



Full wwPDB EM Validation Report ⓘ

Mar 5, 2026 – 06:47 PM UTC

PDB ID : 6EPC / pdb_00006epc
EMDB ID : EMD-3913
Title : Ground state 26S proteasome (GS2)
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 : 12.30 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:

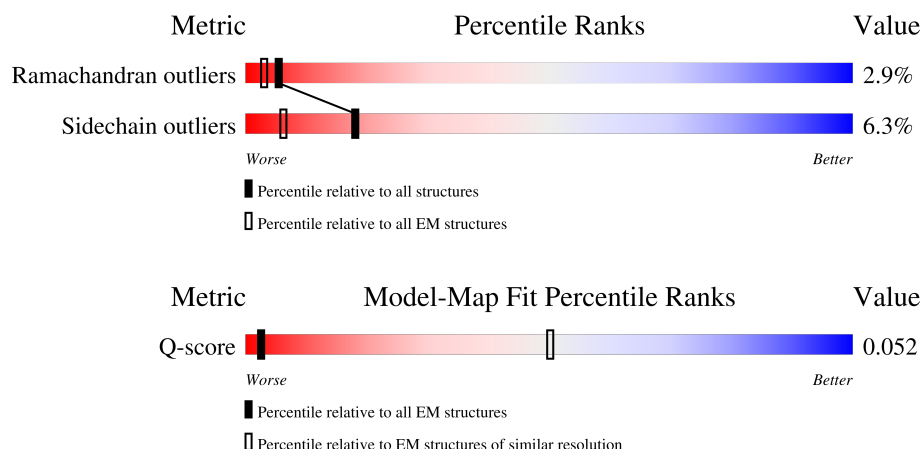
EMDB validation analysis : 0.0.1.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & 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 12.30 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	82 (11.80 - 12.80)

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	16% 37% 52% 5% 6%
32	J	406	18% 38% 58% 5%

2 Entry composition

There are 32 unique types of molecules in this entry. The entry contains 82757 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- Molecule 18 is a protein called RCG28037.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

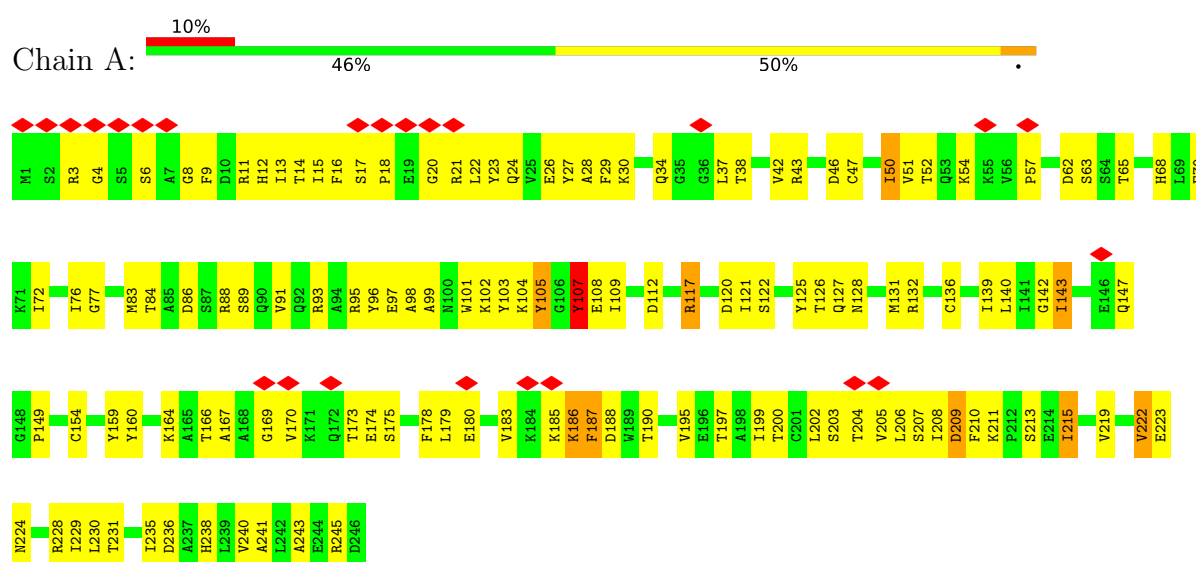
- Molecule 32 is a protein called 26S proteasome regulatory subunit 8.

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

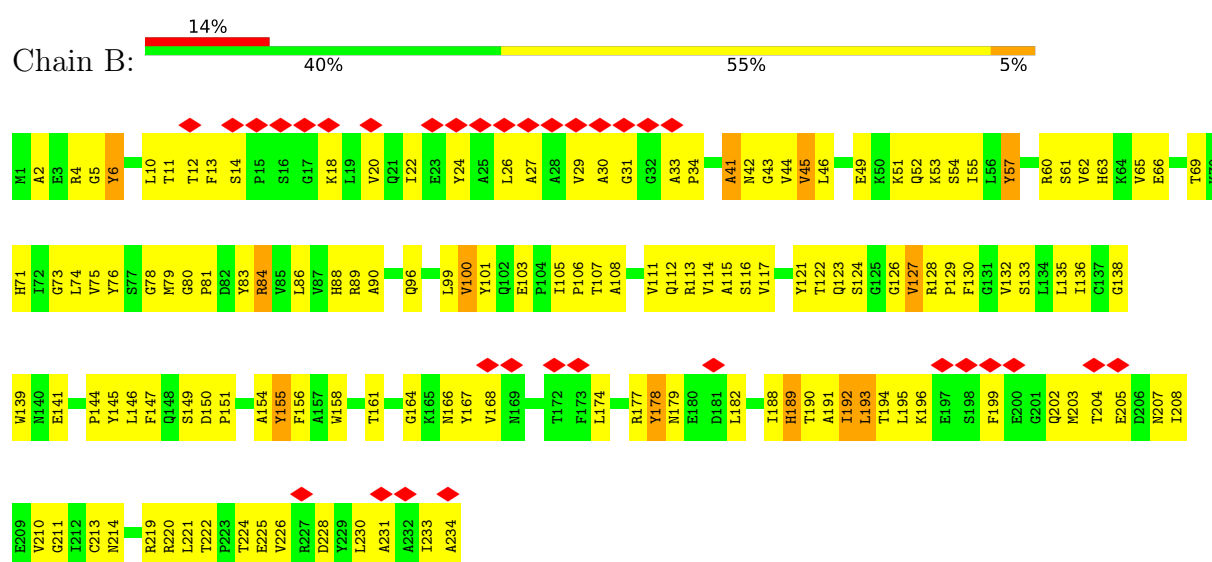
3 Residue-property plots

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

• Molecule 1: Proteasome subunit alpha type-6



• Molecule 2: Proteasome subunit alpha type-2

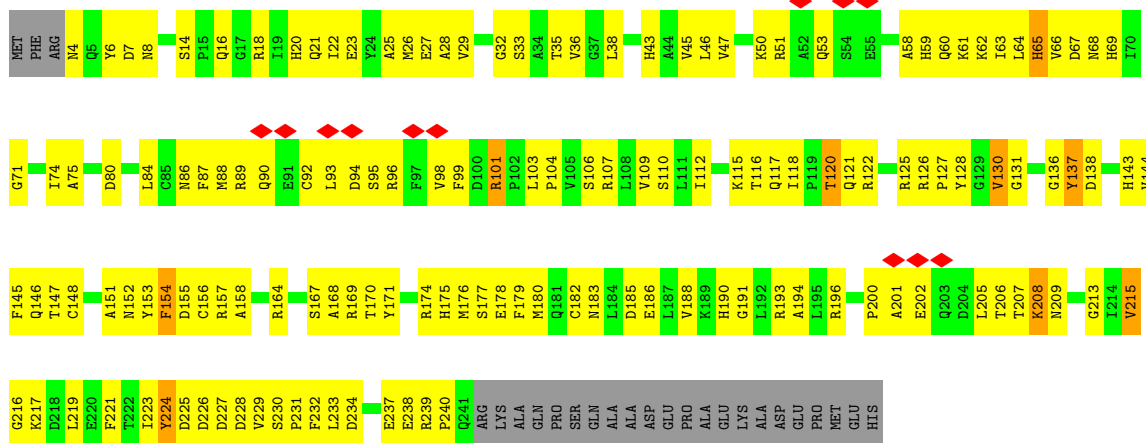
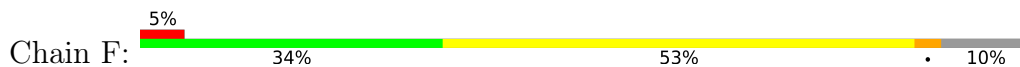


• Molecule 3: Proteasome subunit alpha type-4

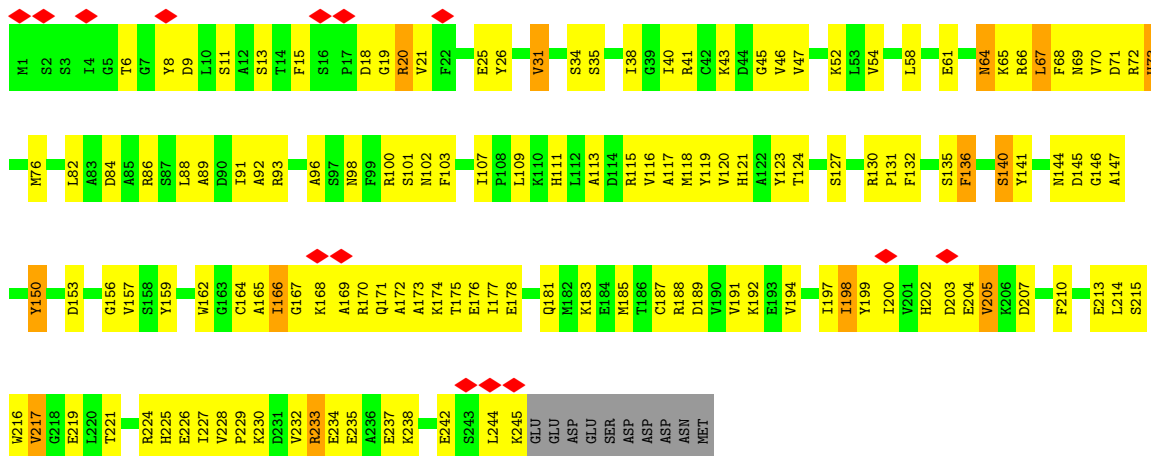




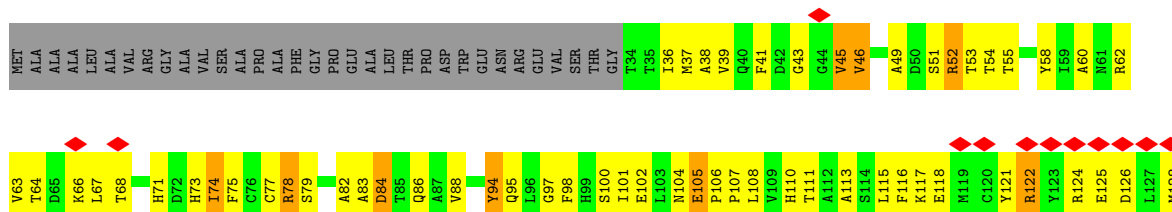
• Molecule 6: Proteasome subunit alpha type-1

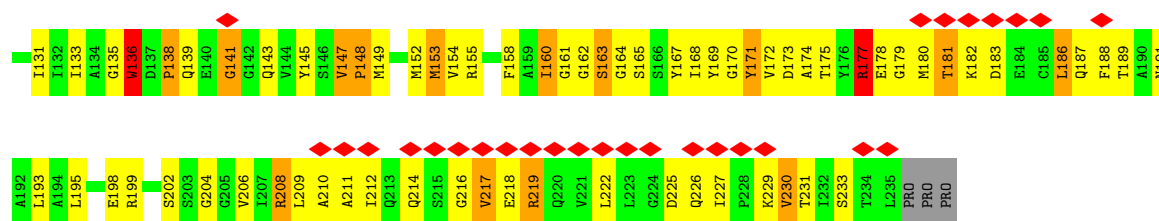


• Molecule 7: Proteasome subunit alpha type-3

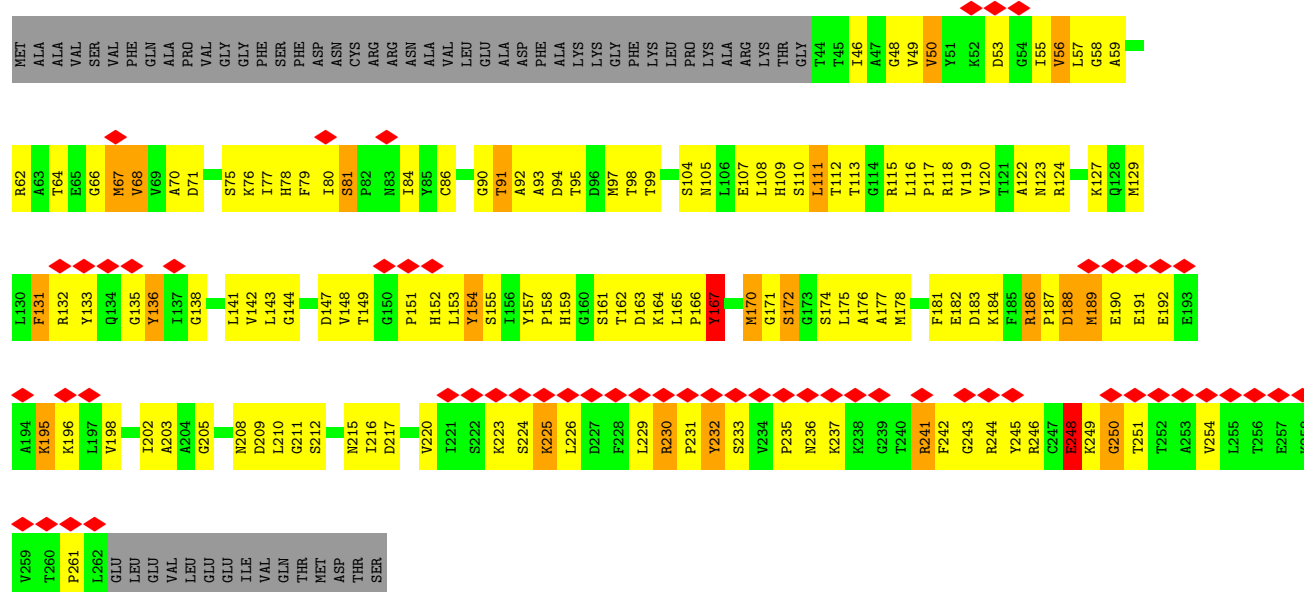


• Molecule 8: Proteasome subunit beta type-6

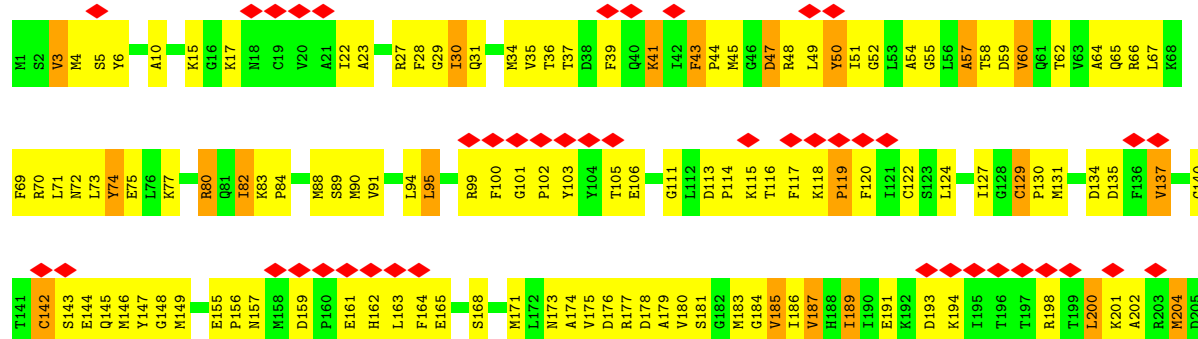




• Molecule 9: Proteasome subunit beta type-7



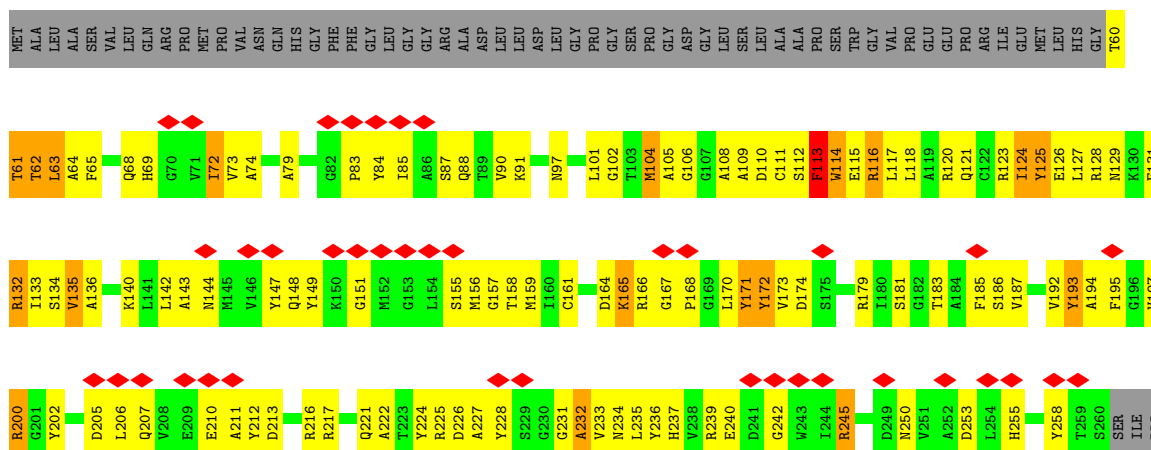
• Molecule 10: Proteasome subunit beta type-3



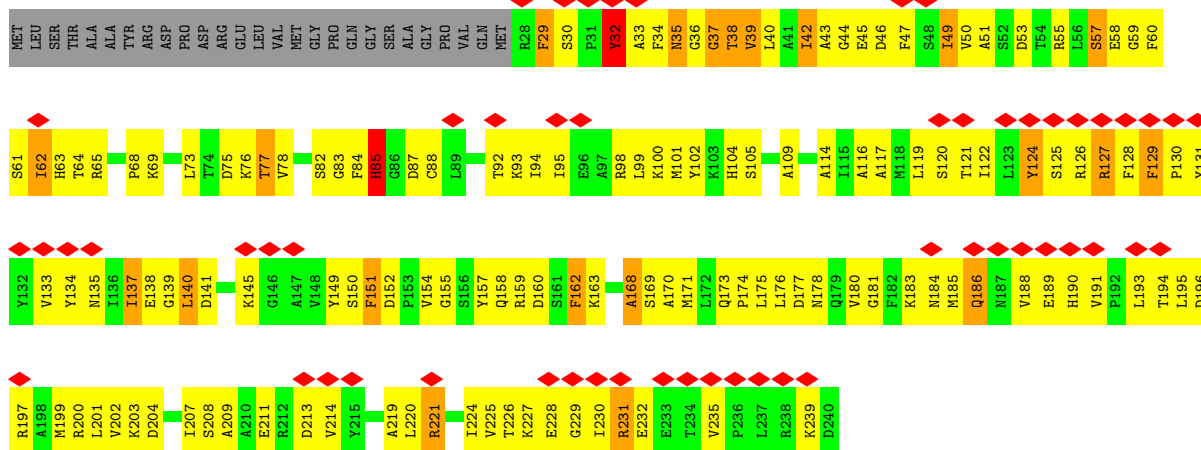
• Molecule 11: Proteasome subunit beta type-2



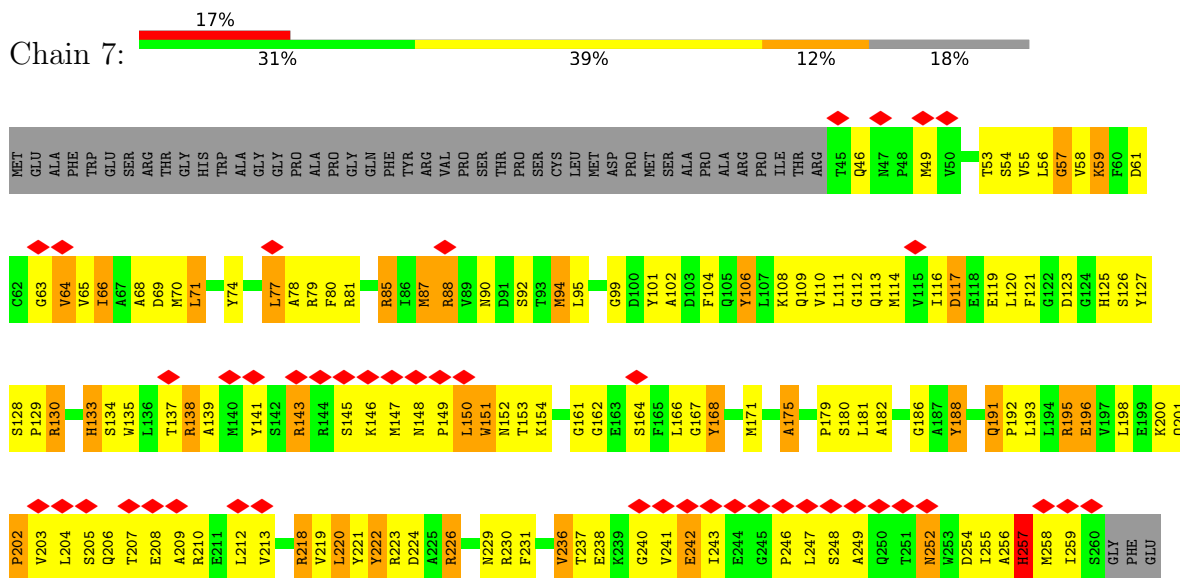
- Molecule 12: Proteasome subunit beta type-5



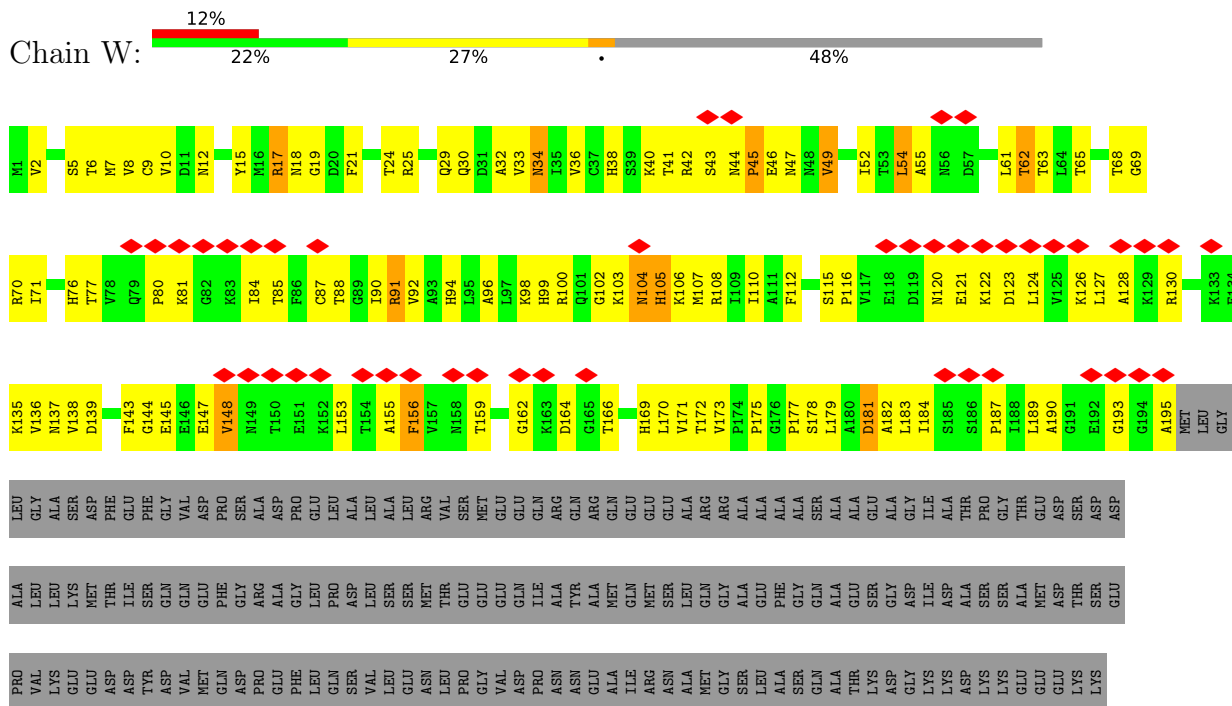
- Molecule 13: Proteasome subunit beta type-1



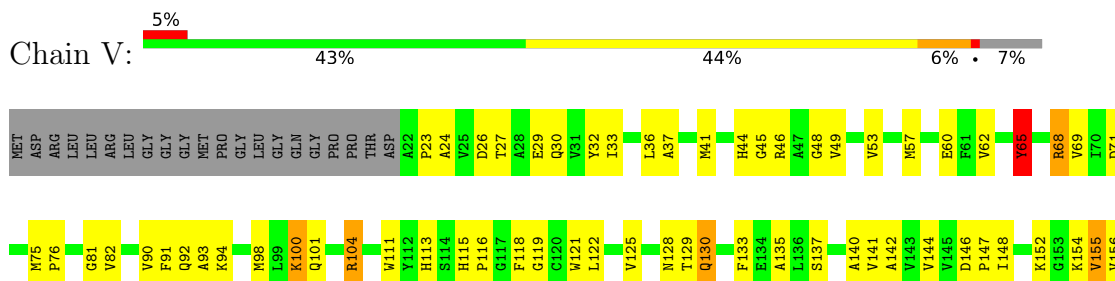
- Molecule 14: Proteasome subunit beta type-4

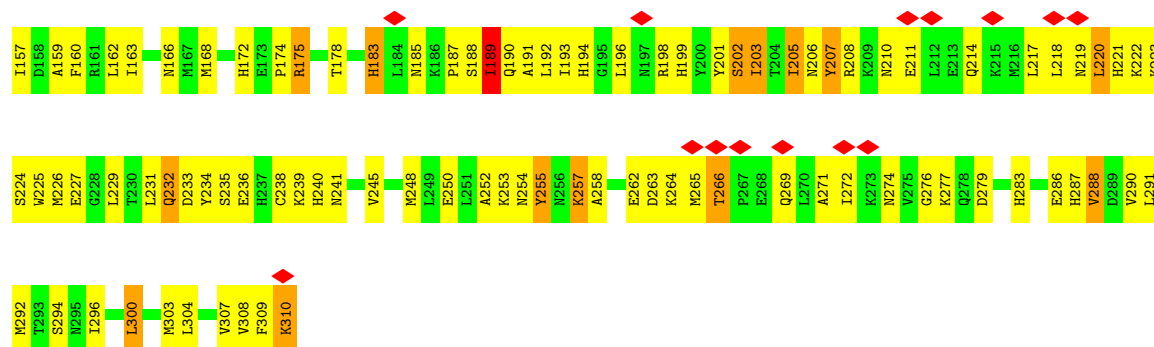


- Molecule 15: 26S proteasome subunit S5a

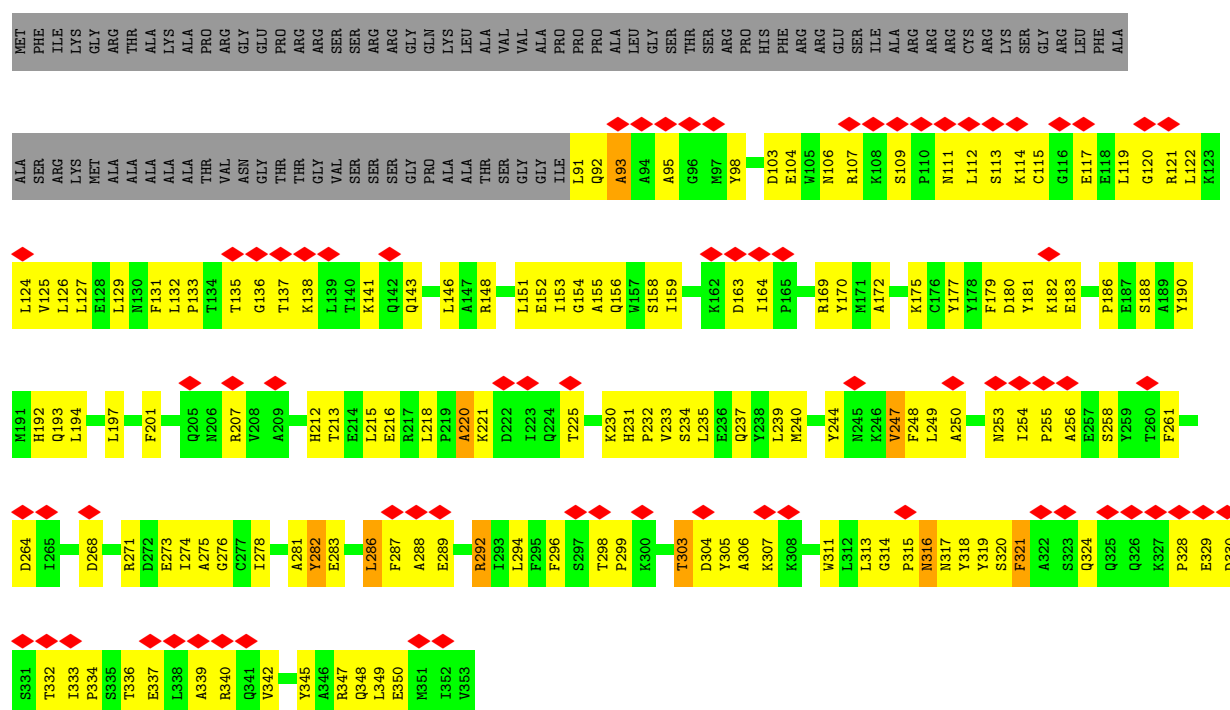


- Molecule 16: Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 14

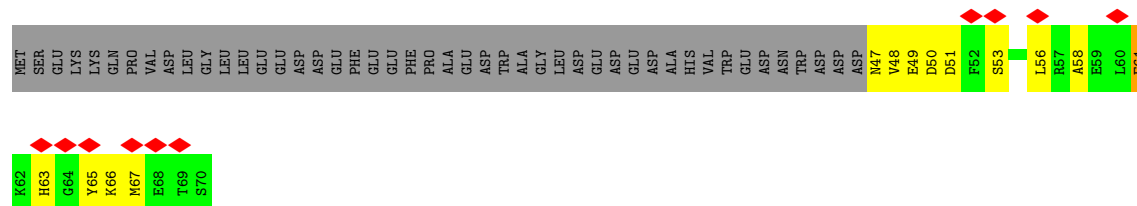




• Molecule 17: Proteasome 26S subunit, non-ATPase 8

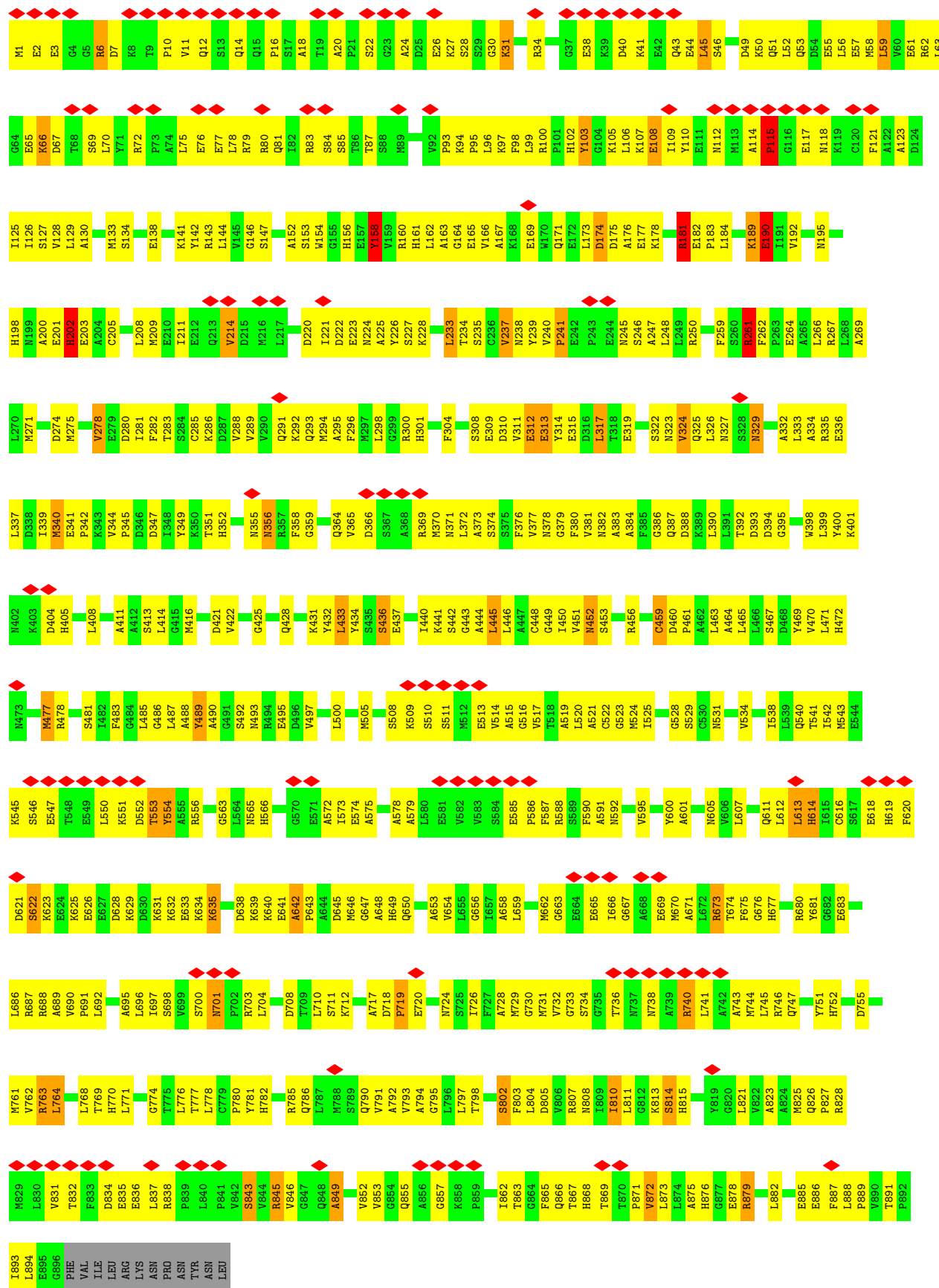


• Molecule 18: RCG28037

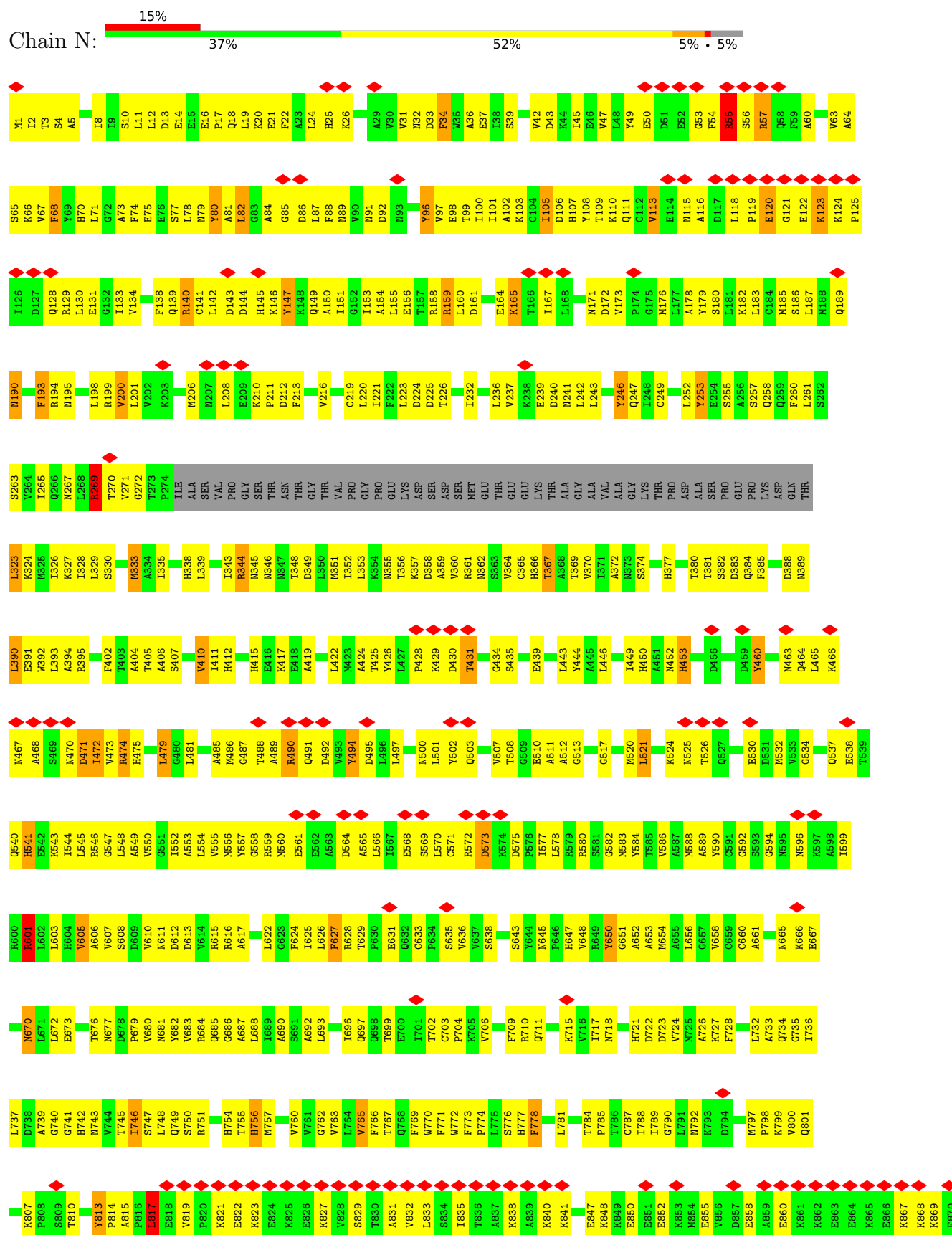


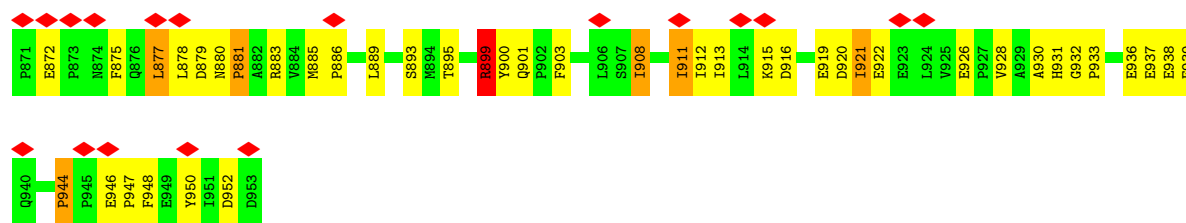
• Molecule 19: 26S proteasome non-ATPase regulatory subunit 2



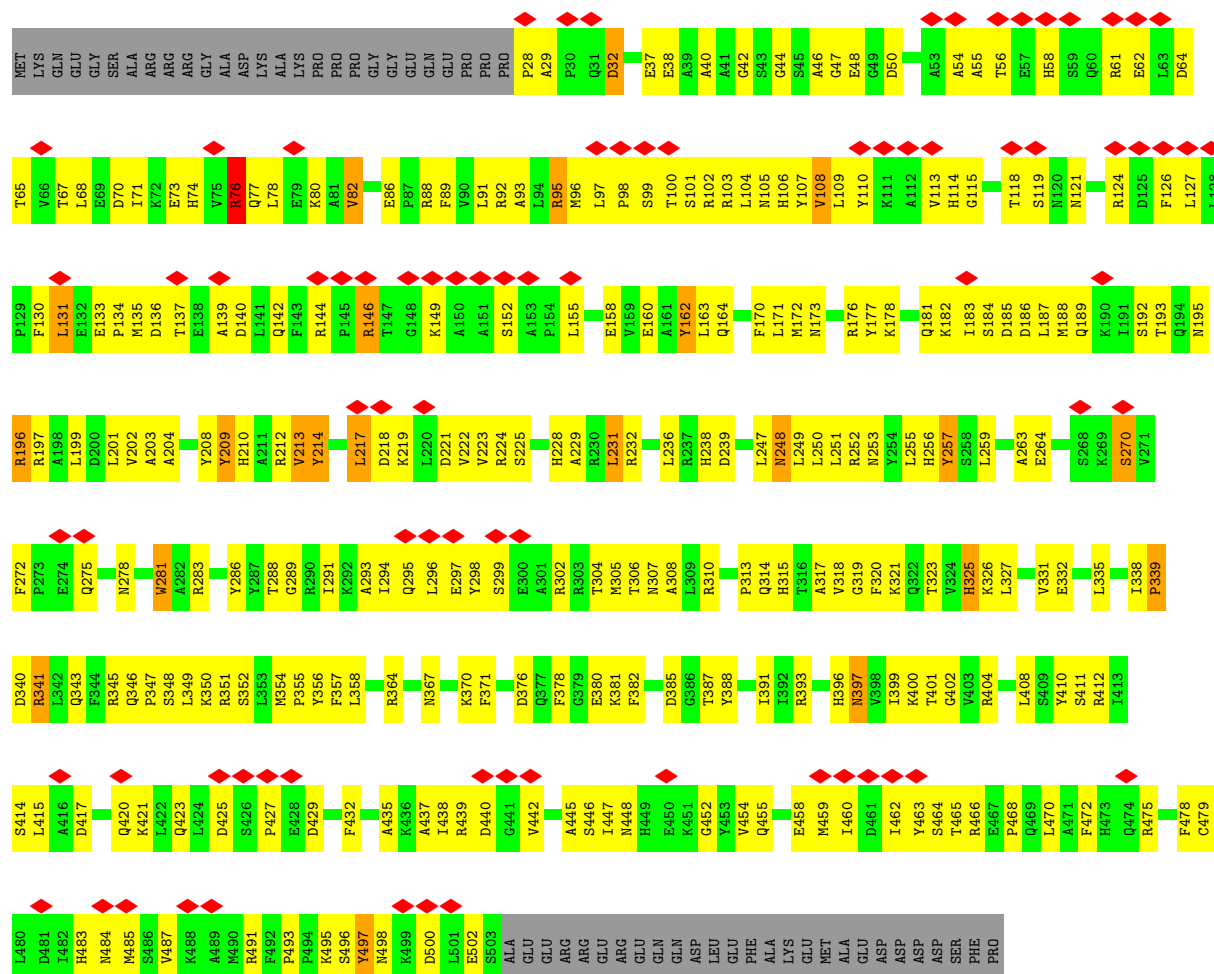


• Molecule 20: 26S proteasome non-ATPase regulatory subunit 1

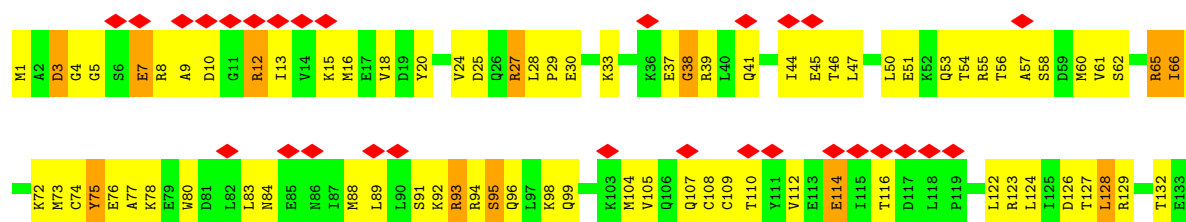
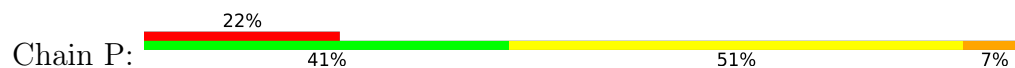


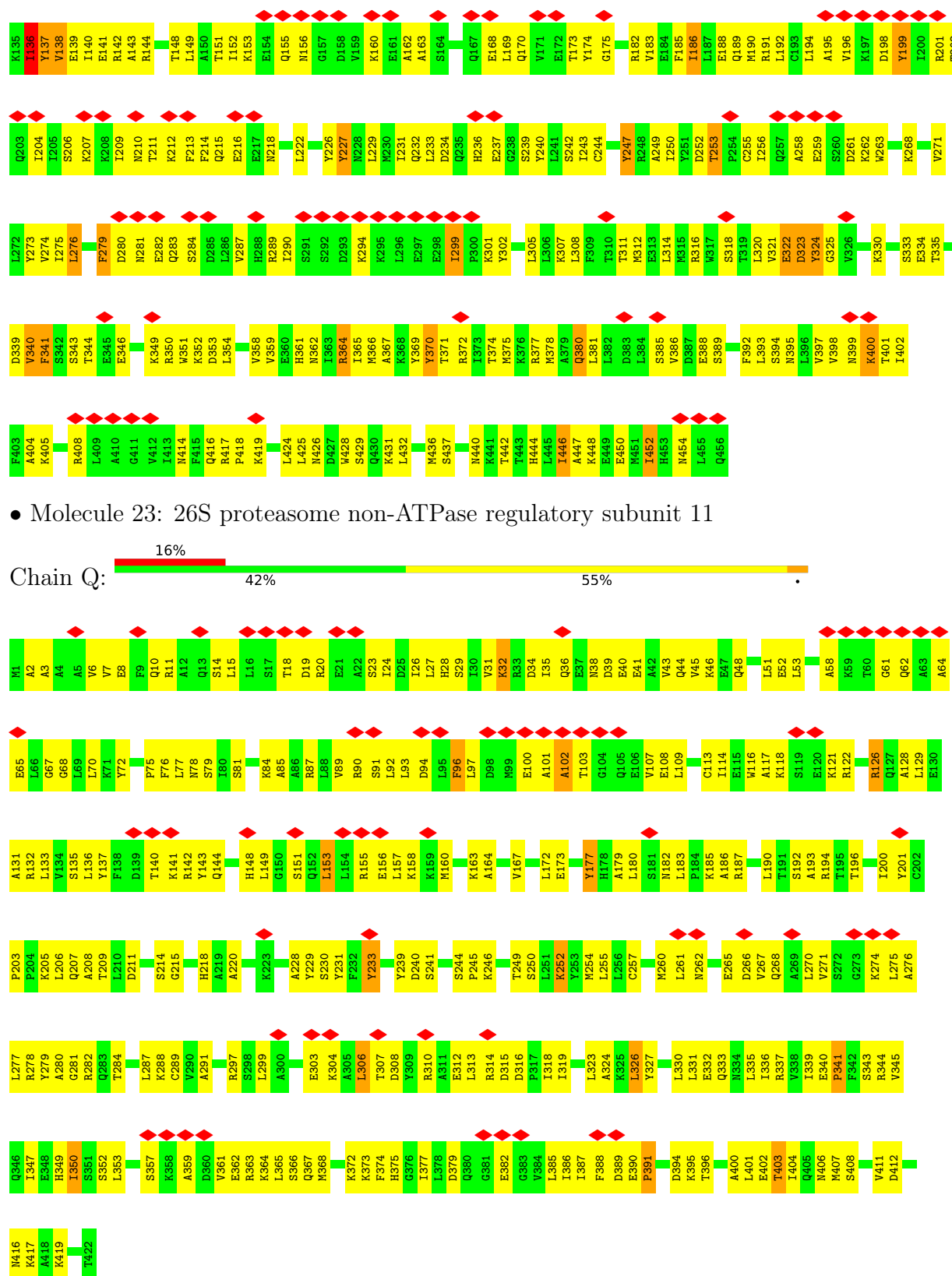


- Molecule 21: Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 3



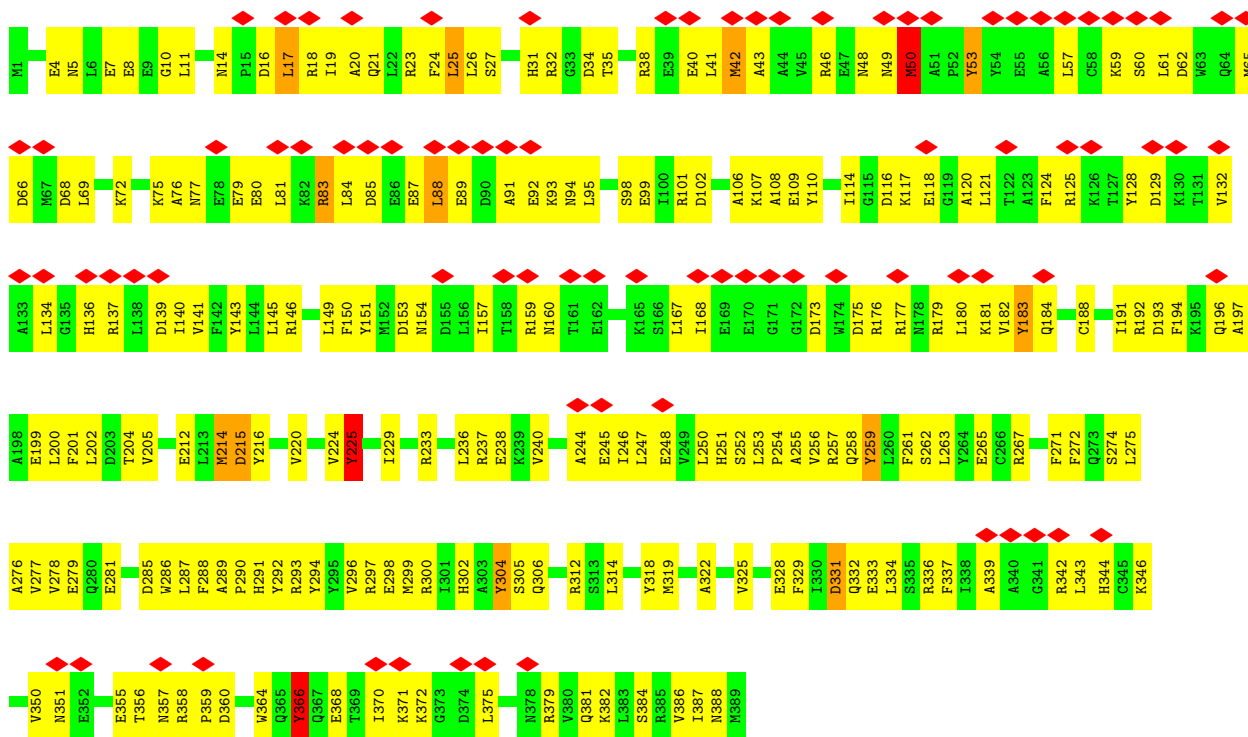
- Molecule 22: Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 12



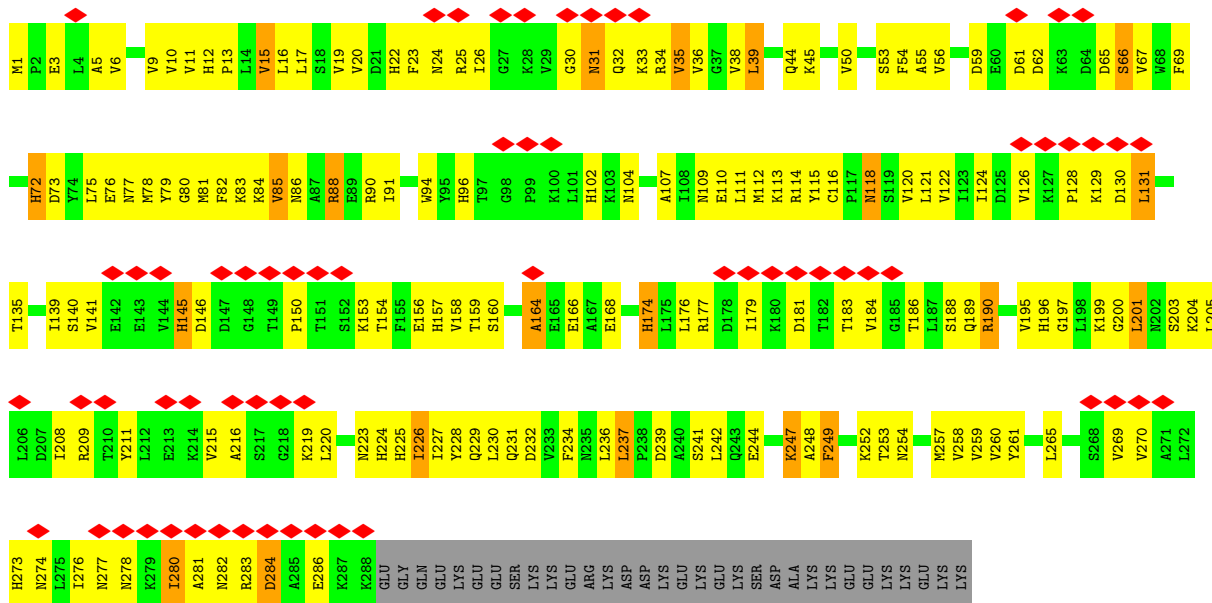


- Molecule 24: Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 6



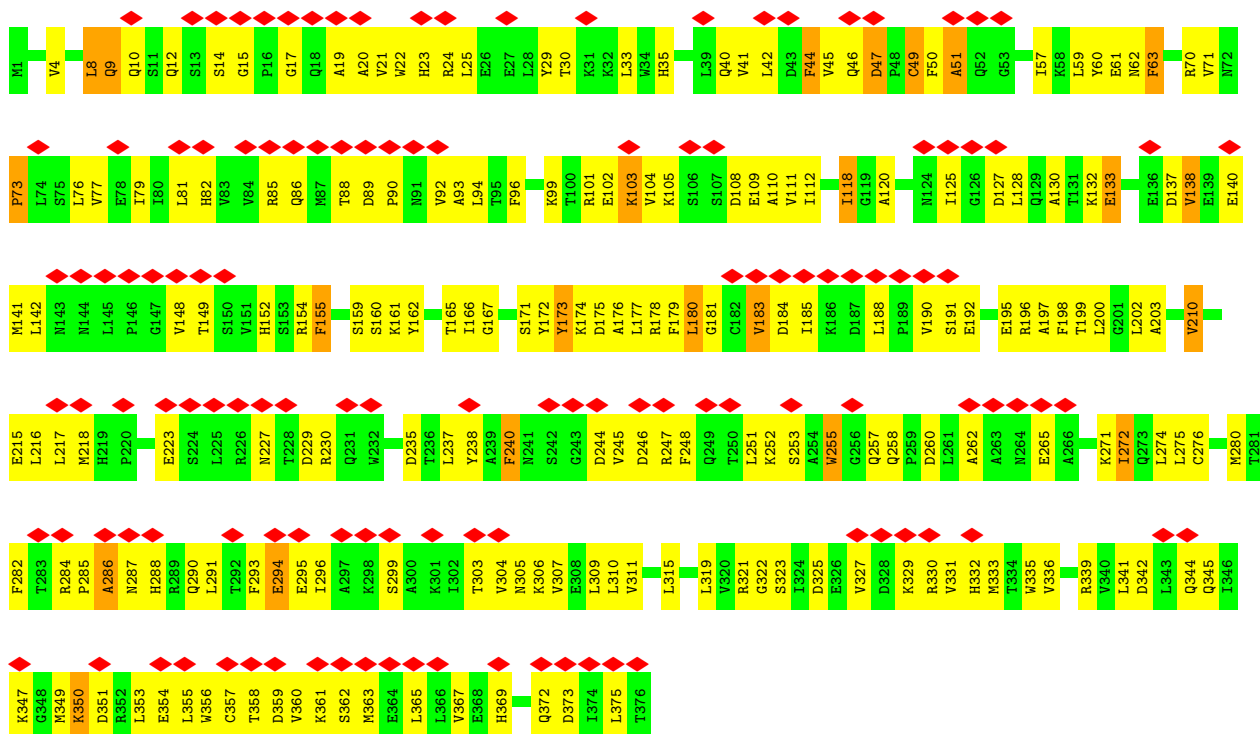


• Molecule 25: Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 7 (Predicted)

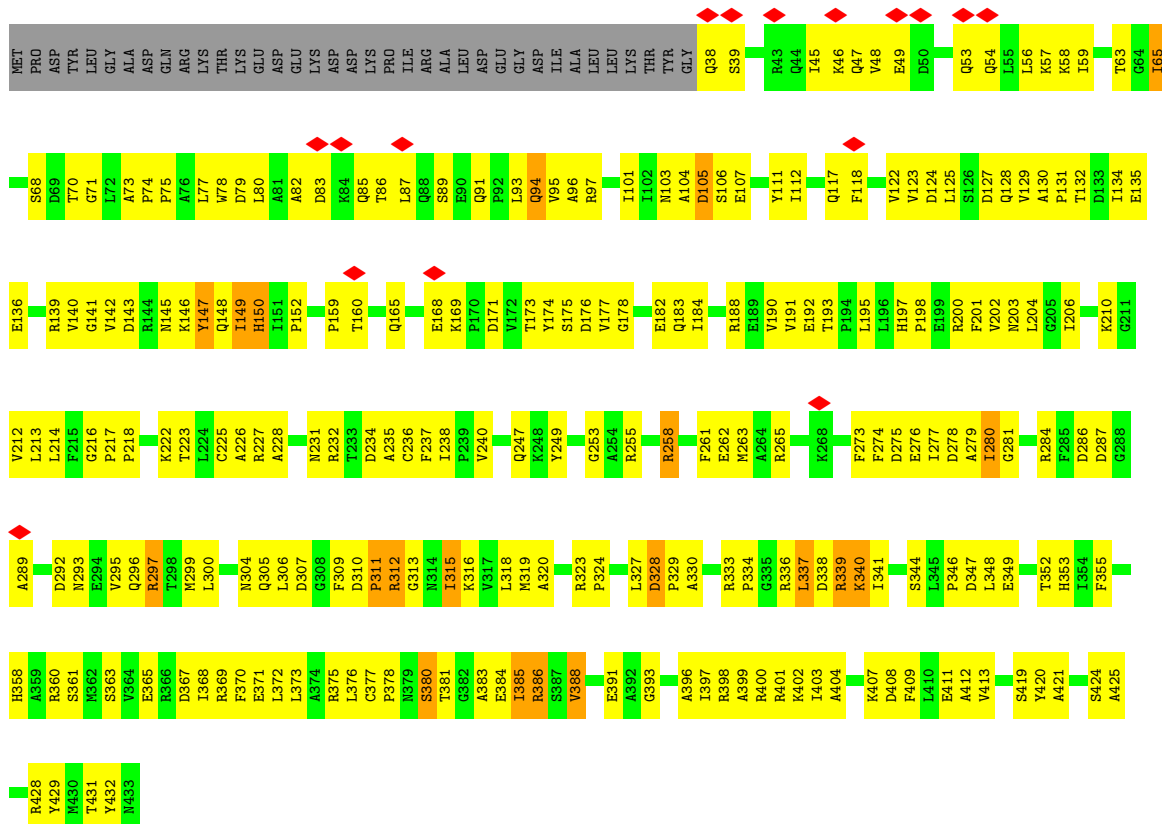


• Molecule 26: 26S proteasome non-ATPase regulatory subunit 13



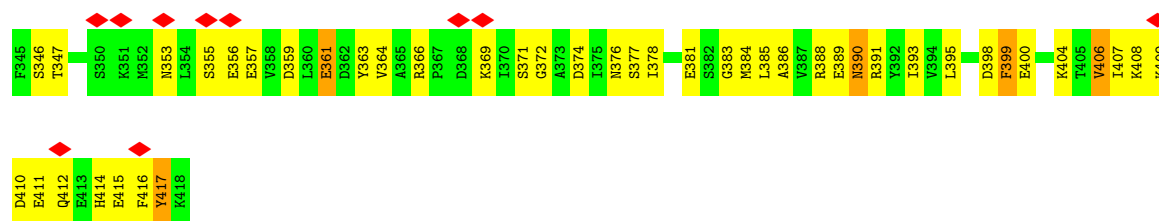


• Molecule 27: 26S proteasome regulatory subunit 7

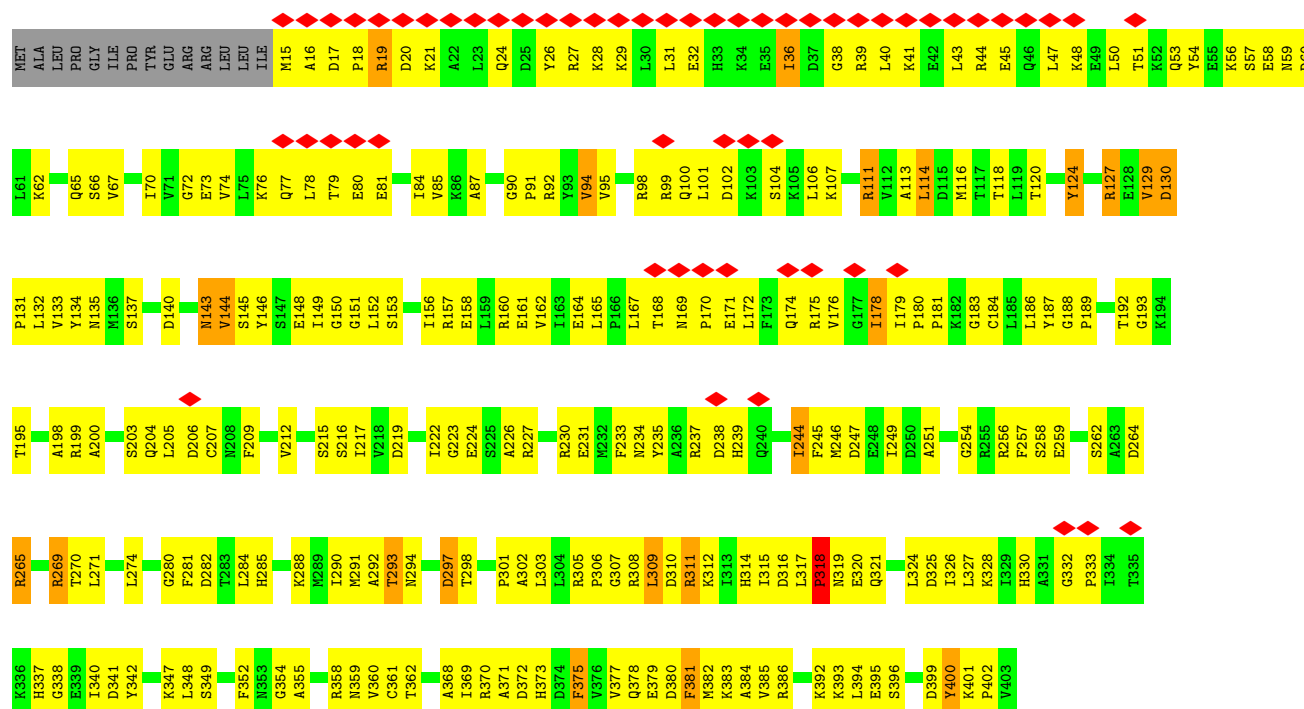


Chain I:

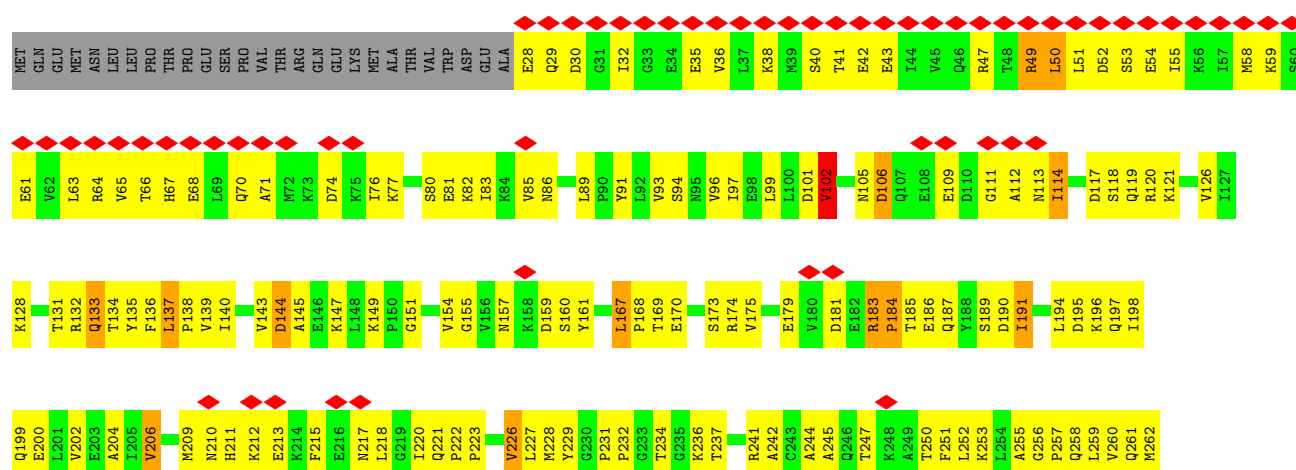


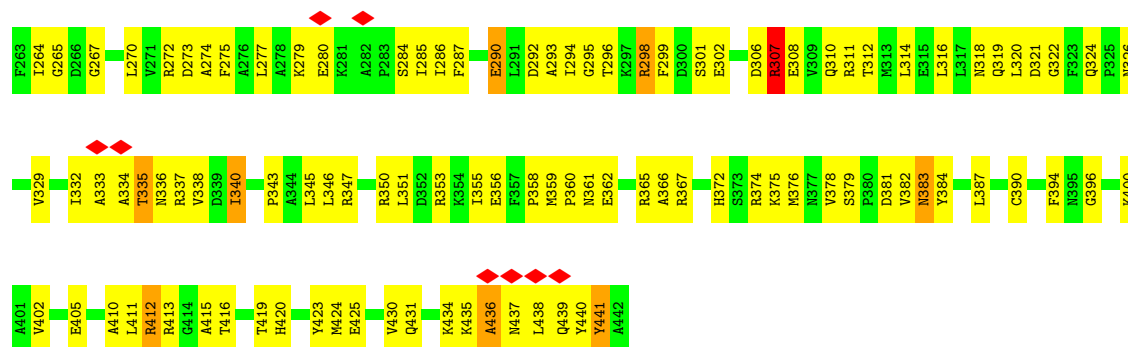


• Molecule 30: Proteasome 26S subunit, ATPase 6

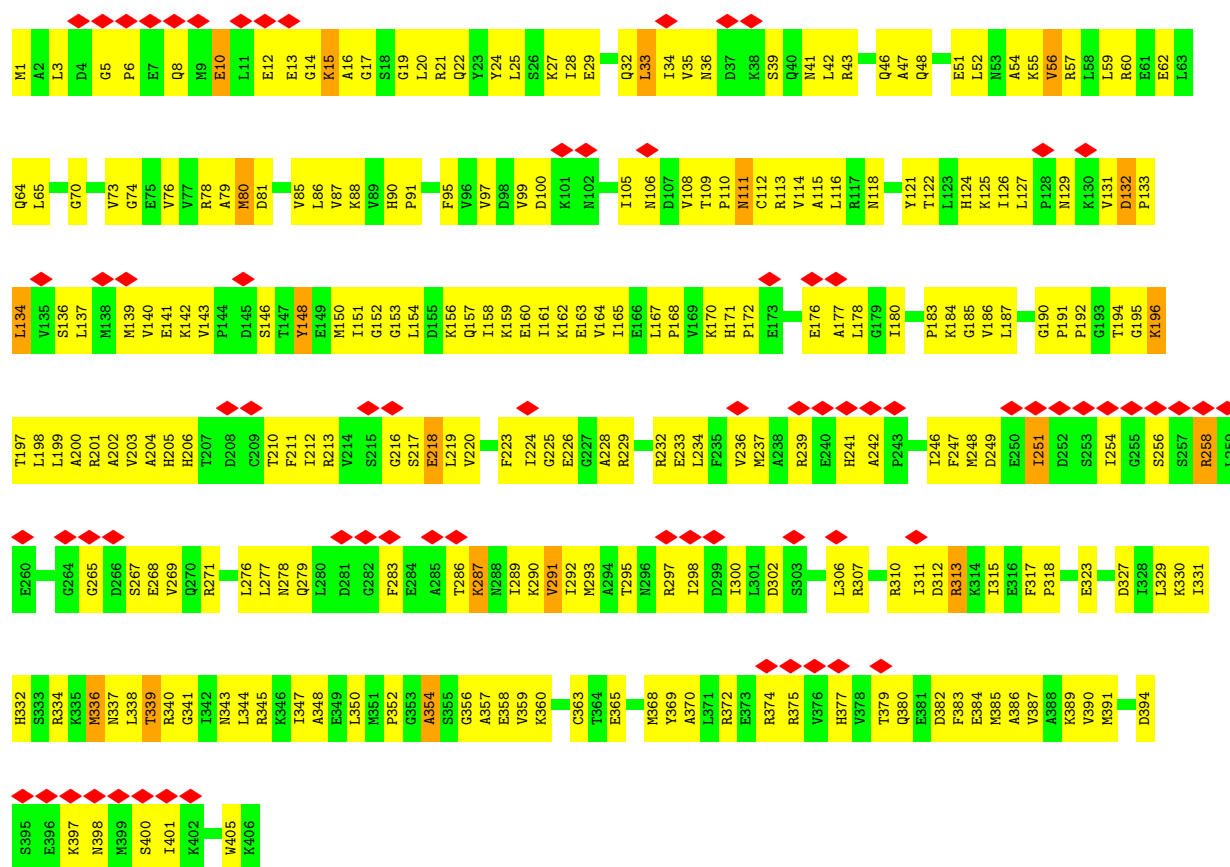


• Molecule 31: 26S proteasome regulatory subunit 6A





• 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	2070	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	0.747	Depositor
Minimum map value	-0.400	Depositor
Average map value	-0.037	Depositor
Map value standard deviation	0.167	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	2.35	82/1954 (4.2%)	2.45	120/2638 (4.5%)
2	B	2.33	85/1867 (4.6%)	2.46	128/2527 (5.1%)
3	C	2.25	69/1990 (3.5%)	2.42	122/2680 (4.6%)
4	D	2.37	90/1953 (4.6%)	2.46	130/2637 (4.9%)
5	E	2.21	56/1806 (3.1%)	2.50	129/2439 (5.3%)
6	F	2.32	78/1906 (4.1%)	2.60	153/2577 (5.9%)
7	G	2.62	71/1947 (3.6%)	2.53	139/2620 (5.3%)
8	1	2.40	77/1542 (5.0%)	2.56	117/2089 (5.6%)
9	2	2.34	75/1679 (4.5%)	2.57	137/2271 (6.0%)
10	3	2.30	64/1629 (3.9%)	2.53	108/2195 (4.9%)
11	4	2.34	69/1604 (4.3%)	2.50	120/2170 (5.5%)
12	5	2.37	72/1592 (4.5%)	2.60	139/2152 (6.5%)
13	6	2.43	84/1690 (5.0%)	2.59	146/2278 (6.4%)
14	7	2.78	79/1720 (4.6%)	2.58	144/2327 (6.2%)
15	W	2.25	57/1500 (3.8%)	2.59	138/2030 (6.8%)
16	V	2.25	67/2315 (2.9%)	2.52	167/3129 (5.3%)
17	T	2.20	72/2195 (3.3%)	2.53	154/2964 (5.2%)
18	Y	2.30	10/201 (5.0%)	2.56	11/266 (4.1%)
19	Z	2.34	302/7026 (4.3%)	2.64	628/9495 (6.6%)
20	N	2.28	297/7206 (4.1%)	2.62	618/9738 (6.3%)
21	S	2.33	141/3918 (3.6%)	2.57	315/5287 (6.0%)
22	P	2.25	120/3754 (3.2%)	2.61	315/5049 (6.2%)
23	Q	2.27	123/3381 (3.6%)	2.59	275/4558 (6.0%)
24	R	2.24	124/3263 (3.8%)	2.59	247/4393 (5.6%)
25	U	2.34	108/2344 (4.6%)	2.58	187/3178 (5.9%)
26	O	2.26	102/3066 (3.3%)	2.55	224/4148 (5.4%)
27	H	2.30	120/3166 (3.8%)	2.52	238/4275 (5.6%)
28	I	2.33	125/3085 (4.1%)	2.51	237/4158 (5.7%)
29	K	2.30	105/3178 (3.3%)	2.53	260/4290 (6.1%)
30	L	2.37	139/3146 (4.4%)	2.58	259/4233 (6.1%)
31	M	2.31	128/3293 (3.9%)	2.61	282/4436 (6.4%)
32	J	2.35	151/3236 (4.7%)	2.57	258/4347 (5.9%)
All	All	2.33	3342/84152 (4.0%)	2.56	6645/113574 (5.9%)

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	4
2	B	0	7
3	C	0	6
4	D	0	11
5	E	0	2
6	F	0	6
7	G	0	6
8	1	0	6
9	2	0	6
10	3	0	7
11	4	0	10
12	5	0	8
13	6	0	8
14	7	0	12
15	W	0	5
16	V	0	5
17	T	0	6
18	Y	0	1
19	Z	0	16
20	N	0	27
21	S	0	14
22	P	0	13
23	Q	0	7
24	R	0	10
25	U	0	6
26	O	0	4
27	H	0	7
28	I	0	7
29	K	0	10
30	L	0	9
31	M	0	9
32	J	0	5
All	All	0	260

All (3342) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	G	224	ARG	CZ-NH1	60.14	2.17	1.32
14	7	121	PHE	CG-CD2	36.32	2.15	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	7	121	PHE	CG-CD1	30.59	2.03	1.38
14	7	121	PHE	CE1-CZ	22.08	2.04	1.38
14	7	121	PHE	CD2-CE2	21.77	2.04	1.38
14	7	121	PHE	CE2-CZ	20.84	2.01	1.38
14	7	121	PHE	CD1-CE1	20.55	2.00	1.38
21	S	500	ASP	CA-C	-13.95	1.46	1.53
4	D	39	ASP	CA-C	-13.73	1.41	1.52
15	W	108	ARG	NE-CZ	12.55	1.46	1.33
13	6	63	HIS	ND1-CE1	12.23	1.44	1.32
13	6	138	GLU	C-N	12.22	1.41	1.33
11	4	105	ALA	C-N	11.65	1.41	1.33
6	F	216	GLY	CA-C	-11.20	1.38	1.51
4	D	140	VAL	CA-C	-11.12	1.39	1.52
28	I	408	ARG	CD-NE	11.12	1.61	1.46
28	I	330	ALA	CA-C	-10.73	1.39	1.52
23	Q	211	ASP	CA-C	-10.70	1.39	1.52
19	Z	572	ALA	C-N	10.66	1.46	1.34
23	Q	281	GLY	CA-C	-10.59	1.41	1.52
19	Z	683	GLU	CA-CB	10.46	1.61	1.52
3	C	218	ARG	NE-CZ	10.45	1.44	1.33
12	5	69	HIS	ND1-CE1	10.44	1.43	1.32
32	J	22	GLN	CA-C	10.33	1.66	1.52
8	1	204	GLY	CA-C	-10.28	1.39	1.52
1	A	63	SER	CA-C	-10.21	1.39	1.52
19	Z	478	ARG	CD-NE	10.07	1.60	1.46
12	5	140	LYS	CA-C	-10.04	1.39	1.52
5	E	113	THR	CA-C	-10.02	1.39	1.52
20	N	679	PRO	N-CA	-10.00	1.34	1.47
16	V	264	LYS	CA-C	-9.97	1.40	1.52
24	R	18	ARG	CA-C	9.95	1.62	1.53
22	P	170	GLN	C-N	9.92	1.46	1.33
14	7	116	ILE	C-N	9.87	1.47	1.33
6	F	148	CYS	CA-C	-9.82	1.40	1.52
7	G	46	VAL	CA-C	-9.73	1.41	1.52
1	A	224	ASN	N-CA	-9.68	1.35	1.46
19	Z	538	ILE	CA-CB	9.63	1.66	1.54
13	6	152	ASP	CA-C	-9.60	1.42	1.52
20	N	605	VAL	CA-C	-9.60	1.40	1.52
19	Z	56	LEU	CA-C	-9.57	1.40	1.52
29	K	318	ASP	C-N	9.45	1.42	1.33
19	Z	161	HIS	ND1-CE1	9.44	1.42	1.32
19	Z	341	GLU	CA-C	-9.45	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	L	80	GLU	CA-C	-9.43	1.44	1.53
8	1	124	ARG	CD-NE	9.38	1.59	1.46
20	N	855	GLU	C-N	9.38	1.45	1.34
8	1	74	ILE	CA-CB	-9.35	1.44	1.54
29	K	357	GLU	C-N	9.30	1.42	1.33
30	L	184	CYS	CA-C	-9.28	1.41	1.52
12	5	61	THR	C-N	9.28	1.46	1.33
19	Z	198	HIS	ND1-CE1	9.24	1.41	1.32
9	2	242	PHE	CA-CB	9.24	1.64	1.52
22	P	395	ASN	CA-C	-9.19	1.41	1.52
1	A	140	LEU	CA-C	-9.19	1.41	1.52
19	Z	690	VAL	CA-CB	-9.18	1.49	1.54
22	P	182	ARG	NE-CZ	9.18	1.43	1.33
13	6	95	ILE	C-N	9.16	1.46	1.33
16	V	188	SER	CA-CB	9.16	1.62	1.53
24	R	302	HIS	ND1-CE1	9.14	1.41	1.32
30	L	19	ARG	CD-NE	9.14	1.59	1.46
24	R	312	ARG	CZ-NH2	9.09	1.45	1.33
2	B	113	ARG	NE-CZ	9.08	1.43	1.33
27	H	401	ARG	NE-CZ	9.07	1.43	1.33
28	I	297	SER	N-CA	-9.05	1.38	1.46
32	J	150	MET	N-CA	-9.05	1.35	1.46
28	I	188	GLY	CA-C	-9.03	1.43	1.52
20	N	633	CYS	CA-CB	9.02	1.65	1.53
19	Z	301	HIS	ND1-CE1	9.01	1.41	1.32
8	1	210	ALA	CA-C	-8.99	1.42	1.52
31	M	211	HIS	CG-ND1	-8.99	1.28	1.38
11	4	155	ARG	CD-NE	8.96	1.58	1.46
26	O	358	THR	CA-C	8.95	1.64	1.52
20	N	149	GLN	CA-C	-8.93	1.41	1.52
1	A	154	CYS	CA-C	-8.92	1.42	1.52
19	Z	686	LEU	CA-C	-8.91	1.42	1.52
26	O	247	ARG	NE-CZ	8.89	1.42	1.33
26	O	61	GLU	CA-C	-8.88	1.41	1.52
26	O	365	LEU	CA-C	-8.88	1.41	1.52
27	H	255	ARG	NE-CZ	8.85	1.42	1.33
29	K	276	ASP	CA-C	-8.85	1.41	1.52
16	V	162	LEU	CA-C	-8.83	1.42	1.52
8	1	182	LYS	CA-C	8.82	1.65	1.53
31	M	143	VAL	CA-C	-8.82	1.41	1.52
15	W	155	ALA	N-CA	-8.82	1.35	1.46
13	6	163	LYS	CA-C	-8.80	1.40	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	4	180	VAL	CA-C	-8.79	1.42	1.52
8	1	154	VAL	CA-C	-8.78	1.41	1.52
19	Z	761	MET	C-N	8.79	1.44	1.33
16	V	137	SER	CA-C	-8.77	1.41	1.52
19	Z	710	LEU	CA-C	-8.76	1.41	1.52
2	B	20	VAL	CA-C	8.76	1.63	1.52
21	S	124	ARG	NE-CZ	8.76	1.42	1.33
21	S	404	ARG	CD-NE	8.74	1.58	1.46
13	6	170	ALA	CA-CB	8.73	1.66	1.53
20	N	121	GLY	CA-C	-8.73	1.44	1.52
8	1	62	ARG	NE-CZ	8.71	1.42	1.33
19	Z	298	LEU	C-N	8.70	1.44	1.33
12	5	186	SER	CA-C	-8.67	1.42	1.52
20	N	647	HIS	ND1-CE1	8.66	1.41	1.32
26	O	294	GLU	C-N	8.66	1.45	1.34
2	B	192	ILE	C-N	8.66	1.45	1.33
4	D	206	GLN	C-N	8.63	1.44	1.33
20	N	742	HIS	CA-C	8.63	1.63	1.53
29	K	29	PHE	CA-C	-8.62	1.42	1.52
24	R	267	ARG	NE-CZ	8.60	1.42	1.33
18	Y	51	ASP	CA-C	8.60	1.64	1.52
31	M	183	ARG	NE-CZ	8.59	1.42	1.33
20	N	807	LYS	CA-C	-8.57	1.43	1.52
23	Q	372	LYS	CA-C	-8.57	1.43	1.53
16	V	300	LEU	CA-C	-8.57	1.41	1.52
20	N	559	ARG	CD-NE	8.56	1.58	1.46
17	T	98	TYR	CA-C	-8.56	1.45	1.52
21	S	298	TYR	N-CA	-8.56	1.35	1.46
19	Z	724	ASN	N-CA	-8.55	1.36	1.46
7	G	73	HIS	ND1-CE1	8.55	1.41	1.32
9	2	62	ARG	NE-CZ	8.55	1.42	1.33
21	S	460	ILE	CA-C	-8.55	1.42	1.52
21	S	475	ARG	CD-NE	8.55	1.58	1.46
3	C	136	TYR	CA-C	-8.53	1.42	1.52
7	G	188	ARG	NE-CZ	8.52	1.42	1.33
3	C	116	ASP	CA-CB	8.51	1.66	1.53
14	7	147	MET	CA-CB	8.50	1.67	1.53
22	P	4	GLY	C-N	8.48	1.41	1.33
12	5	195	PHE	N-CA	-8.47	1.35	1.46
3	C	3	ARG	CA-CB	8.46	1.68	1.53
6	F	118	ILE	CA-CB	-8.45	1.49	1.54
20	N	147	TYR	CA-C	-8.44	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	2	188	ASP	CA-C	-8.43	1.41	1.52
24	R	60	SER	CA-C	-8.43	1.42	1.52
16	V	254	ASN	C-N	8.43	1.45	1.33
31	M	436	ALA	CA-C	-8.41	1.41	1.52
21	S	294	ILE	CA-C	8.40	1.63	1.52
17	T	320	SER	N-CA	-8.39	1.35	1.46
4	D	15	HIS	ND1-CE1	8.39	1.41	1.32
19	Z	245	ASN	CA-C	-8.38	1.41	1.52
20	N	360	VAL	CA-C	-8.36	1.44	1.52
27	H	400	ARG	NE-CZ	8.36	1.42	1.33
27	H	139	ARG	CD-NE	8.34	1.57	1.46
31	M	222	PRO	CA-C	-8.33	1.44	1.52
6	F	51	ARG	CD-NE	8.32	1.57	1.46
12	5	239	ARG	CD-NE	8.32	1.57	1.46
4	D	50	VAL	N-CA	-8.32	1.36	1.46
10	3	80	ARG	CA-C	-8.30	1.42	1.52
2	B	60	ARG	NE-CZ	8.30	1.42	1.33
3	C	110	LEU	CA-C	-8.30	1.42	1.52
27	H	336	ARG	CZ-NH2	8.30	1.44	1.33
31	M	101	ASP	CA-CB	8.30	1.63	1.53
23	Q	314	ARG	CD-NE	8.28	1.57	1.46
13	6	87	ASP	C-N	8.27	1.44	1.33
22	P	405	LYS	CA-CB	8.26	1.64	1.53
31	M	353	ARG	NE-CZ	8.25	1.42	1.33
26	O	238	TYR	CA-C	-8.24	1.42	1.52
1	A	38	THR	C-N	8.24	1.46	1.33
8	1	62	ARG	CD-NE	8.23	1.57	1.46
9	2	229	LEU	C-N	8.21	1.42	1.33
17	T	194	LEU	N-CA	-8.20	1.36	1.46
7	G	233	ARG	CD-NE	8.20	1.57	1.46
22	P	351	TRP	CA-C	-8.20	1.41	1.52
27	H	54	GLN	CA-CB	8.20	1.66	1.53
31	M	128	LYS	CA-C	-8.20	1.42	1.52
10	3	179	ALA	CA-C	8.20	1.64	1.52
22	P	414	ASN	N-CA	-8.19	1.36	1.46
10	3	115	LYS	CA-C	-8.19	1.42	1.52
25	U	94	TRP	C-N	8.19	1.44	1.33
22	P	316	ARG	CA-C	-8.18	1.42	1.52
24	R	153	ASP	CA-C	-8.18	1.42	1.52
24	R	256	VAL	C-N	8.17	1.44	1.33
5	E	70	ILE	CA-CB	-8.17	1.43	1.54
27	H	412	ALA	N-CA	8.16	1.56	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	M	132	ARG	CZ-NH1	8.16	1.44	1.32
27	H	404	ALA	CA-C	-8.15	1.42	1.52
29	K	257	ASN	CA-CB	8.14	1.64	1.53
13	6	162	PHE	CA-C	-8.13	1.42	1.52
8	1	52	ARG	N-CA	-8.13	1.37	1.46
20	N	124	LYS	N-CA	-8.12	1.38	1.46
15	W	139	ASP	CA-C	-8.12	1.43	1.52
22	P	350	ARG	N-CA	-8.12	1.35	1.46
5	E	157	ASP	C-N	8.11	1.43	1.33
2	B	74	LEU	CA-C	-8.11	1.42	1.52
28	I	151	LEU	CA-C	-8.10	1.42	1.52
30	L	381	PHE	CA-CB	8.10	1.66	1.53
12	5	123	ARG	NE-CZ	8.09	1.42	1.33
25	U	33	LYS	CA-C	-8.09	1.42	1.53
13	6	177	ASP	CA-C	-8.09	1.42	1.52
6	F	174	ARG	CD-NE	8.08	1.57	1.46
19	Z	821	LEU	CA-C	-8.07	1.42	1.52
15	W	171	VAL	C-N	8.07	1.44	1.33
26	O	172	TYR	CA-C	-8.07	1.42	1.52
19	Z	393	ASP	C-N	8.07	1.44	1.33
26	O	70	ARG	CZ-NH1	8.06	1.44	1.32
27	H	124	ASP	CA-CB	8.05	1.65	1.53
7	G	130	ARG	CD-NE	8.04	1.57	1.46
19	Z	102	HIS	CD2-NE2	8.04	1.46	1.37
5	E	60	GLU	CA-C	-8.04	1.45	1.53
13	6	202	VAL	CA-C	-8.04	1.43	1.52
14	7	92	SER	CA-C	-8.03	1.42	1.52
26	O	235	ASP	N-CA	-8.03	1.35	1.46
16	V	222	LYS	CA-CB	8.03	1.66	1.53
23	Q	81	SER	CA-C	8.01	1.63	1.53
2	B	133	SER	CA-C	-8.01	1.43	1.52
7	G	164	CYS	CA-C	-8.01	1.42	1.52
22	P	334	GLU	N-CA	-8.01	1.36	1.46
8	1	73	HIS	C-N	8.01	1.41	1.33
19	Z	274	ASP	C-N	8.01	1.44	1.33
28	I	293	LYS	CA-C	-8.01	1.43	1.52
23	Q	107	VAL	C-N	8.00	1.44	1.33
31	M	307	ARG	CZ-NH2	8.00	1.43	1.33
2	B	136	ILE	CA-C	-8.00	1.43	1.52
20	N	920	ASP	CA-CB	7.99	1.65	1.53
30	L	98	ARG	NE-CZ	7.98	1.41	1.33
20	N	488	THR	C-N	7.97	1.44	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	1	170	GLY	CA-C	-7.95	1.43	1.52
19	Z	669	GLU	C-N	7.95	1.44	1.33
24	R	291	HIS	ND1-CE1	7.94	1.40	1.32
26	O	282	PHE	CA-CB	7.94	1.65	1.53
30	L	308	ARG	CA-C	-7.93	1.46	1.52
31	M	379	SER	CA-C	-7.93	1.45	1.53
25	U	158	VAL	CA-C	-7.93	1.43	1.52
15	W	170	LEU	CA-C	-7.92	1.43	1.52
23	Q	153	LEU	C-N	7.92	1.44	1.33
21	S	228	HIS	ND1-CE1	7.92	1.40	1.32
28	I	183	THR	C-O	-7.91	1.14	1.24
3	C	9	THR	C-N	7.90	1.44	1.33
6	F	130	VAL	CA-C	-7.88	1.43	1.52
19	Z	72	ARG	NE-CZ	7.87	1.41	1.33
9	2	90	GLY	N-CA	-7.87	1.37	1.45
1	A	204	THR	C-N	7.87	1.43	1.33
23	Q	314	ARG	NE-CZ	7.86	1.41	1.33
11	4	140	LEU	N-CA	-7.86	1.36	1.46
31	M	49	ARG	NE-CZ	7.85	1.41	1.33
13	6	109	ALA	CA-C	-7.85	1.42	1.53
27	H	328	ASP	CA-C	7.85	1.63	1.52
21	S	305	MET	C-N	7.84	1.44	1.33
26	O	345	GLN	CA-C	-7.84	1.42	1.52
27	H	97	ARG	NE-CZ	7.84	1.41	1.33
13	6	239	LYS	CA-CB	7.84	1.61	1.54
21	S	95	ARG	CA-C	-7.84	1.42	1.53
6	F	59	HIS	ND1-CE1	7.84	1.40	1.32
31	M	168	PRO	C-N	7.83	1.44	1.33
1	A	95	ARG	NE-CZ	7.83	1.41	1.33
4	D	204	VAL	CA-C	7.82	1.62	1.52
21	S	82	VAL	CA-CB	-7.82	1.43	1.54
24	R	38	ARG	CD-NE	7.82	1.57	1.46
32	J	331	ILE	CA-C	-7.82	1.42	1.52
13	6	227	LYS	C-N	7.82	1.40	1.33
4	D	138	LEU	CA-C	-7.82	1.43	1.53
16	V	156	VAL	CA-C	-7.80	1.43	1.52
6	F	223	ILE	CA-C	-7.80	1.43	1.52
1	A	93	ARG	NE-CZ	7.80	1.41	1.33
13	6	124	TYR	N-CA	-7.80	1.36	1.46
20	N	237	VAL	C-N	7.80	1.44	1.33
19	Z	828	ARG	CD-NE	7.79	1.57	1.46
19	Z	271	MET	C-N	7.79	1.44	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	G	214	LEU	CA-C	-7.78	1.43	1.52
19	Z	746	ARG	CD-NE	7.78	1.57	1.46
21	S	427	PRO	C-N	7.78	1.44	1.34
8	1	110	HIS	ND1-CE1	7.77	1.40	1.32
26	O	45	VAL	N-CA	-7.77	1.36	1.46
31	M	197	GLN	CA-CB	7.77	1.66	1.53
30	L	337	HIS	CA-C	-7.76	1.42	1.53
8	1	105	GLU	N-CA	-7.76	1.35	1.46
30	L	180	PRO	C-N	7.76	1.43	1.33
22	P	316	ARG	NE-CZ	7.75	1.41	1.33
23	Q	411	VAL	CA-C	-7.75	1.43	1.52
32	J	86	LEU	CA-C	-7.75	1.43	1.52
20	N	751	ARG	CD-NE	7.74	1.57	1.46
12	5	133	ILE	C-N	7.74	1.44	1.33
20	N	359	ALA	CA-C	-7.74	1.42	1.52
10	3	200	LEU	CA-C	-7.73	1.43	1.52
3	C	148	TYR	CA-C	-7.73	1.43	1.52
31	M	434	LYS	CA-C	-7.72	1.42	1.52
19	Z	634	LYS	CA-C	-7.72	1.43	1.53
27	H	323	ARG	CA-C	-7.72	1.44	1.52
23	Q	29	SER	CA-C	-7.72	1.42	1.52
19	Z	885	GLU	N-CA	-7.69	1.36	1.46
30	L	92	ARG	NE-CZ	7.69	1.41	1.33
9	2	143	LEU	C-N	7.67	1.41	1.33
15	W	12	ASN	N-CA	-7.67	1.37	1.46
19	Z	130	ALA	C-N	7.66	1.43	1.33
12	5	166	ARG	NE-CZ	7.66	1.41	1.33
25	U	159	THR	CA-C	-7.66	1.43	1.52
8	1	175	THR	N-CA	-7.65	1.36	1.46
24	R	188	CYS	C-N	7.65	1.43	1.34
30	L	321	GLN	C-N	7.64	1.44	1.33
19	Z	422	VAL	CA-CB	-7.64	1.45	1.54
17	T	121	ARG	NE-CZ	7.64	1.41	1.33
32	J	247	PHE	CA-C	-7.63	1.43	1.52
29	K	294	ASN	CA-C	-7.63	1.42	1.52
9	2	167	TYR	CA-CB	7.63	1.66	1.53
24	R	25	LEU	CA-CB	7.62	1.65	1.53
29	K	216	ALA	N-CA	-7.62	1.37	1.46
7	G	217	VAL	CA-C	-7.61	1.43	1.52
30	L	19	ARG	N-CA	-7.61	1.36	1.46
32	J	265	GLY	CA-C	-7.61	1.42	1.51
19	Z	547	GLU	CA-C	-7.60	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	U	25	ARG	CA-C	-7.60	1.43	1.52
25	U	122	VAL	CA-C	-7.59	1.43	1.52
28	I	162	VAL	CA-C	-7.59	1.44	1.52
29	K	222	HIS	CB-CG	7.59	1.60	1.50
1	A	54	LYS	N-CA	-7.58	1.36	1.46
11	4	59	TYR	CA-CB	7.58	1.65	1.53
20	N	374	SER	CA-C	-7.57	1.43	1.52
21	S	102	ARG	NE-CZ	7.57	1.41	1.33
4	D	36	ARG	CA-C	-7.57	1.43	1.52
14	7	256	ALA	N-CA	-7.56	1.36	1.46
14	7	218	ARG	NE-CZ	7.56	1.41	1.33
9	2	127	LYS	N-CA	7.56	1.55	1.46
31	M	50	LEU	C-N	7.56	1.44	1.34
2	B	123	GLN	CA-CB	7.55	1.65	1.53
20	N	34	PHE	N-CA	-7.55	1.37	1.46
24	R	18	ARG	CD-NE	7.55	1.56	1.46
5	E	145	GLY	C-N	7.55	1.43	1.33
8	1	106	PRO	CA-C	-7.54	1.47	1.51
23	Q	299	LEU	C-N	7.54	1.43	1.33
19	Z	551	LYS	CA-C	-7.54	1.43	1.52
21	S	88	ARG	CD-NE	7.54	1.56	1.46
27	H	411	GLU	CA-C	-7.54	1.43	1.52
6	F	148	CYS	CA-CB	7.53	1.65	1.53
12	5	200	ARG	NE-CZ	7.53	1.41	1.33
15	W	24	THR	N-CA	-7.53	1.36	1.46
15	W	45	PRO	N-CA	-7.53	1.37	1.47
31	M	362	GLU	CA-C	-7.52	1.43	1.52
20	N	211	PRO	N-CA	-7.51	1.39	1.46
25	U	12	HIS	C-N	-7.51	1.24	1.34
1	A	42	VAL	CA-C	-7.51	1.43	1.52
4	D	100	HIS	CE1-NE2	-7.51	1.25	1.32
13	6	68	PRO	CA-C	-7.51	1.45	1.53
24	R	59	LYS	N-CA	-7.51	1.36	1.46
10	3	30	ILE	CA-C	-7.50	1.44	1.52
5	E	30	GLY	CA-C	-7.49	1.42	1.51
30	L	90	GLY	N-CA	-7.49	1.34	1.44
25	U	84	LYS	N-CA	-7.48	1.37	1.46
27	H	48	VAL	N-CA	-7.48	1.37	1.46
22	P	66	ILE	CA-C	-7.47	1.43	1.52
22	P	417	ARG	NE-CZ	7.47	1.41	1.33
29	K	391	ARG	NE-CZ	7.47	1.41	1.33
32	J	237	MET	CA-C	-7.47	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	7	130	ARG	NE-CZ	7.47	1.41	1.33
20	N	769	PHE	CA-C	7.46	1.59	1.52
32	J	160	GLU	N-CA	-7.46	1.37	1.46
26	O	82	HIS	ND1-CE1	7.46	1.40	1.32
32	J	287	LYS	CA-C	-7.46	1.43	1.52
26	O	353	LEU	N-CA	-7.45	1.37	1.46
2	B	129	PRO	CA-C	-7.45	1.43	1.52
25	U	12	HIS	CD2-NE2	7.44	1.46	1.37
32	J	341	GLY	CA-C	-7.44	1.43	1.52
14	7	223	ARG	NE-CZ	7.44	1.41	1.33
29	K	366	ARG	NE-CZ	7.44	1.41	1.33
31	M	356	GLU	C-N	7.43	1.39	1.33
17	T	332	THR	C-N	7.43	1.41	1.33
21	S	199	LEU	CA-CB	7.43	1.65	1.53
12	5	171	TYR	CA-C	-7.42	1.43	1.52
19	Z	774	GLY	CA-C	-7.42	1.41	1.51
12	5	60	THR	C-N	7.42	1.43	1.33
25	U	259	VAL	C-N	7.41	1.43	1.33
1	A	21	ARG	CD-NE	7.41	1.56	1.46
32	J	184	LYS	CA-C	-7.41	1.43	1.52
19	Z	575	ALA	C-N	7.41	1.43	1.33
19	Z	460	ASP	CA-C	7.40	1.59	1.53
10	3	34	MET	CA-C	-7.40	1.43	1.52
20	N	676	THR	C-N	7.40	1.44	1.34
24	R	160	ASN	CA-C	-7.40	1.43	1.52
13	6	211	GLU	C-N	7.39	1.43	1.34
21	S	144	ARG	CD-NE	7.39	1.56	1.46
30	L	151	GLY	C-N	7.39	1.44	1.33
9	2	144	GLY	CA-C	-7.39	1.45	1.52
22	P	54	THR	CA-C	-7.39	1.43	1.52
20	N	626	LEU	CA-C	-7.38	1.42	1.52
5	E	122	GLN	CA-C	-7.38	1.43	1.52
20	N	717	ILE	C-N	7.38	1.43	1.33
32	J	91	PRO	N-CA	-7.38	1.38	1.47
19	Z	59	LEU	CA-C	-7.37	1.43	1.52
6	F	202	GLU	CA-CB	7.37	1.65	1.53
32	J	87	VAL	CA-C	-7.37	1.43	1.52
9	2	164	LYS	C-N	7.37	1.40	1.33
19	Z	811	LEU	CA-C	-7.36	1.43	1.52
30	L	167	LEU	CA-CB	7.36	1.64	1.53
19	Z	428	GLN	C-N	7.36	1.43	1.33
23	Q	87	ARG	NE-CZ	7.35	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	M	137	LEU	C-N	7.35	1.40	1.33
20	N	777	HIS	ND1-CE1	7.35	1.39	1.32
10	3	163	LEU	C-N	7.35	1.44	1.34
9	2	226	LEU	N-CA	-7.34	1.36	1.45
21	S	48	GLU	N-CA	-7.34	1.37	1.46
23	Q	340	GLU	CA-CB	7.34	1.62	1.53
25	U	197	GLY	CA-C	-7.34	1.43	1.52
28	I	333	ARG	CD-NE	7.34	1.56	1.46
29	K	221	HIS	CB-CG	-7.34	1.39	1.50
31	M	38	LYS	C-N	7.34	1.43	1.33
19	Z	223	GLU	C-N	7.33	1.43	1.33
2	B	127	VAL	CA-C	-7.33	1.44	1.52
2	B	89	ARG	CA-C	-7.32	1.43	1.52
21	S	304	THR	C-N	7.32	1.43	1.33
21	S	146	ARG	CD-NE	7.32	1.56	1.46
10	3	99	ARG	CD-NE	7.32	1.56	1.46
27	H	97	ARG	CD-NE	7.32	1.56	1.46
1	A	241	ALA	C-N	7.32	1.43	1.34
8	1	131	ILE	C-N	7.32	1.42	1.33
21	S	496	SER	CA-C	-7.32	1.43	1.52
10	3	55	GLY	CA-C	-7.30	1.46	1.52
27	H	344	SER	CA-CB	7.30	1.65	1.53
10	3	194	LYS	N-CA	-7.30	1.36	1.46
17	T	107	ARG	CD-NE	7.30	1.56	1.46
2	B	179	ASN	CA-C	-7.30	1.43	1.52
8	1	141	GLY	C-N	7.30	1.43	1.33
8	1	113	ALA	N-CA	-7.29	1.37	1.46
12	5	147	TYR	C-N	7.29	1.43	1.33
27	H	213	LEU	CA-C	-7.28	1.43	1.52
19	Z	133	MET	N-CA	-7.28	1.36	1.46
28	I	250	VAL	CA-C	-7.28	1.43	1.52
20	N	900	TYR	CA-C	-7.27	1.43	1.52
32	J	258	ARG	CZ-NH2	7.27	1.43	1.33
19	Z	894	LEU	CA-C	-7.27	1.43	1.52
14	7	218	ARG	CD-NE	7.27	1.56	1.46
28	I	406	ALA	N-CA	-7.27	1.37	1.46
14	7	139	ALA	CA-C	-7.26	1.43	1.52
6	F	213	GLY	CA-C	-7.26	1.41	1.51
29	K	357	GLU	CA-CB	7.26	1.60	1.53
29	K	388	ARG	NE-CZ	7.26	1.41	1.33
31	M	227	LEU	CA-C	-7.26	1.43	1.52
23	Q	157	LEU	CA-C	-7.26	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	N	487	GLY	C-N	7.25	1.43	1.33
20	N	33	ASP	CA-CB	7.25	1.65	1.53
10	3	198	ARG	CD-NE	7.25	1.56	1.46
15	W	116	PRO	C-N	7.25	1.42	1.33
11	4	16	ALA	CA-C	-7.24	1.43	1.52
14	7	229	ASN	N-CA	-7.23	1.37	1.45
1	A	26	GLU	CA-CB	7.23	1.65	1.53
21	S	437	ALA	CA-CB	7.23	1.64	1.53
32	J	124	HIS	ND1-CE1	7.23	1.39	1.32
17	T	95	ALA	CA-C	-7.22	1.43	1.53
32	J	146	SER	N-CA	-7.22	1.37	1.46
19	Z	16	PRO	CA-C	-7.22	1.39	1.52
19	Z	65	GLU	CA-C	-7.22	1.42	1.53
13	6	59	GLY	CA-C	-7.22	1.45	1.52
20	N	253	TYR	CA-CB	7.21	1.64	1.53
30	L	257	PHE	N-CA	7.21	1.55	1.46
1	A	125	TYR	CA-CB	7.21	1.64	1.53
25	U	181	ASP	C-N	7.21	1.42	1.33
1	A	199	ILE	C-N	7.21	1.43	1.33
2	B	167	TYR	CA-CB	7.20	1.65	1.53
21	S	455	GLN	CA-C	-7.20	1.44	1.52
24	R	177	ARG	NE-CZ	7.20	1.41	1.33
31	M	76	ILE	CA-CB	7.20	1.63	1.54
29	K	53	PHE	CA-CB	7.20	1.64	1.53
9	2	241	ARG	CZ-NH2	7.19	1.42	1.33
32	J	85	VAL	CA-C	-7.19	1.44	1.52
13	6	239	LYS	N-CA	-7.18	1.39	1.46
20	N	425	THR	CA-C	-7.18	1.43	1.52
22	P	185	PHE	CA-CB	7.18	1.64	1.53
25	U	141	VAL	C-N	7.18	1.43	1.33
31	M	285	ILE	C-O	-7.18	1.16	1.24
23	Q	367	GLN	CA-C	-7.17	1.43	1.52
1	A	97	GLU	C-N	7.17	1.43	1.33
26	O	196	ARG	NE-CZ	7.17	1.41	1.33
10	3	131	MET	C-N	7.17	1.43	1.33
20	N	73	ALA	CA-C	-7.17	1.43	1.53
10	3	66	ARG	CD-NE	7.17	1.56	1.46
19	Z	127	SER	C-N	7.17	1.43	1.33
19	Z	245	ASN	CA-CB	7.17	1.65	1.53
20	N	194	ARG	NE-CZ	7.17	1.41	1.33
29	K	88	VAL	CA-C	-7.16	1.44	1.52
19	Z	879	ARG	CA-C	-7.16	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	17	ARG	CD-NE	7.16	1.56	1.46
19	Z	165	GLU	N-CA	-7.15	1.37	1.46
19	Z	663	GLY	C-N	7.15	1.42	1.33
20	N	70	HIS	ND1-CE1	7.15	1.39	1.32
13	6	120	SER	CA-C	-7.15	1.43	1.52
20	N	647	HIS	CA-C	-7.15	1.43	1.52
26	O	93	ALA	C-N	7.15	1.43	1.33
30	L	175	ARG	CD-NE	7.15	1.56	1.46
20	N	564	ASP	CA-CB	7.15	1.64	1.53
20	N	650	TYR	C-N	7.14	1.44	1.33
29	K	361	GLU	CA-C	-7.14	1.43	1.52
16	V	245	VAL	N-CA	-7.14	1.38	1.46
20	N	171	ASN	CA-C	-7.14	1.44	1.52
3	C	22	GLU	CA-C	-7.13	1.43	1.52
6	F	112	ILE	CA-CB	-7.13	1.45	1.54
16	V	236	GLU	CA-C	7.13	1.62	1.52
19	Z	867	THR	C-N	7.13	1.43	1.33
32	J	178	LEU	C-N	7.13	1.44	1.33
32	J	384	GLU	C-N	7.13	1.43	1.33
6	F	227	ASP	CA-CB	7.12	1.64	1.53
20	N	788	ILE	CA-C	-7.12	1.43	1.52
29	K	339	ARG	NE-CZ	7.12	1.40	1.33
26	O	178	ARG	NE-CZ	7.12	1.40	1.33
17	T	119	LEU	C-N	7.12	1.42	1.33
29	K	274	ARG	CZ-NH2	7.12	1.42	1.33
32	J	317	PHE	C-N	7.11	1.41	1.33
19	Z	782	HIS	ND1-CE1	7.11	1.39	1.32
23	Q	140	THR	C-N	7.11	1.43	1.33
2	B	111	VAL	C-N	7.10	1.43	1.33
21	S	286	TYR	CA-CB	7.10	1.64	1.53
25	U	94	TRP	N-CA	-7.10	1.36	1.45
3	C	91	ARG	NE-CZ	7.09	1.40	1.33
21	S	326	LYS	N-CA	-7.09	1.38	1.46
25	U	227	ILE	C-N	7.09	1.43	1.33
28	I	227	PRO	N-CD	-7.08	1.37	1.47
5	E	186	HIS	C-N	7.08	1.42	1.33
25	U	73	ASP	C-N	7.08	1.43	1.33
11	4	113	PRO	C-N	7.08	1.43	1.33
25	U	124	ILE	CA-C	-7.08	1.43	1.52
11	4	32	HIS	CB-CG	7.08	1.60	1.50
13	6	228	GLU	CA-C	-7.07	1.45	1.53
19	Z	691	PRO	C-N	7.07	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	I	100	ASP	C-N	7.06	1.42	1.33
4	D	232	GLU	CA-CB	7.06	1.65	1.53
8	1	54	THR	CA-C	-7.06	1.44	1.52
8	1	113	ALA	C-N	7.06	1.43	1.33
16	V	141	VAL	C-N	7.06	1.43	1.33
19	Z	182	GLU	N-CA	-7.06	1.40	1.46
25	U	226	ILE	CA-CB	7.06	1.63	1.54
19	Z	250	ARG	CD-NE	7.05	1.56	1.46
23	Q	340	GLU	N-CA	-7.05	1.40	1.46
26	O	178	ARG	CA-C	-7.04	1.43	1.52
12	5	73	VAL	N-CA	-7.04	1.38	1.46
20	N	67	VAL	C-N	7.04	1.43	1.33
21	S	92	ARG	CA-C	-7.04	1.43	1.52
25	U	284	ASP	CA-CB	7.04	1.64	1.53
27	H	297	ARG	CZ-NH2	7.04	1.42	1.33
28	I	58	CYS	C-N	7.04	1.43	1.33
8	1	229	LYS	CA-CB	7.04	1.63	1.53
27	H	140	VAL	C-N	7.04	1.41	1.33
32	J	73	VAL	CA-C	-7.04	1.43	1.52
19	Z	308	SER	CA-C	-7.03	1.43	1.52
24	R	233	ARG	CD-NE	7.03	1.56	1.46
23	Q	100	GLU	CA-C	-7.03	1.43	1.52
30	L	39	ARG	CD-NE	7.03	1.56	1.46
32	J	297	ARG	CD-NE	7.03	1.56	1.46
22	P	361	HIS	CA-C	-7.03	1.43	1.52
2	B	81	PRO	N-CD	7.03	1.57	1.47
23	Q	379	ASP	CA-CB	7.02	1.61	1.52
13	6	135	ASN	C-N	7.02	1.42	1.33
27	H	123	VAL	CA-C	-7.02	1.45	1.53
31	M	320	LEU	CA-CB	7.02	1.65	1.53
24	R	114	ILE	C-N	7.02	1.42	1.33
27	H	65	ILE	C-N	7.01	1.41	1.32
28	I	339	PRO	C-N	7.01	1.42	1.33
8	1	222	LEU	CA-CB	7.00	1.63	1.53
20	N	565	ALA	N-CA	-7.00	1.37	1.46
4	D	75	VAL	CA-C	-7.00	1.45	1.52
9	2	110	SER	CA-C	-7.00	1.43	1.52
22	P	47	LEU	CA-C	-7.00	1.43	1.52
1	A	131	MET	CA-C	-7.00	1.43	1.52
7	G	102	ASN	CA-CB	7.00	1.64	1.53
8	1	53	THR	N-CA	-6.99	1.37	1.45
13	6	122	ILE	CA-C	-6.99	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	7	220	LEU	CA-C	-6.99	1.43	1.52
27	H	363	SER	CA-C	-6.99	1.44	1.52
3	C	237	ILE	CA-CB	-6.99	1.45	1.54
32	J	13	GLU	CA-C	-6.99	1.43	1.52
20	N	737	LEU	N-CA	-6.98	1.38	1.46
30	L	176	VAL	CA-CB	6.98	1.63	1.54
31	M	155	GLY	C-N	6.98	1.41	1.33
31	M	376	MET	CA-C	-6.98	1.44	1.52
6	F	185	ASP	CA-C	6.98	1.61	1.52
28	I	270	LEU	CA-C	-6.98	1.43	1.52
29	K	137	ASN	CA-CB	6.97	1.63	1.54
29	K	414	HIS	CD2-NE2	6.97	1.45	1.37
13	6	63	HIS	N-CA	-6.97	1.37	1.46
31	M	120	ARG	CD-NE	6.97	1.56	1.46
4	D	11	SER	CA-C	-6.97	1.44	1.52
16	V	133	PHE	CA-C	6.97	1.61	1.52
17	T	320	SER	CA-C	-6.97	1.43	1.52
27	H	212	VAL	CA-CB	-6.96	1.45	1.54
14	7	201	GLN	N-CA	6.96	1.52	1.46
27	H	369	ARG	CD-NE	6.96	1.55	1.46
28	I	363	ARG	NE-CZ	6.96	1.40	1.33
24	R	23	ARG	CZ-NH2	6.96	1.42	1.33
19	Z	209	MET	CA-C	-6.95	1.43	1.52
6	F	215	VAL	C-N	6.95	1.40	1.33
1	A	128	ASN	N-CA	-6.95	1.37	1.45
20	N	599	ILE	N-CA	-6.95	1.38	1.46
20	N	450	HIS	ND1-CE1	6.94	1.39	1.32
28	I	71	TYR	CA-C	-6.94	1.43	1.52
16	V	101	GLN	N-CA	-6.94	1.37	1.46
2	B	117	VAL	CA-CB	6.94	1.63	1.54
11	4	172	ILE	N-CA	-6.94	1.37	1.46
8	1	37	MET	CA-C	-6.93	1.44	1.52
9	2	241	ARG	CZ-NH1	6.93	1.42	1.32
6	F	156	CYS	CA-C	-6.93	1.44	1.52
10	3	180	VAL	CA-C	-6.93	1.45	1.52
21	S	121	ASN	CA-C	-6.93	1.43	1.52
28	I	347	ILE	CA-C	-6.93	1.43	1.52
25	U	129	LYS	CA-C	-6.93	1.44	1.52
24	R	7	GLU	CA-C	-6.93	1.43	1.52
26	O	354	GLU	C-N	6.93	1.43	1.33
24	R	197	ALA	CA-C	-6.92	1.43	1.52
31	M	151	GLY	C-N	6.92	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	3	69	PHE	CA-CB	6.92	1.64	1.53
19	Z	492	SER	CA-C	-6.92	1.44	1.52
21	S	483	HIS	CB-CG	6.92	1.59	1.50
30	L	312	LYS	N-CA	-6.92	1.36	1.46
32	J	81	ASP	C-N	6.92	1.43	1.33
27	H	127	ASP	CA-C	-6.91	1.44	1.52
1	A	167	ALA	N-CA	-6.91	1.37	1.45
31	M	346	LEU	C-N	6.90	1.43	1.33
6	F	143	HIS	CG-CD2	-6.90	1.28	1.35
28	I	272	ARG	NE-CZ	6.90	1.40	1.33
2	B	113	ARG	CA-C	6.90	1.61	1.52
27	H	65	ILE	CA-CB	6.90	1.63	1.54
31	M	350	ARG	CD-NE	6.89	1.55	1.46
14	7	240	GLY	C-N	6.89	1.41	1.33
30	L	245	PHE	CA-C	-6.89	1.44	1.52
20	N	586	VAL	C-N	6.89	1.42	1.33
16	V	133	PHE	C-N	6.88	1.42	1.33
25	U	111	LEU	C-N	6.88	1.43	1.34
4	D	121	LYS	N-CA	-6.88	1.37	1.46
23	Q	179	ALA	CA-C	-6.88	1.44	1.52
11	4	155	ARG	NE-CZ	6.88	1.40	1.33
14	7	193	LEU	CA-C	-6.88	1.43	1.52
20	N	43	ASP	CA-C	-6.88	1.43	1.52
21	S	466	ARG	CD-NE	6.88	1.55	1.46
25	U	20	VAL	CA-CB	-6.88	1.46	1.54
28	I	127	VAL	CA-C	-6.88	1.44	1.52
19	Z	578	ALA	CA-C	-6.87	1.43	1.52
25	U	45	LYS	C-N	6.87	1.42	1.33
32	J	116	LEU	C-N	6.87	1.42	1.33
14	7	137	THR	C-N	6.87	1.43	1.34
28	I	130	GLU	N-CA	-6.86	1.37	1.45
32	J	114	VAL	CA-C	6.86	1.60	1.52
20	N	158	ARG	NE-CZ	6.86	1.40	1.33
31	M	228	MET	CA-C	-6.86	1.44	1.52
19	Z	519	ALA	CA-CB	6.86	1.64	1.53
1	A	203	SER	CA-CB	6.85	1.64	1.53
9	2	132	ARG	NE-CZ	6.85	1.40	1.33
20	N	840	LYS	N-CA	-6.85	1.37	1.46
27	H	386	ARG	CD-NE	6.85	1.55	1.46
11	4	95	ARG	NE-CZ	6.85	1.40	1.33
26	O	210	VAL	CA-CB	-6.85	1.46	1.54
23	Q	44	GLN	C-N	6.85	1.42	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	R	21	GLN	N-CA	-6.85	1.37	1.46
20	N	357	LYS	CA-CB	6.84	1.64	1.53
30	L	349	SER	N-CA	-6.84	1.37	1.46
9	2	78	HIS	ND1-CE1	6.84	1.39	1.32
29	K	84	SER	C-N	6.84	1.41	1.33
1	A	101	TRP	N-CA	6.84	1.54	1.46
1	A	160	TYR	CZ-OH	6.84	1.52	1.38
1	A	228	ARG	CA-C	-6.84	1.44	1.52
29	K	143	LEU	CA-C	-6.84	1.45	1.52
32	J	171	HIS	CG-CD2	6.84	1.43	1.35
32	J	286	THR	C-N	6.83	1.42	1.33
30	L	254	GLY	CA-C	-6.83	1.45	1.52
30	L	373	HIS	CA-C	-6.83	1.44	1.52
29	K	304	ASN	CA-C	-6.83	1.43	1.52
7	G	234	GLU	N-CA	-6.83	1.38	1.46
12	5	174	ASP	N-CA	-6.83	1.37	1.46
5	E	163	VAL	CA-C	-6.83	1.44	1.52
26	O	185	ILE	N-CA	-6.83	1.38	1.46
31	M	359	MET	CA-C	-6.83	1.45	1.53
27	H	397	ILE	CA-CB	6.82	1.62	1.54
28	I	263	GLY	N-CA	6.82	1.54	1.44
31	M	80	SER	CA-C	-6.82	1.43	1.52
15	W	76	HIS	CG-ND1	6.82	1.45	1.38
20	N	571	CYS	N-CA	-6.81	1.38	1.46
21	S	231	LEU	CA-CB	6.81	1.64	1.53
23	Q	357	SER	CA-C	-6.81	1.44	1.53
19	Z	698	SER	C-O	-6.81	1.15	1.24
12	5	134	SER	C-N	6.80	1.42	1.33
15	W	124	LEU	C-N	6.80	1.42	1.33
23	Q	167	VAL	CA-CB	-6.80	1.46	1.54
5	E	65	GLU	N-CA	-6.80	1.37	1.46
22	P	325	GLY	N-CA	6.80	1.54	1.45
19	Z	382	ASN	CA-C	-6.80	1.43	1.52
8	1	118	GLU	N-CA	-6.80	1.38	1.46
19	Z	879	ARG	CZ-NH2	6.80	1.42	1.33
20	N	883	ARG	NE-CZ	6.80	1.40	1.33
28	I	281	ILE	C-N	6.80	1.42	1.33
2	B	14	SER	CA-C	-6.79	1.45	1.52
20	N	131	GLU	CA-CB	-6.79	1.42	1.53
13	6	190	HIS	ND1-CE1	6.79	1.39	1.32
5	E	121	LEU	CA-CB	6.79	1.63	1.53
31	M	189	SER	CA-C	-6.79	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	I	394	ASP	N-CA	-6.79	1.38	1.46
30	L	386	ARG	C-N	6.79	1.42	1.33
28	I	280	SER	CA-C	-6.78	1.43	1.52
31	M	138	PRO	CA-C	6.78	1.59	1.52
13	6	51	ALA	CA-CB	6.78	1.63	1.53
4	D	229	GLU	C-N	6.78	1.43	1.33
13	6	44	GLY	CA-C	-6.78	1.42	1.51
26	O	22	TRP	N-CA	-6.78	1.38	1.46
9	2	153	LEU	CA-C	-6.77	1.44	1.52
1	A	213	SER	N-CA	-6.77	1.37	1.46
7	G	224	ARG	CD-NE	6.77	1.55	1.46
16	V	274	ASN	CA-C	-6.77	1.44	1.53
4	D	115	ARG	CZ-NH2	6.77	1.42	1.33
13	6	173	GLN	CA-CB	6.77	1.62	1.53
22	P	262	LYS	CA-C	-6.77	1.44	1.52
27	H	304	ASN	CA-CB	6.77	1.63	1.53
19	Z	319	GLU	C-N	6.76	1.42	1.33
10	3	73	LEU	CA-C	-6.76	1.44	1.52
13	6	98	ARG	CD-NE	6.76	1.55	1.46
19	Z	156	HIS	ND1-CE1	6.76	1.39	1.32
23	Q	349	HIS	C-N	6.76	1.42	1.33
28	I	434	THR	CA-CB	6.76	1.64	1.53
19	Z	234	THR	CA-CB	6.76	1.64	1.53
20	N	366	HIS	ND1-CE1	6.76	1.39	1.32
8	1	82	ALA	N-CA	-6.75	1.37	1.46
11	4	160	LEU	CA-CB	-6.75	1.42	1.53
2	B	224	THR	CA-C	6.75	1.61	1.52
11	4	133	GLY	CA-C	-6.75	1.45	1.52
4	D	19	VAL	CA-C	-6.75	1.44	1.52
7	G	6	THR	CA-C	-6.74	1.45	1.53
21	S	412	ARG	NE-CZ	6.74	1.40	1.33
20	N	80	TYR	CA-CB	6.74	1.64	1.53
23	Q	35	ILE	CA-CB	6.74	1.62	1.54
27	H	149	ILE	CA-C	-6.74	1.44	1.52
4	D	112	TYR	CA-C	-6.73	1.44	1.52
23	Q	315	ASP	CA-CB	6.73	1.63	1.53
31	M	134	THR	CA-C	-6.73	1.44	1.52
8	1	82	ALA	C-N	6.73	1.43	1.33
10	3	122	CYS	CA-C	-6.73	1.44	1.52
14	7	206	GLN	CA-CB	6.73	1.63	1.53
19	Z	205	CYS	N-CA	6.73	1.54	1.46
1	A	21	ARG	NE-CZ	6.73	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	3	30	ILE	N-CA	-6.72	1.38	1.46
23	Q	250	SER	C-N	6.72	1.42	1.33
28	I	227	PRO	C-O	-6.72	1.17	1.24
19	Z	835	GLU	CA-CB	6.72	1.64	1.53
20	N	258	GLN	CA-C	-6.72	1.44	1.52
26	O	23	HIS	ND1-CE1	6.72	1.39	1.32
8	1	143	GLN	C-N	6.72	1.42	1.33
29	K	114	ARG	NE-CZ	6.72	1.40	1.33
19	Z	862	ILE	CA-C	-6.72	1.44	1.52
26	O	373	ASP	C-N	6.72	1.42	1.33
27	H	223	THR	C-N	6.72	1.42	1.33
28	I	333	ARG	CZ-NH2	6.72	1.42	1.33
32	J	197	THR	CA-C	-6.72	1.44	1.52
16	V	222	LYS	C-N	6.71	1.43	1.33
20	N	546	ARG	CD-NE	6.71	1.55	1.46
1	A	9	PHE	N-CA	-6.71	1.38	1.46
12	5	227	ALA	CA-C	-6.71	1.44	1.52
21	S	144	ARG	NE-CZ	6.71	1.40	1.33
24	R	267	ARG	CD-NE	6.71	1.55	1.46
32	J	300	ILE	CA-CB	-6.71	1.45	1.54
7	G	65	LYS	CA-CB	6.71	1.63	1.53
17	T	135	THR	N-CA	-6.70	1.38	1.46
23	Q	35	ILE	C-N	6.70	1.43	1.33
7	G	21	VAL	CA-CB	-6.70	1.46	1.54
11	4	3	TYR	N-CA	-6.70	1.37	1.45
29	K	262	ILE	N-CA	-6.70	1.38	1.46
2	B	213	CYS	N-CA	-6.70	1.37	1.46
21	S	62	GLU	N-CA	-6.70	1.38	1.46
1	A	197	THR	CA-C	-6.69	1.44	1.52
11	4	59	TYR	N-CA	-6.69	1.38	1.46
5	E	61	PRO	CA-C	-6.69	1.45	1.52
25	U	228	TYR	CA-CB	6.68	1.63	1.53
14	7	219	VAL	C-N	6.68	1.43	1.33
31	M	252	LEU	CA-CB	6.68	1.61	1.53
7	G	20	ARG	NE-CZ	6.68	1.40	1.33
19	Z	176	ALA	C-N	6.68	1.42	1.33
27	H	146	LYS	CA-C	-6.67	1.43	1.52
31	M	175	VAL	N-CA	-6.67	1.38	1.46
26	O	137	ASP	CA-C	6.67	1.61	1.52
21	S	68	LEU	CA-C	-6.67	1.44	1.52
21	S	189	GLN	CA-C	-6.67	1.44	1.52
25	U	12	HIS	ND1-CE1	6.67	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	84	THR	C-N	6.66	1.42	1.33
3	C	50	ARG	NE-CZ	6.66	1.40	1.33
16	V	266	THR	C-N	6.66	1.41	1.33
21	S	339	PRO	C-N	6.66	1.42	1.33
15	W	36	VAL	C-N	6.66	1.42	1.33
20	N	129	ARG	C-N	6.66	1.42	1.33
3	C	111	VAL	C-N	6.65	1.42	1.33
9	2	186	ARG	CD-NE	6.65	1.55	1.46
19	Z	493	ASN	CA-C	-6.65	1.44	1.52
28	I	382	ASP	C-O	6.65	1.31	1.24
29	K	416	PHE	CA-C	-6.65	1.44	1.53
17	T	340	ARG	NE-CZ	6.65	1.40	1.33
12	5	232	ALA	C-N	6.64	1.42	1.33
9	2	97	MET	C-N	6.64	1.43	1.33
30	L	53	GLN	C-N	6.64	1.43	1.33
19	Z	100	ARG	NE-CZ	6.64	1.40	1.33
3	C	137	ILE	CA-C	-6.64	1.44	1.52
4	D	111	GLU	CA-C	-6.64	1.44	1.52
28	I	136	LEU	C-N	6.64	1.42	1.33
28	I	410	ARG	CD-NE	6.64	1.55	1.46
22	P	95	SER	CA-C	-6.63	1.43	1.52
19	Z	450	ILE	C-N	6.63	1.42	1.33
21	S	327	LEU	N-CA	-6.63	1.38	1.46
21	S	448	ASN	CA-C	-6.63	1.44	1.52
26	O	82	HIS	C-N	6.63	1.42	1.33
4	D	159	TYR	CA-C	-6.62	1.44	1.52
20	N	111	GLN	CA-C	-6.62	1.44	1.52
27	H	142	VAL	N-CA	-6.62	1.38	1.46
11	4	4	LEU	N-CA	-6.62	1.37	1.46
19	Z	531	ASN	CA-CB	6.62	1.64	1.53
4	D	97	CYS	CA-C	-6.62	1.44	1.52
6	F	35	THR	C-N	6.62	1.42	1.33
31	M	232	PRO	CA-C	-6.62	1.44	1.52
19	Z	6	ARG	CA-CB	6.62	1.64	1.54
19	Z	780	PRO	C-N	6.62	1.42	1.33
31	M	179	GLU	C-N	6.61	1.42	1.33
23	Q	265	GLU	CA-CB	6.61	1.63	1.53
4	D	90	ILE	C-N	6.61	1.42	1.33
20	N	769	PHE	C-N	6.61	1.43	1.33
22	P	16	MET	C-N	6.61	1.42	1.33
27	H	358	HIS	ND1-CE1	6.61	1.39	1.32
13	6	224	ILE	CA-C	-6.61	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Z	278	VAL	C-N	6.61	1.42	1.34
28	I	192	ASN	CA-CB	6.61	1.63	1.53
26	O	363	MET	N-CA	-6.61	1.38	1.46
28	I	157	HIS	CG-ND1	-6.60	1.30	1.38
4	D	5	ARG	CA-C	-6.60	1.44	1.52
7	G	183	LYS	N-CA	-6.60	1.38	1.46
23	Q	419	LYS	C-N	6.60	1.42	1.34
11	4	161	ARG	CD-NE	6.60	1.55	1.46
31	M	360	PRO	CA-C	-6.60	1.45	1.53
31	M	332	ILE	CA-C	-6.60	1.44	1.52
7	G	64	ASN	C-N	6.59	1.43	1.33
26	O	196	ARG	CA-C	-6.59	1.44	1.52
13	6	154	VAL	C-N	6.59	1.41	1.34
20	N	130	LEU	CA-C	-6.59	1.44	1.52
24	R	247	LEU	CA-CB	6.59	1.63	1.53
30	L	134	TYR	C-N	6.59	1.42	1.33
28	I	298	ASN	N-CA	-6.59	1.37	1.46
3	C	95	GLN	CA-C	-6.58	1.44	1.52
32	J	203	VAL	N-CA	-6.58	1.38	1.46
20	N	741	GLY	C-N	6.58	1.42	1.33
2	B	30	ALA	C-N	6.58	1.42	1.33
21	S	347	PRO	CA-C	-6.58	1.44	1.52
25	U	183	THR	N-CA	-6.58	1.39	1.46
9	2	203	ALA	N-CA	-6.58	1.38	1.46
8	1	64	THR	CA-C	-6.58	1.45	1.52
11	4	70	ARG	NE-CZ	6.58	1.40	1.33
12	5	161	CYS	C-N	6.58	1.38	1.33
10	3	142	CYS	CA-C	-6.58	1.44	1.52
22	P	138	VAL	C-O	-6.58	1.16	1.24
14	7	129	PRO	CA-C	-6.57	1.43	1.52
15	W	76	HIS	ND1-CE1	6.57	1.39	1.32
21	S	173	ASN	CA-C	-6.57	1.44	1.52
31	M	199	GLN	N-CA	-6.57	1.38	1.46
21	S	218	ASP	C-N	6.57	1.42	1.33
4	D	57	ARG	C-N	6.56	1.42	1.33
10	3	45	MET	CA-C	-6.56	1.44	1.52
10	3	49	LEU	N-CA	-6.56	1.37	1.46
28	I	196	GLU	CA-C	-6.56	1.44	1.52
20	N	485	ALA	CA-C	-6.56	1.43	1.52
30	L	305	ARG	NE-CZ	6.56	1.40	1.33
7	G	47	VAL	N-CA	-6.56	1.38	1.46
2	B	114	VAL	C-N	6.55	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Z	314	TYR	CA-C	6.55	1.61	1.52
14	7	113	GLN	CA-CB	6.55	1.64	1.53
30	L	79	THR	C-N	6.55	1.40	1.33
13	6	121	THR	N-CA	-6.55	1.38	1.46
21	S	92	ARG	CD-NE	6.55	1.55	1.46
16	V	36	LEU	N-CA	6.54	1.54	1.46
19	Z	566	HIS	C-N	6.54	1.42	1.33
6	F	177	SER	CA-CB	6.54	1.63	1.53
30	L	39	ARG	NE-CZ	6.54	1.40	1.33
3	C	166	ASN	CA-CB	6.54	1.63	1.53
17	T	163	ASP	C-N	6.54	1.40	1.33
20	N	380	THR	C-N	6.54	1.42	1.33
20	N	377	HIS	ND1-CE1	6.54	1.39	1.32
20	N	417	LYS	CA-CB	6.54	1.64	1.53
25	U	277	ASN	C-N	6.54	1.42	1.34
6	F	68	ASN	C-N	6.54	1.42	1.33
27	H	183	GLN	N-CA	-6.54	1.38	1.46
15	W	7	MET	CA-C	-6.53	1.45	1.52
20	N	367	THR	CA-C	-6.53	1.44	1.52
26	O	142	LEU	N-CA	-6.53	1.38	1.46
14	7	78	ALA	CA-C	-6.53	1.44	1.52
2	B	122	THR	CA-C	-6.53	1.44	1.52
7	G	213	GLU	CA-C	-6.53	1.44	1.52
12	5	116	ARG	CA-C	-6.52	1.44	1.52
24	R	50	MET	N-CA	-6.52	1.37	1.46
5	E	48	LEU	CA-C	-6.52	1.44	1.52
19	Z	313	GLU	C-N	6.52	1.42	1.33
15	W	175	PRO	N-CA	-6.51	1.39	1.47
29	K	202	VAL	CA-C	-6.51	1.44	1.52
19	Z	834	ASP	C-N	6.51	1.42	1.33
1	A	43	ARG	CA-C	-6.51	1.44	1.52
11	4	74	GLU	C-N	6.51	1.42	1.33
26	O	323	SER	CA-C	-6.51	1.44	1.52
30	L	198	ALA	CA-CB	6.50	1.63	1.53
30	L	393	LYS	N-CA	-6.50	1.38	1.46
22	P	385	SER	CA-C	-6.50	1.44	1.53
23	Q	160	MET	CA-C	-6.50	1.44	1.52
8	1	38	ALA	CA-C	-6.50	1.44	1.52
13	6	45	GLU	N-CA	-6.50	1.38	1.46
22	P	124	LEU	N-CA	-6.50	1.38	1.46
32	J	229	ARG	CA-C	-6.50	1.44	1.52
4	D	91	ASN	CA-CB	6.50	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	3	70	ARG	NE-CZ	6.50	1.40	1.33
28	I	58	CYS	CA-C	-6.50	1.43	1.52
4	D	102	LEU	CA-CB	6.50	1.63	1.53
21	S	37	GLU	C-O	-6.49	1.16	1.24
22	P	92	LYS	N-CA	-6.49	1.38	1.46
25	U	44	GLN	CA-C	-6.49	1.44	1.52
27	H	223	THR	CA-CB	6.49	1.63	1.53
4	D	50	VAL	CA-C	-6.49	1.45	1.52
20	N	872	GLU	CA-C	-6.49	1.44	1.52
30	L	206	ASP	CA-CB	6.49	1.63	1.53
31	M	358	PRO	C-N	6.49	1.42	1.33
13	6	124	TYR	CZ-OH	6.49	1.51	1.38
22	P	191	ARG	CD-NE	6.48	1.55	1.46
19	Z	40	ASP	C-N	6.48	1.42	1.33
25	U	174	HIS	ND1-CE1	6.48	1.39	1.32
30	L	156	ILE	C-O	-6.48	1.16	1.24
12	5	181	SER	N-CA	-6.48	1.38	1.46
14	7	80	PHE	CA-C	-6.48	1.45	1.53
30	L	230	ARG	CD-NE	6.48	1.55	1.46
27	H	129	VAL	N-CA	-6.48	1.38	1.46
28	I	361	LYS	N-CA	-6.48	1.38	1.46
4	D	69	VAL	C-N	6.47	1.42	1.33
29	K	357	GLU	CA-C	-6.47	1.45	1.53
13	6	40	LEU	CA-C	-6.47	1.44	1.52
21	S	208	TYR	CA-CB	6.47	1.63	1.53
21	S	338	ILE	N-CA	-6.47	1.38	1.46
22	P	198	ASP	CA-CB	6.47	1.60	1.52
20	N	546	ARG	NE-CZ	6.47	1.40	1.33
20	N	606	ALA	N-CA	-6.47	1.38	1.46
20	N	883	ARG	N-CA	-6.47	1.37	1.46
14	7	99	GLY	CA-C	-6.47	1.46	1.51
17	T	275	ALA	C-N	6.47	1.42	1.33
20	N	490	ARG	CZ-NH2	6.46	1.41	1.33
20	N	577	ILE	CA-CB	-6.46	1.46	1.54
22	P	160	LYS	CA-C	-6.46	1.44	1.52
30	L	145	SER	N-CA	-6.46	1.37	1.46
31	M	96	VAL	N-CA	-6.46	1.38	1.46
9	2	245	TYR	N-CA	-6.46	1.38	1.46
27	H	355	PHE	C-N	6.46	1.42	1.33
20	N	931	HIS	CG-ND1	6.46	1.45	1.38
25	U	282	ASN	N-CA	-6.46	1.38	1.46
16	V	29	GLU	CA-C	-6.45	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	J	161	ILE	CA-CB	-6.45	1.46	1.54
25	U	223	ASN	CA-C	-6.45	1.45	1.52
8	1	219	ARG	NE-CZ	6.45	1.40	1.33
12	5	217	ARG	CA-C	-6.45	1.44	1.52
19	Z	161	HIS	CB-CG	6.45	1.59	1.50
20	N	534	GLY	C-N	6.45	1.42	1.34
22	P	244	CYS	N-CA	6.45	1.54	1.46
9	2	152	HIS	CG-ND1	6.44	1.45	1.38
3	C	90	LEU	CA-C	-6.44	1.44	1.52
19	Z	34	ARG	NE-CZ	6.44	1.40	1.33
20	N	635	SER	N-CA	-6.44	1.38	1.46
22	P	361	HIS	ND1-CE1	6.44	1.39	1.32
25	U	156	GLU	C-N	6.44	1.42	1.33
29	K	245	ARG	CZ-NH2	6.44	1.41	1.33
1	A	183	VAL	C-N	6.43	1.42	1.33
14	7	231	PHE	C-N	6.43	1.42	1.33
28	I	343	ARG	CZ-NH1	6.43	1.41	1.32
29	K	309	MET	CA-C	-6.43	1.44	1.52
1	A	125	TYR	N-CA	-6.43	1.38	1.46
13	6	140	LEU	C-N	6.43	1.42	1.33
23	Q	24	ILE	C-N	6.43	1.42	1.33
24	R	145	LEU	CA-C	-6.43	1.44	1.52
30	L	27	ARG	NE-CZ	6.43	1.40	1.33
6	F	27	GLU	C-N	6.43	1.42	1.33
17	T	250	ALA	C-N	6.43	1.42	1.33
22	P	160	LYS	CA-CB	6.43	1.63	1.53
28	I	428	TYR	CA-C	-6.43	1.44	1.52
30	L	324	LEU	N-CA	-6.43	1.38	1.46
5	E	32	LYS	N-CA	-6.43	1.37	1.46
31	M	65	VAL	CA-C	-6.43	1.44	1.52
32	J	352	PRO	CA-C	-6.43	1.46	1.52
7	G	156	GLY	CA-C	-6.42	1.42	1.51
20	N	615	ARG	CD-NE	6.42	1.55	1.46
23	Q	276	ALA	C-N	6.42	1.42	1.34
17	T	256	ALA	CA-C	-6.42	1.46	1.53
27	H	420	TYR	CA-C	-6.42	1.44	1.52
24	R	91	ALA	CA-C	-6.42	1.44	1.52
19	Z	680	ARG	CD-NE	6.42	1.55	1.46
10	3	185	VAL	N-CA	-6.41	1.38	1.46
14	7	236	VAL	N-CA	-6.41	1.38	1.46
20	N	742	HIS	CA-CB	6.41	1.63	1.53
19	Z	143	ARG	NE-CZ	6.41	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	W	52	ILE	CA-C	-6.41	1.45	1.52
28	I	59	ARG	NE-CZ	6.41	1.40	1.33
29	K	407	ILE	CA-C	-6.41	1.44	1.52
20	N	750	SER	CA-C	-6.41	1.44	1.52
31	M	365	ARG	NE-CZ	6.41	1.40	1.33
3	C	18	LEU	CA-C	6.41	1.60	1.52
21	S	401	THR	C-N	6.40	1.41	1.33
12	5	68	GLN	C-N	6.40	1.38	1.33
17	T	131	PHE	N-CA	-6.40	1.38	1.46
23	Q	121	LYS	CA-C	-6.40	1.46	1.53
26	O	42	LEU	CA-C	-6.40	1.44	1.52
23	Q	215	GLY	CA-C	-6.40	1.44	1.52
8	1	71	HIS	ND1-CE1	6.40	1.39	1.32
22	P	444	HIS	CB-CG	-6.40	1.41	1.50
3	C	4	ARG	CD-NE	6.40	1.55	1.46
9	2	181	PHE	CA-CB	6.39	1.63	1.53
19	Z	736	THR	CA-C	-6.39	1.44	1.52
3	C	8	ARG	CD-NE	6.39	1.55	1.46
19	Z	335	ARG	CZ-NH2	6.39	1.41	1.33
20	N	70	HIS	N-CA	-6.39	1.38	1.46
22	P	144	ARG	NE-CZ	6.39	1.40	1.33
29	K	390	ASN	CA-C	-6.39	1.44	1.52
32	J	336	MET	C-N	6.39	1.41	1.33
6	F	158	ALA	N-CA	-6.39	1.38	1.46
25	U	25	ARG	NE-CZ	6.39	1.40	1.33
19	Z	477	MET	CA-C	-6.39	1.44	1.52
32	J	350	LEU	C-N	6.39	1.43	1.33
10	3	99	ARG	CA-CB	6.38	1.63	1.53
20	N	835	ILE	C-N	6.38	1.42	1.33
24	R	49	ASN	CA-CB	6.38	1.64	1.53
16	V	71	ASP	CA-C	-6.38	1.45	1.52
19	Z	823	ALA	N-CA	-6.38	1.37	1.45
20	N	696	ILE	C-N	6.38	1.42	1.33
2	B	108	ALA	CA-CB	6.38	1.63	1.53
20	N	361	ARG	NE-CZ	6.38	1.40	1.33
31	M	318	ASN	N-CA	-6.38	1.38	1.46
7	G	113	ALA	C-N	6.38	1.42	1.33
5	E	64	ILE	CA-CB	-6.38	1.46	1.54
11	4	48	GLY	CA-C	-6.38	1.47	1.52
19	Z	38	GLU	C-N	6.38	1.42	1.33
19	Z	358	PHE	CA-C	-6.38	1.44	1.52
24	R	215	ASP	N-CA	-6.38	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	U	75	LEU	CB-CG	6.37	1.66	1.53
28	I	349	ARG	CD-NE	6.37	1.55	1.46
29	K	353	ASN	CA-CB	6.37	1.63	1.53
1	A	159	TYR	N-CA	-6.37	1.38	1.46
6	F	137	TYR	N-CA	-6.37	1.38	1.46
17	T	336	THR	CA-C	-6.37	1.44	1.52
28	I	264	PRO	C-N	6.37	1.42	1.33
4	D	19	VAL	C-N	6.37	1.42	1.33
32	J	390	VAL	CA-C	-6.37	1.44	1.52
4	D	45	VAL	N-CA	-6.36	1.38	1.46
22	P	183	VAL	C-N	6.36	1.42	1.33
31	M	132	ARG	C-N	6.36	1.41	1.33
20	N	613	ASP	CA-CB	6.36	1.63	1.53
20	N	757	MET	CA-C	-6.36	1.45	1.52
9	2	120	VAL	CA-C	-6.36	1.44	1.52
17	T	148	ARG	NE-CZ	6.36	1.40	1.33
24	R	386	VAL	C-N	6.36	1.41	1.33
31	M	54	GLU	CA-C	-6.36	1.44	1.52
21	S	238	HIS	C-N	6.35	1.42	1.33
23	Q	156	GLU	N-CA	-6.35	1.38	1.46
28	I	371	ARG	C-N	6.35	1.42	1.33
11	4	78	THR	C-N	6.35	1.42	1.33
1	A	219	VAL	N-CA	-6.35	1.38	1.46
21	S	439	ARG	CA-CB	6.35	1.63	1.53
19	Z	41	LYS	N-CA	-6.34	1.38	1.46
19	Z	588	ARG	CA-C	-6.34	1.44	1.52
21	S	74	HIS	ND1-CE1	6.34	1.38	1.32
32	J	136	SER	CA-C	-6.34	1.44	1.52
5	E	89	ILE	C-N	6.34	1.42	1.33
24	R	346	LYS	CA-C	-6.34	1.45	1.52
27	H	45	ILE	CA-C	-6.34	1.45	1.52
14	7	128	SER	CA-CB	6.34	1.63	1.53
23	Q	324	ALA	N-CA	-6.34	1.38	1.46
32	J	246	ILE	CA-C	-6.34	1.45	1.52
32	J	141	GLU	C-N	6.33	1.42	1.33
17	T	347	ARG	CD-NE	6.33	1.55	1.46
20	N	356	THR	N-CA	-6.33	1.38	1.46
23	Q	260	MET	CA-C	-6.33	1.44	1.52
24	R	137	ARG	NE-CZ	6.33	1.40	1.33
32	J	36	ASN	CA-CB	6.33	1.63	1.53
13	6	43	ALA	N-CA	-6.33	1.38	1.46
21	S	78	LEU	CA-C	-6.33	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	E	28	ILE	CA-CB	6.33	1.62	1.54
19	Z	264	GLU	N-CA	-6.33	1.38	1.46
22	P	330	LYS	C-N	6.33	1.42	1.33
31	M	284	SER	CA-C	-6.33	1.44	1.52
20	N	475	HIS	ND1-CE1	6.33	1.38	1.32
11	4	99	HIS	ND1-CE1	6.33	1.38	1.32
4	D	100	HIS	ND1-CE1	6.32	1.38	1.32
19	Z	248	LEU	CA-C	-6.32	1.44	1.52
16	V	174	PRO	CA-CB	-6.32	1.45	1.53
8	1	54	THR	N-CA	-6.32	1.38	1.46
24	R	136	HIS	CA-CB	6.31	1.63	1.53
11	4	87	ASN	CA-C	-6.31	1.44	1.52
19	Z	563	GLY	C-N	6.31	1.42	1.33
11	4	181	ARG	CD-NE	6.31	1.55	1.46
12	5	136	ALA	N-CA	-6.31	1.38	1.46
20	N	249	CYS	CA-CB	6.31	1.63	1.53
20	N	381	THR	CA-C	-6.31	1.45	1.52
27	H	312	ARG	CA-C	-6.31	1.44	1.52
13	6	158	GLN	CA-C	-6.30	1.44	1.52
19	Z	782	HIS	CE1-NE2	6.30	1.38	1.32
20	N	517	GLY	C-N	6.30	1.42	1.33
28	I	96	ARG	CD-NE	6.30	1.55	1.46
2	B	22	ILE	C-N	6.30	1.42	1.33
8	1	139	GLN	CA-C	-6.30	1.44	1.52
19	Z	398	TRP	NE1-CE2	-6.30	1.30	1.37
20	N	70	HIS	CA-C	-6.30	1.44	1.52
12	5	231	GLY	CA-C	-6.30	1.46	1.52
14	7	143	ARG	CD-NE	6.30	1.55	1.46
20	N	199	ARG	CD-NE	6.30	1.55	1.46
20	N	453	HIS	ND1-CE1	6.30	1.38	1.32
29	K	136	SER	N-CA	-6.30	1.38	1.46
5	E	202	LEU	CA-C	-6.30	1.44	1.52
32	J	1	MET	CG-SD	6.30	1.96	1.80
20	N	601	ARG	CZ-NH2	6.29	1.41	1.33
24	R	20	ALA	C-N	6.29	1.42	1.34
2	B	84	ARG	CD-NE	6.29	1.55	1.46
6	F	89	ARG	C-N	6.29	1.42	1.33
8	1	180	MET	CA-C	-6.29	1.46	1.53
12	5	222	ALA	C-O	-6.29	1.16	1.24
19	Z	746	ARG	NE-CZ	6.29	1.40	1.33
20	N	103	LYS	C-N	6.29	1.42	1.33
20	N	526	THR	CA-C	-6.29	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	S	371	PHE	N-CA	-6.29	1.38	1.46
31	M	217	ASN	C-N	6.29	1.42	1.33
8	1	179	GLY	C-N	6.29	1.41	1.33
24	R	151	TYR	CA-C	-6.28	1.44	1.52
30	L	292	ALA	CA-C	-6.28	1.45	1.52
30	L	311	ARG	NE-CZ	6.28	1.40	1.33
32	J	340	ARG	NE-CZ	6.28	1.40	1.33
15	W	144	GLY	N-CA	-6.28	1.38	1.45
19	Z	428	GLN	CA-CB	6.28	1.63	1.53
22	P	371	THR	N-CA	-6.28	1.38	1.46
32	J	254	ILE	C-N	6.28	1.40	1.33
22	P	122	LEU	CA-CB	6.28	1.63	1.53
32	J	131	VAL	CA-CB	6.28	1.64	1.54
4	D	200	ALA	CA-C	6.28	1.61	1.52
10	3	178	ASP	CA-CB	6.28	1.63	1.53
9	2	97	MET	CA-C	-6.27	1.44	1.52
30	L	162	VAL	CA-CB	-6.27	1.46	1.54
9	2	133	TYR	CA-CB	6.27	1.63	1.53
20	N	710	ARG	CZ-NH1	6.27	1.41	1.32
15	W	190	ALA	CA-C	-6.27	1.44	1.52
27	H	200	ARG	CA-C	6.27	1.60	1.52
16	V	140	ALA	CA-C	-6.26	1.45	1.52
19	Z	76	GLU	N-CA	-6.26	1.38	1.46
31	M	118	SER	CA-C	6.26	1.61	1.52
9	2	208	ASN	CA-CB	6.26	1.63	1.53
4	D	140	VAL	C-N	6.26	1.39	1.33
27	H	226	ALA	CA-C	-6.26	1.44	1.52
18	Y	58	ALA	C-N	6.26	1.42	1.33
20	N	721	HIS	ND1-CE1	6.26	1.38	1.32
21	S	354	MET	CA-C	6.26	1.60	1.52
19	Z	450	ILE	N-CA	-6.25	1.39	1.46
31	M	99	LEU	CA-CB	6.25	1.61	1.53
20	N	151	ILE	CB-CG1	6.25	1.66	1.53
20	N	947	PRO	CA-C	-6.25	1.47	1.53
29	K	187	HIS	CE1-NE2	-6.25	1.26	1.32
19	Z	662	MET	CA-CB	6.25	1.63	1.53
10	3	48	ARG	NE-CZ	6.25	1.40	1.33
27	H	284	ARG	CD-NE	6.25	1.54	1.46
20	N	502	TYR	CA-CB	6.25	1.63	1.53
22	P	129	ARG	CZ-NH2	6.25	1.41	1.33
24	R	229	ILE	CA-C	-6.25	1.45	1.52
8	1	110	HIS	CE1-NE2	6.25	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	I	268	ARG	NE-CZ	6.25	1.40	1.33
32	J	79	ALA	C-N	6.25	1.42	1.33
25	U	209	ARG	CZ-NH1	6.24	1.41	1.32
30	L	256	ARG	NE-CZ	6.24	1.40	1.33
4	D	60	ARG	CD-NE	6.24	1.54	1.46
19	Z	79	ARG	CZ-NH2	6.24	1.41	1.33
29	K	340	GLN	C-N	6.24	1.42	1.33
20	N	450	HIS	C-N	6.24	1.41	1.33
25	U	166	GLU	CA-CB	6.24	1.63	1.53
20	N	172	ASP	CA-CB	6.24	1.63	1.53
27	H	315	ILE	C-N	6.24	1.42	1.33
1	A	29	PHE	N-CA	6.24	1.54	1.46
25	U	77	ASN	CA-C	-6.24	1.44	1.52
23	Q	352	SER	C-N	6.23	1.42	1.33
2	B	66	GLU	CA-C	-6.23	1.47	1.52
8	1	218	GLU	N-CA	-6.23	1.38	1.46
31	M	133	GLN	CA-C	-6.23	1.44	1.52
19	Z	579	ALA	CA-CB	-6.23	1.43	1.53
19	Z	291	GLN	C-N	6.23	1.41	1.33
23	Q	349	HIS	CE1-NE2	6.23	1.38	1.32
28	I	371	ARG	CA-C	6.23	1.60	1.52
29	K	406	VAL	C-N	6.23	1.41	1.33
30	L	316	ASP	N-CA	-6.23	1.37	1.46
11	4	119	ASP	CA-CB	6.22	1.62	1.53
2	B	188	ILE	N-CA	-6.22	1.39	1.46
9	2	212	SER	N-CA	-6.22	1.40	1.46
10	3	52	GLY	CA-C	-6.22	1.46	1.51
20	N	367	THR	C-O	-6.22	1.16	1.24
21	S	219	LYS	CA-C	-6.22	1.44	1.52
22	P	55	ARG	CZ-NH2	6.22	1.41	1.33
4	D	93	ALA	C-N	6.22	1.42	1.33
5	E	42	THR	C-N	6.22	1.42	1.33
19	Z	261	ARG	N-CA	-6.22	1.38	1.46
19	Z	129	LEU	CA-CB	6.22	1.62	1.53
7	G	100	ARG	NE-CZ	6.21	1.39	1.33
22	P	436	MET	CA-C	-6.21	1.44	1.52
9	2	49	VAL	CA-C	-6.21	1.45	1.52
26	O	90	PRO	C-N	6.21	1.42	1.33
26	O	162	TYR	CA-C	-6.21	1.45	1.52
5	E	59	MET	CA-CB	6.21	1.62	1.53
13	6	159	ARG	NE-CZ	6.21	1.39	1.33
16	V	111	TRP	C-N	6.21	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	T	286	LEU	N-CA	-6.21	1.38	1.46
18	Y	56	LEU	C-N	6.21	1.41	1.33
19	Z	834	ASP	CA-C	-6.21	1.45	1.52
30	L	87	ALA	CA-C	-6.21	1.45	1.52
12	5	194	ALA	N-CA	-6.21	1.38	1.46
27	H	367	ASP	CA-C	-6.21	1.44	1.52
4	D	126	GLN	CA-CB	6.20	1.63	1.53
16	V	62	VAL	CA-C	-6.20	1.45	1.52
20	N	577	ILE	N-CA	-6.20	1.39	1.46
24	R	225	TYR	CA-CB	6.20	1.63	1.53
1	A	95	ARG	CZ-NH2	6.20	1.41	1.33
3	C	160	LYS	CA-CB	6.20	1.63	1.54
20	N	92	ASP	N-CA	-6.20	1.38	1.46
27	H	295	VAL	N-CA	-6.20	1.39	1.46
28	I	307	ARG	NE-CZ	6.20	1.39	1.33
8	1	101	ILE	CA-C	6.20	1.60	1.52
32	J	293	MET	CA-C	-6.20	1.45	1.52
6	F	66	VAL	CA-CB	-6.19	1.47	1.54
28	I	93	GLU	CA-C	-6.19	1.44	1.52
14	7	203	VAL	N-CA	-6.19	1.39	1.46
27	H	57	LYS	C-N	6.19	1.42	1.33
32	J	168	PRO	CA-C	-6.19	1.42	1.52
32	J	233	GLU	N-CA	-6.19	1.38	1.46
32	J	337	ASN	N-CA	-6.19	1.38	1.46
5	E	115	ALA	CA-C	6.18	1.60	1.52
12	5	239	ARG	CA-C	-6.18	1.45	1.52
20	N	247	GLN	C-N	6.18	1.41	1.33
25	U	96	HIS	CA-C	-6.18	1.45	1.52
13	6	235	VAL	CA-C	-6.18	1.46	1.52
14	7	81	ARG	NE-CZ	6.18	1.39	1.33
22	P	201	ARG	C-N	6.18	1.42	1.34
29	K	385	LEU	C-N	6.18	1.42	1.33
28	I	238	ALA	C-N	6.18	1.41	1.33
8	1	107	PRO	CA-CB	6.18	1.62	1.53
21	S	463	TYR	C-N	6.18	1.38	1.33
25	U	73	ASP	CA-C	-6.18	1.44	1.52
29	K	412	GLN	CA-C	-6.18	1.45	1.52
1	A	222	VAL	CA-CB	-6.17	1.46	1.54
4	D	186	ALA	CA-C	-6.17	1.44	1.52
4	D	55	ASP	CA-C	-6.17	1.45	1.52
17	T	332	THR	CA-C	-6.17	1.45	1.52
1	A	104	LYS	CA-C	-6.17	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Z	459	CYS	C-N	6.17	1.40	1.33
2	B	111	VAL	CA-C	-6.17	1.45	1.52
11	4	110	HIS	ND1-CE1	6.17	1.38	1.32
30	L	120	THR	C-N	6.17	1.39	1.33
16	V	234	TYR	CA-C	-6.16	1.44	1.52
19	Z	587	PHE	CA-CB	6.16	1.63	1.53
20	N	868	LYS	C-N	6.16	1.42	1.33
1	A	208	ILE	CA-C	6.16	1.60	1.52
2	B	220	ARG	CA-CB	6.16	1.62	1.53
25	U	269	VAL	N-CA	6.16	1.53	1.46
27	H	337	LEU	C-N	6.16	1.42	1.33
14	7	148	ASN	CA-CB	6.15	1.63	1.53
22	P	136	ILE	CB-CG1	6.15	1.65	1.53
26	O	127	ASP	C-N	6.15	1.41	1.33
31	M	256	GLY	CA-C	6.15	1.55	1.51
30	L	282	ASP	CA-C	-6.15	1.44	1.52
13	6	211	GLU	CA-CB	6.15	1.63	1.53
4	D	173	SER	N-CA	-6.14	1.39	1.46
22	P	446	ILE	CA-CB	-6.14	1.45	1.54
27	H	159	PRO	CA-C	6.14	1.59	1.52
21	S	393	ARG	NE-CZ	6.14	1.39	1.33
30	L	171	GLU	C-N	6.14	1.41	1.33
32	J	158	ILE	CA-CB	6.14	1.62	1.54
1	A	63	SER	CA-CB	6.14	1.62	1.53
2	B	122	THR	CA-CB	6.14	1.63	1.53
13	6	221	ARG	NE-CZ	6.14	1.39	1.33
2	B	128	ARG	N-CA	6.14	1.50	1.45
19	Z	770	HIS	ND1-CE1	6.14	1.38	1.32
23	Q	70	LEU	N-CA	-6.14	1.38	1.46
27	H	79	ASP	CA-CB	6.13	1.62	1.53
23	Q	92	LEU	CA-CB	6.13	1.63	1.53
24	R	271	PHE	CA-C	-6.13	1.45	1.52
7	G	18	ASP	N-CA	-6.13	1.38	1.46
17	T	249	LEU	C-N	6.13	1.42	1.33
20	N	449	ILE	C-O	-6.13	1.17	1.24
29	K	277	ALA	C-N	6.13	1.42	1.33
15	W	61	LEU	CA-C	-6.13	1.45	1.52
17	T	303	THR	C-N	6.13	1.41	1.33
28	I	420	LYS	C-N	6.13	1.42	1.33
31	M	251	PHE	CA-C	-6.13	1.45	1.52
1	A	72	ILE	CA-C	-6.12	1.45	1.52
1	A	34	GLN	CA-C	-6.12	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	W	115	SER	C-N	6.12	1.41	1.33
19	Z	80	ARG	CD-NE	6.12	1.54	1.46
22	P	437	SER	N-CA	-6.12	1.39	1.46
11	4	120	TYR	N-CA	-6.12	1.38	1.46
13	6	42	ILE	CA-C	-6.12	1.45	1.52
23	Q	132	ARG	CD-NE	6.12	1.54	1.46
21	S	371	PHE	CA-CB	6.12	1.62	1.53
23	Q	246	LYS	N-CA	6.12	1.54	1.46
23	Q	333	GLN	N-CA	-6.12	1.39	1.46
32	J	14	GLY	N-CA	-6.12	1.36	1.45
32	J	283	PHE	CA-C	-6.12	1.45	1.52
9	2	163	ASP	CA-C	-6.11	1.45	1.52
22	P	8	ARG	CZ-NH2	6.11	1.41	1.33
19	Z	26	GLU	CA-C	-6.11	1.46	1.53
25	U	76	GLU	C-N	6.11	1.42	1.33
32	J	47	ALA	CA-C	-6.11	1.44	1.52
13	6	62	ILE	CA-C	6.11	1.60	1.52
16	V	160	PHE	CA-C	6.11	1.60	1.52
26	O	125	ILE	C-N	6.11	1.41	1.32
4	D	154	ASP	CA-CB	6.10	1.63	1.53
17	T	103	ASP	N-CA	-6.10	1.38	1.46
20	N	922	GLU	CA-C	-6.10	1.45	1.52
21	S	106	HIS	ND1-CE1	6.10	1.38	1.32
21	S	440	ASP	CA-CB	6.10	1.62	1.53
22	P	57	ALA	CA-C	6.10	1.60	1.52
1	A	43	ARG	N-CA	-6.10	1.38	1.46
13	6	53	ASP	N-CA	-6.10	1.38	1.46
21	S	222	VAL	CA-CB	6.10	1.62	1.54
23	Q	36	GLN	C-O	-6.10	1.17	1.24
2	B	178	TYR	N-CA	-6.10	1.37	1.46
20	N	722	ASP	C-N	6.10	1.41	1.33
22	P	74	CYS	N-CA	-6.10	1.38	1.46
31	M	114	ILE	CA-C	-6.10	1.45	1.52
4	D	178	LEU	N-CA	6.09	1.53	1.46
9	2	241	ARG	CD-NE	6.09	1.54	1.46
13	6	160	ASP	CA-C	-6.09	1.45	1.52
25	U	90	ARG	CA-CB	6.09	1.64	1.53
23	Q	359	ALA	N-CA	-6.09	1.38	1.46
31	M	353	ARG	CA-CB	6.09	1.62	1.53
2	B	43	GLY	CA-C	-6.09	1.43	1.51
19	Z	467	SER	CA-CB	-6.09	1.43	1.53
31	M	35	GLU	N-CA	-6.09	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	H	227	ARG	C-N	6.08	1.42	1.33
11	4	191	LEU	C-N	6.08	1.41	1.33
20	N	71	LEU	C-O	-6.08	1.16	1.24
30	L	205	LEU	CA-C	-6.08	1.44	1.52
4	D	85	ASP	CA-C	-6.08	1.45	1.52
3	C	116	ASP	N-CA	-6.08	1.39	1.46
29	K	304	ASN	C-N	6.08	1.41	1.33
16	V	263	ASP	CA-C	-6.08	1.45	1.52
19	Z	285	CYS	CA-C	-6.08	1.45	1.52
20	N	549	ALA	C-N	6.08	1.41	1.33
29	K	338	ARG	CZ-NH1	6.08	1.41	1.32
5	E	53	ARG	N-CA	-6.07	1.38	1.46
15	W	121	GLU	CA-CB	6.07	1.62	1.53
19	Z	785	ARG	NE-CZ	6.07	1.39	1.33
31	M	64	ARG	C-O	-6.07	1.17	1.24
32	J	41	ASN	C-N	6.07	1.41	1.33
7	G	189	ASP	CA-C	-6.07	1.44	1.52
5	E	80	GLY	C-N	6.07	1.42	1.33
25	U	34	ARG	CZ-NH2	6.07	1.41	1.33
22	P	124	LEU	CA-C	-6.07	1.44	1.52
32	J	34	ILE	CA-C	-6.07	1.45	1.52
25	U	6	VAL	CA-CB	-6.07	1.46	1.54
32	J	29	GLU	C-N	6.07	1.42	1.33
2	B	193	LEU	CA-C	-6.06	1.45	1.52
10	3	146	MET	N-CA	-6.06	1.39	1.46
21	S	298	TYR	C-N	6.06	1.41	1.33
22	P	437	SER	CA-CB	6.06	1.62	1.53
29	K	388	ARG	CA-C	-6.06	1.45	1.52
17	T	114	LYS	C-N	6.06	1.41	1.33
20	N	1	MET	CA-CB	6.06	1.65	1.53
20	N	143	ASP	N-CA	-6.06	1.39	1.46
24	R	157	ILE	N-CA	-6.06	1.39	1.46
32	J	357	ALA	N-CA	-6.06	1.39	1.46
1	A	170	VAL	N-CA	-6.06	1.39	1.46
19	Z	831	VAL	CA-CB	-6.06	1.46	1.54
24	R	305	SER	N-CA	-6.06	1.39	1.46
32	J	213	ARG	N-CA	6.06	1.53	1.46
32	J	219	LEU	CA-C	-6.06	1.45	1.52
18	Y	63	HIS	CE1-NE2	-6.05	1.26	1.32
17	T	316	ASN	C-O	-6.05	1.16	1.23
20	N	474	ARG	CD-NE	6.05	1.54	1.46
25	U	254	ASN	C-O	6.05	1.31	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	U	257	MET	C-N	6.05	1.41	1.33
1	A	231	THR	C-O	-6.05	1.16	1.24
16	V	48	GLY	N-CA	-6.05	1.38	1.45
19	Z	380	PHE	C-N	6.05	1.41	1.33
19	Z	405	HIS	CD2-NE2	6.05	1.44	1.37
22	P	209	ILE	N-CA	-6.05	1.38	1.46
24	R	46	ARG	N-CA	-6.05	1.38	1.46
25	U	1	MET	CA-CB	6.05	1.65	1.53
31	M	91	TYR	N-CA	-6.05	1.38	1.46
12	5	114	TRP	C-N	6.04	1.42	1.33
4	D	7	ILE	CA-C	-6.04	1.45	1.52
15	W	65	THR	N-CA	-6.04	1.39	1.46
24	R	11	LEU	CA-CB	6.04	1.61	1.53
24	R	62	ASP	CA-C	-6.04	1.44	1.52
27	H	160	THR	N-CA	-6.04	1.38	1.46
14	7	139	ALA	CA-CB	6.04	1.62	1.53
31	M	70	GLN	C-N	6.04	1.42	1.33
6	F	71	GLY	N-CA	6.04	1.51	1.45
6	F	239	ARG	CD-NE	6.04	1.54	1.46
8	1	187	GLN	N-CA	-6.04	1.39	1.46
9	2	136	TYR	CA-CB	6.04	1.63	1.53
20	N	481	LEU	N-CA	-6.04	1.39	1.46
30	L	73	GLU	CA-C	-6.04	1.44	1.52
16	V	159	ALA	CA-C	-6.04	1.45	1.52
19	Z	31	LYS	N-CA	-6.04	1.39	1.46
19	Z	534	VAL	CA-CB	-6.04	1.46	1.54
5	E	182	GLN	CA-C	-6.03	1.45	1.52
30	L	394	LEU	CA-C	6.03	1.60	1.52
31	M	252	LEU	CA-C	-6.03	1.45	1.52
29	K	229	ARG	NE-CZ	6.03	1.39	1.33
8	1	202	SER	CA-CB	6.03	1.63	1.53
21	S	404	ARG	NE-CZ	6.03	1.39	1.33
24	R	246	ILE	C-N	6.03	1.42	1.33
27	H	212	VAL	CA-C	6.03	1.59	1.52
18	Y	49	GLU	N-CA	-6.03	1.38	1.46
30	L	179	ILE	CA-C	6.03	1.59	1.52
19	Z	322	SER	C-N	6.02	1.41	1.33
32	J	106	ASN	CA-CB	6.02	1.63	1.53
6	F	125	ARG	NE-CZ	6.02	1.39	1.33
2	B	195	LEU	CB-CG	6.02	1.65	1.53
29	K	341	LYS	C-N	6.02	1.41	1.33
9	2	151	PRO	CA-C	6.02	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	3	44	PRO	N-CA	-6.02	1.40	1.47
11	4	54	VAL	C-N	6.02	1.41	1.33
22	P	93	ARG	NE-CZ	6.02	1.39	1.33
32	J	345	ARG	NE-CZ	6.02	1.39	1.33
1	A	208	ILE	C-N	6.02	1.42	1.33
15	W	96	ALA	N-CA	-6.02	1.39	1.46
19	Z	70	LEU	CA-CB	6.02	1.63	1.53
12	5	245	ARG	NE-CZ	6.01	1.39	1.33
9	2	165	LEU	N-CA	6.01	1.52	1.46
4	D	76	VAL	C-N	6.01	1.40	1.33
10	3	27	ARG	NE-CZ	6.01	1.39	1.33
12	5	166	ARG	CA-C	-6.01	1.45	1.52
16	V	146	ASP	CA-CB	6.01	1.62	1.53
22	P	263	TRP	C-N	6.01	1.41	1.33
11	4	153	ARG	N-CA	-6.01	1.37	1.45
16	V	283	HIS	ND1-CE1	6.01	1.38	1.32
19	Z	332	ALA	N-CA	-6.01	1.38	1.46
19	Z	720	GLU	C-N	6.01	1.41	1.33
23	Q	158	LYS	CA-CB	6.01	1.62	1.53
24	R	145	LEU	CA-CB	6.01	1.62	1.53
23	Q	7	VAL	N-CA	-6.01	1.39	1.46
3	C	2	SER	CA-C	-6.00	1.45	1.52
9	2	178	MET	CA-C	6.00	1.60	1.52
19	Z	871	PRO	CA-C	-6.00	1.46	1.52
29	K	194	ILE	N-CA	-6.00	1.39	1.46
30	L	56	LYS	CA-C	-6.00	1.45	1.52
32	J	334	ARG	CD-NE	6.00	1.54	1.46
32	J	210	THR	N-CA	-6.00	1.38	1.45
2	B	5	GLY	C-N	6.00	1.41	1.33
12	5	216	ARG	CD-NE	6.00	1.54	1.46
23	Q	207	GLN	C-N	6.00	1.42	1.33
28	I	303	ARG	CA-C	-6.00	1.45	1.52
28	I	220	LYS	CA-C	-6.00	1.45	1.52
13	6	204	ASP	C-O	-5.99	1.17	1.24
19	Z	578	ALA	N-CA	-5.99	1.39	1.46
23	Q	318	ILE	C-N	5.99	1.41	1.33
3	C	216	LEU	CA-CB	5.99	1.62	1.53
29	K	162	VAL	N-CA	-5.99	1.39	1.46
30	L	382	MET	CA-CB	5.99	1.62	1.53
19	Z	524	MET	C-N	5.99	1.41	1.33
22	P	67	LEU	C-N	5.99	1.41	1.33
25	U	31	ASN	CA-C	-5.99	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	90	ALA	N-CA	-5.99	1.39	1.46
15	W	138	VAL	N-CA	5.99	1.53	1.46
19	Z	370	MET	CA-C	-5.99	1.44	1.52
20	N	380	THR	N-CA	-5.99	1.38	1.45
22	P	8	ARG	CD-NE	5.99	1.54	1.46
24	R	344	HIS	CB-CG	-5.99	1.41	1.50
31	M	412	ARG	NE-CZ	5.99	1.39	1.33
6	F	99	PHE	CA-C	-5.98	1.45	1.52
7	G	192	LYS	CA-C	-5.98	1.45	1.52
19	Z	872	VAL	CA-C	-5.98	1.45	1.52
26	O	200	LEU	C-N	5.98	1.41	1.33
32	J	27	LYS	C-N	5.98	1.41	1.33
2	B	63	HIS	N-CA	-5.98	1.36	1.46
20	N	158	ARG	CA-C	-5.98	1.46	1.53
4	D	110	VAL	CA-CB	-5.98	1.46	1.54
20	N	728	PHE	C-O	-5.98	1.17	1.24
3	C	205	LYS	N-CA	-5.97	1.38	1.46
13	6	159	ARG	N-CA	-5.97	1.38	1.45
19	Z	849	ALA	C-N	5.97	1.41	1.33
28	I	99	VAL	N-CA	-5.97	1.39	1.46
8	1	214	GLN	C-O	-5.97	1.17	1.24
11	4	98	TYR	CA-C	-5.97	1.45	1.52
21	S	270	SER	CA-CB	5.97	1.63	1.53
22	P	199	TYR	C-N	5.97	1.41	1.33
32	J	236	VAL	C-O	-5.97	1.17	1.24
5	E	190	THR	C-N	5.97	1.41	1.33
9	2	68	VAL	CA-CB	-5.97	1.46	1.54
31	M	274	ALA	C-N	5.97	1.42	1.33
7	G	157	VAL	CA-CB	-5.97	1.47	1.54
19	Z	160	ARG	NE-CZ	5.97	1.39	1.33
20	N	652	ALA	CA-C	-5.97	1.45	1.52
22	P	399	ASN	CA-CB	5.97	1.63	1.53
28	I	328	ILE	CA-CB	-5.97	1.47	1.54
30	L	308	ARG	CD-NE	5.97	1.54	1.46
3	C	19	TYR	C-N	5.97	1.42	1.34
31	M	430	VAL	C-N	5.97	1.41	1.33
9	2	196	LYS	CA-CB	5.97	1.62	1.53
19	Z	797	LEU	N-CA	-5.97	1.38	1.46
19	Z	141	LYS	CA-C	-5.96	1.45	1.52
26	O	21	VAL	CA-C	-5.96	1.45	1.52
29	K	404	LYS	N-CA	-5.96	1.38	1.46
24	R	336	ARG	CZ-NH1	5.96	1.41	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	J	139	MET	N-CA	-5.96	1.39	1.46
6	F	117	GLN	CA-CB	5.96	1.62	1.53
32	J	10	GLU	N-CA	-5.96	1.38	1.46
8	1	102	GLU	CA-CB	5.96	1.62	1.53
19	Z	873	LEU	C-N	5.96	1.42	1.33
20	N	726	ALA	CA-C	-5.96	1.45	1.52
21	S	100	THR	C-N	5.96	1.42	1.34
22	P	12	ARG	CD-NE	5.96	1.54	1.46
32	J	113	ARG	CZ-NH2	5.96	1.41	1.33
20	N	667	GLU	C-N	5.96	1.41	1.33
23	Q	364	LYS	CA-C	-5.95	1.45	1.52
6	F	180	MET	N-CA	-5.95	1.39	1.46
21	S	340	ASP	CA-C	-5.95	1.45	1.52
15	W	70	ARG	CZ-NH2	5.95	1.41	1.33
19	Z	793	VAL	N-CA	-5.95	1.38	1.46
20	N	771	PHE	CA-C	-5.95	1.45	1.52
19	Z	703	ARG	CD-NE	5.95	1.54	1.46
32	J	163	GLU	C-N	5.95	1.41	1.33
17	T	182	LYS	C-N	5.94	1.42	1.33
20	N	588	MET	CA-C	-5.94	1.45	1.52
26	O	335	TRP	CA-C	-5.94	1.45	1.52
2	B	61	SER	CA-CB	5.94	1.63	1.53
19	Z	879	ARG	CD-NE	5.94	1.54	1.46
6	F	155	ASP	CA-CB	5.94	1.61	1.53
7	G	115	ARG	CD-NE	5.94	1.54	1.46
20	N	467	ASN	CA-CB	5.94	1.62	1.53
21	S	65	THR	C-N	5.94	1.40	1.33
31	M	251	PHE	N-CA	-5.94	1.39	1.46
15	W	106	LYS	N-CA	-5.94	1.38	1.45
28	I	198	LYS	CA-C	-5.93	1.45	1.52
29	K	189	GLU	N-CA	-5.93	1.39	1.46
32	J	46	GLN	C-N	5.93	1.41	1.33
1	A	238	HIS	CB-CG	5.93	1.58	1.50
17	T	192	HIS	CA-CB	5.93	1.62	1.53
22	P	76	GLU	C-N	5.93	1.41	1.33
9	2	92	ALA	CA-C	-5.93	1.45	1.52
24	R	146	ARG	CZ-NH2	5.93	1.41	1.33
28	I	209	GLU	N-CA	-5.93	1.39	1.46
29	K	265	ASP	CA-C	-5.93	1.45	1.52
4	D	220	ASP	N-CA	5.93	1.51	1.46
21	S	466	ARG	C-N	5.93	1.41	1.33
26	O	223	GLU	C-N	5.93	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	K	338	ARG	CA-CB	5.93	1.62	1.53
30	L	157	ARG	NE-CZ	5.93	1.39	1.33
32	J	16	ALA	N-CA	-5.93	1.39	1.46
15	W	179	LEU	CA-C	-5.93	1.44	1.52
2	B	203	MET	CA-CB	5.93	1.60	1.53
19	Z	595	VAL	C-N	5.93	1.41	1.33
24	R	61	LEU	CA-CB	5.93	1.62	1.53
26	O	183	VAL	CA-C	-5.93	1.45	1.52
7	G	88	LEU	CA-C	-5.92	1.44	1.52
29	K	289	LEU	CA-C	5.92	1.60	1.52
30	L	315	ILE	CA-C	-5.92	1.45	1.52
9	2	138	GLY	CA-C	-5.92	1.43	1.51
27	H	231	ASN	CA-C	-5.92	1.45	1.52
6	F	109	VAL	CA-CB	-5.92	1.46	1.54
10	3	59	ASP	C-O	-5.92	1.17	1.24
12	5	131	GLU	C-N	5.92	1.42	1.33
32	J	354	ALA	N-CA	-5.92	1.38	1.46
6	F	101	ARG	N-CA	5.92	1.51	1.46
14	7	151	TRP	C-N	5.92	1.41	1.33
14	7	171	MET	C-N	5.92	1.41	1.33
1	A	12	HIS	ND1-CE1	5.92	1.38	1.32
9	2	177	ALA	C-N	5.92	1.42	1.33
27	H	277	ILE	N-CA	5.92	1.54	1.46
16	V	115	HIS	N-CA	-5.92	1.39	1.46
28	I	429	LYS	CA-CB	5.92	1.62	1.53
32	J	330	LYS	CA-CB	5.92	1.62	1.53
19	Z	529	SER	CA-C	-5.92	1.45	1.53
20	N	895	THR	CA-CB	5.92	1.63	1.53
28	I	319	PHE	N-CA	-5.92	1.38	1.46
8	1	71	HIS	CG-ND1	-5.91	1.31	1.38
9	2	98	THR	CA-C	-5.91	1.45	1.52
32	J	400	SER	C-N	5.91	1.41	1.33
20	N	532	MET	N-CA	5.91	1.53	1.46
21	S	380	GLU	CA-C	-5.91	1.45	1.52
28	I	329	MET	CA-C	-5.91	1.45	1.52
15	W	137	ASN	CA-C	-5.91	1.45	1.52
16	V	208	ARG	CD-NE	5.91	1.54	1.46
19	Z	63	LEU	C-N	5.91	1.41	1.33
19	Z	566	HIS	N-CA	-5.91	1.38	1.46
27	H	206	ILE	CA-C	-5.91	1.45	1.52
10	3	201	LYS	N-CA	-5.91	1.39	1.46
31	M	151	GLY	CA-C	-5.91	1.43	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	J	331	ILE	N-CA	-5.91	1.39	1.46
19	Z	590	PHE	N-CA	-5.91	1.38	1.46
20	N	8	ILE	CA-CB	-5.91	1.46	1.54
20	N	129	ARG	NE-CZ	5.90	1.39	1.33
20	N	797	MET	C-O	-5.90	1.16	1.24
26	O	12	GLN	C-N	5.90	1.41	1.33
29	K	283	ARG	NE-CZ	5.90	1.39	1.33
16	V	288	VAL	C-N	5.90	1.41	1.33
19	Z	351	THR	C-N	5.90	1.41	1.34
20	N	718	ASN	C-N	5.90	1.41	1.33
31	M	375	LYS	CA-CB	5.90	1.62	1.53
3	C	99	LEU	CA-CB	5.90	1.62	1.53
10	3	157	ASN	CA-C	-5.90	1.45	1.52
22	P	416	GLN	CA-C	-5.90	1.45	1.53
2	B	151	PRO	C-N	5.90	1.42	1.33
4	D	42	VAL	N-CA	-5.90	1.39	1.46
2	B	199	PHE	C-O	-5.90	1.16	1.24
9	2	155	SER	CA-C	-5.90	1.45	1.52
9	2	158	PRO	CA-CB	-5.90	1.45	1.53
6	F	175	HIS	ND1-CE1	5.90	1.38	1.32
10	3	36	THR	CA-C	-5.89	1.45	1.52
19	Z	456	ARG	CA-C	-5.89	1.44	1.52
27	H	384	GLU	CA-CB	5.89	1.62	1.53
8	1	66	LYS	CA-C	-5.89	1.45	1.52
19	Z	762	VAL	CA-C	-5.89	1.45	1.52
20	N	195	ASN	C-N	5.89	1.41	1.33
23	Q	173	GLU	CA-CB	5.89	1.62	1.53
25	U	121	LEU	CA-C	-5.89	1.45	1.52
31	M	209	MET	N-CA	5.89	1.53	1.46
12	5	237	HIS	CG-CD2	5.89	1.42	1.35
19	Z	53	GLN	CA-CB	5.89	1.62	1.53
19	Z	807	ARG	CZ-NH1	5.89	1.41	1.32
27	H	388	VAL	N-CA	-5.89	1.39	1.46
9	2	70	ALA	CA-C	-5.89	1.45	1.52
31	M	133	GLN	C-N	5.89	1.41	1.33
14	7	49	MET	N-CA	5.89	1.53	1.46
21	S	89	PHE	CG-CD2	5.89	1.51	1.38
24	R	344	HIS	CA-CB	5.89	1.63	1.53
11	4	76	SER	CA-CB	5.88	1.62	1.53
31	M	140	ILE	N-CA	-5.88	1.39	1.46
19	Z	7	ASP	C-N	5.88	1.41	1.33
20	N	182	LYS	CA-CB	5.88	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	Q	284	THR	C-N	5.88	1.42	1.33
25	U	3	GLU	C-N	5.88	1.42	1.33
29	K	164	TYR	CA-CB	5.88	1.61	1.53
8	1	49	ALA	CA-C	5.88	1.59	1.52
25	U	197	GLY	C-N	5.88	1.41	1.33
24	R	290	PRO	N-CA	5.88	1.54	1.47
20	N	327	LYS	N-CA	-5.88	1.39	1.46
23	Q	132	ARG	CZ-NH2	5.88	1.41	1.33
28	I	133	VAL	CA-C	-5.88	1.45	1.52
20	N	473	VAL	N-CA	-5.88	1.39	1.46
13	6	99	LEU	CA-C	-5.87	1.45	1.52
23	Q	113	CYS	N-CA	-5.87	1.39	1.46
29	K	121	ARG	NE-CZ	5.87	1.39	1.33
28	I	283	PHE	CA-C	-5.87	1.45	1.52
28	I	331	THR	N-CA	-5.87	1.38	1.45
3	C	226	ARG	CZ-NH2	5.87	1.41	1.33
13	6	134	TYR	CA-CB	5.87	1.61	1.53
24	R	141	VAL	CA-C	5.87	1.60	1.52
30	L	308	ARG	NE-CZ	5.87	1.39	1.33
20	N	45	ILE	CA-CB	-5.87	1.47	1.54
16	V	155	VAL	CA-CB	5.87	1.62	1.54
30	L	76	LYS	C-N	5.87	1.42	1.33
2	B	112	GLN	CA-C	-5.86	1.45	1.52
7	G	233	ARG	NE-CZ	5.86	1.39	1.33
9	2	163	ASP	CA-CB	5.86	1.61	1.53
21	S	124	ARG	CA-C	-5.86	1.45	1.52
28	I	266	LEU	CA-CB	5.86	1.62	1.53
1	A	109	ILE	C-N	5.86	1.41	1.33
4	D	26	VAL	CA-CB	-5.86	1.47	1.54
5	E	73	HIS	CA-CB	5.86	1.63	1.53
20	N	212	ASP	N-CA	-5.86	1.38	1.46
28	I	154	HIS	N-CA	-5.86	1.38	1.46
30	L	230	ARG	N-CA	-5.86	1.39	1.46
21	S	364	ARG	N-CA	-5.86	1.39	1.46
11	4	57	ALA	CA-C	-5.86	1.45	1.52
15	W	15	TYR	CA-C	-5.86	1.45	1.52
20	N	724	VAL	C-N	5.86	1.41	1.33
19	Z	58	MET	CA-CB	5.86	1.62	1.53
28	I	206	THR	CA-CB	5.86	1.62	1.53
12	5	104	MET	C-N	5.85	1.41	1.33
15	W	169	HIS	ND1-CE1	5.85	1.38	1.32
12	5	255	HIS	CB-CG	5.85	1.58	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	R	175	ASP	CA-CB	5.85	1.62	1.53
3	C	53	HIS	CB-CG	-5.85	1.42	1.50
6	F	207	THR	C-N	5.85	1.41	1.33
19	Z	114	ALA	CA-C	5.85	1.60	1.52
20	N	571	CYS	C-O	-5.85	1.17	1.24
20	N	683	VAL	C-N	5.85	1.41	1.33
12	5	245	ARG	CZ-NH1	5.85	1.41	1.32
19	Z	688	ARG	CA-CB	5.85	1.62	1.53
32	J	236	VAL	CA-C	-5.85	1.45	1.52
1	A	96	TYR	CA-CB	5.84	1.62	1.53
2	B	44	VAL	N-CA	-5.84	1.39	1.46
30	L	70	ILE	CA-C	-5.84	1.45	1.52
20	N	79	ASN	CA-CB	5.84	1.62	1.53
20	N	159	ARG	CZ-NH2	5.84	1.41	1.33
29	K	132	LEU	C-N	5.84	1.41	1.33
14	7	206	GLN	CA-C	-5.84	1.45	1.53
20	N	64	ALA	C-N	5.84	1.41	1.33
9	2	191	GLU	N-CA	5.83	1.53	1.46
14	7	125	HIS	CB-CG	5.83	1.58	1.50
15	W	112	PHE	CA-C	-5.83	1.45	1.52
2	B	161	THR	C-O	-5.83	1.16	1.23
6	F	96	ARG	C-O	5.83	1.31	1.24
7	G	215	SER	CA-CB	5.83	1.65	1.53
19	Z	495	GLU	C-N	5.83	1.41	1.33
24	R	95	LEU	CA-C	-5.83	1.45	1.52
25	U	114	ARG	CD-NE	5.83	1.54	1.46
12	5	217	ARG	CZ-NH1	5.83	1.41	1.32
9	2	48	GLY	CA-C	-5.83	1.45	1.51
10	3	91	VAL	CA-CB	5.83	1.62	1.54
26	O	141	MET	C-O	-5.83	1.17	1.24
29	K	81	ARG	C-N	5.83	1.41	1.33
19	Z	261	ARG	CZ-NH2	5.83	1.41	1.33
7	G	146	GLY	C-N	5.82	1.41	1.33
21	S	249	LEU	CA-CB	5.82	1.62	1.53
32	J	90	HIS	ND1-CE1	5.82	1.38	1.32
9	2	55	ILE	C-N	5.82	1.41	1.33
6	F	238	GLU	CA-C	-5.82	1.45	1.52
24	R	304	TYR	C-N	-5.82	1.26	1.33
15	W	42	ARG	CA-C	5.82	1.60	1.52
22	P	283	GLN	CA-CB	5.82	1.62	1.53
29	K	43	ARG	CA-CB	5.82	1.62	1.53
22	P	444	HIS	CG-ND1	5.82	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	H	265	ARG	CZ-NH1	5.82	1.40	1.32
5	E	41	GLN	N-CA	-5.82	1.39	1.46
9	2	67	MET	C-N	5.82	1.41	1.33
22	P	405	LYS	CA-C	-5.82	1.46	1.53
28	I	135	ILE	CA-C	-5.82	1.46	1.52
1	A	240	VAL	CA-CB	-5.81	1.46	1.54
17	T	133	PRO	CA-C	-5.81	1.46	1.52
14	7	150	LEU	CB-CG	5.81	1.65	1.53
28	I	59	ARG	CZ-NH1	5.81	1.40	1.32
30	L	320	GLU	N-CA	-5.81	1.39	1.46
19	Z	868	HIS	ND1-CE1	5.81	1.38	1.32
29	K	344	ILE	CA-C	-5.81	1.45	1.52
14	7	257	HIS	ND1-CE1	5.81	1.38	1.32
24	R	224	VAL	C-N	5.81	1.41	1.33
26	O	177	LEU	CA-CB	5.81	1.62	1.53
30	L	38	GLY	C-O	-5.81	1.16	1.23
25	U	237	LEU	CA-C	-5.81	1.45	1.52
32	J	374	ARG	C-N	5.81	1.41	1.33
6	F	169	ARG	CD-NE	5.80	1.54	1.46
7	G	116	VAL	CA-C	-5.80	1.45	1.52
21	S	281	TRP	CD2-CE3	5.80	1.49	1.40
25	U	91	ILE	N-CA	-5.80	1.39	1.46
32	J	313	ARG	NE-CZ	5.80	1.39	1.33
7	G	41	ARG	N-CA	-5.80	1.38	1.46
11	4	152	SER	C-N	5.80	1.41	1.33
2	B	4	ARG	CZ-NH2	5.80	1.41	1.33
26	O	77	VAL	C-N	5.80	1.41	1.33
5	E	195	ILE	C-N	5.80	1.41	1.33
9	2	171	GLY	N-CA	-5.80	1.39	1.45
12	5	63	LEU	C-N	5.80	1.41	1.33
19	Z	654	VAL	CA-CB	-5.80	1.47	1.54
23	Q	136	LEU	CA-CB	5.80	1.62	1.53
31	M	220	ILE	CA-C	-5.80	1.46	1.52
32	J	213	ARG	CA-C	-5.79	1.45	1.52
6	F	96	ARG	N-CA	-5.79	1.39	1.46
19	Z	405	HIS	CA-CB	5.79	1.62	1.53
25	U	90	ARG	NE-CZ	5.79	1.39	1.33
6	F	28	ALA	C-N	5.79	1.41	1.33
29	K	82	ILE	C-N	5.79	1.42	1.33
19	Z	6	ARG	NE-CZ	5.79	1.39	1.33
30	L	178	ILE	C-O	5.79	1.29	1.23
31	M	311	ARG	NE-CZ	5.79	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	T	207	ARG	NE-CZ	5.79	1.39	1.33
21	S	462	ILE	CA-C	-5.79	1.45	1.52
28	I	126	SER	CA-CB	5.79	1.60	1.52
6	F	47	VAL	C-N	5.78	1.41	1.33
7	G	93	ARG	NE-CZ	5.78	1.39	1.33
7	G	177	ILE	N-CA	-5.78	1.39	1.46
12	5	79	ALA	CA-C	-5.78	1.46	1.53
29	K	327	LEU	CA-CB	5.78	1.62	1.53
30	L	135	ASN	CA-C	-5.78	1.45	1.52
15	W	122	LYS	CA-C	-5.78	1.45	1.52
14	7	182	ALA	CA-C	-5.78	1.45	1.52
19	Z	493	ASN	CG-ND2	5.78	1.45	1.33
30	L	207	CYS	CA-C	-5.78	1.46	1.52
9	2	117	PRO	N-CA	-5.78	1.40	1.47
10	3	60	VAL	CA-C	-5.78	1.46	1.52
21	S	351	ARG	CD-NE	5.78	1.54	1.46
22	P	271	VAL	N-CA	-5.78	1.39	1.46
31	M	324	GLN	N-CA	-5.78	1.39	1.46
15	W	7	MET	CA-CB	5.78	1.62	1.53
19	Z	556	ARG	N-CA	-5.78	1.39	1.46
26	O	248	PHE	CA-C	-5.78	1.45	1.52
27	H	47	GLN	N-CA	-5.78	1.39	1.46
16	V	49	VAL	C-O	-5.77	1.17	1.24
21	S	396	HIS	ND1-CE1	5.77	1.38	1.32
9	2	157	TYR	CZ-OH	5.77	1.50	1.38
19	Z	626	GLU	N-CA	-5.77	1.39	1.46
20	N	754	HIS	CE1-NE2	5.77	1.38	1.32
32	J	234	LEU	N-CA	-5.77	1.39	1.46
28	I	102	LEU	C-N	5.77	1.41	1.33
19	Z	868	HIS	CE1-NE2	-5.76	1.26	1.32
19	Z	889	PRO	CA-CB	-5.76	1.47	1.53
9	2	124	ARG	CA-C	-5.76	1.45	1.52
22	P	237	GLU	C-N	5.76	1.40	1.33
30	L	384	ALA	C-N	5.76	1.41	1.33
32	J	201	ARG	NE-CZ	5.76	1.39	1.33
16	V	208	ARG	N-CA	-5.76	1.39	1.46
32	J	384	GLU	CA-C	-5.76	1.45	1.52
14	7	205	SER	C-N	5.76	1.43	1.33
19	Z	763	ARG	NE-CZ	5.76	1.39	1.33
5	E	27	ALA	CA-C	-5.75	1.45	1.52
7	G	140	SER	CA-C	-5.75	1.45	1.52
17	T	111	ASN	N-CA	-5.75	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	N	208	LEU	CA-C	-5.75	1.45	1.52
27	H	428	ARG	CD-NE	5.75	1.54	1.46
24	R	98	SER	CA-CB	5.75	1.62	1.53
2	B	2	ALA	N-CA	-5.75	1.41	1.46
22	P	408	ARG	CD-NE	5.75	1.54	1.46
24	R	10	GLY	C-N	5.75	1.42	1.33
3	C	193	ALA	N-CA	-5.75	1.39	1.46
4	D	81	GLY	CA-C	5.75	1.62	1.52
19	Z	436	SER	C-N	5.75	1.41	1.33
30	L	45	GLU	CA-C	-5.75	1.45	1.52
21	S	491	ARG	NE-CZ	5.75	1.39	1.33
28	I	80	ARG	CZ-NH2	5.75	1.41	1.33
3	C	214	ALA	CA-C	-5.74	1.45	1.52
6	F	239	ARG	CZ-NH1	5.74	1.40	1.32
13	6	101	MET	CA-C	-5.74	1.45	1.52
19	Z	6	ARG	N-CA	-5.74	1.38	1.45
21	S	176	ARG	CZ-NH1	5.74	1.40	1.32
23	Q	41	GLU	C-N	5.74	1.41	1.33
26	O	85	ARG	NE-CZ	5.74	1.39	1.33
30	L	21	LYS	CA-CB	5.74	1.62	1.53
9	2	90	GLY	CA-C	-5.74	1.45	1.51
20	N	850	GLU	CA-CB	5.74	1.62	1.53
4	D	239	GLU	N-CA	-5.74	1.39	1.46
27	H	385	ILE	CA-C	-5.74	1.45	1.52
27	H	431	THR	C-N	5.74	1.41	1.33
30	L	85	VAL	CA-CB	-5.74	1.47	1.54
20	N	460	TYR	C-O	-5.74	1.17	1.24
13	6	134	TYR	C-N	5.74	1.41	1.33
7	G	20	ARG	CZ-NH2	5.74	1.41	1.33
17	T	172	ALA	N-CA	-5.74	1.39	1.46
20	N	66	LYS	CA-CB	5.74	1.62	1.53
20	N	84	ALA	CA-CB	5.74	1.62	1.53
20	N	105	ILE	N-CA	5.74	1.53	1.46
24	R	108	ALA	CA-C	-5.74	1.45	1.52
14	7	255	ILE	N-CA	-5.73	1.39	1.46
25	U	241	SER	CA-CB	5.73	1.61	1.53
5	E	10	ARG	CZ-NH2	5.73	1.41	1.33
20	N	638	SER	N-CA	-5.73	1.39	1.46
25	U	107	ALA	CA-C	-5.73	1.45	1.52
28	I	410	ARG	NE-CZ	5.73	1.39	1.33
20	N	125	PRO	N-CA	5.73	1.53	1.47
19	Z	534	VAL	C-N	5.73	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	S	108	VAL	CA-C	5.73	1.60	1.52
24	R	238	GLU	C-N	5.73	1.41	1.33
20	N	141	CYS	CA-C	-5.73	1.45	1.52
23	Q	408	SER	C-N	5.73	1.41	1.33
32	J	162	LYS	N-CA	-5.73	1.39	1.46
4	D	38	ARG	C-N	5.72	1.40	1.33
25	U	283	ARG	N-CA	-5.72	1.39	1.46
10	3	27	ARG	CD-NE	5.72	1.54	1.46
19	Z	546	SER	CA-C	5.72	1.60	1.52
20	N	36	ALA	CA-CB	5.72	1.62	1.53
20	N	608	SER	C-N	5.72	1.41	1.33
20	N	831	ALA	CA-C	-5.72	1.45	1.52
24	R	66	ASP	CA-C	-5.72	1.45	1.52
24	R	106	ALA	C-N	5.72	1.41	1.33
25	U	1	MET	C-N	5.72	1.41	1.33
20	N	221	ILE	CA-CB	-5.72	1.47	1.54
24	R	237	ARG	CA-C	-5.72	1.45	1.52
24	R	255	ALA	CA-C	5.72	1.60	1.52
29	K	121	ARG	N-CA	-5.72	1.39	1.46
8	1	122	ARG	NE-CZ	5.72	1.39	1.33
20	N	186	SER	CA-C	-5.72	1.45	1.52
26	O	44	PHE	C-N	5.72	1.40	1.34
30	L	78	LEU	CA-CB	5.72	1.62	1.53
31	M	76	ILE	CA-C	-5.72	1.45	1.52
20	N	201	LEU	CA-CB	5.72	1.62	1.53
28	I	321	SER	C-N	5.72	1.41	1.33
30	L	62	LYS	CA-CB	5.72	1.62	1.53
6	F	157	ARG	C-N	5.71	1.40	1.33
25	U	280	ILE	CA-CB	-5.71	1.47	1.54
20	N	355	ASN	C-N	5.71	1.41	1.33
21	S	95	ARG	CZ-NH2	5.71	1.40	1.33
4	D	9	VAL	N-CA	-5.71	1.39	1.46
30	L	326	ILE	CA-C	-5.71	1.45	1.52
32	J	105	ILE	N-CA	5.71	1.53	1.46
19	Z	83	ARG	NE-CZ	5.71	1.39	1.33
23	Q	288	LYS	CA-C	5.71	1.60	1.52
24	R	83	ARG	NE-CZ	5.71	1.39	1.33
20	N	430	ASP	CA-C	-5.70	1.45	1.52
21	S	439	ARG	C-N	5.70	1.41	1.33
32	J	271	ARG	NE-CZ	5.70	1.39	1.33
20	N	852	GLU	CA-C	-5.70	1.46	1.52
1	A	77	GLY	CA-C	5.70	1.56	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Z	107	LYS	CA-C	-5.70	1.45	1.52
29	K	56	VAL	CA-C	-5.70	1.45	1.52
20	N	790	GLY	CA-C	-5.70	1.45	1.52
21	S	73	GLU	N-CA	-5.70	1.38	1.46
25	U	54	PHE	CA-C	-5.70	1.45	1.52
26	O	359	ASP	CA-CB	5.70	1.62	1.53
29	K	249	ASP	C-N	5.70	1.41	1.33
20	N	65	SER	N-CA	5.70	1.53	1.46
2	B	128	ARG	CA-C	5.69	1.58	1.52
9	2	235	PRO	C-N	5.69	1.40	1.33
14	7	138	ARG	NE-CZ	5.69	1.39	1.33
30	L	386	ARG	CZ-NH2	5.69	1.40	1.33
31	M	362	GLU	C-O	-5.69	1.17	1.24
19	Z	782	HIS	C-N	5.69	1.42	1.33
19	Z	894	LEU	C-N	5.69	1.41	1.33
20	N	838	LYS	N-CA	-5.69	1.39	1.46
6	F	65	HIS	CG-ND1	-5.69	1.31	1.38
16	V	121	TRP	CZ2-CH2	5.69	1.48	1.37
5	E	54	ILE	CA-C	-5.69	1.46	1.52
8	1	78	ARG	CZ-NH1	5.69	1.40	1.32
13	6	189	GLU	CA-CB	5.69	1.63	1.53
21	S	396	HIS	CA-C	-5.69	1.45	1.52
1	A	8	GLY	CA-C	-5.69	1.43	1.51
10	3	184	GLY	C-N	5.69	1.41	1.33
14	7	226	ARG	NE-CZ	5.69	1.39	1.33
19	Z	144	LEU	CA-CB	5.69	1.62	1.53
32	J	224	ILE	N-CA	-5.69	1.40	1.46
21	S	238	HIS	CG-ND1	5.69	1.44	1.38
1	A	12	HIS	CA-C	-5.68	1.45	1.52
3	C	135	LEU	C-N	5.68	1.41	1.33
7	G	71	ASP	CA-C	-5.68	1.45	1.52
15	W	103	LYS	CA-C	-5.68	1.45	1.53
21	S	64	ASP	CA-CB	5.68	1.62	1.53
21	S	86	GLU	C-O	-5.68	1.19	1.24
31	M	274	ALA	CA-CB	5.68	1.62	1.53
12	5	110	ASP	CA-C	-5.68	1.45	1.52
13	6	137	ILE	N-CA	-5.68	1.39	1.46
19	Z	248	LEU	N-CA	-5.68	1.39	1.46
19	Z	793	VAL	CA-CB	-5.68	1.46	1.54
26	O	197	ALA	CA-CB	5.68	1.62	1.53
31	M	358	PRO	CA-C	-5.68	1.46	1.52
20	N	867	LYS	CA-C	-5.68	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	S	183	ILE	N-CA	-5.68	1.39	1.46
5	E	139	VAL	C-N	5.68	1.41	1.33
17	T	299	PRO	N-CD	5.68	1.55	1.47
23	Q	28	HIS	ND1-CE1	5.68	1.38	1.32
28	I	266	LEU	C-N	5.68	1.41	1.33
8	1	148	PRO	CA-C	5.68	1.60	1.52
13	6	69	LYS	N-CA	-5.68	1.38	1.46
27	H	217	PRO	CA-C	5.68	1.57	1.52
1	A	180	GLU	N-CA	5.67	1.53	1.46
19	Z	202	HIS	C-N	5.67	1.41	1.33
19	Z	889	PRO	C-N	5.67	1.41	1.33
27	H	402	LYS	N-CA	5.67	1.52	1.46
29	K	106	THR	N-CA	-5.67	1.39	1.46
32	J	35	VAL	C-N	5.67	1.41	1.33
2	B	96	GLN	CA-CB	5.67	1.62	1.53
5	E	16	SER	CA-CB	5.67	1.60	1.53
18	Y	67	MET	CA-C	-5.67	1.45	1.52
21	S	400	LYS	C-N	5.67	1.41	1.33
24	R	109	GLU	C-N	5.67	1.41	1.33
6	F	170	THR	N-CA	5.67	1.53	1.46
10	3	65	GLN	CA-C	-5.67	1.45	1.52
19	Z	556	ARG	CZ-NH2	5.67	1.40	1.33
20	N	14	GLU	C-N	5.67	1.41	1.33
20	N	751	ARG	CZ-NH2	5.67	1.40	1.33
24	R	79	GLU	CA-C	-5.67	1.45	1.52
31	M	343	PRO	C-N	5.67	1.41	1.33
20	N	688	LEU	C-N	5.67	1.41	1.33
21	S	351	ARG	N-CA	-5.67	1.38	1.46
25	U	145	HIS	CG-ND1	5.67	1.44	1.38
30	L	116	MET	C-N	5.67	1.41	1.33
4	D	208	GLY	C-N	5.67	1.41	1.33
7	G	191	VAL	CA-CB	-5.67	1.47	1.54
10	3	35	VAL	CA-CB	-5.67	1.45	1.53
14	7	58	VAL	CA-C	-5.67	1.45	1.52
19	Z	744	MET	CA-C	5.67	1.60	1.52
24	R	384	SER	CA-CB	5.66	1.62	1.53
32	J	199	LEU	N-CA	-5.66	1.39	1.46
4	D	101	ARG	CD-NE	5.66	1.54	1.46
12	5	240	GLU	C-O	-5.66	1.17	1.24
19	Z	359	GLY	CA-C	-5.66	1.43	1.51
32	J	28	ILE	CA-C	-5.66	1.45	1.52
6	F	143	HIS	CA-C	-5.66	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	U	160	SER	CA-C	-5.66	1.45	1.52
27	H	190	VAL	N-CA	-5.66	1.39	1.46
16	V	137	SER	CA-CB	5.66	1.64	1.53
23	Q	52	GLU	CA-C	-5.66	1.45	1.52
24	R	107	LYS	C-N	5.66	1.41	1.33
25	U	265	LEU	N-CA	-5.66	1.39	1.46
30	L	288	LYS	CA-C	-5.66	1.46	1.52
31	M	47	ARG	CZ-NH2	5.66	1.40	1.33
13	6	116	ALA	CA-C	-5.65	1.45	1.52
21	S	250	LEU	N-CA	-5.65	1.39	1.46
21	S	391	ILE	CA-C	-5.65	1.45	1.52
1	A	17	SER	C-N	5.65	1.40	1.33
19	Z	619	HIS	CE1-NE2	5.65	1.38	1.32
22	P	33	LYS	N-CA	-5.65	1.39	1.46
26	O	149	THR	CA-CB	5.65	1.61	1.53
10	3	164	PHE	CA-CB	5.65	1.62	1.53
28	I	197	ILE	CA-CB	-5.65	1.47	1.54
31	M	298	ARG	NE-CZ	5.65	1.39	1.33
32	J	317	PHE	CA-C	5.65	1.60	1.52
20	N	833	LEU	N-CA	-5.65	1.39	1.46
25	U	118	ASN	CA-C	-5.65	1.45	1.52
31	M	212	LYS	C-N	5.65	1.41	1.33
16	V	279	ASP	CA-C	5.65	1.59	1.52
21	S	177	TYR	C-O	5.65	1.30	1.23
30	L	104	SER	C-N	5.65	1.41	1.34
9	2	202	ILE	CA-C	-5.65	1.45	1.52
27	H	258	ARG	CD-NE	5.65	1.54	1.46
27	H	398	ARG	CZ-NH1	5.65	1.40	1.32
6	F	228	ASP	CA-CB	5.64	1.63	1.53
23	Q	323	LEU	CA-CB	5.64	1.62	1.53
24	R	124	PHE	N-CA	-5.64	1.39	1.46
29	K	272	THR	CA-C	5.64	1.59	1.52
4	D	109	THR	C-N	5.64	1.40	1.34
20	N	797	MET	C-N	5.64	1.40	1.33
24	R	182	VAL	C-N	5.64	1.41	1.33
1	A	28	ALA	N-CA	5.64	1.53	1.46
5	E	123	PHE	N-CA	-5.64	1.38	1.45
13	6	59	GLY	N-CA	-5.64	1.39	1.45
15	W	171	VAL	CA-CB	-5.64	1.47	1.54
19	Z	177	GLU	CA-C	-5.64	1.46	1.52
20	N	740	GLY	C-N	5.64	1.39	1.33
25	U	6	VAL	C-O	5.64	1.29	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	H	340	LYS	CA-C	-5.64	1.45	1.52
29	K	415	GLU	N-CA	-5.64	1.41	1.46
30	L	370	ARG	CA-CB	5.64	1.62	1.53
4	D	240	LYS	C-N	5.64	1.41	1.33
16	V	140	ALA	N-CA	5.64	1.52	1.46
6	F	21	GLN	C-N	5.63	1.41	1.33
21	S	46	ALA	C-N	5.63	1.40	1.33
21	S	414	SER	C-N	5.63	1.41	1.33
16	V	68	ARG	CZ-NH1	5.63	1.40	1.32
26	O	19	ALA	C-N	5.63	1.41	1.33
31	M	64	ARG	C-N	5.63	1.41	1.33
26	O	303	THR	C-N	5.63	1.40	1.34
20	N	773	PHE	C-O	-5.63	1.17	1.24
29	K	187	HIS	C-N	5.63	1.41	1.33
14	7	208	GLU	CA-C	5.63	1.60	1.52
24	R	129	ASP	CA-C	-5.63	1.45	1.52
27	H	323	ARG	CD-NE	5.63	1.54	1.46
7	G	21	VAL	CA-C	-5.62	1.46	1.52
6	F	153	TYR	N-CA	-5.62	1.39	1.45
11	4	170	ARG	CD-NE	5.62	1.54	1.46
19	Z	202	HIS	ND1-CE1	5.62	1.38	1.32
20	N	193	PHE	CA-CB	5.62	1.62	1.53
20	N	829	SER	CA-CB	5.62	1.62	1.53
22	P	274	VAL	N-CA	-5.62	1.39	1.46
23	Q	363	ARG	CA-C	-5.62	1.45	1.52
2	B	63	HIS	ND1-CE1	5.62	1.38	1.32
2	B	189	HIS	CE1-NE2	-5.62	1.26	1.32
21	S	124	ARG	N-CA	-5.62	1.39	1.46
25	U	257	MET	CA-C	-5.62	1.45	1.52
26	O	347	LYS	CA-C	5.62	1.60	1.52
15	W	102	GLY	C-N	5.62	1.43	1.33
28	I	425	ASN	C-N	5.62	1.41	1.33
2	B	83	TYR	CA-C	-5.62	1.45	1.52
2	B	177	ARG	CA-C	-5.62	1.45	1.52
21	S	454	VAL	CA-C	-5.62	1.46	1.52
3	C	70	GLU	CA-CB	5.62	1.61	1.53
4	D	38	ARG	NE-CZ	5.62	1.39	1.33
13	6	53	ASP	CA-C	-5.62	1.45	1.52
15	W	68	THR	C-N	5.62	1.41	1.33
19	Z	98	PHE	CA-C	-5.62	1.45	1.52
20	N	582	GLY	C-N	5.62	1.41	1.33
21	S	103	ARG	NE-CZ	5.62	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	1	60	ALA	CA-CB	5.61	1.60	1.53
24	R	251	HIS	ND1-CE1	5.61	1.38	1.32
28	I	295	TYR	CA-C	-5.61	1.45	1.52
1	A	6	SER	CA-C	-5.61	1.45	1.52
3	C	145	PHE	CA-C	-5.61	1.45	1.52
20	N	946	GLU	CA-CB	5.61	1.62	1.53
21	S	224	ARG	NE-CZ	5.61	1.39	1.33
22	P	284	SER	N-CA	-5.61	1.39	1.46
11	4	21	ALA	CA-C	-5.61	1.45	1.52
26	O	375	LEU	CA-C	-5.61	1.45	1.52
27	H	148	GLN	CA-CB	5.61	1.63	1.53
30	L	48	LYS	CA-C	-5.61	1.45	1.52
32	J	339	THR	C-N	5.61	1.41	1.33
19	Z	24	ALA	N-CA	-5.61	1.39	1.46
19	Z	220	ASP	C-N	5.61	1.41	1.33
25	U	39	LEU	CA-CB	5.61	1.62	1.53
28	I	131	HIS	CA-CB	5.61	1.65	1.54
30	L	212	VAL	CA-CB	5.61	1.61	1.54
3	C	37	ILE	CA-CB	-5.61	1.46	1.54
6	F	137	TYR	C-N	5.61	1.38	1.33
12	5	128	ARG	CZ-NH2	5.61	1.40	1.33
30	L	192	THR	N-CA	-5.61	1.39	1.46
30	L	246	MET	C-N	5.61	1.41	1.33
30	L	269	ARG	NE-CZ	5.61	1.39	1.33
32	J	88	LYS	C-O	-5.61	1.17	1.24
6	F	14	SER	CA-CB	5.60	1.62	1.53
22	P	8	ARG	NE-CZ	5.60	1.39	1.33
4	D	194	ILE	CA-CB	-5.60	1.47	1.54
10	3	162	HIS	CB-CG	5.60	1.57	1.50
27	H	428	ARG	NE-CZ	5.60	1.39	1.33
30	L	175	ARG	CZ-NH2	5.60	1.40	1.33
13	6	120	SER	C-N	5.60	1.41	1.34
22	P	94	ARG	CZ-NH1	5.60	1.40	1.32
23	Q	11	ARG	N-CA	-5.60	1.39	1.46
25	U	88	ARG	CZ-NH2	5.60	1.40	1.33
31	M	277	LEU	N-CA	-5.60	1.39	1.46
13	6	125	SER	C-N	5.60	1.41	1.34
23	Q	282	ARG	CZ-NH1	5.60	1.40	1.32
6	F	126	ARG	NE-CZ	5.59	1.39	1.33
19	Z	46	SER	N-CA	-5.59	1.39	1.46
26	O	118	ILE	N-CA	-5.59	1.39	1.46
14	7	154	LYS	CA-C	-5.59	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	Q	32	LYS	N-CA	-5.59	1.39	1.46
28	I	154	HIS	ND1-CE1	5.59	1.38	1.32
30	L	327	LEU	N-CA	-5.59	1.39	1.46
22	P	75	TYR	C-N	5.59	1.40	1.33
23	Q	289	CYS	CA-CB	5.59	1.62	1.53
27	H	234	ASP	CA-CB	5.59	1.61	1.53
16	V	203	ILE	N-CA	-5.59	1.39	1.46
24	R	334	LEU	CA-C	-5.59	1.45	1.52
28	I	236	ALA	CA-C	-5.59	1.45	1.52
1	A	219	VAL	CA-C	-5.59	1.46	1.52
2	B	6	TYR	CA-C	-5.59	1.45	1.52
7	G	101	SER	CA-CB	5.59	1.62	1.53
18	Y	58	ALA	CA-C	-5.59	1.45	1.52
18	Y	63	HIS	CA-CB	5.59	1.62	1.53
22	P	386	VAL	CA-C	-5.59	1.45	1.52
14	7	230	ARG	N-CA	-5.58	1.38	1.46
28	I	111	THR	CA-C	-5.58	1.45	1.52
29	K	164	TYR	CA-C	-5.58	1.45	1.52
4	D	149	ARG	CD-NE	5.58	1.54	1.46
6	F	122	ARG	N-CA	5.58	1.53	1.45
12	5	142	LEU	N-CA	-5.58	1.39	1.46
18	Y	66	LYS	CA-CB	5.58	1.62	1.53
19	Z	600	TYR	C-N	5.58	1.40	1.33
19	Z	708	ASP	CA-C	5.58	1.60	1.52
23	Q	274	LYS	C-N	5.58	1.41	1.33
24	R	179	ARG	CD-NE	5.58	1.54	1.46
28	I	103	ARG	NE-CZ	5.58	1.39	1.33
30	L	111	ARG	NE-CZ	5.58	1.39	1.33
32	J	370	ALA	N-CA	-5.58	1.39	1.46
30	L	127	ARG	NE-CZ	5.58	1.39	1.33
9	2	86	CYS	C-N	5.58	1.41	1.33
26	O	319	LEU	CA-CB	5.58	1.62	1.53
20	N	210	LYS	N-CA	-5.58	1.39	1.46
30	L	305	ARG	CD-NE	5.58	1.54	1.46
2	B	78	GLY	C-N	5.58	1.41	1.33
7	G	117	ALA	C-N	5.57	1.41	1.33
10	3	47	ASP	C-N	5.57	1.42	1.33
12	5	216	ARG	CA-CB	5.57	1.61	1.53
24	R	32	ARG	N-CA	5.57	1.53	1.46
7	G	214	LEU	N-CA	-5.57	1.38	1.45
14	7	90	ASN	C-N	5.57	1.41	1.33
16	V	76	PRO	C-O	-5.57	1.17	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Z	635	LYS	CA-C	-5.57	1.45	1.52
19	Z	845	ARG	NE-CZ	5.57	1.39	1.33
21	S	58	HIS	ND1-CE1	5.57	1.38	1.32
23	Q	23	SER	N-CA	-5.57	1.38	1.46
26	O	101	ARG	NE-CZ	5.57	1.39	1.33
26	O	355	LEU	CA-C	-5.57	1.45	1.52
13	6	185	MET	CA-C	-5.57	1.45	1.52
25	U	25	ARG	CZ-NH2	5.57	1.40	1.33
29	K	54	LEU	N-CA	-5.57	1.39	1.46
31	M	101	ASP	CA-C	-5.57	1.46	1.52
32	J	254	ILE	CA-C	-5.57	1.45	1.52
32	J	292	ILE	CA-C	-5.57	1.45	1.52
7	G	185	MET	CA-CB	5.57	1.62	1.53
15	W	2	VAL	CA-C	-5.57	1.46	1.52
27	H	150	HIS	ND1-CE1	5.57	1.38	1.32
32	J	140	VAL	C-N	5.57	1.41	1.33
19	Z	853	VAL	CA-C	-5.56	1.46	1.52
20	N	431	THR	N-CA	-5.56	1.39	1.46
19	Z	461	PRO	CA-CB	5.56	1.62	1.53
19	Z	670	MET	C-N	5.56	1.41	1.33
27	H	89	SER	C-N	5.56	1.41	1.33
20	N	267	ASN	C-N	5.56	1.41	1.33
23	Q	266	ASP	CA-C	-5.56	1.45	1.52
5	E	129	ASP	CA-C	-5.56	1.45	1.52
6	F	43	HIS	CG-CD2	5.56	1.42	1.35
11	4	136	ALA	CA-C	5.56	1.60	1.52
6	F	94	ASP	C-N	5.56	1.41	1.33
26	O	94	LEU	C-N	5.56	1.41	1.33
16	V	69	VAL	N-CA	-5.56	1.39	1.46
19	Z	543	MET	C-N	5.56	1.41	1.33
10	3	74	TYR	CA-C	-5.55	1.45	1.52
21	S	192	SER	CA-C	-5.55	1.45	1.52
23	Q	214	SER	CA-CB	5.55	1.62	1.53
20	N	899	ARG	NE-CZ	5.55	1.39	1.33
19	Z	743	ALA	CA-C	-5.55	1.45	1.52
21	S	40	ALA	CA-CB	5.55	1.61	1.53
21	S	201	LEU	C-N	5.55	1.40	1.33
12	5	187	VAL	C-N	5.55	1.41	1.33
16	V	294	SER	C-O	-5.55	1.17	1.24
20	N	434	GLY	CA-C	-5.55	1.44	1.51
21	S	114	HIS	CA-C	-5.55	1.47	1.53
25	U	153	LYS	CA-CB	5.55	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	I	377	ASP	C-N	5.55	1.39	1.33
16	V	221	HIS	ND1-CE1	5.55	1.38	1.32
20	N	702	THR	N-CA	-5.55	1.39	1.46
20	N	344	ARG	CZ-NH2	5.54	1.40	1.33
19	Z	20	ALA	CA-C	5.54	1.59	1.52
23	Q	51	LEU	CA-C	-5.54	1.45	1.52
19	Z	671	ALA	CA-C	-5.54	1.45	1.52
22	P	404	ALA	C-N	5.54	1.41	1.33
28	I	366	GLN	CD-NE2	5.54	1.44	1.33
31	M	296	THR	C-O	-5.54	1.17	1.23
22	P	447	ALA	CA-C	-5.54	1.45	1.52
15	W	17	ARG	NE-CZ	5.54	1.39	1.33
2	B	115	ALA	CA-C	-5.54	1.45	1.52
20	N	395	ARG	CZ-NH1	5.54	1.40	1.32
32	J	387	VAL	CA-C	-5.54	1.45	1.52
30	L	259	GLU	CA-C	-5.54	1.46	1.53
8	1	126	ASP	CA-CB	5.53	1.62	1.53
14	7	166	LEU	CA-C	-5.53	1.46	1.52
19	Z	189	LYS	N-CA	5.53	1.53	1.46
30	L	171	GLU	N-CA	-5.53	1.39	1.46
30	L	311	ARG	CD-NE	5.53	1.53	1.46
25	U	66	SER	C-N	5.53	1.40	1.33
26	O	85	ARG	CZ-NH1	5.53	1.40	1.32
30	L	72	GLY	C-N	-5.53	1.26	1.33
30	L	158	GLU	CA-C	5.53	1.59	1.52
2	B	141	GLU	CA-C	5.53	1.60	1.53
13	6	94	ILE	CA-CB	5.52	1.61	1.54
25	U	53	SER	CA-C	-5.52	1.45	1.52
11	4	19	ARG	CZ-NH1	5.52	1.40	1.32
11	4	138	LEU	C-N	5.52	1.41	1.33
20	N	650	TYR	CA-CB	5.52	1.61	1.53
25	U	282	ASN	CA-C	-5.52	1.45	1.52
30	L	204	GLN	N-CA	-5.52	1.39	1.46
19	Z	422	VAL	C-N	5.52	1.40	1.33
2	B	196	LYS	C-N	5.52	1.40	1.33
12	5	224	TYR	CA-C	-5.52	1.45	1.52
31	M	68	GLU	C-N	5.52	1.41	1.33
19	Z	592	ASN	CA-CB	5.52	1.61	1.53
23	Q	304	LYS	CA-CB	5.52	1.61	1.53
11	4	127	ALA	CA-C	-5.52	1.46	1.52
2	B	88	HIS	ND1-CE1	5.51	1.38	1.32
20	N	797	MET	N-CA	-5.51	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	L	57	SER	CA-C	-5.51	1.45	1.52
2	B	75	VAL	N-CA	-5.51	1.39	1.46
25	U	31	ASN	CA-CB	5.51	1.62	1.53
14	7	196	GLU	CA-CB	5.51	1.62	1.53
20	N	486	MET	C-N	5.51	1.40	1.33
20	N	590	TYR	C-N	5.51	1.40	1.33
23	Q	45	VAL	C-N	5.51	1.41	1.33
19	Z	826	GLN	CA-C	-5.51	1.46	1.52
28	I	249	ARG	CA-CB	5.51	1.63	1.53
29	K	80	LYS	N-CA	-5.51	1.39	1.46
19	Z	802	SER	N-CA	-5.50	1.39	1.46
20	N	328	ILE	CA-C	5.50	1.59	1.52
32	J	293	MET	N-CA	-5.50	1.39	1.46
10	3	202	ALA	C-N	5.50	1.41	1.33
19	Z	449	GLY	C-N	5.50	1.40	1.33
25	U	122	VAL	N-CA	-5.50	1.39	1.46
26	O	373	ASP	CA-C	-5.50	1.45	1.52
28	I	174	MET	C-N	5.50	1.41	1.33
28	I	392	GLY	N-CA	5.50	1.53	1.45
19	Z	845	ARG	CD-NE	5.50	1.53	1.46
20	N	426	TYR	C-N	5.50	1.41	1.33
20	N	747	SER	CA-CB	-5.50	1.44	1.53
21	S	364	ARG	CA-C	5.50	1.59	1.52
31	M	322	GLY	CA-C	-5.50	1.44	1.51
19	Z	14	GLN	CA-C	5.50	1.59	1.52
23	Q	362	GLU	C-N	5.50	1.41	1.33
13	6	194	THR	N-CA	-5.50	1.39	1.46
11	4	62	LYS	CA-CB	5.49	1.62	1.53
20	N	142	LEU	C-N	5.49	1.41	1.33
23	Q	194	ARG	CZ-NH1	5.49	1.40	1.32
23	Q	229	TYR	CZ-OH	5.49	1.49	1.38
26	O	199	THR	CA-C	-5.49	1.45	1.52
4	D	225	ILE	CA-CB	-5.49	1.47	1.54
8	1	208	ARG	N-CA	-5.49	1.39	1.46
5	E	21	LEU	N-CA	-5.49	1.39	1.46
20	N	55	ARG	CD-NE	5.49	1.53	1.46
24	R	179	ARG	C-N	5.49	1.41	1.33
2	B	57	TYR	C-N	5.49	1.41	1.33
23	Q	11	ARG	NE-CZ	5.49	1.39	1.33
27	H	399	ALA	CA-C	-5.49	1.45	1.52
32	J	237	MET	C-N	5.49	1.41	1.33
16	V	250	GLU	CA-CB	5.49	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Z	647	GLY	CA-C	-5.49	1.46	1.52
20	N	390	LEU	C-N	5.49	1.41	1.34
20	N	577	ILE	CA-C	5.49	1.59	1.52
22	P	352	LYS	CA-CB	5.49	1.61	1.53
28	I	227	PRO	CA-C	-5.49	1.47	1.52
32	J	332	HIS	N-CA	-5.49	1.39	1.46
20	N	801	GLN	N-CA	5.48	1.52	1.46
11	4	19	ARG	NE-CZ	5.48	1.39	1.33
28	I	79	ILE	N-CA	-5.48	1.40	1.46
28	I	418	ASP	C-O	-5.48	1.17	1.24
6	F	69	HIS	C-N	5.48	1.41	1.33
13	6	114	ALA	CA-C	-5.48	1.45	1.52
19	Z	616	CYS	CA-C	-5.48	1.45	1.52
3	C	92	LEU	CA-C	5.48	1.59	1.52
22	P	425	LEU	C-N	5.48	1.40	1.33
23	Q	163	LYS	CA-C	-5.48	1.45	1.52
22	P	201	ARG	CD-NE	5.48	1.53	1.46
5	E	109	VAL	CA-CB	5.47	1.61	1.54
7	G	153	ASP	CA-CB	5.47	1.61	1.53
25	U	115	TYR	N-CA	-5.47	1.39	1.46
7	G	20	ARG	CD-NE	5.47	1.53	1.46
17	T	261	PHE	CA-CB	5.47	1.61	1.53
20	N	179	TYR	CA-C	-5.47	1.45	1.52
20	N	180	SER	CA-C	-5.47	1.45	1.52
21	S	213	VAL	CA-CB	-5.47	1.48	1.54
6	F	237	GLU	CA-C	-5.47	1.45	1.52
17	T	348	GLN	CA-CB	5.47	1.61	1.53
20	N	513	GLY	C-N	5.47	1.41	1.33
20	N	703	CYS	CA-C	5.47	1.58	1.52
20	N	777	HIS	C-N	5.47	1.41	1.33
21	S	345	ARG	CD-NE	5.47	1.53	1.46
27	H	429	TYR	C-N	5.47	1.41	1.33
4	D	213	GLU	C-N	5.47	1.41	1.33
30	L	150	GLY	CA-C	-5.47	1.44	1.51
30	L	160	ARG	NE-CZ	5.47	1.39	1.33
9	2	142	VAL	CA-C	-5.47	1.46	1.52
12	5	168	PRO	CA-C	-5.47	1.44	1.52
19	Z	167	ALA	C-N	5.47	1.41	1.33
20	N	68	PHE	C-N	5.47	1.41	1.33
26	O	63	PHE	N-CA	-5.47	1.39	1.46
29	K	229	ARG	CD-NE	5.47	1.53	1.46
3	C	104	PRO	CA-C	5.46	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	N	435	SER	CA-C	5.46	1.59	1.52
21	S	302	ARG	NE-CZ	5.46	1.39	1.33
26	O	102	GLU	CA-C	-5.46	1.46	1.52
29	K	252	ARG	CA-CB	5.46	1.62	1.53
30	L	209	PHE	C-N	5.46	1.41	1.33
30	L	262	SER	C-O	-5.46	1.17	1.24
4	D	175	ARG	NE-CZ	5.46	1.39	1.33
20	N	682	TYR	C-N	5.46	1.40	1.33
24	R	46	ARG	CD-NE	5.46	1.53	1.46
7	G	93	ARG	CA-C	-5.46	1.45	1.52
23	Q	48	GLN	CD-NE2	5.46	1.44	1.33
26	O	138	VAL	C-N	5.46	1.41	1.33
28	I	345	GLY	C-N	5.46	1.41	1.33
10	3	200	LEU	N-CA	-5.46	1.39	1.46
28	I	364	ILE	N-CA	5.46	1.53	1.46
13	6	55	ARG	CD-NE	5.46	1.53	1.46
20	N	265	ILE	CA-CB	-5.46	1.48	1.54
24	R	192	ARG	NE-CZ	5.46	1.39	1.33
31	M	126	VAL	N-CA	5.46	1.52	1.46
11	4	99	HIS	CB-CG	5.46	1.57	1.50
20	N	140	ARG	NE-CZ	5.46	1.39	1.33
21	S	131	LEU	C-N	5.46	1.40	1.33
23	Q	94	ASP	CA-CB	5.46	1.61	1.53
32	J	20	LEU	CA-C	-5.46	1.45	1.52
24	R	20	ALA	CA-C	-5.46	1.45	1.52
15	W	110	ILE	CA-CB	5.45	1.61	1.54
23	Q	257	CYS	CA-CB	5.45	1.61	1.53
24	R	293	ARG	C-N	5.45	1.41	1.33
32	J	165	ILE	CA-C	5.45	1.59	1.52
32	J	363	CYS	CA-C	-5.45	1.46	1.52
9	2	163	ASP	N-CA	-5.45	1.39	1.46
17	T	271	ARG	NE-CZ	5.45	1.39	1.33
28	I	117	ASP	CA-CB	5.45	1.59	1.52
4	D	176	GLU	C-N	5.45	1.41	1.33
19	Z	545	LYS	C-N	5.45	1.41	1.33
23	Q	90	ARG	CA-C	-5.45	1.45	1.52
30	L	249	ILE	CB-CG1	5.45	1.64	1.53
19	Z	394	ASP	C-N	5.45	1.40	1.33
19	Z	588	ARG	CZ-NH1	5.45	1.40	1.32
20	N	916	ASP	CA-CB	5.45	1.62	1.53
22	P	140	ILE	CA-C	-5.45	1.46	1.52
24	R	65	MET	CA-C	-5.45	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	Q	411	VAL	CA-CB	-5.45	1.47	1.54
25	U	199	LYS	CA-CB	5.45	1.61	1.53
27	H	284	ARG	CZ-NH1	5.45	1.40	1.32
19	Z	259	PHE	CA-CB	5.44	1.62	1.53
19	Z	77	GLU	CA-CB	5.44	1.61	1.53
13	6	85	HIS	C-N	5.44	1.41	1.33
22	P	151	THR	C-O	-5.44	1.17	1.24
22	P	192	LEU	CA-C	-5.44	1.46	1.52
20	N	128	GLN	C-N	5.44	1.40	1.33
8	1	169	TYR	CA-CB	5.44	1.60	1.53
16	V	235	SER	N-CA	-5.44	1.39	1.46
24	R	140	ILE	N-CA	-5.44	1.40	1.46
22	P	398	VAL	C-N	5.44	1.41	1.34
23	Q	114	ILE	CA-C	-5.44	1.45	1.52
32	J	57	ARG	CA-CB	5.44	1.61	1.53
29	K	162	VAL	C-N	5.43	1.38	1.33
3	C	224	VAL	CA-CB	-5.43	1.48	1.54
12	5	106	GLY	CA-C	-5.43	1.45	1.51
20	N	97	VAL	CA-C	5.43	1.59	1.52
29	K	320	ALA	CA-C	-5.43	1.45	1.52
3	C	184	MET	N-CA	-5.43	1.39	1.46
10	3	116	THR	N-CA	-5.43	1.39	1.46
19	Z	374	SER	N-CA	5.43	1.53	1.46
21	S	259	LEU	CA-C	-5.43	1.46	1.53
29	K	199	PRO	N-CD	-5.43	1.40	1.47
4	D	245	ASN	CA-CB	5.43	1.61	1.53
20	N	167	ILE	CB-CG1	5.43	1.64	1.53
20	N	616	ARG	CZ-NH2	5.43	1.40	1.33
20	N	684	ARG	CZ-NH2	5.43	1.40	1.33
27	H	373	LEU	C-N	5.43	1.41	1.33
30	L	135	ASN	CA-CB	5.43	1.61	1.53
32	J	115	ALA	N-CA	-5.43	1.39	1.45
32	J	372	ARG	CA-C	-5.43	1.46	1.52
7	G	144	ASN	C-N	5.43	1.42	1.33
24	R	337	PHE	CA-C	5.43	1.59	1.52
27	H	228	ALA	N-CA	-5.43	1.39	1.46
30	L	311	ARG	CA-C	-5.43	1.46	1.52
1	A	169	GLY	N-CA	-5.43	1.39	1.45
12	5	165	LYS	CA-CB	5.43	1.60	1.53
14	7	248	SER	N-CA	-5.43	1.39	1.46
20	N	615	ARG	NE-CZ	5.43	1.39	1.33
20	N	776	SER	C-N	5.43	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	O	9	GLN	N-CA	-5.43	1.39	1.46
26	O	333	MET	CA-C	-5.43	1.46	1.52
28	I	396	LYS	CA-CB	5.43	1.61	1.53
29	K	210	CYS	C-N	5.43	1.39	1.33
31	M	157	ASN	C-N	5.43	1.41	1.33
32	J	334	ARG	NE-CZ	5.43	1.39	1.33
5	E	80	GLY	N-CA	-5.42	1.40	1.45
20	N	677	ASN	C-N	5.42	1.41	1.33
23	Q	310	ARG	NE-CZ	5.42	1.39	1.33
27	H	425	ALA	CA-C	-5.42	1.45	1.52
21	S	442	VAL	CA-CB	-5.42	1.46	1.54
24	R	150	PHE	N-CA	5.42	1.52	1.46
27	H	318	LEU	C-N	5.42	1.40	1.33
3	C	100	GLN	CA-CB	5.42	1.61	1.53
19	Z	785	ARG	CD-NE	5.42	1.53	1.46
26	O	351	ASP	CA-C	-5.42	1.45	1.52
27	H	279	ALA	CA-C	5.42	1.59	1.52
2	B	177	ARG	CZ-NH1	5.42	1.40	1.32
12	5	102	GLY	N-CA	5.42	1.51	1.45
13	6	141	ASP	CA-CB	5.42	1.60	1.53
21	S	126	PHE	CA-CB	5.42	1.61	1.53
21	S	281	TRP	NE1-CE2	-5.42	1.31	1.37
31	M	272	ARG	CZ-NH2	5.42	1.40	1.33
5	E	11	GLY	N-CA	-5.42	1.38	1.45
13	6	219	ALA	CA-CB	5.42	1.61	1.53
26	O	155	PHE	CB-CG	5.42	1.63	1.50
30	L	39	ARG	CA-C	-5.42	1.45	1.52
17	T	234	SER	CA-C	-5.42	1.45	1.52
29	K	62	LYS	C-N	5.42	1.41	1.33
6	F	145	PHE	CA-C	-5.41	1.46	1.52
8	1	86	GLN	N-CA	-5.41	1.39	1.46
19	Z	460	ASP	C-N	-5.41	1.26	1.33
27	H	117	GLN	CA-C	5.41	1.60	1.52
28	I	307	ARG	CA-CB	5.41	1.61	1.53
23	Q	135	SER	CA-CB	5.41	1.61	1.53
6	F	224	TYR	CA-CB	5.41	1.60	1.53
10	3	122	CYS	C-N	5.41	1.41	1.33
14	7	68	ALA	CA-C	5.41	1.59	1.52
27	H	63	THR	C-N	5.41	1.41	1.33
5	E	141	LEU	CA-C	-5.41	1.46	1.52
16	V	113	HIS	ND1-CE1	5.41	1.38	1.32
26	O	240	PHE	N-CA	-5.41	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	I	311	GLU	C-N	5.41	1.41	1.33
28	I	361	LYS	C-N	5.41	1.41	1.33
4	D	115	ARG	N-CA	5.41	1.52	1.46
4	D	144	PHE	C-N	5.41	1.41	1.33
10	3	23	ALA	CA-C	-5.41	1.45	1.52
15	W	69	GLY	C-N	5.41	1.41	1.33
21	S	497	TYR	C-N	5.41	1.41	1.33
3	C	206	LEU	CA-CB	5.40	1.62	1.53
4	D	149	ARG	CA-C	-5.40	1.46	1.52
27	H	353	HIS	N-CA	-5.40	1.39	1.46
28	I	316	LEU	CA-C	-5.40	1.45	1.52
19	Z	645	ASP	C-N	5.40	1.41	1.34
26	O	166	ILE	C-N	5.40	1.40	1.32
3	C	82	ASP	C-O	5.40	1.30	1.24
3	C	145	PHE	C-N	5.40	1.40	1.33
19	Z	30	GLY	CA-C	5.40	1.58	1.52
19	Z	747	GLN	C-N	5.40	1.41	1.33
23	Q	155	ARG	CZ-NH2	5.40	1.40	1.33
29	K	384	MET	C-N	5.40	1.41	1.33
30	L	291	MET	N-CA	-5.40	1.39	1.46
10	3	135	ASP	CA-C	-5.40	1.46	1.52
23	Q	375	HIS	CB-CG	5.40	1.57	1.50
1	A	243	ALA	C-N	5.39	1.41	1.33
4	D	89	VAL	N-CA	-5.39	1.40	1.46
8	1	39	VAL	CA-C	-5.39	1.46	1.52
22	P	377	ARG	CD-NE	5.39	1.53	1.46
24	R	181	LYS	C-N	5.39	1.40	1.33
21	S	304	THR	N-CA	-5.39	1.39	1.46
28	I	87	PRO	CA-CB	5.39	1.61	1.53
31	M	337	ARG	NE-CZ	5.39	1.39	1.33
6	F	157	ARG	NE-CZ	5.39	1.39	1.33
11	4	125	ALA	C-N	5.39	1.41	1.33
24	R	18	ARG	CA-CB	-5.39	1.46	1.53
7	G	72	ARG	C-O	-5.39	1.16	1.24
11	4	9	GLY	C-N	5.39	1.40	1.33
19	Z	79	ARG	CA-C	-5.39	1.46	1.52
19	Z	516	GLY	C-N	5.39	1.40	1.34
21	S	264	GLU	CA-C	-5.39	1.45	1.52
22	P	155	GLN	C-O	-5.39	1.17	1.24
23	Q	61	GLY	C-N	5.39	1.40	1.33
25	U	160	SER	N-CA	-5.39	1.39	1.46
29	K	99	ASN	N-CA	-5.39	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	M	228	MET	N-CA	-5.39	1.39	1.46
1	A	207	SER	C-N	5.38	1.41	1.33
2	B	161	THR	CA-C	-5.38	1.46	1.52
3	C	62	SER	CA-C	-5.38	1.45	1.52
17	T	121	ARG	CZ-NH2	5.38	1.40	1.33
20	N	11	LEU	CA-CB	5.38	1.61	1.53
20	N	521	LEU	CB-CG	5.38	1.64	1.53
25	U	114	ARG	CZ-NH2	5.38	1.40	1.33
4	D	5	ARG	CZ-NH1	5.38	1.40	1.32
9	2	120	VAL	CA-CB	-5.38	1.47	1.54
11	4	98	TYR	N-CA	-5.38	1.39	1.46
14	7	143	ARG	CZ-NH2	5.38	1.40	1.33
27	H	287	ASP	C-N	5.38	1.40	1.33
15	W	175	PRO	CA-CB	5.38	1.60	1.53
20	N	443	LEU	CA-C	5.38	1.59	1.52
21	S	197	ARG	CD-NE	5.38	1.53	1.46
23	Q	131	ALA	CA-C	-5.38	1.45	1.52
24	R	101	ARG	CA-C	-5.38	1.46	1.52
27	H	184	ILE	C-O	-5.38	1.17	1.24
19	Z	770	HIS	CE1-NE2	-5.38	1.27	1.32
23	Q	260	MET	C-N	5.38	1.41	1.33
27	H	49	GLU	CA-C	-5.38	1.45	1.52
27	H	95	VAL	C-N	5.38	1.40	1.33
20	N	616	ARG	NE-CZ	5.37	1.39	1.33
30	L	207	CYS	CA-CB	5.37	1.62	1.53
30	L	293	THR	CA-C	-5.37	1.46	1.52
4	D	38	ARG	CA-C	-5.37	1.46	1.52
4	D	113	ILE	C-N	5.37	1.41	1.33
26	O	319	LEU	CB-CG	5.37	1.64	1.53
31	M	412	ARG	CD-NE	5.37	1.53	1.46
17	T	264	ASP	N-CA	-5.37	1.40	1.46
10	3	66	ARG	CZ-NH1	5.37	1.40	1.32
20	N	557	TYR	N-CA	-5.37	1.40	1.46
31	M	144	ASP	N-CA	-5.37	1.38	1.45
19	Z	358	PHE	C-N	5.37	1.41	1.33
20	N	343	ILE	C-N	5.37	1.40	1.33
6	F	152	ASN	CA-CB	5.37	1.61	1.53
9	2	225	LYS	C-N	5.37	1.40	1.33
19	Z	72	ARG	CZ-NH2	5.37	1.40	1.33
20	N	494	TYR	C-O	5.37	1.30	1.24
20	N	556	MET	CA-C	-5.37	1.45	1.52
23	Q	97	LEU	N-CA	-5.37	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	I	303	ARG	CZ-NH1	5.37	1.40	1.32
30	L	19	ARG	NE-CZ	5.37	1.39	1.33
2	B	221	LEU	CA-C	-5.36	1.45	1.52
19	Z	214	VAL	CA-C	-5.36	1.46	1.52
20	N	213	PHE	N-CA	-5.36	1.39	1.46
23	Q	206	LEU	C-N	5.36	1.41	1.33
24	R	298	GLU	C-O	-5.36	1.17	1.24
27	H	355	PHE	CA-C	-5.36	1.45	1.52
2	B	24	TYR	CA-CB	5.36	1.62	1.53
24	R	8	GLU	CA-C	5.36	1.59	1.52
24	R	168	ILE	CA-CB	-5.36	1.47	1.54
25	U	209	ARG	CD-NE	5.36	1.53	1.46
17	T	330	ASP	C-N	5.36	1.40	1.33
19	Z	334	ALA	CA-C	5.36	1.59	1.52
19	Z	882	LEU	N-CA	-5.36	1.39	1.46
22	P	299	ILE	C-N	5.36	1.40	1.34
25	U	140	SER	CA-CB	5.36	1.60	1.53
32	J	315	ILE	CA-C	-5.36	1.46	1.52
2	B	138	GLY	N-CA	-5.36	1.37	1.45
17	T	230	LYS	C-N	5.36	1.41	1.33
25	U	154	THR	C-O	-5.36	1.17	1.24
13	6	231	ARG	NE-CZ	5.35	1.39	1.33
9	2	116	LEU	N-CA	-5.35	1.39	1.46
12	5	149	TYR	N-CA	-5.35	1.39	1.46
19	Z	647	GLY	C-N	5.35	1.41	1.33
32	J	312	ASP	CA-CB	-5.35	1.45	1.53
10	3	17	LYS	N-CA	-5.35	1.39	1.45
16	V	118	PHE	CA-CB	5.35	1.62	1.53
7	G	91	ILE	CA-CB	-5.35	1.47	1.54
25	U	90	ARG	CD-NE	5.35	1.53	1.46
31	M	43	GLU	C-N	5.35	1.40	1.33
9	2	237	LYS	C-N	5.35	1.41	1.33
14	7	88	ARG	CZ-NH2	5.35	1.40	1.33
19	Z	863	THR	CA-C	-5.35	1.45	1.52
27	H	101	ILE	C-N	5.35	1.41	1.33
32	J	372	ARG	CZ-NH1	5.35	1.40	1.32
13	6	178	ASN	CA-CB	5.35	1.61	1.53
20	N	673	GLU	CA-CB	5.35	1.61	1.53
17	T	340	ARG	CZ-NH1	5.34	1.40	1.32
20	N	154	ALA	CA-C	-5.34	1.45	1.52
20	N	715	LYS	CA-C	5.34	1.59	1.52
25	U	72	HIS	N-CA	5.34	1.52	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	O	99	LYS	N-CA	-5.34	1.39	1.46
30	L	292	ALA	N-CA	-5.34	1.39	1.46
5	E	227	HIS	CA-C	-5.34	1.46	1.52
13	6	73	LEU	CA-C	-5.34	1.46	1.52
31	M	259	LEU	CA-C	-5.34	1.45	1.52
32	J	6	PRO	N-CD	-5.34	1.40	1.47
32	J	248	MET	CA-C	-5.34	1.46	1.52
19	Z	646	MET	CA-C	-5.34	1.45	1.52
22	P	195	ALA	C-N	5.34	1.40	1.34
22	P	236	HIS	ND1-CE1	5.34	1.37	1.32
23	Q	32	LYS	C-N	5.34	1.41	1.33
23	Q	307	THR	N-CA	-5.34	1.40	1.46
32	J	171	HIS	CB-CG	5.34	1.57	1.50
9	2	210	LEU	C-N	5.34	1.41	1.33
12	5	231	GLY	C-N	5.34	1.41	1.33
16	V	234	TYR	N-CA	5.34	1.52	1.46
17	T	349	LEU	C-N	5.34	1.41	1.33
29	K	143	LEU	N-CA	5.34	1.50	1.45
7	G	93	ARG	CD-NE	5.34	1.53	1.46
14	7	221	TYR	CA-C	-5.34	1.46	1.52
1	A	223	GLU	C-N	5.34	1.39	1.33
5	E	177	ALA	N-CA	5.34	1.52	1.46
12	5	212	TYR	N-CA	5.34	1.52	1.46
29	K	166	ASP	C-N	5.34	1.40	1.33
12	5	143	ALA	C-N	5.33	1.41	1.33
2	B	63	HIS	CD2-NE2	5.33	1.43	1.37
22	P	140	ILE	N-CA	-5.33	1.40	1.46
30	L	29	LYS	C-N	5.33	1.41	1.33
12	5	132	ARG	CA-C	-5.33	1.45	1.52
20	N	47	VAL	N-CA	-5.33	1.40	1.46
20	N	225	ASP	N-CA	5.33	1.52	1.46
22	P	339	ASP	C-N	5.33	1.40	1.33
1	A	23	TYR	C-N	5.33	1.41	1.33
1	A	211	LYS	C-N	-5.33	1.28	1.34
15	W	108	ARG	CZ-NH2	5.33	1.40	1.33
17	T	93	ALA	CA-C	-5.33	1.45	1.52
21	S	71	ILE	CA-C	-5.33	1.46	1.52
28	I	281	ILE	N-CA	-5.33	1.40	1.46
29	K	366	ARG	CD-NE	5.33	1.53	1.46
30	L	129	VAL	N-CA	5.33	1.52	1.46
15	W	107	MET	N-CA	5.33	1.52	1.46
19	Z	286	LYS	N-CA	-5.33	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	O	349	MET	C-N	5.33	1.41	1.33
31	M	83	ILE	CA-C	-5.33	1.45	1.52
3	C	123	GLN	C-N	5.33	1.41	1.33
4	D	48	LYS	N-CA	-5.33	1.39	1.46
1	A	243	ALA	CA-C	-5.32	1.46	1.52
4	D	89	VAL	CA-C	-5.32	1.46	1.52
4	D	128	ASN	CA-CB	5.32	1.62	1.53
8	1	230	VAL	C-N	5.32	1.41	1.33
9	2	115	ARG	CD-NE	5.32	1.53	1.46
10	3	106	GLU	CA-C	-5.32	1.47	1.52
18	Y	47	ASN	N-CA	5.32	1.56	1.46
20	N	658	VAL	CA-CB	5.32	1.61	1.54
22	P	322	GLU	C-N	5.32	1.41	1.33
30	L	402	PRO	N-CD	-5.32	1.40	1.47
32	J	151	ILE	N-CA	-5.32	1.40	1.46
11	4	37	LYS	CA-C	-5.32	1.46	1.52
16	V	221	HIS	CA-C	-5.32	1.46	1.52
19	Z	198	HIS	CG-ND1	5.32	1.44	1.38
26	O	322	GLY	C-N	5.32	1.40	1.33
27	H	361	SER	CA-C	5.32	1.59	1.52
16	V	205	ILE	CA-C	-5.32	1.46	1.52
23	Q	350	ILE	CA-C	-5.32	1.46	1.52
5	E	183	GLU	N-CA	-5.32	1.40	1.46
8	1	133	ILE	CA-CB	-5.32	1.47	1.53
9	2	132	ARG	C-O	-5.32	1.17	1.24
14	7	226	ARG	N-CA	-5.32	1.39	1.45
20	N	548	LEU	N-CA	5.32	1.52	1.46
2	B	149	SER	CA-CB	5.32	1.63	1.53
6	F	95	SER	CA-C	-5.32	1.45	1.52
23	Q	126	ARG	CZ-NH1	5.32	1.40	1.32
7	G	153	ASP	C-N	5.31	1.39	1.34
19	Z	181	ARG	N-CA	-5.31	1.39	1.46
32	J	108	VAL	CA-C	-5.31	1.46	1.52
4	D	9	VAL	CA-C	-5.31	1.46	1.52
4	D	206	GLN	CA-CB	5.31	1.60	1.53
5	E	30	GLY	C-N	5.31	1.41	1.33
14	7	106	TYR	CA-CB	5.31	1.61	1.53
26	O	339	ARG	NE-CZ	5.31	1.38	1.33
31	M	229	TYR	CA-CB	5.31	1.65	1.54
1	A	23	TYR	C-O	-5.31	1.18	1.24
30	L	199	ARG	CA-C	5.31	1.59	1.52
8	1	84	ASP	C-N	5.31	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	3	84	PRO	C-N	5.31	1.41	1.33
22	P	190	MET	N-CA	-5.31	1.39	1.46
7	G	242	GLU	N-CA	-5.31	1.39	1.46
17	T	342	VAL	CA-C	-5.31	1.46	1.52
22	P	362	ASN	CA-CB	5.31	1.61	1.53
29	K	80	LYS	CA-CB	5.31	1.62	1.53
3	C	59	VAL	C-N	5.31	1.40	1.33
8	1	46	VAL	C-O	-5.31	1.18	1.23
6	F	71	GLY	C-N	5.30	1.40	1.33
11	4	121	LEU	CA-CB	5.30	1.61	1.53
17	T	278	ILE	CA-CB	-5.30	1.47	1.54
32	J	161	ILE	CA-C	-5.30	1.46	1.52
20	N	492	ASP	CA-C	-5.30	1.45	1.52
8	1	55	THR	CA-C	-5.30	1.46	1.52
10	3	148	GLY	C-O	-5.30	1.17	1.23
20	N	78	LEU	N-CA	-5.30	1.40	1.46
21	S	182	LYS	C-N	5.30	1.40	1.33
31	M	299	PHE	N-CA	5.30	1.52	1.46
1	A	47	CYS	CA-C	-5.30	1.46	1.52
20	N	84	ALA	N-CA	-5.30	1.40	1.46
31	M	112	ALA	CA-C	-5.30	1.47	1.53
31	M	190	ASP	C-N	5.30	1.40	1.33
21	S	97	LEU	C-N	5.30	1.40	1.33
4	D	100	HIS	N-CA	-5.30	1.39	1.46
20	N	765	VAL	C-N	5.30	1.40	1.33
4	D	162	TRP	NE1-CE2	-5.29	1.31	1.37
8	1	66	LYS	CA-CB	5.29	1.62	1.53
20	N	673	GLU	C-O	-5.29	1.19	1.24
25	U	176	LEU	CA-CB	5.29	1.61	1.53
32	J	334	ARG	C-N	5.29	1.41	1.33
4	D	123	ARG	C-O	-5.29	1.18	1.24
14	7	236	VAL	CA-CB	-5.29	1.48	1.54
21	S	46	ALA	N-CA	5.29	1.52	1.46
29	K	232	GLY	C-N	5.29	1.40	1.33
29	K	356	GLU	CA-CB	-5.29	1.45	1.53
1	A	11	ARG	CD-NE	5.29	1.53	1.46
26	O	258	GLN	CA-C	5.29	1.59	1.52
4	D	128	ASN	CA-C	-5.29	1.46	1.52
22	P	58	SER	C-N	5.29	1.40	1.33
1	A	46	ASP	CA-CB	5.29	1.61	1.54
3	C	205	LYS	C-N	5.29	1.41	1.33
15	W	94	HIS	ND1-CE1	5.29	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	N	746	ILE	C-N	5.29	1.40	1.33
30	L	104	SER	CA-CB	5.29	1.61	1.53
31	M	200	GLU	CA-CB	5.29	1.61	1.53
13	6	114	ALA	C-N	5.28	1.40	1.33
17	T	232	PRO	CA-C	-5.28	1.44	1.52
26	O	295	GLU	C-N	5.28	1.40	1.33
28	I	373	THR	N-CA	5.28	1.52	1.46
31	M	255	ALA	N-CA	-5.28	1.39	1.46
6	F	46	LEU	CA-CB	5.28	1.61	1.53
19	Z	138	GLU	C-N	5.28	1.40	1.33
21	S	252	ARG	CZ-NH1	5.28	1.40	1.32
29	K	196	ILE	C-N	5.28	1.42	1.33
6	F	80	ASP	N-CA	-5.28	1.39	1.46
14	7	138	ARG	CA-CB	5.28	1.61	1.53
15	W	84	ILE	CA-CB	-5.28	1.48	1.54
20	N	607	VAL	CA-CB	-5.28	1.47	1.54
26	O	101	ARG	N-CA	-5.28	1.39	1.46
27	H	45	ILE	CA-CB	5.28	1.60	1.54
12	5	179	ARG	NE-CZ	5.28	1.38	1.33
13	6	76	LYS	C-N	5.28	1.41	1.33
17	T	314	GLY	CA-C	-5.28	1.44	1.51
23	Q	58	ALA	C-N	5.28	1.41	1.33
28	I	63	LEU	CA-CB	5.28	1.61	1.53
28	I	103	ARG	CD-NE	5.28	1.53	1.46
8	1	211	ALA	CA-C	-5.28	1.46	1.52
12	5	120	ARG	CD-NE	5.28	1.53	1.46
12	5	206	LEU	CA-C	-5.28	1.46	1.52
14	7	70	MET	C-N	5.28	1.40	1.33
20	N	111	GLN	CA-CB	5.28	1.61	1.53
24	R	201	PHE	C-N	5.28	1.41	1.33
24	R	225	TYR	CA-C	-5.28	1.46	1.52
27	H	191	VAL	C-N	5.28	1.40	1.33
27	H	274	PHE	CA-CB	5.28	1.60	1.53
1	A	91	VAL	CA-CB	5.28	1.61	1.54
5	E	162	PHE	CA-CB	5.28	1.62	1.53
20	N	835	ILE	N-CA	-5.28	1.40	1.46
21	S	96	MET	N-CA	-5.28	1.39	1.46
25	U	252	LYS	CA-C	-5.28	1.46	1.52
31	M	286	ILE	C-O	-5.28	1.18	1.24
10	3	183	MET	CA-C	-5.27	1.46	1.52
15	W	88	THR	C-N	5.27	1.40	1.33
22	P	418	PRO	CA-C	-5.27	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	4	191	LEU	CA-C	-5.27	1.46	1.52
27	H	71	GLY	CA-C	-5.27	1.44	1.51
3	C	190	LEU	C-O	-5.27	1.17	1.24
11	4	28	MET	C-N	5.27	1.40	1.33
21	S	173	ASN	C-O	-5.27	1.17	1.24
22	P	38	GLY	C-N	5.27	1.40	1.33
25	U	157	HIS	ND1-CE1	5.27	1.37	1.32
30	L	354	GLY	CA-C	5.27	1.57	1.52
22	P	185	PHE	CA-C	-5.27	1.46	1.52
23	Q	345	VAL	C-N	5.27	1.40	1.33
24	R	214	MET	CA-CB	5.27	1.62	1.53
25	U	81	MET	CA-C	-5.27	1.46	1.52
29	K	361	GLU	N-CA	5.27	1.52	1.46
3	C	171	ALA	CA-C	-5.27	1.46	1.52
19	Z	887	PHE	C-N	5.27	1.41	1.33
8	1	39	VAL	N-CA	-5.26	1.40	1.46
30	L	101	LEU	CA-C	-5.26	1.46	1.52
32	J	129	ASN	CA-C	-5.26	1.46	1.52
16	V	221	HIS	CD2-NE2	5.26	1.43	1.37
24	R	124	PHE	CA-C	-5.26	1.46	1.52
3	C	30	HIS	C-N	5.26	1.40	1.33
11	4	52	ASP	N-CA	-5.26	1.39	1.46
20	N	474	ARG	NE-CZ	5.26	1.38	1.33
30	L	44	ARG	CZ-NH1	5.26	1.40	1.32
6	F	61	LYS	CA-CB	5.26	1.62	1.53
16	V	175	ARG	CD-NE	5.26	1.53	1.46
19	Z	339	ILE	C-N	5.26	1.40	1.33
20	N	199	ARG	C-O	-5.26	1.18	1.24
20	N	474	ARG	CZ-NH2	5.26	1.40	1.33
10	3	191	GLU	CA-C	-5.26	1.46	1.52
5	E	105	GLU	CA-C	-5.26	1.46	1.52
7	G	205	VAL	C-N	5.26	1.41	1.33
14	7	222	TYR	C-N	5.26	1.40	1.33
26	O	362	SER	C-N	5.26	1.41	1.34
27	H	214	LEU	C-N	5.25	1.40	1.33
9	2	113	THR	C-N	5.25	1.40	1.33
19	Z	322	SER	CA-CB	5.25	1.62	1.53
23	Q	6	VAL	C-N	5.25	1.40	1.33
1	A	68	HIS	ND1-CE1	5.25	1.37	1.32
3	C	4	ARG	CZ-NH1	5.25	1.40	1.32
17	T	304	ASP	CA-C	-5.25	1.46	1.52
23	Q	279	TYR	C-N	5.25	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	Q	341	PRO	N-CD	5.25	1.55	1.47
31	M	441	TYR	N-CA	-5.25	1.40	1.46
7	G	228	VAL	N-CA	-5.25	1.40	1.46
2	B	53	LYS	C-N	5.25	1.41	1.33
28	I	410	ARG	N-CA	5.25	1.52	1.46
8	1	225	ASP	C-N	5.25	1.41	1.33
15	W	29	GLN	CA-C	-5.25	1.45	1.52
17	T	192	HIS	ND1-CE1	5.25	1.37	1.32
19	Z	85	SER	CA-CB	5.25	1.62	1.53
22	P	216	GLU	CA-CB	5.25	1.61	1.53
26	O	44	PHE	CA-CB	5.25	1.61	1.53
29	K	239	TYR	CA-CB	5.25	1.60	1.53
2	B	49	GLU	CA-C	-5.25	1.46	1.52
5	E	23	GLN	C-N	5.24	1.40	1.33
20	N	57	ARG	CZ-NH2	5.24	1.40	1.33
21	S	253	ASN	CA-C	-5.24	1.46	1.52
22	P	83	LEU	N-CA	-5.24	1.40	1.46
23	Q	327	TYR	CA-CB	5.24	1.61	1.53
25	U	135	THR	CA-C	-5.24	1.46	1.52
25	U	200	GLY	C-N	5.24	1.40	1.33
31	M	372	HIS	ND1-CE1	5.24	1.37	1.32
32	J	302	ASP	N-CA	-5.24	1.39	1.45
19	Z	121	PHE	C-N	5.24	1.40	1.33
32	J	3	LEU	C-N	5.24	1.40	1.33
20	N	194	ARG	N-CA	-5.24	1.40	1.46
29	K	216	ALA	CA-CB	5.24	1.61	1.53
30	L	172	LEU	N-CA	-5.24	1.40	1.46
13	6	207	ILE	N-CA	5.24	1.52	1.46
21	S	193	THR	N-CA	-5.24	1.39	1.46
28	I	272	ARG	CZ-NH1	5.24	1.40	1.32
30	L	227	ARG	NE-CZ	5.24	1.38	1.33
14	7	218	ARG	CA-C	-5.24	1.46	1.52
17	T	292	ARG	NE-CZ	5.24	1.38	1.33
26	O	108	ASP	C-N	5.24	1.41	1.33
27	H	188	ARG	NE-CZ	5.24	1.38	1.33
30	L	189	PRO	N-CD	-5.24	1.40	1.47
22	P	237	GLU	C-O	5.24	1.30	1.24
22	P	372	ARG	C-N	5.24	1.40	1.33
30	L	284	LEU	N-CA	-5.24	1.40	1.46
7	G	19	GLY	CA-C	-5.23	1.44	1.51
24	R	128	TYR	CB-CG	-5.23	1.40	1.51
29	K	248	ARG	CD-NE	5.23	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	E	96	THR	C-N	-5.23	1.26	1.34
5	E	158	PRO	CA-CB	-5.23	1.46	1.53
7	G	67	LEU	N-CA	-5.23	1.39	1.46
19	Z	632	LYS	C-N	5.23	1.40	1.33
31	M	234	THR	CA-CB	5.23	1.61	1.53
32	J	21	ARG	NE-CZ	5.23	1.38	1.33
32	J	380	GLN	CA-C	5.23	1.59	1.52
1	A	26	GLU	CA-C	-5.23	1.45	1.52
1	A	202	LEU	CA-CB	5.23	1.61	1.53
3	C	196	VAL	CA-C	5.23	1.59	1.52
12	5	239	ARG	C-O	-5.23	1.18	1.24
14	7	90	ASN	CG-ND2	5.23	1.44	1.33
16	V	198	ARG	CD-NE	5.23	1.53	1.46
19	Z	300	ARG	CZ-NH1	5.23	1.40	1.32
20	N	537	GLN	N-CA	-5.23	1.40	1.46
24	R	370	ILE	CA-CB	-5.23	1.48	1.54
31	M	334	ALA	C-N	5.23	1.40	1.33
7	G	61	GLU	C-N	5.23	1.41	1.33
20	N	435	SER	CA-CB	5.23	1.61	1.53
23	Q	331	LEU	N-CA	-5.23	1.40	1.46
12	5	228	TYR	C-N	5.23	1.40	1.33
20	N	37	GLU	CA-C	-5.23	1.46	1.52
5	E	93	ARG	CD-NE	5.22	1.53	1.46
17	T	180	ASP	N-CA	-5.22	1.39	1.45
19	Z	891	THR	C-N	-5.22	1.29	1.33
25	U	107	ALA	N-CA	-5.22	1.40	1.46
32	J	143	VAL	CA-CB	-5.22	1.47	1.54
2	B	80	GLY	N-CA	-5.22	1.37	1.44
7	G	221	THR	C-N	5.22	1.41	1.33
16	V	238	CYS	N-CA	-5.22	1.40	1.46
17	T	154	GLY	N-CA	-5.22	1.38	1.45
3	C	88	ASN	CA-CB	5.22	1.61	1.53
22	P	186	ILE	N-CA	-5.22	1.40	1.46
4	D	111	GLU	C-N	5.22	1.40	1.33
20	N	113	VAL	CA-CB	5.22	1.60	1.54
20	N	415	HIS	CG-CD2	5.22	1.41	1.35
1	A	16	PHE	CA-C	-5.22	1.46	1.53
15	W	62	THR	CA-CB	5.22	1.63	1.53
20	N	345	ASN	CA-CB	5.22	1.62	1.53
23	Q	416	ASN	C-N	5.22	1.41	1.34
8	1	177	ARG	CZ-NH2	5.22	1.40	1.33
11	4	38	MET	C-N	5.22	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	N	176	MET	C-O	-5.22	1.18	1.24
22	P	50	LEU	N-CA	-5.22	1.40	1.46
23	Q	103	THR	C-N	5.22	1.40	1.33
24	R	306	GLN	N-CA	-5.22	1.40	1.46
13	6	168	ALA	CA-C	-5.21	1.45	1.52
15	W	81	LYS	N-CA	-5.21	1.39	1.46
16	V	130	GLN	CA-CB	5.21	1.61	1.53
21	S	95	ARG	CZ-NH1	5.21	1.40	1.32
30	L	172	LEU	CB-CG	5.21	1.63	1.53
2	B	65	VAL	N-CA	-5.21	1.40	1.46
15	W	43	SER	N-CA	-5.21	1.40	1.46
19	Z	517	VAL	C-N	5.21	1.40	1.33
5	E	145	GLY	N-CA	5.21	1.51	1.45
9	2	135	GLY	C-N	5.21	1.41	1.33
11	4	126	LYS	CA-CB	5.21	1.60	1.53
16	V	113	HIS	C-O	-5.21	1.17	1.23
16	V	196	LEU	C-O	-5.21	1.18	1.24
19	Z	138	GLU	N-CA	-5.21	1.40	1.46
19	Z	152	ALA	C-N	5.21	1.40	1.33
21	S	459	MET	N-CA	-5.21	1.39	1.46
22	P	137	TYR	N-CA	-5.21	1.40	1.46
26	O	17	GLY	CA-C	-5.21	1.44	1.51
26	O	104	VAL	N-CA	5.21	1.52	1.46
29	K	364	VAL	CA-C	-5.21	1.46	1.52
32	J	99	VAL	C-N	5.21	1.40	1.33
5	E	236	GLU	C-O	5.21	1.30	1.24
24	R	117	LYS	CA-C	-5.21	1.46	1.52
1	A	132	ARG	CA-CB	5.21	1.62	1.53
6	F	233	LEU	N-CA	-5.21	1.39	1.46
12	5	120	ARG	CA-CB	5.21	1.61	1.53
19	Z	440	ILE	CA-CB	-5.21	1.47	1.54
20	N	893	SER	N-CA	5.21	1.52	1.46
11	4	15	VAL	C-O	-5.21	1.18	1.24
16	V	46	ARG	NE-CZ	5.21	1.38	1.33
19	Z	614	HIS	CE1-NE2	5.21	1.37	1.32
24	R	358	ARG	NE-CZ	5.21	1.38	1.33
24	R	359	PRO	N-CA	-5.21	1.41	1.47
25	U	164	ALA	N-CA	-5.21	1.39	1.46
30	L	319	ASN	CA-C	-5.21	1.46	1.53
5	E	14	THR	CA-C	-5.21	1.46	1.52
26	O	132	LYS	N-CA	-5.21	1.40	1.46
19	Z	142	TYR	CA-C	-5.20	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Z	656	GLY	C-N	5.20	1.40	1.33
32	J	39	SER	CA-C	5.20	1.59	1.52
25	U	62	ASP	CA-C	-5.20	1.46	1.52
19	Z	386	GLY	C-N	5.20	1.40	1.33
20	N	495	ASP	C-N	5.20	1.40	1.33
7	G	76	MET	CA-C	-5.20	1.46	1.52
14	7	134	SER	CA-C	-5.20	1.46	1.52
19	Z	414	LEU	CA-CB	5.20	1.61	1.53
28	I	312	LEU	CA-CB	5.20	1.61	1.53
6	F	167	SER	N-CA	-5.20	1.40	1.46
17	T	288	ALA	CA-C	-5.20	1.46	1.52
19	Z	381	VAL	CA-CB	-5.20	1.48	1.54
23	Q	394	ASP	N-CA	-5.20	1.38	1.45
19	Z	355	ASN	N-CA	-5.19	1.40	1.46
20	N	785	PRO	C-N	5.19	1.41	1.33
19	Z	198	HIS	C-N	5.19	1.40	1.33
22	P	188	GLU	CA-CB	5.19	1.61	1.53
27	H	235	ALA	N-CA	5.19	1.51	1.45
22	P	275	ILE	CA-CB	-5.19	1.47	1.54
23	Q	336	ILE	CA-C	-5.19	1.46	1.52
23	Q	20	ARG	NE-CZ	5.19	1.38	1.33
29	K	167	ILE	C-O	-5.19	1.18	1.24
32	J	88	LYS	C-N	5.19	1.40	1.33
7	G	13	SER	CA-CB	5.19	1.60	1.53
8	1	233	SER	C-N	5.19	1.40	1.33
21	S	250	LEU	CA-C	-5.19	1.46	1.52
23	Q	332	GLU	CA-C	-5.18	1.46	1.52
29	K	96	VAL	N-CA	-5.18	1.40	1.46
1	A	245	ARG	NE-CZ	5.18	1.38	1.33
19	Z	509	LYS	N-CA	5.18	1.52	1.46
20	N	178	ALA	C-N	5.18	1.40	1.33
20	N	411	ILE	C-N	5.18	1.39	1.33
20	N	580	ARG	CZ-NH1	5.18	1.40	1.32
21	S	278	ASN	CA-CB	5.18	1.61	1.53
26	O	149	THR	C-N	5.18	1.40	1.33
31	M	413	ARG	CA-CB	5.18	1.61	1.53
30	L	199	ARG	CZ-NH1	5.18	1.40	1.32
12	5	64	ALA	CA-CB	5.18	1.61	1.53
13	6	65	ARG	CD-NE	5.18	1.53	1.46
14	7	249	ALA	C-N	5.18	1.41	1.33
21	S	210	HIS	ND1-CE1	5.18	1.37	1.32
24	R	358	ARG	CA-CB	5.18	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	O	196	ARG	CZ-NH1	5.18	1.40	1.32
26	O	244	ASP	C-N	5.18	1.40	1.33
30	L	24	GLN	CA-CB	5.18	1.61	1.53
31	M	358	PRO	C-O	-5.18	1.16	1.23
8	1	107	PRO	C-O	-5.18	1.17	1.24
15	W	32	ALA	C-N	5.18	1.40	1.33
19	Z	282	PHE	N-CA	-5.18	1.40	1.46
20	N	919	GLU	CA-C	-5.18	1.46	1.52
30	L	294	ASN	CA-CB	5.18	1.61	1.53
7	G	34	SER	C-N	5.17	1.41	1.33
7	G	169	ALA	CA-CB	5.17	1.62	1.53
11	4	32	HIS	CA-C	-5.17	1.45	1.52
17	T	286	LEU	CA-C	-5.17	1.45	1.52
20	N	685	GLN	C-N	5.17	1.40	1.33
20	N	756	HIS	ND1-CE1	5.17	1.37	1.32
24	R	332	GLN	CA-C	-5.17	1.46	1.52
20	N	475	HIS	CA-C	-5.17	1.46	1.52
24	R	220	VAL	C-O	-5.17	1.18	1.24
30	L	153	SER	CA-C	5.17	1.59	1.52
32	J	374	ARG	CA-C	-5.17	1.46	1.53
20	N	10	SER	C-N	5.17	1.40	1.33
20	N	198	LEU	CA-C	-5.17	1.46	1.52
22	P	98	LYS	C-N	5.17	1.40	1.33
8	1	108	LEU	CA-C	-5.17	1.46	1.53
10	3	198	ARG	NE-CZ	5.17	1.38	1.33
21	S	396	HIS	CD2-NE2	5.17	1.43	1.37
2	B	210	VAL	CA-CB	-5.17	1.46	1.55
14	7	74	TYR	CA-C	-5.17	1.45	1.53
14	7	247	LEU	N-CA	-5.17	1.39	1.46
19	Z	452	ASN	CA-CB	5.17	1.62	1.53
22	P	96	GLN	CA-C	-5.17	1.45	1.52
2	B	168	VAL	CA-C	-5.17	1.46	1.52
3	C	224	VAL	CA-C	5.17	1.58	1.52
19	Z	365	VAL	CA-CB	-5.17	1.49	1.54
20	N	3	THR	CA-C	-5.17	1.46	1.52
24	R	89	GLU	CA-C	5.17	1.59	1.52
26	O	218	MET	N-CA	-5.17	1.40	1.46
27	H	94	GLN	N-CA	5.17	1.52	1.46
32	J	365	GLU	C-O	-5.17	1.18	1.24
20	N	343	ILE	CA-C	-5.17	1.46	1.52
7	G	153	ASP	N-CA	-5.16	1.40	1.46
7	G	173	ALA	C-N	5.16	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	4	141	SER	N-CA	-5.16	1.39	1.46
12	5	113	PHE	CA-CB	5.16	1.61	1.53
17	T	315	PRO	N-CD	-5.16	1.40	1.47
22	P	232	GLN	C-N	5.16	1.40	1.33
31	M	111	GLY	C-N	5.16	1.38	1.33
6	F	164	ARG	CD-NE	5.16	1.53	1.46
6	F	217	LYS	N-CA	-5.16	1.40	1.46
21	S	463	TYR	CA-CB	5.16	1.59	1.53
32	J	132	ASP	CA-CB	5.16	1.61	1.53
11	4	85	ARG	CZ-NH2	5.16	1.40	1.33
12	5	61	THR	CA-C	5.16	1.59	1.52
19	Z	405	HIS	ND1-CE1	5.16	1.37	1.32
22	P	156	ASN	CA-C	-5.16	1.46	1.53
26	O	9	GLN	CA-C	5.16	1.59	1.52
25	U	19	VAL	N-CA	-5.16	1.40	1.46
26	O	230	ARG	CD-NE	5.16	1.53	1.46
27	H	39	SER	C-N	5.16	1.40	1.33
28	I	119	ASN	CA-CB	5.16	1.61	1.53
5	E	173	ALA	CA-C	-5.16	1.46	1.52
9	2	79	PHE	C-N	5.16	1.39	1.33
16	V	46	ARG	N-CA	-5.16	1.40	1.46
22	P	169	LEU	CA-C	-5.16	1.46	1.52
28	I	277	HIS	CG-CD2	-5.16	1.30	1.35
32	J	142	LYS	N-CA	-5.16	1.39	1.46
19	Z	574	GLU	N-CA	-5.15	1.40	1.46
17	T	132	LEU	CB-CG	5.15	1.63	1.53
23	Q	206	LEU	N-CA	-5.15	1.40	1.46
24	R	53	TYR	CZ-OH	5.15	1.48	1.38
25	U	220	LEU	CA-CB	5.15	1.60	1.54
26	O	165	THR	CA-C	5.15	1.59	1.52
26	O	327	VAL	CA-CB	5.15	1.61	1.54
29	K	61	ILE	C-N	5.15	1.40	1.33
32	J	218	GLU	CA-C	-5.15	1.47	1.53
12	5	111	CYS	CA-CB	5.15	1.61	1.53
17	T	306	ALA	CA-C	5.15	1.59	1.52
19	Z	283	THR	CA-C	5.15	1.59	1.52
25	U	229	GLN	CA-CB	5.15	1.61	1.53
8	1	111	THR	C-N	5.15	1.40	1.33
11	4	51	GLY	CA-C	-5.15	1.44	1.51
11	4	180	VAL	N-CA	-5.15	1.40	1.46
20	N	601	ARG	CA-CB	5.15	1.61	1.53
21	S	297	GLU	N-CA	-5.15	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	2	230	ARG	CD-NE	5.15	1.53	1.46
17	T	321	PHE	CA-CB	5.15	1.61	1.53
19	Z	448	CYS	C-O	-5.15	1.18	1.24
22	P	30	GLU	N-CA	-5.15	1.40	1.46
27	H	217	PRO	C-N	-5.15	1.27	1.33
10	3	58	THR	CA-CB	5.15	1.62	1.53
30	L	362	THR	N-CA	5.15	1.52	1.46
4	D	178	LEU	C-N	5.14	1.40	1.33
13	6	225	VAL	N-CA	-5.14	1.40	1.46
19	Z	144	LEU	CA-C	5.14	1.59	1.52
20	N	370	VAL	C-N	5.14	1.40	1.33
27	H	402	LYS	C-O	-5.14	1.17	1.24
29	K	93	LEU	CA-CB	-5.14	1.45	1.53
32	J	249	ASP	C-N	5.14	1.40	1.33
7	G	86	ARG	CA-C	-5.14	1.46	1.52
13	6	35	ASN	CA-C	-5.14	1.46	1.52
14	7	152	ASN	CA-C	-5.14	1.46	1.52
20	N	572	ARG	NE-CZ	5.14	1.38	1.33
24	R	192	ARG	C-N	5.14	1.40	1.33
27	H	91	GLN	CA-C	-5.14	1.47	1.52
27	H	96	ALA	CA-C	-5.14	1.46	1.52
31	M	42	GLU	C-N	5.14	1.41	1.33
19	Z	399	LEU	N-CA	-5.14	1.40	1.46
21	S	323	THR	C-N	5.14	1.40	1.33
27	H	286	ASP	CA-C	-5.14	1.46	1.52
22	P	65	ARG	NE-CZ	5.14	1.38	1.33
32	J	171	HIS	C-O	-5.14	1.18	1.24
9	2	86	CYS	N-CA	-5.14	1.39	1.45
27	H	383	ALA	CA-C	-5.14	1.46	1.52
25	U	195	VAL	C-O	-5.14	1.17	1.24
13	6	92	THR	CA-C	5.13	1.59	1.52
15	W	17	ARG	CZ-NH2	5.13	1.40	1.33
2	B	100	VAL	CA-CB	-5.13	1.48	1.54
19	Z	738	ASN	C-N	5.13	1.39	1.33
25	U	145	HIS	CE1-NE2	-5.13	1.27	1.32
27	H	413	VAL	N-CA	-5.13	1.40	1.46
28	I	359	LYS	CA-C	5.13	1.59	1.52
32	J	78	ARG	CD-NE	5.13	1.53	1.46
24	R	355	GLU	CA-CB	5.13	1.61	1.53
29	K	366	ARG	C-O	-5.13	1.19	1.24
27	H	132	THR	N-CA	-5.13	1.40	1.46
28	I	81	ASN	CA-CB	5.13	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	I	131	HIS	CA-C	-5.13	1.46	1.52
8	1	88	VAL	N-CA	-5.13	1.40	1.46
23	Q	326	LEU	CB-CG	5.13	1.63	1.53
28	I	439	TYR	CA-C	5.13	1.59	1.52
4	D	245	ASN	CG-ND2	5.12	1.44	1.33
20	N	718	ASN	CA-CB	5.12	1.61	1.53
21	S	382	PHE	C-N	5.12	1.40	1.34
3	C	137	ILE	C-N	5.12	1.39	1.33
8	1	135	GLY	CA-C	-5.12	1.44	1.51
20	N	17	PRO	N-CA	5.12	1.54	1.47
25	U	225	HIS	CA-C	-5.12	1.46	1.52
28	I	154	HIS	C-N	5.12	1.40	1.33
28	I	195	GLN	CA-C	-5.12	1.45	1.52
30	L	131	PRO	C-N	5.12	1.40	1.33
9	2	170	MET	N-CA	-5.12	1.39	1.46
32	J	51	GLU	C-N	5.12	1.40	1.33
1	A	142	GLY	C-N	5.12	1.40	1.33
15	W	87	CYS	CA-CB	5.12	1.61	1.53
19	Z	72	ARG	CA-C	5.12	1.58	1.52
25	U	249	PHE	CA-CB	5.12	1.61	1.53
29	K	417	TYR	N-CA	-5.12	1.39	1.46
4	D	188	GLU	N-CA	-5.12	1.39	1.46
30	L	15	MET	CA-CB	5.12	1.63	1.53
14	7	168	TYR	CA-C	-5.12	1.46	1.52
19	Z	857	GLY	C-N	5.12	1.39	1.33
7	G	145	ASP	CA-C	-5.11	1.45	1.52
13	6	126	ARG	NE-CZ	5.11	1.38	1.33
14	7	210	ARG	NE-CZ	5.11	1.38	1.33
28	I	224	LEU	C-N	5.11	1.39	1.33
31	M	340	ILE	CA-C	-5.11	1.46	1.52
14	7	249	ALA	C-O	-5.11	1.17	1.23
20	N	822	GLU	C-N	5.11	1.40	1.34
2	B	46	LEU	N-CA	-5.11	1.40	1.46
8	1	138	PRO	CA-CB	5.11	1.61	1.53
10	3	66	ARG	CA-CB	5.11	1.61	1.53
27	H	380	SER	C-N	5.11	1.40	1.33
30	L	399	ASP	CA-CB	5.11	1.59	1.53
14	7	180	SER	C-N	5.11	1.40	1.33
19	Z	261	ARG	NE-CZ	5.11	1.38	1.33
24	R	233	ARG	CZ-NH1	5.11	1.40	1.32
31	M	259	LEU	N-CA	5.11	1.52	1.46
9	2	111	LEU	CA-CB	5.11	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	6	51	ALA	CA-C	5.11	1.59	1.52
26	O	154	ARG	CZ-NH2	5.11	1.40	1.33
28	I	391	SER	C-O	-5.11	1.17	1.24
3	C	104	PRO	N-CA	-5.11	1.41	1.47
3	C	197	LEU	CA-C	-5.11	1.45	1.52
13	6	208	SER	N-CA	5.11	1.52	1.46
17	T	320	SER	CA-CB	5.11	1.61	1.53
25	U	26	ILE	C-N	5.11	1.41	1.33
17	T	292	ARG	CD-NE	5.10	1.53	1.46
25	U	102	HIS	C-O	5.10	1.30	1.23
27	H	393	GLY	N-CA	5.10	1.52	1.45
31	M	241	ARG	CD-NE	5.10	1.53	1.46
31	M	290	GLU	C-N	5.10	1.40	1.33
32	J	327	ASP	CA-C	5.10	1.59	1.52
4	D	114	THR	C-N	5.10	1.40	1.33
7	G	9	ASP	CA-C	-5.10	1.45	1.52
19	Z	431	LYS	C-N	5.10	1.40	1.33
22	P	149	LEU	C-N	5.10	1.40	1.33
21	S	209	TYR	C-O	-5.10	1.18	1.24
27	H	396	ALA	CA-C	-5.10	1.46	1.52
3	C	231	LYS	CA-CB	5.10	1.61	1.53
14	7	126	SER	N-CA	-5.10	1.39	1.46
26	O	275	LEU	CA-C	-5.10	1.46	1.52
2	B	144	PRO	C-O	5.10	1.29	1.23
17	T	158	SER	CA-CB	5.10	1.61	1.53
20	N	419	ALA	N-CA	5.10	1.52	1.46
24	R	136	HIS	N-CA	-5.10	1.39	1.46
32	J	377	HIS	ND1-CE1	5.10	1.37	1.32
8	1	162	GLY	N-CA	-5.09	1.40	1.45
11	4	146	TYR	N-CA	-5.09	1.40	1.46
12	5	108	ALA	N-CA	-5.09	1.39	1.46
19	Z	103	TYR	CA-CB	5.09	1.61	1.53
19	Z	250	ARG	CZ-NH2	5.09	1.40	1.33
20	N	172	ASP	N-CA	5.09	1.52	1.46
24	R	180	LEU	N-CA	-5.09	1.40	1.46
26	O	284	ARG	CZ-NH1	5.09	1.39	1.32
19	Z	436	SER	C-O	-5.09	1.17	1.24
28	I	323	GLY	C-N	5.09	1.40	1.33
3	C	22	GLU	CA-CB	5.09	1.61	1.53
7	G	69	ASN	N-CA	-5.09	1.39	1.46
19	Z	643	PRO	CA-C	5.09	1.60	1.52
23	Q	373	LYS	C-N	5.09	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	J	186	VAL	C-N	5.09	1.40	1.33
3	C	186	LEU	CA-CB	5.09	1.61	1.53
7	G	165	ALA	C-N	5.09	1.40	1.33
15	W	44	ASN	N-CA	-5.09	1.39	1.46
23	Q	303	GLU	CA-CB	5.09	1.61	1.53
26	O	22	TRP	C-N	5.09	1.40	1.33
27	H	360	ARG	NE-CZ	5.09	1.38	1.33
10	3	105	THR	N-CA	-5.09	1.39	1.46
17	T	342	VAL	N-CA	-5.09	1.40	1.46
26	O	229	ASP	CA-C	5.09	1.59	1.52
30	L	169	ASN	C-O	-5.09	1.18	1.24
10	3	29	GLY	CA-C	-5.09	1.46	1.52
19	Z	171	GLN	C-O	-5.09	1.17	1.23
22	P	211	THR	C-N	5.09	1.40	1.33
19	Z	53	GLN	N-CA	-5.08	1.40	1.46
20	N	255	SER	CA-CB	5.08	1.61	1.53
24	R	297	ARG	NE-CZ	5.08	1.38	1.33
25	U	96	HIS	N-CA	-5.08	1.39	1.46
26	O	19	ALA	CA-C	-5.08	1.46	1.52
30	L	43	LEU	N-CA	-5.08	1.40	1.46
32	J	313	ARG	C-N	5.08	1.40	1.33
11	4	130	ALA	CA-C	5.08	1.59	1.52
17	T	275	ALA	N-CA	5.08	1.52	1.46
19	Z	894	LEU	CA-CB	5.08	1.61	1.53
28	I	268	ARG	CA-C	-5.08	1.46	1.52
30	L	58	GLU	C-N	5.08	1.41	1.34
30	L	302	ALA	CA-C	5.08	1.59	1.52
1	A	170	VAL	CA-C	-5.08	1.46	1.52
10	3	95	LEU	CA-CB	5.08	1.61	1.53
19	Z	659	LEU	CA-CB	5.08	1.61	1.53
19	Z	688	ARG	CA-C	-5.08	1.46	1.52
25	U	44	GLN	CA-CB	5.08	1.60	1.53
29	K	32	PRO	C-N	5.08	1.39	1.33
29	K	240	LEU	CA-C	-5.08	1.46	1.52
22	P	255	CYS	N-CA	-5.08	1.40	1.46
32	J	206	HIS	ND1-CE1	5.08	1.37	1.32
11	4	181	ARG	NE-CZ	5.08	1.38	1.33
13	6	95	ILE	CA-CB	-5.08	1.48	1.54
17	T	213	THR	C-N	5.08	1.41	1.34
23	Q	365	LEU	CA-C	-5.08	1.46	1.52
31	M	204	ALA	C-N	5.08	1.40	1.33
32	J	368	MET	C-N	5.08	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	74	CYS	CB-SG	5.07	1.98	1.81
19	Z	619	HIS	N-CA	-5.07	1.39	1.46
20	N	444	TYR	CA-CB	5.07	1.61	1.53
23	Q	8	GLU	N-CA	-5.07	1.40	1.46
24	R	257	ARG	CZ-NH1	5.07	1.39	1.32
28	I	363	ARG	CA-C	-5.07	1.46	1.52
31	M	94	SER	CA-CB	5.07	1.61	1.53
3	C	26	GLU	C-N	5.07	1.40	1.33
3	C	96	ARG	NE-CZ	5.07	1.38	1.33
3	C	200	THR	N-CA	-5.07	1.40	1.46
13	6	184	ASN	CA-CB	5.07	1.61	1.53
17	T	306	ALA	N-CA	-5.07	1.39	1.46
19	Z	761	MET	CA-C	-5.07	1.46	1.52
20	N	39	SER	C-N	5.07	1.40	1.33
20	N	578	LEU	C-O	-5.07	1.17	1.24
28	I	346	ARG	NE-CZ	5.07	1.38	1.33
29	K	333	PHE	CA-CB	5.07	1.59	1.53
19	Z	648	ALA	CA-C	-5.07	1.46	1.52
6	F	130	VAL	N-CA	-5.07	1.40	1.46
20	N	374	SER	CA-CB	5.07	1.61	1.53
25	U	130	ASP	CA-C	-5.07	1.46	1.52
2	B	164	GLY	CA-C	-5.07	1.45	1.52
6	F	128	TYR	N-CA	-5.07	1.39	1.46
21	S	439	ARG	CA-C	-5.07	1.46	1.52
19	Z	443	GLY	CA-C	-5.06	1.45	1.51
22	P	213	PHE	CA-CB	5.06	1.61	1.53
23	Q	314	ARG	C-N	5.06	1.40	1.33
29	K	275	PHE	CA-C	-5.06	1.46	1.52
20	N	372	ALA	CA-C	5.06	1.59	1.52
24	R	342	ARG	NE-CZ	5.06	1.38	1.33
32	J	52	LEU	N-CA	5.06	1.52	1.46
3	C	210	LYS	CA-CB	5.06	1.61	1.53
17	T	235	LEU	CA-C	-5.06	1.46	1.52
17	T	276	GLY	C-N	5.06	1.40	1.33
19	Z	695	ALA	C-N	5.06	1.40	1.33
20	N	446	LEU	N-CA	-5.06	1.40	1.46
6	F	110	SER	C-N	5.06	1.40	1.33
16	V	210	ASN	N-CA	-5.06	1.39	1.45
17	T	124	LEU	CA-CB	5.06	1.61	1.53
17	T	231	HIS	N-CA	-5.06	1.42	1.46
22	P	98	LYS	CA-CB	5.06	1.62	1.53
5	E	168	ARG	CZ-NH1	5.06	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	1	171	TYR	CA-CB	5.06	1.61	1.53
31	M	154	VAL	N-CA	-5.06	1.40	1.46
31	M	437	ASN	CA-C	5.06	1.58	1.52
19	Z	565	ASN	CA-C	5.06	1.59	1.52
30	L	333	PRO	C-O	-5.06	1.18	1.24
4	D	219	ARG	CZ-NH2	5.05	1.40	1.33
16	V	128	ASN	N-CA	-5.05	1.40	1.46
20	N	91	ASN	CG-ND2	5.05	1.43	1.33
20	N	365	CYS	CA-C	-5.05	1.46	1.52
24	R	248	GLU	CA-C	5.05	1.59	1.52
30	L	385	VAL	C-N	5.05	1.40	1.33
4	D	70	CYS	C-N	5.05	1.40	1.33
19	Z	336	GLU	CA-C	-5.05	1.46	1.52
2	B	231	ALA	CA-CB	5.05	1.61	1.53
6	F	28	ALA	C-O	-5.05	1.18	1.24
11	4	32	HIS	N-CA	5.05	1.52	1.46
11	4	157	VAL	CA-C	-5.05	1.45	1.52
12	5	239	ARG	NE-CZ	5.05	1.38	1.33
13	6	109	ALA	C-O	-5.05	1.16	1.23
19	Z	376	PHE	CA-CB	5.05	1.61	1.53
19	Z	673	ARG	CD-NE	5.05	1.53	1.46
23	Q	91	SER	CA-CB	5.05	1.61	1.53
25	U	283	ARG	CA-C	-5.05	1.46	1.52
28	I	63	LEU	C-N	5.05	1.40	1.33
30	L	200	ALA	CA-C	-5.05	1.46	1.52
30	L	401	LYS	N-CA	-5.05	1.39	1.46
4	D	154	ASP	C-N	5.05	1.40	1.34
20	N	183	LEU	CA-CB	5.05	1.61	1.53
20	N	603	LEU	C-N	5.05	1.40	1.33
24	R	379	ARG	CA-C	-5.05	1.46	1.52
3	C	176	LYS	CA-C	-5.05	1.46	1.52
26	O	284	ARG	NE-CZ	5.05	1.38	1.33
28	I	242	GLN	C-N	5.05	1.41	1.34
20	N	154	ALA	CA-CB	5.05	1.61	1.53
21	S	103	ARG	C-N	5.05	1.39	1.33
24	R	38	ARG	NE-CZ	5.05	1.38	1.33
27	H	200	ARG	NE-CZ	5.05	1.38	1.33
32	J	226	GLU	CA-C	-5.05	1.46	1.52
4	D	40	ILE	N-CA	-5.04	1.40	1.46
6	F	75	ALA	N-CA	-5.04	1.40	1.46
24	R	42	MET	CA-CB	5.04	1.61	1.53
1	A	230	LEU	CA-CB	5.04	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	7	85	ARG	NE-CZ	5.04	1.38	1.33
20	N	20	LYS	N-CA	-5.04	1.40	1.46
24	R	101	ARG	NE-CZ	5.04	1.38	1.33
29	K	303	VAL	N-CA	-5.04	1.40	1.46
30	L	209	PHE	N-CA	-5.04	1.40	1.46
2	B	219	ARG	NE-CZ	5.04	1.38	1.33
12	5	132	ARG	NE-CZ	5.04	1.38	1.33
24	R	116	ASP	CA-CB	5.04	1.59	1.53
16	V	60	GLU	CA-C	-5.04	1.46	1.52
24	R	27	SER	CA-C	-5.04	1.46	1.52
17	T	188	SER	N-CA	-5.04	1.39	1.45
19	Z	301	HIS	CG-CD2	5.04	1.41	1.35
19	Z	456	ARG	CD-NE	5.04	1.53	1.46
20	N	140	ARG	CA-CB	-5.04	1.45	1.53
20	N	847	GLU	CA-C	5.04	1.58	1.52
15	W	104	ASN	CA-CB	5.04	1.61	1.53
24	R	251	HIS	CD2-NE2	5.04	1.43	1.37
5	E	199	LEU	C-N	5.04	1.40	1.33
12	5	106	GLY	C-N	5.04	1.38	1.32
12	5	235	LEU	C-N	5.04	1.40	1.33
19	Z	392	THR	CA-C	5.04	1.59	1.52
20	N	653	ALA	N-CA	-5.04	1.40	1.46
23	Q	287	LEU	CA-CB	5.04	1.61	1.53
27	H	94	GLN	C-N	5.04	1.39	1.33
31	M	231	PRO	C-O	-5.04	1.18	1.24
3	C	35	LEU	CA-C	-5.03	1.46	1.52
4	D	233	LYS	CA-C	5.03	1.59	1.52
17	T	146	LEU	C-N	5.03	1.40	1.33
21	S	61	ARG	CD-NE	5.03	1.53	1.46
28	I	125	THR	CA-C	-5.03	1.46	1.52
31	M	351	LEU	N-CA	-5.03	1.40	1.47
8	1	225	ASP	CA-C	-5.03	1.46	1.52
9	2	191	GLU	CA-C	-5.03	1.46	1.52
19	Z	827	PRO	N-CD	-5.03	1.40	1.47
20	N	269	ARG	NE-CZ	5.03	1.38	1.33
20	N	743	ASN	C-N	5.03	1.40	1.33
20	N	799	LYS	C-N	5.03	1.39	1.33
24	R	32	ARG	NE-CZ	5.03	1.38	1.33
27	H	124	ASP	N-CA	-5.03	1.38	1.46
28	I	194	ILE	CA-CB	-5.03	1.48	1.54
29	K	372	GLY	CA-C	-5.03	1.45	1.52
31	M	226	VAL	C-O	5.03	1.29	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	J	185	GLY	CA-C	-5.03	1.48	1.52
32	J	225	GLY	N-CA	-5.03	1.38	1.45
2	B	41	ALA	CA-C	-5.03	1.46	1.52
8	1	214	GLN	CA-CB	5.03	1.60	1.53
11	4	54	VAL	CA-C	5.03	1.60	1.52
22	P	311	THR	N-CA	5.03	1.52	1.46
30	L	325	ASP	C-N	5.03	1.40	1.33
19	Z	566	HIS	CE1-NE2	5.03	1.37	1.32
19	Z	628	ASP	N-CA	-5.03	1.40	1.46
22	P	142	ARG	NE-CZ	5.03	1.38	1.33
27	H	175	SER	C-N	5.03	1.40	1.34
2	B	226	VAL	CA-CB	-5.03	1.48	1.54
19	Z	731	MET	N-CA	-5.03	1.40	1.46
1	A	88	ARG	NE-CZ	5.02	1.38	1.33
6	F	130	VAL	C-N	5.02	1.39	1.32
21	S	76	ARG	C-N	5.02	1.40	1.33
23	Q	278	ARG	C-N	5.02	1.40	1.33
4	D	182	TYR	N-CA	-5.02	1.39	1.46
10	3	162	HIS	C-N	5.02	1.40	1.33
1	A	228	ARG	CZ-NH1	5.02	1.39	1.32
21	S	256	HIS	ND1-CE1	5.02	1.37	1.32
26	O	286	ALA	C-N	5.02	1.40	1.33
19	Z	224	ASN	C-N	5.02	1.40	1.33
20	N	176	MET	C-N	5.02	1.40	1.33
20	N	263	SER	C-N	5.02	1.40	1.33
21	S	432	PHE	CA-CB	5.02	1.61	1.53
22	P	324	TYR	CZ-OH	5.02	1.48	1.38
25	U	34	ARG	NE-CZ	5.02	1.38	1.33
27	H	432	TYR	CZ-OH	5.02	1.48	1.38
3	C	14	PRO	N-CA	-5.02	1.41	1.47
6	F	229	VAL	N-CA	-5.02	1.40	1.46
26	O	271	LYS	C-O	-5.02	1.18	1.24
32	J	202	ALA	C-N	5.02	1.40	1.33
9	2	195	LYS	CA-C	-5.02	1.46	1.52
1	A	43	ARG	NE-CZ	5.01	1.38	1.33
2	B	221	LEU	C-N	5.01	1.40	1.33
3	C	104	PRO	N-CD	5.01	1.54	1.47
11	4	29	LYS	CA-C	5.01	1.59	1.52
12	5	174	ASP	C-N	5.01	1.40	1.33
22	P	320	LEU	N-CA	5.01	1.52	1.46
23	Q	403	THR	C-N	5.01	1.40	1.33
24	R	300	ARG	CD-NE	5.01	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	K	45	LYS	C-N	5.01	1.40	1.33
19	Z	75	LEU	C-N	5.01	1.40	1.33
19	Z	712	LYS	CA-CB	5.01	1.61	1.53
32	J	295	THR	C-O	-5.01	1.17	1.23
32	J	338	LEU	CA-C	-5.01	1.46	1.52
19	Z	697	ILE	C-N	5.01	1.40	1.33
11	4	93	ARG	CZ-NH1	5.01	1.39	1.32
31	M	64	ARG	CZ-NH1	5.01	1.39	1.32
2	B	84	ARG	CZ-NH2	5.01	1.40	1.33
11	4	117	TYR	CA-C	-5.01	1.46	1.52
19	Z	115	PRO	N-CA	5.01	1.53	1.47
19	Z	879	ARG	CZ-NH1	5.01	1.39	1.32
20	N	261	LEU	C-O	5.01	1.29	1.24
21	S	232	ARG	CZ-NH2	5.01	1.40	1.33
30	L	318	PRO	CA-C	-5.01	1.45	1.52
32	J	143	VAL	C-N	5.00	1.39	1.33
11	4	175	LEU	CA-CB	5.00	1.60	1.54
16	V	271	ALA	C-N	5.00	1.40	1.33
19	Z	489	TYR	CA-CB	5.00	1.61	1.53
24	R	304	TYR	CZ-OH	5.00	1.48	1.38
19	Z	852	VAL	C-N	5.00	1.40	1.33
31	M	247	THR	N-CA	-5.00	1.40	1.46

All (6645) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	224	ARG	NE-CZ-NH2	-21.59	99.77	119.20
12	5	62	THR	N-CA-CB	14.69	135.32	110.49
19	Z	453	SER	CA-C-N	13.57	137.10	120.14
19	Z	453	SER	C-N-CA	13.57	137.10	120.14
19	Z	356	ASN	CA-CB-CG	13.41	126.01	112.60
21	S	437	ALA	CA-C-N	13.31	138.70	120.46
21	S	437	ALA	C-N-CA	13.31	138.70	120.46
13	6	30	SER	N-CA-C	-13.00	96.52	108.22
9	2	77	ILE	N-CA-C	-12.56	101.01	111.81
4	D	173	SER	CA-C-O	12.21	133.64	120.82
22	P	414	ASN	CA-CB-CG	-12.04	100.56	112.60
6	F	118	ILE	O-C-N	-11.96	112.77	120.42
5	E	84	ASP	CA-CB-CG	-11.82	100.78	112.60
4	D	235	VAL	N-CA-CB	11.79	126.57	110.54
32	J	153	GLY	N-CA-C	-11.58	99.78	114.37
14	7	54	SER	N-CA-C	-11.35	91.90	109.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	3	113	ASP	CA-CB-CG	11.34	123.94	112.60
10	3	28	PHE	CA-C-N	11.28	131.82	120.31
10	3	28	PHE	C-N-CA	11.28	131.82	120.31
29	K	166	ASP	N-CA-C	-11.25	100.05	113.88
20	N	85	GLY	O-C-N	11.23	131.83	123.52
23	Q	244	SER	N-CA-C	-11.19	98.11	108.07
21	S	385	ASP	CA-CB-CG	11.17	123.77	112.60
29	K	399	PHE	CA-CB-CG	-11.12	102.69	113.80
22	P	127	THR	CA-C-N	11.01	135.03	120.28
22	P	127	THR	C-N-CA	11.01	135.03	120.28
27	H	306	LEU	N-CA-C	10.92	124.34	111.02
10	3	145	GLN	CA-C-N	10.82	134.78	120.28
10	3	145	GLN	C-N-CA	10.82	134.78	120.28
24	R	118	GLU	CA-C-N	10.78	133.62	120.14
24	R	118	GLU	C-N-CA	10.78	133.62	120.14
19	Z	112	ASN	N-CA-C	10.74	122.56	111.07
23	Q	39	ASP	CA-CB-CG	-10.73	101.86	112.60
5	E	154	PHE	CA-CB-CG	-10.73	103.07	113.80
31	M	324	GLN	CA-C-N	10.66	130.76	119.89
31	M	324	GLN	C-N-CA	10.66	130.76	119.89
19	Z	156	HIS	CA-C-O	10.66	132.07	120.24
10	3	47	ASP	CA-CB-CG	-10.62	101.98	112.60
12	5	65	PHE	CA-CB-CG	-10.47	103.33	113.80
24	R	167	LEU	N-CA-C	10.42	122.72	111.36
20	N	122	GLU	N-CA-C	-10.32	101.45	114.56
20	N	2	ILE	N-CA-C	-10.30	103.31	113.20
13	6	88	CYS	CA-C-N	10.26	134.86	120.29
13	6	88	CYS	C-N-CA	10.26	134.86	120.29
17	T	289	GLU	N-CA-C	-10.25	99.52	114.39
22	P	263	TRP	N-CA-CB	10.20	126.09	110.28
31	M	338	VAL	N-CA-C	-10.18	101.18	111.77
17	T	247	VAL	CA-C-N	10.17	136.10	120.75
17	T	247	VAL	C-N-CA	10.17	136.10	120.75
5	E	12	VAL	N-CA-C	-10.13	102.80	112.83
18	Y	48	VAL	N-CA-C	-10.13	102.85	111.56
28	I	168	ASP	CA-CB-CG	-10.11	102.49	112.60
10	3	155	GLU	CA-C-O	-10.08	106.35	120.16
27	H	75	PRO	CA-C-N	10.06	133.52	120.44
27	H	75	PRO	C-N-CA	10.06	133.52	120.44
19	Z	394	ASP	CA-C-N	10.05	130.90	119.94
19	Z	394	ASP	C-N-CA	10.05	130.90	119.94
24	R	31	HIS	CE1-NE2-CD2	-10.03	98.97	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	F	138	ASP	CA-CB-CG	10.01	122.61	112.60
11	4	50	ALA	N-CA-CB	9.99	127.37	110.49
2	B	214	ASN	CA-CB-CG	9.97	122.57	112.60
8	1	121	TYR	CB-CG-CD1	-9.95	105.87	120.80
15	W	54	LEU	CA-C-N	9.95	135.65	121.42
15	W	54	LEU	C-N-CA	9.95	135.65	121.42
13	6	84	PHE	CA-CB-CG	9.93	123.73	113.80
29	K	275	PHE	CA-CB-CG	-9.93	103.88	113.80
23	Q	91	SER	N-CA-C	9.89	121.65	111.07
23	Q	132	ARG	NE-CZ-NH2	-9.87	110.32	119.20
19	Z	732	VAL	CA-C-N	9.85	130.87	119.94
19	Z	732	VAL	C-N-CA	9.85	130.87	119.94
13	6	209	ALA	CA-C-N	9.84	133.46	120.28
13	6	209	ALA	C-N-CA	9.84	133.46	120.28
9	2	76	LYS	CA-C-N	-9.83	110.75	122.35
9	2	76	LYS	C-N-CA	-9.83	110.75	122.35
23	Q	84	LYS	CA-C-N	9.81	133.43	120.28
23	Q	84	LYS	C-N-CA	9.81	133.43	120.28
30	L	91	PRO	N-CA-CB	9.79	111.87	103.35
30	L	400	TYR	CA-C-O	9.76	130.81	120.36
19	Z	143	ARG	CA-C-N	9.76	133.35	120.28
19	Z	143	ARG	C-N-CA	9.76	133.35	120.28
20	N	627	PHE	CA-CB-CG	9.74	123.54	113.80
12	5	195	PHE	CA-CB-CG	9.72	123.52	113.80
2	B	114	VAL	CA-C-N	9.70	133.28	120.28
2	B	114	VAL	C-N-CA	9.70	133.28	120.28
19	Z	300	ARG	CA-C-N	9.70	133.04	120.44
19	Z	300	ARG	C-N-CA	9.70	133.04	120.44
20	N	885	MET	CA-C-O	-9.64	112.09	120.19
20	N	324	LYS	CA-C-N	9.64	134.16	120.28
20	N	324	LYS	C-N-CA	9.64	134.16	120.28
20	N	33	ASP	CA-CB-CG	-9.63	102.97	112.60
20	N	464	GLN	CA-C-N	9.61	132.93	120.44
20	N	464	GLN	C-N-CA	9.61	132.93	120.44
16	V	121	TRP	CG-CD2-CE3	-9.59	124.31	133.90
11	4	83	PHE	CA-CB-CG	9.58	123.38	113.80
19	Z	246	SER	CA-C-N	9.58	133.11	120.28
19	Z	246	SER	C-N-CA	9.58	133.11	120.28
22	P	189	GLN	N-CA-CB	9.57	124.18	110.12
19	Z	811	LEU	N-CA-C	-9.54	101.53	113.55
2	B	42	ASN	N-CA-C	-9.53	99.87	113.21
20	N	404	ALA	N-CA-C	9.51	121.25	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	1	143	GLN	CB-CA-C	-9.49	98.19	111.95
29	K	200	ARG	CA-C-N	9.48	130.78	120.44
29	K	200	ARG	C-N-CA	9.48	130.78	120.44
17	T	106	ASN	CA-C-N	9.46	132.95	120.28
17	T	106	ASN	C-N-CA	9.46	132.95	120.28
5	E	224	GLN	OE1-CD-NE2	9.42	132.02	122.60
19	Z	222	ASP	CA-C-N	9.42	132.90	120.28
19	Z	222	ASP	C-N-CA	9.42	132.90	120.28
31	M	351	LEU	CA-C-N	9.42	133.88	120.79
31	M	351	LEU	C-N-CA	9.42	133.88	120.79
24	R	291	HIS	CA-C-N	9.42	133.84	120.28
24	R	291	HIS	C-N-CA	9.42	133.84	120.28
32	J	109	THR	O-C-N	-9.42	112.49	121.72
32	J	398	ASN	CA-CB-CG	9.40	122.00	112.60
10	3	173	ASN	N-CA-C	-9.40	100.99	111.14
13	6	173	GLN	CA-C-O	-9.39	109.78	118.79
20	N	930	ALA	N-CA-C	9.38	123.48	110.35
8	1	101	ILE	CA-C-N	9.37	132.62	120.44
8	1	101	ILE	C-N-CA	9.37	132.62	120.44
19	Z	11	VAL	CA-C-N	9.37	132.84	120.28
19	Z	11	VAL	C-N-CA	9.37	132.84	120.28
16	V	183	HIS	CA-CB-CG	9.36	123.16	113.80
20	N	385	PHE	CA-CB-CG	9.36	123.16	113.80
19	Z	433	LEU	N-CA-C	-9.35	101.09	111.28
16	V	248	MET	CA-C-N	9.33	132.78	120.28
16	V	248	MET	C-N-CA	9.33	132.78	120.28
16	V	279	ASP	CA-C-N	9.31	129.06	119.19
16	V	279	ASP	C-N-CA	9.31	129.06	119.19
15	W	88	THR	CA-C-N	9.29	130.22	120.00
15	W	88	THR	C-N-CA	9.29	130.22	120.00
31	M	439	GLN	OE1-CD-NE2	9.27	131.87	122.60
25	U	104	ASN	CA-CB-CG	9.26	121.86	112.60
5	E	174	SER	CA-C-N	9.26	132.69	120.28
5	E	174	SER	C-N-CA	9.26	132.69	120.28
16	V	309	PHE	N-CA-C	9.26	120.97	111.07
21	S	146	ARG	N-CA-C	9.26	120.97	111.07
12	5	193	TYR	N-CA-CB	9.25	126.57	110.39
27	H	338	ASP	CA-CB-CG	-9.22	103.38	112.60
9	2	57	LEU	N-CA-C	-9.22	93.39	108.41
10	3	144	GLU	N-CA-C	-9.21	99.05	110.65
20	N	389	ASN	CA-CB-CG	-9.20	103.40	112.60
23	Q	148	HIS	CA-C-O	9.19	130.47	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	394	ASP	CA-CB-CG	9.18	121.78	112.60
1	A	224	ASN	CA-C-O	-9.18	111.54	120.26
20	N	5	ALA	CA-C-N	9.18	132.95	120.38
20	N	5	ALA	C-N-CA	9.18	132.95	120.38
17	T	231	HIS	CA-CB-CG	9.18	122.98	113.80
29	K	366	ARG	O-C-N	-9.12	112.36	120.48
20	N	683	VAL	CA-C-N	9.11	132.49	120.28
20	N	683	VAL	C-N-CA	9.11	132.49	120.28
20	N	754	HIS	CE1-NE2-CD2	-9.10	99.90	109.00
25	U	274	ASN	CA-CB-CG	9.10	121.70	112.60
6	F	240	PRO	N-CA-CB	9.09	108.01	102.92
19	Z	704	LEU	CA-C-N	9.08	133.64	120.38
19	Z	704	LEU	C-N-CA	9.08	133.64	120.38
8	1	136	TRP	N-CA-CB	9.07	125.82	110.49
14	7	148	ASN	CA-CB-CG	-9.07	103.53	112.60
7	G	224	ARG	NH1-CZ-NH2	9.07	131.09	119.30
14	7	95	LEU	N-CA-C	-9.06	95.53	109.85
23	Q	203	PRO	CA-C-N	9.05	129.24	119.28
23	Q	203	PRO	C-N-CA	9.05	129.24	119.28
7	G	111	HIS	CA-CB-CG	9.05	122.85	113.80
32	J	150	MET	CA-C-N	9.05	133.27	120.42
32	J	150	MET	C-N-CA	9.05	133.27	120.42
20	N	167	ILE	N-CA-C	-9.05	95.45	108.11
16	V	287	HIS	CE1-NE2-CD2	-9.04	99.96	109.00
21	S	464	SER	N-CA-CB	9.03	118.72	109.51
10	3	54	ALA	CA-C-N	-9.02	115.75	122.33
10	3	54	ALA	C-N-CA	-9.02	115.75	122.33
31	M	285	ILE	N-CA-C	-9.01	95.50	108.11
21	S	459	MET	N-CA-C	-9.01	99.78	110.41
25	U	231	GLN	CA-C-N	8.99	132.33	120.28
25	U	231	GLN	C-N-CA	8.99	132.33	120.28
27	H	352	THR	CA-C-O	-8.99	110.89	120.42
27	H	293	ASN	CA-CB-CG	-8.99	103.61	112.60
19	Z	485	LEU	CA-C-N	8.98	129.88	120.00
19	Z	485	LEU	C-N-CA	8.98	129.88	120.00
23	Q	268	GLN	N-CA-C	-8.98	101.47	111.07
26	O	176	ALA	CA-C-N	8.97	132.10	120.44
26	O	176	ALA	C-N-CA	8.97	132.10	120.44
26	O	30	THR	CA-CB-OG1	8.97	123.05	109.60
7	G	204	GLU	N-CA-C	-8.97	101.31	112.88
30	L	144	VAL	CA-C-N	8.96	134.24	121.42
30	L	144	VAL	C-N-CA	8.96	134.24	121.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	203	SER	CA-C-N	8.96	132.62	120.44
30	L	203	SER	C-N-CA	8.96	132.62	120.44
24	R	357	ASN	CA-CB-CG	-8.96	103.64	112.60
8	1	106	PRO	N-CA-C	8.96	119.07	110.47
24	R	196	GLN	CA-C-N	8.95	133.16	120.28
24	R	196	GLN	C-N-CA	8.95	133.16	120.28
12	5	195	PHE	CA-C-N	8.93	131.31	120.14
12	5	195	PHE	C-N-CA	8.93	131.31	120.14
20	N	153	ILE	CA-C-N	8.93	132.25	120.28
20	N	153	ILE	C-N-CA	8.93	132.25	120.28
28	I	302	GLU	CA-C-N	8.90	132.21	120.28
28	I	302	GLU	C-N-CA	8.90	132.21	120.28
9	2	208	ASN	CA-CB-CG	8.90	121.50	112.60
23	Q	255	LEU	N-CA-CB	8.89	123.18	110.12
2	B	111	VAL	CB-CA-C	-8.88	100.15	112.14
25	U	20	VAL	N-CA-CB	8.87	120.93	110.55
32	J	229	ARG	N-CA-C	-8.87	102.62	113.97
16	V	133	PHE	CA-CB-CG	-8.86	104.94	113.80
20	N	936	GLU	CA-C-N	8.85	131.94	120.44
20	N	936	GLU	C-N-CA	8.85	131.94	120.44
13	6	162	PHE	CA-CB-CG	8.85	122.65	113.80
13	6	94	ILE	CA-C-N	8.84	132.57	120.46
13	6	94	ILE	C-N-CA	8.84	132.57	120.46
25	U	209	ARG	O-C-N	8.84	131.17	122.07
22	P	114	GLU	N-CA-C	8.83	122.07	111.82
26	O	244	ASP	CA-C-N	8.83	131.87	120.56
26	O	244	ASP	C-N-CA	8.83	131.87	120.56
19	Z	622	SER	CA-C-N	8.83	131.91	120.44
19	Z	622	SER	C-N-CA	8.83	131.91	120.44
1	A	149	PRO	CA-C-O	-8.82	111.29	121.34
19	Z	416	MET	CA-C-O	-8.81	111.21	120.55
28	I	63	LEU	CA-C-N	8.81	132.09	120.28
28	I	63	LEU	C-N-CA	8.81	132.09	120.28
24	R	388	ASN	N-CA-CB	8.81	123.06	110.12
2	B	12	THR	N-CA-C	-8.80	95.60	109.23
20	N	86	ASP	CA-CB-CG	8.79	121.39	112.60
14	7	186	GLY	O-C-N	8.77	132.36	122.62
19	Z	734	SER	CA-C-N	8.77	129.72	119.98
19	Z	734	SER	C-N-CA	8.77	129.72	119.98
20	N	875	PHE	CA-CB-CG	-8.77	105.03	113.80
20	N	578	LEU	CA-C-N	8.76	132.02	120.28
20	N	578	LEU	C-N-CA	8.76	132.02	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	I	180	PRO	CA-C-N	8.76	132.38	120.38
28	I	180	PRO	C-N-CA	8.76	132.38	120.38
19	Z	777	THR	CA-C-N	8.76	132.02	120.28
19	Z	777	THR	C-N-CA	8.76	132.02	120.28
30	L	342	TYR	N-CA-C	8.75	121.92	111.33
32	J	105	ILE	N-CA-C	8.75	119.55	110.62
1	A	120	ASP	CB-CA-C	-8.75	95.97	110.85
6	F	148	CYS	CA-C-N	8.75	128.97	119.87
6	F	148	CYS	C-N-CA	8.75	128.97	119.87
20	N	171	ASN	CA-CB-CG	-8.75	103.85	112.60
31	M	236	LYS	N-CA-C	8.75	120.58	111.14
26	O	8	LEU	CA-C-N	8.74	131.99	120.28
26	O	8	LEU	C-N-CA	8.74	131.99	120.28
16	V	82	VAL	CA-C-O	8.73	131.69	120.78
10	3	95	LEU	CA-C-N	8.73	131.97	120.28
10	3	95	LEU	C-N-CA	8.73	131.97	120.28
12	5	210	GLU	N-CA-C	-8.73	101.73	111.07
20	N	178	ALA	CA-C-N	8.72	131.97	120.28
20	N	178	ALA	C-N-CA	8.72	131.97	120.28
20	N	766	PHE	CA-CB-CG	8.71	122.51	113.80
11	4	82	ASN	CA-CB-CG	8.71	121.31	112.60
25	U	32	GLN	N-CA-C	-8.71	101.73	111.14
29	K	135	HIS	CA-CB-CG	-8.71	105.09	113.80
28	I	120	HIS	N-CA-C	-8.70	96.17	109.14
27	H	265	ARG	CD-NE-CZ	-8.70	112.22	124.40
21	S	454	VAL	O-C-N	-8.69	114.27	123.14
20	N	450	HIS	ND1-CE1-NE2	8.69	117.09	108.40
23	Q	128	ALA	CA-C-N	8.68	131.91	120.28
23	Q	128	ALA	C-N-CA	8.68	131.91	120.28
30	L	170	PRO	CA-C-N	8.67	131.90	120.28
30	L	170	PRO	C-N-CA	8.67	131.90	120.28
21	S	248	ASN	CB-CA-C	-8.66	97.28	110.88
11	4	36	PHE	CA-CB-CG	-8.66	105.14	113.80
29	K	172	ILE	CA-C-N	8.65	131.87	120.28
29	K	172	ILE	C-N-CA	8.65	131.87	120.28
26	O	253	SER	CA-C-N	8.65	132.73	120.28
26	O	253	SER	C-N-CA	8.65	132.73	120.28
19	Z	335	ARG	NE-CZ-NH1	8.63	130.13	121.50
28	I	94	GLU	CA-C-O	-8.62	111.76	120.82
7	G	214	LEU	N-CA-C	-8.62	96.31	109.41
21	S	306	THR	N-CA-CB	8.62	122.92	110.16
32	J	311	ILE	CA-C-N	8.61	132.76	120.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	311	ILE	C-N-CA	8.61	132.76	120.79
5	E	156	MET	N-CA-C	-8.61	95.90	109.50
19	Z	332	ALA	N-CA-C	-8.61	95.44	108.52
31	M	134	THR	CA-C-O	8.60	129.87	120.32
23	Q	91	SER	CA-C-N	8.60	132.50	120.29
23	Q	91	SER	C-N-CA	8.60	132.50	120.29
23	Q	148	HIS	N-CA-C	8.60	120.27	111.07
28	I	376	ASP	CA-CB-CG	-8.59	104.01	112.60
24	R	159	ARG	NE-CZ-NH2	8.59	126.93	119.20
27	H	216	GLY	CA-C-N	8.59	129.23	120.38
27	H	216	GLY	C-N-CA	8.59	129.23	120.38
28	I	263	GLY	CA-C-O	-8.59	109.24	121.52
24	R	72	LYS	N-CA-CB	8.59	122.74	110.12
26	O	109	GLU	CA-C-N	8.57	132.12	120.38
26	O	109	GLU	C-N-CA	8.57	132.12	120.38
21	S	186	ASP	CA-C-N	8.57	132.62	120.28
21	S	186	ASP	C-N-CA	8.57	132.62	120.28
3	C	120	ALA	O-C-N	8.57	131.20	122.12
28	I	391	SER	CA-C-N	8.57	130.85	120.14
28	I	391	SER	C-N-CA	8.57	130.85	120.14
30	L	17	ASP	CA-C-N	8.55	128.25	119.19
30	L	17	ASP	C-N-CA	8.55	128.25	119.19
31	M	137	LEU	O-C-N	8.55	128.51	121.84
14	7	130	ARG	CA-C-N	8.54	131.73	120.28
14	7	130	ARG	C-N-CA	8.54	131.73	120.28
27	H	249	TYR	CA-C-N	8.54	133.24	120.77
27	H	249	TYR	C-N-CA	8.54	133.24	120.77
14	7	119	GLU	N-CA-CB	8.53	122.79	110.16
28	I	380	LEU	N-CA-C	8.53	120.35	111.14
13	6	170	ALA	CA-C-N	8.53	132.56	120.28
13	6	170	ALA	C-N-CA	8.53	132.56	120.28
22	P	44	ILE	N-CA-C	8.52	119.33	110.72
19	Z	115	PRO	CA-C-N	8.51	129.42	119.98
19	Z	115	PRO	C-N-CA	8.51	129.42	119.98
26	O	252	LYS	CA-C-N	8.51	132.80	120.38
26	O	252	LYS	C-N-CA	8.51	132.80	120.38
10	3	129	CYS	O-C-N	-8.50	114.06	121.20
19	Z	650	GLN	OE1-CD-NE2	8.50	131.10	122.60
22	P	323	ASP	CA-CB-CG	8.49	121.09	112.60
19	Z	301	HIS	ND1-CE1-NE2	8.49	116.89	108.40
12	5	225	ARG	CA-C-N	8.48	131.46	120.44
12	5	225	ARG	C-N-CA	8.48	131.46	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	10	SER	CA-C-N	8.47	131.63	120.28
20	N	10	SER	C-N-CA	8.47	131.63	120.28
19	Z	102	HIS	CE1-NE2-CD2	-8.47	100.53	109.00
25	U	215	VAL	CA-C-N	8.45	131.42	120.44
25	U	215	VAL	C-N-CA	8.45	131.42	120.44
17	T	282	TYR	CA-C-N	8.44	131.42	120.44
17	T	282	TYR	C-N-CA	8.44	131.42	120.44
14	7	63	GLY	CA-C-N	8.44	137.16	121.97
14	7	63	GLY	C-N-CA	8.44	137.16	121.97
11	4	148	THR	CA-C-O	-8.44	108.60	120.16
20	N	333	MET	CA-C-N	8.44	131.41	120.44
20	N	333	MET	C-N-CA	8.44	131.41	120.44
27	H	370	PHE	CA-C-N	8.44	131.58	120.28
27	H	370	PHE	C-N-CA	8.44	131.58	120.28
29	K	390	ASN	CA-CB-CG	-8.43	104.17	112.60
22	P	252	ASP	CA-CB-CG	-8.43	104.17	112.60
32	J	302	ASP	CA-CB-CG	-8.42	104.18	112.60
17	T	141	LYS	CA-C-O	-8.41	111.63	120.55
4	D	227	SER	CA-C-O	-8.41	111.46	120.88
25	U	239	ASP	CA-C-O	8.41	122.82	117.94
17	T	188	SER	N-CA-C	-8.40	96.44	108.96
26	O	165	THR	N-CA-C	8.39	120.05	111.07
26	O	180	LEU	CA-C-N	8.39	129.23	120.00
26	O	180	LEU	C-N-CA	8.39	129.23	120.00
26	O	248	PHE	CA-CB-CG	8.38	122.18	113.80
31	M	237	THR	CA-C-N	8.38	131.51	120.28
31	M	237	THR	C-N-CA	8.38	131.51	120.28
20	N	109	THR	N-CA-CB	8.38	122.44	110.12
1	A	20	GLY	O-C-N	8.38	132.35	122.38
25	U	224	HIS	CA-CB-CG	8.37	122.17	113.80
32	J	12	GLU	CA-C-N	8.37	132.17	120.29
32	J	12	GLU	C-N-CA	8.37	132.17	120.29
30	L	309	LEU	CA-C-N	8.37	131.31	120.44
30	L	309	LEU	C-N-CA	8.37	131.31	120.44
7	G	96	ALA	CA-C-N	8.36	131.31	120.44
7	G	96	ALA	C-N-CA	8.36	131.31	120.44
15	W	65	THR	O-C-N	-8.36	114.10	121.71
23	Q	67	GLY	CA-C-N	8.36	129.19	120.00
23	Q	67	GLY	C-N-CA	8.36	129.19	120.00
17	T	220	ALA	N-CA-CB	8.35	124.61	110.49
20	N	651	GLY	CA-C-N	8.35	131.47	120.28
20	N	651	GLY	C-N-CA	8.35	131.47	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	2	122	ALA	CA-C-N	8.34	131.45	120.28
9	2	122	ALA	C-N-CA	8.34	131.45	120.28
24	R	48	ASN	N-CA-C	-8.34	99.56	112.99
22	P	53	GLN	CA-C-N	8.33	131.45	120.28
22	P	53	GLN	C-N-CA	8.33	131.45	120.28
21	S	229	ALA	CA-C-N	8.33	132.97	120.31
21	S	229	ALA	C-N-CA	8.33	132.97	120.31
21	S	251	LEU	CB-CA-C	-8.32	97.82	110.88
10	3	37	THR	N-CA-C	-8.31	104.00	114.56
21	S	152	SER	N-CA-C	-8.30	103.14	113.18
19	Z	508	SER	N-CA-C	-8.29	102.72	113.17
19	Z	198	HIS	CG-CD2-NE2	8.29	115.49	107.20
21	S	491	ARG	CA-C-N	8.29	130.45	120.09
21	S	491	ARG	C-N-CA	8.29	130.45	120.09
19	Z	542	ILE	CA-C-N	8.27	132.03	120.29
19	Z	542	ILE	C-N-CA	8.27	132.03	120.29
25	U	56	VAL	CA-C-N	8.27	128.76	119.83
25	U	56	VAL	C-N-CA	8.27	128.76	119.83
16	V	91	PHE	CA-CB-CG	-8.25	105.55	113.80
15	W	21	PHE	CA-CB-CG	-8.25	105.55	113.80
20	N	193	PHE	CA-CB-CG	-8.24	105.56	113.80
32	J	359	VAL	CA-C-N	8.24	131.33	120.28
32	J	359	VAL	C-N-CA	8.24	131.33	120.28
17	T	113	SER	N-CA-CB	8.24	121.96	110.01
30	L	235	TYR	CA-C-N	8.24	131.32	120.28
30	L	235	TYR	C-N-CA	8.24	131.32	120.28
13	6	145	LYS	N-CA-C	-8.23	102.45	114.39
10	3	189	ILE	N-CA-C	-8.23	96.62	108.48
29	K	222	HIS	CA-C-N	8.23	131.14	120.44
29	K	222	HIS	C-N-CA	8.23	131.14	120.44
19	Z	198	HIS	N-CA-C	8.23	120.33	111.36
20	N	66	LYS	N-CA-C	8.23	120.25	111.28
24	R	305	SER	N-CA-C	8.23	120.25	111.28
5	E	203	LYS	CA-C-O	8.22	129.14	120.42
21	S	315	HIS	N-CA-C	-8.22	105.24	114.62
30	L	195	THR	CA-C-N	8.22	131.30	120.28
30	L	195	THR	C-N-CA	8.22	131.30	120.28
4	D	145	ASP	CA-CB-CG	-8.22	104.38	112.60
6	F	107	ARG	N-CA-CB	8.22	121.93	110.01
10	3	193	ASP	N-CA-C	-8.21	99.93	110.53
20	N	622	LEU	CB-CA-C	-8.21	97.16	110.79
24	R	180	LEU	CA-C-N	8.21	131.11	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	180	LEU	C-N-CA	8.21	131.11	120.44
20	N	450	HIS	CE1-NE2-CD2	-8.21	100.79	109.00
7	G	166	ILE	N-CA-C	-8.20	96.19	108.17
22	P	444	HIS	CA-CB-CG	8.20	122.00	113.80
24	R	14	ASN	CA-CB-CG	-8.19	104.41	112.60
27	H	39	SER	CA-C-N	8.19	131.26	120.28
27	H	39	SER	C-N-CA	8.19	131.26	120.28
32	J	54	ALA	CA-C-O	-8.19	111.87	120.55
1	A	93	ARG	CA-C-N	8.19	131.25	120.28
1	A	93	ARG	C-N-CA	8.19	131.25	120.28
19	Z	161	HIS	CE1-NE2-CD2	-8.19	100.81	109.00
24	R	173	ASP	CA-C-N	8.18	131.91	120.29
24	R	173	ASP	C-N-CA	8.18	131.91	120.29
25	U	122	VAL	N-CA-C	-8.18	96.71	108.17
17	T	153	ILE	CA-C-N	8.18	130.37	120.14
17	T	153	ILE	C-N-CA	8.18	130.37	120.14
20	N	877	LEU	N-CA-C	-8.18	103.43	113.41
29	K	187	HIS	CA-CB-CG	-8.18	105.62	113.80
10	3	73	LEU	CA-C-N	8.15	131.20	120.28
10	3	73	LEU	C-N-CA	8.15	131.20	120.28
19	Z	274	ASP	CA-C-N	8.14	131.19	120.28
19	Z	274	ASP	C-N-CA	8.14	131.19	120.28
19	Z	566	HIS	CE1-NE2-CD2	-8.14	100.86	109.00
31	M	308	GLU	N-CA-C	-8.14	101.13	112.45
5	E	227	HIS	CE1-NE2-CD2	-8.14	100.86	109.00
16	V	90	VAL	CB-CA-C	-8.14	101.55	111.97
7	G	194	VAL	N-CA-CB	8.13	121.60	110.54
20	N	19	LEU	CA-C-N	8.14	131.84	120.29
20	N	19	LEU	C-N-CA	8.14	131.84	120.29
22	P	25	ASP	CA-CB-CG	-8.13	104.47	112.60
3	C	102	GLN	N-CA-C	-8.13	101.45	113.40
21	S	378	PHE	CA-C-N	8.12	130.37	120.13
21	S	378	PHE	C-N-CA	8.12	130.37	120.13
31	M	275	PHE	CA-C-N	8.12	131.16	120.28
31	M	275	PHE	C-N-CA	8.12	131.16	120.28
11	4	110	HIS	CA-CB-CG	8.12	121.92	113.80
15	W	24	THR	N-CA-C	-8.12	96.37	108.79
28	I	408	ARG	CB-CA-C	-8.11	97.32	110.79
3	C	126	GLY	N-CA-C	-8.11	103.99	115.43
20	N	415	HIS	N-CA-C	-8.11	95.30	108.52
20	N	120	GLU	CA-C-N	8.11	127.80	120.10
20	N	120	GLU	C-N-CA	8.11	127.80	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	I	59	ARG	CA-C-N	8.10	131.14	120.28
28	I	59	ARG	C-N-CA	8.10	131.14	120.28
20	N	491	GLN	CA-C-N	8.10	131.13	120.28
20	N	491	GLN	C-N-CA	8.10	131.13	120.28
5	E	104	ASN	OD1-CG-ND2	-8.09	114.51	122.60
19	Z	804	LEU	N-CA-C	8.09	120.76	110.24
28	I	434	THR	CA-C-N	8.09	129.95	119.84
28	I	434	THR	C-N-CA	8.09	129.95	119.84
24	R	183	TYR	O-C-N	8.09	130.69	122.12
32	J	194	THR	N-CA-C	-8.09	102.45	112.88
31	M	292	ASP	CA-CB-CG	-8.08	104.52	112.60
11	4	153	ARG	N-CA-C	8.08	120.95	110.53
9	2	53	ASP	CA-CB-CG	-8.08	104.52	112.60
19	Z	485	LEU	CA-C-O	8.07	129.11	120.55
21	S	113	VAL	CB-CA-C	8.07	121.09	111.32
24	R	132	VAL	CA-C-N	8.07	132.17	120.71
24	R	132	VAL	C-N-CA	8.07	132.17	120.71
1	A	107	TYR	CA-C-N	8.07	132.17	120.71
1	A	107	TYR	C-N-CA	8.07	132.17	120.71
14	7	127	TYR	N-CA-C	-8.06	104.59	114.75
24	R	220	VAL	CA-C-O	-8.06	112.57	120.95
6	F	87	PHE	CA-C-N	8.06	131.73	120.29
6	F	87	PHE	C-N-CA	8.06	131.73	120.29
9	2	55	ILE	N-CA-C	8.06	118.16	110.42
14	7	77	LEU	N-CA-C	-8.06	93.64	110.80
29	K	337	ASP	CA-C-N	8.06	130.91	120.44
29	K	337	ASP	C-N-CA	8.06	130.91	120.44
30	L	282	ASP	CA-CB-CG	-8.06	104.54	112.60
22	P	88	MET	CG-SD-CE	-8.05	83.19	100.90
26	O	41	VAL	N-CA-CB	8.04	121.48	110.54
27	H	130	ALA	CA-C-N	8.04	127.69	119.56
27	H	130	ALA	C-N-CA	8.04	127.69	119.56
3	C	189	ALA	CA-C-N	8.04	131.71	120.29
3	C	189	ALA	C-N-CA	8.04	131.71	120.29
5	E	215	ILE	CA-CB-CG1	8.04	124.07	110.40
25	U	128	PRO	O-C-N	8.04	132.10	123.10
19	Z	202	HIS	CB-CG-ND1	-8.03	110.65	122.70
31	M	319	GLN	CA-C-N	8.03	132.51	120.31
31	M	319	GLN	C-N-CA	8.03	132.51	120.31
12	5	111	CYS	N-CA-C	8.03	120.11	111.36
2	B	230	LEU	CA-C-N	8.02	131.03	120.28
2	B	230	LEU	C-N-CA	8.02	131.03	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	33	LEU	CA-C-O	-8.02	112.44	120.70
6	F	68	ASN	CA-CB-CG	-8.02	104.58	112.60
19	Z	349	TYR	CA-C-N	8.02	131.02	120.28
19	Z	349	TYR	C-N-CA	8.02	131.02	120.28
22	P	349	LYS	CA-C-O	8.02	129.16	120.10
27	H	79	ASP	CA-CB-CG	8.02	120.61	112.60
22	P	107	GLN	CA-C-N	8.01	131.02	120.28
22	P	107	GLN	C-N-CA	8.01	131.02	120.28
24	R	336	ARG	NE-CZ-NH2	8.01	126.41	119.20
5	E	201	ILE	CA-C-N	8.01	131.01	120.28
5	E	201	ILE	C-N-CA	8.01	131.01	120.28
7	G	185	MET	CA-C-N	8.01	132.08	120.71
7	G	185	MET	C-N-CA	8.01	132.08	120.71
32	J	95	PHE	CB-CA-C	-8.01	93.13	109.38
26	O	47	ASP	CA-C-O	-8.00	109.19	120.16
19	Z	658	ALA	CA-C-N	8.00	131.65	120.29
19	Z	658	ALA	C-N-CA	8.00	131.65	120.29
22	P	346	GLU	CA-C-N	8.00	130.14	120.14
22	P	346	GLU	C-N-CA	8.00	130.14	120.14
28	I	178	LYS	CA-C-O	7.99	128.99	120.36
20	N	831	ALA	N-CA-C	7.99	120.90	111.71
17	T	197	LEU	CA-C-N	7.99	130.83	120.44
17	T	197	LEU	C-N-CA	7.99	130.83	120.44
19	Z	390	LEU	CA-C-N	7.99	130.83	120.44
19	Z	390	LEU	C-N-CA	7.99	130.83	120.44
12	5	253	ASP	CA-C-N	7.99	130.98	120.28
12	5	253	ASP	C-N-CA	7.99	130.98	120.28
21	S	32	ASP	CA-CB-CG	-7.99	104.61	112.60
28	I	91	LYS	CA-C-N	7.98	131.63	120.29
28	I	91	LYS	C-N-CA	7.98	131.63	120.29
32	J	241	HIS	CA-CB-CG	-7.98	105.82	113.80
15	W	65	THR	N-CA-C	-7.97	101.04	108.22
19	Z	347	ASP	CA-CB-CG	-7.97	104.63	112.60
25	U	157	HIS	CA-CB-CG	7.97	121.77	113.80
19	Z	43	GLN	CA-C-N	7.97	132.42	120.31
19	Z	43	GLN	C-N-CA	7.97	132.42	120.31
19	Z	388	ASP	CA-C-N	7.97	131.29	120.38
19	Z	388	ASP	C-N-CA	7.97	131.29	120.38
8	1	227	ILE	CA-C-O	-7.96	109.28	119.95
11	4	25	ILE	N-CA-C	-7.96	96.65	108.12
19	Z	752	HIS	N-CA-C	7.96	119.96	111.28
32	J	345	ARG	CA-C-N	7.96	130.79	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	345	ARG	C-N-CA	7.96	130.79	120.44
24	R	194	PHE	CA-C-N	7.96	130.78	120.44
24	R	194	PHE	C-N-CA	7.96	130.78	120.44
22	P	392	PHE	CA-C-N	7.95	130.94	120.28
22	P	392	PHE	C-N-CA	7.95	130.94	120.28
11	4	31	ASP	N-CA-C	-7.95	97.29	109.85
6	F	65	HIS	CE1-NE2-CD2	-7.95	101.05	109.00
31	M	206	VAL	CA-CB-CG1	-7.95	96.89	110.40
19	Z	515	ALA	CA-C-N	7.94	130.07	120.14
19	Z	515	ALA	C-N-CA	7.94	130.07	120.14
13	6	224	ILE	N-CA-C	-7.94	97.06	108.17
21	S	462	ILE	N-CA-C	-7.94	104.63	112.17
1	A	51	VAL	N-CA-C	-7.94	96.64	108.46
5	E	59	MET	N-CA-C	-7.93	95.48	108.41
6	F	151	ALA	CA-C-N	7.93	132.05	120.95
6	F	151	ALA	C-N-CA	7.93	132.05	120.95
16	V	287	HIS	ND1-CE1-NE2	7.93	116.33	108.40
20	N	362	ASN	N-CA-CB	7.93	123.00	110.55
24	R	89	GLU	O-C-N	7.92	130.52	122.12
28	I	290	ILE	CA-C-N	7.92	128.58	119.94
28	I	290	ILE	C-N-CA	7.92	128.58	119.94
26	O	190	VAL	O-C-N	7.92	129.99	121.83
30	L	377	VAL	CA-C-N	7.92	130.90	120.28
30	L	377	VAL	C-N-CA	7.92	130.90	120.28
22	P	124	LEU	O-C-N	7.92	130.51	122.12
20	N	146	LYS	CA-C-N	7.92	131.53	120.29
20	N	146	LYS	C-N-CA	7.92	131.53	120.29
14	7	212	LEU	CA-C-O	-7.91	112.55	120.70
11	4	91	CYS	N-CA-CB	7.91	121.87	110.16
24	R	149	LEU	CA-C-N	7.91	130.72	120.44
24	R	149	LEU	C-N-CA	7.91	130.72	120.44
7	G	66	ARG	N-CA-C	-7.90	103.85	113.97
19	Z	364	GLN	CA-C-N	7.90	131.09	120.50
19	Z	364	GLN	C-N-CA	7.90	131.09	120.50
31	M	267	GLY	CA-C-N	7.90	131.51	120.29
31	M	267	GLY	C-N-CA	7.90	131.51	120.29
16	V	94	LYS	N-CA-CB	7.90	121.73	110.12
19	Z	528	GLY	N-CA-C	-7.90	104.29	115.43
27	H	367	ASP	N-CA-C	-7.90	102.71	113.30
1	A	222	VAL	N-CA-C	-7.90	104.88	111.91
26	O	255	TRP	CA-CB-CG	7.89	128.60	113.60
2	B	52	GLN	N-CA-C	-7.89	103.61	113.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	238	LYS	CA-C-N	7.88	131.48	120.29
7	G	238	LYS	C-N-CA	7.88	131.48	120.29
19	Z	105	LYS	CA-C-N	7.88	131.47	120.29
19	Z	105	LYS	C-N-CA	7.88	131.47	120.29
20	N	921	ILE	CA-C-O	7.88	129.11	119.58
19	Z	57	GLU	CA-C-N	7.87	131.62	120.28
19	Z	57	GLU	C-N-CA	7.87	131.62	120.28
13	6	219	ALA	CA-C-N	7.87	136.57	121.54
13	6	219	ALA	C-N-CA	7.87	136.57	121.54
2	B	126	GLY	N-CA-C	-7.87	104.34	115.43
17	T	254	ILE	CA-C-O	-7.86	109.42	119.95
15	W	33	VAL	CA-C-O	-7.86	112.52	120.85
12	5	85	ILE	CA-C-N	7.86	132.29	121.05
12	5	85	ILE	C-N-CA	7.86	132.29	121.05
13	6	117	ALA	CA-C-N	7.85	130.81	120.28
13	6	117	ALA	C-N-CA	7.85	130.81	120.28
19	Z	613	LEU	CA-C-N	7.85	136.54	121.54
19	Z	613	LEU	C-N-CA	7.85	136.54	121.54
15	W	156	PHE	CA-CB-CG	-7.85	105.95	113.80
20	N	583	MET	N-CA-C	-7.85	102.73	111.28
20	N	665	ASN	CA-C-N	7.84	130.64	120.44
20	N	665	ASN	C-N-CA	7.84	130.64	120.44
24	R	339	ALA	CA-C-N	7.84	131.43	120.29
24	R	339	ALA	C-N-CA	7.84	131.43	120.29
31	M	272	ARG	CA-C-N	7.84	131.43	120.29
31	M	272	ARG	C-N-CA	7.84	131.43	120.29
2	B	222	THR	CA-C-O	-7.84	112.02	120.17
19	Z	295	ALA	CA-C-O	-7.84	112.59	120.82
9	2	75	SER	N-CA-C	-7.84	97.80	108.38
12	5	258	TYR	CA-C-O	-7.83	112.25	120.55
17	T	283	GLU	N-CA-C	7.83	119.45	111.07
32	J	191	PRO	N-CA-C	7.83	120.25	110.70
25	U	17	LEU	CA-C-N	7.83	130.77	120.28
25	U	17	LEU	C-N-CA	7.83	130.77	120.28
20	N	572	ARG	CA-C-N	7.83	132.32	120.82
20	N	572	ARG	C-N-CA	7.83	132.32	120.82
28	I	287	ILE	CA-C-N	7.82	131.80	120.38
28	I	287	ILE	C-N-CA	7.82	131.80	120.38
16	V	262	GLU	N-CA-CB	7.82	123.93	112.13
30	L	282	ASP	CA-C-O	-7.82	113.04	121.56
8	1	106	PRO	O-C-N	-7.81	117.72	121.31
21	S	275	GLN	N-CA-C	-7.81	103.47	113.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	U	196	HIS	CE1-NE2-CD2	-7.81	101.19	109.00
29	K	63	ASP	CA-C-N	7.81	130.75	120.28
29	K	63	ASP	C-N-CA	7.81	130.75	120.28
23	Q	260	MET	CA-C-N	7.81	133.09	120.60
23	Q	260	MET	C-N-CA	7.81	133.09	120.60
30	L	199	ARG	CA-C-N	7.81	131.06	120.44
30	L	199	ARG	C-N-CA	7.81	131.06	120.44
22	P	132	THR	CA-C-N	7.80	130.58	120.44
22	P	132	THR	C-N-CA	7.80	130.58	120.44
25	U	257	MET	CA-C-N	7.80	131.15	120.46
25	U	257	MET	C-N-CA	7.80	131.15	120.46
20	N	512	ALA	CA-C-N	7.80	128.59	119.94
20	N	512	ALA	C-N-CA	7.80	128.59	119.94
25	U	30	GLY	CA-C-O	-7.80	111.90	121.02
20	N	139	GLN	N-CA-CB	7.80	121.58	110.12
22	P	60	MET	O-C-N	7.79	130.38	122.12
24	R	4	GLU	CA-C-N	7.79	130.72	120.28
24	R	4	GLU	C-N-CA	7.79	130.72	120.28
20	N	123	LYS	CA-C-N	7.79	132.50	120.97
20	N	123	LYS	C-N-CA	7.79	132.50	120.97
32	J	203	VAL	CA-C-O	-7.79	112.85	120.95
20	N	382	SER	N-CA-C	-7.78	100.88	110.61
30	L	47	LEU	CA-C-N	7.78	130.71	120.28
30	L	47	LEU	C-N-CA	7.78	130.71	120.28
25	U	114	ARG	CA-C-N	7.78	130.55	120.44
25	U	114	ARG	C-N-CA	7.78	130.55	120.44
19	Z	325	GLN	N-CA-C	-7.78	103.25	112.89
21	S	355	PRO	O-C-N	7.77	132.76	122.27
9	2	233	SER	N-CA-C	-7.77	101.44	113.02
29	K	66	LYS	CA-C-O	-7.77	112.19	120.42
21	S	289	GLY	O-C-N	-7.77	114.73	122.19
21	S	357	PHE	CB-CG-CD2	-7.77	107.50	120.70
21	S	214	TYR	CB-CA-C	-7.76	98.63	110.90
28	I	84	GLN	CA-C-N	7.76	136.36	121.54
28	I	84	GLN	C-N-CA	7.76	136.36	121.54
29	K	139	LEU	CA-C-N	7.76	131.44	120.42
29	K	139	LEU	C-N-CA	7.76	131.44	120.42
26	O	255	TRP	CA-C-N	7.76	129.84	120.14
26	O	255	TRP	C-N-CA	7.76	129.84	120.14
22	P	222	LEU	CA-C-N	7.75	130.67	120.28
22	P	222	LEU	C-N-CA	7.75	130.67	120.28
24	R	358	ARG	O-C-N	7.75	130.23	121.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	173	SER	O-C-N	-7.75	114.09	122.07
31	M	221	GLN	O-C-N	-7.75	113.39	121.60
4	D	150	LEU	N-CA-C	-7.74	95.41	108.26
19	Z	437	GLU	CA-C-N	7.74	130.65	120.28
19	Z	437	GLU	C-N-CA	7.74	130.65	120.28
22	P	95	SER	N-CA-CB	7.74	123.57	110.49
25	U	258	VAL	CA-C-O	-7.74	112.90	120.95
14	7	192	PRO	CA-C-N	7.74	130.65	120.28
14	7	192	PRO	C-N-CA	7.74	130.65	120.28
6	F	154	PHE	CA-CB-CG	-7.73	106.07	113.80
20	N	666	LYS	CA-C-N	7.73	131.27	120.29
20	N	666	LYS	C-N-CA	7.73	131.27	120.29
8	1	174	ALA	CA-C-N	7.73	131.27	120.29
8	1	174	ALA	C-N-CA	7.73	131.27	120.29
19	Z	730	GLY	CA-C-N	7.73	130.64	120.28
19	Z	730	GLY	C-N-CA	7.73	130.64	120.28
23	Q	267	VAL	CA-C-N	7.73	130.49	120.44
23	Q	267	VAL	C-N-CA	7.73	130.49	120.44
2	B	139	TRP	CA-C-O	7.72	128.67	120.33
16	V	146	ASP	CA-C-O	-7.72	112.49	119.75
3	C	157	GLY	CA-C-N	7.72	129.16	122.29
3	C	157	GLY	C-N-CA	7.72	129.16	122.29
9	2	244	ARG	N-CA-C	-7.72	97.67	109.95
16	V	296	ILE	N-CA-C	7.72	117.79	110.53
29	K	333	PHE	CA-CB-CG	-7.72	106.08	113.80
15	W	76	HIS	CG-CD2-NE2	7.72	114.92	107.20
10	3	111	GLY	O-C-N	-7.72	116.70	123.80
19	Z	392	THR	O-C-N	7.72	130.95	122.15
11	4	70	ARG	CA-C-N	7.71	130.47	120.44
11	4	70	ARG	C-N-CA	7.71	130.47	120.44
24	R	153	ASP	CA-C-N	7.71	130.61	120.28
24	R	153	ASP	C-N-CA	7.71	130.61	120.28
29	K	120	ASP	CA-C-N	7.71	135.18	122.07
29	K	120	ASP	C-N-CA	7.71	135.18	122.07
1	A	50	ILE	N-CA-CB	7.71	124.08	111.44
3	C	94	ALA	O-C-N	7.70	130.28	122.12
15	W	147	GLU	N-CA-C	7.70	120.35	111.11
10	3	157	ASN	N-CA-C	-7.70	95.86	108.41
20	N	901	GLN	CA-C-O	-7.70	112.70	120.63
23	Q	343	SER	N-CA-C	-7.70	97.29	109.23
14	7	167	GLY	N-CA-C	-7.70	97.41	111.04
20	N	948	PHE	CA-CB-CG	7.70	121.50	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	18	LEU	CA-C-N	7.70	130.91	120.44
3	C	18	LEU	C-N-CA	7.70	130.91	120.44
5	E	84	ASP	CA-C-N	7.70	131.22	120.29
5	E	84	ASP	C-N-CA	7.70	131.22	120.29
30	L	135	ASN	CA-CB-CG	7.70	120.30	112.60
22	P	136	ILE	CA-CB-CG1	7.69	123.48	110.40
22	P	163	ALA	CA-C-N	7.69	130.90	120.44
22	P	163	ALA	C-N-CA	7.69	130.90	120.44
19	Z	301	HIS	CE1-NE2-CD2	-7.68	101.32	109.00
23	Q	252	LYS	CA-C-N	7.68	131.99	120.31
23	Q	252	LYS	C-N-CA	7.68	131.99	120.31
19	Z	889	PRO	N-CA-C	-7.68	104.85	114.68
26	O	192	GLU	CA-C-N	7.68	131.19	120.29
26	O	192	GLU	C-N-CA	7.68	131.19	120.29
26	O	284	ARG	CA-C-N	7.68	127.67	119.76
26	O	284	ARG	C-N-CA	7.68	127.67	119.76
15	W	138	VAL	N-CA-C	-7.67	97.03	108.46
28	I	140	ASP	CA-C-N	7.67	130.89	120.38
28	I	140	ASP	C-N-CA	7.67	130.89	120.38
5	E	100	TRP	N-CA-C	-7.67	103.00	111.36
24	R	18	ARG	CA-C-N	7.67	130.22	120.56
24	R	18	ARG	C-N-CA	7.67	130.22	120.56
3	C	120	ALA	CA-C-O	-7.67	112.42	120.55
17	T	169	ARG	N-CA-CB	7.67	121.13	110.01
4	D	22	ALA	N-CA-C	7.66	119.63	111.28
20	N	858	GLU	N-CA-C	-7.66	100.01	111.81
2	B	130	PHE	CA-CB-CG	-7.66	106.14	113.80
14	7	138	ARG	CA-C-N	7.66	130.54	120.28
14	7	138	ARG	C-N-CA	7.66	130.54	120.28
32	J	386	ALA	CA-C-O	-7.65	112.79	120.82
22	P	446	ILE	N-CA-C	7.65	120.65	111.09
26	O	191	SER	O-C-N	7.65	130.23	122.12
15	W	139	ASP	N-CA-C	-7.65	96.76	109.07
1	A	179	LEU	N-CA-C	7.64	119.69	111.36
3	C	73	ALA	CA-C-O	-7.64	112.44	120.99
28	I	161	GLY	CA-C-O	7.64	129.37	121.35
5	E	55	THR	N-CA-C	-7.64	104.49	113.88
7	G	224	ARG	NE-CZ-NH1	7.64	129.14	121.50
13	6	82	SER	CA-C-N	7.63	127.90	122.33
13	6	82	SER	C-N-CA	7.63	127.90	122.33
29	K	90	GLY	N-CA-C	-7.63	100.58	111.42
20	N	116	ALA	CA-C-N	7.63	131.39	120.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	116	ALA	C-N-CA	7.63	131.39	120.79
22	P	10	ASP	CA-CB-CG	-7.63	104.97	112.60
7	G	232	VAL	O-C-N	7.63	129.69	121.83
19	Z	358	PHE	N-CA-C	-7.63	98.15	110.20
11	4	67	TYR	CA-C-O	-7.62	112.34	120.42
7	G	109	LEU	N-CA-C	7.62	120.47	111.71
32	J	201	ARG	CA-C-N	7.62	131.25	120.28
32	J	201	ARG	C-N-CA	7.62	131.25	120.28
21	S	58	HIS	CA-CB-CG	-7.61	106.19	113.80
27	H	182	GLU	CA-C-N	7.61	130.48	120.28
27	H	182	GLU	C-N-CA	7.61	130.48	120.28
19	Z	288	VAL	N-CA-C	7.61	117.72	110.42
4	D	206	GLN	OE1-CD-NE2	7.61	130.21	122.60
3	C	94	ALA	CA-C-O	-7.60	112.49	120.55
4	D	115	ARG	CA-C-O	7.60	128.61	120.55
18	Y	50	ASP	CA-C-N	7.60	130.47	120.28
18	Y	50	ASP	C-N-CA	7.60	130.47	120.28
22	P	7	GLU	CA-C-N	7.60	131.08	120.29
22	P	7	GLU	C-N-CA	7.60	131.08	120.29
2	B	111	VAL	N-CA-CB	7.60	120.87	110.54
20	N	510	GLU	CA-C-N	7.59	131.07	120.29
20	N	510	GLU	C-N-CA	7.59	131.07	120.29
20	N	605	VAL	CB-CA-C	-7.59	101.90	112.14
32	J	162	LYS	O-C-N	7.59	130.16	122.12
31	M	420	HIS	CE1-NE2-CD2	-7.58	101.42	109.00
28	I	77	GLU	N-CA-C	7.58	119.62	111.36
3	C	151	ASP	CA-CB-CG	-7.58	105.02	112.60
19	Z	372	LEU	CA-C-N	7.57	130.42	120.28
19	Z	372	LEU	C-N-CA	7.57	130.42	120.28
26	O	248	PHE	CA-C-N	7.57	130.42	120.28
26	O	248	PHE	C-N-CA	7.57	130.42	120.28
20	N	100	ILE	CA-C-N	7.57	130.25	120.56
20	N	100	ILE	C-N-CA	7.57	130.25	120.56
10	3	140	GLY	N-CA-C	-7.57	99.33	110.90
11	4	37	LYS	N-CA-C	-7.57	96.08	108.41
11	4	180	VAL	O-C-N	-7.57	114.38	123.00
20	N	656	LEU	CA-C-N	7.57	128.34	119.94
20	N	656	LEU	C-N-CA	7.57	128.34	119.94
30	L	234	ASN	CA-CB-CG	7.57	120.17	112.60
17	T	298	THR	O-C-N	-7.56	116.87	121.71
4	D	5	ARG	NH1-CZ-NH2	-7.56	109.47	119.30
20	N	183	LEU	CA-C-N	7.56	130.41	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	183	LEU	C-N-CA	7.56	130.41	120.28
20	N	429	LYS	N-CA-CB	7.56	121.35	110.16
19	Z	225	ALA	CB-CA-C	-7.56	98.25	110.79
11	4	139	THR	CA-C-N	7.55	131.02	120.29
11	4	139	THR	C-N-CA	7.55	131.02	120.29
21	S	42	GLY	N-CA-C	7.55	121.80	112.73
32	J	118	ASN	CA-CB-CG	7.55	120.16	112.60
12	5	236	TYR	CB-CA-C	-7.55	96.66	109.72
16	V	229	LEU	N-CA-C	7.55	120.58	111.82
19	Z	486	GLY	N-CA-C	-7.55	103.11	112.77
24	R	253	LEU	N-CA-C	7.55	126.49	109.81
22	P	201	ARG	CB-CA-C	-7.55	98.02	110.85
28	I	276	GLU	N-CA-CB	-7.55	98.99	110.16
20	N	577	ILE	CA-C-N	7.55	131.15	120.28
20	N	577	ILE	C-N-CA	7.55	131.15	120.28
26	O	284	ARG	NE-CZ-NH1	-7.55	113.95	121.50
12	5	210	GLU	CA-C-N	7.54	130.39	120.28
12	5	210	GLU	C-N-CA	7.54	130.39	120.28
14	7	64	VAL	CA-C-N	7.54	135.55	121.97
14	7	64	VAL	C-N-CA	7.54	135.55	121.97
23	Q	180	LEU	CA-C-N	7.54	133.36	122.35
23	Q	180	LEU	C-N-CA	7.54	133.36	122.35
27	H	397	ILE	CA-C-N	7.54	130.24	120.44
27	H	397	ILE	C-N-CA	7.54	130.24	120.44
27	H	86	THR	CA-C-N	7.54	130.24	120.44
27	H	86	THR	C-N-CA	7.54	130.24	120.44
17	T	273	GLU	CB-CG-CD	-7.54	99.79	112.60
21	S	105	ASN	N-CA-C	-7.54	101.16	112.54
30	L	94	VAL	N-CA-CB	7.54	121.50	111.25
22	P	335	THR	O-C-N	-7.53	112.66	121.32
1	A	200	THR	N-CA-CB	7.53	121.19	110.12
20	N	106	ASP	N-CA-C	7.53	119.48	111.28
32	J	172	PRO	CA-C-N	7.53	130.37	120.28
32	J	172	PRO	C-N-CA	7.53	130.37	120.28
5	E	64	ILE	N-CA-C	-7.52	97.60	108.36
6	F	131	GLY	N-CA-C	-7.52	97.72	111.04
13	6	229	GLY	N-CA-C	-7.52	105.47	115.32
22	P	57	ALA	O-C-N	7.52	130.72	122.15
10	3	75	GLU	O-C-N	7.52	129.82	122.07
24	R	233	ARG	O-C-N	-7.52	113.41	120.55
13	6	104	HIS	CA-CB-CG	7.52	121.32	113.80
13	6	174	PRO	CA-C-N	7.52	130.66	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	6	174	PRO	C-N-CA	7.52	130.66	120.44
29	K	262	ILE	N-CA-C	-7.52	96.90	107.80
11	4	49	GLU	O-C-N	7.52	132.20	123.41
15	W	77	THR	CA-C-N	7.52	133.45	121.95
15	W	77	THR	C-N-CA	7.52	133.45	121.95
20	N	541	HIS	ND1-CE1-NE2	7.51	115.91	108.40
20	N	762	GLY	CA-C-N	7.51	130.75	120.46
20	N	762	GLY	C-N-CA	7.51	130.75	120.46
2	B	14	SER	CA-C-O	-7.51	113.20	120.64
32	J	236	VAL	N-CA-C	7.51	117.63	110.42
12	5	164	ASP	CA-CB-CG	7.51	120.11	112.60
30	L	347	LYS	CA-C-N	7.51	130.95	120.29
30	L	347	LYS	C-N-CA	7.51	130.95	120.29
29	K	98	GLN	CB-CA-C	-7.50	99.04	110.90
30	L	168	THR	CA-C-O	-7.50	112.97	120.70
31	M	416	THR	N-CA-C	-7.50	104.27	113.50
19	Z	623	LYS	CA-C-N	7.50	130.94	120.29
19	Z	623	LYS	C-N-CA	7.50	130.94	120.29
20	N	75	GLU	N-CA-C	7.50	119.10	111.07
22	P	371	THR	N-CA-CB	7.50	121.91	110.28
28	I	62	LEU	CA-C-O	7.50	128.50	120.55
19	Z	443	GLY	CA-C-N	7.50	130.33	120.28
19	Z	443	GLY	C-N-CA	7.50	130.33	120.28
11	4	96	THR	CA-C-O	-7.50	112.37	120.17
21	S	288	THR	CA-C-N	7.50	128.30	119.98
21	S	288	THR	C-N-CA	7.50	128.30	119.98
5	E	149	LYS	N-CA-C	-7.50	102.47	111.69
27	H	223	THR	CB-CA-C	-7.50	98.11	110.85
8	1	171	TYR	CA-C-N	7.49	130.72	120.46
8	1	171	TYR	C-N-CA	7.49	130.72	120.46
19	Z	483	PHE	CA-C-N	7.49	128.29	119.98
19	Z	483	PHE	C-N-CA	7.49	128.29	119.98
2	B	199	PHE	CA-CB-CG	7.49	121.29	113.80
19	Z	878	GLU	CA-C-O	7.49	128.41	120.70
16	V	240	HIS	ND1-CE1-NE2	7.49	115.89	108.40
5	E	136	PRO	O-C-N	7.48	132.56	123.13
6	F	183	ASN	N-CA-C	-7.48	99.45	110.52
28	I	226	GLY	CA-C-N	7.48	128.09	120.38
28	I	226	GLY	C-N-CA	7.48	128.09	120.38
13	6	150	SER	CA-C-O	-7.48	112.31	120.24
21	S	77	GLN	CA-C-N	7.48	130.91	120.29
21	S	77	GLN	C-N-CA	7.48	130.91	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	235	LEU	CA-C-N	7.47	130.16	120.44
17	T	235	LEU	C-N-CA	7.47	130.16	120.44
31	M	378	VAL	CA-C-O	7.47	128.64	120.64
17	T	181	TYR	CA-C-N	7.47	130.29	120.28
17	T	181	TYR	C-N-CA	7.47	130.29	120.28
13	6	213	ASP	N-CA-C	7.47	119.06	111.07
29	K	308	ILE	N-CA-C	-7.47	96.84	107.75
1	A	185	LYS	CA-C-N	7.47	135.80	121.54
1	A	185	LYS	C-N-CA	7.47	135.80	121.54
21	S	320	PHE	CA-C-N	7.46	130.28	120.28
21	S	320	PHE	C-N-CA	7.46	130.28	120.28
32	J	360	LYS	CA-C-N	7.46	129.69	120.22
32	J	360	LYS	C-N-CA	7.46	129.69	120.22
20	N	653	ALA	N-CA-C	-7.46	103.23	111.36
20	N	800	VAL	N-CA-C	-7.46	97.73	108.17
21	S	225	SER	CA-C-N	7.46	130.27	120.28
21	S	225	SER	C-N-CA	7.46	130.27	120.28
26	O	203	ALA	N-CA-C	7.46	120.28	111.71
15	W	94	HIS	ND1-CE1-NE2	7.46	115.86	108.40
11	4	161	ARG	NE-CZ-NH2	7.45	125.91	119.20
16	V	245	VAL	N-CA-CB	7.45	120.67	110.54
19	Z	876	HIS	N-CA-C	-7.45	105.36	114.75
19	Z	463	LEU	CA-C-O	-7.45	112.65	120.55
20	N	8	ILE	CB-CA-C	-7.45	101.94	112.22
13	6	105	SER	N-CA-C	7.45	119.47	111.36
26	O	20	ALA	O-C-N	7.45	130.01	122.12
30	L	165	LEU	CA-C-O	-7.45	111.64	118.79
22	P	381	LEU	CA-C-N	7.44	131.62	120.31
22	P	381	LEU	C-N-CA	7.44	131.62	120.31
26	O	96	PHE	CA-C-N	7.44	130.25	120.28
26	O	96	PHE	C-N-CA	7.44	130.25	120.28
1	A	178	PHE	CA-CB-CG	-7.44	106.36	113.80
6	F	233	LEU	CA-C-N	7.44	131.69	121.05
6	F	233	LEU	C-N-CA	7.44	131.69	121.05
4	D	17	PHE	CB-CA-C	-7.44	99.15	110.90
1	A	14	THR	CA-C-N	7.43	135.35	121.97
1	A	14	THR	C-N-CA	7.43	135.35	121.97
20	N	490	ARG	CA-C-N	7.43	130.24	120.28
20	N	490	ARG	C-N-CA	7.43	130.24	120.28
15	W	108	ARG	NE-CZ-NH2	-7.43	112.51	119.20
24	R	287	LEU	N-CA-C	-7.43	103.26	111.36
12	5	181	SER	CB-CA-C	-7.43	100.68	111.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	310	ARG	N-CA-C	7.43	119.02	111.07
20	N	822	GLU	CA-C-N	7.43	130.97	120.28
20	N	822	GLU	C-N-CA	7.43	130.97	120.28
24	R	322	ALA	O-C-N	7.43	130.11	122.09
26	O	331	VAL	CB-CA-C	7.42	121.31	110.77
29	K	46	LYS	CA-C-N	7.42	130.23	120.28
29	K	46	LYS	C-N-CA	7.42	130.23	120.28
10	3	89	SER	CA-C-N	7.42	130.09	120.44
10	3	89	SER	C-N-CA	7.42	130.09	120.44
21	S	221	ASP	CA-CB-CG	-7.42	105.18	112.60
25	U	248	ALA	CA-C-N	7.42	130.82	120.29
25	U	248	ALA	C-N-CA	7.42	130.82	120.29
19	Z	67	ASP	CB-CA-C	-7.42	97.64	109.80
9	2	205	GLY	CA-C-N	7.41	130.95	120.42
9	2	205	GLY	C-N-CA	7.41	130.95	120.42
24	R	14	ASN	OD1-CG-ND2	7.41	130.01	122.60
30	L	60	ASP	CA-CB-CG	7.41	120.01	112.60
21	S	208	TYR	CA-C-N	7.41	130.81	120.29
21	S	208	TYR	C-N-CA	7.41	130.81	120.29
26	O	112	ILE	O-C-N	7.41	129.46	121.83
20	N	330	SER	N-CA-CB	7.40	121.00	110.12
9	2	175	LEU	N-CA-CB	-7.40	99.24	110.12
3	C	205	LYS	CA-C-O	7.40	127.28	119.14
19	Z	161	HIS	ND1-CE1-NE2	7.40	115.80	108.40
22	P	67	LEU	O-C-N	7.40	129.97	122.12
21	S	178	LYS	N-CA-CB	7.40	123.30	112.13
20	N	792	ASN	CA-C-N	7.40	130.19	120.28
20	N	792	ASN	C-N-CA	7.40	130.19	120.28
2	B	69	THR	N-CA-C	-7.39	99.13	108.45
23	Q	205	LYS	CA-C-N	7.39	130.79	120.29
23	Q	205	LYS	C-N-CA	7.39	130.79	120.29
8	1	95	GLN	CB-CA-C	-7.39	98.28	110.85
25	U	225	HIS	N-CA-C	7.39	119.33	111.28
19	Z	649	HIS	CE1-NE2-CD2	-7.39	101.61	109.00
10	3	149	MET	CA-C-N	7.38	130.04	120.44
10	3	149	MET	C-N-CA	7.38	130.04	120.44
6	F	120	THR	O-C-N	7.38	131.35	122.27
7	G	167	GLY	CA-C-O	-7.38	115.82	120.91
6	F	121	GLN	CB-CG-CD	-7.38	100.05	112.60
11	4	189	HIS	ND1-CE1-NE2	7.38	115.78	108.40
17	T	311	TRP	CA-C-N	7.38	131.19	120.71
17	T	311	TRP	C-N-CA	7.38	131.19	120.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	113	VAL	CB-CA-C	-7.38	102.18	112.14
6	F	175	HIS	CE1-NE2-CD2	-7.38	101.62	109.00
20	N	429	LYS	N-CA-C	-7.38	103.32	111.36
23	Q	332	GLU	CA-C-N	7.38	130.16	120.28
23	Q	332	GLU	C-N-CA	7.38	130.16	120.28
28	I	99	VAL	CA-C-N	7.38	130.03	120.44
28	I	99	VAL	C-N-CA	7.38	130.03	120.44
30	L	359	ASN	OD1-CG-ND2	7.37	129.97	122.60
13	6	51	ALA	N-CA-C	-7.37	97.23	109.24
24	R	272	PHE	CA-CB-CG	-7.37	106.43	113.80
19	Z	465	LEU	CA-C-N	7.37	130.75	120.29
19	Z	465	LEU	C-N-CA	7.37	130.75	120.29
13	6	214	VAL	N-CA-C	7.36	117.45	110.53
22	P	9	ALA	CA-C-O	-7.36	112.61	120.42
21	S	498	ASN	CA-CB-CG	7.36	119.96	112.60
8	1	118	GLU	CA-C-N	7.36	130.14	120.28
8	1	118	GLU	C-N-CA	7.36	130.14	120.28
16	V	37	ALA	N-CA-C	7.36	119.30	111.28
23	Q	46	LYS	CA-C-N	7.36	130.00	120.44
23	Q	46	LYS	C-N-CA	7.36	130.00	120.44
30	L	231	GLU	CA-C-O	-7.36	112.75	120.55
2	B	228	ASP	CA-CB-CG	-7.35	105.25	112.60
26	O	49	CYS	N-CA-CB	7.35	122.91	110.49
25	U	90	ARG	N-CA-C	-7.35	98.60	108.74
26	O	184	ASP	CA-C-N	7.35	133.20	122.99
26	O	184	ASP	C-N-CA	7.35	133.20	122.99
6	F	201	ALA	CA-C-N	7.34	130.43	120.44
6	F	201	ALA	C-N-CA	7.34	130.43	120.44
4	D	107	PRO	CA-C-N	7.34	130.40	120.63
4	D	107	PRO	C-N-CA	7.34	130.40	120.63
22	P	274	VAL	CB-CA-C	-7.34	102.23	112.14
26	O	185	ILE	N-CA-C	-7.34	97.55	108.12
28	I	401	GLU	CA-C-O	-7.34	111.53	119.97
4	D	11	SER	O-C-N	-7.34	112.88	121.32
31	M	58	MET	O-C-N	-7.34	114.34	122.12
7	G	38	ILE	N-CA-C	-7.34	97.55	108.85
19	Z	118	ASN	O-C-N	7.34	130.51	122.15
25	U	32	GLN	CA-C-O	-7.34	113.14	120.70
22	P	45	GLU	CA-C-O	-7.33	113.12	120.82
27	H	104	ALA	CA-C-N	7.33	134.01	120.95
27	H	104	ALA	C-N-CA	7.33	134.01	120.95
10	3	111	GLY	CA-C-O	7.33	127.64	120.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	154	VAL	O-C-N	-7.33	114.93	123.00
9	2	99	THR	O-C-N	-7.33	114.35	122.12
29	K	197	ASP	CA-C-N	7.33	127.93	120.38
29	K	197	ASP	C-N-CA	7.33	127.93	120.38
22	P	233	LEU	CA-C-N	7.32	130.69	120.29
22	P	233	LEU	C-N-CA	7.32	130.69	120.29
24	R	19	ILE	CB-CA-C	-7.32	102.60	111.97
25	U	184	VAL	CA-CB-CG1	7.32	122.85	110.40
26	O	57	ILE	CA-C-N	7.32	129.96	120.44
26	O	57	ILE	C-N-CA	7.32	129.96	120.44
29	K	107	THR	N-CA-C	-7.32	105.26	114.56
3	C	19	TYR	N-CA-C	-7.32	103.24	111.14
15	W	87	CYS	N-CA-C	7.32	119.26	111.28
19	Z	553	THR	N-CA-C	7.32	118.90	111.07
2	B	154	ALA	CA-C-O	-7.32	113.14	121.19
4	D	145	ASP	N-CA-C	-7.32	102.62	112.94
27	H	117	GLN	N-CA-C	-7.32	104.36	113.28
29	K	244	PRO	CA-C-N	7.32	130.08	120.28
29	K	244	PRO	C-N-CA	7.32	130.08	120.28
19	Z	733	GLY	O-C-N	7.31	129.20	122.18
29	K	343	LEU	O-C-N	7.31	129.87	122.12
17	T	136	GLY	N-CA-C	7.31	120.34	111.93
19	Z	432	TYR	CA-C-N	7.31	130.07	120.28
19	Z	432	TYR	C-N-CA	7.31	130.07	120.28
20	N	428	PRO	N-CA-C	-7.31	107.08	114.68
23	Q	214	SER	CA-C-N	7.31	128.04	120.00
23	Q	214	SER	C-N-CA	7.31	128.04	120.00
19	Z	432	TYR	CA-C-O	-7.30	112.81	120.55
4	D	5	ARG	NE-CZ-NH1	7.30	128.80	121.50
15	W	47	ASN	N-CA-CB	7.30	122.14	110.46
4	D	4	ASP	CA-CB-CG	-7.30	105.30	112.60
13	6	190	HIS	CB-CG-CD2	-7.30	121.71	131.20
2	B	33	ALA	CA-C-N	7.30	127.71	119.83
2	B	33	ALA	C-N-CA	7.30	127.71	119.83
25	U	102	HIS	ND1-CE1-NE2	7.29	115.69	108.40
30	L	54	TYR	N-CA-C	-7.29	103.41	111.36
15	W	42	ARG	CA-C-N	7.29	129.92	120.44
15	W	42	ARG	C-N-CA	7.29	129.92	120.44
31	M	138	PRO	CA-C-N	7.29	131.04	120.91
31	M	138	PRO	C-N-CA	7.29	131.04	120.91
22	P	61	VAL	CA-C-N	7.29	130.35	120.44
22	P	61	VAL	C-N-CA	7.29	130.35	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	346	GLN	O-C-N	-7.28	113.86	120.71
20	N	703	CYS	CA-C-N	7.28	126.91	119.19
20	N	703	CYS	C-N-CA	7.28	126.91	119.19
21	S	249	LEU	CB-CA-C	-7.28	98.70	110.79
29	K	124	LEU	N-CA-C	-7.28	104.02	113.12
27	H	385	ILE	N-CA-CB	7.28	121.50	110.58
19	Z	283	THR	CA-C-N	7.28	130.76	120.28
19	Z	283	THR	C-N-CA	7.28	130.76	120.28
24	R	277	VAL	CA-C-O	-7.28	113.38	120.95
27	H	275	ASP	CA-CB-CG	-7.28	105.33	112.60
20	N	599	ILE	N-CA-C	7.27	118.04	110.62
30	L	311	ARG	NE-CZ-NH2	-7.27	112.66	119.20
22	P	213	PHE	CA-CB-CG	-7.27	106.53	113.80
23	Q	53	LEU	CA-C-N	7.26	127.99	120.00
23	Q	53	LEU	C-N-CA	7.26	127.99	120.00
31	M	105	ASN	CA-CB-CG	-7.26	105.34	112.60
20	N	107	HIS	CE1-NE2-CD2	-7.26	101.74	109.00
28	I	162	VAL	CB-CA-C	7.26	120.11	111.32
4	D	221	GLN	OE1-CD-NE2	7.26	129.86	122.60
22	P	39	ARG	CA-C-N	7.25	130.00	120.28
22	P	39	ARG	C-N-CA	7.25	130.00	120.28
24	R	319	MET	CA-C-N	7.25	130.00	120.28
24	R	319	MET	C-N-CA	7.25	130.00	120.28
24	R	366	TYR	N-CA-C	7.25	120.23	111.82
27	H	73	ALA	CA-C-O	-7.25	110.23	120.16
31	M	173	SER	CA-C-N	7.25	129.99	120.28
31	M	173	SER	C-N-CA	7.25	129.99	120.28
8	1	172	VAL	O-C-N	-7.24	114.84	121.87
19	Z	55	GLU	N-CA-CB	7.24	120.77	110.12
23	Q	389	ASP	CA-CB-CG	-7.24	105.36	112.60
27	H	117	GLN	CA-C-O	-7.24	110.56	119.18
30	L	36	ILE	CA-C-N	7.24	129.98	120.28
30	L	36	ILE	C-N-CA	7.24	129.98	120.28
17	T	231	HIS	CE1-NE2-CD2	-7.24	101.76	109.00
20	N	778	PHE	CA-C-N	7.24	132.19	120.60
20	N	778	PHE	C-N-CA	7.24	132.19	120.60
23	Q	361	VAL	CA-C-N	7.24	129.98	120.28
23	Q	361	VAL	C-N-CA	7.24	129.98	120.28
26	O	258	GLN	N-CA-C	-7.24	99.03	110.10
16	V	245	VAL	O-C-N	7.24	128.89	121.87
20	N	568	GLU	N-CA-C	7.24	119.17	111.28
4	D	158	THR	N-CA-C	-7.23	96.38	108.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	210	ARG	CA-C-N	7.23	130.56	120.29
14	7	210	ARG	C-N-CA	7.23	130.56	120.29
20	N	424	ALA	N-CA-C	7.23	119.16	111.28
24	R	160	ASN	CA-C-N	7.23	130.56	120.29
24	R	160	ASN	C-N-CA	7.23	130.56	120.29
32	J	133	PRO	CA-C-N	7.23	130.56	120.29
32	J	133	PRO	C-N-CA	7.23	130.56	120.29
30	L	120	THR	N-CA-C	-7.23	98.15	109.72
2	B	105	ILE	CA-C-N	7.23	126.99	119.76
2	B	105	ILE	C-N-CA	7.23	126.99	119.76
7	G	135	SER	N-CA-C	-7.23	97.62	109.40
15	W	159	THR	CA-CB-OG1	7.23	120.44	109.60
26	O	350	LYS	N-CA-C	7.22	119.15	111.28
22	P	204	ILE	CA-C-N	7.22	130.35	120.46
22	P	204	ILE	C-N-CA	7.22	130.35	120.46
30	L	215	SER	N-CA-C	-7.22	103.57	112.88
12	5	61	THR	CA-C-N	7.21	135.32	121.54
12	5	61	THR	C-N-CA	7.21	135.32	121.54
22	P	294	LYS	N-CA-C	-7.21	104.73	113.97
24	R	120	ALA	CA-C-O	-7.21	113.27	120.70
11	4	123	ALA	CA-C-N	7.21	135.32	121.54
11	4	123	ALA	C-N-CA	7.21	135.32	121.54
19	Z	72	ARG	CA-C-O	-7.21	111.87	118.79
19	Z	770	HIS	CA-CB-CG	-7.21	106.59	113.80
25	U	25	ARG	N-CA-C	7.21	119.14	111.28
26	O	360	VAL	CB-CA-C	-7.21	102.74	111.97
22	P	227	TYR	CA-C-O	-7.21	112.78	120.42
7	G	207	ASP	CA-CB-CG	-7.21	105.39	112.60
22	P	134	GLY	O-C-N	-7.21	116.36	122.92
6	F	65	HIS	ND1-CE1-NE2	7.21	115.61	108.40
18	Y	53	SER	N-CA-C	-7.20	103.51	111.36
24	R	343	LEU	N-CA-C	-7.20	95.46	110.80
26	O	89	ASP	CA-CB-CG	-7.20	105.40	112.60
13	6	151	PHE	CA-CB-CG	-7.20	106.60	113.80
24	R	143	TYR	N-CA-C	7.20	119.12	111.28
26	O	173	TYR	N-CA-C	7.20	119.12	111.28
1	A	70	PHE	CA-CB-CG	-7.19	106.61	113.80
29	K	39	ASP	CA-C-N	7.19	129.79	120.44
29	K	39	ASP	C-N-CA	7.19	129.79	120.44
22	P	141	GLU	CA-C-N	7.19	129.79	120.44
22	P	141	GLU	C-N-CA	7.19	129.79	120.44
29	K	355	SER	CA-C-N	7.19	131.67	121.02

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	355	SER	C-N-CA	7.19	131.67	121.02
3	C	55	LEU	CB-CA-C	7.19	121.04	110.26
10	3	57	ALA	CA-C-N	7.19	130.92	120.71
10	3	57	ALA	C-N-CA	7.19	130.92	120.71
12	5	197	VAL	CA-C-O	-7.19	112.88	120.57
19	Z	201	GLU	CA-C-N	7.18	132.09	120.60
19	Z	201	GLU	C-N-CA	7.18	132.09	120.60
24	R	285	ASP	O-C-N	7.18	129.47	122.07
28	I	314	ASN	CA-CB-CG	-7.18	105.42	112.60
8	1	71	HIS	CA-CB-CG	7.18	120.98	113.80
25	U	188	SER	N-CA-C	7.18	119.18	111.36
32	J	54	ALA	O-C-N	7.17	129.72	122.12
13	6	196	ASP	CA-C-N	7.17	129.76	120.44
13	6	196	ASP	C-N-CA	7.17	129.76	120.44
7	G	224	ARG	CD-NE-CZ	7.17	134.43	124.40
21	S	475	ARG	NE-CZ-NH2	-7.17	112.75	119.20
30	L	168	THR	O-C-N	7.16	129.83	122.09
3	C	116	ASP	CA-CB-CG	-7.16	105.44	112.60
19	Z	202	HIS	CE1-NE2-CD2	-7.16	101.84	109.00
20	N	173	VAL	O-C-N	-7.16	112.94	121.10
3	C	197	LEU	CA-C-N	7.16	129.74	120.44
3	C	197	LEU	C-N-CA	7.16	129.74	120.44
23	Q	314	ARG	CA-C-N	7.16	129.74	120.44
23	Q	314	ARG	C-N-CA	7.16	129.74	120.44
31	M	139	VAL	CA-C-N	7.16	130.09	120.50
31	M	139	VAL	C-N-CA	7.16	130.09	120.50
24	R	372	LYS	CA-C-N	7.15	127.92	119.98
24	R	372	LYS	C-N-CA	7.15	127.92	119.98
11	4	107	TYR	N-CA-CB	7.15	122.69	110.68
23	Q	68	GLY	N-CA-C	7.15	121.92	112.77
24	R	220	VAL	O-C-N	7.15	128.81	121.87
9	2	71	ASP	CA-CB-CG	7.15	119.75	112.60
12	5	205	ASP	CA-CB-CG	-7.15	105.45	112.60
13	6	104	HIS	ND1-CE1-NE2	7.15	115.55	108.40
20	N	260	PHE	CA-C-N	7.15	129.86	120.28
20	N	260	PHE	C-N-CA	7.15	129.86	120.28
16	V	125	VAL	CA-C-N	7.14	131.17	120.31
16	V	125	VAL	C-N-CA	7.14	131.17	120.31
30	L	251	ALA	O-C-N	7.14	129.43	122.07
25	U	62	ASP	CA-C-N	7.14	129.85	120.28
25	U	62	ASP	C-N-CA	7.14	129.85	120.28
25	U	3	GLU	N-CA-C	-7.14	103.18	112.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	U	83	LYS	N-CA-C	7.14	119.06	111.28
16	V	263	ASP	CA-CB-CG	7.14	119.74	112.60
25	U	31	ASN	CA-CB-CG	-7.14	105.46	112.60
2	B	194	THR	CA-CB-OG1	7.13	120.30	109.60
25	U	150	PRO	N-CA-C	7.13	121.57	110.80
31	M	420	HIS	CA-C-N	7.13	129.84	120.28
31	M	420	HIS	C-N-CA	7.13	129.84	120.28
2	B	26	LEU	N-CA-CB	7.13	121.20	110.22
19	Z	280	ASP	CA-CB-CG	7.13	119.73	112.60
20	N	383	ASP	N-CA-C	-7.13	104.05	112.89
4	D	140	VAL	CA-CB-CG1	7.13	122.52	110.40
19	Z	489	TYR	CB-CA-C	7.13	123.74	110.70
20	N	629	THR	CA-C-N	7.13	126.80	119.82
20	N	629	THR	C-N-CA	7.13	126.80	119.82
22	P	162	ALA	CA-C-O	7.13	128.10	120.55
1	A	99	ALA	CA-C-O	7.12	127.97	120.42
19	Z	174	ASP	CA-C-O	-7.12	113.52	120.92
31	M	441	TYR	N-CA-C	-7.12	102.57	112.25
14	7	191	GLN	O-C-N	-7.12	113.14	121.32
15	W	32	ALA	CA-C-O	-7.12	113.35	120.82
19	Z	296	PHE	CA-C-N	7.12	130.53	120.28
19	Z	296	PHE	C-N-CA	7.12	130.53	120.28
32	J	170	LYS	CA-C-N	7.12	131.17	122.42
32	J	170	LYS	C-N-CA	7.12	131.17	122.42
19	Z	413	SER	CA-C-N	7.11	129.81	120.28
19	Z	413	SER	C-N-CA	7.11	129.81	120.28
22	P	334	GLU	N-CA-C	7.11	118.93	111.03
5	E	178	GLN	N-CA-C	7.11	119.11	111.36
5	E	191	LEU	N-CA-C	-7.11	103.46	111.14
28	I	120	HIS	CB-CG-CD2	-7.11	121.95	131.20
31	M	168	PRO	CA-C-N	7.11	130.81	120.71
31	M	168	PRO	C-N-CA	7.11	130.81	120.71
23	Q	218	HIS	ND1-CE1-NE2	7.11	115.51	108.40
19	Z	10	PRO	CA-C-N	7.11	130.19	120.46
19	Z	10	PRO	C-N-CA	7.11	130.19	120.46
20	N	388	ASP	CA-CB-CG	7.11	119.70	112.60
22	P	353	ASP	CA-C-N	7.11	130.51	120.28
22	P	353	ASP	C-N-CA	7.11	130.51	120.28
22	P	215	GLN	N-CA-C	7.10	119.10	111.36
25	U	159	THR	CA-C-N	7.10	133.59	122.94
25	U	159	THR	C-N-CA	7.10	133.59	122.94
7	G	219	GLU	CA-C-O	-7.10	112.08	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	369	TYR	CA-CB-CG	-7.10	101.12	113.90
26	O	367	VAL	CA-C-N	7.10	130.51	120.28
26	O	367	VAL	C-N-CA	7.10	130.51	120.28
9	2	254	VAL	CA-C-N	7.09	131.19	121.05
9	2	254	VAL	C-N-CA	7.09	131.19	121.05
23	Q	10	GLN	CA-C-O	-7.09	113.03	120.55
27	H	85	GLN	CA-C-O	-7.09	113.03	120.55
27	H	407	LYS	CB-CA-C	-7.09	99.02	110.79
30	L	20	ASP	CA-C-N	7.09	130.36	120.29
30	L	20	ASP	C-N-CA	7.09	130.36	120.29
5	E	127	ASP	CA-CB-CG	7.09	119.69	112.60
21	S	470	LEU	CA-C-N	7.09	129.78	120.28
21	S	470	LEU	C-N-CA	7.09	129.78	120.28
24	R	5	ASN	CA-CB-CG	7.09	119.69	112.60
24	R	114	ILE	O-C-N	7.08	128.74	121.87
20	N	226	THR	CA-C-N	7.08	129.77	120.28
20	N	226	THR	C-N-CA	7.08	129.77	120.28
21	S	203	ALA	CA-C-N	7.08	129.77	120.28
21	S	203	ALA	C-N-CA	7.08	129.77	120.28
25	U	196	HIS	CA-C-O	-7.08	113.05	120.55
29	K	123	LEU	N-CA-C	-7.08	103.75	112.88
5	E	211	ASN	N-CA-C	-7.07	98.56	109.24
22	P	388	GLU	CA-C-N	7.07	129.63	120.44
22	P	388	GLU	C-N-CA	7.07	129.63	120.44
11	4	23	SER	CA-C-O	-7.07	112.64	120.70
17	T	192	HIS	CE1-NE2-CD2	-7.07	101.93	109.00
30	L	328	LYS	N-CA-C	7.07	118.98	111.28
19	Z	493	ASN	OD1-CG-ND2	-7.07	115.53	122.60
21	S	350	LYS	CA-C-N	7.07	131.91	120.60
21	S	350	LYS	C-N-CA	7.07	131.91	120.60
28	I	161	GLY	O-C-N	-7.07	117.14	123.92
32	J	6	PRO	N-CA-CB	7.07	109.47	103.25
6	F	122	ARG	NE-CZ-NH2	7.07	125.56	119.20
29	K	302	ASN	CA-CB-CG	-7.06	105.54	112.60
31	M	36	VAL	CA-C-N	7.06	129.62	120.44
31	M	36	VAL	C-N-CA	7.06	129.62	120.44
30	L	133	VAL	CA-C-O	7.06	128.29	120.95
14	7	116	ILE	CA-CB-CG2	7.06	122.50	110.50
20	N	813	TYR	CA-C-O	-7.06	112.59	119.51
23	Q	45	VAL	N-CA-C	7.06	118.66	110.62
6	F	67	ASP	CA-CB-CG	-7.05	105.55	112.60
15	W	105	HIS	ND1-CE1-NE2	7.05	115.45	108.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	63	LEU	N-CA-CB	7.05	120.60	110.16
11	4	146	TYR	CA-CB-CG	-7.05	101.21	113.90
12	5	207	GLN	N-CA-C	-7.05	102.71	112.30
19	Z	317	LEU	N-CA-C	-7.05	103.68	111.36
10	3	100	PHE	CA-C-N	7.05	130.38	121.36
10	3	100	PHE	C-N-CA	7.05	130.38	121.36
20	N	704	PRO	CA-C-N	7.05	130.30	120.29
20	N	704	PRO	C-N-CA	7.05	130.30	120.29
25	U	236	LEU	CA-C-N	7.05	139.00	121.80
25	U	236	LEU	C-N-CA	7.05	139.00	121.80
2	B	128	ARG	CA-C-N	7.05	127.60	119.99
2	B	128	ARG	C-N-CA	7.05	127.60	119.99
12	5	237	HIS	CE1-NE2-CD2	-7.05	101.95	109.00
20	N	879	ASP	N-CA-C	-7.04	98.47	109.25
23	Q	65	GLU	CA-C-N	7.04	129.72	120.28
23	Q	65	GLU	C-N-CA	7.04	129.72	120.28
5	E	90	ASP	CA-C-O	7.04	128.01	120.55
16	V	119	GLY	O-C-N	7.04	129.33	122.92
30	L	152	LEU	CA-C-N	7.04	134.99	121.54
30	L	152	LEU	C-N-CA	7.04	134.99	121.54
26	O	361	LYS	CA-C-O	7.04	128.01	120.55
20	N	346	ASN	CB-CG-OD1	-7.04	106.73	120.80
21	S	352	SER	N-CA-C	-7.04	104.83	113.41
29	K	294	ASN	CA-C-N	7.03	131.00	120.31
29	K	294	ASN	C-N-CA	7.03	131.00	120.31
16	V	81	GLY	N-CA-C	7.03	121.67	112.25
5	E	170	ILE	O-C-N	-7.03	115.58	123.10
23	Q	14	SER	CA-C-O	-7.03	112.16	120.10
31	M	335	THR	CA-C-N	7.02	130.26	120.29
31	M	335	THR	C-N-CA	7.02	130.26	120.29
8	1	165	SER	N-CA-C	7.02	121.60	112.89
10	3	83	LYS	N-CA-CB	-7.02	99.91	109.88
14	7	153	THR	N-CA-CB	7.02	122.09	110.85
20	N	886	PRO	N-CA-C	-7.02	104.83	114.80
22	P	5	GLY	O-C-N	7.02	129.03	122.99
25	U	204	LYS	CB-CA-C	-7.02	99.13	110.79
3	C	87	THR	O-C-N	-7.02	114.68	122.12
6	F	93	LEU	N-CA-CB	7.02	120.55	110.16
16	V	283	HIS	CA-C-N	7.02	130.26	120.29
16	V	283	HIS	C-N-CA	7.02	130.26	120.29
23	Q	109	LEU	CA-C-N	7.02	129.68	120.28
23	Q	109	LEU	C-N-CA	7.02	129.68	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	99	LEU	CB-CA-C	-7.02	99.86	110.88
14	7	117	ASP	CA-C-N	7.01	130.25	120.29
14	7	117	ASP	C-N-CA	7.01	130.25	120.29
21	S	109	LEU	CA-C-N	7.01	129.68	120.28
21	S	109	LEU	C-N-CA	7.01	129.68	120.28
21	S	130	PHE	CB-CA-C	-7.01	108.48	116.54
10	3	106	GLU	O-C-N	-7.01	115.35	121.31
1	A	30	LYS	N-CA-C	-7.01	103.69	111.82
11	4	121	LEU	CA-C-N	7.01	132.59	120.68
11	4	121	LEU	C-N-CA	7.01	132.59	120.68
12	5	192	VAL	N-CA-C	7.01	120.83	111.44
27	H	131	PRO	CA-C-N	7.01	129.67	120.28
27	H	131	PRO	C-N-CA	7.01	129.67	120.28
31	M	77	LYS	CA-C-N	7.01	129.55	120.44
31	M	77	LYS	C-N-CA	7.01	129.55	120.44
19	Z	888	LEU	CA-C-O	-7.00	113.17	120.87
20	N	467	ASN	CA-C-O	-7.00	113.69	120.90
24	R	87	GLU	CA-C-O	-7.00	113.13	120.55
24	R	139	ASP	CA-C-N	7.00	130.05	120.46
24	R	139	ASP	C-N-CA	7.00	130.05	120.46
22	P	229	LEU	CA-C-N	6.99	129.65	120.28
22	P	229	LEU	C-N-CA	6.99	129.65	120.28
16	V	75	MET	CA-C-N	6.99	126.96	119.76
16	V	75	MET	C-N-CA	6.99	126.96	119.76
32	J	171	HIS	CE1-NE2-CD2	-6.99	102.01	109.00
13	6	85	HIS	CA-CB-CG	6.99	120.79	113.80
3	C	69	ASN	CA-C-O	-6.99	113.83	121.31
23	Q	261	LEU	CA-C-N	6.99	134.89	121.54
23	Q	261	LEU	C-N-CA	6.99	134.89	121.54
24	R	139	ASP	O-C-N	6.99	129.53	122.12
20	N	932	GLY	CA-C-N	6.99	127.40	119.92
20	N	932	GLY	C-N-CA	6.99	127.40	119.92
23	Q	277	LEU	CA-C-N	6.99	129.64	120.28
23	Q	277	LEU	C-N-CA	6.99	129.64	120.28
20	N	569	SER	CA-C-N	6.99	129.64	120.28
20	N	569	SER	C-N-CA	6.99	129.64	120.28
24	R	375	LEU	CA-C-N	6.99	130.21	120.29
24	R	375	LEU	C-N-CA	6.99	130.21	120.29
32	J	114	VAL	CB-CA-C	-6.99	99.51	110.69
24	R	159	ARG	NH1-CZ-NH2	-6.98	110.22	119.30
3	C	195	LYS	N-CA-C	6.98	118.89	111.28
26	O	92	VAL	CA-C-N	6.98	129.63	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	92	VAL	C-N-CA	6.98	129.63	120.28
7	G	187	CYS	CA-C-N	6.98	129.51	120.44
7	G	187	CYS	C-N-CA	6.98	129.51	120.44
20	N	412	HIS	CB-CG-ND1	6.98	133.17	122.70
1	A	195	VAL	O-C-N	6.98	128.64	121.87
10	3	168	SER	N-CA-CB	6.98	120.49	110.16
30	L	249	ILE	CA-C-N	6.97	130.56	120.38
30	L	249	ILE	C-N-CA	6.97	130.56	120.38
7	G	210	PHE	CA-CB-CG	6.97	120.77	113.80
24	R	248	GLU	CA-C-N	6.97	131.49	120.47
24	R	248	GLU	C-N-CA	6.97	131.49	120.47
30	L	377	VAL	N-CA-CB	6.97	121.59	112.60
25	U	234	PHE	CA-C-N	6.97	130.19	120.29
25	U	234	PHE	C-N-CA	6.97	130.19	120.29
19	Z	61	GLU	N-CA-CB	6.97	120.47	110.16
19	Z	62	ARG	CA-C-N	6.97	130.32	120.28
19	Z	62	ARG	C-N-CA	6.97	130.32	120.28
30	L	143	ASN	OD1-CG-ND2	6.97	129.57	122.60
6	F	202	GLU	CA-C-N	6.97	131.71	122.30
6	F	202	GLU	C-N-CA	6.97	131.71	122.30
9	2	217	ASP	CA-C-N	6.97	132.61	123.00
9	2	217	ASP	C-N-CA	6.97	132.61	123.00
8	1	170	GLY	N-CA-C	6.96	121.09	112.73
11	4	95	ARG	CA-C-N	6.96	130.07	120.39
11	4	95	ARG	C-N-CA	6.96	130.07	120.39
20	N	807	LYS	O-C-N	-6.96	116.57	121.65
23	Q	260	MET	O-C-N	6.96	130.84	122.27
16	V	224	SER	O-C-N	6.96	130.37	122.22
20	N	880	ASN	CA-CB-CG	-6.96	105.64	112.60
22	P	283	GLN	N-CA-C	-6.96	103.77	111.36
28	I	163	LEU	N-CA-C	-6.96	104.94	113.50
24	R	137	ARG	CA-C-O	6.96	128.13	120.82
21	S	105	ASN	CA-CB-CG	-6.96	105.64	112.60
12	5	172	TYR	O-C-N	6.96	132.18	123.28
20	N	405	THR	CA-C-N	6.96	129.60	120.28
20	N	405	THR	C-N-CA	6.96	129.60	120.28
17	T	104	GLU	N-CA-CB	6.95	120.34	110.12
32	J	365	GLU	CA-C-N	6.95	129.60	120.28
32	J	365	GLU	C-N-CA	6.95	129.60	120.28
30	L	257	PHE	CA-CB-CG	6.95	120.75	113.80
29	K	198	PRO	CA-C-N	6.95	128.53	119.84
29	K	198	PRO	C-N-CA	6.95	128.53	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	446	LEU	CA-C-N	6.95	129.59	120.28
19	Z	446	LEU	C-N-CA	6.95	129.59	120.28
20	N	410	VAL	O-C-N	6.95	128.61	121.87
27	H	339	ARG	N-CA-C	-6.95	98.46	109.23
16	V	121	TRP	N-CA-C	-6.95	98.16	108.79
19	Z	337	LEU	CA-C-N	6.95	130.16	120.29
19	Z	337	LEU	C-N-CA	6.95	130.16	120.29
20	N	553	ALA	N-CA-C	6.95	118.85	111.28
21	S	197	ARG	CA-C-N	6.95	129.59	120.28
21	S	197	ARG	C-N-CA	6.95	129.59	120.28
30	L	226	ALA	O-C-N	6.94	130.07	122.15
4	D	101	ARG	NE-CZ-NH2	6.94	125.45	119.20
22	P	333	SER	CA-C-N	6.94	130.07	120.63
22	P	333	SER	C-N-CA	6.94	130.07	120.63
23	Q	116	TRP	CA-C-O	-6.94	113.06	120.42
7	G	25	GLU	CA-C-N	6.94	129.58	120.28
7	G	25	GLU	C-N-CA	6.94	129.58	120.28
13	6	64	THR	CA-C-N	6.94	129.88	120.44
13	6	64	THR	C-N-CA	6.94	129.88	120.44
23	Q	239	TYR	CA-C-N	6.94	130.28	120.28
23	Q	239	TYR	C-N-CA	6.94	130.28	120.28
27	H	204	LEU	O-C-N	6.94	130.06	122.15
19	Z	352	HIS	CA-CB-CG	6.94	120.74	113.80
24	R	62	ASP	CA-CB-CG	-6.94	105.66	112.60
5	E	25	GLU	CA-C-N	6.93	130.13	120.29
5	E	25	GLU	C-N-CA	6.93	130.13	120.29
22	P	188	GLU	N-CA-C	6.93	118.84	111.28
31	M	59	LYS	O-C-N	6.93	130.05	122.15
24	R	368	GLU	N-CA-CB	6.93	121.02	110.28
30	L	297	ASP	CA-CB-CG	6.93	119.53	112.60
1	A	68	HIS	CB-CG-CD2	-6.93	122.19	131.20
20	N	754	HIS	CA-C-N	6.93	134.77	121.54
20	N	754	HIS	C-N-CA	6.93	134.77	121.54
22	P	99	GLN	O-C-N	6.93	129.46	122.12
22	P	287	VAL	CA-CB-CG1	6.93	122.17	110.40
17	T	231	HIS	ND1-CE1-NE2	6.92	115.33	108.40
19	Z	366	ASP	CA-CB-CG	-6.92	105.68	112.60
16	V	245	VAL	CA-C-N	6.92	129.56	120.28
16	V	245	VAL	C-N-CA	6.92	129.56	120.28
12	5	205	ASP	N-CA-C	-6.92	98.80	109.52
28	I	100	ASP	N-CA-C	-6.92	103.67	111.07
1	A	76	ILE	CA-C-N	6.92	127.53	121.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	76	ILE	C-N-CA	6.92	127.53	121.58
8	1	83	ALA	N-CA-C	6.92	118.90	111.36
19	Z	110	TYR	N-CA-C	-6.92	103.67	111.07
3	C	178	ASP	CA-CB-CG	6.92	119.52	112.60
10	3	103	TYR	CA-C-N	6.92	133.56	120.97
10	3	103	TYR	C-N-CA	6.92	133.56	120.97
17	T	143	GLN	O-C-N	6.91	129.45	122.12
27	H	409	PHE	CA-CB-CG	-6.91	106.89	113.80
20	N	389	ASN	N-CA-C	-6.91	101.94	110.65
25	U	241	SER	CA-C-O	-6.91	112.72	120.32
30	L	18	PRO	CB-CA-C	-6.91	102.02	112.11
7	G	202	HIS	ND1-CE1-NE2	6.91	115.31	108.40
20	N	799	LYS	CA-C-N	-6.91	114.63	123.19
20	N	799	LYS	C-N-CA	-6.91	114.63	123.19
21	S	367	ASN	CA-CB-CG	-6.91	105.69	112.60
21	S	318	VAL	N-CA-CB	6.90	118.17	110.51
32	J	306	LEU	CA-C-O	-6.90	113.23	120.55
19	Z	640	LYS	N-CA-C	6.90	118.80	111.28
27	H	225	CYS	CA-C-N	6.90	129.52	120.28
27	H	225	CYS	C-N-CA	6.90	129.52	120.28
29	K	143	LEU	CA-C-O	-6.90	113.81	120.64
32	J	318	PRO	CA-C-N	6.90	127.48	120.38
32	J	318	PRO	C-N-CA	6.90	127.48	120.38
21	S	202	VAL	CA-C-N	6.90	130.21	120.28
21	S	202	VAL	C-N-CA	6.90	130.21	120.28
32	J	160	GLU	CA-C-O	-6.90	113.60	120.70
5	E	208	GLU	CA-C-N	6.89	133.22	120.95
5	E	208	GLU	C-N-CA	6.89	133.22	120.95
20	N	699	THR	N-CA-CB	6.89	120.47	110.06
19	Z	416	MET	O-C-N	6.89	129.43	122.12
24	R	240	VAL	N-CA-CB	6.89	118.91	110.64
3	C	229	LYS	CA-C-N	6.89	129.51	120.28
3	C	229	LYS	C-N-CA	6.89	129.51	120.28
12	5	105	ALA	CA-C-O	-6.89	113.38	121.44
13	6	104	HIS	CE1-NE2-CD2	-6.89	102.11	109.00
20	N	161	ASP	N-CA-C	-6.89	103.77	111.28
20	N	180	SER	CA-C-N	6.89	129.51	120.28
20	N	180	SER	C-N-CA	6.89	129.51	120.28
21	S	354	MET	CA-C-O	-6.89	111.98	118.73
25	U	36	VAL	N-CA-C	-6.89	98.56	108.48
20	N	242	LEU	N-CA-C	-6.88	103.86	111.36
21	S	124	ARG	NE-CZ-NH1	-6.88	114.62	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	64	ALA	CA-C-N	6.88	129.50	120.28
23	Q	64	ALA	C-N-CA	6.88	129.50	120.28
14	7	200	LYS	CA-C-N	6.88	129.48	120.26
14	7	200	LYS	C-N-CA	6.88	129.48	120.26
32	J	279	GLN	CA-C-O	6.88	129.58	120.15
20	N	50	GLU	CA-C-O	-6.88	113.26	120.55
20	N	68	PHE	CA-C-N	6.88	129.50	120.28
20	N	68	PHE	C-N-CA	6.88	129.50	120.28
7	G	113	ALA	CA-C-N	6.88	129.50	120.28
7	G	113	ALA	C-N-CA	6.88	129.50	120.28
29	K	330	LYS	N-CA-C	-6.88	98.00	109.07
21	S	28	PRO	CA-C-N	6.87	128.68	120.09
21	S	28	PRO	C-N-CA	6.87	128.68	120.09
31	M	74	ASP	CA-CB-CG	-6.87	105.73	112.60
14	7	123	ASP	CA-CB-CG	-6.87	105.73	112.60
21	S	91	LEU	CA-C-N	6.87	129.48	120.28
21	S	91	LEU	C-N-CA	6.87	129.48	120.28
4	D	3	TYR	CA-CB-CG	6.87	126.26	113.90
10	3	179	ALA	N-CA-C	6.87	120.92	112.54
13	6	57	SER	CA-C-N	6.87	132.68	123.00
13	6	57	SER	C-N-CA	6.87	132.68	123.00
16	V	69	VAL	CA-C-N	6.87	130.17	120.42
16	V	69	VAL	C-N-CA	6.87	130.17	120.42
31	M	196	LYS	CA-C-N	6.87	130.75	120.31
31	M	196	LYS	C-N-CA	6.87	130.75	120.31
11	4	101	ASN	CA-CB-CG	6.86	119.46	112.60
22	P	218	ASN	CA-C-O	6.86	127.77	120.70
28	I	184	TYR	CA-C-N	6.86	134.65	121.54
28	I	184	TYR	C-N-CA	6.86	134.65	121.54
17	T	318	TYR	N-CA-C	-6.86	93.17	107.37
22	P	231	ILE	O-C-N	6.86	128.53	121.87
9	2	64	THR	N-CA-C	-6.86	97.72	108.90
14	7	135	TRP	O-C-N	6.86	129.50	122.09
19	Z	324	VAL	N-CA-CB	6.86	122.54	111.23
20	N	272	GLY	N-CA-C	-6.86	102.74	111.72
31	M	257	PRO	CA-C-N	6.86	130.15	120.28
31	M	257	PRO	C-N-CA	6.86	130.15	120.28
13	6	160	ASP	CA-C-O	6.85	128.56	121.23
16	V	57	MET	CA-C-O	6.85	127.76	120.36
23	Q	240	ASP	CA-C-O	-6.85	112.36	120.10
8	1	38	ALA	N-CA-C	-6.85	97.03	108.75
29	K	346	SER	CA-C-N	6.85	130.02	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	346	SER	C-N-CA	6.85	130.02	120.29
21	S	93	ALA	CA-C-N	6.85	130.48	120.82
21	S	93	ALA	C-N-CA	6.85	130.48	120.82
6	F	33	SER	N-CA-C	6.84	120.15	110.23
19	Z	514	VAL	N-CA-C	-6.84	105.67	112.17
25	U	79	TYR	CA-CB-CG	6.84	126.22	113.90
31	M	256	GLY	CA-C-O	-6.84	115.06	119.65
6	F	155	ASP	CA-CB-CG	6.84	119.44	112.60
30	L	127	ARG	CA-C-N	6.84	130.59	120.87
30	L	127	ARG	C-N-CA	6.84	130.59	120.87
31	M	211	HIS	CA-C-N	6.84	129.45	120.28
31	M	211	HIS	C-N-CA	6.84	129.45	120.28
20	N	540	GLN	N-CA-C	-6.84	104.14	113.30
17	T	117	GLU	N-CA-CB	6.84	120.28	110.16
21	S	458	GLU	O-C-N	6.84	131.04	123.04
26	O	177	LEU	O-C-N	6.84	129.11	122.07
1	A	188	ASP	N-CA-CB	6.84	122.04	110.49
5	E	190	THR	CA-C-N	6.84	129.74	120.44
5	E	190	THR	C-N-CA	6.84	129.74	120.44
28	I	169	PRO	CA-C-N	6.84	130.00	120.29
28	I	169	PRO	C-N-CA	6.84	130.00	120.29
29	K	98	GLN	N-CA-C	6.84	118.52	111.14
19	Z	802	SER	CB-CA-C	-6.83	96.82	110.42
21	S	319	GLY	CA-C-N	6.83	130.00	120.29
21	S	319	GLY	C-N-CA	6.83	130.00	120.29
26	O	128	LEU	CA-C-N	6.83	129.44	120.28
26	O	128	LEU	C-N-CA	6.83	129.44	120.28
7	G	40	ILE	CA-C-N	6.83	131.27	121.50
7	G	40	ILE	C-N-CA	6.83	131.27	121.50
19	Z	620	PHE	N-CA-C	-6.83	105.08	113.41
26	O	315	LEU	CA-C-N	6.83	129.32	120.44
26	O	315	LEU	C-N-CA	6.83	129.32	120.44
11	4	32	HIS	CA-C-O	-6.83	110.75	120.51
21	S	56	THR	CA-C-N	6.83	129.31	120.44
21	S	56	THR	C-N-CA	6.83	129.31	120.44
20	N	495	ASP	CA-CB-CG	-6.82	105.78	112.60
10	3	171	MET	CA-C-N	6.82	129.42	120.28
10	3	171	MET	C-N-CA	6.82	129.42	120.28
12	5	255	HIS	CE1-NE2-CD2	-6.82	102.18	109.00
27	H	70	THR	N-CA-C	-6.82	97.09	108.75
29	K	66	LYS	N-CA-C	-6.82	103.93	111.36
1	A	195	VAL	CA-C-O	-6.81	113.86	120.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	237	GLN	CA-C-N	6.81	129.41	120.28
29	K	237	GLN	C-N-CA	6.81	129.41	120.28
28	I	385	MET	O-C-N	6.81	129.34	122.12
16	V	23	PRO	CA-C-N	6.81	130.54	120.87
16	V	23	PRO	C-N-CA	6.81	130.54	120.87
21	S	402	GLY	CA-C-N	6.81	129.79	120.46
21	S	402	GLY	C-N-CA	6.81	129.79	120.46
22	P	27	ARG	CD-NE-CZ	-6.81	114.87	124.40
28	I	88	LEU	CA-C-N	6.81	134.55	121.54
28	I	88	LEU	C-N-CA	6.81	134.55	121.54
12	5	113	PHE	CA-C-N	6.80	129.95	120.29
12	5	113	PHE	C-N-CA	6.80	129.95	120.29
14	7	109	GLN	CA-C-N	6.80	129.13	120.56
14	7	109	GLN	C-N-CA	6.80	129.13	120.56
32	J	317	PHE	O-C-N	6.80	130.48	121.70
32	J	3	LEU	CA-C-N	6.80	134.25	122.82
32	J	3	LEU	C-N-CA	6.80	134.25	122.82
23	Q	38	ASN	N-CA-CB	6.80	121.98	110.49
32	J	121	TYR	CA-C-O	6.80	129.24	120.81
20	N	821	LYS	CA-C-N	6.80	129.39	120.28
20	N	821	LYS	C-N-CA	6.80	129.39	120.28
12	5	112	SER	N-CA-C	6.79	118.69	111.28
25	U	22	HIS	CA-C-O	-6.79	112.42	120.10
31	M	82	LYS	CA-C-N	6.79	130.07	120.42
31	M	82	LYS	C-N-CA	6.79	130.07	120.42
1	A	102	LYS	N-CA-CB	6.79	120.11	110.12
6	F	26	MET	N-CA-CB	6.79	120.11	110.12
7	G	150	TYR	N-CA-C	-6.79	98.77	109.50
17	T	240	MET	CA-C-N	6.79	129.38	120.28
17	T	240	MET	C-N-CA	6.79	129.38	120.28
3	C	7	SER	N-CA-C	-6.79	103.58	112.41
19	Z	464	ALA	CB-CA-C	-6.79	100.22	110.88
28	I	273	VAL	CA-CB-CG1	6.79	121.94	110.40
22	P	91	SER	CA-C-O	-6.78	113.71	120.70
26	O	167	GLY	CA-C-O	-6.78	112.39	118.77
27	H	107	GLU	N-CA-C	-6.78	97.36	108.41
32	J	48	GLN	OE1-CD-NE2	6.78	129.38	122.60
4	D	21	TYR	CA-C-N	6.78	129.37	120.28
4	D	21	TYR	C-N-CA	6.78	129.37	120.28
26	O	154	ARG	CA-C-N	6.78	129.25	120.44
26	O	154	ARG	C-N-CA	6.78	129.25	120.44
23	Q	316	ASP	CA-C-N	6.78	126.74	119.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	316	ASP	C-N-CA	6.78	126.74	119.28
3	C	15	GLU	N-CA-C	-6.78	105.04	113.38
7	G	124	THR	CA-C-N	6.78	129.36	120.28
7	G	124	THR	C-N-CA	6.78	129.36	120.28
25	U	253	THR	CA-C-O	-6.78	113.24	120.42
22	P	9	ALA	N-CA-C	6.77	118.74	111.36
21	S	396	HIS	ND1-CE1-NE2	6.77	115.17	108.40
4	D	30	SER	CA-C-N	6.77	131.18	121.50
4	D	30	SER	C-N-CA	6.77	131.18	121.50
5	E	30	GLY	CA-C-N	6.77	129.35	120.28
5	E	30	GLY	C-N-CA	6.77	129.35	120.28
7	G	159	TYR	O-C-N	-6.77	114.91	123.24
9	2	229	LEU	CA-C-O	6.77	127.84	120.32
20	N	733	ALA	CB-CA-C	-6.77	99.55	110.79
30	L	294	ASN	CA-C-O	-6.77	113.31	120.55
31	M	312	THR	O-C-N	-6.77	114.43	122.15
21	S	313	PRO	CA-C-N	6.77	134.47	121.54
21	S	313	PRO	C-N-CA	6.77	134.47	121.54
31	M	86	ASN	CA-C-N	6.77	130.03	120.28
31	M	86	ASN	C-N-CA	6.77	130.03	120.28
8	1	97	GLY	CA-C-N	6.76	129.34	120.28
8	1	97	GLY	C-N-CA	6.76	129.34	120.28
11	4	132	HIS	CE1-NE2-CD2	-6.76	102.23	109.00
11	4	144	ASP	CA-C-N	6.76	130.59	120.31
11	4	144	ASP	C-N-CA	6.76	130.59	120.31
11	4	189	HIS	CE1-NE2-CD2	-6.76	102.23	109.00
8	1	122	ARG	NE-CZ-NH2	-6.76	113.11	119.20
25	U	75	LEU	CA-C-O	-6.76	113.38	120.55
20	N	412	HIS	CG-CD2-NE2	6.76	113.96	107.20
19	Z	681	TYR	CA-C-N	6.76	127.44	120.00
19	Z	681	TYR	C-N-CA	6.76	127.44	120.00
19	Z	786	GLN	CA-C-N	6.76	132.20	121.66
19	Z	786	GLN	C-N-CA	6.76	132.20	121.66
22	P	1	MET	CG-SD-CE	-6.76	86.03	100.90
30	L	102	ASP	CA-CB-CG	-6.76	105.84	112.60
30	L	162	VAL	N-CA-C	-6.76	104.27	110.82
27	H	177	VAL	CA-CB-CG1	-6.76	98.91	110.40
31	M	265	GLY	CA-C-N	6.75	130.58	120.31
31	M	265	GLY	C-N-CA	6.75	130.58	120.31
9	2	99	THR	CA-C-N	6.75	129.88	120.29
9	2	99	THR	C-N-CA	6.75	129.88	120.29
26	O	276	CYS	O-C-N	-6.75	114.96	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	F	194	ALA	CA-C-N	6.75	129.33	120.28
6	F	194	ALA	C-N-CA	6.75	129.33	120.28
28	I	221	GLY	O-C-N	6.75	129.18	122.77
30	L	133	VAL	N-CA-C	6.75	117.51	110.62
1	A	18	PRO	N-CA-CB	6.75	110.23	103.48
23	Q	132	ARG	NE-CZ-NH1	6.75	128.25	121.50
1	A	125	TYR	CA-C-O	6.75	127.70	120.55
28	I	144	LEU	N-CA-C	-6.75	96.66	108.20
21	S	358	LEU	CA-C-N	6.74	129.31	120.28
21	S	358	LEU	C-N-CA	6.74	129.31	120.28
21	S	487	VAL	CA-C-N	6.74	129.20	120.44
21	S	487	VAL	C-N-CA	6.74	129.20	120.44
4	D	169	ARG	N-CA-CB	6.74	121.88	110.49
10	3	175	VAL	N-CA-C	6.74	117.49	110.62
5	E	42	THR	N-CA-CB	6.74	121.15	111.05
19	Z	665	GLU	CA-C-N	6.74	129.69	120.46
19	Z	665	GLU	C-N-CA	6.74	129.69	120.46
22	P	47	LEU	N-CA-CB	6.73	120.12	110.16
22	P	233	LEU	O-C-N	-6.73	115.14	122.07
28	I	368	HIS	CA-C-N	6.73	129.30	120.28
28	I	368	HIS	C-N-CA	6.73	129.30	120.28
20	N	686	GLY	N-CA-C	-6.73	104.65	112.73
27	H	327	LEU	CA-C-O	-6.73	113.33	120.80
27	H	329	PRO	CA-C-N	6.73	129.30	120.28
27	H	329	PRO	C-N-CA	6.73	129.30	120.28
30	L	380	ASP	CB-CA-C	-6.73	98.18	110.63
19	Z	228	LYS	CA-C-N	6.73	129.68	120.46
19	Z	228	LYS	C-N-CA	6.73	129.68	120.46
25	U	195	VAL	CA-C-N	6.73	129.30	120.28
25	U	195	VAL	C-N-CA	6.73	129.30	120.28
32	J	139	MET	O-C-N	-6.73	114.82	122.09
20	N	128	GLN	N-CA-C	6.73	118.69	111.36
22	P	299	ILE	CA-C-O	-6.73	115.18	119.15
30	L	396	SER	O-C-N	-6.72	116.20	123.26
14	7	201	GLN	OE1-CD-NE2	6.72	129.32	122.60
28	I	200	SER	N-CA-C	6.72	118.40	111.14
32	J	307	ARG	O-C-N	-6.72	114.29	121.42
1	A	175	SER	CA-C-O	6.72	127.54	120.42
19	Z	646	MET	CA-C-N	6.72	127.44	119.98
19	Z	646	MET	C-N-CA	6.72	127.44	119.98
21	S	354	MET	N-CA-CB	6.72	120.31	110.30
22	P	12	ARG	O-C-N	6.72	130.99	122.93

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	242	GLU	O-C-N	6.72	128.99	122.07
7	G	132	PHE	CA-C-O	-6.72	113.11	120.43
12	5	144	ASN	CA-C-N	6.72	129.28	120.28
12	5	144	ASN	C-N-CA	6.72	129.28	120.28
27	H	178	GLY	N-CA-C	-6.72	105.83	115.64
12	5	199	ASP	CA-CB-CG	6.72	119.32	112.60
29	K	133	HIS	ND1-CE1-NE2	6.72	115.12	108.40
19	Z	814	SER	N-CA-CB	6.71	121.84	110.49
20	N	50	GLU	N-CA-C	6.71	118.60	111.28
20	N	366	HIS	CB-CG-CD2	-6.71	122.47	131.20
22	P	263	TRP	CA-C-O	-6.71	112.25	119.97
16	V	76	PRO	N-CA-CB	6.71	109.28	103.31
29	K	340	GLN	CA-C-N	6.71	129.28	120.28
29	K	340	GLN	C-N-CA	6.71	129.28	120.28
27	H	398	ARG	NE-CZ-NH2	6.71	125.24	119.20
19	Z	470	VAL	CA-C-N	6.71	129.27	120.28
19	Z	470	VAL	C-N-CA	6.71	129.27	120.28
21	S	131	LEU	CA-C-N	6.71	130.23	120.71
21	S	131	LEU	C-N-CA	6.71	130.23	120.71
22	P	401	THR	N-CA-C	-6.71	98.83	109.23
15	W	38	HIS	ND1-CE1-NE2	6.71	115.11	108.40
21	S	399	ILE	CA-C-N	6.71	129.26	120.28
21	S	399	ILE	C-N-CA	6.71	129.26	120.28
8	1	178	GLU	CA-C-O	-6.70	113.12	120.36
19	Z	154	TRP	CA-C-N	6.70	127.42	119.98
19	Z	154	TRP	C-N-CA	6.70	127.42	119.98
32	J	81	ASP	CA-CB-CG	-6.70	105.90	112.60
23	Q	230	SER	CA-C-O	-6.70	113.45	120.55
3	C	97	TYR	N-CA-C	6.70	118.66	111.36
16	V	135	ALA	CA-C-N	6.70	129.15	120.44
16	V	135	ALA	C-N-CA	6.70	129.15	120.44
22	P	369	TYR	O-C-N	6.70	129.33	122.09
31	M	181	ASP	CA-CB-CG	-6.70	105.90	112.60
2	B	10	LEU	N-CA-C	-6.70	104.73	113.17
11	4	25	ILE	N-CA-CB	6.70	121.30	111.52
6	F	209	ASN	CA-C-N	-6.70	114.37	123.14
6	F	209	ASN	C-N-CA	-6.70	114.37	123.14
9	2	170	MET	N-CA-C	-6.70	97.68	109.06
29	K	303	VAL	CA-C-N	6.70	134.33	121.54
29	K	303	VAL	C-N-CA	6.70	134.33	121.54
19	Z	879	ARG	N-CA-C	-6.69	96.55	110.80
20	N	86	ASP	CA-C-N	6.69	134.32	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	86	ASP	C-N-CA	6.69	134.32	121.54
25	U	84	LYS	CA-C-N	6.69	128.99	120.56
25	U	84	LYS	C-N-CA	6.69	128.99	120.56
13	6	60	PHE	CA-CB-CG	-6.69	107.11	113.80
15	W	177	PRO	N-CA-CB	6.69	109.29	103.27
19	Z	96	LEU	N-CA-C	-6.69	104.07	111.36
6	F	208	LYS	N-CA-C	6.69	119.42	111.33
9	2	236	ASN	CA-CB-CG	6.69	119.29	112.60
19	Z	341	GLU	N-CA-CB	6.69	120.48	109.98
22	P	377	ARG	CD-NE-CZ	-6.69	115.04	124.40
23	Q	396	THR	CA-C-N	6.69	129.24	120.28
23	Q	396	THR	C-N-CA	6.69	129.24	120.28
20	N	921	ILE	CA-CB-CG1	6.69	121.77	110.40
19	Z	202	HIS	CB-CG-CD2	6.68	139.89	131.20
20	N	425	THR	CA-C-N	6.68	130.47	120.31
20	N	425	THR	C-N-CA	6.68	130.47	120.31
25	U	168	GLU	CA-C-N	6.68	129.53	120.44
25	U	168	GLU	C-N-CA	6.68	129.53	120.44
27	H	408	ASP	O-C-N	6.68	129.21	122.12
1	A	199	ILE	O-C-N	6.68	128.85	121.90
17	T	347	ARG	CA-C-N	6.68	129.23	120.28
17	T	347	ARG	C-N-CA	6.68	129.23	120.28
22	P	30	GLU	CB-CG-CD	-6.68	101.24	112.60
7	G	120	VAL	N-CA-CB	6.68	118.36	110.55
21	S	44	GLY	CA-C-N	6.68	129.12	120.44
21	S	44	GLY	C-N-CA	6.68	129.12	120.44
2	B	230	LEU	CB-CA-C	-6.67	99.71	110.79
32	J	88	LYS	N-CA-CB	6.67	121.03	110.55
2	B	63	HIS	CE1-NE2-CD2	-6.67	102.33	109.00
23	Q	179	ALA	CA-C-N	6.67	130.45	120.31
23	Q	179	ALA	C-N-CA	6.67	130.45	120.31
24	R	8	GLU	N-CA-CB	6.67	120.03	110.16
26	O	215	GLU	CA-C-N	6.67	129.22	120.28
26	O	215	GLU	C-N-CA	6.67	129.22	120.28
27	H	324	PRO	N-CA-C	-6.67	106.98	114.92
1	A	12	HIS	CE1-NE2-CD2	-6.67	102.33	109.00
18	Y	49	GLU	CA-C-N	6.67	130.44	120.31
18	Y	49	GLU	C-N-CA	6.67	130.44	120.31
7	G	123	TYR	CB-CG-CD1	6.67	130.80	120.80
6	F	130	VAL	O-C-N	6.66	130.03	123.03
13	6	35	ASN	CA-CB-CG	6.66	119.26	112.60
26	O	41	VAL	N-CA-C	6.66	117.42	110.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	143	ILE	N-CA-CB	6.66	119.00	111.21
1	A	229	ILE	N-CA-C	-6.66	98.84	108.36
12	5	124	ILE	CA-CB-CG1	6.66	121.72	110.40
13	6	183	LYS	N-CA-CB	6.66	120.56	110.30
17	T	225	THR	N-CA-CB	6.66	121.75	110.49
15	W	120	ASN	CA-C-N	6.66	129.75	120.29
15	W	120	ASN	C-N-CA	6.66	129.75	120.29
9	2	190	GLU	CA-C-N	6.66	130.16	120.71
9	2	190	GLU	C-N-CA	6.66	130.16	120.71
32	J	19	GLY	O-C-N	6.66	128.58	122.19
14	7	128	SER	CA-C-N	6.66	128.16	119.84
14	7	128	SER	C-N-CA	6.66	128.16	119.84
15	W	139	ASP	CA-CB-CG	6.66	119.25	112.60
2	B	71	HIS	CG-CD2-NE2	6.65	113.85	107.20
1	A	127	GLN	CA-CB-CG	6.65	127.41	114.10
11	4	184	ASP	N-CA-C	-6.65	98.56	109.40
1	A	143	ILE	N-CA-C	-6.65	98.28	107.99
8	1	94	TYR	N-CA-CB	6.65	119.90	110.12
20	N	160	LEU	CA-C-O	-6.65	113.37	120.42
20	N	538	GLU	CA-C-O	-6.65	113.50	120.55
22	P	195	ALA	N-CA-C	6.65	118.53	111.28
23	Q	281	GLY	CA-C-N	6.65	130.42	120.31
23	Q	281	GLY	C-N-CA	6.65	130.42	120.31
12	5	129	ASN	CA-C-N	6.65	129.48	120.44
12	5	129	ASN	C-N-CA	6.65	129.48	120.44
19	Z	40	ASP	O-C-N	-6.65	115.49	122.94
32	J	127	LEU	CA-C-N	6.65	126.78	119.87
32	J	127	LEU	C-N-CA	6.65	126.78	119.87
24	R	136	HIS	CE1-NE2-CD2	-6.65	102.35	109.00
31	M	302	GLU	N-CA-C	-6.65	105.46	113.97
3	C	77	ALA	N-CA-CB	6.64	120.94	110.84
32	J	39	SER	CA-C-N	6.64	129.19	120.28
32	J	39	SER	C-N-CA	6.64	129.19	120.28
32	J	242	ALA	O-C-N	-6.64	114.22	121.53
19	Z	643	PRO	O-C-N	6.64	130.79	122.22
28	I	277	HIS	CA-CB-CG	-6.64	107.16	113.80
22	P	214	PHE	CA-CB-CG	-6.64	107.16	113.80
32	J	330	LYS	O-C-N	-6.64	115.23	122.07
3	C	116	ASP	CB-CA-C	-6.64	99.77	110.79
10	3	176	ASP	CA-C-O	-6.64	113.51	120.55
23	Q	192	SER	CA-C-N	6.64	129.07	120.44
23	Q	192	SER	C-N-CA	6.64	129.07	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	U	166	GLU	N-CA-C	6.64	118.17	111.07
27	H	376	LEU	CA-C-N	6.64	130.32	120.83
27	H	376	LEU	C-N-CA	6.64	130.32	120.83
12	5	109	ALA	N-CA-CB	6.64	119.77	109.48
27	H	432	TYR	CA-C-O	6.64	127.54	120.70
30	L	370	ARG	CA-C-N	6.64	129.84	120.28
30	L	370	ARG	C-N-CA	6.64	129.84	120.28
6	F	43	HIS	ND1-CE1-NE2	6.64	115.04	108.40
15	W	162	GLY	CA-C-N	6.64	129.47	120.44
15	W	162	GLY	C-N-CA	6.64	129.47	120.44
30	L	206	ASP	CA-CB-CG	-6.64	105.96	112.60
9	2	78	HIS	CA-C-O	-6.63	113.00	120.43
14	7	243	ILE	CA-C-N	6.63	132.34	122.99
14	7	243	ILE	C-N-CA	6.63	132.34	122.99
30	L	164	GLU	N-CA-C	6.63	118.30	111.14
5	E	100	TRP	CA-C-N	6.63	129.06	120.44
5	E	100	TRP	C-N-CA	6.63	129.06	120.44
20	N	868	LYS	CA-C-N	6.63	130.25	120.90
20	N	868	LYS	C-N-CA	6.63	130.25	120.90
4	D	77	ALA	CA-C-N	6.63	129.46	120.38
4	D	77	ALA	C-N-CA	6.63	129.46	120.38
20	N	838	LYS	CA-C-N	6.63	129.06	120.44
20	N	838	LYS	C-N-CA	6.63	129.06	120.44
20	N	160	LEU	N-CA-C	6.63	118.59	111.36
23	Q	220	ALA	N-CA-C	6.63	118.30	111.14
23	Q	249	THR	O-C-N	-6.63	115.09	122.12
21	S	248	ASN	N-CA-CB	6.63	119.62	110.01
28	I	327	VAL	CA-C-N	6.63	131.38	122.90
28	I	327	VAL	C-N-CA	6.63	131.38	122.90
19	Z	625	LYS	N-CA-C	6.62	118.50	111.28
11	4	51	GLY	CA-C-N	6.62	129.69	120.29
11	4	51	GLY	C-N-CA	6.62	129.69	120.29
15	W	19	GLY	CA-C-N	6.62	129.04	120.44
15	W	19	GLY	C-N-CA	6.62	129.04	120.44
21	S	224	ARG	CA-C-N	6.62	129.04	120.44
21	S	224	ARG	C-N-CA	6.62	129.04	120.44
31	M	184	PRO	N-CA-C	-6.62	98.83	112.47
32	J	350	LEU	O-C-N	-6.62	115.25	122.07
1	A	98	ALA	CA-C-N	6.62	129.69	120.29
1	A	98	ALA	C-N-CA	6.62	129.69	120.29
22	P	169	LEU	N-CA-C	6.62	118.49	111.28
8	1	110	HIS	CA-CB-CG	6.62	120.42	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	2	250	GLY	CA-C-N	6.62	131.75	122.36
9	2	250	GLY	C-N-CA	6.62	131.75	122.36
21	S	187	LEU	O-C-N	6.62	129.96	122.22
7	G	216	TRP	CB-CG-CD2	-6.61	117.54	126.80
21	S	171	LEU	CA-C-N	6.61	129.14	120.28
21	S	171	LEU	C-N-CA	6.61	129.14	120.28
7	G	242	GLU	CA-C-N	6.61	130.36	120.31
7	G	242	GLU	C-N-CA	6.61	130.36	120.31
11	4	154	GLU	N-CA-C	-6.61	97.59	108.76
27	H	56	LEU	CA-C-O	-6.61	113.49	120.63
29	K	164	TYR	N-CA-C	-6.61	105.10	112.57
22	P	188	GLU	CA-C-N	6.61	129.14	120.28
22	P	188	GLU	C-N-CA	6.61	129.14	120.28
19	Z	489	TYR	CA-CB-CG	-6.61	102.01	113.90
32	J	176	GLU	N-CA-C	-6.61	104.16	111.36
32	J	232	ARG	CA-C-N	6.61	129.67	120.29
32	J	232	ARG	C-N-CA	6.61	129.67	120.29
22	P	45	GLU	CA-C-N	6.61	129.13	120.28
22	P	45	GLU	C-N-CA	6.61	129.13	120.28
27	H	377	CYS	O-C-N	-6.61	115.96	121.38
28	I	157	HIS	CE1-NE2-CD2	-6.60	102.40	109.00
31	M	200	GLU	N-CA-C	6.60	118.48	111.28
11	4	72	GLY	O-C-N	6.60	128.51	122.18
16	V	90	VAL	N-CA-CB	6.60	118.27	110.55
23	Q	390	GLU	CA-C-N	6.60	127.18	120.38
23	Q	390	GLU	C-N-CA	6.60	127.18	120.38
20	N	681	ASN	N-CA-C	6.60	118.13	111.07
24	R	137	ARG	CA-C-N	6.60	130.34	120.31
24	R	137	ARG	C-N-CA	6.60	130.34	120.31
31	M	376	MET	CA-C-N	6.59	130.71	120.75
31	M	376	MET	C-N-CA	6.59	130.71	120.75
6	F	86	ASN	CA-C-N	6.59	129.65	120.29
6	F	86	ASN	C-N-CA	6.59	129.65	120.29
14	7	81	ARG	N-CA-C	-6.59	104.02	111.14
19	Z	329	ASN	CA-C-N	6.59	132.18	122.82
19	Z	329	ASN	C-N-CA	6.59	132.18	122.82
6	F	227	ASP	N-CA-CB	6.59	119.56	110.01
3	C	86	LEU	N-CA-C	6.59	118.54	111.36
20	N	390	LEU	CA-C-N	6.58	129.76	120.28
20	N	390	LEU	C-N-CA	6.58	129.76	120.28
21	S	295	GLN	O-C-N	6.58	130.95	122.39
17	T	345	TYR	CA-C-N	6.58	129.10	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	345	TYR	C-N-CA	6.58	129.10	120.28
20	N	592	GLY	N-CA-C	-6.58	106.65	115.21
27	H	373	LEU	CA-C-N	6.58	129.10	120.28
27	H	373	LEU	C-N-CA	6.58	129.10	120.28
32	J	110	PRO	CA-C-N	6.58	134.11	121.54
32	J	110	PRO	C-N-CA	6.58	134.11	121.54
10	3	187	VAL	O-C-N	6.58	130.31	123.20
14	7	77	LEU	N-CA-CB	6.58	121.61	110.49
22	P	268	LYS	CB-CA-C	-6.58	99.87	110.79
23	Q	218	HIS	CE1-NE2-CD2	-6.58	102.42	109.00
24	R	94	ASN	CA-C-N	6.58	130.09	120.82
24	R	94	ASN	C-N-CA	6.58	130.09	120.82
19	Z	224	ASN	CA-CB-CG	6.58	119.17	112.60
26	O	111	VAL	CA-C-N	6.58	129.76	120.42
26	O	111	VAL	C-N-CA	6.58	129.76	120.42
2	B	146	LEU	N-CA-C	-6.57	96.65	108.48
7	G	31	VAL	CA-CB-CG2	6.57	121.57	110.40
19	Z	50	LYS	CA-C-O	6.57	127.52	120.55
32	J	217	SER	N-CA-C	-6.57	99.08	109.07
8	1	67	LEU	N-CA-CB	6.57	121.09	110.77
5	E	21	LEU	N-CA-CB	6.57	119.63	109.97
20	N	745	THR	CA-C-O	-6.57	113.75	121.44
27	H	307	ASP	CA-CB-CG	6.57	119.17	112.60
6	F	51	ARG	CA-C-N	6.57	132.90	122.59
6	F	51	ARG	C-N-CA	6.57	132.90	122.59
19	Z	811	LEU	N-CA-CB	6.57	119.92	110.40
23	Q	65	GLU	N-CA-C	6.57	118.44	111.28
8	1	68	THR	N-CA-CB	6.57	118.13	110.71
8	1	106	PRO	CB-CA-C	-6.57	105.22	111.39
12	5	126	GLU	CA-C-N	6.57	129.08	120.28
12	5	126	GLU	C-N-CA	6.57	129.08	120.28
16	V	227	GLU	CA-C-N	6.57	127.27	119.98
16	V	227	GLU	C-N-CA	6.57	127.27	119.98
22	P	168	GLU	CA-C-O	-6.57	113.94	120.70
28	I	271	PHE	CA-CB-CG	-6.57	107.23	113.80
20	N	470	ASN	CA-C-N	6.56	134.08	121.54
20	N	470	ASN	C-N-CA	6.56	134.08	121.54
29	K	406	VAL	CA-C-N	6.56	129.45	120.46
29	K	406	VAL	C-N-CA	6.56	129.45	120.46
32	J	343	ASN	OD1-CG-ND2	-6.56	116.04	122.60
31	M	301	SER	N-CA-CB	6.56	119.88	109.51
9	2	105	ASN	CA-C-N	6.56	129.60	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	2	105	ASN	C-N-CA	6.56	129.60	120.29
19	Z	235	SER	N-CA-CB	6.56	120.32	110.22
29	K	204	MET	CG-SD-CE	-6.56	86.47	100.90
15	W	123	ASP	CA-C-N	6.56	129.07	120.28
15	W	123	ASP	C-N-CA	6.56	129.07	120.28
21	S	331	VAL	O-C-N	6.56	128.34	121.91
11	4	61	GLN	CA-C-N	6.56	130.28	120.31
11	4	61	GLN	C-N-CA	6.56	130.28	120.31
10	3	114	PRO	N-CA-C	-6.55	100.73	111.68
12	5	133	ILE	N-CA-CB	6.55	122.04	111.23
15	W	172	THR	CA-C-N	6.55	134.25	122.13
15	W	172	THR	C-N-CA	6.55	134.25	122.13
17	T	253	ASN	N-CA-C	-6.55	103.89	112.41
22	P	73	MET	CA-CB-CG	-6.55	101.00	114.10
22	P	149	LEU	CA-C-N	6.55	129.06	120.28
22	P	149	LEU	C-N-CA	6.55	129.06	120.28
1	A	103	TYR	CB-CG-CD2	-6.55	110.98	120.80
27	H	212	VAL	N-CA-C	-6.55	98.70	108.46
6	F	64	LEU	N-CA-C	-6.55	98.73	109.40
6	F	112	ILE	CA-C-N	6.55	128.53	120.22
6	F	112	ILE	C-N-CA	6.55	128.53	120.22
6	F	176	MET	CA-C-N	6.55	129.59	120.29
6	F	176	MET	C-N-CA	6.55	129.59	120.29
20	N	389	ASN	CA-C-N	6.55	130.26	120.31
20	N	389	ASN	C-N-CA	6.55	130.26	120.31
20	N	742	HIS	ND1-CE1-NE2	6.55	114.95	108.40
32	J	112	CYS	N-CA-C	-6.55	98.53	109.07
7	G	203	ASP	N-CA-C	-6.54	99.16	109.50
32	J	203	VAL	CB-CA-C	-6.54	103.30	112.14
6	F	234	ASP	N-CA-CB	6.54	119.62	109.48
11	4	42	ILE	CA-CB-CG1	6.54	121.52	110.40
6	F	62	LYS	O-C-N	-6.54	114.49	122.34
20	N	763	VAL	O-C-N	-6.54	115.53	121.87
32	J	271	ARG	NE-CZ-NH1	-6.54	114.96	121.50
19	Z	202	HIS	ND1-CE1-NE2	6.54	114.94	108.40
19	Z	323	ASN	CA-C-N	6.54	133.74	121.97
19	Z	323	ASN	C-N-CA	6.54	133.74	121.97
24	R	154	ASN	CA-C-N	6.54	129.33	120.44
24	R	154	ASN	C-N-CA	6.54	129.33	120.44
12	5	69	HIS	CB-CG-CD2	-6.53	122.70	131.20
19	Z	378	ASN	CA-C-N	6.53	127.19	120.00
19	Z	378	ASN	C-N-CA	6.53	127.19	120.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	244	ALA	CA-C-N	6.53	129.03	120.28
24	R	244	ALA	C-N-CA	6.53	129.03	120.28
28	I	260	LEU	CA-C-N	6.53	133.88	122.05
28	I	260	LEU	C-N-CA	6.53	133.88	122.05
32	J	139	MET	CA-C-N	6.53	129.41	120.46
32	J	139	MET	C-N-CA	6.53	129.41	120.46
29	K	409	LYS	CB-CA-C	-6.53	103.11	111.86
8	1	225	ASP	CA-C-N	6.53	134.01	121.54
8	1	225	ASP	C-N-CA	6.53	134.01	121.54
24	R	351	ASN	CA-CB-CG	-6.53	106.07	112.60
20	N	615	ARG	NE-CZ-NH1	6.53	128.03	121.50
20	N	743	ASN	CA-CB-CG	-6.53	106.07	112.60
23	Q	118	LYS	N-CA-CB	6.53	119.72	110.12
16	V	225	TRP	CA-CB-CG	6.53	126.00	113.60
22	P	386	VAL	N-CA-C	6.53	117.28	110.62
30	L	317	LEU	CA-C-N	6.52	128.00	119.84
30	L	317	LEU	C-N-CA	6.52	128.00	119.84
17	T	183	GLU	N-CA-C	-6.52	96.91	110.80
26	O	45	VAL	O-C-N	6.52	128.46	121.87
20	N	952	ASP	CA-CB-CG	-6.52	106.08	112.60
5	E	89	ILE	N-CA-C	6.52	117.31	110.72
19	Z	551	LYS	N-CA-CB	6.52	120.37	109.94
27	H	122	VAL	N-CA-CB	6.52	120.12	111.25
2	B	211	GLY	CA-C-O	-6.52	115.86	120.94
19	Z	442	SER	CA-C-N	6.52	128.50	120.22
19	Z	442	SER	C-N-CA	6.52	128.50	120.22
20	N	754	HIS	ND1-CE1-NE2	6.52	114.92	108.40
19	Z	190	GLU	CA-C-N	6.52	129.67	120.42
19	Z	190	GLU	C-N-CA	6.52	129.67	120.42
20	N	706	VAL	N-CA-CB	6.52	120.35	110.58
31	M	161	TYR	O-C-N	6.52	130.96	122.68
3	C	239	LYS	N-CA-C	-6.51	104.18	111.28
19	Z	152	ALA	CA-C-N	6.51	129.01	120.28
19	Z	152	ALA	C-N-CA	6.51	129.01	120.28
32	J	59	LEU	CA-C-N	6.51	128.91	120.44
32	J	59	LEU	C-N-CA	6.51	128.91	120.44
32	J	267	SER	CA-C-N	6.51	129.00	120.28
32	J	267	SER	C-N-CA	6.51	129.00	120.28
27	H	38	GLN	CB-CG-CD	-6.51	101.53	112.60
9	2	159	HIS	ND1-CE1-NE2	6.51	114.91	108.40
20	N	754	HIS	CG-CD2-NE2	6.51	113.71	107.20
29	K	152	MET	N-CA-C	-6.51	101.15	110.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	V	201	TYR	O-C-N	6.51	131.24	122.59
27	H	197	HIS	CA-C-N	6.51	126.21	119.64
27	H	197	HIS	C-N-CA	6.51	126.21	119.64
22	P	321	VAL	N-CA-CB	6.50	118.16	110.55
25	U	177	ARG	CA-C-N	6.50	132.45	122.11
25	U	177	ARG	C-N-CA	6.50	132.45	122.11
16	V	207	TYR	CA-C-N	6.50	131.08	122.30
16	V	207	TYR	C-N-CA	6.50	131.08	122.30
19	Z	524	MET	N-CA-C	6.50	118.37	111.28
30	L	264	ASP	N-CA-C	6.50	119.36	111.82
14	7	202	PRO	N-CA-CB	6.50	110.08	103.25
1	A	190	THR	O-C-N	-6.50	114.08	122.72
20	N	520	MET	CA-C-N	6.50	133.95	121.54
20	N	520	MET	C-N-CA	6.50	133.95	121.54
16	V	146	ASP	CA-CB-CG	-6.50	106.10	112.60
19	Z	198	HIS	ND1-CE1-NE2	6.50	114.90	108.40
26	O	141	MET	N-CA-CB	6.50	119.78	110.16
30	L	291	MET	CA-C-O	-6.50	113.68	120.70
2	B	34	PRO	N-CA-CB	6.50	109.12	103.27
16	V	307	VAL	CA-C-O	-6.50	114.19	120.95
19	Z	208	LEU	CA-C-N	6.50	129.28	120.38
19	Z	208	LEU	C-N-CA	6.50	129.28	120.38
20	N	748	LEU	N-CA-C	-6.50	104.28	111.36
21	S	425	ASP	CA-CB-CG	-6.50	106.10	112.60
23	Q	68	GLY	CA-C-O	6.50	127.55	120.66
24	R	109	GLU	CA-C-N	6.50	128.99	120.28
24	R	109	GLU	C-N-CA	6.50	128.99	120.28
29	K	324	PRO	N-CA-CB	6.50	109.12	103.27
4	D	155	PRO	N-CA-C	6.50	121.98	113.86
29	K	206	GLY	CA-C-N	6.50	127.07	120.38
29	K	206	GLY	C-N-CA	6.50	127.07	120.38
17	T	159	ILE	CB-CA-C	-6.49	103.38	112.14
23	Q	265	GLU	CA-C-O	6.49	127.43	120.55
24	R	296	VAL	N-CA-C	6.49	116.65	110.42
25	U	31	ASN	CA-C-N	6.49	129.27	120.44
25	U	31	ASN	C-N-CA	6.49	129.27	120.44
31	M	337	ARG	NE-CZ-NH2	6.49	125.05	119.20
20	N	241	ASN	CA-C-N	6.49	129.50	120.29
20	N	241	ASN	C-N-CA	6.49	129.50	120.29
26	O	265	GLU	N-CA-C	-6.49	106.32	114.56
16	V	41	MET	CA-C-N	6.49	128.97	120.28
16	V	41	MET	C-N-CA	6.49	128.97	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	407	MET	O-C-N	6.49	129.55	122.15
30	L	186	LEU	N-CA-CB	6.49	121.01	110.43
13	6	230	ILE	CA-C-N	6.49	133.93	121.54
13	6	230	ILE	C-N-CA	6.49	133.93	121.54
25	U	196	HIS	CG-CD2-NE2	6.49	113.69	107.20
2	B	188	ILE	CA-C-N	6.48	128.97	120.28
2	B	188	ILE	C-N-CA	6.48	128.97	120.28
20	N	479	LEU	O-C-N	6.48	129.09	122.09
20	N	594	GLY	N-CA-C	-6.48	97.81	113.18
29	K	257	ASN	CA-C-O	6.48	129.21	121.17
32	J	269	VAL	O-C-N	6.48	128.16	121.87
9	2	211	GLY	O-C-N	6.48	131.12	122.70
22	P	322	GLU	N-CA-C	6.48	118.22	111.03
26	O	291	LEU	N-CA-C	-6.48	99.18	109.23
6	F	58	ALA	CA-C-N	6.48	130.34	120.82
6	F	58	ALA	C-N-CA	6.48	130.34	120.82
20	N	450	HIS	CG-CD2-NE2	6.48	113.68	107.20
9	2	159	HIS	CE1-NE2-CD2	-6.48	102.52	109.00
22	P	429	SER	CA-C-N	6.48	129.49	120.29
22	P	429	SER	C-N-CA	6.48	129.49	120.29
29	K	222	HIS	CG-CD2-NE2	6.48	113.68	107.20
13	6	201	LEU	CA-C-N	6.48	128.72	120.56
13	6	201	LEU	C-N-CA	6.48	128.72	120.56
24	R	331	ASP	N-CA-C	6.48	118.00	111.07
29	K	290	LEU	CA-C-N	6.48	129.49	120.29
29	K	290	LEU	C-N-CA	6.48	129.49	120.29
20	N	801	GLN	N-CA-C	-6.47	98.85	109.40
30	L	44	ARG	NE-CZ-NH2	6.47	125.03	119.20
13	6	85	HIS	ND1-CE1-NE2	6.47	114.87	108.40
20	N	26	LYS	CA-C-N	6.47	128.95	120.28
20	N	26	LYS	C-N-CA	6.47	128.95	120.28
21	S	188	MET	O-C-N	6.47	129.79	122.22
16	V	92	GLN	OE1-CD-NE2	6.47	129.07	122.60
19	Z	292	LYS	N-CA-C	-6.47	103.92	110.97
25	U	115	TYR	N-CA-C	6.47	117.99	111.07
29	K	395	LEU	CA-C-N	6.47	128.94	120.28
29	K	395	LEU	C-N-CA	6.47	128.94	120.28
14	7	133	HIS	ND1-CE1-NE2	6.46	114.86	108.40
19	Z	383	ALA	CA-C-O	-6.46	113.92	121.16
22	P	239	SER	CA-C-N	6.46	129.23	120.44
22	P	239	SER	C-N-CA	6.46	129.23	120.44
21	S	315	HIS	CE1-NE2-CD2	-6.46	102.54	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	745	LEU	O-C-N	6.46	129.07	122.09
14	7	87	MET	CG-SD-CE	-6.46	86.69	100.90
15	W	175	PRO	CA-C-O	-6.46	113.79	121.67
16	V	190	GLN	CA-C-N	6.46	128.94	120.28
16	V	190	GLN	C-N-CA	6.46	128.94	120.28
2	B	182	LEU	CA-C-N	6.46	132.72	120.97
2	B	182	LEU	C-N-CA	6.46	132.72	120.97
22	P	142	ARG	CA-C-N	6.46	129.46	120.29
22	P	142	ARG	C-N-CA	6.46	129.46	120.29
32	J	52	LEU	CA-C-N	6.46	129.46	120.29
32	J	52	LEU	C-N-CA	6.46	129.46	120.29
3	C	49	ARG	CA-C-N	6.45	128.93	120.28
3	C	49	ARG	C-N-CA	6.45	128.93	120.28
24	R	136	HIS	ND1-CE1-NE2	6.45	114.85	108.40
31	M	71	ALA	CA-C-N	6.45	129.45	120.29
31	M	71	ALA	C-N-CA	6.45	129.45	120.29
19	Z	266	LEU	CA-C-N	6.45	128.83	120.44
19	Z	266	LEU	C-N-CA	6.45	128.83	120.44
20	N	236	LEU	CA-C-O	-6.45	112.81	120.10
28	I	158	ALA	CA-C-O	-6.45	113.76	120.99
6	F	20	HIS	CA-C-N	6.45	129.57	120.28
6	F	20	HIS	C-N-CA	6.45	129.57	120.28
24	R	229	ILE	N-CA-C	-6.45	104.23	110.42
7	G	120	VAL	CB-CA-C	-6.45	103.72	111.97
21	S	493	PRO	N-CA-C	6.45	118.57	110.70
19	Z	805	ASP	N-CA-C	-6.45	100.98	110.52
21	S	317	ALA	CA-C-N	6.45	128.92	120.60
21	S	317	ALA	C-N-CA	6.45	128.92	120.60
19	Z	677	HIS	ND1-CE1-NE2	6.44	114.84	108.40
19	Z	813	LYS	O-C-N	6.44	130.27	122.35
27	H	279	ALA	CA-C-N	6.44	133.56	121.97
27	H	279	ALA	C-N-CA	6.44	133.56	121.97
28	I	120	HIS	CB-CG-ND1	6.44	132.36	122.70
4	D	66	ASP	CA-CB-CG	-6.44	106.16	112.60
21	S	144	ARG	O-C-N	-6.44	115.29	120.38
27	H	198	PRO	CA-C-N	6.44	128.91	120.28
27	H	198	PRO	C-N-CA	6.44	128.91	120.28
32	J	332	HIS	ND1-CE1-NE2	6.44	114.84	108.40
19	Z	508	SER	CB-CA-C	6.44	120.84	110.09
20	N	601	ARG	N-CA-C	6.44	118.38	111.36
24	R	34	ASP	N-CA-C	6.44	120.99	113.20
24	R	292	TYR	N-CA-C	-6.44	104.31	111.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	69	LYS	CA-C-O	-6.44	113.73	120.55
30	L	58	GLU	CA-CB-CG	-6.44	101.23	114.10
20	N	362	ASN	CB-CA-C	-6.43	99.64	110.19
20	N	930	ALA	CA-C-O	-6.43	114.12	121.07
29	K	386	ALA	CA-C-N	6.43	129.55	120.42
29	K	386	ALA	C-N-CA	6.43	129.55	120.42
32	J	330	LYS	CA-C-N	6.43	129.56	120.42
32	J	330	LYS	C-N-CA	6.43	129.56	120.42
19	Z	224	ASN	CB-CA-C	-6.43	100.11	110.79
23	Q	190	LEU	CA-C-N	6.43	128.90	120.28
23	Q	190	LEU	C-N-CA	6.43	128.90	120.28
14	7	66	ILE	CA-C-N	-6.43	113.30	122.94
14	7	66	ILE	C-N-CA	-6.43	113.30	122.94
20	N	687	ALA	N-CA-C	6.43	118.29	111.28
26	O	20	ALA	CA-C-O	-6.43	113.74	120.55
3	C	117	ILE	CA-C-N	6.43	128.89	120.28
3	C	117	ILE	C-N-CA	6.43	128.89	120.28
20	N	206	MET	CA-C-N	6.43	128.89	120.28
20	N	206	MET	C-N-CA	6.43	128.89	120.28
24	R	34	ASP	CA-C-N	6.43	129.22	120.54
24	R	34	ASP	C-N-CA	6.43	129.22	120.54
31	M	320	LEU	CA-C-O	-6.43	112.58	119.97
2	B	226	VAL	CA-C-N	6.42	128.89	120.28
2	B	226	VAL	C-N-CA	6.42	128.89	120.28
13	6	100	LYS	CA-C-N	6.42	128.88	120.28
13	6	100	LYS	C-N-CA	6.42	128.88	120.28
22	P	124	LEU	CA-C-O	-6.42	113.75	120.55
26	O	350	LYS	N-CA-CB	6.42	119.56	110.12
1	A	122	SER	N-CA-C	-6.42	104.37	111.82
8	1	216	GLY	CA-C-N	6.42	133.52	121.97
8	1	216	GLY	C-N-CA	6.42	133.52	121.97
11	4	69	MET	CA-C-N	6.42	128.88	120.28
11	4	69	MET	C-N-CA	6.42	128.88	120.28
3	C	146	GLN	N-CA-C	6.42	118.82	109.07
24	R	314	LEU	N-CA-C	-6.42	99.32	109.07
13	6	85	HIS	CB-CG-CD2	-6.42	122.86	131.20
20	N	878	LEU	N-CA-C	-6.42	99.55	109.24
23	Q	308	ASP	CA-C-N	6.41	131.43	120.72
23	Q	308	ASP	C-N-CA	6.41	131.43	120.72
24	R	381	GLN	CA-C-N	6.41	128.87	120.28
24	R	381	GLN	C-N-CA	6.41	128.87	120.28
19	Z	575	ALA	CA-C-N	6.41	129.53	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	575	ALA	C-N-CA	6.41	129.53	120.42
27	H	169	LYS	O-C-N	-6.41	113.95	121.32
27	H	327	LEU	O-C-N	6.41	130.69	123.19
16	V	98	MET	CA-C-O	6.41	127.22	120.42
27	H	83	ASP	CA-CB-CG	-6.41	106.19	112.60
15	W	169	HIS	CG-CD2-NE2	6.41	113.61	107.20
2	B	174	LEU	N-CA-CB	6.41	119.64	110.16
6	F	116	THR	CA-C-N	6.41	128.87	120.28
6	F	116	THR	C-N-CA	6.41	128.87	120.28
9	2	104	SER	CA-C-N	6.41	128.77	120.44
9	2	104	SER	C-N-CA	6.41	128.77	120.44
15	W	182	ALA	CA-C-N	6.41	130.85	120.60
15	W	182	ALA	C-N-CA	6.41	130.85	120.60
27	H	74	PRO	CA-C-O	-6.41	111.27	120.56
6	F	62	LYS	N-CA-C	-6.41	105.04	112.92
15	W	170	LEU	CB-CA-C	-6.41	99.69	110.19
24	R	77	ASN	CA-C-O	-6.41	113.63	120.42
30	L	294	ASN	N-CA-C	-6.41	103.59	111.40
20	N	393	LEU	N-CA-C	6.40	119.25	111.82
2	B	86	LEU	CA-C-N	6.40	129.51	120.42
2	B	86	LEU	C-N-CA	6.40	129.51	120.42
5	E	30	GLY	CA-C-O	6.40	127.34	120.30
8	1	110	HIS	CE1-NE2-CD2	-6.40	102.60	109.00
23	Q	382	GLU	N-CA-C	-6.40	106.43	114.56
25	U	203	SER	N-CA-C	-6.40	104.31	111.28
19	Z	291	GLN	OE1-CD-NE2	6.40	129.00	122.60
24	R	339	ALA	N-CA-C	6.40	118.25	111.28
31	M	186	GLU	N-CA-C	-6.40	105.51	113.38
19	Z	542	ILE	O-C-N	-6.40	115.67	121.87
14	7	213	VAL	O-C-N	6.39	128.42	121.83
24	R	99	GLU	CA-C-N	6.39	129.50	120.42
24	R	99	GLU	C-N-CA	6.39	129.50	120.42
30	L	375	PHE	N-CA-C	-6.39	99.35	109.07
3	C	227	VAL	N-CA-CB	6.39	117.69	110.72
4	D	220	ASP	N-CA-C	-6.39	102.95	113.50
19	Z	782	HIS	CG-CD2-NE2	6.39	113.59	107.20
30	L	56	LYS	CB-CA-C	-6.39	100.84	110.88
22	P	126	ASP	O-C-N	6.39	129.43	122.15
27	H	193	THR	CA-C-O	-6.39	112.14	118.34
2	B	113	ARG	CG-CD-NE	-6.39	97.95	112.00
13	6	50	VAL	N-CA-C	-6.39	98.84	108.17
24	R	177	ARG	O-C-N	-6.39	115.35	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	195	ASN	N-CA-CB	6.38	121.28	110.49
30	L	169	ASN	CA-CB-CG	-6.38	106.22	112.60
20	N	933	PRO	O-C-N	6.38	130.63	122.91
29	K	246	MET	CA-C-N	6.38	128.60	120.56
29	K	246	MET	C-N-CA	6.38	128.60	120.56
1	A	65	THR	CA-CB-OG1	6.38	119.17	109.60
10	3	181	SER	N-CA-C	-6.38	105.07	112.92
22	P	359	VAL	O-C-N	-6.38	114.59	121.80
7	G	41	ARG	O-C-N	-6.38	115.58	123.04
26	O	307	VAL	N-CA-C	6.38	117.12	110.62
32	J	64	GLN	CA-C-O	-6.38	113.66	120.42
12	5	200	ARG	CA-C-N	6.38	127.06	119.98
12	5	200	ARG	C-N-CA	6.38	127.06	119.98
26	O	359	ASP	CA-CB-CG	6.38	118.98	112.60
31	M	413	ARG	CD-NE-CZ	-6.38	115.47	124.40
24	R	85	ASP	CB-CA-C	-6.38	100.21	110.79
15	W	38	HIS	CB-CA-C	-6.37	100.02	110.85
25	U	104	ASN	OD1-CG-ND2	6.37	128.97	122.60
32	J	111	ASN	CA-CB-CG	-6.37	106.23	112.60
20	N	257	SER	CA-C-N	6.37	129.34	120.29
20	N	257	SER	C-N-CA	6.37	129.34	120.29
23	Q	2	ALA	N-CA-C	-6.37	105.47	113.18
29	K	299	PHE	CA-C-O	-6.37	112.90	120.10
31	M	329	VAL	N-CA-CB	6.37	117.67	110.72
13	6	126	ARG	CA-C-N	6.37	129.14	120.54
13	6	126	ARG	C-N-CA	6.37	129.14	120.54
22	P	92	LYS	CB-CA-C	-6.37	100.22	110.79
16	V	189	ILE	CA-C-N	6.37	129.45	120.28
16	V	189	ILE	C-N-CA	6.37	129.45	120.28
19	Z	524	MET	CA-C-N	6.37	129.19	120.46
19	Z	524	MET	C-N-CA	6.37	129.19	120.46
22	P	207	LYS	CG-CD-CE	6.37	125.95	111.30
24	R	202	LEU	N-CA-C	6.37	118.30	111.36
8	1	128	MET	N-CA-C	-6.37	98.24	109.06
17	T	151	LEU	CA-C-N	6.37	129.33	120.29
17	T	151	LEU	C-N-CA	6.37	129.33	120.29
24	R	46	ARG	CA-C-O	-6.37	113.38	120.70
1	A	238	HIS	CA-C-N	6.36	128.71	120.44
1	A	238	HIS	C-N-CA	6.36	128.71	120.44
16	V	24	ALA	O-C-N	-6.36	115.13	122.89
27	H	206	ILE	N-CA-CB	6.36	119.34	110.56
20	N	788	ILE	CA-CB-CG1	6.36	121.21	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	249	LEU	CA-C-N	6.36	128.80	120.28
21	S	249	LEU	C-N-CA	6.36	128.80	120.28
31	M	85	VAL	N-CA-CB	6.36	117.99	110.55
19	Z	843	SER	N-CA-C	6.36	124.34	110.80
20	N	411	ILE	CB-CA-C	-6.36	103.56	112.14
21	S	293	ALA	CA-C-O	-6.36	114.15	120.70
19	Z	161	HIS	CB-CG-CD2	-6.36	122.94	131.20
17	T	289	GLU	CA-C-N	6.36	129.43	120.28
17	T	289	GLU	C-N-CA	6.36	129.43	120.28
22	P	258	ALA	CA-C-O	-6.36	114.15	120.70
2	B	13	PHE	CA-CB-CG	-6.35	107.45	113.80
15	W	2	VAL	N-CA-C	-6.35	99.11	107.88
19	Z	326	LEU	CB-CA-C	-6.35	100.90	110.88
5	E	23	GLN	CA-C-N	6.35	129.44	120.42
5	E	23	GLN	C-N-CA	6.35	129.44	120.42
17	T	249	LEU	N-CA-C	-6.35	103.66	112.30
20	N	645	ASN	CA-CB-CG	6.35	118.95	112.60
26	O	184	ASP	CA-CB-CG	-6.35	106.25	112.60
29	K	389	GLU	CA-C-N	6.35	133.67	121.54
29	K	389	GLU	C-N-CA	6.35	133.67	121.54
22	P	369	TYR	CA-C-O	-6.35	114.16	120.70
24	R	143	TYR	CA-C-N	6.35	128.79	120.28
24	R	143	TYR	C-N-CA	6.35	128.79	120.28
24	R	236	LEU	CA-C-N	6.35	128.70	120.44
24	R	236	LEU	C-N-CA	6.35	128.70	120.44
3	C	17	ARG	CA-C-N	6.35	129.72	120.71
3	C	17	ARG	C-N-CA	6.35	129.72	120.71
4	D	135	ILE	CB-CA-C	-6.35	101.76	110.90
13	6	129	PHE	O-C-N	-6.35	114.02	121.32
14	7	111	LEU	CA-C-N	6.35	126.99	119.94
14	7	111	LEU	C-N-CA	6.35	126.99	119.94
20	N	915	LYS	N-CA-CB	6.35	121.22	110.49
22	P	127	THR	O-C-N	-6.35	114.91	122.15
24	R	89	GLU	CA-C-O	-6.35	113.82	120.55
24	R	245	GLU	CA-C-O	-6.35	113.82	120.55
23	Q	324	ALA	CB-CA-C	-6.35	100.06	110.85
27	H	160	THR	N-CA-C	-6.35	105.19	113.12
26	O	248	PHE	N-CA-C	6.35	118.20	111.28
27	H	295	VAL	N-CA-C	6.35	117.09	110.62
23	Q	142	ARG	CA-C-N	6.34	129.30	120.29
23	Q	142	ARG	C-N-CA	6.34	129.30	120.29
24	R	193	ASP	CA-CB-CG	-6.34	106.26	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	362	THR	N-CA-CB	6.34	119.27	110.07
31	M	76	ILE	CA-CB-CG2	-6.34	99.71	110.50
32	J	41	ASN	CB-CA-C	-6.34	100.07	110.85
19	Z	163	ALA	N-CA-C	6.34	119.00	111.71
1	A	77	GLY	CA-C-O	-6.34	115.23	121.76
21	S	238	HIS	ND1-CE1-NE2	6.34	114.74	108.40
32	J	165	ILE	O-C-N	6.34	129.67	121.94
1	A	209	ASP	CA-CB-CG	-6.33	106.27	112.60
17	T	294	LEU	N-CA-CB	6.33	120.90	110.39
20	N	261	LEU	CA-C-N	6.33	128.77	120.28
20	N	261	LEU	C-N-CA	6.33	128.77	120.28
21	S	376	ASP	N-CA-C	-6.33	104.29	111.07
22	P	46	THR	CA-C-O	-6.33	113.84	120.55
32	J	323	GLU	CB-CA-C	-6.33	100.94	110.88
15	W	170	LEU	N-CA-CB	6.33	120.49	110.55
20	N	365	CYS	N-CA-C	-6.33	104.47	111.82
24	R	68	ASP	N-CA-CB	6.33	119.97	110.22
27	H	292	ASP	CA-C-N	6.33	129.09	120.54
27	H	292	ASP	C-N-CA	6.33	129.09	120.54
30	L	337	HIS	N-CA-C	-6.33	102.98	112.54
2	B	136	ILE	CA-C-N	6.33	132.50	122.62
2	B	136	ILE	C-N-CA	6.33	132.50	122.62
30	L	368	ALA	O-C-N	6.33	128.83	122.12
19	Z	198	HIS	CE1-NE2-CD2	-6.33	102.67	109.00
20	N	633	CYS	CA-C-O	-6.33	112.53	118.73
31	M	206	VAL	CA-C-N	6.33	128.74	120.26
31	M	206	VAL	C-N-CA	6.33	128.74	120.26
10	3	118	LYS	N-CA-C	-6.32	95.84	109.81
19	Z	106	LEU	CA-C-N	6.32	128.75	120.28
19	Z	106	LEU	C-N-CA	6.32	128.75	120.28
20	N	19	LEU	CA-C-O	-6.32	113.72	120.42
21	S	341	ARG	N-CA-C	-6.32	104.48	111.82
30	L	26	TYR	CB-CG-CD1	6.32	130.28	120.80
11	4	56	PHE	CA-CB-CG	-6.32	107.48	113.80
20	N	32	ASN	CA-C-N	6.32	129.92	120.31
20	N	32	ASN	C-N-CA	6.32	129.92	120.31
28	I	257	GLN	CA-C-N	6.32	128.66	120.44
28	I	257	GLN	C-N-CA	6.32	128.66	120.44
21	S	502	GLU	N-CA-C	-6.32	98.89	109.07
31	M	147	LYS	O-C-N	6.32	128.58	122.07
22	P	425	LEU	N-CA-CB	6.32	119.41	110.12
22	P	151	THR	N-CA-C	6.32	117.83	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	203	ALA	O-C-N	6.32	129.61	122.22
13	6	114	ALA	CA-C-N	6.32	129.11	120.46
13	6	114	ALA	C-N-CA	6.32	129.11	120.46
21	S	414	SER	N-CA-C	6.31	118.94	110.35
27	H	385	ILE	CB-CA-C	-6.31	103.51	112.22
15	W	34	ASN	CA-CB-CG	6.31	118.91	112.60
19	Z	500	LEU	CA-C-N	6.31	131.26	120.72
19	Z	500	LEU	C-N-CA	6.31	131.26	120.72
24	R	356	THR	CA-C-N	6.31	128.65	120.44
24	R	356	THR	C-N-CA	6.31	128.65	120.44
23	Q	326	LEU	O-C-N	-6.31	115.43	122.12
29	K	327	LEU	CA-C-N	6.31	130.36	120.89
29	K	327	LEU	C-N-CA	6.31	130.36	120.89
30	L	50	LEU	CA-C-N	6.31	128.74	120.28
30	L	50	LEU	C-N-CA	6.31	128.74	120.28
5	E	223	GLY	N-CA-C	-6.31	106.53	115.30
15	W	85	THR	N-CA-C	-6.31	95.27	107.44
29	K	371	SER	N-CA-CB	6.31	119.31	110.04
6	F	127	PRO	O-C-N	-6.30	115.53	123.10
10	3	62	THR	N-CA-CB	6.30	119.15	110.01
15	W	96	ALA	N-CA-C	6.30	118.15	111.28
21	S	137	THR	CA-C-O	6.30	125.98	119.05
21	S	239	ASP	CA-CB-CG	6.30	118.90	112.60
24	R	254	PRO	N-CA-C	6.30	125.45	112.47
4	D	225	ILE	N-CA-CB	6.30	118.58	111.21
15	W	126	LYS	CA-C-O	6.30	127.23	120.55
3	C	128	ARG	NE-CZ-NH2	-6.30	113.53	119.20
20	N	85	GLY	N-CA-C	-6.30	105.87	111.67
23	Q	407	MET	CA-C-O	-6.30	113.74	120.42
9	2	97	MET	CA-C-N	6.30	129.23	120.29
9	2	97	MET	C-N-CA	6.30	129.23	120.29
20	N	463	ASN	CA-C-N	6.30	129.23	120.29
20	N	463	ASN	C-N-CA	6.30	129.23	120.29
26	O	309	LEU	CA-C-N	6.30	128.62	120.44
26	O	309	LEU	C-N-CA	6.30	128.62	120.44
28	I	253	SER	N-CA-CB	6.30	120.84	110.39
12	5	187	VAL	CA-C-N	6.29	133.75	121.41
12	5	187	VAL	C-N-CA	6.29	133.75	121.41
25	U	22	HIS	CE1-NE2-CD2	-6.29	102.70	109.00
19	Z	336	GLU	CA-C-N	6.29	128.62	120.44
19	Z	336	GLU	C-N-CA	6.29	128.62	120.44
10	3	69	PHE	CA-CB-CG	-6.29	107.51	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	166	VAL	CA-C-N	6.29	128.71	120.28
19	Z	166	VAL	C-N-CA	6.29	128.71	120.28
29	K	169	GLY	CA-C-O	-6.29	115.48	121.90
7	G	191	VAL	CB-CA-C	-6.29	103.80	112.04
9	2	211	GLY	CA-C-N	6.29	130.73	120.23
9	2	211	GLY	C-N-CA	6.29	130.73	120.23
11	4	132	HIS	CG-CD2-NE2	6.29	113.49	107.20
12	5	167	GLY	CA-C-O	-6.29	112.53	121.52
32	J	134	LEU	N-CA-C	-6.29	104.50	111.36
22	P	33	LYS	CA-C-O	6.29	127.22	120.55
29	K	339	ARG	CA-C-N	6.29	129.87	120.31
29	K	339	ARG	C-N-CA	6.29	129.87	120.31
30	L	298	THR	N-CA-C	-6.29	106.57	114.56
4	D	75	VAL	O-C-N	6.29	129.89	122.66
25	U	139	ILE	N-CA-C	-6.29	99.09	108.46
27	H	407	LYS	O-C-N	6.29	128.78	122.12
29	K	222	HIS	CE1-NE2-CD2	-6.29	102.71	109.00
32	J	186	VAL	CB-CA-C	-6.29	101.93	110.42
7	G	68	PHE	CA-CB-CG	-6.29	107.51	113.80
23	Q	299	LEU	N-CA-C	-6.29	104.53	111.82
31	M	374	ARG	CA-C-N	6.29	128.99	120.44
31	M	374	ARG	C-N-CA	6.29	128.99	120.44
20	N	237	VAL	CA-C-O	6.28	127.48	120.95
21	S	341	ARG	N-CA-CB	6.28	120.02	110.28
30	L	338	GLY	O-C-N	6.28	130.87	122.70
7	G	245	LYS	CB-CA-C	6.28	122.03	110.10
9	2	55	ILE	N-CA-CB	-6.28	103.20	110.55
25	U	10	VAL	N-CA-C	-6.28	99.32	108.11
15	W	76	HIS	ND1-CE1-NE2	6.28	114.68	108.40
10	3	134	ASP	N-CA-C	-6.28	98.96	109.07
20	N	358	ASP	CA-C-N	6.28	128.69	120.28
20	N	358	ASP	C-N-CA	6.28	128.69	120.28
28	I	387	LYS	CA-C-O	-6.28	114.59	121.87
30	L	114	LEU	CA-C-O	-6.28	113.77	121.11
8	1	214	GLN	CA-C-N	6.28	128.98	120.38
8	1	214	GLN	C-N-CA	6.28	128.98	120.38
24	R	281	GLU	N-CA-CB	6.28	119.29	110.07
32	J	127	LEU	N-CA-C	-6.28	101.88	109.72
1	A	12	HIS	CG-CD2-NE2	6.27	113.47	107.20
19	Z	7	ASP	CA-CB-CG	-6.27	106.33	112.60
23	Q	233	TYR	N-CA-C	-6.27	104.52	111.36
21	S	414	SER	CA-C-N	6.27	128.69	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	414	SER	C-N-CA	6.27	128.69	120.28
3	C	194	VAL	CB-CA-C	6.27	120.87	112.22
23	Q	89	VAL	CA-CB-CG1	6.27	121.06	110.40
28	I	277	HIS	O-C-N	6.27	129.56	122.22
11	4	103	LEU	CA-C-O	6.27	127.06	120.54
28	I	319	PHE	N-CA-C	-6.27	105.63	113.28
32	J	204	ALA	O-C-N	-6.27	115.47	122.12
4	D	227	SER	O-C-N	6.27	128.55	121.53
16	V	100	LYS	N-CA-C	6.27	118.11	111.28
15	W	193	GLY	N-CA-C	-6.26	103.01	112.41
25	U	227	ILE	N-CA-C	6.26	117.01	110.62
27	H	202	VAL	O-C-N	-6.26	115.38	121.83
31	M	210	ASN	CA-CB-CG	-6.26	106.33	112.60
31	M	381	ASP	CA-C-O	6.26	127.06	120.42
32	J	167	LEU	CA-C-N	6.26	125.83	119.19
32	J	167	LEU	C-N-CA	6.26	125.83	119.19
21	S	307	ASN	CB-CA-C	-6.26	100.39	110.79
23	Q	160	MET	CG-SD-CE	-6.26	87.12	100.90
19	Z	162	LEU	N-CA-C	-6.26	104.51	111.71
32	J	291	VAL	N-CA-CB	6.26	120.66	111.52
15	W	91	ARG	NE-CZ-NH2	6.26	124.83	119.20
29	K	359	ASP	N-CA-C	-6.26	98.79	109.24
10	3	116	THR	CA-C-N	6.26	131.02	122.07
10	3	116	THR	C-N-CA	6.26	131.02	122.07
23	Q	193	ALA	N-CA-C	6.26	117.76	111.07
32	J	146	SER	CB-CA-C	-6.26	100.87	110.26
21	S	228	HIS	CG-CD2-NE2	6.25	113.45	107.20
17	T	212	HIS	N-CA-C	6.25	118.18	111.36
20	N	412	HIS	CA-CB-CG	-6.25	107.55	113.80
20	N	681	ASN	CA-C-N	6.25	129.81	120.31
20	N	681	ASN	C-N-CA	6.25	129.81	120.31
23	Q	114	ILE	N-CA-CB	6.25	119.96	110.58
29	K	251	PHE	CA-C-N	6.25	129.28	120.28
29	K	251	PHE	C-N-CA	6.25	129.28	120.28
19	Z	585	GLU	N-CA-C	-6.25	100.95	108.14
21	S	299	SER	CA-C-O	-6.25	114.44	121.00
32	J	64	GLN	O-C-N	6.25	129.28	122.15
25	U	59	ASP	N-CA-C	-6.25	98.71	108.90
19	Z	552	ASP	CA-C-O	-6.25	113.93	120.55
23	Q	144	GLN	CA-C-N	6.25	129.16	120.29
23	Q	144	GLN	C-N-CA	6.25	129.16	120.29
15	W	98	LYS	N-CA-C	6.25	118.09	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	325	HIS	CE1-NE2-CD2	-6.25	102.75	109.00
22	P	366	MET	CA-C-N	6.25	128.65	120.28
22	P	366	MET	C-N-CA	6.25	128.65	120.28
22	P	436	MET	N-CA-C	6.25	118.09	111.28
6	F	98	VAL	N-CA-C	6.24	116.29	110.42
13	6	58	GLU	N-CA-C	-6.24	98.23	108.41
18	Y	51	ASP	CA-CB-CG	6.24	118.84	112.60
23	Q	330	LEU	CA-C-N	6.24	128.56	120.44
23	Q	330	LEU	C-N-CA	6.24	128.56	120.44
25	U	34	ARG	NE-CZ-NH2	6.24	124.82	119.20
22	P	450	GLU	CA-C-N	6.24	128.93	120.44
22	P	450	GLU	C-N-CA	6.24	128.93	120.44
32	J	60	ARG	N-CA-CB	6.24	119.06	110.01
32	J	177	ALA	N-CA-C	6.24	118.08	111.28
30	L	181	PRO	CA-C-O	-6.24	114.15	121.95
31	M	36	VAL	CB-CA-C	-6.24	103.98	111.97
31	M	295	GLY	CA-C-O	6.24	127.28	122.16
15	W	38	HIS	CE1-NE2-CD2	-6.24	102.76	109.00
19	Z	408	LEU	CA-C-N	6.24	129.14	120.29
19	Z	408	LEU	C-N-CA	6.24	129.14	120.29
20	N	12	LEU	CA-C-N	6.24	129.79	120.31
20	N	12	LEU	C-N-CA	6.24	129.79	120.31
32	J	401	ILE	N-CA-CB	6.23	121.52	111.23
22	P	282	GLU	CA-C-N	6.23	129.14	120.29
22	P	282	GLU	C-N-CA	6.23	129.14	120.29
4	D	242	LYS	CA-C-N	6.23	128.63	120.28
4	D	242	LYS	C-N-CA	6.23	128.63	120.28
19	Z	379	GLY	O-C-N	6.23	128.23	122.19
24	R	60	SER	CA-C-N	6.23	129.67	120.95
24	R	60	SER	C-N-CA	6.23	129.67	120.95
3	C	165	GLY	N-CA-C	-6.23	102.02	110.43
9	2	131	PHE	CA-CB-CG	-6.23	107.57	113.80
12	5	183	THR	N-CA-CB	6.23	120.57	110.42
20	N	389	ASN	N-CA-CB	6.23	117.51	110.35
24	R	76	ALA	CA-C-N	6.23	129.13	120.29
24	R	76	ALA	C-N-CA	6.23	129.13	120.29
30	L	244	ILE	CB-CA-C	6.23	119.85	110.63
2	B	166	ASN	CB-CA-C	-6.23	103.05	111.89
29	K	210	CYS	CA-CB-SG	-6.23	100.08	114.40
12	5	235	LEU	N-CA-C	-6.22	98.58	108.73
20	N	107	HIS	ND1-CE1-NE2	6.22	114.62	108.40
32	J	236	VAL	N-CA-CB	6.22	117.83	110.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	2	46	ILE	CA-C-O	-6.22	113.00	120.78
16	V	206	ASN	CA-C-N	6.22	131.76	122.99
16	V	206	ASN	C-N-CA	6.22	131.76	122.99
28	I	146	PRO	N-CA-C	-6.22	105.42	113.57
11	4	142	ILE	N-CA-C	6.22	116.97	110.62
19	Z	117	GLU	CB-CG-CD	-6.22	102.02	112.60
26	O	265	GLU	CA-C-N	6.22	128.94	120.54
26	O	265	GLU	C-N-CA	6.22	128.94	120.54
6	F	180	MET	O-C-N	6.22	128.71	122.12
10	3	184	GLY	CA-C-O	-6.22	114.69	122.59
20	N	105	ILE	CA-CB-CG1	6.22	120.97	110.40
20	N	685	GLN	CA-C-N	6.22	126.88	119.98
20	N	685	GLN	C-N-CA	6.22	126.88	119.98
31	M	244	ALA	CB-CA-C	-6.22	101.12	110.88
1	A	164	LYS	N-CA-C	-6.22	104.04	111.69
20	N	42	VAL	O-C-N	6.22	128.15	121.87
21	S	247	LEU	N-CA-C	-6.22	104.42	111.07
9	2	80	ILE	N-CA-C	-6.22	98.79	107.80
13	6	158	GLN	N-CA-CB	6.22	121.12	111.24
22	P	343	SER	CA-C-N	6.22	133.41	121.54
22	P	343	SER	C-N-CA	6.22	133.41	121.54
31	M	250	THR	CA-C-N	6.22	132.15	123.07
31	M	250	THR	C-N-CA	6.22	132.15	123.07
8	1	212	ILE	N-CA-C	-6.21	99.47	108.17
15	W	99	HIS	N-CA-C	-6.21	99.57	109.76
20	N	627	PHE	CB-CG-CD2	-6.21	110.14	120.70
28	I	378	VAL	N-CA-C	-6.21	100.64	108.84
30	L	239	HIS	CG-CD2-NE2	6.21	113.42	107.20
32	J	347	ILE	N-CA-C	6.21	116.96	110.62
21	S	435	ALA	N-CA-C	6.21	118.05	111.28
24	R	328	GLU	O-C-N	-6.21	115.53	122.12
14	7	147	MET	CG-SD-CE	-6.21	87.24	100.90
19	Z	324	VAL	O-C-N	-6.21	114.81	122.57
20	N	74	PHE	N-CA-C	-6.21	104.59	111.36
14	7	188	TYR	CA-C-N	6.21	128.60	120.28
14	7	188	TYR	C-N-CA	6.21	128.60	120.28
20	N	474	ARG	CD-NE-CZ	-6.21	115.71	124.40
27	H	386	ARG	CA-C-N	6.21	128.60	120.28
27	H	386	ARG	C-N-CA	6.21	128.60	120.28
8	1	71	HIS	CG-CD2-NE2	6.21	113.41	107.20
12	5	170	LEU	CA-C-O	-6.21	114.36	121.19
19	Z	34	ARG	CA-C-O	6.21	127.09	120.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	W	100	ARG	NE-CZ-NH2	6.20	124.78	119.20
23	Q	313	LEU	CA-C-N	6.20	129.10	120.29
23	Q	313	LEU	C-N-CA	6.20	129.10	120.29
25	U	32	GLN	OE1-CD-NE2	-6.20	116.40	122.60
25	U	118	ASN	CA-CB-CG	6.20	118.80	112.60
29	K	248	ARG	O-C-N	6.20	128.70	122.12
21	S	101	SER	CA-C-O	6.20	127.10	119.97
2	B	106	PRO	CA-C-N	6.20	128.59	120.28
2	B	106	PRO	C-N-CA	6.20	128.59	120.28
7	G	103	PHE	CA-C-N	6.20	131.59	122.10
7	G	103	PHE	C-N-CA	6.20	131.59	122.10
9	2	174	SER	O-C-N	-6.20	114.43	122.37
13	6	158	GLN	N-CA-C	-6.20	99.09	108.52
27	H	309	PHE	N-CA-C	-6.20	105.70	113.20
31	M	307	ARG	N-CA-CB	6.20	120.97	110.49
32	J	382	ASP	N-CA-C	6.20	118.04	111.28
4	D	241	GLU	CA-C-N	6.20	128.59	120.28
4	D	241	GLU	C-N-CA	6.20	128.59	120.28
15	W	8	VAL	CB-CA-C	6.20	119.27	110.84
24	R	336	ARG	N-CA-C	6.20	118.12	111.36
30	L	146	TYR	CB-CG-CD1	6.20	130.10	120.80
28	I	278	ALA	O-C-N	-6.20	114.19	121.32
32	J	197	THR	CA-CB-OG1	6.20	118.89	109.60
3	C	227	VAL	N-CA-C	-6.20	99.66	108.58
31	M	425	GLU	CA-C-N	6.20	126.86	119.98
31	M	425	GLU	C-N-CA	6.20	126.86	119.98
4	D	33	VAL	CA-CB-CG1	6.19	120.93	110.40
23	Q	40	GLU	N-CA-C	-6.19	106.95	114.75
10	3	117	PHE	CA-C-O	-6.19	114.36	121.54
14	7	224	ASP	CA-C-O	-6.19	114.33	120.70
23	Q	177	TYR	CB-CG-CD2	-6.19	111.51	120.80
27	H	280	ILE	CA-CB-CG1	6.19	120.92	110.40
11	4	136	ALA	CA-C-N	6.19	129.19	120.28
11	4	136	ALA	C-N-CA	6.19	129.19	120.28
27	H	286	ASP	CA-CB-CG	6.19	118.79	112.60
29	K	62	LYS	CA-C-N	6.19	129.08	120.29
29	K	62	LYS	C-N-CA	6.19	129.08	120.29
30	L	306	PRO	N-CA-CB	6.19	108.82	103.31
32	J	39	SER	N-CA-CB	6.19	118.98	110.01
16	V	257	LYS	O-C-N	6.19	128.68	122.12
25	U	23	PHE	CB-CA-C	-6.19	100.52	110.79
8	1	116	PHE	CB-CG-CD2	-6.18	110.19	120.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	W	94	HIS	CE1-NE2-CD2	-6.18	102.82	109.00
19	Z	83	ARG	O-C-N	6.18	129.20	122.15
26	O	154	ARG	NE-CZ-NH2	-6.18	113.63	119.20
31	M	147	LYS	N-CA-C	-6.18	104.45	111.07
32	J	5	GLY	O-C-N	-6.18	115.59	121.77
20	N	711	GLN	N-CA-C	-6.18	104.54	111.28
22	P	114	GLU	CA-C-N	6.18	128.35	120.56
22	P	114	GLU	C-N-CA	6.18	128.35	120.56
2	B	89	ARG	CA-C-N	6.18	128.56	120.28
2	B	89	ARG	C-N-CA	6.18	128.56	120.28
12	5	213	ASP	N-CA-C	6.18	118.02	111.28
19	Z	778	LEU	N-CA-CB	6.18	119.21	110.12
7	G	111	HIS	CA-C-N	6.18	128.56	120.28
7	G	111	HIS	C-N-CA	6.18	128.56	120.28
20	N	611	ASN	CA-CB-CG	6.18	118.78	112.60
11	4	161	ARG	CA-C-N	6.18	128.56	120.28
11	4	161	ARG	C-N-CA	6.18	128.56	120.28
21	S	472	PHE	CA-C-N	6.18	128.56	120.28
21	S	472	PHE	C-N-CA	6.18	128.56	120.28
28	I	135	ILE	N-CA-C	6.18	117.55	109.58
3	C	9	THR	CA-C-O	6.17	126.97	120.42
7	G	82	LEU	N-CA-C	6.17	120.07	112.54
23	Q	368	MET	CA-C-N	6.17	128.92	120.46
23	Q	368	MET	C-N-CA	6.17	128.92	120.46
30	L	238	ASP	CA-CB-CG	-6.17	106.43	112.60
8	1	71	HIS	CE1-NE2-CD2	-6.17	102.83	109.00
31	M	204	ALA	CA-C-O	-6.17	114.34	120.70
25	U	260	VAL	CA-C-N	6.17	129.17	120.28
25	U	260	VAL	C-N-CA	6.17	129.17	120.28
23	Q	308	ASP	CA-CB-CG	6.17	118.77	112.60
6	F	147	THR	N-CA-C	-6.17	99.35	109.40
16	V	44	HIS	CA-C-N	6.17	126.78	120.00
16	V	44	HIS	C-N-CA	6.17	126.78	120.00
19	Z	56	LEU	CA-C-O	6.17	127.09	120.55
19	Z	813	LYS	N-CA-C	-6.17	105.69	112.72
20	N	452	ASN	CA-CB-CG	6.17	118.77	112.60
22	P	256	ILE	CA-C-N	6.17	128.46	120.44
22	P	256	ILE	C-N-CA	6.17	128.46	120.44
26	O	184	ASP	N-CA-CB	6.17	119.04	109.85
27	H	396	ALA	N-CA-C	6.17	118.00	111.28
30	L	94	VAL	N-CA-C	-6.17	99.53	108.17
21	S	446	SER	CA-C-N	6.17	130.84	123.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	446	SER	C-N-CA	6.17	130.84	123.19
31	M	273	ASP	CA-C-N	6.17	129.05	120.29
31	M	273	ASP	C-N-CA	6.17	129.05	120.29
4	D	193	THR	CA-C-N	6.17	129.18	120.42
4	D	193	THR	C-N-CA	6.17	129.18	120.42
8	1	163	SER	N-CA-CB	6.16	120.91	110.49
17	T	192	HIS	ND1-CE1-NE2	6.16	114.56	108.40
20	N	727	LYS	CB-CA-C	-6.16	101.20	110.88
24	R	294	TYR	CA-C-N	6.16	128.45	120.44
24	R	294	TYR	C-N-CA	6.16	128.45	120.44
27	H	360	ARG	O-C-N	6.16	128.65	122.12
30	L	223	GLY	N-CA-C	-6.16	106.81	115.32
20	N	613	ASP	N-CA-C	6.16	117.80	111.14
21	S	204	ALA	CA-C-N	6.16	129.04	120.29
21	S	204	ALA	C-N-CA	6.16	129.04	120.29
29	K	169	GLY	O-C-N	6.16	129.35	122.82
6	F	32	GLY	O-C-N	-6.16	116.25	122.59
6	F	93	LEU	CA-C-O	-6.16	113.89	120.42
6	F	146	GLN	CG-CD-OE1	-6.16	108.48	120.80
19	Z	1	MET	CG-SD-CE	-6.16	87.35	100.90
19	Z	761	MET	CA-C-N	6.16	129.76	120.77
19	Z	761	MET	C-N-CA	6.16	129.76	120.77
20	N	124	LYS	N-CA-C	6.16	121.26	113.25
20	N	359	ALA	N-CA-C	6.16	117.99	111.28
32	J	254	ILE	N-CA-C	-6.16	98.76	107.75
9	2	246	ARG	CA-C-N	6.16	130.51	120.23
9	2	246	ARG	C-N-CA	6.16	130.51	120.23
20	N	369	THR	O-C-N	6.16	129.17	122.15
24	R	102	ASP	CA-C-O	6.16	127.08	120.55
25	U	50	VAL	CB-CA-C	-6.15	103.51	110.96
14	7	120	LEU	CA-C-N	6.15	129.14	120.28
14	7	120	LEU	C-N-CA	6.15	129.14	120.28
27	H	204	LEU	CA-C-O	-6.15	113.90	120.42
17	T	350	GLU	CA-C-N	6.15	128.52	120.28
17	T	350	GLU	C-N-CA	6.15	128.52	120.28
19	Z	158	TYR	N-CA-C	6.15	118.96	111.82
20	N	406	ALA	CA-C-N	6.15	129.14	120.28
20	N	406	ALA	C-N-CA	6.15	129.14	120.28
9	2	120	VAL	CA-C-N	6.15	128.52	120.28
9	2	120	VAL	C-N-CA	6.15	128.52	120.28
2	B	53	LYS	CA-C-O	-6.15	113.19	120.81
10	3	59	ASP	N-CA-C	6.15	117.98	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	6	87	ASP	N-CA-C	6.15	120.04	112.54
16	V	45	GLY	CA-C-N	6.15	129.02	120.29
16	V	45	GLY	C-N-CA	6.15	129.02	120.29
31	M	245	ALA	N-CA-C	6.15	118.06	111.36
6	F	206	THR	CA-CB-OG1	6.15	118.82	109.60
4	D	73	PHE	CA-C-O	6.14	127.34	120.70
11	4	68	LYS	CA-C-O	6.14	127.06	120.55
17	T	120	GLY	CA-C-N	6.14	128.51	120.28
17	T	120	GLY	C-N-CA	6.14	128.51	120.28
17	T	273	GLU	CA-C-N	6.14	128.88	120.46
17	T	273	GLU	C-N-CA	6.14	128.88	120.46
21	S	177	TYR	CA-C-N	6.14	130.85	122.19
21	S	177	TYR	C-N-CA	6.14	130.85	122.19
24	R	95	LEU	CA-C-N	6.14	126.76	120.00
24	R	95	LEU	C-N-CA	6.14	126.76	120.00
24	R	258	GLN	CA-CB-CG	6.14	126.39	114.10
25	U	230	LEU	CA-C-N	6.14	128.51	120.28
25	U	230	LEU	C-N-CA	6.14	128.51	120.28
12	5	234	ASN	CA-C-N	6.14	130.94	122.77
12	5	234	ASN	C-N-CA	6.14	130.94	122.77
30	L	54	TYR	CA-C-N	6.14	129.65	120.31
30	L	54	TYR	C-N-CA	6.14	129.65	120.31
8	1	158	PHE	CA-C-N	-6.14	112.16	122.29
8	1	158	PHE	C-N-CA	-6.14	112.16	122.29
11	4	104	LEU	CB-CA-C	-6.14	99.67	109.80
19	Z	289	VAL	CA-C-O	-6.14	113.62	120.74
23	Q	249	THR	CA-CB-OG1	6.14	118.81	109.60
16	V	310	LYS	CB-CG-CD	6.14	125.42	111.30
17	T	244	TYR	CA-C-O	6.14	127.38	119.95
21	S	493	PRO	CA-C-O	-6.14	111.66	120.56
3	C	91	ARG	CA-C-N	6.13	128.78	120.44
3	C	91	ARG	C-N-CA	6.13	128.78	120.44
19	Z	768	LEU	N-CA-C	-6.13	105.02	113.18
20	N	232	ILE	CA-C-N	6.13	129.63	120.31
20	N	232	ILE	C-N-CA	6.13	129.63	120.31
21	S	264	GLU	CA-C-N	6.13	129.00	120.29
21	S	264	GLU	C-N-CA	6.13	129.00	120.29
1	A	52	THR	N-CA-C	-6.13	99.75	109.07
15	W	32	ALA	CA-C-N	6.13	129.13	120.42
15	W	32	ALA	C-N-CA	6.13	129.13	120.42
31	M	113	ASN	CA-C-N	6.13	133.01	121.97
31	M	113	ASN	C-N-CA	6.13	133.01	121.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	120	ASP	N-CA-CB	6.13	119.23	110.16
3	C	85	VAL	O-C-N	6.13	128.15	121.83
14	7	168	TYR	N-CA-C	-6.13	98.28	108.34
25	U	239	ASP	CB-CA-C	-6.13	108.24	117.07
31	M	97	ILE	CB-CA-C	-6.13	103.99	112.02
13	6	177	ASP	N-CA-CB	6.13	119.23	110.16
29	K	278	GLN	CB-CA-C	-6.13	101.25	109.16
30	L	393	LYS	CA-C-N	6.13	128.78	120.44
30	L	393	LYS	C-N-CA	6.13	128.78	120.44
6	F	68	ASN	N-CA-C	-6.13	106.47	112.97
12	5	118	LEU	N-CA-CB	6.13	119.78	110.28
13	6	230	ILE	CA-CB-CG1	6.13	120.82	110.40
17	T	232	PRO	N-CA-C	6.13	122.05	113.53
9	2	84	ILE	O-C-N	-6.13	114.91	122.57
17	T	239	LEU	CA-C-N	6.13	128.40	120.44
17	T	239	LEU	C-N-CA	6.13	128.40	120.44
21	S	263	ALA	N-CA-CB	6.12	119.12	110.12
24	R	91	ALA	N-CA-CB	6.12	119.12	110.12
10	3	72	ASN	CB-CA-C	-6.12	98.91	110.67
13	6	239	LYS	N-CA-CB	6.12	115.76	109.51
17	T	137	THR	N-CA-C	-6.12	98.83	108.14
22	P	105	VAL	CA-C-N	6.12	128.49	120.28
22	P	105	VAL	C-N-CA	6.12	128.49	120.28
31	M	372	HIS	CG-CD2-NE2	6.12	113.32	107.20
2	B	103	GLU	N-CA-C	-6.12	97.34	108.85
6	F	182	CYS	N-CA-C	6.12	117.94	110.41
8	1	195	LEU	CA-C-N	6.12	128.98	120.29
8	1	195	LEU	C-N-CA	6.12	128.98	120.29
28	I	218	PRO	CA-C-N	6.12	126.06	119.76
28	I	218	PRO	C-N-CA	6.12	126.06	119.76
1	A	11	ARG	N-CA-C	-6.12	105.39	112.92
17	T	190	TYR	CB-CG-CD2	-6.12	111.62	120.80
31	M	186	GLU	CA-C-N	6.12	133.23	121.54
31	M	186	GLU	C-N-CA	6.12	133.23	121.54
3	C	90	LEU	CA-C-N	6.12	128.48	120.28
3	C	90	LEU	C-N-CA	6.12	128.48	120.28
25	U	261	TYR	CG-CD1-CE1	-6.12	112.03	121.20
8	1	161	GLY	N-CA-C	-6.12	98.69	113.18
24	R	279	GLU	CA-C-O	6.12	127.03	120.55
28	I	426	VAL	CB-CA-C	-6.12	103.88	112.14
29	K	171	ASP	CA-C-N	6.11	129.10	120.42
29	K	171	ASP	C-N-CA	6.11	129.10	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	100	ASP	CA-CB-CG	-6.11	106.49	112.60
20	N	246	TYR	CA-CB-CG	-6.11	102.90	113.90
1	A	245	ARG	CA-C-N	6.11	132.70	121.70
1	A	245	ARG	C-N-CA	6.11	132.70	121.70
2	B	74	LEU	CA-C-N	6.11	131.62	122.58
2	B	74	LEU	C-N-CA	6.11	131.62	122.58
29	K	28	SER	CA-C-N	6.11	132.59	122.33
29	K	28	SER	C-N-CA	6.11	132.59	122.33
10	3	162	HIS	ND1-CE1-NE2	6.11	114.51	108.40
23	Q	108	GLU	CB-CA-C	-6.11	100.65	110.79
24	R	31	HIS	CG-CD2-NE2	6.11	113.31	107.20
21	S	29	ALA	CA-C-O	-6.11	112.42	118.34
25	U	278	ASN	CA-CB-CG	-6.11	106.49	112.60
30	L	70	ILE	N-CA-C	-6.11	98.91	108.86
9	2	66	GLY	N-CA-C	-6.10	98.71	113.18
10	3	10	ALA	N-CA-C	-6.10	97.80	110.80
13	6	102	TYR	CB-CA-C	-6.10	100.48	110.85
28	I	380	LEU	CB-CA-C	-6.10	101.26	110.90
20	N	16	GLU	CA-C-N	6.10	125.99	119.28
20	N	16	GLU	C-N-CA	6.10	125.99	119.28
20	N	107	HIS	N-CA-C	-6.10	104.71	111.36
31	M	367	ARG	CD-NE-CZ	6.10	132.94	124.40
9	2	209	ASP	CA-C-N	-6.10	114.39	122.99
9	2	209	ASP	C-N-CA	-6.10	114.39	122.99
19	Z	195	ASN	CA-C-O	6.10	127.01	120.55
28	I	400	THR	CA-C-O	-6.10	114.42	120.70
31	M	280	GLU	N-CA-CB	6.10	119.19	110.16
32	J	360	LYS	CA-C-O	6.10	127.01	120.55
5	E	115	ALA	O-C-N	6.09	128.35	122.07
20	N	89	ASN	OD1-CG-ND2	6.09	128.69	122.60
22	P	289	ARG	CA-C-O	-6.09	114.09	120.55
23	Q	89	VAL	CA-C-O	6.09	127.29	120.95
26	O	375	LEU	O-C-N	-6.09	115.66	122.12
29	K	46	LYS	N-CA-C	6.09	117.92	111.28
11	4	123	ALA	N-CA-C	-6.09	104.20	111.69
15	W	166	THR	CA-C-N	-6.09	115.02	122.15
15	W	166	THR	C-N-CA	-6.09	115.02	122.15
19	Z	201	GLU	N-CA-C	-6.09	105.33	112.89
24	R	278	VAL	CA-CB-CG2	-6.09	100.04	110.40
32	J	348	ALA	N-CA-CB	6.09	118.84	110.01
19	Z	44	GLU	CA-C-N	6.09	128.44	120.28
19	Z	44	GLU	C-N-CA	6.09	128.44	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	109	ILE	CA-C-N	6.09	128.36	120.44
19	Z	109	ILE	C-N-CA	6.09	128.36	120.44
19	Z	770	HIS	CA-C-N	6.09	132.07	122.94
19	Z	770	HIS	C-N-CA	6.09	132.07	122.94
21	S	255	LEU	CA-C-N	6.09	128.44	120.28
21	S	255	LEU	C-N-CA	6.09	128.44	120.28
23	Q	122	ARG	CA-C-N	6.09	129.05	120.28
23	Q	122	ARG	C-N-CA	6.09	129.05	120.28
26	O	306	LYS	CA-C-N	6.09	128.80	120.46
26	O	306	LYS	C-N-CA	6.09	128.80	120.46
29	K	36	ASP	CA-CB-CG	-6.09	106.51	112.60
31	M	366	ALA	CA-C-N	6.09	128.94	120.29
31	M	366	ALA	C-N-CA	6.09	128.94	120.29
30	L	157	ARG	CB-CA-C	-6.09	100.68	110.79
27	H	192	GLU	O-C-N	6.09	128.66	122.09
28	I	178	LYS	O-C-N	-6.09	116.06	123.30
12	5	91	LYS	CA-C-N	6.08	129.47	120.95
12	5	91	LYS	C-N-CA	6.08	129.47	120.95
19	Z	81	GLN	CA-C-N	6.08	129.06	120.42
19	Z	81	GLN	C-N-CA	6.08	129.06	120.42
19	Z	852	VAL	N-CA-C	6.08	117.27	109.30
20	N	31	VAL	N-CA-C	6.08	119.56	111.17
20	N	140	ARG	CA-C-N	6.08	128.93	120.29
20	N	140	ARG	C-N-CA	6.08	128.93	120.29
22	P	367	ALA	CA-C-N	6.08	128.90	120.63
22	P	367	ALA	C-N-CA	6.08	128.90	120.63
29	K	264	ILE	CA-C-N	6.08	128.68	120.65
29	K	264	ILE	C-N-CA	6.08	128.68	120.65
31	M	234	THR	CA-CB-OG1	6.08	118.72	109.60
31	M	402	VAL	CA-C-N	6.08	128.43	120.28
31	M	402	VAL	C-N-CA	6.08	128.43	120.28
12	5	228	TYR	O-C-N	-6.08	116.16	123.27
29	K	50	GLU	CA-C-N	6.08	129.03	120.28
29	K	50	GLU	C-N-CA	6.08	129.03	120.28
31	M	311	ARG	NE-CZ-NH2	-6.08	113.73	119.20
14	7	108	LYS	CA-C-N	6.08	129.55	120.31
14	7	108	LYS	C-N-CA	6.08	129.55	120.31
1	A	24	GLN	CA-C-N	6.08	128.78	120.46
1	A	24	GLN	C-N-CA	6.08	128.78	120.46
20	N	165	LYS	N-CA-C	-6.08	97.86	110.80
26	O	59	LEU	CA-C-N	6.08	128.34	120.44
26	O	59	LEU	C-N-CA	6.08	128.34	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	F	88	MET	O-C-N	6.07	129.07	122.15
19	Z	871	PRO	N-CA-C	6.07	120.03	110.50
21	S	228	HIS	CE1-NE2-CD2	-6.07	102.93	109.00
29	K	78	GLU	O-C-N	-6.07	115.81	122.07
32	J	105	ILE	O-C-N	-6.07	115.98	121.87
8	1	149	MET	CA-C-N	6.07	131.60	120.79
8	1	149	MET	C-N-CA	6.07	131.60	120.79
16	V	286	GLU	CA-C-O	-6.07	114.11	120.55
19	Z	211	ILE	CB-CA-C	-6.07	103.84	112.22
19	Z	399	LEU	CA-C-O	6.07	126.95	120.70
19	Z	401	LYS	N-CA-C	6.07	118.69	111.71
27	H	313	GLY	N-CA-C	-6.07	103.81	112.55
31	M	310	GLN	CG-CD-NE2	-6.07	107.29	116.40
17	T	313	LEU	CB-CA-C	-6.07	103.13	111.51
19	Z	574	GLU	CB-CG-CD	-6.07	102.28	112.60
24	R	31	HIS	ND1-CE1-NE2	6.07	114.47	108.40
27	H	136	GLU	CB-CA-C	-6.07	100.18	109.89
28	I	95	GLU	CA-C-N	6.07	128.70	120.44
28	I	95	GLU	C-N-CA	6.07	128.70	120.44
4	D	176	GLU	CA-C-O	-6.07	113.99	120.42
17	T	212	HIS	CE1-NE2-CD2	-6.07	102.93	109.00
27	H	278	ASP	N-CA-C	-6.07	104.52	112.41
4	D	221	GLN	N-CA-C	-6.07	101.38	110.24
20	N	10	SER	CA-C-O	-6.07	114.12	120.55
21	S	326	LYS	CA-C-N	6.07	128.90	120.29
21	S	326	LYS	C-N-CA	6.07	128.90	120.29
31	M	161	TYR	CA-C-N	6.07	132.11	122.59
31	M	161	TYR	C-N-CA	6.07	132.11	122.59
8	1	199	ARG	CA-C-N	6.06	128.69	120.44
8	1	199	ARG	C-N-CA	6.06	128.69	120.44
12	5	167	GLY	CA-C-N	6.06	127.42	119.84
12	5	167	GLY	C-N-CA	6.06	127.42	119.84
20	N	394	ALA	CA-C-N	6.06	129.53	120.31
20	N	394	ALA	C-N-CA	6.06	129.53	120.31
23	Q	365	LEU	CA-C-N	6.06	128.32	120.44
23	Q	365	LEU	C-N-CA	6.06	128.32	120.44
21	S	325	HIS	CG-CD2-NE2	6.06	113.26	107.20
27	H	236	CYS	N-CA-CB	6.06	118.98	109.83
28	I	62	LEU	N-CA-C	6.06	117.89	111.28
32	J	160	GLU	CA-C-N	6.06	128.76	120.46
32	J	160	GLU	C-N-CA	6.06	128.76	120.46
32	J	372	ARG	CA-C-N	6.06	130.84	120.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	372	ARG	C-N-CA	6.06	130.84	120.72
17	T	329	GLU	CA-C-O	6.06	125.13	118.65
19	Z	405	HIS	CA-C-N	6.06	127.71	120.14
19	Z	405	HIS	C-N-CA	6.06	127.71	120.14
22	P	432	LEU	N-CA-C	6.06	117.88	111.28
25	U	128	PRO	CA-C-O	-6.06	114.12	121.03
3	C	108	GLU	CA-C-N	6.06	128.68	120.44
3	C	108	GLU	C-N-CA	6.06	128.68	120.44
20	N	798	PRO	N-CA-C	-6.06	102.11	111.13
25	U	226	ILE	CA-CB-CG2	-6.05	100.21	110.50
17	T	152	GLU	N-CA-CB	6.05	119.12	110.16
22	P	323	ASP	CA-C-O	-6.05	114.47	120.70
4	D	58	THR	N-CA-C	-6.05	105.48	112.92
29	K	208	PRO	N-CA-C	6.05	120.35	111.03
2	B	132	VAL	CA-CB-CG1	6.05	120.69	110.40
6	F	18	ARG	N-CA-C	-6.05	97.59	108.48
9	2	248	GLU	N-CA-C	-6.05	97.91	110.80
19	Z	556	ARG	N-CA-C	6.05	117.95	111.36
7	G	131	PRO	O-C-N	-6.05	115.59	122.91
26	O	339	ARG	CA-C-N	6.05	128.67	120.63
26	O	339	ARG	C-N-CA	6.05	128.67	120.63
9	2	154	TYR	CA-CB-CG	-6.05	103.02	113.90
12	5	179	ARG	NE-CZ-NH2	6.05	124.64	119.20
14	7	110	VAL	N-CA-CB	6.05	117.62	110.55
16	V	272	ILE	N-CA-C	6.05	116.68	110.82
22	P	312	MET	O-C-N	6.05	131.02	122.68
31	M	223	PRO	CA-C-N	6.05	128.38	120.28
31	M	223	PRO	C-N-CA	6.05	128.38	120.28
12	5	149	TYR	N-CA-CB	6.04	119.11	110.16
19	Z	395	GLY	CA-C-O	6.04	127.67	120.90
26	O	103	LYS	CA-C-N	6.04	128.69	120.77
26	O	103	LYS	C-N-CA	6.04	128.69	120.77
30	L	90	GLY	CA-C-N	6.04	126.01	119.78
30	L	90	GLY	C-N-CA	6.04	126.01	119.78
4	D	111	GLU	CA-C-N	6.04	128.38	120.28
4	D	111	GLU	C-N-CA	6.04	128.38	120.28
13	6	191	VAL	N-CA-C	-6.04	95.83	108.88
22	P	174	TYR	CB-CG-CD2	-6.04	111.74	120.80
25	U	12	HIS	O-C-N	-6.04	114.76	121.53
15	W	145	GLU	N-CA-CB	6.04	120.21	110.42
17	T	337	GLU	N-CA-C	-6.04	104.72	114.09
21	S	387	THR	CA-C-N	6.04	128.66	120.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	387	THR	C-N-CA	6.04	128.66	120.38
24	R	179	ARG	N-CA-CB	6.04	119.00	110.12
29	K	108	GLY	N-CA-C	-6.04	106.38	115.32
11	4	140	LEU	CB-CA-C	-6.04	100.58	110.85
30	L	41	LYS	CA-C-N	6.04	128.87	120.29
30	L	41	LYS	C-N-CA	6.04	128.87	120.29
1	A	107	TYR	CB-CG-CD1	6.04	129.86	120.80
19	Z	134	SER	N-CA-C	6.04	119.57	111.24
19	Z	755	ASP	CA-C-O	-6.04	114.06	119.86
20	N	475	HIS	N-CA-C	6.04	117.53	111.07
21	S	278	ASN	CA-CB-CG	-6.04	106.56	112.60
22	P	275	ILE	CB-CA-C	-6.04	103.89	112.22
23	Q	406	ASN	CA-C-O	6.04	126.92	120.70
30	L	216	SER	N-CA-C	-6.04	105.73	114.12
32	J	256	SER	N-CA-C	-6.04	105.91	113.28
20	N	643	SER	CA-C-N	6.04	128.65	120.38
20	N	643	SER	C-N-CA	6.04	128.65	120.38
29	K	219	VAL	CA-CB-CG2	6.04	120.66	110.40
4	D	120	LEU	CB-CA-C	-6.04	101.40	110.88
21	S	121	ASN	N-CA-C	-6.04	105.96	113.38
1	A	222	VAL	CA-C-O	6.03	126.17	120.14
19	Z	388	ASP	N-CA-C	-6.03	105.22	113.30
27	H	274	PHE	N-CA-C	-6.03	99.37	108.96
24	R	250	LEU	CA-C-O	6.03	129.14	120.51
1	A	108	GLU	N-CA-CB	6.03	118.94	109.83
2	B	128	ARG	CA-C-O	-6.03	114.67	120.64
8	1	121	TYR	CB-CG-CD2	6.03	129.85	120.80
22	P	399	ASN	OD1-CG-ND2	6.03	128.63	122.60
28	I	332	ASN	CA-C-N	6.03	132.18	121.75
28	I	332	ASN	C-N-CA	6.03	132.18	121.75
4	D	14	GLY	O-C-N	-6.03	114.86	122.70
32	J	292	ILE	N-CA-C	-6.03	99.67	108.11
20	N	25	HIS	CE1-NE2-CD2	-6.03	102.97	109.00
26	O	10	GLN	CA-C-N	6.03	129.47	120.31
26	O	10	GLN	C-N-CA	6.03	129.47	120.31
26	O	33	LEU	N-CA-CB	6.03	120.33	110.39
26	O	118	ILE	N-CA-CB	6.03	118.74	110.54
29	K	214	MET	N-CA-C	6.03	117.85	111.28
19	Z	59	LEU	CA-C-N	6.03	128.71	120.46
19	Z	59	LEU	C-N-CA	6.03	128.71	120.46
30	L	205	LEU	N-CA-CB	6.03	119.62	110.28
10	3	41	LYS	N-CA-CB	6.02	120.67	110.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	20	ALA	CA-C-N	6.02	129.47	120.31
24	R	20	ALA	C-N-CA	6.02	129.47	120.31
26	O	321	ARG	CA-C-O	6.02	128.16	121.11
17	T	333	ILE	CA-C-N	6.02	126.38	119.93
17	T	333	ILE	C-N-CA	6.02	126.38	119.93
20	N	439	GLU	CA-C-N	6.02	126.50	119.94
20	N	439	GLU	C-N-CA	6.02	126.50	119.94
24	R	77	ASN	CA-C-N	6.02	128.27	120.44
24	R	77	ASN	C-N-CA	6.02	128.27	120.44
16	V	206	ASN	CA-CB-CG	-6.02	106.58	112.60
22	P	252	ASP	N-CA-CB	6.02	119.61	110.28
13	6	85	HIS	CE1-NE2-CD2	-6.02	102.98	109.00
20	N	164	GLU	CA-C-N	6.02	133.03	121.54
20	N	164	GLU	C-N-CA	6.02	133.03	121.54
22	P	378	MET	CG-SD-CE	-6.02	87.66	100.90
29	K	187	HIS	CG-CD2-NE2	6.02	113.22	107.20
26	O	60	TYR	CB-CG-CD2	-6.02	111.78	120.80
3	C	30	HIS	ND1-CE1-NE2	6.01	114.42	108.40
27	H	348	LEU	CA-C-O	-6.01	114.18	120.55
16	V	235	SER	CA-C-N	6.01	128.83	120.29
16	V	235	SER	C-N-CA	6.01	128.83	120.29
21	S	396	HIS	N-CA-C	6.01	117.91	111.36
24	R	272	PHE	CA-C-N	6.01	128.26	120.44
24	R	272	PHE	C-N-CA	6.01	128.26	120.44
31	M	222	PRO	CA-C-N	6.01	125.77	119.76
31	M	222	PRO	C-N-CA	6.01	125.77	119.76
6	F	53	GLN	CB-CG-CD	-6.01	102.39	112.60
20	N	938	GLU	CB-CG-CD	-6.01	102.39	112.60
22	P	226	TYR	CA-C-N	6.01	128.82	120.29
22	P	226	TYR	C-N-CA	6.01	128.82	120.29
26	O	15	GLY	CA-C-N	6.01	125.92	119.85
26	O	15	GLY	C-N-CA	6.01	125.92	119.85
3	C	104	PRO	CA-C-N	6.01	133.25	122.13
3	C	104	PRO	C-N-CA	6.01	133.25	122.13
5	E	227	HIS	ND1-CE1-NE2	6.01	114.41	108.40
9	2	232	TYR	CB-CG-CD1	-6.01	111.79	120.80
27	H	93	LEU	CA-C-N	6.01	133.01	121.54
27	H	93	LEU	C-N-CA	6.01	133.01	121.54
31	M	81	GLU	CA-C-N	6.01	128.82	120.29
31	M	81	GLU	C-N-CA	6.01	128.82	120.29
31	M	126	VAL	CB-CA-C	6.01	118.23	110.96
32	J	311	ILE	N-CA-C	-6.01	95.92	106.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	908	ILE	CB-CA-C	6.00	119.01	110.84
24	R	8	GLU	O-C-N	6.00	129.00	122.15
24	R	26	LEU	CA-C-N	6.00	128.33	120.28
24	R	26	LEU	C-N-CA	6.00	128.33	120.28
29	K	410	ASP	CA-C-O	6.00	125.89	119.34
32	J	125	LYS	N-CA-C	-6.00	100.17	109.24
1	A	88	ARG	CA-C-N	6.00	128.81	120.29
1	A	88	ARG	C-N-CA	6.00	128.81	120.29
27	H	311	PRO	N-CA-CB	6.00	109.55	103.25
28	I	364	ILE	O-C-N	6.00	128.01	121.83
8	1	125	GLU	CA-C-O	-6.00	111.43	119.11
17	T	218	LEU	CA-C-O	-6.00	111.94	120.16
24	R	35	THR	CA-C-O	-6.00	114.48	120.90
27	H	132	THR	CA-C-N	6.00	128.32	120.28
27	H	132	THR	C-N-CA	6.00	128.32	120.28
29	K	278	GLN	N-CA-C	-6.00	107.19	114.75
30	L	148	GLU	CA-C-N	6.00	129.95	120.47
30	L	148	GLU	C-N-CA	6.00	129.95	120.47
20	N	575	ASP	O-C-N	-6.00	114.71	121.43
23	Q	215	GLY	CA-C-N	6.00	128.68	120.46
23	Q	215	GLY	C-N-CA	6.00	128.68	120.46
19	Z	304	PHE	CA-C-N	6.00	128.32	120.28
19	Z	304	PHE	C-N-CA	6.00	128.32	120.28
20	N	213	PHE	CA-CB-CG	-6.00	107.80	113.80
21	S	355	PRO	CA-C-N	6.00	129.43	120.31
21	S	355	PRO	C-N-CA	6.00	129.43	120.31
21	S	382	PHE	CA-C-N	6.00	128.92	120.28
21	S	382	PHE	C-N-CA	6.00	128.92	120.28
2	B	188	ILE	N-CA-CB	6.00	118.25	110.57
8	1	171	TYR	CA-CB-CG	6.00	124.69	113.90
19	Z	440	ILE	N-CA-C	6.00	116.78	110.72
20	N	160	LEU	CA-C-N	6.00	128.31	120.28
20	N	160	LEU	C-N-CA	6.00	128.31	120.28
24	R	364	TRP	CD2-CE2-CZ2	-6.00	116.40	122.40
8	1	198	GLU	CA-C-N	5.99	128.31	120.28
8	1	198	GLU	C-N-CA	5.99	128.31	120.28
12	5	198	MET	O-C-N	-5.99	115.90	122.07
21	S	118	THR	O-C-N	5.99	130.18	122.81
14	7	80	PHE	CA-CB-CG	-5.99	107.81	113.80
32	J	148	TYR	CB-CA-C	-5.99	99.17	110.67
8	1	107	PRO	N-CD-CG	5.99	112.19	103.20
16	V	57	MET	N-CA-C	-5.99	99.13	108.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	5	245	ARG	O-C-N	-5.99	116.19	122.96
12	5	157	GLY	N-CA-C	-5.99	98.99	113.18
17	T	122	LEU	CA-C-O	5.99	126.86	120.10
20	N	63	VAL	N-CA-C	5.99	116.73	110.62
24	R	95	LEU	N-CA-C	-5.99	101.18	110.10
27	H	91	GLN	CA-C-O	-5.99	113.58	119.69
1	A	147	GLN	CG-CD-NE2	-5.99	107.42	116.40
1	A	199	ILE	CA-C-O	-5.99	114.41	121.05
5	E	69	GLU	CB-CG-CD	-5.99	102.42	112.60
16	V	219	ASN	OD1-CG-ND2	5.99	128.59	122.60
24	R	220	VAL	N-CA-CB	5.99	118.68	110.54
26	O	179	PHE	CA-CB-CG	5.99	119.79	113.80
27	H	184	ILE	O-C-N	-5.99	115.67	121.83
28	I	306	GLN	CB-CG-CD	-5.99	102.42	112.60
14	7	209	ALA	CA-C-N	5.98	128.30	120.28
14	7	209	ALA	C-N-CA	5.98	128.30	120.28
16	V	32	TYR	CA-CB-CG	-5.98	103.13	113.90
20	N	612	ASP	CA-CB-CG	-5.98	106.62	112.60
29	K	323	ARG	CG-CD-NE	-5.98	98.84	112.00
1	A	68	HIS	CB-CG-ND1	5.98	131.67	122.70
9	2	186	ARG	N-CA-C	-5.98	102.24	109.72
16	V	154	LYS	CB-CA-C	-5.98	101.33	111.02
19	Z	601	ALA	N-CA-C	5.98	118.93	110.50
21	S	248	ASN	N-CA-C	5.98	117.47	111.07
23	Q	153	LEU	N-CA-CB	5.98	118.91	110.12
27	H	398	ARG	CA-C-N	5.98	129.40	120.31
27	H	398	ARG	C-N-CA	5.98	129.40	120.31
19	Z	79	ARG	CA-C-N	5.98	128.29	120.28
19	Z	79	ARG	C-N-CA	5.98	128.29	120.28
23	Q	363	ARG	CA-C-N	5.98	128.29	120.28
23	Q	363	ARG	C-N-CA	5.98	128.29	120.28
25	U	15	VAL	N-CA-C	-5.98	104.68	110.72
31	M	410	ALA	CA-C-N	5.98	128.29	120.28
31	M	410	ALA	C-N-CA	5.98	128.29	120.28
5	E	73	HIS	CE1-NE2-CD2	-5.98	103.02	109.00
15	W	189	LEU	CA-C-O	5.98	126.89	120.55
6	F	175	HIS	ND1-CE1-NE2	5.97	114.37	108.40
14	7	57	GLY	CA-C-N	-5.97	113.02	122.64
14	7	57	GLY	C-N-CA	-5.97	113.02	122.64
14	7	243	ILE	O-C-N	-5.97	116.40	123.03
21	S	376	ASP	CA-CB-CG	-5.97	106.63	112.60
32	J	156	LYS	CA-C-N	5.97	128.77	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	156	LYS	C-N-CA	5.97	128.77	120.29
32	J	171	HIS	CA-CB-CG	-5.97	107.83	113.80
3	C	129	PRO	O-C-N	5.97	130.27	122.86
19	Z	746	ARG	CA-C-N	5.97	128.77	120.29
19	Z	746	ARG	C-N-CA	5.97	128.77	120.29
21	S	323	THR	CA-C-N	5.97	128.64	120.46
21	S	323	THR	C-N-CA	5.97	128.64	120.46
29	K	411	GLU	N-CA-C	-5.97	107.22	114.75
16	V	232	GLN	CA-C-N	5.97	132.40	122.73
16	V	232	GLN	C-N-CA	5.97	132.40	122.73
19	Z	392	THR	CA-CB-OG1	5.97	118.56	109.60
26	O	49	CYS	CA-C-N	5.97	130.61	122.07
26	O	49	CYS	C-N-CA	5.97	130.61	122.07
26	O	171	SER	CA-C-N	5.97	128.77	120.29
26	O	171	SER	C-N-CA	5.97	128.77	120.29
11	4	194	ILE	N-CA-C	5.97	117.79	109.55
15	W	92	VAL	CA-C-N	5.97	128.20	120.44
15	W	92	VAL	C-N-CA	5.97	128.20	120.44
19	Z	611	GLN	OE1-CD-NE2	5.97	128.57	122.60
19	Z	677	HIS	CE1-NE2-CD2	-5.97	103.03	109.00
20	N	240	ASP	CA-CB-CG	-5.97	106.63	112.60
13	6	30	SER	CA-C-N	5.97	127.30	119.84
13	6	30	SER	C-N-CA	5.97	127.30	119.84
24	R	205	VAL	N-CA-CB	5.97	118.65	110.54
32	J	164	VAL	CA-C-O	-5.97	114.43	121.05
21	S	341	ARG	CA-CB-CG	5.96	126.03	114.10
32	J	204	ALA	CA-C-N	5.96	128.27	120.28
32	J	204	ALA	C-N-CA	5.96	128.27	120.28
11	4	43	LEU	CB-CA-C	-5.96	99.53	109.55
17	T	129	LEU	CB-CA-C	-5.96	101.48	110.90
19	Z	63	LEU	CB-CA-C	-5.96	99.60	110.63
22	P	73	MET	CG-SD-CE	-5.96	87.78	100.90
24	R	192	ARG	CB-CG-CD	5.96	125.01	111.30
28	I	385	MET	CG-SD-CE	-5.96	87.78	100.90
14	7	53	THR	CA-C-O	5.96	127.84	121.11
6	F	179	PHE	CA-C-N	5.96	128.26	120.28
6	F	179	PHE	C-N-CA	5.96	128.26	120.28
12	5	151	GLY	CA-C-N	5.96	129.17	120.71
12	5	151	GLY	C-N-CA	5.96	129.17	120.71
20	N	430	ASP	N-CA-C	-5.96	99.99	109.23
28	I	411	ARG	NE-CZ-NH1	5.96	127.46	121.50
31	M	119	GLN	N-CA-C	-5.96	98.01	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	W	76	HIS	CE1-NE2-CD2	-5.96	103.04	109.00
16	V	248	MET	N-CA-CB	5.96	119.39	110.22
20	N	848	LYS	N-CA-C	-5.96	104.15	113.02
20	N	895	THR	CB-CA-C	-5.96	99.26	110.16
22	P	58	SER	CA-C-N	5.96	128.26	120.28
22	P	58	SER	C-N-CA	5.96	128.26	120.28
25	U	75	LEU	CA-C-N	5.96	128.18	120.44
25	U	75	LEU	C-N-CA	5.96	128.18	120.44
32	J	195	GLY	CA-C-N	5.96	128.75	120.29
32	J	195	GLY	C-N-CA	5.96	128.75	120.29
7	G	170	ARG	NE-CZ-NH1	5.96	127.45	121.50
26	O	361	LYS	N-CA-CB	5.96	118.87	110.12
27	H	103	ASN	OD1-CG-ND2	5.95	128.55	122.60
17	T	201	PHE	CA-CB-CG	5.95	119.75	113.80
29	K	304	ASN	CA-C-N	5.95	129.18	120.91
29	K	304	ASN	C-N-CA	5.95	129.18	120.91
5	E	196	LYS	CA-C-N	5.95	128.85	120.28
5	E	196	LYS	C-N-CA	5.95	128.85	120.28
16	V	258	ALA	CA-C-O	5.95	126.86	120.55
22	P	202	THR	CA-C-N	5.95	128.18	120.44
22	P	202	THR	C-N-CA	5.95	128.18	120.44
26	O	23	HIS	N-CA-CB	5.95	118.87	110.12
26	O	152	HIS	CE1-NE2-CD2	-5.95	103.05	109.00
30	L	59	ASN	N-CA-CB	5.95	119.50	110.28
30	L	259	GLU	N-CA-C	-5.95	103.41	112.99
7	G	54	VAL	N-CA-CB	5.95	118.33	111.90
17	T	233	VAL	N-CA-CB	5.95	118.18	110.57
20	N	267	ASN	N-CA-CB	5.95	119.50	110.28
20	N	326	ILE	N-CA-C	5.95	116.69	110.62
28	I	141	LYS	N-CA-C	5.95	118.53	111.33
20	N	787	CYS	O-C-N	5.95	130.05	123.33
6	F	109	VAL	CA-C-O	-5.95	114.55	120.85
6	F	136	GLY	CA-C-O	-5.95	115.78	121.19
8	1	68	THR	CA-C-O	-5.95	115.75	121.34
12	5	108	ALA	CA-C-N	5.95	129.55	121.05
12	5	108	ALA	C-N-CA	5.95	129.55	121.05
14	7	71	LEU	O-C-N	5.95	130.15	122.89
22	P	375	MET	N-CA-CB	5.95	118.96	110.16
23	Q	366	SER	O-C-N	5.95	128.19	122.07
25	U	281	ALA	N-CA-C	5.95	117.76	111.28
28	I	391	SER	N-CA-C	5.95	123.47	110.80
31	M	242	ALA	O-C-N	5.95	128.42	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	160	LYS	N-CA-C	-5.94	107.01	114.56
19	Z	508	SER	CA-C-N	5.94	131.55	123.11
19	Z	508	SER	C-N-CA	5.94	131.55	123.11
19	Z	769	THR	N-CA-C	-5.94	100.11	109.50
25	U	86	ASN	CA-CB-CG	-5.94	106.66	112.60
26	O	23	HIS	CE1-NE2-CD2	-5.94	103.06	109.00
4	D	122	GLN	N-CA-C	5.94	117.76	111.28
8	1	225	ASP	CA-CB-CG	-5.94	106.66	112.60
11	4	68	LYS	O-C-N	-5.94	115.82	122.12
21	S	189	GLN	CA-C-N	5.94	128.73	120.29
21	S	189	GLN	C-N-CA	5.94	128.73	120.29
31	M	197	GLN	OE1-CD-NE2	5.94	128.54	122.60
4	D	106	ASP	CA-C-N	5.94	126.29	119.93
4	D	106	ASP	C-N-CA	5.94	126.29	119.93
20	N	739	ALA	CA-C-N	5.94	131.10	120.77
20	N	739	ALA	C-N-CA	5.94	131.10	120.77
28	I	347	ILE	CA-C-N	5.94	128.72	120.29
28	I	347	ILE	C-N-CA	5.94	128.72	120.29
29	K	256	GLU	CA-CB-CG	5.94	125.98	114.10
30	L	132	LEU	N-CA-C	-5.94	104.81	111.28
4	D	107	PRO	CB-CA-C	5.94	119.18	111.64
5	E	142	LEU	N-CA-CB	5.94	120.03	110.65
13	6	158	GLN	O-C-N	-5.94	117.27	123.56
17	T	193	GLN	CA-C-N	5.94	128.16	120.44
17	T	193	GLN	C-N-CA	5.94	128.16	120.44
22	P	80	TRP	CA-C-N	5.94	128.24	120.28
22	P	80	TRP	C-N-CA	5.94	128.24	120.28
29	K	261	ILE	CA-C-O	-5.94	114.16	120.39
13	6	181	GLY	O-C-N	-5.94	114.98	122.70
2	B	155	TYR	N-CA-CB	5.93	121.74	111.00
13	6	219	ALA	O-C-N	5.93	129.55	122.72
19	Z	456	ARG	CA-C-N	5.93	131.01	122.35
19	Z	456	ARG	C-N-CA	5.93	131.01	122.35
24	R	329	PHE	CA-CB-CG	-5.93	107.87	113.80
3	C	174	MET	CA-C-N	5.93	128.23	120.28
3	C	174	MET	C-N-CA	5.93	128.23	120.28
3	C	175	LEU	CA-C-O	-5.93	114.26	120.55
15	W	91	ARG	O-C-N	5.93	128.18	122.07
16	V	113	HIS	CG-CD2-NE2	5.93	113.13	107.20
22	P	212	LYS	N-CA-C	5.93	117.75	111.28
24	R	259	TYR	CA-CB-CG	5.93	124.58	113.90
25	U	145	HIS	ND1-CE1-NE2	5.93	114.33	108.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	F	51	ARG	NE-CZ-NH2	5.93	124.54	119.20
24	R	94	ASN	CA-CB-CG	5.93	118.53	112.60
1	A	139	ILE	CA-CB-CG2	-5.93	100.42	110.50
19	Z	626	GLU	N-CA-C	5.93	117.55	111.14
25	U	158	VAL	CA-C-N	5.93	129.13	120.71
25	U	158	VAL	C-N-CA	5.93	129.13	120.71
25	U	247	LYS	CA-C-N	5.93	128.82	120.28
25	U	247	LYS	C-N-CA	5.93	128.82	120.28
9	2	107	GLU	N-CA-CB	5.93	118.83	110.12
13	6	101	MET	N-CA-CB	5.93	118.83	110.12
17	T	233	VAL	O-C-N	-5.93	115.73	121.90
25	U	82	PHE	CA-CB-CG	-5.93	107.87	113.80
10	3	90	MET	CA-C-O	-5.93	114.60	120.82
11	4	3	TYR	N-CA-C	-5.93	100.13	108.96
13	6	30	SER	CA-C-O	-5.93	114.63	120.26
13	6	185	MET	CA-C-N	5.93	132.86	121.54
13	6	185	MET	C-N-CA	5.93	132.86	121.54
16	V	189	ILE	O-C-N	-5.93	115.16	122.57
22	P	240	TYR	CA-C-N	5.93	128.71	120.29
22	P	240	TYR	C-N-CA	5.93	128.71	120.29
23	Q	400	ALA	CA-C-N	5.93	128.22	120.28
23	Q	400	ALA	C-N-CA	5.93	128.22	120.28
20	N	430	ASP	CA-C-N	5.92	132.85	121.54
20	N	430	ASP	C-N-CA	5.92	132.85	121.54
21	S	232	ARG	NE-CZ-NH2	5.92	124.53	119.20
27	H	353	HIS	CA-CB-CG	5.92	119.72	113.80
30	L	27	ARG	N-CA-C	5.92	117.74	111.28
32	J	122	THR	O-C-N	-5.92	116.02	123.01
5	E	52	LYS	N-CA-CB	5.92	119.46	110.28
14	7	195	ARG	CB-CG-CD	5.92	124.92	111.30
31	M	287	PHE	CA-CB-CG	-5.92	107.88	113.80
15	W	181	ASP	O-C-N	-5.92	114.71	122.59
20	N	703	CYS	O-C-N	-5.92	114.79	121.36
21	S	106	HIS	O-C-N	-5.92	114.71	122.59
22	P	253	THR	CA-C-O	-5.92	112.05	120.16
24	R	382	LYS	CB-CA-C	-5.92	100.96	110.79
19	Z	647	GLY	CA-C-O	5.92	126.85	120.75
19	Z	832	THR	N-CA-C	-5.92	103.84	113.19
20	N	138	PHE	N-CA-C	-5.92	104.95	111.82
31	M	126	VAL	N-CA-CB	5.92	117.75	111.00
5	E	66	LYS	CA-C-N	-5.92	115.43	123.12
5	E	66	LYS	C-N-CA	-5.92	115.43	123.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	E	213	THR	N-CA-C	-5.92	106.22	113.50
7	G	145	ASP	O-C-N	5.92	128.20	121.93
17	T	207	ARG	N-CA-C	-5.92	101.36	109.71
31	M	202	VAL	CA-CB-CG2	-5.92	100.34	110.40
11	4	103	LEU	N-CA-CB	5.92	120.13	110.37
16	V	226	MET	CG-SD-CE	-5.92	87.88	100.90
19	Z	49	ASP	CA-C-N	5.92	128.21	120.28
19	Z	49	ASP	C-N-CA	5.92	128.21	120.28
20	N	270	THR	N-CA-C	5.92	117.40	111.07
20	N	575	ASP	CA-C-N	5.92	125.46	119.19
20	N	575	ASP	C-N-CA	5.92	125.46	119.19
27	H	341	ILE	CA-C-O	5.92	126.60	120.39
29	K	187	HIS	CE1-NE2-CD2	-5.92	103.08	109.00
2	B	213	CYS	N-CA-C	-5.92	99.76	109.40
12	5	121	GLN	CA-C-N	5.92	128.69	120.29
12	5	121	GLN	C-N-CA	5.92	128.69	120.29
20	N	952	ASP	CA-C-O	-5.91	114.15	120.42
5	E	73	HIS	ND1-CE1-NE2	5.91	114.31	108.40
29	K	383	GLY	CA-C-N	5.91	128.69	120.29
29	K	383	GLY	C-N-CA	5.91	128.69	120.29
20	N	120	GLU	O-C-N	5.91	130.45	122.59
30	L	317	LEU	N-CA-CB	5.91	118.44	109.75
3	C	233	VAL	N-CA-CB	5.91	118.58	110.54
7	G	34	SER	CA-C-N	5.91	132.82	121.54
7	G	34	SER	C-N-CA	5.91	132.82	121.54
19	Z	653	ALA	CA-C-N	5.91	128.81	120.42
19	Z	653	ALA	C-N-CA	5.91	128.81	120.42
29	K	286	GLN	N-CA-C	-5.91	104.92	111.36
31	M	189	SER	CA-C-N	5.91	129.29	120.31
31	M	189	SER	C-N-CA	5.91	129.29	120.31
5	E	162	PHE	CA-CB-CG	5.91	119.71	113.80
19	Z	245	ASN	CA-C-N	5.91	128.20	120.28
19	Z	245	ASN	C-N-CA	5.91	128.20	120.28
20	N	349	ASP	CA-C-N	5.91	130.59	120.72
20	N	349	ASP	C-N-CA	5.91	130.59	120.72
25	U	113	LYS	N-CA-C	5.91	117.72	111.28
29	K	335	LEU	N-CA-CB	5.91	119.64	110.01
2	B	189	HIS	CB-CG-CD2	-5.91	123.52	131.20
29	K	179	GLU	CA-C-O	-5.91	114.62	120.70
31	M	423	TYR	CB-CA-C	-5.91	101.57	110.90
19	Z	411	ALA	CA-C-N	5.90	128.67	120.29
19	Z	411	ALA	C-N-CA	5.90	128.67	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	97	LYS	N-CA-C	5.90	117.79	111.36
20	N	194	ARG	NE-CZ-NH2	-5.90	113.89	119.20
25	U	174	HIS	CB-CG-ND1	5.90	131.55	122.70
26	O	294	GLU	N-CA-CB	5.90	118.80	110.12
29	K	102	ILE	CA-C-O	5.90	126.85	120.53
8	1	122	ARG	CA-C-N	5.90	128.44	120.65
8	1	122	ARG	C-N-CA	5.90	128.44	120.65
26	O	183	VAL	CA-C-O	5.90	128.16	120.78
27	H	305	GLN	OE1-CD-NE2	-5.90	116.70	122.60
20	N	56	SER	N-CA-C	5.90	118.03	109.71
28	I	303	ARG	NE-CZ-NH1	-5.90	115.60	121.50
4	D	202	LEU	CA-C-N	5.90	129.66	120.82
4	D	202	LEU	C-N-CA	5.90	129.66	120.82
22	P	148	THR	CA-C-N	5.90	128.66	120.29
22	P	148	THR	C-N-CA	5.90	128.66	120.29
22	P	428	TRP	CG-CD2-CE3	-5.90	128.00	133.90
29	K	48	GLN	CA-C-N	5.90	128.18	120.28
29	K	48	GLN	C-N-CA	5.90	128.18	120.28
32	J	356	GLY	CA-C-N	5.90	128.18	120.28
32	J	356	GLY	C-N-CA	5.90	128.18	120.28
7	G	141	TYR	N-CA-CB	5.90	120.59	110.68
12	5	211	ALA	N-CA-CB	5.90	118.79	110.12
19	Z	764	LEU	N-CA-C	-5.90	103.88	113.19
5	E	18	GLU	N-CA-CB	-5.89	100.79	110.40
7	G	69	ASN	CA-CB-CG	5.89	118.49	112.60
14	7	55	VAL	O-C-N	5.89	129.94	122.57
19	Z	79	ARG	CB-CA-C	-5.89	101.62	110.88
19	Z	156	HIS	O-C-N	-5.89	114.57	122.23
22	P	128	LEU	CA-C-O	-5.89	114.30	120.55
30	L	66	SER	CA-C-N	5.89	132.58	121.97
30	L	66	SER	C-N-CA	5.89	132.58	121.97
1	A	112	ASP	CA-C-N	5.89	128.66	120.29
1	A	112	ASP	C-N-CA	5.89	128.66	120.29
7	G	89	ALA	CA-C-N	5.89	128.10	120.44
7	G	89	ALA	C-N-CA	5.89	128.10	120.44
3	C	19	TYR	O-C-N	5.89	128.45	122.09
4	D	110	VAL	CA-C-N	5.89	128.17	120.28
4	D	110	VAL	C-N-CA	5.89	128.17	120.28
16	V	94	LYS	N-CA-C	-5.89	104.86	111.28
19	Z	605	ASN	CA-C-N	5.89	128.78	120.42
19	Z	605	ASN	C-N-CA	5.89	128.78	120.42
28	I	162	VAL	N-CA-C	-5.89	97.36	106.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	348	LEU	CA-C-N	5.89	129.12	120.82
30	L	348	LEU	C-N-CA	5.89	129.12	120.82
15	W	148	VAL	CA-CB-CG2	5.89	120.41	110.40
11	4	100	VAL	N-CA-C	-5.89	99.74	108.45
17	T	207	ARG	N-CA-CB	5.89	116.94	110.35
20	N	789	ILE	CA-C-O	5.89	126.08	120.25
20	N	877	LEU	N-CA-CB	5.89	119.06	110.47
21	S	96	MET	CA-C-N	5.89	128.15	120.26
21	S	96	MET	C-N-CA	5.89	128.15	120.26
29	K	110	ASN	N-CA-C	-5.89	100.59	109.95
20	N	558	GLY	N-CA-C	-5.88	105.43	115.08
21	S	479	CYS	CA-C-N	5.88	128.16	120.28
21	S	479	CYS	C-N-CA	5.88	128.16	120.28
25	U	35	VAL	CA-C-N	-5.88	114.94	123.06
25	U	35	VAL	C-N-CA	-5.88	114.94	123.06
2	B	14	SER	CA-C-N	5.88	127.19	119.84
2	B	14	SER	C-N-CA	5.88	127.19	119.84
6	F	226	ASP	N-CA-C	-5.88	103.89	113.19
21	S	485	MET	CA-C-N	5.88	128.44	120.44
21	S	485	MET	C-N-CA	5.88	128.44	120.44
28	I	93	GLU	CA-C-N	5.88	128.09	120.44
28	I	93	GLU	C-N-CA	5.88	128.09	120.44
32	J	258	ARG	N-CA-C	-5.88	104.76	112.41
25	U	220	LEU	O-C-N	-5.88	116.96	121.55
13	6	130	PRO	O-C-N	5.88	129.58	122.23
22	P	242	SER	O-C-N	-5.88	115.45	122.15
25	U	13	PRO	CA-C-N	5.88	128.08	120.44
25	U	13	PRO	C-N-CA	5.88	128.08	120.44
26	O	257	GLN	OE1-CD-NE2	5.88	128.48	122.60
5	E	232	GLU	CA-C-O	-5.88	114.65	120.70
15	W	94	HIS	CB-CA-C	-5.88	101.65	110.88
19	Z	51	GLN	CA-C-N	5.88	128.16	120.28
19	Z	51	GLN	C-N-CA	5.88	128.16	120.28
26	O	246	ASP	CA-C-O	-5.88	114.32	120.55
31	M	382	VAL	CA-C-N	5.88	131.79	122.62
31	M	382	VAL	C-N-CA	5.88	131.79	122.62
22	P	386	VAL	CA-C-N	5.88	128.63	120.29
22	P	386	VAL	C-N-CA	5.88	128.63	120.29
19	Z	805	ASP	CA-C-N	5.87	130.39	120.29
19	Z	805	ASP	C-N-CA	5.87	130.39	120.29
28	I	424	GLU	CB-CA-C	-5.87	101.66	110.88
31	M	117	ASP	O-C-N	-5.87	115.30	122.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	102	ASN	CA-CB-CG	-5.87	106.73	112.60
19	Z	226	TYR	N-CA-C	5.87	117.76	111.36
22	P	389	SER	N-CA-CB	5.87	118.52	110.01
32	J	24	TYR	N-CA-CB	5.87	118.75	110.12
4	D	142	PHE	CA-CB-CG	-5.87	107.93	113.80
19	Z	184	LEU	CA-C-N	5.87	128.15	120.28
19	Z	184	LEU	C-N-CA	5.87	128.15	120.28
19	Z	566	HIS	ND1-CE1-NE2	5.87	114.27	108.40
20	N	199	ARG	CA-C-N	5.87	128.50	120.46
20	N	199	ARG	C-N-CA	5.87	128.50	120.46
20	N	564	ASP	N-CA-C	5.87	117.68	111.28
22	P	110	THR	CA-C-N	5.87	128.63	120.29
22	P	110	THR	C-N-CA	5.87	128.63	120.29
23	Q	32	LYS	CA-C-O	-5.87	114.66	120.82
5	E	144	GLY	O-C-N	-5.87	115.07	122.70
11	4	13	VAL	CA-C-N	5.87	130.78	120.87
11	4	13	VAL	C-N-CA	5.87	130.78	120.87
23	Q	207	GLN	CA-C-N	5.87	128.62	120.29
23	Q	207	GLN	C-N-CA	5.87	128.62	120.29
26	O	132	LYS	N-CA-C	5.87	117.68	111.28
26	O	332	HIS	CE1-NE2-CD2	-5.87	103.13	109.00
13	6	46	ASP	N-CA-C	-5.87	98.31	110.80
25	U	259	VAL	O-C-N	-5.87	116.16	121.91
30	L	342	TYR	CB-CG-CD1	5.87	129.60	120.80
10	3	29	GLY	CA-C-O	-5.86	116.30	121.58
4	D	131	ARG	CA-C-N	5.86	126.06	120.31
4	D	131	ARG	C-N-CA	5.86	126.06	120.31
13	6	29	PHE	CA-C-O	-5.86	114.26	121.06
19	Z	102	HIS	CA-C-N	5.86	128.13	120.28
19	Z	102	HIS	C-N-CA	5.86	128.13	120.28
25	U	34	ARG	NE-CZ-NH1	-5.86	115.64	121.50
29	K	228	ILE	N-CA-C	-5.86	99.19	107.75
6	F	126	ARG	N-CA-C	5.86	118.09	109.42
6	F	143	HIS	CG-CD2-NE2	5.86	113.06	107.20
20	N	584	TYR	CA-C-N	5.86	128.06	120.44
20	N	584	TYR	C-N-CA	5.86	128.06	120.44
11	4	196	PHE	CA-CB-CG	-5.86	107.94	113.80
8	1	104	ASN	OD1-CG-ND2	-5.86	116.74	122.60
16	V	287	HIS	CG-CD2-NE2	5.86	113.06	107.20
19	Z	364	GLN	N-CA-C	-5.86	104.64	113.89
25	U	107	ALA	CB-CA-C	-5.86	100.89	110.85
27	H	385	ILE	CA-C-O	5.86	127.06	120.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	369	LYS	N-CA-CB	5.86	118.60	110.17
2	B	12	THR	O-C-N	-5.85	116.48	123.27
4	D	179	GLU	CA-C-N	5.85	128.40	120.44
4	D	179	GLU	C-N-CA	5.85	128.40	120.44
14	7	206	GLN	CB-CA-C	5.85	121.29	111.22
12	5	237	HIS	ND1-CE1-NE2	5.85	114.25	108.40
28	I	421	LYS	CA-C-N	5.85	128.60	120.29
28	I	421	LYS	C-N-CA	5.85	128.60	120.29
32	J	198	LEU	CA-C-N	5.85	128.60	120.29
32	J	198	LEU	C-N-CA	5.85	128.60	120.29
19	Z	432	TYR	O-C-N	5.85	128.32	122.12
19	Z	434	TYR	CA-C-O	5.85	126.62	120.42
19	Z	674	THR	CA-C-N	5.85	128.12	120.28
19	Z	674	THR	C-N-CA	5.85	128.12	120.28
20	N	545	LEU	N-CA-C	5.85	117.33	111.07
20	N	900	TYR	N-CA-CB	5.85	119.69	110.56
26	O	86	GLN	CA-C-O	-5.85	113.24	119.97
19	Z	387	GLN	CA-C-O	-5.85	115.65	122.37
31	M	362	GLU	O-C-N	5.85	128.32	122.12
6	F	65	HIS	CB-CG-ND1	5.84	131.47	122.70
13	6	39	VAL	CA-C-N	5.84	132.15	122.33
13	6	39	VAL	C-N-CA	5.84	132.15	122.33
21	S	310	ARG	CA-C-N	5.84	128.59	120.29
21	S	310	ARG	C-N-CA	5.84	128.59	120.29
21	S	387	THR	OG1-CB-CG2	-5.84	97.61	109.30
27	H	82	ALA	CA-C-N	5.84	128.70	120.28
27	H	82	ALA	C-N-CA	5.84	128.70	120.28
27	H	287	ASP	N-CA-C	-5.84	105.76	114.64
28	I	81	ASN	CA-C-O	-5.84	113.25	119.97
25	U	183	THR	N-CA-C	-5.84	105.51	114.16
31	M	251	PHE	CA-C-N	5.84	130.19	122.42
31	M	251	PHE	C-N-CA	5.84	130.19	122.42
1	A	128	ASN	CA-CB-CG	-5.84	106.76	112.60
2	B	158	TRP	CD2-CE2-CZ2	-5.84	116.56	122.40
31	M	316	LEU	CA-C-O	-5.84	114.36	120.55
16	V	307	VAL	N-CA-CB	5.84	118.48	110.54
19	Z	729	MET	O-C-N	5.84	128.31	122.12
22	P	273	TYR	N-CA-C	5.84	117.72	111.36
27	H	227	ARG	CD-NE-CZ	-5.84	116.22	124.40
30	L	303	LEU	CA-C-N	5.84	128.10	120.28
30	L	303	LEU	C-N-CA	5.84	128.10	120.28
5	E	117	SER	N-CA-C	5.84	118.59	111.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	5	148	GLN	CA-C-O	-5.84	114.36	120.55
5	E	93	ARG	CA-C-O	-5.84	114.69	120.82
5	E	143	PHE	CA-CB-CG	-5.84	107.96	113.80
8	1	181	THR	N-CA-CB	5.84	119.29	110.42
19	Z	464	ALA	N-CA-CB	5.84	118.47	110.01
24	R	350	VAL	CA-C-N	5.84	132.36	122.26
24	R	350	VAL	C-N-CA	5.84	132.36	122.26
20	N	616	ARG	CD-NE-CZ	-5.83	116.23	124.40
7	G	20	ARG	CA-C-N	5.83	130.42	123.19
7	G	20	ARG	C-N-CA	5.83	130.42	123.19
31	M	138	PRO	N-CA-CB	5.83	107.14	103.23
5	E	83	ALA	CA-C-N	5.83	129.17	120.31
5	E	83	ALA	C-N-CA	5.83	129.17	120.31
7	G	101	SER	O-C-N	5.83	128.08	122.07
19	Z	421	ASP	N-CA-CB	5.83	119.72	110.57
20	N	464	GLN	CA-C-O	-5.83	114.24	120.42
27	H	174	TYR	CA-C-N	5.83	128.09	120.28
27	H	174	TYR	C-N-CA	5.83	128.09	120.28
31	M	195	ASP	N-CA-C	5.83	117.64	111.28
15	W	7	MET	N-CA-CB	5.83	119.74	110.65
7	G	176	GLU	CA-C-N	5.83	128.44	120.46
7	G	176	GLU	C-N-CA	5.83	128.44	120.46
12	5	83	PRO	CB-CA-C	5.83	118.69	111.23
20	N	613	ASP	CA-C-O	-5.83	114.70	120.70
29	K	303	VAL	O-C-N	5.83	127.96	121.90
19	Z	404	ASP	CA-C-N	5.83	128.67	120.28
19	Z	404	ASP	C-N-CA	5.83	128.67	120.28
32	J	343	ASN	CB-CG-ND2	5.83	125.14	116.40
2	B	75	VAL	N-CA-C	-5.83	99.37	108.81
4	D	112	TYR	O-C-N	5.83	128.29	122.12
20	N	810	THR	CB-CA-C	5.83	118.09	109.29
21	S	351	ARG	NE-CZ-NH2	5.83	124.44	119.20
24	R	197	ALA	CA-C-N	5.83	128.09	120.28
24	R	197	ALA	C-N-CA	5.83	128.09	120.28
28	I	235	LEU	N-CA-C	5.83	117.63	111.28
6	F	22	ILE	N-CA-C	-5.82	104.84	110.72
15	W	121	GLU	N-CA-C	-5.82	105.01	111.36
16	V	166	ASN	CA-CB-CG	5.82	118.42	112.60
17	T	339	ALA	CA-C-N	5.82	132.66	121.54
17	T	339	ALA	C-N-CA	5.82	132.66	121.54
19	Z	628	ASP	CA-CB-CG	5.82	118.42	112.60
19	Z	745	LEU	CA-C-N	5.82	128.56	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	745	LEU	C-N-CA	5.82	128.56	120.29
20	N	875	PHE	CB-CG-CD2	5.82	130.60	120.70
22	P	116	THR	N-CA-C	-5.82	99.67	107.88
26	O	62	ASN	CA-CB-CG	5.82	118.42	112.60
30	L	310	ASP	N-CA-C	-5.82	104.84	111.07
20	N	723	ASP	CA-C-N	5.82	128.44	120.46
20	N	723	ASP	C-N-CA	5.82	128.44	120.46
14	7	114	MET	N-CA-CB	5.82	118.51	110.07
20	N	31	VAL	CA-C-O	5.82	126.98	120.64
20	N	346	ASN	CB-CG-ND2	5.82	125.13	116.40
14	7	213	VAL	CA-C-O	-5.82	114.68	120.85
22	P	400	LYS	N-CA-CB	5.82	120.32	110.49
30	L	91	PRO	N-CA-C	5.82	120.46	111.21
32	J	236	VAL	CB-CA-C	-5.82	104.52	111.97
5	E	10	ARG	CD-NE-CZ	-5.82	116.25	124.40
21	S	119	SER	N-CA-CB	5.82	118.70	109.51
25	U	130	ASP	CA-C-N	5.82	129.15	120.31
25	U	130	ASP	C-N-CA	5.82	129.15	120.31
9	2	58	GLY	CA-C-O	-5.82	115.24	120.94
9	2	202	ILE	CA-C-N	5.82	128.07	120.28
9	2	202	ILE	C-N-CA	5.82	128.07	120.28
19	Z	281	ILE	N-CA-CB	5.82	118.45	110.54
12	5	73	VAL	CA-CB-CG1	5.81	120.28	110.40
30	L	95	VAL	CA-C-N	5.81	129.87	122.83
30	L	95	VAL	C-N-CA	5.81	129.87	122.83
31	M	52	ASP	CA-CB-CG	-5.81	106.79	112.60
4	D	28	LYS	N-CA-C	-5.81	105.68	112.89
5	E	163	VAL	CB-CA-C	5.81	121.64	111.18
10	3	3	VAL	N-CA-C	-5.81	100.11	108.48
19	Z	445	LEU	N-CA-C	5.81	117.69	111.36
9	2	190	GLU	CA-C-O	-5.81	115.20	121.36
26	O	195	GLU	CB-CA-C	-5.81	101.15	110.79
27	H	46	LYS	CA-C-O	5.81	126.58	120.42
29	K	250	VAL	CA-C-N	5.81	128.54	120.29
29	K	250	VAL	C-N-CA	5.81	128.54	120.29
31	M	221	GLN	CB-CG-CD	-5.81	102.72	112.60
5	E	113	THR	N-CA-C	5.81	117.61	111.28
15	W	90	ILE	CA-C-O	-5.81	114.91	120.95
19	Z	41	LYS	N-CA-C	5.81	117.28	111.07
20	N	561	GLU	CA-C-N	5.81	128.64	120.28
20	N	561	GLU	C-N-CA	5.81	128.64	120.28
21	S	160	GLU	CA-C-N	5.81	128.54	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	160	GLU	C-N-CA	5.81	128.54	120.29
27	H	348	LEU	O-C-N	5.81	128.28	122.12
8	1	52	ARG	CA-C-O	5.81	124.91	118.52
5	E	216	GLU	CB-CG-CD	-5.80	102.73	112.60
24	R	125	ARG	CA-C-N	5.80	128.53	120.29
24	R	125	ARG	C-N-CA	5.80	128.53	120.29
27	H	338	ASP	CB-CA-C	-5.80	100.08	110.70
1	A	143	ILE	CA-CB-CG1	5.80	120.27	110.40
19	Z	240	VAL	CA-C-N	5.80	127.09	119.84
19	Z	240	VAL	C-N-CA	5.80	127.09	119.84
1	A	3	ARG	O-C-N	5.80	129.54	122.58
4	D	83	THR	CA-C-N	5.80	128.05	120.28
4	D	83	THR	C-N-CA	5.80	128.05	120.28
25	U	77	ASN	CA-C-N	5.80	128.06	120.28
25	U	77	ASN	C-N-CA	5.80	128.06	120.28
26	O	262	ALA	CA-C-N	5.80	128.33	120.44
26	O	262	ALA	C-N-CA	5.80	128.33	120.44
30	L	199	ARG	O-C-N	5.80	128.76	122.15
8	1	169	TYR	N-CA-C	-5.80	105.52	112.59
11	4	113	PRO	N-CA-CB	5.80	109.34	103.25
21	S	297	GLU	CA-C-N	5.80	128.53	120.29
21	S	297	GLU	C-N-CA	5.80	128.53	120.29
22	P	424	LEU	CA-C-N	5.80	128.05	120.28
22	P	424	LEU	C-N-CA	5.80	128.05	120.28
24	R	40	GLU	CB-CA-C	-5.80	100.99	110.85
25	U	80	GLY	O-C-N	-5.80	116.62	122.19
26	O	280	MET	CB-CA-C	-5.80	100.99	110.85
30	L	280	GLY	CA-C-N	5.80	128.32	120.38
30	L	280	GLY	C-N-CA	5.80	128.32	120.38
22	P	175	GLY	N-CA-C	-5.80	107.25	115.43
25	U	82	PHE	N-CA-C	5.80	118.55	111.82
29	K	127	ASN	OD1-CG-ND2	5.80	128.40	122.60
2	B	168	VAL	CB-CA-C	-5.80	104.31	112.14
14	7	126	SER	CA-CB-OG	5.80	122.69	111.10
20	N	656	LEU	O-C-N	5.79	128.76	122.15
21	S	109	LEU	O-C-N	5.79	128.16	122.19
23	Q	390	GLU	CB-CG-CD	-5.79	102.75	112.60
27	H	188	ARG	N-CA-C	5.79	117.60	111.28
13	6	114	ALA	CB-CA-C	-5.79	101.17	110.79
16	V	191	ALA	N-CA-CB	5.79	118.64	110.12
19	Z	234	THR	CA-C-N	5.79	128.62	120.28
19	Z	234	THR	C-N-CA	5.79	128.62	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	I	335	GLU	N-CA-C	-5.79	106.19	113.72
9	2	217	ASP	CA-C-O	5.79	126.61	120.36
19	Z	649	HIS	ND1-CE1-NE2	5.79	114.19	108.40
20	N	190	ASN	CA-CB-CG	5.79	118.39	112.60
20	N	384	GLN	CA-C-N	5.79	128.32	120.44
20	N	384	GLN	C-N-CA	5.79	128.32	120.44
32	J	405	TRP	CE3-CZ3-CH2	5.79	128.63	121.10
19	Z	2	GLU	CA-C-N	5.79	129.94	121.31
19	Z	2	GLU	C-N-CA	5.79	129.94	121.31
21	S	97	LEU	CA-C-O	-5.79	113.06	118.73
20	N	219	CYS	CA-C-N	5.79	127.96	120.44
20	N	219	CYS	C-N-CA	5.79	127.96	120.44
20	N	672	LEU	CA-C-N	5.79	127.33	120.09
20	N	672	LEU	C-N-CA	5.79	127.33	120.09
26	O	4	VAL	N-CA-CB	5.79	119.31	111.21
30	L	67	VAL	CA-C-N	5.79	132.75	121.41
30	L	67	VAL	C-N-CA	5.79	132.75	121.41
27	H	74	PRO	O-C-N	-5.79	114.63	121.46
11	4	99	HIS	CE1-NE2-CD2	-5.79	103.22	109.00
16	V	115	HIS	CB-CA-C	-5.79	102.03	110.13
17	T	328	PRO	O-C-N	5.79	129.66	123.01
20	N	944	PRO	CA-C-O	-5.79	112.17	120.56
21	S	214	TYR	N-CA-CB	5.79	118.46	110.07
7	G	162	TRP	O-C-N	-5.78	115.56	122.15
17	T	194	LEU	O-C-N	5.78	128.03	122.07
21	S	345	ARG	CA-CB-CG	5.78	125.67	114.10
25	U	38	VAL	CB-CA-C	-5.78	103.65	111.63
30	L	354	GLY	CA-C-O	5.78	126.71	120.75
20	N	383	ASP	CA-C-N	5.78	127.96	120.44
20	N	383	ASP	C-N-CA	5.78	127.96	120.44
27	H	310	ASP	CA-C-N	5.78	127.07	119.84
27	H	310	ASP	C-N-CA	5.78	127.07	119.84
10	3	77	LYS	CA-C-N	5.78	128.49	120.63
10	3	77	LYS	C-N-CA	5.78	128.49	120.63
19	Z	629	LYS	CB-CA-C	-5.78	101.19	110.79
19	Z	692	LEU	CA-C-N	5.78	127.95	120.44
19	Z	692	LEU	C-N-CA	5.78	127.95	120.44
27	H	372	LEU	O-C-N	5.78	128.25	122.12
29	K	288	ILE	CA-C-N	5.78	128.50	120.29
29	K	288	ILE	C-N-CA	5.78	128.50	120.29
9	2	112	THR	CA-C-N	5.78	127.95	120.44
9	2	112	THR	C-N-CA	5.78	127.95	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	5	228	TYR	N-CA-C	-5.78	98.86	108.34
19	Z	45	LEU	CA-C-N	5.78	127.95	120.44
19	Z	45	LEU	C-N-CA	5.78	127.95	120.44
20	N	68	PHE	N-CA-CB	5.78	118.61	110.12
20	N	77	SER	CA-C-N	5.78	127.95	120.44
20	N	77	SER	C-N-CA	5.78	127.95	120.44
27	H	333	ARG	NE-CZ-NH2	5.78	124.40	119.20
30	L	56	LYS	CA-C-N	5.78	128.02	120.28
30	L	56	LYS	C-N-CA	5.78	128.02	120.28
21	S	223	VAL	N-CA-C	-5.78	103.70	111.44
32	J	78	ARG	NE-CZ-NH1	5.77	127.27	121.50
32	J	271	ARG	NE-CZ-NH2	5.77	124.40	119.20
32	J	386	ALA	O-C-N	5.77	128.02	122.07
2	B	54	SER	CA-C-N	5.77	132.36	121.97
2	B	54	SER	C-N-CA	5.77	132.36	121.97
9	2	53	ASP	CA-C-N	5.77	128.25	122.30
9	2	53	ASP	C-N-CA	5.77	128.25	122.30
14	7	135	TRP	CA-C-O	-5.77	114.75	120.70
19	Z	233	LEU	N-CA-C	5.77	117.25	111.07
29	K	187	HIS	ND1-CE1-NE2	5.77	114.17	108.40
31	M	147	LYS	CA-C-O	-5.77	114.76	120.82
10	3	101	GLY	O-C-N	5.77	127.61	122.42
20	N	735	GLY	CA-C-N	5.77	128.37	120.46
20	N	735	GLY	C-N-CA	5.77	128.37	120.46
20	N	937	GLU	CA-C-O	-5.77	114.76	120.82
24	R	263	LEU	N-CA-CB	5.77	118.44	110.07
6	F	60	GLN	CA-C-N	5.77	129.91	121.31
6	F	60	GLN	C-N-CA	5.77	129.91	121.31
9	2	49	VAL	CA-C-N	5.77	131.12	122.58
9	2	49	VAL	C-N-CA	5.77	131.12	122.58
16	V	185	ASN	CA-C-O	5.77	127.92	121.40
20	N	771	PHE	CA-CB-CG	-5.77	108.03	113.80
21	S	288	THR	N-CA-CB	-5.77	101.64	110.12
14	7	254	ASP	CA-C-N	5.77	129.62	121.66
14	7	254	ASP	C-N-CA	5.77	129.62	121.66
20	N	565	ALA	N-CA-C	-5.77	105.07	111.36
30	L	332	GLY	CA-C-N	5.77	125.62	119.28
30	L	332	GLY	C-N-CA	5.77	125.62	119.28
11	4	167	LEU	CB-CA-C	-5.77	101.05	110.85
21	S	340	ASP	N-CA-CB	5.76	120.07	110.85
23	Q	394	ASP	CA-CB-CG	-5.76	106.84	112.60
25	U	227	ILE	N-CA-CB	5.76	118.38	110.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	198	PHE	CA-C-N	5.76	128.48	120.29
26	O	198	PHE	C-N-CA	5.76	128.48	120.29
16	V	224	SER	CA-C-N	5.76	127.93	120.44
16	V	224	SER	C-N-CA	5.76	127.93	120.44
28	I	404	LEU	CA-C-O	5.76	126.53	120.42
29	K	342	ARG	CA-C-N	5.76	128.00	120.28
29	K	342	ARG	C-N-CA	5.76	128.00	120.28
32	J	224	ILE	N-CA-C	-5.76	107.15	113.43
10	3	39	PHE	CA-C-O	-5.76	113.14	119.08
11	4	11	ASP	CA-C-N	5.76	128.00	120.28
11	4	11	ASP	C-N-CA	5.76	128.00	120.28
12	5	192	VAL	CA-C-O	5.76	126.47	120.25
19	Z	22	SER	N-CA-C	5.76	117.56	111.28
23	Q	79	SER	CA-C-N	5.76	128.35	120.46
23	Q	79	SER	C-N-CA	5.76	128.35	120.46
28	I	224	LEU	N-CA-CB	5.76	120.03	110.47
19	Z	169	GLU	CA-C-O	5.76	126.61	120.10
27	H	225	CYS	N-CA-C	5.76	117.64	111.36
29	K	393	ILE	N-CA-C	-5.76	100.29	108.58
30	L	269	ARG	N-CA-C	5.76	117.64	111.36
26	O	51	ALA	N-CA-CB	5.76	120.22	110.49
31	M	405	GLU	CA-C-N	5.76	128.00	120.28
31	M	405	GLU	C-N-CA	5.76	128.00	120.28
2	B	62	VAL	N-CA-CB	-5.76	101.73	111.23
17	T	313	LEU	O-C-N	-5.76	118.20	123.50
25	U	232	ASP	CA-C-O	-5.76	114.45	120.55
20	N	743	ASN	CB-CA-C	-5.75	98.97	110.42
22	P	340	VAL	CA-C-N	5.75	132.53	121.54
22	P	340	VAL	C-N-CA	5.75	132.53	121.54
10	3	48	ARG	CA-C-N	5.75	132.53	121.54
10	3	48	ARG	C-N-CA	5.75	132.53	121.54
13	6	83	GLY	N-CA-C	-5.75	100.86	111.04
17	T	192	HIS	CG-CD2-NE2	5.75	112.95	107.20
17	T	256	ALA	N-CA-CB	5.75	121.47	111.40
19	Z	667	GLY	CA-C-N	5.75	127.99	120.28
19	Z	667	GLY	C-N-CA	5.75	127.99	120.28
28	I	352	GLU	O-C-N	-5.75	116.48	123.27
31	M	411	LEU	CA-C-N	5.75	127.92	120.44
31	M	411	LEU	C-N-CA	5.75	127.92	120.44
32	J	22	GLN	CA-C-N	5.75	129.06	120.31
32	J	22	GLN	C-N-CA	5.75	129.06	120.31
13	6	155	GLY	CA-C-O	-5.75	113.94	120.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	W	49	VAL	CA-C-N	5.75	126.65	121.82
15	W	49	VAL	C-N-CA	5.75	126.65	121.82
19	Z	711	SER	N-CA-CB	5.75	119.08	110.22
23	Q	364	LYS	CA-C-N	5.75	127.99	120.28
23	Q	364	LYS	C-N-CA	5.75	127.99	120.28
28	I	195	GLN	CA-C-N	5.75	128.46	120.29
28	I	195	GLN	C-N-CA	5.75	128.46	120.29
31	M	383	ASN	N-CA-C	-5.75	100.41	109.50
28	I	207	HIS	CA-CB-CG	5.75	119.55	113.80
4	D	198	ILE	CA-C-O	-5.75	114.76	120.85
10	3	101	GLY	CA-C-N	5.75	127.02	119.84
10	3	101	GLY	C-N-CA	5.75	127.02	119.84
17	T	281	ALA	N-CA-C	5.75	117.35	111.14
19	Z	808	ASN	CA-CB-CG	5.75	118.35	112.60
23	Q	417	LYS	CA-C-N	5.75	130.32	120.72
23	Q	417	LYS	C-N-CA	5.75	130.32	120.72
31	M	264	ILE	N-CA-CB	-5.75	103.24	110.31
2	B	191	ALA	N-CA-CB	5.75	118.57	110.12
5	E	173	ALA	N-CA-C	-5.75	98.92	108.34
20	N	605	VAL	N-CA-CB	5.75	118.36	110.54
30	L	379	GLU	CA-C-N	5.75	128.55	120.28
30	L	379	GLU	C-N-CA	5.75	128.55	120.28
12	5	224	TYR	CB-CG-CD2	-5.75	112.18	120.80
25	U	23	PHE	N-CA-C	5.75	117.54	111.28
19	Z	301	HIS	N-CA-C	-5.74	104.92	111.07
26	O	50	PHE	CB-CG-CD2	5.74	130.46	120.70
32	J	70	GLY	N-CA-C	-5.74	103.03	110.38
5	E	227	HIS	CG-CD2-NE2	5.74	112.94	107.20
8	1	153	MET	N-CA-C	-5.74	98.57	110.80
23	Q	101	ALA	CB-CA-C	-5.74	100.50	110.09
13	6	85	HIS	N-CA-CB	5.74	120.19	110.49
19	Z	156	HIS	CA-CB-CG	-5.74	108.06	113.80
19	Z	638	ASP	N-CA-CB	5.74	118.33	110.01
3	C	12	PHE	N-CA-C	-5.74	100.93	110.17
4	D	101	ARG	NE-CZ-NH1	-5.74	115.76	121.50
12	5	97	ASN	CA-CB-CG	5.74	118.34	112.60
14	7	143	ARG	NE-CZ-NH2	-5.74	114.03	119.20
15	W	128	ALA	CA-C-N	5.74	127.97	120.28
15	W	128	ALA	C-N-CA	5.74	127.97	120.28
17	T	169	ARG	NE-CZ-NH2	-5.74	114.03	119.20
19	Z	222	ASP	CA-CB-CG	-5.74	106.86	112.60
20	N	760	VAL	CA-C-O	-5.74	114.98	120.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	123	ARG	CA-C-N	5.74	127.97	120.28
22	P	123	ARG	C-N-CA	5.74	127.97	120.28
23	Q	374	PHE	N-CA-CB	5.74	120.19	110.49
26	O	330	ARG	CB-CA-C	-5.74	97.44	110.07
28	I	370	SER	N-CA-CB	5.74	118.56	110.12
2	B	62	VAL	CB-CA-C	5.74	120.70	111.29
7	G	6	THR	CA-CB-OG1	5.74	118.20	109.60
12	5	235	LEU	CA-C-N	-5.74	115.08	123.00
12	5	235	LEU	C-N-CA	-5.74	115.08	123.00
19	Z	631	LYS	CA-C-O	5.74	126.63	120.55
21	S	56	THR	CA-CB-OG1	5.74	118.20	109.60
22	P	196	VAL	CA-C-N	5.74	130.72	122.35
22	P	196	VAL	C-N-CA	5.74	130.72	122.35
25	U	9	VAL	CA-CB-CG2	-5.74	100.65	110.40
20	N	155	LEU	O-C-N	5.73	128.20	122.12
20	N	933	PRO	CA-C-O	-5.73	114.78	121.95
22	P	66	ILE	N-CA-CB	5.73	118.34	110.54
14	7	168	TYR	O-C-N	5.73	129.98	123.27
15	W	99	HIS	CB-CG-CD2	5.73	138.65	131.20
19	Z	425	GLY	CA-C-N	5.73	128.43	120.29
19	Z	425	GLY	C-N-CA	5.73	128.43	120.29
22	P	28	LEU	CA-C-O	-5.73	113.36	118.63
22	P	394	SER	N-CA-CB	-5.73	101.67	110.16
32	J	211	PHE	CA-CB-CG	-5.73	108.07	113.80
7	G	194	VAL	O-C-N	5.73	127.43	121.87
7	G	235	GLU	CA-C-O	5.73	126.62	120.55
21	S	98	PRO	CB-CA-C	5.73	118.51	111.12
21	S	164	GLN	CA-C-N	5.73	127.89	120.44
21	S	164	GLN	C-N-CA	5.73	127.89	120.44
23	Q	312	GLU	CA-C-O	5.73	126.62	120.55
24	R	184	GLN	CA-C-N	5.73	126.30	120.00
24	R	184	GLN	C-N-CA	5.73	126.30	120.00
30	L	124	TYR	O-C-N	-5.73	116.64	123.06
32	J	171	HIS	ND1-CE1-NE2	5.73	114.13	108.40
32	J	363	CYS	CA-C-O	5.73	126.60	120.70
7	G	141	TYR	N-CA-C	-5.73	99.56	108.90
31	M	61	GLU	N-CA-C	-5.73	105.04	111.28
15	W	187	PRO	O-C-N	5.73	130.37	122.64
20	N	486	MET	N-CA-C	-5.73	101.81	110.28
29	K	400	GLU	CA-C-N	5.73	127.89	120.44
29	K	400	GLU	C-N-CA	5.73	127.89	120.44
32	J	336	MET	CA-C-N	5.73	129.00	120.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	336	MET	C-N-CA	5.73	129.00	120.87
24	R	204	THR	CA-C-N	5.73	128.30	120.46
24	R	204	THR	C-N-CA	5.73	128.30	120.46
26	O	356	TRP	CA-C-N	5.73	127.95	120.28
26	O	356	TRP	C-N-CA	5.73	127.95	120.28
31	M	67	HIS	CA-C-N	5.73	127.95	120.28
31	M	67	HIS	C-N-CA	5.73	127.95	120.28
3	C	166	ASN	CA-C-N	5.72	130.30	122.34
3	C	166	ASN	C-N-CA	5.72	130.30	122.34
19	Z	355	ASN	CA-CB-CG	-5.72	106.88	112.60
20	N	134	VAL	N-CA-C	5.72	116.46	110.62
4	D	183	THR	N-CA-C	-5.72	100.60	109.24
5	E	18	GLU	CA-C-O	5.72	126.41	119.31
9	2	183	ASP	N-CA-C	5.72	119.52	112.54
14	7	130	ARG	NE-CZ-NH2	-5.72	114.05	119.20
17	T	299	PRO	CA-C-N	5.72	127.95	120.28
17	T	299	PRO	C-N-CA	5.72	127.95	120.28
19	Z	642	ALA	N-CA-C	5.72	122.45	109.81
20	N	511	ALA	CA-C-N	5.72	127.95	120.28
20	N	511	ALA	C-N-CA	5.72	127.95	120.28
24	R	31	HIS	O-C-N	5.72	128.67	122.15
24	R	49	ASN	CA-CB-CG	-5.72	106.88	112.60
31	M	261	GLN	CA-C-O	-5.72	115.15	121.33
21	S	445	ALA	N-CA-C	-5.72	100.79	108.86
9	2	117	PRO	CB-CA-C	-5.72	102.12	111.56
15	W	5	SER	N-CA-C	-5.72	100.38	109.59
20	N	497	LEU	O-C-N	-5.72	115.63	122.15
20	N	588	MET	CA-C-N	5.72	128.22	120.44
20	N	588	MET	C-N-CA	5.72	128.22	120.44
23	Q	385	LEU	N-CA-C	-5.72	99.20	108.52
23	Q	388	PHE	CA-CB-CG	-5.72	108.08	113.80
16	V	81	GLY	O-C-N	5.72	129.06	122.60
20	N	239	GLU	CA-C-N	5.72	130.48	122.36
20	N	239	GLU	C-N-CA	5.72	130.48	122.36
9	2	55	ILE	O-C-N	5.71	127.51	121.91
20	N	746	ILE	CA-C-O	5.71	128.12	120.69
22	P	182	ARG	NE-CZ-NH2	5.71	124.34	119.20
6	F	106	SER	CA-C-N	5.71	127.87	120.44
6	F	106	SER	C-N-CA	5.71	127.87	120.44
10	3	165	GLU	CA-C-O	-5.71	114.50	120.55
16	V	265	MET	N-CA-CB	5.71	119.13	110.45
19	Z	247	ALA	O-C-N	5.71	128.17	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	521	ALA	CA-C-N	5.71	127.93	120.28
19	Z	521	ALA	C-N-CA	5.71	127.93	120.28
19	Z	676	GLY	CA-C-N	5.71	128.99	120.31
19	Z	676	GLY	C-N-CA	5.71	128.99	120.31
28	I	258	LYS	O-C-N	5.71	127.95	122.07
1	A	126	THR	CA-C-N	5.71	128.40	120.29
1	A	126	THR	C-N-CA	5.71	128.40	120.29
11	4	9	GLY	N-CA-C	-5.71	100.69	112.34
19	Z	876	HIS	ND1-CE1-NE2	5.71	114.11	108.40
25	U	253	THR	O-C-N	5.71	128.66	122.15
1	A	205	VAL	N-CA-C	5.71	115.90	110.53
4	D	239	GLU	O-C-N	-5.71	116.07	122.12
16	V	291	LEU	CB-CA-C	-5.71	101.31	110.79
23	Q	390	GLU	CA-C-O	-5.71	114.39	119.75
32	J	62	GLU	CB-CG-CD	-5.71	102.90	112.60
32	J	278	ASN	OD1-CG-ND2	5.71	128.31	122.60
12	5	158	THR	CB-CA-C	5.71	118.94	109.53
15	W	85	THR	CA-C-O	5.71	128.17	120.47
26	O	15	GLY	CA-C-O	-5.71	113.36	121.52
6	F	115	LYS	CB-CA-C	-5.71	101.15	110.85
1	A	206	LEU	CA-C-N	5.70	130.27	122.34
1	A	206	LEU	C-N-CA	5.70	130.27	122.34
16	V	93	ALA	CA-C-N	5.70	127.92	120.28
16	V	93	ALA	C-N-CA	5.70	127.92	120.28
19	Z	144	LEU	CD1-CG-CD2	5.70	123.35	110.80
20	N	573	ASP	CA-C-N	5.70	128.20	120.44
20	N	573	ASP	C-N-CA	5.70	128.20	120.44
29	K	286	GLN	OE1-CD-NE2	5.70	128.30	122.60
20	N	932	GLY	CA-C-O	-5.70	113.37	121.52
22	P	104	MET	CA-C-N	5.70	129.48	120.47
22	P	104	MET	C-N-CA	5.70	129.48	120.47
23	Q	143	TYR	CB-CA-C	-5.70	101.16	110.85
25	U	109	ASN	OD1-CG-ND2	5.70	128.30	122.60
25	U	159	THR	CA-CB-OG1	5.70	118.15	109.60
7	G	200	ILE	N-CA-CB	5.70	118.29	110.54
13	6	62	ILE	CA-CB-CG1	5.70	120.09	110.40
19	Z	165	GLU	CA-C-N	5.70	129.65	120.30
19	Z	165	GLU	C-N-CA	5.70	129.65	120.30
20	N	220	LEU	CA-C-O	-5.70	114.83	120.82
20	N	784	THR	N-CA-C	-5.70	100.28	109.40
29	K	158	GLN	N-CA-CB	5.70	119.57	111.19
6	F	177	SER	CA-C-N	5.70	127.92	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	F	177	SER	C-N-CA	5.70	127.92	120.28
21	S	107	TYR	N-CA-C	-5.70	104.19	113.19
21	S	257	TYR	CB-CG-CD1	5.70	129.35	120.80
24	R	279	GLU	O-C-N	-5.70	116.08	122.12
25	U	110	GLU	N-CA-C	5.70	117.49	111.28
31	M	241	ARG	CB-CA-C	-5.70	101.33	110.79
32	J	350	LEU	CA-C-N	5.70	128.58	120.49
32	J	350	LEU	C-N-CA	5.70	128.58	120.49
9	2	241	ARG	CD-NE-CZ	-5.70	116.42	124.40
23	Q	160	MET	O-C-N	5.70	129.72	123.22
8	1	94	TYR	CA-CB-CG	5.70	124.15	113.90
13	6	127	ARG	NE-CZ-NH1	5.70	127.19	121.50
22	P	426	ASN	CA-C-N	5.70	128.38	120.29
22	P	426	ASN	C-N-CA	5.70	128.38	120.29
27	H	218	PRO	CA-C-O	-5.70	115.11	121.32
28	I	277	HIS	CB-CG-CD2	5.70	138.60	131.20
29	K	335	LEU	N-CA-C	-5.70	102.47	109.65
22	P	30	GLU	CA-CB-CG	5.69	125.49	114.10
22	P	377	ARG	NE-CZ-NH1	5.69	127.19	121.50
5	E	46	VAL	N-CA-C	-5.69	100.14	108.11
13	6	101	MET	CB-CA-C	-5.69	101.34	110.79
13	6	188	VAL	N-CA-C	-5.69	107.44	112.90
16	V	65	TYR	CA-C-N	-5.69	114.61	122.30
16	V	65	TYR	C-N-CA	-5.69	114.61	122.30
27	H	370	PHE	CA-CB-CG	-5.69	108.11	113.80
31	M	336	ASN	N-CA-C	-5.69	105.16	111.36
6	F	143	HIS	CE1-NE2-CD2	-5.69	103.31	109.00
8	1	167	TYR	CA-C-N	5.69	129.46	120.47
8	1	167	TYR	C-N-CA	5.69	129.46	120.47
19	Z	461	PRO	O-C-N	5.69	129.87	123.04
19	Z	700	SER	N-CA-C	5.69	117.48	111.28
20	N	392	TRP	CA-CB-CG	5.69	124.41	113.60
29	K	170	MET	N-CA-CB	5.69	120.64	111.65
31	M	390	CYS	CA-C-O	5.69	126.45	120.42
9	2	91	THR	N-CA-CB	5.69	120.10	110.49
30	L	369	ILE	CA-C-N	5.69	127.90	120.28
30	L	369	ILE	C-N-CA	5.69	127.90	120.28
4	D	15	HIS	ND1-CE1-NE2	5.69	114.09	108.40
13	6	137	ILE	N-CA-C	5.69	117.52	108.87
14	7	54	SER	CA-C-O	-5.69	114.73	121.16
19	Z	94	LYS	CA-C-O	-5.69	112.37	120.16
23	Q	156	GLU	N-CA-C	5.69	117.28	111.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	137	TYR	CA-C-N	5.69	127.90	120.28
23	Q	137	TYR	C-N-CA	5.69	127.90	120.28
6	F	20	HIS	CA-C-O	-5.68	114.53	120.55
3	C	96	ARG	CB-CG-CD	5.68	124.37	111.30
4	D	40	ILE	N-CA-C	-5.68	99.60	108.86
9	2	59	ALA	N-CA-C	-5.68	100.52	109.50
9	2	94	ASP	O-C-N	5.68	128.63	122.15
21	S	98	PRO	O-C-N	5.68	129.79	122.91
24	R	360	ASP	CA-C-O	5.68	126.37	119.78
31	M	355	ILE	CA-C-N	5.68	132.30	122.64
31	M	355	ILE	C-N-CA	5.68	132.30	122.64
1	A	183	VAL	CA-C-N	5.68	127.83	120.44
1	A	183	VAL	C-N-CA	5.68	127.83	120.44
4	D	36	ARG	NE-CZ-NH2	-5.68	114.09	119.20
19	Z	146	GLY	CA-C-N	5.68	132.39	121.54
19	Z	146	GLY	C-N-CA	5.68	132.39	121.54
24	R	371	LYS	N-CA-C	5.68	117.47	111.28
25	U	24	ASN	CA-CB-CG	-5.68	106.92	112.60
26	O	275	LEU	CA-C-N	5.68	127.89	120.28
26	O	275	LEU	C-N-CA	5.68	127.89	120.28
27	H	78	TRP	N-CA-C	-5.68	105.61	112.54
27	H	328	ASP	CA-C-N	5.68	125.30	119.56
27	H	328	ASP	C-N-CA	5.68	125.30	119.56
32	J	190	GLY	CA-C-N	5.68	126.23	120.38
32	J	190	GLY	C-N-CA	5.68	126.23	120.38
1	A	183	VAL	N-CA-C	5.68	116.41	110.62
2	B	147	PHE	N-CA-C	-5.68	100.67	109.24
9	2	57	LEU	N-CA-CB	5.68	119.50	110.65
14	7	112	GLY	O-C-N	-5.68	116.73	122.18
16	V	221	HIS	CA-C-N	5.68	128.94	120.31
16	V	221	HIS	C-N-CA	5.68	128.94	120.31
19	Z	612	LEU	CB-CA-C	-5.68	101.20	110.85
28	I	438	LEU	CA-C-N	5.68	128.35	120.29
28	I	438	LEU	C-N-CA	5.68	128.35	120.29
29	K	141	ASP	CA-CB-CG	5.68	118.28	112.60
30	L	371	ALA	CA-C-N	5.68	132.38	121.54
30	L	371	ALA	C-N-CA	5.68	132.38	121.54
2	B	150	ASP	CA-C-N	5.67	125.38	119.82
2	B	150	ASP	C-N-CA	5.67	125.38	119.82
11	4	42	ILE	O-C-N	-5.67	116.53	122.20
11	4	151	ILE	N-CA-C	-5.67	97.53	109.34
13	6	231	ARG	N-CA-CB	5.67	120.08	110.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	259	ILE	O-C-N	5.67	127.80	121.90
28	I	404	LEU	CA-C-N	5.67	128.94	120.31
28	I	404	LEU	C-N-CA	5.67	128.94	120.31
22	P	189	GLN	O-C-N	5.67	128.13	122.12
23	Q	339	ILE	CA-C-N	5.67	129.37	120.97
23	Q	339	ILE	C-N-CA	5.67	129.37	120.97
1	A	174	GLU	CA-C-O	-5.67	114.41	120.42
4	D	87	ARG	CD-NE-CZ	-5.67	116.46	124.40
4	D	88	ILE	CA-C-N	5.67	128.23	120.46
4	D	88	ILE	C-N-CA	5.67	128.23	120.46
7	G	178	GLU	CA-C-N	5.67	127.88	120.28
7	G	178	GLU	C-N-CA	5.67	127.88	120.28
12	5	166	ARG	N-CA-CB	5.67	119.15	110.70
27	H	105	ASP	CA-C-N	5.67	132.37	121.54
27	H	105	ASP	C-N-CA	5.67	132.37	121.54
6	F	23	GLU	CA-C-N	5.67	127.88	120.28
6	F	23	GLU	C-N-CA	5.67	127.88	120.28
16	V	44	HIS	CA-C-O	5.67	126.43	120.42
17	T	212	HIS	ND1-CE1-NE2	5.67	114.07	108.40
19	Z	87	THR	CA-C-O	-5.67	114.87	120.82
32	J	278	ASN	CA-CB-CG	5.67	118.27	112.60
1	A	62	ASP	CA-CB-CG	5.67	118.27	112.60
1	A	128	ASN	OD1-CG-ND2	-5.67	116.93	122.60
5	E	108	THR	N-CA-CB	5.67	119.41	110.23
6	F	122	ARG	N-CA-CB	5.67	118.46	110.36
20	N	115	ASN	CA-CB-CG	-5.67	106.93	112.60
25	U	257	MET	N-CA-C	5.67	117.13	111.07
19	Z	31	LYS	CB-CA-C	5.67	119.88	110.81
19	Z	123	ALA	CA-C-N	5.67	127.80	120.44
19	Z	123	ALA	C-N-CA	5.67	127.80	120.44
19	Z	227	SER	CA-C-N	5.67	128.33	120.29
19	Z	227	SER	C-N-CA	5.67	128.33	120.29
19	Z	683	GLU	CA-C-O	-5.67	115.73	120.26
23	Q	26	ILE	O-C-N	5.67	127.67	121.83
2	B	226	VAL	N-CA-C	-5.66	105.00	110.72
22	P	437	SER	O-C-N	5.66	128.21	122.09
27	H	149	ILE	CA-CB-CG1	5.66	120.03	110.40
30	L	146	TYR	CB-CG-CD2	-5.66	112.30	120.80
8	1	136	TRP	CB-CG-CD2	5.66	134.73	126.80
19	Z	237	VAL	CA-C-N	5.66	128.33	120.29
19	Z	237	VAL	C-N-CA	5.66	128.33	120.29
29	K	52	GLU	N-CA-C	-5.66	105.25	111.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	1	160	ILE	CA-CB-CG1	5.66	120.02	110.40
9	2	182	GLU	N-CA-CB	-5.66	101.78	110.16
20	N	734	GLN	CA-C-N	5.66	126.23	120.00
20	N	734	GLN	C-N-CA	5.66	126.23	120.00
20	N	817	LEU	CA-C-N	5.66	128.43	120.28
20	N	817	LEU	C-N-CA	5.66	128.43	120.28
24	R	387	ILE	N-CA-C	5.66	116.44	110.72
21	S	181	GLN	N-CA-C	-5.66	104.50	111.40
22	P	174	TYR	CB-CG-CD1	5.66	129.29	120.80
32	J	25	LEU	N-CA-CB	5.66	119.05	110.28
10	3	60	VAL	N-CA-C	5.66	115.74	110.42
2	B	190	THR	N-CA-C	-5.66	105.26	111.82
16	V	30	GLN	OE1-CD-NE2	5.66	128.25	122.60
19	Z	621	ASP	N-CA-C	-5.66	98.75	110.80
27	H	299	MET	CA-C-N	5.66	127.86	120.28
27	H	299	MET	C-N-CA	5.66	127.86	120.28
6	F	68	ASN	N-CA-CB	-5.65	102.62	110.65
7	G	192	LYS	O-C-N	5.65	128.20	122.09
15	W	77	THR	CB-CA-C	5.65	119.18	109.51
16	V	292	MET	N-CA-C	5.65	117.12	111.07
28	I	134	SER	N-CA-C	-5.65	100.18	109.40
2	B	27	ALA	O-C-N	-5.65	116.13	122.12
3	C	75	SER	N-CA-C	-5.65	100.76	109.52
28	I	121	ALA	CA-C-N	5.65	130.33	122.93
28	I	121	ALA	C-N-CA	5.65	130.33	122.93
2	B	129	PRO	N-CA-CB	5.65	108.56	103.19
14	7	119	GLU	CA-C-N	5.65	128.31	120.29
14	7	119	GLU	C-N-CA	5.65	128.31	120.29
19	Z	108	GLU	CA-C-N	5.65	128.44	120.42
19	Z	108	GLU	C-N-CA	5.65	128.44	120.42
20	N	511	ALA	CB-CA-C	-5.65	101.24	110.85
26	O	290	GLN	CA-C-N	5.65	131.61	122.29
26	O	290	GLN	C-N-CA	5.65	131.61	122.29
29	K	280	GLY	CA-C-N	5.65	127.79	120.44
29	K	280	GLY	C-N-CA	5.65	127.79	120.44
27	H	311	PRO	CA-C-N	5.65	132.33	121.54
27	H	311	PRO	C-N-CA	5.65	132.33	121.54
30	L	307	GLY	N-CA-C	-5.65	106.87	115.00
2	B	60	ARG	CB-CG-CD	5.65	124.29	111.30
4	D	181	ASN	N-CA-CB	5.65	118.20	110.01
16	V	253	LYS	O-C-N	5.65	128.11	122.12
20	N	735	GLY	O-C-N	5.65	127.67	122.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	185	PHE	N-CA-C	5.65	117.44	111.28
22	P	279	PHE	CA-CB-CG	-5.65	108.15	113.80
23	Q	8	GLU	N-CA-C	5.65	117.44	111.28
30	L	137	SER	CA-C-N	5.65	128.31	120.29
30	L	137	SER	C-N-CA	5.65	128.31	120.29
16	V	140	ALA	N-CA-C	-5.65	99.70	108.90
21	S	187	LEU	CA-C-N	5.65	128.41	120.28
21	S	187	LEU	C-N-CA	5.65	128.41	120.28
13	6	37	GLY	CA-C-N	5.64	132.32	121.54
13	6	37	GLY	C-N-CA	5.64	132.32	121.54
20	N	500	ASN	N-CA-CB	-5.64	101.82	110.12
20	N	693	LEU	N-CA-CB	5.64	118.42	110.12
27	H	140	VAL	N-CA-CB	-5.64	101.36	111.92
9	2	141	LEU	CA-C-O	5.64	126.40	120.36
15	W	2	VAL	CA-C-N	5.64	132.32	121.54
15	W	2	VAL	C-N-CA	5.64	132.32	121.54
30	L	400	TYR	N-CA-CB	5.64	119.62	110.42
31	M	321	ASP	CA-CB-CG	5.64	118.24	112.60
32	J	17	GLY	O-C-N	5.64	127.61	122.19
20	N	652	ALA	CA-C-N	5.64	128.30	120.29
20	N	652	ALA	C-N-CA	5.64	128.30	120.29
25	U	174	HIS	CB-CG-CD2	-5.64	123.87	131.20
5	E	10	ARG	N-CA-C	-5.64	100.96	108.74
13	6	75	ASP	N-CA-C	5.64	117.43	111.28
17	T	156	GLN	CA-C-N	5.64	128.88	120.31
17	T	156	GLN	C-N-CA	5.64	128.88	120.31
19	Z	718	ASP	N-CA-CB	5.64	118.34	110.11
20	N	428	PRO	CA-C-N	5.64	128.30	120.29
20	N	428	PRO	C-N-CA	5.64	128.30	120.29
22	P	20	TYR	CA-C-O	-5.64	114.57	120.55
22	P	359	VAL	CA-C-O	5.64	126.56	120.47
30	L	354	GLY	CA-C-N	5.64	127.84	120.28
30	L	354	GLY	C-N-CA	5.64	127.84	120.28
27	H	184	ILE	CA-C-N	5.64	128.30	120.29
27	H	184	ILE	C-N-CA	5.64	128.30	120.29
30	L	107	LYS	CA-C-N	5.64	125.75	119.32
30	L	107	LYS	C-N-CA	5.64	125.75	119.32
31	M	413	ARG	N-CA-CB	5.64	118.41	110.12
20	N	468	ALA	O-C-N	5.64	128.12	122.03
23	Q	76	PHE	CA-C-N	5.64	127.77	120.44
23	Q	76	PHE	C-N-CA	5.64	127.77	120.44
23	Q	94	ASP	CA-CB-CG	5.64	118.24	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	297	ARG	CD-NE-CZ	-5.64	116.51	124.40
28	I	396	LYS	CA-C-N	5.64	128.29	120.29
28	I	396	LYS	C-N-CA	5.64	128.29	120.29
10	3	80	ARG	N-CA-C	-5.63	101.69	110.42
19	Z	510	SER	N-CA-C	-5.63	100.14	108.99
27	H	353	HIS	CE1-NE2-CD2	-5.63	103.37	109.00
28	I	192	ASN	CA-CB-CG	5.63	118.23	112.60
28	I	227	PRO	N-CA-CB	5.63	108.55	103.08
28	I	312	LEU	CA-C-N	5.63	127.83	120.28
28	I	312	LEU	C-N-CA	5.63	127.83	120.28
32	J	141	GLU	CA-C-N	5.63	132.30	121.54
32	J	141	GLU	C-N-CA	5.63	132.30	121.54
19	Z	69	SER	CA-C-N	5.63	130.26	120.68
19	Z	69	SER	C-N-CA	5.63	130.26	120.68
22	P	280	ASP	N-CA-C	-5.63	100.86	109.65
25	U	196	HIS	ND1-CE1-NE2	5.63	114.03	108.40
30	L	99	ARG	NE-CZ-NH2	-5.63	114.13	119.20
32	J	397	LYS	CA-C-N	5.63	127.83	120.28
32	J	397	LYS	C-N-CA	5.63	127.83	120.28
9	2	129	MET	N-CA-CB	5.63	118.50	110.16
14	7	203	VAL	N-CA-C	-5.63	100.29	108.17
31	M	353	ARG	NE-CZ-NH2	-5.63	114.13	119.20
9	2	147	ASP	CA-C-O	-5.63	114.34	120.36
19	Z	41	LYS	CA-C-N	5.63	127.82	120.28
19	Z	41	LYS	C-N-CA	5.63	127.82	120.28
26	O	159	SER	N-CA-C	-5.63	105.05	111.07
29	K	208	PRO	N-CA-CB	5.63	108.34	103.27
1	A	236	ASP	CA-CB-CG	-5.63	106.97	112.60
20	N	497	LEU	CA-C-N	5.63	127.82	120.28
20	N	497	LEU	C-N-CA	5.63	127.82	120.28
31	M	424	MET	CA-C-N	5.63	128.38	120.28
31	M	424	MET	C-N-CA	5.63	128.38	120.28
32	J	246	ILE	N-CA-C	-5.63	101.46	108.89
12	5	234	ASN	N-CA-C	5.62	118.39	109.50
16	V	172	HIS	CA-C-N	5.62	127.12	120.09
16	V	172	HIS	C-N-CA	5.62	127.12	120.09
30	L	28	LYS	CA-C-N	5.62	127.82	120.28
30	L	28	LYS	C-N-CA	5.62	127.82	120.28
7	G	217	VAL	N-CA-C	-5.62	97.64	109.34
8	1	124	ARG	NE-CZ-NH1	-5.62	115.88	121.50
20	N	54	PHE	CA-C-N	5.62	128.28	120.29
20	N	54	PHE	C-N-CA	5.62	128.28	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	353	ASN	CA-CB-CG	5.62	118.22	112.60
29	K	364	VAL	CA-C-N	5.62	128.28	120.29
29	K	364	VAL	C-N-CA	5.62	128.28	120.29
30	L	21	LYS	CA-C-N	5.62	127.81	120.28
30	L	21	LYS	C-N-CA	5.62	127.81	120.28
4	D	38	ARG	CA-C-N	5.62	128.98	121.90
4	D	38	ARG	C-N-CA	5.62	128.98	121.90
4	D	225	ILE	CA-CB-CG1	5.62	119.96	110.40
31	M	59	LYS	CA-C-O	-5.62	114.46	120.42
15	W	36	VAL	CA-C-N	5.62	127.75	120.44
15	W	36	VAL	C-N-CA	5.62	127.75	120.44
28	I	370	SER	O-C-N	-5.62	116.16	122.12
12	5	132	ARG	N-CA-CB	5.62	119.98	110.49
25	U	265	LEU	CA-C-N	5.62	128.16	120.46
25	U	265	LEU	C-N-CA	5.62	128.16	120.46
12	5	74	ALA	N-CA-C	5.62	118.97	109.76
30	L	383	LYS	O-C-N	5.62	128.07	122.12
9	2	107	GLU	CA-C-N	5.62	127.81	120.28
9	2	107	GLU	C-N-CA	5.62	127.81	120.28
11	4	41	LYS	CG-CD-CE	5.62	124.22	111.30
8	1	98	PHE	CB-CG-CD1	-5.61	111.16	120.70
9	2	155	SER	CA-C-N	5.61	130.95	122.98
9	2	155	SER	C-N-CA	5.61	130.95	122.98
10	3	43	PHE	CA-CB-CG	-5.61	108.19	113.80
17	T	212	HIS	CG-CD2-NE2	5.61	112.81	107.20
19	Z	810	ILE	N-CA-C	5.61	121.02	109.34
20	N	599	ILE	O-C-N	5.61	127.31	121.87
27	H	383	ALA	CA-C-N	5.61	127.80	120.28
27	H	383	ALA	C-N-CA	5.61	127.80	120.28
31	M	169	THR	O-C-N	-5.61	115.97	122.87
4	D	152	GLN	CB-CG-CD	5.61	122.14	112.60
19	Z	18	ALA	CA-C-N	5.61	128.26	120.29
19	Z	18	ALA	C-N-CA	5.61	128.26	120.29
23	Q	201	TYR	CA-C-N	5.61	132.21	122.28
23	Q	201	TYR	C-N-CA	5.61	132.21	122.28
12	5	61	THR	CB-CA-C	5.61	121.41	110.30
20	N	271	VAL	CA-CB-CG2	5.61	119.94	110.40
20	N	617	ALA	CA-C-N	5.61	128.26	120.29
20	N	617	ALA	C-N-CA	5.61	128.26	120.29
21	S	212	ARG	O-C-N	5.61	128.07	122.12
24	R	250	LEU	N-CA-CB	5.61	119.97	110.49
26	O	161	LYS	CB-CA-C	-5.61	102.07	110.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	H	295	VAL	CA-C-N	5.61	128.84	120.31
27	H	295	VAL	C-N-CA	5.61	128.84	120.31
13	6	155	GLY	O-C-N	5.61	128.79	122.34
24	R	81	LEU	O-C-N	-5.61	116.18	122.12
9	2	223	LYS	CB-CA-C	-5.61	100.44	110.70
21	S	364	ARG	N-CA-C	5.61	117.39	111.28
25	U	209	ARG	CA-C-O	-5.61	114.94	120.82
30	L	18	PRO	N-CA-CB	5.61	109.46	103.52
30	L	174	GLN	CA-C-N	5.61	127.79	120.28
30	L	174	GLN	C-N-CA	5.61	127.79	120.28
32	J	358	GLU	O-C-N	5.61	128.54	122.15
22	P	374	THR	CA-C-O	-5.60	115.11	121.72
7	G	168	LYS	CG-CD-CE	5.60	124.19	111.30
8	1	193	LEU	N-CA-CB	5.60	118.45	110.16
9	2	81	SER	CB-CA-C	5.60	121.21	110.17
16	V	208	ARG	N-CA-CB	5.60	119.58	110.17
19	Z	264	GLU	O-C-N	5.60	128.54	122.15
22	P	307	LYS	CA-C-N	5.60	127.72	120.44
22	P	307	LYS	C-N-CA	5.60	127.72	120.44
31	M	29	GLN	CA-C-N	5.60	128.82	120.31
31	M	29	GLN	C-N-CA	5.60	128.82	120.31
21	S	332	GLU	N-CA-CB	5.60	118.35	110.12
25	U	126	VAL	CA-C-O	5.60	125.97	119.36
25	U	270	VAL	CA-C-N	5.60	127.78	120.28
25	U	270	VAL	C-N-CA	5.60	127.78	120.28
28	I	322	ARG	O-C-N	5.60	129.47	122.86
4	D	170	GLY	N-CA-C	-5.60	99.92	113.18
9	2	251	THR	CB-CA-C	5.60	119.84	111.89
10	3	64	ALA	N-CA-C	5.60	117.06	111.07
16	V	194	HIS	ND1-CE1-NE2	5.60	114.00	108.40
31	M	378	VAL	N-CA-C	-5.60	100.60	108.27
20	N	36	ALA	CB-CA-C	-5.60	102.09	110.88
3	C	191	ALA	CB-CA-C	-5.59	101.34	110.85
4	D	245	ASN	CB-CA-C	-5.59	101.50	110.79
8	1	117	LYS	CA-C-N	5.59	128.24	120.29
8	1	117	LYS	C-N-CA	5.59	128.24	120.29
8	1	177	ARG	CA-C-N	5.59	130.88	122.99
8	1	177	ARG	C-N-CA	5.59	130.88	122.99
21	S	371	PHE	CA-C-O	-5.59	114.95	120.82
5	E	151	PRO	CA-C-O	-5.59	115.25	121.23
20	N	428	PRO	N-CA-CB	5.59	109.14	102.60
4	D	215	ALA	N-CA-C	-5.59	100.78	109.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	697	GLN	CA-C-O	5.59	127.74	120.81
21	S	421	LYS	CB-CA-C	-5.59	102.06	110.90
24	R	325	VAL	CB-CA-C	5.59	118.95	110.90
27	H	45	ILE	N-CA-CB	5.59	117.09	110.55
27	H	130	ALA	CA-C-O	-5.59	114.87	120.96
32	J	258	ARG	CA-C-O	-5.59	113.18	119.95
32	J	317	PHE	CA-C-O	-5.59	113.62	120.05
3	C	111	VAL	CA-CB-CG1	-5.59	100.90	110.40
17	T	253	ASN	CA-CB-CG	-5.59	107.01	112.60
19	Z	733	GLY	CA-C-N	5.59	128.23	120.29
19	Z	733	GLY	C-N-CA	5.59	128.23	120.29
19	Z	855	GLN	N-CA-C	-5.59	102.48	110.59
21	S	321	LYS	CB-CA-C	-5.59	101.51	110.79
31	M	250	THR	N-CA-CB	5.59	118.18	109.85
31	M	361	ASN	CA-CB-CG	-5.59	107.01	112.60
10	3	155	GLU	CA-C-N	5.59	126.83	119.84
10	3	155	GLU	C-N-CA	5.59	126.83	119.84
2	B	146	LEU	N-CA-CB	5.59	119.98	110.71
15	W	30	GLN	N-CA-CB	5.59	118.33	110.12
21	S	170	PHE	CA-C-N	5.59	128.03	120.38
21	S	170	PHE	C-N-CA	5.59	128.03	120.38
21	S	420	GLN	CB-CA-C	-5.59	102.07	110.90
25	U	122	VAL	CA-CB-CG1	-5.59	100.90	110.40
30	L	247	ASP	N-CA-C	-5.59	101.07	109.95
12	5	197	VAL	CB-CA-C	-5.58	103.50	112.16
2	B	222	THR	N-CA-C	5.58	116.73	109.64
7	G	213	GLU	N-CA-C	-5.58	99.18	108.34
8	1	135	GLY	O-C-N	5.58	129.96	122.70
16	V	220	LEU	N-CA-CB	5.58	118.17	110.07
20	N	352	ILE	CB-CA-C	-5.58	104.60	112.14
21	S	113	VAL	CA-C-N	5.58	130.67	122.63
21	S	113	VAL	C-N-CA	5.58	130.67	122.63
21	S	432	PHE	CA-C-N	5.58	128.35	120.42
21	S	432	PHE	C-N-CA	5.58	128.35	120.42
23	Q	135	SER	CA-C-N	5.58	127.76	120.28
23	Q	135	SER	C-N-CA	5.58	127.76	120.28
24	R	288	PHE	CA-CB-CG	-5.58	108.22	113.80
27	H	391	GLU	CA-C-N	5.58	127.70	120.44
27	H	391	GLU	C-N-CA	5.58	127.70	120.44
28	I	372	MET	N-CA-CB	5.58	118.42	110.44
32	J	70	GLY	CA-C-O	5.58	127.55	121.02
1	A	210	PHE	N-CA-C	5.58	118.72	110.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	5	111	CYS	N-CA-CB	-5.58	101.90	110.16
17	T	307	LYS	CA-C-N	5.58	128.79	120.31
17	T	307	LYS	C-N-CA	5.58	128.79	120.31
19	Z	282	PHE	N-CA-C	5.58	117.04	111.07
19	Z	283	THR	CA-CB-OG1	5.58	117.97	109.60
20	N	466	LYS	CA-C-O	5.58	126.34	120.42
22	P	143	ALA	N-CA-C	-5.58	105.28	111.36
28	I	216	ILE	N-CA-C	-5.58	103.97	110.05
31	M	63	LEU	O-C-N	-5.58	115.79	122.15
21	S	381	LYS	O-C-N	5.58	128.03	122.12
9	2	198	VAL	CA-CB-CG2	5.58	119.88	110.40
11	4	23	SER	O-C-N	5.58	130.26	123.01
16	V	276	GLY	N-CA-C	-5.58	107.74	114.66
18	Y	49	GLU	O-C-N	-5.58	116.56	123.36
19	Z	102	HIS	CA-C-O	5.58	126.46	120.55
21	S	357	PHE	CB-CG-CD1	5.58	130.19	120.70
5	E	103	TYR	CA-C-N	5.58	130.28	122.36
5	E	103	TYR	C-N-CA	5.58	130.28	122.36
28	I	324	ASP	CA-CB-CG	-5.58	107.02	112.60
1	A	83	MET	CG-SD-CE	-5.58	88.64	100.90
26	O	70	ARG	CA-C-O	5.58	126.46	120.55
29	K	142	VAL	N-CA-C	-5.58	100.29	108.99
6	F	120	THR	CA-CB-CG2	5.57	119.97	110.50
20	N	530	GLU	CA-C-N	5.57	127.69	120.44
20	N	530	GLU	C-N-CA	5.57	127.69	120.44
28	I	122	ILE	N-CA-C	-5.57	99.21	107.51
26	O	335	TRP	CD2-CE2-CZ2	-5.57	116.83	122.40
15	W	40	LYS	CA-C-N	5.57	127.75	120.28
15	W	40	LYS	C-N-CA	5.57	127.75	120.28
19	Z	590	PHE	CA-CB-CG	5.57	119.37	113.80
20	N	155	LEU	CB-CA-C	-5.57	101.54	110.79
21	S	140	ASP	O-C-N	5.57	128.50	122.15
23	Q	375	HIS	CE1-NE2-CD2	-5.57	103.43	109.00
28	I	56	THR	CA-C-N	5.57	127.75	120.28
28	I	56	THR	C-N-CA	5.57	127.75	120.28
31	M	211	HIS	CE1-NE2-CD2	-5.57	103.43	109.00
4	D	89	VAL	CA-C-N	5.57	127.58	120.56
4	D	89	VAL	C-N-CA	5.57	127.58	120.56
22	P	62	SER	CB-CA-C	-5.57	102.10	110.90
2	B	130	PHE	N-CA-C	5.57	117.51	110.33
12	5	104	MET	O-C-N	5.57	129.91	123.17
29	K	179	GLU	O-C-N	5.57	128.10	122.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	342	TYR	CA-C-N	5.57	127.74	120.28
30	L	342	TYR	C-N-CA	5.57	127.74	120.28
2	B	149	SER	N-CA-C	-5.57	99.83	108.90
10	3	161	GLU	CA-C-N	5.57	127.74	120.28
10	3	161	GLU	C-N-CA	5.57	127.74	120.28
19	Z	203	GLU	CA-C-N	5.57	127.74	120.28
19	Z	203	GLU	C-N-CA	5.57	127.74	120.28
19	Z	554	TYR	CA-C-O	5.57	126.43	120.70
19	Z	649	HIS	CG-CD2-NE2	5.57	112.77	107.20
20	N	566	LEU	CA-C-N	5.57	128.32	120.42
20	N	566	LEU	C-N-CA	5.57	128.32	120.42
20	N	599	ILE	CA-C-N	5.57	127.74	120.28
20	N	599	ILE	C-N-CA	5.57	127.74	120.28
28	I	72	LEU	CA-C-N	5.57	127.74	120.28
28	I	72	LEU	C-N-CA	5.57	127.74	120.28
13	6	160	ASP	O-C-N	-5.56	117.47	123.42
31	M	93	VAL	CB-CA-C	5.56	118.91	110.90
31	M	320	LEU	N-CA-CB	5.56	118.90	110.28
14	7	201	GLN	CA-C-N	5.56	126.79	119.84
14	7	201	GLN	C-N-CA	5.56	126.79	119.84
17	T	186	PRO	CA-C-N	5.56	129.00	121.05
17	T	186	PRO	C-N-CA	5.56	129.00	121.05
21	S	408	LEU	O-C-N	5.56	128.49	122.15
31	M	97	ILE	N-CA-C	-5.56	105.30	110.53
6	F	25	ALA	CA-C-N	5.56	127.73	120.28
6	F	25	ALA	C-N-CA	5.56	127.73	120.28
6	F	26	MET	CA-C-O	-5.56	114.66	120.55
6	F	196	ARG	NE-CZ-NH2	-5.56	114.20	119.20
24	R	53	TYR	CA-C-N	5.56	132.12	122.56
24	R	53	TYR	C-N-CA	5.56	132.12	122.56
24	R	318	TYR	CA-C-O	-5.56	114.97	120.70
28	I	405	MET	CA-C-O	5.56	126.36	119.97
32	J	97	VAL	CA-C-O	-5.56	115.46	121.19
12	5	129	ASN	N-CA-CB	5.56	118.29	110.12
13	6	122	ILE	CA-C-O	-5.56	115.28	121.17
19	Z	720	GLU	CA-C-N	5.56	129.44	120.55
19	Z	720	GLU	C-N-CA	5.56	129.44	120.55
19	Z	744	MET	CA-C-N	5.56	128.00	120.44
19	Z	744	MET	C-N-CA	5.56	128.00	120.44
26	O	305	ASN	CA-C-N	5.56	128.76	120.31
26	O	305	ASN	C-N-CA	5.56	128.76	120.31
22	P	153	LYS	CA-C-N	5.56	127.72	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	153	LYS	C-N-CA	5.56	127.72	120.28
28	I	292	THR	N-CA-CB	5.56	118.38	110.16
15	W	127	LEU	O-C-N	5.55	128.48	122.15
19	Z	497	VAL	CA-C-N	5.55	127.72	120.28
19	Z	497	VAL	C-N-CA	5.55	127.72	120.28
21	S	236	LEU	N-CA-C	5.55	117.42	111.36
30	L	219	ASP	CA-C-N	5.55	127.66	120.44
30	L	219	ASP	C-N-CA	5.55	127.66	120.44
27	H	327	LEU	N-CA-CB	5.55	119.68	110.52
16	V	211	GLU	N-CA-C	5.55	117.33	111.28
17	T	303	THR	CA-C-N	5.55	127.66	120.44
17	T	303	THR	C-N-CA	5.55	127.66	120.44
21	S	88	ARG	CA-C-N	5.55	127.72	120.28
21	S	88	ARG	C-N-CA	5.55	127.72	120.28
27	H	413	VAL	N-CA-CB	5.55	118.91	110.58
28	I	284	ILE	CB-CA-C	5.55	118.91	111.19
2	B	60	ARG	NE-CZ-NH1	-5.55	115.95	121.50
3	C	134	LEU	N-CA-CB	5.55	119.62	110.69
30	L	51	THR	N-CA-CB	5.55	118.28	110.12
32	J	154	LEU	CA-C-N	5.55	127.98	120.38
32	J	154	LEU	C-N-CA	5.55	127.98	120.38
7	G	70	VAL	N-CA-C	5.55	116.28	110.62
19	Z	313	GLU	CA-C-N	5.55	132.14	121.54
19	Z	313	GLU	C-N-CA	5.55	132.14	121.54
23	Q	291	ALA	N-CA-C	5.55	117.41	111.36
27	H	375	ARG	O-C-N	5.55	128.47	122.15
28	I	341	LEU	CA-C-O	-5.55	115.00	120.82
1	A	3	ARG	NE-CZ-NH1	5.55	127.05	121.50
7	G	202	HIS	CE1-NE2-CD2	-5.55	103.45	109.00
8	1	110	HIS	O-C-N	5.55	128.00	122.12
19	Z	380	PHE	CB-CG-CD2	-5.55	111.27	120.70
20	N	187	LEU	N-CA-CB	5.55	118.11	110.07
23	Q	31	VAL	N-CA-CB	5.55	118.08	110.54
30	L	158	GLU	O-C-N	5.55	128.00	122.12
32	J	10	GLU	CA-C-N	5.55	127.98	120.38
32	J	10	GLU	C-N-CA	5.55	127.98	120.38
4	D	203	GLU	CA-C-O	-5.54	114.71	120.92
19	Z	156	HIS	ND1-CE1-NE2	5.54	113.94	108.40
12	5	149	TYR	CA-C-N	5.54	128.74	120.31
12	5	149	TYR	C-N-CA	5.54	128.74	120.31
19	Z	525	ILE	N-CA-C	-5.54	104.97	110.62
21	S	196	ARG	NE-CZ-NH2	5.54	124.19	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	274	LEU	CB-CA-C	-5.54	101.59	110.79
7	G	175	THR	N-CA-CB	5.54	118.36	110.16
19	Z	344	VAL	CA-C-O	-5.54	112.53	119.95
32	J	183	PRO	CA-C-N	5.54	127.98	120.44
32	J	183	PRO	C-N-CA	5.54	127.98	120.44
17	T	324	GLN	CA-C-N	5.54	128.73	120.31
17	T	324	GLN	C-N-CA	5.54	128.73	120.31
20	N	232	ILE	N-CA-CB	5.54	118.89	110.58
20	N	346	ASN	OD1-CG-ND2	5.54	128.14	122.60
26	O	305	ASN	N-CA-C	-5.54	105.32	111.36
27	H	135	GLU	N-CA-C	-5.54	100.29	108.99
28	I	223	ILE	O-C-N	-5.54	117.33	123.20
3	C	164	ILE	N-CA-CB	5.54	120.53	111.45
8	1	171	TYR	CA-C-O	5.54	126.29	120.42
13	6	57	SER	N-CA-CB	5.54	119.85	110.49
15	W	6	THR	CA-C-O	-5.54	114.29	120.66
20	N	2	ILE	CA-C-N	5.54	128.74	120.87
20	N	2	ILE	C-N-CA	5.54	128.74	120.87
27	H	330	ALA	CA-C-N	5.54	128.73	120.31
27	H	330	ALA	C-N-CA	5.54	128.73	120.31
6	F	224	TYR	CA-CB-CG	-5.54	103.93	113.90
7	G	170	ARG	O-C-N	5.54	128.46	122.15
32	J	268	GLU	CB-CA-C	-5.54	101.60	110.79
26	O	372	GLN	OE1-CD-NE2	-5.54	117.06	122.60
27	H	253	GLY	CA-C-N	5.54	127.70	120.28
27	H	253	GLY	C-N-CA	5.54	127.70	120.28
31	M	117	ASP	N-CA-C	5.54	117.44	110.24
8	1	186	LEU	CA-C-N	5.53	127.70	120.28
8	1	186	LEU	C-N-CA	5.53	127.70	120.28
9	2	99	THR	CA-C-O	5.53	126.42	120.55
19	Z	315	GLU	N-CA-C	-5.53	105.16	111.14
20	N	351	MET	N-CA-C	5.53	118.07	111.71
21	S	345	ARG	CB-CG-CD	5.53	124.03	111.30
26	O	188	LEU	CA-C-N	5.53	126.83	120.85
26	O	188	LEU	C-N-CA	5.53	126.83	120.85
28	I	304	GLU	N-CA-C	5.53	116.99	111.07
4	D	117	ILE	N-CA-CB	5.53	118.06	110.54
19	Z	269	ALA	O-C-N	5.53	127.98	122.12
19	Z	340	MET	N-CA-C	5.53	117.31	111.28
25	U	231	GLN	OE1-CD-NE2	5.53	128.13	122.60
4	D	16	LEU	CA-C-O	-5.53	115.31	121.23
4	D	186	ALA	N-CA-C	-5.53	103.93	111.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	124	THR	CA-C-O	5.53	126.41	120.55
15	W	61	LEU	CA-C-O	-5.53	114.63	120.55
20	N	212	ASP	CA-C-N	5.53	130.08	120.68
20	N	212	ASP	C-N-CA	5.53	130.08	120.68
20	N	661	ALA	CA-C-O	-5.53	114.98	120.90
20	N	833	LEU	CA-C-N	5.53	128.15	120.29
20	N	833	LEU	C-N-CA	5.53	128.15	120.29
23	Q	208	ALA	CB-CA-C	-5.53	101.45	110.85
24	R	274	SER	CA-C-N	5.53	127.63	120.44
24	R	274	SER	C-N-CA	5.53	127.63	120.44
26	O	288	HIS	CA-CB-CG	5.53	119.33	113.80
32	J	55	LYS	CB-CA-C	-5.53	102.20	110.88
2	B	123	GLN	OE1-CD-NE2	-5.53	117.07	122.60
26	O	46	GLN	CA-C-O	5.53	125.74	119.27
3	C	111	VAL	CA-CB-CG2	5.53	119.80	110.40
6	F	178	GLU	CA-C-N	5.53	127.69	120.28
6	F	178	GLU	C-N-CA	5.53	127.69	120.28
15	W	184	ILE	CA-C-O	-5.53	115.20	120.95
22	P	202	THR	CA-CB-OG1	5.53	117.89	109.60
28	I	347	ILE	CA-CB-CG1	-5.53	101.00	110.40
20	N	50	GLU	O-C-N	5.53	127.98	122.12
20	N	500	ASN	CA-C-N	5.53	127.68	120.28
20	N	500	ASN	C-N-CA	5.53	127.68	120.28
23	Q	366	SER	CA-C-O	-5.53	115.02	120.82
31	M	30	ASP	CB-CA-C	-5.53	100.06	110.67
1	A	211	LYS	N-CA-C	-5.52	102.96	110.36
3	C	117	ILE	CB-CA-C	-5.52	104.60	112.22
12	5	226	ASP	CA-C-N	5.52	129.93	120.71
12	5	226	ASP	C-N-CA	5.52	129.93	120.71
14	7	175	ALA	N-CA-CB	5.52	119.82	110.49
21	S	144	ARG	N-CA-C	5.52	119.75	112.35
22	P	89	LEU	N-CA-C	-5.52	105.18	111.14
24	R	181	LYS	N-CA-CB	5.52	118.02	110.01
24	R	199	GLU	CA-C-N	5.52	127.95	120.44
24	R	199	GLU	C-N-CA	5.52	127.95	120.44
25	U	261	TYR	CD1-CE1-CZ	5.52	129.54	119.60
28	I	304	GLU	O-C-N	5.52	127.76	122.07
29	K	257	ASN	CA-C-N	5.52	128.07	120.39
29	K	257	ASN	C-N-CA	5.52	128.07	120.39
8	1	217	VAL	CA-C-N	5.52	130.62	123.00
8	1	217	VAL	C-N-CA	5.52	130.62	123.00
15	W	33	VAL	N-CA-CB	5.52	118.86	110.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	736	ILE	N-CA-C	5.52	116.25	110.62
30	L	200	ALA	CA-C-O	-5.52	115.01	120.70
4	D	148	PRO	N-CA-CB	5.52	108.46	103.33
4	D	160	HIS	CE1-NE2-CD2	-5.52	103.48	109.00
6	F	125	ARG	CA-C-N	5.52	128.93	121.20
6	F	125	ARG	C-N-CA	5.52	128.93	121.20
13	6	102	TYR	N-CA-CB	5.52	118.33	110.16
24	R	262	SER	CA-C-N	5.52	127.94	120.44
24	R	262	SER	C-N-CA	5.52	127.94	120.44
25	U	61	ASP	N-CA-C	-5.52	99.42	108.41
29	K	31	GLY	CA-C-N	5.52	126.24	120.12
29	K	31	GLY	C-N-CA	5.52	126.24	120.12
9	2	243	GLY	CA-C-N	5.52	131.75	122.87
9	2	243	GLY	C-N-CA	5.52	131.75	122.87
12	5	62	THR	CA-CB-CG2	5.52	119.88	110.50
22	P	74	CYS	N-CA-CB	5.52	118.32	110.16
29	K	217	LYS	N-CA-CB	5.52	118.23	110.12
5	E	42	THR	N-CA-C	-5.51	101.37	109.81
22	P	369	TYR	N-CA-C	5.51	117.10	111.14
27	H	217	PRO	N-CD-CG	5.51	111.47	103.20
29	K	409	LYS	N-CA-CB	5.51	120.29	111.91
7	G	215	SER	CA-C-O	5.51	127.22	120.60
8	1	209	LEU	N-CA-C	-5.51	100.25	109.24
20	N	357	LYS	N-CA-CB	5.51	118.22	110.12
23	Q	266	ASP	CA-C-N	5.51	128.01	120.46
23	Q	266	ASP	C-N-CA	5.51	128.01	120.46
29	K	81	ARG	CA-C-O	5.51	126.26	120.42
7	G	127	SER	N-CA-C	-5.51	106.40	113.23
14	7	46	GLN	CA-C-N	5.51	128.32	120.49
14	7	46	GLN	C-N-CA	5.51	128.32	120.49
21	S	133	GLU	CA-C-O	-5.51	113.80	120.74
24	R	85	ASP	O-C-N	5.51	127.96	122.12
3	C	21	VAL	CA-C-O	-5.51	115.01	120.85
16	V	133	PHE	N-CA-C	-5.51	105.36	111.36
16	V	287	HIS	CB-CA-C	-5.51	101.64	110.79
17	T	188	SER	O-C-N	-5.51	116.77	123.10
22	P	108	CYS	N-CA-CB	5.51	118.22	110.12
22	P	301	LYS	CA-C-N	5.51	128.11	120.29
22	P	301	LYS	C-N-CA	5.51	128.11	120.29
22	P	341	PHE	N-CA-CB	5.51	119.80	110.49
26	O	357	CYS	CA-C-N	5.51	127.66	120.28
26	O	357	CYS	C-N-CA	5.51	127.66	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	113	VAL	N-CA-CB	5.51	118.03	110.54
3	C	61	PHE	CB-CA-C	-5.51	102.20	110.90
13	6	232	GLU	CB-CG-CD	-5.51	103.24	112.60
16	V	248	MET	CB-CA-C	-5.51	100.44	110.63
20	N	939	GLU	N-CA-C	-5.51	99.45	108.76
28	I	294	ARG	CD-NE-CZ	-5.51	116.69	124.40
29	K	36	ASP	CA-C-N	5.51	128.68	120.31
29	K	36	ASP	C-N-CA	5.51	128.68	120.31
29	K	268	ASP	CA-C-O	-5.51	114.59	120.92
20	N	346	ASN	CA-C-O	-5.50	115.44	120.95
20	N	526	THR	CA-C-N	5.50	127.66	120.28
20	N	526	THR	C-N-CA	5.50	127.66	120.28
16	V	104	ARG	CA-C-O	-5.50	113.82	119.49
19	Z	618	GLU	CB-CA-C	-5.50	101.13	109.99
28	I	201	VAL	CA-CB-CG2	5.50	119.76	110.40
30	L	395	GLU	CA-C-O	-5.50	114.59	120.42
6	F	65	HIS	CA-CB-CG	5.50	119.30	113.80
14	7	242	GLU	N-CA-CB	5.50	119.79	110.49
19	Z	81	GLN	N-CA-C	5.50	117.28	111.28
20	N	680	VAL	N-CA-C	-5.50	100.66	108.58
20	N	746	ILE	CA-CB-CG1	5.50	119.75	110.40
23	Q	51	LEU	CA-C-O	-5.50	114.72	120.55
26	O	130	ALA	CA-C-O	-5.50	114.72	120.55
12	5	63	LEU	N-CA-C	5.50	122.51	110.80
19	Z	712	LYS	CB-CA-C	-5.50	102.25	110.88
32	J	228	ALA	N-CA-C	-5.50	105.36	113.61
15	W	112	PHE	CA-CB-CG	-5.50	108.30	113.80
19	Z	183	PRO	N-CD-CG	5.50	111.45	103.20
22	P	185	PHE	CA-CB-CG	5.50	119.30	113.80
23	Q	118	LYS	O-C-N	5.50	127.95	122.12
3	C	25	MET	CA-C-O	5.50	126.38	120.55
11	4	90	ASP	N-CA-C	5.50	117.35	111.36
12	5	237	HIS	CB-CG-ND1	5.50	130.94	122.70
20	N	912	ILE	CB-CA-C	5.50	119.16	111.08
23	Q	306	LEU	CA-C-N	5.50	127.58	120.44
23	Q	306	LEU	C-N-CA	5.50	127.58	120.44
25	U	102	HIS	N-CA-C	-5.50	100.77	108.96
30	L	65	GLN	CA-C-N	5.50	130.76	121.14
30	L	65	GLN	C-N-CA	5.50	130.76	121.14
5	E	192	LYS	CA-C-N	5.50	128.09	120.29
5	E	192	LYS	C-N-CA	5.50	128.09	120.29
14	7	241	VAL	CB-CA-C	-5.50	105.27	110.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	333	LEU	N-CA-C	-5.49	105.21	111.14
26	O	41	VAL	CB-CA-C	-5.49	104.72	112.14
27	H	134	ILE	N-CA-C	-5.49	101.74	109.21
27	H	273	PHE	N-CA-C	-5.49	99.57	108.52
30	L	143	ASN	N-CA-CB	5.49	119.77	110.49
32	J	329	LEU	CA-C-N	5.49	127.58	120.44
32	J	329	LEU	C-N-CA	5.49	127.58	120.44
13	6	175	LEU	O-C-N	-5.49	116.16	122.09
17	T	349	LEU	N-CA-CB	5.49	118.19	110.12
24	R	293	ARG	CD-NE-CZ	-5.49	116.71	124.40
25	U	112	MET	CG-SD-CE	-5.49	88.82	100.90
19	Z	485	LEU	O-C-N	-5.49	116.30	122.12
20	N	613	ASP	O-C-N	5.49	128.02	122.09
21	S	478	PHE	CA-C-N	5.49	127.64	120.28
21	S	478	PHE	C-N-CA	5.49	127.64	120.28
24	R	102	ASP	CA-C-N	5.49	127.91	120.44
24	R	102	ASP	C-N-CA	5.49	127.91	120.44
24	R	146	ARG	N-CA-CB	-5.49	102.03	110.16
30	L	113	ALA	N-CA-C	-5.49	100.94	109.72
7	G	136	PHE	CA-CB-CG	5.49	119.29	113.80
14	7	248	SER	CA-C-N	5.49	131.34	122.29
14	7	248	SER	C-N-CA	5.49	131.34	122.29
21	S	349	LEU	N-CA-C	-5.49	105.89	112.59
30	L	140	ASP	CA-C-N	5.49	125.69	120.31
30	L	140	ASP	C-N-CA	5.49	125.69	120.31
9	2	232	TYR	CB-CG-CD2	5.49	129.03	120.80
25	U	88	ARG	NH1-CZ-NH2	5.49	126.43	119.30
26	O	10	GLN	CA-C-O	5.49	126.24	120.42
3	C	9	THR	N-CA-C	-5.49	105.38	111.36
20	N	553	ALA	CB-CA-C	-5.49	101.68	110.79
22	P	370	TYR	CA-C-O	-5.49	115.25	121.39
29	K	81	ARG	N-CA-C	5.49	117.34	111.36
7	G	92	ALA	CB-CA-C	-5.48	101.69	110.79
14	7	223	ARG	CB-CG-CD	5.48	123.91	111.30
22	P	210	ASN	OD1-CG-ND2	-5.48	117.12	122.60
29	K	290	LEU	N-CA-C	-5.48	105.20	111.07
9	2	132	ARG	NE-CZ-NH1	5.48	126.98	121.50
16	V	233	ASP	N-CA-C	-5.48	100.08	109.24
27	H	39	SER	CA-C-O	5.48	126.36	120.55
27	H	203	ASN	OD1-CG-ND2	5.48	128.08	122.60
27	H	261	PHE	CA-C-N	5.48	127.63	120.28
27	H	261	PHE	C-N-CA	5.48	127.63	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	132	VAL	N-CA-C	5.48	117.22	108.89
24	R	88	LEU	CA-C-N	5.48	127.62	120.28
24	R	88	LEU	C-N-CA	5.48	127.62	120.28
6	F	26	MET	CA-C-N	5.48	128.17	120.28
6	F	26	MET	C-N-CA	5.48	128.17	120.28
28	I	341	LEU	O-C-N	5.48	127.71	122.07
30	L	281	PHE	N-CA-CB	5.48	118.28	110.06
12	5	240	GLU	N-CA-C	-5.48	100.25	109.07
19	Z	271	MET	N-CA-C	5.48	116.93	111.07
19	Z	492	SER	CA-C-O	-5.48	115.22	121.58
20	N	323	LEU	CA-C-N	5.48	129.37	120.60
20	N	323	LEU	C-N-CA	5.48	129.37	120.60
25	U	257	MET	CA-C-O	-5.48	115.07	120.82
26	O	272	ILE	N-CA-C	-5.48	105.03	110.62
27	H	201	PHE	N-CA-C	5.48	116.93	111.07
31	M	136	PHE	N-CA-C	-5.48	100.78	109.76
2	B	29	VAL	O-C-N	5.48	127.18	121.87
3	C	111	VAL	CB-CA-C	-5.48	104.66	112.22
16	V	27	THR	CA-CB-OG1	5.48	117.81	109.60
28	I	147	GLY	CA-C-O	-5.48	114.28	120.30
10	3	34	MET	N-CA-CB	-5.47	102.06	110.16
11	4	100	VAL	O-C-N	-5.47	116.97	123.05
27	H	334	PRO	CA-C-O	-5.47	115.37	121.23
29	K	279	THR	N-CA-C	-5.47	101.66	110.14
5	E	143	PHE	CB-CA-C	-5.47	101.08	110.22
9	2	81	SER	O-C-N	-5.47	115.03	121.32
12	5	101	LEU	CA-C-O	-5.47	115.06	120.70
12	5	240	GLU	N-CA-CB	5.47	119.16	110.57
20	N	648	VAL	CB-CA-C	-5.47	104.75	112.14
22	P	15	LYS	CA-C-N	5.47	127.61	120.28
22	P	15	LYS	C-N-CA	5.47	127.61	120.28
22	P	261	ASP	N-CA-C	5.47	117.25	111.28
23	Q	275	LEU	N-CA-CB	5.47	119.74	110.49
25	U	38	VAL	N-CA-CB	5.47	120.07	110.49
11	4	67	TYR	CG-CD1-CE1	5.47	129.41	121.20
13	6	36	GLY	O-C-N	5.47	126.98	122.71
23	Q	386	ILE	CA-C-N	-5.47	115.97	123.14
23	Q	386	ILE	C-N-CA	-5.47	115.97	123.14
27	H	222	LYS	CB-CA-C	-5.47	101.55	110.85
28	I	199	GLU	N-CA-CB	5.47	118.16	110.12
1	A	22	LEU	O-C-N	-5.47	116.71	123.33
12	5	202	TYR	CA-C-O	5.47	126.56	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	508	THR	N-CA-CB	5.47	118.76	110.28
20	N	829	SER	N-CA-CB	5.47	118.16	110.12
22	P	437	SER	CA-C-O	-5.47	115.07	120.70
27	H	188	ARG	N-CA-CB	5.47	118.16	110.12
16	V	115	HIS	N-CA-CB	5.47	120.34	110.17
16	V	217	LEU	O-C-N	-5.47	115.55	122.27
20	N	99	THR	CB-CA-C	-5.47	101.39	110.68
22	P	29	PRO	CA-C-O	-5.47	111.24	119.55
22	P	308	LEU	O-C-N	-5.47	116.44	122.07
27	H	262	GLU	O-C-N	5.47	127.92	122.12
27	H	319	MET	CB-CA-C	-5.47	99.71	109.71
6	F	20	HIS	O-C-N	5.46	127.91	122.12
8	1	136	TRP	CE3-CZ3-CH2	-5.46	114.00	121.10
11	4	19	ARG	NE-CZ-NH1	5.46	126.97	121.50
14	7	78	ALA	N-CA-CB	5.46	119.72	110.49
14	7	220	LEU	N-CA-CB	5.46	118.25	110.16
15	W	99	HIS	CB-CG-ND1	-5.46	114.50	122.70
17	T	159	ILE	O-C-N	5.46	127.17	121.87
17	T	231	HIS	N-CA-C	5.46	120.18	112.75
19	Z	471	LEU	CA-C-N	5.46	131.97	121.54
19	Z	471	LEU	C-N-CA	5.46	131.97	121.54
19	Z	675	PHE	CA-CB-CG	5.46	119.27	113.80
20	N	246	TYR	CB-CA-C	-5.46	101.72	110.79
21	S	497	TYR	CA-CB-CG	-5.46	104.06	113.90
24	R	255	ALA	CA-C-N	5.46	129.26	120.30
24	R	255	ALA	C-N-CA	5.46	129.26	120.30
26	O	355	LEU	CA-C-N	5.46	128.05	120.29
26	O	355	LEU	C-N-CA	5.46	128.05	120.29
30	L	149	ILE	CA-C-N	5.46	132.12	121.41
30	L	149	ILE	C-N-CA	5.46	132.12	121.41
30	L	305	ARG	CA-C-N	5.46	125.39	119.76
30	L	305	ARG	C-N-CA	5.46	125.39	119.76
32	J	216	GLY	CA-C-N	5.46	131.20	121.75
32	J	216	GLY	C-N-CA	5.46	131.20	121.75
28	I	434	THR	CA-C-O	-5.46	112.67	120.16
9	2	172	SER	CA-C-N	5.46	127.16	120.22
9	2	172	SER	C-N-CA	5.46	127.16	120.22
19	Z	63	LEU	CA-C-N	5.46	126.04	119.98
19	Z	63	LEU	C-N-CA	5.46	126.04	119.98
20	N	185	MET	CA-C-O	5.46	126.21	120.42
24	R	342	ARG	NE-CZ-NH2	-5.46	114.28	119.20
21	S	58	HIS	CG-CD2-NE2	5.46	112.66	107.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	332	HIS	CE1-NE2-CD2	-5.46	103.54	109.00
19	Z	780	PRO	O-C-N	5.46	129.26	122.22
23	Q	230	SER	CA-C-N	5.46	128.04	120.29
23	Q	230	SER	C-N-CA	5.46	128.04	120.29
21	S	286	TYR	N-CA-C	5.46	117.23	111.28
28	I	237	LYS	CA-C-N	5.46	127.86	120.44
28	I	237	LYS	C-N-CA	5.46	127.86	120.44
30	L	378	GLN	CA-C-N	5.46	128.04	120.29
30	L	378	GLN	C-N-CA	5.46	128.04	120.29
32	J	200	ALA	CA-C-N	5.46	128.60	120.31
32	J	200	ALA	C-N-CA	5.46	128.60	120.31
23	Q	31	VAL	CA-C-N	5.46	127.53	120.44
23	Q	31	VAL	C-N-CA	5.46	127.53	120.44
3	C	70	GLU	N-CA-C	-5.45	106.82	112.93
16	V	240	HIS	O-C-N	5.45	127.90	122.12
19	Z	647	GLY	N-CA-C	-5.45	106.19	112.73
20	N	467	ASN	CA-C-N	5.45	128.05	120.63
20	N	467	ASN	C-N-CA	5.45	128.05	120.63
24	R	93	LYS	CA-CB-CG	5.45	125.01	114.10
26	O	260	ASP	CA-CB-CG	-5.45	107.15	112.60
4	D	23	GLN	OE1-CD-NE2	-5.45	117.15	122.60
29	K	249	ASP	CA-C-N	5.45	127.93	120.46
29	K	249	ASP	C-N-CA	5.45	127.93	120.46
1	A	9	PHE	N-CA-C	-5.45	104.89	112.03
8	1	79	SER	CA-C-N	5.45	129.46	121.67
8	1	79	SER	C-N-CA	5.45	129.46	121.67
8	1	100	SER	N-CA-C	5.45	117.30	111.36
23	Q	96	PHE	CA-CB-CG	5.45	119.25	113.80
28	I	437	GLY	CA-C-N	5.45	127.53	120.44
28	I	437	GLY	C-N-CA	5.45	127.53	120.44
29	K	69	LYS	CA-C-N	5.45	127.58	120.28
29	K	69	LYS	C-N-CA	5.45	127.58	120.28
29	K	414	HIS	CB-CG-CD2	-5.45	124.11	131.20
3	C	213	ILE	N-CA-C	-5.45	100.48	108.11
7	G	124	THR	CA-CB-OG1	5.45	117.77	109.60
8	1	191	ASN	CB-CG-ND2	-5.45	108.23	116.40
19	Z	332	ALA	N-CA-CB	5.45	119.90	111.24
24	R	175	ASP	CA-C-N	5.45	128.12	120.28
24	R	175	ASP	C-N-CA	5.45	128.12	120.28
31	M	139	VAL	N-CA-C	5.45	116.61	109.58
19	Z	262	PHE	CA-C-O	-5.45	112.70	120.16
20	N	144	ASP	N-CA-CB	5.45	119.43	110.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	266	GLU	CA-C-O	-5.45	114.47	120.24
23	Q	240	ASP	N-CA-CB	5.45	118.61	110.22
23	Q	386	ILE	CA-CB-CG1	5.45	119.66	110.40
26	O	120	ALA	CB-CA-C	-5.45	101.59	110.85
26	O	133	GLU	O-C-N	5.45	127.89	122.12
27	H	296	GLN	CB-CA-C	-5.45	100.22	110.67
28	I	334	ILE	N-CA-C	-5.45	106.11	111.77
31	M	183	ARG	CA-C-O	-5.45	115.05	120.66
32	J	375	ARG	NE-CZ-NH1	-5.45	116.05	121.50
2	B	31	GLY	O-C-N	-5.44	116.53	122.84
2	B	107	THR	N-CA-C	5.44	117.21	111.28
8	1	62	ARG	NE-CZ-NH2	5.44	124.10	119.20
20	N	747	SER	CA-C-N	5.44	128.02	120.29
20	N	747	SER	C-N-CA	5.44	128.02	120.29
22	P	94	ARG	N-CA-CB	5.44	118.64	110.53
26	O	195	GLU	N-CA-C	5.44	117.21	111.28
19	Z	522	CYS	CA-C-N	5.44	126.02	119.98
19	Z	522	CYS	C-N-CA	5.44	126.02	119.98
21	S	302	ARG	O-C-N	5.44	127.89	122.12
22	P	446	ILE	CA-C-N	5.44	127.57	120.28
22	P	446	ILE	C-N-CA	5.44	127.57	120.28
23	Q	149	LEU	O-C-N	5.44	128.35	122.15
29	K	292	LEU	CA-C-N	5.44	128.02	120.29
29	K	292	LEU	C-N-CA	5.44	128.02	120.29
13	6	169	SER	O-C-N	5.44	128.95	122.26
19	Z	373	ALA	O-C-N	5.44	127.89	122.12
23	Q	34	ASP	CA-C-N	5.44	128.20	120.53
23	Q	34	ASP	C-N-CA	5.44	128.20	120.53
26	O	12	GLN	CA-C-N	5.44	128.44	120.71
26	O	12	GLN	C-N-CA	5.44	128.44	120.71
8	1	41	PHE	CA-CB-CG	5.44	119.24	113.80
8	1	52	ARG	O-C-N	-5.44	116.25	121.85
14	7	110	VAL	CA-C-N	5.44	128.01	120.29
14	7	110	VAL	C-N-CA	5.44	128.01	120.29
3	C	151	ASP	CA-C-N	5.44	125.52	119.32
3	C	151	ASP	C-N-CA	5.44	125.52	119.32
13	6	84	PHE	CA-C-N	5.44	131.93	121.54
13	6	84	PHE	C-N-CA	5.44	131.93	121.54
26	O	227	ASN	CA-C-N	5.44	127.57	120.28
26	O	227	ASN	C-N-CA	5.44	127.57	120.28
31	M	438	LEU	N-CA-C	-5.44	105.27	112.94
16	V	241	ASN	CA-CB-CG	-5.44	107.16	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	18	THR	CA-CB-OG1	5.44	117.75	109.60
8	1	46	VAL	N-CA-C	5.43	117.61	108.81
12	5	200	ARG	CA-C-O	-5.43	114.66	120.42
12	5	222	ALA	CA-C-N	5.43	128.01	120.29
12	5	222	ALA	C-N-CA	5.43	128.01	120.29
19	Z	692	LEU	CB-CA-C	-5.43	101.77	110.79
23	Q	129	LEU	O-C-N	-5.43	116.36	122.12
24	R	364	TRP	CD2-CE3-CZ3	5.43	125.67	118.60
28	I	317	ASP	N-CA-C	-5.43	99.48	108.12
19	Z	352	HIS	CA-C-N	5.43	127.56	120.28
19	Z	352	HIS	C-N-CA	5.43	127.56	120.28
19	Z	642	ALA	CA-C-N	5.43	125.25	119.28
19	Z	642	ALA	C-N-CA	5.43	125.25	119.28
30	L	314	HIS	CE1-NE2-CD2	-5.43	103.57	109.00
30	L	324	LEU	N-CA-C	5.43	116.88	111.07
2	B	45	VAL	N-CA-C	-5.43	100.30	108.12
20	N	182	LYS	CA-C-O	-5.43	114.79	120.55
20	N	338	HIS	CE1-NE2-CD2	-5.43	103.57	109.00
22	P	281	ASN	CA-C-N	5.43	128.00	120.29
22	P	281	ASN	C-N-CA	5.43	128.00	120.29
9	2	123	ASN	CA-C-N	5.43	127.83	120.44
9	2	123	ASN	C-N-CA	5.43	127.83	120.44
19	Z	782	HIS	CE1-NE2-CD2	-5.43	103.57	109.00
24	R	43	ALA	CA-C-N	5.43	127.56	120.28
24	R	43	ALA	C-N-CA	5.43	127.56	120.28
31	M	431	GLN	CA-C-O	5.43	128.17	121.87
2	B	116	SER	CA-C-N	5.43	128.13	120.42
2	B	116	SER	C-N-CA	5.43	128.13	120.42
4	D	24	GLU	CB-CG-CD	-5.43	103.37	112.60
19	Z	342	PRO	CA-C-N	5.43	127.50	120.44
19	Z	342	PRO	C-N-CA	5.43	127.50	120.44
21	S	139	ALA	N-CA-C	5.43	117.20	111.28
28	I	281	ILE	N-CA-C	-5.43	100.37	108.46
30	L	233	PHE	N-CA-C	5.43	117.28	111.36
31	M	167	LEU	CA-C-O	-5.43	113.53	120.04
4	D	100	HIS	CA-C-N	5.43	127.55	120.28
4	D	100	HIS	C-N-CA	5.43	127.55	120.28
31	M	255	ALA	O-C-N	-5.43	116.89	123.29
2	B	43	GLY	O-C-N	-5.42	115.65	122.70
6	F	7	ASP	N-CA-C	-5.42	105.36	112.41
7	G	175	THR	CA-CB-OG1	5.42	117.74	109.60
8	1	180	MET	CA-C-O	-5.42	115.25	122.03

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	3	168	SER	O-C-N	5.42	128.34	122.15
20	N	200	VAL	N-CA-C	-5.42	105.09	110.62
27	H	380	SER	N-CA-C	5.42	118.10	109.96
13	6	149	TYR	CB-CG-CD1	-5.42	112.67	120.80
15	W	99	HIS	ND1-CE1-NE2	5.42	113.82	108.40
28	I	207	HIS	ND1-CE1-NE2	5.42	113.82	108.40
28	I	385	MET	CA-C-N	5.42	127.55	120.28
28	I	385	MET	C-N-CA	5.42	127.55	120.28
19	Z	238	ASN	CA-CB-CG	5.42	118.02	112.60
19	Z	510	SER	CA-C-O	-5.42	114.92	120.99
1	A	231	THR	N-CA-CB	5.42	119.65	110.49
27	H	49	GLU	CA-C-O	-5.42	114.81	120.55
17	T	175	LYS	O-C-N	5.42	127.86	122.12
20	N	338	HIS	ND1-CE1-NE2	5.42	113.82	108.40
27	H	421	ALA	N-CA-C	5.42	117.19	111.28
28	I	306	GLN	CA-C-N	5.42	127.98	120.29
28	I	306	GLN	C-N-CA	5.42	127.98	120.29
29	K	186	THR	N-CA-C	5.42	117.05	111.03
32	J	278	ASN	O-C-N	5.42	127.65	122.07
9	2	242	PHE	N-CA-C	-5.42	98.38	107.32
11	4	52	ASP	CA-C-N	5.42	129.84	120.58
11	4	52	ASP	C-N-CA	5.42	129.84	120.58
11	4	170	ARG	CA-C-N	5.42	127.81	120.44
11	4	170	ARG	C-N-CA	5.42	127.81	120.44
17	T	197	LEU	O-C-N	-5.42	116.38	122.12
19	Z	846	VAL	N-CA-CB	5.42	120.73	112.06
27	H	141	GLY	CA-C-O	-5.42	115.33	120.64
27	H	210	LYS	N-CA-CB	5.42	119.64	110.49
32	J	8	GLN	CA-C-N	5.42	131.88	121.54
32	J	8	GLN	C-N-CA	5.42	131.88	121.54
14	7	221	TYR	CA-C-O	-5.42	114.68	120.42
8	1	172	VAL	N-CA-C	5.41	116.14	110.62
11	4	99	HIS	CB-CG-CD2	5.41	138.24	131.20
12	5	124	ILE	N-CA-C	5.41	116.19	110.72
14	7	92	SER	O-C-N	-5.41	116.59	122.92
20	N	503	GLN	CA-C-N	5.41	130.32	122.36
20	N	503	GLN	C-N-CA	5.41	130.32	122.36
22	P	128	LEU	CA-C-N	5.41	127.48	120.44
22	P	128	LEU	C-N-CA	5.41	127.48	120.44
1	A	224	ASN	N-CA-C	-5.41	103.35	108.22
20	N	622	LEU	N-CA-CB	5.41	118.08	110.12
20	N	643	SER	O-C-N	5.41	129.08	122.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	216	LEU	CB-CA-C	-5.41	101.81	110.79
31	M	215	PHE	CA-CB-CG	-5.41	108.39	113.80
6	F	8	ASN	CA-CB-CG	5.41	118.01	112.60
9	2	176	ALA	CA-C-O	5.41	126.16	120.42
14	7	58	VAL	CA-C-O	-5.41	114.61	121.48
15	W	17	ARG	NE-CZ-NH2	-5.41	114.33	119.20
17	T	125	VAL	N-CA-C	5.41	119.68	111.89
20	N	330	SER	O-C-N	5.41	127.85	122.12
22	P	318	SER	CA-C-N	5.41	127.97	120.29
22	P	318	SER	C-N-CA	5.41	127.97	120.29
23	Q	177	TYR	CB-CG-CD1	5.41	128.91	120.80
27	H	87	LEU	N-CA-C	-5.41	105.28	111.07
27	H	143	ASP	CA-C-O	-5.41	115.72	121.94
2	B	55	ILE	N-CA-CB	5.41	120.15	111.23
19	Z	31	LYS	CA-C-N	5.41	129.74	120.71
19	Z	31	LYS	C-N-CA	5.41	129.74	120.71
19	Z	160	ARG	CA-C-N	5.41	128.07	120.28
19	Z	160	ARG	C-N-CA	5.41	128.07	120.28
20	N	138	PHE	CA-CB-CG	-5.41	108.39	113.80
23	Q	158	LYS	N-CA-C	5.41	117.87	111.33
24	R	285	ASP	CA-CB-CG	5.41	118.01	112.60
3	C	46	ALA	CA-C-O	-5.41	114.51	120.24
11	4	96	THR	CA-C-N	5.41	125.74	119.47
11	4	96	THR	C-N-CA	5.41	125.74	119.47
12	5	159	MET	CB-CA-C	5.41	118.91	111.23
17	T	244	TYR	CB-CA-C	-5.41	102.26	111.02
20	N	654	MET	CA-C-N	5.41	127.52	120.28
20	N	654	MET	C-N-CA	5.41	127.52	120.28
27	H	300	LEU	CA-C-N	5.41	127.52	120.28
27	H	300	LEU	C-N-CA	5.41	127.52	120.28
32	J	370	ALA	CA-C-N	5.41	127.52	120.28
32	J	370	ALA	C-N-CA	5.41	127.52	120.28
3	C	142	HIS	CA-CB-CG	-5.40	108.40	113.80
22	P	152	ILE	CA-C-N	5.40	129.74	120.72
22	P	152	ILE	C-N-CA	5.40	129.74	120.72
29	K	127	ASN	N-CA-CB	5.40	118.03	109.71
20	N	625	ILE	N-CA-C	-5.40	105.45	110.53
16	V	269	GLN	OE1-CD-NE2	5.40	128.00	122.60
19	Z	128	VAL	CA-C-N	5.40	127.52	120.28
19	Z	128	VAL	C-N-CA	5.40	127.52	120.28
21	S	50	ASP	N-CA-C	5.40	117.17	111.28
22	P	294	LYS	CA-C-N	5.40	128.06	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	294	LYS	C-N-CA	5.40	128.06	120.28
23	Q	149	LEU	N-CA-CB	5.40	118.15	110.16
24	R	38	ARG	CA-C-N	5.40	127.52	120.28
24	R	38	ARG	C-N-CA	5.40	127.52	120.28
26	O	375	LEU	CA-C-O	5.40	126.28	120.55
10	3	119	PRO	N-CA-CB	5.40	108.92	103.25
2	B	101	TYR	O-C-N	5.40	128.30	122.15
7	G	25	GLU	CA-C-O	-5.40	114.70	120.42
15	W	18	ASN	N-CA-CB	5.40	117.59	110.25
17	T	283	GLU	CB-CA-C	-5.40	102.41	110.88
21	S	67	THR	O-C-N	5.40	127.86	122.03
21	S	192	SER	O-C-N	-5.40	116.26	122.95
23	Q	323	LEU	CA-C-N	5.40	127.95	120.29
23	Q	323	LEU	C-N-CA	5.40	127.95	120.29
25	U	129	LYS	N-CA-C	-5.40	100.52	108.99
29	K	61	ILE	CA-C-O	-5.40	114.80	120.57
30	L	77	GLN	OE1-CD-NE2	5.40	128.00	122.60
5	E	44	GLU	N-CA-C	-5.40	106.70	113.72
5	E	136	PRO	N-CA-CB	5.40	108.38	103.15
20	N	108	TYR	CA-C-O	-5.40	115.15	120.82
6	F	88	MET	CA-C-O	-5.39	114.70	120.42
7	G	64	ASN	CA-C-N	5.39	129.00	121.02
7	G	64	ASN	C-N-CA	5.39	129.00	121.02
9	2	109	HIS	CB-CA-C	-5.39	101.68	110.85
17	T	296	PHE	N-CA-C	-5.39	103.57	110.53
19	Z	513	GLU	CA-C-O	5.39	125.55	119.18
19	Z	701	ASN	N-CA-CB	5.39	117.32	110.04
22	P	80	TRP	CE3-CZ3-CH2	5.39	128.11	121.10
26	O	349	MET	N-CA-C	5.39	117.16	111.28
4	D	160	HIS	CG-CD2-NE2	5.39	112.59	107.20
9	2	116	LEU	CA-C-N	5.39	126.58	119.84
9	2	116	LEU	C-N-CA	5.39	126.58	119.84
15	W	144	GLY	N-CA-C	5.39	119.02	112.49
17	T	92	GLN	OE1-CD-NE2	-5.39	117.21	122.60
19	Z	370	MET	N-CA-C	5.39	118.08	111.82
19	Z	633	GLU	CA-C-N	5.39	129.79	122.19
19	Z	633	GLU	C-N-CA	5.39	129.79	122.19
22	P	93	ARG	NE-CZ-NH2	-5.39	114.35	119.20
4	D	24	GLU	N-CA-CB	5.39	118.14	110.16
12	5	250	ASN	N-CA-C	-5.39	96.52	107.41
20	N	589	ALA	CA-C-O	-5.39	115.15	120.70
21	S	429	ASP	N-CA-C	-5.39	105.48	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	120	VAL	CA-C-N	5.39	127.94	120.29
7	G	120	VAL	C-N-CA	5.39	127.94	120.29
17	T	317	ASN	CA-C-N	5.39	131.54	122.76
17	T	317	ASN	C-N-CA	5.39	131.54	122.76
21	S	58	HIS	CE1-NE2-CD2	-5.39	103.61	109.00
31	M	49	ARG	NE-CZ-NH2	-5.39	114.35	119.20
9	2	249	LYS	CA-C-O	-5.39	115.84	121.55
28	I	272	ARG	CA-C-N	5.39	128.07	120.42
28	I	272	ARG	C-N-CA	5.39	128.07	120.42
29	K	254	ALA	CA-C-O	5.39	126.26	120.55
31	M	70	GLN	OE1-CD-NE2	5.39	127.99	122.60
19	Z	161	HIS	CG-CD2-NE2	5.39	112.59	107.20
3	C	27	ALA	CA-C-O	-5.38	114.84	120.55
7	G	174	LYS	O-C-N	5.38	128.29	122.15
14	7	149	PRO	CA-C-O	-5.38	115.29	121.86
19	Z	83	ARG	N-CA-CB	5.38	118.13	110.16
19	Z	103	TYR	O-C-N	5.38	127.83	122.12
24	R	275	LEU	O-C-N	5.38	127.61	122.07
26	O	110	ALA	CA-C-N	5.38	127.84	120.46
26	O	110	ALA	C-N-CA	5.38	127.84	120.46
31	M	139	VAL	CA-CB-CG1	5.38	119.55	110.40
15	W	153	LEU	CA-C-N	5.38	127.49	120.28
15	W	153	LEU	C-N-CA	5.38	127.49	120.28
23	Q	109	LEU	O-C-N	-5.38	116.28	122.09
25	U	55	ALA	CA-C-O	-5.38	115.28	121.47
14	7	164	SER	N-CA-C	-5.38	104.98	112.03
20	N	121	GLY	N-CA-C	5.38	118.12	111.93
25	U	104	ASN	N-CA-CB	5.38	118.51	110.22
30	L	355	ALA	CA-C-N	5.38	127.93	120.29
30	L	355	ALA	C-N-CA	5.38	127.93	120.29
3	C	48	GLU	CA-C-N	5.38	128.35	120.71
3	C	48	GLU	C-N-CA	5.38	128.35	120.71
4	D	244	GLU	N-CA-CB	5.38	118.03	110.12
5	E	202	LEU	N-CA-C	-5.38	105.42	111.28
22	P	432	LEU	O-C-N	5.38	127.82	122.12
2	B	222	THR	CA-C-N	5.38	125.20	119.28
2	B	222	THR	C-N-CA	5.38	125.20	119.28
4	D	53	LEU	CA-C-O	5.38	124.44	118.52
14	7	175	ALA	CA-C-N	5.38	129.56	122.30
14	7	175	ALA	C-N-CA	5.38	129.56	122.30
21	S	228	HIS	N-CA-C	-5.38	105.50	111.36
31	M	86	ASN	CA-C-O	-5.38	113.78	119.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	227	VAL	CG1-CB-CG2	5.38	122.63	110.80
6	F	215	VAL	O-C-N	-5.38	116.87	123.00
7	G	121	HIS	O-C-N	5.38	128.28	122.15
10	3	131	MET	CA-C-N	5.38	131.65	121.97
10	3	131	MET	C-N-CA	5.38	131.65	121.97
12	5	173	VAL	CA-C-N	5.38	129.92	122.77
12	5	173	VAL	C-N-CA	5.38	129.92	122.77
13	6	73	LEU	O-C-N	-5.38	116.82	123.33
27	H	279	ALA	N-CA-C	-5.38	105.01	113.02
28	I	317	ASP	CB-CA-C	-5.38	104.47	115.28
31	M	200	GLU	O-C-N	5.38	127.82	122.12
31	M	420	HIS	ND1-CE1-NE2	5.38	113.78	108.40
32	J	389	LYS	CA-C-N	5.38	128.06	120.42
32	J	389	LYS	C-N-CA	5.38	128.06	120.42
19	Z	50	LYS	CA-C-N	5.38	128.48	120.31
19	Z	50	LYS	C-N-CA	5.38	128.48	120.31
26	O	336	VAL	N-CA-CB	5.38	119.37	111.52
4	D	123	ARG	N-CA-CB	5.37	118.02	110.12
6	F	146	GLN	OE1-CD-NE2	5.37	127.97	122.60
15	W	164	ASP	N-CA-C	-5.37	102.53	110.48
23	Q	19	ASP	CA-CB-CG	-5.37	107.23	112.60
23	Q	180	LEU	N-CA-C	-5.37	105.59	111.82
27	H	47	GLN	N-CA-C	5.37	117.22	111.36
31	M	322	GLY	CA-C-N	5.37	127.48	120.28
31	M	322	GLY	C-N-CA	5.37	127.48	120.28
32	J	157	GLN	O-C-N	-5.37	116.02	122.15
30	L	145	SER	CA-C-N	5.37	128.47	120.31
30	L	145	SER	C-N-CA	5.37	128.47	120.31
6	F	190	HIS	ND1-CE1-NE2	5.37	113.77	108.40
26	O	251	LEU	CA-C-N	5.37	128.22	120.38
26	O	251	LEU	C-N-CA	5.37	128.22	120.38
32	J	205	HIS	ND1-CE1-NE2	5.37	113.77	108.40
5	E	207	GLU	CA-C-N	5.37	131.77	122.64
5	E	207	GLU	C-N-CA	5.37	131.77	122.64
7	G	181	GLN	CA-CB-CG	-5.37	103.36	114.10
9	2	141	LEU	N-CA-C	-5.37	99.98	108.73
11	4	173	LEU	N-CA-C	-5.37	101.78	110.32
16	V	226	MET	CA-C-O	-5.37	115.17	120.70
21	S	135	MET	CB-CA-C	-5.37	101.10	110.17
22	P	3	ASP	CA-CB-CG	-5.37	107.23	112.60
23	Q	347	ILE	CA-C-N	5.37	127.47	120.28
23	Q	347	ILE	C-N-CA	5.37	127.47	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	R	25	LEU	CA-C-N	5.37	128.47	120.31
24	R	25	LEU	C-N-CA	5.37	128.47	120.31
31	M	169	THR	CA-C-O	5.37	127.10	121.19
20	N	781	LEU	CA-C-N	5.37	128.01	120.28
20	N	781	LEU	C-N-CA	5.37	128.01	120.28
22	P	305	LEU	CB-CA-C	-5.37	101.88	110.79
25	U	189	GLN	OE1-CD-NE2	5.37	127.97	122.60
6	F	234	ASP	CA-C-N	5.37	131.93	121.41
6	F	234	ASP	C-N-CA	5.37	131.93	121.41
15	W	159	THR	N-CA-CB	5.37	118.01	110.12
19	Z	586	PRO	CA-C-N	5.37	127.91	120.29
19	Z	586	PRO	C-N-CA	5.37	127.91	120.29
22	P	243	ILE	N-CA-CB	5.37	118.63	110.58
31	M	412	ARG	N-CA-CB	5.37	117.79	110.01
3	C	233	VAL	CA-C-O	5.36	126.53	120.95
16	V	290	VAL	O-C-N	5.36	127.35	121.83
19	Z	543	MET	CA-C-N	5.36	127.41	120.44
19	Z	543	MET	C-N-CA	5.36	127.41	120.44
21	S	417	ASP	CA-CB-CG	5.36	117.96	112.60
22	P	142	ARG	N-CA-C	5.36	116.81	111.07
27	H	263	MET	CG-SD-CE	-5.36	89.10	100.90
31	M	185	THR	CA-C-O	-5.36	114.94	121.05
7	G	147	ALA	CA-C-N	5.36	131.59	122.37
7	G	147	ALA	C-N-CA	5.36	131.59	122.37
19	Z	93	PRO	N-CA-C	5.36	120.58	113.40
1	A	30	LYS	CA-C-N	5.36	128.00	120.28
1	A	30	LYS	C-N-CA	5.36	128.00	120.28
16	V	252	ALA	N-CA-C	5.36	117.12	111.28
19	Z	520	LEU	CA-C-N	5.36	127.90	120.29
19	Z	520	LEU	C-N-CA	5.36	127.90	120.29
19	Z	791	VAL	O-C-N	-5.36	116.31	121.83
20	N	171	ASN	OD1-CG-ND2	5.36	127.96	122.60
20	N	860	GLU	CA-C-O	-5.36	115.08	121.89
21	S	348	SER	N-CA-CB	-5.36	102.80	110.57
25	U	9	VAL	O-C-N	5.36	128.75	123.18
27	H	176	ASP	CA-C-N	5.36	127.80	120.46
27	H	176	ASP	C-N-CA	5.36	127.80	120.46
22	P	354	LEU	CA-C-N	5.36	127.41	120.44
22	P	354	LEU	C-N-CA	5.36	127.41	120.44
22	P	364	ARG	CA-C-N	5.36	128.03	120.42
22	P	364	ARG	C-N-CA	5.36	128.03	120.42
12	5	172	TYR	CB-CA-C	-5.36	101.89	110.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	13	ASP	N-CA-CB	-5.36	101.98	110.28
30	L	76	LYS	CB-CA-C	5.36	118.62	109.99
9	2	202	ILE	N-CA-CB	5.36	118.61	110.58
11	4	50	ALA	N-CA-C	-5.36	99.39	110.80
21	S	99	SER	N-CA-CB	5.36	119.76	110.39
28	I	334	ILE	CA-CB-CG1	5.36	119.50	110.40
29	K	221	HIS	ND1-CE1-NE2	5.36	113.76	108.40
31	M	250	THR	CA-CB-OG1	5.36	117.64	109.60
31	M	396	GLY	CA-C-N	5.36	127.89	120.29
31	M	396	GLY	C-N-CA	5.36	127.89	120.29
30	L	120	THR	CA-C-O	-5.35	115.06	121.11
6	F	110	SER	CA-C-O	-5.35	114.88	120.55
6	F	186	GLU	N-CA-CB	5.35	118.58	110.28
7	G	166	ILE	CA-CB-CG2	-5.35	101.40	110.50
11	4	170	ARG	CD-NE-CZ	5.35	131.89	124.40
12	5	84	TYR	CA-CB-CG	-5.35	104.26	113.90
16	V	239	LYS	O-C-N	5.35	127.79	122.12
19	Z	792	ALA	CA-C-O	-5.35	114.75	120.42
21	S	318	VAL	CA-C-N	5.35	125.89	120.00
21	S	318	VAL	C-N-CA	5.35	125.89	120.00
21	S	376	ASP	CA-C-O	-5.35	115.20	120.82
23	Q	375	HIS	ND1-CE1-NE2	5.35	113.75	108.40
25	U	196	HIS	CB-CG-ND1	5.35	130.73	122.70
28	I	278	ALA	CB-CA-C	5.35	120.72	110.17
31	M	58	MET	N-CA-C	5.35	117.11	111.28
32	J	95	PHE	CA-C-N	5.35	129.67	122.93
32	J	95	PHE	C-N-CA	5.35	129.67	122.93
13	6	131	TYR	N-CA-C	-5.35	99.38	108.26
21	S	70	ASP	CA-C-N	5.35	127.79	120.46
21	S	70	ASP	C-N-CA	5.35	127.79	120.46
23	Q	167	VAL	CA-C-N	5.35	127.45	120.28
23	Q	167	VAL	C-N-CA	5.35	127.45	120.28
2	B	11	THR	N-CA-CB	5.35	120.68	111.00
7	G	200	ILE	CA-CB-CG1	5.35	119.50	110.40
16	V	121	TRP	CE2-CD2-CE3	5.35	124.15	118.80
21	S	50	ASP	N-CA-CB	5.35	117.98	110.12
23	Q	85	ALA	N-CA-CB	5.35	117.98	110.12
25	U	205	LEU	N-CA-CB	5.35	117.98	110.12
25	U	286	GLU	O-C-N	5.35	128.85	122.27
28	I	287	ILE	CA-C-O	-5.35	113.22	119.85
31	M	191	ILE	CA-C-N	5.35	131.89	121.41
31	M	191	ILE	C-N-CA	5.35	131.89	121.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	3	143	SER	N-CA-C	-5.35	105.49	112.23
11	4	155	ARG	N-CA-C	5.35	117.86	111.71
16	V	157	ILE	N-CA-C	-5.35	100.62	108.11
19	Z	102	HIS	ND1-CE1-NE2	5.35	113.75	108.40
19	Z	728	ALA	CA-C-O	-5.35	114.75	120.42
20	N	541	HIS	CA-C-N	5.35	127.88	120.29
20	N	541	HIS	C-N-CA	5.35	127.88	120.29
24	R	80	GLU	N-CA-C	-5.35	105.53	111.36
5	E	194	ALA	CA-C-N	5.35	127.40	120.56
5	E	194	ALA	C-N-CA	5.35	127.40	120.56
19	Z	803	PHE	N-CA-C	5.35	117.43	110.53
27	H	289	ALA	N-CA-C	-5.35	104.74	113.19
5	E	172	SER	CA-C-O	5.34	126.12	119.97
11	4	110	HIS	CB-CG-CD2	-5.34	124.25	131.20
20	N	652	ALA	N-CA-C	-5.34	105.45	111.28
21	S	387	THR	CA-C-O	5.34	125.95	119.38
31	M	102	VAL	CA-C-N	5.34	128.80	120.68
31	M	102	VAL	C-N-CA	5.34	128.80	120.68
2	B	139	TRP	N-CA-C	-5.34	98.51	108.02
20	N	18	GLN	CB-CG-CD	-5.34	103.52	112.60
31	M	247	THR	CA-CB-OG1	5.34	117.61	109.60
2	B	108	ALA	O-C-N	5.34	127.78	122.12
7	G	197	ILE	CA-C-N	5.34	127.78	120.46
7	G	197	ILE	C-N-CA	5.34	127.78	120.46
8	1	63	VAL	CB-CA-C	-5.34	104.58	111.20
9	2	143	LEU	N-CA-C	-5.34	98.67	108.02
16	V	33	ILE	CB-CA-C	5.34	118.79	110.83
21	S	103	ARG	N-CA-C	5.34	118.61	112.57
23	Q	118	LYS	CA-C-O	-5.34	114.89	120.55
25	U	22	HIS	CG-CD2-NE2	5.34	112.54	107.20
26	O	245	VAL	N-CA-C	-5.34	105.51	110.53
3	C	85	VAL	CA-C-O	-5.34	115.19	120.85
7	G	213	GLU	CA-C-O	5.34	125.90	120.24
17	T	164	ILE	CA-C-N	5.34	124.67	118.85
17	T	164	ILE	C-N-CA	5.34	124.67	118.85
20	N	685	GLN	CB-CA-C	-5.34	102.50	110.88
21	S	281	TRP	N-CA-C	5.34	116.78	111.07
26	O	175	ASP	O-C-N	5.34	127.78	122.12
30	L	130	ASP	CA-CB-CG	-5.34	107.26	112.60
20	N	467	ASN	O-C-N	5.34	127.80	122.03
23	Q	257	CYS	CA-C-N	5.34	127.87	120.29
23	Q	257	CYS	C-N-CA	5.34	127.87	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	H	85	GLN	CA-C-N	5.34	127.43	120.28
27	H	85	GLN	C-N-CA	5.34	127.43	120.28
5	E	30	GLY	O-C-N	-5.34	116.46	122.28
10	3	94	LEU	O-C-N	5.34	127.78	122.12
19	Z	100	ARG	NE-CZ-NH2	5.34	124.00	119.20
19	Z	872	VAL	N-CA-CB	5.34	117.40	110.57
21	S	308	ALA	CB-CA-C	-5.34	101.93	110.79
28	I	157	HIS	CA-C-N	5.34	131.29	121.85
28	I	157	HIS	C-N-CA	5.34	131.29	121.85
28	I	218	PRO	CA-C-O	-5.34	112.82	120.56
30	L	368	ALA	N-CA-CB	5.34	117.97	110.12
25	U	201	LEU	CA-C-N	5.33	127.43	120.28
25	U	201	LEU	C-N-CA	5.33	127.43	120.28
26	O	351	ASP	CA-C-O	-5.33	114.77	120.42
3	C	57	ASP	O-C-N	5.33	128.23	122.15
4	D	3	TYR	CB-CG-CD1	5.33	128.80	120.80
6	F	190	HIS	CB-CG-ND1	-5.33	114.70	122.70
16	V	48	GLY	CA-C-O	-5.33	114.43	120.30
16	V	218	LEU	CA-C-N	5.33	128.44	120.87
16	V	218	LEU	C-N-CA	5.33	128.44	120.87
32	J	310	ARG	CD-NE-CZ	-5.33	116.93	124.40
32	J	383	PHE	CA-C-N	5.33	127.37	120.44
32	J	383	PHE	C-N-CA	5.33	127.37	120.44
3	C	2	SER	N-CA-C	-5.33	100.62	108.99
14	7	125	HIS	CE1-NE2-CD2	-5.33	103.67	109.00
19	Z	488	ALA	CA-C-N	5.33	129.70	120.58
19	Z	488	ALA	C-N-CA	5.33	129.70	120.58
29	K	263	PHE	N-CA-C	-5.33	99.60	108.34
8	1	43	GLY	CA-C-N	5.33	131.86	121.41
8	1	43	GLY	C-N-CA	5.33	131.86	121.41
10	3	204	MET	N-CA-C	-5.33	99.45	110.80
12	5	124	ILE	O-C-N	5.33	127.32	121.83
21	S	281	TRP	CA-CB-CG	5.33	123.73	113.60
31	M	174	ARG	CA-C-N	5.33	127.76	120.46
31	M	174	ARG	C-N-CA	5.33	127.76	120.46
5	E	130	PRO	N-CD-CG	5.33	111.19	103.20
20	N	102	ALA	O-C-N	5.33	128.22	122.15
21	S	341	ARG	CA-C-N	5.33	127.42	120.28
21	S	341	ARG	C-N-CA	5.33	127.42	120.28
24	R	116	ASP	O-C-N	5.33	129.96	122.77
28	I	262	ASP	N-CA-C	-5.33	105.64	111.82
28	I	377	ASP	CA-C-O	5.33	125.52	119.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	229	PRO	N-CA-CB	5.33	108.32	103.15
14	7	258	MET	N-CA-C	-5.33	107.44	114.31
22	P	37	GLU	CB-CG-CD	-5.33	103.55	112.60
22	P	305	LEU	CA-C-N	5.33	127.86	120.29
22	P	305	LEU	C-N-CA	5.33	127.86	120.29
29	K	236	VAL	CA-C-O	-5.33	115.53	121.23
2	B	60	ARG	CA-C-O	5.33	126.23	119.95
9	2	90	GLY	CA-C-O	5.33	127.18	121.37
19	Z	275	MET	N-CA-CB	5.33	117.95	110.12
20	N	832	VAL	CA-C-N	5.33	127.42	120.28
20	N	832	VAL	C-N-CA	5.33	127.42	120.28
23	Q	158	LYS	CA-C-N	5.33	128.81	120.82
23	Q	158	LYS	C-N-CA	5.33	128.81	120.82
24	R	259	TYR	CB-CG-CD2	-5.33	112.81	120.80
16	V	65	TYR	N-CA-CB	5.32	120.89	110.88
19	Z	556	ARG	NH1-CZ-NH2	5.32	126.22	119.30
19	Z	797	LEU	CA-C-N	5.32	127.41	120.28
19	Z	797	LEU	C-N-CA	5.32	127.41	120.28
23	Q	108	GLU	CB-CG-CD	-5.32	103.55	112.60
25	U	146	ASP	CA-CB-CG	5.32	117.92	112.60
27	H	125	LEU	N-CA-C	-5.32	100.50	109.07
29	K	377	SER	CB-CA-C	-5.32	101.95	110.79
30	L	392	LYS	CA-C-N	5.32	127.68	120.44
30	L	392	LYS	C-N-CA	5.32	127.68	120.44
20	N	573	ASP	CA-C-O	5.32	127.19	121.44
28	I	172	THR	CA-C-O	-5.32	113.85	119.97
28	I	304	GLU	CA-C-N	5.32	127.75	120.46
28	I	304	GLU	C-N-CA	5.32	127.75	120.46
22	P	431	LYS	N-CA-CB	5.32	118.03	110.16
27	H	139	ARG	N-CA-CB	5.32	117.79	109.97
27	H	280	ILE	CA-C-O	5.32	127.43	120.78
28	I	206	THR	N-CA-CB	5.32	117.79	110.07
32	J	347	ILE	CA-C-N	5.32	127.36	120.44
32	J	347	ILE	C-N-CA	5.32	127.36	120.44
7	G	121	HIS	CB-CG-CD2	-5.32	124.28	131.20
11	4	88	LEU	CA-C-N	5.32	127.41	120.28
11	4	88	LEU	C-N-CA	5.32	127.41	120.28
22	P	417	ARG	NE-CZ-NH1	-5.32	116.18	121.50
25	U	118	ASN	N-CA-C	5.32	117.16	110.24
24	R	61	LEU	O-C-N	-5.32	116.39	122.93
28	I	94	GLU	CA-C-N	5.32	127.84	120.29
28	I	94	GLU	C-N-CA	5.32	127.84	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	59	GLU	CB-CA-C	-5.32	102.50	110.90
31	M	307	ARG	CD-NE-CZ	-5.32	116.95	124.40
2	B	156	PHE	N-CA-CB	5.32	120.62	111.00
19	Z	266	LEU	CA-C-O	5.32	126.18	120.55
21	S	272	PHE	CA-C-N	5.32	126.45	120.66
21	S	272	PHE	C-N-CA	5.32	126.45	120.66
21	S	446	SER	N-CA-C	-5.32	100.02	109.06
23	Q	192	SER	N-CA-CB	5.32	118.03	110.16
29	K	227	PHE	CA-C-N	5.32	130.17	123.10
29	K	227	PHE	C-N-CA	5.32	130.17	123.10
31	M	121	LYS	N-CA-CB	5.32	118.00	109.28
6	F	144	VAL	N-CA-C	-5.31	99.99	107.75
16	V	214	GLN	CA-C-N	5.31	127.40	120.28
16	V	214	GLN	C-N-CA	5.31	127.40	120.28
23	Q	102	ALA	N-CA-CB	5.31	119.47	110.49
23	Q	182	ASN	CB-CG-ND2	-5.31	108.43	116.40
26	O	255	TRP	N-CA-C	-5.31	105.60	111.71
30	L	54	TYR	CB-CG-CD1	-5.31	112.83	120.80
17	T	115	CYS	O-C-N	5.31	127.75	122.12
21	S	65	THR	CA-CB-OG1	5.31	117.57	109.60
25	U	16	LEU	CA-C-N	5.31	127.83	120.29
25	U	16	LEU	C-N-CA	5.31	127.83	120.29
10	3	82	ILE	N-CA-C	-5.31	100.67	108.85
19	Z	239	TYR	N-CA-CB	5.31	118.02	110.16
19	Z	689	ALA	N-CA-C	5.31	116.87	111.14
19	Z	893	ILE	CA-C-N	-5.31	113.61	122.64
19	Z	893	ILE	C-N-CA	-5.31	113.61	122.64
29	K	353	ASN	N-CA-CB	5.31	118.91	110.57
9	2	159	HIS	CG-CD2-NE2	5.31	112.51	107.20
20	N	381	THR	CB-CA-C	5.31	119.63	110.77
22	P	136	ILE	CA-C-N	5.31	127.39	120.28
22	P	136	ILE	C-N-CA	5.31	127.39	120.28
26	O	166	ILE	O-C-N	-5.31	116.36	121.83
27	H	183	GLN	OE1-CD-NE2	5.31	127.91	122.60
29	K	89	ILE	O-C-N	5.31	128.92	123.03
16	V	255	TYR	CA-CB-CG	5.31	123.45	113.90
5	E	236	GLU	O-C-N	5.30	127.74	122.12
12	5	155	SER	N-CA-C	-5.30	104.81	111.92
14	7	94	MET	CG-SD-CE	-5.30	89.23	100.90
14	7	179	PRO	N-CA-C	-5.30	102.25	112.01
28	I	277	HIS	CB-CG-ND1	-5.30	114.74	122.70
1	A	175	SER	CA-C-N	5.30	127.82	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	175	SER	C-N-CA	5.30	127.82	120.29
16	V	193	ILE	O-C-N	5.30	127.29	121.83
19	Z	327	ASN	CA-C-N	5.30	127.39	120.28
19	Z	327	ASN	C-N-CA	5.30	127.39	120.28
20	N	911	ILE	N-CA-CB	5.30	118.73	111.41
21	S	247	LEU	O-C-N	-5.30	116.61	122.07
25	U	242	LEU	CA-C-N	5.30	131.67	121.54
25	U	242	LEU	C-N-CA	5.30	131.67	121.54
3	C	23	TYR	CA-C-O	5.30	126.04	120.42
7	G	107	ILE	CA-CB-CG2	5.30	119.51	110.50
20	N	750	SER	N-CA-CB	5.30	117.80	110.17
27	H	419	SER	CA-C-O	-5.30	115.23	120.80
32	J	32	GLN	CA-C-N	5.30	127.65	120.44
32	J	32	GLN	C-N-CA	5.30	127.65	120.44
1	A	50	ILE	CA-CB-CG1	5.30	119.41	110.40
7	G	84	ASP	CA-CB-CG	-5.30	107.30	112.60
21	S	315	HIS	CG-CD2-NE2	5.30	112.50	107.20
21	S	325	HIS	CA-C-N	5.30	127.33	120.44
21	S	325	HIS	C-N-CA	5.30	127.33	120.44
23	Q	187	ARG	CA-C-N	5.30	127.33	120.44
23	Q	187	ARG	C-N-CA	5.30	127.33	120.44
24	R	179	ARG	CA-C-N	5.30	127.38	120.28
24	R	179	ARG	C-N-CA	5.30	127.38	120.28
26	O	295	GLU	CB-CA-C	-5.30	100.83	110.63
26	O	311	VAL	CA-C-O	-5.30	115.55	121.17
7	G	198	ILE	CA-C-N	5.30	127.38	120.28
7	G	198	ILE	C-N-CA	5.30	127.38	120.28
20	N	179	TYR	CB-CG-CD1	5.30	128.75	120.80
21	S	47	GLY	CA-C-N	5.30	127.38	120.28
21	S	47	GLY	C-N-CA	5.30	127.38	120.28
24	R	17	LEU	N-CA-CB	5.30	119.44	110.49
24	R	72	LYS	CB-CA-C	-5.30	102.00	110.79
24	R	109	GLU	CB-CG-CD	-5.30	103.60	112.60
31	M	274	ALA	CB-CA-C	-5.30	101.85	110.85
32	J	41	ASN	O-C-N	-5.30	116.11	122.15
19	Z	717	ALA	N-CA-C	-5.29	101.34	109.76
25	U	12	HIS	CA-C-N	5.29	124.91	119.56
25	U	12	HIS	C-N-CA	5.29	124.91	119.56
27	H	419	SER	CA-C-N	5.29	127.38	120.28
27	H	419	SER	C-N-CA	5.29	127.38	120.28
1	A	105	TYR	N-CA-CB	5.29	117.99	110.16
2	B	233	ILE	CA-C-O	-5.29	115.57	121.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	3	177	ARG	CB-CA-C	-5.29	101.85	110.85
14	7	237	THR	N-CA-C	-5.29	99.81	108.76
23	Q	89	VAL	CA-C-N	5.29	127.81	120.29
23	Q	89	VAL	C-N-CA	5.29	127.81	120.29
23	Q	271	VAL	CB-CA-C	-5.29	103.21	111.26
27	H	79	ASP	N-CA-C	5.29	117.05	111.28
6	F	94	ASP	CB-CA-C	-5.29	101.86	110.85
7	G	103	PHE	CB-CG-CD1	5.29	129.69	120.70
19	Z	866	GLN	O-C-N	5.29	128.41	122.22
20	N	39	SER	CA-C-O	-5.29	114.94	120.55
20	N	346	ASN	CA-CB-CG	-5.29	107.31	112.60
22	P	352	LYS	CA-C-N	5.29	128.35	120.31
22	P	352	LYS	C-N-CA	5.29	128.35	120.31
24	R	265	GLU	CA-C-N	5.29	131.65	121.54
24	R	265	GLU	C-N-CA	5.29	131.65	121.54
7	G	172	ALA	N-CA-C	5.29	117.05	111.28
20	N	880	ASN	CA-C-N	5.29	126.45	119.84
20	N	880	ASN	C-N-CA	5.29	126.45	119.84
23	Q	245	PRO	CA-C-N	5.29	128.35	120.31
23	Q	245	PRO	C-N-CA	5.29	128.35	120.31
23	Q	267	VAL	N-CA-CB	5.29	117.73	110.54
28	I	97	SER	CA-C-O	-5.29	115.25	120.70
12	5	87	SER	CA-C-O	-5.29	115.57	121.23
19	Z	161	HIS	CA-C-N	5.29	127.90	120.28
19	Z	161	HIS	C-N-CA	5.29	127.90	120.28
20	N	189	GLN	OE1-CD-NE2	-5.29	117.31	122.60
20	N	200	VAL	CA-CB-CG2	-5.29	101.41	110.40
20	N	831	ALA	CA-C-N	5.29	127.71	120.46
20	N	831	ALA	C-N-CA	5.29	127.71	120.46
23	Q	404	ILE	CA-C-N	5.29	127.37	120.28
23	Q	404	ILE	C-N-CA	5.29	127.37	120.28
25	U	19	VAL	N-CA-CB	5.29	117.73	110.54
28	I	86	LYS	CA-C-N	5.29	126.45	119.84
28	I	86	LYS	C-N-CA	5.29	126.45	119.84
30	L	32	GLU	CA-C-N	5.29	127.37	120.28
30	L	32	GLU	C-N-CA	5.29	127.37	120.28
30	L	330	HIS	CA-CB-CG	5.29	119.09	113.80
31	M	28	GLU	CA-C-N	5.29	127.32	120.44
31	M	28	GLU	C-N-CA	5.29	127.32	120.44
32	J	124	HIS	CE1-NE2-CD2	-5.29	103.71	109.00
32	J	132	ASP	N-CA-C	-5.29	98.12	109.81
13	6	168	ALA	N-CA-CB	5.29	119.42	110.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	44	TYR	N-CA-CB	5.29	117.89	110.12
1	A	126	THR	CA-CB-CG2	5.29	119.49	110.50
8	1	110	HIS	N-CA-C	5.29	117.04	111.28
26	O	369	HIS	CA-CB-CG	-5.29	108.52	113.80
30	L	149	ILE	N-CA-C	-5.29	104.44	111.05
16	V	277	LYS	N-CA-C	-5.28	102.03	109.96
19	Z	169	GLU	N-CA-C	5.28	117.79	111.71
19	Z	352	HIS	CG-CD2-NE2	5.28	112.48	107.20
20	N	827	LYS	CB-CA-C	-5.28	102.58	110.88
21	S	210	HIS	CE1-NE2-CD2	-5.28	103.72	109.00
29	K	29	PHE	O-C-N	5.28	129.81	123.36
29	K	137	ASN	O-C-N	-5.28	116.23	121.88
6	F	65	HIS	CB-CG-CD2	-5.28	124.33	131.20
12	5	127	LEU	CA-C-O	5.28	126.15	120.55
19	Z	815	HIS	ND1-CE1-NE2	5.28	113.68	108.40
23	Q	211	ASP	N-CA-C	5.28	116.84	111.14
23	Q	324	ALA	N-CA-CB	5.28	117.98	110.16
30	L	77	GLN	CB-CG-CD	-5.28	103.62	112.60
31	M	258	GLN	CA-C-N	5.28	127.36	120.28
31	M	258	GLN	C-N-CA	5.28	127.36	120.28
13	6	95	ILE	CB-CA-C	-5.28	105.01	112.14
23	Q	401	LEU	N-CA-C	-5.28	105.53	111.28
24	R	121	LEU	CB-CA-C	-5.28	102.59	110.88
15	W	126	LYS	CA-C-N	5.28	127.78	120.29
15	W	126	LYS	C-N-CA	5.28	127.78	120.29
18	Y	61	GLU	CA-C-N	5.28	127.35	120.28
18	Y	61	GLU	C-N-CA	5.28	127.35	120.28
19	Z	751	TYR	CA-C-O	5.28	126.02	120.42
23	Q	79	SER	N-CA-C	5.28	117.94	111.82
30	L	168	THR	N-CA-C	-5.28	105.44	111.14
30	L	239	HIS	CA-CB-CG	5.28	119.08	113.80
10	3	67	LEU	CA-C-N	5.28	128.33	120.31
10	3	67	LEU	C-N-CA	5.28	128.33	120.31
20	N	485	ALA	O-C-N	-5.28	115.53	122.39
22	P	139	GLU	CA-C-N	5.28	127.21	120.56
22	P	139	GLU	C-N-CA	5.28	127.21	120.56
23	Q	268	GLN	CG-CD-NE2	5.28	124.31	116.40
24	R	108	ALA	CA-C-O	-5.28	114.96	120.55
27	H	247	GLN	OE1-CD-NE2	5.28	127.88	122.60
30	L	100	GLN	CA-C-N	5.28	128.20	120.71
30	L	100	GLN	C-N-CA	5.28	128.20	120.71
31	M	229	TYR	CB-CG-CD2	-5.28	112.89	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	E	108	THR	CA-C-N	5.27	127.69	120.46
5	E	108	THR	C-N-CA	5.27	127.69	120.46
24	R	261	PHE	CA-C-N	5.27	127.35	120.28
24	R	261	PHE	C-N-CA	5.27	127.35	120.28
26	O	35	HIS	CB-CG-ND1	-5.27	114.79	122.70
4	D	48	LYS	CA-C-O	5.27	124.48	118.47
14	7	146	LYS	CA-C-N	5.27	127.87	120.28
14	7	146	LYS	C-N-CA	5.27	127.87	120.28
20	N	4	SER	CA-C-N	5.27	129.53	120.72
20	N	4	SER	C-N-CA	5.27	129.53	120.72
20	N	815	ALA	N-CA-C	-5.27	100.25	109.48
32	J	14	GLY	CA-C-O	5.27	124.97	119.07
10	3	88	MET	CA-C-N	5.27	128.32	120.31
10	3	88	MET	C-N-CA	5.27	128.32	120.31
20	N	145	HIS	CE1-NE2-CD2	-5.27	103.73	109.00
28	I	116	ILE	CA-C-N	5.27	130.77	122.34
28	I	116	ILE	C-N-CA	5.27	130.77	122.34
28	I	143	LEU	O-C-N	-5.27	115.98	122.25
6	F	29	VAL	N-CA-CB	5.27	119.36	110.56
19	Z	294	MET	CB-CA-C	-5.27	100.55	110.67
19	Z	752	HIS	ND1-CE1-NE2	5.27	113.67	108.40
20	N	412	HIS	CB-CG-CD2	-5.27	124.35	131.20
26	O	105	LYS	CA-C-N	5.27	131.61	121.54
26	O	105	LYS	C-N-CA	5.27	131.61	121.54
28	I	287	ILE	O-C-N	5.27	128.95	122.05
2	B	76	TYR	CA-CB-CG	5.27	123.38	113.90
19	Z	118	ASN	CA-C-N	5.27	127.29	120.44
19	Z	118	ASN	C-N-CA	5.27	127.29	120.44
19	Z	312	GLU	CA-C-N	5.27	131.60	121.54
19	Z	312	GLU	C-N-CA	5.27	131.60	121.54
20	N	417	LYS	CA-C-N	5.27	130.36	121.14
20	N	417	LYS	C-N-CA	5.27	130.36	121.14
20	N	610	VAL	CA-C-N	5.27	131.60	121.54
20	N	610	VAL	C-N-CA	5.27	131.60	121.54
20	N	734	GLN	O-C-N	5.27	127.50	122.07
21	S	458	GLU	N-CA-CB	5.27	118.12	109.95
26	O	152	HIS	CA-C-N	5.27	127.34	120.28
26	O	152	HIS	C-N-CA	5.27	127.34	120.28
27	H	82	ALA	N-CA-C	5.27	117.02	111.28
27	H	149	ILE	CA-C-N	5.27	130.58	122.42
27	H	149	ILE	C-N-CA	5.27	130.58	122.42
6	F	63	ILE	N-CA-C	-5.27	100.83	108.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	748	LEU	N-CA-CB	5.27	117.95	110.16
24	R	46	ARG	NE-CZ-NH2	-5.27	114.46	119.20
30	L	164	GLU	CA-C-N	5.27	126.31	119.78
30	L	164	GLU	C-N-CA	5.27	126.31	119.78
4	D	28	LYS	CA-C-N	5.26	131.73	121.41
4	D	28	LYS	C-N-CA	5.26	131.73	121.41
5	E	172	SER	N-CA-C	5.26	117.93	111.82
12	5	135	VAL	CA-C-N	5.26	128.34	120.87
12	5	135	VAL	C-N-CA	5.26	128.34	120.87
15	W	55	ALA	CA-C-N	5.26	131.59	121.54
15	W	55	ALA	C-N-CA	5.26	131.59	121.54
20	N	189	GLN	N-CA-C	-5.26	105.52	112.94
20	N	611	ASN	OD1-CG-ND2	5.26	127.86	122.60
20	N	823	LYS	N-CA-CB	5.26	118.33	110.22
24	R	92	GLU	CA-C-N	5.26	128.31	120.31
24	R	92	GLU	C-N-CA	5.26	128.31	120.31
26	O	288	HIS	N-CA-C	-5.26	102.96	110.59
5	E	161	THR	CA-CB-OG1	5.26	117.49	109.60
14	7	220	LEU	CA-C-N	5.26	127.76	120.29
14	7	220	LEU	C-N-CA	5.26	127.76	120.29
20	N	24	LEU	CA-C-N	5.26	127.28	120.44
20	N	24	LEU	C-N-CA	5.26	127.28	120.44
12	5	185	PHE	O-C-N	5.26	129.48	122.43
16	V	202	SER	N-CA-C	5.26	122.01	110.80
19	Z	334	ALA	CA-C-N	5.26	127.60	120.44
19	Z	334	ALA	C-N-CA	5.26	127.60	120.44
23	Q	367	GLN	N-CA-C	5.26	117.09	111.36
29	K	414	HIS	CA-C-N	5.26	128.27	120.17
29	K	414	HIS	C-N-CA	5.26	128.27	120.17
31	M	396	GLY	O-C-N	-5.26	117.14	122.19
5	E	150	GLY	CA-C-N	5.26	125.51	119.83
5	E	150	GLY	C-N-CA	5.26	125.51	119.83
9	2	48	GLY	CA-C-N	5.26	130.16	122.69
9	2	48	GLY	C-N-CA	5.26	130.16	122.69
9	2	212	SER	CA-C-O	5.26	124.60	119.08
19	Z	444	ALA	CA-C-O	-5.26	114.98	120.55
21	S	146	ARG	CB-CA-C	-5.26	102.62	110.88
26	O	217	LEU	CA-C-O	-5.26	114.97	120.55
28	I	182	GLU	CA-CB-CG	5.26	124.62	114.10
1	A	86	ASP	CA-C-O	-5.26	113.92	119.97
20	N	241	ASN	OD1-CG-ND2	5.26	127.86	122.60
27	H	365	GLU	CA-C-O	5.26	127.29	121.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	L	325	ASP	CA-CB-CG	5.26	117.86	112.60
7	G	227	ILE	CA-C-N	5.26	131.85	122.13
7	G	227	ILE	C-N-CA	5.26	131.85	122.13
10	3	177	ARG	CG-CD-NE	-5.26	100.44	112.00
12	5	237	HIS	CB-CG-CD2	-5.26	124.37	131.20
19	Z	659	LEU	N-CA-CB	5.26	117.94	110.16
26	O	332	HIS	ND1-CE1-NE2	5.26	113.66	108.40
30	L	157	ARG	CA-C-O	5.25	126.12	120.55
2	B	234	ALA	CB-CA-C	-5.25	102.62	110.50
19	Z	283	THR	N-CA-C	5.25	117.09	111.36
19	Z	771	LEU	CA-C-N	-5.25	113.73	120.72
19	Z	771	LEU	C-N-CA	-5.25	113.73	120.72
20	N	570	LEU	CA-C-N	5.25	127.75	120.29
20	N	570	LEU	C-N-CA	5.25	127.75	120.29
21	S	263	ALA	CB-CA-C	-5.25	102.07	110.79
22	P	323	ASP	N-CA-CB	5.25	117.69	110.07
23	Q	375	HIS	CA-CB-CG	5.25	119.05	113.80
26	O	71	VAL	O-C-N	5.25	128.50	123.14
31	M	372	HIS	CA-C-N	5.25	128.30	120.31
31	M	372	HIS	C-N-CA	5.25	128.30	120.31
32	J	307	ARG	NE-CZ-NH2	5.25	123.93	119.20
5	E	61	PRO	N-CA-C	-5.25	107.96	114.68
10	3	59	ASP	CA-CB-CG	5.25	117.85	112.60
13	6	49	ILE	CB-CA-C	5.25	118.53	110.55
21	S	162	TYR	N-CA-CB	5.25	117.84	110.12
21	S	315	HIS	ND1-CE1-NE2	5.25	113.65	108.40
22	P	56	THR	CA-C-N	5.25	127.75	120.29
22	P	56	THR	C-N-CA	5.25	127.75	120.29
32	J	106	ASN	O-C-N	5.25	129.37	122.33
15	W	80	PRO	CA-C-O	5.25	127.06	119.34
17	T	311	TRP	CA-CB-CG	5.25	123.58	113.60
5	E	233	GLU	CA-C-N	5.25	127.31	120.28
5	E	233	GLU	C-N-CA	5.25	127.31	120.28
6	F	178	GLU	N-CA-C	5.25	117.00	111.28
12	5	121	GLN	CA-CB-CG	5.25	124.60	114.10
15	W	5	SER	N-CA-CB	5.25	119.14	110.69
15	W	40	LYS	N-CA-CB	5.25	117.93	110.16
19	Z	366	ASP	CA-C-N	5.25	131.56	121.54
19	Z	366	ASP	C-N-CA	5.25	131.56	121.54
20	N	612	ASP	O-C-N	5.25	128.13	122.15
20	N	926	GLU	O-C-N	-5.25	116.65	121.37
25	U	12	HIS	CE1-NE2-CD2	-5.25	103.75	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	387	LEU	CA-C-N	5.25	127.84	120.28
31	M	387	LEU	C-N-CA	5.25	127.84	120.28
31	M	415	ALA	CA-C-N	5.25	131.00	121.92
31	M	415	ALA	C-N-CA	5.25	131.00	121.92
24	R	252	SER	O-C-N	5.25	129.57	122.59
31	M	345	LEU	N-CA-CB	5.25	117.92	110.16
1	A	215	ILE	N-CA-C	-5.25	100.31	108.86
17	T	115	CYS	CB-CA-C	-5.25	102.08	110.79
17	T	237	GLN	CA-C-N	5.25	127.74	120.29
17	T	237	GLN	C-N-CA	5.25	127.74	120.29
20	N	99	THR	CA-C-N	5.25	127.17	120.56
20	N	99	THR	C-N-CA	5.25	127.17	120.56
28	I	154	HIS	CB-CA-C	-5.25	100.57	110.01
28	I	365	PHE	CA-CB-CG	5.25	119.05	113.80
5	E	166	ASP	N-CA-C	-5.24	107.01	113.41
16	V	129	THR	OG1-CB-CG2	-5.24	98.81	109.30
27	H	112	ILE	CA-C-O	-5.24	114.88	120.59
27	H	367	ASP	CA-CB-CG	-5.24	107.36	112.60
28	I	153	ASN	CA-C-N	5.24	131.87	122.38
28	I	153	ASN	C-N-CA	5.24	131.87	122.38
20	N	547	GLY	CA-C-N	5.24	127.73	120.29
20	N	547	GLY	C-N-CA	5.24	127.73	120.29
9	2	192	GLU	CA-C-N	5.24	127.73	120.29
9	2	192	GLU	C-N-CA	5.24	127.73	120.29
14	7	145	SER	CA-C-N	5.24	127.73	120.29
14	7	145	SER	C-N-CA	5.24	127.73	120.29
31	M	189	SER	O-C-N	-5.24	116.57	122.12
31	M	260	VAL	CA-C-O	-5.24	115.15	121.54
10	3	105	THR	CB-CA-C	5.24	118.17	109.53
19	Z	711	SER	CA-C-N	5.24	127.25	120.44
19	Z	711	SER	C-N-CA	5.24	127.25	120.44
19	Z	720	GLU	N-CA-C	-5.24	99.64	110.80
24	R	229	ILE	N-CA-CB	5.24	116.68	110.55
17	T	112	LEU	CA-C-N	5.24	127.25	120.44
17	T	112	LEU	C-N-CA	5.24	127.25	120.44
23	Q	288	LYS	N-CA-CB	5.24	117.60	110.01
6	F	175	HIS	CG-CD2-NE2	5.24	112.44	107.20
7	G	174	LYS	CA-C-N	5.24	127.72	120.29
7	G	174	LYS	C-N-CA	5.24	127.72	120.29
16	V	175	ARG	CA-C-O	5.24	126.10	120.55
20	N	611	ASN	CB-CG-OD1	-5.24	110.33	120.80
25	U	114	ARG	CB-CA-C	-5.24	102.10	110.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	164	TYR	CB-CG-CD2	5.24	128.65	120.80
31	M	211	HIS	CB-CG-CD2	-5.24	124.39	131.20
4	D	2	SER	CA-C-N	5.23	128.28	120.95
4	D	2	SER	C-N-CA	5.23	128.28	120.95
19	Z	189	LYS	N-CA-CB	5.23	118.92	110.65
19	Z	838	ARG	CA-C-N	5.23	125.44	120.31
19	Z	838	ARG	C-N-CA	5.23	125.44	120.31
24	R	25	LEU	CB-CA-C	-5.23	102.10	110.79
32	J	15	LYS	CA-CB-CG	5.23	124.57	114.10
32	J	239	ARG	N-CA-C	5.23	116.98	111.28
3	C	27	ALA	CA-C-N	5.23	127.63	120.46
3	C	27	ALA	C-N-CA	5.23	127.63	120.46
6	F	232	PHE	CA-CB-CG	5.23	119.03	113.80
7	G	45	GLY	CA-C-O	-5.23	116.34	121.05
9	2	241	ARG	CA-C-O	-5.23	114.51	120.32
15	W	155	ALA	CA-C-N	5.23	127.29	120.28
15	W	155	ALA	C-N-CA	5.23	127.29	120.28
11	4	185	LYS	N-CA-C	-5.23	99.92	108.76
16	V	53	VAL	O-C-N	-5.23	117.40	123.00
26	O	293	PHE	CA-C-N	5.23	127.29	120.28
26	O	293	PHE	C-N-CA	5.23	127.29	120.28
29	K	193	GLN	N-CA-C	5.23	116.98	111.28
29	K	400	GLU	CB-CG-CD	-5.23	103.71	112.60
31	M	419	THR	CA-C-O	-5.23	115.51	121.68
2	B	73	GLY	O-C-N	5.23	128.43	123.57
3	C	136	TYR	CB-CG-CD2	-5.23	112.96	120.80
5	E	131	GLY	N-CA-C	-5.23	108.18	114.66
10	3	174	ALA	CB-CA-C	-5.23	102.11	110.79
28	I	84	GLN	CA-C-O	-5.23	115.00	120.80
4	D	82	LEU	N-CA-C	5.23	117.25	108.73
5	E	52	LYS	N-CA-C	-5.23	105.76	111.82
13	6	32	TYR	CA-C-O	-5.23	113.03	120.51
19	Z	794	ALA	CB-CA-C	-5.23	102.11	110.79
31	M	318	ASN	CA-C-O	5.23	126.09	120.55
16	V	303	MET	O-C-N	-5.23	116.19	122.15
19	Z	369	ARG	CD-NE-CZ	-5.23	117.08	124.40
22	P	61	VAL	CB-CA-C	-5.23	105.01	112.22
22	P	358	VAL	CB-CA-C	-5.23	105.08	112.14
23	Q	402	GLU	CA-C-O	5.23	125.96	120.42
7	G	21	VAL	N-CA-CB	-5.22	104.15	111.25
13	6	105	SER	CB-CA-C	-5.22	101.97	110.85
25	U	78	MET	CA-C-N	5.22	127.23	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	U	78	MET	C-N-CA	5.22	127.23	120.44
29	K	47	LEU	CA-C-N	5.22	127.71	120.29
29	K	47	LEU	C-N-CA	5.22	127.71	120.29
30	L	184	CYS	N-CA-C	-5.22	100.72	109.24
3	C	100	GLN	CA-C-O	-5.22	115.32	120.70
14	7	161	GLY	CA-C-N	5.22	128.68	121.26
14	7	161	GLY	C-N-CA	5.22	128.68	121.26
19	Z	27	LYS	O-C-N	-5.22	116.16	122.48
20	N	213	PHE	CA-C-N	5.22	127.14	120.56
20	N	213	PHE	C-N-CA	5.22	127.14	120.56
20	N	452	ASN	N-CA-CB	5.22	119.32	110.49
21	S	209	TYR	N-CA-C	5.22	117.05	111.36
29	K	221	HIS	CA-C-O	-5.22	115.34	120.82
6	F	84	LEU	CA-C-N	5.22	127.28	120.28
6	F	84	LEU	C-N-CA	5.22	127.28	120.28
19	Z	165	GLU	N-CA-CB	-5.22	102.44	110.12
19	Z	352	HIS	CE1-NE2-CD2	-5.22	103.78	109.00
22	P	399	ASN	CA-CB-CG	5.22	117.82	112.60
27	H	396	ALA	CA-C-N	5.22	127.61	120.46
27	H	396	ALA	C-N-CA	5.22	127.61	120.46
28	I	357	ASP	N-CA-CB	5.22	118.48	110.49
28	I	384	ILE	CB-CA-C	-5.22	105.18	112.02
9	2	189	MET	N-CA-CB	5.22	119.31	110.49
12	5	255	HIS	ND1-CE1-NE2	5.22	113.62	108.40
15	W	195	ALA	CB-CA-C	-5.22	102.67	110.50
21	S	270	SER	CA-C-O	5.22	127.97	120.51
23	Q	228	ALA	CA-C-O	5.22	126.08	120.55
6	F	168	ALA	CA-C-N	5.22	127.27	120.28
6	F	168	ALA	C-N-CA	5.22	127.27	120.28
17	T	170	TYR	N-CA-CB	5.22	118.37	110.28
19	Z	164	GLY	CA-C-O	-5.22	115.38	120.75
22	P	29	PRO	O-C-N	5.22	128.95	122.22
28	I	338	ASP	CA-C-O	-5.22	114.58	119.80
29	K	398	ASP	N-CA-CB	5.22	117.64	110.07
1	A	27	TYR	O-C-N	5.22	128.69	122.27
2	B	18	LYS	CA-C-O	-5.22	115.50	121.40
6	F	145	PHE	CA-CB-CG	-5.22	108.58	113.80
10	3	99	ARG	CA-C-N	5.22	130.94	122.07
10	3	99	ARG	C-N-CA	5.22	130.94	122.07
15	W	123	ASP	N-CA-C	5.22	116.65	111.07
19	Z	825	MET	CG-SD-CE	-5.22	89.42	100.90
20	N	690	ALA	CB-CA-C	-5.22	102.13	110.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	218	ALA	CA-C-O	5.22	126.07	120.70
32	J	57	ARG	N-CA-C	-5.22	105.59	111.28
3	C	5	TYR	N-CA-CB	5.21	118.17	110.56
3	C	81	SER	CA-C-N	5.21	128.24	120.31
3	C	81	SER	C-N-CA	5.21	128.24	120.31
7	G	58	LEU	CA-C-N	5.21	130.78	122.59
7	G	58	LEU	C-N-CA	5.21	130.78	122.59
11	4	171	PHE	N-CA-C	5.21	116.77	111.14
14	7	133	HIS	CA-C-N	5.21	127.69	120.29
14	7	133	HIS	C-N-CA	5.21	127.69	120.29
16	V	233	ASP	CA-C-N	5.21	127.27	120.28
16	V	233	ASP	C-N-CA	5.21	127.27	120.28
19	Z	574	GLU	N-CA-CB	-5.21	102.45	110.12
19	Z	868	HIS	CA-CB-CG	-5.21	108.58	113.80
26	O	140	GLU	CA-C-O	5.21	125.95	120.42
2	B	194	THR	N-CA-CB	5.21	118.36	110.28
6	F	219	LEU	CA-C-O	5.21	126.83	120.99
20	N	612	ASP	CA-C-O	-5.21	114.89	120.42
22	P	215	GLN	N-CA-CB	5.21	117.88	110.16
29	K	88	VAL	CB-CA-C	-5.21	102.89	110.81
13	6	69	LYS	N-CA-CB	5.21	119.30	110.49
14	7	192	PRO	CB-CA-C	5.21	119.72	112.11
29	K	183	LEU	O-C-N	-5.21	115.33	121.32
30	L	40	LEU	CA-C-N	5.21	127.27	120.28
30	L	40	LEU	C-N-CA	5.21	127.27	120.28
13	6	133	VAL	CA-CB-CG2	5.21	119.26	110.40
19	Z	869	THR	CA-CB-OG1	5.21	117.42	109.60
20	N	53	GLY	O-C-N	5.21	129.47	122.70
1	A	224	ASN	OD1-CG-ND2	-5.21	117.39	122.60
27	H	188	ARG	CB-CA-C	-5.21	102.14	110.79
31	M	40	SER	CA-C-N	5.21	127.78	120.28
31	M	40	SER	C-N-CA	5.21	127.78	120.28
3	C	66	TYR	N-CA-CB	5.21	118.74	110.57
9	2	81	SER	N-CA-C	-5.21	98.31	109.81
19	Z	78	LEU	CA-C-N	5.21	127.21	120.44
19	Z	78	LEU	C-N-CA	5.21	127.21	120.44
19	Z	241	PRO	N-CA-C	5.21	123.19	112.47
22	P	276	LEU	N-CA-CB	5.21	118.24	110.22
24	R	297	ARG	O-C-N	5.21	127.43	122.07
28	I	184	TYR	N-CA-CB	5.21	118.02	109.95
11	4	71	ASN	N-CA-CB	5.21	117.56	110.01
11	4	156	ALA	CA-C-N	5.21	128.84	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	4	156	ALA	C-N-CA	5.21	128.84	120.30
26	O	329	LYS	CA-CB-CG	-5.21	103.69	114.10
30	L	227	ARG	CA-C-O	-5.21	115.03	120.55
32	J	90	HIS	N-CA-CB	5.21	118.06	110.30
32	J	159	LYS	N-CA-C	5.21	116.95	111.28
5	E	26	TYR	CB-CG-CD1	5.20	128.60	120.80
5	E	182	GLN	CA-C-N	5.20	127.52	120.44
5	E	182	GLN	C-N-CA	5.20	127.52	120.44
6	F	20	HIS	N-CA-CB	5.20	117.77	110.12
6	F	232	PHE	CA-C-O	-5.20	114.90	120.42
14	7	181	LEU	CB-CA-C	-5.20	100.06	110.42
19	Z	591	ALA	CA-C-N	5.20	127.25	120.28
19	Z	591	ALA	C-N-CA	5.20	127.25	120.28
23	Q	8	GLU	N-CA-CB	5.20	117.77	110.12
23	Q	209	THR	CA-CB-OG1	5.20	117.40	109.60
31	M	70	GLN	CA-C-N	5.20	127.68	120.29
31	M	70	GLN	C-N-CA	5.20	127.68	120.29
2	B	113	ARG	CA-C-O	-5.20	114.91	120.42
23	Q	186	ALA	O-C-N	5.20	127.43	122.07
24	R	212	GLU	O-C-N	-5.20	116.10	122.55
27	H	368	ILE	CA-C-N	5.20	129.74	121.99
27	H	368	ILE	C-N-CA	5.20	129.74	121.99
3	C	9	THR	O-C-N	-5.20	116.22	122.15
17	T	148	ARG	CA-C-N	5.20	127.25	120.28
17	T	148	ARG	C-N-CA	5.20	127.25	120.28
19	Z	28	SER	CB-CA-C	-5.20	102.16	110.79
19	Z	61	GLU	CA-C-N	5.20	127.25	120.28
19	Z	61	GLU	C-N-CA	5.20	127.25	120.28
27	H	58	LYS	N-CA-C	5.20	117.03	111.36
27	H	320	ALA	CA-C-O	-5.20	114.74	120.36
30	L	361	CYS	N-CA-CB	-5.20	102.47	110.12
32	J	60	ARG	CA-C-N	5.20	128.22	120.31
32	J	60	ARG	C-N-CA	5.20	128.22	120.31
2	B	231	ALA	N-CA-C	-5.20	105.61	111.28
8	1	83	ALA	CA-C-N	5.20	127.51	120.44
8	1	83	ALA	C-N-CA	5.20	127.51	120.44
19	Z	464	ALA	CA-C-N	5.20	127.20	120.44
19	Z	464	ALA	C-N-CA	5.20	127.20	120.44
20	N	2	ILE	CB-CA-C	5.20	115.85	110.70
20	N	133	ILE	N-CA-CB	5.20	117.61	110.54
20	N	156	GLU	CA-C-N	5.20	128.21	120.31
20	N	156	GLU	C-N-CA	5.20	128.21	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	596	ASN	CB-CA-C	-5.20	102.01	110.85
21	S	77	GLN	O-C-N	5.20	127.70	122.09
25	U	12	HIS	CA-C-O	-5.20	115.06	120.88
29	K	193	GLN	CA-C-N	5.20	127.58	120.46
29	K	193	GLN	C-N-CA	5.20	127.58	120.46
30	L	308	ARG	N-CA-C	-5.20	103.59	111.34
16	V	219	ASN	CB-CG-OD1	-5.20	110.41	120.80
20	N	541	HIS	CE1-NE2-CD2	-5.20	103.80	109.00
24	R	175	ASP	CA-CB-CG	5.20	117.80	112.60
30	L	74	VAL	CA-C-N	5.20	127.67	120.29
30	L	74	VAL	C-N-CA	5.20	127.67	120.29
1	A	154	CYS	N-CA-C	-5.20	101.22	109.59
15	W	17	ARG	NE-CZ-NH1	5.20	126.69	121.50
16	V	254	ASN	N-CA-CB	5.20	118.33	110.28
19	Z	746	ARG	NE-CZ-NH2	-5.20	114.52	119.20
21	S	484	ASN	CA-C-N	5.20	127.24	120.28
21	S	484	ASN	C-N-CA	5.20	127.24	120.28
22	P	16	MET	N-CA-C	5.20	116.94	111.28
32	J	251	ILE	N-CA-CB	5.20	119.80	111.23
2	B	145	TYR	CA-CB-CG	-5.19	104.55	113.90
16	V	223	LYS	O-C-N	-5.19	115.29	122.46
26	O	35	HIS	CE1-NE2-CD2	-5.19	103.81	109.00
2	B	124	SER	CA-C-O	-5.19	115.30	121.89
7	G	227	ILE	N-CA-C	-5.19	102.15	109.21
15	W	147	GLU	N-CA-CB	5.19	117.68	109.94
19	Z	677	HIS	CB-CA-C	-5.19	100.70	110.67
20	N	242	LEU	CA-C-N	5.19	127.24	120.28
20	N	242	LEU	C-N-CA	5.19	127.24	120.28
20	N	557	TYR	CA-C-N	5.19	128.63	121.26
20	N	557	TYR	C-N-CA	5.19	128.63	121.26
20	N	841	LYS	CA-C-O	5.19	125.92	120.42
24	R	151	TYR	CB-CG-CD2	5.19	128.59	120.80
26	O	40	GLN	N-CA-C	5.19	117.02	111.36
28	I	370	SER	CA-C-N	5.19	127.66	120.29
28	I	370	SER	C-N-CA	5.19	127.66	120.29
1	A	37	LEU	N-CA-C	-5.19	102.07	110.32
4	D	163	LYS	CB-CA-C	-5.19	102.07	110.79
6	F	231	PRO	CA-C-N	5.19	127.66	120.29
6	F	231	PRO	C-N-CA	5.19	127.66	120.29
17	T	92	GLN	N-CA-C	-5.19	100.44	108.90
19	Z	301	HIS	CA-C-N	5.19	125.74	119.98
19	Z	301	HIS	C-N-CA	5.19	125.74	119.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	523	GLY	CA-C-N	5.19	127.24	120.28
19	Z	523	GLY	C-N-CA	5.19	127.24	120.28
20	N	814	PRO	O-C-N	5.19	129.47	123.14
21	S	294	ILE	CA-C-O	-5.19	115.35	120.85
21	S	343	GLN	CA-C-O	5.19	126.05	120.55
1	A	186	LYS	N-CA-C	5.19	121.85	110.80
3	C	36	GLY	CA-C-N	5.19	130.18	122.71
3	C	36	GLY	C-N-CA	5.19	130.18	122.71
9	2	50	VAL	N-CA-C	-5.19	100.40	108.81
10	3	27	ARG	N-CA-CB	5.19	117.60	109.97
16	V	214	GLN	N-CA-C	5.19	116.94	111.28
7	G	228	VAL	O-C-N	-5.19	115.19	121.10
19	Z	125	ILE	CB-CA-C	5.19	118.82	112.02
22	P	28	LEU	N-CA-C	5.19	119.99	113.25
22	P	51	GLU	CB-CA-C	-5.19	101.84	110.14
22	P	397	VAL	N-CA-CB	5.19	117.59	110.54
3	C	41	ASP	CA-CB-CG	5.19	117.79	112.60
4	D	176	GLU	N-CA-C	-5.19	105.71	111.36
19	Z	677	HIS	CA-CB-CG	-5.19	108.61	113.80
22	P	417	ARG	CA-C-N	5.19	125.99	120.13
22	P	417	ARG	C-N-CA	5.19	125.99	120.13
26	O	203	ALA	CA-C-O	-5.19	114.24	120.10
19	Z	398	TRP	N-CA-C	5.18	117.73	111.40
24	R	276	ALA	CB-CA-C	-5.18	102.19	110.79
28	I	166	ASP	CA-CB-CG	-5.18	107.42	112.60
2	B	192	ILE	CA-C-N	5.18	127.65	120.29
2	B	192	ILE	C-N-CA	5.18	127.65	120.29
5	E	162	PHE	N-CA-C	-5.18	101.25	109.59
19	Z	740	ARG	CA-C-O	5.18	125.91	120.42
20	N	81	ALA	CA-C-N	5.18	128.19	120.31
20	N	81	ALA	C-N-CA	5.18	128.19	120.31
20	N	330	SER	CB-CA-C	-5.18	102.19	110.79
20	N	615	ARG	NE-CZ-NH2	-5.18	114.54	119.20
23	Q	412	ASP	N-CA-C	5.18	116.93	111.28
28	I	247	PHE	CA-CB-CG	-5.18	108.62	113.80
32	J	51	GLU	CA-C-N	5.18	127.65	120.29
32	J	51	GLU	C-N-CA	5.18	127.65	120.29
6	F	225	ASP	CB-CA-C	-5.18	101.31	109.34
19	Z	335	ARG	CD-NE-CZ	-5.18	117.15	124.40
30	L	161	GLU	CA-C-O	5.18	126.04	120.55
30	L	175	ARG	O-C-N	5.18	127.61	122.12
13	6	191	VAL	N-CA-CB	5.18	118.46	111.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	217	LEU	CA-C-N	5.18	129.97	122.36
21	S	217	LEU	C-N-CA	5.18	129.97	122.36
21	S	446	SER	N-CA-CB	5.18	120.40	111.13
26	O	325	ASP	CA-CB-CG	-5.18	107.42	112.60
30	L	31	LEU	CA-C-N	5.18	127.22	120.28
30	L	31	LEU	C-N-CA	5.18	127.22	120.28
31	M	279	LYS	CA-C-N	5.18	127.64	120.29
31	M	279	LYS	C-N-CA	5.18	127.64	120.29
4	D	159	TYR	CA-C-O	-5.18	114.39	120.60
5	E	102	THR	CB-CA-C	-5.18	102.92	110.95
5	E	196	LYS	O-C-N	-5.18	116.63	122.12
19	Z	7	ASP	N-CA-C	-5.18	106.65	113.17
22	P	88	MET	CA-C-N	5.18	127.48	120.44
22	P	88	MET	C-N-CA	5.18	127.48	120.44
24	R	48	ASN	CA-CB-CG	-5.18	107.42	112.60
29	K	280	GLY	CA-C-O	5.18	125.99	120.40
31	M	119	GLN	OE1-CD-NE2	5.18	127.78	122.60
7	G	11	SER	N-CA-CB	5.18	119.96	111.31
10	3	55	GLY	N-CA-C	-5.18	101.88	111.04
15	W	10	VAL	CA-CB-CG1	-5.18	101.60	110.40
19	Z	738	ASN	OD1-CG-ND2	5.18	127.78	122.60
20	N	339	LEU	CA-C-N	5.18	127.22	120.28
20	N	339	LEU	C-N-CA	5.18	127.22	120.28
22	P	109	CYS	CA-C-O	-5.18	114.93	120.42
25	U	85	VAL	CA-CB-CG2	5.18	119.20	110.40
27	H	192	GLU	N-CA-C	-5.18	105.55	111.14
9	2	249	LYS	CA-C-N	5.17	131.55	121.41
9	2	249	LYS	C-N-CA	5.17	131.55	121.41
12	5	173	VAL	O-C-N	5.17	128.54	123.00
13	6	101	MET	CA-C-N	5.17	127.64	120.29
13	6	101	MET	C-N-CA	5.17	127.64	120.29
17	T	155	ALA	O-C-N	-5.17	116.25	122.15
17	T	169	ARG	CB-CA-C	-5.17	102.76	110.88
19	Z	114	ALA	N-CA-C	5.17	121.25	109.81
20	N	370	VAL	CA-C-O	-5.17	115.36	120.85
20	N	391	GLU	CA-C-N	5.17	127.17	120.44
20	N	391	GLU	C-N-CA	5.17	127.17	120.44
8	1	116	PHE	CB-CA-C	-5.17	102.06	110.85
16	V	250	GLU	CA-C-N	5.17	128.17	120.31
16	V	250	GLU	C-N-CA	5.17	128.17	120.31
23	Q	230	SER	N-CA-CB	5.17	117.72	110.12
26	O	25	LEU	CA-C-O	-5.17	115.07	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	209	TYR	CB-CG-CD1	5.17	128.56	120.80
30	L	285	HIS	ND1-CE1-NE2	5.17	113.57	108.40
31	M	435	LYS	N-CA-C	-5.17	106.08	114.09
32	J	196	LYS	CA-C-N	5.17	127.63	120.29
32	J	196	LYS	C-N-CA	5.17	127.63	120.29
13	6	200	ARG	CA-C-N	5.17	127.21	120.28
13	6	200	ARG	C-N-CA	5.17	127.21	120.28
19	Z	798	THR	N-CA-C	5.17	116.92	111.28
5	E	63	SER	N-CA-CB	5.17	119.23	110.49
5	E	111	SER	N-CA-C	5.17	116.99	111.36
8	1	168	ILE	O-C-N	5.17	127.09	121.87
10	3	175	VAL	CA-C-N	5.17	127.21	120.28
10	3	175	VAL	C-N-CA	5.17	127.21	120.28
13	6	230	ILE	O-C-N	5.17	127.15	121.83
20	N	150	ALA	N-CA-C	5.17	116.91	111.28
2	B	41	ALA	CA-C-N	5.17	128.03	119.35
2	B	41	ALA	C-N-CA	5.17	128.03	119.35
3	C	25	MET	N-CA-C	5.17	116.91	111.28
8	1	37	MET	O-C-N	-5.17	117.27	123.31
19	Z	441	LYS	N-CA-CB	5.17	117.81	110.16
19	Z	538	ILE	N-CA-C	5.17	115.39	110.53
20	N	543	LYS	CA-C-N	5.17	127.54	120.46
20	N	543	LYS	C-N-CA	5.17	127.54	120.46
21	S	115	GLY	CA-C-O	-5.17	115.26	121.67
23	Q	327	TYR	N-CA-C	5.17	116.60	111.07
14	7	90	ASN	OD1-CG-ND2	5.17	127.77	122.60
31	M	145	ALA	CA-C-N	5.17	127.20	120.28
31	M	145	ALA	C-N-CA	5.17	127.20	120.28
3	C	70	GLU	N-CA-CB	5.16	117.69	110.56
4	D	151	TYR	N-CA-C	-5.16	101.52	109.52
8	1	189	THR	N-CA-CB	5.16	117.71	110.12
19	Z	472	HIS	ND1-CE1-NE2	5.16	113.56	108.40
19	Z	696	LEU	CA-C-N	5.16	127.53	120.46
19	Z	696	LEU	C-N-CA	5.16	127.53	120.46
20	N	329	LEU	CA-C-N	5.16	127.20	120.28
20	N	329	LEU	C-N-CA	5.16	127.20	120.28
25	U	131	LEU	N-CA-CB	5.16	118.28	110.28
27	H	152	PRO	N-CA-CB	5.16	108.13	103.33
29	K	414	HIS	ND1-CE1-NE2	5.16	113.56	108.40
27	H	168	GLU	CB-CG-CD	-5.16	103.82	112.60
9	2	147	ASP	N-CA-C	-5.16	100.32	108.73
12	5	142	LEU	N-CA-C	5.16	117.81	111.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	80	PHE	N-CA-CB	5.16	117.54	110.57
20	N	366	HIS	CA-C-N	5.16	127.62	120.29
20	N	366	HIS	C-N-CA	5.16	127.62	120.29
25	U	196	HIS	CB-CG-CD2	-5.16	124.49	131.20
28	I	190	LEU	CA-C-N	5.16	127.62	120.29
28	I	190	LEU	C-N-CA	5.16	127.62	120.29
31	M	89	LEU	N-CA-C	5.16	121.21	109.81
32	J	76	VAL	CB-CA-C	5.16	116.80	111.23
6	F	188	VAL	O-C-N	-5.16	116.52	121.83
14	7	85	ARG	NE-CZ-NH1	5.16	126.66	121.50
15	W	136	VAL	CB-CA-C	-5.16	102.99	110.63
19	Z	377	VAL	N-CA-C	5.16	115.88	110.62
19	Z	481	SER	N-CA-C	5.16	116.71	111.14
21	S	158	GLU	CA-C-O	-5.16	114.95	120.42
23	Q	387	ILE	CA-C-N	5.16	130.36	120.97
23	Q	387	ILE	C-N-CA	5.16	130.36	120.97
25	U	120	VAL	N-CA-C	-5.16	102.92	109.58
28	I	303	ARG	NE-CZ-NH2	5.16	123.84	119.20
31	M	252	LEU	CA-C-O	-5.16	115.06	120.58
32	J	29	GLU	CA-C-O	5.16	125.93	120.10
13	6	186	GLN	N-CA-CB	5.16	119.21	110.49
14	7	198	LEU	N-CA-C	5.16	116.90	111.28
17	T	253	ASN	CA-C-O	-5.16	113.71	119.95
17	T	328	PRO	CA-C-O	-5.16	115.71	121.23
19	Z	450	ILE	N-CA-C	5.16	115.38	110.53
20	N	715	LYS	N-CA-CB	5.16	117.49	110.01
13	6	58	GLU	CA-C-N	5.16	126.66	121.35
13	6	58	GLU	C-N-CA	5.16	126.66	121.35
19	Z	641	GLU	CA-C-O	-5.16	115.73	121.81
22	P	249	ALA	CA-C-N	5.16	127.52	120.46
22	P	249	ALA	C-N-CA	5.16	127.52	120.46
24	R	333	GLU	CB-CA-C	-5.16	102.08	110.85
27	H	258	ARG	CB-CG-CD	5.16	123.16	111.30
27	H	349	GLU	CA-C-N	5.16	125.70	119.98
27	H	349	GLU	C-N-CA	5.16	125.70	119.98
28	I	412	MET	N-CA-C	-5.16	106.30	112.59
31	M	440	TYR	CA-C-N	5.16	131.51	122.95
31	M	440	TYR	C-N-CA	5.16	131.51	122.95
15	W	173	VAL	CA-C-N	5.15	125.69	120.38
15	W	173	VAL	C-N-CA	5.15	125.69	120.38
20	N	335	ILE	N-CA-CB	5.15	118.31	110.58
32	J	35	VAL	N-CA-C	5.15	115.88	110.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	334	PRO	N-CA-CB	5.15	107.83	103.19
22	P	143	ALA	CA-C-N	5.15	127.19	120.28
22	P	143	ALA	C-N-CA	5.15	127.19	120.28
27	H	188	ARG	O-C-N	-5.15	116.66	122.12
28	I	375	ALA	CA-C-O	5.15	126.84	121.38
32	J	391	MET	O-C-N	5.15	127.58	122.12
4	D	181	ASN	CA-C-N	5.15	128.02	120.71
4	D	181	ASN	C-N-CA	5.15	128.02	120.71
11	4	42	ILE	N-CA-C	-5.15	106.89	113.22
13	6	151	PHE	CA-C-O	-5.15	115.25	120.71
16	V	240	HIS	CE1-NE2-CD2	-5.15	103.85	109.00
19	Z	815	HIS	CA-C-N	5.15	129.45	122.19
19	Z	815	HIS	C-N-CA	5.15	129.45	122.19
30	L	392	LYS	CB-CA-C	-5.15	102.80	110.88
31	M	218	LEU	CB-CA-C	-5.15	102.24	110.79
31	M	247	THR	CA-C-N	5.15	131.38	121.54
31	M	247	THR	C-N-CA	5.15	131.38	121.54
16	V	152	LYS	CB-CA-C	-5.15	104.89	111.22
21	S	354	MET	CA-C-N	5.15	124.65	119.19
21	S	354	MET	C-N-CA	5.15	124.65	119.19
29	K	377	SER	CA-C-N	5.15	127.73	120.42
29	K	377	SER	C-N-CA	5.15	127.73	120.42
31	M	67	HIS	CE1-NE2-CD2	-5.15	103.85	109.00
2	B	123	GLN	CA-C-O	5.15	125.89	119.97
19	Z	129	LEU	CA-C-N	5.15	127.18	120.28
19	Z	129	LEU	C-N-CA	5.15	127.18	120.28
20	N	223	LEU	CA-C-N	5.15	129.50	122.34
20	N	223	LEU	C-N-CA	5.15	129.50	122.34
21	S	272	PHE	CA-CB-CG	-5.15	108.65	113.80
21	S	291	ILE	CA-C-O	5.15	126.31	120.85
26	O	94	LEU	CA-C-N	5.15	127.60	120.29
26	O	94	LEU	C-N-CA	5.15	127.60	120.29
29	K	399	PHE	N-CA-CB	5.15	117.53	110.07
1	A	173	THR	N-CA-C	5.14	116.97	111.36
2	B	51	LYS	N-CA-C	-5.14	100.69	108.67
15	W	164	ASP	CA-CB-CG	-5.14	107.46	112.60
19	Z	875	ALA	N-CA-C	5.14	118.00	109.46
21	S	475	ARG	CA-C-N	5.14	127.51	120.46
21	S	475	ARG	C-N-CA	5.14	127.51	120.46
24	R	259	TYR	CB-CG-CD1	5.14	128.52	120.80
29	K	120	ASP	N-CA-CB	5.14	117.52	109.85
30	L	302	ALA	CA-C-O	5.14	126.00	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	274	ALA	CA-C-N	5.14	127.59	120.29
31	M	274	ALA	C-N-CA	5.14	127.59	120.29
8	1	75	PHE	CA-CB-CG	-5.14	108.66	113.80
11	4	79	ALA	CA-C-N	5.14	127.17	120.28
11	4	79	ALA	C-N-CA	5.14	127.17	120.28
12	5	135	VAL	O-C-N	5.14	129.00	122.57
19	Z	61	GLU	CB-CG-CD	-5.14	103.86	112.60
24	R	75	LYS	CA-C-N	5.14	127.59	120.29
24	R	75	LYS	C-N-CA	5.14	127.59	120.29
24	R	179	ARG	CB-CA-C	-5.14	102.25	110.79
7	G	34	SER	O-C-N	5.14	129.73	123.10
23	Q	252	LYS	CG-CD-CE	5.14	123.12	111.30
26	O	304	VAL	N-CA-C	5.14	117.48	111.05
27	H	77	LEU	CA-C-O	5.14	125.87	120.42
31	M	286	ILE	N-CA-C	-5.14	100.34	107.80
5	E	83	ALA	CB-CA-C	-5.14	102.26	110.79
6	F	221	PHE	N-CA-C	-5.14	101.59	109.76
10	3	120	PHE	CA-C-O	5.14	126.88	121.33
19	Z	401	LYS	CA-C-N	5.14	129.56	120.87
19	Z	401	LYS	C-N-CA	5.14	129.56	120.87
20	N	381	THR	CA-CB-OG1	5.14	117.31	109.60
21	S	55	ALA	CA-C-N	-5.14	115.57	123.07
21	S	55	ALA	C-N-CA	-5.14	115.57	123.07
22	P	77	ALA	CB-CA-C	-5.14	103.09	111.06
27	H	56	LEU	CB-CA-C	-5.14	101.94	110.68
29	K	81	ARG	CA-C-N	5.14	127.72	120.42
29	K	81	ARG	C-N-CA	5.14	127.72	120.42
31	M	394	PHE	N-CA-C	-5.14	100.93	108.79
5	E	142	LEU	CB-CA-C	-5.14	102.47	110.74
12	5	115	GLU	N-CA-CB	-5.14	102.62	110.07
15	W	94	HIS	ND1-CG-CD2	5.14	111.24	106.10
18	Y	63	HIS	ND1-CE1-NE2	5.14	113.54	108.40
19	Z	464	ALA	O-C-N	-5.14	116.78	122.07
21	S	76	ARG	NE-CZ-NH2	-5.14	114.58	119.20
31	M	36	VAL	O-C-N	5.14	126.95	121.91
23	Q	78	ASN	CB-CG-ND2	-5.14	108.69	116.40
32	J	90	HIS	CA-C-O	-5.14	113.70	118.73
6	F	36	VAL	N-CA-C	-5.13	101.09	108.48
11	4	180	VAL	CA-C-O	5.13	126.72	121.28
14	7	79	ARG	CA-C-N	5.13	129.86	122.16
14	7	79	ARG	C-N-CA	5.13	129.86	122.16
25	U	209	ARG	N-CA-C	5.13	116.56	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	U	276	ILE	N-CA-C	5.13	115.91	110.72
28	I	266	LEU	CA-C-O	5.13	125.99	120.55
29	K	119	ILE	CA-C-O	-5.13	115.19	121.04
2	B	225	GLU	N-CA-C	-5.13	105.69	111.28
19	Z	278	VAL	N-CA-CB	5.13	116.56	110.55
11	4	121	LEU	N-CA-C	-5.13	102.42	110.17
16	V	218	LEU	N-CA-C	5.13	116.68	111.14
19	Z	65	GLU	CA-C-N	5.13	131.01	122.54
19	Z	65	GLU	C-N-CA	5.13	131.01	122.54
19	Z	205	CYS	CA-C-O	-5.13	114.30	120.10
19	Z	505	MET	N-CA-C	-5.13	104.22	111.56
20	N	21	GLU	CB-CA-C	-5.13	102.27	110.79
20	N	133	ILE	CA-C-O	5.13	126.29	120.95
20	N	269	ARG	CB-CG-CD	5.13	123.10	111.30
27	H	381	THR	N-CA-C	-5.13	103.76	110.53
31	M	333	ALA	N-CA-CB	5.13	118.95	110.69
17	T	143	GLN	CA-C-O	-5.13	115.11	120.55
17	T	275	ALA	CA-C-N	5.13	125.67	119.98
17	T	275	ALA	C-N-CA	5.13	125.67	119.98
19	Z	84	SER	CA-C-N	-5.13	111.74	121.54
19	Z	84	SER	C-N-CA	-5.13	111.74	121.54
20	N	101	ILE	N-CA-C	5.13	115.35	110.53
21	S	397	ASN	CA-CB-CG	5.13	117.73	112.60
22	P	169	LEU	CA-C-N	5.13	127.66	120.28
22	P	169	LEU	C-N-CA	5.13	127.66	120.28
23	Q	241	SER	CA-C-N	5.13	131.20	121.97
23	Q	241	SER	C-N-CA	5.13	131.20	121.97
3	C	193	ALA	CA-C-N	5.13	127.70	120.42
3	C	193	ALA	C-N-CA	5.13	127.70	120.42
19	Z	481	SER	CA-C-N	5.13	127.70	120.42
19	Z	481	SER	C-N-CA	5.13	127.70	120.42
20	N	693	LEU	CB-CA-C	-5.13	102.28	110.79
15	W	128	ALA	N-CA-C	5.12	116.87	111.28
31	M	41	THR	CA-CB-OG1	5.12	117.29	109.60
3	C	238	LYS	N-CA-C	-5.12	105.78	111.36
5	E	80	GLY	O-C-N	5.12	126.41	123.08
6	F	144	VAL	N-CA-CB	5.12	118.30	111.64
14	7	133	HIS	CE1-NE2-CD2	-5.12	103.88	109.00
15	W	183	LEU	N-CA-C	5.12	118.63	112.38
16	V	122	LEU	CA-C-O	-5.12	115.67	121.72
22	P	173	THR	CA-CB-OG1	5.12	117.28	109.60
26	O	88	THR	CA-CB-CG2	-5.12	101.79	110.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	K	184	PRO	CA-C-N	5.12	127.41	120.44
29	K	184	PRO	C-N-CA	5.12	127.41	120.44
29	K	347	THR	N-CA-C	-5.12	105.78	111.36
32	J	180	ILE	CA-CB-CG1	5.12	119.11	110.40
32	J	385	MET	CG-SD-CE	-5.12	89.63	100.90
1	A	211	LYS	CA-C-N	5.12	125.57	120.04
1	A	211	LYS	C-N-CA	5.12	125.57	120.04
9	2	86	CYS	N-CA-C	-5.12	101.58	109.52
15	W	177	PRO	N-CA-C	5.12	118.92	111.03
20	N	950	TYR	CB-CA-C	-5.12	102.84	110.88
21	S	468	PRO	CB-CA-C	5.12	119.12	111.85
22	P	84	ASN	CA-CB-CG	-5.12	107.48	112.60
23	Q	254	MET	CA-C-N	5.12	127.14	120.28
23	Q	254	MET	C-N-CA	5.12	127.14	120.28
28	I	280	SER	O-C-N	5.12	129.22	123.48
29	K	384	MET	CA-C-O	-5.12	114.99	120.42
5	E	112	VAL	CA-C-N	5.12	127.14	120.28
5	E	112	VAL	C-N-CA	5.12	127.14	120.28
20	N	57	ARG	CA-C-O	-5.12	115.44	120.82
23	Q	75	PRO	N-CD-CG	5.12	110.88	103.20
29	K	71	GLU	CA-C-N	5.12	127.10	120.44
29	K	71	GLU	C-N-CA	5.12	127.10	120.44
7	G	132	PHE	CA-CB-CG	-5.12	108.68	113.80
8	1	147	VAL	N-CA-CB	5.12	117.84	111.39
13	6	175	LEU	CA-C-N	5.12	128.09	120.31
13	6	175	LEU	C-N-CA	5.12	128.09	120.31
19	Z	329	ASN	CA-CB-CG	-5.12	107.48	112.60
30	L	16	ALA	O-C-N	-5.12	117.11	123.36
32	J	212	ILE	CA-C-N	-5.12	115.94	123.00
32	J	212	ILE	C-N-CA	-5.12	115.94	123.00
19	Z	614	HIS	CE1-NE2-CD2	-5.12	103.88	109.00
29	K	172	ILE	CA-CB-CG2	-5.12	101.80	110.50
29	K	414	HIS	CE1-NE2-CD2	-5.12	103.88	109.00
6	F	6	TYR	CA-CB-CG	-5.12	104.69	113.90
11	4	1	MET	CA-C-N	5.12	131.31	121.54
11	4	1	MET	C-N-CA	5.12	131.31	121.54
11	4	163	CYS	CA-C-N	5.12	127.56	120.29
11	4	163	CYS	C-N-CA	5.12	127.56	120.29
20	N	74	PHE	CA-CB-CG	-5.12	108.69	113.80
21	S	465	THR	CA-CB-OG1	5.12	117.27	109.60
23	Q	185	LYS	CA-C-O	5.12	125.84	120.42
28	I	66	GLU	CA-C-N	5.12	128.09	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	I	66	GLU	C-N-CA	5.12	128.09	120.31
28	I	340	ALA	CA-C-N	5.12	127.09	120.44
28	I	340	ALA	C-N-CA	5.12	127.09	120.44
29	K	35	GLU	CA-C-N	5.12	127.55	120.29
29	K	35	GLU	C-N-CA	5.12	127.55	120.29
32	J	300	ILE	N-CA-C	-5.12	105.39	112.50
9	2	49	VAL	N-CA-C	-5.11	100.41	108.90
9	2	220	VAL	CA-C-N	5.11	129.77	123.12
9	2	220	VAL	C-N-CA	5.11	129.77	123.12
13	6	116	ALA	CA-C-N	5.11	127.13	120.28
13	6	116	ALA	C-N-CA	5.11	127.13	120.28
17	T	194	LEU	CA-C-O	-5.11	115.45	120.82
17	T	298	THR	CA-C-N	5.11	124.61	119.19
17	T	298	THR	C-N-CA	5.11	124.61	119.19
19	Z	371	ASN	CA-CB-CG	5.11	117.71	112.60
19	Z	590	PHE	CA-C-O	5.11	125.85	119.97
19	Z	724	ASN	OD1-CG-ND2	5.11	127.71	122.60
20	N	869	LYS	N-CA-CB	5.11	117.82	109.69
21	S	172	MET	CA-C-N	5.11	127.55	120.29
21	S	172	MET	C-N-CA	5.11	127.55	120.29
23	Q	117	ALA	CA-C-N	5.11	127.13	120.28
23	Q	117	ALA	C-N-CA	5.11	127.13	120.28
29	K	116	LEU	CA-C-N	5.11	130.10	122.74
29	K	116	LEU	C-N-CA	5.11	130.10	122.74
29	K	260	ALA	N-CA-C	-5.11	101.30	109.07
29	K	381	GLU	N-CA-C	5.11	116.85	111.28
31	M	206	VAL	CA-C-O	-5.11	115.43	120.85
4	D	61	LYS	N-CA-C	-5.11	105.79	111.36
15	W	41	THR	CA-C-N	5.11	127.13	120.28
15	W	41	THR	C-N-CA	5.11	127.13	120.28
27	H	59	ILE	CA-C-N	5.11	127.09	120.44
27	H	59	ILE	C-N-CA	5.11	127.09	120.44
27	H	429	TYR	CB-CA-C	-5.11	102.16	110.85
1	A	117	ARG	N-CA-C	5.11	116.93	111.36
1	A	200	THR	CA-C-O	5.11	125.97	120.55
13	6	128	PHE	N-CA-CB	5.11	118.75	110.42
13	6	158	GLN	OE1-CD-NE2	5.11	127.71	122.60
13	6	201	LEU	CA-C-O	-5.11	115.13	120.55
20	N	67	VAL	CA-C-N	5.11	127.13	120.28
20	N	67	VAL	C-N-CA	5.11	127.13	120.28
22	P	212	LYS	CA-C-N	5.11	127.13	120.28
22	P	212	LYS	C-N-CA	5.11	127.13	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	Q	343	SER	CA-C-N	5.11	131.30	121.54
23	Q	343	SER	C-N-CA	5.11	131.30	121.54
30	L	284	LEU	N-CA-CB	5.11	118.72	110.65
2	B	51	LYS	CA-CB-CG	-5.11	103.88	114.10
20	N	488	THR	CA-C-N	5.11	131.30	121.54
20	N	488	THR	C-N-CA	5.11	131.30	121.54
31	M	217	ASN	CB-CG-ND2	-5.11	108.74	116.40
20	N	82	LEU	N-CA-C	-5.11	105.90	111.82
20	N	143	ASP	CA-CB-CG	-5.11	107.49	112.60
22	P	196	VAL	O-C-N	5.11	127.03	121.87
22	P	442	THR	CA-C-N	5.11	127.12	120.28
22	P	442	THR	C-N-CA	5.11	127.12	120.28
23	Q	391	PRO	N-CA-C	5.11	116.93	110.70
28	I	210	TYR	O-C-N	5.11	127.97	122.15
30	L	99	ARG	CD-NE-CZ	-5.11	117.25	124.40
32	J	352	PRO	N-CA-C	-5.11	107.52	114.98
6	F	205	LEU	N-CA-C	5.11	117.63	110.23
13	6	199	MET	N-CA-C	-5.11	105.80	111.36
20	N	224	ASP	N-CA-C	-5.11	104.37	111.52
20	N	696	ILE	CA-C-O	5.11	127.16	120.78
21	S	110	TYR	N-CA-C	5.11	116.85	111.28
23	Q	10	GLN	N-CA-C	-5.11	105.72	111.28
23	Q	151	SER	CA-C-N	5.11	127.12	120.28
23	Q	151	SER	C-N-CA	5.11	127.12	120.28
26	O	138	VAL	CA-C-N	5.11	127.12	120.28
26	O	138	VAL	C-N-CA	5.11	127.12	120.28
28	I	382	ASP	CB-CA-C	-5.11	102.86	110.88
29	K	374	ASP	CA-C-N	5.11	127.67	120.42
29	K	374	ASP	C-N-CA	5.11	127.67	120.42
30	L	330	HIS	CA-C-N	5.11	128.07	120.31
30	L	330	HIS	C-N-CA	5.11	128.07	120.31
12	5	192	VAL	O-C-N	-5.10	114.83	121.82
19	Z	641	GLU	O-C-N	5.10	128.67	122.85
25	U	72	HIS	CA-C-N	5.10	127.12	120.28
25	U	72	HIS	C-N-CA	5.10	127.12	120.28
30	L	104	SER	CA-C-N	5.10	127.63	120.28
30	L	104	SER	C-N-CA	5.10	127.63	120.28
30	L	274	LEU	O-C-N	-5.10	116.71	122.12
32	J	277	LEU	N-CA-CB	5.10	118.08	110.22
6	F	208	LYS	O-C-N	5.10	127.53	122.12
8	1	106	PRO	CA-C-N	5.10	126.22	119.84
8	1	106	PRO	C-N-CA	5.10	126.22	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	511	SER	CB-CA-C	-5.10	102.84	110.90
20	N	98	GLU	N-CA-CB	5.10	118.47	110.46
21	S	315	HIS	CB-CA-C	-5.10	102.49	109.28
21	S	423	GLN	OE1-CD-NE2	5.10	127.70	122.60
23	Q	276	ALA	CA-C-O	-5.10	115.01	120.42
23	Q	335	LEU	N-CA-C	5.10	116.53	111.07
26	O	181	GLY	N-CA-C	5.10	119.30	112.77
26	O	202	LEU	O-C-N	5.10	127.53	122.12
32	J	157	GLN	N-CA-CB	5.10	117.71	110.16
19	Z	541	THR	O-C-N	-5.10	116.71	122.12
22	P	399	ASN	O-C-N	5.10	128.54	122.27
26	O	299	SER	CA-C-O	5.10	126.50	121.20
29	K	155	THR	CA-C-O	5.10	127.35	121.28
4	D	5	ARG	CA-C-O	-5.10	115.24	121.36
5	E	193	GLU	N-CA-CB	5.10	117.71	110.16
21	S	74	HIS	N-CA-C	5.10	117.62	111.40
21	S	88	ARG	N-CA-CB	5.10	118.18	110.28
23	Q	164	ALA	N-CA-C	5.10	116.92	111.36
23	Q	339	ILE	CA-C-O	-5.10	115.44	120.85
29	K	115	ILE	CB-CA-C	5.10	118.43	110.83
31	M	106	ASP	N-CA-CB	5.10	119.11	110.49
32	J	19	GLY	CA-C-N	5.10	127.62	120.28
32	J	19	GLY	C-N-CA	5.10	127.62	120.28
1	A	97	GLU	CA-C-N	5.10	127.53	120.29
1	A	97	GLU	C-N-CA	5.10	127.53	120.29
4	D	219	ARG	CD-NE-CZ	-5.10	117.27	124.40
5	E	32	LYS	CA-C-N	5.10	127.11	120.28
5	E	32	LYS	C-N-CA	5.10	127.11	120.28
6	F	92	CYS	CA-C-N	5.10	127.53	120.29
6	F	92	CYS	C-N-CA	5.10	127.53	120.29
8	1	54	THR	N-CA-C	-5.10	101.09	109.40
11	4	99	HIS	CB-CG-ND1	-5.10	115.05	122.70
26	O	183	VAL	N-CA-CB	5.10	119.64	111.23
28	I	357	ASP	CB-CA-C	-5.10	100.57	111.78
28	I	405	MET	CG-SD-CE	-5.10	89.68	100.90
29	K	378	ILE	CB-CA-C	5.10	119.25	112.22
13	6	226	THR	CA-C-O	-5.10	114.72	120.32
23	Q	395	LYS	O-C-N	-5.10	116.34	122.15
12	5	156	MET	CA-C-O	5.09	127.47	121.36
19	Z	16	PRO	N-CA-CB	5.09	108.40	103.51
22	P	96	GLN	CA-CB-CG	5.09	124.29	114.10
22	P	247	TYR	CA-C-N	5.09	127.11	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	247	TYR	C-N-CA	5.09	127.11	120.28
6	F	190	HIS	N-CA-C	-5.09	105.91	111.82
31	M	51	LEU	CA-C-N	5.09	127.10	120.28
31	M	51	LEU	C-N-CA	5.09	127.10	120.28
8	1	110	HIS	CG-CD2-NE2	5.09	112.29	107.20
20	N	472	ILE	CA-C-N	5.09	127.65	120.42
20	N	472	ILE	C-N-CA	5.09	127.65	120.42
20	N	660	CYS	N-CA-C	5.09	119.47	113.16
22	P	107	GLN	CA-CB-CG	5.09	124.28	114.10
22	P	377	ARG	NE-CZ-NH2	-5.09	114.62	119.20
25	U	116	CYS	N-CA-C	-5.09	101.54	108.11
31	M	293	ALA	O-C-N	-5.09	116.35	122.15
20	N	450	HIS	CA-CB-CG	-5.09	108.71	113.80
20	N	501	LEU	O-C-N	-5.09	116.72	122.12
20	N	566	LEU	N-CA-C	5.09	116.91	111.36
24	R	139	ASP	CA-C-O	-5.09	115.16	120.55
30	L	31	LEU	CA-C-O	-5.09	115.16	120.55
5	E	85	ALA	O-C-N	5.09	127.95	122.15
1	A	159	TYR	N-CA-C	-5.09	100.05	108.75
1	A	235	ILE	CA-C-O	-5.09	115.66	120.95
6	F	50	LYS	O-C-N	5.09	128.65	122.85
12	5	144	ASN	OD1-CG-ND2	5.09	127.69	122.60
13	6	203	LYS	CB-CA-C	-5.09	102.35	110.79
19	Z	95	PRO	CA-C-O	-5.09	111.82	119.55
19	Z	514	VAL	CA-C-N	5.09	127.61	120.28
19	Z	514	VAL	C-N-CA	5.09	127.61	120.28
19	Z	843	SER	CB-CA-C	-5.09	100.30	110.42
28	I	261	GLY	N-CA-C	-5.09	108.30	115.32
29	K	45	LYS	CA-C-O	-5.09	115.16	120.55
31	M	308	GLU	O-C-N	5.09	129.76	122.28
1	A	136	CYS	CB-CA-C	-5.08	99.37	109.79
6	F	191	GLY	O-C-N	-5.08	117.26	122.19
11	4	68	LYS	CA-C-N	5.08	127.09	120.28
11	4	68	LYS	C-N-CA	5.08	127.09	120.28
20	N	471	ASP	CA-C-N	5.08	127.43	120.46
20	N	471	ASP	C-N-CA	5.08	127.43	120.46
23	Q	18	THR	N-CA-C	-5.08	99.97	110.80
28	I	435	PRO	N-CA-CB	5.08	108.59	103.25
5	E	11	GLY	CA-C-O	5.08	129.68	122.51
8	1	77	CYS	N-CA-C	-5.08	101.64	109.52
10	3	22	ILE	N-CA-C	-5.08	100.57	108.86
16	V	168	MET	N-CA-C	5.08	116.82	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	N	195	ASN	N-CA-C	5.08	116.82	111.28
21	S	452	GLY	CA-C-N	5.08	130.44	122.21
21	S	452	GLY	C-N-CA	5.08	130.44	122.21
26	O	160	SER	N-CA-C	5.08	116.90	111.36
28	I	267	VAL	N-CA-CB	5.08	118.20	110.58
29	K	377	SER	N-CA-C	5.08	116.82	111.28
11	4	144	ASP	O-C-N	5.08	127.94	122.15
19	Z	795	GLY	CA-C-N	5.08	127.51	120.29
19	Z	795	GLY	C-N-CA	5.08	127.51	120.29
25	U	65	ASP	CA-CB-CG	5.08	117.68	112.60
30	L	358	ARG	O-C-N	5.08	127.51	122.12
28	I	63	LEU	N-CA-CB	-5.08	102.64	110.16
29	K	266	GLU	N-CA-C	-5.08	100.01	108.34
30	L	144	VAL	N-CA-CB	5.08	119.61	111.23
5	E	196	LYS	N-CA-C	5.08	116.81	111.28
20	N	402	PHE	N-CA-C	-5.08	105.66	111.14
20	N	628	ARG	N-CA-C	-5.08	106.67	112.92
23	Q	133	LEU	N-CA-C	5.08	116.90	111.36
29	K	67	ASN	CA-C-O	5.08	125.80	120.42
5	E	20	ARG	CD-NE-CZ	-5.08	117.29	124.40
10	3	83	LYS	CA-C-O	-5.08	115.64	120.97
11	4	138	LEU	CD1-CG-CD2	5.08	121.97	110.80
23	Q	297	ARG	NE-CZ-NH1	5.08	126.58	121.50
31	M	66	THR	N-CA-CB	5.08	117.67	110.16
32	J	8	GLN	CA-C-O	-5.08	116.28	121.87
9	2	177	ALA	CA-C-O	5.08	125.80	120.42
20	N	45	ILE	CB-CA-C	-5.08	105.29	112.14
21	S	255	LEU	N-CA-C	5.08	116.81	111.28
23	Q	93	LEU	N-CA-C	5.08	116.81	111.28
26	O	148	VAL	CB-CA-C	-5.08	102.26	110.28
30	L	59	ASN	CA-C-N	5.08	128.03	120.31
30	L	59	ASN	C-N-CA	5.08	128.03	120.31
5	E	10	ARG	NE-CZ-NH1	5.07	126.57	121.50
11	4	124	LEU	O-C-N	5.07	129.34	122.59
19	Z	556	ARG	NE-CZ-NH2	-5.07	114.64	119.20
19	Z	770	HIS	CG-CD2-NE2	5.07	112.27	107.20
20	N	216	VAL	N-CA-C	5.07	117.43	111.09
22	P	112	VAL	N-CA-C	5.07	115.80	110.62
28	I	146	PRO	CA-C-N	5.07	126.66	120.22
28	I	146	PRO	C-N-CA	5.07	126.66	120.22
29	K	330	LYS	N-CA-CB	5.07	118.53	110.57
14	7	195	ARG	CD-NE-CZ	-5.07	117.30	124.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	109	SER	CA-C-O	-5.07	114.22	120.05
31	M	53	SER	CA-C-O	5.07	125.80	119.97
4	D	91	ASN	CA-C-N	5.07	127.49	120.29
4	D	91	ASN	C-N-CA	5.07	127.49	120.29
4	D	234	TYR	CA-C-N	5.07	127.41	120.46
4	D	234	TYR	C-N-CA	5.07	127.41	120.46
13	6	39	VAL	CA-C-O	5.07	127.12	120.78
14	7	61	ASP	CB-CA-C	-5.07	100.96	109.48
17	T	138	LYS	CA-C-N	5.07	127.08	120.28
17	T	138	LYS	C-N-CA	5.07	127.08	120.28
23	Q	108	GLU	N-CA-CB	5.07	117.57	110.12
23	Q	182	ASN	CA-CB-CG	-5.07	107.53	112.60
25	U	216	ALA	N-CA-CB	5.07	117.36	110.01
28	I	367	ILE	N-CA-C	5.07	115.79	110.62
17	T	126	LEU	O-C-N	-5.07	115.80	122.39
24	R	294	TYR	CA-CB-CG	-5.07	104.78	113.90
11	4	154	GLU	CB-CG-CD	5.07	121.21	112.60
14	7	113	GLN	CA-C-O	-5.07	114.14	119.97
16	V	309	PHE	CA-CB-CG	-5.07	108.73	113.80
17	T	180	ASP	CA-CB-CG	5.07	117.67	112.60
19	Z	3	GLU	CB-CG-CD	-5.07	103.98	112.60
19	Z	666	ILE	CB-CA-C	-5.07	105.30	112.14
19	Z	790	GLN	CB-CG-CD	-5.07	103.98	112.60
20	N	749	GLN	N-CA-C	-5.07	100.61	108.42
31	M	362	GLU	CA-C-O	-5.07	115.18	120.55
32	J	74	GLY	CA-C-N	5.07	130.82	121.85
32	J	74	GLY	C-N-CA	5.07	130.82	121.85
32	J	80	MET	CG-SD-CE	-5.07	89.75	100.90
7	G	118	MET	O-C-N	5.07	127.49	122.12
15	W	87	CYS	CB-CA-C	-5.07	102.38	110.79
17	T	179	PHE	N-CA-C	-5.07	100.09	108.75
19	Z	66	LYS	N-CA-C	-5.07	106.79	113.17
20	N	692	ALA	CA-C-N	5.07	127.07	120.28
20	N	692	ALA	C-N-CA	5.07	127.07	120.28
20	N	939	GLU	CB-CA-C	5.07	118.87	109.70
26	O	73	PRO	CA-C-N	5.07	127.48	120.29
26	O	73	PRO	C-N-CA	5.07	127.48	120.29
26	O	285	PRO	CA-C-O	-5.07	115.56	121.34
27	H	145	ASN	OD1-CG-ND2	-5.07	117.53	122.60
27	H	323	ARG	CA-C-O	-5.07	114.56	120.03
27	H	425	ALA	N-CA-C	-5.07	105.84	111.36
30	L	65	GLN	CB-CG-CD	-5.07	103.99	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	M	381	ASP	CA-C-N	5.07	130.20	122.25
31	M	381	ASP	C-N-CA	5.07	130.20	122.25
32	J	163	GLU	CA-C-N	5.07	127.04	120.56
32	J	163	GLU	C-N-CA	5.07	127.04	120.56
3	C	101	TYR	CA-C-N	5.06	131.73	123.93
3	C	101	TYR	C-N-CA	5.06	131.73	123.93
3	C	136	TYR	O-C-N	-5.06	117.27	123.19
11	4	112	GLY	CA-C-O	-5.06	114.28	121.52
19	Z	540	GLN	N-CA-C	5.06	117.69	111.82
20	N	513	GLY	CA-C-N	5.06	127.06	120.28
20	N	513	GLY	C-N-CA	5.06	127.06	120.28
23	Q	116	TRP	O-C-N	5.06	127.92	122.15
28	I	160	ILE	CB-CG1-CD1	5.06	124.43	113.80
30	L	264	ASP	CA-C-N	5.06	127.06	120.28
30	L	264	ASP	C-N-CA	5.06	127.06	120.28
30	L	382	MET	CA-C-N	5.06	127.06	120.28
30	L	382	MET	C-N-CA	5.06	127.06	120.28
31	M	131	THR	CA-C-O	5.06	125.27	119.35
2	B	117	VAL	N-CA-C	5.06	115.83	110.72
24	R	248	GLU	CB-CA-C	-5.06	102.39	110.79
28	I	380	LEU	CA-C-N	5.06	127.48	120.29
28	I	380	LEU	C-N-CA	5.06	127.48	120.29
1	A	89	SER	N-CA-C	5.06	116.88	111.36
4	D	23	GLN	CG-CD-OE1	5.06	130.92	120.80
5	E	98	ASN	OD1-CG-ND2	5.06	127.66	122.60
9	2	93	ALA	N-CA-C	5.06	116.88	111.36
19	Z	153	SER	CA-C-N	5.06	128.00	120.31
19	Z	153	SER	C-N-CA	5.06	128.00	120.31
20	N	60	ALA	CA-C-N	5.06	127.47	120.29
20	N	60	ALA	C-N-CA	5.06	127.47	120.29
29	K	176	GLU	CA-C-N	5.06	127.61	120.42
29	K	176	GLU	C-N-CA	5.06	127.61	120.42
30	L	79	THR	N-CA-C	-5.06	101.21	108.60
14	7	179	PRO	CA-C-O	-5.06	115.82	122.19
15	W	15	TYR	CA-C-O	-5.06	114.63	120.24
19	Z	587	PHE	N-CA-CB	5.06	117.65	110.16
20	N	592	GLY	CA-C-O	-5.06	113.59	119.10
27	H	195	LEU	CA-C-N	5.06	127.47	120.29
27	H	195	LEU	C-N-CA	5.06	127.47	120.29
27	H	348	LEU	N-CA-CB	5.06	117.56	110.12
32	J	197	THR	CA-CB-CG2	-5.06	101.90	110.50
3	C	54	LYS	CA-C-N	5.06	128.52	121.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	54	LYS	C-N-CA	5.06	128.52	121.24
14	7	59	LYS	CG-CD-CE	5.06	122.93	111.30
20	N	31	VAL	CA-C-N	5.06	129.23	120.58
20	N	31	VAL	C-N-CA	5.06	129.23	120.58
20	N	544	ILE	O-C-N	5.06	126.78	121.87
29	K	67	ASN	CA-C-N	5.06	127.47	120.29
29	K	67	ASN	C-N-CA	5.06	127.47	120.29
7	G	101	SER	CA-C-N	5.05	127.50	120.63
7	G	101	SER	C-N-CA	5.05	127.50	120.63
12	5	117	LEU	N-CA-C	5.05	117.68	111.82
14	7	162	GLY	CA-C-O	-5.05	115.97	121.48
23	Q	62	GLN	OE1-CD-NE2	5.05	127.66	122.60
29	K	376	ASN	CA-CB-CG	-5.05	107.55	112.60
30	L	224	GLU	N-CA-CB	5.05	117.64	110.16
30	L	340	ILE	CA-C-N	5.05	131.19	121.54
30	L	340	ILE	C-N-CA	5.05	131.19	121.54
8	1	49	ALA	O-C-N	5.05	129.32	123.41
12	5	174	ASP	CA-C-N	5.05	129.97	123.00
12	5	174	ASP	C-N-CA	5.05	129.97	123.00
12	5	242	GLY	CA-C-N	5.05	131.19	121.54
12	5	242	GLY	C-N-CA	5.05	131.19	121.54
19	Z	323	ASN	CA-CB-CG	-5.05	107.55	112.60
22	P	45	GLU	N-CA-C	5.05	116.48	111.07
4	D	221	GLN	CG-CD-NE2	-5.05	108.82	116.40
9	2	192	GLU	CB-CA-C	-5.05	102.40	110.79
19	Z	433	LEU	CB-CA-C	5.05	119.17	110.79
23	Q	103	THR	CA-C-N	5.05	125.55	119.94
23	Q	103	THR	C-N-CA	5.05	125.55	119.94
26	O	296	ILE	CB-CA-C	-5.05	105.32	112.14
26	O	373	ASP	CA-CB-CG	-5.05	107.55	112.60
27	H	349	GLU	N-CA-C	5.05	116.79	111.28
7	G	225	HIS	ND1-CE1-NE2	5.05	113.45	108.40
14	7	223	ARG	CA-C-N	5.05	127.31	120.44
14	7	223	ARG	C-N-CA	5.05	127.31	120.44
15	W	76	HIS	CA-CB-CG	-5.05	108.75	113.80
20	N	684	ARG	CA-C-N	5.05	127.00	120.44
20	N	684	ARG	C-N-CA	5.05	127.00	120.44
22	P	452	ILE	CA-C-O	-5.05	114.47	120.78
25	U	190	ARG	N-CA-CB	5.05	117.54	110.12
29	K	127	ASN	CB-CG-OD1	-5.05	110.70	120.80
31	M	117	ASP	CA-CB-CG	5.05	117.65	112.60
2	B	112	GLN	CA-C-N	5.05	127.46	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	112	GLN	C-N-CA	5.05	127.46	120.29
3	C	29	GLY	O-C-N	5.05	127.59	122.24
13	6	191	VAL	CA-C-N	5.05	124.22	118.97
13	6	191	VAL	C-N-CA	5.05	124.22	118.97
19	Z	563	GLY	CA-C-O	-5.05	115.31	120.66
22	P	231	ILE	CA-C-O	-5.05	115.70	120.95
2	B	139	TRP	N-CA-CB	5.05	118.51	110.84
10	3	4	MET	CA-C-N	5.05	131.18	121.54
10	3	4	MET	C-N-CA	5.05	131.18	121.54
14	7	135	TRP	CB-CG-CD2	-5.05	119.74	126.80
19	Z	573	ILE	CA-C-N	5.05	127.04	120.28
19	Z	573	ILE	C-N-CA	5.05	127.04	120.28
20	N	566	LEU	CB-CA-C	-5.05	102.27	110.85
30	L	188	GLY	CA-C-O	-5.05	114.30	121.52
22	P	88	MET	CA-C-O	-5.04	115.20	120.55
22	P	380	GLN	CA-C-O	-5.04	115.52	120.82
4	D	121	LYS	N-CA-C	5.04	116.86	111.36
4	D	231	ILE	CA-C-O	-5.04	115.17	120.57
6	F	16	GLN	N-CA-C	-5.04	107.80	114.31
13	6	61	SER	CB-CA-C	5.04	120.45	110.42
13	6	121	THR	O-C-N	-5.04	116.06	122.27
16	V	192	LEU	CA-C-N	5.04	127.58	120.42
16	V	192	LEU	C-N-CA	5.04	127.58	120.42
16	V	194	HIS	CE1-NE2-CD2	-5.04	103.96	109.00
21	S	502	GLU	CA-C-O	5.04	125.88	120.38
23	Q	201	TYR	CA-C-O	5.04	125.32	119.32
20	N	525	ASN	OD1-CG-ND2	-5.04	117.56	122.60
28	I	349	ARG	NE-CZ-NH1	5.04	126.54	121.50
19	Z	670	MET	CG-SD-CE	-5.04	89.81	100.90
29	K	132	LEU	O-C-N	-5.04	116.60	123.15
29	K	273	LYS	N-CA-C	-5.04	106.82	113.17
4	D	56	GLU	N-CA-C	-5.04	101.50	109.96
4	D	221	GLN	N-CA-CB	5.04	116.84	110.04
14	7	141	TYR	CB-CA-C	-5.04	102.28	110.85
19	Z	863	THR	CA-CB-OG1	5.04	117.16	109.60
20	N	110	LYS	CB-CG-CD	5.04	122.89	111.30
21	S	475	ARG	NH1-CZ-NH2	5.04	125.85	119.30
25	U	199	LYS	CB-CA-C	-5.04	102.42	110.79
25	U	208	ILE	CB-CA-C	-5.04	105.27	112.22
27	H	103	ASN	CA-CB-CG	-5.04	107.56	112.60
29	K	253	LEU	CA-C-N	5.04	127.03	120.28
29	K	253	LEU	C-N-CA	5.04	127.03	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	E	197	SER	N-CA-C	-5.04	105.92	111.71
16	V	172	HIS	CB-CG-CD2	5.04	137.75	131.20
7	G	237	GLU	CA-C-N	5.04	127.03	120.28
7	G	237	GLU	C-N-CA	5.04	127.03	120.28
14	7	207	THR	CA-CB-OG1	5.04	117.15	109.60
15	W	9	CYS	N-CA-C	-5.04	100.96	109.07
15	W	135	LYS	O-C-N	5.04	129.12	122.47
20	N	919	GLU	CB-CA-C	-5.04	99.96	111.95
24	R	344	HIS	CE1-NE2-CD2	-5.04	103.96	109.00
25	U	260	VAL	O-C-N	5.04	127.02	121.83
27	H	129	VAL	CA-C-O	5.04	126.58	121.49
28	I	131	HIS	ND1-CE1-NE2	5.04	113.44	108.40
3	C	31	ALA	CA-C-O	5.03	127.71	121.87
20	N	193	PHE	CA-C-O	-5.03	115.08	120.42
20	N	219	CYS	N-CA-C	5.03	116.77	111.28
22	P	234	ASP	CB-CA-C	-5.03	102.29	110.85
22	P	440	ASN	N-CA-C	5.03	116.77	111.28
26	O	349	MET	O-C-N	5.03	127.46	122.12
27	H	424	SER	CA-C-N	5.03	127.44	120.29
27	H	424	SER	C-N-CA	5.03	127.44	120.29
30	L	92	ARG	CA-C-N	5.03	130.36	122.21
30	L	92	ARG	C-N-CA	5.03	130.36	122.21
30	L	207	CYS	N-CA-C	-5.03	102.34	110.14
31	M	419	THR	CA-C-N	5.03	127.44	120.29
31	M	419	THR	C-N-CA	5.03	127.44	120.29
8	1	188	PHE	CA-CB-CG	-5.03	108.77	113.80
3	C	148	TYR	O-C-N	5.03	129.43	123.24
9	2	244	ARG	N-CA-CB	5.03	118.90	110.85
14	7	59	LYS	CB-CG-CD	5.03	122.87	111.30
19	Z	294	MET	CA-C-N	5.03	126.98	120.44
19	Z	294	MET	C-N-CA	5.03	126.98	120.44
22	P	50	LEU	CA-C-O	-5.03	115.22	120.55
26	O	174	LYS	CA-C-N	5.03	127.02	120.28
26	O	174	LYS	C-N-CA	5.03	127.02	120.28
29	K	123	LEU	CA-C-N	5.03	132.19	122.53
29	K	123	LEU	C-N-CA	5.03	132.19	122.53
20	N	91	ASN	O-C-N	5.03	127.45	122.12
28	I	105	THR	O-C-N	-5.03	116.55	121.38
30	L	129	VAL	N-CA-CB	5.03	119.26	110.96
4	D	154	ASP	N-CA-C	-5.03	98.70	109.81
5	E	152	GLN	OE1-CD-NE2	5.03	127.63	122.60
10	3	65	GLN	N-CA-C	5.03	117.65	111.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	590	PHE	O-C-N	-5.03	116.09	122.27
29	K	242	GLU	CB-CG-CD	5.03	121.15	112.60
1	A	17	SER	CA-C-N	5.03	124.69	119.56
1	A	17	SER	C-N-CA	5.03	124.69	119.56
2	B	22	ILE	N-CA-CB	5.03	118.12	110.58
2	B	204	THR	CA-C-O	-5.03	115.90	121.33
13	6	38	THR	N-CA-CB	5.03	118.98	110.49
19	Z	894	LEU	N-CA-CB	5.03	118.82	110.63
20	N	624	PHE	CB-CA-C	-5.03	102.31	110.85
20	N	631	GLU	CA-C-N	5.03	127.95	120.31
20	N	631	GLU	C-N-CA	5.03	127.95	120.31
30	L	127	ARG	CD-NE-CZ	5.03	131.44	124.40
31	M	244	ALA	CA-C-N	5.03	127.43	120.29
31	M	244	ALA	C-N-CA	5.03	127.43	120.29
32	J	42	LEU	O-C-N	5.03	127.45	122.12
28	I	71	TYR	N-CA-C	5.02	116.84	111.36
32	J	205	HIS	CE1-NE2-CD2	-5.02	103.98	109.00
9	2	167	TYR	CA-C-N	-5.02	115.48	122.71
9	2	167	TYR	C-N-CA	-5.02	115.48	122.71
20	N	392	TRP	N-CA-CB	-5.02	102.73	110.01
22	P	194	LEU	CA-C-N	5.02	127.01	120.28
22	P	194	LEU	C-N-CA	5.02	127.01	120.28
31	M	198	ILE	O-C-N	5.02	126.74	121.87
9	2	95	THR	N-CA-C	-5.02	105.89	111.36
15	W	96	ALA	CA-C-N	5.02	127.51	120.28
15	W	96	ALA	C-N-CA	5.02	127.51	120.28
11	4	105	ALA	CA-C-N	5.02	126.44	121.62
11	4	105	ALA	C-N-CA	5.02	126.44	121.62
12	5	255	HIS	CA-CB-CG	5.02	118.82	113.80
20	N	364	VAL	CA-C-N	5.02	127.94	120.31
20	N	364	VAL	C-N-CA	5.02	127.94	120.31
23	Q	118	LYS	CG-CD-CE	5.02	122.85	111.30
28	I	101	ASP	CA-CB-CG	-5.02	107.58	112.60
28	I	120	HIS	CA-CB-CG	-5.02	108.78	113.80
30	L	251	ALA	CA-C-O	-5.02	115.55	120.82
13	6	38	THR	CA-CB-OG1	5.02	117.13	109.60
13	6	139	GLY	O-C-N	5.02	127.47	123.61
17	T	274	ILE	CA-C-N	5.02	127.00	120.28
17	T	274	ILE	C-N-CA	5.02	127.00	120.28
19	Z	12	GLN	N-CA-C	5.02	116.75	111.28
19	Z	126	ILE	CB-CG1-CD1	5.02	124.34	113.80
21	S	197	ARG	N-CA-C	-5.02	105.89	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	O	342	ASP	N-CA-C	-5.02	101.11	108.79
27	H	53	GLN	N-CA-C	5.02	116.75	111.28
31	M	67	HIS	CB-CG-CD2	-5.02	124.68	131.20
31	M	270	LEU	CA-C-N	5.02	127.33	120.46
31	M	270	LEU	C-N-CA	5.02	127.33	120.46
32	J	137	LEU	CA-C-N	5.02	127.00	120.28
32	J	137	LEU	C-N-CA	5.02	127.00	120.28
32	J	289	ILE	CB-CA-C	-5.02	103.65	110.77
32	J	344	LEU	O-C-N	5.02	128.44	122.27
22	P	72	LYS	O-C-N	5.02	127.87	122.15
29	K	47	LEU	CA-C-O	-5.02	115.23	120.55
1	A	8	GLY	N-CA-C	-5.01	101.30	113.18
6	F	53	GLN	OE1-CD-NE2	5.01	127.61	122.60
13	6	202	VAL	CA-C-N	5.01	127.00	120.28
13	6	202	VAL	C-N-CA	5.01	127.00	120.28
20	N	628	ARG	NE-CZ-NH2	5.01	123.71	119.20
20	N	670	ASN	CB-CA-C	5.01	120.30	110.67
22	P	316	ARG	NE-CZ-NH1	5.01	126.52	121.50
27	H	237	PHE	CA-C-O	5.01	125.67	120.30
28	I	76	GLU	CB-CG-CD	-5.01	104.08	112.60
29	K	340	GLN	CG-CD-NE2	5.01	123.92	116.40
32	J	22	GLN	CB-CA-C	-5.01	102.47	110.79
32	J	246	ILE	O-C-N	-5.01	117.24	122.81
21	S	210	HIS	N-CA-CB	5.01	117.28	110.01
25	U	225	HIS	CB-CA-C	-5.01	102.47	110.79
29	K	312	ASN	CB-CA-C	5.01	118.71	109.99
1	A	169	GLY	CA-C-N	5.01	127.54	120.42
1	A	169	GLY	C-N-CA	5.01	127.54	120.42
7	G	15	PHE	CA-CB-CG	5.01	118.81	113.80
14	7	102	ALA	CA-C-N	5.01	127.93	120.31
14	7	102	ALA	C-N-CA	5.01	127.93	120.31
14	7	126	SER	CA-C-N	5.01	130.24	121.52
14	7	126	SER	C-N-CA	5.01	130.24	121.52
15	W	99	HIS	CE1-NE2-CD2	-5.01	103.99	109.00
17	T	268	ASP	CA-CB-CG	-5.01	107.59	112.60
19	Z	184	LEU	CA-C-O	-5.01	115.24	120.55
19	Z	296	PHE	N-CA-C	-5.01	105.71	111.07
19	Z	607	LEU	CA-C-N	5.01	127.40	120.29
19	Z	607	LEU	C-N-CA	5.01	127.40	120.29
20	N	446	LEU	CA-C-N	5.01	125.54	119.98
20	N	446	LEU	C-N-CA	5.01	125.54	119.98
26	O	9	GLN	O-C-N	-5.01	116.81	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	I	80	ARG	NE-CZ-NH1	5.01	126.51	121.50
26	O	335	TRP	N-CA-C	-5.01	101.47	109.23
30	L	270	THR	O-C-N	5.01	127.43	122.12
7	G	98	ASN	O-C-N	-5.01	116.44	122.15
7	G	244	LEU	CA-C-O	5.01	126.08	120.82
9	2	216	ILE	N-CA-CB	5.01	120.07	112.06
19	Z	200	ALA	CA-C-O	-5.01	114.77	120.98
22	P	365	ILE	CA-C-O	-5.01	115.54	120.85
26	O	310	LEU	CA-C-N	5.01	126.87	120.56
26	O	310	LEU	C-N-CA	5.01	126.87	120.56
30	L	375	PHE	CA-CB-CG	-5.01	108.79	113.80
32	J	56	VAL	N-CA-CB	5.01	118.09	110.58
16	V	142	ALA	CB-CA-C	-5.00	101.98	110.19
20	N	118	LEU	CA-C-O	-5.00	113.30	120.16
26	O	237	LEU	N-CA-C	-5.00	105.91	111.36
28	I	379	THR	CB-CA-C	5.00	119.82	111.51
12	5	192	VAL	N-CA-CB	-5.00	101.49	110.95
19	Z	335	ARG	NE-CZ-NH2	-5.00	114.70	119.20
19	Z	358	PHE	N-CA-CB	5.00	117.62	110.06
21	S	137	THR	CA-C-N	5.00	127.98	120.87
21	S	137	THR	C-N-CA	5.00	127.98	120.87
21	S	370	LYS	N-CA-C	-5.00	105.74	111.14
23	Q	388	PHE	CA-C-N	5.00	128.31	120.75
23	Q	388	PHE	C-N-CA	5.00	128.31	120.75
24	R	290	PRO	CA-N-CD	-5.00	104.99	112.00
25	U	253	THR	CA-CB-OG1	5.00	117.11	109.60
3	C	99	LEU	CA-C-O	5.00	125.85	120.70
6	F	200	PRO	CA-C-O	-5.00	115.11	122.31
17	T	348	GLN	CA-C-N	5.00	126.98	120.28
17	T	348	GLN	C-N-CA	5.00	126.98	120.28
20	N	172	ASP	N-CA-CB	5.00	117.30	109.85
21	S	105	ASN	OD1-CG-ND2	5.00	127.60	122.60
24	R	57	LEU	N-CA-C	-5.00	100.89	109.24
31	M	42	GLU	CA-C-O	-5.00	115.25	120.55
31	M	253	LYS	N-CA-C	5.00	117.55	110.10

There are no chirality outliers.

All (260) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
8	1	145	TYR	Sidechain
8	1	155	ARG	Sidechain

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Mol	Chain	Res	Type	Group
8	1	177	ARG	Sidechain
8	1	208	ARG	Sidechain
8	1	58	TYR	Sidechain
8	1	78	ARG	Sidechain
9	2	118	ARG	Sidechain
9	2	167	TYR	Sidechain
9	2	186	ARG	Sidechain
9	2	230	ARG	Sidechain
9	2	241	ARG	Sidechain
9	2	56	VAL	Mainchain
10	3	129	CYS	Peptide
10	3	147	TYR	Sidechain
10	3	3	VAL	Peptide
10	3	50	TYR	Sidechain
10	3	6	TYR	Sidechain
10	3	74	TYR	Sidechain
10	3	80	ARG	Sidechain
11	4	107	TYR	Sidechain
11	4	117	TYR	Sidechain
11	4	120	TYR	Sidechain
11	4	147	TYR	Sidechain
11	4	170	ARG	Sidechain
11	4	175	LEU	Peptide
11	4	178	PHE	Sidechain
11	4	19	ARG	Sidechain
11	4	3	TYR	Sidechain
11	4	73	TYR	Sidechain
12	5	113	PHE	Sidechain
12	5	125	TYR	Sidechain
12	5	132	ARG	Sidechain
12	5	171	TYR	Sidechain
12	5	172	TYR	Sidechain
12	5	193	TYR	Sidechain
12	5	61	THR	Mainchain
12	5	72	ILE	Mainchain
13	6	124	TYR	Sidechain
13	6	127	ARG	Sidechain
13	6	151	PHE	Sidechain
13	6	197	ARG	Sidechain
13	6	221	ARG	Sidechain
13	6	29	PHE	Sidechain
13	6	32	TYR	Sidechain

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Mol	Chain	Res	Type	Group
13	6	85	HIS	Sidechain
14	7	106	TYR	Sidechain
14	7	130	ARG	Sidechain
14	7	143	ARG	Sidechain
14	7	168	TYR	Sidechain
14	7	188	TYR	Sidechain
14	7	195	ARG	Sidechain
14	7	222	TYR	Sidechain
14	7	226	ARG	Sidechain
14	7	257	HIS	Sidechain
14	7	57	GLY	Mainchain
14	7	69	ASP	Mainchain
14	7	88	ARG	Sidechain
1	A	105	TYR	Sidechain
1	A	107	TYR	Sidechain
1	A	117	ARG	Sidechain
1	A	187	PHE	Sidechain
2	B	121	TYR	Sidechain
2	B	155	TYR	Sidechain
2	B	178	TYR	Sidechain
2	B	189	HIS	Sidechain
2	B	57	TYR	Sidechain
2	B	6	TYR	Sidechain
2	B	84	ARG	Sidechain
3	C	136	TYR	Sidechain
3	C	143	TYR	Sidechain
3	C	19	TYR	Sidechain
3	C	218	ARG	Sidechain
3	C	49	ARG	Sidechain
3	C	5	TYR	Sidechain
4	D	101	ARG	Sidechain
4	D	112	TYR	Sidechain
4	D	131	ARG	Sidechain
4	D	151	TYR	Sidechain
4	D	159	TYR	Sidechain
4	D	169	ARG	Sidechain
4	D	3	TYR	Sidechain
4	D	38	ARG	Sidechain
4	D	74	ALA	Peptide
4	D	76	VAL	Peptide
4	D	87	ARG	Sidechain
5	E	20	ARG	Sidechain

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Mol	Chain	Res	Type	Group
5	E	99	HIS	Sidechain
6	F	137	TYR	Sidechain
6	F	154	PHE	Sidechain
6	F	171	TYR	Sidechain
6	F	193	ARG	Sidechain
6	F	224	TYR	Sidechain
6	F	65	HIS	Peptide
7	G	119	TYR	Sidechain
7	G	150	TYR	Sidechain
7	G	199	TYR	Sidechain
7	G	233	ARG	Sidechain
7	G	26	TYR	Sidechain
7	G	8	TYR	Sidechain
27	H	111	TYR	Sidechain
27	H	147	TYR	Sidechain
27	H	150	HIS	Sidechain
27	H	232	ARG	Sidechain
27	H	258	ARG	Sidechain
27	H	339	ARG	Sidechain
27	H	386	ARG	Sidechain
28	I	131	HIS	Sidechain
28	I	132	TYR	Sidechain
28	I	138	PHE	Sidechain
28	I	225	TYR	Sidechain
28	I	249	ARG	Sidechain
28	I	268	ARG	Sidechain
28	I	439	TYR	Sidechain
32	J	148	TYR	Sidechain
32	J	258	ARG	Sidechain
32	J	313	ARG	Sidechain
32	J	369	TYR	Sidechain
32	J	43	ARG	Sidechain
29	K	114	ARG	Sidechain
29	K	178	ARG	Sidechain
29	K	205	TYR	Sidechain
29	K	263	PHE	Sidechain
29	K	313	ARG	Sidechain
29	K	323	ARG	Sidechain
29	K	363	TYR	Sidechain
29	K	417	TYR	Sidechain
29	K	44	TYR	Sidechain
29	K	81	ARG	Sidechain

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Mol	Chain	Res	Type	Group
30	L	111	ARG	Sidechain
30	L	124	TYR	Sidechain
30	L	187	TYR	Sidechain
30	L	19	ARG	Sidechain
30	L	237	ARG	Sidechain
30	L	265	ARG	Sidechain
30	L	269	ARG	Sidechain
30	L	311	ARG	Sidechain
30	L	400	TYR	Sidechain
31	M	133	GLN	Sidechain
31	M	135	TYR	Sidechain
31	M	183	ARG	Sidechain
31	M	307	ARG	Sidechain
31	M	347	ARG	Sidechain
31	M	384	TYR	Sidechain
31	M	412	ARG	Sidechain
31	M	441	TYR	Sidechain
31	M	49	ARG	Sidechain
20	N	147	TYR	Sidechain
20	N	159	ARG	Sidechain
20	N	193	PHE	Sidechain
20	N	22	PHE	Sidechain
20	N	246	TYR	Sidechain
20	N	253	TYR	Sidechain
20	N	269	ARG	Sidechain
20	N	34	PHE	Sidechain
20	N	344	ARG	Sidechain
20	N	460	TYR	Sidechain
20	N	474	ARG	Sidechain
20	N	49	TYR	Sidechain
20	N	494	TYR	Sidechain
20	N	541	HIS	Sidechain
20	N	55	ARG	Sidechain
20	N	57	ARG	Sidechain
20	N	601	ARG	Sidechain
20	N	650	TYR	Sidechain
20	N	68	PHE	Sidechain
20	N	709	PHE	Sidechain
20	N	778	PHE	Sidechain
20	N	80	TYR	Sidechain
20	N	813	TYR	Sidechain
20	N	88	PHE	Sidechain

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Mol	Chain	Res	Type	Group
20	N	881	PRO	Mainchain
20	N	899	ARG	Sidechain
20	N	96	TYR	Sidechain
26	O	173	TYR	Sidechain
26	O	24	ARG	Sidechain
26	O	29	TYR	Sidechain
26	O	63	PHE	Sidechain
22	P	114	GLU	Peptide
22	P	137	TYR	Sidechain
22	P	199	TYR	Sidechain
22	P	227	TYR	Sidechain
22	P	247	TYR	Sidechain
22	P	27	ARG	Sidechain
22	P	279	PHE	Sidechain
22	P	302	TYR	Sidechain
22	P	322	GLU	Sidechain
22	P	324	TYR	Sidechain
22	P	370	TYR	Sidechain
22	P	38	GLY	Mainchain
22	P	75	TYR	Sidechain
23	Q	126	ARG	Sidechain
23	Q	177	TYR	Sidechain
23	Q	231	TYR	Sidechain
23	Q	233	TYR	Sidechain
23	Q	344	ARG	Sidechain
23	Q	72	TYR	Sidechain
23	Q	96	PHE	Sidechain
24	R	110	TYR	Sidechain
24	R	183	TYR	Sidechain
24	R	216	TYR	Sidechain
24	R	225	TYR	Sidechain
24	R	24	PHE	Sidechain
24	R	259	TYR	Sidechain
24	R	304	TYR	Sidechain
24	R	366	TYR	Sidechain
24	R	53	TYR	Sidechain
24	R	83	ARG	Sidechain
21	S	146	ARG	Sidechain
21	S	162	TYR	Sidechain
21	S	196	ARG	Sidechain
21	S	209	TYR	Sidechain
21	S	214	TYR	Sidechain

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Mol	Chain	Res	Type	Group
21	S	257	TYR	Sidechain
21	S	283	ARG	Sidechain
21	S	325	HIS	Sidechain
21	S	356	TYR	Sidechain
21	S	388	TYR	Sidechain
21	S	410	TYR	Sidechain
21	S	497	TYR	Sidechain
21	S	76	ARG	Sidechain
21	S	95	ARG	Sidechain
17	T	177	TYR	Sidechain
17	T	282	TYR	Sidechain
17	T	292	ARG	Sidechain
17	T	305	TYR	Sidechain
17	T	321	PHE	Sidechain
17	T	91	LEU	Peptide
25	U	145	HIS	Sidechain
25	U	190	ARG	Sidechain
25	U	211	TYR	Sidechain
25	U	69	PHE	Sidechain
25	U	72	HIS	Sidechain
25	U	88	ARG	Sidechain
16	V	104	ARG	Sidechain
16	V	175	ARG	Sidechain
16	V	207	TYR	Sidechain
16	V	65	TYR	Sidechain
16	V	68	ARG	Sidechain
15	W	105	HIS	Sidechain
15	W	130	ARG	Sidechain
15	W	156	PHE	Sidechain
15	W	25	ARG	Sidechain
15	W	91	ARG	Sidechain
18	Y	65	TYR	Sidechain
19	Z	103	TYR	Sidechain
19	Z	158	TYR	Sidechain
19	Z	181	ARG	Sidechain
19	Z	202	HIS	Sidechain
19	Z	261	ARG	Sidechain
19	Z	267	ARG	Sidechain
19	Z	400	TYR	Sidechain
19	Z	469	TYR	Sidechain
19	Z	489	TYR	Sidechain
19	Z	554	TYR	Sidechain

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Mol	Chain	Res	Type	Group
19	Z	673	ARG	Sidechain
19	Z	687	ARG	Sidechain
19	Z	719	PRO	Peptide
19	Z	781	TYR	Sidechain
19	Z	845	ARG	Sidechain
19	Z	865	PHE	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
4	D	1926	0	1955	0	0
5	E	1778	0	1756	0	0
6	F	1871	0	1856	0	0
7	G	1912	0	1907	0	0
8	1	1516	0	1485	0	0
9	2	1651	0	1674	0	0
10	3	1600	0	1621	0	0
11	4	1572	0	1575	0	0
12	5	1560	0	1519	0	0
13	6	1659	0	1654	0	0
14	7	1686	0	1662	0	0
15	W	1480	0	1522	0	0
16	V	2272	0	2288	0	0
17	T	2149	0	2170	0	0
18	Y	199	0	180	0	0
19	Z	6913	0	6910	0	0
20	N	7082	0	7121	0	0
21	S	3844	0	3888	0	0
22	P	3706	0	3817	0	0
23	Q	3335	0	3435	0	0
24	R	3204	0	3204	0	0
25	U	2299	0	2334	0	0
26	O	3011	0	3042	0	0
27	H	3113	0	3162	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
28	I	3042	0	3098	0	0
29	K	3125	0	3151	0	0
30	L	3098	0	3171	0	0
31	M	3252	0	3321	0	0
32	J	3194	0	3311	0	0
All	All	82757	0	83522	0	0

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

There are no clashes within the asymmetric unit.

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	244/246 (99%)	226 (93%)	14 (6%)	4 (2%)	7	38
2	B	232/234 (99%)	210 (90%)	19 (8%)	3 (1%)	9	42
3	C	247/261 (95%)	229 (93%)	16 (6%)	2 (1%)	16	54
4	D	244/254 (96%)	218 (89%)	21 (9%)	5 (2%)	6	31
5	E	231/241 (96%)	220 (95%)	10 (4%)	1 (0%)	30	67
6	F	236/263 (90%)	219 (93%)	17 (7%)	0	100	100
7	G	243/255 (95%)	220 (90%)	19 (8%)	4 (2%)	7	38
8	1	200/238 (84%)	173 (86%)	13 (6%)	14 (7%)	1	11
9	2	217/277 (78%)	181 (83%)	16 (7%)	20 (9%)	0	8
10	3	203/205 (99%)	169 (83%)	19 (9%)	15 (7%)	1	10
11	4	194/201 (96%)	175 (90%)	10 (5%)	9 (5%)	2	17
12	5	199/263 (76%)	176 (88%)	17 (8%)	6 (3%)	3	23
13	6	211/240 (88%)	180 (85%)	16 (8%)	15 (7%)	1	11

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
14	7	214/263 (81%)	187 (87%)	15 (7%)	12 (6%)	1	14
15	W	193/377 (51%)	178 (92%)	8 (4%)	7 (4%)	2	20
16	V	287/310 (93%)	258 (90%)	17 (6%)	12 (4%)	2	17
17	T	261/353 (74%)	233 (89%)	22 (8%)	6 (2%)	5	28
18	Y	22/70 (31%)	21 (96%)	1 (4%)	0	100	100
19	Z	894/908 (98%)	800 (90%)	71 (8%)	23 (3%)	4	25
20	N	901/953 (94%)	823 (91%)	58 (6%)	20 (2%)	5	29
21	S	474/530 (89%)	425 (90%)	33 (7%)	16 (3%)	3	21
22	P	454/456 (100%)	419 (92%)	22 (5%)	13 (3%)	3	23
23	Q	420/422 (100%)	388 (92%)	24 (6%)	8 (2%)	6	32
24	R	387/389 (100%)	360 (93%)	21 (5%)	6 (2%)	7	38
25	U	286/320 (89%)	261 (91%)	15 (5%)	10 (4%)	3	20
26	O	374/376 (100%)	347 (93%)	18 (5%)	9 (2%)	4	27
27	H	394/433 (91%)	350 (89%)	27 (7%)	17 (4%)	2	17
28	I	383/440 (87%)	359 (94%)	15 (4%)	9 (2%)	5	28
29	K	389/418 (93%)	356 (92%)	26 (7%)	7 (2%)	6	34
30	L	387/403 (96%)	356 (92%)	19 (5%)	12 (3%)	3	22
31	M	413/442 (93%)	381 (92%)	18 (4%)	14 (3%)	3	21
32	J	404/406 (100%)	365 (90%)	31 (8%)	8 (2%)	6	31
All	All	10438/11447 (91%)	9463 (91%)	668 (6%)	307 (3%)	5	23

All (307) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
7	G	35	SER
8	1	45	VAL
8	1	105	GLU
8	1	153	MET
8	1	163	SER
8	1	217	VAL
9	2	81	SER
9	2	91	THR
9	2	166	PRO
9	2	172	SER
9	2	224	SER

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Mol	Chain	Res	Type
9	2	248	GLU
10	3	5	SER
10	3	41	LYS
10	3	57	ALA
10	3	142	CYS
10	3	204	MET
11	4	22	ALA
11	4	50	ALA
11	4	114	ALA
12	5	62	THR
12	5	72	ILE
13	6	57	SER
13	6	85	HIS
13	6	129	PHE
13	6	168	ALA
13	6	231	ARG
14	7	64	VAL
14	7	65	VAL
14	7	175	ALA
14	7	242	GLU
15	W	17	ARG
16	V	26	ASP
16	V	147	PRO
16	V	189	ILE
16	V	199	HIS
17	T	220	ALA
19	Z	147	SER
19	Z	241	PRO
19	Z	310	ASP
19	Z	324	VAL
19	Z	614	HIS
19	Z	810	ILE
19	Z	814	SER
19	Z	843	SER
20	N	119	PRO
20	N	165	LYS
20	N	453	HIS
20	N	471	ASP
20	N	881	PRO
20	N	899	ARG
21	S	54	ALA
21	S	108	VAL

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Mol	Chain	Res	Type
21	S	142	GLN
21	S	270	SER
21	S	296	LEU
21	S	314	GLN
22	P	3	ASP
22	P	13	ILE
22	P	341	PHE
22	P	344	THR
22	P	400	LYS
23	Q	3	ALA
23	Q	43	VAL
23	Q	102	ALA
24	R	17	LEU
24	R	289	ALA
25	U	5	ALA
25	U	164	ALA
25	U	219	LYS
25	U	237	LEU
26	O	47	ASP
27	H	65	ILE
27	H	94	GLN
27	H	128	GLN
27	H	280	ILE
27	H	347	ASP
28	I	87	PRO
28	I	118	ASP
28	I	278	ALA
28	I	391	SER
32	J	152	GLY
1	A	57	PRO
1	A	186	LYS
2	B	41	ALA
2	B	207	ASN
3	C	58	GLU
4	D	29	GLY
4	D	80	SER
8	1	136	TRP
8	1	164	GLY
8	1	206	VAL
8	1	226	GLN
9	2	161	SER
9	2	187	PRO

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Mol	Chain	Res	Type
9	2	189	MET
9	2	250	GLY
10	3	31	GLN
10	3	137	VAL
10	3	186	ILE
11	4	124	LEU
12	5	63	LEU
12	5	233	VAL
13	6	33	ALA
13	6	39	VAL
14	7	77	LEU
14	7	101	TYR
15	W	104	ASN
15	W	148	VAL
16	V	148	ILE
16	V	202	SER
16	V	232	GLN
19	Z	173	LEU
19	Z	178	LYS
19	Z	837	LEU
19	Z	849	ALA
20	N	87	LEU
20	N	123	LYS
20	N	431	THR
20	N	489	ALA
20	N	755	THR
20	N	817	LEU
21	S	82	VAL
21	S	184	SER
21	S	185	ASP
22	P	136	ILE
22	P	419	LYS
22	P	452	ILE
23	Q	280	ALA
24	R	16	ASP
24	R	191	ILE
24	R	215	ASP
26	O	49	CYS
26	O	51	ALA
26	O	341	LEU
27	H	118	PHE
27	H	147	TYR

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Mol	Chain	Res	Type
27	H	276	GLU
27	H	403	ILE
29	K	269	ALA
29	K	304	ASN
30	L	118	THR
30	L	144	VAL
31	M	106	ASP
31	M	187	GLN
31	M	298	ARG
32	J	220	VAL
32	J	223	PHE
1	A	4	GLY
4	D	13	ASP
4	D	76	VAL
7	G	73	HIS
7	G	217	VAL
8	1	51	SER
9	2	215	ASN
9	2	232	TYR
10	3	43	PHE
10	3	50	TYR
10	3	127	ILE
10	3	159	ASP
10	3	185	VAL
11	4	32	HIS
12	5	88	GLN
13	6	47	PHE
13	6	77	THR
14	7	202	PRO
15	W	46	GLU
15	W	181	ASP
17	T	93	ALA
19	Z	190	GLU
19	Z	293	GLN
19	Z	384	ALA
19	Z	459	CYS
20	N	348	THR
20	N	560	MET
20	N	944	PRO
21	S	80	LYS
21	S	127	LEU
22	P	402	ILE

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Mol	Chain	Res	Type
22	P	454	ASN
23	Q	141	LYS
23	Q	262	ASN
25	U	186	THR
25	U	247	LYS
26	O	14	SER
26	O	103	LYS
26	O	286	ALA
26	O	287	ASN
27	H	171	ASP
27	H	173	THR
27	H	281	GLY
27	H	312	ARG
28	I	89	GLU
28	I	185	ALA
28	I	410	ARG
29	K	390	ASN
30	L	81	GLU
30	L	127	ARG
30	L	143	ASN
30	L	193	GLY
31	M	306	ASP
31	M	307	ARG
31	M	326	ASN
31	M	436	ALA
32	J	10	GLU
32	J	80	MET
32	J	354	ALA
4	D	169	ARG
7	G	43	LYS
9	2	67	MET
9	2	136	TYR
9	2	188	ASP
9	2	225	LYS
10	3	130	PRO
13	6	32	TYR
13	6	34	PHE
13	6	220	LEU
14	7	252	ASN
15	W	178	SER
16	V	116	PRO
16	V	183	HIS

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Mol	Chain	Res	Type
16	V	266	THR
17	T	287	PHE
19	Z	490	ALA
19	Z	802	SER
20	N	524	LYS
20	N	772	TRP
20	N	819	VAL
21	S	149	LYS
21	S	339	PRO
22	P	93	ARG
22	P	95	SER
22	P	340	VAL
24	R	50	MET
25	U	31	ASN
25	U	66	SER
27	H	337	LEU
28	I	431	GLN
29	K	317	LEU
29	K	408	LYS
30	L	372	ASP
31	M	160	SER
31	M	290	GLU
32	J	111	ASN
1	A	209	ASP
2	B	202	GLN
5	E	73	HIS
8	1	231	THR
9	2	148	VAL
9	2	167	TYR
11	4	4	LEU
11	4	101	ASN
12	5	232	ALA
13	6	157	TYR
14	7	56	LEU
14	7	191	GLN
16	V	187	PRO
17	T	258	SER
17	T	286	LEU
20	N	490	ARG
20	N	903	PHE
21	S	131	LEU
21	S	134	PRO

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Mol	Chain	Res	Type
21	S	136	ASP
30	L	258	SER
30	L	341	ASP
31	M	114	ILE
32	J	192	PRO
3	C	8	ARG
8	1	138	PRO
8	1	141	GLY
8	1	148	PRO
9	2	231	PRO
14	7	151	TRP
19	Z	175	ASP
19	Z	622	SER
19	Z	642	ALA
25	U	244	GLU
27	H	106	SER
27	H	311	PRO
28	I	127	VAL
30	L	297	ASP
15	W	45	PRO
16	V	155	VAL
19	Z	311	VAL
23	Q	341	PRO
27	H	378	PRO
30	L	318	PRO
31	M	184	PRO
9	2	261	PRO
10	3	119	PRO
11	4	13	VAL
13	6	37	GLY
13	6	62	ILE
26	O	183	VAL
14	7	246	PRO
19	Z	115	PRO
31	M	102	VAL
31	M	340	ILE
11	4	26	VAL
17	T	255	PRO
23	Q	391	PRO
25	U	179	ILE
29	K	199	PRO
29	K	406	VAL

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Mol	Chain	Res	Type
30	L	183	GLY
31	M	32	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%)	200 (95%)	10 (5%)	23	44
2	B	191/191 (100%)	182 (95%)	9 (5%)	23	45
3	C	209/221 (95%)	197 (94%)	12 (6%)	18	40
4	D	208/215 (97%)	193 (93%)	15 (7%)	13	35
5	E	195/203 (96%)	182 (93%)	13 (7%)	15	36
6	F	204/224 (91%)	191 (94%)	13 (6%)	16	37
7	G	202/212 (95%)	189 (94%)	13 (6%)	16	37
8	1	160/185 (86%)	139 (87%)	21 (13%)	4	15
9	2	180/227 (79%)	166 (92%)	14 (8%)	11	32
10	3	175/175 (100%)	160 (91%)	15 (9%)	10	29
11	4	167/172 (97%)	152 (91%)	15 (9%)	9	27
12	5	158/205 (77%)	146 (92%)	12 (8%)	12	33
13	6	179/200 (90%)	162 (90%)	17 (10%)	8	25
14	7	178/215 (83%)	159 (89%)	19 (11%)	6	21
15	W	168/312 (54%)	161 (96%)	7 (4%)	26	48
16	V	253/268 (94%)	235 (93%)	18 (7%)	13	35
17	T	233/298 (78%)	224 (96%)	9 (4%)	28	49
18	Y	22/63 (35%)	21 (96%)	1 (4%)	24	46
19	Z	753/765 (98%)	699 (93%)	54 (7%)	13	35
20	N	776/814 (95%)	726 (94%)	50 (6%)	16	37
21	S	414/458 (90%)	395 (95%)	19 (5%)	24	45
22	P	419/419 (100%)	393 (94%)	26 (6%)	16	38

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
23	Q	362/362 (100%)	343 (95%)	19 (5%)	21	42
24	R	345/345 (100%)	329 (95%)	16 (5%)	24	45
25	U	259/289 (90%)	244 (94%)	15 (6%)	18	40
26	O	334/334 (100%)	315 (94%)	19 (6%)	18	40
27	H	341/372 (92%)	324 (95%)	17 (5%)	22	43
28	I	341/385 (89%)	322 (94%)	19 (6%)	19	40
29	K	343/367 (94%)	324 (94%)	19 (6%)	19	41
30	L	341/353 (97%)	319 (94%)	22 (6%)	15	37
31	M	357/382 (94%)	336 (94%)	21 (6%)	18	39
32	J	352/352 (100%)	333 (95%)	19 (5%)	20	41
All	All	9029/9793 (92%)	8461 (94%)	568 (6%)	18	37

All (568) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	13	ILE
1	A	15	ILE
1	A	50	ILE
1	A	107	TYR
1	A	121	ILE
1	A	143	ILE
1	A	166	THR
1	A	187	PHE
1	A	215	ILE
1	A	222	VAL
2	B	45	VAL
2	B	79	MET
2	B	100	VAL
2	B	127	VAL
2	B	135	LEU
2	B	192	ILE
2	B	193	LEU
2	B	205	GLU
2	B	208	ILE
3	C	35	LEU
3	C	43	VAL
3	C	44	LEU
3	C	80	THR

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Mol	Chain	Res	Type
3	C	103	GLU
3	C	137	ILE
3	C	140	ASP
3	C	164	ILE
3	C	176	LYS
3	C	180	LYS
3	C	216	LEU
3	C	225	ILE
4	D	9	VAL
4	D	10	PHE
4	D	13	ASP
4	D	33	VAL
4	D	59	VAL
4	D	75	VAL
4	D	79	VAL
4	D	102	LEU
4	D	110	VAL
4	D	140	VAL
4	D	150	LEU
4	D	152	GLN
4	D	154	ASP
4	D	225	ILE
4	D	235	VAL
5	E	41	GLN
5	E	69	GLU
5	E	162	PHE
5	E	170	ILE
5	E	191	LEU
5	E	195	ILE
5	E	201	ILE
5	E	207	GLU
5	E	209	LYS
5	E	211	ASN
5	E	215	ILE
5	E	217	LEU
5	E	238	ILE
6	F	4	ASN
6	F	38	LEU
6	F	45	VAL
6	F	74	ILE
6	F	90	GLN
6	F	101	ARG

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Mol	Chain	Res	Type
6	F	103	LEU
6	F	104	PRO
6	F	120	THR
6	F	130	VAL
6	F	208	LYS
6	F	215	VAL
6	F	230	SER
7	G	20	ARG
7	G	31	VAL
7	G	52	LYS
7	G	64	ASN
7	G	67	LEU
7	G	136	PHE
7	G	140	SER
7	G	166	ILE
7	G	171	GLN
7	G	198	ILE
7	G	205	VAL
7	G	226	GLU
7	G	230	LYS
8	1	36	ILE
8	1	45	VAL
8	1	46	VAL
8	1	52	ARG
8	1	74	ILE
8	1	84	ASP
8	1	94	TYR
8	1	115	LEU
8	1	122	ARG
8	1	136	TRP
8	1	147	VAL
8	1	152	MET
8	1	160	ILE
8	1	171	TYR
8	1	173	ASP
8	1	177	ARG
8	1	181	THR
8	1	183	ASP
8	1	186	LEU
8	1	219	ARG
8	1	230	VAL
9	2	50	VAL

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Mol	Chain	Res	Type
9	2	56	VAL
9	2	68	VAL
9	2	108	LEU
9	2	111	LEU
9	2	119	VAL
9	2	131	PHE
9	2	149	THR
9	2	154	TYR
9	2	162	THR
9	2	170	MET
9	2	184	LYS
9	2	195	LYS
9	2	248	GLU
10	3	15	LYS
10	3	30	ILE
10	3	47	ASP
10	3	51	ILE
10	3	60	VAL
10	3	71	LEU
10	3	82	ILE
10	3	95	LEU
10	3	102	PRO
10	3	124	LEU
10	3	137	VAL
10	3	156	PRO
10	3	187	VAL
10	3	189	ILE
10	3	200	LEU
11	4	4	LEU
11	4	5	ILE
11	4	41	LYS
11	4	42	ILE
11	4	49	GLU
11	4	61	GLN
11	4	68	LYS
11	4	69	MET
11	4	113	PRO
11	4	115	LEU
11	4	116	TYR
11	4	138	LEU
11	4	145	ARG
11	4	168	GLN

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Mol	Chain	Res	Type
11	4	194	ILE
12	5	90	VAL
12	5	104	MET
12	5	113	PHE
12	5	114	TRP
12	5	116	ARG
12	5	124	ILE
12	5	125	TYR
12	5	135	VAL
12	5	165	LYS
12	5	200	ARG
12	5	221	GLN
12	5	245	ARG
13	6	35	ASN
13	6	38	THR
13	6	42	ILE
13	6	49	ILE
13	6	77	THR
13	6	78	VAL
13	6	93	LYS
13	6	119	LEU
13	6	137	ILE
13	6	140	LEU
13	6	162	PHE
13	6	171	MET
13	6	176	LEU
13	6	180	VAL
13	6	186	GLN
13	6	193	LEU
13	6	195	LEU
14	7	59	LYS
14	7	66	ILE
14	7	71	LEU
14	7	85	ARG
14	7	87	MET
14	7	94	MET
14	7	104	PHE
14	7	117	ASP
14	7	133	HIS
14	7	138	ARG
14	7	150	LEU
14	7	196	GLU

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Mol	Chain	Res	Type
14	7	204	LEU
14	7	218	ARG
14	7	220	LEU
14	7	236	VAL
14	7	238	GLU
14	7	252	ASN
14	7	257	HIS
15	W	34	ASN
15	W	49	VAL
15	W	54	LEU
15	W	62	THR
15	W	63	THR
15	W	71	ILE
15	W	143	PHE
16	V	65	TYR
16	V	100	LYS
16	V	130	GLN
16	V	144	VAL
16	V	163	ILE
16	V	178	THR
16	V	189	ILE
16	V	203	ILE
16	V	205	ILE
16	V	220	LEU
16	V	231	LEU
16	V	255	TYR
16	V	257	LYS
16	V	288	VAL
16	V	300	LEU
16	V	304	LEU
16	V	308	VAL
16	V	310	LYS
17	T	127	LEU
17	T	215	LEU
17	T	216	GLU
17	T	221	LYS
17	T	247	VAL
17	T	248	PHE
17	T	303	THR
17	T	316	ASN
17	T	319	TYR
18	Y	61	GLU

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Mol	Chain	Res	Type
19	Z	6	ARG
19	Z	31	LYS
19	Z	45	LEU
19	Z	52	LEU
19	Z	59	LEU
19	Z	66	LYS
19	Z	99	LEU
19	Z	108	GLU
19	Z	115	PRO
19	Z	158	TYR
19	Z	174	ASP
19	Z	181	ARG
19	Z	189	LYS
19	Z	190	GLU
19	Z	192	VAL
19	Z	202	HIS
19	Z	214	VAL
19	Z	221	ILE
19	Z	233	LEU
19	Z	237	VAL
19	Z	261	ARG
19	Z	278	VAL
19	Z	309	GLU
19	Z	312	GLU
19	Z	313	GLU
19	Z	317	LEU
19	Z	329	ASN
19	Z	340	MET
19	Z	345	PRO
19	Z	356	ASN
19	Z	433	LEU
19	Z	436	SER
19	Z	445	LEU
19	Z	451	VAL
19	Z	452	ASN
19	Z	477	MET
19	Z	487	LEU
19	Z	550	LEU
19	Z	553	THR
19	Z	613	LEU
19	Z	635	LYS
19	Z	639	LYS

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Mol	Chain	Res	Type
19	Z	701	ASN
19	Z	719	PRO
19	Z	726	ILE
19	Z	740	ARG
19	Z	741	LEU
19	Z	763	ARG
19	Z	764	LEU
19	Z	776	LEU
19	Z	836	GLU
19	Z	872	VAL
19	Z	879	ARG
19	Z	886	GLU
20	N	55	ARG
20	N	82	LEU
20	N	96	TYR
20	N	105	ILE
20	N	113	VAL
20	N	120	GLU
20	N	140	ARG
20	N	190	ASN
20	N	200	VAL
20	N	243	LEU
20	N	252	LEU
20	N	269	ARG
20	N	323	LEU
20	N	333	MET
20	N	353	LEU
20	N	367	THR
20	N	390	LEU
20	N	407	SER
20	N	410	VAL
20	N	422	LEU
20	N	465	LEU
20	N	472	ILE
20	N	479	LEU
20	N	507	VAL
20	N	521	LEU
20	N	550	VAL
20	N	552	ILE
20	N	554	LEU
20	N	555	VAL
20	N	573	ASP

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Mol	Chain	Res	Type
20	N	601	ARG
20	N	605	VAL
20	N	627	PHE
20	N	636	VAL
20	N	670	ASN
20	N	732	LEU
20	N	746	ILE
20	N	756	HIS
20	N	765	VAL
20	N	767	THR
20	N	770	TRP
20	N	774	PRO
20	N	817	LEU
20	N	877	LEU
20	N	889	LEU
20	N	908	ILE
20	N	911	ILE
20	N	913	ILE
20	N	921	ILE
20	N	928	VAL
21	S	32	ASP
21	S	38	GLU
21	S	76	ARG
21	S	104	LEU
21	S	155	LEU
21	S	163	LEU
21	S	213	VAL
21	S	217	LEU
21	S	231	LEU
21	S	248	ASN
21	S	281	TRP
21	S	335	LEU
21	S	341	ARG
21	S	397	ASN
21	S	411	SER
21	S	415	LEU
21	S	438	ILE
21	S	447	ILE
21	S	495	LYS
22	P	7	GLU
22	P	12	ARG
22	P	18	VAL

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Mol	Chain	Res	Type
22	P	24	VAL
22	P	41	GLN
22	P	65	ARG
22	P	66	ILE
22	P	78	LYS
22	P	128	LEU
22	P	136	ILE
22	P	138	VAL
22	P	186	ILE
22	P	206	SER
22	P	250	ILE
22	P	253	THR
22	P	259	GLU
22	P	276	LEU
22	P	290	ILE
22	P	299	ILE
22	P	314	LEU
22	P	323	ASP
22	P	364	ARG
22	P	380	GLN
22	P	393	LEU
22	P	446	ILE
22	P	448	LYS
23	Q	15	LEU
23	Q	27	LEU
23	Q	32	LYS
23	Q	77	LEU
23	Q	153	LEU
23	Q	172	LEU
23	Q	183	LEU
23	Q	196	THR
23	Q	200	ILE
23	Q	252	LYS
23	Q	270	LEU
23	Q	306	LEU
23	Q	319	ILE
23	Q	326	LEU
23	Q	337	ARG
23	Q	350	ILE
23	Q	353	LEU
23	Q	377	ILE
23	Q	403	THR

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Mol	Chain	Res	Type
24	R	25	LEU
24	R	41	LEU
24	R	42	MET
24	R	50	MET
24	R	69	LEU
24	R	84	LEU
24	R	88	LEU
24	R	134	LEU
24	R	176	ARG
24	R	200	LEU
24	R	214	MET
24	R	225	TYR
24	R	286	TRP
24	R	299	MET
24	R	331	ASP
24	R	366	TYR
25	U	11	VAL
25	U	15	VAL
25	U	35	VAL
25	U	39	LEU
25	U	67	VAL
25	U	85	VAL
25	U	118	ASN
25	U	131	LEU
25	U	174	HIS
25	U	201	LEU
25	U	226	ILE
25	U	249	PHE
25	U	273	HIS
25	U	280	ILE
25	U	284	ASP
26	O	8	LEU
26	O	9	GLN
26	O	44	PHE
26	O	73	PRO
26	O	76	LEU
26	O	79	ILE
26	O	81	LEU
26	O	118	ILE
26	O	133	GLU
26	O	138	VAL
26	O	155	PHE

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Mol	Chain	Res	Type
26	O	180	LEU
26	O	210	VAL
26	O	240	PHE
26	O	255	TRP
26	O	272	ILE
26	O	294	GLU
26	O	344	GLN
26	O	350	LYS
27	H	68	SER
27	H	80	LEU
27	H	105	ASP
27	H	149	ILE
27	H	165	GLN
27	H	238	ILE
27	H	240	VAL
27	H	297	ARG
27	H	315	ILE
27	H	316	LYS
27	H	328	ASP
27	H	340	LYS
27	H	346	PRO
27	H	371	GLU
27	H	380	SER
27	H	385	ILE
27	H	388	VAL
28	I	62	LEU
28	I	85	MET
28	I	107	MET
28	I	115	ILE
28	I	134	SER
28	I	135	ILE
28	I	159	VAL
28	I	162	VAL
28	I	194	ILE
28	I	214	MET
28	I	216	ILE
28	I	253	SER
28	I	257	GLN
28	I	294	ARG
28	I	309	MET
28	I	360	THR
28	I	405	MET

Continued on next page...

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Mol	Chain	Res	Type
28	I	410	ARG
28	I	439	TYR
29	K	30	LEU
29	K	33	GLU
29	K	51	LEU
29	K	80	LYS
29	K	120	ASP
29	K	125	LYS
29	K	130	VAL
29	K	154	LEU
29	K	189	GLU
29	K	198	PRO
29	K	234	GLU
29	K	242	GLU
29	K	284	GLU
29	K	285	VAL
29	K	311	THR
29	K	321	LEU
29	K	344	ILE
29	K	361	GLU
29	K	399	PHE
30	L	36	ILE
30	L	84	ILE
30	L	94	VAL
30	L	106	LEU
30	L	114	LEU
30	L	129	VAL
30	L	130	ASP
30	L	178	ILE
30	L	217	ILE
30	L	222	ILE
30	L	244	ILE
30	L	265	ARG
30	L	271	LEU
30	L	290	ILE
30	L	293	THR
30	L	301	PRO
30	L	309	LEU
30	L	318	PRO
30	L	352	PHE
30	L	360	VAL
30	L	375	PHE

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Mol	Chain	Res	Type
30	L	381	PHE
31	M	50	LEU
31	M	55	ILE
31	M	102	VAL
31	M	109	GLU
31	M	137	LEU
31	M	144	ASP
31	M	149	LYS
31	M	159	ASP
31	M	167	LEU
31	M	170	GLU
31	M	191	ILE
31	M	194	LEU
31	M	206	VAL
31	M	213	GLU
31	M	226	VAL
31	M	262	MET
31	M	294	ILE
31	M	314	LEU
31	M	335	THR
31	M	383	ASN
31	M	400	LYS
32	J	15	LYS
32	J	33	LEU
32	J	56	VAL
32	J	65	LEU
32	J	126	ILE
32	J	132	ASP
32	J	134	LEU
32	J	187	LEU
32	J	196	LYS
32	J	218	GLU
32	J	251	ILE
32	J	276	LEU
32	J	287	LYS
32	J	290	LYS
32	J	291	VAL
32	J	298	ILE
32	J	336	MET
32	J	339	THR
32	J	379	THR

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.

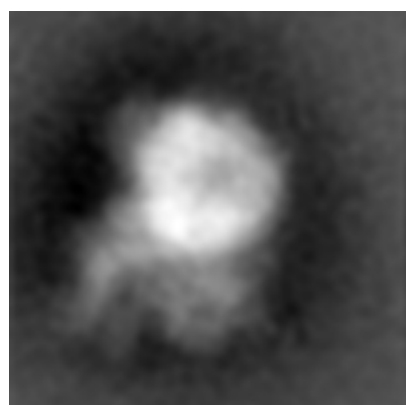
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-3913. These allow visual inspection of the internal detail of the map and identification of artifacts.

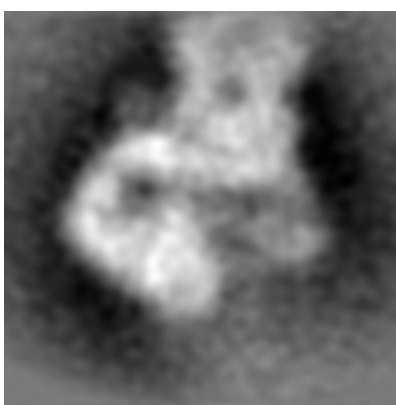
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

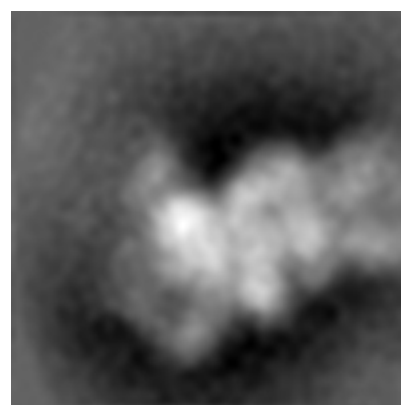
6.1.1 Primary map



X



Y



Z

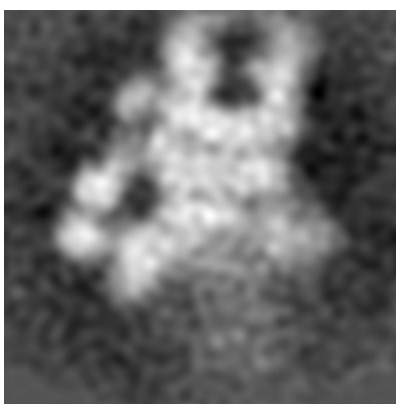
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

6.2.1 Primary map



X Index: 45



Y Index: 45

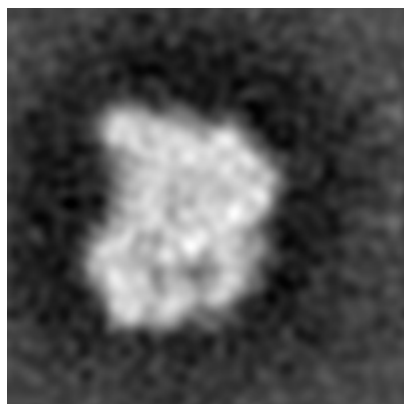


Z Index: 45

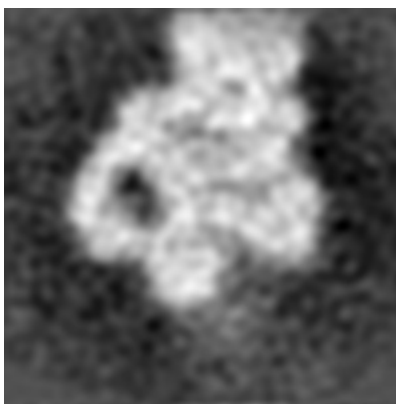
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

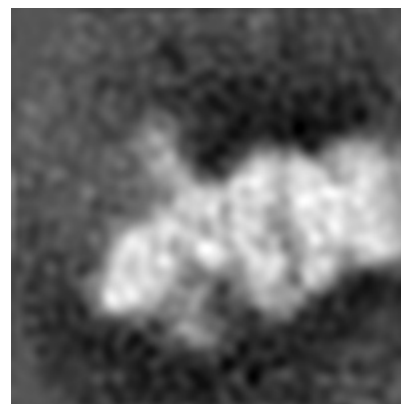
6.3.1 Primary map



X Index: 55



Y Index: 37

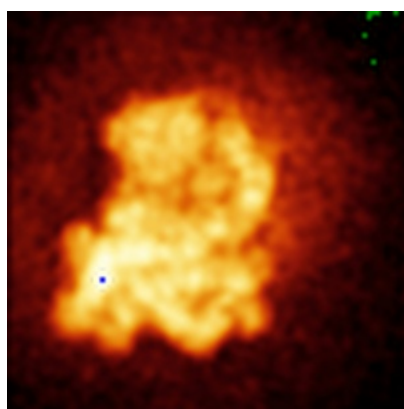


Z Index: 42

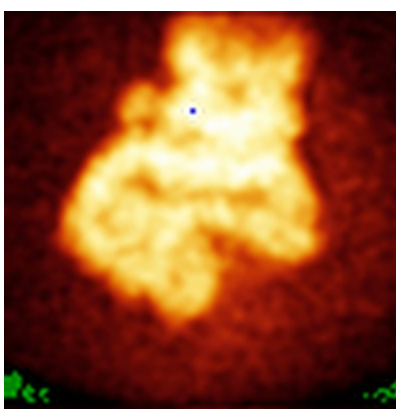
The images above show the largest variance slices of the map in three orthogonal directions.

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

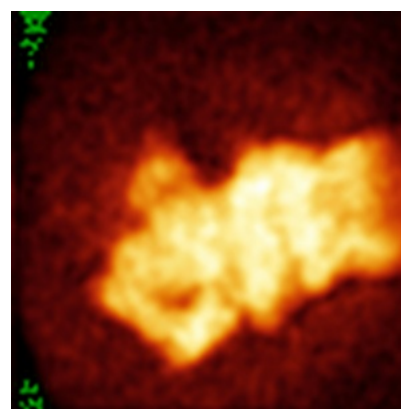
6.4.1 Primary map



X



Y

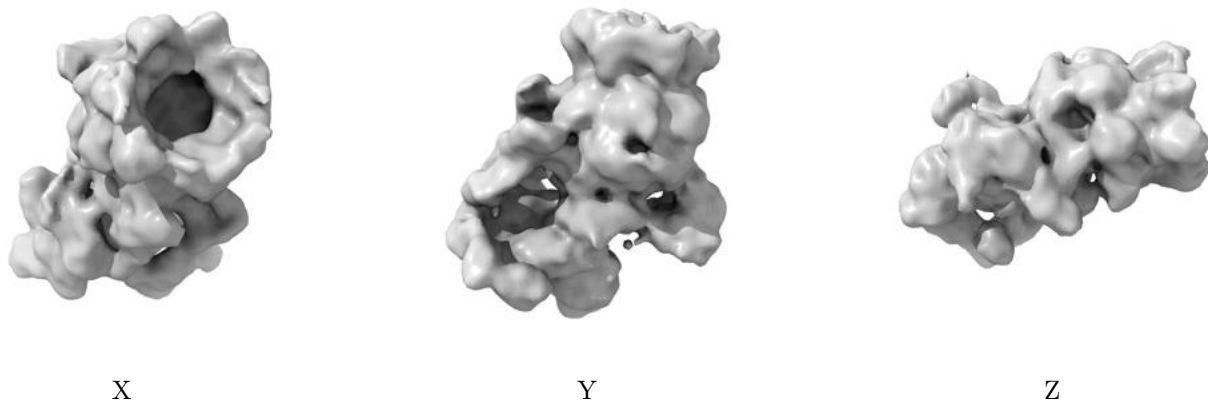


Z

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.

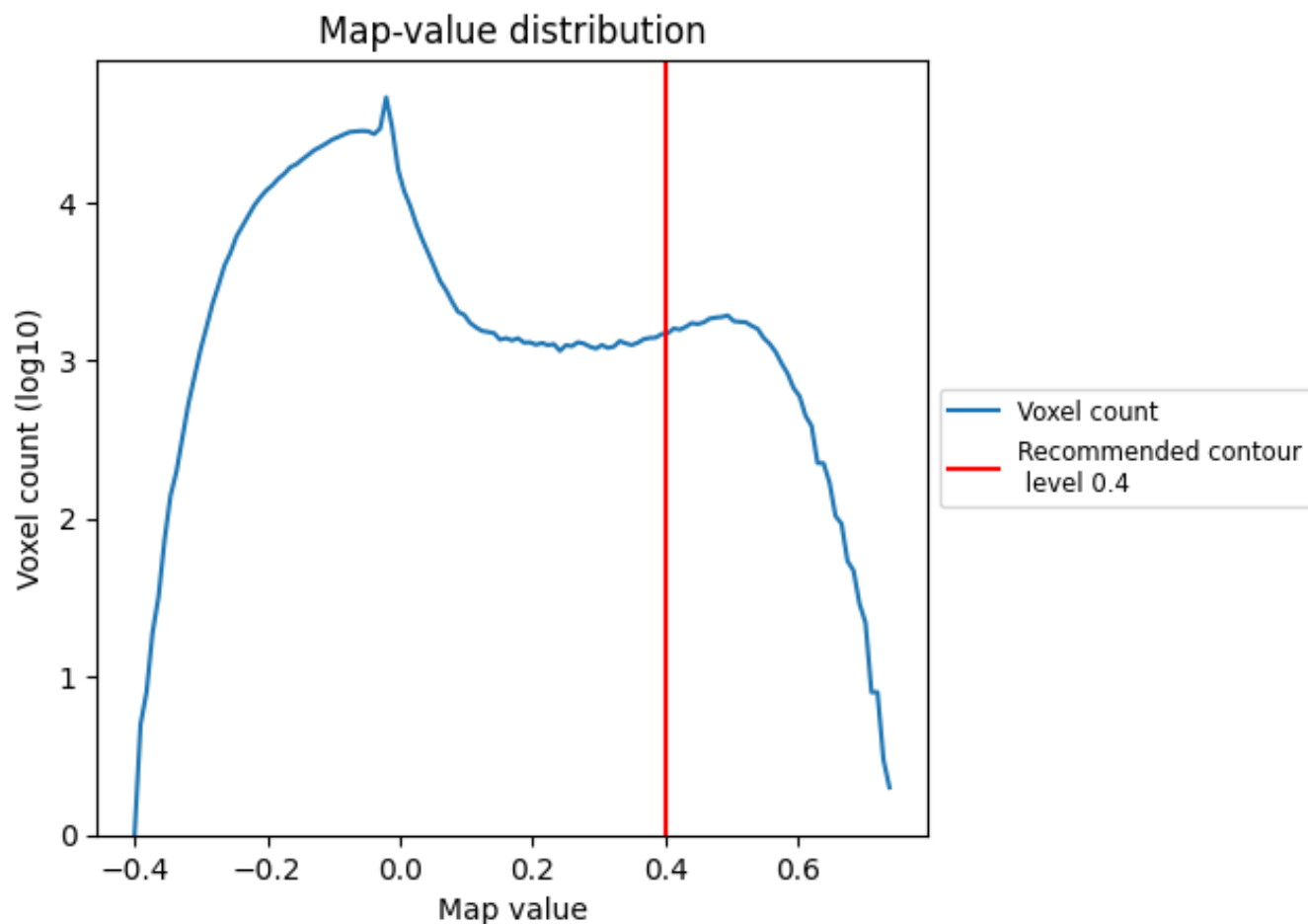
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

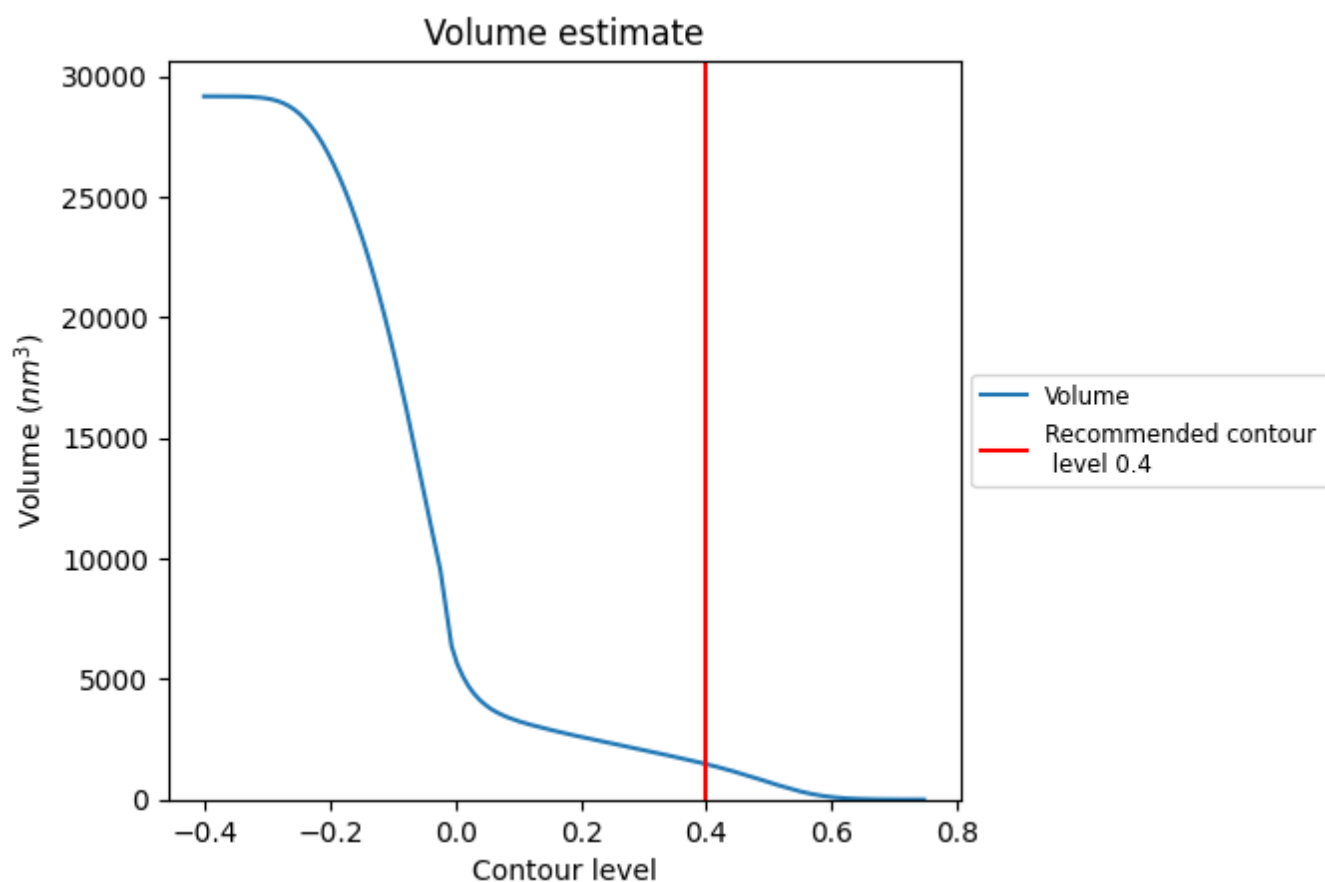
This section contains the results of statistical analysis of the map.

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.

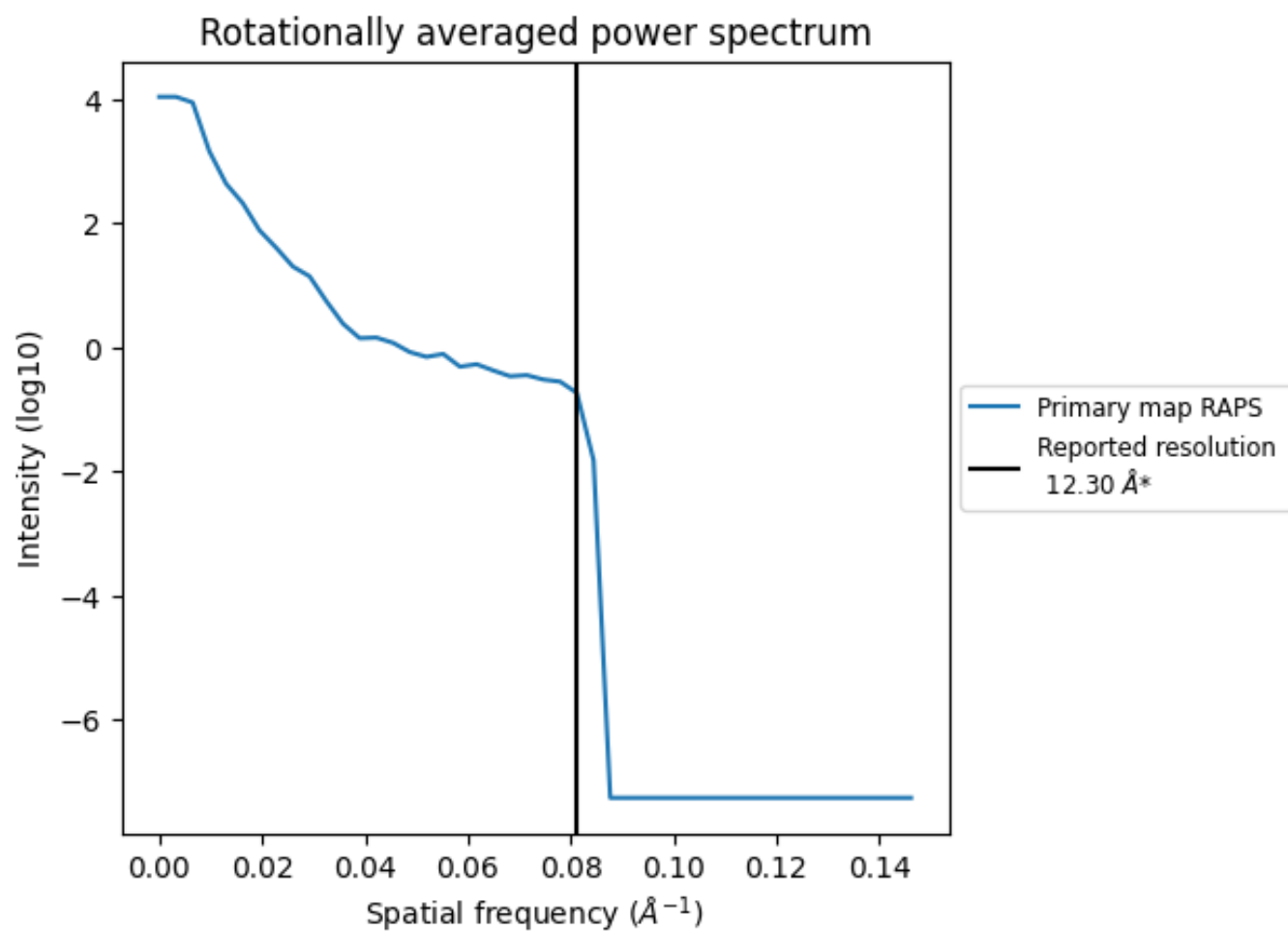
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1469 nm³; this corresponds to an approximate mass of 1327 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 0.081 $\text{\AA}^{-1}$

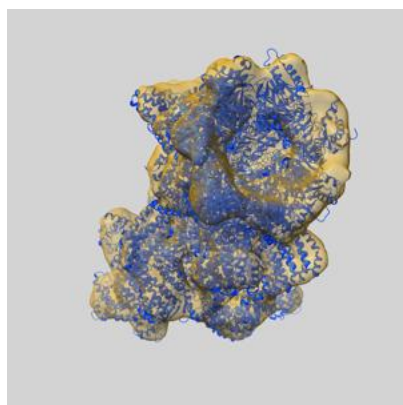
8 Fourier-Shell correlation

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

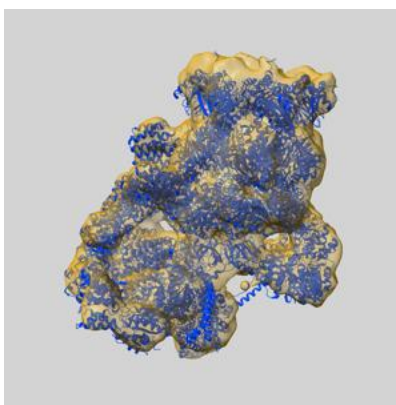
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-3913 and PDB model 6EPC. Per-residue inclusion information can be found in section 3 on page 10.

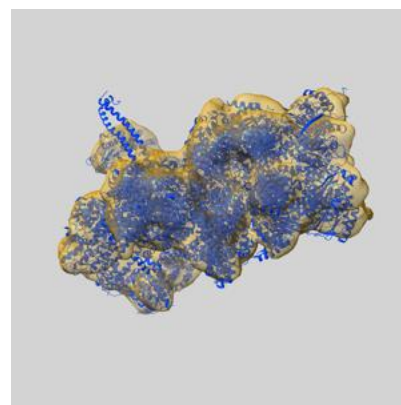
9.1 Map-model overlay [i](#)



X



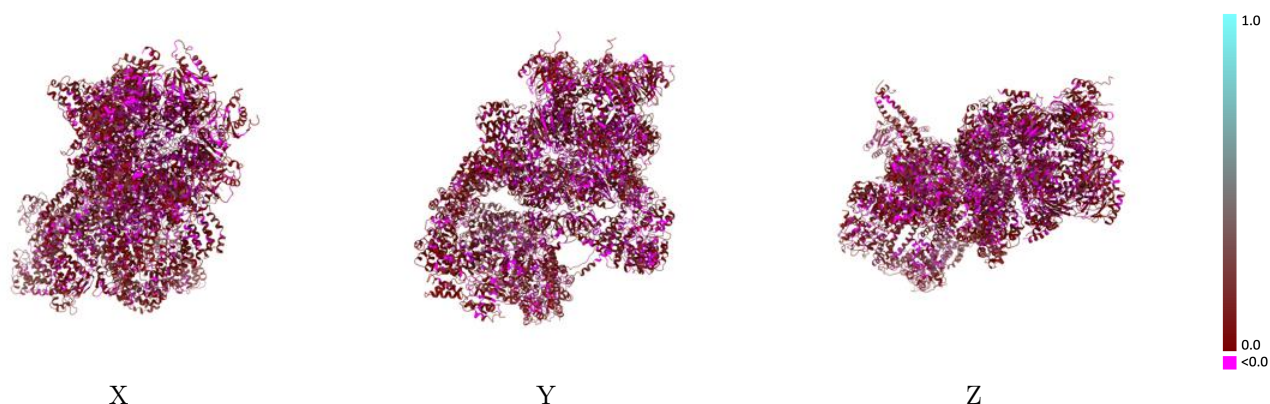
Y



Z

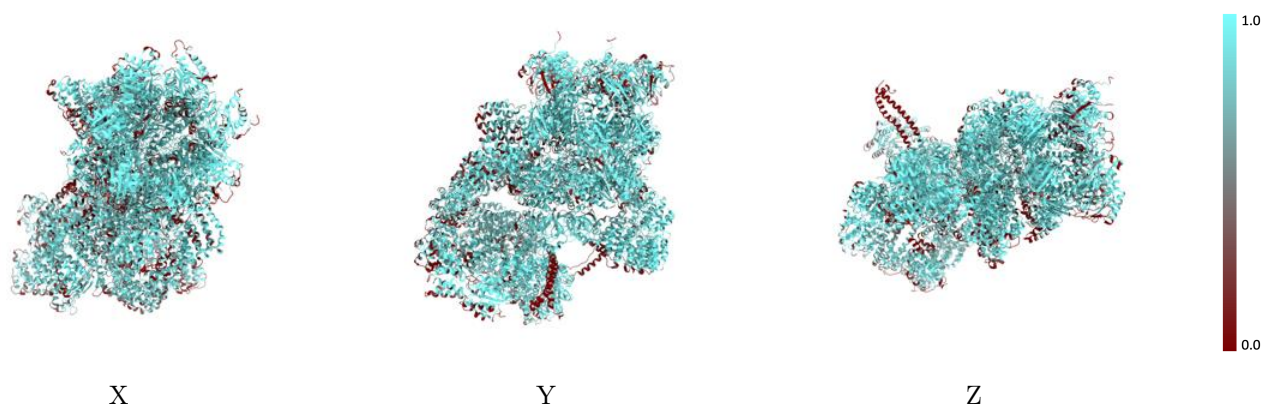
The images above show the 3D surface view of the map at the recommended contour level 0.4 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



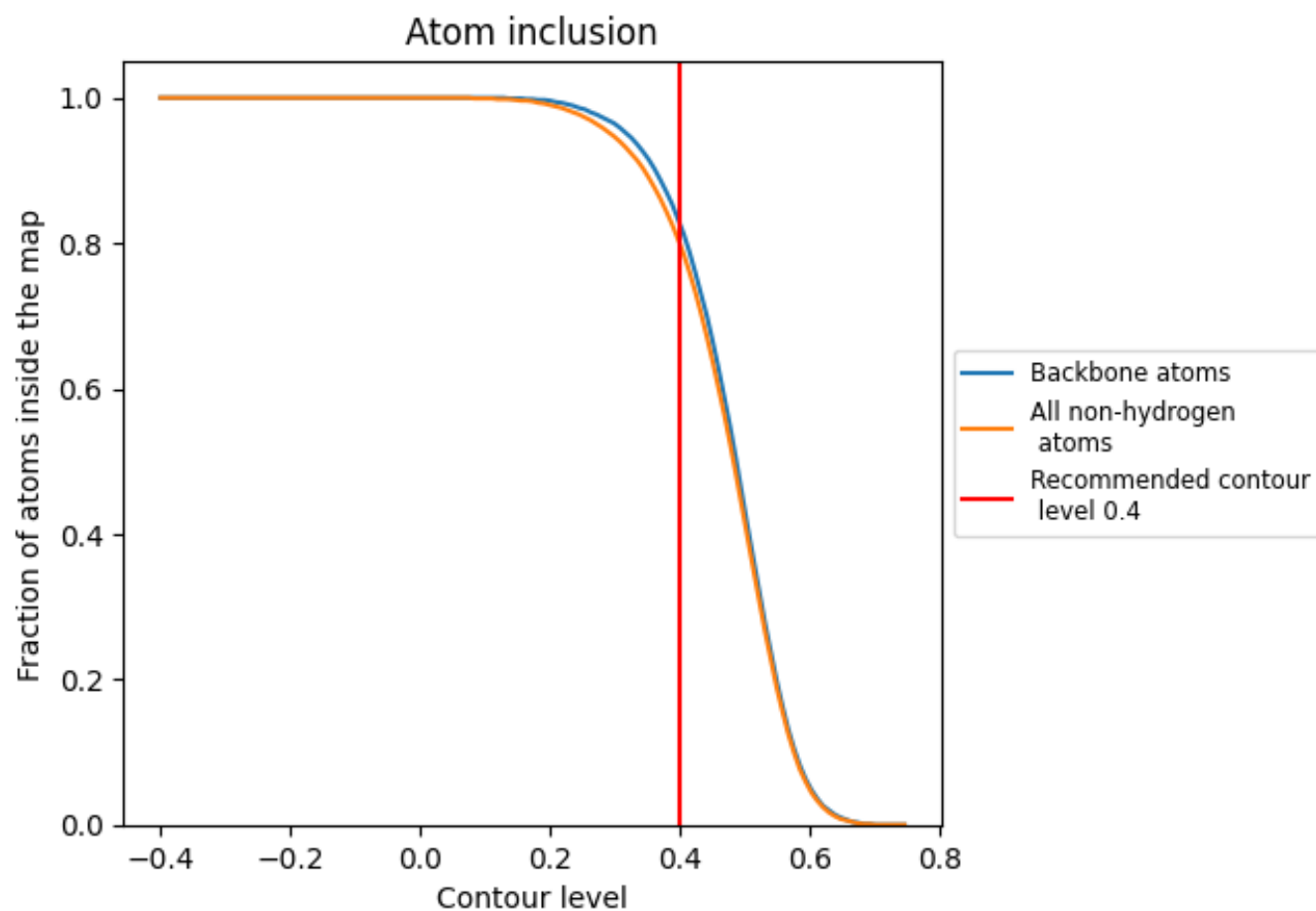
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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, 83% of all backbone atoms, 80% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

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

Chain	Atom inclusion	Q-score
All	 0.8000	 0.0520
1	 0.7720	 0.0430
2	 0.6970	 0.0440
3	 0.7310	 0.0290
4	 0.7200	 0.0570
5	 0.7730	 0.0470
6	 0.6820	 0.0410
7	 0.7710	 0.0470
A	 0.8820	 0.0400
B	 0.8320	 0.0450
C	 0.7820	 0.0460
D	 0.8380	 0.0440
E	 0.8900	 0.0340
F	 0.9330	 0.0470
G	 0.9220	 0.0310
H	 0.9380	 0.0420
I	 0.8130	 0.0420
J	 0.7940	 0.0550
K	 0.8540	 0.0490
L	 0.8230	 0.0480
M	 0.8080	 0.0480
N	 0.8140	 0.0560
O	 0.6490	 0.0690
P	 0.7410	 0.0740
Q	 0.7920	 0.0640
R	 0.7360	 0.0610
S	 0.7940	 0.0570
T	 0.6810	 0.0690
U	 0.7450	 0.0460
V	 0.9240	 0.0570
W	 0.7210	 0.0720
Y	 0.5410	 0.0380
Z	 0.8270	 0.0470

