



Full wwPDB EM Validation Report ⓘ

Mar 19, 2026 – 07:45 PM UTC

PDB ID : 5GAS / pdb_00005gas
EMDB ID : EMD-8017
Title : Thermus thermophilus V/A-ATPase, conformation 2
Authors : Schep, D.G.; Zhao, J.; Rubinstein, J.L.
Deposited on : 2016-02-05
Resolution : 9.50 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 : **NOT EXECUTED**
MapQ : **FAILED**
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

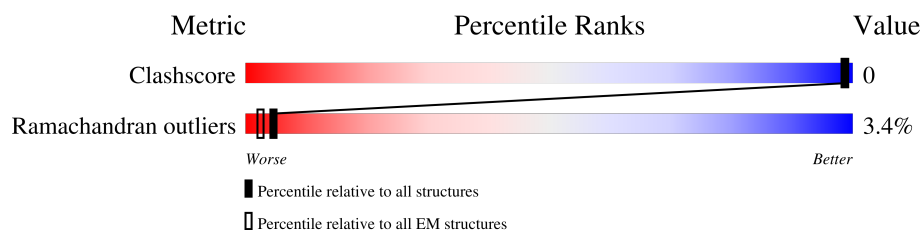
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 9.50 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.



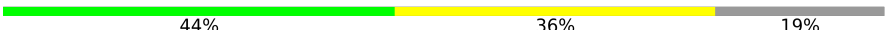
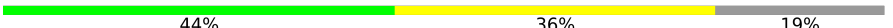
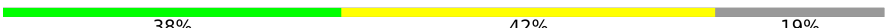
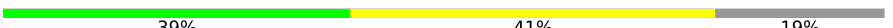
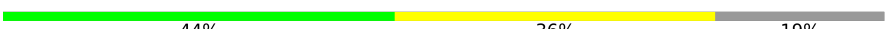
Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	229148	23984
Ramachandran outliers	224038	23583

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 $\leq 5\%$.

Mol	Chain	Length	Quality of chain
1	A	577	 57% 41% .
1	B	577	 58% 41% .
1	C	577	 55% 43% .
2	D	457	 53% 46% .
2	E	457	 58% 40% .
2	F	457	 59% 40% .
3	G	186	 55% 43% ...
3	H	186	 54% 44% ..
4	I	105	 57% 38% 5%
4	J	105	 62% 32% . 5%

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Mol	Chain	Length	Quality of chain
5	K	210	 55% 43% •
6	L	100	 58% 40% •
7	M	323	 57% 42% •
8	N	652	 52% 42% • 5%
9	O	99	 44% 36% 19%
9	P	99	 44% 36% 19%
9	Q	99	 37% 43% 19%
9	R	99	 46% 34% 19%
9	S	99	 38% 42% 19%
9	T	99	 36% 44% 19%
9	U	99	 39% 41% 19%
9	V	99	 34% 46% 19%
9	W	99	 46% 34% 19%
9	X	99	 42% 38% 19%
9	Y	99	 44% 36% 19%
9	Z	99	 43% 37% 19%

2 Entry composition [i](#)

There are 9 unique types of molecules in this entry. The entry contains 23487 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	577	Total	C	N	O	0	0
			2307	1154	577	576		
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

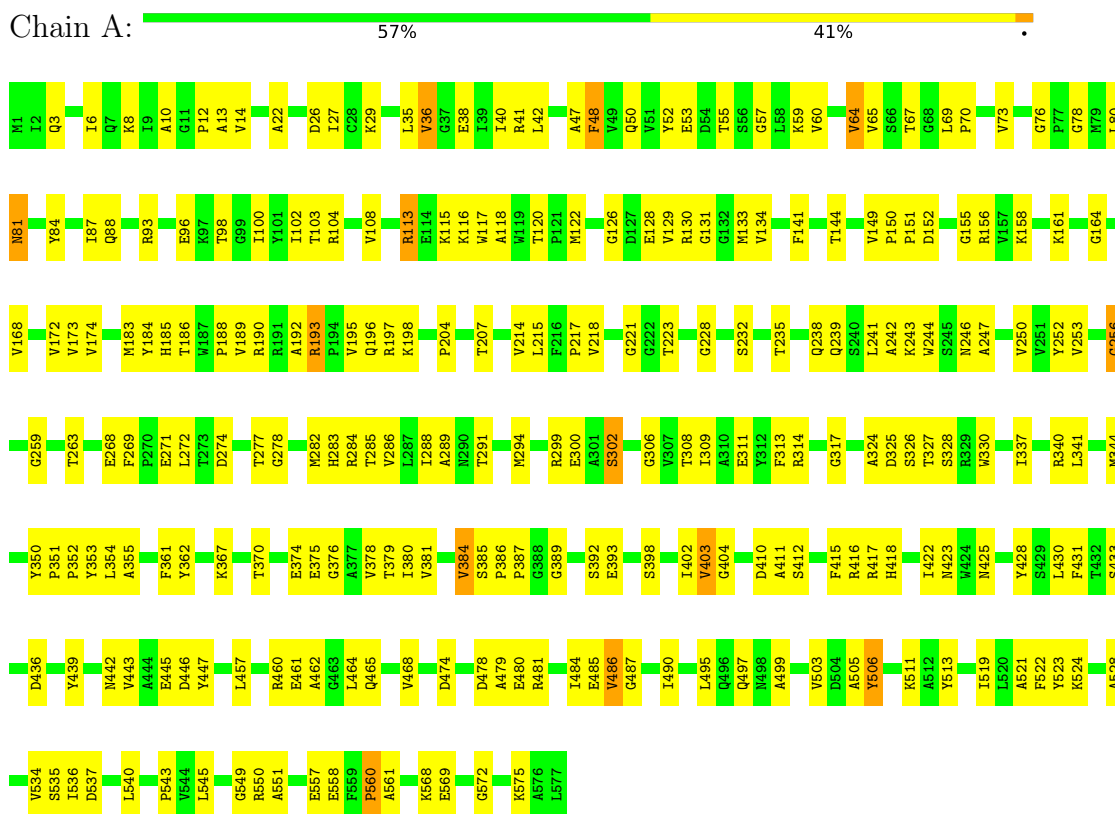
- Molecule 9 is a protein called Vacuolar type ATP synthase subunit.

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. 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. 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



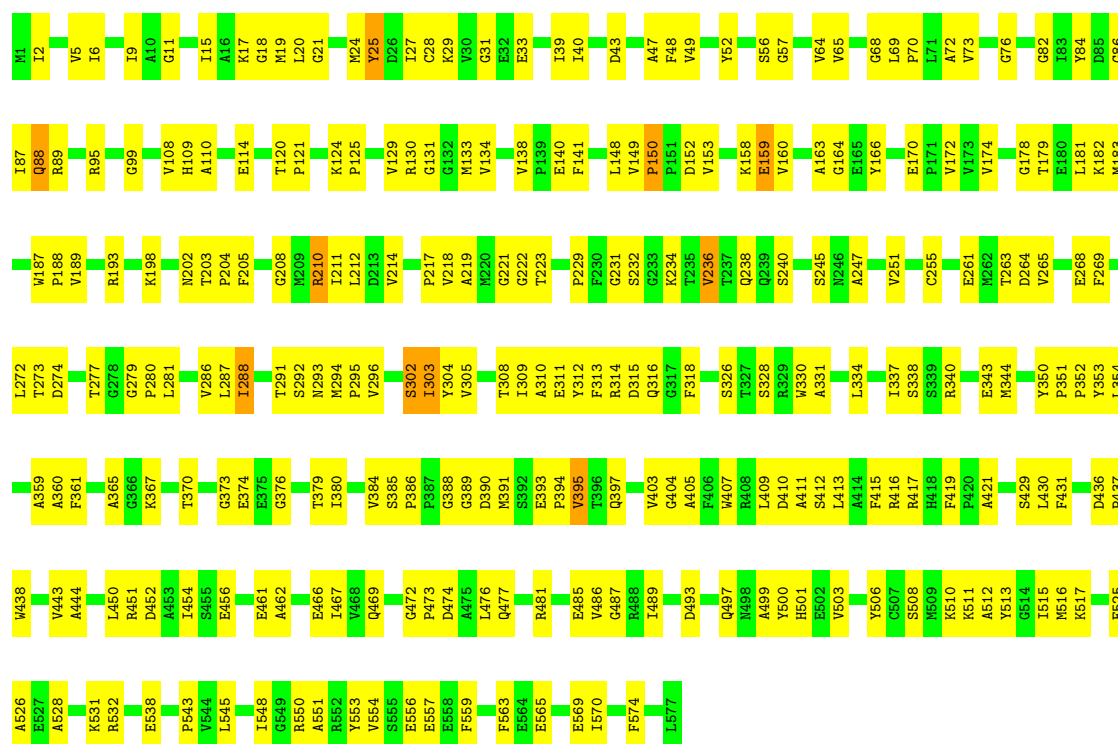
- Molecule 1: V-type ATP synthase alpha chain





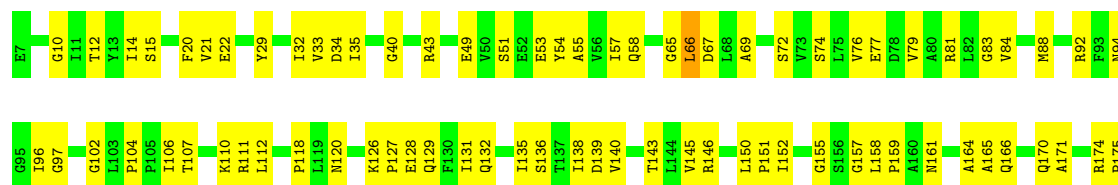
• Molecule 1: V-type ATP synthase alpha chain

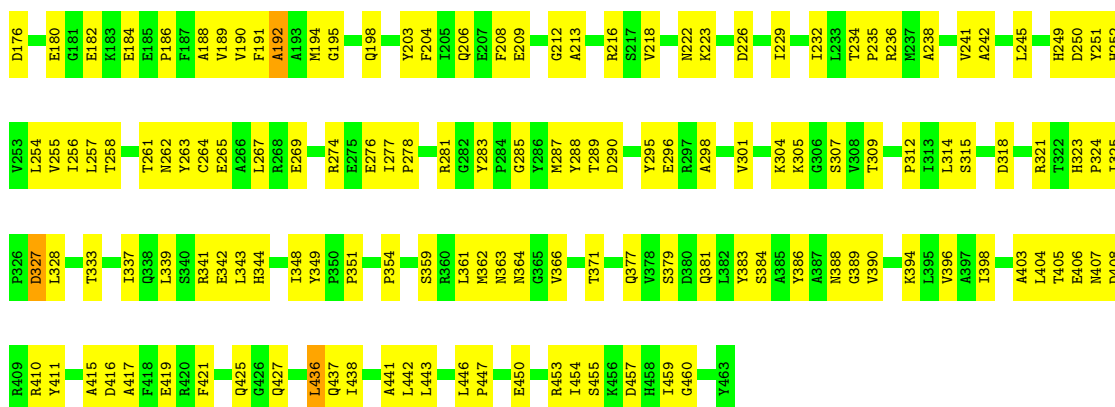
Chain C: 55% 43% .



• Molecule 2: V-type ATP synthase beta chain

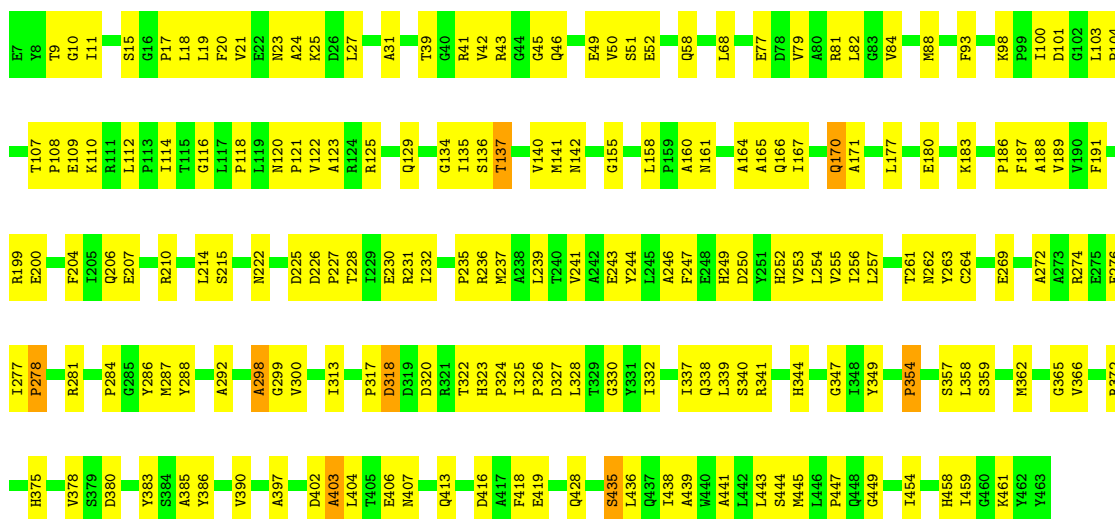
Chain D: 53% 46% .





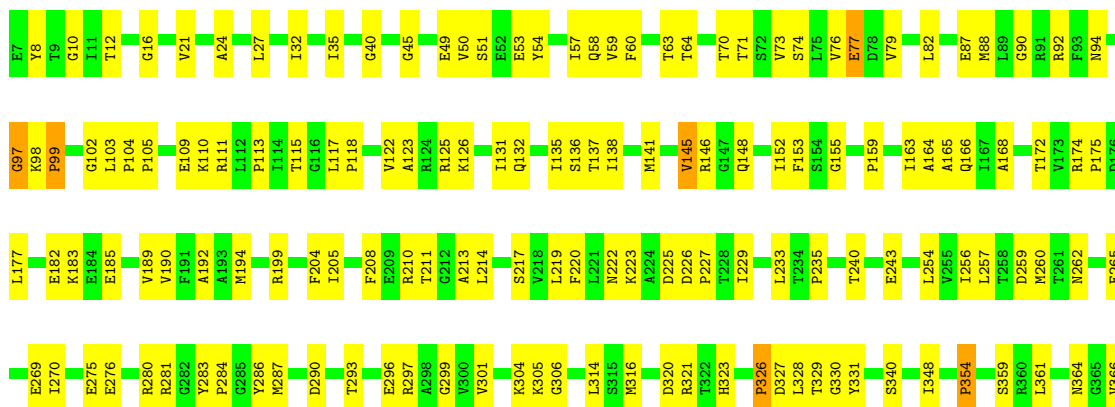
• Molecule 2: V-type ATP synthase beta chain

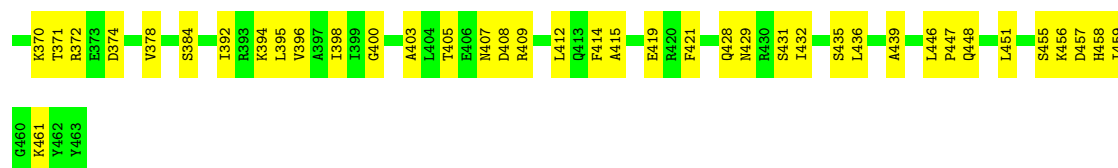
Chain E: 58% 40% .



• Molecule 2: V-type ATP synthase beta chain

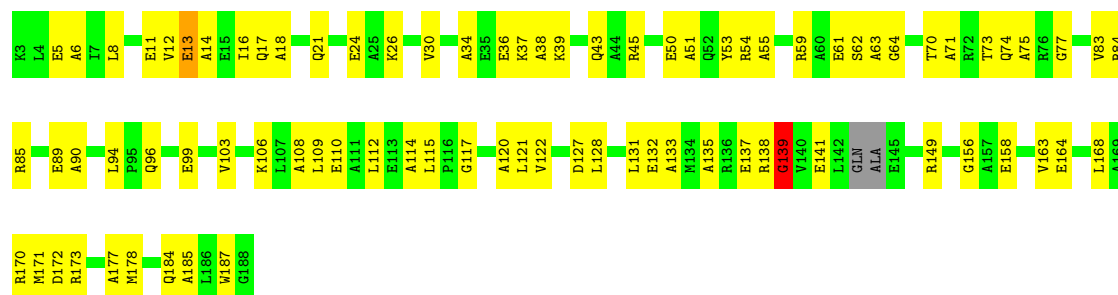
Chain F: 59% 40% .





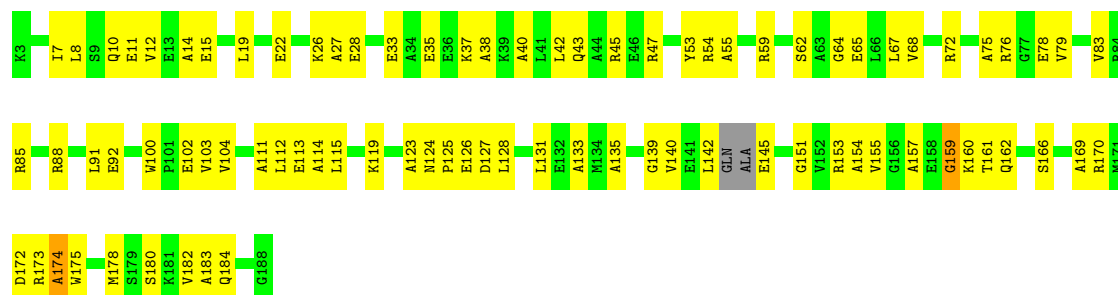
• Molecule 3: V-type ATP synthase subunit E

Chain G: 55% 43%



• Molecule 3: V-type ATP synthase subunit E

Chain H: 54% 44%



• Molecule 4: V-type ATPase subunit G

Chain I: 57% 38% 5%



• Molecule 4: V-type ATPase subunit G

Chain J: 62% 32% 5%



E117
V118
L119
P120

• Molecule 5: V-type ATP synthase subunit D

Chain K:  55% 43%

S2 S5 S6 P6 M9 Q13 Q17 Q18 L18 R19 L20 A21 Q22 V25 K30 K31 K32 D33 A34 L35 V36 F39 F40 G41 E45 A46 P47 E48 K51 K58 E59 A60 A63 L64 L65 L66 A67 F70 F71 G72 F73 E74 V75 V76 A77 P84 P85 L86 E90 N95 N96 W97 P102 R103 T107 F108 P116 V117 G118 T119 P120 A121 E125 A126 S127 R128 E176 R177 F178 I179 Q180 L183 R188 R193 L194 K195 K198 E205 A206 E207 G210 G211

• Molecule 6: V-type ATP synthase subunit F

Chain L:  58% 40%

M1 A2 V3 I4 A5 D6 P7 A10 F13 R14 L15 L18 E19 A23 S24 S25 A34 A35 E27 E28 L29 L32 L33 E34 T35 L36 V37 E38 R39 A43 L44 V45 A46 A50 L51 L52 P55 E56 R57 E60 M63 R66 P69 N95 L96 V70 G71 L72 A75 K78 E79 A80 F81 Q82 G83 M90 K96 T97 I98 G99 F100

• Molecule 7: V-type ATP synthase subunit C

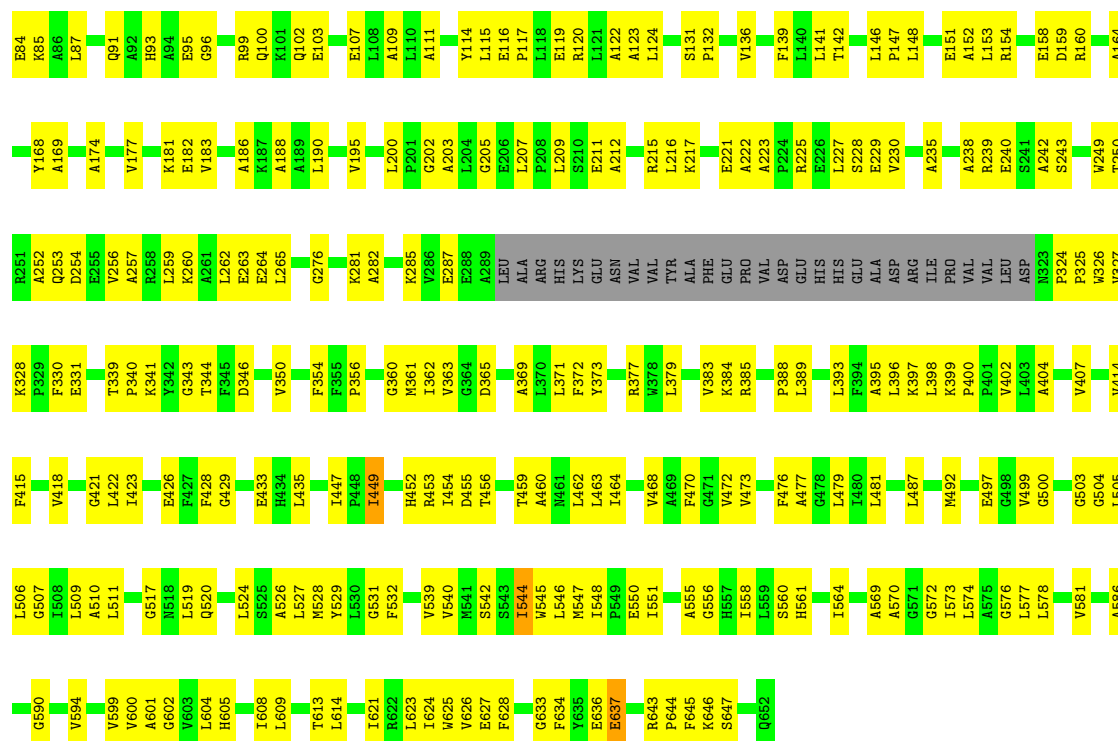
Chain M:  57% 42%

MET ALA D3 D4 F5 A6 Y7 L8 R11 V12 R13 V14 F24 F25 Q26 E27 F33 A34 D35 F36 E38 L39 Y45 G46 G47 A50 G53 P55 D56 R59 T64 Q65 L72 G78 A83 V84 L88 H94 N95 L96 Q97 A98 L99 R100 R101 A102 K103 P108 F109 E110 E111 V112 L113 P116 E121 E122 V123 W124 R125 Q131 D132 P133 A134 G135 G136 A137 A141 V142 P143 G144 H145 A148 V154 E157 L161 A162 R163 V164 E165 L168 A169 K170 R171 F172 F173 E174 D175 V176 A177 K178 L183 A187 L188 R189 D190 Y191 L192 A193 L194 E195 V196 D197 A198 E199 R202 A213 A216 F217 F218 L219 K220 G221 F224 V225 D226 R227 V228 R229 F230 A231 W234 Y238 A239 D242 E243 L244 S245 G246 T247 F248 F249 S250 G254 L258 K259 A260 L261 E262 R263 G264 C267 L270 K271 Q278 D279 L281 G282 V283 G284 L285 V286 L287 A288 Y289 W295 E296 A297 R301 A304 R305 R306 A307 Y308 L311 Q315 V316 E317 E318 V320 V321 C322 PRO

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

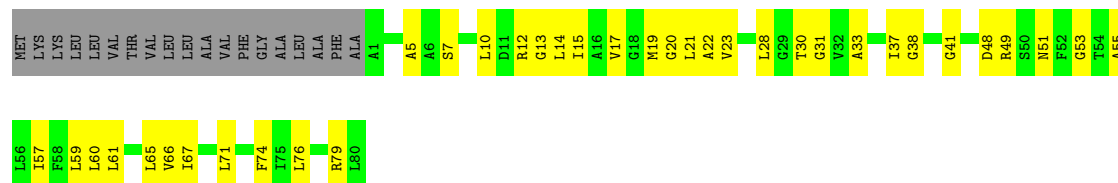
Chain N:  52% 42% 5%

MET ILE ALA PRO M1 V5 L6 A13 K14 E15 Q18 Q21 Q25 T30 L31 R32 P33 E34 A35 L36 S37 A38 Y39 S42 A47 E48 R51 A54 A57 Q58 A59 T62 L63 S64 L65 L66 L67 A70 E71 P72 P75 F76 P77 A82 A83



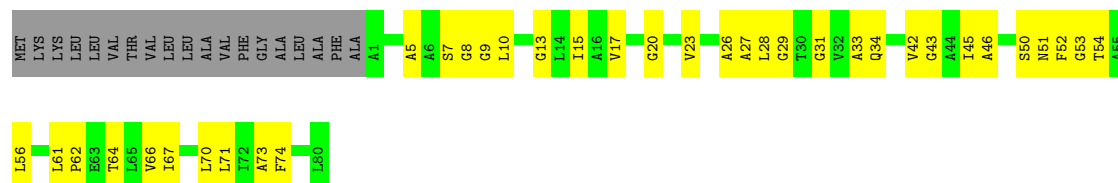
• Molecule 9: Vacuolar type ATP synthase subunit

Chain O: 44% 36% 19%



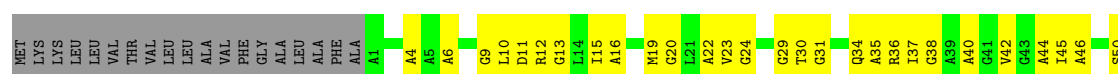
• Molecule 9: Vacuolar type ATP synthase subunit

Chain P: 44% 36% 19%



• Molecule 9: Vacuolar type ATP synthase subunit

Chain Q: 37% 43% 19%





• Molecule 9: Vacuolar type ATP synthase subunit

Chain R: 46% 34% 19%



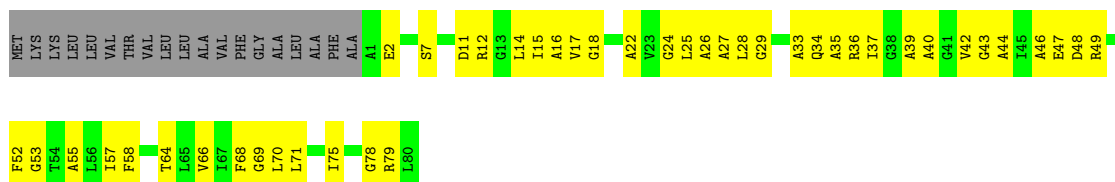
• Molecule 9: Vacuolar type ATP synthase subunit

Chain S: 38% 42% 19%



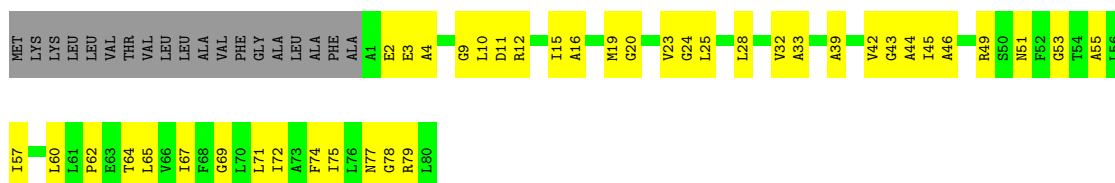
• Molecule 9: Vacuolar type ATP synthase subunit

Chain T: 36% 44% 19%



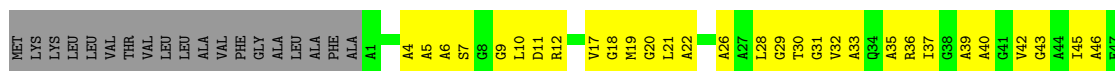
• Molecule 9: Vacuolar type ATP synthase subunit

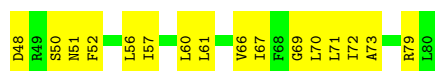
Chain U: 39% 41% 19%



• Molecule 9: Vacuolar type ATP synthase subunit

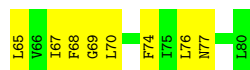
Chain V: 34% 46% 19%





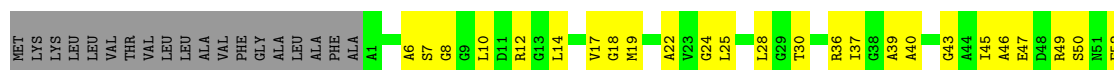
- Molecule 9: Vacuolar type ATP synthase subunit

Chain W: 46% 34% 19%



- Molecule 9: Vacuolar type ATP synthase subunit

Chain X: 42% 38% 19%



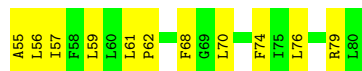
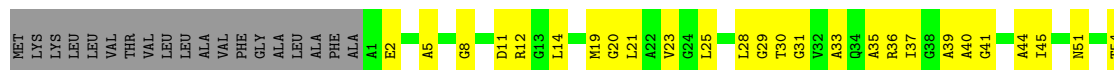
- Molecule 9: Vacuolar type ATP synthase subunit

Chain Y: 44% 36% 19%



- Molecule 9: Vacuolar type ATP synthase subunit

Chain Z: 43% 37% 19%



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	9721	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

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	2.50	117/2306 (5.1%)	2.86	222/2881 (7.7%)
1	B	2.54	112/2306 (4.9%)	2.85	225/2881 (7.8%)
1	C	2.60	139/2306 (6.0%)	2.86	227/2881 (7.9%)
2	D	2.54	100/1826 (5.5%)	2.89	193/2281 (8.5%)
2	E	2.52	88/1826 (4.8%)	2.79	174/2281 (7.6%)
2	F	2.50	83/1826 (4.5%)	2.88	185/2281 (8.1%)
3	G	2.57	33/732 (4.5%)	2.86	73/912 (8.0%)
3	H	2.58	42/732 (5.7%)	2.95	70/912 (7.7%)
4	I	2.43	18/398 (4.5%)	2.78	43/496 (8.7%)
4	J	2.33	12/398 (3.0%)	2.91	40/496 (8.1%)
5	K	2.53	45/838 (5.4%)	3.00	100/1046 (9.6%)
6	L	2.69	26/398 (6.5%)	2.79	29/496 (5.8%)
7	M	2.49	65/1278 (5.1%)	3.09	160/1596 (10.0%)
8	N	2.51	114/2472 (4.6%)	3.08	342/3087 (11.1%)
9	O	2.59	22/318 (6.9%)	3.09	41/396 (10.4%)
9	P	2.28	12/318 (3.8%)	3.25	45/396 (11.4%)
9	Q	2.70	20/318 (6.3%)	3.21	50/396 (12.6%)
9	R	2.45	11/318 (3.5%)	3.05	37/396 (9.3%)
9	S	2.61	19/318 (6.0%)	3.19	44/396 (11.1%)
9	T	2.49	14/318 (4.4%)	3.52	62/396 (15.7%)
9	U	2.61	15/318 (4.7%)	3.15	46/396 (11.6%)
9	V	2.69	20/318 (6.3%)	3.41	62/396 (15.7%)
9	W	2.43	12/318 (3.8%)	3.12	43/396 (10.9%)
9	X	2.53	19/318 (6.0%)	3.01	40/396 (10.1%)
9	Y	2.69	21/318 (6.6%)	3.09	43/396 (10.9%)
9	Z	2.52	17/318 (5.3%)	3.09	46/396 (11.6%)
All	All	2.53	1196/23458 (5.1%)	2.95	2642/29279 (9.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	B	0	1
3	G	0	1
7	M	0	1
All	All	0	3

All (1196) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	375	GLU	C-N	17.10	1.42	1.33
8	N	520	GLN	C-N	10.10	1.41	1.33
3	H	55	ALA	CA-C	-9.92	1.40	1.52
9	Y	15	ILE	CA-C	-9.74	1.40	1.52
2	E	454	ILE	CA-C	-9.73	1.40	1.52
8	N	362	ILE	CA-C	-9.61	1.40	1.52
1	B	221	GLY	CA-C	-9.55	1.38	1.51
8	N	605	HIS	CA-C	-9.54	1.39	1.52
2	D	242	ALA	CA-C	-9.51	1.41	1.52
2	E	428	GLN	CA-C	-9.46	1.41	1.52
3	G	89	GLU	CA-C	9.45	1.65	1.52
9	U	10	LEU	CA-C	-9.39	1.40	1.52
2	D	447	PRO	C-N	9.38	1.45	1.33
1	B	429	SER	CA-C	-9.28	1.40	1.52
7	M	135	GLY	CA-C	-9.22	1.41	1.52
2	E	435	SER	CA-C	9.21	1.65	1.52
6	L	70	VAL	CA-C	-9.21	1.41	1.52
2	F	409	ARG	CA-C	-9.19	1.41	1.52
2	D	381	GLN	CA-C	-9.18	1.41	1.52
7	M	315	GLN	C-N	9.09	1.41	1.33
2	F	254	LEU	N-CA	-9.07	1.35	1.46
1	C	9	ILE	CA-C	-9.06	1.41	1.52
1	C	493	ASP	C-N	9.01	1.46	1.33
3	H	67	LEU	C-N	8.89	1.45	1.33
4	I	107	LEU	CA-C	-8.85	1.43	1.52
1	B	25	TYR	CA-C	-8.84	1.41	1.52
3	G	127	ASP	N-CA	-8.81	1.33	1.45
2	D	371	THR	CA-C	-8.80	1.41	1.52
2	E	272	ALA	C-N	8.75	1.45	1.33
1	A	250	VAL	CA-C	8.73	1.63	1.52
1	A	215	LEU	CA-C	-8.70	1.41	1.52
9	Y	20	GLY	CA-C	-8.63	1.41	1.52
9	V	71	LEU	C-N	8.57	1.44	1.33
3	H	43	GLN	CA-C	-8.56	1.41	1.52
8	N	600	VAL	CA-C	-8.53	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	108	VAL	N-CA	-8.51	1.33	1.45
1	B	138	VAL	CA-C	-8.51	1.44	1.52
9	Y	48	ASP	CA-C	-8.48	1.44	1.53
2	D	77	GLU	CA-C	-8.45	1.42	1.52
2	F	451	LEU	CA-C	-8.42	1.42	1.52
9	S	21	LEU	C-N	8.40	1.44	1.33
1	A	243	LYS	CA-C	-8.40	1.45	1.52
2	D	296	GLU	CA-C	-8.39	1.40	1.52
9	Y	58	PHE	C-N	8.34	1.45	1.34
4	J	45	GLU	CA-C	-8.32	1.42	1.52
8	N	77	PRO	N-CA	-8.31	1.37	1.47
9	V	20	GLY	C-N	8.30	1.44	1.33
1	B	39	ILE	CA-C	-8.23	1.43	1.53
1	B	440	ARG	C-N	8.21	1.44	1.33
9	V	51	ASN	C-N	8.21	1.45	1.33
9	W	74	PHE	CA-C	-8.11	1.42	1.52
1	C	131	GLY	CA-C	-8.10	1.43	1.52
2	D	337	ILE	CA-C	-8.07	1.43	1.52
5	K	25	VAL	C-N	8.07	1.44	1.33
1	A	104	ARG	CA-C	-8.07	1.42	1.52
1	B	163	ALA	C-N	8.04	1.42	1.32
6	L	25	SER	C-N	8.01	1.40	1.33
9	Y	31	GLY	C-N	7.99	1.44	1.33
2	E	378	VAL	C-N	7.99	1.44	1.33
1	C	312	TYR	C-N	7.95	1.44	1.33
2	D	198	GLN	CA-C	-7.95	1.42	1.52
1	A	8	LYS	C-N	7.91	1.46	1.33
9	Y	29	GLY	CA-C	-7.91	1.42	1.51
9	S	48	ASP	CA-C	-7.91	1.44	1.53
2	E	121	PRO	CA-C	-7.90	1.43	1.52
4	I	49	LYS	N-CA	-7.86	1.37	1.46
1	B	4	GLY	C-N	7.82	1.44	1.33
9	S	22	ALA	C-N	7.82	1.43	1.33
1	A	192	ALA	CA-C	-7.82	1.43	1.52
1	C	469	GLN	CA-C	-7.81	1.42	1.52
2	F	340	SER	N-CA	-7.81	1.36	1.46
1	C	33	GLU	CA-C	-7.79	1.43	1.52
3	G	83	VAL	C-N	7.79	1.44	1.33
8	N	72	PRO	CA-C	-7.79	1.43	1.52
6	L	32	LEU	N-CA	-7.75	1.36	1.46
8	N	637	GLU	CA-C	-7.75	1.42	1.52
2	F	284	PRO	CA-C	-7.73	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	245	SER	N-CA	-7.72	1.36	1.45
5	K	112	ALA	C-N	7.70	1.44	1.33
1	B	493	ASP	C-N	7.69	1.44	1.33
2	D	349	TYR	CA-C	7.68	1.59	1.52
1	C	172	VAL	N-CA	-7.68	1.39	1.46
9	U	3	GLU	C-N	7.66	1.44	1.33
1	B	16	ALA	CA-C	-7.65	1.43	1.52
3	H	155	VAL	C-N	7.65	1.41	1.33
1	B	150	PRO	CA-C	7.65	1.59	1.52
8	N	528	MET	N-CA	-7.64	1.36	1.46
7	M	34	ALA	C-N	7.62	1.44	1.34
3	H	40	ALA	CA-C	-7.62	1.42	1.52
9	T	16	ALA	C-N	7.60	1.43	1.33
2	E	256	ILE	N-CA	-7.59	1.36	1.47
9	Z	30	THR	N-CA	-7.59	1.37	1.46
7	M	316	VAL	CA-C	7.58	1.62	1.52
1	B	547	ARG	C-N	7.58	1.42	1.34
1	C	554	VAL	CA-C	-7.57	1.43	1.52
1	B	96	GLU	CA-C	-7.54	1.43	1.52
2	D	145	VAL	N-CA	-7.53	1.37	1.46
1	A	3	GLN	CA-C	-7.53	1.43	1.52
5	K	210	GLY	CA-C	-7.52	1.41	1.51
1	A	129	VAL	CA-C	-7.51	1.43	1.53
4	I	48	VAL	C-N	7.50	1.42	1.33
6	L	81	PHE	CA-C	-7.50	1.43	1.52
9	Q	45	ILE	CA-C	-7.50	1.43	1.52
9	R	54	THR	CA-C	-7.50	1.43	1.52
3	G	75	ALA	CA-C	-7.49	1.43	1.52
7	M	238	TYR	C-N	7.48	1.43	1.33
2	D	67	ASP	CA-C	-7.48	1.42	1.52
9	O	5	ALA	CA-C	-7.48	1.43	1.52
1	A	185	HIS	CA-C	-7.48	1.43	1.52
1	A	506	TYR	C-N	7.47	1.43	1.33
2	F	455	SER	CA-C	-7.47	1.42	1.53
2	F	405	THR	CA-C	-7.46	1.43	1.52
2	E	372	ARG	CA-C	-7.44	1.43	1.52
1	B	213	ASP	N-CA	-7.42	1.36	1.46
2	D	218	VAL	N-CA	-7.42	1.36	1.46
3	G	141	GLU	CA-C	-7.42	1.42	1.52
8	N	388	PRO	N-CA	-7.40	1.41	1.47
7	M	137	ALA	CA-C	-7.38	1.43	1.52
7	M	59	ARG	CA-C	7.37	1.62	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	389	GLY	CA-C	-7.36	1.42	1.51
8	N	82	ALA	CA-C	-7.36	1.43	1.52
1	A	309	ILE	C-N	7.35	1.43	1.34
9	O	59	LEU	C-N	7.35	1.44	1.34
9	Q	4	ALA	CA-C	-7.34	1.44	1.52
7	M	39	LEU	CA-C	7.34	1.62	1.52
1	B	157	VAL	N-CA	-7.29	1.37	1.46
9	Q	9	GLY	CA-C	-7.29	1.44	1.52
2	D	363	ASN	CA-C	-7.28	1.44	1.52
1	C	138	VAL	N-CA	-7.25	1.39	1.46
9	X	46	ALA	CA-C	-7.25	1.43	1.52
9	V	37	ILE	CA-C	-7.24	1.43	1.52
2	E	257	LEU	CA-C	-7.22	1.43	1.53
2	E	406	GLU	C-N	7.22	1.43	1.33
1	A	487	GLY	CA-C	-7.21	1.44	1.52
2	F	152	ILE	CA-C	-7.20	1.45	1.52
9	W	22	ALA	N-CA	-7.20	1.37	1.46
2	D	76	VAL	CA-C	-7.19	1.43	1.52
2	D	269	GLU	C-N	7.19	1.42	1.33
8	N	383	VAL	CA-C	-7.18	1.46	1.52
1	C	511	LYS	CA-C	-7.18	1.44	1.53
2	F	82	LEU	N-CA	-7.17	1.38	1.46
9	Z	28	LEU	C-N	7.17	1.42	1.33
1	A	108	VAL	N-CA	-7.17	1.37	1.46
1	B	453	ALA	C-N	7.17	1.43	1.33
1	B	224	ALA	CA-C	-7.16	1.43	1.52
3	H	12	VAL	CA-C	-7.15	1.44	1.52
2	D	394	LYS	CA-C	-7.14	1.45	1.53
2	F	296	GLU	CA-C	-7.14	1.42	1.52
2	E	18	LEU	C-N	7.14	1.42	1.33
1	C	159	GLU	C-N	7.13	1.42	1.33
9	O	57	ILE	N-CA	-7.13	1.37	1.46
1	C	351	PRO	CA-C	-7.12	1.45	1.52
9	Y	54	THR	CA-C	7.11	1.62	1.52
2	F	431	SER	N-CA	-7.11	1.36	1.45
4	I	110	ALA	CA-C	-7.11	1.44	1.52
5	K	177	ARG	N-CA	-7.10	1.38	1.46
9	W	17	VAL	C-N	7.09	1.42	1.33
2	E	317	PRO	C-N	7.07	1.42	1.33
5	K	96	VAL	CA-C	-7.07	1.43	1.52
2	E	347	GLY	C-N	7.07	1.42	1.33
9	T	24	GLY	C-N	7.05	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	N	51	ARG	CA-C	-7.05	1.43	1.52
1	B	287	LEU	CA-C	-7.05	1.44	1.52
1	B	300	GLU	N-CA	-7.04	1.37	1.46
1	A	238	GLN	C-N	7.04	1.44	1.33
2	D	234	THR	N-CA	-7.04	1.39	1.46
5	K	140	VAL	CA-C	-7.03	1.42	1.52
2	D	457	ASP	N-CA	7.03	1.55	1.46
9	O	41	GLY	C-N	7.03	1.42	1.33
7	M	53	GLY	CA-C	-7.02	1.44	1.52
2	E	21	VAL	CA-C	-7.02	1.44	1.52
2	D	327	ASP	CA-C	-7.02	1.43	1.52
6	L	79	GLU	N-CA	-7.01	1.38	1.46
2	E	358	LEU	N-CA	-7.00	1.38	1.46
2	E	445	MET	CA-C	-7.00	1.43	1.52
8	N	250	THR	C-N	7.00	1.43	1.33
1	C	493	ASP	CA-C	6.99	1.58	1.52
2	F	199	ARG	C-N	6.97	1.43	1.33
1	A	259	GLY	CA-C	-6.97	1.42	1.51
8	N	574	LEU	N-CA	-6.97	1.37	1.46
1	B	383	ALA	CA-C	-6.96	1.44	1.52
7	M	284	GLY	CA-C	-6.96	1.44	1.51
1	C	95	ARG	N-CA	-6.95	1.38	1.46
9	X	61	LEU	CA-C	6.95	1.61	1.52
9	W	50	SER	C-N	6.94	1.43	1.33
8	N	464	ILE	C-N	6.93	1.43	1.34
7	M	113	LEU	CA-C	-6.93	1.44	1.52
9	S	42	VAL	N-CA	-6.93	1.38	1.46
9	W	65	LEU	CA-C	-6.92	1.44	1.52
1	C	134	VAL	CA-C	-6.91	1.45	1.52
2	F	136	SER	N-CA	-6.90	1.37	1.46
1	C	43	ASP	N-CA	-6.90	1.38	1.46
1	C	303	ILE	C-N	6.89	1.43	1.33
1	A	247	ALA	CA-C	-6.88	1.44	1.52
7	M	56	ASP	C-N	6.88	1.42	1.33
8	N	207	LEU	CA-C	-6.88	1.45	1.53
1	C	513	TYR	N-CA	-6.87	1.38	1.46
9	S	64	THR	C-N	6.87	1.43	1.33
9	X	58	PHE	C-N	6.87	1.43	1.33
2	F	323	HIS	CA-C	6.86	1.58	1.52
2	D	403	ALA	C-N	6.86	1.42	1.33
2	E	135	ILE	C-N	6.86	1.43	1.33
2	D	216	ARG	CA-C	-6.86	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	223	THR	CA-C	-6.86	1.44	1.52
2	D	267	LEU	C-N	6.85	1.42	1.33
1	B	239	GLN	CA-C	-6.84	1.43	1.52
1	C	163	ALA	C-N	6.84	1.40	1.32
5	K	63	ALA	C-N	6.83	1.42	1.33
3	G	77	GLY	CA-C	6.83	1.61	1.51
3	G	139	GLY	C-N	6.83	1.41	1.33
9	Z	2	GLU	CA-C	-6.83	1.44	1.52
9	W	42	VAL	C-N	6.82	1.42	1.33
7	M	8	LEU	C-N	6.81	1.42	1.33
1	B	483	VAL	N-CA	-6.80	1.38	1.46
1	B	300	GLU	CA-C	-6.79	1.44	1.52
2	F	199	ARG	CA-C	-6.79	1.44	1.52
2	E	116	GLY	N-CA	-6.79	1.39	1.45
1	C	174	VAL	CA-C	-6.79	1.44	1.52
1	C	436	ASP	N-CA	6.79	1.53	1.46
1	C	559	PHE	C-N	6.77	1.42	1.34
2	D	53	GLU	N-CA	-6.77	1.40	1.46
1	A	98	THR	CA-C	6.77	1.56	1.52
1	B	169	GLU	CA-C	-6.77	1.44	1.52
8	N	240	GLU	C-N	6.77	1.44	1.33
6	L	45	VAL	CA-C	-6.76	1.44	1.52
1	A	158	LYS	N-CA	-6.75	1.37	1.46
8	N	569	ALA	C-O	6.75	1.31	1.24
3	H	123	ALA	CA-C	-6.74	1.44	1.52
9	V	79	ARG	CA-C	-6.73	1.44	1.52
5	K	170	PRO	N-CA	-6.73	1.38	1.47
1	A	81	ASN	C-N	6.73	1.43	1.33
2	F	219	LEU	CA-C	-6.70	1.44	1.52
2	F	331	TYR	CA-C	-6.70	1.44	1.52
3	H	15	GLU	C-N	6.69	1.42	1.33
1	A	431	PHE	N-CA	6.68	1.54	1.46
1	B	547	ARG	CA-C	6.68	1.61	1.52
5	K	165	GLU	CA-C	6.68	1.62	1.52
8	N	397	LYS	C-N	6.67	1.42	1.33
1	A	308	THR	C-N	6.67	1.42	1.33
2	E	210	ARG	CA-C	-6.66	1.44	1.52
1	A	59	LYS	CA-C	-6.66	1.44	1.52
9	S	75	ILE	CA-C	6.66	1.60	1.52
1	B	251	VAL	N-CA	-6.66	1.37	1.46
6	L	66	ARG	N-CA	-6.66	1.37	1.46
5	K	205	GLU	C-N	6.65	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	232	ILE	C-N	6.65	1.42	1.33
2	D	364	ASN	CA-C	-6.64	1.44	1.52
8	N	229	GLU	C-N	6.63	1.42	1.33
9	T	29	GLY	N-CA	-6.63	1.37	1.45
9	Q	51	ASN	N-CA	-6.63	1.37	1.46
9	V	36	ARG	C-N	6.63	1.42	1.33
7	M	157	GLU	N-CA	-6.62	1.37	1.46
5	K	125	GLU	CA-C	-6.62	1.44	1.52
1	B	557	GLU	N-CA	-6.62	1.37	1.46
2	D	342	GLU	C-N	6.61	1.43	1.33
6	L	18	LEU	N-CA	-6.61	1.37	1.45
1	A	131	GLY	CA-C	-6.61	1.42	1.51
2	F	99	PRO	C-N	6.60	1.41	1.33
8	N	556	GLY	CA-C	-6.60	1.43	1.51
2	E	98	LYS	CA-C	-6.60	1.43	1.52
3	H	140	VAL	CA-C	-6.59	1.44	1.52
8	N	131	SER	CA-C	-6.59	1.44	1.52
2	F	281	ARG	C-N	6.59	1.43	1.33
9	V	17	VAL	N-CA	-6.58	1.38	1.46
1	C	473	PRO	N-CA	-6.58	1.39	1.47
4	I	106	ARG	CA-C	-6.58	1.46	1.53
5	K	206	ALA	C-N	6.57	1.43	1.33
9	R	19	MET	N-CA	-6.57	1.37	1.46
1	B	100	ILE	N-CA	-6.57	1.38	1.46
2	F	366	VAL	CA-C	-6.57	1.45	1.52
1	B	272	LEU	C-N	6.56	1.42	1.33
1	A	387	PRO	C-N	6.55	1.43	1.33
7	M	24	PHE	C-O	-6.55	1.16	1.24
1	A	344	MET	CA-C	-6.54	1.43	1.53
1	A	215	LEU	N-CA	-6.54	1.38	1.46
1	C	338	SER	C-N	6.54	1.41	1.33
8	N	205	GLY	CA-C	-6.54	1.45	1.52
9	W	67	ILE	C-N	6.53	1.42	1.33
1	C	43	ASP	C-O	-6.53	1.16	1.23
1	C	374	GLU	CA-C	-6.53	1.44	1.52
9	Q	44	ALA	C-N	6.52	1.42	1.33
2	D	171	ALA	N-CA	-6.52	1.38	1.46
2	D	107	THR	C-O	-6.51	1.17	1.24
3	H	59	ARG	C-N	-6.51	1.25	1.33
4	I	64	ALA	C-N	6.51	1.42	1.33
1	B	554	VAL	CA-C	6.51	1.60	1.52
2	F	287	MET	CA-C	-6.50	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	H	35	GLU	N-CA	-6.50	1.38	1.46
4	J	93	GLU	C-N	6.50	1.43	1.34
3	H	173	ARG	CA-C	-6.50	1.46	1.53
2	D	159	PRO	CA-C	-6.50	1.44	1.52
1	B	403	VAL	CA-C	-6.49	1.45	1.52
7	M	39	LEU	N-CA	6.49	1.54	1.46
9	X	24	GLY	C-N	6.49	1.42	1.33
8	N	459	THR	CA-C	6.48	1.61	1.52
1	C	166	TYR	CA-C	-6.48	1.44	1.52
9	O	15	ILE	CA-C	-6.48	1.44	1.52
1	B	382	GLY	CA-C	-6.47	1.46	1.52
1	B	60	VAL	CA-C	-6.46	1.45	1.53
6	L	46	ALA	CA-C	-6.46	1.45	1.52
1	C	218	VAL	N-CA	6.46	1.52	1.46
9	U	2	GLU	C-N	6.46	1.42	1.33
1	A	374	GLU	CA-C	-6.44	1.44	1.53
1	A	41	ARG	CA-C	-6.44	1.44	1.52
1	A	215	LEU	C-N	6.43	1.41	1.33
9	U	4	ALA	C-N	6.43	1.42	1.33
8	N	594	VAL	C-O	-6.43	1.16	1.24
2	D	301	VAL	N-CA	-6.43	1.38	1.46
7	M	279	ASP	N-CA	-6.43	1.40	1.46
1	B	339	SER	CA-C	-6.42	1.44	1.52
5	K	22	GLN	CA-C	6.42	1.62	1.52
4	J	91	ARG	CA-C	-6.42	1.44	1.52
1	A	196	GLN	C-N	6.42	1.41	1.33
1	A	497	GLN	CA-C	6.42	1.60	1.52
1	B	376	GLY	C-N	6.42	1.42	1.33
3	G	37	LYS	CA-C	-6.42	1.44	1.52
9	O	41	GLY	CA-C	-6.41	1.44	1.52
2	F	240	THR	C-N	6.41	1.42	1.33
9	O	28	LEU	C-O	6.41	1.31	1.24
7	M	258	LEU	CA-C	-6.41	1.44	1.52
8	N	202	GLY	CA-C	-6.41	1.43	1.52
1	C	352	PRO	CA-C	-6.41	1.45	1.52
8	N	222	ALA	C-N	6.41	1.42	1.33
1	A	384	VAL	C-N	6.40	1.40	1.33
9	X	30	THR	C-N	6.40	1.42	1.33
8	N	259	LEU	C-N	6.40	1.42	1.33
9	P	71	LEU	N-CA	-6.40	1.38	1.46
9	Q	12	ARG	N-CA	6.40	1.54	1.46
1	A	73	VAL	CA-C	-6.40	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	503	VAL	N-CA	-6.40	1.40	1.46
2	E	287	MET	C-O	-6.40	1.16	1.24
2	F	211	THR	C-N	6.40	1.42	1.33
2	F	276	GLU	C-N	6.39	1.40	1.33
2	D	107	THR	CA-C	-6.39	1.45	1.52
6	L	60	GLU	CA-C	-6.39	1.44	1.52
9	X	66	VAL	N-CA	-6.39	1.38	1.46
5	K	64	LEU	C-N	6.38	1.42	1.33
1	B	209	MET	CA-C	-6.38	1.44	1.52
3	G	173	ARG	CA-C	-6.38	1.44	1.52
9	X	39	ALA	CA-C	-6.38	1.44	1.52
1	C	205	PHE	CA-C	-6.38	1.44	1.52
2	D	106	ILE	CA-C	6.38	1.60	1.52
1	C	557	GLU	N-CA	-6.38	1.38	1.46
6	L	37	VAL	N-CA	-6.38	1.37	1.46
7	M	199	GLU	CA-C	-6.38	1.44	1.52
1	A	418	HIS	CA-C	-6.37	1.45	1.52
1	B	521	ALA	C-N	6.37	1.42	1.33
7	M	148	ALA	CA-C	-6.37	1.44	1.52
1	C	538	GLU	C-N	6.37	1.42	1.34
1	A	36	VAL	C-N	6.36	1.40	1.33
1	A	379	THR	N-CA	-6.35	1.38	1.46
6	L	79	GLU	C-N	6.35	1.42	1.33
1	C	450	LEU	CA-C	-6.34	1.45	1.52
1	C	361	PHE	C-O	6.33	1.32	1.24
1	B	533	GLY	C-N	6.33	1.39	1.33
1	C	411	ALA	N-CA	-6.33	1.38	1.46
3	G	128	LEU	C-N	6.33	1.40	1.34
5	K	127	SER	N-CA	6.33	1.54	1.46
9	R	53	GLY	C-N	6.33	1.42	1.33
2	F	211	THR	N-CA	-6.33	1.38	1.45
2	E	359	SER	CA-C	-6.32	1.45	1.52
4	J	58	LEU	C-N	6.31	1.43	1.33
8	N	369	ALA	N-CA	-6.31	1.38	1.46
8	N	492	MET	C-N	6.31	1.42	1.34
9	P	67	ILE	C-N	6.31	1.42	1.33
9	Q	12	ARG	CA-C	-6.30	1.44	1.52
8	N	462	LEU	CA-C	-6.30	1.44	1.52
2	E	386	TYR	CA-C	-6.29	1.44	1.52
7	M	8	LEU	N-CA	-6.29	1.38	1.46
2	F	189	VAL	CA-C	-6.29	1.44	1.52
4	I	83	ALA	N-CA	-6.29	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	T	46	ALA	N-CA	-6.29	1.38	1.46
9	S	47	GLU	C-N	6.28	1.42	1.33
1	B	339	SER	N-CA	-6.28	1.39	1.46
2	D	386	TYR	C-N	6.28	1.41	1.33
2	D	232	ILE	C-N	6.28	1.42	1.33
9	P	46	ALA	N-CA	-6.28	1.38	1.46
7	M	84	VAL	CA-C	-6.28	1.44	1.52
1	C	405	ALA	CA-C	6.27	1.60	1.52
9	Q	72	ILE	C-O	-6.27	1.16	1.24
1	A	269	PHE	C-N	6.27	1.42	1.33
7	M	295	TRP	CA-C	-6.27	1.44	1.52
8	N	590	GLY	CA-C	-6.27	1.43	1.51
1	A	535	SER	CA-C	-6.27	1.44	1.52
2	D	295	TYR	C-N	6.26	1.42	1.33
8	N	324	PRO	CA-C	6.26	1.57	1.52
2	D	344	HIS	C-N	6.26	1.43	1.33
2	E	264	CYS	CA-C	-6.26	1.44	1.52
1	B	474	ASP	N-CA	-6.26	1.37	1.45
1	B	476	LEU	CA-C	-6.25	1.45	1.52
1	C	133	MET	CA-C	-6.25	1.44	1.52
1	C	198	LYS	C-N	6.25	1.42	1.33
9	S	10	LEU	C-N	6.25	1.42	1.33
3	G	103	VAL	C-N	6.24	1.41	1.33
1	C	407	TRP	CA-C	6.24	1.59	1.53
1	B	495	LEU	C-N	6.23	1.41	1.33
2	D	307	SER	CA-C	-6.23	1.44	1.52
1	B	176	GLU	CA-C	-6.23	1.44	1.52
3	G	137	GLU	N-CA	-6.23	1.39	1.46
2	D	386	TYR	CA-C	-6.23	1.44	1.52
3	H	76	ARG	C-N	6.22	1.42	1.33
1	C	273	THR	N-CA	-6.22	1.38	1.46
5	K	97	TRP	CA-C	6.22	1.60	1.52
2	F	225	ASP	N-CA	-6.21	1.39	1.46
1	A	128	GLU	CA-C	-6.21	1.45	1.52
1	B	80	LEU	CA-C	-6.21	1.44	1.52
2	F	155	GLY	CA-C	-6.20	1.44	1.51
2	D	96	ILE	N-CA	-6.20	1.39	1.46
1	A	246	ASN	N-CA	-6.20	1.39	1.46
4	I	44	ALA	CA-C	-6.20	1.45	1.52
1	C	211	ILE	CA-C	-6.18	1.44	1.52
2	E	188	ALA	C-N	6.18	1.41	1.33
2	F	45	GLY	CA-C	-6.17	1.43	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	575	LYS	CA-C	-6.17	1.44	1.52
7	M	279	ASP	CA-C	-6.17	1.44	1.52
2	D	277	ILE	C-O	-6.17	1.16	1.24
2	E	41	ARG	CA-C	-6.17	1.44	1.52
1	C	218	VAL	C-N	6.16	1.42	1.33
8	N	160	ARG	C-N	6.16	1.41	1.33
2	F	27	LEU	N-CA	-6.16	1.38	1.45
1	C	148	LEU	CA-C	-6.15	1.45	1.52
7	M	195	GLU	CA-C	-6.15	1.45	1.52
9	X	22	ALA	N-CA	-6.15	1.39	1.46
2	E	100	ILE	CA-C	-6.15	1.45	1.52
2	F	163	ILE	N-CA	6.15	1.54	1.46
8	N	21	GLN	C-N	6.14	1.42	1.33
9	Z	41	GLY	N-CA	-6.14	1.38	1.45
1	C	20	LEU	N-CA	-6.14	1.38	1.46
2	F	329	THR	N-CA	-6.14	1.39	1.46
2	E	250	ASP	C-N	6.14	1.41	1.33
1	C	39	ILE	C-O	6.13	1.31	1.24
1	A	569	GLU	CA-C	6.13	1.61	1.52
1	C	570	ILE	C-N	6.13	1.42	1.34
2	E	404	LEU	CA-C	-6.13	1.44	1.52
4	I	83	ALA	C-N	6.12	1.42	1.33
5	K	178	PHE	N-CA	-6.12	1.39	1.46
6	L	72	LEU	CA-C	-6.12	1.47	1.52
1	A	242	ALA	N-CA	-6.12	1.38	1.46
3	G	133	ALA	N-CA	-6.12	1.38	1.46
9	V	70	LEU	N-CA	-6.11	1.38	1.46
2	D	229	ILE	C-N	6.11	1.41	1.33
1	C	21	GLY	CA-C	6.11	1.60	1.51
1	A	404	GLY	C-N	6.11	1.41	1.33
8	N	600	VAL	N-CA	-6.11	1.39	1.46
3	G	74	GLN	CA-C	-6.11	1.45	1.52
2	E	81	ARG	N-CA	6.10	1.53	1.46
9	T	40	ALA	N-CA	6.10	1.53	1.46
7	M	306	ARG	CA-C	-6.10	1.44	1.52
2	D	249	HIS	C-N	6.09	1.41	1.33
1	C	183	MET	CA-C	-6.09	1.44	1.52
2	F	50	VAL	CA-C	-6.09	1.44	1.52
8	N	397	LYS	N-CA	-6.09	1.38	1.46
8	N	449	ILE	CA-C	-6.09	1.45	1.52
5	K	17	GLN	N-CA	-6.08	1.39	1.46
9	V	31	GLY	N-CA	-6.08	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	N	265	LEU	C-N	6.08	1.42	1.34
1	B	347	GLU	C-N	6.07	1.42	1.33
2	D	43	ARG	CA-C	-6.07	1.45	1.52
2	E	459	ILE	CA-C	-6.07	1.45	1.52
1	A	29	LYS	CA-C	-6.07	1.45	1.52
5	K	126	ALA	CA-C	-6.07	1.45	1.52
8	N	122	ALA	C-O	-6.07	1.17	1.24
9	U	32	VAL	C-N	6.07	1.41	1.33
3	H	22	GLU	N-CA	-6.06	1.39	1.46
2	F	276	GLU	CA-C	-6.06	1.45	1.52
7	M	50	ALA	C-N	6.06	1.42	1.33
2	D	20	PHE	C-O	-6.05	1.16	1.23
1	A	188	PRO	N-CA	-6.05	1.39	1.47
1	C	373	GLY	C-N	6.05	1.42	1.33
9	R	9	GLY	C-N	6.05	1.42	1.33
4	J	110	ALA	C-N	6.05	1.41	1.34
3	G	131	LEU	CA-C	-6.04	1.44	1.52
9	S	77	ASN	C-O	-6.04	1.16	1.23
9	T	79	ARG	N-CA	-6.03	1.39	1.46
9	Z	45	ILE	N-CA	-6.03	1.39	1.46
1	B	207	THR	CA-C	-6.03	1.44	1.52
1	C	308	THR	C-N	6.03	1.41	1.33
9	T	58	PHE	CA-C	-6.02	1.45	1.52
3	G	164	GLU	CA-C	-6.02	1.45	1.52
9	Q	13	GLY	CA-C	6.02	1.58	1.52
4	J	73	TYR	N-CA	-6.02	1.38	1.46
1	B	91	LEU	CA-C	-6.01	1.44	1.52
2	F	222	ASN	N-CA	-6.01	1.39	1.46
3	G	90	ALA	C-N	6.00	1.42	1.34
1	A	100	ILE	N-CA	-6.00	1.39	1.46
1	B	441	GLU	CA-C	-6.00	1.45	1.52
3	H	183	ALA	C-N	6.00	1.41	1.33
1	B	207	THR	C-N	6.00	1.41	1.33
2	E	443	LEU	C-N	6.00	1.41	1.33
9	Y	73	ALA	CA-C	-5.99	1.45	1.52
1	A	150	PRO	CA-C	5.99	1.55	1.51
2	D	55	ALA	C-O	5.99	1.31	1.23
2	F	92	ARG	CA-C	-5.99	1.45	1.52
1	B	114	GLU	N-CA	-5.99	1.38	1.46
5	K	46	ALA	CA-C	-5.99	1.45	1.52
2	F	321	ARG	C-N	5.98	1.41	1.33
8	N	54	ALA	CA-C	5.98	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	N	373	TYR	N-CA	-5.98	1.39	1.46
2	E	31	ALA	CA-C	-5.98	1.44	1.52
8	N	6	LEU	CA-C	-5.97	1.45	1.52
9	U	65	LEU	C-N	5.96	1.41	1.33
9	O	48	ASP	CA-C	-5.96	1.47	1.53
1	C	29	LYS	CA-C	-5.96	1.45	1.52
9	Y	75	ILE	C-N	5.96	1.41	1.33
1	C	526	ALA	CA-C	-5.95	1.45	1.52
3	H	125	PRO	N-CA	-5.95	1.40	1.47
2	D	189	VAL	N-CA	-5.95	1.39	1.46
7	M	282	GLY	CA-C	-5.95	1.43	1.51
8	N	253	GLN	C-N	5.95	1.41	1.33
3	H	7	ILE	C-N	5.94	1.42	1.34
3	H	62	SER	N-CA	-5.94	1.39	1.46
1	A	6	ILE	CA-C	-5.93	1.46	1.52
1	A	572	GLY	CA-C	-5.93	1.43	1.51
1	C	234	LYS	CA-C	5.93	1.60	1.52
5	K	33	ASP	C-N	5.93	1.41	1.33
8	N	63	LEU	CA-C	-5.93	1.45	1.52
9	X	68	PHE	C-N	5.93	1.41	1.33
1	B	568	LYS	C-N	5.93	1.42	1.33
2	F	24	ALA	C-N	5.93	1.42	1.33
9	V	21	LEU	C-N	5.93	1.41	1.33
1	B	272	LEU	CA-C	-5.92	1.45	1.52
1	B	75	LEU	CA-C	-5.92	1.45	1.52
2	F	70	THR	N-CA	-5.92	1.39	1.46
2	E	458	HIS	CA-C	-5.92	1.45	1.52
3	G	37	LYS	N-CA	-5.91	1.39	1.46
2	D	460	GLY	CA-C	-5.91	1.43	1.51
3	H	102	GLU	CA-C	-5.91	1.44	1.52
1	B	510	LYS	CA-C	5.91	1.60	1.52
8	N	111	ALA	N-CA	-5.91	1.39	1.46
1	B	210	ARG	CA-C	-5.90	1.44	1.52
1	C	367	LYS	CA-C	-5.90	1.45	1.52
1	C	87	ILE	CA-C	5.90	1.61	1.52
9	O	60	LEU	N-CA	5.90	1.53	1.46
1	A	378	VAL	N-CA	-5.90	1.39	1.46
2	D	58	GLN	C-O	-5.90	1.17	1.23
7	M	123	VAL	N-CA	-5.89	1.39	1.46
9	Z	79	ARG	CA-C	-5.89	1.45	1.52
1	A	402	ILE	C-N	5.89	1.41	1.33
5	K	31	LYS	N-CA	-5.89	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	N	115	LEU	CA-C	5.88	1.60	1.52
9	U	16	ALA	C-N	5.88	1.41	1.33
2	D	304	LYS	CA-C	-5.88	1.45	1.53
5	K	131	ARG	CA-C	-5.88	1.44	1.52
1	B	325	ASP	CA-C	5.87	1.60	1.52
9	O	65	LEU	C-O	-5.87	1.17	1.24
1	B	124	LYS	C-O	-5.87	1.18	1.24
1	C	88	GLN	N-CA	-5.87	1.38	1.46
9	V	67	ILE	N-CA	5.87	1.53	1.46
8	N	601	ALA	N-CA	-5.87	1.38	1.46
1	C	149	VAL	CA-C	5.86	1.57	1.53
2	E	123	ALA	N-CA	-5.86	1.39	1.46
1	B	91	LEU	C-N	5.86	1.41	1.33
1	B	116	LYS	CA-C	5.86	1.59	1.52
2	D	132	GLN	CA-C	-5.86	1.45	1.52
3	H	142	LEU	CA-C	5.86	1.65	1.52
1	C	389	GLY	C-N	5.86	1.41	1.33
2	F	153	PHE	N-CA	-5.86	1.39	1.46
3	G	115	LEU	C-O	-5.86	1.19	1.24
1	A	302	SER	N-CA	-5.86	1.38	1.46
2	D	206	GLN	CA-C	-5.85	1.44	1.52
8	N	215	ARG	CA-C	-5.85	1.45	1.52
1	C	124	LYS	CA-C	-5.85	1.46	1.52
1	C	388	GLY	CA-C	-5.85	1.43	1.51
7	M	218	PHE	C-N	5.85	1.40	1.33
1	B	154	ARG	CA-C	-5.84	1.45	1.52
2	F	384	SER	CA-C	5.84	1.60	1.52
3	G	158	GLU	CA-C	5.84	1.60	1.52
8	N	361	MET	C-N	5.84	1.40	1.33
9	T	2	GLU	CA-C	-5.84	1.45	1.52
2	E	278	PRO	N-CA	5.84	1.54	1.47
1	B	290	ASN	CA-C	-5.84	1.45	1.52
8	N	623	LEU	C-N	5.84	1.41	1.33
7	M	11	ARG	CA-C	-5.83	1.45	1.52
9	T	24	GLY	N-CA	5.83	1.53	1.45
1	B	452	ASP	N-CA	-5.83	1.39	1.46
2	E	136	SER	C-N	5.83	1.41	1.33
7	M	144	GLY	N-CA	5.83	1.53	1.45
5	K	146	ARG	N-CA	-5.82	1.39	1.46
1	C	19	MET	C-N	5.82	1.41	1.33
1	C	182	LYS	CA-C	-5.82	1.48	1.52
2	F	192	ALA	CA-C	-5.82	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	N	327	VAL	CA-C	-5.82	1.45	1.52
1	B	449	GLU	C-N	5.82	1.41	1.34
2	D	112	LEU	C-N	5.82	1.41	1.33
2	E	438	ILE	CA-C	-5.82	1.45	1.53
9	V	73	ALA	CA-C	-5.82	1.45	1.52
1	C	485	GLU	C-N	5.82	1.41	1.33
1	B	261	GLU	N-CA	-5.81	1.38	1.46
1	C	203	THR	CA-C	-5.81	1.45	1.52
9	X	25	LEU	C-N	5.81	1.41	1.33
1	A	474	ASP	C-N	5.81	1.42	1.33
2	F	280	ARG	C-N	5.81	1.42	1.33
8	N	230	VAL	N-CA	-5.81	1.39	1.46
9	O	67	ILE	CA-C	-5.81	1.45	1.52
1	A	113	ARG	CA-C	-5.80	1.45	1.52
3	H	113	GLU	C-N	5.80	1.41	1.33
4	I	60	GLU	CA-C	5.80	1.60	1.52
4	I	92	ALA	N-CA	-5.80	1.39	1.46
8	N	242	ALA	CA-C	-5.80	1.45	1.52
9	O	21	LEU	N-CA	-5.80	1.39	1.46
9	U	44	ALA	C-N	5.80	1.41	1.33
9	Z	74	PHE	N-CA	-5.80	1.39	1.46
4	J	111	VAL	C-N	5.79	1.41	1.33
9	V	26	ALA	N-CA	-5.79	1.39	1.46
1	A	445	GLU	C-N	5.79	1.41	1.33
1	C	214	VAL	N-CA	5.79	1.53	1.46
9	Z	28	LEU	C-O	5.79	1.30	1.24
1	A	560	PRO	N-CA	-5.78	1.40	1.47
9	Y	75	ILE	C-O	-5.78	1.17	1.24
8	N	124	LEU	C-N	5.78	1.41	1.33
9	R	22	ALA	N-CA	-5.78	1.39	1.46
1	C	385	SER	CA-C	-5.77	1.45	1.52
6	L	57	ARG	N-CA	-5.77	1.39	1.46
1	C	86	GLY	CA-C	-5.77	1.43	1.51
2	D	146	ARG	CA-C	-5.77	1.45	1.52
2	D	309	THR	CA-C	-5.77	1.45	1.52
7	M	192	LEU	CA-C	5.77	1.60	1.52
7	M	219	LEU	C-N	5.77	1.41	1.33
8	N	119	GLU	C-N	5.76	1.41	1.33
8	N	626	VAL	N-CA	-5.76	1.39	1.46
9	P	20	GLY	N-CA	-5.76	1.37	1.45
9	Q	56	LEU	CA-C	5.76	1.60	1.52
9	R	38	GLY	CA-C	-5.76	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	D	14	ILE	N-CA	-5.76	1.39	1.46
2	F	12	THR	C-N	5.76	1.41	1.33
2	F	88	MET	N-CA	-5.76	1.38	1.46
8	N	479	LEU	C-N	5.76	1.41	1.33
9	O	7	SER	CA-C	-5.75	1.45	1.52
2	E	10	GLY	CA-C	-5.75	1.44	1.52
6	L	10	ALA	CA-C	-5.75	1.45	1.52
6	L	90	MET	N-CA	-5.75	1.38	1.46
2	E	25	LYS	C-N	5.75	1.41	1.33
1	B	388	GLY	N-CA	-5.74	1.37	1.45
2	D	92	ARG	CA-C	-5.74	1.45	1.52
8	N	249	TRP	CA-C	-5.74	1.45	1.52
1	A	536	ILE	C-N	5.74	1.41	1.33
8	N	407	VAL	CA-C	-5.74	1.45	1.52
9	R	64	THR	C-N	5.74	1.41	1.33
9	X	49	ARG	N-CA	-5.73	1.38	1.46
6	L	51	LEU	CA-C	-5.73	1.46	1.52
6	L	78	LYS	CA-C	-5.73	1.45	1.52
1	C	376	GLY	C-N	5.73	1.41	1.33
1	A	325	ASP	C-O	-5.72	1.17	1.24
4	I	59	LEU	C-N	5.72	1.41	1.33
9	S	39	ALA	N-CA	5.72	1.53	1.46
1	A	55	THR	C-O	-5.72	1.17	1.23
8	N	550	GLU	C-N	5.71	1.40	1.34
9	T	34	GLN	N-CA	-5.71	1.39	1.46
9	Q	72	ILE	C-N	5.71	1.41	1.33
2	E	255	VAL	C-N	5.71	1.39	1.33
9	T	28	LEU	C-N	5.71	1.40	1.33
2	E	225	ASP	N-CA	-5.70	1.41	1.46
8	N	252	ALA	CA-C	-5.70	1.45	1.52
1	C	219	ALA	C-N	5.69	1.41	1.33
7	M	243	GLU	N-CA	-5.69	1.38	1.45
1	B	368	VAL	C-N	5.69	1.40	1.33
7	M	5	PHE	C-N	5.69	1.40	1.33
8	N	25	VAL	C-N	5.69	1.41	1.33
5	K	51	LYS	CA-C	-5.69	1.45	1.52
2	F	415	ALA	CA-C	-5.69	1.45	1.52
2	F	419	GLU	C-N	5.69	1.41	1.33
9	Q	34	GLN	C-O	-5.69	1.17	1.24
3	G	135	ALA	C-N	5.69	1.41	1.33
2	D	425	GLN	C-N	5.68	1.41	1.33
8	N	415	PHE	C-N	5.68	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	Q	51	ASN	C-N	5.68	1.41	1.34
2	E	264	CYS	C-N	5.68	1.41	1.33
4	I	55	ALA	C-N	5.68	1.40	1.33
1	B	534	VAL	C-O	-5.68	1.18	1.23
3	H	115	LEU	C-O	-5.68	1.19	1.24
1	B	160	VAL	CA-C	-5.68	1.45	1.52
2	F	265	GLU	CA-C	-5.68	1.45	1.52
5	K	31	LYS	CA-C	-5.68	1.45	1.52
2	D	249	HIS	CA-C	-5.67	1.45	1.52
1	A	374	GLU	C-N	5.67	1.43	1.33
2	D	49	GLU	CA-C	5.67	1.59	1.52
2	F	435	SER	N-CA	-5.67	1.38	1.46
6	L	39	ARG	C-N	5.67	1.41	1.33
9	S	67	ILE	N-CA	5.67	1.53	1.46
1	A	113	ARG	N-CA	-5.66	1.38	1.46
8	N	95	GLU	C-N	5.66	1.40	1.33
1	A	80	LEU	CA-C	-5.66	1.45	1.52
2	E	51	SER	C-N	5.66	1.41	1.33
7	M	4	ASP	C-N	5.66	1.41	1.33
1	C	25	TYR	CA-C	-5.66	1.45	1.52
2	E	324	PRO	C-N	5.66	1.39	1.33
2	F	269	GLU	N-CA	-5.66	1.39	1.46
9	Z	56	LEU	CA-C	-5.66	1.45	1.52
3	G	43	GLN	N-CA	-5.66	1.39	1.46
9	Z	59	LEU	CA-C	-5.66	1.45	1.52
5	K	179	ILE	N-CA	-5.66	1.39	1.46
5	K	95	ASN	CA-C	-5.65	1.45	1.52
2	E	269	GLU	CA-C	-5.65	1.44	1.52
9	P	50	SER	N-CA	-5.65	1.39	1.46
8	N	481	LEU	CA-C	5.65	1.60	1.52
5	K	41	GLY	C-N	5.64	1.42	1.33
1	A	468	VAL	CA-C	-5.64	1.46	1.52
2	E	249	HIS	CA-C	5.64	1.60	1.52
9	S	53	GLY	CA-C	-5.64	1.45	1.52
1	A	418	HIS	N-CA	-5.64	1.39	1.46
9	O	60	LEU	CA-C	-5.64	1.45	1.52
4	I	80	GLU	C-N	5.63	1.41	1.33
2	D	55	ALA	CA-C	-5.63	1.45	1.52
8	N	203	ALA	CA-C	-5.63	1.45	1.52
8	N	324	PRO	C-N	5.63	1.41	1.33
9	X	7	SER	CA-C	-5.62	1.45	1.52
1	C	365	ALA	C-N	5.62	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	136	SER	N-CA	-5.62	1.39	1.46
8	N	505	LEU	C-N	5.62	1.41	1.33
9	Q	69	GLY	CA-C	-5.62	1.45	1.52
9	V	73	ALA	N-CA	-5.62	1.39	1.46
1	C	367	LYS	N-CA	5.62	1.52	1.46
3	G	34	ALA	N-CA	-5.61	1.39	1.46
1	B	248	ASP	N-CA	-5.61	1.39	1.46
2	E	357	SER	C-N	5.61	1.40	1.33
8	N	70	ALA	CA-C	-5.61	1.45	1.52
1	C	73	VAL	CA-C	-5.61	1.45	1.52
1	C	407	TRP	C-N	5.61	1.41	1.33
2	F	103	LEU	CA-C	5.61	1.60	1.53
1	A	126	GLY	C-N	5.61	1.41	1.33
7	M	281	LEU	C-N	5.61	1.41	1.33
9	Z	30	THR	C-N	5.61	1.41	1.33
2	E	354	PRO	C-O	-5.60	1.16	1.24
1	C	489	ILE	C-N	5.60	1.40	1.34
9	U	57	ILE	CA-C	5.60	1.60	1.52
3	G	122	VAL	N-CA	-5.60	1.40	1.46
1	B	356	ALA	N-CA	5.60	1.52	1.46
1	B	389	GLY	CA-C	5.60	1.59	1.51
9	Z	39	ALA	CA-C	-5.59	1.45	1.52
1	B	42	LEU	C-O	-5.59	1.17	1.24
2	D	88	MET	CA-C	-5.59	1.45	1.52
2	E	68	LEU	C-N	5.59	1.41	1.33
8	N	614	LEU	C-N	5.59	1.41	1.33
9	Y	35	ALA	CA-C	5.59	1.60	1.52
2	D	250	ASP	C-N	5.58	1.41	1.33
1	C	152	ASP	C-N	5.58	1.40	1.33
8	N	174	ALA	CA-C	-5.58	1.46	1.52
1	C	232	SER	CA-C	-5.58	1.46	1.53
2	F	148	GLN	N-CA	-5.58	1.38	1.45
2	F	260	MET	N-CA	-5.58	1.39	1.46
6	L	83	GLY	C-N	5.58	1.42	1.33
2	E	109	GLU	CA-C	-5.57	1.45	1.52
2	E	246	ALA	N-CA	-5.57	1.39	1.46
2	E	338	GLN	CA-C	-5.57	1.45	1.52
8	N	354	PHE	N-CA	-5.57	1.39	1.46
1	A	428	TYR	CA-C	-5.57	1.45	1.52
2	E	458	HIS	C-N	5.57	1.40	1.33
9	V	66	VAL	N-CA	-5.57	1.40	1.46
7	M	94	HIS	N-CA	5.56	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	X	57	ILE	CA-C	-5.56	1.45	1.52
8	N	18	GLN	N-CA	-5.56	1.39	1.46
2	F	24	ALA	N-CA	-5.55	1.40	1.46
2	F	374	ASP	C-N	5.55	1.41	1.33
3	G	13	GLU	CA-C	5.54	1.60	1.52
1	A	433	SER	N-CA	-5.54	1.38	1.46
1	B	573	ALA	N-CA	-5.54	1.38	1.46
2	E	129	GLN	CA-C	-5.54	1.45	1.52
5	K	45	GLU	C-N	5.54	1.40	1.33
1	C	395	VAL	N-CA	5.54	1.53	1.46
1	C	125	PRO	N-CA	5.54	1.53	1.47
3	G	6	ALA	C-O	-5.54	1.16	1.24
2	F	174	ARG	C-N	-5.53	1.29	1.33
1	A	325	ASP	N-CA	-5.53	1.39	1.46
1	C	545	LEU	C-N	5.53	1.41	1.34
1	C	563	PHE	C-N	5.53	1.40	1.33
3	G	36	GLU	CA-C	-5.53	1.44	1.52
1	C	160	VAL	C-O	-5.53	1.18	1.24
2	F	403	ALA	CA-C	-5.53	1.45	1.52
1	B	159	GLU	N-CA	-5.52	1.39	1.45
2	E	341	ARG	C-N	5.52	1.41	1.33
1	A	173	VAL	CA-C	-5.52	1.45	1.52
1	B	295	PRO	C-N	5.52	1.41	1.34
1	A	133	MET	CA-C	-5.51	1.46	1.52
5	K	149	LYS	C-N	5.51	1.40	1.34
1	C	31	GLY	CA-C	-5.51	1.44	1.52
1	C	350	TYR	C-N	5.51	1.39	1.33
2	D	12	THR	CA-C	-5.51	1.45	1.52
1	A	442	ASN	CA-C	5.51	1.59	1.52
2	F	88	MET	C-N	5.51	1.41	1.33
9	P	54	THR	CA-C	-5.50	1.45	1.52
8	N	109	ALA	CA-C	-5.50	1.45	1.52
1	B	318	PHE	CA-C	-5.50	1.45	1.52
1	A	223	THR	N-CA	-5.50	1.39	1.45
1	A	284	ARG	C-N	5.50	1.40	1.33
1	B	175	LEU	CA-C	-5.50	1.45	1.52
9	T	11	ASP	C-N	-5.50	1.26	1.33
3	H	27	ALA	N-CA	5.49	1.53	1.46
1	B	302	SER	C-N	5.49	1.40	1.33
8	N	542	SER	CA-C	-5.49	1.45	1.52
1	B	282	MET	N-CA	-5.49	1.39	1.46
1	C	202	ASN	CA-C	-5.49	1.48	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	457	LEU	C-N	5.49	1.41	1.33
2	D	84	VAL	CA-C	-5.49	1.45	1.52
2	E	142	ASN	C-N	5.49	1.41	1.33
8	N	123	ALA	C-N	5.49	1.41	1.34
1	A	386	PRO	CA-C	5.48	1.57	1.52
1	C	515	ILE	CA-C	-5.48	1.46	1.52
3	H	10	GLN	CA-C	-5.48	1.45	1.52
7	M	98	ALA	C-N	5.48	1.40	1.33
9	T	47	GLU	CA-C	-5.47	1.45	1.52
1	C	286	VAL	N-CA	5.47	1.52	1.46
2	D	324	PRO	C-N	5.47	1.39	1.33
2	D	102	GLY	CA-C	5.46	1.59	1.51
2	D	256	ILE	C-N	5.46	1.40	1.33
1	A	69	LEU	CA-C	-5.46	1.47	1.52
1	B	554	VAL	N-CA	-5.46	1.40	1.46
1	A	341	LEU	CA-C	-5.46	1.45	1.52
1	C	311	GLU	C-N	5.46	1.40	1.33
1	A	490	ILE	C-N	5.45	1.41	1.33
1	B	385	SER	C-N	5.45	1.39	1.33
8	N	37	SER	N-CA	-5.45	1.39	1.46
9	Q	37	ILE	CA-C	-5.45	1.45	1.52
1	C	292	SER	N-CA	5.45	1.53	1.46
3	G	61	GLU	C-N	5.45	1.40	1.33
3	G	106	LYS	C-N	5.45	1.41	1.33
7	M	108	PRO	C-N	5.45	1.41	1.33
7	M	259	LYS	C-N	5.45	1.41	1.33
1	B	227	PRO	N-CA	-5.44	1.40	1.46
9	X	14	LEU	CA-C	-5.44	1.45	1.52
8	N	211	GLU	N-CA	-5.44	1.39	1.46
5	K	154	ILE	C-N	5.44	1.40	1.33
1	C	370	THR	C-N	5.43	1.41	1.34
8	N	500	GLY	CA-C	-5.43	1.46	1.52
1	B	162	PRO	C-N	5.43	1.41	1.33
1	C	380	ILE	C-N	5.43	1.40	1.33
7	M	110	GLU	C-N	5.43	1.41	1.33
1	A	67	THR	CA-C	-5.43	1.45	1.52
2	D	251	TYR	CA-C	-5.43	1.46	1.52
9	Q	54	THR	C-N	5.43	1.41	1.33
2	E	231	ARG	N-CA	-5.42	1.39	1.46
9	Q	52	PHE	CA-C	5.42	1.60	1.52
2	E	247	PHE	CA-C	-5.42	1.46	1.53
9	O	20	GLY	C-N	5.42	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	J	86	ALA	C-N	5.42	1.41	1.33
9	O	65	LEU	N-CA	-5.42	1.39	1.46
9	Z	14	LEU	C-N	5.42	1.40	1.33
2	D	131	ILE	C-N	5.42	1.41	1.33
7	M	230	PHE	C-N	5.42	1.41	1.33
1	C	268	GLU	C-N	5.42	1.42	1.34
9	Y	5	ALA	N-CA	-5.42	1.41	1.46
1	A	22	ALA	CA-C	-5.41	1.45	1.53
1	A	351	PRO	CA-C	5.41	1.57	1.52
1	B	10	ALA	C-N	5.41	1.41	1.33
1	B	271	GLU	C-O	-5.41	1.17	1.23
8	N	360	GLY	C-N	5.41	1.42	1.33
2	D	204	PHE	N-CA	-5.41	1.40	1.46
2	D	404	LEU	CA-C	-5.41	1.46	1.52
7	M	141	ALA	C-N	5.41	1.42	1.33
7	M	262	GLU	CA-C	5.41	1.59	1.52
8	N	87	LEU	CA-C	-5.41	1.45	1.52
9	V	18	GLY	C-N	5.41	1.41	1.34
9	S	72	ILE	C-N	5.41	1.41	1.33
7	M	72	LEU	N-CA	-5.40	1.40	1.46
8	N	82	ALA	C-N	5.40	1.40	1.33
1	A	550	ARG	C-N	5.40	1.41	1.33
1	B	92	GLU	C-O	-5.40	1.17	1.24
8	N	415	PHE	N-CA	-5.40	1.39	1.46
9	S	54	THR	CA-C	5.40	1.59	1.52
9	U	65	LEU	CA-C	-5.40	1.45	1.52
1	C	269	PHE	CA-C	5.40	1.58	1.52
8	N	65	LEU	CA-C	5.40	1.59	1.52
1	B	419	PHE	CA-C	-5.40	1.46	1.52
2	D	238	ALA	N-CA	-5.39	1.39	1.46
2	E	204	PHE	CA-C	-5.39	1.45	1.52
2	E	323	HIS	C-N	5.39	1.40	1.33
4	I	34	LEU	CA-C	-5.39	1.45	1.52
1	B	499	ALA	N-CA	-5.39	1.38	1.46
2	E	58	GLN	CA-C	-5.39	1.45	1.52
9	O	17	VAL	N-CA	-5.39	1.40	1.46
9	X	43	GLY	CA-C	5.38	1.58	1.52
2	E	252	HIS	C-N	5.38	1.40	1.33
3	H	103	VAL	C-N	5.38	1.40	1.33
3	H	139	GLY	C-N	5.38	1.40	1.33
1	C	76	GLY	CA-C	-5.38	1.44	1.51
8	N	228	SER	CA-C	-5.37	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	5	VAL	C-O	-5.37	1.18	1.24
6	L	98	ILE	CA-C	-5.37	1.46	1.52
9	V	72	ILE	C-N	5.37	1.41	1.33
2	F	132	GLN	CA-C	-5.37	1.46	1.52
1	C	222	GLY	C-O	5.36	1.29	1.23
1	C	313	PHE	CA-C	-5.36	1.45	1.52
8	N	609	LEU	CA-C	-5.36	1.45	1.52
9	X	64	THR	C-N	5.36	1.40	1.33
1	C	330	TRP	CA-C	-5.36	1.45	1.52
9	Q	61	LEU	C-N	5.36	1.40	1.34
9	O	19	MET	N-CA	-5.36	1.39	1.46
1	B	486	VAL	CA-C	-5.35	1.46	1.52
2	D	427	GLN	C-N	5.35	1.40	1.33
9	P	51	ASN	C-N	5.35	1.41	1.34
2	D	88	MET	N-CA	-5.35	1.39	1.46
2	D	281	ARG	C-N	5.35	1.41	1.33
5	K	58	LYS	C-N	5.34	1.40	1.33
1	C	277	THR	C-N	5.34	1.41	1.33
1	C	462	ALA	N-CA	5.34	1.52	1.46
6	L	96	LYS	C-O	-5.34	1.17	1.24
1	C	47	ALA	CA-C	-5.33	1.46	1.52
2	F	113	PRO	CA-C	-5.33	1.46	1.52
9	U	55	ALA	C-N	5.33	1.41	1.33
1	C	202	ASN	N-CA	-5.33	1.42	1.47
9	P	66	VAL	CA-C	-5.33	1.45	1.52
9	U	71	LEU	C-N	-5.33	1.27	1.33
1	C	69	LEU	C-N	5.33	1.40	1.33
7	M	231	ALA	CA-C	5.33	1.59	1.52
9	Y	56	LEU	C-N	5.33	1.40	1.33
9	S	78	GLY	C-N	5.32	1.40	1.33
9	Y	13	GLY	CA-C	-5.32	1.46	1.52
1	A	47	ALA	CA-C	-5.32	1.46	1.52
3	H	68	VAL	N-CA	-5.32	1.40	1.46
4	J	53	ALA	CA-C	5.32	1.59	1.52
1	C	52	TYR	C-N	5.32	1.41	1.33
1	C	391	MET	CA-C	5.32	1.59	1.52
9	Z	61	LEU	CA-C	5.32	1.59	1.52
1	C	170	GLU	C-N	-5.32	1.26	1.33
1	C	486	VAL	C-N	5.32	1.41	1.33
3	H	166	SER	C-N	-5.32	1.26	1.34
4	J	117	GLU	C-N	5.32	1.40	1.33
2	D	81	ARG	CA-C	-5.31	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	84	TYR	N-CA	-5.31	1.38	1.45
1	C	212	LEU	C-N	5.31	1.41	1.33
9	Y	61	LEU	N-CA	-5.31	1.40	1.46
3	G	109	LEU	C-N	5.31	1.41	1.33
6	L	29	ALA	CA-C	-5.31	1.45	1.52
2	E	318	ASP	N-CA	-5.30	1.39	1.45
1	B	465	GLN	CA-C	-5.30	1.45	1.52
1	A	52	TYR	CA-C	-5.30	1.45	1.52
8	N	472	VAL	C-O	-5.30	1.18	1.24
1	A	299	ARG	CA-C	5.30	1.60	1.52
1	C	431	PHE	C-N	5.30	1.41	1.33
2	E	27	LEU	C-N	5.30	1.41	1.33
3	H	88	ARG	C-N	5.30	1.40	1.33
8	N	136	VAL	N-CA	-5.30	1.40	1.46
1	C	70	PRO	CA-C	-5.29	1.45	1.52
1	C	474	ASP	C-N	5.29	1.40	1.33
2	F	53	GLU	CA-C	-5.29	1.49	1.52
1	A	252	TYR	N-CA	-5.29	1.39	1.46
2	E	188	ALA	C-O	-5.29	1.17	1.23
1	A	134	VAL	C-N	5.29	1.41	1.33
2	F	256	ILE	N-CA	-5.29	1.38	1.46
9	Q	23	VAL	C-N	5.29	1.39	1.33
2	F	429	ASN	C-N	5.29	1.40	1.33
2	F	461	LYS	CA-C	-5.28	1.45	1.52
5	K	35	LEU	C-N	5.28	1.40	1.33
9	Q	40	ALA	C-O	-5.28	1.17	1.24
1	B	225	ALA	C-N	5.28	1.39	1.33
1	B	236	VAL	C-N	5.28	1.41	1.34
8	N	281	LYS	C-N	5.28	1.41	1.34
2	E	397	ALA	N-CA	-5.28	1.39	1.46
5	K	66	LEU	N-CA	5.28	1.52	1.46
5	K	90	GLU	CA-C	-5.28	1.46	1.53
1	C	553	TYR	C-O	5.27	1.31	1.23
2	F	16	GLY	CA-C	5.27	1.59	1.51
1	B	85	ASP	C-N	5.27	1.41	1.33
4	I	65	LYS	N-CA	5.27	1.52	1.46
1	A	380	ILE	N-CA	-5.27	1.40	1.46
3	G	171	MET	CA-C	-5.27	1.46	1.52
1	B	393	GLU	CA-C	5.27	1.58	1.53
9	W	16	ALA	CA-C	-5.27	1.46	1.52
8	N	576	GLY	C-N	5.26	1.41	1.33
9	P	42	VAL	N-CA	-5.26	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	D	51	SER	CA-C	-5.26	1.45	1.52
9	Y	16	ALA	N-CA	-5.26	1.39	1.46
1	B	28	CYS	CA-C	-5.26	1.46	1.53
1	C	472	GLY	CA-C	5.26	1.59	1.51
9	U	77	ASN	N-CA	5.26	1.52	1.46
1	A	115	LYS	C-N	5.26	1.40	1.33
9	P	70	LEU	C-N	5.26	1.41	1.33
2	E	45	GLY	C-N	5.25	1.40	1.33
1	C	129	VAL	C-N	5.25	1.40	1.33
2	E	103	LEU	C-N	5.25	1.39	1.33
8	N	84	GLU	N-CA	-5.25	1.39	1.46
8	N	531	GLY	N-CA	5.25	1.52	1.45
1	C	49	VAL	CA-C	-5.25	1.46	1.52
3	H	38	ALA	N-CA	-5.25	1.40	1.46
8	N	195	VAL	N-CA	-5.25	1.39	1.46
1	C	236	VAL	C-N	5.25	1.40	1.33
1	A	13	ALA	CA-C	-5.25	1.44	1.52
1	A	311	GLU	C-N	5.25	1.41	1.34
2	F	194	MET	N-CA	-5.25	1.40	1.46
3	H	104	VAL	C-N	5.25	1.40	1.33
9	X	65	LEU	C-N	5.25	1.40	1.33
2	D	454	ILE	C-N	5.25	1.40	1.33
2	E	276	GLU	CA-C	5.25	1.59	1.52
3	H	182	VAL	C-N	5.24	1.40	1.33
9	X	8	GLY	C-O	-5.24	1.19	1.24
1	A	423	ASN	CA-C	-5.24	1.46	1.53
2	E	243	GLU	N-CA	5.24	1.52	1.46
5	K	171	GLY	N-CA	-5.24	1.39	1.45
9	Z	68	PHE	CA-C	5.24	1.59	1.52
1	B	197	ARG	CA-C	-5.24	1.46	1.52
1	A	14	VAL	CA-C	5.24	1.58	1.52
8	N	481	LEU	C-N	5.23	1.40	1.33
2	F	141	MET	C-N	5.23	1.40	1.33
5	K	73	PRO	C-N	5.23	1.40	1.33
1	A	144	THR	CA-C	-5.23	1.46	1.52
9	R	64	THR	N-CA	-5.23	1.40	1.46
9	Y	27	ALA	C-N	5.23	1.40	1.33
9	R	7	SER	CA-C	-5.23	1.46	1.52
1	C	179	THR	N-CA	5.22	1.53	1.46
1	A	256	GLY	C-N	5.22	1.40	1.33
8	N	31	LEU	N-CA	5.22	1.52	1.45
1	B	20	LEU	CA-C	-5.22	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	403	VAL	C-N	5.22	1.41	1.33
1	C	17	LYS	C-N	5.22	1.41	1.33
1	A	78	GLY	N-CA	5.21	1.51	1.45
1	C	2	ILE	C-N	5.21	1.41	1.33
2	F	301	VAL	N-CA	-5.21	1.40	1.46
1	B	144	THR	CA-C	-5.21	1.46	1.52
1	A	328	SER	N-CA	5.21	1.52	1.46
9	O	48	ASP	C-N	5.21	1.40	1.33
2	D	69	ALA	CA-C	-5.21	1.46	1.52
1	A	575	LYS	C-N	5.21	1.40	1.33
2	F	257	LEU	C-N	5.21	1.40	1.33
9	V	56	LEU	N-CA	-5.21	1.40	1.46
1	A	253	VAL	CA-C	-5.20	1.46	1.52
5	K	120	PRO	C-N	5.20	1.40	1.33
7	M	78	GLY	CA-C	-5.20	1.44	1.51
1	A	60	VAL	C-N	5.20	1.39	1.32
1	C	265	VAL	CA-C	5.20	1.59	1.52
3	H	128	LEU	CA-C	5.20	1.58	1.52
8	N	177	VAL	CA-C	-5.20	1.46	1.52
9	P	26	ALA	C-N	5.20	1.40	1.33
1	C	461	GLU	C-N	5.19	1.40	1.33
2	D	341	ARG	N-CA	-5.19	1.39	1.46
8	N	265	LEU	C-O	-5.19	1.18	1.24
3	G	8	LEU	C-N	5.19	1.41	1.33
3	H	79	VAL	N-CA	5.19	1.52	1.46
2	F	280	ARG	C-O	-5.19	1.17	1.24
9	Y	19	MET	C-O	-5.19	1.17	1.24
7	M	317	GLU	N-CA	-5.19	1.40	1.46
9	Z	62	PRO	C-N	5.19	1.41	1.34
1	C	419	PHE	CA-C	-5.18	1.46	1.52
1	A	521	ALA	C-O	-5.18	1.18	1.24
9	O	13	GLY	CA-C	-5.18	1.46	1.52
1	B	485	GLU	C-N	5.18	1.40	1.33
1	C	292	SER	C-N	5.18	1.40	1.33
2	D	453	ARG	N-CA	-5.18	1.40	1.46
2	D	79	VAL	CA-C	-5.18	1.46	1.52
8	N	339	THR	N-CA	-5.18	1.40	1.46
1	B	511	LYS	N-CA	-5.17	1.39	1.46
2	D	342	GLU	N-CA	-5.17	1.40	1.46
1	A	186	THR	N-CA	-5.17	1.39	1.46
3	G	59	ARG	N-CA	5.17	1.52	1.46
4	J	114	VAL	CA-C	-5.17	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	M	116	PRO	N-CA	-5.17	1.40	1.47
2	D	289	THR	CA-C	-5.17	1.46	1.52
1	C	326	SER	C-N	5.17	1.41	1.33
9	T	7	SER	C-N	5.17	1.38	1.32
2	F	131	ILE	CA-C	-5.17	1.46	1.52
8	N	544	ILE	C-N	5.17	1.41	1.33
1	A	156	ARG	CA-C	-5.16	1.46	1.52
8	N	561	HIS	C-N	5.16	1.40	1.33
2	F	77	GLU	N-CA	-5.16	1.39	1.46
2	F	60	PHE	CA-C	-5.16	1.46	1.52
9	S	36	ARG	C-N	5.16	1.40	1.33
1	B	251	VAL	CA-C	-5.16	1.46	1.52
3	H	68	VAL	CA-C	-5.16	1.46	1.52
2	D	127	PRO	N-CA	-5.15	1.40	1.47
5	K	73	PRO	CA-C	5.15	1.59	1.52
7	M	11	ARG	N-CA	-5.15	1.40	1.46
9	R	55	ALA	N-CA	-5.15	1.40	1.46
1	A	291	THR	CA-C	-5.15	1.46	1.52
9	S	44	ALA	CA-C	-5.15	1.46	1.52
2	E	43	ARG	C-N	5.15	1.41	1.33
9	S	41	GLY	CA-C	-5.15	1.45	1.52
2	E	237	MET	C-N	5.15	1.40	1.33
1	C	359	ALA	CA-C	5.14	1.59	1.52
2	F	361	LEU	N-CA	-5.14	1.39	1.46
7	M	229	ARG	C-N	5.14	1.40	1.33
1	B	573	ALA	CA-C	-5.14	1.48	1.53
7	M	267	CYS	C-N	5.14	1.40	1.33
8	N	117	PRO	CA-C	-5.14	1.44	1.52
2	F	49	GLU	CA-C	-5.14	1.45	1.52
9	Y	17	VAL	N-CA	-5.14	1.40	1.46
1	B	574	PHE	C-N	5.14	1.41	1.33
2	F	109	GLU	C-N	5.14	1.40	1.33
1	C	27	ILE	N-CA	-5.13	1.40	1.46
9	Y	60	LEU	C-N	5.13	1.40	1.33
2	D	143	THR	C-N	5.13	1.40	1.33
9	O	76	LEU	C-N	-5.13	1.26	1.33
1	B	462	ALA	CA-C	-5.13	1.46	1.52
4	I	105	ALA	CA-C	5.13	1.59	1.52
9	V	35	ALA	CA-C	-5.13	1.45	1.52
9	X	28	LEU	C-N	5.13	1.40	1.33
1	B	180	GLU	N-CA	-5.12	1.40	1.46
5	K	121	ALA	C-N	5.12	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	M	297	ALA	N-CA	5.12	1.52	1.46
9	Z	55	ALA	CA-C	-5.12	1.46	1.52
2	D	203	TYR	C-N	5.12	1.40	1.33
3	H	169	ALA	CA-C	5.12	1.59	1.52
2	F	275	GLU	CA-C	-5.12	1.46	1.53
2	E	81	ARG	C-O	-5.12	1.17	1.23
2	E	413	GLN	C-N	5.12	1.41	1.33
8	N	609	LEU	N-CA	-5.12	1.40	1.46
7	M	218	PHE	N-CA	-5.12	1.39	1.45
5	K	108	PHE	N-CA	-5.12	1.40	1.46
9	U	46	ALA	C-O	-5.12	1.18	1.24
2	F	448	GLN	N-CA	-5.11	1.40	1.46
8	N	91	GLN	C-O	-5.11	1.18	1.24
7	M	239	ALA	CA-C	5.11	1.59	1.52
1	A	425	ASN	N-CA	-5.11	1.40	1.46
3	H	45	ARG	CA-C	5.11	1.59	1.52
9	Y	28	LEU	C-N	5.11	1.40	1.33
1	A	141	PHE	C-N	5.10	1.40	1.33
2	D	151	PRO	N-CA	-5.10	1.41	1.47
2	E	444	SER	N-CA	-5.10	1.39	1.46
7	M	301	ARG	N-CA	-5.10	1.40	1.46
9	W	52	PHE	N-CA	5.10	1.52	1.46
5	K	165	GLU	N-CA	-5.10	1.39	1.46
1	B	175	LEU	N-CA	-5.09	1.39	1.45
3	H	133	ALA	N-CA	-5.09	1.40	1.46
3	H	170	ARG	N-CA	-5.09	1.39	1.46
1	A	96	GLU	C-O	-5.09	1.17	1.24
1	C	569	GLU	C-N	5.09	1.40	1.33
2	E	299	GLY	C-N	5.09	1.40	1.33
7	M	175	ASP	N-CA	-5.09	1.40	1.46
2	D	417	ALA	C-N	5.09	1.40	1.33
1	B	177	ASP	C-N	5.08	1.41	1.33
2	F	51	SER	N-CA	-5.08	1.39	1.45
2	E	21	VAL	N-CA	-5.08	1.40	1.46
2	E	449	GLY	N-CA	-5.08	1.38	1.45
4	I	72	GLN	C-O	-5.08	1.17	1.23
9	O	49	ARG	C-N	5.08	1.41	1.33
1	A	195	VAL	CA-C	5.08	1.58	1.52
1	B	25	TYR	C-N	5.08	1.40	1.33
7	M	190	ASP	N-CA	-5.08	1.40	1.46
9	W	56	LEU	C-N	5.08	1.40	1.33
1	C	84	TYR	N-CA	-5.08	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	D	32	ILE	N-CA	-5.08	1.40	1.46
1	C	70	PRO	C-N	5.07	1.40	1.33
7	M	121	GLU	C-N	5.07	1.41	1.34
3	H	92	GLU	C-N	5.07	1.40	1.33
1	C	11	GLY	N-CA	5.07	1.51	1.44
2	E	383	TYR	CA-C	-5.07	1.46	1.52
9	P	13	GLY	N-CA	-5.07	1.39	1.45
2	F	436	LEU	CA-C	5.07	1.59	1.52
8	N	38	ALA	CA-C	-5.07	1.46	1.52
2	D	195	GLY	CA-C	-5.06	1.44	1.51
2	E	187	PHE	C-N	5.06	1.40	1.33
7	M	165	GLU	CA-C	-5.06	1.46	1.52
1	C	409	LEU	N-CA	5.06	1.52	1.46
9	S	40	ALA	CA-C	-5.06	1.46	1.52
2	D	170	GLN	CA-C	-5.06	1.46	1.52
2	D	176	ASP	N-CA	-5.06	1.39	1.46
8	N	154	ARG	C-N	5.06	1.40	1.33
2	D	192	ALA	N-CA	-5.06	1.39	1.46
1	A	300	GLU	CA-C	-5.05	1.46	1.53
2	E	244	TYR	C-N	5.05	1.41	1.33
2	E	292	ALA	N-CA	-5.05	1.40	1.46
3	H	172	ASP	C-N	5.05	1.40	1.33
9	W	70	LEU	CA-C	5.05	1.59	1.52
1	C	515	ILE	C-N	5.05	1.40	1.33
2	D	304	LYS	N-CA	-5.05	1.40	1.45
1	A	126	GLY	CA-C	5.05	1.58	1.51
1	C	456	GLU	C-O	-5.05	1.17	1.24
2	F	131	ILE	N-CA	5.05	1.52	1.46
9	V	46	ALA	N-CA	-5.05	1.40	1.46
6	L	13	PHE	N-CA	5.04	1.52	1.46
2	D	363	ASN	C-O	-5.04	1.18	1.24
2	E	375	HIS	C-N	5.04	1.40	1.33
3	H	91	LEU	CA-C	5.04	1.59	1.52
2	D	83	GLY	C-N	5.04	1.38	1.33
1	A	27	ILE	C-N	5.04	1.40	1.33
8	N	67	GLY	C-N	5.04	1.40	1.33
1	C	182	LYS	C-O	-5.03	1.17	1.25
1	A	48	PHE	CA-C	-5.03	1.46	1.52
1	C	551	ALA	N-CA	-5.03	1.39	1.46
2	D	419	GLU	C-N	5.03	1.39	1.33
5	K	74	GLU	C-O	-5.03	1.18	1.24
8	N	350	VAL	N-CA	-5.03	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	215	SER	N-CA	-5.03	1.40	1.46
8	N	452	HIS	N-CA	-5.03	1.39	1.46
9	W	69	GLY	CA-C	-5.02	1.46	1.52
2	D	290	ASP	N-CA	5.02	1.52	1.46
4	J	52	GLU	CA-C	-5.02	1.46	1.52
9	R	37	ILE	N-CA	5.02	1.52	1.46
1	C	88	GLN	CA-C	-5.02	1.46	1.52
2	E	42	VAL	C-N	5.02	1.40	1.33
6	L	50	ALA	C-N	5.02	1.40	1.33
8	N	341	LYS	C-N	5.02	1.39	1.33
2	D	204	PHE	CA-C	-5.01	1.46	1.52
1	A	540	LEU	C-O	-5.01	1.18	1.24
2	D	22	GLU	CA-C	-5.01	1.46	1.53
5	K	30	LYS	CA-C	5.01	1.59	1.52
6	L	51	LEU	N-CA	5.01	1.52	1.46
8	N	186	ALA	N-CA	-5.01	1.40	1.46
1	B	443	VAL	C-N	5.01	1.39	1.33
2	F	348	ILE	CA-C	-5.00	1.46	1.52
7	M	234	MET	C-N	5.00	1.41	1.33
8	N	524	LEU	N-CA	-5.00	1.40	1.46
2	F	421	PHE	CA-C	-5.00	1.46	1.52
7	M	270	LEU	CA-C	-5.00	1.46	1.52
7	M	278	GLN	N-CA	-5.00	1.39	1.46
8	N	499	VAL	C-N	5.00	1.40	1.33
1	B	61	GLY	C-N	5.00	1.40	1.33
8	N	600	VAL	C-O	-5.00	1.18	1.24
9	U	60	LEU	C-O	-5.00	1.17	1.24

All (2642) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	218	VAL	N-CA-C	-13.59	100.80	113.71
9	T	52	PHE	CA-C-N	13.45	135.09	120.03
9	T	52	PHE	C-N-CA	13.45	135.09	120.03
2	D	194	MET	N-CA-C	-13.25	97.22	114.31
7	M	45	TYR	CA-C-N	12.47	135.73	120.14
7	M	45	TYR	C-N-CA	12.47	135.73	120.14
9	P	52	PHE	CA-C-N	12.08	133.39	119.98
9	P	52	PHE	C-N-CA	12.08	133.39	119.98
5	K	108	PHE	N-CA-C	-11.99	97.43	108.22
1	B	147	ILE	CA-C-N	11.98	138.63	121.50
1	B	147	ILE	C-N-CA	11.98	138.63	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	N	400	PRO	O-C-N	11.90	126.74	121.15
8	N	116	GLU	CA-C-O	-11.81	107.15	118.73
9	P	27	ALA	CA-C-N	11.71	135.67	120.44
9	P	27	ALA	C-N-CA	11.71	135.67	120.44
1	C	164	GLY	N-CA-C	-11.53	97.24	110.96
7	M	304	ALA	N-CA-C	11.48	123.79	111.28
8	N	13	ALA	CA-C-N	11.37	135.90	120.44
8	N	13	ALA	C-N-CA	11.37	135.90	120.44
9	R	28	LEU	CA-C-N	11.31	132.53	119.98
9	R	28	LEU	C-N-CA	11.31	132.53	119.98
9	W	58	PHE	CA-C-N	10.99	135.00	120.28
9	W	58	PHE	C-N-CA	10.99	135.00	120.28
2	E	330	GLY	CA-C-N	10.98	135.15	120.65
2	E	330	GLY	C-N-CA	10.98	135.15	120.65
1	B	210	ARG	CA-C-N	10.63	133.95	120.56
1	B	210	ARG	C-N-CA	10.63	133.95	120.56
1	B	9	ILE	N-CA-C	-10.40	92.96	108.46
9	T	40	ALA	CA-C-N	10.38	133.12	120.14
9	T	40	ALA	C-N-CA	10.38	133.12	120.14
7	M	154	VAL	N-CA-C	10.26	120.17	110.53
2	E	39	THR	N-CA-C	-10.23	100.11	112.59
2	E	101	ASP	N-CA-C	-10.22	99.13	112.41
7	M	191	TYR	CA-C-N	10.08	133.55	120.44
7	M	191	TYR	C-N-CA	10.08	133.55	120.44
9	P	61	LEU	CA-C-N	10.02	129.68	119.56
9	P	61	LEU	C-N-CA	10.02	129.68	119.56
8	N	504	GLY	CA-C-N	9.99	133.67	120.28
8	N	504	GLY	C-N-CA	9.99	133.67	120.28
1	A	149	VAL	CA-C-O	-9.98	112.70	119.19
8	N	263	GLU	CA-C-N	9.79	133.75	120.44
8	N	263	GLU	C-N-CA	9.79	133.75	120.44
8	N	599	VAL	CA-C-N	9.77	133.85	120.46
8	N	599	VAL	C-N-CA	9.77	133.85	120.46
2	D	287	MET	CA-C-N	9.77	133.73	120.54
2	D	287	MET	C-N-CA	9.77	133.73	120.54
1	A	462	ALA	CA-C-N	9.71	130.90	120.03
1	A	462	ALA	C-N-CA	9.71	130.90	120.03
1	A	150	PRO	CA-C-O	-9.66	113.94	120.90
7	M	142	VAL	CA-C-O	-9.66	111.37	118.71
9	O	19	MET	CA-C-N	9.65	132.21	120.14
9	O	19	MET	C-N-CA	9.65	132.21	120.14
9	P	61	LEU	CA-C-O	-9.64	108.99	118.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	T	49	ARG	CA-C-N	9.61	134.12	120.28
9	T	49	ARG	C-N-CA	9.61	134.12	120.28
9	X	12	ARG	CA-C-N	9.60	130.64	119.98
9	X	12	ARG	C-N-CA	9.60	130.64	119.98
8	N	454	ILE	N-CA-C	-9.59	101.79	111.77
1	A	503	VAL	N-CA-C	-9.59	103.79	113.47
2	F	286	TYR	CA-C-N	9.57	133.46	120.44
2	F	286	TYR	C-N-CA	9.57	133.46	120.44
2	D	213	ALA	CA-C-N	9.52	133.80	120.29
2	D	213	ALA	C-N-CA	9.52	133.80	120.29
9	Z	37	ILE	CA-C-N	9.50	130.45	120.00
9	Z	37	ILE	C-N-CA	9.50	130.45	120.00
1	A	130	ARG	N-CA-C	-9.45	94.88	108.96
9	Q	52	PHE	CA-C-N	9.43	130.45	119.98
9	Q	52	PHE	C-N-CA	9.43	130.45	119.98
3	H	78	GLU	CA-C-N	9.42	132.62	120.56
3	H	78	GLU	C-N-CA	9.42	132.62	120.56
2	D	363	ASN	N-CA-C	-9.41	103.89	114.62
2	F	98	LYS	CA-C-N	9.36	131.54	119.84
2	F	98	LYS	C-N-CA	9.36	131.54	119.84
8	N	384	LYS	CA-C-N	9.36	133.16	120.44
8	N	384	LYS	C-N-CA	9.36	133.16	120.44
2	D	328	LEU	CA-C-N	9.32	132.76	120.28
2	D	328	LEU	C-N-CA	9.32	132.76	120.28
1	A	102	ILE	N-CA-C	-9.31	94.16	107.75
9	W	29	GLY	CA-C-O	-9.29	111.19	120.75
2	F	428	GLN	CA-C-N	9.25	134.42	120.82
2	F	428	GLN	C-N-CA	9.25	134.42	120.82
1	A	239	GLN	N-CA-C	-9.22	102.03	113.28
1	C	251	VAL	N-CA-C	-9.18	94.90	108.12
1	B	497	GLN	N-CA-C	-9.14	92.51	108.69
3	H	160	LYS	N-CA-C	-9.10	104.25	114.62
9	R	43	GLY	CA-C-O	9.09	130.30	120.66
9	P	74	PHE	CA-C-O	-9.07	111.29	120.82
1	A	268	GLU	CA-C-N	9.01	131.35	120.09
1	A	268	GLU	C-N-CA	9.01	131.35	120.09
3	H	172	ASP	N-CA-C	8.99	121.08	111.28
2	F	175	PRO	CA-C-N	8.97	134.28	120.82
2	F	175	PRO	C-N-CA	8.97	134.28	120.82
9	W	35	ALA	O-C-N	8.96	131.30	122.07
9	Q	11	ASP	CA-C-O	8.95	130.04	120.55
8	N	33	PRO	CA-C-O	-8.94	106.39	119.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	N	96	GLY	O-C-N	8.94	130.77	122.19
1	C	172	VAL	N-CA-C	-8.93	104.45	113.47
9	Y	40	ALA	CA-C-N	8.89	131.33	120.13
9	Y	40	ALA	C-N-CA	8.89	131.33	120.13
2	D	245	LEU	N-CA-C	-8.88	102.58	113.41
8	N	526	ALA	N-CA-C	-8.87	103.57	114.75
1	C	525	GLU	CA-C-N	8.86	132.87	120.29
1	C	525	GLU	C-N-CA	8.86	132.87	120.29
1	A	380	ILE	O-C-N	8.85	132.56	123.10
1	B	435	LEU	N-CA-C	-8.84	102.23	113.72
9	V	45	ILE	CA-C-N	8.82	131.91	120.44
9	V	45	ILE	C-N-CA	8.82	131.91	120.44
1	C	202	ASN	N-CA-C	-8.81	100.88	113.21
1	B	567	MET	N-CA-C	8.77	121.63	111.11
3	G	164	GLU	CA-C-O	-8.76	110.90	120.36
2	F	10	GLY	N-CA-C	-8.75	101.66	116.01
9	X	54	THR	N-CA-C	-8.74	101.75	111.28
8	N	326	TRP	N-CA-C	-8.74	101.31	112.93
1	A	355	ALA	O-C-N	8.73	131.52	122.09
2	D	318	ASP	CA-C-N	8.73	137.02	122.79
2	D	318	ASP	C-N-CA	8.73	137.02	122.79
5	K	86	LEU	CA-C-N	8.72	134.75	122.36
5	K	86	LEU	C-N-CA	8.72	134.75	122.36
4	J	33	LEU	CA-C-N	8.71	132.65	120.29
4	J	33	LEU	C-N-CA	8.71	132.65	120.29
9	T	78	GLY	CA-C-N	8.70	131.94	120.28
9	T	78	GLY	C-N-CA	8.70	131.94	120.28
2	F	314	LEU	O-C-N	-8.69	113.10	123.10
2	D	57	ILE	N-CA-C	-8.69	95.69	108.89
1	A	522	PHE	CA-C-N	8.68	131.72	120.44
1	A	522	PHE	C-N-CA	8.68	131.72	120.44
9	T	34	GLN	CA-C-N	8.68	132.61	120.29
9	T	34	GLN	C-N-CA	8.68	132.61	120.29
8	N	151	GLU	CA-C-N	8.68	131.72	120.44
8	N	151	GLU	C-N-CA	8.68	131.72	120.44
2	D	333	THR	O-C-N	8.67	132.73	122.85
9	W	74	PHE	CA-C-O	-8.65	111.38	120.55
7	M	7	TYR	CA-C-N	8.64	132.21	120.54
7	M	7	TYR	C-N-CA	8.64	132.21	120.54
1	C	574	PHE	N-CA-C	-8.64	102.11	114.12
1	A	523	TYR	CA-C-N	8.61	132.16	120.54
1	A	523	TYR	C-N-CA	8.61	132.16	120.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	Q	63	GLU	CA-C-N	8.60	131.81	120.28
9	Q	63	GLU	C-N-CA	8.60	131.81	120.28
9	V	52	PHE	CA-C-N	8.60	129.53	119.98
9	V	52	PHE	C-N-CA	8.60	129.53	119.98
1	A	370	THR	CA-C-N	8.60	132.50	120.29
1	A	370	THR	C-N-CA	8.60	132.50	120.29
9	X	37	ILE	N-CA-C	-8.59	102.05	110.72
8	N	517	GLY	CA-C-N	8.58	137.93	121.54
8	N	517	GLY	C-N-CA	8.58	137.93	121.54
9	V	30	THR	CA-C-N	8.58	129.46	119.94
9	V	30	THR	C-N-CA	8.58	129.46	119.94
9	Q	29	GLY	CA-C-O	8.57	129.58	120.75
8	N	397	LYS	CA-C-N	8.57	132.09	120.44
8	N	397	LYS	C-N-CA	8.57	132.09	120.44
9	S	73	ALA	CA-C-N	8.55	131.56	120.44
9	S	73	ALA	C-N-CA	8.55	131.56	120.44
1	A	100	ILE	N-CA-C	-8.54	104.81	113.10
2	D	76	VAL	N-CA-C	-8.54	103.51	111.45
8	N	285	LYS	N-CA-C	8.53	121.72	111.82
1	A	337	ILE	O-C-N	8.52	130.26	121.91
3	H	37	LYS	CA-C-N	8.51	131.50	120.44
3	H	37	LYS	C-N-CA	8.51	131.50	120.44
9	W	39	ALA	N-CA-C	8.50	120.54	111.28
3	G	62	SER	CA-C-N	8.50	131.49	120.44
3	G	62	SER	C-N-CA	8.50	131.49	120.44
2	D	161	ASN	N-CA-C	-8.49	101.39	112.68
2	F	104	PRO	CA-C-N	8.48	130.44	119.84
2	F	104	PRO	C-N-CA	8.48	130.44	119.84
9	P	33	ALA	CA-C-N	8.48	131.65	120.28
9	P	33	ALA	C-N-CA	8.48	131.65	120.28
1	C	525	GLU	CA-C-O	-8.47	109.84	119.41
2	E	461	LYS	N-CA-C	-8.47	103.46	113.88
9	U	43	GLY	O-C-N	8.47	130.32	122.19
1	B	135	LEU	N-CA-C	-8.44	103.50	113.88
2	F	146	ARG	CA-C-O	8.44	129.61	120.58
8	N	511	LEU	CA-C-N	8.43	131.58	120.28
8	N	511	LEU	C-N-CA	8.43	131.58	120.28
1	B	501	HIS	N-CA-C	-8.42	94.53	108.76
1	B	91	LEU	CA-C-N	8.41	134.56	121.19
1	B	91	LEU	C-N-CA	8.41	134.56	121.19
2	F	304	LYS	CA-C-N	8.40	131.54	120.28
2	F	304	LYS	C-N-CA	8.40	131.54	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	402	ILE	N-CA-C	-8.39	104.52	112.83
1	B	451	ARG	CA-C-N	8.37	131.49	120.28
1	B	451	ARG	C-N-CA	8.37	131.49	120.28
1	C	570	ILE	N-CA-C	-8.36	102.67	110.53
2	F	446	LEU	CA-C-N	8.34	128.21	120.21
2	F	446	LEU	C-N-CA	8.34	128.21	120.21
1	A	521	ALA	CA-C-N	8.33	131.79	120.54
1	A	521	ALA	C-N-CA	8.33	131.79	120.54
1	A	328	SER	N-CA-C	-8.33	102.16	111.82
2	D	327	ASP	CA-C-N	8.32	131.43	120.28
2	D	327	ASP	C-N-CA	8.32	131.43	120.28
9	S	21	LEU	CA-C-N	8.32	131.25	120.44
9	S	21	LEU	C-N-CA	8.32	131.25	120.44
9	P	45	ILE	CA-C-N	8.30	131.73	120.44
9	P	45	ILE	C-N-CA	8.30	131.73	120.44
2	D	174	ARG	CA-C-O	-8.30	111.82	119.62
9	X	61	LEU	CA-C-N	8.30	127.95	119.82
9	X	61	LEU	C-N-CA	8.30	127.95	119.82
6	L	18	LEU	CA-C-O	-8.29	112.37	121.33
4	I	63	GLU	CA-C-N	8.29	131.74	120.38
4	I	63	GLU	C-N-CA	8.29	131.74	120.38
5	K	207	GLU	N-CA-C	-8.29	101.32	112.26
3	G	168	LEU	CA-C-N	8.28	131.38	120.28
3	G	168	LEU	C-N-CA	8.28	131.38	120.28
1	B	187	TRP	O-C-N	-8.28	116.06	121.85
2	D	164	ALA	CA-C-O	-8.27	111.70	120.63
9	Y	32	VAL	N-CA-C	-8.26	102.77	110.53
9	O	55	ALA	CA-C-N	8.26	132.01	120.29
9	O	55	ALA	C-N-CA	8.26	132.01	120.29
8	N	96	GLY	CA-C-O	-8.25	111.66	120.90
7	M	108	PRO	CA-C-N	8.23	131.31	120.28
7	M	108	PRO	C-N-CA	8.23	131.31	120.28
2	F	57	ILE	N-CA-C	-8.21	95.47	108.86
2	D	150	LEU	CA-C-N	8.20	127.96	119.76
2	D	150	LEU	C-N-CA	8.20	127.96	119.76
2	D	150	LEU	O-C-N	-8.20	111.95	121.47
8	N	15	GLU	CA-C-N	8.20	131.09	120.44
8	N	15	GLU	C-N-CA	8.20	131.09	120.44
9	W	29	GLY	O-C-N	8.19	130.06	122.19
9	Y	43	GLY	CA-C-N	8.19	131.25	120.28
9	Y	43	GLY	C-N-CA	8.19	131.25	120.28
9	R	52	PHE	CA-C-N	8.18	129.06	119.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	R	52	PHE	C-N-CA	8.18	129.06	119.98
1	A	263	THR	N-CA-C	-8.18	102.26	112.72
1	B	432	THR	N-CA-C	-8.16	101.80	112.41
1	C	170	GLU	CA-C-N	8.16	128.19	119.78
1	C	170	GLU	C-N-CA	8.16	128.19	119.78
9	Q	36	ARG	N-CA-C	8.16	119.96	111.14
9	Z	11	ASP	CA-C-N	8.16	131.88	120.29
9	Z	11	ASP	C-N-CA	8.16	131.88	120.29
1	A	207	THR	N-CA-C	-8.16	103.34	113.38
2	D	212	GLY	N-CA-C	-8.15	101.71	115.08
1	A	184	TYR	N-CA-C	-8.13	93.48	110.80
7	M	278	GLN	N-CA-C	-8.13	103.36	113.28
9	T	12	ARG	CA-C-N	8.12	129.00	119.98
9	T	12	ARG	C-N-CA	8.12	129.00	119.98
8	N	560	SER	CA-C-O	-8.12	111.94	120.55
4	I	112	ALA	N-CA-C	8.12	120.85	111.11
9	Z	31	GLY	CA-C-N	8.12	130.95	120.56
9	Z	31	GLY	C-N-CA	8.12	130.95	120.56
8	N	221	GLU	N-CA-C	8.12	119.90	111.14
1	A	93	ARG	N-CA-C	8.11	121.04	111.71
1	A	102	ILE	O-C-N	-8.10	114.62	123.20
2	D	415	ALA	CA-C-N	8.10	131.47	120.38
2	D	415	ALA	C-N-CA	8.10	131.47	120.38
2	F	459	ILE	N-CA-C	-8.09	102.55	110.72
9	Z	29	GLY	CA-C-N	8.08	131.11	120.28
9	Z	29	GLY	C-N-CA	8.08	131.11	120.28
1	A	183	MET	N-CA-C	-8.08	101.60	112.26
2	F	316	MET	N-CA-C	-8.07	98.89	108.25
2	E	93	PHE	CA-C-N	8.06	132.16	120.71
2	E	93	PHE	C-N-CA	8.06	132.16	120.71
6	L	13	PHE	N-CA-C	-8.06	103.23	113.23
3	G	30	VAL	CA-C-O	-8.06	112.57	120.95
3	H	114	ALA	CA-C-N	8.03	129.62	120.06
3	H	114	ALA	C-N-CA	8.03	129.62	120.06
9	W	23	VAL	CA-C-N	8.03	128.85	119.94
9	W	23	VAL	C-N-CA	8.03	128.85	119.94
1	C	352	PRO	N-CA-C	-8.03	103.40	114.80
1	C	193	ARG	CA-C-N	8.03	127.98	120.03
1	C	193	ARG	C-N-CA	8.03	127.98	120.03
9	U	9	GLY	CA-C-N	8.01	131.02	120.28
9	U	9	GLY	C-N-CA	8.01	131.02	120.28
1	B	192	ALA	CA-C-N	8.01	131.41	120.67

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	192	ALA	C-N-CA	8.01	131.41	120.67
1	B	44	GLY	CA-C-N	8.00	135.08	122.60
1	B	44	GLY	C-N-CA	8.00	135.08	122.60
2	F	185	GLU	CA-C-O	-8.00	113.82	121.34
9	O	74	PHE	CA-C-N	8.00	130.79	120.56
9	O	74	PHE	C-N-CA	8.00	130.79	120.56
1	A	551	ALA	N-CA-C	-7.99	100.62	110.61
9	W	63	GLU	CA-C-N	7.99	130.98	120.28
9	W	63	GLU	C-N-CA	7.99	130.98	120.28
5	K	195	LYS	CA-C-N	7.99	130.98	120.28
5	K	195	LYS	C-N-CA	7.99	130.98	120.28
6	L	6	ASP	N-CA-C	-7.98	100.73	110.31
8	N	139	PHE	CA-C-O	-7.98	112.69	121.23
1	B	182	LYS	O-C-N	-7.97	113.70	122.79
3	H	47	ARG	CA-C-N	7.96	130.79	120.44
3	H	47	ARG	C-N-CA	7.96	130.79	120.44
8	N	608	ILE	CA-C-N	7.96	130.95	120.28
8	N	608	ILE	C-N-CA	7.96	130.95	120.28
9	S	19	MET	CA-C-N	7.94	130.07	120.14
9	S	19	MET	C-N-CA	7.94	130.07	120.14
9	Q	53	GLY	CA-C-N	7.94	130.92	120.28
9	Q	53	GLY	C-N-CA	7.94	130.92	120.28
2	D	258	THR	N-CA-C	-7.93	97.26	109.24
2	D	312	PRO	CA-C-O	-7.93	111.80	121.31
1	A	274	ASP	O-C-N	-7.93	113.74	121.19
2	F	12	THR	N-CA-C	-7.93	97.27	109.24
9	U	51	ASN	N-CA-C	-7.92	101.77	112.94
1	C	510	LYS	N-CA-C	7.92	122.64	112.34
1	A	528	ALA	CA-C-N	7.91	131.39	120.63
1	A	528	ALA	C-N-CA	7.91	131.39	120.63
2	D	285	GLY	N-CA-C	-7.91	103.32	115.66
1	C	503	VAL	O-C-N	7.90	129.81	122.14
8	N	540	VAL	CA-C-O	-7.90	112.74	120.95
8	N	399	LYS	CA-C-N	7.89	125.34	119.66
8	N	399	LYS	C-N-CA	7.89	125.34	119.66
1	A	416	ARG	N-CA-C	7.89	119.51	111.07
8	N	503	GLY	CA-C-N	7.88	128.72	119.98
8	N	503	GLY	C-N-CA	7.88	128.72	119.98
7	M	196	VAL	N-CA-C	7.87	117.98	110.42
8	N	468	VAL	CA-C-N	7.86	130.81	120.28
8	N	468	VAL	C-N-CA	7.86	130.81	120.28
1	B	505	ALA	N-CA-C	-7.85	103.73	113.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	M	216	ALA	N-CA-C	-7.84	102.22	112.41
1	C	393	GLU	CA-C-N	7.84	129.63	119.84
1	C	393	GLU	C-N-CA	7.84	129.63	119.84
2	E	180	GLU	CA-C-N	7.83	136.76	121.41
2	E	180	GLU	C-N-CA	7.83	136.76	121.41
1	C	208	GLY	CA-C-O	7.83	126.78	118.95
2	E	313	ILE	CA-C-O	-7.82	113.26	120.22
8	N	39	TYR	CA-C-N	7.81	132.22	121.05
8	N	39	TYR	C-N-CA	7.81	132.22	121.05
8	N	418	VAL	CA-C-N	7.81	131.17	120.46
8	N	418	VAL	C-N-CA	7.81	131.17	120.46
7	M	13	ARG	CA-C-N	7.81	130.40	120.56
7	M	13	ARG	C-N-CA	7.81	130.40	120.56
9	V	20	GLY	CA-C-N	7.81	130.74	120.28
9	V	20	GLY	C-N-CA	7.81	130.74	120.28
1	A	353	TYR	N-CA-C	-7.80	95.81	108.52
7	M	243	GLU	N-CA-C	-7.80	104.25	114.31
3	H	19	LEU	CA-C-N	7.80	133.74	120.72
3	H	19	LEU	C-N-CA	7.80	133.74	120.72
1	C	512	ALA	CA-C-N	7.80	130.58	120.44
1	C	512	ALA	C-N-CA	7.80	130.58	120.44
1	B	295	PRO	CA-C-N	7.79	131.52	120.53
1	B	295	PRO	C-N-CA	7.79	131.52	120.53
3	H	154	ALA	N-CA-C	-7.78	97.17	109.23
2	D	366	VAL	O-C-N	-7.77	113.04	122.36
2	E	199	ARG	CA-C-O	-7.75	112.68	120.82
2	F	243	GLU	CA-C-N	7.75	133.66	120.72
2	F	243	GLU	C-N-CA	7.75	133.66	120.72
2	F	226	ASP	CA-C-N	7.75	129.53	119.84
2	F	226	ASP	C-N-CA	7.75	129.53	119.84
1	C	565	GLU	CA-C-N	7.74	130.99	120.54
1	C	565	GLU	C-N-CA	7.74	130.99	120.54
6	L	63	MET	CA-C-N	7.74	133.74	122.36
6	L	63	MET	C-N-CA	7.74	133.74	122.36
2	E	407	ASN	N-CA-C	-7.74	103.90	112.72
2	E	380	ASP	CA-C-O	-7.74	111.65	120.24
1	B	148	LEU	CA-C-N	7.73	134.28	120.59
1	B	148	LEU	C-N-CA	7.73	134.28	120.59
7	M	125	ARG	CA-C-N	7.73	130.64	120.28
7	M	125	ARG	C-N-CA	7.73	130.64	120.28
3	H	68	VAL	N-CA-C	-7.73	103.32	110.82
2	E	416	ASP	N-CA-C	-7.72	101.98	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	389	GLY	N-CA-C	-7.72	105.51	114.69
7	M	243	GLU	CA-C-N	7.72	132.53	121.50
7	M	243	GLU	C-N-CA	7.72	132.53	121.50
1	B	445	GLU	N-CA-C	-7.71	103.90	113.38
3	H	54	ARG	CA-C-N	7.71	130.92	120.44
3	H	54	ARG	C-N-CA	7.71	130.92	120.44
1	C	331	ALA	CA-C-O	-7.71	111.39	120.10
9	Q	42	VAL	CA-C-N	7.70	128.52	119.98
9	Q	42	VAL	C-N-CA	7.70	128.52	119.98
9	Q	61	LEU	O-C-N	-7.69	113.48	120.71
3	H	38	ALA	CA-C-N	7.69	131.48	120.79
3	H	38	ALA	C-N-CA	7.69	131.48	120.79
9	Y	49	ARG	CA-C-N	7.69	131.35	120.28
9	Y	49	ARG	C-N-CA	7.69	131.35	120.28
9	S	61	LEU	O-C-N	-7.69	113.48	120.71
4	I	32	GLN	N-CA-C	-7.68	103.87	113.55
1	C	293	ASN	N-CA-C	-7.68	103.96	112.72
9	T	36	ARG	CA-C-N	7.68	131.32	120.42
9	T	36	ARG	C-N-CA	7.68	131.32	120.42
2	F	122	VAL	N-CA-C	-7.67	105.23	112.83
1	B	400	LEU	N-CA-C	-7.67	101.59	113.02
9	T	53	GLY	CA-C-O	-7.66	113.29	120.80
9	P	34	GLN	N-CA-C	7.65	119.62	111.28
2	F	58	GLN	CA-C-N	7.65	131.05	120.49
2	F	58	GLN	C-N-CA	7.65	131.05	120.49
1	C	565	GLU	CA-C-O	-7.64	112.83	120.70
7	M	285	LEU	CA-C-N	7.63	131.26	120.42
7	M	285	LEU	C-N-CA	7.63	131.26	120.42
2	F	166	GLN	CA-C-O	7.63	128.83	120.82
2	E	114	ILE	CA-C-N	7.62	130.35	120.44
2	E	114	ILE	C-N-CA	7.62	130.35	120.44
1	C	24	MET	CA-C-O	-7.62	111.94	120.70
1	B	532	ARG	N-CA-C	-7.62	103.71	113.16
1	C	141	PHE	CA-C-O	7.62	128.73	120.20
6	L	38	GLU	N-CA-C	7.62	120.55	111.33
2	F	229	ILE	N-CA-C	-7.61	103.44	110.82
1	A	242	ALA	CA-C-O	-7.59	112.42	120.55
7	M	178	LYS	CA-C-O	-7.59	112.37	120.42
9	W	35	ALA	N-CA-C	7.59	119.19	111.07
1	C	95	ARG	CA-C-N	7.59	131.85	120.31
1	C	95	ARG	C-N-CA	7.59	131.85	120.31
2	D	182	GLU	CA-C-O	7.59	126.87	118.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	381	VAL	CA-C-N	7.58	128.93	121.57
1	B	381	VAL	C-N-CA	7.58	128.93	121.57
1	B	191	ARG	N-CA-C	-7.58	96.05	108.41
4	I	30	GLU	CA-C-O	-7.58	112.86	120.82
8	N	230	VAL	O-C-N	7.57	129.63	121.83
1	C	229	PRO	CA-C-N	7.57	131.62	120.87
1	C	229	PRO	C-N-CA	7.57	131.62	120.87
8	N	249	TRP	CA-C-O	-7.57	112.53	120.55
8	N	146	LEU	CA-C-N	7.57	127.45	119.05
8	N	146	LEU	C-N-CA	7.57	127.45	119.05
2	D	333	THR	CA-C-O	-7.57	112.88	121.81
4	I	99	VAL	CA-C-N	7.56	130.27	120.44
4	I	99	VAL	C-N-CA	7.56	130.27	120.44
3	H	119	LYS	O-C-N	7.55	130.75	122.15
2	F	71	THR	CA-C-N	7.54	131.90	120.82
2	F	71	THR	C-N-CA	7.54	131.90	120.82
8	N	470	PHE	CA-C-O	7.54	128.64	119.97
1	A	513	TYR	O-C-N	7.53	129.83	122.07
9	P	31	GLY	CA-C-N	7.53	130.20	120.56
9	P	31	GLY	C-N-CA	7.53	130.20	120.56
1	A	524	LYS	CA-C-O	7.53	128.96	120.90
2	E	207	GLU	N-CA-C	7.53	121.91	112.87
2	D	314	LEU	CA-C-N	7.53	133.05	121.53
2	D	314	LEU	C-N-CA	7.53	133.05	121.53
1	C	272	LEU	N-CA-C	-7.52	97.33	109.96
2	E	241	VAL	CA-C-N	7.51	130.35	120.28
2	E	241	VAL	C-N-CA	7.51	130.35	120.28
2	D	274	ARG	CA-C-N	7.51	131.10	120.28
2	D	274	ARG	C-N-CA	7.51	131.10	120.28
2	F	64	THR	CA-C-O	7.51	128.73	120.92
2	D	135	ILE	N-CA-C	-7.50	97.31	108.12
8	N	476	PHE	CA-C-N	7.50	130.34	120.28
8	N	476	PHE	C-N-CA	7.50	130.34	120.28
9	Q	67	ILE	O-C-N	7.50	129.56	121.83
9	R	12	ARG	CA-C-N	7.50	128.31	119.98
9	R	12	ARG	C-N-CA	7.50	128.31	119.98
9	R	48	ASP	CA-C-N	7.50	130.32	120.28
9	R	48	ASP	C-N-CA	7.50	130.32	120.28
8	N	142	THR	N-CA-C	-7.50	98.01	109.85
2	D	120	ASN	CA-C-N	7.49	127.13	119.19
2	D	120	ASN	C-N-CA	7.49	127.13	119.19
9	R	19	MET	CA-C-N	7.49	129.50	120.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	R	19	MET	C-N-CA	7.49	129.50	120.14
3	H	43	GLN	CA-C-N	7.48	130.91	120.29
3	H	43	GLN	C-N-CA	7.48	130.91	120.29
1	C	543	PRO	CA-C-N	7.48	130.70	120.46
1	C	543	PRO	C-N-CA	7.48	130.70	120.46
1	A	534	VAL	N-CA-C	-7.47	96.71	107.77
3	G	184	GLN	N-CA-C	7.47	119.42	111.28
9	X	36	ARG	CA-C-N	7.47	131.02	120.42
9	X	36	ARG	C-N-CA	7.47	131.02	120.42
2	D	407	ASN	N-CA-C	-7.46	101.61	111.24
2	D	276	GLU	CA-C-O	-7.46	113.65	121.55
8	N	507	GLY	O-C-N	-7.46	114.96	122.19
2	E	230	GLU	CA-C-N	7.45	132.52	120.60
2	E	230	GLU	C-N-CA	7.45	132.52	120.60
9	V	32	VAL	N-CA-C	7.45	117.53	110.53
9	O	14	LEU	CA-C-N	7.45	130.66	120.46
9	O	14	LEU	C-N-CA	7.45	130.66	120.46
8	N	428	PHE	O-C-N	-7.44	114.23	122.12
2	D	263	TYR	CA-C-N	7.44	131.24	120.38
2	D	263	TYR	C-N-CA	7.44	131.24	120.38
8	N	227	LEU	CA-C-N	7.43	130.24	120.28
8	N	227	LEU	C-N-CA	7.43	130.24	120.28
8	N	464	ILE	O-C-N	7.43	129.62	121.90
6	L	56	GLU	CA-C-N	7.43	130.97	120.28
6	L	56	GLU	C-N-CA	7.43	130.97	120.28
8	N	577	LEU	N-CA-C	-7.43	104.22	113.28
9	S	74	PHE	CA-C-N	7.42	129.91	120.56
9	S	74	PHE	C-N-CA	7.42	129.91	120.56
9	X	40	ALA	CA-C-N	7.42	129.42	120.14
9	X	40	ALA	C-N-CA	7.42	129.42	120.14
8	N	510	ALA	CA-C-N	7.40	130.20	120.28
8	N	510	ALA	C-N-CA	7.40	130.20	120.28
1	B	390	ASP	N-CA-C	-7.39	97.77	109.23
2	E	43	ARG	N-CA-C	-7.38	98.45	108.86
3	G	54	ARG	CA-C-N	7.38	130.77	120.29
3	G	54	ARG	C-N-CA	7.38	130.77	120.29
1	A	244	TRP	N-CA-C	-7.38	103.69	114.39
1	C	140	GLU	CA-C-N	7.38	131.15	120.38
1	C	140	GLU	C-N-CA	7.38	131.15	120.38
8	N	183	VAL	CA-C-N	7.37	130.76	120.29
8	N	183	VAL	C-N-CA	7.37	130.76	120.29
1	C	412	SER	CA-C-N	7.37	135.62	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	412	SER	C-N-CA	7.37	135.62	121.54
2	D	406	GLU	N-CA-C	-7.37	104.81	114.31
9	S	52	PHE	CA-C-N	7.37	129.35	120.14
9	S	52	PHE	C-N-CA	7.37	129.35	120.14
1	A	485	GLU	N-CA-C	7.36	119.09	111.14
8	N	159	ASP	CA-C-N	7.36	133.12	122.08
8	N	159	ASP	C-N-CA	7.36	133.12	122.08
4	J	26	LEU	CA-C-N	7.35	130.00	120.44
4	J	26	LEU	C-N-CA	7.35	130.00	120.44
5	K	188	ARG	CA-C-N	7.35	130.45	120.38
5	K	188	ARG	C-N-CA	7.35	130.45	120.38
9	S	28	LEU	N-CA-C	-7.35	103.27	111.28
2	F	370	LYS	CA-C-N	7.35	131.49	120.17
2	F	370	LYS	C-N-CA	7.35	131.49	120.17
1	A	545	LEU	N-CA-C	-7.34	103.28	111.28
2	F	166	GLN	N-CA-C	-7.34	103.22	111.07
7	M	27	GLU	CA-C-N	7.33	130.11	120.28
7	M	27	GLU	C-N-CA	7.33	130.11	120.28
8	N	243	SER	CA-C-N	7.33	130.11	120.28
8	N	243	SER	C-N-CA	7.33	130.11	120.28
9	U	15	ILE	CA-C-N	7.33	130.11	120.28
9	U	15	ILE	C-N-CA	7.33	130.11	120.28
8	N	182	GLU	N-CA-C	-7.33	102.88	112.41
1	B	76	GLY	N-CA-C	-7.33	97.39	112.34
3	H	111	ALA	N-CA-C	7.33	119.27	111.28
1	A	150	PRO	O-C-N	7.32	124.68	121.31
2	F	262	ASN	CA-C-N	7.32	131.07	120.38
2	F	262	ASN	C-N-CA	7.32	131.07	120.38
9	T	39	ALA	N-CA-C	-7.32	103.38	111.36
2	D	222	ASN	N-CA-C	-7.31	97.90	109.23
4	J	82	GLU	CA-C-N	7.31	130.08	120.28
4	J	82	GLU	C-N-CA	7.31	130.08	120.28
2	F	412	LEU	N-CA-C	-7.31	101.66	111.96
7	M	35	ASP	N-CA-C	7.31	120.30	111.82
2	D	265	GLU	CA-C-N	7.30	130.06	120.28
2	D	265	GLU	C-N-CA	7.30	130.06	120.28
7	M	178	LYS	O-C-N	7.29	130.47	122.15
1	A	354	LEU	CA-C-N	7.29	130.36	120.44
1	A	354	LEU	C-N-CA	7.29	130.36	120.44
9	Y	78	GLY	CA-C-N	7.29	131.39	120.31
9	Y	78	GLY	C-N-CA	7.29	131.39	120.31
6	L	79	GLU	N-CA-C	-7.29	102.49	112.03

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	378	VAL	CA-C-N	7.28	130.76	120.28
2	F	378	VAL	C-N-CA	7.28	130.76	120.28
5	K	48	GLU	N-CA-C	7.28	119.90	111.02
1	B	151	PRO	CA-C-O	-7.28	113.04	121.34
9	P	74	PHE	CA-C-N	7.28	129.73	120.56
9	P	74	PHE	C-N-CA	7.28	129.73	120.56
8	N	103	GLU	CA-C-N	7.28	130.62	120.29
8	N	103	GLU	C-N-CA	7.28	130.62	120.29
7	M	145	HIS	CA-C-O	-7.27	112.48	120.69
2	D	155	GLY	O-C-N	7.26	129.06	122.81
9	W	49	ARG	CA-C-N	7.26	130.74	120.28
9	W	49	ARG	C-N-CA	7.26	130.74	120.28
2	F	329	THR	CA-C-N	7.26	135.64	121.41
2	F	329	THR	C-N-CA	7.26	135.64	121.41
2	F	435	SER	CA-C-N	7.26	130.60	120.29
2	F	435	SER	C-N-CA	7.26	130.60	120.29
3	H	8	LEU	N-CA-C	7.26	120.06	111.71
8	N	527	LEU	N-CA-C	-7.26	104.05	113.12
2	D	136	SER	O-C-N	7.25	129.54	122.07
2	E	122	VAL	N-CA-C	-7.25	105.76	112.43
1	B	436	ASP	CA-C-N	7.25	126.51	118.97
1	B	436	ASP	C-N-CA	7.25	126.51	118.97
2	E	187	PHE	N-CA-C	-7.25	104.41	113.18
1	A	294	MET	CA-C-N	7.25	128.90	119.84
1	A	294	MET	C-N-CA	7.25	128.90	119.84
9	T	27	ALA	CA-C-N	7.25	129.86	120.44
9	T	27	ALA	C-N-CA	7.25	129.86	120.44
1	B	455	SER	CA-C-N	7.24	129.98	120.28
1	B	455	SER	C-N-CA	7.24	129.98	120.28
2	E	226	ASP	CA-C-N	7.24	128.89	119.84
2	E	226	ASP	C-N-CA	7.24	128.89	119.84
2	E	11	ILE	N-CA-C	-7.23	98.08	108.42
8	N	414	VAL	O-C-N	7.23	129.28	121.83
7	M	262	GLU	N-CA-C	-7.23	103.48	111.36
9	Z	12	ARG	CA-C-N	7.22	128.00	119.98
9	Z	12	ARG	C-N-CA	7.22	128.00	119.98
8	N	48	GLU	N-CA-C	-7.21	103.35	111.14
1	B	111	LEU	N-CA-C	-7.20	96.67	108.41
2	F	190	VAL	N-CA-C	-7.20	98.03	108.11
3	G	45	ARG	CA-C-N	7.20	130.26	120.54
3	G	45	ARG	C-N-CA	7.20	130.26	120.54
2	D	241	VAL	CA-C-O	7.20	126.91	119.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	J	101	GLU	CA-C-N	7.20	129.80	120.44
4	J	101	GLU	C-N-CA	7.20	129.80	120.44
8	N	506	LEU	CA-C-N	7.20	127.92	120.00
8	N	506	LEU	C-N-CA	7.20	127.92	120.00
9	W	59	LEU	CA-C-N	7.20	130.51	120.29
9	W	59	LEU	C-N-CA	7.20	130.51	120.29
2	E	372	ARG	CA-C-N	7.19	129.92	120.28
2	E	372	ARG	C-N-CA	7.19	129.92	120.28
2	F	74	SER	N-CA-C	-7.19	96.83	108.41
1	A	285	THR	CA-C-N	7.17	130.00	122.97
1	A	285	THR	C-N-CA	7.17	130.00	122.97
9	Z	20	GLY	CA-C-N	7.17	129.89	120.28
9	Z	20	GLY	C-N-CA	7.17	129.89	120.28
8	N	252	ALA	CA-C-N	7.17	129.76	120.44
8	N	252	ALA	C-N-CA	7.17	129.76	120.44
9	Z	70	LEU	CA-C-N	7.17	129.89	120.28
9	Z	70	LEU	C-N-CA	7.17	129.89	120.28
9	S	56	LEU	CA-C-O	-7.17	113.32	120.70
1	C	499	ALA	N-CA-C	-7.17	103.85	112.59
8	N	209	LEU	CA-C-N	7.16	129.88	120.28
8	N	209	LEU	C-N-CA	7.16	129.88	120.28
9	V	40	ALA	CA-C-N	7.16	129.09	120.14
9	V	40	ALA	C-N-CA	7.16	129.09	120.14
9	W	42	VAL	CA-C-N	7.16	127.93	119.98
9	W	42	VAL	C-N-CA	7.16	127.93	119.98
1	C	485	GLU	CA-C-N	7.16	130.59	120.42
1	C	485	GLU	C-N-CA	7.16	130.59	120.42
2	F	283	TYR	CA-C-N	7.16	127.19	119.89
2	F	283	TYR	C-N-CA	7.16	127.19	119.89
4	I	56	LYS	CA-C-N	7.16	130.59	120.28
4	I	56	LYS	C-N-CA	7.16	130.59	120.28
9	U	45	ILE	CA-C-O	7.15	128.39	120.95
9	S	27	ALA	CA-C-N	7.14	129.85	120.28
9	S	27	ALA	C-N-CA	7.14	129.85	120.28
1	A	447	TYR	CA-C-O	-7.14	110.38	120.16
3	G	12	VAL	O-C-N	7.14	129.32	121.90
2	F	235	PRO	CA-C-N	7.13	130.79	120.38
2	F	235	PRO	C-N-CA	7.13	130.79	120.38
8	N	85	LYS	CA-C-O	-7.11	112.88	120.42
2	D	359	SER	N-CA-C	-7.11	96.46	108.26
8	N	479	LEU	N-CA-C	7.11	120.07	111.82
9	T	33	ALA	CA-C-N	7.11	129.80	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	T	33	ALA	C-N-CA	7.11	129.80	120.28
1	B	73	VAL	CA-C-N	7.10	131.46	121.24
1	B	73	VAL	C-N-CA	7.10	131.46	121.24
4	J	80	GLU	N-CA-C	-7.10	104.25	113.12
5	K	9	MET	CA-C-N	7.09	131.09	120.31
5	K	9	MET	C-N-CA	7.09	131.09	120.31
3	G	50	GLU	CA-C-O	-7.09	113.55	121.00
2	E	189	VAL	N-CA-C	-7.09	98.09	108.23
2	F	98	LYS	CA-C-O	-7.08	111.54	120.04
8	N	182	GLU	CA-C-N	7.07	130.14	120.46
8	N	182	GLU	C-N-CA	7.07	130.14	120.46
8	N	429	GLY	CA-C-N	7.07	129.75	120.28
8	N	429	GLY	C-N-CA	7.07	129.75	120.28
2	E	167	ILE	CA-C-N	7.06	130.61	120.79
2	E	167	ILE	C-N-CA	7.06	130.61	120.79
2	E	79	VAL	CA-C-N	7.06	130.73	120.71
2	E	79	VAL	C-N-CA	7.06	130.73	120.71
2	E	177	LEU	N-CA-C	-7.05	104.28	113.17
8	N	365	ASP	CA-C-N	7.05	130.43	120.42
8	N	365	ASP	C-N-CA	7.05	130.43	120.42
8	N	624	ILE	CA-C-O	-7.05	113.62	120.95
7	M	242	ASP	N-CA-C	-7.05	104.42	113.16
6	L	10	ALA	CA-C-O	-7.05	112.95	120.42
9	V	50	SER	N-CA-C	7.05	119.81	111.71
4	I	55	ALA	CA-C-N	7.05	130.59	120.79
4	I	55	ALA	C-N-CA	7.05	130.59	120.79
2	F	125	ARG	CA-C-N	7.04	131.39	120.68
2	F	125	ARG	C-N-CA	7.04	131.39	120.68
5	K	102	PRO	CA-C-O	-7.04	113.31	122.19
5	K	145	THR	N-CA-C	-7.04	103.36	112.23
3	G	127	ASP	N-CA-C	-7.04	104.57	113.72
8	N	395	ALA	CA-C-O	-7.04	113.23	122.03
1	B	229	PRO	O-C-N	7.04	131.10	123.01
3	H	42	LEU	N-CA-C	-7.04	104.97	113.97
4	J	38	GLU	N-CA-C	7.04	118.60	111.07
9	X	8	GLY	N-CA-C	-7.04	104.35	112.79
1	C	247	ALA	N-CA-C	-7.03	98.38	109.07
9	R	36	ARG	N-CA-C	7.03	118.59	111.07
1	B	509	MET	CA-C-N	7.03	129.69	120.28
1	B	509	MET	C-N-CA	7.03	129.69	120.28
8	N	177	VAL	N-CA-C	-7.03	98.27	108.11
2	F	172	THR	N-CA-C	-7.02	95.84	108.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	228	GLY	N-CA-C	-7.02	98.03	112.34
2	D	254	LEU	N-CA-C	-7.01	97.81	109.24
9	S	23	VAL	CA-C-N	7.01	127.72	119.94
9	S	23	VAL	C-N-CA	7.01	127.72	119.94
1	A	436	ASP	CA-C-O	-7.01	110.56	120.16
1	A	64	VAL	N-CA-C	-7.00	94.77	109.34
5	K	5	SER	CA-C-N	6.99	127.94	120.11
5	K	5	SER	C-N-CA	6.99	127.94	120.11
1	C	291	THR	CA-C-O	-6.99	113.38	121.49
8	N	111	ALA	CA-C-N	6.98	129.63	120.28
8	N	111	ALA	C-N-CA	6.98	129.63	120.28
9	T	18	GLY	CA-C-N	6.98	130.91	120.31
9	T	18	GLY	C-N-CA	6.98	130.91	120.31
8	N	628	PHE	O-C-N	6.97	129.62	122.09
8	N	528	MET	CA-C-N	6.97	129.93	120.38
8	N	528	MET	C-N-CA	6.97	129.93	120.38
8	N	499	VAL	CA-C-N	6.97	127.72	119.98
8	N	499	VAL	C-N-CA	6.97	127.72	119.98
1	B	299	ARG	N-CA-C	-6.97	104.66	113.72
9	O	31	GLY	N-CA-C	6.97	121.09	112.73
1	A	53	GLU	CA-C-N	6.96	131.06	120.82
1	A	53	GLU	C-N-CA	6.96	131.06	120.82
1	C	517	LYS	CA-C-O	-6.96	113.69	121.00
1	A	330	TRP	CA-C-N	6.96	129.49	120.44
1	A	330	TRP	C-N-CA	6.96	129.49	120.44
9	Q	30	THR	CA-C-N	6.96	127.53	119.94
9	Q	30	THR	C-N-CA	6.96	127.53	119.94
2	D	283	TYR	N-CA-C	-6.96	101.34	110.39
1	B	559	PHE	CA-C-O	-6.96	111.91	118.73
4	J	105	ALA	N-CA-C	-6.95	102.78	112.45
9	Q	65	LEU	N-CA-C	6.95	118.94	111.36
1	B	478	ASP	O-C-N	6.95	129.23	122.07
1	A	120	THR	CA-C-N	6.94	126.70	119.76
1	A	120	THR	C-N-CA	6.94	126.70	119.76
2	F	359	SER	N-CA-C	-6.94	97.58	108.90
1	C	47	ALA	CA-C-N	6.94	131.98	122.19
1	C	47	ALA	C-N-CA	6.94	131.98	122.19
4	I	113	LEU	CA-C-N	6.94	129.19	120.72
4	I	113	LEU	C-N-CA	6.94	129.19	120.72
4	I	105	ALA	N-CA-C	-6.94	104.44	113.12
8	N	453	ARG	CA-C-O	6.94	126.90	119.34
9	R	63	GLU	CA-C-N	6.94	129.57	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	R	63	GLU	C-N-CA	6.94	129.57	120.28
1	B	58	LEU	CA-C-O	-6.93	113.02	120.92
1	C	318	PHE	CA-C-N	6.93	130.71	120.87
1	C	318	PHE	C-N-CA	6.93	130.71	120.87
1	A	217	PRO	N-CA-C	6.93	122.22	111.21
5	K	205	GLU	N-CA-C	-6.93	104.57	113.16
1	C	354	LEU	N-CA-C	-6.92	103.81	111.36
1	B	576	ALA	N-CA-C	-6.92	103.73	112.93
1	C	367	LYS	N-CA-C	-6.91	98.42	109.76
2	F	194	MET	N-CA-C	-6.91	98.51	108.60
6	L	51	LEU	N-CA-C	-6.91	103.49	112.68
1	A	294	MET	N-CA-C	-6.90	101.11	110.36
1	B	105	GLY	CA-C-O	-6.90	116.70	122.29
1	C	421	ALA	CA-C-N	6.90	130.84	120.77
1	C	421	ALA	C-N-CA	6.90	130.84	120.77
1	C	393	GLU	N-CA-C	-6.90	101.38	110.07
2	D	191	PHE	N-CA-C	-6.90	99.14	108.86
1	C	149	VAL	O-C-N	6.89	126.83	121.46
2	D	235	PRO	CA-C-N	6.89	129.39	120.44
2	D	235	PRO	C-N-CA	6.89	129.39	120.44
7	M	36	PHE	CA-C-N	6.89	129.51	120.28
7	M	36	PHE	C-N-CA	6.89	129.51	120.28
9	U	62	PRO	CA-C-N	6.88	130.19	120.28
9	U	62	PRO	C-N-CA	6.88	130.19	120.28
1	A	425	ASN	N-CA-C	-6.88	96.57	107.93
1	A	197	ARG	CA-C-O	6.88	128.64	121.28
2	E	406	GLU	N-CA-C	-6.88	104.88	113.28
7	M	311	LEU	CA-C-N	6.88	128.44	119.84
7	M	311	LEU	C-N-CA	6.88	128.44	119.84
9	X	52	PHE	CA-C-N	6.88	128.73	120.14
9	X	52	PHE	C-N-CA	6.88	128.73	120.14
1	C	89	ARG	O-C-N	-6.87	117.04	121.85
1	A	465	GLN	CA-C-N	6.87	129.37	120.44
1	A	465	GLN	C-N-CA	6.87	129.37	120.44
2	D	35	ILE	O-C-N	-6.86	115.96	123.03
9	T	57	ILE	O-C-N	6.86	128.89	121.83
1	A	10	ALA	CA-C-N	6.86	132.63	121.87
1	A	10	ALA	C-N-CA	6.86	132.63	121.87
9	S	29	GLY	O-C-N	6.85	128.77	122.19
1	A	269	PHE	CA-C-O	-6.85	111.70	118.34
9	R	10	LEU	CA-C-N	6.84	129.45	120.28
9	R	10	LEU	C-N-CA	6.84	129.45	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	N	456	THR	N-CA-C	-6.84	97.58	108.73
2	F	354	PRO	CA-C-N	6.83	129.60	120.58
2	F	354	PRO	C-N-CA	6.83	129.60	120.58
2	F	378	VAL	CA-C-O	-6.83	113.61	120.85
1	B	391	MET	CA-C-N	6.83	130.70	120.31
1	B	391	MET	C-N-CA	6.83	130.70	120.31
9	Q	37	ILE	CA-C-N	6.83	127.51	120.00
9	Q	37	ILE	C-N-CA	6.83	127.51	120.00
9	Y	72	ILE	CA-C-N	6.82	129.42	120.28
9	Y	72	ILE	C-N-CA	6.82	129.42	120.28
1	B	279	GLY	CA-C-N	6.81	126.84	119.90
1	B	279	GLY	C-N-CA	6.81	126.84	119.90
9	R	25	LEU	N-CA-C	-6.81	103.92	111.82
8	N	602	GLY	O-C-N	6.81	128.72	122.18
4	I	84	LEU	CA-C-N	6.80	129.28	120.44
4	I	84	LEU	C-N-CA	6.80	129.28	120.44
2	D	379	SER	CA-C-N	6.79	130.06	120.28
2	D	379	SER	C-N-CA	6.79	130.06	120.28
4	J	50	ARG	N-CA-C	6.79	119.55	111.33
8	N	264	GLU	CA-C-O	-6.79	113.71	120.70
1	B	91	LEU	N-CA-C	6.79	119.51	111.71
2	D	21	VAL	N-CA-C	-6.78	98.52	107.88
1	A	376	GLY	CA-C-O	-6.78	114.98	120.81
5	K	75	VAL	N-CA-C	6.78	119.53	111.05
1	A	174	VAL	N-CA-C	-6.78	97.77	108.95
9	X	49	ARG	N-CA-C	-6.78	104.63	113.17
2	E	103	LEU	CA-C-N	6.77	127.36	120.38
2	E	103	LEU	C-N-CA	6.77	127.36	120.38
5	K	157	THR	CA-C-N	6.77	129.35	120.28
5	K	157	THR	C-N-CA	6.77	129.35	120.28
9	Q	73	ALA	CA-C-N	6.77	129.65	120.44
9	Q	73	ALA	C-N-CA	6.77	129.65	120.44
9	Q	57	ILE	CA-C-N	6.76	129.24	120.44
9	Q	57	ILE	C-N-CA	6.76	129.24	120.44
1	A	524	LYS	O-C-N	-6.76	115.06	122.09
2	F	243	GLU	N-CA-C	-6.76	103.83	111.07
7	M	165	GLU	N-CA-C	6.76	118.65	111.28
3	G	16	ILE	O-C-N	-6.76	114.12	122.57
7	M	194	LEU	CA-C-N	6.76	129.23	120.44
7	M	194	LEU	C-N-CA	6.76	129.23	120.44
7	M	122	GLU	O-C-N	-6.76	113.96	122.27
9	U	67	ILE	CA-C-N	6.76	129.33	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	U	67	ILE	C-N-CA	6.76	129.33	120.28
3	G	128	LEU	O-C-N	-6.75	113.55	121.32
2	D	457	ASP	CA-C-N	6.75	130.95	120.82
2	D	457	ASP	C-N-CA	6.75	130.95	120.82
9	O	61	LEU	O-C-N	-6.75	114.36	120.71
3	H	26	LYS	N-CA-C	-6.75	104.69	113.12
8	N	328	LYS	CA-C-O	-6.75	112.12	118.73
8	N	477	ALA	CA-C-N	6.75	127.29	119.94
8	N	477	ALA	C-N-CA	6.75	127.29	119.94
2	D	321	ARG	CA-C-O	6.75	126.65	119.03
2	E	286	TYR	CA-C-N	6.74	131.91	121.19
2	E	286	TYR	C-N-CA	6.74	131.91	121.19
7	M	187	ALA	CA-C-N	6.74	129.86	120.29
7	M	187	ALA	C-N-CA	6.74	129.86	120.29
1	C	486	VAL	N-CA-C	-6.74	103.92	110.72
2	E	443	LEU	N-CA-C	-6.74	104.37	112.59
8	N	76	PHE	CA-C-N	6.73	127.74	120.13
8	N	76	PHE	C-N-CA	6.73	127.74	120.13
7	M	176	VAL	N-CA-C	6.73	116.88	110.42
8	N	633	GLY	O-C-N	-6.73	115.03	122.50
1	A	26	ASP	CA-C-N	6.73	129.70	120.35
1	A	26	ASP	C-N-CA	6.73	129.70	120.35
2	F	226	ASP	N-CA-C	-6.72	98.82	109.04
8	N	254	ASP	CA-C-N	6.72	129.29	120.28
8	N	254	ASP	C-N-CA	6.72	129.29	120.28
9	Z	54	THR	CA-C-N	6.72	129.28	120.28
9	Z	54	THR	C-N-CA	6.72	129.28	120.28
2	D	94	ASN	CA-C-N	6.71	128.53	120.14
2	D	94	ASN	C-N-CA	6.71	128.53	120.14
2	E	19	LEU	CA-C-N	6.71	130.65	121.05
2	E	19	LEU	C-N-CA	6.71	130.65	121.05
1	B	92	GLU	CA-C-N	6.71	129.82	120.29
1	B	92	GLU	C-N-CA	6.71	129.82	120.29
5	K	198	LYS	CA-C-N	6.71	127.55	120.03
5	K	198	LYS	C-N-CA	6.71	127.55	120.03
7	M	54	LEU	CA-C-N	6.71	126.66	119.28
7	M	54	LEU	C-N-CA	6.71	126.66	119.28
7	M	36	PHE	O-C-N	6.71	129.23	122.12
1	B	316	GLN	N-CA-C	-6.71	105.09	113.28
1	A	161	LYS	CA-C-N	6.71	128.22	119.84
1	A	161	LYS	C-N-CA	6.71	128.22	119.84
3	G	178	MET	CA-C-N	6.71	129.26	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	G	178	MET	C-N-CA	6.71	129.26	120.28
3	H	135	ALA	CA-C-N	6.71	131.92	120.72
3	H	135	ALA	C-N-CA	6.71	131.92	120.72
1	C	15	ILE	N-CA-C	-6.70	98.53	108.45
9	V	46	ALA	CA-C-N	6.70	129.74	120.63
9	V	46	ALA	C-N-CA	6.70	129.74	120.63
8	N	47	ALA	CA-C-N	6.70	129.55	120.44
8	N	47	ALA	C-N-CA	6.70	129.55	120.44
8	N	379	LEU	N-CA-C	-6.70	104.75	113.12
8	N	481	LEU	CA-C-N	6.70	129.25	120.28
8	N	481	LEU	C-N-CA	6.70	129.25	120.28
1	A	192	ALA	O-C-N	-6.69	115.43	123.13
8	N	262	LEU	CA-C-N	6.69	129.24	120.28
8	N	262	LEU	C-N-CA	6.69	129.24	120.28
1	A	288	ILE	N-CA-C	-6.68	104.80	111.88
1	C	487	GLY	CA-C-N	6.68	129.12	120.44
1	C	487	GLY	C-N-CA	6.68	129.12	120.44
9	T	35	ALA	CA-C-N	6.68	129.23	120.28
9	T	35	ALA	C-N-CA	6.68	129.23	120.28
1	C	280	PRO	CA-C-N	6.68	129.23	120.28
1	C	280	PRO	C-N-CA	6.68	129.23	120.28
7	M	301	ARG	CA-C-N	6.68	129.12	120.44
7	M	301	ARG	C-N-CA	6.68	129.12	120.44
8	N	578	LEU	N-CA-C	-6.67	104.95	113.23
1	A	313	PHE	N-CA-C	-6.67	102.43	112.04
1	B	535	SER	CA-C-O	-6.67	114.48	121.55
2	D	226	ASP	N-CA-C	-6.67	101.09	110.29
2	E	206	GLN	N-CA-C	6.66	118.54	111.28
2	F	165	ALA	CA-C-N	6.66	129.09	120.44
2	F	165	ALA	C-N-CA	6.66	129.09	120.44
2	D	110	LYS	N-CA-C	-6.65	98.61	108.79
2	E	214	LEU	N-CA-C	-6.65	104.31	114.16
1	B	66	SER	N-CA-C	-6.65	98.13	109.24
1	C	516	MET	O-C-N	-6.65	115.07	122.12
2	D	315	SER	N-CA-C	-6.65	102.56	110.41
2	E	222	ASN	CA-C-O	6.65	126.36	119.05
7	M	288	ALA	CA-C-N	6.65	129.48	120.44
7	M	288	ALA	C-N-CA	6.65	129.48	120.44
9	Z	29	GLY	CA-C-O	-6.65	113.45	120.90
1	B	516	MET	O-C-N	-6.64	114.10	122.27
1	B	62	GLU	CA-C-N	6.64	126.67	119.90
1	B	62	GLU	C-N-CA	6.64	126.67	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	53	GLU	CA-C-O	6.64	123.60	119.55
8	N	131	SER	CA-C-O	-6.64	114.22	119.66
9	V	22	ALA	N-CA-C	6.64	118.31	111.14
3	G	26	LYS	N-CA-C	-6.63	104.83	113.12
1	C	506	TYR	N-CA-C	-6.63	99.10	109.25
2	D	261	THR	N-CA-C	-6.63	106.14	114.56
2	E	418	PHE	CA-C-N	6.63	134.20	121.54
2	E	418	PHE	C-N-CA	6.63	134.20	121.54
2	E	385	ALA	CA-C-N	6.63	129.46	120.44
2	E	385	ALA	C-N-CA	6.63	129.46	120.44
1	C	189	VAL	CA-C-O	-6.63	114.06	120.95
8	N	344	THR	CA-C-N	6.63	131.34	120.94
8	N	344	THR	C-N-CA	6.63	131.34	120.94
9	O	15	ILE	CA-C-N	6.62	129.05	120.44
9	O	15	ILE	C-N-CA	6.62	129.05	120.44
2	F	159	PRO	CA-C-N	6.62	130.00	120.79
2	F	159	PRO	C-N-CA	6.62	130.00	120.79
8	N	643	ARG	CA-C-N	6.62	126.65	119.90
8	N	643	ARG	C-N-CA	6.62	126.65	119.90
4	J	78	ARG	O-C-N	6.62	129.13	122.12
8	N	147	PRO	CA-C-N	6.62	129.14	120.28
8	N	147	PRO	C-N-CA	6.62	129.14	120.28
2	E	104	PRO	N-CA-C	6.61	118.77	110.70
3	G	114	ALA	CA-C-N	6.61	128.36	120.09
3	G	114	ALA	C-N-CA	6.61	128.36	120.09
8	N	644	PRO	CA-C-O	-6.61	113.89	121.36
9	Q	72	ILE	CA-C-N	6.61	129.14	120.28
9	Q	72	ILE	C-N-CA	6.61	129.14	120.28
2	D	377	GLN	CA-C-N	6.61	128.96	120.70
2	D	377	GLN	C-N-CA	6.61	128.96	120.70
7	M	192	LEU	CA-C-O	-6.61	113.88	120.82
9	V	37	ILE	O-C-N	6.60	128.63	121.83
6	L	6	ASP	CA-C-O	-6.60	114.41	121.27
1	B	189	VAL	N-CA-C	-6.59	106.24	113.43
1	A	422	ILE	CA-C-O	-6.59	115.11	121.63
2	D	241	VAL	N-CA-C	-6.59	106.57	112.90
3	H	159	GLY	N-CA-C	-6.59	97.56	113.18
9	U	11	ASP	CA-C-N	6.59	129.64	120.29
9	U	11	ASP	C-N-CA	6.59	129.64	120.29
9	Y	17	VAL	CA-C-N	6.58	127.24	120.00
9	Y	17	VAL	C-N-CA	6.58	127.24	120.00
1	C	500	TYR	N-CA-C	-6.58	105.82	114.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	325	ASP	CA-C-N	6.57	134.09	121.54
1	A	325	ASP	C-N-CA	6.57	134.09	121.54
1	B	358	LEU	CA-C-N	6.57	129.41	120.54
1	B	358	LEU	C-N-CA	6.57	129.41	120.54
1	C	487	GLY	CA-C-O	-6.57	114.36	120.80
5	K	183	LEU	CA-C-N	6.56	129.07	120.28
5	K	183	LEU	C-N-CA	6.56	129.07	120.28
9	X	47	GLU	CA-C-O	-6.56	113.94	120.70
9	U	79	ARG	N-CA-C	-6.56	98.94	109.96
5	K	162	ASN	CA-C-N	6.55	129.90	120.79
5	K	162	ASN	C-N-CA	6.55	129.90	120.79
8	N	402	VAL	CA-C-N	6.55	129.06	120.28
8	N	402	VAL	C-N-CA	6.55	129.06	120.28
8	N	325	PRO	N-CA-C	6.55	123.31	113.81
1	B	93	ARG	O-C-N	6.55	129.61	122.15
1	B	339	SER	N-CA-C	6.55	118.08	111.07
7	M	283	VAL	O-C-N	6.55	129.72	122.12
9	O	33	ALA	CA-C-N	6.54	129.58	120.29
9	O	33	ALA	C-N-CA	6.54	129.58	120.29
9	V	7	SER	N-CA-C	-6.54	102.86	113.19
2	E	19	LEU	N-CA-C	6.54	118.79	108.79
9	W	16	ALA	N-CA-C	6.53	118.40	111.28
2	D	388	ASN	CA-C-N	6.52	134.19	121.41
2	D	388	ASN	C-N-CA	6.52	134.19	121.41
6	L	39	ARG	CA-C-O	-6.52	113.57	120.55
9	Q	15	ILE	CA-C-N	6.52	129.02	120.28
9	Q	15	ILE	C-N-CA	6.52	129.02	120.28
8	N	433	GLU	CA-C-N	6.52	133.99	121.54
8	N	433	GLU	C-N-CA	6.52	133.99	121.54
9	O	53	GLY	O-C-N	6.52	128.45	122.19
2	E	253	VAL	N-CA-C	-6.52	99.10	108.42
9	X	37	ILE	CA-C-N	6.52	127.17	120.00
9	X	37	ILE	C-N-CA	6.52	127.17	120.00
1	B	303	ILE	N-CA-C	-6.51	104.50	110.82
7	M	168	LEU	N-CA-C	-6.51	104.26	111.36
9	X	19	MET	CA-C-N	6.51	128.49	120.22
9	X	19	MET	C-N-CA	6.51	128.49	120.22
4	I	114	VAL	N-CA-C	-6.51	104.30	110.42
1	B	353	TYR	CA-C-N	6.51	129.83	120.79
1	B	353	TYR	C-N-CA	6.51	129.83	120.79
1	C	279	GLY	CA-C-N	6.51	127.97	119.84
1	C	279	GLY	C-N-CA	6.51	127.97	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	170	GLN	O-C-N	-6.51	113.94	122.59
1	C	274	ASP	N-CA-C	-6.50	101.33	110.31
9	Z	62	PRO	CA-C-N	6.50	129.65	120.28
9	Z	62	PRO	C-N-CA	6.50	129.65	120.28
8	N	223	ALA	CA-C-N	6.50	126.27	119.05
8	N	223	ALA	C-N-CA	6.50	126.27	119.05
7	M	144	GLY	N-CA-C	-6.50	106.11	115.27
8	N	492	MET	N-CA-C	6.49	119.17	111.71
9	O	23	VAL	CA-C-N	6.49	127.14	119.94
9	O	23	VAL	C-N-CA	6.49	127.14	119.94
1	A	35	LEU	N-CA-C	-6.48	105.67	113.97
7	M	249	PHE	CA-C-N	6.48	130.16	120.31
7	M	249	PHE	C-N-CA	6.48	130.16	120.31
3	G	24	GLU	N-CA-C	-6.48	105.01	113.17
9	Q	35	ALA	N-CA-C	6.48	118.34	111.28
2	D	348	ILE	N-CA-C	-6.47	100.41	109.21
9	Z	28	LEU	CA-C-N	6.47	126.99	119.94
9	Z	28	LEU	C-N-CA	6.47	126.99	119.94
3	G	73	THR	CA-C-N	6.47	128.85	120.44
3	G	73	THR	C-N-CA	6.47	128.85	120.44
9	W	38	GLY	O-C-N	-6.47	115.92	122.19
3	H	83	VAL	CA-C-O	-6.47	114.22	120.95
2	F	79	VAL	CA-C-O	-6.46	115.12	121.58
8	N	389	LEU	N-CA-C	-6.46	98.71	109.24
1	C	181	LEU	N-CA-C	-6.46	99.59	109.41
2	F	323	HIS	CA-C-N	6.46	126.22	119.05
2	F	323	HIS	C-N-CA	6.46	126.22	119.05
1	A	189	VAL	N-CA-C	-6.46	106.44	112.83
1	A	193	ARG	CA-C-N	6.46	127.91	119.84
1	A	193	ARG	C-N-CA	6.46	127.91	119.84
2	D	136	SER	CA-C-O	-6.46	114.04	120.82
1	B	486	VAL	N-CA-C	-6.46	104.35	110.42
9	S	59	LEU	N-CA-C	6.46	119.13	111.71
9	U	23	VAL	CA-C-N	6.46	127.11	119.94
9	U	23	VAL	C-N-CA	6.46	127.11	119.94
2	F	214	LEU	N-CA-C	-6.45	104.66	113.30
8	N	235	ALA	CA-C-N	6.45	128.92	120.28
8	N	235	ALA	C-N-CA	6.45	128.92	120.28
9	O	48	ASP	CA-C-N	6.45	128.92	120.28
9	O	48	ASP	C-N-CA	6.45	128.92	120.28
2	D	450	GLU	N-CA-C	-6.45	102.81	112.54
1	B	507	CYS	N-CA-C	-6.44	99.54	109.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	X	78	GLY	CA-C-O	6.44	126.16	119.01
1	B	461	GLU	N-CA-C	-6.44	104.12	112.23
9	U	39	ALA	CA-C-N	6.43	129.54	120.28
9	U	39	ALA	C-N-CA	6.43	129.54	120.28
1	C	416	ARG	N-CA-C	6.42	120.86	112.89
3	G	110	GLU	CA-C-N	6.42	129.18	120.38
3	G	110	GLU	C-N-CA	6.42	129.18	120.38
9	Y	35	ALA	CA-C-O	-6.42	113.74	120.55
2	E	183	LYS	N-CA-C	-6.42	105.48	113.38
4	J	76	ARG	CA-C-N	6.42	128.88	120.28
4	J	76	ARG	C-N-CA	6.42	128.88	120.28
1	B	399	THR	N-CA-C	-6.42	104.70	113.30
2	E	82	LEU	CA-C-N	6.42	127.08	120.60
2	E	82	LEU	C-N-CA	6.42	127.08	120.60
3	H	184	GLN	CA-C-O	-6.42	113.75	120.55
2	D	111	ARG	CA-C-O	6.41	127.37	120.32
8	N	215	ARG	N-CA-C	6.41	118.27	111.28
1	A	65	VAL	N-CA-C	-6.41	98.28	107.77
2	D	69	ALA	CA-C-O	-6.41	113.76	120.55
3	H	127	ASP	CA-C-N	6.41	127.72	119.78
3	H	127	ASP	C-N-CA	6.41	127.72	119.78
9	T	53	GLY	O-C-N	6.41	128.38	122.17
9	X	46	ALA	N-CA-C	6.41	117.92	111.07
9	P	50	SER	CA-C-O	-6.40	112.86	120.10
9	S	78	GLY	N-CA-C	-6.40	106.24	115.27
1	A	306	GLY	CA-C-N	6.40	129.23	120.46
1	A	306	GLY	C-N-CA	6.40	129.23	120.46
8	N	532	PHE	CA-C-N	6.40	128.14	120.14
8	N	532	PHE	C-N-CA	6.40	128.14	120.14
5	K	117	VAL	CA-C-N	6.40	130.69	120.07
5	K	117	VAL	C-N-CA	6.40	130.69	120.07
9	U	49	ARG	CA-C-N	6.39	133.75	121.54
9	U	49	ARG	C-N-CA	6.39	133.75	121.54
5	K	155	LYS	CA-C-N	6.39	129.14	120.38
5	K	155	LYS	C-N-CA	6.39	129.14	120.38
8	N	103	GLU	CA-C-O	-6.39	113.78	120.55
5	K	39	PHE	O-C-N	6.38	128.89	122.12
2	E	112	LEU	O-C-N	-6.38	115.89	121.32
2	E	52	GLU	N-CA-C	-6.38	105.45	112.72
9	Z	19	MET	CA-C-N	6.38	128.12	120.14
9	Z	19	MET	C-N-CA	6.38	128.12	120.14
2	E	365	GLY	N-CA-C	-6.37	106.93	115.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	M	176	VAL	CA-C-O	-6.37	114.42	121.17
8	N	257	ALA	CA-C-N	6.37	128.71	120.44
8	N	257	ALA	C-N-CA	6.37	128.71	120.44
2	D	236	ARG	CA-C-N	6.36	129.13	120.54
2	D	236	ARG	C-N-CA	6.36	129.13	120.54
2	F	451	LEU	N-CA-C	-6.36	98.53	108.90
9	U	33	ALA	N-CA-C	6.36	118.22	111.28
1	C	99	GLY	CA-C-N	6.36	129.17	120.46
1	C	99	GLY	C-N-CA	6.36	129.17	120.46
1	C	569	GLU	CA-C-N	6.36	128.70	120.56
1	C	569	GLU	C-N-CA	6.36	128.70	120.56
7	M	122	GLU	CA-C-N	6.36	128.57	120.56
7	M	122	GLU	C-N-CA	6.36	128.57	120.56
9	W	33	ALA	CA-C-N	6.36	128.80	120.28
9	W	33	ALA	C-N-CA	6.36	128.80	120.28
1	B	151	PRO	O-C-N	6.36	130.72	123.03
8	N	447	ILE	CA-C-N	6.35	126.38	119.90
8	N	447	ILE	C-N-CA	6.35	126.38	119.90
2	F	118	PRO	CA-C-N	6.34	133.66	121.54
2	F	118	PRO	C-N-CA	6.34	133.66	121.54
1	B	42	LEU	O-C-N	-6.34	114.75	123.12
8	N	547	MET	CA-C-N	6.34	125.40	120.33
8	N	547	MET	C-N-CA	6.34	125.40	120.33
1	A	327	THR	CA-C-N	6.34	129.95	120.31
1	A	327	THR	C-N-CA	6.34	129.95	120.31
2	E	88	MET	N-CA-C	-6.34	103.89	111.69
3	H	33	GLU	CA-C-N	6.34	129.29	120.29
3	H	33	GLU	C-N-CA	6.34	129.29	120.29
3	H	100	TRP	CA-C-O	-6.34	112.19	118.34
8	N	202	GLY	CA-C-N	6.33	128.77	120.28
8	N	202	GLY	C-N-CA	6.33	128.77	120.28
2	D	408	ASP	CA-C-N	6.33	128.77	120.28
2	D	408	ASP	C-N-CA	6.33	128.77	120.28
8	N	287	GLU	CA-C-N	6.33	128.77	120.28
8	N	287	GLU	C-N-CA	6.33	128.77	120.28
5	K	58	LYS	CA-C-N	6.33	130.32	120.82
5	K	58	LYS	C-N-CA	6.33	130.32	120.82
9	U	10	LEU	CA-C-N	6.33	128.67	120.44
9	U	10	LEU	C-N-CA	6.33	128.67	120.44
1	B	449	GLU	N-CA-C	-6.33	104.51	112.93
8	N	383	VAL	CA-C-N	6.33	132.16	122.23
8	N	383	VAL	C-N-CA	6.33	132.16	122.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	Y	23	VAL	CA-C-O	6.33	127.53	120.95
9	Z	57	ILE	CA-C-O	-6.33	114.14	120.85
1	A	495	LEU	N-CA-C	-6.32	105.72	113.50
1	A	235	THR	N-CA-C	-6.32	105.73	113.50
1	C	72	ALA	N-CA-C	-6.32	99.81	109.41
2	D	10	GLY	N-CA-C	-6.32	98.21	113.18
2	F	340	SER	CA-C-N	6.32	128.65	120.44
2	F	340	SER	C-N-CA	6.32	128.65	120.44
8	N	99	ARG	CA-C-N	6.32	128.65	120.44
8	N	99	ARG	C-N-CA	6.32	128.65	120.44
7	M	100	LEU	CA-C-N	6.31	129.25	120.29
7	M	100	LEU	C-N-CA	6.31	129.25	120.29
1	B	379	THR	N-CA-C	-6.31	99.44	109.59
4	J	32	GLN	CA-C-N	6.30	129.36	120.28
4	J	32	GLN	C-N-CA	6.30	129.36	120.28
2	E	274	ARG	N-CA-C	-6.30	106.56	114.56
1	A	460	ARG	N-CA-C	-6.30	104.29	112.23
1	A	192	ALA	CA-C-N	6.30	137.17	121.80
1	A	192	ALA	C-N-CA	6.30	137.17	121.80
8	N	564	ILE	CA-C-O	-6.30	114.17	120.85
8	N	202	GLY	O-C-N	6.30	129.61	122.62
1	B	149	VAL	CA-C-O	-6.29	113.95	119.62
1	C	330	TRP	CA-C-N	6.29	129.34	120.28
1	C	330	TRP	C-N-CA	6.29	129.34	120.28
7	M	279	ASP	CA-C-O	-6.29	114.36	121.28
9	W	42	VAL	O-C-N	-6.29	115.77	121.87
2	D	255	VAL	N-CA-C	-6.28	99.43	108.48
9	V	22	ALA	CA-C-O	6.28	127.17	120.70
9	R	72	ILE	O-C-N	6.28	128.06	121.91
9	O	71	LEU	CA-C-N	6.28	128.47	120.56
9	O	71	LEU	C-N-CA	6.28	128.47	120.56
1	C	390	ASP	CA-C-O	-6.27	114.97	121.87
3	G	94	LEU	CA-C-O	-6.27	111.57	120.16
2	D	104	PRO	CA-C-O	-6.27	111.47	120.56
2	E	161	ASN	O-C-N	6.27	128.86	122.09
2	D	410	ARG	CA-C-N	6.26	128.92	120.65
2	D	410	ARG	C-N-CA	6.26	128.92	120.65
6	L	29	ALA	CA-C-O	-6.26	111.55	120.51
2	D	81	ARG	O-C-N	-6.26	114.45	122.78
2	D	305	LYS	N-CA-C	-6.26	104.11	112.94
2	D	436	LEU	N-CA-C	6.26	124.14	110.80
7	M	161	LEU	N-CA-C	6.26	118.66	111.02

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	N	539	VAL	N-CA-C	-6.26	105.52	113.22
6	L	36	LEU	N-CA-C	6.26	118.62	111.11
9	V	12	ARG	N-CA-C	-6.26	104.54	111.36
2	D	443	LEU	CA-C-O	6.26	127.08	119.38
4	J	29	LYS	CA-C-N	6.25	128.95	120.38
4	J	29	LYS	C-N-CA	6.25	128.95	120.38
2	E	43	ARG	CA-C-O	6.25	128.34	121.40
2	F	138	ILE	CA-C-O	6.25	126.39	120.14
2	D	242	ALA	N-CA-C	-6.25	104.37	112.68
8	N	5	VAL	N-CA-C	-6.25	99.49	108.48
8	N	497	GLU	CA-C-O	-6.24	114.27	120.70
1	B	26	ASP	N-CA-C	-6.24	100.13	108.74
9	V	39	ALA	CA-C-N	6.24	129.26	120.28
9	V	39	ALA	C-N-CA	6.24	129.26	120.28
2	E	300	VAL	CA-C-N	6.24	129.02	120.35
2	E	300	VAL	C-N-CA	6.24	129.02	120.35
1	C	410	ASP	CA-C-N	6.23	129.26	120.28
1	C	410	ASP	C-N-CA	6.23	129.26	120.28
1	C	415	PHE	N-CA-C	6.23	120.44	112.34
2	D	257	LEU	N-CA-C	-6.23	98.74	108.90
3	G	21	GLN	CA-C-N	6.23	129.14	120.29
3	G	21	GLN	C-N-CA	6.23	129.14	120.29
3	H	182	VAL	N-CA-C	6.23	117.01	110.72
9	Q	22	ALA	CA-C-O	-6.23	114.28	120.82
9	V	28	LEU	CA-C-N	6.23	126.73	119.94
9	V	28	LEU	C-N-CA	6.23	126.73	119.94
2	F	111	ARG	CA-C-N	6.23	130.13	120.60
2	F	111	ARG	C-N-CA	6.23	130.13	120.60
1	B	15	ILE	N-CA-C	-6.22	99.28	108.99
2	D	188	ALA	CA-C-O	6.22	129.06	121.72
2	F	447	PRO	CA-C-O	-6.22	113.53	122.31
2	F	326	PRO	CA-C-N	6.22	129.44	120.79
2	F	326	PRO	C-N-CA	6.22	129.44	120.79
1	A	76	GLY	CA-C-N	6.22	126.18	120.21
1	A	76	GLY	C-N-CA	6.22	126.18	120.21
1	C	265	VAL	CA-C-N	6.22	128.90	120.38
1	C	265	VAL	C-N-CA	6.22	128.90	120.38
9	Z	23	VAL	O-C-N	6.22	128.24	121.83
1	C	328	SER	O-C-N	6.22	128.71	122.12
9	Y	75	ILE	CA-C-N	6.21	128.60	120.28
9	Y	75	ILE	C-N-CA	6.21	128.60	120.28
1	B	251	VAL	CA-C-O	6.21	126.54	120.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	550	ARG	N-CA-C	-6.21	105.71	113.28
2	F	94	ASN	N-CA-C	-6.21	99.79	109.72
7	M	112	VAL	N-CA-C	-6.21	99.74	108.80
1	A	362	TYR	N-CA-C	6.20	118.04	111.28
2	E	134	GLY	CA-C-N	6.20	133.14	121.97
2	E	134	GLY	C-N-CA	6.20	133.14	121.97
3	H	83	VAL	O-C-N	6.20	127.89	121.87
3	H	140	VAL	N-CA-C	-6.20	99.19	108.12
7	M	169	ALA	N-CA-C	6.20	118.04	111.28
9	O	12	ARG	CA-C-N	6.20	126.86	119.98
9	O	12	ARG	C-N-CA	6.20	126.86	119.98
9	P	28	LEU	N-CA-C	-6.20	104.44	111.07
1	A	430	LEU	N-CA-C	-6.19	105.56	113.23
2	E	161	ASN	CA-C-O	-6.19	114.33	120.70
1	B	459	GLN	CA-C-N	6.19	131.05	120.72
1	B	459	GLN	C-N-CA	6.19	131.05	120.72
8	N	473	VAL	CA-C-N	6.18	129.71	120.31
8	N	473	VAL	C-N-CA	6.18	129.71	120.31
5	K	121	ALA	CA-C-N	6.18	128.56	120.28
5	K	121	ALA	C-N-CA	6.18	128.56	120.28
5	K	18	LEU	CA-C-O	-6.18	114.29	120.90
1	C	497	GLN	O-C-N	-6.18	116.78	123.26
9	T	48	ASP	CA-C-N	6.18	129.06	120.29
9	T	48	ASP	C-N-CA	6.18	129.06	120.29
4	I	49	LYS	CA-C-N	6.17	128.83	120.38
4	I	49	LYS	C-N-CA	6.17	128.83	120.38
7	M	103	LYS	O-C-N	6.17	128.43	122.07
9	X	53	GLY	CA-C-O	-6.17	113.73	120.40
2	E	454	ILE	N-CA-C	-6.17	99.35	108.85
7	M	264	GLY	N-CA-C	6.16	120.13	112.73
9	T	22	ALA	N-CA-C	6.16	117.66	111.07
1	B	252	TYR	CA-C-N	6.16	131.29	123.10
1	B	252	TYR	C-N-CA	6.16	131.29	123.10
5	K	67	ALA	CA-C-O	6.16	127.06	120.10
3	G	18	ALA	CA-C-N	6.15	128.53	120.28
3	G	18	ALA	C-N-CA	6.15	128.53	120.28
1	B	300	GLU	CA-C-N	6.15	128.44	120.44
1	B	300	GLU	C-N-CA	6.15	128.44	120.44
1	C	481	ARG	CA-C-N	6.15	128.81	120.38
1	C	481	ARG	C-N-CA	6.15	128.81	120.38
2	D	411	TYR	N-CA-C	-6.15	104.27	110.97
7	M	224	PHE	CA-C-O	6.15	126.16	119.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	226	ASP	CA-C-O	-6.14	115.07	120.60
7	M	194	LEU	N-CA-C	6.14	118.06	111.36
1	C	351	PRO	N-CA-C	6.14	118.19	110.70
3	H	153	ARG	N-CA-C	-6.14	102.26	110.55
4	J	76	ARG	N-CA-C	-6.14	104.22	111.03
3	H	88	ARG	N-CA-C	-6.14	104.50	112.23
1	B	517	LYS	N-CA-C	-6.13	105.93	113.41
1	A	361	PHE	CA-C-O	6.13	126.92	120.42
2	F	439	ALA	CA-C-O	-6.13	114.33	121.07
9	R	33	ALA	O-C-N	6.13	128.62	122.12
9	T	17	VAL	CA-C-N	6.13	126.74	120.00
9	T	17	VAL	C-N-CA	6.13	126.74	120.00
5	K	65	LEU	N-CA-C	-6.13	97.75	110.80
8	N	209	LEU	N-CA-C	6.13	117.96	111.28
2	D	29	TYR	CA-C-O	-6.12	114.37	120.98
2	D	118	PRO	CA-C-O	-6.12	114.07	122.15
2	E	292	ALA	CA-C-N	6.12	128.48	120.28
2	E	292	ALA	C-N-CA	6.12	128.48	120.28
9	V	19	MET	CA-C-N	6.12	128.00	120.22
9	V	19	MET	C-N-CA	6.12	128.00	120.22
1	B	542	LEU	CA-C-N	6.12	125.81	119.82
1	B	542	LEU	C-N-CA	6.12	125.81	119.82
1	C	472	GLY	CA-C-N	6.12	126.65	120.04
1	C	472	GLY	C-N-CA	6.12	126.65	120.04
9	R	78	GLY	CA-C-N	6.12	130.07	121.02
9	R	78	GLY	C-N-CA	6.12	130.07	121.02
9	Z	41	GLY	N-CA-C	6.12	120.60	112.77
9	S	37	ILE	CA-C-N	6.12	126.77	119.98
9	S	37	ILE	C-N-CA	6.12	126.77	119.98
9	Z	36	ARG	CA-C-N	6.11	129.10	120.42
9	Z	36	ARG	C-N-CA	6.11	129.10	120.42
2	F	141	MET	N-CA-C	-6.11	104.53	112.23
8	N	331	GLU	N-CA-C	6.11	118.74	111.71
1	B	495	LEU	N-CA-C	-6.11	105.53	114.39
2	F	398	ILE	N-CA-C	-6.11	104.41	113.39
1	B	216	PHE	CA-C-N	6.11	127.48	119.84
1	B	216	PHE	C-N-CA	6.11	127.48	119.84
6	L	3	VAL	O-C-N	6.11	129.64	123.10
2	F	229	ILE	CA-C-O	-6.10	113.70	120.96
1	B	487	GLY	CA-C-N	6.10	128.78	120.54
1	B	487	GLY	C-N-CA	6.10	128.78	120.54
1	C	314	ARG	CA-C-N	6.10	129.29	120.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	314	ARG	C-N-CA	6.10	129.29	120.38
5	K	125	GLU	CA-C-N	6.10	128.95	120.29
5	K	125	GLU	C-N-CA	6.10	128.95	120.29
2	D	404	LEU	CA-C-O	-6.09	115.09	121.55
2	D	97	GLY	O-C-N	-6.09	114.78	122.70
9	Y	12	ARG	N-CA-C	6.09	117.99	111.36
1	C	221	GLY	CA-C-N	6.08	130.24	121.54
1	C	221	GLY	C-N-CA	6.08	130.24	121.54
9	R	61	LEU	CA-C-O	-6.08	112.44	118.34
1	B	138	VAL	CA-C-N	6.08	127.44	119.84
1	B	138	VAL	C-N-CA	6.08	127.44	119.84
3	G	170	ARG	N-CA-C	-6.08	104.56	112.23
5	K	173	ARG	CA-C-N	6.08	133.16	121.54
5	K	173	ARG	C-N-CA	6.08	133.16	121.54
5	K	179	ILE	CA-C-N	6.08	133.16	121.54
5	K	179	ILE	C-N-CA	6.08	133.16	121.54
7	M	183	LEU	CA-C-O	6.08	126.42	119.18
2	D	442	LEU	N-CA-C	-6.08	104.94	112.90
2	F	286	TYR	N-CA-C	-6.08	106.12	112.93
8	N	164	ALA	O-C-N	-6.08	115.76	123.24
2	F	110	LYS	N-CA-C	-6.08	99.91	108.96
2	F	205	ILE	CA-C-N	6.08	128.70	120.44
2	F	205	ILE	C-N-CA	6.08	128.70	120.44
1	B	497	GLN	CA-C-N	6.07	129.49	120.87
1	B	497	GLN	C-N-CA	6.07	129.49	120.87
1	C	404	GLY	O-C-N	-6.07	114.64	122.29
1	C	503	VAL	N-CA-C	-6.07	106.82	112.83
3	H	64	GLY	CA-C-N	6.07	128.42	120.28
3	H	64	GLY	C-N-CA	6.07	128.42	120.28
9	T	49	ARG	N-CA-C	-6.07	104.74	111.36
8	N	463	LEU	CA-C-O	6.07	126.95	119.97
9	Q	16	ALA	CA-C-N	6.07	128.21	120.56
9	Q	16	ALA	C-N-CA	6.07	128.21	120.56
2	F	54	TYR	O-C-N	6.07	130.39	122.93
9	S	66	VAL	CA-C-O	-6.07	114.64	120.95
9	O	38	GLY	CA-C-O	-6.06	114.50	120.75
5	K	60	ALA	CA-C-N	6.06	130.83	121.19
5	K	60	ALA	C-N-CA	6.06	130.83	121.19
2	E	441	ALA	N-CA-C	-6.06	105.89	113.28
7	M	14	VAL	CA-C-O	-6.06	114.75	121.17
1	A	69	LEU	CA-C-O	-6.06	114.93	120.50
1	A	436	ASP	CA-C-N	6.05	127.41	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	436	ASP	C-N-CA	6.05	127.41	119.84
1	A	381	VAL	CA-C-O	6.05	126.87	120.51
4	I	30	GLU	O-C-N	6.05	128.30	122.07
8	N	529	TYR	O-C-N	6.05	128.53	122.12
1	A	439	TYR	CA-C-N	6.05	129.20	120.79
1	A	439	TYR	C-N-CA	6.05	129.20	120.79
2	E	435	SER	CA-C-N	6.05	128.39	120.28
2	E	435	SER	C-N-CA	6.05	128.39	120.28
2	F	40	GLY	N-CA-C	-6.05	106.81	115.64
1	B	525	GLU	CA-C-N	6.05	128.99	120.28
1	B	525	GLU	C-N-CA	6.05	128.99	120.28
1	C	236	VAL	CA-C-N	6.04	129.19	120.79
1	C	236	VAL	C-N-CA	6.04	129.19	120.79
2	F	290	ASP	N-CA-C	6.04	119.48	111.75
3	H	175	TRP	N-CA-C	-6.04	103.26	112.99
9	S	47	GLU	CA-C-N	6.04	130.93	122.41
9	S	47	GLU	C-N-CA	6.04	130.93	122.41
2	D	94	ASN	N-CA-C	-6.04	100.99	109.69
8	N	555	ALA	CA-C-N	6.04	127.89	120.22
8	N	555	ALA	C-N-CA	6.04	127.89	120.22
3	G	163	VAL	CA-C-N	6.04	131.50	122.99
3	G	163	VAL	C-N-CA	6.04	131.50	122.99
9	V	37	ILE	CA-C-O	-6.04	114.45	120.85
7	M	14	VAL	O-C-N	6.04	127.83	121.91
9	Q	46	ALA	CA-C-O	-6.04	114.48	120.82
9	Z	44	ALA	CA-C-N	6.03	128.99	120.42
9	Z	44	ALA	C-N-CA	6.03	128.99	120.42
8	N	377	ARG	O-C-N	-6.03	114.35	122.43
5	K	84	PRO	CA-C-O	-6.03	111.82	120.56
1	B	109	HIS	N-CA-C	6.03	119.10	110.24
2	F	182	GLU	N-CA-C	-6.03	105.85	112.72
1	B	448	PRO	N-CA-C	6.02	121.75	113.98
5	K	115	SER	CA-C-O	-6.02	114.59	120.19
7	M	197	ASP	CA-C-N	6.02	128.35	120.28
7	M	197	ASP	C-N-CA	6.02	128.35	120.28
8	N	32	ARG	CA-C-O	-6.02	115.01	121.27
8	N	59	ALA	N-CA-C	6.02	117.92	111.36
1	C	188	PRO	CA-C-N	6.02	128.70	120.46
1	C	188	PRO	C-N-CA	6.02	128.70	120.46
2	E	84	VAL	CA-C-O	6.01	125.57	120.22
8	N	281	LYS	CA-C-N	6.01	128.94	120.28
8	N	281	LYS	C-N-CA	6.01	128.94	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	M	245	SER	N-CA-C	-6.01	99.82	108.60
7	M	113	LEU	N-CA-C	-6.01	98.61	108.41
8	N	212	ALA	CA-C-N	6.01	128.82	120.29
8	N	212	ALA	C-N-CA	6.01	128.82	120.29
1	A	499	ALA	N-CA-C	-6.00	106.20	112.93
7	M	144	GLY	CA-C-N	6.00	129.79	120.60
7	M	144	GLY	C-N-CA	6.00	129.79	120.60
9	T	42	VAL	CA-C-N	6.00	126.60	120.00
9	T	42	VAL	C-N-CA	6.00	126.60	120.00
1	A	283	HIS	N-CA-C	-6.00	104.31	111.69
7	M	133	PRO	O-C-N	6.00	129.96	122.22
1	A	151	PRO	CA-C-N	5.99	132.99	121.54
1	A	151	PRO	C-N-CA	5.99	132.99	121.54
2	D	416	ASP	O-C-N	5.99	128.47	122.12
8	N	235	ALA	N-CA-C	5.99	117.48	111.07
2	D	67	ASP	N-CA-C	-5.99	100.81	110.32
1	C	150	PRO	N-CA-C	5.97	117.99	110.70
3	G	112	LEU	CA-C-N	5.97	130.69	120.72
3	G	112	LEU	C-N-CA	5.97	130.69	120.72
8	N	346	ASP	CA-C-N	5.97	127.30	119.84
8	N	346	ASP	C-N-CA	5.97	127.30	119.84
2	D	184	GLU	N-CA-C	-5.97	104.71	112.23
2	F	305	LYS	N-CA-C	5.97	117.79	111.28
7	M	97	GLN	CA-C-N	5.97	128.28	120.28
7	M	97	GLN	C-N-CA	5.97	128.28	120.28
7	M	72	LEU	CA-C-O	-5.97	112.55	118.34
1	C	217	PRO	N-CA-C	-5.97	100.18	112.47
6	L	19	GLU	N-CA-C	-5.96	100.18	109.72
8	N	285	LYS	CA-C-N	5.96	128.07	120.56
8	N	285	LYS	C-N-CA	5.96	128.07	120.56
2	F	21	VAL	CA-C-O	5.96	127.28	120.90
1	C	153	VAL	N-CA-C	-5.96	96.00	106.61
2	D	381	GLN	CA-C-N	5.96	128.54	120.38
2	D	381	GLN	C-N-CA	5.96	128.54	120.38
2	E	261	THR	CA-C-O	-5.96	114.56	120.70
2	E	199	ARG	O-C-N	5.96	128.21	122.07
8	N	573	ILE	CA-C-N	5.96	128.54	120.38
8	N	573	ILE	C-N-CA	5.96	128.54	120.38
8	N	634	PHE	CA-C-N	5.96	129.07	120.79
8	N	634	PHE	C-N-CA	5.96	129.07	120.79
9	V	12	ARG	CA-C-N	5.96	126.59	119.98
9	V	12	ARG	C-N-CA	5.96	126.59	119.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	402	ILE	CA-C-O	5.95	126.68	119.54
2	E	93	PHE	N-CA-C	5.95	116.94	108.54
1	A	398	SER	N-CA-C	5.95	119.64	112.38
1	B	359	ALA	O-C-N	5.95	128.28	122.09
2	F	76	VAL	CA-C-O	-5.95	113.34	120.78
8	N	372	PHE	CA-C-N	5.95	128.53	120.38
8	N	372	PHE	C-N-CA	5.95	128.53	120.38
9	V	43	GLY	CA-C-N	5.95	128.25	120.28
9	V	43	GLY	C-N-CA	5.95	128.25	120.28
1	B	371	LEU	CA-C-O	5.94	126.25	119.18
7	M	95	ASN	CA-C-N	5.94	128.24	120.28
7	M	95	ASN	C-N-CA	5.94	128.24	120.28
9	Y	54	THR	CA-C-N	5.94	128.24	120.28
9	Y	54	THR	C-N-CA	5.94	128.24	120.28
7	M	25	PHE	CA-C-O	-5.94	113.14	119.97
8	N	168	TYR	N-CA-C	-5.94	102.47	111.56
9	S	71	LEU	CA-C-O	-5.94	114.26	120.55
1	C	121	PRO	CA-C-N	5.93	130.37	120.70
1	C	121	PRO	C-N-CA	5.93	130.37	120.70
2	D	170	GLN	CA-C-N	5.93	129.26	120.95
2	D	170	GLN	C-N-CA	5.93	129.26	120.95
2	E	125	ARG	CA-C-N	5.93	128.91	120.49
2	E	125	ARG	C-N-CA	5.93	128.91	120.49
8	N	35	ALA	CA-C-N	5.93	129.33	120.31
8	N	35	ALA	C-N-CA	5.93	129.33	120.31
1	C	469	GLN	CA-C-N	5.93	129.04	120.38
1	C	469	GLN	C-N-CA	5.93	129.04	120.38
4	I	77	GLU	CA-C-N	5.93	128.15	120.44
4	I	77	GLU	C-N-CA	5.93	128.15	120.44
8	N	54	ALA	CA-C-O	-5.93	114.27	120.55
8	N	476	PHE	CA-C-O	-5.93	114.27	120.55
1	B	6	ILE	N-CA-C	-5.93	100.04	109.17
2	D	66	LEU	N-CA-C	-5.93	98.18	110.80
9	V	6	ALA	CA-C-O	5.92	125.57	119.05
2	F	97	GLY	O-C-N	-5.92	115.00	122.70
3	H	112	LEU	N-CA-C	-5.92	105.14	112.90
5	K	32	ARG	CA-C-N	5.92	129.03	120.38
5	K	32	ARG	C-N-CA	5.92	129.03	120.38
3	G	39	LYS	CA-C-O	-5.92	114.57	120.90
1	B	229	PRO	CA-C-O	-5.92	114.90	121.23
1	B	288	ILE	N-CA-C	-5.92	107.22	112.90
1	C	476	LEU	CA-C-N	5.92	129.52	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	476	LEU	C-N-CA	5.92	129.52	120.82
2	F	456	LYS	CA-C-N	5.92	128.13	120.44
2	F	456	LYS	C-N-CA	5.92	128.13	120.44
7	M	65	GLN	CA-C-O	-5.92	113.17	119.97
8	N	600	VAL	CA-C-N	5.91	132.40	121.52
8	N	600	VAL	C-N-CA	5.91	132.40	121.52
2	F	281	ARG	CA-C-N	5.91	133.00	121.41
2	F	281	ARG	C-N-CA	5.91	133.00	121.41
9	Y	22	ALA	N-CA-C	5.91	117.40	111.07
9	P	64	THR	CA-C-N	5.91	128.48	120.44
9	P	64	THR	C-N-CA	5.91	128.48	120.44
9	T	66	VAL	CA-C-N	5.91	128.56	120.46
9	T	66	VAL	C-N-CA	5.91	128.56	120.46
2	E	349	TYR	CA-C-O	-5.91	113.19	119.22
9	O	79	ARG	N-CA-C	5.91	118.50	111.71
9	Y	51	ASN	CA-C-N	5.91	129.29	120.31
9	Y	51	ASN	C-N-CA	5.91	129.29	120.31
1	A	48	PHE	CA-C-N	5.91	129.01	120.98
1	A	48	PHE	C-N-CA	5.91	129.01	120.98
1	A	354	LEU	O-C-N	5.91	130.44	122.59
1	A	479	ALA	N-CA-C	-5.91	105.57	112.89
1	C	274	ASP	CA-C-O	-5.91	114.70	120.19
2	E	288	TYR	N-CA-C	5.91	118.47	111.33
1	A	557	GLU	CA-C-N	5.90	129.28	120.31
1	A	557	GLU	C-N-CA	5.90	129.28	120.31
1	C	108	VAL	CA-C-O	5.90	128.17	121.44
9	T	69	GLY	CA-C-N	5.90	128.67	120.29
9	T	69	GLY	C-N-CA	5.90	128.67	120.29
1	B	62	GLU	O-C-N	-5.90	115.72	121.38
2	E	161	ASN	N-CA-C	5.90	117.51	111.14
3	G	108	ALA	N-CA-C	5.90	118.49	111.71
8	N	460	ALA	CA-C-N	5.90	128.18	120.28
8	N	460	ALA	C-N-CA	5.90	128.18	120.28
2	D	65	GLY	O-C-N	5.90	130.37	122.70
9	V	33	ALA	CA-C-O	5.90	126.67	120.42
2	D	157	GLY	N-CA-C	-5.89	107.04	115.64
9	U	12	ARG	CA-C-N	5.89	126.52	119.98
9	U	12	ARG	C-N-CA	5.89	126.52	119.98
2	E	107	THR	CA-C-N	5.89	127.20	119.84
2	E	107	THR	C-N-CA	5.89	127.20	119.84
8	N	330	PHE	CA-C-N	5.89	128.76	120.28
8	N	330	PHE	C-N-CA	5.89	128.76	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	168	VAL	CA-C-N	5.89	128.17	120.28
1	A	168	VAL	C-N-CA	5.89	128.17	120.28
1	B	246	ASN	N-CA-C	-5.89	106.07	113.72
9	W	39	ALA	O-C-N	5.89	128.36	122.12
2	F	432	ILE	O-C-N	5.88	127.84	121.90
9	X	73	ALA	CA-C-N	5.88	128.09	120.44
9	X	73	ALA	C-N-CA	5.88	128.09	120.44
1	B	369	ILE	CA-C-O	5.88	126.82	120.53
2	D	323	HIS	CA-C-N	5.88	127.19	119.84
2	D	323	HIS	C-N-CA	5.88	127.19	119.84
8	N	636	GLU	N-CA-C	5.88	118.76	110.23
1	C	444	ALA	N-CA-C	-5.88	99.76	108.99
1	A	300	GLU	CA-C-N	5.88	128.47	120.54
1	A	300	GLU	C-N-CA	5.88	128.47	120.54
8	N	636	GLU	CA-C-N	5.88	132.76	121.54
8	N	636	GLU	C-N-CA	5.88	132.76	121.54
1	B	16	ALA	O-C-N	5.87	129.97	123.33
4	J	74	ARG	N-CA-C	5.87	117.68	111.28
9	V	70	LEU	CA-C-N	5.87	128.15	120.28
9	V	70	LEU	C-N-CA	5.87	128.15	120.28
9	Y	61	LEU	CA-C-O	-5.87	112.64	118.34
8	N	398	LEU	O-C-N	5.87	128.43	122.09
1	B	289	ALA	N-CA-C	5.87	117.87	110.24
1	A	497	GLN	N-CA-C	-5.87	100.23	109.50
1	A	543	PRO	N-CA-C	-5.87	104.78	114.75
8	N	152	ALA	O-C-N	-5.87	116.03	122.07
3	G	177	ALA	N-CA-C	-5.86	105.71	112.92
5	K	97	TRP	CA-C-N	5.86	132.90	121.41
5	K	97	TRP	C-N-CA	5.86	132.90	121.41
9	V	10	LEU	N-CA-C	-5.86	105.02	111.82
9	W	40	ALA	N-CA-C	5.86	118.62	111.82
1	C	302	SER	CA-C-O	-5.86	112.13	120.51
2	D	126	LYS	CA-C-N	5.86	125.77	119.85
2	D	126	LYS	C-N-CA	5.86	125.77	119.85
2	F	269	GLU	CA-C-N	5.86	127.94	120.56
2	F	269	GLU	C-N-CA	5.86	127.94	120.56
4	J	81	THR	O-C-N	-5.86	114.80	122.59
7	M	304	ALA	CA-C-N	5.86	128.13	120.28
7	M	304	ALA	C-N-CA	5.86	128.13	120.28
9	W	10	LEU	CA-C-N	5.86	128.13	120.28
9	W	10	LEU	C-N-CA	5.86	128.13	120.28
1	A	50	GLN	N-CA-C	-5.85	99.70	109.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	444	ALA	O-C-N	-5.85	118.14	123.41
2	D	223	LYS	N-CA-C	-5.85	100.61	108.86
1	A	324	ALA	CA-C-N	5.85	130.71	121.99
1	A	324	ALA	C-N-CA	5.85	130.71	121.99
8	N	423	ILE	CA-C-O	-5.85	114.65	120.85
1	C	261	GLU	O-C-N	-5.85	115.07	122.27
3	G	64	GLY	CA-C-N	5.85	128.60	120.29
3	G	64	GLY	C-N-CA	5.85	128.60	120.29
2	F	103	LEU	CA-C-N	5.85	126.40	120.38
2	F	103	LEU	C-N-CA	5.85	126.40	120.38
1	A	155	GLY	CA-C-N	5.84	131.01	122.77
1	A	155	GLY	C-N-CA	5.84	131.01	122.77
9	V	60	LEU	CA-C-N	5.84	127.40	120.09
9	V	60	LEU	C-N-CA	5.84	127.40	120.09
1	C	508	SER	CA-C-N	5.84	132.70	121.54
1	C	508	SER	C-N-CA	5.84	132.70	121.54
9	S	70	LEU	CA-C-N	5.84	128.11	120.28
9	S	70	LEU	C-N-CA	5.84	128.11	120.28
2	D	438	ILE	CA-C-N	5.84	128.38	120.38
2	D	438	ILE	C-N-CA	5.84	128.38	120.38
9	U	19	MET	CA-C-N	5.84	127.44	120.14
9	U	19	MET	C-N-CA	5.84	127.44	120.14
9	X	6	ALA	N-CA-C	-5.84	106.13	113.72
7	M	219	LEU	CA-C-N	5.84	129.05	120.82
7	M	219	LEU	C-N-CA	5.84	129.05	120.82
1	B	161	LYS	O-C-N	-5.84	114.89	121.43
1	C	343	GLU	O-C-N	5.84	129.84	122.37
4	I	107	LEU	N-CA-C	-5.83	105.17	112.93
7	M	109	PHE	N-CA-C	-5.83	104.92	111.28
1	B	38	GLU	CA-C-N	5.83	130.29	122.01
1	B	38	GLU	C-N-CA	5.83	130.29	122.01
2	E	9	THR	CA-C-O	-5.83	114.33	120.80
2	F	328	LEU	CA-C-N	5.83	128.89	120.79
2	F	328	LEU	C-N-CA	5.83	128.89	120.79
2	F	8	TYR	N-CA-C	-5.82	98.40	110.80
9	P	53	GLY	CA-C-O	-5.82	114.75	120.75
9	P	56	LEU	CA-C-O	-5.82	114.71	120.82
7	M	287	LEU	CA-C-N	5.82	128.08	120.28
7	M	287	LEU	C-N-CA	5.82	128.08	120.28
1	A	511	LYS	CA-C-N	5.82	128.00	120.44
1	A	511	LYS	C-N-CA	5.82	128.00	120.44
1	B	423	ASN	N-CA-C	-5.82	100.31	109.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	R	75	ILE	CA-C-N	5.82	129.15	120.31
9	R	75	ILE	C-N-CA	5.82	129.15	120.31
1	B	258	ARG	N-CA-C	5.82	117.57	109.31
1	B	97	LYS	N-CA-C	5.81	117.70	111.36
9	O	53	GLY	CA-C-O	-5.81	114.76	120.75
1	B	148	LEU	O-C-N	-5.81	116.24	123.04
2	D	152	ILE	N-CA-C	-5.81	98.77	107.37
2	F	138	ILE	N-CA-C	5.81	117.08	111.91
7	M	202	ARG	CA-C-O	5.80	126.57	120.42
3	H	157	ALA	CA-C-N	5.80	127.98	120.44
3	H	157	ALA	C-N-CA	5.80	127.98	120.44
9	U	28	LEU	O-C-N	5.80	128.04	122.07
9	V	10	LEU	CA-C-N	5.80	128.05	120.28
9	V	10	LEU	C-N-CA	5.80	128.05	120.28
9	P	10	LEU	CA-C-N	5.80	128.05	120.28
9	P	10	LEU	C-N-CA	5.80	128.05	120.28
2	F	320	ASP	N-CA-C	-5.80	101.11	110.32
9	Z	39	ALA	O-C-N	5.79	128.75	122.15
6	L	27	GLU	N-CA-C	5.79	117.67	111.36
1	B	355	ALA	CA-C-N	5.79	128.84	120.79
1	B	355	ALA	C-N-CA	5.79	128.84	120.79
1	C	158	LYS	CA-C-N	5.79	132.60	121.54
1	C	158	LYS	C-N-CA	5.79	132.60	121.54
2	D	261	THR	O-C-N	5.79	128.24	122.10
9	Y	39	ALA	CA-C-N	5.79	128.03	120.28
9	Y	39	ALA	C-N-CA	5.79	128.03	120.28
9	Q	6	ALA	CA-C-N	5.79	127.96	120.44
9	Q	6	ALA	C-N-CA	5.79	127.96	120.44
1	A	505	ALA	CA-C-O	-5.78	115.09	121.28
1	A	294	MET	O-C-N	-5.78	113.82	121.34
2	D	341	ARG	CA-C-N	5.78	128.03	120.28
2	D	341	ARG	C-N-CA	5.78	128.03	120.28
5	K	193	ARG	N-CA-C	-5.78	104.90	111.14
8	N	393	LEU	CA-C-O	-5.78	113.57	120.10
9	Q	16	ALA	N-CA-C	5.77	117.57	111.28
7	M	171	ARG	CA-C-N	5.77	128.02	120.28
7	M	171	ARG	C-N-CA	5.77	128.02	120.28
1	B	418	HIS	CA-C-O	5.77	127.18	120.49
1	C	472	GLY	CA-C-O	-5.77	113.27	121.52
1	A	223	THR	N-CA-C	-5.77	99.94	108.99
1	B	47	ALA	CA-C-O	5.77	126.54	120.54
1	C	538	GLU	CA-C-O	-5.76	114.31	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	H	47	ARG	N-CA-C	5.76	117.56	111.28
7	M	83	ALA	N-CA-C	5.76	117.36	111.14
2	F	183	LYS	N-CA-C	-5.76	106.39	113.41
1	B	363	GLU	CA-C-N	5.76	128.79	120.38
1	B	363	GLU	C-N-CA	5.76	128.79	120.38
1	C	65	VAL	N-CA-C	-5.76	100.13	108.71
1	C	316	GLN	O-C-N	-5.75	115.44	122.34
3	H	72	ARG	CA-C-N	5.75	127.99	120.28
3	H	72	ARG	C-N-CA	5.75	127.99	120.28
9	X	39	ALA	CA-C-O	-5.75	114.45	120.55
1	C	263	THR	N-CA-C	-5.75	106.81	113.88
4	J	83	ALA	CA-C-N	5.75	128.45	120.63
4	J	83	ALA	C-N-CA	5.75	128.45	120.63
6	L	70	VAL	CA-C-O	-5.75	114.43	120.76
9	S	49	ARG	CA-C-N	5.75	128.56	120.28
9	S	49	ARG	C-N-CA	5.75	128.56	120.28
1	C	294	MET	CA-C-N	5.75	127.03	119.84
1	C	294	MET	C-N-CA	5.75	127.03	119.84
2	E	237	MET	N-CA-C	-5.75	104.39	111.40
9	Y	23	VAL	CA-C-N	5.75	126.32	119.94
9	Y	23	VAL	C-N-CA	5.75	126.32	119.94
7	M	195	GLU	CA-C-O	-5.75	114.79	120.82
9	Y	12	ARG	CA-C-N	5.75	126.36	119.98
9	Y	12	ARG	C-N-CA	5.75	126.36	119.98
1	A	103	THR	CA-C-N	5.75	130.05	121.72
1	A	103	THR	C-N-CA	5.75	130.05	121.72
3	G	164	GLU	N-CA-C	-5.75	99.54	108.90
1	A	78	GLY	N-CA-C	-5.74	107.43	113.58
1	A	324	ALA	N-CA-C	-5.74	99.37	108.73
2	E	237	MET	CA-C-N	5.74	128.29	120.54
2	E	237	MET	C-N-CA	5.74	128.29	120.54
9	W	9	GLY	CA-C-N	5.74	129.04	120.31
9	W	9	GLY	C-N-CA	5.74	129.04	120.31
5	K	206	ALA	CA-C-O	5.74	126.36	119.59
9	R	35	ALA	CA-C-O	-5.74	114.79	120.70
8	N	217	LYS	N-CA-C	-5.74	105.11	111.36
1	A	190	ARG	CA-C-N	5.74	132.50	121.54
1	A	190	ARG	C-N-CA	5.74	132.50	121.54
2	D	264	CYS	CA-C-N	5.74	128.22	120.65
2	D	264	CYS	C-N-CA	5.74	128.22	120.65
9	S	64	THR	CA-C-O	-5.74	114.47	120.55
9	Q	29	GLY	O-C-N	-5.73	116.69	122.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	G	109	LEU	CA-C-N	5.73	128.43	120.29
3	G	109	LEU	C-N-CA	5.73	128.43	120.29
8	N	343	GLY	N-CA-C	-5.73	107.81	115.32
2	E	84	VAL	N-CA-C	-5.73	97.27	107.18
8	N	645	PHE	N-CA-C	5.73	118.30	111.71
9	Y	5	ALA	N-CA-C	-5.72	104.06	113.50
1	B	105	GLY	CA-C-N	5.72	132.27	121.97
1	B	105	GLY	C-N-CA	5.72	132.27	121.97
3	G	117	GLY	N-CA-C	5.72	120.75	114.40
7	M	8	LEU	CA-C-N	5.72	127.95	120.28
7	M	8	LEU	C-N-CA	5.72	127.95	120.28
1	A	385	SER	N-CA-C	-5.72	103.07	108.22
1	C	379	THR	CA-C-N	5.72	130.95	123.06
1	C	379	THR	C-N-CA	5.72	130.95	123.06
1	C	452	ASP	CA-C-O	5.72	126.61	120.55
9	T	44	ALA	CA-C-N	5.72	128.54	120.42
9	T	44	ALA	C-N-CA	5.72	128.54	120.42
9	Y	54	THR	O-C-N	-5.72	116.06	122.12
7	M	220	LYS	CA-C-N	5.71	132.61	121.41
7	M	220	LYS	C-N-CA	5.71	132.61	121.41
1	A	537	ASP	O-C-N	5.71	127.95	122.07
2	D	40	GLY	N-CA-C	-5.71	107.44	115.32
2	E	322	THR	N-CA-C	-5.71	105.04	113.61
1	A	393	GLU	CA-C-N	5.71	126.98	119.84
1	A	393	GLU	C-N-CA	5.71	126.98	119.84
2	D	129	GLN	O-C-N	-5.71	115.85	122.87
2	F	446	LEU	CA-C-O	-5.71	114.08	120.25
8	N	107	GLU	CA-C-N	5.71	127.93	120.28
8	N	107	GLU	C-N-CA	5.71	127.93	120.28
3	H	183	ALA	N-CA-C	5.71	117.50	111.28
1	A	314	ARG	CA-C-N	5.70	128.24	120.54
1	A	314	ARG	C-N-CA	5.70	128.24	120.54
1	B	464	LEU	CA-C-N	5.70	128.24	120.54
1	B	464	LEU	C-N-CA	5.70	128.24	120.54
1	C	204	PRO	N-CA-C	5.70	120.03	111.14
9	P	45	ILE	N-CA-C	5.70	116.48	110.72
1	A	122	MET	N-CA-C	-5.70	105.73	114.16
1	A	241	LEU	CA-C-N	5.70	130.22	120.71
1	A	241	LEU	C-N-CA	5.70	130.22	120.71
1	A	568	LYS	CA-C-N	5.70	128.49	120.28
1	A	568	LYS	C-N-CA	5.70	128.49	120.28
1	C	68	GLY	N-CA-C	-5.70	107.40	115.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	186	PRO	N-CA-C	5.70	120.16	111.15
2	F	102	GLY	O-C-N	-5.70	115.29	122.41
8	N	625	TRP	N-CA-C	5.70	119.33	112.38
1	B	520	LEU	O-C-N	5.70	128.66	122.11
2	E	120	ASN	CA-C-N	5.70	127.78	120.89
2	E	120	ASN	C-N-CA	5.70	127.78	120.89
1	B	392	SER	CA-C-N	5.69	128.58	120.49
1	B	392	SER	C-N-CA	5.69	128.58	120.49
8	N	225	ARG	O-C-N	-5.69	115.66	122.15
8	N	570	ALA	CA-C-N	5.69	127.26	120.14
8	N	570	ALA	C-N-CA	5.69	127.26	120.14
1	A	384	VAL	N-CA-C	5.69	121.18	109.34
2	F	371	THR	CA-C-O	5.69	124.74	118.65
1	C	528	ALA	CA-C-O	5.69	126.37	119.31
9	R	31	GLY	O-C-N	5.69	127.65	122.19
8	N	142	THR	CA-C-N	5.69	128.22	120.54
8	N	142	THR	C-N-CA	5.69	128.22	120.54
7	M	254	GLY	N-CA-C	-5.68	107.42	115.43
8	N	221	GLU	CA-C-N	5.68	128.36	120.29
8	N	221	GLU	C-N-CA	5.68	128.36	120.29
9	Q	20	GLY	CA-C-N	5.68	127.89	120.28
9	Q	20	GLY	C-N-CA	5.68	127.89	120.28
9	W	62	PRO	CA-C-N	5.68	127.89	120.28
9	W	62	PRO	C-N-CA	5.68	127.89	120.28
2	F	447	PRO	CA-C-N	5.68	128.46	120.28
2	F	447	PRO	C-N-CA	5.68	128.46	120.28
5	K	13	GLN	CA-C-N	5.68	129.69	120.60
5	K	13	GLN	C-N-CA	5.68	129.69	120.60
1	B	447	TYR	CA-C-N	5.68	125.39	119.82
1	B	447	TYR	C-N-CA	5.68	125.39	119.82
1	C	210	ARG	CA-C-N	5.68	128.54	120.53
1	C	210	ARG	C-N-CA	5.68	128.54	120.53
8	N	464	ILE	CA-C-O	-5.68	114.75	121.05
2	F	327	ASP	CA-C-N	5.68	128.68	120.79
2	F	327	ASP	C-N-CA	5.68	128.68	120.79
1	C	288	ILE	CA-C-N	5.68	128.77	120.71
1	C	288	ILE	C-N-CA	5.68	128.77	120.71
2	D	138	ILE	CA-C-O	-5.68	113.66	121.15
2	F	87	GLU	CA-C-N	5.68	131.17	122.77
2	F	87	GLU	C-N-CA	5.68	131.17	122.77
1	C	48	PHE	O-C-N	-5.67	116.75	123.22
1	B	79	MET	CA-C-O	5.67	126.43	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	390	VAL	CA-C-O	-5.67	115.37	121.27
8	N	551	ILE	CA-C-N	5.67	127.81	120.44
8	N	551	ILE	C-N-CA	5.67	127.81	120.44
1	A	38	GLU	CA-C-N	5.67	130.06	122.01
1	A	38	GLU	C-N-CA	5.67	130.06	122.01
2	F	233	LEU	CA-C-N	5.67	135.63	121.80
2	F	233	LEU	C-N-CA	5.67	135.63	121.80
1	B	564	GLU	CA-C-O	-5.66	114.49	120.55
9	O	22	ALA	N-CA-C	5.66	117.45	111.28
4	J	72	GLN	O-C-N	-5.66	115.27	122.34
9	U	33	ALA	CA-C-N	5.66	127.86	120.28
9	U	33	ALA	C-N-CA	5.66	127.86	120.28
8	N	260	LYS	CA-C-N	5.66	127.86	120.28
8	N	260	LYS	C-N-CA	5.66	127.86	120.28
9	R	16	ALA	CA-C-N	5.66	127.69	120.56
9	R	16	ALA	C-N-CA	5.66	127.69	120.56
2	D	343	LEU	N-CA-C	-5.65	106.43	113.38
2	D	180	GLU	CA-C-N	5.65	132.49	121.41
2	D	180	GLU	C-N-CA	5.65	132.49	121.41
4	J	31	LYS	O-C-N	-5.65	113.32	122.42
9	Z	35	ALA	N-CA-C	5.65	117.12	111.07
6	L	39	ARG	CA-C-N	5.65	131.19	121.07
6	L	39	ARG	C-N-CA	5.65	131.19	121.07
9	Z	40	ALA	CA-C-N	5.65	126.21	120.00
9	Z	40	ALA	C-N-CA	5.65	126.21	120.00
2	F	395	LEU	N-CA-C	-5.65	98.00	107.99
9	V	42	VAL	CA-C-N	5.65	126.21	120.00
9	V	42	VAL	C-N-CA	5.65	126.21	120.00
1	B	347	GLU	CA-C-N	5.64	130.87	122.74
1	B	347	GLU	C-N-CA	5.64	130.87	122.74
1	C	120	THR	O-C-N	-5.64	116.31	122.06
7	M	103	LYS	N-CA-C	5.64	117.11	111.07
2	F	137	THR	CA-C-O	-5.64	113.88	120.20
4	I	33	LEU	CA-C-N	5.64	127.84	120.28
4	I	33	LEU	C-N-CA	5.64	127.84	120.28
2	E	284	PRO	N-CA-C	5.64	124.08	112.47
9	T	68	PHE	CA-C-N	5.64	126.24	119.98
9	T	68	PHE	C-N-CA	5.64	126.24	119.98
1	C	261	GLU	CA-C-O	5.64	126.45	119.97
2	D	250	ASP	O-C-N	-5.64	115.93	122.86
7	M	14	VAL	CA-C-N	5.64	128.40	120.28
7	M	14	VAL	C-N-CA	5.64	128.40	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	532	ARG	CA-C-N	5.63	130.58	121.00
1	C	532	ARG	C-N-CA	5.63	130.58	121.00
1	A	221	GLY	N-CA-C	-5.63	107.42	115.64
1	C	548	ILE	N-CA-C	-5.63	105.36	110.82
2	E	15	SER	CA-C-O	5.63	127.41	121.33
3	G	55	ALA	O-C-N	5.63	128.57	122.15
9	O	66	VAL	CA-C-N	5.63	128.42	120.42
9	O	66	VAL	C-N-CA	5.63	128.42	120.42
2	D	165	ALA	N-CA-C	-5.63	105.29	111.82
2	F	219	LEU	N-CA-C	-5.63	101.42	110.14
1	C	121	PRO	CA-C-O	-5.63	114.72	122.15
7	M	221	GLY	CA-C-N	5.63	127.03	121.57
7	M	221	GLY	C-N-CA	5.63	127.03	121.57
5	K	13	GLN	O-C-N	-5.62	116.02	122.09
1	B	76	GLY	CA-C-N	5.62	126.87	119.84
1	B	76	GLY	C-N-CA	5.62	126.87	119.84
9	V	48	ASP	CA-C-N	5.62	127.82	120.28
9	V	48	ASP	C-N-CA	5.62	127.82	120.28
1	B	253	VAL	CA-C-O	5.62	126.23	120.39
2	D	386	TYR	N-CA-C	-5.62	104.77	111.69
3	G	84	ARG	CA-C-N	5.62	128.08	120.38
3	G	84	ARG	C-N-CA	5.62	128.08	120.38
8	N	141	LEU	N-CA-C	-5.62	100.75	109.24
9	S	17	VAL	O-C-N	5.62	127.32	121.87
1	A	299	ARG	N-CA-C	5.62	118.94	111.75
8	N	421	GLY	N-CA-C	5.62	120.60	113.24
2	D	262	ASN	N-CA-C	-5.62	106.27	113.23
9	O	37	ILE	CA-C-O	-5.62	114.90	120.85
3	G	38	ALA	O-C-N	5.61	128.07	122.12
8	N	558	ILE	N-CA-C	-5.61	105.03	110.42
2	E	339	LEU	O-C-N	5.61	128.96	121.67
8	N	544	ILE	CA-C-N	5.61	132.25	121.54
8	N	544	ILE	C-N-CA	5.61	132.25	121.54
1	A	117	TRP	N-CA-C	-5.61	99.53	109.06
1	C	65	VAL	O-C-N	-5.61	116.99	122.93
2	F	220	PHE	N-CA-C	-5.61	99.13	108.32
9	R	55	ALA	CA-C-N	5.60	127.79	120.28
9	R	55	ALA	C-N-CA	5.60	127.79	120.28
9	V	67	ILE	CA-C-N	5.60	127.79	120.28
9	V	67	ILE	C-N-CA	5.60	127.79	120.28
1	A	412	SER	CA-C-N	5.60	128.04	120.65
1	A	412	SER	C-N-CA	5.60	128.04	120.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	K	36	VAL	CA-C-N	5.60	127.72	120.44
5	K	36	VAL	C-N-CA	5.60	127.72	120.44
8	N	524	LEU	CA-C-O	5.60	126.56	119.95
1	B	520	LEU	CA-C-N	5.60	128.57	120.79
1	B	520	LEU	C-N-CA	5.60	128.57	120.79
2	D	276	GLU	O-C-N	5.60	129.70	122.81
1	A	173	VAL	N-CA-C	-5.60	100.96	108.35
5	K	39	PHE	N-CA-C	5.60	118.10	111.33
1	A	549	GLY	N-CA-C	-5.60	106.93	115.66
1	A	271	GLU	CA-C-N	5.59	129.20	120.75
1	A	271	GLU	C-N-CA	5.59	129.20	120.75
5	K	148	LYS	CA-C-N	5.59	127.71	120.44
5	K	148	LYS	C-N-CA	5.59	127.71	120.44
9	V	61	LEU	CA-C-N	5.59	125.30	119.82
9	V	61	LEU	C-N-CA	5.59	125.30	119.82
9	W	68	PHE	CA-C-N	5.59	126.19	119.98
9	W	68	PHE	C-N-CA	5.59	126.19	119.98
2	E	236	ARG	CA-C-N	5.59	130.05	120.71
2	E	236	ARG	C-N-CA	5.59	130.05	120.71
9	W	61	LEU	CA-C-O	-5.59	113.25	118.73
4	I	58	LEU	CA-C-O	5.59	126.45	120.70
9	X	18	GLY	CA-C-N	5.59	128.80	120.31
9	X	18	GLY	C-N-CA	5.59	128.80	120.31
9	Z	25	LEU	N-CA-C	5.59	117.45	111.36
1	A	190	ARG	N-CA-C	-5.58	106.14	113.17
1	C	187	TRP	CA-C-N	5.58	125.51	119.76
1	C	187	TRP	C-N-CA	5.58	125.51	119.76
2	E	227	PRO	CA-C-N	5.58	129.19	120.82
2	E	227	PRO	C-N-CA	5.58	129.19	120.82
1	A	446	ASP	N-CA-C	-5.58	105.07	112.94
2	F	59	VAL	CA-C-N	5.58	127.69	120.44
2	F	59	VAL	C-N-CA	5.58	127.69	120.44
8	N	14	LYS	CA-C-N	5.58	128.21	120.29
8	N	14	LYS	C-N-CA	5.58	128.21	120.29
1	B	189	VAL	CA-C-O	5.58	124.26	118.96
2	D	166	GLN	N-CA-C	5.58	118.08	111.33
1	A	337	ILE	CA-C-O	-5.58	115.26	121.17
2	F	53	GLU	CA-C-N	5.58	128.76	120.95
2	F	53	GLU	C-N-CA	5.58	128.76	120.95
9	T	37	ILE	CA-C-N	5.58	126.17	119.98
9	T	37	ILE	C-N-CA	5.58	126.17	119.98
2	E	200	GLU	N-CA-C	5.57	118.89	111.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	27	ILE	CA-C-N	-5.57	114.93	122.95
1	B	27	ILE	C-N-CA	-5.57	114.93	122.95
9	O	13	GLY	CA-C-N	5.57	128.20	120.29
9	O	13	GLY	C-N-CA	5.57	128.20	120.29
1	B	48	PHE	CA-C-N	5.57	130.15	121.85
1	B	48	PHE	C-N-CA	5.57	130.15	121.85
8	N	42	SER	CA-C-N	5.57	125.23	119.05
8	N	42	SER	C-N-CA	5.57	125.23	119.05
1	A	403	VAL	CA-C-O	5.57	127.74	120.78
2	F	87	GLU	N-CA-C	-5.57	106.48	113.72
1	B	266	LEU	O-C-N	5.57	127.82	122.03
1	C	553	TYR	N-CA-C	-5.57	106.16	113.17
2	F	328	LEU	O-C-N	5.57	128.03	122.08
3	H	124	ASN	CA-C-O	-5.57	114.91	120.64
2	F	204	PHE	CA-C-N	5.56	131.99	121.97
2	F	204	PHE	C-N-CA	5.56	131.99	121.97
1	B	309	ILE	CA-C-O	-5.56	114.76	120.71
1	C	231	GLY	N-CA-C	-5.56	104.58	112.81
2	F	306	GLY	N-CA-C	-5.56	101.78	111.62
8	N	120	ARG	CA-C-O	-5.56	114.98	120.82
2	D	188	ALA	O-C-N	-5.56	116.72	122.94
7	M	124	TRP	CA-C-N	5.56	128.18	120.29
7	M	124	TRP	C-N-CA	5.56	128.18	120.29
1	A	78	GLY	CA-C-N	5.56	127.66	120.44
1	A	78	GLY	C-N-CA	5.56	127.66	120.44
1	B	309	ILE	N-CA-C	-5.55	104.95	111.00
8	N	504	GLY	O-C-N	-5.55	116.86	122.19
1	A	393	GLU	N-CA-C	5.55	116.88	109.83
7	M	283	VAL	CA-C-O	-5.55	112.81	119.36
8	N	548	ILE	CA-C-O	-5.55	114.97	118.69
9	Q	31	GLY	CA-C-O	-5.55	114.68	120.90
9	Y	67	ILE	O-C-N	-5.55	116.49	121.87
2	F	270	ILE	CA-C-N	5.55	127.33	120.34
2	F	270	ILE	C-N-CA	5.55	127.33	120.34
2	F	457	ASP	O-C-N	5.55	127.78	122.07
3	H	11	GLU	CA-C-N	5.55	127.66	120.56
3	H	11	GLU	C-N-CA	5.55	127.66	120.56
2	E	226	ASP	N-CA-C	-5.55	102.63	110.29
1	C	438	TRP	CA-C-N	5.55	128.50	120.79
1	C	438	TRP	C-N-CA	5.55	128.50	120.79
8	N	102	GLN	CA-C-O	5.55	126.30	120.42
2	D	158	LEU	CA-C-N	5.54	125.49	119.78

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	158	LEU	C-N-CA	5.54	125.49	119.78
9	Q	73	ALA	O-C-N	-5.54	116.24	122.12
1	A	42	LEU	N-CA-C	-5.54	100.74	109.50
5	K	139	ARG	N-CA-C	5.54	117.76	111.11
1	C	310	ALA	N-CA-C	5.54	117.75	111.11
6	L	43	ALA	N-CA-C	-5.54	105.40	111.82
7	M	189	ARG	CA-C-N	5.54	127.70	120.28
7	M	189	ARG	C-N-CA	5.54	127.70	120.28
1	C	316	GLN	N-CA-C	-5.53	106.11	112.92
1	C	337	ILE	O-C-N	-5.53	116.49	121.91
2	D	190	VAL	N-CA-C	-5.53	99.84	108.86
3	G	149	ARG	CA-C-N	5.53	128.69	120.17
3	G	149	ARG	C-N-CA	5.53	128.69	120.17
1	B	480	GLU	O-C-N	5.53	128.53	122.11
2	D	34	ASP	CA-C-N	5.53	131.16	122.70
2	D	34	ASP	C-N-CA	5.53	131.16	122.70
6	L	23	ALA	N-CA-C	-5.53	99.02	110.80
4	I	80	GLU	CA-C-O	5.53	126.02	119.67
8	N	404	ALA	CA-C-N	5.53	128.14	120.29
8	N	404	ALA	C-N-CA	5.53	128.14	120.29
9	U	25	LEU	CA-C-N	5.53	127.68	120.28
9	U	25	LEU	C-N-CA	5.53	127.68	120.28
9	Q	74	PHE	CA-C-N	5.52	127.52	120.56
9	Q	74	PHE	C-N-CA	5.52	127.52	120.56
2	F	378	VAL	O-C-N	5.52	127.52	121.83
3	G	99	GLU	N-CA-C	-5.52	106.43	112.72
2	F	414	PHE	N-CA-C	-5.52	105.17	111.07
8	N	57	ALA	O-C-N	5.52	128.44	122.15
1	B	166	TYR	N-CA-C	-5.52	100.74	108.96
1	C	438	TRP	N-CA-C	5.52	118.22	111.82
2	E	140	VAL	CA-C-N	5.51	128.13	120.63
2	E	140	VAL	C-N-CA	5.51	128.13	120.63
1	C	309	ILE	CA-C-O	-5.51	115.54	121.27
5	K	21	ALA	CA-C-N	5.51	129.09	120.82
5	K	21	ALA	C-N-CA	5.51	129.09	120.82
2	D	34	ASP	N-CA-C	-5.51	101.38	109.81
2	F	370	LYS	N-CA-C	-5.51	106.92	113.97
9	V	11	ASP	CA-C-N	5.51	128.11	120.29
9	V	11	ASP	C-N-CA	5.51	128.11	120.29
1	A	403	VAL	O-C-N	-5.50	115.69	122.57
1	A	272	LEU	CA-C-N	5.50	128.69	120.87
1	A	272	LEU	C-N-CA	5.50	128.69	120.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	314	LEU	CA-C-N	5.50	131.21	122.62
2	F	314	LEU	C-N-CA	5.50	131.21	122.62
9	Q	19	MET	CA-C-N	5.50	127.02	120.14
9	Q	19	MET	C-N-CA	5.50	127.02	120.14
1	B	83	ILE	N-CA-C	-5.50	100.55	108.53
1	B	150	PRO	CA-C-O	-5.50	112.58	120.56
4	I	44	ALA	CA-C-N	5.50	127.92	120.44
4	I	44	ALA	C-N-CA	5.50	127.92	120.44
5	K	193	ARG	CA-C-N	5.50	127.65	120.28
5	K	193	ARG	C-N-CA	5.50	127.65	120.28
9	Q	72	ILE	CA-C-O	-5.50	115.23	120.95
9	V	51	ASN	CA-C-N	5.50	128.10	120.29
9	V	51	ASN	C-N-CA	5.50	128.10	120.29
9	T	75	ILE	N-CA-C	5.50	115.70	110.53
9	R	8	GLY	N-CA-C	-5.50	106.13	112.29
9	S	76	LEU	CA-C-N	5.50	128.68	120.87
9	S	76	LEU	C-N-CA	5.50	128.68	120.87
1	B	497	GLN	O-C-N	-5.50	116.65	123.36
1	A	87	ILE	CA-C-N	5.49	132.03	121.54
1	A	87	ILE	C-N-CA	5.49	132.03	121.54
1	B	486	VAL	O-C-N	5.49	127.82	121.94
9	T	70	LEU	N-CA-C	-5.49	105.37	111.36
8	N	186	ALA	CA-C-N	5.49	127.64	120.28
8	N	186	ALA	C-N-CA	5.49	127.64	120.28
1	B	269	PHE	CA-C-O	-5.49	113.35	118.73
2	E	121	PRO	N-CA-C	-5.49	107.00	114.80
9	X	10	LEU	CA-C-N	5.49	127.58	120.44
9	X	10	LEU	C-N-CA	5.49	127.58	120.44
1	A	410	ASP	O-C-N	-5.49	115.29	122.59
1	B	509	MET	CA-C-O	5.49	126.30	120.10
2	D	396	VAL	N-CA-C	5.49	116.26	110.72
3	H	68	VAL	CA-C-N	5.49	127.94	120.54
3	H	68	VAL	C-N-CA	5.49	127.94	120.54
7	M	173	PHE	CA-C-O	-5.49	114.61	120.42
7	M	289	TYR	CA-C-O	-5.49	115.05	120.70
3	H	180	SER	O-C-N	5.48	128.01	122.09
1	C	138	VAL	N-CA-C	-5.48	101.48	107.73
2	E	288	TYR	CA-C-N	5.48	127.89	120.38
2	E	288	TYR	C-N-CA	5.48	127.89	120.38
9	U	53	GLY	N-CA-C	5.48	119.31	112.73
1	A	198	LYS	N-CA-C	-5.48	101.54	110.20
9	Z	45	ILE	CA-C-O	5.48	126.66	120.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	N	229	GLU	N-CA-C	5.48	116.93	111.07
1	A	392	SER	N-CA-C	-5.48	106.64	113.38
1	A	116	LYS	N-CA-C	-5.47	100.74	109.23
8	N	395	ALA	O-C-N	5.47	129.42	122.91
8	N	396	LEU	CA-C-N	5.47	131.19	122.10
8	N	396	LEU	C-N-CA	5.47	131.19	122.10
9	T	34	GLN	O-C-N	-5.47	116.32	122.12
1	B	233	GLY	CA-C-N	5.47	131.99	121.54
1	B	233	GLY	C-N-CA	5.47	131.99	121.54
1	A	289	ALA	O-C-N	-5.47	116.30	122.97
1	A	53	GLU	CA-C-O	-5.47	114.69	120.92
2	F	458	HIS	CA-C-N	5.46	128.18	120.42
2	F	458	HIS	C-N-CA	5.46	128.18	120.42
7	M	261	LEU	CA-C-N	5.46	128.05	120.29
7	M	261	LEU	C-N-CA	5.46	128.05	120.29
9	W	55	ALA	O-C-N	-5.46	115.92	122.15
8	N	152	ALA	CA-C-N	5.46	127.54	120.44
8	N	152	ALA	C-N-CA	5.46	127.54	120.44
8	N	546	LEU	N-CA-C	-5.46	103.40	111.81
8	N	624	ILE	O-C-N	5.46	127.16	121.87
5	K	84	PRO	N-CA-C	-5.46	104.05	110.70
1	A	561	ALA	CA-C-N	5.45	127.90	120.54
1	A	561	ALA	C-N-CA	5.45	127.90	120.54
3	G	139	GLY	N-CA-C	-5.45	100.26	113.18
9	T	43	GLY	CA-C-O	-5.45	114.88	120.66
2	D	234	THR	CA-C-O	-5.45	113.06	118.34
4	I	47	ARG	N-CA-C	-5.45	106.69	113.55
1	C	337	ILE	CA-C-N	5.45	129.81	120.72
1	C	337	ILE	C-N-CA	5.45	129.81	120.72
4	J	114	VAL	CA-C-N	5.45	127.89	120.54
4	J	114	VAL	C-N-CA	5.45	127.89	120.54
9	O	10	LEU	CA-C-N	5.45	127.52	120.44
9	O	10	LEU	C-N-CA	5.45	127.52	120.44
9	Q	24	GLY	N-CA-C	5.44	119.08	112.49
1	B	301	ALA	O-C-N	-5.44	116.46	122.07
1	A	461	GLU	CA-C-N	5.44	128.32	120.38
1	A	461	GLU	C-N-CA	5.44	128.32	120.38
7	M	308	TYR	N-CA-C	5.44	117.29	111.36
5	K	72	GLY	O-C-N	5.44	127.21	121.77
1	B	211	ILE	N-CA-C	-5.44	105.20	110.42
1	C	114	GLU	CA-C-N	5.44	130.75	122.65
1	C	114	GLU	C-N-CA	5.44	130.75	122.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	233	LEU	CA-C-O	-5.44	113.72	119.97
3	G	51	ALA	CA-C-O	-5.44	115.08	120.90
2	E	281	ARG	N-CA-C	-5.43	105.61	113.21
8	N	613	THR	N-CA-C	-5.43	106.66	113.28
4	J	102	LYS	CA-C-O	-5.43	115.12	120.82
1	A	519	ILE	CA-C-O	5.43	127.07	121.05
6	L	50	ALA	N-CA-C	-5.43	105.39	112.23
8	N	627	GLU	N-CA-C	-5.43	105.46	112.68
9	T	37	ILE	CA-C-O	-5.43	115.10	120.85
5	K	6	PRO	CA-C-O	-5.42	114.50	122.31
3	H	65	GLU	N-CA-C	-5.42	105.37	111.28
3	H	126	GLU	CA-C-O	5.42	125.77	119.32
8	N	324	PRO	O-C-N	-5.42	115.06	121.46
1	B	123	VAL	CA-C-O	-5.42	116.33	121.64
1	B	402	ILE	N-CA-C	-5.42	100.50	108.85
1	C	178	GLY	CA-C-N	5.42	130.44	122.63
1	C	178	GLY	C-N-CA	5.42	130.44	122.63
2	E	118	PRO	N-CA-C	5.42	119.08	111.33
7	M	102	ALA	N-CA-C	5.42	117.19	111.28
9	Z	21	LEU	CA-C-N	5.42	127.54	120.28
9	Z	21	LEU	C-N-CA	5.42	127.54	120.28
1	A	486	VAL	CA-C-N	5.42	126.00	119.98
1	A	486	VAL	C-N-CA	5.42	126.00	119.98
2	F	297	ARG	N-CA-C	-5.42	105.11	112.26
1	C	279	GLY	N-CA-C	-5.42	101.28	112.34
1	B	316	GLN	O-C-N	5.42	130.10	122.41
1	B	366	GLY	CA-C-N	5.42	129.83	122.19
1	B	366	GLY	C-N-CA	5.42	129.83	122.19
2	D	74	SER	CA-C-N	5.42	129.03	121.02
2	D	74	SER	C-N-CA	5.42	129.03	121.02
1	A	302	SER	N-CA-C	5.41	122.33	110.80
1	A	286	VAL	N-CA-C	-5.41	106.40	111.48
1	C	334	LEU	CA-C-N	5.41	127.47	120.44
1	C	334	LEU	C-N-CA	5.41	127.47	120.44
7	M	162	ALA	CA-C-N	5.41	127.97	120.29
7	M	162	ALA	C-N-CA	5.41	127.97	120.29
8	N	604	LEU	O-C-N	-5.41	116.39	122.12
8	N	371	LEU	N-CA-C	-5.40	106.61	114.12
9	Q	60	LEU	N-CA-C	5.40	118.09	111.82
2	E	299	GLY	O-C-N	5.40	127.84	122.92
4	J	32	GLN	N-CA-C	-5.40	107.24	113.88
9	P	17	VAL	CA-C-N	5.40	125.97	119.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	P	17	VAL	C-N-CA	5.40	125.97	119.98
1	B	286	VAL	N-CA-C	-5.40	100.29	108.17
5	K	45	GLU	CA-C-N	5.40	127.83	120.54
5	K	45	GLU	C-N-CA	5.40	127.83	120.54
1	B	380	ILE	N-CA-C	-5.40	100.42	108.46
8	N	455	ASP	CA-C-N	5.39	129.94	122.77
8	N	455	ASP	C-N-CA	5.39	129.94	122.77
9	T	71	LEU	CA-C-O	-5.39	114.70	120.42
2	E	366	VAL	N-CA-C	-5.39	100.93	108.80
9	U	42	VAL	CA-C-N	5.39	125.97	119.98
9	U	42	VAL	C-N-CA	5.39	125.97	119.98
9	X	67	ILE	CA-C-O	-5.39	115.13	120.85
8	N	492	MET	O-C-N	-5.39	115.91	122.22
2	D	384	SER	CA-C-N	5.39	127.50	120.28
2	D	384	SER	C-N-CA	5.39	127.50	120.28
7	M	64	THR	CA-C-O	5.39	126.13	120.42
9	S	48	ASP	CA-C-O	-5.39	116.04	122.13
8	N	207	LEU	CA-C-O	-5.39	114.60	120.69
2	E	108	PRO	CA-C-N	5.38	127.44	120.44
2	E	108	PRO	C-N-CA	5.38	127.44	120.44
9	S	34	GLN	O-C-N	-5.38	116.02	122.15
9	Y	44	ALA	CA-C-O	-5.38	114.85	120.55
1	B	455	SER	N-CA-C	5.38	117.14	111.28
7	M	36	PHE	CA-C-O	-5.38	114.85	120.55
1	A	243	LYS	O-C-N	-5.38	116.85	121.85
2	D	309	THR	O-C-N	-5.38	117.09	123.22
1	A	164	GLY	N-CA-C	-5.37	103.94	111.09
1	B	515	ILE	CA-C-N	5.37	128.47	120.31
1	B	515	ILE	C-N-CA	5.37	128.47	120.31
8	N	256	VAL	CA-C-O	-5.37	115.47	121.17
2	E	327	ASP	CA-C-O	-5.37	115.36	121.00
2	F	432	ILE	N-CA-C	5.37	118.58	111.17
8	N	435	LEU	O-C-N	-5.37	115.39	122.42
8	N	459	THR	CA-C-N	5.37	127.47	120.28
8	N	459	THR	C-N-CA	5.37	127.47	120.28
9	X	36	ARG	O-C-N	-5.37	116.03	122.15
1	B	472	GLY	N-CA-C	5.36	123.28	112.34
2	E	191	PHE	N-CA-C	-5.36	100.29	109.24
2	F	394	LYS	CA-C-N	-5.36	115.50	123.11
2	F	394	LYS	C-N-CA	-5.36	115.50	123.11
8	N	200	LEU	CA-C-N	5.36	125.53	119.90
8	N	200	LEU	C-N-CA	5.36	125.53	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	N	356	PRO	CA-C-N	5.36	127.40	120.44
8	N	356	PRO	C-N-CA	5.36	127.40	120.44
8	N	100	GLN	CA-C-O	-5.35	115.20	120.82
8	N	146	LEU	CA-C-O	-5.35	113.15	118.34
8	N	621	ILE	N-CA-C	-5.35	104.27	111.44
9	W	61	LEU	N-CA-C	5.35	120.03	112.75
7	M	37	LEU	CA-C-N	5.35	127.89	120.29
7	M	37	LEU	C-N-CA	5.35	127.89	120.29
8	N	256	VAL	CA-C-N	5.35	127.45	120.28
8	N	256	VAL	C-N-CA	5.35	127.45	120.28
9	P	62	PRO	O-C-N	5.35	129.58	122.30
1	C	203	THR	N-CA-C	-5.35	100.91	109.04
2	E	246	ALA	N-CA-C	5.35	116.92	111.14
9	Y	45	ILE	CA-C-N	5.35	127.39	120.44
9	Y	45	ILE	C-N-CA	5.35	127.39	120.44
1	A	78	GLY	O-C-N	-5.34	118.44	122.71
1	A	464	LEU	CA-C-N	5.34	128.84	120.82
1	A	464	LEU	C-N-CA	5.34	128.84	120.82
2	E	263	TYR	N-CA-C	-5.34	105.10	111.03
1	B	42	LEU	CA-C-O	5.34	126.10	120.33
2	D	339	LEU	N-CA-C	-5.34	101.45	109.95
2	E	50	VAL	CA-C-N	5.34	130.95	122.62
2	E	50	VAL	C-N-CA	5.34	130.95	122.62
8	N	190	LEU	CA-C-N	5.34	127.44	120.28
8	N	190	LEU	C-N-CA	5.34	127.44	120.28
1	A	196	GLN	N-CA-C	-5.34	104.35	112.04
1	B	54	ASP	N-CA-C	5.34	117.97	110.23
2	D	54	TYR	N-CA-C	-5.34	101.35	108.34
2	E	155	GLY	CA-C-O	-5.34	117.66	122.57
9	P	29	GLY	O-C-N	5.34	127.37	122.19
5	K	119	THR	CA-C-N	5.34	126.51	119.84
5	K	119	THR	C-N-CA	5.34	126.51	119.84
9	O	30	THR	CA-C-O	5.34	126.21	120.55
1	A	40	ILE	N-CA-C	-5.33	106.22	111.88
1	A	134	VAL	N-CA-C	-5.33	101.95	109.21
1	A	481	ARG	CA-C-O	-5.33	112.38	119.10
9	X	64	THR	N-CA-C	5.33	117.10	111.28
8	N	426	GLU	CA-C-N	5.33	127.38	120.44
8	N	426	GLU	C-N-CA	5.33	127.38	120.44
8	N	646	LYS	CA-C-O	-5.33	115.19	120.90
2	D	325	ILE	CA-C-N	5.33	125.65	119.47
2	D	325	ILE	C-N-CA	5.33	125.65	119.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	447	PRO	N-CA-C	5.33	119.59	110.95
9	T	55	ALA	CA-C-N	5.33	127.86	120.29
9	T	55	ALA	C-N-CA	5.33	127.86	120.29
1	C	64	VAL	CA-C-N	5.33	130.53	122.91
1	C	64	VAL	C-N-CA	5.33	130.53	122.91
2	D	398	ILE	N-CA-C	-5.33	106.98	111.56
2	E	137	THR	O-C-N	-5.33	115.50	122.59
8	N	238	ALA	CA-C-O	-5.33	114.77	120.42
9	V	29	GLY	CA-C-O	-5.33	114.93	120.90
8	N	601	ALA	CA-C-N	5.33	125.85	119.94
8	N	601	ALA	C-N-CA	5.33	125.85	119.94
9	S	56	LEU	O-C-N	5.33	127.84	122.09
1	C	486	VAL	CA-C-N	5.32	125.99	120.03
1	C	486	VAL	C-N-CA	5.32	125.99	120.03
9	Y	60	LEU	N-CA-C	5.32	117.83	111.71
3	G	96	GLN	CA-C-O	5.32	125.00	119.14
1	B	268	GLU	CA-C-N	5.32	127.39	120.26
1	B	268	GLU	C-N-CA	5.32	127.39	120.26
2	F	137	THR	N-CA-C	5.32	118.56	111.75
4	I	63	GLU	N-CA-C	-5.32	105.60	112.68
8	N	509	LEU	CA-C-N	5.32	127.67	120.65
8	N	509	LEU	C-N-CA	5.32	127.67	120.65
9	S	67	ILE	CA-C-N	5.32	127.41	120.28
9	S	67	ILE	C-N-CA	5.32	127.41	120.28
1	A	340	ARG	N-CA-C	-5.32	106.30	112.89
1	C	291	THR	N-CA-C	-5.32	101.63	109.18
2	F	407	ASN	N-CA-C	5.32	117.49	111.11
2	E	326	PRO	CA-C-N	5.32	127.67	120.65
2	E	326	PRO	C-N-CA	5.32	127.67	120.65
5	K	156	LYS	N-CA-C	5.31	117.76	111.33
3	G	24	GLU	O-C-N	-5.31	115.70	122.34
8	N	373	TYR	O-C-N	5.31	127.75	122.12
9	Z	33	ALA	N-CA-C	5.31	117.07	111.28
2	D	35	ILE	CA-C-O	5.31	125.50	120.25
2	E	277	ILE	N-CA-C	-5.31	97.42	108.88
1	B	567	MET	CA-C-N	5.31	127.83	120.29
1	B	567	MET	C-N-CA	5.31	127.83	120.29
9	Y	73	ALA	CA-C-N	5.30	127.65	120.44
9	Y	73	ALA	C-N-CA	5.30	127.65	120.44
1	C	353	TYR	CA-C-O	5.30	125.70	119.28
8	N	25	VAL	CA-C-O	5.30	126.65	121.19
9	T	15	ILE	N-CA-C	-5.30	105.21	110.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	441	ALA	CA-C-O	5.30	125.49	119.18
2	E	261	THR	O-C-N	5.30	127.81	122.09
2	F	400	GLY	O-C-N	5.30	129.11	123.17
8	N	435	LEU	CA-C-O	5.30	125.19	119.15
9	Q	38	GLY	N-CA-C	5.30	119.55	112.77
1	C	384	VAL	N-CA-C	-5.30	106.52	111.45
9	T	26	ALA	N-CA-C	-5.30	105.51	111.28
1	A	214	VAL	O-C-N	-5.29	115.95	122.57
1	B	4	GLY	N-CA-C	-5.29	100.63	113.18
2	E	397	ALA	CA-C-N	5.29	127.94	120.42
2	E	397	ALA	C-N-CA	5.29	127.94	120.42
2	E	403	ALA	CA-C-N	5.29	129.25	120.94
2	E	403	ALA	C-N-CA	5.29	129.25	120.94
2	E	337	ILE	N-CA-C	-5.29	100.58	108.46
2	F	113	PRO	CA-C-O	-5.29	115.17	122.15
9	W	67	ILE	O-C-N	5.29	127.00	121.87
9	Y	11	ASP	N-CA-C	-5.29	105.52	111.28
1	A	344	MET	N-CA-C	-5.29	102.84	110.40
1	B	128	GLU	O-C-N	-5.29	117.14	123.27
2	E	135	ILE	N-CA-C	-5.29	98.35	109.34
2	F	208	PHE	N-CA-C	5.29	116.72	111.07
5	K	158	THR	CA-C-N	5.29	127.68	120.54
5	K	158	THR	C-N-CA	5.29	127.68	120.54
2	E	158	LEU	O-C-N	-5.28	114.60	121.10
1	A	415	PHE	CA-C-O	-5.28	114.82	120.42
1	B	152	ASP	CA-C-N	5.28	130.41	122.75
1	B	152	ASP	C-N-CA	5.28	130.41	122.75
1	C	130	ARG	CA-C-N	5.28	125.69	120.31
1	C	130	ARG	C-N-CA	5.28	125.69	120.31
2	D	33	VAL	N-CA-C	-5.28	98.36	109.34
2	E	77	GLU	CA-C-N	5.28	127.30	120.44
2	E	77	GLU	C-N-CA	5.28	127.30	120.44
1	B	537	ASP	CA-C-O	-5.28	115.26	121.07
1	C	27	ILE	CA-C-N	5.28	131.62	121.54
1	C	27	ILE	C-N-CA	5.28	131.62	121.54
3	G	17	GLN	N-CA-C	-5.28	106.97	113.41
8	N	120	ARG	CA-C-N	5.28	127.35	120.28
8	N	120	ARG	C-N-CA	5.28	127.35	120.28
9	W	76	LEU	N-CA-C	5.28	117.94	111.82
2	F	35	ILE	O-C-N	5.28	128.52	122.93
9	V	69	GLY	CA-C-N	5.28	127.78	120.29
9	V	69	GLY	C-N-CA	5.28	127.78	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	381	VAL	N-CA-C	-5.27	98.37	109.34
2	F	217	SER	O-C-N	-5.27	117.78	123.42
2	F	431	SER	CA-C-O	5.27	127.70	121.58
4	I	23	ILE	CA-C-N	5.27	127.87	120.28
4	I	23	ILE	C-N-CA	5.27	127.87	120.28
7	M	88	LEU	CA-C-N	5.27	127.60	120.38
7	M	88	LEU	C-N-CA	5.27	127.60	120.38
9	P	56	LEU	CA-C-N	5.27	127.68	120.46
9	P	56	LEU	C-N-CA	5.27	127.68	120.46
9	X	73	ALA	N-CA-C	5.27	117.03	111.28
3	H	53	TYR	N-CA-C	-5.27	106.91	113.55
9	W	2	GLU	N-CA-C	-5.27	101.28	109.24
1	B	111	LEU	CA-C-N	5.27	129.21	120.94
1	B	111	LEU	C-N-CA	5.27	129.21	120.94
2	F	287	MET	CA-C-N	5.27	129.57	121.19
2	F	287	MET	C-N-CA	5.27	129.57	121.19
8	N	75	PRO	CA-C-N	5.27	129.23	122.64
8	N	75	PRO	C-N-CA	5.27	129.23	122.64
8	N	385	ARG	CA-C-N	5.27	129.89	122.09
8	N	385	ARG	C-N-CA	5.27	129.89	122.09
2	E	262	ASN	CA-C-N	5.27	127.79	120.63
2	E	262	ASN	C-N-CA	5.27	127.79	120.63
7	M	227	ARG	CA-C-N	5.27	127.90	120.42
7	M	227	ARG	C-N-CA	5.27	127.90	120.42
1	C	430	LEU	CA-C-N	5.27	127.29	120.44
1	C	430	LEU	C-N-CA	5.27	127.29	120.44
9	R	50	SER	N-CA-C	5.27	118.81	112.38
2	D	288	TYR	CA-C-N	5.26	127.60	120.44
2	D	288	TYR	C-N-CA	5.26	127.60	120.44
7	M	47	GLY	N-CA-C	-5.26	108.42	115.32
4	I	64	ALA	CA-C-N	5.26	127.60	120.44
4	I	64	ALA	C-N-CA	5.26	127.60	120.44
8	N	423	ILE	O-C-N	5.26	127.25	121.83
1	C	409	LEU	N-CA-C	-5.26	101.12	109.59
2	F	115	THR	N-CA-C	-5.26	99.88	108.76
5	K	145	THR	CA-C-N	5.26	127.32	120.28
5	K	145	THR	C-N-CA	5.26	127.32	120.28
1	C	240	SER	CA-C-O	-5.25	114.95	120.63
4	I	118	VAL	O-C-N	-5.25	117.36	122.09
7	M	84	VAL	CA-C-N	5.25	127.32	120.28
7	M	84	VAL	C-N-CA	5.25	127.32	120.28
1	B	404	GLY	N-CA-C	-5.25	100.73	113.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	295	TYR	N-CA-C	5.25	117.08	111.36
9	U	20	GLY	CA-C-O	-5.25	114.73	120.40
8	N	153	LEU	N-CA-C	-5.25	105.45	111.07
9	O	49	ARG	CA-C-O	-5.25	114.99	120.55
9	Y	52	PHE	CA-C-N	5.25	125.80	119.98
9	Y	52	PHE	C-N-CA	5.25	125.80	119.98
9	T	64	THR	CA-C-N	5.24	127.57	120.44
9	T	64	THR	C-N-CA	5.24	127.57	120.44
7	M	6	ALA	CA-C-N	5.24	127.25	120.44
7	M	6	ALA	C-N-CA	5.24	127.25	120.44
4	J	84	LEU	N-CA-C	-5.24	105.22	111.03
8	N	211	GLU	O-C-N	5.24	128.12	122.15
1	A	361	PHE	O-C-N	-5.24	116.18	122.15
2	E	46	GLN	N-CA-C	-5.24	101.63	109.95
9	Z	51	ASN	N-CA-C	-5.24	104.63	112.54
4	J	72	GLN	CA-C-O	5.23	125.47	119.35
1	C	429	SER	N-CA-C	-5.23	98.50	107.61
9	Q	50	SER	N-CA-C	5.23	117.73	111.71
9	W	77	ASN	N-CA-C	-5.23	106.13	112.88
2	D	135	ILE	CA-C-N	5.23	127.24	120.44
2	D	135	ILE	C-N-CA	5.23	127.24	120.44
3	G	71	ALA	O-C-N	5.23	128.34	122.22
8	N	84	GLU	CA-C-N	5.23	127.72	120.29
8	N	84	GLU	C-N-CA	5.23	127.72	120.29
8	N	548	ILE	CA-C-N	5.23	125.54	119.47
8	N	548	ILE	C-N-CA	5.23	125.54	119.47
9	U	24	GLY	N-CA-C	-5.23	106.43	112.50
8	N	216	LEU	CA-C-N	5.23	127.71	120.29
8	N	216	LEU	C-N-CA	5.23	127.71	120.29
9	O	79	ARG	O-C-N	5.23	128.34	122.22
9	X	54	THR	CA-C-O	5.23	126.09	120.55
2	E	171	ALA	N-CA-C	-5.23	101.19	109.76
7	M	39	LEU	CA-C-N	5.23	127.28	120.28
7	M	39	LEU	C-N-CA	5.23	127.28	120.28
1	C	386	PRO	CA-C-N	5.22	124.73	119.19
1	C	386	PRO	C-N-CA	5.22	124.73	119.19
7	M	247	THR	CA-C-N	5.22	127.06	121.00
7	M	247	THR	C-N-CA	5.22	127.06	121.00
4	J	119	LEU	O-C-N	-5.22	115.31	121.32
8	N	249	TRP	CA-C-N	5.22	127.23	120.44
8	N	249	TRP	C-N-CA	5.22	127.23	120.44
2	F	175	PRO	N-CA-C	-5.22	108.00	114.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	J	78	ARG	CA-C-O	-5.22	115.02	120.55
7	M	271	LYS	CA-C-N	5.22	127.23	120.44
7	M	271	LYS	C-N-CA	5.22	127.23	120.44
8	N	282	ALA	CA-C-N	5.22	126.27	120.06
8	N	282	ALA	C-N-CA	5.22	126.27	120.06
3	G	85	ARG	CA-C-O	-5.22	114.99	120.63
3	H	85	ARG	CA-C-N	5.22	127.54	120.44
3	H	85	ARG	C-N-CA	5.22	127.54	120.44
3	H	145	GLU	CA-C-N	5.22	125.02	119.28
3	H	145	GLU	C-N-CA	5.22	125.02	119.28
2	D	58	GLN	N-CA-C	-5.21	96.80	107.70
2	D	120	ASN	CA-C-O	-5.21	115.27	120.64
1	A	411	ALA	N-CA-C	-5.21	107.05	113.41
7	M	230	PHE	O-C-N	-5.21	116.70	122.07
1	B	488	ARG	CA-C-O	-5.21	115.33	120.90
9	T	14	LEU	CA-C-N	5.21	127.60	120.46
9	T	14	LEU	C-N-CA	5.21	127.60	120.46
2	E	298	ALA	CA-C-N	5.21	129.54	122.04
2	E	298	ALA	C-N-CA	5.21	129.54	122.04
7	M	121	GLU	CA-C-O	5.21	126.47	120.90
4	I	83	ALA	CA-C-N	5.21	127.52	120.44
4	I	83	ALA	C-N-CA	5.21	127.52	120.44
1	B	465	GLN	CA-C-N	5.20	128.62	120.82
1	B	465	GLN	C-N-CA	5.20	128.62	120.82
8	N	519	LEU	N-CA-C	-5.20	106.24	112.59
9	X	50	SER	N-CA-C	-5.20	106.17	112.88
1	B	212	LEU	N-CA-C	5.20	119.95	111.37
1	B	307	VAL	O-C-N	-5.20	116.65	121.90
2	E	253	VAL	O-C-N	5.20	128.72	123.00
8	N	572	GLY	CA-C-N	5.20	127.80	120.42
8	N	572	GLY	C-N-CA	5.20	127.80	120.42
1	C	328	SER	N-CA-C	5.20	117.62	111.33
9	S	38	GLY	CA-C-O	-5.20	115.40	120.75
2	E	160	ALA	CA-C-O	5.20	125.68	119.60
9	P	23	VAL	CA-C-N	5.20	125.71	119.94
9	P	23	VAL	C-N-CA	5.20	125.71	119.94
1	B	436	ASP	CA-C-O	-5.20	113.30	118.34
2	D	328	LEU	O-C-N	-5.20	116.61	122.12
5	K	128	ARG	CA-C-N	5.20	128.91	120.60
5	K	128	ARG	C-N-CA	5.20	128.91	120.60
8	N	540	VAL	O-C-N	5.20	126.91	121.87
9	V	29	GLY	O-C-N	5.20	127.18	122.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	234	THR	CA-C-N	5.19	124.64	119.24
2	D	234	THR	C-N-CA	5.19	124.64	119.24
1	A	478	ASP	CA-C-O	-5.19	114.92	120.42
1	B	349	GLY	CA-C-O	5.19	124.78	119.02
2	D	459	ILE	O-C-N	5.19	127.00	121.91
8	N	647	SER	CA-C-O	5.19	125.91	119.79
9	U	69	GLY	CA-C-N	5.19	127.66	120.29
9	U	69	GLY	C-N-CA	5.19	127.66	120.29
2	F	73	VAL	CA-C-N	5.19	129.32	122.42
2	F	73	VAL	C-N-CA	5.19	129.32	122.42
9	P	29	GLY	CA-C-O	-5.19	115.16	120.66
1	C	82	GLY	N-CA-C	-5.19	100.89	113.18
4	J	81	THR	CA-C-O	5.19	127.93	120.51
9	P	15	ILE	CA-C-N	5.19	127.18	120.44
9	P	15	ILE	C-N-CA	5.19	127.18	120.44
2	D	209	GLU	CA-C-N	5.18	129.38	120.72
2	D	209	GLU	C-N-CA	5.18	129.38	120.72
1	C	554	VAL	N-CA-C	-5.18	101.02	108.48
4	I	73	TYR	N-CA-C	-5.18	107.02	113.55
9	Q	10	LEU	N-CA-C	-5.18	105.71	111.36
4	J	95	GLU	CA-C-O	5.18	125.33	119.27
5	K	107	THR	N-CA-C	-5.18	98.80	108.02
2	D	278	PRO	N-CA-C	-5.18	101.80	112.47
3	G	172	ASP	N-CA-C	5.18	116.93	111.28
4	I	76	ARG	N-CA-C	5.18	116.73	111.14
2	E	164	ALA	CA-C-O	5.18	125.92	119.97
9	X	17	VAL	CA-C-O	-5.18	115.68	121.17
2	F	265	GLU	CA-C-N	5.18	127.47	120.38
2	F	265	GLU	C-N-CA	5.18	127.47	120.38
8	N	158	GLU	N-CA-C	5.18	115.66	108.00
1	C	238	GLN	N-CA-C	5.17	117.59	111.33
1	C	268	GLU	CA-C-N	5.17	127.17	120.44
1	C	268	GLU	C-N-CA	5.17	127.17	120.44
2	F	135	ILE	O-C-N	5.17	127.50	122.69
3	H	182	VAL	O-C-N	-5.17	116.50	121.83
1	A	204	PRO	N-CA-C	5.17	119.17	111.41
1	B	359	ALA	CA-C-O	-5.17	115.37	120.90
1	C	531	LYS	CA-C-O	5.17	125.73	119.11
2	F	110	LYS	O-C-N	5.17	129.05	123.10
1	A	367	LYS	CA-C-O	-5.17	115.62	122.44
1	C	454	ILE	CA-C-N	5.17	128.95	120.63
1	C	454	ILE	C-N-CA	5.17	128.95	120.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	27	LEU	CA-C-O	5.17	126.38	120.54
9	Z	39	ALA	N-CA-C	5.17	116.99	111.36
1	C	87	ILE	N-CA-C	-5.17	106.87	113.22
2	D	72	SER	N-CA-C	-5.17	102.10	110.32
2	E	325	ILE	CA-C-N	5.17	126.30	119.84
2	E	325	ILE	C-N-CA	5.17	126.30	119.84
5	K	20	LEU	CA-C-O	-5.17	115.38	120.70
1	C	287	LEU	N-CA-C	-5.17	100.98	109.40
1	B	120	THR	O-C-N	-5.16	115.23	121.12
1	C	501	HIS	N-CA-C	-5.16	100.48	108.90
7	M	226	ASP	CA-C-N	5.16	127.20	120.28
7	M	226	ASP	C-N-CA	5.16	127.20	120.28
9	Z	14	LEU	N-CA-C	-5.16	105.65	111.28
1	A	513	TYR	N-CA-C	5.16	116.59	111.07
2	E	228	THR	N-CA-C	5.16	119.88	111.37
2	E	323	HIS	CA-C-O	-5.16	115.32	120.63
7	M	318	GLU	CA-C-O	-5.16	115.08	120.55
6	L	34	GLU	O-C-N	5.15	127.60	122.03
2	E	228	THR	CA-C-O	-5.15	115.15	120.92
8	N	148	LEU	CA-C-N	5.15	127.05	120.56
8	N	148	LEU	C-N-CA	5.15	127.05	120.56
8	N	276	GLY	CA-C-N	5.15	130.66	122.62
8	N	276	GLY	C-N-CA	5.15	130.66	122.62
9	R	2	GLU	CA-C-N	5.15	129.44	122.07
9	R	2	GLU	C-N-CA	5.15	129.44	122.07
2	D	238	ALA	CA-C-O	5.15	125.88	120.42
3	H	126	GLU	N-CA-C	-5.15	106.40	113.30
7	M	284	GLY	N-CA-C	5.15	118.87	112.64
1	B	72	ALA	N-CA-C	-5.15	101.54	109.52
9	P	74	PHE	O-C-N	5.14	127.37	122.07
1	B	197	ARG	CA-C-N	5.14	129.70	122.09
1	B	197	ARG	C-N-CA	5.14	129.70	122.09
2	E	328	LEU	CA-C-N	5.14	127.59	120.29
2	E	328	LEU	C-N-CA	5.14	127.59	120.29
2	E	313	ILE	O-C-N	5.14	127.60	122.97
2	F	284	PRO	N-CA-C	5.14	119.28	111.11
9	Z	79	ARG	N-CA-C	-5.14	99.73	108.26
1	A	120	THR	CA-C-O	-5.14	114.62	119.55
1	A	558	GLU	N-CA-C	-5.14	105.86	111.82
1	B	510	LYS	N-CA-C	-5.14	105.68	111.28
9	V	17	VAL	N-CA-C	5.13	115.86	110.62
1	C	315	ASP	N-CA-C	5.13	118.32	111.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	439	ALA	N-CA-C	5.13	118.64	112.38
2	F	126	LYS	CA-C-O	-5.13	115.11	120.70
9	R	30	THR	O-C-N	5.13	127.56	122.12
9	W	28	LEU	CA-C-N	5.13	125.68	119.98
9	W	28	LEU	C-N-CA	5.13	125.68	119.98
4	J	103	ALA	N-CA-C	5.13	116.95	111.36
5	K	77	ALA	CA-C-N	5.13	126.55	120.14
5	K	77	ALA	C-N-CA	5.13	126.55	120.14
8	N	62	THR	CA-C-N	5.13	127.15	120.28
8	N	62	THR	C-N-CA	5.13	127.15	120.28
1	C	170	GLU	CA-C-O	-5.13	114.71	120.25
2	E	160	ALA	CA-C-N	5.13	127.41	120.44
2	E	160	ALA	C-N-CA	5.13	127.41	120.44
2	E	344	HIS	CA-C-O	5.13	125.98	120.55
7	M	250	SER	O-C-N	-5.13	115.97	122.27
7	M	190	ASP	CA-C-N	5.12	127.57	120.29
7	M	190	ASP	C-N-CA	5.12	127.57	120.29
2	D	208	PHE	N-CA-C	-5.12	107.20	113.50
4	I	31	LYS	N-CA-C	5.12	119.24	113.15
8	N	93	HIS	O-C-N	5.12	127.98	122.15
3	G	185	ALA	N-CA-C	-5.12	105.78	112.23
2	E	390	VAL	CA-C-N	5.12	128.49	120.82
2	E	390	VAL	C-N-CA	5.12	128.49	120.82
8	N	114	TYR	CA-C-N	-5.12	113.48	120.44
8	N	114	TYR	C-N-CA	-5.12	113.48	120.44
2	D	371	THR	CA-C-N	5.11	128.97	120.94
2	D	371	THR	C-N-CA	5.11	128.97	120.94
5	K	40	PHE	CA-C-N	5.11	125.76	120.03
5	K	40	PHE	C-N-CA	5.11	125.76	120.03
9	S	33	ALA	CA-C-N	5.11	127.55	120.29
9	S	33	ALA	C-N-CA	5.11	127.55	120.29
9	V	71	LEU	CA-C-N	5.11	127.46	120.46
9	V	71	LEU	C-N-CA	5.11	127.46	120.46
2	E	141	MET	N-CA-C	5.11	116.70	111.03
1	C	303	ILE	CA-C-N	5.11	131.30	121.54
1	C	303	ILE	C-N-CA	5.11	131.30	121.54
1	A	118	ALA	CA-C-N	-5.11	115.95	123.00
1	A	118	ALA	C-N-CA	-5.11	115.95	123.00
3	H	151	GLY	CA-C-O	5.11	126.97	121.61
9	P	70	LEU	CA-C-N	5.11	127.54	120.29
9	P	70	LEU	C-N-CA	5.11	127.54	120.29
1	B	271	GLU	N-CA-C	-5.10	107.44	113.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	X	65	LEU	O-C-N	-5.10	116.81	122.07
1	C	437	PRO	CA-C-N	5.10	128.07	120.31
1	C	437	PRO	C-N-CA	5.10	128.07	120.31
2	D	394	LYS	N-CA-C	-5.10	104.77	111.96
7	M	103	LYS	CA-C-O	-5.10	115.46	120.82
8	N	222	ALA	CA-C-N	5.10	126.47	120.09
8	N	222	ALA	C-N-CA	5.10	126.47	120.09
9	P	73	ALA	CA-C-N	5.10	127.07	120.44
9	P	73	ALA	C-N-CA	5.10	127.07	120.44
9	Q	67	ILE	CA-C-O	-5.10	115.44	120.85
1	B	242	ALA	O-C-N	5.10	128.65	122.48
1	C	277	THR	N-CA-C	-5.10	105.81	112.23
3	H	174	ALA	CA-C-N	5.10	128.74	120.23
3	H	174	ALA	C-N-CA	5.10	128.74	120.23
7	M	131	GLN	CA-C-N	5.10	127.73	120.49
7	M	131	GLN	C-N-CA	5.10	127.73	120.49
7	M	320	VAL	CA-C-N	-5.10	116.49	123.12
7	M	320	VAL	C-N-CA	-5.10	116.49	123.12
1	B	166	TYR	CA-C-N	5.10	128.11	120.87
1	B	166	TYR	C-N-CA	5.10	128.11	120.87
5	K	170	PRO	CA-C-N	5.10	125.61	120.00
5	K	170	PRO	C-N-CA	5.10	125.61	120.00
4	J	91	ARG	CA-C-N	5.09	127.42	120.54
4	J	91	ARG	C-N-CA	5.09	127.42	120.54
5	K	103	ARG	CA-C-O	-5.09	115.09	121.46
9	Z	5	ALA	CA-C-N	5.09	131.60	122.38
9	Z	5	ALA	C-N-CA	5.09	131.60	122.38
1	C	477	GLN	CA-C-N	5.09	131.26	121.18
1	C	477	GLN	C-N-CA	5.09	131.26	121.18
8	N	136	VAL	CA-C-O	-5.09	115.74	121.75
1	B	413	LEU	CA-C-O	5.09	125.82	120.42
1	C	310	ALA	CA-C-N	5.09	127.35	120.38
1	C	310	ALA	C-N-CA	5.09	127.35	120.38
2	E	436	LEU	N-CA-C	5.09	116.83	111.28
4	I	36	ARG	O-C-N	5.09	127.95	122.15
2	F	12	THR	CA-C-N	5.08	131.25	121.54
2	F	12	THR	C-N-CA	5.08	131.25	121.54
2	D	446	LEU	CA-C-N	5.08	126.19	119.84
2	D	446	LEU	C-N-CA	5.08	126.19	119.84
3	G	187	TRP	CA-C-O	-5.08	113.86	119.81
5	K	144	GLU	O-C-N	-5.08	115.62	122.43
8	N	257	ALA	O-C-N	5.08	127.51	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	20	PHE	CA-C-N	5.08	130.48	122.70
2	E	20	PHE	C-N-CA	5.08	130.48	122.70
9	T	25	LEU	CA-C-N	5.08	127.09	120.28
9	T	25	LEU	C-N-CA	5.08	127.09	120.28
2	E	230	GLU	N-CA-C	5.08	117.48	111.33
9	Y	40	ALA	O-C-N	5.08	127.50	122.12
9	U	75	ILE	CA-C-N	5.08	127.50	120.29
9	U	75	ILE	C-N-CA	5.08	127.50	120.29
1	A	149	VAL	N-CA-C	-5.08	102.06	108.05
2	D	252	HIS	N-CA-C	-5.08	99.52	108.20
3	H	75	ALA	N-CA-C	-5.08	105.66	111.14
9	X	45	ILE	CA-C-O	-5.08	115.47	120.85
2	E	186	PRO	CA-C-O	-5.07	114.44	121.90
2	E	402	ASP	CA-C-O	-5.07	115.67	121.40
2	F	459	ILE	CA-C-O	-5.07	115.47	120.85
3	G	53	TYR	N-CA-C	-5.07	107.16	113.55
9	U	64	THR	CA-C-O	-5.07	115.17	120.55
9	U	74	PHE	N-CA-C	5.07	116.81	111.28
1	A	352	PRO	O-C-N	5.07	129.12	122.27
1	B	251	VAL	N-CA-C	-5.07	100.27	107.77
1	C	338	SER	CA-C-N	5.07	127.34	120.65
1	C	338	SER	C-N-CA	5.07	127.34	120.65
2	D	455	SER	CA-C-N	5.07	127.07	120.28
2	D	455	SER	C-N-CA	5.07	127.07	120.28
1	C	360	ALA	CA-C-N	5.07	127.58	120.28
1	C	360	ALA	C-N-CA	5.07	127.58	120.28
5	K	176	ILE	CA-C-N	5.07	127.03	120.44
5	K	176	ILE	C-N-CA	5.07	127.03	120.44
2	D	361	LEU	CA-C-O	-5.07	115.08	120.40
2	E	118	PRO	CA-C-O	-5.07	115.02	122.31
2	F	177	LEU	O-C-N	-5.07	115.81	122.39
9	P	43	GLY	O-C-N	5.07	127.61	122.24
1	C	264	ASP	CA-C-N	5.06	127.03	120.70
1	C	264	ASP	C-N-CA	5.06	127.03	120.70
1	A	218	VAL	CA-C-N	5.06	130.76	122.81
1	A	218	VAL	C-N-CA	5.06	130.76	122.81
1	B	291	THR	CA-C-N	5.06	127.48	120.29
1	B	291	THR	C-N-CA	5.06	127.48	120.29
1	C	6	ILE	N-CA-C	5.06	116.11	109.58
1	C	272	LEU	O-C-N	-5.06	117.29	123.16
2	D	165	ALA	CA-C-O	-5.06	114.15	119.97
5	K	76	VAL	CA-C-N	5.06	127.33	120.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	K	76	VAL	C-N-CA	5.06	127.33	120.65
3	G	115	LEU	CA-C-N	5.06	125.30	119.83
3	G	115	LEU	C-N-CA	5.06	125.30	119.83
7	M	83	ALA	CA-C-N	5.06	127.39	120.46
7	M	83	ALA	C-N-CA	5.06	127.39	120.46
7	M	190	ASP	O-C-N	-5.06	116.75	122.12
8	N	422	LEU	CA-C-N	5.06	127.61	120.42
8	N	422	LEU	C-N-CA	5.06	127.61	120.42
8	N	487	LEU	N-CA-C	5.06	116.48	111.07
3	G	63	ALA	CA-C-N	5.06	126.64	120.22
3	G	63	ALA	C-N-CA	5.06	126.64	120.22
5	K	127	SER	CA-C-N	5.06	127.47	120.29
5	K	127	SER	C-N-CA	5.06	127.47	120.29
1	A	350	TYR	CA-C-O	-5.06	114.32	120.54
1	B	564	GLU	CA-C-N	5.05	131.19	121.54
1	B	564	GLU	C-N-CA	5.05	131.19	121.54
2	D	120	ASN	N-CA-C	-5.05	102.86	110.24
3	G	127	ASP	CA-C-O	-5.05	113.49	119.05
7	M	213	ALA	CA-C-N	5.05	126.16	119.84
7	M	213	ALA	C-N-CA	5.05	126.16	119.84
2	F	299	GLY	N-CA-C	-5.05	101.20	113.18
9	P	9	GLY	CA-C-N	5.05	127.47	120.29
9	P	9	GLY	C-N-CA	5.05	127.47	120.29
1	B	371	LEU	N-CA-C	-5.05	107.12	113.28
9	R	26	ALA	CA-C-N	5.05	127.04	120.28
9	R	26	ALA	C-N-CA	5.05	127.04	120.28
9	W	21	LEU	N-CA-C	-5.05	105.78	111.28
2	F	123	ALA	N-CA-C	-5.05	106.97	112.72
5	K	34	ALA	CA-C-N	5.05	127.04	120.28
5	K	34	ALA	C-N-CA	5.05	127.04	120.28
7	M	33	PHE	N-CA-C	5.05	116.78	111.28
8	N	14	LYS	O-C-N	5.05	127.54	122.09
9	U	72	ILE	N-CA-C	-5.05	105.58	110.42
9	V	9	GLY	CA-C-N	5.05	127.98	120.31
9	V	9	GLY	C-N-CA	5.05	127.98	120.31
6	L	75	ALA	CA-C-N	5.04	131.72	121.93
6	L	75	ALA	C-N-CA	5.04	131.72	121.93
8	N	581	VAL	CA-C-N	5.04	131.30	121.41
8	N	581	VAL	C-N-CA	5.04	131.30	121.41
1	C	545	LEU	CA-C-N	5.04	127.98	120.31
1	C	545	LEU	C-N-CA	5.04	127.98	120.31
2	D	359	SER	CA-C-N	5.04	130.28	122.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	359	SER	C-N-CA	5.04	130.28	122.26
2	F	32	ILE	O-C-N	-5.04	117.45	123.05
9	U	77	ASN	N-CA-C	-5.04	107.62	112.97
3	H	28	GLU	CA-C-O	-5.04	115.16	120.55
8	N	188	ALA	O-C-N	5.04	127.46	122.12
9	U	16	ALA	N-CA-C	5.04	116.78	111.28
9	Z	76	LEU	N-CA-C	5.04	116.86	111.36
1	C	451	ARG	N-CA-C	5.04	117.17	111.02
9	O	51	ASN	CA-C-N	5.04	127.53	120.28
9	O	51	ASN	C-N-CA	5.04	127.53	120.28
2	E	110	LYS	N-CA-C	-5.04	100.20	108.41
8	N	33	PRO	O-C-N	5.04	128.99	122.24
9	X	78	GLY	N-CA-C	-5.04	108.17	115.27
5	K	128	ARG	O-C-N	-5.03	116.41	122.15
2	D	421	PHE	CA-C-N	5.03	128.37	120.82
2	D	421	PHE	C-N-CA	5.03	128.37	120.82
1	B	501	HIS	CA-C-O	5.03	125.91	120.32
1	C	179	THR	CA-C-N	5.03	128.34	120.75
1	C	179	THR	C-N-CA	5.03	128.34	120.75
9	V	57	ILE	CA-C-N	5.03	127.02	120.28
9	V	57	ILE	C-N-CA	5.03	127.02	120.28
8	N	99	ARG	O-C-N	-5.03	116.42	122.15
2	F	408	ASP	CA-C-N	5.03	127.28	120.44
2	F	408	ASP	C-N-CA	5.03	127.28	120.44
8	N	228	SER	CA-C-N	5.03	126.97	120.44
8	N	228	SER	C-N-CA	5.03	126.97	120.44
3	G	11	GLU	N-CA-C	-5.03	106.32	112.90
6	L	7	PRO	N-CA-C	5.03	120.66	113.47
8	N	468	VAL	N-CA-C	-5.03	105.50	110.62
9	S	67	ILE	O-C-N	5.02	126.74	121.87
1	B	373	GLY	O-C-N	-5.02	116.05	122.43
1	B	383	ALA	O-C-N	-5.02	117.50	123.22
6	L	29	ALA	O-C-N	5.02	129.27	122.59
1	C	18	GLY	CA-C-O	5.02	124.59	119.02
2	E	286	TYR	O-C-N	-5.02	116.07	122.34
8	N	186	ALA	N-CA-C	5.02	116.83	111.36
8	N	527	LEU	CA-C-N	5.02	129.21	120.68
8	N	527	LEU	C-N-CA	5.02	129.21	120.68
1	B	322	LEU	O-C-N	-5.02	117.44	123.31
1	C	281	LEU	CA-C-N	5.02	128.71	120.63
1	C	281	LEU	C-N-CA	5.02	128.71	120.63
4	J	100	ARG	N-CA-C	5.01	116.56	111.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	N	132	PRO	CA-C-N	5.01	127.27	120.65
8	N	132	PRO	C-N-CA	5.01	127.27	120.65
1	A	550	ARG	N-CA-C	-5.01	104.47	110.88
9	T	11	ASP	CA-C-N	5.01	127.00	120.28
9	T	11	ASP	C-N-CA	5.01	127.00	120.28
2	E	165	ALA	CA-C-N	5.01	131.11	121.54
2	E	165	ALA	C-N-CA	5.01	131.11	121.54
5	K	41	GLY	N-CA-C	5.01	118.94	112.83
7	M	163	ARG	O-C-N	-5.01	116.44	122.15
9	O	59	LEU	CA-C-N	5.01	127.92	120.31
9	O	59	LEU	C-N-CA	5.01	127.92	120.31
2	E	254	LEU	N-CA-C	-5.01	100.30	108.76
3	G	70	THR	CA-C-N	5.01	127.49	120.28
3	G	70	THR	C-N-CA	5.01	127.49	120.28
1	B	94	ILE	N-CA-C	-5.01	105.61	110.42
2	E	292	ALA	N-CA-C	-5.01	105.71	111.07
8	N	57	ALA	N-CA-C	5.01	116.82	111.36
1	B	217	PRO	O-C-N	5.00	129.40	122.64
8	N	200	LEU	CA-C-O	-5.00	116.63	121.08
9	S	30	THR	O-C-N	5.00	127.22	122.07
8	N	239	ARG	O-C-N	5.00	127.22	122.07
1	B	291	THR	CA-C-O	5.00	127.18	121.28
2	F	145	VAL	CA-C-N	5.00	129.07	122.42
2	F	145	VAL	C-N-CA	5.00	129.07	122.42
3	G	38	ALA	CA-C-N	5.00	127.29	120.54
3	G	38	ALA	C-N-CA	5.00	127.29	120.54
4	I	101	GLU	N-CA-C	5.00	116.73	111.28

There are no chirality outliers.

All (3) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	B	485	GLU	Mainchain
3	G	139	GLY	Peptide
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	0	0
1	B	2307	0	654	0	0
1	C	2307	0	654	0	0
2	D	1827	0	510	0	0
2	E	1827	0	510	1	0
2	F	1827	0	510	0	0
3	G	734	0	191	1	0
3	H	734	0	191	0	0
4	I	399	0	100	1	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	1	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	23487	0	6779	3	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 (3) 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)
4:I:21:GLY:HA3	8:N:30:THR:H	1.75	0.52
3:G:121:LEU:H	3:G:139:GLY:HA3	1.85	0.41
2:E:318:ASP:C	2:E:320:ASP:H	2.29	0.40

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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%)	477 (83%)	69 (12%)	29 (5%)	1	16
1	B	575/577 (100%)	491 (85%)	64 (11%)	20 (4%)	3	20
1	C	575/577 (100%)	473 (82%)	70 (12%)	32 (6%)	1	14
2	D	455/457 (100%)	375 (82%)	63 (14%)	17 (4%)	2	20
2	E	455/457 (100%)	365 (80%)	72 (16%)	18 (4%)	2	18
2	F	455/457 (100%)	361 (79%)	71 (16%)	23 (5%)	1	15
3	G	180/186 (97%)	159 (88%)	14 (8%)	7 (4%)	2	19
3	H	180/186 (97%)	161 (89%)	12 (7%)	7 (4%)	2	19
4	I	98/105 (93%)	96 (98%)	0	2 (2%)	6	31
4	J	98/105 (93%)	95 (97%)	2 (2%)	1 (1%)	12	49
5	K	208/210 (99%)	163 (78%)	34 (16%)	11 (5%)	1	15
6	L	98/100 (98%)	72 (74%)	19 (19%)	7 (7%)	1	11
7	M	318/323 (98%)	306 (96%)	11 (4%)	1 (0%)	36	72
8	N	615/652 (94%)	570 (93%)	34 (6%)	11 (2%)	6	34
9	O	78/99 (79%)	75 (96%)	3 (4%)	0	100	100
9	P	78/99 (79%)	73 (94%)	2 (3%)	3 (4%)	2	19
9	Q	78/99 (79%)	72 (92%)	6 (8%)	0	100	100
9	R	78/99 (79%)	75 (96%)	1 (1%)	2 (3%)	4	25
9	S	78/99 (79%)	74 (95%)	3 (4%)	1 (1%)	9	42
9	T	78/99 (79%)	76 (97%)	2 (3%)	0	100	100
9	U	78/99 (79%)	73 (94%)	4 (5%)	1 (1%)	9	42
9	V	78/99 (79%)	73 (94%)	3 (4%)	2 (3%)	4	25
9	W	78/99 (79%)	74 (95%)	4 (5%)	0	100	100
9	X	78/99 (79%)	74 (95%)	3 (4%)	1 (1%)	9	42
9	Y	78/99 (79%)	72 (92%)	6 (8%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	Z	78/99 (79%)	72 (92%)	5 (6%)	1 (1%)	9	42
All	All	5821/6157 (94%)	5047 (87%)	577 (10%)	197 (3%)	4	21

All (197) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	417	ARG
1	B	85	ASP
1	B	326	SER
1	C	109	HIS
1	C	210	ARG
1	C	303	ILE
1	C	305	VAL
1	C	466	GLU
1	C	556	GLU
2	D	298	ALA
2	D	327	ASP
2	E	354	PRO
2	E	419	GLU
2	F	354	PRO
6	L	69	PRO
7	M	4	ASP
8	N	637	GLU
9	P	5	ALA
9	R	6	ALA
1	A	64	VAL
1	A	70	PRO
1	A	152	ASP
1	A	302	SER
1	A	326	SER
1	A	480	GLU
1	B	210	ARG
1	B	232	SER
1	B	233	GLY
1	B	512	ALA
1	C	28	CYS
1	C	159	GLU
1	C	340	ARG
1	C	417	ARG
1	C	443	VAL
2	D	15	SER
2	D	139	ASP

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Mol	Chain	Res	Type
2	D	140	VAL
2	D	192	ALA
2	D	389	GLY
2	E	340	SER
2	F	117	LEU
2	F	210	ARG
2	F	227	PRO
2	F	293	THR
2	F	330	GLY
2	F	396	VAL
3	G	14	ALA
3	H	14	ALA
3	H	131	LEU
3	H	162	GLN
3	H	178	MET
5	K	70	PHE
5	K	117	VAL
5	K	168	VAL
6	L	66	ARG
6	L	75	ALA
8	N	38	ALA
8	N	169	ALA
8	N	181	LYS
8	N	544	ILE
9	V	4	ALA
1	A	232	SER
1	A	256	GLY
1	A	278	GLY
1	A	317	GLY
1	B	106	VAL
1	B	284	ARG
1	B	417	ARG
1	B	494	PHE
1	B	551	ALA
1	C	57	GLY
1	C	88	GLN
1	C	255	CYS
1	C	302	SER
1	C	304	TYR
2	D	66	LEU
2	E	17	PRO
2	E	23	ASN

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Mol	Chain	Res	Type
2	E	49	GLU
2	E	137	THR
2	E	239	LEU
2	E	298	ALA
2	E	403	ALA
2	F	90	GLY
2	F	164	ALA
2	F	213	ALA
2	F	259	ASP
2	F	326	PRO
2	F	364	ASN
2	F	372	ARG
3	G	156	GLY
5	K	65	LEU
5	K	180	GLN
5	K	210	GLY
6	L	5	ALA
9	P	7	SER
9	R	5	ALA
9	V	5	ALA
9	Z	8	GLY
1	A	36	VAL
1	A	48	PHE
1	A	57	GLY
1	A	81	ASN
1	A	193	ARG
1	A	282	MET
1	A	403	VAL
1	A	506	TYR
1	B	565	GLU
1	C	110	ALA
1	C	245	SER
1	C	288	ILE
1	C	295	PRO
1	C	344	MET
1	C	397	GLN
1	C	413	LEU
1	C	467	ILE
2	D	128	GLU
2	D	175	PRO
2	D	351	PRO
2	D	405	THR

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Mol	Chain	Res	Type
2	E	24	ALA
2	E	166	GLN
2	F	77	GLU
2	F	97	GLY
3	G	120	ALA
3	G	132	GLU
3	H	161	THR
4	I	81	THR
5	K	116	PRO
5	K	134	ALA
6	L	15	LEU
6	L	55	PRO
8	N	363	VAL
8	N	586	ALA
9	S	8	GLY
1	A	88	GLN
1	A	113	ARG
1	A	277	THR
1	B	36	VAL
1	B	202	ASN
1	B	563	PHE
1	C	25	TYR
1	C	394	PRO
1	C	395	VAL
2	D	362	MET
2	D	383	TYR
2	D	437	GLN
2	E	278	PRO
2	E	362	MET
2	E	435	SER
2	F	63	THR
2	F	168	ALA
2	F	223	LYS
3	G	5	GLU
3	G	13	GLU
3	G	138	ARG
3	H	174	ALA
4	I	119	LEU
4	J	81	THR
5	K	174	ALA
6	L	52	LEU
8	N	75	PRO

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Mol	Chain	Res	Type
9	X	79	ARG
1	A	384	VAL
1	A	484	ILE
1	B	259	GLY
1	B	263	THR
1	B	440	ARG
1	C	56	SER
1	C	150	PRO
2	D	436	LEU
2	E	170	GLN
5	K	153	GLU
8	N	545	TRP
1	A	12	PRO
1	A	172	VAL
2	F	99	PRO
2	F	392	ILE
3	H	159	GLY
9	P	8	GLY
1	A	443	VAL
1	A	486	VAL
2	D	354	PRO
2	E	235	PRO
8	N	340	PRO
1	A	560	PRO
2	F	105	PRO
5	K	179	ILE
1	B	265	VAL
1	B	514	GLY
1	C	40	ILE
1	C	296	VAL
2	E	332	ILE
2	F	145	VAL
8	N	449	ILE
9	U	78	GLY
1	C	236	VAL

5.3.2 Protein sidechains ⓘ

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

This section contains visualisations of the EMDB entry EMD-8017. 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

This section was not generated.

6.2 Central slices

This section was not generated.

6.3 Largest variance slices

This section was not generated.

6.4 Orthogonal standard-deviation projections (False-color)

This section was not generated.

6.5 Orthogonal surface views

This section was not generated.

6.6 Mask visualisation

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

7 Map analysis ⓘ

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

7.1 Map-value distribution ⓘ

This section was not generated.

7.2 Volume estimate versus contour level ⓘ

This section was not generated.

7.3 Rotationally averaged power spectrum ⓘ

This section was not generated. The rotationally averaged power spectrum had issues being displayed.

8 Fourier-Shell correlation

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

9 Map-model fit

This section was not generated.