



Full wwPDB EM Validation Report ⓘ

Mar 9, 2026 – 07:00 AM UTC

PDB ID : 5GAR / pdb_00005gar
EMDB ID : EMD-8016
Title : Thermus thermophilus V/A-ATPase, conformation 1
Authors : Schep, D.G.; Zhao, J.; Rubinstein, J.L.
Deposited on : 2016-02-05
Resolution : 6.40 Å(reported)

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

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

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

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

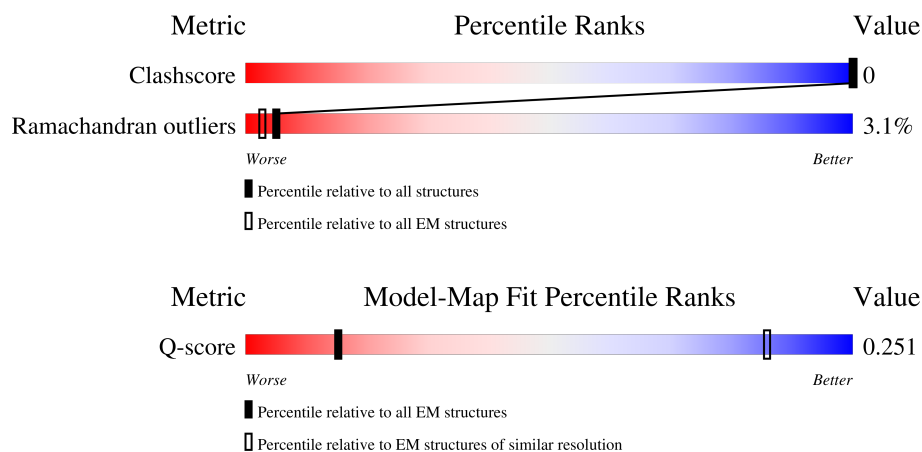
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 6.40 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.



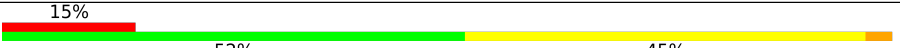
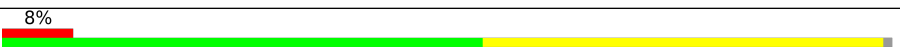
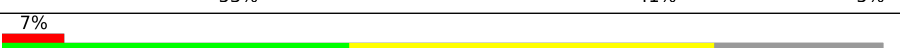
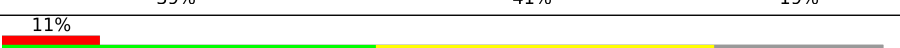
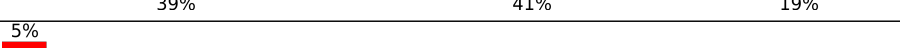
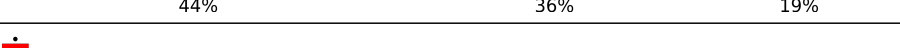
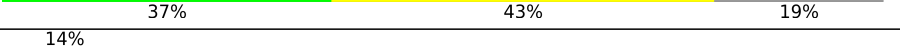
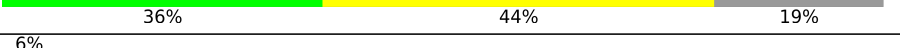
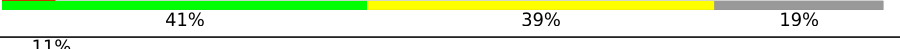
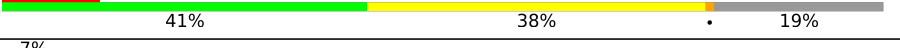
Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Q-score	-	25397	544 (5.90 - 6.90)

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

Mol	Chain	Length	Quality of chain
1	A	577	 60% 39%
1	B	577	 58% 40%
1	C	577	 54% 45%
2	D	457	 54% 45%
2	E	457	 57% 42%

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Mol	Chain	Length	Quality of chain
2	F	457	
3	G	186	
3	H	186	
4	I	105	
4	J	105	
5	K	210	
6	L	100	
7	M	323	
8	N	652	
9	O	99	
9	P	99	
9	Q	99	
9	R	99	
9	S	99	
9	T	99	
9	U	99	
9	V	99	
9	W	99	
9	X	99	
9	Y	99	
9	Z	99	

2 Entry composition

There are 9 unique types of molecules in this entry. The entry contains 23483 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called V-type ATP synthase alpha chain.

Mol	Chain	Residues	Atoms				AltConf	Trace
1	A	577	Total	C	N	O	0	0
			2307	1154	577	576		
1	B	576	Total	C	N	O	0	0
			2303	1152	576	575		
1	C	577	Total	C	N	O	0	0
			2307	1154	577	576		

- Molecule 2 is a protein called V-type ATP synthase beta chain.

Mol	Chain	Residues	Atoms				AltConf	Trace
2	D	457	Total	C	N	O	0	0
			1827	914	457	456		
2	E	457	Total	C	N	O	0	0
			1827	914	457	456		
2	F	457	Total	C	N	O	0	0
			1827	914	457	456		

- Molecule 3 is a protein called V-type ATP synthase subunit E.

Mol	Chain	Residues	Atoms				AltConf	Trace
3	G	184	Total	C	N	O	0	0
			734	368	184	182		
3	H	184	Total	C	N	O	0	0
			734	368	184	182		

There are 6 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
G	134	MET	LEU	conflict	UNP P74901
G	171	MET	LEU	conflict	UNP P74901
G	178	MET	LEU	conflict	UNP P74901
H	134	MET	LEU	conflict	UNP P74901
H	171	MET	LEU	conflict	UNP P74901

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Chain	Residue	Modelled	Actual	Comment	Reference
H	178	MET	LEU	conflict	UNP P74901

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

Mol	Chain	Residues	Atoms				AltConf	Trace
4	I	100	Total	C	N	O	0	0
			399	200	100	99		
4	J	100	Total	C	N	O	0	0
			399	200	100	99		

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
I	16	GLY	-	insertion	UNP Q72J66
J	16	GLY	-	insertion	UNP Q72J66

- Molecule 5 is a protein called V-type ATP synthase subunit D.

Mol	Chain	Residues	Atoms				AltConf	Trace
5	K	210	Total	C	N	O	0	0
			839	420	210	209		

- Molecule 6 is a protein called V-type ATP synthase subunit F.

Mol	Chain	Residues	Atoms				AltConf	Trace
6	L	100	Total	C	N	O	0	0
			399	200	100	99		

- Molecule 7 is a protein called V-type ATP synthase subunit C.

Mol	Chain	Residues	Atoms				AltConf	Trace
7	M	320	Total	C	N	O	0	0
			1279	640	320	319		

- Molecule 8 is a protein called Archaeal/vacuolar-type H⁺-ATPase subunit I.

Mol	Chain	Residues	Atoms				AltConf	Trace
8	N	619	Total	C	N	O	0	0
			2474	1238	619	617		

There are 3 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
N	154	ARG	LYS	conflict	UNP H9ZQR4
N	164	ALA	VAL	conflict	UNP H9ZQR4
N	173	PRO	ALA	conflict	UNP H9ZQR4

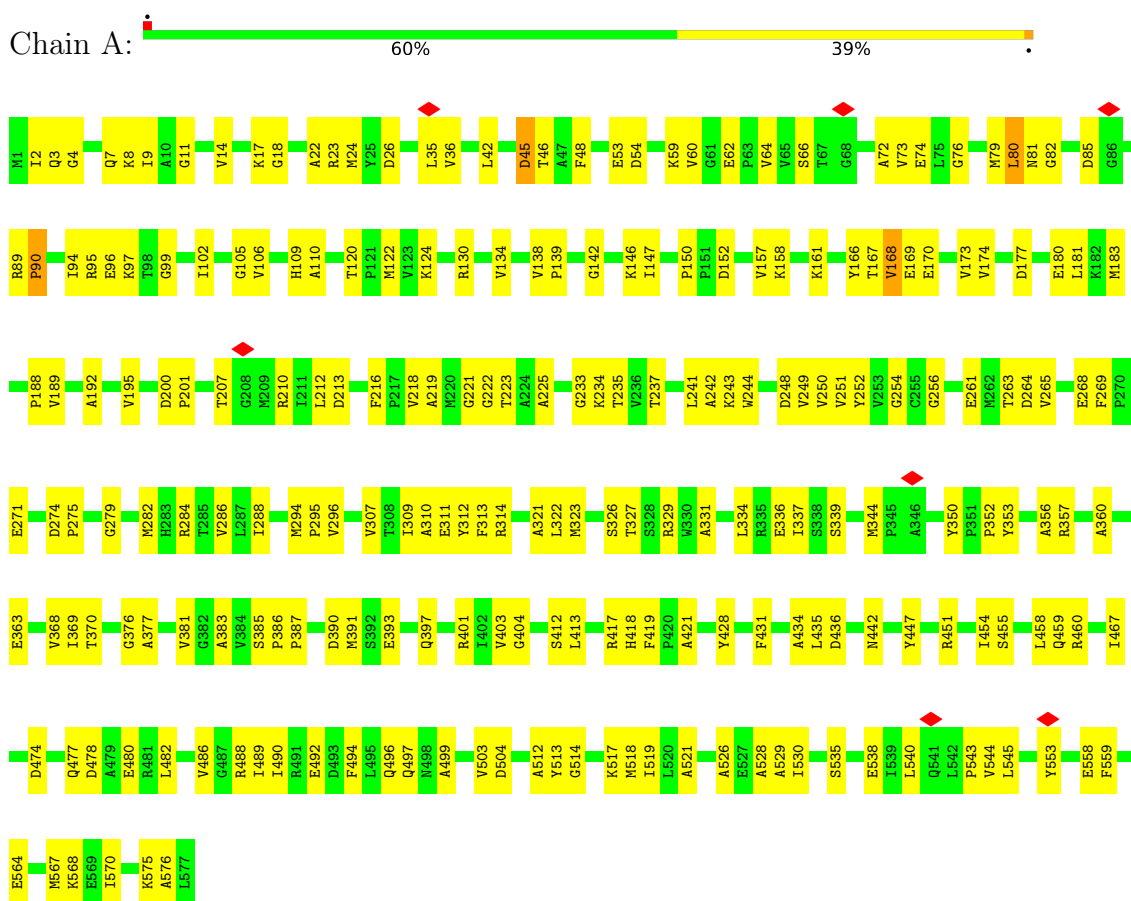
- Molecule 9 is a protein called Vacuolar type ATP synthase subunit.

Mol	Chain	Residues	Atoms				AltConf	Trace
9	O	80	Total 319	C 160	N 80	O 79	0	0
9	P	80	Total 319	C 160	N 80	O 79	0	0
9	Q	80	Total 319	C 160	N 80	O 79	0	0
9	R	80	Total 319	C 160	N 80	O 79	0	0
9	S	80	Total 319	C 160	N 80	O 79	0	0
9	T	80	Total 319	C 160	N 80	O 79	0	0
9	U	80	Total 319	C 160	N 80	O 79	0	0
9	V	80	Total 319	C 160	N 80	O 79	0	0
9	W	80	Total 319	C 160	N 80	O 79	0	0
9	X	80	Total 319	C 160	N 80	O 79	0	0
9	Y	80	Total 319	C 160	N 80	O 79	0	0
9	Z	80	Total 319	C 160	N 80	O 79	0	0

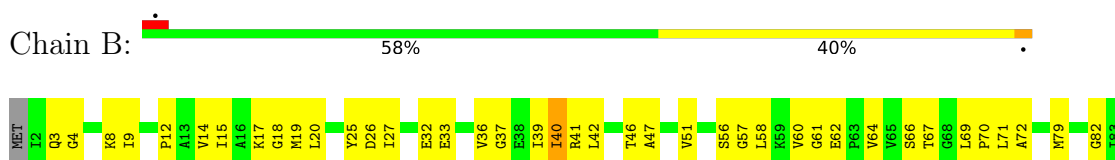
3 Residue-property plots

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

• Molecule 1: V-type ATP synthase alpha chain

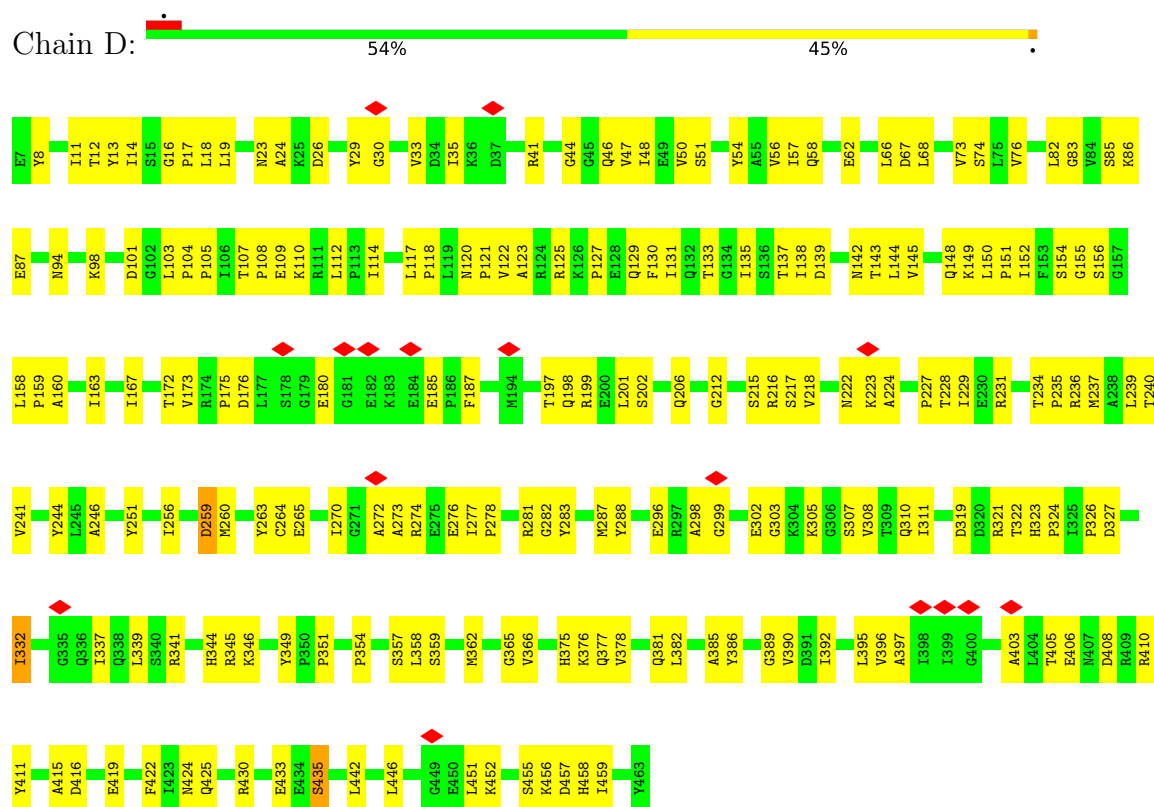


• Molecule 1: V-type ATP synthase alpha chain

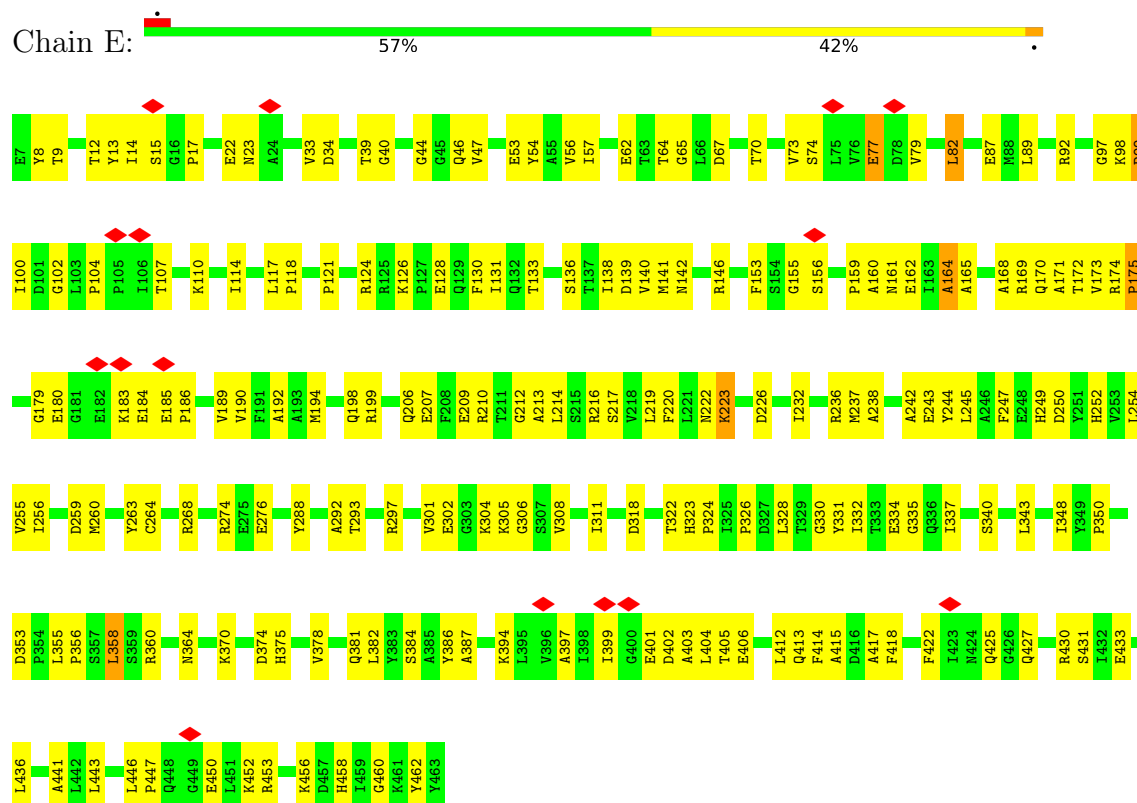




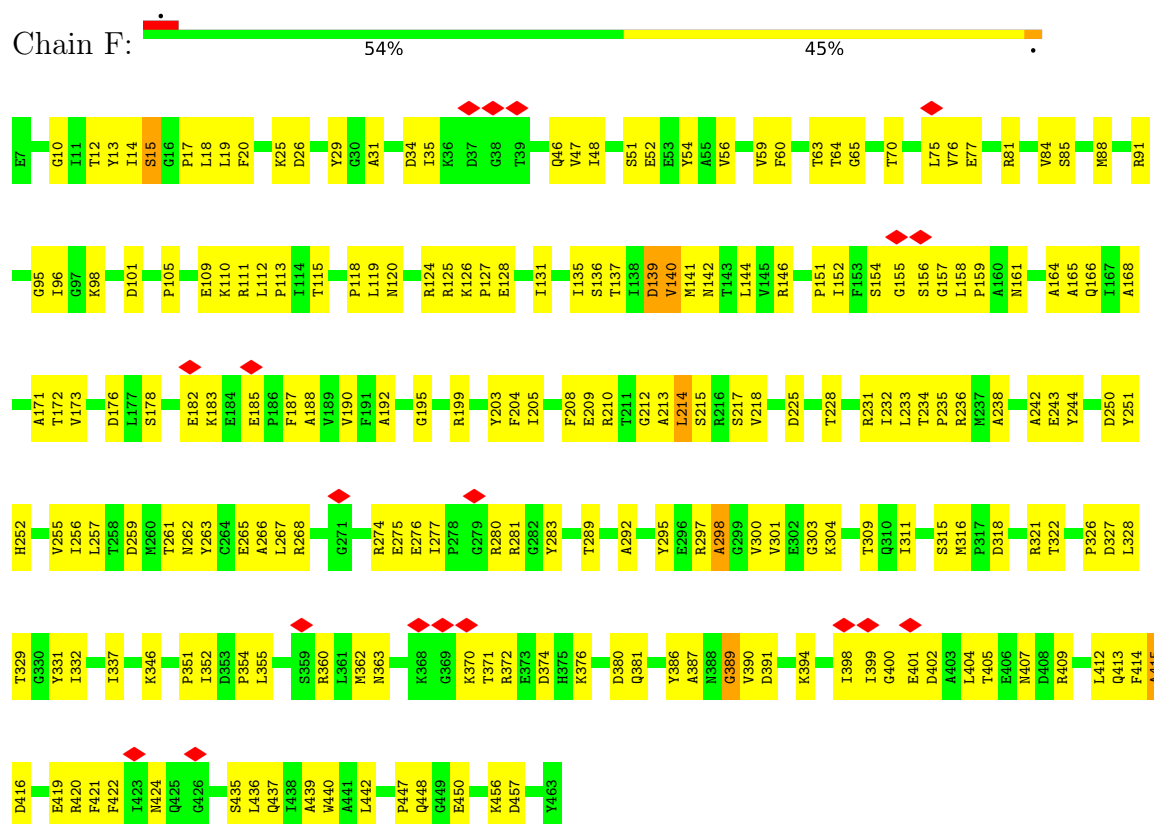
• Molecule 2: V-type ATP synthase beta chain



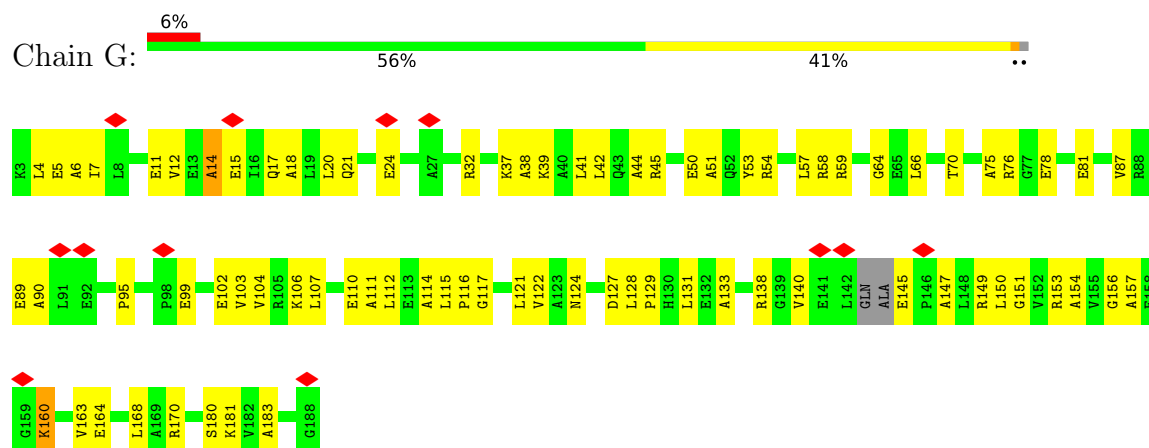
• Molecule 2: V-type ATP synthase beta chain



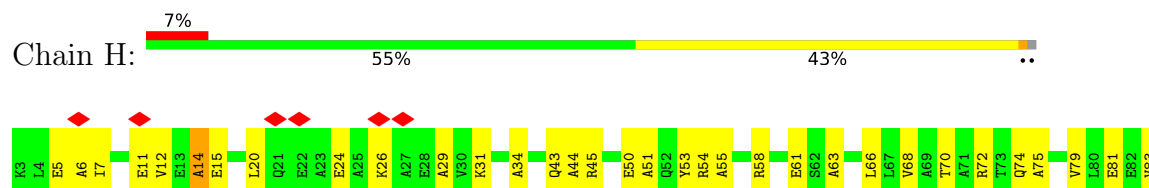
- Molecule 2: V-type ATP synthase beta chain

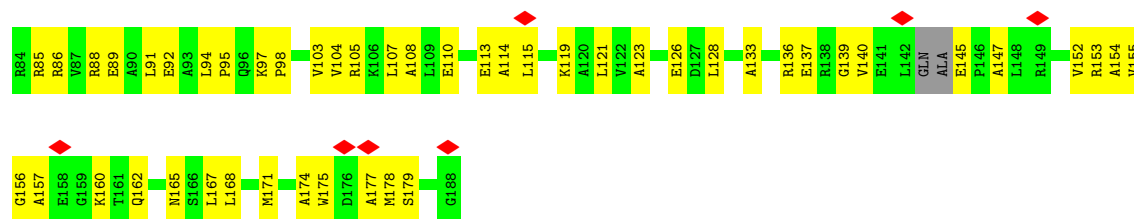


- Molecule 3: V-type ATP synthase subunit E



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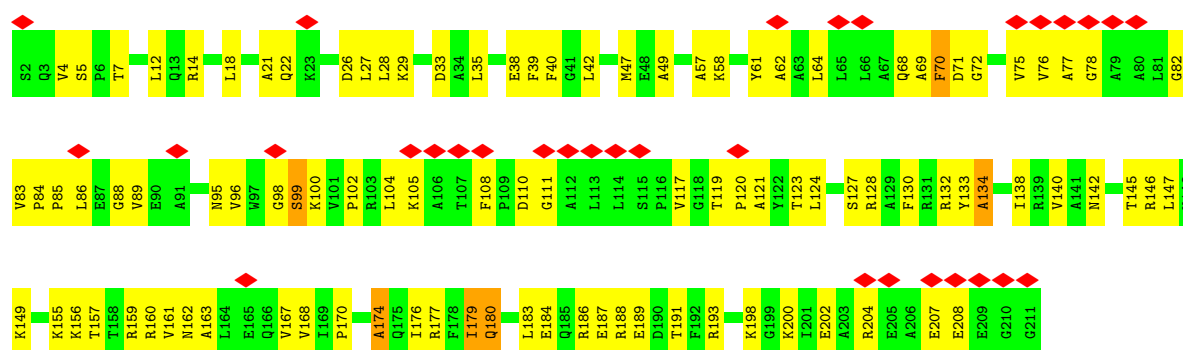
• Molecule 4: V-type ATPase subunit G



• Molecule 4: V-type ATPase subunit G

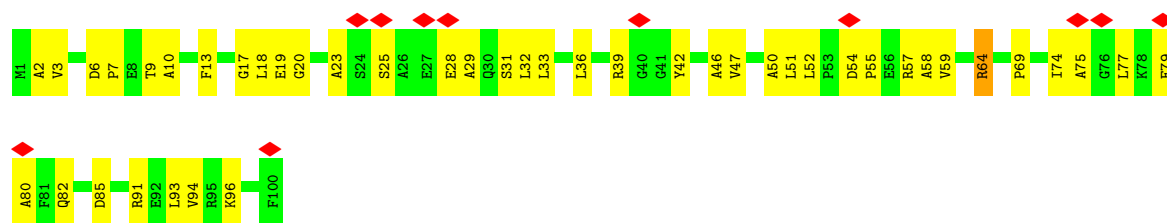


• Molecule 5: V-type ATP synthase subunit D

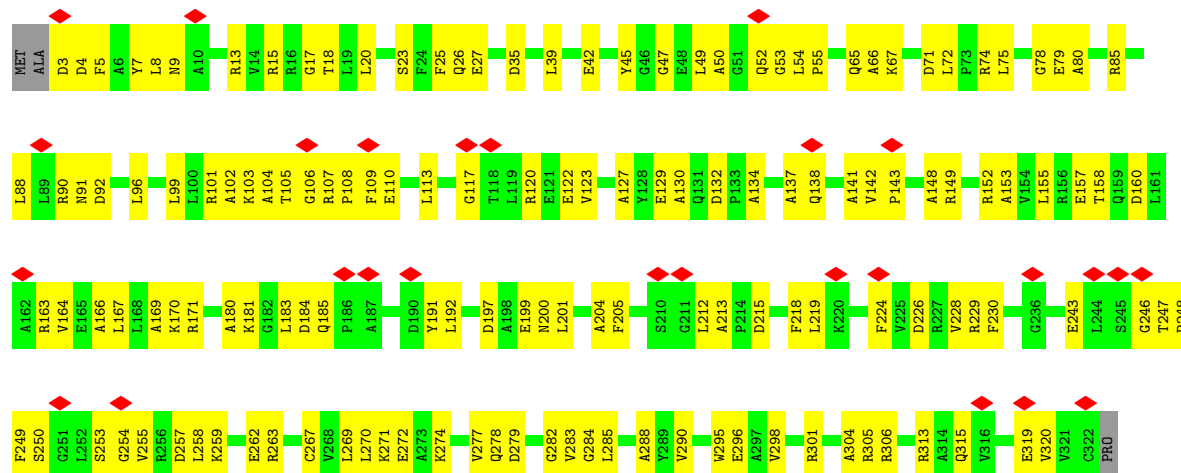


• Molecule 6: V-type ATP synthase subunit F

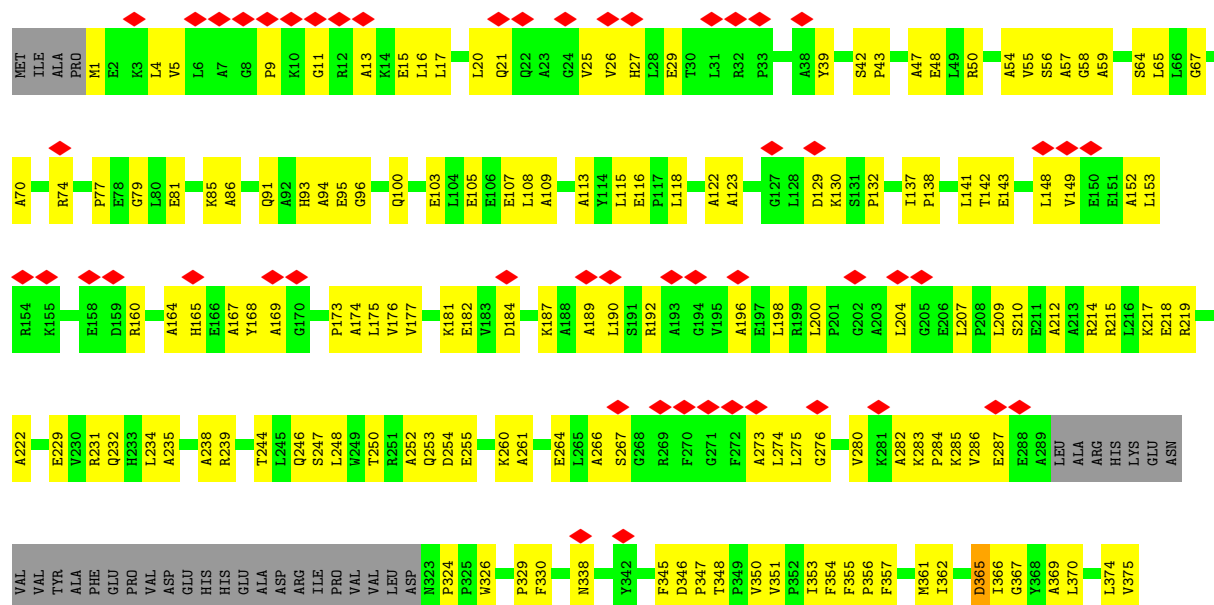


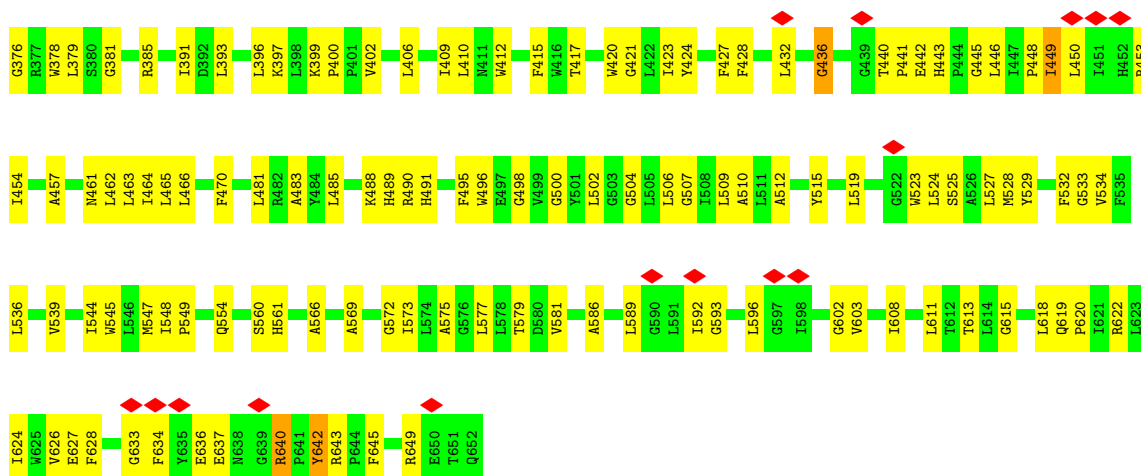


• Molecule 7: V-type ATP synthase subunit C

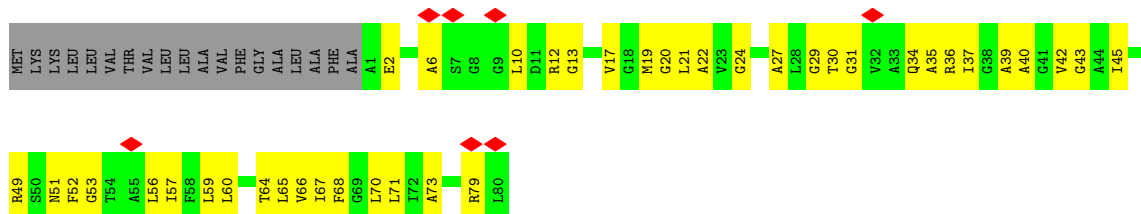


• Molecule 8: Archaeal/vacuolar-type H⁺-ATPase subunit I

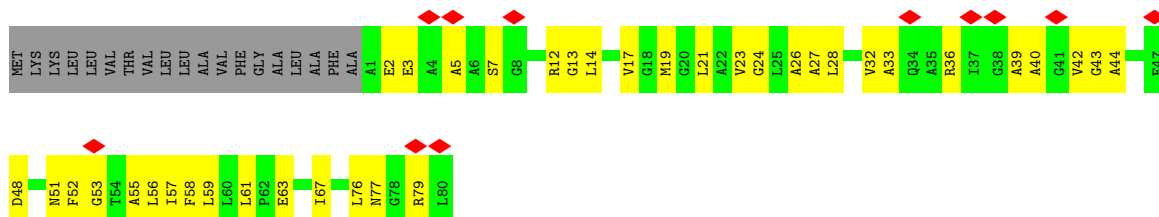
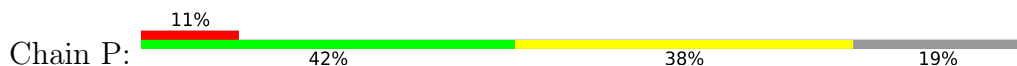




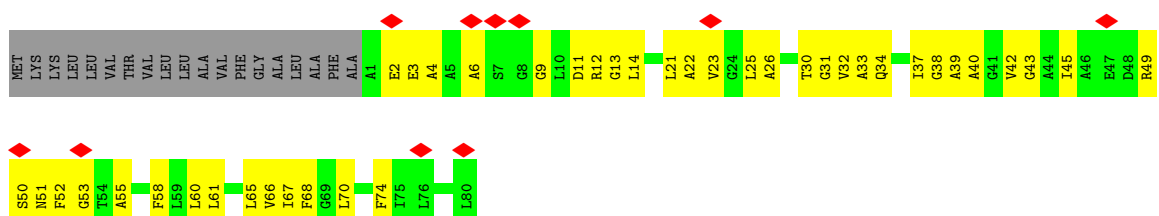
• Molecule 9: Vacuolar type ATP synthase subunit



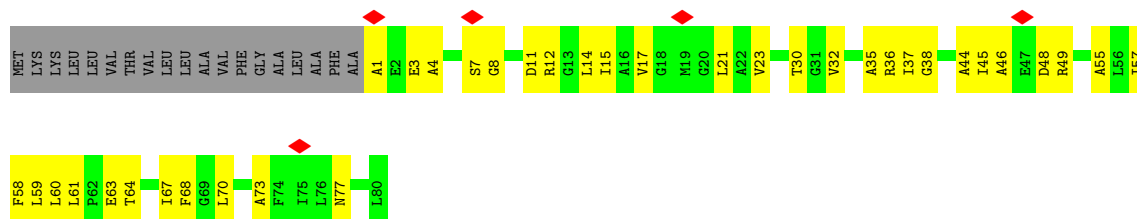
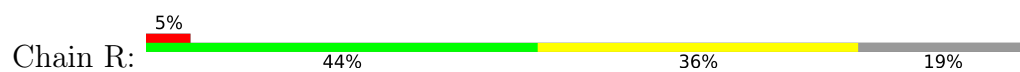
• Molecule 9: Vacuolar type ATP synthase subunit



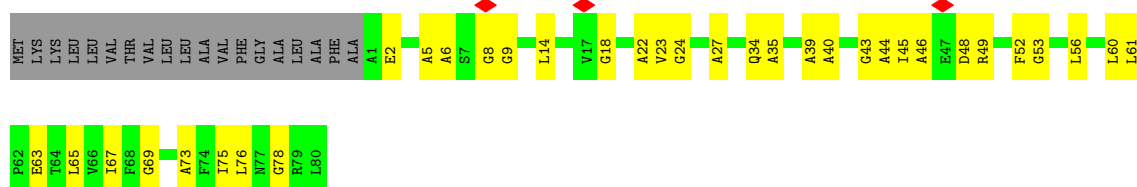
• Molecule 9: Vacuolar type ATP synthase subunit



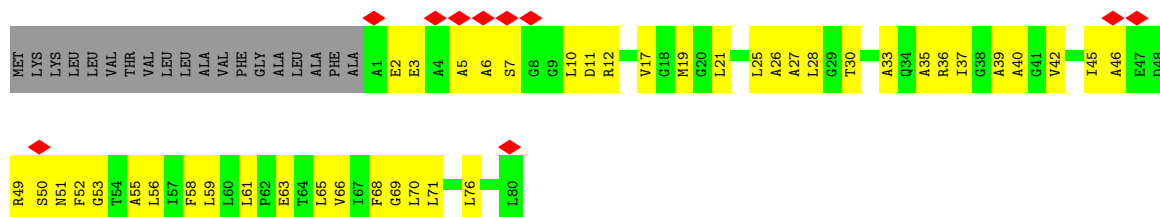
• Molecule 9: Vacuolar type ATP synthase subunit



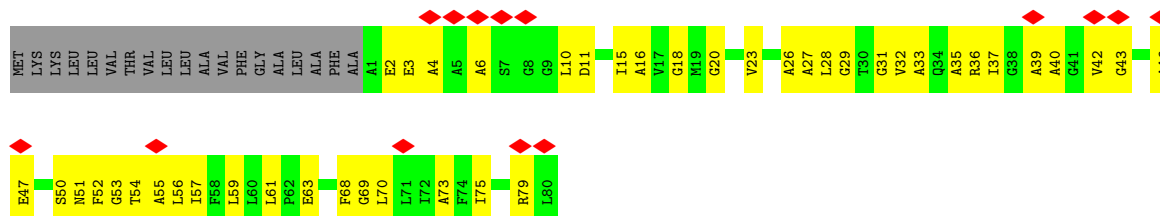
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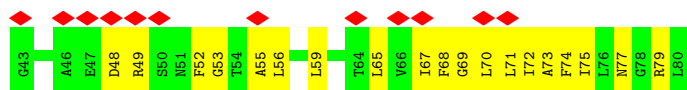


- Molecule 9: Vacuolar type ATP synthase subunit

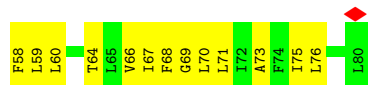
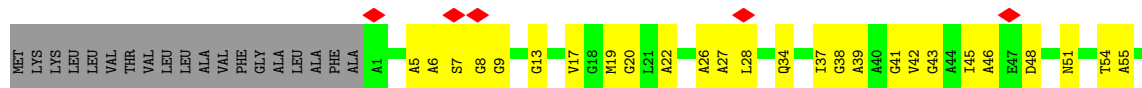
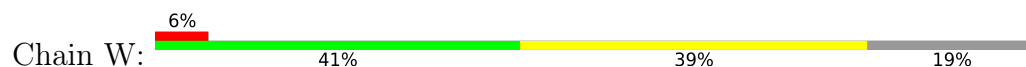


- Molecule 9: Vacuolar type ATP synthase subunit

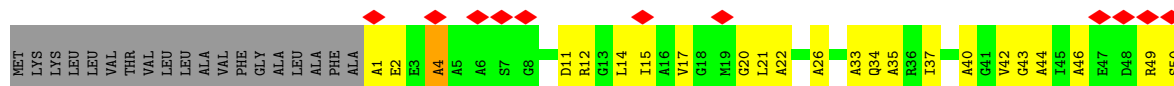




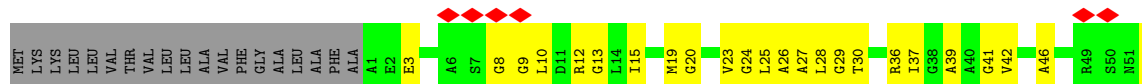
- Molecule 9: Vacuolar type ATP synthase subunit



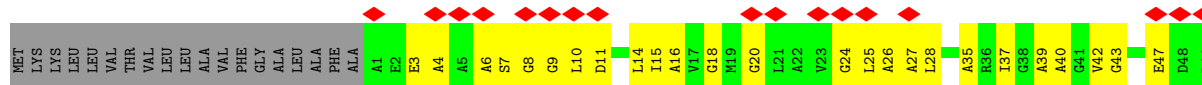
- Molecule 9: Vacuolar type ATP synthase subunit



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- Molecule 9: Vacuolar type ATP synthase subunit



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	197178	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TECNAI F20	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/\text{\AA}^2$)	35.7	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	6000	Depositor
Magnification	34483	Depositor
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.152	Depositor
Minimum map value	-0.047	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.007	Depositor
Recommended contour level	0.0382	Depositor
Map size (Å)	371.2, 371.2, 371.2	wwPDB
Map dimensions	256, 256, 256	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.45, 1.45, 1.45	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	A	2.54	109/2306 (4.7%)	2.88	206/2881 (7.2%)
1	B	2.56	119/2302 (5.2%)	2.85	220/2876 (7.6%)
1	C	2.55	126/2306 (5.5%)	2.87	260/2881 (9.0%)
2	D	2.60	105/1826 (5.8%)	2.87	189/2281 (8.3%)
2	E	2.55	83/1826 (4.5%)	2.91	190/2281 (8.3%)
2	F	2.53	102/1826 (5.6%)	2.83	180/2281 (7.9%)
3	G	2.52	35/732 (4.8%)	2.93	83/912 (9.1%)
3	H	2.50	40/732 (5.5%)	2.88	86/912 (9.4%)
4	I	2.55	23/398 (5.8%)	2.84	46/496 (9.3%)
4	J	2.54	17/398 (4.3%)	2.90	48/496 (9.7%)
5	K	2.52	48/838 (5.7%)	3.06	117/1046 (11.2%)
6	L	2.55	19/398 (4.8%)	2.93	46/496 (9.3%)
7	M	2.53	71/1278 (5.6%)	3.13	165/1596 (10.3%)
8	N	2.56	129/2472 (5.2%)	3.03	320/3087 (10.4%)
9	O	2.56	19/318 (6.0%)	3.25	47/396 (11.9%)
9	P	2.52	18/318 (5.7%)	3.18	51/396 (12.9%)
9	Q	2.58	16/318 (5.0%)	3.18	47/396 (11.9%)
9	R	2.53	18/318 (5.7%)	3.06	47/396 (11.9%)
9	S	2.55	18/318 (5.7%)	3.01	38/396 (9.6%)
9	T	2.59	20/318 (6.3%)	3.19	48/396 (12.1%)
9	U	2.60	17/318 (5.3%)	3.36	59/396 (14.9%)
9	V	2.62	21/318 (6.6%)	3.30	52/396 (13.1%)
9	W	2.62	21/318 (6.6%)	3.12	37/396 (9.3%)
9	X	2.47	17/318 (5.3%)	3.17	49/396 (12.4%)
9	Y	2.45	13/318 (4.1%)	3.20	49/396 (12.4%)
9	Z	2.62	17/318 (5.3%)	3.37	57/396 (14.4%)
All	All	2.55	1241/23454 (5.3%)	2.97	2737/29274 (9.3%)

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
7	M	0	1

All (1241) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	276	GLU	C-N	12.05	1.43	1.32
1	A	442	ASN	CA-C	-11.65	1.43	1.52
8	N	374	LEU	C-N	11.64	1.48	1.33
1	A	60	VAL	CA-C	-11.22	1.43	1.52
1	A	192	ALA	CA-C	-10.96	1.39	1.52
1	B	375	GLU	CA-C	-10.45	1.40	1.52
4	I	82	GLU	CA-C	-10.44	1.42	1.52
2	D	121	PRO	N-CA	-10.37	1.40	1.47
4	J	45	GLU	CA-C	10.22	1.65	1.52
2	F	352	ILE	C-N	10.17	1.43	1.33
8	N	273	ALA	CA-C	-10.06	1.40	1.52
1	C	148	LEU	C-N	9.91	1.42	1.32
1	A	357	ARG	CA-C	-9.77	1.39	1.52
1	A	353	TYR	N-CA	-9.72	1.35	1.46
2	D	307	SER	CA-C	-9.65	1.41	1.52
6	L	20	GLY	CA-C	-9.59	1.43	1.51
1	C	504	ASP	C-N	9.54	1.45	1.33
8	N	620	PRO	C-N	9.30	1.45	1.33
2	D	156	SER	CA-C	-9.29	1.41	1.53
3	G	151	GLY	N-CA	-9.27	1.35	1.45
1	C	203	THR	CA-C	-9.19	1.44	1.52
9	S	61	LEU	N-CA	-9.11	1.36	1.46
2	F	19	LEU	CA-C	-9.05	1.41	1.52
1	A	7	GLN	CA-C	-8.88	1.44	1.52
2	E	142	ASN	CA-C	-8.86	1.42	1.52
2	F	35	ILE	CA-C	-8.77	1.43	1.52
9	R	36	ARG	C-N	8.67	1.44	1.33
8	N	461	ASN	C-N	8.66	1.45	1.33
2	D	54	TYR	CA-C	-8.63	1.42	1.52
8	N	490	ARG	C-N	8.59	1.45	1.33
2	D	283	TYR	CA-C	-8.54	1.42	1.52
2	E	124	ARG	CA-C	-8.49	1.42	1.52
1	C	269	PHE	N-CA	8.46	1.54	1.46
2	D	299	GLY	C-N	8.44	1.44	1.33
2	E	74	SER	CA-C	-8.40	1.42	1.52
8	N	509	LEU	CA-C	-8.40	1.41	1.52
2	E	386	TYR	C-N	8.38	1.44	1.33
3	G	57	LEU	CA-C	-8.37	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	Q	45	ILE	C-N	8.37	1.44	1.33
5	K	188	ARG	N-CA	-8.31	1.36	1.46
2	D	273	ALA	CA-C	-8.31	1.42	1.52
1	A	219	ALA	CA-C	-8.30	1.42	1.53
1	B	203	THR	CA-C	-8.30	1.44	1.52
1	B	158	LYS	CA-C	-8.28	1.42	1.52
7	M	123	VAL	CA-C	-8.28	1.42	1.52
1	A	200	ASP	CA-C	-8.26	1.44	1.52
2	D	112	LEU	N-CA	-8.25	1.40	1.46
9	R	77	ASN	CA-C	-8.24	1.42	1.52
1	A	35	LEU	CA-C	-8.19	1.41	1.52
9	Q	74	PHE	C-N	8.17	1.44	1.33
1	C	213	ASP	CA-C	-8.15	1.41	1.52
1	C	256	GLY	C-N	8.12	1.45	1.33
8	N	440	THR	C-N	8.11	1.43	1.33
1	B	247	ALA	CA-C	-8.10	1.43	1.53
9	S	14	LEU	N-CA	-8.08	1.36	1.46
1	B	486	VAL	CA-C	8.08	1.63	1.52
2	D	51	SER	N-CA	-8.05	1.35	1.45
1	C	569	GLU	CA-C	-8.05	1.41	1.52
1	A	147	ILE	CA-C	-8.02	1.43	1.52
3	G	42	LEU	C-N	8.00	1.44	1.33
9	W	43	GLY	C-N	7.99	1.44	1.33
9	Z	9	GLY	C-N	7.97	1.44	1.33
1	C	49	VAL	C-N	7.96	1.44	1.33
7	M	306	ARG	N-CA	-7.96	1.36	1.46
1	B	302	SER	CA-C	-7.96	1.42	1.52
8	N	532	PHE	CA-C	-7.95	1.41	1.52
2	D	302	GLU	N-CA	-7.94	1.36	1.46
2	F	457	ASP	C-N	7.93	1.43	1.33
1	A	180	GLU	CA-C	-7.92	1.42	1.52
9	R	15	ILE	CA-C	-7.91	1.42	1.52
1	A	225	ALA	C-N	7.90	1.42	1.33
2	E	328	LEU	C-N	7.89	1.43	1.33
1	C	324	ALA	CA-C	-7.89	1.42	1.52
7	M	13	ARG	C-N	7.86	1.43	1.33
1	A	478	ASP	CA-C	-7.85	1.43	1.52
9	O	37	ILE	C-N	7.85	1.43	1.33
9	Q	34	GLN	CA-C	-7.84	1.42	1.52
2	D	44	GLY	C-N	7.82	1.41	1.32
1	C	172	VAL	N-CA	-7.81	1.36	1.46
9	U	4	ALA	C-O	-7.81	1.18	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	M	152	ARG	CA-C	-7.81	1.43	1.52
1	C	94	ILE	CA-C	-7.81	1.43	1.52
2	F	70	THR	N-CA	-7.80	1.37	1.46
1	C	444	ALA	CA-C	-7.78	1.43	1.52
2	D	145	VAL	CA-C	-7.78	1.44	1.52
8	N	152	ALA	CA-C	-7.77	1.42	1.52
1	B	27	ILE	CA-C	-7.77	1.43	1.52
1	A	181	LEU	CA-C	-7.76	1.42	1.52
1	A	269	PHE	C-N	7.75	1.42	1.34
1	C	273	THR	N-CA	-7.74	1.37	1.46
8	N	118	LEU	C-N	7.72	1.43	1.33
2	F	187	PHE	N-CA	7.71	1.55	1.46
2	F	17	PRO	CA-C	-7.70	1.45	1.52
9	R	45	ILE	CA-C	-7.69	1.43	1.52
1	B	327	THR	C-N	7.68	1.44	1.33
2	F	289	THR	CA-C	-7.67	1.43	1.52
1	B	287	LEU	CA-C	-7.66	1.43	1.52
9	X	12	ARG	CA-C	-7.65	1.43	1.52
1	B	319	SER	CA-C	-7.62	1.43	1.52
1	C	427	SER	CA-C	-7.61	1.43	1.52
7	M	315	GLN	C-N	7.59	1.40	1.33
2	E	324	PRO	C-N	7.58	1.42	1.33
2	D	120	ASN	C-N	-7.58	1.27	1.33
1	B	39	ILE	CA-C	-7.56	1.43	1.52
1	C	66	SER	CA-C	-7.56	1.43	1.52
5	K	78	GLY	CA-C	-7.55	1.42	1.51
8	N	324	PRO	CA-C	7.54	1.59	1.52
9	P	23	VAL	CA-C	-7.54	1.43	1.52
1	B	8	LYS	CA-C	-7.53	1.43	1.52
8	N	489	HIS	CA-C	-7.53	1.42	1.52
1	A	146	LYS	N-CA	-7.53	1.36	1.45
2	D	382	LEU	C-N	7.53	1.42	1.33
1	A	331	ALA	C-N	7.52	1.44	1.33
9	T	26	ALA	N-CA	7.52	1.55	1.46
1	B	254	GLY	N-CA	7.51	1.52	1.45
2	D	135	ILE	CA-C	-7.50	1.43	1.52
8	N	448	PRO	CA-C	-7.49	1.44	1.52
2	E	252	HIS	N-CA	-7.49	1.37	1.46
2	E	184	GLU	C-N	7.48	1.40	1.33
9	X	56	LEU	CA-C	-7.46	1.43	1.52
9	P	51	ASN	N-CA	-7.46	1.37	1.46
3	H	171	MET	CA-C	-7.45	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	D	180	GLU	CA-C	-7.45	1.43	1.52
3	H	175	TRP	CA-C	-7.45	1.42	1.52
1	C	544	VAL	C-N	7.44	1.43	1.33
2	D	118	PRO	C-N	7.44	1.43	1.33
9	U	29	GLY	CA-C	7.42	1.60	1.52
7	M	117	GLY	CA-C	-7.42	1.41	1.51
8	N	219	ARG	C-N	7.41	1.43	1.33
2	F	75	LEU	N-CA	-7.40	1.36	1.46
2	D	142	ASN	N-CA	-7.39	1.36	1.46
1	C	4	GLY	N-CA	7.39	1.51	1.45
1	C	498	ASN	CA-C	-7.38	1.43	1.52
9	T	65	LEU	CA-C	7.38	1.62	1.52
1	B	26	ASP	C-N	7.36	1.42	1.33
1	B	181	LEU	N-CA	-7.36	1.36	1.45
2	F	420	ARG	C-N	7.36	1.44	1.33
1	A	519	ILE	C-N	7.35	1.43	1.33
8	N	209	LEU	CA-C	-7.35	1.42	1.52
8	N	485	LEU	C-N	7.34	1.42	1.34
7	M	259	LYS	N-CA	-7.33	1.37	1.46
3	G	111	ALA	C-N	7.31	1.44	1.33
5	K	64	LEU	CA-C	-7.31	1.45	1.53
1	B	64	VAL	CA-C	-7.30	1.43	1.52
2	F	13	TYR	CA-C	-7.29	1.43	1.52
2	F	172	THR	C-N	7.29	1.44	1.33
2	E	64	THR	C-N	7.29	1.44	1.33
3	G	44	ALA	C-N	7.28	1.43	1.33
1	B	410	ASP	CA-C	-7.28	1.44	1.52
6	L	10	ALA	C-N	7.28	1.43	1.33
9	O	30	THR	CA-C	-7.27	1.43	1.52
9	T	37	ILE	N-CA	-7.26	1.37	1.46
3	H	86	ARG	C-N	7.26	1.42	1.34
8	N	338	ASN	N-CA	-7.26	1.36	1.46
1	B	227	PRO	N-CA	-7.24	1.38	1.47
1	C	149	VAL	C-N	7.24	1.42	1.33
7	M	229	ARG	CA-C	-7.24	1.43	1.52
2	E	170	GLN	CA-C	7.23	1.62	1.52
2	D	321	ARG	CA-C	-7.20	1.42	1.52
2	F	407	ASN	N-CA	-7.20	1.37	1.46
9	S	44	ALA	C-N	7.20	1.43	1.33
9	S	49	ARG	N-CA	-7.20	1.37	1.46
2	F	252	HIS	N-CA	-7.19	1.37	1.46
1	B	171	PRO	CA-C	-7.19	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	M	230	PHE	C-N	7.18	1.43	1.33
1	B	289	ALA	N-CA	-7.18	1.37	1.46
1	A	544	VAL	N-CA	-7.18	1.37	1.46
3	G	104	VAL	N-CA	-7.17	1.38	1.46
2	F	214	LEU	C-N	7.14	1.44	1.33
1	C	550	ARG	CA-C	7.13	1.61	1.52
1	C	102	ILE	C-O	-7.13	1.15	1.24
9	Y	66	VAL	C-N	7.13	1.42	1.33
2	E	318	ASP	N-CA	7.12	1.53	1.46
2	F	142	ASN	C-N	7.12	1.43	1.33
2	E	186	PRO	C-N	7.12	1.43	1.33
1	B	263	THR	CA-C	7.11	1.61	1.52
6	L	93	LEU	C-N	7.11	1.42	1.33
1	C	106	VAL	CA-C	-7.11	1.43	1.52
1	A	334	LEU	CA-C	7.10	1.62	1.52
1	A	166	TYR	CA-C	-7.09	1.43	1.52
2	E	34	ASP	CA-C	-7.09	1.44	1.52
9	Z	18	GLY	CA-C	-7.09	1.44	1.52
2	F	355	LEU	N-CA	-7.09	1.41	1.46
7	M	290	VAL	C-N	7.07	1.42	1.33
3	H	156	GLY	CA-C	-7.06	1.41	1.52
1	B	162	PRO	C-N	7.06	1.43	1.33
9	Y	65	LEU	CA-C	7.06	1.61	1.52
9	V	12	ARG	N-CA	-7.06	1.37	1.46
2	D	56	VAL	N-CA	-7.05	1.38	1.46
5	K	5	SER	CA-C	-7.05	1.45	1.52
4	J	63	GLU	CA-C	-7.05	1.44	1.52
2	D	83	GLY	CA-C	-7.05	1.43	1.52
1	C	378	VAL	N-CA	-7.05	1.37	1.46
8	N	545	TRP	N-CA	-7.04	1.37	1.46
1	B	323	MET	CA-C	-7.04	1.45	1.53
2	D	222	ASN	C-N	7.03	1.43	1.33
9	W	71	LEU	C-N	7.03	1.42	1.33
9	V	48	ASP	C-N	7.02	1.43	1.33
9	Q	21	LEU	CA-C	-7.01	1.44	1.52
1	C	431	PHE	CA-C	-7.01	1.44	1.52
4	I	41	LYS	CA-C	-7.00	1.43	1.52
1	C	278	GLY	CA-C	-6.99	1.42	1.51
9	S	46	ALA	N-CA	-6.99	1.38	1.46
2	D	201	LEU	N-CA	-6.98	1.38	1.46
9	Q	38	GLY	CA-C	-6.98	1.44	1.52
9	W	7	SER	CA-C	-6.98	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	481	ARG	N-CA	6.97	1.54	1.46
2	E	126	LYS	C-N	6.97	1.42	1.33
2	F	372	ARG	CA-C	-6.97	1.44	1.52
3	G	121	LEU	C-N	6.96	1.42	1.33
3	H	15	GLU	C-N	6.95	1.41	1.34
9	P	76	LEU	CA-C	-6.95	1.43	1.52
1	C	403	VAL	CA-C	6.94	1.61	1.52
5	K	176	ILE	N-CA	6.94	1.54	1.46
1	C	457	LEU	C-N	6.94	1.43	1.34
3	H	43	GLN	N-CA	-6.93	1.37	1.46
7	M	129	GLU	C-N	6.93	1.42	1.33
1	C	507	CYS	N-CA	-6.93	1.37	1.46
9	S	8	GLY	C-N	6.93	1.41	1.33
9	X	49	ARG	N-CA	-6.92	1.38	1.46
1	A	46	THR	N-CA	-6.92	1.37	1.46
1	C	13	ALA	CA-C	-6.92	1.43	1.52
2	E	136	SER	CA-C	-6.92	1.43	1.52
8	N	406	LEU	CA-C	-6.91	1.43	1.52
1	A	326	SER	C-N	6.91	1.43	1.33
1	C	520	LEU	C-N	6.90	1.42	1.33
2	D	354	PRO	N-CA	6.90	1.55	1.47
7	M	282	GLY	C-N	6.90	1.42	1.34
2	E	128	GLU	N-CA	-6.89	1.37	1.46
2	D	451	LEU	CA-C	-6.89	1.43	1.52
2	F	31	ALA	C-N	6.89	1.41	1.33
1	B	444	ALA	CA-C	-6.87	1.44	1.52
2	E	162	GLU	CA-C	-6.87	1.44	1.52
1	B	12	PRO	N-CA	-6.87	1.38	1.47
1	A	459	GLN	N-CA	6.86	1.54	1.46
3	H	137	GLU	C-N	6.86	1.42	1.33
2	E	46	GLN	N-CA	-6.85	1.37	1.46
2	F	328	LEU	CA-C	-6.84	1.43	1.52
2	F	283	TYR	N-CA	-6.84	1.39	1.45
1	A	249	VAL	CA-C	-6.84	1.43	1.52
1	C	451	ARG	C-N	6.84	1.43	1.33
2	F	244	TYR	CA-C	-6.84	1.43	1.52
2	D	73	VAL	C-N	6.83	1.42	1.33
2	F	371	THR	CA-C	-6.83	1.44	1.52
2	E	311	ILE	CA-C	-6.82	1.45	1.52
2	D	148	GLN	CA-C	-6.82	1.44	1.52
4	J	25	SER	CA-C	-6.81	1.44	1.52
9	X	52	PHE	N-CA	-6.81	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	263	TYR	CA-C	6.81	1.61	1.52
1	B	564	GLU	CA-C	-6.80	1.44	1.52
7	M	17	GLY	C-N	6.79	1.42	1.33
8	N	608	ILE	N-CA	-6.79	1.38	1.46
5	K	198	LYS	N-CA	-6.79	1.38	1.46
5	K	57	ALA	CA-C	-6.79	1.44	1.52
2	F	435	SER	N-CA	-6.78	1.37	1.46
4	J	49	LYS	C-N	6.78	1.42	1.33
2	F	213	ALA	CA-C	-6.78	1.44	1.52
3	H	31	LYS	N-CA	-6.78	1.37	1.46
5	K	133	TYR	CA-C	-6.76	1.46	1.53
6	L	32	LEU	CA-C	-6.76	1.45	1.53
1	B	72	ALA	N-CA	-6.74	1.37	1.45
9	Y	19	MET	CA-C	-6.73	1.43	1.52
4	I	48	VAL	C-N	6.73	1.42	1.33
4	I	54	GLU	CA-C	-6.73	1.44	1.52
3	G	133	ALA	CA-C	-6.72	1.43	1.52
1	A	386	PRO	CA-C	6.72	1.58	1.52
9	O	2	GLU	C-N	6.72	1.43	1.33
2	D	155	GLY	C-N	6.71	1.42	1.33
2	D	246	ALA	N-CA	-6.71	1.38	1.46
2	E	378	VAL	N-CA	-6.70	1.37	1.46
1	C	206	LEU	N-CA	-6.70	1.37	1.46
7	M	85	ARG	N-CA	-6.70	1.38	1.46
2	D	46	GLN	CA-C	-6.70	1.44	1.52
2	D	349	TYR	CA-C	-6.70	1.44	1.52
3	G	164	GLU	CA-C	-6.69	1.44	1.52
2	E	174	ARG	CA-C	-6.69	1.44	1.52
2	F	257	LEU	CA-C	-6.69	1.44	1.52
2	E	355	LEU	CA-C	6.69	1.60	1.52
2	D	24	ALA	CA-C	-6.68	1.43	1.52
9	W	68	PHE	C-N	6.68	1.42	1.33
1	A	377	ALA	C-N	6.68	1.42	1.33
1	B	19	MET	CA-C	-6.68	1.44	1.52
1	B	194	PRO	C-N	6.67	1.42	1.33
1	C	503	VAL	C-N	6.67	1.43	1.33
3	H	72	ARG	N-CA	-6.67	1.38	1.46
2	F	190	VAL	CA-C	-6.67	1.44	1.52
1	B	368	VAL	N-CA	-6.66	1.38	1.46
3	H	98	PRO	CA-C	6.65	1.59	1.52
1	C	154	ARG	CA-C	-6.65	1.44	1.52
3	G	81	GLU	C-N	6.64	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	131	ILE	N-CA	6.64	1.53	1.46
8	N	174	ALA	CA-C	-6.63	1.44	1.52
9	V	70	LEU	CA-C	-6.63	1.44	1.52
2	F	84	VAL	CA-C	-6.62	1.44	1.52
1	A	122	MET	C-N	6.62	1.42	1.33
2	D	98	LYS	CA-C	-6.62	1.44	1.52
8	N	25	VAL	C-N	6.62	1.42	1.33
7	M	248	PRO	N-CA	-6.61	1.40	1.47
1	A	575	LYS	CA-C	-6.61	1.43	1.52
8	N	138	PRO	CA-C	6.61	1.60	1.52
1	B	110	ALA	C-N	6.60	1.42	1.33
8	N	491	HIS	C-N	6.60	1.42	1.34
8	N	462	LEU	CA-C	-6.60	1.44	1.52
8	N	636	GLU	CA-C	-6.60	1.44	1.53
1	A	490	ILE	CA-C	6.60	1.61	1.52
1	B	254	GLY	CA-C	-6.59	1.45	1.52
2	F	283	TYR	CA-C	6.59	1.58	1.52
1	A	417	ARG	CA-C	-6.59	1.44	1.53
1	A	95	ARG	N-CA	-6.59	1.37	1.46
2	E	247	PHE	CA-C	-6.59	1.43	1.52
1	A	64	VAL	C-N	6.58	1.41	1.33
5	K	189	GLU	CA-C	-6.58	1.44	1.52
7	M	102	ALA	C-N	6.58	1.42	1.33
7	M	148	ALA	CA-C	-6.58	1.44	1.52
1	A	460	ARG	N-CA	-6.58	1.37	1.46
2	D	103	LEU	C-N	6.58	1.41	1.33
2	D	198	GLN	N-CA	-6.57	1.37	1.46
5	K	86	LEU	CA-C	-6.56	1.45	1.53
9	T	66	VAL	CA-C	-6.56	1.44	1.52
1	C	56	SER	CA-C	-6.55	1.44	1.52
2	D	319	ASP	CA-C	-6.54	1.44	1.52
2	E	302	GLU	CA-C	-6.54	1.44	1.52
1	C	181	LEU	CA-C	-6.54	1.44	1.52
1	C	164	GLY	N-CA	6.54	1.52	1.45
2	E	422	PHE	C-N	6.54	1.42	1.33
1	C	226	ILE	N-CA	-6.54	1.39	1.46
9	T	27	ALA	N-CA	6.53	1.54	1.46
1	C	177	ASP	N-CA	-6.53	1.37	1.46
1	B	17	LYS	C-N	6.52	1.42	1.33
8	N	603	VAL	C-N	6.52	1.42	1.33
1	B	182	LYS	CA-C	-6.52	1.44	1.52
2	F	276	GLU	C-N	6.52	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	N	59	ALA	CA-C	-6.52	1.44	1.52
1	A	173	VAL	CA-C	-6.52	1.44	1.52
5	K	104	LEU	CA-C	-6.51	1.44	1.52
1	C	138	VAL	CA-C	-6.50	1.46	1.52
2	D	288	TYR	N-CA	-6.49	1.38	1.46
7	M	181	LYS	N-CA	-6.49	1.38	1.46
9	X	20	GLY	CA-C	-6.49	1.44	1.52
7	M	313	ARG	CA-C	-6.48	1.44	1.52
9	O	70	LEU	CA-C	-6.48	1.44	1.52
9	S	24	GLY	CA-C	-6.47	1.45	1.52
5	K	160	ARG	CA-C	-6.46	1.44	1.52
2	F	144	LEU	N-CA	-6.45	1.38	1.46
1	A	431	PHE	CA-C	-6.45	1.44	1.53
8	N	615	GLY	N-CA	-6.45	1.37	1.45
1	A	252	TYR	C-N	6.45	1.41	1.33
1	B	324	ALA	C-N	6.45	1.42	1.33
1	B	4	GLY	CA-C	-6.44	1.42	1.51
5	K	86	LEU	C-N	6.44	1.42	1.33
4	I	101	GLU	CA-C	6.44	1.61	1.52
1	B	183	MET	C-N	6.43	1.42	1.33
9	W	48	ASP	C-N	6.43	1.41	1.33
1	C	113	ARG	N-CA	-6.42	1.39	1.46
3	H	140	VAL	CA-C	-6.41	1.44	1.52
1	A	161	LYS	N-CA	6.41	1.54	1.45
1	B	496	GLN	CA-C	-6.41	1.44	1.52
4	J	85	LEU	CA-C	-6.40	1.44	1.52
9	Q	9	GLY	CA-C	-6.40	1.44	1.51
1	C	372	GLY	N-CA	-6.39	1.36	1.45
5	K	111	GLY	CA-C	-6.39	1.42	1.52
1	A	234	LYS	CA-C	-6.39	1.43	1.52
5	K	155	LYS	CA-C	6.39	1.61	1.52
9	Q	22	ALA	N-CA	-6.38	1.38	1.46
1	B	535	SER	N-CA	-6.38	1.38	1.45
9	Y	41	GLY	CA-C	6.38	1.59	1.51
2	D	229	ILE	N-CA	-6.38	1.38	1.46
2	E	161	ASN	N-CA	-6.38	1.38	1.46
2	F	146	ARG	C-N	6.37	1.42	1.33
1	C	2	ILE	C-N	6.37	1.41	1.33
2	D	129	GLN	N-CA	-6.35	1.38	1.46
4	I	108	ASP	CA-C	-6.35	1.44	1.52
8	N	351	VAL	CA-C	-6.35	1.47	1.52
8	N	498	GLY	C-N	6.35	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	M	110	GLU	CA-C	-6.34	1.44	1.53
9	U	79	ARG	C-N	6.34	1.42	1.33
2	F	166	GLN	C-O	-6.34	1.16	1.24
8	N	105	GLU	C-N	6.34	1.42	1.33
1	A	368	VAL	N-CA	-6.33	1.39	1.46
4	J	62	ALA	C-N	6.33	1.41	1.33
8	N	153	LEU	N-CA	-6.33	1.38	1.46
9	X	67	ILE	CA-C	-6.33	1.44	1.52
1	C	3	GLN	CA-C	-6.33	1.44	1.52
9	T	69	GLY	C-N	6.33	1.42	1.33
1	B	440	ARG	C-N	6.33	1.41	1.33
3	H	165	ASN	C-N	6.32	1.42	1.33
9	Y	15	ILE	N-CA	6.32	1.54	1.46
1	B	460	ARG	C-N	6.32	1.42	1.33
7	M	157	GLU	C-N	6.31	1.41	1.33
8	N	593	GLY	N-CA	6.31	1.53	1.45
2	E	141	MET	CA-C	-6.30	1.44	1.52
1	A	575	LYS	C-N	6.30	1.42	1.33
9	U	26	ALA	N-CA	-6.30	1.38	1.46
2	E	334	GLU	CA-C	-6.29	1.45	1.52
5	K	120	PRO	C-N	6.29	1.41	1.33
7	M	204	ALA	N-CA	-6.29	1.38	1.46
9	Z	43	GLY	CA-C	-6.29	1.45	1.52
9	V	74	PHE	C-N	6.28	1.41	1.33
2	F	409	ARG	C-N	6.28	1.42	1.33
9	W	76	LEU	N-CA	-6.28	1.38	1.46
1	B	289	ALA	CA-C	-6.27	1.44	1.52
1	C	277	THR	CA-C	-6.27	1.44	1.52
9	X	55	ALA	C-N	6.27	1.42	1.33
9	O	6	ALA	C-N	6.26	1.41	1.33
1	C	351	PRO	CA-C	6.26	1.55	1.51
2	F	309	THR	CA-C	-6.26	1.45	1.52
8	N	461	ASN	CA-C	-6.26	1.44	1.52
8	N	198	LEU	C-N	6.26	1.42	1.33
1	C	120	THR	N-CA	-6.25	1.38	1.46
1	C	488	ARG	N-CA	-6.25	1.39	1.46
2	E	308	VAL	C-N	6.25	1.42	1.33
9	Q	14	LEU	CA-C	6.25	1.60	1.52
1	B	367	LYS	C-N	6.25	1.42	1.33
7	M	138	GLN	C-N	6.25	1.41	1.33
8	N	190	LEU	CA-C	-6.25	1.44	1.52
4	J	53	ALA	N-CA	-6.25	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	N	274	LEU	CA-C	-6.25	1.44	1.52
2	E	124	ARG	N-CA	-6.25	1.38	1.46
2	D	229	ILE	CA-C	-6.24	1.44	1.52
2	E	450	GLU	CA-C	-6.24	1.44	1.52
2	F	422	PHE	C-N	6.24	1.40	1.34
9	Y	23	VAL	CA-C	-6.24	1.44	1.52
2	D	256	ILE	C-N	6.23	1.42	1.33
5	K	187	GLU	C-N	6.23	1.42	1.33
9	Z	65	LEU	N-CA	-6.23	1.39	1.46
9	Z	72	ILE	CA-C	-6.22	1.45	1.52
7	M	320	VAL	C-N	6.22	1.42	1.33
2	F	29	TYR	CA-C	-6.22	1.44	1.52
1	C	167	THR	CA-C	-6.22	1.45	1.52
9	O	21	LEU	C-N	6.21	1.41	1.33
1	C	402	ILE	CA-C	6.21	1.60	1.53
7	M	143	PRO	N-CA	-6.21	1.39	1.47
2	F	292	ALA	N-CA	-6.21	1.38	1.46
8	N	107	GLU	C-N	6.21	1.42	1.33
1	A	150	PRO	CA-C	-6.21	1.46	1.52
3	H	160	LYS	C-N	6.21	1.42	1.33
1	C	291	THR	C-N	6.20	1.42	1.33
9	O	36	ARG	CA-C	-6.20	1.45	1.52
9	Y	42	VAL	CA-C	-6.20	1.45	1.52
3	G	168	LEU	C-N	6.20	1.42	1.33
9	S	43	GLY	N-CA	-6.19	1.37	1.45
1	B	352	PRO	N-CA	-6.19	1.41	1.47
2	D	456	LYS	CA-C	-6.19	1.44	1.52
6	L	32	LEU	C-N	6.19	1.42	1.33
8	N	547	MET	CA-C	-6.18	1.44	1.53
2	D	74	SER	N-CA	-6.18	1.39	1.46
2	E	39	THR	C-N	6.18	1.42	1.33
7	M	283	VAL	N-CA	-6.18	1.39	1.46
8	N	524	LEU	N-CA	6.18	1.53	1.46
2	F	268	ARG	C-N	6.18	1.41	1.33
8	N	232	GLN	N-CA	-6.18	1.38	1.46
9	Z	60	LEU	N-CA	-6.17	1.38	1.46
1	A	339	SER	CA-C	-6.17	1.45	1.52
1	A	447	TYR	CA-C	6.17	1.60	1.52
2	E	250	ASP	CA-C	-6.16	1.47	1.53
1	B	489	ILE	CA-C	6.15	1.60	1.52
2	F	217	SER	CA-C	-6.13	1.45	1.52
6	L	10	ALA	CA-C	-6.13	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	I	64	ALA	CA-C	-6.13	1.44	1.52
1	A	514	GLY	C-N	6.13	1.40	1.34
6	L	31	SER	CA-C	-6.13	1.44	1.52
1	B	290	ASN	CA-C	-6.12	1.45	1.52
3	H	75	ALA	C-N	6.12	1.42	1.33
1	B	517	LYS	CA-C	-6.12	1.45	1.52
9	O	22	ALA	CA-C	-6.12	1.45	1.52
1	B	450	LEU	N-CA	-6.12	1.39	1.46
2	F	315	SER	CA-C	-6.12	1.47	1.52
9	W	6	ALA	CA-C	-6.11	1.44	1.52
2	E	417	ALA	C-O	-6.11	1.16	1.24
8	N	210	SER	C-N	6.11	1.42	1.33
2	E	242	ALA	CA-C	-6.11	1.44	1.52
2	E	397	ALA	N-CA	6.10	1.52	1.46
2	F	298	ALA	C-N	6.10	1.42	1.33
1	B	407	TRP	CA-C	-6.10	1.47	1.53
7	M	71	ASP	C-N	6.09	1.41	1.33
8	N	167	ALA	CA-C	-6.09	1.45	1.53
1	A	89	ARG	N-CA	6.09	1.51	1.45
7	M	192	LEU	CA-C	-6.09	1.44	1.52
2	E	433	GLU	CA-C	-6.09	1.44	1.52
9	O	67	ILE	N-CA	-6.09	1.39	1.46
9	Q	32	VAL	C-N	6.08	1.42	1.33
2	E	364	ASN	N-CA	-6.08	1.38	1.46
2	D	154	SER	N-CA	-6.08	1.38	1.45
1	A	62	GLU	C-N	6.08	1.40	1.33
1	A	241	LEU	C-N	6.08	1.42	1.33
7	M	295	TRP	N-CA	-6.08	1.38	1.46
9	Q	11	ASP	C-N	6.07	1.41	1.33
9	T	5	ALA	N-CA	-6.07	1.39	1.46
9	S	73	ALA	C-N	6.07	1.41	1.33
1	C	160	VAL	CA-C	-6.07	1.45	1.52
2	E	404	LEU	N-CA	-6.07	1.38	1.45
8	N	357	PHE	N-CA	-6.07	1.39	1.46
8	N	453	ARG	C-N	6.07	1.40	1.33
1	C	506	TYR	CA-C	6.07	1.60	1.52
7	M	319	GLU	CA-C	-6.07	1.44	1.52
2	F	321	ARG	C-N	6.06	1.42	1.33
1	B	18	GLY	C-N	6.06	1.42	1.33
8	N	391	ILE	C-O	-6.05	1.18	1.24
3	H	55	ALA	CA-C	-6.05	1.45	1.52
2	D	48	ILE	N-CA	-6.05	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	N	160	ARG	CA-C	-6.05	1.47	1.52
1	B	367	LYS	CA-C	-6.04	1.45	1.52
2	D	215	SER	C-N	6.04	1.42	1.33
9	W	70	LEU	N-CA	-6.04	1.39	1.46
2	E	73	VAL	C-N	6.03	1.43	1.33
7	M	319	GLU	C-N	6.03	1.40	1.33
1	A	158	LYS	CA-C	6.03	1.60	1.53
1	C	172	VAL	C-N	6.03	1.39	1.33
9	Y	60	LEU	CA-C	-6.03	1.44	1.52
8	N	397	LYS	C-N	6.03	1.41	1.33
2	D	217	SER	CA-C	-6.03	1.45	1.52
8	N	548	ILE	C-N	6.02	1.41	1.33
2	E	256	ILE	CA-C	-6.02	1.44	1.52
2	F	47	VAL	CA-C	-6.01	1.45	1.52
8	N	432	LEU	CA-C	-6.01	1.44	1.52
8	N	77	PRO	CA-C	6.01	1.59	1.52
2	E	413	GLN	N-CA	-6.01	1.38	1.46
2	F	250	ASP	CA-C	-6.01	1.44	1.52
5	K	100	LYS	CA-C	-6.01	1.45	1.52
2	F	281	ARG	N-CA	-6.00	1.37	1.46
2	F	91	ARG	CA-C	-6.00	1.45	1.52
2	E	214	LEU	N-CA	-6.00	1.38	1.46
9	Y	52	PHE	CA-C	-6.00	1.45	1.52
9	O	56	LEU	N-CA	-5.99	1.39	1.46
2	D	282	GLY	CA-C	-5.99	1.43	1.51
7	M	54	LEU	CA-C	-5.99	1.45	1.52
1	C	491	ARG	C-N	5.98	1.42	1.33
9	U	39	ALA	CA-C	-5.98	1.44	1.52
2	F	210	ARG	CA-C	-5.98	1.45	1.52
4	J	37	LEU	CA-C	-5.97	1.45	1.52
8	N	457	ALA	CA-C	5.97	1.60	1.52
7	M	104	ALA	C-N	5.97	1.42	1.33
2	F	81	ARG	C-N	5.97	1.42	1.33
8	N	164	ALA	CA-C	-5.96	1.45	1.52
6	L	42	TYR	CA-C	-5.96	1.45	1.52
1	C	294	MET	CA-C	5.96	1.59	1.53
7	M	142	VAL	CA-C	5.96	1.59	1.52
1	B	425	ASN	C-N	5.96	1.42	1.33
1	C	310	ALA	N-CA	-5.96	1.38	1.46
2	F	256	ILE	C-N	5.95	1.41	1.33
3	H	83	VAL	C-N	5.95	1.41	1.33
4	J	117	GLU	N-CA	-5.95	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	M	54	LEU	N-CA	5.94	1.52	1.46
1	B	172	VAL	CA-C	-5.94	1.44	1.52
2	E	304	LYS	CA-C	-5.94	1.45	1.52
1	C	465	GLN	C-N	5.94	1.41	1.33
2	E	198	GLN	CA-C	-5.94	1.44	1.52
4	J	110	ALA	CA-C	-5.94	1.45	1.52
2	E	360	ARG	C-N	5.94	1.41	1.33
2	F	318	ASP	CA-C	5.94	1.60	1.52
9	X	43	GLY	CA-C	-5.94	1.45	1.52
1	A	390	ASP	CA-C	-5.93	1.45	1.52
2	F	238	ALA	C-N	5.93	1.41	1.33
2	F	398	ILE	CA-C	-5.93	1.46	1.52
3	G	153	ARG	C-N	5.93	1.41	1.33
7	M	127	ALA	C-N	5.92	1.41	1.33
7	M	247	THR	CA-C	-5.92	1.46	1.52
9	Z	47	GLU	C-O	-5.92	1.17	1.24
1	B	70	PRO	CA-C	-5.92	1.44	1.52
8	N	217	LYS	C-N	5.92	1.42	1.33
1	B	178	GLY	CA-C	-5.92	1.44	1.52
2	F	70	THR	CA-C	-5.92	1.45	1.52
1	C	446	ASP	CA-C	-5.92	1.45	1.52
2	D	298	ALA	C-N	5.91	1.42	1.33
2	D	278	PRO	CA-C	-5.91	1.44	1.52
2	E	446	LEU	CA-C	-5.91	1.46	1.52
9	O	43	GLY	N-CA	-5.91	1.38	1.45
9	W	59	LEU	C-N	5.91	1.41	1.34
1	A	42	LEU	C-N	5.91	1.42	1.33
2	F	413	GLN	CA-C	5.91	1.60	1.52
1	C	146	LYS	N-CA	-5.91	1.37	1.45
2	E	452	LYS	C-N	5.91	1.41	1.33
3	H	45	ARG	N-CA	-5.91	1.39	1.46
2	E	184	GLU	CA-C	5.90	1.60	1.52
1	A	234	LYS	C-O	-5.90	1.17	1.24
8	N	81	GLU	C-O	-5.90	1.17	1.24
2	D	442	LEU	N-CA	-5.90	1.38	1.46
2	E	70	THR	CA-C	-5.89	1.45	1.52
1	B	271	GLU	CA-C	-5.89	1.44	1.52
2	E	414	PHE	CA-C	-5.89	1.45	1.52
8	N	91	GLN	CA-C	-5.89	1.45	1.52
9	R	7	SER	C-N	5.89	1.39	1.32
2	E	405	THR	C-N	5.89	1.41	1.33
7	M	17	GLY	N-CA	-5.89	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	397	GLN	N-CA	-5.88	1.38	1.46
2	E	226	ASP	CA-C	-5.88	1.46	1.53
1	A	528	ALA	N-CA	-5.88	1.38	1.46
3	G	70	THR	CA-C	-5.88	1.45	1.52
2	D	125	ARG	C-N	5.88	1.41	1.33
4	J	27	ALA	CA-C	-5.88	1.45	1.52
7	M	90	ARG	N-CA	-5.88	1.39	1.46
7	M	296	GLU	N-CA	-5.88	1.39	1.46
9	X	66	VAL	N-CA	-5.88	1.39	1.46
1	A	321	ALA	CA-C	-5.87	1.45	1.52
1	B	334	LEU	C-N	5.87	1.41	1.33
1	A	109	HIS	CA-C	-5.87	1.45	1.52
3	G	149	ARG	CA-C	-5.86	1.45	1.53
2	D	322	THR	C-N	5.86	1.42	1.33
1	C	433	SER	N-CA	-5.86	1.38	1.46
7	M	201	LEU	CA-C	-5.86	1.45	1.52
2	D	231	ARG	C-N	5.86	1.40	1.33
7	M	157	GLU	N-CA	-5.86	1.39	1.46
1	A	74	GLU	CA-C	-5.86	1.45	1.52
1	B	332	GLU	C-N	5.86	1.41	1.33
1	C	461	GLU	C-N	5.86	1.41	1.34
8	N	622	ARG	N-CA	5.85	1.53	1.46
2	D	308	VAL	CA-C	-5.85	1.45	1.52
8	N	26	VAL	CA-C	-5.85	1.45	1.52
9	Z	73	ALA	CA-C	-5.85	1.45	1.52
2	F	56	VAL	CA-C	5.84	1.59	1.52
2	E	412	LEU	CA-C	-5.84	1.47	1.53
1	B	234	LYS	C-N	5.84	1.41	1.34
4	I	98	ALA	C-N	5.84	1.40	1.33
2	F	120	ASN	CA-C	5.83	1.59	1.53
1	C	363	GLU	CA-C	-5.83	1.44	1.52
1	B	225	ALA	CA-C	-5.83	1.45	1.52
2	E	219	LEU	C-N	5.83	1.40	1.33
9	P	52	PHE	C-N	5.83	1.41	1.33
2	E	223	LYS	C-O	-5.83	1.16	1.24
9	P	2	GLU	CA-C	-5.83	1.45	1.52
3	H	94	LEU	C-N	5.83	1.41	1.34
3	H	157	ALA	CA-C	-5.82	1.44	1.52
7	M	42	GLU	C-N	5.82	1.41	1.33
8	N	280	VAL	N-CA	-5.82	1.39	1.46
3	G	21	GLN	N-CA	-5.81	1.38	1.46
1	B	104	ARG	C-N	5.81	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	D	139	ASP	C-N	5.81	1.41	1.33
3	H	83	VAL	CA-C	5.81	1.60	1.52
9	T	2	GLU	CA-C	-5.81	1.44	1.53
9	S	73	ALA	CA-C	-5.80	1.45	1.52
1	C	9	ILE	C-O	-5.80	1.17	1.24
2	D	458	HIS	N-CA	-5.80	1.38	1.46
2	D	122	VAL	C-N	5.79	1.42	1.33
2	D	263	TYR	C-N	5.79	1.40	1.33
1	C	430	LEU	CA-C	-5.79	1.45	1.52
8	N	470	PHE	CA-C	-5.79	1.44	1.52
1	C	443	VAL	CA-C	-5.79	1.45	1.52
5	K	188	ARG	C-N	5.79	1.41	1.33
6	L	33	LEU	CA-C	-5.79	1.45	1.52
2	D	377	GLN	N-CA	-5.79	1.39	1.46
2	E	22	GLU	CA-C	-5.79	1.45	1.52
8	N	285	LYS	C-N	5.79	1.41	1.33
2	D	150	LEU	CA-C	-5.78	1.45	1.52
2	F	355	LEU	C-O	-5.78	1.19	1.24
1	B	326	SER	CA-C	-5.78	1.47	1.53
2	F	48	ILE	C-N	5.78	1.41	1.33
8	N	175	LEU	N-CA	-5.78	1.38	1.46
2	F	311	ILE	N-CA	-5.78	1.39	1.46
4	J	100	ARG	CA-C	-5.77	1.45	1.52
8	N	393	LEU	C-N	5.77	1.41	1.33
2	F	447	PRO	N-CA	-5.77	1.40	1.47
1	B	435	LEU	C-N	5.77	1.41	1.33
1	A	244	TRP	C-N	5.77	1.40	1.33
5	K	18	LEU	CA-C	5.77	1.60	1.52
8	N	645	PHE	N-CA	5.77	1.53	1.46
1	A	418	HIS	CA-C	-5.76	1.45	1.53
9	S	43	GLY	CA-C	5.76	1.59	1.52
2	F	135	ILE	CA-C	-5.76	1.45	1.52
8	N	200	LEU	N-CA	-5.76	1.38	1.45
1	B	322	LEU	C-N	5.76	1.41	1.33
2	F	101	ASP	C-N	5.76	1.40	1.33
1	C	38	GLU	N-CA	5.76	1.53	1.46
1	A	381	VAL	CA-C	-5.75	1.45	1.52
1	A	513	TYR	C-O	-5.75	1.17	1.24
7	M	65	GLN	C-N	5.75	1.41	1.33
3	G	64	GLY	CA-C	-5.75	1.45	1.52
9	U	28	LEU	C-N	5.75	1.40	1.33
1	C	475	ALA	CA-C	-5.74	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	D	241	VAL	N-CA	-5.74	1.40	1.46
5	K	61	TYR	C-N	5.74	1.42	1.33
8	N	549	PRO	N-CA	5.74	1.55	1.47
7	M	298	VAL	N-CA	-5.73	1.39	1.46
2	E	245	LEU	CA-C	-5.72	1.47	1.53
5	K	18	LEU	C-N	5.72	1.41	1.33
5	K	138	ILE	CA-C	-5.72	1.45	1.52
7	M	20	LEU	C-O	5.72	1.31	1.24
9	X	62	PRO	C-N	5.72	1.41	1.34
2	F	276	GLU	N-CA	-5.72	1.39	1.46
1	C	124	LYS	C-N	5.72	1.41	1.34
8	N	160	ARG	C-N	5.72	1.41	1.33
9	S	78	GLY	CA-C	-5.72	1.43	1.51
1	B	271	GLU	C-N	5.72	1.41	1.33
2	D	228	THR	C-N	5.72	1.40	1.34
1	B	326	SER	C-N	-5.72	1.26	1.33
5	K	89	VAL	N-CA	-5.72	1.39	1.46
8	N	219	ARG	N-CA	-5.71	1.39	1.46
7	M	74	ARG	CA-C	-5.71	1.44	1.52
2	F	10	GLY	C-N	5.71	1.41	1.33
3	H	179	SER	N-CA	-5.71	1.39	1.46
1	A	336	GLU	CA-C	5.71	1.58	1.52
7	M	96	LEU	CA-C	-5.71	1.45	1.52
4	J	109	GLU	C-O	-5.71	1.17	1.24
8	N	48	GLU	C-O	-5.70	1.17	1.24
8	N	273	ALA	N-CA	-5.69	1.38	1.45
9	Q	65	LEU	CA-C	-5.69	1.45	1.52
4	I	99	VAL	C-N	5.69	1.41	1.33
1	C	315	ASP	C-N	5.69	1.41	1.33
1	C	404	GLY	C-N	5.69	1.40	1.33
8	N	189	ALA	C-N	5.69	1.41	1.33
8	N	275	LEU	N-CA	-5.69	1.39	1.46
1	A	279	GLY	CA-C	-5.69	1.43	1.51
1	B	119	TRP	CA-C	-5.68	1.45	1.52
1	C	42	LEU	C-N	5.68	1.41	1.33
6	L	58	ALA	N-CA	-5.68	1.39	1.46
9	Q	52	PHE	N-CA	-5.68	1.39	1.46
1	B	159	GLU	N-CA	-5.68	1.38	1.46
9	Z	79	ARG	C-N	5.68	1.41	1.33
2	D	377	GLN	CA-C	-5.68	1.45	1.52
3	G	112	LEU	N-CA	-5.68	1.38	1.46
2	D	287	MET	N-CA	5.68	1.52	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	D	278	PRO	N-CA	-5.68	1.40	1.47
2	F	203	TYR	C-N	5.68	1.41	1.33
9	X	61	LEU	C-N	5.68	1.40	1.34
1	B	62	GLU	CA-C	-5.67	1.45	1.52
1	B	185	HIS	CA-C	-5.67	1.45	1.52
4	I	49	LYS	C-N	5.67	1.41	1.33
9	V	26	ALA	CA-C	-5.67	1.45	1.52
1	C	216	PHE	C-N	5.67	1.40	1.33
1	A	482	LEU	CA-C	-5.67	1.45	1.52
3	H	51	ALA	C-N	5.67	1.41	1.33
9	T	51	ASN	CA-C	-5.67	1.45	1.52
1	A	66	SER	N-CA	-5.66	1.38	1.46
2	F	124	ARG	N-CA	5.66	1.52	1.45
4	I	40	ALA	CA-C	-5.66	1.45	1.52
2	E	244	TYR	C-N	5.66	1.40	1.33
5	K	186	ARG	CA-C	-5.66	1.45	1.52
2	E	47	VAL	N-CA	-5.66	1.39	1.46
3	G	181	LYS	CA-C	-5.65	1.45	1.52
9	O	30	THR	N-CA	-5.65	1.39	1.46
9	W	51	ASN	C-N	5.65	1.41	1.34
1	B	41	ARG	C-N	5.65	1.41	1.33
2	E	264	CYS	CA-C	-5.65	1.44	1.52
1	B	370	THR	CA-C	-5.64	1.45	1.53
9	Z	68	PHE	C-N	5.64	1.41	1.33
5	K	22	GLN	C-N	5.64	1.42	1.33
1	B	527	GLU	N-CA	5.64	1.53	1.46
2	F	231	ARG	CA-C	5.63	1.60	1.52
2	E	146	ARG	N-CA	-5.63	1.39	1.46
5	K	7	THR	CA-C	5.63	1.58	1.52
9	R	17	VAL	N-CA	5.63	1.53	1.46
2	F	376	LYS	CA-C	-5.63	1.45	1.52
8	N	355	PHE	N-CA	5.63	1.51	1.46
7	M	8	LEU	C-N	5.62	1.41	1.33
9	S	9	GLY	CA-C	-5.62	1.47	1.51
9	V	48	ASP	CA-C	-5.62	1.47	1.53
1	A	558	GLU	N-CA	5.62	1.52	1.46
5	K	100	LYS	C-N	5.62	1.37	1.33
3	G	140	VAL	CA-C	-5.61	1.46	1.52
8	N	627	GLU	N-CA	-5.61	1.39	1.46
1	A	567	MET	C-O	5.61	1.30	1.24
1	B	407	TRP	C-N	5.61	1.41	1.33
1	C	52	TYR	N-CA	-5.61	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	328	LEU	N-CA	-5.61	1.39	1.46
7	M	35	ASP	C-N	5.61	1.41	1.33
1	C	270	PRO	N-CA	5.60	1.54	1.47
1	C	164	GLY	C-N	5.60	1.41	1.33
2	F	255	VAL	CA-C	-5.60	1.46	1.52
9	T	21	LEU	CA-C	-5.60	1.45	1.52
2	D	19	LEU	C-O	-5.59	1.17	1.23
2	E	256	ILE	N-CA	-5.59	1.38	1.46
8	N	254	ASP	C-N	5.59	1.41	1.33
9	X	78	GLY	C-N	5.59	1.41	1.33
1	C	5	VAL	C-N	5.59	1.40	1.33
2	F	77	GLU	CA-C	-5.59	1.45	1.52
9	W	67	ILE	CA-C	-5.59	1.45	1.52
4	I	106	ARG	C-N	5.58	1.40	1.33
1	A	535	SER	C-N	5.58	1.40	1.34
9	T	71	LEU	N-CA	-5.58	1.39	1.46
9	U	33	ALA	N-CA	-5.58	1.39	1.46
9	Y	10	LEU	N-CA	5.58	1.53	1.46
1	C	529	ALA	C-N	5.58	1.41	1.33
6	L	74	ILE	N-CA	-5.58	1.39	1.46
9	V	28	LEU	CA-C	-5.58	1.46	1.52
1	A	243	LYS	CA-C	-5.58	1.45	1.52
2	E	179	GLY	C-N	5.58	1.41	1.33
2	F	96	ILE	C-N	5.57	1.40	1.33
5	K	105	LYS	N-CA	5.57	1.52	1.46
8	N	329	PRO	N-CA	-5.57	1.40	1.47
9	V	26	ALA	N-CA	-5.57	1.39	1.46
9	P	51	ASN	CA-C	-5.57	1.45	1.52
9	U	4	ALA	N-CA	-5.57	1.42	1.47
2	F	303	GLY	C-N	-5.57	1.25	1.33
9	P	55	ALA	CA-C	-5.56	1.45	1.52
1	A	526	ALA	CA-C	-5.56	1.45	1.52
8	N	17	LEU	N-CA	-5.56	1.39	1.46
3	G	32	ARG	C-O	-5.56	1.17	1.24
1	B	37	GLY	CA-C	-5.55	1.44	1.51
2	F	127	PRO	CA-C	-5.55	1.47	1.53
8	N	108	LEU	CA-C	-5.55	1.45	1.52
3	H	119	LYS	C-N	5.55	1.40	1.33
1	C	375	GLU	CA-C	-5.55	1.45	1.52
2	E	65	GLY	C-N	5.55	1.40	1.33
8	N	569	ALA	C-N	5.55	1.41	1.33
2	E	358	LEU	C-N	5.54	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	51	ALA	N-CA	-5.54	1.39	1.46
3	G	164	GLU	N-CA	-5.54	1.39	1.46
1	C	487	GLY	C-N	5.54	1.41	1.33
8	N	5	VAL	CA-C	5.54	1.59	1.52
9	U	23	VAL	C-N	5.54	1.40	1.33
3	H	29	ALA	CA-C	-5.54	1.45	1.52
2	D	430	ARG	CA-C	-5.54	1.46	1.52
9	U	47	GLU	N-CA	-5.53	1.39	1.46
3	G	122	VAL	CA-C	-5.53	1.46	1.52
7	M	263	ARG	CA-C	-5.53	1.45	1.52
1	C	236	VAL	CA-C	-5.53	1.44	1.52
7	M	26	GLN	C-N	5.53	1.41	1.33
4	I	94	ALA	N-CA	5.52	1.53	1.46
1	A	543	PRO	N-CA	-5.52	1.40	1.47
1	C	3	GLN	C-N	5.52	1.38	1.32
2	F	105	PRO	C-N	5.52	1.41	1.34
8	N	412	TRP	C-N	5.52	1.41	1.34
8	N	624	ILE	C-N	5.52	1.41	1.33
3	H	155	VAL	C-N	5.52	1.42	1.33
1	B	487	GLY	CA-C	-5.52	1.45	1.52
8	N	633	GLY	N-CA	-5.52	1.37	1.45
9	W	69	GLY	CA-C	-5.51	1.46	1.52
1	B	281	LEU	N-CA	-5.51	1.39	1.46
2	E	370	LYS	C-N	5.50	1.44	1.34
6	L	64	ARG	CA-C	-5.50	1.45	1.52
1	A	428	TYR	N-CA	-5.50	1.38	1.45
3	H	92	GLU	C-N	5.50	1.40	1.33
5	K	84	PRO	CA-C	5.50	1.57	1.52
7	M	113	LEU	CA-C	5.50	1.59	1.52
1	C	521	ALA	CA-C	5.50	1.59	1.52
7	M	213	ALA	C-N	5.50	1.39	1.34
9	V	69	GLY	CA-C	-5.50	1.46	1.52
8	N	361	MET	C-N	5.49	1.39	1.33
8	N	365	ASP	C-N	5.49	1.41	1.33
1	C	165	GLU	C-N	5.49	1.41	1.33
2	D	377	GLN	C-N	5.49	1.40	1.34
1	B	32	GLU	CA-C	-5.49	1.45	1.52
1	B	249	VAL	C-N	5.48	1.41	1.33
7	M	39	LEU	C-N	5.48	1.41	1.33
8	N	239	ARG	N-CA	-5.48	1.39	1.46
8	N	376	GLY	C-N	5.48	1.42	1.33
1	A	95	ARG	C-N	5.48	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	111	ALA	CA-C	-5.48	1.45	1.52
8	N	260	LYS	C-N	5.48	1.40	1.33
8	N	284	PRO	C-N	5.48	1.41	1.34
2	E	153	PHE	C-N	5.48	1.41	1.33
1	C	434	ALA	N-CA	-5.47	1.38	1.45
1	C	341	LEU	C-N	5.47	1.41	1.33
5	K	121	ALA	N-CA	-5.47	1.39	1.46
7	M	258	LEU	CA-C	-5.47	1.45	1.52
9	R	30	THR	CA-C	-5.47	1.45	1.52
9	R	45	ILE	N-CA	5.47	1.53	1.46
2	D	274	ARG	CA-C	-5.46	1.45	1.52
5	K	70	PHE	N-CA	-5.46	1.39	1.46
2	F	59	VAL	N-CA	-5.46	1.39	1.46
2	F	412	LEU	N-CA	-5.46	1.39	1.46
4	I	44	ALA	C-N	5.46	1.41	1.33
8	N	400	PRO	C-N	-5.46	1.26	1.34
1	B	237	THR	C-N	-5.46	1.26	1.33
8	N	176	VAL	CA-C	-5.46	1.46	1.52
1	A	152	ASP	CA-C	-5.45	1.46	1.53
1	C	202	ASN	N-CA	-5.45	1.39	1.46
2	D	131	ILE	C-N	5.45	1.41	1.33
2	E	65	GLY	CA-C	-5.45	1.44	1.51
9	V	4	ALA	CA-C	-5.45	1.46	1.52
9	V	6	ALA	CA-C	-5.45	1.45	1.52
1	C	419	PHE	C-O	-5.45	1.19	1.24
9	O	53	GLY	N-CA	-5.45	1.38	1.45
1	A	326	SER	CA-C	-5.44	1.45	1.52
2	D	158	LEU	C-N	5.44	1.40	1.33
1	B	3	GLN	N-CA	-5.44	1.39	1.46
2	F	136	SER	C-N	5.44	1.41	1.33
8	N	495	PHE	CA-C	-5.44	1.46	1.52
2	E	447	PRO	C-N	5.43	1.41	1.33
8	N	70	ALA	N-CA	-5.43	1.39	1.46
1	B	507	CYS	CA-C	-5.43	1.46	1.52
1	C	350	TYR	C-N	5.43	1.38	1.33
9	U	42	VAL	C-N	5.43	1.40	1.33
2	F	52	GLU	CA-C	5.43	1.59	1.52
1	B	134	VAL	CA-C	-5.43	1.45	1.52
8	N	231	ARG	C-N	5.43	1.41	1.33
1	B	61	GLY	C-N	5.42	1.41	1.33
8	N	267	SER	C-N	5.42	1.41	1.33
1	B	223	THR	N-CA	-5.42	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	453	ALA	C-N	5.42	1.40	1.33
1	B	151	PRO	C-N	5.42	1.41	1.33
2	D	260	MET	N-CA	5.42	1.53	1.46
1	A	81	ASN	C-N	5.42	1.41	1.33
1	A	451	ARG	N-CA	5.42	1.52	1.46
1	A	72	ALA	CA-C	-5.42	1.45	1.52
1	A	496	GLN	CA-C	-5.41	1.46	1.52
1	B	51	VAL	CA-C	-5.41	1.46	1.52
2	D	50	VAL	C-O	-5.41	1.18	1.24
7	M	228	VAL	N-CA	-5.41	1.39	1.46
9	T	59	LEU	C-O	-5.41	1.17	1.24
9	Y	28	LEU	C-N	5.41	1.40	1.33
1	C	499	ALA	C-N	5.41	1.41	1.33
5	K	204	ARG	C-N	5.41	1.41	1.33
3	H	167	LEU	CA-C	-5.40	1.45	1.52
9	V	49	ARG	N-CA	-5.40	1.39	1.46
9	P	59	LEU	CA-C	-5.40	1.45	1.52
9	V	72	ILE	C-N	-5.40	1.26	1.33
6	L	7	PRO	N-CA	-5.40	1.40	1.47
1	A	458	LEU	C-N	5.39	1.40	1.33
2	D	424	ASN	C-O	-5.39	1.17	1.23
1	B	172	VAL	N-CA	5.39	1.51	1.46
7	M	274	LYS	C-N	5.39	1.41	1.33
3	G	54	ARG	CA-C	-5.39	1.45	1.52
9	W	58	PHE	C-N	5.39	1.41	1.33
9	Z	65	LEU	C-N	5.39	1.40	1.33
2	F	34	ASP	C-N	5.38	1.40	1.33
8	N	96	GLY	CA-C	5.38	1.57	1.52
8	N	483	ALA	N-CA	-5.38	1.39	1.46
8	N	67	GLY	C-N	5.38	1.41	1.33
1	C	331	ALA	C-N	5.38	1.41	1.34
9	P	43	GLY	C-N	5.38	1.41	1.33
5	K	202	GLU	C-N	5.37	1.41	1.33
4	I	59	LEU	CA-C	-5.37	1.45	1.52
1	C	173	VAL	N-CA	-5.36	1.39	1.46
6	L	25	SER	N-CA	-5.36	1.39	1.46
1	A	168	VAL	CA-C	5.36	1.59	1.52
2	F	18	LEU	C-N	5.36	1.40	1.33
2	F	354	PRO	CA-C	-5.36	1.47	1.52
9	S	56	LEU	CA-C	-5.36	1.45	1.52
1	B	47	ALA	CA-C	-5.36	1.46	1.52
8	N	428	PHE	C-O	-5.35	1.17	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	D	416	ASP	N-CA	-5.35	1.39	1.46
2	E	12	THR	CA-C	-5.35	1.46	1.52
2	F	35	ILE	N-CA	-5.35	1.39	1.46
9	R	44	ALA	N-CA	-5.35	1.39	1.46
1	C	380	ILE	CA-C	5.35	1.59	1.52
9	T	12	ARG	CA-C	-5.35	1.45	1.52
1	A	170	GLU	C-N	5.35	1.40	1.33
1	B	219	ALA	C-N	5.35	1.41	1.33
2	D	144	LEU	CA-C	5.35	1.59	1.52
3	H	7	ILE	C-N	5.35	1.41	1.33
9	R	38	GLY	CA-C	-5.35	1.46	1.52
3	H	110	GLU	C-N	5.34	1.41	1.33
1	C	311	GLU	C-N	5.34	1.41	1.34
8	N	432	LEU	C-N	5.34	1.40	1.33
4	I	29	LYS	CA-C	-5.34	1.45	1.52
9	P	19	MET	CA-C	-5.34	1.45	1.52
5	K	207	GLU	C-N	5.34	1.41	1.33
1	C	30	VAL	C-N	5.34	1.41	1.33
5	K	39	PHE	C-N	5.34	1.40	1.33
8	N	212	ALA	N-CA	-5.33	1.40	1.46
8	N	338	ASN	C-N	5.33	1.38	1.33
9	P	42	VAL	C-N	5.33	1.40	1.33
1	C	190	ARG	CA-C	-5.33	1.45	1.52
2	F	85	SER	C-N	5.33	1.40	1.33
4	I	98	ALA	N-CA	-5.33	1.39	1.46
7	M	91	ASN	C-N	5.33	1.41	1.34
7	M	183	LEU	C-N	5.33	1.41	1.33
9	X	22	ALA	N-CA	-5.33	1.40	1.46
1	C	321	ALA	CA-C	-5.33	1.46	1.52
9	V	53	GLY	CA-C	-5.33	1.45	1.52
9	W	41	GLY	C-N	5.33	1.40	1.33
8	N	549	PRO	CA-C	-5.33	1.43	1.52
1	B	449	GLU	C-O	-5.32	1.17	1.24
2	E	254	LEU	CA-C	5.32	1.58	1.52
3	H	115	LEU	C-O	-5.32	1.19	1.24
9	P	56	LEU	CA-C	-5.32	1.46	1.52
9	R	64	THR	C-N	5.32	1.41	1.33
1	A	26	ASP	CA-C	-5.31	1.46	1.52
1	B	33	GLU	C-N	5.31	1.38	1.33
1	B	191	ARG	C-N	5.31	1.41	1.33
8	N	122	ALA	C-O	-5.31	1.18	1.24
1	A	26	ASP	C-N	5.31	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	D	236	ARG	CA-C	5.30	1.59	1.52
7	M	201	LEU	C-N	5.30	1.41	1.33
2	D	296	GLU	C-N	5.30	1.41	1.33
2	D	366	VAL	CA-C	-5.30	1.46	1.52
3	H	104	VAL	C-N	5.30	1.41	1.33
8	N	346	ASP	C-N	5.30	1.37	1.33
1	A	251	VAL	N-CA	5.30	1.53	1.46
1	B	519	ILE	N-CA	5.30	1.52	1.46
2	D	197	THR	CA-C	-5.30	1.45	1.53
2	E	460	GLY	C-N	5.30	1.41	1.33
9	W	22	ALA	CA-C	-5.29	1.46	1.52
2	D	435	SER	N-CA	-5.29	1.39	1.46
8	N	628	PHE	C-N	5.29	1.40	1.33
1	A	568	LYS	N-CA	-5.28	1.39	1.46
1	C	136	GLY	CA-C	-5.28	1.45	1.51
2	E	57	ILE	C-O	-5.28	1.18	1.24
2	F	416	ASP	N-CA	5.28	1.52	1.46
9	P	67	ILE	C-N	5.28	1.40	1.33
2	F	326	PRO	C-N	5.28	1.41	1.33
1	B	275	PRO	CA-C	-5.28	1.45	1.52
8	N	248	LEU	C-N	5.27	1.40	1.33
9	R	7	SER	CA-C	-5.27	1.46	1.52
1	A	24	MET	CA-C	5.27	1.59	1.52
5	K	62	ALA	CA-C	-5.27	1.45	1.52
9	P	48	ASP	N-CA	-5.27	1.39	1.46
9	U	69	GLY	CA-C	-5.27	1.46	1.52
2	E	164	ALA	C-N	5.27	1.41	1.33
5	K	128	ARG	C-O	-5.27	1.18	1.24
9	S	67	ILE	CA-C	5.27	1.59	1.52
1	A	403	VAL	C-N	5.27	1.41	1.33
2	D	82	LEU	N-CA	-5.27	1.39	1.46
9	Q	70	LEU	CA-C	-5.27	1.46	1.52
2	D	197	THR	C-N	5.26	1.41	1.33
6	L	69	PRO	N-CA	-5.26	1.40	1.47
7	M	279	ASP	C-N	5.26	1.40	1.34
4	I	75	GLU	C-N	5.26	1.40	1.33
5	K	26	ASP	N-CA	-5.26	1.40	1.46
8	N	234	LEU	N-CA	-5.26	1.40	1.46
1	A	503	VAL	CA-C	-5.26	1.44	1.52
3	H	103	VAL	CA-C	5.26	1.59	1.52
1	C	445	GLU	C-N	5.26	1.41	1.33
7	M	110	GLU	C-N	5.26	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	T	39	ALA	CA-C	-5.26	1.46	1.52
9	Z	61	LEU	C-O	-5.26	1.19	1.24
1	A	391	MET	CA-C	-5.25	1.45	1.52
1	B	160	VAL	CA-C	-5.25	1.46	1.52
1	C	12	PRO	C-N	5.25	1.40	1.33
1	B	175	LEU	CA-C	-5.25	1.46	1.52
8	N	283	LYS	N-CA	5.25	1.51	1.46
1	B	60	VAL	CA-C	5.25	1.58	1.52
1	C	247	ALA	CA-C	-5.25	1.46	1.52
2	F	146	ARG	N-CA	5.25	1.52	1.46
7	M	155	LEU	C-N	5.25	1.41	1.34
9	O	45	ILE	CA-C	-5.25	1.45	1.52
2	D	378	VAL	C-N	5.24	1.41	1.33
3	G	183	ALA	C-N	5.24	1.40	1.33
8	N	153	LEU	CA-C	-5.24	1.46	1.52
9	W	71	LEU	CA-C	-5.24	1.46	1.52
1	A	96	GLU	C-N	5.24	1.40	1.33
1	B	337	ILE	CA-C	-5.24	1.46	1.52
1	C	436	ASP	N-CA	-5.24	1.38	1.46
9	Z	16	ALA	N-CA	-5.24	1.40	1.46
2	D	159	PRO	C-N	5.24	1.41	1.33
3	G	32	ARG	CA-C	-5.24	1.46	1.52
8	N	58	GLY	N-CA	-5.24	1.39	1.45
2	D	46	GLN	N-CA	-5.23	1.39	1.45
9	V	65	LEU	CA-C	-5.23	1.46	1.52
9	Z	64	THR	C-N	5.23	1.40	1.33
8	N	441	PRO	C-O	-5.22	1.17	1.23
1	A	3	GLN	N-CA	-5.22	1.39	1.46
2	E	9	THR	N-CA	-5.22	1.39	1.46
9	S	39	ALA	N-CA	-5.22	1.40	1.46
1	A	434	ALA	CA-C	-5.22	1.45	1.52
2	D	58	GLN	N-CA	-5.22	1.39	1.46
1	B	331	ALA	N-CA	-5.22	1.39	1.46
1	B	528	ALA	N-CA	-5.21	1.39	1.46
1	C	14	VAL	C-N	5.21	1.40	1.33
3	G	95	PRO	N-CA	-5.21	1.40	1.47
5	K	183	LEU	CA-C	-5.21	1.46	1.52
1	A	322	LEU	CA-C	-5.21	1.46	1.52
3	G	41	LEU	N-CA	-5.21	1.39	1.46
8	N	276	GLY	N-CA	-5.21	1.40	1.45
8	N	409	ILE	N-CA	-5.21	1.40	1.46
8	N	620	PRO	N-CA	-5.21	1.40	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	P	36	ARG	N-CA	5.21	1.52	1.46
9	U	31	GLY	N-CA	-5.21	1.39	1.45
1	B	566	ALA	N-CA	-5.20	1.40	1.46
2	E	44	GLY	N-CA	5.20	1.51	1.45
3	G	75	ALA	CA-C	5.20	1.59	1.52
1	C	266	LEU	CA-C	-5.20	1.45	1.52
8	N	354	PHE	N-CA	-5.20	1.40	1.46
5	K	85	PRO	N-CA	-5.20	1.41	1.47
8	N	489	HIS	C-N	5.19	1.41	1.33
3	H	105	ARG	C-N	5.19	1.41	1.34
9	Q	33	ALA	C-N	5.19	1.40	1.33
9	U	11	ASP	N-CA	-5.19	1.40	1.46
1	B	518	MET	CA-C	5.19	1.59	1.52
1	B	127	ASP	N-CA	-5.19	1.39	1.45
9	R	49	ARG	N-CA	5.19	1.52	1.46
6	L	91	ARG	N-CA	-5.19	1.39	1.46
7	M	75	LEU	C-N	5.18	1.40	1.33
9	T	10	LEU	N-CA	-5.18	1.40	1.46
2	F	152	ILE	CA-C	5.18	1.58	1.52
9	W	39	ALA	N-CA	-5.18	1.40	1.46
9	X	46	ALA	C-N	5.18	1.41	1.33
9	R	59	LEU	N-CA	-5.18	1.40	1.46
1	B	329	ARG	N-CA	-5.18	1.39	1.46
2	F	256	ILE	CA-C	-5.17	1.46	1.52
2	F	456	LYS	CA-C	-5.17	1.46	1.52
1	B	235	THR	C-N	5.17	1.40	1.33
1	C	312	TYR	N-CA	-5.17	1.39	1.46
3	H	128	LEU	N-CA	-5.17	1.41	1.46
9	Y	36	ARG	N-CA	-5.17	1.40	1.46
1	B	475	ALA	C-N	5.17	1.40	1.33
1	B	506	TYR	CA-C	-5.16	1.46	1.52
1	C	225	ALA	N-CA	-5.16	1.39	1.46
1	B	499	ALA	N-CA	-5.16	1.39	1.46
2	E	414	PHE	C-N	5.16	1.40	1.33
2	F	12	THR	C-N	5.16	1.40	1.33
2	E	121	PRO	C-N	5.16	1.40	1.33
2	F	275	GLU	C-N	5.16	1.40	1.33
9	U	73	ALA	CA-C	5.16	1.59	1.52
9	V	9	GLY	C-N	5.16	1.41	1.34
1	C	480	GLU	C-N	5.16	1.41	1.33
2	D	224	ALA	N-CA	-5.16	1.39	1.46
1	C	34	GLY	C-O	-5.16	1.17	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	272	LEU	C-N	5.16	1.40	1.33
8	N	488	LYS	CA-C	-5.16	1.45	1.52
9	Y	27	ALA	C-N	5.16	1.40	1.33
4	J	86	ALA	N-CA	-5.15	1.40	1.46
5	K	147	LEU	C-O	5.15	1.30	1.24
1	C	165	GLU	CA-C	-5.15	1.46	1.52
2	E	79	VAL	N-CA	-5.15	1.40	1.46
9	R	68	PHE	C-N	5.15	1.40	1.33
9	Z	25	LEU	C-N	5.15	1.41	1.33
1	B	26	ASP	CA-C	-5.15	1.46	1.52
1	C	333	ALA	N-CA	-5.15	1.39	1.46
2	D	151	PRO	C-N	5.14	1.40	1.33
2	E	301	VAL	C-O	-5.14	1.18	1.24
3	G	90	ALA	N-CA	5.14	1.52	1.46
8	N	116	GLU	N-CA	-5.14	1.41	1.46
9	T	70	LEU	N-CA	-5.14	1.40	1.46
8	N	602	GLY	C-N	5.14	1.40	1.33
1	A	312	TYR	C-N	5.14	1.41	1.33
1	C	8	LYS	CA-C	-5.14	1.46	1.52
5	K	123	THR	CA-C	-5.14	1.45	1.52
7	M	152	ARG	N-CA	-5.14	1.40	1.46
8	N	54	ALA	N-CA	-5.13	1.40	1.46
1	B	36	VAL	CA-C	5.13	1.58	1.52
9	O	67	ILE	CA-C	-5.13	1.46	1.52
9	P	57	ILE	CA-C	-5.13	1.46	1.52
1	A	17	LYS	N-CA	5.13	1.52	1.45
1	B	71	LEU	CA-C	5.13	1.59	1.52
2	D	389	GLY	C-N	5.13	1.40	1.33
2	F	171	ALA	N-CA	5.13	1.52	1.46
3	H	171	MET	C-N	5.13	1.40	1.34
9	V	74	PHE	CA-C	-5.12	1.46	1.52
1	C	407	TRP	C-N	5.12	1.39	1.33
5	K	179	ILE	C-O	-5.12	1.18	1.24
9	Q	65	LEU	C-N	5.12	1.40	1.33
9	R	60	LEU	N-CA	5.12	1.52	1.46
9	T	50	SER	C-N	5.12	1.40	1.33
1	A	519	ILE	CA-C	-5.12	1.45	1.52
2	D	108	PRO	N-CA	5.12	1.51	1.46
9	X	15	ILE	C-N	5.12	1.40	1.33
4	I	107	LEU	CA-C	-5.11	1.47	1.52
1	C	187	TRP	CA-C	-5.11	1.47	1.53
5	K	111	GLY	C-N	5.11	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	543	PRO	C-N	5.11	1.40	1.33
1	A	370	THR	C-N	5.11	1.41	1.33
9	Z	69	GLY	N-CA	-5.11	1.39	1.45
1	A	35	LEU	C-N	5.11	1.40	1.33
2	D	167	ILE	C-N	5.11	1.40	1.33
9	O	19	MET	CA-C	-5.11	1.45	1.52
8	N	362	ILE	C-N	5.10	1.40	1.33
9	W	66	VAL	C-O	-5.10	1.18	1.24
9	T	69	GLY	CA-C	-5.10	1.46	1.52
1	B	517	LYS	C-N	5.10	1.40	1.34
3	G	99	GLU	C-N	5.10	1.41	1.33
9	R	17	VAL	CA-C	5.10	1.59	1.52
5	K	183	LEU	C-N	5.10	1.40	1.33
8	N	79	GLY	CA-C	-5.10	1.43	1.52
8	N	247	SER	C-N	5.10	1.40	1.33
2	D	8	TYR	C-N	5.09	1.40	1.33
7	M	50	ALA	N-CA	-5.09	1.41	1.46
9	S	48	ASP	C-N	5.09	1.40	1.33
1	A	458	LEU	N-CA	-5.09	1.39	1.46
1	B	458	LEU	C-O	5.09	1.30	1.24
9	S	5	ALA	N-CA	-5.09	1.39	1.46
8	N	347	PRO	CA-C	-5.09	1.47	1.52
6	L	54	ASP	CA-C	5.09	1.59	1.52
3	H	34	ALA	CA-C	5.09	1.59	1.52
9	V	24	GLY	N-CA	-5.09	1.39	1.45
2	F	331	TYR	C-N	5.08	1.40	1.33
4	I	55	ALA	CA-C	-5.08	1.46	1.52
3	H	81	GLU	CA-C	-5.08	1.45	1.52
5	K	159	ARG	CA-C	-5.08	1.46	1.52
7	M	85	ARG	C-N	5.08	1.40	1.33
9	P	53	GLY	CA-C	5.08	1.58	1.51
1	C	29	LYS	C-N	5.08	1.41	1.33
1	C	45	ASP	CA-C	-5.08	1.45	1.52
2	D	395	LEU	C-N	5.08	1.40	1.33
3	H	63	ALA	CA-C	-5.08	1.46	1.52
1	A	454	ILE	N-CA	5.07	1.51	1.45
1	C	16	ALA	N-CA	-5.07	1.39	1.45
9	R	60	LEU	C-N	5.07	1.40	1.33
2	D	457	ASP	CA-C	-5.07	1.45	1.52
4	J	40	ALA	N-CA	-5.07	1.40	1.46
2	D	130	PHE	C-N	5.06	1.40	1.33
1	C	164	GLY	CA-C	-5.06	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	109	GLU	C-N	5.06	1.40	1.33
5	K	77	ALA	N-CA	-5.06	1.40	1.46
9	U	70	LEU	CA-C	5.06	1.59	1.52
9	X	77	ASN	N-CA	5.06	1.52	1.46
1	A	237	THR	C-N	5.06	1.40	1.33
1	B	84	TYR	C-O	-5.06	1.17	1.23
3	H	91	LEU	N-CA	-5.06	1.40	1.46
9	W	55	ALA	N-CA	5.06	1.52	1.46
4	I	91	ARG	C-N	5.05	1.40	1.33
1	A	99	GLY	C-N	-5.05	1.27	1.34
2	F	400	GLY	N-CA	-5.05	1.38	1.45
9	V	13	GLY	CA-C	-5.05	1.45	1.52
9	V	42	VAL	CA-C	-5.05	1.46	1.52
1	A	538	GLU	C-N	5.05	1.39	1.34
1	C	409	LEU	CA-C	-5.05	1.46	1.52
9	P	58	PHE	C-N	5.05	1.40	1.33
8	N	376	GLY	CA-C	-5.05	1.45	1.52
9	Z	72	ILE	N-CA	5.05	1.52	1.46
4	I	68	ALA	CA-C	-5.04	1.45	1.52
1	A	264	ASP	C-N	5.04	1.40	1.33
1	A	488	ARG	C-O	-5.04	1.18	1.24
1	C	112	ASP	CA-C	-5.04	1.46	1.52
2	D	35	ILE	N-CA	-5.04	1.39	1.46
2	D	50	VAL	N-CA	-5.04	1.40	1.46
8	N	400	PRO	CA-C	5.04	1.56	1.52
9	O	60	LEU	C-N	5.04	1.40	1.33
2	D	110	LYS	C-O	-5.04	1.18	1.24
4	I	76	ARG	C-N	5.04	1.40	1.33
3	G	147	ALA	CA-C	-5.04	1.46	1.53
1	B	474	ASP	CA-C	-5.03	1.46	1.52
2	D	85	SER	C-N	5.03	1.40	1.33
2	D	345	ARG	CA-C	5.03	1.59	1.52
1	A	134	VAL	N-CA	-5.03	1.40	1.46
1	C	273	THR	C-O	-5.03	1.18	1.24
4	J	53	ALA	C-N	-5.03	1.27	1.34
6	L	39	ARG	C-N	5.03	1.38	1.33
9	T	68	PHE	N-CA	-5.03	1.40	1.46
9	V	38	GLY	CA-C	-5.03	1.46	1.52
1	B	9	ILE	N-CA	5.03	1.52	1.46
7	M	105	THR	N-CA	5.03	1.52	1.46
4	J	78	ARG	CA-C	-5.03	1.46	1.52
1	A	518	MET	CA-C	-5.02	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	X	2	GLU	C-O	-5.02	1.18	1.24
1	A	286	VAL	CA-C	-5.02	1.46	1.52
2	D	359	SER	N-CA	-5.02	1.40	1.45
9	W	60	LEU	C-N	5.02	1.40	1.33
1	C	336	GLU	C-N	5.02	1.40	1.33
2	F	155	GLY	C-N	5.02	1.40	1.33
3	H	44	ALA	N-CA	-5.02	1.39	1.46
9	O	35	ALA	C-O	-5.02	1.18	1.24
2	D	332	ILE	N-CA	-5.01	1.40	1.46
2	E	244	TYR	CA-C	5.01	1.59	1.52
9	O	49	ARG	C-O	-5.01	1.17	1.24
8	N	212	ALA	C-N	5.01	1.40	1.33
1	C	523	TYR	C-N	5.01	1.39	1.33
3	G	122	VAL	C-N	5.01	1.39	1.33
1	C	323	MET	CA-C	-5.01	1.46	1.52
2	F	203	TYR	CA-C	-5.01	1.46	1.52
6	L	94	VAL	CA-C	-5.01	1.46	1.52
9	Q	23	VAL	C-N	5.01	1.39	1.33
9	U	36	ARG	C-N	5.01	1.40	1.33
9	W	27	ALA	CA-C	-5.01	1.46	1.52
9	T	3	GLU	C-N	5.00	1.40	1.33
1	C	387	PRO	C-O	-5.00	1.18	1.24
7	M	262	GLU	N-CA	-5.00	1.40	1.46
7	M	267	CYS	CA-C	-5.00	1.46	1.52
2	D	218	VAL	C-N	5.00	1.40	1.33
2	F	125	ARG	CA-C	5.00	1.58	1.52
3	G	24	GLU	CA-C	-5.00	1.46	1.52

All (2737) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	K	108	PHE	N-CA-C	-13.37	96.17	108.07
2	E	100	ILE	N-CA-C	-13.26	100.54	113.53
1	B	150	PRO	O-C-N	12.47	127.01	121.15
7	M	78	GLY	CA-C-N	12.30	137.24	120.38
7	M	78	GLY	C-N-CA	12.30	137.24	120.38
8	N	427	PHE	CA-C-N	11.91	136.24	120.28
8	N	427	PHE	C-N-CA	11.91	136.24	120.28
9	W	17	VAL	CA-C-N	11.86	133.14	119.98
9	W	17	VAL	C-N-CA	11.86	133.14	119.98
7	M	164	VAL	N-CA-C	-11.56	99.32	110.42
1	A	503	VAL	N-CA-C	-11.42	101.52	112.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	M	283	VAL	CA-C-N	11.40	132.87	119.99
7	M	283	VAL	C-N-CA	11.40	132.87	119.99
3	G	53	TYR	N-CA-C	-11.19	99.45	113.55
7	M	9	ASN	CA-C-N	11.09	135.13	120.28
7	M	9	ASN	C-N-CA	11.09	135.13	120.28
8	N	95	GLU	CA-C-N	10.95	132.09	119.94
8	N	95	GLU	C-N-CA	10.95	132.09	119.94
1	A	4	GLY	N-CA-C	-10.75	99.89	112.79
2	D	433	GLU	CA-C-N	10.67	135.00	120.38
2	D	433	GLU	C-N-CA	10.67	135.00	120.38
1	B	150	PRO	CA-C-O	-10.61	112.35	120.73
1	A	81	ASN	CA-C-N	10.52	131.91	120.44
1	A	81	ASN	C-N-CA	10.52	131.91	120.44
9	P	44	ALA	CA-C-O	-10.52	109.40	120.55
1	C	173	VAL	N-CA-C	-10.40	94.74	108.06
7	M	243	GLU	N-CA-C	-10.40	97.45	113.89
2	E	399	ILE	N-CA-C	-10.36	102.61	112.96
1	B	69	LEU	CA-C-N	10.29	130.05	119.76
1	B	69	LEU	C-N-CA	10.29	130.05	119.76
7	M	142	VAL	CA-C-O	-10.29	110.89	118.71
9	Y	52	PHE	CA-C-N	10.24	131.34	119.98
9	Y	52	PHE	C-N-CA	10.24	131.34	119.98
9	U	20	GLY	CA-C-N	10.14	133.63	120.44
9	U	20	GLY	C-N-CA	10.14	133.63	120.44
9	Z	35	ALA	N-CA-C	10.12	121.90	111.07
1	B	392	SER	N-CA-C	-10.10	98.70	112.94
9	V	42	VAL	O-C-N	10.08	131.64	121.87
1	C	351	PRO	CA-C-O	-9.97	113.72	120.90
2	E	370	LYS	N-CA-C	-9.97	99.93	114.39
2	F	370	LYS	N-CA-C	-9.96	100.81	113.16
9	P	40	ALA	CA-C-N	9.92	130.92	120.00
9	P	40	ALA	C-N-CA	9.92	130.92	120.00
8	N	512	ALA	CA-C-N	9.85	134.46	120.28
8	N	512	ALA	C-N-CA	9.85	134.46	120.28
2	E	462	TYR	N-CA-C	-9.82	93.29	108.42
2	D	35	ILE	O-C-N	9.80	133.37	123.18
8	N	640	ARG	CA-C-N	9.78	132.07	119.84
8	N	640	ARG	C-N-CA	9.78	132.07	119.84
1	C	226	ILE	O-C-N	-9.73	115.56	121.69
2	D	160	ALA	CA-C-N	9.72	133.66	120.44
2	D	160	ALA	C-N-CA	9.72	133.66	120.44
8	N	586	ALA	N-CA-C	-9.71	99.61	113.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	L	29	ALA	CA-C-N	9.70	133.04	120.44
6	L	29	ALA	C-N-CA	9.70	133.04	120.44
9	X	64	THR	CA-C-N	9.67	133.01	120.44
9	X	64	THR	C-N-CA	9.67	133.01	120.44
8	N	385	ARG	N-CA-C	-9.66	101.50	113.28
3	H	53	TYR	N-CA-C	-9.64	101.40	113.55
7	M	141	ALA	CA-C-N	9.62	129.67	120.43
7	M	141	ALA	C-N-CA	9.62	129.67	120.43
2	E	139	ASP	N-CA-C	-9.57	103.71	114.62
1	A	120	THR	CA-C-O	-9.55	110.80	119.59
2	D	12	THR	N-CA-C	-9.54	99.53	112.03
2	E	337	ILE	N-CA-C	-9.53	94.26	108.46
3	H	175	TRP	N-CA-C	-9.52	98.85	113.89
9	Q	37	ILE	CA-C-N	9.47	130.49	119.98
9	Q	37	ILE	C-N-CA	9.47	130.49	119.98
1	C	358	LEU	N-CA-C	-9.46	99.17	112.13
7	M	219	LEU	CA-C-N	9.43	134.11	120.71
7	M	219	LEU	C-N-CA	9.43	134.11	120.71
1	C	304	TYR	N-CA-C	9.43	124.19	112.87
9	W	19	MET	CA-C-N	9.38	132.13	120.22
9	W	19	MET	C-N-CA	9.38	132.13	120.22
1	A	419	PHE	N-CA-C	-9.32	96.06	110.14
1	A	189	VAL	CA-C-O	9.31	130.53	120.57
1	A	218	VAL	N-CA-C	-9.30	94.68	108.45
2	D	375	HIS	CA-C-N	9.30	133.68	120.28
2	D	375	HIS	C-N-CA	9.30	133.68	120.28
1	C	473	PRO	CA-C-N	9.30	137.10	122.60
1	C	473	PRO	C-N-CA	9.30	137.10	122.60
9	P	44	ALA	O-C-N	9.28	131.96	122.12
9	Q	66	VAL	CA-C-O	-9.28	111.02	120.85
9	Y	65	LEU	CA-C-O	-9.25	110.61	120.42
2	E	77	GLU	CA-C-N	9.20	133.52	120.28
2	E	77	GLU	C-N-CA	9.20	133.52	120.28
1	A	147	ILE	CA-C-N	9.18	134.46	121.24
1	A	147	ILE	C-N-CA	9.18	134.46	121.24
2	D	131	ILE	CA-C-N	9.16	134.67	122.30
2	D	131	ILE	C-N-CA	9.16	134.67	122.30
6	L	6	ASP	CA-C-O	-9.16	110.79	120.87
1	B	207	THR	N-CA-C	-9.14	99.92	114.09
2	E	458	HIS	CA-C-O	-9.14	109.46	119.97
2	E	199	ARG	CA-C-N	9.13	132.51	120.28
2	E	199	ARG	C-N-CA	9.13	132.51	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	N	324	PRO	CA-C-O	-9.13	107.33	120.56
3	G	110	GLU	CA-C-N	9.12	132.85	120.54
3	G	110	GLU	C-N-CA	9.12	132.85	120.54
1	C	447	TYR	O-C-N	-9.11	113.18	120.38
2	F	109	GLU	N-CA-C	-9.09	101.98	113.43
1	B	242	ALA	CA-C-N	9.08	132.24	120.44
1	B	242	ALA	C-N-CA	9.08	132.24	120.44
1	B	329	ARG	CA-C-N	9.07	134.43	120.82
1	B	329	ARG	C-N-CA	9.07	134.43	120.82
1	A	356	ALA	N-CA-C	9.06	122.07	111.02
1	A	288	ILE	N-CA-C	-9.05	104.21	112.90
1	C	358	LEU	CA-C-N	9.04	132.40	120.28
1	C	358	LEU	C-N-CA	9.04	132.40	120.28
5	K	28	LEU	CA-C-O	9.04	130.33	120.20
1	B	453	ALA	CA-C-N	9.02	135.10	120.30
1	B	453	ALA	C-N-CA	9.02	135.10	120.30
9	U	27	ALA	CA-C-N	8.95	132.08	120.44
9	U	27	ALA	C-N-CA	8.95	132.08	120.44
2	D	327	ASP	N-CA-C	8.95	120.72	110.97
8	N	351	VAL	O-C-N	-8.92	114.71	120.42
2	F	209	GLU	N-CA-C	-8.90	102.19	113.23
9	V	65	LEU	N-CA-C	8.90	120.98	111.28
9	U	59	LEU	CA-C-N	8.89	132.20	120.28
9	U	59	LEU	C-N-CA	8.89	132.20	120.28
7	M	288	ALA	CA-C-N	8.88	131.98	120.44
7	M	288	ALA	C-N-CA	8.88	131.98	120.44
1	C	91	LEU	CA-C-N	8.87	131.97	120.44
1	C	91	LEU	C-N-CA	8.87	131.97	120.44
6	L	94	VAL	N-CA-C	8.86	119.67	110.72
3	H	29	ALA	N-CA-C	8.85	120.93	111.28
1	C	504	ASP	N-CA-C	-8.85	102.50	113.38
6	L	10	ALA	CA-C-N	8.83	134.06	120.82
6	L	10	ALA	C-N-CA	8.83	134.06	120.82
5	K	75	VAL	N-CA-C	8.82	119.62	110.62
9	P	14	LEU	CA-C-N	8.82	132.54	120.46
9	P	14	LEU	C-N-CA	8.82	132.54	120.46
1	A	559	PHE	CA-C-O	-8.81	109.80	118.34
1	C	486	VAL	CA-C-N	8.81	129.89	120.03
1	C	486	VAL	C-N-CA	8.81	129.89	120.03
6	L	85	ASP	CA-C-N	8.81	135.57	120.86
6	L	85	ASP	C-N-CA	8.81	135.57	120.86
8	N	619	GLN	CA-C-N	8.76	128.35	119.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	N	619	GLN	C-N-CA	8.76	128.35	119.24
1	B	281	LEU	CA-C-N	8.75	132.72	120.29
1	B	281	LEU	C-N-CA	8.75	132.72	120.29
2	E	216	ARG	N-CA-C	-8.75	99.33	112.54
3	H	50	GLU	CA-C-N	8.74	132.35	120.54
3	H	50	GLU	C-N-CA	8.74	132.35	120.54
2	D	397	ALA	O-C-N	8.74	131.38	122.12
1	A	385	SER	CA-C-O	-8.73	112.78	119.59
9	Z	26	ALA	N-CA-C	-8.73	101.85	111.36
9	O	42	VAL	CA-C-N	8.72	131.29	120.22
9	O	42	VAL	C-N-CA	8.72	131.29	120.22
8	N	187	LYS	CA-C-N	8.69	131.93	120.28
8	N	187	LYS	C-N-CA	8.69	131.93	120.28
2	F	119	LEU	CA-C-O	8.69	130.45	120.80
1	B	505	ALA	N-CA-C	-8.68	101.64	113.18
4	I	51	ALA	CA-C-O	8.67	129.74	120.55
8	N	548	ILE	CA-C-N	8.65	128.80	119.28
8	N	548	ILE	C-N-CA	8.65	128.80	119.28
9	Z	40	ALA	CA-C-N	8.64	129.50	120.00
9	Z	40	ALA	C-N-CA	8.64	129.50	120.00
3	G	140	VAL	CA-C-N	8.63	133.67	121.24
3	G	140	VAL	C-N-CA	8.63	133.67	121.24
3	H	12	VAL	CA-C-O	-8.62	111.48	121.05
9	Q	49	ARG	N-CA-C	-8.62	102.83	112.57
9	X	40	ALA	CA-C-N	8.62	130.91	120.14
9	X	40	ALA	C-N-CA	8.62	130.91	120.14
7	M	305	ARG	CA-C-N	8.61	131.82	120.28
7	M	305	ARG	C-N-CA	8.61	131.82	120.28
3	H	110	GLU	CA-C-N	8.56	131.75	120.28
3	H	110	GLU	C-N-CA	8.56	131.75	120.28
1	A	311	GLU	CA-C-N	8.52	132.05	120.54
1	A	311	GLU	C-N-CA	8.52	132.05	120.54
2	F	168	ALA	N-CA-C	8.52	122.77	112.38
9	Y	61	LEU	CA-C-N	8.50	128.15	119.56
9	Y	61	LEU	C-N-CA	8.50	128.15	119.56
2	E	238	ALA	CA-C-N	8.50	131.49	120.44
2	E	238	ALA	C-N-CA	8.50	131.49	120.44
2	D	222	ASN	N-CA-C	-8.50	102.93	113.38
1	A	53	GLU	CA-C-N	8.47	133.27	120.82
1	A	53	GLU	C-N-CA	8.47	133.27	120.82
9	X	21	LEU	CA-C-O	8.46	129.39	120.42
5	K	149	LYS	N-CA-C	8.45	120.11	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	172	VAL	N-CA-C	-8.44	105.69	113.71
1	B	537	ASP	CA-C-O	8.42	129.48	120.55
2	D	227	PRO	CA-C-N	8.41	133.44	120.82
2	D	227	PRO	C-N-CA	8.41	133.44	120.82
1	C	434	ALA	N-CA-C	-8.41	102.43	114.12
9	V	11	ASP	CA-C-N	8.40	133.07	120.31
9	V	11	ASP	C-N-CA	8.40	133.07	120.31
1	B	263	THR	N-CA-C	-8.39	103.56	113.88
9	X	35	ALA	CA-C-N	8.39	132.20	120.29
9	X	35	ALA	C-N-CA	8.39	132.20	120.29
9	Z	74	PHE	CA-C-O	-8.38	112.07	120.70
3	G	50	GLU	CA-C-N	8.38	131.85	120.54
3	G	50	GLU	C-N-CA	8.38	131.85	120.54
2	F	261	THR	N-CA-C	-8.37	103.93	114.56
6	L	59	VAL	N-CA-C	8.37	119.15	110.62
4	J	83	ALA	CA-C-N	8.36	131.31	120.44
4	J	83	ALA	C-N-CA	8.36	131.31	120.44
9	Z	58	PHE	O-C-N	8.33	131.65	122.15
7	M	277	VAL	N-CA-C	-8.32	104.59	112.83
1	B	303	ILE	CA-C-N	8.30	137.40	121.54
1	B	303	ILE	C-N-CA	8.30	137.40	121.54
2	E	209	GLU	N-CA-C	8.30	122.67	112.54
2	E	169	ARG	CA-C-N	8.30	131.40	120.28
2	E	169	ARG	C-N-CA	8.30	131.40	120.28
3	G	124	ASN	O-C-N	-8.29	112.15	121.43
8	N	420	TRP	CA-C-N	8.28	130.49	120.14
8	N	420	TRP	C-N-CA	8.28	130.49	120.14
9	T	11	ASP	CA-C-N	8.28	131.37	120.28
9	T	11	ASP	C-N-CA	8.28	131.37	120.28
1	C	136	GLY	CA-C-O	-8.27	113.52	121.96
2	F	139	ASP	O-C-N	-8.23	111.64	122.59
1	C	226	ILE	N-CA-C	-8.23	102.44	109.19
1	B	89	ARG	N-CA-C	-8.23	97.51	110.10
9	V	26	ALA	CA-C-N	8.23	131.31	120.28
9	V	26	ALA	C-N-CA	8.23	131.31	120.28
9	T	19	MET	N-CA-C	8.22	121.35	111.82
8	N	109	ALA	O-C-N	-8.20	113.63	122.07
9	S	73	ALA	CA-C-N	8.19	131.09	120.44
9	S	73	ALA	C-N-CA	8.19	131.09	120.44
2	F	208	PHE	N-CA-C	-8.18	103.44	113.50
2	E	185	GLU	CA-C-O	-8.17	111.08	119.49
7	M	78	GLY	CA-C-O	-8.17	111.39	121.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	276	GLU	N-CA-C	-8.16	103.35	113.38
1	C	267	VAL	N-CA-C	-8.15	104.76	112.83
9	O	12	ARG	CA-C-N	8.15	129.03	119.98
9	O	12	ARG	C-N-CA	8.15	129.03	119.98
1	B	87	ILE	N-CA-C	-8.14	101.42	113.39
7	M	191	TYR	CA-C-N	8.14	131.19	120.28
7	M	191	TYR	C-N-CA	8.14	131.19	120.28
3	H	54	ARG	CA-C-N	8.13	131.84	120.29
3	H	54	ARG	C-N-CA	8.13	131.84	120.29
2	E	87	GLU	N-CA-C	-8.13	103.27	113.02
8	N	410	LEU	CA-C-N	8.11	131.15	120.28
8	N	410	LEU	C-N-CA	8.11	131.15	120.28
1	A	188	PRO	CA-C-O	-8.10	112.36	121.43
1	A	518	MET	CA-C-N	8.08	133.48	120.55
1	A	518	MET	C-N-CA	8.08	133.48	120.55
3	H	70	THR	CA-C-O	8.08	128.99	120.42
8	N	13	ALA	CA-C-N	8.08	131.76	120.29
8	N	13	ALA	C-N-CA	8.08	131.76	120.29
8	N	16	LEU	CA-C-N	8.08	130.94	120.44
8	N	16	LEU	C-N-CA	8.08	130.94	120.44
2	D	406	GLU	N-CA-C	-8.07	104.58	114.75
8	N	253	GLN	O-C-N	-8.05	113.58	122.12
9	T	42	VAL	CA-C-N	8.03	128.84	120.00
9	T	42	VAL	C-N-CA	8.03	128.84	120.00
9	T	52	PHE	N-CA-C	-8.03	102.47	111.71
1	A	504	ASP	N-CA-C	-8.02	103.96	114.31
1	C	200	ASP	CA-C-O	-8.02	113.38	119.32
3	H	97	LYS	N-CA-C	-8.02	99.62	110.36
9	R	70	LEU	CA-C-N	8.01	131.66	120.29
9	R	70	LEU	C-N-CA	8.01	131.66	120.29
3	G	7	ILE	CA-C-N	8.00	131.80	120.28
3	G	7	ILE	C-N-CA	8.00	131.80	120.28
2	F	26	ASP	N-CA-C	-8.00	102.58	113.30
9	V	23	VAL	CA-C-N	7.98	128.84	119.98
9	V	23	VAL	C-N-CA	7.98	128.84	119.98
1	B	553	TYR	N-CA-C	-7.98	103.56	112.57
2	D	341	ARG	N-CA-C	-7.98	102.36	114.16
1	C	351	PRO	CA-C-N	7.96	127.68	119.56
1	C	351	PRO	C-N-CA	7.96	127.68	119.56
2	E	131	ILE	O-C-N	-7.96	114.50	122.93
5	K	187	GLU	CA-C-N	7.96	131.26	120.44
5	K	187	GLU	C-N-CA	7.96	131.26	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	M	226	ASP	CA-C-N	7.93	130.91	120.28
7	M	226	ASP	C-N-CA	7.93	130.91	120.28
8	N	47	ALA	CA-C-O	-7.93	112.01	120.42
4	J	87	ARG	N-CA-C	7.93	120.01	111.36
1	C	525	GLU	CA-C-N	7.92	131.54	120.29
1	C	525	GLU	C-N-CA	7.92	131.54	120.29
2	F	182	GLU	N-CA-C	-7.92	101.65	112.03
9	X	17	VAL	CA-C-N	7.92	128.57	119.94
9	X	17	VAL	C-N-CA	7.92	128.57	119.94
9	V	19	MET	N-CA-C	-7.92	102.25	112.23
9	S	6	ALA	CA-C-N	7.91	131.94	120.71
9	S	6	ALA	C-N-CA	7.91	131.94	120.71
8	N	182	GLU	N-CA-C	-7.91	101.79	112.94
8	N	415	PHE	N-CA-C	-7.90	102.67	111.28
1	B	197	ARG	N-CA-C	-7.90	96.70	108.79
1	C	462	ALA	CA-C-N	7.90	128.88	120.03
1	C	462	ALA	C-N-CA	7.90	128.88	120.03
9	V	40	ALA	CA-C-N	7.89	130.01	120.14
9	V	40	ALA	C-N-CA	7.89	130.01	120.14
8	N	85	LYS	CA-C-O	-7.89	112.05	120.42
2	F	140	VAL	CA-C-N	7.88	131.16	120.44
2	F	140	VAL	C-N-CA	7.88	131.16	120.44
2	D	138	ILE	N-CA-C	-7.86	103.03	110.42
1	C	241	LEU	N-CA-C	-7.86	101.31	113.02
2	F	165	ALA	CA-C-N	7.86	131.15	120.38
2	F	165	ALA	C-N-CA	7.86	131.15	120.38
2	F	329	THR	CA-C-O	-7.82	112.26	120.55
9	Y	72	ILE	O-C-N	7.81	129.44	121.87
1	C	285	THR	CA-C-O	7.80	128.90	120.32
8	N	575	ALA	CA-C-N	7.79	130.12	120.22
8	N	575	ALA	C-N-CA	7.79	130.12	120.22
1	A	467	ILE	CA-C-N	7.79	130.65	120.60
1	A	467	ILE	C-N-CA	7.79	130.65	120.60
9	T	76	LEU	O-C-N	7.77	131.83	122.27
8	N	357	PHE	CA-C-N	7.76	130.69	120.28
8	N	357	PHE	C-N-CA	7.76	130.69	120.28
9	S	40	ALA	CA-C-N	7.76	128.59	119.98
9	S	40	ALA	C-N-CA	7.76	128.59	119.98
9	T	28	LEU	CA-C-N	7.75	128.59	119.98
9	T	28	LEU	C-N-CA	7.75	128.59	119.98
2	E	249	HIS	CA-C-N	7.74	134.61	122.93
2	E	249	HIS	C-N-CA	7.74	134.61	122.93

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	386	TYR	N-CA-C	-7.73	102.79	111.14
2	E	232	ILE	O-C-N	-7.73	114.21	121.94
2	D	206	GLN	CA-C-N	7.73	135.37	120.99
2	D	206	GLN	C-N-CA	7.73	135.37	120.99
1	A	261	GLU	CA-C-N	7.73	131.41	120.28
1	A	261	GLU	C-N-CA	7.73	131.41	120.28
3	H	26	LYS	N-CA-C	-7.73	103.46	113.12
2	D	339	LEU	N-CA-C	-7.72	103.38	114.12
9	O	57	ILE	CA-C-O	-7.71	112.68	120.85
8	N	11	GLY	O-C-N	7.70	129.66	122.19
1	A	97	LYS	N-CA-C	7.70	119.67	111.28
1	B	150	PRO	N-CA-C	7.70	118.81	110.58
2	E	297	ARG	N-CA-C	-7.69	100.94	111.56
9	Q	67	ILE	CA-C-N	7.69	130.59	120.28
9	Q	67	ILE	C-N-CA	7.69	130.59	120.28
9	R	30	THR	O-C-N	7.69	130.92	122.15
2	F	414	PHE	N-CA-C	-7.69	104.04	113.50
4	I	71	ALA	CA-C-O	-7.68	112.33	120.63
7	M	229	ARG	CA-C-N	7.68	130.43	120.44
7	M	229	ARG	C-N-CA	7.68	130.43	120.44
1	C	355	ALA	CA-C-N	7.68	132.34	120.82
1	C	355	ALA	C-N-CA	7.68	132.34	120.82
1	C	43	ASP	N-CA-C	-7.67	94.46	110.80
1	A	105	GLY	CA-C-N	-7.67	111.95	122.91
1	A	105	GLY	C-N-CA	-7.67	111.95	122.91
1	C	255	CYS	N-CA-C	-7.66	103.01	111.36
2	F	386	TYR	N-CA-C	-7.66	102.27	111.69
9	Z	63	GLU	CA-C-N	7.66	130.54	120.28
9	Z	63	GLU	C-N-CA	7.66	130.54	120.28
9	Y	59	LEU	CA-C-N	7.65	131.30	120.28
9	Y	59	LEU	C-N-CA	7.65	131.30	120.28
1	A	307	VAL	N-CA-C	7.65	119.34	110.62
2	E	446	LEU	O-C-N	-7.63	113.65	121.28
2	F	157	GLY	N-CA-C	-7.62	104.51	115.64
3	G	66	LEU	O-C-N	-7.62	114.04	122.12
9	Z	28	LEU	CA-C-N	7.62	128.44	119.98
9	Z	28	LEU	C-N-CA	7.62	128.44	119.98
9	Q	39	ALA	CA-C-N	7.60	131.23	120.28
9	Q	39	ALA	C-N-CA	7.60	131.23	120.28
6	L	18	LEU	N-CA-C	-7.60	97.86	109.41
7	M	200	ASN	CA-C-O	7.60	128.47	120.42
9	O	51	ASN	N-CA-C	-7.60	101.16	111.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	H	128	LEU	O-C-N	-7.60	113.57	120.71
1	C	223	THR	N-CA-C	-7.59	97.07	108.99
9	O	64	THR	O-C-N	7.58	130.16	122.12
2	E	136	SER	CA-C-N	7.58	131.44	120.38
2	E	136	SER	C-N-CA	7.58	131.44	120.38
1	A	251	VAL	N-CA-C	-7.57	96.56	107.77
1	B	271	GLU	N-CA-C	-7.57	103.63	113.17
1	B	458	LEU	CA-C-N	7.57	130.75	120.54
1	B	458	LEU	C-N-CA	7.57	130.75	120.54
2	F	111	ARG	N-CA-C	-7.56	94.80	108.02
1	A	363	GLU	CA-C-N	7.55	131.41	120.38
1	A	363	GLU	C-N-CA	7.55	131.41	120.38
1	B	280	PRO	CA-C-N	7.55	132.68	120.60
1	B	280	PRO	C-N-CA	7.55	132.68	120.60
4	I	110	ALA	O-C-N	7.55	129.85	122.07
1	B	500	TYR	N-CA-C	-7.55	101.26	113.19
1	C	380	ILE	N-CA-C	-7.55	97.21	108.46
1	B	560	PRO	CA-C-N	7.54	130.38	120.28
1	B	560	PRO	C-N-CA	7.54	130.38	120.28
2	D	109	GLU	N-CA-C	-7.53	103.16	113.18
2	D	362	MET	CA-C-O	7.53	126.80	118.52
9	T	35	ALA	CA-C-N	7.53	130.22	120.44
9	T	35	ALA	C-N-CA	7.53	130.22	120.44
9	T	63	GLU	CA-C-N	7.53	130.37	120.28
9	T	63	GLU	C-N-CA	7.53	130.37	120.28
1	A	189	VAL	O-C-N	-7.52	114.27	121.87
2	F	12	THR	N-CA-C	-7.52	106.05	114.62
2	F	54	TYR	CA-C-O	-7.52	113.40	121.14
3	G	133	ALA	N-CA-C	-7.51	104.25	113.41
8	N	379	LEU	N-CA-C	-7.50	104.10	113.55
9	Y	63	GLU	CA-C-N	7.49	130.32	120.28
9	Y	63	GLU	C-N-CA	7.49	130.32	120.28
7	M	219	LEU	N-CA-C	-7.49	97.62	109.23
1	C	274	ASP	CA-C-O	-7.48	112.17	120.25
2	E	305	LYS	CA-C-N	7.47	128.58	120.44
2	E	305	LYS	C-N-CA	7.47	128.58	120.44
7	M	122	GLU	CA-C-N	7.47	129.97	120.56
7	M	122	GLU	C-N-CA	7.47	129.97	120.56
1	B	203	THR	N-CA-C	-7.46	97.45	109.40
1	C	412	SER	CA-C-N	7.46	130.50	120.65
1	C	412	SER	C-N-CA	7.46	130.50	120.65
9	V	3	GLU	N-CA-C	-7.46	101.19	113.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	G	39	LYS	CA-C-N	7.46	131.02	120.28
3	G	39	LYS	C-N-CA	7.46	131.02	120.28
8	N	436	GLY	CA-C-N	7.46	132.49	120.55
8	N	436	GLY	C-N-CA	7.46	132.49	120.55
1	B	98	THR	N-CA-C	-7.45	105.36	114.75
1	C	483	VAL	N-CA-C	-7.45	103.41	110.42
5	K	170	PRO	CA-C-N	7.45	128.19	120.00
5	K	170	PRO	C-N-CA	7.45	128.19	120.00
8	N	449	ILE	CA-C-N	7.45	131.29	121.90
8	N	449	ILE	C-N-CA	7.45	131.29	121.90
8	N	187	LYS	N-CA-C	7.44	119.03	111.07
9	T	40	ALA	CA-C-N	7.44	129.44	120.14
9	T	40	ALA	C-N-CA	7.44	129.44	120.14
1	C	62	GLU	CA-C-O	-7.43	112.97	120.63
2	D	408	ASP	N-CA-C	-7.42	104.07	113.43
9	Z	39	ALA	CA-C-O	7.42	128.61	120.82
1	A	221	GLY	CA-C-N	7.42	132.15	121.54
1	A	221	GLY	C-N-CA	7.42	132.15	121.54
7	M	169	ALA	CA-C-N	7.41	130.07	120.44
7	M	169	ALA	C-N-CA	7.41	130.07	120.44
9	X	33	ALA	CA-C-O	-7.41	113.04	120.82
4	J	105	ALA	N-CA-C	-7.41	103.33	112.88
1	B	556	GLU	N-CA-C	7.40	121.41	112.38
7	M	301	ARG	CA-C-N	7.39	130.19	120.28
7	M	301	ARG	C-N-CA	7.39	130.19	120.28
4	I	96	ALA	CA-C-N	7.39	131.17	120.38
4	I	96	ALA	C-N-CA	7.39	131.17	120.38
1	C	314	ARG	CA-C-N	7.38	130.51	120.54
1	C	314	ARG	C-N-CA	7.38	130.51	120.54
9	Q	60	LEU	CA-C-N	7.38	129.32	120.09
9	Q	60	LEU	C-N-CA	7.38	129.32	120.09
9	V	73	ALA	CA-C-N	7.38	130.04	120.44
9	V	73	ALA	C-N-CA	7.38	130.04	120.44
2	E	337	ILE	CA-C-O	7.38	128.93	120.67
7	M	108	PRO	CA-C-N	7.37	130.16	120.28
7	M	108	PRO	C-N-CA	7.37	130.16	120.28
7	M	55	PRO	CA-C-N	7.37	130.75	120.29
7	M	55	PRO	C-N-CA	7.37	130.75	120.29
1	C	333	ALA	CA-C-N	7.37	130.15	120.28
1	C	333	ALA	C-N-CA	7.37	130.15	120.28
3	H	75	ALA	CA-C-N	7.37	130.15	120.28
3	H	75	ALA	C-N-CA	7.37	130.15	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	P	2	GLU	O-C-N	-7.36	115.54	123.42
7	M	167	LEU	CA-C-O	-7.36	112.62	120.42
8	N	534	VAL	N-CA-C	-7.35	103.30	110.72
5	K	12	LEU	CA-C-N	7.34	130.43	120.44
5	K	12	LEU	C-N-CA	7.34	130.43	120.44
1	A	451	ARG	CA-C-N	7.33	130.43	120.38
1	A	451	ARG	C-N-CA	7.33	130.43	120.38
9	W	17	VAL	O-C-N	-7.33	114.76	121.87
8	N	122	ALA	CA-C-N	7.33	130.10	120.28
8	N	122	ALA	C-N-CA	7.33	130.10	120.28
1	C	491	ARG	CA-C-N	7.32	133.10	120.58
1	C	491	ARG	C-N-CA	7.32	133.10	120.58
1	A	323	MET	CA-C-N	7.32	131.20	120.95
1	A	323	MET	C-N-CA	7.32	131.20	120.95
1	B	423	ASN	CA-C-N	7.31	130.39	120.44
1	B	423	ASN	C-N-CA	7.31	130.39	120.44
1	C	14	VAL	N-CA-C	-7.31	97.56	108.46
2	E	40	GLY	CA-C-N	7.31	131.09	120.71
2	E	40	GLY	C-N-CA	7.31	131.09	120.71
7	M	7	TYR	N-CA-C	7.30	118.89	111.07
9	Y	39	ALA	CA-C-N	7.30	130.66	120.29
9	Y	39	ALA	C-N-CA	7.30	130.66	120.29
1	A	269	PHE	CA-C-N	7.29	126.97	119.82
1	A	269	PHE	C-N-CA	7.29	126.97	119.82
1	B	244	TRP	CA-C-N	7.29	135.47	121.54
1	B	244	TRP	C-N-CA	7.29	135.47	121.54
5	K	83	VAL	CA-C-O	-7.29	113.06	119.62
1	B	523	TYR	CA-C-N	7.29	130.77	120.28
1	B	523	TYR	C-N-CA	7.29	130.77	120.28
1	C	518	MET	CA-C-N	7.29	129.74	120.56
1	C	518	MET	C-N-CA	7.29	129.74	120.56
8	N	523	TRP	CA-C-N	7.28	134.25	122.67
8	N	523	TRP	C-N-CA	7.28	134.25	122.67
1	C	536	ILE	CA-C-N	7.28	130.04	120.28
1	C	536	ILE	C-N-CA	7.28	130.04	120.28
1	A	576	ALA	N-CA-C	-7.27	102.34	112.45
2	F	243	GLU	N-CA-C	7.26	121.04	111.75
1	A	200	ASP	O-C-N	-7.25	115.56	121.80
2	D	446	LEU	CA-C-N	7.24	127.65	119.83
2	D	446	LEU	C-N-CA	7.24	127.65	119.83
2	F	442	LEU	N-CA-C	-7.24	104.58	113.41
3	H	12	VAL	O-C-N	7.24	129.43	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	152	ILE	N-CA-C	-7.22	97.44	107.99
3	H	14	ALA	CA-C-N	7.22	130.55	120.29
3	H	14	ALA	C-N-CA	7.22	130.55	120.29
9	P	24	GLY	CA-C-N	7.22	130.54	120.29
9	P	24	GLY	C-N-CA	7.22	130.54	120.29
8	N	362	ILE	O-C-N	-7.22	114.75	122.83
4	I	60	GLU	N-CA-C	-7.21	103.50	111.36
2	E	190	VAL	N-CA-C	-7.21	98.01	108.11
9	U	63	GLU	CA-C-N	7.20	129.93	120.28
9	U	63	GLU	C-N-CA	7.20	129.93	120.28
8	N	283	LYS	CA-C-N	7.20	126.69	118.85
8	N	283	LYS	C-N-CA	7.20	126.69	118.85
1	B	465	GLN	CA-C-N	7.19	135.28	121.54
1	B	465	GLN	C-N-CA	7.19	135.28	121.54
8	N	495	PHE	CA-C-O	7.19	128.37	120.82
1	C	262	MET	N-CA-C	-7.18	103.62	112.88
2	E	172	THR	N-CA-C	-7.17	96.36	108.26
1	A	360	ALA	CA-C-N	7.16	129.88	120.28
1	A	360	ALA	C-N-CA	7.16	129.88	120.28
2	D	218	VAL	N-CA-C	-7.16	97.29	107.75
8	N	39	TYR	N-CA-C	-7.16	102.65	112.03
2	E	34	ASP	O-C-N	-7.15	114.91	123.13
8	N	402	VAL	CA-C-N	7.14	129.85	120.28
8	N	402	VAL	C-N-CA	7.14	129.85	120.28
1	C	279	GLY	CA-C-N	7.14	128.77	119.84
1	C	279	GLY	C-N-CA	7.14	128.77	119.84
7	M	226	ASP	CA-C-O	-7.13	113.67	121.31
2	F	274	ARG	CA-C-N	7.13	130.15	120.38
2	F	274	ARG	C-N-CA	7.13	130.15	120.38
1	C	29	LYS	N-CA-C	-7.13	96.71	108.76
1	A	369	ILE	CA-C-O	7.13	128.03	120.48
1	B	393	GLU	CA-C-N	7.13	128.75	119.84
1	B	393	GLU	C-N-CA	7.13	128.75	119.84
1	C	398	SER	N-CA-C	7.12	119.90	111.71
2	D	344	HIS	CA-C-N	7.12	132.00	120.60
2	D	344	HIS	C-N-CA	7.12	132.00	120.60
9	P	61	LEU	O-C-N	-7.12	113.65	120.70
2	D	122	VAL	O-C-N	7.12	129.85	122.09
2	D	212	GLY	CA-C-N	7.11	129.81	120.28
2	D	212	GLY	C-N-CA	7.11	129.81	120.28
1	B	58	LEU	O-C-N	7.11	131.76	122.95
2	F	54	TYR	O-C-N	7.11	131.90	122.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	W	26	ALA	CA-C-N	7.11	129.80	120.28
9	W	26	ALA	C-N-CA	7.11	129.80	120.28
4	I	110	ALA	CA-C-O	-7.10	113.36	120.82
7	M	92	ASP	CA-C-O	-7.10	112.08	120.10
9	S	35	ALA	CA-C-O	-7.10	113.37	120.82
2	D	87	GLU	CA-C-O	7.09	127.86	119.56
2	F	126	LYS	CA-C-O	-7.09	112.71	119.80
1	C	261	GLU	N-CA-C	-7.08	104.64	113.28
1	B	232	SER	N-CA-C	-7.08	103.20	112.41
5	K	28	LEU	CA-C-N	7.08	130.07	120.44
5	K	28	LEU	C-N-CA	7.08	130.07	120.44
6	L	74	ILE	N-CA-C	-7.08	97.27	108.95
1	B	113	ARG	CA-C-O	7.08	127.74	119.32
2	D	274	ARG	CA-C-O	7.07	126.68	118.90
2	D	455	SER	CA-C-N	7.07	131.06	120.31
2	D	455	SER	C-N-CA	7.07	131.06	120.31
2	E	217	SER	CA-C-O	-7.07	113.88	121.45
2	E	322	THR	O-C-N	7.07	129.62	122.12
1	C	186	THR	N-CA-C	7.07	120.75	110.28
1	C	121	PRO	N-CA-C	-7.07	100.59	111.13
1	A	14	VAL	N-CA-C	-7.07	98.31	108.42
4	J	82	GLU	O-C-N	7.06	130.78	122.09
9	V	33	ALA	CA-C-N	7.06	130.32	120.29
9	V	33	ALA	C-N-CA	7.06	130.32	120.29
7	M	132	ASP	CA-C-N	7.06	127.05	119.28
7	M	132	ASP	C-N-CA	7.06	127.05	119.28
1	C	426	GLY	CA-C-O	7.05	126.41	118.86
9	V	25	LEU	O-C-N	-7.05	114.11	122.15
5	K	174	ALA	CA-C-N	7.05	130.22	120.63
5	K	174	ALA	C-N-CA	7.05	130.22	120.63
1	A	435	LEU	CA-C-N	7.05	128.90	120.09
1	A	435	LEU	C-N-CA	7.05	128.90	120.09
9	P	28	LEU	CA-C-N	7.05	127.80	119.98
9	P	28	LEU	C-N-CA	7.05	127.80	119.98
2	E	212	GLY	O-C-N	-7.04	113.55	122.70
1	B	330	TRP	CA-C-N	7.04	130.41	120.28
1	B	330	TRP	C-N-CA	7.04	130.41	120.28
2	D	187	PHE	O-C-N	7.04	130.78	122.34
7	M	166	ALA	N-CA-C	7.03	118.74	111.14
9	O	40	ALA	CA-C-N	7.03	128.93	120.14
9	O	40	ALA	C-N-CA	7.03	128.93	120.14
1	C	161	LYS	CA-C-N	7.03	127.20	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	161	LYS	C-N-CA	7.03	127.20	120.31
1	C	343	GLU	N-CA-C	-7.03	98.49	108.96
2	E	222	ASN	CA-C-N	7.02	134.95	121.54
2	E	222	ASN	C-N-CA	7.02	134.95	121.54
1	C	100	ILE	N-CA-C	-7.02	104.59	113.22
2	F	151	PRO	CA-C-O	-7.02	113.30	121.86
3	H	174	ALA	N-CA-C	-7.01	104.29	112.92
1	A	142	GLY	N-CA-C	-7.01	106.96	114.67
9	X	44	ALA	N-CA-C	7.01	118.92	111.28
7	M	230	PHE	CA-C-O	-7.00	113.47	120.82
9	Z	20	GLY	CA-C-N	6.99	129.65	120.28
9	Z	20	GLY	C-N-CA	6.99	129.65	120.28
2	D	198	GLN	CA-C-N	6.99	129.53	120.44
2	D	198	GLN	C-N-CA	6.99	129.53	120.44
9	R	38	GLY	CA-C-N	6.99	130.21	120.29
9	R	38	GLY	C-N-CA	6.99	130.21	120.29
3	H	107	LEU	CA-C-N	6.99	130.34	120.28
3	H	107	LEU	C-N-CA	6.99	130.34	120.28
2	D	105	PRO	N-CA-C	6.98	122.21	111.11
1	B	475	ALA	N-CA-C	-6.98	103.14	113.61
4	J	73	TYR	N-CA-C	-6.98	104.40	113.12
8	N	421	GLY	O-C-N	6.98	129.63	122.24
1	A	499	ALA	N-CA-C	-6.97	104.51	113.16
2	F	251	TYR	N-CA-C	-6.97	98.04	108.99
2	E	183	LYS	N-CA-C	-6.97	104.43	114.12
8	N	415	PHE	CA-C-N	6.97	130.32	120.28
8	N	415	PHE	C-N-CA	6.97	130.32	120.28
9	Q	55	ALA	CA-C-N	6.97	129.62	120.28
9	Q	55	ALA	C-N-CA	6.97	129.62	120.28
9	R	8	GLY	N-CA-C	-6.97	101.82	111.09
3	H	168	LEU	CA-C-N	6.97	129.62	120.28
3	H	168	LEU	C-N-CA	6.97	129.62	120.28
8	N	57	ALA	CA-C-N	6.97	129.07	120.22
8	N	57	ALA	C-N-CA	6.97	129.07	120.22
8	N	461	ASN	N-CA-C	6.96	118.87	111.28
2	E	322	THR	CA-C-O	-6.96	113.18	120.55
9	Q	58	PHE	CA-C-N	6.96	129.60	120.28
9	Q	58	PHE	C-N-CA	6.96	129.60	120.28
8	N	9	PRO	CA-C-N	6.95	129.60	120.28
8	N	9	PRO	C-N-CA	6.95	129.60	120.28
9	Z	10	LEU	CA-C-N	6.94	129.58	120.28
9	Z	10	LEU	C-N-CA	6.94	129.58	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	209	MET	N-CA-C	-6.94	98.76	109.24
2	E	413	GLN	CA-C-N	6.94	129.46	120.44
2	E	413	GLN	C-N-CA	6.94	129.46	120.44
1	A	486	VAL	O-C-N	6.93	129.11	121.90
9	S	53	GLY	CA-C-N	6.93	130.13	120.29
9	S	53	GLY	C-N-CA	6.93	130.13	120.29
1	B	412	SER	N-CA-C	-6.93	103.42	110.97
1	C	385	SER	CA-C-O	-6.92	113.15	120.28
2	E	406	GLU	O-C-N	6.92	129.56	122.09
8	N	634	PHE	CA-C-N	6.92	129.85	120.44
8	N	634	PHE	C-N-CA	6.92	129.85	120.44
4	I	55	ALA	CA-C-N	6.91	130.40	120.79
4	I	55	ALA	C-N-CA	6.91	130.40	120.79
8	N	160	ARG	N-CA-C	-6.91	103.54	113.21
8	N	496	TRP	N-CA-C	6.91	118.81	111.28
1	A	421	ALA	N-CA-C	-6.91	97.26	108.52
8	N	399	LYS	CA-C-N	6.91	127.50	120.38
8	N	399	LYS	C-N-CA	6.91	127.50	120.38
1	C	120	THR	CA-C-N	6.90	127.35	120.52
1	C	120	THR	C-N-CA	6.90	127.35	120.52
2	E	15	SER	O-C-N	6.90	129.44	122.12
1	A	169	GLU	N-CA-C	-6.90	106.06	114.75
1	B	318	PHE	CA-C-N	6.90	132.24	122.72
1	B	318	PHE	C-N-CA	6.90	132.24	122.72
7	M	99	LEU	CA-C-N	6.90	129.52	120.28
7	M	99	LEU	C-N-CA	6.90	129.52	120.28
2	E	67	ASP	N-CA-C	-6.89	98.69	108.96
1	A	553	TYR	N-CA-C	-6.89	102.75	113.02
2	E	332	ILE	N-CA-C	-6.88	102.64	112.35
2	D	272	ALA	O-C-N	6.88	130.44	122.25
9	P	19	MET	CA-C-N	6.88	128.74	120.14
9	P	19	MET	C-N-CA	6.88	128.74	120.14
8	N	130	LYS	N-CA-C	-6.88	103.47	112.41
9	Y	61	LEU	O-C-N	-6.88	114.25	120.71
9	Y	60	LEU	CA-C-O	6.88	127.87	120.10
2	E	8	TYR	N-CA-C	-6.87	103.48	112.41
7	M	149	ARG	CA-C-O	6.87	127.70	120.42
9	S	73	ALA	O-C-N	-6.87	114.84	122.12
8	N	573	ILE	CA-C-N	6.86	129.48	120.28
8	N	573	ILE	C-N-CA	6.86	129.48	120.28
5	K	167	VAL	O-C-N	6.86	128.80	121.94
8	N	149	VAL	CA-C-N	6.86	129.35	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	N	149	VAL	C-N-CA	6.86	129.35	120.44
8	N	592	ILE	CA-C-N	6.86	128.93	120.22
8	N	592	ILE	C-N-CA	6.86	128.93	120.22
9	R	57	ILE	CA-C-N	6.86	129.47	120.28
9	R	57	ILE	C-N-CA	6.86	129.47	120.28
2	D	199	ARG	CA-C-N	6.85	130.39	120.38
2	D	199	ARG	C-N-CA	6.85	130.39	120.38
7	M	197	ASP	CA-C-N	6.85	129.46	120.28
7	M	197	ASP	C-N-CA	6.85	129.46	120.28
8	N	56	SER	CA-C-N	6.85	129.46	120.28
8	N	56	SER	C-N-CA	6.85	129.46	120.28
1	C	203	THR	N-CA-C	-6.84	97.50	109.48
2	E	206	GLN	CA-C-N	6.84	129.45	120.28
2	E	206	GLN	C-N-CA	6.84	129.45	120.28
1	B	127	ASP	N-CA-C	-6.84	100.08	110.14
6	L	36	LEU	N-CA-C	6.84	118.39	111.07
2	F	158	LEU	O-C-N	-6.83	115.54	121.35
5	K	177	ARG	CA-C-N	6.83	129.32	120.44
5	K	177	ARG	C-N-CA	6.83	129.32	120.44
2	F	262	ASN	N-CA-C	-6.83	103.95	112.90
1	A	387	PRO	N-CA-C	-6.83	104.62	113.57
3	G	14	ALA	CA-C-N	6.83	129.72	120.44
3	G	14	ALA	C-N-CA	6.83	129.72	120.44
8	N	643	ARG	CA-C-N	6.83	126.81	119.78
8	N	643	ARG	C-N-CA	6.83	126.81	119.78
9	V	52	PHE	CA-C-N	6.83	128.67	120.14
9	V	52	PHE	C-N-CA	6.83	128.67	120.14
9	R	32	VAL	CA-C-N	6.82	129.43	120.28
9	R	32	VAL	C-N-CA	6.82	129.43	120.28
2	F	265	GLU	CA-C-N	6.82	129.42	120.28
2	F	265	GLU	C-N-CA	6.82	129.42	120.28
9	U	50	SER	N-CA-C	-6.82	104.28	114.64
2	F	34	ASP	CA-C-N	-6.81	113.83	123.17
2	F	34	ASP	C-N-CA	-6.81	113.83	123.17
2	F	415	ALA	CA-C-N	6.81	129.71	120.38
2	F	415	ALA	C-N-CA	6.81	129.71	120.38
2	D	416	ASP	CA-C-N	6.81	129.70	120.38
2	D	416	ASP	C-N-CA	6.81	129.70	120.38
1	C	178	GLY	N-CA-C	-6.80	105.71	115.64
2	E	452	LYS	N-CA-C	-6.80	104.09	114.16
1	C	555	SER	CA-C-N	6.80	129.39	120.28
1	C	555	SER	C-N-CA	6.80	129.39	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	17	PRO	CA-C-O	-6.79	110.93	118.68
8	N	86	ALA	CA-C-O	6.79	127.95	120.82
9	Q	40	ALA	CA-C-N	6.79	128.63	120.14
9	Q	40	ALA	C-N-CA	6.79	128.63	120.14
9	Z	11	ASP	N-CA-C	-6.79	103.87	111.28
1	A	540	LEU	CA-C-O	6.79	127.78	119.97
1	C	55	THR	CA-C-O	-6.79	113.38	121.66
1	C	311	GLU	CA-C-N	6.79	130.29	120.38
1	C	311	GLU	C-N-CA	6.79	130.29	120.38
2	E	340	SER	CA-C-N	6.79	129.26	120.44
2	E	340	SER	C-N-CA	6.79	129.26	120.44
3	G	106	LYS	N-CA-C	6.78	119.51	111.71
7	M	271	LYS	N-CA-C	6.78	118.67	111.28
9	W	46	ALA	O-C-N	6.78	129.31	122.12
9	V	15	ILE	CA-C-N	6.78	129.36	120.28
9	V	15	ILE	C-N-CA	6.78	129.36	120.28
4	J	63	GLU	CA-C-N	6.78	129.66	120.38
4	J	63	GLU	C-N-CA	6.78	129.66	120.38
2	D	411	TYR	CA-C-N	6.77	134.47	121.54
2	D	411	TYR	C-N-CA	6.77	134.47	121.54
2	F	51	SER	CA-C-N	6.77	129.24	120.44
2	F	51	SER	C-N-CA	6.77	129.24	120.44
8	N	196	ALA	CA-C-N	6.76	130.32	120.71
8	N	196	ALA	C-N-CA	6.76	130.32	120.71
9	S	52	PHE	CA-C-N	6.76	128.60	120.14
9	S	52	PHE	C-N-CA	6.76	128.60	120.14
9	Y	12	ARG	CA-C-N	6.76	127.49	119.98
9	Y	12	ARG	C-N-CA	6.76	127.49	119.98
7	M	88	LEU	CA-C-N	6.76	130.25	120.38
7	M	88	LEU	C-N-CA	6.76	130.25	120.38
9	R	73	ALA	CA-C-N	6.76	129.23	120.44
9	R	73	ALA	C-N-CA	6.76	129.23	120.44
2	D	365	GLY	O-C-N	-6.75	114.56	122.45
7	M	23	SER	O-C-N	-6.75	113.39	122.43
7	M	248	PRO	N-CA-C	-6.75	106.89	114.92
2	D	260	MET	CA-C-N	6.74	129.20	120.44
2	D	260	MET	C-N-CA	6.74	129.20	120.44
7	M	45	TYR	CA-C-N	6.74	132.78	120.79
7	M	45	TYR	C-N-CA	6.74	132.78	120.79
1	C	92	GLU	N-CA-C	-6.74	103.86	111.07
9	P	26	ALA	CA-C-N	6.74	129.85	120.29
9	P	26	ALA	C-N-CA	6.74	129.85	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	W	28	LEU	CA-C-N	6.74	127.41	120.00
9	W	28	LEU	C-N-CA	6.74	127.41	120.00
4	J	56	LYS	CA-C-O	-6.72	113.67	121.07
1	C	294	MET	O-C-N	6.72	127.28	121.30
1	C	70	PRO	CA-C-N	6.71	132.55	122.68
1	C	70	PRO	C-N-CA	6.71	132.55	122.68
9	O	31	GLY	CA-C-O	6.71	128.25	121.00
2	E	142	ASN	N-CA-C	-6.71	98.83	109.23
7	M	157	GLU	CA-C-O	-6.71	112.80	120.24
9	Y	13	GLY	O-C-N	6.71	128.63	122.19
1	B	191	ARG	N-CA-C	-6.71	99.11	109.24
2	E	82	LEU	CA-C-N	6.70	127.15	120.31
2	E	82	LEU	C-N-CA	6.70	127.15	120.31
5	K	162	ASN	O-C-N	6.70	129.25	122.08
9	T	49	ARG	N-CA-C	6.70	118.59	111.28
1	C	474	ASP	N-CA-C	-6.70	104.24	112.88
2	E	403	ALA	N-CA-C	-6.70	103.49	112.94
9	V	79	ARG	N-CA-C	-6.70	99.26	109.85
2	F	283	TYR	CA-C-N	6.70	128.21	119.84
2	F	283	TYR	C-N-CA	6.70	128.21	119.84
4	J	86	ALA	N-CA-C	6.69	119.43	111.33
1	A	124	LYS	N-CA-C	-6.69	100.44	108.14
2	F	381	GLN	CA-C-N	6.69	129.55	120.38
2	F	381	GLN	C-N-CA	6.69	129.55	120.38
8	N	248	LEU	CA-C-N	6.69	129.57	120.54
8	N	248	LEU	C-N-CA	6.69	129.57	120.54
2	F	374	ASP	N-CA-C	-6.69	105.12	113.28
1	A	223	THR	O-C-N	-6.69	115.58	123.41
2	D	408	ASP	CA-C-N	6.69	131.40	120.63
2	D	408	ASP	C-N-CA	6.69	131.40	120.63
1	A	4	GLY	O-C-N	6.69	129.34	122.79
8	N	376	GLY	O-C-N	6.68	129.32	122.24
2	F	398	ILE	N-CA-C	-6.68	106.35	111.62
2	D	237	MET	N-CA-C	-6.67	103.26	111.40
4	I	73	TYR	CA-C-N	6.67	130.46	120.31
4	I	73	TYR	C-N-CA	6.67	130.46	120.31
5	K	33	ASP	CA-C-N	6.67	129.71	120.63
5	K	33	ASP	C-N-CA	6.67	129.71	120.63
1	B	440	ARG	CA-C-N	6.67	129.45	120.65
1	B	440	ARG	C-N-CA	6.67	129.45	120.65
9	Q	2	GLU	CA-C-N	6.67	134.28	121.54
9	Q	2	GLU	C-N-CA	6.67	134.28	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	529	ALA	N-CA-C	-6.67	103.94	111.14
1	C	378	VAL	O-C-N	6.66	130.26	123.20
8	N	415	PHE	CA-C-O	-6.66	113.49	120.55
8	N	534	VAL	CA-C-O	-6.66	113.79	120.85
2	D	410	ARG	N-CA-C	-6.66	104.80	113.12
1	C	24	MET	CA-C-N	6.65	132.89	122.78
1	C	24	MET	C-N-CA	6.65	132.89	122.78
8	N	173	PRO	CA-C-O	-6.65	113.19	120.97
1	A	339	SER	N-CA-C	6.65	118.19	111.07
1	C	13	ALA	O-C-N	-6.65	115.45	122.96
9	U	46	ALA	N-CA-C	6.65	118.18	111.07
9	T	53	GLY	CA-C-N	6.65	129.19	120.28
9	T	53	GLY	C-N-CA	6.65	129.19	120.28
9	U	61	LEU	CA-C-O	-6.65	112.22	118.73
2	D	148	GLN	CA-C-O	6.64	128.76	121.06
2	E	53	GLU	N-CA-C	-6.64	107.05	114.62
9	V	77	ASN	CA-C-N	6.64	132.29	121.00
9	V	77	ASN	C-N-CA	6.64	132.29	121.00
1	A	350	TYR	CA-C-N	6.64	127.22	120.38
1	A	350	TYR	C-N-CA	6.64	127.22	120.38
9	Q	30	THR	CA-C-N	6.64	127.31	119.94
9	Q	30	THR	C-N-CA	6.64	127.31	119.94
9	Z	27	ALA	CA-C-N	6.64	129.41	120.65
9	Z	27	ALA	C-N-CA	6.64	129.41	120.65
9	U	40	ALA	CA-C-N	6.63	128.49	120.13
9	U	40	ALA	C-N-CA	6.63	128.49	120.13
1	C	249	VAL	N-CA-C	-6.63	98.49	108.17
2	D	323	HIS	CA-C-N	6.63	126.58	119.28
2	D	323	HIS	C-N-CA	6.63	126.58	119.28
1	A	235	THR	N-CA-C	6.63	120.47	112.38
4	J	48	VAL	CA-C-N	6.63	129.40	120.65
4	J	48	VAL	C-N-CA	6.63	129.40	120.65
5	K	61	TYR	CA-C-N	6.63	134.51	121.58
5	K	61	TYR	C-N-CA	6.63	134.51	121.58
8	N	347	PRO	N-CA-C	-6.63	107.03	114.92
8	N	579	THR	CA-C-N	6.63	129.06	120.44
8	N	579	THR	C-N-CA	6.63	129.06	120.44
1	C	260	ASN	O-C-N	6.63	130.42	122.27
7	M	66	ALA	CA-C-O	-6.63	113.86	120.82
1	B	311	GLU	CA-C-N	6.63	130.00	120.79
1	B	311	GLU	C-N-CA	6.63	130.00	120.79
1	C	65	VAL	N-CA-C	-6.63	98.08	107.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	456	LYS	CA-C-N	6.62	129.05	120.44
2	E	456	LYS	C-N-CA	6.62	129.05	120.44
1	C	393	GLU	CA-C-N	6.62	126.13	119.24
1	C	393	GLU	C-N-CA	6.62	126.13	119.24
9	O	39	ALA	N-CA-C	6.62	118.50	111.28
1	B	436	ASP	CA-C-O	-6.62	112.54	118.63
1	A	8	LYS	O-C-N	6.62	131.30	122.96
1	C	425	ASN	N-CA-C	-6.62	97.58	108.76
9	X	14	LEU	N-CA-C	6.62	118.50	111.28
1	C	531	LYS	CA-C-O	6.62	127.56	120.55
2	D	288	TYR	CA-C-N	6.62	129.47	120.54
2	D	288	TYR	C-N-CA	6.62	129.47	120.54
7	M	163	ARG	CA-C-N	6.62	128.90	120.56
7	M	163	ARG	C-N-CA	6.62	128.90	120.56
8	N	613	THR	CA-C-N	6.61	130.36	120.31
8	N	613	THR	C-N-CA	6.61	130.36	120.31
1	A	282	MET	CA-C-O	-6.61	111.49	119.49
1	A	558	GLU	N-CA-C	-6.60	103.19	113.02
1	C	147	ILE	N-CA-C	-6.60	98.62	108.12
1	C	402	ILE	N-CA-C	-6.60	106.09	112.29
1	B	15	ILE	N-CA-C	-6.59	98.69	108.45
1	A	519	ILE	N-CA-C	-6.59	103.82	111.00
1	C	193	ARG	O-C-N	-6.59	114.69	121.28
5	K	38	GLU	CA-C-N	6.58	129.40	120.38
5	K	38	GLU	C-N-CA	6.58	129.40	120.38
9	U	68	PHE	N-CA-C	6.58	118.54	111.36
1	A	336	GLU	N-CA-C	-6.58	104.18	112.93
3	G	42	LEU	CA-C-O	6.58	126.28	119.05
2	F	233	LEU	O-C-N	6.58	129.19	122.09
2	E	394	LYS	N-CA-C	-6.57	103.87	112.41
3	G	6	ALA	N-CA-C	6.57	118.52	111.36
2	E	118	PRO	CA-C-N	6.56	134.08	121.54
2	E	118	PRO	C-N-CA	6.56	134.08	121.54
1	B	381	VAL	O-C-N	-6.56	116.67	123.03
1	A	295	PRO	CA-C-N	6.56	129.78	120.53
1	A	295	PRO	C-N-CA	6.56	129.78	120.53
2	E	110	LYS	CA-C-N	6.56	132.25	123.00
2	E	110	LYS	C-N-CA	6.56	132.25	123.00
2	F	404	LEU	N-CA-C	-6.55	97.54	108.75
9	P	33	ALA	N-CA-C	6.55	118.22	111.14
3	G	107	LEU	CA-C-N	6.55	129.71	120.28
3	G	107	LEU	C-N-CA	6.55	129.71	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	279	GLY	N-CA-C	-6.55	98.98	112.34
9	X	70	LEU	CA-C-O	-6.55	113.48	120.42
9	Z	78	GLY	CA-C-N	6.55	131.75	122.72
9	Z	78	GLY	C-N-CA	6.55	131.75	122.72
9	Q	51	ASN	N-CA-C	-6.54	103.95	114.09
7	M	79	GLU	O-C-N	6.54	129.06	122.12
1	B	381	VAL	CA-C-O	6.54	126.71	120.31
1	A	314	ARG	CA-C-N	6.53	131.63	120.72
1	A	314	ARG	C-N-CA	6.53	131.63	120.72
1	C	480	GLU	CA-C-N	6.53	134.01	121.54
1	C	480	GLU	C-N-CA	6.53	134.01	121.54
4	I	40	ALA	CA-C-O	-6.53	113.63	120.55
8	N	636	GLU	N-CA-C	6.53	119.15	110.53
9	X	69	GLY	O-C-N	6.53	128.46	122.19
1	C	482	LEU	O-C-N	6.53	128.82	122.03
9	Q	61	LEU	O-C-N	-6.53	114.57	120.71
3	H	108	ALA	CA-C-N	6.53	129.32	120.44
3	H	108	ALA	C-N-CA	6.53	129.32	120.44
1	A	480	GLU	N-CA-C	-6.53	104.09	111.14
9	P	53	GLY	N-CA-C	6.52	122.11	113.37
9	W	64	THR	CA-C-N	6.52	128.91	120.44
9	W	64	THR	C-N-CA	6.52	128.91	120.44
9	X	1	ALA	CA-C-N	6.52	128.91	120.44
9	X	1	ALA	C-N-CA	6.52	128.91	120.44
8	N	238	ALA	CA-C-N	6.51	129.33	120.54
8	N	238	ALA	C-N-CA	6.51	129.33	120.54
1	C	538	GLU	CA-C-N	6.51	129.66	120.42
1	C	538	GLU	C-N-CA	6.51	129.66	120.42
5	K	146	ARG	CA-C-N	6.51	128.90	120.44
5	K	146	ARG	C-N-CA	6.51	128.90	120.44
3	H	115	LEU	CA-C-O	-6.51	112.03	118.34
9	U	11	ASP	CA-C-N	6.51	129.00	120.28
9	U	11	ASP	C-N-CA	6.51	129.00	120.28
6	L	3	VAL	N-CA-C	-6.51	99.11	108.48
1	A	412	SER	N-CA-C	6.50	118.45	111.36
3	G	117	GLY	N-CA-C	-6.50	106.80	115.32
2	D	358	LEU	N-CA-C	-6.50	97.66	108.32
5	K	130	PHE	CA-C-N	6.50	128.99	120.28
5	K	130	PHE	C-N-CA	6.50	128.99	120.28
2	F	337	ILE	N-CA-C	-6.49	98.84	108.45
7	M	47	GLY	N-CA-C	-6.49	106.82	115.32
9	O	73	ALA	CA-C-N	6.49	128.98	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	O	73	ALA	C-N-CA	6.49	128.98	120.28
1	B	412	SER	CA-C-N	6.48	131.06	120.63
1	B	412	SER	C-N-CA	6.48	131.06	120.63
7	M	171	ARG	CA-C-N	6.48	128.86	120.44
7	M	171	ARG	C-N-CA	6.48	128.86	120.44
1	C	183	MET	N-CA-C	-6.48	105.34	112.72
1	A	23	ARG	O-C-N	-6.47	115.69	122.94
1	C	328	SER	CA-C-N	6.47	128.96	120.28
1	C	328	SER	C-N-CA	6.47	128.96	120.28
2	D	201	LEU	N-CA-C	-6.47	103.84	111.03
1	B	537	ASP	CA-C-N	6.47	129.24	120.44
1	B	537	ASP	C-N-CA	6.47	129.24	120.44
4	J	96	ALA	CA-C-N	6.47	129.24	120.38
4	J	96	ALA	C-N-CA	6.47	129.24	120.38
2	E	175	PRO	CA-C-N	6.47	130.52	120.82
2	E	175	PRO	C-N-CA	6.47	130.52	120.82
1	B	94	ILE	N-CA-C	-6.46	103.95	111.00
2	E	382	LEU	CA-C-N	6.46	129.42	120.63
2	E	382	LEU	C-N-CA	6.46	129.42	120.63
3	G	103	VAL	N-CA-C	6.46	116.62	110.42
1	B	486	VAL	CA-C-O	-6.46	114.24	120.95
8	N	25	VAL	N-CA-C	6.45	118.08	109.37
4	J	26	LEU	CA-C-N	6.45	129.41	120.63
4	J	26	LEU	C-N-CA	6.45	129.41	120.63
8	N	450	LEU	O-C-N	6.45	128.11	121.79
5	K	142	ASN	N-CA-C	-6.45	106.04	114.04
2	D	133	THR	N-CA-C	-6.45	99.41	109.72
1	B	99	GLY	O-C-N	-6.44	117.36	122.90
3	G	32	ARG	CA-C-N	6.44	128.91	120.28
3	G	32	ARG	C-N-CA	6.44	128.91	120.28
4	I	32	GLN	N-CA-C	-6.44	105.44	113.55
9	U	18	GLY	CA-C-N	6.44	130.10	120.31
9	U	18	GLY	C-N-CA	6.44	130.10	120.31
9	X	37	ILE	N-CA-C	-6.44	104.22	110.72
1	B	161	LYS	CA-C-N	6.43	127.88	119.84
1	B	161	LYS	C-N-CA	6.43	127.88	119.84
5	K	167	VAL	CA-C-O	-6.43	114.58	121.27
7	M	218	PHE	N-CA-C	-6.43	97.89	108.76
9	Z	7	SER	N-CA-C	-6.43	102.83	112.54
5	K	42	LEU	CA-C-O	-6.42	113.11	120.24
8	N	369	ALA	CA-C-N	6.42	128.89	120.28
8	N	369	ALA	C-N-CA	6.42	128.89	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	M	5	PHE	N-CA-C	-6.42	105.08	113.17
8	N	608	ILE	CA-C-N	6.42	129.17	120.44
8	N	608	ILE	C-N-CA	6.42	129.17	120.44
1	C	365	ALA	N-CA-C	-6.42	99.55	109.24
9	S	27	ALA	CA-C-N	6.42	128.78	120.44
9	S	27	ALA	C-N-CA	6.42	128.78	120.44
9	Y	66	VAL	CA-C-N	6.42	129.25	120.46
9	Y	66	VAL	C-N-CA	6.42	129.25	120.46
5	K	124	LEU	CA-C-O	-6.41	113.75	120.55
9	V	59	LEU	CA-C-N	6.41	129.52	120.28
9	V	59	LEU	C-N-CA	6.41	129.52	120.28
8	N	561	HIS	N-CA-C	-6.41	104.37	111.36
8	N	222	ALA	N-CA-C	6.41	118.34	111.36
9	W	20	GLY	CA-C-N	6.41	128.86	120.28
9	W	20	GLY	C-N-CA	6.41	128.86	120.28
9	Z	24	GLY	CA-C-N	6.40	129.38	120.29
9	Z	24	GLY	C-N-CA	6.40	129.38	120.29
4	J	51	ALA	O-C-N	6.40	129.45	122.15
6	L	9	THR	N-CA-C	-6.40	105.63	113.50
9	U	3	GLU	CA-C-O	-6.40	112.04	119.59
8	N	132	PRO	O-C-N	6.39	131.27	122.64
1	C	86	GLY	N-CA-C	-6.39	106.73	114.66
2	F	419	GLU	CA-C-O	-6.39	113.54	121.02
8	N	649	ARG	CA-C-N	6.39	128.84	120.28
8	N	649	ARG	C-N-CA	6.39	128.84	120.28
3	H	154	ALA	N-CA-C	-6.39	99.33	109.23
1	B	144	THR	N-CA-C	-6.38	99.45	108.96
1	B	234	LYS	CA-C-N	6.38	129.47	120.28
1	B	234	LYS	C-N-CA	6.38	129.47	120.28
8	N	264	GLU	CA-C-N	6.38	128.83	120.28
8	N	264	GLU	C-N-CA	6.38	128.83	120.28
9	O	65	LEU	N-CA-C	6.38	117.90	111.07
2	E	402	ASP	N-CA-C	-6.37	105.54	113.38
3	G	17	GLN	N-CA-C	-6.37	106.05	113.88
1	A	477	GLN	CA-C-N	6.37	129.06	120.65
1	A	477	GLN	C-N-CA	6.37	129.06	120.65
1	B	20	LEU	O-C-N	-6.37	116.52	123.52
1	B	251	VAL	N-CA-C	-6.36	98.95	108.12
7	M	278	GLN	N-CA-C	-6.36	105.27	113.16
1	C	230	PHE	N-CA-C	6.36	120.17	111.39
9	O	71	LEU	CA-C-N	6.36	128.57	120.56
9	O	71	LEU	C-N-CA	6.36	128.57	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	102	ILE	N-CA-C	-6.36	99.24	108.71
3	G	75	ALA	N-CA-C	-6.36	104.27	111.07
3	H	97	LYS	CA-C-N	6.35	128.37	121.00
3	H	97	LYS	C-N-CA	6.35	128.37	121.00
9	X	26	ALA	CA-C-N	6.35	128.79	120.28
9	X	26	ALA	C-N-CA	6.35	128.79	120.28
1	B	67	THR	N-CA-C	-6.34	102.91	112.04
2	F	235	PRO	CA-C-N	6.34	128.68	120.44
2	F	235	PRO	C-N-CA	6.34	128.68	120.44
1	A	545	LEU	CA-C-N	6.34	128.77	120.28
1	A	545	LEU	C-N-CA	6.34	128.77	120.28
9	T	45	ILE	CA-C-N	6.34	128.77	120.28
9	T	45	ILE	C-N-CA	6.34	128.77	120.28
2	F	210	ARG	N-CA-C	-6.33	103.90	111.69
9	X	33	ALA	O-C-N	6.33	128.59	122.07
1	C	42	LEU	CA-C-O	6.33	128.41	121.06
2	D	422	PHE	CA-C-N	6.33	128.54	120.56
2	D	422	PHE	C-N-CA	6.33	128.54	120.56
2	F	204	PHE	CA-C-N	6.33	128.77	120.60
2	F	204	PHE	C-N-CA	6.33	128.77	120.60
1	B	238	GLN	N-CA-C	6.33	118.99	111.33
5	K	68	GLN	N-CA-C	-6.33	100.12	109.81
1	C	193	ARG	CA-C-N	6.33	126.24	119.85
1	C	193	ARG	C-N-CA	6.33	126.24	119.85
1	B	515	ILE	CA-C-N	6.32	129.04	120.38
1	B	515	ILE	C-N-CA	6.32	129.04	120.38
2	D	123	ALA	N-CA-C	-6.32	102.95	111.87
2	E	14	ILE	CA-C-N	6.32	128.75	120.28
2	E	14	ILE	C-N-CA	6.32	128.75	120.28
8	N	400	PRO	CA-C-N	6.32	126.07	119.05
8	N	400	PRO	C-N-CA	6.32	126.07	119.05
9	Z	58	PHE	CA-C-O	-6.32	113.72	120.42
3	H	5	GLU	CA-C-O	6.32	127.24	119.79
8	N	85	LYS	O-C-N	6.32	129.35	122.15
1	C	111	LEU	CA-C-N	6.32	129.68	120.71
1	C	111	LEU	C-N-CA	6.32	129.68	120.71
9	X	34	GLN	CA-C-N	6.31	128.65	120.44
9	X	34	GLN	C-N-CA	6.31	128.65	120.44
8	N	375	VAL	CA-C-N	6.31	128.03	120.14
8	N	375	VAL	C-N-CA	6.31	128.03	120.14
1	A	337	ILE	CA-C-N	6.30	128.63	120.44
1	A	337	ILE	C-N-CA	6.30	128.63	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	M	53	GLY	CA-C-N	6.30	127.97	120.09
7	M	53	GLY	C-N-CA	6.30	127.97	120.09
8	N	189	ALA	N-CA-C	6.30	118.15	111.28
5	K	119	THR	CA-C-N	6.30	127.72	119.84
5	K	119	THR	C-N-CA	6.30	127.72	119.84
4	I	108	ASP	CA-C-N	6.30	128.72	120.28
4	I	108	ASP	C-N-CA	6.30	128.72	120.28
2	F	187	PHE	N-CA-C	-6.30	99.45	109.59
2	D	410	ARG	CA-C-N	6.29	129.88	120.31
2	D	410	ARG	C-N-CA	6.29	129.88	120.31
1	A	271	GLU	CA-C-N	6.29	130.81	120.94
1	A	271	GLU	C-N-CA	6.29	130.81	120.94
2	F	225	ASP	CA-C-N	6.29	130.24	120.68
2	F	225	ASP	C-N-CA	6.29	130.24	120.68
8	N	232	GLN	N-CA-C	6.29	118.13	111.28
1	B	241	LEU	CA-C-N	6.29	129.33	120.28
1	B	241	LEU	C-N-CA	6.29	129.33	120.28
1	C	340	ARG	CA-C-O	-6.29	111.52	119.31
6	L	51	LEU	N-CA-C	-6.29	97.41	110.80
1	C	266	LEU	CA-C-O	6.28	127.10	119.31
9	U	73	ALA	N-CA-C	6.28	117.79	111.07
2	D	172	THR	N-CA-C	-6.28	99.76	109.24
1	A	174	VAL	N-CA-C	-6.28	99.38	108.36
1	A	404	GLY	N-CA-C	-6.28	98.30	113.18
1	C	565	GLU	N-CA-C	-6.28	104.68	112.90
1	C	547	ARG	N-CA-C	-6.28	103.97	111.69
4	J	107	LEU	CA-C-N	6.27	128.69	120.28
4	J	107	LEU	C-N-CA	6.27	128.69	120.28
9	R	61	LEU	O-C-N	-6.27	114.81	120.71
9	X	21	LEU	O-C-N	-6.27	115.00	122.15
1	B	407	TRP	CA-C-N	6.27	129.73	120.95
1	B	407	TRP	C-N-CA	6.27	129.73	120.95
2	D	57	ILE	CA-C-N	6.27	132.73	122.07
2	D	57	ILE	C-N-CA	6.27	132.73	122.07
6	L	82	GLN	O-C-N	6.27	127.68	121.85
3	G	102	GLU	CA-C-N	6.27	128.46	120.56
3	G	102	GLU	C-N-CA	6.27	128.46	120.56
9	S	35	ALA	N-CA-C	6.27	117.78	111.07
1	A	514	GLY	CA-C-N	6.26	131.04	120.64
1	A	514	GLY	C-N-CA	6.26	131.04	120.64
9	U	32	VAL	CA-C-N	6.26	128.66	120.28
9	U	32	VAL	C-N-CA	6.26	128.66	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	Z	68	PHE	CA-C-N	6.26	126.92	119.98
9	Z	68	PHE	C-N-CA	6.26	126.92	119.98
9	Z	67	ILE	CA-C-N	6.25	128.57	120.44
9	Z	67	ILE	C-N-CA	6.25	128.57	120.44
1	B	186	THR	N-CA-C	-6.25	98.71	108.90
1	B	486	VAL	CA-C-N	6.25	127.03	120.03
1	B	486	VAL	C-N-CA	6.25	127.03	120.03
2	D	337	ILE	O-C-N	-6.25	117.35	122.97
7	M	253	SER	O-C-N	6.25	130.56	122.87
2	E	172	THR	O-C-N	-6.25	115.28	123.28
9	T	46	ALA	CA-C-N	6.25	128.93	120.44
9	T	46	ALA	C-N-CA	6.25	128.93	120.44
2	F	154	SER	O-C-N	-6.24	115.78	123.33
7	M	254	GLY	CA-C-N	6.24	130.93	123.19
7	M	254	GLY	C-N-CA	6.24	130.93	123.19
9	U	3	GLU	O-C-N	6.24	129.68	122.25
2	F	75	LEU	N-CA-C	-6.24	100.42	109.59
1	C	49	VAL	O-C-N	-6.24	115.87	122.67
7	M	263	ARG	CA-C-N	6.24	127.02	120.03
7	M	263	ARG	C-N-CA	6.24	127.02	120.03
1	A	344	MET	CA-C-N	6.24	126.00	119.76
1	A	344	MET	C-N-CA	6.24	126.00	119.76
2	D	244	TYR	CA-C-O	6.24	127.33	120.90
7	M	25	PHE	N-CA-C	-6.24	104.58	111.82
1	C	238	GLN	N-CA-C	-6.24	104.94	113.30
2	F	236	ARG	CA-C-O	6.24	127.37	120.82
3	G	99	GLU	N-CA-C	-6.23	105.25	112.92
3	G	115	LEU	CA-C-N	6.23	126.75	120.14
3	G	115	LEU	C-N-CA	6.23	126.75	120.14
4	I	113	LEU	N-CA-C	6.23	118.08	111.28
3	G	154	ALA	N-CA-C	6.23	118.60	108.26
9	U	26	ALA	CA-C-N	6.23	129.14	120.29
9	U	26	ALA	C-N-CA	6.23	129.14	120.29
9	V	22	ALA	CA-C-N	6.23	129.27	120.42
9	V	22	ALA	C-N-CA	6.23	129.27	120.42
9	Z	43	GLY	O-C-N	6.23	128.17	122.19
1	A	268	GLU	O-C-N	6.23	129.25	122.15
7	M	257	ASP	CA-C-N	6.23	128.62	120.28
7	M	257	ASP	C-N-CA	6.23	128.62	120.28
8	N	142	THR	N-CA-C	-6.22	101.25	110.46
1	C	221	GLY	N-CA-C	-6.22	106.73	115.32
2	F	321	ARG	N-CA-C	-6.22	103.75	113.02

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	Z	51	ASN	CA-C-O	-6.22	111.92	119.32
1	B	447	TYR	CA-C-N	6.22	125.70	119.24
1	B	447	TYR	C-N-CA	6.22	125.70	119.24
8	N	519	LEU	CA-C-O	6.21	126.05	119.03
8	N	642	TYR	N-CA-C	-6.21	97.57	110.80
2	D	117	LEU	CA-C-O	-6.21	113.36	119.69
2	D	26	ASP	CA-C-O	6.21	126.98	119.78
3	G	59	ARG	CA-C-O	-6.21	114.26	120.90
5	K	123	THR	CA-C-N	6.21	128.60	120.28
5	K	123	THR	C-N-CA	6.21	128.60	120.28
9	Z	58	PHE	CA-C-N	6.21	128.60	120.28
9	Z	58	PHE	C-N-CA	6.21	128.60	120.28
2	F	362	MET	CA-C-N	6.20	131.01	121.53
2	F	362	MET	C-N-CA	6.20	131.01	121.53
2	E	104	PRO	N-CA-C	6.20	118.26	110.70
9	O	66	VAL	CA-C-N	6.20	129.22	120.42
9	O	66	VAL	C-N-CA	6.20	129.22	120.42
9	P	27	ALA	CA-C-N	6.20	128.49	120.44
9	P	27	ALA	C-N-CA	6.20	128.49	120.44
4	J	44	ALA	CA-C-N	6.19	128.86	120.44
4	J	44	ALA	C-N-CA	6.19	128.86	120.44
4	J	51	ALA	N-CA-C	6.19	118.11	111.36
1	B	396	THR	CA-C-O	-6.19	114.39	120.89
2	D	270	ILE	N-CA-C	6.19	116.94	110.62
9	O	34	GLN	CA-C-O	6.19	127.11	120.55
1	A	90	PRO	CA-C-N	6.19	128.57	120.28
1	A	90	PRO	C-N-CA	6.19	128.57	120.28
1	A	294	MET	CA-C-O	-6.19	113.69	120.69
2	F	159	PRO	N-CA-C	-6.18	101.92	111.13
7	M	49	LEU	CA-C-O	-6.18	114.99	121.55
8	N	353	ILE	CA-C-N	6.18	128.57	120.28
8	N	353	ILE	C-N-CA	6.18	128.57	120.28
2	F	204	PHE	N-CA-C	6.18	117.82	111.14
2	E	236	ARG	CA-C-N	6.18	133.34	121.54
2	E	236	ARG	C-N-CA	6.18	133.34	121.54
1	B	550	ARG	N-CA-C	-6.18	105.74	113.28
2	D	86	LYS	N-CA-C	-6.18	105.38	113.17
6	L	75	ALA	O-C-N	6.18	129.20	122.15
1	C	233	GLY	CA-C-N	6.18	129.06	120.29
1	C	233	GLY	C-N-CA	6.18	129.06	120.29
2	D	357	SER	CA-C-O	-6.18	113.94	120.80
9	Q	26	ALA	CA-C-N	6.18	129.06	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	Q	26	ALA	C-N-CA	6.18	129.06	120.29
4	I	91	ARG	CA-C-O	-6.17	113.88	120.42
9	Y	58	PHE	N-CA-C	-6.17	104.55	111.28
9	O	73	ALA	CA-C-O	-6.17	114.01	120.55
8	N	445	GLY	O-C-N	6.17	130.06	122.29
5	K	71	ASP	N-CA-C	-6.16	104.25	112.94
1	A	279	GLY	CA-C-N	6.16	127.54	119.84
1	A	279	GLY	C-N-CA	6.16	127.54	119.84
1	B	422	ILE	O-C-N	6.16	129.25	122.66
7	M	269	LEU	CA-C-N	6.16	128.82	120.44
7	M	269	LEU	C-N-CA	6.16	128.82	120.44
1	B	438	TRP	O-C-N	6.16	129.43	122.22
3	H	58	ARG	CA-C-N	6.16	128.85	120.54
3	H	58	ARG	C-N-CA	6.16	128.85	120.54
8	N	378	TRP	N-CA-C	-6.16	105.92	113.50
8	N	496	TRP	CA-C-N	6.16	128.81	120.44
8	N	496	TRP	C-N-CA	6.16	128.81	120.44
1	C	252	TYR	N-CA-C	-6.15	99.21	109.24
2	E	355	LEU	O-C-N	-6.15	115.00	120.48
1	A	79	MET	N-CA-C	-6.15	103.18	112.04
8	N	174	ALA	N-CA-C	-6.15	99.78	109.50
9	T	28	LEU	CA-C-O	6.15	127.28	120.82
9	X	52	PHE	CA-C-N	6.15	127.83	120.14
9	X	52	PHE	C-N-CA	6.15	127.83	120.14
7	M	259	LYS	CA-C-N	6.14	128.51	120.28
7	M	259	LYS	C-N-CA	6.14	128.51	120.28
3	H	113	GLU	N-CA-C	-6.14	104.70	111.82
9	P	48	ASP	O-C-N	-6.14	116.12	123.31
9	O	36	ARG	CA-C-O	6.14	127.02	120.70
2	D	251	TYR	N-CA-C	-6.14	98.99	109.24
3	G	110	GLU	O-C-N	-6.14	115.61	122.12
9	Q	53	GLY	N-CA-C	6.14	120.10	112.73
1	B	195	VAL	O-C-N	-6.14	116.25	123.00
1	C	181	LEU	O-C-N	-6.14	115.47	123.02
2	F	283	TYR	CA-C-O	-6.14	114.85	120.50
2	E	441	ALA	CA-C-O	-6.13	114.05	120.92
9	Z	75	ILE	N-CA-C	6.13	116.29	110.53
3	G	170	ARG	CA-C-N	6.13	128.41	120.44
3	G	170	ARG	C-N-CA	6.13	128.41	120.44
2	E	153	PHE	CA-C-O	-6.13	113.97	121.02
2	F	389	GLY	CA-C-N	6.13	133.00	121.97
2	F	389	GLY	C-N-CA	6.13	133.00	121.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	213	ALA	N-CA-C	-6.13	104.00	112.03
2	F	19	LEU	N-CA-C	-6.13	100.10	109.41
3	H	136	ARG	O-C-N	-6.12	114.01	122.46
7	M	199	GLU	CA-C-N	6.12	128.98	120.29
7	M	199	GLU	C-N-CA	6.12	128.98	120.29
1	C	481	ARG	O-C-N	-6.12	114.45	122.59
9	Z	42	VAL	CA-C-O	6.12	127.08	120.47
8	N	15	GLU	CA-C-N	6.12	128.76	120.44
8	N	15	GLU	C-N-CA	6.12	128.76	120.44
9	Q	22	ALA	N-CA-C	6.12	117.61	111.07
8	N	231	ARG	CA-C-N	6.12	128.47	120.28
8	N	231	ARG	C-N-CA	6.12	128.47	120.28
1	A	106	VAL	O-C-N	-6.11	116.45	122.93
9	R	63	GLU	CA-C-N	6.11	128.47	120.28
9	R	63	GLU	C-N-CA	6.11	128.47	120.28
9	Y	66	VAL	O-C-N	-6.11	115.54	121.83
4	J	89	ARG	CA-C-O	-6.11	114.07	120.55
5	K	193	ARG	CA-C-N	6.11	128.46	120.28
5	K	193	ARG	C-N-CA	6.11	128.46	120.28
9	V	36	ARG	CA-C-O	6.11	127.02	120.55
2	D	68	LEU	N-CA-C	-6.11	104.24	113.89
2	F	322	THR	N-CA-C	-6.11	105.12	113.30
2	F	98	LYS	CA-C-O	-6.10	114.00	120.23
7	M	153	ALA	N-CA-C	6.10	117.93	111.28
2	F	316	MET	N-CA-C	6.10	123.29	109.81
2	E	173	VAL	CA-C-O	6.10	127.68	121.58
2	F	276	GLU	N-CA-C	6.10	119.08	110.23
8	N	533	GLY	O-C-N	-6.10	115.78	122.24
8	N	215	ARG	CA-C-O	-6.10	114.09	120.55
9	Z	50	SER	N-CA-C	-6.09	104.64	114.09
1	C	496	GLN	CA-C-O	6.09	127.42	120.84
5	K	163	ALA	CA-C-N	6.09	128.76	120.54
5	K	163	ALA	C-N-CA	6.09	128.76	120.54
1	A	486	VAL	N-CA-C	-6.09	104.81	110.53
1	B	387	PRO	CA-C-O	-6.09	111.23	118.90
1	C	150	PRO	CA-C-N	6.09	126.03	119.76
1	C	150	PRO	C-N-CA	6.09	126.03	119.76
2	E	364	ASN	N-CA-C	-6.09	105.43	112.92
9	Z	72	ILE	O-C-N	6.09	127.88	121.91
2	E	331	TYR	N-CA-C	-6.09	105.76	113.43
5	K	14	ARG	CA-C-O	-6.09	111.89	119.38
5	K	21	ALA	CA-C-N	6.09	133.17	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	K	21	ALA	C-N-CA	6.09	133.17	121.54
9	W	69	GLY	CA-C-N	6.09	128.44	120.28
9	W	69	GLY	C-N-CA	6.09	128.44	120.28
1	B	153	VAL	N-CA-C	-6.08	95.78	106.61
9	V	17	VAL	CA-C-N	6.08	127.95	120.22
9	V	17	VAL	C-N-CA	6.08	127.95	120.22
1	C	442	ASN	N-CA-C	6.08	117.60	110.97
7	M	301	ARG	O-C-N	-6.08	115.52	122.09
1	B	513	TYR	O-C-N	6.08	128.33	122.07
2	D	202	SER	CA-C-N	6.08	130.86	120.71
2	D	202	SER	C-N-CA	6.08	130.86	120.71
8	N	229	GLU	N-CA-C	6.08	117.91	111.28
1	A	352	PRO	N-CA-C	-6.07	106.27	113.86
2	E	102	GLY	N-CA-C	-6.07	107.38	115.40
3	G	128	LEU	O-C-N	-6.07	114.34	121.32
9	S	34	GLN	CA-C-O	-6.07	113.98	120.42
9	Z	26	ALA	CA-C-N	6.07	128.42	120.28
9	Z	26	ALA	C-N-CA	6.07	128.42	120.28
5	K	39	PHE	CA-C-O	-6.07	114.08	120.63
9	P	13	GLY	CA-C-O	6.07	126.75	120.80
9	Y	30	THR	CA-C-N	6.07	126.67	119.94
9	Y	30	THR	C-N-CA	6.07	126.67	119.94
1	C	415	PHE	O-C-N	-6.07	114.81	122.27
5	K	102	PRO	CA-C-N	6.07	134.86	123.09
5	K	102	PRO	C-N-CA	6.07	134.86	123.09
8	N	463	LEU	O-C-N	-6.07	114.81	122.27
8	N	506	LEU	CA-C-N	6.07	126.67	120.00
8	N	506	LEU	C-N-CA	6.07	126.67	120.00
8	N	464	ILE	CA-C-N	6.06	129.53	120.31
8	N	464	ILE	C-N-CA	6.06	129.53	120.31
2	F	439	ALA	CA-C-O	6.06	127.18	120.63
3	G	4	LEU	N-CA-C	-6.06	99.02	108.90
4	J	56	LYS	CA-C-N	6.06	129.00	120.28
4	J	56	LYS	C-N-CA	6.06	129.00	120.28
2	F	405	THR	CA-C-N	6.05	128.71	120.54
2	F	405	THR	C-N-CA	6.05	128.71	120.54
3	G	145	GLU	CA-C-N	6.05	126.49	119.47
3	G	145	GLU	C-N-CA	6.05	126.49	119.47
9	U	29	GLY	CA-C-O	6.05	127.08	120.66
9	V	56	LEU	N-CA-C	6.05	117.96	111.36
2	D	397	ALA	CA-C-O	-6.05	114.14	120.55
1	C	293	ASN	N-CA-C	-6.05	104.25	111.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	249	VAL	N-CA-C	-6.04	99.78	108.42
1	B	541	GLN	N-CA-C	-6.04	104.01	113.02
7	M	255	VAL	O-C-N	6.04	129.53	123.18
1	A	528	ALA	N-CA-C	-6.04	105.94	113.55
2	D	16	GLY	O-C-N	6.04	127.81	121.77
3	G	121	LEU	N-CA-C	-6.04	96.51	107.75
8	N	74	ARG	CA-C-N	6.04	127.39	119.84
8	N	74	ARG	C-N-CA	6.04	127.39	119.84
9	X	42	VAL	CA-C-N	6.04	126.53	119.94
9	X	42	VAL	C-N-CA	6.04	126.53	119.94
1	A	309	ILE	N-CA-C	-6.04	104.42	111.00
7	M	88	LEU	N-CA-C	6.04	118.66	111.71
9	R	12	ARG	CA-C-N	6.04	126.68	119.98
9	R	12	ARG	C-N-CA	6.04	126.68	119.98
1	C	2	ILE	N-CA-C	-6.04	99.72	108.17
2	F	195	GLY	N-CA-C	-6.04	98.88	113.18
1	A	393	GLU	O-C-N	-6.03	115.09	121.30
2	E	107	THR	O-C-N	-6.03	115.59	121.38
2	F	110	LYS	N-CA-C	-6.03	100.17	109.52
9	V	67	ILE	N-CA-C	6.03	116.77	110.62
9	P	57	ILE	CA-C-N	6.03	128.35	120.28
9	P	57	ILE	C-N-CA	6.03	128.35	120.28
7	M	78	GLY	O-C-N	6.02	129.42	122.61
8	N	397	LYS	CA-C-N	6.02	128.63	120.44
8	N	397	LYS	C-N-CA	6.02	128.63	120.44
1	C	135	LEU	N-CA-C	-6.02	106.10	113.50
5	K	145	THR	CA-C-N	6.02	128.35	120.28
5	K	145	THR	C-N-CA	6.02	128.35	120.28
8	N	212	ALA	CA-C-N	6.02	128.84	120.29
8	N	212	ALA	C-N-CA	6.02	128.84	120.29
9	P	77	ASN	N-CA-C	6.01	118.64	109.62
2	D	131	ILE	N-CA-C	-6.01	99.21	107.99
7	M	15	ARG	CA-C-O	-6.01	113.31	120.10
9	V	67	ILE	CA-C-O	-6.01	114.70	120.95
2	E	292	ALA	N-CA-C	6.01	117.52	110.97
1	A	282	MET	O-C-N	6.01	130.20	122.39
2	E	264	CYS	N-CA-C	-6.00	106.08	113.41
2	F	151	PRO	N-CA-C	-6.00	101.65	111.68
4	I	32	GLN	CA-C-N	6.00	128.32	120.28
4	I	32	GLN	C-N-CA	6.00	128.32	120.28
9	Y	20	GLY	O-C-N	6.00	128.60	122.24
1	B	18	GLY	N-CA-C	-6.00	106.97	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	447	PRO	CA-C-O	-6.00	113.67	122.31
1	C	275	PRO	CA-C-N	5.99	128.59	120.44
1	C	275	PRO	C-N-CA	5.99	128.59	120.44
9	U	10	LEU	N-CA-C	5.99	118.77	111.82
2	E	356	PRO	O-C-N	5.99	130.71	122.38
8	N	143	GLU	CA-C-N	5.99	128.22	120.44
8	N	143	GLU	C-N-CA	5.99	128.22	120.44
8	N	523	TRP	N-CA-C	-5.99	105.62	113.17
9	T	55	ALA	CA-C-N	5.99	128.23	120.44
9	T	55	ALA	C-N-CA	5.99	128.23	120.44
2	F	450	GLU	N-CA-C	-5.99	105.80	114.12
8	N	255	GLU	CA-C-N	5.99	128.10	120.56
8	N	255	GLU	C-N-CA	5.99	128.10	120.56
8	N	261	ALA	CA-C-N	5.99	128.30	120.28
8	N	261	ALA	C-N-CA	5.99	128.30	120.28
8	N	539	VAL	N-CA-C	-5.98	107.06	111.90
2	F	297	ARG	N-CA-C	-5.98	99.53	109.46
7	M	67	LYS	CA-C-O	-5.98	112.60	119.60
1	C	575	LYS	N-CA-C	5.98	119.40	111.75
2	F	118	PRO	CA-C-O	-5.98	114.48	121.95
1	C	62	GLU	CA-C-N	5.98	125.99	119.89
1	C	62	GLU	C-N-CA	5.98	125.99	119.89
2	D	305	LYS	N-CA-C	-5.98	101.35	110.14
1	A	401	ARG	N-CA-C	-5.98	106.12	113.41
1	B	155	GLY	CA-C-N	5.97	130.32	120.94
1	B	155	GLY	C-N-CA	5.97	130.32	120.94
9	P	56	LEU	CA-C-O	-5.97	114.09	120.42
2	F	301	VAL	CA-C-N	5.96	130.67	121.19
2	F	301	VAL	C-N-CA	5.96	130.67	121.19
7	M	149	ARG	CA-C-N	5.96	128.19	120.44
7	M	149	ARG	C-N-CA	5.96	128.19	120.44
2	D	390	VAL	N-CA-C	-5.96	104.70	110.72
3	H	68	VAL	N-CA-C	-5.96	105.04	110.82
8	N	466	LEU	CA-C-N	5.96	128.27	120.28
8	N	466	LEU	C-N-CA	5.96	128.27	120.28
2	E	156	SER	N-CA-C	-5.96	105.09	112.90
5	K	47	MET	CA-C-N	5.96	128.52	120.65
5	K	47	MET	C-N-CA	5.96	128.52	120.65
1	C	500	TYR	N-CA-C	-5.96	106.17	113.50
2	E	165	ALA	CA-C-O	-5.96	112.58	119.61
2	F	391	ASP	N-CA-C	5.95	118.53	111.33
4	I	48	VAL	O-C-N	5.95	127.88	121.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	141	MET	N-CA-C	5.95	117.57	111.14
1	B	236	VAL	CA-C-N	5.95	129.06	120.79
1	B	236	VAL	C-N-CA	5.95	129.06	120.79
3	G	163	VAL	N-CA-C	-5.95	99.16	108.86
7	M	137	ALA	N-CA-C	5.95	117.76	111.28
8	N	504	GLY	CA-C-N	5.95	128.17	120.44
8	N	504	GLY	C-N-CA	5.95	128.17	120.44
1	C	510	LYS	N-CA-C	5.95	120.07	112.34
1	A	195	VAL	CA-C-O	-5.95	114.54	120.90
3	H	24	GLU	N-CA-C	-5.95	106.03	113.28
1	B	328	SER	O-C-N	-5.94	115.82	122.12
8	N	250	THR	O-C-N	5.94	128.51	122.09
1	C	4	GLY	N-CA-C	-5.94	102.14	110.63
8	N	11	GLY	CA-C-O	-5.94	114.36	120.66
8	N	252	ALA	O-C-N	5.94	128.42	122.12
1	A	274	ASP	CA-C-O	-5.94	112.91	120.04
1	B	486	VAL	O-C-N	5.94	127.63	121.87
2	E	92	ARG	CA-C-N	-5.94	111.48	121.75
2	E	92	ARG	C-N-CA	-5.94	111.48	121.75
8	N	529	TYR	CA-C-N	5.93	128.82	120.28
8	N	529	TYR	C-N-CA	5.93	128.82	120.28
3	H	155	VAL	CA-C-N	5.93	129.43	121.01
3	H	155	VAL	C-N-CA	5.93	129.43	121.01
8	N	1	MET	CA-C-N	5.93	130.55	122.19
8	N	1	MET	C-N-CA	5.93	130.55	122.19
8	N	13	ALA	N-CA-C	5.93	117.41	111.07
8	N	463	LEU	CA-C-O	5.93	126.79	119.97
2	F	199	ARG	CA-C-O	-5.92	114.60	120.70
9	O	68	PHE	CA-C-O	-5.92	114.27	120.55
2	F	277	ILE	O-C-N	-5.92	114.35	121.10
3	G	121	LEU	CA-C-O	5.92	127.23	120.84
5	K	161	VAL	CA-C-N	5.92	129.02	120.79
5	K	161	VAL	C-N-CA	5.92	129.02	120.79
9	O	36	ARG	CA-C-N	5.92	128.83	120.42
9	O	36	ARG	C-N-CA	5.92	128.83	120.42
2	D	125	ARG	CA-C-N	5.92	129.66	120.60
2	D	125	ARG	C-N-CA	5.92	129.66	120.60
8	N	273	ALA	O-C-N	-5.92	116.41	123.27
9	Y	9	GLY	CA-C-N	5.92	128.69	120.29
9	Y	9	GLY	C-N-CA	5.92	128.69	120.29
9	O	79	ARG	CA-C-O	5.91	125.79	119.34
1	B	293	ASN	CA-C-N	5.91	129.65	120.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	293	ASN	C-N-CA	5.91	129.65	120.60
1	B	492	GLU	CA-C-O	5.91	125.30	118.97
3	H	66	LEU	N-CA-C	5.91	117.72	111.28
1	C	114	GLU	N-CA-C	-5.91	104.46	112.26
4	I	102	LYS	CA-C-N	5.91	128.68	120.29
4	I	102	LYS	C-N-CA	5.91	128.68	120.29
7	M	110	GLU	CA-C-N	5.91	130.55	122.34
7	M	110	GLU	C-N-CA	5.91	130.55	122.34
9	R	63	GLU	O-C-N	5.91	129.13	122.22
1	C	461	GLU	CA-C-N	5.91	129.00	120.38
1	C	461	GLU	C-N-CA	5.91	129.00	120.38
9	R	46	ALA	N-CA-C	-5.90	104.75	111.07
1	A	530	ILE	O-C-N	-5.90	114.41	122.26
1	C	438	TRP	CA-C-N	5.90	128.46	120.44
1	C	438	TRP	C-N-CA	5.90	128.46	120.44
8	N	618	LEU	N-CA-C	-5.90	106.08	113.28
1	B	406	PHE	N-CA-C	-5.90	98.67	108.34
5	K	167	VAL	N-CA-C	5.90	116.55	110.36
2	F	355	LEU	O-C-N	-5.89	116.20	120.27
9	T	71	LEU	O-C-N	-5.89	115.87	122.12
2	F	173	VAL	O-C-N	-5.89	116.47	122.54
9	O	24	GLY	O-C-N	5.89	127.91	122.19
9	Z	56	LEU	N-CA-C	5.89	117.78	111.36
2	E	56	VAL	N-CA-C	-5.89	99.64	108.12
2	E	343	LEU	O-C-N	5.89	128.88	122.11
8	N	253	GLN	CA-C-N	5.89	128.17	120.28
8	N	253	GLN	C-N-CA	5.89	128.17	120.28
1	C	313	PHE	CA-C-N	5.88	128.16	120.28
1	C	313	PHE	C-N-CA	5.88	128.16	120.28
3	H	20	LEU	N-CA-C	5.88	120.07	113.01
9	X	43	GLY	CA-C-O	-5.88	114.31	120.90
1	C	86	GLY	CA-C-N	5.88	130.84	122.09
1	C	86	GLY	C-N-CA	5.88	130.84	122.09
8	N	65	LEU	CA-C-O	5.88	126.65	120.42
2	D	122	VAL	N-CA-C	-5.87	107.03	112.43
1	B	25	TYR	CA-C-N	5.87	131.14	121.39
1	B	25	TYR	C-N-CA	5.87	131.14	121.39
5	K	128	ARG	CA-C-N	5.87	128.74	120.28
5	K	128	ARG	C-N-CA	5.87	128.74	120.28
9	V	71	LEU	N-CA-C	-5.87	104.79	111.07
9	V	29	GLY	CA-C-N	5.87	128.62	120.29
9	V	29	GLY	C-N-CA	5.87	128.62	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	51	VAL	CA-C-N	5.87	128.40	120.65
1	B	51	VAL	C-N-CA	5.87	128.40	120.65
8	N	207	LEU	CA-C-N	5.87	125.87	119.89
8	N	207	LEU	C-N-CA	5.87	125.87	119.89
5	K	204	ARG	N-CA-C	5.86	117.67	111.28
5	K	68	GLN	CA-C-O	-5.86	114.76	121.68
8	N	21	GLN	O-C-N	5.86	128.33	122.12
2	D	264	CYS	O-C-N	5.86	128.35	122.08
8	N	446	LEU	CA-C-O	-5.86	113.47	120.56
1	B	331	ALA	CA-C-N	5.86	128.45	120.54
1	B	331	ALA	C-N-CA	5.86	128.45	120.54
2	E	159	PRO	CA-C-N	5.86	132.73	121.54
2	E	159	PRO	C-N-CA	5.86	132.73	121.54
3	G	154	ALA	CA-C-N	5.86	128.49	120.35
3	G	154	ALA	C-N-CA	5.86	128.49	120.35
7	M	249	PHE	N-CA-C	-5.86	105.95	112.57
1	A	9	ILE	N-CA-C	-5.86	99.78	108.45
4	I	113	LEU	CA-C-N	5.86	127.86	120.72
4	I	113	LEU	C-N-CA	5.86	127.86	120.72
9	O	10	LEU	CA-C-N	5.86	128.05	120.44
9	O	10	LEU	C-N-CA	5.86	128.05	120.44
9	R	48	ASP	CA-C-O	5.86	128.13	120.11
5	K	127	SER	CA-C-N	5.85	128.12	120.28
5	K	127	SER	C-N-CA	5.85	128.12	120.28
1	B	32	GLU	N-CA-C	-5.85	105.80	113.17
9	W	73	ALA	CA-C-N	5.85	128.12	120.28
9	W	73	ALA	C-N-CA	5.85	128.12	120.28
1	C	553	TYR	N-CA-C	-5.85	107.13	114.56
2	F	360	ARG	N-CA-C	-5.85	107.13	114.56
1	C	63	PRO	CA-C-N	5.84	132.49	121.97
1	C	63	PRO	C-N-CA	5.84	132.49	121.97
7	M	54	LEU	CA-C-N	5.84	125.71	119.28
7	M	54	LEU	C-N-CA	5.84	125.71	119.28
9	W	41	GLY	CA-C-O	-5.84	114.09	120.40
4	J	109	GLU	CA-C-N	5.84	128.38	120.44
4	J	109	GLU	C-N-CA	5.84	128.38	120.44
4	J	54	GLU	O-C-N	-5.84	115.39	122.22
1	B	143	PHE	N-CA-C	-5.84	98.37	110.80
7	M	8	LEU	N-CA-C	5.83	117.31	111.07
9	S	45	ILE	CA-C-N	5.83	128.02	120.44
9	S	45	ILE	C-N-CA	5.83	128.02	120.44
2	E	243	GLU	N-CA-C	5.83	117.31	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	I	82	GLU	N-CA-C	-5.83	105.18	112.93
1	A	110	ALA	N-CA-C	5.83	118.38	111.33
1	B	314	ARG	CA-C-N	5.83	128.89	120.38
1	B	314	ARG	C-N-CA	5.83	128.89	120.38
3	H	6	ALA	N-CA-C	5.83	119.65	112.54
8	N	528	MET	N-CA-C	-5.83	104.89	112.23
2	F	416	ASP	O-C-N	5.83	128.30	122.12
9	R	36	ARG	N-CA-C	5.83	117.43	111.14
1	B	528	ALA	CA-C-N	5.82	130.43	120.71
1	B	528	ALA	C-N-CA	5.82	130.43	120.71
2	D	277	ILE	CA-C-N	5.82	125.58	119.76
2	D	277	ILE	C-N-CA	5.82	125.58	119.76
8	N	141	LEU	CA-C-O	5.82	127.81	121.06
8	N	489	HIS	N-CA-C	-5.82	106.16	113.72
1	A	254	GLY	CA-C-N	5.82	131.08	122.82
1	A	254	GLY	C-N-CA	5.82	131.08	122.82
1	C	506	TYR	CA-C-N	5.82	130.66	121.99
1	C	506	TYR	C-N-CA	5.82	130.66	121.99
8	N	109	ALA	CA-C-O	5.82	126.93	120.82
3	G	15	GLU	CA-C-O	-5.81	114.71	120.70
9	S	23	VAL	O-C-N	-5.81	115.84	121.83
9	Q	31	GLY	CA-C-N	5.81	127.88	120.56
9	Q	31	GLY	C-N-CA	5.81	127.88	120.56
9	R	67	ILE	O-C-N	-5.81	116.23	121.87
8	N	55	VAL	CA-C-O	-5.81	114.91	120.95
2	F	95	GLY	O-C-N	-5.80	116.12	122.68
7	M	272	GLU	O-C-N	5.80	128.27	122.12
1	A	327	THR	CA-C-O	5.80	126.30	119.28
1	B	70	PRO	CA-C-N	5.80	128.95	120.71
1	B	70	PRO	C-N-CA	5.80	128.95	120.71
1	C	35	LEU	N-CA-C	-5.80	106.83	114.31
2	E	384	SER	CA-C-O	-5.80	113.30	119.97
3	H	121	LEU	N-CA-C	-5.80	98.96	108.76
2	F	64	THR	CA-C-O	5.80	125.54	119.51
2	D	58	GLN	CA-C-N	5.79	128.86	120.98
2	D	58	GLN	C-N-CA	5.79	128.86	120.98
9	P	36	ARG	CA-C-O	5.79	126.69	120.55
1	A	24	MET	CA-C-N	5.79	132.60	121.54
1	A	24	MET	C-N-CA	5.79	132.60	121.54
1	B	411	ALA	O-C-N	5.79	128.26	122.12
5	K	161	VAL	N-CA-C	5.79	116.25	110.23
8	N	515	TYR	CA-C-N	5.79	130.48	120.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	N	515	TYR	C-N-CA	5.79	130.48	120.58
1	C	240	SER	CA-C-O	5.79	126.01	119.18
2	F	178	SER	N-CA-C	-5.79	106.38	113.50
5	K	72	GLY	CA-C-N	5.79	127.08	119.84
5	K	72	GLY	C-N-CA	5.79	127.08	119.84
1	B	438	TRP	CA-C-O	-5.79	113.56	120.10
4	I	70	GLU	CA-C-N	5.79	128.31	120.38
4	I	70	GLU	C-N-CA	5.79	128.31	120.38
6	L	47	VAL	N-CA-C	-5.79	99.79	108.12
9	U	28	LEU	CA-C-N	5.79	126.36	120.00
9	U	28	LEU	C-N-CA	5.79	126.36	120.00
2	D	459	ILE	N-CA-C	-5.78	104.70	111.00
9	U	75	ILE	N-CA-C	5.78	115.97	110.53
2	F	363	ASN	N-CA-C	-5.78	103.59	110.41
1	B	542	LEU	CA-C-N	5.78	125.88	119.87
1	B	542	LEU	C-N-CA	5.78	125.88	119.87
2	D	66	LEU	CA-C-N	5.77	132.93	122.02
2	D	66	LEU	C-N-CA	5.77	132.93	122.02
2	E	256	ILE	N-CA-C	-5.77	97.54	107.24
2	F	275	GLU	O-C-N	5.77	128.24	122.12
9	U	23	VAL	CA-C-N	5.77	126.23	119.94
9	U	23	VAL	C-N-CA	5.77	126.23	119.94
1	B	488	ARG	CA-C-O	-5.77	114.77	120.82
9	O	13	GLY	CA-C-N	5.77	128.48	120.29
9	O	13	GLY	C-N-CA	5.77	128.48	120.29
2	E	323	HIS	O-C-N	-5.76	115.68	121.27
3	G	66	LEU	CA-C-N	5.76	128.58	120.28
3	G	66	LEU	C-N-CA	5.76	128.58	120.28
8	N	103	GLU	O-C-N	5.76	128.23	122.12
6	L	46	ALA	CA-C-O	5.76	127.52	120.60
8	N	442	GLU	N-CA-C	5.76	117.56	111.28
2	D	67	ASP	CA-C-N	5.76	130.98	121.99
2	D	67	ASP	C-N-CA	5.76	130.98	121.99
9	X	4	ALA	CA-C-N	5.76	129.04	120.17
9	X	4	ALA	C-N-CA	5.76	129.04	120.17
2	F	332	ILE	CA-C-O	-5.76	115.42	121.41
3	H	115	LEU	CA-C-N	5.76	125.76	119.89
3	H	115	LEU	C-N-CA	5.76	125.76	119.89
8	N	218	GLU	N-CA-C	5.75	117.63	111.36
4	I	82	GLU	CA-C-N	5.75	127.99	120.28
4	I	82	GLU	C-N-CA	5.75	127.99	120.28
1	A	521	ALA	CA-C-N	5.75	127.92	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	521	ALA	C-N-CA	5.75	127.92	120.44
1	A	521	ALA	CA-C-O	5.75	127.39	121.07
9	Y	57	ILE	N-CA-C	5.75	116.53	110.72
3	G	76	ARG	N-CA-C	-5.75	105.02	111.28
9	Z	8	GLY	O-C-N	-5.75	119.53	123.95
8	N	626	VAL	N-CA-C	-5.74	104.76	110.62
9	O	27	ALA	CA-C-O	-5.74	114.46	120.55
2	E	431	SER	CA-C-N	5.74	128.62	120.53
2	E	431	SER	C-N-CA	5.74	128.62	120.53
2	F	156	SER	N-CA-C	-5.74	99.83	109.07
2	D	396	VAL	CA-C-N	5.74	127.97	120.28
2	D	396	VAL	C-N-CA	5.74	127.97	120.28
1	B	79	MET	N-CA-C	-5.73	104.64	111.69
2	F	218	VAL	N-CA-C	-5.73	99.38	107.75
4	J	106	ARG	N-CA-C	-5.73	101.86	110.06
2	E	114	ILE	N-CA-C	-5.73	107.16	112.83
2	F	215	SER	N-CA-C	-5.73	105.02	113.61
4	I	66	ALA	N-CA-C	5.73	117.52	111.28
1	C	293	ASN	CA-C-N	5.72	128.43	120.65
1	C	293	ASN	C-N-CA	5.72	128.43	120.65
9	O	35	ALA	N-CA-C	5.72	117.52	111.28
1	C	70	PRO	O-C-N	5.72	130.36	122.64
1	A	489	ILE	N-CA-C	-5.72	103.78	111.44
9	T	37	ILE	CA-C-N	5.72	126.29	120.00
9	T	37	ILE	C-N-CA	5.72	126.29	120.00
8	N	381	GLY	N-CA-C	-5.71	99.64	113.18
2	D	365	GLY	CA-C-O	5.71	125.63	119.06
4	J	25	SER	CA-C-N	5.71	130.39	120.68
4	J	25	SER	C-N-CA	5.71	130.39	120.68
4	J	33	LEU	CA-C-N	5.71	128.40	120.29
4	J	33	LEU	C-N-CA	5.71	128.40	120.29
8	N	589	LEU	N-CA-C	-5.71	105.90	112.92
9	Q	9	GLY	CA-C-N	5.71	128.40	120.29
9	Q	9	GLY	C-N-CA	5.71	128.40	120.29
1	C	405	ALA	CA-C-O	5.71	127.17	120.43
1	B	237	THR	O-C-N	-5.71	115.97	122.08
1	C	30	VAL	O-C-N	-5.71	116.89	123.00
9	W	45	ILE	N-CA-C	-5.71	104.96	110.72
1	B	90	PRO	CA-C-N	5.70	129.81	120.63
1	B	90	PRO	C-N-CA	5.70	129.81	120.63
1	C	455	SER	CA-C-N	5.70	127.85	120.44
1	C	455	SER	C-N-CA	5.70	127.85	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	573	ALA	N-CA-C	-5.70	106.13	112.57
2	E	453	ARG	N-CA-C	-5.70	105.91	112.92
1	A	529	ALA	CA-C-O	5.70	127.00	120.90
1	B	109	HIS	O-C-N	-5.70	115.80	122.81
2	E	138	ILE	O-C-N	-5.70	115.45	122.57
1	A	73	VAL	CA-C-N	5.69	129.44	121.24
1	A	73	VAL	C-N-CA	5.69	129.44	121.24
9	U	16	ALA	N-CA-C	5.69	117.49	111.28
1	A	167	THR	N-CA-C	-5.69	101.86	110.28
1	C	298	ALA	CA-C-N	5.69	128.48	120.28
1	C	298	ALA	C-N-CA	5.69	128.48	120.28
2	D	18	LEU	CA-C-O	-5.69	114.46	121.06
3	G	129	PRO	N-CA-C	-5.69	108.14	114.92
8	N	103	GLU	CA-C-N	5.69	127.84	120.44
8	N	103	GLU	C-N-CA	5.69	127.84	120.44
9	R	58	PHE	CA-C-N	5.69	127.91	120.28
9	R	58	PHE	C-N-CA	5.69	127.91	120.28
3	H	83	VAL	N-CA-C	5.69	116.42	110.62
3	H	74	GLN	CA-C-N	5.69	128.37	120.29
3	H	74	GLN	C-N-CA	5.69	128.37	120.29
1	C	103	THR	CA-C-N	5.69	129.63	121.50
1	C	103	THR	C-N-CA	5.69	129.63	121.50
1	C	464	LEU	CA-C-N	5.69	129.35	120.82
1	C	464	LEU	C-N-CA	5.69	129.35	120.82
2	E	374	ASP	CA-C-N	5.69	127.90	120.28
2	E	374	ASP	C-N-CA	5.69	127.90	120.28
6	L	32	LEU	CA-C-N	5.69	132.40	121.54
6	L	32	LEU	C-N-CA	5.69	132.40	121.54
9	V	53	GLY	CA-C-N	5.68	127.90	120.28
9	V	53	GLY	C-N-CA	5.68	127.90	120.28
1	C	63	PRO	N-CA-C	5.68	120.14	111.11
4	I	80	GLU	N-CA-C	-5.68	105.37	112.93
8	N	21	GLN	CA-C-N	5.68	128.36	120.29
8	N	21	GLN	C-N-CA	5.68	128.36	120.29
1	B	188	PRO	CA-C-O	-5.68	114.87	121.34
3	G	15	GLU	O-C-N	5.68	128.22	122.09
9	O	39	ALA	CA-C-N	5.68	128.35	120.29
9	O	39	ALA	C-N-CA	5.68	128.35	120.29
2	D	41	ARG	N-CA-C	-5.67	100.46	109.59
9	O	53	GLY	CA-C-N	5.67	127.89	120.28
9	O	53	GLY	C-N-CA	5.67	127.89	120.28
1	A	288	ILE	CA-C-N	5.67	128.90	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	288	ILE	C-N-CA	5.67	128.90	120.90
8	N	165	HIS	O-C-N	5.67	129.74	123.33
4	I	71	ALA	O-C-N	5.67	128.13	122.12
1	A	294	MET	N-CA-C	5.67	117.72	109.84
1	B	253	VAL	N-CA-C	-5.67	100.81	108.06
2	F	228	THR	CA-C-O	5.67	125.92	119.18
7	M	54	LEU	N-CA-C	5.67	121.21	113.16
1	B	337	ILE	CA-C-N	5.67	130.18	120.72
1	B	337	ILE	C-N-CA	5.67	130.18	120.72
7	M	80	ALA	CA-C-O	5.67	126.77	120.82
8	N	457	ALA	CA-C-N	5.67	127.81	120.44
8	N	457	ALA	C-N-CA	5.67	127.81	120.44
1	A	8	LYS	N-CA-C	-5.66	100.70	109.14
7	M	279	ASP	CA-C-O	-5.66	112.40	120.16
8	N	330	PHE	N-CA-C	5.66	117.53	111.36
2	D	234	THR	CA-C-N	5.66	126.92	119.84
2	D	234	THR	C-N-CA	5.66	126.92	119.84
9	T	25	LEU	N-CA-C	-5.66	105.19	111.36
2	F	424	ASN	N-CA-C	-5.66	98.53	108.20
8	N	374	LEU	CA-C-N	5.65	128.21	120.46
8	N	374	LEU	C-N-CA	5.65	128.21	120.46
1	C	451	ARG	CA-C-O	5.65	126.21	119.60
2	D	130	PHE	N-CA-C	-5.65	100.49	109.59
9	P	21	LEU	CA-C-N	5.65	127.85	120.28
9	P	21	LEU	C-N-CA	5.65	127.85	120.28
8	N	507	GLY	CA-C-N	5.65	127.79	120.56
8	N	507	GLY	C-N-CA	5.65	127.79	120.56
2	D	385	ALA	N-CA-C	5.65	117.24	111.14
8	N	27	HIS	CA-C-N	5.64	129.37	121.24
8	N	27	HIS	C-N-CA	5.64	129.37	121.24
8	N	554	GLN	CA-C-N	5.64	128.89	120.31
8	N	554	GLN	C-N-CA	5.64	128.89	120.31
8	N	566	ALA	CA-C-N	5.64	128.43	120.42
8	N	566	ALA	C-N-CA	5.64	128.43	120.42
4	J	108	ASP	CA-C-N	5.64	127.84	120.28
4	J	108	ASP	C-N-CA	5.64	127.84	120.28
9	S	60	LEU	CA-C-N	5.64	127.14	120.09
9	S	60	LEU	C-N-CA	5.64	127.14	120.09
1	A	296	VAL	N-CA-C	5.64	117.05	110.62
7	M	249	PHE	CA-C-N	5.64	128.88	120.31
7	M	249	PHE	C-N-CA	5.64	128.88	120.31
3	G	181	LYS	N-CA-C	5.63	117.10	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	228	THR	CA-C-N	5.63	129.37	120.47
2	D	228	THR	C-N-CA	5.63	129.37	120.47
9	V	77	ASN	CA-C-O	-5.63	114.33	120.81
9	W	42	VAL	O-C-N	-5.63	116.41	121.87
1	C	393	GLU	O-C-N	-5.63	117.44	121.83
8	N	184	ASP	CA-C-N	5.63	127.83	120.28
8	N	184	ASP	C-N-CA	5.63	127.83	120.28
8	N	20	LEU	CA-C-O	5.63	126.39	120.42
8	N	356	PRO	CA-C-N	5.63	127.82	120.28
8	N	356	PRO	C-N-CA	5.63	127.82	120.28
9	Q	68	PHE	CA-C-N	5.63	127.37	120.22
9	Q	68	PHE	C-N-CA	5.63	127.37	120.22
9	S	78	GLY	CA-C-N	5.63	131.36	122.36
9	S	78	GLY	C-N-CA	5.63	131.36	122.36
9	V	55	ALA	CA-C-N	5.63	128.28	120.29
9	V	55	ALA	C-N-CA	5.63	128.28	120.29
9	Z	37	ILE	CA-C-O	5.63	126.82	120.85
8	N	103	GLU	CA-C-O	-5.63	114.59	120.55
2	F	127	PRO	N-CA-C	-5.62	101.02	111.03
9	Y	29	GLY	O-C-N	5.62	127.64	122.19
1	C	380	ILE	CA-C-O	5.62	126.97	120.67
9	R	64	THR	CA-C-N	5.62	127.81	120.28
9	R	64	THR	C-N-CA	5.62	127.81	120.28
6	L	13	PHE	N-CA-C	-5.62	105.77	113.30
8	N	266	ALA	O-C-N	-5.62	115.65	122.22
9	U	2	GLU	N-CA-C	-5.62	100.40	108.60
1	A	201	PRO	CA-C-O	-5.62	114.89	122.08
1	A	436	ASP	CA-C-O	-5.62	112.89	118.34
1	B	135	LEU	N-CA-C	-5.62	98.84	110.80
8	N	345	PHE	N-CA-C	-5.62	101.60	109.69
1	B	538	GLU	O-C-N	5.61	128.15	122.09
8	N	282	ALA	CA-C-N	5.61	127.11	120.09
8	N	282	ALA	C-N-CA	5.61	127.11	120.09
1	A	183	MET	O-C-N	5.61	128.07	122.12
1	B	162	PRO	CA-C-N	5.61	128.73	120.82
1	B	162	PRO	C-N-CA	5.61	128.73	120.82
2	D	30	GLY	CA-C-N	5.61	129.75	120.94
2	D	30	GLY	C-N-CA	5.61	129.75	120.94
5	K	127	SER	N-CA-C	5.61	117.39	111.28
7	M	52	GLN	CA-C-N	5.61	128.35	121.06
7	M	52	GLN	C-N-CA	5.61	128.35	121.06
2	E	318	ASP	N-CA-C	-5.61	104.33	113.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	J	110	ALA	O-C-N	-5.61	116.03	122.09
2	F	234	THR	CA-C-O	-5.61	112.90	118.34
9	Y	73	ALA	CA-C-N	5.61	127.79	120.28
9	Y	73	ALA	C-N-CA	5.61	127.79	120.28
9	Z	35	ALA	CA-C-O	-5.61	114.94	120.82
1	A	54	ASP	O-C-N	5.60	129.99	122.82
1	B	223	THR	CA-C-O	5.60	127.79	120.11
8	N	424	TYR	CA-C-N	5.60	130.59	120.79
8	N	424	TYR	C-N-CA	5.60	130.59	120.79
1	C	326	SER	N-CA-C	5.60	117.46	110.91
9	Z	74	PHE	O-C-N	5.60	128.14	122.09
1	B	273	THR	CA-C-N	5.60	129.19	120.68
1	B	273	THR	C-N-CA	5.60	129.19	120.68
9	W	76	LEU	N-CA-C	5.60	118.32	111.82
2	E	387	ALA	CA-C-N	5.60	127.78	120.28
2	E	387	ALA	C-N-CA	5.60	127.78	120.28
7	M	130	ALA	CA-C-O	-5.59	115.46	121.56
8	N	148	LEU	CA-C-N	5.59	127.72	120.56
8	N	148	LEU	C-N-CA	5.59	127.72	120.56
1	B	448	PRO	CA-C-N	5.59	128.54	120.38
1	B	448	PRO	C-N-CA	5.59	128.54	120.38
7	M	18	THR	N-CA-C	-5.59	105.77	112.59
9	P	23	VAL	CA-C-N	5.59	126.31	119.99
9	P	23	VAL	C-N-CA	5.59	126.31	119.99
9	U	28	LEU	N-CA-C	-5.59	105.09	111.07
4	I	109	GLU	N-CA-C	5.59	117.37	111.28
8	N	129	ASP	N-CA-C	-5.59	106.46	113.72
9	X	73	ALA	CA-C-N	5.59	127.70	120.44
9	X	73	ALA	C-N-CA	5.59	127.70	120.44
1	C	476	LEU	N-CA-C	-5.58	99.42	108.52
9	Q	43	GLY	O-C-N	-5.58	116.78	122.19
1	A	130	ARG	CA-C-N	5.58	132.34	121.41
1	A	130	ARG	C-N-CA	5.58	132.34	121.41
1	C	428	TYR	O-C-N	5.58	129.99	122.96
2	E	171	ALA	O-C-N	5.58	129.86	122.95
7	M	170	LYS	CA-C-N	5.58	128.21	120.29
7	M	170	LYS	C-N-CA	5.58	128.21	120.29
9	P	23	VAL	CA-C-O	5.58	126.75	120.95
9	X	17	VAL	O-C-N	-5.58	116.10	121.90
1	C	523	TYR	CA-C-N	5.57	128.53	120.79
1	C	523	TYR	C-N-CA	5.57	128.53	120.79
2	F	76	VAL	N-CA-C	-5.57	97.75	109.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	154	SER	CA-C-O	5.57	127.28	120.60
2	F	31	ALA	CA-C-N	5.57	129.59	121.80
2	F	31	ALA	C-N-CA	5.57	129.59	121.80
2	F	136	SER	CA-C-N	5.57	132.17	121.54
2	F	136	SER	C-N-CA	5.57	132.17	121.54
8	N	527	LEU	N-CA-C	-5.57	106.84	113.97
9	O	52	PHE	CA-C-N	5.57	127.10	120.14
9	O	52	PHE	C-N-CA	5.57	127.10	120.14
9	Q	51	ASN	CA-C-N	5.57	128.77	120.31
9	Q	51	ASN	C-N-CA	5.57	128.77	120.31
1	C	575	LYS	O-C-N	-5.57	115.86	122.20
7	M	250	SER	N-CA-C	-5.57	105.36	111.82
9	Z	37	ILE	CA-C-N	5.56	126.12	120.00
9	Z	37	ILE	C-N-CA	5.56	126.12	120.00
6	L	9	THR	CA-C-N	5.56	128.19	120.29
6	L	9	THR	C-N-CA	5.56	128.19	120.29
9	S	2	GLU	N-CA-C	-5.56	100.85	109.24
1	C	462	ALA	O-C-N	5.55	128.53	122.20
2	E	133	THR	CA-C-N	5.55	129.15	121.26
2	E	133	THR	C-N-CA	5.55	129.15	121.26
9	W	54	THR	O-C-N	-5.55	115.82	122.15
8	N	109	ALA	CA-C-N	5.55	127.66	120.44
8	N	109	ALA	C-N-CA	5.55	127.66	120.44
9	T	30	THR	CA-C-N	5.55	126.14	119.98
9	T	30	THR	C-N-CA	5.55	126.14	119.98
1	B	134	VAL	N-CA-C	5.55	120.88	109.34
3	G	20	LEU	O-C-N	-5.55	114.99	122.43
8	N	42	SER	CA-C-N	5.55	125.38	119.28
8	N	42	SER	C-N-CA	5.55	125.38	119.28
8	N	96	GLY	CA-C-N	5.55	127.72	120.28
8	N	96	GLY	C-N-CA	5.55	127.72	120.28
9	X	12	ARG	CA-C-N	5.55	126.10	119.94
9	X	12	ARG	C-N-CA	5.55	126.10	119.94
1	C	381	VAL	CA-C-N	5.55	127.30	120.92
1	C	381	VAL	C-N-CA	5.55	127.30	120.92
1	B	192	ALA	CA-C-N	5.55	129.11	120.68
1	B	192	ALA	C-N-CA	5.55	129.11	120.68
2	F	113	PRO	O-C-N	5.55	129.89	123.01
4	J	103	ALA	N-CA-C	5.55	117.41	111.36
5	K	4	VAL	N-CA-C	-5.55	99.82	108.81
7	M	101	ARG	N-CA-C	5.55	117.41	111.36
7	M	270	LEU	N-CA-C	-5.55	105.15	111.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	18	GLY	N-CA-C	-5.54	107.99	115.36
7	M	88	LEU	CA-C-O	5.54	126.37	120.10
9	Y	25	LEU	O-C-N	-5.54	115.83	122.15
2	F	112	LEU	CA-C-O	-5.54	114.92	120.63
3	G	160	LYS	CA-C-N	5.54	130.51	122.36
3	G	160	LYS	C-N-CA	5.54	130.51	122.36
7	M	205	PHE	CA-C-O	-5.54	115.00	120.82
8	N	64	SER	CA-C-N	5.54	128.16	120.29
8	N	64	SER	C-N-CA	5.54	128.16	120.29
9	U	40	ALA	CA-C-O	5.54	126.36	120.10
9	W	37	ILE	CA-C-N	5.54	126.10	120.00
9	W	37	ILE	C-N-CA	5.54	126.10	120.00
1	C	337	ILE	O-C-N	5.54	127.34	121.91
2	E	146	ARG	N-CA-C	5.54	117.49	108.63
2	D	154	SER	N-CA-C	-5.53	102.01	110.14
2	F	14	ILE	N-CA-C	-5.53	101.05	108.35
8	N	287	GLU	CA-C-N	5.53	127.97	120.44
8	N	287	GLU	C-N-CA	5.53	127.97	120.44
1	B	552	ARG	N-CA-C	-5.53	105.15	113.89
2	D	392	ILE	CA-C-N	5.53	129.54	120.63
2	D	392	ILE	C-N-CA	5.53	129.54	120.63
1	B	444	ALA	CA-C-N	5.53	132.10	121.54
1	B	444	ALA	C-N-CA	5.53	132.10	121.54
3	G	18	ALA	O-C-N	5.53	127.77	122.07
8	N	118	LEU	CA-C-N	5.53	127.63	120.44
8	N	118	LEU	C-N-CA	5.53	127.63	120.44
9	R	3	GLU	N-CA-C	-5.53	98.23	107.80
2	E	443	LEU	CA-C-N	5.52	128.71	120.31
2	E	443	LEU	C-N-CA	5.52	128.71	120.31
9	S	63	GLU	CA-C-N	5.52	127.68	120.28
9	S	63	GLU	C-N-CA	5.52	127.68	120.28
9	V	75	ILE	CA-C-N	5.52	128.13	120.29
9	V	75	ILE	C-N-CA	5.52	128.13	120.29
1	A	455	SER	N-CA-C	5.52	117.30	111.28
1	B	254	GLY	O-C-N	5.52	128.59	123.73
3	G	131	LEU	N-CA-C	-5.52	99.10	108.26
2	D	324	PRO	CA-C-O	-5.52	111.16	119.55
2	F	398	ILE	CA-C-N	5.51	127.62	120.56
2	F	398	ILE	C-N-CA	5.51	127.62	120.56
3	H	68	VAL	CA-C-N	5.51	127.98	120.54
3	H	68	VAL	C-N-CA	5.51	127.98	120.54
5	K	40	PHE	CA-C-N	5.51	126.21	120.03

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	K	40	PHE	C-N-CA	5.51	126.21	120.03
9	O	57	ILE	O-C-N	5.51	127.51	121.83
2	E	82	LEU	N-CA-C	-5.51	99.06	110.80
9	R	48	ASP	CA-C-N	5.51	127.66	120.28
9	R	48	ASP	C-N-CA	5.51	127.66	120.28
7	M	103	LYS	CA-C-O	-5.51	115.04	120.82
4	J	110	ALA	CA-C-O	5.50	126.37	120.70
9	O	29	GLY	CA-C-N	5.50	128.10	120.29
9	O	29	GLY	C-N-CA	5.50	128.10	120.29
1	B	216	PHE	O-C-N	-5.50	115.65	121.04
1	B	531	LYS	N-CA-C	-5.50	106.42	113.23
1	C	195	VAL	CA-C-O	-5.50	115.27	121.75
2	E	194	MET	N-CA-C	-5.50	99.79	108.14
7	M	215	ASP	N-CA-C	-5.50	106.41	113.23
9	Z	63	GLU	CA-C-O	5.50	126.14	119.38
8	N	204	LEU	O-C-N	5.49	127.94	122.12
2	D	265	GLU	CA-C-N	5.49	127.90	120.65
2	D	265	GLU	C-N-CA	5.49	127.90	120.65
2	F	394	LYS	N-CA-C	-5.49	103.16	111.56
3	G	12	VAL	CA-C-O	-5.49	114.95	121.05
9	Q	12	ARG	O-C-N	-5.49	116.30	122.12
9	X	61	LEU	CA-C-N	5.49	125.20	119.82
9	X	61	LEU	C-N-CA	5.49	125.20	119.82
9	Y	26	ALA	CA-C-O	5.49	126.37	120.55
2	D	127	PRO	O-C-N	5.49	129.69	123.10
9	X	11	ASP	CA-C-N	5.49	128.08	120.29
9	X	11	ASP	C-N-CA	5.49	128.08	120.29
2	D	365	GLY	N-CA-C	-5.49	107.70	115.43
2	E	436	LEU	N-CA-C	-5.49	105.46	111.82
4	I	56	LYS	CA-C-N	5.49	128.65	120.31
4	I	56	LYS	C-N-CA	5.49	128.65	120.31
5	K	86	LEU	N-CA-C	-5.48	96.24	107.70
1	A	458	LEU	N-CA-C	-5.48	106.59	113.28
9	Y	37	ILE	N-CA-C	-5.48	105.19	110.72
1	A	166	TYR	CA-C-N	5.48	128.65	120.87
1	A	166	TYR	C-N-CA	5.48	128.65	120.87
2	D	240	THR	CA-C-N	5.48	127.94	120.77
2	D	240	THR	C-N-CA	5.48	127.94	120.77
2	D	73	VAL	N-CA-C	-5.47	100.60	108.48
2	E	244	TYR	CA-C-O	5.47	126.11	119.38
5	K	84	PRO	N-CA-C	5.47	117.38	110.70
7	M	142	VAL	O-C-N	-5.47	116.92	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	35	ILE	CA-C-N	5.47	129.69	122.30
2	D	35	ILE	C-N-CA	5.47	129.69	122.30
3	G	17	GLN	CA-C-N	5.47	127.55	120.44
3	G	17	GLN	C-N-CA	5.47	127.55	120.44
1	C	113	ARG	N-CA-C	-5.47	104.28	112.54
1	C	557	GLU	O-C-N	5.47	128.38	122.15
2	D	303	GLY	CA-C-N	5.47	129.01	120.75
2	D	303	GLY	C-N-CA	5.47	129.01	120.75
1	B	289	ALA	O-C-N	5.46	129.53	122.81
2	D	452	LYS	N-CA-C	-5.46	105.62	114.09
2	E	160	ALA	CA-C-N	5.46	131.98	121.54
2	E	160	ALA	C-N-CA	5.46	131.98	121.54
5	K	5	SER	CA-C-N	5.46	125.93	120.52
5	K	5	SER	C-N-CA	5.46	125.93	120.52
8	N	264	GLU	N-CA-C	5.46	117.04	111.14
9	T	58	PHE	O-C-N	5.46	127.91	122.12
1	B	447	TYR	CA-C-O	-5.46	113.89	119.08
1	C	487	GLY	CA-C-N	5.46	127.54	120.44
1	C	487	GLY	C-N-CA	5.46	127.54	120.44
8	N	611	LEU	CA-C-O	5.46	126.27	120.10
1	B	301	ALA	N-CA-C	-5.46	106.46	113.23
7	M	107	ARG	O-C-N	-5.46	115.44	121.66
1	B	259	GLY	CA-C-N	5.46	128.60	120.31
1	B	259	GLY	C-N-CA	5.46	128.60	120.31
3	H	61	GLU	CA-C-N	5.45	127.53	120.44
3	H	61	GLU	C-N-CA	5.45	127.53	120.44
8	N	510	ALA	N-CA-C	-5.45	105.25	111.14
1	B	147	ILE	CA-C-O	5.45	127.40	120.75
1	C	457	LEU	CA-C-N	5.45	128.34	120.38
1	C	457	LEU	C-N-CA	5.45	128.34	120.38
3	H	97	LYS	O-C-N	-5.45	114.25	121.34
1	A	478	ASP	N-CA-C	5.45	116.91	110.97
2	E	288	TYR	O-C-N	5.45	128.38	122.11
2	D	107	THR	N-CA-C	-5.45	98.70	109.10
2	F	399	ILE	CA-C-O	-5.45	115.01	121.05
8	N	113	ALA	N-CA-C	5.45	117.02	111.14
1	A	474	ASP	N-CA-C	-5.44	105.77	112.90
7	M	160	ASP	CA-C-N	5.44	128.36	120.79
7	M	160	ASP	C-N-CA	5.44	128.36	120.79
8	N	100	GLN	CA-C-N	5.44	127.58	120.28
8	N	100	GLN	C-N-CA	5.44	127.58	120.28
9	S	69	GLY	CA-C-N	5.44	128.02	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	S	69	GLY	C-N-CA	5.44	128.02	120.29
7	M	155	LEU	CA-C-N	5.44	128.58	120.31
7	M	155	LEU	C-N-CA	5.44	128.58	120.31
9	Z	26	ALA	CA-C-O	-5.44	114.65	120.42
3	H	89	GLU	CA-C-N	5.44	127.51	120.44
3	H	89	GLU	C-N-CA	5.44	127.51	120.44
8	N	43	PRO	CA-C-N	5.44	127.57	120.28
8	N	43	PRO	C-N-CA	5.44	127.57	120.28
9	T	65	LEU	O-C-N	-5.44	116.35	122.12
9	U	53	GLY	O-C-N	-5.44	116.97	122.19
1	C	50	GLN	N-CA-C	-5.44	100.31	109.07
1	A	54	ASP	CA-C-O	-5.44	115.57	121.44
1	A	76	GLY	CA-C-N	5.44	126.64	119.84
1	A	76	GLY	C-N-CA	5.44	126.64	119.84
8	N	443	HIS	N-CA-C	-5.44	97.79	109.81
9	V	39	ALA	CA-C-N	5.44	127.57	120.28
9	V	39	ALA	C-N-CA	5.44	127.57	120.28
3	G	116	PRO	N-CA-C	-5.44	102.60	111.68
5	K	49	ALA	CA-C-N	5.43	127.88	120.54
5	K	49	ALA	C-N-CA	5.43	127.88	120.54
9	R	1	ALA	CA-C-N	5.43	131.32	121.92
9	R	1	ALA	C-N-CA	5.43	131.32	121.92
1	A	274	ASP	N-CA-C	-5.43	101.94	110.14
1	A	497	GLN	N-CA-C	-5.43	96.77	107.69
2	E	184	GLU	N-CA-C	-5.43	105.87	112.88
2	E	356	PRO	N-CA-C	-5.43	106.63	114.18
3	G	45	ARG	CA-C-O	-5.43	115.11	120.82
9	T	33	ALA	CA-C-N	5.43	127.56	120.28
9	T	33	ALA	C-N-CA	5.43	127.56	120.28
9	Y	23	VAL	CA-C-N	5.43	125.98	120.00
9	Y	23	VAL	C-N-CA	5.43	125.98	120.00
8	N	94	ALA	CA-C-N	5.43	127.56	120.28
8	N	94	ALA	C-N-CA	5.43	127.56	120.28
2	D	104	PRO	CA-C-O	-5.43	112.69	120.56
2	E	381	GLN	N-CA-C	-5.42	102.63	111.04
6	L	42	TYR	N-CA-C	-5.42	99.84	109.06
8	N	192	ARG	CA-C-O	-5.42	114.80	120.55
1	A	53	GLU	N-CA-C	-5.42	100.93	109.50
1	B	104	ARG	N-CA-C	5.42	122.35	110.80
1	B	511	LYS	CA-C-N	5.42	127.81	120.38
1	B	511	LYS	C-N-CA	5.42	127.81	120.38
1	B	372	GLY	N-CA-C	-5.42	107.21	115.66

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	H	128	LEU	CA-C-N	5.42	125.09	119.56
3	H	128	LEU	C-N-CA	5.42	125.09	119.56
5	K	140	VAL	CA-C-N	5.42	130.62	121.14
5	K	140	VAL	C-N-CA	5.42	130.62	121.14
9	U	54	THR	CA-C-N	5.42	127.54	120.28
9	U	54	THR	C-N-CA	5.42	127.54	120.28
2	D	173	VAL	CA-C-O	-5.42	114.70	120.39
2	D	175	PRO	O-C-N	5.41	129.95	122.64
3	H	11	GLU	N-CA-C	-5.41	105.81	112.90
7	M	72	LEU	CA-C-O	-5.41	113.09	118.34
8	N	509	LEU	CA-C-N	5.41	127.80	120.44
8	N	509	LEU	C-N-CA	5.41	127.80	120.44
1	B	517	LYS	CA-C-N	5.41	128.28	120.38
1	B	517	LYS	C-N-CA	5.41	128.28	120.38
8	N	633	GLY	N-CA-C	-5.41	107.31	115.32
9	Z	15	ILE	CA-C-N	5.41	127.53	120.28
9	Z	15	ILE	C-N-CA	5.41	127.53	120.28
2	E	441	ALA	CA-C-N	5.41	127.97	120.29
2	E	441	ALA	C-N-CA	5.41	127.97	120.29
1	B	517	LYS	CA-C-O	-5.41	115.32	121.00
7	M	39	LEU	CA-C-N	5.41	127.53	120.28
7	M	39	LEU	C-N-CA	5.41	127.53	120.28
9	R	11	ASP	CA-C-O	5.41	126.28	120.55
1	C	367	LYS	N-CA-C	5.41	122.31	110.80
2	E	328	LEU	CA-C-N	5.40	128.30	120.79
2	E	328	LEU	C-N-CA	5.40	128.30	120.79
5	K	98	GLY	N-CA-C	-5.40	106.22	115.08
8	N	417	THR	CA-C-N	5.40	128.09	120.42
8	N	417	THR	C-N-CA	5.40	128.09	120.42
9	U	27	ALA	O-C-N	-5.40	115.99	122.15
2	D	259	ASP	CA-C-N	5.40	131.87	121.18
2	D	259	ASP	C-N-CA	5.40	131.87	121.18
9	V	16	ALA	CA-C-N	5.40	128.09	120.42
9	V	16	ALA	C-N-CA	5.40	128.09	120.42
9	Y	69	GLY	CA-C-N	5.40	127.52	120.28
9	Y	69	GLY	C-N-CA	5.40	127.52	120.28
1	B	526	ALA	N-CA-C	5.40	117.25	111.36
8	N	502	LEU	CA-C-N	5.40	126.89	120.14
8	N	502	LEU	C-N-CA	5.40	126.89	120.14
9	P	24	GLY	CA-C-O	5.40	126.61	121.05
5	K	35	LEU	CA-C-O	-5.40	114.00	120.10
9	R	37	ILE	CA-C-N	5.40	125.97	119.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	R	37	ILE	C-N-CA	5.40	125.97	119.98
2	E	65	GLY	O-C-N	5.39	129.71	122.70
8	N	209	LEU	CA-C-N	5.39	127.51	120.28
8	N	209	LEU	C-N-CA	5.39	127.51	120.28
9	U	73	ALA	CA-C-N	5.39	127.51	120.28
9	U	73	ALA	C-N-CA	5.39	127.51	120.28
3	G	39	LYS	N-CA-C	5.39	116.84	111.07
1	A	482	LEU	CA-C-N	5.39	129.76	121.19
1	A	482	LEU	C-N-CA	5.39	129.76	121.19
2	E	430	ARG	N-CA-C	-5.39	100.88	109.07
5	K	184	GLU	N-CA-C	5.39	116.96	111.14
9	R	45	ILE	CA-C-N	5.39	127.45	120.44
9	R	45	ILE	C-N-CA	5.39	127.45	120.44
9	T	56	LEU	N-CA-C	5.39	116.84	111.07
5	K	183	LEU	CA-C-N	5.39	127.77	120.44
5	K	183	LEU	C-N-CA	5.39	127.77	120.44
1	A	200	ASP	CA-C-N	5.39	125.36	120.03
1	A	200	ASP	C-N-CA	5.39	125.36	120.03
1	B	14	VAL	O-C-N	-5.39	117.06	123.04
5	K	76	VAL	CA-C-N	5.39	127.76	120.65
5	K	76	VAL	C-N-CA	5.39	127.76	120.65
8	N	50	ARG	O-C-N	5.39	127.62	122.07
9	Y	75	ILE	O-C-N	5.39	127.09	121.87
9	P	39	ALA	CA-C-N	5.38	127.94	120.29
9	P	39	ALA	C-N-CA	5.38	127.94	120.29
1	B	40	ILE	CA-C-N	5.38	131.82	121.54
1	B	40	ILE	C-N-CA	5.38	131.82	121.54
9	P	17	VAL	CA-C-N	5.38	125.95	119.98
9	P	17	VAL	C-N-CA	5.38	125.95	119.98
1	C	484	ILE	CA-C-N	5.38	127.44	120.44
1	C	484	ILE	C-N-CA	5.38	127.44	120.44
2	D	94	ASN	CA-C-N	5.38	131.96	121.41
2	D	94	ASN	C-N-CA	5.38	131.96	121.41
3	H	89	GLU	N-CA-C	5.38	117.14	111.28
3	H	133	ALA	O-C-N	5.38	127.90	122.09
7	M	27	GLU	O-C-N	5.38	127.83	122.12
2	D	47	VAL	N-CA-C	-5.38	100.58	108.11
3	G	38	ALA	CA-C-N	5.38	127.43	120.44
3	G	38	ALA	C-N-CA	5.38	127.43	120.44
1	A	216	PHE	CA-C-O	-5.38	113.96	120.74
1	B	354	LEU	O-C-N	5.38	127.82	122.12
1	C	95	ARG	O-C-N	5.38	127.82	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	Q	45	ILE	CA-C-O	5.38	126.55	120.85
2	E	350	PRO	CA-C-N	5.38	125.85	120.04
2	E	350	PRO	C-N-CA	5.38	125.85	120.04
9	Y	53	GLY	N-CA-C	-5.38	106.28	112.73
1	A	564	GLU	CA-C-O	5.37	126.12	120.42
2	F	158	LEU	CA-C-O	-5.37	115.12	120.66
2	F	232	ILE	CA-C-O	5.37	123.63	118.90
7	M	26	GLN	CA-C-O	-5.37	115.18	120.82
1	A	309	ILE	CA-C-O	-5.37	114.96	120.71
2	E	140	VAL	CA-C-N	5.37	129.81	120.68
2	E	140	VAL	C-N-CA	5.37	129.81	120.68
3	G	89	GLU	N-CA-C	-5.37	105.42	111.28
1	B	223	THR	N-CA-C	-5.37	98.89	108.13
9	S	22	ALA	CA-C-O	-5.37	115.19	120.82
5	K	200	LYS	N-CA-C	-5.37	105.08	111.03
9	U	52	PHE	CA-C-N	5.37	125.94	119.98
9	U	52	PHE	C-N-CA	5.37	125.94	119.98
5	K	198	LYS	CA-C-N	5.36	125.93	119.98
5	K	198	LYS	C-N-CA	5.36	125.93	119.98
5	K	99	SER	CA-C-N	5.36	131.18	122.07
5	K	99	SER	C-N-CA	5.36	131.18	122.07
2	F	60	PHE	N-CA-C	-5.36	106.93	112.93
1	C	575	LYS	CA-C-N	5.36	127.40	120.44
1	C	575	LYS	C-N-CA	5.36	127.40	120.44
9	Q	13	GLY	CA-C-N	5.35	127.89	120.29
9	Q	13	GLY	C-N-CA	5.35	127.89	120.29
1	A	310	ALA	O-C-N	5.35	127.79	122.12
2	D	180	GLU	CA-C-N	5.35	126.28	120.44
2	D	180	GLU	C-N-CA	5.35	126.28	120.44
2	D	305	LYS	CA-C-O	5.35	128.63	121.78
5	K	57	ALA	O-C-N	5.35	127.87	122.09
9	Q	25	LEU	CA-C-O	-5.35	114.75	120.42
4	J	32	GLN	N-CA-C	-5.35	107.30	113.88
2	F	442	LEU	CA-C-N	5.35	130.50	121.14
2	F	442	LEU	C-N-CA	5.35	130.50	121.14
9	W	34	GLN	CA-C-O	-5.35	114.88	120.55
9	Q	22	ALA	CA-C-N	5.35	128.01	120.42
9	Q	22	ALA	C-N-CA	5.35	128.01	120.42
9	V	68	PHE	CA-C-N	5.35	125.92	119.98
9	V	68	PHE	C-N-CA	5.35	125.92	119.98
2	E	334	GLU	CA-C-O	-5.35	114.55	120.38
1	C	96	GLU	CA-C-O	-5.34	112.68	119.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	H	85	ARG	N-CA-C	5.34	117.11	111.28
1	A	94	ILE	CA-C-O	-5.34	115.51	121.17
1	A	570	ILE	O-C-N	5.34	128.89	121.84
2	F	161	ASN	CA-C-N	5.34	128.21	120.79
2	F	161	ASN	C-N-CA	5.34	128.21	120.79
2	E	130	PHE	O-C-N	5.34	129.36	123.33
9	W	13	GLY	N-CA-C	5.34	120.53	113.37
1	A	222	GLY	CA-C-O	-5.34	115.97	122.75
2	F	267	LEU	CA-C-N	5.34	128.82	120.82
2	F	267	LEU	C-N-CA	5.34	128.82	120.82
1	C	300	GLU	N-CA-C	-5.33	105.13	111.69
2	E	192	ALA	N-CA-C	-5.33	99.41	108.26
4	I	99	VAL	CA-C-O	-5.33	114.32	119.92
9	S	18	GLY	N-CA-C	5.33	119.60	112.77
8	N	348	THR	CA-C-O	-5.33	112.86	120.16
9	U	51	ASN	N-CA-C	-5.33	106.36	112.92
1	C	286	VAL	N-CA-C	5.33	115.54	110.42
1	C	539	ILE	CA-C-N	5.33	127.37	120.44
1	C	539	ILE	C-N-CA	5.33	127.37	120.44
3	H	44	ALA	CA-C-N	5.33	127.36	120.44
3	H	44	ALA	C-N-CA	5.33	127.36	120.44
1	B	168	VAL	CA-C-O	5.33	126.49	120.95
9	S	76	LEU	N-CA-C	-5.32	105.56	111.36
1	A	138	VAL	O-C-N	-5.32	115.03	121.10
1	B	352	PRO	N-CA-C	-5.32	108.59	114.92
2	D	114	ILE	N-CA-C	-5.32	106.24	111.88
6	L	57	ARG	N-CA-C	5.32	117.83	111.71
9	W	59	LEU	CA-C-N	5.32	127.94	120.28
9	W	59	LEU	C-N-CA	5.32	127.94	120.28
1	A	492	GLU	CA-C-O	5.32	126.37	120.63
2	E	33	VAL	N-CA-C	5.32	116.02	108.42
3	H	177	ALA	CA-C-O	-5.32	112.91	120.51
2	D	149	LYS	N-CA-C	-5.31	98.72	108.02
9	S	35	ALA	CA-C-N	5.31	127.67	120.44
9	S	35	ALA	C-N-CA	5.31	127.67	120.44
1	A	99	GLY	CA-C-N	5.31	128.02	120.53
1	A	99	GLY	C-N-CA	5.31	128.02	120.53
2	D	143	THR	O-C-N	-5.31	115.53	122.59
3	G	58	ARG	N-CA-C	5.31	116.75	111.07
2	E	220	PHE	N-CA-C	-5.31	100.38	108.76
2	E	268	ARG	CA-C-N	5.31	127.83	120.29
2	E	268	ARG	C-N-CA	5.31	127.83	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	N	465	LEU	O-C-N	-5.31	115.74	122.27
2	D	108	PRO	CA-C-O	-5.30	115.44	121.96
2	D	337	ILE	CA-C-O	5.30	124.94	120.22
2	E	418	PHE	N-CA-C	-5.30	105.17	111.69
2	F	164	ALA	CA-C-N	5.30	127.82	120.29
2	F	164	ALA	C-N-CA	5.30	127.82	120.29
2	F	380	ASP	N-CA-C	5.30	117.06	111.28
3	H	79	VAL	CA-C-N	5.30	127.39	120.28
3	H	79	VAL	C-N-CA	5.30	127.39	120.28
4	J	113	LEU	O-C-N	-5.30	116.50	122.12
9	U	6	ALA	O-C-N	5.30	128.99	122.20
1	A	256	GLY	CA-C-N	5.30	128.30	120.82
1	A	256	GLY	C-N-CA	5.30	128.30	120.82
8	N	572	GLY	CA-C-N	5.30	127.95	120.42
8	N	572	GLY	C-N-CA	5.30	127.95	120.42
1	A	442	ASN	N-CA-C	-5.30	104.87	112.13
1	C	543	PRO	CA-C-N	5.30	129.44	120.64
1	C	543	PRO	C-N-CA	5.30	129.44	120.64
2	E	104	PRO	CA-C-N	5.30	126.47	119.84
2	E	104	PRO	C-N-CA	5.30	126.47	119.84
4	I	64	ALA	CA-C-N	5.30	127.65	120.44
4	I	64	ALA	C-N-CA	5.30	127.65	120.44
9	Q	50	SER	N-CA-C	-5.30	105.09	112.30
1	B	82	GLY	CA-C-N	5.30	129.21	122.37
1	B	82	GLY	C-N-CA	5.30	129.21	122.37
1	C	144	THR	N-CA-C	-5.30	99.77	108.41
9	U	15	ILE	O-C-N	-5.30	116.73	121.87
5	K	61	TYR	N-CA-C	5.30	120.06	111.37
1	A	2	ILE	N-CA-C	-5.29	100.26	107.99
8	N	396	LEU	CA-C-N	5.29	130.53	122.11
8	N	396	LEU	C-N-CA	5.29	130.53	122.11
1	A	22	ALA	CA-C-N	5.29	132.71	122.07
1	A	22	ALA	C-N-CA	5.29	132.71	122.07
3	H	31	LYS	CA-C-N	5.29	127.64	120.44
3	H	31	LYS	C-N-CA	5.29	127.64	120.44
3	H	83	VAL	O-C-N	5.29	127.00	121.87
7	M	167	LEU	CA-C-N	5.29	127.37	120.28
7	M	167	LEU	C-N-CA	5.29	127.37	120.28
9	P	32	VAL	CA-C-O	-5.29	115.56	121.17
1	C	116	LYS	N-CA-C	-5.29	101.25	109.24
2	F	329	THR	O-C-N	5.29	127.73	122.12
3	H	43	GLN	O-C-N	-5.29	116.12	122.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	M	246	GLY	N-CA-C	-5.29	108.02	115.32
8	N	214	ARG	CA-C-N	5.29	127.37	120.28
8	N	214	ARG	C-N-CA	5.29	127.37	120.28
9	U	56	LEU	CA-C-N	5.29	127.93	120.42
9	U	56	LEU	C-N-CA	5.29	127.93	120.42
1	B	254	GLY	CA-C-O	-5.29	115.55	121.31
2	F	183	LYS	CA-C-N	5.29	128.35	120.31
2	F	183	LYS	C-N-CA	5.29	128.35	120.31
2	F	280	ARG	CA-C-N	5.29	129.69	122.34
2	F	280	ARG	C-N-CA	5.29	129.69	122.34
6	L	80	ALA	CA-C-N	5.29	128.61	121.05
6	L	80	ALA	C-N-CA	5.29	128.61	121.05
7	M	304	ALA	CA-C-O	-5.29	114.94	120.55
2	E	375	HIS	CA-C-N	5.29	128.14	120.79
2	E	375	HIS	C-N-CA	5.29	128.14	120.79
1	A	376	GLY	O-C-N	-5.29	119.88	123.95
2	F	346	LYS	CA-C-O	5.29	124.63	118.97
1	B	118	ALA	N-CA-C	5.28	117.15	110.33
2	D	197	THR	CA-C-N	5.28	131.63	121.54
2	D	197	THR	C-N-CA	5.28	131.63	121.54
6	L	2	ALA	CA-C-N	5.28	130.34	123.06
6	L	2	ALA	C-N-CA	5.28	130.34	123.06
9	U	55	ALA	CA-C-N	5.28	127.35	120.28
9	U	55	ALA	C-N-CA	5.28	127.35	120.28
2	D	435	SER	CA-C-N	5.28	127.35	120.28
2	D	435	SER	C-N-CA	5.28	127.35	120.28
2	E	172	THR	CA-C-O	5.28	126.64	120.20
5	K	208	GLU	N-CA-C	-5.28	105.99	112.90
9	W	75	ILE	O-C-N	5.28	127.08	121.91
2	D	163	ILE	CA-C-N	5.27	127.88	120.28
2	D	163	ILE	C-N-CA	5.27	127.88	120.28
7	M	120	ARG	CA-C-N	5.27	127.61	120.38
7	M	120	ARG	C-N-CA	5.27	127.61	120.38
2	D	263	TYR	N-CA-C	-5.27	105.18	111.03
5	K	156	LYS	CA-C-N	5.27	127.61	120.65
5	K	156	LYS	C-N-CA	5.27	127.61	120.65
1	B	46	THR	N-CA-C	-5.27	101.40	109.41
1	B	57	GLY	CA-C-N	5.27	128.25	120.82
1	B	57	GLY	C-N-CA	5.27	128.25	120.82
2	F	401	GLU	N-CA-C	-5.27	106.63	114.64
7	M	259	LYS	N-CA-C	5.27	116.71	111.07
2	E	99	PRO	N-CA-C	5.27	123.32	112.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	H	53	TYR	CA-C-N	5.27	127.34	120.28
3	H	53	TYR	C-N-CA	5.27	127.34	120.28
8	N	423	ILE	CA-C-O	-5.27	115.27	120.85
2	F	242	ALA	N-CA-C	-5.26	103.51	111.56
9	T	12	ARG	CA-C-N	5.26	125.82	119.98
9	T	12	ARG	C-N-CA	5.26	125.82	119.98
1	B	230	PHE	O-C-N	-5.26	116.23	122.65
1	B	285	THR	CA-C-N	5.26	129.71	123.19
1	B	285	THR	C-N-CA	5.26	129.71	123.19
2	D	172	THR	CA-C-N	5.26	130.03	123.14
2	D	172	THR	C-N-CA	5.26	130.03	123.14
2	E	22	GLU	CA-C-N	5.26	131.59	121.54
2	E	22	GLU	C-N-CA	5.26	131.59	121.54
2	E	54	TYR	CA-C-O	5.26	126.75	120.28
5	K	58	LYS	CA-C-N	5.26	131.59	121.54
5	K	58	LYS	C-N-CA	5.26	131.59	121.54
1	C	338	SER	CA-C-N	5.26	127.28	120.44
1	C	338	SER	C-N-CA	5.26	127.28	120.44
6	L	28	GLU	N-CA-C	-5.25	104.83	113.50
7	M	285	LEU	CA-C-N	5.25	127.66	120.46
7	M	285	LEU	C-N-CA	5.25	127.66	120.46
1	B	250	VAL	N-CA-C	-5.25	100.64	108.46
1	B	559	PHE	CA-C-O	-5.25	113.80	118.63
2	E	337	ILE	O-C-N	-5.25	117.48	123.10
3	H	88	ARG	CA-C-N	5.25	127.31	120.28
3	H	88	ARG	C-N-CA	5.25	127.31	120.28
1	B	193	ARG	N-CA-C	5.25	117.32	110.08
1	C	382	GLY	O-C-N	-5.25	118.48	122.99
2	F	20	PHE	N-CA-C	-5.25	99.78	108.75
2	F	63	THR	CA-C-O	5.25	126.84	120.81
8	N	204	LEU	CA-C-N	5.25	125.81	119.98
8	N	204	LEU	C-N-CA	5.25	125.81	119.98
1	A	383	ALA	CA-C-N	5.25	129.58	121.71
1	A	383	ALA	C-N-CA	5.25	129.58	121.71
2	F	151	PRO	O-C-N	5.25	129.74	123.13
3	G	37	LYS	CA-C-N	5.25	127.62	120.54
3	G	37	LYS	C-N-CA	5.25	127.62	120.54
9	W	75	ILE	CA-C-N	5.25	128.28	120.31
9	W	75	ILE	C-N-CA	5.25	128.28	120.31
2	D	321	ARG	CA-C-N	5.25	127.57	120.44
2	D	321	ARG	C-N-CA	5.25	127.57	120.44
2	E	98	LYS	CA-C-N	5.25	126.40	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	98	LYS	C-N-CA	5.25	126.40	119.84
3	G	106	LYS	CA-C-N	5.25	127.26	120.44
3	G	106	LYS	C-N-CA	5.25	127.26	120.44
3	H	123	ALA	N-CA-C	-5.25	101.33	109.14
8	N	275	LEU	N-CA-C	-5.25	100.85	109.40
1	C	163	ALA	N-CA-C	5.24	117.06	110.24
1	C	326	SER	CA-C-N	5.24	131.56	121.18
1	C	326	SER	C-N-CA	5.24	131.56	121.18
2	D	346	LYS	CA-C-N	5.24	129.74	122.29
2	D	346	LYS	C-N-CA	5.24	129.74	122.29
5	K	96	VAL	CA-C-O	-5.24	116.79	121.09
1	C	562	TYR	CA-C-N	5.24	127.25	120.44
1	C	562	TYR	C-N-CA	5.24	127.25	120.44
2	F	185	GLU	CA-C-N	5.24	126.39	119.84
2	F	185	GLU	C-N-CA	5.24	126.39	119.84
4	I	59	LEU	CA-C-O	-5.24	112.81	119.31
4	J	107	LEU	N-CA-C	-5.24	106.57	113.12
1	A	213	ASP	CA-C-O	5.24	126.16	120.55
2	F	422	PHE	O-C-N	-5.24	116.64	122.09
5	K	29	LYS	N-CA-C	-5.24	105.48	111.14
9	U	35	ALA	CA-C-O	-5.24	115.00	120.55
9	Q	31	GLY	CA-C-O	-5.24	115.34	121.00
9	X	74	PHE	N-CA-C	5.24	116.67	111.07
8	N	137	ILE	CA-C-N	5.24	125.69	120.14
8	N	137	ILE	C-N-CA	5.24	125.69	120.14
9	P	63	GLU	CA-C-N	5.24	127.30	120.28
9	P	63	GLU	C-N-CA	5.24	127.30	120.28
1	C	164	GLY	CA-C-O	-5.24	116.62	121.96
9	P	23	VAL	O-C-N	-5.24	116.79	121.87
9	Y	3	GLU	CA-C-O	5.24	126.18	120.58
9	W	42	VAL	CA-C-O	5.23	126.39	120.95
9	R	35	ALA	CA-C-N	5.23	127.55	120.44
9	R	35	ALA	C-N-CA	5.23	127.55	120.44
1	A	474	ASP	CA-C-O	5.23	125.72	119.60
2	D	87	GLU	CA-C-N	5.23	127.55	120.44
2	D	87	GLU	C-N-CA	5.23	127.55	120.44
9	T	17	VAL	CA-C-O	5.23	126.71	121.17
1	B	103	THR	N-CA-C	-5.23	98.87	108.02
2	D	197	THR	N-CA-C	-5.23	102.42	109.95
2	F	394	LYS	CA-C-N	5.23	128.01	120.38
2	F	394	LYS	C-N-CA	5.23	128.01	120.38
6	L	33	LEU	CA-C-N	5.22	127.55	120.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	L	33	LEU	C-N-CA	5.22	127.55	120.65
8	N	177	VAL	O-C-N	-5.22	117.62	123.26
9	Z	3	GLU	CA-C-O	5.22	126.71	120.28
1	A	454	ILE	CA-C-O	5.22	123.68	119.29
1	B	340	ARG	CA-C-O	-5.22	113.04	120.51
2	D	33	VAL	CA-C-O	-5.22	115.59	121.75
2	E	331	TYR	CA-C-N	5.22	128.91	120.82
2	E	331	TYR	C-N-CA	5.22	128.91	120.82
2	E	348	ILE	N-CA-C	-5.22	100.55	108.17
9	R	14	LEU	O-C-N	-5.22	116.20	122.15
8	N	370	LEU	O-C-N	5.22	127.65	122.12
9	X	37	ILE	CA-C-N	5.22	125.74	120.00
9	X	37	ILE	C-N-CA	5.22	125.74	120.00
1	C	360	ALA	N-CA-C	5.22	116.97	111.28
3	G	45	ARG	CA-C-N	5.22	128.04	120.79
3	G	45	ARG	C-N-CA	5.22	128.04	120.79
8	N	348	THR	CA-C-N	5.22	124.88	119.56
8	N	348	THR	C-N-CA	5.22	124.88	119.56
1	A	11	GLY	CA-C-O	-5.22	114.06	121.52
1	C	345	PRO	O-C-N	5.22	129.30	123.04
2	E	401	GLU	N-CA-C	-5.22	105.79	113.61
3	H	126	GLU	N-CA-C	-5.22	106.60	113.17
8	N	454	ILE	N-CA-C	-5.22	106.34	111.77
9	T	36	ARG	CA-C-N	5.22	127.83	120.42
9	T	36	ARG	C-N-CA	5.22	127.83	120.42
1	B	324	ALA	N-CA-C	5.21	117.59	108.52
1	C	53	GLU	CA-C-N	5.21	129.13	120.94
1	C	53	GLU	C-N-CA	5.21	129.13	120.94
1	C	159	GLU	CA-C-N	5.21	131.36	121.97
1	C	159	GLU	C-N-CA	5.21	131.36	121.97
8	N	239	ARG	CA-C-N	5.21	129.54	120.68
8	N	239	ARG	C-N-CA	5.21	129.54	120.68
3	G	124	ASN	CA-C-O	5.21	126.58	120.69
5	K	147	LEU	CA-C-N	5.21	127.69	120.29
5	K	147	LEU	C-N-CA	5.21	127.69	120.29
3	H	133	ALA	N-CA-C	-5.21	105.51	111.14
9	Z	28	LEU	N-CA-C	-5.21	105.29	110.97
1	C	66	SER	CA-C-N	5.21	127.69	120.29
1	C	66	SER	C-N-CA	5.21	127.69	120.29
2	D	319	ASP	CA-C-N	5.21	128.50	121.05
2	D	319	ASP	C-N-CA	5.21	128.50	121.05
9	R	15	ILE	N-CA-C	5.21	115.94	110.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	266	ALA	O-C-N	5.21	127.64	122.12
8	N	577	LEU	N-CA-C	-5.21	106.92	113.28
9	P	55	ALA	CA-C-N	5.21	127.69	120.29
9	P	55	ALA	C-N-CA	5.21	127.69	120.29
9	T	7	SER	CA-C-N	5.21	131.62	121.41
9	T	7	SER	C-N-CA	5.21	131.62	121.41
9	X	12	ARG	N-CA-C	5.21	117.04	111.36
1	A	48	PHE	CA-C-N	5.21	129.61	121.85
1	A	48	PHE	C-N-CA	5.21	129.61	121.85
2	E	264	CYS	CA-C-N	5.21	127.52	120.65
2	E	264	CYS	C-N-CA	5.21	127.52	120.65
8	N	627	GLU	CA-C-N	5.21	127.68	120.29
8	N	627	GLU	C-N-CA	5.21	127.68	120.29
1	A	248	ASP	O-C-N	-5.21	116.41	122.03
2	F	188	ALA	N-CA-C	-5.21	101.00	108.60
1	C	160	VAL	O-C-N	5.20	129.07	122.57
5	K	180	GLN	CA-C-N	5.20	127.51	120.38
5	K	180	GLN	C-N-CA	5.20	127.51	120.38
2	F	46	GLN	N-CA-C	-5.20	100.70	109.07
4	J	22	LEU	N-CA-C	-5.20	101.46	109.52
9	T	61	LEU	CA-C-O	-5.20	113.30	118.34
2	F	15	SER	N-CA-C	-5.20	99.73	110.80
9	O	45	ILE	N-CA-C	5.20	117.55	111.05
9	Y	60	LEU	O-C-N	-5.20	116.14	122.22
1	C	258	ARG	CA-C-O	-5.20	116.15	121.87
9	R	21	LEU	CA-C-N	5.20	127.19	120.44
9	R	21	LEU	C-N-CA	5.20	127.19	120.44
8	N	286	VAL	CA-C-N	5.19	128.21	120.31
8	N	286	VAL	C-N-CA	5.19	128.21	120.31
9	P	12	ARG	CA-C-N	5.19	125.85	120.03
9	P	12	ARG	C-N-CA	5.19	125.85	120.03
6	L	28	GLU	CA-C-N	5.19	129.93	122.40
6	L	28	GLU	C-N-CA	5.19	129.93	122.40
9	U	43	GLY	O-C-N	5.19	127.22	122.19
1	B	554	VAL	N-CA-C	-5.19	101.13	108.65
2	D	185	GLU	N-CA-C	-5.19	100.46	108.55
2	D	299	GLY	N-CA-C	-5.19	100.88	113.18
9	Z	60	LEU	CA-C-N	5.19	126.57	120.09
9	Z	60	LEU	C-N-CA	5.19	126.57	120.09
1	C	323	MET	N-CA-C	-5.19	99.15	108.48
1	C	484	ILE	O-C-N	-5.19	116.09	122.57
7	M	200	ASN	CA-C-N	5.18	127.18	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	M	200	ASN	C-N-CA	5.18	127.18	120.44
1	A	45	ASP	CA-C-O	5.18	127.92	120.51
2	F	212	GLY	O-C-N	5.18	128.55	122.38
6	L	59	VAL	O-C-N	5.18	126.90	121.87
3	H	139	GLY	N-CA-C	5.18	125.46	113.18
1	C	250	VAL	N-CA-C	-5.18	100.86	108.11
5	K	157	THR	CA-C-N	5.18	127.22	120.28
5	K	157	THR	C-N-CA	5.18	127.22	120.28
7	M	212	LEU	CA-C-N	5.17	127.69	120.65
7	M	212	LEU	C-N-CA	5.17	127.69	120.65
9	S	65	LEU	CA-C-N	5.17	127.18	120.56
9	S	65	LEU	C-N-CA	5.17	127.18	120.56
2	D	50	VAL	N-CA-C	-5.17	102.83	109.30
6	L	17	GLY	N-CA-C	-5.17	108.53	114.69
8	N	152	ALA	CA-C-N	5.17	127.21	120.28
8	N	152	ALA	C-N-CA	5.17	127.21	120.28
9	P	7	SER	CA-C-O	-5.17	114.13	119.51
1	B	156	ARG	O-C-N	5.17	128.96	122.86
8	N	338	ASN	CA-C-N	-5.17	116.18	122.64
8	N	338	ASN	C-N-CA	-5.17	116.18	122.64
8	N	448	PRO	CA-C-O	-5.17	115.84	121.27
9	T	66	VAL	CA-C-N	5.17	127.54	120.46
9	T	66	VAL	C-N-CA	5.17	127.54	120.46
9	U	37	ILE	O-C-N	5.17	127.15	121.83
2	E	415	ALA	CA-C-N	5.17	127.63	120.29
2	E	415	ALA	C-N-CA	5.17	127.63	120.29
1	B	376	GLY	N-CA-C	-5.17	103.14	110.63
2	E	209	GLU	CA-C-N	5.16	131.40	121.54
2	E	209	GLU	C-N-CA	5.16	131.40	121.54
9	O	17	VAL	CA-C-N	5.16	125.57	119.94
9	O	17	VAL	C-N-CA	5.16	125.57	119.94
9	P	52	PHE	CA-C-N	5.16	126.78	120.22
9	P	52	PHE	C-N-CA	5.16	126.78	120.22
7	M	158	THR	O-C-N	5.16	128.94	123.42
2	D	29	TYR	N-CA-C	-5.16	102.64	110.28
2	F	77	GLU	CA-C-O	5.16	126.90	121.33
8	N	326	TRP	N-CA-C	-5.16	105.82	112.68
1	A	271	GLU	CA-C-O	5.16	124.72	119.05
2	F	409	ARG	O-C-N	5.16	127.59	122.12
7	M	262	GLU	CA-C-O	-5.16	114.95	120.42
8	N	350	VAL	CA-C-N	5.16	124.46	120.33
8	N	350	VAL	C-N-CA	5.16	124.46	120.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	O	20	GLY	O-C-N	5.16	127.71	122.24
9	T	58	PHE	CA-C-O	-5.16	115.08	120.55
1	A	517	LYS	N-CA-C	-5.16	107.12	113.41
8	N	244	THR	CA-C-O	5.16	126.02	120.55
9	R	55	ALA	CA-C-N	5.16	127.61	120.29
9	R	55	ALA	C-N-CA	5.16	127.61	120.29
1	C	279	GLY	N-CA-C	-5.15	101.83	112.34
2	F	157	GLY	CA-C-O	5.15	124.53	118.96
5	K	191	THR	O-C-N	-5.15	116.76	122.07
6	L	57	ARG	CA-C-N	5.15	127.45	120.44
6	L	57	ARG	C-N-CA	5.15	127.45	120.44
7	M	132	ASP	N-CA-C	-5.15	98.51	108.45
8	N	59	ALA	O-C-N	5.15	128.03	122.15
9	Q	42	VAL	CA-C-N	5.15	125.67	120.00
9	Q	42	VAL	C-N-CA	5.15	125.67	120.00
2	F	387	ALA	CA-C-N	5.15	131.38	121.54
2	F	387	ALA	C-N-CA	5.15	131.38	121.54
1	B	520	LEU	O-C-N	5.15	128.40	122.17
5	K	88	GLY	N-CA-C	-5.15	106.14	113.86
7	M	109	PHE	N-CA-C	-5.15	105.67	111.28
7	M	26	GLN	O-C-N	5.14	127.37	122.07
8	N	4	LEU	O-C-N	5.14	129.57	123.24
9	P	32	VAL	CA-C-N	5.14	127.44	120.44
9	P	32	VAL	C-N-CA	5.14	127.44	120.44
1	A	60	VAL	N-CA-C	-5.14	102.36	109.46
1	C	336	GLU	O-C-N	5.14	129.32	122.43
3	H	152	VAL	CA-C-O	5.14	125.34	120.25
4	I	103	ALA	CA-C-O	5.14	125.87	120.42
5	K	132	ARG	CA-C-N	5.14	128.86	121.71
5	K	132	ARG	C-N-CA	5.14	128.86	121.71
1	A	212	LEU	N-CA-C	5.14	119.85	111.37
1	B	294	MET	CA-C-N	5.14	126.26	119.84
1	B	294	MET	C-N-CA	5.14	126.26	119.84
1	B	535	SER	CA-C-O	-5.14	115.66	121.72
1	C	356	ALA	N-CA-C	5.14	119.85	111.37
4	I	63	GLU	CA-C-N	5.14	127.48	120.54
4	I	63	GLU	C-N-CA	5.14	127.48	120.54
2	D	112	LEU	CA-C-O	-5.14	115.75	120.94
5	K	96	VAL	CA-C-N	5.14	128.15	120.90
5	K	96	VAL	C-N-CA	5.14	128.15	120.90
9	R	23	VAL	CA-C-N	5.14	125.65	120.00
9	R	23	VAL	C-N-CA	5.14	125.65	120.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	66	SER	O-C-N	-5.14	116.96	123.17
1	A	313	PHE	CA-C-N	5.13	127.16	120.28
1	A	313	PHE	C-N-CA	5.13	127.16	120.28
1	C	546	GLU	CA-C-O	5.13	125.69	119.38
2	D	14	ILE	N-CA-C	-5.13	100.81	108.46
2	D	452	LYS	CA-C-O	-5.13	112.99	118.79
9	Y	28	LEU	N-CA-C	-5.13	105.58	111.07
1	A	397	GLN	CA-C-N	5.13	127.42	120.44
1	A	397	GLN	C-N-CA	5.13	127.42	120.44
2	D	76	VAL	N-CA-C	-5.13	106.80	111.67
8	N	93	HIS	CA-C-N	5.13	127.16	120.28
8	N	93	HIS	C-N-CA	5.13	127.16	120.28
8	N	115	LEU	CA-C-N	5.13	126.50	120.09
8	N	115	LEU	C-N-CA	5.13	126.50	120.09
7	M	284	GLY	N-CA-C	5.13	118.85	112.64
8	N	123	ALA	CA-C-N	5.13	127.16	120.28
8	N	123	ALA	C-N-CA	5.13	127.16	120.28
1	A	59	LYS	O-C-N	5.13	128.56	122.20
1	A	99	GLY	N-CA-C	-5.13	103.50	112.53
1	C	138	VAL	N-CA-C	-5.13	97.80	108.88
1	A	413	LEU	CA-C-N	5.13	127.66	120.28
1	A	413	LEU	C-N-CA	5.13	127.66	120.28
1	B	526	ALA	CA-C-O	5.13	125.85	120.42
2	E	427	GLN	CA-C-N	5.13	127.99	120.71
2	E	427	GLN	C-N-CA	5.13	127.99	120.71
8	N	596	LEU	O-C-N	-5.12	116.15	122.25
8	N	536	LEU	CA-C-N	5.12	131.59	122.06
8	N	536	LEU	C-N-CA	5.12	131.59	122.06
2	E	155	GLY	O-C-N	-5.12	115.55	123.03
2	F	205	ILE	N-CA-C	5.12	115.74	110.36
8	N	29	GLU	CA-C-O	-5.12	114.77	120.66
8	N	177	VAL	N-CA-C	-5.12	100.94	108.11
1	C	386	PRO	N-CA-C	-5.12	104.45	110.70
2	E	263	TYR	O-C-N	-5.12	116.36	122.20
1	A	242	ALA	CA-C-N	5.12	127.56	120.29
1	A	242	ALA	C-N-CA	5.12	127.56	120.29
2	E	180	GLU	N-CA-C	-5.12	101.35	109.59
2	E	274	ARG	CA-C-N	5.12	130.20	122.68
2	E	274	ARG	C-N-CA	5.12	130.20	122.68
5	K	108	PHE	CA-C-O	5.12	125.22	120.56
2	E	255	VAL	N-CA-C	-5.12	101.21	108.58
8	N	602	GLY	CA-C-N	5.12	127.69	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	N	602	GLY	C-N-CA	5.12	127.69	120.42
1	A	17	LYS	N-CA-C	-5.11	101.64	109.41
2	D	405	THR	CA-C-N	5.11	130.42	121.52
2	D	405	THR	C-N-CA	5.11	130.42	121.52
1	B	336	GLU	O-C-N	-5.11	116.78	122.09
7	M	65	GLN	CA-C-O	-5.11	115.00	120.42
1	B	457	LEU	CA-C-O	5.11	126.69	121.07
1	B	15	ILE	O-C-N	-5.11	117.38	123.05
2	E	65	GLY	CA-C-O	-5.10	111.69	120.57
9	T	3	GLU	N-CA-C	-5.10	105.41	111.69
1	A	157	VAL	CA-C-O	-5.10	115.03	120.39
5	K	75	VAL	CA-C-O	5.10	126.26	120.95
1	C	149	VAL	CA-C-N	5.10	125.63	120.38
1	C	149	VAL	C-N-CA	5.10	125.63	120.38
2	F	65	GLY	O-C-N	-5.10	116.07	122.70
2	F	300	VAL	N-CA-C	-5.10	101.24	108.58
7	M	103	LYS	CA-C-N	5.10	127.11	120.28
7	M	103	LYS	C-N-CA	5.10	127.11	120.28
8	N	532	PHE	N-CA-C	-5.10	105.81	112.23
9	V	7	SER	N-CA-C	-5.10	104.78	112.99
1	C	317	GLY	CA-C-N	5.09	131.41	121.63
1	C	317	GLY	C-N-CA	5.09	131.41	121.63
1	C	345	PRO	CA-C-N	5.09	129.51	121.56
1	C	345	PRO	C-N-CA	5.09	129.51	121.56
1	B	42	LEU	CA-C-O	-5.09	115.80	121.81
1	C	576	ALA	CA-C-N	5.09	130.87	121.70
1	C	576	ALA	C-N-CA	5.09	130.87	121.70
1	A	559	PHE	CA-C-N	5.09	125.77	120.12
1	A	559	PHE	C-N-CA	5.09	125.77	120.12
2	D	310	GLN	CA-C-O	-5.09	115.07	120.92
9	W	38	GLY	CA-C-N	5.09	127.10	120.28
9	W	38	GLY	C-N-CA	5.09	127.10	120.28
1	B	36	VAL	N-CA-C	-5.08	102.13	108.84
2	E	189	VAL	N-CA-C	-5.08	101.05	108.17
2	F	63	THR	CA-C-N	5.08	130.56	121.15
2	F	63	THR	C-N-CA	5.08	130.56	121.15
1	B	277	THR	N-CA-C	-5.08	106.24	112.90
2	F	440	TRP	N-CA-C	5.08	118.74	112.54
3	G	78	GLU	CA-C-N	5.08	127.06	120.56
3	G	78	GLU	C-N-CA	5.08	127.06	120.56
2	E	274	ARG	N-CA-C	-5.08	104.71	111.87
9	Z	75	ILE	O-C-N	5.08	127.18	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	154	SER	CA-C-N	5.08	128.14	122.55
2	D	154	SER	C-N-CA	5.08	128.14	122.55
2	F	283	TYR	O-C-N	-5.08	118.46	121.71
8	N	528	MET	CA-C-O	-5.08	113.80	119.79
9	R	64	THR	O-C-N	5.08	127.50	122.12
9	Y	74	PHE	CA-C-N	5.08	127.42	120.46
9	Y	74	PHE	C-N-CA	5.08	127.42	120.46
1	C	263	THR	N-CA-C	-5.08	106.93	113.23
1	C	559	PHE	CA-C-N	5.08	126.19	119.84
1	C	559	PHE	C-N-CA	5.08	126.19	119.84
1	C	164	GLY	CA-C-N	-5.08	112.96	121.39
1	C	164	GLY	C-N-CA	-5.08	112.96	121.39
3	G	87	VAL	N-CA-C	5.08	115.80	110.62
7	M	137	ALA	CA-C-O	-5.08	115.17	120.55
9	U	63	GLU	O-C-N	-5.07	116.28	122.22
9	U	68	PHE	O-C-N	5.07	127.93	122.15
9	U	70	LEU	N-CA-C	-5.07	105.83	111.36
1	B	559	PHE	CA-C-N	5.07	126.18	119.84
1	B	559	PHE	C-N-CA	5.07	126.18	119.84
9	S	75	ILE	CA-C-N	5.07	127.49	120.29
9	S	75	ILE	C-N-CA	5.07	127.49	120.29
2	D	311	ILE	CA-C-N	5.07	124.83	119.76
2	D	311	ILE	C-N-CA	5.07	124.83	119.76
2	E	353	ASP	N-CA-C	-5.07	103.31	110.31
1	C	9	ILE	N-CA-C	-5.07	100.59	107.99
2	F	295	TYR	CA-C-O	-5.07	115.05	120.42
4	J	113	LEU	N-CA-C	5.07	116.81	111.28
5	K	134	ALA	CA-C-N	5.07	129.25	121.19
5	K	134	ALA	C-N-CA	5.07	129.25	121.19
9	V	67	ILE	O-C-N	5.07	126.79	121.87
1	C	74	GLU	CA-C-O	5.07	126.00	120.58
1	C	120	THR	N-CA-C	-5.07	97.53	107.91
2	D	11	ILE	N-CA-C	-5.07	100.45	107.80
2	F	416	ASP	CA-C-O	-5.07	115.16	120.63
8	N	481	LEU	CA-C-N	5.07	127.07	120.28
8	N	481	LEU	C-N-CA	5.07	127.07	120.28
9	S	27	ALA	O-C-N	5.07	127.49	122.12
9	Z	6	ALA	N-CA-C	-5.07	106.35	112.88
2	F	283	TYR	N-CA-C	-5.06	100.65	108.55
9	Q	4	ALA	CA-C-O	5.06	126.65	121.23
1	C	568	LYS	CA-C-N	5.06	127.57	120.28
1	C	568	LYS	C-N-CA	5.06	127.57	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	306	GLY	O-C-N	5.06	129.55	122.82
3	H	95	PRO	CA-C-N	5.06	130.00	121.14
3	H	95	PRO	C-N-CA	5.06	130.00	121.14
7	M	180	ALA	CA-C-N	5.06	127.57	120.28
7	M	180	ALA	C-N-CA	5.06	127.57	120.28
8	N	355	PHE	CA-C-O	-5.06	113.93	118.79
1	C	542	LEU	CA-C-O	-5.06	115.94	120.19
5	K	27	LEU	CA-C-N	5.06	127.77	120.38
5	K	27	LEU	C-N-CA	5.06	127.77	120.38
1	A	122	MET	N-CA-C	-5.06	106.02	113.61
1	B	507	CYS	CA-C-O	5.06	127.65	121.68
2	F	304	LYS	CA-C-N	5.06	127.32	120.44
2	F	304	LYS	C-N-CA	5.06	127.32	120.44
3	H	147	ALA	N-CA-C	-5.06	106.41	112.58
8	N	246	GLN	CA-C-N	5.06	127.48	120.29
8	N	246	GLN	C-N-CA	5.06	127.48	120.29
3	G	127	ASP	N-CA-C	-5.06	105.48	113.02
3	G	54	ARG	N-CA-C	5.06	116.79	111.28
2	F	183	LYS	N-CA-C	-5.05	107.06	113.18
8	N	581	VAL	CA-C-O	-5.05	114.70	120.26
2	E	207	GLU	CA-C-N	5.05	127.01	120.44
2	E	207	GLU	C-N-CA	5.05	127.01	120.44
2	E	412	LEU	N-CA-C	-5.05	104.84	111.96
4	J	69	LEU	CA-C-N	5.05	127.30	120.38
4	J	69	LEU	C-N-CA	5.05	127.30	120.38
6	L	96	LYS	CA-C-N	5.05	132.82	121.76
6	L	96	LYS	C-N-CA	5.05	132.82	121.76
2	D	376	LYS	O-C-N	-5.05	116.31	122.22
3	H	153	ARG	N-CA-C	-5.05	103.05	110.52
4	I	41	LYS	CA-C-N	5.05	127.81	120.79
4	I	41	LYS	C-N-CA	5.05	127.81	120.79
9	P	3	GLU	N-CA-C	-5.05	106.14	113.21
2	D	415	ALA	N-CA-C	-5.05	107.12	113.28
4	J	110	ALA	CA-C-N	5.05	127.37	120.46
4	J	110	ALA	C-N-CA	5.05	127.37	120.46
6	L	50	ALA	N-CA-C	-5.04	106.90	113.16
8	N	560	SER	N-CA-C	5.04	116.78	111.28
1	A	207	THR	N-CA-C	-5.04	106.98	114.64
1	C	294	MET	CA-C-N	5.04	126.14	119.84
1	C	294	MET	C-N-CA	5.04	126.14	119.84
2	E	117	LEU	CA-C-O	-5.04	114.88	119.62
2	E	168	ALA	CA-C-N	5.04	127.45	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	168	ALA	C-N-CA	5.04	127.45	120.29
2	F	115	THR	N-CA-C	-5.04	105.49	111.69
9	X	59	LEU	CA-C-N	5.04	127.54	120.28
9	X	59	LEU	C-N-CA	5.04	127.54	120.28
9	Y	67	ILE	O-C-N	-5.04	116.98	121.87
9	Z	47	GLU	N-CA-C	5.04	116.58	111.14
1	B	252	TYR	N-CA-C	-5.04	101.19	109.40
1	C	555	SER	O-C-N	-5.04	116.74	122.89
2	E	260	MET	CA-C-N	5.04	127.28	120.38
2	E	260	MET	C-N-CA	5.04	127.28	120.38
9	W	60	LEU	CA-C-N	5.04	126.39	120.09
9	W	60	LEU	C-N-CA	5.04	126.39	120.09
6	L	77	LEU	CA-C-N	5.04	130.50	122.74
6	L	77	LEU	C-N-CA	5.04	130.50	122.74
7	M	267	CYS	CA-C-N	5.04	126.91	120.56
7	M	267	CYS	C-N-CA	5.04	126.91	120.56
3	G	11	GLU	N-CA-C	-5.04	106.30	112.90
7	M	201	LEU	CA-C-N	5.03	127.44	120.29
7	M	201	LEU	C-N-CA	5.03	127.44	120.29
9	Z	14	LEU	N-CA-C	-5.03	105.87	111.36
1	B	419	PHE	CA-C-O	-5.03	115.03	119.86
1	A	94	ILE	N-CA-C	-5.03	105.59	110.42
1	C	483	VAL	CA-C-N	5.03	131.02	121.97
1	C	483	VAL	C-N-CA	5.03	131.02	121.97
7	M	106	GLY	CA-C-N	5.03	128.91	120.86
7	M	106	GLY	C-N-CA	5.03	128.91	120.86
1	A	250	VAL	N-CA-C	-5.03	100.33	107.77
2	D	381	GLN	CA-C-O	-5.03	115.54	121.07
6	L	19	GLU	N-CA-C	-5.03	99.48	108.13
9	Y	67	ILE	N-CA-C	-5.03	105.49	110.62
2	E	335	GLY	O-C-N	5.03	128.23	123.05
2	D	241	VAL	CA-C-N	5.02	127.26	120.38
2	D	241	VAL	C-N-CA	5.02	127.26	120.38
5	K	95	ASN	O-C-N	-5.02	117.50	123.22
2	F	281	ARG	CA-C-N	5.02	128.39	121.26
2	F	281	ARG	C-N-CA	5.02	128.39	121.26
7	M	134	ALA	CA-C-N	5.02	125.55	119.98
7	M	134	ALA	C-N-CA	5.02	125.55	119.98
8	N	500	GLY	O-C-N	-5.02	117.37	122.19
9	U	57	ILE	CA-C-N	5.02	127.00	120.28
9	U	57	ILE	C-N-CA	5.02	127.00	120.28
9	X	77	ASN	CA-C-O	-5.02	115.04	120.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	Y	46	ALA	CA-C-N	5.02	127.45	120.63
9	Y	46	ALA	C-N-CA	5.02	127.45	120.63
1	B	174	VAL	N-CA-C	-5.02	100.62	107.75
1	C	320	VAL	N-CA-C	-5.02	101.25	108.48
2	D	321	ARG	N-CA-C	-5.02	107.00	112.72
2	F	448	GLN	N-CA-C	5.02	117.83	110.30
3	G	180	SER	CA-C-N	5.02	126.96	120.44
3	G	180	SER	C-N-CA	5.02	126.96	120.44
9	O	13	GLY	N-CA-C	5.01	118.75	112.73
3	H	145	GLU	CA-C-N	5.01	124.79	119.28
3	H	145	GLU	C-N-CA	5.01	124.79	119.28
1	A	329	ARG	O-C-N	5.01	129.26	122.59
1	B	387	PRO	N-CA-C	-5.01	107.50	114.27
2	F	422	PHE	N-CA-C	5.01	117.12	111.11
1	B	290	ASN	N-CA-C	-5.01	101.70	109.72
2	F	236	ARG	CA-C-N	5.01	127.30	120.54
2	F	236	ARG	C-N-CA	5.01	127.30	120.54
3	H	171	MET	CA-C-O	5.01	126.08	120.82
9	X	61	LEU	N-CA-C	5.01	120.28	113.16
9	X	62	PRO	CA-C-N	5.01	127.49	120.28
9	X	62	PRO	C-N-CA	5.01	127.49	120.28
1	C	59	LYS	CA-C-N	5.01	127.21	120.50
1	C	59	LYS	C-N-CA	5.01	127.21	120.50
4	I	53	ALA	CA-C-N	5.01	126.99	120.28
4	I	53	ALA	C-N-CA	5.01	126.99	120.28
8	N	234	LEU	CA-C-N	5.01	126.95	120.44
8	N	234	LEU	C-N-CA	5.01	126.95	120.44
9	Y	24	GLY	O-C-N	5.01	127.05	122.19
2	F	263	TYR	CA-C-N	5.00	127.69	120.38
2	F	263	TYR	C-N-CA	5.00	127.69	120.38
1	A	80	LEU	CA-C-N	5.00	131.10	121.54
1	A	80	LEU	C-N-CA	5.00	131.10	121.54
2	F	295	TYR	N-CA-C	5.00	116.81	111.36
8	N	235	ALA	N-CA-C	-5.00	105.72	111.07
9	O	59	LEU	N-CA-C	5.00	116.73	111.28
4	J	92	ALA	CA-C-O	5.00	126.25	120.90
6	L	10	ALA	N-CA-C	-5.00	105.91	111.36
7	M	253	SER	CA-C-O	-5.00	115.69	121.19

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
7	M	3	ASP	Peptide

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	2307	0	654	1	0
1	B	2303	0	650	0	0
1	C	2307	0	654	0	0
2	D	1827	0	510	0	0
2	E	1827	0	510	0	0
2	F	1827	0	510	0	0
3	G	734	0	191	0	0
3	H	734	0	191	0	0
4	I	399	0	100	0	0
4	J	399	0	100	0	0
5	K	839	0	230	0	0
6	L	399	0	119	0	0
7	M	1279	0	357	0	0
8	N	2474	0	691	0	0
9	O	319	0	109	0	0
9	P	319	0	109	0	0
9	Q	319	0	109	0	0
9	R	319	0	109	0	0
9	S	319	0	109	0	0
9	T	319	0	109	0	0
9	U	319	0	109	0	0
9	V	319	0	109	0	0
9	W	319	0	109	0	0
9	X	319	0	109	0	0
9	Y	319	0	109	0	0
9	Z	319	0	109	0	0
All	All	23483	0	6775	1	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 (1) 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)
1:A:80:LEU:C	1:A:82:GLY:H	2.29	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	A	575/577 (100%)	504 (88%)	56 (10%)	15 (3%)	4	25
1	B	574/577 (100%)	477 (83%)	73 (13%)	24 (4%)	2	17
1	C	575/577 (100%)	499 (87%)	56 (10%)	20 (4%)	3	20
2	D	455/457 (100%)	370 (81%)	65 (14%)	20 (4%)	2	17
2	E	455/457 (100%)	369 (81%)	66 (14%)	20 (4%)	2	17
2	F	455/457 (100%)	377 (83%)	57 (12%)	21 (5%)	2	16
3	G	180/186 (97%)	162 (90%)	10 (6%)	8 (4%)	2	17
3	H	180/186 (97%)	167 (93%)	9 (5%)	4 (2%)	5	29
4	I	98/105 (93%)	93 (95%)	4 (4%)	1 (1%)	12	48
4	J	98/105 (93%)	94 (96%)	3 (3%)	1 (1%)	12	48
5	K	208/210 (99%)	172 (83%)	25 (12%)	11 (5%)	1	14
6	L	98/100 (98%)	78 (80%)	15 (15%)	5 (5%)	1	15
7	M	318/323 (98%)	307 (96%)	7 (2%)	4 (1%)	9	42
8	N	615/652 (94%)	559 (91%)	43 (7%)	13 (2%)	5	30
9	O	78/99 (79%)	76 (97%)	2 (3%)	0	100	100
9	P	78/99 (79%)	74 (95%)	2 (3%)	2 (3%)	4	25
9	Q	78/99 (79%)	72 (92%)	4 (5%)	2 (3%)	4	25
9	R	78/99 (79%)	73 (94%)	4 (5%)	1 (1%)	9	42
9	S	78/99 (79%)	74 (95%)	4 (5%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	T	78/99 (79%)	75 (96%)	2 (3%)	1 (1%)	9	42
9	U	78/99 (79%)	75 (96%)	3 (4%)	0	100	100
9	V	78/99 (79%)	72 (92%)	6 (8%)	0	100	100
9	W	78/99 (79%)	74 (95%)	1 (1%)	3 (4%)	2	19
9	X	78/99 (79%)	74 (95%)	1 (1%)	3 (4%)	2	19
9	Y	78/99 (79%)	74 (95%)	3 (4%)	1 (1%)	9	42
9	Z	78/99 (79%)	74 (95%)	3 (4%)	1 (1%)	9	42
All	All	5820/6157 (94%)	5115 (88%)	524 (9%)	181 (3%)	5	22

All (181) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	B	134	VAL
1	B	258	ARG
1	B	303	ILE
1	B	305	VAL
1	B	466	GLU
1	C	227	PRO
1	C	480	GLU
2	D	259	ASP
2	D	419	GLU
2	E	62	GLU
2	E	175	PRO
2	F	25	LYS
2	F	139	ASP
2	F	176	ASP
2	F	298	ALA
5	K	117	VAL
7	M	4	ASP
8	N	169	ALA
8	N	365	ASP
8	N	642	TYR
9	Q	3	GLU
1	A	85	ASP
1	A	210	ARG
1	A	233	GLY
1	A	512	ALA
1	B	210	ARG
1	B	292	SER
1	B	443	VAL

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Mol	Chain	Res	Type
1	B	445	GLU
1	C	64	VAL
1	C	70	PRO
1	C	302	SER
1	C	403	VAL
1	C	417	ARG
1	C	471	VAL
2	D	17	PRO
2	D	176	ASP
2	D	239	LEU
2	D	332	ILE
2	D	425	GLN
2	E	82	LEU
2	E	97	GLY
2	E	210	ARG
2	E	330	GLY
2	F	15	SER
2	F	140	VAL
2	F	192	ALA
2	F	327	ASP
3	G	14	ALA
3	G	150	LEU
3	G	157	ALA
3	H	14	ALA
5	K	168	VAL
6	L	64	ARG
8	N	544	ILE
9	R	4	ALA
9	T	6	ALA
9	Z	4	ALA
1	A	177	ASP
1	A	494	PHE
1	B	104	ARG
1	B	219	ALA
1	B	296	VAL
1	B	302	SER
1	B	340	ARG
1	C	233	GLY
1	C	295	PRO
1	C	432	THR
2	D	23	ASN
2	D	101	ASP

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Mol	Chain	Res	Type
2	E	17	PRO
2	E	23	ASN
2	E	77	GLU
2	E	164	ALA
2	E	293	THR
2	E	425	GLN
2	F	88	MET
2	F	128	GLU
2	F	351	PRO
2	F	415	ALA
3	G	114	ALA
3	G	156	GLY
3	G	160	LYS
3	H	162	GLN
3	H	178	MET
5	K	69	ALA
5	K	70	PHE
5	K	82	GLY
5	K	110	ASP
6	L	23	ALA
7	M	185	GLN
8	N	367	GLY
8	N	449	ILE
8	N	525	SER
8	N	637	GLU
9	Q	6	ALA
9	W	8	GLY
9	X	4	ALA
9	Y	8	GLY
1	A	90	PRO
1	B	432	THR
1	B	499	ALA
1	C	36	VAL
1	C	56	SER
1	C	57	GLY
1	C	81	ASN
2	D	137	THR
2	D	281	ARG
2	D	435	SER
2	E	89	LEU
2	E	223	LYS
2	E	358	LEU

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Mol	Chain	Res	Type
2	F	137	THR
2	F	214	LEU
2	F	389	GLY
3	H	114	ALA
6	L	52	LEU
7	M	224	PHE
8	N	181	LYS
8	N	436	GLY
8	N	640	ARG
9	P	5	ALA
9	X	79	ARG
1	A	36	VAL
1	A	45	ASP
1	A	263	THR
1	A	284	ARG
1	B	56	SER
1	B	245	SER
1	C	243	LYS
1	C	287	LEU
2	D	62	GLU
2	D	216	ARG
2	D	403	ALA
2	E	13	TYR
2	E	326	PRO
2	F	259	ASP
2	F	402	ASP
2	F	421	PHE
2	F	437	GLN
3	G	138	ARG
5	K	99	SER
5	K	134	ALA
5	K	180	GLN
6	L	55	PRO
6	L	79	GLU
8	N	366	ILE
9	P	79	ARG
9	W	5	ALA
9	W	9	GLY
9	X	50	SER
1	A	139	PRO
1	B	179	THR
2	D	13	TYR

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Mol	Chain	Res	Type
2	D	223	LYS
2	E	237	MET
2	E	259	ASP
2	F	436	LEU
3	G	5	GLU
4	J	81	THR
5	K	174	ALA
7	M	184	ASP
8	N	168	TYR
1	A	168	VAL
1	A	275	PRO
2	E	99	PRO
1	B	40	ILE
1	B	388	GLY
1	B	389	GLY
2	D	326	PRO
2	D	351	PRO
1	C	280	PRO
1	C	288	ILE
4	I	119	LEU
5	K	179	ILE
1	A	265	VAL
1	B	275	PRO
1	C	139	PRO
2	D	235	PRO
1	B	344	MET
2	F	390	VAL

5.3.2 Protein sidechains [i](#)

There are no protein residues with a non-rotameric sidechain to report in this entry.

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

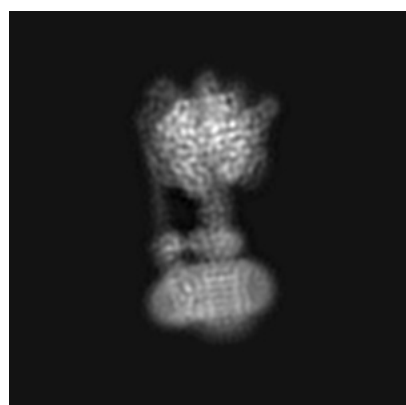
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-8016. These allow visual inspection of the internal detail of the map and identification of artifacts.

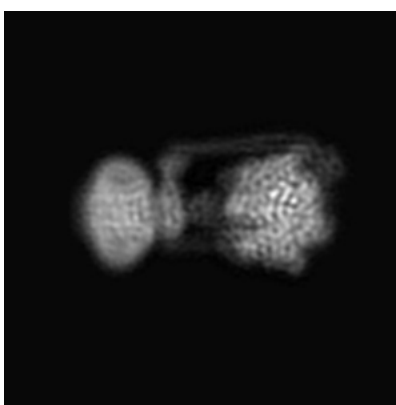
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

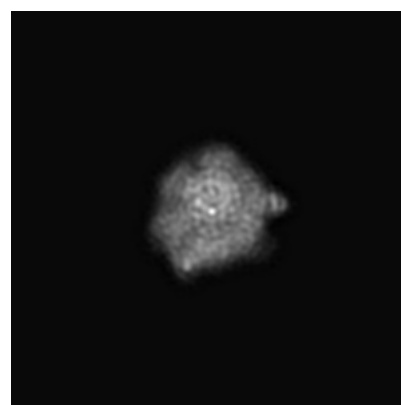
6.1.1 Primary map



X



Y



Z

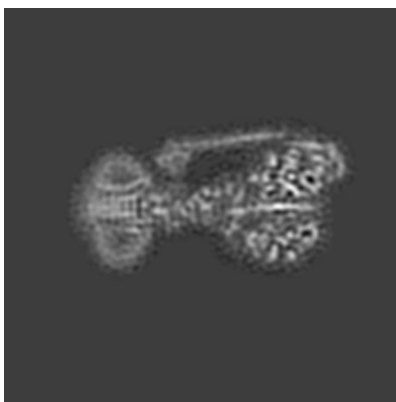
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

6.2.1 Primary map



X Index: 128



Y Index: 128



Z Index: 128

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

6.3 Largest variance slices [i](#)

6.3.1 Primary map



X Index: 128



Y Index: 130

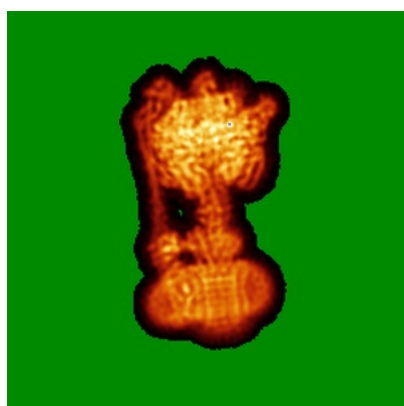


Z Index: 178

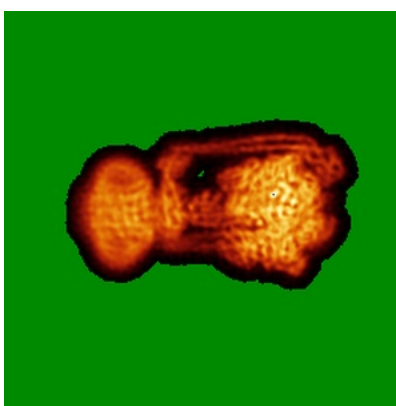
The images above show the largest variance slices of the map in three orthogonal directions.

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

6.4.1 Primary map



X



Y



Z

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

6.5 Orthogonal surface views [i](#)

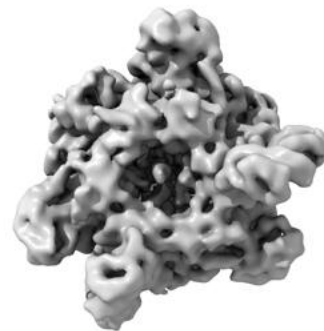
6.5.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.0382. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

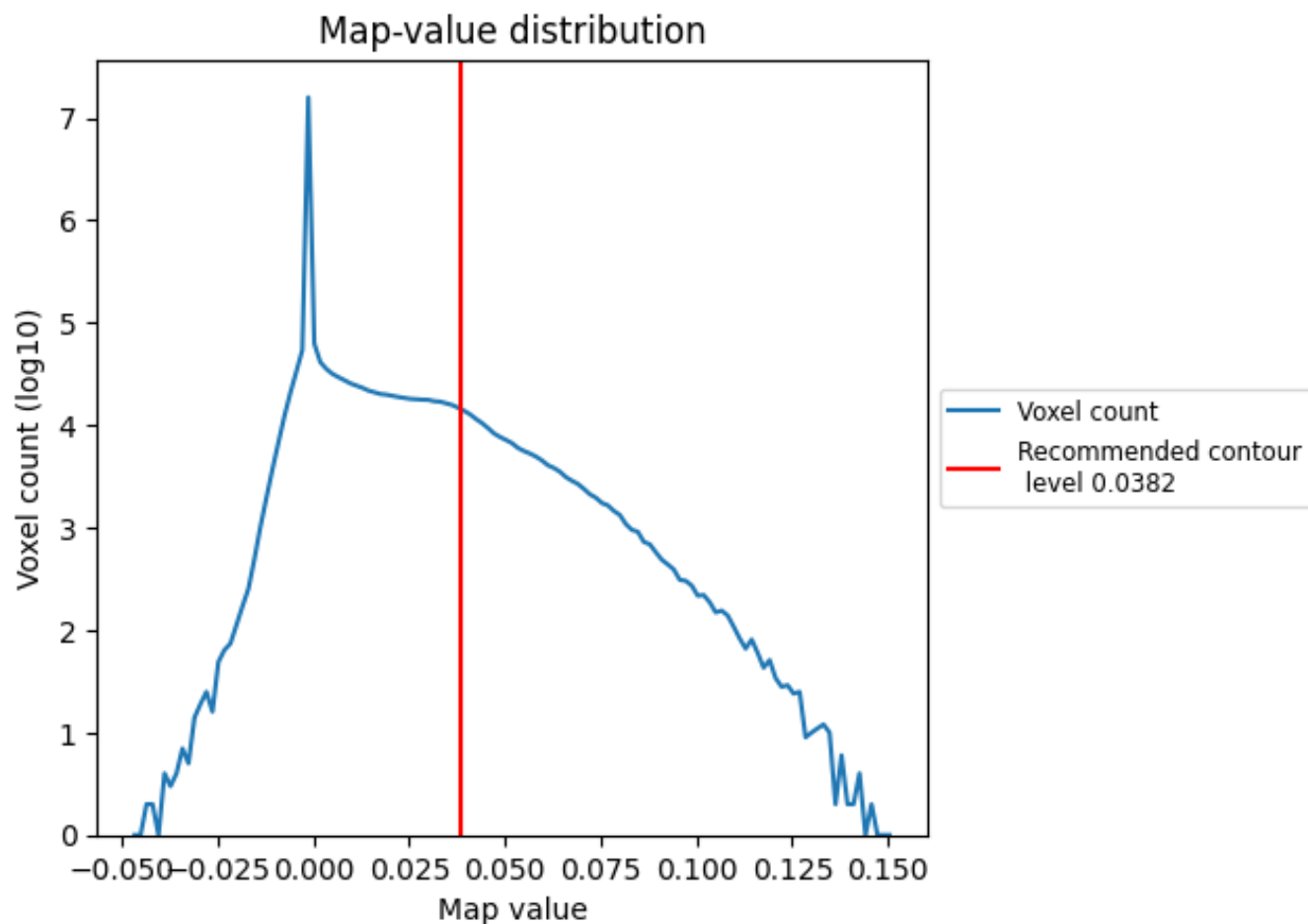
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

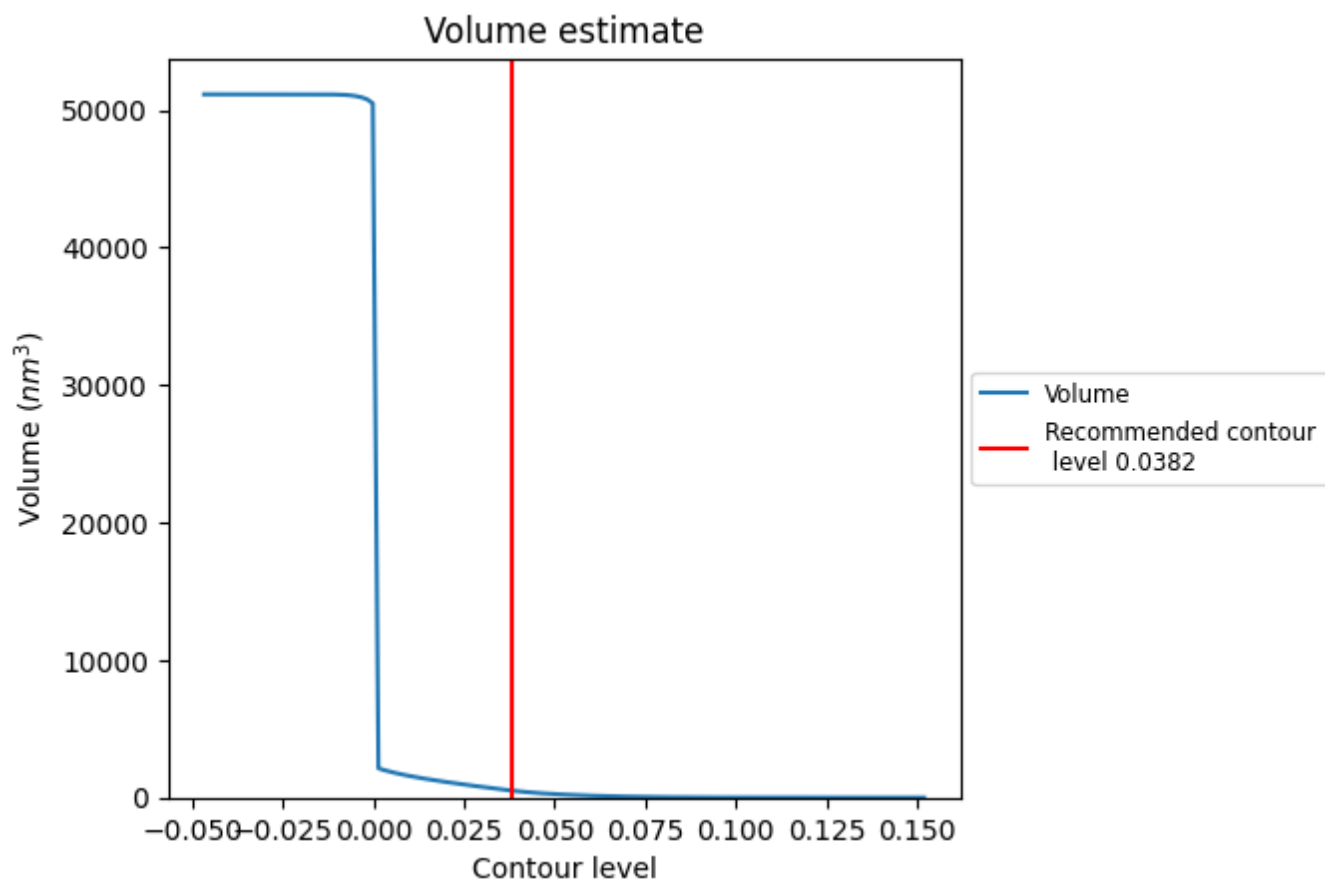
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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

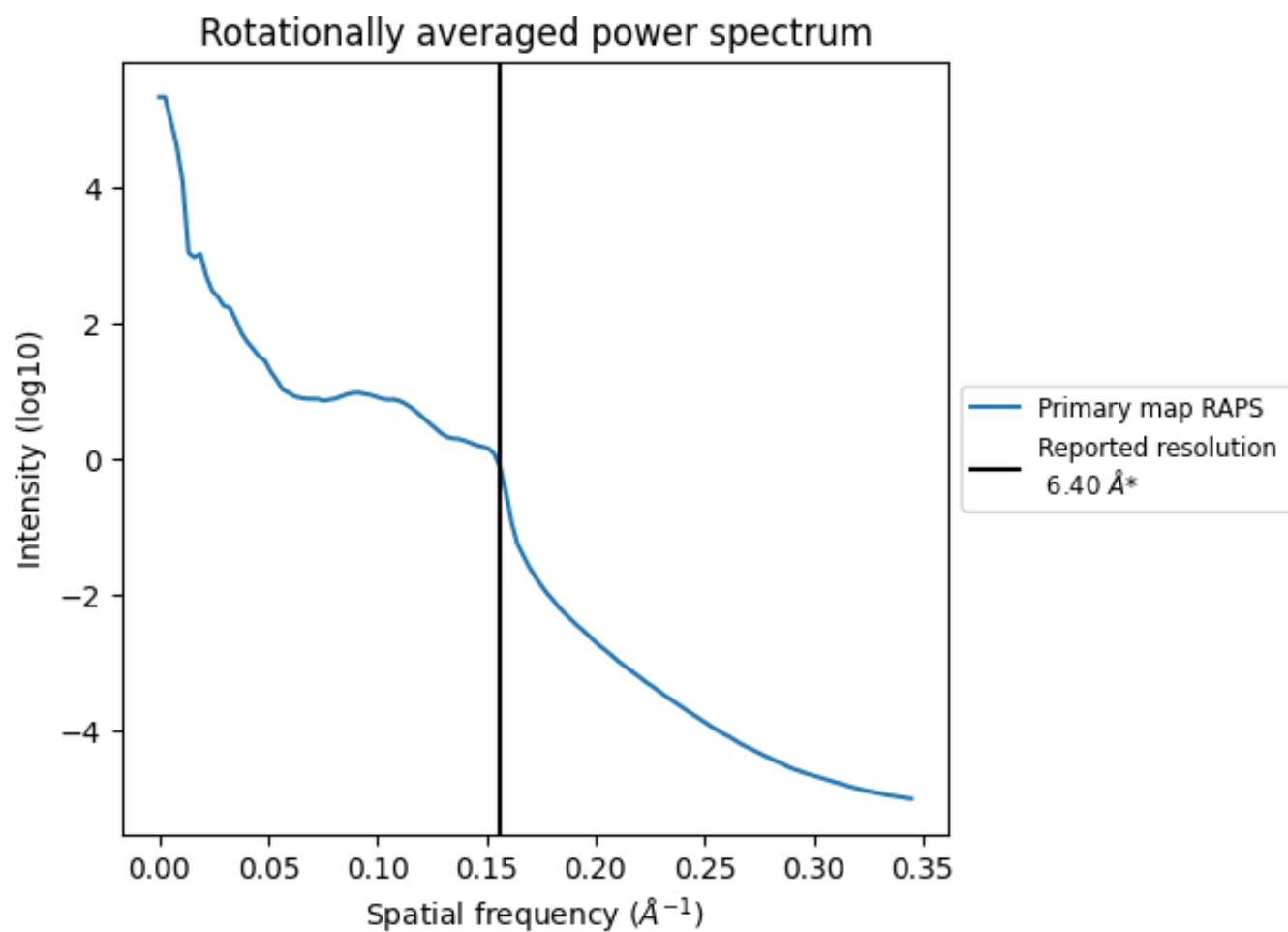
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 507 nm³; this corresponds to an approximate mass of 458 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 0.156 Å⁻¹

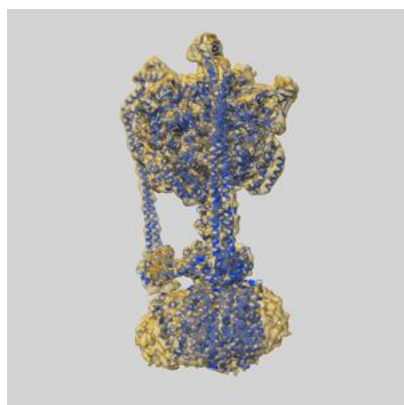
8 Fourier-Shell correlation

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

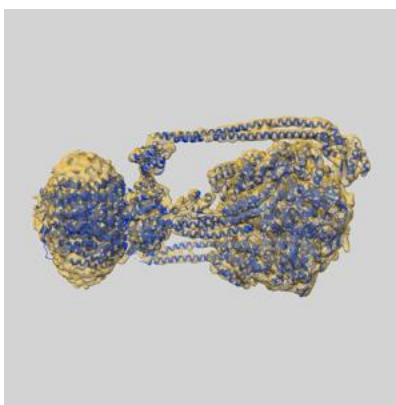
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-8016 and PDB model 5GAR. Per-residue inclusion information can be found in [section 3](#) on [page 7](#).

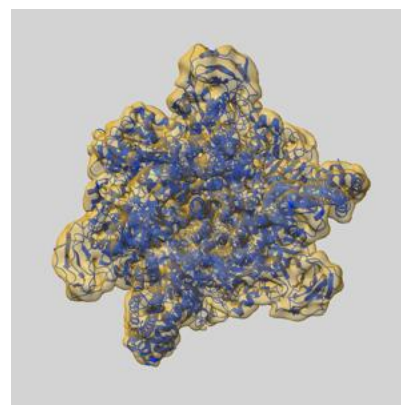
9.1 Map-model overlay [i](#)



X



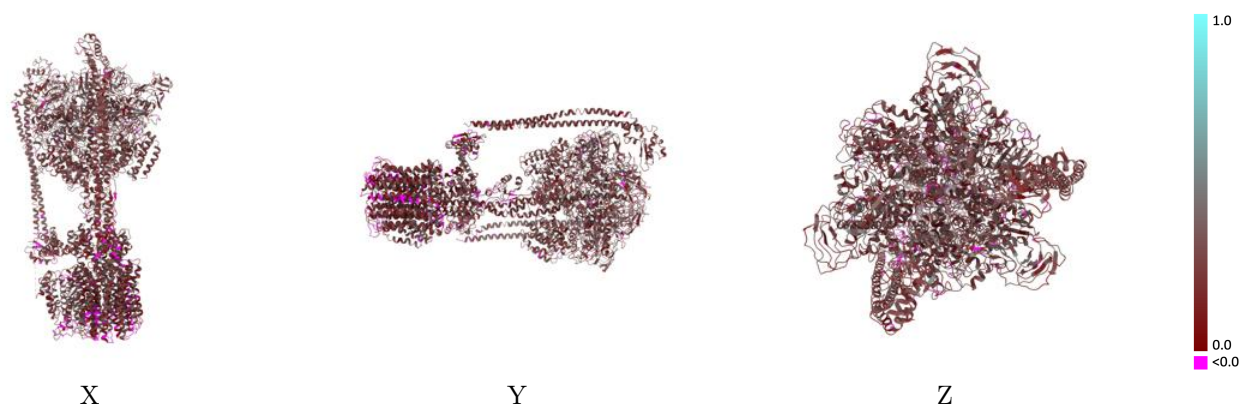
Y



Z

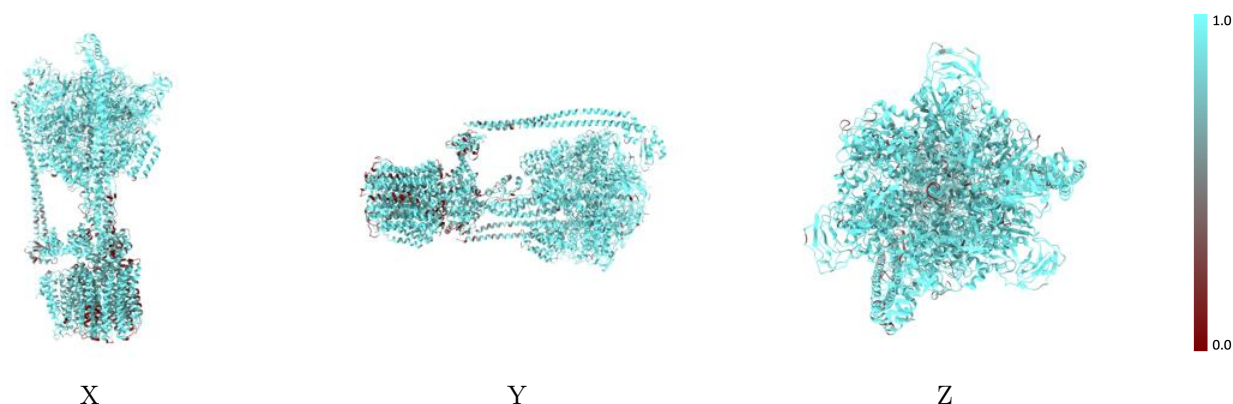
The images above show the 3D surface view of the map at the recommended contour level 0.0382 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



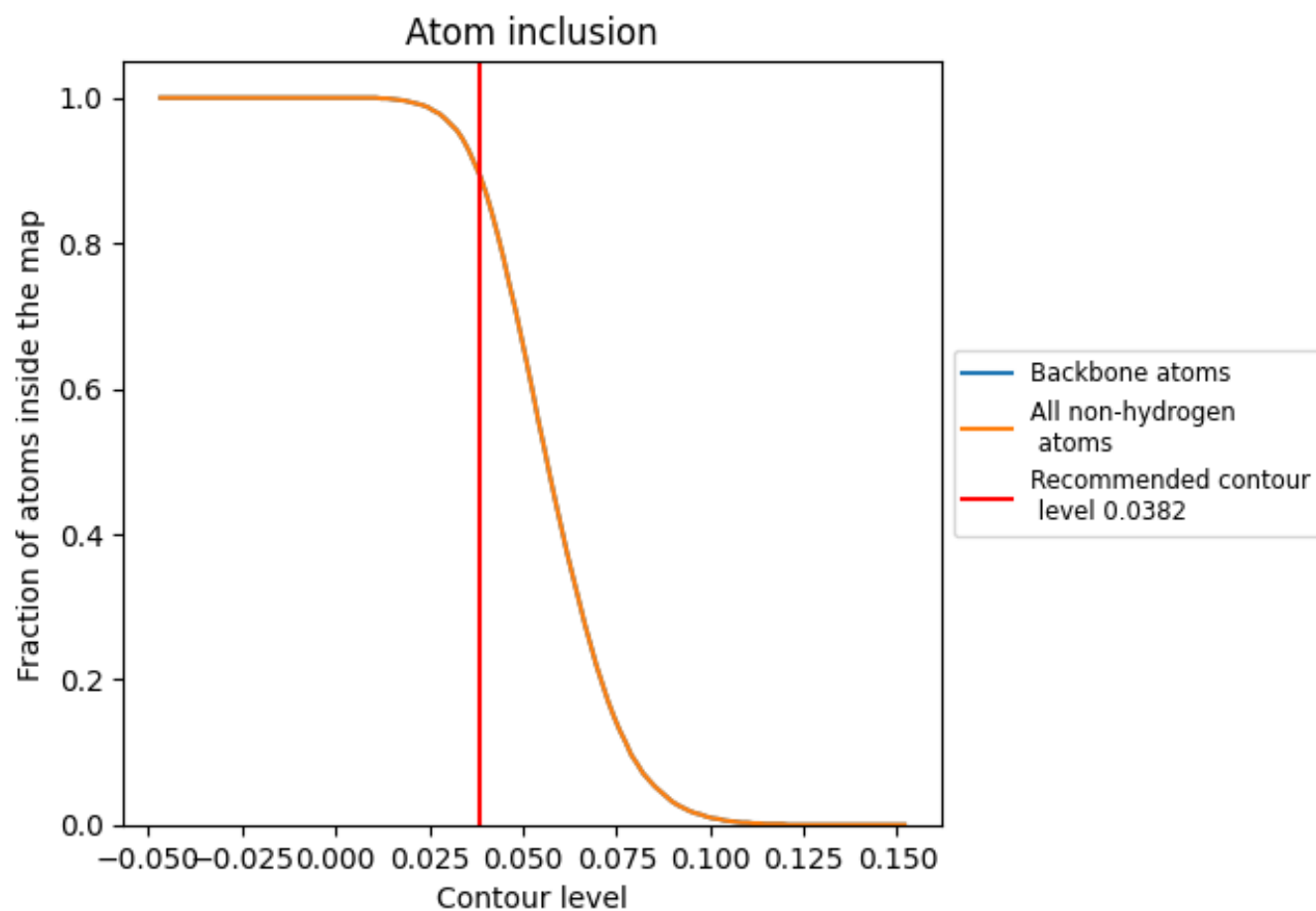
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.0382).

9.4 Atom inclusion [i](#)



At the recommended contour level, 90% of all backbone atoms, 90% 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 (0.0382) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.8970	 0.2510
A	 0.9610	 0.2860
B	 0.9410	 0.2780
C	 0.9570	 0.2790
D	 0.9390	 0.2780
E	 0.9390	 0.2770
F	 0.9350	 0.2770
G	 0.9020	 0.2610
H	 0.8990	 0.2510
I	 0.8220	 0.2220
J	 0.9070	 0.2500
K	 0.8150	 0.2160
L	 0.8150	 0.2420
M	 0.8610	 0.2610
N	 0.8430	 0.2140
O	 0.8400	 0.2010
P	 0.8120	 0.1950
Q	 0.8620	 0.2270
R	 0.8930	 0.2450
S	 0.9250	 0.2260
T	 0.8400	 0.2010
U	 0.7840	 0.1870
V	 0.6330	 0.1060
W	 0.8530	 0.2070
X	 0.8250	 0.1760
Y	 0.8780	 0.1830
Z	 0.6520	 0.1330

