



Full wwPDB EM Validation Report ⓘ

Mar 8, 2026 – 09:04 AM UTC

PDB ID : 6EPF / pdb_00006epf
EMDB ID : EMD-3916
Title : Ground state 26S proteasome (GS1)
Authors : Guo, Q.; Lehmer, C.; Martinez-Sanchez, A.; Rudack, T.; Beck, F.; Hartmann, H.; Hipp, M.S.; Hartl, F.U.; Edbauer, D.; Baumeister, W.; Fernandez-Busnadiego, R.
Deposited on : 2017-10-11
Resolution : 11.80 Å(reported)

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

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

A user guide is available at

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

The types of validation reports are described at

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

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

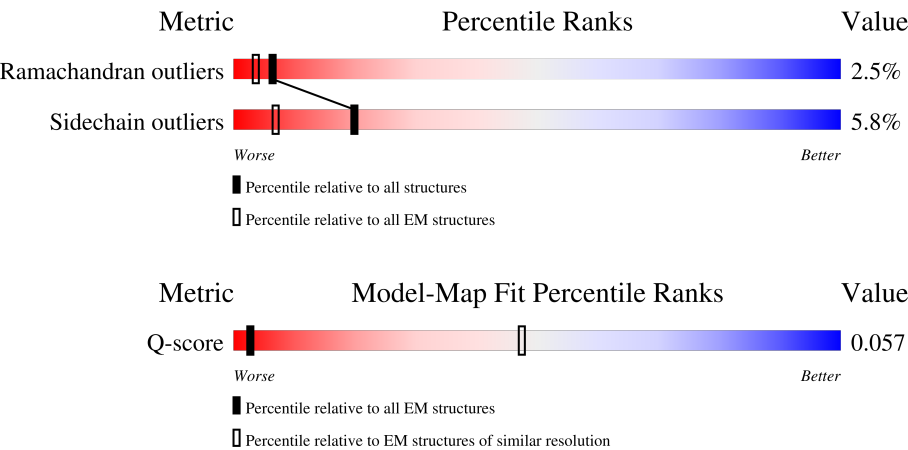
EMDB validation analysis : 0.0.1.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDb archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh &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

1 Overall quality at a glance i

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

The reported resolution of this entry is 11.80 Å.

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



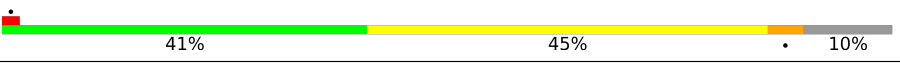
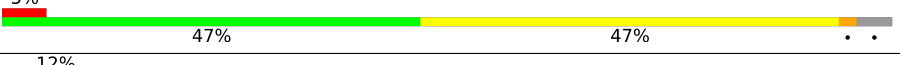
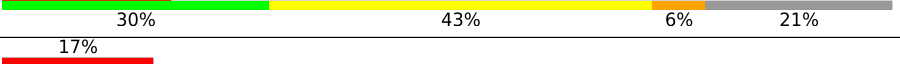
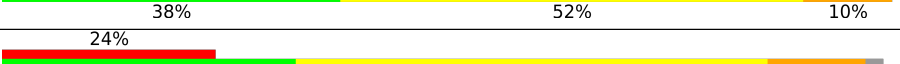
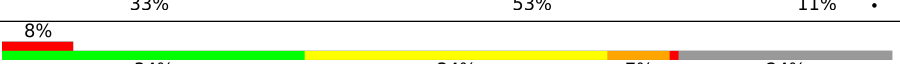
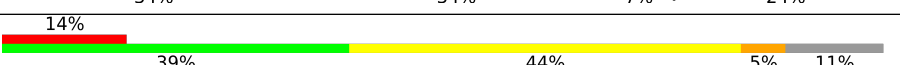
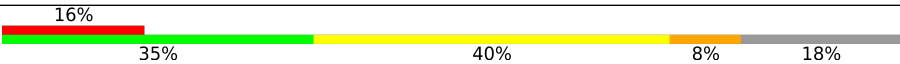
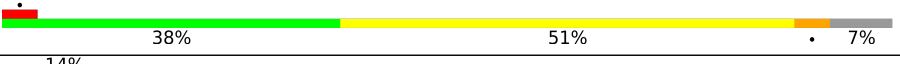
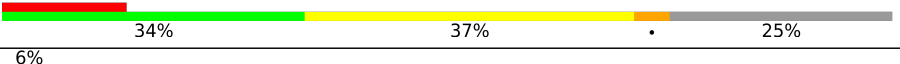
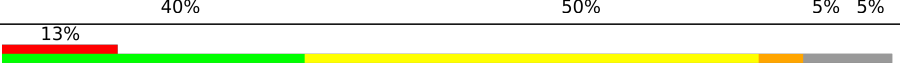
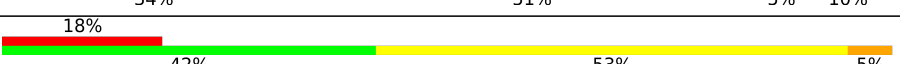
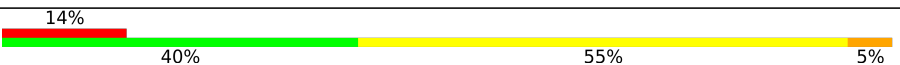
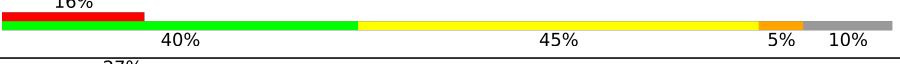
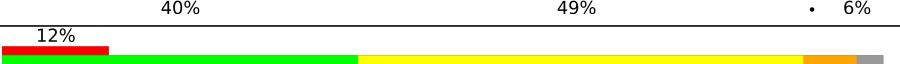
Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	93 (11.30 - 12.30)

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

Mol	Chain	Length	Quality of chain
1	A	246	7% 46% 48% 5%
2	B	234	9% 43% 53%
3	C	261	8% 41% 47% 7% 5%
4	D	254	11% 43% 51%
5	E	241	5% 46% 47%

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Mol	Chain	Length	Quality of chain
6	F	263	
7	G	255	
8	1	238	
9	2	277	
10	3	205	
11	4	201	
12	5	263	
13	6	240	
14	7	263	
15	W	377	
16	V	310	
17	T	353	
18	Y	70	
19	Z	908	
20	N	953	
21	S	530	
22	P	456	
23	Q	422	
24	R	389	
25	U	320	
26	O	376	
27	H	433	
28	I	440	
29	K	418	
30	L	403	

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Mol	Chain	Length	Quality of chain
31	M	442	15% 41% 49% • 6%
32	J	406	14% 44% 52% •

2 Entry composition

There are 32 unique types of molecules in this entry. The entry contains 82757 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 Proteasome subunit alpha type-6.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	246	Total	C	N	O	S	0	0
			1920	1215	322	369	14		

- Molecule 2 is a protein called Proteasome subunit alpha type-2.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	234	Total	C	N	O	S	0	0
			1828	1166	311	344	7		

- Molecule 3 is a protein called Proteasome subunit alpha type-4.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	C	249	Total	C	N	O	S	0	0
			1960	1238	337	374	11		

- Molecule 4 is a protein called Proteasome subunit alpha type-7.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	D	246	Total	C	N	O	S	0	0
			1926	1209	340	371	6		

- Molecule 5 is a protein called Proteasome subunit alpha type-5.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	E	233	Total	C	N	O	S	0	0
			1778	1114	296	358	10		

- Molecule 6 is a protein called Proteasome subunit alpha type-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	F	238	Total	C	N	O	S	0	0
			1871	1170	337	353	11		

- Molecule 7 is a protein called Proteasome subunit alpha type-3.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	G	245	Total	C	N	O	S	0	0
			1912	1212	326	362	12		

- Molecule 8 is a protein called Proteasome subunit beta type-6.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	1	202	Total	C	N	O	S	0	0
			1516	948	259	297	12		

- Molecule 9 is a protein called Proteasome subunit beta type-7.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	2	219	Total	C	N	O	S	0	0
			1651	1042	281	316	12		

- Molecule 10 is a protein called Proteasome subunit beta type-3.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	3	205	Total	C	N	O	S	0	0
			1600	1018	266	296	20		

- Molecule 11 is a protein called Proteasome subunit beta type-2.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	4	196	Total	C	N	O	S	0	0
			1572	1007	267	289	9		

- Molecule 12 is a protein called Proteasome subunit beta type-5.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	5	201	Total	C	N	O	S	0	0
			1560	984	272	295	9		

- Molecule 13 is a protein called Proteasome subunit beta type-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	6	213	Total	C	N	O	S	0	0
			1659	1050	284	315	10		

- Molecule 14 is a protein called Proteasome subunit beta type-4.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	7	216	Total	C	N	O	S	0	0
			1686	1065	292	317	12		

- Molecule 15 is a protein called 26S proteasome subunit S5a.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	W	195	Total	C	N	O	S	0	0
			1480	922	265	285	8		

- Molecule 16 is a protein called Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 14.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	V	289	Total	C	N	O	S	0	0
			2272	1438	391	424	19		

- Molecule 17 is a protein called Proteasome 26S subunit, non-ATPase 8.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	T	263	Total	C	N	O	S	0	0
			2149	1390	351	398	10		

- Molecule 18 is a protein called RCG28037.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	Y	24	Total	C	N	O	S	0	0
			199	120	34	44	1		

- Molecule 19 is a protein called 26S proteasome non-ATPase regulatory subunit 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	Z	896	Total	C	N	O	S	0	0
			6913	4342	1178	1346	47		

- Molecule 20 is a protein called 26S proteasome non-ATPase regulatory subunit 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	N	905	Total	C	N	O	S	0	0
			7082	4487	1193	1356	46		

- Molecule 21 is a protein called Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 3.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	S	476	Total	C	N	O	S	0	0
			3844	2438	685	707	14		

- Molecule 22 is a protein called Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 12.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	P	456	Total	C	N	O	S	0	0
			3706	2338	635	709	24		

- Molecule 23 is a protein called 26S proteasome non-ATPase regulatory subunit 11.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	Q	422	Total	C	N	O	S	0	0
			3335	2116	567	639	13		

- Molecule 24 is a protein called Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 6.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	R	389	Total	C	N	O	S	0	0
			3204	2042	542	600	20		

- Molecule 25 is a protein called Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 7 (Predicted).

Mol	Chain	Residues	Atoms					AltConf	Trace
25	U	288	Total	C	N	O	S	0	0
			2299	1470	395	428	6		

- Molecule 26 is a protein called 26S proteasome non-ATPase regulatory subunit 13.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	O	376	Total	C	N	O	S	0	0
			3011	1918	514	564	15		

- Molecule 27 is a protein called 26S proteasome regulatory subunit 7.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	H	396	Total	C	N	O	S	0	0
			3113	1960	546	589	18		

- Molecule 28 is a protein called 26S proteasome regulatory subunit 4.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	I	385	Total	C	N	O	S	0	0
			3042	1913	516	598	15		

- Molecule 29 is a protein called 26S proteasome regulatory subunit 6B.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	K	391	Total	C	N	O	S	0	0
			3125	1978	535	599	13		

- Molecule 30 is a protein called Proteasome 26S subunit, ATPase 6.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	L	389	Total	C	N	O	S	0	0
			3098	1947	552	582	17		

- Molecule 31 is a protein called 26S proteasome regulatory subunit 6A.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	M	415	Total	C	N	O	S	0	0
			3252	2038	561	635	18		

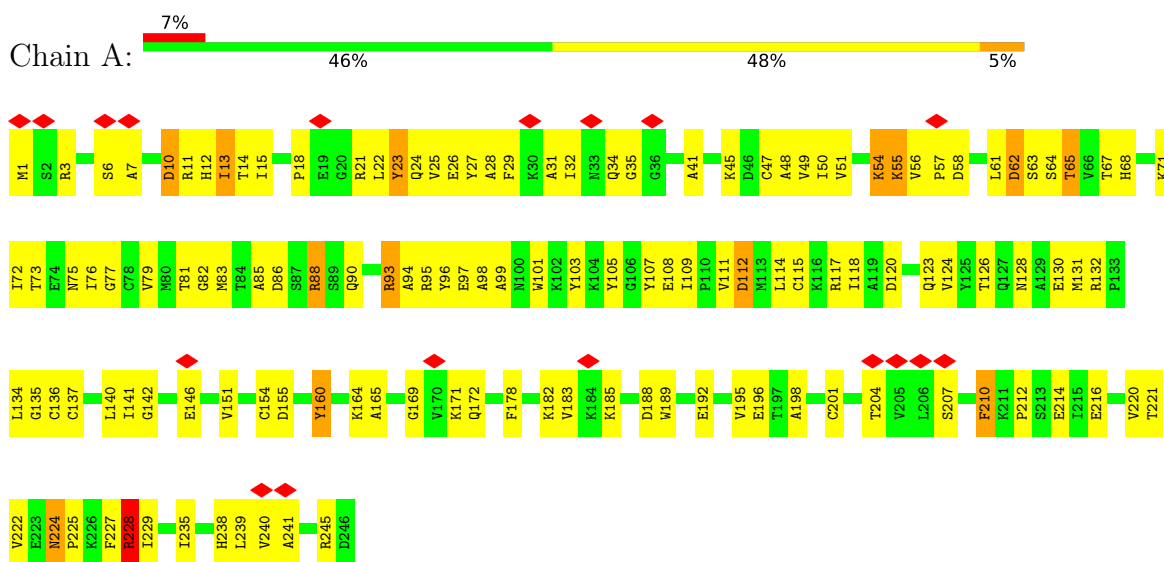
- Molecule 32 is a protein called 26S proteasome regulatory subunit 8.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	J	406	Total	C	N	O	S	0	0
			3194	2006	569	599	20		

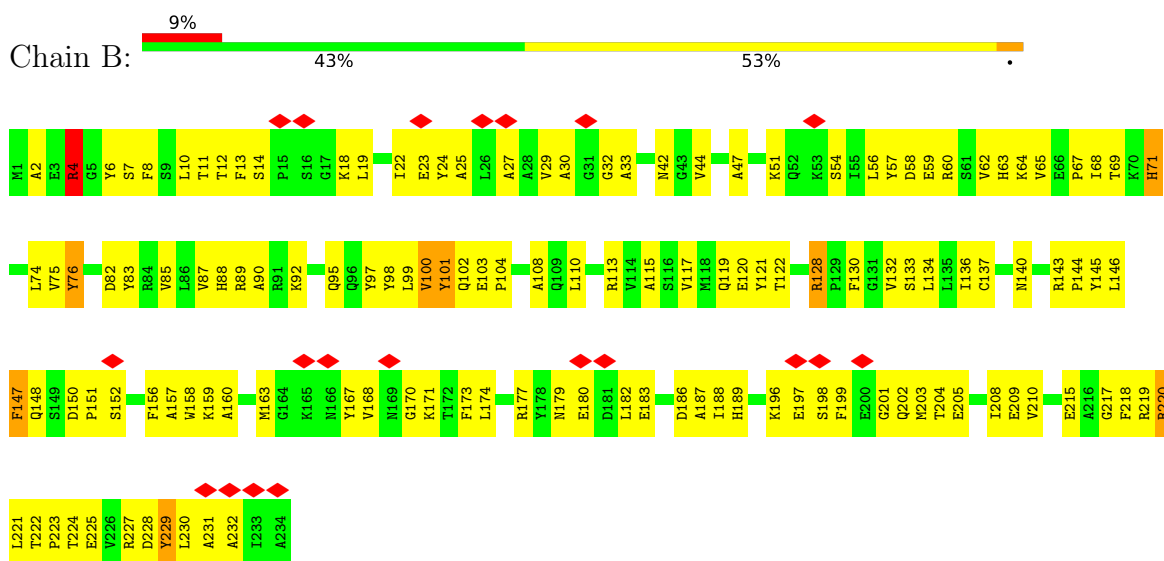
3 Residue-property plots

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

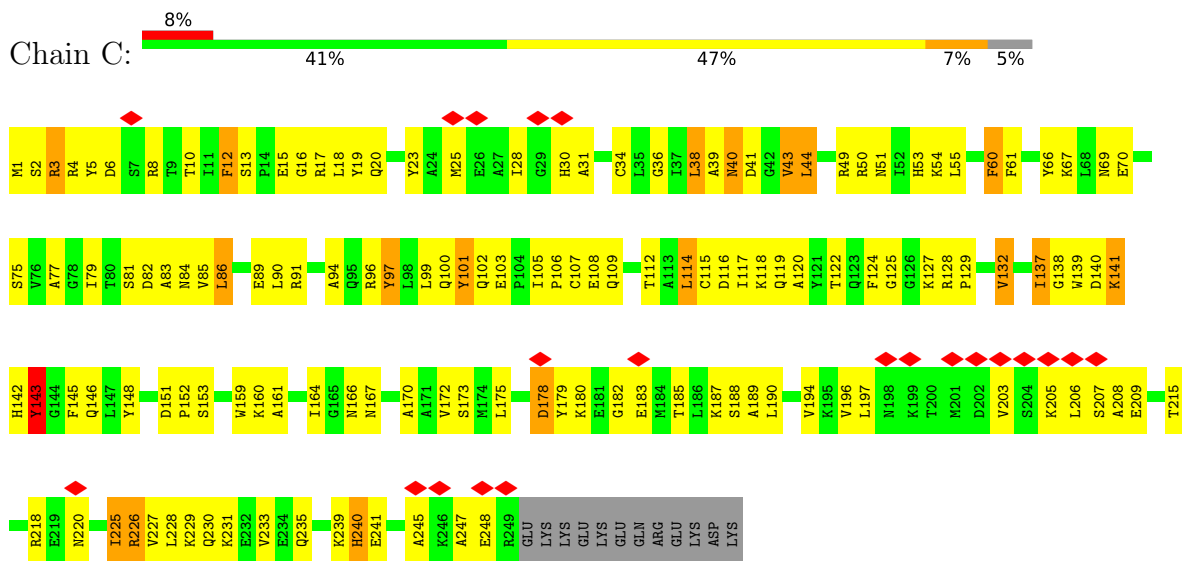
• Molecule 1: Proteasome subunit alpha type-6



• Molecule 2: Proteasome subunit alpha type-2



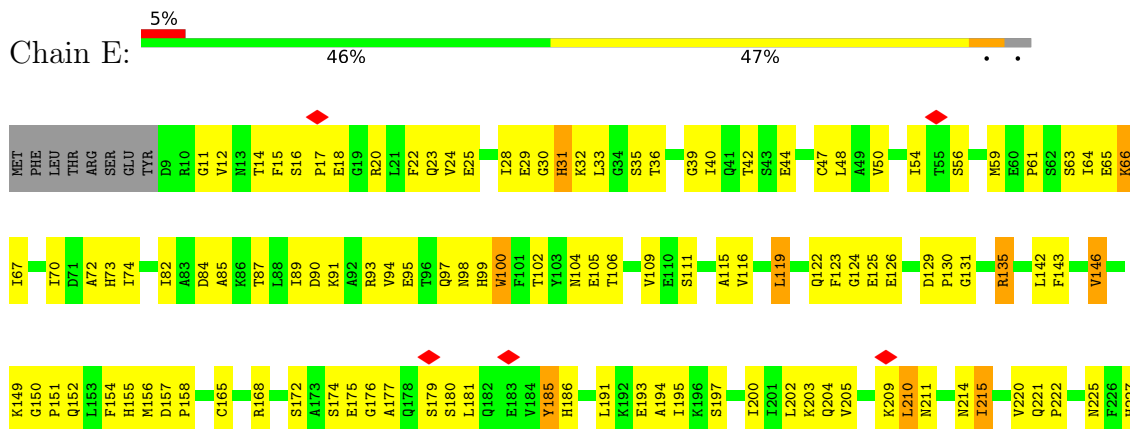
• Molecule 3: Proteasome subunit alpha type-4

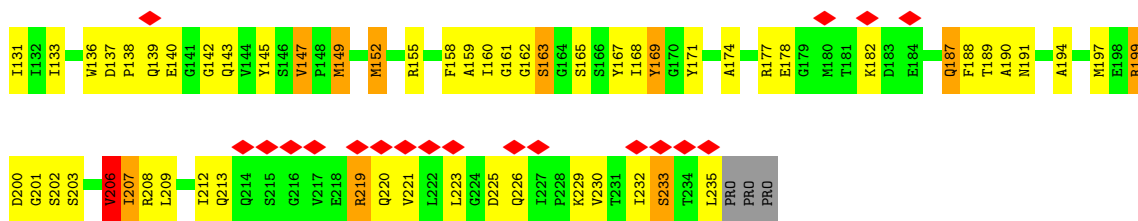


- Molecule 4: Proteasome subunit alpha type-7

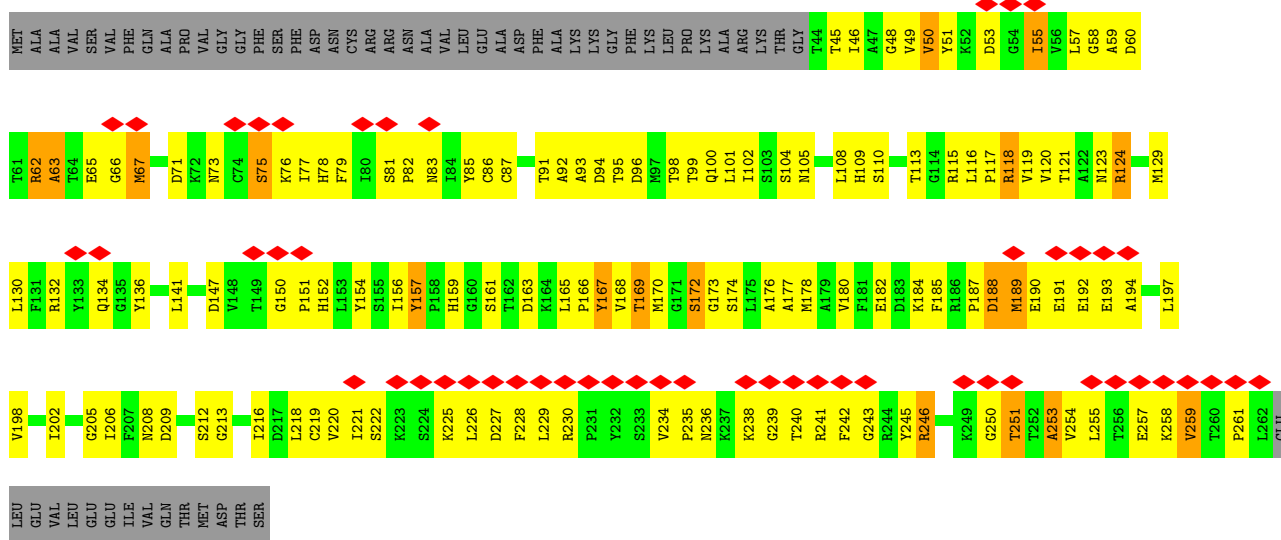


- Molecule 5: Proteasome subunit alpha type-5

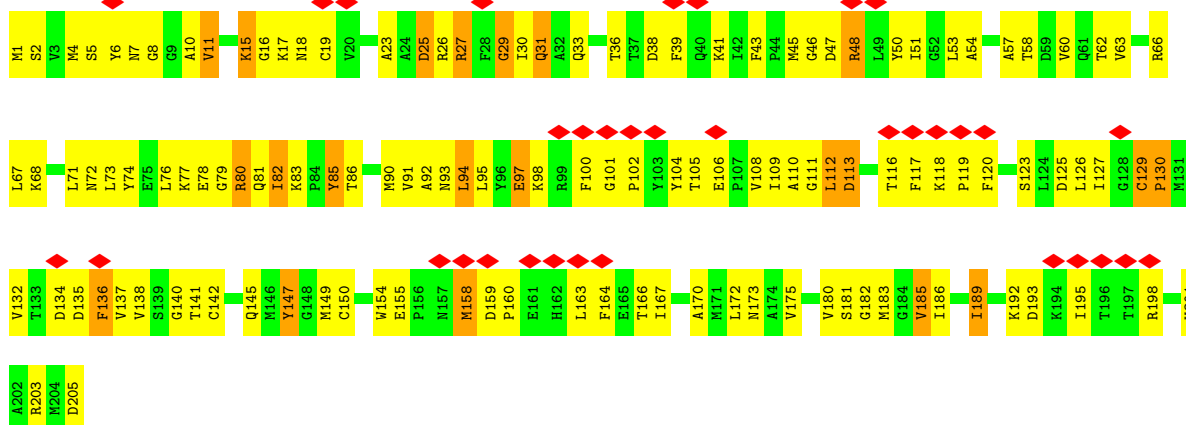




• Molecule 9: Proteasome subunit beta type-7

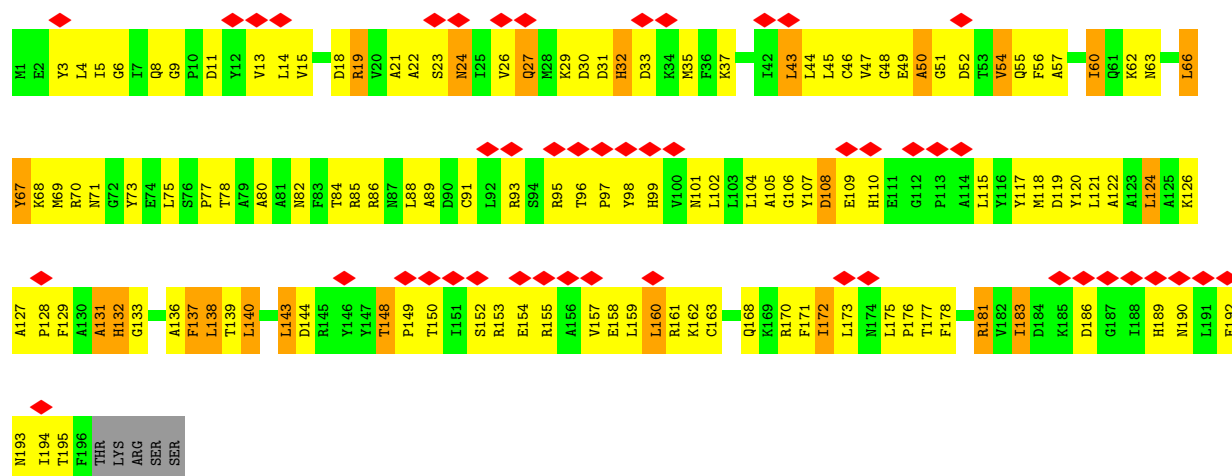


• Molecule 10: Proteasome subunit beta type-3

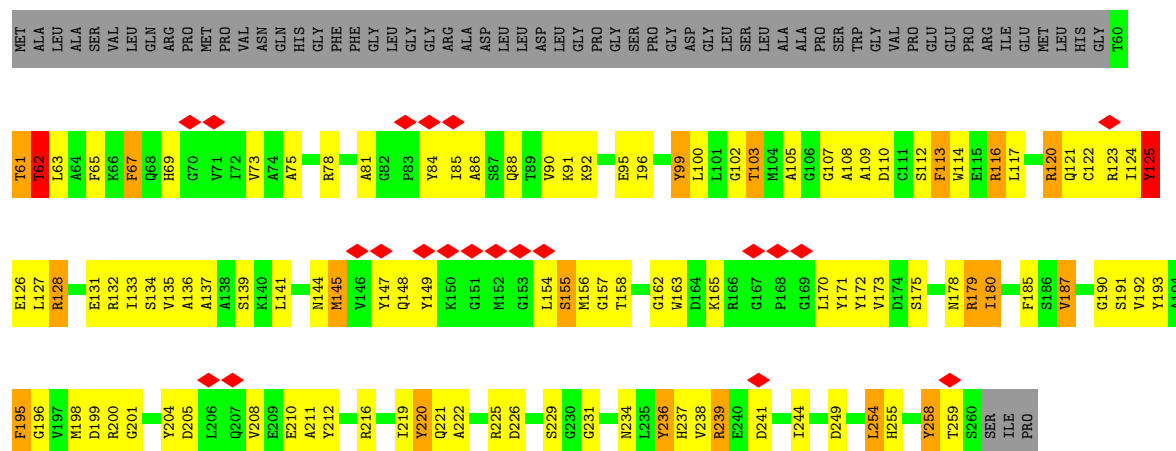


• Molecule 11: Proteasome subunit beta type-2

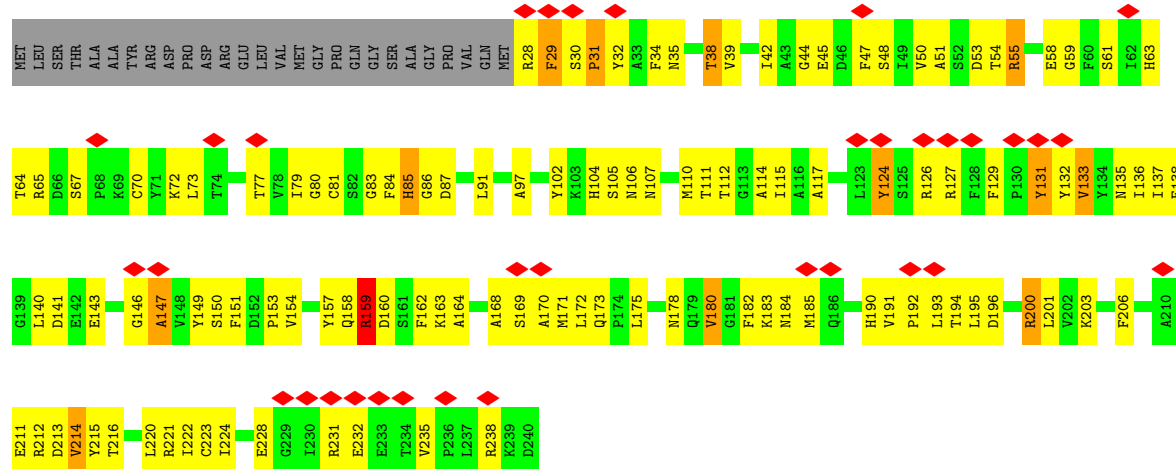




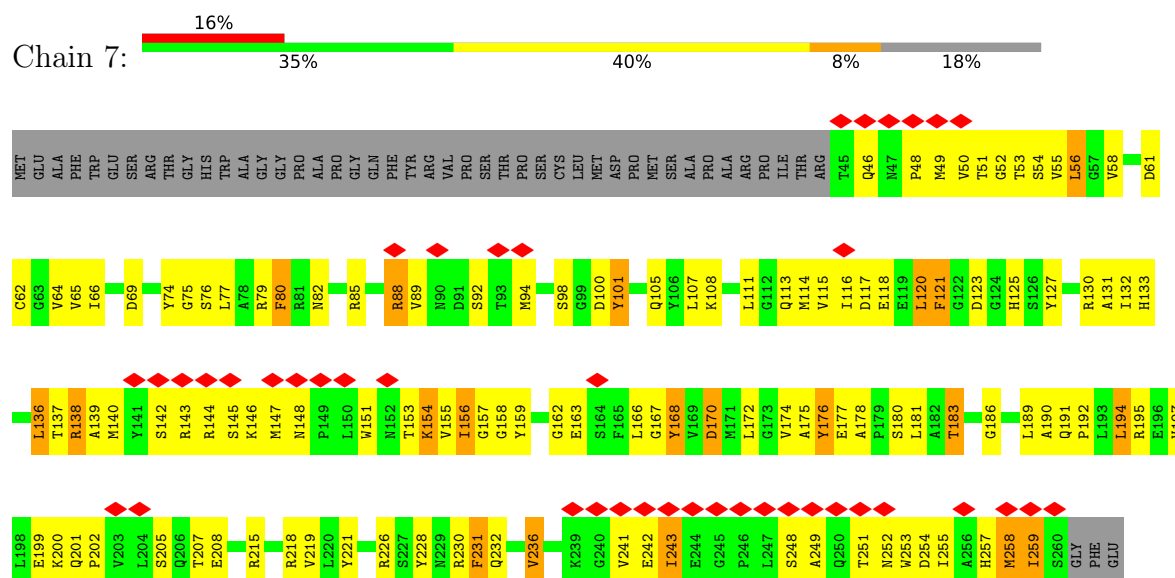
• Molecule 12: Proteasome subunit beta type-5



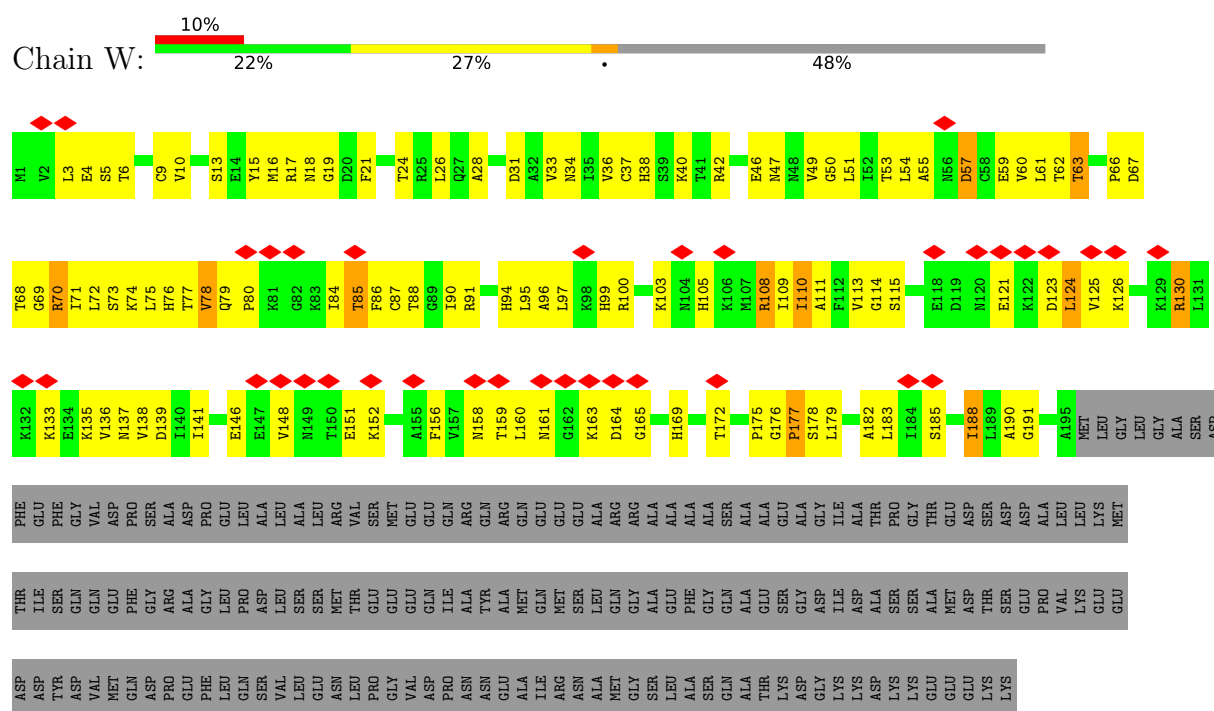
• Molecule 13: Proteasome subunit beta type-1



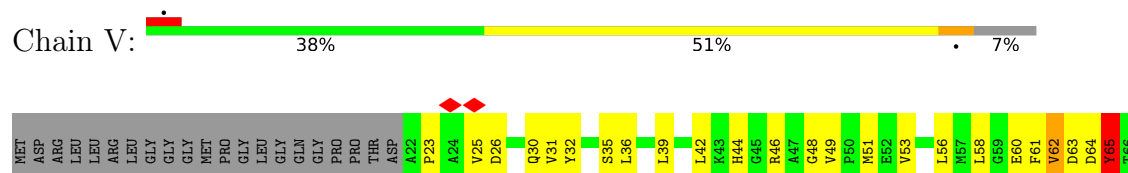
- Molecule 14: Proteasome subunit beta type-4

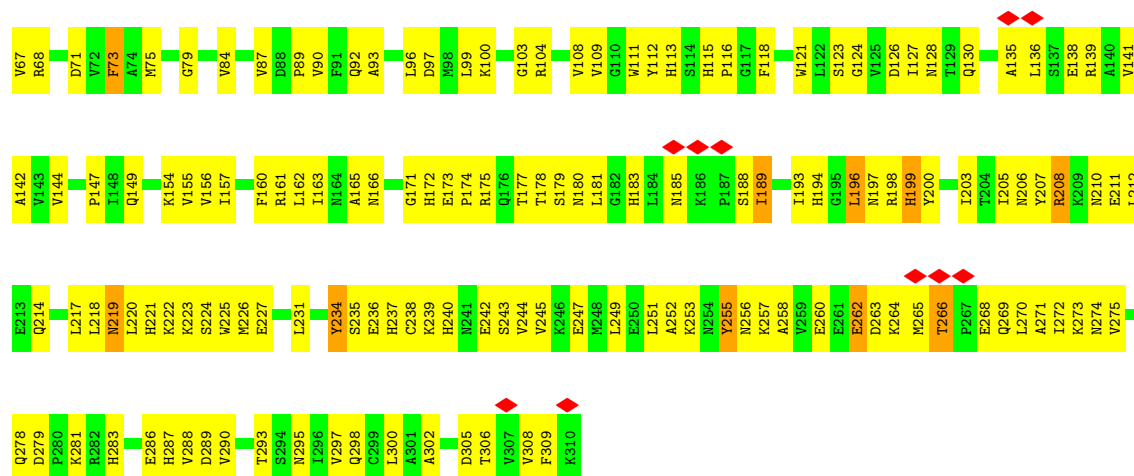


- Molecule 15: 26S proteasome subunit S5a

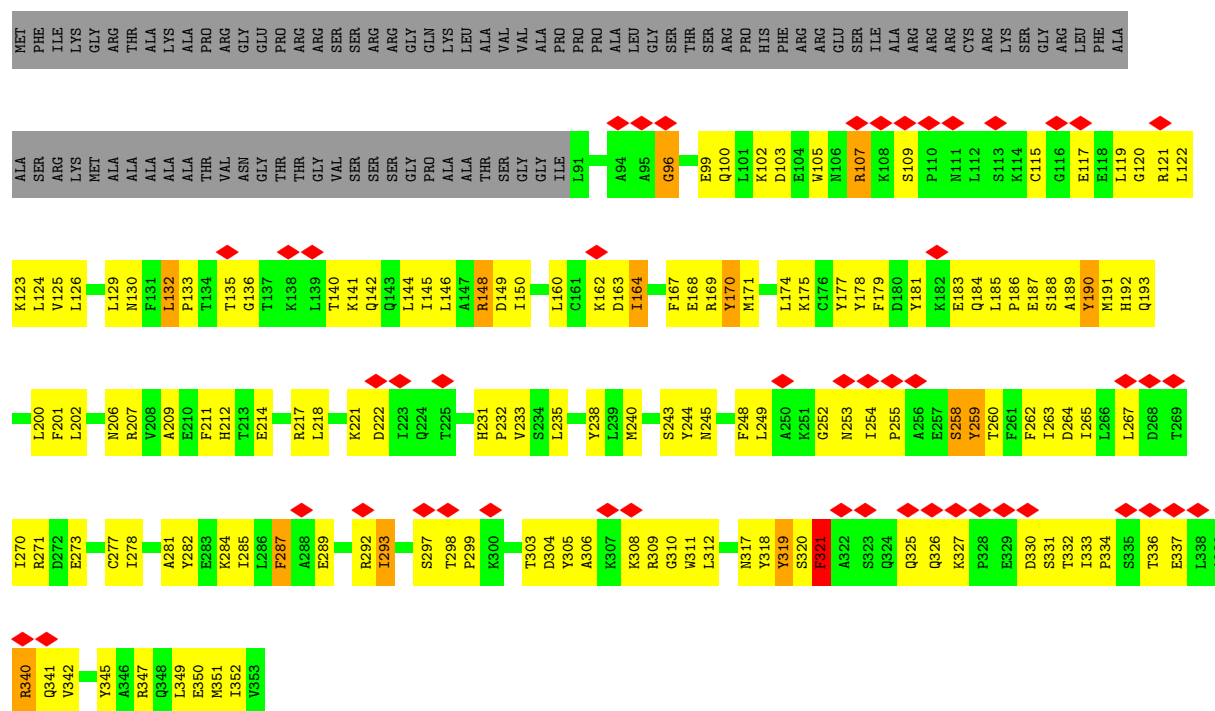


- Molecule 16: Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 14

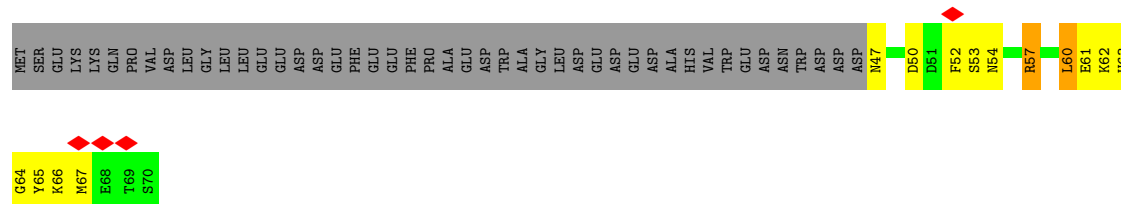




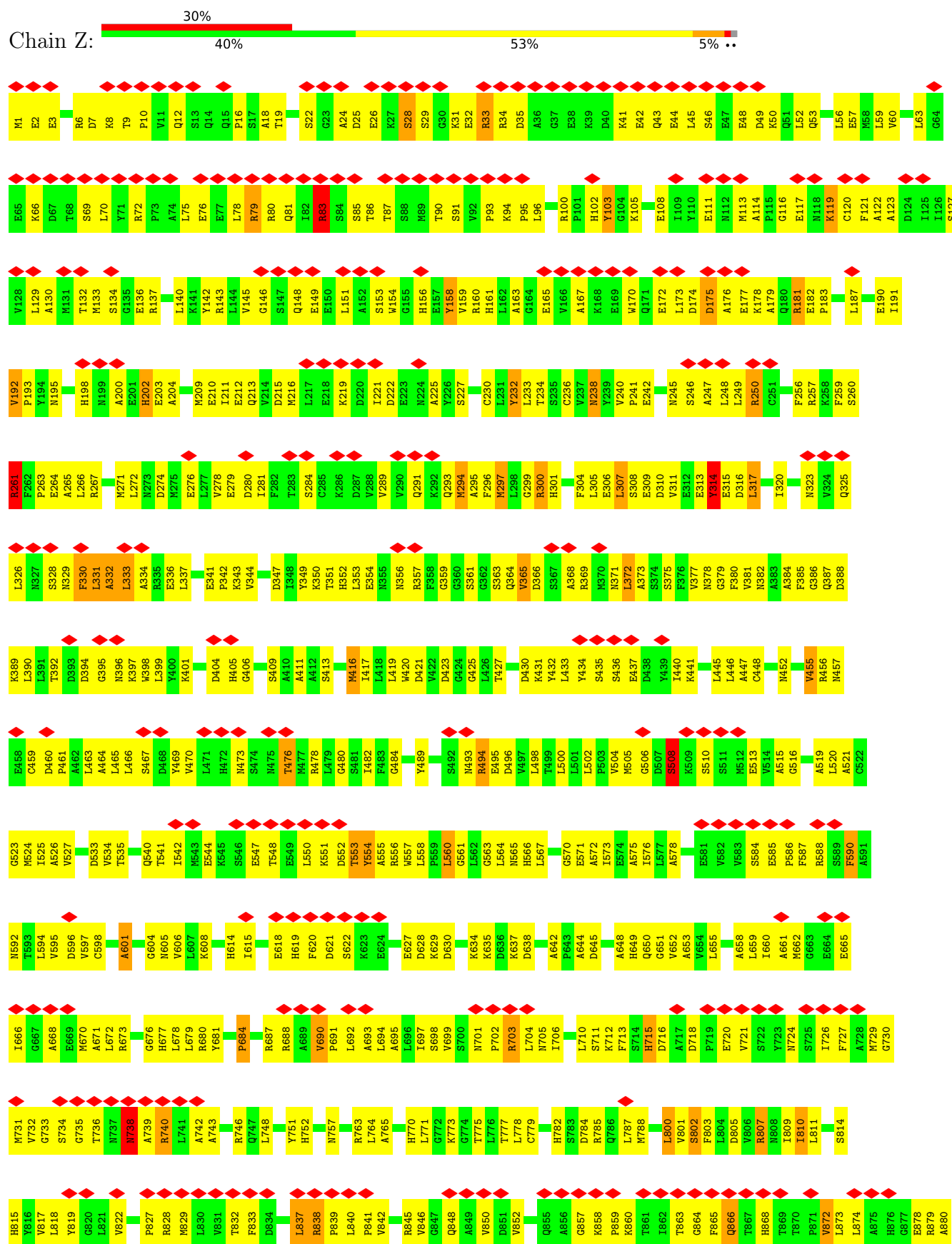
• Molecule 17: Proteasome 26S subunit, non-ATPase 8

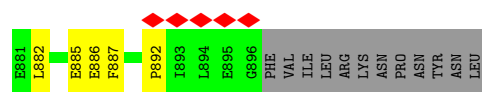


• Molecule 18: RCG28037

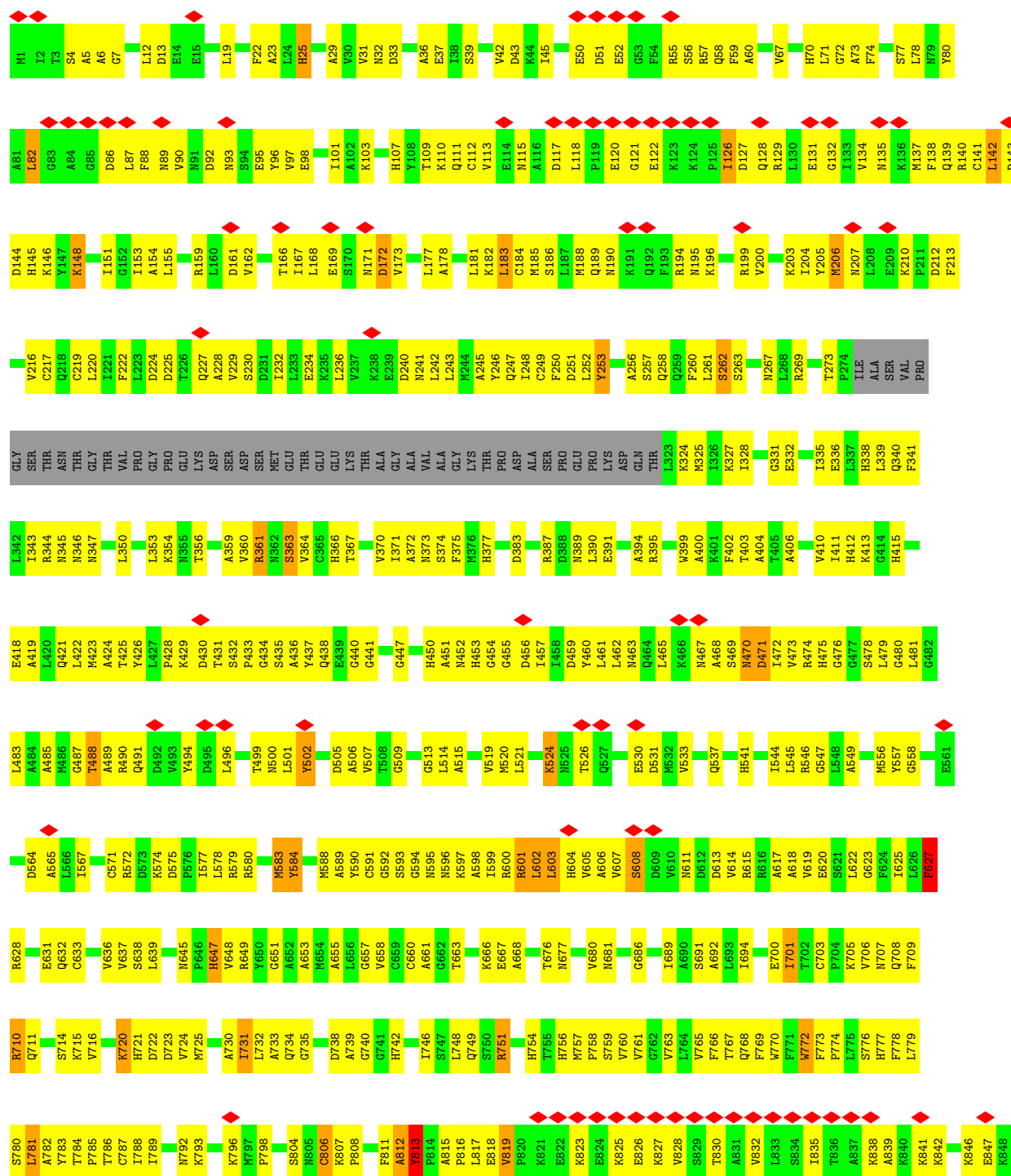


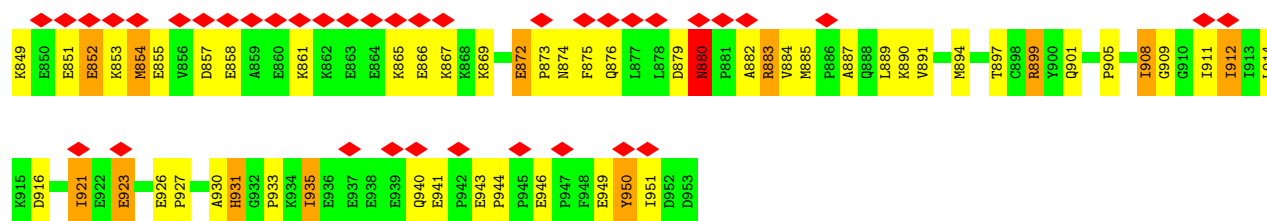
• Molecule 19: 26S proteasome non-ATPase regulatory subunit 2



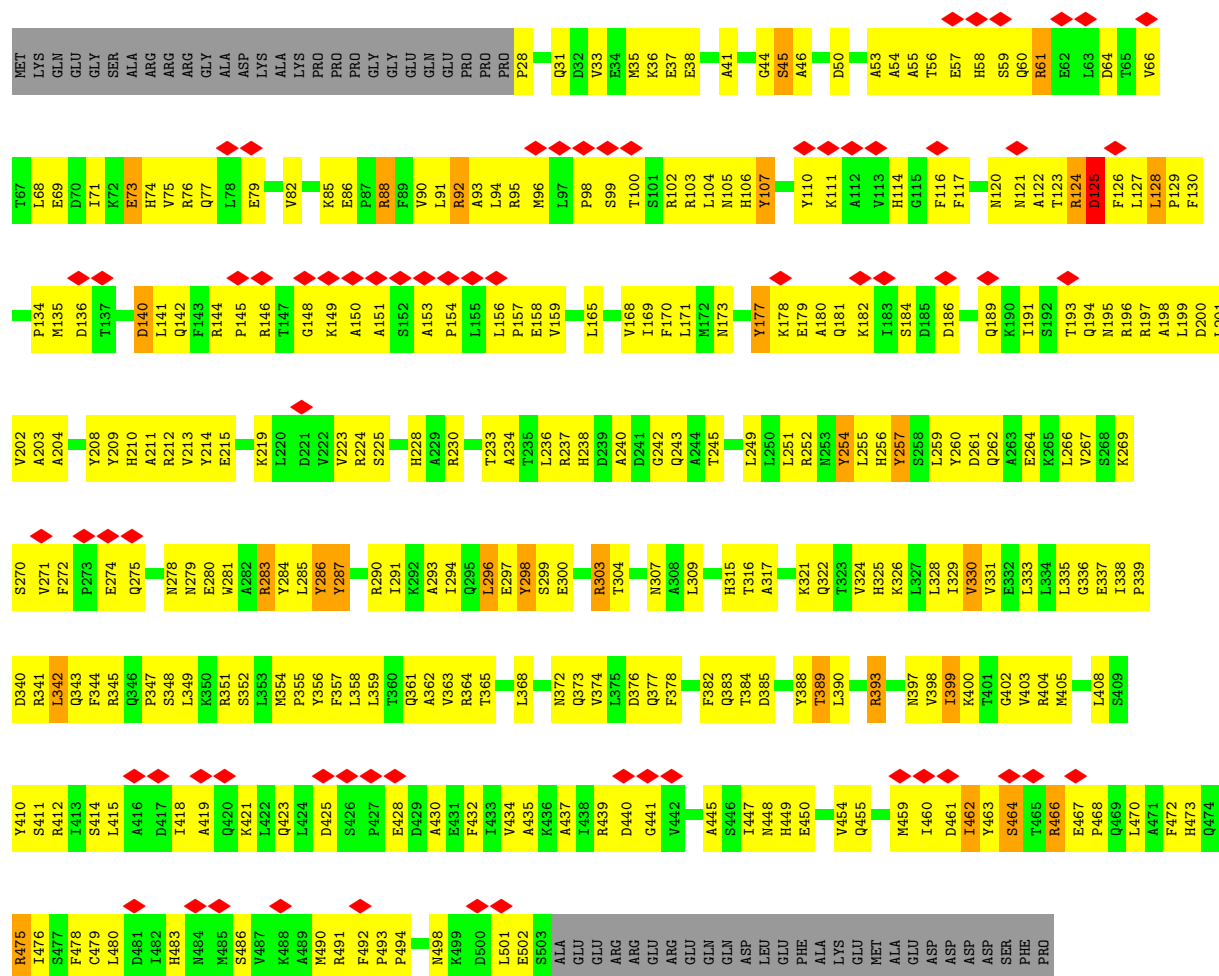


• Molecule 20: 26S proteasome non-ATPase regulatory subunit 1

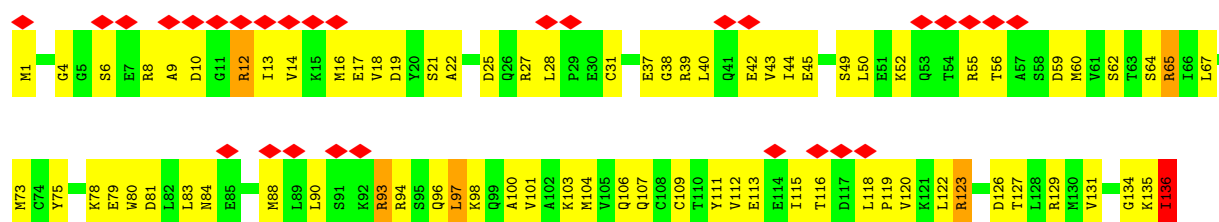
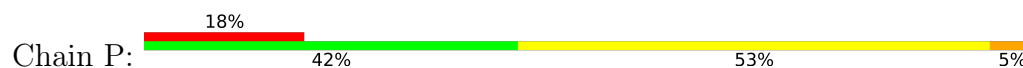


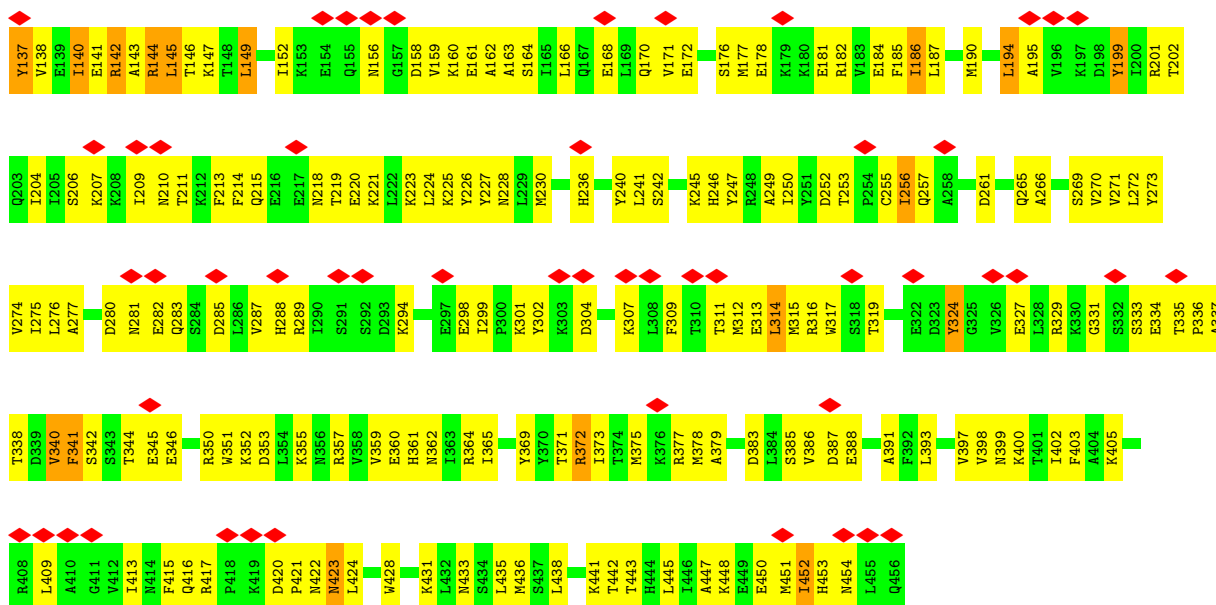


• Molecule 21: Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 3

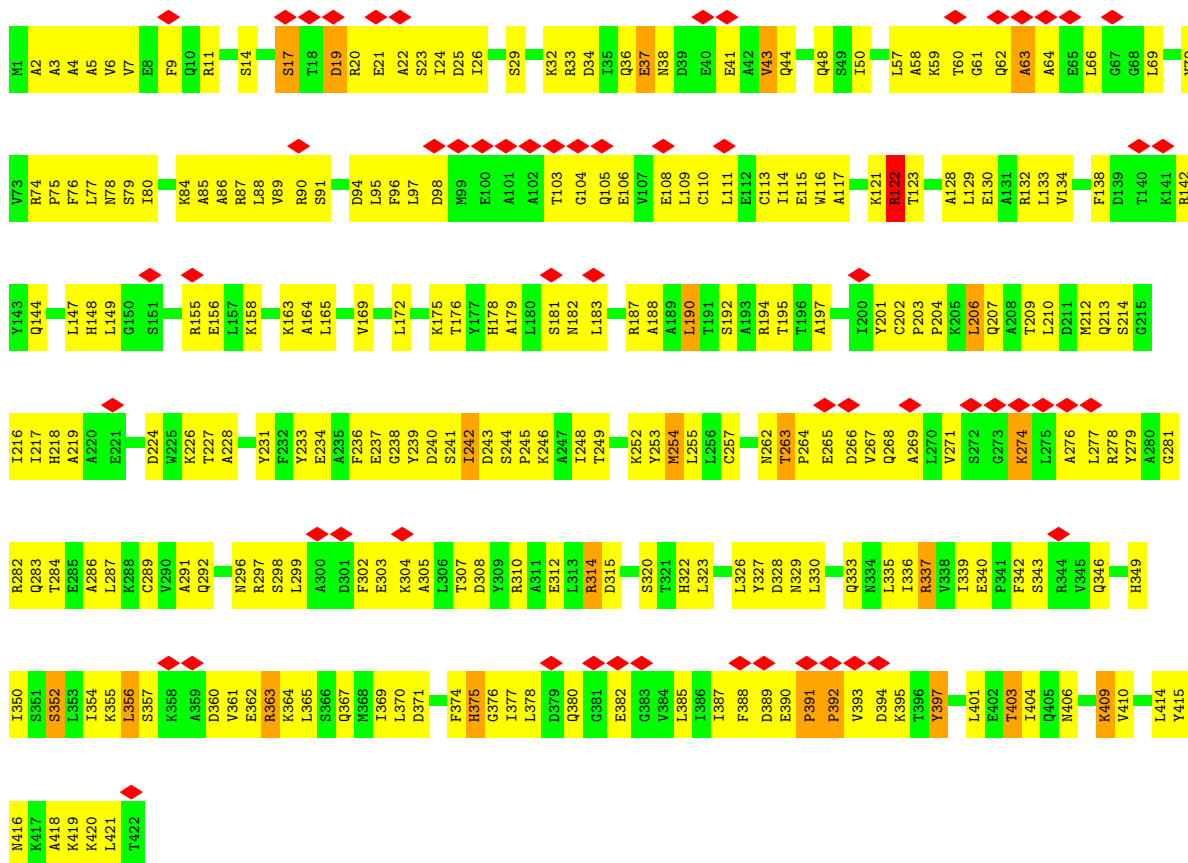


• Molecule 22: Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 12





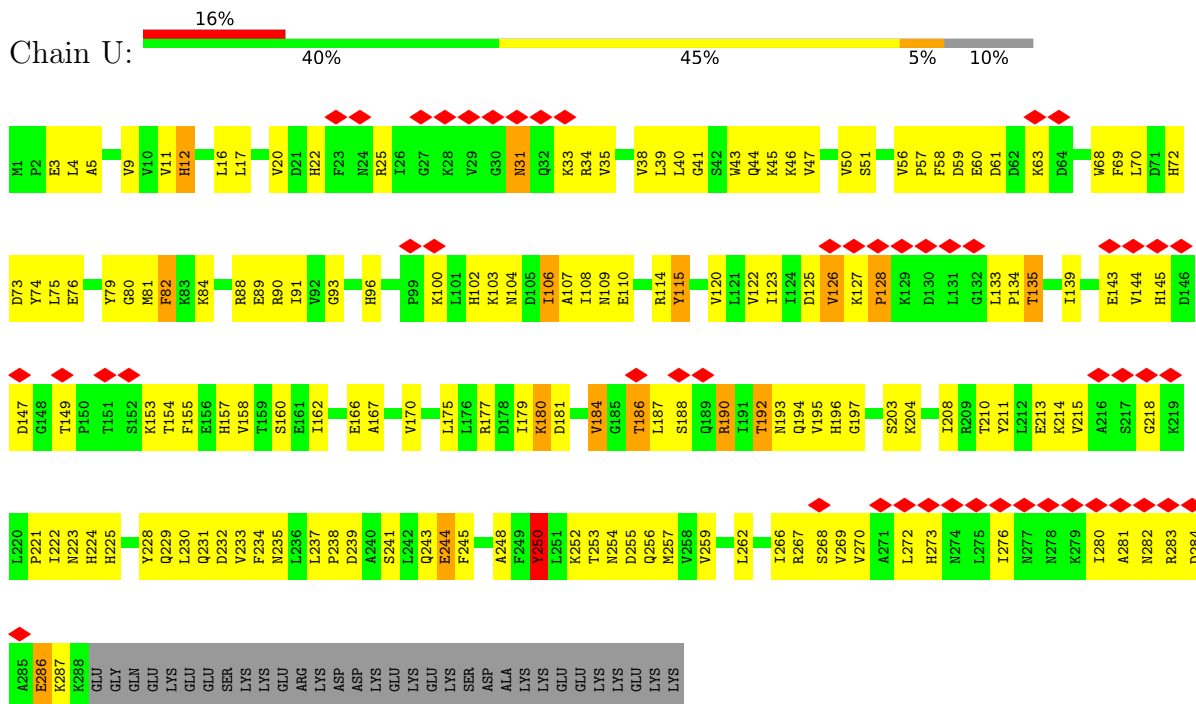
• Molecule 23: 26S proteasome non-ATPase regulatory subunit 11



• Molecule 24: Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 6



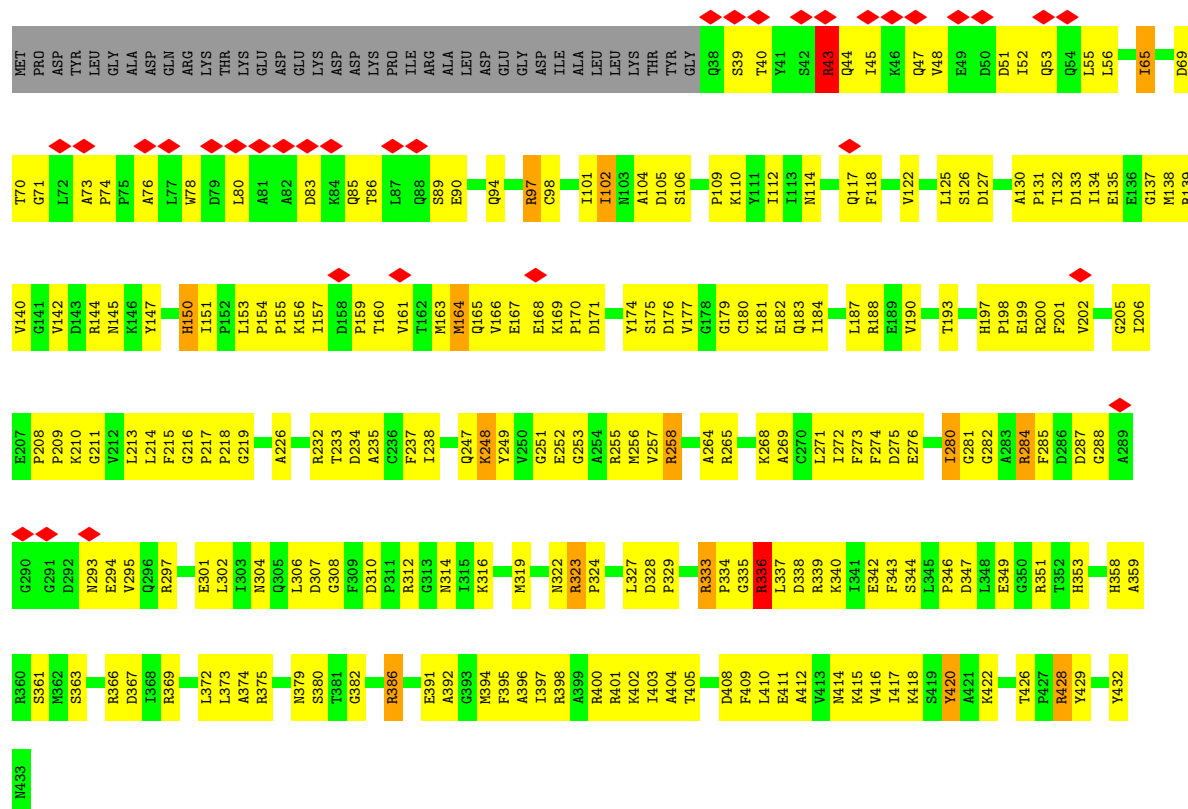
- Molecule 25: Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 7 (Predicted)



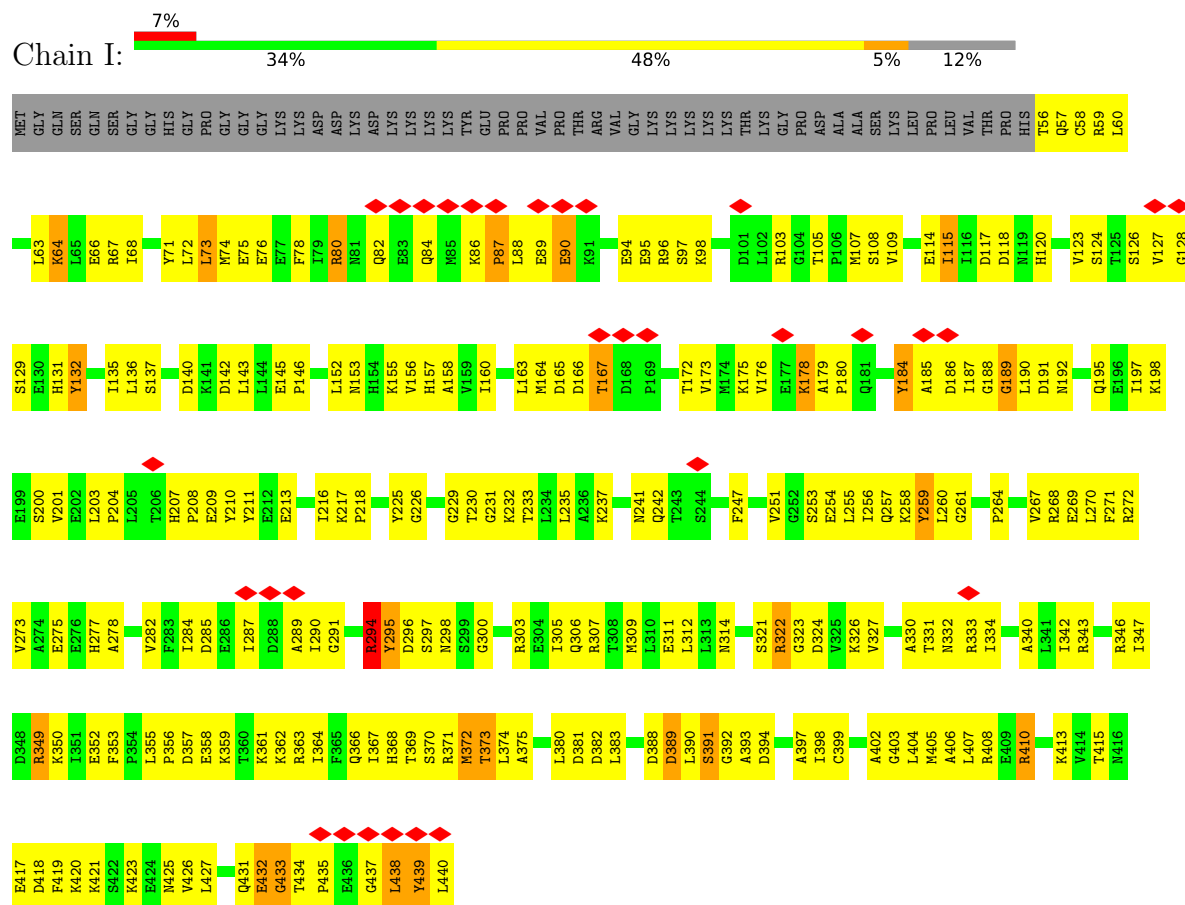
- Molecule 26: 26S proteasome non-ATPase regulatory subunit 13



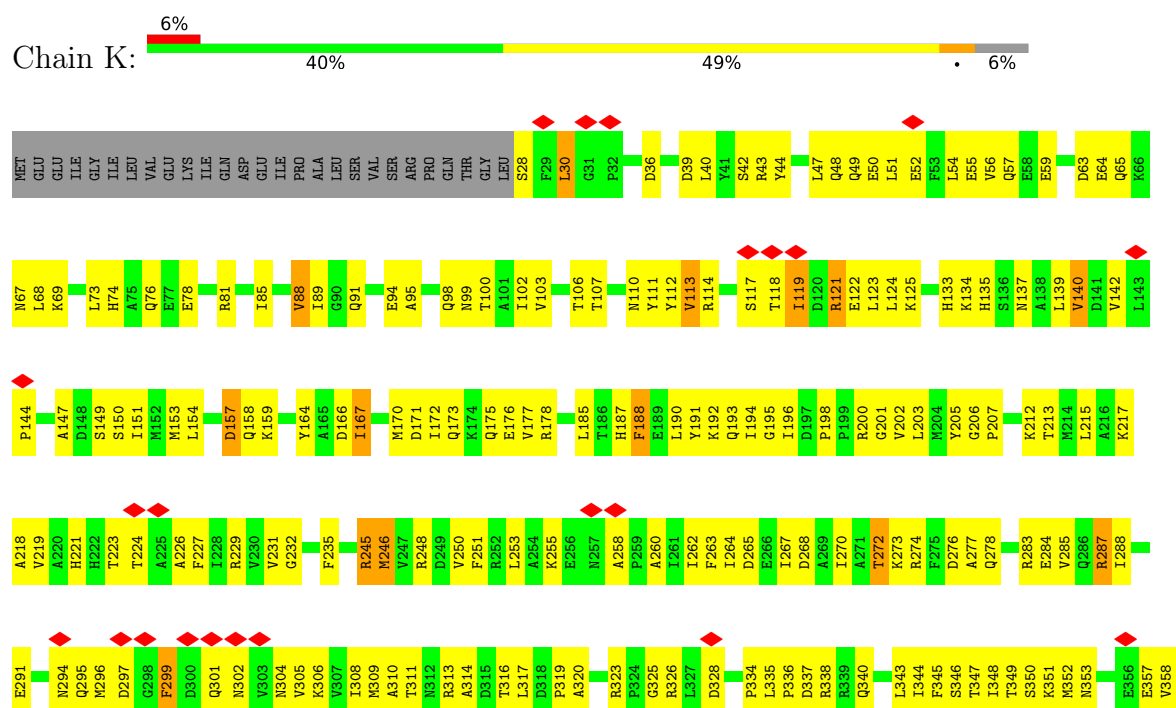
- Molecule 27: 26S proteasome regulatory subunit 7

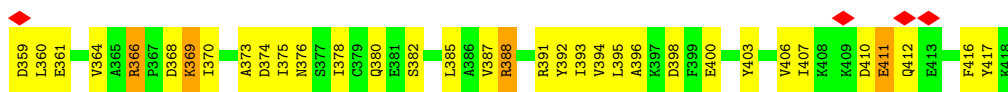


• Molecule 28: 26S proteasome regulatory subunit 4

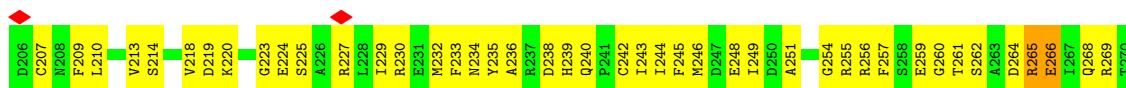
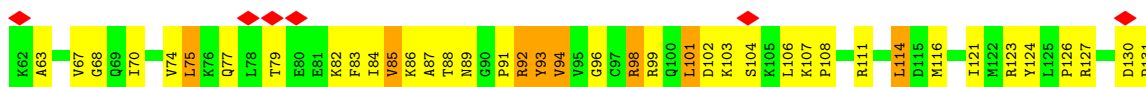
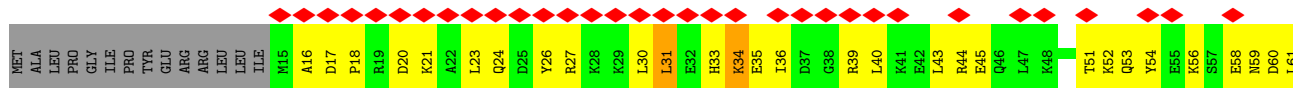
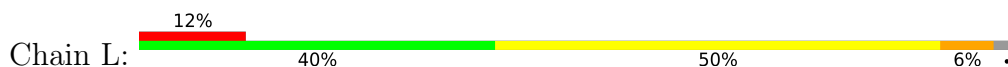


• Molecule 29: 26S proteasome regulatory subunit 6B

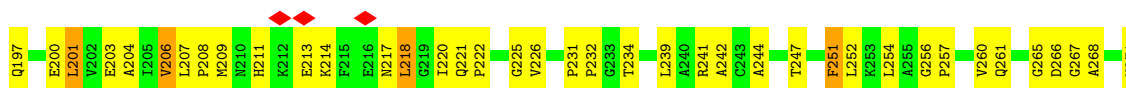
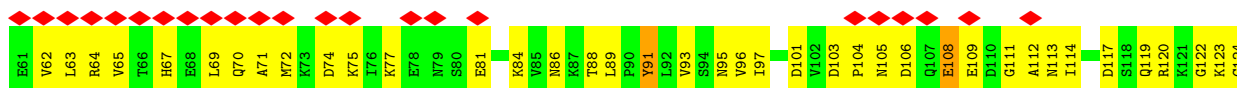


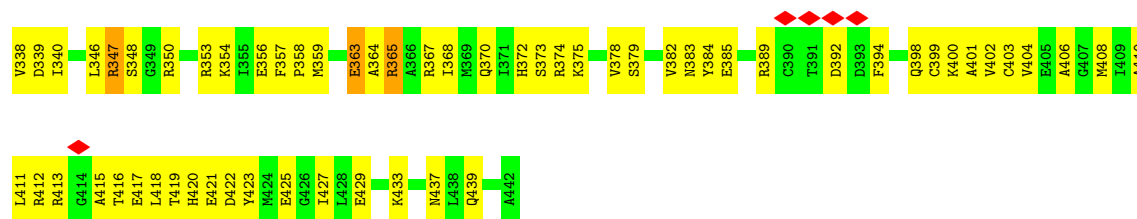


• Molecule 30: Proteasome 26S subunit, ATPase 6

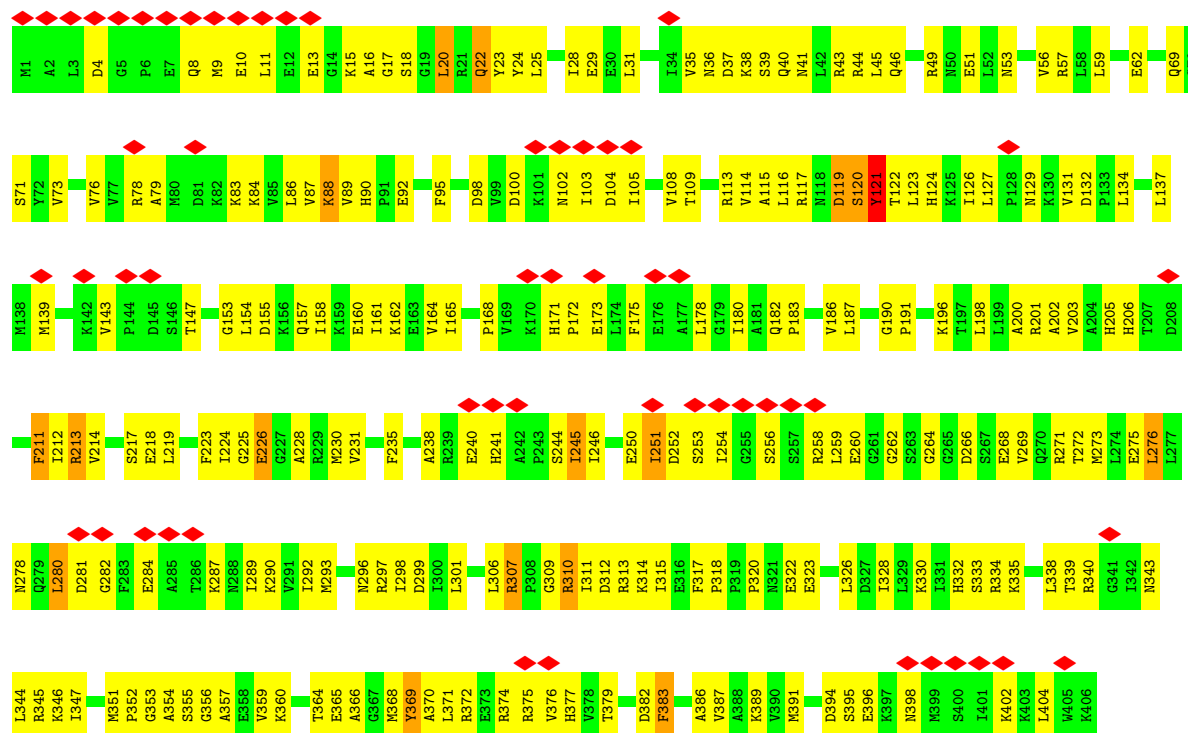


• Molecule 31: 26S proteasome regulatory subunit 6A





• Molecule 32: 26S proteasome regulatory subunit 8



4 Experimental information

Property	Value	Source
EM reconstruction method	SUBTOMOGRAM AVERAGING	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of subtomograms used	7393	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	1.8	Depositor
Minimum defocus (nm)	5000	Depositor
Maximum defocus (nm)	7000	Depositor
Magnification	42000	Depositor
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.860	Depositor
Minimum map value	-0.446	Depositor
Average map value	-0.037	Depositor
Map value standard deviation	0.171	Depositor
Recommended contour level	0.4	Depositor
Map size (Å)	307.80002, 307.80002, 307.80002	wwPDB
Map dimensions	90, 90, 90	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	3.4200003, 3.4200003, 3.4200003	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	2.30	74/1954 (3.8%)	2.46	120/2638 (4.5%)
2	B	2.25	62/1867 (3.3%)	2.55	151/2527 (6.0%)
3	C	2.32	82/1990 (4.1%)	2.50	137/2680 (5.1%)
4	D	2.31	74/1953 (3.8%)	2.50	135/2637 (5.1%)
5	E	2.73	66/1806 (3.7%)	2.54	133/2439 (5.5%)
6	F	2.34	83/1906 (4.4%)	2.47	137/2577 (5.3%)
7	G	2.23	61/1947 (3.1%)	2.41	118/2620 (4.5%)
8	1	2.28	52/1542 (3.4%)	2.58	125/2089 (6.0%)
9	2	2.28	63/1679 (3.8%)	2.52	124/2271 (5.5%)
10	3	2.23	51/1629 (3.1%)	2.63	139/2195 (6.3%)
11	4	2.31	67/1604 (4.2%)	2.51	121/2170 (5.6%)
12	5	2.55	69/1592 (4.3%)	2.55	121/2152 (5.6%)
13	6	2.26	58/1690 (3.4%)	2.54	119/2278 (5.2%)
14	7	2.33	72/1720 (4.2%)	2.54	133/2327 (5.7%)
15	W	2.35	56/1500 (3.7%)	2.56	112/2030 (5.5%)
16	V	2.32	90/2315 (3.9%)	2.60	194/3129 (6.2%)
17	T	2.23	66/2195 (3.0%)	2.50	177/2964 (6.0%)
18	Y	2.54	12/201 (6.0%)	2.55	12/266 (4.5%)
19	Z	2.32	282/7026 (4.0%)	2.66	644/9495 (6.8%)
20	N	2.31	287/7206 (4.0%)	2.57	600/9738 (6.2%)
21	S	2.35	160/3918 (4.1%)	2.62	339/5287 (6.4%)
22	P	2.26	131/3754 (3.5%)	2.56	309/5049 (6.1%)
23	Q	2.31	132/3381 (3.9%)	2.62	305/4558 (6.7%)
24	R	2.30	125/3263 (3.8%)	2.58	245/4393 (5.6%)
25	U	2.29	89/2344 (3.8%)	2.55	182/3178 (5.7%)
26	O	2.27	111/3066 (3.6%)	2.56	247/4148 (6.0%)
27	H	2.27	111/3166 (3.5%)	2.52	232/4275 (5.4%)
28	I	2.33	148/3085 (4.8%)	2.56	242/4158 (5.8%)
29	K	2.26	132/3178 (4.2%)	2.51	209/4290 (4.9%)
30	L	2.33	132/3146 (4.2%)	2.55	265/4233 (6.3%)
31	M	2.27	117/3293 (3.6%)	2.56	252/4436 (5.7%)
32	J	2.32	126/3236 (3.9%)	2.54	236/4347 (5.4%)
All	All	2.31	3241/84152 (3.9%)	2.56	6615/113574 (5.8%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	8
2	B	0	11
3	C	0	6
4	D	0	8
5	E	0	2
6	F	0	8
7	G	0	8
8	1	0	6
9	2	0	6
10	3	0	9
11	4	0	4
12	5	0	11
13	6	0	9
14	7	0	4
15	W	0	3
16	V	0	5
17	T	0	11
18	Y	0	1
19	Z	0	19
20	N	0	17
21	S	0	22
22	P	0	12
23	Q	0	10
24	R	0	12
25	U	0	6
26	O	0	9
27	H	0	11
28	I	0	12
29	K	0	11
30	L	0	11
31	M	0	8
32	J	0	11
All	All	0	291

All (3241) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	E	97	GLN	CG-CD	65.28	3.15	1.52
12	5	125	TYR	CG-CD1	18.96	1.79	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	5	125	TYR	CE2-CZ	17.77	1.80	1.38
12	5	125	TYR	CG-CD2	17.70	1.76	1.39
12	5	125	TYR	CD1-CE1	15.07	1.83	1.38
12	5	125	TYR	CE1-CZ	14.57	1.73	1.38
20	N	872	GLU	CA-C	14.52	1.71	1.52
12	5	125	TYR	CD2-CE2	14.19	1.81	1.38
21	S	95	ARG	CA-C	-13.39	1.43	1.52
5	E	155	HIS	ND1-CE1	13.29	1.45	1.32
29	K	158	GLN	N-CA	-12.07	1.35	1.46
21	S	393	ARG	CD-NE	11.38	1.62	1.46
31	M	220	ILE	CA-CB	-11.37	1.41	1.54
11	4	105	ALA	C-N	11.26	1.41	1.33
19	Z	341	GLU	C-N	11.05	1.45	1.34
17	T	340	ARG	CD-NE	11.03	1.61	1.46
16	V	172	HIS	ND1-CE1	10.95	1.43	1.32
4	D	64	ALA	CA-C	-10.76	1.39	1.52
32	J	310	ARG	NE-CZ	10.67	1.44	1.33
1	A	25	VAL	CA-CB	-10.54	1.40	1.54
32	J	175	PHE	N-CA	-10.42	1.33	1.46
19	Z	763	ARG	CD-NE	10.35	1.60	1.46
20	N	595	ASN	CA-C	-10.31	1.39	1.52
20	N	620	GLU	CA-C	-10.24	1.39	1.52
19	Z	209	MET	CA-C	-10.20	1.39	1.52
2	B	160	ALA	CA-C	-10.18	1.40	1.52
19	Z	622	SER	CA-C	-10.11	1.44	1.52
30	L	271	LEU	CA-C	9.97	1.65	1.52
2	B	71	HIS	CA-C	-9.97	1.41	1.53
22	P	129	ARG	CD-NE	9.96	1.60	1.46
2	B	69	THR	N-CA	-9.88	1.32	1.46
12	5	123	ARG	CD-NE	9.87	1.60	1.46
5	E	126	GLU	CA-C	-9.86	1.40	1.52
32	J	206	HIS	CG-CD2	9.84	1.46	1.35
3	C	151	ASP	C-N	9.76	1.43	1.34
3	C	173	SER	CA-C	-9.64	1.40	1.52
31	M	372	HIS	ND1-CE1	9.63	1.42	1.32
1	A	97	GLU	C-N	9.54	1.46	1.33
1	A	82	GLY	C-O	-9.52	1.19	1.24
7	G	48	PHE	N-CA	-9.51	1.34	1.45
26	O	303	THR	C-N	9.44	1.44	1.33
19	Z	482	ILE	CA-CB	-9.42	1.42	1.54
1	A	56	VAL	CA-C	-9.40	1.44	1.52
30	L	27	ARG	CD-NE	9.36	1.59	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	2	58	GLY	CA-C	-9.35	1.45	1.52
27	H	130	ALA	C-N	9.35	1.45	1.33
3	C	55	LEU	N-CA	-9.33	1.34	1.46
11	4	155	ARG	CZ-NH2	9.31	1.45	1.33
13	6	65	ARG	CD-NE	9.31	1.59	1.46
20	N	513	GLY	CA-C	-9.27	1.42	1.52
4	D	141	GLY	CA-C	9.27	1.62	1.51
25	U	208	ILE	CA-C	-9.23	1.41	1.52
14	7	159	TYR	CA-C	-9.23	1.41	1.52
23	Q	362	GLU	CA-C	-9.18	1.40	1.52
24	R	108	ALA	CA-C	-9.09	1.41	1.52
27	H	211	GLY	CA-C	-9.08	1.45	1.52
21	S	146	ARG	NE-CZ	9.07	1.43	1.33
31	M	143	VAL	CA-CB	9.07	1.64	1.54
21	S	337	GLU	N-CA	-9.05	1.34	1.46
19	Z	167	ALA	CA-C	-9.05	1.41	1.52
11	4	110	HIS	ND1-CE1	9.01	1.41	1.32
25	U	41	GLY	CA-C	-8.99	1.42	1.52
15	W	100	ARG	NE-CZ	8.98	1.43	1.33
8	1	36	ILE	CA-C	-8.97	1.43	1.53
19	Z	274	ASP	N-CA	8.92	1.56	1.45
30	L	234	ASN	CA-C	-8.90	1.41	1.52
19	Z	829	MET	CA-C	-8.89	1.43	1.52
29	K	178	ARG	NE-CZ	8.85	1.42	1.33
23	Q	104	GLY	CA-C	-8.85	1.42	1.52
21	S	408	LEU	CA-C	-8.84	1.41	1.52
11	4	95	ARG	NE-CZ	8.78	1.42	1.33
31	M	439	GLN	CA-CB	8.78	1.65	1.53
30	L	209	PHE	CA-C	-8.77	1.42	1.52
19	Z	644	ALA	N-CA	-8.76	1.35	1.46
20	N	107	HIS	CA-C	-8.76	1.41	1.52
20	N	575	ASP	C-N	8.76	1.44	1.34
16	V	206	ASN	N-CA	-8.75	1.35	1.45
20	N	248	ILE	CA-C	-8.74	1.41	1.52
31	M	49	ARG	NE-CZ	8.71	1.42	1.33
18	Y	65	TYR	CA-C	-8.71	1.40	1.52
31	M	368	ILE	CA-C	8.71	1.63	1.52
14	7	88	ARG	CD-NE	8.71	1.58	1.46
32	J	88	LYS	N-CA	-8.70	1.36	1.46
24	R	195	LYS	CA-C	-8.69	1.41	1.52
21	S	74	HIS	CG-CD2	8.68	1.45	1.35
22	P	227	TYR	CA-CB	8.67	1.66	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	W	10	VAL	CA-C	-8.66	1.42	1.52
31	M	241	ARG	NE-CZ	8.66	1.42	1.33
10	3	105	THR	N-CA	-8.63	1.35	1.46
10	3	193	ASP	N-CA	-8.63	1.35	1.45
21	S	249	LEU	CA-C	-8.63	1.41	1.52
28	I	343	ARG	NE-CZ	8.59	1.42	1.33
30	L	179	ILE	N-CA	-8.59	1.38	1.46
15	W	88	THR	N-CA	-8.59	1.35	1.46
10	3	198	ARG	CD-NE	8.58	1.58	1.46
4	D	88	ILE	CA-C	-8.57	1.42	1.52
19	Z	584	SER	CA-C	-8.57	1.42	1.52
31	M	49	ARG	CD-NE	8.57	1.58	1.46
1	A	95	ARG	NE-CZ	8.56	1.42	1.33
19	Z	337	LEU	N-CA	-8.56	1.35	1.46
27	H	208	PRO	CA-C	8.55	1.60	1.52
16	V	44	HIS	CA-C	-8.54	1.42	1.52
14	7	136	LEU	CA-C	-8.54	1.41	1.52
27	H	190	VAL	N-CA	-8.54	1.36	1.46
19	Z	716	ASP	CA-C	-8.53	1.45	1.53
12	5	239	ARG	NE-CZ	8.52	1.42	1.33
12	5	117	LEU	CA-C	-8.49	1.41	1.52
21	S	338	ILE	N-CA	-8.49	1.39	1.46
19	Z	505	MET	N-CA	-8.48	1.34	1.46
25	U	12	HIS	ND1-CE1	8.48	1.41	1.32
27	H	83	ASP	CA-C	-8.47	1.41	1.52
32	J	90	HIS	N-CA	-8.47	1.39	1.46
21	S	408	LEU	C-N	8.44	1.45	1.33
5	E	143	PHE	CA-CB	8.42	1.63	1.53
27	H	89	SER	CA-C	8.42	1.64	1.53
23	Q	87	ARG	CD-NE	8.41	1.58	1.46
3	C	145	PHE	CA-C	-8.39	1.42	1.52
12	5	78	ARG	CD-NE	8.39	1.57	1.46
24	R	229	ILE	CA-C	8.39	1.63	1.52
28	I	363	ARG	NE-CZ	8.39	1.42	1.33
29	K	351	LYS	C-N	8.38	1.44	1.33
24	R	176	ARG	CD-NE	8.38	1.57	1.46
20	N	423	MET	C-N	8.36	1.44	1.33
2	B	76	TYR	CA-C	-8.36	1.42	1.52
8	1	147	VAL	CA-C	-8.35	1.44	1.52
25	U	96	HIS	CE1-NE2	8.31	1.40	1.32
28	I	312	LEU	CA-C	-8.31	1.42	1.52
8	1	219	ARG	NE-CZ	8.31	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	H	412	ALA	N-CA	-8.30	1.36	1.46
28	I	108	SER	CA-CB	8.30	1.65	1.53
21	S	398	VAL	CA-CB	-8.29	1.44	1.54
26	O	151	VAL	N-CA	-8.28	1.36	1.46
14	7	215	ARG	CD-NE	8.27	1.57	1.46
24	R	324	GLY	CA-C	-8.27	1.40	1.51
27	H	153	LEU	C-N	8.26	1.43	1.33
8	1	138	PRO	N-CA	-8.24	1.37	1.46
9	2	65	GLU	CA-C	-8.24	1.42	1.52
30	L	17	ASP	C-N	8.24	1.44	1.34
28	I	75	GLU	N-CA	-8.24	1.36	1.46
31	M	437	ASN	CA-C	-8.24	1.42	1.52
24	R	336	ARG	CD-NE	8.23	1.57	1.46
23	Q	91	SER	CA-C	-8.23	1.42	1.52
14	7	120	LEU	C-N	8.22	1.44	1.33
4	D	152	GLN	CA-C	-8.22	1.42	1.52
28	I	289	ALA	C-N	8.22	1.44	1.33
30	L	53	GLN	N-CA	-8.21	1.36	1.46
15	W	60	VAL	CA-C	-8.20	1.44	1.53
16	V	237	HIS	CE1-NE2	8.20	1.40	1.32
19	Z	742	ALA	CA-C	-8.19	1.42	1.52
25	U	25	ARG	NE-CZ	8.18	1.42	1.33
11	4	6	GLY	N-CA	-8.18	1.36	1.45
21	S	197	ARG	CA-CB	8.18	1.66	1.53
2	B	227	ARG	C-N	8.17	1.44	1.33
19	Z	406	GLY	N-CA	-8.17	1.35	1.45
26	O	69	HIS	ND1-CE1	8.17	1.40	1.32
14	7	125	HIS	ND1-CE1	8.16	1.40	1.32
6	F	44	ALA	N-CA	-8.16	1.35	1.46
25	U	241	SER	N-CA	-8.15	1.36	1.46
10	3	23	ALA	CA-C	-8.12	1.43	1.52
6	F	136	GLY	N-CA	-8.11	1.37	1.45
20	N	338	HIS	CA-C	-8.10	1.42	1.52
25	U	25	ARG	CD-NE	8.10	1.57	1.46
28	I	253	SER	CA-C	-8.10	1.41	1.52
19	Z	526	ALA	CA-C	-8.09	1.42	1.52
21	S	335	LEU	C-N	8.09	1.45	1.33
1	A	172	GLN	C-N	8.08	1.45	1.33
23	Q	421	LEU	CA-C	-8.08	1.42	1.52
8	1	35	THR	C-N	8.08	1.41	1.33
22	P	184	GLU	C-N	8.08	1.44	1.33
23	Q	387	ILE	CA-C	-8.08	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	60	ARG	NE-CZ	8.07	1.42	1.33
16	V	93	ALA	CA-C	-8.07	1.42	1.52
24	R	125	ARG	NE-CZ	8.07	1.42	1.33
1	A	99	ALA	CA-C	-8.05	1.42	1.52
8	1	208	ARG	N-CA	-8.03	1.36	1.46
26	O	321	ARG	NE-CZ	8.02	1.41	1.33
15	W	79	GLN	CA-CB	8.02	1.62	1.53
9	2	235	PRO	CA-CB	8.01	1.65	1.53
20	N	474	ARG	NE-CZ	8.01	1.41	1.33
31	M	280	GLU	C-N	8.01	1.44	1.34
10	3	73	LEU	CA-CB	8.00	1.65	1.53
4	D	221	GLN	CA-CB	7.99	1.65	1.53
3	C	231	LYS	N-CA	-7.99	1.36	1.46
23	Q	142	ARG	CD-NE	7.99	1.57	1.46
18	Y	61	GLU	C-N	7.99	1.44	1.33
15	W	111	ALA	CA-C	-7.97	1.42	1.52
11	4	163	CYS	C-N	7.96	1.44	1.33
3	C	12	PHE	CA-C	-7.96	1.42	1.52
13	6	127	ARG	NE-CZ	7.95	1.41	1.33
29	K	297	ASP	N-CA	-7.94	1.36	1.46
19	Z	703	ARG	NE-CZ	7.94	1.41	1.33
19	Z	433	LEU	CA-CB	7.93	1.65	1.53
29	K	40	LEU	CA-C	-7.93	1.42	1.52
20	N	345	ASN	CA-CB	7.92	1.66	1.53
25	U	143	GLU	CA-C	-7.92	1.42	1.52
11	4	82	ASN	CA-C	-7.92	1.42	1.52
23	Q	419	LYS	N-CA	-7.90	1.36	1.46
5	E	220	VAL	CA-C	-7.89	1.42	1.52
29	K	273	LYS	C-N	7.88	1.43	1.33
24	R	161	THR	CA-C	-7.88	1.42	1.52
2	B	173	PHE	CA-C	7.88	1.62	1.52
24	R	314	LEU	N-CA	-7.87	1.35	1.45
5	E	129	ASP	CA-C	-7.86	1.45	1.53
15	W	69	GLY	CA-C	-7.86	1.43	1.52
13	6	232	GLU	CA-C	-7.85	1.42	1.52
29	K	410	ASP	C-N	7.85	1.44	1.33
32	J	290	LYS	CA-C	-7.85	1.43	1.52
13	6	53	ASP	C-N	7.84	1.43	1.33
19	Z	202	HIS	CE1-NE2	-7.84	1.24	1.32
23	Q	87	ARG	C-N	7.84	1.43	1.33
15	W	36	VAL	C-N	7.84	1.44	1.33
1	A	132	ARG	CA-C	-7.83	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	V	175	ARG	NE-CZ	7.83	1.41	1.33
32	J	297	ARG	NE-CZ	7.82	1.41	1.33
26	O	360	VAL	C-O	-7.80	1.15	1.24
9	2	73	ASN	N-CA	-7.80	1.36	1.46
7	G	216	TRP	CA-C	-7.80	1.43	1.52
19	Z	807	ARG	CZ-NH2	7.79	1.43	1.33
30	L	160	ARG	CA-C	-7.79	1.42	1.52
9	2	167	TYR	N-CA	-7.78	1.39	1.46
17	T	109	SER	CA-CB	7.78	1.63	1.53
3	C	245	ALA	CA-CB	7.78	1.65	1.53
11	4	85	ARG	CD-NE	7.77	1.57	1.46
31	M	399	CYS	C-N	7.77	1.44	1.33
3	C	187	LYS	CA-C	-7.77	1.43	1.52
16	V	87	VAL	C-N	7.77	1.43	1.33
6	F	69	HIS	CE1-NE2	-7.77	1.24	1.32
26	O	94	LEU	C-N	7.77	1.43	1.33
14	7	49	MET	CA-C	-7.76	1.42	1.52
24	R	302	HIS	CD2-NE2	7.75	1.46	1.37
17	T	259	TYR	C-N	7.74	1.44	1.33
21	S	466	ARG	NE-CZ	7.74	1.41	1.33
21	S	473	HIS	CE1-NE2	-7.74	1.24	1.32
32	J	339	THR	CA-C	-7.74	1.43	1.52
21	S	114	HIS	ND1-CE1	7.73	1.40	1.32
27	H	247	GLN	CA-C	-7.73	1.43	1.52
29	K	170	MET	CA-C	-7.73	1.45	1.53
17	T	265	ILE	N-CA	-7.73	1.37	1.46
1	A	24	GLN	CA-C	-7.72	1.42	1.52
26	O	271	LYS	CA-C	-7.72	1.42	1.52
10	3	106	GLU	N-CA	-7.72	1.39	1.46
3	C	143	TYR	CA-C	-7.72	1.42	1.52
22	P	275	ILE	C-N	7.71	1.44	1.34
22	P	309	PHE	C-N	7.71	1.44	1.33
28	I	324	ASP	CA-CB	7.71	1.64	1.53
12	5	149	TYR	C-N	7.70	1.43	1.33
23	Q	2	ALA	CA-C	7.70	1.59	1.52
31	M	347	ARG	CD-NE	7.70	1.57	1.46
9	2	250	GLY	CA-C	-7.70	1.41	1.51
29	K	398	ASP	CA-CB	7.69	1.65	1.53
1	A	238	HIS	C-N	7.69	1.44	1.33
23	Q	236	PHE	CA-CB	7.68	1.65	1.53
27	H	432	TYR	CA-CB	7.67	1.65	1.53
16	V	161	ARG	C-N	7.67	1.44	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	T	347	ARG	CD-NE	7.66	1.56	1.46
26	O	224	SER	CA-C	7.66	1.62	1.52
27	H	369	ARG	NE-CZ	7.66	1.41	1.33
22	P	252	ASP	N-CA	7.64	1.55	1.46
22	P	288	HIS	N-CA	-7.64	1.36	1.46
26	O	2	LYS	CA-C	-7.64	1.44	1.53
16	V	51	MET	N-CA	-7.64	1.36	1.46
16	V	271	ALA	N-CA	-7.64	1.37	1.46
19	Z	695	ALA	N-CA	-7.63	1.37	1.46
31	M	65	VAL	CA-C	-7.63	1.43	1.52
25	U	61	ASP	CA-C	-7.62	1.43	1.52
16	V	222	LYS	CA-C	-7.62	1.42	1.52
26	O	343	LEU	N-CA	-7.62	1.37	1.46
26	O	164	GLN	C-N	7.62	1.43	1.33
16	V	104	ARG	CD-NE	7.62	1.56	1.46
23	Q	281	GLY	CA-C	-7.62	1.41	1.51
32	J	315	ILE	CA-C	-7.62	1.43	1.52
5	E	172	SER	CA-C	-7.61	1.43	1.52
2	B	30	ALA	CA-CB	7.61	1.65	1.53
19	Z	765	ALA	CA-C	-7.61	1.43	1.52
19	Z	464	ALA	CA-C	-7.61	1.43	1.52
31	M	294	ILE	C-N	7.60	1.42	1.32
24	R	293	ARG	CZ-NH1	7.59	1.43	1.32
30	L	27	ARG	NE-CZ	7.59	1.41	1.33
19	Z	879	ARG	N-CA	-7.59	1.37	1.46
22	P	246	HIS	C-N	7.58	1.44	1.33
28	I	362	LYS	N-CA	-7.58	1.37	1.46
19	Z	160	ARG	CD-NE	7.58	1.56	1.46
8	1	74	ILE	CA-C	-7.57	1.42	1.52
20	N	228	ALA	CA-C	-7.57	1.43	1.52
6	F	157	ARG	NE-CZ	7.57	1.41	1.33
23	Q	79	SER	CA-C	7.57	1.62	1.52
22	P	276	LEU	C-N	7.56	1.44	1.33
3	C	44	LEU	CA-C	-7.56	1.43	1.52
30	L	269	ARG	CD-NE	7.55	1.56	1.46
17	T	170	TYR	CA-C	-7.54	1.43	1.52
6	F	226	ASP	N-CA	-7.53	1.39	1.46
31	M	303	LYS	C-N	7.53	1.44	1.33
21	S	304	THR	C-N	7.52	1.44	1.33
22	P	210	ASN	C-N	7.52	1.44	1.33
28	I	322	ARG	CZ-NH2	7.52	1.43	1.33
29	K	226	ALA	CA-C	-7.51	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	J	240	GLU	C-N	7.51	1.41	1.33
22	P	273	TYR	CA-C	-7.50	1.43	1.52
27	H	333	ARG	CZ-NH1	7.50	1.43	1.32
12	5	135	VAL	CA-CB	-7.49	1.45	1.54
6	F	135	ALA	CA-C	-7.49	1.43	1.52
31	M	119	GLN	CA-C	-7.49	1.45	1.53
10	3	60	VAL	CA-C	-7.48	1.43	1.52
2	B	65	VAL	CA-CB	7.48	1.63	1.53
16	V	126	ASP	C-N	7.46	1.43	1.33
28	I	176	VAL	CA-C	-7.46	1.43	1.52
28	I	410	ARG	CD-NE	7.46	1.56	1.46
22	P	317	TRP	CA-C	-7.45	1.43	1.52
31	M	305	GLY	C-N	7.45	1.44	1.33
1	A	88	ARG	NE-CZ	7.44	1.41	1.33
24	R	297	ARG	CD-NE	7.44	1.56	1.46
20	N	600	ARG	CZ-NH1	7.43	1.43	1.32
12	5	208	VAL	N-CA	-7.43	1.37	1.46
29	K	376	ASN	C-N	7.42	1.44	1.33
31	M	164	LEU	CA-C	-7.42	1.43	1.52
1	A	41	ALA	CA-C	-7.42	1.43	1.52
28	I	373	THR	N-CA	-7.41	1.36	1.46
20	N	57	ARG	NE-CZ	7.41	1.41	1.33
6	F	209	ASN	N-CA	-7.41	1.37	1.46
19	Z	470	VAL	C-N	7.41	1.43	1.34
19	Z	552	ASP	CA-C	-7.41	1.43	1.52
7	G	67	LEU	CA-CB	7.41	1.63	1.53
10	3	73	LEU	CA-C	-7.40	1.43	1.52
6	F	19	ILE	CA-CB	-7.40	1.45	1.53
11	4	67	TYR	CA-C	-7.40	1.43	1.52
22	P	387	ASP	CA-CB	7.40	1.65	1.53
19	Z	350	LYS	N-CA	-7.39	1.37	1.46
23	Q	254	MET	CA-C	-7.39	1.43	1.52
20	N	7	GLY	CA-C	-7.39	1.44	1.52
5	E	36	THR	CA-C	-7.39	1.43	1.52
4	D	26	VAL	CA-CB	-7.38	1.45	1.54
19	Z	882	LEU	CA-C	-7.38	1.43	1.53
16	V	68	ARG	NE-CZ	7.38	1.41	1.33
9	2	159	HIS	ND1-CE1	7.38	1.40	1.32
9	2	234	VAL	CA-C	-7.38	1.45	1.52
32	J	164	VAL	CA-C	-7.38	1.44	1.52
20	N	882	ALA	CA-C	-7.37	1.43	1.52
27	H	358	HIS	ND1-CE1	7.37	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	81	THR	CA-C	-7.37	1.43	1.52
20	N	742	HIS	ND1-CE1	7.37	1.40	1.32
19	Z	670	MET	N-CA	-7.36	1.37	1.46
27	H	213	LEU	CA-C	-7.36	1.44	1.52
19	Z	233	LEU	C-N	7.35	1.44	1.33
16	V	185	ASN	C-N	7.35	1.42	1.33
10	3	167	ILE	C-N	7.34	1.43	1.33
18	Y	57	ARG	CZ-NH1	7.34	1.43	1.32
19	Z	56	LEU	CA-CB	7.34	1.65	1.53
19	Z	865	PHE	N-CA	-7.34	1.39	1.46
30	L	315	ILE	CA-C	-7.34	1.45	1.53
19	Z	149	GLU	CA-C	-7.33	1.43	1.52
27	H	287	ASP	C-N	7.33	1.41	1.33
29	K	396	ALA	N-CA	7.33	1.55	1.46
28	I	371	ARG	C-O	-7.33	1.15	1.24
28	I	333	ARG	NE-CZ	7.32	1.41	1.33
20	N	816	PRO	CA-C	-7.32	1.44	1.53
23	Q	206	LEU	CA-C	-7.32	1.43	1.52
26	O	239	ALA	CA-C	-7.32	1.42	1.52
2	B	11	THR	N-CA	-7.32	1.37	1.46
9	2	96	ASP	CA-C	-7.32	1.43	1.52
6	F	54	SER	CA-C	-7.31	1.44	1.52
20	N	944	PRO	CA-C	-7.31	1.45	1.52
17	T	297	SER	CA-C	-7.31	1.42	1.52
6	F	59	HIS	ND1-CE1	7.30	1.39	1.32
7	G	226	GLU	CA-C	-7.30	1.43	1.52
5	E	40	ILE	CA-C	-7.29	1.43	1.52
1	A	228	ARG	NE-CZ	7.29	1.41	1.33
30	L	230	ARG	NE-CZ	7.29	1.41	1.33
21	S	286	TYR	CA-C	-7.29	1.43	1.52
20	N	462	LEU	C-N	7.28	1.43	1.33
10	3	126	LEU	CA-C	-7.28	1.43	1.52
29	K	135	HIS	CA-C	-7.28	1.43	1.53
4	D	76	VAL	N-CA	-7.28	1.37	1.46
24	R	367	GLN	CA-C	-7.28	1.43	1.52
11	4	161	ARG	CD-NE	7.27	1.56	1.46
20	N	819	VAL	C-N	-7.27	1.24	1.33
20	N	171	ASN	CA-C	-7.27	1.42	1.52
15	W	19	GLY	C-N	7.27	1.43	1.33
19	Z	120	CYS	CA-C	-7.26	1.43	1.52
19	Z	618	GLU	CA-C	-7.25	1.43	1.52
21	S	397	ASN	CA-CB	7.25	1.64	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	U	50	VAL	N-CA	-7.25	1.38	1.46
26	O	3	ASP	C-N	7.25	1.41	1.33
5	E	151	PRO	CA-C	-7.25	1.44	1.52
1	A	71	LYS	CA-C	-7.25	1.43	1.53
9	2	257	GLU	CA-CB	7.25	1.65	1.53
1	A	135	GLY	C-N	7.25	1.43	1.33
27	H	51	ASP	C-N	7.24	1.43	1.33
1	A	240	VAL	CA-CB	-7.24	1.45	1.54
32	J	296	ASN	CA-C	-7.24	1.44	1.53
30	L	369	ILE	CA-CB	-7.24	1.45	1.54
25	U	88	ARG	NE-CZ	7.24	1.41	1.33
22	P	241	LEU	CA-CB	7.23	1.64	1.53
20	N	899	ARG	CD-NE	7.23	1.56	1.46
30	L	45	GLU	CA-CB	7.23	1.64	1.53
9	2	212	SER	C-N	7.22	1.40	1.33
21	S	403	VAL	CA-CB	-7.22	1.45	1.54
21	S	96	MET	CA-C	-7.22	1.43	1.52
5	E	146	VAL	C-N	7.22	1.39	1.33
2	B	148	GLN	C-N	7.21	1.43	1.33
19	Z	558	LEU	CA-C	7.21	1.60	1.52
19	Z	527	VAL	CA-CB	7.21	1.61	1.54
5	E	185	TYR	C-N	7.20	1.42	1.33
20	N	715	LYS	CA-CB	7.20	1.64	1.53
7	G	41	ARG	CD-NE	7.20	1.56	1.46
19	Z	301	HIS	ND1-CE1	7.20	1.39	1.32
24	R	169	GLU	N-CA	-7.20	1.37	1.46
24	R	379	ARG	CD-NE	7.20	1.56	1.46
23	Q	122	ARG	CD-NE	7.20	1.56	1.46
29	K	378	ILE	CA-CB	-7.20	1.45	1.54
6	F	222	THR	CA-C	-7.19	1.43	1.52
19	Z	59	LEU	N-CA	-7.19	1.37	1.46
14	7	181	LEU	N-CA	-7.18	1.38	1.46
20	N	600	ARG	NE-CZ	7.18	1.41	1.33
20	N	740	GLY	C-N	7.18	1.40	1.33
4	D	37	GLY	CA-C	-7.18	1.43	1.51
30	L	169	ASN	CA-CB	7.18	1.64	1.53
26	O	106	SER	N-CA	7.17	1.55	1.46
29	K	94	GLU	C-N	7.16	1.43	1.33
26	O	309	LEU	N-CA	-7.16	1.37	1.46
17	T	145	ILE	CA-C	-7.16	1.44	1.52
32	J	43	ARG	C-O	-7.16	1.15	1.24
7	G	119	TYR	C-N	7.15	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	P	219	THR	CA-C	-7.15	1.42	1.52
24	R	304	TYR	C-N	7.15	1.43	1.33
30	L	104	SER	CA-CB	7.15	1.64	1.53
26	O	87	MET	CA-C	-7.15	1.43	1.52
28	I	72	LEU	CA-C	-7.15	1.43	1.52
2	B	110	LEU	C-N	7.14	1.43	1.33
28	I	268	ARG	CD-NE	7.14	1.56	1.46
9	2	190	GLU	C-N	7.14	1.42	1.33
21	S	45	SER	CA-C	-7.14	1.43	1.52
22	P	129	ARG	CZ-NH2	7.13	1.42	1.33
19	Z	28	SER	C-N	7.13	1.43	1.33
22	P	4	GLY	C-N	7.12	1.42	1.33
18	Y	53	SER	CA-C	7.12	1.61	1.52
23	Q	190	LEU	CA-C	7.12	1.61	1.52
26	O	44	PHE	CA-CB	7.12	1.64	1.53
30	L	91	PRO	CA-CB	-7.11	1.44	1.53
3	C	43	VAL	CA-C	-7.11	1.44	1.52
24	R	59	LYS	C-N	-7.11	1.23	1.33
27	H	179	GLY	CA-C	-7.11	1.41	1.51
28	I	207	HIS	CB-CG	7.11	1.60	1.50
19	Z	305	LEU	CA-C	-7.10	1.43	1.52
12	5	216	ARG	NE-CZ	7.09	1.40	1.33
9	2	245	TYR	CA-CB	7.09	1.64	1.53
19	Z	161	HIS	ND1-CE1	7.09	1.39	1.32
25	U	72	HIS	ND1-CE1	7.09	1.39	1.32
26	O	34	TRP	C-N	7.08	1.42	1.33
13	6	28	ARG	NE-CZ	7.08	1.40	1.33
3	C	114	LEU	CA-C	-7.08	1.43	1.52
23	Q	385	LEU	CA-C	-7.07	1.44	1.52
21	S	492	PHE	N-CA	-7.07	1.40	1.46
28	I	349	ARG	CZ-NH2	7.07	1.42	1.33
17	T	162	LYS	CA-C	-7.07	1.44	1.53
16	V	126	ASP	N-CA	-7.06	1.37	1.46
23	Q	25	ASP	CA-C	-7.06	1.43	1.52
29	K	258	ALA	CA-CB	7.06	1.63	1.53
31	M	34	GLU	CA-C	-7.06	1.43	1.52
1	A	185	LYS	C-N	7.06	1.42	1.33
3	C	161	ALA	CA-C	-7.06	1.44	1.52
20	N	647	HIS	ND1-CE1	7.05	1.39	1.32
24	R	139	ASP	C-N	7.05	1.42	1.33
23	Q	392	PRO	N-CA	-7.05	1.42	1.47
23	Q	217	ILE	CA-CB	-7.04	1.46	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	K	95	ALA	CA-CB	7.04	1.63	1.53
30	L	123	ARG	NE-CZ	7.04	1.40	1.33
8	1	50	ASP	CA-CB	7.04	1.65	1.53
19	Z	365	VAL	C-N	7.04	1.42	1.33
30	L	45	GLU	CA-C	-7.03	1.43	1.52
6	F	126	ARG	CZ-NH1	7.03	1.42	1.32
20	N	55	ARG	NE-CZ	7.03	1.40	1.33
12	5	86	ALA	CA-C	-7.03	1.43	1.52
26	O	247	ARG	NE-CZ	7.03	1.40	1.33
6	F	156	CYS	N-CA	-7.03	1.37	1.45
8	1	80	GLY	N-CA	7.03	1.51	1.45
8	1	187	GLN	CA-CB	7.03	1.64	1.53
15	W	95	LEU	CA-C	-7.03	1.43	1.52
21	S	322	GLN	C-N	7.02	1.43	1.33
20	N	403	THR	N-CA	7.02	1.54	1.46
23	Q	116	TRP	C-O	-7.01	1.16	1.24
4	D	47	LYS	N-CA	-7.01	1.37	1.46
20	N	714	SER	N-CA	-7.00	1.37	1.46
19	Z	299	GLY	C-N	7.00	1.43	1.33
22	P	257	GLN	CA-C	-7.00	1.44	1.52
13	6	159	ARG	CD-NE	7.00	1.56	1.46
25	U	211	TYR	N-CA	-7.00	1.37	1.46
32	J	134	LEU	C-N	7.00	1.42	1.33
22	P	59	ASP	N-CA	-7.00	1.37	1.46
3	C	218	ARG	CA-C	-6.99	1.44	1.52
21	S	290	ARG	CD-NE	6.99	1.56	1.46
25	U	153	LYS	CA-C	-6.98	1.44	1.52
8	1	122	ARG	NE-CZ	6.98	1.40	1.33
11	4	6	GLY	CA-C	-6.98	1.45	1.51
23	Q	420	LYS	N-CA	-6.98	1.38	1.46
23	Q	406	ASN	CA-CB	6.98	1.64	1.53
28	I	423	LYS	N-CA	-6.97	1.38	1.46
31	M	374	ARG	NE-CZ	6.97	1.40	1.33
15	W	164	ASP	CA-C	6.97	1.61	1.53
30	L	284	LEU	N-CA	-6.97	1.36	1.45
20	N	876	GLN	CA-CB	6.96	1.64	1.53
32	J	251	ILE	CA-C	-6.96	1.42	1.52
1	A	6	SER	C-N	6.96	1.44	1.33
7	G	94	GLU	N-CA	-6.96	1.38	1.46
20	N	923	GLU	CA-CB	6.96	1.62	1.53
20	N	537	GLN	N-CA	-6.96	1.37	1.46
31	M	106	ASP	N-CA	-6.96	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	P	280	ASP	CA-C	-6.96	1.44	1.52
19	Z	117	GLU	CA-CB	6.95	1.64	1.53
30	L	111	ARG	NE-CZ	6.95	1.40	1.33
32	J	395	SER	N-CA	-6.95	1.38	1.46
3	C	148	TYR	CA-C	-6.95	1.44	1.52
12	5	92	LYS	N-CA	-6.95	1.37	1.46
16	V	237	HIS	ND1-CE1	6.95	1.39	1.32
31	M	218	LEU	CA-CB	6.95	1.64	1.53
16	V	108	VAL	CA-CB	-6.95	1.45	1.53
19	Z	588	ARG	CD-NE	6.95	1.55	1.46
29	K	395	LEU	CA-C	-6.95	1.43	1.53
8	1	52	ARG	CD-NE	6.94	1.55	1.46
30	L	385	VAL	CA-CB	-6.94	1.46	1.54
6	F	143	HIS	C-N	6.94	1.42	1.33
11	4	47	VAL	N-CA	-6.94	1.36	1.46
11	4	107	TYR	CA-C	-6.94	1.44	1.52
30	L	114	LEU	CA-C	-6.94	1.44	1.52
28	I	176	VAL	CA-CB	-6.94	1.45	1.53
20	N	628	ARG	NE-CZ	6.93	1.40	1.33
4	D	38	ARG	CA-C	-6.93	1.43	1.52
27	H	145	ASN	CA-C	-6.93	1.44	1.53
20	N	391	GLU	CA-C	-6.93	1.43	1.52
27	H	201	PHE	CA-C	-6.92	1.43	1.52
27	H	238	ILE	CA-C	-6.92	1.45	1.52
28	I	184	TYR	CA-C	-6.91	1.44	1.52
24	R	119	GLY	C-N	6.91	1.43	1.33
21	S	224	ARG	CD-NE	6.91	1.55	1.46
30	L	330	HIS	ND1-CE1	6.91	1.39	1.32
5	E	63	SER	C-N	6.91	1.41	1.33
16	V	31	VAL	N-CA	-6.90	1.37	1.46
16	V	211	GLU	C-N	6.90	1.43	1.33
25	U	22	HIS	ND1-CE1	6.90	1.39	1.32
1	A	94	ALA	CA-CB	6.90	1.64	1.53
27	H	43	ARG	N-CA	-6.90	1.38	1.46
27	H	386	ARG	CZ-NH1	6.90	1.42	1.32
27	H	319	MET	CA-C	-6.90	1.44	1.52
10	3	155	GLU	CA-C	-6.90	1.44	1.52
8	1	38	ALA	N-CA	-6.89	1.37	1.45
28	I	272	ARG	NE-CZ	6.89	1.40	1.33
24	R	74	LYS	CA-CB	6.89	1.64	1.53
6	F	85	CYS	CA-CB	6.89	1.64	1.53
15	W	79	GLN	C-O	-6.89	1.19	1.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	4	149	PRO	N-CA	-6.88	1.39	1.47
23	Q	240	ASP	CA-C	-6.88	1.43	1.52
26	O	330	ARG	CZ-NH1	6.88	1.42	1.32
27	H	344	SER	N-CA	-6.88	1.37	1.46
30	L	74	VAL	N-CA	-6.88	1.38	1.46
30	L	268	GLN	C-N	6.87	1.42	1.33
31	M	330	LYS	CA-C	-6.87	1.44	1.52
6	F	4	ASN	N-CA	6.87	1.59	1.46
13	6	115	ILE	CA-CB	6.87	1.63	1.54
19	Z	342	PRO	C-N	6.87	1.42	1.33
8	1	169	TYR	N-CA	-6.87	1.38	1.46
20	N	571	CYS	C-N	6.87	1.43	1.33
24	R	233	ARG	CZ-NH1	6.86	1.42	1.32
32	J	200	ALA	C-N	6.86	1.43	1.33
22	P	138	VAL	N-CA	-6.86	1.37	1.46
1	A	11	ARG	NE-CZ	6.86	1.40	1.33
29	K	202	VAL	N-CA	-6.85	1.38	1.46
13	6	64	THR	CA-CB	6.85	1.62	1.53
23	Q	148	HIS	ND1-CE1	6.85	1.39	1.32
30	L	156	ILE	C-N	6.85	1.43	1.33
19	Z	9	THR	N-CA	6.85	1.53	1.46
19	Z	204	ALA	N-CA	-6.85	1.37	1.46
29	K	248	ARG	CD-NE	6.85	1.55	1.46
16	V	281	LYS	CA-CB	6.84	1.64	1.53
20	N	490	ARG	NE-CZ	6.84	1.40	1.33
20	N	171	ASN	N-CA	6.84	1.55	1.46
19	Z	278	VAL	CA-CB	-6.84	1.46	1.54
9	2	194	ALA	CA-C	-6.84	1.44	1.52
19	Z	156	HIS	CA-C	-6.84	1.43	1.52
15	W	26	LEU	CA-C	-6.84	1.44	1.52
27	H	159	PRO	CA-C	6.84	1.62	1.52
6	F	238	GLU	CA-C	-6.83	1.44	1.52
12	5	237	HIS	CA-C	-6.83	1.44	1.52
19	Z	659	LEU	CA-CB	6.83	1.64	1.53
16	V	25	VAL	CA-C	-6.82	1.45	1.52
10	3	66	ARG	NE-CZ	6.82	1.40	1.33
12	5	78	ARG	N-CA	-6.82	1.37	1.45
16	V	115	HIS	ND1-CE1	6.82	1.39	1.32
32	J	213	ARG	N-CA	-6.82	1.37	1.46
19	Z	385	PHE	CA-C	-6.81	1.44	1.52
22	P	27	ARG	NE-CZ	6.81	1.40	1.33
9	2	116	LEU	CA-C	-6.81	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	4	171	PHE	C-N	6.81	1.42	1.33
23	Q	218	HIS	ND1-CE1	6.81	1.39	1.32
21	S	304	THR	N-CA	-6.81	1.38	1.46
19	Z	731	MET	C-N	6.80	1.42	1.33
32	J	117	ARG	CA-C	-6.80	1.44	1.52
31	M	392	ASP	N-CA	-6.80	1.37	1.46
6	F	190	HIS	ND1-CE1	6.79	1.39	1.32
31	M	340	ILE	N-CA	-6.79	1.38	1.46
15	W	74	LYS	CA-CB	6.79	1.63	1.53
24	R	329	PHE	C-N	6.79	1.42	1.33
17	T	221	LYS	CA-C	-6.79	1.44	1.53
22	P	194	LEU	CA-CB	6.79	1.64	1.53
27	H	176	ASP	C-N	6.78	1.40	1.33
8	1	158	PHE	C-N	6.78	1.43	1.33
23	Q	134	VAL	N-CA	-6.78	1.38	1.46
19	Z	281	ILE	C-N	6.78	1.42	1.33
24	R	86	GLU	N-CA	-6.78	1.38	1.46
19	Z	478	ARG	CD-NE	6.77	1.55	1.46
19	Z	782	HIS	ND1-CE1	6.77	1.39	1.32
26	O	196	ARG	NE-CZ	6.77	1.40	1.33
32	J	258	ARG	CZ-NH2	6.77	1.42	1.33
20	N	499	THR	CA-C	-6.76	1.44	1.52
15	W	125	VAL	N-CA	-6.76	1.38	1.46
32	J	264	GLY	C-N	6.76	1.42	1.34
24	R	13	LYS	C-N	6.76	1.44	1.33
29	K	219	VAL	C-N	6.76	1.42	1.33
20	N	489	ALA	N-CA	-6.76	1.36	1.46
20	N	916	ASP	CA-C	-6.76	1.44	1.52
28	I	426	VAL	CA-CB	6.76	1.62	1.54
6	F	12	VAL	CA-C	-6.76	1.44	1.52
19	Z	266	LEU	CA-C	-6.75	1.43	1.52
32	J	84	LYS	N-CA	-6.75	1.37	1.45
17	T	293	ILE	C-N	6.75	1.43	1.33
7	G	12	ALA	N-CA	-6.75	1.40	1.46
19	Z	177	GLU	N-CA	-6.75	1.38	1.46
25	U	157	HIS	C-N	6.75	1.42	1.33
32	J	293	MET	CA-C	-6.75	1.44	1.52
9	2	243	GLY	C-N	6.75	1.42	1.33
14	7	257	HIS	ND1-CE1	6.74	1.39	1.32
19	Z	187	LEU	N-CA	-6.74	1.38	1.46
10	3	25	ASP	CA-C	-6.74	1.44	1.52
4	D	79	VAL	CA-C	-6.74	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	K	260	ALA	N-CA	-6.74	1.37	1.46
30	L	39	ARG	CA-C	-6.74	1.44	1.52
30	L	175	ARG	CZ-NH1	6.74	1.42	1.32
23	Q	20	ARG	CA-C	-6.73	1.43	1.52
32	J	71	SER	CA-C	-6.73	1.44	1.52
12	5	91	LYS	CA-CB	6.73	1.64	1.53
29	K	114	ARG	C-N	6.73	1.42	1.33
25	U	39	LEU	CA-C	-6.73	1.44	1.52
19	Z	333	LEU	CA-C	-6.72	1.44	1.52
1	A	120	ASP	C-N	6.72	1.42	1.33
8	1	137	ASP	CA-CB	6.72	1.64	1.53
6	F	60	GLN	C-N	6.72	1.42	1.33
19	Z	12	GLN	N-CA	-6.71	1.38	1.46
23	Q	132	ARG	CD-NE	6.71	1.55	1.46
10	3	67	LEU	N-CA	-6.71	1.38	1.46
22	P	195	ALA	CA-C	-6.71	1.44	1.52
20	N	344	ARG	CA-CB	6.71	1.64	1.53
20	N	97	VAL	CA-C	-6.70	1.44	1.52
14	7	157	GLY	C-N	6.70	1.38	1.33
19	Z	502	LEU	C-N	-6.70	1.27	1.34
24	R	244	ALA	C-N	6.70	1.42	1.33
24	R	83	ARG	NE-CZ	6.70	1.40	1.33
26	O	270	ARG	CD-NE	6.70	1.55	1.46
7	G	111	HIS	ND1-CE1	6.69	1.39	1.32
8	1	182	LYS	N-CA	-6.69	1.37	1.46
22	P	301	LYS	N-CA	-6.69	1.38	1.46
30	L	61	LEU	C-N	6.69	1.42	1.33
20	N	258	GLN	CA-CB	6.69	1.63	1.53
3	C	69	ASN	N-CA	-6.69	1.38	1.46
16	V	123	SER	CA-C	-6.69	1.44	1.53
25	U	115	TYR	N-CA	-6.69	1.38	1.46
3	C	226	ARG	CZ-NH2	6.68	1.42	1.33
12	5	75	ALA	CA-C	-6.68	1.44	1.52
19	Z	628	ASP	CA-C	-6.68	1.44	1.52
20	N	325	MET	C-N	6.68	1.42	1.33
1	A	198	ALA	CA-C	-6.68	1.44	1.52
6	F	89	ARG	NE-CZ	6.68	1.40	1.33
14	7	51	THR	CA-C	-6.68	1.48	1.52
32	J	313	ARG	CD-NE	6.68	1.55	1.46
21	S	136	ASP	CA-C	6.68	1.61	1.53
3	C	205	LYS	CA-CB	6.67	1.64	1.53
20	N	686	GLY	C-N	6.67	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	I	285	ASP	CA-C	-6.67	1.44	1.52
16	V	210	ASN	CA-C	-6.67	1.44	1.52
32	J	298	ILE	N-CA	-6.66	1.38	1.46
20	N	413	LYS	C-N	6.66	1.43	1.33
22	P	31	CYS	N-CA	-6.66	1.38	1.46
31	M	297	LYS	CA-CB	6.66	1.61	1.53
8	1	80	GLY	CA-C	-6.66	1.46	1.52
20	N	890	LYS	CA-C	-6.66	1.44	1.52
6	F	237	GLU	C-O	-6.66	1.16	1.23
19	Z	447	ALA	C-N	6.66	1.42	1.33
4	D	213	GLU	CA-C	-6.66	1.44	1.52
14	7	130	ARG	CA-C	-6.66	1.44	1.52
19	Z	257	ARG	NE-CZ	6.66	1.40	1.33
21	S	322	GLN	CA-CB	6.66	1.63	1.53
25	U	170	VAL	CA-C	6.66	1.61	1.52
19	Z	7	ASP	C-N	6.65	1.42	1.33
29	K	113	VAL	CA-C	-6.65	1.45	1.52
21	S	208	TYR	CA-CB	6.65	1.63	1.53
32	J	45	LEU	N-CA	-6.65	1.38	1.46
2	B	208	ILE	N-CA	-6.65	1.38	1.46
4	D	197	VAL	CA-CB	-6.65	1.46	1.54
12	5	255	HIS	C-N	6.65	1.43	1.33
20	N	435	SER	N-CA	-6.64	1.37	1.45
2	B	108	ALA	CA-C	-6.64	1.44	1.52
8	1	152	MET	CA-C	-6.64	1.43	1.52
12	5	254	LEU	N-CA	6.64	1.54	1.46
27	H	375	ARG	NE-CZ	6.64	1.40	1.33
30	L	138	HIS	ND1-CE1	6.64	1.39	1.32
31	M	422	ASP	C-N	6.64	1.42	1.33
10	3	48	ARG	CD-NE	6.64	1.55	1.46
4	D	166	ALA	N-CA	-6.64	1.37	1.46
19	Z	158	TYR	CA-CB	6.64	1.64	1.53
20	N	505	ASP	CA-C	-6.63	1.44	1.52
18	Y	63	HIS	CB-CG	6.63	1.59	1.50
19	Z	681	TYR	CA-CB	6.62	1.63	1.53
11	4	106	GLY	CA-C	-6.62	1.47	1.52
28	I	260	LEU	CA-CB	6.62	1.62	1.53
27	H	347	ASP	CA-CB	6.62	1.63	1.53
11	4	138	LEU	N-CA	6.62	1.54	1.46
20	N	894	MET	CA-C	-6.61	1.44	1.52
26	O	230	ARG	C-N	6.61	1.42	1.33
19	Z	87	THR	CA-C	-6.61	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	O	284	ARG	NE-CZ	6.61	1.40	1.33
22	P	228	ASN	CA-CB	6.60	1.63	1.53
6	F	18	ARG	CD-NE	6.60	1.55	1.46
20	N	45	ILE	C-N	6.60	1.42	1.33
32	J	201	ARG	CA-C	-6.60	1.44	1.52
22	P	266	ALA	CA-C	-6.59	1.44	1.52
22	P	316	ARG	CD-NE	6.59	1.55	1.46
30	L	157	ARG	CD-NE	6.59	1.55	1.46
24	R	205	VAL	N-CA	6.59	1.54	1.46
11	4	189	HIS	N-CA	-6.59	1.37	1.45
24	R	200	LEU	N-CA	-6.59	1.38	1.46
20	N	367	THR	C-N	6.59	1.42	1.33
30	L	178	ILE	C-N	6.59	1.39	1.33
31	M	47	ARG	NE-CZ	6.59	1.40	1.33
25	U	256	GLN	N-CA	-6.59	1.37	1.46
27	H	209	PRO	CA-C	-6.58	1.43	1.52
23	Q	182	ASN	CA-CB	6.58	1.64	1.53
31	M	433	LYS	CA-CB	6.58	1.63	1.53
22	P	112	VAL	C-O	-6.58	1.15	1.24
29	K	385	LEU	CA-C	-6.58	1.43	1.52
13	6	206	PHE	N-CA	-6.58	1.38	1.46
14	7	180	SER	C-N	6.58	1.41	1.33
21	S	61	ARG	CA-C	-6.58	1.44	1.52
31	M	410	ALA	CA-C	-6.58	1.44	1.52
5	E	54	ILE	CA-CB	-6.58	1.46	1.54
16	V	242	GLU	CA-CB	6.58	1.63	1.53
25	U	283	ARG	CZ-NH1	6.58	1.42	1.32
15	W	50	GLY	N-CA	-6.58	1.38	1.44
21	S	356	TYR	CA-C	-6.58	1.44	1.52
6	F	82	ARG	C-N	6.57	1.42	1.33
20	N	93	ASN	C-O	-6.57	1.16	1.24
9	2	219	CYS	C-N	6.57	1.41	1.33
18	Y	52	PHE	CA-C	-6.57	1.44	1.52
20	N	161	ASP	CA-C	-6.57	1.44	1.52
4	D	92	ARG	CD-NE	6.57	1.55	1.46
6	F	239	ARG	NE-CZ	6.57	1.40	1.33
30	L	227	ARG	CA-CB	6.57	1.63	1.53
3	C	39	ALA	N-CA	-6.56	1.37	1.45
25	U	224	HIS	CB-CG	6.56	1.59	1.50
1	A	137	CYS	CA-C	-6.56	1.44	1.52
14	7	131	ALA	C-N	6.56	1.42	1.33
21	S	142	GLN	N-CA	-6.56	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	E	94	VAL	C-N	6.56	1.42	1.33
14	7	232	GLN	N-CA	-6.56	1.38	1.46
26	O	147	GLY	C-N	6.56	1.40	1.33
14	7	61	ASP	CA-CB	6.55	1.65	1.53
24	R	68	ASP	CA-CB	6.55	1.64	1.53
28	I	160	ILE	C-N	6.55	1.40	1.33
11	4	46	CYS	C-N	6.55	1.42	1.33
22	P	98	LYS	N-CA	-6.55	1.38	1.46
24	R	96	GLY	CA-C	6.55	1.59	1.52
27	H	164	MET	C-O	-6.55	1.16	1.24
29	K	291	GLU	N-CA	-6.55	1.38	1.46
31	M	404	VAL	CA-CB	-6.55	1.46	1.54
26	O	32	LYS	N-CA	-6.55	1.37	1.46
31	M	124	CYS	CA-C	-6.55	1.44	1.52
7	G	23	GLN	CA-CB	6.55	1.63	1.53
30	L	386	ARG	NE-CZ	6.55	1.40	1.33
3	C	127	LYS	N-CA	-6.54	1.38	1.45
22	P	218	ASN	N-CA	-6.54	1.38	1.46
28	I	291	GLY	C-N	6.54	1.42	1.33
23	Q	110	CYS	C-N	6.54	1.42	1.33
7	G	85	ALA	CA-C	-6.54	1.44	1.52
14	7	80	PHE	CA-CB	6.54	1.61	1.52
22	P	172	GLU	CA-C	-6.54	1.44	1.52
19	Z	448	CYS	CA-C	-6.53	1.44	1.52
11	4	122	ALA	N-CA	-6.53	1.39	1.46
29	K	262	ILE	CA-C	-6.53	1.44	1.52
20	N	481	LEU	CA-CB	6.53	1.63	1.53
22	P	312	MET	N-CA	-6.53	1.38	1.46
29	K	54	LEU	C-N	6.53	1.42	1.33
4	D	101	ARG	CD-NE	6.52	1.55	1.46
27	H	361	SER	N-CA	-6.52	1.38	1.46
28	I	282	VAL	CA-CB	-6.52	1.46	1.54
23	Q	192	SER	N-CA	-6.52	1.38	1.46
14	7	137	THR	CA-C	-6.52	1.44	1.52
30	L	176	VAL	CA-CB	6.52	1.62	1.54
19	Z	117	GLU	C-N	6.51	1.42	1.34
7	G	72	ARG	CZ-NH2	6.51	1.42	1.33
27	H	171	ASP	CA-CB	6.51	1.61	1.53
5	E	66	LYS	N-CA	-6.51	1.40	1.46
20	N	746	ILE	CA-C	-6.51	1.44	1.52
21	S	237	ARG	NE-CZ	6.51	1.40	1.33
6	F	59	HIS	CA-C	-6.51	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	H	170	PRO	CA-C	-6.51	1.44	1.52
30	L	256	ARG	C-N	6.50	1.41	1.33
14	7	118	GLU	N-CA	-6.50	1.38	1.46
13	6	184	ASN	N-CA	-6.50	1.37	1.46
20	N	841	LYS	CA-CB	6.50	1.63	1.53
19	Z	306	GLU	N-CA	-6.50	1.37	1.46
30	L	354	GLY	C-N	6.50	1.42	1.33
32	J	289	ILE	C-N	6.50	1.42	1.33
11	4	70	ARG	CD-NE	6.49	1.55	1.46
21	S	296	LEU	CA-C	-6.49	1.44	1.52
24	R	188	CYS	C-N	6.49	1.41	1.33
32	J	313	ARG	NE-CZ	6.49	1.40	1.33
27	H	272	ILE	CA-C	-6.49	1.44	1.52
28	I	307	ARG	CZ-NH1	6.49	1.41	1.32
32	J	120	SER	CA-CB	6.49	1.64	1.53
19	Z	301	HIS	N-CA	-6.49	1.38	1.46
22	P	221	LYS	CA-CB	6.49	1.63	1.53
31	M	56	LYS	CA-C	-6.49	1.44	1.52
17	T	148	ARG	C-N	6.48	1.42	1.33
21	S	447	ILE	N-CA	-6.48	1.38	1.46
28	I	272	ARG	CD-NE	6.48	1.55	1.46
27	H	112	ILE	C-O	6.48	1.31	1.24
5	E	227	HIS	ND1-CE1	6.48	1.39	1.32
14	7	219	VAL	C-N	6.48	1.42	1.33
19	Z	504	VAL	C-N	6.48	1.43	1.33
21	S	41	ALA	C-N	6.48	1.41	1.33
22	P	219	THR	C-N	6.47	1.42	1.33
23	Q	214	SER	CA-CB	6.47	1.63	1.53
23	Q	226	LYS	C-O	-6.47	1.16	1.24
26	O	245	VAL	CA-C	6.47	1.60	1.52
31	M	415	ALA	N-CA	-6.47	1.38	1.46
24	R	385	ARG	CD-NE	6.47	1.55	1.46
23	Q	69	LEU	CA-CB	6.47	1.63	1.53
20	N	190	ASN	CA-C	-6.47	1.44	1.52
30	L	305	ARG	CA-C	6.47	1.60	1.52
32	J	211	PHE	CA-CB	6.46	1.62	1.53
21	S	215	GLU	C-N	6.46	1.42	1.33
31	M	192	GLY	C-N	6.46	1.43	1.33
15	W	70	ARG	N-CA	-6.46	1.38	1.46
27	H	183	GLN	N-CA	-6.46	1.38	1.46
3	C	125	GLY	C-N	6.46	1.40	1.33
7	G	215	SER	N-CA	-6.46	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Z	225	ALA	C-O	6.46	1.31	1.24
3	C	241	GLU	CA-C	-6.45	1.44	1.52
20	N	19	LEU	CA-C	-6.45	1.44	1.52
23	Q	395	LYS	N-CA	-6.45	1.38	1.46
24	R	252	SER	N-CA	-6.45	1.39	1.46
7	G	100	ARG	NE-CZ	6.44	1.40	1.33
22	P	116	THR	C-N	6.44	1.41	1.33
28	I	419	PHE	C-N	6.44	1.42	1.33
20	N	363	SER	C-N	6.44	1.41	1.34
21	S	260	TYR	CA-CB	6.44	1.63	1.53
19	Z	59	LEU	C-N	6.44	1.41	1.33
21	S	85	LYS	CA-CB	6.44	1.62	1.53
11	4	32	HIS	CB-CG	-6.44	1.41	1.50
20	N	468	ALA	N-CA	-6.44	1.38	1.46
31	M	365	ARG	C-N	6.44	1.42	1.33
20	N	883	ARG	NE-CZ	6.43	1.40	1.33
22	P	100	ALA	C-O	-6.43	1.16	1.24
4	D	228	PRO	C-N	6.43	1.42	1.33
23	Q	77	LEU	N-CA	6.43	1.54	1.46
30	L	148	GLU	CA-C	6.43	1.61	1.52
5	E	17	PRO	C-N	6.43	1.42	1.33
16	V	289	ASP	C-N	6.43	1.42	1.33
19	Z	357	ARG	NE-CZ	6.43	1.40	1.33
32	J	16	ALA	C-N	6.43	1.42	1.33
20	N	706	VAL	N-CA	-6.42	1.38	1.46
21	S	415	LEU	CA-C	-6.42	1.44	1.52
32	J	372	ARG	NE-CZ	6.42	1.40	1.33
7	G	125	LEU	N-CA	-6.42	1.38	1.46
21	S	398	VAL	C-O	-6.42	1.16	1.24
9	2	152	HIS	CE1-NE2	-6.41	1.26	1.32
19	Z	807	ARG	CD-NE	6.41	1.55	1.46
19	Z	628	ASP	C-N	6.41	1.42	1.33
23	Q	96	PHE	CA-C	-6.41	1.44	1.52
24	R	43	ALA	N-CA	-6.41	1.38	1.46
31	M	111	GLY	CA-C	-6.41	1.44	1.51
1	A	56	VAL	CA-CB	-6.41	1.49	1.55
24	R	360	ASP	CA-C	-6.41	1.45	1.52
20	N	835	ILE	C-N	6.41	1.42	1.33
20	N	469	SER	C-N	6.40	1.41	1.33
32	J	37	ASP	CA-CB	6.40	1.63	1.53
2	B	2	ALA	CA-C	-6.40	1.46	1.53
3	C	138	GLY	N-CA	-6.40	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	G	81	LEU	CA-CB	6.40	1.62	1.53
32	J	256	SER	CA-C	6.40	1.61	1.52
29	K	200	ARG	C-N	6.40	1.37	1.33
26	O	122	LYS	CA-C	-6.40	1.44	1.52
19	Z	465	LEU	N-CA	-6.39	1.38	1.46
20	N	792	ASN	CA-C	-6.39	1.45	1.52
25	U	180	LYS	C-N	6.39	1.38	1.33
19	Z	544	GLU	C-N	6.39	1.42	1.33
26	O	49	CYS	N-CA	-6.39	1.38	1.46
30	L	74	VAL	C-N	6.39	1.42	1.33
5	E	168	ARG	CD-NE	6.39	1.55	1.46
24	R	158	THR	CA-C	-6.39	1.44	1.52
19	Z	874	LEU	C-N	6.39	1.42	1.33
8	1	177	ARG	CZ-NH2	6.38	1.41	1.33
14	7	163	GLU	CA-C	-6.38	1.43	1.52
21	S	404	ARG	NE-CZ	6.38	1.40	1.33
17	T	188	SER	C-N	6.38	1.42	1.34
32	J	44	ARG	N-CA	-6.38	1.38	1.46
11	4	80	ALA	CA-C	-6.37	1.44	1.52
32	J	365	GLU	N-CA	6.37	1.54	1.46
12	5	128	ARG	NE-CZ	6.37	1.40	1.33
28	I	231	GLY	CA-C	-6.37	1.43	1.51
28	I	282	VAL	C-N	6.37	1.42	1.33
8	1	83	ALA	CA-C	-6.36	1.44	1.52
10	3	181	SER	C-N	6.36	1.44	1.33
23	Q	11	ARG	NE-CZ	6.36	1.40	1.33
22	P	409	LEU	N-CA	6.36	1.54	1.46
23	Q	360	ASP	C-N	6.36	1.42	1.33
31	M	51	LEU	C-N	6.36	1.42	1.33
7	G	82	LEU	CA-CB	6.35	1.63	1.53
13	6	201	LEU	CA-CB	6.35	1.63	1.53
3	C	230	GLN	CA-C	-6.34	1.44	1.52
16	V	243	SER	C-N	6.34	1.41	1.33
19	Z	280	ASP	CA-C	-6.34	1.44	1.52
24	R	178	ASN	N-CA	-6.34	1.38	1.46
20	N	90	VAL	CA-C	-6.34	1.44	1.52
27	H	217	PRO	CA-C	-6.34	1.46	1.52
28	I	294	ARG	CD-NE	6.34	1.55	1.46
14	7	64	VAL	CA-C	6.34	1.60	1.52
16	V	238	CYS	CA-CB	6.34	1.63	1.53
28	I	126	SER	N-CA	-6.34	1.38	1.46
29	K	283	ARG	CD-NE	6.34	1.55	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	E	186	HIS	CG-CD2	6.33	1.42	1.35
20	N	267	ASN	C-N	6.33	1.42	1.33
24	R	367	GLN	C-N	6.33	1.42	1.33
16	V	73	PHE	CA-C	-6.33	1.44	1.52
29	K	153	MET	C-N	6.33	1.42	1.33
29	K	310	ALA	CA-C	-6.33	1.45	1.52
30	L	126	PRO	N-CA	6.33	1.54	1.47
32	J	191	PRO	CA-CB	-6.33	1.45	1.54
19	Z	770	HIS	ND1-CE1	6.33	1.38	1.32
17	T	175	LYS	CA-C	-6.33	1.44	1.52
19	Z	153	SER	C-N	6.33	1.42	1.34
20	N	572	ARG	CZ-NH1	6.33	1.41	1.32
23	Q	80	ILE	CA-CB	-6.33	1.47	1.54
24	R	300	ARG	CD-NE	6.33	1.55	1.46
31	M	81	GLU	C-N	6.33	1.42	1.33
15	W	133	LYS	N-CA	-6.33	1.38	1.46
26	O	259	PRO	CA-C	-6.33	1.46	1.52
30	L	136	MET	CA-CB	6.33	1.63	1.53
5	E	20	ARG	NE-CZ	6.32	1.40	1.33
12	5	78	ARG	CZ-NH2	6.32	1.41	1.33
19	Z	215	ASP	CA-CB	6.32	1.63	1.53
1	A	82	GLY	C-N	6.32	1.42	1.33
13	6	81	CYS	C-N	6.32	1.41	1.33
20	N	77	SER	C-N	6.32	1.42	1.33
20	N	137	MET	CA-C	-6.32	1.44	1.52
23	Q	409	LYS	CA-CB	6.32	1.63	1.53
30	L	255	ARG	CZ-NH1	6.32	1.41	1.32
23	Q	41	GLU	C-N	6.31	1.42	1.33
16	V	104	ARG	CA-CB	6.31	1.59	1.53
17	T	109	SER	CA-C	-6.31	1.44	1.52
21	S	191	ILE	N-CA	6.31	1.54	1.46
19	Z	885	GLU	CA-C	-6.31	1.45	1.52
32	J	38	LYS	CA-CB	6.30	1.63	1.53
23	Q	254	MET	CA-CB	6.30	1.63	1.53
4	D	52	LYS	CA-C	-6.30	1.46	1.53
23	Q	414	LEU	CA-CB	6.30	1.63	1.53
8	1	72	ASP	CA-C	-6.30	1.44	1.52
19	Z	137	ARG	CZ-NH1	6.30	1.41	1.32
19	Z	100	ARG	N-CA	-6.29	1.40	1.46
32	J	320	PRO	CA-CB	-6.29	1.44	1.53
20	N	501	LEU	CA-C	-6.29	1.44	1.52
27	H	408	ASP	N-CA	-6.29	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	4	60	ILE	C-N	6.29	1.42	1.33
21	S	272	PHE	CA-C	-6.29	1.44	1.52
21	S	345	ARG	CZ-NH1	6.29	1.41	1.32
23	Q	356	LEU	N-CA	-6.29	1.38	1.45
9	2	163	ASP	C-N	6.28	1.41	1.33
20	N	606	ALA	N-CA	-6.28	1.39	1.46
1	A	82	GLY	CA-C	-6.28	1.44	1.52
17	T	252	GLY	CA-C	-6.28	1.43	1.51
21	S	460	ILE	N-CA	-6.28	1.39	1.46
16	V	200	TYR	CA-C	-6.28	1.46	1.52
25	U	33	LYS	CA-CB	6.28	1.63	1.53
32	J	41	ASN	CA-C	-6.28	1.44	1.52
25	U	81	MET	CA-C	-6.28	1.44	1.52
29	K	54	LEU	CA-C	6.28	1.60	1.52
21	S	285	LEU	CA-C	-6.27	1.44	1.52
29	K	215	LEU	C-N	6.27	1.42	1.33
20	N	25	HIS	CA-CB	6.27	1.63	1.53
20	N	781	LEU	C-N	6.27	1.42	1.33
2	B	179	ASN	CA-C	-6.27	1.45	1.52
3	C	119	GLN	CA-CB	6.26	1.63	1.53
4	D	197	VAL	N-CA	-6.26	1.39	1.46
7	G	51	GLU	CA-C	-6.26	1.44	1.52
20	N	768	GLN	CA-C	-6.26	1.44	1.52
28	I	201	VAL	CA-C	-6.26	1.45	1.52
20	N	372	ALA	C-O	-6.26	1.17	1.24
20	N	387	ARG	CZ-NH1	6.26	1.41	1.32
20	N	594	GLY	CA-C	-6.26	1.44	1.52
29	K	328	ASP	C-N	6.26	1.42	1.33
31	M	190	ASP	CA-CB	6.26	1.63	1.53
32	J	404	LEU	N-CA	-6.26	1.38	1.46
21	S	86	GLU	CA-CB	6.25	1.63	1.53
6	F	197	GLU	C-N	6.25	1.42	1.33
15	W	135	LYS	C-N	6.25	1.42	1.33
19	Z	842	VAL	C-N	6.25	1.41	1.33
28	I	210	TYR	N-CA	-6.25	1.38	1.46
23	Q	314	ARG	CD-NE	6.25	1.55	1.46
19	Z	838	ARG	CD-NE	6.25	1.54	1.46
20	N	23	ALA	CA-CB	6.25	1.63	1.53
20	N	353	LEU	CA-CB	6.25	1.63	1.53
22	P	8	ARG	CD-NE	6.25	1.54	1.46
1	A	1	MET	C-N	6.25	1.41	1.33
31	M	151	GLY	C-N	6.25	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	P	315	MET	CA-C	-6.24	1.44	1.53
24	R	111	LEU	N-CA	-6.24	1.38	1.46
9	2	213	GLY	C-O	-6.24	1.17	1.23
28	I	432	GLU	CA-CB	6.24	1.64	1.53
4	D	239	GLU	CA-CB	6.24	1.63	1.53
10	3	160	PRO	C-O	-6.24	1.15	1.23
22	P	28	LEU	C-N	6.24	1.42	1.34
3	C	79	ILE	CA-C	-6.24	1.45	1.52
5	E	22	PHE	C-O	6.24	1.31	1.24
24	R	152	MET	CA-C	-6.24	1.46	1.53
31	M	357	PHE	N-CA	-6.23	1.40	1.46
4	D	87	ARG	CZ-NH1	6.23	1.41	1.32
19	Z	705	ASN	CA-C	-6.23	1.44	1.52
30	L	157	ARG	NE-CZ	6.23	1.40	1.33
30	L	266	GLU	N-CA	6.23	1.54	1.46
5	E	104	ASN	C-N	6.23	1.41	1.33
21	S	114	HIS	CA-CB	6.23	1.64	1.53
28	I	397	ALA	CA-C	-6.23	1.44	1.52
24	R	143	TYR	N-CA	6.23	1.53	1.46
28	I	195	GLN	CA-C	-6.23	1.44	1.52
2	B	132	VAL	C-N	6.23	1.41	1.33
21	S	483	HIS	ND1-CE1	6.23	1.38	1.32
31	M	62	VAL	CA-C	-6.23	1.44	1.52
16	V	269	GLN	CA-C	-6.22	1.44	1.52
20	N	572	ARG	N-CA	-6.22	1.38	1.46
1	A	128	ASN	N-CA	6.22	1.53	1.45
19	Z	833	PHE	CA-CB	6.22	1.61	1.53
22	P	383	ASP	CA-C	-6.22	1.45	1.53
24	R	379	ARG	C-N	6.22	1.41	1.33
31	M	406	ALA	N-CA	-6.22	1.38	1.46
7	G	93	ARG	NE-CZ	6.22	1.39	1.33
25	U	175	LEU	CA-CB	6.22	1.63	1.53
27	H	255	ARG	CD-NE	6.22	1.54	1.46
1	A	14	THR	CA-C	-6.21	1.45	1.52
30	L	358	ARG	CD-NE	6.21	1.54	1.46
19	Z	506	GLY	CA-C	-6.21	1.43	1.51
20	N	647	HIS	CA-C	-6.21	1.45	1.52
21	S	215	GLU	N-CA	6.21	1.53	1.46
23	Q	337	ARG	C-N	6.21	1.41	1.33
26	O	70	ARG	NE-CZ	6.21	1.39	1.33
1	A	28	ALA	N-CA	-6.21	1.38	1.46
11	4	21	ALA	CA-CB	6.21	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	Q	286	ALA	C-N	6.21	1.42	1.33
32	J	312	ASP	C-N	6.21	1.41	1.33
13	6	112	THR	CA-C	-6.21	1.45	1.52
20	N	341	PHE	CA-C	-6.21	1.45	1.52
22	P	147	LYS	N-CA	-6.21	1.38	1.46
22	P	250	ILE	CA-C	-6.21	1.44	1.52
10	3	38	ASP	CA-CB	6.20	1.63	1.53
22	P	39	ARG	CZ-NH2	6.20	1.41	1.33
4	D	161	ALA	CA-C	-6.20	1.44	1.52
29	K	301	GLN	CA-C	-6.20	1.44	1.52
11	4	173	LEU	C-N	6.20	1.43	1.33
18	Y	64	GLY	CA-C	-6.20	1.45	1.52
20	N	579	ARG	NE-CZ	6.20	1.39	1.33
23	Q	44	GLN	CA-CB	6.20	1.63	1.53
28	I	391	SER	N-CA	-6.20	1.38	1.46
4	D	115	ARG	CD-NE	6.20	1.54	1.46
20	N	122	GLU	C-N	6.20	1.40	1.32
27	H	358	HIS	CD2-NE2	6.20	1.44	1.37
13	6	190	HIS	ND1-CE1	6.19	1.38	1.32
19	Z	29	SER	CA-C	6.19	1.60	1.52
3	C	44	LEU	C-N	6.19	1.42	1.33
8	1	159	ALA	CA-C	-6.19	1.45	1.52
32	J	137	LEU	N-CA	6.19	1.53	1.46
22	P	163	ALA	N-CA	-6.19	1.38	1.46
1	A	61	LEU	CA-C	-6.19	1.45	1.52
22	P	391	ALA	N-CA	-6.18	1.39	1.46
26	O	31	LYS	CA-CB	6.18	1.63	1.53
8	1	199	ARG	CZ-NH2	6.18	1.41	1.33
31	M	120	ARG	NE-CZ	6.18	1.39	1.33
16	V	239	LYS	C-N	6.18	1.41	1.33
21	S	145	PRO	N-CA	-6.18	1.39	1.47
6	F	190	HIS	CD2-NE2	-6.17	1.31	1.37
9	2	115	ARG	CZ-NH1	6.17	1.41	1.32
19	Z	261	ARG	CZ-NH2	6.17	1.41	1.33
21	S	57	GLU	CA-CB	6.17	1.62	1.53
29	K	89	ILE	N-CA	-6.17	1.38	1.46
28	I	132	TYR	N-CA	-6.17	1.38	1.46
3	C	137	ILE	C-N	6.17	1.40	1.33
17	T	186	PRO	C-N	6.17	1.41	1.33
19	Z	198	HIS	ND1-CE1	6.17	1.38	1.32
25	U	38	VAL	CA-C	-6.17	1.44	1.52
29	K	159	LYS	CA-CB	6.17	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	101	ARG	CA-C	6.17	1.60	1.52
27	H	214	LEU	CA-C	-6.17	1.45	1.52
14	7	116	ILE	N-CA	-6.17	1.39	1.46
21	S	473	HIS	ND1-CE1	6.17	1.38	1.32
15	W	177	PRO	CA-CB	-6.17	1.45	1.53
7	G	188	ARG	CA-CB	6.16	1.62	1.53
12	5	172	TYR	C-N	6.16	1.42	1.33
21	S	329	ILE	CA-CB	-6.16	1.47	1.54
31	M	211	HIS	CE1-NE2	6.16	1.38	1.32
19	Z	671	ALA	CA-C	-6.16	1.44	1.52
21	S	212	ARG	CZ-NH2	6.16	1.41	1.33
25	U	22	HIS	CB-CG	6.16	1.58	1.50
30	L	311	ARG	NE-CZ	6.16	1.39	1.33
6	F	193	ARG	CZ-NH1	6.16	1.41	1.32
13	6	106	ASN	CA-CB	6.16	1.63	1.53
14	7	98	SER	C-N	6.16	1.40	1.33
21	S	36	LYS	N-CA	-6.16	1.39	1.46
24	R	35	THR	C-N	6.16	1.42	1.33
22	P	164	SER	CA-C	-6.16	1.44	1.52
23	Q	74	ARG	NE-CZ	6.16	1.39	1.33
3	C	228	LEU	C-N	6.16	1.42	1.33
15	W	4	GLU	C-N	6.16	1.41	1.33
14	7	195	ARG	CD-NE	6.15	1.54	1.46
14	7	156	ILE	CA-C	-6.15	1.45	1.52
9	2	45	THR	CA-C	-6.15	1.44	1.52
23	Q	132	ARG	C-N	6.15	1.42	1.33
24	R	233	ARG	C-O	-6.15	1.18	1.24
3	C	180	LYS	CA-C	-6.15	1.45	1.52
3	C	49	ARG	CD-NE	6.15	1.54	1.46
20	N	558	GLY	C-N	6.15	1.40	1.33
21	S	435	ALA	N-CA	-6.15	1.38	1.46
25	U	17	LEU	C-N	6.15	1.42	1.33
31	M	364	ALA	CA-C	-6.15	1.44	1.52
15	W	50	GLY	CA-C	-6.14	1.46	1.52
29	K	85	ILE	CA-C	6.14	1.59	1.52
19	Z	200	ALA	CA-C	-6.14	1.44	1.53
1	A	18	PRO	C-N	6.14	1.41	1.33
19	Z	748	LEU	CA-C	-6.14	1.44	1.52
28	I	290	ILE	C-N	6.14	1.40	1.33
20	N	421	GLN	N-CA	-6.14	1.39	1.46
3	C	17	ARG	NE-CZ	6.14	1.39	1.33
20	N	71	LEU	C-N	6.13	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	I	271	PHE	N-CA	-6.13	1.38	1.46
11	4	95	ARG	C-N	6.13	1.41	1.33
22	P	265	GLN	CA-C	-6.13	1.44	1.52
20	N	425	THR	C-N	6.13	1.42	1.33
24	R	279	GLU	N-CA	-6.13	1.39	1.46
28	I	303	ARG	CD-NE	6.13	1.54	1.46
7	G	134	CYS	CA-C	-6.13	1.45	1.52
19	Z	521	ALA	C-O	-6.13	1.16	1.24
20	N	485	ALA	C-N	6.13	1.42	1.33
26	O	115	LYS	C-N	6.13	1.42	1.33
6	F	97	PHE	C-N	6.12	1.42	1.33
22	P	452	ILE	C-O	-6.12	1.16	1.24
25	U	31	ASN	CA-C	-6.12	1.44	1.52
1	A	214	GLU	N-CA	-6.12	1.38	1.46
5	E	225	ASN	N-CA	-6.12	1.38	1.45
27	H	126	SER	N-CA	-6.12	1.38	1.46
7	G	13	SER	CA-CB	-6.12	1.44	1.53
19	Z	575	ALA	C-N	6.12	1.41	1.33
25	U	60	GLU	CA-C	-6.12	1.45	1.52
26	O	85	ARG	CD-NE	6.12	1.54	1.46
32	J	162	LYS	N-CA	6.12	1.53	1.46
4	D	138	LEU	N-CA	-6.12	1.38	1.46
19	Z	596	ASP	C-N	6.12	1.41	1.33
1	A	35	GLY	C-N	6.12	1.42	1.33
6	F	44	ALA	CA-C	-6.12	1.45	1.52
10	3	117	PHE	C-N	6.12	1.42	1.33
15	W	51	LEU	CA-C	-6.12	1.45	1.52
20	N	887	ALA	C-N	6.11	1.42	1.33
23	Q	210	LEU	CA-C	-6.11	1.44	1.52
28	I	402	ALA	N-CA	-6.11	1.39	1.46
31	M	97	ILE	CA-C	6.11	1.60	1.52
20	N	830	THR	CA-CB	-6.11	1.43	1.53
22	P	37	GLU	C-N	6.11	1.42	1.33
28	I	132	TYR	CA-CB	6.11	1.60	1.53
6	F	239	ARG	CA-C	6.11	1.60	1.52
26	O	168	ASN	N-CA	-6.11	1.39	1.46
29	K	306	LYS	CA-C	-6.11	1.45	1.53
32	J	109	THR	CA-CB	6.11	1.64	1.53
26	O	354	GLU	C-N	6.11	1.42	1.33
28	I	361	LYS	N-CA	-6.11	1.38	1.46
29	K	325	GLY	N-CA	-6.11	1.35	1.45
29	K	319	PRO	C-N	6.11	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	6	86	GLY	N-CA	-6.11	1.36	1.45
14	7	145	SER	N-CA	-6.11	1.38	1.46
29	K	28	SER	CA-CB	6.11	1.65	1.53
32	J	38	LYS	C-N	6.11	1.42	1.33
23	Q	169	VAL	C-O	-6.10	1.17	1.24
29	K	265	ASP	CA-C	6.10	1.60	1.52
17	T	162	LYS	CA-CB	6.10	1.62	1.53
20	N	931	HIS	ND1-CE1	6.10	1.38	1.32
29	K	140	VAL	CA-C	-6.10	1.44	1.52
13	6	50	VAL	N-CA	-6.10	1.39	1.46
22	P	182	ARG	NE-CZ	6.10	1.39	1.33
27	H	156	LYS	CA-CB	6.10	1.62	1.53
32	J	223	PHE	CA-C	-6.10	1.45	1.52
27	H	284	ARG	CD-NE	6.10	1.54	1.46
23	Q	210	LEU	C-N	6.09	1.42	1.33
21	S	336	GLY	CA-C	-6.09	1.43	1.51
26	O	37	LEU	C-N	6.09	1.42	1.33
20	N	772	TRP	CA-CB	6.09	1.63	1.53
30	L	108	PRO	CA-C	-6.09	1.43	1.52
4	D	124	TYR	N-CA	-6.09	1.38	1.46
11	4	32	HIS	CA-C	6.09	1.60	1.52
20	N	839	ALA	C-N	6.08	1.42	1.33
32	J	213	ARG	CD-NE	6.08	1.54	1.46
13	6	102	TYR	C-N	6.08	1.41	1.33
17	T	238	TYR	CA-C	-6.08	1.44	1.52
20	N	935	ILE	CA-CB	-6.08	1.47	1.54
27	H	235	ALA	N-CA	6.08	1.53	1.45
30	L	30	LEU	C-N	6.08	1.42	1.33
13	6	107	ASN	C-N	6.08	1.42	1.34
19	Z	130	ALA	CA-C	-6.08	1.44	1.52
20	N	855	GLU	C-N	6.08	1.42	1.33
19	Z	233	LEU	N-CA	6.08	1.53	1.46
22	P	351	TRP	CA-CB	6.08	1.63	1.53
25	U	194	GLN	CA-CB	6.08	1.62	1.53
27	H	284	ARG	C-N	6.08	1.41	1.33
28	I	255	LEU	C-O	-6.08	1.17	1.24
32	J	71	SER	C-N	6.07	1.41	1.33
9	2	230	ARG	CD-NE	6.07	1.54	1.46
20	N	599	ILE	C-N	6.07	1.42	1.33
19	Z	213	GLN	CA-C	-6.07	1.44	1.52
32	J	39	SER	N-CA	-6.07	1.39	1.46
21	S	419	ALA	C-N	6.07	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	T	232	PRO	CA-C	-6.07	1.42	1.52
21	S	122	ALA	CA-C	-6.07	1.45	1.52
12	5	226	ASP	CA-CB	6.07	1.62	1.53
23	Q	218	HIS	CG-ND1	-6.07	1.31	1.38
5	E	168	ARG	CZ-NH1	6.06	1.41	1.32
17	T	200	LEU	CA-CB	6.06	1.62	1.53
12	5	221	GLN	CA-C	-6.06	1.45	1.52
31	M	149	LYS	CA-CB	6.06	1.64	1.53
31	M	176	LYS	CA-C	-6.06	1.44	1.52
29	K	219	VAL	N-CA	-6.06	1.38	1.46
4	D	148	PRO	CA-C	6.06	1.60	1.52
19	Z	6	ARG	NE-CZ	6.06	1.39	1.33
20	N	509	GLY	N-CA	-6.06	1.38	1.45
2	B	229	TYR	CA-C	-6.06	1.45	1.52
2	B	115	ALA	CA-C	-6.06	1.44	1.52
8	1	124	ARG	C-N	6.05	1.42	1.33
20	N	249	CYS	CA-C	-6.05	1.45	1.52
27	H	334	PRO	CA-C	6.05	1.59	1.52
30	L	282	ASP	CA-C	-6.05	1.45	1.52
28	I	355	LEU	CA-C	-6.05	1.46	1.53
4	D	95	VAL	C-N	6.04	1.41	1.33
21	S	201	LEU	CA-C	-6.04	1.45	1.52
8	1	177	ARG	NE-CZ	6.04	1.39	1.33
24	R	257	ARG	CZ-NH1	6.04	1.41	1.32
22	P	375	MET	CA-C	6.04	1.60	1.52
28	I	241	ASN	CA-C	-6.04	1.45	1.52
32	J	40	GLN	C-N	6.04	1.41	1.33
30	L	45	GLU	N-CA	6.04	1.53	1.46
20	N	470	ASN	C-N	6.04	1.42	1.33
2	B	18	LYS	C-N	6.03	1.42	1.33
21	S	228	HIS	CA-C	-6.03	1.45	1.52
20	N	478	SER	CA-C	-6.03	1.44	1.52
27	H	396	ALA	C-N	6.03	1.41	1.33
30	L	364	ALA	N-CA	-6.03	1.39	1.46
8	1	209	LEU	CA-C	-6.03	1.45	1.52
32	J	346	LYS	C-N	6.03	1.41	1.33
19	Z	572	ALA	CA-C	-6.03	1.45	1.52
22	P	21	SER	C-N	-6.03	1.25	1.33
23	Q	262	ASN	CA-C	-6.03	1.45	1.53
27	H	282	GLY	C-N	6.03	1.41	1.33
32	J	246	ILE	CA-C	-6.03	1.45	1.52
11	4	193	ASN	C-N	6.02	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	I	140	ASP	CA-C	-6.02	1.45	1.52
4	D	215	ALA	CA-C	-6.02	1.45	1.52
6	F	140	MET	N-CA	-6.02	1.38	1.46
19	Z	698	SER	C-N	6.02	1.41	1.33
21	S	66	VAL	C-N	6.02	1.41	1.33
28	I	294	ARG	CA-C	-6.02	1.45	1.52
29	K	166	ASP	CA-C	6.02	1.60	1.52
3	C	50	ARG	CZ-NH2	6.02	1.41	1.33
3	C	196	VAL	C-N	6.02	1.42	1.34
20	N	145	HIS	CB-CG	6.02	1.58	1.50
25	U	239	ASP	CA-C	-6.02	1.45	1.52
31	M	307	ARG	CZ-NH2	6.02	1.41	1.33
20	N	140	ARG	CD-NE	6.02	1.54	1.46
28	I	300	GLY	N-CA	-6.02	1.37	1.45
24	R	198	ALA	CA-CB	6.01	1.62	1.53
28	I	109	VAL	N-CA	-6.01	1.39	1.46
5	E	186	HIS	CA-C	-6.01	1.45	1.52
20	N	730	ALA	C-O	-6.01	1.17	1.24
23	Q	59	LYS	CA-C	-6.01	1.47	1.52
24	R	294	TYR	C-N	6.01	1.41	1.33
13	6	169	SER	CA-C	6.01	1.60	1.52
20	N	250	PHE	CA-CB	6.01	1.62	1.53
21	S	483	HIS	CD2-NE2	6.01	1.44	1.37
10	3	77	LYS	CA-CB	6.01	1.62	1.53
14	7	85	ARG	CA-C	6.01	1.60	1.52
26	O	363	MET	N-CA	-6.01	1.39	1.46
29	K	232	GLY	CA-C	-6.01	1.44	1.52
11	4	19	ARG	CD-NE	6.00	1.54	1.46
17	T	231	HIS	CA-CB	6.00	1.61	1.53
18	Y	54	ASN	CA-CB	6.00	1.62	1.53
19	Z	852	VAL	N-CA	6.00	1.54	1.46
20	N	121	GLY	CA-C	-6.00	1.42	1.52
24	R	237	ARG	CD-NE	6.00	1.54	1.46
21	S	140	ASP	CA-CB	6.00	1.62	1.54
28	I	68	ILE	CA-C	-6.00	1.45	1.52
32	J	126	ILE	CA-CB	-6.00	1.46	1.54
19	Z	542	ILE	CA-C	-6.00	1.45	1.52
21	S	66	VAL	N-CA	-6.00	1.39	1.46
22	P	126	ASP	CA-C	6.00	1.60	1.52
24	R	345	CYS	N-CA	-6.00	1.38	1.45
31	M	367	ARG	N-CA	-6.00	1.39	1.46
13	6	59	GLY	CA-C	-6.00	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	N	667	GLU	C-N	6.00	1.41	1.33
25	U	128	PRO	CA-C	6.00	1.60	1.52
5	E	50	VAL	CA-C	-6.00	1.45	1.52
16	V	193	ILE	N-CA	-6.00	1.39	1.46
20	N	434	GLY	CA-C	6.00	1.61	1.52
19	Z	257	ARG	CA-C	-5.99	1.45	1.52
4	D	136	SER	C-N	5.99	1.42	1.33
29	K	103	VAL	C-O	5.99	1.30	1.23
30	L	358	ARG	N-CA	-5.99	1.38	1.46
17	T	121	ARG	NE-CZ	5.99	1.39	1.33
1	A	95	ARG	CD-NE	5.99	1.54	1.46
6	F	237	GLU	C-N	5.99	1.41	1.33
27	H	163	MET	CA-CB	5.99	1.62	1.53
31	M	298	ARG	CA-C	-5.99	1.45	1.52
24	R	291	HIS	ND1-CE1	5.99	1.38	1.32
3	C	182	GLY	C-N	5.98	1.42	1.33
12	5	90	VAL	CA-CB	-5.98	1.46	1.54
24	R	166	SER	CA-CB	5.98	1.62	1.53
1	A	108	GLU	C-N	5.98	1.38	1.33
25	U	184	VAL	C-N	5.98	1.42	1.33
3	C	99	LEU	C-N	5.98	1.41	1.33
19	Z	72	ARG	NE-CZ	5.98	1.39	1.33
21	S	466	ARG	C-N	5.98	1.40	1.33
29	K	85	ILE	N-CA	-5.98	1.40	1.47
4	D	139	ILE	N-CA	-5.98	1.39	1.46
22	P	289	ARG	NE-CZ	5.98	1.39	1.33
26	O	365	LEU	CA-CB	5.98	1.62	1.53
29	K	245	ARG	CD-NE	5.98	1.54	1.46
19	Z	829	MET	N-CA	-5.98	1.39	1.46
6	F	78	THR	C-O	-5.97	1.17	1.24
15	W	46	GLU	C-N	5.97	1.41	1.33
19	Z	746	ARG	CA-C	-5.97	1.45	1.52
20	N	943	GLU	CA-CB	5.97	1.62	1.53
19	Z	496	ASP	CA-CB	5.97	1.62	1.53
26	O	24	ARG	CD-NE	5.97	1.54	1.46
29	K	328	ASP	CA-CB	5.97	1.63	1.53
19	Z	238	ASN	CA-CB	5.97	1.62	1.53
22	P	107	GLN	N-CA	-5.97	1.38	1.46
26	O	135	ILE	C-N	5.97	1.41	1.33
13	6	183	LYS	CA-C	-5.97	1.44	1.52
20	N	438	GLN	CA-C	-5.97	1.44	1.52
1	A	165	ALA	N-CA	-5.96	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	V	260	GLU	CA-CB	5.96	1.63	1.53
29	K	123	LEU	N-CA	-5.96	1.38	1.46
1	A	245	ARG	C-N	5.96	1.41	1.33
15	W	59	GLU	C-N	5.96	1.39	1.33
22	P	201	ARG	CA-C	-5.96	1.45	1.52
32	J	238	ALA	C-O	-5.96	1.17	1.24
2	B	227	ARG	CZ-NH2	5.96	1.41	1.33
21	S	33	VAL	CA-C	5.96	1.60	1.52
29	K	245	ARG	NE-CZ	5.96	1.39	1.33
19	Z	505	MET	CA-C	5.96	1.61	1.53
4	D	86	ALA	C-O	-5.95	1.17	1.24
18	Y	53	SER	N-CA	-5.95	1.39	1.46
13	6	124	TYR	CA-CB	5.95	1.62	1.53
15	W	179	LEU	CB-CG	5.95	1.65	1.53
17	T	332	THR	C-N	5.95	1.38	1.32
21	S	423	GLN	N-CA	-5.95	1.38	1.46
28	I	94	GLU	CA-C	-5.95	1.45	1.52
31	M	71	ALA	C-N	5.95	1.41	1.33
8	1	145	TYR	CA-CB	5.95	1.63	1.53
9	2	228	PHE	CA-C	-5.95	1.45	1.52
31	M	44	ILE	CA-C	5.95	1.60	1.52
16	V	173	GLU	C-O	-5.95	1.19	1.24
29	K	55	GLU	CA-C	-5.95	1.45	1.52
5	E	40	ILE	CA-CB	-5.94	1.47	1.54
14	7	46	GLN	CA-C	-5.94	1.45	1.52
20	N	196	LYS	C-N	5.94	1.41	1.33
19	Z	746	ARG	C-O	-5.94	1.17	1.24
20	N	269	ARG	CZ-NH2	5.94	1.41	1.33
31	M	408	MET	CA-C	-5.94	1.45	1.52
6	F	90	GLN	C-N	5.94	1.42	1.33
3	C	53	HIS	ND1-CE1	5.94	1.38	1.32
19	Z	513	GLU	C-N	5.94	1.40	1.34
1	A	98	ALA	N-CA	-5.93	1.39	1.46
12	5	141	LEU	N-CA	-5.93	1.39	1.46
16	V	220	LEU	C-N	5.93	1.41	1.33
24	R	38	ARG	N-CA	-5.93	1.39	1.46
31	M	285	ILE	N-CA	-5.93	1.39	1.46
4	D	198	ILE	CA-CB	5.93	1.61	1.54
11	4	170	ARG	CD-NE	5.93	1.54	1.46
20	N	761	VAL	CA-C	-5.93	1.45	1.52
4	D	121	LYS	CA-C	-5.93	1.45	1.52
5	E	149	LYS	CA-CB	5.93	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	F	85	CYS	CA-C	-5.93	1.45	1.52
28	I	392	GLY	N-CA	-5.93	1.37	1.45
2	B	83	TYR	CA-C	-5.93	1.45	1.52
3	C	159	TRP	C-N	5.93	1.42	1.33
4	D	78	SER	C-N	5.93	1.39	1.33
27	H	85	GLN	CA-C	-5.93	1.45	1.52
31	M	67	HIS	CE1-NE2	5.93	1.38	1.32
9	2	188	ASP	C-N	5.92	1.42	1.33
20	N	5	ALA	N-CA	-5.92	1.38	1.46
25	U	82	PHE	N-CA	-5.92	1.38	1.46
19	Z	715	HIS	C-N	5.92	1.41	1.33
20	N	186	SER	CA-CB	5.92	1.62	1.53
22	P	94	ARG	NE-CZ	5.92	1.39	1.33
24	R	4	GLU	C-N	5.92	1.41	1.33
31	M	337	ARG	CD-NE	5.92	1.54	1.46
9	2	118	ARG	NE-CZ	5.92	1.39	1.33
23	Q	98	ASP	N-CA	-5.92	1.39	1.46
24	R	135	GLY	C-N	5.92	1.41	1.33
27	H	420	TYR	CZ-OH	5.92	1.50	1.38
13	6	200	ARG	CZ-NH2	5.92	1.41	1.33
19	Z	300	ARG	CD-NE	5.92	1.54	1.46
21	S	335	LEU	C-O	-5.92	1.17	1.24
19	Z	598	CYS	N-CA	-5.92	1.39	1.46
20	N	479	LEU	CA-C	-5.92	1.45	1.52
2	B	137	CYS	CA-C	-5.91	1.45	1.52
20	N	867	LYS	N-CA	-5.91	1.38	1.45
22	P	253	THR	CA-C	5.91	1.59	1.52
28	I	211	TYR	CA-C	-5.91	1.45	1.52
30	L	36	ILE	CA-C	-5.91	1.45	1.52
19	Z	250	ARG	NE-CZ	5.91	1.39	1.33
28	I	76	GLU	CA-CB	5.91	1.62	1.53
1	A	201	CYS	CA-CB	5.91	1.62	1.53
5	E	122	GLN	CA-CB	5.91	1.63	1.53
10	3	138	VAL	N-CA	-5.91	1.39	1.46
10	3	198	ARG	CZ-NH2	5.91	1.41	1.33
11	4	69	MET	C-N	5.91	1.41	1.33
17	T	349	LEU	C-N	5.91	1.42	1.34
20	N	780	SER	CA-CB	5.91	1.63	1.53
28	I	187	ILE	C-N	5.91	1.39	1.33
5	E	25	GLU	CA-CB	5.91	1.62	1.53
10	3	113	ASP	CA-CB	5.91	1.62	1.53
22	P	453	HIS	ND1-CE1	5.91	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	E	194	ALA	C-N	5.90	1.41	1.33
19	Z	315	GLU	CA-C	-5.90	1.45	1.52
25	U	193	ASN	CA-C	-5.90	1.45	1.52
2	B	100	VAL	N-CA	-5.90	1.39	1.46
22	P	225	LYS	C-N	5.90	1.41	1.33
5	E	238	ILE	C-N	5.90	1.41	1.33
6	F	190	HIS	CB-CG	-5.90	1.41	1.50
19	Z	456	ARG	CZ-NH2	5.90	1.41	1.33
19	Z	650	GLN	C-N	5.90	1.41	1.33
24	R	259	TYR	CA-CB	5.90	1.62	1.53
6	F	203	GLN	CA-C	-5.90	1.45	1.52
28	I	131	HIS	ND1-CE1	5.90	1.38	1.32
15	W	90	ILE	CA-CB	5.89	1.61	1.54
23	Q	233	TYR	C-N	5.89	1.41	1.33
32	J	355	SER	CA-C	5.89	1.60	1.52
15	W	78	VAL	CA-CB	-5.89	1.46	1.54
29	K	217	LYS	CA-C	-5.89	1.45	1.52
29	K	360	LEU	N-CA	-5.89	1.39	1.46
32	J	271	ARG	NE-CZ	5.89	1.39	1.33
32	J	293	MET	C-N	5.89	1.41	1.33
29	K	43	ARG	CZ-NH2	5.89	1.41	1.33
24	R	130	LYS	CA-C	-5.89	1.44	1.53
25	U	122	VAL	N-CA	-5.89	1.39	1.46
28	I	66	GLU	N-CA	-5.89	1.39	1.46
31	M	171	TYR	CA-C	-5.89	1.45	1.52
3	C	142	HIS	ND1-CE1	5.88	1.38	1.32
24	R	114	ILE	N-CA	-5.88	1.39	1.46
23	Q	111	LEU	CA-CB	5.88	1.62	1.53
3	C	226	ARG	NE-CZ	5.88	1.39	1.33
4	D	119	SER	C-N	5.88	1.41	1.33
7	G	119	TYR	CZ-OH	5.88	1.50	1.38
9	2	124	ARG	CZ-NH2	5.88	1.41	1.33
12	5	103	THR	CA-C	-5.88	1.45	1.52
32	J	252	ASP	CA-CB	5.88	1.62	1.53
4	D	49	SER	C-N	5.88	1.39	1.33
24	R	110	TYR	CA-CB	5.88	1.62	1.53
9	2	98	THR	C-N	5.88	1.41	1.33
29	K	308	ILE	CA-CB	5.88	1.61	1.54
19	Z	148	GLN	CA-C	-5.88	1.45	1.52
19	Z	284	SER	N-CA	5.88	1.53	1.46
27	H	200	ARG	N-CA	-5.88	1.39	1.46
29	K	110	ASN	CA-CB	5.88	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	V	127	ILE	N-CA	-5.87	1.39	1.46
20	N	475	HIS	ND1-CE1	5.87	1.38	1.32
11	4	178	PHE	N-CA	-5.87	1.38	1.46
12	5	128	ARG	CA-C	-5.87	1.45	1.52
20	N	153	ILE	C-N	5.87	1.41	1.33
20	N	56	SER	CA-CB	5.87	1.61	1.53
2	B	83	TYR	C-N	5.87	1.41	1.33
8	1	68	THR	CA-C	-5.87	1.45	1.52
8	1	92	VAL	CA-CB	-5.87	1.46	1.54
20	N	370	VAL	C-O	-5.87	1.17	1.24
21	S	502	GLU	C-N	5.87	1.41	1.33
32	J	49	ARG	NE-CZ	5.87	1.39	1.33
16	V	194	HIS	N-CA	-5.87	1.39	1.46
20	N	80	TYR	CA-C	-5.87	1.45	1.52
23	Q	286	ALA	C-O	-5.87	1.17	1.24
23	Q	363	ARG	CD-NE	5.87	1.54	1.46
29	K	306	LYS	C-N	5.87	1.41	1.33
32	J	20	LEU	CA-C	-5.87	1.44	1.52
6	F	101	ARG	NE-CZ	5.86	1.39	1.33
7	G	77	ALA	C-N	5.86	1.41	1.33
28	I	190	LEU	CA-CB	5.86	1.62	1.53
3	C	231	LYS	CA-CB	5.86	1.62	1.53
12	5	156	MET	C-N	5.86	1.42	1.33
22	P	42	GLU	CA-C	-5.86	1.45	1.52
7	G	83	ALA	CA-C	-5.86	1.45	1.52
17	T	281	ALA	N-CA	5.86	1.53	1.46
24	R	8	GLU	CA-C	-5.86	1.45	1.52
29	K	273	LYS	CA-C	5.86	1.60	1.52
22	P	67	LEU	CA-C	-5.86	1.45	1.52
29	K	276	ASP	N-CA	5.86	1.53	1.46
1	A	90	GLN	CA-C	-5.86	1.44	1.52
3	C	128	ARG	CA-C	-5.86	1.46	1.53
6	F	175	HIS	CA-CB	5.86	1.61	1.53
22	P	38	GLY	CA-C	-5.86	1.43	1.51
28	I	97	SER	CA-C	-5.86	1.45	1.52
30	L	82	LYS	CA-C	-5.86	1.45	1.52
4	D	220	ASP	C-N	5.86	1.41	1.33
15	W	9	CYS	C-N	5.86	1.40	1.33
16	V	75	MET	C-N	5.86	1.41	1.33
20	N	751	ARG	CD-NE	5.86	1.54	1.46
5	E	210	LEU	C-N	5.85	1.41	1.33
25	U	90	ARG	CZ-NH2	5.85	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Z	328	SER	CA-CB	5.85	1.62	1.53
20	N	183	LEU	CA-C	-5.85	1.45	1.52
2	B	27	ALA	N-CA	-5.85	1.39	1.46
3	C	100	GLN	CA-CB	5.85	1.62	1.53
30	L	116	MET	CA-C	-5.85	1.45	1.52
4	D	27	LYS	CA-CB	5.85	1.62	1.53
12	5	113	PHE	CA-CB	5.85	1.62	1.53
15	W	141	ILE	CA-CB	-5.85	1.47	1.54
20	N	88	PHE	CA-C	-5.85	1.44	1.52
25	U	221	PRO	C-N	5.85	1.40	1.33
23	Q	90	ARG	N-CA	-5.85	1.39	1.46
11	4	161	ARG	NE-CZ	5.84	1.39	1.33
19	Z	746	ARG	N-CA	-5.84	1.39	1.46
20	N	496	LEU	C-N	5.84	1.42	1.34
19	Z	93	PRO	C-N	5.84	1.41	1.33
25	U	70	LEU	N-CA	-5.84	1.38	1.46
30	L	225	SER	CA-C	-5.84	1.44	1.52
32	J	328	ILE	C-N	5.84	1.41	1.33
6	F	109	VAL	CA-C	-5.84	1.45	1.52
22	P	362	ASN	CA-C	-5.84	1.45	1.52
24	R	201	PHE	C-N	5.84	1.41	1.33
3	C	239	LYS	CA-C	-5.84	1.45	1.52
11	4	127	ALA	CA-C	5.84	1.59	1.53
27	H	398	ARG	CA-C	5.84	1.60	1.52
1	A	216	GLU	N-CA	-5.84	1.38	1.46
20	N	343	ILE	CA-C	-5.84	1.45	1.52
28	I	84	GLN	CA-CB	5.84	1.63	1.53
6	F	196	ARG	CA-C	-5.83	1.44	1.52
1	A	109	ILE	CA-CB	-5.83	1.47	1.54
3	C	77	ALA	C-N	5.83	1.42	1.33
6	F	224	TYR	N-CA	-5.83	1.39	1.46
19	Z	688	ARG	CZ-NH2	5.83	1.41	1.33
21	S	202	VAL	CA-C	-5.83	1.45	1.52
24	R	380	VAL	C-N	5.83	1.41	1.33
31	M	385	GLU	CA-CB	5.83	1.62	1.53
21	S	352	SER	CA-CB	5.83	1.62	1.53
16	V	39	LEU	CA-CB	5.83	1.62	1.53
19	Z	216	MET	N-CA	-5.83	1.39	1.46
19	Z	363	SER	N-CA	-5.83	1.38	1.46
30	L	132	LEU	N-CA	-5.83	1.39	1.46
30	L	311	ARG	CA-C	-5.83	1.45	1.52
19	Z	784	ASP	CA-C	-5.83	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	L	92	ARG	CD-NE	5.83	1.54	1.46
4	D	83	THR	CA-C	-5.82	1.44	1.52
11	4	88	LEU	C-N	5.82	1.41	1.33
19	Z	44	GLU	C-N	5.82	1.41	1.33
27	H	168	GLU	C-N	5.82	1.39	1.33
27	H	380	SER	C-N	5.82	1.41	1.33
32	J	132	ASP	C-O	-5.82	1.18	1.24
24	R	327	VAL	C-N	5.82	1.41	1.33
9	2	78	HIS	CA-C	-5.82	1.45	1.52
15	W	130	ARG	CA-CB	5.82	1.62	1.53
19	Z	635	LYS	CA-C	-5.82	1.45	1.52
20	N	162	VAL	CA-CB	5.82	1.61	1.54
26	O	105	LYS	C-N	5.82	1.41	1.33
26	O	342	ASP	N-CA	-5.82	1.39	1.46
30	L	246	MET	CA-C	-5.82	1.45	1.52
6	F	146	GLN	CA-C	-5.82	1.45	1.52
13	6	126	ARG	NE-CZ	5.82	1.39	1.33
13	6	138	GLU	CA-C	-5.82	1.45	1.52
19	Z	170	TRP	CA-C	-5.82	1.45	1.52
19	Z	730	GLY	C-N	5.82	1.41	1.33
20	N	474	ARG	CD-NE	5.82	1.54	1.46
32	J	395	SER	CA-C	5.82	1.60	1.52
30	L	339	GLU	CA-C	-5.81	1.45	1.52
32	J	318	PRO	CA-C	5.81	1.57	1.52
3	C	225	ILE	N-CA	-5.81	1.39	1.46
32	J	345	ARG	CD-NE	5.81	1.54	1.46
9	2	48	GLY	CA-C	-5.81	1.45	1.51
26	O	137	ASP	C-N	5.81	1.41	1.33
27	H	226	ALA	CA-CB	5.81	1.62	1.53
5	E	30	GLY	CA-C	5.80	1.58	1.52
11	4	66	LEU	CA-C	-5.80	1.45	1.52
19	Z	435	SER	CA-CB	5.80	1.62	1.53
19	Z	712	LYS	CA-C	-5.80	1.45	1.52
20	N	129	ARG	CZ-NH2	5.80	1.41	1.33
25	U	282	ASN	CA-C	5.80	1.60	1.52
29	K	65	GLN	C-N	5.79	1.41	1.33
8	1	78	ARG	NE-CZ	5.79	1.39	1.33
26	O	178	ARG	CZ-NH2	5.79	1.41	1.33
1	A	23	TYR	CA-C	-5.79	1.45	1.52
8	1	201	GLY	C-N	5.79	1.41	1.33
12	5	241	ASP	N-CA	5.79	1.53	1.46
13	6	38	THR	N-CA	-5.79	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	34	CYS	CA-C	5.79	1.59	1.52
12	5	116	ARG	NE-CZ	5.79	1.39	1.33
16	V	23	PRO	N-CA	-5.79	1.40	1.47
20	N	657	GLY	CA-C	-5.79	1.45	1.52
26	O	263	ALA	N-CA	-5.79	1.38	1.46
20	N	143	ASP	CA-C	-5.79	1.45	1.52
21	S	37	GLU	CA-C	5.79	1.60	1.52
23	Q	176	THR	C-N	5.79	1.42	1.34
4	D	188	GLU	CA-CB	5.79	1.62	1.53
15	W	34	ASN	CA-C	-5.79	1.45	1.52
24	R	61	LEU	C-N	5.79	1.42	1.33
32	J	246	ILE	N-CA	-5.79	1.39	1.46
21	S	189	GLN	CA-CB	5.78	1.62	1.53
26	O	166	ILE	CA-CB	-5.78	1.47	1.54
29	K	44	TYR	C-O	-5.78	1.17	1.24
1	A	183	VAL	N-CA	5.78	1.53	1.46
6	F	157	ARG	CZ-NH1	5.78	1.40	1.32
7	G	93	ARG	CD-NE	5.78	1.54	1.46
19	Z	695	ALA	C-N	5.78	1.41	1.33
19	Z	100	ARG	CA-C	5.78	1.59	1.52
22	P	240	TYR	C-N	5.78	1.41	1.33
24	R	254	PRO	N-CA	5.78	1.54	1.47
16	V	199	HIS	ND1-CE1	5.78	1.38	1.32
20	N	636	VAL	CA-C	-5.78	1.45	1.52
22	P	13	ILE	N-CA	-5.78	1.39	1.46
14	7	178	ALA	N-CA	-5.78	1.40	1.46
20	N	361	ARG	NE-CZ	5.78	1.39	1.33
24	R	117	LYS	C-N	5.78	1.41	1.33
24	R	312	ARG	N-CA	-5.78	1.39	1.46
26	O	359	ASP	C-N	5.78	1.41	1.33
14	7	94	MET	C-N	5.77	1.41	1.33
28	I	390	LEU	CB-CG	5.77	1.65	1.53
3	C	175	LEU	N-CA	-5.77	1.39	1.46
14	7	89	VAL	CA-C	5.77	1.59	1.52
24	R	35	THR	CA-C	-5.77	1.45	1.52
21	S	150	ALA	N-CA	-5.77	1.39	1.46
17	T	320	SER	CA-C	-5.77	1.45	1.52
29	K	40	LEU	N-CA	5.77	1.53	1.46
29	K	323	ARG	CZ-NH1	5.77	1.40	1.32
29	K	393	ILE	C-O	-5.76	1.18	1.24
30	L	251	ALA	N-CA	-5.76	1.39	1.46
12	5	222	ALA	N-CA	-5.76	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	S	79	GLU	C-N	5.76	1.41	1.33
11	4	99	HIS	C-N	5.76	1.40	1.33
16	V	56	LEU	CA-C	-5.76	1.46	1.52
17	T	245	ASN	CA-CB	5.76	1.62	1.53
24	R	336	ARG	CZ-NH2	5.76	1.41	1.33
27	H	218	PRO	N-CA	-5.76	1.40	1.47
31	M	260	VAL	CA-C	-5.76	1.46	1.52
23	Q	74	ARG	CA-C	-5.76	1.45	1.52
31	M	372	HIS	CA-C	-5.76	1.45	1.52
9	2	246	ARG	N-CA	-5.75	1.39	1.46
10	3	80	ARG	N-CA	-5.75	1.39	1.46
30	L	265	ARG	NE-CZ	5.75	1.39	1.33
2	B	44	VAL	CA-C	-5.75	1.45	1.52
12	5	239	ARG	CD-NE	5.75	1.54	1.46
3	C	152	PRO	N-CD	5.75	1.55	1.47
4	D	103	THR	CA-C	-5.75	1.45	1.52
20	N	733	ALA	N-CA	-5.75	1.39	1.46
23	Q	148	HIS	CE1-NE2	-5.75	1.26	1.32
25	U	93	GLY	CA-C	-5.75	1.45	1.52
4	D	115	ARG	NE-CZ	5.75	1.39	1.33
16	V	227	GLU	CA-C	-5.75	1.45	1.52
20	N	951	ILE	N-CA	5.75	1.53	1.46
25	U	33	LYS	N-CA	-5.75	1.38	1.45
3	C	190	LEU	N-CA	5.75	1.53	1.46
9	2	60	ASP	CA-C	-5.75	1.45	1.52
10	3	132	VAL	CA-C	-5.75	1.46	1.52
20	N	619	VAL	C-N	5.75	1.41	1.33
27	H	133	ASP	N-CA	5.75	1.52	1.46
27	H	293	ASN	CA-C	-5.75	1.45	1.52
28	I	261	GLY	N-CA	-5.75	1.36	1.45
19	Z	387	GLN	C-N	5.75	1.41	1.33
20	N	852	GLU	CA-C	-5.75	1.45	1.52
5	E	72	ALA	N-CA	-5.75	1.38	1.46
4	D	113	ILE	CA-C	-5.74	1.45	1.52
10	3	18	ASN	CA-C	-5.74	1.45	1.52
19	Z	687	ARG	NE-CZ	5.74	1.39	1.33
26	O	326	GLU	C-N	5.74	1.41	1.33
30	L	392	LYS	CA-C	-5.74	1.45	1.52
26	O	260	ASP	CA-C	-5.74	1.45	1.52
19	Z	630	ASP	C-N	5.74	1.41	1.33
22	P	383	ASP	C-N	5.74	1.41	1.33
29	K	364	VAL	C-N	5.74	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	L	188	GLY	CA-C	-5.74	1.43	1.51
32	J	178	LEU	N-CA	-5.74	1.39	1.46
9	2	109	HIS	CA-C	-5.74	1.45	1.52
13	6	136	ILE	CA-C	-5.74	1.45	1.52
17	T	243	SER	CA-C	-5.74	1.46	1.53
19	Z	868	HIS	ND1-CE1	5.74	1.38	1.32
20	N	429	LYS	C-N	5.74	1.41	1.33
30	L	93	TYR	CA-C	-5.74	1.45	1.52
12	5	81	ALA	CA-C	-5.74	1.45	1.52
15	W	161	ASN	CA-CB	5.74	1.62	1.53
20	N	159	ARG	CZ-NH1	5.74	1.40	1.32
32	J	205	HIS	ND1-CE1	5.74	1.38	1.32
22	P	379	ALA	C-N	5.73	1.41	1.33
21	S	270	SER	C-N	5.73	1.40	1.33
19	Z	317	LEU	CA-C	-5.73	1.45	1.52
32	J	260	GLU	C-N	5.73	1.40	1.33
13	6	44	GLY	CA-C	-5.73	1.43	1.51
15	W	79	GLN	CA-C	-5.73	1.46	1.52
19	Z	83	ARG	CD-NE	5.73	1.54	1.46
22	P	281	ASN	C-O	-5.73	1.17	1.24
27	H	105	ASP	CA-CB	5.73	1.63	1.53
29	K	395	LEU	CA-CB	5.73	1.62	1.53
11	4	108	ASP	CA-C	-5.72	1.45	1.52
15	W	126	LYS	CA-CB	5.72	1.62	1.53
20	N	57	ARG	CZ-NH2	5.72	1.40	1.33
23	Q	403	THR	CA-C	-5.72	1.45	1.52
26	O	316	SER	CA-CB	5.72	1.62	1.53
5	E	82	ILE	CA-C	-5.72	1.45	1.52
17	T	119	LEU	C-O	-5.72	1.17	1.24
20	N	841	LYS	C-N	5.72	1.41	1.33
29	K	59	GLU	C-O	-5.72	1.17	1.24
31	M	287	PHE	CA-C	-5.72	1.45	1.52
23	Q	106	GLU	CA-C	-5.72	1.45	1.52
28	I	381	ASP	CA-C	-5.72	1.45	1.52
11	4	139	THR	N-CA	-5.72	1.39	1.46
24	R	233	ARG	CD-NE	5.72	1.54	1.46
29	K	207	PRO	CA-C	-5.72	1.48	1.52
29	K	416	PHE	C-N	5.72	1.41	1.33
12	5	62	THR	CA-C	-5.72	1.45	1.52
20	N	127	ASP	CA-CB	5.72	1.62	1.53
22	P	372	ARG	NE-CZ	5.72	1.39	1.33
27	H	428	ARG	CZ-NH2	5.72	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	M	365	ARG	NE-CZ	5.72	1.39	1.33
8	1	124	ARG	CZ-NH1	5.71	1.40	1.32
8	1	206	VAL	CA-C	-5.71	1.45	1.52
24	R	225	TYR	CA-CB	5.71	1.62	1.53
25	U	25	ARG	C-N	5.71	1.40	1.34
30	L	210	LEU	CA-CB	5.71	1.60	1.53
3	C	97	TYR	C-N	5.71	1.41	1.33
4	D	96	GLU	CA-CB	5.71	1.62	1.53
9	2	177	ALA	N-CA	-5.71	1.39	1.46
20	N	263	SER	C-N	5.71	1.40	1.34
19	Z	222	ASP	C-N	5.71	1.41	1.33
24	R	146	ARG	CA-C	5.71	1.60	1.52
21	S	362	ALA	CA-CB	5.71	1.62	1.53
11	4	37	LYS	CA-C	-5.70	1.45	1.52
29	K	287	ARG	CD-NE	5.70	1.54	1.46
30	L	56	LYS	CA-C	-5.70	1.45	1.52
25	U	16	LEU	CA-CB	5.70	1.62	1.53
23	Q	248	ILE	CA-C	5.70	1.60	1.52
24	R	308	LEU	N-CA	-5.70	1.39	1.46
29	K	69	LYS	CA-CB	5.70	1.62	1.53
15	W	172	THR	N-CA	-5.70	1.39	1.46
16	V	58	LEU	CA-C	5.70	1.59	1.52
14	7	166	LEU	C-N	5.70	1.40	1.32
20	N	103	LYS	CA-CB	5.70	1.62	1.53
5	E	151	PRO	N-CA	-5.70	1.40	1.47
6	F	57	ALA	C-N	5.70	1.41	1.33
20	N	501	LEU	CA-CB	5.70	1.62	1.53
31	M	338	VAL	CA-C	5.70	1.60	1.52
13	6	196	ASP	CA-CB	5.69	1.62	1.53
14	7	55	VAL	CA-C	-5.69	1.47	1.52
23	Q	90	ARG	C-N	5.69	1.41	1.33
30	L	21	LYS	N-CA	5.69	1.53	1.46
32	J	116	LEU	N-CA	-5.69	1.38	1.45
5	E	142	LEU	N-CA	-5.69	1.39	1.46
13	6	104	HIS	CA-CB	5.69	1.62	1.53
19	Z	80	ARG	CD-NE	5.69	1.54	1.46
20	N	134	VAL	C-N	5.69	1.41	1.33
22	P	9	ALA	CA-C	-5.69	1.45	1.52
24	R	123	ALA	N-CA	-5.69	1.39	1.46
27	H	154	PRO	CA-C	5.69	1.57	1.52
32	J	272	THR	C-N	5.69	1.41	1.33
17	T	201	PHE	CA-CB	5.69	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	2	110	SER	CA-CB	5.69	1.62	1.53
19	Z	447	ALA	N-CA	-5.69	1.39	1.46
21	S	283	ARG	CZ-NH1	5.69	1.40	1.32
32	J	11	LEU	CA-CB	5.69	1.62	1.53
25	U	20	VAL	CA-C	-5.69	1.45	1.52
29	K	305	VAL	N-CA	-5.69	1.39	1.46
4	D	30	SER	CA-C	-5.68	1.45	1.52
16	V	30	GLN	N-CA	-5.68	1.39	1.46
19	Z	557	TRP	CZ2-CH2	5.68	1.48	1.37
27	H	90	GLU	CA-C	-5.68	1.48	1.52
1	A	12	HIS	N-CA	-5.68	1.39	1.46
6	F	36	VAL	C-N	5.68	1.41	1.33
21	S	316	THR	CA-C	-5.68	1.45	1.52
4	D	92	ARG	CZ-NH2	5.68	1.40	1.33
18	Y	67	MET	CA-C	5.68	1.59	1.52
27	H	258	ARG	CZ-NH1	5.68	1.40	1.32
28	I	123	VAL	C-N	5.68	1.41	1.33
16	V	61	PHE	CA-CB	5.68	1.61	1.53
28	I	67	ARG	CA-C	-5.68	1.45	1.52
14	7	146	LYS	CA-C	-5.67	1.45	1.52
19	Z	493	ASN	C-N	5.67	1.41	1.33
9	2	235	PRO	C-N	5.67	1.40	1.33
10	3	26	ARG	CZ-NH1	5.67	1.40	1.32
12	5	100	LEU	C-N	5.67	1.41	1.33
28	I	143	LEU	C-N	5.67	1.41	1.33
32	J	224	ILE	CA-CB	-5.67	1.48	1.54
1	A	50	ILE	CA-CB	-5.67	1.46	1.54
13	6	153	PRO	CA-C	-5.67	1.46	1.52
32	J	343	ASN	CA-C	-5.67	1.45	1.52
20	N	431	THR	N-CA	5.67	1.53	1.46
22	P	261	ASP	C-N	5.67	1.41	1.33
26	O	365	LEU	CB-CG	5.67	1.64	1.53
26	O	155	PHE	CA-CB	5.66	1.62	1.53
29	K	39	ASP	CA-C	5.66	1.60	1.52
31	M	109	GLU	CA-CB	5.66	1.60	1.53
2	B	122	THR	N-CA	-5.66	1.39	1.46
11	4	159	LEU	N-CA	5.66	1.53	1.46
19	Z	154	TRP	CA-C	-5.66	1.45	1.52
21	S	245	THR	CA-C	5.66	1.60	1.52
29	K	264	ILE	CA-CB	5.66	1.60	1.53
7	G	44	ASP	N-CA	-5.66	1.38	1.46
21	S	213	VAL	CA-C	5.66	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	3	85	TYR	C-N	5.65	1.41	1.33
11	4	109	GLU	CA-C	-5.65	1.45	1.52
16	V	111	TRP	C-N	5.65	1.41	1.33
11	4	190	ASN	N-CA	-5.65	1.39	1.46
19	Z	779	CYS	C-N	5.65	1.41	1.34
25	U	72	HIS	C-N	5.65	1.41	1.33
29	K	326	ARG	CZ-NH2	5.65	1.40	1.33
30	L	96	GLY	C-O	-5.65	1.19	1.24
31	M	181	ASP	N-CA	5.65	1.52	1.46
4	D	167	ILE	CA-C	-5.65	1.46	1.52
14	7	62	CYS	CA-CB	5.65	1.61	1.53
26	O	117	ALA	C-N	5.65	1.41	1.33
29	K	251	PHE	CA-C	-5.65	1.45	1.52
30	L	390	ASP	N-CA	-5.65	1.39	1.46
14	7	144	ARG	CZ-NH2	5.65	1.40	1.33
31	M	271	VAL	CA-C	5.65	1.59	1.52
2	B	148	GLN	CA-C	-5.65	1.45	1.52
25	U	108	ILE	CA-C	-5.65	1.45	1.52
28	I	172	THR	CA-C	-5.65	1.45	1.52
3	C	50	ARG	CD-NE	5.65	1.54	1.46
6	F	18	ARG	C-N	5.65	1.39	1.33
19	Z	267	ARG	C-N	5.65	1.41	1.33
19	Z	622	SER	C-N	5.65	1.42	1.33
24	R	255	ALA	C-N	5.65	1.40	1.33
25	U	70	LEU	CA-CB	5.65	1.63	1.53
32	J	203	VAL	CA-CB	-5.65	1.47	1.54
6	F	106	SER	C-N	5.64	1.41	1.33
12	5	107	GLY	CA-C	5.64	1.59	1.51
14	7	183	THR	C-N	5.64	1.40	1.33
20	N	757	MET	C-N	5.64	1.41	1.33
21	S	126	PHE	N-CA	-5.64	1.39	1.46
28	I	349	ARG	C-N	5.64	1.41	1.33
20	N	400	ALA	C-N	5.64	1.41	1.33
23	Q	121	LYS	CA-C	-5.64	1.45	1.52
8	1	118	GLU	C-N	5.64	1.41	1.33
12	5	200	ARG	CD-NE	5.64	1.54	1.46
23	Q	375	HIS	CD2-NE2	5.64	1.44	1.37
24	R	26	LEU	C-N	5.64	1.40	1.33
25	U	144	VAL	CA-CB	-5.64	1.47	1.54
6	F	122	ARG	C-N	5.64	1.40	1.33
30	L	334	ILE	C-N	5.64	1.41	1.33
32	J	212	ILE	CA-C	-5.64	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	H	410	LEU	C-N	5.64	1.41	1.33
2	B	159	LYS	C-N	-5.63	1.26	1.33
3	C	148	TYR	N-CA	-5.63	1.39	1.46
12	5	131	GLU	C-N	5.63	1.41	1.33
28	I	267	VAL	N-CA	-5.63	1.39	1.46
30	L	124	TYR	N-CA	5.63	1.52	1.45
30	L	213	VAL	C-O	5.63	1.30	1.24
31	M	145	ALA	CA-CB	5.63	1.62	1.53
23	Q	329	ASN	CA-CB	5.63	1.62	1.53
27	H	219	GLY	C-N	5.63	1.41	1.33
28	I	314	ASN	C-N	5.63	1.41	1.33
7	G	66	ARG	NE-CZ	5.63	1.39	1.33
26	O	284	ARG	N-CA	-5.63	1.41	1.46
27	H	295	VAL	CA-C	-5.63	1.46	1.52
28	I	254	GLU	C-N	5.63	1.41	1.33
8	1	62	ARG	NE-CZ	5.63	1.39	1.33
19	Z	771	LEU	CA-C	-5.63	1.45	1.52
20	N	636	VAL	N-CA	5.63	1.53	1.46
26	O	124	ASN	C-N	5.63	1.41	1.33
26	O	259	PRO	N-CA	-5.63	1.43	1.47
26	O	338	PRO	N-CA	-5.63	1.40	1.47
31	M	75	LYS	CA-C	-5.63	1.45	1.52
1	A	15	ILE	N-CA	-5.63	1.39	1.46
29	K	47	LEU	CA-C	-5.63	1.45	1.52
30	L	190	PRO	N-CA	-5.63	1.40	1.47
30	L	285	HIS	ND1-CE1	5.63	1.38	1.32
32	J	217	SER	CA-C	-5.63	1.45	1.53
8	1	177	ARG	CD-NE	5.62	1.54	1.46
20	N	203	LYS	CA-CB	5.62	1.62	1.53
21	S	345	ARG	CD-NE	5.62	1.54	1.46
25	U	90	ARG	CA-C	-5.62	1.45	1.52
29	K	226	ALA	C-N	5.62	1.40	1.33
2	B	158	TRP	NE1-CE2	5.62	1.43	1.37
5	E	59	MET	CA-CB	5.62	1.62	1.53
8	1	162	GLY	CA-C	-5.62	1.45	1.51
9	2	242	PHE	CA-CB	5.62	1.61	1.52
12	5	154	LEU	CA-CB	5.62	1.59	1.53
20	N	173	VAL	CA-CB	-5.62	1.51	1.54
23	Q	20	ARG	CD-NE	5.62	1.54	1.46
28	I	431	GLN	C-N	5.62	1.41	1.33
8	1	60	ALA	N-CA	-5.62	1.39	1.46
28	I	333	ARG	CZ-NH2	5.62	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	66	ASP	CA-C	-5.62	1.45	1.53
19	Z	588	ARG	C-N	5.62	1.41	1.33
22	P	106	GLN	N-CA	-5.62	1.39	1.46
3	C	90	LEU	CA-C	-5.61	1.45	1.52
25	U	194	GLN	CA-C	5.61	1.59	1.52
21	S	384	THR	C-N	5.61	1.41	1.34
13	6	55	ARG	CZ-NH1	5.61	1.40	1.32
15	W	91	ARG	CZ-NH2	5.61	1.40	1.33
19	Z	116	GLY	N-CA	-5.61	1.38	1.45
24	R	226	VAL	CA-C	5.61	1.60	1.52
27	H	144	ARG	CD-NE	5.61	1.54	1.46
6	F	42	THR	C-N	5.61	1.41	1.33
21	S	278	ASN	N-CA	-5.61	1.39	1.46
26	O	40	GLN	C-N	5.61	1.41	1.33
28	I	413	LYS	CA-C	-5.61	1.46	1.52
9	2	141	LEU	CA-C	-5.61	1.46	1.52
19	Z	676	GLY	CA-C	-5.61	1.45	1.52
19	Z	841	PRO	C-N	5.61	1.40	1.33
21	S	106	HIS	CA-CB	5.61	1.62	1.53
31	M	350	ARG	CA-C	-5.61	1.45	1.52
19	Z	172	GLU	N-CA	-5.60	1.39	1.46
10	3	181	SER	CA-C	-5.60	1.46	1.52
22	P	329	ARG	CZ-NH1	5.60	1.40	1.32
28	I	382	ASP	C-N	5.60	1.41	1.33
11	4	163	CYS	CA-C	5.60	1.60	1.52
22	P	194	LEU	CB-CG	5.60	1.64	1.53
25	U	253	THR	CA-C	5.60	1.60	1.52
31	M	177	ALA	C-N	5.60	1.41	1.34
31	M	400	LYS	C-N	5.60	1.41	1.33
17	T	304	ASP	CA-CB	5.60	1.62	1.53
19	Z	430	ASP	C-N	5.60	1.41	1.33
19	Z	782	HIS	CG-CD2	5.60	1.42	1.35
29	K	349	THR	CA-C	5.60	1.60	1.52
6	F	59	HIS	C-N	5.59	1.41	1.33
6	F	236	LEU	CA-CB	5.59	1.62	1.53
9	2	241	ARG	C-O	5.59	1.30	1.23
29	K	265	ASP	C-N	5.59	1.40	1.33
12	5	180	ILE	CA-CB	-5.59	1.47	1.54
28	I	349	ARG	CZ-NH1	5.59	1.40	1.32
21	S	88	ARG	CD-NE	5.59	1.54	1.46
23	Q	17	SER	N-CA	-5.59	1.39	1.46
24	R	278	VAL	N-CA	-5.59	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	2	109	HIS	CE1-NE2	-5.59	1.26	1.32
4	D	101	ARG	C-N	5.59	1.41	1.33
16	V	175	ARG	C-N	5.59	1.41	1.34
19	Z	649	HIS	CA-CB	5.59	1.62	1.53
28	I	189	GLY	C-N	5.59	1.41	1.33
22	P	350	ARG	NE-CZ	5.58	1.39	1.33
21	S	182	LYS	C-N	5.58	1.40	1.34
23	Q	86	ALA	N-CA	-5.58	1.39	1.46
31	M	359	MET	C-N	-5.58	1.26	1.33
19	Z	149	GLU	C-N	5.58	1.41	1.33
20	N	269	ARG	CD-NE	5.58	1.54	1.46
1	A	55	LYS	C-N	5.58	1.38	1.33
1	A	132	ARG	CD-NE	5.58	1.54	1.46
7	G	115	ARG	N-CA	-5.58	1.39	1.46
20	N	807	LYS	C-N	-5.58	1.28	1.34
22	P	156	ASN	CA-CB	5.58	1.61	1.53
27	H	86	THR	CA-C	-5.58	1.45	1.52
21	S	430	ALA	C-N	5.58	1.41	1.33
31	M	64	ARG	CZ-NH2	5.58	1.40	1.33
4	D	75	VAL	N-CA	-5.58	1.39	1.46
12	5	249	ASP	CA-C	-5.58	1.45	1.52
21	S	158	GLU	CA-CB	5.58	1.62	1.53
22	P	416	GLN	CA-C	-5.58	1.45	1.53
28	I	180	PRO	N-CD	-5.58	1.40	1.47
20	N	178	ALA	CA-CB	5.57	1.61	1.53
22	P	187	LEU	CA-CB	5.57	1.61	1.53
27	H	56	LEU	CA-CB	5.57	1.62	1.53
28	I	158	ALA	CA-C	-5.57	1.45	1.52
14	7	168	TYR	CA-C	-5.57	1.46	1.52
19	Z	105	LYS	C-N	5.57	1.41	1.33
19	Z	146	GLY	N-CA	-5.57	1.39	1.45
22	P	451	MET	N-CA	-5.57	1.39	1.46
23	Q	279	TYR	CA-C	-5.57	1.45	1.52
10	3	51	ILE	CA-C	-5.57	1.45	1.52
19	Z	461	PRO	CA-CB	5.57	1.62	1.53
19	Z	653	ALA	CA-CB	5.57	1.61	1.53
14	7	74	TYR	N-CA	5.57	1.53	1.46
23	Q	244	SER	CA-CB	5.57	1.61	1.53
30	L	96	GLY	N-CA	5.57	1.52	1.44
2	B	65	VAL	CA-C	-5.56	1.46	1.52
14	7	255	ILE	CA-CB	-5.56	1.46	1.54
31	M	183	ARG	CZ-NH2	5.56	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	4	ARG	CD-NE	5.56	1.54	1.46
19	Z	865	PHE	C-N	5.56	1.41	1.33
20	N	599	ILE	CA-CB	5.56	1.61	1.54
20	N	857	ASP	CA-CB	5.56	1.63	1.53
17	T	126	LEU	N-CA	-5.56	1.39	1.46
19	Z	76	GLU	CA-C	-5.56	1.45	1.52
19	Z	802	SER	N-CA	5.56	1.53	1.46
20	N	708	GLN	C-N	5.56	1.41	1.33
29	K	151	ILE	C-N	5.56	1.41	1.33
7	G	34	SER	CA-C	-5.56	1.45	1.53
20	N	247	GLN	CA-C	5.56	1.59	1.52
24	R	381	GLN	CG-CD	5.56	1.66	1.52
31	M	77	LYS	C-N	5.56	1.41	1.33
17	T	235	LEU	C-N	5.56	1.41	1.33
21	S	156	LEU	CA-C	5.56	1.59	1.52
11	4	14	LEU	N-CA	-5.55	1.39	1.46
15	W	54	LEU	C-N	5.55	1.41	1.33
20	N	194	ARG	CD-NE	5.55	1.54	1.46
20	N	686	GLY	N-CA	-5.55	1.38	1.45
27	H	337	LEU	CA-C	-5.55	1.47	1.53
28	I	271	PHE	C-N	5.55	1.41	1.33
25	U	35	VAL	CA-C	-5.55	1.45	1.52
12	5	198	MET	C-N	5.55	1.41	1.34
19	Z	644	ALA	C-N	5.55	1.41	1.33
20	N	485	ALA	CA-C	-5.55	1.45	1.52
2	B	219	ARG	CD-NE	5.55	1.54	1.46
11	4	86	ARG	CZ-NH1	5.55	1.40	1.32
1	A	95	ARG	N-CA	-5.54	1.39	1.46
15	W	138	VAL	N-CA	-5.54	1.39	1.46
22	P	333	SER	C-N	5.54	1.41	1.33
30	L	160	ARG	NE-CZ	5.54	1.39	1.33
31	M	296	THR	CA-C	-5.54	1.46	1.52
3	C	15	GLU	C-O	-5.54	1.17	1.24
19	Z	261	ARG	NE-CZ	5.54	1.39	1.33
20	N	628	ARG	N-CA	-5.54	1.39	1.46
24	R	177	ARG	CZ-NH1	5.54	1.40	1.32
27	H	139	ARG	NE-CZ	5.54	1.39	1.33
28	I	282	VAL	N-CA	-5.54	1.39	1.46
29	K	323	ARG	NE-CZ	5.54	1.39	1.33
31	M	323	PHE	C-N	5.54	1.42	1.33
32	J	165	ILE	N-CA	-5.54	1.39	1.46
4	D	199	LYS	C-N	5.54	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	R	239	LYS	N-CA	-5.54	1.39	1.46
29	K	95	ALA	C-N	5.54	1.40	1.33
30	L	43	LEU	CA-C	5.54	1.59	1.52
28	I	393	ALA	CA-C	-5.54	1.45	1.52
6	F	181	GLN	CA-C	-5.54	1.45	1.52
20	N	72	GLY	CA-C	-5.54	1.43	1.51
1	A	114	LEU	CA-C	-5.54	1.45	1.52
14	7	199	GLU	CA-CB	5.54	1.61	1.53
17	T	318	TYR	CA-C	-5.54	1.47	1.53
25	U	59	ASP	CA-C	-5.54	1.45	1.52
31	M	364	ALA	C-N	5.54	1.41	1.33
19	Z	212	GLU	N-CA	-5.53	1.39	1.46
22	P	387	ASP	C-N	5.53	1.41	1.33
23	Q	133	LEU	C-N	5.53	1.40	1.33
10	3	82	ILE	N-CA	-5.53	1.40	1.46
21	S	184	SER	N-CA	5.53	1.53	1.46
22	P	123	ARG	CZ-NH1	5.53	1.40	1.32
26	O	142	LEU	CA-C	-5.53	1.45	1.52
28	I	256	ILE	N-CA	-5.53	1.39	1.46
14	7	123	ASP	N-CA	-5.53	1.39	1.46
24	R	344	HIS	CG-CD2	5.53	1.42	1.35
13	6	135	ASN	C-O	5.53	1.30	1.23
22	P	220	GLU	C-N	5.53	1.41	1.33
22	P	298	GLU	C-N	5.53	1.38	1.33
23	Q	355	LYS	CA-CB	5.52	1.61	1.53
21	S	315	HIS	CA-C	5.52	1.60	1.52
23	Q	385	LEU	CA-CB	5.52	1.61	1.53
30	L	219	ASP	N-CA	-5.52	1.38	1.46
3	C	4	ARG	CA-C	-5.52	1.45	1.52
7	G	224	ARG	CZ-NH1	5.52	1.40	1.32
13	6	67	SER	CA-CB	5.52	1.60	1.53
25	U	273	HIS	ND1-CE1	5.52	1.38	1.32
28	I	157	HIS	ND1-CE1	5.52	1.38	1.32
32	J	124	HIS	ND1-CE1	5.52	1.38	1.32
2	B	64	LYS	CA-CB	5.52	1.62	1.53
13	6	58	GLU	C-N	5.52	1.39	1.33
20	N	132	GLY	C-N	5.52	1.40	1.33
22	P	158	ASP	C-N	5.52	1.40	1.34
23	Q	263	THR	CA-CB	5.52	1.60	1.53
19	Z	621	ASP	CA-C	5.52	1.60	1.52
20	N	217	CYS	CA-C	-5.52	1.45	1.52
24	R	26	LEU	CA-C	-5.52	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	J	322	GLU	N-CA	-5.52	1.39	1.46
31	M	336	ASN	C-N	5.51	1.40	1.33
3	C	18	LEU	CA-CB	5.51	1.61	1.53
28	I	153	ASN	CA-CB	5.51	1.61	1.53
6	F	97	PHE	CA-CB	5.51	1.62	1.53
26	O	23	HIS	CA-C	-5.51	1.45	1.52
20	N	383	ASP	C-N	5.51	1.40	1.33
27	H	401	ARG	CZ-NH1	5.51	1.40	1.32
31	M	161	TYR	N-CA	-5.51	1.39	1.46
7	G	41	ARG	NE-CZ	5.51	1.39	1.33
20	N	590	TYR	C-N	5.51	1.41	1.33
2	B	113	ARG	NE-CZ	5.51	1.39	1.33
4	D	214	LEU	C-O	5.51	1.30	1.23
13	6	221	ARG	CZ-NH2	5.51	1.40	1.33
15	W	76	HIS	C-N	5.51	1.40	1.33
17	T	217	ARG	NE-CZ	5.51	1.39	1.33
24	R	116	ASP	CA-C	-5.51	1.46	1.52
25	U	229	GLN	CD-NE2	5.51	1.44	1.33
27	H	415	LYS	CA-CB	5.51	1.61	1.53
30	L	160	ARG	C-N	5.51	1.40	1.33
10	3	80	ARG	CZ-NH2	5.50	1.40	1.33
12	5	88	GLN	C-N	5.50	1.40	1.33
20	N	129	ARG	NE-CZ	5.50	1.39	1.33
30	L	375	PHE	CA-C	-5.50	1.46	1.52
20	N	169	GLU	CA-C	-5.50	1.45	1.53
21	S	170	PHE	CA-CB	5.50	1.62	1.53
25	U	254	ASN	CA-CB	5.50	1.61	1.53
27	H	117	GLN	N-CA	5.50	1.53	1.46
21	S	252	ARG	NE-CZ	5.50	1.39	1.33
27	H	199	GLU	CA-CB	5.50	1.61	1.53
30	L	218	VAL	CA-CB	5.50	1.61	1.54
8	1	118	GLU	CA-CB	5.50	1.61	1.53
16	V	235	SER	CA-CB	5.50	1.61	1.53
20	N	735	GLY	CA-C	-5.50	1.45	1.52
7	G	191	VAL	CA-CB	5.50	1.61	1.54
21	S	148	GLY	CA-C	5.50	1.58	1.52
27	H	109	PRO	CA-CB	5.50	1.61	1.53
28	I	213	GLU	CA-C	-5.50	1.45	1.52
32	J	338	LEU	C-N	5.50	1.41	1.33
20	N	710	ARG	NE-CZ	5.50	1.39	1.33
25	U	84	LYS	C-N	5.50	1.40	1.33
27	H	373	LEU	CA-CB	5.50	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	J	39	SER	CA-C	-5.50	1.45	1.52
6	F	164	ARG	C-N	5.50	1.41	1.33
19	Z	506	GLY	C-N	5.50	1.41	1.33
20	N	760	VAL	CA-CB	5.50	1.60	1.54
22	P	12	ARG	NE-CZ	5.50	1.39	1.33
19	Z	805	ASP	C-N	-5.49	1.27	1.33
20	N	572	ARG	CZ-NH2	5.49	1.40	1.33
23	Q	420	LYS	CA-CB	5.49	1.61	1.53
29	K	346	SER	CA-C	-5.49	1.45	1.52
6	F	51	ARG	NE-CZ	5.49	1.39	1.33
20	N	391	GLU	CA-CB	5.49	1.61	1.53
25	U	287	LYS	C-N	5.49	1.41	1.33
28	I	64	LYS	CA-C	-5.49	1.45	1.52
1	A	136	CYS	N-CA	-5.49	1.38	1.45
15	W	55	ALA	CA-C	5.49	1.59	1.52
19	Z	478	ARG	NE-CZ	5.49	1.39	1.33
19	Z	661	ALA	CA-C	5.49	1.59	1.52
6	F	154	PHE	N-CA	-5.49	1.39	1.46
11	4	77	PRO	C-N	5.49	1.41	1.33
17	T	265	ILE	CA-C	5.49	1.59	1.52
3	C	5	TYR	N-CA	-5.49	1.39	1.46
9	2	159	HIS	CA-C	-5.49	1.45	1.52
20	N	943	GLU	C-N	5.49	1.39	1.33
30	L	301	PRO	C-N	5.49	1.41	1.33
30	L	374	ASP	C-N	5.49	1.40	1.33
28	I	369	THR	C-N	5.48	1.41	1.33
22	P	127	THR	CA-C	-5.48	1.45	1.52
6	F	48	ALA	CA-C	-5.48	1.46	1.52
16	V	53	VAL	CA-CB	5.48	1.64	1.54
20	N	779	LEU	CA-C	-5.48	1.45	1.52
23	Q	410	VAL	CA-C	-5.48	1.45	1.52
32	J	117	ARG	C-N	5.48	1.40	1.33
32	J	259	LEU	N-CA	-5.48	1.39	1.46
20	N	126	ILE	CB-CG1	5.48	1.64	1.53
23	Q	265	GLU	CA-CB	5.48	1.61	1.53
25	U	20	VAL	N-CA	-5.48	1.40	1.46
31	M	57	ILE	C-N	5.48	1.41	1.33
32	J	212	ILE	CB-CG1	5.48	1.64	1.53
2	B	223	PRO	CA-CB	5.47	1.61	1.53
21	S	102	ARG	CZ-NH2	5.47	1.40	1.33
26	O	352	ARG	CZ-NH2	5.47	1.40	1.33
1	A	86	ASP	C-N	5.47	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	P	166	LEU	N-CA	-5.47	1.39	1.46
25	U	208	ILE	CA-CB	-5.47	1.47	1.54
30	L	137	SER	N-CA	5.47	1.53	1.46
1	A	140	LEU	CB-CG	5.47	1.64	1.53
5	E	222	PRO	N-CD	-5.47	1.40	1.47
7	G	237	GLU	CA-C	-5.47	1.45	1.52
15	W	97	LEU	CA-C	-5.47	1.45	1.52
20	N	710	ARG	CD-NE	5.47	1.53	1.46
26	O	81	LEU	C-N	5.47	1.41	1.33
27	H	144	ARG	NE-CZ	5.47	1.39	1.33
29	K	387	VAL	C-N	5.47	1.41	1.33
20	N	151	ILE	C-N	5.47	1.41	1.33
9	2	115	ARG	NE-CZ	5.47	1.39	1.33
10	3	189	ILE	N-CA	5.47	1.52	1.46
19	Z	411	ALA	N-CA	-5.47	1.39	1.46
27	H	70	THR	CA-C	-5.47	1.45	1.53
32	J	340	ARG	N-CA	-5.47	1.39	1.46
1	A	131	MET	CA-CB	5.46	1.62	1.53
2	B	137	CYS	N-CA	-5.46	1.39	1.45
11	4	70	ARG	CA-CB	5.46	1.61	1.53
12	5	162	GLY	CA-C	-5.46	1.46	1.52
17	T	285	ILE	C-O	-5.46	1.17	1.23
17	T	327	LYS	C-N	5.46	1.39	1.33
30	L	135	ASN	CA-C	5.46	1.59	1.52
20	N	212	ASP	CA-C	-5.46	1.46	1.52
5	E	72	ALA	CA-CB	5.46	1.62	1.53
9	2	129	MET	CA-C	5.46	1.59	1.52
13	6	216	THR	C-N	5.46	1.41	1.33
19	Z	34	ARG	NE-CZ	5.46	1.39	1.33
20	N	798	PRO	CA-C	-5.46	1.45	1.52
24	R	281	GLU	C-O	-5.46	1.17	1.24
6	F	60	GLN	N-CA	-5.46	1.39	1.46
21	S	238	HIS	CA-CB	5.46	1.61	1.53
23	Q	61	GLY	CA-C	-5.46	1.44	1.51
20	N	5	ALA	CA-CB	5.46	1.62	1.53
23	Q	268	GLN	CA-CB	5.46	1.61	1.53
26	O	297	ALA	CA-C	-5.46	1.45	1.52
30	L	75	LEU	C-N	5.46	1.40	1.33
32	J	76	VAL	CA-C	-5.46	1.46	1.53
4	D	140	VAL	CA-C	-5.46	1.46	1.52
7	G	23	GLN	N-CA	5.46	1.52	1.46
12	5	122	CYS	N-CA	-5.46	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Z	49	ASP	CA-CB	5.46	1.61	1.53
19	Z	91	SER	CA-C	-5.46	1.46	1.52
20	N	739	ALA	C-N	5.46	1.40	1.33
24	R	241	ILE	C-N	5.46	1.41	1.33
26	O	289	ARG	CD-NE	5.46	1.53	1.46
22	P	364	ARG	CZ-NH1	5.46	1.40	1.32
24	R	233	ARG	CA-C	5.45	1.59	1.52
30	L	16	ALA	CA-C	-5.45	1.45	1.52
6	F	157	ARG	CA-C	-5.45	1.45	1.52
16	V	26	ASP	CA-C	-5.45	1.46	1.52
16	V	58	LEU	C-N	5.45	1.38	1.33
20	N	415	HIS	N-CA	5.45	1.52	1.45
28	I	216	ILE	C-N	5.45	1.42	1.33
30	L	311	ARG	CD-NE	5.45	1.53	1.46
27	H	105	ASP	CA-C	-5.45	1.45	1.52
4	D	115	ARG	CZ-NH1	5.45	1.40	1.32
6	F	87	PHE	N-CA	5.45	1.52	1.46
25	U	89	GLU	CA-C	-5.45	1.45	1.52
21	S	324	VAL	C-N	5.45	1.41	1.33
25	U	179	ILE	C-N	5.45	1.41	1.33
26	O	330	ARG	CD-NE	5.45	1.53	1.46
27	H	272	ILE	C-O	-5.45	1.18	1.24
28	I	257	GLN	CA-C	-5.45	1.46	1.52
22	P	269	SER	C-N	5.44	1.40	1.33
6	F	175	HIS	N-CA	5.44	1.52	1.46
7	G	3	SER	CA-C	-5.44	1.46	1.53
10	3	83	LYS	C-N	5.44	1.40	1.33
10	3	203	ARG	NE-CZ	5.44	1.39	1.33
16	V	103	GLY	CA-C	-5.44	1.44	1.51
19	Z	614	HIS	CB-CG	-5.44	1.42	1.50
26	O	358	THR	CA-C	-5.44	1.45	1.52
29	K	193	GLN	CA-C	-5.44	1.45	1.52
30	L	343	GLU	CA-C	5.44	1.59	1.52
28	I	363	ARG	CZ-NH1	5.44	1.40	1.32
30	L	295	ARG	NE-CZ	5.44	1.39	1.33
4	D	117	ILE	C-O	-5.44	1.17	1.24
11	4	49	GLU	C-N	5.44	1.41	1.33
20	N	778	PHE	C-N	5.44	1.41	1.33
23	Q	393	VAL	C-N	5.44	1.41	1.33
3	C	5	TYR	C-N	5.44	1.41	1.33
27	H	397	ILE	N-CA	-5.44	1.39	1.46
16	V	306	THR	CA-C	-5.43	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	T	190	TYR	CA-CB	5.43	1.62	1.53
31	M	413	ARG	NE-CZ	5.43	1.39	1.33
20	N	572	ARG	CD-NE	5.43	1.53	1.46
21	S	149	LYS	C-N	5.43	1.40	1.33
28	I	389	ASP	CA-CB	5.43	1.62	1.53
30	L	99	ARG	C-N	5.43	1.40	1.33
19	Z	521	ALA	N-CA	-5.43	1.39	1.46
19	Z	570	GLY	N-CA	5.43	1.50	1.45
20	N	491	GLN	CA-C	-5.43	1.45	1.52
20	N	544	ILE	CA-CB	5.43	1.61	1.54
21	S	121	ASN	N-CA	-5.43	1.40	1.46
22	P	199	TYR	CA-C	-5.43	1.45	1.52
20	N	246	TYR	CA-CB	5.43	1.61	1.53
7	G	54	VAL	CA-CB	5.43	1.59	1.53
8	1	75	PHE	C-N	5.43	1.41	1.33
22	P	8	ARG	NE-CZ	5.43	1.39	1.33
23	Q	217	ILE	CA-C	-5.43	1.46	1.52
30	L	391	SER	N-CA	5.43	1.52	1.46
31	M	186	GLU	CA-CB	5.43	1.62	1.53
19	Z	735	GLY	CA-C	-5.42	1.46	1.52
21	S	46	ALA	C-N	5.42	1.40	1.33
12	5	133	ILE	N-CA	-5.42	1.39	1.46
19	Z	129	LEU	C-N	5.42	1.41	1.33
3	C	3	ARG	CA-C	-5.42	1.45	1.52
7	G	172	ALA	C-O	-5.42	1.17	1.24
15	W	85	THR	N-CA	-5.42	1.39	1.46
16	V	188	SER	C-O	5.42	1.28	1.23
17	T	235	LEU	CA-C	5.42	1.59	1.52
19	Z	209	MET	C-N	5.42	1.41	1.33
31	M	104	PRO	N-CA	-5.42	1.40	1.47
24	R	379	ARG	CZ-NH1	5.42	1.40	1.32
32	J	17	GLY	CA-C	-5.42	1.46	1.52
2	B	104	PRO	C-N	5.42	1.39	1.33
4	D	26	VAL	N-CA	-5.42	1.39	1.46
19	Z	678	LEU	C-O	-5.42	1.17	1.24
22	P	168	GLU	CA-C	-5.42	1.45	1.52
23	Q	292	GLN	CA-C	-5.42	1.45	1.52
29	K	369	LYS	CA-CB	5.42	1.62	1.53
9	2	104	SER	CA-C	5.42	1.59	1.52
19	Z	703	ARG	C-N	5.42	1.41	1.33
21	S	279	ASN	CA-C	-5.42	1.45	1.52
25	U	145	HIS	ND1-CE1	5.42	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	O	305	ASN	CA-CB	5.42	1.62	1.53
32	J	124	HIS	C-N	5.42	1.40	1.33
7	G	152	ILE	C-O	-5.41	1.18	1.24
19	Z	25	ASP	CA-C	-5.41	1.45	1.52
20	N	183	LEU	CA-CB	5.41	1.61	1.53
23	Q	179	ALA	C-N	5.41	1.41	1.34
26	O	274	LEU	CA-C	-5.41	1.45	1.52
5	E	64	ILE	CA-C	-5.41	1.46	1.52
19	Z	52	LEU	CA-CB	5.41	1.61	1.53
21	S	285	LEU	N-CA	-5.41	1.39	1.46
23	Q	377	ILE	C-N	5.41	1.41	1.33
27	H	134	ILE	CA-CB	5.41	1.61	1.54
31	M	374	ARG	CA-CB	5.41	1.61	1.53
19	Z	240	VAL	CA-CB	5.41	1.61	1.54
24	R	321	GLU	CA-CB	5.41	1.61	1.53
25	U	56	VAL	CA-C	5.41	1.58	1.52
29	K	416	PHE	N-CA	-5.41	1.39	1.46
3	C	36	GLY	CA-C	-5.41	1.44	1.51
19	Z	95	PRO	N-CD	-5.41	1.40	1.47
21	S	476	ILE	C-N	5.41	1.40	1.33
14	7	79	ARG	CZ-NH1	5.40	1.40	1.32
29	K	125	LYS	N-CA	-5.40	1.43	1.46
29	K	302	ASN	CA-C	-5.40	1.46	1.52
32	J	46	GLN	CA-C	-5.40	1.46	1.52
32	J	113	ARG	CZ-NH2	5.40	1.40	1.33
11	4	93	ARG	CD-NE	5.40	1.53	1.46
6	F	64	LEU	CA-CB	5.40	1.63	1.53
19	Z	673	ARG	CA-CB	5.40	1.61	1.53
24	R	388	ASN	CG-ND2	5.40	1.44	1.33
15	W	99	HIS	C-N	5.40	1.40	1.33
27	H	271	LEU	CA-CB	5.40	1.61	1.53
27	H	301	GLU	CA-CB	5.40	1.61	1.53
15	W	53	THR	CA-C	-5.39	1.46	1.52
19	Z	191	ILE	C-N	5.39	1.41	1.34
24	R	329	PHE	CA-CB	5.39	1.61	1.53
26	O	336	VAL	C-O	5.39	1.29	1.24
13	6	195	LEU	C-N	5.39	1.40	1.33
21	S	237	ARG	CZ-NH1	5.39	1.40	1.32
5	E	73	HIS	CG-CD2	-5.39	1.29	1.35
16	V	104	ARG	CZ-NH1	5.39	1.40	1.32
16	V	264	LYS	CA-C	-5.39	1.45	1.52
19	Z	81	GLN	N-CA	-5.39	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Z	280	ASP	C-N	-5.39	1.27	1.33
27	H	114	ASN	C-N	5.39	1.41	1.33
22	P	135	LYS	N-CA	-5.39	1.39	1.46
17	T	212	HIS	CE1-NE2	5.39	1.38	1.32
19	Z	284	SER	C-N	5.39	1.41	1.33
20	N	883	ARG	C-N	5.39	1.40	1.33
21	S	114	HIS	CD2-NE2	5.39	1.43	1.37
11	4	162	LYS	C-O	-5.38	1.18	1.24
17	T	214	GLU	N-CA	-5.38	1.39	1.46
21	S	179	GLU	CA-C	5.38	1.55	1.52
21	S	483	HIS	CE1-NE2	-5.38	1.27	1.32
23	Q	95	LEU	CA-CB	5.38	1.61	1.53
27	H	391	GLU	N-CA	-5.38	1.39	1.46
11	4	23	SER	C-N	5.38	1.40	1.33
24	R	150	PHE	CA-CB	5.38	1.61	1.53
26	O	136	GLU	CA-C	-5.38	1.46	1.52
29	K	149	SER	N-CA	-5.38	1.39	1.46
2	B	228	ASP	CA-C	-5.38	1.45	1.52
2	B	204	THR	N-CA	-5.38	1.38	1.46
12	5	95	GLU	CA-CB	5.38	1.61	1.53
14	7	255	ILE	CA-C	-5.38	1.46	1.52
16	V	130	GLN	C-N	5.38	1.41	1.33
20	N	394	ALA	CA-C	5.38	1.59	1.52
20	N	623	GLY	CA-C	-5.38	1.46	1.52
24	R	349	LYS	N-CA	5.38	1.53	1.46
27	H	137	GLY	C-N	5.38	1.40	1.33
6	F	95	SER	N-CA	-5.38	1.39	1.46
9	2	177	ALA	CA-C	-5.38	1.45	1.52
13	6	231	ARG	CZ-NH1	5.38	1.40	1.32
26	O	29	TYR	C-N	5.38	1.41	1.33
31	M	142	LEU	N-CA	-5.38	1.39	1.46
8	1	125	GLU	N-CA	-5.38	1.38	1.46
21	S	494	PRO	N-CA	-5.38	1.40	1.47
23	Q	278	ARG	CA-C	5.38	1.60	1.52
31	M	164	LEU	C-N	-5.38	1.26	1.33
31	M	354	LYS	C-O	-5.38	1.18	1.24
2	B	196	LYS	C-O	-5.37	1.17	1.24
10	3	7	ASN	N-CA	-5.37	1.41	1.46
16	V	75	MET	N-CA	-5.37	1.36	1.45
21	S	455	GLN	CA-C	-5.37	1.46	1.52
29	K	78	GLU	CA-C	-5.37	1.46	1.52
29	K	106	THR	CA-C	-5.37	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	L	70	ILE	CA-C	-5.37	1.46	1.52
4	D	235	VAL	CA-C	5.37	1.59	1.52
26	O	43	ASP	C-N	5.37	1.41	1.33
31	M	211	HIS	CB-CG	-5.37	1.42	1.50
29	K	229	ARG	NE-CZ	5.37	1.39	1.33
4	D	126	GLN	C-O	-5.37	1.17	1.24
14	7	115	VAL	C-N	5.37	1.40	1.33
21	S	102	ARG	CD-NE	5.37	1.53	1.46
29	K	99	ASN	C-N	5.37	1.41	1.33
32	J	57	ARG	CA-C	-5.37	1.45	1.52
5	E	209	LYS	CA-C	-5.37	1.45	1.53
19	Z	433	LEU	CB-CG	5.37	1.64	1.53
4	D	62	ILE	CA-C	-5.36	1.45	1.52
14	7	76	SER	CA-C	-5.36	1.46	1.53
19	Z	665	GLU	CA-C	-5.36	1.46	1.52
23	Q	117	ALA	CA-CB	5.36	1.61	1.53
26	O	284	ARG	CD-NE	5.36	1.53	1.46
26	O	350	LYS	C-N	5.36	1.41	1.33
27	H	97	ARG	CZ-NH1	5.36	1.40	1.32
22	P	287	VAL	CA-CB	-5.36	1.46	1.54
26	O	123	LEU	N-CA	5.36	1.52	1.46
10	3	120	PHE	CA-C	-5.36	1.46	1.52
16	V	161	ARG	CD-NE	5.36	1.53	1.46
17	T	140	THR	C-N	5.36	1.40	1.33
24	R	111	LEU	CA-C	-5.36	1.45	1.52
27	H	140	VAL	N-CA	-5.36	1.40	1.46
28	I	330	ALA	CA-C	-5.36	1.45	1.52
5	E	106	THR	N-CA	-5.36	1.38	1.45
19	Z	134	SER	N-CA	-5.36	1.38	1.46
19	Z	642	ALA	C-N	5.36	1.41	1.34
1	A	117	ARG	C-N	5.36	1.40	1.33
20	N	649	ARG	CZ-NH1	5.36	1.40	1.32
23	Q	106	GLU	N-CA	-5.36	1.40	1.46
24	R	75	LYS	CA-CB	5.36	1.61	1.53
30	L	150	GLY	C-N	5.36	1.41	1.33
3	C	61	PHE	CA-CB	5.35	1.61	1.53
6	F	140	MET	CA-C	5.35	1.59	1.52
19	Z	455	VAL	C-O	-5.35	1.18	1.23
32	J	379	THR	CA-CB	5.35	1.60	1.53
17	T	190	TYR	N-CA	-5.35	1.39	1.46
21	S	266	LEU	CA-C	-5.35	1.45	1.52
20	N	399	TRP	NE1-CE2	5.35	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	I	282	VAL	C-O	-5.35	1.18	1.24
30	L	214	SER	C-N	5.35	1.40	1.33
20	N	222	PHE	N-CA	-5.35	1.40	1.46
20	N	383	ASP	CA-CB	5.35	1.62	1.53
30	L	259	GLU	CA-C	-5.35	1.48	1.52
30	L	323	ARG	CD-NE	5.35	1.53	1.46
14	7	52	GLY	CA-C	-5.35	1.44	1.51
19	Z	344	VAL	CA-CB	-5.35	1.51	1.54
19	Z	389	LYS	CA-CB	5.35	1.61	1.53
7	G	194	VAL	N-CA	5.34	1.52	1.46
20	N	488	THR	C-N	5.34	1.41	1.33
14	7	208	GLU	N-CA	-5.34	1.39	1.46
17	T	299	PRO	C-N	5.34	1.41	1.33
19	Z	66	LYS	N-CA	-5.34	1.39	1.46
26	O	98	GLU	C-N	5.34	1.41	1.33
1	A	151	VAL	CA-CB	-5.34	1.47	1.54
5	E	168	ARG	CA-C	-5.34	1.45	1.52
7	G	238	LYS	CA-C	-5.34	1.46	1.52
19	Z	478	ARG	CZ-NH1	5.34	1.40	1.32
23	Q	78	ASN	N-CA	-5.34	1.39	1.46
4	D	141	GLY	N-CA	-5.34	1.38	1.45
9	2	67	MET	C-N	-5.34	1.28	1.34
24	R	84	LEU	C-N	5.34	1.41	1.33
14	7	53	THR	N-CA	-5.34	1.39	1.46
17	T	211	PHE	CA-CB	5.34	1.61	1.53
28	I	192	ASN	C-O	-5.34	1.17	1.24
13	6	64	THR	CA-C	-5.34	1.46	1.52
20	N	875	PHE	CA-C	-5.34	1.46	1.52
7	G	128	ALA	CA-C	-5.33	1.45	1.52
20	N	431	THR	CA-C	-5.33	1.46	1.52
20	N	631	GLU	CA-C	-5.33	1.45	1.52
21	S	470	LEU	C-N	5.33	1.41	1.33
32	J	203	VAL	C-N	5.33	1.41	1.33
17	T	332	THR	CA-CB	5.33	1.62	1.54
19	Z	498	LEU	N-CA	-5.33	1.39	1.46
19	Z	828	ARG	NE-CZ	5.33	1.39	1.33
19	Z	839	PRO	N-CA	5.33	1.51	1.46
20	N	596	ASN	CA-C	5.33	1.60	1.52
21	S	478	PHE	CA-CB	-5.33	1.45	1.53
23	Q	113	CYS	C-N	5.33	1.40	1.33
24	R	243	GLY	N-CA	-5.33	1.39	1.45
24	R	366	TYR	N-CA	-5.33	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	N	251	ASP	CA-C	-5.33	1.45	1.52
23	Q	194	ARG	C-N	5.33	1.40	1.33
16	V	84	VAL	C-O	-5.33	1.17	1.24
30	L	278	MET	CA-C	-5.33	1.45	1.52
29	K	274	ARG	CA-C	-5.33	1.46	1.52
19	Z	873	LEU	N-CA	-5.33	1.39	1.46
19	Z	818	LEU	N-CA	-5.32	1.39	1.46
20	N	395	ARG	N-CA	5.32	1.52	1.46
13	6	97	ALA	N-CA	-5.32	1.40	1.46
20	N	377	HIS	ND1-CE1	5.32	1.37	1.32
20	N	592	GLY	CA-C	-5.32	1.44	1.51
16	V	290	VAL	CA-CB	-5.32	1.48	1.54
20	N	454	GLY	C-N	5.32	1.40	1.33
26	O	75	SER	CA-C	-5.32	1.45	1.52
29	K	337	ASP	CA-C	5.32	1.59	1.53
7	G	121	HIS	C-N	5.32	1.41	1.33
5	E	48	LEU	CA-C	-5.32	1.46	1.52
12	5	84	TYR	CA-CB	5.32	1.61	1.53
13	6	162	PHE	CA-C	-5.32	1.46	1.52
14	7	226	ARG	C-N	5.32	1.41	1.33
17	T	271	ARG	NE-CZ	5.32	1.38	1.33
19	Z	9	THR	C-N	5.32	1.40	1.33
19	Z	56	LEU	N-CA	-5.32	1.40	1.46
20	N	601	ARG	CZ-NH2	5.32	1.40	1.33
28	I	203	LEU	CA-C	5.32	1.59	1.52
28	I	322	ARG	CZ-NH1	5.32	1.40	1.32
7	G	206	LYS	CA-CB	5.32	1.61	1.53
9	2	117	PRO	N-CA	-5.32	1.40	1.46
10	3	26	ARG	N-CA	-5.32	1.39	1.46
19	Z	26	GLU	CA-CB	5.32	1.61	1.53
23	Q	363	ARG	CZ-NH1	5.32	1.40	1.32
24	R	257	ARG	C-N	5.32	1.41	1.33
26	O	72	ASN	CA-C	5.32	1.59	1.52
26	O	344	GLN	C-N	5.32	1.41	1.34
27	H	398	ARG	CZ-NH1	5.32	1.40	1.32
28	I	323	GLY	N-CA	5.32	1.53	1.45
15	W	139	ASP	CA-C	-5.31	1.46	1.52
20	N	207	ASN	C-N	5.31	1.40	1.33
26	O	315	LEU	CA-CB	5.31	1.61	1.53
28	I	268	ARG	C-N	5.31	1.40	1.33
30	L	254	GLY	N-CA	-5.31	1.40	1.44
23	Q	3	ALA	C-O	-5.31	1.17	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	U	79	TYR	CA-C	5.31	1.59	1.52
25	U	231	GLN	CA-C	-5.31	1.46	1.52
32	J	246	ILE	CA-CB	5.31	1.60	1.54
1	A	83	MET	C-N	5.31	1.40	1.33
5	E	100	TRP	CZ2-CH2	5.31	1.47	1.37
12	5	225	ARG	CZ-NH1	5.31	1.40	1.32
14	7	243	ILE	N-CA	-5.31	1.39	1.46
21	S	374	VAL	N-CA	-5.31	1.40	1.46
31	M	200	GLU	C-O	-5.31	1.17	1.24
32	J	230	MET	CA-C	-5.31	1.46	1.53
3	C	96	ARG	CZ-NH1	5.31	1.40	1.32
4	D	219	ARG	CA-CB	5.31	1.62	1.53
31	M	160	SER	CA-CB	5.31	1.64	1.53
4	D	224	LYS	C-N	5.30	1.40	1.33
12	5	134	SER	N-CA	-5.30	1.39	1.46
20	N	182	LYS	C-N	5.30	1.40	1.33
31	M	70	GLN	CA-CB	5.30	1.61	1.53
20	N	31	VAL	C-N	5.30	1.41	1.33
21	S	257	TYR	C-N	5.30	1.41	1.33
27	H	426	THR	C-O	-5.30	1.19	1.24
14	7	192	PRO	CA-C	5.30	1.59	1.52
16	V	142	ALA	CA-CB	5.30	1.61	1.53
16	V	272	ILE	CB-CG1	5.30	1.64	1.53
19	Z	34	ARG	CD-NE	5.30	1.53	1.46
25	U	88	ARG	CD-NE	5.30	1.53	1.46
32	J	190	GLY	CA-C	-5.30	1.44	1.51
9	2	253	ALA	CA-CB	5.30	1.62	1.53
17	T	105	TRP	C-N	5.30	1.40	1.33
21	S	252	ARG	CZ-NH2	5.30	1.40	1.33
3	C	91	ARG	CD-NE	5.30	1.53	1.46
7	G	233	ARG	C-O	-5.30	1.18	1.24
15	W	138	VAL	CA-C	-5.30	1.46	1.52
20	N	786	THR	N-CA	-5.30	1.40	1.46
20	N	830	THR	N-CA	-5.30	1.40	1.46
20	N	756	HIS	CD2-NE2	-5.30	1.32	1.37
28	I	233	THR	C-N	5.30	1.41	1.33
7	G	52	LYS	CA-C	-5.29	1.46	1.52
20	N	787	CYS	C-O	-5.29	1.17	1.23
30	L	227	ARG	NE-CZ	5.29	1.38	1.33
15	W	77	THR	N-CA	-5.29	1.39	1.46
20	N	166	THR	C-N	5.29	1.40	1.33
20	N	426	TYR	CA-CB	5.29	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	Q	337	ARG	NE-CZ	5.29	1.38	1.33
25	U	193	ASN	C-N	5.29	1.40	1.33
4	D	139	ILE	CA-C	5.29	1.58	1.52
26	O	82	HIS	CD2-NE2	5.29	1.43	1.37
21	S	472	PHE	CA-CB	5.29	1.61	1.53
24	R	146	ARG	NE-CZ	5.29	1.38	1.33
19	Z	210	GLU	C-N	5.29	1.40	1.33
20	N	372	ALA	N-CA	5.29	1.52	1.46
10	3	81	GLN	CA-C	-5.29	1.46	1.52
14	7	254	ASP	CA-C	-5.29	1.47	1.53
29	K	295	GLN	CA-C	-5.29	1.45	1.52
3	C	81	SER	CA-CB	5.28	1.61	1.53
21	S	363	VAL	C-N	5.28	1.40	1.33
27	H	237	PHE	CA-C	5.28	1.59	1.52
30	L	111	ARG	CD-NE	5.28	1.53	1.46
7	G	99	PHE	CA-CB	5.28	1.61	1.53
12	5	244	ILE	C-N	5.28	1.40	1.33
20	N	700	GLU	C-N	5.28	1.40	1.33
16	V	198	ARG	N-CA	-5.28	1.40	1.46
24	R	353	ILE	N-CA	-5.28	1.40	1.46
27	H	351	ARG	NE-CZ	5.28	1.38	1.33
30	L	286	ARG	C-N	5.28	1.40	1.33
13	6	150	SER	CA-C	-5.28	1.46	1.52
21	S	209	TYR	CA-C	-5.28	1.45	1.52
29	K	177	VAL	CA-C	-5.28	1.46	1.52
31	M	32	ILE	N-CA	-5.28	1.40	1.46
15	W	13	SER	N-CA	5.28	1.52	1.45
19	Z	841	PRO	N-CD	-5.28	1.40	1.47
22	P	433	ASN	C-N	5.28	1.41	1.33
29	K	52	GLU	C-N	5.28	1.41	1.33
32	J	201	ARG	CD-NE	5.28	1.53	1.46
6	F	105	VAL	N-CA	-5.28	1.40	1.46
19	Z	314	TYR	N-CA	-5.28	1.39	1.46
20	N	390	LEU	C-N	5.28	1.40	1.33
22	P	428	TRP	NE1-CE2	5.28	1.43	1.37
29	K	121	ARG	NE-CZ	5.28	1.38	1.33
7	G	204	GLU	CA-C	-5.27	1.43	1.52
1	A	48	ALA	C-N	5.27	1.41	1.33
9	2	79	PHE	CA-C	-5.27	1.46	1.52
20	N	927	PRO	CA-CB	5.27	1.61	1.53
28	I	375	ALA	CA-C	-5.27	1.46	1.52
14	7	154	LYS	CA-C	-5.27	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Z	330	PHE	C-N	5.27	1.41	1.33
9	2	95	THR	C-N	5.27	1.41	1.33
12	5	231	GLY	N-CA	5.27	1.50	1.44
19	Z	463	LEU	C-N	5.27	1.40	1.33
32	J	103	ILE	CA-CB	-5.27	1.46	1.54
22	P	302	TYR	N-CA	-5.27	1.39	1.46
30	L	83	PHE	CA-C	-5.27	1.46	1.52
7	G	157	VAL	N-CA	-5.26	1.40	1.46
9	2	110	SER	C-N	5.26	1.40	1.33
12	5	185	PHE	CA-CB	5.26	1.61	1.53
14	7	167	GLY	N-CA	-5.26	1.39	1.46
23	Q	22	ALA	C-N	5.26	1.41	1.33
28	I	298	ASN	C-N	5.26	1.42	1.34
28	I	425	ASN	C-N	5.26	1.40	1.33
32	J	312	ASP	CA-C	-5.26	1.45	1.52
7	G	115	ARG	NE-CZ	5.26	1.38	1.33
7	G	162	TRP	CA-C	5.26	1.59	1.52
10	3	85	TYR	CZ-OH	5.26	1.49	1.38
19	Z	811	LEU	CA-CB	5.26	1.61	1.53
13	6	151	PHE	C-N	5.26	1.40	1.33
12	5	165	LYS	CA-C	-5.26	1.46	1.52
23	Q	164	ALA	CA-C	-5.26	1.46	1.52
32	J	317	PHE	CA-CB	5.26	1.60	1.53
4	D	41	VAL	N-CA	-5.26	1.40	1.46
7	G	224	ARG	CD-NE	5.26	1.53	1.46
19	Z	350	LYS	CA-C	5.26	1.59	1.52
20	N	847	GLU	CA-CB	5.26	1.61	1.53
21	S	491	ARG	NE-CZ	5.26	1.38	1.33
26	O	309	LEU	C-O	5.26	1.30	1.24
30	L	242	CYS	CA-CB	5.26	1.63	1.53
3	C	159	TRP	NE1-CE2	5.25	1.43	1.37
13	6	214	VAL	N-CA	-5.25	1.40	1.46
22	P	22	ALA	CA-C	5.25	1.59	1.52
23	Q	322	HIS	CB-CG	5.25	1.57	1.50
24	R	363	ASN	C-N	5.25	1.40	1.33
26	O	10	GLN	CA-C	-5.25	1.46	1.52
26	O	266	ALA	C-N	5.25	1.42	1.33
32	J	266	ASP	CA-CB	5.25	1.62	1.53
20	N	933	PRO	C-N	5.25	1.40	1.33
23	Q	308	ASP	CA-C	-5.25	1.46	1.52
27	H	343	PHE	CA-C	-5.25	1.46	1.53
14	7	92	SER	C-N	5.25	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	P	352	LYS	C-O	5.25	1.30	1.24
26	O	69	HIS	C-N	5.25	1.41	1.33
30	L	286	ARG	CZ-NH1	5.25	1.40	1.32
3	C	124	PHE	CA-C	-5.25	1.46	1.52
9	2	59	ALA	CA-C	-5.25	1.46	1.52
21	S	303	ARG	NE-CZ	5.25	1.38	1.33
3	C	166	ASN	CA-CB	5.25	1.60	1.53
15	W	66	PRO	C-N	5.25	1.40	1.33
21	S	197	ARG	NE-CZ	5.25	1.38	1.33
23	Q	142	ARG	CZ-NH1	5.25	1.40	1.32
30	L	389	ALA	N-CA	-5.25	1.40	1.46
17	T	187	GLU	CA-C	5.25	1.59	1.52
9	2	242	PHE	C-N	5.24	1.40	1.34
11	4	138	LEU	CA-C	-5.24	1.46	1.52
30	L	160	ARG	CA-CB	5.24	1.61	1.53
6	F	118	ILE	C-O	-5.24	1.20	1.24
20	N	578	LEU	CA-CB	5.24	1.61	1.53
22	P	294	LYS	N-CA	-5.24	1.40	1.46
25	U	267	ARG	CZ-NH1	5.24	1.40	1.32
14	7	151	TRP	CA-C	-5.24	1.46	1.52
19	Z	480	GLY	CA-C	5.24	1.58	1.52
26	O	16	PRO	C-N	5.24	1.41	1.33
15	W	130	ARG	NE-CZ	5.24	1.38	1.33
21	S	76	ARG	CA-C	-5.24	1.46	1.52
1	A	222	VAL	CA-C	-5.24	1.46	1.52
2	B	82	ASP	C-N	5.24	1.41	1.33
5	E	195	ILE	CA-CB	5.24	1.61	1.54
13	6	58	GLU	C-O	-5.24	1.18	1.24
17	T	232	PRO	N-CD	-5.24	1.40	1.47
19	Z	195	ASN	CA-CB	5.24	1.61	1.53
20	N	526	THR	C-N	5.24	1.40	1.33
21	S	419	ALA	N-CA	5.24	1.52	1.46
22	P	403	PHE	CA-CB	5.24	1.61	1.53
23	Q	142	ARG	CA-CB	5.24	1.59	1.52
26	O	289	ARG	CA-C	-5.24	1.46	1.52
28	I	157	HIS	CG-CD2	5.24	1.41	1.35
28	I	427	LEU	C-N	5.24	1.40	1.33
30	L	370	ARG	CZ-NH2	5.24	1.40	1.33
6	F	196	ARG	CZ-NH1	5.23	1.40	1.32
19	Z	421	ASP	C-N	5.23	1.40	1.33
29	K	394	VAL	N-CA	-5.23	1.39	1.46
21	S	37	GLU	C-N	5.23	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	M	154	VAL	C-O	5.23	1.29	1.23
22	P	38	GLY	C-N	5.23	1.40	1.33
25	U	188	SER	CA-C	-5.23	1.46	1.52
26	O	169	HIS	ND1-CE1	5.23	1.37	1.32
31	M	334	ALA	CA-C	-5.23	1.46	1.52
20	N	145	HIS	CG-ND1	5.23	1.44	1.38
21	S	110	TYR	CZ-OH	5.23	1.49	1.38
25	U	224	HIS	ND1-CE1	5.23	1.37	1.32
27	H	69	ASP	N-CA	-5.23	1.39	1.46
29	K	193	GLN	CA-CB	5.23	1.61	1.53
32	J	89	VAL	CA-CB	-5.23	1.47	1.54
2	B	27	ALA	C-N	5.23	1.40	1.33
5	E	61	PRO	C-N	5.23	1.40	1.33
16	V	139	ARG	CZ-NH2	5.23	1.40	1.33
19	Z	629	LYS	C-O	-5.23	1.17	1.24
20	N	461	LEU	CA-CB	5.23	1.61	1.53
20	N	564	ASP	CA-CB	5.23	1.61	1.53
30	L	138	HIS	CD2-NE2	5.23	1.43	1.37
30	L	286	ARG	CD-NE	5.23	1.53	1.46
31	M	151	GLY	N-CA	-5.23	1.37	1.45
19	Z	33	ARG	CZ-NH2	5.23	1.40	1.33
21	S	240	ALA	CA-CB	5.22	1.61	1.53
21	S	260	TYR	CA-C	5.22	1.59	1.52
28	I	352	GLU	C-N	5.22	1.41	1.33
2	B	30	ALA	C-N	5.22	1.40	1.33
21	S	300	GLU	N-CA	-5.22	1.39	1.46
28	I	107	MET	C-N	5.22	1.40	1.33
19	Z	701	ASN	CA-CB	5.22	1.62	1.53
19	Z	234	THR	N-CA	-5.22	1.40	1.46
20	N	793	LYS	C-N	5.22	1.40	1.33
28	I	152	LEU	N-CA	-5.22	1.39	1.46
28	I	342	ILE	N-CA	-5.22	1.39	1.46
31	M	382	VAL	C-N	5.22	1.40	1.33
2	B	13	PHE	CA-CB	5.22	1.61	1.53
19	Z	690	VAL	CA-C	-5.22	1.47	1.52
20	N	490	ARG	CD-NE	5.22	1.53	1.46
23	Q	385	LEU	C-N	5.22	1.40	1.33
26	O	153	SER	CA-CB	5.22	1.61	1.53
26	O	255	TRP	NE1-CE2	5.22	1.43	1.37
31	M	157	ASN	N-CA	-5.22	1.39	1.46
22	P	403	PHE	N-CA	5.21	1.52	1.46
25	U	248	ALA	C-O	-5.21	1.17	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	I	157	HIS	C-N	5.21	1.40	1.33
10	3	180	VAL	N-CA	-5.21	1.39	1.46
20	N	73	ALA	CA-CB	-5.21	1.45	1.52
22	P	316	ARG	CZ-NH2	5.21	1.40	1.33
23	Q	144	GLN	N-CA	-5.21	1.40	1.46
26	O	289	ARG	CZ-NH1	5.21	1.40	1.32
20	N	950	TYR	CA-C	-5.21	1.46	1.52
22	P	10	ASP	N-CA	-5.21	1.39	1.46
23	Q	312	GLU	CA-C	-5.21	1.46	1.52
26	O	127	ASP	CA-CB	5.21	1.61	1.53
28	I	368	HIS	ND1-CE1	5.21	1.37	1.32
3	C	240	HIS	ND1-CE1	5.21	1.37	1.32
17	T	167	PHE	N-CA	5.21	1.52	1.46
20	N	601	ARG	NE-CZ	5.21	1.38	1.33
20	N	615	ARG	CZ-NH2	5.21	1.40	1.33
20	N	818	GLU	CA-CB	5.21	1.60	1.53
23	Q	308	ASP	C-N	5.21	1.41	1.33
28	I	68	ILE	N-CA	-5.21	1.40	1.46
6	F	65	HIS	N-CA	-5.21	1.39	1.46
9	2	246	ARG	NE-CZ	5.21	1.38	1.33
21	S	75	VAL	C-N	5.21	1.40	1.33
23	Q	212	MET	CA-CB	5.21	1.61	1.53
13	6	180	VAL	N-CA	-5.20	1.40	1.46
14	7	215	ARG	NE-CZ	5.20	1.38	1.33
20	N	22	PHE	C-N	5.20	1.40	1.33
20	N	792	ASN	CA-CB	5.20	1.61	1.53
26	O	277	LEU	CA-CB	5.20	1.61	1.53
30	L	311	ARG	CZ-NH1	5.20	1.40	1.32
1	A	115	CYS	CA-CB	5.20	1.61	1.53
19	Z	560	LEU	N-CA	-5.20	1.40	1.46
24	R	281	GLU	CA-CB	5.20	1.61	1.53
22	P	55	ARG	NE-CZ	5.20	1.38	1.33
10	3	15	LYS	CA-C	-5.20	1.46	1.52
14	7	89	VAL	C-O	5.20	1.29	1.23
16	V	130	GLN	CA-CB	5.20	1.61	1.53
26	O	304	VAL	N-CA	-5.20	1.39	1.46
28	I	438	LEU	N-CA	5.20	1.52	1.46
29	K	358	VAL	C-N	5.20	1.40	1.33
1	A	225	PRO	N-CA	-5.20	1.41	1.47
27	H	43	ARG	CD-NE	5.20	1.53	1.46
20	N	817	LEU	C-N	5.19	1.40	1.33
31	M	239	LEU	N-CA	-5.19	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	T	248	PHE	N-CA	-5.19	1.40	1.46
19	Z	558	LEU	C-O	-5.19	1.19	1.24
20	N	883	ARG	CD-NE	5.19	1.53	1.46
24	R	315	THR	N-CA	-5.19	1.39	1.45
26	O	209	GLY	C-N	5.19	1.40	1.33
27	H	174	TYR	C-N	5.19	1.40	1.33
29	K	317	LEU	CA-C	-5.19	1.46	1.52
1	A	141	ILE	N-CA	-5.19	1.40	1.46
5	E	98	ASN	C-N	5.19	1.40	1.33
11	4	160	LEU	C-N	5.19	1.40	1.33
17	T	164	ILE	CA-CB	-5.19	1.50	1.53
25	U	190	ARG	CZ-NH2	5.19	1.40	1.33
21	S	107	TYR	N-CA	-5.19	1.40	1.46
25	U	213	GLU	CA-C	-5.19	1.46	1.52
30	L	86	LYS	CA-C	-5.19	1.46	1.52
2	B	220	ARG	NE-CZ	5.19	1.38	1.33
4	D	56	GLU	CA-CB	5.19	1.62	1.54
12	5	191	SER	CA-C	5.19	1.59	1.52
27	H	248	LYS	C-N	5.19	1.40	1.33
1	A	10	ASP	N-CA	-5.18	1.39	1.46
20	N	220	LEU	CA-C	-5.18	1.46	1.52
27	H	132	THR	CA-CB	5.18	1.62	1.53
31	M	123	LYS	CA-C	-5.18	1.46	1.52
2	B	74	LEU	N-CA	-5.18	1.39	1.45
2	B	210	VAL	C-O	-5.18	1.19	1.24
5	E	31	HIS	C-N	5.18	1.41	1.34
5	E	89	ILE	C-N	5.18	1.40	1.33
11	4	54	VAL	CA-CB	-5.18	1.47	1.54
19	Z	502	LEU	N-CA	-5.18	1.41	1.46
28	I	307	ARG	CA-CB	5.18	1.61	1.53
8	1	223	LEU	N-CA	-5.18	1.39	1.46
32	J	347	ILE	CA-C	-5.18	1.46	1.52
16	V	64	ASP	C-N	5.18	1.41	1.33
19	Z	606	VAL	C-N	5.18	1.40	1.33
20	N	415	HIS	C-N	5.18	1.41	1.33
23	Q	113	CYS	C-O	-5.18	1.18	1.24
4	D	235	VAL	CA-CB	-5.18	1.48	1.54
5	E	99	HIS	ND1-CE1	5.18	1.37	1.32
19	Z	382	ASN	N-CA	-5.18	1.40	1.46
22	P	450	GLU	N-CA	-5.17	1.39	1.46
23	Q	352	SER	N-CA	-5.17	1.40	1.46
28	I	326	LYS	CA-CB	5.17	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	K	366	ARG	CZ-NH1	5.17	1.40	1.32
12	5	154	LEU	CA-C	-5.17	1.47	1.53
6	F	93	LEU	C-N	5.17	1.40	1.33
13	6	115	ILE	N-CA	-5.17	1.40	1.46
20	N	389	ASN	CB-CG	5.17	1.65	1.52
21	S	364	ARG	NE-CZ	5.17	1.38	1.33
30	L	351	GLY	CA-C	5.17	1.58	1.51
17	T	212	HIS	ND1-CE1	5.17	1.37	1.32
21	S	171	LEU	CA-C	-5.17	1.46	1.52
26	O	63	PHE	CA-C	5.17	1.59	1.52
27	H	184	ILE	N-CA	5.17	1.52	1.46
32	J	17	GLY	N-CA	-5.17	1.39	1.45
1	A	124	VAL	CA-C	-5.17	1.46	1.52
21	S	211	ALA	CA-C	-5.17	1.46	1.52
27	H	131	PRO	CA-C	-5.17	1.46	1.52
29	K	288	ILE	C-N	5.17	1.41	1.33
30	L	134	TYR	C-N	5.17	1.40	1.33
16	V	157	ILE	C-N	5.17	1.40	1.33
22	P	223	LYS	C-N	5.17	1.40	1.33
11	4	132	HIS	CA-C	-5.16	1.46	1.52
19	Z	111	GLU	CA-C	-5.16	1.46	1.52
25	U	187	LEU	N-CA	5.16	1.52	1.46
28	I	289	ALA	N-CA	-5.16	1.40	1.46
3	C	218	ARG	NE-CZ	5.16	1.38	1.33
8	1	108	LEU	N-CA	-5.16	1.39	1.45
13	6	158	GLN	N-CA	-5.16	1.39	1.45
19	Z	456	ARG	CZ-NH1	5.16	1.40	1.32
29	K	196	ILE	N-CA	-5.16	1.40	1.46
8	1	155	ARG	CD-NE	5.16	1.53	1.46
12	5	190	GLY	C-N	5.16	1.41	1.33
28	I	305	ILE	CA-C	-5.16	1.46	1.52
9	2	136	TYR	CA-CB	5.16	1.61	1.53
10	3	167	ILE	N-CA	-5.16	1.40	1.46
11	4	121	LEU	N-CA	-5.16	1.39	1.45
11	4	186	ASP	CA-C	-5.16	1.46	1.53
12	5	205	ASP	C-N	5.16	1.40	1.33
16	V	144	VAL	CA-CB	5.16	1.60	1.54
21	S	230	ARG	CD-NE	5.16	1.53	1.46
4	D	196	LEU	C-N	5.16	1.40	1.33
16	V	63	ASP	CA-C	5.16	1.59	1.52
19	Z	788	MET	CA-CB	5.16	1.62	1.53
20	N	651	GLY	CA-C	5.16	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	4	137	PHE	C-N	5.16	1.40	1.33
20	N	633	CYS	CA-C	5.16	1.58	1.52
28	I	268	ARG	CZ-NH2	5.16	1.40	1.33
28	I	371	ARG	CA-CB	5.15	1.61	1.53
19	Z	687	ARG	CA-C	5.15	1.59	1.52
7	G	230	LYS	N-CA	-5.15	1.40	1.46
12	5	148	GLN	N-CA	-5.15	1.39	1.46
20	N	502	TYR	N-CA	5.15	1.52	1.46
24	R	348	ASP	CA-CB	5.15	1.59	1.53
25	U	34	ARG	CA-CB	5.15	1.61	1.53
31	M	298	ARG	NE-CZ	5.15	1.38	1.33
32	J	202	ALA	N-CA	5.15	1.52	1.46
17	T	179	PHE	C-N	5.15	1.41	1.33
20	N	524	LYS	C-N	5.15	1.40	1.33
5	E	16	SER	CA-C	5.15	1.59	1.52
11	4	143	LEU	N-CA	-5.15	1.40	1.46
16	V	226	MET	C-N	5.15	1.41	1.34
23	Q	85	ALA	C-N	5.15	1.40	1.33
24	R	197	ALA	C-N	5.15	1.40	1.33
30	L	98	ARG	CA-C	-5.15	1.46	1.52
32	J	374	ARG	NE-CZ	5.15	1.38	1.33
6	F	71	GLY	C-N	5.15	1.40	1.33
14	7	180	SER	CA-CB	5.15	1.63	1.54
23	Q	378	LEU	N-CA	-5.15	1.39	1.46
30	L	354	GLY	CA-C	-5.15	1.46	1.52
31	M	56	LYS	CA-CB	5.15	1.61	1.53
6	F	220	GLU	CA-CB	5.14	1.62	1.53
9	2	86	CYS	CA-C	-5.14	1.46	1.52
17	T	292	ARG	N-CA	-5.14	1.40	1.46
29	K	207	PRO	C-O	-5.14	1.20	1.24
1	A	68	HIS	ND1-CE1	5.14	1.37	1.32
3	C	86	LEU	N-CA	-5.14	1.40	1.46
9	2	100	GLN	CA-CB	5.14	1.61	1.53
10	3	129	CYS	CA-CB	5.14	1.60	1.53
16	V	278	GLN	CA-C	-5.14	1.46	1.53
18	Y	57	ARG	CD-NE	5.14	1.53	1.46
19	Z	508	SER	CA-CB	5.14	1.62	1.53
19	Z	822	VAL	CA-CB	5.14	1.60	1.54
20	N	242	LEU	CA-C	-5.14	1.46	1.52
27	H	340	LYS	CA-C	5.14	1.59	1.52
16	V	44	HIS	N-CA	-5.14	1.40	1.46
27	H	147	TYR	C-N	5.14	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	K	114	ARG	CD-NE	5.14	1.53	1.46
2	B	12	THR	C-N	5.14	1.40	1.33
21	S	104	LEU	C-N	5.14	1.40	1.33
21	S	92	ARG	CZ-NH2	5.14	1.40	1.33
28	I	357	ASP	N-CA	-5.14	1.39	1.45
5	E	220	VAL	N-CA	-5.14	1.40	1.46
22	P	164	SER	CA-CB	5.14	1.61	1.53
25	U	75	LEU	CA-C	-5.14	1.46	1.52
28	I	132	TYR	CA-C	5.14	1.59	1.53
31	M	358	PRO	C-N	5.14	1.40	1.33
32	J	24	TYR	C-N	5.14	1.40	1.34
20	N	578	LEU	N-CA	-5.13	1.39	1.46
20	N	590	TYR	CA-CB	5.13	1.61	1.53
25	U	280	ILE	N-CA	-5.13	1.40	1.46
27	H	232	ARG	CD-NE	5.13	1.53	1.46
32	J	10	GLU	CA-C	-5.13	1.46	1.52
3	C	16	GLY	N-CA	5.13	1.52	1.45
29	K	288	ILE	CA-CB	-5.13	1.48	1.54
5	E	150	GLY	N-CA	-5.13	1.37	1.44
14	7	61	ASP	CA-C	-5.13	1.46	1.52
19	Z	573	ILE	CA-CB	-5.13	1.47	1.54
19	Z	621	ASP	CA-CB	5.13	1.62	1.53
29	K	297	ASP	C-N	5.13	1.41	1.33
6	F	129	GLY	C-O	5.13	1.30	1.23
19	Z	703	ARG	CZ-NH2	5.13	1.40	1.33
20	N	784	THR	CA-C	5.13	1.57	1.52
2	B	4	ARG	CZ-NH2	5.13	1.40	1.33
16	V	162	LEU	C-N	5.13	1.40	1.33
29	K	231	VAL	CA-CB	-5.13	1.47	1.54
29	K	232	GLY	C-O	-5.13	1.17	1.23
2	B	98	TYR	CA-CB	5.13	1.61	1.53
7	G	25	GLU	C-O	-5.13	1.18	1.24
9	2	191	GLU	N-CA	5.13	1.52	1.45
19	Z	257	ARG	CZ-NH1	5.13	1.40	1.32
23	Q	72	TYR	C-N	5.13	1.39	1.34
25	U	40	LEU	C-O	-5.13	1.17	1.23
26	O	309	LEU	CA-CB	5.13	1.61	1.53
28	I	67	ARG	C-N	5.13	1.40	1.33
29	K	326	ARG	N-CA	-5.13	1.39	1.46
5	E	125	GLU	CA-C	5.12	1.59	1.52
28	I	63	LEU	CA-C	-5.12	1.46	1.52
3	C	142	HIS	CG-CD2	5.12	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	N	71	LEU	N-CA	-5.12	1.40	1.46
27	H	274	PHE	CA-C	-5.12	1.46	1.52
1	A	22	LEU	CA-CB	5.12	1.62	1.53
13	6	163	LYS	C-N	5.12	1.40	1.33
17	T	345	TYR	C-N	5.12	1.40	1.33
28	I	146	PRO	CA-C	-5.12	1.46	1.52
30	L	101	LEU	CA-C	-5.12	1.46	1.52
24	R	210	SER	N-CA	-5.12	1.39	1.46
29	K	218	ALA	C-O	-5.12	1.18	1.24
21	S	339	PRO	CA-CB	5.12	1.60	1.53
31	M	71	ALA	CA-C	5.12	1.59	1.52
31	M	147	LYS	CA-C	-5.12	1.46	1.52
16	V	305	ASP	CA-C	-5.12	1.46	1.52
17	T	330	ASP	CA-CB	5.12	1.62	1.53
20	N	374	SER	N-CA	-5.12	1.40	1.46
24	R	328	GLU	N-CA	-5.12	1.40	1.46
26	O	279	GLU	C-N	5.12	1.40	1.33
32	J	252	ASP	N-CA	-5.12	1.39	1.46
11	4	35	MET	CA-CB	5.12	1.61	1.53
14	7	74	TYR	C-N	5.12	1.39	1.33
20	N	774	PRO	CA-C	5.12	1.61	1.52
21	S	58	HIS	CA-CB	5.12	1.61	1.53
7	G	103	PHE	CA-CB	5.11	1.61	1.53
20	N	591	CYS	CA-C	5.11	1.59	1.52
21	S	198	ALA	C-O	-5.11	1.18	1.24
22	P	275	ILE	N-CA	5.11	1.52	1.46
24	R	296	VAL	C-N	5.11	1.40	1.33
15	W	10	VAL	N-CA	-5.11	1.40	1.46
17	T	249	LEU	N-CA	-5.11	1.38	1.45
21	S	236	LEU	CA-C	-5.11	1.46	1.52
25	U	126	VAL	CA-CB	5.11	1.61	1.54
30	L	358	ARG	NE-CZ	5.11	1.38	1.33
21	S	275	GLN	C-N	5.11	1.40	1.33
3	C	5	TYR	CZ-OH	5.11	1.48	1.38
7	G	101	SER	CA-C	-5.11	1.46	1.52
11	4	60	ILE	CA-CB	5.11	1.60	1.54
16	V	109	VAL	C-N	5.11	1.38	1.33
23	Q	78	ASN	CA-C	-5.11	1.46	1.52
30	L	260	GLY	C-N	5.11	1.40	1.33
30	L	344	ALA	N-CA	5.11	1.52	1.46
17	T	284	LYS	CA-C	-5.11	1.46	1.52
19	Z	256	PHE	CA-CB	5.11	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	P	122	LEU	CA-CB	5.11	1.61	1.53
23	Q	336	ILE	CA-C	-5.11	1.46	1.52
5	E	65	GLU	CA-C	-5.10	1.46	1.52
17	T	202	LEU	C-N	5.10	1.40	1.33
19	Z	866	GLN	N-CA	-5.10	1.39	1.46
19	Z	85	SER	CA-C	-5.10	1.48	1.52
19	Z	846	VAL	CA-C	5.10	1.58	1.52
24	R	31	HIS	CG-ND1	5.10	1.43	1.38
24	R	61	LEU	CA-C	-5.10	1.45	1.52
26	O	131	THR	CA-C	5.10	1.59	1.52
29	K	122	GLU	C-N	5.10	1.41	1.33
3	C	25	MET	CA-CB	5.10	1.61	1.53
29	K	338	ARG	NE-CZ	5.10	1.38	1.33
2	B	202	GLN	C-N	5.10	1.40	1.33
4	D	178	LEU	CA-CB	5.10	1.61	1.53
23	Q	88	LEU	CA-CB	5.10	1.61	1.53
30	L	40	LEU	CA-C	-5.10	1.46	1.52
30	L	358	ARG	CZ-NH1	5.10	1.39	1.32
31	M	336	ASN	N-CA	5.10	1.52	1.46
19	Z	819	TYR	C-N	5.10	1.39	1.33
21	S	259	LEU	CA-C	5.10	1.59	1.53
29	K	391	ARG	CD-NE	5.10	1.53	1.46
6	F	107	ARG	NE-CZ	5.10	1.38	1.33
25	U	12	HIS	CD2-NE2	-5.10	1.32	1.37
29	K	190	LEU	CA-C	-5.10	1.46	1.52
32	J	205	HIS	CE1-NE2	5.10	1.37	1.32
28	I	88	LEU	N-CA	5.09	1.52	1.46
30	L	292	ALA	C-O	5.09	1.29	1.23
3	C	247	ALA	CA-C	-5.09	1.46	1.52
9	2	254	VAL	CA-C	-5.09	1.46	1.52
14	7	162	GLY	C-O	-5.09	1.19	1.24
19	Z	494	ARG	NE-CZ	5.09	1.38	1.33
20	N	720	LYS	CA-C	-5.09	1.46	1.52
26	O	184	ASP	CA-C	-5.09	1.46	1.52
10	3	135	ASP	N-CA	-5.09	1.39	1.46
16	V	205	ILE	CA-C	-5.09	1.46	1.52
21	S	326	LYS	N-CA	-5.09	1.40	1.46
23	Q	406	ASN	CA-C	5.09	1.59	1.52
27	H	275	ASP	CA-C	-5.09	1.46	1.52
22	P	227	TYR	C-N	5.09	1.40	1.33
23	Q	165	LEU	CA-CB	5.09	1.61	1.53
26	O	259	PRO	C-N	5.09	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	108	ALA	C-N	5.09	1.40	1.33
12	5	196	GLY	C-N	5.09	1.40	1.34
19	Z	79	ARG	C-N	5.09	1.40	1.33
20	N	475	HIS	CB-CG	5.09	1.57	1.50
21	S	73	GLU	C-N	5.09	1.40	1.33
22	P	44	ILE	N-CA	-5.09	1.40	1.46
28	I	322	ARG	CA-C	-5.09	1.46	1.52
2	B	198	SER	CA-C	5.09	1.59	1.52
6	F	64	LEU	CA-C	-5.09	1.46	1.52
14	7	158	GLY	CA-C	-5.09	1.46	1.52
19	Z	300	ARG	N-CA	-5.09	1.40	1.46
22	P	289	ARG	CA-C	-5.09	1.46	1.52
28	I	117	ASP	CA-C	-5.09	1.47	1.53
28	I	175	LYS	N-CA	-5.09	1.40	1.46
6	F	166	GLN	CA-CB	5.08	1.61	1.53
25	U	12	HIS	CA-CB	5.08	1.59	1.53
28	I	98	LYS	CA-CB	-5.08	1.44	1.53
3	C	172	VAL	C-N	5.08	1.40	1.33
25	U	252	LYS	C-N	5.08	1.40	1.33
26	O	258	GLN	N-CA	5.08	1.52	1.45
2	B	101	TYR	CA-C	-5.08	1.46	1.52
3	C	233	VAL	CA-C	-5.08	1.46	1.52
13	6	184	ASN	CA-CB	5.08	1.61	1.53
20	N	412	HIS	ND1-CE1	5.08	1.37	1.32
24	R	4	GLU	CA-CB	5.08	1.61	1.53
24	R	325	VAL	CA-C	5.08	1.59	1.52
32	J	375	ARG	CA-CB	5.08	1.61	1.53
3	C	8	ARG	NE-CZ	5.08	1.38	1.33
5	E	47	CYS	CA-C	-5.08	1.46	1.52
6	F	43	HIS	CG-ND1	5.08	1.43	1.38
15	W	21	PHE	C-O	-5.08	1.17	1.23
16	V	97	ASP	N-CA	5.08	1.52	1.46
24	R	340	ALA	C-N	5.08	1.41	1.33
29	K	375	ILE	CA-C	-5.08	1.46	1.52
31	M	370	GLN	N-CA	-5.08	1.40	1.46
5	E	135	ARG	NE-CZ	5.08	1.38	1.33
14	7	116	ILE	CA-CB	5.08	1.60	1.54
2	B	230	LEU	C-N	5.08	1.40	1.33
16	V	253	LYS	CA-C	-5.08	1.46	1.52
19	Z	105	LYS	CA-C	-5.08	1.46	1.52
31	M	69	LEU	N-CA	-5.08	1.40	1.46
32	J	92	GLU	N-CA	5.08	1.52	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	J	211	PHE	C-N	5.08	1.40	1.33
32	J	332	HIS	CD2-NE2	-5.08	1.32	1.37
1	A	182	LYS	N-CA	-5.07	1.40	1.46
13	6	141	ASP	CA-C	-5.07	1.46	1.53
19	Z	308	SER	CA-CB	5.07	1.59	1.54
28	I	225	TYR	CZ-OH	5.07	1.48	1.38
29	K	202	VAL	CA-C	5.07	1.58	1.52
20	N	366	HIS	ND1-CE1	5.07	1.37	1.32
22	P	142	ARG	CD-NE	5.07	1.53	1.46
4	D	160	HIS	ND1-CE1	5.07	1.37	1.32
6	F	198	THR	N-CA	-5.07	1.40	1.46
10	3	158	MET	N-CA	-5.07	1.39	1.46
16	V	51	MET	CA-C	-5.07	1.46	1.52
16	V	189	ILE	C-N	5.07	1.40	1.33
24	R	38	ARG	CZ-NH1	5.07	1.39	1.32
24	R	272	PHE	N-CA	-5.07	1.39	1.46
28	I	388	ASP	C-N	5.07	1.40	1.33
12	5	175	SER	C-N	5.07	1.40	1.33
15	W	40	LYS	CA-CB	5.07	1.61	1.53
20	N	33	ASP	N-CA	5.07	1.52	1.46
21	S	428	GLU	N-CA	-5.07	1.40	1.46
22	P	372	ARG	C-N	5.07	1.40	1.33
31	M	357	PHE	C-O	-5.07	1.19	1.24
6	F	193	ARG	CZ-NH2	5.07	1.40	1.33
7	G	225	HIS	CA-C	-5.07	1.46	1.52
14	7	136	LEU	C-N	5.07	1.40	1.33
20	N	865	LYS	CA-C	-5.07	1.46	1.52
21	S	421	LYS	C-N	5.07	1.41	1.33
24	R	2	PRO	N-CA	-5.07	1.40	1.47
26	O	254	ALA	N-CA	-5.07	1.40	1.46
26	O	354	GLU	CA-C	-5.07	1.46	1.52
31	M	306	ASP	CA-C	-5.07	1.46	1.52
2	B	210	VAL	N-CA	-5.07	1.40	1.46
19	Z	249	LEU	CA-C	-5.07	1.46	1.52
19	Z	436	SER	C-N	5.07	1.40	1.33
21	S	44	GLY	CA-C	-5.07	1.46	1.52
24	R	184	GLN	N-CA	-5.07	1.40	1.46
31	M	379	SER	N-CA	5.07	1.53	1.45
32	J	366	ALA	C-N	5.06	1.40	1.33
12	5	123	ARG	N-CA	-5.06	1.40	1.46
19	Z	733	GLY	C-O	-5.06	1.17	1.23
26	O	194	GLN	C-N	5.06	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	J	113	ARG	NE-CZ	5.06	1.38	1.33
20	N	55	ARG	CD-NE	5.06	1.53	1.46
20	N	135	ASN	CA-CB	5.06	1.61	1.53
20	N	721	HIS	ND1-CE1	5.06	1.37	1.32
21	S	79	GLU	CA-CB	5.06	1.61	1.53
22	P	316	ARG	NE-CZ	5.06	1.38	1.33
24	R	317	GLY	CA-C	-5.06	1.46	1.52
10	3	36	THR	C-N	5.06	1.40	1.33
19	Z	148	GLN	C-N	5.06	1.42	1.34
20	N	166	THR	N-CA	-5.06	1.41	1.46
22	P	171	VAL	C-N	5.06	1.40	1.33
24	R	213	LEU	CA-C	5.06	1.59	1.52
25	U	281	ALA	N-CA	-5.06	1.40	1.46
4	D	202	LEU	N-CA	-5.06	1.39	1.46
8	1	171	TYR	CA-CB	5.06	1.61	1.53
13	6	135	ASN	N-CA	-5.06	1.39	1.46
19	Z	272	LEU	CA-C	-5.06	1.46	1.52
22	P	398	VAL	N-CA	5.06	1.52	1.46
29	K	400	GLU	CA-CB	5.06	1.61	1.53
31	M	375	LYS	CA-C	5.06	1.59	1.52
2	B	25	ALA	CA-C	-5.06	1.46	1.52
3	C	16	GLY	C-N	5.06	1.40	1.33
11	4	23	SER	CA-C	-5.06	1.46	1.52
19	Z	555	ALA	C-N	5.05	1.40	1.33
23	Q	214	SER	N-CA	-5.05	1.40	1.46
23	Q	282	ARG	CZ-NH1	5.05	1.39	1.32
23	Q	356	LEU	CA-CB	5.05	1.62	1.53
28	I	417	GLU	CG-CD	5.05	1.64	1.52
20	N	336	GLU	CA-C	-5.05	1.46	1.52
26	O	113	LEU	C-N	5.05	1.40	1.34
9	2	75	SER	CA-CB	5.05	1.62	1.53
16	V	283	HIS	C-N	5.05	1.40	1.33
17	T	107	ARG	CZ-NH1	5.05	1.39	1.32
19	Z	693	ALA	N-CA	-5.05	1.40	1.46
20	N	375	PHE	CA-CB	5.05	1.61	1.53
22	P	386	VAL	CA-CB	-5.05	1.48	1.54
26	O	158	LEU	CA-CB	5.05	1.61	1.53
27	H	338	ASP	C-N	5.05	1.41	1.33
28	I	200	SER	N-CA	-5.05	1.40	1.46
32	J	8	GLN	CA-CB	5.05	1.60	1.53
6	F	148	CYS	CA-C	-5.05	1.46	1.52
8	1	131	ILE	CA-CB	5.05	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	3	39	PHE	CA-C	5.05	1.58	1.52
29	K	185	LEU	CA-C	-5.05	1.46	1.52
5	E	186	HIS	CA-CB	5.05	1.62	1.53
16	V	297	VAL	C-N	5.05	1.40	1.33
19	Z	301	HIS	CG-CD2	5.05	1.41	1.35
29	K	395	LEU	N-CA	-5.05	1.39	1.45
8	1	233	SER	C-N	5.05	1.41	1.33
4	D	163	LYS	C-N	5.04	1.40	1.33
12	5	65	PHE	CA-CB	5.04	1.64	1.54
16	V	256	ASN	CA-CB	5.04	1.61	1.53
21	S	95	ARG	NE-CZ	5.04	1.38	1.33
23	Q	266	ASP	CA-C	-5.04	1.46	1.52
13	6	84	PHE	C-N	5.04	1.40	1.33
20	N	146	LYS	N-CA	-5.04	1.40	1.46
20	N	489	ALA	CA-C	-5.04	1.46	1.53
22	P	405	LYS	CA-C	-5.04	1.46	1.52
20	N	721	HIS	CG-ND1	-5.04	1.32	1.38
4	D	19	VAL	CA-CB	-5.04	1.48	1.54
8	1	112	ALA	CA-C	-5.04	1.46	1.52
9	2	218	LEU	CA-C	-5.04	1.46	1.52
10	3	135	ASP	CA-C	-5.04	1.46	1.52
22	P	142	ARG	CZ-NH2	5.04	1.40	1.33
29	K	348	ILE	N-CA	5.04	1.52	1.46
20	N	224	ASP	CA-CB	5.04	1.60	1.53
28	I	306	GLN	N-CA	-5.04	1.40	1.46
28	I	374	LEU	CA-CB	-5.04	1.45	1.53
32	J	114	VAL	CA-C	-5.04	1.46	1.52
1	A	105	TYR	C-N	5.04	1.41	1.33
16	V	180	ASN	CA-C	5.04	1.58	1.52
16	V	211	GLU	C-O	-5.04	1.17	1.24
29	K	391	ARG	N-CA	-5.04	1.40	1.46
30	L	285	HIS	CG-ND1	5.04	1.43	1.38
2	B	117	VAL	CA-CB	-5.03	1.48	1.54
8	1	208	ARG	NE-CZ	5.03	1.38	1.33
15	W	136	VAL	CA-C	-5.03	1.46	1.52
19	Z	634	LYS	C-N	5.03	1.40	1.33
20	N	4	SER	CA-C	5.03	1.59	1.52
20	N	77	SER	CA-C	-5.03	1.46	1.52
26	O	366	LEU	N-CA	-5.03	1.40	1.46
31	M	307	ARG	CA-C	5.03	1.60	1.53
7	G	188	ARG	CZ-NH1	5.03	1.39	1.32
14	7	138	ARG	CZ-NH2	5.03	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	T	340	ARG	N-CA	-5.03	1.39	1.46
28	I	105	THR	CA-C	5.03	1.58	1.52
5	E	165	CYS	C-N	-5.03	1.26	1.33
21	S	193	THR	CA-C	-5.03	1.46	1.52
23	Q	90	ARG	NE-CZ	5.03	1.38	1.33
24	R	150	PHE	C-O	-5.03	1.18	1.24
21	S	415	LEU	C-N	5.03	1.40	1.33
23	Q	155	ARG	CZ-NH2	5.03	1.40	1.33
28	I	87	PRO	CA-C	5.03	1.59	1.52
1	A	101	TRP	NE1-CE2	-5.03	1.31	1.37
14	7	64	VAL	N-CA	-5.03	1.40	1.46
19	Z	385	PHE	CA-CB	5.03	1.62	1.53
20	N	521	LEU	CA-C	-5.03	1.46	1.52
20	N	614	VAL	C-O	-5.03	1.18	1.24
22	P	19	ASP	CA-C	-5.03	1.46	1.52
30	L	308	ARG	NE-CZ	5.03	1.38	1.33
14	7	177	GLU	N-CA	-5.02	1.39	1.45
17	T	171	MET	CA-CB	5.02	1.61	1.53
19	Z	372	LEU	N-CA	-5.02	1.40	1.46
26	O	156	TYR	N-CA	-5.02	1.40	1.46
3	C	170	ALA	CA-C	-5.02	1.46	1.52
21	S	340	ASP	CA-CB	5.02	1.61	1.53
28	I	350	LYS	CA-C	-5.02	1.46	1.52
28	I	426	VAL	C-N	5.02	1.40	1.33
1	A	79	VAL	N-CA	5.02	1.52	1.46
1	A	95	ARG	C-N	5.02	1.40	1.33
7	G	238	LYS	N-CA	-5.02	1.40	1.46
19	Z	316	ASP	C-N	5.02	1.40	1.33
20	N	248	ILE	N-CA	-5.02	1.40	1.46
29	K	171	ASP	CA-C	-5.02	1.46	1.52
30	L	389	ALA	CA-C	-5.02	1.46	1.52
31	M	60	SER	C-N	5.02	1.40	1.33
7	G	131	PRO	CA-CB	-5.02	1.46	1.53
11	4	89	ALA	C-N	5.02	1.40	1.34
19	Z	736	THR	N-CA	-5.02	1.40	1.46
21	S	93	ALA	C-O	-5.02	1.17	1.24
24	R	293	ARG	CZ-NH2	5.02	1.40	1.33
30	L	197	LEU	N-CA	-5.02	1.40	1.46
32	J	244	SER	CA-C	-5.02	1.46	1.52
5	E	28	ILE	CA-C	-5.02	1.46	1.52
5	E	39	GLY	C-N	5.02	1.40	1.33
4	D	14	GLY	CA-C	5.02	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	6	72	LYS	N-CA	-5.01	1.40	1.46
19	Z	629	LYS	CA-C	-5.01	1.46	1.52
22	P	134	GLY	C-N	5.01	1.40	1.33
23	Q	320	SER	N-CA	-5.01	1.40	1.46
24	R	386	VAL	N-CA	-5.01	1.40	1.46
27	H	52	ILE	CA-CB	5.01	1.60	1.54
30	L	141	PRO	CA-C	5.01	1.59	1.52
7	G	86	ARG	C-N	5.01	1.40	1.33
9	2	60	ASP	C-N	5.01	1.40	1.33
13	6	105	SER	CA-C	-5.01	1.46	1.52
20	N	661	ALA	N-CA	-5.01	1.40	1.46
21	S	354	MET	C-O	-5.01	1.19	1.24
8	1	152	MET	CA-CB	5.01	1.61	1.53
15	W	100	ARG	C-N	5.01	1.40	1.33
18	Y	57	ARG	CA-C	-5.01	1.46	1.52
20	N	700	GLU	CA-C	-5.01	1.48	1.53
25	U	154	THR	CA-C	-5.01	1.46	1.52
26	O	69	HIS	CD2-NE2	5.01	1.43	1.37
2	B	174	LEU	CA-CB	5.01	1.61	1.53
20	N	195	ASN	CA-C	5.01	1.59	1.52
20	N	506	ALA	CA-CB	5.01	1.61	1.53
28	I	404	LEU	CA-CB	5.01	1.61	1.53
32	J	395	SER	CA-CB	5.01	1.61	1.53
9	2	62	ARG	CZ-NH1	5.01	1.39	1.32
10	3	101	GLY	N-CA	5.01	1.51	1.44
20	N	113	VAL	N-CA	-5.01	1.40	1.46
2	B	232	ALA	CA-C	-5.01	1.46	1.52
11	4	98	TYR	CA-C	-5.01	1.46	1.52
13	6	110	MET	CA-C	-5.01	1.46	1.52
25	U	147	ASP	N-CA	-5.01	1.39	1.46
32	J	78	ARG	C-N	5.01	1.40	1.33
10	3	132	VAL	CA-CB	-5.00	1.48	1.54
14	7	85	ARG	CD-NE	5.00	1.53	1.46
6	F	182	CYS	CA-C	-5.00	1.46	1.53
8	1	39	VAL	C-O	5.00	1.29	1.23
14	7	189	LEU	N-CA	5.00	1.52	1.46
3	C	208	ALA	CA-C	-5.00	1.45	1.52
11	4	63	ASN	C-N	5.00	1.40	1.33
12	5	122	CYS	C-O	-5.00	1.18	1.24
19	Z	311	VAL	N-CA	-5.00	1.40	1.46
19	Z	524	MET	CA-C	-5.00	1.46	1.52
19	Z	688	ARG	NE-CZ	5.00	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	N	339	LEU	CA-C	-5.00	1.46	1.52
22	P	118	LEU	C-O	-5.00	1.19	1.24
24	R	161	THR	C-N	5.00	1.40	1.33
28	I	358	GLU	CA-C	5.00	1.59	1.52
32	J	83	LYS	CA-CB	5.00	1.60	1.53

All (6615) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	718	ASP	CA-C-O	-13.62	108.34	120.60
5	E	97	GLN	CB-CG-CD	13.50	135.55	112.60
29	K	302	ASN	CA-CB-CG	12.66	125.26	112.60
3	C	51	ASN	CA-CB-CG	-12.46	100.14	112.60
4	D	82	LEU	N-CA-C	-12.42	95.53	110.44
10	3	45	MET	CA-C-N	-12.28	110.89	122.80
10	3	45	MET	C-N-CA	-12.28	110.89	122.80
27	H	310	ASP	O-C-N	-11.76	110.61	121.66
14	7	231	PHE	CA-CB-CG	11.71	125.51	113.80
27	H	391	GLU	CA-C-N	11.45	135.32	120.44
27	H	391	GLU	C-N-CA	11.45	135.32	120.44
24	R	51	ALA	O-C-N	-11.40	113.87	121.85
31	M	373	SER	CA-C-N	11.37	135.52	120.28
31	M	373	SER	C-N-CA	11.37	135.52	120.28
24	R	243	GLY	N-CA-C	11.30	124.93	111.93
6	F	9	ASP	CA-CB-CG	-11.24	101.36	112.60
31	M	103	ASP	CA-C-N	11.19	131.50	119.87
31	M	103	ASP	C-N-CA	11.19	131.50	119.87
13	6	34	PHE	CA-CB-CG	-11.12	102.68	113.80
24	R	68	ASP	CA-CB-CG	-11.10	101.50	112.60
14	7	121	PHE	CA-CB-CG	11.06	124.86	113.80
29	K	345	PHE	CA-CB-CG	-10.99	102.81	113.80
15	W	42	ARG	CA-C-N	10.90	134.61	120.44
15	W	42	ARG	C-N-CA	10.90	134.61	120.44
13	6	73	LEU	CA-C-N	10.88	138.19	122.09
13	6	73	LEU	C-N-CA	10.88	138.19	122.09
19	Z	192	VAL	N-CA-CB	10.81	117.31	110.50
12	5	162	GLY	O-C-N	-10.80	115.36	123.35
12	5	241	ASP	CA-CB-CG	-10.78	101.82	112.60
20	N	325	MET	CA-C-N	10.74	135.18	120.46
20	N	325	MET	C-N-CA	10.74	135.18	120.46
16	V	224	SER	CA-C-N	10.71	134.36	120.44
16	V	224	SER	C-N-CA	10.71	134.36	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	461	ASP	CA-CB-CG	10.71	123.31	112.60
5	E	157	ASP	CA-C-N	10.64	130.39	119.64
5	E	157	ASP	C-N-CA	10.64	130.39	119.64
17	T	206	ASN	CA-CB-CG	-10.54	102.06	112.60
19	Z	42	GLU	CA-C-N	10.50	134.35	120.28
19	Z	42	GLU	C-N-CA	10.50	134.35	120.28
12	5	63	LEU	N-CA-C	10.48	125.16	111.75
31	M	425	GLU	CA-C-N	10.48	131.61	119.98
31	M	425	GLU	C-N-CA	10.48	131.61	119.98
1	A	224	ASN	CA-CB-CG	10.45	123.05	112.60
29	K	140	VAL	N-CA-C	10.41	121.24	110.72
1	A	130	GLU	N-CA-C	-10.40	99.10	112.93
17	T	281	ALA	N-CA-C	10.38	122.17	111.07
4	D	48	LYS	N-CA-C	-10.29	97.63	113.89
19	Z	325	GLN	CA-C-N	10.25	134.02	120.28
19	Z	325	GLN	C-N-CA	10.25	134.02	120.28
27	H	379	ASN	CA-CB-CG	-10.25	102.35	112.60
11	4	133	GLY	N-CA-C	-10.22	95.26	110.90
13	6	141	ASP	CA-CB-CG	10.20	122.80	112.60
20	N	564	ASP	CA-C-N	10.17	133.66	120.44
20	N	564	ASP	C-N-CA	10.17	133.66	120.44
27	H	252	GLU	CA-C-N	10.17	131.19	120.00
27	H	252	GLU	C-N-CA	10.17	131.19	120.00
19	Z	622	SER	N-CA-C	-10.12	99.04	113.21
19	Z	278	VAL	N-CA-C	10.11	120.93	110.62
23	Q	274	LYS	CA-C-N	10.10	134.18	120.44
23	Q	274	LYS	C-N-CA	10.10	134.18	120.44
27	H	280	ILE	N-CA-C	-10.09	102.59	112.17
11	4	48	GLY	O-C-N	10.07	131.37	123.61
19	Z	456	ARG	N-CA-C	-10.06	94.80	108.38
18	Y	50	ASP	CA-CB-CG	10.03	122.62	112.60
24	R	85	ASP	CA-CB-CG	-10.02	102.58	112.60
27	H	392	ALA	N-CA-C	-9.99	100.38	111.07
32	J	121	TYR	N-CA-CB	9.99	127.38	110.49
20	N	22	PHE	CA-CB-CG	-9.99	103.81	113.80
23	Q	392	PRO	CB-CA-C	9.98	120.90	109.92
17	T	115	CYS	CA-C-N	9.95	131.02	119.98
17	T	115	CYS	C-N-CA	9.95	131.02	119.98
23	Q	286	ALA	CA-C-N	9.94	133.60	120.28
23	Q	286	ALA	C-N-CA	9.94	133.60	120.28
26	O	3	ASP	N-CA-C	-9.93	100.71	113.12
25	U	106	ILE	O-C-N	9.92	131.50	121.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	39	SER	N-CA-C	9.91	121.67	111.07
31	M	312	THR	CA-CB-OG1	9.89	124.44	109.60
19	Z	833	PHE	CA-CB-CG	-9.88	103.92	113.80
3	C	70	GLU	N-CA-C	-9.86	100.56	112.59
4	D	144	PHE	CA-C-N	9.85	133.48	120.28
4	D	144	PHE	C-N-CA	9.85	133.48	120.28
32	J	164	VAL	N-CA-C	9.84	119.67	110.42
19	Z	688	ARG	N-CA-C	9.83	121.59	111.07
5	E	229	PHE	CA-CB-CG	9.80	123.61	113.80
26	O	209	GLY	CA-C-N	9.78	133.61	120.50
26	O	209	GLY	C-N-CA	9.78	133.61	120.50
32	J	259	LEU	N-CA-C	9.78	121.54	111.07
5	E	90	ASP	CA-CB-CG	-9.76	102.84	112.60
24	R	62	ASP	CA-CB-CG	-9.76	102.84	112.60
20	N	82	LEU	CA-C-N	9.74	130.80	119.98
20	N	82	LEU	C-N-CA	9.74	130.80	119.98
30	L	239	HIS	CA-CB-CG	-9.71	104.09	113.80
21	S	415	LEU	CA-C-N	9.66	133.22	120.28
21	S	415	LEU	C-N-CA	9.66	133.22	120.28
29	K	207	PRO	CA-C-O	-9.65	113.10	120.73
23	Q	350	ILE	CA-C-N	9.65	133.21	120.28
23	Q	350	ILE	C-N-CA	9.65	133.21	120.28
19	Z	713	PHE	CA-CB-CG	-9.63	104.17	113.80
2	B	10	LEU	N-CA-C	-9.62	98.69	113.02
23	Q	149	LEU	CA-C-N	9.61	130.65	119.98
23	Q	149	LEU	C-N-CA	9.61	130.65	119.98
30	L	347	LYS	CA-C-N	9.59	133.91	120.29
30	L	347	LYS	C-N-CA	9.59	133.91	120.29
30	L	209	PHE	CA-CB-CG	9.57	123.37	113.80
31	M	410	ALA	CA-C-N	9.56	133.87	120.29
31	M	410	ALA	C-N-CA	9.56	133.87	120.29
29	K	278	GLN	N-CA-C	-9.55	102.43	114.56
32	J	171	HIS	CA-C-N	9.53	129.27	119.64
32	J	171	HIS	C-N-CA	9.53	129.27	119.64
20	N	703	CYS	N-CA-C	-9.53	99.64	108.22
32	J	344	LEU	CA-C-N	9.53	133.05	120.28
32	J	344	LEU	C-N-CA	9.53	133.05	120.28
8	1	110	HIS	CA-C-N	9.53	133.05	120.28
8	1	110	HIS	C-N-CA	9.53	133.05	120.28
28	I	188	GLY	CA-C-O	9.52	129.58	120.92
30	L	308	ARG	NE-CZ-NH2	-9.51	110.64	119.20
16	V	90	VAL	CA-C-N	9.50	132.79	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	V	90	VAL	C-N-CA	9.50	132.79	120.44
20	N	453	HIS	CA-CB-CG	-9.46	104.34	113.80
19	Z	192	VAL	CB-CA-C	-9.44	104.35	114.35
11	4	101	ASN	N-CA-C	-9.40	94.35	109.76
20	N	899	ARG	CA-C-N	9.40	134.63	120.82
20	N	899	ARG	C-N-CA	9.40	134.63	120.82
32	J	157	GLN	O-C-N	9.38	132.06	122.12
30	L	301	PRO	CA-C-N	9.38	132.84	120.28
30	L	301	PRO	C-N-CA	9.38	132.84	120.28
20	N	763	VAL	N-CA-C	9.34	120.15	110.72
19	Z	304	PHE	CA-C-N	9.33	132.78	120.28
19	Z	304	PHE	C-N-CA	9.33	132.78	120.28
21	S	146	ARG	NE-CZ-NH2	-9.33	110.81	119.20
29	K	353	ASN	CA-CB-CG	-9.32	103.28	112.60
20	N	838	LYS	CA-C-N	9.31	132.55	120.44
20	N	838	LYS	C-N-CA	9.31	132.55	120.44
31	M	411	LEU	CA-C-N	9.31	132.76	120.28
31	M	411	LEU	C-N-CA	9.31	132.76	120.28
10	3	140	GLY	N-CA-C	-9.31	96.21	111.38
13	6	61	SER	N-CA-C	-9.30	95.28	109.41
14	7	142	SER	CA-C-N	9.30	132.74	120.28
14	7	142	SER	C-N-CA	9.30	132.74	120.28
25	U	100	LYS	CA-C-N	9.30	134.01	120.90
25	U	100	LYS	C-N-CA	9.30	134.01	120.90
23	Q	217	ILE	CA-C-N	9.29	132.52	120.44
23	Q	217	ILE	C-N-CA	9.29	132.52	120.44
21	S	50	ASP	N-CA-C	9.29	121.40	111.28
32	J	278	ASN	CA-C-O	-9.28	111.08	120.82
8	1	74	ILE	N-CA-C	-9.28	102.86	111.67
20	N	463	ASN	CA-CB-CG	9.28	121.88	112.60
3	C	146	GLN	OE1-CD-NE2	-9.27	113.33	122.60
2	B	163	MET	CA-C-N	9.27	133.98	119.98
2	B	163	MET	C-N-CA	9.27	133.98	119.98
19	Z	670	MET	CA-C-N	9.27	132.70	120.28
19	Z	670	MET	C-N-CA	9.27	132.70	120.28
3	C	143	TYR	CA-C-O	9.26	129.32	119.14
26	O	72	ASN	N-CA-CB	9.25	120.47	109.74
21	S	99	SER	CA-C-N	9.24	132.46	120.44
21	S	99	SER	C-N-CA	9.24	132.46	120.44
27	H	302	LEU	CA-C-N	9.23	132.37	120.56
27	H	302	LEU	C-N-CA	9.23	132.37	120.56
24	R	41	LEU	CA-C-N	9.22	132.64	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	41	LEU	C-N-CA	9.22	132.64	120.28
9	2	92	ALA	CA-C-N	9.21	132.41	120.44
9	2	92	ALA	C-N-CA	9.21	132.41	120.44
25	U	233	VAL	CA-C-O	-9.20	111.42	121.17
2	B	173	PHE	CA-CB-CG	-9.19	104.61	113.80
27	H	140	VAL	CA-C-N	-9.19	113.89	122.80
27	H	140	VAL	C-N-CA	-9.19	113.89	122.80
19	Z	638	ASP	CA-CB-CG	9.19	121.79	112.60
16	V	265	MET	CA-C-N	9.18	133.86	121.74
16	V	265	MET	C-N-CA	9.18	133.86	121.74
23	Q	238	GLY	O-C-N	9.18	131.00	122.19
25	U	195	VAL	CA-C-N	9.15	132.55	120.28
25	U	195	VAL	C-N-CA	9.15	132.55	120.28
28	I	303	ARG	NE-CZ-NH2	-9.15	110.96	119.20
20	N	872	GLU	CA-C-N	9.14	131.26	119.84
20	N	872	GLU	C-N-CA	9.14	131.26	119.84
19	Z	279	GLU	CA-C-N	9.14	133.26	120.29
19	Z	279	GLU	C-N-CA	9.14	133.26	120.29
13	6	184	ASN	CA-CB-CG	-9.13	103.47	112.60
6	F	148	CYS	CA-C-N	9.13	128.77	119.82
6	F	148	CYS	C-N-CA	9.13	128.77	119.82
4	D	221	GLN	CA-C-N	9.11	129.66	119.92
4	D	221	GLN	C-N-CA	9.11	129.66	119.92
29	K	121	ARG	N-CA-C	-9.11	100.10	112.94
29	K	270	ILE	N-CA-C	-9.10	104.43	111.62
2	B	228	ASP	CA-C-N	9.09	132.46	120.28
2	B	228	ASP	C-N-CA	9.09	132.46	120.28
19	Z	757	ASN	CA-C-N	9.07	135.25	122.36
19	Z	757	ASN	C-N-CA	9.07	135.25	122.36
15	W	183	LEU	CA-C-N	9.07	133.32	120.53
15	W	183	LEU	C-N-CA	9.07	133.32	120.53
16	V	73	PHE	CA-CB-CG	9.06	122.86	113.80
19	Z	432	TYR	CA-C-N	9.06	132.42	120.28
19	Z	432	TYR	C-N-CA	9.06	132.42	120.28
4	D	173	SER	N-CA-C	9.06	121.23	111.36
20	N	531	ASP	N-CA-CB	9.04	123.53	110.16
19	Z	274	ASP	CA-C-N	9.04	133.12	120.29
19	Z	274	ASP	C-N-CA	9.04	133.12	120.29
24	R	339	ALA	CA-C-N	9.03	132.38	120.28
24	R	339	ALA	C-N-CA	9.03	132.38	120.28
17	T	179	PHE	CA-CB-CG	-9.03	104.77	113.80
20	N	874	ASN	CA-CB-CG	-9.02	103.58	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	199	ARG	CA-C-N	9.02	132.71	120.44
30	L	199	ARG	C-N-CA	9.02	132.71	120.44
19	Z	510	SER	CA-C-N	9.00	132.34	120.28
19	Z	510	SER	C-N-CA	9.00	132.34	120.28
31	M	252	LEU	CA-C-O	9.00	130.56	120.84
9	2	227	ASP	CA-CB-CG	-8.99	103.61	112.60
24	R	20	ALA	O-C-N	8.99	132.74	122.22
7	G	170	ARG	NE-CZ-NH2	-8.99	111.11	119.20
24	R	277	VAL	N-CA-C	8.96	119.76	110.72
31	M	363	GLU	CA-C-N	8.96	132.28	120.28
31	M	363	GLU	C-N-CA	8.96	132.28	120.28
4	D	178	LEU	CA-C-N	8.95	132.28	120.28
4	D	178	LEU	C-N-CA	8.95	132.28	120.28
20	N	377	HIS	CG-CD2-NE2	8.95	116.15	107.20
21	S	466	ARG	CA-C-N	8.95	130.71	120.06
21	S	466	ARG	C-N-CA	8.95	130.71	120.06
13	6	190	HIS	CA-CB-CG	8.94	122.73	113.80
9	2	152	HIS	ND1-CE1-NE2	8.93	117.33	108.40
20	N	383	ASP	CA-C-N	8.92	132.04	120.44
20	N	383	ASP	C-N-CA	8.92	132.04	120.44
19	Z	6	ARG	N-CA-C	-8.91	101.72	112.59
29	K	407	ILE	N-CA-C	-8.91	104.64	112.12
25	U	203	SER	O-C-N	8.91	131.56	122.12
3	C	107	CYS	N-CA-C	-8.89	101.67	111.36
28	I	207	HIS	CE1-NE2-CD2	-8.89	100.11	109.00
13	6	117	ALA	N-CA-C	8.88	120.95	111.28
9	2	51	TYR	N-CA-C	-8.86	94.45	108.90
31	M	275	PHE	CA-CB-CG	-8.86	104.94	113.80
4	D	131	ARG	CA-C-N	8.85	129.39	119.83
4	D	131	ARG	C-N-CA	8.85	129.39	119.83
23	Q	115	GLU	CA-C-N	8.83	131.92	120.44
23	Q	115	GLU	C-N-CA	8.83	131.92	120.44
9	2	174	SER	N-CA-C	-8.83	94.51	108.90
19	Z	630	ASP	CA-C-N	8.83	132.11	120.28
19	Z	630	ASP	C-N-CA	8.83	132.11	120.28
22	P	433	ASN	CA-CB-CG	8.82	121.42	112.60
5	E	225	ASN	CA-CB-CG	-8.81	103.79	112.60
26	O	342	ASP	CA-CB-CG	-8.81	103.79	112.60
17	T	253	ASN	N-CA-C	-8.81	102.31	113.23
25	U	16	LEU	N-CA-C	-8.81	101.76	111.36
14	7	166	LEU	CA-C-N	8.81	128.76	122.33
14	7	166	LEU	C-N-CA	8.81	128.76	122.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	9	VAL	N-CA-C	-8.80	95.84	108.42
26	O	288	HIS	CA-C-N	8.80	132.07	120.28
26	O	288	HIS	C-N-CA	8.80	132.07	120.28
31	M	291	LEU	CA-C-N	8.80	132.95	120.28
31	M	291	LEU	C-N-CA	8.80	132.95	120.28
24	R	263	LEU	CA-C-N	8.78	131.85	120.44
24	R	263	LEU	C-N-CA	8.78	131.85	120.44
28	I	361	LYS	CA-C-N	8.78	131.85	120.44
28	I	361	LYS	C-N-CA	8.78	131.85	120.44
28	I	372	MET	CA-C-N	8.77	138.29	121.54
28	I	372	MET	C-N-CA	8.77	138.29	121.54
2	B	101	TYR	N-CA-C	8.75	122.45	111.69
28	I	231	GLY	CA-C-N	8.74	132.70	120.29
28	I	231	GLY	C-N-CA	8.74	132.70	120.29
17	T	145	ILE	O-C-N	8.74	130.47	121.91
17	T	325	GLN	CA-C-N	8.73	131.98	120.28
17	T	325	GLN	C-N-CA	8.73	131.98	120.28
25	U	239	ASP	CA-C-N	8.72	133.10	120.71
25	U	239	ASP	C-N-CA	8.72	133.10	120.71
29	K	368	ASP	N-CA-C	-8.72	102.66	113.38
27	H	197	HIS	CA-C-N	8.71	129.45	120.04
27	H	197	HIS	C-N-CA	8.71	129.45	120.04
28	I	203	LEU	CA-C-O	-8.71	109.89	118.34
30	L	316	ASP	CA-C-N	8.71	137.53	121.69
30	L	316	ASP	C-N-CA	8.71	137.53	121.69
20	N	435	SER	CA-C-N	8.70	131.94	120.28
20	N	435	SER	C-N-CA	8.70	131.94	120.28
11	4	136	ALA	CA-C-N	8.70	134.53	120.60
11	4	136	ALA	C-N-CA	8.70	134.53	120.60
20	N	225	ASP	CA-CB-CG	8.70	121.30	112.60
7	G	206	LYS	CB-CA-C	-8.69	96.07	110.85
22	P	78	LYS	N-CA-C	-8.69	101.62	113.18
20	N	694	ILE	N-CA-C	-8.69	101.95	110.72
15	W	164	ASP	CA-CB-CG	8.67	121.27	112.60
31	M	167	LEU	CA-C-N	8.67	130.67	119.84
31	M	167	LEU	C-N-CA	8.67	130.67	119.84
19	Z	456	ARG	CA-C-N	8.66	138.09	121.54
19	Z	456	ARG	C-N-CA	8.66	138.09	121.54
6	F	100	ASP	CA-CB-CG	8.66	121.26	112.60
7	G	60	GLU	N-CA-C	-8.65	96.17	109.24
14	7	69	ASP	N-CA-C	-8.65	94.14	108.76
1	A	63	SER	N-CA-C	-8.64	99.25	113.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	137	SER	CA-C-N	8.64	132.56	120.29
30	L	137	SER	C-N-CA	8.64	132.56	120.29
20	N	347	ASN	CA-CB-CG	-8.64	103.96	112.60
1	A	97	GLU	CA-C-N	8.63	131.66	120.44
1	A	97	GLU	C-N-CA	8.63	131.66	120.44
11	4	33	ASP	CA-CB-CG	-8.59	104.01	112.60
14	7	82	ASN	CA-CB-CG	-8.59	104.01	112.60
3	C	239	LYS	N-CA-C	8.59	120.64	111.28
16	V	273	LYS	N-CA-C	8.58	120.33	110.97
17	T	253	ASN	OD1-CG-ND2	-8.58	114.02	122.60
21	S	361	GLN	CA-C-N	8.58	131.78	120.28
21	S	361	GLN	C-N-CA	8.58	131.78	120.28
32	J	226	GLU	O-C-N	-8.58	114.23	123.42
21	S	144	ARG	O-C-N	8.58	127.16	120.38
19	Z	181	ARG	CA-C-N	8.57	130.80	120.09
19	Z	181	ARG	C-N-CA	8.57	130.80	120.09
9	2	259	VAL	N-CA-C	8.57	123.32	109.78
20	N	183	LEU	CA-C-N	8.57	131.76	120.28
20	N	183	LEU	C-N-CA	8.57	131.76	120.28
20	N	366	HIS	CE1-NE2-CD2	-8.56	100.44	109.00
17	T	264	ASP	N-CA-C	8.56	120.61	111.28
29	K	207	PRO	N-CA-CB	8.55	107.67	103.22
17	T	141	LYS	N-CA-C	8.55	121.37	111.11
13	6	110	MET	N-CA-C	-8.55	94.53	109.06
3	C	103	GLU	N-CA-C	-8.55	97.08	108.11
2	B	87	VAL	N-CA-CB	8.54	121.50	110.57
11	4	104	LEU	N-CA-C	-8.53	96.92	110.14
22	P	277	ALA	CA-C-O	-8.53	111.49	120.87
29	K	246	MET	CA-C-N	8.53	132.14	120.46
29	K	246	MET	C-N-CA	8.53	132.14	120.46
28	I	331	THR	CA-C-O	-8.52	111.51	120.89
29	K	74	HIS	O-C-N	-8.52	112.44	122.15
22	P	25	ASP	CA-CB-CG	8.51	121.11	112.60
32	J	391	MET	CA-C-O	-8.51	111.53	120.55
20	N	454	GLY	CA-C-N	8.51	129.61	119.99
20	N	454	GLY	C-N-CA	8.51	129.61	119.99
32	J	100	ASP	CA-CB-CG	-8.51	104.09	112.60
16	V	252	ALA	CA-C-N	8.51	131.68	120.28
16	V	252	ALA	C-N-CA	8.51	131.68	120.28
21	S	382	PHE	CA-C-N	8.51	131.68	120.28
21	S	382	PHE	C-N-CA	8.51	131.68	120.28
28	I	312	LEU	CA-C-N	8.50	131.49	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	I	312	LEU	C-N-CA	8.50	131.49	120.44
29	K	299	PHE	N-CA-C	8.50	121.48	111.71
11	4	152	SER	CA-C-N	8.50	132.80	120.82
11	4	152	SER	C-N-CA	8.50	132.80	120.82
27	H	366	ARG	N-CA-C	-8.50	101.92	112.88
8	1	137	ASP	CA-CB-CG	8.49	121.09	112.60
17	T	136	GLY	N-CA-C	-8.49	97.96	112.06
13	6	211	GLU	CA-C-N	8.49	131.66	120.28
13	6	211	GLU	C-N-CA	8.49	131.66	120.28
22	P	236	HIS	CA-CB-CG	8.49	122.29	113.80
24	R	351	ASN	CA-C-N	8.49	134.56	122.08
24	R	351	ASN	C-N-CA	8.49	134.56	122.08
3	C	84	ASN	N-CA-C	8.48	120.52	111.28
17	T	133	PRO	CA-C-N	8.48	136.36	123.05
17	T	133	PRO	C-N-CA	8.48	136.36	123.05
21	S	173	ASN	OD1-CG-ND2	-8.48	114.12	122.60
1	A	169	GLY	CA-C-N	8.47	132.48	120.53
1	A	169	GLY	C-N-CA	8.47	132.48	120.53
31	M	204	ALA	N-CA-C	8.47	120.29	111.14
18	Y	61	GLU	O-C-N	8.47	131.81	122.15
9	2	202	ILE	N-CA-CB	8.47	121.41	110.57
14	7	226	ARG	CD-NE-CZ	8.47	136.25	124.40
17	T	129	LEU	CA-C-N	8.46	132.47	120.28
17	T	129	LEU	C-N-CA	8.46	132.47	120.28
19	Z	427	THR	CA-C-N	8.45	131.61	120.28
19	Z	427	THR	C-N-CA	8.45	131.61	120.28
26	O	283	THR	N-CA-C	8.45	120.41	111.03
19	Z	463	LEU	CA-C-N	8.45	131.43	120.44
19	Z	463	LEU	C-N-CA	8.45	131.43	120.44
14	7	208	GLU	CA-C-N	8.44	131.41	120.44
14	7	208	GLU	C-N-CA	8.44	131.41	120.44
1	A	154	CYS	CA-C-N	8.44	133.50	120.68
1	A	154	CYS	C-N-CA	8.44	133.50	120.68
26	O	350	LYS	N-CA-C	8.44	120.09	111.07
32	J	376	VAL	CA-C-O	8.44	126.57	118.98
10	3	134	ASP	CA-CB-CG	-8.43	104.17	112.60
32	J	298	ILE	N-CA-C	-8.43	103.56	113.42
20	N	722	ASP	CA-CB-CG	-8.42	104.18	112.60
17	T	142	GLN	CA-C-N	8.42	132.24	120.29
17	T	142	GLN	C-N-CA	8.42	132.24	120.29
26	O	74	LEU	N-CA-C	8.42	120.45	111.28
19	Z	160	ARG	NE-CZ-NH2	8.41	126.77	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	597	VAL	CA-C-N	8.41	131.55	120.28
19	Z	597	VAL	C-N-CA	8.41	131.55	120.28
8	1	202	SER	CA-C-O	-8.40	111.51	120.42
21	S	491	ARG	CA-C-N	8.40	131.52	120.26
21	S	491	ARG	C-N-CA	8.40	131.52	120.26
30	L	317	LEU	CA-C-N	8.40	128.91	119.83
30	L	317	LEU	C-N-CA	8.40	128.91	119.83
21	S	272	PHE	CA-CB-CG	-8.40	105.40	113.80
16	V	222	LYS	N-CA-C	-8.39	102.82	113.23
27	H	215	PHE	CA-CB-CG	8.39	122.19	113.80
29	K	320	ALA	CA-C-N	8.39	137.94	121.58
29	K	320	ALA	C-N-CA	8.39	137.94	121.58
30	L	380	ASP	CA-CB-CG	8.39	120.99	112.60
15	W	76	HIS	N-CA-C	-8.39	102.14	111.28
25	U	31	ASN	CA-CB-CG	-8.38	104.22	112.60
31	M	86	ASN	CB-CG-ND2	8.38	128.97	116.40
27	H	327	LEU	N-CA-C	8.37	121.73	110.35
20	N	742	HIS	CE1-NE2-CD2	-8.36	100.64	109.00
22	P	385	SER	N-CA-C	-8.36	97.85	110.14
26	O	68	GLU	CA-C-N	8.36	133.02	120.31
26	O	68	GLU	C-N-CA	8.36	133.02	120.31
31	M	166	THR	CA-C-O	8.36	130.08	120.80
13	6	154	VAL	N-CA-C	-8.36	101.89	111.00
20	N	781	LEU	N-CA-C	-8.36	102.25	111.36
15	W	123	ASP	N-CA-CB	8.35	122.18	110.07
20	N	742	HIS	CA-CB-CG	8.35	122.15	113.80
30	L	289	MET	CA-C-O	8.35	129.38	120.36
32	J	155	ASP	CA-CB-CG	-8.35	104.25	112.60
19	Z	850	VAL	CA-C-N	8.35	132.99	121.05
19	Z	850	VAL	C-N-CA	8.35	132.99	121.05
5	E	22	PHE	CA-C-N	8.34	131.46	120.28
5	E	22	PHE	C-N-CA	8.34	131.46	120.28
26	O	185	ILE	N-CA-C	-8.34	95.43	107.77
20	N	230	SER	CA-C-N	8.34	131.45	120.28
20	N	230	SER	C-N-CA	8.34	131.45	120.28
17	T	331	SER	N-CA-C	-8.32	103.57	114.31
32	J	161	ILE	O-C-N	8.32	130.40	121.83
16	V	149	GLN	N-CA-C	-8.32	100.98	112.30
20	N	377	HIS	CE1-NE2-CD2	-8.32	100.68	109.00
19	Z	100	ARG	CA-C-N	8.32	128.04	119.64
19	Z	100	ARG	C-N-CA	8.32	128.04	119.64
30	L	323	ARG	CA-C-O	-8.32	110.70	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	301	LYS	CA-C-N	8.31	132.09	120.29
22	P	301	LYS	C-N-CA	8.31	132.09	120.29
23	Q	322	HIS	CE1-NE2-CD2	-8.30	100.70	109.00
20	N	514	LEU	CA-C-N	8.30	131.40	120.28
20	N	514	LEU	C-N-CA	8.30	131.40	120.28
22	P	445	LEU	CA-C-N	8.29	131.82	120.46
22	P	445	LEU	C-N-CA	8.29	131.82	120.46
31	M	401	ALA	CA-C-N	8.29	131.81	120.46
31	M	401	ALA	C-N-CA	8.29	131.81	120.46
13	6	30	SER	CA-C-O	-8.27	111.98	119.59
19	Z	398	TRP	N-CA-C	8.27	121.90	111.24
27	H	55	LEU	CA-C-N	8.27	131.70	120.38
27	H	55	LEU	C-N-CA	8.27	131.70	120.38
24	R	344	HIS	ND1-CE1-NE2	8.25	116.65	108.40
23	Q	64	ALA	CA-C-N	8.25	131.33	120.28
23	Q	64	ALA	C-N-CA	8.25	131.33	120.28
23	Q	32	LYS	CA-C-N	8.25	131.33	120.28
23	Q	32	LYS	C-N-CA	8.25	131.33	120.28
24	R	19	ILE	N-CA-C	8.24	119.05	110.72
17	T	231	HIS	ND1-CE1-NE2	8.23	116.63	108.40
16	V	212	LEU	CA-C-N	8.23	131.98	120.29
16	V	212	LEU	C-N-CA	8.23	131.98	120.29
11	4	57	ALA	CA-C-N	8.23	131.97	120.29
11	4	57	ALA	C-N-CA	8.23	131.97	120.29
16	V	263	ASP	CA-CB-CG	-8.23	104.37	112.60
19	Z	858	LYS	CA-C-O	-8.22	108.89	120.16
8	1	219	ARG	NE-CZ-NH2	-8.22	111.80	119.20
29	K	207	PRO	O-C-N	-8.22	117.29	121.15
30	L	170	PRO	CA-C-N	8.22	132.11	120.28
30	L	170	PRO	C-N-CA	8.22	132.11	120.28
28	I	392	GLY	CA-C-N	8.21	131.28	120.28
28	I	392	GLY	C-N-CA	8.21	131.28	120.28
28	I	142	ASP	CA-CB-CG	-8.21	104.39	112.60
19	Z	70	LEU	CA-C-N	8.20	131.60	120.44
19	Z	70	LEU	C-N-CA	8.20	131.60	120.44
29	K	67	ASN	CA-C-N	8.20	131.27	120.28
29	K	67	ASN	C-N-CA	8.20	131.27	120.28
26	O	362	SER	CA-C-N	8.20	131.27	120.28
26	O	362	SER	C-N-CA	8.20	131.27	120.28
11	4	171	PHE	N-CA-C	8.20	123.84	112.45
19	Z	494	ARG	N-CA-C	-8.20	97.29	110.32
29	K	167	ILE	CA-C-N	8.19	134.83	120.74

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	167	ILE	C-N-CA	8.19	134.83	120.74
8	1	226	GLN	N-CA-C	-8.18	103.43	113.41
19	Z	452	ASN	CA-CB-CG	-8.18	104.42	112.60
26	O	106	SER	CA-C-N	8.18	133.50	121.31
26	O	106	SER	C-N-CA	8.18	133.50	121.31
31	M	308	GLU	N-CA-C	-8.18	101.62	111.69
16	V	262	GLU	N-CA-CB	8.18	124.31	110.49
32	J	56	VAL	CA-C-N	8.18	131.24	120.28
32	J	56	VAL	C-N-CA	8.18	131.24	120.28
20	N	172	ASP	N-CA-C	-8.17	93.39	110.80
10	3	51	ILE	CA-CB-CG1	8.17	124.29	110.40
27	H	127	ASP	CA-C-N	8.17	132.04	120.28
27	H	127	ASP	C-N-CA	8.17	132.04	120.28
19	Z	364	GLN	N-CA-C	-8.17	99.84	112.99
20	N	142	LEU	CA-C-N	8.15	131.53	120.44
20	N	142	LEU	C-N-CA	8.15	131.53	120.44
20	N	813	TYR	CA-C-N	8.15	128.09	119.85
20	N	813	TYR	C-N-CA	8.15	128.09	119.85
28	I	173	VAL	CA-C-N	8.15	131.21	120.28
28	I	173	VAL	C-N-CA	8.15	131.21	120.28
29	K	206	GLY	CA-C-N	8.15	125.53	119.66
29	K	206	GLY	C-N-CA	8.15	125.53	119.66
31	M	293	ALA	N-CA-C	8.15	120.17	111.28
11	4	104	LEU	N-CA-CB	8.15	123.40	110.85
7	G	162	TRP	N-CA-C	-8.15	103.13	113.72
20	N	759	SER	CA-C-N	8.14	130.82	120.56
20	N	759	SER	C-N-CA	8.14	130.82	120.56
16	V	219	ASN	CA-CB-CG	8.14	120.74	112.60
32	J	345	ARG	CA-C-N	8.13	131.18	120.28
32	J	345	ARG	C-N-CA	8.13	131.18	120.28
6	F	179	PHE	CA-C-N	8.13	131.01	120.44
6	F	179	PHE	C-N-CA	8.13	131.01	120.44
30	L	198	ALA	CA-C-N	8.12	131.83	120.29
30	L	198	ALA	C-N-CA	8.12	131.83	120.29
1	A	235	ILE	N-CA-CB	8.12	120.05	110.55
20	N	867	LYS	CA-C-N	8.12	132.35	120.90
20	N	867	LYS	C-N-CA	8.12	132.35	120.90
24	R	251	HIS	CG-CD2-NE2	8.12	115.32	107.20
32	J	191	PRO	N-CA-CB	8.12	110.96	103.08
32	J	172	PRO	CA-C-N	8.12	130.99	120.44
32	J	172	PRO	C-N-CA	8.12	130.99	120.44
25	U	233	VAL	O-C-N	8.11	129.86	121.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	153	THR	CA-CB-OG1	8.11	121.77	109.60
21	S	106	HIS	CE1-NE2-CD2	-8.11	100.89	109.00
4	D	232	GLU	CA-C-O	8.10	129.14	120.55
22	P	176	SER	N-CA-C	-8.10	104.27	114.56
25	U	45	LYS	N-CA-C	-8.10	94.90	108.75
21	S	54	ALA	CA-C-O	-8.10	112.45	121.84
16	V	214	GLN	CA-CB-CG	-8.09	97.91	114.10
31	M	182	GLU	N-CA-CB	8.09	124.16	110.49
29	K	268	ASP	CA-CB-CG	-8.08	104.52	112.60
10	3	46	GLY	CA-C-O	-8.08	112.72	120.64
17	T	321	PHE	CA-C-N	8.08	131.11	120.28
17	T	321	PHE	C-N-CA	8.08	131.11	120.28
10	3	2	SER	N-CA-C	8.08	121.19	110.53
19	Z	175	ASP	N-CA-CB	8.08	124.14	110.49
3	C	13	SER	CA-C-N	8.07	128.16	119.28
3	C	13	SER	C-N-CA	8.07	128.16	119.28
3	C	30	HIS	CA-C-O	8.07	128.98	120.42
3	C	227	VAL	N-CA-C	-8.07	96.82	108.36
7	G	53	LEU	CA-C-N	8.06	132.94	122.95
7	G	53	LEU	C-N-CA	8.06	132.94	122.95
19	Z	203	GLU	CA-C-N	8.05	131.88	120.28
19	Z	203	GLU	C-N-CA	8.05	131.88	120.28
24	R	249	VAL	N-CA-C	8.04	118.14	110.42
27	H	193	THR	CA-C-O	-8.04	110.85	118.73
10	3	120	PHE	CA-C-N	8.04	132.49	120.75
10	3	120	PHE	C-N-CA	8.04	132.49	120.75
14	7	61	ASP	CA-CB-CG	8.04	120.64	112.60
31	M	403	CYS	CA-C-N	8.04	131.84	120.42
31	M	403	CYS	C-N-CA	8.04	131.84	120.42
7	G	109	LEU	CA-C-N	8.04	131.05	120.28
7	G	109	LEU	C-N-CA	8.04	131.05	120.28
6	F	183	ASN	N-CA-C	-8.03	98.39	109.95
26	O	111	VAL	CA-CB-CG1	8.03	124.05	110.40
5	E	240	ASP	CA-CB-CG	-8.02	104.58	112.60
17	T	341	GLN	OE1-CD-NE2	8.01	130.61	122.60
30	L	305	ARG	CA-C-O	-8.01	111.79	119.80
7	G	168	LYS	N-CA-C	8.01	119.64	111.07
21	S	170	PHE	CA-CB-CG	-8.00	105.80	113.80
9	2	220	VAL	N-CA-C	-8.00	96.07	107.75
19	Z	279	GLU	CA-C-O	8.00	128.90	120.42
24	R	123	ALA	CA-C-N	8.00	131.00	120.28
24	R	123	ALA	C-N-CA	8.00	131.00	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	I	218	PRO	N-CA-CB	7.98	110.82	103.08
23	Q	123	THR	CA-C-N	7.98	130.98	120.28
23	Q	123	THR	C-N-CA	7.98	130.98	120.28
15	W	177	PRO	N-CA-CB	7.98	111.63	103.25
6	F	232	PHE	CA-C-N	7.97	130.96	120.28
6	F	232	PHE	C-N-CA	7.97	130.96	120.28
14	7	170	ASP	CA-C-N	7.97	134.23	122.99
14	7	170	ASP	C-N-CA	7.97	134.23	122.99
27	H	264	ALA	CA-C-O	-7.97	112.45	120.82
27	H	272	ILE	CA-C-O	7.97	129.05	120.53
19	Z	662	MET	CA-C-N	7.96	128.62	119.94
19	Z	662	MET	C-N-CA	7.96	128.62	119.94
21	S	373	GLN	N-CA-C	7.96	119.74	111.14
8	1	110	HIS	CG-CD2-NE2	7.96	115.16	107.20
22	P	113	GLU	CA-C-O	-7.96	112.46	120.82
5	E	42	THR	N-CA-C	-7.96	97.27	109.85
8	1	110	HIS	CE1-NE2-CD2	-7.96	101.05	109.00
16	V	217	LEU	CA-C-N	7.95	130.78	120.44
16	V	217	LEU	C-N-CA	7.95	130.78	120.44
23	Q	263	THR	O-C-N	7.95	128.83	121.04
32	J	108	VAL	N-CA-C	-7.95	101.71	113.39
32	J	173	GLU	N-CA-C	-7.94	102.58	111.07
12	5	237	HIS	CE1-NE2-CD2	-7.92	101.08	109.00
10	3	82	ILE	N-CA-CB	7.92	119.94	111.46
32	J	225	GLY	N-CA-C	-7.92	104.26	115.43
10	3	27	ARG	N-CA-CB	7.92	121.77	110.44
3	C	69	ASN	OD1-CG-ND2	7.92	130.52	122.60
31	M	332	ILE	CA-C-O	7.92	129.92	120.66
19	Z	405	HIS	CB-CG-CD2	-7.91	120.91	131.20
4	D	89	VAL	CA-C-N	7.91	130.53	120.56
4	D	89	VAL	C-N-CA	7.91	130.53	120.56
24	R	362	LYS	CA-C-N	7.91	130.88	120.28
24	R	362	LYS	C-N-CA	7.91	130.88	120.28
30	L	235	TYR	CA-C-N	7.91	131.52	120.29
30	L	235	TYR	C-N-CA	7.91	131.52	120.29
4	D	85	ASP	CA-C-N	7.91	131.52	120.29
4	D	85	ASP	C-N-CA	7.91	131.52	120.29
11	4	55	GLN	CB-CA-C	-7.91	98.47	110.88
21	S	342	LEU	CA-C-N	7.91	131.67	120.28
21	S	342	LEU	C-N-CA	7.91	131.67	120.28
28	I	140	ASP	CA-C-N	7.91	130.87	120.28
28	I	140	ASP	C-N-CA	7.91	130.87	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	111	LEU	CA-C-N	7.90	130.87	120.28
23	Q	111	LEU	C-N-CA	7.90	130.87	120.28
4	D	47	LYS	N-CA-CB	7.90	123.84	110.49
32	J	389	LYS	CA-C-N	7.90	131.28	120.46
32	J	389	LYS	C-N-CA	7.90	131.28	120.46
8	I	98	PHE	N-CA-CB	7.90	121.73	110.12
16	V	128	ASN	CA-CB-CG	-7.89	104.71	112.60
27	H	273	PHE	CA-CB-CG	7.89	121.69	113.80
6	F	94	ASP	CA-C-N	7.89	131.50	120.29
6	F	94	ASP	C-N-CA	7.89	131.50	120.29
17	T	222	ASP	N-CA-C	-7.88	100.49	113.50
16	V	35	SER	CA-C-N	7.88	130.84	120.28
16	V	35	SER	C-N-CA	7.88	130.84	120.28
25	U	155	PHE	CA-CB-CG	-7.88	105.92	113.80
20	N	390	LEU	CA-C-N	7.88	130.84	120.28
20	N	390	LEU	C-N-CA	7.88	130.84	120.28
21	S	116	PHE	N-CA-C	-7.88	102.18	113.21
16	V	274	ASN	OD1-CG-ND2	7.87	130.47	122.60
22	P	246	HIS	CA-CB-CG	-7.87	105.93	113.80
24	R	156	LEU	CA-C-N	7.87	131.24	120.46
24	R	156	LEU	C-N-CA	7.87	131.24	120.46
19	Z	594	LEU	CA-C-N	7.86	131.23	120.46
19	Z	594	LEU	C-N-CA	7.86	131.23	120.46
19	Z	397	LYS	N-CA-C	7.86	119.54	110.97
30	L	94	VAL	N-CA-C	-7.86	97.17	108.17
20	N	273	THR	CA-C-O	-7.85	112.89	120.19
19	Z	461	PRO	CA-C-N	7.85	131.44	120.29
19	Z	461	PRO	C-N-CA	7.85	131.44	120.29
19	Z	102	HIS	CE1-NE2-CD2	-7.85	101.15	109.00
20	N	59	PHE	CA-C-N	7.85	130.79	120.28
20	N	59	PHE	C-N-CA	7.85	130.79	120.28
2	B	13	PHE	CA-CB-CG	-7.84	105.95	113.80
19	Z	323	ASN	CB-CG-ND2	-7.84	104.63	116.40
2	B	140	ASN	OD1-CG-ND2	7.84	130.44	122.60
16	V	295	ASN	CA-C-N	7.84	130.43	120.56
16	V	295	ASN	C-N-CA	7.84	130.43	120.56
10	3	53	LEU	N-CA-CB	7.83	124.45	110.83
22	P	100	ALA	CA-C-N	7.83	133.13	120.30
22	P	100	ALA	C-N-CA	7.83	133.13	120.30
21	S	291	ILE	N-CA-C	7.82	117.93	110.42
29	K	63	ASP	CA-CB-CG	-7.82	104.78	112.60
19	Z	764	LEU	N-CA-C	-7.82	102.75	114.64

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	207	THR	CA-C-N	7.82	130.75	120.28
14	7	207	THR	C-N-CA	7.82	130.75	120.28
14	7	170	ASP	CA-CB-CG	7.81	120.41	112.60
15	W	96	ALA	CA-C-N	7.81	131.53	120.28
15	W	96	ALA	C-N-CA	7.81	131.53	120.28
2	B	130	PHE	CB-CG-CD2	-7.81	107.42	120.70
27	H	234	ASP	CA-CB-CG	-7.81	104.79	112.60
19	Z	866	GLN	N-CA-C	-7.81	102.84	113.30
23	Q	60	THR	N-CA-C	-7.80	103.83	112.72
29	K	64	GLU	CA-C-N	7.79	131.36	120.29
29	K	64	GLU	C-N-CA	7.79	131.36	120.29
31	M	339	ASP	CA-C-N	7.79	131.49	120.42
31	M	339	ASP	C-N-CA	7.79	131.49	120.42
22	P	186	ILE	N-CA-CB	7.79	121.13	110.54
23	Q	418	ALA	N-CA-C	7.79	120.66	111.71
20	N	204	ILE	CA-C-N	7.78	130.71	120.28
20	N	204	ILE	C-N-CA	7.78	130.71	120.28
22	P	204	ILE	N-CA-CB	7.78	121.12	110.54
19	Z	605	ASN	N-CA-C	-7.78	102.33	112.68
28	I	197	ILE	CB-CA-C	-7.78	101.49	112.22
28	I	278	ALA	CA-C-O	-7.78	111.90	120.69
20	N	627	PHE	CA-C-N	7.78	131.04	120.54
20	N	627	PHE	C-N-CA	7.78	131.04	120.54
5	E	157	ASP	O-C-N	-7.77	114.74	121.35
15	W	94	HIS	CA-CB-CG	7.77	121.57	113.80
13	6	32	TYR	CA-C-N	7.77	131.03	120.54
13	6	32	TYR	C-N-CA	7.77	131.03	120.54
20	N	74	PHE	CA-C-N	7.77	131.03	120.38
20	N	74	PHE	C-N-CA	7.77	131.03	120.38
24	R	251	HIS	CE1-NE2-CD2	-7.77	101.23	109.00
19	Z	887	PHE	CA-CB-CG	-7.76	106.03	113.80
12	5	139	SER	CA-C-N	7.75	131.30	120.29
12	5	139	SER	C-N-CA	7.75	131.30	120.29
28	I	242	GLN	N-CA-CB	7.75	121.30	110.07
29	K	338	ARG	N-CA-C	7.74	119.35	111.07
21	S	74	HIS	N-CA-C	7.74	119.50	111.14
21	S	71	ILE	CA-C-N	7.74	130.50	120.44
21	S	71	ILE	C-N-CA	7.74	130.50	120.44
21	S	31	GLN	CA-C-N	7.74	130.65	120.28
21	S	31	GLN	C-N-CA	7.74	130.65	120.28
20	N	213	PHE	N-CA-C	7.72	120.78	111.82
29	K	287	ARG	O-C-N	7.72	130.95	122.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	50	LYS	CA-C-N	7.72	132.04	120.31
19	Z	50	LYS	C-N-CA	7.72	132.04	120.31
5	E	215	ILE	CA-CB-CG1	7.72	123.52	110.40
14	7	115	VAL	O-C-N	-7.72	113.88	121.83
22	P	255	CYS	N-CA-C	7.72	119.33	111.07
27	H	180	CYS	CA-C-N	7.71	136.27	121.54
27	H	180	CYS	C-N-CA	7.71	136.27	121.54
21	S	77	GLN	CA-C-N	7.71	130.61	120.28
21	S	77	GLN	C-N-CA	7.71	130.61	120.28
23	Q	226	LYS	O-C-N	7.71	130.01	122.07
28	I	90	GLU	CA-C-N	7.71	130.47	120.44
28	I	90	GLU	C-N-CA	7.71	130.47	120.44
13	6	54	THR	N-CA-C	-7.71	97.00	108.79
29	K	343	LEU	CA-C-N	7.70	131.01	120.46
29	K	343	LEU	C-N-CA	7.70	131.01	120.46
27	H	69	ASP	CA-C-N	7.70	133.88	120.87
27	H	69	ASP	C-N-CA	7.70	133.88	120.87
12	5	178	ASN	CA-C-N	7.70	136.24	121.54
12	5	178	ASN	C-N-CA	7.70	136.24	121.54
8	1	221	VAL	N-CA-C	-7.70	96.34	108.81
20	N	185	MET	N-CA-C	7.70	119.31	111.07
6	F	18	ARG	O-C-N	-7.69	114.41	123.41
25	U	109	ASN	CA-C-N	7.69	130.44	120.44
25	U	109	ASN	C-N-CA	7.69	130.44	120.44
24	R	62	ASP	CA-C-O	7.69	128.33	119.18
21	S	307	ASN	CA-C-N	7.69	130.58	120.28
21	S	307	ASN	C-N-CA	7.69	130.58	120.28
30	L	293	THR	CA-CB-OG1	7.69	121.13	109.60
11	4	119	ASP	CA-CB-CG	-7.68	104.92	112.60
9	2	221	ILE	N-CA-C	-7.68	96.78	107.99
22	P	357	ARG	NE-CZ-NH2	7.68	126.11	119.20
25	U	184	VAL	N-CA-CB	7.68	123.90	111.23
24	R	378	ASN	N-CA-C	-7.67	102.99	111.36
26	O	235	ASP	CA-C-N	7.67	130.56	120.28
26	O	235	ASP	C-N-CA	7.67	130.56	120.28
27	H	307	ASP	CA-CB-CG	-7.67	104.93	112.60
21	S	454	VAL	N-CA-C	-7.66	97.30	108.71
26	O	125	ILE	CA-C-O	-7.66	112.99	120.95
20	N	607	VAL	N-CA-C	7.65	118.43	110.62
14	7	174	VAL	N-CA-C	-7.65	105.85	113.20
19	Z	392	THR	CA-CB-OG1	7.65	121.08	109.60
20	N	589	ALA	CA-C-N	7.64	131.93	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	589	ALA	C-N-CA	7.64	131.93	120.31
18	Y	63	HIS	CA-C-O	-7.64	112.45	120.55
1	A	189	TRP	N-CA-C	7.63	120.14	109.15
29	K	388	ARG	CA-C-N	7.63	131.91	120.31
29	K	388	ARG	C-N-CA	7.63	131.91	120.31
4	D	92	ARG	NE-CZ-NH1	7.63	129.13	121.50
8	1	208	ARG	NE-CZ-NH2	-7.63	112.33	119.20
21	S	88	ARG	CA-C-N	7.63	130.50	120.28
21	S	88	ARG	C-N-CA	7.63	130.50	120.28
24	R	147	ILE	CA-C-N	7.63	128.39	120.00
24	R	147	ILE	C-N-CA	7.63	128.39	120.00
10	3	145	GLN	CA-C-N	7.62	131.12	120.29
10	3	145	GLN	C-N-CA	7.62	131.12	120.29
14	7	186	GLY	CA-C-N	7.62	132.80	120.60
14	7	186	GLY	C-N-CA	7.62	132.80	120.60
24	R	386	VAL	N-CA-C	7.62	117.73	110.42
20	N	825	LYS	N-CA-C	7.62	119.58	111.28
19	Z	692	LEU	CA-C-N	7.61	130.33	120.44
19	Z	692	LEU	C-N-CA	7.61	130.33	120.44
1	A	137	CYS	CA-C-O	-7.61	111.91	120.66
26	O	219	HIS	CE1-NE2-CD2	-7.61	101.39	109.00
26	O	340	VAL	CA-C-N	7.60	132.91	122.19
26	O	340	VAL	C-N-CA	7.60	132.91	122.19
30	L	369	ILE	CA-C-N	7.60	130.47	120.28
30	L	369	ILE	C-N-CA	7.60	130.47	120.28
4	D	78	SER	N-CA-C	-7.59	103.08	111.36
20	N	117	ASP	N-CA-C	7.59	120.22	111.11
27	H	271	LEU	CA-C-O	-7.59	112.18	120.30
20	N	632	GLN	OE1-CD-NE2	7.59	130.19	122.60
25	U	284	ASP	CA-C-N	7.59	130.45	120.28
25	U	284	ASP	C-N-CA	7.59	130.45	120.28
6	F	175	HIS	CE1-NE2-CD2	-7.58	101.42	109.00
14	7	64	VAL	CA-C-O	7.58	130.26	120.78
31	M	122	GLY	CA-C-N	7.58	131.64	120.87
31	M	122	GLY	C-N-CA	7.58	131.64	120.87
21	S	135	MET	CA-C-N	7.58	132.91	122.07
21	S	135	MET	C-N-CA	7.58	132.91	122.07
20	N	441	GLY	CA-C-N	7.58	128.20	119.94
20	N	441	GLY	C-N-CA	7.58	128.20	119.94
6	F	91	GLU	CA-C-N	7.57	131.04	120.29
6	F	91	GLU	C-N-CA	7.57	131.04	120.29
22	P	331	GLY	CA-C-N	7.57	132.14	121.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	331	GLY	C-N-CA	7.57	132.14	121.24
24	R	157	ILE	CB-CA-C	-7.57	101.92	112.14
24	R	363	ASN	CA-C-N	7.57	130.28	120.44
24	R	363	ASN	C-N-CA	7.57	130.28	120.44
2	B	90	ALA	CA-C-N	7.56	130.41	120.28
2	B	90	ALA	C-N-CA	7.56	130.41	120.28
13	6	131	TYR	N-CA-C	-7.56	95.27	108.20
31	M	338	VAL	N-CA-C	-7.56	105.64	112.90
7	G	23	GLN	CA-C-N	7.55	131.15	120.42
7	G	23	GLN	C-N-CA	7.55	131.15	120.42
20	N	13	ASP	CA-CB-CG	7.55	120.15	112.60
26	O	35	HIS	ND1-CE1-NE2	7.55	115.95	108.40
21	S	210	HIS	CG-CD2-NE2	7.55	114.75	107.20
22	P	450	GLU	CA-C-N	7.55	130.71	120.44
22	P	450	GLU	C-N-CA	7.55	130.71	120.44
28	I	82	GLN	O-C-N	-7.55	114.12	122.12
5	E	70	ILE	N-CA-C	-7.54	102.78	111.00
31	M	231	PRO	N-CA-C	7.54	119.90	110.70
10	3	111	GLY	N-CA-C	-7.54	97.75	111.25
19	Z	493	ASN	N-CA-C	-7.54	102.16	112.03
27	H	233	THR	CA-C-N	7.53	133.48	122.63
27	H	233	THR	C-N-CA	7.53	133.48	122.63
1	A	98	ALA	CA-C-O	-7.53	112.91	120.82
15	W	88	THR	CA-C-N	7.53	128.28	120.00
15	W	88	THR	C-N-CA	7.53	128.28	120.00
25	U	127	LYS	CA-C-O	-7.53	112.45	120.88
31	M	292	ASP	CA-C-N	7.52	130.36	120.28
31	M	292	ASP	C-N-CA	7.52	130.36	120.28
28	I	165	ASP	N-CA-C	-7.52	103.17	113.18
32	J	377	HIS	CA-CB-CG	-7.52	106.28	113.80
12	5	185	PHE	N-CA-CB	7.52	121.25	109.82
24	R	155	ASP	CA-C-N	7.52	130.36	120.28
24	R	155	ASP	C-N-CA	7.52	130.36	120.28
22	P	101	VAL	CA-C-N	7.52	130.96	120.29
22	P	101	VAL	C-N-CA	7.52	130.96	120.29
21	S	493	PRO	CB-CA-C	7.51	120.08	110.92
24	R	136	HIS	CA-CB-CG	-7.51	106.29	113.80
32	J	235	PHE	CA-CB-CG	-7.51	106.29	113.80
3	C	230	GLN	CB-CG-CD	-7.51	99.84	112.60
30	L	35	GLU	N-CA-C	-7.51	103.10	111.28
20	N	588	MET	N-CA-C	7.50	119.53	111.36
7	G	170	ARG	NE-CZ-NH1	7.50	129.00	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	247	LEU	N-CA-CB	7.50	121.14	110.12
28	I	425	ASN	CA-C-N	7.49	130.72	120.46
28	I	425	ASN	C-N-CA	7.49	130.72	120.46
21	S	344	PHE	CA-C-N	7.49	130.32	120.28
21	S	344	PHE	C-N-CA	7.49	130.32	120.28
29	K	175	GLN	CA-C-O	-7.49	112.48	120.42
19	Z	295	ALA	CB-CA-C	-7.48	99.13	110.88
31	M	328	GLN	OE1-CD-NE2	7.48	130.08	122.60
29	K	133	HIS	CA-CB-CG	7.48	121.28	113.80
22	P	162	ALA	CA-C-N	7.48	130.30	120.28
22	P	162	ALA	C-N-CA	7.48	130.30	120.28
26	O	295	GLU	N-CA-CB	7.48	121.23	110.16
2	B	136	ILE	O-C-N	-7.48	115.33	123.18
28	I	118	ASP	CA-CB-CG	7.48	120.08	112.60
31	M	207	LEU	CA-C-N	7.47	127.11	119.19
31	M	207	LEU	C-N-CA	7.47	127.11	119.19
4	D	74	ALA	CA-C-N	7.47	135.42	121.97
4	D	74	ALA	C-N-CA	7.47	135.42	121.97
21	S	492	PHE	CA-C-O	-7.47	111.41	118.73
28	I	136	LEU	CA-C-O	7.47	129.23	121.23
6	F	14	SER	N-CA-C	-7.47	100.62	110.40
23	Q	134	VAL	N-CA-CB	7.47	121.78	110.58
25	U	104	ASN	CA-C-N	7.46	131.65	120.31
25	U	104	ASN	C-N-CA	7.46	131.65	120.31
26	O	259	PRO	N-CA-C	-7.46	104.09	114.98
2	B	223	PRO	CA-C-N	7.46	130.88	120.29
2	B	223	PRO	C-N-CA	7.46	130.88	120.29
31	M	346	LEU	N-CA-C	7.46	119.10	110.97
25	U	222	ILE	N-CA-CB	7.46	120.85	111.46
5	E	131	GLY	O-C-N	-7.45	113.01	122.70
15	W	182	ALA	N-CA-C	-7.45	101.62	110.41
17	T	163	ASP	CB-CA-C	-7.45	98.79	111.31
26	O	186	LYS	N-CA-C	-7.45	103.02	112.93
2	B	62	VAL	N-CA-CB	7.45	119.49	111.00
19	Z	401	LYS	CA-C-O	-7.45	111.69	120.10
6	F	190	HIS	CG-CD2-NE2	7.45	114.64	107.20
24	R	191	ILE	CA-C-N	7.44	130.25	120.28
24	R	191	ILE	C-N-CA	7.44	130.25	120.28
23	Q	277	LEU	N-CA-C	-7.44	104.35	113.50
29	K	49	GLN	CA-C-N	7.44	130.25	120.28
29	K	49	GLN	C-N-CA	7.44	130.25	120.28
7	G	172	ALA	N-CA-C	7.43	119.46	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	404	ASP	CA-C-N	7.43	130.98	120.28
19	Z	404	ASP	C-N-CA	7.43	130.98	120.28
32	J	18	SER	CA-C-N	7.43	129.66	120.22
32	J	18	SER	C-N-CA	7.43	129.66	120.22
19	Z	495	GLU	CA-C-N	7.43	130.24	120.28
19	Z	495	GLU	C-N-CA	7.43	130.24	120.28
20	N	109	THR	O-C-N	-7.43	114.25	122.12
21	S	219	LYS	N-CA-C	-7.43	98.51	110.32
9	2	134	GLN	CA-C-O	-7.42	112.55	120.42
28	I	434	THR	CA-C-O	-7.42	110.78	117.98
30	L	328	LYS	CB-CA-C	-7.42	98.47	110.79
8	1	165	SER	N-CA-C	-7.42	103.35	113.30
1	A	23	TYR	CA-C-N	7.42	130.22	120.28
1	A	23	TYR	C-N-CA	7.42	130.22	120.28
9	2	246	ARG	N-CA-C	-7.42	102.31	112.03
23	Q	116	TRP	CA-C-N	7.42	130.22	120.28
23	Q	116	TRP	C-N-CA	7.42	130.22	120.28
21	S	279	ASN	CA-CB-CG	7.42	120.02	112.60
14	7	154	LYS	N-CA-C	-7.41	96.08	108.75
5	E	98	ASN	CA-C-N	7.41	130.21	120.28
5	E	98	ASN	C-N-CA	7.41	130.21	120.28
19	Z	182	GLU	O-C-N	-7.41	113.75	120.71
24	R	75	LYS	O-C-N	7.41	130.59	122.15
26	O	219	HIS	ND1-CE1-NE2	7.41	115.81	108.40
6	F	236	LEU	N-CA-C	7.40	120.71	110.35
8	1	160	ILE	CA-C-N	7.40	127.31	121.61
8	1	160	ILE	C-N-CA	7.40	127.31	121.61
14	7	75	GLY	CA-C-N	7.40	134.09	123.14
14	7	75	GLY	C-N-CA	7.40	134.09	123.14
5	E	97	GLN	OE1-CD-NE2	-7.40	115.20	122.60
8	1	213	GLN	OE1-CD-NE2	-7.40	115.20	122.60
8	1	191	ASN	CA-C-N	7.40	130.19	120.28
8	1	191	ASN	C-N-CA	7.40	130.19	120.28
28	I	188	GLY	CA-C-N	7.39	135.90	121.41
28	I	188	GLY	C-N-CA	7.39	135.90	121.41
28	I	124	SER	N-CA-C	-7.39	97.19	109.24
28	I	268	ARG	CA-C-N	7.39	130.19	120.28
28	I	268	ARG	C-N-CA	7.39	130.19	120.28
8	1	54	THR	N-CA-C	-7.39	96.85	108.90
19	Z	294	MET	CA-C-N	7.39	130.05	120.44
19	Z	294	MET	C-N-CA	7.39	130.05	120.44
20	N	402	PHE	CA-C-N	7.39	130.18	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	402	PHE	C-N-CA	7.39	130.18	120.28
22	P	10	ASP	N-CA-C	7.39	120.78	111.69
21	S	194	GLN	N-CA-C	-7.39	103.83	112.92
19	Z	655	LEU	CA-C-N	7.38	128.12	120.00
19	Z	655	LEU	C-N-CA	7.38	128.12	120.00
27	H	306	LEU	N-CA-C	7.38	119.11	111.14
21	S	238	HIS	CE1-NE2-CD2	-7.38	101.62	109.00
22	P	249	ALA	CA-C-N	7.38	130.57	120.46
22	P	249	ALA	C-N-CA	7.38	130.57	120.46
8	1	93	THR	CA-C-N	7.38	130.03	120.44
8	1	93	THR	C-N-CA	7.38	130.03	120.44
31	M	209	MET	CB-CA-C	-7.38	99.24	110.90
16	V	288	VAL	CA-C-N	7.38	130.03	120.44
16	V	288	VAL	C-N-CA	7.38	130.03	120.44
9	2	49	VAL	N-CA-C	-7.38	96.66	108.90
19	Z	328	SER	CA-C-N	7.38	130.16	120.28
19	Z	328	SER	C-N-CA	7.38	130.16	120.28
1	A	229	ILE	CA-C-N	7.38	131.52	120.31
1	A	229	ILE	C-N-CA	7.38	131.52	120.31
26	O	58	LYS	CA-C-N	7.38	130.16	120.28
26	O	58	LYS	C-N-CA	7.38	130.16	120.28
19	Z	868	HIS	ND1-CE1-NE2	7.37	115.77	108.40
6	F	29	VAL	CA-C-N	7.37	130.90	120.28
6	F	29	VAL	C-N-CA	7.37	130.90	120.28
22	P	39	ARG	CA-C-N	7.37	130.75	120.29
22	P	39	ARG	C-N-CA	7.37	130.75	120.29
30	L	238	ASP	CB-CA-C	-7.37	99.26	110.90
4	D	211	ASN	CA-CB-CG	-7.37	105.23	112.60
21	S	203	ALA	CA-C-N	7.37	130.15	120.28
21	S	203	ALA	C-N-CA	7.37	130.15	120.28
21	S	418	ILE	CA-C-N	7.36	130.15	120.28
21	S	418	ILE	C-N-CA	7.36	130.15	120.28
27	H	411	GLU	CA-C-N	7.36	130.74	120.29
27	H	411	GLU	C-N-CA	7.36	130.74	120.29
13	6	214	VAL	CB-CA-C	-7.36	102.40	112.04
19	Z	219	LYS	CA-C-O	7.36	128.42	120.55
20	N	138	PHE	CA-C-N	7.36	130.14	120.28
20	N	138	PHE	C-N-CA	7.36	130.14	120.28
28	I	84	GLN	CA-C-O	-7.36	113.13	121.81
28	I	68	ILE	N-CA-C	7.35	118.15	110.72
17	T	253	ASN	CA-CB-CG	-7.35	105.25	112.60
27	H	177	VAL	N-CA-CB	-7.35	104.93	112.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	185	THR	CA-C-N	7.35	130.13	120.28
3	C	185	THR	C-N-CA	7.35	130.13	120.28
3	C	218	ARG	CA-C-O	-7.35	112.71	120.58
30	L	56	LYS	N-CA-C	-7.35	103.27	111.28
22	P	201	ARG	CA-C-N	7.35	130.13	120.28
22	P	201	ARG	C-N-CA	7.35	130.13	120.28
3	C	153	SER	N-CA-C	-7.35	102.59	113.61
28	I	207	HIS	ND1-CE1-NE2	7.35	115.75	108.40
30	L	376	VAL	CA-CB-CG1	7.35	122.89	110.40
19	Z	28	SER	N-CA-C	7.34	120.16	111.71
9	2	172	SER	N-CA-CB	7.34	122.90	110.49
32	J	41	ASN	OD1-CG-ND2	7.34	129.94	122.60
32	J	175	PHE	CA-C-N	7.34	130.72	120.29
32	J	175	PHE	C-N-CA	7.34	130.72	120.29
10	3	117	PHE	N-CA-C	-7.34	104.35	113.38
23	Q	284	THR	N-CA-C	-7.34	103.36	111.36
15	W	94	HIS	CA-C-N	7.34	129.98	120.44
15	W	94	HIS	C-N-CA	7.34	129.98	120.44
15	W	152	LYS	CA-C-N	7.34	130.84	120.28
15	W	152	LYS	C-N-CA	7.34	130.84	120.28
20	N	219	CYS	O-C-N	7.34	129.63	122.07
21	S	106	HIS	CG-CD2-NE2	7.34	114.54	107.20
24	R	230	ALA	CA-C-O	-7.33	112.64	120.42
14	7	117	ASP	CA-C-O	-7.33	112.65	120.42
24	R	194	PHE	CA-C-N	7.33	130.11	120.28
24	R	194	PHE	C-N-CA	7.33	130.11	120.28
31	M	222	PRO	N-CA-CB	7.33	110.19	103.08
19	Z	19	THR	CA-C-N	7.33	129.25	120.09
19	Z	19	THR	C-N-CA	7.33	129.25	120.09
26	O	145	LEU	CA-C-O	-7.33	112.47	119.80
31	M	378	VAL	O-C-N	7.33	131.30	123.02
21	S	224	ARG	N-CA-C	7.32	119.26	111.28
27	H	333	ARG	CA-C-O	-7.32	113.10	120.64
3	C	2	SER	CA-C-O	-7.32	112.79	120.55
23	Q	283	GLN	N-CA-CB	7.32	120.88	110.12
20	N	765	VAL	CB-CA-C	7.31	122.31	112.22
19	Z	240	VAL	CA-C-N	7.31	127.74	119.92
19	Z	240	VAL	C-N-CA	7.31	127.74	119.92
19	Z	102	HIS	ND1-CE1-NE2	7.31	115.71	108.40
24	R	203	ASP	N-CA-C	7.31	119.33	111.36
6	F	110	SER	CA-C-N	7.30	130.66	120.29
6	F	110	SER	C-N-CA	7.30	130.66	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	6	221	ARG	NE-CZ-NH2	-7.30	112.63	119.20
28	I	103	ARG	NE-CZ-NH2	-7.30	112.63	119.20
9	2	208	ASN	CA-C-O	7.30	128.16	120.42
21	S	144	ARG	CA-C-O	-7.30	111.78	118.79
21	S	198	ALA	CA-C-N	7.30	130.65	120.29
21	S	198	ALA	C-N-CA	7.30	130.65	120.29
1	A	31	ALA	CA-C-O	-7.30	111.86	120.10
23	Q	147	LEU	CA-C-N	7.29	130.05	120.28
23	Q	147	LEU	C-N-CA	7.29	130.05	120.28
26	O	251	LEU	N-CA-C	-7.29	103.47	112.88
19	Z	729	MET	CA-C-N	7.29	128.02	120.00
19	Z	729	MET	C-N-CA	7.29	128.02	120.00
19	Z	746	ARG	CA-C-N	7.29	130.05	120.28
19	Z	746	ARG	C-N-CA	7.29	130.05	120.28
22	P	397	VAL	O-C-N	7.29	128.94	121.87
5	E	95	GLU	CB-CA-C	-7.29	98.46	110.85
8	1	92	VAL	N-CA-C	7.29	118.08	110.72
16	V	208	ARG	N-CA-C	-7.29	95.09	107.99
19	Z	878	GLU	CB-CG-CD	-7.29	100.21	112.60
32	J	182	GLN	CA-C-N	7.29	127.70	119.83
32	J	182	GLN	C-N-CA	7.29	127.70	119.83
20	N	901	GLN	CA-C-O	-7.28	113.13	120.63
30	L	31	LEU	CA-C-N	7.28	130.04	120.28
30	L	31	LEU	C-N-CA	7.28	130.04	120.28
23	Q	298	SER	N-CA-CB	7.28	122.20	110.77
6	F	16	GLN	OE1-CD-NE2	-7.28	115.32	122.60
16	V	71	ASP	CA-CB-CG	7.28	119.88	112.60
19	Z	706	ILE	CA-C-N	7.28	130.03	120.28
19	Z	706	ILE	C-N-CA	7.28	130.03	120.28
26	O	82	HIS	CB-CG-CD2	-7.28	121.74	131.20
32	J	43	ARG	O-C-N	-7.28	114.41	122.12
8	1	75	PHE	CA-CB-CG	7.28	121.08	113.80
32	J	219	LEU	CA-C-N	7.28	130.75	120.42
32	J	219	LEU	C-N-CA	7.28	130.75	120.42
20	N	200	VAL	CA-C-N	7.27	130.03	120.28
20	N	200	VAL	C-N-CA	7.27	130.03	120.28
21	S	117	PHE	CA-CB-CG	7.27	121.07	113.80
26	O	213	PHE	CA-CB-CG	-7.27	106.53	113.80
9	2	166	PRO	CA-C-N	7.27	131.06	121.90
9	2	166	PRO	C-N-CA	7.27	131.06	121.90
19	Z	399	LEU	N-CA-C	7.27	118.99	111.14
23	Q	11	ARG	N-CA-C	-7.27	103.29	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	U	283	ARG	NE-CZ-NH2	-7.27	112.66	119.20
29	K	167	ILE	CA-CB-CG2	-7.27	98.14	110.50
20	N	472	ILE	CA-CB-CG1	7.27	122.75	110.40
25	U	248	ALA	N-CA-C	7.26	121.24	112.38
30	L	88	THR	N-CA-C	-7.26	104.23	113.23
21	S	437	ALA	CA-C-N	7.25	130.40	120.46
21	S	437	ALA	C-N-CA	7.25	130.40	120.46
32	J	395	SER	N-CA-CB	7.25	120.78	110.12
21	S	41	ALA	CA-C-N	7.25	127.84	119.94
21	S	41	ALA	C-N-CA	7.25	127.84	119.94
8	1	209	LEU	N-CA-C	-7.24	96.71	108.52
4	D	77	ALA	CA-C-N	7.24	130.57	120.29
4	D	77	ALA	C-N-CA	7.24	130.57	120.29
30	L	51	THR	CA-C-N	7.24	129.98	120.28
30	L	51	THR	C-N-CA	7.24	129.98	120.28
8	1	140	GLU	CA-C-O	-7.24	112.75	120.42
19	Z	837	LEU	N-CA-CB	7.24	122.73	110.49
29	K	385	LEU	CA-C-N	7.24	130.71	120.28
29	K	385	LEU	C-N-CA	7.24	130.71	120.28
31	M	60	SER	CA-C-N	7.24	129.98	120.28
31	M	60	SER	C-N-CA	7.24	129.98	120.28
5	E	74	ILE	CA-C-N	7.24	127.17	122.18
5	E	74	ILE	C-N-CA	7.24	127.17	122.18
5	E	122	GLN	CA-C-N	7.24	131.40	121.05
5	E	122	GLN	C-N-CA	7.24	131.40	121.05
31	M	420	HIS	ND1-CE1-NE2	7.23	115.63	108.40
8	1	76	CYS	N-CA-C	-7.23	98.31	109.52
30	L	60	ASP	CB-CA-C	-7.23	98.78	110.79
32	J	266	ASP	O-C-N	-7.23	113.37	122.27
10	3	112	LEU	N-CA-C	-7.23	96.48	108.34
20	N	911	ILE	N-CA-C	-7.23	97.44	107.99
19	Z	366	ASP	CA-C-N	7.23	135.35	121.54
19	Z	366	ASP	C-N-CA	7.23	135.35	121.54
32	J	301	LEU	N-CA-C	7.23	119.56	109.15
19	Z	715	HIS	CA-C-N	7.22	135.32	122.89
19	Z	715	HIS	C-N-CA	7.22	135.32	122.89
19	Z	770	HIS	N-CA-C	-7.22	104.33	113.72
26	O	373	ASP	O-C-N	7.22	129.78	122.12
23	Q	416	ASN	O-C-N	-7.22	114.63	122.07
1	A	73	THR	N-CA-C	-7.22	97.71	107.88
28	I	158	ALA	O-C-N	-7.22	114.97	123.41
12	5	137	ALA	CA-C-O	7.21	128.20	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	341	ARG	N-CA-C	7.21	120.19	111.82
8	1	206	VAL	CA-C-N	7.21	134.94	121.97
8	1	206	VAL	C-N-CA	7.21	134.94	121.97
11	4	55	GLN	CA-C-N	7.21	130.53	120.29
11	4	55	GLN	C-N-CA	7.21	130.53	120.29
30	L	163	ILE	N-CA-C	7.21	117.81	110.82
27	H	190	VAL	O-C-N	7.21	129.39	121.90
30	L	289	MET	O-C-N	-7.21	114.72	123.30
24	R	271	PHE	O-C-N	7.20	129.49	122.07
25	U	25	ARG	NE-CZ-NH2	-7.20	112.72	119.20
23	Q	88	LEU	CB-CA-C	-7.20	99.58	110.88
16	V	309	PHE	CA-CB-CG	-7.20	106.60	113.80
24	R	5	ASN	CA-C-N	7.20	130.51	120.29
24	R	5	ASN	C-N-CA	7.20	130.51	120.29
24	R	292	TYR	CA-C-N	7.20	129.93	120.28
24	R	292	TYR	C-N-CA	7.20	129.93	120.28
31	M	226	VAL	N-CA-C	-7.20	97.76	108.99
29	K	268	ASP	N-CA-C	-7.19	103.60	112.88
20	N	74	PHE	CA-CB-CG	-7.19	106.61	113.80
20	N	604	HIS	CE1-NE2-CD2	-7.19	101.81	109.00
27	H	216	GLY	N-CA-C	-7.19	97.68	112.34
27	H	422	LYS	CB-CA-C	-7.19	98.86	110.79
30	L	58	GLU	N-CA-C	7.19	119.19	111.36
26	O	42	LEU	CA-C-N	7.18	130.49	120.29
26	O	42	LEU	C-N-CA	7.18	130.49	120.29
22	P	365	ILE	CA-CB-CG1	7.18	122.61	110.40
21	S	329	ILE	CA-C-O	-7.18	113.08	121.05
5	E	73	HIS	CE1-NE2-CD2	-7.18	101.82	109.00
12	5	226	ASP	N-CA-C	-7.18	103.39	111.14
20	N	332	GLU	N-CA-C	-7.18	103.53	111.36
30	L	331	ALA	CA-C-N	7.18	133.14	121.87
30	L	331	ALA	C-N-CA	7.18	133.14	121.87
19	Z	190	GLU	CA-C-N	7.18	130.61	120.42
19	Z	190	GLU	C-N-CA	7.18	130.61	120.42
6	F	65	HIS	CA-C-N	-7.17	115.24	122.77
6	F	65	HIS	C-N-CA	-7.17	115.24	122.77
7	G	132	PHE	CA-CB-CG	-7.17	106.63	113.80
12	5	201	GLY	CA-C-N	7.17	129.76	120.44
12	5	201	GLY	C-N-CA	7.17	129.76	120.44
21	S	358	LEU	N-CA-C	7.17	119.96	111.71
27	H	264	ALA	O-C-N	7.17	129.45	122.07
19	Z	163	ALA	CA-C-N	7.17	129.10	120.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	163	ALA	C-N-CA	7.17	129.10	120.14
20	N	887	ALA	O-C-N	-7.17	114.66	123.04
28	I	303	ARG	CB-CA-C	-7.17	98.89	110.79
5	E	221	GLN	CA-C-O	-7.16	111.88	120.41
25	U	51	SER	CB-CA-C	-7.16	98.76	110.79
17	T	135	THR	N-CA-C	-7.16	103.16	112.68
26	O	35	HIS	CE1-NE2-CD2	-7.16	101.84	109.00
26	O	247	ARG	N-CA-C	-7.16	104.56	112.72
32	J	375	ARG	NE-CZ-NH2	7.16	125.64	119.20
19	Z	227	SER	CA-C-N	7.16	129.87	120.28
19	Z	227	SER	C-N-CA	7.16	129.87	120.28
20	N	611	ASN	CA-CB-CG	7.16	119.76	112.60
20	N	507	VAL	CA-C-N	7.16	131.19	120.31
20	N	507	VAL	C-N-CA	7.16	131.19	120.31
22	P	447	ALA	CA-C-O	-7.16	112.97	120.55
24	R	100	ILE	CA-C-O	-7.15	113.51	120.95
8	1	37	MET	N-CA-CB	7.15	123.27	110.83
10	3	80	ARG	CD-NE-CZ	-7.15	114.39	124.40
17	T	352	ILE	CB-CA-C	-7.15	102.82	111.97
20	N	406	ALA	CA-C-N	7.15	130.58	120.28
20	N	406	ALA	C-N-CA	7.15	130.58	120.28
24	R	136	HIS	ND1-CE1-NE2	7.15	115.55	108.40
26	O	138	VAL	CA-C-N	7.15	129.86	120.28
26	O	138	VAL	C-N-CA	7.15	129.86	120.28
27	H	170	PRO	CA-C-N	7.15	132.14	122.84
27	H	170	PRO	C-N-CA	7.15	132.14	122.84
22	P	334	GLU	N-CA-C	-7.15	103.42	111.14
10	3	51	ILE	N-CA-CB	7.15	123.16	111.44
32	J	330	LYS	N-CA-C	7.14	118.72	111.07
19	Z	375	SER	CA-C-N	7.14	129.72	120.44
19	Z	375	SER	C-N-CA	7.14	129.72	120.44
31	M	292	ASP	CA-CB-CG	-7.14	105.46	112.60
19	Z	96	LEU	CA-C-N	7.14	130.43	120.29
19	Z	96	LEU	C-N-CA	7.14	130.43	120.29
20	N	425	THR	CA-CB-OG1	7.14	120.31	109.60
25	U	125	ASP	CA-C-N	7.14	134.82	121.97
25	U	125	ASP	C-N-CA	7.14	134.82	121.97
17	T	181	TYR	CA-C-N	7.14	130.07	120.65
17	T	181	TYR	C-N-CA	7.14	130.07	120.65
7	G	162	TRP	N-CA-CB	7.13	121.14	110.65
32	J	250	GLU	N-CA-C	-7.13	96.70	108.76
19	Z	552	ASP	CA-CB-CG	-7.13	105.47	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	U	3	GLU	N-CA-C	-7.13	105.11	114.31
27	H	288	GLY	CA-C-O	7.13	127.95	119.82
3	C	13	SER	N-CA-C	-7.13	99.66	110.50
19	Z	595	VAL	CA-C-N	7.13	129.83	120.28
19	Z	595	VAL	C-N-CA	7.13	129.83	120.28
21	S	64	ASP	CA-C-O	-7.13	113.36	120.70
24	R	179	ARG	NE-CZ-NH2	-7.13	112.78	119.20
13	6	114	ALA	CA-C-N	7.13	130.22	120.46
13	6	114	ALA	C-N-CA	7.13	130.22	120.46
19	Z	541	THR	N-CA-C	7.13	118.69	111.07
22	P	398	VAL	O-C-N	-7.13	114.96	121.87
23	Q	74	ARG	O-C-N	-7.13	114.01	120.71
20	N	515	ALA	CA-C-N	7.12	129.70	120.44
20	N	515	ALA	C-N-CA	7.12	129.70	120.44
2	B	168	VAL	CB-CA-C	-7.12	102.52	112.14
13	6	104	HIS	ND1-CE1-NE2	7.12	115.52	108.40
23	Q	401	LEU	N-CA-CB	7.12	120.59	110.12
25	U	231	GLN	CA-C-N	7.12	130.54	120.28
25	U	231	GLN	C-N-CA	7.12	130.54	120.28
26	O	267	GLN	N-CA-C	-7.12	104.06	114.39
16	V	211	GLU	CA-C-O	-7.12	112.05	120.10
25	U	72	HIS	O-C-N	7.12	129.78	122.09
20	N	350	LEU	CA-C-N	7.12	129.82	120.28
20	N	350	LEU	C-N-CA	7.12	129.82	120.28
21	S	331	VAL	CA-C-N	7.12	130.40	120.29
21	S	331	VAL	C-N-CA	7.12	130.40	120.29
10	3	123	SER	N-CA-CB	7.12	123.87	111.13
20	N	488	THR	CA-C-N	7.12	132.24	122.07
20	N	488	THR	C-N-CA	7.12	132.24	122.07
27	H	322	ASN	N-CA-C	-7.12	104.75	113.50
12	5	73	VAL	N-CA-C	-7.11	97.89	108.99
7	G	89	ALA	N-CA-CB	7.11	120.68	110.16
26	O	308	GLU	N-CA-CB	7.11	121.17	110.22
4	D	152	GLN	OE1-CD-NE2	7.11	129.71	122.60
13	6	160	ASP	N-CA-C	-7.11	97.92	108.79
23	Q	271	VAL	N-CA-CB	7.10	118.70	110.82
25	U	72	HIS	CG-CD2-NE2	7.10	114.30	107.20
4	D	100	HIS	CG-CD2-NE2	7.10	114.30	107.20
21	S	279	ASN	CA-C-N	7.10	129.79	120.28
21	S	279	ASN	C-N-CA	7.10	129.79	120.28
2	B	189	HIS	CE1-NE2-CD2	-7.10	101.90	109.00
28	I	166	ASP	CA-C-N	7.10	135.09	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	I	166	ASP	C-N-CA	7.10	135.09	121.54
1	A	64	SER	N-CA-C	-7.09	102.94	112.94
24	R	57	LEU	N-CA-C	-7.09	102.90	112.26
2	B	60	ARG	NH1-CZ-NH2	7.09	128.52	119.30
2	B	146	LEU	CA-C-O	7.09	129.00	120.28
13	6	137	ILE	CB-CA-C	7.09	120.92	111.21
16	V	75	MET	N-CA-C	-7.09	101.18	110.39
23	Q	7	VAL	N-CA-C	7.09	117.88	110.72
30	L	289	MET	CA-C-N	7.09	132.42	123.14
30	L	289	MET	C-N-CA	7.09	132.42	123.14
32	J	22	GLN	N-CA-C	-7.08	103.64	111.36
1	A	3	ARG	NE-CZ-NH2	7.08	125.58	119.20
5	E	39	GLY	N-CA-C	-7.08	96.39	113.18
27	H	333	ARG	CA-C-N	7.08	128.04	120.11
27	H	333	ARG	C-N-CA	7.08	128.04	120.11
12	5	237	HIS	ND1-CE1-NE2	7.08	115.48	108.40
19	Z	787	LEU	N-CA-CB	7.08	122.20	110.52
19	Z	803	PHE	CA-C-N	7.08	132.84	120.87
19	Z	803	PHE	C-N-CA	7.08	132.84	120.87
20	N	832	VAL	N-CA-CB	7.08	120.17	110.54
28	I	235	LEU	CA-C-N	7.08	130.35	120.29
28	I	235	LEU	C-N-CA	7.08	130.35	120.29
26	O	249	GLN	N-CA-CB	7.08	120.97	110.49
23	Q	327	TYR	CA-C-N	7.08	129.77	120.28
23	Q	327	TYR	C-N-CA	7.08	129.77	120.28
31	M	419	THR	CA-CB-OG1	7.08	120.22	109.60
19	Z	534	VAL	N-CA-C	-7.08	97.84	108.17
19	Z	801	VAL	CA-C-N	7.08	135.06	121.54
19	Z	801	VAL	C-N-CA	7.08	135.06	121.54
8	1	139	GLN	CA-C-N	7.07	130.34	120.29
8	1	139	GLN	C-N-CA	7.07	130.34	120.29
20	N	453	HIS	CE1-NE2-CD2	-7.07	101.93	109.00
22	P	442	THR	CA-C-O	-7.07	113.05	120.55
16	V	210	ASN	CA-C-N	7.07	130.46	120.28
16	V	210	ASN	C-N-CA	7.07	130.46	120.28
20	N	194	ARG	NE-CZ-NH2	7.07	125.56	119.20
26	O	136	GLU	CA-C-N	7.07	130.06	120.44
26	O	136	GLU	C-N-CA	7.07	130.06	120.44
24	R	243	GLY	CA-C-N	7.07	130.32	120.29
24	R	243	GLY	C-N-CA	7.07	130.32	120.29
13	6	29	PHE	CA-CB-CG	-7.07	106.73	113.80
29	K	316	THR	N-CA-C	-7.07	101.20	111.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	4	148	THR	CA-C-N	7.06	127.10	119.90
11	4	148	THR	C-N-CA	7.06	127.10	119.90
14	7	100	ASP	CA-CB-CG	-7.06	105.54	112.60
19	Z	405	HIS	CE1-NE2-CD2	-7.06	101.94	109.00
21	S	124	ARG	CA-C-N	7.06	135.03	121.54
21	S	124	ARG	C-N-CA	7.06	135.03	121.54
19	Z	495	GLU	O-C-N	7.06	130.19	122.15
26	O	8	LEU	CA-C-N	7.06	129.74	120.28
26	O	8	LEU	C-N-CA	7.06	129.74	120.28
26	O	44	PHE	CA-CB-CG	7.06	120.86	113.80
2	B	128	ARG	CA-C-O	-7.05	113.85	120.34
21	S	493	PRO	N-CA-C	7.05	119.30	110.70
21	S	64	ASP	N-CA-CB	7.05	120.29	110.07
17	T	245	ASN	CA-CB-CG	7.04	119.64	112.60
31	M	420	HIS	CE1-NE2-CD2	-7.04	101.95	109.00
2	B	222	THR	CA-CB-OG1	7.04	120.17	109.60
31	M	327	THR	N-CA-C	-7.04	104.50	113.23
2	B	14	SER	CA-C-N	7.04	127.03	119.28
2	B	14	SER	C-N-CA	7.04	127.03	119.28
5	E	214	ASN	CA-CB-CG	-7.04	105.56	112.60
17	T	150	ILE	N-CA-C	7.04	117.80	110.62
28	I	88	LEU	N-CA-C	-7.04	103.22	111.03
2	B	171	LYS	CA-C-N	7.03	130.28	120.29
2	B	171	LYS	C-N-CA	7.03	130.28	120.29
19	Z	69	SER	N-CA-C	-7.03	105.32	114.04
27	H	110	LYS	O-C-N	-7.03	115.18	123.41
20	N	622	LEU	CA-C-N	7.03	127.79	119.98
20	N	622	LEU	C-N-CA	7.03	127.79	119.98
2	B	89	ARG	CA-C-N	7.03	129.70	120.28
2	B	89	ARG	C-N-CA	7.03	129.70	120.28
22	P	40	LEU	N-CA-C	-7.03	103.70	111.36
24	R	325	VAL	CA-C-N	7.03	128.10	120.44
24	R	325	VAL	C-N-CA	7.03	128.10	120.44
31	M	226	VAL	CB-CA-C	7.03	121.02	110.90
19	Z	359	GLY	CA-C-N	7.03	130.77	122.19
19	Z	359	GLY	C-N-CA	7.03	130.77	122.19
30	L	20	ASP	CB-CA-C	-7.03	98.90	110.85
10	3	62	THR	N-CA-CB	7.03	120.17	109.91
27	H	304	ASN	CB-CA-C	-7.03	99.80	110.90
29	K	137	ASN	CA-CB-CG	-7.03	105.57	112.60
4	D	183	THR	CA-C-N	7.02	130.26	120.29
4	D	183	THR	C-N-CA	7.02	130.26	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	222	ASP	CA-C-O	7.02	126.17	118.65
17	T	278	ILE	CA-C-N	7.02	129.57	120.44
17	T	278	ILE	C-N-CA	7.02	129.57	120.44
22	P	252	ASP	N-CA-C	7.02	119.78	111.71
32	J	307	ARG	CA-C-O	7.02	126.92	120.60
20	N	815	ALA	N-CA-C	7.01	125.31	109.81
23	Q	333	GLN	OE1-CD-NE2	7.01	129.62	122.60
15	W	87	CYS	CA-C-N	7.01	130.25	120.29
15	W	87	CYS	C-N-CA	7.01	130.25	120.29
20	N	42	VAL	CA-C-N	7.01	129.68	120.28
20	N	42	VAL	C-N-CA	7.01	129.68	120.28
26	O	127	ASP	CA-C-O	7.01	127.76	120.40
13	6	146	GLY	CA-C-N	7.01	134.93	121.54
13	6	146	GLY	C-N-CA	7.01	134.93	121.54
20	N	723	ASP	CA-C-O	-7.01	113.92	121.56
5	E	11	GLY	CA-C-N	7.01	130.19	121.85
5	E	11	GLY	C-N-CA	7.01	130.19	121.85
12	5	234	ASN	OD1-CG-ND2	7.01	129.61	122.60
19	Z	405	HIS	ND1-CE1-NE2	7.01	115.41	108.40
2	B	65	VAL	CB-CA-C	-7.00	102.84	111.32
25	U	230	LEU	CA-C-N	7.00	130.24	120.29
25	U	230	LEU	C-N-CA	7.00	130.24	120.29
16	V	308	VAL	N-CA-C	7.00	117.11	110.53
30	L	259	GLU	N-CA-C	-7.00	103.41	113.21
30	L	314	HIS	CA-C-O	7.00	128.02	120.32
22	P	136	ILE	CA-C-N	7.00	130.36	120.28
22	P	136	ILE	C-N-CA	7.00	130.36	120.28
28	I	145	GLU	CA-C-N	7.00	126.99	119.78
28	I	145	GLU	C-N-CA	7.00	126.99	119.78
11	4	46	CYS	N-CA-CB	7.00	123.00	110.83
30	L	126	PRO	CA-C-N	7.00	130.64	120.71
30	L	126	PRO	C-N-CA	7.00	130.64	120.71
13	6	63	HIS	CE1-NE2-CD2	-7.00	102.00	109.00
31	M	143	VAL	O-C-N	7.00	130.29	122.67
24	R	245	GLU	N-CA-CB	6.99	120.40	110.12
11	4	84	THR	N-CA-CB	6.99	120.51	110.16
28	I	146	PRO	CA-C-N	6.99	133.31	122.20
28	I	146	PRO	C-N-CA	6.99	133.31	122.20
31	M	88	THR	CA-C-N	6.99	131.29	120.60
31	M	88	THR	C-N-CA	6.99	131.29	120.60
26	O	122	LYS	N-CA-CB	6.99	120.39	110.12
29	K	150	SER	N-CA-C	6.99	119.49	111.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	220	VAL	CB-CA-C	-6.98	101.91	110.99
19	Z	111	GLU	N-CA-C	6.98	118.68	111.14
20	N	377	HIS	ND1-CE1-NE2	6.98	115.38	108.40
6	F	227	ASP	CA-CB-CG	-6.98	105.62	112.60
3	C	85	VAL	O-C-N	6.97	129.01	121.83
19	Z	331	LEU	N-CA-C	-6.97	103.34	112.41
20	N	450	HIS	CE1-NE2-CD2	-6.97	102.03	109.00
31	M	117	ASP	CA-CB-CG	6.97	119.57	112.60
12	5	78	ARG	CA-C-O	6.97	129.51	121.28
15	W	67	ASP	N-CA-C	6.97	120.96	110.64
19	Z	827	PRO	CA-C-N	6.97	130.73	120.90
19	Z	827	PRO	C-N-CA	6.97	130.73	120.90
29	K	212	LYS	CA-C-O	-6.97	113.16	120.55
26	O	43	ASP	N-CA-C	-6.97	103.76	111.36
32	J	296	ASN	CA-CB-CG	-6.97	105.63	112.60
24	R	153	ASP	O-C-N	6.97	131.35	123.27
6	F	62	LYS	N-CA-CB	6.96	121.53	110.73
20	N	6	ALA	N-CA-C	6.96	119.75	111.33
6	F	138	ASP	CA-CB-CG	-6.96	105.64	112.60
25	U	90	ARG	NE-CZ-NH1	-6.96	114.54	121.50
8	1	73	HIS	ND1-CE1-NE2	6.96	115.36	108.40
26	O	373	ASP	CA-C-N	6.96	130.30	120.42
26	O	373	ASP	C-N-CA	6.96	130.30	120.42
28	I	399	CYS	N-CA-C	6.96	118.94	111.36
30	L	308	ARG	N-CA-C	-6.96	105.98	114.75
1	A	27	TYR	CB-CG-CD2	-6.95	110.38	120.80
14	7	230	ARG	N-CA-C	-6.95	98.75	109.24
19	Z	121	PHE	O-C-N	6.95	129.59	122.09
19	Z	202	HIS	CA-CB-CG	6.95	120.75	113.80
20	N	483	LEU	CA-C-N	6.95	129.89	120.44
20	N	483	LEU	C-N-CA	6.95	129.89	120.44
26	O	101	ARG	N-CA-C	6.95	120.45	110.24
21	S	294	ILE	CB-CA-C	-6.94	102.64	112.22
22	P	49	SER	CA-C-N	6.94	129.46	120.44
22	P	49	SER	C-N-CA	6.94	129.46	120.44
23	Q	90	ARG	CA-C-N	6.94	129.46	120.44
23	Q	90	ARG	C-N-CA	6.94	129.46	120.44
20	N	655	ALA	CB-CA-C	-6.93	99.28	110.79
27	H	160	THR	N-CA-C	-6.93	103.82	112.90
27	H	216	GLY	CA-C-N	6.93	127.52	120.38
27	H	216	GLY	C-N-CA	6.93	127.52	120.38
22	P	119	PRO	N-CD-CG	6.93	113.60	103.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	420	LYS	CA-C-N	6.93	129.57	120.28
23	Q	420	LYS	C-N-CA	6.93	129.57	120.28
4	D	203	GLU	CA-C-N	6.93	129.29	120.56
4	D	203	GLU	C-N-CA	6.93	129.29	120.56
5	E	181	LEU	N-CA-C	6.92	118.83	111.28
9	2	78	HIS	CE1-NE2-CD2	-6.92	102.08	109.00
20	N	166	THR	N-CA-C	-6.92	102.08	113.50
22	P	283	GLN	CA-C-N	6.92	129.56	120.28
22	P	283	GLN	C-N-CA	6.92	129.56	120.28
25	U	149	THR	CA-C-N	6.92	126.88	120.03
25	U	149	THR	C-N-CA	6.92	126.88	120.03
32	J	280	LEU	N-CA-CB	6.92	123.24	110.99
28	I	115	ILE	CA-CB-CG1	6.92	122.17	110.40
30	L	170	PRO	N-CA-CB	-6.92	96.62	103.20
14	7	51	THR	N-CA-C	-6.92	100.50	111.02
14	7	69	ASP	CA-C-N	6.92	134.27	122.37
14	7	69	ASP	C-N-CA	6.92	134.27	122.37
20	N	785	PRO	CA-C-O	-6.92	113.01	121.31
26	O	124	ASN	CA-C-N	6.92	129.94	120.46
26	O	124	ASN	C-N-CA	6.92	129.94	120.46
19	Z	763	ARG	NE-CZ-NH1	6.92	128.42	121.50
17	T	326	GLN	CA-C-N	6.91	128.73	120.09
17	T	326	GLN	C-N-CA	6.91	128.73	120.09
1	A	21	ARG	CA-C-N	6.91	131.18	120.75
1	A	21	ARG	C-N-CA	6.91	131.18	120.75
7	G	90	ASP	CA-CB-CG	-6.91	105.69	112.60
13	6	140	LEU	N-CA-C	-6.91	97.01	108.34
22	P	314	LEU	N-CA-CB	6.91	120.66	109.95
27	H	151	ILE	CA-C-N	6.91	127.47	120.14
27	H	151	ILE	C-N-CA	6.91	127.47	120.14
10	3	123	SER	O-C-N	-6.91	114.97	123.33
11	4	31	ASP	CA-CB-CG	-6.91	105.69	112.60
19	Z	145	VAL	CB-CA-C	-6.91	102.69	112.22
4	D	97	CYS	CA-C-O	6.91	128.07	120.82
16	V	171	GLY	N-CA-C	-6.91	105.29	115.72
26	O	12	GLN	CA-C-N	6.91	130.81	120.31
26	O	12	GLN	C-N-CA	6.91	130.81	120.31
31	M	89	LEU	CA-C-O	-6.91	112.89	120.69
32	J	154	LEU	N-CA-C	-6.90	93.47	107.41
25	U	46	LYS	N-CA-C	-6.90	103.82	111.82
1	A	51	VAL	N-CA-CB	6.90	121.59	111.52
13	6	70	CYS	N-CA-C	-6.90	102.27	110.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	245	ASN	N-CA-C	6.90	118.80	111.28
20	N	454	GLY	N-CA-C	6.90	122.26	114.67
20	N	556	MET	CG-SD-CE	-6.90	85.72	100.90
25	U	214	LYS	CB-CA-C	-6.90	99.12	110.85
20	N	148	LYS	N-CA-C	6.89	118.80	111.28
19	Z	329	ASN	OD1-CG-ND2	6.89	129.49	122.60
20	N	766	PHE	N-CA-C	6.89	118.79	111.28
24	R	91	ALA	N-CA-C	6.89	118.79	111.28
30	L	341	ASP	CA-C-N	6.89	129.82	120.38
30	L	341	ASP	C-N-CA	6.89	129.82	120.38
23	Q	182	ASN	CA-C-O	6.89	129.92	122.13
9	2	57	LEU	N-CA-C	-6.89	97.98	109.07
20	N	777	HIS	CA-CB-CG	-6.89	106.91	113.80
19	Z	525	ILE	N-CA-C	-6.88	103.60	110.62
20	N	602	LEU	CA-C-O	6.88	127.72	120.42
23	Q	77	LEU	O-C-N	6.88	129.42	122.12
23	Q	175	LYS	N-CA-CB	6.88	120.35	110.16
2	B	99	LEU	O-C-N	-6.88	114.98	122.07
5	E	115	ALA	CA-C-N	6.88	130.19	120.42
5	E	115	ALA	C-N-CA	6.88	130.19	120.42
26	O	272	ILE	CA-C-N	6.88	130.06	120.29
26	O	272	ILE	C-N-CA	6.88	130.06	120.29
7	G	175	THR	CA-C-N	6.88	130.18	120.28
7	G	175	THR	C-N-CA	6.88	130.18	120.28
1	A	7	ALA	N-CA-C	-6.88	104.89	113.28
16	V	115	HIS	CB-CG-ND1	6.88	133.01	122.70
19	Z	57	GLU	CA-C-N	6.88	129.50	120.28
19	Z	57	GLU	C-N-CA	6.88	129.50	120.28
21	S	53	ALA	CA-C-N	6.88	132.12	122.36
21	S	53	ALA	C-N-CA	6.88	132.12	122.36
19	Z	578	ALA	CA-C-N	6.87	129.49	120.28
19	Z	578	ALA	C-N-CA	6.87	129.49	120.28
19	Z	586	PRO	N-CA-C	-6.87	104.56	113.57
19	Z	608	LYS	O-C-N	6.87	129.15	122.07
6	F	173	GLU	CA-C-O	-6.87	113.14	120.42
21	S	256	HIS	ND1-CE1-NE2	6.87	115.27	108.40
28	I	312	LEU	N-CA-C	6.87	118.77	111.28
16	V	181	LEU	N-CA-C	-6.87	102.72	112.13
17	T	174	LEU	CA-C-N	6.87	129.37	120.44
17	T	174	LEU	C-N-CA	6.87	129.37	120.44
19	Z	710	LEU	CA-C-N	6.87	130.17	120.28
19	Z	710	LEU	C-N-CA	6.87	130.17	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	390	LEU	CA-C-N	6.87	129.87	120.46
21	S	390	LEU	C-N-CA	6.87	129.87	120.46
26	O	246	ASP	CB-CA-C	6.87	118.42	109.28
2	B	159	LYS	N-CA-C	-6.87	105.45	114.31
12	5	109	ALA	CA-C-N	6.87	130.04	120.29
12	5	109	ALA	C-N-CA	6.87	130.04	120.29
21	S	275	GLN	OE1-CD-NE2	6.87	129.47	122.60
19	Z	137	ARG	CA-C-O	-6.86	113.27	120.55
19	Z	739	ALA	CA-C-O	-6.86	113.55	121.10
24	R	68	ASP	N-CA-CB	6.86	120.79	110.22
20	N	772	TRP	CD2-CE2-CZ2	-6.86	115.54	122.40
20	N	879	ASP	N-CA-C	-6.86	104.39	112.89
9	2	239	GLY	CA-C-O	-6.86	115.06	122.47
26	O	365	LEU	CA-C-O	-6.86	113.28	120.55
7	G	173	ALA	CA-C-N	6.86	129.47	120.28
7	G	173	ALA	C-N-CA	6.86	129.47	120.28
19	Z	554	TYR	CB-CG-CD1	-6.86	110.52	120.80
21	S	202	VAL	N-CA-C	6.86	117.64	110.72
20	N	89	ASN	CA-CB-CG	-6.85	105.75	112.60
28	I	321	SER	N-CA-C	-6.85	100.32	110.46
8	1	110	HIS	ND1-CE1-NE2	6.85	115.25	108.40
19	Z	590	PHE	CA-CB-CG	6.84	120.64	113.80
19	Z	778	LEU	CA-C-O	-6.84	113.30	120.55
22	P	313	GLU	N-CA-C	-6.84	98.67	109.07
27	H	358	HIS	CE1-NE2-CD2	-6.84	102.16	109.00
28	I	391	SER	CA-C-N	6.84	128.69	120.14
28	I	391	SER	C-N-CA	6.84	128.69	120.14
16	V	286	GLU	CB-CG-CD	-6.84	100.97	112.60
17	T	167	PHE	CA-CB-CG	-6.84	106.96	113.80
29	K	306	LYS	CA-C-N	6.84	130.42	120.91
29	K	306	LYS	C-N-CA	6.84	130.42	120.91
32	J	214	VAL	N-CA-C	-6.84	97.88	107.80
31	M	221	GLN	O-C-N	-6.84	115.06	121.35
31	M	138	PRO	CB-CA-C	6.83	117.62	111.40
14	7	105	GLN	N-CA-C	6.83	119.57	111.71
19	Z	102	HIS	CA-C-N	6.83	129.43	120.28
19	Z	102	HIS	C-N-CA	6.83	129.43	120.28
19	Z	369	ARG	CA-C-N	6.83	129.43	120.28
19	Z	369	ARG	C-N-CA	6.83	129.43	120.28
21	S	354	MET	O-C-N	-6.83	114.40	120.48
28	I	334	ILE	CA-CB-CG1	6.83	122.01	110.40
29	K	67	ASN	CA-CB-CG	6.83	119.43	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	419	LYS	CA-C-N	6.83	129.43	120.28
23	Q	419	LYS	C-N-CA	6.83	129.43	120.28
24	R	164	ALA	CA-C-N	6.83	129.43	120.28
24	R	164	ALA	C-N-CA	6.83	129.43	120.28
9	2	187	PRO	CA-C-N	6.83	134.58	121.54
9	2	187	PRO	C-N-CA	6.83	134.58	121.54
10	3	67	LEU	CA-C-O	-6.83	113.18	120.42
12	5	136	ALA	CA-C-N	6.83	129.43	120.28
12	5	136	ALA	C-N-CA	6.83	129.43	120.28
21	S	146	ARG	NE-CZ-NH1	6.83	128.33	121.50
21	S	180	ALA	N-CA-C	-6.83	104.57	113.17
25	U	72	HIS	CE1-NE2-CD2	-6.83	102.17	109.00
30	L	107	LYS	CB-CA-C	-6.83	99.39	109.97
8	1	158	PHE	CA-C-O	-6.83	113.63	120.80
13	6	132	TYR	CA-C-N	6.83	130.26	120.98
13	6	132	TYR	C-N-CA	6.83	130.26	120.98
29	K	176	GLU	N-CA-C	6.83	118.38	111.07
21	S	321	LYS	CA-C-O	-6.82	113.26	120.63
5	E	203	LYS	N-CA-C	6.82	118.72	111.28
22	P	45	GLU	N-CA-CB	6.82	119.90	110.01
28	I	359	LYS	N-CA-CB	6.82	120.14	110.12
8	1	162	GLY	O-C-N	6.82	131.35	123.51
20	N	851	GLU	CA-C-N	6.82	134.56	121.54
20	N	851	GLU	C-N-CA	6.82	134.56	121.54
10	3	79	GLY	N-CA-C	6.82	120.41	112.50
17	T	252	GLY	N-CA-C	-6.82	106.97	115.08
24	R	312	ARG	NE-CZ-NH2	6.82	125.33	119.20
13	6	53	ASP	CA-CB-CG	6.81	119.41	112.60
32	J	260	GLU	N-CA-C	-6.81	104.44	112.89
20	N	400	ALA	O-C-N	-6.81	114.90	122.12
23	Q	375	HIS	CE1-NE2-CD2	-6.81	102.19	109.00
3	C	61	PHE	N-CA-C	-6.81	103.55	110.97
20	N	476	GLY	CA-C-N	6.81	127.50	119.94
20	N	476	GLY	C-N-CA	6.81	127.50	119.94
22	P	337	ALA	CA-C-N	6.81	130.42	120.82
22	P	337	ALA	C-N-CA	6.81	130.42	120.82
31	M	315	GLU	CA-C-N	6.81	129.41	120.28
31	M	315	GLU	C-N-CA	6.81	129.41	120.28
32	J	299	ASP	CA-C-N	6.81	131.47	120.30
32	J	299	ASP	C-N-CA	6.81	131.47	120.30
6	F	131	GLY	CA-C-O	-6.81	114.35	120.75
19	Z	571	GLU	N-CA-C	-6.81	104.18	113.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	53	GLY	N-CA-C	-6.81	101.74	111.20
17	T	99	GLU	CA-C-N	6.81	129.40	120.28
17	T	99	GLU	C-N-CA	6.81	129.40	120.28
27	H	217	PRO	CA-C-N	6.81	126.74	120.21
27	H	217	PRO	C-N-CA	6.81	126.74	120.21
11	4	195	THR	CA-C-O	6.80	127.71	120.36
17	T	334	PRO	CA-C-O	-6.80	113.67	121.56
32	J	306	LEU	O-C-N	-6.80	114.39	122.15
17	T	212	HIS	CA-CB-CG	-6.80	107.00	113.80
31	M	357	PHE	O-C-N	-6.80	113.34	121.02
19	Z	12	GLN	N-CA-C	6.79	118.77	111.36
19	Z	75	LEU	CA-C-N	6.79	129.39	120.28
19	Z	75	LEU	C-N-CA	6.79	129.39	120.28
31	M	323	PHE	N-CA-C	-6.79	103.80	111.14
11	4	108	ASP	CA-C-N	6.79	132.38	123.00
11	4	108	ASP	C-N-CA	6.79	132.38	123.00
13	6	193	LEU	O-C-N	6.79	125.86	120.83
20	N	247	GLN	CA-C-N	6.79	129.77	120.46
20	N	247	GLN	C-N-CA	6.79	129.77	120.46
20	N	139	GLN	CA-C-N	6.79	129.38	120.28
20	N	139	GLN	C-N-CA	6.79	129.38	120.28
16	V	193	ILE	CB-CA-C	-6.79	102.97	112.14
17	T	287	PHE	N-CA-C	-6.79	105.15	113.50
28	I	120	HIS	CB-CG-CD2	-6.79	122.37	131.20
20	N	811	PHE	CA-C-O	-6.79	112.17	119.97
2	B	44	VAL	N-CA-C	-6.79	98.71	108.48
15	W	49	VAL	CA-C-N	6.79	127.52	121.82
15	W	49	VAL	C-N-CA	6.79	127.52	121.82
16	V	127	ILE	N-CA-C	6.79	117.54	110.62
19	Z	563	GLY	O-C-N	6.78	128.77	122.19
21	S	349	LEU	CA-C-N	6.78	129.67	120.38
21	S	349	LEU	C-N-CA	6.78	129.67	120.38
22	P	452	ILE	CA-C-O	-6.78	112.30	120.78
2	B	188	ILE	CB-CA-C	-6.78	102.99	112.14
24	R	111	LEU	O-C-N	-6.78	114.93	122.12
20	N	364	VAL	CA-C-N	6.78	129.36	120.28
20	N	364	VAL	C-N-CA	6.78	129.36	120.28
24	R	147	ILE	CB-CA-C	-6.78	102.99	112.14
22	P	424	LEU	CA-C-N	6.77	129.35	120.28
22	P	424	LEU	C-N-CA	6.77	129.35	120.28
23	Q	187	ARG	CD-NE-CZ	6.77	133.88	124.40
32	J	53	ASN	OD1-CG-ND2	6.77	129.37	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	697	ILE	O-C-N	6.77	128.44	121.87
30	L	330	HIS	CA-C-N	6.77	130.03	120.28
30	L	330	HIS	C-N-CA	6.77	130.03	120.28
32	J	200	ALA	N-CA-CB	6.77	120.07	110.12
19	Z	259	PHE	N-CA-C	-6.77	100.96	110.50
20	N	889	LEU	N-CA-C	-6.77	99.03	109.52
15	W	94	HIS	N-CA-CB	6.76	119.82	110.01
28	I	123	VAL	N-CA-C	-6.76	98.38	108.12
29	K	338	ARG	CA-C-N	6.76	129.89	120.29
29	K	338	ARG	C-N-CA	6.76	129.89	120.29
20	N	453	HIS	N-CA-C	-6.76	102.34	113.50
22	P	227	TYR	CA-C-N	6.76	129.23	120.44
22	P	227	TYR	C-N-CA	6.76	129.23	120.44
20	N	738	ASP	CA-CB-CG	-6.76	105.84	112.60
21	S	210	HIS	CE1-NE2-CD2	-6.76	102.24	109.00
31	M	146	GLU	N-CA-C	6.76	118.30	111.07
9	2	236	ASN	N-CA-C	-6.76	101.22	111.56
29	K	118	THR	CA-CB-CG2	6.76	121.99	110.50
1	A	134	LEU	N-CA-C	6.75	119.76	110.24
2	B	144	PRO	CA-C-O	-6.75	113.62	121.86
20	N	545	LEU	CA-C-O	-6.75	113.39	120.55
20	N	499	THR	CA-C-N	6.75	129.33	120.28
20	N	499	THR	C-N-CA	6.75	129.33	120.28
22	P	227	TYR	CA-C-O	-6.75	113.39	120.55
26	O	191	SER	N-CA-C	6.75	118.64	111.28
31	M	394	PHE	CA-CB-CG	-6.75	107.05	113.80
22	P	288	HIS	CB-CG-CD2	-6.75	122.42	131.20
10	3	16	GLY	CA-C-O	6.75	127.44	121.57
20	N	183	LEU	O-C-N	-6.75	114.97	122.12
26	O	287	ASN	N-CA-C	6.75	118.29	111.07
27	H	409	PHE	N-CA-C	6.75	118.63	111.28
31	M	109	GLU	N-CA-CB	6.75	121.51	110.17
17	T	271	ARG	CA-C-N	6.74	129.87	120.29
17	T	271	ARG	C-N-CA	6.74	129.87	120.29
19	Z	495	GLU	CA-C-O	-6.74	113.27	120.42
10	3	19	CYS	O-C-N	6.74	129.10	122.09
13	6	136	ILE	N-CA-CB	6.74	120.17	111.67
10	3	102	PRO	CA-C-O	-6.74	113.97	121.32
21	S	68	LEU	O-C-N	6.74	129.01	122.07
27	H	102	ILE	N-CA-CB	6.74	122.35	111.23
28	I	398	ILE	N-CA-CB	6.74	120.69	110.58
32	J	266	ASP	CA-C-O	6.74	127.72	119.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	V	181	LEU	CA-C-N	6.74	130.21	121.85
16	V	181	LEU	C-N-CA	6.74	130.21	121.85
18	Y	63	HIS	CE1-NE2-CD2	-6.74	102.26	109.00
21	S	347	PRO	N-CA-C	-6.74	105.23	114.80
25	U	230	LEU	N-CA-C	6.74	118.62	111.28
26	O	266	ALA	N-CA-C	-6.74	104.19	112.88
24	R	49	ASN	CA-C-N	6.73	134.40	121.54
24	R	49	ASN	C-N-CA	6.73	134.40	121.54
19	Z	576	ILE	CA-C-N	6.73	129.30	120.28
19	Z	576	ILE	C-N-CA	6.73	129.30	120.28
22	P	371	THR	N-CA-C	-6.73	105.69	114.04
31	M	207	LEU	O-C-N	-6.73	113.58	121.32
16	V	58	LEU	N-CA-CB	6.73	121.62	110.85
14	7	137	THR	CA-C-N	6.73	129.84	120.29
14	7	137	THR	C-N-CA	6.73	129.84	120.29
20	N	241	ASN	CA-C-N	6.73	129.84	120.29
20	N	241	ASN	C-N-CA	6.73	129.84	120.29
2	B	54	SER	O-C-N	6.73	131.54	122.59
28	I	218	PRO	CA-C-N	6.73	127.09	119.83
28	I	218	PRO	C-N-CA	6.73	127.09	119.83
30	L	378	GLN	CB-CG-CD	-6.73	101.17	112.60
3	C	54	LYS	N-CA-C	-6.72	105.11	113.38
14	7	199	GLU	CA-C-N	6.72	130.53	120.31
14	7	199	GLU	C-N-CA	6.72	130.53	120.31
17	T	232	PRO	N-CA-C	6.72	122.73	113.65
19	Z	558	LEU	O-C-N	-6.72	115.07	120.38
29	K	117	SER	CA-C-N	6.72	131.68	122.34
29	K	117	SER	C-N-CA	6.72	131.68	122.34
31	M	339	ASP	CA-CB-CG	-6.72	105.88	112.60
11	4	110	HIS	N-CA-C	-6.72	99.10	109.52
4	D	129	GLY	CA-C-O	-6.72	112.16	119.82
11	4	63	ASN	CA-CB-CG	6.72	119.32	112.60
13	6	29	PHE	N-CA-CB	6.72	123.15	111.39
20	N	212	ASP	CA-C-N	6.72	130.52	120.31
20	N	212	ASP	C-N-CA	6.72	130.52	120.31
27	H	256	MET	N-CA-C	6.72	118.69	111.36
3	C	225	ILE	CA-CB-CG1	6.72	121.82	110.40
20	N	577	ILE	CA-CB-CG1	6.72	121.82	110.40
16	V	302	ALA	CA-C-N	6.71	129.28	120.28
16	V	302	ALA	C-N-CA	6.71	129.28	120.28
21	S	339	PRO	CA-C-O	-6.71	113.48	121.67
26	O	251	LEU	CA-C-N	6.71	131.44	120.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	251	LEU	C-N-CA	6.71	131.44	120.63
22	P	19	ASP	CA-C-N	6.71	129.28	120.28
22	P	19	ASP	C-N-CA	6.71	129.28	120.28
20	N	714	SER	N-CA-C	6.71	118.60	111.28
25	U	147	ASP	CA-CB-CG	6.71	119.31	112.60
25	U	108	ILE	CA-C-N	6.71	129.27	120.28
25	U	108	ILE	C-N-CA	6.71	129.27	120.28
7	G	191	VAL	CA-C-N	6.71	129.27	120.28
7	G	191	VAL	C-N-CA	6.71	129.27	120.28
27	H	211	GLY	CA-C-O	6.71	127.21	120.64
13	6	30	SER	CA-C-N	6.71	128.22	119.84
13	6	30	SER	C-N-CA	6.71	128.22	119.84
22	P	256	ILE	CA-C-N	6.71	129.16	120.44
22	P	256	ILE	C-N-CA	6.71	129.16	120.44
25	U	123	ILE	N-CA-CB	6.71	120.12	111.67
27	H	155	PRO	O-C-N	6.71	130.29	122.98
19	Z	143	ARG	N-CA-CB	6.70	120.08	110.16
20	N	182	LYS	CA-C-N	6.70	129.26	120.28
20	N	182	LYS	C-N-CA	6.70	129.26	120.28
7	G	24	VAL	N-CA-C	-6.70	103.95	110.72
24	R	105	MET	CA-C-N	6.70	129.26	120.28
24	R	105	MET	C-N-CA	6.70	129.26	120.28
30	L	201	VAL	CA-CB-CG1	6.70	121.79	110.40
21	S	171	LEU	N-CA-C	6.70	118.58	111.28
32	J	218	GLU	N-CA-C	-6.70	103.56	113.61
20	N	37	GLU	O-C-N	6.70	129.78	122.15
6	F	65	HIS	CA-CB-CG	6.69	120.49	113.80
32	J	28	ILE	CA-C-N	6.69	129.25	120.28
32	J	28	ILE	C-N-CA	6.69	129.25	120.28
19	Z	777	THR	CA-C-N	6.69	129.25	120.28
19	Z	777	THR	C-N-CA	6.69	129.25	120.28
19	Z	307	LEU	CA-C-N	6.69	129.67	121.64
19	Z	307	LEU	C-N-CA	6.69	129.67	121.64
22	P	288	HIS	CA-C-N	6.69	129.24	120.28
22	P	288	HIS	C-N-CA	6.69	129.24	120.28
23	Q	380	GLN	N-CA-C	-6.69	104.93	113.23
30	L	139	GLU	CA-C-N	6.69	128.45	120.09
30	L	139	GLU	C-N-CA	6.69	128.45	120.09
30	L	358	ARG	O-C-N	6.69	130.50	122.27
21	S	468	PRO	CA-C-N	6.69	129.24	120.28
21	S	468	PRO	C-N-CA	6.69	129.24	120.28
13	6	214	VAL	CA-C-N	6.69	131.66	122.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	6	214	VAL	C-N-CA	6.69	131.66	122.77
7	G	181	GLN	CA-C-O	6.68	127.51	120.36
12	5	258	TYR	CA-C-N	6.68	129.13	120.44
12	5	258	TYR	C-N-CA	6.68	129.13	120.44
16	V	245	VAL	CA-C-O	6.68	127.90	120.95
27	H	382	GLY	CA-C-O	6.68	127.63	120.75
30	L	87	ALA	CA-C-N	6.68	133.42	121.66
30	L	87	ALA	C-N-CA	6.68	133.42	121.66
14	7	191	GLN	N-CA-C	6.68	124.58	109.81
25	U	273	HIS	CB-CG-CD2	-6.68	122.51	131.20
4	D	100	HIS	CE1-NE2-CD2	-6.68	102.32	109.00
1	A	58	ASP	CA-C-N	6.68	130.46	120.31
1	A	58	ASP	C-N-CA	6.68	130.46	120.31
3	C	124	PHE	N-CA-CB	6.68	122.11	111.56
11	4	68	LYS	N-CA-C	6.68	118.56	111.28
17	T	117	GLU	O-C-N	6.68	131.28	122.33
2	B	97	TYR	CA-C-N	6.67	129.22	120.28
2	B	97	TYR	C-N-CA	6.67	129.22	120.28
24	R	230	ALA	O-C-N	6.67	129.76	122.15
31	M	321	ASP	CA-CB-CG	6.67	119.27	112.60
29	K	215	LEU	CA-C-N	6.67	129.22	120.28
29	K	215	LEU	C-N-CA	6.67	129.22	120.28
20	N	132	GLY	CA-C-N	6.67	129.60	120.46
20	N	132	GLY	C-N-CA	6.67	129.60	120.46
24	R	64	GLN	CA-C-N	6.67	130.82	120.75
24	R	64	GLN	C-N-CA	6.67	130.82	120.75
3	C	38	LEU	N-CA-C	-6.67	98.83	109.76
14	7	219	VAL	N-CA-C	6.67	119.42	111.09
15	W	125	VAL	CA-C-N	6.67	129.11	120.44
15	W	125	VAL	C-N-CA	6.67	129.11	120.44
22	P	436	MET	CB-CA-C	-6.67	99.52	110.85
27	H	417	ILE	N-CA-CB	6.67	118.35	110.55
24	R	267	ARG	N-CA-CB	6.67	121.18	110.65
26	O	327	VAL	N-CA-C	-6.67	102.51	111.44
25	U	38	VAL	CB-CA-C	-6.66	101.75	111.68
6	F	70	ILE	CA-C-N	6.66	129.51	121.38
6	F	70	ILE	C-N-CA	6.66	129.51	121.38
31	M	225	GLY	N-CA-C	-6.66	100.52	110.38
22	P	369	TYR	CA-CB-CG	-6.66	101.91	113.90
15	W	31	ASP	N-CA-C	-6.66	104.10	111.36
10	3	15	LYS	CA-C-N	6.66	126.73	121.61
10	3	15	LYS	C-N-CA	6.66	126.73	121.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	W	99	HIS	CA-CB-CG	-6.66	107.14	113.80
21	S	64	ASP	CA-CB-CG	-6.66	105.94	112.60
30	L	179	ILE	CA-C-N	6.66	127.23	120.38
30	L	179	ILE	C-N-CA	6.66	127.23	120.38
25	U	235	ASN	N-CA-C	6.65	118.53	111.28
19	Z	203	GLU	N-CA-C	6.65	118.53	111.28
6	F	204	ASP	CA-CB-CG	-6.65	105.95	112.60
23	Q	245	PRO	CA-C-N	6.65	130.41	120.31
23	Q	245	PRO	C-N-CA	6.65	130.41	120.31
24	R	176	ARG	N-CA-C	6.65	119.53	111.82
27	H	206	ILE	N-CA-C	-6.65	98.62	109.12
23	Q	108	GLU	CA-C-N	6.65	129.08	120.44
23	Q	108	GLU	C-N-CA	6.65	129.08	120.44
21	S	59	SER	CA-C-N	6.64	129.72	120.29
21	S	59	SER	C-N-CA	6.64	129.72	120.29
20	N	452	ASN	CA-C-N	6.64	130.40	120.17
20	N	452	ASN	C-N-CA	6.64	130.40	120.17
20	N	901	GLN	N-CA-C	-6.64	101.76	110.39
27	H	217	PRO	N-CA-CB	6.64	109.52	103.08
20	N	461	LEU	N-CA-CB	6.64	119.98	110.16
24	R	46	ARG	CA-C-N	6.64	129.72	120.29
24	R	46	ARG	C-N-CA	6.64	129.72	120.29
19	Z	108	GLU	CA-C-N	6.64	129.84	120.42
19	Z	108	GLU	C-N-CA	6.64	129.84	120.42
29	K	285	VAL	CA-CB-CG2	-6.64	99.12	110.40
31	M	357	PHE	CA-C-N	6.64	126.55	119.85
31	M	357	PHE	C-N-CA	6.64	126.55	119.85
13	6	85	HIS	CG-CD2-NE2	6.63	113.83	107.20
31	M	130	SER	CA-C-N	6.63	133.22	122.67
31	M	130	SER	C-N-CA	6.63	133.22	122.67
16	V	128	ASN	CA-C-N	6.63	129.17	120.28
16	V	128	ASN	C-N-CA	6.63	129.17	120.28
2	B	186	ASP	CA-CB-CG	-6.63	105.97	112.60
24	R	100	ILE	CA-C-N	6.63	129.17	120.28
24	R	100	ILE	C-N-CA	6.63	129.17	120.28
20	N	418	GLU	N-CA-C	-6.63	103.88	112.23
24	R	260	LEU	CA-C-N	6.63	129.16	120.28
24	R	260	LEU	C-N-CA	6.63	129.16	120.28
19	Z	353	LEU	CA-C-O	-6.63	113.53	120.55
25	U	250	TYR	N-CA-C	6.63	118.50	111.28
10	3	136	PHE	CA-CB-CG	-6.62	107.17	113.80
3	C	49	ARG	CD-NE-CZ	-6.62	115.13	124.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	3	47	ASP	CA-CB-CG	-6.62	105.98	112.60
27	H	394	MET	N-CA-CB	6.62	119.86	110.12
6	F	196	ARG	CA-C-N	6.62	130.38	120.31
6	F	196	ARG	C-N-CA	6.62	130.38	120.31
15	W	61	LEU	N-CA-C	6.62	118.58	111.36
15	W	156	PHE	CA-CB-CG	-6.62	107.18	113.80
24	R	301	ILE	N-CA-C	-6.62	104.06	110.42
30	L	238	ASP	N-CA-C	6.62	118.29	111.14
29	K	157	ASP	CA-C-N	6.62	130.37	120.17
29	K	157	ASP	C-N-CA	6.62	130.37	120.17
9	2	178	MET	CA-C-N	6.62	129.15	120.28
9	2	178	MET	C-N-CA	6.62	129.15	120.28
28	I	296	ASP	CA-CB-CG	-6.62	105.98	112.60
2	B	54	SER	CA-C-O	-6.62	111.05	120.51
7	G	16	SER	CA-C-N	6.62	126.24	119.56
7	G	16	SER	C-N-CA	6.62	126.24	119.56
21	S	449	HIS	CA-CB-CG	6.62	120.42	113.80
32	J	332	HIS	CG-CD2-NE2	6.62	113.81	107.20
23	Q	370	LEU	CA-C-N	6.61	131.76	120.72
23	Q	370	LEU	C-N-CA	6.61	131.76	120.72
28	I	230	THR	N-CA-C	-6.61	105.78	114.31
19	Z	748	LEU	CA-C-N	6.61	129.14	120.28
19	Z	748	LEU	C-N-CA	6.61	129.14	120.28
2	B	32	GLY	CA-C-N	6.61	129.58	120.39
2	B	32	GLY	C-N-CA	6.61	129.58	120.39
8	1	229	LYS	N-CA-C	-6.61	99.25	109.76
25	U	203	SER	CA-C-O	-6.61	113.54	120.55
20	N	749	GLN	OE1-CD-NE2	6.61	129.21	122.60
1	A	238	HIS	CE1-NE2-CD2	-6.61	102.39	109.00
25	U	76	GLU	CA-C-O	-6.61	113.89	120.70
28	I	332	ASN	N-CA-C	-6.61	105.04	113.23
21	S	492	PHE	O-C-N	-6.61	114.60	120.48
3	C	67	LYS	N-CA-C	-6.60	97.75	108.52
6	F	170	THR	CA-C-O	-6.60	113.55	120.55
19	Z	702	PRO	CA-C-O	-6.60	113.00	122.31
31	M	63	LEU	CA-C-N	6.60	129.13	120.28
31	M	63	LEU	C-N-CA	6.60	129.13	120.28
22	P	420	ASP	N-CA-C	-6.60	100.00	110.10
26	O	371	ALA	N-CA-CB	6.60	121.65	110.49
28	I	68	ILE	CA-C-N	6.60	129.13	120.28
28	I	68	ILE	C-N-CA	6.60	129.13	120.28
4	D	231	ILE	CA-C-N	6.60	129.13	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	231	ILE	C-N-CA	6.60	129.13	120.28
25	U	225	HIS	CE1-NE2-CD2	-6.60	102.40	109.00
5	E	70	ILE	CB-CA-C	-6.60	103.40	112.24
19	Z	887	PHE	N-CA-C	-6.60	104.17	111.36
20	N	923	GLU	CA-C-N	6.60	132.24	122.74
20	N	923	GLU	C-N-CA	6.60	132.24	122.74
31	M	57	ILE	N-CA-C	6.60	117.38	110.72
13	6	54	THR	O-C-N	-6.60	116.36	123.42
1	A	192	GLU	CA-C-N	6.59	129.12	120.28
1	A	192	GLU	C-N-CA	6.59	129.12	120.28
7	G	103	PHE	CA-CB-CG	-6.59	107.20	113.80
19	Z	645	ASP	CA-C-N	6.59	129.12	120.28
19	Z	645	ASP	C-N-CA	6.59	129.12	120.28
30	L	384	ALA	CA-C-N	6.59	128.87	120.56
30	L	384	ALA	C-N-CA	6.59	128.87	120.56
9	2	230	ARG	NE-CZ-NH2	6.59	125.13	119.20
20	N	722	ASP	CA-C-N	6.59	131.29	120.94
20	N	722	ASP	C-N-CA	6.59	131.29	120.94
4	D	177	PHE	CA-C-N	6.59	130.33	120.31
4	D	177	PHE	C-N-CA	6.59	130.33	120.31
10	3	63	VAL	N-CA-C	6.59	117.38	110.72
29	K	344	ILE	CB-CA-C	-6.59	103.24	112.14
28	I	435	PRO	O-C-N	6.59	129.61	122.17
10	3	91	VAL	O-C-N	-6.59	115.05	121.83
15	W	159	THR	CA-CB-OG1	6.59	119.48	109.60
26	O	46	GLN	CB-CG-CD	-6.59	101.40	112.60
19	Z	615	ILE	N-CA-C	-6.58	105.12	113.22
21	S	202	VAL	CA-C-O	6.58	127.83	120.85
26	O	47	ASP	CA-CB-CG	-6.58	106.02	112.60
20	N	761	VAL	CA-C-N	6.58	127.24	120.00
20	N	761	VAL	C-N-CA	6.58	127.24	120.00
21	S	405	MET	CA-C-O	-6.58	113.57	120.55
22	P	156	ASN	N-CA-CB	6.58	120.56	110.49
22	P	301	LYS	N-CA-C	6.58	118.11	111.07
31	M	144	ASP	CA-C-N	6.58	129.10	120.28
31	M	144	ASP	C-N-CA	6.58	129.10	120.28
12	5	193	TYR	CA-C-N	6.58	129.09	120.28
12	5	193	TYR	C-N-CA	6.58	129.09	120.28
16	V	154	LYS	CA-C-N	6.58	133.81	121.97
16	V	154	LYS	C-N-CA	6.58	133.81	121.97
24	R	153	ASP	N-CA-C	-6.58	97.69	108.41
26	O	110	ALA	CA-C-N	6.58	128.85	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	110	ALA	C-N-CA	6.58	128.85	120.56
13	6	63	HIS	CG-CD2-NE2	6.58	113.78	107.20
18	Y	63	HIS	CA-CB-CG	-6.58	107.22	113.80
19	Z	336	GLU	CA-C-N	6.58	129.63	120.29
19	Z	336	GLU	C-N-CA	6.58	129.63	120.29
20	N	181	LEU	CB-CA-C	-6.57	100.56	110.88
31	M	86	ASN	CB-CG-OD1	-6.57	107.65	120.80
21	S	316	THR	CA-C-N	6.57	129.74	120.28
21	S	316	THR	C-N-CA	6.57	129.74	120.28
21	S	351	ARG	CA-C-N	6.57	129.09	120.28
21	S	351	ARG	C-N-CA	6.57	129.09	120.28
30	L	315	ILE	N-CA-C	-6.57	97.10	107.15
31	M	294	ILE	CA-C-O	-6.57	114.12	120.95
32	J	309	GLY	CA-C-O	6.57	127.57	119.88
16	V	283	HIS	CB-CG-CD2	6.57	139.74	131.20
7	G	231	ASP	CA-CB-CG	-6.57	106.03	112.60
2	B	63	HIS	CG-CD2-NE2	6.57	113.77	107.20
8	1	62	ARG	NE-CZ-NH1	6.57	128.07	121.50
14	7	248	SER	CA-C-O	6.57	128.40	120.92
19	Z	800	LEU	N-CA-C	-6.57	102.63	112.54
27	H	198	PRO	CA-C-N	6.57	128.97	120.44
27	H	198	PRO	C-N-CA	6.57	128.97	120.44
4	D	82	LEU	CA-C-N	6.56	130.28	120.31
4	D	82	LEU	C-N-CA	6.56	130.28	120.31
9	2	230	ARG	CB-CA-C	-6.56	104.53	110.44
13	6	35	ASN	CA-C-N	6.56	128.91	120.64
13	6	35	ASN	C-N-CA	6.56	128.91	120.64
13	6	85	HIS	CE1-NE2-CD2	-6.56	102.44	109.00
22	P	60	MET	N-CA-C	6.56	118.43	111.28
28	I	96	ARG	NE-CZ-NH2	6.56	125.11	119.20
30	L	138	HIS	N-CA-CB	6.56	119.87	110.16
20	N	455	GLY	CA-C-N	6.56	129.60	120.29
20	N	455	GLY	C-N-CA	6.56	129.60	120.29
21	S	66	VAL	N-CA-C	6.56	116.69	110.53
6	F	226	ASP	CA-C-N	6.56	128.96	120.44
6	F	226	ASP	C-N-CA	6.56	128.96	120.44
32	J	375	ARG	NE-CZ-NH1	-6.56	114.94	121.50
10	3	85	TYR	CA-C-N	6.55	129.06	120.28
10	3	85	TYR	C-N-CA	6.55	129.06	120.28
19	Z	684	PRO	N-CA-CB	-6.55	97.23	103.39
20	N	258	GLN	OE1-CD-NE2	6.55	129.16	122.60
20	N	705	LYS	CA-C-N	6.55	129.44	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	705	LYS	C-N-CA	6.55	129.44	120.46
25	U	22	HIS	CA-C-N	6.55	129.06	120.28
25	U	22	HIS	C-N-CA	6.55	129.06	120.28
25	U	222	ILE	N-CA-C	-6.55	98.30	107.80
17	T	262	PHE	CA-CB-CG	-6.55	107.25	113.80
19	Z	301	HIS	CA-C-N	6.55	127.25	119.98
19	Z	301	HIS	C-N-CA	6.55	127.25	119.98
21	S	215	GLU	CA-C-N	6.55	129.35	120.44
21	S	215	GLU	C-N-CA	6.55	129.35	120.44
29	K	133	HIS	CE1-NE2-CD2	-6.55	102.45	109.00
4	D	139	ILE	CB-CA-C	-6.55	103.42	111.08
22	P	423	ASN	CA-C-N	6.55	129.59	120.29
22	P	423	ASN	C-N-CA	6.55	129.59	120.29
1	A	195	VAL	CA-C-N	6.55	129.59	120.29
1	A	195	VAL	C-N-CA	6.55	129.59	120.29
22	P	261	ASP	N-CA-C	6.55	118.42	111.28
19	Z	614	HIS	CA-C-N	6.55	131.20	121.77
19	Z	614	HIS	C-N-CA	6.55	131.20	121.77
24	R	192	ARG	NE-CZ-NH1	-6.54	114.95	121.50
10	3	27	ARG	N-CA-C	-6.54	102.09	110.53
7	G	143	VAL	N-CA-C	-6.54	106.75	113.10
19	Z	561	GLY	O-C-N	-6.54	115.84	122.19
20	N	228	ALA	CA-C-N	6.54	129.71	120.42
20	N	228	ALA	C-N-CA	6.54	129.71	120.42
26	O	198	PHE	CA-C-O	-6.54	113.49	120.42
1	A	221	THR	O-C-N	-6.54	115.64	123.03
2	B	42	ASN	CA-CB-CG	-6.54	106.06	112.60
19	Z	688	ARG	NE-CZ-NH1	6.54	128.04	121.50
21	S	105	ASN	OD1-CG-ND2	6.54	129.14	122.60
16	V	90	VAL	CA-C-O	-6.54	113.92	120.85
9	2	105	ASN	CA-CB-CG	-6.54	106.06	112.60
20	N	597	LYS	O-C-N	6.54	128.80	122.07
20	N	618	ALA	N-CA-C	6.54	118.06	111.07
24	R	322	ALA	CA-C-N	6.54	129.57	120.29
24	R	322	ALA	C-N-CA	6.54	129.57	120.29
2	B	7	SER	N-CA-C	-6.53	97.42	108.26
5	E	64	ILE	CB-CA-C	6.53	119.55	111.25
19	Z	161	HIS	N-CA-CB	6.53	119.72	110.12
21	S	124	ARG	N-CA-C	-6.53	102.47	112.99
11	4	9	GLY	CA-C-N	6.53	128.00	119.84
11	4	9	GLY	C-N-CA	6.53	128.00	119.84
21	S	140	ASP	CA-C-O	6.53	126.02	118.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	155	PRO	N-CA-CB	6.53	109.55	103.41
7	G	73	HIS	CE1-NE2-CD2	-6.53	102.47	109.00
9	2	113	THR	CA-C-N	6.53	127.18	120.00
9	2	113	THR	C-N-CA	6.53	127.18	120.00
23	Q	111	LEU	N-CA-CB	6.53	119.48	110.01
28	I	356	PRO	CA-C-N	6.53	131.19	120.94
28	I	356	PRO	C-N-CA	6.53	131.19	120.94
11	4	144	ASP	CA-CB-CG	6.53	119.13	112.60
16	V	258	ALA	O-C-N	6.53	128.79	122.07
19	Z	238	ASN	CA-CB-CG	6.53	119.13	112.60
28	I	180	PRO	CA-C-N	6.53	129.50	120.63
28	I	180	PRO	C-N-CA	6.53	129.50	120.63
30	L	210	LEU	N-CA-C	-6.53	98.09	108.73
24	R	194	PHE	CA-CB-CG	-6.52	107.28	113.80
17	T	146	LEU	CA-C-N	6.52	128.92	120.44
17	T	146	LEU	C-N-CA	6.52	128.92	120.44
26	O	118	ILE	CA-CB-CG1	6.52	121.49	110.40
17	T	103	ASP	CA-CB-CG	6.52	119.12	112.60
5	E	179	SER	O-C-N	6.52	129.03	122.12
7	G	170	ARG	N-CA-C	6.52	119.22	111.33
8	1	149	MET	CG-SD-CE	-6.52	86.56	100.90
27	H	208	PRO	CA-C-N	6.52	127.99	119.84
27	H	208	PRO	C-N-CA	6.52	127.99	119.84
21	S	74	HIS	ND1-CE1-NE2	6.52	114.92	108.40
19	Z	671	ALA	O-C-N	-6.51	115.22	122.12
20	N	756	HIS	N-CA-C	-6.51	95.63	107.75
22	P	359	VAL	N-CA-C	6.51	117.30	110.72
32	J	183	PRO	N-CA-CB	6.51	109.13	103.27
28	I	191	ASP	CA-C-N	6.51	129.01	120.28
28	I	191	ASP	C-N-CA	6.51	129.01	120.28
20	N	51	ASP	CA-CB-CG	6.51	119.11	112.60
27	H	281	GLY	CA-C-N	6.51	127.54	120.44
27	H	281	GLY	C-N-CA	6.51	127.54	120.44
32	J	164	VAL	N-CA-CB	-6.51	103.30	110.65
26	O	325	ASP	CB-CA-C	-6.51	100.18	110.79
27	H	122	VAL	N-CA-C	-6.51	99.06	108.36
27	H	402	LYS	N-CA-C	-6.51	105.50	113.50
19	Z	332	ALA	N-CA-C	-6.50	96.94	110.80
20	N	557	TYR	CA-CB-CG	-6.50	102.19	113.90
26	O	358	THR	O-C-N	6.50	129.01	122.12
3	C	148	TYR	CA-CB-CG	-6.50	102.20	113.90
21	S	287	TYR	CA-C-O	-6.50	113.53	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	2	50	VAL	CA-C-N	6.50	132.16	122.99
9	2	50	VAL	C-N-CA	6.50	132.16	122.99
11	4	55	GLN	N-CA-C	6.50	118.03	111.07
19	Z	32	GLU	CA-C-O	-6.50	114.00	120.70
21	S	467	GLU	O-C-N	-6.50	114.55	120.92
22	P	379	ALA	CA-C-N	6.50	128.89	120.44
22	P	379	ALA	C-N-CA	6.50	128.89	120.44
19	Z	437	GLU	CA-C-O	-6.50	114.58	121.99
20	N	467	ASN	CA-CB-CG	6.50	119.10	112.60
30	L	52	LYS	CA-C-N	6.50	128.99	120.28
30	L	52	LYS	C-N-CA	6.50	128.99	120.28
5	E	174	SER	CA-C-O	-6.50	113.64	120.92
13	6	133	VAL	O-C-N	6.50	129.75	122.67
24	R	268	TYR	CA-CB-CG	-6.50	102.20	113.90
25	U	196	HIS	CA-CB-CG	6.50	120.30	113.80
2	B	189	HIS	CG-CD2-NE2	6.50	113.69	107.20
16	V	79	GLY	N-CA-C	-6.49	105.53	115.66
20	N	851	GLU	CA-C-O	6.49	127.20	119.60
20	N	853	LYS	N-CA-C	-6.49	103.78	112.94
2	B	168	VAL	N-CA-CB	6.49	119.37	110.54
2	B	215	GLU	N-CA-C	-6.49	105.36	113.28
27	H	74	PRO	O-C-N	-6.49	113.80	121.46
32	J	41	ASN	CB-CG-ND2	-6.49	106.67	116.40
12	5	112	SER	N-CA-C	6.49	118.43	111.36
19	Z	684	PRO	N-CA-C	6.49	121.40	111.34
30	L	131	PRO	CA-C-N	6.49	129.26	120.44
30	L	131	PRO	C-N-CA	6.49	129.26	120.44
10	3	1	MET	CA-C-N	6.49	132.78	120.97
10	3	1	MET	C-N-CA	6.49	132.78	120.97
4	D	121	LYS	N-CA-C	6.49	118.35	111.28
5	E	35	SER	N-CA-C	6.49	119.63	110.23
5	E	229	PHE	N-CA-CB	6.49	119.62	109.83
21	S	202	VAL	O-C-N	-6.49	115.15	121.83
21	S	267	VAL	CB-CA-C	-6.49	103.39	112.14
25	U	72	HIS	ND1-CE1-NE2	6.49	114.89	108.40
20	N	931	HIS	CA-CB-CG	-6.48	107.32	113.80
4	D	86	ALA	CA-C-N	6.48	129.61	120.28
4	D	86	ALA	C-N-CA	6.48	129.61	120.28
12	5	91	LYS	CA-C-N	6.48	133.92	121.54
12	5	91	LYS	C-N-CA	6.48	133.92	121.54
19	Z	592	ASN	CA-CB-CG	-6.48	106.12	112.60
19	Z	608	LYS	N-CA-C	6.48	118.00	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	411	SER	CA-C-O	6.48	129.78	120.51
31	M	162	LEU	CA-C-N	6.48	130.60	122.43
31	M	162	LEU	C-N-CA	6.48	130.60	122.43
31	M	418	LEU	N-CA-CB	6.48	121.21	110.52
32	J	158	ILE	N-CA-C	6.48	117.23	110.62
2	B	74	LEU	N-CA-C	-6.48	99.26	109.50
3	C	83	ALA	CB-CA-C	-6.48	100.04	110.79
11	4	23	SER	N-CA-CB	6.48	121.06	110.37
17	T	311	TRP	CA-C-N	6.48	130.31	121.05
17	T	311	TRP	C-N-CA	6.48	130.31	121.05
21	S	186	ASP	CA-CB-CG	-6.48	106.12	112.60
30	L	147	SER	N-CA-C	6.48	118.34	111.28
12	5	114	TRP	N-CA-C	-6.47	104.30	111.36
8	1	158	PHE	CA-CB-CG	-6.47	107.33	113.80
11	4	29	LYS	N-CA-C	6.47	118.83	108.41
26	O	289	ARG	NE-CZ-NH1	6.47	127.97	121.50
32	J	157	GLN	CA-C-O	-6.47	113.69	120.55
10	3	120	PHE	CA-CB-CG	-6.47	107.33	113.80
11	4	30	ASP	CA-C-O	-6.47	114.04	120.70
19	Z	523	GLY	CA-C-N	6.47	129.48	120.29
19	Z	523	GLY	C-N-CA	6.47	129.48	120.29
21	S	129	PRO	O-C-N	6.47	131.37	122.64
26	O	88	THR	CA-CB-OG1	6.47	119.30	109.60
1	A	124	VAL	CA-C-N	6.47	128.94	120.28
1	A	124	VAL	C-N-CA	6.47	128.94	120.28
17	T	311	TRP	CA-C-O	-6.47	114.04	120.70
20	N	402	PHE	CA-CB-CG	6.46	120.27	113.80
22	P	346	GLU	CA-C-N	6.46	128.43	120.22
22	P	346	GLU	C-N-CA	6.46	128.43	120.22
26	O	74	LEU	O-C-N	6.46	128.97	122.12
27	H	45	ILE	N-CA-C	6.46	116.63	110.42
29	K	74	HIS	CA-C-O	6.46	127.27	120.42
28	I	388	ASP	N-CA-C	-6.46	98.37	108.90
12	5	124	ILE	CA-CB-CG1	6.46	121.38	110.40
26	O	178	ARG	NE-CZ-NH1	6.46	127.96	121.50
32	J	126	ILE	CA-C-N	6.46	129.66	120.49
32	J	126	ILE	C-N-CA	6.46	129.66	120.49
2	B	102	GLN	OE1-CD-NE2	6.46	129.06	122.60
9	2	221	ILE	CB-CA-C	-6.46	102.13	110.98
21	S	33	VAL	CA-C-O	-6.46	114.23	120.95
29	K	357	GLU	CB-CG-CD	-6.46	101.63	112.60
31	M	206	VAL	N-CA-CB	6.46	118.83	110.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	334	ALA	CA-C-O	6.46	127.49	120.32
12	5	122	CYS	O-C-N	6.46	129.06	122.09
22	P	369	TYR	N-CA-CB	6.46	119.43	110.07
31	M	251	PHE	N-CA-C	-6.46	98.21	108.73
1	A	128	ASN	CA-C-O	6.45	129.10	121.36
19	Z	225	ALA	N-CA-C	6.45	118.31	111.28
19	Z	291	GLN	CG-CD-NE2	6.45	126.08	116.40
19	Z	296	PHE	CA-CB-CG	6.45	120.25	113.80
25	U	166	GLU	CA-C-O	6.45	127.39	120.55
26	O	72	ASN	CA-C-O	-6.45	113.93	120.96
31	M	44	ILE	CB-CA-C	-6.45	103.43	112.14
31	M	299	PHE	CA-CB-CG	-6.45	107.35	113.80
12	5	132	ARG	CA-C-N	6.45	132.14	122.98
12	5	132	ARG	C-N-CA	6.45	132.14	122.98
22	P	375	MET	O-C-N	-6.45	114.80	122.15
23	Q	416	ASN	CA-C-O	6.45	127.59	120.82
7	G	231	ASP	CA-C-N	6.45	129.58	120.42
7	G	231	ASP	C-N-CA	6.45	129.58	120.42
17	T	317	ASN	N-CA-C	-6.45	99.84	108.74
10	3	72	ASN	CA-CB-CG	-6.45	106.16	112.60
20	N	731	ILE	O-C-N	6.45	128.47	121.83
23	Q	281	GLY	CA-C-N	6.45	128.92	120.28
23	Q	281	GLY	C-N-CA	6.45	128.92	120.28
20	N	480	GLY	CA-C-N	6.44	129.44	120.29
20	N	480	GLY	C-N-CA	6.44	129.44	120.29
21	S	434	VAL	CA-C-O	-6.44	114.25	120.95
15	W	115	SER	CA-C-O	-6.44	113.34	119.91
19	Z	476	THR	CA-C-N	6.44	129.44	120.29
19	Z	476	THR	C-N-CA	6.44	129.44	120.29
7	G	96	ALA	N-CA-C	6.44	118.38	111.36
24	R	13	LYS	CB-CA-C	-6.44	100.10	110.79
17	T	148	ARG	CB-CA-C	-6.44	99.90	110.85
19	Z	460	ASP	CA-C-N	6.44	126.89	120.52
19	Z	460	ASP	C-N-CA	6.44	126.89	120.52
20	N	101	ILE	CA-C-N	6.44	128.91	120.28
20	N	101	ILE	C-N-CA	6.44	128.91	120.28
15	W	24	THR	CA-C-N	6.44	128.91	120.28
15	W	24	THR	C-N-CA	6.44	128.91	120.28
19	Z	332	ALA	N-CA-CB	6.44	121.37	110.49
20	N	648	VAL	CA-C-N	6.44	128.91	120.28
20	N	648	VAL	C-N-CA	6.44	128.91	120.28
28	I	82	GLN	CA-C-O	6.44	127.37	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	233	VAL	CA-C-O	-6.44	114.03	120.85
19	Z	734	SER	CA-C-N	6.44	127.12	119.98
19	Z	734	SER	C-N-CA	6.44	127.12	119.98
26	O	231	GLN	CA-C-N	6.43	129.43	120.29
26	O	231	GLN	C-N-CA	6.43	129.43	120.29
1	A	1	MET	CA-C-N	6.43	132.88	121.75
1	A	1	MET	C-N-CA	6.43	132.88	121.75
20	N	433	PRO	CA-C-N	6.43	130.49	120.00
20	N	433	PRO	C-N-CA	6.43	130.49	120.00
29	K	294	ASN	CA-C-O	6.43	127.37	120.55
32	J	103	ILE	CB-CA-C	-6.43	103.08	110.73
23	Q	97	LEU	CA-C-O	-6.43	113.61	120.42
1	A	51	VAL	N-CA-C	-6.43	98.86	108.12
7	G	159	TYR	O-C-N	6.43	130.72	123.27
15	W	63	THR	N-CA-C	-6.43	100.47	110.17
22	P	79	GLU	N-CA-C	6.42	118.36	111.36
10	3	4	MET	N-CA-CB	6.42	121.91	110.80
22	P	43	VAL	O-C-N	-6.42	115.22	121.83
25	U	145	HIS	CG-CD2-NE2	6.42	113.62	107.20
32	J	37	ASP	CA-C-N	6.42	128.88	120.28
32	J	37	ASP	C-N-CA	6.42	128.88	120.28
16	V	30	GLN	CB-CG-CD	-6.42	101.69	112.60
26	O	41	VAL	CB-CA-C	-6.42	103.47	112.14
11	4	78	THR	CA-C-N	6.42	128.88	120.28
11	4	78	THR	C-N-CA	6.42	128.88	120.28
20	N	25	HIS	CB-CG-CD2	-6.42	122.86	131.20
30	L	33	HIS	ND1-CE1-NE2	6.42	114.82	108.40
2	B	47	ALA	O-C-N	6.42	131.10	123.27
3	C	183	GLU	N-CA-C	-6.42	105.20	113.16
25	U	114	ARG	NE-CZ-NH1	6.42	127.92	121.50
26	O	38	THR	CA-C-N	6.42	129.40	120.29
26	O	38	THR	C-N-CA	6.42	129.40	120.29
26	O	136	GLU	CA-C-O	-6.42	114.08	120.82
26	O	249	GLN	N-CA-C	-6.42	105.09	113.17
15	W	17	ARG	CA-C-N	6.41	133.79	121.54
15	W	17	ARG	C-N-CA	6.41	133.79	121.54
22	P	14	VAL	N-CA-C	-6.41	99.25	108.48
25	U	68	TRP	CE2-CD2-CE3	6.41	125.21	118.80
29	K	223	THR	O-C-N	6.41	128.68	122.07
23	Q	163	LYS	CA-C-N	6.41	129.40	120.29
23	Q	163	LYS	C-N-CA	6.41	129.40	120.29
26	O	96	PHE	O-C-N	6.41	129.46	122.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	43	ARG	NE-CZ-NH1	6.41	127.91	121.50
16	V	68	ARG	N-CA-C	-6.41	98.95	109.40
20	N	637	VAL	O-C-N	-6.41	114.75	122.06
23	Q	403	THR	N-CA-C	6.41	118.34	111.36
28	I	415	THR	N-CA-C	-6.41	100.46	109.69
17	T	218	LEU	CA-C-O	-6.41	111.38	120.16
19	Z	304	PHE	CB-CA-C	-6.41	99.96	110.85
23	Q	342	PHE	CB-CG-CD1	6.41	131.59	120.70
30	L	138	HIS	ND1-CE1-NE2	6.41	114.81	108.40
22	P	123	ARG	O-C-N	6.40	130.15	122.27
20	N	823	LYS	CA-C-N	6.40	128.86	120.28
20	N	823	LYS	C-N-CA	6.40	128.86	120.28
17	T	312	LEU	CA-C-N	6.40	133.76	121.54
17	T	312	LEU	C-N-CA	6.40	133.76	121.54
20	N	613	ASP	CA-C-N	6.40	129.51	120.42
20	N	613	ASP	C-N-CA	6.40	129.51	120.42
31	M	322	GLY	CA-C-N	6.40	129.14	120.44
31	M	322	GLY	C-N-CA	6.40	129.14	120.44
6	F	237	GLU	N-CA-C	-6.40	98.18	109.06
22	P	438	LEU	CA-C-O	-6.40	113.64	120.42
16	V	183	HIS	CA-CB-CG	6.40	120.20	113.80
7	G	100	ARG	NE-CZ-NH1	-6.39	115.11	121.50
7	G	196	LYS	CA-C-O	6.39	127.32	119.97
15	W	113	VAL	CB-CA-C	6.39	120.33	111.19
19	Z	313	GLU	N-CA-CB	6.39	121.46	114.17
24	R	136	HIS	CE1-NE2-CD2	-6.39	102.61	109.00
28	I	364	ILE	CA-C-N	6.39	129.36	120.29
28	I	364	ILE	C-N-CA	6.39	129.36	120.29
30	L	99	ARG	CA-C-N	6.39	128.75	120.44
30	L	99	ARG	C-N-CA	6.39	128.75	120.44
4	D	191	ASP	CA-CB-CG	-6.39	106.21	112.60
12	5	120	ARG	CA-C-N	6.39	128.84	120.28
12	5	120	ARG	C-N-CA	6.39	128.84	120.28
16	V	115	HIS	CG-CD2-NE2	6.39	113.59	107.20
27	H	190	VAL	N-CA-C	6.39	116.53	110.53
32	J	124	HIS	CA-CB-CG	-6.39	107.41	113.80
5	E	229	PHE	CA-C-O	-6.39	114.17	121.19
16	V	240	HIS	CE1-NE2-CD2	-6.39	102.61	109.00
21	S	297	GLU	CA-C-N	6.39	129.36	120.29
21	S	297	GLU	C-N-CA	6.39	129.36	120.29
24	R	366	TYR	CA-C-N	6.39	128.84	120.28
24	R	366	TYR	C-N-CA	6.39	128.84	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	170	ALA	CA-C-N	6.39	128.84	120.28
26	O	170	ALA	C-N-CA	6.39	128.84	120.28
22	P	55	ARG	O-C-N	6.38	130.68	122.89
13	6	173	GLN	OE1-CD-NE2	-6.38	116.22	122.60
5	E	176	GLY	O-C-N	6.38	128.32	122.19
12	5	254	LEU	CA-C-N	6.38	129.12	120.44
12	5	254	LEU	C-N-CA	6.38	129.12	120.44
13	6	35	ASN	CB-CA-C	-6.38	99.13	109.72
20	N	58	GLN	CA-C-N	6.38	129.35	120.29
20	N	58	GLN	C-N-CA	6.38	129.35	120.29
20	N	909	GLY	CA-C-N	6.38	131.03	120.25
20	N	909	GLY	C-N-CA	6.38	131.03	120.25
22	P	145	LEU	CA-C-N	6.38	128.83	120.28
22	P	145	LEU	C-N-CA	6.38	128.83	120.28
29	K	373	ALA	CA-C-N	6.38	128.83	120.28
29	K	373	ALA	C-N-CA	6.38	128.83	120.28
5	E	32	LYS	N-CA-CB	6.38	120.17	110.28
6	F	170	THR	N-CA-C	-6.38	104.33	111.28
22	P	270	VAL	CA-C-O	-6.38	114.41	121.17
23	Q	406	ASN	CA-CB-CG	-6.38	106.22	112.60
25	U	259	VAL	CA-C-N	6.38	129.20	120.46
25	U	259	VAL	C-N-CA	6.38	129.20	120.46
32	J	284	GLU	N-CA-C	-6.38	103.84	111.69
4	D	122	GLN	N-CA-C	6.38	118.31	111.36
21	S	479	CYS	N-CA-CB	6.38	120.04	110.22
26	O	262	ALA	CB-CA-C	-6.37	97.74	110.42
22	P	214	PHE	CA-CB-CG	-6.37	107.43	113.80
31	M	242	ALA	CA-C-N	6.37	128.82	120.28
31	M	242	ALA	C-N-CA	6.37	128.82	120.28
31	M	183	ARG	O-C-N	-6.37	115.47	121.20
2	B	147	PHE	CA-C-N	6.37	133.05	122.73
2	B	147	PHE	C-N-CA	6.37	133.05	122.73
19	Z	102	HIS	CB-CG-CD2	6.37	139.48	131.20
20	N	519	VAL	CA-C-O	-6.37	114.10	120.85
25	U	157	HIS	CA-CB-CG	6.37	120.17	113.80
10	3	134	ASP	CA-C-O	-6.37	113.49	120.43
19	Z	668	ALA	N-CA-C	6.37	118.22	111.28
26	O	228	THR	CA-C-O	-6.37	111.55	119.38
19	Z	78	LEU	CA-C-N	6.36	128.80	120.28
19	Z	78	LEU	C-N-CA	6.36	128.80	120.28
32	J	36	ASN	CA-CB-CG	-6.36	106.24	112.60
1	A	210	PHE	CA-CB-CG	-6.36	107.44	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	453	HIS	O-C-N	6.36	130.95	122.43
2	B	225	GLU	CA-C-O	6.36	127.16	120.42
17	T	327	LYS	O-C-N	-6.36	114.73	120.71
22	P	282	GLU	O-C-N	6.36	128.86	122.12
23	Q	289	CYS	N-CA-C	6.36	118.00	111.14
25	U	81	MET	N-CA-C	6.35	118.28	111.36
28	I	129	SER	CA-C-N	6.35	131.94	121.39
28	I	129	SER	C-N-CA	6.35	131.94	121.39
30	L	227	ARG	N-CA-C	6.35	118.20	111.28
2	B	88	HIS	CA-C-N	6.35	128.79	120.28
2	B	88	HIS	C-N-CA	6.35	128.79	120.28
8	1	111	THR	CA-C-N	6.35	128.79	120.28
8	1	111	THR	C-N-CA	6.35	128.79	120.28
9	2	46	ILE	O-C-N	-6.35	116.87	123.03
26	O	204	GLY	CA-C-N	6.35	129.31	120.29
26	O	204	GLY	C-N-CA	6.35	129.31	120.29
3	C	40	ASN	N-CA-C	6.35	121.17	113.17
11	4	139	THR	N-CA-C	6.35	118.20	111.28
20	N	36	ALA	CA-C-N	6.35	129.31	120.29
20	N	36	ALA	C-N-CA	6.35	129.31	120.29
28	I	60	LEU	CA-C-N	6.35	128.79	120.28
28	I	60	LEU	C-N-CA	6.35	128.79	120.28
32	J	278	ASN	O-C-N	6.35	128.61	122.07
20	N	224	ASP	CA-CB-CG	-6.35	106.25	112.60
23	Q	74	ARG	CA-C-N	6.35	125.92	119.19
23	Q	74	ARG	C-N-CA	6.35	125.92	119.19
29	K	311	THR	N-CA-C	-6.35	98.56	108.90
19	Z	615	ILE	CA-C-N	6.34	129.77	120.82
19	Z	615	ILE	C-N-CA	6.34	129.77	120.82
30	L	299	LEU	CA-C-N	6.34	129.21	120.39
30	L	299	LEU	C-N-CA	6.34	129.21	120.39
31	M	359	MET	CA-C-O	-6.34	113.57	120.17
32	J	44	ARG	NE-CZ-NH1	6.34	127.84	121.50
22	P	274	VAL	O-C-N	6.34	128.02	121.87
23	Q	403	THR	O-C-N	6.34	129.38	122.15
12	5	212	TYR	N-CA-C	-6.34	104.37	111.28
20	N	471	ASP	CA-C-N	6.34	129.15	120.46
20	N	471	ASP	C-N-CA	6.34	129.15	120.46
1	A	112	ASP	N-CA-C	6.34	118.19	111.28
19	Z	628	ASP	CA-CB-CG	6.34	118.94	112.60
22	P	79	GLU	CB-CG-CD	6.34	123.38	112.60
23	Q	72	TYR	CB-CG-CD2	-6.34	111.29	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	519	ALA	CB-CA-C	-6.34	100.27	110.79
29	K	57	GLN	O-C-N	6.34	128.84	122.12
1	A	117	ARG	CA-C-N	6.34	129.42	120.42
1	A	117	ARG	C-N-CA	6.34	129.42	120.42
8	1	111	THR	N-CA-C	-6.34	104.37	111.28
9	2	205	GLY	CA-C-N	6.34	129.42	120.42
9	2	205	GLY	C-N-CA	6.34	129.42	120.42
15	W	50	GLY	CA-C-O	-6.34	114.79	121.57
15	W	80	PRO	CA-C-N	6.34	131.08	122.84
15	W	80	PRO	C-N-CA	6.34	131.08	122.84
19	Z	260	SER	CA-C-N	6.34	133.64	121.54
19	Z	260	SER	C-N-CA	6.34	133.64	121.54
20	N	111	GLN	N-CA-C	6.34	118.27	111.36
27	H	180	CYS	N-CA-CB	6.34	119.10	110.10
20	N	95	GLU	N-CA-C	-6.33	105.31	114.12
19	Z	716	ASP	CB-CA-C	-6.33	109.26	116.54
30	L	39	ARG	N-CA-CB	6.33	119.53	110.16
16	V	135	ALA	CB-CA-C	-6.33	100.28	110.79
18	Y	60	LEU	N-CA-C	6.33	117.98	111.14
24	R	145	LEU	CA-C-N	6.33	128.77	120.28
24	R	145	LEU	C-N-CA	6.33	128.77	120.28
28	I	284	ILE	N-CA-C	-6.33	98.00	107.37
16	V	87	VAL	N-CA-CB	6.33	118.61	110.13
23	Q	165	LEU	N-CA-C	6.33	118.18	111.28
2	B	63	HIS	CE1-NE2-CD2	-6.33	102.67	109.00
4	D	87	ARG	N-CA-C	-6.33	104.43	111.71
6	F	228	ASP	N-CA-C	-6.33	103.69	112.30
10	3	155	GLU	CA-C-O	-6.33	111.49	120.16
27	H	403	ILE	CA-CB-CG1	6.33	121.16	110.40
11	4	176	PRO	CA-C-N	6.33	133.62	121.54
11	4	176	PRO	C-N-CA	6.33	133.62	121.54
21	S	400	LYS	N-CA-CB	6.33	119.42	110.12
31	M	402	VAL	CB-CA-C	-6.33	103.60	112.14
5	E	30	GLY	CA-C-N	6.33	128.76	120.28
5	E	30	GLY	C-N-CA	6.33	128.76	120.28
20	N	344	ARG	N-CA-C	6.33	117.97	111.14
28	I	103	ARG	NE-CZ-NH1	6.33	127.83	121.50
29	K	283	ARG	NE-CZ-NH2	-6.33	113.51	119.20
10	3	80	ARG	N-CA-C	-6.32	98.89	109.07
20	N	575	ASP	N-CA-CB	6.32	119.68	110.32
26	O	364	GLU	N-CA-C	6.32	118.17	111.28
20	N	724	VAL	CA-C-N	6.32	129.26	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	724	VAL	C-N-CA	6.32	129.26	120.29
32	J	241	HIS	CA-CB-CG	6.32	120.12	113.80
20	N	359	ALA	CA-C-O	-6.32	113.72	120.42
32	J	37	ASP	N-CA-CB	6.32	119.51	110.16
20	N	666	LYS	CA-C-N	6.32	128.74	120.28
20	N	666	LYS	C-N-CA	6.32	128.74	120.28
24	R	67	MET	CG-SD-CE	-6.32	87.01	100.90
27	H	429	TYR	CA-C-O	-6.32	113.86	120.55
13	6	213	ASP	CA-C-O	-6.31	114.19	120.82
19	Z	300	ARG	N-CA-CB	-6.31	100.91	110.07
19	Z	467	SER	CA-C-N	6.31	129.26	120.29
19	Z	467	SER	C-N-CA	6.31	129.26	120.29
19	Z	45	LEU	CB-CA-C	-6.31	100.31	110.79
19	Z	513	GLU	CA-C-O	6.31	127.11	120.42
22	P	140	ILE	CA-C-N	6.31	129.25	120.29
22	P	140	ILE	C-N-CA	6.31	129.25	120.29
27	H	70	THR	N-CA-C	6.31	118.70	110.43
2	B	132	VAL	CA-C-O	6.31	127.31	120.43
31	M	389	ARG	CA-CB-CG	-6.31	101.48	114.10
10	3	97	GLU	CB-CG-CD	6.31	123.32	112.60
22	P	270	VAL	CA-C-N	6.31	129.10	120.46
22	P	270	VAL	C-N-CA	6.31	129.10	120.46
30	L	285	HIS	CA-C-N	6.31	128.73	120.28
30	L	285	HIS	C-N-CA	6.31	128.73	120.28
12	5	99	TYR	N-CA-C	-6.31	99.14	108.79
20	N	141	CYS	CA-C-O	6.31	127.22	119.97
5	E	124	GLY	N-CA-C	-6.30	98.24	113.18
9	2	261	PRO	O-C-N	6.30	130.81	123.06
21	S	376	ASP	N-CA-C	6.30	117.82	111.07
27	H	396	ALA	N-CA-C	6.30	118.15	111.28
30	L	99	ARG	O-C-N	6.30	128.65	122.09
1	A	26	GLU	N-CA-C	-6.30	104.49	111.36
5	E	18	GLU	CA-C-N	6.30	133.76	121.41
5	E	18	GLU	C-N-CA	6.30	133.76	121.41
5	E	90	ASP	CA-C-O	-6.30	113.87	120.55
6	F	214	ILE	CA-CB-CG1	6.30	121.12	110.40
19	Z	344	VAL	CA-C-O	-6.30	114.47	118.69
20	N	921	ILE	CA-C-N	6.30	132.27	123.07
20	N	921	ILE	C-N-CA	6.30	132.27	123.07
10	3	78	GLU	CA-C-N	6.30	126.94	119.94
10	3	78	GLU	C-N-CA	6.30	126.94	119.94
17	T	145	ILE	CA-C-N	6.30	128.72	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	145	ILE	C-N-CA	6.30	128.72	120.28
20	N	456	ASP	CA-CB-CG	6.30	118.90	112.60
28	I	84	GLN	O-C-N	6.30	130.03	122.85
19	Z	49	ASP	CA-C-N	6.30	129.23	120.29
19	Z	49	ASP	C-N-CA	6.30	129.23	120.29
30	L	23	LEU	CA-C-N	6.30	128.72	120.28
30	L	23	LEU	C-N-CA	6.30	128.72	120.28
30	L	172	LEU	N-CA-C	6.30	117.81	111.07
11	4	31	ASP	N-CA-C	-6.30	99.43	109.76
16	V	290	VAL	N-CA-CB	6.30	117.92	110.55
29	K	159	LYS	N-CA-C	6.30	116.84	109.60
21	S	154	PRO	N-CD-CG	6.29	112.64	103.20
26	O	247	ARG	NE-CZ-NH2	-6.29	113.53	119.20
5	E	175	GLU	CA-C-N	6.29	126.80	119.94
5	E	175	GLU	C-N-CA	6.29	126.80	119.94
19	Z	550	LEU	N-CA-C	-6.29	104.66	112.90
15	W	130	ARG	N-CA-CB	6.29	119.37	110.12
24	R	374	ASP	CA-CB-CG	6.29	118.89	112.60
28	I	394	ASP	N-CA-C	6.29	118.94	111.71
31	M	149	LYS	CA-C-N	6.29	127.70	119.84
31	M	149	LYS	C-N-CA	6.29	127.70	119.84
5	E	235	GLU	N-CA-C	6.29	119.12	111.82
19	Z	695	ALA	CA-C-N	6.29	128.71	120.28
19	Z	695	ALA	C-N-CA	6.29	128.71	120.28
9	2	66	GLY	N-CA-C	-6.29	98.28	113.18
20	N	541	HIS	CE1-NE2-CD2	-6.29	102.71	109.00
29	K	213	THR	N-CA-CB	6.29	119.36	110.12
7	G	93	ARG	N-CA-CB	6.29	119.46	110.16
16	V	60	GLU	CA-C-O	-6.29	113.77	121.06
26	O	63	PHE	CB-CA-C	-6.29	100.97	110.90
2	B	182	LEU	N-CA-C	-6.28	100.20	109.81
19	Z	469	TYR	CB-CG-CD1	6.28	130.22	120.80
20	N	478	SER	CA-C-O	6.28	127.20	119.97
25	U	234	PHE	N-CA-CB	6.28	119.46	110.16
26	O	118	ILE	CA-C-N	6.28	127.99	120.14
26	O	118	ILE	C-N-CA	6.28	127.99	120.14
31	M	287	PHE	CA-C-O	6.28	127.30	120.58
31	M	398	GLN	CA-C-N	6.28	128.69	120.28
31	M	398	GLN	C-N-CA	6.28	128.69	120.28
1	A	21	ARG	N-CA-CB	6.28	119.31	109.83
17	T	336	THR	N-CA-C	-6.28	97.58	108.69
20	N	411	ILE	CB-CA-C	-6.28	103.80	112.02

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	231	LYS	N-CA-C	6.27	117.78	111.07
29	K	107	THR	O-C-N	6.27	128.77	122.12
14	7	75	GLY	CA-C-O	-6.27	115.87	121.64
19	Z	648	ALA	O-C-N	6.27	128.77	122.12
20	N	127	ASP	CA-C-N	6.27	128.68	120.28
20	N	127	ASP	C-N-CA	6.27	128.68	120.28
7	G	172	ALA	O-C-N	6.27	129.30	122.15
23	Q	75	PRO	CA-N-CD	-6.27	103.22	112.00
6	F	104	PRO	N-CA-C	6.27	120.69	111.03
25	U	103	LYS	CA-C-N	6.27	129.31	120.28
25	U	103	LYS	C-N-CA	6.27	129.31	120.28
28	I	75	GLU	N-CA-C	6.27	118.19	111.36
13	6	171	MET	CA-C-O	6.26	127.01	119.43
14	7	190	ALA	N-CA-C	6.26	119.04	111.40
20	N	190	ASN	CA-CB-CG	6.26	118.86	112.60
28	I	267	VAL	CA-CB-CG2	-6.26	99.75	110.40
2	B	203	MET	O-C-N	6.26	130.91	123.33
26	O	306	LYS	N-CA-C	-6.26	106.86	114.75
22	P	141	GLU	CA-C-N	6.26	128.58	120.44
22	P	141	GLU	C-N-CA	6.26	128.58	120.44
30	L	369	ILE	N-CA-C	6.26	117.01	110.62
1	A	224	ASN	N-CA-C	-6.26	99.88	109.64
14	7	241	VAL	CA-C-N	6.26	133.49	121.54
14	7	241	VAL	C-N-CA	6.26	133.49	121.54
24	R	310	SER	N-CA-C	6.26	120.65	112.89
4	D	160	HIS	CA-C-N	6.25	130.37	121.42
4	D	160	HIS	C-N-CA	6.25	130.37	121.42
20	N	770	TRP	CA-C-O	6.25	127.18	120.55
21	S	177	TYR	CA-C-N	6.25	131.28	122.46
21	S	177	TYR	C-N-CA	6.25	131.28	122.46
2	B	57	TYR	N-CA-C	-6.25	99.21	109.40
10	3	170	ALA	CA-C-N	6.25	129.17	120.29
10	3	170	ALA	C-N-CA	6.25	129.17	120.29
16	V	64	ASP	CA-CB-CG	-6.25	106.35	112.60
19	Z	266	LEU	N-CA-CB	6.25	119.85	110.22
4	D	188	GLU	N-CA-C	6.25	117.76	111.07
20	N	474	ARG	CA-C-N	6.25	128.57	120.44
20	N	474	ARG	C-N-CA	6.25	128.57	120.44
25	U	266	ILE	CA-C-N	6.25	129.28	120.28
25	U	266	ILE	C-N-CA	6.25	129.28	120.28
27	H	157	ILE	CA-C-N	6.25	127.90	120.09
27	H	157	ILE	C-N-CA	6.25	127.90	120.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	113	GLU	O-C-N	6.25	128.51	122.07
31	M	86	ASN	CA-C-N	6.25	129.81	120.31
31	M	86	ASN	C-N-CA	6.25	129.81	120.31
4	D	88	ILE	CA-C-N	6.25	129.02	120.46
4	D	88	ILE	C-N-CA	6.25	129.02	120.46
6	F	229	VAL	N-CA-CB	6.25	121.33	110.65
23	Q	29	SER	N-CA-CB	6.25	119.30	110.12
31	M	254	LEU	N-CA-C	-6.25	98.44	109.06
16	V	67	VAL	N-CA-C	-6.25	99.43	108.17
27	H	416	VAL	CA-C-N	6.25	128.43	120.56
27	H	416	VAL	C-N-CA	6.25	128.43	120.56
2	B	103	GLU	N-CA-C	-6.24	102.27	110.39
19	Z	136	GLU	CA-C-O	6.24	127.15	119.97
27	H	294	GLU	CA-C-N	6.24	128.55	120.56
27	H	294	GLU	C-N-CA	6.24	128.55	120.56
20	N	651	GLY	CA-C-N	6.24	128.56	120.44
20	N	651	GLY	C-N-CA	6.24	128.56	120.44
21	S	91	LEU	CA-C-N	6.24	128.64	120.28
21	S	91	LEU	C-N-CA	6.24	128.64	120.28
5	E	104	ASN	CA-CB-CG	-6.24	106.36	112.60
9	2	87	CYS	CA-C-N	6.24	126.90	120.60
9	2	87	CYS	C-N-CA	6.24	126.90	120.60
4	D	56	GLU	CA-C-N	6.24	128.55	120.44
4	D	56	GLU	C-N-CA	6.24	128.55	120.44
32	J	8	GLN	OE1-CD-NE2	6.24	128.84	122.60
14	7	133	HIS	CA-CB-CG	6.24	120.04	113.80
12	5	110	ASP	CA-C-O	-6.24	113.81	120.42
14	7	258	MET	CA-CB-CG	6.24	126.57	114.10
17	T	263	ILE	O-C-N	-6.24	115.82	121.87
17	T	289	GLU	CB-CA-C	-6.24	101.05	110.90
29	K	30	LEU	N-CA-C	-6.24	104.94	113.30
31	M	420	HIS	CA-CB-CG	6.24	120.03	113.80
32	J	235	PHE	N-CA-CB	6.23	119.28	110.12
3	C	235	GLN	CA-C-N	6.23	129.14	120.29
3	C	235	GLN	C-N-CA	6.23	129.14	120.29
4	D	15	HIS	O-C-N	6.23	130.27	123.10
8	1	207	ILE	CA-C-N	6.23	130.41	121.50
8	1	207	ILE	C-N-CA	6.23	130.41	121.50
14	7	66	ILE	CA-C-O	-6.23	114.67	121.28
19	Z	527	VAL	N-CA-C	6.23	118.42	109.51
20	N	428	PRO	CA-C-N	6.23	128.92	120.38
20	N	428	PRO	C-N-CA	6.23	128.92	120.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	132	LYS	CA-C-N	6.23	129.14	120.29
26	O	132	LYS	C-N-CA	6.23	129.14	120.29
7	G	196	LYS	N-CA-C	6.23	119.05	111.82
8	1	115	LEU	N-CA-CB	6.23	119.94	110.28
16	V	223	LYS	CA-C-N	6.23	130.57	120.60
16	V	223	LYS	C-N-CA	6.23	130.57	120.60
19	Z	496	ASP	CA-C-N	6.23	128.41	120.56
19	Z	496	ASP	C-N-CA	6.23	128.41	120.56
22	P	341	PHE	CA-C-N	6.23	133.44	121.54
22	P	341	PHE	C-N-CA	6.23	133.44	121.54
25	U	179	ILE	O-C-N	6.23	129.99	123.26
27	H	247	GLN	CA-C-N	6.23	133.44	121.54
27	H	247	GLN	C-N-CA	6.23	133.44	121.54
32	J	205	HIS	CB-CG-CD2	-6.23	123.10	131.20
3	C	220	ASN	CB-CG-OD1	-6.23	108.35	120.80
14	7	202	PRO	N-CA-CB	6.23	109.89	103.23
16	V	156	VAL	N-CA-CB	6.23	118.62	111.90
17	T	260	THR	CA-C-N	6.23	128.63	120.28
17	T	260	THR	C-N-CA	6.23	128.63	120.28
25	U	127	LYS	CA-C-N	6.23	127.62	119.84
25	U	127	LYS	C-N-CA	6.23	127.62	119.84
5	E	152	GLN	OE1-CD-NE2	6.22	128.82	122.60
3	C	132	VAL	CB-CA-C	-6.22	101.24	110.82
19	Z	352	HIS	CE1-NE2-CD2	-6.22	102.78	109.00
32	J	117	ARG	CA-C-O	6.22	127.16	120.32
4	D	89	VAL	CA-C-O	-6.22	114.48	120.95
23	Q	296	ASN	N-CA-C	6.22	120.13	112.54
27	H	65	ILE	N-CA-CB	6.22	121.49	111.23
31	M	413	ARG	O-C-N	6.22	129.24	122.15
9	2	159	HIS	CA-C-N	6.22	126.88	119.98
9	2	159	HIS	C-N-CA	6.22	126.88	119.98
22	P	84	ASN	CA-C-N	6.22	128.61	120.28
22	P	84	ASN	C-N-CA	6.22	128.61	120.28
4	D	17	PHE	N-CA-C	6.22	118.06	111.28
24	R	260	LEU	N-CA-CB	6.22	119.36	110.16
3	C	2	SER	N-CA-C	6.21	118.05	111.28
19	Z	123	ALA	CA-C-N	6.21	128.52	120.44
19	Z	123	ALA	C-N-CA	6.21	128.52	120.44
23	Q	63	ALA	CA-C-N	6.21	129.23	120.28
23	Q	63	ALA	C-N-CA	6.21	129.23	120.28
26	O	48	PRO	CA-C-N	6.21	133.41	121.54
26	O	48	PRO	C-N-CA	6.21	133.41	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	252	LEU	O-C-N	-6.21	115.23	122.87
21	S	255	LEU	CA-C-O	-6.21	114.30	120.70
20	N	373	ASN	CA-CB-CG	6.21	118.81	112.60
32	J	62	GLU	CA-C-O	-6.21	113.97	120.55
32	J	102	ASN	N-CA-C	-6.21	104.05	111.69
6	F	51	ARG	O-C-N	-6.21	114.79	123.11
7	G	220	LEU	N-CA-C	6.21	117.71	111.07
14	7	201	GLN	N-CA-CB	6.21	120.05	110.43
19	Z	440	ILE	CA-C-N	6.21	128.60	120.28
19	Z	440	ILE	C-N-CA	6.21	128.60	120.28
21	S	421	LYS	CB-CA-C	-6.21	101.14	110.88
13	6	235	VAL	CA-C-O	-6.21	111.64	119.95
20	N	506	ALA	N-CA-C	6.21	117.71	111.07
23	Q	122	ARG	CA-C-O	-6.20	115.05	121.87
26	O	182	CYS	N-CA-C	6.20	120.69	113.18
27	H	48	VAL	CA-C-N	6.20	129.10	120.29
27	H	48	VAL	C-N-CA	6.20	129.10	120.29
30	L	261	THR	N-CA-CB	-6.20	101.81	110.25
21	S	102	ARG	CA-C-N	6.20	129.74	120.31
21	S	102	ARG	C-N-CA	6.20	129.74	120.31
19	Z	699	VAL	CA-C-N	6.20	129.09	120.29
19	Z	699	VAL	C-N-CA	6.20	129.09	120.29
26	O	23	HIS	N-CA-CB	6.20	119.00	110.01
26	O	96	PHE	CA-CB-CG	-6.20	107.60	113.80
4	D	24	GLU	N-CA-C	6.20	119.01	111.82
5	E	100	TRP	CZ3-CH2-CZ2	-6.20	113.44	121.50
23	Q	226	LYS	N-CA-CB	6.20	119.00	110.01
19	Z	482	ILE	CA-C-O	-6.20	114.28	120.85
22	P	228	ASN	CA-CB-CG	6.19	118.79	112.60
24	R	272	PHE	CA-CB-CG	-6.19	107.61	113.80
14	7	257	HIS	CE1-NE2-CD2	-6.19	102.81	109.00
29	K	340	GLN	CA-C-N	6.19	128.58	120.28
29	K	340	GLN	C-N-CA	6.19	128.58	120.28
30	L	340	ILE	O-C-N	6.19	129.96	122.03
30	L	351	GLY	CA-C-N	6.19	129.63	120.90
30	L	351	GLY	C-N-CA	6.19	129.63	120.90
31	M	37	LEU	CA-C-N	6.19	128.49	120.44
31	M	37	LEU	C-N-CA	6.19	128.49	120.44
1	A	107	TYR	N-CA-CB	6.19	119.41	110.06
19	Z	445	LEU	CA-C-N	6.19	129.08	120.29
19	Z	445	LEU	C-N-CA	6.19	129.08	120.29
22	P	190	MET	CG-SD-CE	-6.19	87.28	100.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	W	91	ARG	NE-CZ-NH2	6.19	124.77	119.20
21	S	94	LEU	N-CA-C	-6.19	99.64	109.23
28	I	403	GLY	CA-C-N	6.19	129.08	120.29
28	I	403	GLY	C-N-CA	6.19	129.08	120.29
32	J	251	ILE	O-C-N	6.19	128.39	122.20
5	E	155	HIS	CG-CD2-NE2	6.19	113.39	107.20
20	N	575	ASP	CA-C-N	6.18	125.75	119.19
20	N	575	ASP	C-N-CA	6.18	125.75	119.19
24	R	252	SER	CA-C-O	6.18	125.32	118.52
29	K	74	HIS	CE1-NE2-CD2	-6.18	102.81	109.00
32	J	289	ILE	N-CA-C	-6.18	98.62	107.77
12	5	212	TYR	CA-C-O	-6.18	114.00	120.55
17	T	191	MET	CA-C-N	6.18	128.48	120.44
17	T	191	MET	C-N-CA	6.18	128.48	120.44
25	U	43	TRP	O-C-N	6.18	130.03	123.42
2	B	75	VAL	N-CA-C	-6.18	99.25	108.46
6	F	22	ILE	CA-C-N	6.18	129.07	120.29
6	F	22	ILE	C-N-CA	6.18	129.07	120.29
31	M	338	VAL	N-CA-CB	-6.18	104.29	112.26
10	3	83	LYS	CA-C-N	6.18	126.54	119.93
10	3	83	LYS	C-N-CA	6.18	126.54	119.93
31	M	231	PRO	CA-C-N	6.18	126.53	119.92
31	M	231	PRO	C-N-CA	6.18	126.53	119.92
11	4	82	ASN	CA-CB-CG	6.18	118.78	112.60
17	T	320	SER	CA-C-N	6.18	128.47	120.44
17	T	320	SER	C-N-CA	6.18	128.47	120.44
17	T	351	MET	CA-C-N	6.18	128.34	120.56
17	T	351	MET	C-N-CA	6.18	128.34	120.56
28	I	96	ARG	CA-C-N	6.18	129.06	120.29
28	I	96	ARG	C-N-CA	6.18	129.06	120.29
2	B	85	VAL	CA-C-O	-6.17	114.30	120.85
2	B	201	GLY	CA-C-N	6.17	130.51	121.31
2	B	201	GLY	C-N-CA	6.17	130.51	121.31
29	K	144	PRO	N-CA-C	6.17	118.23	110.70
23	Q	376	GLY	CA-C-O	-6.17	115.58	121.38
31	M	31	GLY	N-CA-C	-6.17	106.57	115.27
23	Q	105	GLN	CA-C-O	6.17	126.96	120.42
19	Z	564	LEU	CB-CA-C	-6.17	100.36	110.85
5	E	44	GLU	N-CA-C	-6.17	105.24	112.89
7	G	193	GLU	N-CA-C	6.17	118.08	111.36
19	Z	190	GLU	CB-CG-CD	6.17	123.08	112.60
21	S	211	ALA	CA-C-N	6.17	128.54	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	211	ALA	C-N-CA	6.17	128.54	120.28
23	Q	322	HIS	ND1-CE1-NE2	6.17	114.57	108.40
31	M	117	ASP	CA-C-N	6.17	132.59	121.92
31	M	117	ASP	C-N-CA	6.17	132.59	121.92
3	C	53	HIS	N-CA-C	-6.17	100.06	108.38
19	Z	354	GLU	CA-C-O	-6.17	114.35	120.82
3	C	167	ASN	CA-CB-CG	-6.16	106.44	112.60
10	3	175	VAL	N-CA-C	6.16	116.94	110.72
17	T	308	LYS	CA-C-N	6.16	129.68	120.31
17	T	308	LYS	C-N-CA	6.16	129.68	120.31
19	Z	547	GLU	N-CA-C	6.16	117.80	111.14
21	S	378	PHE	CA-C-N	6.16	127.90	120.13
21	S	378	PHE	C-N-CA	6.16	127.90	120.13
22	P	345	GLU	CA-C-N	6.16	128.54	120.28
22	P	345	GLU	C-N-CA	6.16	128.54	120.28
30	L	255	ARG	CA-C-N	6.16	128.86	120.54
30	L	255	ARG	C-N-CA	6.16	128.86	120.54
22	P	213	PHE	CA-C-N	6.16	129.15	120.28
22	P	213	PHE	C-N-CA	6.16	129.15	120.28
3	C	151	ASP	CA-CB-CG	-6.16	106.44	112.60
14	7	53	THR	CA-C-N	6.16	131.83	122.65
14	7	53	THR	C-N-CA	6.16	131.83	122.65
20	N	113	VAL	CA-CB-CG1	6.16	120.87	110.40
22	P	97	LEU	N-CA-CB	6.16	120.90	110.49
5	E	67	ILE	N-CA-CB	6.16	119.64	111.64
11	4	70	ARG	CA-C-N	6.16	128.45	120.44
11	4	70	ARG	C-N-CA	6.16	128.45	120.44
15	W	185	SER	CA-C-O	-6.16	114.35	120.82
20	N	115	ASN	CA-C-N	6.16	129.15	120.28
20	N	115	ASN	C-N-CA	6.16	129.15	120.28
24	R	87	GLU	CA-C-N	6.16	128.53	120.28
24	R	87	GLU	C-N-CA	6.16	128.53	120.28
29	K	380	GLN	CA-C-N	6.16	128.53	120.28
29	K	380	GLN	C-N-CA	6.16	128.53	120.28
21	S	397	ASN	CA-CB-CG	-6.16	106.44	112.60
25	U	102	HIS	CE1-NE2-CD2	-6.16	102.84	109.00
16	V	161	ARG	N-CA-C	-6.16	103.89	112.45
21	S	339	PRO	N-CD-CG	6.15	112.43	103.20
20	N	725	MET	CA-C-N	6.15	128.53	120.28
20	N	725	MET	C-N-CA	6.15	128.53	120.28
24	R	7	GLU	CA-C-N	6.15	129.03	120.29
24	R	7	GLU	C-N-CA	6.15	129.03	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	144	ASN	CB-CA-C	-6.15	101.22	110.88
12	5	237	HIS	CA-C-O	6.15	127.00	120.36
16	V	189	ILE	N-CA-C	6.15	122.13	109.34
23	Q	207	GLN	O-C-N	-6.15	115.60	122.12
24	R	117	LYS	CA-C-N	6.15	128.80	120.44
24	R	117	LYS	C-N-CA	6.15	128.80	120.44
25	U	76	GLU	O-C-N	6.15	128.73	122.09
29	K	394	VAL	CA-CB-CG1	6.15	120.86	110.40
32	J	369	TYR	N-CA-CB	6.15	119.26	110.16
2	B	29	VAL	CA-C-N	6.15	128.52	120.28
2	B	29	VAL	C-N-CA	6.15	128.52	120.28
4	D	173	SER	CA-C-N	6.15	129.15	120.42
4	D	173	SER	C-N-CA	6.15	129.15	120.42
31	M	167	LEU	CA-C-O	-6.15	114.47	120.19
31	M	326	ASN	N-CA-C	-6.15	104.56	114.09
8	1	152	MET	CB-CA-C	-6.15	98.19	110.42
10	3	91	VAL	CA-C-N	6.15	128.52	120.28
10	3	91	VAL	C-N-CA	6.15	128.52	120.28
19	Z	516	GLY	O-C-N	6.15	128.75	122.24
19	Z	697	ILE	CB-CA-C	-6.15	103.84	112.14
1	A	62	ASP	CA-CB-CG	6.14	118.74	112.60
17	T	130	ASN	CA-C-N	6.14	128.51	120.28
17	T	130	ASN	C-N-CA	6.14	128.51	120.28
20	N	500	ASN	N-CA-C	-6.14	104.58	111.28
24	R	358	ARG	NE-CZ-NH2	-6.14	113.67	119.20
28	I	421	LYS	CA-C-O	6.14	127.03	120.70
30	L	43	LEU	CA-C-N	6.14	128.51	120.28
30	L	43	LEU	C-N-CA	6.14	128.51	120.28
3	C	20	GLN	CA-C-N	6.14	128.88	120.46
3	C	20	GLN	C-N-CA	6.14	128.88	120.46
4	D	211	ASN	N-CA-C	-6.14	104.66	111.36
6	F	175	HIS	CG-CD2-NE2	6.14	113.34	107.20
19	Z	361	SER	CB-CA-C	-6.14	100.68	110.14
26	O	70	ARG	NE-CZ-NH1	-6.14	115.36	121.50
28	I	290	ILE	CA-CB-CG1	6.14	120.84	110.40
8	1	91	ALA	CA-C-O	-6.14	113.91	120.42
19	Z	267	ARG	CA-C-N	6.14	129.01	120.29
19	Z	267	ARG	C-N-CA	6.14	129.01	120.29
23	Q	213	GLN	CA-C-N	6.14	128.51	120.28
23	Q	213	GLN	C-N-CA	6.14	128.51	120.28
13	6	214	VAL	N-CA-C	6.14	116.78	110.82
30	L	36	ILE	CA-C-N	6.14	128.51	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	36	ILE	C-N-CA	6.14	128.51	120.28
20	N	262	SER	CA-C-N	6.14	129.01	120.29
20	N	262	SER	C-N-CA	6.14	129.01	120.29
3	C	114	LEU	N-CA-C	6.14	118.94	111.82
3	C	142	HIS	ND1-CE1-NE2	6.14	114.54	108.40
4	D	175	ARG	NE-CZ-NH1	-6.14	115.36	121.50
9	2	101	LEU	N-CA-C	6.14	117.97	111.28
30	L	312	LYS	CA-C-O	6.14	128.30	120.57
4	D	18	GLN	OE1-CD-NE2	-6.13	116.47	122.60
5	E	40	ILE	N-CA-C	-6.13	99.29	108.12
10	3	94	LEU	CA-C-N	6.13	129.00	120.29
10	3	94	LEU	C-N-CA	6.13	129.00	120.29
12	5	219	ILE	N-CA-CB	6.13	119.78	110.58
21	S	486	SER	CB-CA-C	-6.13	101.21	110.90
6	F	193	ARG	N-CA-CB	6.13	119.14	110.12
29	K	201	GLY	CA-C-O	-6.13	115.58	120.91
7	G	29	LYS	CA-C-N	6.13	128.50	120.28
7	G	29	LYS	C-N-CA	6.13	128.50	120.28
13	6	212	ARG	CA-C-N	6.13	128.41	120.44
13	6	212	ARG	C-N-CA	6.13	128.41	120.44
14	7	148	ASN	CA-CB-CG	-6.13	106.47	112.60
20	N	608	SER	O-C-N	6.13	128.62	122.12
26	O	84	VAL	CA-CB-CG2	-6.13	99.98	110.40
19	Z	713	PHE	CA-C-N	6.13	130.96	120.72
19	Z	713	PHE	C-N-CA	6.13	130.96	120.72
5	E	98	ASN	OD1-CG-ND2	6.13	128.73	122.60
12	5	241	ASP	N-CA-CB	6.13	119.36	110.47
12	5	259	THR	N-CA-CB	6.13	118.90	110.01
2	B	8	PHE	CA-CB-CG	-6.13	107.67	113.80
3	C	118	LYS	O-C-N	6.13	128.62	122.12
7	G	13	SER	CA-C-N	6.13	130.00	120.75
7	G	13	SER	C-N-CA	6.13	130.00	120.75
20	N	606	ALA	N-CA-C	6.13	117.63	111.07
4	D	235	VAL	O-C-N	6.12	127.81	121.87
20	N	639	LEU	CB-CA-C	-6.12	100.44	110.85
22	P	388	GLU	CB-CA-C	-6.12	100.63	110.79
25	U	91	ILE	CA-C-N	6.12	130.35	120.55
25	U	91	ILE	C-N-CA	6.12	130.35	120.55
26	O	108	ASP	CA-C-N	6.12	133.09	122.56
26	O	108	ASP	C-N-CA	6.12	133.09	122.56
28	I	392	GLY	O-C-N	6.12	128.73	122.24
6	F	170	THR	CA-C-N	6.12	128.48	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	F	170	THR	C-N-CA	6.12	128.48	120.28
11	4	45	LEU	N-CA-C	6.12	119.38	109.40
13	6	178	ASN	CA-CB-CG	-6.12	106.48	112.60
20	N	144	ASP	CB-CA-C	-6.12	99.30	110.63
20	N	479	LEU	CA-C-N	6.12	126.73	120.00
20	N	479	LEU	C-N-CA	6.12	126.73	120.00
19	Z	496	ASP	CA-C-O	-6.12	114.06	120.55
24	R	184	GLN	CA-C-N	6.12	126.77	119.98
24	R	184	GLN	C-N-CA	6.12	126.77	119.98
32	J	374	ARG	NE-CZ-NH1	-6.12	115.38	121.50
26	O	219	HIS	CG-CD2-NE2	6.12	113.32	107.20
6	F	10	VAL	CB-CA-C	6.12	121.32	111.29
17	T	133	PRO	CA-C-O	-6.12	113.82	120.97
26	O	35	HIS	CG-CD2-NE2	6.12	113.31	107.20
28	I	405	MET	N-CA-CB	6.12	119.21	110.16
3	C	1	MET	CA-C-N	6.11	128.47	120.28
3	C	1	MET	C-N-CA	6.11	128.47	120.28
8	1	42	ASP	O-C-N	6.11	129.79	121.78
14	7	183	THR	N-CA-CB	6.11	122.90	111.53
21	S	322	GLN	OE1-CD-NE2	6.11	128.71	122.60
31	M	30	ASP	N-CA-C	-6.11	99.44	108.79
20	N	366	HIS	CG-CD2-NE2	6.11	113.31	107.20
22	P	397	VAL	CA-C-O	-6.11	114.59	120.95
10	3	76	LEU	CA-C-N	6.11	128.47	120.28
10	3	76	LEU	C-N-CA	6.11	128.47	120.28
12	5	67	PHE	CA-C-O	6.11	128.15	121.06
20	N	603	LEU	N-CA-C	6.11	117.94	111.28
22	P	422	ASN	N-CA-C	6.11	117.94	111.28
26	O	318	GLY	CA-C-O	6.11	124.51	118.77
2	B	230	LEU	CA-C-O	6.11	127.03	120.55
23	Q	361	VAL	CA-C-N	6.11	128.47	120.28
23	Q	361	VAL	C-N-CA	6.11	128.47	120.28
20	N	692	ALA	CA-C-N	6.11	128.47	120.28
20	N	692	ALA	C-N-CA	6.11	128.47	120.28
27	H	97	ARG	NE-CZ-NH2	6.11	124.70	119.20
28	I	275	GLU	O-C-N	6.11	128.59	122.12
6	F	194	ALA	CA-C-N	6.11	128.46	120.28
6	F	194	ALA	C-N-CA	6.11	128.46	120.28
19	Z	102	HIS	CA-CB-CG	6.11	119.91	113.80
24	R	135	GLY	CA-C-N	6.11	128.46	120.28
24	R	135	GLY	C-N-CA	6.11	128.46	120.28
6	F	104	PRO	CA-C-O	-6.10	114.70	121.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	433	ASN	N-CA-C	6.10	117.93	111.28
2	B	69	THR	CA-C-N	6.10	129.29	120.38
2	B	69	THR	C-N-CA	6.10	129.29	120.38
21	S	230	ARG	CA-C-N	6.10	128.46	120.28
21	S	230	ARG	C-N-CA	6.10	128.46	120.28
22	P	431	LYS	N-CA-C	-6.10	104.54	111.07
30	L	102	ASP	N-CA-CB	6.10	119.27	110.06
20	N	346	ASN	CA-C-N	6.10	128.46	120.28
20	N	346	ASN	C-N-CA	6.10	128.46	120.28
23	Q	179	ALA	N-CA-C	6.10	117.93	111.28
31	M	72	MET	CG-SD-CE	-6.10	87.49	100.90
10	3	16	GLY	O-C-N	-6.10	118.01	123.37
26	O	26	GLU	N-CA-C	6.10	117.92	111.28
19	Z	314	TYR	CA-CB-CG	-6.09	102.93	113.90
1	A	155	ASP	O-C-N	-6.09	114.83	121.53
20	N	584	TYR	N-CA-CB	6.09	119.08	110.12
11	4	91	CYS	CA-C-O	-6.09	113.96	120.42
14	7	257	HIS	ND1-CE1-NE2	6.09	114.49	108.40
24	R	18	ARG	NE-CZ-NH1	-6.09	115.41	121.50
26	O	67	PHE	N-CA-CB	6.09	120.29	110.42
3	C	240	HIS	CE1-NE2-CD2	-6.09	102.91	109.00
19	Z	234	THR	CA-C-N	6.09	129.05	120.28
19	Z	234	THR	C-N-CA	6.09	129.05	120.28
25	U	16	LEU	N-CA-CB	6.09	119.17	110.16
8	1	160	ILE	N-CA-C	-6.09	99.44	108.45
15	W	103	LYS	CB-CA-C	6.09	119.82	109.53
20	N	257	SER	CA-C-N	6.09	128.44	120.28
20	N	257	SER	C-N-CA	6.09	128.44	120.28
2	B	209	GLU	N-CA-C	-6.09	98.71	109.06
15	W	55	ALA	N-CA-C	6.08	118.15	110.24
31	M	146	GLU	CA-C-N	6.08	128.43	120.28
31	M	146	GLU	C-N-CA	6.08	128.43	120.28
32	J	322	GLU	N-CA-C	6.08	117.99	111.36
6	F	218	ASP	CA-C-O	6.08	126.47	119.35
15	W	136	VAL	N-CA-C	-6.08	99.40	108.46
16	V	136	LEU	N-CA-CB	6.08	118.89	110.07
23	Q	201	TYR	N-CA-C	-6.08	105.51	113.17
25	U	90	ARG	N-CA-C	-6.08	100.29	108.86
9	2	123	ASN	CA-C-N	6.08	128.43	120.28
9	2	123	ASN	C-N-CA	6.08	128.43	120.28
9	2	251	THR	N-CA-CB	6.08	120.76	110.49
24	R	331	ASP	CA-CB-CG	6.08	118.68	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	346	ILE	CA-C-N	6.08	128.43	120.28
26	O	346	ILE	C-N-CA	6.08	128.43	120.28
14	7	249	ALA	N-CA-C	-6.08	99.90	109.50
16	V	92	GLN	O-C-N	-6.08	115.53	122.09
23	Q	209	THR	CA-C-N	6.08	128.42	120.28
23	Q	209	THR	C-N-CA	6.08	128.42	120.28
14	7	58	VAL	CG1-CB-CG2	6.08	124.17	110.80
20	N	577	ILE	N-CA-CB	6.08	118.80	110.54
20	N	734	GLN	O-C-N	6.08	128.56	122.12
22	P	344	THR	CA-C-N	6.07	128.34	120.44
22	P	344	THR	C-N-CA	6.07	128.34	120.44
31	M	67	HIS	CE1-NE2-CD2	-6.07	102.93	109.00
31	M	96	VAL	CB-CA-C	-6.07	102.81	111.31
7	G	124	THR	CA-C-N	6.07	128.41	120.28
7	G	124	THR	C-N-CA	6.07	128.41	120.28
22	P	138	VAL	N-CA-C	6.07	118.64	111.05
23	Q	188	ALA	CA-C-N	6.07	128.41	120.28
23	Q	188	ALA	C-N-CA	6.07	128.41	120.28
28	I	67	ARG	N-CA-CB	6.07	119.04	110.12
23	Q	388	PHE	CA-CB-CG	-6.07	107.73	113.80
26	O	232	TRP	CB-CG-CD2	-6.07	118.30	126.80
6	F	202	GLU	CA-C-N	6.07	131.54	122.99
6	F	202	GLU	C-N-CA	6.07	131.54	122.99
7	G	194	VAL	N-CA-CB	6.07	118.79	110.54
19	Z	371	ASN	CA-CB-CG	6.07	118.67	112.60
23	Q	257	CYS	N-CA-C	6.07	117.97	111.36
26	O	269	LEU	N-CA-C	-6.07	105.72	112.57
27	H	257	VAL	CA-C-N	6.07	128.32	120.44
27	H	257	VAL	C-N-CA	6.07	128.32	120.44
28	I	82	GLN	N-CA-CB	6.07	119.04	110.12
28	I	421	LYS	O-C-N	-6.07	115.54	122.09
32	J	24	TYR	N-CA-CB	6.07	119.56	110.22
29	K	370	ILE	N-CA-C	-6.06	99.42	108.46
1	A	126	THR	CA-C-N	6.06	129.53	120.31
1	A	126	THR	C-N-CA	6.06	129.53	120.31
14	7	147	MET	N-CA-C	6.06	118.68	111.71
15	W	158	ASN	CA-C-N	6.06	128.40	120.28
15	W	158	ASN	C-N-CA	6.06	128.40	120.28
19	Z	7	ASP	N-CA-C	-6.06	104.52	113.61
19	Z	671	ALA	CA-C-O	6.06	126.98	120.55
21	S	383	GLN	CA-C-N	6.06	128.32	120.44
21	S	383	GLN	C-N-CA	6.06	128.32	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	U	218	GLY	N-CA-C	-6.06	106.67	114.85
19	Z	535	THR	CA-C-N	6.06	128.40	120.28
19	Z	535	THR	C-N-CA	6.06	128.40	120.28
21	S	445	ALA	O-C-N	6.06	130.84	122.78
32	J	245	ILE	N-CA-CB	6.06	120.06	111.82
12	5	113	PHE	CA-C-O	6.06	126.84	120.42
12	5	221	GLN	N-CA-C	6.06	117.96	111.36
26	O	31	LYS	O-C-N	6.06	129.72	122.27
19	Z	103	TYR	N-CA-C	-6.06	104.68	111.28
25	U	192	THR	CA-C-N	6.05	128.39	120.28
25	U	192	THR	C-N-CA	6.05	128.39	120.28
28	I	76	GLU	O-C-N	6.05	128.31	122.07
30	L	264	ASP	CA-CB-CG	-6.05	106.55	112.60
5	E	177	ALA	O-C-N	6.05	129.05	122.15
19	Z	94	LYS	N-CA-C	6.05	121.76	113.16
24	R	280	GLN	OE1-CD-NE2	6.05	128.65	122.60
3	C	189	ALA	N-CA-CB	6.05	119.01	110.12
7	G	159	TYR	CA-C-O	-6.05	114.04	121.06
10	3	163	LEU	CA-C-N	6.05	128.88	120.29
10	3	163	LEU	C-N-CA	6.05	128.88	120.29
19	Z	6	ARG	CA-C-O	6.05	127.09	119.95
19	Z	732	VAL	N-CA-C	-6.05	104.61	110.72
26	O	169	HIS	CE1-NE2-CD2	-6.05	102.95	109.00
29	K	76	GLN	CA-C-N	6.05	128.99	120.28
29	K	76	GLN	C-N-CA	6.05	128.99	120.28
2	B	177	ARG	NE-CZ-NH1	-6.05	115.45	121.50
14	7	143	ARG	CA-C-N	6.05	128.30	120.44
14	7	143	ARG	C-N-CA	6.05	128.30	120.44
23	Q	3	ALA	N-CA-C	-6.05	104.25	111.69
23	Q	287	LEU	N-CA-C	6.05	117.87	111.28
32	J	356	GLY	O-C-N	6.05	128.87	122.28
19	Z	734	SER	N-CA-C	6.05	117.87	111.28
19	Z	860	LYS	N-CA-C	-6.05	100.00	109.25
24	R	254	PRO	N-CA-C	6.05	124.92	112.47
31	M	359	MET	N-CA-CB	6.05	119.47	109.98
20	N	366	HIS	ND1-CE1-NE2	6.04	114.44	108.40
19	Z	326	LEU	N-CA-C	-6.04	104.69	111.28
25	U	11	VAL	CA-C-O	-6.04	113.90	120.67
26	O	125	ILE	N-CA-C	-6.04	104.46	110.62
27	H	154	PRO	N-CA-C	6.04	118.07	110.70
30	L	249	ILE	N-CA-C	-6.04	106.61	112.29
10	3	16	GLY	N-CA-C	-6.04	101.53	111.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	329	ASN	CA-C-N	6.04	133.08	121.54
19	Z	329	ASN	C-N-CA	6.04	133.08	121.54
20	N	441	GLY	N-CA-C	-6.04	105.28	113.37
32	J	357	ALA	CA-C-O	6.04	126.95	120.55
14	7	143	ARG	NE-CZ-NH2	6.04	124.63	119.20
20	N	400	ALA	CA-C-N	6.04	128.86	120.29
20	N	400	ALA	C-N-CA	6.04	128.86	120.29
19	Z	323	ASN	CB-CG-OD1	6.04	132.87	120.80
25	U	238	PRO	N-CA-CB	6.04	108.95	103.34
26	O	70	ARG	NH1-CZ-NH2	6.04	127.14	119.30
32	J	86	LEU	N-CA-C	-6.04	98.69	108.41
26	O	163	TYR	CA-C-O	-6.03	114.02	120.42
32	J	352	PRO	O-C-N	6.03	130.78	122.64
3	C	139	TRP	N-CA-C	-6.03	98.01	108.69
20	N	32	ASN	N-CA-CB	6.03	119.42	110.49
21	S	359	LEU	N-CA-CB	6.03	118.98	110.12
24	R	337	PHE	N-CA-CB	6.03	119.08	110.16
11	4	24	ASN	CB-CG-OD1	-6.03	108.74	120.80
6	F	4	ASN	OD1-CG-ND2	6.03	128.63	122.60
6	F	67	ASP	CA-CB-CG	-6.03	106.57	112.60
9	2	176	ALA	CA-C-O	6.03	126.81	120.42
12	5	84	TYR	CG-CD2-CE2	-6.03	112.16	121.20
31	M	317	LEU	N-CA-CB	6.03	119.08	110.16
32	J	62	GLU	O-C-N	6.03	128.51	122.12
9	2	115	ARG	CB-CA-C	6.03	120.45	111.89
17	T	100	GLN	CA-C-N	6.02	128.35	120.28
17	T	100	GLN	C-N-CA	6.02	128.35	120.28
21	S	384	THR	N-CA-C	6.02	117.52	111.07
5	E	200	ILE	CA-C-O	6.02	127.23	120.85
9	2	121	THR	CA-C-O	6.02	126.93	120.55
23	Q	303	GLU	CA-C-N	6.02	128.35	120.28
23	Q	303	GLU	C-N-CA	6.02	128.35	120.28
28	I	180	PRO	N-CA-CB	6.02	109.05	103.39
28	I	388	ASP	CA-C-N	6.02	133.04	121.54
28	I	388	ASP	C-N-CA	6.02	133.04	121.54
28	I	258	LYS	N-CA-C	-6.02	105.42	112.89
2	B	101	TYR	CA-CB-CG	-6.02	103.06	113.90
19	Z	179	ALA	N-CA-C	-6.02	97.98	110.80
19	Z	413	SER	CA-C-N	6.02	128.35	120.28
19	Z	413	SER	C-N-CA	6.02	128.35	120.28
24	R	251	HIS	ND1-CE1-NE2	6.02	114.42	108.40
31	M	309	VAL	CB-CA-C	-6.02	102.83	112.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	E	56	SER	O-C-N	-6.02	115.92	122.06
19	Z	677	HIS	CA-C-O	-6.02	114.04	120.42
22	P	168	GLU	CA-C-N	6.02	128.94	120.28
22	P	168	GLU	C-N-CA	6.02	128.94	120.28
29	K	361	GLU	N-CA-C	6.02	117.84	111.28
17	T	277	CYS	CA-C-N	6.01	128.96	120.42
17	T	277	CYS	C-N-CA	6.01	128.96	120.42
19	Z	716	ASP	CA-CB-CG	-6.01	106.58	112.60
20	N	565	ALA	CA-C-N	6.01	128.62	120.44
20	N	565	ALA	C-N-CA	6.01	128.62	120.44
25	U	223	ASN	OD1-CG-ND2	6.01	128.62	122.60
32	J	126	ILE	N-CA-CB	6.01	117.28	110.72
7	G	234	GLU	N-CA-C	6.01	117.91	111.36
14	7	116	ILE	N-CA-C	6.01	116.75	110.62
22	P	324	TYR	CA-C-N	6.01	126.78	119.99
22	P	324	TYR	C-N-CA	6.01	126.78	119.99
17	T	337	GLU	N-CA-C	-6.01	98.00	110.80
19	Z	248	LEU	CA-C-N	6.01	128.33	120.28
19	Z	248	LEU	C-N-CA	6.01	128.33	120.28
19	Z	425	GLY	CA-C-N	6.01	128.82	120.29
19	Z	425	GLY	C-N-CA	6.01	128.82	120.29
20	N	410	VAL	CB-CA-C	-6.01	104.03	112.14
30	L	39	ARG	CA-C-N	6.01	128.25	120.44
30	L	39	ARG	C-N-CA	6.01	128.25	120.44
2	B	67	PRO	CA-C-N	6.01	128.95	120.42
2	B	67	PRO	C-N-CA	6.01	128.95	120.42
24	R	313	SER	CA-C-N	6.01	132.14	121.75
24	R	313	SER	C-N-CA	6.01	132.14	121.75
19	Z	842	VAL	N-CA-C	-6.00	107.14	112.90
21	S	330	VAL	CA-C-N	6.00	128.68	120.46
21	S	330	VAL	C-N-CA	6.00	128.68	120.46
22	P	122	LEU	CB-CA-C	-6.00	100.64	110.85
23	Q	105	GLN	CA-C-N	6.00	128.60	120.44
23	Q	105	GLN	C-N-CA	6.00	128.60	120.44
26	O	31	LYS	CA-C-N	6.00	131.19	122.36
26	O	31	LYS	C-N-CA	6.00	131.19	122.36
25	U	81	MET	CA-CB-CG	6.00	126.10	114.10
30	L	107	LYS	N-CA-CB	6.00	119.71	111.25
7	G	187	CYS	N-CA-C	-6.00	104.86	111.82
19	Z	187	LEU	CA-C-N	6.00	131.27	123.11
19	Z	187	LEU	C-N-CA	6.00	131.27	123.11
22	P	253	THR	CA-C-N	6.00	125.88	119.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	253	THR	C-N-CA	6.00	125.88	119.28
28	I	298	ASN	CA-C-N	6.00	132.16	122.14
28	I	298	ASN	C-N-CA	6.00	132.16	122.14
4	D	11	SER	CA-C-O	-6.00	114.45	120.63
21	S	255	LEU	N-CA-CB	6.00	118.77	110.07
22	P	386	VAL	CA-C-O	-6.00	114.71	120.95
25	U	61	ASP	CA-CB-CG	-6.00	106.60	112.60
2	B	63	HIS	CA-C-N	6.00	130.73	120.72
2	B	63	HIS	C-N-CA	6.00	130.73	120.72
14	7	101	TYR	N-CA-CB	6.00	120.62	110.49
31	M	211	HIS	CA-CB-CG	6.00	119.80	113.80
11	4	140	LEU	N-CA-CB	5.99	119.53	110.30
13	6	194	THR	CA-C-N	5.99	129.80	120.75
13	6	194	THR	C-N-CA	5.99	129.80	120.75
16	V	48	GLY	CA-C-N	5.99	133.22	122.13
16	V	48	GLY	C-N-CA	5.99	133.22	122.13
19	Z	672	LEU	CA-C-N	5.99	128.31	120.28
19	Z	672	LEU	C-N-CA	5.99	128.31	120.28
24	R	303	ALA	CA-C-O	-5.99	114.53	120.82
28	I	73	LEU	O-C-N	5.99	128.47	122.12
23	Q	387	ILE	N-CA-C	-5.99	99.85	108.48
12	5	155	SER	N-CA-CB	5.99	120.61	110.49
19	Z	119	LYS	O-C-N	5.99	128.47	122.12
21	S	103	ARG	CA-C-N	5.99	128.31	120.28
21	S	103	ARG	C-N-CA	5.99	128.31	120.28
21	S	344	PHE	CA-CB-CG	-5.99	107.81	113.80
23	Q	48	GLN	OE1-CD-NE2	5.99	128.59	122.60
25	U	262	LEU	N-CA-C	-5.99	104.75	111.28
30	L	85	VAL	CA-C-O	5.99	127.38	120.67
11	4	129	PHE	CA-CB-CG	5.99	119.79	113.80
21	S	198	ALA	CA-C-O	5.99	126.90	120.55
28	I	366	GLN	CA-C-N	5.99	128.10	120.56
28	I	366	GLN	C-N-CA	5.99	128.10	120.56
10	3	166	THR	CA-CB-OG1	5.99	118.58	109.60
14	7	151	TRP	N-CA-CB	5.99	121.32	111.08
20	N	465	LEU	N-CA-C	-5.99	104.84	111.36
21	S	325	HIS	CA-C-N	5.99	128.22	120.44
21	S	325	HIS	C-N-CA	5.99	128.22	120.44
22	P	304	ASP	CA-C-N	5.99	128.22	120.44
22	P	304	ASP	C-N-CA	5.99	128.22	120.44
24	R	13	LYS	CA-C-O	-5.99	114.20	120.55
26	O	279	GLU	CB-CA-C	-5.99	101.74	110.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	127	LYS	N-CA-C	-5.98	100.44	109.95
9	2	93	ALA	CA-C-N	5.98	128.30	120.28
9	2	93	ALA	C-N-CA	5.98	128.30	120.28
16	V	126	ASP	CA-CB-CG	5.98	118.58	112.60
20	N	792	ASN	N-CA-C	-5.98	101.35	110.14
22	P	341	PHE	CA-C-O	-5.98	113.56	120.98
23	Q	364	LYS	N-CA-CB	5.98	119.01	110.16
25	U	268	SER	N-CA-C	5.98	117.80	111.28
30	L	193	GLY	CA-C-N	5.98	128.78	120.29
30	L	193	GLY	C-N-CA	5.98	128.78	120.29
30	L	323	ARG	O-C-N	5.98	129.22	122.22
10	3	154	TRP	CA-C-O	-5.98	113.60	120.24
20	N	748	LEU	N-CA-C	-5.98	104.33	111.69
25	U	108	ILE	N-CA-C	-5.98	104.68	110.72
27	H	47	GLN	N-CA-C	5.98	117.88	111.36
32	J	40	GLN	OE1-CD-NE2	5.98	128.58	122.60
3	C	8	ARG	NE-CZ-NH2	-5.98	113.82	119.20
21	S	202	VAL	CA-C-N	5.98	128.89	120.28
21	S	202	VAL	C-N-CA	5.98	128.89	120.28
12	5	236	TYR	N-CA-C	-5.98	98.99	108.73
21	S	490	MET	O-C-N	5.98	128.46	122.12
23	Q	335	LEU	CA-C-N	5.98	128.91	120.42
23	Q	335	LEU	C-N-CA	5.98	128.91	120.42
31	M	163	ILE	N-CA-CB	5.98	118.66	111.31
10	3	149	MET	CA-C-N	5.97	128.21	120.44
10	3	149	MET	C-N-CA	5.97	128.21	120.44
1	A	105	TYR	N-CA-CB	5.97	119.10	110.20
13	6	170	ALA	N-CA-CB	5.97	117.82	110.53
19	Z	651	GLY	N-CA-C	-5.97	105.12	112.77
26	O	374	ILE	CA-C-N	5.97	128.28	120.28
26	O	374	ILE	C-N-CA	5.97	128.28	120.28
2	B	232	ALA	N-CA-C	5.97	117.79	111.28
15	W	68	THR	N-CA-C	-5.97	104.71	112.23
4	D	205	VAL	O-C-N	-5.97	116.17	123.09
14	7	205	SER	N-CA-C	-5.97	103.37	110.41
19	Z	380	PHE	CA-CB-CG	-5.97	107.83	113.80
19	Z	694	LEU	CA-C-N	5.97	128.28	120.28
19	Z	694	LEU	C-N-CA	5.97	128.28	120.28
20	N	432	SER	O-C-N	-5.97	114.45	121.32
21	S	260	TYR	CA-C-N	5.97	128.28	120.28
21	S	260	TYR	C-N-CA	5.97	128.28	120.28
21	S	345	ARG	NH1-CZ-NH2	-5.97	111.54	119.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	F	232	PHE	CA-C-O	5.97	126.75	120.42
22	P	116	THR	CA-CB-OG1	5.97	118.55	109.60
32	J	16	ALA	CA-C-N	5.97	126.61	119.98
32	J	16	ALA	C-N-CA	5.97	126.61	119.98
9	2	191	GLU	CA-C-O	-5.96	115.31	121.87
19	Z	724	ASN	CB-CA-C	-5.96	101.52	110.88
22	P	287	VAL	CA-C-N	5.96	128.87	120.28
22	P	287	VAL	C-N-CA	5.96	128.87	120.28
22	P	377	ARG	CA-C-N	5.96	128.27	120.28
22	P	377	ARG	C-N-CA	5.96	128.27	120.28
28	I	184	TYR	CA-C-O	5.96	127.75	121.19
32	J	306	LEU	CB-CA-C	-5.96	100.71	110.85
7	G	32	GLU	CA-C-N	5.96	128.27	120.28
7	G	32	GLU	C-N-CA	5.96	128.27	120.28
17	T	207	ARG	CA-C-N	5.96	130.08	120.30
17	T	207	ARG	C-N-CA	5.96	130.08	120.30
17	T	347	ARG	CA-C-N	5.96	128.76	120.29
17	T	347	ARG	C-N-CA	5.96	128.76	120.29
20	N	424	ALA	CA-C-N	5.96	128.27	120.28
20	N	424	ALA	C-N-CA	5.96	128.27	120.28
21	S	340	ASP	CA-C-N	5.96	129.37	120.31
21	S	340	ASP	C-N-CA	5.96	129.37	120.31
24	R	18	ARG	NE-CZ-NH2	5.96	124.57	119.20
24	R	162	GLU	N-CA-CB	5.96	118.89	110.12
24	R	275	LEU	N-CA-C	5.96	117.86	111.36
6	F	190	HIS	CA-CB-CG	5.96	119.76	113.80
9	2	240	THR	CA-C-O	-5.96	114.39	120.71
23	Q	371	ASP	CA-CB-CG	-5.96	106.64	112.60
31	M	179	GLU	CA-C-N	5.96	132.10	122.68
31	M	179	GLU	C-N-CA	5.96	132.10	122.68
5	E	29	GLU	CA-C-N	5.96	126.59	119.98
5	E	29	GLU	C-N-CA	5.96	126.59	119.98
12	5	137	ALA	CA-C-N	5.96	128.27	120.28
12	5	137	ALA	C-N-CA	5.96	128.27	120.28
32	J	354	ALA	N-CA-C	-5.96	105.34	114.16
11	4	131	ALA	N-CA-CB	5.96	120.56	110.49
11	4	181	ARG	CA-CB-CG	5.96	126.02	114.10
19	Z	840	LEU	CA-C-O	-5.96	114.77	119.66
27	H	135	GLU	N-CA-C	-5.96	99.34	108.76
30	L	390	ASP	CA-CB-CG	5.96	118.56	112.60
9	2	121	THR	CA-CB-CG2	5.96	120.62	110.50
14	7	252	ASN	OD1-CG-ND2	5.96	128.56	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	311	ILE	N-CA-C	-5.96	99.15	108.86
29	K	302	ASN	N-CA-CB	5.96	120.90	111.43
29	K	207	PRO	CA-C-N	5.95	125.65	119.64
29	K	207	PRO	C-N-CA	5.95	125.65	119.64
19	Z	158	TYR	N-CA-CB	5.95	119.50	110.28
24	R	216	TYR	CA-C-N	5.95	128.18	120.44
24	R	216	TYR	C-N-CA	5.95	128.18	120.44
31	M	412	ARG	CA-C-N	5.95	128.74	120.29
31	M	412	ARG	C-N-CA	5.95	128.74	120.29
10	3	10	ALA	CA-C-N	5.95	132.68	121.97
10	3	10	ALA	C-N-CA	5.95	132.68	121.97
25	U	196	HIS	CA-C-N	5.95	126.58	119.98
25	U	196	HIS	C-N-CA	5.95	126.58	119.98
30	L	229	ILE	CB-CA-C	-5.95	104.11	112.14
30	L	17	ASP	CA-CB-CG	-5.95	106.65	112.60
30	L	152	LEU	CA-C-N	5.95	132.90	121.54
30	L	152	LEU	C-N-CA	5.95	132.90	121.54
6	F	190	HIS	N-CA-C	5.95	117.84	111.36
19	Z	297	MET	CA-C-N	5.95	128.25	120.28
19	Z	297	MET	C-N-CA	5.95	128.25	120.28
3	C	23	TYR	CB-CG-CD2	-5.95	111.88	120.80
22	P	149	LEU	O-C-N	5.95	128.42	122.12
23	Q	29	SER	N-CA-C	5.95	117.76	111.28
23	Q	216	ILE	CB-CA-C	-5.95	104.11	112.14
25	U	106	ILE	N-CA-CB	5.95	118.63	110.54
6	F	108	LEU	CA-C-O	5.94	126.72	120.42
7	G	127	SER	N-CA-C	-5.94	105.68	113.17
19	Z	620	PHE	N-CA-C	-5.94	107.26	114.75
31	M	217	ASN	OD1-CG-ND2	5.94	128.54	122.60
5	E	14	THR	CA-CB-OG1	5.94	118.51	109.60
11	4	170	ARG	N-CA-CB	5.94	118.62	110.01
17	T	123	LYS	N-CA-C	5.94	118.54	111.71
20	N	120	GLU	CA-C-O	5.94	126.85	120.55
27	H	324	PRO	CA-C-N	5.94	128.24	120.28
27	H	324	PRO	C-N-CA	5.94	128.24	120.28
32	J	160	GLU	N-CA-CB	5.94	118.68	110.07
19	Z	43	GLN	CA-C-N	5.94	129.34	120.31
19	Z	43	GLN	C-N-CA	5.94	129.34	120.31
19	Z	103	TYR	CA-C-N	5.94	126.57	119.98
19	Z	103	TYR	C-N-CA	5.94	126.57	119.98
20	N	677	ASN	O-C-N	5.94	128.92	122.15
12	5	195	PHE	CA-C-N	5.94	126.53	120.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	5	195	PHE	C-N-CA	5.94	126.53	120.00
20	N	742	HIS	CG-CD2-NE2	5.94	113.14	107.20
20	N	890	LYS	N-CA-CB	5.94	120.25	110.69
28	I	207	HIS	CG-CD2-NE2	5.94	113.14	107.20
1	A	45	LYS	N-CA-C	-5.93	105.87	114.12
3	C	60	PHE	CA-CB-CG	-5.93	107.86	113.80
19	Z	351	THR	CA-C-N	5.93	129.33	120.31
19	Z	351	THR	C-N-CA	5.93	129.33	120.31
23	Q	241	SER	O-C-N	-5.93	115.96	122.07
24	R	163	LYS	CA-C-N	5.93	128.23	120.28
24	R	163	LYS	C-N-CA	5.93	128.23	120.28
24	R	335	SER	CA-C-O	5.93	126.84	120.55
31	M	45	VAL	N-CA-CB	5.93	118.61	110.54
32	J	351	MET	CA-C-O	-5.93	114.17	119.75
5	E	191	LEU	N-CA-C	5.93	117.75	111.28
11	4	43	LEU	O-C-N	-5.93	115.06	122.24
27	H	306	LEU	O-C-N	5.93	128.50	122.09
2	B	173	PHE	N-CA-C	-5.93	104.89	111.36
19	Z	551	LYS	N-CA-C	-5.93	98.86	108.41
24	R	83	ARG	CA-C-O	-5.93	114.14	120.42
27	H	165	GLN	CA-C-N	5.93	129.35	120.69
27	H	165	GLN	C-N-CA	5.93	129.35	120.69
6	F	75	ALA	N-CA-C	-5.93	97.94	108.13
14	7	254	ASP	CA-C-N	5.93	132.64	121.97
14	7	254	ASP	C-N-CA	5.93	132.64	121.97
26	O	94	LEU	CA-C-N	5.93	128.15	120.44
26	O	94	LEU	C-N-CA	5.93	128.15	120.44
27	H	174	TYR	N-CA-C	-5.93	105.87	112.57
28	I	251	VAL	CA-C-N	5.93	126.56	119.98
28	I	251	VAL	C-N-CA	5.93	126.56	119.98
5	E	129	ASP	O-C-N	-5.92	115.20	121.30
19	Z	496	ASP	CA-CB-CG	5.92	118.52	112.60
23	Q	19	ASP	CA-C-N	5.92	129.31	120.31
23	Q	19	ASP	C-N-CA	5.92	129.31	120.31
27	H	414	ASN	CA-CB-CG	5.92	118.53	112.60
20	N	882	ALA	CA-C-O	-5.92	115.10	121.38
3	C	82	ASP	CA-CB-CG	-5.92	106.68	112.60
14	7	181	LEU	N-CA-C	-5.92	102.02	111.02
18	Y	66	LYS	N-CA-CB	5.92	118.60	110.01
20	N	742	HIS	N-CA-C	5.92	119.73	111.74
8	1	34	THR	CA-C-N	5.92	129.12	120.71
8	1	34	THR	C-N-CA	5.92	129.12	120.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	148	GLU	N-CA-C	-5.92	105.55	112.89
20	N	524	LYS	CA-CB-CG	5.92	125.94	114.10
21	S	326	LYS	CA-C-N	5.92	128.69	120.29
21	S	326	LYS	C-N-CA	5.92	128.69	120.29
28	I	258	LYS	CA-C-N	5.92	131.21	121.39
28	I	258	LYS	C-N-CA	5.92	131.21	121.39
23	Q	328	ASP	CA-CB-CG	5.92	118.52	112.60
23	Q	391	PRO	N-CA-C	5.92	117.92	110.70
28	I	198	LYS	O-C-N	-5.92	115.30	122.22
5	E	116	VAL	CA-CB-CG2	-5.92	100.34	110.40
19	Z	378	ASN	OD1-CG-ND2	5.91	128.51	122.60
19	Z	677	HIS	CB-CG-CD2	-5.91	123.51	131.20
20	N	144	ASP	CA-C-N	5.91	130.56	122.34
20	N	144	ASP	C-N-CA	5.91	130.56	122.34
22	P	65	ARG	NE-CZ-NH1	5.91	127.41	121.50
31	M	420	HIS	CA-C-N	5.91	128.13	120.44
31	M	420	HIS	C-N-CA	5.91	128.13	120.44
3	C	6	ASP	O-C-N	-5.91	114.79	122.77
4	D	193	THR	N-CA-CB	5.91	118.91	110.16
15	W	146	GLU	N-CA-CB	5.91	119.03	110.88
20	N	885	MET	CA-C-N	5.91	125.45	119.19
20	N	885	MET	C-N-CA	5.91	125.45	119.19
27	H	232	ARG	N-CA-CB	5.91	118.58	110.01
27	H	47	GLN	CA-C-N	5.91	128.55	120.46
27	H	47	GLN	C-N-CA	5.91	128.55	120.46
31	M	257	PRO	N-CA-CB	5.91	109.78	103.52
17	T	352	ILE	N-CA-CB	5.91	117.46	110.55
19	Z	411	ALA	CA-C-O	-5.91	114.16	120.42
24	R	302	HIS	CB-CA-C	-5.91	100.81	110.85
27	H	282	GLY	CA-C-N	5.91	129.25	120.87
27	H	282	GLY	C-N-CA	5.91	129.25	120.87
15	W	151	GLU	N-CA-CB	5.90	119.60	110.21
19	Z	677	HIS	O-C-N	5.90	128.88	122.15
22	P	413	ILE	O-C-N	5.90	129.46	123.20
30	L	243	ILE	O-C-N	5.90	129.42	123.10
19	Z	620	PHE	CA-CB-CG	-5.90	107.90	113.80
23	Q	66	LEU	CA-C-N	5.90	126.49	120.00
23	Q	66	LEU	C-N-CA	5.90	126.49	120.00
29	K	284	GLU	CA-C-N	5.90	128.80	120.42
29	K	284	GLU	C-N-CA	5.90	128.80	120.42
30	L	298	THR	N-CA-C	-5.90	105.57	112.89
32	J	187	LEU	O-C-N	-5.90	116.33	123.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	102	GLN	N-CA-CB	5.90	120.46	110.49
7	G	243	SER	CB-CA-C	-5.90	99.34	110.67
24	R	255	ALA	CA-C-N	5.90	129.98	120.30
24	R	255	ALA	C-N-CA	5.90	129.98	120.30
29	K	221	HIS	CB-CG-ND1	5.90	131.55	122.70
29	K	393	ILE	CA-CB-CG1	5.90	120.43	110.40
31	M	181	ASP	N-CA-C	-5.90	105.39	112.59
32	J	38	LYS	CA-C-N	5.90	128.19	120.28
32	J	38	LYS	C-N-CA	5.90	128.19	120.28
6	F	143	HIS	CE1-NE2-CD2	-5.90	103.10	109.00
19	Z	476	THR	CA-CB-OG1	5.90	118.45	109.60
20	N	52	GLU	CA-C-O	5.90	126.55	119.59
23	Q	128	ALA	CA-C-O	5.90	126.80	120.55
8	1	52	ARG	NE-CZ-NH2	-5.90	113.89	119.20
8	1	99	HIS	CE1-NE2-CD2	-5.90	103.10	109.00
9	2	170	MET	CA-C-N	5.90	127.73	121.48
9	2	170	MET	C-N-CA	5.90	127.73	121.48
21	S	153	ALA	N-CA-C	-5.90	101.54	110.50
1	A	13	ILE	N-CA-C	-5.89	99.80	108.23
14	7	62	CYS	CA-C-O	-5.89	114.47	121.60
24	R	176	ARG	NE-CZ-NH2	-5.89	113.90	119.20
29	K	172	ILE	CA-C-N	5.89	128.17	120.28
29	K	172	ILE	C-N-CA	5.89	128.17	120.28
22	P	224	LEU	N-CA-CB	5.89	118.55	110.01
25	U	63	LYS	CA-C-O	5.89	125.38	118.90
28	I	362	LYS	CA-C-N	5.89	128.65	120.29
28	I	362	LYS	C-N-CA	5.89	128.65	120.29
30	L	257	PHE	CA-C-N	5.89	130.49	122.19
30	L	257	PHE	C-N-CA	5.89	130.49	122.19
10	3	132	VAL	N-CA-C	5.89	117.22	109.21
20	N	461	LEU	N-CA-C	5.89	117.78	111.36
21	S	242	GLY	N-CA-C	5.89	120.31	112.77
21	S	140	ASP	CA-CB-CG	-5.88	106.72	112.60
23	Q	249	THR	CA-C-N	5.88	128.16	120.28
23	Q	249	THR	C-N-CA	5.88	128.16	120.28
31	M	189	SER	CA-C-O	-5.88	114.31	120.55
32	J	31	LEU	CA-C-N	5.88	128.75	120.28
32	J	31	LEU	C-N-CA	5.88	128.75	120.28
19	Z	344	VAL	N-CA-CB	5.88	115.04	110.45
20	N	453	HIS	CG-CD2-NE2	5.88	113.08	107.20
20	N	676	THR	N-CA-C	-5.88	104.87	111.28
32	J	398	ASN	OD1-CG-ND2	5.88	128.48	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	367	THR	CA-C-O	5.88	126.78	120.55
20	N	866	GLU	N-CA-CB	5.88	119.39	110.45
22	P	146	THR	CA-C-N	5.88	128.16	120.28
22	P	146	THR	C-N-CA	5.88	128.16	120.28
27	H	328	ASP	CA-C-N	5.88	125.56	119.56
27	H	328	ASP	C-N-CA	5.88	125.56	119.56
28	I	437	GLY	CA-C-N	5.88	128.16	120.28
28	I	437	GLY	C-N-CA	5.88	128.16	120.28
17	T	144	LEU	CB-CG-CD1	5.88	128.34	110.70
20	N	765	VAL	CA-C-O	5.88	127.08	120.85
26	O	43	ASP	N-CA-CB	5.88	118.86	110.16
31	M	378	VAL	CA-C-O	-5.88	115.81	121.63
2	B	173	PHE	CA-C-N	5.88	128.15	120.28
2	B	173	PHE	C-N-CA	5.88	128.15	120.28
3	C	99	LEU	CB-CA-C	-5.88	101.65	110.88
9	2	46	ILE	CB-CA-C	-5.88	103.74	110.73
11	4	52	ASP	O-C-N	5.88	128.12	122.07
16	V	270	LEU	CA-C-N	5.88	128.08	120.44
16	V	270	LEU	C-N-CA	5.88	128.08	120.44
20	N	113	VAL	N-CA-C	5.88	116.06	110.42
20	N	141	CYS	CA-C-N	5.88	128.15	120.28
20	N	141	CYS	C-N-CA	5.88	128.15	120.28
20	N	941	GLU	N-CA-C	5.88	113.42	108.13
23	Q	17	SER	N-CA-CB	5.88	120.42	110.49
25	U	115	TYR	N-CA-C	5.88	117.49	111.14
28	I	195	GLN	N-CA-C	5.88	118.47	111.71
13	6	160	ASP	CA-CB-CG	5.87	118.47	112.60
16	V	240	HIS	ND1-CE1-NE2	5.87	114.27	108.40
17	T	124	LEU	N-CA-C	5.87	117.76	111.36
19	Z	587	PHE	CA-C-N	5.87	129.24	120.31
19	Z	587	PHE	C-N-CA	5.87	129.24	120.31
23	Q	219	ALA	O-C-N	5.87	128.43	122.09
24	R	245	GLU	CA-C-O	-5.87	114.33	120.55
2	B	60	ARG	NE-CZ-NH1	-5.87	115.63	121.50
17	T	209	ALA	CA-C-O	-5.87	114.33	120.55
21	S	228	HIS	N-CA-CB	5.87	118.85	110.16
31	M	161	TYR	N-CA-C	5.87	118.24	108.20
31	M	326	ASN	CA-C-O	5.87	125.42	118.79
2	B	22	ILE	CA-C-N	5.87	128.15	120.28
2	B	22	ILE	C-N-CA	5.87	128.15	120.28
20	N	450	HIS	ND1-CE1-NE2	5.87	114.27	108.40
1	A	178	PHE	CB-CG-CD1	5.87	130.68	120.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	255	LEU	CA-C-N	5.87	128.15	120.28
23	Q	255	LEU	C-N-CA	5.87	128.15	120.28
25	U	47	VAL	N-CA-CB	-5.87	104.32	110.72
27	H	199	GLU	CA-C-O	5.87	126.98	120.82
13	6	190	HIS	ND1-CE1-NE2	5.87	114.27	108.40
29	K	287	ARG	CD-NE-CZ	-5.87	116.19	124.40
20	N	547	GLY	O-C-N	5.87	127.81	122.18
23	Q	305	ALA	CA-C-N	5.87	129.23	120.31
23	Q	305	ALA	C-N-CA	5.87	129.23	120.31
31	M	74	ASP	CA-C-N	5.87	128.14	120.28
31	M	74	ASP	C-N-CA	5.87	128.14	120.28
16	V	157	ILE	CA-C-O	5.86	127.21	120.76
16	V	160	PHE	CA-C-O	5.86	127.64	120.60
23	Q	357	SER	CA-C-N	5.86	128.06	120.44
23	Q	357	SER	C-N-CA	5.86	128.06	120.44
23	Q	390	GLU	CA-C-N	5.86	126.42	120.38
23	Q	390	GLU	C-N-CA	5.86	126.42	120.38
1	A	93	ARG	NE-CZ-NH1	-5.86	115.64	121.50
7	G	84	ASP	CA-C-N	5.86	128.13	120.28
7	G	84	ASP	C-N-CA	5.86	128.13	120.28
31	M	111	GLY	N-CA-C	-5.86	104.11	112.55
11	4	71	ASN	CA-CB-CG	5.86	118.46	112.60
12	5	121	GLN	CA-C-O	-5.86	114.34	120.55
23	Q	385	LEU	CA-C-N	5.86	129.69	122.37
23	Q	385	LEU	C-N-CA	5.86	129.69	122.37
25	U	114	ARG	CA-C-N	5.86	128.41	120.44
25	U	114	ARG	C-N-CA	5.86	128.41	120.44
29	K	201	GLY	O-C-N	5.86	128.12	123.61
19	Z	666	ILE	N-CA-CB	-5.86	102.57	110.54
20	N	760	VAL	O-C-N	5.86	127.65	121.91
21	S	328	LEU	CA-C-O	5.86	126.63	120.42
7	G	81	LEU	CA-C-N	5.86	129.21	120.31
7	G	81	LEU	C-N-CA	5.86	129.21	120.31
19	Z	419	LEU	N-CA-C	-5.86	102.24	110.50
23	Q	202	CYS	CA-C-N	5.86	126.41	120.38
23	Q	202	CYS	C-N-CA	5.86	126.41	120.38
28	I	366	GLN	O-C-N	5.86	128.33	122.12
11	4	30	ASP	N-CA-CB	5.86	118.56	110.07
12	5	113	PHE	CA-CB-CG	5.86	119.66	113.80
16	V	235	SER	N-CA-CB	5.86	118.73	110.12
20	N	101	ILE	N-CA-C	5.86	116.04	110.42
28	I	211	TYR	CA-C-O	-5.86	114.21	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	5	148	GLN	CB-CA-C	-5.85	99.43	110.67
4	D	65	LEU	N-CA-C	-5.85	104.26	111.40
11	4	50	ALA	CA-C-O	5.85	128.88	120.51
14	7	197	VAL	CA-C-N	5.85	128.12	120.28
14	7	197	VAL	C-N-CA	5.85	128.12	120.28
20	N	827	LYS	CA-C-O	5.85	126.75	120.55
22	P	18	VAL	CA-C-N	5.85	128.12	120.28
22	P	18	VAL	C-N-CA	5.85	128.12	120.28
29	K	366	ARG	NE-CZ-NH1	5.85	127.35	121.50
32	J	310	ARG	NH1-CZ-NH2	5.85	126.91	119.30
12	5	178	ASN	CA-CB-CG	-5.85	106.75	112.60
19	Z	35	ASP	CA-CB-CG	-5.85	106.75	112.60
26	O	97	LEU	CA-C-O	-5.85	114.35	120.55
9	2	132	ARG	CA-C-N	5.85	128.12	120.28
9	2	132	ARG	C-N-CA	5.85	128.12	120.28
27	H	404	ALA	N-CA-C	5.85	117.84	110.24
28	I	347	ILE	CA-CB-CG2	5.85	120.44	110.50
1	A	76	ILE	O-C-N	-5.85	117.04	123.18
21	S	372	ASN	CA-CB-CG	-5.85	106.75	112.60
22	P	338	THR	O-C-N	-5.85	115.70	122.95
2	B	157	ALA	CA-C-O	5.85	126.80	120.43
24	R	175	ASP	CA-C-O	5.85	126.75	120.55
9	2	239	GLY	O-C-N	5.84	127.83	122.81
16	V	124	GLY	O-C-N	-5.84	116.58	122.19
19	Z	373	ALA	CA-C-N	5.84	128.11	120.28
19	Z	373	ALA	C-N-CA	5.84	128.11	120.28
25	U	204	LYS	CB-CA-C	-5.84	101.70	110.88
29	K	227	PHE	N-CA-C	-5.84	98.76	108.34
30	L	326	ILE	CA-CB-CG1	5.84	120.33	110.40
17	T	254	ILE	CA-C-O	-5.84	112.12	119.95
26	O	282	PHE	N-CA-CB	5.84	118.48	110.01
20	N	935	ILE	N-CA-C	-5.84	107.29	112.90
21	S	445	ALA	CA-C-O	-5.84	114.92	121.40
24	R	208	PHE	N-CA-C	-5.84	98.36	110.80
29	K	135	HIS	CA-CB-CG	5.84	119.64	113.80
29	K	217	LYS	CA-C-N	5.84	128.58	120.29
29	K	217	LYS	C-N-CA	5.84	128.58	120.29
16	V	84	VAL	CA-C-N	5.84	128.10	120.28
16	V	84	VAL	C-N-CA	5.84	128.10	120.28
29	K	352	MET	N-CA-CB	5.84	118.71	110.36
32	J	269	VAL	CA-C-N	5.84	128.58	120.29
32	J	269	VAL	C-N-CA	5.84	128.58	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	74	LEU	CA-C-N	5.84	131.06	122.94
2	B	74	LEU	C-N-CA	5.84	131.06	122.94
30	L	400	TYR	O-C-N	5.84	129.87	123.27
3	C	215	THR	OG1-CB-CG2	-5.84	97.63	109.30
26	O	82	HIS	CE1-NE2-CD2	-5.84	103.16	109.00
23	Q	314	ARG	NE-CZ-NH2	5.83	124.45	119.20
6	F	190	HIS	CA-C-N	5.83	126.42	120.00
6	F	190	HIS	C-N-CA	5.83	126.42	120.00
17	T	333	ILE	CA-C-O	-5.83	115.41	119.38
24	R	344	HIS	CE1-NE2-CD2	-5.83	103.17	109.00
16	V	128	ASN	CA-C-O	-5.83	114.24	120.42
20	N	574	LYS	CA-C-O	5.83	126.55	119.38
24	R	77	ASN	OD1-CG-ND2	5.83	128.43	122.60
7	G	178	GLU	CA-C-N	5.83	128.09	120.28
7	G	178	GLU	C-N-CA	5.83	128.09	120.28
8	1	80	GLY	CA-C-N	5.83	132.67	121.54
8	1	80	GLY	C-N-CA	5.83	132.67	121.54
11	4	60	ILE	CA-C-N	5.83	128.09	120.28
11	4	60	ILE	C-N-CA	5.83	128.09	120.28
12	5	258	TYR	CA-C-O	-5.83	114.70	120.82
15	W	3	LEU	CA-C-O	-5.83	114.91	122.14
27	H	202	VAL	CA-C-N	5.83	128.02	120.44
27	H	202	VAL	C-N-CA	5.83	128.02	120.44
19	Z	63	LEU	CA-C-N	5.83	126.41	120.00
19	Z	63	LEU	C-N-CA	5.83	126.41	120.00
19	Z	553	THR	CA-C-N	5.83	128.09	120.28
19	Z	553	THR	C-N-CA	5.83	128.09	120.28
31	M	232	PRO	CB-CA-C	5.83	118.64	111.12
14	7	147	MET	CG-SD-CE	-5.83	88.08	100.90
15	W	105	HIS	CB-CG-CD2	-5.83	123.63	131.20
31	M	136	PHE	CA-CB-CG	-5.83	107.97	113.80
5	E	29	GLU	CB-CA-C	5.82	121.41	110.63
16	V	68	ARG	CA-C-N	5.82	131.03	123.11
16	V	68	ARG	C-N-CA	5.82	131.03	123.11
20	N	338	HIS	CE1-NE2-CD2	-5.82	103.18	109.00
29	K	69	LYS	CB-CG-CD	5.82	124.69	111.30
30	L	223	GLY	CA-C-O	5.82	125.84	119.55
26	O	215	GLU	N-CA-CB	5.82	119.30	110.28
9	2	193	GLU	CA-C-N	5.82	128.56	120.29
9	2	193	GLU	C-N-CA	5.82	128.56	120.29
19	Z	130	ALA	CA-C-O	5.82	126.72	120.55
21	S	428	GLU	CA-C-N	5.82	128.08	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	428	GLU	C-N-CA	5.82	128.08	120.28
28	I	340	ALA	CA-C-N	5.82	129.16	120.31
28	I	340	ALA	C-N-CA	5.82	129.16	120.31
17	T	340	ARG	CD-NE-CZ	-5.82	116.26	124.40
22	P	219	THR	CA-C-N	5.82	128.35	120.38
22	P	219	THR	C-N-CA	5.82	128.35	120.38
11	4	132	HIS	CA-C-N	5.82	126.98	121.46
11	4	132	HIS	C-N-CA	5.82	126.98	121.46
14	7	132	ILE	CA-C-O	5.82	127.02	120.85
19	Z	614	HIS	CE1-NE2-CD2	-5.82	103.18	109.00
19	Z	730	GLY	CA-C-O	5.82	126.83	120.66
13	6	147	ALA	N-CA-CB	5.81	120.31	110.49
19	Z	423	ASP	N-CA-C	-5.81	99.68	108.52
5	E	210	LEU	N-CA-CB	5.81	118.84	110.06
19	Z	727	PHE	CA-CB-CG	5.81	119.61	113.80
32	J	202	ALA	CA-C-N	5.81	128.42	120.46
32	J	202	ALA	C-N-CA	5.81	128.42	120.46
1	A	192	GLU	N-CA-C	-5.81	105.03	111.36
3	C	17	ARG	CA-C-N	5.81	131.02	123.00
3	C	17	ARG	C-N-CA	5.81	131.02	123.00
4	D	74	ALA	CB-CA-C	-5.81	100.67	110.43
10	3	181	SER	N-CA-C	-5.81	105.56	114.16
11	4	189	HIS	CE1-NE2-CD2	-5.81	103.19	109.00
14	7	155	VAL	CB-CA-C	5.81	119.23	110.63
3	C	102	GLN	N-CA-CB	5.81	120.74	111.91
4	D	211	ASN	OD1-CG-ND2	5.81	128.41	122.60
6	F	66	VAL	CB-CA-C	-5.81	105.22	110.91
14	7	253	TRP	N-CA-C	-5.81	104.31	111.40
22	P	453	HIS	ND1-CE1-NE2	5.81	114.21	108.40
4	D	12	PRO	N-CA-CB	5.81	108.87	103.41
4	D	184	ASP	CA-C-O	5.81	126.58	120.42
5	E	22	PHE	CA-C-O	-5.81	114.72	120.70
20	N	583	MET	CG-SD-CE	-5.81	88.13	100.90
16	V	218	LEU	O-C-N	5.81	128.05	122.07
19	Z	350	LYS	CA-C-N	5.81	128.53	120.29
19	Z	350	LYS	C-N-CA	5.81	128.53	120.29
20	N	520	MET	CA-C-N	5.81	130.62	121.56
20	N	520	MET	C-N-CA	5.81	130.62	121.56
20	N	628	ARG	CA-C-O	-5.81	114.69	120.90
20	N	645	ASN	N-CA-C	-5.81	100.97	109.50
32	J	212	ILE	CB-CA-C	5.81	119.26	111.19
16	V	258	ALA	CA-C-O	-5.80	114.72	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	235	PHE	O-C-N	-5.80	115.97	122.12
7	G	46	VAL	CB-CA-C	5.80	119.43	110.50
16	V	36	LEU	O-C-N	5.80	128.27	122.12
20	N	655	ALA	N-CA-CB	5.80	118.65	110.12
22	P	214	PHE	CA-C-N	5.80	128.85	120.38
22	P	214	PHE	C-N-CA	5.80	128.85	120.38
23	Q	339	ILE	CA-C-O	-5.80	114.20	120.47
24	R	160	ASN	OD1-CG-ND2	-5.80	116.80	122.60
6	F	193	ARG	NE-CZ-NH2	5.80	124.42	119.20
16	V	42	LEU	CA-C-N	5.80	127.98	120.44
16	V	42	LEU	C-N-CA	5.80	127.98	120.44
21	S	145	PRO	N-CA-CB	5.80	109.67	103.52
21	S	303	ARG	NE-CZ-NH1	-5.80	115.70	121.50
20	N	107	HIS	CG-CD2-NE2	5.80	113.00	107.20
20	N	245	ALA	CB-CA-C	-5.80	100.99	110.85
30	L	36	ILE	CA-CB-CG2	-5.80	100.64	110.50
6	F	188	VAL	O-C-N	-5.80	115.86	121.83
20	N	234	GLU	N-CA-CB	5.80	118.74	110.16
21	S	123	THR	CA-C-N	5.80	129.91	120.23
21	S	123	THR	C-N-CA	5.80	129.91	120.23
27	H	372	LEU	CA-C-O	5.80	126.69	120.55
30	L	103	LYS	N-CA-C	5.80	118.38	111.71
21	S	440	ASP	O-C-N	-5.79	115.98	122.12
17	T	177	TYR	N-CA-CB	5.79	119.26	110.28
17	T	231	HIS	CE1-NE2-CD2	-5.79	103.21	109.00
24	R	63	TRP	N-CA-C	-5.79	103.95	111.71
5	E	93	ARG	O-C-N	5.79	128.26	122.12
7	G	225	HIS	CA-CB-CG	-5.79	108.01	113.80
19	Z	743	ALA	N-CA-C	5.79	117.59	111.28
20	N	98	GLU	N-CA-C	-5.79	106.22	113.28
20	N	733	ALA	N-CA-C	5.79	117.59	111.28
20	N	826	GLU	CA-C-N	5.79	128.04	120.28
20	N	826	GLU	C-N-CA	5.79	128.04	120.28
22	P	181	GLU	N-CA-CB	5.79	118.63	110.12
22	P	421	PRO	N-CA-C	5.79	121.47	113.65
23	Q	203	PRO	N-CA-CB	5.79	108.70	103.08
25	U	167	ALA	N-CA-CB	5.79	118.63	110.12
7	G	179	LYS	CB-CA-C	-5.79	101.18	110.79
13	6	77	THR	CA-C-N	5.79	128.39	120.46
13	6	77	THR	C-N-CA	5.79	128.39	120.46
16	V	243	SER	CA-C-N	5.79	127.97	120.56
16	V	243	SER	C-N-CA	5.79	127.97	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	54	ALA	N-CA-C	5.79	119.38	111.39
3	C	220	ASN	OD1-CG-ND2	5.79	128.39	122.60
4	D	110	VAL	CG1-CB-CG2	-5.79	98.06	110.80
15	W	94	HIS	CB-CA-C	-5.79	101.79	110.88
20	N	758	PRO	N-CD-CG	5.79	111.88	103.20
21	S	261	ASP	CA-C-O	5.79	126.69	120.55
30	L	45	GLU	CA-C-N	5.79	128.04	120.28
30	L	45	GLU	C-N-CA	5.79	128.04	120.28
1	A	54	LYS	CA-C-N	5.79	132.59	121.54
1	A	54	LYS	C-N-CA	5.79	132.59	121.54
22	P	403	PHE	CB-CA-C	5.79	119.39	110.14
23	Q	34	ASP	N-CA-CB	5.79	120.16	110.32
25	U	233	VAL	N-CA-C	-5.79	104.86	110.42
12	5	231	GLY	CA-C-O	-5.78	114.08	122.52
19	Z	247	ALA	CA-C-O	-5.78	114.42	120.55
22	P	441	LYS	CA-C-N	5.78	128.03	120.28
22	P	441	LYS	C-N-CA	5.78	128.03	120.28
30	L	340	ILE	CA-C-N	5.78	132.59	121.54
30	L	340	ILE	C-N-CA	5.78	132.59	121.54
24	R	204	THR	CA-CB-CG2	-5.78	100.67	110.50
6	F	210	VAL	O-C-N	5.78	129.44	123.20
22	P	311	THR	CA-CB-OG1	5.78	118.27	109.60
29	K	417	TYR	CB-CA-C	-5.78	99.76	109.65
30	L	180	PRO	CA-C-N	5.78	125.54	119.76
30	L	180	PRO	C-N-CA	5.78	125.54	119.76
31	M	104	PRO	N-CA-C	-5.78	106.92	114.03
16	V	286	GLU	CA-C-N	5.78	128.50	120.29
16	V	286	GLU	C-N-CA	5.78	128.50	120.29
19	Z	535	THR	N-CA-CB	5.78	118.71	110.16
29	K	235	PHE	CA-CB-CG	5.78	119.58	113.80
13	6	132	TYR	N-CA-C	5.78	118.61	110.23
14	7	108	LYS	N-CA-CB	5.78	118.39	110.01
15	W	169	HIS	CE1-NE2-CD2	-5.78	103.22	109.00
25	U	84	LYS	O-C-N	-5.78	116.12	122.07
1	A	212	PRO	CA-C-O	-5.78	110.77	119.55
6	F	226	ASP	CA-CB-CG	5.78	118.38	112.60
14	7	123	ASP	CA-CB-CG	-5.78	106.83	112.60
20	N	169	GLU	CA-C-N	5.78	130.60	122.46
20	N	169	GLU	C-N-CA	5.78	130.60	122.46
20	N	828	VAL	N-CA-CB	5.78	118.39	110.54
2	B	25	ALA	N-CA-CB	5.77	118.71	110.16
28	I	353	PHE	N-CA-C	-5.77	99.51	109.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	221	LEU	O-C-N	-5.77	116.21	122.79
5	E	25	GLU	N-CA-C	-5.77	104.99	111.28
8	1	152	MET	CA-C-O	-5.77	112.26	120.51
12	5	105	ALA	N-CA-CB	5.77	120.24	110.49
13	6	175	LEU	CA-C-N	5.77	128.01	120.28
13	6	175	LEU	C-N-CA	5.77	128.01	120.28
23	Q	203	PRO	CA-C-N	5.77	125.46	119.05
23	Q	203	PRO	C-N-CA	5.77	125.46	119.05
30	L	218	VAL	N-CA-C	-5.77	100.10	108.87
13	6	79	ILE	N-CA-C	5.77	116.99	108.45
13	6	91	LEU	CA-C-O	-5.77	114.30	120.42
20	N	544	ILE	N-CA-C	-5.77	104.73	110.62
20	N	754	HIS	CE1-NE2-CD2	-5.77	103.23	109.00
23	Q	315	ASP	CA-C-N	5.77	129.28	121.20
23	Q	315	ASP	C-N-CA	5.77	129.28	121.20
30	L	16	ALA	CA-C-O	-5.77	112.60	119.35
11	4	117	TYR	CA-CB-CG	-5.77	103.52	113.90
19	Z	259	PHE	CA-CB-CG	5.77	119.57	113.80
19	Z	350	LYS	CB-CA-C	-5.77	101.22	110.79
30	L	314	HIS	ND1-CE1-NE2	5.77	114.17	108.40
8	1	178	GLU	N-CA-C	-5.77	100.37	108.96
14	7	232	GLN	N-CA-C	-5.77	98.34	108.20
19	Z	886	GLU	CA-C-N	5.77	128.48	120.29
19	Z	886	GLU	C-N-CA	5.77	128.48	120.29
6	F	67	ASP	CA-C-O	-5.76	115.27	121.38
15	W	182	ALA	CA-C-N	5.76	129.91	120.63
15	W	182	ALA	C-N-CA	5.76	129.91	120.63
20	N	339	LEU	CA-C-O	-5.76	114.44	120.55
29	K	277	ALA	N-CA-C	5.76	119.20	111.24
3	C	105	ILE	CA-C-O	-5.76	114.35	119.71
8	1	168	ILE	CA-C-N	5.76	131.70	122.83
8	1	168	ILE	C-N-CA	5.76	131.70	122.83
14	7	139	ALA	CB-CA-C	-5.76	101.23	110.79
19	Z	738	ASN	CA-CB-CG	5.76	118.36	112.60
22	P	123	ARG	NE-CZ-NH2	5.76	124.39	119.20
22	P	250	ILE	N-CA-CB	5.76	118.38	110.54
29	K	277	ALA	CA-C-O	5.76	129.28	122.14
20	N	478	SER	CA-C-N	5.76	128.27	120.44
20	N	478	SER	C-N-CA	5.76	128.27	120.44
21	S	351	ARG	N-CA-CB	5.76	118.59	110.12
21	S	459	MET	N-CA-CB	5.76	122.24	111.53
27	H	133	ASP	CA-CB-CG	-5.76	106.84	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	F	190	HIS	CE1-NE2-CD2	-5.76	103.24	109.00
9	2	55	ILE	CA-C-N	-5.76	114.94	122.94
9	2	55	ILE	C-N-CA	-5.76	114.94	122.94
19	Z	132	THR	CA-C-O	-5.76	114.45	120.55
23	Q	50	ILE	CA-C-N	5.76	128.00	120.28
23	Q	50	ILE	C-N-CA	5.76	128.00	120.28
2	B	99	LEU	CA-C-O	5.76	126.86	120.82
8	1	140	GLU	O-C-N	5.76	128.71	122.15
20	N	185	MET	O-C-N	5.76	128.00	122.07
20	N	653	ALA	CB-CA-C	-5.76	101.06	110.85
26	O	112	ILE	CA-CB-CG1	5.76	120.19	110.40
29	K	67	ASN	CA-C-O	-5.76	113.35	119.97
7	G	108	PRO	CA-C-O	-5.75	114.41	121.31
11	4	163	CYS	CA-C-N	5.75	127.99	120.28
11	4	163	CYS	C-N-CA	5.75	127.99	120.28
13	6	200	ARG	CD-NE-CZ	-5.75	116.35	124.40
22	P	236	HIS	CE1-NE2-CD2	-5.75	103.25	109.00
23	Q	227	THR	CA-C-N	5.75	127.99	120.28
23	Q	227	THR	C-N-CA	5.75	127.99	120.28
16	V	283	HIS	CE1-NE2-CD2	-5.75	103.25	109.00
19	Z	289	VAL	CA-C-N	5.75	129.73	120.30
19	Z	289	VAL	C-N-CA	5.75	129.73	120.30
24	R	363	ASN	OD1-CG-ND2	5.75	128.35	122.60
27	H	205	GLY	CA-C-O	5.75	124.18	118.77
29	K	91	GLN	CA-C-N	5.75	131.49	122.17
29	K	91	GLN	C-N-CA	5.75	131.49	122.17
5	E	180	SER	CA-C-N	5.75	127.98	120.28
5	E	180	SER	C-N-CA	5.75	127.98	120.28
23	Q	175	LYS	CB-CA-C	-5.75	101.08	110.85
15	W	28	ALA	CB-CA-C	-5.75	101.08	110.85
15	W	37	CYS	CB-CA-C	-5.75	101.08	110.85
20	N	625	ILE	N-CA-C	5.75	116.53	110.72
20	N	806	CYS	N-CA-C	-5.75	98.55	110.80
24	R	105	MET	CB-CA-C	-5.75	101.08	110.85
16	V	287	HIS	N-CA-C	5.75	117.62	111.36
9	2	190	GLU	CA-C-N	5.75	130.58	120.87
9	2	190	GLU	C-N-CA	5.75	130.58	120.87
20	N	660	CYS	CA-C-N	5.75	127.98	120.28
20	N	660	CYS	C-N-CA	5.75	127.98	120.28
23	Q	314	ARG	CB-CG-CD	5.75	124.51	111.30
28	I	390	LEU	CA-C-N	5.75	132.51	121.54
28	I	390	LEU	C-N-CA	5.75	132.51	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	88	ARG	NE-CZ-NH1	-5.74	115.76	121.50
22	P	220	GLU	O-C-N	-5.74	116.03	122.12
27	H	112	ILE	N-CA-CB	5.74	118.59	111.41
32	J	43	ARG	NE-CZ-NH2	-5.74	114.03	119.20
32	J	292	ILE	CA-C-O	-5.74	113.95	120.67
2	B	163	MET	CG-SD-CE	-5.74	88.27	100.90
26	O	34	TRP	CG-CD2-CE3	-5.74	128.16	133.90
32	J	109	THR	CA-C-N	5.74	126.23	120.14
32	J	109	THR	C-N-CA	5.74	126.23	120.14
19	Z	161	HIS	ND1-CE1-NE2	5.74	114.14	108.40
19	Z	619	HIS	CA-CB-CG	5.74	119.54	113.80
23	Q	96	PHE	CA-C-N	5.74	128.44	120.29
23	Q	96	PHE	C-N-CA	5.74	128.44	120.29
31	M	256	GLY	CA-C-N	5.74	125.28	119.19
31	M	256	GLY	C-N-CA	5.74	125.28	119.19
31	M	382	VAL	CA-C-O	5.74	127.07	120.76
1	A	224	ASN	CA-C-O	-5.74	112.56	119.67
3	C	105	ILE	N-CA-C	5.74	114.57	108.95
4	D	126	GLN	N-CA-CB	5.74	118.65	110.16
20	N	796	LYS	CA-C-O	-5.74	115.23	121.14
26	O	95	THR	N-CA-C	-5.74	104.93	111.07
29	K	191	TYR	CA-C-N	5.74	128.44	120.29
29	K	191	TYR	C-N-CA	5.74	128.44	120.29
5	E	194	ALA	CA-C-N	5.74	128.32	120.46
5	E	194	ALA	C-N-CA	5.74	128.32	120.46
5	E	229	PHE	O-C-N	5.74	129.93	122.87
29	K	88	VAL	N-CA-C	-5.74	100.02	108.85
6	F	59	HIS	N-CA-CB	5.74	118.84	109.95
25	U	33	LYS	CB-CG-CD	5.74	124.49	111.30
28	I	273	VAL	N-CA-C	-5.74	104.77	110.62
29	K	314	ALA	N-CA-C	-5.74	105.61	113.30
13	6	54	THR	CA-C-O	5.73	127.37	121.23
16	V	279	ASP	CA-C-N	5.73	125.27	119.19
16	V	279	ASP	C-N-CA	5.73	125.27	119.19
28	I	188	GLY	O-C-N	-5.73	117.52	123.48
19	Z	192	VAL	CA-C-O	-5.73	113.98	118.85
20	N	618	ALA	O-C-N	5.73	127.97	122.07
10	3	25	ASP	N-CA-CB	5.73	120.88	111.08
15	W	73	SER	CA-C-N	5.73	127.96	120.28
15	W	73	SER	C-N-CA	5.73	127.96	120.28
20	N	709	PHE	N-CA-CB	5.73	118.54	110.12
20	N	770	TRP	CB-CG-CD1	5.73	135.50	126.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	319	THR	CA-C-N	5.73	127.96	120.28
22	P	319	THR	C-N-CA	5.73	127.96	120.28
25	U	143	GLU	N-CA-C	-5.73	100.59	109.24
20	N	389	ASN	CA-CB-CG	-5.73	106.87	112.60
22	P	433	ASN	CA-C-N	5.73	128.43	120.29
22	P	433	ASN	C-N-CA	5.73	128.43	120.29
22	P	454	ASN	OD1-CG-ND2	5.73	128.33	122.60
29	K	65	GLN	CB-CG-CD	-5.73	102.86	112.60
11	4	57	ALA	CB-CA-C	-5.73	101.89	110.88
12	5	212	TYR	N-CA-CB	5.73	118.54	110.12
18	Y	50	ASP	CA-C-N	5.73	128.42	120.29
18	Y	50	ASP	C-N-CA	5.73	128.42	120.29
30	L	68	GLY	CA-C-N	5.73	128.98	120.90
30	L	68	GLY	C-N-CA	5.73	128.98	120.90
9	2	124	ARG	CB-CA-C	-5.73	101.28	110.79
19	Z	213	GLN	CA-C-N	5.73	127.78	120.56
19	Z	213	GLN	C-N-CA	5.73	127.78	120.56
27	H	138	MET	CG-SD-CE	-5.73	88.30	100.90
4	D	7	ILE	CB-CA-C	-5.72	101.90	111.29
20	N	546	ARG	NE-CZ-NH2	-5.72	114.05	119.20
25	U	68	TRP	CG-CD2-CE3	-5.72	128.18	133.90
28	I	295	TYR	CA-CB-CG	-5.72	103.59	113.90
14	7	133	HIS	CE1-NE2-CD2	-5.72	103.28	109.00
26	O	198	PHE	O-C-N	5.72	128.67	122.15
1	A	185	LYS	O-C-N	-5.72	115.33	122.83
14	7	189	LEU	N-CA-C	5.72	117.52	111.28
14	7	66	ILE	CA-CB-CG1	5.72	120.12	110.40
19	Z	261	ARG	N-CA-C	-5.72	98.62	110.80
19	Z	267	ARG	CD-NE-CZ	-5.72	116.39	124.40
19	Z	272	LEU	N-CA-C	5.72	117.59	111.36
19	Z	381	VAL	CB-CA-C	-5.72	104.65	111.97
22	P	56	THR	N-CA-C	-5.72	105.12	111.36
22	P	285	ASP	N-CA-C	5.72	117.19	111.07
23	Q	267	VAL	N-CA-C	-5.72	104.93	110.42
6	F	28	ALA	CA-C-N	5.72	128.29	120.46
6	F	28	ALA	C-N-CA	5.72	128.29	120.46
30	L	236	ALA	O-C-N	5.72	128.67	122.15
19	Z	476	THR	N-CA-C	5.72	117.59	111.36
31	M	34	GLU	CB-CA-C	-5.72	101.30	110.79
32	J	62	GLU	CA-CB-CG	-5.72	102.67	114.10
2	B	24	TYR	CB-CG-CD1	5.71	129.37	120.80
2	B	134	LEU	O-C-N	-5.71	115.80	123.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	3	108	VAL	CA-C-N	5.71	130.28	121.71
10	3	108	VAL	C-N-CA	5.71	130.28	121.71
19	Z	533	ASP	N-CA-CB	5.71	120.15	110.49
28	I	425	ASN	OD1-CG-ND2	5.71	128.31	122.60
32	J	254	ILE	N-CA-C	-5.71	99.27	107.78
13	6	63	HIS	ND1-CG-CD2	-5.71	100.39	106.10
20	N	541	HIS	ND1-CE1-NE2	5.71	114.11	108.40
30	L	36	ILE	CA-CB-CG1	5.71	120.11	110.40
3	C	139	TRP	CH2-CZ2-CE2	5.71	124.92	117.50
9	2	165	LEU	CB-CA-C	-5.71	104.52	110.17
21	S	69	GLU	CA-C-N	5.71	128.40	120.29
21	S	69	GLU	C-N-CA	5.71	128.40	120.29
30	L	89	ASN	N-CA-CB	5.71	118.77	110.26
19	Z	814	SER	CB-CA-C	-5.71	103.28	112.07
30	L	239	HIS	CA-C-N	5.71	128.32	120.39
30	L	239	HIS	C-N-CA	5.71	128.32	120.39
30	L	377	VAL	CA-C-N	5.71	128.99	120.31
30	L	377	VAL	C-N-CA	5.71	128.99	120.31
4	D	242	LYS	N-CA-C	-5.71	105.06	111.28
8	1	232	ILE	CA-C-N	5.71	132.44	121.54
8	1	232	ILE	C-N-CA	5.71	132.44	121.54
13	6	64	THR	CA-C-N	5.71	128.20	120.44
13	6	64	THR	C-N-CA	5.71	128.20	120.44
16	V	49	VAL	N-CA-C	5.71	121.20	108.88
20	N	436	ALA	CA-C-N	5.71	128.39	120.29
20	N	436	ALA	C-N-CA	5.71	128.39	120.29
25	U	222	ILE	CA-C-O	-5.71	114.42	120.53
32	J	147	THR	CA-C-N	5.71	128.50	120.28
32	J	147	THR	C-N-CA	5.71	128.50	120.28
29	K	81	ARG	N-CA-C	5.71	117.58	111.36
29	K	223	THR	N-CA-C	5.71	117.17	111.07
1	A	29	PHE	CA-C-N	5.70	128.49	120.28
1	A	29	PHE	C-N-CA	5.70	128.49	120.28
17	T	311	TRP	CB-CG-CD2	-5.70	118.81	126.80
21	S	198	ALA	O-C-N	-5.70	116.07	122.12
21	S	234	ALA	CA-C-O	-5.70	113.41	119.97
21	S	450	GLU	CB-CG-CD	-5.70	102.90	112.60
32	J	253	SER	N-CA-C	-5.70	107.56	114.75
29	K	272	THR	N-CA-C	-5.70	100.84	109.85
2	B	56	LEU	N-CA-C	-5.70	103.83	111.87
13	6	97	ALA	N-CA-CB	5.70	118.50	110.12
16	V	113	HIS	CE1-NE2-CD2	-5.70	103.30	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	25	ASP	O-C-N	5.70	129.47	123.03
22	P	227	TYR	N-CA-CB	5.70	118.50	110.12
22	P	353	ASP	CA-CB-CG	-5.70	106.90	112.60
25	U	272	LEU	N-CA-CB	5.70	118.33	110.07
25	U	273	HIS	ND1-CE1-NE2	5.70	114.10	108.40
30	L	141	PRO	N-CA-CB	5.70	109.23	103.25
15	W	76	HIS	CE1-NE2-CD2	-5.70	103.30	109.00
20	N	722	ASP	N-CA-CB	5.70	119.29	110.46
20	N	880	ASN	CA-CB-CG	5.70	118.30	112.60
30	L	373	HIS	CE1-NE2-CD2	-5.70	103.30	109.00
10	3	8	GLY	N-CA-C	-5.70	106.38	115.66
10	3	110	ALA	N-CA-CB	5.70	119.53	110.65
19	Z	160	ARG	CA-C-N	5.70	127.91	120.28
19	Z	160	ARG	C-N-CA	5.70	127.91	120.28
29	K	192	LYS	CA-C-N	5.70	127.91	120.28
29	K	192	LYS	C-N-CA	5.70	127.91	120.28
4	D	131	ARG	CA-C-O	-5.69	114.54	119.72
17	T	193	GLN	CA-C-N	5.69	127.91	120.28
17	T	193	GLN	C-N-CA	5.69	127.91	120.28
19	Z	561	GLY	CA-C-O	5.69	126.70	120.66
7	G	199	TYR	CA-CB-CG	-5.69	103.65	113.90
11	4	183	ILE	CA-C-O	5.69	127.05	121.19
17	T	345	TYR	N-CA-CB	5.69	118.26	110.01
20	N	371	ILE	N-CA-C	-5.69	104.81	110.62
24	R	73	MET	CA-C-N	5.69	127.91	120.28
24	R	73	MET	C-N-CA	5.69	127.91	120.28
25	U	273	HIS	CA-C-N	5.69	128.48	120.28
25	U	273	HIS	C-N-CA	5.69	128.48	120.28
27	H	150	HIS	CA-CB-CG	-5.69	108.11	113.80
28	I	277	HIS	ND1-CE1-NE2	5.69	114.09	108.40
1	A	72	ILE	N-CA-CB	5.69	119.11	110.58
23	Q	360	ASP	CA-C-O	5.69	126.58	120.55
27	H	349	GLU	CA-C-N	5.69	126.30	119.98
27	H	349	GLU	C-N-CA	5.69	126.30	119.98
19	Z	46	SER	N-CA-C	5.69	117.16	111.07
19	Z	567	LEU	CA-C-O	-5.69	114.89	121.15
20	N	647	HIS	CB-CG-CD2	-5.69	123.80	131.20
28	I	207	HIS	CA-C-N	5.69	126.18	120.04
28	I	207	HIS	C-N-CA	5.69	126.18	120.04
13	6	87	ASP	CA-C-O	-5.69	114.39	120.42
20	N	746	ILE	N-CA-C	-5.69	99.31	107.78
21	S	178	LYS	N-CA-CB	-5.69	103.49	111.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	146	ARG	NE-CZ-NH2	-5.69	114.08	119.20
28	I	406	ALA	CA-C-N	5.69	127.90	120.28
28	I	406	ALA	C-N-CA	5.69	127.90	120.28
20	N	227	GLN	CA-C-N	5.69	127.83	120.44
20	N	227	GLN	C-N-CA	5.69	127.83	120.44
21	S	259	LEU	N-CA-C	-5.69	100.52	108.54
22	P	1	MET	CA-C-N	5.69	129.73	120.23
22	P	1	MET	C-N-CA	5.69	129.73	120.23
23	Q	62	GLN	N-CA-C	5.69	118.31	110.35
12	5	149	TYR	CA-C-N	5.68	127.83	120.44
12	5	149	TYR	C-N-CA	5.68	127.83	120.44
20	N	203	LYS	CA-C-O	-5.68	114.39	120.42
22	P	17	GLU	N-CA-C	5.68	117.56	111.36
23	Q	392	PRO	N-CA-C	-5.68	107.40	114.68
28	I	56	THR	CA-C-N	5.68	127.90	120.28
28	I	56	THR	C-N-CA	5.68	127.90	120.28
28	I	57	GLN	OE1-CD-NE2	5.68	128.28	122.60
30	L	265	ARG	NE-CZ-NH2	5.68	124.32	119.20
31	M	144	ASP	CA-C-O	5.68	127.40	120.92
19	Z	676	GLY	CA-C-N	5.68	128.36	120.29
19	Z	676	GLY	C-N-CA	5.68	128.36	120.29
20	N	185	MET	CA-C-O	-5.68	114.85	120.82
22	P	417	ARG	N-CA-C	-5.68	101.94	110.24
26	O	143	ASN	N-CA-CB	5.68	118.57	110.16
8	1	114	SER	N-CA-C	5.68	118.41	111.82
13	6	85	HIS	N-CA-CB	5.68	120.09	110.49
31	M	268	ALA	CA-C-N	5.68	128.46	120.28
31	M	268	ALA	C-N-CA	5.68	128.46	120.28
6	F	143	HIS	ND1-CE1-NE2	5.68	114.08	108.40
8	1	197	MET	N-CA-C	5.68	117.15	111.07
20	N	206	MET	CG-SD-CE	5.68	113.40	100.90
21	S	197	ARG	NE-CZ-NH2	5.68	124.31	119.20
24	R	21	GLN	CA-C-N	5.68	127.89	120.28
24	R	21	GLN	C-N-CA	5.68	127.89	120.28
26	O	96	PHE	CB-CA-C	-5.68	101.19	110.85
26	O	178	ARG	NE-CZ-NH2	-5.68	114.09	119.20
32	J	153	GLY	N-CA-C	-5.68	107.54	114.92
8	1	189	THR	N-CA-CB	5.68	118.56	110.16
21	S	151	ALA	N-CA-CB	5.68	120.08	110.49
26	O	93	ALA	CA-C-O	-5.68	114.53	120.55
6	F	126	ARG	N-CA-C	-5.68	101.57	110.14
9	2	159	HIS	CG-CD2-NE2	5.68	112.88	107.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	V	160	PHE	CA-CB-CG	-5.68	108.12	113.80
25	U	158	VAL	O-C-N	5.68	129.47	123.00
26	O	147	GLY	CA-C-N	5.68	131.22	121.63
26	O	147	GLY	C-N-CA	5.68	131.22	121.63
30	L	152	LEU	N-CA-C	-5.68	106.31	113.18
19	Z	167	ALA	N-CA-C	5.67	117.47	111.28
19	Z	565	ASN	N-CA-C	5.67	117.47	111.28
22	P	215	GLN	CA-C-N	5.67	128.77	120.71
22	P	215	GLN	C-N-CA	5.67	128.77	120.71
26	O	272	ILE	CB-CA-C	5.67	119.80	112.14
28	I	94	GLU	CA-C-N	5.67	127.88	120.28
28	I	94	GLU	C-N-CA	5.67	127.88	120.28
6	F	161	ILE	CA-CB-CG2	-5.67	100.86	110.50
8	1	225	ASP	N-CA-C	-5.67	105.67	112.59
19	Z	460	ASP	O-C-N	-5.67	114.80	121.32
24	R	379	ARG	CA-C-O	-5.67	114.41	120.42
30	L	52	LYS	CA-C-O	-5.67	114.54	120.55
19	Z	493	ASN	OD1-CG-ND2	5.67	128.27	122.60
21	S	389	THR	O-C-N	5.67	128.13	122.12
21	S	414	SER	N-CA-CB	5.67	118.37	110.04
27	H	335	GLY	N-CA-C	-5.67	107.55	114.92
4	D	47	LYS	O-C-N	5.67	130.13	122.59
4	D	117	ILE	CA-C-O	-5.67	115.06	120.95
17	T	240	MET	CA-C-N	5.67	128.34	120.29
17	T	240	MET	C-N-CA	5.67	128.34	120.29
20	N	468	ALA	CA-C-N	5.67	130.17	122.07
20	N	468	ALA	C-N-CA	5.67	130.17	122.07
25	U	120	VAL	N-CA-CB	5.67	119.38	111.05
5	E	238	ILE	CA-C-N	5.67	127.87	120.28
5	E	238	ILE	C-N-CA	5.67	127.87	120.28
22	P	443	THR	N-CA-C	-5.67	105.11	111.28
27	H	211	GLY	N-CA-C	5.67	120.80	110.71
15	W	110	ILE	N-CA-CB	5.66	118.95	111.25
15	W	191	GLY	CA-C-O	5.66	128.68	121.94
19	Z	161	HIS	CE1-NE2-CD2	-5.66	103.34	109.00
19	Z	396	ASN	CA-CB-CG	5.66	118.26	112.60
26	O	21	VAL	CA-C-O	5.66	126.85	120.85
2	B	51	LYS	CA-C-N	5.66	130.47	121.18
2	B	51	LYS	C-N-CA	5.66	130.47	121.18
19	Z	566	HIS	CE1-NE2-CD2	-5.66	103.34	109.00
26	O	203	ALA	CA-C-O	5.66	126.55	120.55
30	L	384	ALA	N-CA-C	5.66	117.25	111.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	113	ASN	CA-C-N	5.66	132.16	121.97
31	M	113	ASN	C-N-CA	5.66	132.16	121.97
21	S	397	ASN	CA-C-N	5.66	127.69	120.56
21	S	397	ASN	C-N-CA	5.66	127.69	120.56
27	H	39	SER	N-CA-CB	5.66	118.22	110.01
16	V	293	THR	CA-C-N	5.66	127.86	120.28
16	V	293	THR	C-N-CA	5.66	127.86	120.28
19	Z	271	MET	N-CA-CB	5.66	118.53	110.16
22	P	265	GLN	CA-C-N	5.66	128.32	120.29
22	P	265	GLN	C-N-CA	5.66	128.32	120.29
1	A	85	ALA	CA-C-N	5.66	128.91	120.31
1	A	85	ALA	C-N-CA	5.66	128.91	120.31
2	B	33	ALA	CA-C-O	-5.66	114.29	120.17
3	C	31	ALA	CA-C-N	5.66	129.04	121.01
3	C	31	ALA	C-N-CA	5.66	129.04	121.01
6	F	111	LEU	N-CA-C	-5.66	105.20	111.36
7	G	102	ASN	OD1-CG-ND2	5.66	128.26	122.60
14	7	236	VAL	CA-CB-CG2	5.66	120.01	110.40
16	V	298	GLN	O-C-N	5.65	128.20	122.09
26	O	180	LEU	N-CA-C	5.65	117.44	111.28
14	7	200	LYS	O-C-N	-5.65	115.32	122.27
17	T	259	TYR	CA-C-N	5.65	127.85	120.28
17	T	259	TYR	C-N-CA	5.65	127.85	120.28
20	N	219	CYS	CA-C-O	-5.65	114.88	120.82
1	A	71	LYS	N-CA-C	-5.65	97.24	107.75
9	2	192	GLU	N-CA-C	5.65	117.44	111.28
19	Z	746	ARG	NE-CZ-NH1	-5.65	115.85	121.50
20	N	430	ASP	CA-C-N	5.65	128.73	120.71
20	N	430	ASP	C-N-CA	5.65	128.73	120.71
21	S	412	ARG	O-C-N	5.65	129.82	123.27
27	H	367	ASP	N-CA-C	-5.65	106.15	113.16
29	K	278	GLN	OE1-CD-NE2	5.65	128.25	122.60
1	A	77	GLY	N-CA-C	-5.65	102.89	111.14
5	E	146	VAL	CA-C-O	-5.65	114.46	120.39
13	6	135	ASN	CA-CB-CG	5.65	118.25	112.60
24	R	289	ALA	CB-CA-C	-5.65	99.04	110.17
28	I	204	PRO	CA-C-N	5.65	128.31	120.29
28	I	204	PRO	C-N-CA	5.65	128.31	120.29
6	F	102	PRO	N-CA-C	-5.65	100.84	112.47
16	V	126	ASP	N-CA-C	5.65	118.20	111.71
24	R	288	PHE	N-CA-C	-5.65	104.27	113.19
27	H	358	HIS	CA-C-N	5.65	127.85	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	H	358	HIS	C-N-CA	5.65	127.85	120.28
29	K	158	GLN	N-CA-C	-5.65	104.18	113.50
30	L	102	ASP	CA-CB-CG	-5.65	106.95	112.60
2	B	113	ARG	N-CA-C	5.65	117.51	111.36
7	G	34	SER	CA-C-N	5.65	131.00	120.95
7	G	34	SER	C-N-CA	5.65	131.00	120.95
19	Z	133	MET	CA-C-O	-5.65	114.44	120.42
20	N	134	VAL	N-CA-CB	5.65	119.05	110.58
22	P	161	GLU	N-CA-CB	5.65	118.52	110.16
26	O	302	ILE	CA-C-N	5.65	132.32	121.54
26	O	302	ILE	C-N-CA	5.65	132.32	121.54
29	K	335	LEU	CA-C-N	5.65	125.65	119.89
29	K	335	LEU	C-N-CA	5.65	125.65	119.89
1	A	94	ALA	O-C-N	5.64	128.10	122.12
3	C	41	ASP	CB-CA-C	5.64	117.93	109.13
14	7	259	ILE	N-CA-C	5.64	116.34	108.89
19	Z	10	PRO	CA-C-O	-5.64	115.01	121.56
19	Z	385	PHE	CA-CB-CG	5.64	119.44	113.80
20	N	161	ASP	CA-CB-CG	5.64	118.24	112.60
20	N	249	CYS	CA-C-N	5.64	127.78	120.44
20	N	249	CYS	C-N-CA	5.64	127.78	120.44
19	Z	108	GLU	CA-C-O	5.64	126.40	120.42
20	N	457	ILE	CA-C-N	5.64	128.19	120.46
20	N	457	ILE	C-N-CA	5.64	128.19	120.46
25	U	9	VAL	N-CA-CB	5.64	119.19	111.41
28	I	72	LEU	CB-CA-C	-5.64	101.98	110.90
29	K	50	GLU	CA-C-O	5.64	126.53	120.55
1	A	136	CYS	CA-C-N	5.64	131.87	122.73
1	A	136	CYS	C-N-CA	5.64	131.87	122.73
5	E	111	SER	CB-CA-C	-5.64	102.02	110.88
19	Z	832	THR	CA-C-O	5.64	128.58	120.51
4	D	184	ASP	O-C-N	-5.64	115.72	122.15
19	Z	202	HIS	ND1-CE1-NE2	5.64	114.04	108.40
19	Z	368	ALA	N-CA-CB	5.64	120.02	110.49
22	P	172	GLU	O-C-N	5.64	128.58	122.15
22	P	185	PHE	CB-CG-CD2	-5.64	111.11	120.70
31	M	274	ALA	N-CA-C	5.64	117.11	111.07
32	J	69	GLN	OE1-CD-NE2	5.64	128.24	122.60
2	B	58	ASP	CA-C-N	5.64	132.31	121.54
2	B	58	ASP	C-N-CA	5.64	132.31	121.54
10	3	170	ALA	CA-C-O	-5.64	114.57	120.55
10	3	173	ASN	OD1-CG-ND2	-5.64	116.96	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	561	GLY	CA-C-N	5.64	127.77	120.44
19	Z	561	GLY	C-N-CA	5.64	127.77	120.44
19	Z	621	ASP	N-CA-C	-5.64	98.79	110.80
28	I	173	VAL	CB-CA-C	-5.64	104.53	112.14
5	E	31	HIS	ND1-CE1-NE2	5.64	114.04	108.40
5	E	155	HIS	CE1-NE2-CD2	-5.64	103.36	109.00
8	1	95	GLN	CB-CA-C	-5.64	101.27	110.85
10	3	68	LYS	N-CA-CB	5.64	118.50	110.16
19	Z	752	HIS	CA-CB-CG	-5.64	108.16	113.80
20	N	219	CYS	CA-C-N	5.64	127.83	120.28
20	N	219	CYS	C-N-CA	5.64	127.83	120.28
26	O	220	PRO	CA-N-CD	-5.64	104.11	112.00
26	O	293	PHE	CA-C-O	5.64	125.89	119.18
27	H	97	ARG	NH1-CZ-NH2	-5.64	111.97	119.30
32	J	360	LYS	CA-C-N	5.64	127.19	120.14
32	J	360	LYS	C-N-CA	5.64	127.19	120.14
12	5	116	ARG	CA-C-N	5.63	128.29	120.29
12	5	116	ARG	C-N-CA	5.63	128.29	120.29
28	I	375	ALA	N-CA-C	-5.63	100.50	109.23
13	6	151	PHE	CA-CB-CG	-5.63	108.17	113.80
16	V	103	GLY	CA-C-N	5.63	128.08	122.00
16	V	103	GLY	C-N-CA	5.63	128.08	122.00
21	S	333	LEU	CA-C-N	5.63	127.83	120.28
21	S	333	LEU	C-N-CA	5.63	127.83	120.28
6	F	82	ARG	N-CA-C	-5.63	105.22	111.36
10	3	31	GLN	CA-C-N	5.63	129.25	120.75
10	3	31	GLN	C-N-CA	5.63	129.25	120.75
11	4	136	ALA	N-CA-C	-5.63	105.29	111.82
12	5	229	SER	N-CA-C	-5.63	104.63	113.02
28	I	380	LEU	CA-C-N	5.63	128.29	120.29
28	I	380	LEU	C-N-CA	5.63	128.29	120.29
2	B	220	ARG	CD-NE-CZ	-5.63	116.52	124.40
19	Z	396	ASN	CA-C-N	5.63	128.08	120.65
19	Z	396	ASN	C-N-CA	5.63	128.08	120.65
30	L	305	ARG	CA-C-N	5.63	126.88	119.84
30	L	305	ARG	C-N-CA	5.63	126.88	119.84
22	P	4	GLY	N-CA-C	-5.63	99.84	113.18
27	H	171	ASP	CA-CB-CG	-5.63	106.97	112.60
31	M	84	LYS	CB-CA-C	-5.63	101.45	110.79
4	D	245	ASN	N-CA-CB	5.63	118.49	110.16
8	1	101	ILE	CA-CB-CG1	5.63	119.97	110.40
9	2	71	ASP	N-CA-C	-5.63	104.77	111.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	3	67	LEU	N-CA-CB	5.63	118.49	110.16
15	W	100	ARG	NE-CZ-NH1	-5.63	115.87	121.50
19	Z	122	ALA	CA-C-O	5.63	126.52	120.55
19	Z	433	LEU	CB-CA-C	-5.63	101.45	110.79
19	Z	676	GLY	CA-C-O	-5.63	114.95	120.75
20	N	224	ASP	N-CA-C	5.63	119.34	111.74
20	N	658	VAL	CA-CB-CG2	5.63	119.96	110.40
25	U	40	LEU	N-CA-C	-5.63	100.72	109.72
26	O	296	ILE	CA-C-N	5.63	127.75	120.44
26	O	296	ILE	C-N-CA	5.63	127.75	120.44
27	H	127	ASP	CA-CB-CG	-5.63	106.97	112.60
29	K	255	LYS	CA-C-N	5.63	127.82	120.28
29	K	255	LYS	C-N-CA	5.63	127.82	120.28
31	M	401	ALA	N-CA-C	5.63	117.41	111.28
14	7	48	PRO	N-CA-C	5.62	120.05	111.11
20	N	681	ASN	CA-CB-CG	-5.62	106.97	112.60
23	Q	349	HIS	CG-CD2-NE2	5.62	112.83	107.20
26	O	289	ARG	CA-C-N	-5.62	112.50	122.74
26	O	289	ARG	C-N-CA	-5.62	112.50	122.74
30	L	370	ARG	CA-C-N	5.62	128.38	120.28
30	L	370	ARG	C-N-CA	5.62	128.38	120.28
7	G	67	LEU	N-CA-CB	5.62	119.59	110.42
13	6	164	ALA	CA-C-O	-5.62	114.69	120.99
16	V	172	HIS	CA-C-O	5.62	126.44	119.97
19	Z	102	HIS	CG-CD2-NE2	5.62	112.82	107.20
20	N	155	LEU	CA-C-N	5.62	128.28	120.29
20	N	155	LEU	C-N-CA	5.62	128.28	120.29
23	Q	307	THR	O-C-N	-5.62	116.28	122.07
25	U	69	PHE	N-CA-C	-5.62	100.23	109.40
25	U	74	TYR	CA-C-N	5.62	127.75	120.44
25	U	74	TYR	C-N-CA	5.62	127.75	120.44
25	U	110	GLU	CB-CG-CD	-5.62	103.04	112.60
31	M	324	GLN	OE1-CD-NE2	5.62	128.22	122.60
3	C	115	CYS	O-C-N	5.62	128.08	122.12
17	T	168	GLU	N-CA-CB	5.62	118.48	110.16
17	T	289	GLU	N-CA-CB	5.62	118.22	110.07
7	G	202	HIS	ND1-CE1-NE2	5.62	114.02	108.40
11	4	110	HIS	CA-CB-CG	5.62	119.42	113.80
19	Z	627	GLU	N-CA-CB	5.62	119.28	110.46
25	U	177	ARG	N-CA-C	-5.62	106.31	112.72
30	L	171	GLU	CA-C-N	5.62	127.75	120.44
30	L	171	GLU	C-N-CA	5.62	127.75	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	102	LYS	CA-C-N	5.62	128.85	120.31
17	T	102	LYS	C-N-CA	5.62	128.85	120.31
21	S	204	ALA	O-C-N	5.62	128.07	122.12
23	Q	244	SER	CA-C-N	5.62	125.31	119.64
23	Q	244	SER	C-N-CA	5.62	125.31	119.64
23	Q	336	ILE	N-CA-CB	5.62	119.01	110.58
28	I	381	ASP	CA-C-O	-5.62	114.47	120.42
20	N	438	GLN	OE1-CD-NE2	-5.62	116.98	122.60
8	1	174	ALA	N-CA-C	5.62	117.40	111.28
13	6	54	THR	CA-CB-OG1	5.62	118.02	109.60
22	P	129	ARG	NE-CZ-NH2	-5.62	114.14	119.20
23	Q	237	GLU	CA-C-O	5.62	126.48	120.70
29	K	133	HIS	CG-CD2-NE2	5.62	112.81	107.20
5	E	73	HIS	CA-CB-CG	-5.61	108.19	113.80
16	V	283	HIS	ND1-CE1-NE2	5.61	114.01	108.40
27	H	405	THR	CA-C-N	5.61	127.80	120.28
27	H	405	THR	C-N-CA	5.61	127.80	120.28
30	L	350	ASP	CA-CB-CG	-5.61	106.99	112.60
32	J	332	HIS	CE1-NE2-CD2	-5.61	103.39	109.00
10	3	50	TYR	N-CA-C	-5.61	105.39	114.09
20	N	776	SER	CA-C-O	-5.61	112.70	119.49
29	K	166	ASP	N-CA-C	-5.61	105.19	113.61
30	L	276	ASN	N-CA-CB	5.61	118.47	110.16
1	A	196	GLU	CA-C-N	5.61	127.80	120.28
1	A	196	GLU	C-N-CA	5.61	127.80	120.28
3	C	112	THR	N-CA-C	5.61	117.40	111.28
8	1	161	GLY	O-C-N	-5.61	118.43	123.37
19	Z	473	ASN	CA-CB-CG	-5.61	106.99	112.60
24	R	238	GLU	O-C-N	-5.61	116.03	122.09
31	M	379	SER	CA-C-N	5.61	126.85	119.84
31	M	379	SER	C-N-CA	5.61	126.85	119.84
32	J	272	THR	CA-C-N	5.61	128.26	120.29
32	J	272	THR	C-N-CA	5.61	128.26	120.29
5	E	24	VAL	CA-C-N	5.61	127.80	120.28
5	E	24	VAL	C-N-CA	5.61	127.80	120.28
24	R	353	ILE	CA-C-N	-5.61	115.72	122.90
24	R	353	ILE	C-N-CA	-5.61	115.72	122.90
11	4	32	HIS	ND1-CE1-NE2	5.61	114.01	108.40
19	Z	691	PRO	CA-C-N	5.61	128.25	120.29
19	Z	691	PRO	C-N-CA	5.61	128.25	120.29
20	N	884	VAL	N-CA-CB	-5.61	104.67	112.52
25	U	193	ASN	CA-C-N	5.61	127.73	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	U	193	ASN	C-N-CA	5.61	127.73	120.44
2	B	187	ALA	CA-C-N	5.61	128.14	120.46
2	B	187	ALA	C-N-CA	5.61	128.14	120.46
10	3	109	ILE	CB-CA-C	5.61	119.30	111.34
20	N	70	HIS	CA-C-N	5.61	128.35	120.28
20	N	70	HIS	C-N-CA	5.61	128.35	120.28
25	U	190	ARG	O-C-N	-5.61	116.18	122.12
4	D	205	VAL	N-CA-C	-5.60	100.95	108.35
5	E	240	ASP	N-CA-CB	5.60	119.50	110.65
10	3	33	GLN	CA-C-N	5.60	128.25	120.29
10	3	33	GLN	C-N-CA	5.60	128.25	120.29
30	L	248	GLU	CB-CG-CD	5.60	122.13	112.60
30	L	269	ARG	NE-CZ-NH2	5.60	124.24	119.20
19	Z	48	GLU	CA-C-N	5.60	127.79	120.28
19	Z	48	GLU	C-N-CA	5.60	127.79	120.28
21	S	439	ARG	NE-CZ-NH2	-5.60	114.16	119.20
25	U	257	MET	CA-C-O	-5.60	114.61	120.55
28	I	290	ILE	N-CA-C	5.60	116.33	110.62
17	T	306	ALA	N-CA-C	5.60	117.39	111.28
22	P	181	GLU	CB-CA-C	-5.60	101.49	110.79
2	B	151	PRO	N-CA-C	5.60	121.21	113.65
23	Q	84	LYS	N-CA-C	5.60	119.21	112.38
1	A	220	VAL	N-CA-CB	5.60	118.95	111.90
6	F	172	LEU	CA-C-N	5.60	128.24	120.29
6	F	172	LEU	C-N-CA	5.60	128.24	120.29
19	Z	48	GLU	N-CA-C	5.60	117.46	111.36
20	N	648	VAL	N-CA-CB	5.60	118.15	110.54
22	P	378	MET	CA-C-O	-5.60	114.62	120.55
29	K	348	ILE	N-CA-CB	5.60	118.97	110.58
3	C	25	MET	CA-C-N	5.59	128.24	120.29
3	C	25	MET	C-N-CA	5.59	128.24	120.29
8	1	110	HIS	CA-CB-CG	5.59	119.39	113.80
10	3	164	PHE	CA-C-N	5.59	128.23	120.29
10	3	164	PHE	C-N-CA	5.59	128.23	120.29
12	5	92	LYS	N-CA-CB	5.59	119.94	110.49
20	N	25	HIS	ND1-CE1-NE2	5.59	114.00	108.40
23	Q	246	LYS	CA-C-O	5.59	126.40	119.97
19	Z	153	SER	CA-C-N	5.59	128.33	120.28
19	Z	153	SER	C-N-CA	5.59	128.33	120.28
22	P	206	SER	CA-C-N	5.59	128.33	120.28
22	P	206	SER	C-N-CA	5.59	128.33	120.28
10	3	31	GLN	N-CA-CB	5.59	119.94	110.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	W	190	ALA	CA-C-N	5.59	126.25	120.60
15	W	190	ALA	C-N-CA	5.59	126.25	120.60
20	N	911	ILE	CA-C-N	5.59	132.03	121.97
20	N	911	ILE	C-N-CA	5.59	132.03	121.97
22	P	177	MET	N-CA-C	-5.59	102.61	110.50
28	I	103	ARG	N-CA-CB	5.59	118.12	110.01
3	C	109	GLN	OE1-CD-NE2	5.59	128.19	122.60
20	N	732	LEU	N-CA-CB	5.59	118.34	110.12
24	R	178	ASN	O-C-N	-5.59	116.19	122.12
27	H	55	LEU	N-CA-CB	5.59	119.67	110.39
28	I	203	LEU	N-CA-CB	5.59	119.09	110.43
32	J	173	GLU	N-CA-CB	5.59	118.11	110.01
19	Z	515	ALA	CA-C-N	5.59	127.12	120.14
19	Z	515	ALA	C-N-CA	5.59	127.12	120.14
20	N	153	ILE	N-CA-C	-5.59	105.08	110.72
26	O	169	HIS	CB-CG-CD2	-5.59	123.94	131.20
20	N	707	ASN	CA-CB-CG	-5.59	107.01	112.60
21	S	96	MET	N-CA-C	-5.59	100.86	109.52
23	Q	144	GLN	N-CA-C	-5.59	105.09	111.07
3	C	167	ASN	N-CA-C	-5.58	103.57	111.56
20	N	940	GLN	N-CA-C	-5.58	106.29	114.39
21	S	441	GLY	N-CA-C	-5.58	106.79	115.67
22	P	144	ARG	NE-CZ-NH1	-5.58	115.92	121.50
23	Q	315	ASP	N-CA-C	5.58	117.37	111.28
25	U	106	ILE	CA-CB-CG1	5.58	119.89	110.40
32	J	235	PHE	CA-C-N	5.58	127.60	120.56
32	J	235	PHE	C-N-CA	5.58	127.60	120.56
3	C	160	LYS	N-CA-CB	5.58	118.52	110.20
4	D	46	GLU	CA-C-N	5.58	132.21	121.54
4	D	46	GLU	C-N-CA	5.58	132.21	121.54
24	R	388	ASN	N-CA-C	5.58	117.37	111.28
2	B	150	ASP	CA-C-N	5.58	125.42	119.28
2	B	150	ASP	C-N-CA	5.58	125.42	119.28
3	C	106	PRO	CA-C-N	5.58	128.22	120.29
3	C	106	PRO	C-N-CA	5.58	128.22	120.29
19	Z	409	SER	CB-CA-C	-5.58	101.36	110.85
19	Z	859	PRO	CA-C-N	5.58	129.81	121.72
19	Z	859	PRO	C-N-CA	5.58	129.81	121.72
32	J	39	SER	CB-CA-C	-5.58	101.53	110.79
3	C	89	GLU	CA-C-N	5.58	127.76	120.28
3	C	89	GLU	C-N-CA	5.58	127.76	120.28
17	T	298	THR	CA-C-N	5.58	125.11	119.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	298	THR	C-N-CA	5.58	125.11	119.19
19	Z	715	HIS	ND1-CE1-NE2	5.58	113.98	108.40
22	P	21	SER	CA-C-N	5.58	128.03	120.44
22	P	21	SER	C-N-CA	5.58	128.03	120.44
2	B	230	LEU	N-CA-C	5.58	117.36	111.28
10	3	98	LYS	CA-C-N	5.58	127.75	120.28
10	3	98	LYS	C-N-CA	5.58	127.75	120.28
16	V	141	VAL	O-C-N	-5.58	116.85	123.04
20	N	419	ALA	CA-C-N	5.58	127.76	120.28
20	N	419	ALA	C-N-CA	5.58	127.76	120.28
22	P	118	LEU	N-CA-C	5.58	119.83	112.35
30	L	293	THR	CA-C-N	5.58	132.20	121.54
30	L	293	THR	C-N-CA	5.58	132.20	121.54
31	M	195	ASP	CA-CB-CG	-5.58	107.02	112.60
5	E	24	VAL	CB-CA-C	-5.58	104.52	112.22
21	S	103	ARG	NE-CZ-NH2	5.58	124.22	119.20
7	G	30	ALA	CB-CA-C	-5.58	101.54	110.79
11	4	75	LEU	CA-C-N	5.58	128.14	120.39
11	4	75	LEU	C-N-CA	5.58	128.14	120.39
20	N	549	ALA	N-CA-C	5.58	117.03	111.07
21	S	58	HIS	CG-CD2-NE2	5.58	112.78	107.20
24	R	34	ASP	CA-CB-CG	-5.58	107.02	112.60
30	L	79	THR	N-CA-C	-5.58	100.85	108.38
32	J	332	HIS	N-CA-C	5.58	117.44	111.36
6	F	179	PHE	CA-CB-CG	-5.57	108.23	113.80
9	2	71	ASP	CA-CB-CG	5.57	118.17	112.60
10	3	205	ASP	N-CA-CB	5.57	119.97	110.50
20	N	632	GLN	N-CA-C	5.57	118.12	111.71
20	N	897	THR	N-CA-C	-5.57	105.83	113.30
20	N	921	ILE	CA-C-O	5.57	124.00	118.98
27	H	43	ARG	CA-CB-CG	5.57	125.25	114.10
16	V	269	GLN	N-CA-C	5.57	117.43	111.36
7	G	18	ASP	CB-CA-C	-5.57	100.51	110.70
12	5	61	THR	N-CA-C	-5.57	100.27	108.79
23	Q	346	GLN	N-CA-C	-5.57	102.64	110.50
8	1	68	THR	CA-C-N	5.57	126.80	119.84
8	1	68	THR	C-N-CA	5.57	126.80	119.84
20	N	432	SER	CA-C-N	5.57	125.19	119.56
20	N	432	SER	C-N-CA	5.57	125.19	119.56
23	Q	129	LEU	N-CA-CB	5.57	118.40	110.16
10	3	4	MET	CG-SD-CE	-5.57	88.65	100.90
12	5	154	LEU	CA-C-O	5.57	126.85	121.67

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	6	173	GLN	O-C-N	-5.57	115.26	120.55
19	Z	456	ARG	NE-CZ-NH1	-5.57	115.93	121.50
19	Z	711	SER	N-CA-C	5.57	118.11	111.71
20	N	377	HIS	CA-CB-CG	5.57	119.37	113.80
19	Z	127	SER	N-CA-C	5.57	117.35	111.28
23	Q	224	ASP	CA-CB-CG	-5.57	107.03	112.60
24	R	217	LYS	CA-C-N	5.57	128.19	120.29
24	R	217	LYS	C-N-CA	5.57	128.19	120.29
31	M	95	ASN	N-CA-C	-5.57	100.89	109.52
15	W	54	LEU	O-C-N	5.56	128.10	122.09
21	S	476	ILE	O-C-N	5.56	127.56	121.83
30	L	239	HIS	CB-CG-CD2	5.56	138.43	131.20
31	M	201	LEU	N-CA-C	5.56	117.42	111.36
4	D	29	GLY	CA-C-N	5.56	132.16	121.54
4	D	29	GLY	C-N-CA	5.56	132.16	121.54
21	S	181	GLN	CB-CG-CD	-5.56	103.14	112.60
19	Z	500	LEU	CA-C-N	5.56	130.01	120.72
19	Z	500	LEU	C-N-CA	5.56	130.01	120.72
28	I	251	VAL	N-CA-C	-5.56	101.88	109.55
7	G	101	SER	CA-C-O	-5.56	114.98	120.82
12	5	102	GLY	CA-C-O	-5.56	116.17	121.62
14	7	107	LEU	N-CA-CB	5.56	118.90	110.28
25	U	47	VAL	CB-CA-C	5.56	117.80	110.91
31	M	423	TYR	N-CA-C	5.56	117.34	111.28
12	5	100	LEU	N-CA-C	-5.56	106.27	113.16
13	6	206	PHE	CA-C-N	5.56	128.07	120.46
13	6	206	PHE	C-N-CA	5.56	128.07	120.46
15	W	176	GLY	CA-C-O	-5.56	115.78	121.62
16	V	60	GLU	O-C-N	5.56	129.72	123.27
17	T	310	GLY	CA-C-O	5.56	124.51	118.95
23	Q	23	SER	CA-C-O	-5.56	112.54	119.38
25	U	268	SER	CA-C-N	5.56	127.56	120.56
25	U	268	SER	C-N-CA	5.56	127.56	120.56
12	5	163	TRP	CA-CB-CG	5.56	124.16	113.60
22	P	417	ARG	CA-C-N	5.56	125.86	119.92
22	P	417	ARG	C-N-CA	5.56	125.86	119.92
24	R	185	GLY	CA-C-N	5.56	127.72	120.28
24	R	185	GLY	C-N-CA	5.56	127.72	120.28
30	L	159	LEU	CA-C-N	5.56	127.72	120.28
30	L	159	LEU	C-N-CA	5.56	127.72	120.28
8	1	80	GLY	N-CA-C	-5.55	102.99	111.10
12	5	128	ARG	CB-CA-C	-5.55	102.12	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	104	MET	CA-C-N	5.55	129.41	120.30
22	P	104	MET	C-N-CA	5.55	129.41	120.30
30	L	85	VAL	CA-CB-CG1	5.55	119.84	110.40
32	J	368	MET	O-C-N	5.55	128.01	122.12
10	3	31	GLN	N-CA-C	-5.55	98.97	110.80
29	K	167	ILE	N-CA-C	-5.55	97.79	109.34
16	V	197	ASN	CA-C-N	5.55	127.72	120.28
16	V	197	ASN	C-N-CA	5.55	127.72	120.28
22	P	52	LYS	N-CA-C	-5.55	105.19	112.41
29	K	187	HIS	CA-CB-CG	5.55	119.35	113.80
20	N	128	GLN	CA-CB-CG	5.55	125.20	114.10
20	N	145	HIS	ND1-CE1-NE2	5.55	113.95	108.40
20	N	168	LEU	N-CA-C	-5.55	98.98	110.80
30	L	98	ARG	N-CA-CB	5.55	118.16	110.17
32	J	168	PRO	CB-CA-C	-5.55	103.46	112.62
16	V	42	LEU	N-CA-CB	5.55	118.28	110.12
17	T	260	THR	N-CA-C	5.55	117.33	111.28
23	Q	77	LEU	CA-C-O	-5.55	114.67	120.55
12	5	185	PHE	CB-CA-C	-5.55	102.10	110.92
20	N	590	TYR	CG-CD1-CE1	-5.55	112.88	121.20
29	K	119	ILE	CA-CB-CG1	5.55	119.83	110.40
29	K	171	ASP	CA-C-O	-5.55	114.54	120.42
32	J	198	LEU	CA-C-N	5.55	128.17	120.29
32	J	198	LEU	C-N-CA	5.55	128.17	120.29
1	A	141	ILE	CA-CB-CG2	-5.54	101.08	110.50
12	5	220	TYR	O-C-N	5.54	127.78	122.07
17	T	231	HIS	O-C-N	-5.54	115.55	120.48
25	U	39	LEU	CA-C-O	5.54	126.42	120.38
25	U	58	PHE	CA-CB-CG	5.54	119.34	113.80
27	H	151	ILE	O-C-N	-5.54	114.78	121.10
28	I	418	ASP	CB-CA-C	-5.54	101.59	110.79
32	J	214	VAL	CA-C-O	5.54	126.46	120.53
32	J	364	THR	CA-C-N	5.54	128.74	120.31
32	J	364	THR	C-N-CA	5.54	128.74	120.31
19	Z	102	HIS	CB-CG-ND1	-5.54	114.39	122.70
20	N	827	LYS	CA-C-N	5.54	128.05	120.46
20	N	827	LYS	C-N-CA	5.54	128.05	120.46
23	Q	86	ALA	CA-C-O	5.54	126.42	120.55
23	Q	195	THR	O-C-N	-5.54	116.36	122.07
23	Q	246	LYS	CA-C-N	5.54	127.71	120.28
23	Q	246	LYS	C-N-CA	5.54	127.71	120.28
4	D	241	GLU	CA-C-N	5.54	127.70	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	241	GLU	C-N-CA	5.54	127.70	120.28
7	G	108	PRO	N-CA-CB	5.54	108.49	103.34
20	N	519	VAL	N-CA-C	5.54	116.31	110.72
3	C	142	HIS	CA-C-O	-5.54	115.00	120.82
19	Z	828	ARG	CB-CA-C	-5.54	100.78	109.70
26	O	294	GLU	CB-CG-CD	-5.54	103.19	112.60
30	L	89	ASN	CA-C-O	-5.54	113.24	120.00
9	2	209	ASP	CA-CB-CG	-5.54	107.06	112.60
21	S	280	GLU	N-CA-C	5.54	117.32	111.28
21	S	448	ASN	CA-C-N	5.54	127.97	120.44
21	S	448	ASN	C-N-CA	5.54	127.97	120.44
27	H	187	LEU	O-C-N	5.54	128.46	122.15
3	C	203	VAL	N-CA-CB	5.54	117.15	110.95
8	1	99	HIS	ND1-CE1-NE2	5.54	113.94	108.40
16	V	257	LYS	CA-C-N	5.54	127.64	120.44
16	V	257	LYS	C-N-CA	5.54	127.64	120.44
17	T	192	HIS	N-CA-CB	5.54	118.03	110.01
24	R	150	PHE	O-C-N	5.54	128.07	122.09
5	E	102	THR	N-CA-C	5.53	117.17	111.03
19	Z	852	VAL	CA-C-N	5.53	131.93	121.97
19	Z	852	VAL	C-N-CA	5.53	131.93	121.97
30	L	102	ASP	CA-C-N	5.53	128.25	120.28
30	L	102	ASP	C-N-CA	5.53	128.25	120.28
30	L	319	ASN	CA-CB-CG	5.53	118.13	112.60
4	D	13	ASP	CA-CB-CG	-5.53	107.07	112.60
28	I	407	LEU	CA-C-O	5.53	126.41	120.55
32	J	137	LEU	CA-C-N	5.53	127.69	120.28
32	J	137	LEU	C-N-CA	5.53	127.69	120.28
22	P	27	ARG	CA-C-N	5.53	127.88	120.58
22	P	27	ARG	C-N-CA	5.53	127.88	120.58
24	R	210	SER	CA-C-N	5.53	132.10	121.54
24	R	210	SER	C-N-CA	5.53	132.10	121.54
24	R	318	TYR	CA-C-N	5.53	127.63	120.44
24	R	318	TYR	C-N-CA	5.53	127.63	120.44
28	I	114	GLU	O-C-N	-5.53	117.50	123.42
29	K	283	ARG	CB-CA-C	-5.53	101.61	110.79
32	J	84	LYS	N-CA-C	-5.53	101.16	109.95
22	P	327	GLU	O-C-N	5.53	128.06	122.09
26	O	225	LEU	N-CA-C	5.53	118.25	109.24
30	L	246	MET	N-CA-C	-5.53	100.17	109.07
5	E	193	GLU	CA-C-N	5.53	127.69	120.28
5	E	193	GLU	C-N-CA	5.53	127.69	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	163	ASP	CA-C-N	5.53	123.72	120.24
17	T	163	ASP	C-N-CA	5.53	123.72	120.24
21	S	298	TYR	CA-C-N	5.53	127.95	120.65
21	S	298	TYR	C-N-CA	5.53	127.95	120.65
21	S	315	HIS	CE1-NE2-CD2	-5.53	103.47	109.00
24	R	292	TYR	CB-CG-CD2	-5.53	112.51	120.80
30	L	121	ILE	O-C-N	-5.53	116.64	122.83
31	M	105	ASN	CA-C-N	5.53	132.10	121.54
31	M	105	ASN	C-N-CA	5.53	132.10	121.54
14	7	228	TYR	CA-C-N	5.53	131.27	122.59
14	7	228	TYR	C-N-CA	5.53	131.27	122.59
15	W	86	PHE	CA-C-N	5.53	127.62	120.44
15	W	86	PHE	C-N-CA	5.53	127.62	120.44
19	Z	420	TRP	N-CA-CB	5.53	119.83	110.49
20	N	93	ASN	CA-CB-CG	5.53	118.13	112.60
19	Z	445	LEU	CB-CA-C	-5.52	101.62	110.79
20	N	261	LEU	CA-C-O	-5.52	114.69	120.55
20	N	505	ASP	CA-C-N	5.52	127.62	120.44
20	N	505	ASP	C-N-CA	5.52	127.62	120.44
29	K	411	GLU	CA-CB-CG	5.52	125.15	114.10
6	F	106	SER	CA-C-N	5.52	127.95	120.44
6	F	106	SER	C-N-CA	5.52	127.95	120.44
20	N	627	PHE	O-C-N	-5.52	115.25	122.59
20	N	689	ILE	CA-C-N	5.52	127.68	120.28
20	N	689	ILE	C-N-CA	5.52	127.68	120.28
22	P	357	ARG	N-CA-C	5.52	117.30	111.28
26	O	206	LEU	CB-CA-C	-5.52	100.06	110.67
30	L	229	ILE	O-C-N	5.52	127.23	121.87
32	J	396	GLU	CB-CA-C	5.52	120.24	110.85
8	1	203	SER	CA-C-O	5.52	126.59	120.63
28	I	418	ASP	O-C-N	5.52	127.97	122.12
3	C	67	LYS	O-C-N	-5.52	116.76	123.27
14	7	50	VAL	CA-C-O	-5.52	114.43	120.72
19	Z	576	ILE	CB-CA-C	5.52	121.20	112.26
21	S	403	VAL	CA-C-N	5.52	127.94	120.44
21	S	403	VAL	C-N-CA	5.52	127.94	120.44
28	I	267	VAL	CB-CA-C	-5.52	104.60	112.22
29	K	370	ILE	O-C-N	5.52	129.01	123.10
16	V	32	TYR	CB-CG-CD1	-5.52	112.52	120.80
21	S	110	TYR	CA-C-N	5.52	132.08	121.54
21	S	110	TYR	C-N-CA	5.52	132.08	121.54
24	R	332	GLN	CA-C-O	-5.52	114.57	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	205	HIS	O-C-N	5.52	128.44	122.15
11	4	107	TYR	N-CA-C	-5.52	99.91	108.90
19	Z	295	ALA	N-CA-C	5.52	116.97	111.07
16	V	31	VAL	N-CA-C	-5.51	99.94	107.99
19	Z	378	ASN	CB-CA-C	-5.51	101.99	110.81
22	P	270	VAL	N-CA-C	5.51	115.71	110.42
22	P	299	ILE	CA-C-N	5.51	125.04	119.19
22	P	299	ILE	C-N-CA	5.51	125.04	119.19
24	R	88	LEU	CA-C-N	5.51	127.67	120.28
24	R	88	LEU	C-N-CA	5.51	127.67	120.28
28	I	363	ARG	N-CA-CB	5.51	118.32	110.16
14	7	257	HIS	CG-CD2-NE2	5.51	112.71	107.20
2	B	170	GLY	N-CA-C	-5.51	106.12	112.73
14	7	172	LEU	O-C-N	-5.51	116.80	123.03
16	V	89	PRO	O-C-N	5.51	129.71	122.27
23	Q	354	ILE	CA-C-N	5.51	130.00	122.34
23	Q	354	ILE	C-N-CA	5.51	130.00	122.34
12	5	158	THR	N-CA-CB	5.51	119.22	110.57
14	7	133	HIS	ND1-CE1-NE2	5.51	113.91	108.40
21	S	66	VAL	CB-CA-C	-5.51	104.80	112.02
27	H	249	TYR	CB-CG-CD1	5.51	129.06	120.80
31	M	47	ARG	NE-CZ-NH2	-5.51	114.24	119.20
1	A	83	MET	CA-C-N	5.51	127.66	120.28
1	A	83	MET	C-N-CA	5.51	127.66	120.28
12	5	144	ASN	OD1-CG-ND2	5.51	128.11	122.60
20	N	340	GLN	O-C-N	5.51	127.96	122.12
5	E	91	LYS	CB-CA-C	-5.51	100.10	110.67
8	1	90	ASP	N-CA-CB	5.51	118.22	110.12
23	Q	94	ASP	N-CA-C	5.51	116.96	111.07
27	H	213	LEU	CB-CA-C	-5.51	101.02	110.16
29	K	352	MET	CB-CA-C	-5.51	98.39	109.68
30	L	91	PRO	N-CA-CB	5.51	107.95	103.32
2	B	183	GLU	CA-C-N	5.50	127.66	120.28
2	B	183	GLU	C-N-CA	5.50	127.66	120.28
20	N	245	ALA	CA-C-N	5.50	127.66	120.28
20	N	245	ALA	C-N-CA	5.50	127.66	120.28
20	N	394	ALA	N-CA-CB	5.50	118.21	110.12
20	N	50	GLU	CA-C-O	5.50	126.38	120.55
20	N	210	LYS	CB-CA-C	-5.50	102.75	110.13
20	N	225	ASP	CA-C-N	5.50	128.67	120.31
20	N	225	ASP	C-N-CA	5.50	128.67	120.31
20	N	229	VAL	CA-C-O	-5.50	115.02	120.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	379	ALA	N-CA-C	5.50	117.28	111.28
11	4	56	PHE	CA-C-N	5.50	127.59	120.44
11	4	56	PHE	C-N-CA	5.50	127.59	120.44
15	W	176	GLY	CA-C-N	5.50	126.72	119.84
15	W	176	GLY	C-N-CA	5.50	126.72	119.84
17	T	125	VAL	CA-C-N	5.50	128.67	120.31
17	T	125	VAL	C-N-CA	5.50	128.67	120.31
19	Z	325	GLN	N-CA-CB	5.50	118.30	110.16
20	N	141	CYS	N-CA-C	5.50	118.20	111.82
26	O	124	ASN	N-CA-CB	5.50	118.21	110.12
26	O	240	PHE	CA-C-O	5.50	126.28	119.79
27	H	118	PHE	CA-C-O	-5.50	114.16	120.98
32	J	131	VAL	CA-C-O	5.50	125.60	121.09
9	2	174	SER	N-CA-CB	5.50	119.92	110.68
21	S	156	LEU	N-CA-CB	5.50	118.50	110.30
22	P	336	PRO	CA-C-N	5.50	127.92	120.38
22	P	336	PRO	C-N-CA	5.50	127.92	120.38
22	P	344	THR	CA-CB-OG1	5.50	117.85	109.60
10	3	110	ALA	CB-CA-C	-5.50	101.03	110.16
19	Z	234	THR	CA-C-O	-5.50	114.59	120.42
19	Z	245	ASN	O-C-N	-5.50	116.29	122.12
23	Q	390	GLU	O-C-N	5.50	127.64	121.32
11	4	115	LEU	O-C-N	-5.50	116.14	122.95
17	T	96	GLY	N-CA-C	-5.50	100.16	113.18
17	T	125	VAL	CA-C-O	-5.50	114.53	120.47
19	Z	156	HIS	ND1-CE1-NE2	5.50	113.90	108.40
19	Z	265	ALA	CB-CA-C	-5.50	101.51	110.85
20	N	222	PHE	N-CA-CB	-5.50	102.04	110.01
25	U	84	LYS	CA-C-O	5.50	126.59	120.82
31	M	266	ASP	O-C-N	5.50	129.03	122.27
21	S	140	ASP	N-CA-C	-5.50	107.22	114.31
21	S	475	ARG	CA-C-N	5.50	128.22	120.42
21	S	475	ARG	C-N-CA	5.50	128.22	120.42
10	3	62	THR	CB-CA-C	-5.49	102.50	110.96
16	V	62	VAL	N-CA-C	-5.49	100.78	108.80
16	V	300	LEU	CA-C-N	5.49	128.09	120.29
16	V	300	LEU	C-N-CA	5.49	128.09	120.29
19	Z	565	ASN	OD1-CG-ND2	5.49	128.09	122.60
20	N	12	LEU	CB-CA-C	-5.49	101.67	110.79
20	N	216	VAL	CA-C-N	5.49	127.64	120.28
20	N	216	VAL	C-N-CA	5.49	127.64	120.28
22	P	45	GLU	CB-CG-CD	5.49	121.94	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	U	181	ASP	CA-C-N	5.49	128.64	120.95
25	U	181	ASP	C-N-CA	5.49	128.64	120.95
24	R	277	VAL	CA-CB-CG1	5.49	119.74	110.40
27	H	275	ASP	CB-CA-C	5.49	118.71	109.48
31	M	81	GLU	CB-CG-CD	-5.49	103.26	112.60
5	E	66	LYS	O-C-N	5.49	128.32	121.84
22	P	415	PHE	N-CA-C	-5.49	106.63	113.38
22	P	447	ALA	O-C-N	5.49	127.94	122.12
28	I	114	GLU	CB-CG-CD	5.49	121.93	112.60
13	6	153	PRO	N-CD-CG	5.49	111.43	103.20
19	Z	356	ASN	CA-CB-CG	5.49	118.09	112.60
24	R	132	VAL	N-CA-C	-5.49	99.93	108.44
26	O	158	LEU	CA-C-N	5.49	128.08	120.29
26	O	158	LEU	C-N-CA	5.49	128.08	120.29
28	I	155	LYS	CA-C-O	-5.49	114.73	120.55
30	L	150	GLY	CA-C-O	5.49	130.63	122.62
30	L	325	ASP	N-CA-CB	5.49	118.28	110.16
31	M	64	ARG	N-CA-C	-5.49	105.30	111.28
19	Z	525	ILE	CB-CA-C	5.49	119.55	112.14
20	N	354	LYS	N-CA-CB	5.49	118.19	110.12
20	N	530	GLU	CA-C-O	-5.49	115.05	120.70
31	M	200	GLU	N-CA-C	5.49	117.34	111.36
4	D	21	TYR	CA-C-N	5.49	127.63	120.28
4	D	21	TYR	C-N-CA	5.49	127.63	120.28
20	N	90	VAL	N-CA-CB	5.49	118.00	110.54
20	N	219	CYS	CB-CA-C	-5.49	102.27	110.88
20	N	599	ILE	CA-CB-CG1	5.49	119.72	110.40
20	N	716	VAL	CA-C-O	5.49	126.67	120.85
21	S	365	THR	O-C-N	5.49	127.93	122.12
23	Q	370	LEU	N-CA-C	5.49	117.26	111.28
28	I	305	ILE	CB-CA-C	-5.49	104.65	112.22
28	I	382	ASP	CA-C-N	5.49	128.08	120.29
28	I	382	ASP	C-N-CA	5.49	128.08	120.29
32	J	122	THR	CA-CB-CG2	-5.49	101.17	110.50
32	J	371	LEU	CA-C-N	5.49	127.57	120.44
32	J	371	LEU	C-N-CA	5.49	127.57	120.44
19	Z	448	CYS	O-C-N	-5.48	116.31	122.12
25	U	11	VAL	CB-CA-C	-5.48	102.05	110.50
32	J	394	ASP	CA-CB-CG	-5.48	107.12	112.60
16	V	256	ASN	CA-CB-CG	-5.48	107.12	112.60
16	V	256	ASN	CB-CA-C	-5.48	101.69	110.79
19	Z	592	ASN	CA-C-N	5.48	127.62	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	592	ASN	C-N-CA	5.48	127.62	120.28
20	N	949	GLU	CB-CG-CD	5.48	121.92	112.60
30	L	314	HIS	CE1-NE2-CD2	-5.48	103.52	109.00
4	D	30	SER	CA-C-N	5.48	129.13	121.24
4	D	30	SER	C-N-CA	5.48	129.13	121.24
13	6	212	ARG	CA-C-O	5.48	126.36	120.55
24	R	66	ASP	CA-CB-CG	-5.48	107.12	112.60
26	O	93	ALA	CA-C-N	5.48	127.62	120.28
26	O	93	ALA	C-N-CA	5.48	127.62	120.28
11	4	144	ASP	CA-C-N	5.48	128.64	120.31
11	4	144	ASP	C-N-CA	5.48	128.64	120.31
22	P	402	ILE	N-CA-C	-5.48	101.85	108.53
23	Q	369	ILE	O-C-N	5.48	127.18	121.87
15	W	124	LEU	N-CA-C	5.48	117.25	111.28
20	N	885	MET	O-C-N	-5.48	116.47	122.06
30	L	186	LEU	CA-C-O	-5.48	114.30	120.32
31	M	67	HIS	CA-C-N	5.48	128.17	120.28
31	M	67	HIS	C-N-CA	5.48	128.17	120.28
1	A	28	ALA	CA-C-N	5.47	128.06	120.29
1	A	28	ALA	C-N-CA	5.47	128.06	120.29
10	3	51	ILE	N-CA-C	-5.47	100.30	108.46
19	Z	343	LYS	N-CA-C	-5.47	105.21	111.07
19	Z	395	GLY	CA-C-N	5.47	127.56	120.44
19	Z	395	GLY	C-N-CA	5.47	127.56	120.44
19	Z	445	LEU	N-CA-C	5.47	117.25	111.28
21	S	298	TYR	CB-CG-CD2	5.47	129.01	120.80
23	Q	245	PRO	N-CA-C	-5.47	106.57	114.18
27	H	71	GLY	CA-C-N	5.47	130.13	122.08
27	H	71	GLY	C-N-CA	5.47	130.13	122.08
28	I	78	PHE	O-C-N	5.47	127.72	122.03
3	C	67	LYS	CA-C-O	5.47	126.34	120.32
3	C	145	PHE	CB-CA-C	-5.47	100.29	109.65
20	N	865	LYS	N-CA-C	-5.47	101.20	109.85
28	I	269	GLU	CA-C-O	-5.47	114.75	120.55
32	J	314	LYS	N-CA-C	-5.47	99.51	108.76
8	1	194	ALA	CA-C-N	5.47	127.61	120.28
8	1	194	ALA	C-N-CA	5.47	127.61	120.28
11	4	13	VAL	CB-CA-C	-5.47	103.94	111.65
19	Z	598	CYS	CA-C-N	5.47	128.06	120.29
19	Z	598	CYS	C-N-CA	5.47	128.06	120.29
23	Q	156	GLU	O-C-N	5.47	128.00	122.09
7	G	126	TYR	CB-CG-CD1	5.47	129.00	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	1	163	SER	N-CA-CB	5.47	119.73	110.49
16	V	194	HIS	CE1-NE2-CD2	-5.47	103.53	109.00
32	J	271	ARG	CA-C-N	5.47	127.55	120.44
32	J	271	ARG	C-N-CA	5.47	127.55	120.44
4	D	221	GLN	OE1-CD-NE2	-5.47	117.13	122.60
16	V	138	GLU	N-CA-C	-5.47	106.38	113.16
27	H	374	ALA	N-CA-C	5.47	117.24	111.28
2	B	130	PHE	CA-CB-CG	-5.47	108.33	113.80
19	Z	817	VAL	CA-C-N	5.47	129.97	120.68
19	Z	817	VAL	C-N-CA	5.47	129.97	120.68
20	N	117	ASP	CB-CA-C	-5.47	102.06	110.81
21	S	168	VAL	O-C-N	-5.47	114.99	122.26
27	H	235	ALA	N-CA-C	-5.47	101.05	109.52
31	M	67	HIS	N-CA-C	5.47	118.16	111.82
12	5	62	THR	N-CA-C	5.46	122.44	110.80
20	N	87	LEU	CA-C-N	5.46	128.62	120.31
20	N	87	LEU	C-N-CA	5.46	128.62	120.31
20	N	754	HIS	CA-C-N	5.46	128.60	120.90
20	N	754	HIS	C-N-CA	5.46	128.60	120.90
23	Q	178	HIS	CA-CB-CG	5.46	119.26	113.80
15	W	109	ILE	N-CA-C	-5.46	100.25	108.12
19	Z	459	CYS	CB-CA-C	-5.46	102.56	111.68
19	Z	785	ARG	N-CA-C	-5.46	105.42	113.61
20	N	842	LYS	N-CA-C	5.46	117.23	111.28
27	H	78	TRP	N-CA-C	5.46	117.31	111.36
32	J	251	ILE	CA-C-N	5.46	129.89	122.19
32	J	251	ILE	C-N-CA	5.46	129.89	122.19
5	E	36	THR	CA-C-O	5.46	127.28	121.05
15	W	109	ILE	O-C-N	-5.46	117.30	123.20
17	T	351	MET	N-CA-CB	5.46	118.15	110.12
20	N	676	THR	CA-C-O	5.46	126.34	120.55
25	U	114	ARG	NE-CZ-NH2	-5.46	114.28	119.20
28	I	346	ARG	N-CA-C	-5.46	106.53	114.12
29	K	223	THR	CA-CB-OG1	5.46	117.79	109.60
31	M	358	PRO	CA-C-N	5.46	127.98	120.39
31	M	358	PRO	C-N-CA	5.46	127.98	120.39
17	T	260	THR	CA-C-O	-5.46	114.76	120.55
20	N	331	GLY	CA-C-N	5.46	128.04	120.29
20	N	331	GLY	C-N-CA	5.46	128.04	120.29
26	O	169	HIS	ND1-CE1-NE2	5.46	113.86	108.40
3	C	207	SER	N-CA-C	-5.46	100.54	108.07
13	6	111	THR	CA-CB-OG1	5.46	117.79	109.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	246	TYR	CA-C-N	5.46	127.54	120.44
20	N	246	TYR	C-N-CA	5.46	127.54	120.44
22	P	271	VAL	O-C-N	5.46	127.17	121.87
23	Q	122	ARG	N-CA-C	5.46	117.58	110.43
28	I	366	GLN	CB-CG-CD	-5.46	103.32	112.60
29	K	56	VAL	CA-C-N	5.46	127.59	120.28
29	K	56	VAL	C-N-CA	5.46	127.59	120.28
30	L	143	ASN	CA-CB-CG	-5.46	107.14	112.60
2	B	85	VAL	CA-C-N	5.46	128.14	120.28
2	B	85	VAL	C-N-CA	5.46	128.14	120.28
4	D	135	ILE	N-CA-C	5.46	118.40	109.78
5	E	97	GLN	N-CA-CB	5.46	118.74	110.28
15	W	137	ASN	N-CA-CB	5.46	119.25	110.85
17	T	260	THR	O-C-N	5.46	127.90	122.12
20	N	905	PRO	O-C-N	5.46	130.01	122.64
21	S	135	MET	N-CA-C	5.46	117.03	111.14
28	I	78	PHE	CA-C-O	-5.46	115.27	121.00
30	L	268	GLN	OE1-CD-NE2	5.46	128.06	122.60
5	E	73	HIS	CG-CD2-NE2	5.46	112.66	107.20
11	4	15	VAL	N-CA-CB	5.46	119.24	111.82
12	5	122	CYS	CA-C-O	-5.46	115.08	120.70
16	V	247	GLU	CA-C-N	5.46	128.60	120.31
16	V	247	GLU	C-N-CA	5.46	128.60	120.31
29	K	407	ILE	CB-CA-C	5.46	116.26	110.91
31	M	125	ALA	O-C-N	-5.46	116.73	123.33
9	2	198	VAL	N-CA-C	5.45	116.18	110.62
10	3	86	THR	CA-C-N	5.45	128.03	120.29
10	3	86	THR	C-N-CA	5.45	128.03	120.29
12	5	123	ARG	O-C-N	5.45	127.69	122.07
28	I	398	ILE	CA-CB-CG2	-5.45	101.23	110.50
29	K	178	ARG	NH1-CZ-NH2	5.45	126.39	119.30
5	E	197	SER	CB-CA-C	-5.45	101.74	110.79
21	S	56	THR	CA-C-N	5.45	127.58	120.28
21	S	56	THR	C-N-CA	5.45	127.58	120.28
1	A	164	LYS	N-CA-C	-5.45	105.36	112.23
23	Q	24	ILE	CA-C-O	-5.45	115.28	120.95
29	K	102	ILE	O-C-N	5.45	128.70	123.14
29	K	224	THR	CA-CB-OG1	5.45	117.77	109.60
16	V	221	HIS	CE1-NE2-CD2	-5.45	103.55	109.00
20	N	500	ASN	CA-C-O	-5.45	114.77	120.55
23	Q	114	ILE	CB-CA-C	-5.45	104.70	112.22
30	L	190	PRO	N-CA-CB	5.45	108.37	103.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	126	VAL	N-CA-C	-5.45	99.90	107.80
30	L	331	ALA	N-CA-CB	5.45	118.61	110.22
1	A	99	ALA	CB-CA-C	-5.45	101.59	110.85
4	D	73	PHE	CB-CG-CD1	-5.45	111.44	120.70
6	F	32	GLY	O-C-N	5.45	130.06	122.82
8	1	98	PHE	CB-CA-C	-5.45	101.75	110.79
16	V	196	LEU	CA-C-N	5.45	128.02	120.29
16	V	196	LEU	C-N-CA	5.45	128.02	120.29
20	N	921	ILE	CA-CB-CG1	5.45	119.66	110.40
31	M	42	GLU	N-CA-C	5.45	117.22	111.28
32	J	386	ALA	N-CA-C	5.45	117.22	111.28
8	1	206	VAL	N-CA-CB	5.44	120.21	111.23
21	S	397	ASN	OD1-CG-ND2	5.44	128.04	122.60
30	L	243	ILE	N-CA-C	-5.44	100.35	108.46
31	M	276	ALA	N-CA-CB	5.44	118.12	110.12
1	A	75	ASN	N-CA-C	5.44	118.38	111.69
19	Z	524	MET	CA-C-N	5.44	127.92	120.46
19	Z	524	MET	C-N-CA	5.44	127.92	120.46
25	U	145	HIS	CE1-NE2-CD2	-5.44	103.56	109.00
28	I	247	PHE	CB-CG-CD2	5.44	129.95	120.70
22	P	64	SER	O-C-N	5.44	127.96	122.09
32	J	212	ILE	CA-C-N	5.44	130.23	122.72
32	J	212	ILE	C-N-CA	5.44	130.23	122.72
11	4	138	LEU	CA-C-N	5.44	127.57	120.28
11	4	138	LEU	C-N-CA	5.44	127.57	120.28
14	7	55	VAL	N-CA-C	-5.44	101.90	108.53
19	Z	173	LEU	CA-C-N	5.44	130.00	121.08
19	Z	173	LEU	C-N-CA	5.44	130.00	121.08
19	Z	230	CYS	CA-C-N	5.44	127.51	120.44
19	Z	230	CYS	C-N-CA	5.44	127.51	120.44
20	N	447	GLY	CA-C-N	5.44	128.01	120.29
20	N	447	GLY	C-N-CA	5.44	128.01	120.29
23	Q	97	LEU	CB-CA-C	-5.44	101.61	110.85
32	J	129	ASN	CA-CB-CG	5.44	118.04	112.60
16	V	283	HIS	CG-CD2-NE2	5.43	112.63	107.20
17	T	248	PHE	CA-C-N	5.43	130.47	121.99
17	T	248	PHE	C-N-CA	5.43	130.47	121.99
20	N	639	LEU	N-CA-CB	5.43	118.20	110.16
26	O	196	ARG	N-CA-CB	5.43	118.11	110.12
27	H	210	LYS	CB-CA-C	-5.43	100.67	110.23
29	K	195	GLY	CA-C-N	5.43	127.78	120.50
29	K	195	GLY	C-N-CA	5.43	127.78	120.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	283	ARG	CA-C-O	-5.43	114.79	120.55
30	L	265	ARG	N-CA-C	5.43	117.20	111.28
5	E	158	PRO	CA-C-N	5.43	131.94	121.18
5	E	158	PRO	C-N-CA	5.43	131.94	121.18
21	S	372	ASN	OD1-CG-ND2	5.43	128.03	122.60
32	J	333	SER	CA-C-N	5.43	128.10	120.28
32	J	333	SER	C-N-CA	5.43	128.10	120.28
20	N	571	CYS	CA-C-N	5.43	128.00	120.29
20	N	571	CYS	C-N-CA	5.43	128.00	120.29
27	H	200	ARG	N-CA-C	5.43	117.28	111.36
29	K	164	TYR	CB-CG-CD1	-5.43	112.65	120.80
4	D	222	PRO	N-CA-CB	5.43	108.49	103.39
5	E	233	GLU	O-C-N	5.43	128.34	122.15
8	1	71	HIS	O-C-N	5.43	126.90	121.85
9	2	63	ALA	CA-C-N	-5.43	115.33	122.99
9	2	63	ALA	C-N-CA	-5.43	115.33	122.99
19	Z	649	HIS	CE1-NE2-CD2	-5.43	103.57	109.00
23	Q	374	PHE	O-C-N	5.43	128.32	121.64
24	R	188	CYS	CA-C-O	-5.43	114.79	120.55
29	K	326	ARG	NE-CZ-NH1	5.43	126.93	121.50
31	M	372	HIS	CE1-NE2-CD2	-5.43	103.57	109.00
1	A	123	GLN	OE1-CD-NE2	-5.43	117.17	122.60
3	C	18	LEU	N-CA-CB	5.43	119.09	110.57
24	R	174	TRP	CZ3-CH2-CZ2	-5.43	114.44	121.50
10	3	92	ALA	O-C-N	5.43	127.87	122.12
20	N	404	ALA	CA-C-O	-5.43	114.80	120.55
20	N	663	THR	CB-CA-C	-5.43	102.81	111.17
27	H	97	ARG	CB-CA-C	-5.43	98.38	109.94
27	H	422	LYS	N-CA-C	5.43	117.19	111.28
29	K	359	ASP	CA-C-N	5.43	128.00	120.29
29	K	359	ASP	C-N-CA	5.43	128.00	120.29
2	B	23	GLU	CA-C-O	-5.42	114.80	120.55
8	1	119	MET	O-C-N	5.42	127.87	122.12
13	6	185	MET	N-CA-CB	5.42	119.32	110.37
20	N	668	ALA	CA-C-O	-5.42	114.80	120.55
23	Q	263	THR	N-CA-C	-5.42	96.06	108.27
30	L	77	GLN	OE1-CD-NE2	5.42	128.02	122.60
9	2	251	THR	N-CA-C	-5.42	99.25	110.80
16	V	100	LYS	N-CA-CB	5.42	118.09	110.12
19	Z	246	SER	CB-CA-C	-5.42	101.79	110.79
22	P	387	ASP	CA-CB-CG	-5.42	107.18	112.60
26	O	65	SER	N-CA-CB	5.42	117.83	109.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	317	LEU	O-C-N	-5.42	117.20	123.33
30	L	85	VAL	N-CA-C	-5.42	100.38	108.46
25	U	79	TYR	CB-CG-CD2	-5.42	112.67	120.80
32	J	119	ASP	CA-CB-CG	-5.42	107.18	112.60
9	2	229	LEU	N-CA-C	-5.42	96.94	107.62
16	V	178	THR	N-CA-CB	5.42	118.30	109.69
22	P	73	MET	N-CA-CB	5.42	118.08	110.12
27	H	304	ASN	N-CA-CB	5.42	117.93	110.07
28	I	186	ASP	N-CA-C	-5.42	104.27	112.99
13	6	104	HIS	CE1-NE2-CD2	-5.42	103.58	109.00
21	S	338	ILE	CA-C-N	5.42	125.32	119.85
21	S	338	ILE	C-N-CA	5.42	125.32	119.85
21	S	340	ASP	O-C-N	-5.42	115.99	122.65
22	P	143	ALA	CA-C-N	5.42	127.98	120.29
22	P	143	ALA	C-N-CA	5.42	127.98	120.29
23	Q	5	ALA	N-CA-C	5.42	118.10	111.82
27	H	161	VAL	CA-CB-CG2	5.42	119.61	110.40
27	H	187	LEU	CA-C-O	-5.42	114.68	120.42
29	K	376	ASN	CB-CG-ND2	-5.42	108.28	116.40
30	L	381	PHE	CB-CA-C	-5.42	101.64	110.85
19	Z	113	MET	CG-SD-CE	-5.42	88.99	100.90
19	Z	880	ALA	CA-C-O	-5.42	115.71	121.94
26	O	54	ASP	N-CA-C	-5.42	100.50	108.79
13	6	143	GLU	N-CA-C	-5.41	103.34	110.43
22	P	137	TYR	CA-C-N	5.41	129.03	120.47
22	P	137	TYR	C-N-CA	5.41	129.03	120.47
24	R	40	GLU	N-CA-C	5.41	117.26	111.36
27	H	139	ARG	CD-NE-CZ	-5.41	116.82	124.40
28	I	272	ARG	CA-C-N	5.41	127.88	120.46
28	I	272	ARG	C-N-CA	5.41	127.88	120.46
32	J	105	ILE	N-CA-C	-5.41	107.70	112.90
9	2	206	ILE	CA-C-N	5.41	127.47	120.44
9	2	206	ILE	C-N-CA	5.41	127.47	120.44
13	6	127	ARG	CD-NE-CZ	-5.41	116.82	124.40
23	Q	234	GLU	O-C-N	-5.41	116.38	122.12
23	Q	304	LYS	CA-C-N	5.41	127.53	120.28
23	Q	304	LYS	C-N-CA	5.41	127.53	120.28
26	O	73	PRO	CB-CA-C	5.41	121.55	112.62
27	H	382	GLY	O-C-N	-5.41	116.99	122.19
13	6	232	GLU	N-CA-CB	5.41	118.99	110.23
19	Z	174	ASP	N-CA-C	-5.41	104.94	112.03
21	S	64	ASP	CB-CA-C	-5.41	102.35	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	327	VAL	CA-C-N	5.41	127.53	120.28
24	R	327	VAL	C-N-CA	5.41	127.53	120.28
26	O	82	HIS	ND1-CE1-NE2	5.41	113.81	108.40
28	I	217	LYS	CA-C-O	-5.41	114.88	119.59
31	M	188	TYR	O-C-N	-5.41	115.89	122.22
31	M	348	SER	CA-C-N	5.41	132.01	121.41
31	M	348	SER	C-N-CA	5.41	132.01	121.41
12	5	145	MET	N-CA-C	5.41	117.25	111.36
21	S	467	GLU	N-CA-C	5.41	121.03	113.57
22	P	12	ARG	N-CA-C	-5.41	98.55	108.02
30	L	205	LEU	CA-C-N	5.41	130.25	122.35
30	L	205	LEU	C-N-CA	5.41	130.25	122.35
31	M	313	MET	CA-C-N	5.41	127.97	120.29
31	M	313	MET	C-N-CA	5.41	127.97	120.29
16	V	240	HIS	CA-C-O	-5.41	115.14	120.82
20	N	691	SER	N-CA-C	-5.41	105.28	111.07
25	U	214	LYS	N-CA-CB	5.41	118.16	110.16
32	J	287	LYS	N-CA-C	-5.41	99.87	109.06
10	3	53	LEU	CB-CA-C	-5.41	99.05	109.37
11	4	11	ASP	N-CA-C	-5.41	101.28	108.74
20	N	638	SER	O-C-N	-5.41	116.39	122.12
28	I	270	LEU	CA-C-N	5.41	128.53	120.31
28	I	270	LEU	C-N-CA	5.41	128.53	120.31
30	L	18	PRO	N-CA-CB	5.41	108.70	103.51
30	L	34	LYS	CA-C-O	-5.41	115.13	120.70
4	D	129	GLY	O-C-N	5.40	128.05	122.54
6	F	155	ASP	CA-CB-CG	5.40	118.00	112.60
14	7	236	VAL	CA-C-N	5.40	131.06	122.74
14	7	236	VAL	C-N-CA	5.40	131.06	122.74
16	V	113	HIS	CB-CG-ND1	5.40	130.80	122.70
19	Z	848	GLN	OE1-CD-NE2	5.40	128.00	122.60
21	S	50	ASP	CA-CB-CG	5.40	118.00	112.60
7	G	228	VAL	CA-C-N	5.40	126.16	120.11
7	G	228	VAL	C-N-CA	5.40	126.16	120.11
8	1	72	ASP	N-CA-C	-5.40	99.30	110.80
20	N	363	SER	N-CA-C	-5.40	99.30	110.80
22	P	80	TRP	CA-C-N	5.40	127.52	120.28
22	P	80	TRP	C-N-CA	5.40	127.52	120.28
27	H	273	PHE	N-CA-CB	5.40	119.30	110.39
32	J	205	HIS	CE1-NE2-CD2	-5.40	103.60	109.00
2	B	14	SER	N-CA-C	-5.40	103.92	110.13
20	N	154	ALA	CA-C-O	5.40	126.27	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	6	228	GLU	N-CA-C	-5.40	101.32	109.85
15	W	111	ALA	N-CA-C	-5.40	100.22	109.24
11	4	132	HIS	CE1-NE2-CD2	-5.40	103.60	109.00
19	Z	785	ARG	CA-C-N	5.40	132.02	121.66
19	Z	785	ARG	C-N-CA	5.40	132.02	121.66
20	N	240	ASP	CA-CB-CG	5.40	118.00	112.60
23	Q	382	GLU	CA-CB-CG	5.40	124.89	114.10
3	C	3	ARG	CA-C-O	5.39	126.17	119.97
7	G	138	LEU	N-CA-C	-5.39	100.61	109.40
16	V	89	PRO	CA-C-O	-5.39	111.41	119.34
22	P	119	PRO	CA-C-N	5.39	127.85	120.46
22	P	119	PRO	C-N-CA	5.39	127.85	120.46
23	Q	269	ALA	O-C-N	-5.39	116.00	122.15
26	O	295	GLU	CA-C-N	5.39	127.85	120.46
26	O	295	GLU	C-N-CA	5.39	127.85	120.46
10	3	86	THR	CA-C-O	5.39	126.27	120.55
13	6	58	GLU	CA-C-N	5.39	125.76	121.61
13	6	58	GLU	C-N-CA	5.39	125.76	121.61
23	Q	287	LEU	CA-C-N	5.39	127.45	120.44
23	Q	287	LEU	C-N-CA	5.39	127.45	120.44
3	C	103	GLU	N-CA-CB	5.39	118.26	110.77
31	M	93	VAL	O-C-N	-5.39	117.37	123.03
4	D	179	GLU	CA-C-N	5.39	127.94	120.29
4	D	179	GLU	C-N-CA	5.39	127.94	120.29
30	L	324	LEU	N-CA-C	5.39	116.84	111.07
8	1	133	ILE	O-C-N	-5.39	117.49	123.20
20	N	103	LYS	CA-C-N	5.39	127.50	120.28
20	N	103	LYS	C-N-CA	5.39	127.50	120.28
21	S	251	LEU	CA-C-N	5.39	127.94	120.29
21	S	251	LEU	C-N-CA	5.39	127.94	120.29
23	Q	418	ALA	O-C-N	5.39	128.52	122.22
28	I	95	GLU	O-C-N	5.39	127.83	122.12
32	J	11	LEU	N-CA-C	5.39	118.32	111.69
1	A	101	TRP	N-CA-C	5.39	116.83	111.07
6	F	203	GLN	O-C-N	5.39	129.71	123.30
10	3	91	VAL	CA-C-O	5.39	126.56	120.85
22	P	270	VAL	CA-CB-CG1	5.39	119.56	110.40
30	L	364	ALA	CA-C-N	5.39	127.06	120.22
30	L	364	ALA	C-N-CA	5.39	127.06	120.22
32	J	51	GLU	N-CA-C	-5.39	105.41	111.28
8	1	161	GLY	N-CA-C	-5.38	102.60	111.38
12	5	198	MET	N-CA-CB	5.38	117.82	110.01

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	V	255	TYR	CA-C-N	5.38	127.50	120.28
16	V	255	TYR	C-N-CA	5.38	127.50	120.28
19	Z	417	ILE	N-CA-CB	5.38	117.46	110.57
20	N	912	ILE	CA-C-O	5.38	127.51	120.78
21	S	377	GLN	N-CA-C	-5.38	105.49	111.36
22	P	285	ASP	CA-C-N	5.38	127.76	120.44
22	P	285	ASP	C-N-CA	5.38	127.76	120.44
25	U	43	TRP	CA-C-N	5.38	131.83	121.54
25	U	43	TRP	C-N-CA	5.38	131.83	121.54
30	L	337	HIS	ND1-CE1-NE2	5.38	113.78	108.40
21	S	223	VAL	CA-C-N	5.38	127.49	120.28
21	S	223	VAL	C-N-CA	5.38	127.49	120.28
5	E	73	HIS	N-CA-C	-5.38	104.33	112.99
20	N	229	VAL	N-CA-C	-5.38	105.28	110.72
21	S	322	GLN	CA-C-N	5.38	127.49	120.28
21	S	322	GLN	C-N-CA	5.38	127.49	120.28
22	P	109	CYS	CA-C-N	5.38	127.49	120.28
22	P	109	CYS	C-N-CA	5.38	127.49	120.28
30	L	52	LYS	N-CA-CB	5.38	118.03	110.12
30	L	138	HIS	CE1-NE2-CD2	-5.38	103.62	109.00
30	L	342	TYR	CA-C-N	5.38	127.49	120.28
30	L	342	TYR	C-N-CA	5.38	127.49	120.28
7	G	230	LYS	CA-C-N	5.38	127.43	120.44
7	G	230	LYS	C-N-CA	5.38	127.43	120.44
21	S	199	LEU	N-CA-CB	5.38	118.12	110.16
24	R	164	ALA	O-C-N	5.38	127.82	122.12
27	H	307	ASP	CA-C-N	5.38	131.95	121.41
27	H	307	ASP	C-N-CA	5.38	131.95	121.41
9	2	96	ASP	N-CA-C	5.38	117.22	111.36
19	Z	720	GLU	CA-C-N	5.38	131.65	121.97
19	Z	720	GLU	C-N-CA	5.38	131.65	121.97
21	S	486	SER	CA-C-N	5.38	127.34	120.56
21	S	486	SER	C-N-CA	5.38	127.34	120.56
3	C	91	ARG	O-C-N	-5.38	116.28	122.09
4	D	90	ILE	CA-C-O	-5.38	115.47	121.17
10	3	101	GLY	N-CA-C	-5.38	101.37	112.34
26	O	319	LEU	CB-CA-C	-5.38	100.35	110.67
8	1	44	GLY	O-C-N	5.38	129.69	122.70
11	4	157	VAL	CA-CB-CG1	5.38	119.54	110.40
19	Z	8	LYS	CA-C-N	5.38	126.81	120.09
19	Z	8	LYS	C-N-CA	5.38	126.81	120.09
19	Z	119	LYS	CA-C-N	5.38	127.43	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	119	LYS	C-N-CA	5.38	127.43	120.44
24	R	163	LYS	N-CA-C	5.38	116.82	111.07
27	H	104	ALA	CA-C-N	5.38	131.81	121.54
27	H	104	ALA	C-N-CA	5.38	131.81	121.54
7	G	86	ARG	N-CA-CB	5.37	118.11	110.16
19	Z	294	MET	CG-SD-CE	-5.37	89.08	100.90
19	Z	805	ASP	N-CA-C	-5.37	101.78	110.32
21	S	125	ASP	N-CA-C	5.37	122.25	110.80
21	S	462	ILE	CA-CB-CG1	5.37	119.53	110.40
24	R	283	LYS	CA-C-N	5.37	127.92	120.29
24	R	283	LYS	C-N-CA	5.37	127.92	120.29
27	H	314	ASN	CA-CB-CG	5.37	117.97	112.60
30	L	289	MET	CG-SD-CE	-5.37	89.08	100.90
32	J	180	ILE	CA-C-O	-5.37	114.04	121.51
6	F	126	ARG	NE-CZ-NH2	5.37	124.03	119.20
17	T	206	ASN	N-CA-CB	5.37	119.57	110.49
22	P	209	ILE	CA-CB-CG2	5.37	119.63	110.50
4	D	11	SER	CA-C-N	5.37	125.45	119.87
4	D	11	SER	C-N-CA	5.37	125.45	119.87
7	G	54	VAL	N-CA-CB	5.37	118.04	111.60
16	V	180	ASN	CA-CB-CG	5.37	117.97	112.60
21	S	128	LEU	CA-C-N	5.37	126.55	119.84
21	S	128	LEU	C-N-CA	5.37	126.55	119.84
22	P	246	HIS	CA-C-O	5.37	126.24	120.55
3	C	117	ILE	CA-C-N	5.37	127.47	120.28
3	C	117	ILE	C-N-CA	5.37	127.47	120.28
3	C	230	GLN	CA-C-N	5.37	127.42	120.44
3	C	230	GLN	C-N-CA	5.37	127.42	120.44
6	F	119	PRO	N-CA-CB	5.37	109.21	103.52
7	G	32	GLU	N-CA-C	5.37	117.88	111.71
9	2	53	ASP	N-CA-C	-5.37	106.11	113.30
20	N	766	PHE	CA-CB-CG	5.37	119.17	113.80
21	S	262	GLN	O-C-N	5.37	127.81	122.12
24	R	371	LYS	N-CA-C	5.37	116.81	111.07
26	O	346	ILE	CA-CB-CG1	5.37	119.53	110.40
26	O	23	HIS	CA-C-N	5.37	127.47	120.28
26	O	23	HIS	C-N-CA	5.37	127.47	120.28
27	H	166	VAL	CA-C-O	-5.37	114.23	120.99
19	Z	386	GLY	N-CA-C	-5.37	100.46	113.18
21	S	233	THR	CA-C-N	5.37	128.47	120.31
21	S	233	THR	C-N-CA	5.37	128.47	120.31
24	R	153	ASP	CA-C-O	-5.37	114.56	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	412	GLN	N-CA-C	-5.37	105.00	112.03
31	M	402	VAL	CA-CB-CG1	5.37	119.52	110.40
1	A	49	VAL	CA-CB-CG2	5.36	119.52	110.40
1	A	67	THR	N-CA-C	-5.36	100.37	108.52
10	3	93	ASN	N-CA-CB	5.36	118.01	110.12
17	T	331	SER	N-CA-CB	5.36	118.03	110.90
20	N	746	ILE	CA-C-O	-5.36	114.94	120.25
25	U	197	GLY	CA-C-O	-5.36	115.22	120.75
29	K	173	GLN	CG-CD-NE2	-5.36	108.35	116.40
30	L	44	ARG	CA-C-N	5.36	127.47	120.28
30	L	44	ARG	C-N-CA	5.36	127.47	120.28
31	M	353	ARG	NE-CZ-NH2	5.36	124.03	119.20
32	J	377	HIS	N-CA-C	-5.36	101.03	109.50
21	S	368	LEU	CA-C-N	5.36	127.47	120.28
21	S	368	LEU	C-N-CA	5.36	127.47	120.28
7	G	14	THR	CA-CB-CG2	-5.36	101.39	110.50
9	2	245	TYR	N-CA-C	5.36	117.00	110.41
11	4	24	ASN	OD1-CG-ND2	5.36	127.96	122.60
14	7	117	ASP	N-CA-CB	5.36	118.09	110.16
16	V	240	HIS	CG-CD2-NE2	5.36	112.56	107.20
20	N	248	ILE	CB-CA-C	-5.36	104.90	112.14
20	N	394	ALA	CB-CA-C	-5.36	101.89	110.79
23	Q	84	LYS	CA-C-N	5.36	127.46	120.28
23	Q	84	LYS	C-N-CA	5.36	127.46	120.28
5	E	202	LEU	CA-C-N	5.36	127.46	120.28
5	E	202	LEU	C-N-CA	5.36	127.46	120.28
7	G	3	SER	CB-CA-C	-5.36	102.73	111.68
11	4	168	GLN	OE1-CD-NE2	5.36	127.96	122.60
15	W	10	VAL	CA-CB-CG2	5.36	119.51	110.40
23	Q	367	GLN	CA-C-N	5.36	127.90	120.29
23	Q	367	GLN	C-N-CA	5.36	127.90	120.29
30	L	345	ILE	CA-C-N	5.36	127.80	120.46
30	L	345	ILE	C-N-CA	5.36	127.80	120.46
8	1	168	ILE	CB-CA-C	-5.36	104.54	111.88
14	7	117	ASP	O-C-N	5.36	128.26	122.15
23	Q	394	ASP	CA-C-N	5.36	128.45	120.31
23	Q	394	ASP	C-N-CA	5.36	128.45	120.31
25	U	210	THR	CA-C-N	5.36	127.46	120.28
25	U	210	THR	C-N-CA	5.36	127.46	120.28
27	H	80	LEU	CA-C-N	5.36	127.90	120.29
27	H	80	LEU	C-N-CA	5.36	127.90	120.29
2	B	147	PHE	N-CA-C	-5.36	101.22	109.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	17	PHE	CA-CB-CG	5.36	119.16	113.80
5	E	109	VAL	CA-C-N	5.36	127.40	120.44
5	E	109	VAL	C-N-CA	5.36	127.40	120.44
10	3	29	GLY	O-C-N	-5.36	115.74	122.70
11	4	11	ASP	CA-C-N	-5.36	114.12	122.37
11	4	11	ASP	C-N-CA	-5.36	114.12	122.37
11	4	128	PRO	N-CD-CG	5.36	111.23	103.20
13	6	203	LYS	CB-CA-C	-5.36	100.39	110.67
22	P	126	ASP	CA-C-N	5.36	127.89	120.29
22	P	126	ASP	C-N-CA	5.36	127.89	120.29
24	R	125	ARG	CA-C-N	5.36	127.46	120.28
24	R	125	ARG	C-N-CA	5.36	127.46	120.28
25	U	100	LYS	CA-C-O	-5.36	115.70	121.38
25	U	179	ILE	CA-C-N	5.36	131.77	121.54
25	U	179	ILE	C-N-CA	5.36	131.77	121.54
26	O	106	SER	N-CA-CB	5.36	119.54	110.49
11	4	75	LEU	CA-C-O	-5.35	115.69	121.36
27	H	265	ARG	N-CA-C	5.35	117.12	111.28
32	J	13	GLU	N-CA-CB	5.35	118.24	110.26
8	1	122	ARG	CB-CA-C	-5.35	101.91	110.79
9	2	94	ASP	CA-CB-CG	5.35	117.95	112.60
13	6	83	GLY	N-CA-C	-5.35	100.49	113.18
16	V	53	VAL	CA-CB-CG2	-5.35	101.30	110.40
22	P	207	LYS	CG-CD-CE	5.35	123.61	111.30
27	H	94	GLN	N-CA-C	-5.35	100.97	109.96
28	I	226	GLY	CA-C-N	5.35	125.89	120.38
28	I	226	GLY	C-N-CA	5.35	125.89	120.38
10	3	108	VAL	CB-CA-C	5.35	117.80	111.32
16	V	44	HIS	O-C-N	-5.35	116.31	122.09
20	N	151	ILE	CA-CB-CG2	-5.35	101.40	110.50
24	R	40	GLU	CA-C-N	5.35	128.44	120.31
24	R	40	GLU	C-N-CA	5.35	128.44	120.31
9	2	55	ILE	CA-C-O	-5.35	114.09	120.78
30	L	123	ARG	O-C-N	5.35	128.60	123.04
1	A	12	HIS	CE1-NE2-CD2	-5.35	103.65	109.00
2	B	224	THR	CA-CB-OG1	5.35	117.62	109.60
10	3	73	LEU	CA-C-N	5.35	127.44	120.28
10	3	73	LEU	C-N-CA	5.35	127.44	120.28
19	Z	815	HIS	CA-C-N	5.35	130.16	122.35
19	Z	815	HIS	C-N-CA	5.35	130.16	122.35
21	S	281	TRP	CB-CG-CD2	-5.35	119.31	126.80
23	Q	86	ALA	CA-C-N	5.35	127.45	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	86	ALA	C-N-CA	5.35	127.45	120.28
19	Z	215	ASP	CA-C-N	5.35	127.98	120.28
19	Z	215	ASP	C-N-CA	5.35	127.98	120.28
19	Z	868	HIS	CE1-NE2-CD2	-5.35	103.65	109.00
20	N	372	ALA	N-CA-C	5.35	116.79	111.07
5	E	99	HIS	CG-CD2-NE2	5.34	112.54	107.20
13	6	80	GLY	N-CA-C	-5.34	100.51	113.18
19	Z	122	ALA	CA-C-N	5.34	127.44	120.28
19	Z	122	ALA	C-N-CA	5.34	127.44	120.28
19	Z	137	ARG	NE-CZ-NH2	-5.34	114.39	119.20
21	S	389	THR	CA-C-N	5.34	128.43	120.31
21	S	389	THR	C-N-CA	5.34	128.43	120.31
22	P	223	LYS	N-CA-C	5.34	117.11	111.28
23	Q	169	VAL	O-C-N	5.34	127.46	121.90
24	R	187	TYR	CA-C-N	5.34	127.44	120.28
24	R	187	TYR	C-N-CA	5.34	127.44	120.28
26	O	40	GLN	CA-C-O	-5.34	114.88	120.55
27	H	369	ARG	NH1-CZ-NH2	5.34	126.25	119.30
9	2	124	ARG	NE-CZ-NH2	-5.34	114.39	119.20
17	T	121	ARG	CA-C-O	-5.34	114.76	120.42
20	N	580	ARG	N-CA-CB	5.34	118.56	110.28
21	S	75	VAL	CA-C-N	5.34	127.39	120.44
21	S	75	VAL	C-N-CA	5.34	127.39	120.44
22	P	103	LYS	CA-C-N	5.34	127.88	120.29
22	P	103	LYS	C-N-CA	5.34	127.88	120.29
26	O	367	VAL	N-CA-CB	5.34	117.81	110.54
1	A	47	CYS	N-CA-C	-5.34	100.95	109.07
9	2	62	ARG	CA-C-N	5.34	131.74	121.54
9	2	62	ARG	C-N-CA	5.34	131.74	121.54
12	5	100	LEU	CA-C-N	5.34	127.44	120.28
12	5	100	LEU	C-N-CA	5.34	127.44	120.28
12	5	222	ALA	CA-C-N	5.34	128.43	120.31
12	5	222	ALA	C-N-CA	5.34	128.43	120.31
15	W	139	ASP	CA-C-O	-5.34	115.05	120.71
17	T	149	ASP	CA-C-O	-5.34	115.21	120.82
19	Z	379	GLY	O-C-N	-5.34	117.01	122.19
20	N	5	ALA	CA-C-N	5.34	127.70	120.38
20	N	5	ALA	C-N-CA	5.34	127.70	120.38
24	R	158	THR	CA-C-N	5.34	127.39	120.44
24	R	158	THR	C-N-CA	5.34	127.39	120.44
29	K	147	ALA	CA-C-O	-5.34	115.33	121.47
2	B	179	ASN	N-CA-C	-5.34	101.64	109.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	V	185	ASN	CA-CB-CG	5.34	117.94	112.60
19	Z	159	VAL	CA-C-N	5.34	127.97	120.28
19	Z	159	VAL	C-N-CA	5.34	127.97	120.28
19	Z	666	ILE	CA-C-O	-5.34	115.40	120.95
20	N	617	ALA	O-C-N	5.34	127.78	122.12
28	I	167	THR	N-CA-C	5.34	122.17	110.80
30	L	255	ARG	N-CA-C	-5.34	101.37	108.74
2	B	182	LEU	CA-C-O	-5.34	115.38	121.68
19	Z	311	VAL	CA-C-N	5.34	128.42	120.95
19	Z	311	VAL	C-N-CA	5.34	128.42	120.95
21	S	480	LEU	N-CA-C	-5.34	105.54	111.36
29	K	291	GLU	N-CA-C	-5.34	105.54	111.36
1	A	48	ALA	CA-C-O	-5.34	114.56	120.38
9	2	102	ILE	CA-CB-CG1	5.34	119.47	110.40
12	5	179	ARG	NE-CZ-NH2	-5.34	114.40	119.20
13	6	104	HIS	N-CA-CB	5.34	117.97	110.12
22	P	344	THR	CA-CB-CG2	-5.34	101.43	110.50
28	I	163	LEU	CA-C-N	5.34	130.25	121.39
28	I	163	LEU	C-N-CA	5.34	130.25	121.39
19	Z	864	GLY	CA-C-N	5.33	128.39	120.17
19	Z	864	GLY	C-N-CA	5.33	128.39	120.17
27	H	426	THR	CA-C-O	-5.33	113.17	118.34
1	A	32	ILE	O-C-N	5.33	127.04	121.87
4	D	61	LYS	CA-C-O	5.33	124.92	119.05
17	T	190	TYR	CA-C-N	5.33	127.96	120.28
17	T	190	TYR	C-N-CA	5.33	127.96	120.28
20	N	499	THR	N-CA-C	5.33	117.09	111.28
22	P	242	SER	O-C-N	-5.33	116.58	122.07
24	R	388	ASN	CA-CB-CG	5.33	117.93	112.60
28	I	155	LYS	O-C-N	5.33	127.77	122.12
2	B	130	PHE	CB-CG-CD1	5.33	129.76	120.70
4	D	167	ILE	N-CA-C	-5.33	100.05	108.90
16	V	178	THR	O-C-N	5.33	129.47	122.97
16	V	188	SER	CB-CA-C	-5.33	104.15	111.51
16	V	283	HIS	O-C-N	-5.33	116.07	122.15
22	P	226	TYR	CA-C-N	5.33	127.42	120.28
22	P	226	TYR	C-N-CA	5.33	127.42	120.28
23	Q	302	PHE	CA-C-N	5.33	127.86	120.29
23	Q	302	PHE	C-N-CA	5.33	127.86	120.29
26	O	169	HIS	CG-CD2-NE2	5.33	112.53	107.20
27	H	268	LYS	O-C-N	5.33	129.26	123.13
28	I	190	LEU	CA-C-N	5.33	127.42	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	I	190	LEU	C-N-CA	5.33	127.42	120.28
32	J	35	VAL	CA-CB-CG1	5.33	119.47	110.40
19	Z	585	GLU	CA-C-O	-5.33	115.36	120.64
20	N	812	ALA	CA-C-N	5.33	134.81	121.80
20	N	812	ALA	C-N-CA	5.33	134.81	121.80
23	Q	204	PRO	CA-C-N	5.33	127.86	120.29
23	Q	204	PRO	C-N-CA	5.33	127.86	120.29
8	1	61	ASN	N-CA-C	-5.33	105.55	111.36
13	6	191	VAL	CG1-CB-CG2	5.33	122.52	110.80
17	T	232	PRO	N-CD-CG	5.33	111.19	103.20
21	S	149	LYS	N-CA-CB	5.33	117.95	110.12
21	S	264	GLU	CA-C-N	5.33	128.41	120.31
21	S	264	GLU	C-N-CA	5.33	128.41	120.31
24	R	253	LEU	N-CA-C	5.33	121.59	109.81
25	U	96	HIS	CG-CD2-NE2	5.33	112.53	107.20
26	O	284	ARG	NE-CZ-NH2	-5.33	114.40	119.20
28	I	259	TYR	CA-C-O	-5.33	115.34	121.47
30	L	124	TYR	N-CA-CB	-5.33	101.94	110.63
31	M	108	GLU	N-CA-CB	5.33	119.50	110.49
31	M	423	TYR	CA-C-N	5.33	127.42	120.28
31	M	423	TYR	C-N-CA	5.33	127.42	120.28
6	F	91	GLU	CA-C-O	-5.33	114.77	120.42
19	Z	143	ARG	CA-C-N	5.33	127.42	120.28
19	Z	143	ARG	C-N-CA	5.33	127.42	120.28
19	Z	441	LYS	N-CA-CB	5.33	117.95	110.12
26	O	4	VAL	CA-C-O	-5.33	112.81	119.95
6	F	149	PRO	N-CA-CB	5.33	108.58	103.52
19	Z	565	ASN	CA-C-N	5.33	127.95	120.28
19	Z	565	ASN	C-N-CA	5.33	127.95	120.28
19	Z	863	THR	N-CA-C	-5.33	99.73	108.41
23	Q	38	ASN	OD1-CG-ND2	5.33	127.93	122.60
23	Q	264	PRO	CA-C-N	5.33	127.36	120.44
23	Q	264	PRO	C-N-CA	5.33	127.36	120.44
23	Q	335	LEU	N-CA-C	5.33	117.09	111.28
32	J	186	VAL	N-CA-C	-5.33	99.89	107.77
7	G	123	TYR	CB-CA-C	-5.32	101.80	110.85
23	Q	212	MET	CA-CB-CG	-5.32	103.45	114.10
27	H	40	THR	CA-C-N	5.32	127.85	120.29
27	H	40	THR	C-N-CA	5.32	127.85	120.29
28	I	87	PRO	O-C-N	-5.32	115.45	122.64
32	J	173	GLU	CB-CA-C	-5.32	102.52	110.88
32	J	402	LYS	CA-CB-CG	5.32	124.75	114.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	E	204	GLN	N-CA-CB	5.32	117.94	110.12
14	7	55	VAL	CA-C-N	5.32	131.70	121.54
14	7	55	VAL	C-N-CA	5.32	131.70	121.54
7	G	71	ASP	CA-C-O	-5.32	115.41	121.58
10	3	91	VAL	N-CA-CB	5.32	118.56	110.58
13	6	160	ASP	O-C-N	5.32	129.11	123.42
19	Z	782	HIS	CA-C-O	-5.32	114.91	120.55
20	N	604	HIS	CG-CD2-NE2	5.32	112.52	107.20
21	S	200	ASP	CA-C-O	-5.32	114.09	120.10
14	7	117	ASP	CB-CA-C	-5.32	101.81	110.85
17	T	168	GLU	CA-C-O	-5.32	114.78	120.42
20	N	260	PHE	N-CA-C	-5.32	105.48	111.28
21	S	186	ASP	CA-C-O	5.32	126.06	120.42
25	U	12	HIS	CA-C-O	-5.32	113.61	121.27
8	1	142	GLY	CA-C-N	5.32	131.69	121.54
8	1	142	GLY	C-N-CA	5.32	131.69	121.54
12	5	211	ALA	O-C-N	5.32	128.21	122.15
19	Z	710	LEU	N-CA-CB	5.32	118.03	110.16
20	N	533	VAL	N-CA-CB	5.32	116.77	110.55
30	L	60	ASP	CA-C-N	5.32	127.40	120.28
30	L	60	ASP	C-N-CA	5.32	127.40	120.28
31	M	265	GLY	N-CA-C	-5.32	108.75	115.08
2	B	117	VAL	CA-C-N	5.32	127.40	120.28
2	B	117	VAL	C-N-CA	5.32	127.40	120.28
6	F	81	ALA	CB-CA-C	-5.32	101.81	110.85
23	Q	130	GLU	CA-C-N	5.32	127.40	120.28
23	Q	130	GLU	C-N-CA	5.32	127.40	120.28
25	U	102	HIS	CG-CD2-NE2	5.32	112.52	107.20
32	J	201	ARG	N-CA-CB	-5.32	102.29	110.16
20	N	404	ALA	O-C-N	5.31	127.75	122.12
20	N	475	HIS	CA-C-N	5.31	125.88	119.98
20	N	475	HIS	C-N-CA	5.31	125.88	119.98
23	Q	299	LEU	CA-C-N	5.31	127.40	120.28
23	Q	299	LEU	C-N-CA	5.31	127.40	120.28
31	M	356	GLU	N-CA-CB	5.31	119.07	110.41
6	F	20	HIS	N-CA-CB	5.31	118.40	110.22
9	2	226	LEU	N-CA-CB	5.31	118.94	110.65
20	N	7	GLY	CA-C-N	5.31	127.74	120.46
20	N	7	GLY	C-N-CA	5.31	127.74	120.46
22	P	182	ARG	CA-C-N	5.31	127.74	120.46
22	P	182	ARG	C-N-CA	5.31	127.74	120.46
3	C	245	ALA	CA-C-N	5.31	127.93	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	245	ALA	C-N-CA	5.31	127.93	120.28
4	D	191	ASP	N-CA-CB	5.31	118.02	110.16
5	E	87	THR	N-CA-C	5.31	117.07	111.28
8	1	106	PRO	N-CA-CB	5.31	108.23	103.08
15	W	108	ARG	NE-CZ-NH2	-5.31	114.42	119.20
29	K	207	PRO	N-CA-C	-5.31	104.90	110.58
6	F	88	MET	CA-C-N	5.31	127.83	120.29
6	F	88	MET	C-N-CA	5.31	127.83	120.29
10	3	62	THR	CA-C-O	-5.31	115.43	121.00
11	4	97	PRO	N-CA-C	5.31	123.41	112.47
11	4	118	MET	N-CA-C	-5.31	100.75	109.40
16	V	271	ALA	CA-C-N	5.31	127.36	120.56
16	V	271	ALA	C-N-CA	5.31	127.36	120.56
17	T	163	ASP	N-CA-CB	5.31	119.15	110.39
19	Z	594	LEU	CA-C-O	-5.31	114.92	120.55
20	N	647	HIS	CA-CB-CG	-5.31	108.49	113.80
24	R	111	LEU	CA-C-N	5.31	127.40	120.28
24	R	111	LEU	C-N-CA	5.31	127.40	120.28
24	R	365	GLN	CA-C-N	5.31	127.39	120.28
24	R	365	GLN	C-N-CA	5.31	127.39	120.28
3	C	81	SER	O-C-N	5.31	127.54	122.07
17	T	120	GLY	CA-C-N	5.31	127.83	120.29
17	T	120	GLY	C-N-CA	5.31	127.83	120.29
19	Z	53	GLN	OE1-CD-NE2	5.31	127.91	122.60
20	N	663	THR	CA-C-N	5.31	129.26	121.67
20	N	663	THR	C-N-CA	5.31	129.26	121.67
21	S	434	VAL	N-CA-CB	5.31	117.76	110.54
24	R	248	GLU	CA-C-N	5.31	127.25	120.56
24	R	248	GLU	C-N-CA	5.31	127.25	120.56
27	H	44	GLN	O-C-N	-5.31	115.74	122.27
30	L	304	LEU	CA-C-O	5.31	126.07	119.97
32	J	92	GLU	N-CA-C	-5.31	101.57	109.96
5	E	20	ARG	CG-CD-NE	-5.31	100.33	112.00
15	W	47	ASN	CA-CB-CG	-5.31	107.29	112.60
16	V	136	LEU	CB-CA-C	-5.31	102.52	110.90
20	N	633	CYS	O-C-N	5.30	125.20	120.48
20	N	930	ALA	N-CA-C	5.30	116.79	109.15
30	L	40	LEU	CA-C-N	5.30	127.82	120.29
30	L	40	LEU	C-N-CA	5.30	127.82	120.29
23	Q	192	SER	CA-C-N	5.30	127.39	120.28
23	Q	192	SER	C-N-CA	5.30	127.39	120.28
24	R	152	MET	CA-C-N	-5.30	115.52	123.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	152	MET	C-N-CA	-5.30	115.52	123.00
7	G	118	MET	CA-CB-CG	-5.30	103.50	114.10
11	4	158	GLU	CA-C-N	5.30	127.82	120.29
11	4	158	GLU	C-N-CA	5.30	127.82	120.29
13	6	45	GLU	CB-CA-C	-5.30	100.57	109.48
27	H	253	GLY	CA-C-O	-5.30	115.04	120.66
28	I	209	GLU	CA-C-N	5.30	127.38	120.28
28	I	209	GLU	C-N-CA	5.30	127.38	120.28
32	J	326	LEU	N-CA-C	5.30	116.74	111.07
2	B	225	GLU	CB-CA-C	-5.30	101.84	110.85
10	3	58	THR	N-CA-C	5.30	118.00	110.10
19	Z	334	ALA	CA-C-N	-5.30	113.23	120.44
19	Z	334	ALA	C-N-CA	-5.30	113.23	120.44
20	N	184	CYS	N-CA-C	-5.30	105.50	111.28
20	N	567	ILE	N-CA-C	5.30	116.07	110.72
20	N	680	VAL	CA-C-N	5.30	127.65	120.44
20	N	680	VAL	C-N-CA	5.30	127.65	120.44
23	Q	114	ILE	CA-C-O	-5.30	115.23	120.85
28	I	247	PHE	CB-CG-CD1	-5.30	111.69	120.70
3	C	50	ARG	CA-C-N	5.30	131.55	123.23
3	C	50	ARG	C-N-CA	5.30	131.55	123.23
27	H	226	ALA	N-CA-CB	5.30	117.91	110.12
32	J	268	GLU	CB-CA-C	-5.30	102.00	110.79
1	A	85	ALA	N-CA-C	5.30	116.74	111.07
3	C	115	CYS	CB-CA-C	-5.30	102.00	110.79
10	3	95	LEU	CA-C-N	5.30	127.81	120.29
10	3	95	LEU	C-N-CA	5.30	127.81	120.29
14	7	159	TYR	N-CA-C	-5.30	100.27	108.90
21	S	238	HIS	CG-CD2-NE2	5.30	112.50	107.20
27	H	418	LYS	N-CA-C	5.30	116.91	111.03
32	J	306	LEU	CA-C-O	5.30	126.03	120.42
4	D	111	GLU	N-CA-C	-5.29	105.51	111.28
19	Z	87	THR	CB-CA-C	-5.29	102.53	110.90
1	A	221	THR	CA-C-N	5.29	129.82	121.09
1	A	221	THR	C-N-CA	5.29	129.82	121.09
10	3	203	ARG	CA-C-N	5.29	131.64	122.64
10	3	203	ARG	C-N-CA	5.29	131.64	122.64
13	6	223	CYS	CA-C-N	-5.29	116.21	123.14
13	6	223	CYS	C-N-CA	-5.29	116.21	123.14
21	S	449	HIS	CA-C-N	5.29	127.81	120.29
21	S	449	HIS	C-N-CA	5.29	127.81	120.29
23	Q	377	ILE	CB-CA-C	5.29	118.64	110.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	273	MET	N-CA-C	-5.29	105.59	111.36
9	2	198	VAL	CA-CB-CG1	5.29	119.39	110.40
19	Z	308	SER	CA-C-O	-5.29	115.92	119.68
20	N	173	VAL	N-CA-C	5.29	118.70	112.35
26	O	270	ARG	N-CA-C	-5.29	107.48	114.04
26	O	349	MET	CA-C-O	-5.29	114.81	120.42
27	H	85	GLN	N-CA-C	5.29	117.05	111.28
28	I	89	GLU	CA-C-N	5.29	127.37	120.28
28	I	89	GLU	C-N-CA	5.29	127.37	120.28
8	1	122	ARG	CA-C-O	-5.29	114.94	120.55
16	V	287	HIS	CE1-NE2-CD2	-5.29	103.71	109.00
3	C	10	THR	CA-C-N	5.29	127.70	120.35
3	C	10	THR	C-N-CA	5.29	127.70	120.35
17	T	273	GLU	CA-C-N	5.29	127.71	120.46
17	T	273	GLU	C-N-CA	5.29	127.71	120.46
19	Z	548	THR	CA-CB-OG1	5.29	117.53	109.60
20	N	200	VAL	N-CA-C	5.29	116.02	110.62
20	N	505	ASP	CA-CB-CG	5.29	117.89	112.60
30	L	102	ASP	CB-CA-C	-5.29	100.59	109.53
10	3	90	MET	CA-C-O	5.29	126.15	120.55
19	Z	735	GLY	O-C-N	5.29	127.27	122.19
21	S	90	VAL	N-CA-CB	5.29	117.73	110.54
23	Q	75	PRO	N-CA-CB	5.29	109.12	103.52
23	Q	322	HIS	CG-CD2-NE2	5.29	112.49	107.20
6	F	53	GLN	OE1-CD-NE2	-5.29	117.31	122.60
10	3	54	ALA	CA-C-O	5.29	126.07	120.36
20	N	248	ILE	N-CA-C	5.29	116.01	110.62
24	R	86	GLU	N-CA-C	5.29	117.04	111.28
26	O	98	GLU	CB-CG-CD	-5.29	103.61	112.60
26	O	194	GLN	CB-CG-CD	-5.29	103.61	112.60
29	K	135	HIS	CE1-NE2-CD2	-5.29	103.71	109.00
12	5	62	THR	CA-C-N	5.28	128.09	120.38
12	5	62	THR	C-N-CA	5.28	128.09	120.38
13	6	102	TYR	CA-C-N	5.28	127.31	120.44
13	6	102	TYR	C-N-CA	5.28	127.31	120.44
16	V	278	GLN	OE1-CD-NE2	5.28	127.88	122.60
19	Z	95	PRO	CA-C-N	5.28	127.31	120.44
19	Z	95	PRO	C-N-CA	5.28	127.31	120.44
20	N	60	ALA	O-C-N	5.28	127.72	122.12
23	Q	6	VAL	N-CA-CB	-5.28	104.37	110.55
25	U	135	THR	N-CA-CB	5.28	120.02	110.83
27	H	53	GLN	N-CA-C	5.28	116.72	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	115	ALA	N-CA-C	-5.28	101.92	110.32
3	C	141	LYS	N-CA-CB	5.28	117.67	110.01
20	N	450	HIS	CG-CD2-NE2	5.28	112.48	107.20
24	R	109	GLU	CA-C-N	5.28	127.79	120.29
24	R	109	GLU	C-N-CA	5.28	127.79	120.29
9	2	190	GLU	N-CA-C	-5.28	100.89	108.60
13	6	133	VAL	CG1-CB-CG2	5.28	122.42	110.80
14	7	114	MET	CA-C-O	-5.28	115.26	120.70
19	Z	372	LEU	CA-C-N	5.28	127.36	120.28
19	Z	372	LEU	C-N-CA	5.28	127.36	120.28
20	N	770	TRP	CA-CB-CG	5.28	123.63	113.60
24	R	70	LEU	CA-C-N	5.28	127.36	120.28
24	R	70	LEU	C-N-CA	5.28	127.36	120.28
28	I	178	LYS	O-C-N	-5.28	117.03	122.94
29	K	263	PHE	CA-CB-CG	5.28	119.08	113.80
30	L	162	VAL	N-CA-C	5.28	115.49	110.53
31	M	214	LYS	CA-C-N	5.28	127.36	120.28
31	M	214	LYS	C-N-CA	5.28	127.36	120.28
32	J	370	ALA	CB-CA-C	-5.28	101.88	110.85
22	P	355	LYS	CA-C-N	5.28	127.79	120.29
22	P	355	LYS	C-N-CA	5.28	127.79	120.29
4	D	154	ASP	CA-C-N	5.28	125.36	119.87
4	D	154	ASP	C-N-CA	5.28	125.36	119.87
8	1	187	GLN	O-C-N	5.28	127.71	122.12
9	2	99	THR	CA-C-N	5.28	127.30	120.44
9	2	99	THR	C-N-CA	5.28	127.30	120.44
10	3	201	LYS	N-CA-CB	5.28	119.23	110.47
19	Z	213	GLN	CA-C-O	5.28	126.06	120.10
19	Z	310	ASP	CA-C-N	5.28	131.47	121.97
19	Z	310	ASP	C-N-CA	5.28	131.47	121.97
21	S	483	HIS	CB-CA-C	-5.28	102.56	110.90
3	C	94	ALA	CA-C-N	5.28	127.78	120.29
3	C	94	ALA	C-N-CA	5.28	127.78	120.29
5	E	211	ASN	O-C-N	5.28	129.17	123.10
8	1	159	ALA	O-C-N	5.28	129.71	123.33
10	3	149	MET	N-CA-C	5.28	117.03	111.28
12	5	116	ARG	CG-CD-NE	-5.28	100.39	112.00
19	Z	176	ALA	O-C-N	-5.28	115.57	122.59
22	P	28	LEU	CA-C-O	-5.28	113.48	118.33
22	P	345	GLU	N-CA-C	5.28	116.72	111.07
30	L	375	PHE	O-C-N	-5.28	117.07	123.29
13	6	222	ILE	CB-CA-C	5.27	118.69	110.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	765	VAL	O-C-N	-5.27	116.40	121.83
5	E	84	ASP	CA-CB-CG	5.27	117.87	112.60
11	4	168	GLN	N-CA-C	5.27	117.03	111.28
19	Z	276	GLU	O-C-N	5.27	127.71	122.12
23	Q	228	ALA	CA-C-N	5.27	127.78	120.29
23	Q	228	ALA	C-N-CA	5.27	127.78	120.29
31	M	91	TYR	N-CA-CB	5.27	121.33	111.52
20	N	605	VAL	N-CA-CB	5.27	116.72	110.55
27	H	175	SER	N-CA-C	-5.27	106.16	112.59
30	L	295	ARG	CB-CA-C	-5.27	103.15	110.16
5	E	123	PHE	N-CA-C	5.27	117.98	110.24
6	F	210	VAL	N-CA-CB	5.27	119.21	111.52
19	Z	22	SER	CA-C-O	-5.27	114.96	120.55
20	N	770	TRP	CB-CG-CD2	-5.27	119.42	126.80
21	S	296	LEU	N-CA-CB	5.27	119.39	110.49
22	P	319	THR	N-CA-C	5.27	117.10	111.36
23	Q	228	ALA	CA-C-O	5.27	126.14	120.55
23	Q	389	ASP	N-CA-CB	5.27	121.32	111.52
26	O	79	ILE	N-CA-C	5.27	115.48	110.42
26	O	142	LEU	N-CA-CB	5.27	117.96	110.16
27	H	403	ILE	CA-C-N	5.27	128.57	120.82
27	H	403	ILE	C-N-CA	5.27	128.57	120.82
28	I	128	GLY	O-C-N	5.27	128.85	122.32
32	J	314	LYS	CA-C-N	-5.27	115.79	123.06
32	J	314	LYS	C-N-CA	-5.27	115.79	123.06
6	F	170	THR	O-C-N	5.27	127.70	122.12
7	G	58	LEU	N-CA-C	-5.27	104.12	110.44
8	I	58	TYR	CA-C-O	-5.27	114.97	120.55
16	V	142	ALA	CA-C-O	-5.27	114.66	120.30
17	T	249	LEU	O-C-N	5.27	127.97	122.23
19	Z	484	GLY	N-CA-C	-5.27	106.03	112.77
20	N	360	VAL	CA-C-N	5.27	130.46	121.29
20	N	360	VAL	C-N-CA	5.27	130.46	121.29
31	M	350	ARG	N-CA-C	-5.27	106.79	113.43
6	F	7	ASP	N-CA-C	-5.27	105.13	112.03
20	N	112	CYS	CA-C-N	5.27	127.19	120.56
20	N	112	CYS	C-N-CA	5.27	127.19	120.56
30	L	388	VAL	CA-C-N	5.27	127.29	120.44
30	L	388	VAL	C-N-CA	5.27	127.29	120.44
32	J	382	ASP	CA-C-N	5.27	127.34	120.28
32	J	382	ASP	C-N-CA	5.27	127.34	120.28
2	B	122	THR	CA-C-N	5.26	127.60	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	122	THR	C-N-CA	5.26	127.60	120.44
3	C	54	LYS	N-CA-CB	-5.26	102.69	110.53
6	F	102	PRO	N-CA-CB	5.26	108.78	103.25
6	F	155	ASP	N-CA-C	-5.26	98.67	107.99
9	2	152	HIS	N-CA-CB	5.26	117.71	109.97
17	T	318	TYR	CA-CB-CG	-5.26	104.42	113.90
19	Z	3	GLU	CA-C-O	5.26	126.86	120.81
20	N	440	GLY	CA-C-N	5.26	126.91	120.22
20	N	440	GLY	C-N-CA	5.26	126.91	120.22
24	R	340	ALA	CB-CA-C	-5.26	102.05	110.79
32	J	282	GLY	N-CA-C	-5.26	106.64	115.80
5	E	154	PHE	CA-C-N	5.26	130.83	122.94
5	E	154	PHE	C-N-CA	5.26	130.83	122.94
10	3	150	CYS	CA-C-N	5.26	127.76	120.29
10	3	150	CYS	C-N-CA	5.26	127.76	120.29
11	4	18	ASP	N-CA-CB	5.26	120.85	111.69
21	S	383	GLN	N-CA-CB	5.26	117.86	110.12
17	T	349	LEU	CA-C-O	5.26	126.34	120.82
21	S	243	GLN	N-CA-C	-5.26	105.62	111.36
21	S	385	ASP	CB-CA-C	-5.26	100.57	110.67
22	P	402	ILE	CA-CB-CG1	5.26	119.34	110.40
23	Q	37	GLU	N-CA-CB	5.26	119.38	110.49
23	Q	84	LYS	CA-CB-CG	5.26	124.62	114.10
26	O	26	GLU	CA-C-N	5.26	127.28	120.44
26	O	26	GLU	C-N-CA	5.26	127.28	120.44
29	K	175	GLN	OE1-CD-NE2	5.26	127.86	122.60
29	K	304	ASN	OD1-CG-ND2	-5.26	117.34	122.60
4	D	225	ILE	N-CA-CB	5.26	117.36	111.21
6	F	226	ASP	CA-C-O	5.26	124.28	118.65
7	G	71	ASP	CA-C-N	5.26	127.64	120.54
7	G	71	ASP	C-N-CA	5.26	127.64	120.54
14	7	201	GLN	CA-C-O	-5.26	113.24	118.34
19	Z	382	ASN	CA-C-O	5.26	126.00	120.42
20	N	110	LYS	N-CA-C	5.26	117.01	111.28
22	P	333	SER	CA-C-N	5.26	127.59	120.44
22	P	333	SER	C-N-CA	5.26	127.59	120.44
31	M	439	GLN	OE1-CD-NE2	-5.26	117.34	122.60
32	J	299	ASP	O-C-N	5.26	128.15	122.15
9	2	189	MET	N-CA-CB	5.26	119.38	110.49
12	5	187	VAL	O-C-N	5.26	128.88	123.04
13	6	51	ALA	CA-C-N	5.26	130.40	122.99
13	6	51	ALA	C-N-CA	5.26	130.40	122.99

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	203	PRO	N-CD-CG	5.26	111.09	103.20
25	U	276	ILE	CA-CB-CG1	5.26	119.34	110.40
5	E	156	MET	O-C-N	5.26	129.71	123.24
10	3	17	LYS	CA-C-O	-5.26	115.14	120.71
14	7	208	GLU	N-CA-CB	5.26	117.85	110.12
23	Q	340	GLU	CB-CG-CD	-5.26	103.67	112.60
9	2	258	LYS	CA-C-N	5.25	127.65	120.35
9	2	258	LYS	C-N-CA	5.25	127.65	120.35
16	V	62	VAL	N-CA-CB	5.25	119.88	112.52
16	V	251	LEU	CA-C-N	5.25	127.32	120.28
16	V	251	LEU	C-N-CA	5.25	127.32	120.28
27	H	150	HIS	CB-CG-CD2	-5.25	124.37	131.20
4	D	138	LEU	CB-CA-C	-5.25	102.91	111.68
11	4	86	ARG	N-CA-C	-5.25	105.63	111.36
12	5	96	ILE	CA-C-O	-5.25	115.19	121.28
14	7	120	LEU	N-CA-C	5.25	117.00	111.28
23	Q	390	GLU	CA-C-O	-5.25	112.96	120.16
29	K	251	PHE	CA-C-N	5.25	127.32	120.28
29	K	251	PHE	C-N-CA	5.25	127.32	120.28
30	L	325	ASP	N-CA-C	5.25	117.09	111.36
32	J	275	GLU	N-CA-CB	5.25	117.84	110.12
2	B	120	GLU	CA-C-N	5.25	128.29	120.31
2	B	120	GLU	C-N-CA	5.25	128.29	120.31
3	C	28	ILE	CA-C-N	5.25	126.70	120.14
3	C	28	ILE	C-N-CA	5.25	126.70	120.14
11	4	44	LEU	CA-C-N	5.25	130.82	122.94
11	4	44	LEU	C-N-CA	5.25	130.82	122.94
12	5	193	TYR	N-CA-CB	5.25	119.58	110.39
17	T	235	LEU	CA-C-N	5.25	127.75	120.29
17	T	235	LEU	C-N-CA	5.25	127.75	120.29
20	N	604	HIS	ND1-CE1-NE2	5.25	113.65	108.40
22	P	228	ASN	OD1-CG-ND2	-5.25	117.35	122.60
24	R	291	HIS	CE1-NE2-CD2	-5.25	103.75	109.00
25	U	160	SER	CA-C-N	5.25	130.98	122.53
25	U	160	SER	C-N-CA	5.25	130.98	122.53
30	L	111	ARG	CA-C-N	5.25	130.98	122.68
30	L	111	ARG	C-N-CA	5.25	130.98	122.68
32	J	113	ARG	N-CA-CB	5.25	117.69	109.97
32	J	323	GLU	CA-CB-CG	-5.25	103.60	114.10
20	N	692	ALA	CA-C-O	-5.25	114.86	120.42
30	L	296	PRO	N-CA-C	-5.25	108.67	114.92
32	J	351	MET	CA-C-N	5.25	126.40	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	351	MET	C-N-CA	5.25	126.40	119.84
32	J	374	ARG	NH1-CZ-NH2	5.25	126.12	119.30
3	C	96	ARG	CA-C-N	5.25	127.31	120.28
3	C	96	ARG	C-N-CA	5.25	127.31	120.28
6	F	85	CYS	CA-C-N	5.25	127.31	120.28
6	F	85	CYS	C-N-CA	5.25	127.31	120.28
11	4	51	GLY	CA-C-N	5.25	127.26	120.44
11	4	51	GLY	C-N-CA	5.25	127.26	120.44
11	4	109	GLU	N-CA-C	-5.25	100.62	109.07
11	4	186	ASP	CA-C-O	-5.25	115.47	121.82
15	W	24	THR	N-CA-C	-5.25	100.75	108.99
19	Z	236	CYS	O-C-N	5.25	129.46	122.43
22	P	378	MET	N-CA-CB	5.25	117.83	110.12
25	U	139	ILE	N-CA-C	-5.25	100.64	108.46
29	K	48	GLN	N-CA-CB	5.25	117.84	110.12
31	M	208	PRO	N-CA-CB	5.25	109.08	103.52
4	D	223	LEU	N-CA-CB	5.25	117.68	109.97
10	3	134	ASP	O-C-N	5.25	129.20	123.27
22	P	442	THR	CA-C-N	5.25	127.31	120.28
22	P	442	THR	C-N-CA	5.25	127.31	120.28
24	R	61	LEU	N-CA-C	-5.25	103.80	111.30
30	L	130	ASP	CA-CB-CG	-5.25	107.35	112.60
31	M	108	GLU	CB-CG-CD	-5.25	103.68	112.60
22	P	219	THR	CA-CB-CG2	-5.25	101.58	110.50
26	O	311	VAL	O-C-N	-5.25	116.78	121.87
27	H	358	HIS	CG-CD2-NE2	5.25	112.44	107.20
30	L	223	GLY	O-C-N	-5.25	117.20	122.65
14	7	251	THR	CA-C-O	-5.24	115.80	121.36
19	Z	198	HIS	CG-CD2-NE2	5.24	112.44	107.20
22	P	88	MET	CA-C-N	5.24	127.57	120.44
22	P	88	MET	C-N-CA	5.24	127.57	120.44
23	Q	14	SER	N-CA-C	5.24	117.00	111.28
22	P	388	GLU	CA-C-N	5.24	127.30	120.28
22	P	388	GLU	C-N-CA	5.24	127.30	120.28
25	U	44	GLN	CB-CG-CD	5.24	121.51	112.60
3	C	116	ASP	CA-C-N	5.24	127.86	120.42
3	C	116	ASP	C-N-CA	5.24	127.86	120.42
4	D	150	LEU	N-CA-C	-5.24	99.42	108.69
12	5	237	HIS	CA-CB-CG	5.24	119.04	113.80
15	W	113	VAL	N-CA-C	-5.24	101.08	109.20
21	S	455	GLN	OE1-CD-NE2	5.24	127.84	122.60
23	Q	326	LEU	CA-C-N	5.24	127.25	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	326	LEU	C-N-CA	5.24	127.25	120.44
27	H	39	SER	CB-CA-C	-5.24	102.65	110.88
28	I	303	ARG	CD-NE-CZ	-5.24	117.06	124.40
2	B	121	TYR	CB-CG-CD2	5.24	128.66	120.80
3	C	194	VAL	CA-C-N	5.24	127.73	120.29
3	C	194	VAL	C-N-CA	5.24	127.73	120.29
5	E	97	GLN	CA-CB-CG	5.24	124.58	114.10
6	F	181	GLN	N-CA-C	5.24	118.93	112.54
19	Z	588	ARG	CB-CG-CD	5.24	123.35	111.30
21	S	157	PRO	CA-C-N	5.24	127.73	120.29
21	S	157	PRO	C-N-CA	5.24	127.73	120.29
23	Q	404	ILE	CA-CB-CG1	5.24	119.31	110.40
27	H	251	GLY	O-C-N	-5.24	115.74	122.39
28	I	264	PRO	N-CA-CB	5.24	109.07	103.52
2	B	217	GLY	CA-C-N	5.24	128.91	121.42
2	B	217	GLY	C-N-CA	5.24	128.91	121.42
16	V	266	THR	N-CA-CB	5.24	116.82	110.17
24	R	80	GLU	CA-C-N	5.24	127.30	120.28
24	R	80	GLU	C-N-CA	5.24	127.30	120.28
15	W	57	ASP	CA-CB-CG	-5.24	107.36	112.60
19	Z	520	LEU	CA-C-N	5.24	127.72	120.29
19	Z	520	LEU	C-N-CA	5.24	127.72	120.29
22	P	245	LYS	CA-C-N	5.24	127.30	120.28
22	P	245	LYS	C-N-CA	5.24	127.30	120.28
26	O	134	THR	CA-C-N	5.24	127.16	120.56
26	O	134	THR	C-N-CA	5.24	127.16	120.56
27	H	268	LYS	CA-C-N	5.24	131.54	121.54
27	H	268	LYS	C-N-CA	5.24	131.54	121.54
27	H	426	THR	N-CA-C	5.24	120.59	113.16
21	S	281	TRP	CB-CG-CD1	5.23	134.75	126.90
27	H	201	PHE	CA-CB-CG	-5.23	108.57	113.80
27	H	363	SER	CA-C-N	5.23	129.62	122.34
27	H	363	SER	C-N-CA	5.23	129.62	122.34
7	G	107	ILE	O-C-N	5.23	127.06	121.10
10	3	182	GLY	N-CA-C	-5.23	107.50	115.66
22	P	111	TYR	CB-CA-C	-5.23	102.11	110.79
24	R	128	TYR	CA-C-N	5.23	127.29	120.28
24	R	128	TYR	C-N-CA	5.23	127.29	120.28
1	A	241	ALA	CA-C-N	5.23	127.29	120.28
1	A	241	ALA	C-N-CA	5.23	127.29	120.28
3	C	20	GLN	CB-CG-CD	-5.23	103.71	112.60
4	D	172	LYS	CA-C-O	-5.23	113.95	119.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	194	ILE	N-CA-CB	5.23	117.65	110.54
10	3	118	LYS	CA-C-O	-5.23	115.12	120.87
16	V	113	HIS	CB-CG-CD2	-5.23	124.40	131.20
19	Z	123	ALA	N-CA-C	5.23	116.98	111.28
20	N	172	ASP	CA-C-N	5.23	124.52	120.33
20	N	172	ASP	C-N-CA	5.23	124.52	120.33
21	S	98	PRO	N-CA-C	-5.23	103.33	111.13
26	O	220	PRO	N-CD-CG	5.23	111.05	103.20
30	L	308	ARG	NH1-CZ-NH2	5.23	126.10	119.30
31	M	221	GLN	N-CA-C	-5.23	101.97	109.24
32	J	205	HIS	CG-CD2-NE2	5.23	112.43	107.20
7	G	136	PHE	CA-C-N	5.23	130.78	122.94
7	G	136	PHE	C-N-CA	5.23	130.78	122.94
10	3	130	PRO	N-CA-C	-5.23	101.70	112.47
25	U	215	VAL	CA-C-N	5.23	127.24	120.44
25	U	215	VAL	C-N-CA	5.23	127.24	120.44
26	O	152	HIS	N-CA-C	-5.23	105.66	111.36
28	I	184	TYR	CB-CA-C	5.23	118.40	109.72
8	1	59	ILE	N-CA-CB	-5.23	105.02	110.72
9	2	83	ASN	N-CA-C	5.23	117.72	111.71
10	3	82	ILE	N-CA-C	-5.23	101.12	108.12
19	Z	718	ASP	CA-C-N	5.23	125.48	119.83
19	Z	718	ASP	C-N-CA	5.23	125.48	119.83
20	N	689	ILE	O-C-N	-5.23	116.80	121.87
25	U	57	PRO	CA-C-O	-5.23	115.04	121.31
27	H	285	PHE	CB-CG-CD1	-5.23	111.81	120.70
28	I	105	THR	CA-CB-OG1	5.23	117.44	109.60
29	K	51	LEU	CA-C-O	-5.23	113.96	119.97
29	K	250	VAL	CA-C-N	5.23	127.71	120.29
29	K	250	VAL	C-N-CA	5.23	127.71	120.29
31	M	267	GLY	CA-C-O	5.23	126.13	120.75
19	Z	724	ASN	CA-C-N	5.23	127.23	120.44
19	Z	724	ASN	C-N-CA	5.23	127.23	120.44
20	N	772	TRP	CE2-CD2-CE3	5.23	124.03	118.80
23	Q	108	GLU	N-CA-C	5.23	117.06	111.36
24	R	27	SER	CA-CB-OG	-5.23	100.65	111.10
25	U	107	ALA	CA-C-N	5.23	127.84	120.42
25	U	107	ALA	C-N-CA	5.23	127.84	120.42
23	Q	36	GLN	CA-C-N	5.22	131.52	121.54
23	Q	36	GLN	C-N-CA	5.22	131.52	121.54
32	J	4	ASP	N-CA-CB	5.22	119.51	111.46
32	J	73	VAL	CA-C-O	-5.22	114.91	120.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	142	SER	N-CA-C	-5.22	100.97	108.60
7	G	161	TYR	N-CA-C	-5.22	101.43	109.52
19	Z	56	LEU	CA-C-O	5.22	126.08	120.70
23	Q	224	ASP	CA-C-N	5.22	128.25	120.31
23	Q	224	ASP	C-N-CA	5.22	128.25	120.31
26	O	213	PHE	CD1-CG-CD2	-5.22	110.77	118.60
27	H	342	GLU	CA-CB-CG	-5.22	103.65	114.10
31	M	416	THR	N-CA-C	-5.22	106.14	112.88
14	7	194	LEU	N-CA-C	5.22	116.97	111.28
27	H	138	MET	CA-C-O	5.22	127.97	121.81
28	I	255	LEU	CA-C-O	-5.22	115.02	120.55
32	J	62	GLU	CA-C-N	5.22	127.28	120.28
32	J	62	GLU	C-N-CA	5.22	127.28	120.28
9	2	101	LEU	CA-C-N	5.22	127.83	120.42
9	2	101	LEU	C-N-CA	5.22	127.83	120.42
17	T	270	ILE	CA-C-N	5.22	127.27	120.28
17	T	270	ILE	C-N-CA	5.22	127.27	120.28
19	Z	53	GLN	CA-C-O	-5.22	115.34	120.82
20	N	798	PRO	CA-C-O	-5.22	115.49	121.86
23	Q	85	ALA	CB-CA-C	-5.22	102.13	110.79
26	O	286	ALA	N-CA-CB	5.22	119.31	110.49
29	K	170	MET	CA-CB-CG	5.22	124.54	114.10
32	J	143	VAL	CA-C-N	5.22	124.98	119.76
32	J	143	VAL	C-N-CA	5.22	124.98	119.76
2	B	156	PHE	CA-CB-CG	-5.22	108.58	113.80
16	V	245	VAL	N-CA-CB	5.22	117.64	110.54
19	Z	352	HIS	ND1-CE1-NE2	5.22	113.62	108.40
20	N	677	ASN	N-CA-C	5.22	117.05	111.36
2	B	69	THR	N-CA-C	-5.21	101.36	108.24
4	D	90	ILE	O-C-N	5.21	127.02	121.91
19	Z	211	ILE	CB-CA-C	-5.21	105.02	112.22
20	N	327	LYS	N-CA-CB	-5.21	102.45	110.01
20	N	475	HIS	CB-CA-C	-5.21	102.69	110.88
22	P	400	LYS	N-CA-CB	5.21	119.30	110.49
25	U	232	ASP	CB-CA-C	-5.21	100.98	110.63
26	O	27	GLU	CB-CG-CD	-5.21	103.73	112.60
27	H	74	PRO	N-CD-CG	5.21	111.02	103.20
1	A	34	GLN	N-CA-C	5.21	117.87	111.82
20	N	647	HIS	CA-C-O	-5.21	115.35	120.82
8	1	163	SER	N-CA-C	-5.21	99.70	110.80
28	I	311	GLU	CB-CG-CD	-5.21	103.74	112.60
29	K	100	THR	N-CA-C	-5.21	101.44	109.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	323	ARG	NE-CZ-NH2	5.21	123.89	119.20
30	L	367	PHE	CA-CB-CG	-5.21	108.59	113.80
19	Z	660	ILE	CA-C-N	5.21	127.26	120.28
19	Z	660	ILE	C-N-CA	5.21	127.26	120.28
12	5	139	SER	CA-C-O	-5.21	114.90	120.42
18	Y	60	LEU	CA-C-N	5.21	127.69	120.29
18	Y	60	LEU	C-N-CA	5.21	127.69	120.29
19	Z	724	ASN	CA-C-O	-5.21	115.35	120.82
20	N	720	LYS	CG-CD-CE	5.21	123.28	111.30
21	S	159	VAL	CA-C-O	-5.21	115.33	120.85
26	O	138	VAL	CA-CB-CG1	5.21	119.25	110.40
26	O	302	ILE	N-CA-C	-5.21	100.83	108.85
30	L	271	LEU	CA-C-N	5.21	127.26	120.28
30	L	271	LEU	C-N-CA	5.21	127.26	120.28
31	M	421	GLU	N-CA-C	-5.21	105.50	111.07
7	G	111	HIS	CG-CD2-NE2	5.21	112.41	107.20
12	5	156	MET	N-CA-C	-5.21	101.16	109.07
19	Z	866	GLN	CG-CD-OE1	-5.21	110.39	120.80
21	S	141	LEU	N-CA-C	-5.21	105.26	113.02
2	B	171	LYS	O-C-N	-5.21	116.60	122.12
15	W	5	SER	N-CA-C	-5.21	100.69	109.07
19	Z	240	VAL	CA-C-O	-5.21	112.97	119.95
20	N	242	LEU	CA-C-N	5.21	127.78	120.28
20	N	242	LEU	C-N-CA	5.21	127.78	120.28
21	S	493	PRO	O-C-N	5.21	127.60	121.46
3	C	229	LYS	CA-C-N	5.20	127.25	120.28
3	C	229	LYS	C-N-CA	5.20	127.25	120.28
7	G	139	GLY	O-C-N	5.20	129.47	122.70
8	1	152	MET	CA-CB-CG	5.20	124.50	114.10
17	T	303	THR	N-CA-CB	5.20	117.86	110.16
17	T	330	ASP	N-CA-CB	5.20	119.28	110.49
19	Z	879	ARG	CA-C-O	5.20	124.24	118.52
21	S	317	ALA	CA-C-N	5.20	127.59	120.46
21	S	317	ALA	C-N-CA	5.20	127.59	120.46
26	O	310	LEU	CA-C-N	5.20	127.59	120.46
26	O	310	LEU	C-N-CA	5.20	127.59	120.46
27	H	142	VAL	CA-C-N	5.20	130.03	121.39
27	H	142	VAL	C-N-CA	5.20	130.03	121.39
6	F	199	LEU	N-CA-C	-5.20	102.59	110.39
20	N	474	ARG	CA-C-O	-5.20	113.99	119.97
23	Q	138	PHE	O-C-N	-5.20	116.61	122.12
16	V	198	ARG	NE-CZ-NH2	5.20	123.88	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	293	ILE	N-CA-C	5.20	115.42	110.53
19	Z	83	ARG	NE-CZ-NH2	5.20	123.88	119.20
20	N	876	GLN	CG-CD-NE2	-5.20	108.60	116.40
21	S	45	SER	CA-C-O	5.20	126.28	120.82
22	P	16	MET	CB-CA-C	-5.20	102.01	110.85
30	L	262	SER	CA-C-N	5.20	127.25	120.28
30	L	262	SER	C-N-CA	5.20	127.25	120.28
31	M	45	VAL	CA-C-N	5.20	127.67	120.29
31	M	45	VAL	C-N-CA	5.20	127.67	120.29
31	M	307	ARG	NE-CZ-NH2	-5.20	114.52	119.20
10	3	54	ALA	O-C-N	-5.20	117.11	123.30
12	5	254	LEU	CA-C-O	-5.20	115.04	120.55
20	N	189	GLN	O-C-N	5.20	127.90	122.23
21	S	261	ASP	CA-CB-CG	-5.20	107.40	112.60
23	Q	252	LYS	N-CA-CB	5.20	117.76	110.12
27	H	197	HIS	CA-CB-CG	-5.20	108.60	113.80
28	I	383	LEU	O-C-N	5.20	128.08	122.15
12	5	226	ASP	N-CA-CB	5.20	117.61	110.07
2	B	229	TYR	CA-C-N	5.20	127.24	120.28
2	B	229	TYR	C-N-CA	5.20	127.24	120.28
5	E	240	ASP	CB-CA-C	-5.20	102.37	110.74
8	1	99	HIS	CB-CG-CD2	-5.20	124.45	131.20
8	1	200	ASP	CA-CB-CG	-5.20	107.40	112.60
19	Z	156	HIS	CG-CD2-NE2	5.20	112.40	107.20
19	Z	165	GLU	CA-C-N	5.20	127.58	120.46
19	Z	165	GLU	C-N-CA	5.20	127.58	120.46
19	Z	446	LEU	CA-C-O	5.20	125.93	120.42
19	Z	819	TYR	CA-C-N	5.20	130.73	121.48
19	Z	819	TYR	C-N-CA	5.20	130.73	121.48
24	R	380	VAL	N-CA-C	5.20	115.92	110.62
25	U	133	LEU	CB-CA-C	-5.20	101.32	109.11
26	O	38	THR	CA-CB-CG2	5.20	119.33	110.50
27	H	76	ALA	N-CA-CB	5.20	117.76	110.12
28	I	254	GLU	CA-C-N	5.20	127.24	120.28
28	I	254	GLU	C-N-CA	5.20	127.24	120.28
9	2	78	HIS	CA-C-O	-5.19	114.46	120.49
1	A	241	ALA	CB-CA-C	-5.19	101.03	110.63
2	B	148	GLN	N-CA-C	-5.19	100.57	109.24
4	D	163	LYS	N-CA-C	-5.19	105.53	111.14
6	F	77	LEU	CA-C-N	5.19	127.66	120.29
6	F	77	LEU	C-N-CA	5.19	127.66	120.29
11	4	27	GLN	CA-CB-CG	5.19	124.48	114.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	248	SER	CB-CA-C	5.19	118.00	109.90
25	U	80	GLY	CA-C-N	5.19	127.66	120.29
25	U	80	GLY	C-N-CA	5.19	127.66	120.29
30	L	157	ARG	O-C-N	-5.19	116.62	122.12
31	M	161	TYR	CA-C-O	-5.19	115.14	120.54
31	M	328	GLN	CG-CD-NE2	-5.19	108.61	116.40
1	A	225	PRO	CB-CA-C	5.19	118.64	110.49
2	B	152	SER	N-CA-CB	5.19	117.75	110.12
10	3	185	VAL	O-C-N	5.19	129.06	122.57
13	6	77	THR	N-CA-C	-5.19	106.45	112.89
22	P	375	MET	CA-C-N	5.19	127.23	120.28
22	P	375	MET	C-N-CA	5.19	127.23	120.28
27	H	395	PHE	O-C-N	5.19	128.07	122.15
29	K	374	ASP	CA-CB-CG	5.19	117.79	112.60
9	2	182	GLU	N-CA-CB	5.19	117.75	110.12
20	N	681	ASN	CB-CA-C	-5.19	102.70	110.90
14	7	136	LEU	CB-CA-C	5.19	119.67	110.85
22	P	81	ASP	CA-C-N	5.19	127.23	120.28
22	P	81	ASP	C-N-CA	5.19	127.23	120.28
22	P	360	GLU	CB-CA-C	-5.19	102.18	110.79
25	U	72	HIS	CB-CG-ND1	5.19	130.48	122.70
32	J	175	PHE	N-CA-C	5.19	116.93	111.28
19	Z	416	MET	CA-C-N	5.19	127.20	120.56
19	Z	416	MET	C-N-CA	5.19	127.20	120.56
28	I	370	SER	CA-C-O	5.19	125.92	120.42
32	J	165	ILE	N-CA-C	5.19	115.46	110.74
8	1	45	VAL	N-CA-C	-5.18	98.56	109.34
12	5	147	TYR	N-CA-C	5.18	116.74	111.14
20	N	639	LEU	CA-C-N	5.18	127.65	120.29
20	N	639	LEU	C-N-CA	5.18	127.65	120.29
21	S	309	LEU	CA-C-O	-5.18	115.36	120.70
22	P	273	TYR	CA-C-O	-5.18	115.36	120.70
24	R	219	PHE	CA-C-O	-5.18	114.92	120.42
31	M	422	ASP	CA-CB-CG	5.18	117.78	112.60
4	D	68	ASN	N-CA-CB	5.18	119.09	111.01
5	E	146	VAL	CA-CB-CG1	5.18	119.21	110.40
15	W	88	THR	CA-CB-OG1	5.18	117.37	109.60
17	T	342	VAL	N-CA-C	5.18	115.91	110.62
20	N	67	VAL	CB-CA-C	-5.18	105.14	112.14
21	S	98	PRO	CB-CA-C	5.18	118.42	110.75
25	U	270	VAL	N-CA-C	5.18	115.95	110.72
26	O	138	VAL	CB-CA-C	-5.18	105.07	112.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	337	HIS	CE1-NE2-CD2	-5.18	103.82	109.00
32	J	103	ILE	CA-C-N	5.18	131.44	121.54
32	J	103	ILE	C-N-CA	5.18	131.44	121.54
1	A	229	ILE	CA-CB-CG1	5.18	119.21	110.40
28	I	87	PRO	N-CA-CB	5.18	108.69	103.25
4	D	68	ASN	N-CA-C	-5.18	106.06	114.09
15	W	165	GLY	CA-C-O	-5.18	111.02	119.31
28	I	367	ILE	N-CA-CB	5.18	116.61	110.55
29	K	361	GLU	CA-C-N	5.18	127.17	120.44
29	K	361	GLU	C-N-CA	5.18	127.17	120.44
30	L	63	ALA	N-CA-CB	5.18	117.58	110.07
32	J	212	ILE	N-CA-C	-5.18	99.70	107.37
11	4	124	LEU	N-CA-C	-5.18	104.29	111.28
32	J	365	GLU	CA-C-N	5.18	127.22	120.28
32	J	365	GLU	C-N-CA	5.18	127.22	120.28
11	4	132	HIS	O-C-N	-5.18	117.35	123.25
11	4	132	HIS	ND1-CE1-NE2	5.18	113.58	108.40
19	Z	1	MET	CA-C-N	5.18	131.43	121.54
19	Z	1	MET	C-N-CA	5.18	131.43	121.54
19	Z	266	LEU	CB-CA-C	-5.18	101.05	110.63
22	P	170	GLN	N-CA-C	5.18	116.92	111.28
26	O	359	ASP	CA-C-N	5.18	127.55	120.46
26	O	359	ASP	C-N-CA	5.18	127.55	120.46
26	O	368	GLU	CA-C-O	-5.18	114.25	120.10
31	M	383	ASN	N-CA-C	-5.18	101.25	108.96
10	3	127	ILE	CA-C-N	5.17	125.83	120.03
10	3	127	ILE	C-N-CA	5.17	125.83	120.03
11	4	55	GLN	N-CA-CB	5.17	117.51	110.01
13	6	47	PHE	CA-CB-CG	-5.17	108.62	113.80
16	V	189	ILE	CA-C-N	5.17	127.21	120.28
16	V	189	ILE	C-N-CA	5.17	127.21	120.28
17	T	171	MET	CA-C-N	5.17	127.21	120.28
17	T	171	MET	C-N-CA	5.17	127.21	120.28
20	N	598	ALA	CB-CA-C	-5.17	102.05	110.85
31	M	160	SER	CB-CA-C	-5.17	98.88	109.38
31	M	203	GLU	CB-CA-C	-5.17	102.76	110.88
4	D	146	GLY	N-CA-C	-5.17	108.14	115.43
6	F	120	THR	CA-C-N	5.17	127.64	120.29
6	F	120	THR	C-N-CA	5.17	127.64	120.29
16	V	244	VAL	CA-C-O	-5.17	115.31	121.05
29	K	296	MET	CA-C-N	5.17	128.17	120.31
29	K	296	MET	C-N-CA	5.17	128.17	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	19	TYR	O-C-N	5.17	127.60	122.12
6	F	95	SER	N-CA-C	-5.17	105.72	111.36
14	7	144	ARG	CD-NE-CZ	-5.17	117.16	124.40
15	W	135	LYS	CG-CD-CE	5.17	123.19	111.30
16	V	275	VAL	CB-CA-C	5.17	119.77	111.29
17	T	218	LEU	N-CA-C	5.17	121.24	109.81
19	Z	872	VAL	CA-C-O	5.17	126.24	120.71
21	S	234	ALA	CA-C-N	5.17	127.63	120.29
21	S	234	ALA	C-N-CA	5.17	127.63	120.29
21	S	326	LYS	CA-C-O	-5.17	115.39	120.82
27	H	285	PHE	CA-CB-CG	5.17	118.97	113.80
2	B	180	GLU	CB-CG-CD	5.17	121.39	112.60
3	C	23	TYR	CB-CG-CD1	5.17	128.55	120.80
5	E	23	GLN	N-CA-C	-5.17	105.65	111.28
9	2	197	LEU	N-CA-C	-5.17	105.73	111.36
12	5	86	ALA	CB-CA-C	-5.17	100.70	110.16
15	W	97	LEU	O-C-N	5.17	128.27	122.22
16	V	63	ASP	CA-CB-CG	-5.17	107.43	112.60
20	N	854	MET	CA-C-N	5.17	127.21	120.28
20	N	854	MET	C-N-CA	5.17	127.21	120.28
22	P	123	ARG	CA-C-O	-5.17	114.03	119.97
22	P	257	GLN	OE1-CD-NE2	5.17	127.77	122.60
26	O	82	HIS	CA-C-O	-5.17	115.07	120.55
30	L	158	GLU	CA-C-N	5.17	127.63	120.29
30	L	158	GLU	C-N-CA	5.17	127.63	120.29
30	L	287	VAL	CA-C-O	5.17	126.93	121.04
32	J	127	LEU	N-CA-C	-5.17	103.27	109.83
6	F	195	LEU	CA-C-N	5.17	128.16	120.31
6	F	195	LEU	C-N-CA	5.17	128.16	120.31
6	F	229	VAL	CA-CB-CG2	-5.17	101.62	110.40
19	Z	394	ASP	CA-CB-CG	5.17	117.77	112.60
19	Z	649	HIS	CA-C-O	5.17	125.91	119.97
20	N	107	HIS	CA-CB-CG	-5.17	108.63	113.80
23	Q	181	SER	CA-C-O	5.17	127.90	120.51
4	D	217	MET	CA-C-N	5.17	130.05	122.77
4	D	217	MET	C-N-CA	5.17	130.05	122.77
21	S	402	GLY	CA-C-O	-5.17	115.19	120.66
23	Q	240	ASP	CA-C-N	5.17	127.15	120.44
23	Q	240	ASP	C-N-CA	5.17	127.15	120.44
8	1	48	GLY	O-C-N	-5.16	115.99	122.70
8	1	188	PHE	O-C-N	5.16	127.67	122.09
19	Z	411	ALA	O-C-N	5.16	128.04	122.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	43	VAL	CB-CA-C	5.16	119.76	111.29
27	H	369	ARG	NE-CZ-NH1	-5.16	116.34	121.50
28	I	439	TYR	O-C-N	5.16	127.61	122.03
30	L	294	ASN	N-CA-CB	5.16	119.22	110.49
31	M	394	PHE	N-CA-CB	5.16	119.72	111.56
6	F	7	ASP	CA-CB-CG	-5.16	107.44	112.60
14	7	127	TYR	N-CA-CB	5.16	119.35	110.68
1	A	94	ALA	CA-C-O	-5.16	115.08	120.55
13	6	104	HIS	CB-CG-CD2	-5.16	124.49	131.20
19	Z	431	LYS	CA-C-N	5.16	128.16	120.31
19	Z	431	LYS	C-N-CA	5.16	128.16	120.31
21	S	35	MET	CG-SD-CE	-5.16	89.55	100.90
24	R	224	VAL	CA-C-O	-5.16	115.38	120.85
25	U	76	GLU	CB-CG-CD	-5.16	103.83	112.60
27	H	359	ALA	CA-C-N	5.16	127.19	120.28
27	H	359	ALA	C-N-CA	5.16	127.19	120.28
29	K	382	SER	CA-C-N	5.16	125.71	119.98
29	K	382	SER	C-N-CA	5.16	125.71	119.98
8	1	73	HIS	CA-CB-CG	5.16	118.96	113.80
8	1	165	SER	O-C-N	-5.16	116.00	122.24
1	A	171	LYS	N-CA-C	-5.16	101.27	108.54
3	C	248	GLU	CA-C-O	-5.16	115.41	120.82
22	P	361	HIS	CB-CA-C	-5.16	102.08	110.85
28	I	176	VAL	O-C-N	-5.16	117.47	122.99
19	Z	225	ALA	CB-CA-C	-5.16	102.23	110.79
20	N	161	ASP	CA-C-N	5.16	127.52	120.46
20	N	161	ASP	C-N-CA	5.16	127.52	120.46
28	I	350	LYS	CA-C-N	-5.16	115.29	122.71
28	I	350	LYS	C-N-CA	-5.16	115.29	122.71
31	M	281	LYS	O-C-N	5.16	128.25	122.22
31	M	281	LYS	CA-C-O	-5.16	114.28	120.10
8	1	230	VAL	CA-C-N	5.15	128.03	120.71
8	1	230	VAL	C-N-CA	5.15	128.03	120.71
14	7	117	ASP	N-CA-C	5.15	116.98	111.36
28	I	74	MET	O-C-N	5.15	127.58	122.12
31	M	217	ASN	CA-C-N	5.15	127.19	120.28
31	M	217	ASN	C-N-CA	5.15	127.19	120.28
32	J	79	ALA	N-CA-C	-5.15	101.71	109.85
10	3	100	PHE	CA-CB-CG	-5.15	108.65	113.80
12	5	62	THR	CA-CB-OG1	5.15	117.33	109.60
14	7	111	LEU	N-CA-C	5.15	116.98	111.36
24	R	189	VAL	CA-C-N	5.15	127.18	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	189	VAL	C-N-CA	5.15	127.18	120.28
25	U	186	THR	CA-C-N	5.15	127.61	120.29
25	U	186	THR	C-N-CA	5.15	127.61	120.29
26	O	47	ASP	CA-C-N	5.15	126.28	119.84
26	O	47	ASP	C-N-CA	5.15	126.28	119.84
26	O	236	THR	CA-C-O	-5.15	115.09	120.55
28	I	334	ILE	CB-CA-C	-5.15	105.26	110.93
29	K	140	VAL	O-C-N	-5.15	116.52	121.83
31	M	49	ARG	CA-C-N	5.15	127.14	120.44
31	M	49	ARG	C-N-CA	5.15	127.14	120.44
31	M	251	PHE	CA-C-O	5.15	125.87	120.36
24	R	123	ALA	O-C-N	-5.15	116.28	122.15
24	R	386	VAL	CA-C-N	5.15	127.73	120.42
24	R	386	VAL	C-N-CA	5.15	127.73	120.42
25	U	16	LEU	CB-CA-C	-5.15	102.09	110.85
29	K	297	ASP	N-CA-CB	5.15	118.26	110.28
31	M	261	GLN	CA-C-N	5.15	129.44	120.68
31	M	261	GLN	C-N-CA	5.15	129.44	120.68
20	N	767	THR	N-CA-C	5.15	117.63	111.71
19	Z	388	ASP	N-CA-C	-5.15	106.40	113.30
20	N	324	LYS	N-CA-C	5.15	116.89	111.28
26	O	349	MET	CA-C-N	5.15	127.13	120.44
26	O	349	MET	C-N-CA	5.15	127.13	120.44
27	H	200	ARG	CA-C-N	5.15	127.60	120.29
27	H	200	ARG	C-N-CA	5.15	127.60	120.29
12	5	219	ILE	N-CA-C	5.15	115.92	110.72
16	V	270	LEU	CB-CA-C	-5.15	102.25	110.79
4	D	90	ILE	N-CA-C	5.14	115.36	110.42
6	F	38	LEU	N-CA-C	-5.14	101.47	109.24
16	V	99	LEU	CA-C-N	5.14	127.17	120.28
16	V	99	LEU	C-N-CA	5.14	127.17	120.28
21	S	225	SER	O-C-N	5.14	127.37	122.07
24	R	364	TRP	CB-CG-CD2	-5.14	119.60	126.80
9	2	147	ASP	O-C-N	-5.14	117.22	123.13
13	6	192	PRO	N-CA-C	-5.14	107.33	114.27
17	T	178	TYR	N-CA-CB	5.14	117.60	109.94
17	T	221	LYS	CA-C-N	5.14	128.09	120.17
17	T	221	LYS	C-N-CA	5.14	128.09	120.17
23	Q	103	THR	N-CA-C	5.14	116.57	111.07
31	M	133	GLN	OE1-CD-NE2	5.14	127.74	122.60
19	Z	601	ALA	O-C-N	-5.14	115.75	122.59
24	R	14	ASN	CA-C-O	-5.14	115.12	119.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	I	137	SER	CA-C-N	5.14	131.36	121.54
28	I	137	SER	C-N-CA	5.14	131.36	121.54
17	T	255	PRO	O-C-N	-5.14	117.22	123.03
19	Z	257	ARG	CA-C-N	5.14	127.12	120.44
19	Z	257	ARG	C-N-CA	5.14	127.12	120.44
15	W	34	ASN	N-CA-C	5.14	116.88	111.28
15	W	38	HIS	ND1-CE1-NE2	5.14	113.54	108.40
21	S	106	HIS	ND1-CE1-NE2	5.14	113.54	108.40
22	P	277	ALA	N-CA-CB	5.14	117.45	110.05
23	Q	336	ILE	CA-C-N	5.14	127.17	120.28
23	Q	336	ILE	C-N-CA	5.14	127.17	120.28
26	O	57	ILE	CA-C-N	5.14	127.12	120.44
26	O	57	ILE	C-N-CA	5.14	127.12	120.44
6	F	182	CYS	N-CA-C	5.14	116.95	110.33
11	4	71	ASN	CA-C-N	5.14	125.54	119.94
11	4	71	ASN	C-N-CA	5.14	125.54	119.94
15	W	169	HIS	CG-CD2-NE2	5.14	112.34	107.20
20	N	711	GLN	CB-CA-C	-5.14	102.12	110.85
21	S	60	GLN	CA-C-N	5.14	127.12	120.44
21	S	60	GLN	C-N-CA	5.14	127.12	120.44
23	Q	202	CYS	N-CA-C	-5.14	103.22	110.31
28	I	433	GLY	CA-C-N	5.14	126.17	120.06
28	I	433	GLY	C-N-CA	5.14	126.17	120.06
32	J	386	ALA	CB-CA-C	-5.14	102.27	110.79
5	E	85	ALA	CA-C-N	5.13	127.16	120.28
5	E	85	ALA	C-N-CA	5.13	127.16	120.28
7	G	43	LYS	N-CA-C	-5.13	107.18	112.93
16	V	118	PHE	O-C-N	-5.13	115.76	122.59
20	N	593	SER	O-C-N	-5.13	117.87	123.52
23	Q	114	ILE	N-CA-CB	5.13	118.28	110.58
26	O	169	HIS	N-CA-CB	5.13	117.76	110.16
29	K	347	THR	CA-C-O	-5.13	115.43	120.82
32	J	359	VAL	N-CA-C	5.13	115.91	110.72
19	Z	775	THR	N-CA-C	-5.13	105.91	113.61
25	U	179	ILE	CA-C-O	-5.13	115.00	120.39
6	F	234	ASP	O-C-N	5.13	129.12	122.81
8	1	220	GLN	CA-C-N	5.13	130.17	122.58
8	1	220	GLN	C-N-CA	5.13	130.17	122.58
21	S	100	THR	CA-C-O	-5.13	115.43	120.82
23	Q	148	HIS	CB-CG-CD2	-5.13	124.53	131.20
24	R	219	PHE	CA-CB-CG	-5.13	108.67	113.80
26	O	286	ALA	CA-C-N	5.13	127.11	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	286	ALA	C-N-CA	5.13	127.11	120.44
28	I	136	LEU	CB-CA-C	-5.13	101.08	110.62
29	K	78	GLU	CB-CG-CD	-5.13	103.88	112.60
12	5	244	ILE	CA-CB-CG2	-5.13	101.78	110.50
20	N	869	LYS	CA-C-O	5.13	127.33	121.28
20	N	909	GLY	N-CA-C	-5.13	108.20	115.43
21	S	329	ILE	CB-CA-C	-5.13	105.30	112.02
23	Q	410	VAL	O-C-N	5.13	126.85	121.87
9	2	151	PRO	CA-C-N	5.13	128.15	120.87
9	2	151	PRO	C-N-CA	5.13	128.15	120.87
9	2	156	ILE	N-CA-CB	5.13	118.31	111.64
17	T	168	GLU	O-C-N	5.13	128.00	122.15
19	Z	336	GLU	N-CA-CB	5.13	117.66	110.12
20	N	874	ASN	N-CA-C	-5.13	101.50	109.24
22	P	340	VAL	CA-CB-CG1	5.13	119.12	110.40
30	L	154	GLU	CA-C-O	5.13	125.86	120.42
5	E	59	MET	O-C-N	5.13	128.91	122.86
19	Z	145	VAL	N-CA-C	-5.13	105.54	110.72
24	R	39	GLU	CB-CG-CD	-5.13	103.88	112.60
32	J	115	ALA	O-C-N	5.13	128.80	123.06
32	J	231	VAL	CA-CB-CG2	5.13	119.12	110.40
14	7	54	SER	O-C-N	-5.12	117.19	123.19
20	N	373	ASN	CA-C-O	-5.12	115.12	120.55
21	S	58	HIS	ND1-CE1-NE2	5.12	113.53	108.40
24	R	146	ARG	N-CA-CB	5.12	117.65	110.12
4	D	232	GLU	N-CA-CB	5.12	117.65	110.12
8	1	116	PHE	CA-C-N	5.12	128.10	120.31
8	1	116	PHE	C-N-CA	5.12	128.10	120.31
10	3	159	ASP	N-CA-CB	5.12	119.49	110.37
22	P	435	LEU	CA-C-N	5.12	127.57	120.29
22	P	435	LEU	C-N-CA	5.12	127.57	120.29
23	Q	236	PHE	N-CA-C	-5.12	105.69	111.28
31	M	189	SER	O-C-N	5.12	127.55	122.12
31	M	244	ALA	CA-C-N	5.12	127.56	120.29
31	M	244	ALA	C-N-CA	5.12	127.56	120.29
16	V	174	PRO	N-CD-CG	5.12	110.88	103.20
19	Z	347	ASP	CB-CA-C	-5.12	102.29	110.79
20	N	253	TYR	O-C-N	5.12	127.34	122.07
23	Q	103	THR	CA-C-N	5.12	125.67	119.98
23	Q	103	THR	C-N-CA	5.12	125.67	119.98
23	Q	115	GLU	CA-C-O	5.12	125.98	120.55
27	H	53	GLN	CA-C-N	5.12	127.14	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	H	53	GLN	C-N-CA	5.12	127.14	120.28
29	K	250	VAL	CA-CB-CG1	5.12	119.11	110.40
31	M	257	PRO	CA-C-O	-5.12	111.81	119.34
32	J	139	MET	CA-C-O	-5.12	115.42	120.70
2	B	204	THR	N-CA-CB	5.12	118.60	110.87
14	7	221	TYR	CA-C-N	5.12	127.10	120.44
14	7	221	TYR	C-N-CA	5.12	127.10	120.44
19	Z	827	PRO	N-CA-CB	-5.12	97.88	103.25
24	R	113	GLN	N-CA-CB	5.12	117.65	110.12
28	I	232	LYS	N-CA-C	-5.12	105.78	111.36
3	C	209	GLU	N-CA-C	-5.12	107.20	113.50
8	1	133	ILE	N-CA-CB	5.12	118.29	111.64
19	Z	405	HIS	CB-CG-ND1	5.12	130.38	122.70
19	Z	515	ALA	N-CA-CB	-5.12	102.34	110.22
24	R	381	GLN	OE1-CD-NE2	5.12	127.72	122.60
18	Y	47	ASN	CA-CB-CG	-5.12	107.48	112.60
19	Z	60	VAL	CA-C-N	5.12	127.14	120.28
19	Z	60	VAL	C-N-CA	5.12	127.14	120.28
20	N	451	ALA	CA-C-N	5.12	129.82	122.40
20	N	451	ALA	C-N-CA	5.12	129.82	122.40
23	Q	276	ALA	CA-C-N	5.12	130.77	121.92
23	Q	276	ALA	C-N-CA	5.12	130.77	121.92
32	J	335	LYS	CB-CA-C	-5.12	102.30	110.79
1	A	160	TYR	N-CA-C	-5.12	101.42	109.50
2	B	68	ILE	N-CA-C	5.12	115.89	110.72
3	C	140	ASP	CA-C-N	5.12	127.09	120.44
3	C	140	ASP	C-N-CA	5.12	127.09	120.44
6	F	84	LEU	CA-C-N	5.12	127.13	120.28
6	F	84	LEU	C-N-CA	5.12	127.13	120.28
14	7	215	ARG	N-CA-CB	5.12	117.73	110.16
16	V	65	TYR	CA-C-N	-5.12	115.39	122.30
16	V	65	TYR	C-N-CA	-5.12	115.39	122.30
16	V	165	ALA	CA-C-N	5.12	127.14	120.28
16	V	165	ALA	C-N-CA	5.12	127.14	120.28
17	T	99	GLU	O-C-N	-5.12	116.16	122.25
19	Z	763	ARG	NE-CZ-NH2	-5.12	114.59	119.20
20	N	453	HIS	CA-C-N	5.12	132.60	121.19
20	N	453	HIS	C-N-CA	5.12	132.60	121.19
20	N	763	VAL	CB-CA-C	-5.12	105.16	112.22
20	N	808	PRO	N-CA-CB	5.12	108.06	103.20
21	S	274	GLU	N-CA-C	-5.12	106.72	113.17
25	U	38	VAL	O-C-N	5.12	129.00	122.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	160	SER	CA-C-O	5.12	125.97	120.55
27	H	73	ALA	O-C-N	-5.12	115.44	121.32
1	A	27	TYR	CB-CG-CD1	5.11	128.47	120.80
3	C	20	GLN	N-CA-C	5.11	116.85	111.28
4	D	15	HIS	CG-CD2-NE2	5.11	112.31	107.20
15	W	15	TYR	O-C-N	-5.11	115.79	122.39
19	Z	390	LEU	CA-C-N	5.11	127.39	120.44
19	Z	390	LEU	C-N-CA	5.11	127.39	120.44
21	S	399	ILE	CA-C-N	5.11	127.13	120.28
21	S	399	ILE	C-N-CA	5.11	127.13	120.28
23	Q	363	ARG	N-CA-CB	5.11	117.73	110.16
31	M	234	THR	N-CA-C	-5.11	106.73	113.17
2	B	231	ALA	CA-C-N	5.11	127.13	120.28
2	B	231	ALA	C-N-CA	5.11	127.13	120.28
17	T	211	PHE	CA-C-N	5.11	127.55	120.29
17	T	211	PHE	C-N-CA	5.11	127.55	120.29
27	H	268	LYS	CA-C-O	-5.11	114.71	120.43
29	K	135	HIS	ND1-CE1-NE2	5.11	113.51	108.40
12	5	239	ARG	CA-C-N	-5.11	115.90	123.05
12	5	239	ARG	C-N-CA	-5.11	115.90	123.05
24	R	238	GLU	CA-C-O	5.11	125.96	120.70
12	5	222	ALA	CB-CA-C	-5.11	102.31	110.79
20	N	884	VAL	O-C-N	-5.11	117.38	123.00
29	K	194	ILE	CB-CA-C	-5.11	105.25	112.14
29	K	353	ASN	N-CA-CB	5.11	118.05	110.29
31	M	404	VAL	CA-C-O	-5.11	115.44	120.85
6	F	147	THR	CA-C-O	-5.11	114.85	120.36
7	G	181	GLN	N-CA-C	-5.11	100.41	108.73
10	3	86	THR	N-CA-CB	-5.11	102.62	110.12
19	Z	572	ALA	CA-C-N	5.11	128.67	120.30
19	Z	572	ALA	C-N-CA	5.11	128.67	120.30
21	S	357	PHE	CA-C-O	-5.11	115.14	120.55
24	R	281	GLU	CB-CG-CD	-5.11	103.92	112.60
29	K	36	ASP	CA-C-N	5.11	127.12	120.28
29	K	36	ASP	C-N-CA	5.11	127.12	120.28
31	M	319	GLN	CB-CG-CD	5.11	121.28	112.60
31	M	417	GLU	O-C-N	5.11	128.97	123.10
6	F	214	ILE	CA-C-N	5.10	130.13	122.58
6	F	214	ILE	C-N-CA	5.10	130.13	122.58
15	W	169	HIS	ND1-CE1-NE2	5.10	113.50	108.40
19	Z	540	GLN	OE1-CD-NE2	5.10	127.70	122.60
21	S	182	LYS	CB-CA-C	-5.10	100.46	110.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	281	GLY	O-C-N	5.10	129.34	122.70
26	O	47	ASP	CA-C-O	-5.10	113.17	120.16
8	1	106	PRO	CA-C-N	5.10	125.38	119.92
8	1	106	PRO	C-N-CA	5.10	125.38	119.92
8	1	112	ALA	CB-CA-C	-5.10	102.32	110.79
11	4	30	ASP	CA-CB-CG	-5.10	107.50	112.60
20	N	335	ILE	CA-CB-CG1	5.10	119.07	110.40
21	S	262	GLN	CA-C-O	-5.10	115.14	120.55
23	Q	310	ARG	NE-CZ-NH2	-5.10	114.61	119.20
31	M	297	LYS	CG-CD-CE	5.10	123.04	111.30
20	N	940	GLN	OE1-CD-NE2	5.10	127.70	122.60
12	5	147	TYR	CB-CG-CD2	5.10	128.45	120.80
19	Z	363	SER	N-CA-CB	5.10	119.11	110.49
19	Z	662	MET	O-C-N	5.10	127.96	122.15
20	N	887	ALA	CA-C-O	5.10	126.50	120.69
22	P	44	ILE	N-CA-C	5.10	115.82	110.62
28	I	80	ARG	CA-C-N	5.10	128.06	120.31
28	I	80	ARG	C-N-CA	5.10	128.06	120.31
1	A	27	TYR	CA-C-N	5.10	127.11	120.28
1	A	27	TYR	C-N-CA	5.10	127.11	120.28
5	E	122	GLN	OE1-CD-NE2	-5.10	117.50	122.60
7	G	35	SER	CA-C-N	5.10	128.71	121.42
7	G	35	SER	C-N-CA	5.10	128.71	121.42
19	Z	76	GLU	O-C-N	-5.10	116.72	122.12
19	Z	160	ARG	O-C-N	-5.10	116.26	122.22
20	N	86	ASP	CA-C-O	-5.10	115.82	121.33
20	N	107	HIS	CE1-NE2-CD2	-5.10	103.90	109.00
21	S	264	GLU	CA-C-O	-5.10	115.45	120.70
22	P	31	CYS	N-CA-CB	5.10	117.61	110.12
23	Q	242	ILE	CA-CB-CG1	5.10	119.06	110.40
30	L	26	TYR	N-CA-C	-5.10	105.72	111.28
30	L	328	LYS	N-CA-CB	5.10	117.61	110.12
3	C	129	PRO	N-CA-C	-5.10	103.26	111.77
11	4	19	ARG	CA-C-O	-5.10	115.28	120.99
15	W	16	MET	CA-C-O	5.10	124.75	119.14
19	Z	232	TYR	CB-CA-C	-5.10	102.33	110.79
29	K	350	SER	O-C-N	5.10	128.18	122.22
30	L	149	ILE	CA-C-N	5.10	128.25	121.01
30	L	149	ILE	C-N-CA	5.10	128.25	121.01
30	L	224	GLU	N-CA-C	-5.10	105.81	111.36
9	2	152	HIS	CB-CG-CD2	-5.09	124.58	131.20
12	5	61	THR	O-C-N	-5.09	117.97	123.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	810	ILE	N-CA-C	5.09	119.94	109.34
25	U	286	GLU	O-C-N	5.09	127.96	122.15
26	O	113	LEU	O-C-N	5.09	127.32	122.07
27	H	258	ARG	N-CA-C	-5.09	105.62	111.07
29	K	188	PHE	CA-C-N	5.09	127.06	120.44
29	K	188	PHE	C-N-CA	5.09	127.06	120.44
9	2	62	ARG	CA-CB-CG	5.09	124.29	114.10
9	2	198	VAL	CA-CB-CG2	-5.09	101.74	110.40
12	5	210	GLU	CB-CG-CD	-5.09	103.94	112.60
22	P	373	ILE	N-CA-C	-5.09	100.55	108.44
26	O	274	LEU	O-C-N	5.09	127.96	122.15
8	1	142	GLY	CA-C-O	-5.09	118.72	122.23
10	3	125	ASP	CA-CB-CG	5.09	117.69	112.60
10	3	159	ASP	CA-CB-CG	-5.09	107.51	112.60
19	Z	572	ALA	N-CA-C	-5.09	105.81	111.36
19	Z	740	ARG	CD-NE-CZ	-5.09	117.27	124.40
21	S	28	PRO	CA-C-N	5.09	128.50	120.97
21	S	28	PRO	C-N-CA	5.09	128.50	120.97
21	S	464	SER	N-CA-CB	5.09	119.10	110.49
23	Q	203	PRO	CA-C-O	-5.09	113.18	120.56
23	Q	278	ARG	CB-CG-CD	5.09	123.01	111.30
28	I	437	GLY	N-CA-C	5.09	118.84	112.73
3	C	178	ASP	N-CA-C	5.09	117.95	111.69
4	D	116	TYR	CA-C-N	5.09	127.43	120.46
4	D	116	TYR	C-N-CA	5.09	127.43	120.46
19	Z	466	LEU	CA-C-N	5.09	127.10	120.28
19	Z	466	LEU	C-N-CA	5.09	127.10	120.28
23	Q	190	LEU	CA-C-O	-5.09	115.03	120.42
26	O	152	HIS	CA-C-N	5.09	127.06	120.44
26	O	152	HIS	C-N-CA	5.09	127.06	120.44
32	J	310	ARG	NE-CZ-NH2	-5.09	114.62	119.20
5	E	130	PRO	N-CA-CB	5.09	108.35	103.52
7	G	202	HIS	CE1-NE2-CD2	-5.09	103.91	109.00
14	7	191	GLN	OE1-CD-NE2	-5.09	117.51	122.60
29	K	139	LEU	CA-C-N	5.09	127.64	120.42
29	K	139	LEU	C-N-CA	5.09	127.64	120.42
2	B	95	GLN	O-C-N	-5.09	116.01	122.27
11	4	73	TYR	CB-CA-C	-5.09	100.90	110.67
12	5	78	ARG	O-C-N	-5.09	117.25	123.10
19	Z	842	VAL	O-C-N	5.09	126.79	122.16
20	N	453	HIS	CA-C-O	5.09	124.09	118.65
20	N	858	GLU	CA-C-O	-5.09	115.28	121.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	33	ARG	O-C-N	5.09	127.51	122.12
23	Q	265	GLU	N-CA-CB	5.09	117.39	110.01
29	K	142	VAL	O-C-N	-5.09	117.53	122.97
31	M	164	LEU	CA-C-N	5.09	130.54	122.10
31	M	164	LEU	C-N-CA	5.09	130.54	122.10
13	6	190	HIS	CE1-NE2-CD2	-5.08	103.92	109.00
16	V	225	TRP	CB-CA-C	-5.08	102.90	110.88
22	P	160	LYS	N-CA-CB	-5.08	102.64	110.01
24	R	226	VAL	CA-CB-CG2	5.08	119.05	110.40
30	L	207	CYS	N-CA-CB	5.08	117.35	110.38
31	M	429	GLU	CB-CA-C	-5.08	102.20	110.85
19	Z	63	LEU	CA-C-O	5.08	125.82	119.97
20	N	390	LEU	N-CA-C	-5.08	105.82	111.36
21	S	123	THR	CA-CB-CG2	5.08	119.14	110.50
22	P	299	ILE	N-CA-C	5.08	112.58	107.55
5	E	135	ARG	N-CA-CB	5.08	119.81	111.17
19	Z	510	SER	N-CA-C	-5.08	101.35	109.07
23	Q	48	GLN	CA-C-O	-5.08	115.47	120.70
30	L	127	ARG	NE-CZ-NH2	5.08	123.77	119.20
30	L	396	SER	N-CA-CB	5.08	119.08	110.49
11	4	133	GLY	O-C-N	5.08	127.88	123.36
23	Q	343	SER	CA-C-N	5.08	129.35	122.19
23	Q	343	SER	C-N-CA	5.08	129.35	122.19
29	K	198	PRO	N-CA-CB	5.08	108.01	103.08
2	B	100	VAL	N-CA-C	5.08	115.19	110.42
8	1	92	VAL	CB-CA-C	-5.08	105.21	112.22
10	3	145	GLN	N-CA-CB	5.08	117.59	110.12
14	7	79	ARG	CA-C-N	5.08	131.26	122.32
14	7	79	ARG	C-N-CA	5.08	131.26	122.32
15	W	103	LYS	CA-C-N	5.08	129.82	122.36
15	W	103	LYS	C-N-CA	5.08	129.82	122.36
19	Z	56	LEU	O-C-N	-5.08	116.61	122.09
19	Z	505	MET	N-CA-CB	5.08	120.38	112.25
20	N	92	ASP	CA-C-N	5.08	127.08	120.28
20	N	92	ASP	C-N-CA	5.08	127.08	120.28
31	M	64	ARG	CD-NE-CZ	-5.08	117.29	124.40
21	S	75	VAL	CA-C-O	-5.08	115.42	121.05
21	S	148	GLY	O-C-N	5.08	127.62	122.24
26	O	155	PHE	CA-C-O	-5.08	115.04	120.42
27	H	169	LYS	O-C-N	-5.08	115.48	121.32
30	L	245	PHE	CA-CB-CG	-5.08	108.72	113.80
3	C	97	TYR	CA-C-N	5.08	127.08	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	97	TYR	C-N-CA	5.08	127.08	120.28
5	E	211	ASN	CA-C-O	-5.08	116.02	121.45
6	F	206	THR	OG1-CB-CG2	-5.08	99.15	109.30
19	Z	356	ASN	O-C-N	-5.08	116.84	122.07
21	S	38	GLU	N-CA-CB	-5.08	102.65	110.01
22	P	452	ILE	CA-C-N	5.08	129.20	120.72
22	P	452	ILE	C-N-CA	5.08	129.20	120.72
23	Q	265	GLU	CB-CA-C	-5.08	102.91	110.88
28	I	66	GLU	CA-CB-CG	5.08	124.25	114.10
30	L	84	ILE	CA-C-O	-5.08	115.10	120.48
7	G	52	LYS	O-C-N	-5.07	117.01	123.05
11	4	194	ILE	CA-C-O	5.07	126.94	121.36
19	Z	195	ASN	N-CA-C	-5.07	105.83	111.36
19	Z	658	ALA	CA-C-N	5.07	127.50	120.29
19	Z	658	ALA	C-N-CA	5.07	127.50	120.29
20	N	460	TYR	CA-CB-CG	5.07	123.03	113.90
23	Q	401	LEU	CB-CA-C	-5.07	102.37	110.79
26	O	36	GLN	N-CA-C	5.07	116.89	111.36
26	O	136	GLU	N-CA-C	5.07	116.50	111.07
31	M	415	ALA	N-CA-CB	5.07	120.27	111.39
4	D	237	GLU	CA-C-O	-5.07	114.14	119.97
16	V	92	GLN	CA-C-O	5.07	125.92	120.70
21	S	61	ARG	CA-C-N	5.07	127.49	120.29
21	S	61	ARG	C-N-CA	5.07	127.49	120.29
5	E	98	ASN	CA-C-O	5.07	125.92	120.55
19	Z	210	GLU	CA-C-O	5.07	125.92	120.55
21	S	159	VAL	O-C-N	5.07	127.05	121.83
23	Q	416	ASN	CB-CG-ND2	5.07	124.00	116.40
27	H	274	PHE	CA-CB-CG	-5.07	108.73	113.80
30	L	107	LYS	CA-C-N	5.07	125.52	120.04
30	L	107	LYS	C-N-CA	5.07	125.52	120.04
12	5	69	HIS	CA-C-O	-5.07	115.77	121.40
14	7	138	ARG	CA-C-N	5.07	127.07	120.28
14	7	138	ARG	C-N-CA	5.07	127.07	120.28
14	7	138	ARG	CG-CD-NE	-5.07	100.85	112.00
19	Z	364	GLN	OE1-CD-NE2	5.07	127.67	122.60
19	Z	637	LYS	N-CA-CB	5.07	117.57	110.12
26	O	353	LEU	CA-C-O	-5.07	115.05	120.42
8	1	147	VAL	CA-CB-CG2	5.07	119.02	110.40
15	W	33	VAL	N-CA-CB	5.07	118.18	110.58
19	Z	158	TYR	CA-C-N	5.07	127.40	120.46
19	Z	158	TYR	C-N-CA	5.07	127.40	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	127	ASP	N-CA-CB	5.07	117.61	110.36
22	P	62	SER	CA-C-O	5.07	125.79	120.42
23	Q	156	GLU	CA-C-O	-5.07	115.48	120.70
23	Q	397	TYR	CA-CB-CG	-5.07	104.78	113.90
24	R	76	ALA	N-CA-CB	5.07	117.36	110.01
27	H	197	HIS	CE1-NE2-CD2	-5.07	103.93	109.00
11	4	96	THR	CA-CB-CG2	5.07	119.11	110.50
12	5	192	VAL	CA-C-N	5.07	131.21	121.18
12	5	192	VAL	C-N-CA	5.07	131.21	121.18
16	V	183	HIS	CB-CG-CD2	-5.07	124.61	131.20
19	Z	140	LEU	CA-C-N	5.07	127.48	120.29
19	Z	140	LEU	C-N-CA	5.07	127.48	120.29
19	Z	170	TRP	CA-C-N	-5.07	116.26	122.84
19	Z	170	TRP	C-N-CA	-5.07	116.26	122.84
19	Z	213	GLN	O-C-N	-5.07	116.29	122.22
19	Z	828	ARG	N-CA-C	5.07	117.38	110.24
20	N	206	MET	CA-C-N	5.07	127.07	120.28
20	N	206	MET	C-N-CA	5.07	127.07	120.28
23	Q	393	VAL	N-CA-CB	5.07	116.54	110.31
2	B	224	THR	CA-C-O	-5.06	115.05	120.42
12	5	61	THR	CB-CA-C	5.06	120.04	110.62
14	7	62	CYS	CA-CB-SG	-5.06	102.75	114.40
19	Z	90	THR	N-CA-CB	5.06	117.62	110.13
20	N	6	ALA	CA-C-N	5.06	125.46	119.94
20	N	6	ALA	C-N-CA	5.06	125.46	119.94
3	C	240	HIS	CG-CD2-NE2	5.06	112.26	107.20
5	E	102	THR	CA-C-N	5.06	128.00	120.31
5	E	102	THR	C-N-CA	5.06	128.00	120.31
7	G	173	ALA	N-CA-CB	5.06	117.56	110.12
8	1	71	HIS	N-CA-C	-5.06	106.12	113.21
19	Z	242	GLU	CA-C-O	-5.06	113.43	118.34
20	N	773	PHE	CA-C-O	-5.06	113.22	120.16
23	Q	226	LYS	CB-CG-CD	5.06	122.94	111.30
24	R	354	VAL	CB-CA-C	5.06	117.92	110.98
1	A	188	ASP	N-CA-C	-5.06	100.83	108.67
5	E	109	VAL	N-CA-C	-5.06	105.46	110.62
14	7	253	TRP	CB-CG-CD2	-5.06	119.72	126.80
21	S	120	ASN	CA-CB-CG	-5.06	107.54	112.60
1	A	235	ILE	CA-C-N	5.06	127.06	120.28
1	A	235	ILE	C-N-CA	5.06	127.06	120.28
14	7	176	TYR	N-CA-CB	5.06	119.04	110.49
16	V	236	GLU	CA-C-N	5.06	127.06	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	V	236	GLU	C-N-CA	5.06	127.06	120.28
20	N	328	ILE	CA-CB-CG1	5.06	119.00	110.40
24	R	315	THR	CA-CB-OG1	5.06	117.19	109.60
29	K	112	TYR	CB-CG-CD1	-5.06	113.21	120.80
32	J	383	PHE	CD1-CG-CD2	5.06	126.19	118.60
7	G	165	ALA	CA-C-N	5.06	129.99	122.71
7	G	165	ALA	C-N-CA	5.06	129.99	122.71
9	2	169	THR	CA-C-N	5.06	131.07	122.37
9	2	169	THR	C-N-CA	5.06	131.07	122.37
20	N	500	ASN	OD1-CG-ND2	5.06	127.66	122.60
22	P	417	ARG	N-CA-CB	5.06	116.87	110.04
25	U	73	ASP	O-C-N	-5.06	116.76	122.12
28	I	237	LYS	CA-C-N	5.06	127.06	120.28
28	I	237	LYS	C-N-CA	5.06	127.06	120.28
16	V	306	THR	CA-CB-OG1	-5.06	102.02	109.60
20	N	591	CYS	N-CA-C	5.06	116.43	109.15
28	I	420	LYS	N-CA-C	5.06	116.79	111.28
15	W	85	THR	CA-C-N	5.05	127.47	120.29
15	W	85	THR	C-N-CA	5.05	127.47	120.29
19	Z	688	ARG	CG-CD-NE	-5.05	100.88	112.00
22	P	403	PHE	N-CA-C	-5.05	100.05	108.34
29	K	217	LYS	N-CA-CB	5.05	117.55	110.12
31	M	32	ILE	CA-C-N	5.05	126.46	120.14
31	M	32	ILE	C-N-CA	5.05	126.46	120.14
22	P	357	ARG	CA-C-N	5.05	127.59	120.42
22	P	357	ARG	C-N-CA	5.05	127.59	120.42
23	Q	323	LEU	N-CA-CB	5.05	118.00	110.22
23	Q	364	LYS	CA-C-N	5.05	127.05	120.28
23	Q	364	LYS	C-N-CA	5.05	127.05	120.28
11	4	8	GLN	N-CA-C	-5.05	99.88	108.26
14	7	108	LYS	CB-CG-CD	5.05	122.92	111.30
16	V	224	SER	CB-CA-C	-5.05	99.66	110.32
21	S	293	ALA	CA-C-N	5.05	127.59	120.42
21	S	293	ALA	C-N-CA	5.05	127.59	120.42
22	P	152	ILE	CA-C-N	5.05	129.16	120.72
22	P	152	ILE	C-N-CA	5.05	129.16	120.72
29	K	42	SER	N-CA-CB	5.05	117.40	110.07
31	M	247	THR	CB-CA-C	-5.05	100.97	110.67
32	J	278	ASN	CB-CG-ND2	5.05	123.98	116.40
5	E	123	PHE	CA-CB-CG	5.05	118.85	113.80
12	5	192	VAL	N-CA-C	5.05	119.94	113.07
15	W	182	ALA	O-C-N	5.05	127.18	122.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	H	167	GLU	O-C-N	-5.05	117.25	122.96
27	H	336	ARG	N-CA-C	-5.05	105.17	113.50
29	K	98	GLN	CA-C-O	5.05	126.57	119.80
32	J	276	LEU	N-CA-C	-5.05	105.67	111.07
15	W	138	VAL	CA-C-N	5.05	130.25	122.93
15	W	138	VAL	C-N-CA	5.05	130.25	122.93
15	W	163	LYS	N-CA-C	-5.05	107.10	114.12
11	4	172	ILE	N-CA-CB	5.05	120.49	110.95
13	6	63	HIS	CA-CB-CG	5.05	118.85	113.80
21	S	254	TYR	N-CA-C	5.05	116.78	111.28
25	U	255	ASP	N-CA-C	-5.05	105.86	111.36
29	K	335	LEU	CA-C-O	-5.05	115.08	120.23
31	M	62	VAL	CA-C-O	-5.05	115.50	120.85
6	F	230	SER	CA-C-N	5.04	124.54	119.19
6	F	230	SER	C-N-CA	5.04	124.54	119.19
19	Z	586	PRO	CA-C-N	5.04	127.45	120.29
19	Z	586	PRO	C-N-CA	5.04	127.45	120.29
21	S	262	GLN	CA-C-N	5.04	127.45	120.29
21	S	262	GLN	C-N-CA	5.04	127.45	120.29
25	U	229	GLN	CB-CA-C	-5.04	102.42	110.79
1	A	10	ASP	CB-CA-C	-5.04	100.38	110.42
1	A	146	GLU	N-CA-C	-5.04	106.81	113.12
5	E	119	LEU	CA-C-N	5.04	127.04	120.28
5	E	119	LEU	C-N-CA	5.04	127.04	120.28
6	F	44	ALA	N-CA-C	-5.04	100.24	108.76
12	5	199	ASP	CA-CB-CG	5.04	117.64	112.60
19	Z	41	LYS	CA-C-N	5.04	127.45	120.29
19	Z	41	LYS	C-N-CA	5.04	127.45	120.29
26	O	68	GLU	O-C-N	-5.04	116.84	122.09
27	H	336	ARG	CA-C-O	5.04	124.05	118.65
28	I	334	ILE	CA-C-O	-5.04	114.99	119.38
2	B	143	ARG	NE-CZ-NH1	5.04	126.54	121.50
3	C	122	THR	CA-C-N	5.04	127.03	120.28
3	C	122	THR	C-N-CA	5.04	127.03	120.28
9	2	157	TYR	CD1-CG-CD2	5.04	125.66	118.10
16	V	249	LEU	CA-C-O	-5.04	115.21	120.55
17	T	336	THR	N-CA-CB	5.04	119.28	110.81
22	P	281	ASN	CA-C-N	5.04	127.04	120.28
22	P	281	ASN	C-N-CA	5.04	127.04	120.28
29	K	81	ARG	NE-CZ-NH1	5.04	126.54	121.50
7	G	173	ALA	O-C-N	5.04	127.46	122.12
19	Z	320	ILE	O-C-N	-5.04	116.98	121.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	614	HIS	ND1-CE1-NE2	5.04	113.44	108.40
31	M	197	GLN	N-CA-C	5.04	116.77	111.28
2	B	133	SER	N-CA-C	-5.04	101.48	109.59
3	C	23	TYR	CA-CB-CG	-5.04	104.83	113.90
14	7	142	SER	N-CA-C	5.04	116.85	111.36
16	V	25	VAL	CA-C-N	5.04	130.50	122.59
16	V	25	VAL	C-N-CA	5.04	130.50	122.59
16	V	166	ASN	CB-CG-ND2	-5.04	108.84	116.40
19	Z	183	PRO	CA-C-N	5.04	127.44	120.29
19	Z	183	PRO	C-N-CA	5.04	127.44	120.29
22	P	271	VAL	CA-C-O	-5.04	115.71	120.95
22	P	448	LYS	CA-C-N	5.04	127.44	120.29
22	P	448	LYS	C-N-CA	5.04	127.44	120.29
23	Q	110	CYS	CA-C-N	5.04	126.99	120.44
23	Q	110	CYS	C-N-CA	5.04	126.99	120.44
23	Q	291	ALA	N-CA-C	5.04	116.77	111.28
28	I	208	PRO	N-CD-CG	5.04	110.76	103.20
16	V	121	TRP	CB-CG-CD2	-5.04	119.75	126.80
22	P	178	GLU	N-CA-C	-5.04	102.61	110.42
24	R	38	ARG	N-CA-CB	5.04	117.98	110.22
4	D	6	ALA	N-CA-C	5.04	117.53	110.23
23	Q	20	ARG	N-CA-C	5.04	117.66	111.82
25	U	192	THR	N-CA-CB	5.04	117.52	110.12
25	U	244	GLU	CB-CG-CD	-5.04	104.04	112.60
30	L	292	ALA	CA-C-O	-5.04	114.08	120.28
32	J	323	GLU	O-C-N	-5.04	116.78	122.12
7	G	137	MET	CA-C-O	-5.03	115.26	120.70
7	G	207	ASP	CA-CB-CG	5.03	117.63	112.60
10	3	189	ILE	CB-CA-C	5.03	118.08	110.63
14	7	221	TYR	CB-CG-CD1	5.03	128.35	120.80
15	W	84	ILE	CB-CA-C	-5.03	104.74	110.73
19	Z	263	PRO	CA-C-N	5.03	127.44	120.29
19	Z	263	PRO	C-N-CA	5.03	127.44	120.29
20	N	131	GLU	O-C-N	-5.03	116.78	122.12
29	K	106	THR	CA-CB-OG1	5.03	117.15	109.60
2	B	69	THR	CA-C-O	-5.03	115.77	121.05
7	G	230	LYS	O-C-N	5.03	127.45	122.12
15	W	51	LEU	CA-C-N	5.03	130.03	122.58
15	W	51	LEU	C-N-CA	5.03	130.03	122.58
19	Z	264	GLU	CA-C-N	5.03	127.44	120.29
19	Z	264	GLU	C-N-CA	5.03	127.44	120.29
1	A	120	ASP	CA-C-N	5.03	127.00	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	120	ASP	C-N-CA	5.03	127.00	120.56
4	D	3	TYR	N-CA-C	-5.03	101.11	109.46
7	G	18	ASP	CA-CB-CG	-5.03	107.57	112.60
15	W	121	GLU	N-CA-C	5.03	117.66	111.82
20	N	339	LEU	O-C-N	5.03	127.45	122.12
20	N	590	TYR	N-CA-C	5.03	117.66	111.82
20	N	756	HIS	CE1-NE2-CD2	-5.03	103.97	109.00
26	O	160	SER	CA-CB-OG	-5.03	101.04	111.10
27	H	339	ARG	CA-C-N	-5.03	115.78	122.72
27	H	339	ARG	C-N-CA	-5.03	115.78	122.72
30	L	382	MET	CA-C-N	5.03	127.43	120.29
30	L	382	MET	C-N-CA	5.03	127.43	120.29
12	5	85	ILE	CA-C-O	5.03	123.51	119.29
20	N	199	ARG	NE-CZ-NH2	-5.03	114.67	119.20
26	O	232	TRP	CB-CG-CD1	5.03	134.44	126.90
7	G	86	ARG	CB-CA-C	-5.03	102.30	110.85
19	Z	679	LEU	CA-C-O	5.03	125.88	120.55
20	N	89	ASN	N-CA-C	5.03	116.76	111.28
21	S	255	LEU	O-C-N	5.03	127.52	122.09
21	S	498	ASN	OD1-CG-ND2	5.03	127.63	122.60
23	Q	48	GLN	CA-C-N	5.03	126.98	120.44
23	Q	48	GLN	C-N-CA	5.03	126.98	120.44
23	Q	183	LEU	O-C-N	-5.03	115.54	121.32
26	O	33	LEU	N-CA-C	-5.03	99.14	107.99
28	I	269	GLU	CA-C-N	5.03	126.97	120.44
28	I	269	GLU	C-N-CA	5.03	126.97	120.44
29	K	73	LEU	N-CA-C	5.03	116.76	111.28
9	2	129	MET	O-C-N	5.03	127.88	122.15
12	5	221	GLN	CB-CG-CD	5.03	121.14	112.60
19	Z	803	PHE	CA-CB-CG	5.03	118.83	113.80
23	Q	240	ASP	CB-CA-C	-5.03	101.33	110.63
32	J	29	GLU	CA-C-N	5.03	127.01	120.28
32	J	29	GLU	C-N-CA	5.03	127.01	120.28
9	2	192	GLU	CA-C-N	5.02	127.42	120.29
9	2	192	GLU	C-N-CA	5.02	127.42	120.29
19	Z	857	GLY	N-CA-C	-5.02	107.88	115.32
20	N	603	LEU	N-CA-CB	5.02	117.50	110.12
20	N	908	ILE	CA-C-O	-5.02	114.58	120.76
3	C	101	TYR	CA-CB-CG	-5.02	104.86	113.90
15	W	68	THR	CA-C-N	5.02	125.55	119.98
15	W	68	THR	C-N-CA	5.02	125.55	119.98
20	N	526	THR	O-C-N	-5.02	116.42	122.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	399	ASN	N-CA-CB	5.02	118.06	110.28
26	O	296	ILE	N-CA-CB	-5.02	103.71	110.54
29	K	213	THR	CB-CA-C	-5.02	102.45	110.79
30	L	94	VAL	N-CA-CB	5.02	118.08	111.25
31	M	427	ILE	CA-CB-CG1	5.02	118.94	110.40
32	J	298	ILE	CA-C-N	5.02	127.42	120.29
32	J	298	ILE	C-N-CA	5.02	127.42	120.29
11	4	175	LEU	CA-C-N	5.02	124.80	119.28
11	4	175	LEU	C-N-CA	5.02	124.80	119.28
19	Z	866	GLN	OE1-CD-NE2	5.02	127.62	122.60
26	O	124	ASN	CA-C-O	5.02	125.87	120.55
19	Z	542	ILE	CA-CB-CG2	-5.02	101.97	110.50
20	N	782	ALA	CA-C-N	5.02	128.47	121.24
20	N	782	ALA	C-N-CA	5.02	128.47	121.24
20	N	914	LEU	N-CA-C	-5.02	105.26	113.19
22	P	159	VAL	CA-C-O	5.02	126.11	120.64
24	R	162	GLU	CA-CB-CG	5.02	124.14	114.10
27	H	323	ARG	CA-C-N	5.02	125.09	119.87
27	H	323	ARG	C-N-CA	5.02	125.09	119.87
6	F	60	GLN	CA-C-N	5.02	128.19	120.82
6	F	60	GLN	C-N-CA	5.02	128.19	120.82
9	2	130	LEU	CA-C-N	5.02	127.94	120.31
9	2	130	LEU	C-N-CA	5.02	127.94	120.31
9	2	228	PHE	O-C-N	-5.02	117.50	123.22
16	V	46	ARG	CD-NE-CZ	-5.02	117.37	124.40
16	V	219	ASN	N-CA-C	5.02	121.49	110.80
19	Z	416	MET	CB-CA-C	-5.02	102.32	110.85
23	Q	197	ALA	CA-C-N	5.02	127.50	120.28
23	Q	197	ALA	C-N-CA	5.02	127.50	120.28
26	O	9	GLN	CA-C-O	5.02	125.87	120.55
29	K	221	HIS	CB-CG-CD2	-5.02	124.68	131.20
4	D	131	ARG	CB-CA-C	-5.02	103.49	110.16
10	3	201	LYS	CA-C-O	5.02	125.83	120.46
24	R	99	GLU	CA-C-O	-5.02	115.10	120.42
26	O	165	THR	N-CA-CB	5.02	117.28	110.01
27	H	97	ARG	CD-NE-CZ	-5.02	117.38	124.40
32	J	369	TYR	CB-CG-CD1	-5.02	113.28	120.80
3	C	108	GLU	CA-C-N	5.01	127.41	120.29
3	C	108	GLU	C-N-CA	5.01	127.41	120.29
6	F	164	ARG	NE-CZ-NH1	5.01	126.52	121.50
16	V	194	HIS	N-CA-CB	5.01	117.28	110.01
20	N	804	SER	CA-C-O	-5.01	114.11	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	299	SER	CA-C-N	5.01	127.93	120.31
21	S	299	SER	C-N-CA	5.01	127.93	120.31
27	H	117	GLN	CB-CG-CD	-5.01	104.08	112.60
27	H	249	TYR	CB-CG-CD2	-5.01	113.28	120.80
28	I	97	SER	CA-C-N	5.01	127.93	120.31
28	I	97	SER	C-N-CA	5.01	127.93	120.31
7	G	233	ARG	O-C-N	5.01	127.23	122.07
13	6	87	ASP	CA-C-N	5.01	127.00	120.28
13	6	87	ASP	C-N-CA	5.01	127.00	120.28
24	R	352	GLU	CB-CG-CD	-5.01	104.08	112.60
4	D	97	CYS	N-CA-C	5.01	116.43	111.07
9	2	76	LYS	CA-C-O	-5.01	113.25	120.11
13	6	190	HIS	O-C-N	5.01	128.26	122.25
17	T	184	GLN	OE1-CD-NE2	5.01	127.61	122.60
17	T	189	ALA	CA-C-N	5.01	129.09	120.72
17	T	189	ALA	C-N-CA	5.01	129.09	120.72
19	Z	697	ILE	N-CA-CB	5.01	117.36	110.54
20	N	462	LEU	O-C-N	5.01	127.43	122.12
20	N	692	ALA	O-C-N	5.01	127.86	122.15
20	N	731	ILE	CA-C-O	-5.01	115.54	120.85
21	S	355	PRO	N-CA-CB	5.01	108.83	103.52
27	H	329	PRO	CA-C-N	5.01	127.41	120.29
27	H	329	PRO	C-N-CA	5.01	127.41	120.29
30	L	240	GLN	CB-CG-CD	-5.01	104.08	112.60
31	M	283	PRO	N-CA-CB	5.01	108.00	103.34
1	A	124	VAL	N-CA-C	5.01	115.73	110.62
8	1	167	TYR	N-CA-C	-5.01	105.49	112.30
9	2	141	LEU	N-CA-C	-5.01	100.56	108.73
9	2	165	LEU	CA-C-O	-5.01	115.15	119.36
17	T	160	LEU	N-CA-C	-5.01	106.59	113.30
17	T	209	ALA	O-C-N	5.01	127.43	122.12
21	S	75	VAL	N-CA-CB	5.01	116.98	110.57
23	Q	420	LYS	N-CA-CB	-5.01	102.76	110.12
25	U	45	LYS	CA-C-N	5.01	127.93	120.31
25	U	45	LYS	C-N-CA	5.01	127.93	120.31
28	I	259	TYR	CB-CG-CD1	5.01	128.31	120.80
17	T	337	GLU	CA-C-N	5.01	128.80	120.94
17	T	337	GLU	C-N-CA	5.01	128.80	120.94
20	N	256	ALA	CA-C-N	5.01	127.88	120.82
20	N	256	ALA	C-N-CA	5.01	127.88	120.82
20	N	584	TYR	CB-CA-C	-5.01	102.48	110.79
24	R	247	LEU	CB-CA-C	-5.01	102.48	110.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	142	GLY	N-CA-C	-5.01	101.31	113.18
6	F	138	ASP	N-CA-C	-5.01	101.84	109.65
7	G	54	VAL	CA-CB-CG2	-5.01	101.89	110.40
8	1	190	ALA	N-CA-C	5.01	116.82	111.36
19	Z	18	ALA	N-CA-C	5.01	116.82	111.36
20	N	437	TYR	CA-C-N	5.01	127.92	120.31
20	N	437	TYR	C-N-CA	5.01	127.92	120.31
24	R	291	HIS	ND1-CE1-NE2	5.01	113.41	108.40
30	L	24	GLN	N-CA-C	-5.01	105.82	111.28
14	7	105	GLN	CA-C-N	5.00	126.99	120.28
14	7	105	GLN	C-N-CA	5.00	126.99	120.28
30	L	143	ASN	CB-CA-C	5.00	120.38	110.42
4	D	67	ASP	N-CA-C	-5.00	107.18	113.28
8	1	212	ILE	CA-C-O	-5.00	115.14	120.39
20	N	846	LYS	CA-C-O	5.00	124.17	118.47
22	P	261	ASP	CA-CB-CG	5.00	117.60	112.60
24	R	215	ASP	CA-C-O	-5.00	116.37	121.87
27	H	358	HIS	ND1-CE1-NE2	5.00	113.40	108.40
29	K	133	HIS	ND1-CE1-NE2	5.00	113.40	108.40
1	A	96	TYR	N-CA-CB	5.00	117.56	110.16
3	C	99	LEU	N-CA-C	5.00	116.42	111.07
3	C	120	ALA	CB-CA-C	-5.00	103.03	110.88
17	T	132	LEU	N-CA-CB	5.00	119.27	110.37
17	T	148	ARG	N-CA-CB	5.00	117.56	110.16
19	Z	9	THR	O-C-N	-5.00	116.01	120.71
19	Z	130	ALA	CB-CA-C	-5.00	102.49	110.79
20	N	565	ALA	N-CA-C	5.00	116.42	111.07
22	P	307	LYS	CA-C-N	5.00	126.94	120.44
22	P	307	LYS	C-N-CA	5.00	126.94	120.44
23	Q	187	ARG	N-CA-CB	-5.00	102.77	110.12

There are no chirality outliers.

All (291) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
8	1	122	ARG	Sidechain
8	1	123	TYR	Sidechain
8	1	124	ARG	Sidechain
8	1	169	TYR	Sidechain
8	1	199	ARG	Sidechain
8	1	94	TYR	Sidechain
9	2	118	ARG	Sidechain

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Mol	Chain	Res	Type	Group
9	2	124	ARG	Sidechain
9	2	154	TYR	Sidechain
9	2	157	TYR	Sidechain
9	2	167	TYR	Sidechain
9	2	85	TYR	Sidechain
10	3	104	TYR	Sidechain
10	3	129	CYS	Peptide
10	3	136	PHE	Sidechain
10	3	147	TYR	Sidechain
10	3	48	ARG	Sidechain
10	3	5	SER	Peptide
10	3	6	TYR	Sidechain
10	3	74	TYR	Sidechain
10	3	80	ARG	Sidechain
11	4	120	TYR	Sidechain
11	4	137	PHE	Sidechain
11	4	153	ARG	Sidechain
11	4	67	TYR	Sidechain
12	5	113	PHE	Sidechain
12	5	116	ARG	Sidechain
12	5	120	ARG	Sidechain
12	5	125	TYR	Sidechain
12	5	128	ARG	Sidechain
12	5	171	TYR	Sidechain
12	5	220	TYR	Sidechain
12	5	236	TYR	Sidechain
12	5	239	ARG	Sidechain
12	5	258	TYR	Sidechain
12	5	62	THR	Peptide
13	6	124	TYR	Sidechain
13	6	131	TYR	Sidechain
13	6	149	TYR	Sidechain
13	6	157	TYR	Sidechain
13	6	159	ARG	Sidechain
13	6	182	PHE	Sidechain
13	6	215	TYR	Sidechain
13	6	29	PHE	Sidechain
13	6	55	ARG	Sidechain
14	7	138	ARG	Sidechain
14	7	168	TYR	Sidechain
14	7	80	PHE	Sidechain
14	7	88	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	A	103	TYR	Sidechain
1	A	160	TYR	Sidechain
1	A	210	PHE	Sidechain
1	A	227	PHE	Sidechain
1	A	228	ARG	Sidechain
1	A	23	TYR	Sidechain
1	A	88	ARG	Sidechain
1	A	93	ARG	Sidechain
2	B	101	TYR	Sidechain
2	B	128	ARG	Sidechain
2	B	145	TYR	Sidechain
2	B	167	TYR	Sidechain
2	B	197	GLU	Mainchain
2	B	218	PHE	Sidechain
2	B	220	ARG	Sidechain
2	B	229	TYR	Sidechain
2	B	4	ARG	Sidechain
2	B	6	TYR	Sidechain
2	B	76	TYR	Sidechain
3	C	101	TYR	Sidechain
3	C	143	TYR	Sidechain
3	C	179	TYR	Sidechain
3	C	226	ARG	Sidechain
3	C	66	TYR	Sidechain
3	C	97	TYR	Sidechain
4	D	10	PHE	Sidechain
4	D	112	TYR	Sidechain
4	D	130	ARG	Sidechain
4	D	144	PHE	Sidechain
4	D	149	ARG	Sidechain
4	D	151	TYR	Sidechain
4	D	218	ARG	Sidechain
4	D	234	TYR	Sidechain
5	E	15	PHE	Sidechain
5	E	185	TYR	Sidechain
6	F	107	ARG	Sidechain
6	F	122	ARG	Sidechain
6	F	137	TYR	Sidechain
6	F	171	TYR	Sidechain
6	F	193	ARG	Sidechain
6	F	239	ARG	Sidechain
6	F	87	PHE	Sidechain

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Mol	Chain	Res	Type	Group
6	F	96	ARG	Sidechain
7	G	115	ARG	Sidechain
7	G	121	HIS	Sidechain
7	G	141	TYR	Sidechain
7	G	15	PHE	Sidechain
7	G	26	TYR	Sidechain
7	G	41	ARG	Sidechain
7	G	68	PHE	Sidechain
7	G	8	TYR	Sidechain
27	H	188	ARG	Sidechain
27	H	258	ARG	Sidechain
27	H	284	ARG	Sidechain
27	H	297	ARG	Sidechain
27	H	323	ARG	Sidechain
27	H	336	ARG	Sidechain
27	H	353	HIS	Sidechain
27	H	386	ARG	Sidechain
27	H	420	TYR	Sidechain
27	H	43	ARG	Sidechain
27	H	97	ARG	Sidechain
28	I	132	TYR	Sidechain
28	I	184	TYR	Sidechain
28	I	259	TYR	Sidechain
28	I	294	ARG	Sidechain
28	I	295	TYR	Sidechain
28	I	322	ARG	Sidechain
28	I	349	ARG	Sidechain
28	I	408	ARG	Sidechain
28	I	439	TYR	Sidechain
28	I	59	ARG	Sidechain
28	I	71	TYR	Sidechain
28	I	80	ARG	Sidechain
32	J	121	TYR	Sidechain
32	J	211	PHE	Sidechain
32	J	213	ARG	Sidechain
32	J	23	TYR	Sidechain
32	J	307	ARG	Sidechain
32	J	310	ARG	Sidechain
32	J	334	ARG	Sidechain
32	J	353	GLY	Peptide
32	J	369	TYR	Sidechain
32	J	383	PHE	Sidechain

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Mol	Chain	Res	Type	Group
32	J	95	PHE	Sidechain
29	K	111	TYR	Sidechain
29	K	188	PHE	Sidechain
29	K	205	TYR	Sidechain
29	K	245	ARG	Sidechain
29	K	287	ARG	Sidechain
29	K	299	PHE	Sidechain
29	K	313	ARG	Sidechain
29	K	366	ARG	Sidechain
29	K	388	ARG	Sidechain
29	K	392	TYR	Sidechain
29	K	403	TYR	Sidechain
30	L	175	ARG	Sidechain
30	L	187	TYR	Sidechain
30	L	199	ARG	Sidechain
30	L	233	PHE	Sidechain
30	L	305	ARG	Sidechain
30	L	311	ARG	Sidechain
30	L	323	ARG	Sidechain
30	L	54	TYR	Sidechain
30	L	92	ARG	Sidechain
30	L	93	TYR	Sidechain
30	L	98	ARG	Sidechain
31	M	160	SER	Peptide
31	M	161	TYR	Sidechain
31	M	183	ARG	Sidechain
31	M	251	PHE	Sidechain
31	M	307	ARG	Peptide,Sidechain
31	M	365	ARG	Sidechain
31	M	91	TYR	Sidechain
20	N	205	TYR	Sidechain
20	N	25	HIS	Sidechain
20	N	253	TYR	Sidechain
20	N	361	ARG	Sidechain
20	N	494	TYR	Sidechain
20	N	502	TYR	Sidechain
20	N	584	TYR	Sidechain
20	N	601	ARG	Sidechain
20	N	627	PHE	Sidechain
20	N	647	HIS	Sidechain
20	N	710	ARG	Sidechain
20	N	751	ARG	Sidechain

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Mol	Chain	Res	Type	Group
20	N	783	TYR	Sidechain
20	N	813	TYR	Sidechain
20	N	931	HIS	Sidechain
20	N	950	TYR	Sidechain
20	N	96	TYR	Sidechain
26	O	155	PHE	Sidechain
26	O	172	TYR	Sidechain
26	O	198	PHE	Sidechain
26	O	211	PHE	Sidechain
26	O	213	PHE	Sidechain
26	O	24	ARG	Sidechain
26	O	352	ARG	Sidechain
26	O	60	TYR	Sidechain
26	O	85	ARG	Sidechain
22	P	12	ARG	Sidechain
22	P	123	ARG	Sidechain
22	P	137	TYR	Sidechain
22	P	142	ARG	Sidechain
22	P	144	ARG	Sidechain
22	P	199	TYR	Sidechain
22	P	324	TYR	Sidechain
22	P	341	PHE	Sidechain
22	P	372	ARG	Sidechain
22	P	65	ARG	Sidechain
22	P	75	TYR	Sidechain
22	P	93	ARG	Sidechain
23	Q	122	ARG	Sidechain
23	Q	231	TYR	Sidechain
23	Q	239	TYR	Sidechain
23	Q	253	TYR	Sidechain
23	Q	337	ARG	Sidechain
23	Q	363	ARG	Sidechain
23	Q	397	TYR	Sidechain
23	Q	415	TYR	Sidechain
23	Q	76	PHE	Sidechain
23	Q	9	PHE	Sidechain
24	R	125	ARG	Sidechain
24	R	128	TYR	Sidechain
24	R	216	TYR	Sidechain
24	R	257	ARG	Sidechain
24	R	259	TYR	Sidechain
24	R	264	TYR	Sidechain

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Mol	Chain	Res	Type	Group
24	R	268	TYR	Sidechain
24	R	304	TYR	Sidechain
24	R	311	TYR	Sidechain
24	R	318	TYR	Sidechain
24	R	379	ARG	Sidechain
24	R	54	TYR	Sidechain
21	S	107	TYR	Sidechain
21	S	124	ARG	Sidechain
21	S	130	PHE	Sidechain
21	S	177	TYR	Sidechain
21	S	196	ARG	Sidechain
21	S	214	TYR	Sidechain
21	S	254	TYR	Sidechain
21	S	257	TYR	Sidechain
21	S	283	ARG	Sidechain
21	S	284	TYR	Sidechain
21	S	286	TYR	Sidechain
21	S	287	TYR	Sidechain
21	S	298	TYR	Sidechain
21	S	303	ARG	Sidechain
21	S	388	TYR	Sidechain
21	S	393	ARG	Sidechain
21	S	432	PHE	Sidechain
21	S	463	TYR	Sidechain
21	S	466	ARG	Sidechain
21	S	475	ARG	Sidechain
21	S	61	ARG	Sidechain
21	S	88	ARG	Sidechain
17	T	107	ARG	Sidechain
17	T	148	ARG	Sidechain
17	T	169	ARG	Sidechain
17	T	170	TYR	Sidechain
17	T	190	TYR	Sidechain
17	T	244	TYR	Sidechain
17	T	282	TYR	Sidechain
17	T	287	PHE	Sidechain
17	T	309	ARG	Sidechain
17	T	319	TYR	Sidechain
17	T	321	PHE	Sidechain
25	U	115	TYR	Sidechain
25	U	12	HIS	Sidechain
25	U	190	ARG	Sidechain

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Mol	Chain	Res	Type	Group
25	U	228	TYR	Sidechain
25	U	245	PHE	Sidechain
25	U	250	TYR	Sidechain
16	V	112	TYR	Sidechain
16	V	207	TYR	Sidechain
16	V	208	ARG	Sidechain
16	V	234	TYR	Sidechain
16	V	65	TYR	Sidechain
15	W	108	ARG	Sidechain
15	W	130	ARG	Sidechain
15	W	70	ARG	Sidechain
18	Y	57	ARG	Sidechain
19	Z	142	TYR	Sidechain
19	Z	181	ARG	Sidechain
19	Z	232	TYR	Sidechain
19	Z	250	ARG	Sidechain
19	Z	261	ARG	Sidechain
19	Z	300	ARG	Sidechain
19	Z	314	TYR	Sidechain
19	Z	33	ARG	Sidechain
19	Z	349	TYR	Sidechain
19	Z	434	TYR	Sidechain
19	Z	489	TYR	Sidechain
19	Z	494	ARG	Sidechain
19	Z	554	TYR	Sidechain
19	Z	680	ARG	Sidechain
19	Z	751	TYR	Sidechain
19	Z	79	ARG	Sidechain
19	Z	807	ARG	Sidechain
19	Z	83	ARG	Sidechain
19	Z	838	ARG	Sidechain

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	1920	0	1927	0	0
2	B	1828	0	1823	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	C	1960	0	1983	0	0
4	D	1926	0	1955	0	0
5	E	1778	0	1756	0	0
6	F	1871	0	1856	0	0
7	G	1912	0	1907	0	0
8	1	1516	0	1485	0	0
9	2	1651	0	1674	0	0
10	3	1600	0	1621	0	0
11	4	1572	0	1575	0	0
12	5	1560	0	1519	0	0
13	6	1659	0	1654	0	0
14	7	1686	0	1662	0	0
15	W	1480	0	1522	0	0
16	V	2272	0	2288	0	0
17	T	2149	0	2170	0	0
18	Y	199	0	180	0	0
19	Z	6913	0	6910	0	0
20	N	7082	0	7121	0	0
21	S	3844	0	3888	0	0
22	P	3706	0	3817	0	0
23	Q	3335	0	3435	0	0
24	R	3204	0	3204	0	0
25	U	2299	0	2334	0	0
26	O	3011	0	3042	0	0
27	H	3113	0	3162	0	0
28	I	3042	0	3098	0	0
29	K	3125	0	3151	0	0
30	L	3098	0	3171	0	0
31	M	3252	0	3321	0	0
32	J	3194	0	3311	0	0
All	All	82757	0	83522	0	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). Clashscore could not be calculated for this entry.

There are no clashes within the asymmetric unit.

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	244/246 (99%)	233 (96%)	7 (3%)	4 (2%)	7	38
2	B	232/234 (99%)	217 (94%)	13 (6%)	2 (1%)	14	51
3	C	247/261 (95%)	238 (96%)	8 (3%)	1 (0%)	30	67
4	D	244/254 (96%)	230 (94%)	11 (4%)	3 (1%)	10	44
5	E	231/241 (96%)	222 (96%)	9 (4%)	0	100	100
6	F	236/263 (90%)	216 (92%)	18 (8%)	2 (1%)	16	54
7	G	243/255 (95%)	225 (93%)	14 (6%)	4 (2%)	7	38
8	1	200/238 (84%)	169 (84%)	19 (10%)	12 (6%)	1	13
9	2	217/277 (78%)	184 (85%)	19 (9%)	14 (6%)	1	12
10	3	203/205 (99%)	167 (82%)	19 (9%)	17 (8%)	0	9
11	4	194/201 (96%)	172 (89%)	12 (6%)	10 (5%)	1	15
12	5	199/263 (76%)	179 (90%)	15 (8%)	5 (2%)	4	26
13	6	211/240 (88%)	182 (86%)	21 (10%)	8 (4%)	2	19
14	7	214/263 (81%)	188 (88%)	18 (8%)	8 (4%)	2	20
15	W	193/377 (51%)	171 (89%)	15 (8%)	7 (4%)	2	20
16	V	287/310 (93%)	264 (92%)	15 (5%)	8 (3%)	4	24
17	T	261/353 (74%)	234 (90%)	23 (9%)	4 (2%)	8	40
18	Y	22/70 (31%)	21 (96%)	1 (4%)	0	100	100
19	Z	894/908 (98%)	805 (90%)	64 (7%)	25 (3%)	4	24
20	N	901/953 (94%)	827 (92%)	50 (6%)	24 (3%)	4	25
21	S	474/530 (89%)	438 (92%)	24 (5%)	12 (2%)	4	26
22	P	454/456 (100%)	422 (93%)	23 (5%)	9 (2%)	6	31
23	Q	420/422 (100%)	390 (93%)	19 (4%)	11 (3%)	4	25
24	R	387/389 (100%)	367 (95%)	15 (4%)	5 (1%)	9	42
25	U	286/320 (89%)	263 (92%)	14 (5%)	9 (3%)	3	22

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
26	O	374/376 (100%)	346 (92%)	19 (5%)	9 (2%)	4	27
27	H	394/433 (91%)	348 (88%)	38 (10%)	8 (2%)	6	31
28	I	383/440 (87%)	349 (91%)	20 (5%)	14 (4%)	2	20
29	K	389/418 (93%)	356 (92%)	30 (8%)	3 (1%)	16	54
30	L	387/403 (96%)	359 (93%)	21 (5%)	7 (2%)	6	34
31	M	413/442 (93%)	380 (92%)	25 (6%)	8 (2%)	6	32
32	J	404/406 (100%)	369 (91%)	27 (7%)	8 (2%)	6	31
All	All	10438/11447 (91%)	9531 (91%)	646 (6%)	261 (2%)	6	26

All (261) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
4	D	75	VAL
8	1	45	VAL
8	1	81	SER
8	1	105	GLU
8	1	163	SER
8	1	206	VAL
9	2	75	SER
9	2	81	SER
9	2	91	THR
9	2	172	SER
9	2	189	MET
9	2	251	THR
10	3	31	GLN
10	3	57	ALA
10	3	142	CYS
11	4	3	TYR
11	4	50	ALA
12	5	179	ARG
13	6	85	HIS
13	6	129	PHE
13	6	147	ALA
13	6	168	ALA
14	7	56	LEU
14	7	176	TYR
14	7	242	GLU
16	V	147	PRO
16	V	189	ILE
16	V	219	ASN

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Mol	Chain	Res	Type
19	Z	2	GLU
19	Z	24	ALA
19	Z	175	ASP
19	Z	261	ARG
19	Z	330	PHE
19	Z	332	ALA
19	Z	384	ALA
19	Z	457	ASN
19	Z	802	SER
19	Z	810	ILE
20	N	172	ASP
20	N	701	ILE
20	N	899	ARG
20	N	912	ILE
21	S	55	ALA
21	S	111	LYS
21	S	296	LEU
22	P	335	THR
22	P	340	VAL
22	P	342	SER
23	Q	37	GLU
23	Q	43	VAL
24	R	208	PHE
25	U	5	ALA
25	U	126	VAL
25	U	180	LYS
25	U	184	VAL
26	O	286	ALA
27	H	181	LYS
27	H	248	LYS
28	I	86	LYS
28	I	373	THR
28	I	391	SER
29	K	406	VAL
31	M	282	ALA
2	B	59	GLU
4	D	47	LYS
6	F	151	ALA
8	1	44	GLY
8	1	72	ASP
8	1	143	GLN
8	1	152	MET

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Mol	Chain	Res	Type
8	1	207	ILE
8	1	233	SER
9	2	55	ILE
9	2	150	GLY
9	2	188	ASP
9	2	253	ALA
10	3	30	ILE
10	3	116	THR
10	3	158	MET
10	3	185	VAL
11	4	27	GLN
11	4	131	ALA
12	5	62	THR
13	6	39	VAL
13	6	220	LEU
14	7	65	VAL
14	7	101	TYR
14	7	175	ALA
15	W	188	ILE
16	V	199	HIS
17	T	183	GLU
17	T	258	SER
17	T	340	ARG
19	Z	293	GLN
19	Z	601	ALA
19	Z	773	LYS
20	N	126	ILE
20	N	488	THR
20	N	772	TRP
20	N	806	CYS
20	N	812	ALA
21	S	462	ILE
22	P	93	ARG
22	P	452	ILE
23	Q	17	SER
23	Q	274	LYS
23	Q	375	HIS
24	R	52	PRO
24	R	211	TYR
24	R	344	HIS
25	U	31	ASN
25	U	243	GLN

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Mol	Chain	Res	Type
26	O	49	CYS
27	H	269	ALA
27	H	276	GLU
27	H	308	GLY
27	H	400	ARG
28	I	87	PRO
28	I	127	VAL
28	I	167	THR
28	I	389	ASP
28	I	410	ARG
31	M	108	GLU
31	M	114	ILE
31	M	301	SER
31	M	347	ARG
32	J	9	MET
32	J	120	SER
32	J	228	ALA
32	J	281	ASP
1	A	55	LYS
1	A	65	THR
2	B	199	PHE
4	D	53	LEU
6	F	200	PRO
7	G	8	TYR
7	G	185	MET
8	1	136	TRP
9	2	67	MET
10	3	11	VAL
10	3	41	LYS
11	4	5	ILE
11	4	22	ALA
11	4	177	THR
12	5	108	ALA
12	5	155	SER
12	5	157	GLY
13	6	31	PRO
13	6	48	SER
15	W	18	ASN
15	W	114	GLY
15	W	178	SER
16	V	179	SER
16	V	262	GLU

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Mol	Chain	Res	Type
17	T	96	GLY
19	Z	151	LEU
19	Z	314	TYR
19	Z	508	SER
19	Z	604	GLY
19	Z	703	ARG
19	Z	721	VAL
20	N	471	ASP
20	N	769	PHE
20	N	872	GLU
20	N	873	PRO
20	N	880	ASN
21	S	125	ASP
21	S	464	SER
22	P	6	SER
22	P	115	ILE
23	Q	58	ALA
24	R	49	ASN
25	U	134	PRO
25	U	186	THR
26	O	263	ALA
26	O	303	THR
27	H	106	SER
28	I	185	ALA
28	I	229	GLY
28	I	433	GLY
29	K	334	PRO
30	L	372	ASP
32	J	119	ASP
32	J	121	TYR
1	A	57	PRO
3	C	206	LEU
7	G	145	ASP
9	2	161	SER
10	3	130	PRO
10	3	186	ILE
14	7	77	LEU
14	7	258	MET
15	W	148	VAL
16	V	116	PRO
16	V	155	VAL
19	Z	738	ASN

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Mol	Chain	Res	Type
19	Z	892	PRO
20	N	363	SER
21	S	73	GLU
21	S	82	VAL
21	S	195	ASN
21	S	501	LEU
23	Q	19	ASP
23	Q	297	ARG
23	Q	391	PRO
28	I	432	GLU
29	K	369	LYS
30	L	144	VAL
30	L	341	ASP
31	M	306	ASP
1	A	10	ASP
9	2	63	ALA
10	3	29	GLY
10	3	85	TYR
11	4	32	HIS
15	W	177	PRO
19	Z	178	LYS
19	Z	837	LEU
20	N	854	MET
21	S	127	LEU
21	S	134	PRO
22	P	136	ILE
23	Q	4	ALA
25	U	244	GLU
26	O	48	PRO
26	O	104	VAL
26	O	262	ALA
26	O	371	ALA
28	I	179	ALA
28	I	189	GLY
30	L	143	ASN
30	L	319	ASN
30	L	396	SER
31	M	112	ALA
32	J	104	ASP
32	J	262	GLY
10	3	43	PHE
15	W	175	PRO

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Mol	Chain	Res	Type
19	Z	114	ALA
20	N	29	ALA
20	N	849	LYS
20	N	852	GLU
20	N	883	ARG
20	N	926	GLU
22	P	97	LEU
23	Q	63	ALA
31	M	182	GLU
10	3	137	VAL
11	4	26	VAL
19	Z	365	VAL
20	N	813	TYR
30	L	141	PRO
7	G	217	VAL
9	2	173	GLY
10	3	195	ILE
20	N	487	GLY
10	3	119	PRO
11	4	148	THR
20	N	118	LEU
26	O	183	VAL
27	H	65	ILE

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain 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 sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	210/210 (100%)	198 (94%)	12 (6%)	18	40
2	B	191/191 (100%)	183 (96%)	8 (4%)	26	48
3	C	209/221 (95%)	189 (90%)	20 (10%)	8	25
4	D	208/215 (97%)	199 (96%)	9 (4%)	26	47
5	E	195/203 (96%)	182 (93%)	13 (7%)	15	36
6	F	204/224 (91%)	196 (96%)	8 (4%)	28	49

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
7	G	202/212 (95%)	191 (95%)	11 (5%)	20	41
8	1	160/185 (86%)	145 (91%)	15 (9%)	8	26
9	2	180/227 (79%)	161 (89%)	19 (11%)	6	21
10	3	175/175 (100%)	159 (91%)	16 (9%)	9	27
11	4	167/172 (97%)	144 (86%)	23 (14%)	3	14
12	5	158/205 (77%)	142 (90%)	16 (10%)	7	23
13	6	179/200 (90%)	168 (94%)	11 (6%)	17	38
14	7	178/215 (83%)	162 (91%)	16 (9%)	9	27
15	W	168/312 (54%)	155 (92%)	13 (8%)	12	32
16	V	253/268 (94%)	240 (95%)	13 (5%)	21	42
17	T	233/298 (78%)	221 (95%)	12 (5%)	21	42
18	Y	22/63 (35%)	20 (91%)	2 (9%)	9	27
19	Z	753/765 (98%)	709 (94%)	44 (6%)	18	40
20	N	776/814 (95%)	735 (95%)	41 (5%)	20	41
21	S	414/458 (90%)	397 (96%)	17 (4%)	27	49
22	P	419/419 (100%)	398 (95%)	21 (5%)	22	43
23	Q	362/362 (100%)	340 (94%)	22 (6%)	17	38
24	R	345/345 (100%)	329 (95%)	16 (5%)	24	45
25	U	259/289 (90%)	248 (96%)	11 (4%)	26	48
26	O	334/334 (100%)	321 (96%)	13 (4%)	28	49
27	H	341/372 (92%)	326 (96%)	15 (4%)	25	47
28	I	341/385 (89%)	324 (95%)	17 (5%)	22	43
29	K	343/367 (94%)	323 (94%)	20 (6%)	18	40
30	L	341/353 (97%)	318 (93%)	23 (7%)	15	36
31	M	357/382 (94%)	342 (96%)	15 (4%)	26	48
32	J	352/352 (100%)	336 (96%)	16 (4%)	24	46
All	All	9029/9793 (92%)	8501 (94%)	528 (6%)	20	40

All (528) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	13	ILE
1	A	54	LYS

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Mol	Chain	Res	Type
1	A	62	ASP
1	A	65	THR
1	A	111	VAL
1	A	112	ASP
1	A	118	ILE
1	A	204	THR
1	A	207	SER
1	A	224	ASN
1	A	228	ARG
1	A	239	LEU
2	B	4	ARG
2	B	19	LEU
2	B	71	HIS
2	B	92	LYS
2	B	100	VAL
2	B	119	GLN
2	B	147	PHE
2	B	205	GLU
3	C	3	ARG
3	C	12	PHE
3	C	38	LEU
3	C	40	ASN
3	C	43	VAL
3	C	44	LEU
3	C	60	PHE
3	C	75	SER
3	C	86	LEU
3	C	114	LEU
3	C	132	VAL
3	C	137	ILE
3	C	141	LYS
3	C	143	TYR
3	C	164	ILE
3	C	178	ASP
3	C	188	SER
3	C	197	LEU
3	C	225	ILE
3	C	240	HIS
4	D	43	LEU
4	D	57	ARG
4	D	60	ARG
4	D	68	ASN

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Mol	Chain	Res	Type
4	D	196	LEU
4	D	197	VAL
4	D	205	VAL
4	D	214	LEU
4	D	245	ASN
5	E	12	VAL
5	E	31	HIS
5	E	33	LEU
5	E	66	LYS
5	E	100	TRP
5	E	105	GLU
5	E	119	LEU
5	E	135	ARG
5	E	146	VAL
5	E	205	VAL
5	E	210	LEU
5	E	215	ILE
5	E	231	LYS
6	F	36	VAL
6	F	66	VAL
6	F	104	PRO
6	F	107	ARG
6	F	117	GLN
6	F	166	GLN
6	F	200	PRO
6	F	214	ILE
7	G	31	VAL
7	G	56	SER
7	G	67	LEU
7	G	115	ARG
7	G	154	PRO
7	G	180	LEU
7	G	182	MET
7	G	191	VAL
7	G	198	ILE
7	G	214	LEU
7	G	235	GLU
8	1	36	ILE
8	1	37	MET
8	1	47	LEU
8	1	54	THR
8	1	67	LEU

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Mol	Chain	Res	Type
8	1	92	VAL
8	1	103	LEU
8	1	108	LEU
8	1	122	ARG
8	1	147	VAL
8	1	149	MET
8	1	187	GLN
8	1	206	VAL
8	1	219	ARG
8	1	235	LEU
9	2	50	VAL
9	2	62	ARG
9	2	77	ILE
9	2	82	PRO
9	2	108	LEU
9	2	119	VAL
9	2	120	VAL
9	2	168	VAL
9	2	169	THR
9	2	180	VAL
9	2	184	LYS
9	2	185	PHE
9	2	216	ILE
9	2	222	SER
9	2	225	LYS
9	2	238	LYS
9	2	246	ARG
9	2	255	LEU
9	2	259	VAL
10	3	11	VAL
10	3	15	LYS
10	3	25	ASP
10	3	27	ARG
10	3	71	LEU
10	3	82	ILE
10	3	94	LEU
10	3	97	GLU
10	3	112	LEU
10	3	113	ASP
10	3	141	THR
10	3	147	TYR
10	3	172	LEU

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Mol	Chain	Res	Type
10	3	183	MET
10	3	189	ILE
10	3	192	LYS
11	4	4	LEU
11	4	19	ARG
11	4	24	ASN
11	4	43	LEU
11	4	54	VAL
11	4	60	ILE
11	4	62	LYS
11	4	66	LEU
11	4	102	LEU
11	4	108	ASP
11	4	124	LEU
11	4	126	LYS
11	4	132	HIS
11	4	138	LEU
11	4	140	LEU
11	4	143	LEU
11	4	150	THR
11	4	154	GLU
11	4	160	LEU
11	4	172	ILE
11	4	181	ARG
11	4	183	ILE
11	4	192	GLU
12	5	61	THR
12	5	67	PHE
12	5	99	TYR
12	5	103	THR
12	5	125	TYR
12	5	126	GLU
12	5	127	LEU
12	5	145	MET
12	5	170	LEU
12	5	173	VAL
12	5	180	ILE
12	5	187	VAL
12	5	195	PHE
12	5	204	TYR
12	5	238	VAL
12	5	254	LEU

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Mol	Chain	Res	Type
13	6	31	PRO
13	6	38	THR
13	6	42	ILE
13	6	133	VAL
13	6	159	ARG
13	6	172	LEU
13	6	180	VAL
13	6	200	ARG
13	6	214	VAL
13	6	224	ILE
13	6	238	ARG
14	7	56	LEU
14	7	113	GLN
14	7	120	LEU
14	7	121	PHE
14	7	136	LEU
14	7	140	MET
14	7	154	LYS
14	7	156	ILE
14	7	170	ASP
14	7	183	THR
14	7	194	LEU
14	7	218	ARG
14	7	231	PHE
14	7	236	VAL
14	7	243	ILE
14	7	259	ILE
15	W	6	THR
15	W	57	ASP
15	W	62	THR
15	W	63	THR
15	W	71	ILE
15	W	72	LEU
15	W	75	LEU
15	W	78	VAL
15	W	85	THR
15	W	110	ILE
15	W	124	LEU
15	W	160	LEU
15	W	188	ILE
16	V	62	VAL
16	V	65	TYR

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Mol	Chain	Res	Type
16	V	73	PHE
16	V	96	LEU
16	V	163	ILE
16	V	177	THR
16	V	196	LEU
16	V	203	ILE
16	V	231	LEU
16	V	234	TYR
16	V	255	TYR
16	V	266	THR
16	V	268	GLU
17	T	122	LEU
17	T	132	LEU
17	T	164	ILE
17	T	185	LEU
17	T	258	SER
17	T	259	TYR
17	T	267	LEU
17	T	293	ILE
17	T	305	TYR
17	T	319	TYR
17	T	321	PHE
17	T	350	GLU
18	Y	60	LEU
18	Y	62	LYS
19	Z	16	PRO
19	Z	28	SER
19	Z	31	LYS
19	Z	83	ARG
19	Z	86	THR
19	Z	103	TYR
19	Z	119	LYS
19	Z	158	TYR
19	Z	192	VAL
19	Z	193	PRO
19	Z	202	HIS
19	Z	221	ILE
19	Z	238	ASN
19	Z	241	PRO
19	Z	294	MET
19	Z	297	MET
19	Z	307	LEU

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Mol	Chain	Res	Type
19	Z	309	GLU
19	Z	317	LEU
19	Z	331	LEU
19	Z	333	LEU
19	Z	372	LEU
19	Z	377	VAL
19	Z	416	MET
19	Z	455	VAL
19	Z	476	THR
19	Z	508	SER
19	Z	553	THR
19	Z	556	ARG
19	Z	560	LEU
19	Z	590	PHE
19	Z	652	VAL
19	Z	684	PRO
19	Z	690	VAL
19	Z	704	LEU
19	Z	715	HIS
19	Z	726	ILE
19	Z	738	ASN
19	Z	740	ARG
19	Z	800	LEU
19	Z	809	ILE
19	Z	845	ARG
19	Z	866	GLN
19	Z	872	VAL
20	N	43	ASP
20	N	78	LEU
20	N	82	LEU
20	N	142	LEU
20	N	148	LYS
20	N	167	ILE
20	N	177	LEU
20	N	183	LEU
20	N	188	MET
20	N	206	MET
20	N	232	ILE
20	N	236	LEU
20	N	243	LEU
20	N	252	LEU
20	N	262	SER

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Mol	Chain	Res	Type
20	N	356	THR
20	N	422	LEU
20	N	459	ASP
20	N	470	ASN
20	N	473	VAL
20	N	524	LYS
20	N	583	MET
20	N	602	LEU
20	N	603	LEU
20	N	608	SER
20	N	627	PHE
20	N	701	ILE
20	N	720	LYS
20	N	731	ILE
20	N	781	LEU
20	N	788	ILE
20	N	789	ILE
20	N	819	VAL
20	N	861	LYS
20	N	880	ASN
20	N	891	VAL
20	N	908	ILE
20	N	921	ILE
20	N	923	GLU
20	N	935	ILE
20	N	946	GLU
21	S	45	SER
21	S	92	ARG
21	S	125	ASP
21	S	128	LEU
21	S	140	ASP
21	S	165	LEU
21	S	169	ILE
21	S	269	LYS
21	S	271	VAL
21	S	330	VAL
21	S	342	LEU
21	S	343	GLN
21	S	348	SER
21	S	389	THR
21	S	399	ILE
21	S	410	TYR

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Mol	Chain	Res	Type
21	S	425	ASP
22	P	50	LEU
22	P	83	LEU
22	P	90	LEU
22	P	96	GLN
22	P	120	VAL
22	P	131	VAL
22	P	136	ILE
22	P	140	ILE
22	P	145	LEU
22	P	149	LEU
22	P	186	ILE
22	P	194	LEU
22	P	202	THR
22	P	211	THR
22	P	230	MET
22	P	247	TYR
22	P	256	ILE
22	P	272	LEU
22	P	314	LEU
22	P	393	LEU
22	P	423	ASN
23	Q	21	GLU
23	Q	26	ILE
23	Q	57	LEU
23	Q	89	VAL
23	Q	109	LEU
23	Q	122	ARG
23	Q	158	LYS
23	Q	172	LEU
23	Q	190	LEU
23	Q	206	LEU
23	Q	242	ILE
23	Q	243	ASP
23	Q	254	MET
23	Q	263	THR
23	Q	314	ARG
23	Q	330	LEU
23	Q	352	SER
23	Q	356	LEU
23	Q	365	LEU
23	Q	392	PRO

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Mol	Chain	Res	Type
23	Q	403	THR
23	Q	409	LYS
24	R	16	ASP
24	R	25	LEU
24	R	35	THR
24	R	37	VAL
24	R	73	MET
24	R	75	LYS
24	R	88	LEU
24	R	134	LEU
24	R	151	TYR
24	R	186	LEU
24	R	217	LYS
24	R	245	GLU
24	R	267	ARG
24	R	292	TYR
24	R	296	VAL
24	R	356	THR
25	U	4	LEU
25	U	82	PHE
25	U	106	ILE
25	U	128	PRO
25	U	135	THR
25	U	162	ILE
25	U	192	THR
25	U	237	LEU
25	U	250	TYR
25	U	269	VAL
25	U	286	GLU
26	O	50	PHE
26	O	68	GLU
26	O	112	ILE
26	O	152	HIS
26	O	160	SER
26	O	190	VAL
26	O	222	LEU
26	O	240	PHE
26	O	249	GLN
26	O	253	SER
26	O	272	ILE
26	O	353	LEU
26	O	359	ASP

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Mol	Chain	Res	Type
27	H	43	ARG
27	H	98	CYS
27	H	101	ILE
27	H	102	ILE
27	H	125	LEU
27	H	150	HIS
27	H	164	MET
27	H	182	GLU
27	H	280	ILE
27	H	312	ARG
27	H	316	LYS
27	H	333	ARG
27	H	336	ARG
27	H	346	PRO
27	H	428	ARG
28	I	58	CYS
28	I	64	LYS
28	I	73	LEU
28	I	90	GLU
28	I	115	ILE
28	I	135	ILE
28	I	156	VAL
28	I	164	MET
28	I	178	LYS
28	I	287	ILE
28	I	294	ARG
28	I	297	SER
28	I	309	MET
28	I	327	VAL
28	I	372	MET
28	I	438	LEU
28	I	440	LEU
29	K	30	LEU
29	K	68	LEU
29	K	88	VAL
29	K	113	VAL
29	K	119	ILE
29	K	121	ARG
29	K	124	LEU
29	K	134	LYS
29	K	140	VAL
29	K	154	LEU

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Mol	Chain	Res	Type
29	K	157	ASP
29	K	167	ILE
29	K	203	LEU
29	K	246	MET
29	K	253	LEU
29	K	267	ILE
29	K	272	THR
29	K	309	MET
29	K	336	PRO
29	K	411	GLU
30	L	31	LEU
30	L	34	LYS
30	L	59	ASN
30	L	67	VAL
30	L	75	LEU
30	L	85	VAL
30	L	94	VAL
30	L	101	LEU
30	L	106	LEU
30	L	114	LEU
30	L	132	LEU
30	L	155	GLN
30	L	178	ILE
30	L	187	TYR
30	L	220	LYS
30	L	232	MET
30	L	244	ILE
30	L	265	ARG
30	L	266	GLU
30	L	308	ARG
30	L	319	ASN
30	L	327	LEU
30	L	377	VAL
31	M	38	LYS
31	M	50	LEU
31	M	101	ASP
31	M	140	ILE
31	M	164	LEU
31	M	184	PRO
31	M	201	LEU
31	M	206	VAL
31	M	213	GLU

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Mol	Chain	Res	Type
31	M	218	LEU
31	M	291	LEU
31	M	316	LEU
31	M	332	ILE
31	M	363	GLU
31	M	384	TYR
32	J	15	LYS
32	J	20	LEU
32	J	22	GLN
32	J	25	LEU
32	J	59	LEU
32	J	87	VAL
32	J	88	LYS
32	J	98	ASP
32	J	123	LEU
32	J	196	LYS
32	J	226	GLU
32	J	245	ILE
32	J	251	ILE
32	J	276	LEU
32	J	280	LEU
32	J	387	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. There are no such sidechains identified.

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

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

5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.6 Ligand geometry

There are no ligands in this entry.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

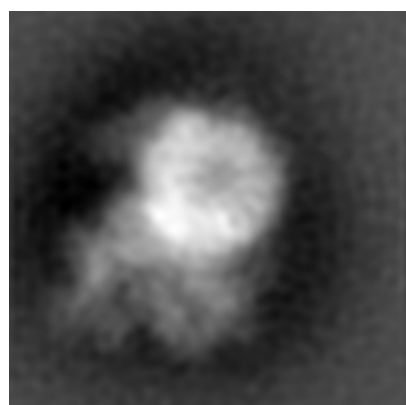
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-3916. These allow visual inspection of the internal detail of the map and identification of artifacts.

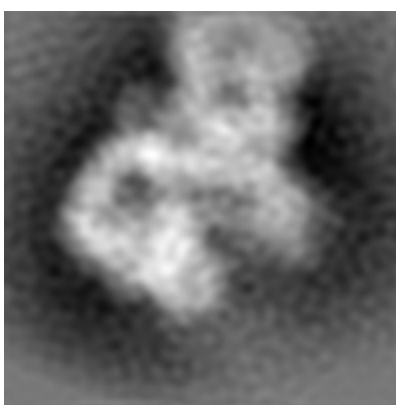
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

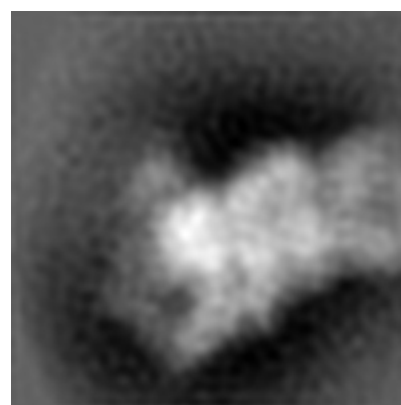
6.1.1 Primary map



X



Y

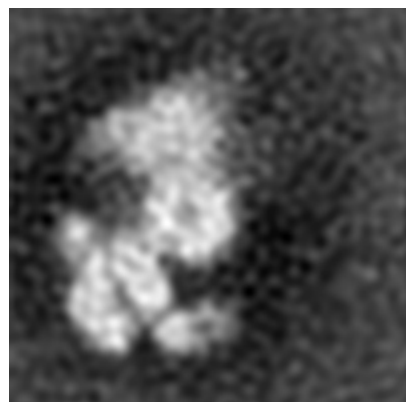


Z

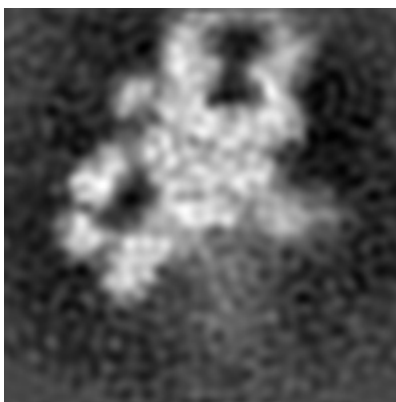
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

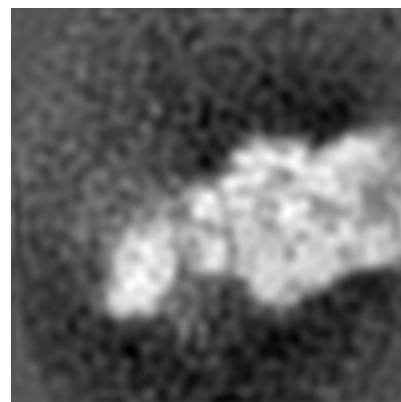
6.2.1 Primary map



X Index: 45



Y Index: 45

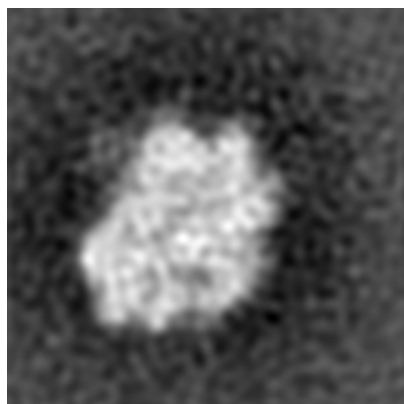


Z Index: 45

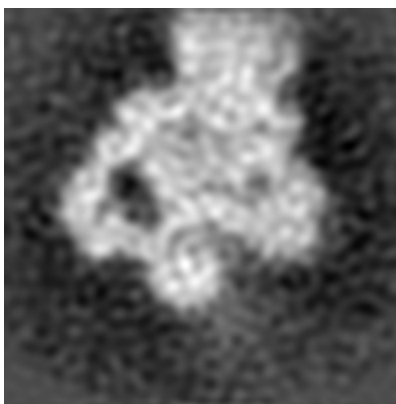
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

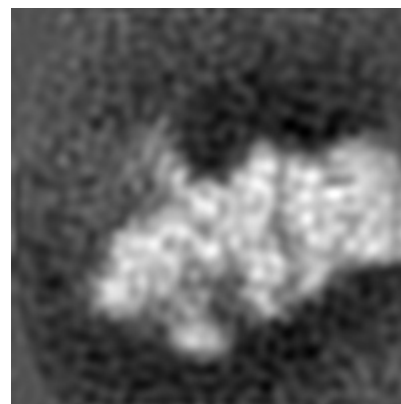
6.3.1 Primary map



X Index: 56



Y Index: 36

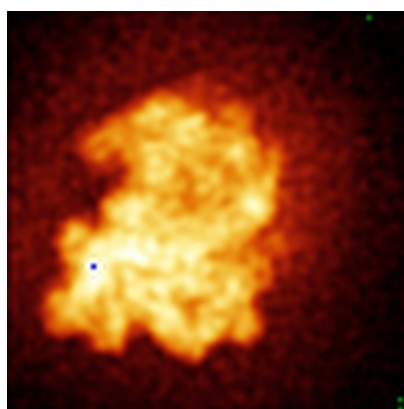


Z Index: 41

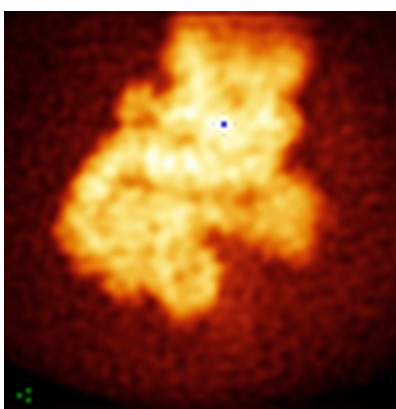
The images above show the largest variance slices of the map in three orthogonal directions.

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

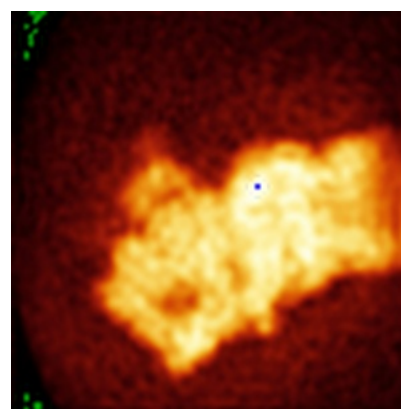
6.4.1 Primary map



X



Y

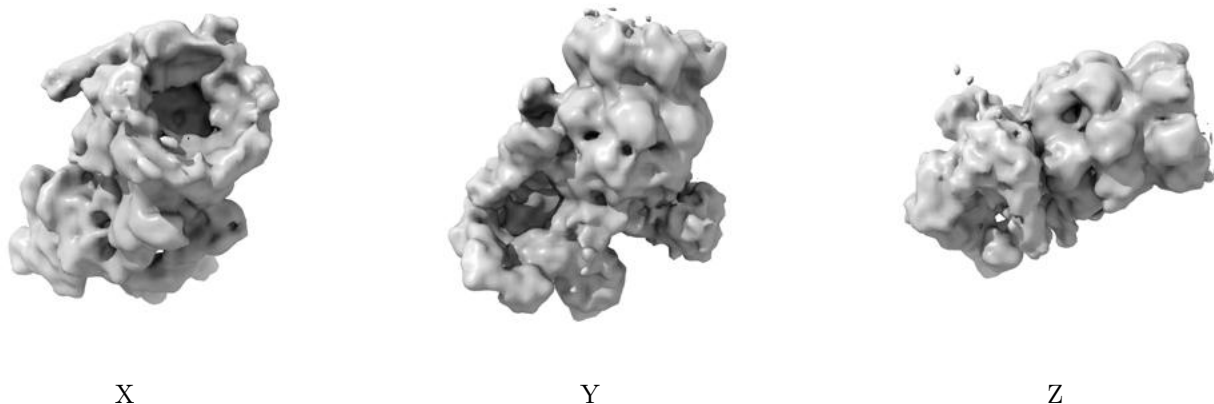


Z

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

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.4. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

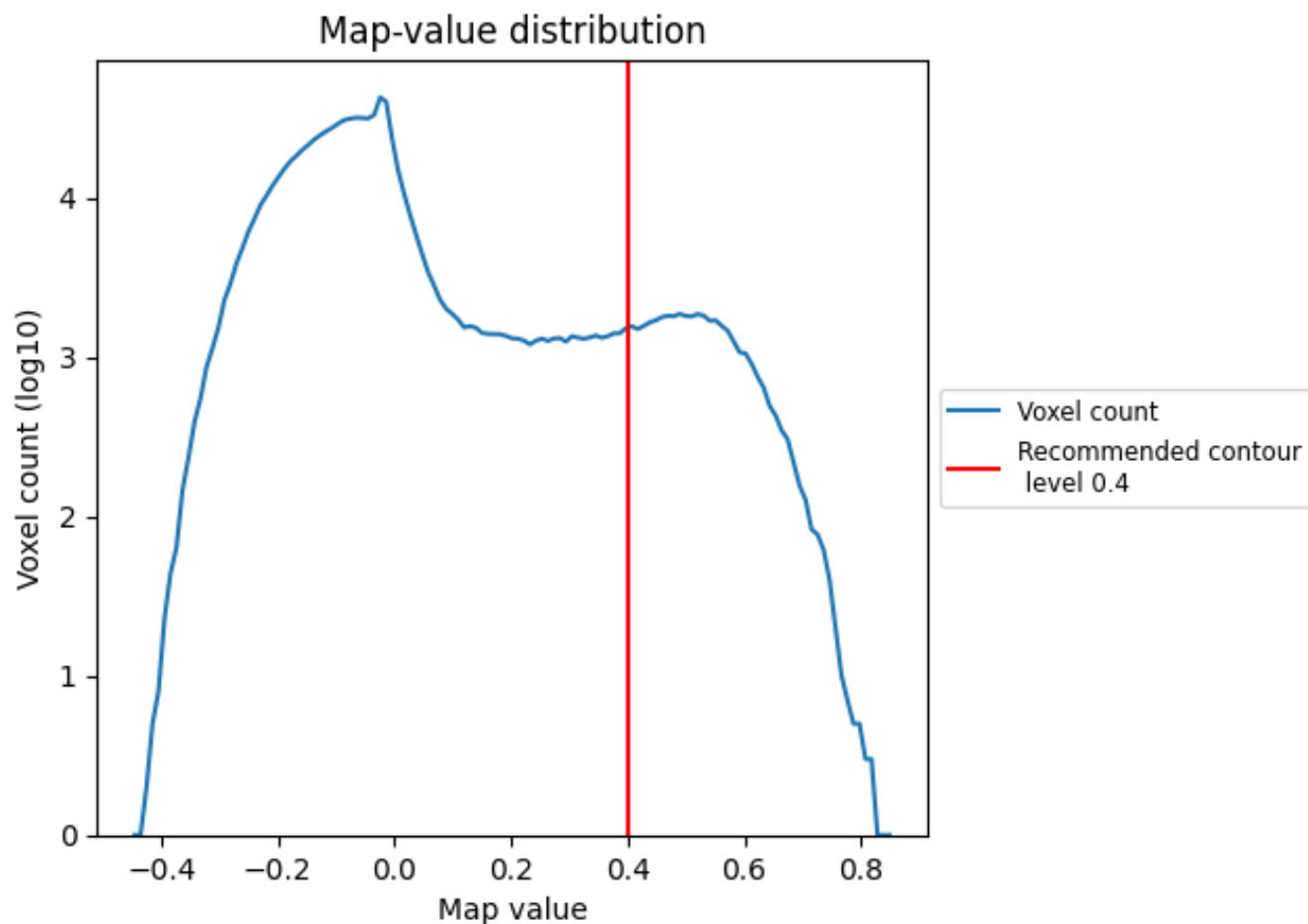
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

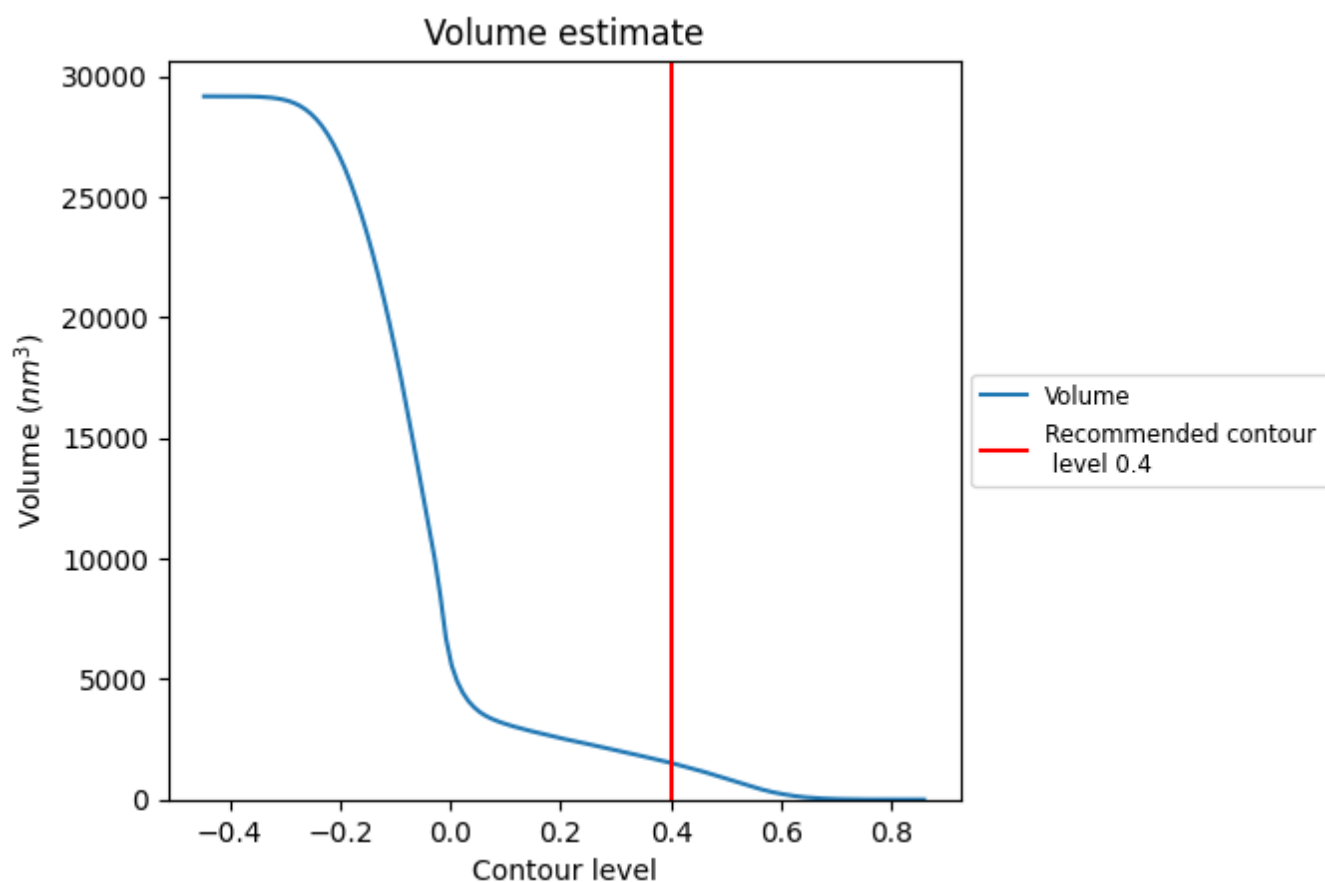
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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

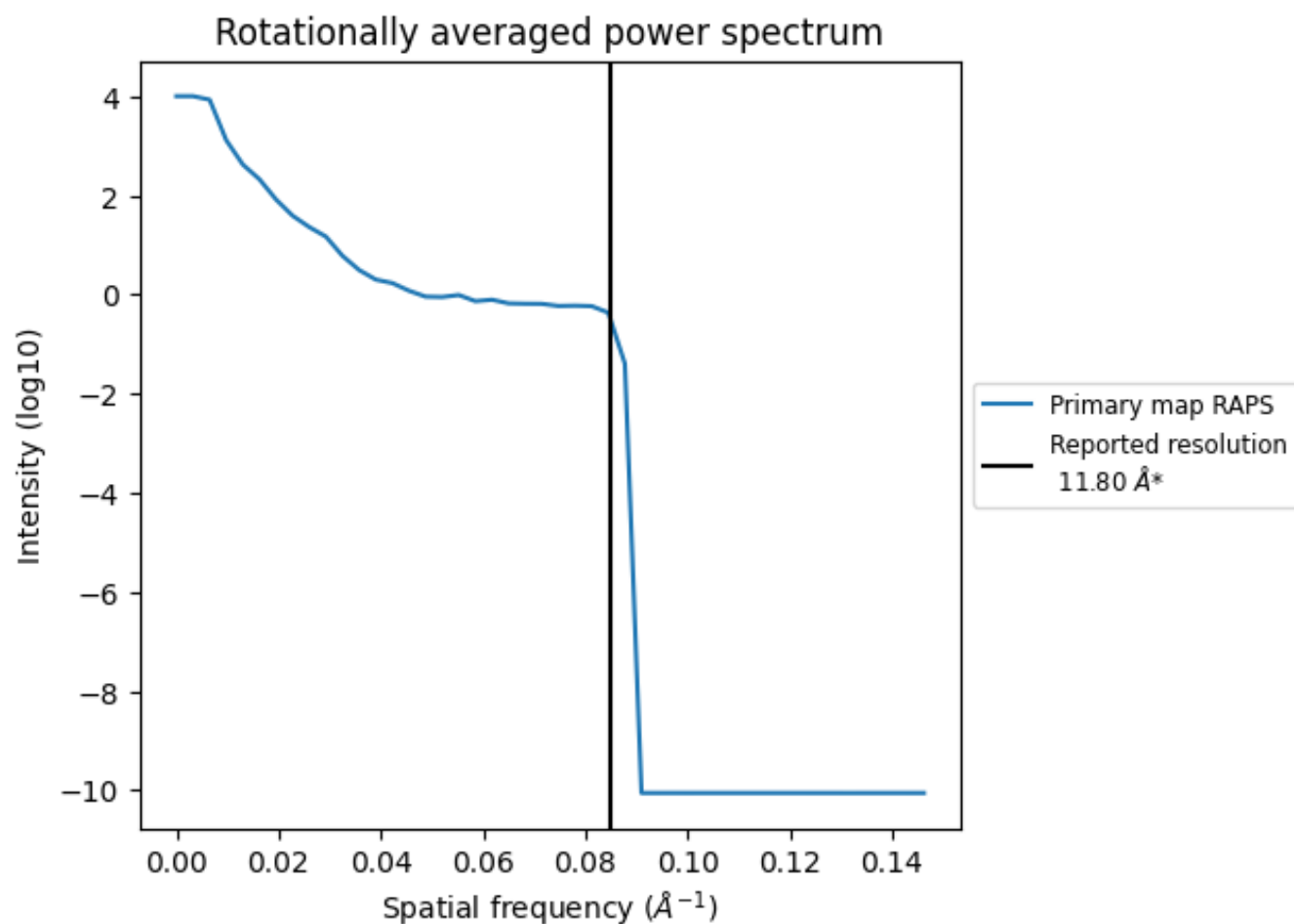
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1525 nm³; this corresponds to an approximate mass of 1377 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum ⓘ



*Reported resolution corresponds to spatial frequency of 0.085 $\text{\AA}^{-1}$

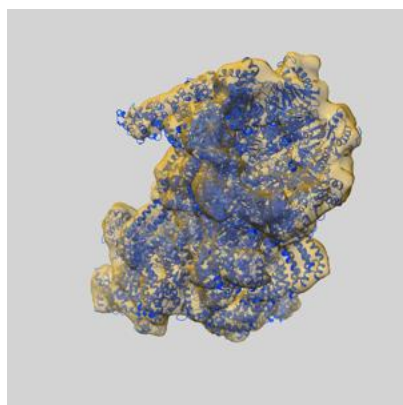
8 Fourier-Shell correlation

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

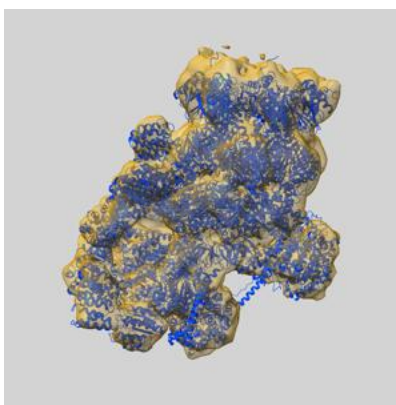
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-3916 and PDB model 6EPF. Per-residue inclusion information can be found in section [3](#) on page [10](#).

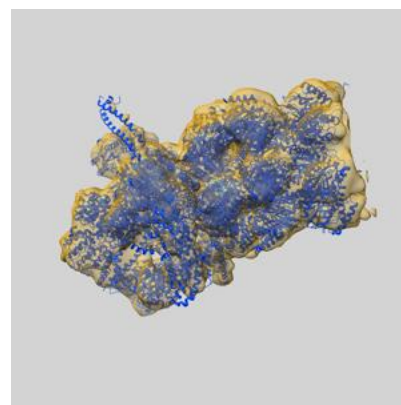
9.1 Map-model overlay [i](#)



X



Y



Z

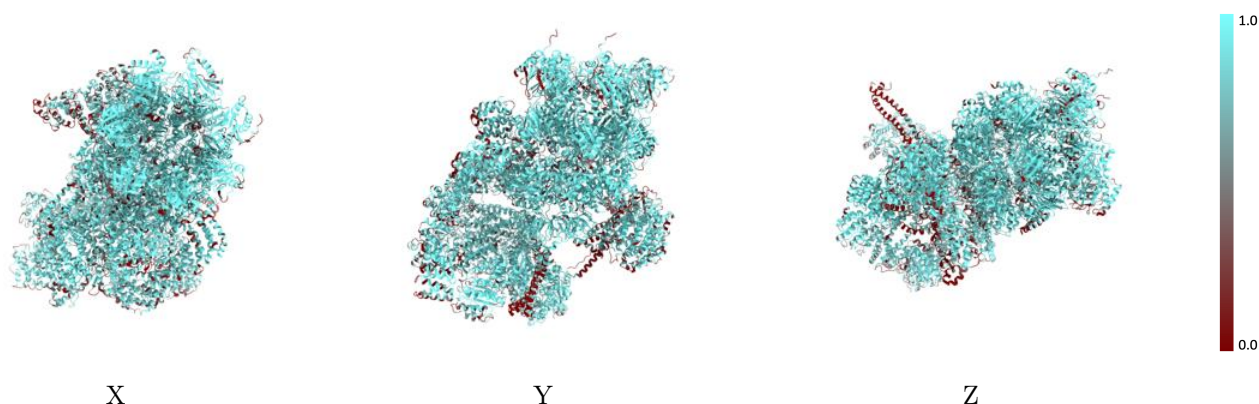
The images above show the 3D surface view of the map at the recommended contour level 0.4 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



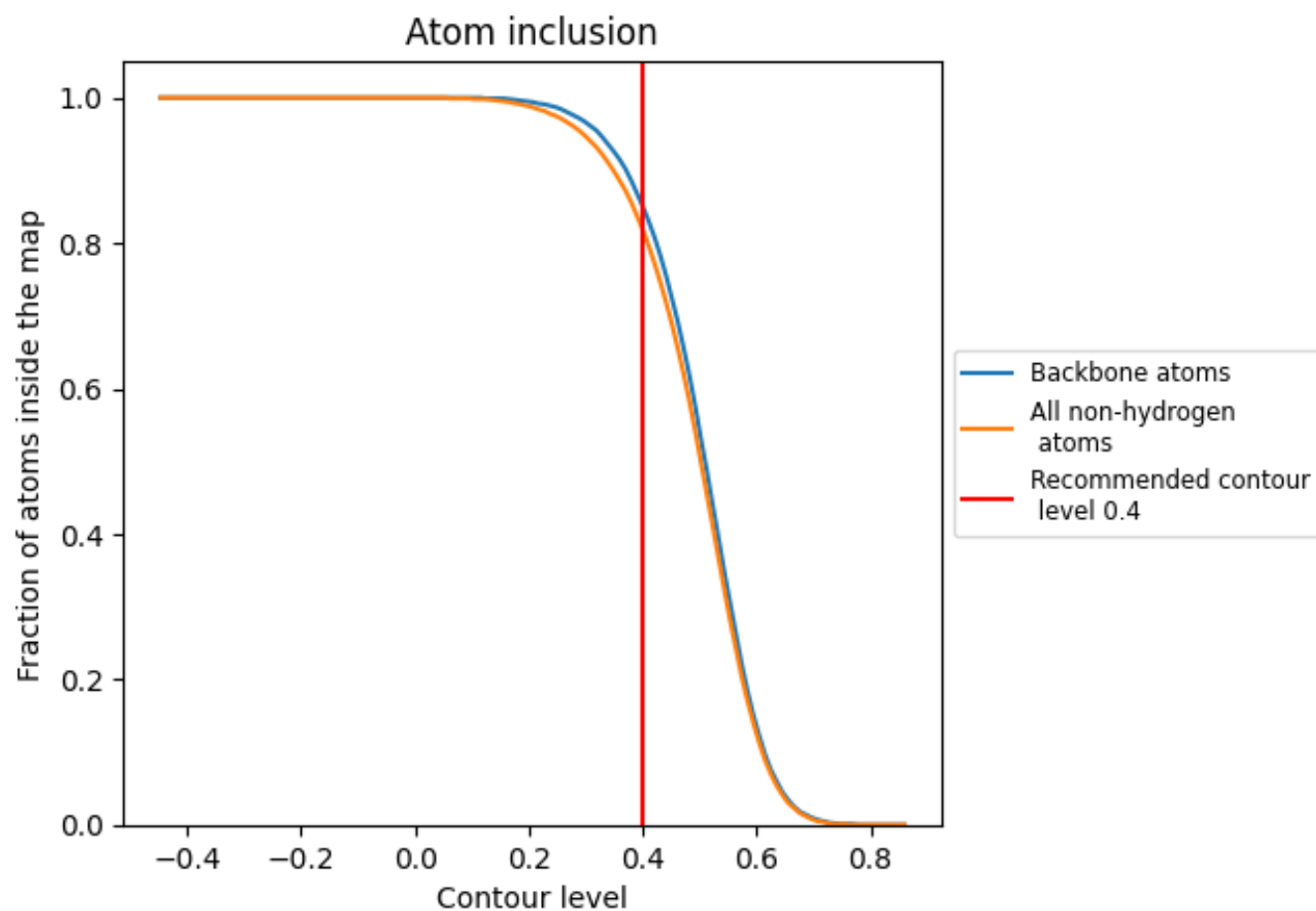
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

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



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.4).

9.4 Atom inclusion [i](#)



At the recommended contour level, 85% of all backbone atoms, 82% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (0.4) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.8190	 0.0570
1	 0.8260	 0.0400
2	 0.7420	 0.0450
3	 0.7800	 0.0440
4	 0.7400	 0.0550
5	 0.8470	 0.0420
6	 0.7940	 0.0450
7	 0.7890	 0.0440
A	 0.8970	 0.0430
B	 0.8930	 0.0490
C	 0.8700	 0.0570
D	 0.8560	 0.0370
E	 0.9140	 0.0450
F	 0.9480	 0.0430
G	 0.9110	 0.0430
H	 0.8970	 0.0440
I	 0.8800	 0.0560
J	 0.8260	 0.0640
K	 0.8880	 0.0650
L	 0.8460	 0.0590
M	 0.8090	 0.0570
N	 0.8270	 0.0580
O	 0.6950	 0.0790
P	 0.7730	 0.0720
Q	 0.8060	 0.0750
R	 0.8390	 0.0730
S	 0.8270	 0.0560
T	 0.7750	 0.0810
U	 0.8000	 0.0610
V	 0.9360	 0.0670
W	 0.7790	 0.0790
Y	 0.7350	 0.0830
Z	 0.6670	 0.0460

