



Full wwPDB EM Validation Report ⓘ

Mar 8, 2026 – 05:14 PM UTC

PDB ID : 6EPE / pdb_00006epe
EMDB ID : EMD-3915
Title : Substrate processing state 26S proteasome (SPS2)
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 : 12.80 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:

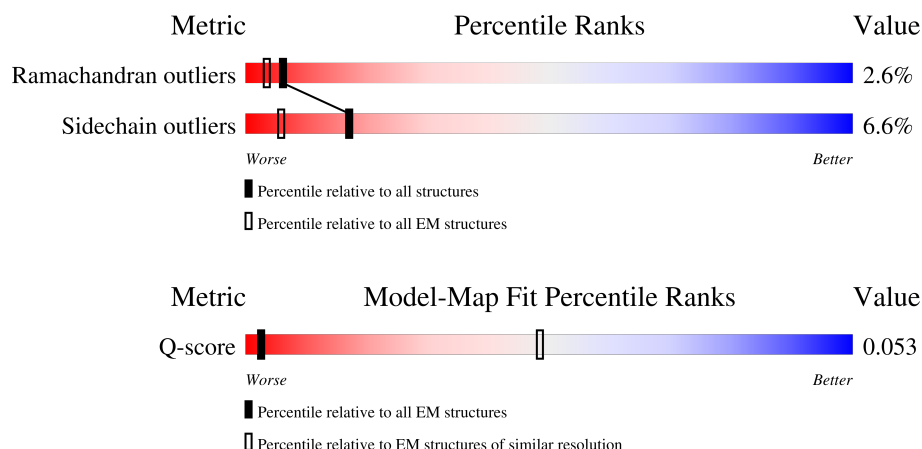
EMDB validation analysis : 0.0.1.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh &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

1 Overall quality at a glance

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

The reported resolution of this entry is 12.80 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.



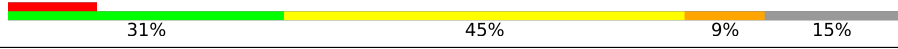
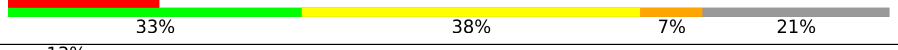
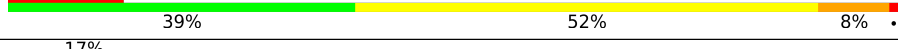
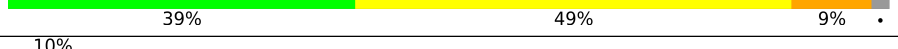
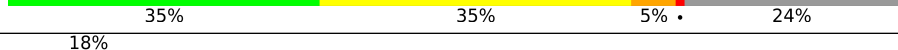
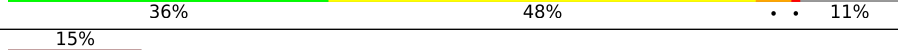
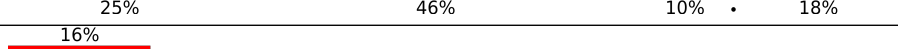
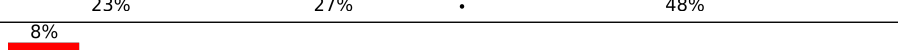
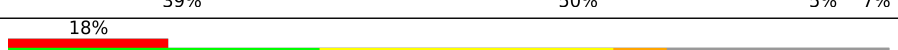
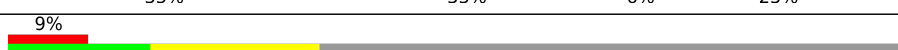
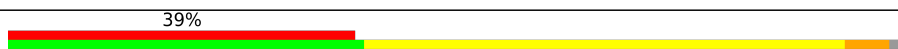
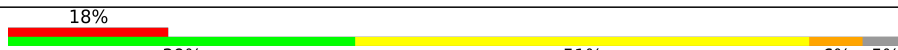
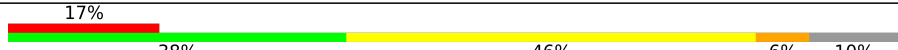
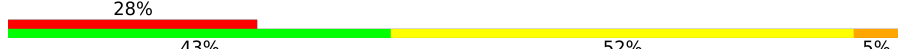
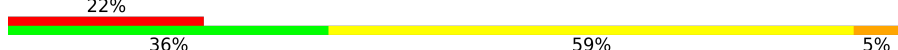
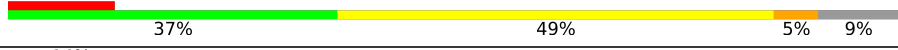
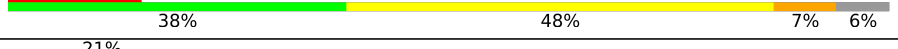
Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	60 (12.30 - 13.30)

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	
2	B	234	
3	C	261	
4	D	254	
5	E	241	

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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	18% 37% 53% 6%
32	J	406	12% 42% 52% 6%

2 Entry composition

There are 32 unique types of molecules in this entry. The entry contains 82758 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
			3126	1978	535	600	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		

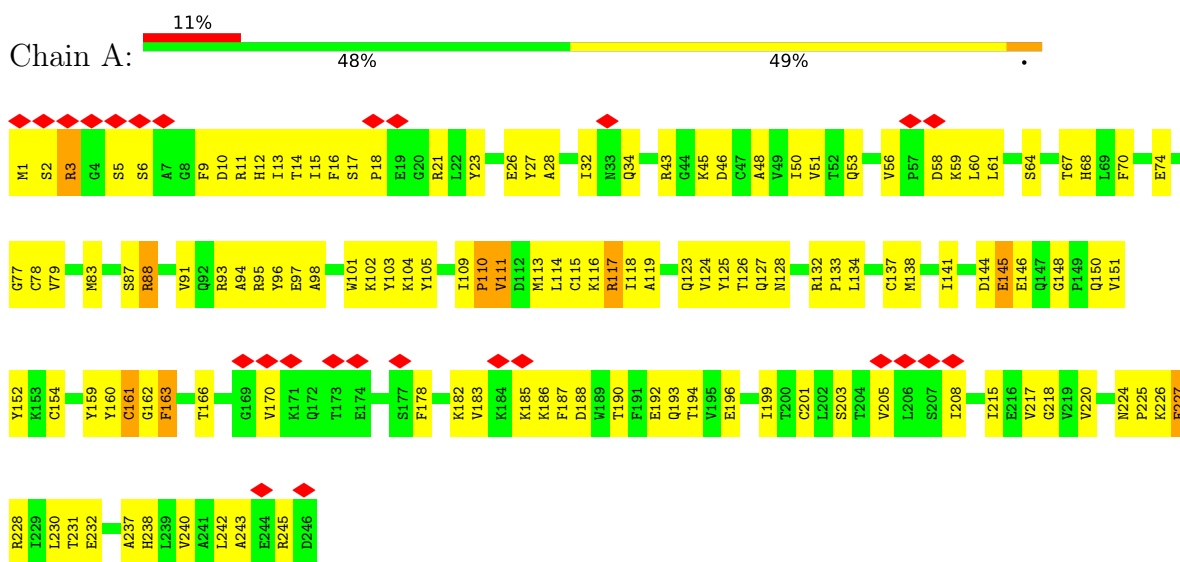
- Molecule 32 is a protein called 26S proteasome regulatory subunit 8.

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

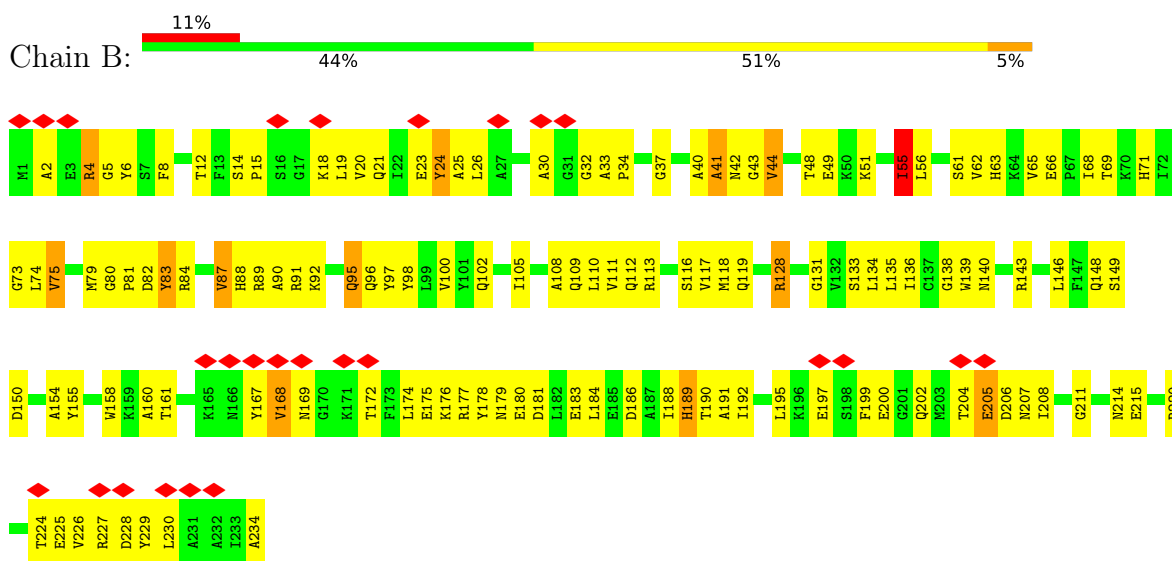
3 Residue-property plots [i](#)

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

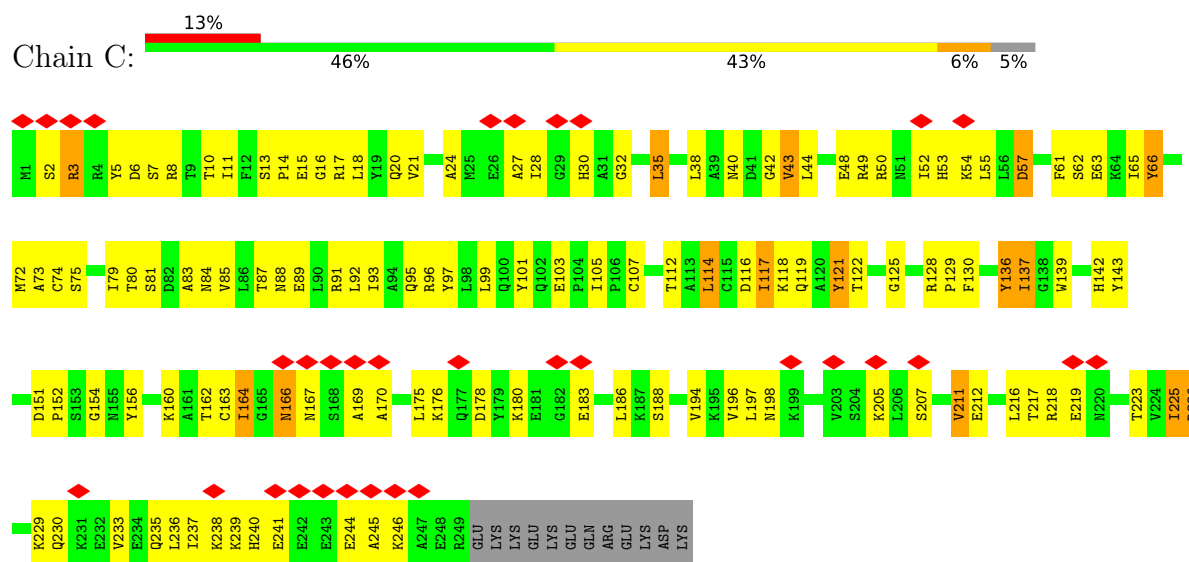
• Molecule 1: Proteasome subunit alpha type-6



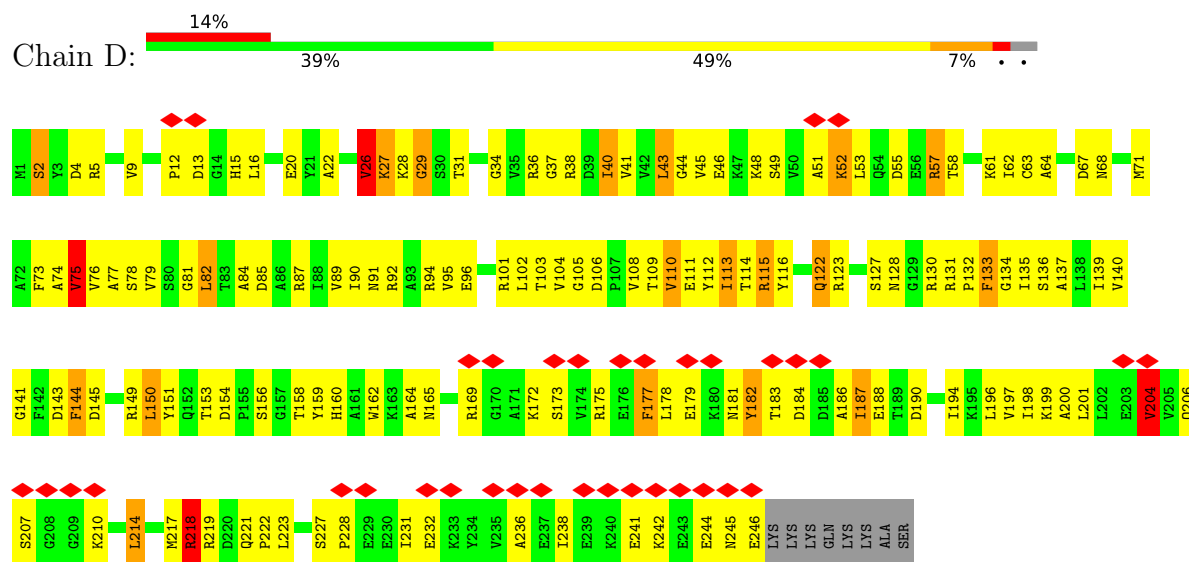
• Molecule 2: Proteasome subunit alpha type-2



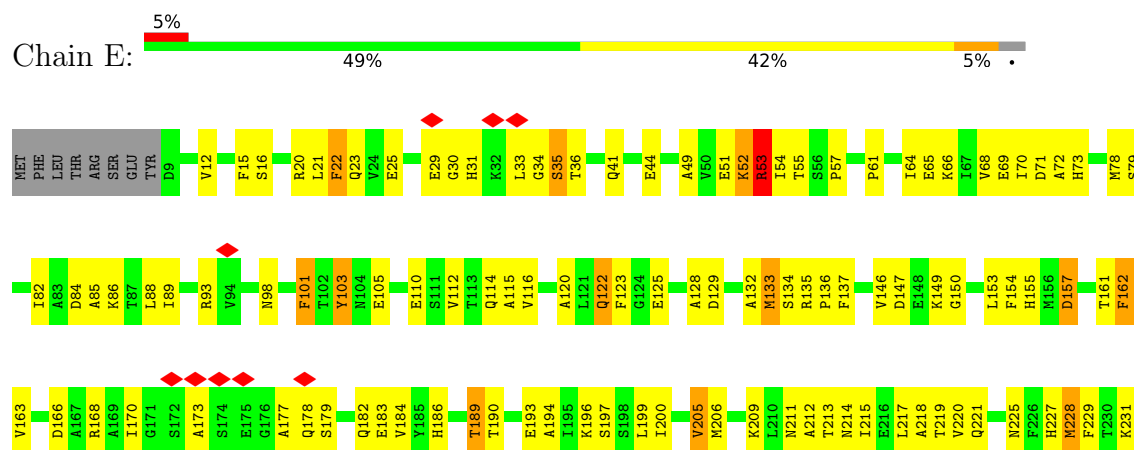
• Molecule 3: Proteasome subunit alpha type-4

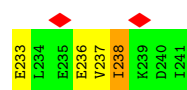


• Molecule 4: Proteasome subunit alpha type-7



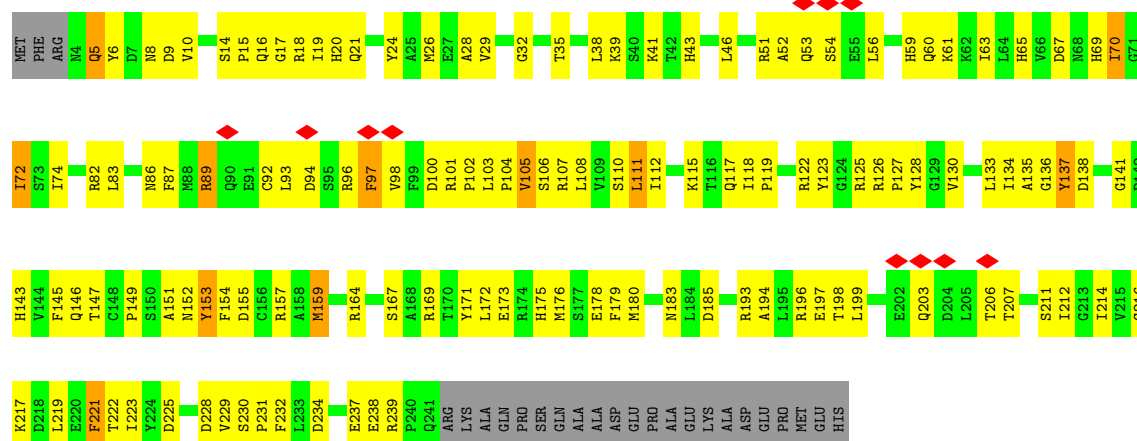
• Molecule 5: Proteasome subunit alpha type-5





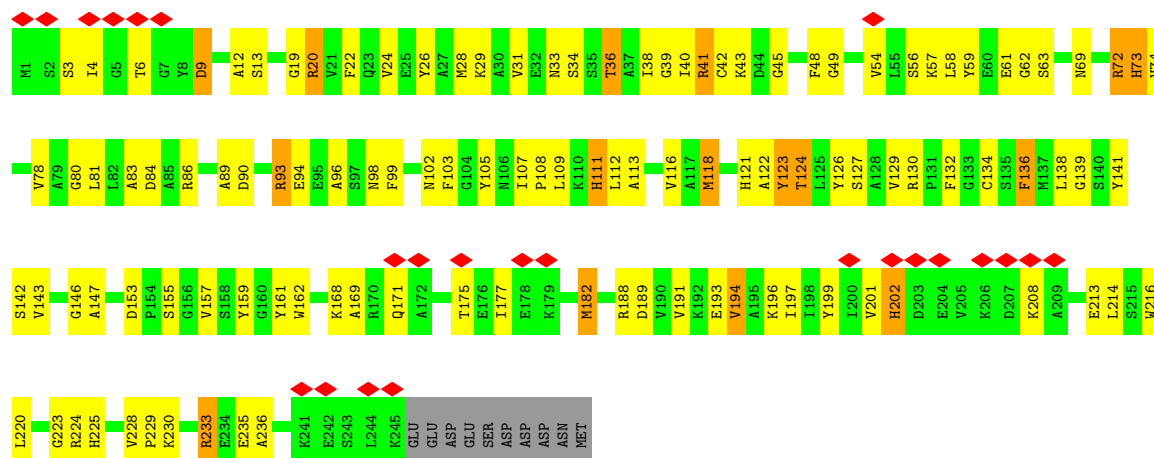
• Molecule 6: Proteasome subunit alpha type-1

Chain F: 40% 46% 10%



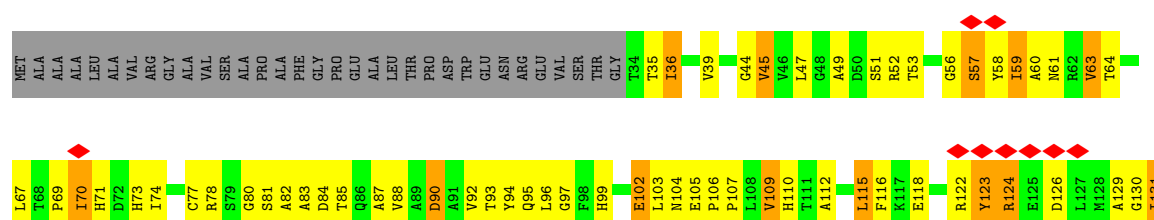
• Molecule 7: Proteasome subunit alpha type-3

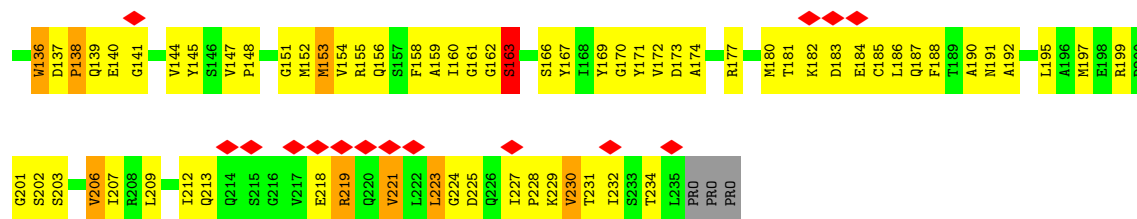
Chain G: 9% 50% 39% 7%



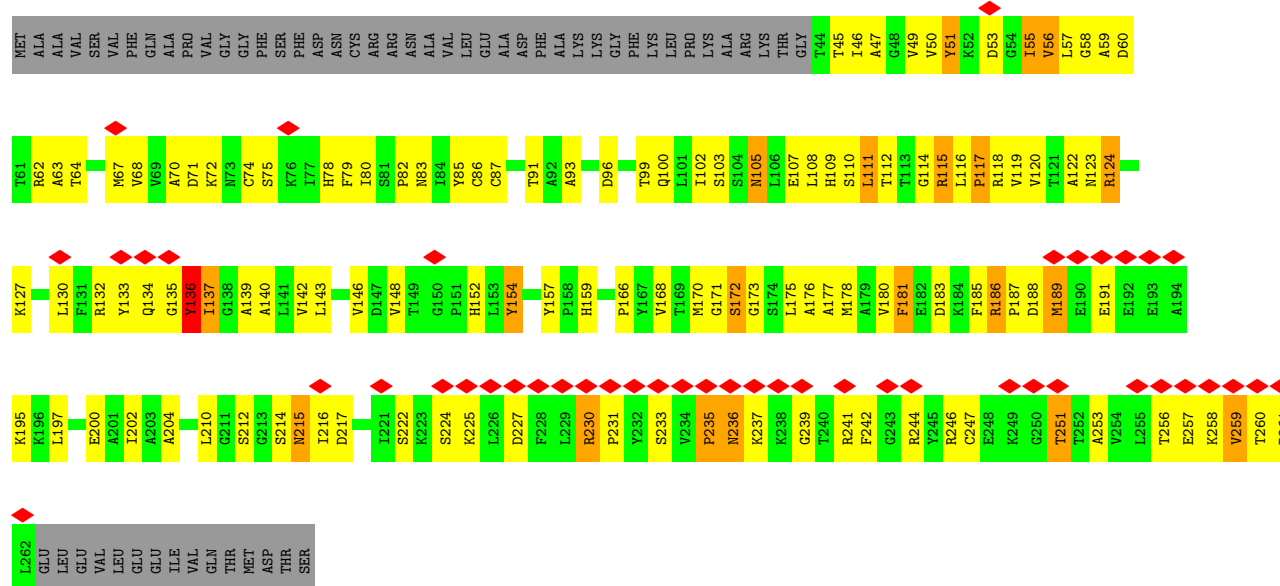
• Molecule 8: Proteasome subunit beta type-6

Chain 1: 10% 31% 45% 9% 15%

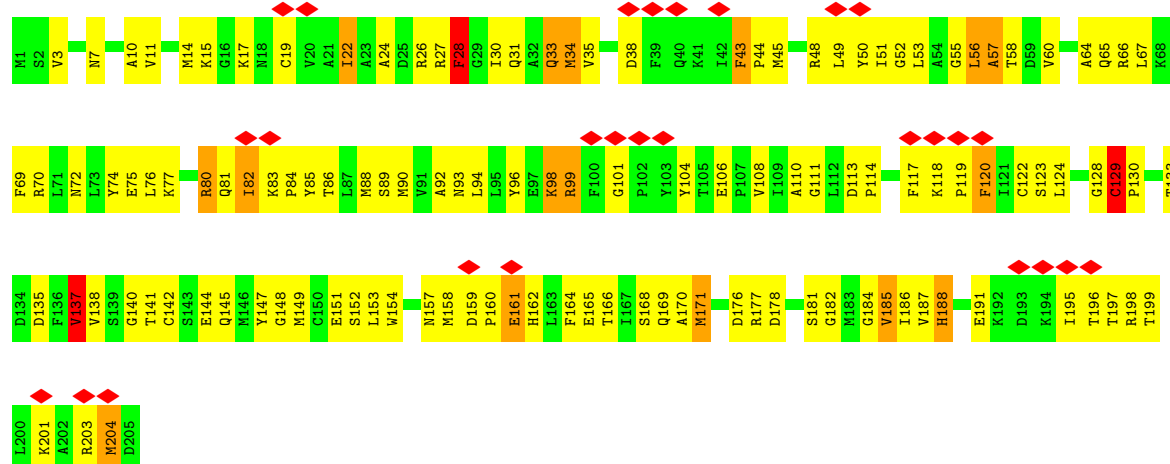




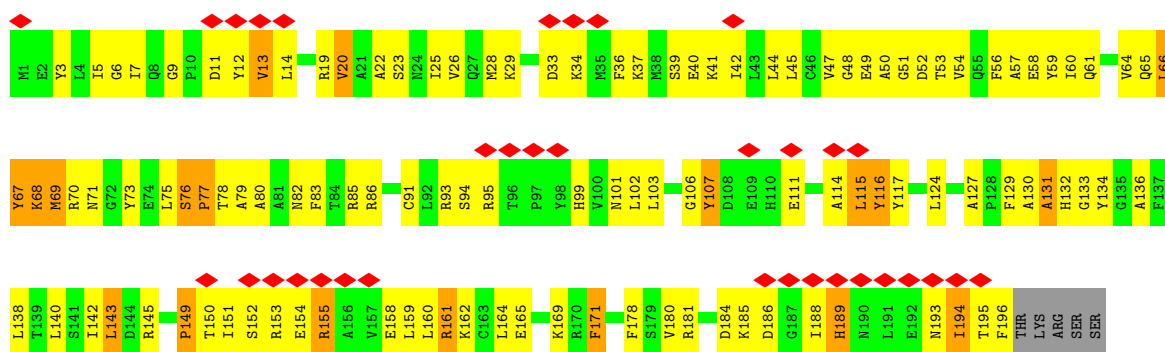
• Molecule 9: Proteasome subunit beta type-7



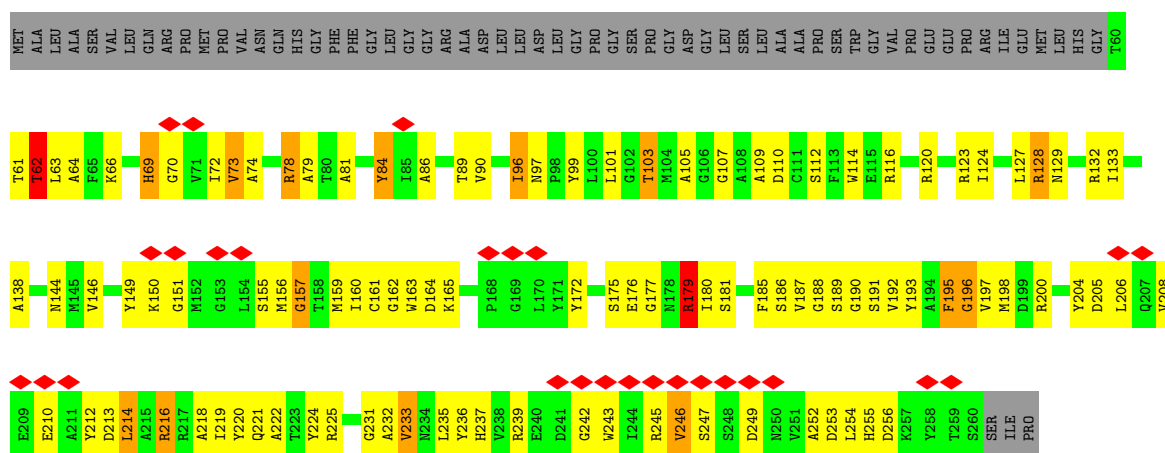
• Molecule 10: Proteasome subunit beta type-3



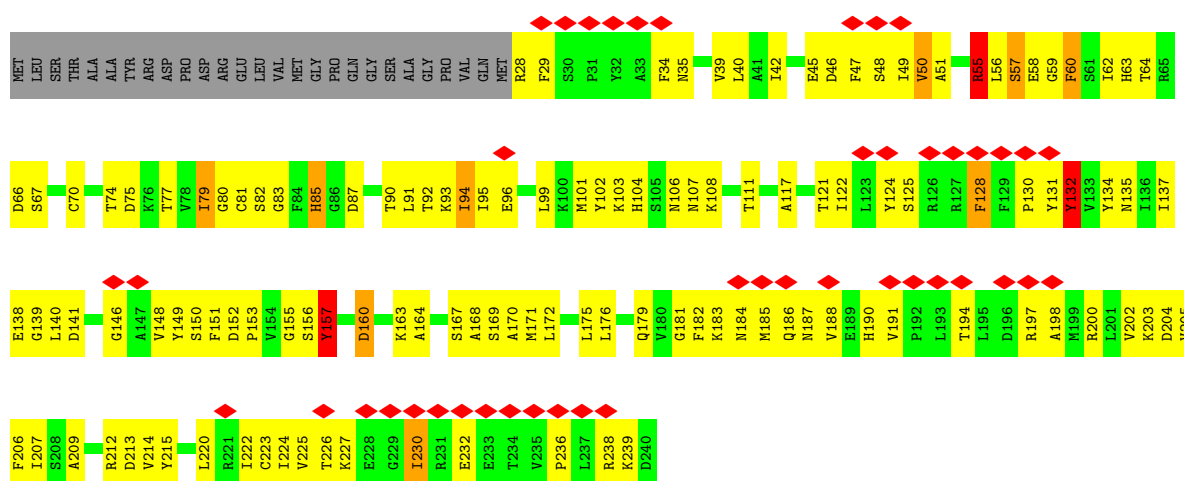
• Molecule 11: Proteasome subunit beta type-2



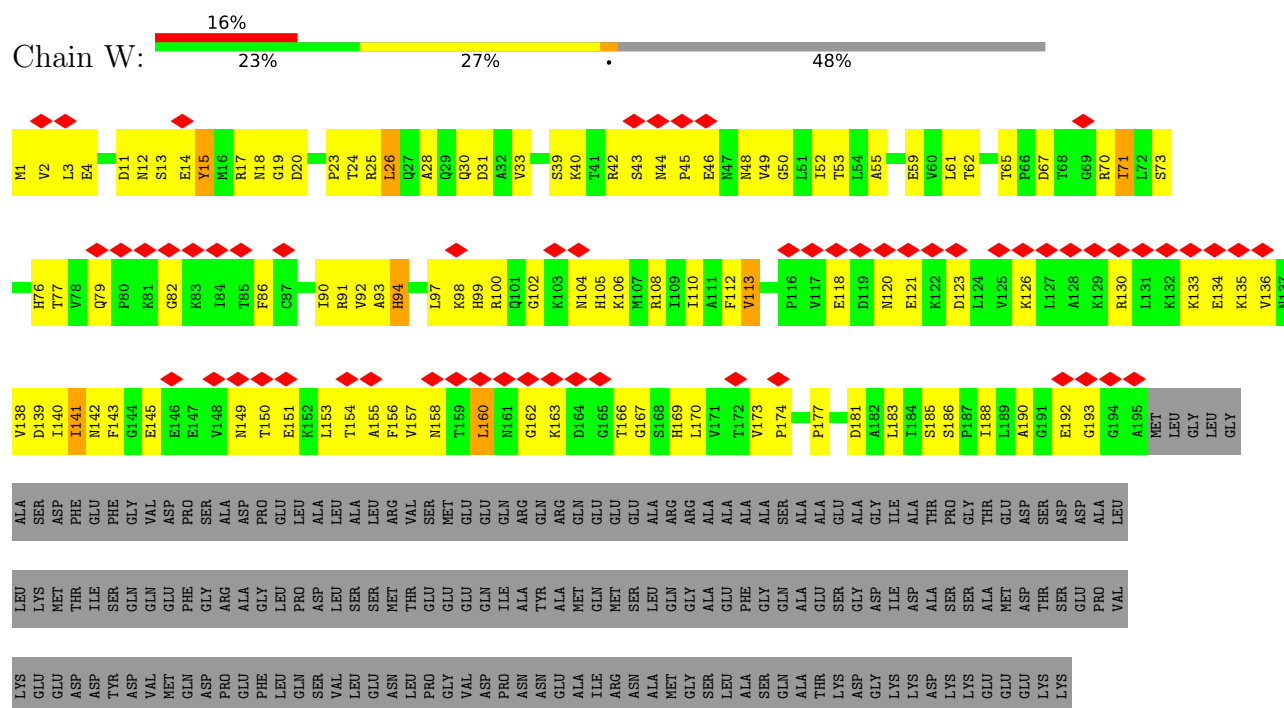
• Molecule 12: Proteasome subunit beta type-5



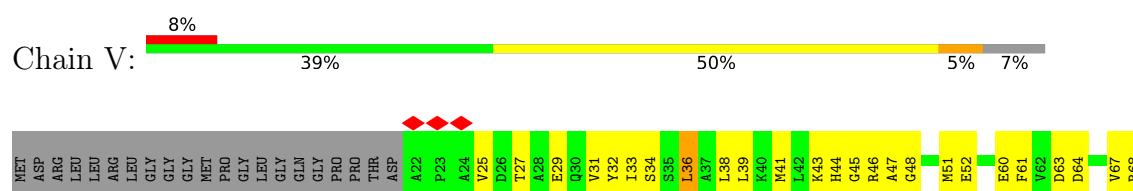
• Molecule 13: Proteasome subunit beta type-1



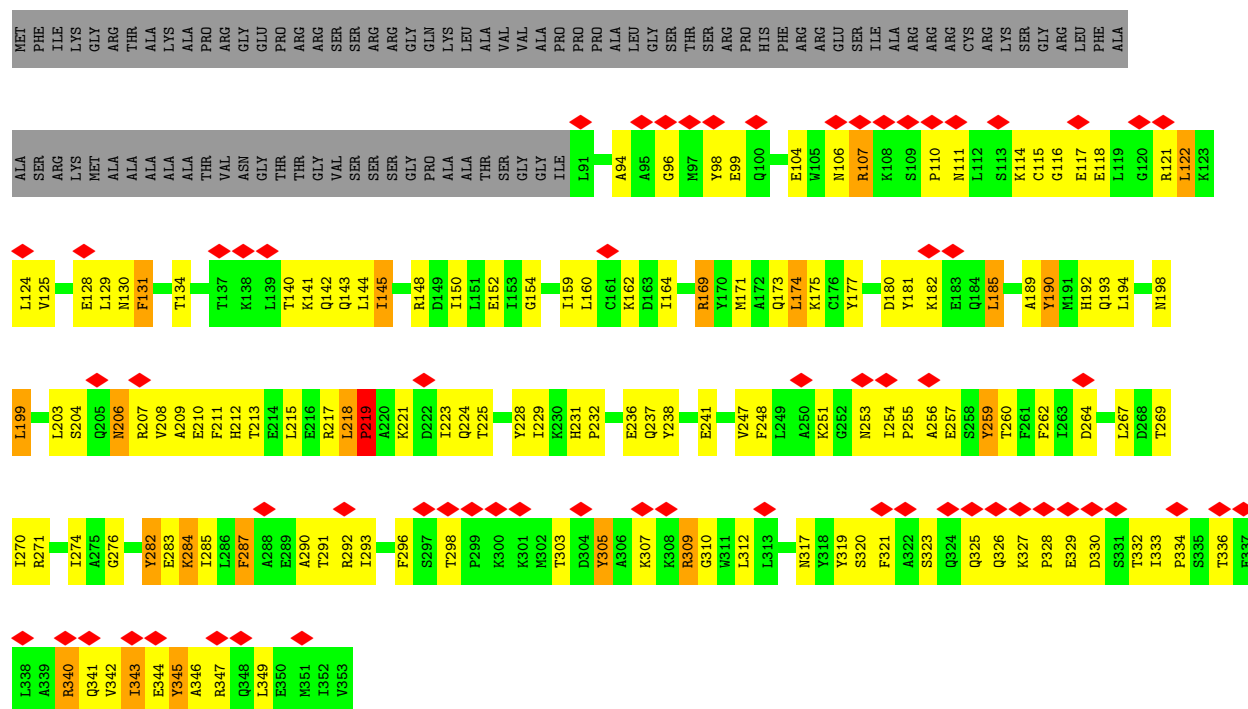
• Molecule 14: Proteasome subunit beta type-4



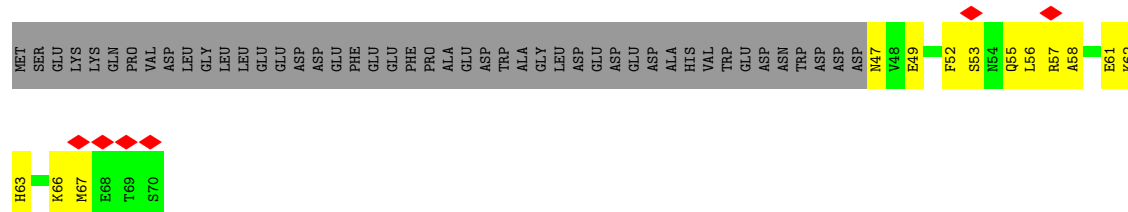
- Molecule 16: Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 14



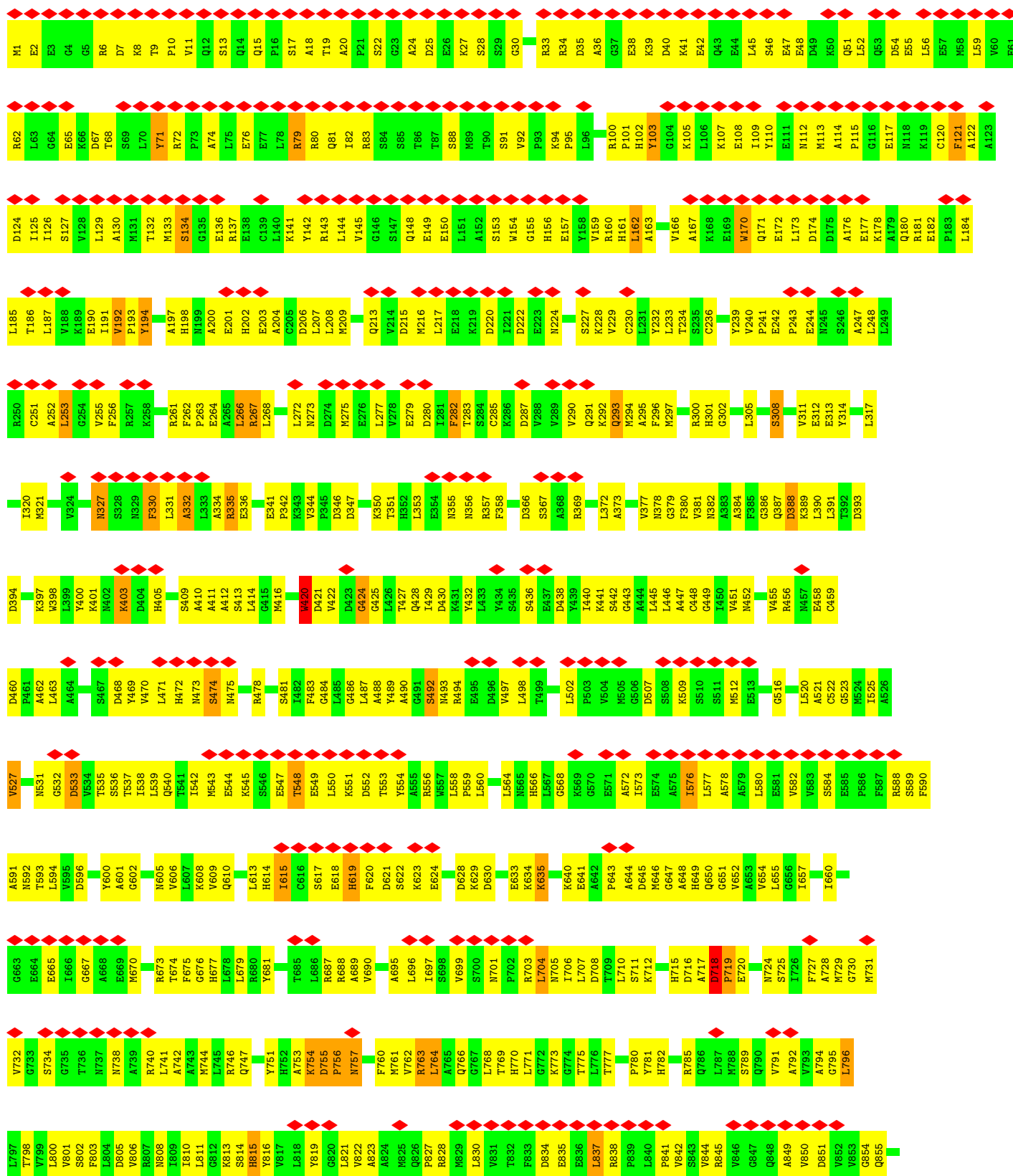
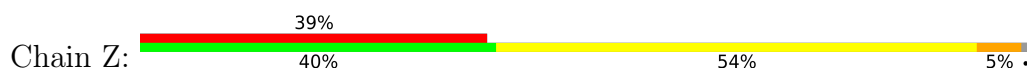
- Molecule 17: Proteasome 26S subunit, non-ATPase 8

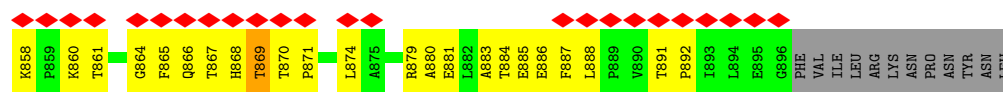


- Molecule 18: RCG28037

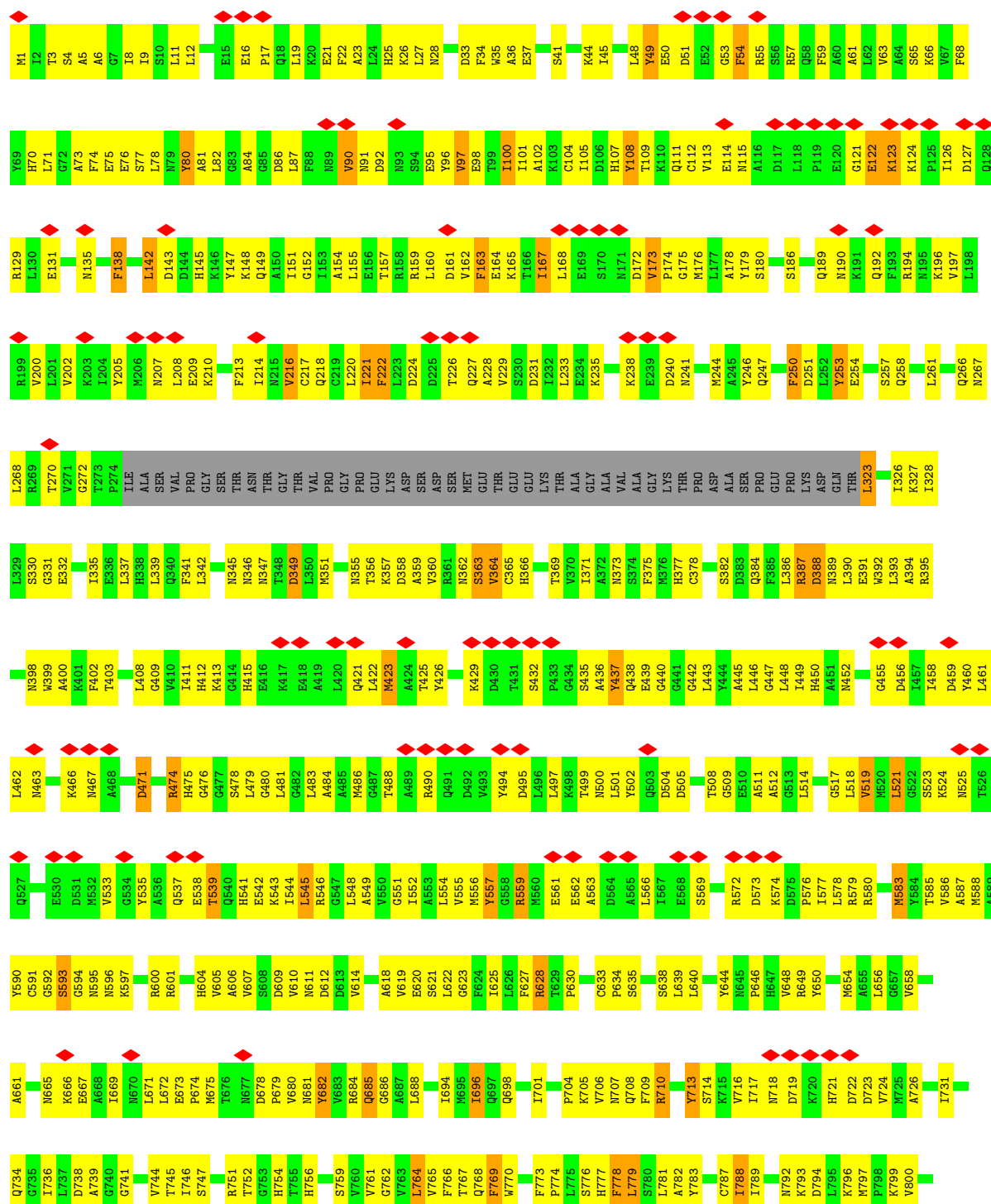


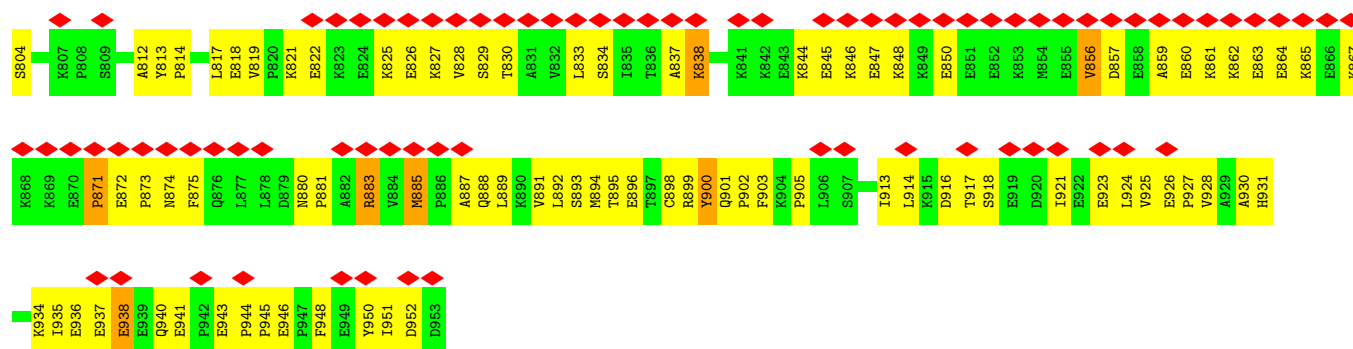
- Molecule 19: 26S proteasome non-ATPase regulatory subunit 2



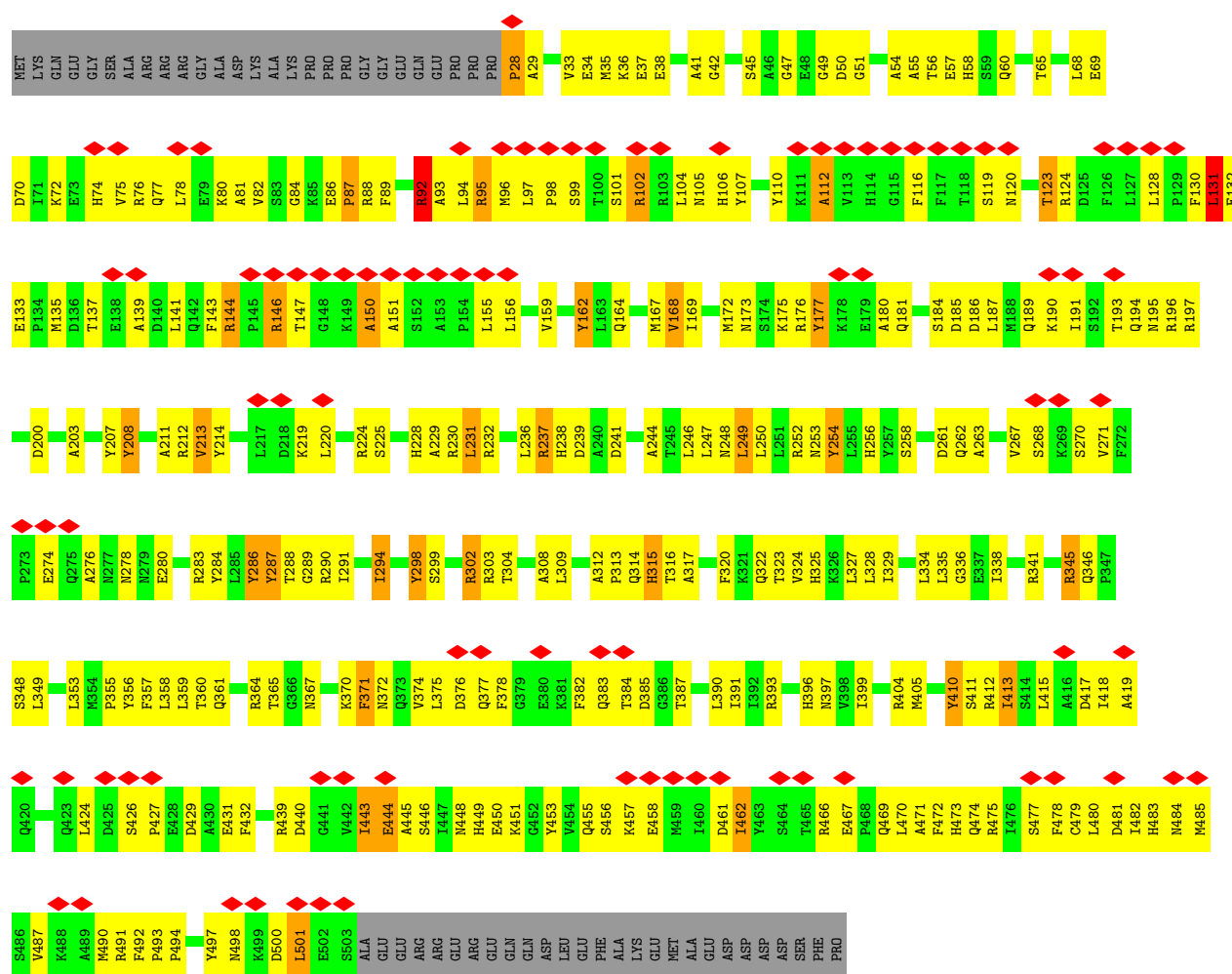


• Molecule 20: 26S proteasome non-ATPase regulatory subunit 1

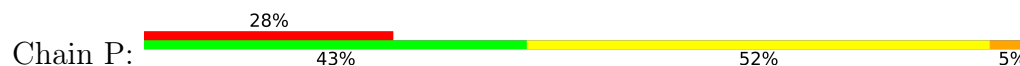


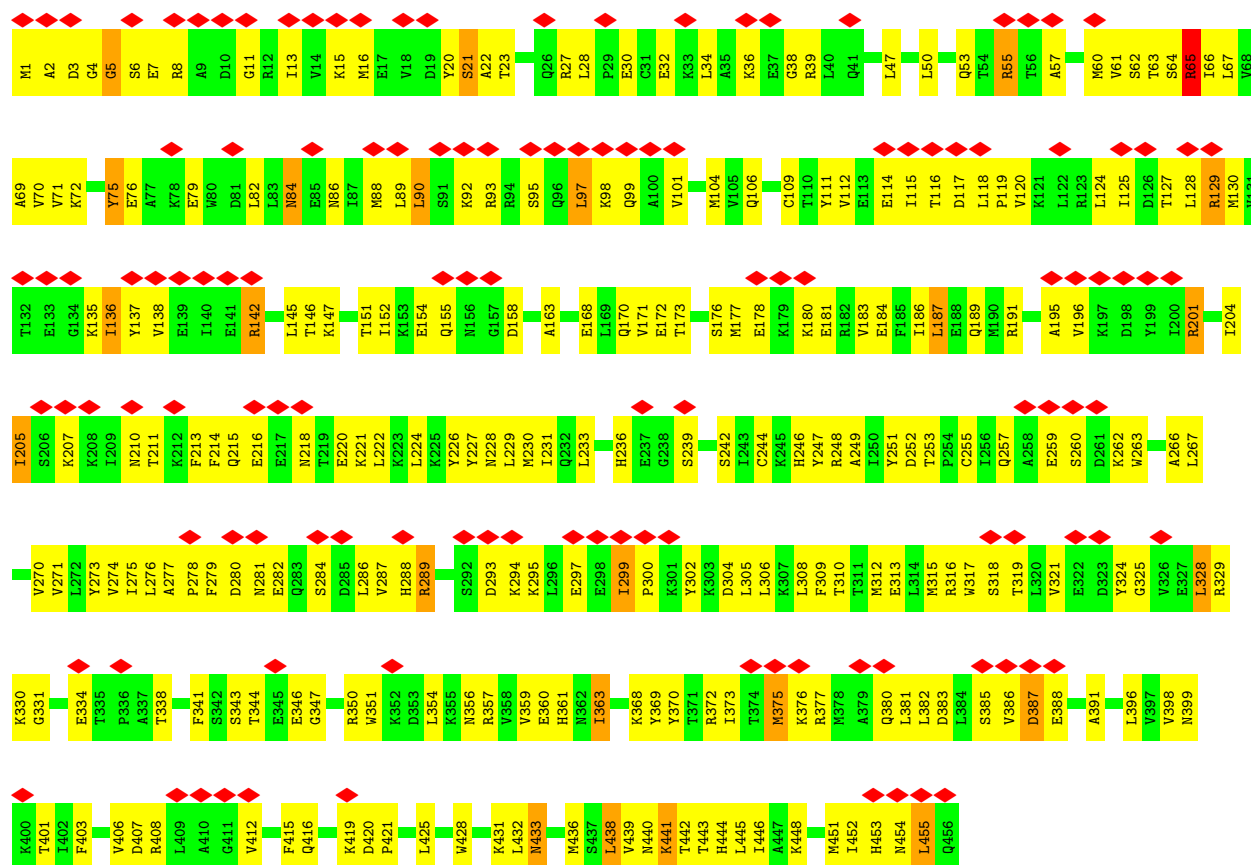


- Molecule 21: Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 3

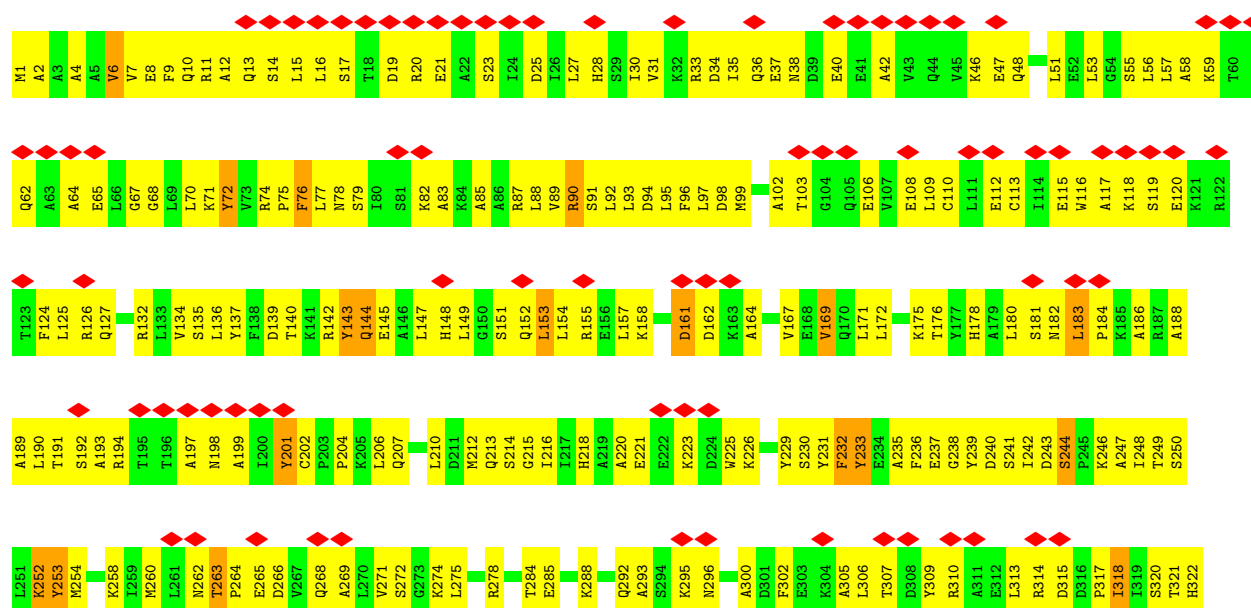


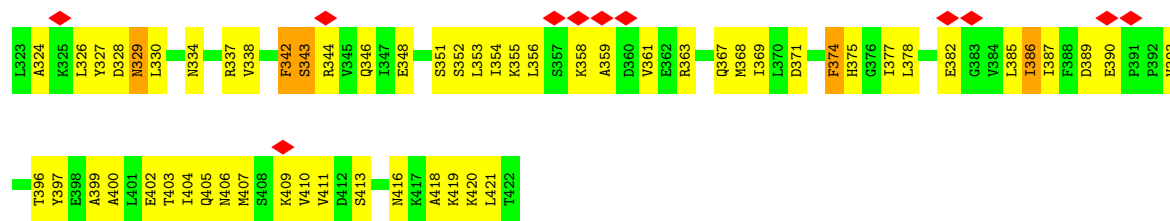
- Molecule 22: Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 12



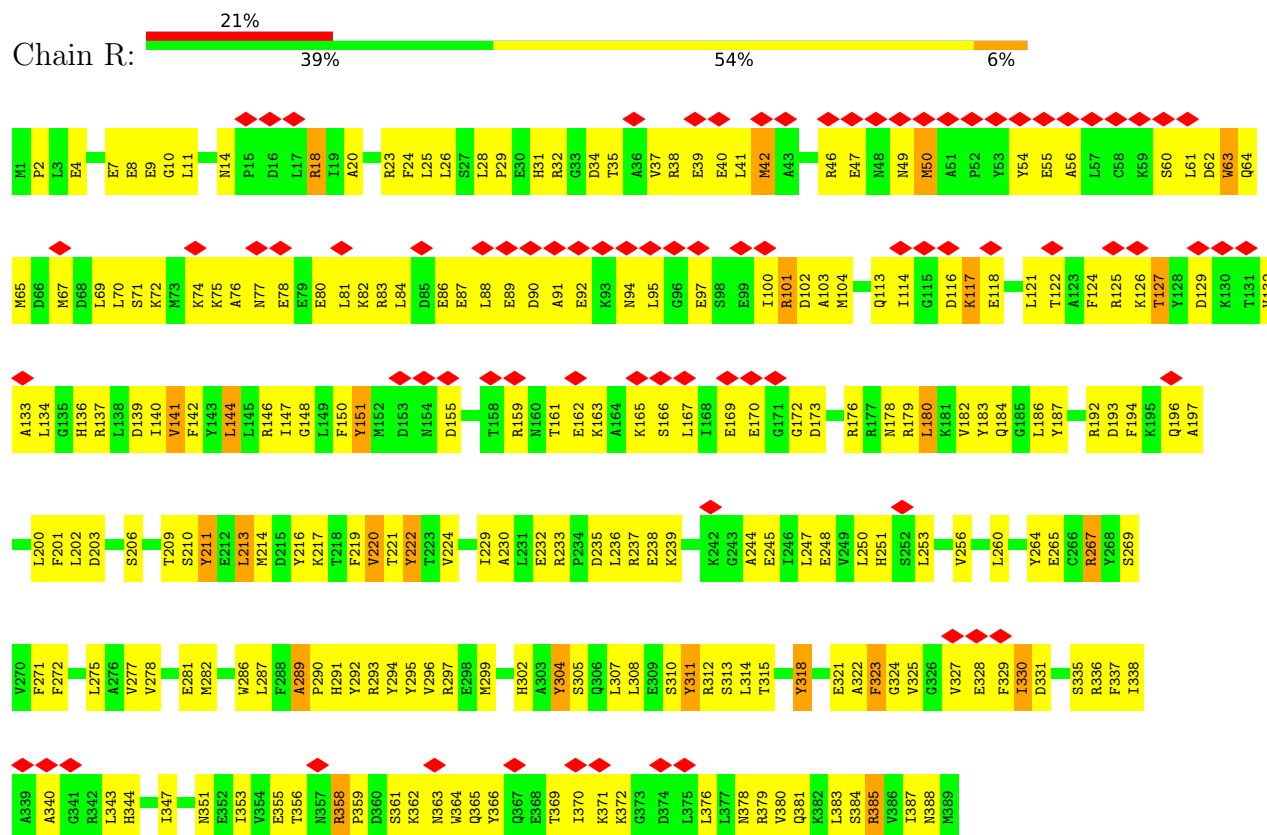


• Molecule 23: 26S proteasome non-ATPase regulatory subunit 11

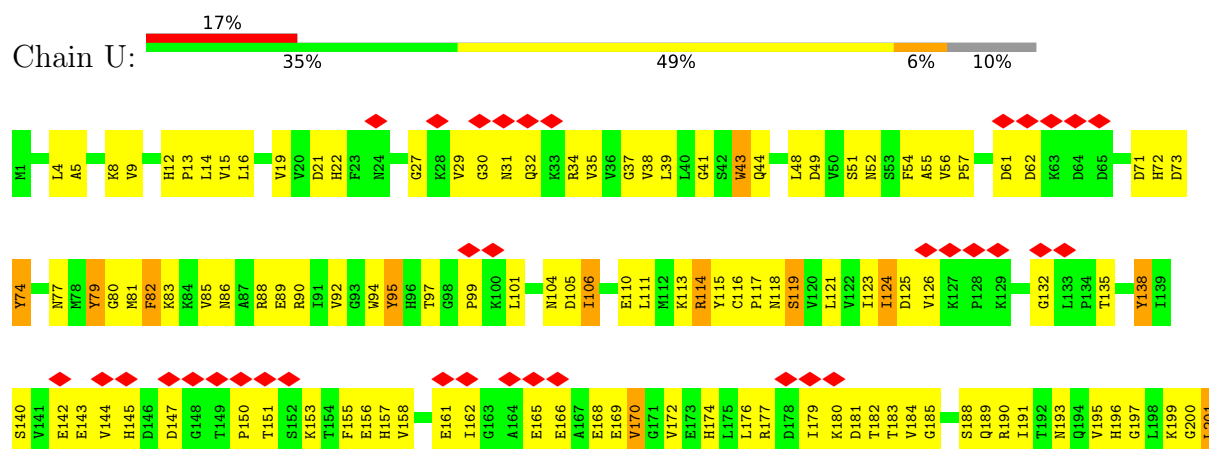


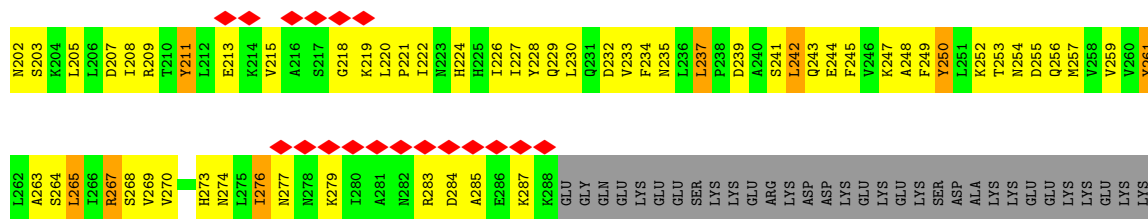


- Molecule 24: Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 6

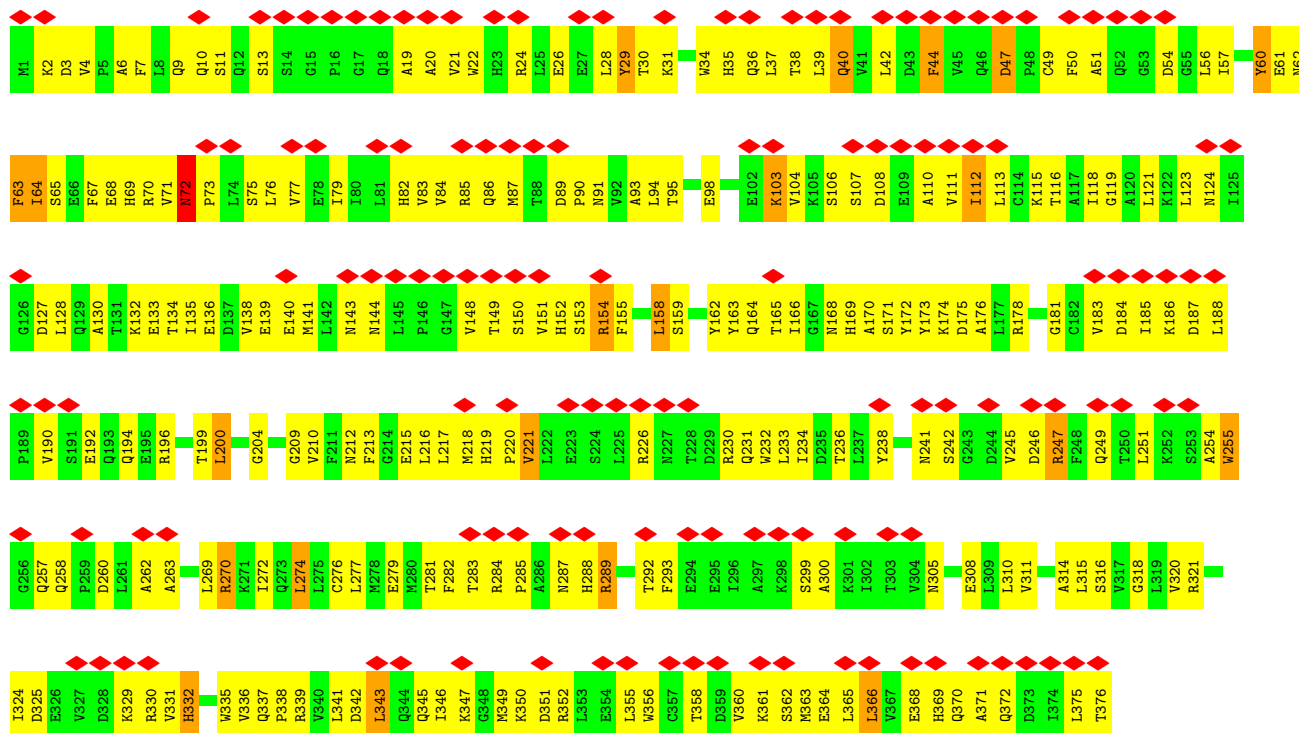


- Molecule 25: Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 7 (Predicted)

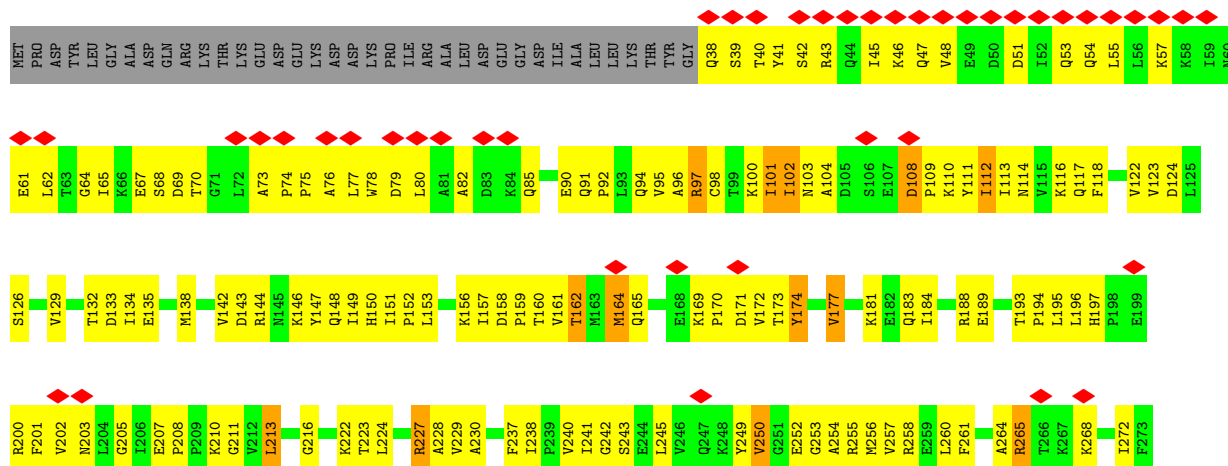


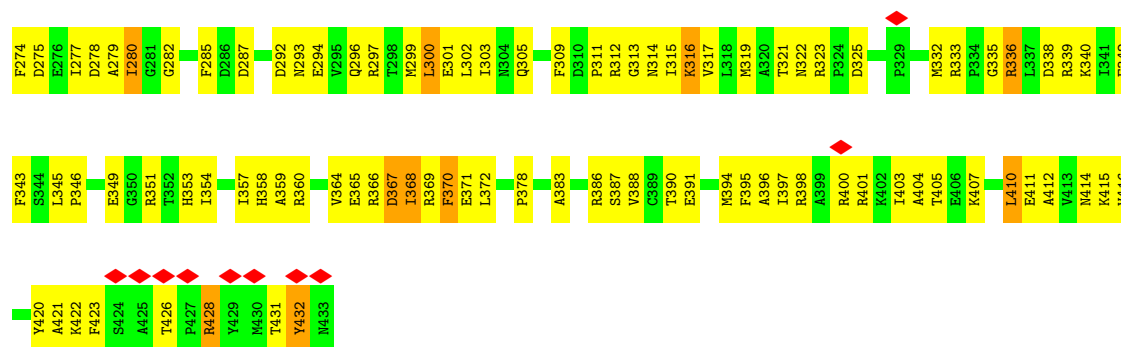


• Molecule 26: 26S proteasome non-ATPase regulatory subunit 13

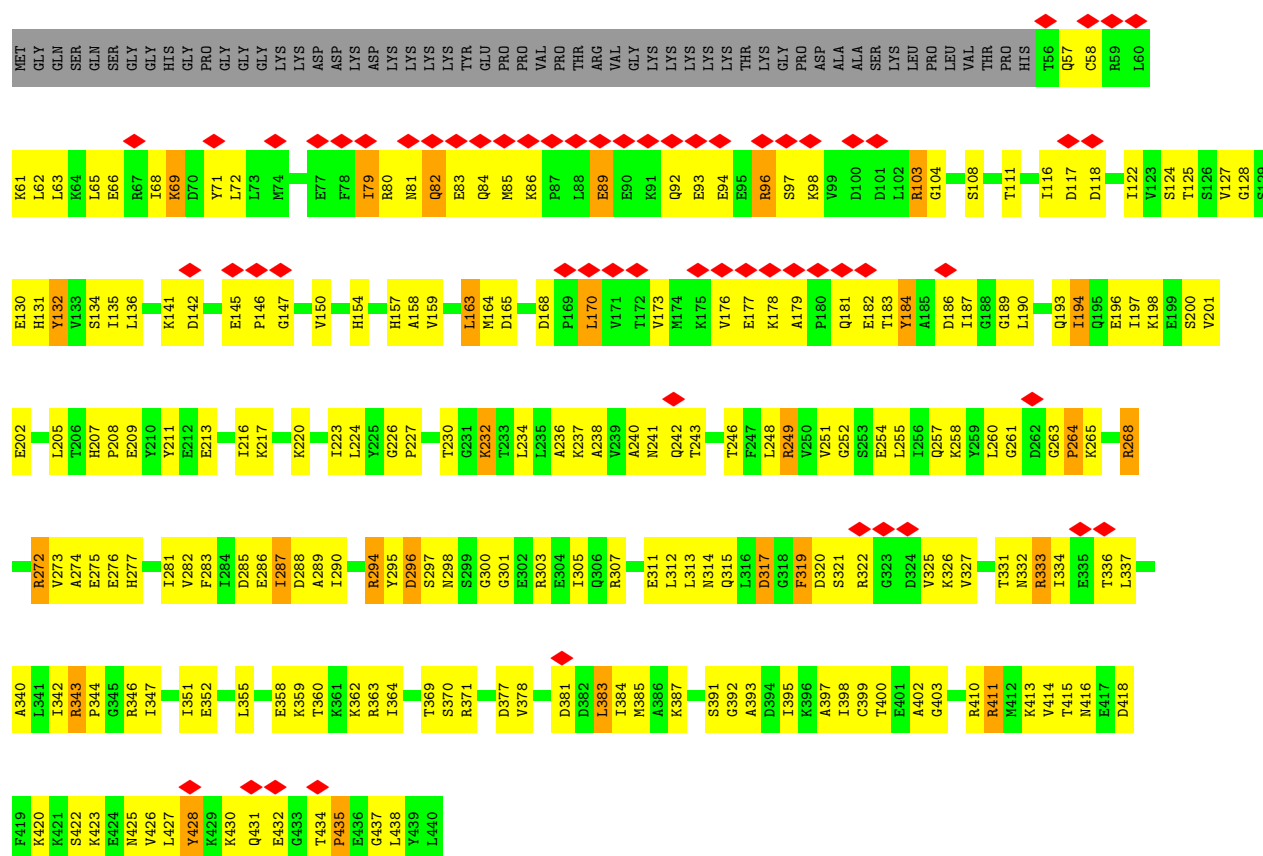


• Molecule 27: 26S proteasome regulatory subunit 7

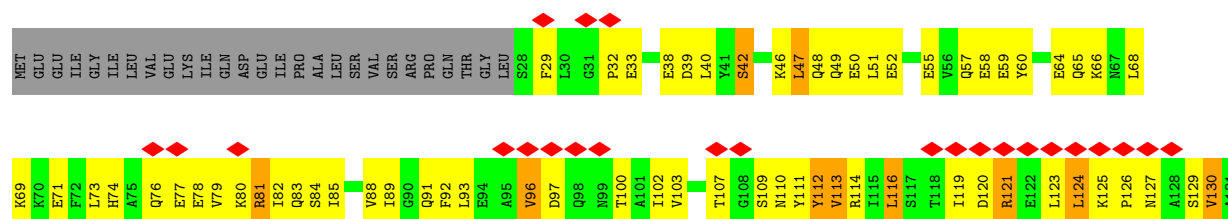


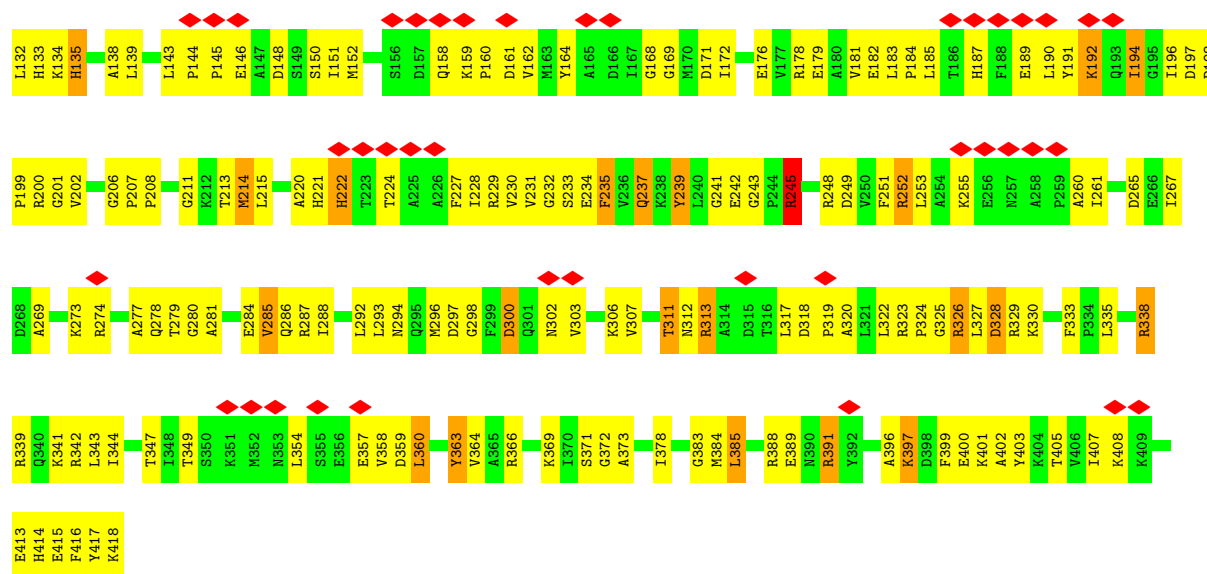


• Molecule 28: 26S proteasome regulatory subunit 4

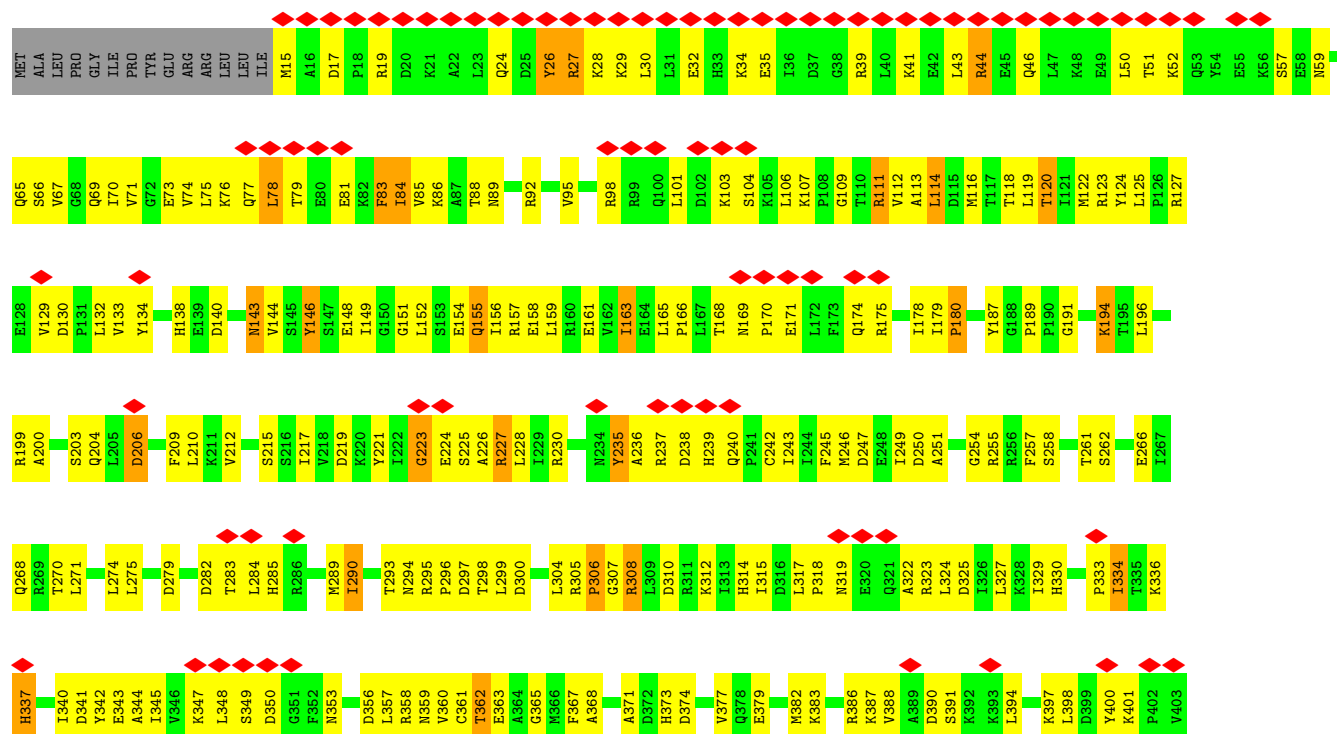


• Molecule 29: 26S proteasome regulatory subunit 6B



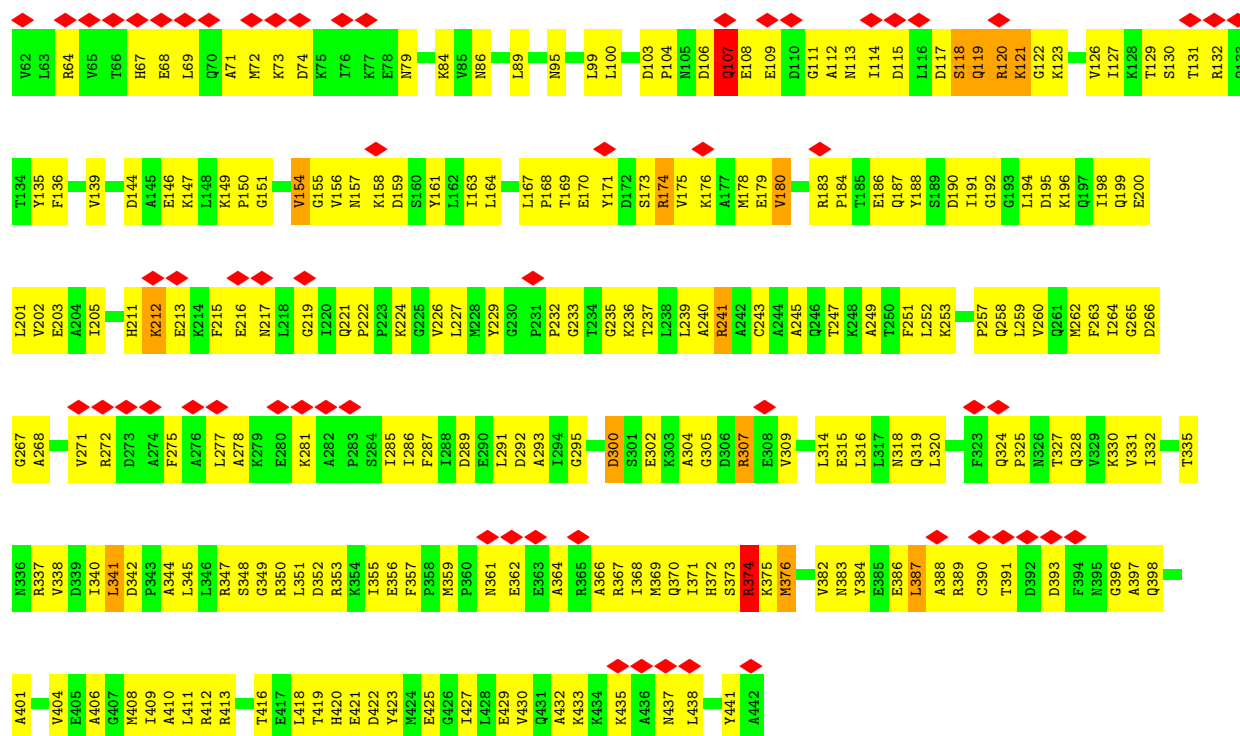


• Molecule 30: Proteasome 26S subunit, ATPase 6

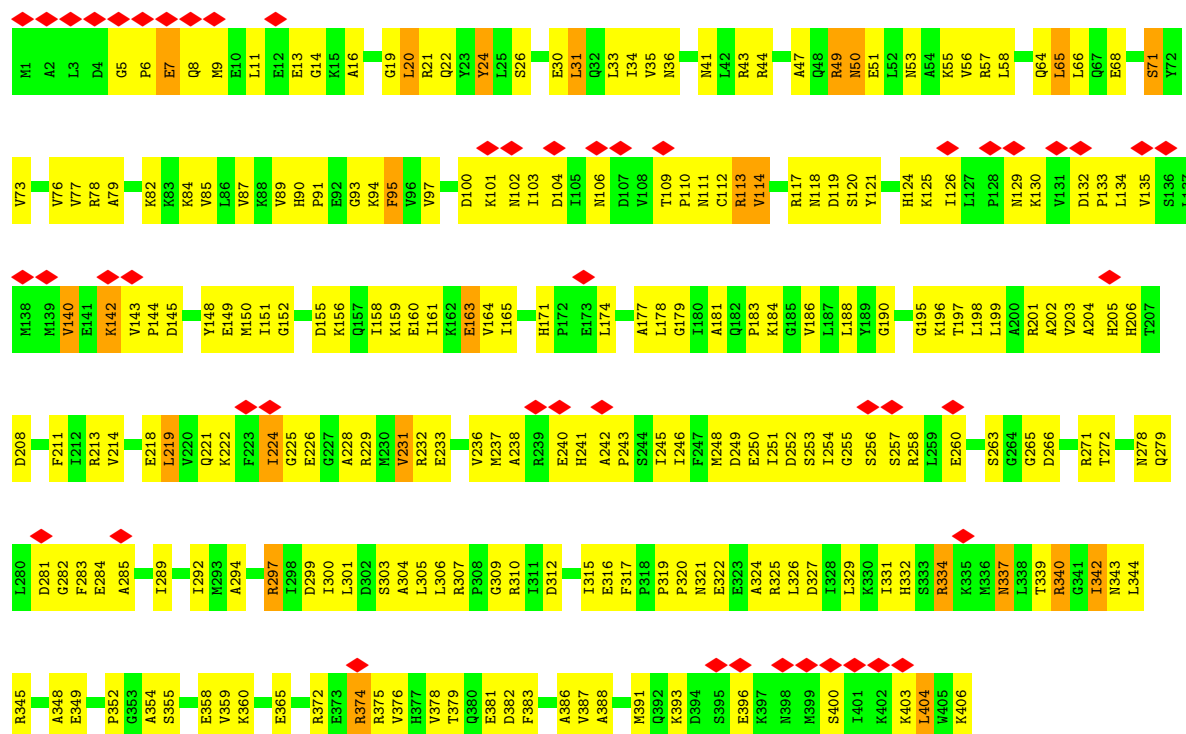


• Molecule 31: 26S proteasome regulatory subunit 6A





• 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	3482	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	0.748	Depositor
Minimum map value	-0.362	Depositor
Average map value	-0.005	Depositor
Map value standard deviation	0.162	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	2.25	62/1954 (3.2%)	2.50	157/2638 (6.0%)
2	B	2.33	70/1867 (3.7%)	2.43	117/2527 (4.6%)
3	C	2.27	70/1990 (3.5%)	2.39	115/2680 (4.3%)
4	D	2.28	73/1953 (3.7%)	2.47	133/2637 (5.0%)
5	E	2.25	63/1806 (3.5%)	2.49	126/2439 (5.2%)
6	F	2.35	85/1906 (4.5%)	2.46	140/2577 (5.4%)
7	G	2.27	66/1947 (3.4%)	2.38	108/2620 (4.1%)
8	1	2.40	70/1542 (4.5%)	2.56	125/2089 (6.0%)
9	2	2.25	57/1679 (3.4%)	2.57	113/2271 (5.0%)
10	3	2.30	64/1629 (3.9%)	2.54	118/2195 (5.4%)
11	4	2.29	53/1604 (3.3%)	2.44	95/2170 (4.4%)
12	5	2.30	60/1592 (3.8%)	2.54	115/2152 (5.3%)
13	6	2.29	71/1690 (4.2%)	2.52	122/2278 (5.4%)
14	7	2.33	71/1720 (4.1%)	2.58	154/2327 (6.6%)
15	W	2.27	52/1500 (3.5%)	2.58	136/2030 (6.7%)
16	V	2.31	90/2315 (3.9%)	2.57	175/3129 (5.6%)
17	T	2.24	73/2195 (3.3%)	2.57	167/2964 (5.6%)
18	Y	2.19	7/201 (3.5%)	2.58	18/266 (6.8%)
19	Z	2.32	285/7026 (4.1%)	2.62	589/9495 (6.2%)
20	N	2.29	282/7207 (3.9%)	2.61	610/9741 (6.3%)
21	S	2.35	171/3918 (4.4%)	2.53	279/5287 (5.3%)
22	P	2.31	153/3754 (4.1%)	2.55	298/5049 (5.9%)
23	Q	2.30	150/3381 (4.4%)	2.67	313/4558 (6.9%)
24	R	2.28	115/3263 (3.5%)	2.54	249/4393 (5.7%)
25	U	2.31	95/2344 (4.1%)	2.56	205/3178 (6.5%)
26	O	2.29	116/3066 (3.8%)	2.67	299/4148 (7.2%)
27	H	2.28	112/3166 (3.5%)	2.56	257/4275 (6.0%)
28	I	2.33	134/3085 (4.3%)	2.50	206/4158 (5.0%)
29	K	2.33	127/3179 (4.0%)	2.53	243/4290 (5.7%)
30	L	2.27	107/3146 (3.4%)	2.53	244/4233 (5.8%)
31	M	2.33	148/3293 (4.5%)	2.58	259/4436 (5.8%)
32	J	2.38	147/3236 (4.5%)	2.55	230/4347 (5.3%)
All	All	2.30	3299/84154 (3.9%)	2.55	6515/113577 (5.7%)

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

All (3299) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	1	147	VAL	N-CA	-12.22	1.36	1.45
1	A	77	GLY	CA-C	-12.15	1.41	1.52
17	T	231	HIS	N-CA	-11.54	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	1	49	ALA	CA-C	-11.46	1.38	1.52
19	Z	27	LYS	CA-C	-11.36	1.38	1.52
14	7	158	GLY	CA-C	-11.35	1.44	1.52
29	K	231	VAL	CA-C	-11.13	1.43	1.52
7	G	132	PHE	N-CA	-11.02	1.31	1.45
27	H	319	MET	CA-C	-10.97	1.39	1.52
17	T	333	ILE	CA-CB	-10.86	1.46	1.53
19	Z	746	ARG	CD-NE	10.63	1.61	1.46
21	S	320	PHE	CA-CB	10.60	1.70	1.53
32	J	171	HIS	CA-CB	10.55	1.62	1.53
11	4	80	ALA	CA-C	-10.49	1.39	1.52
20	N	66	LYS	N-CA	-10.41	1.33	1.46
14	7	119	GLU	CA-C	10.23	1.66	1.52
12	5	200	ARG	NE-CZ	10.17	1.44	1.33
11	4	48	GLY	CA-C	-10.06	1.45	1.52
20	N	618	ALA	CA-C	-10.03	1.39	1.52
2	B	227	ARG	CD-NE	10.00	1.60	1.46
28	I	184	TYR	CA-C	-10.00	1.40	1.52
25	U	39	LEU	CA-C	-9.96	1.40	1.52
30	L	295	ARG	CD-NE	9.87	1.60	1.46
23	Q	194	ARG	CD-NE	9.80	1.59	1.46
11	4	6	GLY	CA-C	-9.73	1.41	1.51
2	B	61	SER	N-CA	-9.72	1.37	1.46
19	Z	295	ALA	CA-C	-9.67	1.40	1.52
27	H	391	GLU	CA-CB	9.61	1.68	1.53
1	A	14	THR	CA-CB	9.58	1.65	1.52
22	P	120	VAL	CA-C	-9.57	1.40	1.52
21	S	449	HIS	ND1-CE1	9.51	1.42	1.32
15	W	28	ALA	CA-C	-9.44	1.40	1.52
5	E	136	PRO	CA-C	-9.30	1.40	1.52
21	S	252	ARG	NE-CZ	9.24	1.43	1.33
22	P	286	LEU	N-CA	-9.19	1.35	1.46
31	M	120	ARG	NE-CZ	9.18	1.43	1.33
6	F	203	GLN	C-N	9.14	1.41	1.33
28	I	200	SER	N-CA	-9.13	1.35	1.46
24	R	330	ILE	CA-C	-9.09	1.41	1.52
26	O	7	PHE	CA-C	-9.09	1.41	1.52
14	7	183	THR	CA-C	-9.07	1.41	1.52
20	N	57	ARG	CZ-NH2	9.07	1.45	1.33
31	M	183	ARG	NE-CZ	9.06	1.43	1.33
23	Q	30	ILE	C-N	9.06	1.45	1.33
16	V	219	ASN	CA-C	-9.04	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	S	364	ARG	NE-CZ	9.03	1.43	1.33
20	N	254	GLU	CA-C	-9.02	1.41	1.52
23	Q	315	ASP	CA-CB	9.00	1.67	1.53
16	V	273	LYS	C-N	8.99	1.43	1.33
31	M	236	LYS	C-N	8.98	1.46	1.33
1	A	238	HIS	C-N	8.97	1.45	1.33
21	S	41	ALA	N-CA	-8.94	1.35	1.46
19	Z	198	HIS	CA-C	-8.94	1.41	1.52
32	J	378	VAL	CA-C	-8.94	1.42	1.53
20	N	34	PHE	CA-C	-8.93	1.42	1.52
27	H	358	HIS	ND1-CE1	8.92	1.41	1.32
11	4	95	ARG	NE-CZ	8.91	1.42	1.33
24	R	313	SER	CA-C	-8.89	1.41	1.52
8	1	129	ALA	CA-C	-8.89	1.41	1.52
21	S	481	ASP	CA-CB	8.89	1.67	1.53
27	H	268	LYS	CA-C	-8.86	1.41	1.53
26	O	318	GLY	C-N	8.85	1.45	1.33
32	J	117	ARG	N-CA	-8.85	1.34	1.45
13	6	190	HIS	C-N	-8.84	1.25	1.33
21	S	466	ARG	CD-NE	8.83	1.58	1.46
29	K	130	VAL	CA-C	-8.82	1.43	1.52
28	I	187	ILE	CA-C	-8.81	1.43	1.53
2	B	143	ARG	NE-CZ	8.81	1.42	1.33
17	T	276	GLY	CA-C	-8.81	1.42	1.52
30	L	226	ALA	CA-C	-8.81	1.41	1.52
19	Z	578	ALA	C-N	8.79	1.45	1.33
13	6	83	GLY	CA-C	-8.79	1.44	1.52
13	6	134	TYR	CA-C	-8.79	1.43	1.53
19	Z	601	ALA	CA-C	-8.79	1.41	1.52
20	N	594	GLY	CA-C	-8.77	1.43	1.52
28	I	305	ILE	CA-C	-8.73	1.41	1.52
31	M	266	ASP	N-CA	-8.73	1.35	1.46
21	S	302	ARG	CD-NE	8.71	1.58	1.46
21	S	177	TYR	CA-CB	8.70	1.65	1.53
7	G	216	TRP	NE1-CE2	8.70	1.47	1.37
19	Z	181	ARG	NE-CZ	8.70	1.42	1.33
19	Z	484	GLY	CA-C	-8.67	1.42	1.52
12	5	73	VAL	CA-C	-8.66	1.42	1.52
19	Z	539	LEU	CA-CB	8.66	1.66	1.53
6	F	185	ASP	CA-C	-8.65	1.42	1.52
22	P	330	LYS	C-N	8.64	1.42	1.33
10	3	113	ASP	CA-C	8.61	1.63	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	L	230	ARG	NE-CZ	8.61	1.42	1.33
29	K	338	ARG	CD-NE	8.59	1.58	1.46
6	F	117	GLN	C-N	8.58	1.43	1.33
8	1	130	GLY	N-CA	-8.57	1.36	1.45
4	D	160	HIS	CA-C	-8.56	1.42	1.52
25	U	106	ILE	N-CA	-8.56	1.36	1.46
31	M	427	ILE	CA-CB	-8.55	1.43	1.54
20	N	174	PRO	C-O	-8.54	1.17	1.24
2	B	100	VAL	N-CA	-8.54	1.36	1.46
11	4	34	LYS	CA-C	-8.53	1.42	1.52
19	Z	143	ARG	CD-NE	8.53	1.58	1.46
6	F	100	ASP	CA-CB	8.53	1.65	1.53
20	N	916	ASP	CA-C	-8.52	1.43	1.53
4	D	145	ASP	CA-C	-8.51	1.41	1.52
28	I	183	THR	N-CA	-8.51	1.35	1.46
13	6	103	LYS	CA-C	-8.47	1.41	1.52
28	I	194	ILE	CA-CB	8.47	1.65	1.54
28	I	274	ALA	CA-C	-8.46	1.41	1.52
19	Z	305	LEU	CA-C	-8.46	1.41	1.52
4	D	38	ARG	NE-CZ	8.45	1.42	1.33
19	Z	470	VAL	CA-CB	-8.44	1.44	1.54
6	F	96	ARG	CD-NE	8.42	1.58	1.46
11	4	69	MET	CA-C	-8.42	1.42	1.52
20	N	796	LYS	CA-C	-8.42	1.42	1.52
25	U	8	LYS	CA-C	-8.41	1.42	1.52
25	U	283	ARG	C-N	8.39	1.45	1.33
16	V	106	GLU	N-CA	-8.38	1.34	1.45
23	Q	240	ASP	C-N	8.38	1.44	1.33
16	V	172	HIS	ND1-CE1	8.37	1.41	1.32
5	E	211	ASN	C-N	8.37	1.45	1.33
16	V	161	ARG	NE-CZ	8.36	1.42	1.33
19	Z	521	ALA	CA-C	-8.36	1.42	1.52
16	V	264	LYS	CA-CB	8.34	1.67	1.53
20	N	681	ASN	CA-CB	8.32	1.66	1.53
27	H	135	GLU	CA-C	-8.32	1.42	1.52
29	K	178	ARG	CD-NE	8.30	1.57	1.46
28	I	370	SER	C-N	8.29	1.45	1.33
31	M	413	ARG	NE-CZ	8.29	1.42	1.33
18	Y	49	GLU	CA-C	-8.29	1.42	1.52
3	C	13	SER	C-N	8.28	1.40	1.33
29	K	239	TYR	CA-C	-8.29	1.45	1.52
21	S	390	LEU	C-N	8.26	1.44	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	N	509	GLY	CA-C	-8.26	1.43	1.52
21	S	57	GLU	CA-CB	8.25	1.67	1.53
32	J	49	ARG	NE-CZ	8.23	1.42	1.33
26	O	276	CYS	CA-CB	8.23	1.66	1.53
25	U	138	TYR	CA-C	-8.22	1.42	1.52
19	Z	810	ILE	CA-C	-8.22	1.42	1.52
22	P	455	LEU	CA-C	-8.22	1.41	1.52
30	L	268	GLN	CA-C	-8.22	1.41	1.52
21	S	308	ALA	CA-C	-8.21	1.42	1.52
24	R	76	ALA	CA-C	-8.21	1.42	1.52
20	N	825	LYS	N-CA	-8.20	1.36	1.46
19	Z	475	ASN	CA-C	-8.19	1.42	1.52
31	M	391	THR	C-N	8.19	1.43	1.33
20	N	194	ARG	CD-NE	8.18	1.57	1.46
1	A	93	ARG	NE-CZ	8.18	1.42	1.33
14	7	257	HIS	CD2-NE2	8.16	1.46	1.37
2	B	139	TRP	CA-C	-8.16	1.43	1.52
28	I	351	ILE	N-CA	-8.15	1.36	1.46
29	K	269	ALA	C-N	8.15	1.41	1.33
7	G	225	HIS	ND1-CE1	8.14	1.40	1.32
29	K	103	VAL	CA-C	-8.14	1.44	1.52
11	4	106	GLY	CA-C	-8.14	1.46	1.52
19	Z	143	ARG	NE-CZ	8.14	1.42	1.33
27	H	372	LEU	C-N	8.14	1.45	1.33
25	U	243	GLN	CA-C	-8.13	1.42	1.52
19	Z	456	ARG	NE-CZ	8.12	1.42	1.33
7	G	141	TYR	CA-C	-8.11	1.42	1.52
14	7	251	THR	CA-C	8.11	1.62	1.52
29	K	229	ARG	CA-C	-8.10	1.43	1.52
23	Q	225	TRP	NE1-CE2	8.10	1.46	1.37
11	4	71	ASN	CA-C	-8.10	1.42	1.52
20	N	944	PRO	CA-C	-8.10	1.44	1.52
22	P	115	ILE	CA-CB	-8.10	1.45	1.54
25	U	249	PHE	N-CA	-8.10	1.36	1.46
22	P	338	THR	N-CA	-8.10	1.36	1.46
10	3	31	GLN	N-CA	8.09	1.55	1.46
28	I	223	ILE	CA-CB	-8.08	1.43	1.54
21	S	443	ILE	N-CA	-8.08	1.36	1.46
23	Q	321	THR	N-CA	-8.08	1.36	1.46
24	R	269	SER	CA-C	-8.08	1.42	1.52
8	1	67	LEU	CA-C	-8.07	1.42	1.52
27	H	150	HIS	C-N	8.07	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	1	155	ARG	CD-NE	8.07	1.57	1.46
19	Z	79	ARG	NE-CZ	8.07	1.42	1.33
24	R	83	ARG	NE-CZ	8.07	1.42	1.33
12	5	245	ARG	NE-CZ	8.06	1.42	1.33
29	K	201	GLY	C-N	8.06	1.44	1.33
2	B	82	ASP	CA-C	-8.06	1.42	1.52
7	G	146	GLY	CA-C	-8.05	1.43	1.52
22	P	69	ALA	C-N	8.04	1.44	1.33
26	O	128	LEU	CA-C	-8.04	1.42	1.52
1	A	21	ARG	CD-NE	8.04	1.57	1.46
19	Z	76	GLU	CA-C	8.03	1.63	1.52
25	U	207	ASP	C-N	8.03	1.44	1.33
32	J	387	VAL	CA-C	-8.03	1.43	1.52
1	A	228	ARG	NE-CZ	8.03	1.41	1.33
20	N	438	GLN	CA-CB	8.03	1.66	1.53
19	Z	619	HIS	ND1-CE1	8.02	1.40	1.32
16	V	48	GLY	C-N	8.02	1.42	1.33
22	P	334	GLU	C-N	8.01	1.45	1.33
20	N	207	ASN	N-CA	-8.01	1.36	1.46
32	J	124	HIS	ND1-CE1	8.00	1.40	1.32
20	N	846	LYS	CA-CB	7.99	1.59	1.53
21	S	197	ARG	CD-NE	7.99	1.57	1.46
19	Z	202	HIS	CB-CG	7.99	1.61	1.50
19	Z	522	CYS	N-CA	7.98	1.56	1.46
21	S	196	ARG	CD-NE	7.98	1.57	1.46
6	F	169	ARG	NE-CZ	7.97	1.41	1.33
14	7	89	VAL	CA-C	-7.97	1.43	1.52
23	Q	16	LEU	CA-CB	7.97	1.66	1.53
29	K	416	PHE	N-CA	7.97	1.54	1.46
1	A	215	ILE	CA-C	-7.97	1.42	1.52
28	I	398	ILE	CA-C	-7.97	1.43	1.52
10	3	188	HIS	N-CA	-7.97	1.36	1.46
30	L	308	ARG	CD-NE	7.96	1.57	1.46
28	I	363	ARG	N-CA	-7.96	1.36	1.46
26	O	135	ILE	CA-C	-7.95	1.42	1.52
11	4	194	ILE	N-CA	-7.95	1.36	1.46
16	V	203	ILE	CA-CB	7.95	1.65	1.54
6	F	39	LYS	CA-C	-7.95	1.42	1.52
22	P	246	HIS	CE1-NE2	-7.91	1.24	1.32
31	M	249	ALA	CA-C	-7.91	1.42	1.52
25	U	39	LEU	N-CA	-7.91	1.36	1.46
32	J	222	LYS	N-CA	-7.91	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	J	224	ILE	CA-C	-7.91	1.42	1.52
27	H	201	PHE	CA-CB	7.90	1.65	1.53
12	5	255	HIS	ND1-CE1	7.89	1.40	1.32
23	Q	74	ARG	N-CA	-7.88	1.39	1.46
22	P	259	GLU	CA-C	-7.88	1.42	1.52
23	Q	126	ARG	NE-CZ	7.88	1.41	1.33
21	S	50	ASP	CA-CB	7.87	1.65	1.53
23	Q	204	PRO	N-CA	-7.87	1.37	1.47
1	A	56	VAL	CA-C	-7.86	1.46	1.53
21	S	194	GLN	CA-C	-7.86	1.42	1.52
32	J	155	ASP	CA-CB	7.85	1.66	1.53
31	M	386	GLU	C-N	7.84	1.44	1.33
27	H	303	ILE	CA-CB	-7.84	1.45	1.54
20	N	456	ASP	CA-C	-7.84	1.42	1.52
26	O	57	ILE	CA-C	-7.83	1.42	1.52
4	D	181	ASN	C-N	7.82	1.43	1.33
12	5	105	ALA	CA-C	-7.81	1.43	1.52
31	M	367	ARG	N-CA	-7.81	1.36	1.46
22	P	39	ARG	CA-C	-7.81	1.44	1.53
28	I	391	SER	C-N	7.81	1.45	1.33
19	Z	136	GLU	N-CA	-7.79	1.36	1.46
19	Z	381	VAL	N-CA	7.79	1.55	1.46
21	S	105	ASN	N-CA	-7.79	1.36	1.46
31	M	404	VAL	CA-CB	-7.78	1.44	1.54
19	Z	763	ARG	CA-C	-7.78	1.43	1.52
20	N	426	TYR	CA-C	-7.77	1.42	1.52
27	H	369	ARG	NE-CZ	7.77	1.41	1.33
6	F	54	SER	CA-C	-7.77	1.43	1.52
32	J	214	VAL	N-CA	-7.76	1.36	1.46
22	P	341	PHE	CA-C	-7.75	1.42	1.52
32	J	382	ASP	CA-C	-7.75	1.42	1.52
6	F	43	HIS	ND1-CE1	7.75	1.40	1.32
3	C	43	VAL	CA-CB	-7.74	1.44	1.55
23	Q	386	ILE	CA-C	-7.74	1.43	1.52
27	H	396	ALA	N-CA	-7.73	1.36	1.46
19	Z	747	GLN	CA-C	-7.73	1.42	1.52
24	R	148	GLY	C-N	7.72	1.44	1.34
28	I	384	ILE	CA-C	-7.72	1.42	1.52
32	J	322	GLU	CA-CB	7.72	1.65	1.53
29	K	245	ARG	C-N	7.71	1.44	1.34
32	J	124	HIS	CG-CD2	7.71	1.44	1.35
7	G	142	SER	N-CA	-7.71	1.36	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	K	234	GLU	CA-CB	7.71	1.66	1.53
4	D	46	GLU	N-CA	-7.70	1.36	1.46
9	2	244	ARG	CD-NE	7.70	1.57	1.46
24	R	361	SER	CA-CB	7.70	1.64	1.53
13	6	236	PRO	CA-CB	-7.69	1.45	1.54
10	3	52	GLY	CA-C	-7.69	1.45	1.51
16	V	115	HIS	CA-C	-7.69	1.43	1.52
31	M	52	ASP	CA-CB	7.69	1.65	1.53
1	A	32	ILE	CA-CB	-7.69	1.44	1.54
16	V	282	ARG	NE-CZ	7.69	1.41	1.33
17	T	111	ASN	N-CA	7.68	1.55	1.46
25	U	79	TYR	C-N	7.68	1.43	1.33
19	Z	341	GLU	CA-C	-7.68	1.42	1.52
26	O	10	GLN	CA-CB	7.68	1.65	1.53
31	M	68	GLU	CA-C	-7.67	1.42	1.52
22	P	319	THR	CA-C	-7.66	1.42	1.52
24	R	38	ARG	CD-NE	7.66	1.56	1.46
26	O	288	HIS	CA-C	-7.65	1.43	1.52
9	2	58	GLY	CA-C	-7.65	1.46	1.52
3	C	81	SER	N-CA	-7.64	1.37	1.46
24	R	359	PRO	CA-C	-7.64	1.46	1.53
29	K	277	ALA	CA-C	-7.63	1.43	1.52
28	I	224	LEU	CA-C	-7.63	1.43	1.52
32	J	114	VAL	N-CA	7.63	1.54	1.46
31	M	347	ARG	NE-CZ	7.63	1.41	1.33
20	N	327	LYS	C-N	7.62	1.43	1.33
20	N	857	ASP	CA-CB	7.62	1.66	1.53
11	4	184	ASP	CA-C	-7.62	1.43	1.52
11	4	28	MET	CA-C	-7.62	1.43	1.52
12	5	231	GLY	C-N	7.61	1.43	1.33
29	K	120	ASP	CA-C	-7.61	1.43	1.52
20	N	925	VAL	N-CA	-7.61	1.38	1.46
15	W	42	ARG	NE-CZ	7.61	1.41	1.33
21	S	87	PRO	N-CA	-7.61	1.39	1.47
19	Z	801	VAL	CA-CB	-7.61	1.46	1.54
10	3	45	MET	C-N	7.61	1.37	1.33
32	J	233	GLU	C-N	7.61	1.44	1.33
9	2	154	TYR	CA-C	-7.60	1.43	1.52
14	7	218	ARG	CA-C	-7.60	1.43	1.52
28	I	282	VAL	CA-C	-7.59	1.43	1.52
26	O	89	ASP	CA-CB	7.59	1.64	1.52
28	I	320	ASP	CA-C	-7.59	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	I	344	PRO	CA-C	7.59	1.61	1.52
30	L	107	LYS	N-CA	-7.59	1.38	1.46
10	3	188	HIS	ND1-CE1	7.58	1.40	1.32
30	L	175	ARG	CD-NE	7.58	1.56	1.46
22	P	436	MET	CA-CB	-7.57	1.41	1.53
28	I	397	ALA	C-N	7.57	1.43	1.33
17	T	346	ALA	C-N	7.57	1.43	1.33
22	P	13	ILE	CA-CB	7.57	1.62	1.54
10	3	187	VAL	N-CA	-7.57	1.37	1.46
30	L	189	PRO	C-N	7.57	1.42	1.33
24	R	353	ILE	CA-C	-7.56	1.43	1.52
10	3	24	ALA	CA-C	-7.56	1.43	1.52
29	K	64	GLU	CA-C	-7.56	1.43	1.52
4	D	114	THR	N-CA	-7.56	1.37	1.46
32	J	164	VAL	CA-C	-7.56	1.43	1.52
20	N	364	VAL	CA-CB	-7.54	1.45	1.54
1	A	3	ARG	CZ-NH2	7.54	1.43	1.33
16	V	46	ARG	CD-NE	7.54	1.56	1.46
21	S	302	ARG	NE-CZ	7.54	1.41	1.33
31	M	383	ASN	CA-C	-7.54	1.43	1.52
17	T	185	LEU	CA-CB	7.53	1.65	1.53
20	N	390	LEU	N-CA	-7.53	1.37	1.46
27	H	78	TRP	N-CA	-7.53	1.37	1.46
30	L	129	VAL	CA-C	-7.52	1.43	1.52
20	N	538	GLU	CA-CB	7.52	1.65	1.53
10	3	176	ASP	CA-CB	7.52	1.65	1.53
24	R	239	LYS	CA-C	-7.52	1.43	1.52
11	4	19	ARG	CD-NE	7.51	1.56	1.46
20	N	178	ALA	CA-C	-7.51	1.43	1.52
4	D	154	ASP	N-CA	-7.51	1.40	1.46
32	J	117	ARG	NE-CZ	7.51	1.41	1.33
4	D	214	LEU	CA-C	-7.50	1.43	1.52
22	P	151	THR	N-CA	-7.50	1.37	1.46
29	K	230	VAL	C-N	7.50	1.40	1.33
30	L	39	ARG	NE-CZ	7.50	1.41	1.33
4	D	101	ARG	CD-NE	7.50	1.56	1.46
4	D	110	VAL	CA-C	-7.49	1.43	1.52
27	H	193	THR	N-CA	-7.49	1.40	1.46
30	L	266	GLU	N-CA	-7.49	1.37	1.46
20	N	268	LEU	CA-C	-7.48	1.43	1.52
7	G	228	VAL	CA-CB	7.48	1.63	1.54
8	1	227	ILE	CA-C	-7.48	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	T	182	LYS	CA-C	-7.47	1.43	1.52
11	4	133	GLY	CA-C	-7.47	1.45	1.52
20	N	844	LYS	CA-C	-7.47	1.43	1.52
16	V	183	HIS	ND1-CE1	7.47	1.40	1.32
31	M	376	MET	C-N	7.46	1.42	1.33
10	3	113	ASP	CA-CB	7.46	1.65	1.53
19	Z	606	VAL	C-N	7.46	1.43	1.33
23	Q	221	GLU	N-CA	-7.46	1.37	1.46
29	K	312	ASN	C-N	7.44	1.43	1.33
28	I	237	LYS	N-CA	-7.43	1.36	1.46
28	I	327	VAL	N-CA	-7.43	1.37	1.46
20	N	356	THR	CA-C	7.43	1.62	1.52
27	H	359	ALA	CA-C	-7.43	1.43	1.52
16	V	34	SER	C-N	7.43	1.43	1.33
9	2	197	LEU	CA-CB	7.42	1.65	1.53
22	P	53	GLN	CA-C	-7.42	1.43	1.52
2	B	149	SER	CA-C	-7.42	1.44	1.52
29	K	369	LYS	CA-C	-7.42	1.44	1.53
21	S	95	ARG	CD-NE	7.42	1.56	1.46
30	L	27	ARG	CD-NE	7.42	1.56	1.46
30	L	304	LEU	CA-C	-7.42	1.43	1.52
19	Z	234	THR	C-N	7.41	1.44	1.33
15	W	70	ARG	NE-CZ	7.41	1.41	1.33
17	T	256	ALA	CA-C	-7.41	1.43	1.53
24	R	312	ARG	CD-NE	7.41	1.56	1.46
31	M	420	HIS	N-CA	7.40	1.55	1.46
6	F	167	SER	N-CA	-7.40	1.37	1.46
23	Q	278	ARG	CA-CB	7.40	1.64	1.53
20	N	517	GLY	CA-C	-7.40	1.43	1.52
20	N	921	ILE	C-N	7.40	1.43	1.33
19	Z	358	PHE	CA-C	7.40	1.61	1.52
22	P	7	GLU	CA-CB	7.39	1.66	1.53
16	V	172	HIS	CE1-NE2	-7.39	1.25	1.32
7	G	41	ARG	CD-NE	7.39	1.56	1.46
23	Q	116	TRP	N-CA	-7.39	1.37	1.46
32	J	114	VAL	CA-C	-7.39	1.44	1.52
30	L	324	LEU	N-CA	-7.38	1.37	1.46
31	M	127	ILE	N-CA	-7.38	1.37	1.46
4	D	153	THR	C-N	7.37	1.42	1.32
14	7	74	TYR	C-N	7.37	1.40	1.33
17	T	284	LYS	C-N	7.37	1.44	1.33
19	Z	830	LEU	C-N	7.37	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	N	226	THR	CA-CB	-7.37	1.41	1.53
31	M	111	GLY	N-CA	-7.37	1.37	1.45
2	B	63	HIS	ND1-CE1	7.37	1.40	1.32
21	S	150	ALA	C-N	7.37	1.43	1.33
27	H	195	LEU	CA-C	-7.37	1.43	1.52
1	A	27	TYR	CA-C	-7.37	1.42	1.52
32	J	90	HIS	ND1-CE1	7.36	1.40	1.32
21	S	86	GLU	C-N	7.36	1.39	1.33
8	1	197	MET	C-O	-7.35	1.15	1.24
24	R	370	ILE	CA-C	-7.35	1.43	1.52
9	2	110	SER	N-CA	-7.34	1.37	1.46
13	6	28	ARG	NE-CZ	7.34	1.41	1.33
19	Z	11	VAL	N-CA	-7.34	1.37	1.46
30	L	196	LEU	C-N	7.34	1.43	1.33
21	S	283	ARG	CD-NE	7.32	1.56	1.46
26	O	84	VAL	CA-CB	-7.32	1.45	1.54
30	L	294	ASN	C-N	7.32	1.42	1.33
5	E	168	ARG	NE-CZ	7.32	1.41	1.33
31	M	307	ARG	NE-CZ	7.32	1.41	1.33
31	M	315	GLU	CA-C	-7.32	1.43	1.52
2	B	140	ASN	CA-C	-7.32	1.43	1.52
8	1	61	ASN	CA-C	-7.32	1.43	1.52
28	I	207	HIS	CG-CD2	-7.32	1.27	1.35
31	M	156	VAL	N-CA	-7.31	1.37	1.46
15	W	100	ARG	CD-NE	7.31	1.56	1.46
31	M	67	HIS	CB-CG	7.31	1.60	1.50
2	B	177	ARG	CD-NE	7.31	1.56	1.46
20	N	837	ALA	CA-C	-7.30	1.43	1.52
27	H	45	ILE	C-N	7.30	1.43	1.33
32	J	271	ARG	CA-CB	7.30	1.64	1.53
22	P	13	ILE	N-CA	-7.30	1.37	1.46
29	K	307	VAL	CA-C	-7.30	1.44	1.52
25	U	158	VAL	C-O	-7.30	1.16	1.24
13	6	90	THR	CA-C	7.29	1.62	1.52
29	K	330	LYS	CA-C	-7.29	1.44	1.52
23	Q	155	ARG	CD-NE	7.29	1.56	1.46
22	P	263	TRP	C-N	7.28	1.43	1.33
19	Z	762	VAL	CA-C	-7.27	1.43	1.52
32	J	340	ARG	CZ-NH2	7.27	1.42	1.33
20	N	172	ASP	CA-C	-7.26	1.41	1.52
20	N	545	LEU	CA-CB	7.26	1.64	1.53
23	Q	330	LEU	CA-C	-7.26	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	U	30	GLY	C-N	7.26	1.41	1.33
27	H	323	ARG	NE-CZ	7.26	1.41	1.33
23	Q	75	PRO	C-N	7.26	1.43	1.33
19	Z	11	VAL	CA-C	-7.26	1.43	1.52
25	U	90	ARG	C-N	7.26	1.40	1.33
9	2	124	ARG	NE-CZ	7.26	1.41	1.33
3	C	241	GLU	CA-C	-7.25	1.43	1.52
14	7	143	ARG	NE-CZ	7.25	1.41	1.33
31	M	350	ARG	NE-CZ	7.25	1.41	1.33
32	J	245	ILE	CA-C	-7.25	1.43	1.52
17	T	141	LYS	C-N	7.24	1.43	1.33
26	O	3	ASP	C-N	7.24	1.41	1.33
5	E	36	THR	CA-C	-7.23	1.43	1.52
32	J	142	LYS	C-N	7.23	1.41	1.33
28	I	131	HIS	ND1-CE1	7.23	1.39	1.32
23	Q	132	ARG	CA-C	-7.22	1.43	1.52
23	Q	409	LYS	CA-C	-7.22	1.43	1.52
4	D	159	TYR	CA-C	-7.22	1.44	1.52
21	S	399	ILE	CA-CB	-7.22	1.45	1.54
29	K	415	GLU	CA-CB	7.22	1.65	1.53
31	M	167	LEU	N-CA	-7.22	1.39	1.45
24	R	61	LEU	C-N	7.21	1.43	1.33
19	Z	414	LEU	CA-CB	7.21	1.64	1.53
25	U	94	TRP	CA-C	-7.21	1.44	1.52
24	R	277	VAL	C-N	7.21	1.42	1.33
19	Z	409	SER	CA-C	-7.20	1.43	1.52
7	G	175	THR	CA-C	-7.20	1.43	1.52
16	V	238	CYS	CA-C	-7.20	1.43	1.52
32	J	129	ASN	C-N	7.20	1.42	1.33
22	P	281	ASN	CA-C	-7.19	1.43	1.52
29	K	135	HIS	ND1-CE1	7.19	1.39	1.32
30	L	356	ASP	C-N	7.19	1.43	1.33
27	H	210	LYS	CA-C	-7.19	1.43	1.52
8	1	225	ASP	CA-C	-7.18	1.44	1.52
24	R	193	ASP	CA-C	-7.18	1.45	1.53
4	D	130	ARG	NE-CZ	7.18	1.41	1.33
17	T	241	GLU	CA-C	-7.18	1.43	1.52
19	Z	427	THR	CA-C	-7.18	1.43	1.52
29	K	76	GLN	N-CA	-7.17	1.37	1.46
14	7	131	ALA	C-O	-7.17	1.15	1.24
17	T	282	TYR	CA-C	-7.17	1.44	1.52
19	Z	715	HIS	CB-CG	7.17	1.60	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	96	ARG	CD-NE	7.17	1.56	1.46
6	F	219	LEU	C-N	7.17	1.42	1.33
13	6	230	ILE	N-CA	-7.16	1.37	1.46
5	E	132	ALA	N-CA	-7.16	1.37	1.45
27	H	73	ALA	C-N	7.16	1.41	1.33
29	K	138	ALA	CA-C	-7.16	1.43	1.52
32	J	237	MET	CA-CB	7.16	1.64	1.53
7	G	93	ARG	C-N	7.16	1.43	1.33
19	Z	33	ARG	CZ-NH2	7.16	1.42	1.33
16	V	189	ILE	CA-C	-7.15	1.43	1.52
7	G	36	THR	CA-C	-7.15	1.43	1.52
29	K	323	ARG	CD-NE	7.15	1.56	1.46
14	7	61	ASP	CA-C	-7.15	1.44	1.52
6	F	231	PRO	CA-C	7.14	1.63	1.52
20	N	360	VAL	CA-C	-7.14	1.44	1.52
32	J	43	ARG	CA-C	-7.14	1.43	1.52
20	N	174	PRO	CA-C	-7.13	1.45	1.52
20	N	719	ASP	C-N	7.13	1.42	1.33
32	J	31	LEU	CA-C	-7.13	1.43	1.52
4	D	91	ASN	N-CA	-7.13	1.37	1.46
12	5	239	ARG	N-CA	-7.13	1.37	1.46
19	Z	197	ALA	N-CA	-7.13	1.37	1.46
20	N	672	LEU	N-CA	-7.13	1.37	1.46
23	Q	356	LEU	C-N	7.13	1.43	1.33
9	2	253	ALA	CA-C	-7.13	1.43	1.52
14	7	60	PHE	CA-CB	7.12	1.68	1.53
3	C	87	THR	N-CA	-7.12	1.37	1.46
27	H	428	ARG	CD-NE	7.12	1.56	1.46
26	O	73	PRO	N-CA	-7.12	1.37	1.47
5	E	89	ILE	CA-C	-7.11	1.43	1.52
19	Z	533	ASP	C-N	7.11	1.42	1.33
11	4	42	ILE	C-N	7.11	1.44	1.33
29	K	349	THR	CA-C	-7.11	1.43	1.52
29	K	388	ARG	CZ-NH1	7.11	1.42	1.32
5	E	16	SER	CA-CB	7.11	1.64	1.53
19	Z	715	HIS	ND1-CE1	7.10	1.39	1.32
23	Q	12	ALA	CA-C	-7.10	1.43	1.52
14	7	203	VAL	CA-C	-7.10	1.43	1.52
15	W	155	ALA	CA-C	7.10	1.61	1.52
20	N	90	VAL	CA-CB	-7.09	1.45	1.54
22	P	189	GLN	CA-C	-7.09	1.43	1.52
6	F	159	MET	CA-C	-7.09	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	Q	153	LEU	N-CA	-7.09	1.38	1.46
25	U	88	ARG	NE-CZ	7.09	1.40	1.33
31	M	369	MET	CA-CB	7.08	1.64	1.53
23	Q	344	ARG	CA-C	-7.07	1.42	1.53
19	Z	35	ASP	C-O	-7.06	1.15	1.24
20	N	604	HIS	C-O	-7.05	1.15	1.24
11	4	56	PHE	CA-C	-7.05	1.43	1.52
22	P	16	MET	CA-C	-7.05	1.44	1.52
24	R	38	ARG	CA-CB	7.04	1.64	1.53
28	I	426	VAL	CA-CB	-7.04	1.45	1.54
12	5	208	VAL	N-CA	-7.04	1.38	1.46
20	N	362	ASN	CA-CB	7.04	1.62	1.53
7	G	54	VAL	CA-C	-7.03	1.44	1.52
29	K	132	LEU	N-CA	-7.03	1.37	1.46
9	2	230	ARG	CD-NE	7.03	1.56	1.46
6	F	108	LEU	CA-CB	7.02	1.64	1.53
19	Z	675	PHE	CA-C	-7.02	1.43	1.52
25	U	71	ASP	CA-CB	7.02	1.62	1.53
25	U	135	THR	CA-C	-7.02	1.44	1.52
31	M	374	ARG	CD-NE	7.02	1.56	1.46
23	Q	48	GLN	N-CA	-7.02	1.37	1.46
22	P	260	SER	CA-CB	7.02	1.64	1.53
32	J	76	VAL	CA-C	-7.01	1.44	1.52
19	Z	803	PHE	N-CA	-7.01	1.36	1.45
27	H	314	ASN	N-CA	-7.01	1.36	1.46
31	M	174	ARG	NE-CZ	7.01	1.40	1.33
32	J	374	ARG	CZ-NH2	7.01	1.42	1.33
19	Z	805	ASP	CA-C	-7.01	1.44	1.52
10	3	51	ILE	C-N	7.00	1.41	1.33
22	P	65	ARG	NE-CZ	7.00	1.40	1.33
22	P	142	ARG	NE-CZ	6.99	1.40	1.33
23	Q	344	ARG	N-CA	-6.99	1.37	1.46
29	K	190	LEU	CA-C	-6.99	1.44	1.52
7	G	112	LEU	CA-C	-6.99	1.43	1.52
22	P	205	ILE	C-N	6.99	1.43	1.34
28	I	234	LEU	CA-CB	6.99	1.64	1.53
30	L	86	LYS	CA-CB	6.98	1.62	1.53
31	M	265	GLY	CA-C	-6.98	1.44	1.52
32	J	171	HIS	N-CA	6.98	1.52	1.46
12	5	86	ALA	N-CA	-6.98	1.38	1.46
16	V	186	LYS	CA-CB	6.98	1.64	1.53
21	S	483	HIS	C-N	6.98	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	O	22	TRP	CA-C	-6.98	1.43	1.52
19	Z	300	ARG	NE-CZ	6.97	1.40	1.33
19	Z	391	LEU	C-N	6.97	1.43	1.34
26	O	289	ARG	NE-CZ	6.97	1.40	1.33
15	W	26	LEU	N-CA	-6.97	1.38	1.46
29	K	49	GLN	N-CA	6.97	1.54	1.46
31	M	337	ARG	NE-CZ	6.97	1.40	1.33
23	Q	221	GLU	C-N	6.97	1.44	1.33
2	B	134	LEU	CA-C	-6.96	1.44	1.52
19	Z	754	LYS	CA-C	-6.96	1.44	1.52
5	E	22	PHE	N-CA	-6.96	1.38	1.46
12	5	161	CYS	CA-C	-6.96	1.44	1.52
19	Z	828	ARG	CD-NE	6.96	1.55	1.46
22	P	53	GLN	CA-CB	6.95	1.62	1.53
22	P	71	VAL	CA-CB	6.95	1.62	1.54
27	H	423	PHE	C-N	6.95	1.43	1.33
22	P	75	TYR	CA-C	-6.94	1.44	1.52
24	R	290	PRO	N-CA	-6.94	1.38	1.47
31	M	422	ASP	CA-CB	6.94	1.64	1.53
16	V	27	THR	CA-C	-6.94	1.43	1.52
29	K	109	SER	CA-C	-6.94	1.44	1.52
19	Z	471	LEU	CA-C	-6.94	1.43	1.52
19	Z	830	LEU	CA-CB	6.94	1.65	1.54
20	N	525	ASN	CA-C	6.94	1.62	1.52
27	H	200	ARG	NE-CZ	6.94	1.40	1.33
31	M	262	MET	C-O	-6.94	1.18	1.24
8	1	56	GLY	C-N	6.94	1.43	1.33
24	R	312	ARG	NE-CZ	6.94	1.40	1.33
32	J	381	GLU	C-N	6.93	1.43	1.33
9	2	62	ARG	CD-NE	6.93	1.55	1.46
9	2	87	CYS	N-CA	-6.93	1.38	1.46
29	K	417	TYR	CA-C	-6.93	1.44	1.52
25	U	32	GLN	N-CA	-6.93	1.40	1.46
2	B	154	ALA	CA-C	-6.92	1.44	1.52
24	R	327	VAL	N-CA	-6.92	1.38	1.46
3	C	137	ILE	N-CA	-6.92	1.38	1.46
17	T	342	VAL	N-CA	-6.92	1.38	1.46
19	Z	687	ARG	CD-NE	6.92	1.55	1.46
20	N	347	ASN	CA-C	-6.92	1.44	1.52
30	L	158	GLU	N-CA	-6.92	1.38	1.46
19	Z	19	THR	N-CA	-6.92	1.38	1.46
1	A	194	THR	N-CA	-6.92	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	L	178	ILE	C-N	6.92	1.41	1.33
6	F	61	LYS	CA-C	-6.91	1.43	1.52
10	3	176	ASP	CA-C	-6.91	1.43	1.52
6	F	164	ARG	NE-CZ	6.91	1.40	1.33
19	Z	478	ARG	NE-CZ	6.91	1.40	1.33
26	O	26	GLU	CA-C	-6.91	1.43	1.52
6	F	74	ILE	CA-CB	-6.91	1.45	1.54
21	S	302	ARG	C-N	6.91	1.42	1.33
20	N	189	GLN	C-N	6.90	1.43	1.33
25	U	155	PHE	CA-C	6.90	1.60	1.52
8	1	67	LEU	CA-CB	6.90	1.62	1.53
20	N	862	LYS	CA-C	-6.90	1.43	1.53
28	I	385	MET	CA-C	-6.90	1.43	1.52
3	C	3	ARG	CD-NE	6.89	1.55	1.46
3	C	3	ARG	CA-C	-6.89	1.43	1.52
2	B	110	LEU	C-N	6.89	1.42	1.33
17	T	192	HIS	N-CA	-6.89	1.38	1.46
6	F	193	ARG	CD-NE	6.88	1.55	1.46
28	I	118	ASP	CA-CB	6.88	1.65	1.53
20	N	930	ALA	N-CA	-6.88	1.36	1.46
26	O	330	ARG	CD-NE	6.88	1.55	1.46
31	M	237	THR	CA-CB	-6.88	1.42	1.53
13	6	58	GLU	CA-CB	6.88	1.63	1.53
4	D	182	TYR	CA-CB	6.88	1.64	1.53
2	B	160	ALA	C-N	6.87	1.42	1.33
6	F	155	ASP	CA-CB	6.86	1.62	1.53
25	U	235	ASN	C-N	6.86	1.43	1.34
30	L	312	LYS	CA-C	-6.86	1.44	1.52
11	4	138	LEU	CA-CB	6.86	1.64	1.53
19	Z	13	SER	CA-CB	6.86	1.64	1.53
7	G	217	VAL	N-CA	-6.86	1.37	1.46
8	1	153	MET	CA-CB	6.86	1.65	1.53
13	6	104	HIS	ND1-CE1	6.86	1.39	1.32
2	B	25	ALA	N-CA	-6.85	1.37	1.46
15	W	91	ARG	CD-NE	6.85	1.55	1.46
24	R	197	ALA	C-N	6.85	1.43	1.33
27	H	421	ALA	N-CA	-6.85	1.37	1.46
25	U	135	THR	C-O	6.84	1.32	1.24
31	M	374	ARG	NE-CZ	6.84	1.40	1.33
31	M	390	CYS	CA-CB	6.84	1.64	1.53
32	J	228	ALA	CA-CB	6.84	1.64	1.53
26	O	320	VAL	N-CA	-6.84	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	149	SER	CA-CB	6.84	1.63	1.53
19	Z	143	ARG	CA-CB	6.84	1.64	1.53
7	G	3	SER	CA-C	-6.83	1.44	1.52
5	E	53	ARG	CA-CB	6.83	1.65	1.53
19	Z	6	ARG	CA-C	-6.83	1.43	1.52
19	Z	861	THR	CA-C	-6.83	1.44	1.52
29	K	237	GLN	CA-C	-6.83	1.43	1.52
30	L	89	ASN	C-N	6.83	1.43	1.33
5	E	20	ARG	CA-C	-6.83	1.44	1.52
6	F	72	ILE	CA-C	-6.83	1.44	1.52
14	7	256	ALA	CA-C	-6.83	1.44	1.52
19	Z	443	GLY	CA-C	-6.82	1.44	1.52
21	S	250	LEU	N-CA	-6.82	1.38	1.46
8	1	94	TYR	C-O	-6.82	1.16	1.24
10	3	199	THR	CA-C	-6.81	1.44	1.52
5	E	220	VAL	N-CA	-6.81	1.37	1.46
16	V	279	ASP	CA-C	-6.81	1.44	1.52
23	Q	232	PHE	CA-CB	6.81	1.64	1.53
3	C	84	ASN	C-N	6.81	1.42	1.33
20	N	257	SER	CA-CB	6.81	1.64	1.53
30	L	246	MET	N-CA	-6.81	1.37	1.46
20	N	229	VAL	N-CA	-6.81	1.38	1.46
25	U	245	PHE	CA-CB	6.81	1.65	1.53
30	L	52	LYS	CA-CB	6.80	1.63	1.53
22	P	50	LEU	CA-C	-6.80	1.44	1.52
21	S	80	LYS	N-CA	-6.80	1.37	1.46
20	N	514	LEU	C-N	6.79	1.42	1.33
2	B	215	GLU	N-CA	-6.79	1.38	1.46
6	F	222	THR	CA-C	-6.79	1.44	1.52
20	N	777	HIS	ND1-CE1	6.79	1.39	1.32
21	S	446	SER	CA-C	6.79	1.60	1.52
8	1	107	PRO	C-N	6.79	1.42	1.33
6	F	119	PRO	C-N	6.79	1.43	1.34
1	A	160	TYR	N-CA	-6.78	1.37	1.46
14	7	257	HIS	ND1-CE1	6.78	1.39	1.32
25	U	166	GLU	C-N	6.78	1.42	1.33
4	D	37	GLY	C-N	6.78	1.43	1.33
9	2	46	ILE	CA-CB	6.78	1.63	1.54
3	C	188	SER	N-CA	-6.78	1.37	1.46
15	W	169	HIS	ND1-CE1	6.78	1.39	1.32
22	P	299	ILE	CA-C	6.78	1.58	1.53
7	G	130	ARG	CZ-NH2	6.78	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	P	224	LEU	C-N	6.78	1.42	1.33
25	U	259	VAL	C-O	-6.78	1.16	1.24
25	U	284	ASP	CA-CB	6.78	1.63	1.53
22	P	403	PHE	N-CA	-6.77	1.38	1.46
23	Q	14	SER	CA-C	6.77	1.61	1.52
5	E	101	PHE	CA-CB	6.77	1.63	1.53
27	H	159	PRO	C-N	6.77	1.42	1.33
11	4	161	ARG	CZ-NH1	6.76	1.42	1.32
19	Z	763	ARG	C-N	6.76	1.42	1.33
19	Z	215	ASP	CA-CB	6.76	1.65	1.53
22	P	316	ARG	C-O	-6.76	1.15	1.23
26	O	95	THR	CA-CB	6.76	1.63	1.53
14	7	89	VAL	N-CA	-6.75	1.38	1.46
19	Z	674	THR	C-N	6.75	1.42	1.33
1	A	220	VAL	CA-C	-6.74	1.44	1.52
13	6	185	MET	CA-CB	6.74	1.62	1.52
11	4	67	TYR	C-N	6.74	1.42	1.33
26	O	94	LEU	CA-CB	6.74	1.64	1.53
16	V	208	ARG	CZ-NH2	6.74	1.42	1.33
19	Z	667	GLY	CA-C	-6.74	1.44	1.52
14	7	123	ASP	C-N	6.73	1.40	1.33
16	V	43	LYS	CA-CB	6.73	1.64	1.53
20	N	934	LYS	CA-C	-6.73	1.44	1.53
32	J	319	PRO	C-N	6.73	1.42	1.33
14	7	230	ARG	CZ-NH1	6.73	1.42	1.32
15	W	61	LEU	CA-C	-6.73	1.44	1.52
19	Z	646	MET	CA-CB	-6.73	1.43	1.53
19	Z	755	ASP	CA-C	-6.72	1.44	1.52
19	Z	382	ASN	CA-C	-6.72	1.44	1.52
26	O	247	ARG	CD-NE	6.72	1.55	1.46
6	F	151	ALA	CA-C	-6.72	1.43	1.52
8	1	124	ARG	NE-CZ	6.71	1.40	1.33
16	V	107	MET	CA-C	-6.71	1.44	1.52
22	P	23	THR	N-CA	-6.71	1.38	1.46
29	K	114	ARG	NE-CZ	6.71	1.40	1.33
32	J	344	LEU	N-CA	-6.71	1.38	1.46
24	R	100	ILE	CA-C	-6.71	1.44	1.52
24	R	192	ARG	NE-CZ	6.71	1.40	1.33
3	C	88	ASN	C-N	6.71	1.42	1.33
23	Q	411	VAL	CA-CB	6.71	1.62	1.54
8	1	97	GLY	C-N	6.70	1.42	1.33
26	O	311	VAL	CA-CB	-6.70	1.46	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	J	68	GLU	N-CA	-6.70	1.37	1.46
7	G	74	VAL	CA-CB	6.70	1.62	1.54
12	5	156	MET	N-CA	-6.70	1.37	1.46
32	J	393	LYS	N-CA	-6.70	1.38	1.46
9	2	124	ARG	N-CA	-6.69	1.38	1.46
32	J	243	PRO	N-CD	-6.69	1.38	1.47
32	J	325	ARG	CD-NE	6.69	1.55	1.46
16	V	301	ALA	N-CA	-6.69	1.38	1.46
21	S	74	HIS	N-CA	-6.69	1.38	1.46
14	7	67	ALA	CA-CB	6.68	1.63	1.53
28	I	333	ARG	NE-CZ	6.68	1.40	1.33
19	Z	22	SER	N-CA	-6.67	1.38	1.46
17	T	131	PHE	CA-C	-6.67	1.44	1.52
27	H	208	PRO	CA-C	6.67	1.58	1.52
26	O	300	ALA	C-N	6.67	1.43	1.33
32	J	359	VAL	N-CA	6.67	1.54	1.46
1	A	152	TYR	CA-C	-6.66	1.44	1.52
22	P	246	HIS	ND1-CE1	6.66	1.39	1.32
12	5	123	ARG	C-N	6.66	1.42	1.33
16	V	214	GLN	CA-C	-6.66	1.44	1.52
26	O	216	LEU	C-N	-6.66	1.25	1.33
30	L	341	ASP	CA-CB	6.66	1.65	1.53
23	Q	420	LYS	N-CA	-6.65	1.38	1.46
28	I	193	GLN	C-N	6.65	1.42	1.33
30	L	112	VAL	CA-C	6.65	1.60	1.52
29	K	148	ASP	CA-C	-6.64	1.43	1.52
1	A	110	PRO	CA-C	-6.64	1.44	1.52
19	Z	448	CYS	C-N	6.64	1.42	1.33
23	Q	361	VAL	CA-C	-6.64	1.44	1.52
26	O	94	LEU	C-N	6.64	1.42	1.33
30	L	219	ASP	CA-C	-6.64	1.44	1.52
15	W	169	HIS	C-O	6.64	1.31	1.23
19	Z	300	ARG	C-N	6.64	1.43	1.33
31	M	108	GLU	CA-C	-6.64	1.44	1.52
25	U	150	PRO	N-CD	-6.64	1.38	1.47
29	K	119	ILE	C-N	6.64	1.42	1.33
8	1	99	HIS	CG-ND1	6.63	1.45	1.38
12	5	99	TYR	CA-C	-6.63	1.43	1.53
8	1	99	HIS	ND1-CE1	6.63	1.39	1.32
27	H	315	ILE	CA-CB	6.63	1.61	1.53
28	I	285	ASP	N-CA	-6.63	1.37	1.46
30	L	230	ARG	C-N	6.63	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	J	292	ILE	CA-C	-6.63	1.44	1.52
14	7	81	ARG	NE-CZ	6.63	1.40	1.33
20	N	95	GLU	N-CA	-6.63	1.38	1.46
20	N	415	HIS	ND1-CE1	6.63	1.39	1.32
27	H	396	ALA	C-N	6.63	1.42	1.33
5	E	20	ARG	NE-CZ	6.63	1.40	1.33
15	W	17	ARG	CD-NE	6.63	1.55	1.46
22	P	442	THR	N-CA	-6.63	1.38	1.46
10	3	14	MET	CA-C	-6.62	1.44	1.52
5	E	125	GLU	CA-C	6.62	1.61	1.52
19	Z	102	HIS	CG-CD2	-6.62	1.28	1.35
25	U	145	HIS	ND1-CE1	6.62	1.39	1.32
11	4	145	ARG	C-N	6.62	1.43	1.33
2	B	108	ALA	CA-C	6.62	1.61	1.52
6	F	18	ARG	CA-C	-6.62	1.44	1.52
19	Z	320	ILE	CA-CB	6.62	1.62	1.54
32	J	47	ALA	N-CA	-6.62	1.38	1.46
24	R	383	LEU	CA-C	-6.61	1.44	1.52
27	H	415	LYS	CA-C	6.61	1.61	1.52
21	S	501	LEU	C-N	6.61	1.43	1.33
30	L	189	PRO	CA-C	6.61	1.58	1.52
11	4	145	ARG	CA-C	-6.61	1.43	1.52
21	S	130	PHE	CA-C	-6.61	1.44	1.52
14	7	61	ASP	N-CA	-6.60	1.38	1.46
16	V	72	VAL	CA-C	-6.60	1.45	1.52
24	R	286	TRP	CA-C	-6.60	1.44	1.52
8	1	154	VAL	C-N	6.60	1.41	1.33
20	N	44	LYS	C-N	6.60	1.42	1.34
2	B	205	GLU	CA-CB	6.60	1.64	1.53
20	N	148	LYS	CA-C	-6.60	1.44	1.52
20	N	105	ILE	C-N	6.59	1.42	1.33
19	Z	640	LYS	CA-C	-6.59	1.44	1.52
20	N	227	GLN	C-N	6.59	1.42	1.33
17	T	320	SER	C-N	6.59	1.42	1.33
32	J	329	LEU	CA-C	-6.59	1.44	1.52
9	2	103	SER	CA-C	-6.59	1.43	1.52
17	T	218	LEU	CA-CB	6.59	1.63	1.53
23	Q	162	ASP	C-N	6.59	1.41	1.33
26	O	93	ALA	C-N	6.59	1.42	1.33
21	S	397	ASN	CA-CB	6.58	1.64	1.53
20	N	70	HIS	CA-C	6.58	1.61	1.52
20	N	766	PHE	C-N	6.58	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	O	369	HIS	C-O	-6.58	1.16	1.24
29	K	324	PRO	CA-CB	-6.58	1.44	1.53
26	O	213	PHE	CA-C	-6.57	1.44	1.52
20	N	73	ALA	N-CA	-6.57	1.38	1.46
31	M	364	ALA	C-N	6.57	1.42	1.33
16	V	246	LYS	C-N	6.57	1.42	1.33
14	7	66	ILE	CB-CG1	6.57	1.66	1.53
25	U	268	SER	CA-CB	6.57	1.63	1.53
4	D	112	TYR	CA-CB	6.56	1.63	1.53
29	K	79	VAL	CA-C	-6.56	1.43	1.52
19	Z	81	GLN	N-CA	6.56	1.54	1.46
22	P	329	ARG	C-N	6.56	1.41	1.33
19	Z	494	ARG	NE-CZ	6.56	1.40	1.33
31	M	351	LEU	C-N	6.55	1.42	1.33
11	4	47	VAL	C-N	6.55	1.37	1.33
19	Z	868	HIS	CA-C	-6.55	1.45	1.53
23	Q	31	VAL	CA-C	-6.55	1.44	1.52
26	O	263	ALA	CA-C	-6.55	1.44	1.52
19	Z	548	THR	CA-C	-6.55	1.44	1.52
26	O	260	ASP	C-N	6.55	1.42	1.33
16	V	214	GLN	N-CA	-6.54	1.38	1.46
20	N	731	ILE	C-N	6.54	1.42	1.33
2	B	43	GLY	N-CA	-6.54	1.38	1.45
27	H	254	ALA	N-CA	6.54	1.54	1.46
15	W	93	ALA	CA-C	-6.54	1.44	1.52
28	I	173	VAL	C-N	6.54	1.42	1.33
4	D	218	ARG	CD-NE	6.53	1.55	1.46
31	M	258	GLN	CA-C	-6.53	1.45	1.52
19	Z	132	THR	CA-C	6.53	1.61	1.52
24	R	238	GLU	CA-C	-6.53	1.44	1.52
19	Z	865	PHE	CA-CB	6.52	1.63	1.53
21	S	187	LEU	CA-C	-6.52	1.44	1.52
20	N	850	GLU	N-CA	-6.52	1.38	1.46
24	R	322	ALA	CA-C	-6.52	1.44	1.52
19	Z	814	SER	N-CA	-6.52	1.38	1.46
30	L	199	ARG	CA-C	-6.52	1.44	1.52
23	Q	305	ALA	C-N	6.51	1.42	1.33
27	H	351	ARG	NE-CZ	6.51	1.40	1.33
32	J	126	ILE	CA-CB	-6.51	1.46	1.54
9	2	159	HIS	CG-CD2	6.51	1.43	1.35
13	6	226	THR	N-CA	-6.51	1.38	1.46
22	P	372	ARG	NE-CZ	6.51	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	M	224	LYS	C-N	6.51	1.39	1.33
9	2	230	ARG	NE-CZ	6.51	1.40	1.33
9	2	241	ARG	NE-CZ	6.51	1.40	1.33
30	L	199	ARG	NE-CZ	6.50	1.40	1.33
32	J	64	GLN	CA-CB	6.50	1.63	1.53
20	N	392	TRP	NE1-CE2	6.50	1.44	1.37
23	Q	193	ALA	C-N	6.50	1.43	1.34
28	I	359	LYS	N-CA	-6.50	1.38	1.46
30	L	65	GLN	CA-CB	6.50	1.63	1.53
4	D	169	ARG	CA-C	-6.50	1.44	1.53
19	Z	327	ASN	CA-CB	6.50	1.64	1.53
27	H	428	ARG	NE-CZ	6.50	1.40	1.33
2	B	21	GLN	N-CA	-6.50	1.38	1.46
13	6	96	GLU	CA-CB	-6.50	1.43	1.53
16	V	225	TRP	NE1-CE2	-6.50	1.30	1.37
25	U	200	GLY	CA-C	-6.50	1.44	1.52
31	M	195	ASP	CA-C	-6.50	1.44	1.52
31	M	404	VAL	CA-C	6.50	1.61	1.52
22	P	249	ALA	C-N	6.50	1.42	1.33
9	2	78	HIS	CA-C	-6.50	1.44	1.52
6	F	185	ASP	N-CA	6.49	1.54	1.46
12	5	214	LEU	CA-C	-6.49	1.44	1.52
17	T	326	GLN	N-CA	6.49	1.54	1.46
18	Y	62	LYS	C-N	6.49	1.42	1.33
27	H	67	GLU	C-N	6.49	1.41	1.33
21	S	42	GLY	CA-C	-6.49	1.45	1.52
28	I	178	LYS	CA-CB	6.49	1.62	1.53
28	I	337	LEU	N-CA	-6.49	1.38	1.45
5	E	225	ASN	N-CA	-6.48	1.37	1.46
6	F	26	MET	CA-CB	6.48	1.64	1.53
3	C	225	ILE	CA-C	-6.48	1.45	1.52
17	T	248	PHE	CA-CB	6.48	1.64	1.53
29	K	326	ARG	CD-NE	6.48	1.55	1.46
21	S	411	SER	C-N	6.48	1.42	1.33
26	O	369	HIS	C-N	6.48	1.42	1.33
27	H	77	LEU	C-N	6.48	1.42	1.33
22	P	445	LEU	CA-CB	6.47	1.64	1.53
26	O	277	LEU	CA-C	-6.47	1.44	1.52
1	A	102	LYS	CA-C	-6.47	1.44	1.52
13	6	139	GLY	CA-C	-6.47	1.47	1.52
9	2	132	ARG	CD-NE	6.47	1.55	1.46
13	6	188	VAL	N-CA	-6.47	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	W	62	THR	CA-C	-6.47	1.44	1.52
30	L	295	ARG	N-CA	-6.47	1.37	1.46
22	P	446	ILE	N-CA	-6.47	1.39	1.46
31	M	237	THR	C-N	6.47	1.42	1.33
7	G	99	PHE	N-CA	-6.46	1.38	1.46
12	5	253	ASP	CA-CB	6.46	1.63	1.53
19	Z	207	LEU	CA-CB	-6.46	1.43	1.53
9	2	132	ARG	NE-CZ	6.46	1.40	1.33
29	K	145	PRO	N-CA	-6.46	1.38	1.47
14	7	231	PHE	N-CA	-6.46	1.38	1.46
19	Z	1	MET	C-N	6.46	1.42	1.33
26	O	35	HIS	ND1-CE1	6.46	1.39	1.32
26	O	213	PHE	CA-CB	6.46	1.63	1.53
21	S	124	ARG	NE-CZ	6.45	1.40	1.33
21	S	286	TYR	C-N	6.45	1.42	1.33
14	7	178	ALA	N-CA	-6.45	1.40	1.46
14	7	246	PRO	CA-C	-6.45	1.45	1.53
20	N	684	ARG	CA-C	-6.45	1.44	1.52
28	I	303	ARG	C-N	6.45	1.42	1.33
10	3	177	ARG	NE-CZ	6.45	1.40	1.33
22	P	90	LEU	CA-C	-6.45	1.44	1.52
19	Z	660	ILE	CA-CB	-6.45	1.46	1.54
27	H	339	ARG	NE-CZ	6.45	1.40	1.33
24	R	220	VAL	CA-C	-6.44	1.44	1.52
9	2	146	VAL	CA-CB	6.44	1.64	1.55
11	4	83	PHE	CA-CB	6.44	1.63	1.53
31	M	413	ARG	CA-CB	6.44	1.63	1.53
27	H	188	ARG	NE-CZ	6.44	1.40	1.33
30	L	43	LEU	CA-C	-6.44	1.44	1.52
31	M	302	GLU	C-N	6.44	1.42	1.33
27	H	401	ARG	CD-NE	6.44	1.55	1.46
23	Q	377	ILE	CA-C	-6.44	1.45	1.52
4	D	158	THR	CA-C	-6.43	1.45	1.52
3	C	30	HIS	ND1-CE1	6.43	1.39	1.32
6	F	67	ASP	CA-C	-6.43	1.45	1.52
10	3	56	LEU	CA-C	-6.43	1.45	1.52
17	T	345	TYR	CA-C	-6.43	1.44	1.52
19	Z	59	LEU	C-N	6.43	1.42	1.33
19	Z	330	PHE	CA-CB	6.43	1.64	1.53
20	N	883	ARG	N-CA	-6.43	1.37	1.46
21	S	270	SER	CA-CB	6.43	1.62	1.53
22	P	129	ARG	NE-CZ	6.43	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	I	190	LEU	CA-C	-6.43	1.44	1.52
27	H	354	ILE	C-N	6.43	1.42	1.33
3	C	139	TRP	CA-C	-6.43	1.44	1.52
19	Z	473	ASN	CA-CB	6.43	1.64	1.53
15	W	13	SER	N-CA	-6.43	1.37	1.46
24	R	311	TYR	N-CA	-6.43	1.38	1.46
26	O	11	SER	C-N	6.43	1.42	1.33
28	I	98	LYS	C-N	6.42	1.42	1.33
31	M	67	HIS	C-N	6.42	1.42	1.33
27	H	43	ARG	NE-CZ	6.42	1.40	1.33
32	J	78	ARG	NE-CZ	6.42	1.40	1.33
22	P	282	GLU	C-N	6.42	1.42	1.33
12	5	161	CYS	C-N	6.42	1.37	1.33
2	B	176	LYS	CA-C	-6.41	1.44	1.52
3	C	229	LYS	C-N	6.41	1.42	1.33
17	T	145	ILE	CA-C	-6.41	1.45	1.52
20	N	621	SER	CA-C	-6.41	1.43	1.52
27	H	272	ILE	CA-C	-6.41	1.44	1.52
31	M	192	GLY	N-CA	6.41	1.52	1.45
16	V	175	ARG	N-CA	-6.41	1.38	1.46
17	T	107	ARG	CZ-NH1	6.41	1.41	1.32
5	E	49	ALA	N-CA	-6.41	1.38	1.46
19	Z	115	PRO	CA-C	6.41	1.60	1.52
26	O	339	ARG	CD-NE	6.41	1.55	1.46
7	G	80	GLY	C-O	-6.40	1.20	1.24
12	5	163	TRP	CA-C	6.40	1.60	1.52
19	Z	74	ALA	N-CA	-6.40	1.38	1.46
8	1	60	ALA	CA-C	-6.40	1.44	1.52
31	M	389	ARG	CD-NE	6.40	1.55	1.46
21	S	323	THR	C-N	6.40	1.42	1.33
21	S	341	ARG	C-N	6.40	1.42	1.34
30	L	41	LYS	CA-C	-6.40	1.44	1.52
22	P	69	ALA	CA-C	6.40	1.61	1.52
16	V	131	GLN	CA-CB	6.40	1.63	1.53
17	T	143	GLN	CA-CB	6.40	1.63	1.53
25	U	265	LEU	C-N	6.40	1.42	1.33
20	N	357	LYS	C-N	6.39	1.42	1.33
27	H	321	THR	N-CA	-6.39	1.38	1.46
29	K	178	ARG	NE-CZ	6.39	1.40	1.33
23	Q	253	TYR	C-N	6.39	1.42	1.33
27	H	97	ARG	NE-CZ	6.39	1.40	1.33
11	4	6	GLY	N-CA	-6.38	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	M	393	ASP	C-N	6.38	1.42	1.33
4	D	84	ALA	CA-C	-6.38	1.44	1.52
5	E	153	LEU	CA-CB	6.38	1.65	1.53
22	P	263	TRP	CA-CB	6.38	1.63	1.53
31	M	164	LEU	C-N	6.38	1.41	1.33
5	E	227	HIS	CA-C	-6.38	1.44	1.52
15	W	77	THR	C-N	6.38	1.41	1.33
15	W	162	GLY	C-N	6.38	1.42	1.33
19	Z	679	LEU	C-N	6.38	1.42	1.33
20	N	674	PRO	C-O	-6.38	1.16	1.24
22	P	278	PRO	CA-C	6.38	1.60	1.52
20	N	580	ARG	CA-CB	6.37	1.63	1.53
26	O	133	GLU	CA-C	-6.37	1.44	1.52
10	3	168	SER	N-CA	-6.37	1.38	1.46
30	L	39	ARG	C-N	6.37	1.42	1.33
1	A	132	ARG	CD-NE	6.37	1.55	1.46
5	E	115	ALA	CA-C	-6.37	1.44	1.52
23	Q	248	ILE	CA-C	-6.37	1.45	1.52
2	B	204	THR	CA-C	-6.37	1.44	1.52
20	N	192	GLN	N-CA	-6.37	1.38	1.46
23	Q	406	ASN	C-N	6.37	1.42	1.33
29	K	60	TYR	CA-C	-6.37	1.44	1.52
9	2	159	HIS	ND1-CE1	6.37	1.39	1.32
31	M	126	VAL	N-CA	-6.37	1.38	1.46
1	A	2	SER	N-CA	-6.36	1.38	1.46
4	D	115	ARG	CZ-NH1	6.36	1.41	1.32
19	Z	79	ARG	CZ-NH2	6.36	1.41	1.33
19	Z	560	LEU	N-CA	-6.36	1.38	1.46
17	T	169	ARG	C-N	6.36	1.42	1.33
21	S	382	PHE	CA-CB	6.36	1.63	1.53
21	S	287	TYR	CA-C	-6.36	1.44	1.52
20	N	611	ASN	N-CA	6.35	1.54	1.46
28	I	307	ARG	CZ-NH2	6.35	1.41	1.33
29	K	69	LYS	C-N	6.35	1.42	1.33
3	C	2	SER	N-CA	6.35	1.51	1.46
25	U	145	HIS	CB-CG	6.35	1.59	1.50
32	J	57	ARG	CZ-NH1	6.35	1.41	1.32
9	2	157	TYR	C-O	-6.35	1.17	1.24
20	N	502	TYR	C-N	6.35	1.42	1.33
21	S	186	ASP	C-N	6.35	1.43	1.33
13	6	153	PRO	C-N	6.35	1.42	1.33
28	I	108	SER	CA-C	-6.35	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	7	214	GLU	CA-C	-6.34	1.44	1.52
21	S	359	LEU	CA-C	-6.34	1.44	1.52
32	J	213	ARG	NE-CZ	6.34	1.40	1.33
29	K	239	TYR	N-CA	-6.34	1.41	1.47
31	M	205	ILE	CA-C	-6.34	1.44	1.52
32	J	104	ASP	CA-CB	6.34	1.64	1.53
12	5	177	GLY	N-CA	-6.34	1.36	1.45
32	J	219	LEU	N-CA	-6.34	1.39	1.46
21	S	431	GLU	N-CA	-6.34	1.38	1.46
15	W	14	GLU	N-CA	-6.34	1.39	1.46
29	K	255	LYS	C-N	6.34	1.42	1.33
31	M	353	ARG	CZ-NH1	6.34	1.41	1.32
31	M	367	ARG	NE-CZ	6.34	1.40	1.33
24	R	294	TYR	C-N	6.33	1.42	1.33
25	U	12	HIS	N-CA	6.33	1.54	1.45
21	S	328	LEU	N-CA	-6.33	1.38	1.46
26	O	158	LEU	N-CA	6.33	1.54	1.46
26	O	289	ARG	CZ-NH2	6.33	1.41	1.33
28	I	410	ARG	C-N	6.33	1.41	1.33
3	C	35	LEU	CA-C	-6.33	1.45	1.52
14	7	79	ARG	CZ-NH2	6.33	1.41	1.33
22	P	117	ASP	N-CA	-6.33	1.38	1.46
23	Q	199	ALA	C-N	6.33	1.41	1.33
2	B	111	VAL	CA-CB	-6.32	1.46	1.54
22	P	129	ARG	CZ-NH2	6.32	1.41	1.33
30	L	144	VAL	CA-C	6.32	1.60	1.52
23	Q	28	HIS	CD2-NE2	6.32	1.44	1.37
29	K	245	ARG	CA-CB	6.32	1.63	1.53
15	W	19	GLY	C-N	6.32	1.42	1.33
27	H	340	LYS	N-CA	-6.32	1.38	1.46
21	S	371	PHE	C-N	6.32	1.42	1.33
23	Q	34	ASP	C-N	6.32	1.41	1.33
28	I	355	LEU	N-CA	-6.32	1.38	1.46
17	T	217	ARG	NE-CZ	6.31	1.40	1.33
23	Q	322	HIS	N-CA	-6.31	1.38	1.46
26	O	352	ARG	NE-CZ	6.31	1.40	1.33
21	S	173	ASN	C-N	6.31	1.43	1.33
22	P	184	GLU	C-N	6.31	1.42	1.33
24	R	335	SER	N-CA	-6.31	1.38	1.46
13	6	121	THR	C-N	6.31	1.41	1.33
7	G	136	PHE	CA-C	-6.30	1.44	1.52
21	S	104	LEU	C-N	6.30	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	H	339	ARG	C-N	6.30	1.42	1.33
14	7	98	SER	CA-C	-6.30	1.44	1.52
24	R	146	ARG	CZ-NH1	6.30	1.41	1.32
25	U	172	VAL	N-CA	-6.30	1.38	1.46
19	Z	785	ARG	CD-NE	6.30	1.55	1.46
19	Z	823	ALA	CA-C	-6.30	1.44	1.52
29	K	245	ARG	CZ-NH1	6.30	1.41	1.32
27	H	135	GLU	N-CA	6.30	1.54	1.45
8	1	78	ARG	CA-C	-6.29	1.45	1.52
8	1	182	LYS	C-N	6.29	1.41	1.33
7	G	45	GLY	CA-C	-6.29	1.44	1.52
19	Z	335	ARG	C-N	6.29	1.42	1.33
21	S	396	HIS	CE1-NE2	6.29	1.38	1.32
25	U	49	ASP	N-CA	-6.29	1.38	1.46
28	I	136	LEU	CA-C	-6.29	1.44	1.52
28	I	331	THR	CA-C	-6.29	1.44	1.52
19	Z	228	LYS	C-O	-6.29	1.16	1.24
7	G	197	ILE	N-CA	-6.29	1.39	1.46
31	M	345	LEU	CA-C	-6.29	1.44	1.52
20	N	270	THR	C-N	6.29	1.41	1.33
28	I	319	PHE	N-CA	-6.29	1.37	1.45
32	J	257	SER	C-N	6.29	1.42	1.33
10	3	86	THR	CA-C	-6.28	1.44	1.52
17	T	217	ARG	CA-CB	6.28	1.63	1.53
28	I	134	SER	N-CA	-6.28	1.38	1.45
16	V	293	THR	C-N	6.28	1.42	1.33
5	E	93	ARG	CA-C	-6.28	1.44	1.52
26	O	73	PRO	N-CD	6.28	1.56	1.47
29	K	196	ILE	CA-CB	-6.28	1.47	1.54
32	J	271	ARG	C-N	6.28	1.42	1.33
20	N	479	LEU	C-N	6.28	1.41	1.33
19	Z	65	GLU	C-N	6.28	1.42	1.33
10	3	166	THR	CA-CB	6.27	1.63	1.53
10	3	181	SER	C-N	6.27	1.42	1.33
19	Z	834	ASP	CA-C	-6.27	1.45	1.52
22	P	8	ARG	CD-NE	6.27	1.55	1.46
23	Q	82	LYS	CA-C	-6.27	1.45	1.52
12	5	225	ARG	CA-CB	6.27	1.63	1.53
13	6	203	LYS	CA-CB	6.27	1.63	1.53
8	1	138	PRO	C-N	6.27	1.43	1.33
16	V	224	SER	CA-CB	6.27	1.63	1.53
20	N	377	HIS	CA-CB	6.27	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	230	GLN	CA-CB	6.26	1.63	1.53
27	H	92	PRO	C-N	6.26	1.42	1.33
30	L	341	ASP	C-N	6.26	1.42	1.33
24	R	343	LEU	CA-C	-6.26	1.46	1.53
26	O	360	VAL	C-N	6.26	1.42	1.33
9	2	260	THR	CA-CB	-6.26	1.44	1.52
30	L	358	ARG	CD-NE	6.26	1.55	1.46
32	J	386	ALA	CA-C	-6.26	1.44	1.52
3	C	183	GLU	CA-C	-6.26	1.44	1.52
19	Z	79	ARG	CD-NE	6.26	1.55	1.46
19	Z	478	ARG	CZ-NH2	6.26	1.41	1.33
21	S	119	SER	CA-CB	6.25	1.64	1.53
27	H	48	VAL	C-N	6.25	1.42	1.33
6	F	83	LEU	C-N	6.25	1.42	1.34
6	F	193	ARG	CZ-NH2	6.25	1.41	1.33
7	G	230	LYS	CA-C	-6.25	1.44	1.52
10	3	123	SER	C-N	6.25	1.41	1.33
16	V	68	ARG	NE-CZ	6.25	1.40	1.33
19	Z	822	VAL	C-N	6.25	1.41	1.33
27	H	299	MET	N-CA	-6.25	1.38	1.46
30	L	120	THR	C-N	6.25	1.40	1.33
6	F	130	VAL	CA-C	-6.25	1.44	1.52
26	O	103	LYS	N-CA	-6.25	1.38	1.46
19	Z	277	LEU	C-N	6.25	1.41	1.34
19	Z	51	GLN	N-CA	-6.24	1.37	1.46
27	H	245	LEU	CA-C	-6.24	1.45	1.52
4	D	144	PHE	C-N	6.24	1.42	1.34
8	1	224	GLY	C-O	6.24	1.29	1.23
3	C	18	LEU	N-CA	6.24	1.53	1.46
19	Z	481	SER	N-CA	-6.24	1.38	1.46
20	N	450	HIS	N-CA	-6.24	1.38	1.46
25	U	287	LYS	C-N	6.24	1.42	1.33
9	2	59	ALA	CA-C	-6.24	1.45	1.52
29	K	267	ILE	CA-C	-6.24	1.44	1.52
6	F	118	ILE	N-CA	-6.24	1.38	1.46
8	1	219	ARG	CZ-NH1	6.24	1.41	1.32
19	Z	236	CYS	N-CA	-6.24	1.38	1.46
4	D	45	VAL	N-CA	-6.23	1.39	1.46
23	Q	11	ARG	NE-CZ	6.23	1.40	1.33
25	U	29	VAL	CA-C	-6.23	1.44	1.52
28	I	322	ARG	CA-C	-6.23	1.45	1.52
31	M	309	VAL	CA-CB	-6.23	1.46	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	88	HIS	CE1-NE2	-6.23	1.26	1.32
8	1	57	SER	CA-CB	6.23	1.64	1.53
24	R	351	ASN	CA-C	-6.23	1.44	1.52
3	C	129	PRO	CA-C	-6.23	1.45	1.52
24	R	162	GLU	CA-CB	6.23	1.63	1.53
19	Z	621	ASP	CA-CB	6.23	1.64	1.53
19	Z	802	SER	CA-C	-6.23	1.44	1.52
29	K	81	ARG	N-CA	-6.23	1.38	1.46
29	K	143	LEU	C-N	6.23	1.40	1.33
21	S	492	PHE	CA-C	-6.22	1.44	1.52
19	Z	488	ALA	CA-C	-6.22	1.45	1.52
29	K	298	GLY	CA-C	6.22	1.59	1.52
4	D	57	ARG	CD-NE	6.22	1.54	1.46
19	Z	615	ILE	CA-C	-6.22	1.44	1.52
21	S	231	LEU	CA-C	-6.22	1.44	1.52
24	R	305	SER	N-CA	-6.22	1.39	1.46
3	C	2	SER	CA-C	-6.22	1.46	1.52
5	E	189	THR	C-N	6.21	1.42	1.33
19	Z	593	THR	CA-C	6.21	1.60	1.52
11	4	161	ARG	N-CA	6.21	1.53	1.46
20	N	359	ALA	CA-C	-6.21	1.45	1.52
6	F	82	ARG	CA-C	-6.21	1.44	1.52
23	Q	98	ASP	C-N	6.21	1.41	1.33
1	A	104	LYS	CA-C	-6.20	1.45	1.52
12	5	103	THR	CA-C	-6.20	1.45	1.52
19	Z	266	LEU	CA-CB	6.20	1.63	1.53
19	Z	773	LYS	CA-C	-6.20	1.45	1.52
22	P	354	LEU	CB-CG	6.20	1.65	1.53
24	R	64	GLN	CA-C	-6.20	1.44	1.52
24	R	122	THR	C-N	6.20	1.42	1.33
20	N	819	VAL	CA-C	6.20	1.59	1.52
30	L	250	ASP	N-CA	-6.20	1.38	1.46
12	5	97	ASN	C-N	-6.20	1.27	1.34
21	S	451	LYS	N-CA	-6.20	1.38	1.46
26	O	349	MET	CA-CB	6.20	1.63	1.53
6	F	232	PHE	C-N	6.19	1.42	1.33
19	Z	227	SER	N-CA	-6.19	1.38	1.46
19	Z	734	SER	CA-CB	6.19	1.63	1.53
19	Z	763	ARG	NE-CZ	6.19	1.39	1.33
22	P	60	MET	CA-C	-6.19	1.44	1.52
28	I	273	VAL	C-N	6.19	1.42	1.33
7	G	147	ALA	CA-CB	6.19	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	7	74	TYR	CA-C	-6.19	1.45	1.52
20	N	555	VAL	C-O	-6.19	1.17	1.24
32	J	396	GLU	C-N	6.19	1.42	1.33
16	V	86	ALA	CA-C	-6.19	1.44	1.52
32	J	58	LEU	CA-C	-6.19	1.45	1.52
10	3	106	GLU	N-CA	-6.19	1.39	1.46
16	V	286	GLU	CA-CB	6.19	1.62	1.53
27	H	213	LEU	C-N	6.19	1.41	1.33
11	4	181	ARG	CZ-NH1	6.18	1.41	1.32
11	4	99	HIS	CA-CB	6.18	1.62	1.53
25	U	177	ARG	C-N	6.18	1.41	1.33
9	2	251	THR	CA-CB	6.18	1.64	1.53
20	N	228	ALA	C-N	6.18	1.41	1.33
20	N	474	ARG	NE-CZ	6.18	1.39	1.33
20	N	609	ASP	CA-CB	6.18	1.63	1.53
29	K	293	LEU	N-CA	6.18	1.53	1.46
9	2	79	PHE	CA-C	-6.18	1.45	1.52
20	N	555	VAL	C-N	6.18	1.42	1.33
13	6	130	PRO	N-CA	-6.17	1.39	1.47
29	K	139	LEU	C-O	6.17	1.32	1.23
30	L	106	LEU	C-O	-6.17	1.17	1.24
3	C	80	THR	C-N	6.17	1.42	1.33
9	2	75	SER	N-CA	-6.17	1.39	1.46
6	F	172	LEU	CA-CB	6.17	1.62	1.53
14	7	56	LEU	CA-C	-6.17	1.45	1.52
19	Z	550	LEU	C-N	6.17	1.41	1.33
5	E	54	ILE	CA-C	6.16	1.60	1.52
19	Z	445	LEU	C-N	6.16	1.42	1.33
23	Q	337	ARG	CZ-NH2	6.16	1.41	1.33
4	D	34	GLY	C-N	6.16	1.42	1.33
20	N	147	TYR	CA-CB	6.16	1.63	1.53
23	Q	405	GLN	C-N	6.16	1.42	1.33
2	B	211	GLY	CA-C	-6.16	1.46	1.51
11	4	44	LEU	CA-C	-6.16	1.45	1.52
14	7	241	VAL	N-CA	-6.16	1.38	1.46
16	V	132	SER	C-N	6.16	1.42	1.33
19	Z	176	ALA	CA-C	-6.15	1.44	1.52
27	H	51	ASP	C-N	6.15	1.41	1.33
21	S	241	ASP	N-CA	-6.15	1.39	1.46
4	D	91	ASN	C-N	6.15	1.42	1.33
10	3	94	LEU	CA-CB	6.15	1.62	1.53
20	N	548	LEU	N-CA	6.15	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	R	69	LEU	CA-CB	6.15	1.62	1.53
26	O	288	HIS	ND1-CE1	6.15	1.38	1.32
30	L	230	ARG	CA-C	-6.15	1.44	1.52
2	B	116	SER	CA-CB	6.15	1.62	1.53
15	W	93	ALA	C-N	6.15	1.42	1.33
22	P	452	ILE	N-CA	-6.15	1.39	1.46
28	I	97	SER	C-N	6.15	1.42	1.33
23	Q	252	LYS	CA-C	-6.15	1.44	1.52
10	3	114	PRO	CA-C	6.14	1.59	1.52
12	5	180	ILE	CA-C	-6.14	1.45	1.52
22	P	55	ARG	CD-NE	6.14	1.54	1.46
2	B	44	VAL	N-CA	-6.14	1.39	1.46
19	Z	559	PRO	CA-C	-6.14	1.42	1.52
20	N	747	SER	CA-C	6.14	1.60	1.52
21	S	482	ILE	C-N	6.14	1.41	1.33
28	I	237	LYS	CA-CB	6.14	1.63	1.53
19	Z	860	LYS	CA-C	-6.13	1.45	1.52
16	V	198	ARG	NE-CZ	6.13	1.39	1.33
21	S	190	LYS	CA-CB	6.13	1.63	1.53
32	J	109	THR	C-O	6.13	1.31	1.23
19	Z	369	ARG	NE-CZ	6.13	1.39	1.33
11	4	70	ARG	NE-CZ	6.13	1.39	1.33
22	P	419	LYS	CA-C	-6.13	1.44	1.52
20	N	408	LEU	N-CA	-6.13	1.39	1.46
6	F	107	ARG	CZ-NH2	6.12	1.41	1.33
19	Z	294	MET	CA-C	-6.12	1.45	1.52
12	5	188	GLY	CA-C	-6.12	1.43	1.51
17	T	293	ILE	C-O	-6.12	1.16	1.24
19	Z	301	HIS	CA-C	-6.12	1.45	1.52
5	E	132	ALA	C-N	6.12	1.41	1.33
6	F	69	HIS	CG-CD2	6.12	1.42	1.35
12	5	232	ALA	CA-C	-6.12	1.44	1.52
26	O	107	SER	CA-CB	6.12	1.61	1.53
29	K	358	VAL	N-CA	-6.12	1.39	1.46
14	7	201	GLN	N-CA	-6.12	1.41	1.46
29	K	82	ILE	N-CA	-6.12	1.39	1.46
4	D	109	THR	N-CA	6.12	1.53	1.46
21	S	466	ARG	CZ-NH1	6.12	1.41	1.32
27	H	336	ARG	CD-NE	6.12	1.54	1.46
5	E	35	SER	N-CA	6.11	1.54	1.46
18	Y	66	LYS	N-CA	-6.11	1.39	1.46
20	N	593	SER	C-N	6.11	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	Q	79	SER	CA-C	-6.11	1.44	1.52
29	K	378	ILE	N-CA	-6.11	1.39	1.46
7	G	6	THR	CA-CB	-6.11	1.43	1.53
20	N	50	GLU	CA-CB	6.11	1.62	1.53
22	P	288	HIS	CA-C	-6.11	1.45	1.52
19	Z	122	ALA	N-CA	-6.11	1.38	1.46
19	Z	729	MET	N-CA	-6.11	1.39	1.46
17	T	309	ARG	NE-CZ	6.11	1.39	1.33
19	Z	854	GLY	CA-C	-6.11	1.42	1.52
16	V	68	ARG	CZ-NH1	6.11	1.41	1.32
16	V	209	LYS	CA-C	-6.11	1.45	1.52
21	S	325	HIS	CE1-NE2	6.11	1.38	1.32
5	E	103	TYR	CA-C	-6.10	1.45	1.52
16	V	175	ARG	CD-NE	6.10	1.54	1.46
14	7	236	VAL	C-O	6.10	1.30	1.24
13	6	134	TYR	CA-CB	6.09	1.60	1.52
20	N	523	SER	CA-C	-6.09	1.44	1.52
32	J	382	ASP	CA-CB	6.09	1.62	1.53
19	Z	455	VAL	CA-C	-6.09	1.45	1.52
5	E	89	ILE	CA-CB	6.09	1.62	1.54
13	6	206	PHE	CG-CD1	6.09	1.51	1.38
16	V	68	ARG	CA-C	-6.09	1.45	1.52
19	Z	850	VAL	C-N	6.09	1.41	1.33
24	R	62	ASP	CA-CB	6.09	1.63	1.53
5	E	199	LEU	C-N	6.09	1.41	1.33
9	2	115	ARG	CZ-NH1	6.09	1.41	1.32
2	B	146	LEU	N-CA	-6.08	1.38	1.46
7	G	169	ALA	CA-C	-6.08	1.45	1.53
21	S	84	GLY	CA-C	-6.08	1.43	1.51
32	J	26	SER	CA-C	-6.08	1.44	1.52
20	N	592	GLY	C-N	6.08	1.42	1.33
29	K	198	PRO	C-N	-6.08	1.25	1.33
30	L	175	ARG	NE-CZ	6.08	1.39	1.33
3	C	72	MET	C-N	6.08	1.42	1.33
15	W	190	ALA	C-N	6.08	1.42	1.33
23	Q	375	HIS	ND1-CE1	6.08	1.38	1.32
28	I	336	THR	CA-CB	6.08	1.63	1.53
10	3	48	ARG	NE-CZ	6.07	1.39	1.33
32	J	44	ARG	CD-NE	6.07	1.54	1.46
6	F	87	PHE	CA-C	-6.07	1.45	1.52
17	T	207	ARG	NE-CZ	6.07	1.39	1.33
3	C	17	ARG	CD-NE	6.07	1.54	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	4	41	LYS	N-CA	6.07	1.52	1.46
23	Q	4	ALA	N-CA	-6.07	1.38	1.46
25	U	241	SER	C-N	6.07	1.42	1.33
31	M	118	SER	C-N	6.07	1.43	1.33
8	1	167	TYR	CA-C	-6.07	1.44	1.52
16	V	167	MET	C-N	6.07	1.42	1.33
24	R	25	LEU	CA-C	-6.07	1.44	1.52
21	S	309	LEU	CA-C	-6.07	1.44	1.52
23	Q	117	ALA	C-N	6.07	1.41	1.33
31	M	295	GLY	CA-C	-6.07	1.45	1.52
1	A	132	ARG	C-N	6.06	1.41	1.33
23	Q	142	ARG	NE-CZ	6.06	1.39	1.33
13	6	191	VAL	N-CA	-6.06	1.40	1.46
5	E	23	GLN	N-CA	-6.06	1.38	1.46
16	V	206	ASN	C-N	6.06	1.42	1.33
19	Z	390	LEU	C-N	6.06	1.41	1.33
21	S	244	ALA	CA-C	-6.06	1.45	1.52
23	Q	10	GLN	C-N	6.06	1.41	1.33
29	K	221	HIS	ND1-CE1	6.06	1.38	1.32
2	B	83	TYR	N-CA	-6.06	1.39	1.46
19	Z	650	GLN	C-N	6.06	1.41	1.33
7	G	57	LYS	CA-CB	6.05	1.61	1.53
20	N	435	SER	C-N	6.05	1.42	1.34
22	P	382	LEU	N-CA	-6.05	1.38	1.46
30	L	143	ASN	CA-C	-6.05	1.47	1.52
32	J	254	ILE	N-CA	-6.05	1.38	1.46
15	W	136	VAL	C-N	6.05	1.41	1.33
16	V	221	HIS	ND1-CE1	6.05	1.38	1.32
21	S	146	ARG	CZ-NH2	6.05	1.41	1.33
29	K	42	SER	CA-CB	6.05	1.63	1.53
28	I	132	TYR	CA-CB	6.05	1.60	1.53
28	I	371	ARG	CD-NE	6.05	1.54	1.46
28	I	400	THR	CA-C	-6.05	1.45	1.52
31	M	67	HIS	CA-CB	6.05	1.62	1.53
31	M	293	ALA	C-N	6.05	1.41	1.33
32	J	250	GLU	CA-C	-6.05	1.46	1.53
23	Q	67	GLY	CA-C	-6.05	1.45	1.52
15	W	40	LYS	CA-CB	6.04	1.62	1.53
1	A	87	SER	C-N	6.04	1.42	1.33
10	3	161	GLU	CA-C	-6.04	1.44	1.52
7	G	31	VAL	C-N	6.04	1.42	1.34
29	K	127	ASN	N-CA	-6.04	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	P	7	GLU	C-N	6.04	1.40	1.33
19	Z	388	ASP	CA-C	-6.04	1.45	1.53
3	C	118	LYS	CA-C	-6.04	1.45	1.52
4	D	244	GLU	CA-CB	6.04	1.62	1.53
9	2	261	PRO	CA-CB	6.04	1.61	1.53
19	Z	651	GLY	C-N	6.04	1.41	1.33
19	Z	719	PRO	CA-CB	6.04	1.62	1.53
20	N	490	ARG	CZ-NH1	6.04	1.41	1.32
26	O	366	LEU	C-N	6.04	1.41	1.33
4	D	41	VAL	CA-CB	-6.03	1.47	1.54
14	7	62	CYS	CA-C	-6.03	1.44	1.53
17	T	236	GLU	CA-CB	6.03	1.62	1.53
20	N	233	LEU	C-N	6.03	1.41	1.33
24	R	376	LEU	N-CA	-6.03	1.38	1.46
32	J	218	GLU	CA-C	-6.03	1.46	1.53
26	O	343	LEU	CA-CB	6.03	1.62	1.53
10	3	66	ARG	NE-CZ	6.03	1.39	1.33
23	Q	19	ASP	N-CA	-6.03	1.38	1.45
24	R	7	GLU	CA-CB	6.03	1.62	1.53
4	D	221	GLN	CA-C	-6.03	1.45	1.52
19	Z	720	GLU	N-CA	6.03	1.53	1.46
28	I	418	ASP	CA-CB	-6.03	1.43	1.53
29	K	81	ARG	CZ-NH2	6.03	1.41	1.33
31	M	67	HIS	CE1-NE2	-6.03	1.26	1.32
21	S	230	ARG	N-CA	-6.03	1.38	1.46
29	K	329	ARG	NE-CZ	6.03	1.39	1.33
2	B	175	GLU	CA-CB	6.02	1.62	1.53
27	H	364	VAL	C-O	-6.02	1.17	1.23
13	6	77	THR	CA-C	-6.02	1.45	1.52
32	J	71	SER	CA-CB	6.02	1.63	1.53
28	I	141	LYS	N-CA	-6.02	1.39	1.46
29	K	211	GLY	C-N	6.02	1.41	1.33
20	N	672	LEU	C-N	6.02	1.42	1.33
32	J	263	SER	N-CA	-6.02	1.37	1.45
25	U	104	ASN	C-N	6.01	1.42	1.34
20	N	349	ASP	CA-C	-6.01	1.45	1.52
24	R	28	LEU	CA-CB	6.01	1.62	1.53
10	3	117	PHE	CA-CB	6.01	1.63	1.53
3	C	163	CYS	C-N	6.01	1.41	1.33
16	V	272	ILE	C-N	6.00	1.42	1.33
21	S	268	SER	C-N	6.00	1.42	1.34
7	G	57	LYS	CA-C	-6.00	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Z	28	SER	C-N	6.00	1.41	1.33
19	Z	502	LEU	CA-CB	6.00	1.61	1.53
30	L	98	ARG	CA-C	-6.00	1.45	1.52
6	F	232	PHE	CA-CB	6.00	1.62	1.53
20	N	369	THR	N-CA	-6.00	1.39	1.46
29	K	335	LEU	N-CA	-6.00	1.37	1.46
2	B	84	ARG	CD-NE	6.00	1.54	1.46
19	Z	768	LEU	C-O	-6.00	1.16	1.24
19	Z	335	ARG	NE-CZ	6.00	1.39	1.33
23	Q	95	LEU	CA-C	-6.00	1.45	1.52
14	7	212	LEU	CA-C	-6.00	1.45	1.52
1	A	61	LEU	N-CA	-5.99	1.38	1.45
6	F	176	MET	CA-CB	5.99	1.62	1.53
8	1	51	SER	CA-C	-5.99	1.45	1.52
19	Z	677	HIS	CE1-NE2	-5.99	1.26	1.32
13	6	111	THR	C-N	5.99	1.40	1.33
22	P	267	LEU	C-N	5.99	1.41	1.33
26	O	218	MET	C-N	5.99	1.41	1.33
32	J	294	ALA	C-N	5.99	1.40	1.33
18	Y	58	ALA	C-N	5.99	1.41	1.33
24	R	237	ARG	CZ-NH2	5.99	1.41	1.33
26	O	279	GLU	CA-CB	5.99	1.62	1.53
17	T	114	LYS	C-N	5.99	1.41	1.33
20	N	422	LEU	CA-C	-5.99	1.45	1.52
28	I	89	GLU	C-N	5.99	1.41	1.33
29	K	132	LEU	C-N	5.99	1.41	1.33
21	S	248	ASN	C-N	5.98	1.42	1.33
23	Q	85	ALA	C-N	5.98	1.41	1.33
31	M	34	GLU	C-N	5.98	1.41	1.33
11	4	195	THR	CA-C	-5.98	1.45	1.52
11	4	130	ALA	CA-C	-5.98	1.45	1.53
17	T	343	ILE	CA-CB	5.98	1.62	1.54
19	Z	838	ARG	CD-NE	5.98	1.54	1.46
2	B	102	GLN	CA-C	-5.98	1.44	1.52
23	Q	367	GLN	N-CA	-5.98	1.39	1.46
25	U	111	LEU	CA-C	-5.98	1.45	1.52
27	H	432	TYR	CA-CB	5.98	1.62	1.53
3	C	18	LEU	C-N	5.97	1.42	1.34
16	V	133	PHE	N-CA	-5.97	1.39	1.46
16	V	293	THR	C-O	-5.97	1.17	1.24
19	Z	535	THR	C-N	5.97	1.41	1.33
22	P	357	ARG	NE-CZ	5.97	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	F	145	PHE	CA-C	-5.97	1.45	1.52
12	5	212	TYR	C-N	5.97	1.41	1.33
19	Z	300	ARG	CD-NE	5.97	1.54	1.46
20	N	330	SER	C-N	5.97	1.42	1.33
20	N	774	PRO	C-O	-5.97	1.15	1.24
1	A	67	THR	CA-C	-5.97	1.45	1.52
7	G	40	ILE	CA-C	-5.97	1.45	1.52
20	N	112	CYS	C-N	5.97	1.41	1.33
21	S	131	LEU	CA-C	-5.97	1.44	1.52
32	J	294	ALA	CA-C	-5.97	1.45	1.52
2	B	5	GLY	CA-C	-5.97	1.45	1.52
22	P	181	GLU	N-CA	-5.96	1.38	1.46
30	L	194	LYS	CA-CB	5.96	1.62	1.53
29	K	323	ARG	CZ-NH1	5.96	1.41	1.32
31	M	161	TYR	CB-CG	5.96	1.64	1.51
11	4	189	HIS	ND1-CE1	5.96	1.38	1.32
23	Q	295	LYS	N-CA	-5.96	1.39	1.46
10	3	177	ARG	CA-CB	5.96	1.63	1.53
8	1	96	LEU	C-N	5.96	1.41	1.33
26	O	24	ARG	CA-C	5.96	1.60	1.52
30	L	122	MET	CA-C	-5.96	1.45	1.52
32	J	282	GLY	N-CA	5.96	1.53	1.45
3	C	162	THR	CA-C	-5.96	1.45	1.52
25	U	57	PRO	CA-CB	5.96	1.61	1.53
26	O	192	GLU	N-CA	-5.96	1.39	1.46
3	C	55	LEU	CA-CB	5.95	1.60	1.53
8	1	45	VAL	N-CA	-5.95	1.39	1.46
20	N	387	ARG	NE-CZ	5.95	1.39	1.33
22	P	124	LEU	N-CA	-5.95	1.39	1.46
20	N	847	GLU	N-CA	-5.95	1.38	1.45
23	Q	1	MET	N-CA	5.95	1.57	1.46
29	K	354	LEU	N-CA	-5.95	1.38	1.46
31	M	318	ASN	CA-CB	5.95	1.62	1.53
20	N	339	LEU	CA-CB	5.95	1.62	1.53
20	N	377	HIS	ND1-CE1	5.95	1.38	1.32
20	N	517	GLY	C-N	5.95	1.42	1.33
20	N	518	LEU	CA-C	-5.95	1.45	1.52
30	L	330	HIS	CG-CD2	5.95	1.42	1.35
20	N	63	VAL	N-CA	-5.94	1.39	1.46
27	H	312	ARG	CZ-NH2	5.94	1.41	1.33
2	B	15	PRO	CA-C	-5.94	1.46	1.52
23	Q	230	SER	CA-C	-5.94	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	O	173	TYR	CA-C	-5.94	1.45	1.52
19	Z	696	LEU	CA-CB	5.94	1.62	1.53
27	H	68	SER	CA-C	-5.94	1.45	1.53
29	K	194	ILE	CA-CB	-5.94	1.47	1.54
6	F	152	ASN	N-CA	-5.94	1.38	1.46
15	W	130	ARG	CA-CB	5.94	1.62	1.53
20	N	899	ARG	NE-CZ	5.94	1.39	1.33
28	I	317	ASP	C-N	5.94	1.40	1.33
2	B	226	VAL	CA-CB	-5.94	1.47	1.54
20	N	443	LEU	CA-C	-5.94	1.45	1.52
3	C	117	ILE	C-N	5.94	1.42	1.33
17	T	292	ARG	C-N	-5.94	1.26	1.33
20	N	688	LEU	C-N	5.93	1.41	1.33
24	R	192	ARG	CD-NE	5.93	1.54	1.46
32	J	186	VAL	N-CA	-5.93	1.39	1.46
8	1	122	ARG	CD-NE	5.93	1.54	1.46
20	N	883	ARG	CZ-NH2	5.93	1.41	1.33
31	M	196	LYS	C-N	5.93	1.41	1.33
19	Z	645	ASP	C-N	5.93	1.41	1.33
22	P	71	VAL	CA-C	-5.93	1.45	1.52
23	Q	260	MET	C-N	5.93	1.42	1.34
12	5	124	ILE	N-CA	-5.93	1.39	1.46
19	Z	25	ASP	CA-CB	5.93	1.60	1.53
20	N	716	VAL	N-CA	-5.93	1.39	1.46
28	I	124	SER	CA-C	-5.93	1.45	1.52
19	Z	272	LEU	CA-CB	-5.92	1.43	1.53
20	N	716	VAL	CA-C	-5.92	1.45	1.52
25	U	249	PHE	CA-C	-5.92	1.44	1.52
13	6	238	ARG	CA-C	-5.92	1.45	1.52
25	U	168	GLU	N-CA	-5.92	1.39	1.46
9	2	56	VAL	CA-C	-5.92	1.45	1.52
15	W	163	LYS	N-CA	-5.92	1.39	1.46
16	V	60	GLU	C-N	5.92	1.41	1.33
21	S	34	GLU	C-N	5.92	1.41	1.33
6	F	152	ASN	CA-C	-5.92	1.45	1.52
21	S	327	LEU	CA-CB	5.92	1.62	1.53
25	U	157	HIS	ND1-CE1	5.92	1.38	1.32
29	K	107	THR	C-O	-5.92	1.16	1.24
29	K	294	ASN	C-N	5.92	1.41	1.33
2	B	89	ARG	NE-CZ	5.91	1.39	1.33
4	D	154	ASP	CA-C	5.91	1.58	1.52
15	W	30	GLN	CA-C	-5.91	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	O	70	ARG	N-CA	5.91	1.53	1.46
28	I	141	LYS	C-N	5.91	1.41	1.33
31	M	198	ILE	C-N	5.91	1.41	1.33
31	M	356	GLU	N-CA	-5.91	1.38	1.45
12	5	128	ARG	CD-NE	5.91	1.54	1.46
20	N	644	TYR	C-N	5.91	1.42	1.32
21	S	211	ALA	C-N	5.91	1.42	1.33
22	P	289	ARG	CA-C	-5.91	1.45	1.52
32	J	201	ARG	CZ-NH1	5.91	1.41	1.32
13	6	175	LEU	C-N	5.91	1.42	1.33
23	Q	258	LYS	CA-C	5.91	1.60	1.52
7	G	225	HIS	CA-C	-5.91	1.45	1.52
26	O	186	LYS	CA-CB	5.91	1.63	1.53
27	H	255	ARG	CZ-NH1	5.91	1.41	1.32
4	D	175	ARG	CD-NE	5.90	1.54	1.46
7	G	213	GLU	CA-C	-5.90	1.45	1.52
14	7	60	PHE	CA-C	-5.90	1.45	1.52
19	Z	764	LEU	CB-CG	5.90	1.65	1.53
21	S	289	GLY	CA-C	-5.90	1.45	1.52
22	P	15	LYS	CA-C	-5.90	1.45	1.52
23	Q	74	ARG	CZ-NH1	5.90	1.41	1.32
9	2	132	ARG	CA-CB	5.90	1.62	1.53
13	6	160	ASP	C-N	5.90	1.41	1.33
15	W	99	HIS	CA-CB	5.90	1.60	1.53
31	M	161	TYR	CA-C	-5.90	1.45	1.52
32	J	118	ASN	CA-C	-5.90	1.44	1.52
22	P	388	GLU	C-N	5.90	1.42	1.33
32	J	113	ARG	CZ-NH2	5.90	1.41	1.33
1	A	5	SER	CA-C	-5.90	1.45	1.52
21	S	144	ARG	CD-NE	5.90	1.54	1.46
8	1	188	PHE	N-CA	-5.89	1.39	1.46
13	6	28	ARG	CD-NE	5.89	1.54	1.46
24	R	356	THR	CA-C	-5.89	1.45	1.52
27	H	189	GLU	C-N	5.89	1.41	1.33
28	I	360	THR	C-N	5.89	1.41	1.34
3	C	95	GLN	C-N	5.89	1.41	1.33
4	D	62	ILE	CA-CB	-5.89	1.46	1.54
11	4	93	ARG	NE-CZ	5.89	1.39	1.33
13	6	225	VAL	C-N	5.89	1.41	1.33
17	T	340	ARG	CZ-NH1	5.89	1.41	1.32
28	I	249	ARG	NE-CZ	5.89	1.39	1.33
4	D	113	ILE	N-CA	5.89	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	3	64	ALA	CA-C	-5.89	1.45	1.52
25	U	95	TYR	CA-C	-5.89	1.45	1.52
28	I	65	LEU	CA-CB	5.89	1.62	1.53
26	O	49	CYS	CA-C	-5.88	1.44	1.52
29	K	73	LEU	C-N	5.88	1.41	1.33
32	J	375	ARG	C-N	5.88	1.40	1.33
17	T	121	ARG	CZ-NH2	5.88	1.41	1.33
20	N	789	ILE	N-CA	-5.88	1.39	1.46
4	D	102	LEU	N-CA	-5.88	1.39	1.46
14	7	210	ARG	CD-NE	5.88	1.54	1.46
25	U	117	PRO	C-N	5.88	1.42	1.33
3	C	219	GLU	C-N	5.88	1.42	1.33
9	2	108	LEU	C-N	5.88	1.42	1.33
20	N	762	GLY	CA-C	-5.88	1.45	1.52
28	I	252	GLY	CA-C	5.88	1.58	1.52
30	L	123	ARG	NE-CZ	5.88	1.39	1.33
6	F	15	PRO	CA-C	5.88	1.61	1.52
8	1	36	ILE	CA-C	5.87	1.59	1.52
21	S	86	GLU	CA-C	-5.87	1.45	1.52
24	R	38	ARG	NE-CZ	5.87	1.39	1.33
21	S	399	ILE	N-CA	-5.87	1.39	1.46
24	R	210	SER	CA-CB	5.87	1.63	1.53
25	U	213	GLU	C-N	5.87	1.41	1.33
29	K	145	PRO	C-N	5.87	1.41	1.33
14	7	198	LEU	C-N	5.87	1.42	1.33
20	N	142	LEU	C-O	-5.87	1.17	1.24
28	I	84	GLN	N-CA	-5.87	1.38	1.46
20	N	601	ARG	NE-CZ	5.86	1.39	1.33
30	L	138	HIS	CA-C	-5.86	1.45	1.52
19	Z	647	GLY	CA-C	-5.86	1.45	1.52
23	Q	389	ASP	CA-CB	5.86	1.63	1.53
20	N	173	VAL	CA-C	5.86	1.58	1.52
7	G	132	PHE	CA-CB	5.86	1.62	1.53
14	7	156	ILE	CA-C	-5.86	1.45	1.52
12	5	151	GLY	C-N	5.86	1.41	1.33
22	P	28	LEU	CA-CB	5.86	1.61	1.53
28	I	142	ASP	CA-C	-5.86	1.45	1.52
1	A	150	GLN	C-N	5.85	1.40	1.33
4	D	139	ILE	CA-C	-5.85	1.46	1.52
16	V	77	GLN	CA-C	-5.85	1.45	1.52
21	S	291	ILE	C-O	-5.85	1.17	1.24
8	1	185	CYS	CA-C	5.85	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	K	354	LEU	CA-C	-5.85	1.45	1.52
7	G	43	LYS	CA-C	5.85	1.60	1.52
11	4	68	LYS	N-CA	-5.85	1.39	1.46
12	5	179	ARG	C-N	5.85	1.40	1.33
14	7	163	GLU	CA-C	5.85	1.56	1.53
19	Z	614	HIS	CB-CG	5.85	1.58	1.50
21	S	427	PRO	N-CA	-5.85	1.40	1.47
23	Q	108	GLU	C-N	5.85	1.41	1.33
30	L	107	LYS	CA-C	-5.85	1.44	1.52
31	M	433	LYS	C-N	5.85	1.40	1.33
23	Q	33	ARG	CZ-NH1	5.84	1.41	1.32
22	P	70	VAL	CA-CB	-5.84	1.47	1.54
5	E	51	GLU	N-CA	-5.84	1.38	1.45
20	N	328	ILE	N-CA	-5.84	1.39	1.46
21	S	172	MET	CA-C	-5.84	1.45	1.52
22	P	401	THR	CA-C	5.84	1.59	1.52
19	Z	688	ARG	N-CA	5.84	1.53	1.46
31	M	61	GLU	CA-CB	5.84	1.62	1.53
14	7	163	GLU	CA-CB	5.83	1.61	1.52
20	N	541	HIS	C-N	5.83	1.41	1.33
29	K	127	ASN	CA-CB	5.83	1.62	1.53
5	E	136	PRO	C-N	5.83	1.42	1.33
14	7	85	ARG	C-N	5.83	1.41	1.33
19	Z	83	ARG	CD-NE	5.83	1.54	1.46
19	Z	483	PHE	CA-C	-5.83	1.45	1.52
26	O	274	LEU	N-CA	-5.83	1.39	1.46
20	N	863	GLU	CA-C	-5.83	1.45	1.52
26	O	152	HIS	CB-CG	5.83	1.58	1.50
28	I	249	ARG	CA-C	-5.83	1.45	1.52
20	N	524	LYS	C-N	5.83	1.41	1.33
23	Q	266	ASP	CA-C	-5.83	1.44	1.52
27	H	260	LEU	CA-C	-5.83	1.45	1.52
32	J	112	CYS	C-N	5.83	1.41	1.33
28	I	81	ASN	CA-C	-5.83	1.45	1.52
28	I	118	ASP	CA-C	-5.83	1.45	1.52
32	J	349	GLU	C-O	-5.83	1.17	1.24
19	Z	489	TYR	CA-C	-5.82	1.45	1.52
20	N	812	ALA	N-CA	-5.82	1.38	1.46
21	S	88	ARG	CZ-NH1	5.82	1.41	1.32
28	I	307	ARG	NE-CZ	5.82	1.39	1.33
31	M	233	GLY	C-N	5.82	1.42	1.33
4	D	236	ALA	CA-C	-5.82	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	M	389	ARG	NE-CZ	5.82	1.39	1.33
9	2	62	ARG	NE-CZ	5.82	1.39	1.33
14	7	235	THR	C-N	5.82	1.41	1.33
19	Z	808	ASN	CA-CB	5.82	1.62	1.53
13	6	81	CYS	CA-CB	5.82	1.63	1.53
32	J	334	ARG	CD-NE	5.82	1.54	1.46
26	O	330	ARG	CA-C	-5.82	1.45	1.52
31	M	184	PRO	N-CD	-5.82	1.39	1.47
7	G	49	GLY	CA-C	-5.81	1.43	1.51
20	N	666	LYS	C-N	5.81	1.41	1.33
20	N	597	LYS	CA-C	-5.81	1.45	1.52
20	N	604	HIS	CG-CD2	5.81	1.42	1.35
27	H	205	GLY	N-CA	-5.81	1.37	1.45
3	C	226	ARG	NE-CZ	5.81	1.39	1.33
6	F	94	ASP	N-CA	-5.81	1.39	1.46
19	Z	346	ASP	CA-CB	5.80	1.62	1.53
20	N	834	SER	N-CA	-5.80	1.39	1.46
22	P	127	THR	C-N	5.80	1.41	1.33
25	U	156	GLU	C-O	-5.80	1.17	1.24
30	L	66	SER	C-N	5.80	1.41	1.33
3	C	92	LEU	N-CA	5.80	1.53	1.46
22	P	356	ASN	C-N	5.80	1.41	1.33
32	J	240	GLU	C-N	5.80	1.41	1.33
22	P	201	ARG	C-N	5.80	1.41	1.33
26	O	152	HIS	ND1-CE1	5.80	1.38	1.32
27	H	311	PRO	C-N	5.80	1.41	1.33
8	1	181	THR	CA-CB	5.80	1.62	1.53
25	U	250	TYR	CA-C	-5.80	1.45	1.52
31	M	173	SER	CA-CB	5.80	1.62	1.53
24	R	385	ARG	CZ-NH1	5.80	1.40	1.32
25	U	29	VAL	CA-CB	-5.80	1.48	1.54
10	3	33	GLN	N-CA	-5.80	1.38	1.46
13	6	48	SER	N-CA	-5.80	1.41	1.46
21	S	439	ARG	CA-CB	5.80	1.62	1.53
20	N	768	GLN	CA-C	-5.79	1.45	1.52
6	F	229	VAL	CA-CB	-5.79	1.46	1.54
21	S	169	ILE	CA-C	5.79	1.59	1.52
23	Q	264	PRO	CA-CB	-5.79	1.44	1.53
8	1	218	GLU	CA-C	-5.79	1.45	1.52
13	6	197	ARG	NE-CZ	5.79	1.39	1.33
30	L	118	THR	CA-C	-5.79	1.45	1.52
10	3	44	PRO	N-CA	-5.79	1.40	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	48	GLU	C-N	5.79	1.41	1.33
8	1	169	TYR	CA-CB	5.79	1.61	1.53
15	W	133	LYS	C-N	5.79	1.42	1.33
19	Z	113	MET	CA-C	-5.79	1.45	1.52
16	V	197	ASN	C-N	5.79	1.41	1.33
21	S	51	GLY	CA-C	-5.79	1.45	1.52
28	I	333	ARG	CA-C	-5.79	1.45	1.52
24	R	237	ARG	CA-CB	5.78	1.62	1.53
28	I	163	LEU	N-CA	-5.78	1.41	1.46
4	D	132	PRO	CA-CB	5.78	1.61	1.53
23	Q	250	SER	N-CA	-5.78	1.39	1.46
5	E	84	ASP	C-N	5.78	1.41	1.33
14	7	165	PHE	CA-C	-5.78	1.45	1.52
31	M	432	ALA	C-N	5.78	1.41	1.33
25	U	232	ASP	C-N	5.78	1.41	1.33
31	M	356	GLU	CA-C	5.78	1.59	1.52
19	Z	891	THR	CA-C	5.78	1.59	1.52
30	L	235	TYR	CA-C	-5.78	1.45	1.52
2	B	71	HIS	CA-C	-5.77	1.45	1.52
9	2	257	GLU	C-N	5.77	1.40	1.33
30	L	169	ASN	N-CA	-5.77	1.40	1.46
5	E	193	GLU	C-N	5.77	1.41	1.33
6	F	237	GLU	CA-CB	5.77	1.61	1.53
14	7	207	THR	C-N	5.77	1.41	1.33
7	G	223	GLY	CA-C	-5.77	1.43	1.51
19	Z	233	LEU	CA-C	-5.77	1.45	1.52
20	N	208	LEU	C-N	5.77	1.41	1.33
22	P	444	HIS	CA-CB	5.77	1.62	1.53
16	V	36	LEU	CA-CB	5.77	1.62	1.53
19	Z	92	VAL	C-N	-5.77	1.27	1.34
31	M	188	TYR	N-CA	-5.77	1.37	1.46
20	N	883	ARG	CD-NE	5.77	1.54	1.46
21	S	80	LYS	C-N	5.77	1.41	1.33
1	A	26	GLU	C-N	5.76	1.42	1.34
19	Z	113	MET	CA-CB	5.76	1.60	1.53
20	N	107	HIS	CG-ND1	-5.76	1.31	1.38
20	N	635	SER	CA-C	-5.76	1.45	1.52
21	S	78	LEU	CA-C	-5.76	1.45	1.52
28	I	135	ILE	CA-CB	5.76	1.60	1.53
28	I	430	LYS	N-CA	-5.76	1.39	1.46
12	5	120	ARG	CD-NE	5.76	1.54	1.46
28	I	93	GLU	CA-CB	5.76	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	E	186	HIS	CG-CD2	5.76	1.42	1.35
22	P	233	LEU	CA-CB	5.76	1.62	1.53
16	V	178	THR	N-CA	-5.76	1.39	1.46
21	S	60	GLN	CA-CB	5.76	1.62	1.53
24	R	216	TYR	CA-C	-5.76	1.45	1.52
27	H	161	VAL	N-CA	-5.76	1.39	1.46
6	F	82	ARG	NE-CZ	5.76	1.39	1.33
20	N	502	TYR	CA-C	-5.76	1.44	1.52
31	M	226	VAL	C-N	5.76	1.41	1.33
2	B	110	LEU	CA-C	-5.75	1.45	1.52
28	I	65	LEU	CB-CG	5.75	1.65	1.53
9	2	50	VAL	CA-C	-5.75	1.46	1.52
19	Z	596	ASP	CA-C	-5.75	1.45	1.52
20	N	559	ARG	CZ-NH2	5.75	1.41	1.33
29	K	91	GLN	N-CA	-5.75	1.39	1.46
29	K	342	ARG	CD-NE	5.75	1.54	1.46
31	M	285	ILE	N-CA	-5.75	1.39	1.46
17	T	269	THR	CA-C	-5.75	1.45	1.52
20	N	586	VAL	C-N	-5.75	1.26	1.33
28	I	146	PRO	C-N	5.75	1.42	1.33
21	S	102	ARG	NE-CZ	5.75	1.39	1.33
22	P	95	SER	CA-C	-5.75	1.45	1.52
3	C	235	GLN	C-N	5.75	1.41	1.34
5	E	157	ASP	CA-CB	5.75	1.61	1.53
7	G	229	PRO	N-CD	-5.75	1.39	1.47
25	U	156	GLU	CA-C	-5.75	1.45	1.52
32	J	310	ARG	CD-NE	5.75	1.54	1.46
11	4	45	LEU	N-CA	-5.74	1.38	1.46
21	S	284	TYR	CA-CB	5.74	1.62	1.53
28	I	254	GLU	N-CA	-5.74	1.39	1.46
5	E	110	GLU	C-N	5.74	1.41	1.33
19	Z	82	ILE	CA-C	5.74	1.59	1.52
23	Q	37	GLU	CA-C	-5.74	1.45	1.52
31	M	180	VAL	CA-C	-5.74	1.45	1.52
12	5	162	GLY	CA-C	-5.74	1.45	1.52
17	T	330	ASP	C-N	5.74	1.41	1.33
22	P	55	ARG	NE-CZ	5.74	1.39	1.33
26	O	154	ARG	CD-NE	5.74	1.54	1.46
32	J	13	GLU	N-CA	-5.74	1.38	1.46
4	D	68	ASN	C-N	5.74	1.41	1.33
29	K	298	GLY	C-O	5.74	1.30	1.23
29	K	366	ARG	CD-NE	5.74	1.54	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	M	121	LYS	C-N	5.74	1.41	1.33
24	R	176	ARG	CZ-NH1	5.74	1.40	1.32
27	H	431	THR	CA-C	-5.74	1.45	1.52
20	N	628	ARG	NE-CZ	5.74	1.39	1.33
31	M	387	LEU	C-N	5.74	1.41	1.33
20	N	639	LEU	N-CA	-5.73	1.39	1.46
4	D	108	VAL	CA-C	-5.73	1.46	1.52
15	W	20	ASP	C-N	5.73	1.41	1.33
19	Z	305	LEU	C-N	5.73	1.41	1.33
8	1	83	ALA	C-N	5.73	1.41	1.33
20	N	888	GLN	CA-CB	5.73	1.61	1.53
22	P	39	ARG	NE-CZ	5.73	1.39	1.33
30	L	180	PRO	CA-C	-5.73	1.48	1.52
22	P	276	LEU	C-N	5.73	1.41	1.33
23	Q	83	ALA	N-CA	-5.73	1.39	1.46
24	R	378	ASN	CA-C	-5.73	1.45	1.52
3	C	223	THR	N-CA	-5.73	1.38	1.46
6	F	143	HIS	CG-ND1	5.73	1.44	1.38
13	6	148	VAL	C-N	5.73	1.41	1.33
19	Z	229	VAL	CA-CB	5.73	1.61	1.54
19	Z	592	ASN	C-N	5.73	1.41	1.33
22	P	97	LEU	C-N	5.73	1.41	1.33
22	P	304	ASP	C-N	5.73	1.41	1.33
26	O	154	ARG	NE-CZ	5.73	1.39	1.33
21	S	364	ARG	CZ-NH2	5.73	1.40	1.33
28	I	371	ARG	NE-CZ	5.72	1.39	1.33
29	K	402	ALA	CA-C	-5.72	1.45	1.52
19	Z	356	ASN	C-N	5.72	1.41	1.33
20	N	685	GLN	CA-C	-5.72	1.45	1.52
26	O	226	ARG	N-CA	-5.72	1.38	1.45
30	L	314	HIS	CD2-NE2	5.72	1.44	1.37
31	M	131	THR	C-N	5.72	1.42	1.33
6	F	105	VAL	CA-CB	-5.72	1.47	1.54
12	5	123	ARG	N-CA	-5.72	1.39	1.46
24	R	331	ASP	CA-CB	5.72	1.62	1.53
11	4	29	LYS	N-CA	-5.72	1.39	1.46
32	J	151	ILE	CA-C	-5.72	1.45	1.52
3	C	240	HIS	CA-C	-5.72	1.45	1.52
23	Q	137	TYR	C-N	5.72	1.41	1.33
31	M	121	LYS	CA-C	-5.72	1.45	1.52
6	F	101	ARG	CA-C	-5.71	1.45	1.52
22	P	129	ARG	CA-C	-5.71	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	H	322	ASN	N-CA	-5.71	1.38	1.46
8	1	213	GLN	N-CA	-5.71	1.39	1.46
13	6	87	ASP	CA-C	-5.71	1.45	1.52
2	B	136	ILE	N-CA	-5.71	1.39	1.46
14	7	166	LEU	CA-CB	5.71	1.60	1.53
23	Q	403	THR	C-N	5.71	1.41	1.33
20	N	155	LEU	CA-C	-5.71	1.45	1.52
11	4	159	LEU	N-CA	-5.71	1.39	1.46
22	P	86	ASN	CA-C	-5.71	1.45	1.52
2	B	155	TYR	CA-C	-5.71	1.45	1.52
2	B	160	ALA	CA-C	-5.71	1.45	1.52
15	W	169	HIS	CG-CD2	5.71	1.42	1.35
20	N	369	THR	CA-CB	-5.71	1.44	1.53
22	P	70	VAL	N-CA	-5.71	1.39	1.46
26	O	19	ALA	C-N	5.71	1.41	1.33
27	H	398	ARG	NE-CZ	5.71	1.39	1.33
24	R	302	HIS	ND1-CE1	5.71	1.38	1.32
21	S	322	GLN	CA-C	-5.70	1.45	1.52
26	O	336	VAL	N-CA	-5.70	1.39	1.46
25	U	89	GLU	N-CA	-5.70	1.39	1.46
14	7	168	TYR	CA-C	-5.70	1.46	1.52
29	K	116	LEU	C-N	5.70	1.41	1.33
32	J	201	ARG	NE-CZ	5.70	1.39	1.33
32	J	252	ASP	CA-CB	5.70	1.61	1.53
7	G	108	PRO	CA-C	-5.70	1.46	1.52
15	W	110	ILE	CA-C	5.70	1.59	1.52
20	N	124	LYS	C-N	5.70	1.41	1.34
24	R	41	LEU	CA-CB	5.70	1.62	1.53
28	I	220	LYS	CA-CB	5.70	1.62	1.54
28	I	343	ARG	CD-NE	5.70	1.54	1.46
5	E	65	GLU	CA-C	-5.69	1.46	1.53
12	5	190	GLY	C-N	5.69	1.41	1.33
22	P	382	LEU	CA-C	-5.69	1.45	1.52
15	W	42	ARG	CD-NE	5.69	1.54	1.46
20	N	341	PHE	CA-CB	5.69	1.62	1.53
26	O	38	THR	CA-C	-5.69	1.45	1.52
10	3	77	LYS	N-CA	-5.69	1.39	1.46
24	R	178	ASN	CA-C	-5.69	1.45	1.52
3	C	103	GLU	C-O	-5.69	1.19	1.24
6	F	178	GLU	CA-C	-5.69	1.45	1.52
23	Q	236	PHE	CA-CB	5.69	1.62	1.53
24	R	358	ARG	N-CA	-5.69	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	245	ALA	N-CA	-5.69	1.39	1.46
7	G	155	SER	CA-C	-5.69	1.45	1.52
32	J	303	SER	CA-C	-5.69	1.45	1.52
12	5	216	ARG	NE-CZ	5.68	1.39	1.33
23	Q	38	ASN	N-CA	-5.68	1.38	1.45
23	Q	175	LYS	C-N	5.68	1.41	1.33
2	B	63	HIS	CA-C	-5.68	1.45	1.52
7	G	177	ILE	CA-CB	5.68	1.61	1.54
19	Z	493	ASN	CA-C	-5.68	1.45	1.52
22	P	446	ILE	C-N	5.68	1.41	1.33
29	K	97	ASP	CA-C	-5.68	1.45	1.52
23	Q	71	LYS	C-N	5.68	1.41	1.34
15	W	167	GLY	N-CA	5.68	1.52	1.45
20	N	448	LEU	C-N	5.68	1.41	1.33
21	S	141	LEU	C-O	-5.68	1.16	1.24
22	P	297	GLU	CA-CB	5.68	1.62	1.53
17	T	257	GLU	CA-CB	5.68	1.63	1.53
1	A	187	PHE	C-N	5.68	1.41	1.33
23	Q	344	ARG	NE-CZ	5.68	1.39	1.33
27	H	188	ARG	C-N	5.68	1.41	1.33
20	N	189	GLN	CA-CB	5.67	1.62	1.54
21	S	232	ARG	CZ-NH2	5.67	1.40	1.33
11	4	7	ILE	CA-C	-5.67	1.45	1.52
30	L	149	ILE	C-N	5.67	1.38	1.33
16	V	208	ARG	CZ-NH1	5.67	1.40	1.32
19	Z	536	SER	C-N	5.67	1.41	1.33
24	R	23	ARG	CZ-NH2	5.67	1.40	1.33
23	Q	400	ALA	CA-C	-5.67	1.45	1.52
24	R	87	GLU	C-N	5.67	1.41	1.33
5	E	219	THR	CA-C	-5.67	1.45	1.52
11	4	161	ARG	CA-CB	5.67	1.62	1.53
17	T	193	GLN	CA-C	-5.67	1.45	1.52
13	6	169	SER	CA-CB	5.66	1.63	1.53
30	L	133	VAL	N-CA	-5.66	1.39	1.46
31	M	349	GLY	C-N	5.66	1.42	1.33
16	V	74	ALA	CA-C	-5.66	1.45	1.52
28	I	297	SER	CA-C	-5.66	1.45	1.53
5	E	65	GLU	C-N	5.66	1.43	1.33
8	1	106	PRO	CA-C	-5.66	1.46	1.52
10	3	152	SER	C-N	5.66	1.41	1.34
19	Z	413	SER	CA-CB	5.66	1.62	1.53
25	U	16	LEU	N-CA	-5.66	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	J	117	ARG	CZ-NH1	5.66	1.40	1.32
3	C	218	ARG	NE-CZ	5.66	1.39	1.33
5	E	177	ALA	N-CA	-5.66	1.39	1.46
19	Z	204	ALA	N-CA	5.66	1.53	1.46
22	P	408	ARG	CZ-NH2	5.66	1.40	1.33
28	I	136	LEU	C-N	5.66	1.41	1.33
29	K	92	PHE	N-CA	-5.66	1.39	1.46
30	L	125	LEU	C-O	-5.66	1.19	1.25
31	M	229	TYR	CA-C	5.66	1.59	1.52
23	Q	202	CYS	CA-CB	5.66	1.60	1.53
28	I	258	LYS	CA-CB	-5.66	1.44	1.53
32	J	241	HIS	CG-ND1	5.66	1.44	1.38
20	N	604	HIS	C-N	5.66	1.41	1.33
23	Q	292	GLN	C-N	5.65	1.41	1.33
24	R	221	THR	CA-C	-5.65	1.45	1.52
24	R	336	ARG	CA-C	-5.65	1.45	1.52
9	2	68	VAL	CA-C	-5.65	1.45	1.52
19	Z	228	LYS	N-CA	-5.65	1.39	1.46
19	Z	520	LEU	CB-CG	5.65	1.64	1.53
19	Z	544	GLU	N-CA	-5.65	1.39	1.46
29	K	306	LYS	CA-C	-5.65	1.45	1.53
19	Z	300	ARG	N-CA	-5.65	1.39	1.46
22	P	129	ARG	CD-NE	5.65	1.54	1.46
23	Q	149	LEU	CA-CB	5.65	1.62	1.53
25	U	12	HIS	ND1-CE1	5.65	1.38	1.32
31	M	47	ARG	NE-CZ	5.65	1.39	1.33
13	6	207	ILE	CA-CB	-5.65	1.46	1.54
19	Z	741	LEU	CA-C	-5.65	1.45	1.52
22	P	180	LYS	CA-CB	5.64	1.62	1.53
10	3	162	HIS	CA-C	-5.64	1.45	1.52
20	N	579	ARG	CZ-NH1	5.64	1.40	1.32
28	I	383	LEU	C-N	5.64	1.41	1.33
2	B	105	ILE	N-CA	-5.64	1.41	1.47
8	1	115	LEU	CA-CB	-5.64	1.44	1.53
17	T	169	ARG	CD-NE	5.64	1.54	1.46
19	Z	369	ARG	CZ-NH1	5.64	1.40	1.32
22	P	145	LEU	C-O	-5.64	1.17	1.24
26	O	284	ARG	CD-NE	5.64	1.54	1.46
16	V	232	GLN	C-N	5.63	1.41	1.33
22	P	130	MET	C-N	5.63	1.40	1.34
25	U	19	VAL	CA-C	-5.63	1.45	1.52
29	K	227	PHE	CA-CB	5.63	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	M	325	PRO	CA-CB	-5.63	1.45	1.53
20	N	394	ALA	C-N	5.63	1.41	1.33
5	E	238	ILE	N-CA	5.63	1.53	1.46
22	P	21	SER	N-CA	-5.63	1.39	1.46
19	Z	297	MET	C-N	5.63	1.41	1.33
22	P	246	HIS	CB-CG	5.63	1.58	1.50
27	H	305	GLN	C-N	5.63	1.41	1.33
30	L	322	ALA	CA-CB	-5.63	1.44	1.53
20	N	701	ILE	CA-CB	5.63	1.60	1.54
21	S	335	LEU	CA-C	-5.63	1.45	1.52
3	C	207	SER	CA-CB	5.63	1.62	1.53
19	Z	584	SER	N-CA	-5.63	1.39	1.46
27	H	250	VAL	C-N	5.63	1.41	1.33
32	J	229	ARG	CA-CB	5.63	1.62	1.53
20	N	903	PHE	C-N	5.62	1.41	1.33
24	R	206	SER	CA-C	-5.62	1.45	1.52
28	I	265	LYS	CA-C	-5.62	1.45	1.52
6	F	197	GLU	CA-C	-5.62	1.45	1.52
13	6	35	ASN	C-N	5.62	1.41	1.33
16	V	218	LEU	C-N	5.62	1.40	1.33
19	Z	582	VAL	CA-CB	-5.62	1.47	1.54
21	S	453	TYR	CA-C	-5.62	1.45	1.52
20	N	459	ASP	CA-CB	5.62	1.62	1.53
20	N	483	LEU	N-CA	-5.62	1.39	1.46
22	P	289	ARG	CZ-NH2	5.62	1.40	1.33
27	H	345	LEU	CA-CB	5.62	1.61	1.53
15	W	4	GLU	CA-C	-5.62	1.45	1.52
16	V	294	SER	C-N	5.62	1.41	1.33
19	Z	394	ASP	N-CA	-5.61	1.39	1.46
19	Z	888	LEU	CA-CB	5.61	1.61	1.53
25	U	80	GLY	N-CA	-5.61	1.38	1.45
31	M	123	LYS	C-N	5.61	1.40	1.33
32	J	249	ASP	CA-C	-5.61	1.46	1.52
3	C	16	GLY	CA-C	5.61	1.59	1.51
15	W	55	ALA	CA-C	-5.61	1.45	1.52
20	N	759	SER	C-N	5.61	1.40	1.33
26	O	2	LYS	N-CA	-5.61	1.39	1.46
26	O	257	GLN	CA-CB	5.61	1.62	1.53
31	M	315	GLU	C-O	-5.61	1.17	1.24
3	C	154	GLY	N-CA	5.61	1.53	1.45
7	G	202	HIS	CB-CG	-5.61	1.42	1.50
11	4	14	LEU	CA-C	-5.61	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	V	178	THR	C-O	-5.61	1.17	1.23
19	Z	80	ARG	CD-NE	5.61	1.54	1.46
27	H	173	THR	N-CA	5.61	1.52	1.45
32	J	375	ARG	NE-CZ	5.60	1.39	1.33
5	E	44	GLU	C-N	5.60	1.38	1.32
25	U	121	LEU	C-N	5.60	1.40	1.33
32	J	82	LYS	CA-C	5.60	1.61	1.52
24	R	184	GLN	C-N	5.60	1.40	1.33
5	E	153	LEU	CA-C	-5.59	1.45	1.52
22	P	244	CYS	CA-CB	5.59	1.62	1.53
8	1	201	GLY	C-N	5.59	1.41	1.33
10	3	199	THR	N-CA	-5.59	1.39	1.46
22	P	325	GLY	CA-C	-5.59	1.45	1.52
25	U	221	PRO	CA-CB	-5.59	1.46	1.53
21	S	455	GLN	CA-CB	5.59	1.62	1.53
29	K	274	ARG	CA-CB	5.59	1.61	1.53
32	J	155	ASP	C-O	5.59	1.31	1.24
28	I	393	ALA	C-N	5.59	1.41	1.33
30	L	282	ASP	CA-CB	5.59	1.62	1.53
10	3	90	MET	C-N	5.59	1.40	1.33
19	Z	312	GLU	N-CA	5.59	1.54	1.46
20	N	504	ASP	CA-CB	5.59	1.61	1.53
30	L	149	ILE	CB-CG1	5.59	1.64	1.53
19	Z	178	LYS	C-N	5.58	1.41	1.33
19	Z	724	ASN	CA-CB	5.58	1.62	1.53
31	M	438	LEU	C-N	5.58	1.40	1.33
16	V	261	GLU	N-CA	-5.58	1.40	1.46
20	N	817	LEU	CA-C	-5.58	1.45	1.52
24	R	4	GLU	N-CA	-5.58	1.39	1.46
4	D	219	ARG	C-N	5.58	1.42	1.33
31	M	425	GLU	N-CA	-5.58	1.39	1.46
19	Z	881	GLU	CA-C	5.58	1.60	1.52
27	H	216	GLY	C-O	-5.58	1.16	1.24
1	A	215	ILE	CB-CG1	5.58	1.64	1.53
10	3	34	MET	CA-C	5.58	1.60	1.52
10	3	50	TYR	N-CA	-5.58	1.39	1.46
27	H	335	GLY	CA-C	-5.58	1.44	1.51
28	I	411	ARG	CD-NE	5.58	1.54	1.46
31	M	95	ASN	CA-C	-5.58	1.45	1.52
31	M	194	LEU	C-N	5.58	1.41	1.33
4	D	204	VAL	CA-CB	-5.58	1.46	1.54
25	U	55	ALA	CA-C	-5.58	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	O	226	ARG	CD-NE	5.58	1.54	1.46
32	J	156	LYS	CA-C	-5.58	1.45	1.52
17	T	145	ILE	CA-CB	-5.58	1.47	1.54
20	N	371	ILE	CA-CB	5.58	1.61	1.54
32	J	100	ASP	N-CA	-5.58	1.39	1.45
32	J	309	GLY	CA-C	-5.58	1.43	1.51
4	D	181	ASN	CA-C	-5.57	1.45	1.52
19	Z	549	GLU	CA-CB	5.57	1.61	1.53
19	Z	844	VAL	N-CA	-5.57	1.39	1.46
19	Z	885	GLU	N-CA	-5.57	1.39	1.46
20	N	437	TYR	CA-CB	5.57	1.61	1.53
28	I	286	GLU	N-CA	5.57	1.53	1.46
32	J	198	LEU	CA-CB	5.57	1.61	1.53
6	F	127	PRO	CA-CB	-5.57	1.47	1.53
13	6	236	PRO	CA-C	5.57	1.58	1.52
19	Z	344	VAL	CA-C	-5.57	1.47	1.52
6	F	83	LEU	CA-C	-5.57	1.45	1.52
19	Z	708	ASP	CA-C	-5.57	1.45	1.52
20	N	867	LYS	CA-CB	5.57	1.61	1.53
26	O	200	LEU	CA-C	-5.57	1.45	1.52
24	R	302	HIS	CG-CD2	5.57	1.42	1.35
11	4	145	ARG	NE-CZ	5.57	1.39	1.33
22	P	260	SER	C-O	-5.57	1.17	1.24
24	R	287	LEU	CA-C	-5.57	1.45	1.52
27	H	255	ARG	CD-NE	5.57	1.54	1.46
7	G	127	SER	CA-C	-5.57	1.45	1.52
20	N	665	ASN	N-CA	5.57	1.52	1.46
28	I	164	MET	C-N	5.57	1.41	1.33
28	I	343	ARG	CZ-NH1	5.56	1.40	1.32
21	S	194	GLN	N-CA	-5.56	1.39	1.46
29	K	48	GLN	CD-NE2	5.56	1.45	1.33
24	R	90	ASP	CA-C	-5.56	1.45	1.52
25	U	15	VAL	C-N	5.56	1.41	1.33
29	K	401	LYS	C-N	5.56	1.41	1.33
20	N	167	ILE	C-N	5.56	1.41	1.33
29	K	385	LEU	N-CA	-5.56	1.39	1.46
32	J	71	SER	C-N	5.56	1.41	1.33
20	N	23	ALA	N-CA	-5.56	1.39	1.46
6	F	157	ARG	C-N	5.55	1.40	1.33
20	N	105	ILE	CA-C	5.55	1.59	1.52
27	H	333	ARG	CD-NE	5.55	1.54	1.46
32	J	258	ARG	CD-NE	5.55	1.54	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	125	GLY	CA-C	-5.55	1.43	1.51
17	T	321	PHE	CA-CB	5.55	1.61	1.53
21	S	444	GLU	CA-C	-5.55	1.45	1.52
27	H	333	ARG	C-N	5.55	1.40	1.33
31	M	247	THR	N-CA	-5.55	1.39	1.46
6	F	14	SER	CA-C	-5.55	1.44	1.52
19	Z	331	LEU	N-CA	-5.55	1.38	1.46
26	O	87	MET	N-CA	-5.55	1.39	1.45
32	J	251	ILE	C-N	5.55	1.41	1.33
1	A	182	LYS	N-CA	-5.54	1.39	1.46
26	O	356	TRP	N-CA	-5.54	1.39	1.46
30	L	73	GLU	N-CA	-5.54	1.39	1.45
31	M	281	LYS	CA-C	-5.54	1.45	1.52
8	1	52	ARG	N-CA	-5.54	1.39	1.46
14	7	238	GLU	CA-C	-5.54	1.46	1.52
21	S	106	HIS	CG-CD2	-5.54	1.29	1.35
23	Q	180	LEU	C-N	5.54	1.41	1.33
28	I	94	GLU	CA-C	-5.54	1.45	1.52
1	A	117	ARG	NE-CZ	5.54	1.39	1.33
21	S	359	LEU	N-CA	-5.54	1.39	1.46
1	A	43	ARG	N-CA	-5.53	1.39	1.46
8	1	131	ILE	N-CA	-5.53	1.39	1.46
9	2	72	LYS	CA-CB	-5.53	1.44	1.53
19	Z	33	ARG	CA-C	-5.53	1.46	1.53
32	J	375	ARG	CA-C	-5.53	1.45	1.53
1	A	12	HIS	ND1-CE1	5.53	1.38	1.32
19	Z	552	ASP	CA-CB	5.53	1.62	1.53
20	N	572	ARG	CD-NE	5.53	1.53	1.46
6	F	35	THR	C-N	5.53	1.41	1.33
20	N	601	ARG	CA-C	-5.53	1.45	1.52
21	S	155	LEU	CA-C	5.53	1.60	1.52
31	M	389	ARG	CZ-NH1	5.53	1.40	1.32
20	N	794	ASP	CA-CB	5.53	1.60	1.53
23	Q	359	ALA	N-CA	-5.53	1.39	1.46
11	4	77	PRO	CA-CB	-5.52	1.46	1.53
14	7	134	SER	CA-C	-5.52	1.45	1.52
22	P	446	ILE	CA-CB	5.52	1.60	1.54
23	Q	229	TYR	N-CA	-5.52	1.39	1.46
27	H	411	GLU	N-CA	-5.52	1.39	1.46
3	C	63	GLU	CA-CB	5.52	1.64	1.54
22	P	137	TYR	CA-C	-5.52	1.45	1.52
26	O	289	ARG	CA-CB	5.52	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	G	56	SER	C-N	5.52	1.42	1.33
10	3	99	ARG	CZ-NH2	5.52	1.40	1.33
12	5	132	ARG	NE-CZ	5.52	1.39	1.33
19	Z	740	ARG	CA-C	-5.52	1.45	1.52
20	N	538	GLU	C-N	5.52	1.41	1.33
23	Q	343	SER	N-CA	-5.52	1.39	1.46
24	R	251	HIS	ND1-CE1	5.52	1.38	1.32
28	I	432	GLU	N-CA	5.52	1.53	1.46
32	J	297	ARG	CZ-NH1	5.52	1.40	1.32
2	B	117	VAL	CA-CB	5.52	1.61	1.54
3	C	96	ARG	C-N	5.52	1.41	1.33
20	N	789	ILE	CA-C	-5.52	1.45	1.52
23	Q	314	ARG	NE-CZ	5.52	1.39	1.33
30	L	387	LYS	C-N	5.52	1.40	1.34
2	B	95	GLN	C-O	-5.52	1.17	1.24
32	J	149	GLU	C-N	5.52	1.40	1.33
2	B	183	GLU	CA-CB	5.51	1.62	1.53
14	7	195	ARG	CA-CB	5.51	1.61	1.53
23	Q	78	ASN	CA-CB	5.51	1.61	1.53
31	M	200	GLU	CA-CB	5.51	1.62	1.53
9	2	246	ARG	CZ-NH1	5.51	1.40	1.32
13	6	164	ALA	CA-CB	5.51	1.63	1.53
23	Q	410	VAL	CA-CB	-5.51	1.47	1.54
25	U	203	SER	CA-C	-5.51	1.45	1.52
3	C	15	GLU	CA-C	-5.51	1.44	1.52
20	N	744	VAL	CA-C	-5.51	1.46	1.52
29	K	162	VAL	CA-C	-5.51	1.47	1.53
8	1	78	ARG	CZ-NH2	5.51	1.40	1.33
19	Z	255	VAL	CA-C	5.51	1.59	1.52
21	S	449	HIS	CG-ND1	5.51	1.44	1.38
24	R	359	PRO	CA-CB	-5.51	1.46	1.53
13	6	92	THR	N-CA	-5.51	1.39	1.46
30	L	122	MET	CA-CB	5.51	1.62	1.53
12	5	237	HIS	CB-CG	-5.51	1.42	1.50
13	6	59	GLY	CA-C	-5.51	1.45	1.51
5	E	123	PHE	CA-CB	5.50	1.62	1.53
21	S	68	LEU	CA-C	-5.50	1.45	1.52
23	Q	135	SER	CA-CB	5.50	1.61	1.53
23	Q	269	ALA	CA-CB	5.50	1.61	1.53
29	K	371	SER	CA-C	-5.50	1.45	1.53
11	4	127	ALA	CA-CB	5.50	1.62	1.53
21	S	261	ASP	CA-CB	5.50	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	U	208	ILE	N-CA	-5.50	1.39	1.46
26	O	13	SER	CA-CB	5.50	1.61	1.53
31	M	135	TYR	CA-C	-5.50	1.45	1.52
9	2	247	CYS	N-CA	-5.50	1.39	1.45
28	I	116	ILE	CB-CG1	5.50	1.64	1.53
32	J	135	VAL	CA-C	5.50	1.59	1.52
3	C	50	ARG	N-CA	-5.50	1.39	1.46
7	G	161	TYR	C-N	5.50	1.42	1.33
10	3	185	VAL	C-N	5.50	1.41	1.33
14	7	153	THR	CA-C	-5.50	1.45	1.52
20	N	210	LYS	C-N	5.50	1.40	1.33
22	P	13	ILE	C-O	-5.50	1.18	1.24
24	R	20	ALA	C-N	5.50	1.41	1.34
26	O	70	ARG	NE-CZ	5.50	1.39	1.33
27	H	172	VAL	CA-C	-5.50	1.45	1.52
31	M	114	ILE	CA-CB	5.50	1.60	1.54
31	M	129	THR	CA-CB	5.50	1.62	1.53
3	C	114	LEU	N-CA	5.50	1.53	1.46
23	Q	8	GLU	C-N	5.50	1.40	1.33
25	U	179	ILE	C-N	5.50	1.41	1.33
32	J	44	ARG	NE-CZ	5.50	1.39	1.33
27	H	194	PRO	N-CD	-5.49	1.40	1.47
28	I	248	LEU	CA-C	5.49	1.59	1.52
30	L	174	GLN	C-N	5.49	1.41	1.33
19	Z	711	SER	N-CA	5.49	1.53	1.46
19	Z	845	ARG	CA-C	-5.49	1.45	1.52
20	N	726	ALA	N-CA	5.49	1.52	1.46
30	L	247	ASP	CA-C	-5.49	1.46	1.52
32	J	332	HIS	C-N	5.49	1.40	1.33
7	G	20	ARG	CD-NE	5.49	1.53	1.46
30	L	212	VAL	CA-CB	-5.49	1.47	1.54
20	N	595	ASN	CA-C	-5.48	1.45	1.52
29	K	243	GLY	N-CA	-5.48	1.40	1.44
4	D	71	MET	CA-C	-5.48	1.45	1.52
16	V	228	GLY	C-O	5.48	1.30	1.23
30	L	127	ARG	CZ-NH2	5.48	1.40	1.33
31	M	123	LYS	N-CA	-5.48	1.39	1.46
1	A	238	HIS	N-CA	5.48	1.53	1.46
23	Q	31	VAL	C-N	5.48	1.41	1.33
24	R	179	ARG	CZ-NH1	5.48	1.40	1.32
25	U	157	HIS	CG-ND1	5.48	1.44	1.38
32	J	310	ARG	NE-CZ	5.48	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	6	64	THR	CA-C	-5.48	1.46	1.52
21	S	412	ARG	C-N	5.48	1.41	1.33
8	1	172	VAL	CA-CB	-5.48	1.47	1.54
15	W	130	ARG	CD-NE	5.48	1.53	1.46
19	Z	405	HIS	CE1-NE2	-5.48	1.27	1.32
24	R	137	ARG	NE-CZ	5.48	1.39	1.33
8	1	187	GLN	C-O	5.48	1.30	1.24
1	A	15	ILE	N-CA	5.47	1.53	1.46
6	F	89	ARG	CZ-NH1	5.47	1.40	1.32
19	Z	282	PHE	CA-C	-5.47	1.45	1.52
20	N	706	VAL	N-CA	-5.47	1.39	1.46
20	N	946	GLU	CA-C	5.47	1.59	1.52
24	R	237	ARG	CD-NE	5.47	1.53	1.46
26	O	85	ARG	CD-NE	5.47	1.53	1.46
6	F	219	LEU	N-CA	-5.47	1.39	1.46
17	T	236	GLU	C-O	-5.47	1.17	1.24
20	N	331	GLY	N-CA	-5.47	1.36	1.45
20	N	713	TYR	CA-CB	5.47	1.61	1.53
22	P	163	ALA	C-N	5.47	1.40	1.33
22	P	233	LEU	C-N	5.47	1.41	1.33
25	U	219	LYS	C-N	5.47	1.41	1.33
29	K	335	LEU	CA-CB	5.47	1.62	1.53
1	A	109	ILE	CA-C	-5.47	1.47	1.52
15	W	118	GLU	C-N	5.47	1.41	1.33
22	P	270	VAL	CA-C	5.47	1.59	1.52
24	R	264	TYR	CA-CB	5.47	1.61	1.53
4	D	29	GLY	CA-C	-5.47	1.44	1.51
19	Z	213	GLN	N-CA	-5.47	1.39	1.46
31	M	44	ILE	N-CA	-5.47	1.39	1.46
22	P	432	LEU	C-N	5.47	1.41	1.33
27	H	401	ARG	CZ-NH1	5.47	1.40	1.32
12	5	61	THR	C-N	5.46	1.41	1.33
22	P	386	VAL	CA-C	-5.46	1.46	1.52
24	R	310	SER	C-N	5.46	1.41	1.33
31	M	130	SER	N-CA	-5.46	1.39	1.46
20	N	765	VAL	C-N	5.46	1.41	1.34
21	S	492	PHE	C-N	-5.46	1.26	1.33
24	R	114	ILE	CA-CB	-5.46	1.46	1.54
32	J	224	ILE	C-N	5.46	1.39	1.32
7	G	109	LEU	CA-C	-5.46	1.45	1.52
20	N	98	GLU	CA-C	-5.46	1.45	1.52
32	J	249	ASP	C-N	5.46	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	218	GLY	N-CA	-5.46	1.37	1.45
20	N	337	LEU	C-N	5.46	1.41	1.34
20	N	387	ARG	CA-CB	5.46	1.61	1.53
26	O	118	ILE	CA-CB	5.46	1.61	1.54
1	A	201	CYS	N-CA	-5.46	1.39	1.46
10	3	176	ASP	N-CA	-5.46	1.39	1.46
20	N	8	ILE	CA-C	5.46	1.59	1.52
22	P	104	MET	C-N	5.46	1.40	1.33
19	Z	47	GLU	CA-C	-5.45	1.45	1.52
21	S	98	PRO	CA-CB	-5.45	1.46	1.53
23	Q	13	GLN	N-CA	-5.45	1.39	1.46
30	L	330	HIS	ND1-CE1	5.45	1.38	1.32
28	I	403	GLY	C-N	5.45	1.41	1.33
1	A	138	MET	CA-C	-5.45	1.46	1.52
14	7	247	LEU	C-N	5.45	1.41	1.33
21	S	492	PHE	CA-CB	5.45	1.60	1.53
24	R	355	GLU	CA-CB	5.45	1.62	1.53
27	H	211	GLY	N-CA	-5.45	1.39	1.45
30	L	92	ARG	CZ-NH2	5.45	1.40	1.33
32	J	22	GLN	C-N	5.45	1.40	1.33
7	G	73	HIS	CE1-NE2	-5.45	1.27	1.32
9	2	204	ALA	C-N	5.45	1.40	1.33
19	Z	227	SER	C-N	5.45	1.41	1.33
19	Z	267	ARG	CZ-NH2	5.45	1.40	1.33
21	S	55	ALA	CA-CB	5.45	1.59	1.52
21	S	246	LEU	CA-C	-5.45	1.45	1.52
30	L	310	ASP	CA-CB	5.45	1.62	1.53
32	J	57	ARG	NE-CZ	5.45	1.39	1.33
22	P	76	GLU	CA-CB	5.45	1.61	1.53
1	A	193	GLN	CA-C	-5.45	1.45	1.52
10	3	26	ARG	NE-CZ	5.45	1.39	1.33
22	P	420	ASP	N-CA	-5.45	1.39	1.45
27	H	146	LYS	CA-C	-5.45	1.46	1.52
31	M	176	LYS	CA-CB	5.45	1.61	1.53
32	J	241	HIS	N-CA	-5.45	1.39	1.46
32	J	248	MET	CA-C	-5.45	1.46	1.52
17	T	343	ILE	N-CA	-5.44	1.39	1.46
5	E	135	ARG	CD-NE	5.44	1.53	1.46
10	3	17	LYS	CA-C	-5.44	1.46	1.52
11	4	155	ARG	CA-CB	5.44	1.62	1.53
13	6	151	PHE	N-CA	-5.44	1.39	1.46
24	R	82	LYS	C-N	5.44	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	U	114	ARG	N-CA	-5.44	1.40	1.46
6	F	134	ILE	CA-CB	5.44	1.60	1.54
21	S	372	ASN	C-N	5.44	1.41	1.33
31	M	272	ARG	CZ-NH1	5.44	1.40	1.32
21	S	324	VAL	CA-CB	-5.44	1.47	1.54
23	Q	20	ARG	NE-CZ	5.44	1.39	1.33
19	Z	800	LEU	N-CA	-5.44	1.39	1.46
22	P	338	THR	CA-C	-5.44	1.45	1.52
24	R	94	ASN	CA-CB	5.44	1.62	1.53
26	O	91	ASN	CA-C	-5.44	1.46	1.52
14	7	231	PHE	CA-C	-5.44	1.45	1.52
15	W	23	PRO	N-CA	-5.44	1.38	1.47
17	T	238	TYR	N-CA	-5.44	1.39	1.46
20	N	622	LEU	CA-CB	5.44	1.61	1.53
20	N	11	LEU	CA-C	5.43	1.59	1.52
21	S	271	VAL	CA-C	-5.43	1.46	1.52
21	S	358	LEU	N-CA	-5.43	1.39	1.46
22	P	279	PHE	C-N	5.43	1.40	1.33
26	O	221	VAL	C-N	5.43	1.41	1.33
21	S	288	THR	CA-C	5.43	1.59	1.52
21	S	473	HIS	ND1-CE1	5.43	1.38	1.32
22	P	214	PHE	N-CA	-5.43	1.39	1.46
30	L	308	ARG	C-N	5.43	1.40	1.33
19	Z	647	GLY	C-N	5.43	1.41	1.33
19	Z	782	HIS	CA-CB	5.43	1.61	1.53
20	N	821	LYS	N-CA	-5.43	1.40	1.46
12	5	233	VAL	CA-CB	-5.43	1.47	1.54
20	N	53	GLY	C-N	5.43	1.40	1.33
24	R	196	GLN	N-CA	-5.43	1.39	1.46
26	O	44	PHE	C-O	-5.43	1.17	1.24
13	6	49	ILE	CA-CB	-5.43	1.49	1.55
21	S	412	ARG	CA-C	-5.43	1.46	1.52
24	R	297	ARG	C-N	5.43	1.41	1.33
6	F	110	SER	CA-C	-5.42	1.45	1.52
13	6	215	TYR	N-CA	-5.42	1.39	1.45
20	N	945	PRO	N-CA	-5.42	1.40	1.47
21	S	404	ARG	CD-NE	5.42	1.53	1.46
7	G	41	ARG	NE-CZ	5.42	1.39	1.33
26	O	188	LEU	CA-CB	5.42	1.61	1.53
10	3	28	PHE	C-N	5.42	1.41	1.33
20	N	614	VAL	N-CA	-5.42	1.40	1.46
31	M	221	GLN	CA-CB	5.42	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	165	ASN	N-CA	5.42	1.52	1.45
20	N	918	SER	N-CA	-5.42	1.39	1.46
26	O	82	HIS	CE1-NE2	-5.42	1.27	1.32
30	L	203	SER	CA-C	-5.42	1.45	1.52
2	B	180	GLU	N-CA	-5.42	1.39	1.46
20	N	53	GLY	N-CA	-5.42	1.36	1.45
23	Q	148	HIS	C-N	5.42	1.40	1.33
27	H	193	THR	CA-C	5.42	1.58	1.52
31	M	271	VAL	C-N	5.42	1.41	1.33
15	W	17	ARG	NE-CZ	5.42	1.39	1.33
26	O	176	ALA	N-CA	-5.42	1.39	1.46
28	I	420	LYS	CA-C	-5.42	1.46	1.52
24	R	232	GLU	CA-C	-5.42	1.45	1.53
12	5	179	ARG	CZ-NH2	5.41	1.40	1.33
12	5	193	TYR	CA-C	5.41	1.60	1.52
26	O	210	VAL	CA-C	-5.41	1.46	1.52
17	T	217	ARG	CZ-NH1	5.41	1.40	1.32
20	N	871	PRO	CA-C	5.41	1.60	1.52
1	A	186	LYS	C-N	5.41	1.40	1.33
8	1	47	LEU	N-CA	5.41	1.52	1.46
19	Z	673	ARG	CZ-NH2	5.41	1.40	1.33
21	S	168	VAL	CA-CB	-5.41	1.46	1.54
21	S	456	SER	N-CA	-5.41	1.38	1.45
3	C	49	ARG	NE-CZ	5.41	1.39	1.33
5	E	155	HIS	ND1-CE1	5.41	1.38	1.32
21	S	130	PHE	C-N	5.41	1.41	1.33
22	P	373	ILE	CA-C	-5.41	1.46	1.52
26	O	277	LEU	C-N	5.41	1.41	1.33
18	Y	57	ARG	N-CA	-5.41	1.39	1.46
23	Q	239	TYR	CA-C	-5.41	1.45	1.52
23	Q	399	ALA	C-N	5.41	1.41	1.33
1	A	123	GLN	CA-CB	5.41	1.62	1.53
7	G	138	LEU	CA-C	-5.41	1.46	1.52
16	V	88	ASP	CA-C	-5.41	1.48	1.52
17	T	148	ARG	NE-CZ	5.41	1.39	1.33
19	Z	492	SER	N-CA	-5.41	1.39	1.46
26	O	116	THR	N-CA	5.41	1.52	1.46
29	K	110	ASN	CA-C	-5.41	1.45	1.52
5	E	93	ARG	CZ-NH2	5.40	1.40	1.33
28	I	208	PRO	N-CA	-5.40	1.40	1.47
19	Z	492	SER	CA-C	-5.40	1.45	1.52
20	N	86	ASP	N-CA	5.40	1.52	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	U	111	LEU	N-CA	-5.40	1.39	1.46
1	A	170	VAL	CA-C	-5.40	1.46	1.52
26	O	149	THR	C-N	5.40	1.41	1.33
13	6	172	LEU	N-CA	-5.40	1.39	1.46
15	W	46	GLU	C-N	5.40	1.40	1.33
16	V	289	ASP	C-N	5.40	1.40	1.33
31	M	41	THR	CA-C	-5.40	1.45	1.52
2	B	91	ARG	CD-NE	5.40	1.53	1.46
16	V	104	ARG	N-CA	-5.40	1.40	1.46
21	S	475	ARG	NE-CZ	5.40	1.39	1.33
23	Q	190	LEU	CB-CG	5.40	1.64	1.53
5	E	146	VAL	CA-CB	-5.40	1.47	1.54
6	F	157	ARG	CA-C	-5.40	1.45	1.52
1	A	192	GLU	CA-CB	5.39	1.61	1.53
14	7	250	GLN	CA-C	-5.39	1.46	1.52
19	Z	815	HIS	CA-C	-5.39	1.45	1.52
19	Z	883	ALA	N-CA	-5.39	1.39	1.46
1	A	141	ILE	CB-CG1	5.39	1.64	1.53
5	E	20	ARG	CZ-NH2	5.39	1.40	1.33
12	5	175	SER	C-N	5.39	1.41	1.33
19	Z	101	PRO	C-N	5.39	1.41	1.33
26	O	194	GLN	C-N	5.39	1.41	1.33
19	Z	321	MET	CA-C	-5.39	1.45	1.52
12	5	107	GLY	C-N	5.39	1.39	1.32
24	R	8	GLU	C-O	5.39	1.30	1.24
22	P	47	LEU	CA-CB	5.39	1.61	1.53
24	R	293	ARG	CA-CB	5.39	1.61	1.53
32	J	73	VAL	N-CA	-5.39	1.40	1.46
7	G	19	GLY	CA-C	-5.39	1.44	1.51
22	P	428	TRP	C-N	5.39	1.41	1.33
29	K	261	ILE	C-N	5.39	1.40	1.33
20	N	402	PHE	CA-CB	5.38	1.61	1.53
20	N	747	SER	C-N	5.38	1.41	1.33
21	S	450	GLU	CA-C	-5.38	1.45	1.52
22	P	383	ASP	C-N	5.38	1.40	1.33
32	J	14	GLY	C-N	5.38	1.40	1.33
13	6	148	VAL	CA-C	-5.38	1.46	1.52
23	Q	262	ASN	CA-CB	5.38	1.61	1.53
28	I	325	VAL	CA-C	-5.38	1.46	1.52
13	6	186	GLN	C-N	5.38	1.40	1.33
14	7	69	ASP	CA-C	-5.38	1.45	1.52
21	S	186	ASP	N-CA	-5.38	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	R	121	LEU	CA-C	-5.38	1.45	1.52
24	R	140	ILE	CA-C	5.38	1.59	1.52
29	K	158	GLN	C-N	5.38	1.40	1.33
7	G	72	ARG	CA-C	-5.38	1.45	1.52
28	I	325	VAL	CA-CB	-5.38	1.49	1.55
8	1	162	GLY	N-CA	-5.38	1.39	1.45
13	6	75	ASP	CA-C	-5.38	1.46	1.52
19	Z	68	THR	CA-CB	5.38	1.61	1.53
19	Z	675	PHE	C-N	5.38	1.41	1.33
21	S	89	PHE	N-CA	-5.38	1.39	1.46
23	Q	216	ILE	CA-C	-5.38	1.45	1.52
28	I	362	LYS	C-N	5.38	1.41	1.33
16	V	282	ARG	N-CA	-5.38	1.39	1.46
20	N	557	TYR	C-O	-5.38	1.17	1.24
25	U	62	ASP	C-N	5.38	1.41	1.34
27	H	404	ALA	CA-CB	5.38	1.60	1.53
14	7	117	ASP	CA-CB	5.37	1.61	1.53
16	V	108	VAL	N-CA	-5.37	1.40	1.46
17	T	144	LEU	CA-CB	5.37	1.61	1.53
21	S	70	ASP	C-N	5.37	1.40	1.33
21	S	387	THR	N-CA	-5.37	1.39	1.46
28	I	403	GLY	N-CA	-5.37	1.39	1.45
31	M	350	ARG	CZ-NH1	5.37	1.40	1.32
32	J	345	ARG	CD-NE	5.37	1.53	1.46
19	Z	388	ASP	N-CA	-5.37	1.40	1.46
23	Q	21	GLU	CA-C	-5.37	1.45	1.52
4	D	43	LEU	CA-C	-5.37	1.46	1.52
12	5	243	TRP	CA-C	-5.37	1.46	1.53
15	W	141	ILE	N-CA	-5.37	1.39	1.46
28	I	422	SER	CA-CB	-5.37	1.44	1.53
31	M	158	LYS	N-CA	-5.37	1.39	1.46
14	7	98	SER	C-O	-5.37	1.17	1.24
20	N	436	ALA	N-CA	-5.37	1.39	1.46
21	S	302	ARG	CZ-NH1	5.37	1.40	1.32
17	T	334	PRO	CA-C	-5.37	1.44	1.52
19	Z	95	PRO	C-N	5.37	1.41	1.33
19	Z	608	LYS	CA-CB	5.37	1.61	1.53
21	S	137	THR	CA-C	-5.37	1.46	1.53
28	I	427	LEU	CA-C	-5.37	1.45	1.52
6	F	167	SER	C-N	5.36	1.41	1.33
25	U	14	LEU	C-N	5.36	1.40	1.33
7	G	96	ALA	N-CA	-5.36	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	2	172	SER	C-N	5.36	1.40	1.33
4	D	115	ARG	CA-C	-5.36	1.45	1.52
11	4	158	GLU	C-N	5.36	1.41	1.33
19	Z	438	ASP	CA-CB	5.36	1.62	1.53
19	Z	522	CYS	C-N	-5.36	1.26	1.33
20	N	559	ARG	NE-CZ	5.36	1.39	1.33
20	N	698	GLN	CA-C	-5.36	1.46	1.52
27	H	164	MET	N-CA	-5.36	1.39	1.46
10	3	55	GLY	CA-C	-5.36	1.47	1.52
13	6	197	ARG	CZ-NH2	5.36	1.40	1.33
16	V	41	MET	C-N	5.36	1.41	1.33
20	N	562	GLU	CA-C	-5.36	1.45	1.52
20	N	938	GLU	N-CA	-5.36	1.39	1.46
28	I	79	ILE	CA-CB	5.36	1.61	1.54
4	D	219	ARG	CZ-NH2	5.36	1.40	1.33
4	D	223	LEU	N-CA	-5.36	1.39	1.46
5	E	200	ILE	CA-CB	-5.36	1.47	1.54
5	E	221	GLN	N-CA	-5.36	1.41	1.45
21	S	327	LEU	CA-C	-5.36	1.45	1.52
9	2	247	CYS	CA-C	-5.35	1.46	1.52
11	4	116	TYR	CA-C	-5.35	1.45	1.52
14	7	167	GLY	CA-C	-5.35	1.48	1.52
14	7	202	PRO	C-N	5.35	1.40	1.33
26	O	123	LEU	C-N	5.35	1.41	1.33
20	N	726	ALA	CA-CB	5.35	1.61	1.53
28	I	385	MET	C-N	5.35	1.41	1.33
3	C	62	SER	CA-CB	5.35	1.60	1.53
19	Z	532	GLY	CA-C	-5.35	1.44	1.51
26	O	231	GLN	C-O	5.35	1.30	1.24
13	6	128	PHE	CA-CB	5.35	1.61	1.53
20	N	208	LEU	N-CA	-5.35	1.39	1.45
20	N	917	THR	CA-C	-5.35	1.45	1.52
23	Q	33	ARG	CZ-NH2	5.35	1.40	1.33
17	T	254	ILE	C-N	5.35	1.40	1.33
22	P	230	MET	CG-SD	5.35	1.94	1.80
27	H	312	ARG	NE-CZ	5.35	1.39	1.33
19	Z	144	LEU	CA-CB	5.34	1.61	1.53
19	Z	756	PRO	N-CD	-5.34	1.40	1.47
27	H	46	LYS	CA-C	-5.34	1.46	1.52
16	V	252	ALA	N-CA	5.34	1.52	1.46
19	Z	19	THR	CA-CB	5.34	1.61	1.53
19	Z	547	GLU	CA-CB	5.34	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	U	35	VAL	C-O	-5.34	1.18	1.24
2	B	37	GLY	CA-C	-5.34	1.44	1.51
13	6	150	SER	CA-CB	5.34	1.61	1.53
20	N	656	LEU	C-N	5.34	1.40	1.33
29	K	313	ARG	C-N	5.34	1.40	1.33
15	W	160	LEU	C-N	5.34	1.40	1.33
19	Z	321	MET	C-N	5.34	1.41	1.34
22	P	210	ASN	N-CA	-5.34	1.39	1.46
28	I	63	LEU	C-N	5.34	1.41	1.33
31	M	278	ALA	C-N	5.34	1.41	1.33
12	5	70	GLY	CA-C	-5.34	1.44	1.51
21	S	167	MET	C-N	5.34	1.39	1.34
4	D	92	ARG	NE-CZ	5.34	1.39	1.33
8	1	60	ALA	CA-CB	5.34	1.59	1.53
17	T	174	LEU	CA-CB	5.34	1.61	1.53
20	N	926	GLU	CA-CB	5.34	1.61	1.53
22	P	63	THR	CA-CB	5.34	1.62	1.53
30	L	119	LEU	CA-C	-5.34	1.46	1.53
32	J	66	LEU	C-N	5.34	1.41	1.34
12	5	179	ARG	N-CA	-5.33	1.39	1.46
20	N	721	HIS	CG-CD2	-5.33	1.29	1.35
31	M	132	ARG	CZ-NH2	5.33	1.40	1.33
32	J	21	ARG	NE-CZ	5.33	1.39	1.33
10	3	80	ARG	CZ-NH2	5.33	1.40	1.33
12	5	210	GLU	C-N	5.33	1.41	1.33
20	N	887	ALA	C-N	5.33	1.41	1.33
21	S	364	ARG	CA-C	-5.33	1.45	1.52
25	U	174	HIS	CA-C	-5.33	1.46	1.52
28	I	117	ASP	CA-C	5.33	1.59	1.53
2	B	158	TRP	C-O	-5.33	1.17	1.23
20	N	872	GLU	CA-C	5.33	1.57	1.52
27	H	421	ALA	CA-CB	5.33	1.62	1.53
20	N	765	VAL	CA-C	-5.33	1.45	1.52
26	O	67	PHE	CA-C	-5.33	1.45	1.52
28	I	411	ARG	CA-C	-5.33	1.46	1.52
3	C	169	ALA	CA-C	-5.33	1.46	1.52
20	N	899	ARG	N-CA	-5.33	1.39	1.46
25	U	153	LYS	CA-C	-5.33	1.46	1.52
32	J	130	LYS	C-N	5.33	1.41	1.33
5	E	186	HIS	ND1-CE1	5.33	1.37	1.32
13	6	51	ALA	CA-C	-5.33	1.46	1.52
18	Y	63	HIS	CA-C	5.33	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Z	232	TYR	CA-CB	5.33	1.61	1.53
1	A	162	GLY	CA-C	-5.32	1.46	1.52
6	F	183	ASN	CA-C	-5.32	1.46	1.53
16	V	154	LYS	CA-CB	5.32	1.62	1.53
20	N	175	GLY	C-N	5.32	1.41	1.33
29	K	408	LYS	CA-C	5.32	1.59	1.52
3	C	35	LEU	N-CA	-5.32	1.39	1.45
28	I	96	ARG	CD-NE	5.32	1.53	1.46
2	B	75	VAL	CA-CB	-5.32	1.47	1.54
13	6	55	ARG	CD-NE	5.32	1.53	1.46
25	U	95	TYR	C-N	5.32	1.40	1.33
32	J	375	ARG	N-CA	-5.32	1.39	1.45
22	P	30	GLU	CA-C	-5.32	1.46	1.52
22	P	125	ILE	CA-CB	-5.32	1.48	1.54
22	P	360	GLU	C-N	5.32	1.41	1.33
24	R	166	SER	CA-CB	5.32	1.61	1.53
32	J	171	HIS	CD2-NE2	5.32	1.43	1.37
4	D	36	ARG	CD-NE	5.32	1.53	1.46
13	6	132	TYR	CZ-OH	5.32	1.49	1.38
20	N	873	PRO	C-N	5.32	1.40	1.33
22	P	396	LEU	N-CA	-5.32	1.40	1.46
19	Z	446	LEU	CA-C	-5.31	1.45	1.52
20	N	542	GLU	N-CA	-5.31	1.39	1.46
23	Q	213	GLN	CA-C	-5.31	1.45	1.52
19	Z	572	ALA	C-N	5.31	1.40	1.33
3	C	130	PHE	CA-C	5.31	1.60	1.53
6	F	5	GLN	CA-C	-5.31	1.45	1.52
7	G	26	TYR	C-O	-5.31	1.17	1.24
7	G	118	MET	N-CA	-5.31	1.40	1.46
12	5	90	VAL	C-O	-5.31	1.18	1.24
13	6	232	GLU	CA-C	-5.31	1.46	1.52
16	V	128	ASN	C-N	5.31	1.41	1.33
17	T	99	GLU	N-CA	-5.31	1.40	1.46
32	J	236	VAL	CA-CB	-5.31	1.47	1.54
20	N	466	LYS	C-N	5.31	1.40	1.33
20	N	778	PHE	CA-C	-5.31	1.45	1.52
21	S	263	ALA	CA-C	-5.31	1.46	1.52
21	S	501	LEU	CA-C	5.31	1.59	1.52
22	P	215	GLN	C-O	-5.31	1.17	1.24
10	3	11	VAL	N-CA	-5.31	1.40	1.46
20	N	258	GLN	C-N	5.31	1.40	1.33
27	H	394	MET	C-N	5.30	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	N	708	GLN	CA-C	-5.30	1.45	1.52
23	Q	178	HIS	ND1-CE1	5.30	1.37	1.32
28	I	209	GLU	N-CA	-5.30	1.40	1.46
32	J	263	SER	CA-C	-5.30	1.45	1.53
8	1	144	VAL	C-O	-5.30	1.18	1.24
23	Q	334	ASN	N-CA	-5.30	1.39	1.46
27	H	174	TYR	CA-CB	5.30	1.61	1.53
29	K	322	LEU	CA-C	-5.30	1.46	1.52
5	E	82	ILE	CA-C	-5.30	1.46	1.52
21	S	93	ALA	N-CA	5.30	1.52	1.46
22	P	398	VAL	C-N	5.30	1.41	1.34
25	U	88	ARG	N-CA	5.30	1.52	1.46
27	H	222	LYS	C-N	5.30	1.41	1.33
27	H	253	GLY	N-CA	5.30	1.52	1.45
10	3	3	VAL	C-N	5.30	1.40	1.33
20	N	71	LEU	CA-CB	5.30	1.62	1.53
16	V	197	ASN	CA-C	-5.30	1.46	1.52
21	S	397	ASN	CA-C	-5.30	1.45	1.52
31	M	289	ASP	CA-C	-5.30	1.46	1.52
31	M	418	LEU	CA-C	-5.30	1.46	1.52
9	2	236	ASN	CA-CB	5.29	1.63	1.53
14	7	99	GLY	N-CA	5.29	1.50	1.45
16	V	87	VAL	CA-C	-5.29	1.47	1.52
17	T	237	GLN	CA-CB	5.29	1.61	1.53
22	P	448	LYS	CA-C	5.29	1.59	1.52
29	K	280	GLY	CA-C	-5.29	1.46	1.52
6	F	225	ASP	CA-C	-5.29	1.45	1.52
10	3	204	MET	C-N	5.29	1.40	1.33
21	S	211	ALA	CA-CB	5.29	1.61	1.53
26	O	184	ASP	C-N	5.29	1.40	1.33
3	C	217	THR	C-N	5.29	1.41	1.33
8	1	159	ALA	CA-CB	-5.29	1.43	1.53
14	7	88	ARG	CD-NE	5.29	1.53	1.46
14	7	179	PRO	CA-C	-5.29	1.47	1.52
25	U	54	PHE	C-N	5.29	1.40	1.33
25	U	229	GLN	C-N	5.29	1.41	1.33
2	B	128	ARG	CZ-NH1	5.29	1.40	1.32
20	N	812	ALA	C-O	-5.29	1.17	1.24
16	V	139	ARG	CZ-NH1	5.29	1.40	1.32
17	T	175	LYS	N-CA	-5.29	1.40	1.46
21	S	228	HIS	CG-ND1	5.29	1.44	1.38
28	I	317	ASP	CA-CB	5.29	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	16	PHE	C-N	5.29	1.41	1.32
28	I	116	ILE	C-O	-5.29	1.18	1.24
19	Z	386	GLY	CA-C	-5.29	1.45	1.51
30	L	191	GLY	C-N	5.29	1.41	1.33
31	M	215	PHE	C-O	-5.29	1.18	1.24
3	C	53	HIS	ND1-CE1	5.28	1.37	1.32
14	7	258	MET	C-N	5.28	1.40	1.33
19	Z	782	HIS	ND1-CE1	5.28	1.37	1.32
21	S	33	VAL	CA-C	-5.28	1.45	1.52
23	Q	20	ARG	CZ-NH1	5.28	1.40	1.32
31	M	113	ASN	C-N	5.28	1.40	1.33
6	F	74	ILE	CB-CG1	5.28	1.64	1.53
10	3	188	HIS	CD2-NE2	5.28	1.43	1.37
19	Z	34	ARG	NE-CZ	5.28	1.38	1.33
32	J	79	ALA	C-N	5.28	1.41	1.33
29	K	317	LEU	N-CA	-5.28	1.38	1.45
2	B	19	LEU	CA-C	-5.28	1.46	1.52
3	C	176	LYS	CA-CB	5.28	1.61	1.53
15	W	15	TYR	CZ-OH	5.28	1.49	1.38
16	V	289	ASP	CA-CB	5.28	1.61	1.53
22	P	293	ASP	CA-CB	5.28	1.62	1.53
5	E	173	ALA	CA-C	-5.28	1.46	1.52
6	F	103	LEU	C-N	-5.28	1.26	1.33
8	1	103	LEU	CA-C	-5.28	1.46	1.52
11	4	161	ARG	NE-CZ	5.28	1.38	1.33
12	5	90	VAL	CA-CB	-5.28	1.48	1.54
21	S	229	ALA	CA-CB	5.28	1.61	1.53
19	Z	11	VAL	CA-CB	5.27	1.61	1.54
20	N	66	LYS	CA-CB	5.27	1.61	1.53
23	Q	140	THR	CA-C	-5.27	1.45	1.52
26	O	238	TYR	CA-C	-5.27	1.46	1.52
13	6	96	GLU	CA-C	5.27	1.59	1.52
19	Z	879	ARG	CD-NE	5.27	1.53	1.46
28	I	260	LEU	CA-C	-5.27	1.46	1.52
31	M	324	GLN	C-O	-5.27	1.17	1.24
23	Q	337	ARG	CA-CB	5.27	1.61	1.53
26	O	284	ARG	NE-CZ	5.27	1.38	1.33
27	H	91	GLN	CA-C	-5.27	1.45	1.52
17	T	173	GLN	C-N	5.27	1.40	1.33
23	Q	246	LYS	CA-C	-5.27	1.46	1.52
25	U	12	HIS	CD2-NE2	5.27	1.43	1.37
32	J	306	LEU	CA-CB	5.27	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	T	238	TYR	CA-CB	5.27	1.61	1.53
23	Q	97	LEU	C-N	5.27	1.40	1.33
2	B	174	LEU	C-O	-5.26	1.18	1.24
10	3	7	ASN	N-CA	-5.26	1.39	1.46
20	N	952	ASP	C-N	5.26	1.40	1.33
23	Q	47	GLU	C-N	5.26	1.40	1.33
27	H	252	GLU	CA-CB	5.26	1.61	1.53
31	M	49	ARG	CZ-NH2	5.26	1.40	1.33
4	D	164	ALA	C-N	5.26	1.40	1.33
13	6	95	ILE	CA-CB	5.26	1.61	1.54
21	S	327	LEU	C-N	5.26	1.40	1.33
22	P	451	MET	N-CA	-5.26	1.40	1.46
23	Q	40	GLU	C-N	5.26	1.41	1.33
24	R	186	LEU	N-CA	-5.26	1.40	1.46
5	E	128	ALA	C-N	5.26	1.41	1.33
12	5	239	ARG	C-O	-5.26	1.17	1.24
14	7	181	LEU	N-CA	-5.26	1.40	1.46
26	O	133	GLU	C-O	-5.26	1.18	1.24
4	D	207	SER	CA-C	-5.26	1.48	1.53
17	T	224	GLN	N-CA	-5.26	1.39	1.46
23	Q	51	LEU	N-CA	-5.26	1.40	1.46
30	L	166	PRO	N-CD	-5.26	1.40	1.47
25	U	19	VAL	C-N	5.25	1.40	1.33
20	N	17	PRO	C-O	-5.25	1.18	1.24
21	S	110	TYR	CA-CB	5.25	1.60	1.53
27	H	69	ASP	CA-CB	5.25	1.61	1.53
28	I	66	GLU	C-N	5.25	1.40	1.33
28	I	79	ILE	N-CA	5.25	1.52	1.46
28	I	333	ARG	CA-CB	5.25	1.62	1.53
1	A	21	ARG	CZ-NH1	5.25	1.40	1.32
1	A	132	ARG	CA-C	-5.25	1.47	1.52
7	G	78	VAL	N-CA	-5.25	1.40	1.46
9	2	80	ILE	CA-CB	-5.25	1.48	1.54
8	1	88	VAL	CA-C	-5.25	1.46	1.52
29	K	341	LYS	C-N	5.25	1.40	1.33
1	A	88	ARG	CZ-NH1	5.25	1.40	1.32
13	6	194	THR	CA-C	5.25	1.59	1.52
29	K	215	LEU	C-O	-5.25	1.18	1.24
21	S	313	PRO	N-CD	-5.25	1.40	1.47
24	R	140	ILE	C-N	5.25	1.40	1.33
32	J	272	THR	CA-CB	5.25	1.61	1.53
8	1	156	GLN	CA-C	-5.24	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	T	96	GLY	CA-C	-5.24	1.46	1.51
17	T	223	ILE	CA-CB	-5.24	1.49	1.54
20	N	764	LEU	CA-C	-5.24	1.46	1.52
24	R	141	VAL	N-CA	5.24	1.53	1.46
30	L	224	GLU	C-N	5.24	1.41	1.34
9	2	242	PHE	N-CA	-5.24	1.39	1.46
16	V	221	HIS	C-N	5.24	1.40	1.33
16	V	241	ASN	C-N	5.24	1.41	1.33
20	N	447	GLY	CA-C	-5.24	1.46	1.52
21	S	88	ARG	CA-C	-5.24	1.45	1.52
32	J	35	VAL	CA-C	-5.24	1.46	1.52
1	A	118	ILE	N-CA	5.24	1.53	1.46
3	C	3	ARG	C-O	5.24	1.30	1.24
19	Z	566	HIS	ND1-CE1	5.24	1.37	1.32
20	N	590	TYR	C-N	5.24	1.40	1.33
20	N	829	SER	CA-C	-5.24	1.46	1.52
21	S	253	ASN	CA-C	-5.24	1.46	1.52
29	K	68	LEU	CA-C	-5.24	1.45	1.52
21	S	474	GLN	CA-C	-5.24	1.46	1.52
22	P	2	ALA	CA-C	-5.24	1.46	1.52
10	3	159	ASP	CA-CB	5.24	1.61	1.53
12	5	180	ILE	C-N	5.24	1.40	1.33
19	Z	372	LEU	CA-CB	5.24	1.61	1.53
25	U	190	ARG	CD-NE	5.24	1.53	1.46
30	L	305	ARG	CZ-NH1	5.24	1.40	1.32
32	J	225	GLY	C-N	5.23	1.40	1.33
6	F	17	GLY	C-N	5.23	1.40	1.33
19	Z	252	ALA	CA-CB	5.23	1.61	1.53
20	N	620	GLU	C-N	5.23	1.41	1.33
20	N	751	ARG	CD-NE	5.23	1.53	1.46
24	R	338	ILE	CA-C	-5.23	1.45	1.52
28	I	264	PRO	C-N	5.23	1.40	1.33
30	L	134	TYR	C-N	5.23	1.40	1.33
5	E	146	VAL	N-CA	-5.23	1.40	1.46
10	3	88	MET	N-CA	-5.23	1.40	1.46
22	P	275	ILE	CB-CG1	5.23	1.64	1.53
25	U	113	LYS	N-CA	-5.23	1.40	1.46
20	N	783	TYR	C-N	5.23	1.41	1.33
15	W	31	ASP	N-CA	-5.23	1.40	1.46
19	Z	455	VAL	N-CA	-5.23	1.40	1.46
20	N	6	ALA	CA-CB	5.23	1.61	1.53
22	P	315	MET	CA-C	-5.23	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	H	129	VAL	CA-C	-5.23	1.46	1.52
32	J	307	ARG	CD-NE	5.23	1.53	1.46
13	6	75	ASP	CA-CB	5.23	1.61	1.53
20	N	639	LEU	C-N	5.23	1.41	1.34
19	Z	51	GLN	C-N	5.22	1.40	1.33
29	K	339	ARG	NE-CZ	5.22	1.38	1.33
15	W	170	LEU	C-N	5.22	1.40	1.33
19	Z	100	ARG	CZ-NH1	5.22	1.40	1.32
21	S	37	GLU	C-O	-5.22	1.18	1.24
21	S	256	HIS	ND1-CE1	5.22	1.37	1.32
29	K	260	ALA	N-CA	-5.22	1.39	1.46
20	N	649	ARG	NE-CZ	5.22	1.38	1.33
27	H	203	ASN	C-N	5.22	1.40	1.33
21	S	427	PRO	CA-CB	5.22	1.61	1.53
23	Q	226	LYS	CA-CB	5.22	1.61	1.53
23	Q	260	MET	CA-C	-5.22	1.46	1.52
24	R	256	VAL	CA-CB	-5.22	1.47	1.54
24	R	297	ARG	CZ-NH1	5.22	1.40	1.32
30	L	200	ALA	CA-CB	5.22	1.61	1.53
14	7	85	ARG	CZ-NH1	5.22	1.40	1.32
23	Q	402	GLU	CA-CB	5.22	1.61	1.53
4	D	134	GLY	C-O	-5.22	1.17	1.24
12	5	165	LYS	CA-CB	5.22	1.61	1.53
19	Z	148	GLN	C-O	5.22	1.30	1.24
19	Z	234	THR	N-CA	-5.22	1.40	1.46
20	N	686	GLY	N-CA	-5.22	1.39	1.45
21	S	38	GLU	C-N	5.22	1.41	1.33
22	P	412	VAL	C-N	5.22	1.39	1.33
31	M	268	ALA	CA-C	-5.22	1.46	1.52
4	D	141	GLY	N-CA	-5.21	1.39	1.45
4	D	73	PHE	CA-CB	5.21	1.61	1.53
23	Q	396	THR	N-CA	-5.21	1.40	1.46
6	F	126	ARG	CA-CB	5.21	1.61	1.53
17	T	189	ALA	C-N	5.21	1.40	1.33
4	D	200	ALA	N-CA	5.21	1.52	1.46
6	F	20	HIS	CG-ND1	-5.21	1.32	1.38
17	T	247	VAL	N-CA	-5.21	1.40	1.46
23	Q	155	ARG	N-CA	-5.21	1.40	1.46
31	M	112	ALA	C-O	-5.21	1.19	1.24
8	1	212	ILE	C-N	5.21	1.40	1.33
15	W	2	VAL	C-N	5.21	1.40	1.33
20	N	55	ARG	NE-CZ	5.21	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	O	168	ASN	CA-CB	5.21	1.62	1.53
28	I	275	GLU	CA-CB	5.21	1.61	1.53
29	K	245	ARG	NE-CZ	5.21	1.38	1.33
30	L	95	VAL	CA-C	-5.21	1.46	1.52
19	Z	619	HIS	N-CA	-5.21	1.39	1.46
28	I	200	SER	C-N	5.21	1.40	1.33
32	J	316	GLU	CA-CB	5.21	1.61	1.53
19	Z	618	GLU	CA-C	-5.20	1.46	1.52
21	S	393	ARG	CZ-NH2	5.20	1.40	1.33
13	6	151	PHE	CA-C	-5.20	1.46	1.52
25	U	183	THR	C-N	5.20	1.40	1.33
29	K	278	GLN	CA-C	-5.20	1.45	1.52
32	J	8	GLN	CA-C	-5.20	1.45	1.52
20	N	157	THR	CA-C	-5.20	1.45	1.52
20	N	940	GLN	C-N	5.20	1.39	1.33
24	R	318	TYR	CA-CB	5.20	1.61	1.53
26	O	219	HIS	C-N	-5.20	1.27	1.34
31	M	135	TYR	CZ-OH	5.20	1.49	1.38
2	B	139	TRP	N-CA	-5.20	1.40	1.46
3	C	180	LYS	C-N	5.20	1.40	1.33
4	D	149	ARG	CZ-NH2	5.20	1.40	1.33
8	1	228	PRO	CA-C	-5.20	1.46	1.52
10	3	165	GLU	CA-C	-5.20	1.46	1.52
14	7	204	LEU	CA-C	-5.20	1.46	1.52
32	J	140	VAL	CA-CB	-5.20	1.47	1.54
7	G	214	LEU	C-N	5.20	1.40	1.33
24	R	159	ARG	NE-CZ	5.20	1.38	1.33
2	B	89	ARG	CZ-NH2	5.20	1.40	1.33
4	D	82	LEU	CA-C	-5.20	1.46	1.52
5	E	183	GLU	CA-CB	5.20	1.61	1.53
12	5	191	SER	CA-CB	5.20	1.62	1.53
16	V	262	GLU	C-N	5.20	1.40	1.33
21	S	370	LYS	CA-CB	5.20	1.61	1.53
9	2	166	PRO	N-CA	-5.19	1.40	1.47
17	T	269	THR	CA-CB	5.19	1.61	1.53
23	Q	329	ASN	CA-CB	5.19	1.61	1.53
28	I	346	ARG	NE-CZ	5.19	1.38	1.33
21	S	491	ARG	NE-CZ	5.19	1.38	1.33
23	Q	197	ALA	CA-C	-5.19	1.45	1.52
10	3	166	THR	N-CA	-5.19	1.40	1.46
19	Z	744	MET	CA-CB	5.19	1.61	1.53
30	L	168	THR	C-N	5.19	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	J	144	PRO	C-N	5.19	1.40	1.33
32	J	263	SER	C-N	5.19	1.40	1.33
19	Z	79	ARG	CA-CB	5.19	1.61	1.53
32	J	231	VAL	C-N	5.19	1.41	1.34
13	6	80	GLY	CA-C	-5.19	1.44	1.51
17	T	206	ASN	CA-C	-5.19	1.45	1.52
19	Z	94	LYS	C-N	5.19	1.40	1.34
26	O	111	VAL	CA-C	-5.19	1.46	1.52
20	N	873	PRO	N-CA	-5.19	1.40	1.47
8	1	95	GLN	CA-C	5.18	1.59	1.52
19	Z	542	ILE	CA-CB	5.18	1.60	1.54
29	K	92	PHE	CA-C	-5.18	1.46	1.52
3	C	54	LYS	CA-C	5.18	1.59	1.52
14	7	49	MET	C-N	-5.18	1.27	1.33
19	Z	468	ASP	CA-CB	5.18	1.61	1.53
20	N	600	ARG	CA-C	5.18	1.59	1.52
21	S	283	ARG	NE-CZ	5.18	1.38	1.33
31	M	408	MET	C-O	-5.18	1.18	1.24
12	5	138	ALA	C-N	5.18	1.41	1.33
23	Q	404	ILE	C-N	5.18	1.40	1.33
20	N	481	LEU	CA-CB	5.18	1.61	1.53
23	Q	53	LEU	CA-C	5.18	1.59	1.52
8	1	159	ALA	C-N	5.18	1.40	1.33
30	L	111	ARG	CZ-NH2	5.18	1.40	1.33
31	M	252	LEU	CA-C	-5.18	1.46	1.52
4	D	87	ARG	C-O	-5.17	1.18	1.24
16	V	227	GLU	CA-C	-5.17	1.45	1.52
19	Z	302	GLY	C-N	5.17	1.40	1.33
19	Z	892	PRO	N-CD	-5.17	1.40	1.47
20	N	145	HIS	CA-CB	5.17	1.61	1.53
20	N	446	LEU	CA-CB	5.17	1.61	1.53
21	S	448	ASN	C-O	-5.17	1.18	1.24
28	I	325	VAL	N-CA	-5.17	1.39	1.46
29	K	292	LEU	CA-CB	5.17	1.61	1.53
30	L	143	ASN	N-CA	5.17	1.51	1.47
17	T	150	ILE	C-O	-5.17	1.18	1.24
17	T	257	GLU	CA-C	-5.17	1.45	1.52
21	S	81	ALA	C-N	5.17	1.40	1.33
2	B	158	TRP	N-CA	-5.17	1.39	1.45
20	N	90	VAL	C-N	5.17	1.40	1.33
3	C	151	ASP	CA-CB	5.17	1.60	1.54
4	D	22	ALA	N-CA	-5.17	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	3	114	PRO	CA-CB	-5.17	1.47	1.54
23	Q	117	ALA	N-CA	-5.17	1.40	1.46
19	Z	441	LYS	C-N	5.17	1.41	1.33
19	Z	490	ALA	CA-C	-5.17	1.45	1.52
20	N	825	LYS	CA-C	5.17	1.59	1.52
32	J	43	ARG	C-N	5.17	1.40	1.33
8	1	45	VAL	CA-CB	5.17	1.61	1.54
21	S	314	GLN	C-N	5.17	1.40	1.33
28	I	164	MET	CA-C	-5.17	1.45	1.52
26	O	311	VAL	C-N	5.17	1.40	1.33
32	J	387	VAL	C-O	5.17	1.29	1.24
8	1	87	ALA	C-N	5.16	1.40	1.33
10	3	152	SER	CA-C	-5.16	1.46	1.52
19	Z	373	ALA	C-N	5.16	1.40	1.33
19	Z	473	ASN	C-N	5.16	1.41	1.33
22	P	331	GLY	C-N	5.16	1.40	1.33
27	H	309	PHE	CA-C	-5.16	1.46	1.52
32	J	376	VAL	C-N	5.16	1.39	1.33
11	4	13	VAL	CA-CB	-5.16	1.47	1.54
22	P	451	MET	CA-CB	5.16	1.61	1.53
3	C	18	LEU	CA-C	-5.16	1.46	1.52
4	D	94	ARG	CZ-NH2	5.16	1.40	1.33
8	1	223	LEU	CA-C	-5.16	1.46	1.52
16	V	27	THR	N-CA	-5.16	1.40	1.45
27	H	279	ALA	CA-C	-5.16	1.46	1.52
15	W	150	THR	C-N	5.16	1.40	1.33
16	V	117	GLY	CA-C	-5.16	1.44	1.51
28	I	136	LEU	CA-CB	5.16	1.59	1.52
29	K	366	ARG	C-O	-5.16	1.19	1.24
31	M	212	LYS	C-N	5.16	1.40	1.33
14	7	134	SER	N-CA	-5.16	1.40	1.46
17	T	204	SER	C-N	5.16	1.41	1.34
18	Y	55	GLN	CA-CB	5.16	1.61	1.53
20	N	782	ALA	CA-CB	5.16	1.61	1.53
27	H	101	ILE	N-CA	-5.16	1.40	1.46
28	I	69	LYS	C-N	5.16	1.40	1.33
21	S	439	ARG	NE-CZ	5.15	1.38	1.33
28	I	68	ILE	N-CA	-5.15	1.40	1.46
2	B	40	ALA	N-CA	-5.15	1.40	1.46
9	2	62	ARG	N-CA	-5.15	1.39	1.45
16	V	180	ASN	CA-C	-5.15	1.46	1.52
20	N	475	HIS	CA-CB	5.15	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	K	228	ILE	CA-C	-5.15	1.46	1.52
4	D	76	VAL	C-N	5.15	1.41	1.33
6	F	63	ILE	CA-C	-5.15	1.46	1.52
23	Q	157	LEU	CA-C	-5.15	1.46	1.52
29	K	77	GLU	CA-C	-5.15	1.46	1.52
9	2	118	ARG	NE-CZ	5.15	1.38	1.33
17	T	182	LYS	C-N	5.15	1.40	1.33
19	Z	331	LEU	CA-CB	5.15	1.61	1.53
28	I	342	ILE	CA-CB	5.15	1.60	1.54
5	E	105	GLU	N-CA	-5.15	1.39	1.46
6	F	107	ARG	CZ-NH1	5.15	1.40	1.32
8	1	234	THR	C-N	5.15	1.40	1.33
13	6	66	ASP	N-CA	-5.15	1.40	1.46
20	N	705	LYS	C-N	5.15	1.40	1.33
24	R	172	GLY	CA-C	-5.15	1.44	1.51
30	L	295	ARG	CZ-NH2	5.15	1.40	1.33
32	J	93	GLY	C-N	5.15	1.40	1.33
10	3	69	PHE	C-N	5.15	1.40	1.33
19	Z	821	LEU	CA-CB	5.15	1.62	1.53
20	N	480	GLY	CA-C	-5.15	1.46	1.52
8	1	60	ALA	C-O	5.14	1.30	1.24
9	2	56	VAL	N-CA	-5.14	1.40	1.46
19	Z	215	ASP	C-N	5.14	1.40	1.33
20	N	931	HIS	ND1-CE1	5.14	1.37	1.32
30	L	74	VAL	N-CA	-5.14	1.40	1.46
6	F	96	ARG	CZ-NH2	5.14	1.40	1.33
24	R	370	ILE	C-N	5.14	1.40	1.33
29	K	273	LYS	C-N	5.14	1.40	1.33
4	D	242	LYS	N-CA	5.14	1.52	1.46
24	R	150	PHE	N-CA	-5.14	1.40	1.46
26	O	310	LEU	C-O	-5.14	1.18	1.24
6	F	217	LYS	N-CA	-5.14	1.40	1.46
20	N	834	SER	CA-CB	5.14	1.61	1.53
30	L	123	ARG	CA-C	-5.14	1.46	1.52
1	A	12	HIS	CD2-NE2	5.14	1.43	1.37
16	V	244	VAL	C-N	5.14	1.40	1.33
22	P	233	LEU	N-CA	-5.14	1.40	1.46
24	R	169	GLU	C-N	5.14	1.40	1.33
19	Z	9	THR	C-N	-5.14	1.29	1.34
19	Z	716	ASP	CA-CB	5.14	1.61	1.53
20	N	97	VAL	CA-CB	-5.14	1.47	1.54
26	O	85	ARG	C-N	5.14	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	M	374	ARG	CA-CB	5.14	1.61	1.53
6	F	136	GLY	C-N	5.13	1.40	1.33
20	N	45	ILE	CA-CB	-5.13	1.47	1.54
20	N	467	ASN	C-O	5.13	1.30	1.24
23	Q	263	THR	CA-C	5.13	1.58	1.52
4	D	173	SER	CA-CB	5.13	1.61	1.53
9	2	224	SER	N-CA	5.13	1.52	1.46
30	L	333	PRO	CA-CB	-5.13	1.46	1.53
31	M	376	MET	CA-C	-5.13	1.45	1.52
19	Z	40	ASP	C-N	5.13	1.41	1.33
19	Z	228	LYS	CA-CB	5.13	1.61	1.53
19	Z	689	ALA	C-N	5.13	1.39	1.33
20	N	777	HIS	CE1-NE2	5.13	1.37	1.32
21	S	195	ASN	C-N	-5.13	1.26	1.33
14	7	172	LEU	C-N	5.13	1.40	1.33
21	S	144	ARG	CA-C	5.13	1.59	1.52
22	P	130	MET	CA-C	-5.13	1.46	1.52
25	U	117	PRO	N-CD	-5.13	1.40	1.47
4	D	58	THR	C-N	5.13	1.40	1.33
9	2	187	PRO	C-N	5.13	1.40	1.33
19	Z	387	GLN	CA-C	-5.13	1.46	1.52
19	Z	507	ASP	C-N	-5.13	1.26	1.33
24	R	117	LYS	N-CA	5.13	1.52	1.46
25	U	48	LEU	CA-CB	5.13	1.61	1.53
29	K	150	SER	N-CA	-5.13	1.39	1.45
32	J	6	PRO	N-CD	-5.13	1.40	1.47
1	A	133	PRO	C-N	5.12	1.40	1.33
4	D	5	ARG	CZ-NH1	5.12	1.40	1.32
9	2	93	ALA	CA-C	-5.12	1.46	1.52
12	5	216	ARG	CZ-NH1	5.12	1.40	1.32
19	Z	568	GLY	CA-C	-5.12	1.44	1.51
23	Q	320	SER	CA-C	-5.12	1.46	1.52
25	U	143	GLU	CA-C	5.12	1.58	1.52
20	N	54	PHE	C-N	5.12	1.41	1.33
22	P	86	ASN	CA-CB	5.12	1.61	1.53
22	P	231	ILE	CA-C	-5.12	1.46	1.52
23	Q	139	ASP	C-N	5.12	1.41	1.33
13	6	212	ARG	CZ-NH2	5.12	1.40	1.33
7	G	196	LYS	CA-CB	5.12	1.61	1.53
20	N	358	ASP	CA-C	5.12	1.59	1.52
25	U	126	VAL	N-CA	-5.12	1.39	1.46
26	O	158	LEU	CA-CB	5.12	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	I	369	THR	CA-C	-5.12	1.45	1.52
31	M	47	ARG	CZ-NH2	5.12	1.40	1.33
3	C	49	ARG	CZ-NH1	5.12	1.40	1.32
11	4	82	ASN	CA-CB	5.12	1.61	1.53
21	S	316	THR	N-CA	5.12	1.52	1.46
21	S	334	LEU	N-CA	-5.12	1.40	1.46
31	M	84	LYS	CA-C	5.12	1.59	1.52
23	Q	324	ALA	C-O	-5.12	1.18	1.24
31	M	180	VAL	C-N	5.12	1.40	1.33
1	A	9	PHE	C-O	-5.11	1.17	1.24
22	P	99	GLN	C-N	5.11	1.40	1.33
11	4	85	ARG	C-O	-5.11	1.18	1.24
16	V	108	VAL	C-N	-5.11	1.27	1.33
21	S	404	ARG	CZ-NH2	5.11	1.40	1.33
24	R	95	LEU	CB-CG	5.11	1.63	1.53
5	E	15	PHE	N-CA	-5.11	1.39	1.46
21	S	483	HIS	CB-CG	5.11	1.57	1.50
24	R	151	TYR	N-CA	-5.11	1.39	1.46
29	K	281	ALA	C-N	5.11	1.40	1.34
30	L	400	TYR	C-N	5.11	1.40	1.33
32	J	404	LEU	CA-CB	5.11	1.62	1.53
25	U	116	CYS	CA-CB	5.11	1.61	1.53
26	O	171	SER	N-CA	-5.11	1.40	1.46
31	M	84	LYS	CA-CB	5.11	1.61	1.53
12	5	157	GLY	CA-C	-5.11	1.44	1.51
20	N	95	GLU	C-N	5.11	1.40	1.33
20	N	425	THR	C-N	5.11	1.40	1.33
20	N	646	PRO	CA-CB	-5.11	1.46	1.53
27	H	229	VAL	CA-CB	-5.11	1.47	1.54
19	Z	400	TYR	CB-CG	5.11	1.62	1.51
24	R	167	LEU	N-CA	-5.11	1.40	1.46
25	U	13	PRO	CA-CB	-5.11	1.46	1.53
17	T	251	LYS	C-N	5.10	1.41	1.33
31	M	46	GLN	C-N	5.10	1.40	1.33
31	M	251	PHE	CA-CB	5.10	1.60	1.53
16	V	151	VAL	C-N	5.10	1.40	1.33
20	N	566	LEU	CB-CG	5.10	1.63	1.53
24	R	229	ILE	N-CA	-5.10	1.40	1.46
26	O	110	ALA	C-N	5.10	1.40	1.33
10	3	49	LEU	C-N	5.10	1.40	1.33
19	Z	112	ASN	C-N	5.10	1.40	1.33
1	A	28	ALA	N-CA	5.10	1.52	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	23	GLU	CA-C	5.10	1.59	1.52
6	F	125	ARG	CA-C	-5.10	1.46	1.52
13	6	124	TYR	N-CA	5.10	1.52	1.46
23	Q	74	ARG	NE-CZ	5.10	1.38	1.33
25	U	165	GLU	CA-C	-5.10	1.46	1.52
32	J	204	ALA	C-N	5.10	1.40	1.33
9	2	114	GLY	CA-C	-5.10	1.45	1.51
16	V	274	ASN	C-N	5.10	1.40	1.33
29	K	373	ALA	C-N	5.10	1.40	1.33
12	5	200	ARG	C-N	5.10	1.41	1.33
27	H	61	GLU	CA-CB	5.10	1.61	1.53
2	B	15	PRO	N-CA	-5.09	1.41	1.47
2	B	24	TYR	CZ-OH	5.09	1.48	1.38
9	2	259	VAL	C-N	5.09	1.38	1.33
15	W	108	ARG	N-CA	5.09	1.52	1.45
19	Z	849	ALA	C-N	5.09	1.39	1.33
20	N	931	HIS	CG-ND1	5.09	1.43	1.38
24	R	331	ASP	CA-C	-5.09	1.46	1.52
26	O	314	ALA	CA-CB	-5.09	1.45	1.53
30	L	77	GLN	N-CA	-5.09	1.40	1.46
30	L	151	GLY	CA-C	-5.09	1.44	1.51
30	L	157	ARG	NE-CZ	5.09	1.38	1.33
4	D	34	GLY	N-CA	-5.09	1.38	1.45
6	F	108	LEU	C-N	5.09	1.40	1.33
8	1	141	GLY	N-CA	-5.09	1.41	1.46
20	N	81	ALA	C-N	5.09	1.41	1.34
20	N	143	ASP	C-N	5.09	1.41	1.33
24	R	92	GLU	N-CA	5.09	1.52	1.46
26	O	215	GLU	N-CA	5.09	1.52	1.46
3	C	143	TYR	CB-CG	5.09	1.62	1.51
26	O	376	THR	CB-OG1	-5.09	1.35	1.43
30	L	155	GLN	CA-C	-5.09	1.46	1.52
30	L	262	SER	CA-CB	5.09	1.61	1.53
1	A	46	ASP	N-CA	5.09	1.52	1.46
2	B	118	MET	C-N	5.09	1.40	1.33
2	B	138	GLY	CA-C	5.09	1.56	1.51
5	E	34	GLY	N-CA	5.09	1.51	1.44
20	N	497	LEU	N-CA	5.09	1.52	1.46
22	P	273	TYR	CA-C	-5.09	1.46	1.52
22	P	407	ASP	CA-C	-5.09	1.46	1.52
7	G	130	ARG	N-CA	5.08	1.52	1.45
13	6	184	ASN	CA-CB	5.08	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	Q	237	GLU	C-N	5.08	1.40	1.33
31	M	260	VAL	C-N	-5.08	1.26	1.33
11	4	66	LEU	CA-CB	-5.08	1.45	1.53
13	6	200	ARG	N-CA	-5.08	1.40	1.46
30	L	258	SER	CA-CB	5.08	1.61	1.53
5	E	206	MET	C-N	5.08	1.40	1.33
10	3	169	GLN	N-CA	5.08	1.52	1.46
12	5	79	ALA	CA-C	-5.08	1.46	1.52
21	S	106	HIS	ND1-CE1	5.08	1.37	1.32
20	N	267	ASN	CA-C	5.08	1.59	1.52
22	P	176	SER	CA-CB	5.08	1.61	1.53
23	Q	265	GLU	C-N	5.08	1.41	1.34
13	6	167	SER	N-CA	-5.08	1.39	1.45
15	W	82	GLY	C-N	5.08	1.40	1.33
20	N	611	ASN	C-N	5.08	1.40	1.33
25	U	114	ARG	CZ-NH1	5.08	1.39	1.32
30	L	28	LYS	C-N	5.08	1.40	1.33
32	J	388	ALA	CA-CB	5.08	1.61	1.53
1	A	117	ARG	CD-NE	5.08	1.53	1.46
15	W	158	ASN	CA-C	-5.08	1.46	1.52
20	N	754	HIS	ND1-CE1	5.08	1.37	1.32
22	P	128	LEU	CA-C	-5.08	1.46	1.52
26	O	86	GLN	C-N	5.08	1.40	1.33
4	D	150	LEU	N-CA	-5.08	1.39	1.46
16	V	251	LEU	N-CA	-5.08	1.39	1.46
20	N	220	LEU	N-CA	-5.08	1.40	1.46
23	Q	37	GLU	CA-CB	5.08	1.60	1.53
24	R	137	ARG	CZ-NH1	5.08	1.39	1.32
26	O	230	ARG	CZ-NH2	5.08	1.40	1.33
12	5	197	VAL	CA-C	-5.07	1.46	1.52
27	H	103	ASN	N-CA	-5.07	1.39	1.46
26	O	376	THR	N-CA	-5.07	1.36	1.46
28	I	249	ARG	CZ-NH2	5.07	1.40	1.33
29	K	274	ARG	N-CA	-5.07	1.39	1.46
1	A	134	LEU	N-CA	-5.07	1.39	1.45
2	B	63	HIS	N-CA	-5.07	1.39	1.46
2	B	116	SER	CA-C	-5.07	1.46	1.52
19	Z	870	THR	C-N	5.07	1.39	1.33
20	N	425	THR	CA-C	-5.07	1.46	1.52
22	P	347	GLY	C-N	5.07	1.40	1.33
28	I	313	LEU	C-N	5.07	1.40	1.33
29	K	144	PRO	CA-C	-5.07	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	4	99	HIS	ND1-CE1	5.07	1.37	1.32
30	L	289	MET	C-N	5.07	1.40	1.33
30	L	359	ASN	CA-C	5.07	1.59	1.52
30	L	386	ARG	CZ-NH1	5.07	1.39	1.32
5	E	236	GLU	CA-CB	5.07	1.61	1.53
7	G	29	LYS	C-N	5.07	1.40	1.33
7	G	224	ARG	CD-NE	5.07	1.53	1.46
19	Z	380	PHE	CA-CB	5.07	1.61	1.53
19	Z	828	ARG	NE-CZ	5.07	1.38	1.33
24	R	136	HIS	CB-CG	5.07	1.57	1.50
31	M	167	LEU	CA-CB	5.07	1.60	1.53
2	B	169	ASN	CA-CB	5.07	1.61	1.53
16	V	169	VAL	C-O	-5.07	1.18	1.24
17	T	110	PRO	C-O	-5.07	1.17	1.24
26	O	220	PRO	CA-C	-5.07	1.43	1.52
20	N	221	ILE	N-CA	5.06	1.52	1.46
24	R	118	GLU	C-N	5.06	1.40	1.33
31	M	186	GLU	N-CA	-5.06	1.39	1.46
4	D	139	ILE	N-CA	-5.06	1.40	1.46
12	5	176	GLU	N-CA	-5.06	1.40	1.45
13	6	79	ILE	CA-CB	5.06	1.63	1.55
17	T	181	TYR	C-N	5.06	1.40	1.33
20	N	600	ARG	N-CA	5.06	1.52	1.46
20	N	612	ASP	CA-C	-5.06	1.46	1.52
22	P	308	LEU	CA-C	-5.06	1.46	1.52
29	K	52	GLU	C-N	5.06	1.40	1.33
3	C	75	SER	CA-C	-5.06	1.46	1.52
23	Q	94	ASP	CA-CB	5.06	1.61	1.53
10	3	26	ARG	CA-C	-5.06	1.46	1.52
22	P	178	GLU	N-CA	-5.06	1.40	1.45
31	M	367	ARG	CZ-NH2	5.06	1.40	1.33
31	M	429	GLU	CA-C	-5.06	1.46	1.52
7	G	136	PHE	CA-CB	5.06	1.62	1.53
16	V	51	MET	N-CA	-5.06	1.39	1.46
19	Z	770	HIS	CB-CG	5.06	1.57	1.50
20	N	218	GLN	N-CA	-5.06	1.40	1.46
1	A	245	ARG	CD-NE	5.06	1.53	1.46
23	Q	254	MET	CA-CB	5.06	1.61	1.53
6	F	146	GLN	CA-C	-5.05	1.46	1.52
29	K	181	VAL	CA-CB	-5.05	1.47	1.54
7	G	220	LEU	CA-C	5.05	1.59	1.52
21	S	385	ASP	N-CA	-5.05	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	P	438	LEU	N-CA	-5.05	1.40	1.46
23	Q	411	VAL	N-CA	-5.05	1.40	1.46
24	R	24	PHE	C-O	-5.05	1.18	1.24
31	M	203	GLU	CA-CB	5.05	1.61	1.53
19	Z	620	PHE	N-CA	-5.05	1.39	1.46
27	H	123	VAL	CA-CB	-5.05	1.47	1.54
27	H	170	PRO	CA-CB	5.05	1.60	1.54
27	H	397	ILE	C-N	5.05	1.40	1.33
1	A	95	ARG	N-CA	-5.05	1.40	1.46
15	W	113	VAL	CA-C	-5.05	1.46	1.52
17	T	194	LEU	CA-C	-5.05	1.46	1.52
19	Z	107	LYS	CA-CB	5.05	1.61	1.53
19	Z	198	HIS	ND1-CE1	5.05	1.37	1.32
19	Z	430	ASP	C-N	5.05	1.40	1.33
19	Z	838	ARG	CA-C	5.05	1.58	1.52
20	N	734	GLN	CA-C	-5.05	1.46	1.52
27	H	365	GLU	CD-OE1	5.05	1.34	1.25
28	I	128	GLY	CA-C	-5.05	1.44	1.52
32	J	26	SER	N-CA	-5.05	1.40	1.46
32	J	365	GLU	C-N	5.05	1.40	1.33
22	P	274	VAL	CA-CB	-5.05	1.47	1.54
25	U	177	ARG	CZ-NH2	5.05	1.40	1.33
31	M	338	VAL	CA-C	5.05	1.58	1.52
32	J	263	SER	CA-CB	5.05	1.61	1.53
19	Z	556	ARG	NE-CZ	5.05	1.38	1.33
24	R	159	ARG	CD-NE	5.05	1.53	1.46
27	H	203	ASN	CA-C	-5.05	1.46	1.52
8	1	35	THR	C-N	-5.04	1.26	1.33
30	L	114	LEU	N-CA	-5.04	1.39	1.45
3	C	119	GLN	C-N	5.04	1.40	1.33
10	3	198	ARG	CZ-NH1	5.04	1.39	1.32
16	V	29	GLU	N-CA	-5.04	1.39	1.45
23	Q	115	GLU	CA-C	-5.04	1.46	1.52
26	O	170	ALA	C-N	5.04	1.40	1.33
29	K	417	TYR	C-N	5.04	1.40	1.33
30	L	237	ARG	NE-CZ	5.04	1.38	1.33
6	F	153	TYR	CZ-OH	5.04	1.48	1.38
20	N	357	LYS	N-CA	5.04	1.52	1.46
20	N	923	GLU	C-N	5.04	1.40	1.33
25	U	176	LEU	CA-C	5.04	1.59	1.52
28	I	296	ASP	CA-C	5.04	1.59	1.52
23	Q	78	ASN	C-N	5.04	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	K	125	LYS	N-CA	-5.04	1.41	1.46
29	K	146	GLU	C-N	5.04	1.40	1.33
1	A	242	LEU	CA-CB	5.04	1.61	1.53
2	B	158	TRP	CA-C	-5.04	1.46	1.52
17	T	271	ARG	CZ-NH1	5.04	1.39	1.32
21	S	219	LYS	C-N	5.04	1.41	1.33
22	P	329	ARG	CZ-NH2	5.04	1.40	1.33
26	O	163	TYR	C-O	5.04	1.30	1.24
26	O	196	ARG	NE-CZ	5.04	1.38	1.33
31	M	266	ASP	CG-OD2	5.04	1.34	1.25
3	C	97	TYR	CZ-OH	5.04	1.48	1.38
6	F	70	ILE	CA-CB	5.04	1.61	1.54
6	F	238	GLU	C-N	5.04	1.38	1.33
7	G	177	ILE	N-CA	-5.04	1.40	1.46
21	S	367	ASN	CG-ND2	5.04	1.43	1.33
21	S	490	MET	CA-CB	5.04	1.61	1.53
23	Q	186	ALA	C-O	-5.04	1.18	1.24
6	F	149	PRO	CA-C	5.03	1.60	1.52
16	V	282	ARG	CA-CB	5.03	1.61	1.53
23	Q	148	HIS	CD2-NE2	-5.03	1.32	1.37
25	U	208	ILE	CA-CB	5.03	1.60	1.54
27	H	162	THR	CA-CB	5.03	1.61	1.53
9	2	185	PHE	N-CA	5.03	1.51	1.46
23	Q	318	ILE	C-O	5.03	1.30	1.24
29	K	47	LEU	CA-C	-5.03	1.45	1.52
1	A	48	ALA	N-CA	5.03	1.52	1.46
6	F	136	GLY	N-CA	-5.03	1.40	1.45
13	6	58	GLU	N-CA	-5.03	1.40	1.46
14	7	85	ARG	NE-CZ	5.03	1.38	1.33
28	I	176	VAL	CA-CB	5.03	1.61	1.54
31	M	332	ILE	N-CA	-5.03	1.40	1.46
7	G	159	TYR	N-CA	-5.03	1.39	1.45
23	Q	2	ALA	CA-C	5.03	1.58	1.52
21	S	353	LEU	C-N	5.03	1.40	1.33
23	Q	83	ALA	C-N	5.03	1.40	1.34
9	2	231	PRO	N-CD	5.03	1.54	1.47
11	4	91	CYS	CA-CB	5.03	1.61	1.53
15	W	188	ILE	N-CA	-5.03	1.40	1.46
21	S	391	ILE	CA-C	-5.03	1.46	1.52
28	I	242	GLN	CA-C	-5.03	1.46	1.52
7	G	208	LYS	CA-C	-5.02	1.46	1.52
8	1	57	SER	C-N	5.02	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	R	327	VAL	C-O	-5.02	1.18	1.24
12	5	245	ARG	CZ-NH2	5.02	1.40	1.33
19	Z	855	GLN	N-CA	-5.02	1.36	1.46
21	S	196	ARG	CZ-NH1	5.02	1.39	1.32
5	E	53	ARG	CD-NE	5.02	1.53	1.46
19	Z	545	LYS	N-CA	-5.02	1.40	1.46
27	H	412	ALA	C-N	5.02	1.40	1.33
8	1	173	ASP	N-CA	5.02	1.52	1.46
17	T	106	ASN	C-N	5.02	1.41	1.33
19	Z	421	ASP	N-CA	-5.02	1.39	1.46
20	N	6	ALA	CA-C	-5.02	1.46	1.52
20	N	544	ILE	CA-C	5.02	1.59	1.52
23	Q	307	THR	CA-C	5.02	1.59	1.52
27	H	227	ARG	CD-NE	5.02	1.53	1.46
32	J	285	ALA	CA-C	-5.02	1.46	1.52
23	Q	145	GLU	C-N	5.02	1.40	1.33
8	1	80	GLY	N-CA	-5.01	1.41	1.46
22	P	89	LEU	C-N	5.01	1.40	1.33
22	P	239	SER	CA-C	5.01	1.59	1.52
27	H	296	GLN	CA-CB	5.01	1.61	1.53
31	M	51	LEU	C-N	5.01	1.40	1.33
4	D	123	ARG	NE-CZ	5.01	1.38	1.33
15	W	53	THR	C-N	5.01	1.41	1.33
23	Q	326	LEU	CA-CB	5.01	1.61	1.53
26	O	258	GLN	CA-C	-5.01	1.45	1.52
31	M	106	ASP	N-CA	-5.01	1.40	1.46
31	M	235	GLY	CA-C	-5.01	1.44	1.51
5	E	237	VAL	C-N	5.01	1.40	1.34
6	F	97	PHE	C-N	-5.01	1.27	1.33
13	6	29	PHE	CA-CB	5.01	1.62	1.53
20	N	804	SER	N-CA	-5.01	1.40	1.46
30	L	109	GLY	CA-C	-5.01	1.44	1.51
32	J	33	LEU	CA-C	-5.01	1.46	1.52
32	J	97	VAL	C-N	5.01	1.40	1.33
25	U	190	ARG	CZ-NH1	5.01	1.39	1.32
20	N	793	LYS	CA-C	-5.01	1.46	1.52
24	R	80	GLU	CA-C	-5.01	1.46	1.52
25	U	276	ILE	C-N	5.01	1.40	1.33
10	3	171	MET	CA-C	-5.01	1.46	1.52
14	7	54	SER	N-CA	-5.01	1.40	1.46
20	N	767	THR	CA-CB	5.01	1.61	1.53
32	J	284	GLU	C-N	5.01	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	113	ARG	CD-NE	5.00	1.53	1.46
9	2	135	GLY	CA-C	5.00	1.58	1.51
16	V	192	LEU	C-N	5.00	1.40	1.33
29	K	55	GLU	CA-CB	5.00	1.61	1.53
19	Z	120	CYS	C-N	5.00	1.40	1.33
20	N	736	ILE	CA-CB	-5.00	1.48	1.54
23	Q	118	LYS	C-O	-5.00	1.18	1.24
26	O	42	LEU	CA-C	-5.00	1.46	1.52
27	H	405	THR	CA-CB	5.00	1.60	1.53
28	I	322	ARG	NE-CZ	5.00	1.38	1.33
31	M	46	GLN	CA-C	-5.00	1.46	1.52
31	M	373	SER	C-O	-5.00	1.17	1.24
31	M	430	VAL	CA-CB	-5.00	1.48	1.54
32	J	21	ARG	CD-NE	5.00	1.53	1.46
32	J	152	GLY	CA-C	-5.00	1.44	1.51
2	B	230	LEU	C-N	5.00	1.40	1.33
7	G	20	ARG	NE-CZ	5.00	1.38	1.33
29	K	121	ARG	NE-CZ	5.00	1.38	1.33
30	L	148	GLU	C-N	5.00	1.39	1.33
30	L	255	ARG	NE-CZ	5.00	1.38	1.33

All (6515) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	332	THR	CA-C-N	16.43	130.59	120.24
17	T	332	THR	C-N-CA	16.43	130.59	120.24
32	J	143	VAL	CA-C-O	-13.55	112.89	119.94
24	R	272	PHE	CA-CB-CG	-12.71	101.09	113.80
31	M	72	MET	CA-C-N	12.70	137.30	120.28
31	M	72	MET	C-N-CA	12.70	137.30	120.28
20	N	756	HIS	CA-CB-CG	12.35	126.15	113.80
24	R	14	ASN	CA-CB-CG	-12.18	100.42	112.60
20	N	174	PRO	N-CA-CB	12.12	109.70	102.92
2	B	34	PRO	N-CA-CB	11.97	114.56	103.19
21	S	191	ILE	N-CA-C	-11.74	102.02	113.53
9	2	215	ASN	CA-C-N	11.74	136.23	120.50
9	2	215	ASN	C-N-CA	11.74	136.23	120.50
10	3	48	ARG	N-CA-C	-11.53	97.09	114.16
26	O	152	HIS	CA-CB-CG	11.40	125.20	113.80
3	C	18	LEU	CA-C-O	11.28	132.43	120.36
20	N	480	GLY	CA-C-N	11.25	135.35	120.28
20	N	480	GLY	C-N-CA	11.25	135.35	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	188	ASP	CA-CB-CG	11.22	123.82	112.60
19	Z	552	ASP	CA-CB-CG	-11.22	101.38	112.60
20	N	168	LEU	N-CA-C	11.20	123.49	111.28
16	V	160	PHE	CA-CB-CG	-11.19	102.61	113.80
29	K	357	GLU	N-CA-C	-11.12	100.25	114.04
29	K	119	ILE	N-CA-C	-11.06	92.05	107.75
31	M	86	ASN	CA-CB-CG	-10.91	101.69	112.60
4	D	84	ALA	N-CA-C	10.90	122.74	111.07
10	3	138	VAL	N-CA-C	-10.88	92.86	108.42
29	K	189	GLU	N-CA-C	10.87	123.13	111.28
10	3	144	GLU	CA-C-N	10.86	134.84	120.28
10	3	144	GLU	C-N-CA	10.86	134.84	120.28
7	G	9	ASP	CA-CB-CG	10.86	123.46	112.60
32	J	50	ASN	CA-CB-CG	10.73	123.33	112.60
23	Q	218	HIS	CA-CB-CG	-10.65	103.15	113.80
11	4	41	LYS	CA-C-O	-10.60	112.56	120.19
28	I	217	LYS	CA-C-N	10.47	131.17	120.38
28	I	217	LYS	C-N-CA	10.47	131.17	120.38
29	K	359	ASP	CA-CB-CG	-10.47	102.13	112.60
20	N	927	PRO	CA-C-O	-10.44	109.45	121.56
32	J	403	LYS	N-CA-C	-10.41	102.75	114.62
2	B	26	LEU	CA-C-N	10.39	134.21	120.28
2	B	26	LEU	C-N-CA	10.39	134.21	120.28
19	Z	242	GLU	CA-C-O	-10.38	109.08	118.63
14	7	230	ARG	CA-C-N	10.36	134.16	120.28
14	7	230	ARG	C-N-CA	10.36	134.16	120.28
19	Z	473	ASN	CA-CB-CG	-10.32	102.28	112.60
30	L	228	LEU	CA-C-N	10.31	133.76	120.56
30	L	228	LEU	C-N-CA	10.31	133.76	120.56
31	M	335	THR	CA-C-N	10.26	133.78	120.44
31	M	335	THR	C-N-CA	10.26	133.78	120.44
20	N	895	THR	N-CA-C	-10.25	101.54	114.56
9	2	227	ASP	CA-CB-CG	10.25	122.85	112.60
8	1	106	PRO	N-CA-C	10.18	123.12	110.70
32	J	383	PHE	CA-CB-CG	-10.10	103.70	113.80
13	6	191	VAL	N-CA-C	-10.09	100.92	109.19
19	Z	553	THR	CA-C-N	10.08	133.54	120.44
19	Z	553	THR	C-N-CA	10.08	133.54	120.44
9	2	180	VAL	N-CA-C	10.07	120.89	110.62
9	2	105	ASN	CA-CB-CG	10.03	122.63	112.60
15	W	166	THR	CA-C-N	10.01	129.61	120.10
15	W	166	THR	C-N-CA	10.01	129.61	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	348	GLU	N-CA-C	9.98	122.16	111.28
28	I	241	ASN	CA-CB-CG	9.98	122.58	112.60
19	Z	295	ALA	N-CA-C	9.97	121.74	111.07
11	4	64	VAL	CA-C-N	9.94	134.40	120.29
11	4	64	VAL	C-N-CA	9.94	134.40	120.29
31	M	387	LEU	CA-C-N	9.89	133.53	120.28
31	M	387	LEU	C-N-CA	9.89	133.53	120.28
7	G	153	ASP	CA-CB-CG	9.86	122.46	112.60
6	F	82	ARG	NE-CZ-NH2	9.86	128.07	119.20
2	B	206	ASP	CA-CB-CG	-9.85	102.75	112.60
19	Z	622	SER	N-CA-C	-9.85	99.67	114.64
32	J	332	HIS	CA-C-N	9.84	133.23	120.44
32	J	332	HIS	C-N-CA	9.84	133.23	120.44
16	V	147	PRO	CA-C-N	9.83	132.95	120.56
16	V	147	PRO	C-N-CA	9.83	132.95	120.56
30	L	165	LEU	CA-C-O	-9.83	109.35	118.79
13	6	82	SER	CA-C-N	9.82	129.50	122.33
13	6	82	SER	C-N-CA	9.82	129.50	122.33
30	L	179	ILE	CA-C-N	9.78	126.70	119.66
30	L	179	ILE	C-N-CA	9.78	126.70	119.66
32	J	16	ALA	CA-C-N	9.72	132.30	120.14
32	J	16	ALA	C-N-CA	9.72	132.30	120.14
17	T	267	LEU	N-CA-C	-9.72	101.42	113.38
12	5	239	ARG	NE-CZ-NH2	-9.71	110.46	119.20
30	L	223	GLY	CA-C-N	9.67	134.02	120.29
30	L	223	GLY	C-N-CA	9.67	134.02	120.29
19	Z	103	TYR	N-CA-C	9.67	121.82	111.28
25	U	197	GLY	CA-C-N	9.67	133.23	120.28
25	U	197	GLY	C-N-CA	9.67	133.23	120.28
9	2	212	SER	N-CA-C	-9.66	101.00	113.17
25	U	211	TYR	CA-C-O	-9.65	110.32	120.55
21	S	162	TYR	CA-C-N	9.65	132.98	120.44
21	S	162	TYR	C-N-CA	9.65	132.98	120.44
16	V	206	ASN	CA-CB-CG	9.64	122.24	112.60
21	S	58	HIS	CA-CB-CG	9.61	123.41	113.80
26	O	187	ASP	CA-CB-CG	9.61	122.21	112.60
32	J	355	SER	CA-C-N	9.58	132.39	120.22
32	J	355	SER	C-N-CA	9.58	132.39	120.22
22	P	329	ARG	CA-C-N	9.56	134.08	120.79
22	P	329	ARG	C-N-CA	9.56	134.08	120.79
19	Z	15	GLN	CA-C-O	-9.56	109.36	118.73
3	C	5	TYR	N-CA-C	-9.55	100.94	112.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	243	GLY	O-C-N	-9.54	117.64	121.07
10	3	98	LYS	N-CA-C	9.52	122.86	111.82
23	Q	6	VAL	CB-CA-C	9.51	126.89	111.29
28	I	193	GLN	OE1-CD-NE2	-9.51	113.09	122.60
31	M	266	ASP	CA-C-N	9.51	132.30	120.22
31	M	266	ASP	C-N-CA	9.51	132.30	120.22
20	N	455	GLY	CA-C-N	9.49	133.76	120.29
20	N	455	GLY	C-N-CA	9.49	133.76	120.29
32	J	253	SER	CA-C-N	9.49	135.46	123.12
32	J	253	SER	C-N-CA	9.49	135.46	123.12
32	J	208	ASP	CA-CB-CG	-9.48	103.12	112.60
26	O	20	ALA	CA-C-N	9.46	132.48	120.56
26	O	20	ALA	C-N-CA	9.46	132.48	120.56
23	Q	413	SER	CA-C-N	9.46	133.72	120.29
23	Q	413	SER	C-N-CA	9.46	133.72	120.29
27	H	264	ALA	CA-C-N	9.46	132.95	120.28
27	H	264	ALA	C-N-CA	9.46	132.95	120.28
22	P	420	ASP	CA-C-N	9.44	129.20	119.19
22	P	420	ASP	C-N-CA	9.44	129.20	119.19
11	4	76	SER	CA-C-O	-9.44	110.03	120.69
23	Q	416	ASN	CA-CB-CG	-9.43	103.17	112.60
26	O	219	HIS	CA-C-N	9.43	129.09	119.56
26	O	219	HIS	C-N-CA	9.43	129.09	119.56
22	P	387	ASP	CA-CB-CG	-9.42	103.18	112.60
21	S	213	VAL	CA-C-N	9.41	132.68	120.44
21	S	213	VAL	C-N-CA	9.41	132.68	120.44
21	S	484	ASN	CA-C-N	9.41	132.89	120.28
21	S	484	ASN	C-N-CA	9.41	132.89	120.28
12	5	189	SER	CA-C-N	9.40	139.84	121.41
12	5	189	SER	C-N-CA	9.40	139.84	121.41
20	N	127	ASP	N-CA-C	9.40	122.74	110.43
22	P	1	MET	CA-C-N	9.39	134.14	120.90
22	P	1	MET	C-N-CA	9.39	134.14	120.90
17	T	287	PHE	CA-CB-CG	-9.38	104.42	113.80
32	J	345	ARG	CA-C-N	9.38	132.63	120.44
32	J	345	ARG	C-N-CA	9.38	132.63	120.44
13	6	35	ASN	CA-CB-CG	9.36	121.96	112.60
20	N	770	TRP	CA-C-N	9.36	132.61	120.44
20	N	770	TRP	C-N-CA	9.36	132.61	120.44
5	E	190	THR	CA-C-N	9.35	133.57	120.29
5	E	190	THR	C-N-CA	9.35	133.57	120.29
6	F	63	ILE	N-CA-C	-9.29	95.16	108.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	84	ILE	N-CA-C	-9.30	95.19	108.58
14	7	229	ASN	CA-CB-CG	9.29	121.89	112.60
19	Z	425	GLY	CA-C-N	9.28	132.71	120.28
19	Z	425	GLY	C-N-CA	9.28	132.71	120.28
19	Z	448	CYS	CA-C-N	9.28	130.28	119.98
19	Z	448	CYS	C-N-CA	9.28	130.28	119.98
20	N	684	ARG	NE-CZ-NH2	-9.27	110.86	119.20
29	K	96	VAL	N-CA-C	-9.27	104.44	113.53
20	N	946	GLU	CA-C-O	-9.27	107.46	120.16
19	Z	591	ALA	CA-C-O	-9.25	110.61	120.42
26	O	168	ASN	CA-CB-CG	9.25	121.85	112.60
16	V	173	GLU	O-C-N	-9.24	112.25	120.48
30	L	66	SER	CA-C-N	9.24	138.60	121.97
30	L	66	SER	C-N-CA	9.24	138.60	121.97
26	O	91	ASN	CA-C-N	9.23	133.53	120.42
26	O	91	ASN	C-N-CA	9.23	133.53	120.42
5	E	137	PHE	CA-CB-CG	-9.21	104.59	113.80
23	Q	314	ARG	N-CA-C	9.21	121.39	111.36
29	K	231	VAL	CA-C-O	-9.20	114.41	121.68
11	4	57	ALA	CB-CA-C	-9.19	96.37	110.90
31	M	30	ASP	CA-CB-CG	9.18	121.78	112.60
14	7	236	VAL	O-C-N	-9.18	113.28	123.10
24	R	282	MET	N-CA-C	9.16	122.58	111.40
19	Z	539	LEU	CA-C-N	9.16	132.55	120.28
19	Z	539	LEU	C-N-CA	9.16	132.55	120.28
21	S	288	THR	CA-C-N	9.15	130.14	119.98
21	S	288	THR	C-N-CA	9.15	130.14	119.98
12	5	164	ASP	O-C-N	-9.12	114.43	123.46
1	A	53	GLN	OE1-CD-NE2	9.10	131.70	122.60
13	6	77	THR	N-CA-C	-9.10	104.25	114.62
1	A	17	SER	CA-C-N	9.09	131.20	119.84
1	A	17	SER	C-N-CA	9.09	131.20	119.84
23	Q	244	SER	CA-C-N	9.08	129.67	119.32
23	Q	244	SER	C-N-CA	9.08	129.67	119.32
22	P	286	LEU	N-CA-C	9.07	120.78	111.07
13	6	63	HIS	CG-CD2-NE2	9.07	116.27	107.20
19	Z	401	LYS	CA-C-N	9.06	134.81	121.31
19	Z	401	LYS	C-N-CA	9.06	134.81	121.31
31	M	240	ALA	CA-C-N	9.05	133.14	120.29
31	M	240	ALA	C-N-CA	9.05	133.14	120.29
31	M	227	LEU	CA-C-O	-9.05	110.59	120.36
24	R	116	ASP	N-CA-C	-9.04	91.06	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	5	216	ARG	N-CA-C	9.03	120.73	111.07
3	C	61	PHE	N-CA-C	-9.03	101.99	113.72
19	Z	810	ILE	N-CA-CB	9.02	120.55	110.72
23	Q	74	ARG	CA-C-O	-9.02	109.89	118.73
21	S	424	LEU	CA-C-N	9.02	132.71	120.54
21	S	424	LEU	C-N-CA	9.02	132.71	120.54
5	E	183	GLU	CA-C-O	9.01	130.18	120.90
27	H	370	PHE	CA-CB-CG	-9.01	104.79	113.80
19	Z	469	TYR	N-CA-C	9.00	121.17	111.36
4	D	238	ILE	N-CA-C	8.99	122.33	111.09
25	U	181	ASP	N-CA-C	-8.99	101.43	111.14
4	D	4	ASP	CA-C-N	8.99	132.32	120.28
4	D	4	ASP	C-N-CA	8.99	132.32	120.28
23	Q	167	VAL	N-CA-CB	8.98	122.76	110.54
30	L	194	LYS	N-CA-C	-8.97	101.50	111.28
20	N	479	LEU	CA-C-N	8.96	129.70	119.94
20	N	479	LEU	C-N-CA	8.96	129.70	119.94
1	A	178	PHE	CA-CB-CG	-8.94	104.86	113.80
15	W	12	ASN	N-CA-C	-8.94	94.33	108.90
15	W	43	SER	O-C-N	8.94	131.28	122.07
30	L	130	ASP	CA-C-N	8.93	128.58	119.56
30	L	130	ASP	C-N-CA	8.93	128.58	119.56
27	H	342	GLU	CA-C-N	8.92	134.35	122.30
27	H	342	GLU	C-N-CA	8.92	134.35	122.30
21	S	49	GLY	CA-C-N	8.91	132.02	120.44
21	S	49	GLY	C-N-CA	8.91	132.02	120.44
1	A	61	LEU	CA-C-O	-8.90	111.86	121.56
7	G	84	ASP	N-CA-CB	8.89	124.07	110.28
28	I	176	VAL	CA-C-N	8.89	138.52	121.54
28	I	176	VAL	C-N-CA	8.89	138.52	121.54
9	2	244	ARG	NE-CZ-NH2	-8.88	111.20	119.20
25	U	22	HIS	CE1-NE2-CD2	-8.88	100.12	109.00
20	N	366	HIS	CE1-NE2-CD2	-8.87	100.13	109.00
1	A	34	GLN	CA-C-N	8.86	129.60	119.94
1	A	34	GLN	C-N-CA	8.86	129.60	119.94
12	5	197	VAL	N-CA-C	8.86	119.66	110.62
21	S	372	ASN	CA-CB-CG	-8.85	103.75	112.60
29	K	29	PHE	CA-CB-CG	-8.85	104.95	113.80
29	K	323	ARG	CA-C-O	-8.85	112.50	120.56
26	O	61	GLU	N-CA-C	-8.84	101.61	111.07
28	I	168	ASP	N-CA-C	-8.84	98.00	108.25
17	T	175	LYS	CB-CA-C	-8.83	96.13	110.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	274	LYS	N-CA-C	-8.81	100.31	112.12
21	S	249	LEU	CA-C-O	-8.81	111.08	120.42
30	L	78	LEU	N-CA-C	-8.79	102.47	113.55
22	P	93	ARG	N-CA-C	8.79	120.48	111.07
29	K	279	THR	O-C-N	-8.79	112.90	123.27
2	B	20	VAL	CA-C-N	8.78	131.85	120.44
2	B	20	VAL	C-N-CA	8.78	131.85	120.44
8	1	39	VAL	CA-C-N	8.78	135.66	122.93
8	1	39	VAL	C-N-CA	8.78	135.66	122.93
21	S	473	HIS	CE1-NE2-CD2	-8.78	100.22	109.00
6	F	105	VAL	N-CA-C	-8.77	101.86	110.72
22	P	441	LYS	CA-C-N	8.76	132.90	120.28
22	P	441	LYS	C-N-CA	8.76	132.90	120.28
26	O	288	HIS	CE1-NE2-CD2	-8.76	100.24	109.00
19	Z	738	ASN	N-CA-C	-8.76	103.18	114.04
20	N	658	VAL	N-CA-C	8.76	119.56	110.72
9	2	64	THR	N-CA-C	-8.74	94.65	108.90
15	W	156	PHE	CA-C-N	8.74	131.58	120.56
15	W	156	PHE	C-N-CA	8.74	131.58	120.56
19	Z	628	ASP	N-CA-C	8.74	121.60	111.11
25	U	180	LYS	CA-C-N	8.73	132.31	120.44
25	U	180	LYS	C-N-CA	8.73	132.31	120.44
8	1	228	PRO	CA-C-N	8.73	134.01	119.35
8	1	228	PRO	C-N-CA	8.73	134.01	119.35
4	D	41	VAL	N-CA-C	-8.72	95.88	108.36
20	N	505	ASP	CA-C-N	8.72	131.78	120.44
20	N	505	ASP	C-N-CA	8.72	131.78	120.44
23	Q	33	ARG	NE-CZ-NH2	8.72	127.05	119.20
4	D	228	PRO	CA-C-N	8.72	132.67	120.29
4	D	228	PRO	C-N-CA	8.72	132.67	120.29
9	2	59	ALA	O-C-N	-8.72	112.52	123.24
15	W	92	VAL	CA-C-N	8.71	131.95	120.28
15	W	92	VAL	C-N-CA	8.71	131.95	120.28
22	P	281	ASN	CA-CB-CG	-8.70	103.90	112.60
9	2	109	HIS	N-CA-C	8.70	120.84	111.36
23	Q	136	LEU	CA-C-N	8.70	132.65	120.29
23	Q	136	LEU	C-N-CA	8.70	132.65	120.29
30	L	362	THR	CA-C-N	8.70	132.65	120.29
30	L	362	THR	C-N-CA	8.70	132.65	120.29
16	V	304	LEU	CA-C-N	8.70	131.93	120.28
16	V	304	LEU	C-N-CA	8.70	131.93	120.28
20	N	250	PHE	CA-CB-CG	-8.70	105.11	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	4	132	HIS	CA-C-N	8.69	130.30	121.35
11	4	132	HIS	C-N-CA	8.69	130.30	121.35
19	Z	624	GLU	N-CA-C	-8.68	103.82	114.75
32	J	111	ASN	CA-CB-CG	8.67	121.27	112.60
20	N	792	ASN	CA-C-N	8.67	132.26	120.38
20	N	792	ASN	C-N-CA	8.67	132.26	120.38
28	I	118	ASP	CA-CB-CG	8.67	121.27	112.60
2	B	21	GLN	N-CA-C	8.66	120.34	111.07
19	Z	446	LEU	CA-C-N	8.65	132.58	120.29
19	Z	446	LEU	C-N-CA	8.65	132.58	120.29
14	7	105	GLN	N-CA-C	-8.65	101.78	111.82
28	I	163	LEU	CA-C-O	8.65	127.91	118.65
5	E	186	HIS	CA-C-N	8.65	133.79	120.82
5	E	186	HIS	C-N-CA	8.65	133.79	120.82
14	7	86	ILE	N-CA-C	-8.65	95.99	108.53
7	G	98	ASN	CA-CB-CG	-8.64	103.96	112.60
9	2	78	HIS	ND1-CE1-NE2	8.63	117.03	108.40
31	M	315	GLU	CA-C-N	8.63	132.17	120.44
31	M	315	GLU	C-N-CA	8.63	132.17	120.44
19	Z	335	ARG	CB-CA-C	-8.62	97.34	110.88
30	L	24	GLN	CA-C-N	8.61	131.82	120.28
30	L	24	GLN	C-N-CA	8.61	131.82	120.28
23	Q	284	THR	O-C-N	8.61	131.24	122.12
14	7	137	THR	N-CA-CB	8.60	122.89	110.16
30	L	368	ALA	CA-C-N	8.60	132.24	120.46
30	L	368	ALA	C-N-CA	8.60	132.24	120.46
9	2	122	ALA	N-CA-C	8.59	120.27	111.07
31	M	195	ASP	CA-CB-CG	-8.59	104.01	112.60
21	S	120	ASN	CA-CB-CG	-8.59	104.01	112.60
20	N	173	VAL	CB-CA-C	-8.59	102.75	114.00
20	N	508	THR	CA-C-N	8.58	129.46	119.94
20	N	508	THR	C-N-CA	8.58	129.46	119.94
20	N	562	GLU	CA-C-O	8.58	129.79	120.10
19	Z	543	MET	N-CA-C	8.55	120.22	111.07
24	R	295	TYR	CA-C-N	8.54	132.17	120.46
24	R	295	TYR	C-N-CA	8.54	132.17	120.46
19	Z	592	ASN	CA-C-N	8.54	131.54	120.44
19	Z	592	ASN	C-N-CA	8.54	131.54	120.44
9	2	157	TYR	CB-CA-C	8.53	119.64	110.17
31	M	227	LEU	O-C-N	8.53	133.45	123.30
13	6	91	LEU	CA-C-N	8.53	132.40	120.29
13	6	91	LEU	C-N-CA	8.53	132.40	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	233	ARG	CA-C-O	-8.53	110.07	118.34
19	Z	153	SER	N-CA-C	8.52	122.66	111.75
19	Z	247	ALA	CA-C-O	-8.52	111.39	120.42
20	N	101	ILE	CA-C-N	8.51	131.69	120.28
20	N	101	ILE	C-N-CA	8.51	131.69	120.28
5	E	196	LYS	CA-C-O	8.50	129.74	120.82
21	S	238	HIS	ND1-CE1-NE2	8.50	116.90	108.40
1	A	28	ALA	CA-C-N	8.50	132.36	120.29
1	A	28	ALA	C-N-CA	8.50	132.36	120.29
19	Z	180	GLN	CA-C-N	8.50	132.52	120.28
19	Z	180	GLN	C-N-CA	8.50	132.52	120.28
31	M	369	MET	N-CA-C	8.50	120.54	111.28
19	Z	141	LYS	CA-C-N	8.49	131.66	120.28
19	Z	141	LYS	C-N-CA	8.49	131.66	120.28
30	L	44	ARG	CA-C-N	8.49	131.66	120.28
30	L	44	ARG	C-N-CA	8.49	131.66	120.28
21	S	426	SER	CA-C-N	8.49	128.10	118.85
21	S	426	SER	C-N-CA	8.49	128.10	118.85
20	N	163	PHE	CA-CB-CG	-8.49	105.31	113.80
30	L	154	GLU	CA-C-O	8.49	129.55	120.55
28	I	295	TYR	N-CA-C	-8.48	100.89	113.61
2	B	2	ALA	N-CA-C	-8.47	96.94	108.38
21	S	238	HIS	CE1-NE2-CD2	-8.47	100.53	109.00
15	W	113	VAL	N-CA-CB	8.47	122.57	111.90
16	V	287	HIS	N-CA-CB	8.46	122.56	110.12
17	T	264	ASP	CA-CB-CG	-8.46	104.14	112.60
32	J	219	LEU	N-CA-C	-8.45	100.81	112.30
6	F	86	ASN	CA-C-N	8.44	131.41	120.44
6	F	86	ASN	C-N-CA	8.44	131.41	120.44
13	6	185	MET	CA-C-N	8.44	134.67	122.35
13	6	185	MET	C-N-CA	8.44	134.67	122.35
4	D	104	VAL	CA-CB-CG2	8.43	124.74	110.40
20	N	61	ALA	CB-CA-C	-8.43	96.79	110.79
15	W	123	ASP	CA-C-N	8.43	132.26	120.29
15	W	123	ASP	C-N-CA	8.43	132.26	120.29
20	N	597	LYS	CA-C-N	8.42	131.56	120.28
20	N	597	LYS	C-N-CA	8.42	131.56	120.28
23	Q	321	THR	CA-C-N	8.41	131.56	120.28
23	Q	321	THR	C-N-CA	8.41	131.56	120.28
23	Q	151	SER	CA-C-N	8.41	131.54	120.28
23	Q	151	SER	C-N-CA	8.41	131.54	120.28
22	P	220	GLU	N-CA-C	8.40	121.49	111.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	272	GLY	CA-C-N	8.40	132.06	120.39
20	N	272	GLY	C-N-CA	8.40	132.06	120.39
23	Q	278	ARG	N-CA-C	8.39	120.05	111.07
9	2	172	SER	CA-C-N	8.39	130.88	120.22
9	2	172	SER	C-N-CA	8.39	130.88	120.22
15	W	188	ILE	CA-C-N	8.39	131.35	120.44
8	1	158	PHE	CA-CB-CG	8.39	122.19	113.80
11	4	9	GLY	O-C-N	8.39	130.16	121.77
15	W	188	ILE	C-N-CA	8.39	131.35	120.44
19	Z	766	GLN	N-CA-C	-8.39	103.17	113.41
30	L	359	ASN	CA-CB-CG	-8.39	104.21	112.60
16	V	61	PHE	CA-CB-CG	8.38	122.18	113.80
23	Q	328	ASP	N-CA-CB	8.38	122.56	110.16
26	O	150	SER	CA-C-O	-8.37	111.67	120.55
20	N	675	MET	CA-C-N	8.37	131.49	120.28
20	N	675	MET	C-N-CA	8.37	131.49	120.28
31	M	156	VAL	N-CA-C	-8.36	96.00	108.46
20	N	916	ASP	CA-C-N	8.36	131.48	120.28
20	N	916	ASP	C-N-CA	8.36	131.48	120.28
14	7	81	ARG	CA-C-O	-8.36	112.09	120.70
6	F	93	LEU	CA-C-N	8.35	131.47	120.28
6	F	93	LEU	C-N-CA	8.35	131.47	120.28
24	R	193	ASP	CA-C-N	8.35	135.75	121.14
24	R	193	ASP	C-N-CA	8.35	135.75	121.14
30	L	34	LYS	O-C-N	8.35	130.97	122.12
20	N	845	GLU	N-CA-C	-8.34	96.59	109.52
20	N	722	ASP	CA-CB-CG	-8.33	104.27	112.60
24	R	179	ARG	CA-C-N	8.33	131.44	120.28
24	R	179	ARG	C-N-CA	8.33	131.44	120.28
31	M	71	ALA	CA-C-N	8.32	131.44	120.28
31	M	71	ALA	C-N-CA	8.32	131.44	120.28
9	2	78	HIS	CE1-NE2-CD2	-8.32	100.68	109.00
17	T	257	GLU	CA-C-N	8.32	136.74	123.93
17	T	257	GLU	C-N-CA	8.32	136.74	123.93
19	Z	7	ASP	N-CA-C	-8.32	104.27	114.75
22	P	262	LYS	N-CA-C	8.32	120.35	111.28
8	1	126	ASP	CA-CB-CG	-8.32	104.28	112.60
24	R	351	ASN	N-CA-C	-8.31	103.33	113.97
25	U	116	CYS	N-CA-C	-8.31	100.34	110.31
25	U	174	HIS	CG-CD2-NE2	8.30	115.50	107.20
16	V	175	ARG	CA-C-N	8.30	131.41	120.28
16	V	175	ARG	C-N-CA	8.30	131.41	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	191	ILE	CA-C-N	8.30	126.97	120.33
19	Z	191	ILE	C-N-CA	8.30	126.97	120.33
28	I	240	ALA	CA-C-O	-8.30	111.75	120.55
20	N	787	CYS	CA-C-O	8.30	130.16	121.36
24	R	155	ASP	CA-CB-CG	8.27	120.87	112.60
11	4	40	GLU	N-CA-C	-8.27	102.98	113.23
22	P	98	LYS	N-CA-C	-8.27	102.78	113.12
24	R	144	LEU	CA-C-N	8.26	131.35	120.28
24	R	144	LEU	C-N-CA	8.26	131.35	120.28
13	6	202	VAL	CA-C-N	8.25	131.34	120.28
13	6	202	VAL	C-N-CA	8.25	131.34	120.28
20	N	172	ASP	CA-C-N	8.25	126.93	120.33
20	N	172	ASP	C-N-CA	8.25	126.93	120.33
23	Q	191	THR	CA-C-N	8.25	132.00	120.29
23	Q	191	THR	C-N-CA	8.25	132.00	120.29
21	S	473	HIS	ND1-CE1-NE2	8.24	116.64	108.40
22	P	28	LEU	N-CA-C	8.24	124.86	113.16
25	U	13	PRO	CA-C-N	8.23	131.98	120.29
25	U	13	PRO	C-N-CA	8.23	131.98	120.29
6	F	65	HIS	ND1-CE1-NE2	8.23	116.63	108.40
8	1	201	GLY	O-C-N	8.23	128.46	122.62
16	V	205	ILE	N-CA-C	-8.23	96.28	108.12
27	H	77	LEU	O-C-N	8.22	130.83	122.12
6	F	147	THR	N-CA-C	-8.21	96.02	109.40
19	Z	677	HIS	ND1-CE1-NE2	8.21	116.61	108.40
20	N	213	PHE	CA-CB-CG	-8.20	105.60	113.80
19	Z	796	LEU	CA-C-N	8.20	131.27	120.28
19	Z	796	LEU	C-N-CA	8.20	131.27	120.28
4	D	85	ASP	CA-CB-CG	-8.20	104.40	112.60
19	Z	62	ARG	NE-CZ-NH1	-8.20	113.30	121.50
12	5	132	ARG	NE-CZ-NH2	-8.20	111.82	119.20
24	R	194	PHE	CA-CB-CG	-8.20	105.60	113.80
19	Z	262	PHE	CA-C-O	-8.19	108.94	120.16
27	H	395	PHE	CA-CB-CG	-8.19	105.61	113.80
30	L	83	PHE	CA-CB-CG	-8.19	105.61	113.80
19	Z	115	PRO	CA-C-N	8.18	129.06	119.98
19	Z	115	PRO	C-N-CA	8.18	129.06	119.98
21	S	229	ALA	CA-C-N	8.18	132.75	120.31
21	S	229	ALA	C-N-CA	8.18	132.75	120.31
3	C	11	ILE	N-CA-C	-8.18	95.76	108.44
5	E	114	GLN	CA-C-N	8.18	131.91	120.29
5	E	114	GLN	C-N-CA	8.18	131.91	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	H	195	LEU	N-CA-C	8.18	119.98	111.14
26	O	272	ILE	N-CA-CB	8.18	122.85	110.58
19	Z	690	VAL	CA-C-N	8.18	128.13	119.05
19	Z	690	VAL	C-N-CA	8.18	128.13	119.05
19	Z	770	HIS	CA-CB-CG	8.18	121.97	113.80
27	H	292	ASP	CA-CB-CG	8.18	120.78	112.60
31	M	241	ARG	CA-C-O	-8.18	111.75	120.42
23	Q	76	PHE	N-CA-C	-8.17	102.45	111.36
19	Z	262	PHE	CA-C-N	8.16	127.73	119.24
19	Z	262	PHE	C-N-CA	8.16	127.73	119.24
20	N	623	GLY	CA-C-N	8.16	131.04	120.44
20	N	623	GLY	C-N-CA	8.16	131.04	120.44
13	6	203	LYS	N-CA-C	-8.15	102.39	111.28
23	Q	65	GLU	CA-C-N	8.15	131.86	120.29
23	Q	65	GLU	C-N-CA	8.15	131.86	120.29
22	P	90	LEU	O-C-N	8.14	131.43	122.15
1	A	58	ASP	CA-C-O	-8.14	112.54	121.33
20	N	173	VAL	N-CA-CB	8.14	116.80	110.45
23	Q	89	VAL	CA-C-N	8.14	131.19	120.28
23	Q	89	VAL	C-N-CA	8.14	131.19	120.28
1	A	13	ILE	N-CA-C	-8.13	96.79	108.42
14	7	171	MET	N-CA-C	-8.14	96.14	109.40
29	K	401	LYS	CA-C-N	8.14	131.18	120.28
29	K	401	LYS	C-N-CA	8.14	131.18	120.28
20	N	217	CYS	CA-C-O	-8.13	111.93	120.55
19	Z	394	ASP	CA-C-N	8.13	128.94	120.00
19	Z	394	ASP	C-N-CA	8.13	128.94	120.00
23	Q	140	THR	CA-C-N	8.12	133.63	122.19
23	Q	140	THR	C-N-CA	8.12	133.63	122.19
26	O	355	LEU	CA-C-N	8.12	131.97	120.28
26	O	355	LEU	C-N-CA	8.12	131.97	120.28
20	N	174	PRO	CA-C-N	8.11	132.16	123.08
20	N	174	PRO	C-N-CA	8.11	132.16	123.08
28	I	423	LYS	CB-CA-C	-8.11	98.14	110.88
20	N	26	LYS	CA-C-N	8.11	131.15	120.28
20	N	26	LYS	C-N-CA	8.11	131.15	120.28
25	U	233	VAL	O-C-N	8.11	129.74	121.87
9	2	217	ASP	CA-CB-CG	8.10	120.70	112.60
20	N	80	TYR	N-CA-C	8.10	120.19	111.36
22	P	214	PHE	CA-CB-CG	-8.10	105.70	113.80
13	6	205	VAL	CA-C-N	8.09	131.45	120.44
13	6	205	VAL	C-N-CA	8.09	131.45	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	V	287	HIS	CB-CA-C	-8.09	97.36	110.79
27	H	160	THR	CA-C-O	-8.09	112.37	120.70
21	S	220	LEU	N-CA-C	-8.08	103.43	113.28
19	Z	617	SER	N-CA-C	-8.07	102.99	112.92
26	O	358	THR	CA-C-O	-8.07	111.86	120.42
1	A	105	TYR	N-CA-C	-8.07	102.56	111.36
20	N	546	ARG	CA-C-N	8.07	128.94	119.98
20	N	546	ARG	C-N-CA	8.07	128.94	119.98
20	N	23	ALA	CA-C-N	8.07	131.09	120.28
20	N	23	ALA	C-N-CA	8.07	131.09	120.28
16	V	126	ASP	CA-CB-CG	8.06	120.66	112.60
24	R	385	ARG	N-CA-CB	8.06	121.97	110.12
11	4	193	ASN	CA-CB-CG	-8.05	104.55	112.60
24	R	77	ASN	CA-CB-CG	8.05	120.65	112.60
6	F	102	PRO	CB-CA-C	8.05	124.84	111.56
25	U	177	ARG	N-CA-C	-8.05	101.94	113.21
19	Z	387	GLN	N-CA-C	-8.04	101.36	112.30
19	Z	755	ASP	CA-C-N	8.04	129.89	119.84
19	Z	755	ASP	C-N-CA	8.04	129.89	119.84
9	2	130	LEU	N-CA-C	8.04	119.67	111.07
5	E	163	VAL	CA-C-N	8.03	132.91	121.42
5	E	163	VAL	C-N-CA	8.03	132.91	121.42
10	3	154	TRP	CA-C-O	-8.04	112.62	120.90
12	5	196	GLY	N-CA-C	8.03	123.75	113.24
27	H	254	ALA	CA-C-N	8.02	131.03	120.28
27	H	254	ALA	C-N-CA	8.02	131.03	120.28
6	F	128	TYR	N-CA-CB	8.02	124.05	110.49
22	P	114	GLU	CA-C-N	8.02	130.51	120.72
22	P	114	GLU	C-N-CA	8.02	130.51	120.72
26	O	341	LEU	N-CA-CB	8.02	123.63	110.39
23	Q	21	GLU	CA-C-N	8.02	131.68	120.29
23	Q	21	GLU	C-N-CA	8.02	131.68	120.29
10	3	157	ASN	N-CA-C	-8.01	93.73	110.80
29	K	338	ARG	N-CA-C	8.01	120.01	111.28
32	J	171	HIS	CE1-NE2-CD2	-8.01	100.99	109.00
20	N	359	ALA	N-CA-C	8.01	119.79	111.14
29	K	327	LEU	N-CA-C	-8.01	94.97	108.26
23	Q	58	ALA	CA-C-N	8.01	131.35	120.54
23	Q	58	ALA	C-N-CA	8.01	131.35	120.54
6	F	230	SER	CA-C-O	-8.00	111.27	118.63
17	T	171	MET	CA-C-N	8.00	131.00	120.28
17	T	171	MET	C-N-CA	8.00	131.00	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	150	ASP	CA-C-N	7.99	127.63	119.56
2	B	150	ASP	C-N-CA	7.99	127.63	119.56
9	2	71	ASP	N-CA-CB	7.99	121.95	110.13
12	5	61	THR	CA-C-N	7.98	136.78	121.54
12	5	61	THR	C-N-CA	7.98	136.78	121.54
29	K	339	ARG	NE-CZ-NH1	7.98	129.48	121.50
9	2	93	ALA	CA-C-N	7.98	130.81	120.44
9	2	93	ALA	C-N-CA	7.98	130.81	120.44
27	H	422	LYS	N-CA-C	7.97	119.97	111.28
19	Z	677	HIS	CE1-NE2-CD2	-7.97	101.03	109.00
29	K	123	LEU	N-CA-C	-7.97	101.70	112.94
13	6	224	ILE	N-CA-C	-7.97	97.00	108.48
12	5	196	GLY	CA-C-O	-7.97	111.80	120.40
3	C	233	VAL	O-C-N	7.96	130.03	121.83
1	A	101	TRP	CA-C-N	7.96	130.95	120.28
1	A	101	TRP	C-N-CA	7.96	130.95	120.28
26	O	82	HIS	ND1-CE1-NE2	7.96	116.36	108.40
26	O	337	GLN	CA-C-N	7.96	129.21	119.98
26	O	337	GLN	C-N-CA	7.96	129.21	119.98
5	E	211	ASN	OD1-CG-ND2	7.95	130.55	122.60
12	5	193	TYR	N-CA-CB	7.95	123.77	110.41
14	7	128	SER	CA-C-O	-7.95	112.47	120.66
15	W	24	THR	N-CA-C	-7.95	97.19	109.52
17	T	228	TYR	O-C-N	7.95	133.97	122.28
29	K	125	LYS	O-C-N	-7.95	113.24	120.71
14	7	154	LYS	N-CA-C	-7.95	96.51	108.99
20	N	251	ASP	CA-CB-CG	7.95	120.55	112.60
19	Z	715	HIS	CA-CB-CG	-7.95	105.85	113.80
20	N	49	TYR	O-C-N	7.95	130.54	122.12
29	K	297	ASP	CA-C-N	7.94	128.73	120.00
29	K	297	ASP	C-N-CA	7.94	128.73	120.00
30	L	299	LEU	CA-C-N	7.94	131.44	120.65
30	L	299	LEU	C-N-CA	7.94	131.44	120.65
1	A	232	GLU	CA-C-O	-7.94	111.13	120.10
32	J	388	ALA	CA-C-N	7.93	131.23	120.44
32	J	388	ALA	C-N-CA	7.93	131.23	120.44
21	S	471	ALA	CA-C-N	7.93	130.75	120.44
21	S	471	ALA	C-N-CA	7.93	130.75	120.44
11	4	180	VAL	N-CA-C	-7.92	95.98	108.81
27	H	78	TRP	CA-C-N	7.92	130.89	120.28
27	H	78	TRP	C-N-CA	7.92	130.89	120.28
31	M	375	LYS	N-CA-C	7.92	119.91	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	W	76	HIS	CE1-NE2-CD2	-7.91	101.09	109.00
32	J	208	ASP	N-CA-CB	7.91	123.86	110.49
17	T	329	GLU	CA-C-N	7.91	131.67	120.28
17	T	329	GLU	C-N-CA	7.91	131.67	120.28
12	5	198	MET	N-CA-C	7.91	119.53	111.07
19	Z	428	GLN	OE1-CD-NE2	7.90	130.50	122.60
20	N	696	ILE	CA-C-N	7.90	133.60	122.46
20	N	696	ILE	C-N-CA	7.90	133.60	122.46
22	P	69	ALA	N-CA-C	7.90	119.89	111.28
6	F	19	ILE	CA-C-N	7.90	132.31	120.31
6	F	19	ILE	C-N-CA	7.90	132.31	120.31
28	I	141	LYS	N-CA-C	7.90	119.89	111.28
14	7	157	GLY	CA-C-N	7.89	130.01	122.36
14	7	157	GLY	C-N-CA	7.89	130.01	122.36
14	7	55	VAL	N-CA-C	-7.88	104.12	111.45
20	N	874	ASN	CA-CB-CG	-7.88	104.72	112.60
31	M	421	GLU	CA-C-N	7.88	130.84	120.28
31	M	421	GLU	C-N-CA	7.88	130.84	120.28
23	Q	201	TYR	N-CA-C	-7.88	102.18	113.21
9	2	152	HIS	ND1-CE1-NE2	7.88	116.28	108.40
23	Q	136	LEU	N-CA-C	7.88	119.50	111.07
28	I	82	GLN	N-CA-CB	7.87	123.80	110.49
4	D	13	ASP	CA-CB-CG	-7.87	104.73	112.60
5	E	225	ASN	N-CA-CB	7.87	123.79	110.49
14	7	125	HIS	ND1-CE1-NE2	7.87	116.27	108.40
19	Z	388	ASP	CA-CB-CG	7.87	120.47	112.60
2	B	81	PRO	O-C-N	7.87	131.67	122.23
29	K	148	ASP	CA-CB-CG	-7.86	104.74	112.60
32	J	358	GLU	CB-CA-C	-7.86	97.74	110.79
23	Q	235	ALA	CA-C-O	-7.86	112.22	120.55
30	L	210	LEU	N-CA-C	-7.86	95.45	108.34
20	N	421	GLN	CA-C-O	-7.86	112.09	120.42
2	B	97	TYR	CA-C-N	7.86	130.81	120.28
2	B	97	TYR	C-N-CA	7.86	130.81	120.28
17	T	180	ASP	CA-CB-CG	-7.86	104.75	112.60
19	Z	366	ASP	CA-CB-CG	-7.85	104.75	112.60
20	N	57	ARG	CA-C-N	7.85	130.64	120.44
20	N	57	ARG	C-N-CA	7.85	130.64	120.44
11	4	196	PHE	CA-CB-CG	-7.84	105.96	113.80
19	Z	332	ALA	N-CA-CB	7.84	123.75	110.49
19	Z	449	GLY	CA-C-N	7.84	130.59	120.56
19	Z	449	GLY	C-N-CA	7.84	130.59	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	359	VAL	CA-C-N	7.84	130.78	120.28
32	J	359	VAL	C-N-CA	7.84	130.78	120.28
29	K	192	LYS	N-CA-C	7.84	119.82	111.28
19	Z	273	ASN	OD1-CG-ND2	7.83	130.43	122.60
15	W	186	SER	CA-C-O	-7.83	113.62	120.19
25	U	155	PHE	CA-CB-CG	-7.83	105.97	113.80
26	O	61	GLU	O-C-N	-7.83	114.01	122.07
15	W	149	ASN	O-C-N	-7.82	115.47	123.29
5	E	125	GLU	N-CA-C	-7.82	98.60	108.45
17	T	141	LYS	N-CA-C	7.82	119.81	111.28
14	7	225	ALA	N-CA-C	7.82	120.94	111.40
13	6	42	ILE	CA-C-O	-7.82	111.91	120.67
29	K	253	LEU	N-CA-CB	7.81	121.61	110.12
18	Y	53	SER	N-CA-C	-7.81	102.85	111.36
27	H	257	VAL	CA-C-N	7.81	130.75	120.28
27	H	257	VAL	C-N-CA	7.81	130.75	120.28
29	K	184	PRO	O-C-N	7.81	132.81	122.27
9	2	107	GLU	N-CA-C	7.81	119.79	111.28
19	Z	74	ALA	N-CA-C	7.81	119.42	111.07
25	U	99	PRO	N-CA-CB	7.80	111.18	102.60
5	E	162	PHE	CA-CB-CG	7.80	121.60	113.80
26	O	168	ASN	CA-C-N	7.79	131.36	120.29
26	O	168	ASN	C-N-CA	7.79	131.36	120.29
32	J	222	LYS	N-CA-C	-7.79	100.44	112.99
14	7	163	GLU	N-CA-C	-7.79	101.27	108.75
26	O	3	ASP	CA-CB-CG	-7.79	104.81	112.60
29	K	326	ARG	N-CA-C	-7.79	104.67	114.56
23	Q	317	PRO	CA-C-N	7.78	131.47	120.42
23	Q	317	PRO	C-N-CA	7.78	131.47	120.42
32	J	20	LEU	N-CA-C	-7.78	101.42	113.02
24	R	121	LEU	N-CA-C	7.78	119.83	111.36
8	1	171	TYR	N-CA-CB	7.77	122.27	110.30
32	J	177	ALA	N-CA-CB	7.77	121.66	110.16
20	N	548	LEU	CA-C-O	-7.77	112.18	120.42
19	Z	566	HIS	CA-C-O	7.77	128.94	119.38
5	E	157	ASP	O-C-N	-7.76	114.94	121.54
5	E	88	LEU	CA-C-N	7.76	131.44	120.42
5	E	88	LEU	C-N-CA	7.76	131.44	120.42
26	O	364	GLU	O-C-N	7.76	130.35	122.12
5	E	129	ASP	CA-C-N	7.76	127.48	119.64
5	E	129	ASP	C-N-CA	7.76	127.48	119.64
20	N	541	HIS	CA-C-N	7.75	131.30	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	541	HIS	C-N-CA	7.75	131.30	120.29
8	1	167	TYR	CA-C-N	7.75	133.01	120.30
8	1	167	TYR	C-N-CA	7.75	133.01	120.30
25	U	41	GLY	N-CA-C	-7.75	99.43	110.75
27	H	126	SER	CA-C-O	7.75	127.06	119.08
20	N	28	ASN	CA-CB-CG	7.74	120.34	112.60
30	L	155	GLN	CA-C-N	7.74	131.06	120.46
30	L	155	GLN	C-N-CA	7.74	131.06	120.46
31	M	61	GLU	CA-C-O	-7.74	112.35	120.55
29	K	171	ASP	CA-CB-CG	-7.73	104.87	112.60
25	U	211	TYR	O-C-N	7.73	130.31	122.12
10	3	177	ARG	CA-CB-CG	7.73	129.55	114.10
20	N	108	TYR	CA-C-N	7.72	130.63	120.28
20	N	108	TYR	C-N-CA	7.72	130.63	120.28
27	H	43	ARG	NE-CZ-NH1	7.72	129.22	121.50
14	7	245	GLY	N-CA-C	-7.72	96.60	112.34
23	Q	268	GLN	CA-C-N	7.71	130.62	120.28
23	Q	268	GLN	C-N-CA	7.71	130.62	120.28
26	O	190	VAL	CA-C-N	7.71	131.24	120.29
26	O	190	VAL	C-N-CA	7.71	131.24	120.29
23	Q	419	LYS	CA-C-N	7.71	130.61	120.28
23	Q	419	LYS	C-N-CA	7.71	130.61	120.28
22	P	376	LYS	O-C-N	7.71	130.01	122.07
27	H	51	ASP	N-CA-CB	7.71	121.19	110.01
2	B	225	GLU	O-C-N	7.71	130.93	122.15
28	I	71	TYR	CB-CA-C	-7.71	98.78	110.88
19	Z	166	VAL	CB-CA-C	-7.70	101.95	112.04
21	S	483	HIS	CG-CD2-NE2	7.70	114.90	107.20
20	N	941	GLU	CA-C-N	7.70	128.16	119.92
20	N	941	GLU	C-N-CA	7.70	128.16	119.92
15	W	104	ASN	OD1-CG-ND2	7.70	130.30	122.60
12	5	179	ARG	N-CA-CB	7.70	123.49	110.49
20	N	463	ASN	CA-CB-CG	7.70	120.30	112.60
23	Q	300	ALA	CA-C-N	7.70	130.59	120.28
23	Q	300	ALA	C-N-CA	7.70	130.59	120.28
30	L	180	PRO	CA-C-O	-7.69	114.65	120.73
10	3	58	THR	CA-C-N	7.68	131.34	120.28
10	3	58	THR	C-N-CA	7.68	131.34	120.28
22	P	271	VAL	N-CA-C	7.68	118.46	110.62
20	N	167	ILE	N-CA-C	-7.68	97.01	108.46
4	D	177	PHE	CA-CB-CG	-7.68	106.12	113.80
15	W	1	MET	CA-C-N	7.68	131.59	120.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	W	1	MET	C-N-CA	7.68	131.59	120.91
2	B	224	THR	CA-CB-OG1	7.68	121.11	109.60
4	D	184	ASP	CA-CB-CG	-7.68	104.92	112.60
23	Q	247	ALA	CA-C-N	7.68	130.23	120.56
23	Q	247	ALA	C-N-CA	7.68	130.23	120.56
4	D	108	VAL	CA-C-N	7.67	132.10	120.82
4	D	108	VAL	C-N-CA	7.67	132.10	120.82
9	2	178	MET	CA-C-N	7.67	131.33	120.28
9	2	178	MET	C-N-CA	7.67	131.33	120.28
24	R	351	ASN	OD1-CG-ND2	7.67	130.27	122.60
3	C	89	GLU	CA-C-N	7.66	131.95	120.31
3	C	89	GLU	C-N-CA	7.66	131.95	120.31
19	Z	51	GLN	CA-C-O	7.66	128.80	119.38
5	E	154	PHE	CA-CB-CG	-7.65	106.15	113.80
13	6	181	GLY	N-CA-C	7.65	121.75	112.49
27	H	240	VAL	N-CA-C	-7.64	97.14	108.45
13	6	64	THR	CA-C-N	7.64	131.02	120.63
13	6	64	THR	C-N-CA	7.64	131.02	120.63
27	H	41	TYR	O-C-N	-7.64	113.44	122.15
27	H	158	ASP	CA-CB-CG	-7.64	104.96	112.60
11	4	5	ILE	CA-CB-CG1	7.63	123.38	110.40
23	Q	8	GLU	N-CA-CB	7.63	121.46	110.16
32	J	245	ILE	CA-CB-CG1	-7.63	97.42	110.40
19	Z	623	LYS	N-CA-C	7.63	119.23	111.07
8	1	63	VAL	CA-C-N	7.63	131.27	120.28
8	1	63	VAL	C-N-CA	7.63	131.27	120.28
31	M	117	ASP	CA-CB-CG	7.63	120.23	112.60
2	B	179	ASN	CA-CB-CG	-7.63	104.97	112.60
26	O	213	PHE	CA-C-N	7.63	128.45	119.98
26	O	213	PHE	C-N-CA	7.63	128.45	119.98
20	N	22	PHE	CA-CB-CG	7.62	121.42	113.80
30	L	258	SER	N-CA-C	-7.62	102.11	111.40
20	N	787	CYS	N-CA-C	-7.62	98.23	108.74
7	G	124	THR	O-C-N	7.61	130.19	122.12
20	N	640	LEU	CA-C-O	7.61	128.72	119.97
26	O	331	VAL	N-CA-C	-7.61	96.77	107.80
19	Z	884	THR	N-CA-C	-7.61	97.62	108.96
25	U	174	HIS	CE1-NE2-CD2	-7.61	101.39	109.00
27	H	165	GLN	CA-C-N	7.61	130.75	120.63
27	H	165	GLN	C-N-CA	7.61	130.75	120.63
4	D	231	ILE	N-CA-C	-7.61	102.86	110.62
19	Z	532	GLY	N-CA-C	-7.61	105.23	114.66

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	196	ARG	CA-C-N	7.61	130.47	120.28
26	O	196	ARG	C-N-CA	7.61	130.47	120.28
22	P	300	PRO	CB-CA-C	-7.60	101.01	112.11
20	N	726	ALA	O-C-N	7.60	130.18	122.12
23	Q	85	ALA	O-C-N	-7.60	114.06	122.12
31	M	430	VAL	N-CA-C	7.60	118.37	110.62
32	J	110	PRO	N-CA-C	7.60	123.19	111.11
31	M	154	VAL	CA-C-N	7.60	129.73	122.36
31	M	154	VAL	C-N-CA	7.60	129.73	122.36
19	Z	114	ALA	CA-C-N	7.59	127.64	119.89
19	Z	114	ALA	C-N-CA	7.59	127.64	119.89
10	3	66	ARG	CB-CA-C	-7.59	98.96	110.88
15	W	105	HIS	CG-CD2-NE2	7.59	114.79	107.20
3	C	28	ILE	CB-CA-C	-7.59	101.89	112.14
19	Z	471	LEU	CA-C-N	7.59	131.65	120.87
19	Z	471	LEU	C-N-CA	7.59	131.65	120.87
25	U	222	ILE	O-C-N	7.59	132.98	122.97
24	R	387	ILE	CA-C-O	-7.58	113.06	120.95
16	V	144	VAL	N-CA-C	-7.58	97.55	108.17
20	N	778	PHE	CA-C-N	7.58	131.45	120.38
20	N	778	PHE	C-N-CA	7.58	131.45	120.38
14	7	251	THR	N-CA-C	-7.58	97.67	108.96
27	H	197	HIS	CG-CD2-NE2	7.58	114.78	107.20
1	A	74	GLU	N-CA-C	-7.58	104.27	113.97
3	C	83	ALA	CA-C-O	-7.57	112.52	120.55
11	4	36	PHE	CA-CB-CG	-7.57	106.23	113.80
22	P	313	GLU	N-CA-C	-7.57	100.33	110.55
26	O	276	CYS	CA-C-N	7.57	130.43	120.28
26	O	276	CYS	C-N-CA	7.57	130.43	120.28
20	N	654	MET	CA-C-N	7.57	130.28	120.44
20	N	654	MET	C-N-CA	7.57	130.28	120.44
30	L	143	ASN	N-CA-C	-7.57	102.62	113.21
8	1	118	GLU	CA-C-N	7.56	131.16	120.28
8	1	118	GLU	C-N-CA	7.56	131.16	120.28
31	M	39	MET	O-C-N	-7.56	114.39	123.16
28	I	334	ILE	CA-C-O	7.55	129.03	120.42
31	M	372	HIS	CA-CB-CG	-7.55	106.25	113.80
31	M	74	ASP	CA-CB-CG	-7.55	105.05	112.60
27	H	69	ASP	N-CA-C	-7.54	99.55	111.02
22	P	53	GLN	CA-C-N	7.54	131.58	120.87
22	P	53	GLN	C-N-CA	7.54	131.58	120.87
11	4	127	ALA	CA-C-O	-7.54	111.53	119.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	351	ASP	CA-CB-CG	-7.54	105.06	112.60
10	3	197	THR	N-CA-C	-7.53	95.98	108.34
5	E	178	GLN	CA-C-O	-7.53	112.44	120.42
11	4	14	LEU	CA-C-O	-7.53	113.57	121.55
22	P	255	CYS	CA-C-N	7.53	130.20	120.56
22	P	255	CYS	C-N-CA	7.53	130.20	120.56
29	K	152	MET	CA-C-N	7.53	132.12	120.75
29	K	152	MET	C-N-CA	7.53	132.12	120.75
26	O	194	GLN	CB-CA-C	-7.53	98.29	110.79
29	K	80	LYS	CA-C-N	7.52	130.36	120.28
29	K	80	LYS	C-N-CA	7.52	130.36	120.28
31	M	222	PRO	CB-CA-C	-7.52	101.74	110.92
20	N	332	GLU	CA-C-N	7.52	130.97	120.29
20	N	332	GLU	C-N-CA	7.52	130.97	120.29
12	5	78	ARG	N-CA-C	-7.52	98.81	110.17
8	1	52	ARG	CA-C-N	7.51	135.89	121.54
8	1	52	ARG	C-N-CA	7.51	135.89	121.54
14	7	111	LEU	CA-C-O	-7.51	112.46	120.42
24	R	173	ASP	CA-C-N	7.51	131.72	120.31
24	R	173	ASP	C-N-CA	7.51	131.72	120.31
32	J	95	PHE	O-C-N	-7.51	114.24	123.33
32	J	391	MET	CA-C-O	-7.51	112.46	120.42
20	N	883	ARG	NE-CZ-NH1	7.50	129.00	121.50
23	Q	368	MET	CA-C-O	-7.50	111.34	119.97
28	I	158	ALA	N-CA-C	-7.50	96.86	108.42
7	G	48	PHE	CA-CB-CG	-7.50	106.31	113.80
9	2	118	ARG	N-CA-CB	7.49	122.84	110.85
10	3	166	THR	N-CA-C	7.49	119.09	111.07
19	Z	760	PHE	N-CA-C	-7.49	101.03	111.52
20	N	445	ALA	N-CA-C	7.49	120.33	111.71
32	J	56	VAL	CA-C-N	7.49	130.32	120.28
32	J	56	VAL	C-N-CA	7.49	130.32	120.28
30	L	138	HIS	CE1-NE2-CD2	-7.49	101.51	109.00
2	B	82	ASP	CA-C-N	7.48	130.31	120.28
2	B	82	ASP	C-N-CA	7.48	130.31	120.28
6	F	115	LYS	CA-C-N	7.48	131.05	120.28
6	F	115	LYS	C-N-CA	7.48	131.05	120.28
23	Q	99	MET	CA-C-O	-7.48	110.82	120.25
19	Z	472	HIS	CA-CB-CG	7.48	121.28	113.80
27	H	152	PRO	CA-C-O	-7.48	112.84	122.12
22	P	431	LYS	CA-C-N	7.47	130.29	120.28
22	P	431	LYS	C-N-CA	7.47	130.29	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	192	VAL	CA-C-O	-7.47	113.69	118.69
30	L	360	VAL	O-C-N	-7.47	114.14	121.83
5	E	29	GLU	CA-C-N	7.46	129.47	120.14
5	E	29	GLU	C-N-CA	7.46	129.47	120.14
30	L	293	THR	CA-C-O	-7.46	112.68	121.11
19	Z	654	VAL	O-C-N	7.46	129.11	121.87
21	S	184	SER	CA-C-N	7.46	130.28	120.28
21	S	184	SER	C-N-CA	7.46	130.28	120.28
27	H	222	LYS	CB-CA-C	-7.46	99.17	110.88
23	Q	57	LEU	N-CA-C	7.46	119.19	111.14
29	K	46	LYS	CA-C-N	7.46	131.02	120.28
29	K	46	LYS	C-N-CA	7.46	131.02	120.28
14	7	121	PHE	CA-C-N	7.45	128.37	120.03
14	7	121	PHE	C-N-CA	7.45	128.37	120.03
24	R	272	PHE	N-CA-CB	7.45	121.18	110.16
20	N	190	ASN	OD1-CG-ND2	-7.45	115.15	122.60
17	T	259	TYR	CA-C-N	7.45	134.17	121.14
17	T	259	TYR	C-N-CA	7.45	134.17	121.14
20	N	609	ASP	CA-C-O	-7.45	113.44	121.56
22	P	61	VAL	CA-C-N	7.44	132.51	120.60
22	P	61	VAL	C-N-CA	7.44	132.51	120.60
29	K	33	GLU	CA-C-O	-7.44	109.96	120.16
29	K	133	HIS	CA-CB-CG	-7.44	106.36	113.80
25	U	52	ASN	CA-CB-CG	7.44	120.04	112.60
31	M	398	GLN	CA-C-N	7.43	130.24	120.28
31	M	398	GLN	C-N-CA	7.43	130.24	120.28
1	A	217	VAL	N-CA-C	-7.43	97.78	108.48
20	N	666	LYS	O-C-N	7.43	130.00	122.12
16	V	226	MET	CG-SD-CE	-7.43	84.55	100.90
20	N	145	HIS	ND1-CE1-NE2	7.43	115.83	108.40
20	N	563	ALA	CA-C-N	7.43	130.56	120.38
20	N	563	ALA	C-N-CA	7.43	130.56	120.38
27	H	129	VAL	N-CA-C	-7.43	98.55	108.06
19	Z	742	ALA	O-C-N	7.43	129.99	122.12
29	K	93	LEU	CB-CA-C	-7.43	99.58	111.39
29	K	364	VAL	N-CA-C	7.42	120.37	111.09
4	D	26	VAL	CB-CA-C	-7.42	99.12	111.29
25	U	252	LYS	N-CA-C	7.42	119.01	111.07
25	U	193	ASN	CA-CB-CG	7.42	120.02	112.60
14	7	121	PHE	N-CA-CB	7.42	121.78	110.28
2	B	6	TYR	O-C-N	7.41	130.10	122.09
8	1	96	LEU	CA-C-N	7.41	128.15	120.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	1	96	LEU	C-N-CA	7.41	128.15	120.00
21	S	241	ASP	CA-CB-CG	-7.41	105.19	112.60
26	O	62	ASN	CA-C-N	7.41	130.08	120.44
26	O	62	ASN	C-N-CA	7.41	130.08	120.44
2	B	4	ARG	N-CA-C	7.41	119.00	111.07
32	J	272	THR	N-CA-C	7.41	119.36	111.28
17	T	345	TYR	CB-CA-C	7.41	123.44	110.85
11	4	20	VAL	CB-CA-C	-7.40	101.41	111.63
27	H	411	GLU	CA-C-N	7.40	130.20	120.28
27	H	411	GLU	C-N-CA	7.40	130.20	120.28
6	F	9	ASP	CA-CB-CG	-7.40	105.20	112.60
2	B	90	ALA	CA-C-N	7.40	130.79	120.29
2	B	90	ALA	C-N-CA	7.40	130.79	120.29
14	7	257	HIS	CE1-NE2-CD2	-7.40	101.60	109.00
1	A	230	LEU	CB-CA-C	-7.40	98.28	110.85
15	W	50	GLY	N-CA-C	-7.40	100.34	111.14
18	Y	52	PHE	CA-C-N	7.40	130.79	120.29
18	Y	52	PHE	C-N-CA	7.40	130.79	120.29
23	Q	91	SER	CA-C-N	7.39	130.19	120.28
23	Q	91	SER	C-N-CA	7.39	130.19	120.28
3	C	61	PHE	CA-CB-CG	-7.39	106.41	113.80
27	H	117	GLN	N-CA-C	-7.39	103.35	112.88
3	C	237	ILE	CA-C-N	7.39	130.78	120.29
3	C	237	ILE	C-N-CA	7.39	130.78	120.29
5	E	170	ILE	CA-C-N	-7.38	113.04	121.83
5	E	170	ILE	C-N-CA	-7.38	113.04	121.83
6	F	157	ARG	N-CA-C	-7.38	103.89	113.12
27	H	195	LEU	CA-C-N	7.38	130.48	120.44
27	H	195	LEU	C-N-CA	7.38	130.48	120.44
28	I	154	HIS	CA-C-N	7.38	130.04	120.44
28	I	154	HIS	C-N-CA	7.38	130.04	120.44
23	Q	407	MET	CA-C-N	7.38	130.17	120.28
23	Q	407	MET	C-N-CA	7.38	130.17	120.28
31	M	149	LYS	CA-C-N	7.38	127.43	119.90
31	M	149	LYS	C-N-CA	7.38	127.43	119.90
8	1	163	SER	N-CA-CB	7.38	122.96	110.49
26	O	247	ARG	CA-C-N	7.38	130.03	120.44
26	O	247	ARG	C-N-CA	7.38	130.03	120.44
21	S	290	ARG	NE-CZ-NH1	-7.37	114.13	121.50
27	H	323	ARG	CA-C-O	-7.37	113.84	119.59
20	N	864	GLU	CB-CA-C	-7.37	98.32	110.85
5	E	166	ASP	CA-CB-CG	-7.37	105.23	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	W	192	GLU	N-CA-C	-7.37	104.09	113.23
24	R	35	THR	N-CA-C	7.37	119.95	111.11
1	A	23	TYR	CA-C-N	7.36	130.15	120.28
1	A	23	TYR	C-N-CA	7.36	130.15	120.28
6	F	223	ILE	O-C-N	-7.36	115.45	123.18
31	M	406	ALA	CA-C-N	7.36	128.15	119.98
31	M	406	ALA	C-N-CA	7.36	128.15	119.98
24	R	165	LYS	CA-C-O	-7.36	112.75	120.55
2	B	211	GLY	CA-C-O	-7.36	115.17	121.57
30	L	365	GLY	O-C-N	7.36	129.33	122.19
30	L	268	GLN	CA-C-N	7.36	130.14	120.28
30	L	268	GLN	C-N-CA	7.36	130.14	120.28
8	1	137	ASP	O-C-N	-7.36	112.21	121.70
12	5	96	ILE	CA-C-O	7.36	128.76	121.19
24	R	275	LEU	CA-C-N	7.36	130.14	120.28
24	R	275	LEU	C-N-CA	7.36	130.14	120.28
20	N	521	LEU	N-CA-C	7.35	121.16	110.42
17	T	118	GLU	CA-C-N	7.35	130.13	120.28
17	T	118	GLU	C-N-CA	7.35	130.13	120.28
7	G	111	HIS	CA-CB-CG	7.35	121.15	113.80
10	3	56	LEU	CA-C-N	7.35	135.58	121.54
10	3	56	LEU	C-N-CA	7.35	135.58	121.54
20	N	82	LEU	CA-C-N	7.35	128.14	119.98
20	N	82	LEU	C-N-CA	7.35	128.14	119.98
31	M	318	ASN	CA-C-N	7.35	130.73	120.29
31	M	318	ASN	C-N-CA	7.35	130.73	120.29
16	V	295	ASN	OD1-CG-ND2	-7.34	115.26	122.60
20	N	717	ILE	N-CA-C	7.34	118.14	110.72
32	J	106	ASN	OD1-CG-ND2	7.34	129.94	122.60
8	1	45	VAL	CA-C-O	-7.34	111.60	120.78
7	G	9	ASP	CA-C-O	7.34	126.50	118.65
31	M	144	ASP	CA-C-N	7.34	130.71	120.29
31	M	144	ASP	C-N-CA	7.34	130.71	120.29
28	I	189	GLY	N-CA-C	7.33	124.62	112.30
27	H	256	MET	CB-CA-C	-7.33	98.39	110.85
5	E	166	ASP	N-CA-C	-7.33	101.49	112.04
16	V	191	ALA	CA-C-O	-7.33	112.65	120.42
26	O	47	ASP	CA-C-O	-7.33	110.12	120.16
20	N	440	GLY	CA-C-N	7.33	129.30	120.14
20	N	440	GLY	C-N-CA	7.33	129.30	120.14
21	S	147	THR	CA-C-N	7.33	128.11	119.98
21	S	147	THR	C-N-CA	7.33	128.11	119.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	777	HIS	CA-C-N	7.32	132.31	120.60
20	N	777	HIS	C-N-CA	7.32	132.31	120.60
8	1	136	TRP	N-CA-CB	7.31	122.85	110.49
7	G	171	GLN	CA-C-N	7.31	130.67	120.29
7	G	171	GLN	C-N-CA	7.31	130.67	120.29
25	U	267	ARG	NE-CZ-NH2	7.31	125.78	119.20
28	I	232	LYS	CA-C-O	7.31	128.17	120.42
21	S	477	SER	CA-C-N	7.31	130.67	120.29
21	S	477	SER	C-N-CA	7.31	130.67	120.29
28	I	337	LEU	CA-C-N	7.31	132.72	121.03
28	I	337	LEU	C-N-CA	7.31	132.72	121.03
21	S	443	ILE	O-C-N	7.30	131.70	122.57
26	O	164	GLN	CA-C-O	7.30	128.29	120.55
20	N	452	ASN	N-CA-CB	7.30	122.83	110.49
4	D	245	ASN	N-CA-C	7.30	119.32	111.36
19	Z	696	LEU	CA-C-O	-7.30	113.18	120.70
20	N	746	ILE	N-CA-C	-7.30	97.80	108.89
28	I	332	ASN	N-CA-C	-7.30	104.40	113.38
20	N	423	MET	CA-C-N	7.30	130.38	120.38
20	N	423	MET	C-N-CA	7.30	130.38	120.38
32	J	253	SER	CB-CA-C	-7.30	97.36	110.35
19	Z	350	LYS	CA-C-N	7.29	130.65	120.29
19	Z	350	LYS	C-N-CA	7.29	130.65	120.29
30	L	353	ASN	CA-C-N	7.29	128.08	119.98
30	L	353	ASN	C-N-CA	7.29	128.08	119.98
4	D	111	GLU	CB-CG-CD	-7.29	100.20	112.60
12	5	133	ILE	N-CA-C	-7.29	97.99	108.42
19	Z	602	GLY	N-CA-C	-7.29	104.50	115.00
28	I	381	ASP	O-C-N	7.29	129.58	122.07
26	O	241	ASN	CA-CB-CG	-7.29	105.31	112.60
6	F	230	SER	N-CA-C	7.29	122.72	113.25
8	1	161	GLY	CA-C-N	7.29	131.61	121.26
8	1	161	GLY	C-N-CA	7.29	131.61	121.26
26	O	128	LEU	CA-C-N	7.28	130.63	120.29
26	O	128	LEU	C-N-CA	7.28	130.63	120.29
24	R	312	ARG	NE-CZ-NH1	-7.28	114.22	121.50
31	M	119	GLN	N-CA-C	-7.28	104.20	113.23
9	2	188	ASP	CA-C-N	7.28	135.44	121.54
9	2	188	ASP	C-N-CA	7.28	135.44	121.54
19	Z	769	THR	O-C-N	-7.28	115.62	123.26
30	L	138	HIS	CG-CD2-NE2	7.28	114.47	107.20
32	J	11	LEU	N-CA-C	-7.28	105.58	114.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	W	121	GLU	CA-C-N	7.27	129.90	120.44
15	W	121	GLU	C-N-CA	7.27	129.90	120.44
11	4	161	ARG	NE-CZ-NH2	7.27	125.74	119.20
11	4	136	ALA	CA-C-N	7.27	132.86	120.72
11	4	136	ALA	C-N-CA	7.27	132.86	120.72
4	D	154	ASP	CA-C-N	7.27	126.89	119.19
4	D	154	ASP	C-N-CA	7.27	126.89	119.19
16	V	43	LYS	CA-C-N	7.27	129.89	120.44
16	V	43	LYS	C-N-CA	7.27	129.89	120.44
19	Z	388	ASP	N-CA-C	-7.26	100.62	111.81
22	P	279	PHE	CA-CB-CG	-7.26	106.53	113.80
1	A	240	VAL	CA-CB-CG2	7.26	122.75	110.40
3	C	95	GLN	OE1-CD-NE2	7.26	129.86	122.60
16	V	288	VAL	CA-C-N	7.26	129.88	120.44
16	V	288	VAL	C-N-CA	7.26	129.88	120.44
23	Q	418	ALA	CA-C-N	7.26	130.73	120.28
23	Q	418	ALA	C-N-CA	7.26	130.73	120.28
19	Z	593	THR	N-CA-C	-7.25	103.31	111.07
4	D	48	LYS	N-CA-C	-7.25	104.03	113.17
20	N	426	TYR	CA-C-N	7.25	130.47	120.39
20	N	426	TYR	C-N-CA	7.25	130.47	120.39
5	E	161	THR	O-C-N	7.25	131.63	122.93
21	S	450	GLU	CA-C-N	7.25	130.58	120.29
21	S	450	GLU	C-N-CA	7.25	130.58	120.29
20	N	335	ILE	CA-C-N	7.24	129.98	120.28
20	N	335	ILE	C-N-CA	7.24	129.98	120.28
22	P	70	VAL	CA-CB-CG1	7.24	122.71	110.40
28	I	277	HIS	CE1-NE2-CD2	-7.24	101.76	109.00
10	3	151	GLU	CB-CG-CD	-7.24	100.30	112.60
19	Z	708	ASP	CA-CB-CG	-7.24	105.36	112.60
28	I	277	HIS	CG-CD2-NE2	7.24	114.44	107.20
15	W	94	HIS	ND1-CE1-NE2	7.23	115.63	108.40
8	1	106	PRO	CA-C-O	-7.23	110.08	120.56
26	O	51	ALA	N-CA-C	-7.23	104.72	113.97
1	A	119	ALA	CA-C-O	-7.23	112.89	120.55
12	5	200	ARG	N-CA-C	-7.23	103.48	111.36
21	S	45	SER	CA-C-N	7.23	129.97	120.28
21	S	45	SER	C-N-CA	7.23	129.97	120.28
29	K	182	GLU	N-CA-C	7.23	119.24	111.36
1	A	144	ASP	CA-CB-CG	-7.22	105.38	112.60
32	J	358	GLU	N-CA-CB	7.22	120.74	110.12
8	1	183	ASP	CA-C-N	7.22	129.96	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	1	183	ASP	C-N-CA	7.22	129.96	120.28
19	Z	206	ASP	N-CA-CB	7.22	120.73	110.12
31	M	175	VAL	N-CA-C	7.22	117.98	110.62
17	T	125	VAL	CA-C-N	7.21	130.67	120.28
17	T	125	VAL	C-N-CA	7.21	130.67	120.28
9	2	239	GLY	O-C-N	7.21	127.74	122.62
30	L	57	SER	CA-C-N	7.21	131.27	120.31
30	L	57	SER	C-N-CA	7.21	131.27	120.31
16	V	291	LEU	N-CA-C	7.21	119.14	111.28
3	C	142	HIS	CE1-NE2-CD2	-7.21	101.79	109.00
16	V	304	LEU	N-CA-C	7.21	118.78	111.07
10	3	69	PHE	CB-CA-C	-7.21	98.60	110.85
16	V	172	HIS	CG-CD2-NE2	7.20	114.40	107.20
23	Q	158	LYS	CA-C-N	7.20	130.25	120.38
23	Q	158	LYS	C-N-CA	7.20	130.25	120.38
32	J	64	GLN	CA-C-O	-7.20	112.78	120.42
4	D	61	LYS	CA-C-N	7.20	134.93	121.97
4	D	61	LYS	C-N-CA	7.20	134.93	121.97
21	S	493	PRO	CA-C-O	-7.20	110.12	120.56
28	I	186	ASP	N-CA-C	-7.20	104.53	113.38
28	I	311	GLU	CA-C-N	7.20	129.93	120.28
28	I	311	GLU	C-N-CA	7.20	129.93	120.28
21	S	237	ARG	N-CA-CB	7.20	121.44	110.28
17	T	140	THR	CA-CB-OG1	7.19	120.39	109.60
2	B	87	VAL	N-CA-C	7.19	117.33	110.42
26	O	166	ILE	N-CA-C	7.19	117.98	110.72
20	N	462	LEU	CB-CA-C	-7.19	98.62	110.85
23	Q	169	VAL	N-CA-CB	7.19	119.77	110.57
26	O	325	ASP	CA-CB-CG	-7.19	105.41	112.60
26	O	372	GLN	CA-C-N	7.19	130.22	120.44
26	O	372	GLN	C-N-CA	7.19	130.22	120.44
20	N	893	SER	CA-C-N	7.19	132.82	122.40
20	N	893	SER	C-N-CA	7.19	132.82	122.40
31	M	44	ILE	CB-CA-C	-7.18	102.31	112.22
32	J	5	GLY	CA-C-N	7.18	127.60	119.92
32	J	5	GLY	C-N-CA	7.18	127.60	119.92
28	I	430	LYS	CA-C-N	7.18	130.48	120.29
28	I	430	LYS	C-N-CA	7.18	130.48	120.29
31	M	423	TYR	CA-C-N	7.18	129.77	120.44
31	M	423	TYR	C-N-CA	7.18	129.77	120.44
31	M	46	GLN	CA-C-N	7.17	130.47	120.29
31	M	46	GLN	C-N-CA	7.17	130.47	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	222	TYR	O-C-N	7.17	130.32	122.15
9	2	127	LYS	N-CA-C	7.17	119.09	111.28
19	Z	141	LYS	CA-C-O	-7.17	112.95	120.55
19	Z	540	GLN	CA-C-N	7.17	129.88	120.28
19	Z	540	GLN	C-N-CA	7.17	129.88	120.28
24	R	380	VAL	N-CA-C	-7.17	103.31	110.62
29	K	296	MET	CA-C-O	-7.17	112.95	120.55
30	L	325	ASP	N-CA-CB	7.17	120.77	110.16
26	O	84	VAL	N-CA-C	7.16	117.95	110.72
15	W	105	HIS	CE1-NE2-CD2	-7.16	101.84	109.00
21	S	283	ARG	N-CA-CB	7.16	120.76	110.16
19	Z	785	ARG	CA-C-O	-7.16	113.31	120.82
20	N	375	PHE	CA-C-N	7.16	129.87	120.28
20	N	375	PHE	C-N-CA	7.16	129.87	120.28
1	A	28	ALA	N-CA-CB	7.16	121.24	110.22
2	B	33	ALA	CA-C-N	7.16	127.72	119.99
2	B	33	ALA	C-N-CA	7.16	127.72	119.99
19	Z	275	MET	CA-C-N	7.16	130.45	120.29
19	Z	275	MET	C-N-CA	7.16	130.45	120.29
5	E	29	GLU	CB-CG-CD	7.15	124.76	112.60
26	O	172	TYR	CA-C-N	7.15	129.74	120.44
26	O	172	TYR	C-N-CA	7.15	129.74	120.44
7	G	84	ASP	CA-C-N	7.15	129.86	120.28
7	G	84	ASP	C-N-CA	7.15	129.86	120.28
26	O	288	HIS	CG-CD2-NE2	7.15	114.35	107.20
5	E	186	HIS	CE1-NE2-CD2	-7.15	101.85	109.00
22	P	267	LEU	CA-C-O	7.15	128.19	119.97
29	K	132	LEU	O-C-N	-7.15	113.94	123.23
31	M	55	ILE	CA-CB-CG1	7.14	122.55	110.40
31	M	74	ASP	CA-C-O	7.14	128.12	120.55
17	T	270	ILE	CA-C-N	7.14	129.85	120.28
17	T	270	ILE	C-N-CA	7.14	129.85	120.28
29	K	133	HIS	CE1-NE2-CD2	-7.14	101.86	109.00
23	Q	407	MET	O-C-N	-7.14	114.55	122.12
31	M	410	ALA	N-CA-C	7.14	119.06	111.28
29	K	327	LEU	CA-C-N	7.13	130.07	120.65
29	K	327	LEU	C-N-CA	7.13	130.07	120.65
7	G	83	ALA	CA-C-O	7.13	128.31	120.82
27	H	61	GLU	CA-C-N	7.13	130.42	120.29
27	H	61	GLU	C-N-CA	7.13	130.42	120.29
32	J	312	ASP	CA-CB-CG	7.13	119.73	112.60
20	N	891	VAL	N-CA-C	-7.13	98.21	108.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	96	ARG	NE-CZ-NH2	7.13	125.62	119.20
28	I	182	GLU	CA-C-O	-7.13	113.17	121.16
23	Q	64	ALA	CA-C-N	7.13	129.83	120.28
23	Q	64	ALA	C-N-CA	7.13	129.83	120.28
1	A	119	ALA	N-CA-C	-7.12	103.52	111.28
19	Z	781	TYR	CA-C-N	7.12	129.70	120.44
19	Z	781	TYR	C-N-CA	7.12	129.70	120.44
30	L	398	LEU	CA-C-O	7.12	126.89	119.05
9	2	70	ALA	N-CA-C	7.12	120.06	109.59
22	P	305	LEU	CA-C-O	7.12	128.10	120.55
13	6	70	CYS	N-CA-C	-7.12	99.95	110.48
20	N	41	SER	CA-C-N	7.12	130.21	120.46
20	N	41	SER	C-N-CA	7.12	130.21	120.46
3	C	128	ARG	CA-C-O	-7.12	112.77	120.17
13	6	101	MET	N-CA-C	7.12	119.04	111.28
23	Q	2	ALA	N-CA-C	-7.12	98.14	109.59
31	M	320	LEU	CA-C-O	-7.12	113.01	120.55
14	7	152	ASN	CA-CB-CG	-7.11	105.49	112.60
23	Q	269	ALA	CA-C-N	7.11	129.81	120.28
23	Q	269	ALA	C-N-CA	7.11	129.81	120.28
19	Z	394	ASP	CA-C-O	-7.11	113.34	121.66
19	Z	728	ALA	CA-C-N	7.11	129.81	120.28
19	Z	728	ALA	C-N-CA	7.11	129.81	120.28
19	Z	520	LEU	N-CA-CB	7.11	120.68	110.16
16	V	287	HIS	CE1-NE2-CD2	-7.11	101.89	109.00
2	B	42	ASN	N-CA-C	-7.10	104.25	114.12
5	E	206	MET	CA-C-N	7.10	130.13	120.54
5	E	206	MET	C-N-CA	7.10	130.13	120.54
29	K	378	ILE	CA-C-N	7.10	130.38	120.29
29	K	378	ILE	C-N-CA	7.10	130.38	120.29
17	T	327	LYS	CA-C-O	-7.10	110.43	120.16
21	S	180	ALA	CA-C-N	7.10	129.67	120.44
21	S	180	ALA	C-N-CA	7.10	129.67	120.44
16	V	199	HIS	CA-CB-CG	7.10	120.90	113.80
19	Z	451	VAL	N-CA-C	7.10	117.86	110.62
30	L	371	ALA	O-C-N	7.09	130.52	122.22
16	V	250	GLU	CA-C-N	7.09	131.09	120.31
16	V	250	GLU	C-N-CA	7.09	131.09	120.31
25	U	110	GLU	CA-C-N	7.09	130.36	120.29
25	U	110	GLU	C-N-CA	7.09	130.36	120.29
14	7	83	ILE	N-CA-C	-7.09	98.27	108.48
1	A	68	HIS	N-CA-C	-7.09	103.67	114.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	W	156	PHE	CA-CB-CG	7.09	120.89	113.80
20	N	552	ILE	CA-C-N	7.09	129.78	120.28
20	N	552	ILE	C-N-CA	7.09	129.78	120.28
22	P	154	GLU	CA-C-N	7.09	129.78	120.28
22	P	154	GLU	C-N-CA	7.09	129.78	120.28
17	T	211	PHE	CA-CB-CG	-7.08	106.72	113.80
21	S	298	TYR	CA-C-N	7.08	129.65	120.44
21	S	298	TYR	C-N-CA	7.08	129.65	120.44
5	E	186	HIS	CG-CD2-NE2	7.08	114.28	107.20
31	M	278	ALA	CA-C-N	7.08	129.77	120.28
31	M	278	ALA	C-N-CA	7.08	129.77	120.28
17	T	208	VAL	CA-C-N	7.08	130.34	120.29
17	T	208	VAL	C-N-CA	7.08	130.34	120.29
1	A	203	SER	CA-C-O	-7.07	111.45	119.79
20	N	872	GLU	O-C-N	-7.07	116.33	121.84
19	Z	813	LYS	O-C-N	-7.06	116.47	123.46
17	T	193	GLN	CA-C-N	7.06	129.74	120.28
17	T	193	GLN	C-N-CA	7.06	129.74	120.28
20	N	514	LEU	CA-C-N	7.06	129.74	120.28
20	N	514	LEU	C-N-CA	7.06	129.74	120.28
27	H	357	ILE	CB-CA-C	-7.06	102.77	112.02
19	Z	835	GLU	N-CA-C	-7.05	102.79	112.03
20	N	781	LEU	N-CA-C	7.05	118.97	111.28
22	P	263	TRP	N-CA-CB	7.05	120.60	110.16
28	I	196	GLU	CA-CB-CG	-7.05	99.99	114.10
25	U	82	PHE	CA-CB-CG	-7.05	106.75	113.80
10	3	111	GLY	CA-C-O	-7.05	114.13	120.75
21	S	396	HIS	CE1-NE2-CD2	-7.05	101.95	109.00
30	L	383	LYS	CA-C-N	7.04	129.72	120.28
30	L	383	LYS	C-N-CA	7.04	129.72	120.28
32	J	365	GLU	CB-CA-C	-7.04	99.10	110.79
16	V	285	GLU	CA-C-N	7.04	129.71	120.28
16	V	285	GLU	C-N-CA	7.04	129.71	120.28
13	6	46	ASP	CA-CB-CG	-7.04	105.56	112.60
15	W	67	ASP	CB-CA-C	-7.04	98.79	110.19
28	I	62	LEU	N-CA-CB	7.04	120.46	110.12
32	J	124	HIS	ND1-CE1-NE2	7.04	115.44	108.40
8	1	87	ALA	CA-C-O	-7.03	113.09	120.55
8	1	170	GLY	N-CA-C	7.03	121.00	112.49
9	2	116	LEU	CB-CA-C	7.03	120.00	110.37
21	S	193	THR	N-CA-C	-7.03	103.76	114.16
22	P	88	MET	N-CA-CB	7.03	120.56	110.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	V	147	PRO	CB-CA-C	7.03	123.16	111.56
29	K	126	PRO	O-C-N	7.03	131.57	122.86
26	O	282	PHE	CA-C-O	-7.03	112.97	120.42
26	O	84	VAL	CA-C-N	7.02	130.26	120.29
26	O	84	VAL	C-N-CA	7.02	130.26	120.29
27	H	197	HIS	CA-C-N	7.02	126.73	119.64
27	H	197	HIS	C-N-CA	7.02	126.73	119.64
1	A	193	GLN	N-CA-C	7.02	118.93	111.28
14	7	117	ASP	CA-C-N	7.02	129.68	120.28
14	7	117	ASP	C-N-CA	7.02	129.68	120.28
29	K	183	LEU	CA-C-O	-7.02	112.05	118.79
19	Z	589	SER	CA-C-N	7.02	129.68	120.28
19	Z	589	SER	C-N-CA	7.02	129.68	120.28
30	L	76	LYS	CA-C-N	7.02	131.75	122.42
30	L	76	LYS	C-N-CA	7.02	131.75	122.42
4	D	162	TRP	O-C-N	-7.01	114.68	123.17
22	P	415	PHE	N-CA-C	-7.01	104.33	113.17
26	O	352	ARG	CA-C-N	7.01	129.68	120.28
26	O	352	ARG	C-N-CA	7.01	129.68	120.28
22	P	270	VAL	CA-C-O	-7.01	113.74	121.17
19	Z	54	ASP	CA-C-N	7.01	129.67	120.28
19	Z	54	ASP	C-N-CA	7.01	129.67	120.28
20	N	774	PRO	CA-C-N	7.01	130.37	120.28
20	N	774	PRO	C-N-CA	7.01	130.37	120.28
3	C	239	LYS	CA-C-N	7.01	130.24	120.29
3	C	239	LYS	C-N-CA	7.01	130.24	120.29
24	R	307	LEU	O-C-N	-7.01	114.52	122.09
28	I	392	GLY	CA-C-O	-7.01	112.83	120.40
19	Z	512	MET	N-CA-C	-7.00	99.23	109.18
4	D	122	GLN	N-CA-C	7.00	118.92	111.28
9	2	258	LYS	CA-C-N	7.00	131.69	122.51
9	2	258	LYS	C-N-CA	7.00	131.69	122.51
30	L	274	LEU	CA-C-N	7.00	129.66	120.28
30	L	274	LEU	C-N-CA	7.00	129.66	120.28
9	2	116	LEU	CA-C-O	-7.00	114.62	120.71
19	Z	613	LEU	N-CA-C	-7.00	95.89	110.80
29	K	222	HIS	CA-C-O	7.00	127.84	120.42
15	W	90	ILE	O-C-N	-7.00	114.62	121.83
20	N	327	LYS	N-CA-C	7.00	118.56	111.07
16	V	45	GLY	CA-C-N	7.00	129.54	120.44
16	V	45	GLY	C-N-CA	7.00	129.54	120.44
22	P	22	ALA	CA-C-N	7.00	129.96	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	22	ALA	C-N-CA	7.00	129.96	120.44
27	H	250	VAL	N-CA-CB	7.00	122.78	111.23
12	5	61	THR	CA-C-O	-7.00	113.78	121.33
28	I	141	LYS	CA-C-N	7.00	129.66	120.28
28	I	141	LYS	C-N-CA	7.00	129.66	120.28
22	P	306	LEU	O-C-N	6.99	129.64	122.09
12	5	222	ALA	N-CA-C	6.99	118.90	111.28
19	Z	470	VAL	CA-C-N	6.99	129.65	120.28
19	Z	470	VAL	C-N-CA	6.99	129.65	120.28
20	N	880	ASN	CA-C-N	6.99	127.02	119.89
20	N	880	ASN	C-N-CA	6.99	127.02	119.89
25	U	169	GLU	CA-C-N	6.99	129.37	120.56
25	U	169	GLU	C-N-CA	6.99	129.37	120.56
10	3	76	LEU	CA-C-N	6.99	130.22	120.29
10	3	76	LEU	C-N-CA	6.99	130.22	120.29
19	Z	103	TYR	CA-C-N	6.99	128.88	120.14
19	Z	103	TYR	C-N-CA	6.99	128.88	120.14
24	R	67	MET	CA-C-N	6.99	129.65	120.28
24	R	67	MET	C-N-CA	6.99	129.65	120.28
24	R	133	ALA	CA-C-N	6.99	130.94	120.31
24	R	133	ALA	C-N-CA	6.99	130.94	120.31
26	O	288	HIS	ND1-CE1-NE2	6.99	115.39	108.40
3	C	80	THR	CA-C-N	6.99	129.64	120.28
3	C	80	THR	C-N-CA	6.99	129.64	120.28
21	S	88	ARG	N-CA-C	-6.99	104.79	113.38
30	L	225	SER	CA-C-N	6.99	129.64	120.28
30	L	225	SER	C-N-CA	6.99	129.64	120.28
27	H	420	TYR	CA-C-N	6.99	130.34	120.28
27	H	420	TYR	C-N-CA	6.99	130.34	120.28
20	N	512	ALA	CA-C-N	6.98	127.73	119.98
20	N	512	ALA	C-N-CA	6.98	127.73	119.98
27	H	388	VAL	N-CA-CB	6.98	118.72	110.55
32	J	160	GLU	O-C-N	6.98	129.52	122.12
23	Q	176	THR	CB-CA-C	-6.98	99.20	110.79
26	O	362	SER	CA-C-N	6.98	130.21	120.29
26	O	362	SER	C-N-CA	6.98	130.21	120.29
22	P	375	MET	CA-C-N	6.98	129.51	120.44
22	P	375	MET	C-N-CA	6.98	129.51	120.44
26	O	133	GLU	N-CA-C	6.98	118.54	111.07
22	P	439	VAL	N-CA-CB	6.97	120.03	110.54
25	U	235	ASN	N-CA-CB	6.97	121.09	110.28
20	N	639	LEU	N-CA-C	-6.97	103.61	111.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	461	LEU	CA-C-N	6.97	130.18	120.29
20	N	461	LEU	C-N-CA	6.97	130.18	120.29
14	7	133	HIS	ND1-CE1-NE2	6.96	115.36	108.40
19	Z	243	PRO	CA-C-N	6.96	130.90	120.31
19	Z	243	PRO	C-N-CA	6.96	130.90	120.31
32	J	253	SER	N-CA-C	-6.96	102.19	113.19
8	1	73	HIS	CE1-NE2-CD2	-6.96	102.04	109.00
26	O	219	HIS	ND1-CE1-NE2	6.96	115.36	108.40
27	H	367	ASP	CA-C-N	6.96	134.49	121.97
27	H	367	ASP	C-N-CA	6.96	134.49	121.97
29	K	151	ILE	CA-C-N	6.96	129.48	120.44
29	K	151	ILE	C-N-CA	6.96	129.48	120.44
1	A	182	LYS	CA-C-N	6.96	130.30	120.42
1	A	182	LYS	C-N-CA	6.96	130.30	120.42
31	M	114	ILE	N-CA-C	-6.96	100.61	109.58
12	5	149	TYR	CA-C-N	6.95	129.60	120.28
12	5	149	TYR	C-N-CA	6.95	129.60	120.28
14	7	54	SER	N-CA-C	-6.95	97.88	109.07
4	D	197	VAL	CA-C-N	6.95	130.29	120.42
4	D	197	VAL	C-N-CA	6.95	130.29	120.42
23	Q	244	SER	CA-C-O	-6.95	110.64	120.16
32	J	381	GLU	CA-C-N	6.95	130.16	120.29
32	J	381	GLU	C-N-CA	6.95	130.16	120.29
4	D	95	VAL	N-CA-CB	6.95	119.99	110.54
10	3	188	HIS	CB-CG-CD2	-6.95	122.17	131.20
19	Z	193	PRO	N-CA-CB	6.94	110.18	103.51
10	3	86	THR	CA-C-O	-6.94	113.19	120.55
31	M	211	HIS	CB-CG-CD2	-6.94	122.17	131.20
19	Z	46	SER	N-CA-C	6.94	119.69	111.71
20	N	415	HIS	CA-CB-CG	6.94	120.74	113.80
22	P	444	HIS	ND1-CE1-NE2	6.94	115.34	108.40
26	O	113	LEU	CA-C-N	6.94	129.46	120.44
26	O	113	LEU	C-N-CA	6.94	129.46	120.44
8	1	140	GLU	CA-C-N	6.93	127.50	122.16
8	1	140	GLU	C-N-CA	6.93	127.50	122.16
27	H	403	ILE	CA-C-N	-6.93	112.94	122.30
27	H	403	ILE	C-N-CA	-6.93	112.94	122.30
20	N	596	ASN	N-CA-CB	-6.93	99.90	110.16
1	A	162	GLY	N-CA-C	-6.93	102.67	112.37
6	F	56	LEU	N-CA-C	-6.93	104.71	113.72
31	M	50	LEU	CA-C-N	6.93	130.26	120.28
31	M	50	LEU	C-N-CA	6.93	130.26	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	162	TRP	N-CA-C	-6.93	104.64	113.23
24	R	136	HIS	CA-C-N	6.93	129.56	120.28
24	R	136	HIS	C-N-CA	6.93	129.56	120.28
15	W	183	LEU	N-CA-C	6.92	121.34	112.34
22	P	251	TYR	CA-C-N	6.92	130.25	120.28
22	P	251	TYR	C-N-CA	6.92	130.25	120.28
26	O	65	SER	CA-C-N	6.92	129.86	120.44
26	O	65	SER	C-N-CA	6.92	129.86	120.44
26	O	375	LEU	N-CA-C	-6.92	105.38	114.31
16	V	75	MET	N-CA-C	-6.92	99.58	109.62
19	Z	536	SER	CA-C-N	6.92	130.12	120.29
19	Z	536	SER	C-N-CA	6.92	130.12	120.29
17	T	320	SER	N-CA-C	6.92	121.18	112.87
25	U	115	TYR	CB-CA-C	-6.92	99.08	110.85
29	K	391	ARG	N-CA-C	-6.92	99.70	110.42
1	A	28	ALA	CB-CA-C	-6.92	97.83	110.63
2	B	202	GLN	CA-C-N	6.92	130.57	120.82
2	B	202	GLN	C-N-CA	6.92	130.57	120.82
6	F	130	VAL	O-C-N	-6.92	115.07	123.09
8	1	218	GLU	CA-C-O	6.92	127.92	120.38
4	D	31	THR	N-CA-C	-6.91	96.93	108.75
4	D	113	ILE	CA-CB-CG1	6.91	122.15	110.40
1	A	45	LYS	N-CA-C	-6.91	105.40	114.31
25	U	241	SER	CA-C-N	6.91	134.74	121.54
25	U	241	SER	C-N-CA	6.91	134.74	121.54
10	3	56	LEU	N-CA-CB	6.91	121.62	110.77
26	O	329	LYS	O-C-N	6.91	131.13	122.91
22	P	433	ASN	CA-CB-CG	6.91	119.51	112.60
28	I	145	GLU	O-C-N	-6.90	117.02	121.85
9	2	210	LEU	CA-C-O	-6.90	113.14	121.28
23	Q	35	ILE	N-CA-C	6.90	116.99	110.30
31	M	215	PHE	CA-C-N	6.90	129.52	120.28
31	M	215	PHE	C-N-CA	6.90	129.52	120.28
13	6	50	VAL	CA-C-O	6.90	127.67	120.36
21	S	315	HIS	ND1-CE1-NE2	6.90	115.30	108.40
26	O	106	SER	CA-C-O	-6.90	113.60	120.70
11	4	7	ILE	N-CA-C	-6.89	98.10	108.17
30	L	83	PHE	N-CA-C	-6.89	97.73	109.24
32	J	133	PRO	CA-C-N	6.89	129.52	120.28
32	J	133	PRO	C-N-CA	6.89	129.52	120.28
3	C	50	ARG	CA-C-N	6.89	131.16	121.24
3	C	50	ARG	C-N-CA	6.89	131.16	121.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	F	164	ARG	NE-CZ-NH2	-6.89	113.00	119.20
7	G	229	PRO	CA-C-O	-6.89	113.34	121.95
10	3	66	ARG	CA-C-N	6.89	130.07	120.29
10	3	66	ARG	C-N-CA	6.89	130.07	120.29
11	4	79	ALA	N-CA-C	6.89	118.79	111.28
20	N	400	ALA	CA-C-N	6.89	129.51	120.28
20	N	400	ALA	C-N-CA	6.89	129.51	120.28
25	U	62	ASP	N-CA-C	6.89	119.81	111.82
22	P	284	SER	CB-CA-C	-6.89	100.06	110.88
31	M	36	VAL	CA-C-O	-6.89	113.55	120.85
19	Z	253	LEU	CA-C-N	6.88	127.62	119.98
19	Z	253	LEU	C-N-CA	6.88	127.62	119.98
22	P	67	LEU	CB-CA-C	-6.88	100.07	110.88
22	P	354	LEU	CA-C-O	-6.88	112.32	120.10
28	I	343	ARG	CA-C-O	-6.88	114.95	121.08
15	W	15	TYR	N-CA-C	-6.88	103.17	112.26
27	H	228	ALA	O-C-N	6.88	129.42	122.12
32	J	301	LEU	O-C-N	6.88	130.98	122.86
15	W	112	PHE	CA-C-N	6.88	132.35	123.13
15	W	112	PHE	C-N-CA	6.88	132.35	123.13
26	O	236	THR	CA-C-N	6.88	129.50	120.28
26	O	236	THR	C-N-CA	6.88	129.50	120.28
11	4	34	LYS	CA-C-O	6.88	128.93	121.16
21	S	244	ALA	N-CA-C	6.88	118.43	111.07
17	T	298	THR	O-C-N	-6.87	114.90	121.57
19	Z	173	LEU	N-CA-C	-6.87	104.09	113.30
27	H	76	ALA	CA-C-N	6.87	129.49	120.28
27	H	76	ALA	C-N-CA	6.87	129.49	120.28
8	1	59	ILE	N-CA-CB	6.87	118.21	110.72
27	H	118	PHE	CA-CB-CG	6.87	120.67	113.80
12	5	185	PHE	CA-CB-CG	-6.87	106.94	113.80
24	R	248	GLU	N-CA-CB	6.87	120.32	110.16
26	O	332	HIS	CA-C-O	-6.87	113.01	120.36
20	N	618	ALA	CA-C-N	6.86	129.86	120.46
20	N	618	ALA	C-N-CA	6.86	129.86	120.46
26	O	60	TYR	CA-C-O	-6.86	113.63	120.70
2	B	40	ALA	CA-C-N	6.86	134.64	121.54
2	B	40	ALA	C-N-CA	6.86	134.64	121.54
3	C	42	GLY	CA-C-N	6.86	132.11	122.23
3	C	42	GLY	C-N-CA	6.86	132.11	122.23
5	E	228	MET	N-CA-C	-6.86	98.06	109.24
22	P	152	ILE	N-CA-C	6.86	116.97	110.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	164	SER	N-CA-C	-6.86	102.98	112.30
25	U	104	ASN	OD1-CG-ND2	6.86	129.46	122.60
25	U	207	ASP	CA-C-N	6.86	130.15	120.42
25	U	207	ASP	C-N-CA	6.86	130.15	120.42
16	V	88	ASP	CA-CB-CG	-6.85	105.75	112.60
8	1	151	GLY	CA-C-N	6.85	134.63	121.54
8	1	151	GLY	C-N-CA	6.85	134.63	121.54
14	7	111	LEU	O-C-N	6.85	129.96	122.15
21	S	446	SER	N-CA-C	-6.85	97.42	109.06
29	K	92	PHE	CA-CB-CG	6.85	120.65	113.80
31	M	352	ASP	CA-C-N	6.85	134.62	121.54
31	M	352	ASP	C-N-CA	6.85	134.62	121.54
2	B	51	LYS	CA-C-N	6.85	134.62	121.54
2	B	51	LYS	C-N-CA	6.85	134.62	121.54
1	A	104	LYS	CA-C-N	6.84	130.01	120.29
1	A	104	LYS	C-N-CA	6.84	130.01	120.29
28	I	346	ARG	CD-NE-CZ	-6.84	114.82	124.40
10	3	160	PRO	N-CA-CB	6.84	109.79	103.15
10	3	178	ASP	CA-C-N	6.84	132.15	120.72
10	3	178	ASP	C-N-CA	6.84	132.15	120.72
21	S	194	GLN	N-CA-C	-6.84	97.81	109.24
14	7	119	GLU	O-C-N	6.84	129.37	122.12
17	T	345	TYR	CA-C-N	6.84	129.45	120.28
17	T	345	TYR	C-N-CA	6.84	129.45	120.28
15	W	65	THR	CA-C-N	6.84	126.52	119.82
15	W	65	THR	C-N-CA	6.84	126.52	119.82
19	Z	384	ALA	CA-C-N	6.84	130.46	120.82
19	Z	384	ALA	C-N-CA	6.84	130.46	120.82
31	M	427	ILE	CA-C-N	6.84	130.00	120.29
31	M	427	ILE	C-N-CA	6.84	130.00	120.29
1	A	27	TYR	CA-C-N	6.83	130.12	120.28
1	A	27	TYR	C-N-CA	6.83	130.12	120.28
1	A	182	LYS	CB-CG-CD	6.83	127.01	111.30
26	O	249	GLN	OE1-CD-NE2	6.83	129.43	122.60
26	O	335	TRP	CA-C-N	6.83	132.69	122.58
26	O	335	TRP	C-N-CA	6.83	132.69	122.58
14	7	193	LEU	CA-C-O	6.83	127.66	120.42
23	Q	91	SER	CB-CA-C	-6.83	99.24	110.85
20	N	244	MET	CA-C-O	6.83	127.66	120.42
24	R	289	ALA	CA-C-N	6.83	127.42	120.04
24	R	289	ALA	C-N-CA	6.83	127.42	120.04
26	O	4	VAL	CA-C-O	-6.83	110.80	119.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	64	ILE	N-CA-CB	6.83	119.82	110.54
1	A	238	HIS	CA-C-N	6.83	129.31	120.44
1	A	238	HIS	C-N-CA	6.83	129.31	120.44
23	Q	293	ALA	CA-C-O	-6.83	113.32	120.55
20	N	197	VAL	CB-CA-C	-6.82	102.93	112.14
24	R	327	VAL	CA-C-N	6.82	129.31	120.44
24	R	327	VAL	C-N-CA	6.82	129.31	120.44
1	A	91	VAL	O-C-N	6.82	129.00	121.90
27	H	183	GLN	O-C-N	-6.82	114.89	122.12
29	K	231	VAL	O-C-N	6.82	128.47	122.12
30	L	247	ASP	CA-CB-CG	-6.82	105.78	112.60
26	O	316	SER	CB-CA-C	-6.82	100.17	110.88
18	Y	66	LYS	CB-CA-C	-6.82	99.47	110.79
23	Q	233	TYR	CA-CB-CG	-6.82	101.62	113.90
1	A	159	TYR	N-CA-CB	6.82	120.12	109.83
13	6	239	LYS	CA-C-O	6.82	126.24	118.47
20	N	678	ASP	CA-CB-CG	6.82	119.42	112.60
21	S	29	ALA	O-C-N	-6.82	114.30	120.71
5	E	73	HIS	CA-C-O	-6.82	111.87	119.78
24	R	91	ALA	CA-C-N	6.82	129.41	120.28
24	R	91	ALA	C-N-CA	6.82	129.41	120.28
20	N	25	HIS	ND1-CE1-NE2	6.81	115.21	108.40
19	Z	263	PRO	N-CA-C	6.81	124.82	113.78
20	N	176	MET	CA-C-N	6.81	129.96	120.29
20	N	176	MET	C-N-CA	6.81	129.96	120.29
30	L	77	GLN	OE1-CD-NE2	-6.81	115.79	122.60
15	W	71	ILE	CA-C-N	6.81	129.40	120.28
15	W	71	ILE	C-N-CA	6.81	129.40	120.28
13	6	85	HIS	CE1-NE2-CD2	-6.81	102.19	109.00
19	Z	242	GLU	CA-C-N	6.81	127.08	119.32
19	Z	242	GLU	C-N-CA	6.81	127.08	119.32
19	Z	72	ARG	CA-C-N	6.80	126.43	119.56
19	Z	72	ARG	C-N-CA	6.80	126.43	119.56
13	6	220	LEU	N-CA-CB	6.80	121.98	110.49
12	5	208	VAL	N-CA-C	-6.80	98.33	108.46
20	N	382	SER	CB-CA-C	-6.80	102.51	111.42
32	J	95	PHE	CA-C-O	6.80	128.76	120.60
15	W	23	PRO	CA-C-N	6.80	133.26	122.59
15	W	23	PRO	C-N-CA	6.80	133.26	122.59
19	Z	182	GLU	N-CA-C	6.80	121.99	112.75
22	P	101	VAL	CA-C-N	6.80	129.39	120.28
22	P	101	VAL	C-N-CA	6.80	129.39	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	319	PRO	N-CA-CB	6.80	110.39	103.25
9	2	239	GLY	CA-C-N	6.79	132.67	122.68
9	2	239	GLY	C-N-CA	6.79	132.67	122.68
30	L	348	LEU	CA-C-O	6.79	127.62	120.42
32	J	324	ALA	CA-C-N	6.79	129.38	120.28
32	J	324	ALA	C-N-CA	6.79	129.38	120.28
16	V	189	ILE	CA-C-O	-6.79	113.66	120.85
19	Z	494	ARG	NE-CZ-NH2	-6.79	113.09	119.20
4	D	186	ALA	CA-C-N	6.79	129.76	120.46
4	D	186	ALA	C-N-CA	6.79	129.76	120.46
3	C	151	ASP	CA-C-N	6.79	126.58	119.05
3	C	151	ASP	C-N-CA	6.79	126.58	119.05
10	3	168	SER	CA-C-O	-6.79	113.71	120.70
13	6	156	SER	N-CA-CB	6.79	120.17	110.13
20	N	101	ILE	CB-CA-C	-6.79	102.98	112.14
22	P	36	LYS	CA-C-N	6.79	129.26	120.44
22	P	36	LYS	C-N-CA	6.79	129.26	120.44
24	R	219	PHE	CA-C-O	-6.79	113.36	120.55
26	O	255	TRP	CB-CG-CD2	6.79	136.30	126.80
29	K	124	LEU	CA-C-N	6.79	128.57	120.09
29	K	124	LEU	C-N-CA	6.79	128.57	120.09
27	H	323	ARG	NE-CZ-NH1	-6.78	114.72	121.50
17	T	181	TYR	CA-C-N	6.78	130.34	120.71
17	T	181	TYR	C-N-CA	6.78	130.34	120.71
27	H	332	MET	N-CA-C	6.78	118.67	111.28
28	I	428	TYR	O-C-N	6.78	129.31	122.12
19	Z	429	ILE	CA-C-N	6.78	129.37	120.28
19	Z	429	ILE	C-N-CA	6.78	129.37	120.28
30	L	379	GLU	N-CA-C	6.78	118.67	111.28
23	Q	421	LEU	CA-C-O	-6.78	113.72	120.70
1	A	230	LEU	N-CA-CB	6.78	120.19	110.16
8	1	192	ALA	N-CA-CB	6.78	119.90	110.07
21	S	325	HIS	CE1-NE2-CD2	-6.78	102.22	109.00
25	U	31	ASN	CB-CA-C	-6.78	101.72	111.14
26	O	269	LEU	CA-C-N	6.78	129.91	120.29
26	O	269	LEU	C-N-CA	6.78	129.91	120.29
31	M	155	GLY	N-CA-C	-6.78	99.12	111.25
3	C	30	HIS	ND1-CE1-NE2	6.78	115.18	108.40
21	S	432	PHE	CA-C-N	6.78	129.74	120.46
21	S	432	PHE	C-N-CA	6.78	129.74	120.46
22	P	360	GLU	CA-C-N	6.78	129.36	120.28
22	P	360	GLU	C-N-CA	6.78	129.36	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	132	ILE	N-CA-C	6.77	117.56	110.72
23	Q	167	VAL	CA-CB-CG2	6.77	121.92	110.40
15	W	93	ALA	CA-C-N	6.77	129.36	120.28
15	W	93	ALA	C-N-CA	6.77	129.36	120.28
19	Z	102	HIS	CG-CD2-NE2	6.77	113.97	107.20
23	Q	152	GLN	CA-C-N	6.77	129.24	120.44
23	Q	152	GLN	C-N-CA	6.77	129.24	120.44
24	R	239	LYS	N-CA-C	6.77	118.35	110.97
7	G	233	ARG	CA-C-N	6.77	129.90	120.29
7	G	233	ARG	C-N-CA	6.77	129.90	120.29
14	7	104	PHE	CA-CB-CG	6.77	120.57	113.80
24	R	278	VAL	CA-C-O	-6.77	113.16	120.47
1	A	183	VAL	N-CA-C	-6.77	103.89	110.72
20	N	123	LYS	CA-C-N	6.77	128.11	120.06
20	N	123	LYS	C-N-CA	6.77	128.11	120.06
20	N	268	LEU	N-CA-C	6.77	118.66	111.28
1	A	208	ILE	CA-C-N	6.77	134.46	121.54
1	A	208	ILE	C-N-CA	6.77	134.46	121.54
19	Z	241	PRO	CA-C-O	-6.77	113.73	122.12
20	N	266	GLN	O-C-N	6.76	129.29	122.12
22	P	363	ILE	CA-C-O	-6.76	113.92	120.95
28	I	92	GLN	N-CA-C	6.76	118.73	111.36
7	G	12	ALA	N-CA-C	-6.76	104.34	112.59
21	S	283	ARG	CA-C-O	-6.76	113.25	120.42
21	S	360	THR	CA-CB-OG1	6.76	119.74	109.60
27	H	42	SER	CA-C-N	6.76	129.89	120.29
27	H	42	SER	C-N-CA	6.76	129.89	120.29
28	I	170	LEU	N-CA-C	6.76	118.73	111.36
32	J	8	GLN	CB-CG-CD	6.76	124.09	112.60
28	I	125	THR	N-CA-C	-6.76	99.94	110.42
9	2	139	ALA	N-CA-C	-6.76	96.41	110.80
19	Z	780	PRO	CA-C-N	6.76	129.33	120.28
19	Z	780	PRO	C-N-CA	6.76	129.33	120.28
20	N	723	ASP	CA-CB-CG	-6.76	105.84	112.60
21	S	143	PHE	O-C-N	-6.76	116.53	123.29
29	K	407	ILE	N-CA-C	-6.76	97.19	107.73
15	W	151	GLU	N-CA-CB	6.75	120.02	109.69
19	Z	202	HIS	CA-C-N	6.75	129.33	120.28
19	Z	202	HIS	C-N-CA	6.75	129.33	120.28
2	B	168	VAL	CA-C-N	6.75	130.57	120.31
2	B	168	VAL	C-N-CA	6.75	130.57	120.31
27	H	113	ILE	N-CA-C	-6.75	98.45	108.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	341	LEU	N-CA-C	-6.75	100.22	110.14
31	M	437	ASN	CA-CB-CG	-6.75	105.85	112.60
11	4	103	LEU	N-CA-C	-6.75	96.66	108.20
25	U	284	ASP	CA-C-O	-6.75	113.40	120.55
17	T	117	GLU	N-CA-CB	6.75	119.85	110.07
2	B	229	TYR	O-C-N	-6.74	114.98	122.12
19	Z	121	PHE	N-CA-CB	6.74	120.03	110.12
19	Z	887	PHE	N-CA-C	-6.74	104.63	112.92
20	N	549	ALA	CA-C-N	6.74	129.99	120.42
20	N	549	ALA	C-N-CA	6.74	129.99	120.42
21	S	356	TYR	N-CA-C	-6.74	104.00	111.82
31	M	342	ASP	CA-C-N	6.74	126.69	119.28
31	M	342	ASP	C-N-CA	6.74	126.69	119.28
19	Z	609	VAL	CA-C-N	6.74	129.31	120.28
19	Z	609	VAL	C-N-CA	6.74	129.31	120.28
25	U	188	SER	CA-C-N	6.74	129.86	120.29
25	U	188	SER	C-N-CA	6.74	129.86	120.29
32	J	50	ASN	N-CA-CB	6.74	120.03	110.12
2	B	80	GLY	CA-C-O	-6.74	111.89	121.52
27	H	265	ARG	CA-C-N	6.74	129.31	120.28
27	H	265	ARG	C-N-CA	6.74	129.31	120.28
27	H	148	GLN	OE1-CD-NE2	6.73	129.33	122.60
16	V	113	HIS	N-CA-C	-6.73	98.49	108.79
24	R	256	VAL	CA-C-N	6.73	129.30	120.28
24	R	256	VAL	C-N-CA	6.73	129.30	120.28
25	U	124	ILE	CA-C-O	6.73	127.73	120.53
25	U	248	ALA	CA-C-N	6.73	129.60	120.38
25	U	248	ALA	C-N-CA	6.73	129.60	120.38
24	R	20	ALA	CB-CA-C	-6.73	99.41	110.85
31	M	73	LYS	CG-CD-CE	6.73	126.77	111.30
16	V	159	ALA	N-CA-C	-6.72	98.77	109.59
30	L	357	LEU	N-CA-CB	6.72	120.00	110.12
4	D	89	VAL	CA-CB-CG2	-6.72	98.97	110.40
20	N	349	ASP	CA-C-N	6.72	130.53	120.31
20	N	349	ASP	C-N-CA	6.72	130.53	120.31
17	T	257	GLU	N-CA-C	-6.72	102.70	111.71
1	A	1	MET	CB-CA-C	6.72	122.86	110.10
3	C	143	TYR	CA-CB-CG	-6.72	101.81	113.90
26	O	152	HIS	CA-C-N	6.72	129.18	120.44
26	O	152	HIS	C-N-CA	6.72	129.18	120.44
27	H	112	ILE	N-CA-CB	6.72	119.07	111.21
30	L	240	GLN	O-C-N	-6.72	113.91	121.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	215	ARG	CA-C-O	6.72	127.67	120.55
25	U	22	HIS	ND1-CE1-NE2	6.72	115.12	108.40
20	N	941	GLU	CA-C-O	-6.71	113.06	119.91
22	P	318	SER	O-C-N	6.71	129.81	122.15
24	R	384	SER	N-CA-CB	6.71	119.99	110.12
28	I	86	LYS	CA-C-N	6.71	128.23	119.84
28	I	86	LYS	C-N-CA	6.71	128.23	119.84
5	E	112	VAL	CA-C-N	6.71	129.27	120.28
5	E	112	VAL	C-N-CA	6.71	129.27	120.28
9	2	132	ARG	NE-CZ-NH2	6.71	125.24	119.20
21	S	417	ASP	CA-CB-CG	-6.71	105.89	112.60
27	H	405	THR	CA-C-N	6.71	130.51	120.31
27	H	405	THR	C-N-CA	6.71	130.51	120.31
32	J	135	VAL	CA-C-N	6.71	129.81	120.29
32	J	135	VAL	C-N-CA	6.71	129.81	120.29
16	V	188	SER	CA-C-N	6.70	129.94	120.42
16	V	188	SER	C-N-CA	6.70	129.94	120.42
24	R	14	ASN	N-CA-C	-6.70	101.34	109.72
25	U	191	ILE	CA-C-O	-6.70	113.40	120.57
26	O	141	MET	CA-C-O	6.70	127.65	120.55
32	J	242	ALA	CB-CA-C	-6.70	99.41	109.26
14	7	64	VAL	CA-C-N	6.70	134.03	121.97
14	7	64	VAL	C-N-CA	6.70	134.03	121.97
19	Z	687	ARG	CA-C-O	6.70	126.64	119.34
3	C	79	ILE	O-C-N	-6.70	115.38	122.81
13	6	169	SER	N-CA-C	-6.70	105.08	113.18
19	Z	558	LEU	CA-C-O	-6.70	112.17	118.73
20	N	48	LEU	O-C-N	-6.70	115.02	122.12
24	R	202	LEU	N-CA-C	-6.70	103.98	111.28
15	W	154	THR	CA-C-N	6.69	129.80	120.29
15	W	154	THR	C-N-CA	6.69	129.80	120.29
29	K	255	LYS	N-CA-C	-6.69	104.06	111.36
13	6	213	ASP	CA-CB-CG	-6.69	105.91	112.60
15	W	158	ASN	OD1-CG-ND2	6.69	129.29	122.60
21	S	213	VAL	N-CA-CB	6.69	119.64	110.54
30	L	98	ARG	N-CA-C	-6.69	99.77	110.14
21	S	225	SER	CA-C-N	6.69	129.54	120.44
21	S	225	SER	C-N-CA	6.69	129.54	120.44
30	L	17	ASP	N-CA-C	-6.69	100.04	110.14
6	F	179	PHE	N-CA-C	6.69	118.22	111.07
21	S	299	SER	N-CA-C	-6.69	103.92	111.07
25	U	22	HIS	CG-CD2-NE2	6.69	113.89	107.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	234	ALA	N-CA-CB	6.69	120.43	110.40
9	2	51	TYR	N-CA-C	6.69	119.31	108.41
21	S	238	HIS	CG-CD2-NE2	6.69	113.89	107.20
32	J	376	VAL	CB-CA-C	6.69	118.28	110.93
3	C	196	VAL	CA-C-N	6.68	129.24	120.28
3	C	196	VAL	C-N-CA	6.68	129.24	120.28
29	K	339	ARG	CD-NE-CZ	-6.68	115.04	124.40
12	5	181	SER	N-CA-CB	6.68	121.33	110.90
30	L	79	THR	N-CA-C	-6.68	98.84	108.60
28	I	202	GLU	N-CA-C	6.68	118.36	111.14
20	N	633	CYS	CA-C-O	-6.68	111.86	118.34
21	S	249	LEU	O-C-N	6.68	129.76	122.15
29	K	252	ARG	NE-CZ-NH2	6.68	125.21	119.20
7	G	121	HIS	ND1-CE1-NE2	6.68	115.08	108.40
14	7	55	VAL	CA-C-O	-6.68	112.68	120.83
29	K	248	ARG	CA-C-N	6.68	129.12	120.44
29	K	248	ARG	C-N-CA	6.68	129.12	120.44
13	6	63	HIS	CE1-NE2-CD2	-6.68	102.32	109.00
16	V	118	PHE	CA-CB-CG	-6.68	107.12	113.80
14	7	110	VAL	CA-CB-CG2	6.67	121.75	110.40
22	P	297	GLU	N-CA-C	6.67	119.39	111.71
26	O	204	GLY	CA-C-N	6.67	129.77	120.29
26	O	204	GLY	C-N-CA	6.67	129.77	120.29
27	H	353	HIS	ND1-CE1-NE2	6.67	115.07	108.40
17	T	192	HIS	ND1-CE1-NE2	6.67	115.07	108.40
19	Z	283	THR	N-CA-C	-6.67	104.01	111.28
26	O	112	ILE	CA-C-O	6.67	127.89	120.95
5	E	237	VAL	CA-C-N	6.67	131.01	120.47
5	E	237	VAL	C-N-CA	6.67	131.01	120.47
27	H	297	ARG	CB-CA-C	-6.67	100.41	110.88
14	7	207	THR	CA-C-N	6.67	129.11	120.44
14	7	207	THR	C-N-CA	6.67	129.11	120.44
15	W	136	VAL	N-CA-C	-6.67	98.83	108.17
23	Q	148	HIS	ND1-CE1-NE2	6.67	115.07	108.40
20	N	442	GLY	CA-C-O	6.67	127.73	120.66
25	U	79	TYR	CA-C-N	6.66	127.33	120.00
25	U	79	TYR	C-N-CA	6.66	127.33	120.00
9	2	183	ASP	CA-CB-CG	6.66	119.26	112.60
16	V	44	HIS	CE1-NE2-CD2	-6.66	102.34	109.00
21	S	190	LYS	CA-C-N	6.66	129.70	121.71
21	S	190	LYS	C-N-CA	6.66	129.70	121.71
22	P	230	MET	CA-C-N	6.66	128.95	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	230	MET	C-N-CA	6.66	128.95	120.56
28	I	179	ALA	CA-C-N	6.66	127.05	119.92
28	I	179	ALA	C-N-CA	6.66	127.05	119.92
30	L	304	LEU	O-C-N	6.66	129.18	122.12
32	J	205	HIS	CE1-NE2-CD2	-6.66	102.34	109.00
32	J	342	ILE	CA-C-O	6.66	129.10	120.78
13	6	171	MET	CG-SD-CE	-6.66	86.25	100.90
29	K	397	LYS	CA-C-N	6.66	129.20	120.28
29	K	397	LYS	C-N-CA	6.66	129.20	120.28
25	U	12	HIS	CE1-NE2-CD2	-6.66	102.34	109.00
19	Z	676	GLY	O-C-N	-6.66	115.19	122.24
1	A	196	GLU	CA-C-N	6.65	129.74	120.29
1	A	196	GLU	C-N-CA	6.65	129.74	120.29
13	6	205	VAL	CA-CB-CG2	-6.65	99.09	110.40
22	P	34	LEU	CA-C-N	6.65	129.20	120.28
22	P	34	LEU	C-N-CA	6.65	129.20	120.28
20	N	186	SER	N-CA-C	6.65	118.32	111.14
23	Q	98	ASP	CA-CB-CG	-6.65	105.95	112.60
26	O	139	GLU	CA-C-O	-6.65	113.50	120.55
7	G	121	HIS	CE1-NE2-CD2	-6.65	102.35	109.00
21	S	385	ASP	CA-CB-CG	-6.65	105.95	112.60
26	O	335	TRP	O-C-N	6.65	130.99	123.27
32	J	255	GLY	CA-C-O	-6.65	116.45	122.24
10	3	22	ILE	N-CA-C	-6.65	98.55	108.46
21	S	413	ILE	CA-CB-CG1	6.65	121.70	110.40
23	Q	346	GLN	N-CA-CB	6.65	121.25	110.41
19	Z	527	VAL	CA-CB-CG2	6.65	121.70	110.40
20	N	147	TYR	CA-C-N	6.65	129.19	120.28
20	N	147	TYR	C-N-CA	6.65	129.19	120.28
20	N	738	ASP	CB-CA-C	-6.65	97.48	110.11
24	R	137	ARG	CA-C-N	6.65	129.73	120.29
24	R	137	ARG	C-N-CA	6.65	129.73	120.29
30	L	327	LEU	N-CA-C	6.65	118.53	111.28
20	N	537	GLN	N-CA-C	6.65	118.60	111.36
28	I	283	PHE	CB-CG-CD2	-6.64	109.40	120.70
19	Z	285	CYS	CA-C-O	-6.64	113.85	120.82
6	F	14	SER	N-CA-CB	6.64	117.29	109.72
19	Z	867	THR	CA-C-N	6.64	132.19	122.63
19	Z	867	THR	C-N-CA	6.64	132.19	122.63
1	A	231	THR	CA-C-N	6.64	129.84	120.28
1	A	231	THR	C-N-CA	6.64	129.84	120.28
4	D	110	VAL	O-C-N	6.64	128.31	121.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	137	TYR	N-CA-CB	6.64	119.99	110.16
29	K	199	PRO	N-CA-C	6.64	121.64	111.15
31	M	109	GLU	O-C-N	-6.64	115.64	123.41
3	C	128	ARG	CA-C-N	6.64	127.02	119.92
3	C	128	ARG	C-N-CA	6.64	127.02	119.92
7	G	102	ASN	CA-CB-CG	6.64	119.24	112.60
17	T	317	ASN	CA-CB-CG	6.64	119.24	112.60
26	O	199	THR	CA-C-N	6.64	129.07	120.44
26	O	199	THR	C-N-CA	6.64	129.07	120.44
1	A	186	LYS	N-CA-C	6.63	119.84	109.96
5	E	64	ILE	CA-C-O	6.63	127.66	120.43
5	E	122	GLN	OE1-CD-NE2	-6.63	115.97	122.60
13	6	203	LYS	CA-C-N	6.63	129.17	120.28
13	6	203	LYS	C-N-CA	6.63	129.17	120.28
1	A	87	SER	N-CA-CB	6.63	119.68	110.07
22	P	177	MET	CA-C-O	-6.63	113.73	121.16
31	M	32	ILE	CA-C-N	6.63	127.29	120.00
31	M	32	ILE	C-N-CA	6.63	127.29	120.00
1	A	111	VAL	CA-C-N	6.63	129.16	120.28
1	A	111	VAL	C-N-CA	6.63	129.16	120.28
11	4	20	VAL	CA-C-N	6.63	129.16	120.28
11	4	20	VAL	C-N-CA	6.63	129.16	120.28
19	Z	645	ASP	CA-C-N	6.63	129.06	120.44
19	Z	645	ASP	C-N-CA	6.63	129.06	120.44
30	L	175	ARG	O-C-N	-6.63	115.09	122.12
15	W	14	GLU	N-CA-C	-6.63	104.35	114.16
19	Z	650	GLN	CA-C-N	6.63	127.34	119.98
19	Z	650	GLN	C-N-CA	6.63	127.34	119.98
19	Z	688	ARG	NH1-CZ-NH2	6.63	127.92	119.30
20	N	710	ARG	NE-CZ-NH2	-6.63	113.24	119.20
2	B	178	TYR	CA-C-O	6.62	128.58	121.16
14	7	47	ASN	CA-C-N	6.62	128.12	119.84
14	7	47	ASN	C-N-CA	6.62	128.12	119.84
7	G	22	PHE	CA-C-N	6.62	129.16	120.28
7	G	22	PHE	C-N-CA	6.62	129.16	120.28
16	V	140	ALA	N-CA-CB	6.62	119.83	109.69
19	Z	112	ASN	N-CA-CB	6.62	119.86	110.12
20	N	411	ILE	N-CA-C	-6.62	104.06	110.42
20	N	519	VAL	N-CA-C	6.62	116.76	110.53
26	O	39	LEU	CA-C-N	6.62	129.15	120.28
26	O	39	LEU	C-N-CA	6.62	129.15	120.28
3	C	152	PRO	CA-C-N	6.62	129.15	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	152	PRO	C-N-CA	6.62	129.15	120.28
3	C	197	LEU	CA-C-N	6.62	129.15	120.28
3	C	197	LEU	C-N-CA	6.62	129.15	120.28
14	7	84	SER	CA-C-N	6.62	131.78	121.26
14	7	84	SER	C-N-CA	6.62	131.78	121.26
26	O	324	ILE	N-CA-C	-6.62	98.84	108.11
23	Q	37	GLU	O-C-N	-6.62	115.67	123.22
26	O	148	VAL	CA-C-N	6.62	134.18	121.54
26	O	148	VAL	C-N-CA	6.62	134.18	121.54
11	4	188	ILE	O-C-N	6.62	128.65	121.83
30	L	337	HIS	CB-CG-CD2	-6.62	122.60	131.20
8	1	169	TYR	N-CA-C	-6.62	105.09	112.57
13	6	28	ARG	NE-CZ-NH1	6.61	128.11	121.50
27	H	275	ASP	N-CA-C	-6.61	100.17	110.42
2	B	214	ASN	CA-CB-CG	6.61	119.21	112.60
15	W	174	PRO	CB-CA-C	6.61	118.99	110.92
26	O	69	HIS	O-C-N	-6.61	115.64	122.18
7	G	141	TYR	N-CA-C	-6.61	97.59	108.76
10	3	58	THR	N-CA-C	6.61	119.81	110.23
11	4	39	SER	CA-C-O	-6.61	113.67	120.54
14	7	257	HIS	CA-CB-CG	-6.61	107.19	113.80
32	J	43	ARG	O-C-N	-6.61	114.62	122.15
4	D	52	LYS	N-CA-C	-6.60	104.52	112.58
13	6	179	GLN	CB-CG-CD	6.60	123.83	112.60
14	7	93	THR	CA-CB-OG1	6.60	119.50	109.60
29	K	300	ASP	CA-C-N	6.60	131.99	122.35
29	K	300	ASP	C-N-CA	6.60	131.99	122.35
3	C	246	LYS	O-C-N	-6.60	114.50	122.22
19	Z	206	ASP	CA-C-N	6.60	129.66	120.29
19	Z	206	ASP	C-N-CA	6.60	129.66	120.29
19	Z	432	TYR	N-CA-CB	6.60	119.93	110.16
19	Z	462	ALA	N-CA-CB	6.60	120.51	110.28
21	S	224	ARG	CA-C-N	6.60	129.12	120.28
21	S	224	ARG	C-N-CA	6.60	129.12	120.28
21	S	418	ILE	CA-C-N	6.60	129.66	120.29
21	S	418	ILE	C-N-CA	6.60	129.66	120.29
27	H	108	ASP	CA-C-N	6.60	126.99	119.93
27	H	108	ASP	C-N-CA	6.60	126.99	119.93
31	M	168	PRO	CA-C-O	-6.60	114.04	121.43
5	E	31	HIS	CB-CG-CD2	-6.60	122.62	131.20
26	O	30	THR	CA-C-N	6.60	129.78	120.28
26	O	30	THR	C-N-CA	6.60	129.78	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	116	ASP	CA-CB-CG	6.59	119.19	112.60
13	6	57	SER	N-CA-C	-6.59	98.95	109.76
14	7	174	VAL	CA-CB-CG1	6.59	121.61	110.40
27	H	287	ASP	N-CA-C	-6.59	105.15	113.72
20	N	669	ILE	CB-CA-C	-6.59	103.24	112.14
19	Z	420	TRP	CB-CG-CD1	-6.59	117.01	126.90
20	N	797	MET	N-CA-C	-6.59	100.50	110.39
27	H	101	ILE	CA-C-O	-6.59	112.94	120.65
19	Z	732	VAL	CA-C-N	6.59	127.30	119.98
19	Z	732	VAL	C-N-CA	6.59	127.30	119.98
32	J	265	GLY	CA-C-N	6.59	129.11	120.28
32	J	265	GLY	C-N-CA	6.59	129.11	120.28
32	J	376	VAL	N-CA-C	-6.59	106.71	113.10
20	N	347	ASN	O-C-N	6.59	130.90	123.19
31	M	107	GLN	N-CA-CB	6.59	121.62	110.49
22	P	275	ILE	CA-C-N	6.59	129.11	120.28
22	P	275	ILE	C-N-CA	6.59	129.11	120.28
13	6	209	ALA	CA-C-N	6.58	129.10	120.28
13	6	209	ALA	C-N-CA	6.58	129.10	120.28
24	R	329	PHE	CA-CB-CG	6.58	120.38	113.80
32	J	174	LEU	CA-C-N	6.58	129.10	120.28
32	J	174	LEU	C-N-CA	6.58	129.10	120.28
1	A	231	THR	N-CA-CB	6.58	121.61	110.49
21	S	70	ASP	N-CA-C	-6.58	104.11	111.28
26	O	305	ASN	N-CA-C	6.58	118.11	111.07
16	V	271	ALA	CA-C-N	6.58	129.76	120.42
16	V	271	ALA	C-N-CA	6.58	129.76	120.42
26	O	11	SER	CA-C-N	6.58	129.10	120.28
26	O	11	SER	C-N-CA	6.58	129.10	120.28
3	C	74	CYS	CA-C-O	6.58	128.83	121.40
19	Z	291	GLN	CA-CB-CG	6.58	127.25	114.10
30	L	251	ALA	CA-C-N	6.58	129.49	120.35
30	L	251	ALA	C-N-CA	6.58	129.49	120.35
27	H	197	HIS	CE1-NE2-CD2	-6.58	102.42	109.00
4	D	75	VAL	N-CA-CB	6.57	122.08	111.23
29	K	306	LYS	CA-C-N	6.57	130.73	121.66
29	K	306	LYS	C-N-CA	6.57	130.73	121.66
21	S	112	ALA	CA-C-N	6.57	132.93	123.27
21	S	112	ALA	C-N-CA	6.57	132.93	123.27
24	R	178	ASN	CA-CB-CG	-6.57	106.03	112.60
7	G	69	ASN	CA-CB-CG	6.57	119.17	112.60
28	I	226	GLY	O-C-N	-6.57	115.20	121.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	4	78	THR	CA-C-N	6.57	129.08	120.28
11	4	78	THR	C-N-CA	6.57	129.08	120.28
20	N	627	PHE	CA-C-N	6.57	134.09	121.54
20	N	627	PHE	C-N-CA	6.57	134.09	121.54
9	2	195	LYS	CA-C-N	6.57	128.98	120.44
9	2	195	LYS	C-N-CA	6.57	128.98	120.44
21	S	493	PRO	CA-C-N	6.57	126.50	119.28
21	S	493	PRO	C-N-CA	6.57	126.50	119.28
28	I	248	LEU	CA-C-O	-6.57	113.37	120.92
5	E	133	MET	CG-SD-CE	-6.57	86.45	100.90
13	6	238	ARG	NE-CZ-NH2	6.57	125.11	119.20
15	W	106	LYS	N-CA-CB	6.57	120.43	110.45
27	H	360	ARG	CA-C-N	6.57	128.97	120.44
27	H	360	ARG	C-N-CA	6.57	128.97	120.44
31	M	159	ASP	CA-CB-CG	-6.57	106.03	112.60
1	A	231	THR	CA-CB-OG1	6.56	119.44	109.60
26	O	72	ASN	CA-C-N	6.56	126.19	119.56
26	O	72	ASN	C-N-CA	6.56	126.19	119.56
9	2	171	GLY	CA-C-N	6.56	134.07	121.54
9	2	171	GLY	C-N-CA	6.56	134.07	121.54
24	R	330	ILE	N-CA-CB	6.56	120.42	110.58
10	3	43	PHE	CA-C-O	-6.56	111.18	120.16
19	Z	409	SER	CA-C-N	6.56	129.07	120.28
19	Z	409	SER	C-N-CA	6.56	129.07	120.28
24	R	2	PRO	CA-C-N	6.56	131.19	120.63
24	R	2	PRO	C-N-CA	6.56	131.19	120.63
24	R	278	VAL	N-CA-C	-6.55	102.90	111.09
29	K	40	LEU	CA-C-N	6.55	129.35	120.44
29	K	40	LEU	C-N-CA	6.55	129.35	120.44
31	M	247	THR	N-CA-C	6.55	119.42	111.82
20	N	172	ASP	N-CA-C	-6.55	102.49	110.88
25	U	43	TRP	CA-CB-CG	6.55	126.05	113.60
26	O	104	VAL	CA-C-N	6.55	129.59	120.29
26	O	104	VAL	C-N-CA	6.55	129.59	120.29
29	K	176	GLU	O-C-N	6.55	129.62	122.15
16	V	128	ASN	O-C-N	6.55	129.06	122.12
17	T	323	SER	CA-C-N	6.55	129.71	120.28
17	T	323	SER	C-N-CA	6.55	129.71	120.28
27	H	112	ILE	N-CA-C	-6.55	98.43	107.99
8	1	109	VAL	CA-C-N	6.55	129.59	120.29
8	1	109	VAL	C-N-CA	6.55	129.59	120.29
3	C	130	PHE	CA-CB-CG	-6.55	107.25	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	340	ILE	O-C-N	6.55	128.75	122.20
19	Z	670	MET	N-CA-CB	6.54	119.85	110.16
4	D	172	LYS	CA-C-N	6.54	129.34	120.44
4	D	172	LYS	C-N-CA	6.54	129.34	120.44
25	U	257	MET	N-CA-C	6.54	118.41	111.28
31	M	382	VAL	N-CA-C	6.54	118.20	109.37
9	2	152	HIS	CE1-NE2-CD2	-6.54	102.46	109.00
10	3	70	ARG	N-CA-CB	6.54	119.74	110.12
19	Z	746	ARG	CA-C-N	6.54	129.58	120.29
19	Z	746	ARG	C-N-CA	6.54	129.58	120.29
4	D	36	ARG	CA-C-N	6.54	128.09	121.35
4	D	36	ARG	C-N-CA	6.54	128.09	121.35
8	1	87	ALA	N-CA-C	6.54	118.41	111.28
14	7	84	SER	N-CA-CB	6.54	121.54	110.49
16	V	186	LYS	CA-C-N	6.54	128.01	119.84
16	V	186	LYS	C-N-CA	6.54	128.01	119.84
1	A	15	ILE	N-CA-C	-6.53	99.32	108.27
15	W	67	ASP	N-CA-CB	6.53	121.07	110.42
17	T	212	HIS	CE1-NE2-CD2	-6.53	102.47	109.00
26	O	82	HIS	CE1-NE2-CD2	-6.53	102.47	109.00
21	S	164	GLN	OE1-CD-NE2	6.53	129.13	122.60
4	D	128	ASN	CA-CB-CG	-6.53	106.07	112.60
28	I	66	GLU	N-CA-CB	6.53	119.83	110.16
22	P	319	THR	O-C-N	6.53	129.04	122.12
28	I	434	THR	CA-C-N	6.53	128.00	119.84
28	I	434	THR	C-N-CA	6.53	128.00	119.84
32	J	354	ALA	CB-CA-C	-6.53	99.75	110.85
5	E	135	ARG	O-C-N	6.53	126.92	121.83
14	7	114	MET	N-CA-CB	6.53	119.47	110.01
16	V	186	LYS	CA-C-O	-6.53	111.22	120.16
25	U	88	ARG	NE-CZ-NH1	6.53	128.03	121.50
29	K	207	PRO	CA-C-O	-6.53	115.57	120.73
4	D	135	ILE	N-CA-CB	-6.52	101.33	110.26
17	T	148	ARG	NE-CZ-NH1	-6.52	114.98	121.50
30	L	199	ARG	NE-CZ-NH1	-6.52	114.98	121.50
32	J	391	MET	CG-SD-CE	-6.52	86.55	100.90
1	A	161	CYS	O-C-N	6.52	130.68	123.25
8	1	99	HIS	CA-CB-CG	6.52	120.32	113.80
26	O	337	GLN	OE1-CD-NE2	6.52	129.12	122.60
17	T	180	ASP	CA-C-N	6.52	132.13	122.74
17	T	180	ASP	C-N-CA	6.52	132.13	122.74
28	I	274	ALA	CA-C-O	-6.52	113.64	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	182	VAL	CB-CA-C	-6.52	103.34	112.14
31	M	99	LEU	N-CA-C	-6.52	100.56	110.14
4	D	221	GLN	CA-C-N	6.51	127.98	119.84
4	D	221	GLN	C-N-CA	6.51	127.98	119.84
10	3	154	TRP	CB-CG-CD2	-6.51	117.68	126.80
29	K	196	ILE	CA-C-N	6.51	129.51	120.65
29	K	196	ILE	C-N-CA	6.51	129.51	120.65
19	Z	630	ASP	CA-CB-CG	-6.51	106.09	112.60
5	E	70	ILE	N-CA-C	-6.51	104.50	110.82
19	Z	537	THR	O-C-N	-6.51	114.73	122.15
24	R	380	VAL	N-CA-CB	6.51	119.39	110.54
9	2	102	ILE	CA-CB-CG1	6.51	121.46	110.40
27	H	196	LEU	N-CA-CB	6.51	119.51	110.07
19	Z	287	ASP	CA-C-N	6.51	128.99	120.60
19	Z	287	ASP	C-N-CA	6.51	128.99	120.60
32	J	196	LYS	CA-C-O	-6.51	113.99	120.82
20	N	217	CYS	O-C-N	6.50	129.01	122.12
23	Q	171	LEU	O-C-N	-6.50	115.23	122.12
1	A	238	HIS	ND1-CE1-NE2	6.50	114.90	108.40
32	J	49	ARG	NE-CZ-NH2	6.50	125.05	119.20
1	A	237	ALA	N-CA-C	6.50	118.36	111.28
19	Z	317	LEU	N-CA-C	-6.50	104.28	111.36
19	Z	704	LEU	CA-C-N	6.50	129.64	120.28
19	Z	704	LEU	C-N-CA	6.50	129.64	120.28
25	U	132	GLY	CA-C-N	6.50	130.54	120.60
25	U	132	GLY	C-N-CA	6.50	130.54	120.60
27	H	95	VAL	O-C-N	6.50	129.82	122.93
10	3	191	GLU	N-CA-CB	6.49	120.02	109.95
15	W	48	ASN	N-CA-C	-6.49	99.24	109.50
17	T	198	ASN	CA-CB-CG	6.49	119.09	112.60
21	S	478	PHE	CA-C-N	6.49	128.98	120.28
21	S	478	PHE	C-N-CA	6.49	128.98	120.28
19	Z	560	LEU	CA-C-N	6.49	127.19	119.98
19	Z	560	LEU	C-N-CA	6.49	127.19	119.98
20	N	900	TYR	N-CA-C	-6.49	99.24	109.50
22	P	299	ILE	CA-C-N	6.49	126.07	119.19
22	P	299	ILE	C-N-CA	6.49	126.07	119.19
20	N	667	GLU	CA-C-N	6.49	128.98	120.28
20	N	667	GLU	C-N-CA	6.49	128.98	120.28
27	H	261	PHE	CA-CB-CG	-6.49	107.31	113.80
28	I	331	THR	CA-CB-CG2	-6.49	99.47	110.50
2	B	161	THR	O-C-N	6.49	130.07	123.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	167	ASN	CA-CB-CG	-6.49	106.11	112.60
19	Z	133	MET	CA-C-N	6.49	133.93	121.54
19	Z	133	MET	C-N-CA	6.49	133.93	121.54
20	N	37	GLU	CA-C-N	6.49	129.63	120.42
20	N	37	GLU	C-N-CA	6.49	129.63	120.42
20	N	762	GLY	O-C-N	-6.49	115.95	122.18
23	Q	249	THR	N-CA-C	6.49	118.35	111.28
29	K	366	ARG	CA-C-O	-6.49	112.37	118.73
10	3	113	ASP	CA-C-O	-6.49	111.28	120.16
15	W	59	GLU	N-CA-C	-6.49	99.21	109.07
19	Z	880	ALA	N-CA-C	-6.49	99.12	108.07
28	I	243	THR	CA-CB-OG1	6.49	119.33	109.60
31	M	374	ARG	CA-C-O	6.48	127.42	120.55
19	Z	677	HIS	CG-CD2-NE2	6.48	113.68	107.20
23	Q	188	ALA	CA-C-O	6.48	127.62	120.82
13	6	209	ALA	N-CA-CB	-6.48	100.57	110.16
20	N	605	VAL	O-C-N	6.48	128.15	121.87
19	Z	33	ARG	CA-C-N	6.47	129.25	120.44
19	Z	33	ARG	C-N-CA	6.47	129.25	120.44
19	Z	851	ASP	CA-CB-CG	-6.47	106.12	112.60
20	N	369	THR	CA-C-O	-6.47	113.69	120.55
22	P	173	THR	CA-C-N	6.47	133.69	122.81
22	P	173	THR	C-N-CA	6.47	133.69	122.81
22	P	253	THR	CA-C-N	6.47	126.05	119.19
22	P	253	THR	C-N-CA	6.47	126.05	119.19
12	5	144	ASN	CA-C-N	6.47	128.95	120.28
12	5	144	ASN	C-N-CA	6.47	128.95	120.28
21	S	494	PRO	N-CD-CG	6.47	112.91	103.20
24	R	293	ARG	O-C-N	-6.47	115.26	122.12
10	3	196	THR	O-C-N	-6.47	116.23	123.48
24	R	147	ILE	CA-C-N	6.47	127.16	119.98
24	R	147	ILE	C-N-CA	6.47	127.16	119.98
27	H	149	ILE	N-CA-CB	6.47	118.37	111.00
28	I	370	SER	N-CA-C	6.47	117.99	111.07
32	J	228	ALA	CA-C-N	6.47	129.48	120.29
32	J	228	ALA	C-N-CA	6.47	129.48	120.29
28	I	315	GLN	N-CA-C	6.47	118.41	111.36
6	F	194	ALA	CA-C-N	6.47	130.14	120.31
6	F	194	ALA	C-N-CA	6.47	130.14	120.31
23	Q	406	ASN	OD1-CG-ND2	6.47	129.07	122.60
16	V	84	VAL	CA-CB-CG1	-6.46	99.41	110.40
19	Z	451	VAL	CA-CB-CG1	6.46	121.39	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	V	103	GLY	N-CA-C	-6.46	105.96	115.72
14	7	167	GLY	CA-C-O	-6.46	114.31	120.64
21	S	399	ILE	O-C-N	-6.46	115.17	121.83
27	H	143	ASP	CA-CB-CG	-6.46	106.14	112.60
30	L	215	SER	N-CA-CB	-6.46	100.90	110.53
25	U	230	LEU	N-CA-CB	6.46	119.72	110.16
19	Z	305	LEU	CA-C-N	6.46	130.31	120.82
19	Z	305	LEU	C-N-CA	6.46	130.31	120.82
20	N	554	LEU	CA-C-N	6.46	129.31	120.46
20	N	554	LEU	C-N-CA	6.46	129.31	120.46
7	G	90	ASP	CA-C-O	-6.46	113.58	120.42
22	P	246	HIS	O-C-N	6.46	128.96	122.12
26	O	134	THR	CA-C-N	6.46	129.31	120.46
26	O	134	THR	C-N-CA	6.46	129.31	120.46
20	N	391	GLU	N-CA-C	-6.45	104.33	111.82
27	H	223	THR	CA-C-N	6.45	128.93	120.28
27	H	223	THR	C-N-CA	6.45	128.93	120.28
31	M	176	LYS	CA-C-N	6.45	129.46	120.29
31	M	176	LYS	C-N-CA	6.45	129.46	120.29
31	M	371	ILE	CA-C-N	6.45	129.45	120.29
31	M	371	ILE	C-N-CA	6.45	129.45	120.29
19	Z	869	THR	N-CA-C	-6.45	99.50	109.24
27	H	338	ASP	CA-CB-CG	-6.45	106.15	112.60
1	A	148	GLY	CA-C-N	6.45	126.80	119.83
1	A	148	GLY	C-N-CA	6.45	126.80	119.83
16	V	125	VAL	CA-C-N	6.45	129.57	120.28
16	V	125	VAL	C-N-CA	6.45	129.57	120.28
19	Z	400	TYR	N-CA-C	6.45	118.39	111.36
22	P	361	HIS	CA-C-O	-6.45	113.71	120.55
28	I	125	THR	CA-CB-OG1	6.45	119.28	109.60
29	K	97	ASP	CA-CB-CG	6.45	119.05	112.60
24	R	178	ASN	N-CA-C	6.45	117.97	111.07
28	I	63	LEU	O-C-N	-6.45	115.28	122.12
11	4	65	GLN	CA-CB-CG	6.45	126.99	114.10
19	Z	109	ILE	N-CA-C	6.45	117.23	110.72
4	D	57	ARG	CA-C-N	6.45	129.21	120.44
4	D	57	ARG	C-N-CA	6.45	129.21	120.44
19	Z	167	ALA	CA-C-N	6.45	131.51	122.36
19	Z	167	ALA	C-N-CA	6.45	131.51	122.36
27	H	55	LEU	CA-C-N	6.45	128.92	120.28
27	H	55	LEU	C-N-CA	6.45	128.92	120.28
28	I	213	GLU	O-C-N	6.45	128.95	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	1	155	ARG	N-CA-C	-6.44	98.87	108.99
14	7	64	VAL	N-CA-C	6.44	122.74	109.34
20	N	588	MET	O-C-N	6.44	129.05	122.09
26	O	154	ARG	NE-CZ-NH2	-6.44	113.40	119.20
13	6	62	ILE	CA-C-N	6.44	130.91	121.31
13	6	62	ILE	C-N-CA	6.44	130.91	121.31
21	S	294	ILE	CB-CA-C	-6.44	101.82	112.26
21	S	413	ILE	CB-CG1-CD1	6.44	127.33	113.80
25	U	89	GLU	N-CA-CB	6.44	121.37	110.87
28	I	281	ILE	N-CA-C	-6.44	98.84	108.12
30	L	132	LEU	CA-C-N	6.44	129.29	120.46
30	L	132	LEU	C-N-CA	6.44	129.29	120.46
26	O	73	PRO	CA-C-N	6.44	129.56	120.28
26	O	73	PRO	C-N-CA	6.44	129.56	120.28
15	W	39	SER	CA-C-N	6.44	128.81	120.44
15	W	39	SER	C-N-CA	6.44	128.81	120.44
23	Q	15	LEU	CB-CA-C	-6.44	100.77	110.88
27	H	353	HIS	CB-CG-CD2	-6.44	122.83	131.20
11	4	116	TYR	O-C-N	6.44	130.94	123.41
13	6	212	ARG	CB-CA-C	-6.44	99.91	110.85
16	V	71	ASP	CA-CB-CG	6.44	119.04	112.60
21	S	156	LEU	CA-C-O	-6.44	112.42	118.73
22	P	224	LEU	CA-C-O	-6.44	114.07	120.70
22	P	312	MET	N-CA-C	-6.44	104.74	112.59
3	C	212	GLU	CB-CG-CD	-6.43	101.66	112.60
19	Z	290	VAL	N-CA-C	-6.43	103.56	112.50
9	2	181	PHE	CA-CB-CG	-6.43	107.37	113.80
20	N	682	TYR	N-CA-C	6.43	119.28	111.82
21	S	397	ASN	CA-CB-CG	-6.43	106.17	112.60
24	R	31	HIS	CE1-NE2-CD2	-6.43	102.57	109.00
25	U	12	HIS	CG-CD2-NE2	6.43	113.63	107.20
30	L	71	VAL	N-CA-C	-6.43	99.23	109.20
27	H	196	LEU	CB-CA-C	-6.43	100.74	110.90
27	H	407	LYS	CA-C-N	6.43	128.90	120.28
27	H	407	LYS	C-N-CA	6.43	128.90	120.28
26	O	300	ALA	CA-C-N	6.43	131.25	122.19
26	O	300	ALA	C-N-CA	6.43	131.25	122.19
1	A	118	ILE	CA-C-N	6.43	128.89	120.28
1	A	118	ILE	C-N-CA	6.43	128.89	120.28
5	E	112	VAL	CB-CA-C	-6.43	103.35	112.22
19	Z	644	ALA	CA-C-O	6.43	127.23	120.42
23	Q	7	VAL	N-CA-C	6.42	117.11	110.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	4	83	PHE	CA-CB-CG	6.42	120.22	113.80
20	N	796	LYS	N-CA-CB	6.42	121.47	110.68
22	P	275	ILE	N-CA-CB	6.42	120.21	110.58
23	Q	238	GLY	CA-C-N	6.42	128.89	120.28
23	Q	238	GLY	C-N-CA	6.42	128.89	120.28
32	J	90	HIS	CA-CB-CG	-6.42	107.38	113.80
12	5	81	ALA	CA-C-O	6.42	127.07	119.56
25	U	234	PHE	CB-CA-C	-6.42	99.94	110.85
31	M	330	LYS	N-CA-C	-6.42	99.45	109.72
11	4	142	ILE	CA-C-N	6.42	128.88	120.28
11	4	142	ILE	C-N-CA	6.42	128.88	120.28
21	S	212	ARG	NE-CZ-NH2	6.42	124.98	119.20
25	U	74	TYR	O-C-N	6.42	128.92	122.12
25	U	115	TYR	N-CA-CB	6.42	119.66	110.16
5	E	214	ASN	OD1-CG-ND2	6.42	129.01	122.60
3	C	50	ARG	NE-CZ-NH2	6.41	124.97	119.20
6	F	96	ARG	NE-CZ-NH2	-6.41	113.43	119.20
26	O	144	ASN	OD1-CG-ND2	6.41	129.01	122.60
20	N	828	VAL	CB-CA-C	-6.41	103.49	112.14
25	U	208	ILE	CA-C-O	-6.41	114.06	120.85
28	I	317	ASP	N-CA-CB	-6.41	100.69	110.12
24	R	184	GLN	CA-C-O	-6.41	113.76	120.55
25	U	21	ASP	CA-C-O	-6.41	114.09	120.82
25	U	105	ASP	N-CA-C	6.41	119.08	111.71
29	K	39	ASP	CA-CB-CG	-6.41	106.19	112.60
21	S	36	LYS	CA-C-N	6.41	128.86	120.28
21	S	36	LYS	C-N-CA	6.41	128.86	120.28
28	I	243	THR	CA-C-N	6.41	131.96	122.74
28	I	243	THR	C-N-CA	6.41	131.96	122.74
10	3	110	ALA	CA-C-N	-6.40	116.78	122.73
10	3	110	ALA	C-N-CA	-6.40	116.78	122.73
19	Z	159	VAL	N-CA-C	6.40	117.19	110.72
20	N	202	VAL	CA-C-N	6.40	128.76	120.44
20	N	202	VAL	C-N-CA	6.40	128.76	120.44
26	O	315	LEU	CA-C-N	6.40	128.76	120.44
26	O	315	LEU	C-N-CA	6.40	128.76	120.44
23	Q	182	ASN	CA-CB-CG	6.40	119.00	112.60
27	H	110	LYS	N-CA-CB	-6.40	100.66	110.07
19	Z	378	ASN	N-CA-CB	6.40	119.53	110.12
22	P	356	ASN	CA-CB-CG	6.40	119.00	112.60
25	U	101	LEU	CA-C-O	6.40	127.36	120.32
26	O	76	LEU	CA-C-N	6.40	129.50	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	76	LEU	C-N-CA	6.40	129.50	120.42
9	2	197	LEU	CB-CA-C	-6.40	99.98	110.85
24	R	92	GLU	CA-C-N	6.40	128.85	120.28
24	R	92	GLU	C-N-CA	6.40	128.85	120.28
29	K	279	THR	CA-C-N	6.40	127.04	120.00
29	K	279	THR	C-N-CA	6.40	127.04	120.00
31	M	253	LYS	N-CA-C	-6.39	98.31	108.73
20	N	678	ASP	O-C-N	-6.39	113.97	121.32
29	K	179	GLU	CA-C-N	6.39	129.13	120.44
29	K	179	GLU	C-N-CA	6.39	129.13	120.44
19	Z	747	GLN	OE1-CD-NE2	6.39	128.99	122.60
21	S	470	LEU	N-CA-C	-6.39	104.31	111.28
13	6	74	THR	O-C-N	-6.39	115.94	123.22
18	Y	66	LYS	O-C-N	-6.39	115.35	122.12
24	R	315	THR	N-CA-C	-6.39	101.06	110.52
30	L	74	VAL	CB-CA-C	-6.39	104.33	111.23
31	M	57	ILE	CA-C-O	-6.39	114.08	120.85
7	G	139	GLY	N-CA-C	-6.39	98.04	113.18
23	Q	53	LEU	CA-C-N	6.39	127.07	119.98
23	Q	53	LEU	C-N-CA	6.39	127.07	119.98
26	O	89	ASP	CA-CB-CG	-6.39	106.21	112.60
30	L	275	LEU	O-C-N	6.38	128.89	122.12
19	Z	389	LYS	CA-C-N	6.38	128.83	120.28
19	Z	389	LYS	C-N-CA	6.38	128.83	120.28
21	S	135	MET	CA-C-N	6.38	131.46	122.08
21	S	135	MET	C-N-CA	6.38	131.46	122.08
32	J	315	ILE	CA-CB-CG1	6.38	121.25	110.40
17	T	192	HIS	CE1-NE2-CD2	-6.38	102.62	109.00
21	S	69	GLU	O-C-N	-6.38	115.50	122.07
27	H	305	GLN	CA-C-N	6.38	128.73	120.44
27	H	305	GLN	C-N-CA	6.38	128.73	120.44
27	H	410	LEU	CA-C-O	-6.38	114.12	120.82
5	E	64	ILE	O-C-N	-6.38	116.18	123.07
20	N	625	ILE	N-CA-C	-6.38	104.28	110.72
5	E	212	ALA	CA-C-N	6.37	128.82	120.28
5	E	212	ALA	C-N-CA	6.37	128.82	120.28
6	F	43	HIS	CG-CD2-NE2	6.37	113.57	107.20
26	O	350	LYS	N-CA-CB	6.37	119.49	110.12
31	M	89	LEU	CD1-CG-CD2	6.37	124.82	110.80
6	F	238	GLU	CA-C-N	6.37	130.60	122.64
6	F	238	GLU	C-N-CA	6.37	130.60	122.64
14	7	216	CYS	N-CA-CB	6.37	119.59	110.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	371	LYS	O-C-N	6.37	128.63	122.07
28	I	307	ARG	CB-CA-C	-6.37	100.83	110.90
30	L	34	LYS	CA-C-O	-6.37	113.80	120.55
31	M	272	ARG	O-C-N	6.37	128.87	122.12
28	I	197	ILE	N-CA-C	-6.37	104.29	110.72
6	F	43	HIS	CE1-NE2-CD2	-6.37	102.63	109.00
7	G	194	VAL	N-CA-CB	6.37	119.20	110.54
26	O	40	GLN	CA-C-N	6.37	129.46	120.42
26	O	40	GLN	C-N-CA	6.37	129.46	120.42
28	I	179	ALA	CA-C-O	-6.37	113.50	120.69
6	F	134	ILE	N-CA-CB	6.37	118.66	111.21
21	S	378	PHE	CA-CB-CG	-6.36	107.44	113.80
25	U	213	GLU	CA-C-N	6.36	128.81	120.28
25	U	213	GLU	C-N-CA	6.36	128.81	120.28
31	M	356	GLU	N-CA-C	-6.36	99.83	109.95
11	4	186	ASP	CA-CB-CG	6.36	118.96	112.60
20	N	439	GLU	CA-C-N	6.36	127.00	120.00
20	N	439	GLU	C-N-CA	6.36	127.00	120.00
7	G	108	PRO	N-CA-CB	6.36	109.60	102.67
20	N	583	MET	CA-C-N	6.36	128.80	120.28
20	N	583	MET	C-N-CA	6.36	128.80	120.28
25	U	220	LEU	CA-C-O	-6.36	113.56	120.17
8	1	206	VAL	CA-C-N	6.36	133.42	121.97
8	1	206	VAL	C-N-CA	6.36	133.42	121.97
17	T	99	GLU	N-CA-C	-6.36	98.05	108.41
30	L	282	ASP	CA-C-O	6.36	128.03	121.23
1	A	78	CYS	CA-C-N	6.36	131.78	122.94
1	A	78	CYS	C-N-CA	6.36	131.78	122.94
19	Z	62	ARG	NE-CZ-NH2	6.36	124.92	119.20
30	L	122	MET	O-C-N	6.36	128.96	122.09
5	E	209	LYS	CA-C-N	6.36	129.90	120.87
5	E	209	LYS	C-N-CA	6.36	129.90	120.87
25	U	170	VAL	N-CA-CB	-6.36	103.11	110.55
30	L	315	ILE	O-C-N	6.36	131.52	122.62
10	3	83	LYS	CA-C-N	6.35	126.37	119.89
10	3	83	LYS	C-N-CA	6.35	126.37	119.89
26	O	329	LYS	CA-C-O	-6.35	114.09	122.03
22	P	57	ALA	CA-C-N	6.35	129.96	120.31
22	P	57	ALA	C-N-CA	6.35	129.96	120.31
22	P	280	ASP	CA-C-N	6.35	129.31	120.29
22	P	280	ASP	C-N-CA	6.35	129.31	120.29
14	7	77	LEU	CA-C-N	6.35	129.31	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	77	LEU	C-N-CA	6.35	129.31	120.29
23	Q	36	GLN	N-CA-C	-6.35	106.50	114.56
24	R	37	VAL	O-C-N	6.35	128.97	121.80
31	M	368	ILE	CA-CB-CG1	6.35	121.20	110.40
4	D	179	GLU	CA-C-O	-6.34	112.93	120.10
20	N	66	LYS	CA-C-O	-6.34	113.69	120.42
26	O	368	GLU	CA-C-N	6.34	128.78	120.28
26	O	368	GLU	C-N-CA	6.34	128.78	120.28
27	H	213	LEU	N-CA-CB	6.34	120.53	110.57
19	Z	91	SER	N-CA-C	-6.34	97.94	108.34
10	3	38	ASP	O-C-N	-6.34	117.18	123.46
20	N	577	ILE	CA-C-N	6.34	128.78	120.28
20	N	577	ILE	C-N-CA	6.34	128.78	120.28
23	Q	9	PHE	CA-C-N	6.34	128.78	120.28
23	Q	9	PHE	C-N-CA	6.34	128.78	120.28
31	M	305	GLY	CA-C-N	6.34	129.41	120.28
31	M	305	GLY	C-N-CA	6.34	129.41	120.28
21	S	498	ASN	CB-CA-C	-6.34	100.93	110.88
23	Q	295	LYS	CA-C-N	6.34	129.94	120.31
23	Q	295	LYS	C-N-CA	6.34	129.94	120.31
31	M	103	ASP	CA-C-O	-6.34	113.58	120.17
13	6	198	ALA	O-C-N	-6.34	115.54	122.07
14	7	101	TYR	N-CA-CB	6.34	121.20	110.49
20	N	113	VAL	CA-C-N	6.34	129.06	120.44
20	N	113	VAL	C-N-CA	6.34	129.06	120.44
28	I	289	ALA	N-CA-C	6.34	117.85	111.07
32	J	177	ALA	CA-C-N	6.33	128.77	120.28
32	J	177	ALA	C-N-CA	6.33	128.77	120.28
2	B	186	ASP	CA-C-N	6.33	128.77	120.28
2	B	186	ASP	C-N-CA	6.33	128.77	120.28
19	Z	699	VAL	CA-C-N	6.33	129.28	120.29
19	Z	699	VAL	C-N-CA	6.33	129.28	120.29
22	P	277	ALA	CA-C-N	6.33	126.25	119.85
22	P	277	ALA	C-N-CA	6.33	126.25	119.85
32	J	43	ARG	CA-C-N	6.33	128.77	120.28
32	J	43	ARG	C-N-CA	6.33	128.77	120.28
19	Z	718	ASP	CA-C-O	-6.33	111.49	120.16
27	H	339	ARG	N-CA-CB	6.33	121.88	111.62
11	4	73	TYR	CA-C-N	6.33	131.14	122.34
11	4	73	TYR	C-N-CA	6.33	131.14	122.34
27	H	338	ASP	N-CA-C	6.33	118.18	111.28
29	K	320	ALA	CA-C-O	-6.33	114.62	121.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	191	ALA	CA-C-N	6.33	129.41	120.42
2	B	191	ALA	C-N-CA	6.33	129.41	120.42
19	Z	803	PHE	CB-CG-CD2	6.33	131.46	120.70
22	P	178	GLU	N-CA-CB	6.33	120.94	110.63
24	R	126	LYS	O-C-N	6.33	128.83	122.12
28	I	71	TYR	N-CA-CB	6.33	119.19	110.01
3	C	40	ASN	CA-CB-CG	6.33	118.93	112.60
19	Z	144	LEU	N-CA-CB	6.33	119.52	110.16
2	B	98	TYR	CA-C-O	-6.33	113.85	120.55
19	Z	256	PHE	N-CA-C	6.33	119.16	111.82
27	H	53	GLN	O-C-N	6.33	128.59	122.07
14	7	243	ILE	CA-CB-CG1	6.32	121.15	110.40
19	Z	114	ALA	N-CA-C	6.32	123.79	109.81
20	N	227	GLN	CA-C-O	-6.32	113.85	120.55
21	S	479	CYS	CA-C-N	6.32	129.39	120.28
21	S	479	CYS	C-N-CA	6.32	129.39	120.28
21	S	144	ARG	NE-CZ-NH2	6.32	124.89	119.20
16	V	128	ASN	OD1-CG-ND2	6.32	128.92	122.60
20	N	342	LEU	CA-C-N	6.32	129.40	120.42
20	N	342	LEU	C-N-CA	6.32	129.40	120.42
28	I	82	GLN	CA-C-N	6.32	133.61	121.54
28	I	82	GLN	C-N-CA	6.32	133.61	121.54
30	L	357	LEU	O-C-N	-6.32	115.42	122.12
12	5	232	ALA	CA-C-O	6.32	127.84	120.89
19	Z	538	ILE	O-C-N	6.32	128.34	121.83
15	W	138	VAL	N-CA-C	-6.32	99.32	108.17
21	S	498	ASN	N-CA-C	6.32	117.83	111.07
26	O	233	LEU	CB-CA-C	-6.32	100.96	110.88
27	H	346	PRO	N-CA-CB	6.32	109.88	103.25
27	H	351	ARG	CA-C-N	6.32	128.75	120.28
27	H	351	ARG	C-N-CA	6.32	128.75	120.28
6	F	8	ASN	N-CA-C	-6.32	104.50	111.82
11	4	64	VAL	CA-C-O	6.32	127.29	120.47
12	5	195	PHE	CA-C-N	6.32	128.04	120.14
12	5	195	PHE	C-N-CA	6.32	128.04	120.14
31	M	262	MET	CB-CA-C	-6.32	108.64	117.23
1	A	95	ARG	N-CA-C	6.31	118.16	111.28
11	4	189	HIS	CE1-NE2-CD2	-6.31	102.69	109.00
19	Z	594	LEU	N-CA-C	6.31	117.83	111.07
12	5	69	HIS	ND1-CE1-NE2	6.31	114.71	108.40
13	6	203	LYS	CA-C-O	-6.31	113.86	120.55
24	R	314	LEU	N-CA-C	-6.31	99.71	109.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	416	THR	N-CA-C	-6.31	106.21	114.04
19	Z	605	ASN	N-CA-C	6.31	117.85	110.97
20	N	84	ALA	CA-C-O	6.31	127.24	120.55
21	S	357	PHE	N-CA-C	-6.31	104.40	111.28
24	R	289	ALA	N-CA-CB	6.31	121.60	110.37
27	H	412	ALA	O-C-N	-6.31	115.43	122.12
8	1	116	PHE	CB-CA-C	-6.31	100.31	110.79
20	N	688	LEU	N-CA-C	6.31	117.82	111.07
14	7	185	TYR	CB-CG-CD1	-6.31	111.34	120.80
16	V	194	HIS	CE1-NE2-CD2	-6.31	102.69	109.00
21	S	189	GLN	CA-C-N	6.31	133.59	121.54
21	S	189	GLN	C-N-CA	6.31	133.59	121.54
23	Q	284	THR	CA-C-O	-6.31	113.86	120.55
27	H	278	ASP	CA-CB-CG	-6.31	106.29	112.60
30	L	282	ASP	O-C-N	-6.31	116.67	123.42
31	M	383	ASN	CA-CB-CG	-6.31	106.29	112.60
20	N	580	ARG	O-C-N	-6.31	115.58	122.07
29	K	413	GLU	N-CA-C	6.31	117.95	111.14
13	6	96	GLU	CB-CA-C	-6.30	100.98	110.88
19	Z	230	CYS	CA-C-N	6.30	129.24	120.29
19	Z	230	CYS	C-N-CA	6.30	129.24	120.29
26	O	64	ILE	O-C-N	-6.30	115.75	121.87
25	U	190	ARG	NE-CZ-NH2	-6.30	113.53	119.20
31	M	420	HIS	CA-C-N	6.30	129.89	120.31
31	M	420	HIS	C-N-CA	6.30	129.89	120.31
16	V	33	ILE	N-CA-C	-6.30	99.35	108.17
28	I	207	HIS	CE1-NE2-CD2	-6.30	102.70	109.00
31	M	115	ASP	N-CA-C	-6.30	99.40	108.60
8	1	166	SER	CA-C-N	6.30	128.72	120.28
8	1	166	SER	C-N-CA	6.30	128.72	120.28
23	Q	103	THR	CA-C-N	6.30	126.93	120.00
23	Q	103	THR	C-N-CA	6.30	126.93	120.00
9	2	197	LEU	CA-C-N	6.30	129.09	120.46
9	2	197	LEU	C-N-CA	6.30	129.09	120.46
13	6	213	ASP	N-CA-CB	6.30	119.20	110.07
17	T	144	LEU	O-C-N	6.29	128.79	122.12
19	Z	655	LEU	CA-C-N	6.29	128.01	120.14
19	Z	655	LEU	C-N-CA	6.29	128.01	120.14
28	I	288	ASP	CB-CA-C	-6.29	98.98	110.63
19	Z	640	LYS	O-C-N	-6.29	115.29	122.09
24	R	9	GLU	O-C-N	6.29	129.32	122.15
17	T	325	GLN	CB-CG-CD	-6.29	101.90	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	163	ALA	CA-C-N	6.29	126.92	120.00
19	Z	163	ALA	C-N-CA	6.29	126.92	120.00
20	N	100	ILE	CA-CB-CG1	6.29	121.10	110.40
7	G	191	VAL	CA-C-N	6.29	129.22	120.29
7	G	191	VAL	C-N-CA	6.29	129.22	120.29
17	T	217	ARG	NE-CZ-NH1	-6.29	115.21	121.50
26	O	255	TRP	CB-CG-CD1	-6.29	117.47	126.90
17	T	269	THR	CA-C-N	6.29	129.35	120.42
17	T	269	THR	C-N-CA	6.29	129.35	120.42
17	T	159	ILE	CA-C-N	6.29	129.33	120.28
17	T	159	ILE	C-N-CA	6.29	129.33	120.28
20	N	179	TYR	CA-C-N	6.29	128.70	120.28
20	N	179	TYR	C-N-CA	6.29	128.70	120.28
29	K	287	ARG	N-CA-C	6.29	118.13	111.28
5	E	31	HIS	CA-C-N	6.28	129.33	120.28
5	E	31	HIS	C-N-CA	6.28	129.33	120.28
19	Z	209	MET	CG-SD-CE	-6.28	87.08	100.90
30	L	171	GLU	CA-C-N	6.28	128.70	120.28
30	L	171	GLU	C-N-CA	6.28	128.70	120.28
5	E	41	GLN	CG-CD-NE2	-6.28	106.98	116.40
23	Q	320	SER	CA-C-N	6.28	129.21	120.29
23	Q	320	SER	C-N-CA	6.28	129.21	120.29
27	H	133	ASP	CA-CB-CG	6.28	118.88	112.60
28	I	298	ASN	OD1-CG-ND2	6.28	128.88	122.60
25	U	179	ILE	CB-CA-C	6.28	122.43	112.26
15	W	185	SER	CA-C-O	-6.28	113.90	120.55
20	N	739	ALA	N-CA-C	6.28	118.40	110.24
28	I	238	ALA	CA-C-N	6.28	129.33	120.42
28	I	238	ALA	C-N-CA	6.28	129.33	120.42
13	6	182	PHE	N-CA-CB	6.28	119.42	110.13
25	U	38	VAL	CB-CA-C	-6.28	102.97	111.63
21	S	445	ALA	CA-C-O	6.27	128.03	121.38
6	F	65	HIS	CE1-NE2-CD2	-6.27	102.73	109.00
29	K	326	ARG	NE-CZ-NH2	-6.27	113.56	119.20
2	B	14	SER	N-CA-C	-6.27	101.09	110.24
9	2	140	ALA	N-CA-C	-6.27	96.86	108.02
16	V	154	LYS	CA-C-O	6.27	126.30	119.15
20	N	646	PRO	N-CA-CB	6.27	110.17	103.52
2	B	34	PRO	N-CD-CG	6.27	112.60	103.20
32	J	124	HIS	CE1-NE2-CD2	-6.27	102.73	109.00
23	Q	108	GLU	CB-CA-C	-6.27	100.20	110.85
13	6	85	HIS	CA-CB-CG	-6.26	107.54	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	37	GLU	CA-C-O	6.26	127.62	120.54
23	Q	89	VAL	CA-CB-CG2	-6.26	99.75	110.40
15	W	79	GLN	CA-C-N	6.26	126.17	119.28
15	W	79	GLN	C-N-CA	6.26	126.17	119.28
22	P	305	LEU	O-C-N	-6.26	115.48	122.12
4	D	153	THR	N-CA-C	-6.26	99.96	109.85
22	P	454	ASN	N-CA-C	-6.26	105.58	113.72
27	H	342	GLU	N-CA-C	-6.26	99.00	108.96
27	H	70	THR	N-CA-C	-6.26	99.55	109.07
32	J	231	VAL	CB-CA-C	-6.26	102.12	112.26
6	F	155	ASP	N-CA-CB	6.26	120.37	110.55
20	N	860	GLU	N-CA-C	-6.26	99.82	109.52
22	P	287	VAL	CA-C-O	-6.26	114.22	120.85
25	U	284	ASP	CA-C-N	6.26	128.66	120.28
25	U	284	ASP	C-N-CA	6.26	128.66	120.28
30	L	152	LEU	CA-C-N	6.26	128.95	120.38
30	L	152	LEU	C-N-CA	6.26	128.95	120.38
32	J	221	GLN	N-CA-C	-6.26	99.20	109.40
13	6	213	ASP	CB-CA-C	-6.25	101.02	110.90
14	7	257	HIS	ND1-CE1-NE2	6.25	114.65	108.40
15	W	102	GLY	N-CA-C	-6.25	98.36	113.18
28	I	276	GLU	O-C-N	6.25	129.28	122.15
30	L	163	ILE	N-CA-C	6.25	116.88	110.82
6	F	72	ILE	CA-CB-CG1	6.25	121.03	110.40
20	N	34	PHE	CA-CB-CG	-6.25	107.55	113.80
29	K	133	HIS	ND1-CE1-NE2	6.25	114.65	108.40
24	R	296	VAL	N-CA-CB	6.25	119.03	110.54
28	I	147	GLY	N-CA-C	-6.25	106.46	115.27
5	E	34	GLY	O-C-N	6.24	128.91	122.79
20	N	432	SER	O-C-N	-6.24	114.14	121.32
23	Q	375	HIS	CG-CD2-NE2	6.24	113.44	107.20
19	Z	30	GLY	CA-C-N	6.24	128.55	120.44
19	Z	30	GLY	C-N-CA	6.24	128.55	120.44
1	A	238	HIS	CE1-NE2-CD2	-6.24	102.76	109.00
4	D	77	ALA	N-CA-CB	6.24	121.03	110.49
17	T	131	PHE	CA-CB-CG	6.24	120.04	113.80
19	Z	279	GLU	CA-C-N	6.24	128.93	120.44
19	Z	279	GLU	C-N-CA	6.24	128.93	120.44
3	C	73	ALA	N-CA-C	-6.24	99.56	109.23
21	S	349	LEU	N-CA-C	-6.24	103.33	113.19
26	O	116	THR	CA-C-O	6.24	127.16	120.55
21	S	325	HIS	CG-CD2-NE2	6.24	113.44	107.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	86	ASN	CA-C-N	6.24	129.00	120.46
22	P	86	ASN	C-N-CA	6.24	129.00	120.46
23	Q	17	SER	N-CA-C	6.24	117.95	111.03
24	R	139	ASP	N-CA-CB	6.24	119.29	110.12
27	H	241	ILE	N-CA-C	-6.23	98.65	107.75
31	M	37	LEU	CA-C-N	6.23	128.91	120.44
31	M	37	LEU	C-N-CA	6.23	128.91	120.44
31	M	309	VAL	CA-C-N	6.23	128.92	120.44
31	M	309	VAL	C-N-CA	6.23	128.92	120.44
13	6	93	LYS	N-CA-C	6.23	118.15	111.36
19	Z	56	LEU	CA-C-N	6.23	129.78	120.31
19	Z	56	LEU	C-N-CA	6.23	129.78	120.31
22	P	5	GLY	CA-C-N	6.23	133.44	121.54
22	P	5	GLY	C-N-CA	6.23	133.44	121.54
32	J	163	GLU	CA-C-N	6.23	128.41	120.56
32	J	163	GLU	C-N-CA	6.23	128.41	120.56
32	J	379	THR	CA-C-N	6.23	128.63	120.28
32	J	379	THR	C-N-CA	6.23	128.63	120.28
2	B	188	ILE	CB-CA-C	-6.23	103.62	112.22
8	1	188	PHE	N-CA-CB	6.23	119.38	110.16
27	H	313	GLY	CA-C-N	6.23	130.97	122.19
27	H	313	GLY	C-N-CA	6.23	130.97	122.19
3	C	30	HIS	CE1-NE2-CD2	-6.22	102.78	109.00
9	2	49	VAL	CA-C-O	-6.22	115.23	121.45
21	S	96	MET	N-CA-C	-6.22	105.63	113.72
21	S	278	ASN	CA-C-N	6.22	129.13	120.29
21	S	278	ASN	C-N-CA	6.22	129.13	120.29
26	O	171	SER	CA-C-N	6.22	128.62	120.28
26	O	171	SER	C-N-CA	6.22	128.62	120.28
27	H	249	TYR	N-CA-C	-6.22	103.23	113.50
9	2	189	MET	N-CA-CB	6.22	121.00	110.49
13	6	184	ASN	CA-C-O	-6.22	114.37	121.65
20	N	272	GLY	N-CA-C	-6.22	105.80	116.01
23	Q	71	LYS	CA-C-N	6.22	129.77	120.31
23	Q	71	LYS	C-N-CA	6.22	129.77	120.31
26	O	369	HIS	CA-CB-CG	6.22	120.02	113.80
20	N	12	LEU	CB-CA-C	-6.22	100.46	110.79
23	Q	8	GLU	CA-C-N	6.22	128.53	120.44
23	Q	8	GLU	C-N-CA	6.22	128.53	120.44
30	L	138	HIS	CA-CB-CG	6.22	120.02	113.80
14	7	67	ALA	N-CA-C	-6.22	99.06	109.07
2	B	63	HIS	CA-CB-CG	-6.22	107.58	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	95	GLN	CA-C-N	6.22	128.61	120.28
3	C	95	GLN	C-N-CA	6.22	128.61	120.28
5	E	110	GLU	N-CA-C	6.22	118.06	111.28
19	Z	588	ARG	N-CA-C	6.22	119.96	112.38
30	L	297	ASP	N-CA-CB	6.22	119.26	110.12
6	F	145	PHE	CA-CB-CG	-6.21	107.58	113.80
14	7	200	LYS	CA-C-N	6.21	128.59	120.26
14	7	200	LYS	C-N-CA	6.21	128.59	120.26
19	Z	143	ARG	CA-C-N	6.21	129.12	120.29
19	Z	143	ARG	C-N-CA	6.21	129.12	120.29
19	Z	150	GLU	CA-CB-CG	6.21	126.53	114.10
20	N	610	VAL	N-CA-C	-6.21	104.25	113.39
26	O	159	SER	CA-C-N	6.21	128.61	120.28
26	O	159	SER	C-N-CA	6.21	128.61	120.28
28	I	251	VAL	CA-C-N	6.21	126.88	119.98
28	I	251	VAL	C-N-CA	6.21	126.88	119.98
23	Q	98	ASP	O-C-N	6.21	128.47	122.07
32	J	53	ASN	CA-CB-CG	6.21	118.81	112.60
3	C	142	HIS	ND1-CE1-NE2	6.21	114.61	108.40
20	N	355	ASN	N-CA-CB	6.21	119.25	110.12
20	N	355	ASN	O-C-N	6.21	128.70	122.12
21	S	377	GLN	O-C-N	-6.21	115.67	122.07
25	U	241	SER	N-CA-CB	6.21	120.98	110.49
26	O	281	THR	CA-C-N	6.21	129.11	120.29
26	O	281	THR	C-N-CA	6.21	129.11	120.29
27	H	383	ALA	CA-C-N	6.21	129.10	120.29
27	H	383	ALA	C-N-CA	6.21	129.10	120.29
29	K	360	LEU	CA-C-N	6.21	129.75	120.31
29	K	360	LEU	C-N-CA	6.21	129.75	120.31
31	M	233	GLY	N-CA-C	-6.21	106.75	115.32
5	E	53	ARG	N-CA-CB	6.21	120.98	110.49
20	N	779	LEU	CA-C-N	6.21	129.22	120.28
20	N	779	LEU	C-N-CA	6.21	129.22	120.28
20	N	251	ASP	O-C-N	6.21	128.70	122.12
20	N	726	ALA	CA-C-O	-6.21	113.97	120.55
19	Z	620	PHE	N-CA-C	-6.20	102.94	110.88
29	K	265	ASP	CB-CA-C	-6.20	100.30	110.85
16	V	227	GLU	CA-C-N	6.20	126.86	119.98
16	V	227	GLU	C-N-CA	6.20	126.86	119.98
10	3	17	LYS	N-CA-C	-6.20	99.61	109.59
21	S	50	ASP	N-CA-CB	6.20	119.00	110.01
23	Q	410	VAL	CA-C-N	6.20	128.95	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	410	VAL	C-N-CA	6.20	128.95	120.46
19	Z	18	ALA	CA-C-N	6.20	128.87	120.44
19	Z	18	ALA	C-N-CA	6.20	128.87	120.44
32	J	87	VAL	N-CA-C	-6.20	99.56	108.48
24	R	125	ARG	CA-C-O	-6.20	113.98	120.55
24	R	203	ASP	N-CA-CB	6.20	119.89	110.28
30	L	75	LEU	N-CA-C	6.20	117.83	111.14
20	N	478	SER	CB-CA-C	-6.20	100.32	110.85
19	Z	194	TYR	CB-CA-C	-6.19	100.32	110.85
30	L	255	ARG	N-CA-CB	6.19	119.97	109.87
17	T	209	ALA	CA-C-N	6.19	129.08	120.29
17	T	209	ALA	C-N-CA	6.19	129.08	120.29
19	Z	412	ALA	O-C-N	6.19	129.21	122.15
19	Z	493	ASN	CA-CB-CG	-6.19	106.41	112.60
24	R	201	PHE	CA-C-N	6.19	128.58	120.28
24	R	201	PHE	C-N-CA	6.19	128.58	120.28
26	O	13	SER	CA-C-N	6.19	128.58	120.28
26	O	13	SER	C-N-CA	6.19	128.58	120.28
3	C	6	ASP	CA-C-N	6.19	133.36	121.54
3	C	6	ASP	C-N-CA	6.19	133.36	121.54
10	3	154	TRP	N-CA-C	6.19	117.90	111.03
22	P	222	LEU	CA-C-N	6.19	128.49	120.44
22	P	222	LEU	C-N-CA	6.19	128.49	120.44
23	Q	369	ILE	CB-CA-C	-6.19	103.79	112.14
22	P	228	ASN	CA-CB-CG	-6.19	106.41	112.60
23	Q	92	LEU	CA-C-N	6.19	128.57	120.28
23	Q	92	LEU	C-N-CA	6.19	128.57	120.28
29	K	49	GLN	OE1-CD-NE2	-6.19	116.41	122.60
14	7	48	PRO	CB-CA-C	-6.18	101.36	111.56
19	Z	129	LEU	CB-CA-C	-6.18	100.53	110.79
20	N	914	LEU	N-CA-C	-6.18	103.93	112.03
24	R	31	HIS	ND1-CE1-NE2	6.18	114.58	108.40
8	1	90	ASP	CA-CB-CG	6.18	118.78	112.60
20	N	92	ASP	CA-C-N	6.18	129.71	120.31
20	N	92	ASP	C-N-CA	6.18	129.71	120.31
9	2	116	LEU	CA-C-N	6.18	127.56	119.84
9	2	116	LEU	C-N-CA	6.18	127.56	119.84
19	Z	740	ARG	CA-C-N	6.18	128.56	120.28
19	Z	740	ARG	C-N-CA	6.18	128.56	120.28
23	Q	188	ALA	CA-C-N	6.18	129.18	120.28
23	Q	188	ALA	C-N-CA	6.18	129.18	120.28
29	K	112	TYR	N-CA-C	-6.18	98.45	108.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	U	52	ASN	OD1-CG-ND2	-6.18	116.42	122.60
13	6	92	THR	O-C-N	-6.18	115.11	122.15
16	V	193	ILE	CB-CA-C	-6.18	103.70	112.22
24	R	299	MET	CA-C-N	6.18	128.56	120.28
24	R	299	MET	C-N-CA	6.18	128.56	120.28
30	L	285	HIS	N-CA-CB	-6.18	101.37	111.01
23	Q	207	GLN	CA-C-N	6.17	128.55	120.28
23	Q	207	GLN	C-N-CA	6.17	128.55	120.28
9	2	148	VAL	CA-C-N	6.17	128.46	120.44
9	2	148	VAL	C-N-CA	6.17	128.46	120.44
19	Z	652	VAL	CA-C-N	6.17	128.55	120.28
19	Z	652	VAL	C-N-CA	6.17	128.55	120.28
20	N	222	PHE	CB-CA-C	-6.17	101.19	110.88
21	S	203	ALA	CA-C-N	6.17	128.55	120.28
21	S	203	ALA	C-N-CA	6.17	128.55	120.28
25	U	270	VAL	CA-C-N	6.17	129.05	120.29
25	U	270	VAL	C-N-CA	6.17	129.05	120.29
30	L	255	ARG	CB-CA-C	-6.17	100.17	110.29
21	S	283	ARG	NE-CZ-NH2	6.17	124.75	119.20
28	I	157	HIS	N-CA-C	-6.17	100.71	109.96
32	J	391	MET	N-CA-C	6.17	118.08	111.36
19	Z	109	ILE	CA-C-N	6.17	128.79	120.65
19	Z	109	ILE	C-N-CA	6.17	128.79	120.65
27	H	314	ASN	CA-CB-CG	6.17	118.77	112.60
7	G	111	HIS	CE1-NE2-CD2	-6.17	102.83	109.00
27	H	40	THR	O-C-N	6.17	129.18	122.15
16	V	142	ALA	CB-CA-C	-6.16	100.28	110.14
31	M	211	HIS	CA-C-N	6.16	128.54	120.28
31	M	211	HIS	C-N-CA	6.16	128.54	120.28
5	E	212	ALA	O-C-N	6.16	129.18	122.15
23	Q	115	GLU	CA-C-N	6.16	128.54	120.28
23	Q	115	GLU	C-N-CA	6.16	128.54	120.28
31	M	293	ALA	CA-C-N	6.16	130.41	120.30
31	M	293	ALA	C-N-CA	6.16	130.41	120.30
4	D	217	MET	CA-C-O	-6.16	113.92	121.06
10	3	57	ALA	N-CA-CB	6.16	120.90	110.49
22	P	406	VAL	O-C-N	6.16	129.65	123.18
27	H	100	LYS	CA-C-O	6.16	127.89	120.99
28	I	80	ARG	N-CA-C	6.16	118.07	111.36
30	L	161	GLU	CB-CA-C	-6.16	100.57	110.79
30	L	296	PRO	CA-C-N	6.16	128.53	120.28
30	L	296	PRO	C-N-CA	6.16	128.53	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	289	ILE	CA-C-O	6.16	127.12	120.53
19	Z	688	ARG	NE-CZ-NH2	-6.16	113.66	119.20
22	P	111	TYR	CB-CA-C	-6.16	100.57	110.79
6	F	143	HIS	CG-CD2-NE2	6.15	113.35	107.20
19	Z	59	LEU	O-C-N	-6.15	115.73	122.07
23	Q	240	ASP	CA-C-O	6.15	127.07	120.55
5	E	25	GLU	CB-CG-CD	-6.15	102.14	112.60
8	1	73	HIS	ND1-CE1-NE2	6.15	114.55	108.40
19	Z	172	GLU	N-CA-C	-6.15	104.17	113.89
21	S	87	PRO	CB-CA-C	6.15	116.89	110.00
31	M	147	LYS	O-C-N	-6.15	115.14	122.15
32	J	266	ASP	CA-C-N	6.15	128.52	120.28
32	J	266	ASP	C-N-CA	6.15	128.52	120.28
3	C	230	GLN	N-CA-C	6.15	117.98	111.28
12	5	124	ILE	CA-C-N	6.15	129.02	120.29
12	5	124	ILE	C-N-CA	6.15	129.02	120.29
32	J	102	ASN	N-CA-C	-6.15	103.19	112.04
2	B	119	GLN	N-CA-CB	6.14	119.15	110.12
25	U	254	ASN	O-C-N	6.14	128.63	122.12
20	N	412	HIS	CG-CD2-NE2	6.14	113.34	107.20
20	N	830	THR	N-CA-C	-6.14	104.69	111.82
27	H	303	ILE	CA-C-N	6.14	128.51	120.28
27	H	303	ILE	C-N-CA	6.14	128.51	120.28
10	3	69	PHE	CA-CB-CG	-6.14	107.66	113.80
14	7	204	LEU	CA-C-O	-6.14	114.04	120.55
16	V	111	TRP	O-C-N	-6.14	116.25	123.25
16	V	283	HIS	CE1-NE2-CD2	-6.14	102.86	109.00
17	T	142	GLN	CA-C-N	6.14	129.01	120.29
17	T	142	GLN	C-N-CA	6.14	129.01	120.29
17	T	310	GLY	CA-C-N	6.14	129.43	120.71
17	T	310	GLY	C-N-CA	6.14	129.43	120.71
32	J	320	PRO	N-CA-C	6.14	120.86	111.34
26	O	226	ARG	CA-C-N	6.14	133.93	123.01
26	O	226	ARG	C-N-CA	6.14	133.93	123.01
26	O	284	ARG	CB-CA-C	-6.14	99.79	109.42
27	H	181	LYS	N-CA-C	-6.14	100.15	109.85
4	D	183	THR	CA-CB-OG1	6.13	118.80	109.60
17	T	150	ILE	CA-C-N	6.13	128.78	120.44
17	T	150	ILE	C-N-CA	6.13	128.78	120.44
16	V	172	HIS	CE1-NE2-CD2	-6.13	102.87	109.00
25	U	234	PHE	CA-CB-CG	6.13	119.93	113.80
32	J	281	ASP	N-CA-CB	6.13	120.85	110.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	190	TYR	CB-CA-C	-6.13	100.61	110.79
19	Z	428	GLN	CB-CG-CD	-6.13	102.18	112.60
19	Z	650	GLN	N-CA-C	-6.13	104.66	111.71
19	Z	741	LEU	CA-C-N	6.13	128.50	120.28
19	Z	741	LEU	C-N-CA	6.13	128.50	120.28
11	4	23	SER	N-CA-CB	6.13	120.82	110.46
23	Q	213	GLN	CA-CB-CG	6.13	126.36	114.10
6	F	21	GLN	CA-C-N	6.13	129.12	120.42
6	F	21	GLN	C-N-CA	6.13	129.12	120.42
15	W	49	VAL	CA-C-N	6.13	126.97	121.82
15	W	49	VAL	C-N-CA	6.13	126.97	121.82
16	V	67	VAL	N-CA-C	-6.13	99.53	108.11
19	Z	640	LYS	N-CA-C	6.13	117.76	111.14
21	S	262	GLN	CA-C-N	6.13	128.99	120.29
21	S	262	GLN	C-N-CA	6.13	128.99	120.29
10	3	104	TYR	N-CA-CB	6.12	119.08	109.83
14	7	218	ARG	CA-C-O	-6.12	114.06	120.55
26	O	34	TRP	N-CA-CB	6.12	119.77	110.28
26	O	154	ARG	NH1-CZ-NH2	6.12	127.26	119.30
8	1	82	ALA	O-C-N	-6.12	115.40	122.93
9	2	100	GLN	CA-CB-CG	6.12	126.35	114.10
19	Z	377	VAL	CB-CA-C	-6.12	103.87	112.14
28	I	61	LYS	N-CA-C	6.12	117.95	111.28
19	Z	751	TYR	N-CA-C	6.12	117.95	111.28
20	N	533	VAL	CA-C-N	6.12	126.74	119.94
20	N	533	VAL	C-N-CA	6.12	126.74	119.94
23	Q	220	ALA	CB-CA-C	-6.12	100.51	110.79
27	H	80	LEU	CA-C-N	6.12	128.98	120.29
27	H	80	LEU	C-N-CA	6.12	128.98	120.29
28	I	181	GLN	CA-C-N	6.12	129.56	120.87
28	I	181	GLN	C-N-CA	6.12	129.56	120.87
28	I	415	THR	N-CA-C	-6.12	100.49	109.18
32	J	317	PHE	CA-CB-CG	-6.12	107.68	113.80
2	B	100	VAL	N-CA-CB	6.12	117.57	110.65
2	B	128	ARG	CA-C-N	6.12	126.08	120.21
2	B	128	ARG	C-N-CA	6.12	126.08	120.21
10	3	196	THR	CA-C-O	6.12	127.62	120.89
19	Z	240	VAL	O-C-N	-6.12	114.13	121.10
20	N	892	LEU	N-CA-C	-6.12	99.73	109.76
10	3	169	GLN	O-C-N	6.12	129.12	122.15
19	Z	40	ASP	N-CA-C	-6.12	105.40	112.92
20	N	196	LYS	N-CA-C	6.12	117.95	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	46	LYS	N-CA-C	6.12	117.61	111.07
26	O	175	ASP	CA-C-O	-6.12	112.94	119.97
28	I	236	ALA	CA-C-N	6.12	129.61	120.31
28	I	236	ALA	C-N-CA	6.12	129.61	120.31
28	I	311	GLU	CA-CB-CG	6.12	126.33	114.10
11	4	52	ASP	CA-C-O	-6.11	114.40	120.70
20	N	164	GLU	CA-C-O	6.11	127.24	120.82
20	N	859	ALA	CA-C-N	6.11	132.19	122.59
20	N	859	ALA	C-N-CA	6.11	132.19	122.59
24	R	10	GLY	N-CA-C	6.11	120.60	112.77
28	I	163	LEU	CA-C-N	6.11	132.84	122.26
28	I	163	LEU	C-N-CA	6.11	132.84	122.26
30	L	227	ARG	NE-CZ-NH1	-6.11	115.39	121.50
1	A	119	ALA	CA-C-N	6.11	128.97	120.29
1	A	119	ALA	C-N-CA	6.11	128.97	120.29
6	F	225	ASP	CA-C-N	6.11	128.75	120.44
6	F	225	ASP	C-N-CA	6.11	128.75	120.44
14	7	58	VAL	CB-CA-C	-6.11	102.58	111.68
5	E	57	PRO	N-CA-C	-6.11	106.72	114.35
32	J	165	ILE	N-CA-C	6.11	116.74	110.82
20	N	109	THR	CA-C-O	-6.11	114.08	120.55
16	V	133	PHE	CA-CB-CG	-6.10	107.70	113.80
14	7	222	TYR	CA-C-O	-6.10	113.95	120.42
19	Z	153	SER	CA-C-N	6.10	128.46	120.28
19	Z	153	SER	C-N-CA	6.10	128.46	120.28
19	Z	380	PHE	CB-CG-CD1	6.10	131.07	120.70
21	S	440	ASP	CA-C-N	6.10	131.37	121.00
21	S	440	ASP	C-N-CA	6.10	131.37	121.00
22	P	116	THR	CA-C-N	6.10	128.74	120.44
22	P	116	THR	C-N-CA	6.10	128.74	120.44
23	Q	149	LEU	CA-C-N	6.10	126.75	119.98
23	Q	149	LEU	C-N-CA	6.10	126.75	119.98
31	M	122	GLY	CA-C-N	6.10	129.37	120.71
31	M	122	GLY	C-N-CA	6.10	129.37	120.71
1	A	133	PRO	O-C-N	6.10	130.29	122.91
6	F	214	ILE	O-C-N	6.10	129.85	123.26
19	Z	22	SER	CA-C-N	6.10	126.59	119.94
19	Z	22	SER	C-N-CA	6.10	126.59	119.94
20	N	165	LYS	CA-C-N	6.10	131.05	120.68
20	N	165	LYS	C-N-CA	6.10	131.05	120.68
24	R	139	ASP	CA-CB-CG	-6.10	106.50	112.60
8	1	74	ILE	CB-CA-C	-6.10	101.29	111.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	2	119	VAL	N-CA-CB	-6.10	102.62	111.52
17	T	259	TYR	CB-CG-CD1	6.10	129.95	120.80
23	Q	6	VAL	CA-C-N	6.10	128.47	120.60
23	Q	6	VAL	C-N-CA	6.10	128.47	120.60
28	I	211	TYR	CG-CD1-CE1	-6.10	112.05	121.20
30	L	180	PRO	CA-C-N	6.09	126.28	120.31
30	L	180	PRO	C-N-CA	6.09	126.28	120.31
21	S	303	ARG	CB-CA-C	-6.09	101.31	110.88
29	K	249	ASP	CA-C-O	-6.09	114.42	120.82
32	J	278	ASN	N-CA-C	6.09	118.00	111.36
32	J	306	LEU	N-CA-C	6.09	117.92	111.28
4	D	210	LYS	CA-C-N	6.09	128.44	120.28
4	D	210	LYS	C-N-CA	6.09	128.44	120.28
9	2	142	VAL	N-CA-C	-6.09	99.71	108.48
19	Z	262	PHE	CA-CB-CG	-6.09	107.71	113.80
20	N	23	ALA	N-CA-C	6.09	117.92	111.28
27	H	41	TYR	CA-C-N	6.09	128.44	120.28
27	H	41	TYR	C-N-CA	6.09	128.44	120.28
23	Q	310	ARG	NE-CZ-NH2	6.09	124.68	119.20
14	7	57	GLY	N-CA-C	-6.09	98.75	113.18
19	Z	814	SER	N-CA-C	-6.09	98.60	108.52
4	D	27	LYS	CA-C-N	6.09	133.16	121.54
4	D	27	LYS	C-N-CA	6.09	133.16	121.54
11	4	5	ILE	CA-C-N	6.09	127.24	121.46
11	4	5	ILE	C-N-CA	6.09	127.24	121.46
21	S	68	LEU	CA-C-N	6.09	128.35	120.44
21	S	68	LEU	C-N-CA	6.09	128.35	120.44
31	M	79	ASN	OD1-CG-ND2	6.09	128.69	122.60
28	I	268	ARG	NE-CZ-NH1	-6.08	115.42	121.50
30	L	50	LEU	CA-C-N	6.08	128.93	120.29
30	L	50	LEU	C-N-CA	6.08	128.93	120.29
30	L	397	LYS	N-CA-CB	6.08	120.33	110.41
2	B	40	ALA	CA-C-O	-6.08	114.61	121.00
5	E	221	GLN	O-C-N	-6.08	116.81	121.55
6	F	172	LEU	CA-C-N	6.08	128.43	120.28
6	F	172	LEU	C-N-CA	6.08	128.43	120.28
19	Z	727	PHE	CB-CA-C	-6.08	101.33	110.88
32	J	254	ILE	N-CA-C	-6.08	98.98	107.80
29	K	234	GLU	N-CA-CB	6.08	119.71	110.28
29	K	363	TYR	N-CA-CB	6.08	118.83	110.01
30	L	367	PHE	CA-CB-CG	-6.08	107.72	113.80
28	I	283	PHE	CB-CG-CD1	6.08	131.03	120.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	126	PRO	CA-C-O	-6.08	113.74	122.31
29	K	325	GLY	N-CA-C	-6.08	106.32	115.32
17	T	349	LEU	CA-C-N	6.08	128.43	120.28
17	T	349	LEU	C-N-CA	6.08	128.43	120.28
24	R	70	LEU	N-CA-CB	6.08	118.88	110.07
26	O	292	THR	O-C-N	-6.08	115.17	122.65
20	N	894	MET	CG-SD-CE	-6.08	87.53	100.90
6	F	130	VAL	CA-C-O	6.08	127.40	120.90
8	1	122	ARG	NE-CZ-NH2	-6.08	113.73	119.20
27	H	303	ILE	N-CA-CB	6.08	117.66	110.55
29	K	338	ARG	CA-C-N	6.08	128.92	120.29
29	K	338	ARG	C-N-CA	6.08	128.92	120.29
22	P	168	GLU	CA-C-O	-6.07	114.44	120.82
26	O	370	GLN	OE1-CD-NE2	6.07	128.67	122.60
3	C	54	LYS	O-C-N	6.07	128.56	122.12
4	D	160	HIS	CG-CD2-NE2	6.07	113.27	107.20
17	T	199	LEU	N-CA-C	-6.07	104.66	111.28
20	N	205	TYR	O-C-N	6.07	128.56	122.12
22	P	419	LYS	CA-C-O	6.07	127.79	120.81
25	U	252	LYS	CA-C-N	6.07	128.41	120.28
25	U	252	LYS	C-N-CA	6.07	128.41	120.28
26	O	169	HIS	CE1-NE2-CD2	-6.07	102.93	109.00
30	L	350	ASP	N-CA-CB	6.07	119.10	109.51
31	M	40	SER	CA-C-N	6.07	129.02	120.28
31	M	40	SER	C-N-CA	6.07	129.02	120.28
26	O	232	TRP	CE3-CZ3-CH2	-6.07	113.21	121.10
9	2	186	ARG	CD-NE-CZ	-6.07	115.91	124.40
16	V	130	GLN	CA-C-N	6.07	129.01	120.28
16	V	130	GLN	C-N-CA	6.07	129.01	120.28
21	S	356	TYR	CA-C-N	6.07	128.41	120.28
21	S	356	TYR	C-N-CA	6.07	128.41	120.28
22	P	257	GLN	OE1-CD-NE2	-6.07	116.53	122.60
25	U	256	GLN	OE1-CD-NE2	-6.07	116.53	122.60
31	M	359	MET	CA-C-O	-6.07	113.84	120.69
1	A	98	ALA	N-CA-C	6.06	117.89	111.28
23	Q	175	LYS	O-C-N	6.06	128.55	122.12
19	Z	296	PHE	CA-CB-CG	6.06	119.86	113.80
20	N	680	VAL	CA-C-N	6.06	128.32	120.44
20	N	680	VAL	C-N-CA	6.06	128.32	120.44
12	5	219	ILE	CA-C-N	6.06	128.40	120.28
12	5	219	ILE	C-N-CA	6.06	128.40	120.28
23	Q	142	ARG	CA-C-N	6.06	128.89	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	142	ARG	C-N-CA	6.06	128.89	120.29
23	Q	285	GLU	CA-C-O	-6.06	114.00	120.42
29	K	293	LEU	O-C-N	6.06	128.54	122.12
1	A	96	TYR	CA-C-N	6.06	128.40	120.28
1	A	96	TYR	C-N-CA	6.06	128.40	120.28
11	4	164	LEU	CA-C-N	6.06	128.89	120.29
11	4	164	LEU	C-N-CA	6.06	128.89	120.29
20	N	5	ALA	CA-C-N	6.06	128.68	120.38
20	N	5	ALA	C-N-CA	6.06	128.68	120.38
23	Q	116	TRP	CE3-CZ3-CH2	-6.06	113.23	121.10
24	R	340	ALA	O-C-N	-6.06	115.83	122.07
29	K	215	LEU	CA-C-N	6.06	128.40	120.28
29	K	215	LEU	C-N-CA	6.06	128.40	120.28
21	S	92	ARG	N-CA-CB	6.06	120.72	110.49
32	J	315	ILE	O-C-N	6.05	129.72	123.18
5	E	120	ALA	N-CA-C	6.05	117.55	111.07
19	Z	542	ILE	CB-CA-C	-6.05	104.22	111.97
20	N	754	HIS	N-CA-C	-6.05	99.94	108.96
22	P	136	ILE	CB-CA-C	6.05	121.22	111.29
2	B	92	LYS	CA-C-N	6.05	128.88	120.29
2	B	92	LYS	C-N-CA	6.05	128.88	120.29
12	5	69	HIS	CE1-NE2-CD2	-6.05	102.95	109.00
15	W	130	ARG	O-C-N	6.05	129.05	122.15
20	N	87	LEU	CA-C-N	6.05	130.97	120.68
20	N	87	LEU	C-N-CA	6.05	130.97	120.68
22	P	443	THR	CA-C-N	6.05	128.39	120.28
22	P	443	THR	C-N-CA	6.05	128.39	120.28
31	M	243	CYS	CA-C-N	6.05	128.39	120.28
31	M	243	CYS	C-N-CA	6.05	128.39	120.28
32	J	55	LYS	O-C-N	6.05	129.05	122.15
6	F	143	HIS	ND1-CE1-NE2	6.05	114.45	108.40
13	6	184	ASN	CB-CA-C	6.05	119.97	111.86
19	Z	220	ASP	N-CA-C	-6.05	97.91	110.80
21	S	28	PRO	CA-C-N	6.05	127.65	120.09
21	S	28	PRO	C-N-CA	6.05	127.65	120.09
24	R	267	ARG	CA-C-N	6.05	129.50	120.31
24	R	267	ARG	C-N-CA	6.05	129.50	120.31
30	L	279	ASP	N-CA-C	6.05	119.34	109.06
10	3	118	LYS	CA-CB-CG	6.05	126.20	114.10
31	M	438	LEU	CA-C-O	-6.05	114.47	120.82
24	R	235	ASP	CA-C-N	6.05	128.38	120.28
24	R	235	ASP	C-N-CA	6.05	128.38	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	34	GLN	OE1-CD-NE2	6.04	128.65	122.60
9	2	191	GLU	CA-C-N	6.04	128.87	120.29
9	2	191	GLU	C-N-CA	6.04	128.87	120.29
23	Q	220	ALA	N-CA-CB	6.04	119.08	110.13
23	Q	367	GLN	N-CA-C	-6.04	104.77	111.36
32	J	171	HIS	CG-CD2-NE2	6.04	113.25	107.20
11	4	37	LYS	CB-CA-C	6.04	119.72	109.75
12	5	146	VAL	CA-CB-CG1	6.04	120.67	110.40
19	Z	747	GLN	N-CA-CB	6.04	119.11	110.16
24	R	363	ASN	CA-C-N	6.04	128.30	120.44
24	R	363	ASN	C-N-CA	6.04	128.30	120.44
28	I	425	ASN	CA-C-N	6.04	128.74	120.46
28	I	425	ASN	C-N-CA	6.04	128.74	120.46
20	N	61	ALA	CA-C-N	6.04	128.87	120.29
20	N	61	ALA	C-N-CA	6.04	128.87	120.29
22	P	172	GLU	N-CA-CB	6.04	120.04	110.55
24	R	308	LEU	CA-C-N	6.04	128.38	120.28
24	R	308	LEU	C-N-CA	6.04	128.38	120.28
30	L	247	ASP	CB-CA-C	-6.04	99.89	109.80
5	E	147	ASP	CA-C-N	6.04	128.37	120.28
5	E	147	ASP	C-N-CA	6.04	128.37	120.28
8	1	139	GLN	CA-C-O	6.04	125.92	119.34
20	N	446	LEU	N-CA-CB	6.04	119.10	110.16
22	P	428	TRP	N-CA-CB	6.04	119.00	110.12
26	O	127	ASP	CA-C-O	-6.04	114.32	120.84
31	M	300	ASP	CA-CB-CG	-6.04	106.56	112.60
7	G	98	ASN	N-CA-CB	6.04	119.09	110.16
19	Z	287	ASP	N-CA-C	6.04	118.82	111.82
27	H	194	PRO	O-C-N	6.04	130.42	122.27
3	C	32	GLY	CA-C-N	6.04	129.28	120.71
3	C	32	GLY	C-N-CA	6.04	129.28	120.71
8	1	71	HIS	CE1-NE2-CD2	-6.04	102.97	109.00
10	3	82	ILE	CA-C-N	6.04	136.53	121.80
10	3	82	ILE	C-N-CA	6.04	136.53	121.80
14	7	115	VAL	CA-C-O	-6.04	114.45	120.85
19	Z	725	SER	CA-C-N	6.04	128.73	120.46
19	Z	725	SER	C-N-CA	6.04	128.73	120.46
22	P	101	VAL	N-CA-C	6.04	116.82	110.72
22	P	396	LEU	O-C-N	6.04	128.52	122.12
28	I	111	THR	N-CA-C	-6.04	99.56	109.40
30	L	382	MET	CA-C-N	6.04	128.37	120.28
30	L	382	MET	C-N-CA	6.04	128.37	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	134	CYS	N-CA-C	-6.03	100.17	109.52
20	N	646	PRO	N-CA-C	-6.03	105.67	113.57
31	M	202	VAL	CA-C-N	6.03	128.28	120.44
31	M	202	VAL	C-N-CA	6.03	128.28	120.44
4	D	136	SER	N-CA-C	-6.03	99.07	108.90
17	T	203	LEU	CB-CA-C	-6.03	100.78	110.79
10	3	182	GLY	N-CA-C	-6.03	105.12	115.61
16	V	283	HIS	ND1-CE1-NE2	6.03	114.43	108.40
26	O	332	HIS	CG-CD2-NE2	6.03	113.23	107.20
27	H	390	THR	CA-C-N	6.03	128.85	120.29
27	H	390	THR	C-N-CA	6.03	128.85	120.29
1	A	102	LYS	CA-C-N	6.03	128.64	120.44
1	A	102	LYS	C-N-CA	6.03	128.64	120.44
30	L	29	LYS	N-CA-C	6.03	117.93	111.36
8	1	190	ALA	N-CA-C	6.03	117.93	111.36
9	2	108	LEU	O-C-N	6.03	128.51	122.12
13	6	92	THR	CA-C-O	6.03	126.81	120.42
19	Z	613	LEU	N-CA-CB	6.03	120.68	110.49
30	L	65	GLN	CA-C-O	-6.03	114.03	120.42
30	L	113	ALA	N-CA-C	-6.03	99.36	109.07
16	V	64	ASP	CA-CB-CG	-6.03	106.57	112.60
20	N	164	GLU	N-CA-C	6.03	117.52	111.07
20	N	813	TYR	O-C-N	-6.03	114.39	121.32
23	Q	55	SER	CA-C-O	-6.03	114.03	120.42
20	N	395	ARG	CA-C-N	6.02	129.85	120.75
20	N	395	ARG	C-N-CA	6.02	129.85	120.75
1	A	18	PRO	N-CA-CB	6.02	109.57	103.25
4	D	109	THR	CA-C-O	6.02	127.94	121.44
17	T	106	ASN	OD1-CG-ND2	6.02	128.62	122.60
19	Z	397	LYS	CA-C-O	-6.02	114.68	121.00
20	N	403	THR	CA-C-N	6.02	128.27	120.44
20	N	403	THR	C-N-CA	6.02	128.27	120.44
20	N	714	SER	CA-C-O	6.02	126.93	120.55
22	P	21	SER	CA-C-N	6.02	128.27	120.44
22	P	21	SER	C-N-CA	6.02	128.27	120.44
29	K	230	VAL	CA-C-N	6.02	128.71	122.27
29	K	230	VAL	C-N-CA	6.02	128.71	122.27
20	N	25	HIS	CE1-NE2-CD2	-6.02	102.98	109.00
20	N	604	HIS	ND1-CE1-NE2	6.02	114.42	108.40
21	S	294	ILE	N-CA-CB	6.02	121.67	110.77
21	S	483	HIS	CE1-NE2-CD2	-6.02	102.98	109.00
29	K	338	ARG	CD-NE-CZ	-6.02	115.97	124.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	374	ARG	NE-CZ-NH2	-6.02	113.78	119.20
1	A	127	GLN	CA-C-O	6.02	126.80	120.42
13	6	138	GLU	N-CA-C	-6.02	98.47	108.34
20	N	583	MET	O-C-N	-6.02	114.87	122.27
22	P	8	ARG	CA-C-N	6.02	128.84	120.29
22	P	8	ARG	C-N-CA	6.02	128.84	120.29
24	R	129	ASP	N-CA-C	6.02	117.84	111.28
31	M	383	ASN	CA-C-N	6.02	128.34	120.28
31	M	383	ASN	C-N-CA	6.02	128.34	120.28
12	5	246	VAL	CA-C-N	6.02	130.42	122.42
12	5	246	VAL	C-N-CA	6.02	130.42	122.42
23	Q	68	GLY	CA-C-N	6.02	128.34	120.28
23	Q	68	GLY	C-N-CA	6.02	128.34	120.28
13	6	163	LYS	N-CA-C	-6.01	103.38	112.04
26	O	19	ALA	CA-C-N	6.01	128.34	120.28
26	O	19	ALA	C-N-CA	6.01	128.34	120.28
23	Q	83	ALA	CA-C-O	6.01	126.79	120.42
28	I	246	THR	N-CA-CB	6.01	118.89	109.69
4	D	46	GLU	CA-C-N	6.01	133.02	121.54
4	D	46	GLU	C-N-CA	6.01	133.02	121.54
15	W	31	ASP	CA-C-N	6.01	128.34	120.28
15	W	31	ASP	C-N-CA	6.01	128.34	120.28
24	R	222	TYR	CA-C-N	6.01	128.34	120.28
24	R	222	TYR	C-N-CA	6.01	128.34	120.28
31	M	167	LEU	CA-C-O	-6.01	114.97	120.50
13	6	63	HIS	CB-CG-CD2	6.01	139.01	131.20
22	P	304	ASP	CA-C-N	6.01	128.33	120.28
22	P	304	ASP	C-N-CA	6.01	128.33	120.28
22	P	363	ILE	N-CA-CB	6.01	118.71	110.54
24	R	101	ARG	NE-CZ-NH2	6.01	124.61	119.20
2	B	73	GLY	N-CA-C	-6.01	102.37	111.14
17	T	152	GLU	N-CA-C	6.01	117.91	111.36
20	N	384	GLN	CB-CG-CD	-6.01	102.39	112.60
20	N	551	GLY	O-C-N	6.01	127.96	122.19
23	Q	223	LYS	CB-CA-C	-6.01	103.34	112.11
26	O	151	VAL	N-CA-C	-6.01	104.65	110.72
15	W	140	ILE	CA-C-O	6.01	126.70	120.39
23	Q	262	ASN	CA-CB-CG	6.01	118.61	112.60
24	R	328	GLU	N-CA-C	-6.01	104.64	111.07
31	M	362	GLU	CA-C-N	6.01	128.82	120.29
31	M	362	GLU	C-N-CA	6.01	128.82	120.29
26	O	124	ASN	CA-C-N	6.00	128.69	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	124	ASN	C-N-CA	6.00	128.69	120.46
21	S	176	ARG	O-C-N	-6.00	116.00	122.85
22	P	89	LEU	CB-CA-C	-6.00	101.46	110.88
18	Y	56	LEU	CA-C-O	-6.00	114.06	120.42
20	N	387	ARG	N-CA-C	6.00	117.62	111.14
32	J	118	ASN	CA-CB-CG	6.00	118.60	112.60
3	C	121	TYR	CB-CG-CD1	6.00	129.80	120.80
5	E	103	TYR	N-CA-C	6.00	117.90	111.36
12	5	163	TRP	CE2-CD2-CE3	6.00	124.80	118.80
23	Q	112	GLU	O-C-N	6.00	128.48	122.12
8	1	227	ILE	O-C-N	-6.00	114.26	121.10
22	P	38	GLY	CA-C-N	6.00	131.27	122.63
22	P	38	GLY	C-N-CA	6.00	131.27	122.63
31	M	293	ALA	CA-C-O	-6.00	114.06	120.42
10	3	164	PHE	CA-C-N	6.00	128.31	120.28
10	3	164	PHE	C-N-CA	6.00	128.31	120.28
23	Q	420	LYS	CA-C-N	6.00	128.59	120.44
23	Q	420	LYS	C-N-CA	6.00	128.59	120.44
24	R	220	VAL	N-CA-CB	6.00	118.69	110.54
26	O	108	ASP	N-CA-C	-6.00	97.34	108.02
17	T	285	ILE	O-C-N	-6.00	116.40	122.75
19	Z	187	LEU	CA-C-O	-6.00	114.53	120.70
20	N	398	ASN	CA-CB-CG	6.00	118.59	112.60
1	A	232	GLU	CA-C-N	5.99	128.23	120.44
1	A	232	GLU	C-N-CA	5.99	128.23	120.44
10	3	118	LYS	CA-C-N	5.99	127.33	119.84
10	3	118	LYS	C-N-CA	5.99	127.33	119.84
17	T	253	ASN	N-CA-C	-5.99	105.27	113.30
19	Z	56	LEU	O-C-N	5.99	128.98	122.15
26	O	153	SER	CA-C-O	-5.99	114.53	120.82
27	H	207	GLU	CA-C-N	-5.99	114.21	120.38
27	H	207	GLU	C-N-CA	-5.99	114.21	120.38
31	M	151	GLY	N-CA-C	-5.99	107.05	115.32
24	R	230	ALA	N-CA-C	5.99	117.61	111.14
27	H	387	SER	CA-C-N	5.99	128.11	120.56
27	H	387	SER	C-N-CA	5.99	128.11	120.56
16	V	177	THR	N-CA-CB	5.99	118.93	110.12
16	V	194	HIS	ND1-CE1-NE2	5.99	114.39	108.40
19	Z	108	GLU	CA-C-N	5.99	128.93	120.42
19	Z	108	GLU	C-N-CA	5.99	128.93	120.42
24	R	264	TYR	CA-C-N	5.99	129.42	120.31
24	R	264	TYR	C-N-CA	5.99	129.42	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	71	VAL	CA-C-N	5.99	136.42	121.80
26	O	71	VAL	C-N-CA	5.99	136.42	121.80
27	H	388	VAL	CA-C-N	5.99	128.31	120.28
27	H	388	VAL	C-N-CA	5.99	128.31	120.28
29	K	312	ASN	CA-CB-CG	5.99	118.59	112.60
15	W	157	VAL	CA-C-O	-5.99	114.82	121.17
19	Z	241	PRO	CA-C-N	5.99	129.83	120.97
19	Z	241	PRO	C-N-CA	5.99	129.83	120.97
24	R	235	ASP	CA-CB-CG	-5.99	106.61	112.60
30	L	290	ILE	O-C-N	5.99	129.73	123.26
15	W	65	THR	CA-C-O	-5.99	114.83	120.34
31	M	264	ILE	CA-C-O	-5.99	114.51	120.85
26	O	293	PHE	CA-CB-CG	-5.98	107.82	113.80
4	D	77	ALA	CA-C-N	5.98	132.97	121.54
4	D	77	ALA	C-N-CA	5.98	132.97	121.54
7	G	72	ARG	CA-C-O	5.98	126.90	119.78
23	Q	134	VAL	N-CA-C	5.98	116.72	110.62
26	O	35	HIS	N-CA-C	-5.98	104.84	111.36
3	C	14	PRO	N-CA-C	-5.98	107.80	114.92
13	6	146	GLY	CA-C-O	-5.98	117.22	121.88
17	T	215	LEU	CA-C-O	-5.98	114.54	120.82
19	Z	264	GLU	CA-C-O	-5.98	114.08	120.42
19	Z	472	HIS	N-CA-CB	5.98	118.76	109.97
20	N	471	ASP	CA-CB-CG	5.98	118.58	112.60
29	K	78	GLU	CA-C-N	5.98	130.11	120.30
29	K	78	GLU	C-N-CA	5.98	130.11	120.30
20	N	543	LYS	N-CA-C	5.98	117.80	111.28
24	R	337	PHE	CB-CG-CD2	-5.98	110.54	120.70
10	3	7	ASN	N-CA-C	-5.98	99.16	108.90
12	5	192	VAL	CA-C-N	5.98	133.24	121.58
12	5	192	VAL	C-N-CA	5.98	133.24	121.58
14	7	61	ASP	CA-C-O	-5.98	113.92	120.43
23	Q	353	LEU	CA-C-N	5.98	129.91	120.47
23	Q	353	LEU	C-N-CA	5.98	129.91	120.47
27	H	224	LEU	CA-C-N	5.98	128.78	120.29
27	H	224	LEU	C-N-CA	5.98	128.78	120.29
31	M	150	PRO	CA-C-O	-5.98	114.61	121.36
8	1	191	ASN	CA-C-N	5.97	128.56	120.44
8	1	191	ASN	C-N-CA	5.97	128.56	120.44
15	W	100	ARG	NE-CZ-NH1	-5.97	115.53	121.50
26	O	251	LEU	CA-C-N	5.97	130.25	120.63
26	O	251	LEU	C-N-CA	5.97	130.25	120.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	I	397	ALA	CA-C-N	5.97	128.09	120.56
28	I	397	ALA	C-N-CA	5.97	128.09	120.56
30	L	373	HIS	CB-CG-ND1	5.97	131.66	122.70
2	B	229	TYR	CA-C-N	5.97	128.88	120.28
2	B	229	TYR	C-N-CA	5.97	128.88	120.28
17	T	215	LEU	CA-C-N	5.97	129.39	120.31
17	T	215	LEU	C-N-CA	5.97	129.39	120.31
20	N	895	THR	CA-C-N	5.97	132.95	121.54
20	N	895	THR	C-N-CA	5.97	132.95	121.54
31	M	239	LEU	CA-C-O	5.97	126.88	120.55
32	J	339	THR	N-CA-C	5.97	118.23	110.53
2	B	56	LEU	N-CA-CB	5.97	119.63	110.61
14	7	70	MET	CA-C-N	5.97	129.35	120.87
14	7	70	MET	C-N-CA	5.97	129.35	120.87
20	N	673	GLU	CA-C-N	5.97	125.59	119.56
20	N	673	GLU	C-N-CA	5.97	125.59	119.56
21	S	107	TYR	N-CA-CB	5.97	119.49	110.30
23	Q	189	ALA	CA-C-N	5.97	128.28	120.28
23	Q	189	ALA	C-N-CA	5.97	128.28	120.28
20	N	97	VAL	CA-C-N	5.97	130.69	120.72
20	N	97	VAL	C-N-CA	5.97	130.69	120.72
23	Q	93	LEU	CB-CA-C	-5.97	100.88	110.79
26	O	77	VAL	CA-C-N	5.97	128.27	120.28
26	O	77	VAL	C-N-CA	5.97	128.27	120.28
17	T	104	GLU	N-CA-CB	5.96	118.99	110.16
6	F	231	PRO	CA-C-N	5.96	128.76	120.29
6	F	231	PRO	C-N-CA	5.96	128.76	120.29
12	5	192	VAL	N-CA-C	5.96	118.20	111.88
14	7	130	ARG	CD-NE-CZ	5.96	132.75	124.40
24	R	304	TYR	CA-C-N	5.96	128.19	120.44
24	R	304	TYR	C-N-CA	5.96	128.19	120.44
1	A	60	LEU	N-CA-C	-5.96	104.86	111.36
3	C	83	ALA	O-C-N	5.96	128.44	122.12
23	Q	135	SER	CA-C-N	5.96	128.19	120.44
23	Q	135	SER	C-N-CA	5.96	128.19	120.44
31	M	173	SER	N-CA-C	-5.96	104.91	111.82
31	M	355	ILE	CA-CB-CG1	5.96	120.53	110.40
6	F	175	HIS	ND1-CE1-NE2	5.96	114.36	108.40
20	N	240	ASP	N-CA-CB	5.96	120.56	110.49
27	H	414	ASN	CB-CA-C	-5.96	100.90	110.79
31	M	420	HIS	ND1-CE1-NE2	5.96	114.36	108.40
16	V	222	LYS	N-CA-C	5.96	117.58	111.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	245	GLU	CB-CG-CD	5.96	122.73	112.60
26	O	83	VAL	CA-C-O	-5.96	114.54	120.85
25	U	261	TYR	N-CA-C	5.96	117.77	111.28
26	O	77	VAL	N-CA-C	5.95	116.73	110.72
20	N	351	MET	N-CA-C	5.95	117.77	111.28
4	D	241	GLU	CA-C-N	5.95	128.25	120.28
4	D	241	GLU	C-N-CA	5.95	128.25	120.28
22	P	407	ASP	O-C-N	-5.95	116.25	123.27
27	H	358	HIS	CG-CD2-NE2	5.95	113.15	107.20
20	N	694	ILE	CA-C-O	5.95	127.65	121.05
24	R	251	HIS	CA-C-N	5.95	132.90	121.54
24	R	251	HIS	C-N-CA	5.95	132.90	121.54
25	U	191	ILE	N-CA-CB	5.95	120.82	110.65
29	K	55	GLU	O-C-N	5.95	128.93	122.15
25	U	224	HIS	CA-C-O	5.95	126.81	119.97
32	J	332	HIS	CB-CA-C	-5.95	100.92	110.79
21	S	116	PHE	N-CA-C	-5.94	105.68	113.17
28	I	275	GLU	N-CA-C	5.94	117.76	111.28
11	4	103	LEU	N-CA-CB	5.94	120.17	110.37
15	W	1	MET	CG-SD-CE	-5.94	87.83	100.90
23	Q	15	LEU	CA-C-N	5.94	128.52	120.44
23	Q	15	LEU	C-N-CA	5.94	128.52	120.44
25	U	85	VAL	N-CA-CB	5.94	117.50	110.55
25	U	158	VAL	CA-C-O	5.94	127.32	120.67
25	U	255	ASP	N-CA-CB	5.94	118.85	110.12
31	M	211	HIS	CA-CB-CG	-5.94	107.86	113.80
19	Z	720	GLU	CA-C-N	5.94	130.50	120.29
19	Z	720	GLU	C-N-CA	5.94	130.50	120.29
23	Q	387	ILE	CA-C-O	5.94	127.49	120.72
29	K	162	VAL	O-C-N	5.94	129.94	122.52
15	W	157	VAL	CA-C-N	5.94	128.72	120.29
15	W	157	VAL	C-N-CA	5.94	128.72	120.29
19	Z	177	GLU	CA-CB-CG	-5.94	102.23	114.10
24	R	364	TRP	CA-C-N	5.94	128.72	120.29
24	R	364	TRP	C-N-CA	5.94	128.72	120.29
16	V	213	GLU	CA-C-N	5.94	128.72	120.29
16	V	213	GLU	C-N-CA	5.94	128.72	120.29
25	U	227	ILE	N-CA-C	-5.94	104.56	110.62
14	7	102	ALA	CA-C-N	5.93	129.33	120.31
14	7	102	ALA	C-N-CA	5.93	129.33	120.31
32	J	30	GLU	CA-C-N	5.93	128.23	120.28
32	J	30	GLU	C-N-CA	5.93	128.23	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	241	ASN	OD1-CG-ND2	5.93	128.53	122.60
29	K	252	ARG	CA-C-N	5.93	128.23	120.28
29	K	252	ARG	C-N-CA	5.93	128.23	120.28
19	Z	628	ASP	CA-C-O	-5.93	114.55	120.90
15	W	157	VAL	N-CA-CB	5.93	117.49	110.55
20	N	654	MET	N-CA-CB	5.93	118.83	110.12
20	N	363	SER	CA-C-N	5.93	128.15	120.56
20	N	363	SER	C-N-CA	5.93	128.15	120.56
12	5	116	ARG	NE-CZ-NH2	5.93	124.53	119.20
29	K	82	ILE	CA-C-O	-5.93	114.57	120.85
19	Z	452	ASN	CA-CB-CG	-5.92	106.68	112.60
19	Z	615	ILE	CA-C-O	-5.92	113.38	120.78
20	N	224	ASP	N-CA-CB	-5.92	103.01	111.84
31	M	163	ILE	CA-C-N	5.92	130.71	120.58
31	M	163	ILE	C-N-CA	5.92	130.71	120.58
2	B	49	GLU	CA-C-O	5.92	127.36	120.49
23	Q	89	VAL	CA-C-O	-5.92	114.79	120.95
27	H	317	VAL	CA-C-O	-5.92	114.19	120.53
31	M	411	LEU	O-C-N	-5.92	115.84	122.12
4	D	133	PHE	N-CA-CB	5.92	118.67	109.97
32	J	126	ILE	N-CA-C	-5.92	99.95	108.53
17	T	189	ALA	N-CA-CB	5.92	118.92	110.16
24	R	383	LEU	N-CA-C	5.92	117.81	111.36
31	M	324	GLN	OE1-CD-NE2	5.92	128.52	122.60
13	6	223	CYS	N-CA-C	-5.92	99.76	109.40
25	U	277	ASN	CA-C-N	5.92	128.21	120.28
25	U	277	ASN	C-N-CA	5.92	128.21	120.28
28	I	437	GLY	CA-C-N	5.92	132.84	121.54
28	I	437	GLY	C-N-CA	5.92	132.84	121.54
6	F	67	ASP	N-CA-C	-5.92	99.96	108.60
19	Z	154	TRP	O-C-N	-5.92	115.85	122.12
28	I	287	ILE	CA-CB-CG1	5.92	120.46	110.40
5	E	34	GLY	CA-C-O	-5.91	115.66	121.93
22	P	316	ARG	N-CA-C	-5.91	99.36	109.24
25	U	234	PHE	CA-C-N	5.91	129.30	120.31
25	U	234	PHE	C-N-CA	5.91	129.30	120.31
27	H	293	ASN	CA-CB-CG	5.91	118.51	112.60
11	4	162	LYS	CA-C-N	5.91	128.20	120.28
11	4	162	LYS	C-N-CA	5.91	128.20	120.28
16	V	102	THR	CA-C-N	5.91	129.98	122.00
16	V	102	THR	C-N-CA	5.91	129.98	122.00
19	Z	17	SER	CB-CA-C	-5.91	101.60	110.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	244	GLU	CA-C-N	5.91	128.20	120.28
19	Z	244	GLU	C-N-CA	5.91	128.20	120.28
25	U	15	VAL	CA-C-N	5.91	128.69	120.29
25	U	15	VAL	C-N-CA	5.91	128.69	120.29
8	1	87	ALA	O-C-N	5.91	128.39	122.12
8	1	136	TRP	CD2-CE2-CZ2	-5.91	116.49	122.40
20	N	796	LYS	CA-C-O	5.91	126.74	120.36
20	N	916	ASP	N-CA-C	-5.91	100.57	108.19
20	N	738	ASP	CA-CB-CG	-5.91	106.69	112.60
20	N	946	GLU	CA-C-N	5.91	127.23	119.84
20	N	946	GLU	C-N-CA	5.91	127.23	119.84
31	M	341	LEU	CA-C-N	5.91	128.60	120.39
31	M	341	LEU	C-N-CA	5.91	128.60	120.39
2	B	40	ALA	O-C-N	5.91	128.17	122.03
11	4	36	PHE	N-CA-C	-5.91	104.46	112.26
22	P	324	TYR	CB-CG-CD1	5.91	129.66	120.80
5	E	197	SER	CA-CB-OG	-5.91	99.29	111.10
10	3	75	GLU	CA-C-N	5.91	128.68	120.29
10	3	75	GLU	C-N-CA	5.91	128.68	120.29
14	7	158	GLY	O-C-N	5.91	129.62	123.48
19	Z	850	VAL	CA-CB-CG1	5.91	120.44	110.40
25	U	21	ASP	O-C-N	5.91	128.15	122.07
32	J	334	ARG	CD-NE-CZ	-5.91	116.13	124.40
7	G	89	ALA	CA-C-N	5.90	128.67	120.29
7	G	89	ALA	C-N-CA	5.90	128.67	120.29
15	W	153	LEU	CA-C-N	5.90	128.19	120.28
15	W	153	LEU	C-N-CA	5.90	128.19	120.28
19	Z	241	PRO	N-CA-CB	5.90	109.90	103.23
20	N	1	MET	CA-C-N	5.90	132.60	121.97
20	N	1	MET	C-N-CA	5.90	132.60	121.97
16	V	176	GLN	N-CA-CB	5.90	118.80	110.12
20	N	231	ASP	CB-CA-C	-5.90	100.81	110.85
29	K	65	GLN	OE1-CD-NE2	5.90	128.50	122.60
32	J	352	PRO	CA-C-N	5.90	125.95	120.34
32	J	352	PRO	C-N-CA	5.90	125.95	120.34
3	C	105	ILE	O-C-N	-5.90	114.37	121.10
19	Z	198	HIS	CA-CB-CG	-5.90	107.90	113.80
21	S	236	LEU	CA-C-O	-5.90	114.30	120.55
24	R	72	LYS	CA-C-N	5.90	128.67	120.29
24	R	72	LYS	C-N-CA	5.90	128.67	120.29
9	2	53	ASP	CA-CB-CG	-5.90	106.70	112.60
12	5	246	VAL	O-C-N	-5.90	116.69	123.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	240	ASP	CA-CB-CG	-5.90	106.70	112.60
20	N	9	ILE	N-CA-C	5.90	116.68	110.72
20	N	326	ILE	N-CA-C	5.90	116.64	110.62
22	P	224	LEU	O-C-N	5.90	128.46	122.09
31	M	109	GLU	N-CA-C	-5.90	98.67	108.75
7	G	224	ARG	N-CA-C	5.90	118.81	110.50
20	N	462	LEU	O-C-N	-5.90	115.43	122.15
16	V	300	LEU	CA-C-N	5.89	128.66	120.29
16	V	300	LEU	C-N-CA	5.89	128.66	120.29
26	O	262	ALA	CA-C-N	5.89	128.46	120.44
26	O	262	ALA	C-N-CA	5.89	128.46	120.44
21	S	65	THR	CA-C-N	5.89	128.53	120.46
21	S	65	THR	C-N-CA	5.89	128.53	120.46
24	R	291	HIS	ND1-CE1-NE2	5.89	114.29	108.40
29	K	222	HIS	CE1-NE2-CD2	-5.89	103.11	109.00
10	3	53	LEU	N-CA-C	-5.89	99.80	109.40
13	6	111	THR	CA-CB-OG1	5.89	118.44	109.60
20	N	495	ASP	CA-CB-CG	5.89	118.49	112.60
20	N	524	LYS	O-C-N	-5.89	115.51	122.58
2	B	195	LEU	CA-C-N	5.89	130.55	120.72
2	B	195	LEU	C-N-CA	5.89	130.55	120.72
15	W	173	VAL	O-C-N	5.89	127.81	121.10
16	V	143	VAL	CB-CA-C	5.89	119.60	110.83
19	Z	564	LEU	CA-C-N	5.89	128.65	120.29
19	Z	564	LEU	C-N-CA	5.89	128.65	120.29
8	1	153	MET	N-CA-CB	5.89	120.44	110.49
13	6	202	VAL	CA-C-O	-5.89	114.61	120.85
14	7	158	GLY	CA-C-O	-5.89	115.56	120.92
20	N	443	LEU	CA-C-N	5.89	128.65	120.29
20	N	443	LEU	C-N-CA	5.89	128.65	120.29
27	H	132	THR	N-CA-C	-5.89	106.26	113.50
31	M	375	LYS	CB-CA-C	-5.89	101.02	110.79
31	M	441	TYR	CB-CG-CD1	5.89	129.63	120.80
7	G	199	TYR	CA-C-N	5.88	128.78	120.42
7	G	199	TYR	C-N-CA	5.88	128.78	120.42
9	2	47	ALA	N-CA-CB	5.88	121.07	110.83
14	7	236	VAL	CA-C-O	5.88	127.26	120.67
20	N	511	ALA	CA-C-O	5.88	127.00	120.82
24	R	265	GLU	O-C-N	5.88	129.51	122.27
32	J	8	GLN	N-CA-CB	-5.88	101.72	110.61
15	W	86	PHE	N-CA-C	5.88	117.36	111.07
19	Z	160	ARG	N-CA-C	-5.88	104.95	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	523	GLY	O-C-N	5.88	127.84	122.19
1	A	151	VAL	N-CA-C	-5.88	99.16	107.75
21	S	76	ARG	NE-CZ-NH2	5.88	124.49	119.20
29	K	414	HIS	ND1-CE1-NE2	5.88	114.28	108.40
29	K	143	LEU	N-CA-C	-5.88	99.94	109.82
20	N	707	ASN	CA-C-N	5.88	128.16	120.28
20	N	707	ASN	C-N-CA	5.88	128.16	120.28
3	C	122	THR	CA-CB-OG1	5.88	118.41	109.60
11	4	101	ASN	OD1-CG-ND2	5.88	128.48	122.60
27	H	169	LYS	CA-C-O	-5.88	114.77	119.71
28	I	173	VAL	CA-C-N	5.88	128.16	120.28
28	I	173	VAL	C-N-CA	5.88	128.16	120.28
9	2	119	VAL	O-C-N	-5.88	116.86	123.20
20	N	345	ASN	N-CA-CB	5.88	119.83	111.25
21	S	338	ILE	N-CA-C	-5.88	102.33	108.15
8	1	84	ASP	O-C-N	5.87	128.12	122.07
8	1	230	VAL	CA-C-N	5.87	129.90	121.50
8	1	230	VAL	C-N-CA	5.87	129.90	121.50
9	2	49	VAL	N-CA-C	-5.87	99.33	108.44
20	N	857	ASP	CA-CB-CG	-5.87	106.73	112.60
22	P	23	THR	CA-C-O	-5.87	114.65	120.70
27	H	82	ALA	CA-C-N	5.87	128.08	120.44
27	H	82	ALA	C-N-CA	5.87	128.08	120.44
31	M	245	ALA	N-CA-CB	5.87	118.75	110.12
27	H	171	ASP	CA-CB-CG	-5.87	106.73	112.60
30	L	65	GLN	CA-C-N	5.87	128.63	120.29
30	L	65	GLN	C-N-CA	5.87	128.63	120.29
31	M	372	HIS	CB-CG-ND1	-5.87	113.89	122.70
7	G	72	ARG	N-CA-C	-5.87	106.03	112.72
25	U	56	VAL	CA-C-N	5.87	126.79	119.98
25	U	56	VAL	C-N-CA	5.87	126.79	119.98
32	J	188	LEU	N-CA-C	-5.87	99.67	109.24
22	P	412	VAL	CA-C-N	5.87	130.90	123.10
22	P	412	VAL	C-N-CA	5.87	130.90	123.10
2	B	34	PRO	CA-N-CD	-5.87	103.79	112.00
7	G	229	PRO	N-CD-CG	5.87	112.00	103.20
20	N	591	CYS	N-CA-CB	5.87	118.69	109.83
22	P	109	CYS	CA-C-O	-5.87	114.20	120.42
24	R	113	GLN	N-CA-C	5.87	117.75	111.36
30	L	343	GLU	CA-C-O	-5.87	114.33	120.55
3	C	216	LEU	N-CA-C	-5.86	97.58	108.02
4	D	41	VAL	CB-CA-C	5.86	118.81	110.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	102	ASN	CA-C-O	-5.86	114.66	120.70
15	W	42	ARG	CA-C-N	5.86	128.06	120.44
15	W	42	ARG	C-N-CA	5.86	128.06	120.44
22	P	363	ILE	O-C-N	5.86	127.56	121.87
23	Q	385	LEU	N-CA-C	-5.86	99.63	109.07
27	H	340	LYS	N-CA-C	-5.86	99.84	109.40
2	B	150	ASP	CA-CB-CG	-5.86	106.74	112.60
27	H	367	ASP	N-CA-CB	5.86	120.40	110.49
28	I	416	ASN	N-CA-CB	5.86	118.74	110.12
20	N	78	LEU	N-CA-C	5.86	117.67	111.28
8	1	231	THR	CA-C-N	5.86	132.51	121.97
8	1	231	THR	C-N-CA	5.86	132.51	121.97
11	4	165	GLU	CA-C-N	5.86	129.22	120.31
11	4	165	GLU	C-N-CA	5.86	129.22	120.31
17	T	232	PRO	O-C-N	5.86	130.18	122.27
19	Z	381	VAL	CA-CB-CG1	5.86	120.36	110.40
24	R	69	LEU	N-CA-C	-5.86	104.89	111.28
7	G	236	ALA	CA-C-N	5.86	128.61	120.29
7	G	236	ALA	C-N-CA	5.86	128.61	120.29
20	N	573	ASP	O-C-N	5.86	129.77	122.86
28	I	154	HIS	ND1-CE1-NE2	5.86	114.26	108.40
30	L	330	HIS	CE1-NE2-CD2	-5.86	103.14	109.00
1	A	154	CYS	N-CA-CB	5.86	120.12	110.69
5	E	22	PHE	O-C-N	5.86	128.41	122.09
10	3	11	VAL	CA-C-N	5.86	132.25	121.94
10	3	11	VAL	C-N-CA	5.86	132.25	121.94
18	Y	67	MET	CA-C-N	5.86	128.13	120.28
18	Y	67	MET	C-N-CA	5.86	128.13	120.28
19	Z	868	HIS	ND1-CE1-NE2	5.86	114.25	108.40
22	P	27	ARG	O-C-N	-5.86	114.58	122.43
27	H	297	ARG	CA-C-N	5.86	128.13	120.28
27	H	297	ARG	C-N-CA	5.86	128.13	120.28
29	K	84	SER	N-CA-C	5.86	117.45	110.19
7	G	13	SER	CB-CA-C	-5.85	101.28	110.94
19	Z	531	ASN	CA-C-N	5.85	131.03	120.79
19	Z	531	ASN	C-N-CA	5.85	131.03	120.79
31	M	438	LEU	O-C-N	5.85	128.10	122.07
32	J	145	ASP	CA-CB-CG	-5.85	106.75	112.60
32	J	375	ARG	CA-C-N	5.85	130.86	122.72
32	J	375	ARG	C-N-CA	5.85	130.86	122.72
10	3	140	GLY	N-CA-C	-5.85	100.95	111.19
11	4	37	LYS	N-CA-C	-5.85	99.70	109.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	768	LEU	N-CA-C	-5.85	98.33	110.80
21	S	75	VAL	N-CA-CB	5.85	117.26	110.65
21	S	254	TYR	CA-C-N	5.85	128.12	120.28
21	S	254	TYR	C-N-CA	5.85	128.12	120.28
24	R	163	LYS	N-CA-CB	5.85	118.82	110.16
26	O	365	LEU	CA-C-N	5.85	128.12	120.28
26	O	365	LEU	C-N-CA	5.85	128.12	120.28
8	1	110	HIS	CA-C-N	5.85	128.12	120.28
8	1	110	HIS	C-N-CA	5.85	128.12	120.28
12	5	129	ASN	CB-CG-ND2	-5.85	107.63	116.40
2	B	189	HIS	ND1-CE1-NE2	5.85	114.25	108.40
8	1	104	ASN	CA-CB-CG	-5.85	106.75	112.60
19	Z	105	LYS	CA-C-N	5.85	129.20	120.31
19	Z	105	LYS	C-N-CA	5.85	129.20	120.31
22	P	300	PRO	N-CA-CB	5.85	109.72	103.52
25	U	32	GLN	CA-C-O	5.85	124.91	118.65
25	U	200	GLY	CA-C-N	5.85	128.70	120.28
25	U	200	GLY	C-N-CA	5.85	128.70	120.28
24	R	144	LEU	N-CA-C	-5.85	104.99	111.36
32	J	299	ASP	N-CA-CB	5.85	120.30	110.77
8	1	229	LYS	CA-C-N	5.84	129.03	120.91
8	1	229	LYS	C-N-CA	5.84	129.03	120.91
7	G	126	TYR	CB-CG-CD1	5.84	129.56	120.80
13	6	206	PHE	N-CA-CB	5.84	118.54	110.07
27	H	200	ARG	N-CA-C	5.84	117.65	111.28
21	S	97	LEU	O-C-N	-5.84	114.60	121.32
30	L	394	LEU	CA-C-O	5.84	126.72	120.70
20	N	78	LEU	CB-CA-C	-5.84	101.10	110.79
30	L	152	LEU	N-CA-C	-5.84	106.11	113.18
3	C	136	TYR	CA-CB-CG	-5.84	103.39	113.90
23	Q	271	VAL	O-C-N	5.84	127.53	121.87
9	2	237	LYS	O-C-N	-5.84	116.73	123.33
19	Z	416	MET	CB-CA-C	5.84	120.48	110.79
29	K	229	ARG	NE-CZ-NH2	5.84	124.45	119.20
2	B	87	VAL	N-CA-CB	5.83	117.38	110.55
20	N	76	GLU	CA-C-N	5.83	128.10	120.28
20	N	76	GLU	C-N-CA	5.83	128.10	120.28
24	R	63	TRP	CA-C-N	5.83	130.10	120.94
24	R	63	TRP	C-N-CA	5.83	130.10	120.94
24	R	388	ASN	OD1-CG-ND2	-5.83	116.77	122.60
27	H	39	SER	CA-C-N	5.83	128.58	120.29
27	H	39	SER	C-N-CA	5.83	128.58	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	184	ASP	N-CA-C	-5.83	105.42	112.54
6	F	20	HIS	CE1-NE2-CD2	-5.83	103.17	109.00
31	M	397	ALA	CA-C-O	5.83	126.73	120.55
22	P	420	ASP	CA-C-O	-5.83	113.87	120.46
12	5	249	ASP	N-CA-C	-5.83	98.78	108.75
22	P	239	SER	CA-C-N	5.83	128.57	120.29
22	P	239	SER	C-N-CA	5.83	128.57	120.29
21	S	376	ASP	N-CA-C	5.83	117.71	111.36
27	H	294	GLU	CA-C-O	-5.83	114.24	120.42
28	I	261	GLY	N-CA-C	5.83	123.11	115.36
29	K	102	ILE	N-CA-C	-5.83	100.08	108.53
9	2	123	ASN	CA-CB-CG	5.83	118.43	112.60
13	6	45	GLU	CB-CG-CD	-5.83	102.69	112.60
17	T	152	GLU	CA-C-O	5.82	126.59	120.42
17	T	154	GLY	CA-C-N	5.82	128.08	120.28
17	T	154	GLY	C-N-CA	5.82	128.08	120.28
21	S	249	LEU	CA-C-N	5.82	128.08	120.28
21	S	249	LEU	C-N-CA	5.82	128.08	120.28
25	U	232	ASP	O-C-N	5.82	128.29	122.12
29	K	159	LYS	O-C-N	-5.82	117.29	121.83
32	J	186	VAL	N-CA-C	-5.82	99.34	108.95
24	R	286	TRP	CA-C-N	5.82	128.56	120.29
24	R	286	TRP	C-N-CA	5.82	128.56	120.29
3	C	81	SER	N-CA-C	-5.82	104.94	111.28
11	4	115	LEU	N-CA-CB	5.82	118.55	110.17
19	Z	593	THR	CA-C-O	-5.82	114.71	120.82
23	Q	12	ALA	CA-C-N	5.82	128.56	120.29
23	Q	12	ALA	C-N-CA	5.82	128.56	120.29
23	Q	214	SER	N-CA-C	-5.82	104.94	111.28
28	I	352	GLU	CA-C-O	-5.82	114.54	120.71
29	K	231	VAL	CA-C-N	5.82	126.40	120.00
29	K	231	VAL	C-N-CA	5.82	126.40	120.00
32	J	84	LYS	N-CA-C	-5.82	100.47	109.14
1	A	53	GLN	N-CA-C	-5.82	101.67	110.28
3	C	160	LYS	N-CA-C	-5.82	105.07	114.09
7	G	86	ARG	CB-CA-C	-5.82	100.96	110.85
8	1	126	ASP	N-CA-C	5.82	117.30	111.07
22	P	117	ASP	N-CA-C	5.82	117.42	111.14
24	R	32	ARG	N-CA-C	5.82	117.70	111.36
23	Q	321	THR	CA-CB-CG2	5.82	120.39	110.50
27	H	65	ILE	N-CA-C	-5.82	104.66	111.00
28	I	62	LEU	CB-CA-C	-5.82	101.14	110.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	275	PHE	O-C-N	5.82	128.06	122.07
26	O	181	GLY	N-CA-C	5.81	119.52	112.49
29	K	292	LEU	CA-C-N	5.81	128.07	120.28
29	K	292	LEU	C-N-CA	5.81	128.07	120.28
7	G	168	LYS	N-CA-C	-5.81	106.53	113.97
19	Z	746	ARG	NE-CZ-NH2	-5.81	113.97	119.20
23	Q	77	LEU	CA-C-O	5.81	126.58	120.42
23	Q	334	ASN	CA-CB-CG	-5.81	106.79	112.60
27	H	67	GLU	CA-C-N	5.81	130.69	120.87
27	H	67	GLU	C-N-CA	5.81	130.69	120.87
2	B	135	LEU	N-CA-CB	5.81	119.67	110.55
21	S	396	HIS	N-CA-CB	-5.81	101.58	110.12
23	Q	375	HIS	CA-CB-CG	-5.81	107.99	113.80
27	H	275	ASP	CA-CB-CG	-5.81	106.79	112.60
19	Z	582	VAL	CA-C-O	-5.81	115.01	121.17
20	N	135	ASN	N-CA-CB	5.81	118.66	110.12
20	N	630	PRO	O-C-N	5.81	130.33	122.37
22	P	62	SER	CA-C-N	5.81	128.65	120.28
22	P	62	SER	C-N-CA	5.81	128.65	120.28
22	P	255	CYS	N-CA-C	-5.81	104.85	111.07
2	B	98	TYR	N-CA-C	-5.81	104.95	111.28
4	D	194	ILE	CB-CA-C	-5.81	104.41	112.02
12	5	179	ARG	CA-C-O	5.81	128.81	120.51
16	V	185	ASN	N-CA-CB	5.81	118.15	110.25
17	T	215	LEU	O-C-N	5.81	128.05	122.07
22	P	407	ASP	N-CA-C	-5.81	99.06	108.52
23	Q	125	LEU	CA-C-N	5.81	128.06	120.28
23	Q	125	LEU	C-N-CA	5.81	128.06	120.28
30	L	317	LEU	CA-C-O	-5.81	114.29	119.75
6	F	32	GLY	CA-C-N	5.80	128.95	120.71
6	F	32	GLY	C-N-CA	5.80	128.95	120.71
28	I	80	ARG	NE-CZ-NH2	-5.80	113.98	119.20
30	L	329	ILE	CA-C-N	5.80	128.53	120.29
30	L	329	ILE	C-N-CA	5.80	128.53	120.29
6	F	111	LEU	CA-C-N	5.80	128.66	120.42
6	F	111	LEU	C-N-CA	5.80	128.66	120.42
6	F	212	ILE	O-C-N	5.80	129.31	123.10
14	7	224	ASP	CB-CA-C	-5.80	101.73	110.90
19	Z	635	LYS	N-CA-C	5.80	117.68	111.36
21	S	304	THR	CA-CB-OG1	5.80	118.30	109.60
25	U	151	THR	CA-C-O	-5.80	114.64	120.96
27	H	124	ASP	N-CA-CB	5.80	120.38	111.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	232	GLU	CA-C-N	5.80	128.05	120.28
4	D	232	GLU	C-N-CA	5.80	128.05	120.28
12	5	84	TYR	CB-CA-C	5.80	121.96	110.42
7	G	63	SER	CA-C-N	5.80	132.61	121.54
7	G	63	SER	C-N-CA	5.80	132.61	121.54
20	N	78	LEU	CA-C-N	5.80	127.98	120.44
20	N	78	LEU	C-N-CA	5.80	127.98	120.44
25	U	88	ARG	NE-CZ-NH2	-5.80	113.98	119.20
31	M	39	MET	CA-C-O	5.80	127.59	120.92
19	Z	280	ASP	CB-CA-C	-5.79	101.74	110.90
7	G	4	ILE	N-CA-C	-5.79	100.14	108.48
8	1	191	ASN	O-C-N	-5.79	115.55	122.15
15	W	76	HIS	ND1-CE1-NE2	5.79	114.19	108.40
20	N	70	HIS	CE1-NE2-CD2	-5.79	103.21	109.00
27	H	96	ALA	N-CA-C	-5.79	100.51	109.14
31	M	212	LYS	N-CA-C	5.79	117.59	111.28
2	B	96	GLN	OE1-CD-NE2	-5.79	116.81	122.60
11	4	61	GLN	O-C-N	-5.79	115.98	122.12
20	N	684	ARG	NE-CZ-NH1	5.79	127.29	121.50
22	P	344	THR	CA-C-N	5.79	128.51	120.29
22	P	344	THR	C-N-CA	5.79	128.51	120.29
26	O	258	GLN	CA-C-O	-5.79	114.81	120.19
10	3	27	ARG	N-CA-CB	5.79	118.72	110.44
29	K	279	THR	N-CA-C	-5.79	99.08	108.52
31	M	157	ASN	CA-C-O	-5.79	114.67	121.16
3	C	244	GLU	CA-C-N	5.79	128.04	120.28
3	C	244	GLU	C-N-CA	5.79	128.04	120.28
5	E	184	VAL	N-CA-C	5.79	116.44	110.82
12	5	159	MET	CA-C-O	-5.79	115.04	121.23
16	V	134	GLU	CA-C-N	5.79	128.04	120.28
16	V	134	GLU	C-N-CA	5.79	128.04	120.28
17	T	296	PHE	N-CA-C	-5.79	100.85	110.17
22	P	309	PHE	CB-CG-CD1	5.79	130.54	120.70
8	1	77	CYS	N-CA-C	-5.79	100.26	109.23
20	N	833	LEU	CA-C-N	5.79	127.96	120.44
20	N	833	LEU	C-N-CA	5.79	127.96	120.44
22	P	66	ILE	N-CA-CB	5.79	121.24	110.77
23	Q	397	TYR	O-C-N	5.79	128.75	122.15
24	R	381	GLN	N-CA-CB	5.79	118.62	110.12
25	U	182	THR	N-CA-C	-5.79	99.18	108.55
26	O	342	ASP	CA-C-N	5.79	128.03	120.28
26	O	342	ASP	C-N-CA	5.79	128.03	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	H	353	HIS	CE1-NE2-CD2	-5.79	103.22	109.00
31	M	344	ALA	CA-C-N	5.79	128.03	120.28
31	M	344	ALA	C-N-CA	5.79	128.03	120.28
19	Z	301	HIS	N-CA-CB	5.78	118.72	110.16
20	N	65	SER	CA-C-N	5.78	128.50	120.29
20	N	65	SER	C-N-CA	5.78	128.50	120.29
20	N	476	GLY	O-C-N	5.78	127.74	122.19
23	Q	363	ARG	NE-CZ-NH2	5.78	124.41	119.20
25	U	119	SER	N-CA-C	5.78	123.12	110.80
29	K	286	GLN	N-CA-C	-5.78	105.06	111.36
31	M	179	GLU	O-C-N	5.78	129.52	122.75
31	M	420	HIS	CE1-NE2-CD2	-5.78	103.22	109.00
4	D	81	GLY	N-CA-C	-5.78	106.76	115.32
19	Z	605	ASN	CB-CA-C	-5.78	102.06	110.96
22	P	233	LEU	N-CA-CB	5.78	118.39	110.01
25	U	285	ALA	O-C-N	5.78	128.25	122.12
17	T	290	ALA	N-CA-C	5.78	120.17	113.18
20	N	578	LEU	O-C-N	5.78	128.25	122.12
20	N	688	LEU	CA-C-N	5.78	128.38	120.46
20	N	688	LEU	C-N-CA	5.78	128.38	120.46
20	N	731	ILE	N-CA-CB	5.78	119.25	110.58
27	H	41	TYR	CA-C-O	5.78	126.55	120.42
30	L	261	THR	CA-CB-OG1	5.78	118.27	109.60
32	J	90	HIS	CE1-NE2-CD2	-5.78	103.22	109.00
30	L	200	ALA	N-CA-CB	5.78	118.45	110.07
27	H	109	PRO	N-CA-CB	5.78	108.39	103.19
31	M	427	ILE	N-CA-CB	5.78	118.40	110.54
16	V	241	ASN	N-CA-C	-5.78	105.06	111.36
17	T	307	LYS	O-C-N	5.78	128.24	122.12
20	N	101	ILE	CA-CB-CG2	5.78	120.32	110.50
20	N	595	ASN	O-C-N	5.78	129.53	123.06
22	P	373	ILE	CA-C-O	5.78	127.40	121.28
23	Q	90	ARG	CA-C-N	5.78	128.49	120.29
23	Q	90	ARG	C-N-CA	5.78	128.49	120.29
26	O	255	TRP	CA-C-N	5.78	126.35	120.00
26	O	255	TRP	C-N-CA	5.78	126.35	120.00
2	B	184	LEU	CA-C-N	5.77	128.02	120.28
2	B	184	LEU	C-N-CA	5.77	128.02	120.28
23	Q	127	GLN	N-CA-CB	-5.77	101.61	110.16
26	O	67	PHE	CA-C-N	5.77	128.81	120.38
26	O	67	PHE	C-N-CA	5.77	128.81	120.38
5	E	44	GLU	N-CA-C	-5.77	106.10	114.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	F	199	LEU	CA-C-N	5.77	127.06	119.84
6	F	199	LEU	C-N-CA	5.77	127.06	119.84
9	2	99	THR	N-CA-CB	5.77	118.61	110.12
19	Z	868	HIS	CE1-NE2-CD2	-5.77	103.23	109.00
20	N	186	SER	CA-C-O	-5.77	114.75	120.70
20	N	799	LYS	N-CA-C	-5.77	106.40	113.50
20	N	937	GLU	O-C-N	-5.77	115.90	122.08
25	U	226	ILE	CA-C-N	5.77	128.37	120.46
25	U	226	ILE	C-N-CA	5.77	128.37	120.46
25	U	230	LEU	CB-CA-C	-5.77	101.04	110.85
29	K	328	ASP	CA-C-O	5.77	127.06	121.00
30	L	104	SER	N-CA-C	-5.77	105.56	113.30
20	N	850	GLU	CA-C-N	5.77	131.94	122.07
20	N	850	GLU	C-N-CA	5.77	131.94	122.07
22	P	324	TYR	N-CA-CB	5.77	119.22	110.28
4	D	150	LEU	N-CA-C	-5.77	98.48	108.69
4	D	198	ILE	CA-C-N	5.77	128.01	120.28
4	D	198	ILE	C-N-CA	5.77	128.01	120.28
10	3	69	PHE	CA-C-N	5.77	128.01	120.28
10	3	69	PHE	C-N-CA	5.77	128.01	120.28
16	V	78	SER	CA-C-O	-5.77	115.41	121.99
16	V	223	LYS	CG-CD-CE	5.77	124.57	111.30
14	7	243	ILE	O-C-N	-5.77	116.82	122.93
20	N	347	ASN	N-CA-C	-5.77	100.30	109.76
22	P	380	GLN	CA-C-O	5.77	126.88	120.82
25	U	81	MET	N-CA-C	5.77	117.65	111.36
21	S	493	PRO	N-CA-C	5.77	117.73	110.70
31	M	275	PHE	CA-C-N	5.77	128.01	120.28
31	M	275	PHE	C-N-CA	5.77	128.01	120.28
4	D	63	CYS	CB-CA-C	-5.76	97.94	109.35
15	W	25	ARG	CA-C-O	5.76	126.66	120.55
17	T	122	LEU	CA-C-N	5.76	128.00	120.28
17	T	122	LEU	C-N-CA	5.76	128.00	120.28
19	Z	473	ASN	CA-C-N	5.76	132.55	121.54
19	Z	473	ASN	C-N-CA	5.76	132.55	121.54
28	I	57	GLN	O-C-N	5.76	128.72	122.15
30	L	132	LEU	CB-CA-C	-5.76	101.05	110.85
21	S	92	ARG	CA-C-N	5.76	128.47	120.29
21	S	92	ARG	C-N-CA	5.76	128.47	120.29
4	D	48	LYS	CA-C-N	5.76	130.35	122.34
4	D	48	LYS	C-N-CA	5.76	130.35	122.34
19	Z	20	ALA	O-C-N	-5.76	114.69	121.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	394	ALA	CA-C-N	5.76	128.00	120.28
20	N	394	ALA	C-N-CA	5.76	128.00	120.28
23	Q	403	THR	CA-C-O	-5.76	114.44	120.55
5	E	82	ILE	CA-C-N	5.76	128.00	120.28
5	E	82	ILE	C-N-CA	5.76	128.00	120.28
15	W	105	HIS	ND1-CE1-NE2	5.76	114.16	108.40
19	Z	615	ILE	N-CA-C	-5.76	97.36	109.34
3	C	178	ASP	CA-CB-CG	5.76	118.36	112.60
19	Z	100	ARG	CA-C-N	5.76	125.38	119.56
19	Z	100	ARG	C-N-CA	5.76	125.38	119.56
22	P	106	GLN	O-C-N	5.76	128.22	122.12
27	H	203	ASN	CA-CB-CG	-5.76	106.84	112.60
31	M	217	ASN	CA-C-N	5.76	127.99	120.28
31	M	217	ASN	C-N-CA	5.76	127.99	120.28
31	M	201	LEU	CA-C-O	-5.75	114.45	120.55
7	G	113	ALA	CA-C-N	5.75	128.46	120.29
7	G	113	ALA	C-N-CA	5.75	128.46	120.29
20	N	826	GLU	N-CA-CB	5.75	118.67	110.16
23	Q	161	ASP	CA-CB-CG	5.75	118.35	112.60
26	O	292	THR	CA-C-N	5.75	127.99	120.28
26	O	292	THR	C-N-CA	5.75	127.99	120.28
26	O	369	HIS	CE1-NE2-CD2	-5.75	103.25	109.00
1	A	242	LEU	CB-CA-C	-5.75	101.24	110.79
5	E	52	LYS	CB-CA-C	-5.75	98.65	110.38
15	W	130	ARG	CA-CB-CG	5.75	125.60	114.10
17	T	326	GLN	CB-CA-C	-5.75	101.24	110.79
20	N	721	HIS	CG-CD2-NE2	5.75	112.95	107.20
24	R	187	TYR	CB-CG-CD1	5.75	129.43	120.80
27	H	116	LYS	N-CA-CB	5.75	118.82	110.65
9	2	68	VAL	N-CA-C	-5.75	107.52	113.10
20	N	122	GLU	CA-C-N	5.75	132.52	121.54
20	N	122	GLU	C-N-CA	5.75	132.52	121.54
25	U	202	ASN	CA-C-N	5.75	127.98	120.28
25	U	202	ASN	C-N-CA	5.75	127.98	120.28
20	N	59	PHE	CA-CB-CG	-5.75	108.05	113.80
20	N	224	ASP	CA-C-N	5.75	130.31	122.84
20	N	224	ASP	C-N-CA	5.75	130.31	122.84
20	N	241	ASN	N-CA-C	-5.75	100.95	109.11
14	7	184	GLY	N-CA-C	-5.75	99.56	113.18
25	U	153	LYS	N-CA-C	-5.75	99.87	109.24
30	L	81	GLU	N-CA-CB	5.75	118.82	110.26
19	Z	149	GLU	N-CA-C	-5.75	99.64	109.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	3	141	THR	CA-C-N	5.74	132.51	121.54
10	3	141	THR	C-N-CA	5.74	132.51	121.54
20	N	209	GLU	CA-C-N	5.74	127.27	120.09
20	N	209	GLU	C-N-CA	5.74	127.27	120.09
21	S	123	THR	O-C-N	-5.74	116.69	123.41
23	Q	390	GLU	CA-C-O	-5.74	114.35	119.75
26	O	138	VAL	CA-C-O	-5.74	114.76	120.85
4	D	227	SER	CA-C-N	5.74	125.28	119.19
4	D	227	SER	C-N-CA	5.74	125.28	119.19
32	J	148	TYR	N-CA-CB	5.74	118.56	110.12
2	B	148	GLN	OE1-CD-NE2	5.74	128.34	122.60
29	K	77	GLU	N-CA-CB	5.74	118.56	110.12
2	B	228	ASP	CA-CB-CG	5.74	118.34	112.60
3	C	112	THR	CA-C-O	-5.74	114.34	120.42
19	Z	424	GLY	CA-C-N	5.74	131.00	120.79
19	Z	424	GLY	C-N-CA	5.74	131.00	120.79
24	R	60	SER	CA-C-N	5.74	127.97	120.28
24	R	60	SER	C-N-CA	5.74	127.97	120.28
27	H	109	PRO	CA-C-N	5.74	130.18	120.88
27	H	109	PRO	C-N-CA	5.74	130.18	120.88
28	I	307	ARG	N-CA-C	5.74	117.34	111.14
13	6	60	PHE	CA-C-O	5.74	126.56	120.36
23	Q	358	LYS	N-CA-CB	5.74	118.39	110.07
16	V	25	VAL	CA-C-N	5.74	130.28	122.19
16	V	25	VAL	C-N-CA	5.74	130.28	122.19
23	Q	275	LEU	CA-C-N	5.74	128.54	120.28
23	Q	275	LEU	C-N-CA	5.74	128.54	120.28
29	K	252	ARG	NE-CZ-NH1	-5.74	115.76	121.50
32	J	387	VAL	CB-CA-C	-5.73	104.63	111.97
7	G	202	HIS	ND1-CE1-NE2	5.73	114.13	108.40
19	Z	127	SER	CA-C-N	5.73	127.78	120.56
19	Z	127	SER	C-N-CA	5.73	127.78	120.56
19	Z	622	SER	CA-C-N	5.73	127.89	120.44
19	Z	622	SER	C-N-CA	5.73	127.89	120.44
22	P	72	LYS	CB-CG-CD	5.73	124.48	111.30
22	P	106	GLN	OE1-CD-NE2	5.73	128.33	122.60
22	P	401	THR	N-CA-C	-5.73	108.08	114.62
24	R	237	ARG	CA-C-N	5.73	128.43	120.63
24	R	237	ARG	C-N-CA	5.73	128.43	120.63
28	I	399	CYS	CA-C-N	5.73	127.89	120.44
28	I	399	CYS	C-N-CA	5.73	127.89	120.44
16	V	41	MET	N-CA-CB	5.73	118.64	110.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	77	SER	CA-C-N	5.73	127.96	120.28
20	N	77	SER	C-N-CA	5.73	127.96	120.28
20	N	226	THR	CA-CB-OG1	5.73	118.19	109.60
20	N	365	CYS	CA-C-N	5.73	127.96	120.28
20	N	365	CYS	C-N-CA	5.73	127.96	120.28
21	S	228	HIS	ND1-CE1-NE2	5.73	114.13	108.40
22	P	293	ASP	N-CA-CB	5.73	118.39	109.97
1	A	205	VAL	CA-C-O	-5.73	115.10	121.17
14	7	87	MET	N-CA-C	-5.73	105.62	113.30
21	S	89	PHE	N-CA-C	-5.73	105.96	113.12
4	D	49	SER	CB-CA-C	-5.73	104.19	111.86
9	2	60	ASP	N-CA-C	-5.73	100.03	108.79
23	Q	403	THR	O-C-N	5.73	128.19	122.12
24	R	23	ARG	NE-CZ-NH2	5.73	124.36	119.20
27	H	57	LYS	CA-C-O	5.73	126.62	120.55
29	K	343	LEU	N-CA-CB	5.73	118.54	110.12
31	M	194	LEU	CA-C-N	5.73	127.95	120.28
31	M	194	LEU	C-N-CA	5.73	127.95	120.28
25	U	249	PHE	CB-CA-C	-5.73	100.94	110.68
32	J	31	LEU	N-CA-CB	5.73	118.54	110.12
1	A	58	ASP	O-C-N	5.72	129.78	123.25
21	S	429	ASP	CA-C-N	5.72	128.52	120.28
21	S	429	ASP	C-N-CA	5.72	128.52	120.28
25	U	191	ILE	CA-C-N	5.72	127.95	120.28
25	U	191	ILE	C-N-CA	5.72	127.95	120.28
28	I	85	MET	CG-SD-CE	-5.72	88.31	100.90
32	J	279	GLN	CA-C-N	5.72	129.01	120.31
32	J	279	GLN	C-N-CA	5.72	129.01	120.31
2	B	66	GLU	CA-C-O	-5.72	114.37	119.86
5	E	136	PRO	CA-C-O	-5.72	114.61	121.48
8	1	95	GLN	CA-C-N	5.72	128.41	120.29
8	1	95	GLN	C-N-CA	5.72	128.41	120.29
26	O	342	ASP	N-CA-C	-5.72	100.66	109.52
20	N	788	ILE	N-CA-C	-5.72	101.34	108.89
32	J	306	LEU	CA-C-O	5.72	126.61	120.55
13	6	214	VAL	N-CA-CB	5.72	118.75	110.52
19	Z	716	ASP	CA-CB-CG	5.72	118.32	112.60
26	O	345	GLN	CB-CG-CD	-5.72	102.88	112.60
29	K	251	PHE	CA-CB-CG	-5.72	108.08	113.80
6	F	16	GLN	CA-CB-CG	5.71	125.53	114.10
9	2	124	ARG	NE-CZ-NH1	5.71	127.21	121.50
19	Z	845	ARG	O-C-N	5.71	129.75	123.01

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	189	ALA	CB-CA-C	-5.71	101.14	110.85
7	G	13	SER	CA-C-N	5.71	133.55	122.07
7	G	13	SER	C-N-CA	5.71	133.55	122.07
17	T	287	PHE	CA-C-N	5.71	127.93	120.28
17	T	287	PHE	C-N-CA	5.71	127.93	120.28
22	P	82	LEU	CA-C-N	5.71	127.93	120.28
22	P	82	LEU	C-N-CA	5.71	127.93	120.28
32	J	343	ASN	CA-CB-CG	5.71	118.31	112.60
1	A	83	MET	N-CA-C	-5.71	101.40	109.96
14	7	182	ALA	CA-C-O	-5.71	113.75	120.60
19	Z	108	GLU	O-C-N	-5.71	115.64	122.15
5	E	228	MET	O-C-N	5.71	129.72	123.27
32	J	240	GLU	N-CA-C	5.71	117.50	111.28
19	Z	232	TYR	CA-C-N	5.71	128.39	120.29
19	Z	232	TYR	C-N-CA	5.71	128.39	120.29
21	S	384	THR	CA-C-O	5.71	126.81	120.82
24	R	323	PHE	N-CA-C	5.71	117.58	111.36
26	O	121	LEU	O-C-N	5.71	128.17	122.12
27	H	358	HIS	CA-CB-CG	-5.71	108.09	113.80
32	J	16	ALA	CA-C-O	5.71	126.47	120.42
20	N	719	ASP	N-CA-CB	5.71	118.96	110.29
19	Z	695	ALA	CA-C-N	5.70	128.20	120.44
19	Z	695	ALA	C-N-CA	5.70	128.20	120.44
20	N	926	GLU	N-CA-CB	5.70	120.52	110.37
23	Q	371	ASP	CA-C-N	5.70	130.27	122.34
23	Q	371	ASP	C-N-CA	5.70	130.27	122.34
24	R	23	ARG	NE-CZ-NH1	-5.70	115.80	121.50
24	R	34	ASP	N-CA-C	5.70	119.01	112.57
26	O	9	GLN	CB-CA-C	-5.70	101.16	110.85
7	G	84	ASP	CB-CA-C	-5.70	99.72	110.67
6	F	154	PHE	CA-C-N	5.70	131.03	123.05
6	F	154	PHE	C-N-CA	5.70	131.03	123.05
8	1	64	THR	CA-C-N	5.70	129.20	121.05
8	1	64	THR	C-N-CA	5.70	129.20	121.05
10	3	108	VAL	N-CA-C	-5.70	98.22	107.28
14	7	70	MET	O-C-N	-5.70	116.31	123.27
22	P	109	CYS	O-C-N	5.70	128.65	122.15
23	Q	83	ALA	CA-C-N	5.70	128.49	120.28
23	Q	83	ALA	C-N-CA	5.70	128.49	120.28
19	Z	367	SER	CA-C-N	5.70	132.42	121.54
19	Z	367	SER	C-N-CA	5.70	132.42	121.54
19	Z	731	MET	N-CA-CB	5.70	118.33	110.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	488	THR	CA-C-N	5.70	130.22	122.19
20	N	488	THR	C-N-CA	5.70	130.22	122.19
21	S	280	GLU	N-CA-C	5.70	117.57	111.36
22	P	32	GLU	N-CA-C	-5.70	105.07	111.28
24	R	321	GLU	CA-C-N	5.70	127.92	120.28
24	R	321	GLU	C-N-CA	5.70	127.92	120.28
31	M	36	VAL	CA-C-N	5.70	127.92	120.28
31	M	36	VAL	C-N-CA	5.70	127.92	120.28
31	M	429	GLU	N-CA-C	5.70	117.57	111.36
20	N	91	ASN	CA-C-N	5.70	127.85	120.44
20	N	91	ASN	C-N-CA	5.70	127.85	120.44
29	K	74	HIS	ND1-CE1-NE2	5.70	114.10	108.40
2	B	131	GLY	CA-C-O	-5.70	110.66	120.57
11	4	34	LYS	O-C-N	-5.70	115.98	123.16
32	J	197	THR	CA-C-N	5.70	127.91	120.28
32	J	197	THR	C-N-CA	5.70	127.91	120.28
6	F	222	THR	N-CA-C	-5.69	99.73	109.24
20	N	483	LEU	N-CA-C	5.69	117.57	111.36
20	N	769	PHE	CB-CG-CD2	-5.69	111.02	120.70
29	K	206	GLY	CA-C-N	5.69	123.76	119.66
29	K	206	GLY	C-N-CA	5.69	123.76	119.66
10	3	160	PRO	CA-C-N	5.69	132.41	121.54
10	3	160	PRO	C-N-CA	5.69	132.41	121.54
12	5	225	ARG	CA-C-N	5.69	128.18	120.44
12	5	225	ARG	C-N-CA	5.69	128.18	120.44
16	V	217	LEU	CA-C-N	5.69	128.96	120.31
16	V	217	LEU	C-N-CA	5.69	128.96	120.31
30	L	249	ILE	CA-C-N	5.69	128.48	120.28
30	L	249	ILE	C-N-CA	5.69	128.48	120.28
1	A	224	ASN	CB-CA-C	-5.69	102.75	109.47
14	7	179	PRO	O-C-N	-5.69	116.32	123.21
19	Z	675	PHE	CA-CB-CG	-5.69	108.11	113.80
22	P	218	ASN	O-C-N	5.69	128.15	122.12
7	G	225	HIS	CG-CD2-NE2	5.69	112.89	107.20
1	A	133	PRO	CA-C-O	-5.69	114.84	121.95
5	E	33	LEU	CA-C-O	-5.69	113.43	119.97
8	1	186	LEU	CB-CA-C	-5.69	101.18	110.85
19	Z	134	SER	CA-C-N	5.69	132.56	121.41
19	Z	134	SER	C-N-CA	5.69	132.56	121.41
19	Z	775	THR	CA-CB-CG2	5.69	120.17	110.50
21	S	415	LEU	N-CA-C	-5.69	105.22	111.82
32	J	224	ILE	CA-CB-CG1	5.69	120.07	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	874	LEU	N-CA-C	-5.69	101.61	110.42
26	O	70	ARG	NE-CZ-NH1	5.69	127.19	121.50
3	C	246	LYS	CA-C-N	5.68	127.90	120.28
3	C	246	LYS	C-N-CA	5.68	127.90	120.28
4	D	199	LYS	N-CA-CB	5.68	118.48	110.12
16	V	254	ASN	CA-C-N	5.68	127.90	120.28
16	V	254	ASN	C-N-CA	5.68	127.90	120.28
19	Z	208	LEU	CA-C-N	5.68	127.83	120.44
19	Z	208	LEU	C-N-CA	5.68	127.83	120.44
19	Z	554	TYR	CB-CG-CD1	5.68	129.33	120.80
20	N	718	ASN	N-CA-C	5.68	117.15	111.07
23	Q	106	GLU	N-CA-CB	5.68	118.57	110.16
23	Q	143	TYR	N-CA-C	-5.68	105.16	111.36
26	O	121	LEU	N-CA-C	5.68	117.48	111.28
17	T	210	GLU	N-CA-C	-5.68	105.17	111.36
24	R	125	ARG	O-C-N	5.68	128.14	122.12
26	O	34	TRP	CA-C-N	5.68	128.36	120.29
26	O	34	TRP	C-N-CA	5.68	128.36	120.29
28	I	413	LYS	CA-C-N	5.68	128.33	120.49
28	I	413	LYS	C-N-CA	5.68	128.33	120.49
32	J	120	SER	CA-CB-OG	5.68	122.46	111.10
4	D	15	HIS	CB-CG-ND1	-5.68	114.18	122.70
6	F	239	ARG	NE-CZ-NH2	5.68	124.31	119.20
19	Z	538	ILE	CA-C-N	5.68	127.89	120.28
19	Z	538	ILE	C-N-CA	5.68	127.89	120.28
32	J	152	GLY	N-CA-C	-5.68	99.72	113.18
7	G	94	GLU	CB-CG-CD	-5.68	102.95	112.60
8	1	182	LYS	CA-C-O	-5.68	115.52	121.99
12	5	110	ASP	O-C-N	5.68	128.22	122.09
20	N	54	PHE	CA-CB-CG	-5.68	108.12	113.80
20	N	122	GLU	CA-CB-CG	5.68	125.45	114.10
21	S	38	GLU	N-CA-C	-5.68	105.09	111.28
28	I	435	PRO	N-CA-C	5.67	124.16	112.47
16	V	279	ASP	CA-C-O	-5.67	113.65	119.49
20	N	180	SER	CB-CA-C	-5.67	101.37	110.79
31	M	178	MET	CA-C-N	5.67	130.46	120.87
31	M	178	MET	C-N-CA	5.67	130.46	120.87
3	C	91	ARG	CA-C-N	5.67	128.15	120.44
3	C	91	ARG	C-N-CA	5.67	128.15	120.44
19	Z	393	ASP	CA-CB-CG	5.67	118.27	112.60
28	I	301	GLY	CA-C-N	5.67	128.15	120.38
28	I	301	GLY	C-N-CA	5.67	128.15	120.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	633	GLU	CB-CG-CD	-5.67	102.96	112.60
23	Q	70	LEU	CA-C-N	5.67	128.44	120.28
23	Q	70	LEU	C-N-CA	5.67	128.44	120.28
30	L	199	ARG	NH1-CZ-NH2	5.67	126.67	119.30
3	C	230	GLN	CA-C-O	-5.67	114.54	120.55
8	1	63	VAL	CA-CB-CG1	5.67	120.03	110.40
16	V	63	ASP	CA-CB-CG	-5.67	106.93	112.60
19	Z	617	SER	O-C-N	5.67	129.14	122.34
23	Q	87	ARG	N-CA-CB	5.67	118.55	110.16
31	M	144	ASP	N-CA-CB	5.67	118.14	110.38
4	D	64	ALA	N-CA-CB	5.67	119.66	110.42
1	A	161	CYS	N-CA-C	-5.66	100.46	109.07
4	D	156	SER	N-CA-C	-5.66	104.72	111.69
20	N	68	PHE	CA-CB-CG	-5.66	108.14	113.80
21	S	440	ASP	CA-CB-CG	5.66	118.26	112.60
26	O	178	ARG	N-CA-C	5.66	117.45	111.28
29	K	187	HIS	CA-CB-CG	-5.66	108.14	113.80
29	K	399	PHE	CB-CA-C	-5.66	101.39	110.79
31	M	241	ARG	O-C-N	5.66	128.61	122.15
21	S	47	GLY	CA-C-N	5.66	127.87	120.28
21	S	47	GLY	C-N-CA	5.66	127.87	120.28
25	U	172	VAL	CA-C-N	5.66	128.33	120.29
25	U	172	VAL	C-N-CA	5.66	128.33	120.29
3	C	20	GLN	CA-C-N	5.66	128.46	120.42
3	C	20	GLN	C-N-CA	5.66	128.46	120.42
9	2	222	SER	N-CA-C	-5.66	99.19	108.76
16	V	279	ASP	CA-CB-CG	-5.66	106.94	112.60
19	Z	181	ARG	N-CA-C	5.66	118.22	111.71
21	S	246	LEU	CA-C-N	5.66	127.80	120.44
21	S	246	LEU	C-N-CA	5.66	127.80	120.44
23	Q	198	ASN	N-CA-C	5.66	118.18	111.33
2	B	97	TYR	N-CA-C	5.66	117.53	111.36
8	1	130	GLY	N-CA-C	-5.66	103.56	111.09
16	V	299	CYS	O-C-N	5.66	128.12	122.12
26	O	352	ARG	N-CA-CB	5.66	118.53	110.16
31	M	292	ASP	CB-CA-C	-5.66	101.06	110.68
5	E	21	LEU	CA-C-N	5.66	128.13	120.44
5	E	21	LEU	C-N-CA	5.66	128.13	120.44
20	N	216	VAL	N-CA-C	5.66	116.39	110.62
20	N	366	HIS	ND1-CE1-NE2	5.66	114.06	108.40
13	6	170	ALA	N-CA-C	-5.66	103.89	111.87
16	V	299	CYS	CA-C-O	-5.66	114.56	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	328	PRO	N-CD-CG	5.66	111.68	103.20
18	Y	47	ASN	CA-C-N	5.66	128.21	120.35
18	Y	47	ASN	C-N-CA	5.66	128.21	120.35
22	P	433	ASN	N-CA-CB	5.66	118.53	110.16
26	O	346	ILE	CA-C-N	5.66	128.42	120.28
26	O	346	ILE	C-N-CA	5.66	128.42	120.28
26	O	355	LEU	N-CA-CB	-5.66	101.79	110.16
1	A	226	LYS	N-CA-C	-5.65	100.34	108.60
27	H	43	ARG	CD-NE-CZ	-5.65	116.48	124.40
6	F	46	LEU	CB-CA-C	-5.65	100.78	110.16
20	N	460	TYR	CB-CA-C	-5.65	101.97	110.90
19	Z	610	GLN	CA-C-O	-5.65	114.56	120.55
20	N	149	GLN	O-C-N	5.65	128.11	122.12
23	Q	306	LEU	N-CA-C	5.65	117.12	111.07
27	H	238	ILE	O-C-N	5.65	127.54	121.10
17	T	232	PRO	CA-C-O	-5.65	111.04	119.34
19	Z	814	SER	CB-CA-C	-5.65	100.93	110.19
21	S	256	HIS	CB-CG-CD2	-5.65	123.86	131.20
27	H	46	LYS	CA-C-N	5.65	128.31	120.29
27	H	46	LYS	C-N-CA	5.65	128.31	120.29
29	K	378	ILE	CA-CB-CG2	-5.65	100.90	110.50
2	B	189	HIS	CE1-NE2-CD2	-5.64	103.36	109.00
5	E	66	LYS	N-CA-C	-5.64	107.04	114.04
19	Z	665	GLU	N-CA-CB	5.64	118.51	110.16
20	N	903	PHE	N-CA-C	-5.64	106.23	113.23
28	I	431	GLN	OE1-CD-NE2	5.64	128.25	122.60
30	L	28	LYS	N-CA-CB	5.64	118.42	110.12
1	A	94	ALA	CB-CA-C	-5.64	101.42	110.79
17	T	173	GLN	CA-C-N	5.64	127.84	120.28
17	T	173	GLN	C-N-CA	5.64	127.84	120.28
22	P	266	ALA	CA-C-N	5.64	128.89	120.31
22	P	266	ALA	C-N-CA	5.64	128.89	120.31
25	U	233	VAL	CA-C-O	-5.64	115.08	120.95
26	O	242	SER	CA-C-O	5.64	126.40	120.42
7	G	102	ASN	CA-C-N	5.64	128.30	120.29
7	G	102	ASN	C-N-CA	5.64	128.30	120.29
11	4	3	TYR	CA-C-O	-5.64	115.42	121.45
32	J	206	HIS	CB-CG-CD2	-5.64	123.87	131.20
5	E	150	GLY	CA-C-N	5.64	125.82	119.90
5	E	150	GLY	C-N-CA	5.64	125.82	119.90
30	L	236	ALA	CA-C-N	5.64	128.30	120.29
30	L	236	ALA	C-N-CA	5.64	128.30	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	206	HIS	ND1-CE1-NE2	5.64	114.04	108.40
32	J	331	ILE	CA-C-N	5.64	127.84	120.28
32	J	331	ILE	C-N-CA	5.64	127.84	120.28
15	W	118	GLU	CA-C-O	5.64	126.88	120.00
22	P	246	HIS	CA-C-N	5.64	127.83	120.28
22	P	246	HIS	C-N-CA	5.64	127.83	120.28
22	P	396	LEU	CA-C-O	-5.64	114.58	120.55
24	R	379	ARG	N-CA-C	5.64	117.42	111.28
9	2	185	PHE	CA-CB-CG	5.63	119.43	113.80
10	3	67	LEU	CB-CA-C	5.63	120.43	110.85
10	3	185	VAL	O-C-N	5.63	129.61	122.57
11	4	73	TYR	O-C-N	-5.63	115.73	122.15
11	4	171	PHE	N-CA-C	5.63	118.51	111.24
14	7	137	THR	N-CA-C	-5.63	105.22	111.36
19	Z	644	ALA	CA-C-N	5.63	127.83	120.28
19	Z	644	ALA	C-N-CA	5.63	127.83	120.28
26	O	29	TYR	CA-C-O	-5.63	114.90	120.82
1	A	132	ARG	NE-CZ-NH2	-5.63	114.13	119.20
27	H	184	ILE	CA-C-N	5.63	128.29	120.29
27	H	184	ILE	C-N-CA	5.63	128.29	120.29
13	6	200	ARG	N-CA-C	5.63	117.50	111.36
19	Z	566	HIS	CE1-NE2-CD2	-5.63	103.37	109.00
20	N	159	ARG	N-CA-C	-5.63	100.71	109.72
21	S	500	ASP	CA-C-N	5.63	132.30	121.54
21	S	500	ASP	C-N-CA	5.63	132.30	121.54
22	P	3	ASP	CA-CB-CG	-5.63	106.97	112.60
24	R	230	ALA	CB-CA-C	-5.63	102.00	110.90
4	D	145	ASP	CA-CB-CG	-5.63	106.97	112.60
19	Z	42	GLU	O-C-N	-5.63	115.34	122.27
28	I	300	GLY	N-CA-C	-5.63	107.42	115.64
32	J	246	ILE	N-CA-CB	5.63	117.80	111.21
10	3	89	SER	CA-C-O	5.63	126.39	120.42
12	5	180	ILE	N-CA-C	-5.63	100.37	108.42
19	Z	677	HIS	CA-CB-CG	-5.63	108.17	113.80
22	P	168	GLU	CA-C-N	5.63	127.76	120.44
22	P	168	GLU	C-N-CA	5.63	127.76	120.44
27	H	322	ASN	CA-CB-CG	-5.63	106.97	112.60
29	K	145	PRO	N-CA-CB	5.63	108.69	103.46
30	L	85	VAL	N-CA-C	-5.63	99.69	108.86
31	M	396	GLY	N-CA-C	5.63	119.03	112.50
1	A	208	ILE	CA-C-O	5.63	127.81	120.78
3	C	54	LYS	N-CA-C	5.63	117.41	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	114	ALA	CA-C-O	-5.63	112.45	120.16
25	U	263	ALA	CA-C-N	5.63	127.82	120.28
25	U	263	ALA	C-N-CA	5.63	127.82	120.28
17	T	162	LYS	N-CA-C	5.62	119.15	111.39
17	T	312	LEU	CA-C-N	5.62	132.28	121.54
17	T	312	LEU	C-N-CA	5.62	132.28	121.54
25	U	31	ASN	CA-C-N	5.62	128.83	120.17
25	U	31	ASN	C-N-CA	5.62	128.83	120.17
29	K	69	LYS	N-CA-CB	5.62	118.39	110.12
30	L	271	LEU	CA-C-N	5.62	127.82	120.28
30	L	271	LEU	C-N-CA	5.62	127.82	120.28
12	5	97	ASN	CA-C-N	5.62	126.11	120.04
12	5	97	ASN	C-N-CA	5.62	126.11	120.04
20	N	90	VAL	N-CA-C	-5.62	105.04	110.72
21	S	195	ASN	N-CA-C	-5.62	98.82	110.80
23	Q	274	LYS	CA-C-N	5.62	128.83	120.17
23	Q	274	LYS	C-N-CA	5.62	128.83	120.17
30	L	290	ILE	N-CA-CB	5.62	119.17	111.41
11	4	131	ALA	N-CA-CB	5.62	119.99	110.49
21	S	298	TYR	N-CA-C	5.62	118.34	111.82
22	P	294	LYS	CG-CD-CE	5.62	124.23	111.30
30	L	367	PHE	N-CA-C	5.62	117.49	111.36
20	N	235	LYS	CB-CG-CD	5.62	124.23	111.30
20	N	856	VAL	N-CA-CB	5.62	120.50	111.23
27	H	301	GLU	CA-C-N	5.62	128.27	120.29
27	H	301	GLU	C-N-CA	5.62	128.27	120.29
31	M	304	ALA	N-CA-C	-5.62	98.83	110.80
1	A	123	GLN	N-CA-C	-5.62	105.30	111.82
19	Z	110	TYR	CA-C-O	-5.62	115.10	121.00
6	F	146	GLN	O-C-N	5.62	129.92	123.29
7	G	40	ILE	CA-C-N	5.62	130.40	122.09
7	G	40	ILE	C-N-CA	5.62	130.40	122.09
10	3	148	GLY	CA-C-O	-5.62	114.71	120.66
21	S	413	ILE	CA-CB-CG2	-5.62	100.95	110.50
22	P	421	PRO	O-C-N	5.62	129.85	122.27
20	N	671	LEU	CA-C-N	5.62	128.37	120.28
20	N	671	LEU	C-N-CA	5.62	128.37	120.28
22	P	361	HIS	CE1-NE2-CD2	-5.62	103.38	109.00
23	Q	120	GLU	N-CA-CB	5.62	118.47	110.16
23	Q	239	TYR	N-CA-C	5.62	117.40	111.28
25	U	105	ASP	CB-CA-C	-5.62	100.24	110.63
14	7	118	GLU	CA-C-O	-5.61	114.60	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	374	ASP	N-CA-C	-5.61	105.24	111.36
11	4	188	ILE	N-CA-C	5.61	116.39	110.72
14	7	163	GLU	CA-C-O	5.61	121.87	118.33
12	5	78	ARG	CA-C-N	5.61	127.73	120.44
12	5	78	ARG	C-N-CA	5.61	127.73	120.44
19	Z	157	GLU	CA-C-N	5.61	128.26	120.29
19	Z	157	GLU	C-N-CA	5.61	128.26	120.29
24	R	41	LEU	CB-CA-C	-5.61	100.25	110.63
29	K	294	ASN	N-CA-C	5.61	117.48	111.36
19	Z	52	LEU	CB-CA-C	-5.61	101.48	110.79
19	Z	185	LEU	N-CA-C	5.61	117.39	111.28
27	H	94	GLN	CA-CB-CG	-5.61	102.88	114.10
29	K	57	GLN	CA-C-O	-5.61	114.47	120.42
15	W	82	GLY	O-C-N	-5.61	118.34	122.71
21	S	262	GLN	CG-CD-NE2	-5.61	107.99	116.40
21	S	419	ALA	CA-C-O	-5.61	114.48	120.42
28	I	326	LYS	CB-CG-CD	5.61	124.20	111.30
4	D	222	PRO	O-C-N	5.61	130.21	122.64
5	E	16	SER	O-C-N	-5.61	114.05	121.34
6	F	152	ASN	CA-CB-CG	-5.61	106.99	112.60
14	7	139	ALA	CA-C-N	5.61	128.83	120.31
14	7	139	ALA	C-N-CA	5.61	128.83	120.31
22	P	11	GLY	N-CA-C	5.61	119.94	112.77
23	Q	110	CYS	CA-C-N	5.61	127.79	120.28
23	Q	110	CYS	C-N-CA	5.61	127.79	120.28
27	H	64	GLY	CA-C-N	5.61	129.52	120.55
27	H	64	GLY	C-N-CA	5.61	129.52	120.55
27	H	173	THR	O-C-N	-5.61	116.65	123.10
28	I	403	GLY	CA-C-O	-5.61	114.94	121.00
30	L	146	TYR	N-CA-CB	5.61	119.89	110.92
32	J	374	ARG	NE-CZ-NH1	5.61	127.11	121.50
12	5	160	ILE	CA-CB-CG1	5.60	119.93	110.40
25	U	264	SER	CA-C-N	5.60	128.25	120.29
25	U	264	SER	C-N-CA	5.60	128.25	120.29
17	T	192	HIS	CA-CB-CG	5.60	119.40	113.80
19	Z	654	VAL	CA-C-N	5.60	128.24	120.29
19	Z	654	VAL	C-N-CA	5.60	128.24	120.29
22	P	281	ASN	CA-C-N	5.60	127.79	120.28
22	P	281	ASN	C-N-CA	5.60	127.79	120.28
28	I	165	ASP	CA-C-N	5.60	132.24	121.54
28	I	165	ASP	C-N-CA	5.60	132.24	121.54
19	Z	155	GLY	CA-C-N	5.60	130.07	120.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	155	GLY	C-N-CA	5.60	130.07	120.72
5	E	79	SER	CA-C-N	5.60	126.57	121.31
5	E	79	SER	C-N-CA	5.60	126.57	121.31
6	F	221	PHE	CA-C-O	5.60	126.98	120.49
8	1	84	ASP	CA-C-O	-5.60	114.94	120.82
25	U	48	LEU	CA-C-N	5.60	131.06	123.11
25	U	48	LEU	C-N-CA	5.60	131.06	123.11
29	K	169	GLY	CA-C-N	5.60	130.31	122.36
29	K	169	GLY	C-N-CA	5.60	130.31	122.36
22	P	321	VAL	CA-C-O	-5.60	115.24	121.17
23	Q	31	VAL	O-C-N	5.60	127.30	121.87
8	1	115	LEU	N-CA-CB	5.59	118.44	110.16
13	6	66	ASP	CB-CA-C	5.59	119.93	109.86
14	7	217	MET	N-CA-C	-5.59	105.26	111.36
21	S	181	GLN	CA-C-N	5.59	127.78	120.28
21	S	181	GLN	C-N-CA	5.59	127.78	120.28
21	S	494	PRO	CA-C-N	5.59	128.23	120.29
21	S	494	PRO	C-N-CA	5.59	128.23	120.29
22	P	127	THR	O-C-N	-5.59	115.39	122.27
26	O	270	ARG	N-CA-C	-5.59	105.26	111.36
30	L	206	ASP	N-CA-CB	5.59	119.94	110.49
16	V	196	LEU	CB-CA-C	-5.59	102.10	110.88
17	T	116	GLY	CA-C-N	5.59	128.05	120.44
17	T	116	GLY	C-N-CA	5.59	128.05	120.44
21	S	358	LEU	CA-C-N	5.59	127.77	120.28
21	S	358	LEU	C-N-CA	5.59	127.77	120.28
23	Q	382	GLU	N-CA-C	-5.59	106.50	113.55
30	L	84	ILE	CB-CA-C	5.59	117.85	110.91
32	J	36	ASN	CA-CB-CG	-5.59	107.01	112.60
1	A	190	THR	N-CA-C	-5.59	100.44	108.60
5	E	229	PHE	CA-C-O	5.59	128.07	121.36
13	6	85	HIS	ND1-CE1-NE2	5.59	113.99	108.40
13	6	95	ILE	O-C-N	5.59	127.59	121.83
17	T	332	THR	CA-CB-OG1	5.59	117.99	109.60
20	N	817	LEU	N-CA-C	5.59	117.95	110.35
1	A	3	ARG	N-CA-CB	5.59	118.27	109.83
2	B	30	ALA	N-CA-C	5.59	117.37	111.28
2	B	207	ASN	O-C-N	5.59	128.92	121.99
3	C	211	VAL	CA-CB-CG1	5.59	119.90	110.40
4	D	137	ALA	N-CA-C	-5.59	100.29	109.40
7	G	153	ASP	CA-C-O	-5.59	115.10	120.97
16	V	194	HIS	CG-CD2-NE2	5.59	112.79	107.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	761	VAL	CB-CA-C	-5.59	104.59	112.14
20	N	781	LEU	CB-CA-C	-5.59	101.51	110.79
3	C	10	THR	N-CA-C	-5.59	105.67	112.88
15	W	15	TYR	CB-CA-C	-5.59	102.13	111.13
23	Q	87	ARG	NH1-CZ-NH2	-5.59	112.04	119.30
28	I	305	ILE	CB-CA-C	-5.59	104.51	112.22
17	T	124	LEU	CA-C-N	5.59	129.46	120.30
17	T	124	LEU	C-N-CA	5.59	129.46	120.30
19	Z	795	GLY	O-C-N	5.59	127.55	122.19
20	N	848	LYS	N-CA-C	-5.59	99.18	108.34
21	S	315	HIS	CE1-NE2-CD2	-5.59	103.41	109.00
24	R	253	LEU	CA-C-O	-5.59	112.51	120.16
26	O	245	VAL	N-CA-C	-5.59	103.95	111.44
30	L	391	SER	CA-C-N	5.59	127.70	120.44
30	L	391	SER	C-N-CA	5.59	127.70	120.44
31	M	401	ALA	CA-C-N	5.59	127.60	120.56
31	M	401	ALA	C-N-CA	5.59	127.60	120.56
17	T	210	GLU	CB-CG-CD	-5.58	103.11	112.60
19	Z	201	GLU	CB-CG-CD	5.58	122.09	112.60
29	K	235	PHE	CB-CA-C	-5.58	102.08	110.90
8	1	102	GLU	CA-C-N	5.58	127.70	120.44
8	1	102	GLU	C-N-CA	5.58	127.70	120.44
13	6	179	GLN	N-CA-C	5.58	117.37	111.28
20	N	709	PHE	N-CA-CB	5.58	118.42	110.16
23	Q	351	SER	CA-C-N	5.58	128.03	120.44
23	Q	351	SER	C-N-CA	5.58	128.03	120.44
30	L	238	ASP	CA-CB-CG	5.58	118.18	112.60
7	G	162	TRP	N-CA-CB	5.58	119.15	110.44
12	5	64	ALA	N-CA-C	-5.58	99.80	108.90
15	W	93	ALA	N-CA-CB	5.58	118.33	110.12
15	W	93	ALA	CA-C-O	-5.58	114.64	120.55
22	P	282	GLU	CA-C-O	-5.58	114.64	120.55
32	J	237	MET	CA-C-O	5.58	126.33	120.42
6	F	234	ASP	CB-CA-C	-5.58	102.13	110.16
16	V	308	VAL	O-C-N	5.58	127.38	121.91
20	N	33	ASP	N-CA-C	5.58	118.29	111.82
1	A	12	HIS	CE1-NE2-CD2	-5.58	103.42	109.00
7	G	111	HIS	CG-CD2-NE2	5.58	112.78	107.20
10	3	93	ASN	CA-C-N	5.58	127.75	120.28
10	3	93	ASN	C-N-CA	5.58	127.75	120.28
20	N	572	ARG	NE-CZ-NH2	5.58	124.22	119.20
20	N	797	MET	CA-C-O	-5.58	114.63	120.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	328	ASP	CA-C-N	5.58	130.42	122.72
29	K	328	ASP	C-N-CA	5.58	130.42	122.72
4	D	187	ILE	O-C-N	-5.58	116.46	121.87
13	6	104	HIS	CE1-NE2-CD2	-5.58	103.42	109.00
22	P	213	PHE	CA-C-N	5.58	128.31	120.28
22	P	213	PHE	C-N-CA	5.58	128.31	120.28
27	H	405	THR	CA-CB-OG1	5.58	117.96	109.60
29	K	50	GLU	CA-C-N	5.58	128.31	120.28
29	K	50	GLU	C-N-CA	5.58	128.31	120.28
1	A	170	VAL	O-C-N	5.57	127.68	121.94
9	2	45	THR	N-CA-C	-5.57	98.10	108.02
13	6	90	THR	CA-CB-OG1	5.57	117.96	109.60
19	Z	522	CYS	CA-C-O	-5.57	114.51	120.42
26	O	158	LEU	N-CA-C	-5.57	105.28	111.36
31	M	170	GLU	CB-CA-C	5.57	118.73	109.53
15	W	193	GLY	CA-C-N	5.57	128.92	121.01
15	W	193	GLY	C-N-CA	5.57	128.92	121.01
27	H	134	ILE	N-CA-C	-5.57	100.10	108.12
21	S	374	VAL	CA-C-N	5.57	127.68	120.44
21	S	374	VAL	C-N-CA	5.57	127.68	120.44
30	L	323	ARG	CA-C-N	5.57	127.68	120.44
30	L	323	ARG	C-N-CA	5.57	127.68	120.44
32	J	305	LEU	CA-C-N	5.57	127.74	120.28
32	J	305	LEU	C-N-CA	5.57	127.74	120.28
29	K	197	ASP	CA-C-O	-5.57	114.52	119.75
30	L	319	ASN	CA-C-N	5.57	127.68	120.44
30	L	319	ASN	C-N-CA	5.57	127.68	120.44
23	Q	7	VAL	CB-CA-C	-5.57	104.75	111.88
25	U	202	ASN	CA-CB-CG	5.57	118.17	112.60
8	1	58	TYR	CB-CG-CD1	-5.57	112.45	120.80
14	7	196	GLU	CA-C-N	5.57	128.09	120.46
14	7	196	GLU	C-N-CA	5.57	128.09	120.46
30	L	239	HIS	ND1-CE1-NE2	5.57	113.97	108.40
7	G	40	ILE	CB-CA-C	5.56	119.12	110.83
8	1	105	GLU	CA-C-N	5.56	126.11	120.38
8	1	105	GLU	C-N-CA	5.56	126.11	120.38
11	4	45	LEU	N-CA-C	-5.56	99.95	109.24
13	6	107	ASN	N-CA-C	-5.56	105.13	111.14
19	Z	83	ARG	N-CA-C	5.56	117.34	111.28
26	O	63	PHE	CA-CB-CG	5.56	119.36	113.80
26	O	90	PRO	N-CA-CB	5.56	109.09	103.25
29	K	159	LYS	CA-C-O	-5.56	114.36	119.76

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	46	GLN	O-C-N	5.56	128.49	122.15
31	M	118	SER	N-CA-CB	5.56	119.89	110.49
4	D	172	LYS	N-CA-C	-5.56	105.30	111.36
4	D	199	LYS	CB-CA-C	-5.56	101.56	110.79
19	Z	229	VAL	O-C-N	-5.56	116.10	121.83
19	Z	858	LYS	CA-C-O	-5.56	113.28	118.73
22	P	60	MET	CA-C-N	5.56	128.32	120.42
22	P	60	MET	C-N-CA	5.56	128.32	120.42
23	Q	192	SER	O-C-N	5.56	128.49	122.15
32	J	150	MET	O-C-N	5.56	127.80	122.07
1	A	116	LYS	CA-C-O	5.56	126.44	120.55
20	N	131	GLU	N-CA-C	-5.56	105.22	111.28
29	K	303	VAL	CB-CA-C	-5.56	104.27	111.88
6	F	185	ASP	CA-CB-CG	5.56	118.16	112.60
4	D	20	GLU	CA-C-O	5.55	126.31	120.42
15	W	134	GLU	CA-C-N	5.55	132.15	121.54
15	W	134	GLU	C-N-CA	5.55	132.15	121.54
20	N	34	PHE	N-CA-C	-5.55	98.19	107.80
20	N	746	ILE	O-C-N	-5.55	117.20	122.98
24	R	65	MET	N-CA-CB	5.55	118.73	110.29
24	R	127	THR	O-C-N	5.55	128.01	122.12
25	U	92	VAL	CB-CA-C	5.55	119.48	111.65
20	N	114	GLU	CA-C-N	5.55	129.99	120.72
20	N	114	GLU	C-N-CA	5.55	129.99	120.72
22	P	15	LYS	O-C-N	-5.55	116.03	122.03
7	G	33	ASN	OD1-CG-ND2	5.55	128.15	122.60
19	Z	803	PHE	CA-CB-CG	-5.55	108.25	113.80
20	N	205	TYR	CA-C-N	5.55	127.72	120.28
20	N	205	TYR	C-N-CA	5.55	127.72	120.28
30	L	341	ASP	CB-CA-C	-5.55	98.61	110.32
31	M	57	ILE	CA-C-N	5.55	128.27	120.28
31	M	57	ILE	C-N-CA	5.55	128.27	120.28
1	A	115	CYS	CA-C-O	5.55	126.35	119.97
6	F	117	GLN	N-CA-CB	5.55	118.77	110.22
8	1	182	LYS	N-CA-C	5.55	117.24	110.41
14	7	123	ASP	CA-CB-CG	5.55	118.15	112.60
23	Q	147	LEU	CA-C-N	5.55	127.72	120.28
23	Q	147	LEU	C-N-CA	5.55	127.72	120.28
23	Q	410	VAL	N-CA-C	5.55	116.33	110.72
25	U	126	VAL	CA-CB-CG2	-5.55	100.97	110.40
25	U	285	ALA	CA-C-O	-5.55	114.67	120.55
29	K	88	VAL	N-CA-C	-5.55	100.19	108.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	30	LEU	CA-C-N	5.55	127.71	120.28
30	L	30	LEU	C-N-CA	5.55	127.71	120.28
20	N	104	CYS	CA-C-N	5.55	127.55	120.56
20	N	104	CYS	C-N-CA	5.55	127.55	120.56
23	Q	46	LYS	O-C-N	-5.55	116.36	122.07
23	Q	72	TYR	CB-CG-CD1	-5.55	112.48	120.80
30	L	262	SER	CA-CB-OG	5.55	122.19	111.10
1	A	137	CYS	N-CA-C	-5.54	99.98	109.24
17	T	110	PRO	N-CA-C	-5.54	106.79	114.27
5	E	231	LYS	CB-CA-C	-5.54	101.59	110.79
13	6	63	HIS	ND1-CG-CD2	-5.54	100.56	106.10
17	T	345	TYR	CA-CB-CG	5.54	123.87	113.90
19	Z	113	MET	CG-SD-CE	-5.54	88.71	100.90
20	N	415	HIS	O-C-N	5.54	129.68	122.86
22	P	183	VAL	CA-C-N	5.54	128.16	120.29
22	P	183	VAL	C-N-CA	5.54	128.16	120.29
23	Q	42	ALA	CB-CA-C	-5.54	102.69	111.17
28	I	194	ILE	CA-C-N	5.54	129.47	120.60
28	I	194	ILE	C-N-CA	5.54	129.47	120.60
6	F	59	HIS	CG-CD2-NE2	5.54	112.74	107.20
22	P	216	GLU	CA-C-N	5.54	128.16	120.29
22	P	216	GLU	C-N-CA	5.54	128.16	120.29
23	Q	260	MET	CA-C-O	-5.54	114.68	120.55
31	M	139	VAL	CA-C-N	5.54	131.94	121.97
31	M	139	VAL	C-N-CA	5.54	131.94	121.97
1	A	64	SER	N-CA-C	5.54	117.32	111.28
11	4	94	SER	CA-C-N	5.54	128.16	120.29
11	4	94	SER	C-N-CA	5.54	128.16	120.29
22	P	440	ASN	N-CA-CB	5.54	118.36	110.16
25	U	51	SER	CA-C-O	5.54	126.48	120.55
26	O	255	TRP	CA-C-O	-5.54	114.68	120.55
28	I	154	HIS	ND1-CG-CD2	5.54	111.64	106.10
32	J	206	HIS	CB-CG-ND1	5.54	131.01	122.70
32	J	199	LEU	CA-C-O	5.54	126.42	120.55
6	F	104	PRO	N-CA-CB	5.54	108.48	103.33
19	Z	224	ASN	N-CA-CB	5.54	118.35	110.16
19	Z	474	SER	N-CA-CB	5.54	119.84	110.49
20	N	436	ALA	CA-C-N	5.54	127.64	120.44
20	N	436	ALA	C-N-CA	5.54	127.64	120.44
29	K	208	PRO	N-CA-CB	5.54	108.49	103.34
29	K	339	ARG	CA-C-N	5.54	127.70	120.28
29	K	339	ARG	C-N-CA	5.54	127.70	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	59	LYS	O-C-N	-5.54	116.25	122.12
32	J	19	GLY	N-CA-C	-5.54	107.47	115.27
19	Z	573	ILE	CA-CB-CG1	5.53	119.81	110.40
19	Z	705	ASN	CA-CB-CG	-5.53	107.07	112.60
20	N	161	ASP	CA-C-N	5.53	128.28	120.42
20	N	161	ASP	C-N-CA	5.53	128.28	120.42
12	5	197	VAL	CB-CA-C	-5.53	104.67	112.14
19	Z	462	ALA	CA-C-N	5.53	127.69	120.28
19	Z	462	ALA	C-N-CA	5.53	127.69	120.28
21	S	455	GLN	OE1-CD-NE2	-5.53	117.07	122.60
24	R	26	LEU	CA-C-N	5.53	128.14	120.29
24	R	26	LEU	C-N-CA	5.53	128.14	120.29
26	O	82	HIS	N-CA-C	5.53	117.11	111.14
29	K	384	MET	CG-SD-CE	-5.53	88.73	100.90
31	M	103	ASP	N-CA-C	5.53	116.66	109.64
1	A	227	PHE	N-CA-CB	5.53	119.44	110.43
14	7	113	GLN	CA-C-N	5.53	127.63	120.44
14	7	113	GLN	C-N-CA	5.53	127.63	120.44
19	Z	456	ARG	N-CA-C	-5.53	105.32	113.61
22	P	391	ALA	CA-C-N	5.53	127.69	120.28
22	P	391	ALA	C-N-CA	5.53	127.69	120.28
7	G	189	ASP	CA-CB-CG	-5.53	107.07	112.60
10	3	149	MET	N-CA-C	5.53	118.07	111.71
19	Z	701	ASN	CA-CB-CG	-5.53	107.07	112.60
23	Q	404	ILE	N-CA-CB	5.53	118.87	110.58
24	R	61	LEU	CB-CA-C	-5.53	101.61	110.79
29	K	38	GLU	CA-C-N	5.53	128.24	120.28
29	K	38	GLU	C-N-CA	5.53	128.24	120.28
13	6	171	MET	CA-C-N	5.53	128.71	120.31
13	6	171	MET	C-N-CA	5.53	128.71	120.31
15	W	145	GLU	CA-C-O	5.53	126.28	120.42
19	Z	398	TRP	CA-CB-CG	5.53	124.10	113.60
20	N	776	SER	CA-C-O	-5.53	112.80	119.49
31	M	171	TYR	N-CA-C	-5.53	99.03	110.80
9	2	132	ARG	NE-CZ-NH1	-5.52	115.98	121.50
15	W	62	THR	N-CA-C	-5.52	100.68	109.07
19	Z	342	PRO	N-CA-CB	5.52	108.60	103.41
20	N	413	LYS	N-CA-C	-5.52	102.11	110.28
22	P	204	ILE	CA-CB-CG1	5.52	119.79	110.40
24	R	161	THR	O-C-N	5.52	128.45	122.15
28	I	431	GLN	N-CA-C	-5.52	105.34	111.36
29	K	241	GLY	CA-C-N	5.52	128.70	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	241	GLY	C-N-CA	5.52	128.70	120.31
31	M	342	ASP	CA-CB-CG	-5.52	107.08	112.60
19	Z	268	LEU	CB-CA-C	-5.52	102.18	110.90
13	6	204	ASP	CB-CA-C	-5.52	101.63	110.79
16	V	118	PHE	N-CA-CB	5.52	121.12	111.13
19	Z	10	PRO	N-CA-C	-5.52	105.37	114.75
19	Z	102	HIS	CE1-NE2-CD2	-5.52	103.48	109.00
19	Z	447	ALA	N-CA-C	5.52	117.38	111.36
22	P	146	THR	CA-C-N	5.52	128.44	120.38
22	P	146	THR	C-N-CA	5.52	128.44	120.38
25	U	230	LEU	CA-C-N	5.52	127.67	120.28
25	U	230	LEU	C-N-CA	5.52	127.67	120.28
32	J	252	ASP	CB-CA-C	-5.52	103.89	111.73
1	A	14	THR	CA-C-N	5.52	131.16	122.33
1	A	14	THR	C-N-CA	5.52	131.16	122.33
4	D	206	GLN	OE1-CD-NE2	5.52	128.12	122.60
10	3	184	GLY	CA-C-N	5.52	131.90	121.97
10	3	184	GLY	C-N-CA	5.52	131.90	121.97
12	5	127	LEU	CA-C-N	5.52	128.13	120.29
12	5	127	LEU	C-N-CA	5.52	128.13	120.29
19	Z	697	ILE	O-C-N	-5.52	116.52	121.87
20	N	781	LEU	CA-C-N	5.52	127.67	120.28
20	N	781	LEU	C-N-CA	5.52	127.67	120.28
22	P	95	SER	N-CA-CB	5.52	119.81	110.49
25	U	250	TYR	N-CA-C	5.52	117.29	111.28
30	L	305	ARG	N-CA-C	-5.52	102.82	109.83
14	7	125	HIS	CE1-NE2-CD2	-5.52	103.48	109.00
24	R	295	TYR	N-CA-CB	-5.52	102.01	110.01
26	O	6	ALA	CA-C-N	5.52	128.12	120.29
26	O	6	ALA	C-N-CA	5.52	128.12	120.29
32	J	34	ILE	N-CA-C	5.52	116.25	110.62
32	J	129	ASN	CB-CA-C	-5.52	100.18	109.83
32	J	160	GLU	CA-C-O	-5.52	114.70	120.55
4	D	67	ASP	CA-CB-CG	-5.51	107.09	112.60
6	F	82	ARG	NH1-CZ-NH2	-5.51	112.13	119.30
11	4	107	TYR	CA-CB-CG	-5.51	103.97	113.90
20	N	822	GLU	CA-C-N	5.51	127.61	120.44
20	N	822	GLU	C-N-CA	5.51	127.61	120.44
25	U	123	ILE	CA-C-N	5.51	130.29	123.12
25	U	123	ILE	C-N-CA	5.51	130.29	123.12
32	J	337	ASN	CA-CB-CG	-5.51	107.08	112.60
7	G	83	ALA	CA-C-N	5.51	128.69	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	83	ALA	C-N-CA	5.51	128.69	120.31
19	Z	320	ILE	N-CA-C	5.51	116.24	110.62
19	Z	347	ASP	CA-CB-CG	-5.51	107.09	112.60
19	Z	403	LYS	CG-CD-CE	5.51	123.98	111.30
22	P	277	ALA	CA-C-O	-5.51	114.69	120.70
27	H	431	THR	CA-C-N	5.51	127.61	120.44
27	H	431	THR	C-N-CA	5.51	127.61	120.44
8	1	202	SER	CA-C-O	-5.51	114.71	120.55
15	W	153	LEU	N-CA-C	5.51	118.05	111.71
17	T	128	GLU	N-CA-CB	5.51	118.79	110.30
21	S	185	ASP	CA-C-N	5.51	127.67	120.28
21	S	185	ASP	C-N-CA	5.51	127.67	120.28
6	F	112	ILE	CA-C-N	5.51	127.03	120.14
6	F	112	ILE	C-N-CA	5.51	127.03	120.14
8	1	123	TYR	CB-CA-C	-5.51	102.23	110.88
13	6	103	LYS	CB-CG-CD	5.51	123.97	111.30
7	G	225	HIS	ND1-CE1-NE2	5.51	113.91	108.40
10	3	184	GLY	N-CA-C	-5.51	100.13	113.18
19	Z	262	PHE	O-C-N	-5.51	114.99	121.32
20	N	126	ILE	CA-C-N	5.51	130.18	120.87
20	N	126	ILE	C-N-CA	5.51	130.18	120.87
23	Q	164	ALA	CA-C-N	5.51	128.11	120.29
23	Q	164	ALA	C-N-CA	5.51	128.11	120.29
30	L	383	LYS	O-C-N	-5.51	116.28	122.12
3	C	20	GLN	CG-CD-NE2	-5.51	108.14	116.40
4	D	123	ARG	CA-C-N	5.51	128.21	120.28
4	D	123	ARG	C-N-CA	5.51	128.21	120.28
5	E	227	HIS	ND1-CE1-NE2	5.51	113.91	108.40
22	P	376	LYS	N-CA-C	-5.51	105.18	111.07
27	H	364	VAL	O-C-N	-5.51	116.80	123.02
28	I	360	THR	CA-C-N	5.51	128.21	120.28
28	I	360	THR	C-N-CA	5.51	128.21	120.28
32	J	183	PRO	CA-C-N	5.51	130.87	121.29
32	J	183	PRO	C-N-CA	5.51	130.87	121.29
20	N	53	GLY	N-CA-C	-5.50	108.11	115.32
20	N	127	ASP	CA-CB-CG	5.50	118.11	112.60
27	H	197	HIS	ND1-CE1-NE2	5.50	113.91	108.40
2	B	41	ALA	N-CA-C	-5.50	99.08	110.80
8	1	92	VAL	CA-CB-CG2	5.50	119.76	110.40
11	4	51	GLY	CA-C-N	5.50	127.92	120.44
11	4	51	GLY	C-N-CA	5.50	127.92	120.44
17	T	213	THR	CA-CB-OG1	5.50	117.86	109.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	246	ASP	CA-C-O	-5.50	115.04	120.82
28	I	69	LYS	O-C-N	5.50	127.95	122.12
2	B	18	LYS	N-CA-C	-5.50	100.70	109.23
8	1	229	LYS	N-CA-C	-5.50	105.51	113.21
10	3	81	GLN	N-CA-C	5.50	118.00	110.24
14	7	223	ARG	CG-CD-NE	-5.50	99.89	112.00
20	N	638	SER	CA-C-N	5.50	127.92	120.44
20	N	638	SER	C-N-CA	5.50	127.92	120.44
8	1	147	VAL	O-C-N	5.50	125.98	120.59
4	D	51	ALA	CA-C-N	5.50	130.66	122.74
4	D	51	ALA	C-N-CA	5.50	130.66	122.74
14	7	103	ASP	CB-CA-C	-5.50	100.11	110.67
20	N	151	ILE	CA-C-O	-5.50	115.23	120.95
25	U	285	ALA	N-CA-C	5.50	117.27	111.28
10	3	135	ASP	N-CA-C	-5.50	100.94	109.24
28	I	69	LYS	CA-CB-CG	5.50	125.09	114.10
20	N	860	GLU	CA-C-O	5.50	127.87	121.44
23	Q	151	SER	CA-C-O	-5.50	113.65	119.97
6	F	134	ILE	N-CA-C	-5.49	99.97	107.99
15	W	12	ASN	OD1-CG-ND2	5.49	128.09	122.60
25	U	218	GLY	CA-C-N	5.49	129.98	122.34
25	U	218	GLY	C-N-CA	5.49	129.98	122.34
26	O	352	ARG	CD-NE-CZ	-5.49	116.71	124.40
5	E	51	GLU	O-C-N	5.49	129.21	123.06
20	N	346	ASN	CA-C-O	5.49	126.75	120.54
20	N	609	ASP	CB-CA-C	-5.49	99.44	109.54
21	S	427	PRO	N-CA-C	-5.49	106.04	113.40
26	O	60	TYR	CA-C-N	5.49	127.58	120.44
26	O	60	TYR	C-N-CA	5.49	127.58	120.44
14	7	74	TYR	CA-C-O	5.49	126.17	120.40
15	W	126	LYS	O-C-N	5.49	127.72	122.07
19	Z	137	ARG	CA-C-N	5.49	127.64	120.28
19	Z	137	ARG	C-N-CA	5.49	127.64	120.28
19	Z	170	TRP	CE2-CD2-CE3	5.49	124.29	118.80
20	N	323	LEU	O-C-N	5.49	129.53	122.39
26	O	217	LEU	N-CA-CB	5.49	118.19	110.12
26	O	370	GLN	CG-CD-OE1	-5.49	109.82	120.80
32	J	359	VAL	CA-C-O	-5.49	115.24	120.95
15	W	11	ASP	N-CA-C	-5.49	99.57	108.52
21	S	75	VAL	CA-C-O	-5.49	114.81	121.18
27	H	74	PRO	N-CA-CB	5.49	108.40	103.08
29	K	202	VAL	CB-CA-C	-5.49	102.44	110.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	100	LEU	CA-C-O	-5.49	112.66	120.51
9	2	246	ARG	NE-CZ-NH1	-5.49	116.01	121.50
14	7	219	VAL	CB-CA-C	-5.49	103.37	112.26
16	V	122	LEU	N-CA-C	-5.49	101.18	109.85
20	N	151	ILE	CA-C-N	5.49	126.04	120.00
20	N	151	ILE	C-N-CA	5.49	126.04	120.00
6	F	69	HIS	ND1-CE1-NE2	5.49	113.89	108.40
12	5	110	ASP	CA-C-N	5.49	128.08	120.29
12	5	110	ASP	C-N-CA	5.49	128.08	120.29
24	R	209	THR	CA-CB-CG2	-5.49	101.17	110.50
31	M	175	VAL	CB-CA-C	-5.49	104.73	112.14
16	V	207	TYR	CA-C-O	-5.48	114.78	120.70
19	Z	143	ARG	NE-CZ-NH2	-5.48	114.27	119.20
19	Z	871	PRO	CA-C-N	5.48	129.72	120.29
19	Z	871	PRO	C-N-CA	5.48	129.72	120.29
22	P	309	PHE	N-CA-C	-5.48	105.38	111.36
30	L	245	PHE	N-CA-C	-5.48	99.58	108.41
4	D	74	ALA	N-CA-C	-5.48	100.98	108.38
10	3	84	PRO	N-CA-C	5.48	119.83	111.11
17	T	121	ARG	O-C-N	5.48	127.93	122.12
19	Z	115	PRO	N-CA-CB	5.48	107.92	103.32
21	S	283	ARG	CB-CA-C	-5.48	101.53	110.85
24	R	49	ASN	CB-CA-C	5.48	119.02	109.65
12	5	62	THR	CA-C-O	5.48	128.34	120.51
14	7	182	ALA	O-C-N	5.48	129.96	123.33
17	T	285	ILE	N-CA-C	-5.48	101.84	108.53
25	U	38	VAL	N-CA-CB	5.48	120.08	110.49
26	O	283	THR	CA-C-N	5.48	128.27	120.49
26	O	283	THR	C-N-CA	5.48	128.27	120.49
12	5	191	SER	CA-C-O	-5.48	112.23	118.47
19	Z	162	LEU	CA-C-N	5.48	127.62	120.28
19	Z	162	LEU	C-N-CA	5.48	127.62	120.28
20	N	921	ILE	N-CA-C	-5.48	107.79	113.10
31	M	219	GLY	CA-C-O	5.48	125.09	119.01
3	C	121	TYR	CA-C-O	5.48	126.36	120.55
9	2	235	PRO	CB-CA-C	5.47	120.59	111.56
16	V	241	ASN	CA-CB-CG	-5.47	107.12	112.60
19	Z	127	SER	N-CA-C	5.47	117.05	111.14
23	Q	243	ASP	CA-CB-CG	-5.47	107.12	112.60
24	R	56	ALA	CA-C-N	5.47	130.82	121.29
24	R	56	ALA	C-N-CA	5.47	130.82	121.29
30	L	284	LEU	N-CA-CB	5.47	118.77	110.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	366	ALA	O-C-N	-5.47	116.32	122.12
8	1	174	ALA	N-CA-C	5.47	117.32	111.36
10	3	119	PRO	N-CA-CB	5.47	109.00	103.25
14	7	171	MET	CA-C-O	5.47	126.61	120.70
16	V	165	ALA	N-CA-C	-5.47	105.39	111.36
19	Z	710	LEU	N-CA-C	5.47	117.25	111.28
20	N	399	TRP	CA-C-N	5.47	127.61	120.28
20	N	399	TRP	C-N-CA	5.47	127.61	120.28
23	Q	77	LEU	CA-C-N	5.47	127.61	120.28
23	Q	77	LEU	C-N-CA	5.47	127.61	120.28
26	O	138	VAL	O-C-N	5.47	127.47	121.83
26	O	339	ARG	NE-CZ-NH2	5.47	124.12	119.20
32	J	125	LYS	CG-CD-CE	5.47	123.89	111.30
8	1	110	HIS	CE1-NE2-CD2	-5.47	103.53	109.00
17	T	290	ALA	CB-CA-C	-5.47	99.07	109.95
20	N	121	GLY	N-CA-C	5.47	120.23	111.64
23	Q	148	HIS	CE1-NE2-CD2	-5.47	103.53	109.00
25	U	21	ASP	CA-CB-CG	-5.47	107.13	112.60
30	L	268	GLN	OE1-CD-NE2	5.47	128.07	122.60
13	6	190	HIS	CB-CG-CD2	-5.47	124.09	131.20
1	A	220	VAL	N-CA-CB	5.47	119.10	112.10
5	E	205	VAL	CB-CA-C	-5.47	104.68	112.22
11	4	150	THR	N-CA-C	-5.47	106.49	112.72
13	6	191	VAL	O-C-N	-5.47	118.25	121.69
21	S	457	LYS	N-CA-C	-5.47	100.80	109.76
22	P	284	SER	N-CA-C	5.47	116.92	111.07
14	7	195	ARG	N-CA-C	-5.46	105.33	111.28
15	W	62	THR	CA-CB-OG1	5.46	117.80	109.60
16	V	194	HIS	CA-C-N	5.46	126.01	120.00
16	V	194	HIS	C-N-CA	5.46	126.01	120.00
19	Z	267	ARG	CA-C-O	-5.46	114.63	120.42
8	1	147	VAL	CA-C-O	5.46	122.78	119.94
19	Z	71	TYR	N-CA-C	5.46	117.31	111.36
30	L	363	GLU	CA-C-N	5.46	128.05	120.29
30	L	363	GLU	C-N-CA	5.46	128.05	120.29
31	M	119	GLN	OE1-CD-NE2	5.46	128.06	122.60
10	3	170	ALA	O-C-N	5.46	127.91	122.12
27	H	285	PHE	CA-CB-CG	-5.46	108.34	113.80
31	M	264	ILE	CA-C-N	5.46	125.89	119.94
31	M	264	ILE	C-N-CA	5.46	125.89	119.94
4	D	143	ASP	N-CA-C	-5.46	103.49	110.53
27	H	278	ASP	CA-C-O	5.46	126.10	119.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	242	GLU	N-CA-C	-5.46	105.49	111.82
6	F	60	GLN	CA-C-N	5.46	129.10	121.24
6	F	60	GLN	C-N-CA	5.46	129.10	121.24
14	7	135	TRP	CB-CG-CD1	-5.46	118.71	126.90
16	V	32	TYR	CA-CB-CG	-5.46	104.07	113.90
22	P	118	LEU	O-C-N	-5.46	115.04	121.32
27	H	74	PRO	CA-C-O	-5.46	112.64	120.56
1	A	6	SER	O-C-N	-5.46	116.34	122.12
2	B	68	ILE	CB-CA-C	-5.46	104.89	112.04
3	C	27	ALA	N-CA-C	-5.46	105.41	111.36
3	C	107	CYS	CA-CB-SG	-5.46	101.85	114.40
16	V	166	ASN	CA-CB-CG	-5.46	107.14	112.60
23	Q	410	VAL	CA-CB-CG1	5.46	119.67	110.40
27	H	123	VAL	O-C-N	5.46	128.66	122.98
20	N	96	TYR	CA-C-N	5.46	131.79	121.97
20	N	96	TYR	C-N-CA	5.46	131.79	121.97
20	N	586	VAL	CA-C-N	5.46	127.53	120.44
20	N	586	VAL	C-N-CA	5.46	127.53	120.44
27	H	338	ASP	N-CA-CB	5.46	118.14	110.12
17	T	336	THR	CA-CB-OG1	5.45	117.78	109.60
20	N	149	GLN	N-CA-CB	5.45	118.14	110.12
22	P	207	LYS	CA-C-N	5.45	127.59	120.28
22	P	207	LYS	C-N-CA	5.45	127.59	120.28
24	R	155	ASP	CA-C-N	5.45	127.59	120.28
24	R	155	ASP	C-N-CA	5.45	127.59	120.28
25	U	254	ASN	CA-C-N	5.45	127.59	120.28
25	U	254	ASN	C-N-CA	5.45	127.59	120.28
20	N	747	SER	CA-C-O	-5.45	114.85	121.28
26	O	165	THR	N-CA-CB	5.45	117.91	110.01
28	I	275	GLU	CB-CG-CD	-5.45	103.33	112.60
29	K	288	ILE	CA-CB-CG1	5.45	119.67	110.40
31	M	151	GLY	CA-C-O	5.45	125.16	119.06
31	M	277	LEU	O-C-N	5.45	127.90	122.12
15	W	3	LEU	CB-CA-C	-5.45	103.78	111.95
25	U	21	ASP	N-CA-C	5.45	116.90	111.07
28	I	216	ILE	CA-CB-CG2	-5.45	101.24	110.50
30	L	261	THR	CA-C-N	5.45	128.59	120.31
30	L	261	THR	C-N-CA	5.45	128.59	120.31
8	1	71	HIS	CG-CD2-NE2	5.45	112.65	107.20
25	U	189	GLN	N-CA-C	-5.45	105.42	111.36
7	G	122	ALA	N-CA-C	5.45	117.22	111.28
20	N	129	ARG	CB-CG-CD	5.45	123.82	111.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	I	82	GLN	O-C-N	5.45	129.83	122.59
2	B	133	SER	O-C-N	-5.44	116.87	123.29
19	Z	520	LEU	CA-C-N	5.44	128.02	120.29
19	Z	520	LEU	C-N-CA	5.44	128.02	120.29
20	N	124	LYS	O-C-N	-5.44	115.59	120.92
20	N	449	ILE	CB-CA-C	-5.44	105.00	111.97
20	N	463	ASN	CA-C-N	5.44	128.02	120.29
20	N	463	ASN	C-N-CA	5.44	128.02	120.29
24	R	78	GLU	CA-C-N	5.44	127.57	120.28
24	R	78	GLU	C-N-CA	5.44	127.57	120.28
25	U	144	VAL	N-CA-CB	5.44	116.46	110.53
16	V	287	HIS	CG-CD2-NE2	5.44	112.64	107.20
20	N	12	LEU	CA-C-O	5.44	126.32	120.55
20	N	818	GLU	CA-C-N	5.44	132.19	122.13
20	N	818	GLU	C-N-CA	5.44	132.19	122.13
25	U	106	ILE	N-CA-CB	5.44	118.74	110.58
26	O	172	TYR	CB-CA-C	-5.44	101.76	110.79
1	A	70	PHE	CA-CB-CG	-5.44	108.36	113.80
4	D	190	ASP	CA-C-O	-5.44	114.66	120.42
12	5	84	TYR	CA-C-N	5.44	129.60	121.77
12	5	84	TYR	C-N-CA	5.44	129.60	121.77
19	Z	186	THR	CA-C-N	5.44	127.84	120.44
19	Z	186	THR	C-N-CA	5.44	127.84	120.44
20	N	378	CYS	O-C-N	-5.44	116.81	122.96
22	P	295	LYS	N-CA-C	5.44	117.21	111.28
27	H	85	GLN	CA-C-N	5.44	128.01	120.29
27	H	85	GLN	C-N-CA	5.44	128.01	120.29
11	4	78	THR	CA-CB-OG1	-5.44	101.44	109.60
12	5	216	ARG	CA-C-N	5.44	128.01	120.29
12	5	216	ARG	C-N-CA	5.44	128.01	120.29
19	Z	644	ALA	N-CA-C	5.44	117.29	111.36
22	P	196	VAL	CA-C-N	5.44	131.92	121.54
22	P	196	VAL	C-N-CA	5.44	131.92	121.54
27	H	47	GLN	N-CA-CB	5.44	118.21	110.16
30	L	242	CYS	CA-C-O	-5.44	114.91	120.89
19	Z	334	ALA	CA-C-N	5.44	127.51	120.44
19	Z	334	ALA	C-N-CA	5.44	127.51	120.44
21	S	36	LYS	N-CA-C	5.44	118.13	111.82
21	S	38	GLU	O-C-N	-5.44	116.36	122.12
30	L	270	THR	CA-CB-OG1	5.44	117.75	109.60
32	J	161	ILE	CA-C-N	5.44	127.51	120.44
32	J	161	ILE	C-N-CA	5.44	127.51	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	21	VAL	O-C-N	-5.43	116.23	121.83
8	1	160	ILE	N-CA-C	-5.43	100.01	108.81
20	N	579	ARG	NE-CZ-NH2	-5.43	114.31	119.20
27	H	282	GLY	CA-C-N	5.43	128.82	121.05
27	H	282	GLY	C-N-CA	5.43	128.82	121.05
30	L	69	GLN	CB-CG-CD	-5.43	103.36	112.60
13	6	198	ALA	N-CA-CB	5.43	117.89	110.01
17	T	175	LYS	O-C-N	5.43	127.88	122.12
17	T	262	PHE	CA-C-N	5.43	129.21	120.30
17	T	262	PHE	C-N-CA	5.43	129.21	120.30
19	Z	475	ASN	CB-CG-ND2	-5.43	108.25	116.40
22	P	317	TRP	CA-C-N	5.43	128.00	120.29
22	P	317	TRP	C-N-CA	5.43	128.00	120.29
24	R	62	ASP	CA-CB-CG	-5.43	107.17	112.60
26	O	31	LYS	O-C-N	5.43	128.58	122.22
30	L	401	LYS	CB-CA-C	-5.43	102.53	110.13
20	N	247	GLN	N-CA-CB	5.43	118.20	110.16
21	S	302	ARG	CA-C-N	5.43	127.50	120.44
21	S	302	ARG	C-N-CA	5.43	127.50	120.44
30	L	26	TYR	CA-C-N	5.43	128.00	120.29
30	L	26	TYR	C-N-CA	5.43	128.00	120.29
30	L	361	CYS	O-C-N	-5.43	116.36	122.12
3	C	49	ARG	CA-C-N	5.43	128.00	120.29
3	C	49	ARG	C-N-CA	5.43	128.00	120.29
6	F	206	THR	CA-C-N	5.43	128.31	120.38
6	F	206	THR	C-N-CA	5.43	128.31	120.38
6	F	214	ILE	CA-C-O	-5.43	114.69	120.39
9	2	64	THR	N-CA-CB	5.43	119.80	110.68
14	7	77	LEU	CB-CA-C	-5.43	108.74	116.34
17	T	203	LEU	N-CA-CB	5.43	118.10	110.12
17	T	330	ASP	CA-CB-CG	-5.43	107.17	112.60
20	N	261	LEU	CA-C-N	5.43	127.56	120.28
20	N	261	LEU	C-N-CA	5.43	127.56	120.28
24	R	260	LEU	CA-C-O	-5.43	114.67	120.42
27	H	144	ARG	N-CA-C	5.43	118.12	111.82
27	H	358	HIS	CE1-NE2-CD2	-5.43	103.57	109.00
27	H	420	TYR	N-CA-C	-5.43	105.36	111.28
29	K	333	PHE	CA-C-N	5.43	126.63	119.84
29	K	333	PHE	C-N-CA	5.43	126.63	119.84
1	A	27	TYR	CB-CG-CD1	5.43	128.94	120.80
20	N	138	PHE	O-C-N	5.43	127.87	122.12
23	Q	82	LYS	CA-C-O	5.43	127.11	121.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	53	SER	CA-C-N	5.43	128.10	120.28
31	M	53	SER	C-N-CA	5.43	128.10	120.28
12	5	256	ASP	CA-CB-CG	5.43	118.03	112.60
26	O	2	LYS	O-C-N	-5.43	117.06	123.41
27	H	208	PRO	CA-C-N	5.43	125.85	119.99
27	H	208	PRO	C-N-CA	5.43	125.85	119.99
32	J	332	HIS	N-CA-CB	5.43	118.09	110.12
3	C	52	ILE	CB-CA-C	-5.42	104.76	110.62
10	3	75	GLU	N-CA-CB	5.42	118.09	110.12
16	V	74	ALA	N-CA-CB	5.42	119.27	110.43
20	N	164	GLU	CA-C-N	-5.42	114.94	123.13
20	N	164	GLU	C-N-CA	-5.42	114.94	123.13
20	N	741	GLY	N-CA-C	-5.42	105.54	114.76
23	Q	137	TYR	CA-C-N	5.42	127.49	120.44
23	Q	137	TYR	C-N-CA	5.42	127.49	120.44
28	I	428	TYR	CA-C-O	-5.42	114.80	120.55
20	N	74	PHE	CA-C-O	-5.42	114.22	120.24
20	N	157	THR	CA-CB-OG1	5.42	117.73	109.60
31	M	103	ASP	CA-CB-CG	5.42	118.02	112.60
6	F	173	GLU	CA-C-O	-5.42	114.80	120.55
14	7	149	PRO	N-CA-C	-5.42	105.53	114.75
16	V	47	ALA	N-CA-CB	5.42	118.18	110.16
20	N	73	ALA	CA-C-O	5.42	127.65	121.58
25	U	61	ASP	O-C-N	-5.42	116.87	122.94
28	I	273	VAL	N-CA-C	-5.42	105.09	110.62
29	K	74	HIS	CE1-NE2-CD2	-5.42	103.58	109.00
9	2	124	ARG	O-C-N	-5.42	116.49	122.07
17	T	241	GLU	CB-CG-CD	-5.42	103.39	112.60
2	B	199	PHE	CA-CB-CG	-5.42	108.38	113.80
20	N	827	LYS	CA-C-N	5.42	127.88	120.46
20	N	827	LYS	C-N-CA	5.42	127.88	120.46
23	Q	57	LEU	CA-C-O	5.42	126.28	120.70
28	I	142	ASP	CA-C-N	5.42	127.48	120.44
28	I	142	ASP	C-N-CA	5.42	127.48	120.44
1	A	124	VAL	CA-C-N	5.42	127.54	120.28
1	A	124	VAL	C-N-CA	5.42	127.54	120.28
2	B	192	ILE	CA-C-N	5.42	127.98	120.29
2	B	192	ILE	C-N-CA	5.42	127.98	120.29
7	G	4	ILE	CA-CB-CG1	5.42	119.61	110.40
7	G	93	ARG	N-CA-C	5.42	117.27	111.36
8	1	153	MET	CB-CA-C	-5.42	99.64	110.42
14	7	242	GLU	N-CA-CB	5.42	119.64	110.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	384	THR	CA-C-N	5.42	128.54	120.31
21	S	384	THR	C-N-CA	5.42	128.54	120.31
24	R	170	GLU	N-CA-C	5.42	116.87	111.07
26	O	347	LYS	N-CA-CB	5.42	118.56	110.22
32	J	283	PHE	CA-CB-CG	-5.42	108.38	113.80
9	2	200	GLU	O-C-N	5.42	128.32	122.15
17	T	260	THR	N-CA-C	-5.42	106.17	112.89
2	B	133	SER	N-CA-C	-5.41	100.36	109.07
3	C	166	ASN	CA-C-N	5.41	131.88	121.54
3	C	166	ASN	C-N-CA	5.41	131.88	121.54
6	F	238	GLU	N-CA-C	5.41	118.08	110.23
13	6	50	VAL	N-CA-C	-5.41	100.32	108.12
21	S	410	TYR	CB-CG-CD2	-5.41	112.68	120.80
32	J	158	ILE	CA-CB-CG1	5.41	119.60	110.40
13	6	224	ILE	CB-CA-C	5.41	118.68	110.62
19	Z	181	ARG	CA-C-O	5.41	126.22	120.10
15	W	33	VAL	O-C-N	5.41	127.21	121.91
15	W	105	HIS	ND1-CG-CD2	-5.41	100.69	106.10
23	Q	233	TYR	CA-C-N	5.41	127.97	120.29
23	Q	233	TYR	C-N-CA	5.41	127.97	120.29
26	O	308	GLU	CB-CG-CD	-5.41	103.40	112.60
32	J	94	LYS	N-CA-C	-5.41	102.47	110.48
14	7	127	TYR	CB-CA-C	-5.41	100.74	109.72
19	Z	51	GLN	O-C-N	-5.41	115.18	122.43
22	P	284	SER	CA-C-O	-5.41	115.14	120.82
24	R	232	GLU	N-CA-CB	5.41	118.64	110.42
19	Z	410	ALA	CA-C-N	5.41	127.53	120.28
19	Z	410	ALA	C-N-CA	5.41	127.53	120.28
19	Z	600	TYR	CB-CG-CD1	5.41	128.91	120.80
23	Q	59	LYS	CA-C-N	5.41	131.43	121.70
23	Q	59	LYS	C-N-CA	5.41	131.43	121.70
24	R	178	ASN	CB-CA-C	-5.41	102.39	110.88
25	U	125	ASP	N-CA-C	-5.41	102.19	110.14
13	6	70	CYS	N-CA-CB	5.41	118.51	110.29
16	V	39	LEU	N-CA-CB	5.41	118.07	110.12
28	I	438	LEU	CA-C-N	5.41	128.91	120.75
28	I	438	LEU	C-N-CA	5.41	128.91	120.75
29	K	160	PRO	CA-C-O	-5.41	115.27	121.86
5	E	194	ALA	CB-CA-C	-5.40	101.82	110.79
19	Z	424	GLY	O-C-N	5.40	129.72	122.70
20	N	724	VAL	CA-C-N	5.40	127.96	120.29
20	N	724	VAL	C-N-CA	5.40	127.96	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	814	PRO	N-CD-CG	5.40	111.31	103.20
20	N	885	MET	CA-C-N	5.40	126.59	119.84
20	N	885	MET	C-N-CA	5.40	126.59	119.84
20	N	905	PRO	CA-C-O	-5.40	111.44	119.00
9	2	108	LEU	N-CA-C	-5.40	105.39	111.28
21	S	383	GLN	N-CA-C	-5.40	105.39	111.28
22	P	359	VAL	N-CA-CB	5.40	117.89	110.54
24	R	40	GLU	N-CA-C	5.40	117.25	111.36
24	R	302	HIS	CG-CD2-NE2	5.40	112.60	107.20
32	J	179	GLY	CA-C-N	5.40	129.89	123.19
32	J	179	GLY	C-N-CA	5.40	129.89	123.19
6	F	96	ARG	CB-CA-C	5.40	121.04	110.67
16	V	31	VAL	CA-C-O	5.40	126.97	120.65
19	Z	156	HIS	ND1-CE1-NE2	5.40	113.80	108.40
20	N	180	SER	N-CA-CB	5.40	118.06	110.12
29	K	288	ILE	CB-CA-C	-5.40	104.77	112.22
32	J	119	ASP	N-CA-C	-5.40	106.47	113.16
19	Z	358	PHE	CA-CB-CG	-5.40	108.40	113.80
19	Z	432	TYR	CB-CA-C	-5.40	101.68	110.85
24	R	330	ILE	CA-C-N	5.40	127.51	120.28
24	R	330	ILE	C-N-CA	5.40	127.51	120.28
29	K	400	GLU	N-CA-CB	5.40	118.06	110.12
30	L	227	ARG	NE-CZ-NH2	5.40	124.06	119.20
31	M	51	LEU	CA-C-N	5.40	127.95	120.29
31	M	51	LEU	C-N-CA	5.40	127.95	120.29
32	J	340	ARG	CA-C-N	5.40	132.16	121.53
32	J	340	ARG	C-N-CA	5.40	132.16	121.53
20	N	556	MET	N-CA-C	5.40	119.12	112.54
11	4	164	LEU	CB-CA-C	-5.39	101.83	110.79
20	N	666	LYS	CA-C-N	5.39	127.95	120.29
20	N	666	LYS	C-N-CA	5.39	127.95	120.29
23	Q	186	ALA	N-CA-C	5.39	117.16	111.28
26	O	363	MET	CA-C-N	5.39	127.51	120.28
26	O	363	MET	C-N-CA	5.39	127.51	120.28
29	K	347	THR	N-CA-CB	5.39	118.14	110.16
30	L	124	TYR	N-CA-C	-5.39	100.90	109.96
2	B	118	MET	N-CA-C	-5.39	105.56	111.82
6	F	141	GLY	O-C-N	5.39	127.16	121.77
23	Q	59	LYS	CA-C-O	-5.39	115.13	120.90
23	Q	221	GLU	N-CA-C	5.39	117.98	111.40
27	H	54	GLN	CA-C-N	5.39	128.05	120.28
27	H	54	GLN	C-N-CA	5.39	128.05	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	H	351	ARG	N-CA-C	5.39	118.08	111.82
32	J	100	ASP	CA-C-O	-5.39	115.58	121.89
6	F	123	TYR	CA-C-N	5.39	131.77	123.31
6	F	123	TYR	C-N-CA	5.39	131.77	123.31
24	R	71	SER	CA-C-N	5.39	127.94	120.29
24	R	71	SER	C-N-CA	5.39	127.94	120.29
4	D	90	ILE	O-C-N	5.39	127.38	121.83
4	D	178	LEU	CA-C-N	5.39	128.04	120.28
4	D	178	LEU	C-N-CA	5.39	128.04	120.28
12	5	193	TYR	N-CA-C	-5.39	106.66	113.18
18	Y	62	LYS	N-CA-C	5.39	117.16	111.28
19	Z	143	ARG	CD-NE-CZ	-5.39	116.86	124.40
19	Z	177	GLU	O-C-N	5.39	129.46	122.40
23	Q	215	GLY	N-CA-C	5.39	119.20	112.73
27	H	43	ARG	NE-CZ-NH2	-5.39	114.35	119.20
28	I	274	ALA	O-C-N	5.39	127.83	122.12
19	Z	440	ILE	N-CA-C	5.39	116.16	110.72
20	N	347	ASN	CA-C-N	5.39	131.97	121.63
20	N	347	ASN	C-N-CA	5.39	131.97	121.63
21	S	56	THR	CA-C-N	5.39	131.83	121.54
21	S	56	THR	C-N-CA	5.39	131.83	121.54
27	H	90	GLU	N-CA-C	-5.39	105.31	111.07
5	E	179	SER	CA-C-N	5.39	128.50	120.31
5	E	179	SER	C-N-CA	5.39	128.50	120.31
11	4	158	GLU	CA-C-N	5.39	127.50	120.28
11	4	158	GLU	C-N-CA	5.39	127.50	120.28
12	5	150	LYS	CA-C-N	5.39	130.38	120.79
12	5	150	LYS	C-N-CA	5.39	130.38	120.79
14	7	176	TYR	N-CA-CB	5.39	119.59	110.49
20	N	25	HIS	CA-C-N	5.39	127.94	120.29
20	N	25	HIS	C-N-CA	5.39	127.94	120.29
20	N	387	ARG	NH1-CZ-NH2	5.39	126.30	119.30
22	P	385	SER	CA-C-N	5.39	127.35	120.56
22	P	385	SER	C-N-CA	5.39	127.35	120.56
5	E	71	ASP	N-CA-C	-5.38	101.27	108.86
12	5	129	ASN	CB-CA-C	-5.38	102.43	110.88
19	Z	459	CYS	CB-CA-C	5.38	118.76	110.14
20	N	500	ASN	OD1-CG-ND2	5.38	127.98	122.60
20	N	944	PRO	CA-C-O	-5.38	112.75	120.56
21	S	361	GLN	CB-CA-C	-5.38	101.85	110.79
22	P	242	SER	CA-C-N	5.38	129.13	120.30
22	P	242	SER	C-N-CA	5.38	129.13	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	232	GLY	CA-C-N	5.38	127.94	120.29
29	K	232	GLY	C-N-CA	5.38	127.94	120.29
26	O	209	GLY	N-CA-C	5.38	120.67	114.16
31	M	409	ILE	O-C-N	5.38	127.19	121.91
3	C	85	VAL	N-CA-C	-5.38	105.28	110.72
19	Z	159	VAL	O-C-N	5.38	127.37	121.83
19	Z	516	GLY	CA-C-N	5.38	129.85	120.86
19	Z	516	GLY	C-N-CA	5.38	129.85	120.86
20	N	4	SER	CA-C-N	5.38	129.71	120.72
20	N	4	SER	C-N-CA	5.38	129.71	120.72
21	S	309	LEU	N-CA-CB	-5.38	102.21	110.12
26	O	152	HIS	O-C-N	-5.38	116.53	122.07
29	K	251	PHE	N-CA-C	5.38	117.23	111.36
31	M	59	LYS	CA-C-O	5.38	126.25	120.55
31	M	370	GLN	OE1-CD-NE2	5.38	127.98	122.60
31	M	435	LYS	N-CA-CB	5.38	117.92	110.17
2	B	49	GLU	O-C-N	-5.38	116.40	123.02
2	B	71	HIS	ND1-CE1-NE2	5.38	113.78	108.40
21	S	469	GLN	CA-C-N	5.38	127.49	120.28
21	S	469	GLN	C-N-CA	5.38	127.49	120.28
11	4	143	LEU	CA-C-N	5.38	129.82	120.68
11	4	143	LEU	C-N-CA	5.38	129.82	120.68
22	P	32	GLU	CA-C-N	5.38	127.93	120.29
22	P	32	GLU	C-N-CA	5.38	127.93	120.29
23	Q	403	THR	N-CA-CB	5.38	118.03	110.12
27	H	349	GLU	O-C-N	-5.38	116.02	122.15
17	T	106	ASN	CA-CB-CG	-5.38	107.22	112.60
17	T	106	ASN	N-CA-C	-5.38	102.03	110.36
23	Q	188	ALA	N-CA-CB	5.38	117.81	110.01
2	B	109	GLN	O-C-N	5.38	128.28	122.15
3	C	164	ILE	N-CA-CB	5.38	120.27	111.45
20	N	108	TYR	O-C-N	5.38	127.61	122.07
22	P	142	ARG	CA-C-N	5.38	127.43	120.44
22	P	142	ARG	C-N-CA	5.38	127.43	120.44
27	H	316	LYS	CG-CD-CE	5.38	123.66	111.30
28	I	80	ARG	N-CA-CB	5.38	118.12	110.16
25	U	269	VAL	CB-CA-C	-5.37	104.89	112.14
31	M	84	LYS	O-C-N	5.37	127.82	122.12
32	J	304	ALA	O-C-N	5.37	127.60	122.07
2	B	2	ALA	CA-C-N	5.37	130.54	121.14
2	B	2	ALA	C-N-CA	5.37	130.54	121.14
8	1	191	ASN	CA-CB-CG	5.37	117.97	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	3	120	PHE	CA-C-N	-5.37	113.44	120.91
10	3	120	PHE	C-N-CA	-5.37	113.44	120.91
20	N	658	VAL	CA-C-N	5.37	127.42	120.44
20	N	658	VAL	C-N-CA	5.37	127.42	120.44
22	P	259	GLU	CA-C-O	-5.37	114.93	121.05
24	R	236	LEU	O-C-N	5.37	127.81	122.12
24	R	32	ARG	NE-CZ-NH2	-5.37	114.37	119.20
31	M	136	PHE	CB-CA-C	-5.37	101.38	110.19
1	A	43	ARG	CA-C-O	-5.37	114.62	120.36
1	A	227	PHE	N-CA-C	-5.37	100.49	109.24
20	N	154	ALA	N-CA-C	5.37	117.13	111.28
20	N	178	ALA	CA-C-N	5.37	127.47	120.28
20	N	178	ALA	C-N-CA	5.37	127.47	120.28
20	N	875	PHE	CB-CG-CD2	5.37	129.83	120.70
21	S	449	HIS	CB-CG-CD2	-5.37	124.22	131.20
23	Q	400	ALA	CA-C-N	5.37	127.47	120.28
23	Q	400	ALA	C-N-CA	5.37	127.47	120.28
25	U	145	HIS	ND1-CE1-NE2	5.37	113.77	108.40
25	U	273	HIS	CE1-NE2-CD2	-5.37	103.63	109.00
26	O	39	LEU	N-CA-CB	5.37	118.01	110.12
30	L	217	ILE	N-CA-C	-5.37	106.19	111.88
31	M	100	LEU	CB-CA-C	-5.37	99.74	110.42
4	D	175	ARG	CA-C-O	5.37	126.11	120.42
31	M	361	ASN	CA-C-N	5.37	127.47	120.28
31	M	361	ASN	C-N-CA	5.37	127.47	120.28
6	F	28	ALA	N-CA-C	-5.37	105.43	111.28
13	6	157	TYR	N-CA-C	-5.37	99.37	110.80
19	Z	39	LYS	CB-CA-C	-5.37	102.10	110.74
19	Z	397	LYS	CB-CA-C	-5.37	102.70	110.96
19	Z	590	PHE	CA-CB-CG	-5.37	108.43	113.80
29	K	358	VAL	CA-C-N	5.37	129.94	120.87
29	K	358	VAL	C-N-CA	5.37	129.94	120.87
31	M	342	ASP	CA-C-O	-5.37	114.59	120.17
12	5	181	SER	CB-CA-C	-5.36	102.79	110.62
30	L	81	GLU	CA-CB-CG	5.36	124.83	114.10
5	E	31	HIS	CE1-NE2-CD2	-5.36	103.64	109.00
22	P	158	ASP	CA-C-N	5.36	127.81	120.46
22	P	158	ASP	C-N-CA	5.36	127.81	120.46
24	R	125	ARG	CB-CA-C	-5.36	101.89	110.79
28	I	201	VAL	N-CA-C	5.36	115.62	110.74
6	F	228	ASP	CA-C-O	5.36	125.62	119.35
6	F	230	SER	CA-C-N	5.36	125.18	119.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	F	230	SER	C-N-CA	5.36	125.18	119.28
12	5	187	VAL	N-CA-C	-5.36	100.88	108.65
15	W	30	GLN	CB-CA-C	-5.36	101.89	110.79
17	T	144	LEU	CA-C-O	-5.36	114.87	120.55
19	Z	133	MET	CA-C-O	-5.36	113.81	119.97
19	Z	486	GLY	O-C-N	-5.36	117.04	122.19
21	S	329	ILE	O-C-N	5.36	127.07	121.87
24	R	271	PHE	CA-CB-CG	5.36	119.16	113.80
28	I	85	MET	CA-C-N	5.36	127.85	120.67
28	I	85	MET	C-N-CA	5.36	127.85	120.67
28	I	319	PHE	CA-C-N	5.36	130.97	121.80
28	I	319	PHE	C-N-CA	5.36	130.97	121.80
28	I	377	ASP	CA-CB-CG	5.36	117.96	112.60
30	L	155	GLN	N-CA-CB	5.36	118.09	110.16
31	M	56	LYS	CA-C-N	5.36	128.03	120.42
31	M	56	LYS	C-N-CA	5.36	128.03	120.42
32	J	202	ALA	CA-C-N	5.36	127.80	120.46
32	J	202	ALA	C-N-CA	5.36	127.80	120.46
19	Z	247	ALA	O-C-N	5.36	128.26	122.15
31	M	146	GLU	N-CA-CB	5.36	118.00	110.12
5	E	217	LEU	N-CA-C	-5.36	100.17	108.90
19	Z	706	ILE	CB-CA-C	-5.36	104.91	112.14
24	R	162	GLU	CA-C-O	-5.36	115.18	120.70
26	O	72	ASN	O-C-N	-5.36	115.16	121.32
7	G	43	LYS	N-CA-CB	5.36	118.52	110.65
14	7	49	MET	CA-C-N	5.36	128.57	120.75
14	7	49	MET	C-N-CA	5.36	128.57	120.75
14	7	174	VAL	CA-C-N	5.36	131.77	121.54
14	7	174	VAL	C-N-CA	5.36	131.77	121.54
14	7	179	PRO	CB-CA-C	5.36	117.93	110.17
20	N	75	GLU	CA-C-N	5.36	128.45	120.31
20	N	75	GLU	C-N-CA	5.36	128.45	120.31
20	N	574	LYS	N-CA-C	-5.35	106.01	112.54
3	C	121	TYR	CB-CG-CD2	-5.35	112.77	120.80
8	1	112	ALA	N-CA-C	5.35	116.92	111.14
13	6	67	SER	O-C-N	-5.35	115.17	121.32
15	W	181	ASP	CA-CB-CG	5.35	117.95	112.60
19	Z	292	LYS	CB-CA-C	-5.35	102.44	110.90
20	N	474	ARG	CA-C-N	5.35	127.40	120.44
20	N	474	ARG	C-N-CA	5.35	127.40	120.44
21	S	104	LEU	CA-C-N	5.35	127.45	120.28
21	S	104	LEU	C-N-CA	5.35	127.45	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	U	174	HIS	CA-C-N	5.35	127.45	120.28
25	U	174	HIS	C-N-CA	5.35	127.45	120.28
27	H	45	ILE	CB-CA-C	-5.35	105.12	111.97
15	W	163	LYS	CA-CB-CG	-5.35	103.40	114.10
2	B	112	GLN	OE1-CD-NE2	5.35	127.95	122.60
13	6	34	PHE	N-CA-C	-5.35	101.28	109.41
13	6	139	GLY	N-CA-C	-5.35	101.64	110.95
16	V	156	VAL	CA-CB-CG1	5.35	119.50	110.40
22	P	127	THR	CA-C-N	5.35	127.45	120.28
22	P	127	THR	C-N-CA	5.35	127.45	120.28
25	U	89	GLU	CB-CG-CD	-5.35	103.50	112.60
26	O	24	ARG	CA-C-N	5.35	127.45	120.28
26	O	24	ARG	C-N-CA	5.35	127.45	120.28
29	K	66	LYS	N-CA-CB	5.35	118.57	110.28
1	A	170	VAL	CA-C-N	5.35	130.10	122.08
1	A	170	VAL	C-N-CA	5.35	130.10	122.08
4	D	22	ALA	CA-C-N	5.35	128.44	120.31
4	D	22	ALA	C-N-CA	5.35	128.44	120.31
14	7	71	LEU	N-CA-C	-5.35	102.36	110.28
19	Z	766	GLN	CG-CD-NE2	5.35	124.42	116.40
19	Z	785	ARG	O-C-N	5.35	127.58	122.07
21	S	451	LYS	N-CA-C	-5.35	105.53	111.36
24	R	81	LEU	CA-C-N	5.35	127.45	120.28
24	R	81	LEU	C-N-CA	5.35	127.45	120.28
24	R	97	GLU	CA-C-N	5.35	127.71	120.44
24	R	97	GLU	C-N-CA	5.35	127.71	120.44
25	U	44	GLN	CB-CG-CD	-5.35	103.51	112.60
28	I	62	LEU	CA-C-N	5.35	127.45	120.28
28	I	62	LEU	C-N-CA	5.35	127.45	120.28
30	L	344	ALA	O-C-N	5.35	127.79	122.12
30	L	349	SER	N-CA-C	5.35	119.36	113.21
6	F	74	ILE	O-C-N	5.35	128.54	122.98
20	N	395	ARG	NH1-CZ-NH2	-5.35	112.35	119.30
24	R	244	ALA	N-CA-C	5.35	117.19	111.36
4	D	55	ASP	N-CA-C	-5.34	102.37	110.28
7	G	33	ASN	CA-CB-CG	5.34	117.94	112.60
12	5	218	ALA	O-C-N	5.34	127.58	122.07
20	N	752	THR	CA-C-N	5.34	129.57	120.91
20	N	752	THR	C-N-CA	5.34	129.57	120.91
20	N	889	LEU	N-CA-C	-5.34	99.97	109.06
24	R	31	HIS	CA-CB-CG	5.34	119.14	113.80
30	L	337	HIS	CE1-NE2-CD2	-5.34	103.66	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	E	86	LYS	CA-C-N	5.34	129.72	120.58
5	E	86	LYS	C-N-CA	5.34	129.72	120.58
19	Z	492	SER	N-CA-C	5.34	122.18	110.80
7	G	62	GLY	CA-C-N	5.34	130.61	122.65
7	G	62	GLY	C-N-CA	5.34	130.61	122.65
14	7	228	TYR	N-CA-C	5.34	117.79	111.33
14	7	252	ASN	CB-CA-C	-5.34	99.79	110.42
19	Z	648	ALA	O-C-N	5.34	127.78	122.12
20	N	253	TYR	CB-CG-CD2	-5.34	112.79	120.80
23	Q	78	ASN	CB-CA-C	-5.34	101.92	110.79
27	H	300	LEU	CA-C-O	5.34	126.43	120.82
28	I	197	ILE	CB-CG1-CD1	5.34	125.02	113.80
1	A	196	GLU	CB-CA-C	-5.34	101.93	110.79
20	N	901	GLN	CA-C-O	-5.34	115.16	120.66
21	S	29	ALA	CA-C-O	5.34	123.52	118.34
22	P	211	THR	CA-C-N	5.34	127.97	120.28
22	P	211	THR	C-N-CA	5.34	127.97	120.28
9	2	55	ILE	CA-CB-CG2	5.34	119.57	110.50
16	V	123	SER	N-CA-CB	5.34	118.53	110.42
20	N	665	ASN	CA-CB-CG	-5.34	107.26	112.60
4	D	68	ASN	O-C-N	5.34	127.35	121.85
22	P	227	TYR	N-CA-C	5.34	117.10	111.28
23	Q	23	SER	CA-C-N	5.34	127.28	120.56
23	Q	23	SER	C-N-CA	5.34	127.28	120.56
32	J	24	TYR	N-CA-C	5.34	116.90	111.14
11	4	194	ILE	N-CA-C	5.33	117.31	109.63
5	E	41	GLN	N-CA-CB	5.33	119.12	110.43
9	2	173	GLY	O-C-N	-5.33	116.47	122.28
11	4	80	ALA	O-C-N	5.33	128.23	122.15
14	7	133	HIS	CE1-NE2-CD2	-5.33	103.67	109.00
24	R	142	PHE	CA-CB-CG	-5.33	108.47	113.80
25	U	253	THR	CA-C-N	5.33	127.43	120.28
25	U	253	THR	C-N-CA	5.33	127.43	120.28
17	T	344	GLU	CA-C-N	5.33	127.86	120.29
17	T	344	GLU	C-N-CA	5.33	127.86	120.29
19	Z	121	PHE	CA-C-O	5.33	126.20	120.55
20	N	36	ALA	N-CA-C	5.33	116.78	111.07
22	P	363	ILE	CB-CA-C	-5.33	104.94	112.14
32	J	228	ALA	CA-C-O	5.33	126.20	120.55
24	R	42	MET	CA-C-N	5.33	127.42	120.28
24	R	42	MET	C-N-CA	5.33	127.42	120.28
1	A	97	GLU	CA-C-N	5.33	127.42	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	97	GLU	C-N-CA	5.33	127.42	120.28
3	C	8	ARG	NE-CZ-NH2	5.33	124.00	119.20
25	U	97	THR	O-C-N	-5.33	115.64	122.83
26	O	361	LYS	CA-C-N	5.33	127.37	120.44
26	O	361	LYS	C-N-CA	5.33	127.37	120.44
30	L	306	PRO	CA-C-N	5.33	131.69	122.05
30	L	306	PRO	C-N-CA	5.33	131.69	122.05
31	M	67	HIS	ND1-CE1-NE2	5.33	113.73	108.40
11	4	102	LEU	N-CA-CB	5.33	120.64	111.00
15	W	139	ASP	O-C-N	-5.33	117.01	123.29
15	W	173	VAL	CA-C-O	-5.33	112.81	119.95
24	R	372	LYS	CA-C-N	5.33	125.89	119.98
24	R	372	LYS	C-N-CA	5.33	125.89	119.98
27	H	150	HIS	N-CA-CB	5.33	118.01	110.13
27	H	312	ARG	N-CA-C	-5.33	101.20	109.14
2	B	128	ARG	CA-C-O	-5.32	115.16	120.96
3	C	87	THR	CA-C-N	5.32	127.41	120.28
3	C	87	THR	C-N-CA	5.32	127.41	120.28
13	6	85	HIS	N-CA-CB	5.32	119.49	110.49
14	7	85	ARG	CB-CG-CD	5.32	123.54	111.30
20	N	918	SER	CA-C-N	5.32	131.12	122.39
20	N	918	SER	C-N-CA	5.32	131.12	122.39
29	K	391	ARG	CB-CA-C	-5.32	101.02	109.80
31	M	46	GLN	N-CA-C	5.32	117.08	111.28
3	C	238	LYS	CA-C-N	5.32	127.41	120.28
3	C	238	LYS	C-N-CA	5.32	127.41	120.28
13	6	149	TYR	O-C-N	-5.32	117.08	123.31
14	7	95	LEU	CA-C-O	5.32	127.69	121.46
19	Z	47	GLU	CB-CA-C	-5.32	101.80	110.85
1	A	228	ARG	NE-CZ-NH2	-5.32	114.41	119.20
4	D	111	GLU	N-CA-C	5.32	117.16	111.36
19	Z	216	MET	CB-CA-C	-5.32	102.46	110.92
19	Z	707	LEU	CA-C-N	5.32	127.36	120.44
19	Z	707	LEU	C-N-CA	5.32	127.36	120.44
20	N	604	HIS	CE1-NE2-CD2	-5.32	103.68	109.00
20	N	605	VAL	CA-C-O	-5.32	115.42	120.95
10	3	152	SER	N-CA-CB	5.32	117.94	110.12
14	7	143	ARG	CA-C-N	5.32	127.41	120.28
14	7	143	ARG	C-N-CA	5.32	127.41	120.28
21	S	232	ARG	NE-CZ-NH2	-5.32	114.41	119.20
26	O	254	ALA	N-CA-C	5.32	117.99	111.82
27	H	183	GLN	N-CA-CB	5.32	117.94	110.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	H	321	THR	CA-C-N	5.32	131.32	122.54
27	H	321	THR	C-N-CA	5.32	131.32	122.54
10	3	57	ALA	N-CA-C	-5.32	99.47	110.80
10	3	188	HIS	N-CA-CB	5.32	118.92	110.57
15	W	45	PRO	N-CA-CB	5.32	108.41	103.41
23	Q	183	LEU	CA-C-O	-5.32	112.87	120.16
26	O	270	ARG	NH1-CZ-NH2	-5.32	112.39	119.30
30	L	373	HIS	CG-CD2-NE2	5.32	112.52	107.20
16	V	237	HIS	CB-CA-C	-5.32	101.97	110.79
22	P	65	ARG	CA-CB-CG	5.32	124.73	114.10
22	P	276	LEU	N-CA-CB	5.32	117.93	110.12
25	U	195	VAL	CB-CA-C	-5.32	105.17	111.97
26	O	238	TYR	CA-C-N	5.32	127.40	120.28
26	O	238	TYR	C-N-CA	5.32	127.40	120.28
31	M	433	LYS	O-C-N	-5.32	116.53	122.75
26	O	262	ALA	CB-CA-C	-5.31	101.97	110.79
28	I	81	ASN	N-CA-C	5.31	117.15	111.36
29	K	48	GLN	CA-C-N	5.31	127.40	120.28
29	K	48	GLN	C-N-CA	5.31	127.40	120.28
29	K	214	MET	CA-C-O	5.31	126.18	120.55
32	J	33	LEU	N-CA-C	5.31	116.88	111.14
13	6	93	LYS	N-CA-CB	5.31	118.02	110.16
14	7	249	ALA	CA-C-N	5.31	128.77	120.75
14	7	249	ALA	C-N-CA	5.31	128.77	120.75
20	N	923	GLU	N-CA-C	-5.31	101.80	109.29
21	S	196	ARG	NE-CZ-NH2	-5.31	114.42	119.20
22	P	79	GLU	CA-C-O	-5.31	114.79	120.42
24	R	364	TRP	N-CA-C	5.31	116.75	111.07
25	U	72	HIS	CA-CB-CG	-5.31	108.49	113.80
26	O	234	ILE	CA-CB-CG1	5.31	119.43	110.40
29	K	59	GLU	CA-C-O	-5.31	114.79	120.42
3	C	194	VAL	CA-C-N	5.31	127.40	120.28
3	C	194	VAL	C-N-CA	5.31	127.40	120.28
19	Z	550	LEU	N-CA-CB	-5.31	103.84	110.90
32	J	184	LYS	CA-C-O	-5.31	116.43	122.01
10	3	92	ALA	CB-CA-C	-5.31	101.97	110.79
19	Z	472	HIS	CA-C-N	5.31	132.47	121.32
19	Z	472	HIS	C-N-CA	5.31	132.47	121.32
20	N	619	VAL	N-CA-C	5.31	116.03	110.62
21	S	274	GLU	CA-C-O	5.31	125.91	119.38
21	S	444	GLU	N-CA-C	5.31	122.11	110.80
27	H	202	VAL	CA-C-N	5.31	127.39	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	H	202	VAL	C-N-CA	5.31	127.39	120.28
29	K	184	PRO	CA-N-CD	-5.31	104.57	112.00
31	M	367	ARG	CD-NE-CZ	-5.31	116.97	124.40
2	B	111	VAL	CA-CB-CG2	5.31	119.42	110.40
6	F	175	HIS	CE1-NE2-CD2	-5.31	103.69	109.00
12	5	205	ASP	O-C-N	-5.31	117.20	123.25
29	K	71	GLU	CA-C-O	-5.31	114.92	120.55
6	F	107	ARG	CA-C-O	-5.31	114.80	120.42
17	T	115	CYS	CA-C-N	5.31	125.87	119.98
17	T	115	CYS	C-N-CA	5.31	125.87	119.98
21	S	462	ILE	N-CA-C	-5.31	107.55	112.43
25	U	196	HIS	CE1-NE2-CD2	-5.31	103.69	109.00
4	D	2	SER	CA-C-N	5.30	127.39	120.28
4	D	2	SER	C-N-CA	5.30	127.39	120.28
12	5	97	ASN	OD1-CG-ND2	-5.30	117.30	122.60
19	Z	727	PHE	N-CA-CB	5.30	117.70	110.01
19	Z	771	LEU	CA-C-N	5.30	129.28	121.96
19	Z	771	LEU	C-N-CA	5.30	129.28	121.96
21	S	77	GLN	N-CA-C	5.30	117.87	111.40
21	S	317	ALA	CA-C-N	5.30	131.52	121.97
21	S	317	ALA	C-N-CA	5.30	131.52	121.97
28	I	347	ILE	CA-C-N	5.30	131.67	121.54
28	I	347	ILE	C-N-CA	5.30	131.67	121.54
30	L	329	ILE	O-C-N	-5.30	116.37	121.83
8	1	203	SER	O-C-N	5.30	128.70	122.34
10	3	66	ARG	N-CA-CB	5.30	117.70	110.01
20	N	943	GLU	CB-CA-C	-5.30	99.73	110.17
23	Q	338	VAL	CA-C-N	5.30	128.99	120.30
23	Q	338	VAL	C-N-CA	5.30	128.99	120.30
24	R	344	HIS	ND1-CE1-NE2	5.30	113.70	108.40
32	J	51	GLU	CA-C-N	5.30	127.82	120.29
32	J	51	GLU	C-N-CA	5.30	127.82	120.29
4	D	92	ARG	CA-C-O	-5.30	114.80	120.42
6	F	211	SER	N-CA-C	-5.30	100.76	109.40
16	V	134	GLU	N-CA-C	5.30	117.06	111.28
19	Z	681	TYR	CA-C-N	5.30	125.83	120.00
19	Z	681	TYR	C-N-CA	5.30	125.83	120.00
23	Q	184	PRO	N-CD-CG	5.30	111.15	103.20
28	I	378	VAL	CA-C-N	5.30	128.23	120.71
28	I	378	VAL	C-N-CA	5.30	128.23	120.71
29	K	396	ALA	CA-C-N	5.30	128.37	120.31
29	K	396	ALA	C-N-CA	5.30	128.37	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	64	ARG	CA-CB-CG	5.30	124.70	114.10
32	J	365	GLU	CA-C-N	5.30	127.38	120.28
32	J	365	GLU	C-N-CA	5.30	127.38	120.28
14	7	109	GLN	CA-C-O	-5.30	114.80	120.42
19	Z	576	ILE	CA-C-N	5.30	127.91	120.28
19	Z	576	ILE	C-N-CA	5.30	127.91	120.28
24	R	136	HIS	ND1-CE1-NE2	5.30	113.70	108.40
16	V	283	HIS	CA-C-N	5.30	127.38	120.28
16	V	283	HIS	C-N-CA	5.30	127.38	120.28
19	Z	267	ARG	N-CA-C	-5.30	105.59	111.36
20	N	173	VAL	N-CA-C	5.30	118.71	112.35
23	Q	154	LEU	N-CA-C	-5.30	105.51	111.28
29	K	326	ARG	CG-CD-NE	-5.30	100.35	112.00
26	O	7	PHE	O-C-N	5.29	128.19	122.15
14	7	253	TRP	CE2-CD2-CE3	5.29	124.09	118.80
15	W	18	ASN	O-C-N	-5.29	116.43	122.89
15	W	149	ASN	CA-C-N	5.29	128.36	120.90
15	W	149	ASN	C-N-CA	5.29	128.36	120.90
16	V	52	GLU	O-C-N	-5.29	116.85	123.04
16	V	113	HIS	CE1-NE2-CD2	-5.29	103.71	109.00
16	V	199	HIS	N-CA-C	5.29	117.86	111.40
26	O	174	LYS	O-C-N	-5.29	116.62	122.07
27	H	369	ARG	NE-CZ-NH1	5.29	126.79	121.50
28	I	387	LYS	O-C-N	-5.29	116.98	122.96
29	K	273	LYS	CA-C-O	-5.29	114.94	120.55
1	A	68	HIS	CE1-NE2-CD2	-5.29	103.71	109.00
7	G	107	ILE	N-CA-CB	5.29	118.62	111.21
16	V	52	GLU	CB-CA-C	-5.29	101.22	109.84
20	N	762	GLY	CA-C-O	5.29	126.71	121.00
21	S	355	PRO	CB-CA-C	-5.29	103.95	112.21
21	S	374	VAL	N-CA-CB	5.29	118.52	110.58
24	R	124	PHE	CA-CB-CG	-5.29	108.51	113.80
27	H	103	ASN	CA-CB-CG	5.29	117.89	112.60
31	M	199	GLN	N-CA-C	5.29	117.05	111.28
5	E	228	MET	N-CA-CB	5.29	119.05	110.43
22	P	309	PHE	CA-C-O	-5.29	114.81	120.42
24	R	182	VAL	N-CA-C	-5.29	105.22	110.62
29	K	372	GLY	CA-C-O	5.29	126.11	120.40
30	L	387	LYS	CA-C-N	5.29	128.83	120.47
30	L	387	LYS	C-N-CA	5.29	128.83	120.47
2	B	69	THR	N-CA-C	-5.29	101.37	108.19
3	C	237	ILE	CA-C-O	-5.29	115.18	121.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	2	136	TYR	N-CA-C	5.29	122.06	110.80
17	T	283	GLU	CB-CA-C	-5.29	101.86	110.85
21	S	69	GLU	CA-CB-CG	-5.29	103.52	114.10
23	Q	206	LEU	O-C-N	5.29	128.18	122.15
32	J	325	ARG	N-CA-C	-5.29	105.52	111.28
2	B	100	VAL	CB-CA-C	-5.29	105.05	111.87
6	F	138	ASP	CA-C-N	5.29	129.55	120.72
6	F	138	ASP	C-N-CA	5.29	129.55	120.72
12	5	66	LYS	O-C-N	-5.29	117.23	123.41
12	5	179	ARG	NE-CZ-NH2	5.29	123.96	119.20
17	T	285	ILE	N-CA-CB	5.29	118.40	112.32
20	N	499	THR	CB-CA-C	-5.29	102.01	110.79
25	U	199	LYS	O-C-N	5.29	128.18	122.15
30	L	307	GLY	N-CA-C	-5.29	108.03	115.32
32	J	9	MET	CA-C-N	5.29	130.13	122.36
32	J	9	MET	C-N-CA	5.29	130.13	122.36
4	D	246	GLU	CA-C-O	-5.28	111.82	120.80
8	1	92	VAL	N-CA-CB	5.28	118.51	110.58
15	W	77	THR	CA-C-O	-5.28	113.89	119.97
19	Z	705	ASN	CA-C-N	5.28	127.70	120.46
19	Z	705	ASN	C-N-CA	5.28	127.70	120.46
21	S	72	LYS	CA-C-N	5.28	128.81	120.89
21	S	72	LYS	C-N-CA	5.28	128.81	120.89
23	Q	144	GLN	N-CA-C	5.28	117.12	111.36
25	U	215	VAL	O-C-N	-5.28	116.40	121.90
28	I	276	GLU	CA-C-N	5.28	129.54	120.72
28	I	276	GLU	C-N-CA	5.28	129.54	120.72
29	K	405	THR	N-CA-CB	5.28	117.89	110.12
20	N	609	ASP	N-CA-C	5.28	117.95	110.50
32	J	285	ALA	N-CA-C	-5.28	107.00	113.50
20	N	905	PRO	O-C-N	5.28	129.48	122.30
21	S	143	PHE	CA-CB-CG	5.28	119.08	113.80
22	P	30	GLU	CA-C-N	5.28	127.36	120.28
22	P	30	GLU	C-N-CA	5.28	127.36	120.28
22	P	151	THR	CA-CB-OG1	5.28	117.52	109.60
22	P	416	GLN	N-CA-CB	5.28	117.91	110.36
23	Q	310	ARG	N-CA-C	5.28	122.05	110.80
30	L	122	MET	CA-C-O	-5.28	115.26	120.70
1	A	51	VAL	N-CA-CB	5.28	119.23	111.52
19	Z	379	GLY	CA-C-O	-5.28	114.99	120.90
22	P	351	TRP	CA-C-O	-5.28	114.82	120.42
29	K	312	ASN	CA-C-O	-5.28	114.82	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	F	115	LYS	N-CA-C	5.28	117.11	111.36
10	3	137	VAL	O-C-N	-5.28	115.97	122.57
17	T	341	GLN	CA-C-N	5.28	127.69	120.46
17	T	341	GLN	C-N-CA	5.28	127.69	120.46
24	R	307	LEU	CA-C-N	5.28	127.78	120.29
24	R	307	LEU	C-N-CA	5.28	127.78	120.29
25	U	83	LYS	CA-C-N	5.28	127.35	120.28
25	U	83	LYS	C-N-CA	5.28	127.35	120.28
28	I	268	ARG	NE-CZ-NH2	5.28	123.95	119.20
2	B	190	THR	O-C-N	-5.28	115.78	122.27
7	G	94	GLU	CA-C-N	5.28	127.35	120.28
7	G	94	GLU	C-N-CA	5.28	127.35	120.28
16	V	75	MET	CA-C-N	5.28	126.44	119.84
16	V	75	MET	C-N-CA	5.28	126.44	119.84
19	Z	427	THR	N-CA-C	5.28	117.03	111.28
27	H	414	ASN	N-CA-CB	5.28	117.87	110.12
6	F	180	MET	CG-SD-CE	-5.27	89.30	100.90
10	3	101	GLY	O-C-N	5.27	127.04	121.77
20	N	341	PHE	CB-CG-CD2	-5.27	111.73	120.70
25	U	279	LYS	CA-C-O	5.27	126.36	120.82
29	K	81	ARG	N-CA-CB	5.27	117.87	110.12
32	J	134	LEU	CA-C-N	5.27	127.20	120.56
32	J	134	LEU	C-N-CA	5.27	127.20	120.56
5	E	238	ILE	CA-C-N	5.27	127.60	120.38
5	E	238	ILE	C-N-CA	5.27	127.60	120.38
6	F	207	THR	CA-C-N	5.27	130.94	121.66
6	F	207	THR	C-N-CA	5.27	130.94	121.66
19	Z	33	ARG	N-CA-C	5.27	119.63	111.56
26	O	54	ASP	O-C-N	-5.27	117.24	123.25
27	H	98	CYS	N-CA-C	-5.27	101.18	109.25
19	Z	791	VAL	CA-C-N	5.27	127.87	120.28
19	Z	791	VAL	C-N-CA	5.27	127.87	120.28
1	A	146	GLU	CA-C-N	5.27	127.61	120.44
1	A	146	GLU	C-N-CA	5.27	127.61	120.44
5	E	120	ALA	CB-CA-C	-5.27	102.61	110.88
6	F	175	HIS	CG-CD2-NE2	5.27	112.47	107.20
6	F	176	MET	CB-CA-C	-5.27	102.04	110.79
19	Z	117	GLU	N-CA-C	5.27	117.10	111.36
19	Z	136	GLU	N-CA-CB	5.27	118.45	110.28
20	N	579	ARG	CB-CG-CD	5.27	123.42	111.30
21	S	278	ASN	CA-CB-CG	-5.27	107.33	112.60
22	P	84	ASN	N-CA-CB	5.27	119.14	110.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	244	ALA	CA-C-N	5.27	127.29	120.44
24	R	244	ALA	C-N-CA	5.27	127.29	120.44
26	O	115	LYS	N-CA-C	-5.27	105.62	111.36
26	O	119	GLY	N-CA-C	5.27	119.05	112.73
28	I	272	ARG	N-CA-C	5.27	116.71	111.07
29	K	344	ILE	N-CA-CB	5.27	118.48	110.58
29	K	388	ARG	NE-CZ-NH2	-5.27	114.46	119.20
32	J	203	VAL	CA-C-N	5.27	127.34	120.28
32	J	203	VAL	C-N-CA	5.27	127.34	120.28
23	Q	164	ALA	N-CA-C	5.27	117.02	111.28
23	Q	212	MET	CA-C-N	5.27	127.34	120.28
23	Q	212	MET	C-N-CA	5.27	127.34	120.28
29	K	401	LYS	N-CA-C	5.27	117.10	111.36
17	T	321	PHE	CA-C-N	5.27	127.34	120.28
17	T	321	PHE	C-N-CA	5.27	127.34	120.28
2	B	48	THR	CA-CB-OG1	5.26	117.50	109.60
9	2	143	LEU	CA-C-N	5.26	126.66	120.71
9	2	143	LEU	C-N-CA	5.26	126.66	120.71
10	3	145	GLN	CA-C-N	5.26	127.33	120.28
10	3	145	GLN	C-N-CA	5.26	127.33	120.28
12	5	99	TYR	CB-CA-C	-5.26	101.26	112.63
15	W	98	LYS	CB-CA-C	-5.26	102.05	110.79
16	V	74	ALA	O-C-N	5.26	129.22	123.27
31	M	281	LYS	N-CA-CB	5.26	119.39	110.49
32	J	21	ARG	CA-C-N	5.26	127.86	120.28
32	J	21	ARG	C-N-CA	5.26	127.86	120.28
2	B	172	THR	CA-CB-OG1	5.26	117.50	109.60
20	N	27	LEU	N-CA-C	-5.26	105.54	111.28
21	S	367	ASN	CA-CB-CG	5.26	117.86	112.60
1	A	103	TYR	CB-CA-C	-5.26	102.58	110.90
9	2	46	ILE	CB-CA-C	-5.26	104.41	110.41
10	3	67	LEU	N-CA-C	-5.26	105.62	111.36
12	5	124	ILE	N-CA-C	5.26	116.03	110.72
12	5	149	TYR	CB-CG-CD2	-5.26	112.91	120.80
19	Z	142	TYR	CA-C-O	-5.26	114.97	120.55
20	N	25	HIS	N-CA-CB	5.26	117.64	110.01
20	N	607	VAL	CA-C-N	5.26	128.31	120.31
20	N	607	VAL	C-N-CA	5.26	128.31	120.31
21	S	252	ARG	CB-CA-C	-5.26	101.91	110.85
24	R	383	LEU	CB-CA-C	-5.26	101.91	110.85
30	L	138	HIS	ND1-CE1-NE2	5.26	113.66	108.40
8	1	85	THR	CA-C-N	5.26	127.76	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	1	85	THR	C-N-CA	5.26	127.76	120.29
19	Z	756	PRO	CA-C-N	5.26	131.59	121.54
19	Z	756	PRO	C-N-CA	5.26	131.59	121.54
20	N	752	THR	N-CA-C	-5.26	106.25	113.30
21	S	236	LEU	CA-C-N	5.26	128.30	120.31
21	S	236	LEU	C-N-CA	5.26	128.30	120.31
22	P	270	VAL	CB-CA-C	-5.26	105.24	111.97
22	P	453	HIS	N-CA-C	-5.26	104.52	112.99
23	Q	288	LYS	CA-C-N	5.26	127.76	120.29
23	Q	288	LYS	C-N-CA	5.26	127.76	120.29
26	O	212	ASN	CB-CA-C	-5.26	103.97	112.07
14	7	199	GLU	CA-C-N	5.26	128.30	120.31
14	7	199	GLU	C-N-CA	5.26	128.30	120.31
19	Z	190	GLU	N-CA-C	5.26	117.09	111.36
28	I	130	GLU	N-CA-C	-5.26	102.74	110.52
31	M	263	PHE	CA-C-N	5.26	127.89	120.42
31	M	263	PHE	C-N-CA	5.26	127.89	120.42
9	2	96	ASP	N-CA-CB	5.26	117.94	110.16
12	5	193	TYR	CA-C-N	5.26	127.32	120.28
12	5	193	TYR	C-N-CA	5.26	127.32	120.28
23	Q	387	ILE	O-C-N	-5.26	117.78	123.14
24	R	50	MET	CA-C-N	5.26	126.66	120.09
24	R	50	MET	C-N-CA	5.26	126.66	120.09
28	I	263	GLY	O-C-N	5.26	127.03	121.77
20	N	111	GLN	CA-C-N	5.25	127.32	120.28
20	N	111	GLN	C-N-CA	5.25	127.32	120.28
20	N	388	ASP	N-CA-CB	5.25	117.94	110.16
24	R	197	ALA	N-CA-CB	5.25	117.84	110.12
3	C	93	ILE	CB-CA-C	-5.25	104.97	112.22
4	D	40	ILE	N-CA-C	-5.25	101.42	108.35
5	E	219	THR	N-CA-C	-5.25	100.83	109.40
10	3	154	TRP	CB-CG-CD1	5.25	134.78	126.90
15	W	90	ILE	CA-C-O	5.25	126.42	120.85
19	Z	105	LYS	CB-CA-C	-5.25	101.92	110.85
20	N	387	ARG	NE-CZ-NH1	-5.25	116.25	121.50
20	N	881	PRO	CB-CA-C	5.25	118.11	111.39
21	S	208	TYR	O-C-N	5.25	128.14	122.15
22	P	329	ARG	NE-CZ-NH1	5.25	126.75	121.50
31	M	211	HIS	ND1-CE1-NE2	5.25	113.65	108.40
10	3	72	ASN	CA-CB-CG	-5.25	107.35	112.60
16	V	226	MET	CA-C-N	5.25	127.84	120.28
16	V	226	MET	C-N-CA	5.25	127.84	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	478	ARG	CA-C-N	5.25	127.27	120.44
19	Z	478	ARG	C-N-CA	5.25	127.27	120.44
19	Z	497	VAL	N-CA-C	5.25	115.47	110.53
22	P	415	PHE	CA-CB-CG	-5.25	108.55	113.80
22	P	425	LEU	CA-C-N	5.25	127.75	120.29
22	P	425	LEU	C-N-CA	5.25	127.75	120.29
23	Q	175	LYS	CA-C-N	5.25	127.32	120.28
23	Q	175	LYS	C-N-CA	5.25	127.32	120.28
24	R	136	HIS	N-CA-C	5.25	117.91	111.82
25	U	239	ASP	CA-CB-CG	-5.25	107.35	112.60
25	U	267	ARG	CA-C-N	5.25	127.27	120.44
25	U	267	ARG	C-N-CA	5.25	127.27	120.44
27	H	242	GLY	O-C-N	-5.25	117.09	122.19
30	L	243	ILE	CA-CB-CG2	-5.25	101.57	110.50
31	M	331	VAL	N-CA-C	-5.25	100.68	108.45
7	G	38	ILE	N-CA-C	-5.25	100.77	108.85
19	Z	798	THR	N-CA-C	5.25	117.00	111.28
30	L	342	TYR	CA-C-N	5.25	127.32	120.28
30	L	342	TYR	C-N-CA	5.25	127.32	120.28
10	3	65	GLN	OE1-CD-NE2	5.25	127.85	122.60
12	5	233	VAL	O-C-N	-5.25	116.01	122.57
20	N	648	VAL	CA-C-N	5.25	127.31	120.28
20	N	648	VAL	C-N-CA	5.25	127.31	120.28
21	S	427	PRO	N-CD-CG	5.25	111.07	103.20
30	L	388	VAL	O-C-N	5.25	127.17	121.87
11	4	76	SER	N-CA-CB	5.25	117.95	110.03
19	Z	292	LYS	CA-C-N	5.25	131.56	121.54
19	Z	292	LYS	C-N-CA	5.25	131.56	121.54
29	K	74	HIS	CA-C-N	5.25	127.74	120.29
29	K	74	HIS	C-N-CA	5.25	127.74	120.29
19	Z	794	ALA	N-CA-C	5.25	117.68	111.33
21	S	196	ARG	N-CA-C	-5.25	101.30	108.38
22	P	201	ARG	N-CA-C	5.25	117.00	111.28
4	D	201	LEU	N-CA-C	5.24	117.74	111.71
19	Z	55	GLU	CB-CG-CD	5.24	121.52	112.60
19	Z	443	GLY	O-C-N	5.24	127.22	122.19
20	N	661	ALA	CB-CA-C	-5.24	100.93	110.63
20	N	694	ILE	N-CA-C	5.24	115.46	110.53
28	I	103	ARG	CD-NE-CZ	-5.24	117.06	124.40
30	L	340	ILE	N-CA-C	-5.24	106.77	113.22
7	G	116	VAL	CA-CB-CG2	-5.24	101.49	110.40
8	1	110	HIS	ND1-CE1-NE2	5.24	113.64	108.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	145	VAL	CA-CB-CG1	5.24	119.31	110.40
20	N	756	HIS	CE1-NE2-CD2	-5.24	103.76	109.00
25	U	249	PHE	N-CA-C	5.24	117.67	111.33
27	H	74	PRO	N-CA-C	5.24	117.09	110.70
12	5	232	ALA	O-C-N	-5.24	117.61	123.48
17	T	298	THR	N-CA-C	-5.24	102.08	110.10
21	S	276	ALA	O-C-N	-5.24	116.79	123.24
23	Q	175	LYS	CA-C-O	-5.24	114.99	120.55
27	H	230	ALA	N-CA-C	5.24	116.99	111.28
29	K	284	GLU	CA-C-N	5.24	127.64	120.46
29	K	284	GLU	C-N-CA	5.24	127.64	120.46
15	W	120	ASN	N-CA-CB	5.24	117.75	110.26
20	N	679	PRO	CA-C-N	5.24	127.60	120.63
20	N	679	PRO	C-N-CA	5.24	127.60	120.63
26	O	364	GLU	CA-C-O	-5.24	115.00	120.55
29	K	144	PRO	CA-C-N	5.24	124.93	119.64
29	K	144	PRO	C-N-CA	5.24	124.93	119.64
29	K	389	GLU	CA-CB-CG	5.24	124.58	114.10
31	M	212	LYS	CB-CA-C	-5.24	102.09	110.79
6	F	232	PHE	CA-C-N	5.24	127.73	120.29
6	F	232	PHE	C-N-CA	5.24	127.73	120.29
3	C	66	TYR	N-CA-C	-5.24	101.16	109.59
12	5	146	VAL	CA-C-N	5.24	127.72	120.29
12	5	146	VAL	C-N-CA	5.24	127.72	120.29
16	V	303	MET	N-CA-CB	5.24	117.82	110.12
27	H	138	MET	O-C-N	5.24	129.34	123.06
10	3	31	GLN	CG-CD-NE2	-5.23	108.55	116.40
7	G	103	PHE	N-CA-C	-5.23	105.66	111.36
15	W	163	LYS	CB-CA-C	5.23	118.06	110.79
19	Z	580	LEU	CB-CA-C	-5.23	102.11	110.79
27	H	78	TRP	CB-CG-CD2	-5.23	119.47	126.80
31	M	357	PHE	CA-C-O	-5.23	114.78	119.59
1	A	126	THR	O-C-N	5.23	127.66	122.12
2	B	109	GLN	OE1-CD-NE2	5.23	127.83	122.60
10	3	158	MET	CG-SD-CE	-5.23	89.39	100.90
15	W	130	ARG	NE-CZ-NH2	-5.23	114.49	119.20
24	R	324	GLY	O-C-N	-5.23	115.75	122.39
28	I	431	GLN	N-CA-CB	5.23	117.90	110.16
29	K	38	GLU	N-CA-C	5.23	117.89	111.82
30	L	51	THR	N-CA-C	-5.23	105.66	111.36
31	M	328	GLN	CB-CA-C	-5.23	102.64	110.90
32	J	327	ASP	CA-C-O	5.23	126.31	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	6	155	GLY	CA-C-N	5.23	129.44	120.71
13	6	155	GLY	C-N-CA	5.23	129.44	120.71
16	V	189	ILE	CA-C-N	5.23	127.55	120.44
16	V	189	ILE	C-N-CA	5.23	127.55	120.44
26	O	21	VAL	CA-C-O	-5.23	115.63	121.17
7	G	111	HIS	ND1-CE1-NE2	5.23	113.63	108.40
14	7	105	GLN	CA-C-N	5.23	127.55	120.44
14	7	105	GLN	C-N-CA	5.23	127.55	120.44
19	Z	41	LYS	CA-C-N	5.23	128.26	120.31
19	Z	41	LYS	C-N-CA	5.23	128.26	120.31
23	Q	124	PHE	CA-C-N	5.23	127.71	120.29
23	Q	124	PHE	C-N-CA	5.23	127.71	120.29
23	Q	352	SER	CA-C-N	5.23	127.55	120.44
23	Q	352	SER	C-N-CA	5.23	127.55	120.44
24	R	253	LEU	O-C-N	-5.23	115.31	121.32
25	U	274	ASN	CA-C-N	5.23	127.29	120.28
25	U	274	ASN	C-N-CA	5.23	127.29	120.28
31	M	251	PHE	CA-CB-CG	-5.23	108.57	113.80
9	2	105	ASN	OD1-CG-ND2	5.23	127.83	122.60
28	I	89	GLU	N-CA-C	-5.23	101.18	109.59
29	K	328	ASP	N-CA-C	-5.23	105.27	110.97
32	J	110	PRO	N-CA-CB	-5.23	98.93	103.32
6	F	151	ALA	CA-C-N	5.22	128.52	121.05
6	F	151	ALA	C-N-CA	5.22	128.52	121.05
13	6	94	ILE	CA-CB-CG1	5.22	119.28	110.40
16	V	297	VAL	N-CA-CB	5.22	118.42	110.58
21	S	87	PRO	N-CA-C	-5.22	108.70	114.92
26	O	130	ALA	CA-C-N	5.22	127.28	120.28
26	O	130	ALA	C-N-CA	5.22	127.28	120.28
26	O	219	HIS	CE1-NE2-CD2	-5.22	103.78	109.00
29	K	285	VAL	CA-C-N	5.22	127.71	120.29
29	K	285	VAL	C-N-CA	5.22	127.71	120.29
12	5	216	ARG	NE-CZ-NH2	5.22	123.90	119.20
12	5	255	HIS	CG-CD2-NE2	5.22	112.42	107.20
16	V	247	GLU	O-C-N	-5.22	116.58	122.12
20	N	115	ASN	CA-C-N	5.22	127.80	120.28
20	N	115	ASN	C-N-CA	5.22	127.80	120.28
21	S	475	ARG	NE-CZ-NH1	-5.22	116.28	121.50
23	Q	172	LEU	CA-C-N	5.22	127.28	120.28
23	Q	172	LEU	C-N-CA	5.22	127.28	120.28
28	I	122	ILE	O-C-N	-5.22	117.62	123.26
28	I	346	ARG	N-CA-C	-5.22	106.85	113.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	112	VAL	CA-CB-CG1	5.22	119.28	110.40
20	N	902	PRO	N-CA-C	5.22	120.63	113.84
28	I	103	ARG	CA-C-O	5.22	126.93	121.19
1	A	145	GLU	CA-C-O	5.22	126.79	119.80
19	Z	704	LEU	CB-CA-C	-5.22	99.08	109.99
20	N	102	ALA	CA-C-N	5.22	127.70	120.29
20	N	102	ALA	C-N-CA	5.22	127.70	120.29
21	S	375	LEU	O-C-N	5.22	127.45	122.07
5	E	110	GLU	N-CA-CB	-5.22	102.45	110.12
7	G	188	ARG	NE-CZ-NH2	-5.22	114.50	119.20
16	V	276	GLY	CA-C-N	5.22	128.51	121.05
16	V	276	GLY	C-N-CA	5.22	128.51	121.05
17	T	98	TYR	N-CA-C	-5.22	106.69	113.16
19	Z	133	MET	O-C-N	5.22	128.69	122.27
31	M	169	THR	N-CA-CB	5.22	117.68	110.17
8	1	80	GLY	CA-C-N	5.22	131.50	121.54
8	1	80	GLY	C-N-CA	5.22	131.50	121.54
13	6	106	ASN	CA-C-N	5.22	127.53	120.44
13	6	106	ASN	C-N-CA	5.22	127.53	120.44
13	6	197	ARG	CD-NE-CZ	-5.22	117.10	124.40
16	V	41	MET	CA-C-N	5.22	127.27	120.28
16	V	41	MET	C-N-CA	5.22	127.27	120.28
17	T	213	THR	CA-C-N	5.22	127.70	120.29
17	T	213	THR	C-N-CA	5.22	127.70	120.29
19	Z	871	PRO	N-CA-CB	5.22	107.69	103.36
20	N	35	TRP	CA-C-N	5.22	127.22	120.44
20	N	35	TRP	C-N-CA	5.22	127.22	120.44
23	Q	20	ARG	CA-C-O	5.22	125.97	119.97
29	K	185	LEU	O-C-N	5.22	127.72	122.09
30	L	336	LYS	N-CA-C	-5.22	101.34	108.38
8	1	82	ALA	CA-C-N	5.21	127.27	120.28
8	1	82	ALA	C-N-CA	5.21	127.27	120.28
9	2	111	LEU	N-CA-CB	5.21	117.88	110.16
11	4	76	SER	O-C-N	5.21	127.27	121.43
17	T	327	LYS	CA-C-N	5.21	124.93	119.82
17	T	327	LYS	C-N-CA	5.21	124.93	119.82
19	Z	868	HIS	N-CA-CB	5.21	119.98	111.74
21	S	312	ALA	CA-C-N	5.21	126.36	119.84
21	S	312	ALA	C-N-CA	5.21	126.36	119.84
23	Q	25	ASP	CA-C-N	5.21	127.13	120.56
23	Q	25	ASP	C-N-CA	5.21	127.13	120.56
31	M	239	LEU	N-CA-CB	5.21	117.79	110.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	190	GLY	O-C-N	-5.21	116.56	121.77
5	E	213	THR	CA-CB-OG1	5.21	117.42	109.60
19	Z	217	LEU	CA-C-N	5.21	127.72	120.63
19	Z	217	LEU	C-N-CA	5.21	127.72	120.63
19	Z	712	LYS	CA-C-N	5.21	127.69	120.29
19	Z	712	LYS	C-N-CA	5.21	127.69	120.29
1	A	232	GLU	O-C-N	5.21	128.32	122.22
12	5	89	THR	N-CA-C	-5.21	100.88	108.07
22	P	195	ALA	CB-CA-C	-5.21	102.70	110.88
22	P	368	LYS	N-CA-C	5.21	116.77	111.14
31	M	69	LEU	CA-C-O	-5.21	115.03	120.55
1	A	205	VAL	CA-C-N	5.21	127.69	120.29
1	A	205	VAL	C-N-CA	5.21	127.69	120.29
29	K	302	ASN	N-CA-C	-5.21	101.89	108.45
10	3	35	VAL	CB-CA-C	-5.21	103.75	110.84
14	7	258	MET	CA-C-N	5.21	129.18	120.64
14	7	258	MET	C-N-CA	5.21	129.18	120.64
19	Z	48	GLU	CA-C-N	5.21	127.69	120.29
19	Z	48	GLU	C-N-CA	5.21	127.69	120.29
22	P	246	HIS	ND1-CE1-NE2	5.21	113.61	108.40
26	O	68	GLU	CA-C-N	-5.21	113.56	121.53
26	O	68	GLU	C-N-CA	-5.21	113.56	121.53
11	4	162	LYS	N-CA-CB	5.21	117.77	110.12
15	W	59	GLU	CA-C-N	5.21	128.99	122.43
15	W	59	GLU	C-N-CA	5.21	128.99	122.43
15	W	92	VAL	N-CA-C	5.21	117.60	111.09
19	Z	293	GLN	CB-CG-CD	-5.21	103.75	112.60
21	S	175	LYS	CG-CD-CE	5.21	123.28	111.30
29	K	129	SER	N-CA-CB	5.21	117.67	110.17
32	J	348	ALA	N-CA-CB	5.21	117.77	110.12
1	A	193	GLN	CA-C-N	5.21	127.68	120.29
1	A	193	GLN	C-N-CA	5.21	127.68	120.29
5	E	179	SER	N-CA-CB	5.21	118.24	110.22
19	Z	493	ASN	CB-CA-C	-5.21	102.64	111.02
19	Z	757	ASN	N-CA-C	5.21	121.89	110.80
30	L	344	ALA	N-CA-C	5.21	116.95	111.28
6	F	106	SER	CA-C-N	5.20	127.68	120.29
6	F	106	SER	C-N-CA	5.20	127.68	120.29
7	G	93	ARG	N-CA-CB	5.20	117.86	110.16
19	Z	22	SER	N-CA-C	5.20	116.64	111.07
19	Z	36	ALA	CB-CA-C	-5.20	102.71	110.88
19	Z	430	ASP	CA-C-O	-5.20	115.03	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	803	PHE	CA-C-N	5.20	130.74	122.62
19	Z	803	PHE	C-N-CA	5.20	130.74	122.62
20	N	127	ASP	CA-C-O	-5.20	116.15	121.87
26	O	287	ASN	CA-C-O	-5.20	114.46	120.24
30	L	89	ASN	N-CA-C	-5.20	105.69	111.36
30	L	347	LYS	N-CA-C	5.20	116.64	111.07
31	M	104	PRO	N-CA-C	5.20	118.66	110.80
31	M	147	LYS	CA-C-O	5.20	125.94	120.42
8	1	209	LEU	CA-C-O	5.20	126.04	120.32
16	V	110	GLY	N-CA-C	-5.20	103.61	110.74
19	Z	753	ALA	N-CA-C	5.20	116.64	111.07
24	R	179	ARG	CB-CA-C	-5.20	102.16	110.79
25	U	156	GLU	CA-C-N	5.20	128.26	120.87
25	U	156	GLU	C-N-CA	5.20	128.26	120.87
25	U	228	TYR	CA-C-N	5.20	127.25	120.28
25	U	228	TYR	C-N-CA	5.20	127.25	120.28
26	O	241	ASN	CA-C-N	5.20	127.68	120.29
26	O	241	ASN	C-N-CA	5.20	127.68	120.29
6	F	52	ALA	O-C-N	-5.20	117.32	123.25
22	P	253	THR	CB-CA-C	-5.20	101.45	109.62
29	K	224	THR	CA-CB-OG1	5.20	117.40	109.60
6	F	92	CYS	CA-C-N	5.20	127.25	120.28
6	F	92	CYS	C-N-CA	5.20	127.25	120.28
10	3	122	CYS	CB-CA-C	5.20	119.97	109.68
19	Z	535	THR	OG1-CB-CG2	5.20	119.70	109.30
21	S	294	ILE	CA-C-N	5.20	129.40	120.72
21	S	294	ILE	C-N-CA	5.20	129.40	120.72
21	S	396	HIS	ND1-CE1-NE2	5.20	113.60	108.40
23	Q	406	ASN	CB-CG-ND2	-5.20	108.60	116.40
26	O	174	LYS	CA-C-N	5.20	128.21	120.31
26	O	174	LYS	C-N-CA	5.20	128.21	120.31
5	E	85	ALA	CA-C-N	5.20	127.76	120.28
5	E	85	ALA	C-N-CA	5.20	127.76	120.28
7	G	73	HIS	ND1-CE1-NE2	5.20	113.60	108.40
25	U	209	ARG	NE-CZ-NH1	5.20	126.70	121.50
20	N	501	LEU	CA-C-N	5.20	127.76	120.28
20	N	501	LEU	C-N-CA	5.20	127.76	120.28
21	S	287	TYR	CA-C-O	5.20	125.93	120.42
25	U	73	ASP	CA-C-N	5.20	127.24	120.28
25	U	73	ASP	C-N-CA	5.20	127.24	120.28
28	I	179	ALA	N-CA-C	5.20	117.06	109.84
25	U	8	LYS	N-CA-CB	5.19	119.96	111.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	3	58	THR	CA-CB-OG1	5.19	117.39	109.60
10	3	88	MET	CA-C-O	-5.19	114.92	120.42
14	7	224	ASP	N-CA-CB	5.19	117.60	110.07
16	V	213	GLU	O-C-N	-5.19	116.62	122.12
18	Y	49	GLU	N-CA-CB	5.19	117.90	110.06
20	N	409	GLY	CA-C-O	5.19	126.10	120.75
21	S	346	GLN	O-C-N	-5.19	116.28	120.38
21	S	356	TYR	N-CA-CB	5.19	118.33	110.28
24	R	55	GLU	N-CA-C	-5.19	106.53	112.92
6	F	239	ARG	CA-C-O	-5.19	114.14	119.49
16	V	38	LEU	CA-C-N	5.19	127.23	120.28
16	V	38	LEU	C-N-CA	5.19	127.23	120.28
16	V	232	GLN	OE1-CD-NE2	5.19	127.79	122.60
20	N	163	PHE	N-CA-C	-5.19	105.52	111.07
22	P	328	LEU	N-CA-CB	5.19	117.84	110.16
29	K	134	LYS	CB-CA-C	-5.19	102.07	110.79
3	C	57	ASP	CA-CB-CG	-5.19	107.41	112.60
20	N	86	ASP	CA-C-N	5.19	130.21	122.74
20	N	86	ASP	C-N-CA	5.19	130.21	122.74
20	N	202	VAL	CB-CA-C	-5.19	105.14	112.14
20	N	425	THR	N-CA-C	5.19	116.94	111.28
26	O	332	HIS	CE1-NE2-CD2	-5.19	103.81	109.00
30	L	35	GLU	N-CA-C	5.19	116.94	111.28
4	D	84	ALA	CB-CA-C	-5.19	102.73	110.88
12	5	74	ALA	CB-CA-C	-5.19	101.19	109.75
27	H	173	THR	CA-CB-OG1	5.19	117.38	109.60
27	H	173	THR	CA-C-O	5.19	127.00	121.45
30	L	70	ILE	CA-CB-CG2	5.19	119.32	110.50
30	L	340	ILE	N-CA-CB	5.19	119.95	112.07
7	G	193	GLU	CA-C-N	5.19	127.56	120.46
7	G	193	GLU	C-N-CA	5.19	127.56	120.46
16	V	251	LEU	CA-C-N	5.19	127.23	120.28
16	V	251	LEU	C-N-CA	5.19	127.23	120.28
21	S	34	GLU	CA-C-O	5.19	125.92	120.42
21	S	133	GLU	O-C-N	-5.19	115.45	121.47
22	P	433	ASN	CB-CG-ND2	5.19	124.18	116.40
24	R	74	LYS	N-CA-C	-5.19	105.63	111.28
32	J	41	ASN	CA-CB-CG	5.19	117.79	112.60
2	B	148	GLN	N-CA-C	-5.18	100.00	108.76
5	E	72	ALA	CA-C-O	-5.18	114.24	120.10
10	3	147	TYR	CB-CG-CD1	-5.18	113.02	120.80
10	3	147	TYR	CB-CG-CD2	5.18	128.58	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	677	HIS	CA-C-N	5.18	127.23	120.28
19	Z	677	HIS	C-N-CA	5.18	127.23	120.28
20	N	857	ASP	CA-C-N	5.18	131.44	121.54
20	N	857	ASP	C-N-CA	5.18	131.44	121.54
21	S	348	SER	N-CA-CB	5.18	119.25	110.49
28	I	314	ASN	CA-C-O	-5.18	115.05	120.55
31	M	247	THR	CA-C-N	5.18	129.92	122.35
31	M	247	THR	C-N-CA	5.18	129.92	122.35
31	M	388	ALA	CA-C-N	5.18	127.23	120.28
31	M	388	ALA	C-N-CA	5.18	127.23	120.28
11	4	83	PHE	N-CA-C	5.18	116.93	111.28
19	Z	717	ALA	CB-CA-C	-5.18	102.67	110.24
21	S	355	PRO	CA-C-N	5.18	128.19	120.31
21	S	355	PRO	C-N-CA	5.18	128.19	120.31
22	P	428	TRP	CB-CG-CD2	5.18	134.06	126.80
23	Q	361	VAL	CA-CB-CG1	5.18	119.21	110.40
24	R	180	LEU	N-CA-C	5.18	116.93	111.28
8	1	70	ILE	N-CA-C	-5.18	101.14	108.65
19	Z	109	ILE	CA-C-O	5.18	126.34	120.85
21	S	361	GLN	CA-C-N	5.18	127.22	120.28
21	S	361	GLN	C-N-CA	5.18	127.22	120.28
23	Q	296	ASN	CB-CG-ND2	-5.18	108.63	116.40
6	F	171	TYR	N-CA-C	-5.18	105.72	111.36
12	5	213	ASP	CA-C-N	5.18	127.64	120.29
12	5	213	ASP	C-N-CA	5.18	127.64	120.29
12	5	221	GLN	N-CA-CB	5.18	117.82	110.16
21	S	239	ASP	CA-C-N	5.18	127.22	120.28
21	S	239	ASP	C-N-CA	5.18	127.22	120.28
32	J	238	ALA	CB-CA-C	-5.18	102.19	110.79
5	E	233	GLU	CA-C-N	5.18	127.22	120.28
5	E	233	GLU	C-N-CA	5.18	127.22	120.28
13	6	130	PRO	N-CA-CB	5.18	108.69	103.25
21	S	357	PHE	CA-C-N	5.18	127.64	120.29
21	S	357	PHE	C-N-CA	5.18	127.64	120.29
27	H	135	GLU	CA-CB-CG	5.18	124.45	114.10
29	K	408	LYS	O-C-N	-5.18	116.58	122.89
1	A	128	ASN	CA-C-O	5.17	126.95	121.16
11	4	107	TYR	N-CA-CB	5.17	119.75	110.80
19	Z	38	GLU	O-C-N	-5.17	116.50	122.09
20	N	592	GLY	CA-C-N	5.17	131.42	121.54
20	N	592	GLY	C-N-CA	5.17	131.42	121.54
21	S	99	SER	CA-C-N	5.17	128.19	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	99	SER	C-N-CA	5.17	128.19	120.90
24	R	86	GLU	CA-C-N	5.17	127.64	120.29
24	R	86	GLU	C-N-CA	5.17	127.64	120.29
28	I	428	TYR	N-CA-CB	5.17	117.73	110.12
24	R	315	THR	N-CA-CB	5.17	118.74	110.46
4	D	44	GLY	N-CA-C	-5.17	102.99	110.90
19	Z	649	HIS	CE1-NE2-CD2	-5.17	103.83	109.00
19	Z	802	SER	CA-C-O	5.17	125.67	121.02
24	R	187	TYR	CB-CG-CD2	-5.17	113.04	120.80
26	O	91	ASN	CA-CB-CG	-5.17	107.43	112.60
27	H	386	ARG	CA-C-O	-5.17	114.02	119.97
30	L	390	ASP	CA-CB-CG	-5.17	107.43	112.60
9	2	83	ASN	CA-C-O	5.17	127.90	120.51
14	7	91	ASP	N-CA-C	-5.17	105.09	111.40
17	T	150	ILE	CA-C-O	5.17	126.65	121.17
2	B	207	ASN	CB-CG-ND2	5.17	124.15	116.40
11	4	53	THR	N-CA-C	5.17	118.74	112.23
20	N	157	THR	O-C-N	5.17	128.63	122.27
22	P	119	PRO	O-C-N	5.17	128.89	122.22
28	I	66	GLU	CB-CG-CD	-5.17	103.81	112.60
31	M	391	THR	N-CA-C	-5.17	102.81	110.46
2	B	100	VAL	N-CA-C	5.17	115.28	110.42
19	Z	498	LEU	N-CA-CB	5.17	117.56	110.07
20	N	569	SER	CA-C-N	5.17	127.63	120.29
20	N	569	SER	C-N-CA	5.17	127.63	120.29
21	S	128	LEU	N-CA-C	-5.17	98.39	109.81
24	R	183	TYR	N-CA-C	5.17	116.91	111.28
24	R	271	PHE	N-CA-C	5.17	116.91	111.28
29	K	83	GLN	OE1-CD-NE2	-5.17	117.43	122.60
30	L	170	PRO	N-CA-C	-5.17	107.40	113.86
32	J	260	GLU	N-CA-C	-5.17	105.73	111.36
14	7	78	ALA	CA-C-O	-5.17	114.94	120.42
19	Z	538	ILE	CA-C-O	-5.17	115.38	120.85
20	N	585	THR	CA-C-N	5.17	127.54	120.46
20	N	585	THR	C-N-CA	5.17	127.54	120.46
22	P	64	SER	CA-C-N	5.17	127.62	120.29
22	P	64	SER	C-N-CA	5.17	127.62	120.29
18	Y	63	HIS	ND1-CE1-NE2	5.16	113.56	108.40
22	P	329	ARG	CD-NE-CZ	-5.16	117.17	124.40
23	Q	149	LEU	N-CA-C	5.16	116.60	111.07
27	H	38	GLN	CB-CA-C	5.16	119.91	110.10
28	I	72	LEU	CA-C-N	5.16	127.20	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	I	72	LEU	C-N-CA	5.16	127.20	120.28
29	K	176	GLU	N-CA-C	5.16	116.99	111.36
30	L	71	VAL	CA-C-N	5.16	131.53	121.41
30	L	71	VAL	C-N-CA	5.16	131.53	121.41
30	L	140	ASP	N-CA-C	-5.16	99.14	108.85
4	D	103	THR	N-CA-CB	5.16	117.56	110.07
7	G	28	MET	O-C-N	-5.16	115.92	122.27
7	G	58	LEU	N-CA-C	-5.16	106.38	113.30
22	P	346	GLU	CA-C-N	5.16	126.59	120.14
22	P	346	GLU	C-N-CA	5.16	126.59	120.14
1	A	127	GLN	O-C-N	-5.16	116.27	122.15
6	F	14	SER	O-C-N	5.16	125.89	120.99
6	F	53	GLN	CB-CG-CD	-5.16	103.83	112.60
19	Z	427	THR	CB-CA-C	5.16	119.36	110.79
20	N	189	GLN	CA-C-N	5.16	131.40	121.54
20	N	189	GLN	C-N-CA	5.16	131.40	121.54
25	U	208	ILE	N-CA-CB	5.16	118.32	110.58
29	K	58	GLU	CB-CG-CD	-5.16	103.83	112.60
31	M	221	GLN	CA-C-N	5.16	125.70	120.38
31	M	221	GLN	C-N-CA	5.16	125.70	120.38
6	F	223	ILE	CA-C-N	5.16	130.12	123.00
6	F	223	ILE	C-N-CA	5.16	130.12	123.00
7	G	24	VAL	CA-CB-CG2	-5.16	101.63	110.40
16	V	98	MET	CG-SD-CE	-5.16	89.55	100.90
20	N	490	ARG	N-CA-CB	5.16	117.55	109.97
22	P	138	VAL	O-C-N	5.16	126.87	121.87
24	R	290	PRO	N-CA-CB	5.16	108.10	103.20
25	U	274	ASN	O-C-N	5.16	127.59	122.12
31	M	74	ASP	CB-CA-C	-5.16	102.23	110.79
11	4	91	CYS	CB-CA-C	-5.16	102.08	110.85
24	R	325	VAL	CA-C-N	5.16	131.52	121.41
24	R	325	VAL	C-N-CA	5.16	131.52	121.41
32	J	181	ALA	N-CA-CB	5.16	119.21	110.49
1	A	113	MET	CA-C-O	-5.16	114.95	120.42
2	B	74	LEU	CB-CA-C	-5.16	98.11	109.56
4	D	188	GLU	CA-C-O	-5.16	114.96	120.42
16	V	96	LEU	CA-C-N	5.16	127.70	120.28
16	V	96	LEU	C-N-CA	5.16	127.70	120.28
17	T	291	THR	CA-C-O	5.16	125.30	119.27
20	N	162	VAL	CA-CB-CG2	-5.16	101.64	110.40
21	S	345	ARG	NE-CZ-NH1	-5.16	116.34	121.50
22	P	399	ASN	CA-CB-CG	5.16	117.76	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	140	GLU	CA-C-N	5.16	127.19	120.28
26	O	140	GLU	C-N-CA	5.16	127.19	120.28
5	E	69	GLU	CA-C-N	5.15	128.11	120.74
5	E	69	GLU	C-N-CA	5.15	128.11	120.74
10	3	203	ARG	NE-CZ-NH2	-5.15	114.56	119.20
17	T	140	THR	N-CA-CB	5.15	118.77	110.42
19	Z	451	VAL	CA-C-N	5.15	131.38	121.54
19	Z	451	VAL	C-N-CA	5.15	131.38	121.54
28	I	104	GLY	N-CA-C	-5.15	100.96	113.18
30	L	156	ILE	N-CA-C	-5.15	105.36	110.62
9	2	202	ILE	N-CA-C	-5.15	105.52	110.72
12	5	133	ILE	CA-C-N	5.15	128.19	120.87
12	5	133	ILE	C-N-CA	5.15	128.19	120.87
20	N	393	LEU	N-CA-C	5.15	116.90	111.28
20	N	561	GLU	N-CA-CB	5.15	118.15	110.22
20	N	781	LEU	N-CA-CB	5.15	117.69	110.12
28	I	234	LEU	N-CA-CB	5.15	117.69	110.12
30	L	71	VAL	O-C-N	-5.15	117.40	122.76
6	F	82	ARG	O-C-N	5.15	128.61	122.27
6	F	143	HIS	CE1-NE2-CD2	-5.15	103.85	109.00
16	V	253	LYS	CA-C-N	5.15	127.18	120.28
16	V	253	LYS	C-N-CA	5.15	127.18	120.28
17	T	160	LEU	CB-CA-C	-5.15	101.10	110.63
19	Z	670	MET	CB-CA-C	-5.15	102.09	110.85
19	Z	705	ASN	OD1-CG-ND2	5.15	127.75	122.60
19	Z	886	GLU	CB-CA-C	-5.15	101.25	109.75
20	N	620	GLU	CA-C-O	-5.15	115.09	120.55
20	N	681	ASN	CA-C-N	5.15	128.14	120.31
20	N	681	ASN	C-N-CA	5.15	128.14	120.31
20	N	726	ALA	CB-CA-C	-5.15	102.24	110.79
22	P	329	ARG	NE-CZ-NH2	-5.15	114.56	119.20
24	R	286	TRP	CA-CB-CG	-5.15	103.81	113.60
24	R	312	ARG	NE-CZ-NH2	5.15	123.83	119.20
28	I	294	ARG	N-CA-C	5.15	117.90	110.28
28	I	402	ALA	CA-C-N	5.15	125.66	119.94
28	I	402	ALA	C-N-CA	5.15	125.66	119.94
30	L	239	HIS	CE1-NE2-CD2	-5.15	103.85	109.00
16	V	126	ASP	CA-C-N	5.15	127.73	120.42
16	V	126	ASP	C-N-CA	5.15	127.73	120.42
24	R	103	ALA	CA-C-N	5.15	127.60	120.29
24	R	103	ALA	C-N-CA	5.15	127.60	120.29
24	R	287	LEU	CA-C-N	5.15	129.59	121.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	287	LEU	C-N-CA	5.15	129.59	121.56
26	O	272	ILE	CB-CA-C	-5.15	105.11	112.22
29	K	318	ASP	O-C-N	-5.15	115.87	121.53
32	J	7	GLU	CB-CG-CD	-5.15	103.85	112.60
20	N	576	PRO	N-CA-CB	5.15	108.98	103.52
23	Q	46	LYS	CA-C-N	5.15	127.60	120.29
23	Q	46	LYS	C-N-CA	5.15	127.60	120.29
23	Q	313	LEU	CA-C-N	5.15	127.60	120.29
23	Q	313	LEU	C-N-CA	5.15	127.60	120.29
24	R	102	ASP	CA-C-O	5.15	126.01	120.55
27	H	243	SER	N-CA-C	5.15	117.79	111.82
30	L	361	CYS	CA-C-O	5.15	126.01	120.55
2	B	32	GLY	CA-C-O	-5.15	117.13	122.28
11	4	117	TYR	N-CA-C	-5.15	100.31	109.06
25	U	140	SER	CA-C-O	5.15	126.92	121.16
17	T	141	LYS	O-C-N	5.14	127.57	122.12
17	T	189	ALA	O-C-N	5.14	128.01	122.15
20	N	104	CYS	O-C-N	5.14	127.57	122.12
23	Q	194	ARG	CD-NE-CZ	-5.14	117.20	124.40
24	R	217	LYS	CA-C-N	5.14	127.17	120.28
24	R	217	LYS	C-N-CA	5.14	127.17	120.28
28	I	184	TYR	N-CA-CB	5.14	117.60	109.83
29	K	383	GLY	CA-C-N	5.14	127.17	120.28
29	K	383	GLY	C-N-CA	5.14	127.17	120.28
32	J	82	LYS	CA-C-N	5.14	129.66	122.36
32	J	82	LYS	C-N-CA	5.14	129.66	122.36
12	5	112	SER	N-CA-C	5.14	116.89	111.28
19	Z	121	PHE	CB-CA-C	-5.14	102.25	110.79
29	K	311	THR	CA-C-N	5.14	127.59	120.29
29	K	311	THR	C-N-CA	5.14	127.59	120.29
31	M	239	LEU	CB-CA-C	-5.14	102.25	110.79
2	B	62	VAL	CA-CB-CG1	-5.14	101.66	110.40
16	V	173	GLU	CA-C-N	5.14	124.75	119.56
16	V	173	GLU	C-N-CA	5.14	124.75	119.56
12	5	185	PHE	N-CA-CB	5.14	117.46	110.01
14	7	122	GLY	CA-C-N	5.14	127.68	120.28
14	7	122	GLY	C-N-CA	5.14	127.68	120.28
19	Z	8	LYS	CA-C-O	-5.14	115.04	121.46
19	Z	272	LEU	CA-C-N	5.14	129.44	122.19
19	Z	272	LEU	C-N-CA	5.14	129.44	122.19
20	N	323	LEU	N-CA-C	5.14	118.65	112.38
23	Q	13	GLN	OE1-CD-NE2	5.14	127.74	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	H	314	ASN	CA-C-O	-5.14	115.17	121.28
28	I	290	ILE	CA-CB-CG1	5.14	119.14	110.40
32	J	129	ASN	CB-CG-ND2	-5.14	108.69	116.40
13	6	104	HIS	ND1-CE1-NE2	5.14	113.54	108.40
18	Y	56	LEU	CA-C-N	5.14	127.59	120.29
18	Y	56	LEU	C-N-CA	5.14	127.59	120.29
22	P	248	ARG	CD-NE-CZ	5.14	131.59	124.40
5	E	116	VAL	CA-CB-CG1	5.14	119.13	110.40
7	G	39	GLY	O-C-N	5.14	129.38	122.70
7	G	81	LEU	CA-C-O	5.14	126.45	120.49
7	G	235	GLU	CA-C-O	-5.14	114.97	120.42
22	P	170	GLN	N-CA-C	5.14	117.78	111.82
22	P	252	ASP	CA-C-N	5.14	127.64	120.65
22	P	252	ASP	C-N-CA	5.14	127.64	120.65
27	H	47	GLN	CB-CG-CD	-5.14	103.87	112.60
27	H	160	THR	CA-CB-OG1	5.14	117.31	109.60
29	K	161	ASP	N-CA-C	-5.14	107.04	113.72
30	L	158	GLU	CA-C-N	5.14	127.58	120.29
30	L	158	GLU	C-N-CA	5.14	127.58	120.29
30	L	159	LEU	CA-C-N	5.14	127.68	120.28
30	L	159	LEU	C-N-CA	5.14	127.68	120.28
30	L	365	GLY	CA-C-O	-5.14	115.22	120.66
2	B	214	ASN	CA-C-N	5.13	127.12	120.44
2	B	214	ASN	C-N-CA	5.13	127.12	120.44
4	D	53	LEU	N-CA-C	-5.13	106.98	114.12
13	6	138	GLU	N-CA-CB	5.13	118.83	110.77
15	W	73	SER	CA-C-O	5.13	125.99	120.70
20	N	773	PHE	CA-C-O	-5.13	113.13	120.16
21	S	472	PHE	CA-C-N	5.13	127.16	120.28
21	S	472	PHE	C-N-CA	5.13	127.16	120.28
26	O	69	HIS	CA-C-O	5.13	125.64	121.02
26	O	75	SER	N-CA-C	5.13	116.56	111.07
6	F	137	TYR	N-CA-C	-5.13	99.92	108.34
22	P	70	VAL	CB-CA-C	-5.13	105.21	112.14
29	K	372	GLY	O-C-N	-5.13	116.80	122.24
1	A	21	ARG	N-CA-C	-5.13	101.33	109.59
9	2	242	PHE	CA-C-O	5.13	126.85	120.54
17	T	208	VAL	CB-CA-C	-5.13	105.14	112.22
19	Z	405	HIS	CA-C-N	5.13	126.56	120.14
19	Z	405	HIS	C-N-CA	5.13	126.56	120.14
23	Q	113	CYS	N-CA-C	5.13	116.87	111.28
27	H	177	VAL	CA-C-N	5.13	131.47	121.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	H	177	VAL	C-N-CA	5.13	131.47	121.41
30	L	46	GLN	CA-C-O	-5.13	114.98	120.42
30	L	295	ARG	CD-NE-CZ	-5.13	117.22	124.40
5	E	136	PRO	N-CA-C	5.13	120.09	111.32
15	W	97	LEU	CA-C-N	5.13	127.16	120.28
15	W	97	LEU	C-N-CA	5.13	127.16	120.28
16	V	114	SER	CA-CB-OG	5.13	121.36	111.10
19	Z	40	ASP	CA-C-N	5.13	128.61	121.02
19	Z	40	ASP	C-N-CA	5.13	128.61	121.02
20	N	694	ILE	CA-CB-CG1	5.13	119.12	110.40
32	J	76	VAL	CA-CB-CG2	-5.13	101.68	110.40
8	1	93	THR	CA-C-N	5.13	127.11	120.44
8	1	93	THR	C-N-CA	5.13	127.11	120.44
20	N	936	GLU	CA-C-N	5.13	127.92	120.79
20	N	936	GLU	C-N-CA	5.13	127.92	120.79
14	7	51	THR	CA-CB-OG1	5.13	117.29	109.60
19	Z	336	GLU	CA-C-N	5.13	127.57	120.29
19	Z	336	GLU	C-N-CA	5.13	127.57	120.29
30	L	103	LYS	CA-C-O	5.13	125.56	119.56
31	M	314	LEU	CB-CA-C	-5.13	102.13	110.85
1	A	199	ILE	O-C-N	-5.12	116.55	121.83
20	N	587	ALA	CA-C-O	-5.12	115.44	120.82
20	N	704	PRO	CA-C-N	5.12	127.15	120.28
20	N	704	PRO	C-N-CA	5.12	127.15	120.28
30	L	337	HIS	N-CA-C	-5.12	105.71	112.94
13	6	125	SER	N-CA-C	5.12	117.60	111.71
17	T	255	PRO	N-CA-C	-5.12	101.60	111.69
20	N	51	ASP	N-CA-C	-5.12	100.95	109.46
20	N	87	LEU	CA-C-O	5.12	126.72	120.57
20	N	747	SER	O-C-N	5.12	128.99	123.10
26	O	61	GLU	CA-C-O	5.12	126.20	120.82
26	O	332	HIS	N-CA-C	-5.12	100.38	108.73
13	6	148	VAL	N-CA-CB	5.12	116.11	110.53
19	Z	460	ASP	CA-C-O	-5.12	113.14	120.16
26	O	108	ASP	CA-CB-CG	-5.12	107.48	112.60
28	I	331	THR	N-CA-CB	5.12	121.05	111.52
6	F	51	ARG	NE-CZ-NH2	-5.12	114.59	119.20
23	Q	232	PHE	CA-C-N	5.12	127.09	120.44
23	Q	232	PHE	C-N-CA	5.12	127.09	120.44
24	R	369	THR	CB-CA-C	-5.12	102.29	110.79
26	O	36	GLN	CA-C-N	5.12	127.14	120.28
26	O	36	GLN	C-N-CA	5.12	127.14	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	134	GLY	N-CA-C	-5.12	106.87	115.62
5	E	34	GLY	CA-C-N	5.12	131.31	121.54
5	E	34	GLY	C-N-CA	5.12	131.31	121.54
5	E	84	ASP	CA-CB-CG	-5.12	107.48	112.60
13	6	151	PHE	CB-CG-CD2	-5.12	112.00	120.70
19	Z	36	ALA	N-CA-CB	5.12	117.43	110.01
19	Z	184	LEU	N-CA-CB	5.12	118.21	110.28
19	Z	641	GLU	CB-CG-CD	-5.12	103.90	112.60
20	N	543	LYS	CA-C-O	5.12	125.98	120.55
21	S	405	MET	CG-SD-CE	-5.12	89.64	100.90
22	P	201	ARG	CA-C-O	5.12	125.97	120.55
22	P	346	GLU	CB-CG-CD	5.12	121.30	112.60
27	H	371	GLU	CA-C-N	5.12	127.09	120.44
27	H	371	GLU	C-N-CA	5.12	127.09	120.44
30	L	32	GLU	CA-C-O	-5.12	115.00	120.42
6	F	171	TYR	O-C-N	-5.12	116.32	122.15
7	G	157	VAL	N-CA-C	-5.12	101.11	108.53
12	5	149	TYR	CB-CG-CD1	5.12	128.47	120.80
24	R	327	VAL	N-CA-CB	5.12	117.50	110.54
2	B	88	HIS	CA-CB-CG	-5.12	108.69	113.80
7	G	228	VAL	N-CA-CB	-5.12	104.05	111.21
9	2	216	ILE	CA-C-N	5.12	129.57	122.77
9	2	216	ILE	C-N-CA	5.12	129.57	122.77
22	P	21	SER	O-C-N	5.12	127.98	122.15
25	U	144	VAL	CB-CA-C	-5.12	104.50	111.15
31	M	86	ASN	CA-C-N	5.12	127.64	120.28
31	M	86	ASN	C-N-CA	5.12	127.64	120.28
22	P	373	ILE	O-C-N	-5.11	117.17	123.00
24	R	89	GLU	CA-C-N	5.11	128.08	120.31
24	R	89	GLU	C-N-CA	5.11	128.08	120.31
30	L	27	ARG	NE-CZ-NH2	5.11	123.80	119.20
31	M	187	GLN	CB-CA-C	-5.11	109.18	116.34
32	J	65	LEU	CA-C-N	5.11	127.64	120.28
32	J	65	LEU	C-N-CA	5.11	127.64	120.28
32	J	406	LYS	CB-CG-CD	5.11	123.06	111.30
10	3	106	GLU	CB-CA-C	-5.11	105.12	110.33
19	Z	629	LYS	CA-C-N	5.11	127.08	120.44
19	Z	629	LYS	C-N-CA	5.11	127.08	120.44
23	Q	207	GLN	OE1-CD-NE2	5.11	127.71	122.60
27	H	157	ILE	CA-C-O	-5.11	115.24	120.71
4	D	217	MET	N-CA-C	-5.11	101.31	109.23
13	6	83	GLY	CA-C-O	-5.11	115.72	120.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	294	MET	CA-C-O	-5.11	115.00	120.42
20	N	429	LYS	CA-C-O	-5.11	115.98	121.45
20	N	475	HIS	CE1-NE2-CD2	-5.11	103.89	109.00
22	P	155	GLN	CA-C-O	-5.11	115.13	120.55
25	U	237	LEU	CA-C-N	-5.11	114.47	119.99
25	U	237	LEU	C-N-CA	-5.11	114.47	119.99
32	J	51	GLU	CB-CA-C	-5.11	102.86	110.88
9	2	259	VAL	CA-C-O	-5.11	116.34	121.45
22	P	189	GLN	CA-C-N	5.11	127.13	120.28
22	P	189	GLN	C-N-CA	5.11	127.13	120.28
28	I	317	ASP	CB-CA-C	5.11	119.27	110.79
32	J	256	SER	CA-C-N	5.11	128.07	120.31
32	J	256	SER	C-N-CA	5.11	128.07	120.31
6	F	141	GLY	CA-C-O	-5.11	114.22	121.52
7	G	196	LYS	N-CA-CB	-5.11	102.60	110.16
19	Z	470	VAL	CA-CB-CG2	5.11	119.08	110.40
19	Z	654	VAL	N-CA-CB	5.11	117.49	110.54
23	Q	239	TYR	CA-C-N	5.11	127.12	120.28
23	Q	239	TYR	C-N-CA	5.11	127.12	120.28
1	A	53	GLN	CA-C-O	5.11	126.88	121.16
3	C	128	ARG	NE-CZ-NH2	-5.11	114.61	119.20
17	T	247	VAL	N-CA-C	5.11	115.83	110.62
20	N	606	ALA	O-C-N	-5.11	116.81	122.07
21	S	35	MET	O-C-N	5.11	127.53	122.12
23	Q	288	LYS	N-CA-C	5.11	116.84	111.28
27	H	416	VAL	CA-CB-CG1	-5.11	101.72	110.40
29	K	113	VAL	N-CA-C	-5.11	100.54	108.81
29	K	190	LEU	CA-C-O	-5.11	115.46	120.82
19	Z	740	ARG	N-CA-C	-5.10	105.72	111.28
19	Z	851	ASP	CA-C-N	5.10	127.44	120.35
19	Z	851	ASP	C-N-CA	5.10	127.44	120.35
32	J	213	ARG	N-CA-CB	5.10	117.86	109.95
1	A	185	LYS	N-CA-C	-5.10	104.22	110.65
6	F	135	ALA	N-CA-CB	5.10	118.58	110.57
14	7	99	GLY	CA-C-O	-5.10	117.13	121.57
15	W	141	ILE	CA-CB-CG1	5.10	119.08	110.40
16	V	48	GLY	N-CA-C	5.10	119.92	113.24
19	Z	248	LEU	CB-CA-C	-5.10	102.32	110.79
23	Q	348	GLU	CB-CA-C	-5.10	102.32	110.79
17	T	319	TYR	CA-C-N	5.10	130.48	120.99
17	T	319	TYR	C-N-CA	5.10	130.48	120.99
19	Z	436	SER	N-CA-C	5.10	121.67	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	792	ALA	CA-C-O	5.10	125.86	120.10
24	R	365	GLN	N-CA-C	-5.10	105.80	111.36
28	I	58	CYS	CA-C-N	5.10	127.12	120.28
28	I	58	CYS	C-N-CA	5.10	127.12	120.28
28	I	416	ASN	CA-C-N	5.10	127.53	120.29
28	I	416	ASN	C-N-CA	5.10	127.53	120.29
30	L	116	MET	N-CA-C	5.10	116.53	111.07
30	L	283	THR	CA-C-N	5.10	132.03	121.32
30	L	283	THR	C-N-CA	5.10	132.03	121.32
30	L	390	ASP	CA-C-N	5.10	128.06	120.31
30	L	390	ASP	C-N-CA	5.10	128.06	120.31
1	A	178	PHE	N-CA-CB	5.10	117.71	110.16
3	C	212	GLU	N-CA-CB	5.10	119.62	110.80
23	Q	90	ARG	CB-CA-C	-5.10	102.33	110.79
4	D	105	GLY	CA-C-N	5.10	134.24	121.80
4	D	105	GLY	C-N-CA	5.10	134.24	121.80
12	5	224	TYR	CB-CG-CD1	-5.10	113.15	120.80
14	7	79	ARG	CB-CA-C	-5.10	101.73	109.89
14	7	160	ALA	CB-CA-C	-5.10	99.49	110.45
15	W	44	ASN	CA-C-N	5.10	125.17	119.87
15	W	44	ASN	C-N-CA	5.10	125.17	119.87
16	V	230	THR	CA-C-O	5.10	126.56	120.70
19	Z	442	SER	CA-C-N	5.10	125.64	119.98
19	Z	442	SER	C-N-CA	5.10	125.64	119.98
20	N	386	LEU	O-C-N	5.10	127.52	122.12
22	P	228	ASN	O-C-N	5.10	127.52	122.12
31	M	404	VAL	N-CA-CB	5.10	117.47	110.54
32	J	13	GLU	N-CA-C	-5.10	106.40	113.18
9	2	134	GLN	N-CA-C	5.10	116.91	111.36
11	4	64	VAL	O-C-N	-5.10	116.04	121.80
17	T	130	ASN	N-CA-C	-5.10	107.04	114.12
21	S	467	GLU	CA-C-O	-5.10	113.64	118.33
3	C	205	LYS	N-CA-C	-5.09	103.75	111.34
10	3	120	PHE	N-CA-C	-5.09	99.95	110.80
16	V	277	LYS	CA-C-N	5.09	131.27	121.54
16	V	277	LYS	C-N-CA	5.09	131.27	121.54
18	Y	63	HIS	CA-C-N	5.09	125.60	120.00
18	Y	63	HIS	C-N-CA	5.09	125.60	120.00
20	N	722	ASP	N-CA-C	5.09	117.43	110.55
23	Q	252	LYS	CA-C-N	5.09	127.61	120.28
23	Q	252	LYS	C-N-CA	5.09	127.61	120.28
28	I	159	VAL	CB-CA-C	5.09	117.72	111.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	133	PRO	N-CA-CB	5.09	108.57	103.48
12	5	252	ALA	CA-C-N	5.09	127.52	120.29
12	5	252	ALA	C-N-CA	5.09	127.52	120.29
14	7	121	PHE	CA-C-O	-5.09	114.11	119.97
20	N	706	VAL	N-CA-C	5.09	115.86	110.72
22	P	72	LYS	CG-CD-CE	5.09	123.02	111.30
22	P	282	GLU	CA-C-N	5.09	127.06	120.44
22	P	282	GLU	C-N-CA	5.09	127.06	120.44
23	Q	375	HIS	CE1-NE2-CD2	-5.09	103.91	109.00
24	R	104	MET	N-CA-CB	5.09	117.70	110.16
31	M	213	GLU	CB-CA-C	-5.09	102.33	110.79
3	C	54	LYS	CB-CA-C	-5.09	102.34	110.79
10	3	27	ARG	N-CA-C	-5.09	103.96	110.53
15	W	193	GLY	N-CA-C	-5.09	108.59	115.36
17	T	212	HIS	CB-CA-C	-5.09	102.20	110.85
19	Z	332	ALA	CB-CA-C	-5.09	100.29	110.42
22	P	84	ASN	CA-CB-CG	5.09	117.69	112.60
22	P	137	TYR	CA-C-N	5.09	127.44	120.46
22	P	137	TYR	C-N-CA	5.09	127.44	120.46
23	Q	28	HIS	CA-C-O	-5.09	115.15	120.55
1	A	23	TYR	CA-CB-CG	5.09	123.06	113.90
11	4	33	ASP	CA-CB-CG	-5.09	107.51	112.60
16	V	156	VAL	CB-CA-C	5.09	119.64	111.29
17	T	329	GLU	N-CA-C	-5.09	106.17	112.38
26	O	85	ARG	CA-C-N	5.09	127.52	120.29
26	O	85	ARG	C-N-CA	5.09	127.52	120.29
26	O	155	PHE	N-CA-CB	5.09	117.69	110.16
28	I	395	ILE	N-CA-CB	-5.09	103.62	110.54
32	J	360	LYS	O-C-N	5.09	127.52	122.12
9	2	177	ALA	O-C-N	-5.09	116.01	122.27
11	4	160	LEU	N-CA-CB	5.09	117.60	110.12
16	V	32	TYR	CA-C-N	-5.09	116.88	123.19
16	V	32	TYR	C-N-CA	-5.09	116.88	123.19
19	Z	203	GLU	N-CA-C	-5.09	105.73	111.28
31	M	267	GLY	CA-C-O	-5.09	114.70	120.30
5	E	205	VAL	N-CA-CB	5.09	118.21	110.58
7	G	83	ALA	O-C-N	-5.09	116.83	122.07
7	G	123	TYR	N-CA-CB	5.09	117.60	110.12
14	7	159	TYR	N-CA-CB	5.09	119.60	110.80
19	Z	142	TYR	N-CA-CB	5.09	117.60	110.12
20	N	339	LEU	CA-C-O	-5.09	115.16	120.55
24	R	211	TYR	N-CA-C	-5.09	99.97	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	325	ASP	N-CA-C	-5.09	98.99	107.99
31	M	187	GLN	CA-C-O	-5.09	112.22	119.80
1	A	196	GLU	N-CA-C	5.08	116.82	111.28
29	K	233	SER	CA-C-N	5.08	128.04	120.31
29	K	233	SER	C-N-CA	5.08	128.04	120.31
3	C	167	ASN	CA-C-N	5.08	127.51	120.29
3	C	167	ASN	C-N-CA	5.08	127.51	120.29
13	6	77	THR	CA-C-N	5.08	128.84	121.52
13	6	77	THR	C-N-CA	5.08	128.84	121.52
20	N	200	VAL	O-C-N	5.08	127.06	121.83
20	N	834	SER	N-CA-C	5.08	116.51	111.07
21	S	119	SER	CA-C-N	5.08	129.77	122.35
21	S	119	SER	C-N-CA	5.08	129.77	122.35
24	R	134	LEU	N-CA-C	-5.08	105.92	111.82
26	O	119	GLY	CA-C-N	5.08	127.09	120.28
26	O	119	GLY	C-N-CA	5.08	127.09	120.28
28	I	242	GLN	N-CA-CB	5.08	117.59	110.12
1	A	187	PHE	O-C-N	-5.08	117.00	122.79
3	C	24	ALA	O-C-N	-5.08	116.73	122.12
6	F	53	GLN	CA-C-O	5.08	124.98	119.24
16	V	41	MET	CB-CA-C	-5.08	102.21	110.85
16	V	189	ILE	CA-CB-CG1	5.08	119.04	110.40
23	Q	116	TRP	CZ3-CH2-CZ2	5.08	128.10	121.50
25	U	37	GLY	CA-C-O	-5.08	115.56	121.61
26	O	69	HIS	CB-CG-CD2	-5.08	124.59	131.20
29	K	417	TYR	N-CA-C	-5.08	105.39	112.30
30	L	59	ASN	N-CA-CB	5.08	117.59	110.12
7	G	201	VAL	N-CA-C	-5.08	105.59	110.72
13	6	131	TYR	N-CA-C	-5.08	99.70	108.69
20	N	148	LYS	CB-CA-C	-5.08	102.36	110.79
27	H	258	ARG	O-C-N	5.08	127.50	122.12
30	L	251	ALA	N-CA-C	-5.08	105.64	111.07
6	F	98	VAL	CA-C-N	5.08	128.03	120.31
6	F	98	VAL	C-N-CA	5.08	128.03	120.31
9	2	171	GLY	N-CA-C	-5.08	103.36	111.18
10	3	96	TYR	O-C-N	-5.08	116.74	122.12
20	N	899	ARG	NE-CZ-NH1	-5.08	116.42	121.50
22	P	319	THR	CA-C-O	-5.08	115.17	120.55
23	Q	260	MET	CA-C-N	5.08	127.59	120.28
23	Q	260	MET	C-N-CA	5.08	127.59	120.28
26	O	71	VAL	N-CA-CB	5.08	116.46	110.82
11	4	75	LEU	CA-C-N	5.08	128.37	120.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	4	75	LEU	C-N-CA	5.08	128.37	120.60
20	N	66	LYS	CB-CA-C	-5.08	102.22	110.85
20	N	389	ASN	CB-CA-C	-5.08	104.97	111.22
5	E	218	ALA	CB-CA-C	-5.08	100.77	109.65
15	W	100	ARG	NH1-CZ-NH2	5.08	125.90	119.30
19	Z	730	GLY	CA-C-N	5.08	127.34	120.44
19	Z	730	GLY	C-N-CA	5.08	127.34	120.44
20	N	494	TYR	CB-CG-CD2	5.08	128.41	120.80
23	Q	31	VAL	N-CA-CB	5.08	117.44	110.54
23	Q	34	ASP	CA-CB-CG	-5.08	107.52	112.60
27	H	55	LEU	N-CA-C	5.08	117.55	111.71
30	L	133	VAL	CA-C-N	5.08	127.08	120.28
30	L	133	VAL	C-N-CA	5.08	127.08	120.28
32	J	344	LEU	N-CA-C	-5.08	105.83	111.36
13	6	157	TYR	CB-CG-CD1	5.07	128.41	120.80
15	W	76	HIS	CG-CD2-NE2	5.07	112.27	107.20
19	Z	445	LEU	CA-C-N	5.07	127.08	120.28
19	Z	445	LEU	C-N-CA	5.07	127.08	120.28
20	N	92	ASP	O-C-N	-5.07	116.84	122.07
20	N	258	GLN	CA-C-N	5.07	127.08	120.28
20	N	258	GLN	C-N-CA	5.07	127.08	120.28
20	N	649	ARG	N-CA-C	-5.07	105.75	111.28
1	A	59	LYS	CA-C-N	5.07	127.49	120.29
1	A	59	LYS	C-N-CA	5.07	127.49	120.29
9	2	233	SER	CA-C-O	5.07	125.92	120.70
19	Z	251	CYS	CA-C-N	5.07	127.08	120.28
19	Z	251	CYS	C-N-CA	5.07	127.08	120.28
24	R	347	ILE	N-CA-CB	5.07	118.23	111.64
6	F	43	HIS	ND1-CE1-NE2	5.07	113.47	108.40
8	1	180	MET	N-CA-C	5.07	118.62	111.52
16	V	161	ARG	NE-CZ-NH1	-5.07	116.43	121.50
19	Z	411	ALA	CA-C-N	5.07	127.49	120.29
19	Z	411	ALA	C-N-CA	5.07	127.49	120.29
32	J	34	ILE	N-CA-CB	5.07	117.44	110.54
1	A	125	TYR	N-CA-C	-5.07	105.75	111.28
27	H	322	ASN	OD1-CG-ND2	-5.07	117.53	122.60
9	2	170	MET	CA-C-N	-5.07	117.22	121.58
9	2	170	MET	C-N-CA	-5.07	117.22	121.58
19	Z	88	SER	N-CA-C	-5.07	106.88	113.16
20	N	73	ALA	CB-CA-C	-5.07	103.17	111.68
22	P	92	LYS	O-C-N	5.07	127.29	122.07
22	P	147	LYS	CA-C-O	5.07	125.88	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	213	THR	CA-CB-OG1	5.07	117.20	109.60
1	A	208	ILE	CA-CB-CG1	5.07	119.01	110.40
22	P	361	HIS	ND1-CE1-NE2	5.07	113.47	108.40
23	Q	266	ASP	N-CA-C	5.07	117.69	111.82
24	R	213	LEU	CA-C-N	5.07	131.22	121.54
24	R	213	LEU	C-N-CA	5.07	131.22	121.54
26	O	79	ILE	CA-CB-CG1	5.07	119.01	110.40
32	J	241	HIS	CG-CD2-NE2	5.07	112.27	107.20
17	T	305	TYR	CA-C-N	5.06	127.57	120.28
17	T	305	TYR	C-N-CA	5.06	127.57	120.28
25	U	44	GLN	CA-C-N	5.06	130.54	122.59
25	U	44	GLN	C-N-CA	5.06	130.54	122.59
29	K	220	ALA	CA-C-O	-5.06	115.18	120.55
4	D	149	ARG	NE-CZ-NH2	5.06	123.76	119.20
6	F	29	VAL	N-CA-CB	5.06	118.17	110.58
14	7	197	VAL	CA-C-N	5.06	127.06	120.28
14	7	197	VAL	C-N-CA	5.06	127.06	120.28
23	Q	284	THR	N-CA-C	-5.06	105.76	111.28
26	O	136	GLU	CA-C-N	5.06	127.02	120.44
26	O	136	GLU	C-N-CA	5.06	127.02	120.44
4	D	96	GLU	CA-C-N	5.06	127.48	120.29
4	D	96	GLU	C-N-CA	5.06	127.48	120.29
12	5	128	ARG	CA-C-N	5.06	127.02	120.44
12	5	128	ARG	C-N-CA	5.06	127.02	120.44
19	Z	117	GLU	CA-C-N	5.06	127.06	120.28
19	Z	117	GLU	C-N-CA	5.06	127.06	120.28
20	N	138	PHE	N-CA-C	5.06	116.80	111.28
20	N	539	THR	CA-CB-CG2	5.06	119.10	110.50
23	Q	85	ALA	CA-C-N	5.06	127.06	120.28
23	Q	85	ALA	C-N-CA	5.06	127.06	120.28
26	O	153	SER	O-C-N	5.06	127.28	122.07
28	I	198	LYS	CA-C-O	-5.06	115.06	120.42
30	L	204	GLN	CA-C-O	5.06	126.13	120.82
30	L	297	ASP	CA-C-O	-5.06	115.19	120.55
32	J	161	ILE	N-CA-CB	5.06	118.17	110.58
1	A	243	ALA	CA-C-N	5.06	128.00	120.31
1	A	243	ALA	C-N-CA	5.06	128.00	120.31
13	6	232	GLU	CA-CB-CG	5.06	124.22	114.10
14	7	227	SER	CA-C-N	5.06	127.31	120.38
14	7	227	SER	C-N-CA	5.06	127.31	120.38
19	Z	125	ILE	N-CA-CB	5.06	118.17	110.58
21	S	336	GLY	CA-C-O	5.06	123.53	118.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	22	ALA	N-CA-C	-5.06	105.66	111.07
24	R	18	ARG	N-CA-C	-5.06	107.66	113.88
27	H	135	GLU	CA-C-N	5.06	127.37	120.54
27	H	135	GLU	C-N-CA	5.06	127.37	120.54
31	M	191	ILE	O-C-N	5.06	128.66	123.05
1	A	5	SER	CA-C-N	5.06	127.06	120.28
1	A	5	SER	C-N-CA	5.06	127.06	120.28
4	D	136	SER	CA-C-O	5.06	125.82	120.36
17	T	274	ILE	CB-CA-C	-5.06	105.31	112.14
19	Z	551	LYS	CA-C-N	5.06	127.47	120.29
19	Z	551	LYS	C-N-CA	5.06	127.47	120.29
20	N	145	HIS	CB-CA-C	-5.06	104.55	111.73
20	N	555	VAL	N-CA-C	5.06	115.78	110.62
22	P	112	VAL	N-CA-CB	-5.06	102.00	110.65
22	P	408	ARG	CA-C-O	5.06	127.02	119.23
23	Q	96	PHE	CA-C-N	5.06	127.06	120.28
23	Q	96	PHE	C-N-CA	5.06	127.06	120.28
26	O	98	GLU	CA-C-O	5.06	125.91	120.55
27	H	146	LYS	N-CA-C	-5.06	108.85	114.62
29	K	89	ILE	CA-C-N	5.06	131.32	121.41
29	K	89	ILE	C-N-CA	5.06	131.32	121.41
24	R	361	SER	CA-C-N	5.06	127.56	120.28
24	R	361	SER	C-N-CA	5.06	127.56	120.28
21	S	487	VAL	N-CA-CB	5.05	117.41	110.54
22	P	381	LEU	CA-C-N	5.05	127.99	120.31
22	P	381	LEU	C-N-CA	5.05	127.99	120.31
24	R	238	GLU	O-C-N	5.05	127.49	122.03
25	U	12	HIS	CA-C-N	5.05	124.67	119.56
25	U	12	HIS	C-N-CA	5.05	124.67	119.56
28	I	170	LEU	CA-C-O	5.05	125.78	120.42
29	K	347	THR	CA-C-N	5.05	127.39	120.46
29	K	347	THR	C-N-CA	5.05	127.39	120.46
30	L	298	THR	N-CA-C	-5.05	99.17	108.02
1	A	163	PHE	CA-CB-CG	-5.05	108.75	113.80
21	S	151	ALA	CA-C-O	-5.05	115.85	121.51
22	P	293	ASP	O-C-N	-5.05	116.73	122.89
2	B	197	GLU	O-C-N	5.05	127.47	122.12
13	6	135	ASN	N-CA-C	-5.05	100.47	109.06
13	6	175	LEU	N-CA-CB	5.05	117.55	110.12
19	Z	593	THR	CA-C-N	-5.05	113.87	120.44
19	Z	593	THR	C-N-CA	-5.05	113.87	120.44
22	P	350	ARG	CA-C-O	-5.05	115.19	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	146	ARG	O-C-N	5.05	127.47	122.12
25	U	222	ILE	N-CA-C	-5.05	100.61	107.99
26	O	168	ASN	N-CA-C	-5.05	100.04	110.80
29	K	220	ALA	O-C-N	5.05	127.47	122.12
29	K	399	PHE	N-CA-CB	5.05	117.55	110.12
32	J	20	LEU	CA-C-N	5.05	127.30	120.38
32	J	20	LEU	C-N-CA	5.05	127.30	120.38
5	E	182	GLN	CA-C-O	5.05	125.90	120.55
12	5	247	SER	N-CA-CB	5.05	118.24	110.21
17	T	229	ILE	CA-CB-CG2	5.05	119.09	110.50
21	S	159	VAL	CA-C-O	-5.05	115.50	120.85
30	L	318	PRO	N-CA-CB	5.05	107.73	103.19
32	J	159	LYS	CA-C-N	5.05	127.05	120.28
32	J	159	LYS	C-N-CA	5.05	127.05	120.28
12	5	224	TYR	N-CA-CB	5.05	118.77	110.39
21	S	200	ASP	CA-C-N	5.05	127.04	120.28
21	S	200	ASP	C-N-CA	5.05	127.04	120.28
25	U	86	ASN	O-C-N	-5.05	117.63	123.33
25	U	253	THR	N-CA-C	-5.05	105.78	111.28
19	Z	130	ALA	CA-C-N	5.04	127.45	120.29
19	Z	130	ALA	C-N-CA	5.04	127.45	120.29
19	Z	806	VAL	N-CA-C	-5.04	106.16	113.07
22	P	70	VAL	CG1-CB-CG2	-5.04	99.70	110.80
23	Q	272	SER	CA-C-N	5.04	131.30	121.41
23	Q	272	SER	C-N-CA	5.04	131.30	121.41
25	U	201	LEU	CA-C-N	5.04	127.45	120.29
25	U	201	LEU	C-N-CA	5.04	127.45	120.29
5	E	30	GLY	CA-C-O	5.04	125.85	120.40
20	N	152	GLY	CA-C-N	5.04	127.37	120.46
20	N	152	GLY	C-N-CA	5.04	127.37	120.46
21	S	241	ASP	N-CA-CB	5.04	117.53	110.12
24	R	20	ALA	N-CA-CB	5.04	117.62	110.16
3	C	27	ALA	CA-C-O	-5.04	115.08	120.42
6	F	52	ALA	CA-C-N	5.04	131.03	122.36
6	F	52	ALA	C-N-CA	5.04	131.03	122.36
13	6	102	TYR	N-CA-CB	5.04	117.62	110.16
14	7	164	SER	CA-C-O	5.04	125.63	119.78
17	T	219	PRO	CA-N-CD	-5.04	104.94	112.00
27	H	45	ILE	N-CA-C	5.04	115.26	110.42
28	I	322	ARG	CA-C-O	-5.04	115.53	120.82
30	L	257	PHE	CA-CB-CG	5.04	118.84	113.80
31	M	309	VAL	N-CA-C	-5.04	105.48	110.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	5	225	ARG	N-CA-CB	-5.04	102.71	110.12
16	V	132	SER	CA-C-N	5.04	127.45	120.29
16	V	132	SER	C-N-CA	5.04	127.45	120.29
32	J	202	ALA	CB-CA-C	-5.04	102.42	110.79
3	C	79	ILE	CA-C-N	5.04	127.97	120.31
3	C	79	ILE	C-N-CA	5.04	127.97	120.31
19	Z	200	ALA	CB-CA-C	-5.04	104.74	111.89
22	P	299	ILE	CA-CB-CG1	5.04	118.97	110.40
26	O	76	LEU	CB-CA-C	-5.04	102.94	110.90
28	I	117	ASP	N-CA-CB	5.04	116.68	110.53
3	C	178	ASP	CA-C-O	-5.04	113.85	119.79
24	R	219	PHE	N-CA-CB	5.04	117.53	110.12
20	N	484	ALA	CA-C-O	5.04	125.76	120.42
26	O	150	SER	O-C-N	5.04	127.46	122.12
32	J	66	LEU	N-CA-CB	5.04	117.98	110.22
16	V	281	LYS	CA-C-N	5.03	127.02	120.28
16	V	281	LYS	C-N-CA	5.03	127.02	120.28
19	Z	460	ASP	O-C-N	5.03	127.11	121.32
21	S	334	LEU	N-CA-CB	5.03	117.52	110.12
22	P	187	LEU	CA-C-N	5.03	127.96	120.31
22	P	187	LEU	C-N-CA	5.03	127.96	120.31
19	Z	20	ALA	CA-C-N	5.03	124.64	119.56
19	Z	20	ALA	C-N-CA	5.03	124.64	119.56
19	Z	355	ASN	CB-CA-C	-5.03	102.98	110.88
22	P	79	GLU	N-CA-C	5.03	116.84	111.36
22	P	277	ALA	CB-CA-C	-5.03	101.17	109.27
6	F	115	LYS	CA-C-O	-5.03	115.09	120.42
9	2	168	VAL	CA-C-O	-5.03	114.95	120.43
11	4	25	ILE	N-CA-CB	5.03	119.69	111.44
14	7	151	TRP	CG-CD2-CE3	-5.03	128.87	133.90
15	W	145	GLU	CA-C-N	5.03	129.12	120.72
15	W	145	GLU	C-N-CA	5.03	129.12	120.72
19	Z	10	PRO	CA-C-N	5.03	131.03	121.97
19	Z	10	PRO	C-N-CA	5.03	131.03	121.97
19	Z	256	PHE	N-CA-CB	5.03	118.08	110.28
20	N	799	LYS	CA-C-N	5.03	131.03	121.97
20	N	799	LYS	C-N-CA	5.03	131.03	121.97
26	O	217	LEU	CB-CA-C	-5.03	102.44	110.79
26	O	299	SER	CA-C-N	5.03	127.52	120.28
26	O	299	SER	C-N-CA	5.03	127.52	120.28
27	H	265	ARG	CA-C-O	-5.03	115.22	120.55
29	K	249	ASP	CB-CA-C	5.03	118.78	110.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	345	ILE	CA-C-O	-5.03	115.72	120.95
18	Y	63	HIS	CB-CG-CD2	-5.03	124.66	131.20
30	L	300	ASP	CA-C-O	-5.03	115.02	119.75
1	A	138	MET	N-CA-C	-5.03	100.98	109.07
4	D	127	SER	CA-C-N	5.03	128.48	121.24
4	D	127	SER	C-N-CA	5.03	128.48	121.24
6	F	126	ARG	CD-NE-CZ	-5.03	117.36	124.40
6	F	216	GLY	N-CA-C	-5.03	102.94	111.08
17	T	310	GLY	N-CA-C	-5.03	108.38	114.92
26	O	136	GLU	N-CA-C	5.03	116.76	111.28
27	H	153	LEU	CA-C-O	-5.03	113.27	120.16
28	I	290	ILE	CB-CA-C	-5.03	104.11	112.26
29	K	74	HIS	CB-CG-ND1	-5.03	115.16	122.70
29	K	237	GLN	CA-C-O	5.03	127.70	120.51
10	3	129	CYS	CA-C-O	-5.03	113.28	120.16
13	6	117	ALA	CA-C-O	-5.03	115.09	120.42
21	S	324	VAL	CB-CA-C	-5.03	105.35	112.14
23	Q	236	PHE	CA-C-N	5.03	127.43	120.29
23	Q	236	PHE	C-N-CA	5.03	127.43	120.29
27	H	230	ALA	CA-C-N	5.03	126.97	120.44
27	H	230	ALA	C-N-CA	5.03	126.97	120.44
27	H	325	ASP	CA-CB-CG	-5.03	107.57	112.60
29	K	77	GLU	CA-C-N	5.03	127.01	120.28
29	K	77	GLU	C-N-CA	5.03	127.01	120.28
32	J	400	SER	O-C-N	-5.03	115.91	122.59
19	Z	442	SER	N-CA-C	-5.02	105.88	111.36
20	N	898	CYS	N-CA-C	-5.02	100.10	110.80
23	Q	154	LEU	CA-C-N	5.02	127.01	120.28
23	Q	154	LEU	C-N-CA	5.02	127.01	120.28
5	E	178	GLN	N-CA-CB	-5.02	102.73	110.16
7	G	90	ASP	O-C-N	5.02	127.88	122.15
20	N	546	ARG	CA-C-O	-5.02	115.10	120.42
23	Q	378	LEU	O-C-N	-5.02	117.36	123.29
24	R	281	GLU	O-C-N	5.02	127.45	122.03
26	O	132	LYS	O-C-N	-5.02	116.80	122.12
8	1	221	VAL	CA-C-N	-5.02	115.91	122.99
8	1	221	VAL	C-N-CA	-5.02	115.91	122.99
4	D	133	PHE	CA-CB-CG	-5.02	108.78	113.80
12	5	114	TRP	CE2-CD2-CE3	5.02	123.82	118.80
13	6	227	LYS	CA-C-N	5.02	129.21	120.68
13	6	227	LYS	C-N-CA	5.02	129.21	120.68
24	R	124	PHE	N-CA-CB	5.02	118.06	110.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	188	LEU	CA-C-O	-5.02	115.03	119.75
29	K	182	GLU	CB-CA-C	-5.02	102.32	110.85
32	J	231	VAL	CA-C-N	5.02	127.94	120.31
32	J	231	VAL	C-N-CA	5.02	127.94	120.31
9	2	124	ARG	NE-CZ-NH2	-5.02	114.68	119.20
17	T	303	THR	CA-C-N	5.02	126.96	120.44
17	T	303	THR	C-N-CA	5.02	126.96	120.44
19	Z	2	GLU	CA-C-N	5.02	127.83	120.71
19	Z	2	GLU	C-N-CA	5.02	127.83	120.71
20	N	107	HIS	CE1-NE2-CD2	-5.02	103.98	109.00
25	U	9	VAL	CA-CB-CG2	5.02	118.93	110.40
25	U	77	ASN	CA-C-N	5.02	127.00	120.28
25	U	77	ASN	C-N-CA	5.02	127.00	120.28
27	H	317	VAL	CA-CB-CG2	-5.02	101.87	110.40
13	6	56	LEU	CA-C-O	5.02	125.75	119.78
16	V	108	VAL	CA-C-N	5.02	128.53	120.30
16	V	108	VAL	C-N-CA	5.02	128.53	120.30
25	U	196	HIS	ND1-CE1-NE2	5.02	113.42	108.40
7	G	39	GLY	N-CA-C	-5.01	101.29	113.18
9	2	260	THR	CA-CB-OG1	5.01	117.12	109.60
17	T	328	PRO	CA-N-CD	-5.01	104.98	112.00
26	O	72	ASN	OD1-CG-ND2	-5.01	117.59	122.60
5	E	61	PRO	N-CA-CB	5.01	108.51	103.25
31	M	362	GLU	CA-C-O	-5.01	115.24	120.55
6	F	127	PRO	N-CA-C	-5.01	108.27	114.68
7	G	28	MET	N-CA-CB	5.01	118.05	110.28
11	4	47	VAL	CA-C-N	5.01	126.96	122.20
11	4	47	VAL	C-N-CA	5.01	126.96	122.20
15	W	108	ARG	NE-CZ-NH1	5.01	126.51	121.50
20	N	838	LYS	N-CA-C	5.01	116.82	111.36
29	K	119	ILE	CA-C-O	5.01	125.20	121.09
30	L	377	VAL	O-C-N	-5.01	117.49	123.00
8	1	73	HIS	CG-CD2-NE2	5.01	112.21	107.20
9	2	117	PRO	N-CD-CG	5.01	110.71	103.20
10	3	111	GLY	N-CA-C	-5.01	103.04	110.71
12	5	206	LEU	N-CA-CB	5.01	117.33	110.07
13	6	187	ASN	OD1-CG-ND2	-5.01	117.59	122.60
15	W	150	THR	CA-C-N	5.01	127.88	120.82
15	W	150	THR	C-N-CA	5.01	127.88	120.82
20	N	873	PRO	N-CA-CB	5.01	108.51	103.25
25	U	162	ILE	CA-CB-CG2	-5.01	101.99	110.50
2	B	79	MET	N-CA-CB	5.01	117.71	109.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	F	105	VAL	O-C-N	5.01	126.99	121.83
9	2	176	ALA	O-C-N	5.01	127.86	122.15
14	7	191	GLN	CG-CD-NE2	-5.01	108.89	116.40
29	K	221	HIS	CG-CD2-NE2	5.01	112.21	107.20
30	L	334	ILE	N-CA-CB	5.01	117.12	110.26
15	W	118	GLU	O-C-N	-5.00	114.92	122.28
19	Z	192	VAL	CA-C-N	5.00	124.61	119.56
19	Z	192	VAL	C-N-CA	5.00	124.61	119.56
29	K	71	GLU	O-C-N	5.00	127.42	122.12
9	2	86	CYS	CA-C-O	-5.00	115.26	121.11
19	Z	222	ASP	CA-C-O	5.00	125.85	120.55
20	N	917	THR	O-C-N	5.00	127.42	122.12
23	Q	76	PHE	CA-C-N	5.00	127.40	120.29
23	Q	76	PHE	C-N-CA	5.00	127.40	120.29
26	O	143	ASN	CA-C-N	5.00	126.94	120.44
26	O	143	ASN	C-N-CA	5.00	126.94	120.44
31	M	319	GLN	CA-C-O	-5.00	115.12	120.42
2	B	55	ILE	N-CA-CB	5.00	119.48	111.23
3	C	170	ALA	O-C-N	5.00	127.85	122.15
4	D	116	TYR	CA-C-N	5.00	127.52	120.42
4	D	116	TYR	C-N-CA	5.00	127.52	120.42
7	G	42	CYS	N-CA-C	-5.00	102.18	109.63
8	1	97	GLY	CA-C-N	5.00	126.98	120.28
8	1	97	GLY	C-N-CA	5.00	126.98	120.28
15	W	185	SER	O-C-N	5.00	127.42	122.12
20	N	716	VAL	CA-C-O	-5.00	115.75	120.95
27	H	316	LYS	CB-CG-CD	5.00	122.81	111.30
27	H	403	ILE	CA-CB-CG1	5.00	118.90	110.40
29	K	29	PHE	CB-CA-C	-5.00	100.67	109.62

There are no chirality outliers.

All (291) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
8	1	123	TYR	Sidechain
8	1	124	ARG	Sidechain
8	1	145	TYR	Sidechain
8	1	199	ARG	Sidechain
8	1	219	ARG	Sidechain
9	2	115	ARG	Sidechain
9	2	133	TYR	Sidechain
9	2	154	TYR	Sidechain

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Mol	Chain	Res	Type	Group
9	2	230	ARG	Sidechain
9	2	51	TYR	Sidechain
9	2	85	TYR	Sidechain
10	3	129	CYS	Peptide
10	3	188	HIS	Sidechain
10	3	28	PHE	Sidechain
10	3	85	TYR	Sidechain
11	4	107	TYR	Sidechain
11	4	116	TYR	Sidechain
11	4	129	PHE	Sidechain
11	4	153	ARG	Sidechain
11	4	161	ARG	Sidechain
11	4	171	PHE	Sidechain
11	4	59	TYR	Sidechain
11	4	67	TYR	Sidechain
11	4	86	ARG	Sidechain
12	5	128	ARG	Sidechain
12	5	172	TYR	Sidechain
12	5	179	ARG	Sidechain
12	5	195	PHE	Sidechain
12	5	196	GLY	Mainchain
12	5	204	TYR	Sidechain
12	5	216	ARG	Sidechain
12	5	220	TYR	Sidechain
12	5	236	TYR	Sidechain
12	5	78	ARG	Peptide,Sidechain
13	6	132	TYR	Sidechain
13	6	152	ASP	Peptide
13	6	55	ARG	Sidechain
14	7	101	TYR	Sidechain
14	7	104	PHE	Sidechain
14	7	141	TYR	Sidechain
14	7	148	ASN	Peptide
14	7	168	TYR	Sidechain
14	7	185	TYR	Sidechain
14	7	222	TYR	Sidechain
14	7	230	ARG	Sidechain
14	7	74	TYR	Sidechain
14	7	88	ARG	Sidechain
1	A	11	ARG	Mainchain
1	A	117	ARG	Sidechain
1	A	163	PHE	Sidechain

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Mol	Chain	Res	Type	Group
1	A	227	PHE	Sidechain
1	A	3	ARG	Sidechain
1	A	88	ARG	Sidechain
2	B	189	HIS	Sidechain
2	B	24	TYR	Sidechain
2	B	8	PHE	Sidechain
2	B	83	TYR	Sidechain
3	C	101	TYR	Sidechain
3	C	121	TYR	Sidechain
3	C	136	TYR	Sidechain
3	C	156	TYR	Sidechain
3	C	226	ARG	Sidechain
3	C	66	TYR	Sidechain
4	D	131	ARG	Sidechain
4	D	133	PHE	Sidechain
4	D	144	PHE	Sidechain
4	D	151	TYR	Sidechain
4	D	177	PHE	Sidechain
4	D	182	TYR	Sidechain
4	D	218	ARG	Sidechain
4	D	52	LYS	Peptide
4	D	57	ARG	Sidechain
5	E	103	TYR	Sidechain
5	E	22	PHE	Sidechain
5	E	53	ARG	Sidechain
6	F	122	ARG	Sidechain
6	F	137	TYR	Sidechain
6	F	153	TYR	Sidechain
6	F	196	ARG	Sidechain
6	F	221	PHE	Sidechain
6	F	24	TYR	Sidechain
6	F	6	TYR	Sidechain
6	F	89	ARG	Sidechain
6	F	97	PHE	Sidechain
7	G	123	TYR	Sidechain
7	G	20	ARG	Sidechain
7	G	233	ARG	Sidechain
7	G	41	ARG	Sidechain
7	G	59	TYR	Sidechain
7	G	72	ARG	Sidechain
27	H	108	ASP	Peptide
27	H	147	TYR	Sidechain

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Mol	Chain	Res	Type	Group
27	H	174	TYR	Sidechain
27	H	227	ARG	Sidechain
27	H	237	PHE	Sidechain
27	H	265	ARG	Sidechain
27	H	274	PHE	Sidechain
27	H	370	PHE	Sidechain
27	H	432	TYR	Sidechain
27	H	97	ARG	Sidechain
28	I	103	ARG	Sidechain
28	I	132	TYR	Sidechain
28	I	249	ARG	Sidechain
28	I	268	ARG	Sidechain
28	I	272	ARG	Sidechain
28	I	317	ASP	Mainchain
28	I	319	PHE	Sidechain
28	I	333	ARG	Sidechain
28	I	343	ARG	Sidechain
28	I	411	ARG	Sidechain
28	I	428	TYR	Sidechain
28	I	96	ARG	Sidechain
32	J	113	ARG	Sidechain
32	J	121	TYR	Sidechain
32	J	211	PHE	Sidechain
32	J	232	ARG	Sidechain
32	J	24	TYR	Sidechain
32	J	297	ARG	Sidechain
32	J	334	ARG	Sidechain
32	J	372	ARG	Sidechain
32	J	95	PHE	Sidechain
29	K	111	TYR	Sidechain
29	K	112	TYR	Sidechain
29	K	121	ARG	Sidechain
29	K	135	HIS	Sidechain
29	K	164	TYR	Sidechain
29	K	168	GLY	Peptide
29	K	191	TYR	Sidechain
29	K	200	ARG	Sidechain
29	K	222	HIS	Sidechain
29	K	235	PHE	Sidechain
29	K	239	TYR	Sidechain
29	K	245	ARG	Sidechain
29	K	252	ARG	Sidechain

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Mol	Chain	Res	Type	Group
29	K	313	ARG	Sidechain
29	K	326	ARG	Sidechain
29	K	338	ARG	Sidechain
29	K	363	TYR	Sidechain
29	K	391	ARG	Sidechain
29	K	403	TYR	Sidechain
29	K	81	ARG	Sidechain
30	L	111	ARG	Sidechain
30	L	146	TYR	Sidechain
30	L	187	TYR	Sidechain
30	L	221	TYR	Sidechain
30	L	227	ARG	Sidechain
30	L	235	TYR	Sidechain
30	L	26	TYR	Sidechain
30	L	27	ARG	Sidechain
30	L	308	ARG	Sidechain
30	L	44	ARG	Sidechain
30	L	83	PHE	Sidechain
31	M	120	ARG	Sidechain
31	M	174	ARG	Sidechain
31	M	241	ARG	Sidechain
31	M	287	PHE	Sidechain
31	M	307	ARG	Sidechain
31	M	374	ARG	Sidechain
31	M	384	TYR	Sidechain
20	N	108	TYR	Sidechain
20	N	138	PHE	Sidechain
20	N	163	PHE	Sidechain
20	N	222	PHE	Sidechain
20	N	246	TYR	Sidechain
20	N	250	PHE	Sidechain
20	N	253	TYR	Sidechain
20	N	437	TYR	Sidechain
20	N	49	TYR	Sidechain
20	N	535	TYR	Sidechain
20	N	54	PHE	Sidechain
20	N	559	ARG	Sidechain
20	N	650	TYR	Sidechain
20	N	682	TYR	Sidechain
20	N	710	ARG	Sidechain
20	N	713	TYR	Sidechain
20	N	778	PHE	Sidechain

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Mol	Chain	Res	Type	Group
20	N	80	TYR	Sidechain
20	N	900	TYR	Sidechain
20	N	948	PHE	Sidechain
20	N	950	TYR	Sidechain
26	O	162	TYR	Sidechain
26	O	247	ARG	Sidechain
26	O	270	ARG	Sidechain
26	O	289	ARG	Sidechain
26	O	29	TYR	Sidechain
26	O	44	PHE	Sidechain
26	O	50	PHE	Sidechain
26	O	60	TYR	Sidechain
26	O	63	PHE	Sidechain
22	P	129	ARG	Sidechain
22	P	142	ARG	Sidechain
22	P	191	ARG	Sidechain
22	P	20	TYR	Sidechain
22	P	201	ARG	Sidechain
22	P	226	TYR	Sidechain
22	P	247	TYR	Sidechain
22	P	289	ARG	Sidechain
22	P	302	TYR	Sidechain
22	P	369	TYR	Sidechain
22	P	370	TYR	Sidechain
22	P	377	ARG	Sidechain
22	P	65	ARG	Sidechain
22	P	75	TYR	Sidechain
23	Q	143	TYR	Sidechain
23	Q	161	ASP	Peptide
23	Q	201	TYR	Sidechain
23	Q	231	TYR	Sidechain
23	Q	232	PHE	Sidechain
23	Q	233	TYR	Sidechain
23	Q	302	PHE	Sidechain
23	Q	309	TYR	Sidechain
23	Q	327	TYR	Sidechain
23	Q	342	PHE	Sidechain
23	Q	374	PHE	Sidechain
23	Q	72	TYR	Sidechain
23	Q	76	PHE	Sidechain
23	Q	90	ARG	Sidechain
24	R	101	ARG	Sidechain

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Mol	Chain	Res	Type	Group
24	R	151	TYR	Sidechain
24	R	222	TYR	Sidechain
24	R	267	ARG	Sidechain
24	R	292	TYR	Sidechain
24	R	304	TYR	Sidechain
24	R	311	TYR	Sidechain
24	R	318	TYR	Sidechain
24	R	323	PHE	Sidechain
24	R	366	TYR	Sidechain
24	R	385	ARG	Sidechain
24	R	54	TYR	Sidechain
21	S	102	ARG	Sidechain
21	S	123	THR	Mainchain
21	S	144	ARG	Sidechain
21	S	146	ARG	Sidechain
21	S	177	TYR	Sidechain
21	S	214	TYR	Sidechain
21	S	237	ARG	Sidechain
21	S	254	TYR	Sidechain
21	S	286	TYR	Sidechain
21	S	287	TYR	Sidechain
21	S	302	ARG	Sidechain
21	S	315	HIS	Sidechain
21	S	345	ARG	Sidechain
21	S	371	PHE	Sidechain
21	S	410	TYR	Sidechain
21	S	497	TYR	Sidechain
21	S	95	ARG	Sidechain
17	T	107	ARG	Sidechain
17	T	131	PHE	Sidechain
17	T	169	ARG	Sidechain
17	T	177	TYR	Sidechain
17	T	185	LEU	Peptide
17	T	190	TYR	Sidechain
17	T	218	LEU	Peptide
17	T	282	TYR	Sidechain
17	T	287	PHE	Sidechain
17	T	305	TYR	Sidechain
17	T	309	ARG	Sidechain
17	T	347	ARG	Sidechain
25	U	114	ARG	Sidechain
25	U	138	TYR	Sidechain

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Mol	Chain	Res	Type	Group
25	U	211	TYR	Sidechain
25	U	261	TYR	Sidechain
25	U	267	ARG	Sidechain
25	U	34	ARG	Sidechain
25	U	74	TYR	Sidechain
25	U	79	TYR	Sidechain
25	U	82	PHE	Sidechain
25	U	95	TYR	Sidechain
16	V	160	PHE	Sidechain
16	V	161	ARG	Sidechain
16	V	200	TYR	Sidechain
16	V	201	TYR	Sidechain
16	V	234	TYR	Sidechain
15	W	142	ASN	Peptide
15	W	143	PHE	Sidechain
15	W	15	TYR	Sidechain
19	Z	103	TYR	Sidechain
19	Z	121	PHE	Sidechain
19	Z	161	HIS	Sidechain
19	Z	194	TYR	Sidechain
19	Z	239	TYR	Sidechain
19	Z	261	ARG	Sidechain
19	Z	267	ARG	Sidechain
19	Z	335	ARG	Sidechain
19	Z	357	ARG	Sidechain
19	Z	703	ARG	Sidechain
19	Z	718	ASP	Peptide
19	Z	764	LEU	Mainchain
19	Z	79	ARG	Sidechain
19	Z	816	TYR	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
3	C	1960	0	1983	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
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	7122	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	3126	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	82758	0	83523	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%)	229 (94%)	13 (5%)	2 (1%)	16	54
2	B	232/234 (99%)	214 (92%)	14 (6%)	4 (2%)	7	36
3	C	247/261 (95%)	231 (94%)	13 (5%)	3 (1%)	10	44
4	D	244/254 (96%)	221 (91%)	13 (5%)	10 (4%)	2	18
5	E	231/241 (96%)	214 (93%)	12 (5%)	5 (2%)	5	29
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%)	174 (87%)	14 (7%)	12 (6%)	1	13
9	2	217/277 (78%)	184 (85%)	18 (8%)	15 (7%)	1	11
10	3	203/205 (99%)	160 (79%)	27 (13%)	16 (8%)	1	10
11	4	194/201 (96%)	167 (86%)	14 (7%)	13 (7%)	1	12
12	5	199/263 (76%)	173 (87%)	17 (8%)	9 (4%)	2	17
13	6	211/240 (88%)	178 (84%)	26 (12%)	7 (3%)	3	21
14	7	214/263 (81%)	187 (87%)	18 (8%)	9 (4%)	2	17
15	W	193/377 (51%)	179 (93%)	12 (6%)	2 (1%)	12	49
16	V	287/310 (93%)	264 (92%)	17 (6%)	6 (2%)	5	30
17	T	261/353 (74%)	229 (88%)	26 (10%)	6 (2%)	5	28
18	Y	22/70 (31%)	22 (100%)	0	0	100	100
19	Z	894/908 (98%)	800 (90%)	62 (7%)	32 (4%)	2	20
20	N	903/953 (95%)	833 (92%)	52 (6%)	18 (2%)	6	31
21	S	474/530 (89%)	416 (88%)	43 (9%)	15 (3%)	3	21
22	P	454/456 (100%)	428 (94%)	20 (4%)	6 (1%)	9	42
23	Q	420/422 (100%)	389 (93%)	20 (5%)	11 (3%)	4	25
24	R	387/389 (100%)	360 (93%)	20 (5%)	7 (2%)	6	34
25	U	286/320 (89%)	262 (92%)	15 (5%)	9 (3%)	3	22

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
26	O	374/376 (100%)	347 (93%)	22 (6%)	5 (1%)	9	42
27	H	394/433 (91%)	361 (92%)	24 (6%)	9 (2%)	5	28
28	I	383/440 (87%)	353 (92%)	23 (6%)	7 (2%)	6	34
29	K	389/418 (93%)	361 (93%)	25 (6%)	3 (1%)	16	54
30	L	387/403 (96%)	369 (95%)	14 (4%)	4 (1%)	12	49
31	M	413/442 (93%)	380 (92%)	27 (6%)	6 (2%)	8	40
32	J	404/406 (100%)	364 (90%)	30 (7%)	10 (2%)	4	26
All	All	10440/11447 (91%)	9490 (91%)	683 (6%)	267 (3%)	6	25

All (267) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	B	41	ALA
4	D	9	VAL
8	1	53	THR
8	1	207	ILE
8	1	232	ILE
9	2	55	ILE
9	2	117	PRO
9	2	172	SER
10	3	10	ALA
10	3	57	ALA
10	3	129	CYS
10	3	130	PRO
10	3	186	ILE
11	4	50	ALA
11	4	114	ALA
11	4	131	ALA
11	4	189	HIS
12	5	62	THR
12	5	109	ALA
12	5	155	SER
12	5	179	ARG
13	6	85	HIS
13	6	157	TYR
13	6	168	ALA
14	7	65	VAL
14	7	101	TYR
14	7	242	GLU
14	7	254	ASP

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Mol	Chain	Res	Type
17	T	94	ALA
17	T	219	PRO
19	Z	134	SER
19	Z	293	GLN
19	Z	332	ALA
19	Z	420	TRP
19	Z	422	VAL
19	Z	474	SER
19	Z	719	PRO
20	N	123	LYS
20	N	593	SER
20	N	696	ILE
20	N	856	VAL
21	S	54	ALA
21	S	444	GLU
22	P	6	SER
24	R	46	ARG
24	R	289	ALA
26	O	183	VAL
27	H	111	TYR
27	H	367	ASP
27	H	368	ILE
28	I	83	GLU
28	I	340	ALA
31	M	107	GLN
31	M	118	SER
32	J	71	SER
32	J	300	ILE
1	A	10	ASP
3	C	3	ARG
3	C	7	SER
4	D	28	LYS
4	D	75	VAL
4	D	78	SER
7	G	182	MET
8	1	136	TRP
8	1	153	MET
8	1	206	VAL
9	2	91	THR
9	2	136	TYR
9	2	137	ILE
9	2	215	ASN

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Mol	Chain	Res	Type
9	2	251	THR
10	3	19	CYS
10	3	120	PHE
10	3	185	VAL
10	3	195	ILE
12	5	101	LEU
12	5	233	VAL
13	6	39	VAL
14	7	64	VAL
14	7	84	SER
14	7	176	TYR
15	W	135	LYS
17	T	221	LYS
19	Z	24	ALA
19	Z	67	ASP
19	Z	308	SER
19	Z	313	GLU
19	Z	458	GLU
19	Z	756	PRO
19	Z	815	HIS
19	Z	837	LEU
20	N	3	THR
20	N	628	ARG
20	N	865	LYS
20	N	928	VAL
21	S	82	VAL
21	S	94	LEU
21	S	112	ALA
21	S	131	LEU
21	S	139	ALA
21	S	461	ASP
22	P	97	LEU
22	P	136	ILE
23	Q	62	GLN
23	Q	119	SER
23	Q	181	SER
23	Q	244	SER
23	Q	342	PHE
23	Q	355	LYS
23	Q	393	VAL
24	R	214	MET
27	H	104	ALA

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Mol	Chain	Res	Type
27	H	250	VAL
27	H	280	ILE
27	H	400	ARG
28	I	82	GLN
28	I	227	PRO
28	I	296	ASP
29	K	42	SER
30	L	67	VAL
30	L	206	ASP
31	M	180	VAL
3	C	166	ASN
4	D	26	VAL
4	D	204	VAL
5	E	53	ARG
5	E	55	THR
8	1	81	SER
8	1	138	PRO
8	1	163	SER
9	2	63	ALA
9	2	82	PRO
9	2	225	LYS
10	3	142	CYS
10	3	161	GLU
11	4	22	ALA
11	4	149	PRO
11	4	178	PHE
12	5	63	LEU
12	5	157	GLY
13	6	47	PHE
13	6	141	ASP
16	V	76	PRO
16	V	186	LYS
16	V	188	SER
17	T	284	LYS
17	T	340	ARG
19	Z	170	TRP
19	Z	314	TYR
19	Z	424	GLY
19	Z	509	LYS
19	Z	533	ASP
19	Z	634	LYS
19	Z	841	PRO

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Mol	Chain	Res	Type
19	Z	864	GLY
20	N	16	GLU
20	N	363	SER
20	N	871	PRO
21	S	92	ARG
21	S	101	SER
22	P	4	GLY
23	Q	6	VAL
23	Q	102	ALA
23	Q	343	SER
24	R	47	GLU
24	R	358	ARG
25	U	5	ALA
25	U	119	SER
25	U	147	ASP
25	U	185	GLY
26	O	47	ASP
26	O	72	ASN
26	O	371	ALA
32	J	91	PRO
32	J	142	LYS
32	J	337	ASN
32	J	342	ILE
32	J	374	ARG
1	A	225	PRO
2	B	181	ASP
4	D	79	VAL
5	E	35	SER
5	E	122	GLN
5	E	189	THR
6	F	10	VAL
6	F	41	LYS
7	G	73	HIS
8	1	44	GLY
9	2	67	MET
10	3	33	GLN
10	3	82	ILE
10	3	128	GLY
10	3	137	VAL
11	4	152	SER
13	6	230	ILE
16	V	266	THR

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Mol	Chain	Res	Type
16	V	275	VAL
19	Z	330	PHE
19	Z	757	ASN
19	Z	819	TYR
19	Z	827	PRO
20	N	557	TYR
20	N	883	ARG
20	N	885	MET
21	S	150	ALA
22	P	5	GLY
22	P	55	ARG
24	R	250	LEU
25	U	27	GLY
25	U	184	VAL
25	U	237	LEU
28	I	435	PRO
29	K	32	PRO
31	M	340	ILE
32	J	195	GLY
32	J	404	LEU
2	B	200	GLU
4	D	27	LYS
4	D	29	GLY
7	G	202	HIS
7	G	217	VAL
9	2	256	THR
11	4	12	TYR
11	4	154	GLU
14	7	191	GLN
16	V	179	SER
17	T	206	ASN
20	N	486	MET
20	N	938	GLU
21	S	258	SER
21	S	458	GLU
21	S	501	LEU
23	Q	374	PHE
24	R	211	TYR
25	U	118	ASN
25	U	242	LEU
26	O	285	PRO
27	H	156	LYS

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Mol	Chain	Res	Type
28	I	177	GLU
29	K	237	GLN
31	M	257	PRO
4	D	106	ASP
9	2	189	MET
10	3	43	PHE
11	4	11	ASP
19	Z	619	HIS
20	N	896	GLU
30	L	254	GLY
32	J	7	GLU
19	Z	718	ASP
27	H	102	ILE
30	L	223	GLY
2	B	55	ILE
8	1	148	PRO
14	7	48	PRO
15	W	177	PRO
19	Z	643	PRO
19	Z	842	VAL
8	1	69	PRO
12	5	242	GLY
31	M	232	PRO
9	2	235	PRO
11	4	13	VAL
19	Z	755	ASP
11	4	26	VAL
20	N	800	VAL
21	S	443	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%)	202 (96%)	8 (4%)	29	50
2	B	191/191 (100%)	177 (93%)	14 (7%)	13	34

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
3	C	209/221 (95%)	192 (92%)	17 (8%)	11	31
4	D	208/215 (97%)	189 (91%)	19 (9%)	9	27
5	E	195/203 (96%)	180 (92%)	15 (8%)	12	32
6	F	204/224 (91%)	195 (96%)	9 (4%)	25	47
7	G	202/212 (95%)	188 (93%)	14 (7%)	14	36
8	1	160/185 (86%)	141 (88%)	19 (12%)	5	18
9	2	180/227 (79%)	164 (91%)	16 (9%)	9	28
10	3	175/175 (100%)	157 (90%)	18 (10%)	7	23
11	4	167/172 (97%)	145 (87%)	22 (13%)	4	15
12	5	158/205 (77%)	146 (92%)	12 (8%)	12	33
13	6	179/200 (90%)	160 (89%)	19 (11%)	6	21
14	7	178/215 (83%)	157 (88%)	21 (12%)	5	18
15	W	168/312 (54%)	161 (96%)	7 (4%)	26	48
16	V	253/268 (94%)	238 (94%)	15 (6%)	18	39
17	T	233/298 (78%)	221 (95%)	12 (5%)	21	42
18	Y	22/63 (35%)	21 (96%)	1 (4%)	24	46
19	Z	753/765 (98%)	712 (95%)	41 (5%)	20	41
20	N	776/814 (95%)	734 (95%)	42 (5%)	20	41
21	S	414/458 (90%)	393 (95%)	21 (5%)	21	42
22	P	419/419 (100%)	396 (94%)	23 (6%)	19	41
23	Q	362/362 (100%)	344 (95%)	18 (5%)	22	43
24	R	345/345 (100%)	322 (93%)	23 (7%)	15	36
25	U	259/289 (90%)	244 (94%)	15 (6%)	18	40
26	O	334/334 (100%)	314 (94%)	20 (6%)	17	39
27	H	341/372 (92%)	314 (92%)	27 (8%)	11	32
28	I	341/385 (89%)	318 (93%)	23 (7%)	15	36
29	K	343/367 (94%)	321 (94%)	22 (6%)	16	37
30	L	341/353 (97%)	322 (94%)	19 (6%)	19	40
31	M	357/382 (94%)	336 (94%)	21 (6%)	18	39
32	J	352/352 (100%)	330 (94%)	22 (6%)	16	37
All	All	9029/9793 (92%)	8434 (93%)	595 (7%)	17	37

All (595) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	50	ILE
1	A	79	VAL
1	A	110	PRO
1	A	111	VAL
1	A	114	LEU
1	A	145	GLU
1	A	161	CYS
1	A	166	THR
2	B	4	ARG
2	B	12	THR
2	B	44	VAL
2	B	55	ILE
2	B	65	VAL
2	B	75	VAL
2	B	87	VAL
2	B	95	GLN
2	B	128	ARG
2	B	167	TYR
2	B	168	VAL
2	B	205	GLU
2	B	208	ILE
2	B	220	ARG
3	C	35	LEU
3	C	38	LEU
3	C	43	VAL
3	C	44	LEU
3	C	57	ASP
3	C	65	ILE
3	C	99	LEU
3	C	114	LEU
3	C	117	ILE
3	C	137	ILE
3	C	164	ILE
3	C	175	LEU
3	C	186	LEU
3	C	198	ASN
3	C	211	VAL
3	C	225	ILE
3	C	236	LEU
4	D	2	SER
4	D	12	PRO
4	D	16	LEU

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Mol	Chain	Res	Type
4	D	26	VAL
4	D	40	ILE
4	D	43	LEU
4	D	75	VAL
4	D	82	LEU
4	D	110	VAL
4	D	113	ILE
4	D	115	ARG
4	D	122	GLN
4	D	140	VAL
4	D	150	LEU
4	D	187	ILE
4	D	196	LEU
4	D	204	VAL
4	D	214	LEU
4	D	218	ARG
5	E	12	VAL
5	E	52	LYS
5	E	68	VAL
5	E	78	MET
5	E	98	ASN
5	E	101	PHE
5	E	133	MET
5	E	134	SER
5	E	149	LYS
5	E	157	ASP
5	E	162	PHE
5	E	205	VAL
5	E	215	ILE
5	E	228	MET
5	E	238	ILE
6	F	5	GLN
6	F	38	LEU
6	F	70	ILE
6	F	72	ILE
6	F	105	VAL
6	F	111	LEU
6	F	133	LEU
6	F	159	MET
6	F	198	THR
7	G	9	ASP
7	G	34	SER

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Mol	Chain	Res	Type
7	G	36	THR
7	G	61	GLU
7	G	93	ARG
7	G	105	TYR
7	G	111	HIS
7	G	118	MET
7	G	124	THR
7	G	129	VAL
7	G	136	PHE
7	G	143	VAL
7	G	182	MET
7	G	194	VAL
8	1	36	ILE
8	1	45	VAL
8	1	57	SER
8	1	59	ILE
8	1	63	VAL
8	1	70	ILE
8	1	90	ASP
8	1	102	GLU
8	1	109	VAL
8	1	115	LEU
8	1	131	ILE
8	1	152	MET
8	1	163	SER
8	1	177	ARG
8	1	184	GLU
8	1	195	LEU
8	1	221	VAL
8	1	223	LEU
8	1	230	VAL
9	2	56	VAL
9	2	57	LEU
9	2	74	CYS
9	2	105	ASN
9	2	111	LEU
9	2	112	THR
9	2	120	VAL
9	2	124	ARG
9	2	136	TYR
9	2	137	ILE
9	2	175	LEU

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Mol	Chain	Res	Type
9	2	181	PHE
9	2	186	ARG
9	2	214	SER
9	2	236	ASN
9	2	259	VAL
10	3	15	LYS
10	3	22	ILE
10	3	28	PHE
10	3	30	ILE
10	3	34	MET
10	3	56	LEU
10	3	60	VAL
10	3	74	TYR
10	3	80	ARG
10	3	98	LYS
10	3	99	ARG
10	3	124	LEU
10	3	133	THR
10	3	137	VAL
10	3	153	LEU
10	3	171	MET
10	3	201	LYS
10	3	204	MET
11	4	20	VAL
11	4	49	GLU
11	4	54	VAL
11	4	58	GLU
11	4	60	ILE
11	4	66	LEU
11	4	68	LYS
11	4	69	MET
11	4	76	SER
11	4	77	PRO
11	4	111	GLU
11	4	115	LEU
11	4	124	LEU
11	4	134	TYR
11	4	140	LEU
11	4	143	LEU
11	4	149	PRO
11	4	151	ILE
11	4	155	ARG

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Mol	Chain	Res	Type
11	4	169	LYS
11	4	185	LYS
11	4	194	ILE
12	5	62	THR
12	5	69	HIS
12	5	72	ILE
12	5	73	VAL
12	5	84	TYR
12	5	96	ILE
12	5	103	THR
12	5	186	SER
12	5	214	LEU
12	5	235	LEU
12	5	246	VAL
12	5	254	LEU
13	6	40	LEU
13	6	50	VAL
13	6	55	ARG
13	6	57	SER
13	6	60	PHE
13	6	79	ILE
13	6	94	ILE
13	6	99	LEU
13	6	108	LYS
13	6	122	ILE
13	6	128	PHE
13	6	132	TYR
13	6	137	ILE
13	6	140	LEU
13	6	157	TYR
13	6	160	ASP
13	6	176	LEU
13	6	183	LYS
13	6	222	ILE
14	7	46	GLN
14	7	77	LEU
14	7	80	PHE
14	7	83	ILE
14	7	88	ARG
14	7	98	SER
14	7	117	ASP
14	7	121	PHE

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Mol	Chain	Res	Type
14	7	123	ASP
14	7	136	LEU
14	7	154	LYS
14	7	170	ASP
14	7	183	THR
14	7	192	PRO
14	7	195	ARG
14	7	198	LEU
14	7	223	ARG
14	7	226	ARG
14	7	229	ASN
14	7	238	GLU
14	7	255	ILE
15	W	26	LEU
15	W	52	ILE
15	W	71	ILE
15	W	94	HIS
15	W	113	VAL
15	W	141	ILE
15	W	160	LEU
16	V	36	LEU
16	V	76	PRO
16	V	158	ASP
16	V	177	THR
16	V	181	LEU
16	V	190	GLN
16	V	203	ILE
16	V	206	ASN
16	V	212	LEU
16	V	226	MET
16	V	227	GLU
16	V	253	LYS
16	V	281	LYS
16	V	298	GLN
16	V	304	LEU
17	T	122	LEU
17	T	129	LEU
17	T	134	THR
17	T	145	ILE
17	T	164	ILE
17	T	174	LEU
17	T	199	LEU

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Mol	Chain	Res	Type
17	T	219	PRO
17	T	225	THR
17	T	259	TYR
17	T	343	ILE
17	T	345	TYR
18	Y	61	GLU
19	Z	45	LEU
19	Z	71	TYR
19	Z	124	ASP
19	Z	126	ILE
19	Z	162	LEU
19	Z	171	GLN
19	Z	174	ASP
19	Z	192	VAL
19	Z	253	LEU
19	Z	266	LEU
19	Z	282	PHE
19	Z	308	SER
19	Z	311	VAL
19	Z	327	ASN
19	Z	351	THR
19	Z	353	LEU
19	Z	388	ASP
19	Z	403	LYS
19	Z	420	TRP
19	Z	463	LEU
19	Z	487	LEU
19	Z	492	SER
19	Z	525	ILE
19	Z	527	VAL
19	Z	548	THR
19	Z	576	ILE
19	Z	577	LEU
19	Z	615	ILE
19	Z	635	LYS
19	Z	657	ILE
19	Z	704	LEU
19	Z	754	LYS
19	Z	761	MET
19	Z	763	ARG
19	Z	777	THR
19	Z	789	SER

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Mol	Chain	Res	Type
19	Z	796	LEU
19	Z	811	LEU
19	Z	837	LEU
19	Z	866	GLN
19	Z	869	THR
20	N	19	LEU
20	N	21	GLU
20	N	90	VAL
20	N	97	VAL
20	N	100	ILE
20	N	122	GLU
20	N	142	LEU
20	N	160	LEU
20	N	167	ILE
20	N	173	VAL
20	N	214	ILE
20	N	216	VAL
20	N	221	ILE
20	N	238	LYS
20	N	323	LEU
20	N	349	ASP
20	N	364	VAL
20	N	373	ASN
20	N	387	ARG
20	N	388	ASP
20	N	423	MET
20	N	458	ILE
20	N	471	ASP
20	N	474	ARG
20	N	519	VAL
20	N	521	LEU
20	N	539	THR
20	N	545	LEU
20	N	583	MET
20	N	634	PRO
20	N	685	GLN
20	N	745	THR
20	N	764	LEU
20	N	769	PHE
20	N	779	LEU
20	N	788	ILE
20	N	838	LYS

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Mol	Chain	Res	Type
20	N	861	LYS
20	N	913	ILE
20	N	924	LEU
20	N	935	ILE
20	N	951	ILE
21	S	28	PRO
21	S	87	PRO
21	S	92	ARG
21	S	131	LEU
21	S	132	GLU
21	S	162	TYR
21	S	168	VAL
21	S	207	TYR
21	S	208	TYR
21	S	213	VAL
21	S	231	LEU
21	S	247	LEU
21	S	249	LEU
21	S	267	VAL
21	S	294	ILE
21	S	298	TYR
21	S	365	THR
21	S	413	ILE
21	S	462	ILE
21	S	480	LEU
21	S	485	MET
22	P	21	SER
22	P	65	ARG
22	P	84	ASN
22	P	90	LEU
22	P	135	LYS
22	P	171	VAL
22	P	186	ILE
22	P	187	LEU
22	P	205	ILE
22	P	221	LYS
22	P	229	LEU
22	P	236	HIS
22	P	299	ILE
22	P	310	THR
22	P	328	LEU
22	P	343	SER

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Mol	Chain	Res	Type
22	P	363	ILE
22	P	375	MET
22	P	387	ASP
22	P	433	ASN
22	P	438	LEU
22	P	441	LYS
22	P	455	LEU
23	Q	27	LEU
23	Q	56	LEU
23	Q	88	LEU
23	Q	109	LEU
23	Q	144	GLN
23	Q	153	LEU
23	Q	169	VAL
23	Q	183	LEU
23	Q	210	LEU
23	Q	241	SER
23	Q	242	ILE
23	Q	252	LYS
23	Q	253	TYR
23	Q	263	THR
23	Q	318	ILE
23	Q	329	ASN
23	Q	354	ILE
23	Q	386	ILE
24	R	11	LEU
24	R	18	ARG
24	R	29	PRO
24	R	39	GLU
24	R	42	MET
24	R	50	MET
24	R	63	TRP
24	R	75	LYS
24	R	84	LEU
24	R	88	LEU
24	R	117	LYS
24	R	127	THR
24	R	132	VAL
24	R	141	VAL
24	R	144	LEU
24	R	180	LEU
24	R	200	LEU

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Mol	Chain	Res	Type
24	R	213	LEU
24	R	220	VAL
24	R	224	VAL
24	R	247	LEU
24	R	330	ILE
24	R	362	LYS
25	U	4	LEU
25	U	43	TRP
25	U	106	ILE
25	U	124	ILE
25	U	142	GLU
25	U	161	GLU
25	U	170	VAL
25	U	201	LEU
25	U	205	LEU
25	U	242	LEU
25	U	244	GLU
25	U	247	LYS
25	U	250	TYR
25	U	265	LEU
25	U	276	ILE
26	O	28	LEU
26	O	37	LEU
26	O	40	GLN
26	O	56	LEU
26	O	64	ILE
26	O	72	ASN
26	O	103	LYS
26	O	112	ILE
26	O	154	ARG
26	O	158	LEU
26	O	185	ILE
26	O	200	LEU
26	O	221	VAL
26	O	255	TRP
26	O	274	LEU
26	O	321	ARG
26	O	332	HIS
26	O	338	PRO
26	O	343	LEU
26	O	366	LEU
27	H	62	LEU

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Mol	Chain	Res	Type
27	H	75	PRO
27	H	79	ASP
27	H	101	ILE
27	H	102	ILE
27	H	112	ILE
27	H	114	ASN
27	H	122	VAL
27	H	142	VAL
27	H	151	ILE
27	H	162	THR
27	H	164	MET
27	H	177	VAL
27	H	213	LEU
27	H	277	ILE
27	H	280	ILE
27	H	300	LEU
27	H	302	LEU
27	H	316	LYS
27	H	336	ARG
27	H	343	PHE
27	H	366	ARG
27	H	368	ILE
27	H	378	PRO
27	H	410	LEU
27	H	426	THR
27	H	428	ARG
28	I	69	LYS
28	I	79	ILE
28	I	89	GLU
28	I	127	VAL
28	I	150	VAL
28	I	163	LEU
28	I	170	LEU
28	I	184	TYR
28	I	194	ILE
28	I	205	LEU
28	I	230	THR
28	I	232	LYS
28	I	255	LEU
28	I	257	GLN
28	I	264	PRO
28	I	287	ILE

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Mol	Chain	Res	Type
28	I	294	ARG
28	I	312	LEU
28	I	321	SER
28	I	358	GLU
28	I	364	ILE
28	I	383	LEU
28	I	414	VAL
29	K	47	LEU
29	K	51	LEU
29	K	85	ILE
29	K	96	VAL
29	K	100	THR
29	K	113	VAL
29	K	116	LEU
29	K	124	LEU
29	K	130	VAL
29	K	172	ILE
29	K	192	LYS
29	K	194	ILE
29	K	214	MET
29	K	245	ARG
29	K	285	VAL
29	K	300	ASP
29	K	311	THR
29	K	328	ASP
29	K	360	LEU
29	K	385	LEU
29	K	397	LYS
29	K	418	LYS
30	L	15	MET
30	L	19	ARG
30	L	78	LEU
30	L	84	ILE
30	L	88	THR
30	L	101	LEU
30	L	114	LEU
30	L	120	THR
30	L	143	ASN
30	L	155	GLN
30	L	163	ILE
30	L	180	PRO
30	L	194	LYS

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Mol	Chain	Res	Type
30	L	209	PHE
30	L	290	ILE
30	L	306	PRO
30	L	334	ILE
30	L	337	HIS
30	L	362	THR
31	M	56	LYS
31	M	107	GLN
31	M	119	GLN
31	M	121	LYS
31	M	154	VAL
31	M	190	ASP
31	M	212	LYS
31	M	216	GLU
31	M	259	LEU
31	M	286	ILE
31	M	291	LEU
31	M	300	ASP
31	M	316	LEU
31	M	327	THR
31	M	341	LEU
31	M	348	SER
31	M	374	ARG
31	M	376	MET
31	M	387	LEU
31	M	412	ARG
31	M	419	THR
32	J	20	LEU
32	J	31	LEU
32	J	49	ARG
32	J	50	ASN
32	J	65	LEU
32	J	77	VAL
32	J	85	VAL
32	J	89	VAL
32	J	101	LYS
32	J	103	ILE
32	J	114	VAL
32	J	132	ASP
32	J	140	VAL
32	J	163	GLU
32	J	178	LEU

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Mol	Chain	Res	Type
32	J	219	LEU
32	J	224	ILE
32	J	226	GLU
32	J	231	VAL
32	J	321	ASN
32	J	326	LEU
32	J	340	ARG

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

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

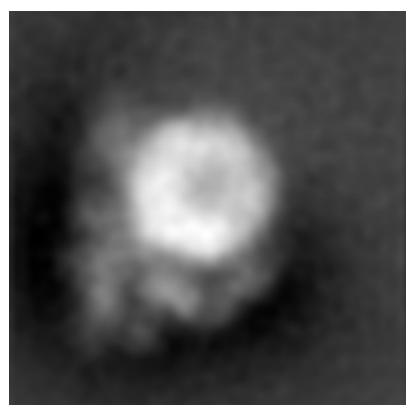
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-3915. These allow visual inspection of the internal detail of the map and identification of artifacts.

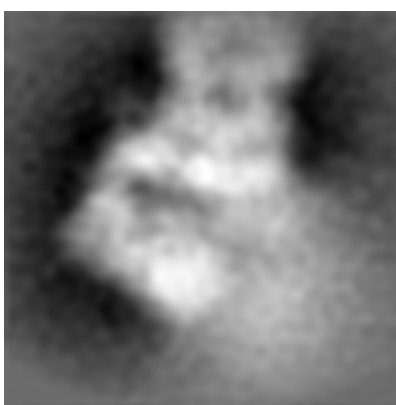
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

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

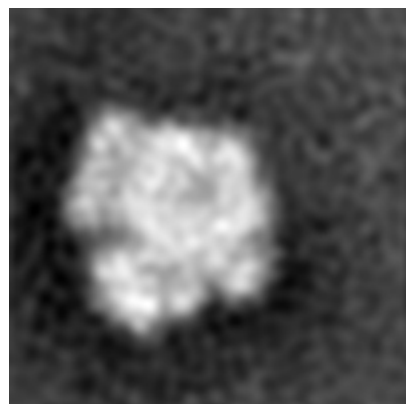


Z Index: 45

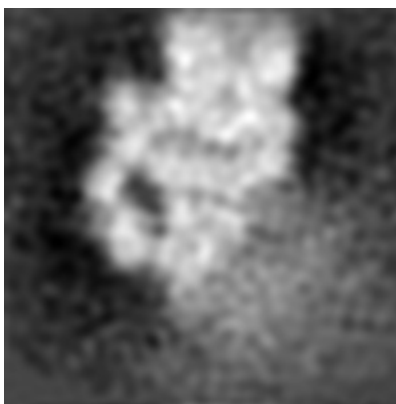
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

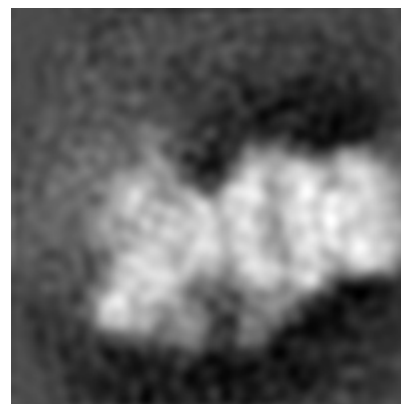
6.3.1 Primary map



X Index: 54



Y Index: 36

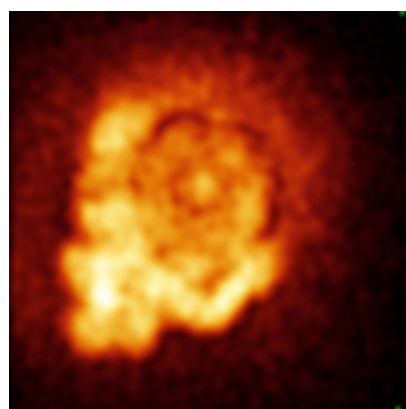


Z Index: 40

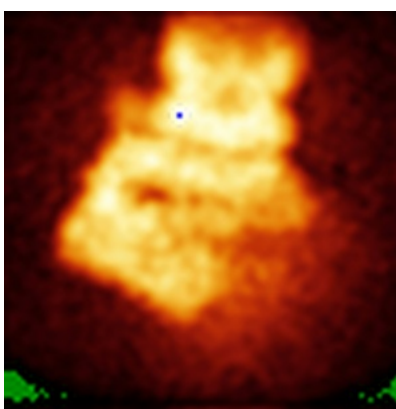
The images above show the largest variance slices of the map in three orthogonal directions.

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

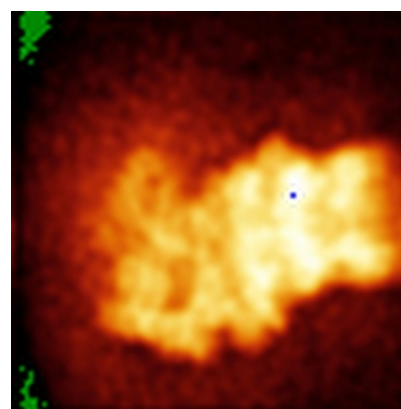
6.4.1 Primary map



X



Y

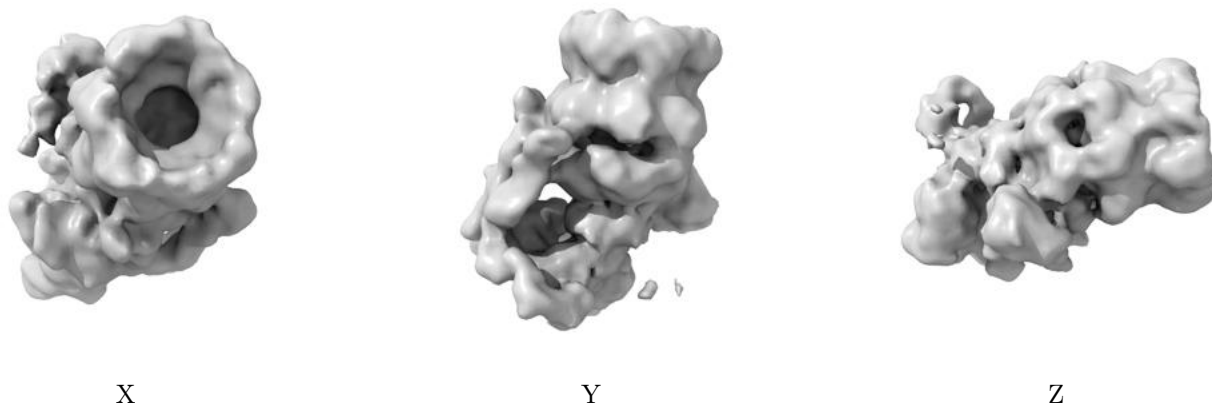


Z

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.

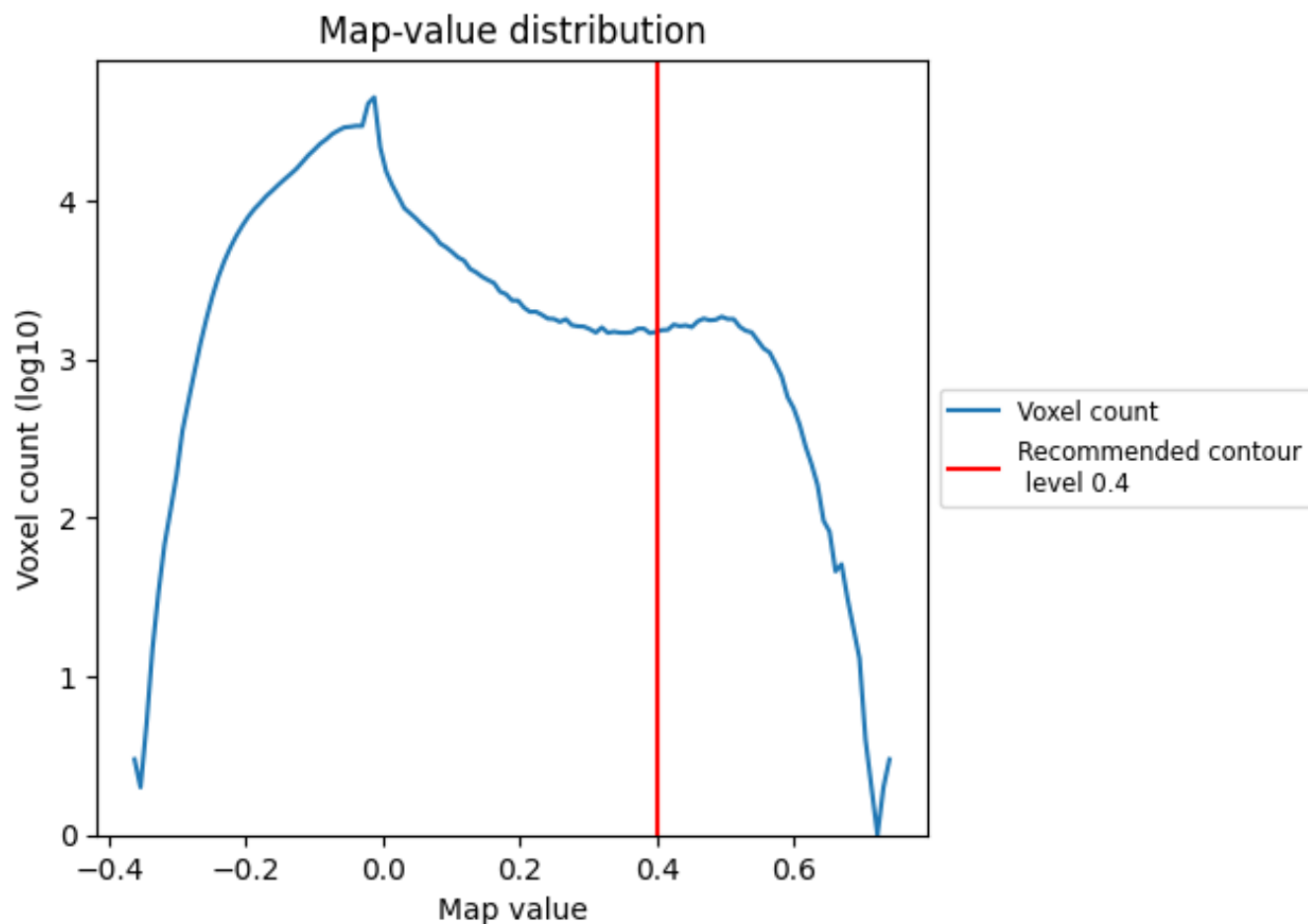
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

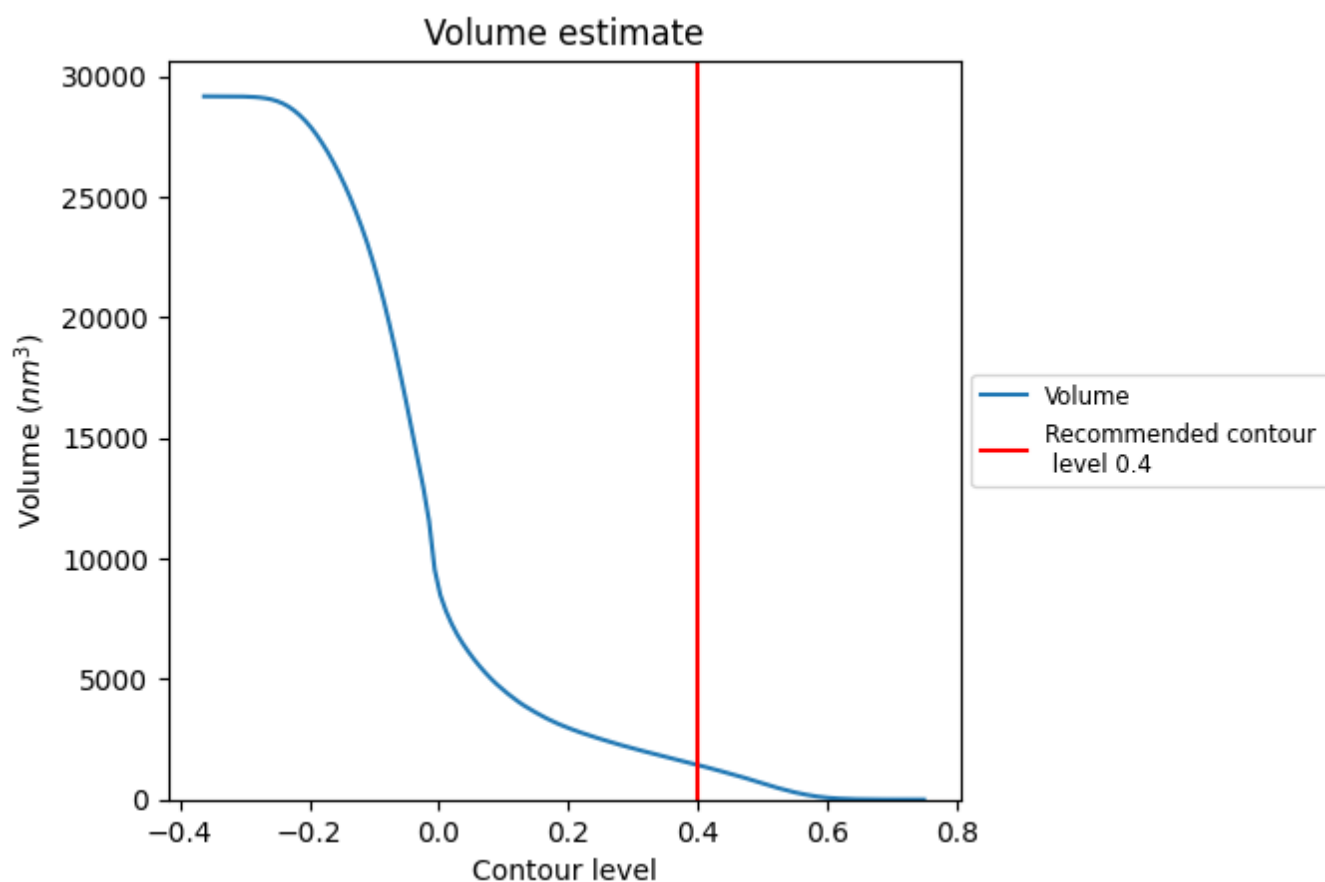
This section contains the results of statistical analysis of the map.

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.

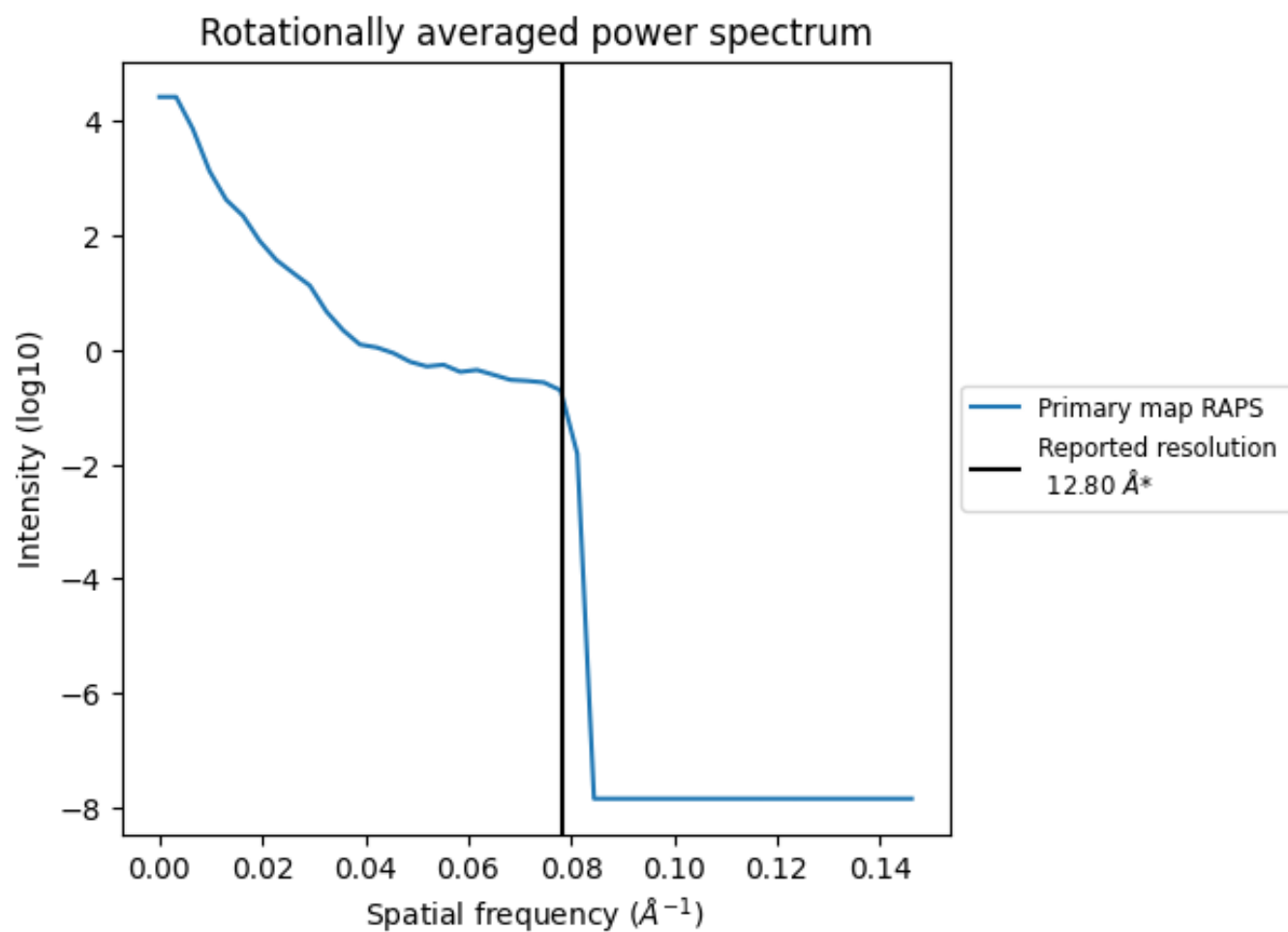
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1428 nm³; this corresponds to an approximate mass of 1290 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 0.078 Å⁻¹

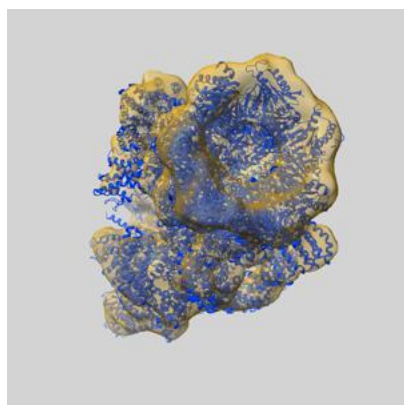
8 Fourier-Shell correlation

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

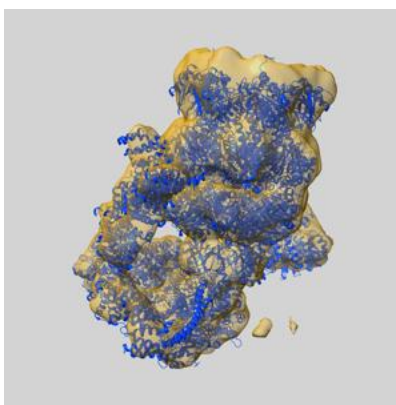
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-3915 and PDB model 6EPE. Per-residue inclusion information can be found in section 3 on page 10.

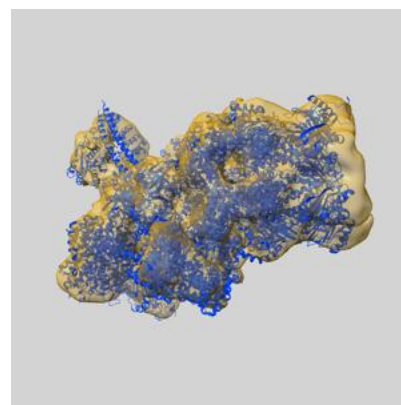
9.1 Map-model overlay [i](#)



X



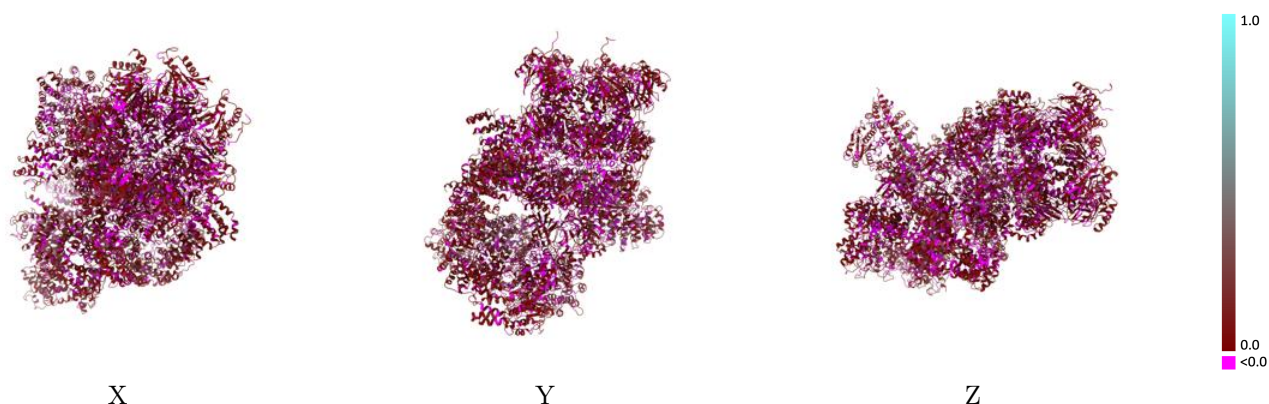
Y



Z

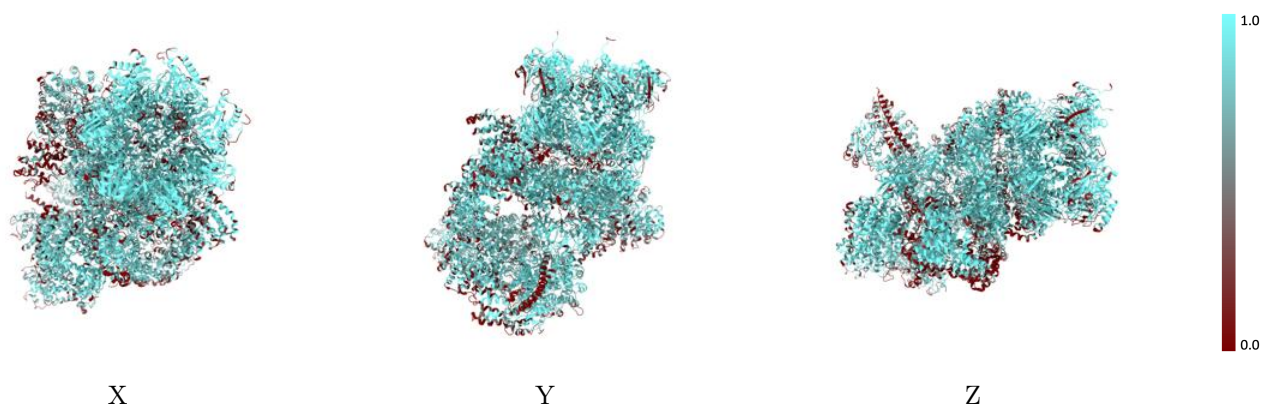
The images above show the 3D surface view of the map at the recommended contour level 0.4 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



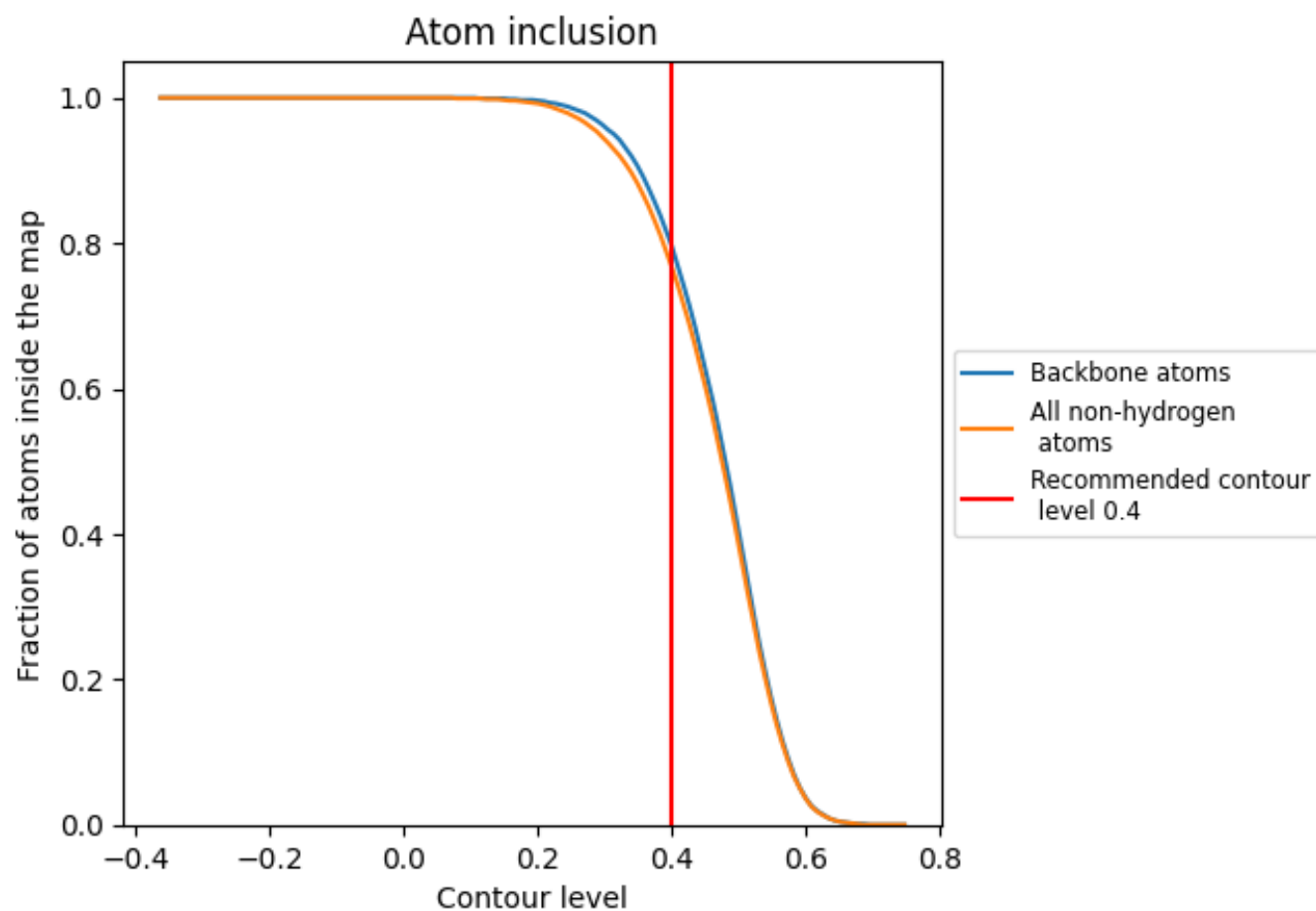
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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, 80% of all backbone atoms, 77% 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	 0.7700	 0.0530
1	 0.8580	 0.0500
2	 0.7490	 0.0540
3	 0.8210	 0.0380
4	 0.7940	 0.0600
5	 0.8450	 0.0550
6	 0.7610	 0.0480
7	 0.7980	 0.0540
A	 0.8740	 0.0390
B	 0.8640	 0.0370
C	 0.8360	 0.0540
D	 0.8330	 0.0510
E	 0.9270	 0.0450
F	 0.9270	 0.0510
G	 0.8730	 0.0410
H	 0.8340	 0.0450
I	 0.7990	 0.0510
J	 0.8300	 0.0600
K	 0.7980	 0.0480
L	 0.7330	 0.0450
M	 0.7800	 0.0290
N	 0.7720	 0.0550
O	 0.6060	 0.0690
P	 0.6850	 0.0700
Q	 0.7320	 0.0500
R	 0.7550	 0.0700
S	 0.7840	 0.0630
T	 0.7150	 0.0750
U	 0.7840	 0.0570
V	 0.8840	 0.0440
W	 0.6530	 0.0600
Y	 0.6890	 0.0570
Z	 0.5840	 0.0460

