12	111.48
3	F	235	THR	CA-C-N	5.70	126.27	120.00
3	F	235	THR	C-N-CA	5.70	126.27	120.00
2	B	395	PHE	CA-C-O	5.70	126.80	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	21	VAL	N-CA-C	5.70	119.35	112.80
1	7	45	ASP	CA-C-O	-5.70	114.38	120.42
10	V	40	ARG	N-CA-C	5.70	117.57	111.36
2	A	274	SER	O-C-N	5.69	128.16	122.12
1	3	59	GLU	O-C-N	-5.69	116.09	122.12
2	B	156	ASP	N-CA-C	5.69	117.56	111.36
4	G	24	LYS	CA-C-N	5.69	127.84	120.56
4	G	24	LYS	C-N-CA	5.69	127.84	120.56
3	E	335	LEU	O-C-N	-5.69	116.53	123.30
1	0	72	LEU	CA-C-N	5.68	128.95	120.31
1	0	72	LEU	C-N-CA	5.68	128.95	120.31
2	C	99	VAL	CA-C-N	5.68	125.61	119.76
2	C	99	VAL	C-N-CA	5.68	125.61	119.76
3	E	388	ILE	CA-C-N	5.68	128.36	120.29
3	E	388	ILE	C-N-CA	5.68	128.36	120.29
7	O	145	LYS	CA-C-N	5.68	127.90	120.28
7	O	145	LYS	C-N-CA	5.68	127.90	120.28
10	V	51	THR	CA-C-O	5.68	126.00	119.35
2	C	188	GLN	CA-C-O	5.68	126.44	119.05
1	1	58	SER	CA-C-N	5.68	128.36	120.29
1	1	58	SER	C-N-CA	5.68	128.36	120.29
2	C	230	TYR	O-C-N	5.68	127.70	121.85
8	T	193	GLY	O-C-N	-5.68	116.68	122.19
3	E	412	ARG	N-CA-C	-5.67	105.18	111.36
3	E	470	ALA	CA-C-N	5.67	127.88	120.28
3	E	470	ALA	C-N-CA	5.67	127.88	120.28
3	F	309	ALA	CA-C-O	-5.67	115.38	121.56
2	A	197	GLU	CA-C-O	5.67	125.61	119.15
3	F	232	VAL	CA-C-N	5.67	128.34	120.29
3	F	232	VAL	C-N-CA	5.67	128.34	120.29
4	G	229	GLU	CA-C-O	-5.66	114.87	120.70
1	6	11	GLY	CA-C-N	5.66	127.86	120.28
1	6	11	GLY	C-N-CA	5.66	127.86	120.28
2	B	319	GLY	CA-C-N	5.66	128.43	120.28
2	B	319	GLY	C-N-CA	5.66	128.43	120.28
5	H	87	ALA	CA-C-N	5.66	128.15	122.66
5	H	87	ALA	C-N-CA	5.66	128.15	122.66
9	U	89	SER	CA-C-O	-5.66	114.55	120.55
2	B	348	THR	CA-C-O	5.66	128.48	121.81
7	O	71	ILE	CA-C-N	5.66	128.91	120.31
7	O	71	ILE	C-N-CA	5.66	128.91	120.31
12	X	50	LEU	CA-C-O	-5.66	114.88	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	277	ALA	CA-C-N	5.65	128.21	120.46
2	C	277	ALA	C-N-CA	5.65	128.21	120.46
1	1	65	CYS	CA-C-N	5.65	128.32	120.29
1	1	65	CYS	C-N-CA	5.65	128.32	120.29
2	B	143	SER	N-CA-C	-5.65	102.12	110.48
3	F	219	PHE	CA-C-N	5.65	128.28	122.80
3	F	219	PHE	C-N-CA	5.65	128.28	122.80
3	F	367	HIS	CA-C-N	5.65	128.12	120.44
3	F	367	HIS	C-N-CA	5.65	128.12	120.44
10	V	126	SER	N-CA-C	-5.65	106.05	113.17
2	C	419	THR	O-C-N	5.64	128.58	122.15
3	E	243	PHE	CA-C-O	-5.64	114.44	120.42
10	V	10	LEU	CA-C-N	5.64	127.78	120.44
10	V	10	LEU	C-N-CA	5.64	127.78	120.44
11	W	11	SER	N-CA-C	-5.64	98.78	110.80
1	1	43	ILE	CA-C-N	5.64	128.40	120.28
1	1	43	ILE	C-N-CA	5.64	128.40	120.28
1	4	15	SER	CA-C-N	5.64	130.14	120.72
1	4	15	SER	C-N-CA	5.64	130.14	120.72
7	O	108	PHE	CA-C-N	5.64	126.20	119.94
7	O	108	PHE	C-N-CA	5.64	126.20	119.94
2	C	198	SER	N-CA-C	-5.64	106.40	113.28
9	U	201	ILE	CA-C-O	-5.64	115.09	120.95
4	G	168	ASP	CA-C-O	-5.63	114.75	119.76
3	F	262	THR	O-C-N	5.63	128.09	122.12
3	D	194	GLY	O-C-N	5.63	127.59	122.19
3	D	356	ARG	N-CA-C	-5.63	105.62	112.88
8	T	74	LYS	N-CA-C	-5.63	105.14	112.23
1	2	52	ILE	CA-C-O	-5.63	115.10	120.95
3	F	16	VAL	N-CA-C	-5.62	99.05	107.37
4	G	57	THR	O-C-N	-5.62	116.16	122.12
9	U	116	VAL	CA-C-N	5.62	127.81	120.28
9	U	116	VAL	C-N-CA	5.62	127.81	120.28
1	9	3	LEU	O-C-N	-5.62	116.16	122.12
2	B	500	LYS	CA-C-N	5.62	127.81	120.28
2	B	500	LYS	C-N-CA	5.62	127.81	120.28
1	0	48	PHE	CA-C-N	5.62	125.29	119.05
1	0	48	PHE	C-N-CA	5.62	125.29	119.05
2	B	194	GLY	CA-C-N	5.62	127.81	120.28
2	B	194	GLY	C-N-CA	5.62	127.81	120.28
1	5	38	SER	N-CA-C	5.62	119.31	112.23
7	O	166	GLY	CA-C-O	-5.62	114.86	122.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	53	LEU	CA-C-N	5.61	126.17	120.00
1	2	53	LEU	C-N-CA	5.61	126.17	120.00
3	D	35	ASN	N-CA-C	-5.61	103.29	110.53
2	C	464	GLY	N-CA-C	5.61	119.28	112.49
3	F	457	PHE	CA-C-O	5.61	125.55	119.15
6	I	40	THR	O-C-N	-5.61	117.91	123.46
2	B	146	GLU	CA-C-O	-5.61	114.97	120.19
2	B	343	ASN	CA-C-N	5.61	128.38	120.42
2	B	343	ASN	C-N-CA	5.61	128.38	120.42
3	D	426	GLY	N-CA-C	-5.61	107.02	115.32
9	U	186	ASN	CA-C-N	5.61	126.85	119.84
9	U	186	ASN	C-N-CA	5.61	126.85	119.84
3	F	155	LEU	CA-C-N	5.60	128.83	120.87
3	F	155	LEU	C-N-CA	5.60	128.83	120.87
7	O	140	ALA	CA-C-N	5.60	128.25	120.29
7	O	140	ALA	C-N-CA	5.60	128.25	120.29
1	3	68	VAL	CA-C-N	5.60	127.78	120.28
1	3	68	VAL	C-N-CA	5.60	127.78	120.28
3	E	462	GLY	CA-C-N	5.60	128.13	120.46
3	E	462	GLY	C-N-CA	5.60	128.13	120.46
7	O	115	HIS	CA-C-O	-5.60	114.61	120.55
11	W	34	LEU	CA-C-N	5.60	125.70	119.32
11	W	34	LEU	C-N-CA	5.60	125.70	119.32
1	3	20	LEU	CA-C-N	5.60	127.14	120.14
1	3	20	LEU	C-N-CA	5.60	127.14	120.14
2	B	252	ALA	CA-C-N	5.60	127.78	120.28
2	B	252	ALA	C-N-CA	5.60	127.78	120.28
13	Y	25	TYR	CA-C-N	5.60	126.16	120.00
13	Y	25	TYR	C-N-CA	5.60	126.16	120.00
2	C	75	ILE	CA-C-O	-5.59	115.83	121.59
13	Y	26	GLY	O-C-N	-5.59	116.76	122.19
2	A	308	LEU	O-C-N	5.59	129.15	122.27
2	B	339	TYR	CA-C-N	5.59	123.76	120.24
2	B	339	TYR	C-N-CA	5.59	123.76	120.24
3	D	295	ARG	N-CA-C	-5.59	106.04	112.92
14	Z	39	TYR	CA-C-O	5.59	126.69	120.82
3	E	466	VAL	CA-C-N	5.59	127.60	120.56
3	E	466	VAL	C-N-CA	5.59	127.60	120.56
10	V	105	GLU	O-C-N	5.59	127.83	122.07
1	8	31	ALA	CA-C-N	5.59	127.77	120.28
1	8	31	ALA	C-N-CA	5.59	127.77	120.28
1	9	13	GLY	O-C-N	-5.58	116.82	122.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	225	PRO	N-CA-C	5.58	117.51	110.70
3	F	44	GLY	N-CA-C	-5.58	102.45	110.60
2	C	479	ASN	CA-C-N	5.58	127.76	120.28
2	C	479	ASN	C-N-CA	5.58	127.76	120.28
3	D	80	GLY	N-CA-C	-5.58	107.31	115.63
4	G	123	PRO	CA-C-N	5.58	128.21	120.29
4	G	123	PRO	C-N-CA	5.58	128.21	120.29
2	A	373	VAL	CA-C-O	-5.57	115.82	121.67
2	B	154	ALA	CA-C-N	5.57	127.69	120.56
2	B	154	ALA	C-N-CA	5.57	127.69	120.56
3	F	119	ALA	N-CA-C	-5.57	100.70	109.50
3	F	392	GLY	O-C-N	-5.57	115.46	122.70
2	A	367	ILE	CA-C-O	5.57	127.59	120.97
4	G	235	ASN	CA-C-N	5.56	127.67	120.44
4	G	235	ASN	C-N-CA	5.56	127.67	120.44
3	F	101	GLU	O-C-N	5.56	126.89	121.66
3	F	151	GLY	N-CA-C	5.56	119.70	112.25
2	A	193	ASN	N-CA-C	-5.56	105.27	113.61
2	A	491	LEU	CA-C-N	5.56	133.21	122.03
2	A	491	LEU	C-N-CA	5.56	133.21	122.03
2	C	24	GLU	CA-C-O	5.56	127.90	121.28
2	A	134	LYS	CA-C-N	5.55	129.75	120.86
2	A	134	LYS	C-N-CA	5.55	129.75	120.86
5	H	75	ALA	N-CA-C	-5.55	99.97	109.24
1	7	31	ALA	CA-C-N	5.55	127.72	120.28
1	7	31	ALA	C-N-CA	5.55	127.72	120.28
1	3	12	ALA	CA-C-N	5.55	125.99	119.94
1	3	12	ALA	C-N-CA	5.55	125.99	119.94
8	T	239	ALA	N-CA-C	-5.55	105.63	112.90
2	C	223	GLU	O-C-N	5.55	128.00	122.12
5	H	50	GLU	CA-C-N	5.55	128.72	120.95
5	H	50	GLU	C-N-CA	5.55	128.72	120.95
3	D	348	VAL	O-C-N	5.55	128.33	122.67
1	2	50	MET	CA-C-N	5.54	127.71	120.28
1	2	50	MET	C-N-CA	5.54	127.71	120.28
9	U	193	VAL	O-C-N	5.54	127.54	121.83
3	F	167	ILE	CA-C-O	5.54	126.73	120.85
3	F	309	ALA	CA-C-N	-5.54	114.38	122.58
3	F	309	ALA	C-N-CA	-5.54	114.38	122.58
4	G	253	ILE	CA-C-N	5.54	128.16	120.29
4	G	253	ILE	C-N-CA	5.54	128.16	120.29
1	8	5	LEU	CA-C-O	5.54	126.29	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	109	VAL	O-C-N	-5.54	116.57	122.61
2	C	186	LEU	CA-C-N	5.54	129.97	120.72
2	C	186	LEU	C-N-CA	5.54	129.97	120.72
3	D	193	GLU	CA-C-N	5.54	126.13	119.98
3	D	193	GLU	C-N-CA	5.54	126.13	119.98
7	O	69	SER	N-CA-C	-5.54	106.02	112.89
1	1	14	ILE	CA-C-N	5.54	128.25	120.28
1	1	14	ILE	C-N-CA	5.54	128.25	120.28
4	G	22	THR	O-C-N	5.54	127.77	122.07
1	8	63	LEU	O-C-N	5.53	127.99	122.12
3	E	396	LEU	CA-C-O	-5.53	114.70	121.78
3	F	71	VAL	CA-C-N	5.53	130.54	122.85
3	F	71	VAL	C-N-CA	5.53	130.54	122.85
1	6	4	VAL	N-CA-C	5.53	116.26	110.62
1	6	43	ILE	CA-C-N	5.53	128.45	120.38
1	6	43	ILE	C-N-CA	5.53	128.45	120.38
2	B	218	LEU	CA-C-N	5.53	128.03	120.46
2	B	218	LEU	C-N-CA	5.53	128.03	120.46
9	U	92	LEU	O-C-N	-5.53	116.38	122.07
12	X	54	THR	N-CA-C	5.53	117.30	111.28
4	G	224	GLN	CA-C-N	5.52	126.08	120.00
4	G	224	GLN	C-N-CA	5.52	126.08	120.00
9	U	74	ALA	CA-C-N	5.52	125.04	119.19
9	U	74	ALA	C-N-CA	5.52	125.04	119.19
2	A	403	ALA	N-CA-C	-5.52	106.55	113.28
2	C	150	THR	CA-C-O	-5.52	113.14	119.60
3	F	366	GLU	CA-C-N	5.52	127.67	120.28
3	F	366	GLU	C-N-CA	5.52	127.67	120.28
2	C	69	GLU	CA-C-N	5.52	124.86	118.85
2	C	69	GLU	C-N-CA	5.52	124.86	118.85
6	I	32	ALA	CA-C-O	-5.51	114.57	120.42
3	F	82	PRO	CA-C-N	5.51	131.89	121.97
3	F	82	PRO	C-N-CA	5.51	131.89	121.97
2	C	486	ARG	N-CA-C	5.51	117.29	111.28
3	F	250	ASP	N-CA-C	-5.51	101.56	110.32
8	T	210	PHE	O-C-N	5.51	129.71	122.33
11	W	51	TYR	N-CA-C	-5.51	105.36	111.36
2	A	40	ILE	O-C-N	-5.50	116.72	123.00
2	A	459	GLU	N-CA-C	5.50	117.43	110.33
4	G	106	ASP	CA-C-N	5.50	130.01	123.19
4	G	106	ASP	C-N-CA	5.50	130.01	123.19
2	C	259	PHE	CA-C-N	5.50	127.65	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	259	PHE	C-N-CA	5.50	127.65	120.28
3	D	152	LYS	CA-C-O	-5.50	114.38	120.38
3	E	36	ALA	O-C-N	5.50	129.98	123.27
1	1	54	GLY	CA-C-N	5.50	127.92	120.44
1	1	54	GLY	C-N-CA	5.50	127.92	120.44
3	D	264	ALA	CA-C-N	5.50	127.01	120.14
3	D	264	ALA	C-N-CA	5.50	127.01	120.14
3	F	381	TYR	O-C-N	5.50	127.95	122.12
8	T	64	ALA	CA-C-N	5.50	128.23	120.42
8	T	64	ALA	C-N-CA	5.50	128.23	120.42
3	E	108	PRO	CA-C-O	-5.50	115.35	121.23
2	B	251	THR	CA-C-N	5.50	128.09	120.29
2	B	251	THR	C-N-CA	5.50	128.09	120.29
1	4	18	GLY	O-C-N	5.49	127.85	122.19
10	V	32	PHE	CA-C-N	5.49	127.64	120.28
10	V	32	PHE	C-N-CA	5.49	127.64	120.28
2	A	153	LYS	N-CA-C	5.49	118.19	111.82
3	E	262	THR	CA-C-N	5.49	127.64	120.28
3	E	262	THR	C-N-CA	5.49	127.64	120.28
5	H	114	SER	O-C-N	-5.49	114.62	122.41
8	T	169	ARG	CA-C-O	5.49	126.11	119.31
12	X	24	ALA	CA-C-N	5.49	127.64	120.28
12	X	24	ALA	C-N-CA	5.49	127.64	120.28
7	O	175	THR	CA-C-N	5.49	130.62	122.99
7	O	175	THR	C-N-CA	5.49	130.62	122.99
1	2	65	CYS	CA-C-N	5.48	127.63	120.28
1	2	65	CYS	C-N-CA	5.48	127.63	120.28
2	C	199	LYS	CA-C-O	5.48	125.76	119.35
2	C	326	LEU	CA-C-O	-5.48	115.25	121.28
2	C	492	SER	N-CA-C	-5.48	100.96	109.24
3	D	402	LEU	N-CA-C	-5.48	105.39	111.36
3	F	379	GLN	CA-C-N	5.48	127.56	120.44
3	F	379	GLN	C-N-CA	5.48	127.56	120.44
2	A	202	TYR	O-C-N	-5.48	115.89	123.12
2	B	100	PRO	CA-C-O	-5.48	114.78	121.03
4	G	79	SER	N-CA-C	-5.48	102.65	110.59
8	T	74	LYS	CA-C-N	5.48	126.03	120.00
8	T	74	LYS	C-N-CA	5.48	126.03	120.00
8	T	211	VAL	O-C-N	-5.48	114.86	121.10
2	A	298	GLY	CA-C-N	5.47	131.54	122.73
2	A	298	GLY	C-N-CA	5.47	131.54	122.73
2	B	400	ARG	CA-C-N	5.47	127.88	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	400	ARG	C-N-CA	5.47	127.88	120.44
3	E	460	VAL	O-C-N	5.47	128.79	122.82
10	V	90	GLN	N-CA-C	-5.47	106.65	113.55
1	5	36	GLY	N-CA-C	5.47	118.85	112.50
2	B	252	ALA	N-CA-C	-5.47	105.40	111.36
11	W	70	ALA	N-CA-C	5.47	116.92	111.07
3	D	73	GLY	CA-C-O	-5.47	111.06	120.57
7	O	112	ASN	O-C-N	-5.46	116.44	122.07
2	A	99	VAL	CA-C-O	-5.46	115.25	121.59
3	F	94	ARG	CA-C-O	5.46	127.00	120.28
2	A	271	ASP	N-CA-C	-5.46	98.32	107.99
1	2	9	TYR	N-CA-C	5.46	118.15	111.82
1	4	63	LEU	CA-C-N	5.46	127.59	120.28
1	4	63	LEU	C-N-CA	5.46	127.59	120.28
3	D	423	VAL	CA-C-N	5.46	127.59	120.28
3	D	423	VAL	C-N-CA	5.46	127.59	120.28
2	B	55	VAL	CA-C-N	5.45	129.67	122.42
2	B	55	VAL	C-N-CA	5.45	129.67	122.42
2	B	79	GLY	CA-C-N	5.45	128.61	120.87
2	B	79	GLY	C-N-CA	5.45	128.61	120.87
2	C	334	GLY	CA-C-O	5.45	124.76	118.98
14	Z	43	LEU	CA-C-O	-5.45	113.70	119.97
3	E	121	PRO	CA-C-N	5.45	126.66	119.84
3	E	121	PRO	C-N-CA	5.45	126.66	119.84
1	2	2	GLN	N-CA-C	5.45	118.73	111.75
2	C	460	LEU	CA-C-N	5.45	128.59	120.31
2	C	460	LEU	C-N-CA	5.45	128.59	120.31
3	D	211	GLY	O-C-N	-5.45	118.12	122.81
3	D	413	PHE	CA-C-N	5.45	127.58	120.28
3	D	413	PHE	C-N-CA	5.45	127.58	120.28
7	O	66	ASP	CA-C-N	5.45	127.58	120.28
7	O	66	ASP	C-N-CA	5.45	127.58	120.28
3	E	443	ALA	CA-C-N	5.44	127.92	120.46
3	E	443	ALA	C-N-CA	5.44	127.92	120.46
2	C	465	GLU	CA-C-N	5.44	127.83	120.38
2	C	465	GLU	C-N-CA	5.44	127.83	120.38
3	D	115	LYS	CA-C-N	5.44	125.38	119.78
3	D	115	LYS	C-N-CA	5.44	125.38	119.78
3	D	257	ASN	CA-C-O	-5.44	114.72	120.92
8	T	122	SER	CA-C-N	5.44	128.15	120.42
8	T	122	SER	C-N-CA	5.44	128.15	120.42
1	4	54	GLY	CA-C-N	5.44	127.51	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	4	54	GLY	C-N-CA	5.44	127.51	120.44
1	9	51	ALA	N-CA-C	5.44	117.21	111.28
3	E	240	ALA	O-C-N	5.44	128.35	122.15
12	X	54	THR	CA-C-O	5.44	126.31	120.55
1	9	53	LEU	CA-C-N	5.44	125.98	120.00
1	9	53	LEU	C-N-CA	5.44	125.98	120.00
3	D	239	ILE	CA-C-N	5.44	127.51	120.44
3	D	239	ILE	C-N-CA	5.44	127.51	120.44
3	E	322	PRO	CA-C-N	5.43	127.56	120.28
3	E	322	PRO	C-N-CA	5.43	127.56	120.28
7	O	60	PRO	O-C-N	5.43	129.49	122.91
3	E	381	TYR	O-C-N	5.43	128.34	122.15
4	G	40	SER	CA-C-O	-5.43	114.79	120.55
8	T	81	ASN	CA-C-N	5.43	127.56	120.28
8	T	81	ASN	C-N-CA	5.43	127.56	120.28
1	4	71	LEU	CA-C-O	5.43	126.31	120.55
2	A	84	VAL	N-CA-C	-5.43	100.81	109.17
2	B	112	ALA	O-C-N	5.43	127.66	122.07
7	O	22	ALA	CA-C-N	5.43	127.49	120.44
7	O	22	ALA	C-N-CA	5.43	127.49	120.44
8	T	66	TYR	CA-C-N	5.43	128.56	120.31
8	T	66	TYR	C-N-CA	5.43	128.56	120.31
2	A	173	ARG	CA-C-N	5.42	129.88	122.34
2	A	173	ARG	C-N-CA	5.42	129.88	122.34
2	C	126	ALA	N-CA-C	-5.42	107.31	114.31
2	C	208	VAL	N-CA-C	-5.42	100.58	108.17
2	B	161	ILE	N-CA-C	-5.42	100.52	108.11
11	W	2	SER	CA-C-O	5.42	127.80	121.46
1	0	53	LEU	CA-C-N	5.42	126.00	119.98
1	0	53	LEU	C-N-CA	5.42	126.00	119.98
7	O	89	LEU	CA-C-N	5.42	127.48	120.44
7	O	89	LEU	C-N-CA	5.42	127.48	120.44
2	B	157	ALA	N-CA-C	5.42	117.27	111.36
2	C	161	ILE	CA-C-O	5.42	127.55	120.78
2	C	327	PRO	CA-C-O	-5.42	115.06	121.67
3	E	299	THR	CA-C-N	5.42	131.48	122.54
3	E	299	THR	C-N-CA	5.42	131.48	122.54
3	D	243	PHE	CA-C-N	5.41	127.80	120.44
3	D	243	PHE	C-N-CA	5.41	127.80	120.44
2	A	244	LEU	CA-C-N	5.41	127.97	120.29
2	A	244	LEU	C-N-CA	5.41	127.97	120.29
3	F	239	ILE	CA-C-O	-5.41	115.11	120.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	281	ARG	CA-C-N	5.41	127.47	120.44
2	A	281	ARG	C-N-CA	5.41	127.47	120.44
2	C	138	ILE	N-CA-C	-5.41	105.26	110.72
3	E	207	ILE	CA-C-N	5.41	129.60	122.30
3	E	207	ILE	C-N-CA	5.41	129.60	122.30
1	7	18	GLY	CA-C-O	-5.40	115.19	120.75
3	D	33	ILE	CA-C-N	5.40	131.85	121.54
3	D	33	ILE	C-N-CA	5.40	131.85	121.54
1	0	57	LEU	CA-C-N	5.40	127.95	120.29
1	0	57	LEU	C-N-CA	5.40	127.95	120.29
2	B	194	GLY	O-C-N	5.40	128.40	122.84
3	D	400	ASP	CA-C-O	-5.40	114.70	120.42
3	E	259	PHE	CA-C-O	5.40	126.18	119.97
1	6	26	ILE	O-C-N	5.39	127.10	121.87
3	E	425	THR	O-C-N	5.39	127.84	122.12
3	E	79	THR	CA-C-O	-5.39	114.83	120.55
3	F	36	ALA	O-C-N	5.39	129.53	123.27
3	D	366	GLU	CA-C-N	5.39	127.94	120.29
3	D	366	GLU	C-N-CA	5.39	127.94	120.29
2	B	11	SER	N-CA-C	5.38	117.23	111.36
5	H	89	GLU	CA-C-O	-5.38	114.47	120.66
2	B	415	SER	CA-C-O	-5.38	114.84	120.55
2	B	241	ALA	CA-C-N	5.38	126.82	120.09
2	B	241	ALA	C-N-CA	5.38	126.82	120.09
3	D	369	ASP	N-CA-C	-5.38	105.49	111.36
1	4	58	SER	CA-C-O	-5.37	114.72	120.42
2	A	258	TRP	CA-C-N	5.37	127.92	120.29
2	A	258	TRP	C-N-CA	5.37	127.92	120.29
9	U	67	GLY	CA-C-N	5.37	127.92	120.29
9	U	67	GLY	C-N-CA	5.37	127.92	120.29
2	A	482	LEU	CA-C-N	5.37	127.47	120.28
2	A	482	LEU	C-N-CA	5.37	127.47	120.28
12	X	32	ASN	N-CA-C	-5.37	101.89	110.10
3	F	64	MET	N-CA-C	-5.36	99.69	108.76
2	B	75	ILE	CA-C-N	5.36	129.31	121.80
2	B	75	ILE	C-N-CA	5.36	129.31	121.80
3	E	236	GLY	CA-C-N	5.36	128.00	120.28
3	E	236	GLY	C-N-CA	5.36	128.00	120.28
3	E	421	ALA	N-CA-C	-5.36	104.01	110.44
10	V	49	GLN	CA-C-O	-5.36	114.86	120.70
11	W	81	GLU	O-C-N	-5.36	116.44	122.12
4	G	47	ALA	CA-C-O	-5.36	114.87	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	106	ARG	N-CA-C	-5.36	106.59	113.23
2	C	473	TYR	CA-C-O	5.35	126.44	120.82
2	B	437	PRO	O-C-N	5.35	129.08	123.03
11	W	73	ILE	CA-C-N	5.35	129.08	120.30
11	W	73	ILE	C-N-CA	5.35	129.08	120.30
3	D	113	LEU	CA-C-N	5.35	130.99	122.59
3	D	113	LEU	C-N-CA	5.35	130.99	122.59
3	E	293	GLN	CA-C-O	5.35	125.96	119.11
1	2	64	PHE	N-CA-C	5.35	116.79	111.07
2	A	253	ALA	CA-C-N	5.35	127.45	120.28
2	A	253	ALA	C-N-CA	5.35	127.45	120.28
3	D	43	GLN	CA-C-N	5.35	131.89	121.41
3	D	43	GLN	C-N-CA	5.35	131.89	121.41
5	H	54	PRO	CA-C-N	-5.35	113.67	121.26
5	H	54	PRO	C-N-CA	-5.35	113.67	121.26
3	E	173	ASN	CA-C-N	5.34	128.01	120.42
3	E	173	ASN	C-N-CA	5.34	128.01	120.42
14	Z	3	GLN	O-C-N	5.34	129.49	122.33
2	A	22	SER	N-CA-C	-5.34	106.53	113.16
3	E	128	SER	O-C-N	5.34	129.89	123.26
1	8	35	ASN	CA-C-O	-5.34	114.76	120.42
2	A	414	ALA	CA-C-N	5.34	127.44	120.28
2	A	414	ALA	C-N-CA	5.34	127.44	120.28
2	C	447	ILE	CA-C-N	5.34	127.44	120.28
2	C	447	ILE	C-N-CA	5.34	127.44	120.28
3	D	406	ARG	O-C-N	5.34	128.24	122.15
3	D	408	ARG	CA-C-N	5.34	127.88	120.29
3	D	408	ARG	C-N-CA	5.34	127.88	120.29
2	C	292	GLY	N-CA-C	-5.34	104.86	112.55
13	Y	26	GLY	CA-C-N	5.34	129.75	120.68
13	Y	26	GLY	C-N-CA	5.34	129.75	120.68
5	H	61	GLU	N-CA-C	-5.34	99.74	108.76
2	A	489	GLY	CA-C-O	5.33	126.23	119.72
3	D	421	ALA	N-CA-C	-5.33	106.64	112.72
1	0	49	PRO	CA-C-N	5.33	127.42	120.28
1	0	49	PRO	C-N-CA	5.33	127.42	120.28
1	4	5	LEU	CA-C-N	5.33	127.37	120.44
1	4	5	LEU	C-N-CA	5.33	127.37	120.44
2	B	328	VAL	O-C-N	5.33	128.96	123.05
11	W	78	TYR	N-CA-C	-5.33	105.47	111.28
3	F	89	ARG	N-CA-C	-5.33	105.62	113.61
3	F	417	PRO	O-C-N	5.33	130.19	123.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	G	191	SER	CA-C-N	5.33	126.50	119.84
4	G	191	SER	C-N-CA	5.33	126.50	119.84
7	O	20	ALA	CA-C-N	5.33	127.42	120.28
7	O	20	ALA	C-N-CA	5.33	127.42	120.28
1	0	44	LYS	CA-C-N	5.32	128.40	120.31
1	0	44	LYS	C-N-CA	5.32	128.40	120.31
1	1	60	ALA	CA-C-N	5.32	127.41	120.28
1	1	60	ALA	C-N-CA	5.32	127.41	120.28
2	C	366	ALA	CA-C-N	5.32	127.63	120.50
2	C	366	ALA	C-N-CA	5.32	127.63	120.50
3	F	461	GLY	CA-C-N	5.32	131.84	121.41
3	F	461	GLY	C-N-CA	5.32	131.84	121.41
8	T	79	GLY	CA-C-O	-5.32	114.97	121.68
1	1	4	VAL	N-CA-C	5.32	116.05	110.62
2	C	252	ALA	CA-C-N	5.32	127.41	120.28
2	C	252	ALA	C-N-CA	5.32	127.41	120.28
3	E	77	LEU	N-CA-C	-5.32	100.98	109.23
8	T	59	LEU	CA-C-N	5.32	129.02	120.30
8	T	59	LEU	C-N-CA	5.32	129.02	120.30
10	V	78	TYR	N-CA-C	-5.32	106.66	112.72
3	F	431	LEU	N-CA-C	-5.32	99.62	108.34
5	H	60	MET	N-CA-C	-5.32	99.77	108.76
8	T	225	ALA	N-CA-C	5.32	117.15	111.36
1	2	40	ASN	CA-C-O	-5.31	112.88	120.16
8	T	242	LEU	CA-C-N	5.31	127.35	120.44
8	T	242	LEU	C-N-CA	5.31	127.35	120.44
3	E	159	ALA	O-C-N	5.31	129.53	123.48
1	1	41	PRO	N-CA-C	5.31	123.41	112.47
1	3	56	ALA	O-C-N	5.31	127.54	122.07
2	A	368	ASN	CA-C-O	-5.31	114.87	120.92
2	A	485	ILE	CA-C-O	-5.31	113.27	119.85
3	F	143	LEU	CA-C-O	5.31	126.17	120.70
4	G	110	ILE	CA-C-O	-5.31	115.22	121.64
2	A	242	ALA	O-C-N	-5.31	115.76	120.48
2	B	182	LEU	O-C-N	-5.31	116.01	122.22
1	9	62	GLY	CA-C-N	5.30	127.39	120.28
1	9	62	GLY	C-N-CA	5.30	127.39	120.28
2	C	310	ARG	N-CA-C	5.30	117.47	111.11
3	E	149	ARG	N-CA-C	-5.30	101.13	109.25
1	2	7	ALA	O-C-N	-5.30	116.50	122.12
3	F	372	SER	O-C-N	-5.30	116.10	122.15
1	2	72	LEU	CA-C-N	5.30	127.84	120.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	72	LEU	C-N-CA	5.30	127.84	120.63
3	D	226	PRO	CA-C-N	5.30	125.86	119.98
3	D	226	PRO	C-N-CA	5.30	125.86	119.98
5	H	32	LEU	O-C-N	5.30	125.64	121.88
1	0	63	LEU	N-CA-C	5.30	117.06	111.28
2	A	339	TYR	N-CA-C	5.30	116.74	111.07
3	E	235	THR	O-C-N	-5.30	116.61	122.07
1	7	16	THR	CA-C-N	5.30	127.72	120.46
1	7	16	THR	C-N-CA	5.30	127.72	120.46
3	D	333	THR	N-CA-C	-5.30	100.27	108.90
7	O	171	LEU	CA-C-N	5.29	131.28	120.80
7	O	171	LEU	C-N-CA	5.29	131.28	120.80
2	B	174	GLN	CA-C-O	-5.29	114.25	120.81
1	2	17	ILE	CA-C-N	5.29	126.75	120.14
1	2	17	ILE	C-N-CA	5.29	126.75	120.14
1	4	27	ALA	O-C-N	5.29	127.73	122.12
2	B	189	LYS	CA-C-O	-5.29	114.94	120.55
3	D	458	TYR	CA-C-N	5.29	131.65	121.54
3	D	458	TYR	C-N-CA	5.29	131.65	121.54
2	C	265	HIS	N-CA-C	5.29	117.45	109.41
3	D	203	GLU	O-C-N	-5.29	116.12	122.15
3	D	313	PRO	N-CA-C	-5.29	101.58	112.47
4	G	226	TYR	O-C-N	-5.29	116.12	122.15
12	X	53	TYR	CA-C-O	-5.29	114.81	120.42
3	F	426	GLY	N-CA-C	-5.29	107.92	115.64
2	C	324	THR	N-CA-C	-5.29	103.05	110.50
3	D	78	ASP	CA-C-N	5.29	127.36	120.28
3	D	78	ASP	C-N-CA	5.29	127.36	120.28
4	G	185	ALA	N-CA-C	-5.29	105.69	111.82
2	B	152	LEU	N-CA-C	-5.28	99.83	108.76
2	B	480	GLU	N-CA-C	-5.28	105.52	111.28
4	G	176	GLU	CA-C-O	-5.28	115.47	119.59
2	A	213	SER	N-CA-C	5.28	117.04	111.28
3	D	433	ARG	CA-C-N	5.28	127.79	120.29
3	D	433	ARG	C-N-CA	5.28	127.79	120.29
3	E	382	LYS	N-CA-C	5.28	117.12	111.36
3	F	234	LEU	CA-C-O	5.28	126.02	120.42
1	4	9	TYR	CA-C-O	-5.28	115.26	120.70
3	D	127	GLN	CA-C-N	5.28	128.26	120.82
3	D	127	GLN	C-N-CA	5.28	128.26	120.82
3	F	430	LYS	O-C-N	-5.28	116.95	123.33
3	D	42	PRO	N-CA-C	-5.27	109.19	114.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	V	95	PHE	CA-C-O	-5.27	114.83	120.42
3	F	234	LEU	O-C-N	-5.27	116.14	122.15
1	3	55	PHE	CA-C-N	5.27	127.29	120.44
1	3	55	PHE	C-N-CA	5.27	127.29	120.44
2	B	442	GLU	N-CA-C	-5.27	106.17	112.59
2	B	115	ASN	CA-C-O	-5.26	115.86	120.60
7	O	126	ALA	O-C-N	5.26	129.38	122.33
1	5	37	VAL	N-CA-C	-5.26	105.41	110.72
2	C	81	ASP	CA-C-N	5.26	127.76	120.29
2	C	81	ASP	C-N-CA	5.26	127.76	120.29
1	9	63	LEU	O-C-N	-5.26	116.55	122.12
3	E	404	VAL	N-CA-C	5.26	115.98	110.62
9	U	170	ARG	N-CA-C	5.26	118.86	112.23
3	E	412	ARG	O-C-N	-5.26	116.16	122.15
1	3	62	GLY	O-C-N	-5.26	117.14	122.19
3	D	278	ALA	CA-C-N	5.26	131.43	121.97
3	D	278	ALA	C-N-CA	5.26	131.43	121.97
3	D	305	THR	N-CA-C	-5.26	100.74	108.99
3	D	391	LEU	CA-C-N	-5.26	115.58	121.83
3	D	391	LEU	C-N-CA	-5.26	115.58	121.83
10	V	148	LYS	CA-C-O	-5.25	113.93	119.97
12	X	28	VAL	O-C-N	5.25	127.01	122.12
1	1	34	ILE	CA-C-O	-5.25	115.60	121.17
2	C	499	LEU	CA-C-O	5.25	126.01	119.97
2	A	291	PRO	O-C-N	5.25	129.26	122.91
6	I	45	THR	N-CA-C	-5.25	101.22	109.25
1	9	41	PRO	N-CA-C	5.25	123.28	112.47
4	G	91	LEU	N-CA-C	-5.25	105.64	111.36
2	C	296	TYR	CA-C-O	-5.25	114.51	119.55
10	V	22	THR	N-CA-C	-5.25	100.68	109.24
1	7	58	SER	CA-C-N	5.25	127.31	120.28
1	7	58	SER	C-N-CA	5.25	127.31	120.28
2	A	498	SER	CA-C-N	5.25	127.31	120.28
2	A	498	SER	C-N-CA	5.25	127.31	120.28
1	8	15	SER	CA-C-N	5.24	127.83	120.28
1	8	15	SER	C-N-CA	5.24	127.83	120.28
2	C	331	THR	CA-C-N	5.24	127.30	120.28
2	C	331	THR	C-N-CA	5.24	127.30	120.28
14	Z	26	LEU	O-C-N	5.24	127.75	122.09
3	D	61	THR	CA-C-O	-5.24	115.50	121.58
3	E	134	LEU	O-C-N	-5.24	116.88	123.27
3	E	266	SER	O-C-N	-5.24	116.57	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	416	GLN	N-CA-C	-5.24	102.17	108.25
9	U	60	LEU	CA-C-O	5.24	125.97	120.42
4	G	204	ASN	O-C-N	5.23	128.69	122.46
2	A	329	ILE	CA-C-N	5.23	130.88	123.14
2	A	329	ILE	C-N-CA	5.23	130.88	123.14
3	D	378	LEU	O-C-N	5.23	128.12	122.15
3	E	281	TYR	CA-C-N	5.23	128.10	120.51
3	E	281	TYR	C-N-CA	5.23	128.10	120.51
2	C	242	ALA	CA-C-N	5.23	124.86	119.05
2	C	242	ALA	C-N-CA	5.23	124.86	119.05
2	A	41	ALA	CA-C-O	-5.23	115.32	121.44
2	A	453	GLY	O-C-N	5.23	128.46	122.34
2	B	138	ILE	CA-C-N	5.23	127.26	120.26
2	B	138	ILE	C-N-CA	5.23	127.26	120.26
2	B	455	LEU	CA-C-N	5.22	127.80	120.28
2	B	455	LEU	C-N-CA	5.22	127.80	120.28
2	C	472	SER	N-CA-C	-5.22	105.67	111.36
3	D	326	PHE	CA-C-O	5.22	125.81	119.49
4	G	167	ASN	O-C-N	-5.22	117.21	123.27
1	2	54	GLY	CA-C-O	5.22	126.20	120.66
4	G	237	MET	CA-C-N	5.22	127.54	120.44
4	G	237	MET	C-N-CA	5.22	127.54	120.44
9	U	104	LYS	CA-C-N	5.22	127.28	120.28
9	U	104	LYS	C-N-CA	5.22	127.28	120.28
2	A	215	VAL	CA-C-N	5.22	127.70	120.29
2	A	215	VAL	C-N-CA	5.22	127.70	120.29
1	9	20	LEU	O-C-N	-5.22	116.59	122.12
2	B	436	SER	O-C-N	-5.22	115.32	121.32
3	D	421	ALA	O-C-N	5.22	128.77	122.35
3	E	452	ILE	CA-C-O	-5.22	114.27	120.90
3	D	456	ALA	N-CA-C	-5.22	106.77	112.72
4	G	244	ALA	N-CA-C	5.22	116.97	111.28
8	T	181	ILE	CA-C-N	5.22	127.70	120.29
8	T	181	ILE	C-N-CA	5.22	127.70	120.29
2	A	221	THR	CA-C-O	-5.21	115.02	120.55
1	7	26	ILE	N-CA-C	-5.21	105.42	110.42
3	F	143	LEU	N-CA-C	5.21	116.77	111.14
3	F	414	LEU	CA-C-N	5.21	130.35	123.05
3	F	414	LEU	C-N-CA	5.21	130.35	123.05
10	V	109	LEU	N-CA-C	-5.21	105.50	111.07
7	O	12	LEU	N-CA-C	-5.21	106.72	114.64
2	B	51	ALA	CA-C-N	5.21	131.48	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	51	ALA	C-N-CA	5.21	131.48	121.54
2	C	85	LYS	N-CA-C	-5.21	101.89	108.45
2	C	225	HIS	CA-C-N	5.21	130.33	122.68
2	C	225	HIS	C-N-CA	5.21	130.33	122.68
3	F	451	ASN	N-CA-C	-5.21	106.33	113.30
2	A	393	LYS	O-C-N	-5.20	116.61	122.12
3	D	237	LEU	O-C-N	-5.20	116.22	122.15
2	A	312	ALA	CA-C-N	5.20	129.32	122.30
2	A	312	ALA	C-N-CA	5.20	129.32	122.30
2	C	15	GLU	CA-C-N	5.20	127.20	120.44
2	C	15	GLU	C-N-CA	5.20	127.20	120.44
3	F	71	VAL	N-CA-C	-5.20	100.84	108.85
7	O	78	HIS	CA-C-O	5.20	125.98	120.36
1	7	1	MET	CA-C-N	5.20	127.20	120.44
1	7	1	MET	C-N-CA	5.20	127.20	120.44
2	A	379	ALA	N-CA-C	-5.20	105.23	112.30
3	D	179	GLY	N-CA-C	-5.20	100.86	113.18
2	B	6	GLN	CA-C-O	-5.20	115.72	120.50
2	B	26	ASN	CA-C-O	5.20	124.77	119.05
6	I	30	GLN	N-CA-C	5.19	116.74	108.79
1	8	70	PHE	N-CA-C	5.19	117.84	111.82
12	X	21	LEU	CA-C-N	5.19	127.24	120.28
12	X	21	LEU	C-N-CA	5.19	127.24	120.28
2	C	256	GLY	O-C-N	5.19	127.17	122.19
2	A	166	ARG	O-C-N	5.19	129.18	122.43
4	G	95	VAL	CA-C-N	5.19	127.66	120.29
4	G	95	VAL	C-N-CA	5.19	127.66	120.29
8	T	160	ILE	CA-C-N	-5.19	115.83	122.26
8	T	160	ILE	C-N-CA	-5.19	115.83	122.26
2	A	58	SER	N-CA-C	-5.19	105.20	112.25
2	C	30	THR	CA-C-N	5.18	126.69	121.35
2	C	30	THR	C-N-CA	5.18	126.69	121.35
3	D	364	GLY	CA-C-O	5.18	126.61	122.52
3	E	452	ILE	O-C-N	5.18	125.70	121.40
4	G	219	LEU	O-C-N	5.18	127.62	122.12
2	C	114	GLY	N-CA-C	-5.18	108.07	115.64
3	D	429	GLY	CA-C-N	5.18	130.60	122.21
3	D	429	GLY	C-N-CA	5.18	130.60	122.21
8	T	172	SER	O-C-N	5.18	128.06	122.15
11	W	38	PRO	CA-C-O	-5.18	115.09	121.31
2	C	426	LEU	N-CA-C	5.18	116.61	111.07
3	F	163	LYS	CA-C-O	-5.18	115.06	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	430	LYS	CA-C-N	5.18	130.07	122.77
3	F	430	LYS	C-N-CA	5.18	130.07	122.77
4	G	16	ILE	CA-C-N	5.18	127.17	120.44
4	G	16	ILE	C-N-CA	5.18	127.17	120.44
8	T	155	VAL	CA-C-O	-5.18	113.01	119.95
2	C	392	LEU	CA-C-N	5.18	127.48	120.44
2	C	392	LEU	C-N-CA	5.18	127.48	120.44
3	D	162	GLY	CA-C-N	5.18	127.22	120.28
3	D	162	GLY	C-N-CA	5.18	127.22	120.28
3	F	122	PRO	O-C-N	5.18	128.96	123.01
2	C	406	ALA	N-CA-C	-5.17	107.62	114.04
1	9	36	GLY	CA-C-O	-5.17	115.18	120.66
1	1	53	LEU	O-C-N	-5.17	116.25	122.15
3	F	127	GLN	CA-C-O	5.17	126.30	120.92
3	F	361	ALA	CA-C-N	5.17	127.76	120.42
3	F	361	ALA	C-N-CA	5.17	127.76	120.42
11	W	48	LEU	CA-C-N	5.17	129.47	120.68
11	W	48	LEU	C-N-CA	5.17	129.47	120.68
2	A	445	PRO	CA-C-N	5.17	127.16	120.44
2	A	445	PRO	C-N-CA	5.17	127.16	120.44
4	G	51	PHE	N-CA-C	5.17	116.60	111.07
4	G	27	ALA	CA-C-N	5.17	127.20	120.28
4	G	27	ALA	C-N-CA	5.17	127.20	120.28
8	T	232	TYR	CA-C-N	5.17	128.82	120.55
8	T	232	TYR	C-N-CA	5.17	128.82	120.55
1	6	49	PRO	CA-C-N	5.16	127.20	120.28
1	6	49	PRO	C-N-CA	5.16	127.20	120.28
2	C	53	GLU	CA-C-N	5.16	129.47	122.19
2	C	53	GLU	C-N-CA	5.16	129.47	122.19
2	C	450	GLY	CA-C-N	5.16	127.53	120.46
2	C	450	GLY	C-N-CA	5.16	127.53	120.46
4	G	136	ASP	CA-C-O	5.16	125.90	120.33
1	9	65	CYS	CA-C-N	5.16	127.62	120.29
1	9	65	CYS	C-N-CA	5.16	127.62	120.29
10	V	124	ILE	N-CA-C	-5.16	104.64	111.09
11	W	67	TRP	O-C-N	-5.16	116.65	122.12
3	D	244	ARG	CA-C-N	5.16	127.61	120.29
3	D	244	ARG	C-N-CA	5.16	127.61	120.29
2	A	188	GLN	N-CA-C	-5.16	106.84	112.72
2	B	41	ALA	N-CA-C	-5.16	101.28	108.96
3	F	366	GLU	O-C-N	5.16	127.58	122.12
3	F	447	GLY	N-CA-C	-5.15	108.12	115.64

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	O	121	GLY	N-CA-C	-5.15	103.20	111.59
1	6	47	VAL	N-CA-C	5.15	117.52	111.09
1	7	56	ALA	O-C-N	-5.15	116.66	122.12
2	C	487	GLU	CA-C-N	-5.15	112.98	120.29
2	C	487	GLU	C-N-CA	-5.15	112.98	120.29
2	C	204	VAL	CA-C-O	5.15	125.81	120.36
7	O	115	HIS	N-CA-C	-5.15	105.67	111.28
2	B	461	SER	CA-C-N	5.14	131.01	122.73
2	B	461	SER	C-N-CA	5.14	131.01	122.73
4	G	16	ILE	CA-C-O	-5.14	115.60	120.95
10	V	44	LEU	CA-C-O	5.14	126.22	120.82
2	C	352	ILE	CA-C-O	-5.14	114.91	120.36
2	A	233	ILE	N-CA-C	-5.14	100.72	108.12
2	B	269	VAL	CA-C-O	-5.14	114.99	120.59
2	C	133	VAL	CA-C-N	5.14	128.51	120.75
2	C	133	VAL	C-N-CA	5.14	128.51	120.75
3	E	196	ASP	CA-C-N	5.14	127.16	120.28
3	E	196	ASP	C-N-CA	5.14	127.16	120.28
7	O	180	ILE	CA-C-N	5.14	127.47	120.54
7	O	180	ILE	C-N-CA	5.14	127.47	120.54
9	U	193	VAL	CA-C-N	5.14	127.58	120.29
9	U	193	VAL	C-N-CA	5.14	127.58	120.29
1	5	6	ALA	CA-C-N	5.13	127.16	120.28
1	5	6	ALA	C-N-CA	5.13	127.16	120.28
3	F	396	LEU	CA-C-O	5.13	126.91	121.16
1	6	44	LYS	N-CA-C	5.13	118.32	111.75
3	D	178	HIS	N-CA-C	-5.13	106.15	112.72
12	X	10	GLU	CA-C-O	5.13	126.21	120.82
13	Y	16	PHE	CA-C-O	5.13	125.99	120.55
2	B	447	ILE	CA-C-O	-5.13	114.93	120.47
2	B	411	ASP	CA-C-N	5.13	131.43	122.81
2	B	411	ASP	C-N-CA	5.13	131.43	122.81
14	Z	42	ARG	O-C-N	-5.13	116.68	122.12
1	1	57	LEU	CA-C-N	5.13	127.15	120.28
1	1	57	LEU	C-N-CA	5.13	127.15	120.28
2	B	448	TYR	CA-C-O	-5.13	115.44	120.82
1	3	56	ALA	CA-C-O	-5.12	115.44	120.82
1	6	48	PHE	CA-C-O	-5.12	113.14	120.16
2	B	378	SER	CA-C-N	5.12	128.79	120.23
2	B	378	SER	C-N-CA	5.12	128.79	120.23
3	F	323	ALA	CA-C-N	5.12	127.14	120.28
3	F	323	ALA	C-N-CA	5.12	127.14	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	G	114	ILE	CA-C-N	5.12	127.15	120.28
4	G	114	ILE	C-N-CA	5.12	127.15	120.28
4	G	189	GLU	N-CA-C	5.12	116.86	111.28
1	5	23	GLY	CA-C-N	5.12	127.47	120.46
1	5	23	GLY	C-N-CA	5.12	127.47	120.46
1	1	52	ILE	CA-C-N	5.12	127.56	120.29
1	1	52	ILE	C-N-CA	5.12	127.56	120.29
1	8	25	GLY	CA-C-N	5.12	127.01	120.56
1	8	25	GLY	C-N-CA	5.12	127.01	120.56
4	G	120	ARG	CA-C-N	5.12	127.56	120.29
4	G	120	ARG	C-N-CA	5.12	127.56	120.29
1	2	53	LEU	O-C-N	-5.12	116.56	122.09
1	4	69	SER	O-C-N	-5.12	116.70	122.12
2	B	498	SER	O-C-N	-5.12	116.80	122.07
2	C	138	ILE	CA-C-O	-5.12	115.43	120.85
2	C	501	SER	CA-C-N	5.12	127.55	120.29
2	C	501	SER	C-N-CA	5.12	127.55	120.29
2	C	328	VAL	N-CA-C	-5.11	100.95	108.11
4	G	119	LEU	CA-C-N	5.11	127.39	120.44
4	G	119	LEU	C-N-CA	5.11	127.39	120.44
1	7	69	SER	O-C-N	5.11	127.33	122.07
2	C	412	LEU	CA-C-O	5.11	125.77	120.30
6	I	58	PRO	CA-C-O	-5.11	115.44	121.67
2	A	374	SER	CA-C-N	5.11	130.41	121.52
2	A	374	SER	C-N-CA	5.11	130.41	121.52
2	B	219	VAL	O-C-N	5.10	126.82	121.87
10	V	43	LEU	O-C-N	5.10	128.55	122.27
1	3	69	SER	N-CA-C	5.10	116.84	111.28
3	F	260	ARG	CA-C-O	-5.10	114.11	119.97
2	B	430	LEU	O-C-N	-5.10	116.34	122.15
8	T	75	GLY	N-CA-C	5.10	119.29	112.77
2	B	439	ALA	CA-C-N	5.09	127.11	120.28
2	B	439	ALA	C-N-CA	5.09	127.11	120.28
12	X	4	GLN	O-C-N	5.09	127.59	122.09
2	B	244	LEU	CA-C-N	5.09	127.52	120.29
2	B	244	LEU	C-N-CA	5.09	127.52	120.29
2	A	365	PRO	N-CA-C	-5.09	98.87	112.10
2	C	237	THR	CA-C-N	5.09	127.41	120.54
2	C	237	THR	C-N-CA	5.09	127.41	120.54
3	E	300	LYS	CA-C-O	-5.09	113.40	119.35
3	F	192	ARG	CA-C-N	5.09	127.51	120.29
3	F	192	ARG	C-N-CA	5.09	127.51	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	G	167	ASN	CA-C-O	5.08	125.74	120.30
8	T	132	LEU	CA-C-O	-5.08	115.16	120.55
8	T	141	PHE	CA-C-O	5.08	125.94	120.55
9	U	109	SER	CA-C-N	5.08	127.42	120.46
9	U	109	SER	C-N-CA	5.08	127.42	120.46
3	D	275	ILE	N-CA-C	-5.08	102.63	107.76
3	E	7	THR	CA-C-N	5.08	124.99	119.76
3	E	7	THR	C-N-CA	5.08	124.99	119.76
2	A	485	ILE	O-C-N	5.08	128.70	122.05
3	F	400	ASP	N-CA-C	5.08	116.81	111.28
8	T	100	ASN	N-CA-C	-5.08	104.38	110.88
1	9	56	ALA	CA-C-N	5.08	127.50	120.29
1	9	56	ALA	C-N-CA	5.08	127.50	120.29
2	B	236	ALA	N-CA-C	-5.08	98.75	107.23
3	F	444	VAL	O-C-N	-5.08	116.95	121.87
2	A	464	GLY	N-CA-C	-5.07	106.28	112.77
3	D	318	THR	CA-C-N	5.07	134.18	121.80
3	D	318	THR	C-N-CA	5.07	134.18	121.80
3	F	424	PHE	CA-C-N	5.07	127.03	120.44
3	F	424	PHE	C-N-CA	5.07	127.03	120.44
8	T	93	PHE	N-CA-C	-5.07	105.21	111.40
3	E	248	GLY	N-CA-C	-5.07	107.27	115.08
1	9	49	PRO	CA-C-N	5.07	127.07	120.28
1	9	49	PRO	C-N-CA	5.07	127.07	120.28
2	B	169	ILE	N-CA-C	-5.07	100.59	107.99
2	C	506	PHE	CA-C-O	-5.07	115.05	120.42
4	G	56	GLU	CA-C-N	5.07	127.07	120.28
4	G	56	GLU	C-N-CA	5.07	127.07	120.28
4	G	200	ASP	N-CA-C	-5.07	100.01	110.80
3	E	74	GLU	O-C-N	5.06	129.26	123.29
8	T	143	SER	N-CA-C	-5.06	107.06	113.18
3	E	188	GLY	O-C-N	5.06	127.70	122.54
3	F	292	LEU	N-CA-C	5.06	116.48	111.07
1	3	60	ALA	N-CA-C	5.06	116.80	111.28
2	A	42	ARG	CA-C-O	5.06	125.60	120.24
2	C	84	VAL	N-CA-C	-5.06	101.03	108.11
2	C	371	LEU	N-CA-C	-5.06	106.35	112.88
5	H	135	SER	N-CA-C	5.06	117.53	111.71
7	O	7	PRO	N-CA-C	-5.06	99.45	112.10
1	0	59	GLU	N-CA-C	5.06	116.79	111.28
2	B	419	THR	O-C-N	5.06	127.28	122.07
10	V	21	ILE	O-C-N	-5.06	117.84	123.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	341	PRO	CA-C-N	5.06	127.05	120.28
2	B	341	PRO	C-N-CA	5.06	127.05	120.28
3	F	470	ALA	N-CA-C	5.06	116.87	111.36
1	7	17	ILE	CA-C-N	5.05	125.59	119.98
1	7	17	ILE	C-N-CA	5.05	125.59	119.98
2	A	382	VAL	CA-C-N	5.05	127.56	120.28
2	A	382	VAL	C-N-CA	5.05	127.56	120.28
2	B	55	VAL	N-CA-C	-5.05	100.84	108.12
3	E	327	ALA	CA-C-O	5.05	125.81	120.10
9	U	79	ASP	CA-C-N	5.05	127.01	120.44
9	U	79	ASP	C-N-CA	5.05	127.01	120.44
3	D	78	ASP	CA-C-O	-5.05	114.76	120.32
2	B	372	SER	O-C-N	5.05	129.05	122.89
2	C	499	LEU	O-C-N	-5.05	116.06	122.27
1	5	14	ILE	CA-C-N	5.05	127.55	120.28
1	5	14	ILE	C-N-CA	5.05	127.55	120.28
3	D	192	ARG	N-CA-C	-5.05	105.78	111.28
3	D	467	VAL	N-CA-C	-5.05	105.62	110.72
1	0	22	ALA	CA-C-N	5.05	125.58	119.98
1	0	22	ALA	C-N-CA	5.05	125.58	119.98
1	2	33	LEU	CA-C-O	-5.05	115.52	120.82
1	2	52	ILE	O-C-N	5.05	126.77	121.87
2	B	290	PRO	CA-C-N	5.05	124.96	119.76
2	B	290	PRO	C-N-CA	5.05	124.96	119.76
2	B	372	SER	CA-C-O	-5.05	115.51	121.16
2	C	45	GLY	N-CA-C	-5.05	101.22	113.18
3	D	21	VAL	CA-C-O	5.05	125.83	120.48
3	D	287	THR	N-CA-C	-5.05	105.78	111.28
3	F	121	PRO	N-CA-C	5.05	116.86	110.70
4	G	139	THR	CA-C-O	5.05	126.73	121.38
1	3	24	ILE	CA-C-N	5.04	125.54	119.94
1	3	24	ILE	C-N-CA	5.04	125.54	119.94
1	7	13	GLY	CA-C-N	5.04	127.37	120.46
1	7	13	GLY	C-N-CA	5.04	127.37	120.46
1	8	33	LEU	N-CA-C	-5.04	105.67	111.07
10	V	160	VAL	CA-C-O	-5.04	115.64	119.98
1	1	19	LEU	CA-C-N	5.04	127.03	120.28
1	1	19	LEU	C-N-CA	5.04	127.03	120.28
1	4	4	VAL	CA-C-N	5.04	127.03	120.28
1	4	4	VAL	C-N-CA	5.04	127.03	120.28
3	D	180	GLY	CA-C-O	-5.04	116.23	122.03
1	9	27	ALA	CA-C-N	5.04	127.36	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	9	27	ALA	C-N-CA	5.04	127.36	120.46
2	C	303	LEU	O-C-N	5.04	127.53	122.09
3	F	263	GLN	CA-C-O	5.04	125.89	120.55
2	B	137	GLY	CA-C-N	5.04	127.01	120.56
2	B	137	GLY	C-N-CA	5.04	127.01	120.56
9	U	122	VAL	CA-C-N	5.03	127.02	120.28
9	U	122	VAL	C-N-CA	5.03	127.02	120.28
2	B	267	LEU	CA-C-O	-5.03	114.35	120.54
4	G	126	ILE	N-CA-C	-5.03	102.20	108.84
9	U	72	TYR	N-CA-C	-5.03	106.24	112.93
1	2	46	THR	CA-C-O	-5.03	115.09	120.42
1	6	4	VAL	CA-C-N	5.03	127.43	120.29
1	6	4	VAL	C-N-CA	5.03	127.43	120.29
2	C	375	ARG	CA-C-N	5.03	130.51	122.56
2	C	375	ARG	C-N-CA	5.03	130.51	122.56
2	B	464	GLY	CA-C-N	5.03	127.02	120.28
2	B	464	GLY	C-N-CA	5.03	127.02	120.28
3	D	418	PHE	N-CA-C	-5.03	101.56	109.50
3	E	289	MET	CA-C-O	5.03	125.88	120.55
2	C	489	GLY	CA-C-N	5.03	130.11	121.87
2	C	489	GLY	C-N-CA	5.03	130.11	121.87
3	E	166	PHE	CA-C-N	5.03	127.56	120.42
3	E	166	PHE	C-N-CA	5.03	127.56	120.42
1	9	21	GLY	CA-C-N	5.02	127.01	120.28
1	9	21	GLY	C-N-CA	5.02	127.01	120.28
7	O	21	THR	CA-C-N	5.02	126.97	120.44
7	O	21	THR	C-N-CA	5.02	126.97	120.44
2	B	146	GLU	CA-C-N	5.02	125.46	120.14
2	B	146	GLU	C-N-CA	5.02	125.46	120.14
3	E	174	ILE	N-CA-C	5.02	115.79	110.72
3	F	199	ARG	N-CA-C	5.02	116.83	111.36
1	6	52	ILE	O-C-N	-5.02	116.66	121.83
1	9	20	LEU	CA-C-O	5.02	125.87	120.55
5	H	119	GLU	CA-C-N	5.02	127.01	120.28
5	H	119	GLU	C-N-CA	5.02	127.01	120.28
8	T	197	ASN	CA-C-N	5.02	127.94	120.31
8	T	197	ASN	C-N-CA	5.02	127.94	120.31
2	C	281	ARG	CA-C-O	5.02	125.87	120.55
3	F	114	ARG	N-CA-C	-5.02	101.78	109.41
1	1	54	GLY	N-CA-C	-5.02	106.71	112.73
2	B	160	PRO	CA-C-N	5.02	129.71	123.14
2	B	160	PRO	C-N-CA	5.02	129.71	123.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	H	78	GLN	N-CA-C	-5.02	103.87	110.39
2	A	506	PHE	CA-C-N	5.02	127.33	120.46
2	A	506	PHE	C-N-CA	5.02	127.33	120.46
5	H	30	VAL	N-CA-C	-5.01	100.99	108.46
2	B	120	LYS	CA-C-O	5.01	125.86	119.95
3	E	49	GLU	CA-C-N	5.01	127.30	120.63
3	E	49	GLU	C-N-CA	5.01	127.30	120.63
3	D	46	LEU	N-CA-C	-5.01	100.12	108.34
2	C	341	PRO	CA-C-N	5.01	126.99	120.28
2	C	341	PRO	C-N-CA	5.01	126.99	120.28
3	E	94	ARG	O-C-N	-5.01	116.68	123.19
3	E	410	ILE	CA-C-O	-5.01	115.74	120.95
3	E	413	PHE	O-C-N	-5.01	116.36	122.22
10	V	40	ARG	CA-C-O	5.01	125.73	120.42
2	B	7	PRO	CA-C-N	5.01	130.80	122.54
2	B	7	PRO	C-N-CA	5.01	130.80	122.54
2	A	83	LEU	O-C-N	-5.01	116.10	122.26
3	E	223	ASN	N-CA-C	-5.00	107.12	113.18
1	7	68	VAL	CA-C-N	5.00	126.94	120.44
1	7	68	VAL	C-N-CA	5.00	126.94	120.44
3	D	426	GLY	CA-C-N	5.00	131.38	122.13
3	D	426	GLY	C-N-CA	5.00	131.38	122.13
5	H	16	LEU	N-CA-C	-5.00	102.39	108.14
8	T	66	TYR	O-C-N	-5.00	116.82	122.12

There are no chirality outliers.

All (12) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	4	40	ASN	Peptide
1	5	40	ASN	Peptide
1	6	40	ASN	Peptide
1	7	40	ASN	Peptide
1	9	40	ASN	Peptide
2	A	31	GLY	Mainchain
2	B	56	GLU	Mainchain
3	E	345	TYR	Peptide
3	F	256	ASP	Peptide
5	H	31	ASN	Peptide
5	H	54	PRO	Peptide
10	V	25	THR	Mainchain

5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	0	300	0	95	0	0
1	1	300	0	95	0	0
1	2	300	0	95	0	0
1	3	296	0	91	0	0
1	4	300	0	95	0	0
1	5	300	0	95	0	0
1	6	296	0	91	0	0
1	7	292	0	91	0	0
1	8	300	0	95	0	0
1	9	296	0	91	0	0
2	A	1996	0	570	0	0
2	B	2028	0	580	1	0
2	C	1984	0	567	0	0
3	D	1872	0	537	1	0
3	E	1876	0	537	0	0
3	F	1880	0	538	2	0
4	G	1059	0	277	0	0
5	H	478	0	122	0	0
6	I	193	0	43	0	0
7	O	748	0	205	0	0
8	T	897	0	248	1	0
9	U	620	0	158	0	0
10	V	685	0	173	0	0
11	W	340	0	92	1	0
12	X	248	0	61	0	0
13	Y	148	0	40	0	0
14	Z	193	0	49	0	0
All	All	20225	0	5731	5	0

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

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

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:137:GLY:HA2	3:F:432:VAL:H	1.73	0.52
2:B:281:ARG:CA	2:B:296:TYR:CA	2.90	0.49
8:T:57:ARG:H	11:W:58:GLY:HA3	1.79	0.47
3:D:41:THR:C	3:D:43:GLN:H	2.24	0.46
3:F:449:TYR:C	3:F:451:ASN:H	2.28	0.41

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	0	73/76 (96%)	73 (100%)	0	0	100	100
1	1	73/76 (96%)	70 (96%)	1 (1%)	2 (3%)	4	25
1	2	73/76 (96%)	71 (97%)	2 (3%)	0	100	100
1	3	72/76 (95%)	69 (96%)	1 (1%)	2 (3%)	4	24
1	4	73/76 (96%)	70 (96%)	1 (1%)	2 (3%)	4	25
1	5	73/76 (96%)	71 (97%)	1 (1%)	1 (1%)	9	40
1	6	72/76 (95%)	70 (97%)	1 (1%)	1 (1%)	9	40
1	7	71/76 (93%)	69 (97%)	1 (1%)	1 (1%)	9	40
1	8	73/76 (96%)	70 (96%)	1 (1%)	2 (3%)	4	25
1	9	72/76 (95%)	70 (97%)	1 (1%)	1 (1%)	9	40
2	A	495/510 (97%)	460 (93%)	30 (6%)	5 (1%)	12	48
2	B	505/510 (99%)	468 (93%)	28 (6%)	9 (2%)	6	34
2	C	492/510 (96%)	455 (92%)	28 (6%)	9 (2%)	6	34
3	D	466/478 (98%)	433 (93%)	28 (6%)	5 (1%)	11	46
3	E	467/478 (98%)	426 (91%)	34 (7%)	7 (2%)	8	40
3	F	468/478 (98%)	427 (91%)	31 (7%)	10 (2%)	5	30

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	G	261/278 (94%)	244 (94%)	11 (4%)	6 (2%)	5	28
5	H	110/138 (80%)	105 (96%)	3 (3%)	2 (2%)	6	34
6	I	42/61 (69%)	41 (98%)	1 (2%)	0	100	100
7	O	185/195 (95%)	160 (86%)	15 (8%)	10 (5%)	1	15
8	T	222/249 (89%)	211 (95%)	9 (4%)	2 (1%)	14	51
9	U	153/209 (73%)	152 (99%)	1 (1%)	0	100	100
10	V	169/173 (98%)	148 (88%)	14 (8%)	7 (4%)	2	18
11	W	83/95 (87%)	65 (78%)	13 (16%)	5 (6%)	1	13
12	X	60/92 (65%)	53 (88%)	4 (7%)	3 (5%)	1	16
13	Y	35/59 (59%)	31 (89%)	3 (9%)	1 (3%)	3	23
14	Z	46/48 (96%)	45 (98%)	1 (2%)	0	100	100
All	All	4984/5321 (94%)	4627 (93%)	264 (5%)	93 (2%)	8	32

All (93) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	1	41	PRO
1	3	41	PRO
1	4	41	PRO
1	5	41	PRO
1	6	41	PRO
1	7	41	PRO
1	8	41	PRO
1	9	41	PRO
2	A	338	ALA
2	B	29	GLU
2	B	435	TYR
2	C	132	GLN
3	D	278	ALA
3	E	451	ASN
3	F	110	LYS
4	G	193	SER
7	O	61	ALA
10	V	62	LEU
11	W	31	TYR
11	W	59	ASP
11	W	61	ALA
2	B	38	ASP

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Mol	Chain	Res	Type
2	B	380	ALA
2	C	28	ASN
3	D	34	LEU
3	D	462	GLY
3	E	278	ALA
3	E	297	THR
3	F	29	GLU
3	F	34	LEU
7	O	53	LEU
7	O	149	GLN
8	T	108	SER
10	V	130	PHE
11	W	8	LYS
1	3	42	SER
1	4	42	SER
2	B	293	ARG
2	C	312	ALA
3	E	68	GLU
3	E	86	PRO
3	E	131	ALA
3	F	28	SER
3	F	43	GLN
5	H	33	PRO
7	O	150	GLY
10	V	57	HIS
10	V	166	ARG
11	W	11	SER
1	1	42	SER
1	8	42	SER
2	B	25	ALA
2	B	52	GLU
2	C	145	HIS
2	C	459	GLU
3	F	394	ASP
4	G	183	PHE
7	O	55	HIS
7	O	82	ASP
7	O	98	LEU
8	T	147	PRO
10	V	55	PHE
10	V	66	SER
12	X	58	VAL

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Mol	Chain	Res	Type
2	A	82	ARG
2	A	145	HIS
2	A	376	VAL
2	B	294	GLU
2	C	30	THR
3	D	16	VAL
3	E	69	GLY
3	F	83	ILE
4	G	56	GLU
4	G	58	LYS
4	G	102	GLN
5	H	80	ASP
7	O	10	VAL
7	O	80	ASN
7	O	171	LEU
12	X	31	TRP
13	Y	9	ILE
2	B	7	PRO
2	C	297	PRO
3	F	42	PRO
3	F	279	VAL
4	G	169	PRO
2	C	382	VAL
3	D	416	GLN
10	V	50	PRO
12	X	39	LEU
2	A	437	PRO
2	C	333	GLY
3	F	86	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.

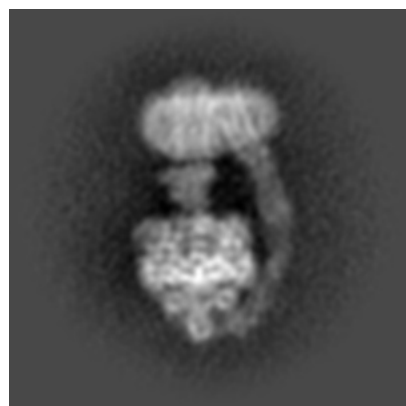
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-25975. These allow visual inspection of the internal detail of the map and identification of artifacts.

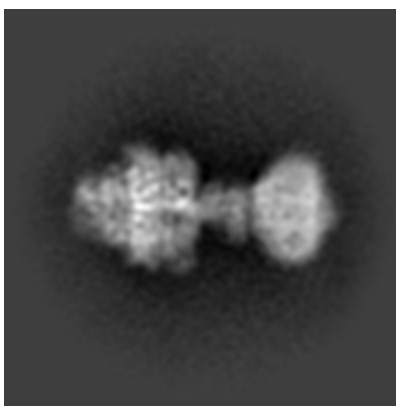
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

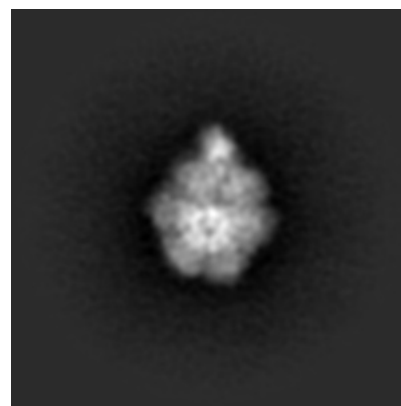
6.1.1 Primary map



X

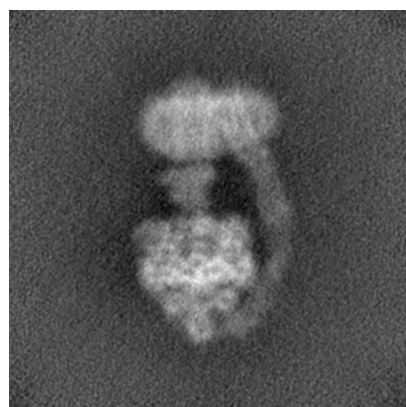


Y

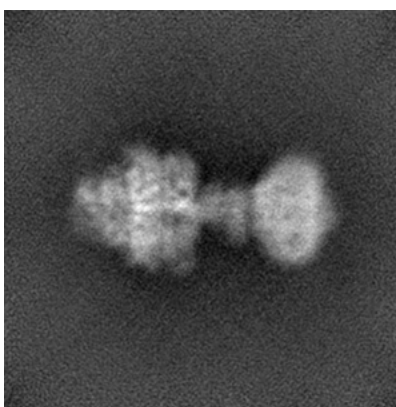


Z

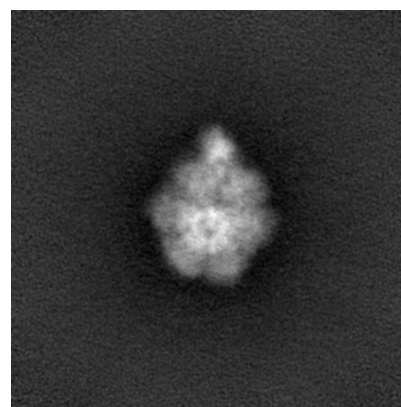
6.1.2 Raw map



X



Y



Z

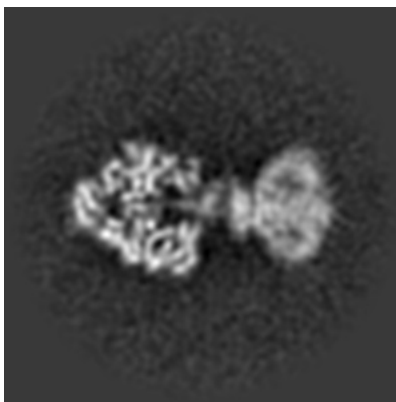
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

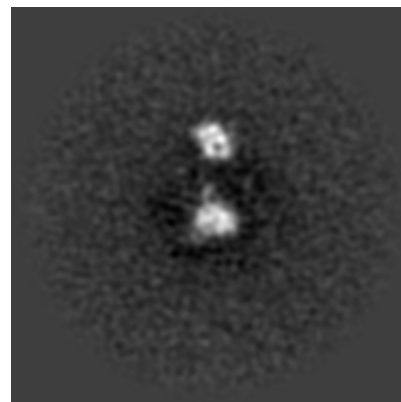
6.2.1 Primary map



X Index: 128

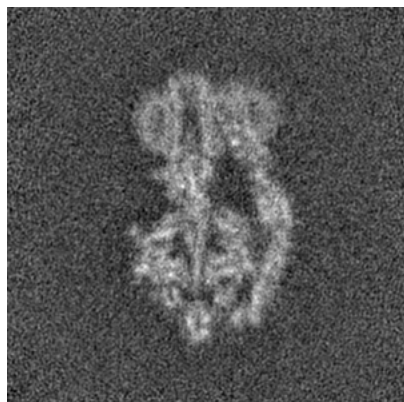


Y Index: 128

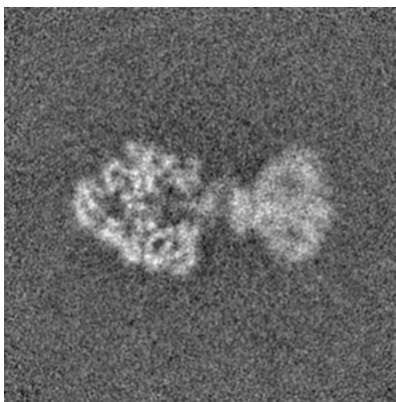


Z Index: 128

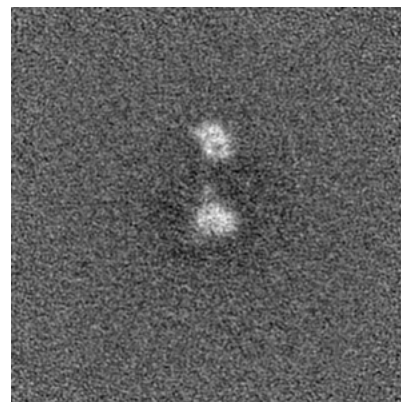
6.2.2 Raw map



X Index: 128



Y Index: 128



Z Index: 128

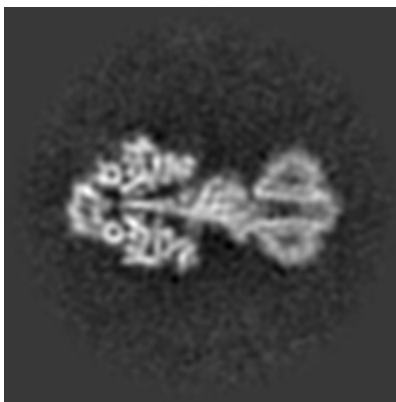
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

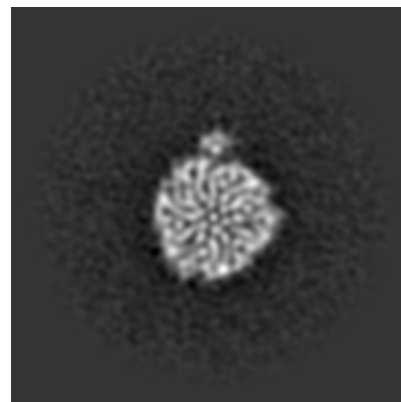
6.3.1 Primary map



X Index: 134

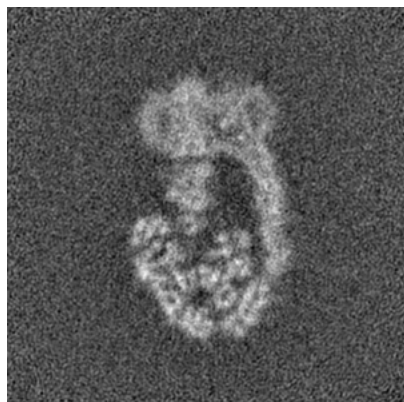


Y Index: 121

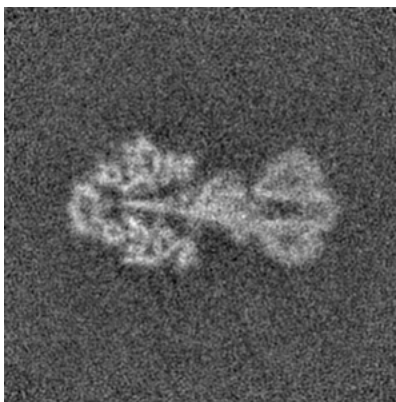


Z Index: 85

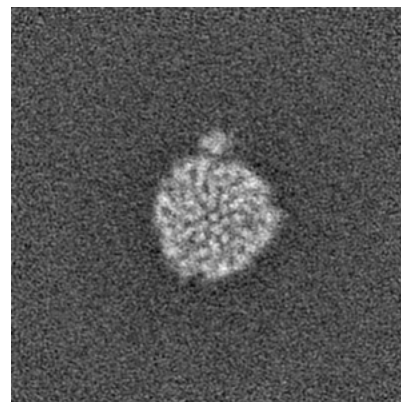
6.3.2 Raw map



X Index: 135



Y Index: 121



Z Index: 85

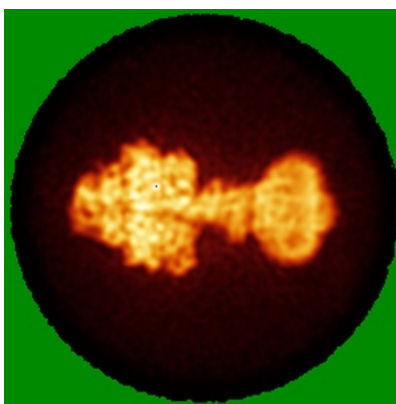
The images above show the largest variance slices of the map in three orthogonal directions.

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

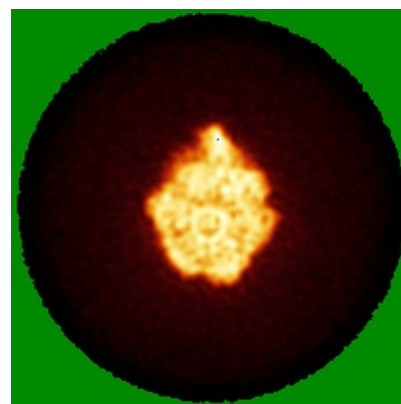
6.4.1 Primary map



X

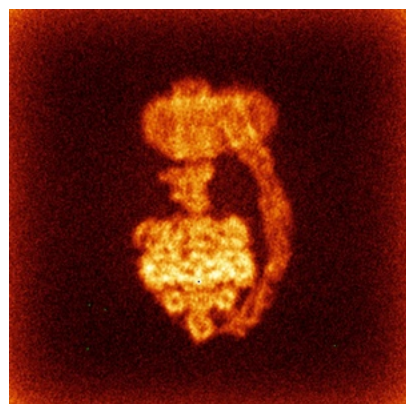


Y

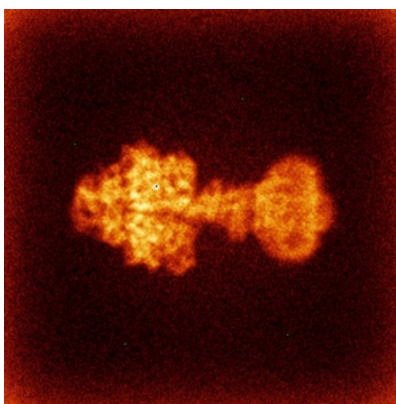


Z

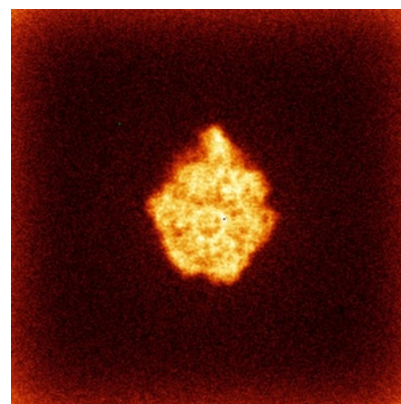
6.4.2 Raw map



X



Y

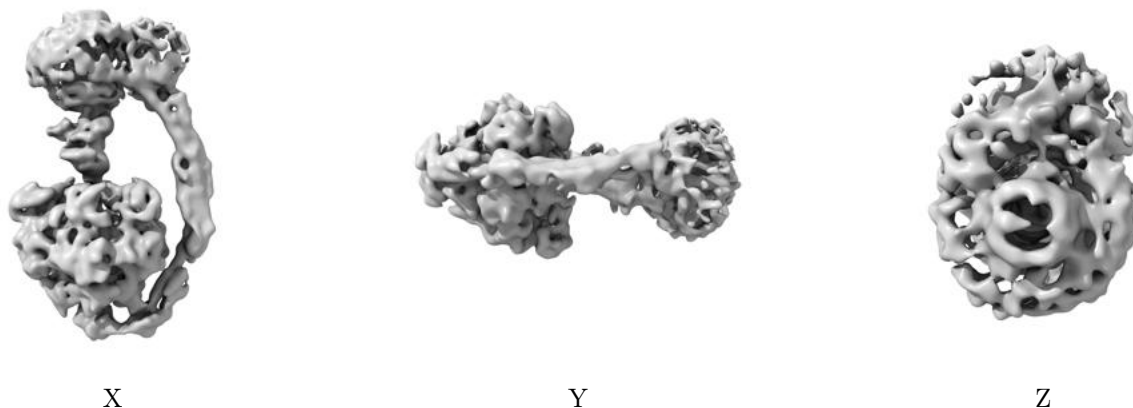


Z

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.

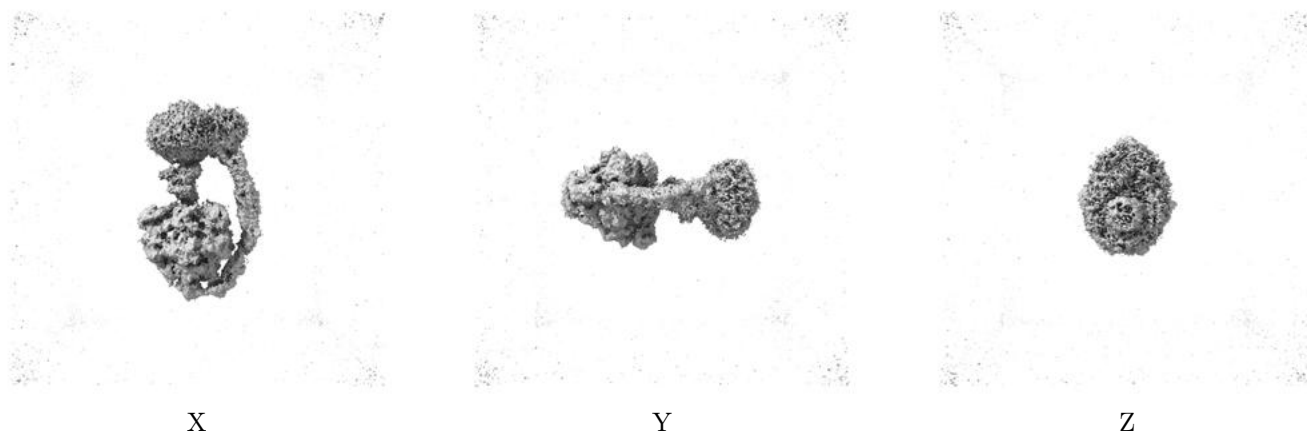
6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.61. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

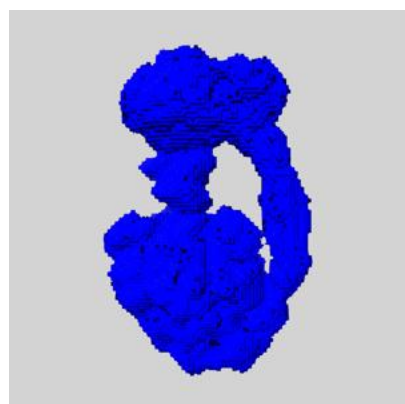
6.6 Mask visualisation [i](#)

This section shows the 3D surface view of the primary map at 50% transparency overlaid with the specified mask at 0% transparency

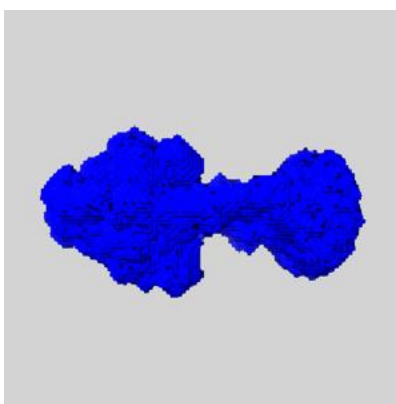
A mask typically either:

- Encompasses the whole structure
- Separates out a domain, a functional unit, a monomer or an area of interest from a larger structure

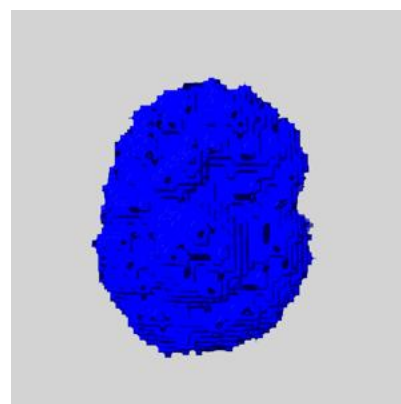
6.6.1 emd_25975_msk_1.map [i](#)



X



Y

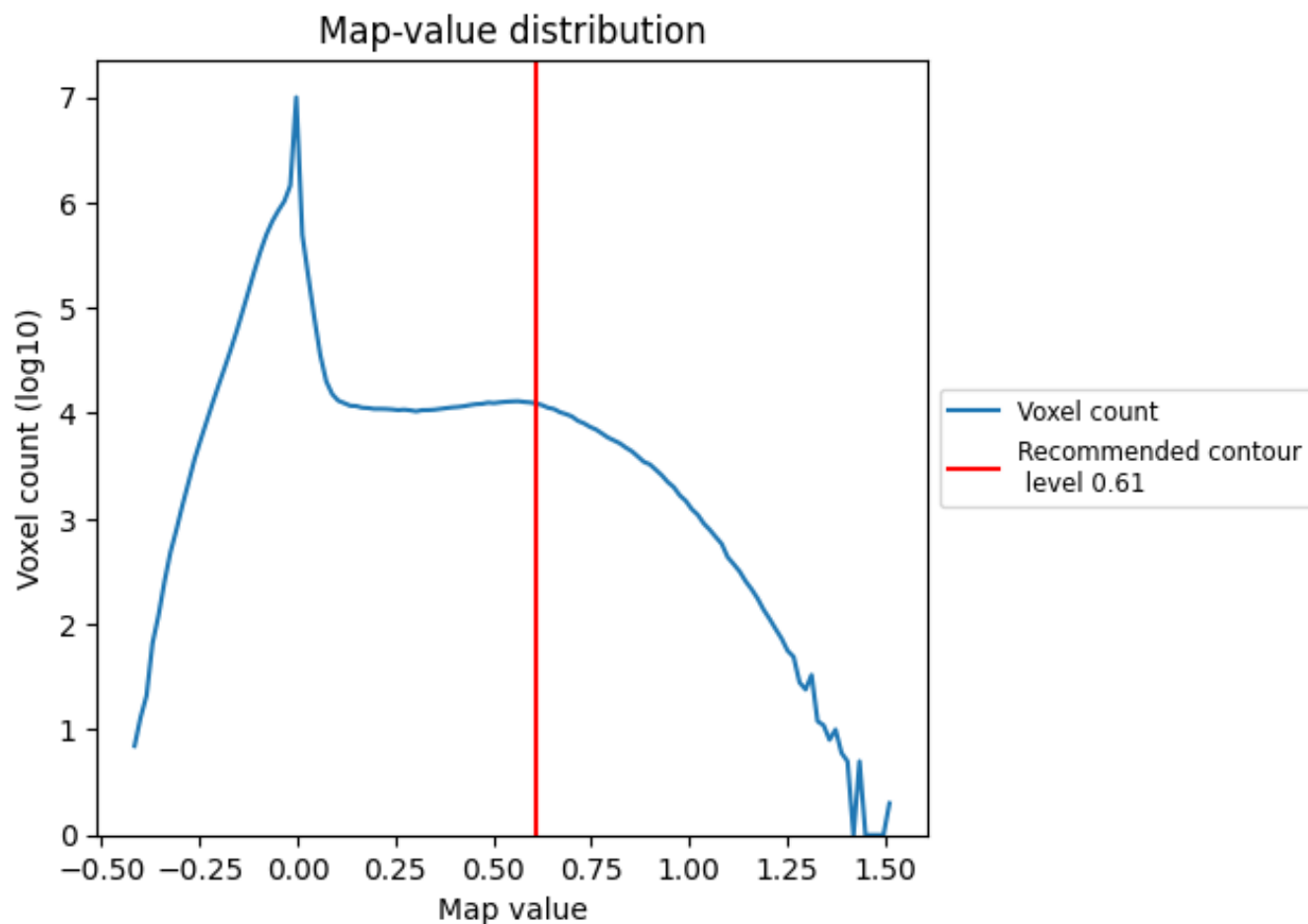


Z

7 Map analysis [i](#)

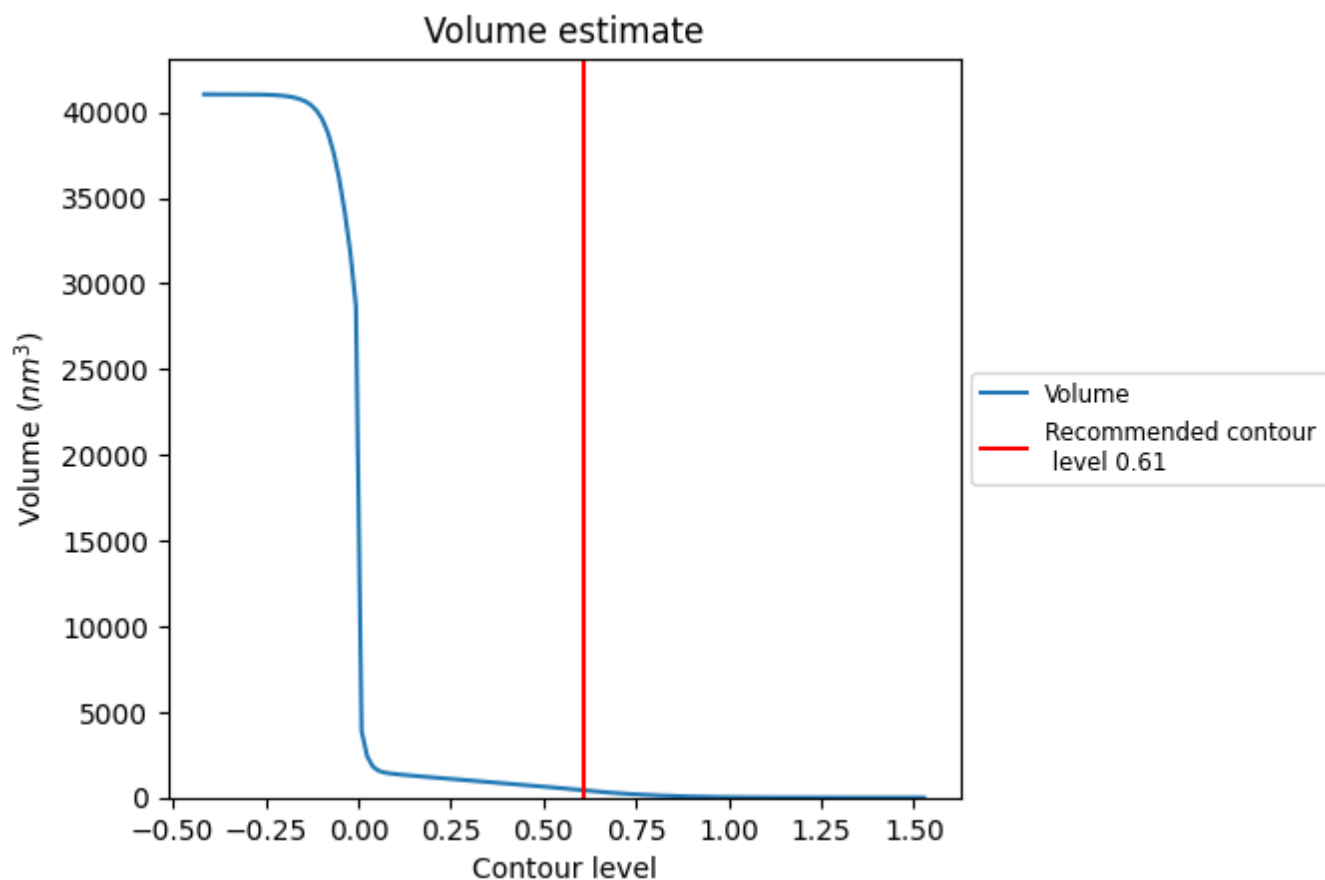
This section contains the results of statistical analysis of the map.

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.

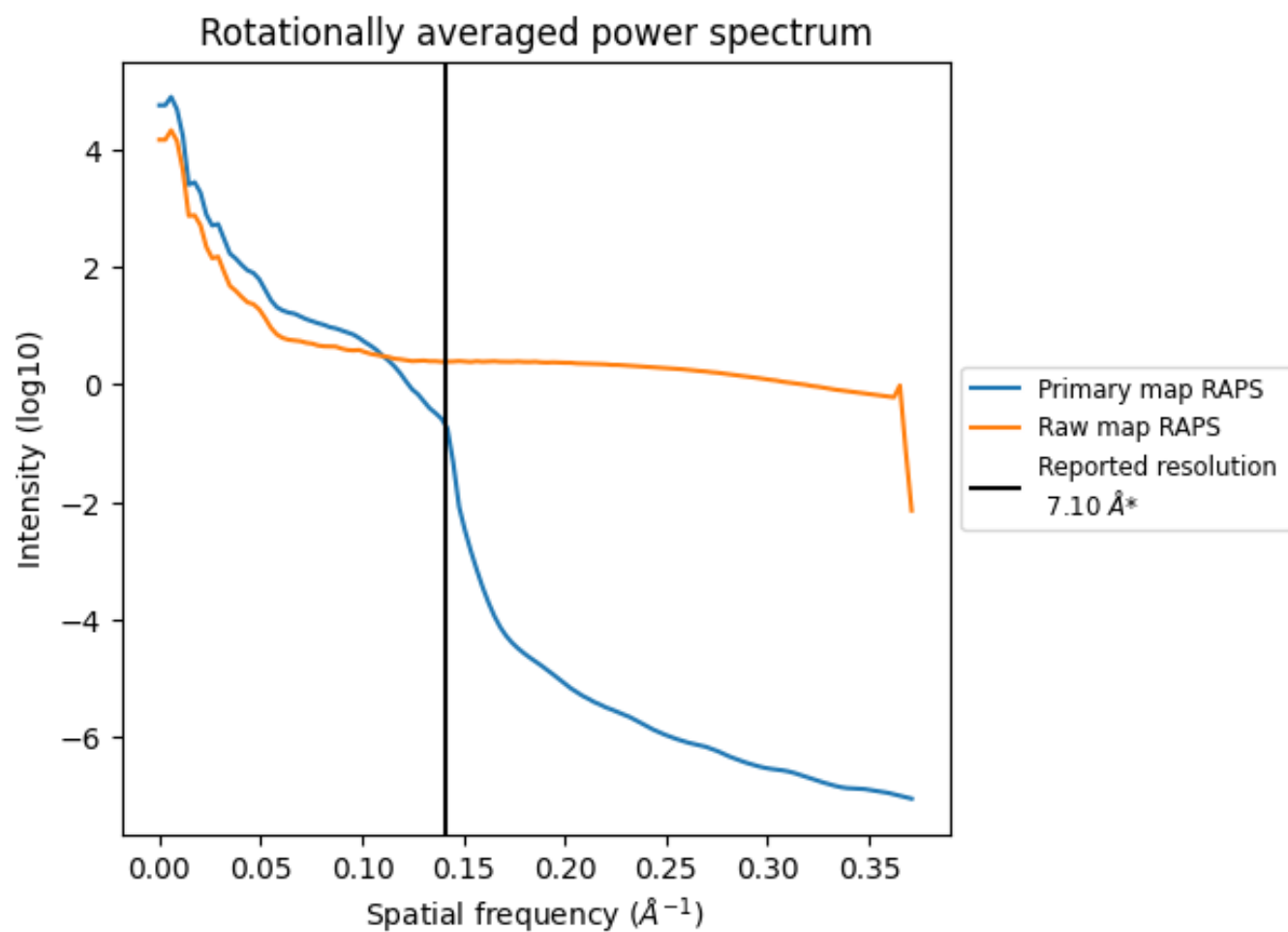
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 415 nm³; this corresponds to an approximate mass of 375 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 ⓘ

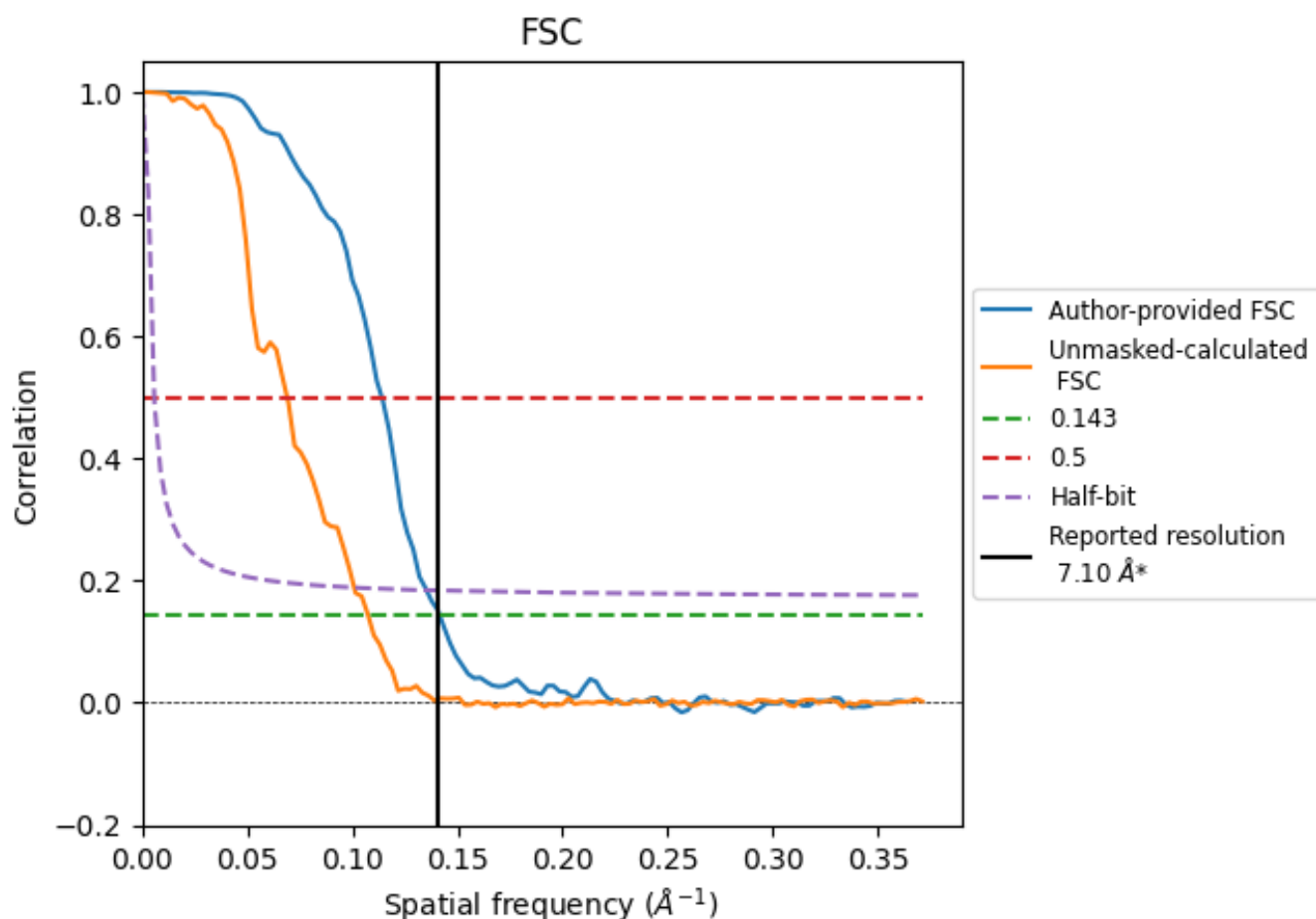


*Reported resolution corresponds to spatial frequency of 0.141 Å⁻¹

8 Fourier-Shell correlation [i](#)

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

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.141 $\text{\AA}^{-1}$

8.2 Resolution estimates [i](#)

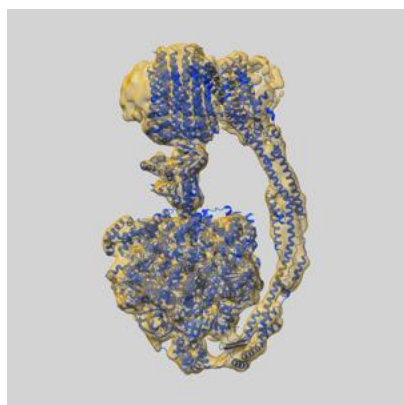
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	7.10	-	-
Author-provided FSC curve	7.07	8.77	7.39
Unmasked-calculated*	9.30	14.49	9.92

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 9.30 differs from the reported value 7.1 by more than 10 %

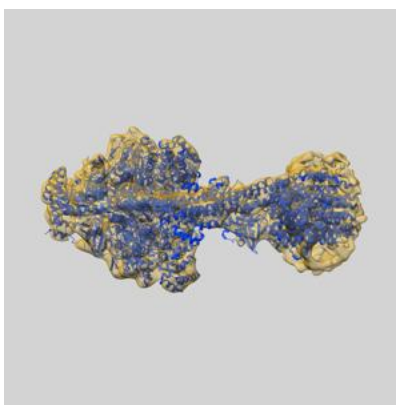
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-25975 and PDB model 7TKN. Per-residue inclusion information can be found in [section 3](#) on [page 7](#).

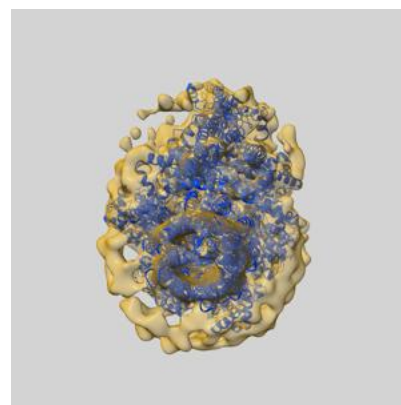
9.1 Map-model overlay [i](#)



X



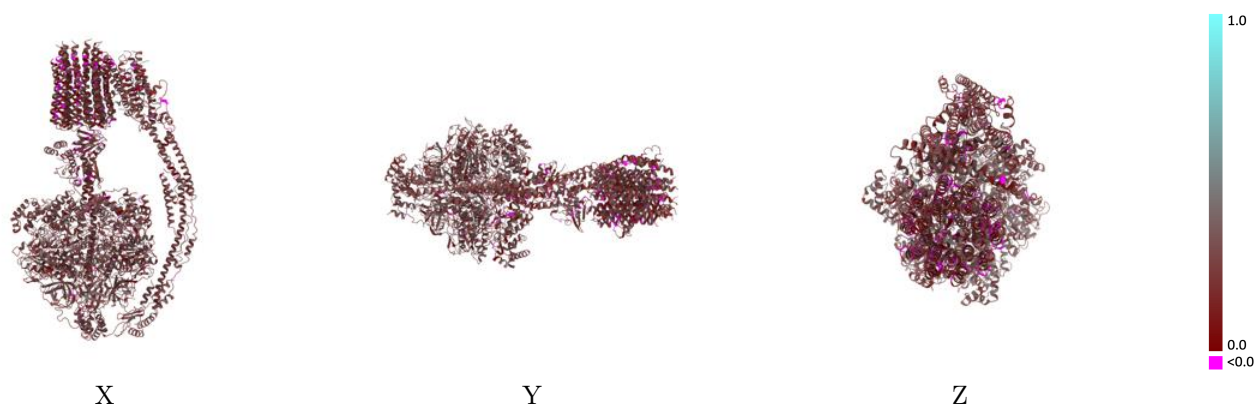
Y



Z

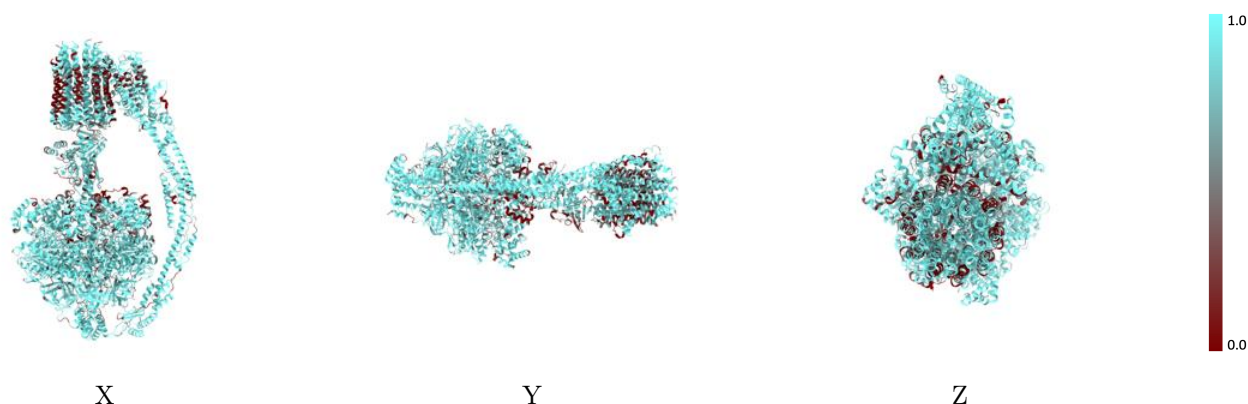
The images above show the 3D surface view of the map at the recommended contour level 0.61 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



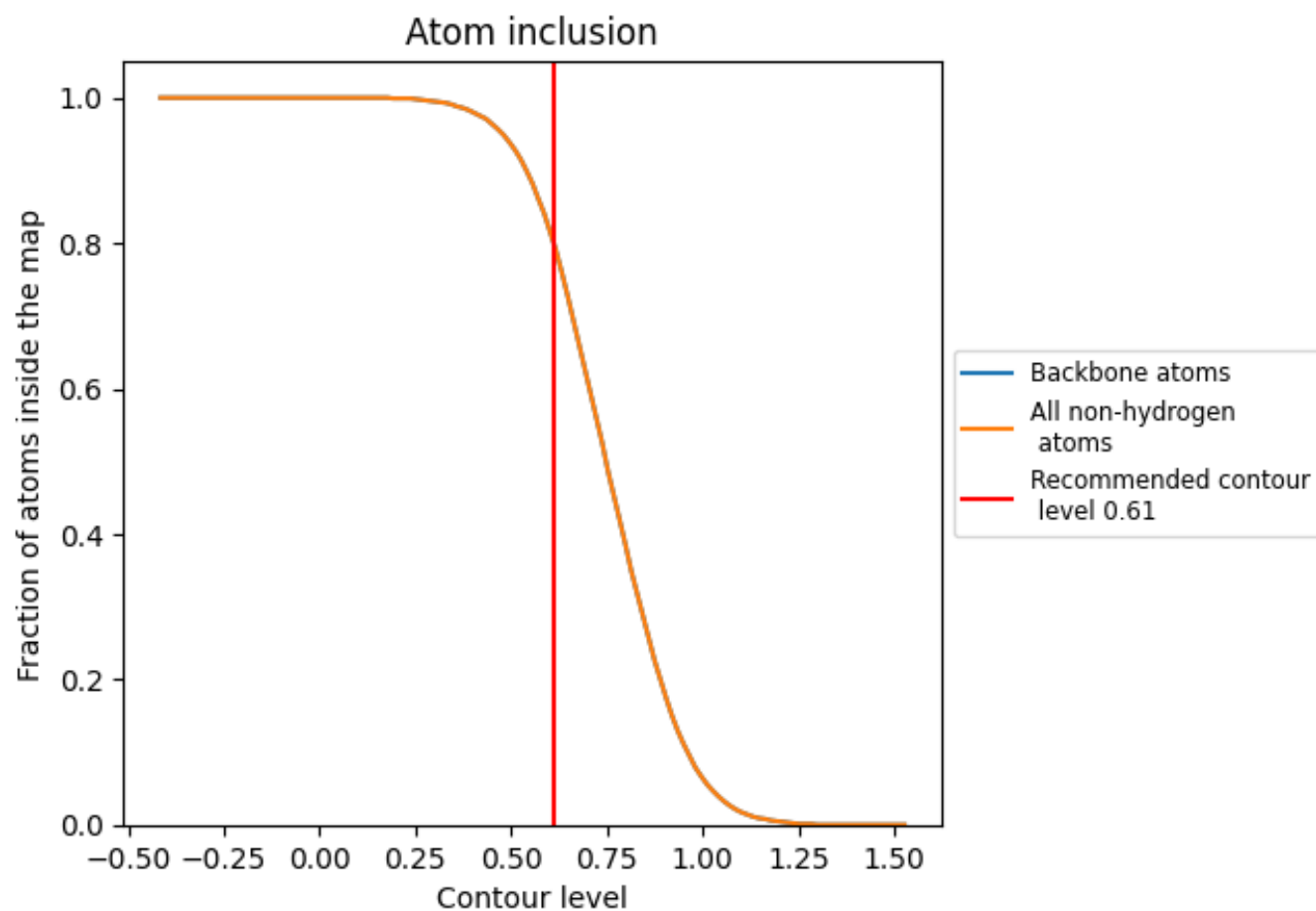
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.61).

9.4 Atom inclusion [i](#)



At the recommended contour level, 80% of all backbone atoms, 80% 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 (0.61) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.8020	 0.2320
0	 0.6670	 0.1730
1	 0.6670	 0.1550
2	 0.6870	 0.1860
3	 0.5880	 0.1170
4	 0.5630	 0.1680
5	 0.7330	 0.1930
6	 0.6590	 0.1690
7	 0.6880	 0.1910
8	 0.6670	 0.2100
9	 0.5950	 0.1660
A	 0.8560	 0.2590
B	 0.8830	 0.2570
C	 0.8410	 0.2500
D	 0.7810	 0.2310
E	 0.8790	 0.2610
F	 0.8170	 0.2450
G	 0.7640	 0.2200
H	 0.6380	 0.1640
I	 0.6110	 0.1840
O	 0.9090	 0.2610
T	 0.7060	 0.2320
U	 0.9770	 0.2750
V	 0.8670	 0.2290
W	 0.7730	 0.1770
X	 0.6810	 0.1930
Y	 0.8180	 0.2240
Z	 0.9070	 0.2110

