



Full wwPDB EM Validation Report ⓘ

Mar 9, 2026 – 02:41 AM UTC

PDB ID : 6FVT / pdb_00006vt
EMDB ID : EMD-3534
Title : 26S proteasome, s1 state
Authors : Eisele, M.R.; Reed, R.G.; Rudack, T.; Schweitzer, A.; Beck, F.; Nagy, I.;
Pfeifer, G.; Plitzko, J.M.; Baumeister, W.; Tomko, R.J.; Sakata, E.
Deposited on : 2018-03-05
Resolution : 4.10 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:

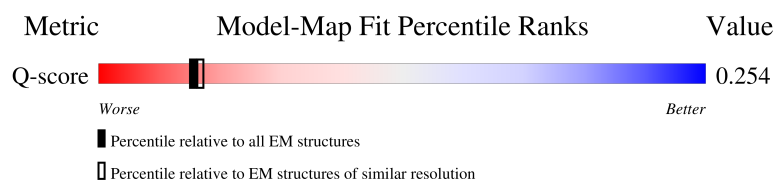
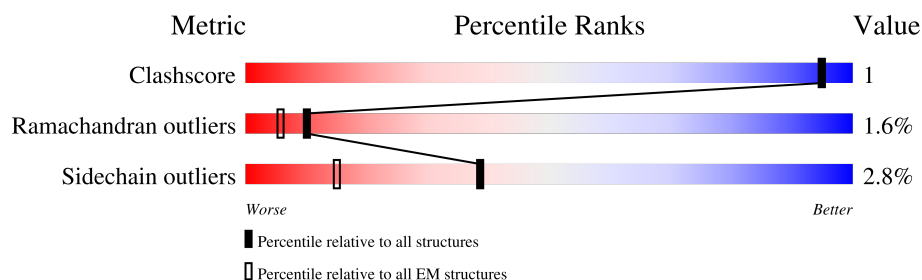
EMDB validation analysis : 0.0.1.dev132
Mogul : 2022.3.0, CSD as543be (2022)
MolProbity : 4-5-2 with Phenix2.0
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data 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 4.10 Å.

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



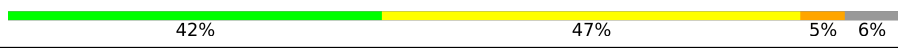
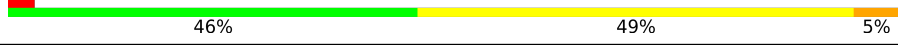
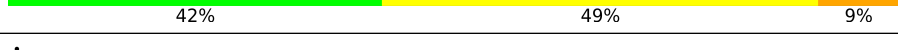
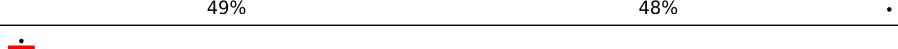
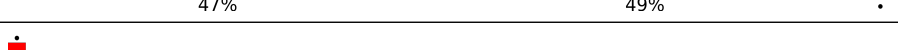
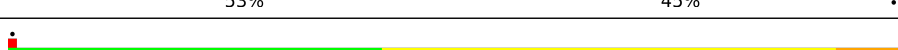
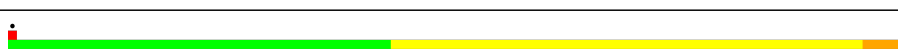
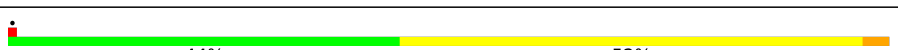
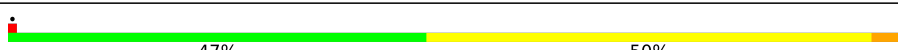
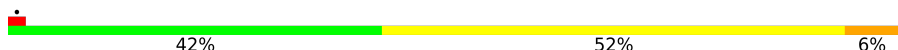
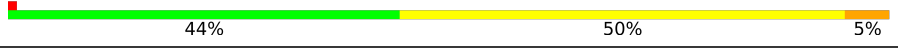
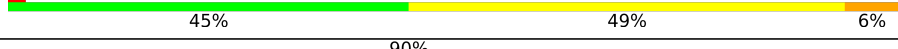
Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	6458 (3.60 - 4.60)

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	241	
1	a	241	
2	B	249	
2	b	249	

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Mol	Chain	Length	Quality of chain
3	C	244	
3	c	244	
4	D	251	
4	d	251	
5	E	244	
5	e	244	
6	F	231	
6	f	231	
7	G	245	
7	g	245	
8	l	196	
8	h	196	
9	2	226	
9	i	226	
10	3	204	
10	j	204	
11	4	195	
11	k	195	
12	5	212	
12	l	212	
13	6	222	
13	m	222	
14	7	232	
14	n	232	
15	W	197	

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Mol	Chain	Length	Quality of chain
16	V	289	
17	T	266	
18	X	127	
19	Y	89	
20	Z	970	
21	N	922	
22	S	475	
23	P	440	
24	Q	434	
25	R	405	
26	U	304	
27	O	388	
28	H	426	
29	I	385	
30	K	394	
31	L	388	
32	M	421	
33	J	405	

2 Entry composition

There are 36 unique types of molecules in this entry. The entry contains 110541 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-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	a	241	Total	C	N	O	S	0	0
			1908	1214	320	366	8		
1	A	241	Total	C	N	O	S	0	0
			1908	1214	320	366	8		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
2	b	249	Total	C	N	O	S	0	0
			1907	1214	314	376	3		
2	B	249	Total	C	N	O	S	0	0
			1907	1214	314	376	3		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
3	c	244	Total	C	N	O	S	0	0
			1905	1201	321	380	3		
3	C	244	Total	C	N	O	S	0	0
			1905	1201	321	380	3		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
4	d	251	Total	C	N	O	S	0	0
			1982	1235	350	393	4		
4	D	237	Total	C	N	O	S	0	0
			1859	1164	325	366	4		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
5	e	244	Total	C	N	O	S	0	0
			1883	1176	316	384	7		
5	E	244	Total	C	N	O	S	0	0
			1883	1176	316	384	7		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
6	f	231	Total	C	N	O	S	0	0
			1773	1114	307	348	4		
6	F	231	Total	C	N	O	S	0	0
			1773	1114	307	348	4		

- Molecule 7 is a protein called Probable proteasome subunit alpha type-7.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	g	245	Total	C	N	O	S	0	0
			1905	1211	331	359	4		
7	G	245	Total	C	N	O	S	0	0
			1905	1211	331	359	4		

- Molecule 8 is a protein called Proteasome subunit beta type-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	h	196	Total	C	N	O	S	0	0
			1512	955	250	300	7		
8	1	196	Total	C	N	O	S	0	0
			1512	955	250	300	7		

- Molecule 9 is a protein called Proteasome subunit beta type-2.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	i	226	Total	C	N	O	S	0	0
			1720	1082	298	333	7		
9	2	226	Total	C	N	O	S	0	0
			1720	1082	298	333	7		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
10	j	204	Total	C	N	O	S	0	0
			1581	1010	258	305	8		

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Mol	Chain	Residues	Atoms					AltConf	Trace
10	3	204	Total	C	N	O	S	0	0
			1581	1010	258	305	8		

- Molecule 11 is a protein called Proteasome subunit beta type-4.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	k	195	Total	C	N	O	S	0	0
			1562	992	264	300	6		
11	4	195	Total	C	N	O	S	0	0
			1562	992	264	300	6		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
12	l	212	Total	C	N	O	S	0	0
			1644	1045	280	312	7		
12	5	212	Total	C	N	O	S	0	0
			1644	1045	280	312	7		

- Molecule 13 is a protein called Proteasome subunit beta type-6.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	m	222	Total	C	N	O	S	0	0
			1757	1115	303	335	4		
13	6	222	Total	C	N	O	S	0	0
			1757	1115	303	335	4		

- Molecule 14 is a protein called Proteasome subunit beta type-7.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	n	232	Total	C	N	O	S	0	0
			1816	1148	311	350	7		
14	7	229	Total	C	N	O	S	0	0
			1790	1133	306	344	7		

- Molecule 15 is a protein called 26S proteasome regulatory subunit RPN10.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	W	197	Total	C	N	O	S	0	0
			1535	962	269	301	3		

- Molecule 16 is a protein called Ubiquitin carboxyl-terminal hydrolase RPN11.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	V	289	Total	C	N	O	S	0	0
			2274	1425	389	446	14		

- Molecule 17 is a protein called 26S proteasome regulatory subunit RPN12.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	T	266	Total	C	N	O	S	0	0
			2193	1405	349	433	6		

- Molecule 18 is a protein called 26S proteasome regulatory subunit RPN13.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	X	127	Total	C	N	O	S	0	0
			1033	664	169	196	4		

- Molecule 19 is a protein called 26S proteasome complex subunit SEM1.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	Y	89	Total	C	N	O	S	0	0
			731	447	119	164	1		

- Molecule 20 is a protein called 26S proteasome regulatory subunit RPN1.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	Z	906	Total	C	N	O	S	0	0
			7006	4416	1150	1410	30		

- Molecule 21 is a protein called 26S proteasome regulatory subunit RPN2.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	N	922	Total	C	N	O	S	0	0
			7158	4536	1205	1389	28		

- Molecule 22 is a protein called 26S proteasome regulatory subunit RPN3.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	S	475	Total	C	N	O	S	0	0
			3895	2488	653	739	15		

- Molecule 23 is a protein called 26S proteasome regulatory subunit RPN5.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	P	440	Total	C	N	O	S	0	0
			3609	2297	604	698	10		

- Molecule 24 is a protein called 26S proteasome regulatory subunit RPN6.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	Q	434	Total	C	N	O	S	0	0
			3499	2225	577	681	16		

- Molecule 25 is a protein called 26S proteasome regulatory subunit RPN7.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	R	405	Total	C	N	O	S	0	0
			3259	2077	535	637	10		

- Molecule 26 is a protein called 26S proteasome regulatory subunit RPN8.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	U	304	Total	C	N	O	S	0	0
			2427	1529	414	477	7		

- Molecule 27 is a protein called 26S proteasome regulatory subunit RPN9.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	O	388	Total	C	N	O	S	0	0
			3186	2051	519	608	8		

- Molecule 28 is a protein called 26S proteasome regulatory subunit 7 homolog.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	H	426	Total	C	N	O	S	0	0
			3313	2056	592	648	17		

- Molecule 29 is a protein called 26S proteasome regulatory subunit 4 homolog.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	I	385	Total	C	N	O	S	0	0
			3022	1899	508	598	17		

- Molecule 30 is a protein called 26S proteasome regulatory subunit 6B homolog.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	K	394	Total	C	N	O	S	0	0
			3113	1951	548	604	10		

- Molecule 31 is a protein called 26S proteasome subunit RPT4.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	L	388	Total	C	N	O	S	0	0
			3083	1942	548	581	12		

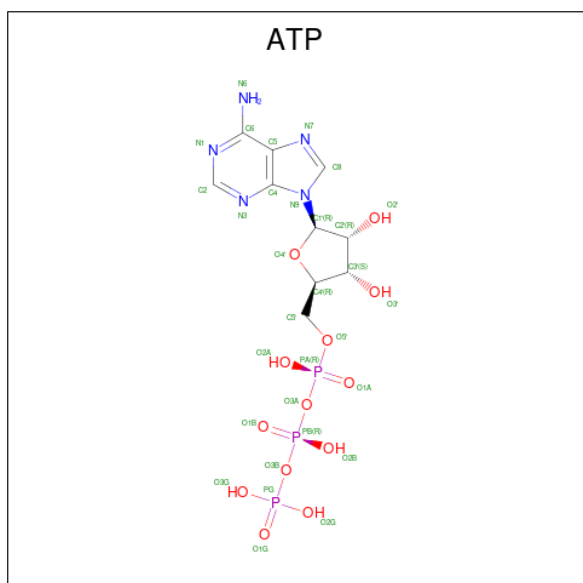
- Molecule 32 is a protein called 26S proteasome regulatory subunit 6A.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	M	421	Total	C	N	O	S	0	0
			3285	2043	573	656	13		

- Molecule 33 is a protein called 26S proteasome regulatory subunit 8 homolog.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	J	405	Total	C	N	O	S	0	0
			3171	1995	565	593	18		

- Molecule 34 is ADENOSINE-5'-TRIPHOSPHATE (CCD ID: ATP) (formula: $C_{10}H_{16}N_5O_{13}P_3$).



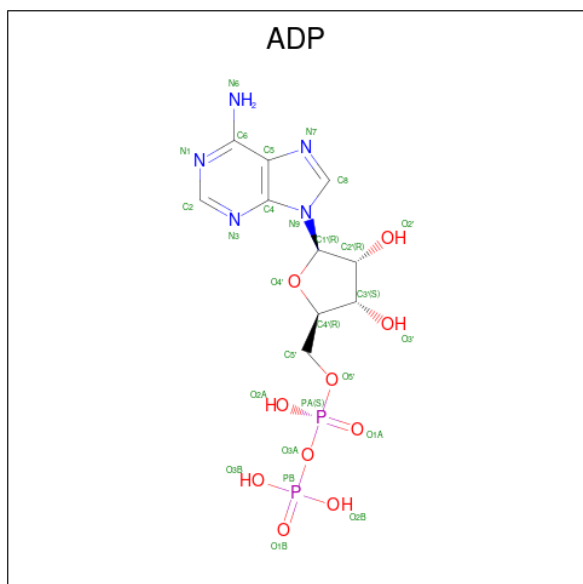
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Mol	Chain	Residues	Atoms					AltConf
34	I	1	Total	C	N	O	P	0
			31	10	5	13	3	
34	K	1	Total	C	N	O	P	0
			31	10	5	13	3	
34	L	1	Total	C	N	O	P	0
			31	10	5	13	3	
34	M	1	Total	C	N	O	P	0
			31	10	5	13	3	

- Molecule 35 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		AltConf
35	H	2	Total	Mg	0
			2	2	
35	I	1	Total	Mg	0
			1	1	
35	K	1	Total	Mg	0
			1	1	
35	L	1	Total	Mg	0
			1	1	
35	J	1	Total	Mg	0
			1	1	

- Molecule 36 is ADENOSINE-5'-DIPHOSPHATE (CCD ID: ADP) (formula: C₁₀H₁₅N₅O₁₀P₂).

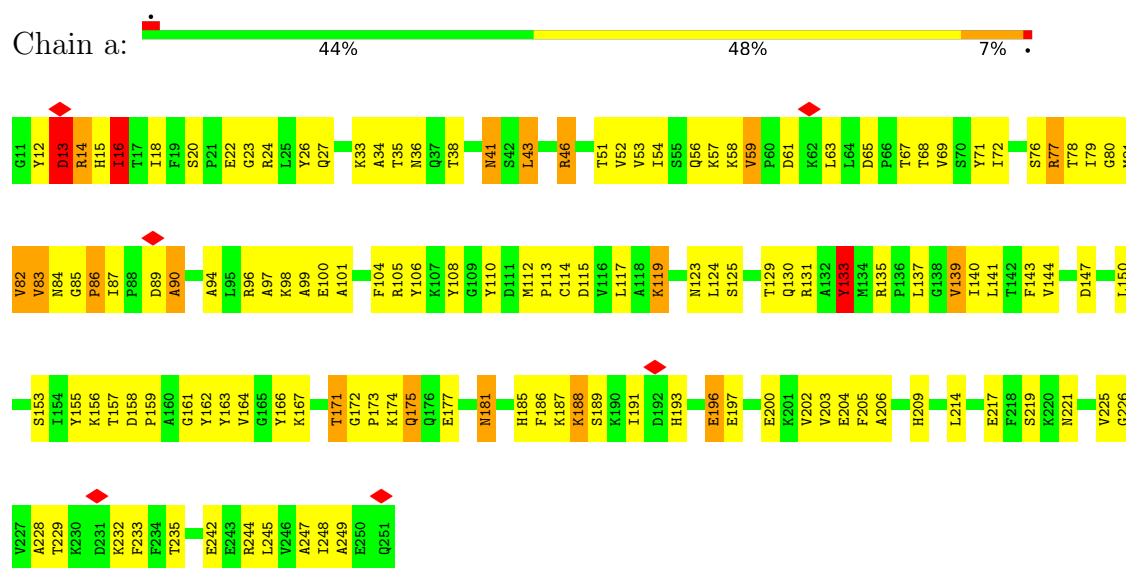


Mol	Chain	Residues	Atoms					AltConf
36	J	1	Total	C	N	O	P	0
			27	10	5	10	2	

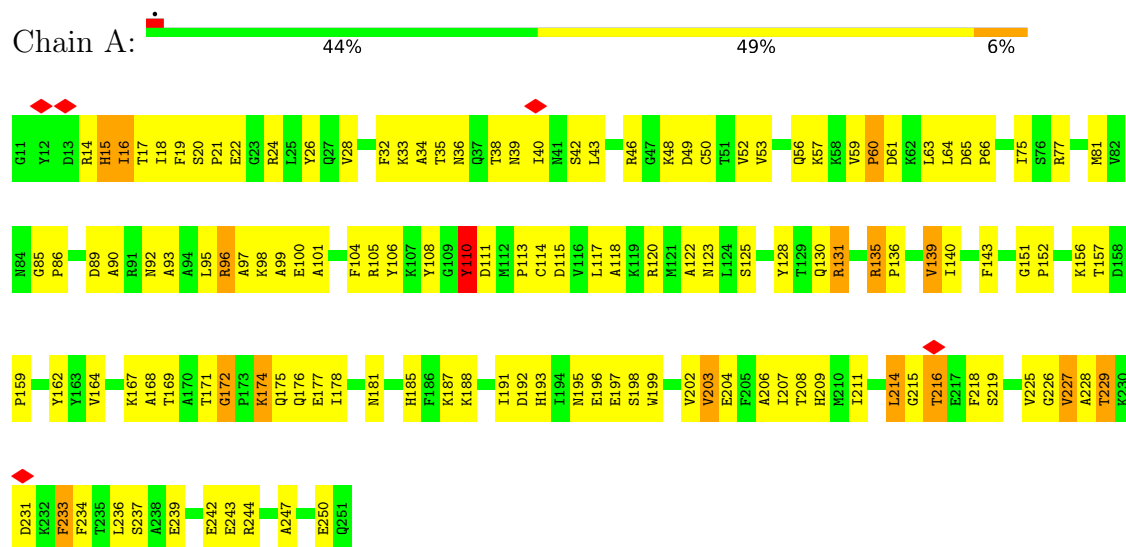
3 Residue-property plots

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.

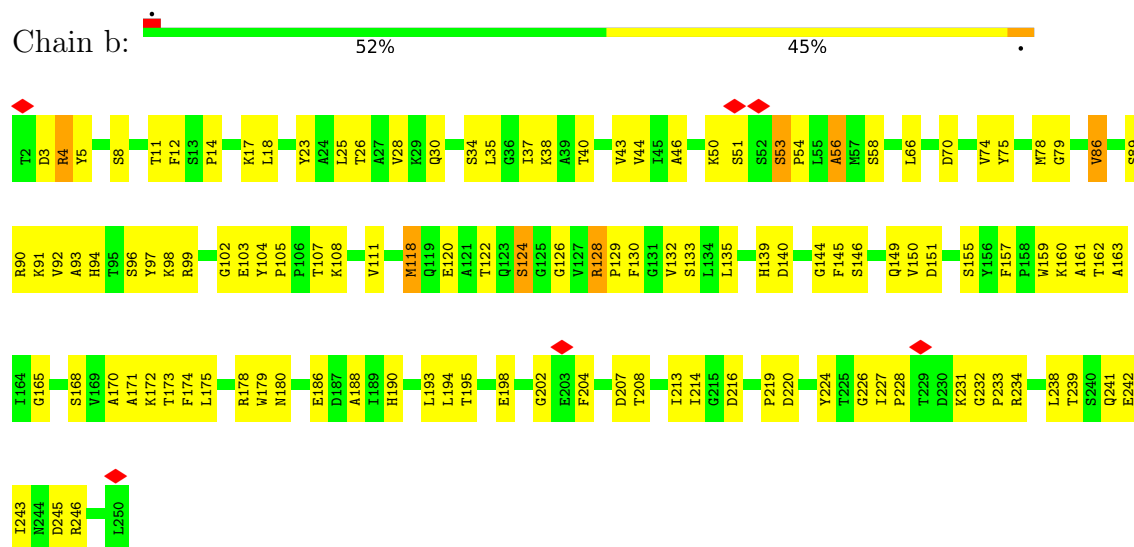
• Molecule 1: Proteasome subunit alpha type-1



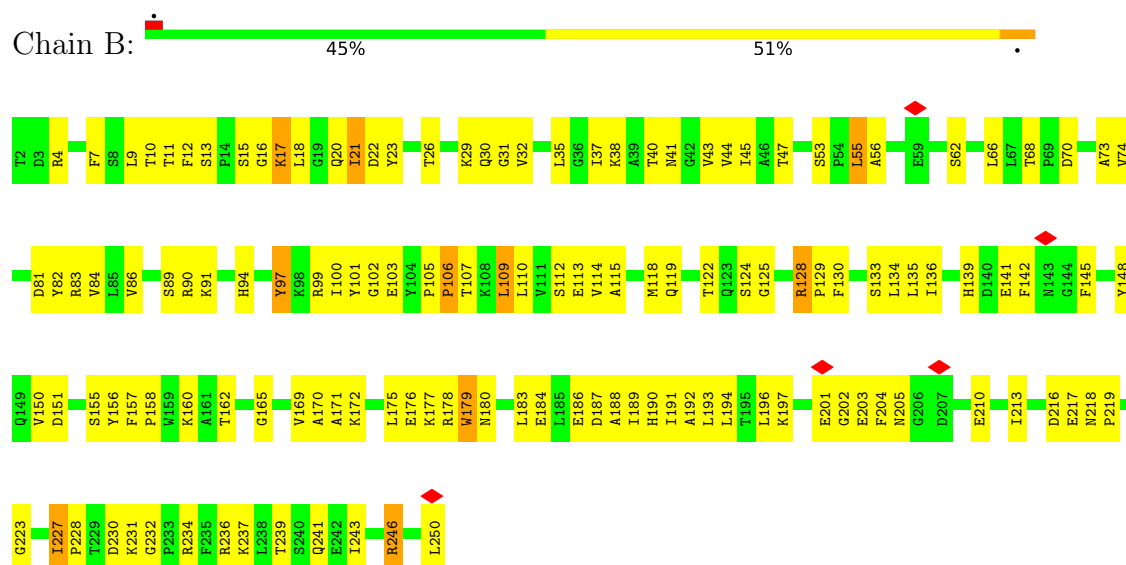
• Molecule 1: Proteasome subunit alpha type-1



• Molecule 2: Proteasome subunit alpha type-2



• Molecule 2: Proteasome subunit alpha type-2



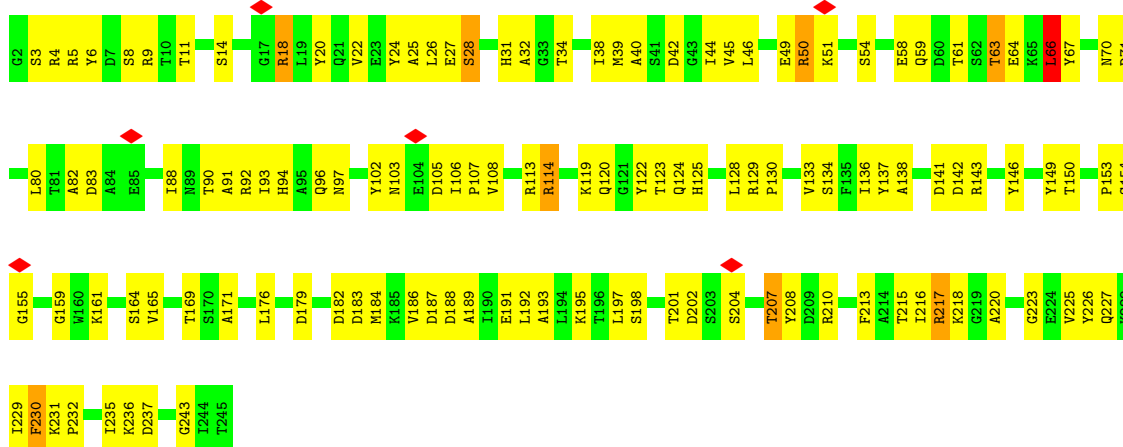
• Molecule 3: Proteasome subunit alpha type-3





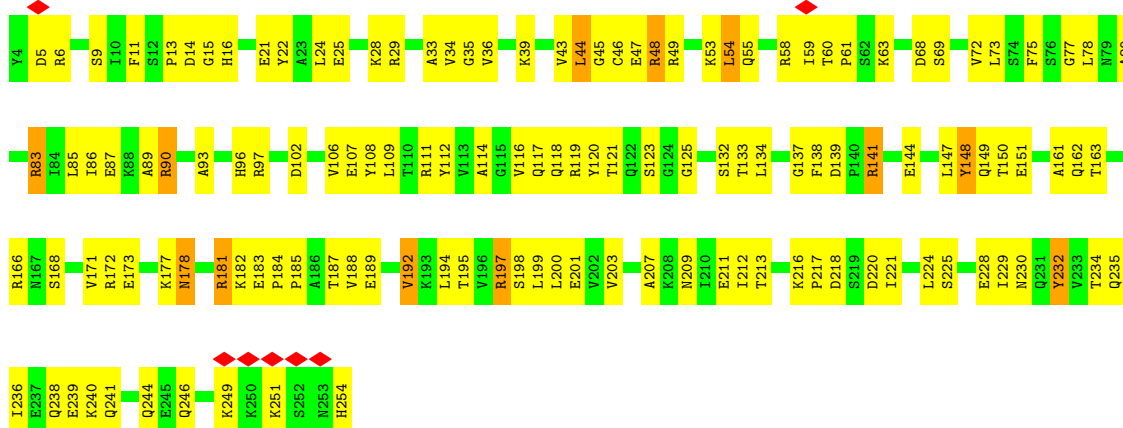
• Molecule 3: Proteasome subunit alpha type-3

Chain C: 48% 48%



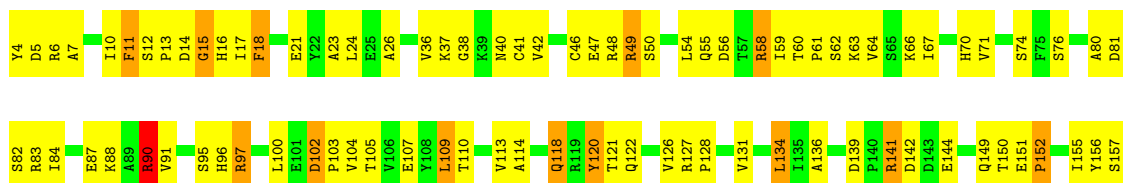
• Molecule 4: Proteasome subunit alpha type-4

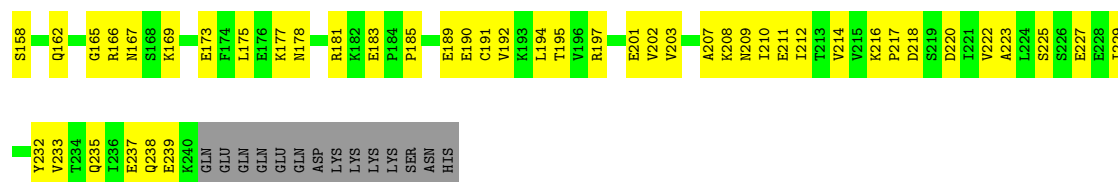
Chain d: 46% 49% 5%



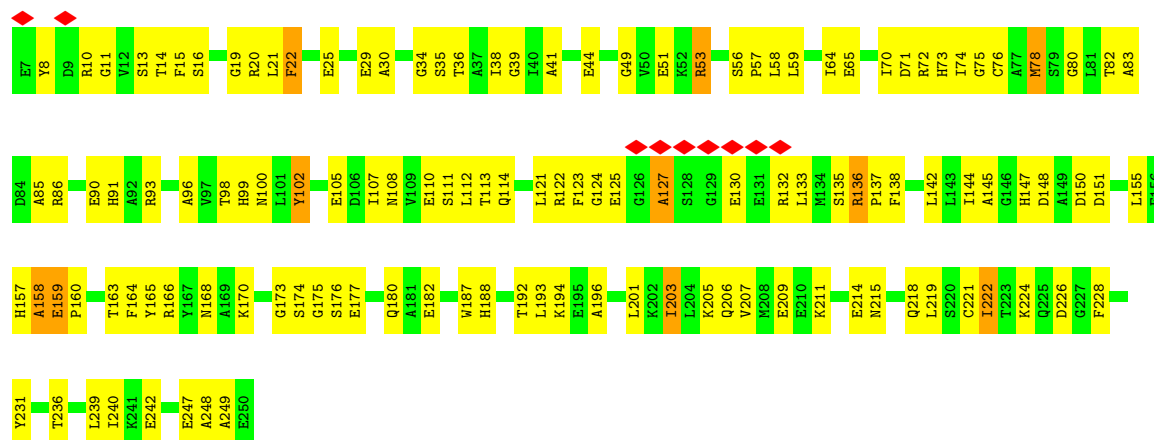
• Molecule 4: Proteasome subunit alpha type-4

Chain D: 42% 47% 5% 6%

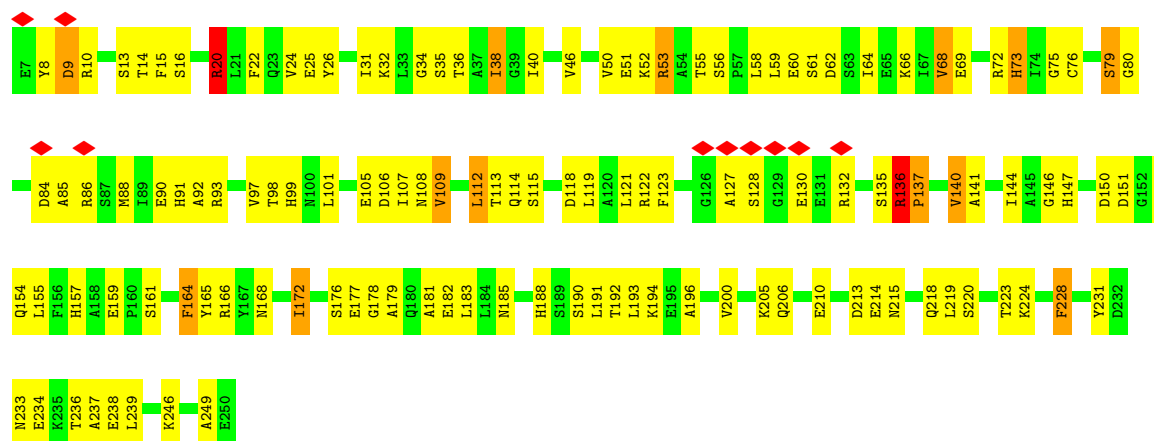




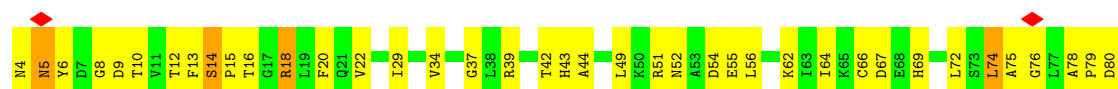
• Molecule 5: Proteasome subunit alpha type-5

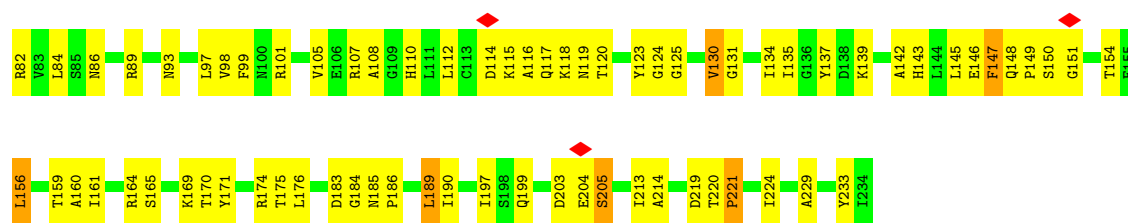


• Molecule 5: Proteasome subunit alpha type-5

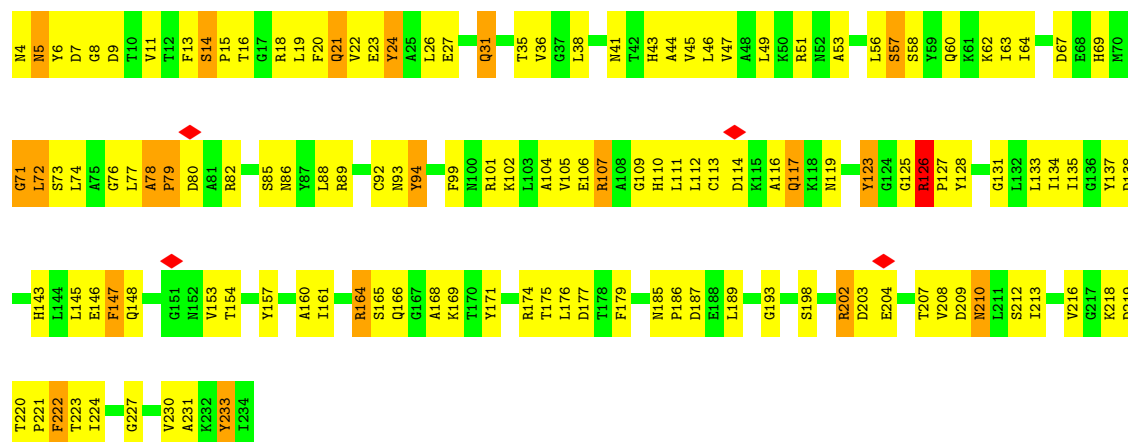


• Molecule 6: Proteasome subunit alpha type-6

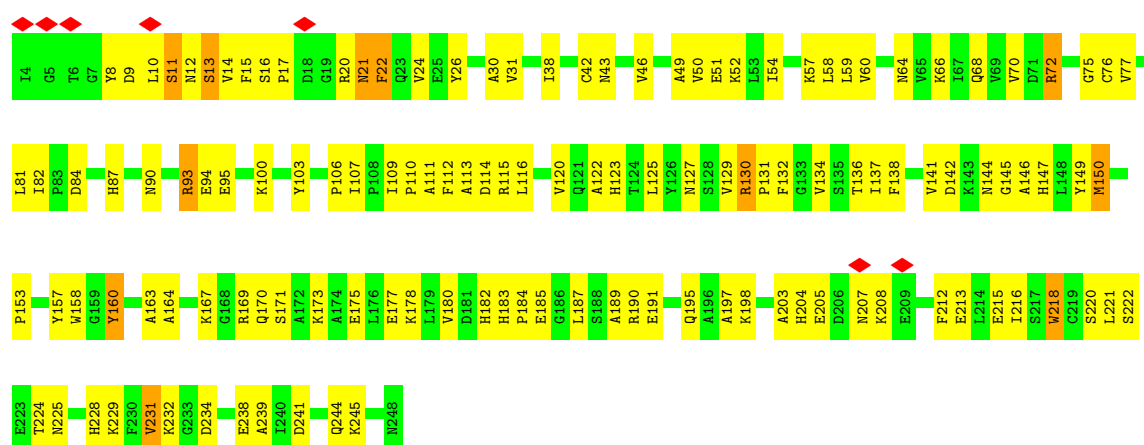




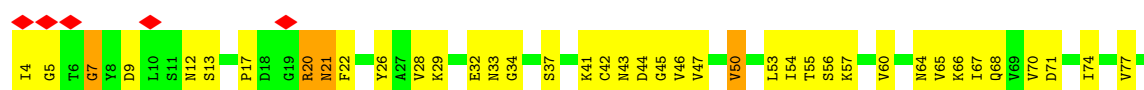
• Molecule 6: Proteasome subunit alpha type-6



• Molecule 7: Probable proteasome subunit alpha type-7

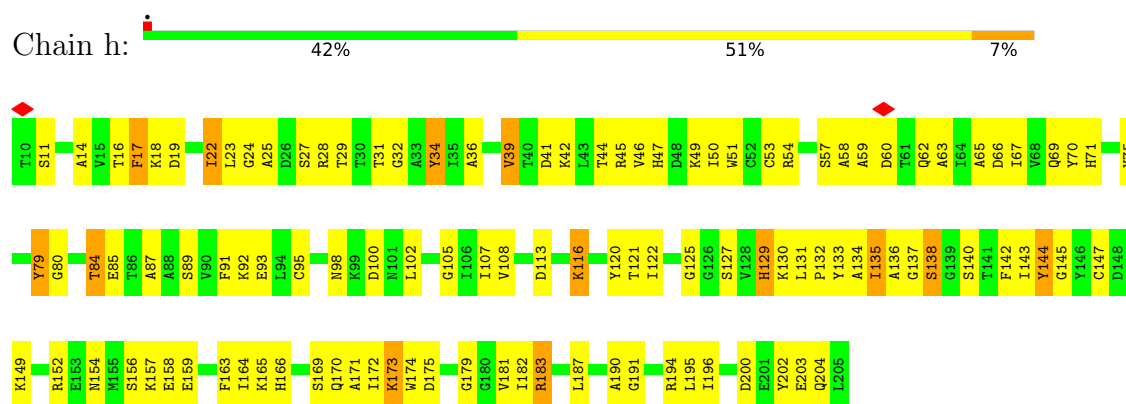


• Molecule 7: Probable proteasome subunit alpha type-7

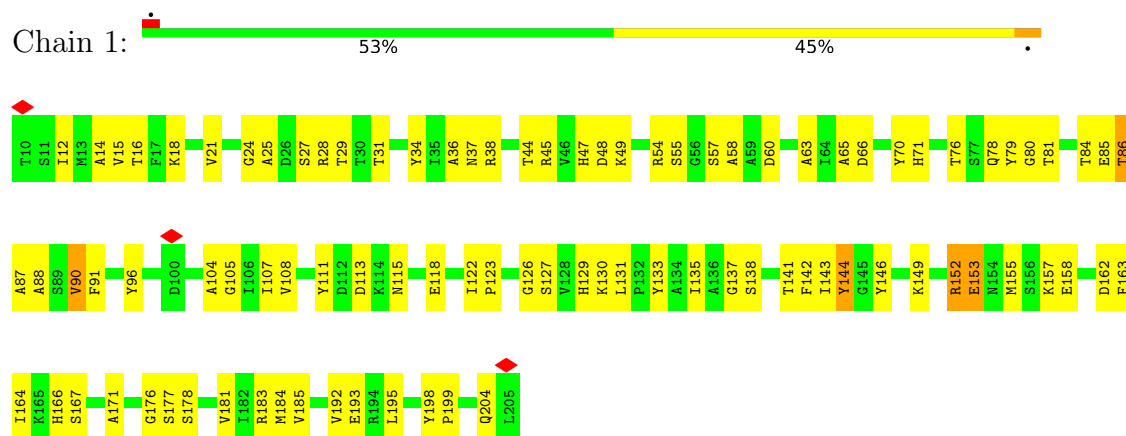




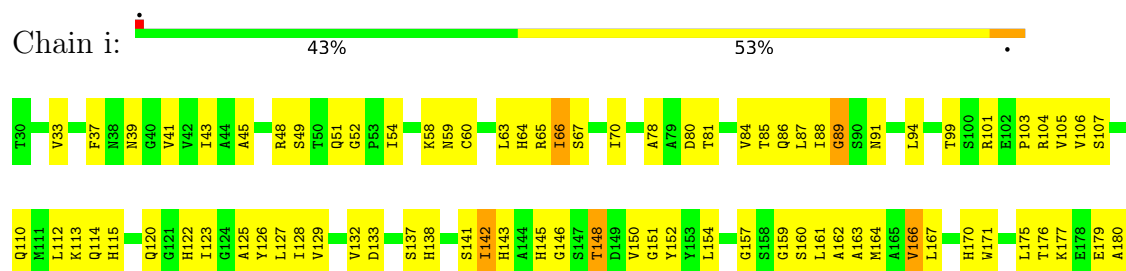
• Molecule 8: Proteasome subunit beta type-1

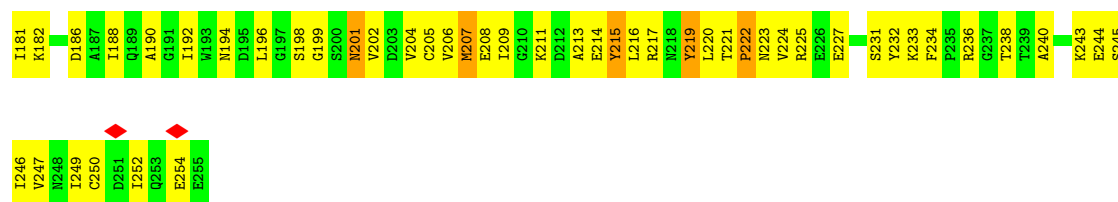


• Molecule 8: Proteasome subunit beta type-1

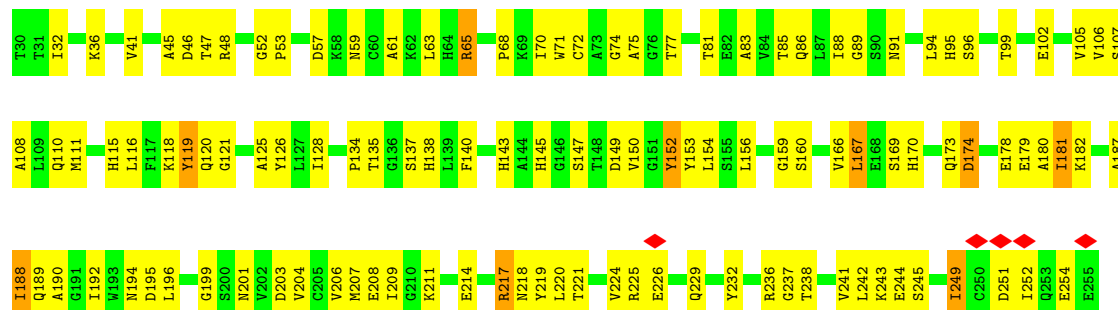


• Molecule 9: Proteasome subunit beta type-2





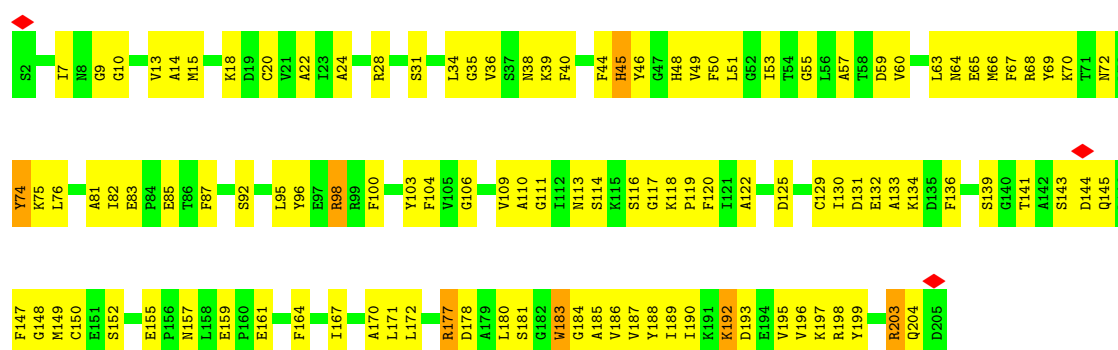
• Molecule 9: Proteasome subunit beta type-2



• Molecule 10: Proteasome subunit beta type-3



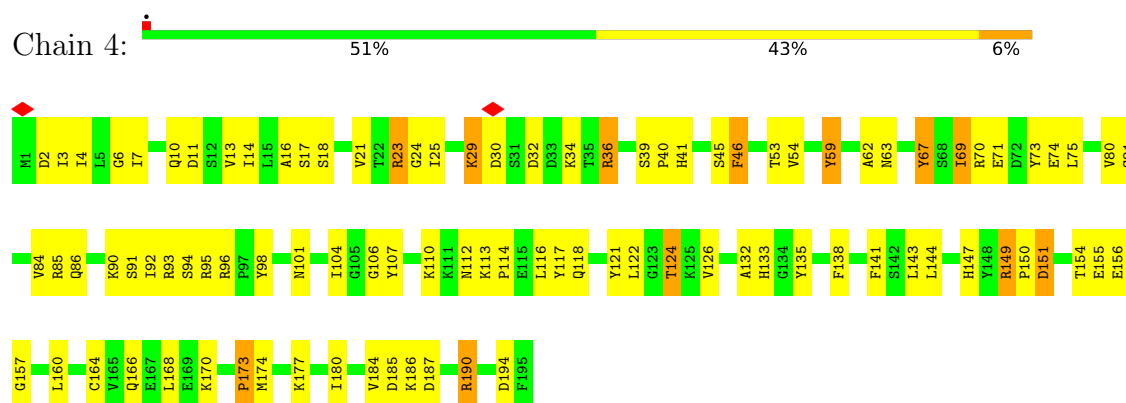
• Molecule 10: Proteasome subunit beta type-3



• Molecule 11: Proteasome subunit beta type-4



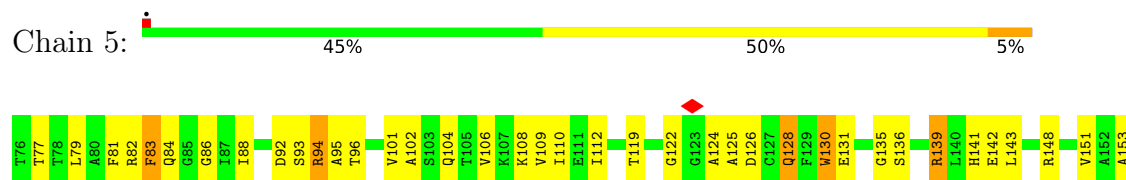
• Molecule 11: Proteasome subunit beta type-4

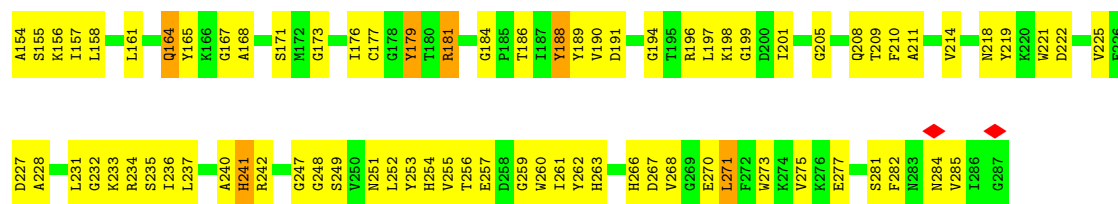


• Molecule 12: Proteasome subunit beta type-5

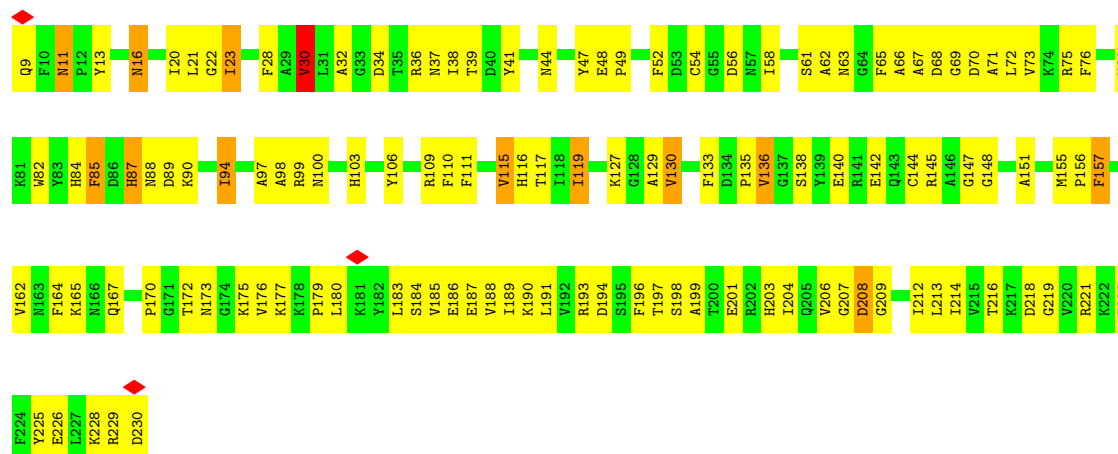


• Molecule 12: Proteasome subunit beta type-5

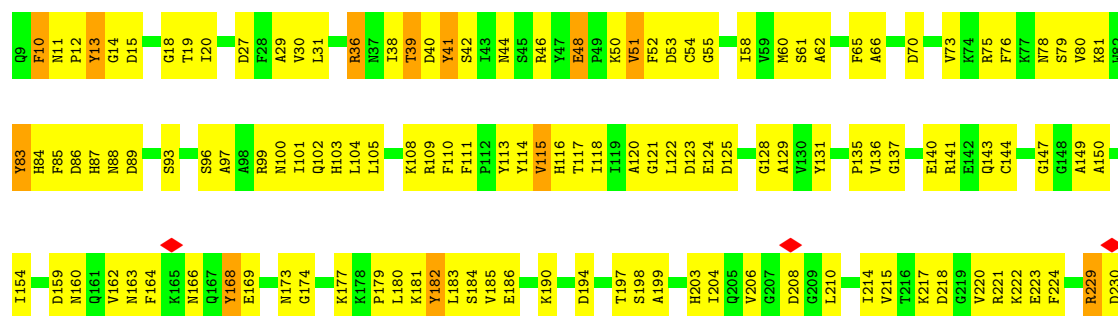




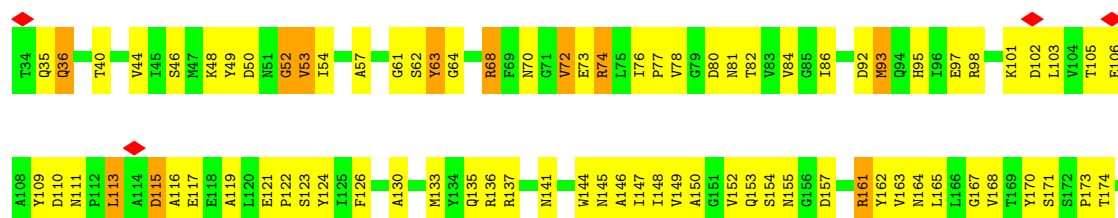
• Molecule 13: Proteasome subunit beta type-6

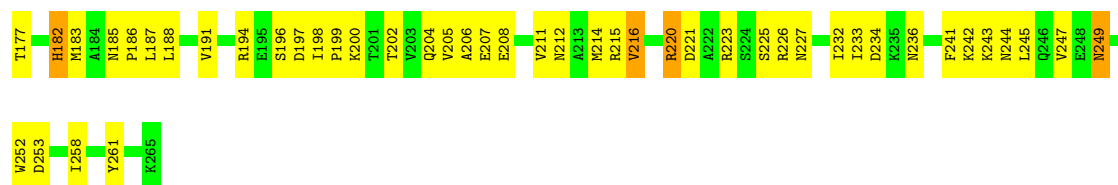


• Molecule 13: Proteasome subunit beta type-6

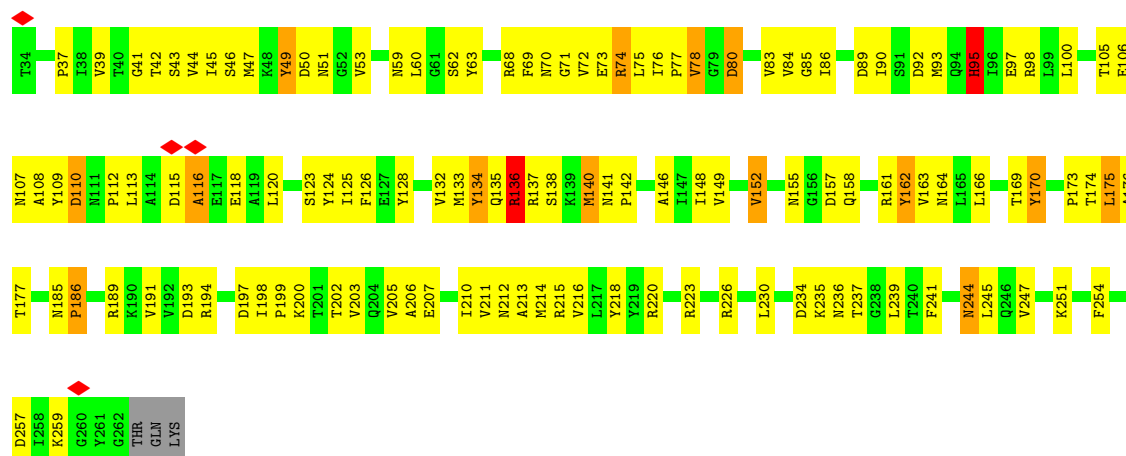


• Molecule 14: Proteasome subunit beta type-7





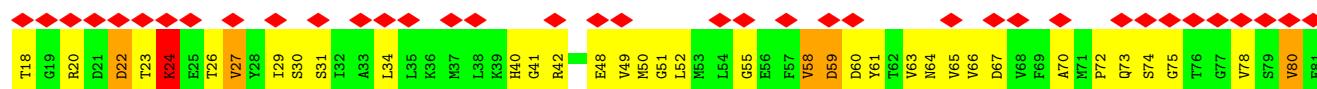
• Molecule 14: Proteasome subunit beta type-7

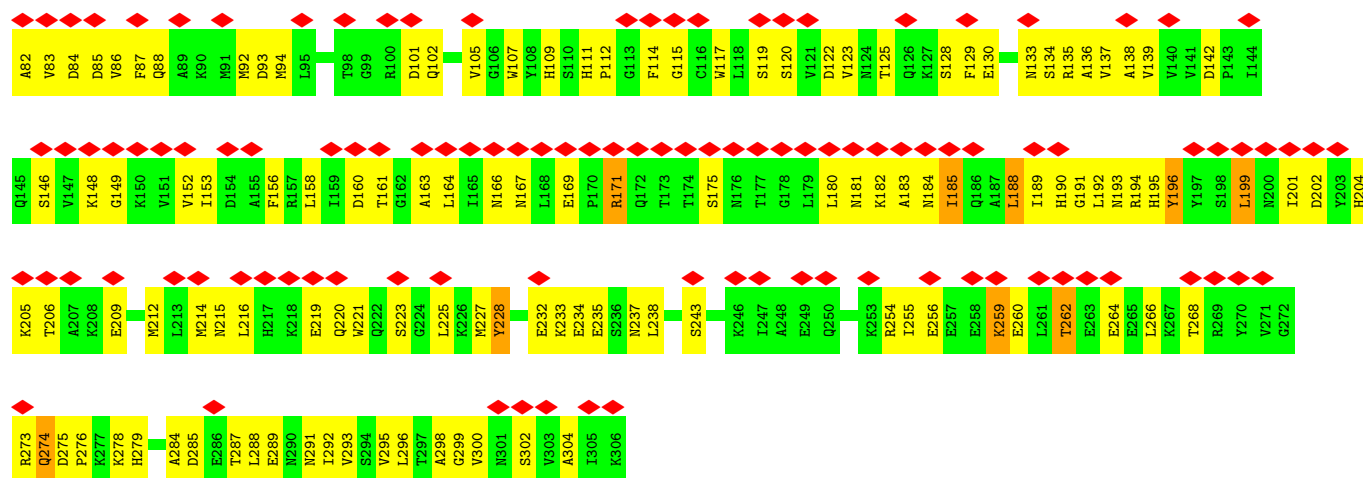


• Molecule 15: 26S proteasome regulatory subunit RPN10

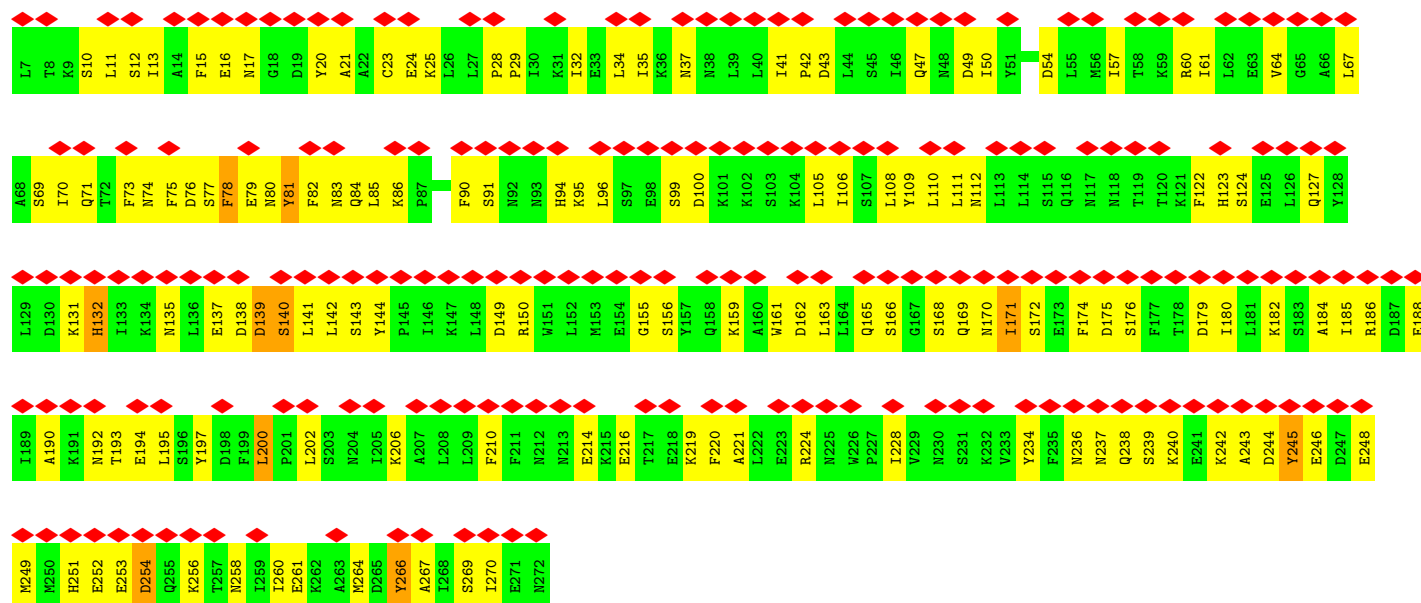
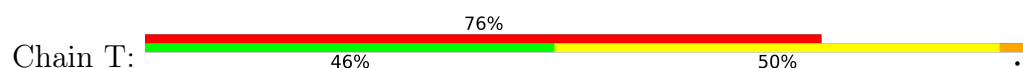


• Molecule 16: Ubiquitin carboxyl-terminal hydrolase RPN11

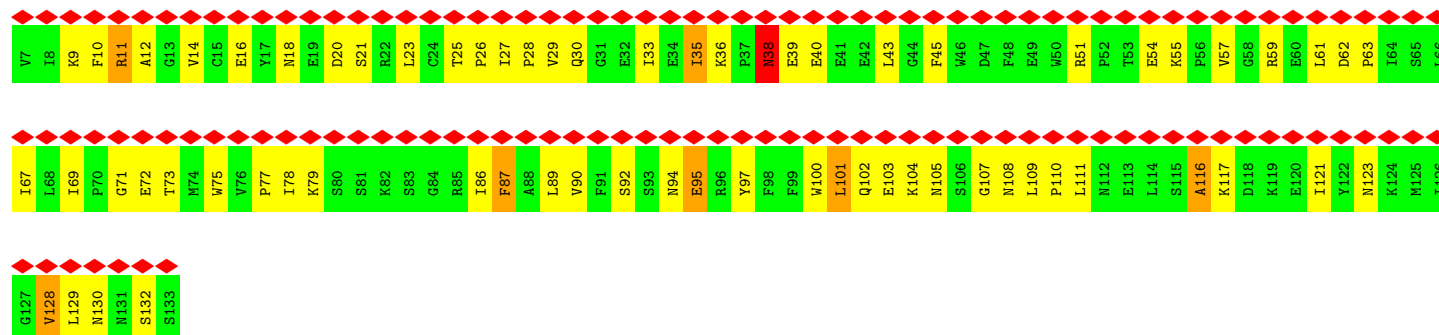




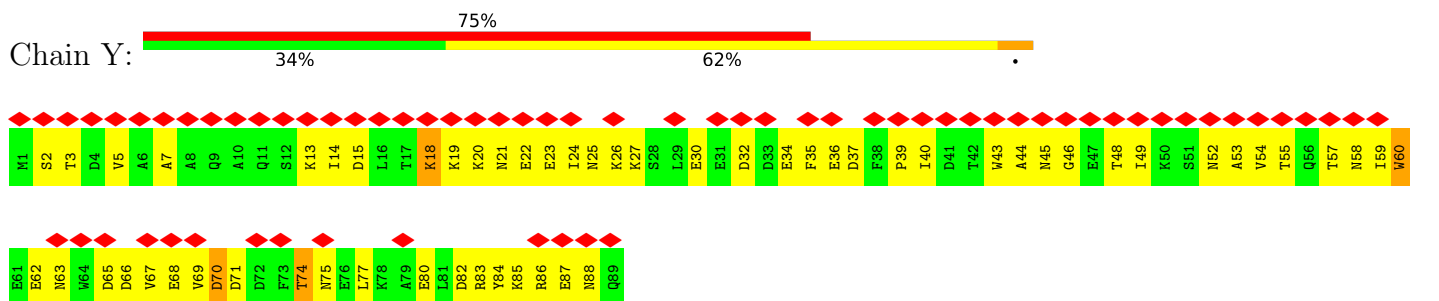
• Molecule 17: 26S proteasome regulatory subunit RPN12



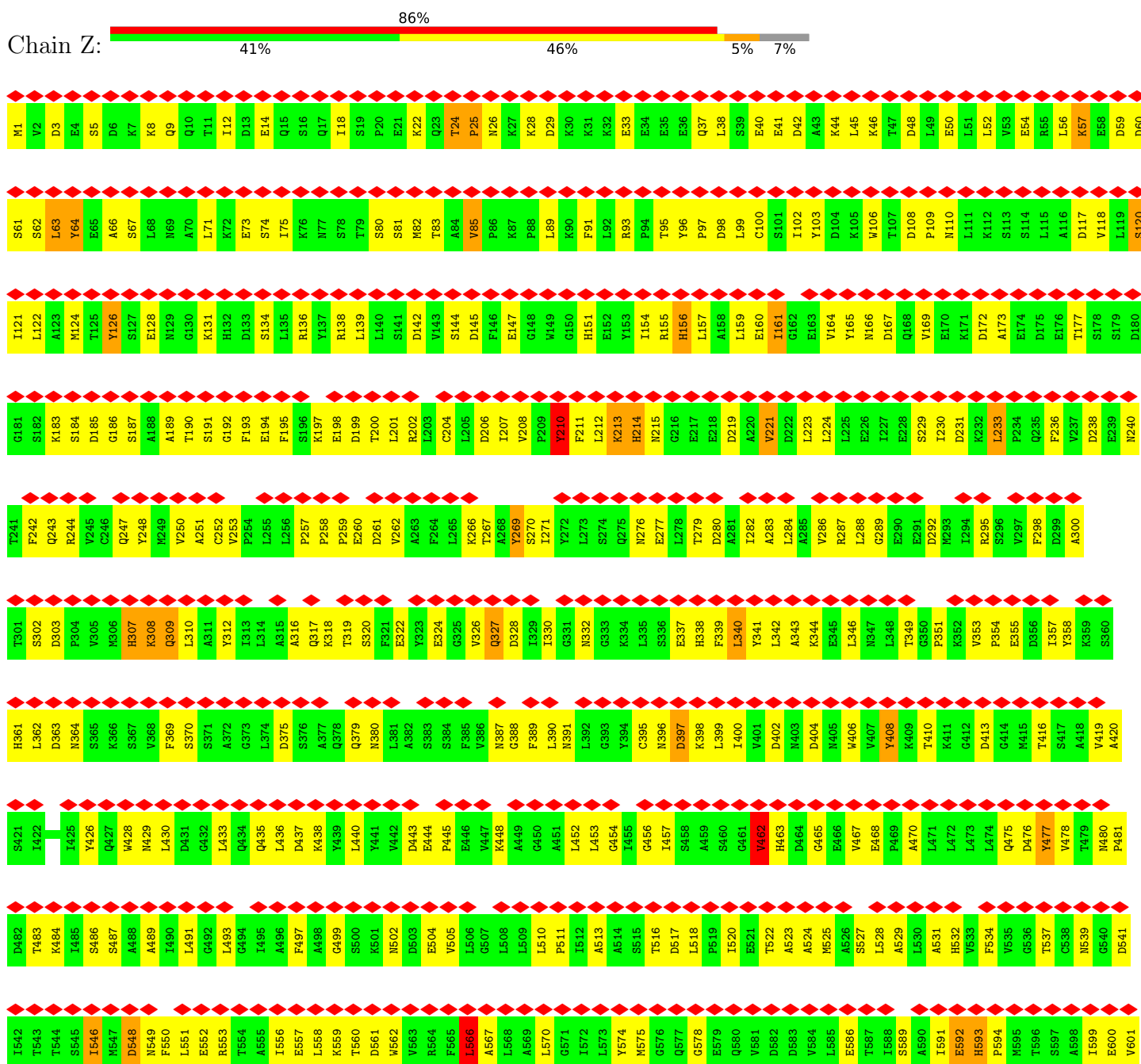
• Molecule 18: 26S proteasome regulatory subunit RPN13

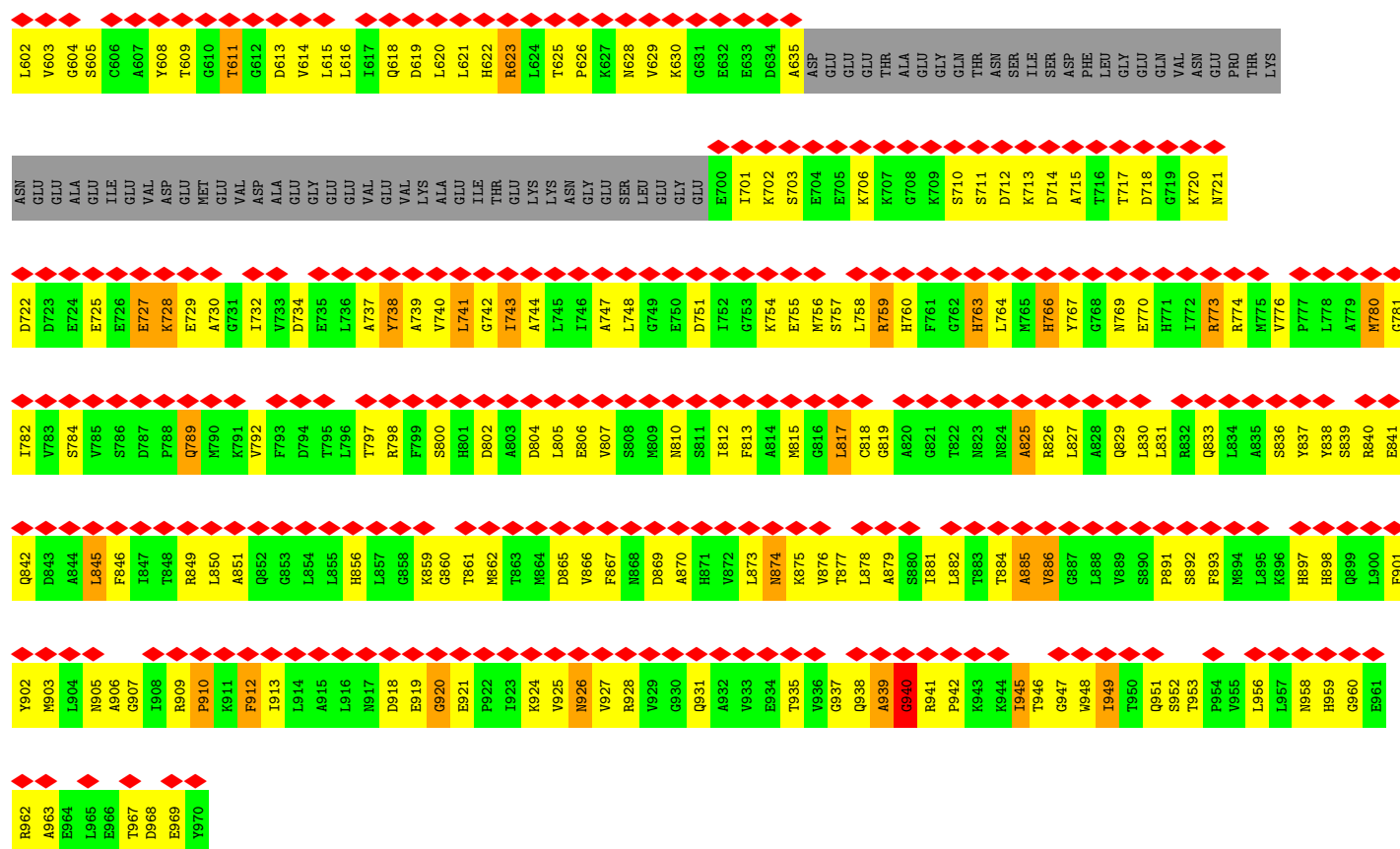


• Molecule 19: 26S proteasome complex subunit SEM1

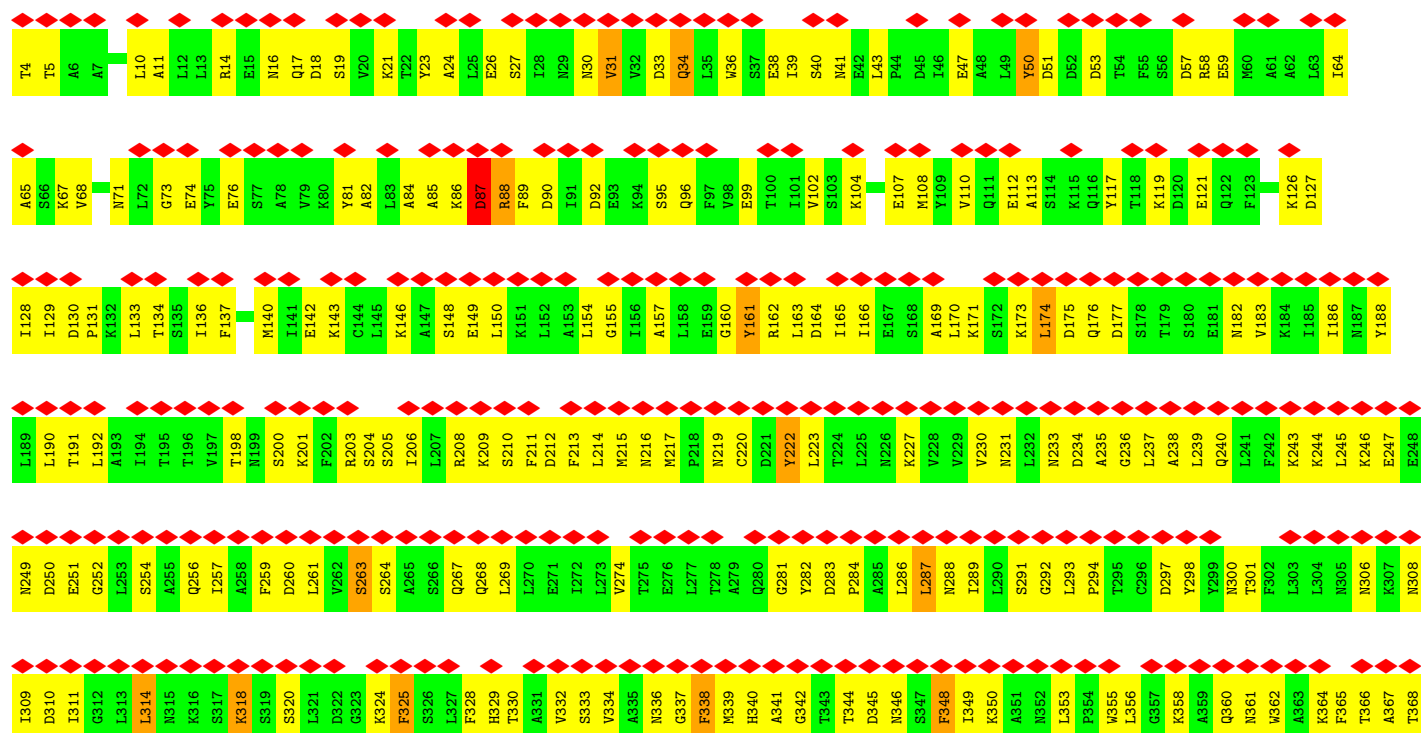
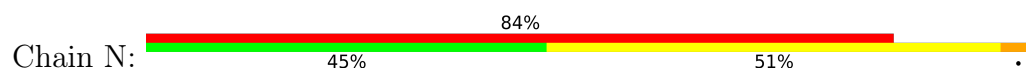


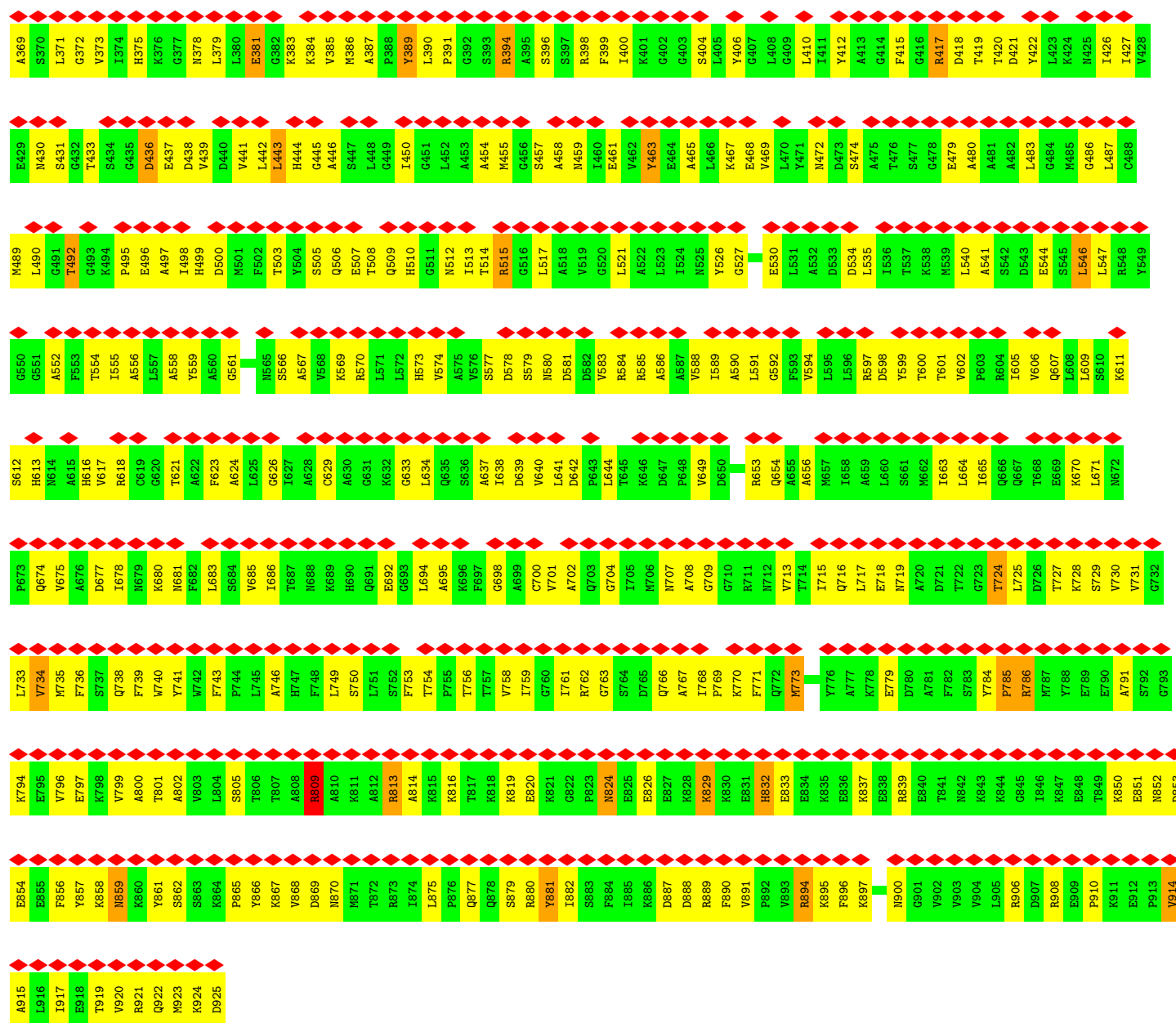
• Molecule 20: 26S proteasome regulatory subunit RPN1



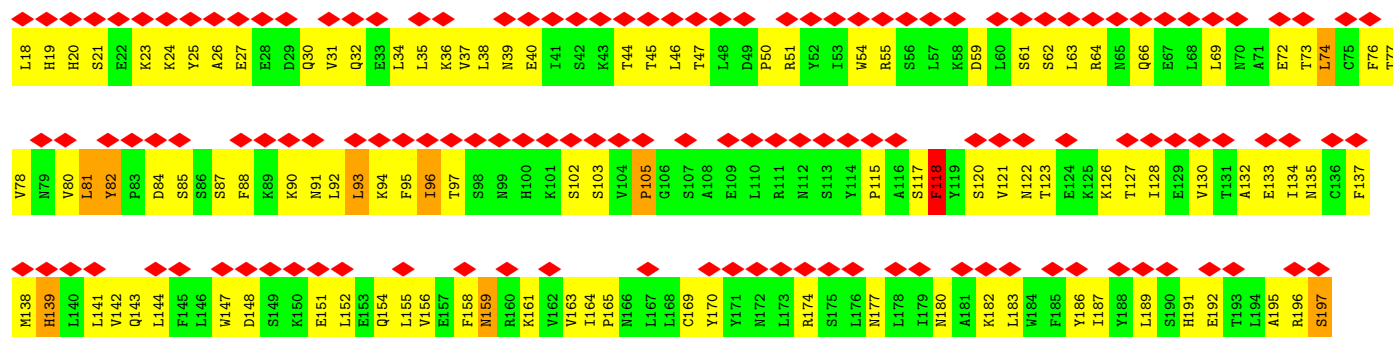


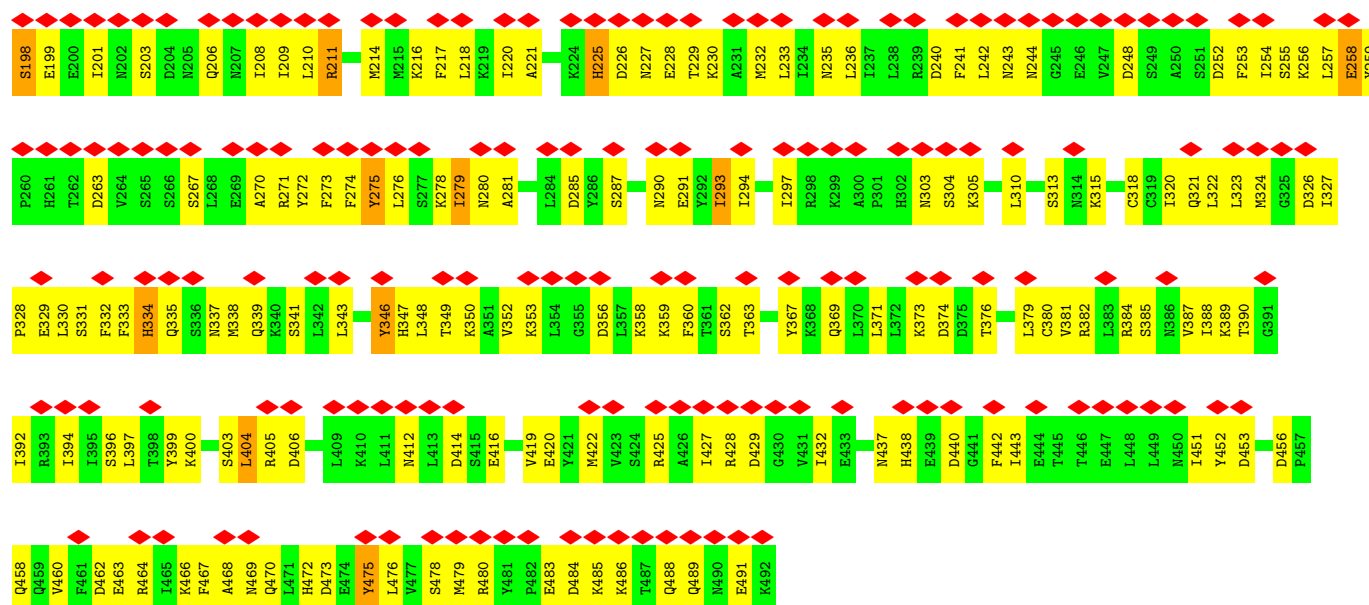
• Molecule 21: 26S proteasome regulatory subunit RPN2



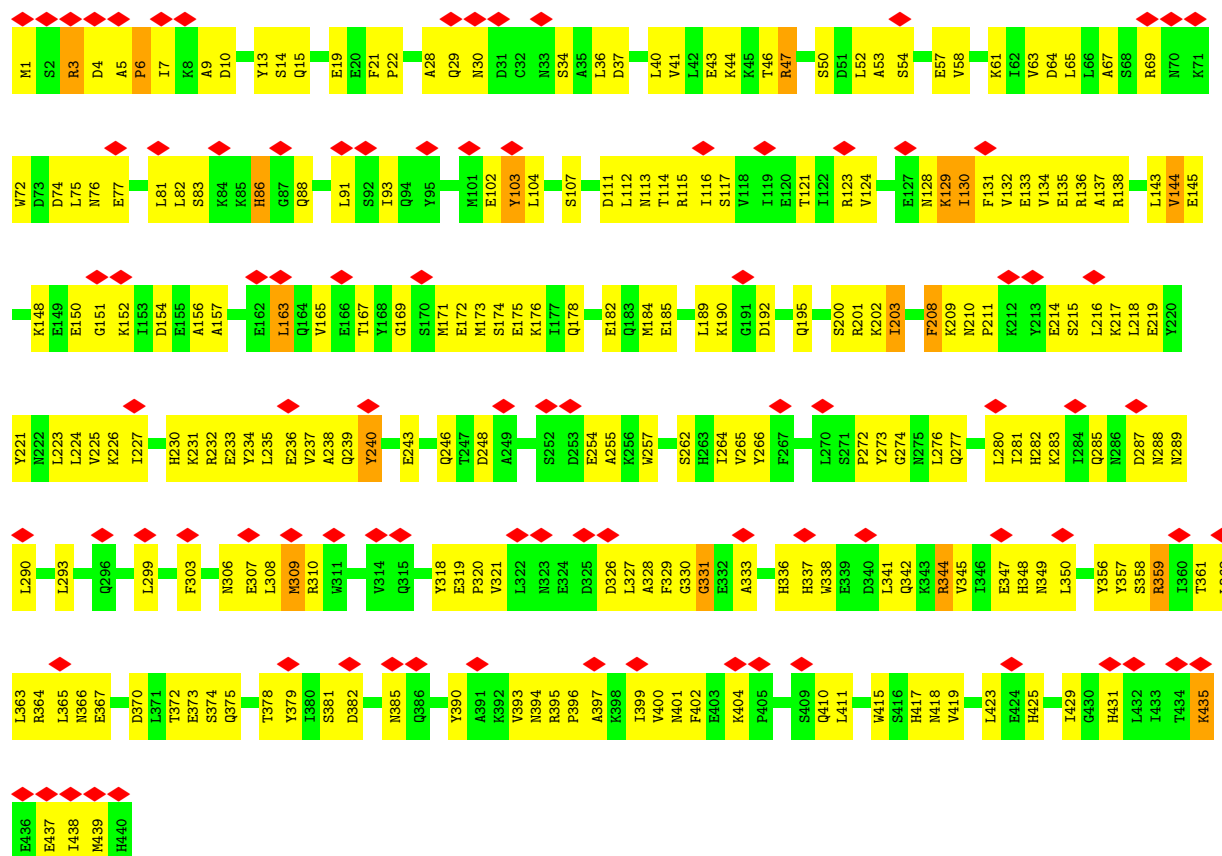


● Molecule 22: 26S proteasome regulatory subunit RPN3

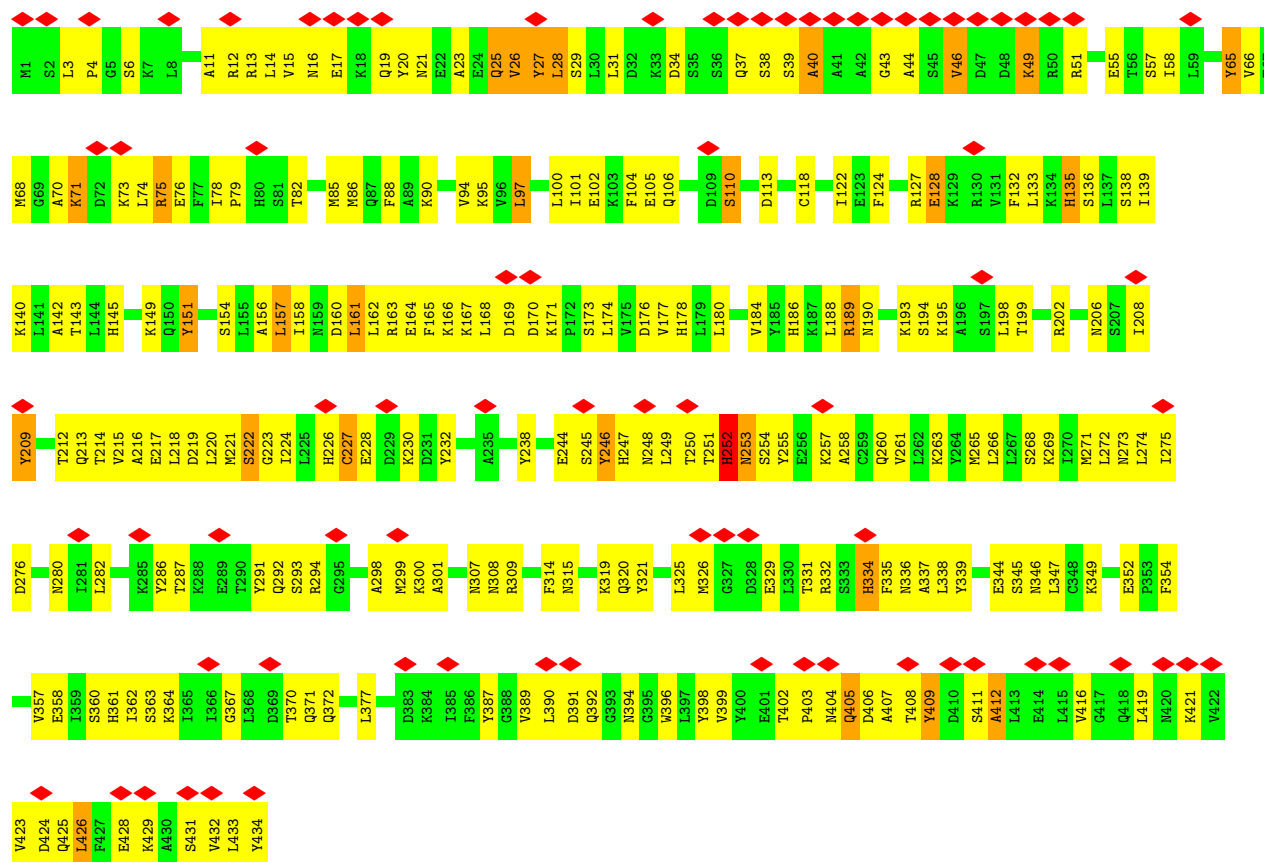
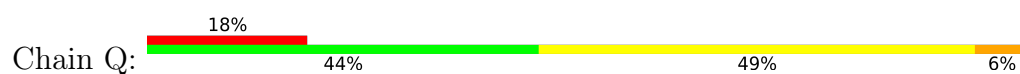




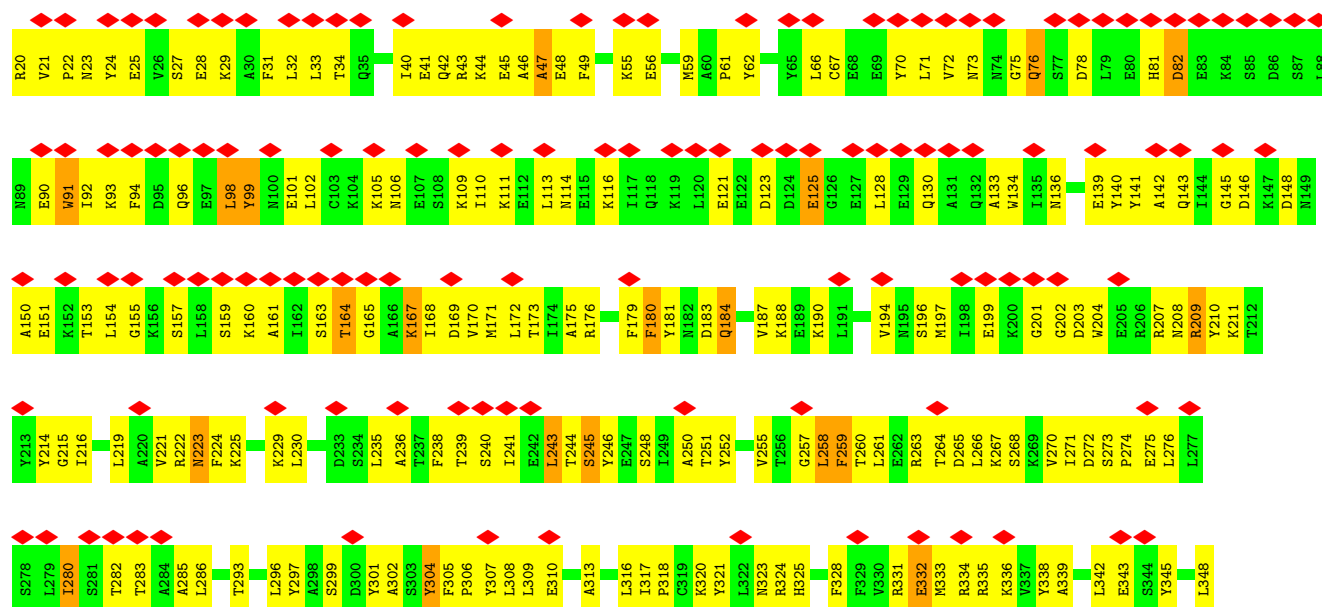
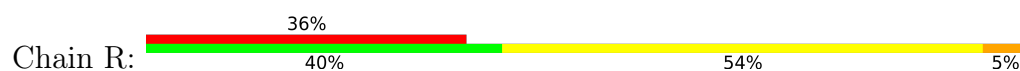
• Molecule 23: 26S proteasome regulatory subunit RPN5

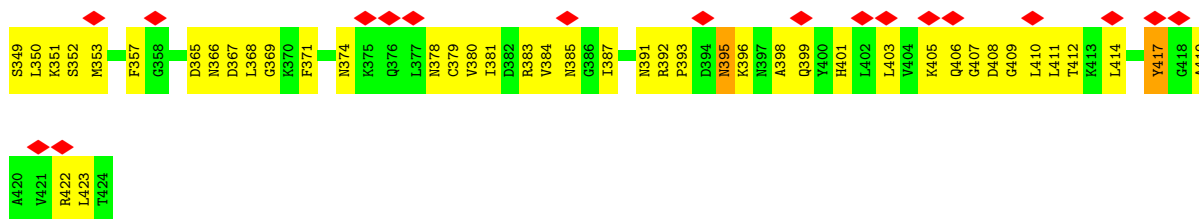


• Molecule 24: 26S proteasome regulatory subunit RPN6

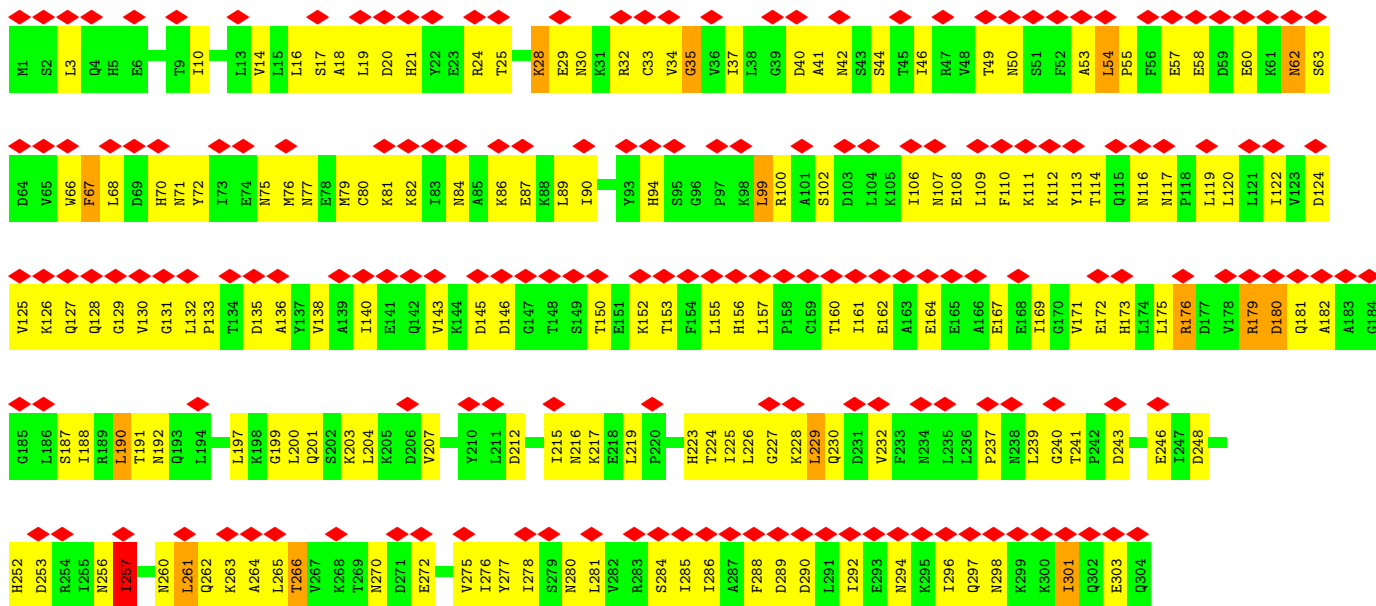
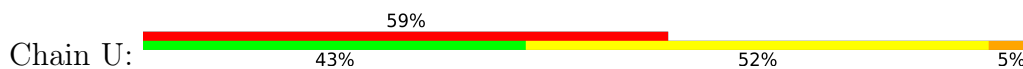


• Molecule 25: 26S proteasome regulatory subunit RPN7

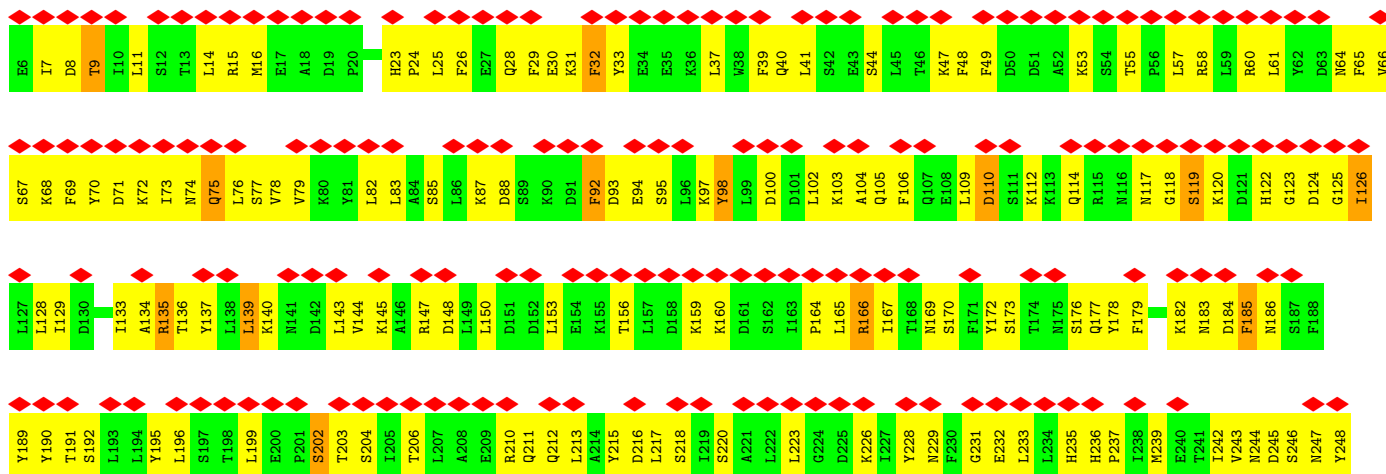


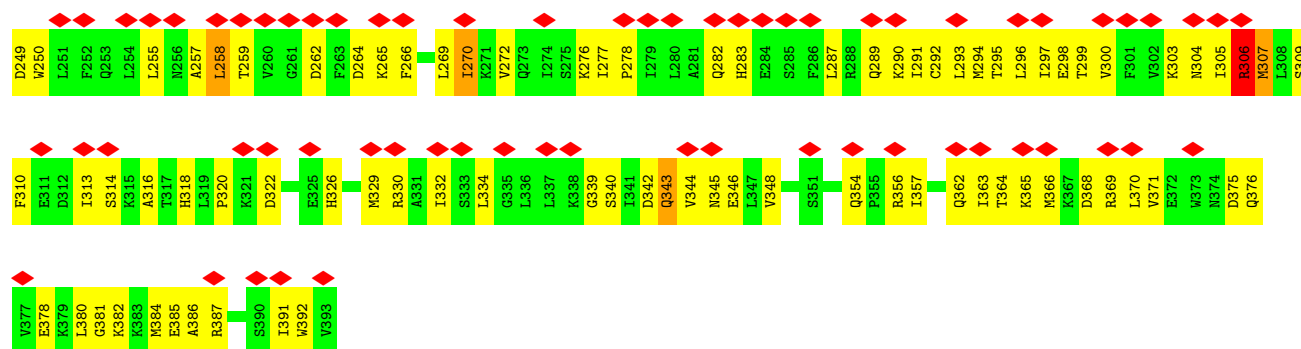


• Molecule 26: 26S proteasome regulatory subunit RPN8

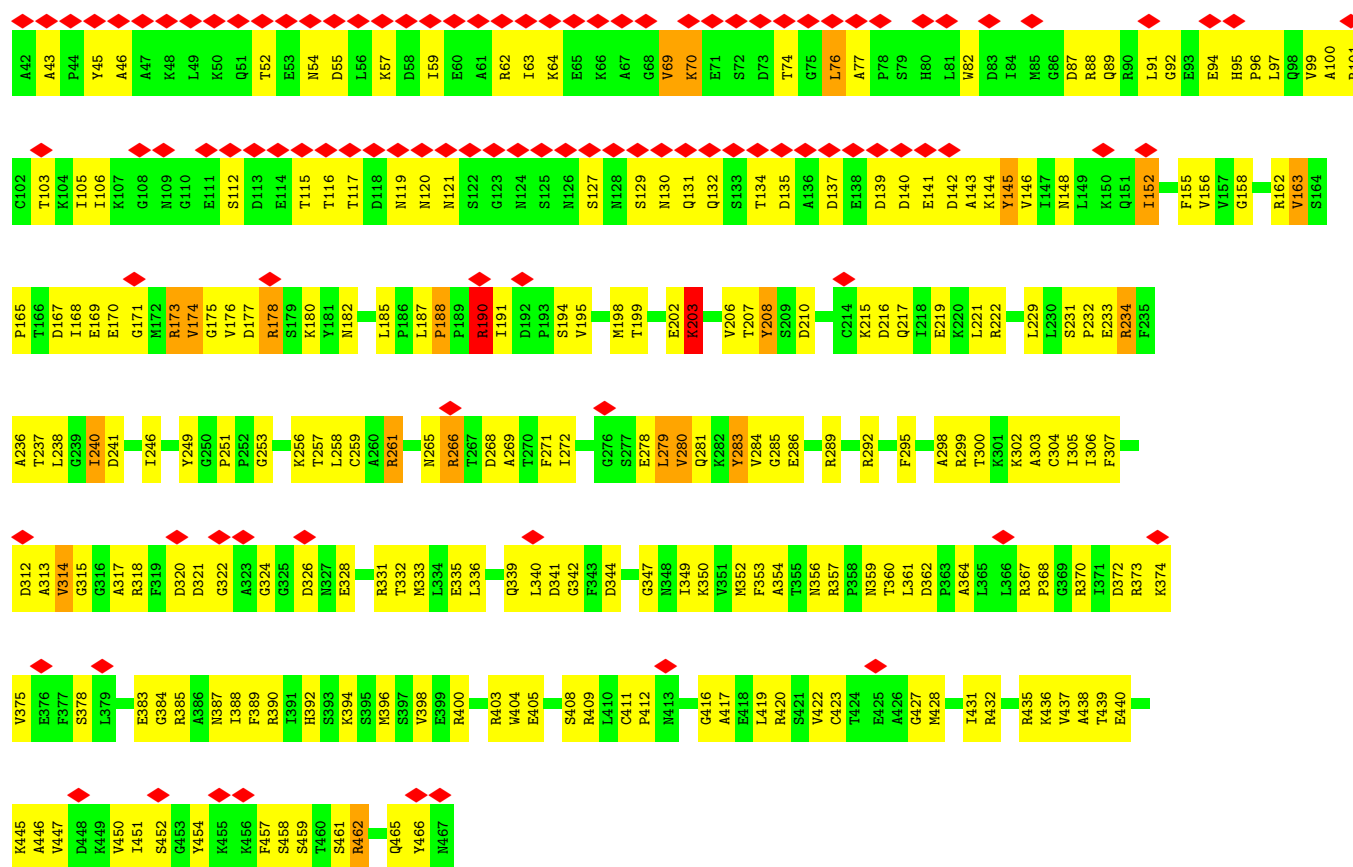
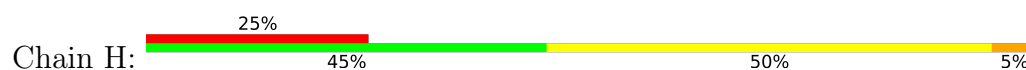


• Molecule 27: 26S proteasome regulatory subunit RPN9

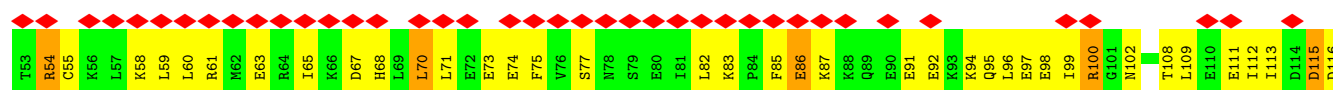


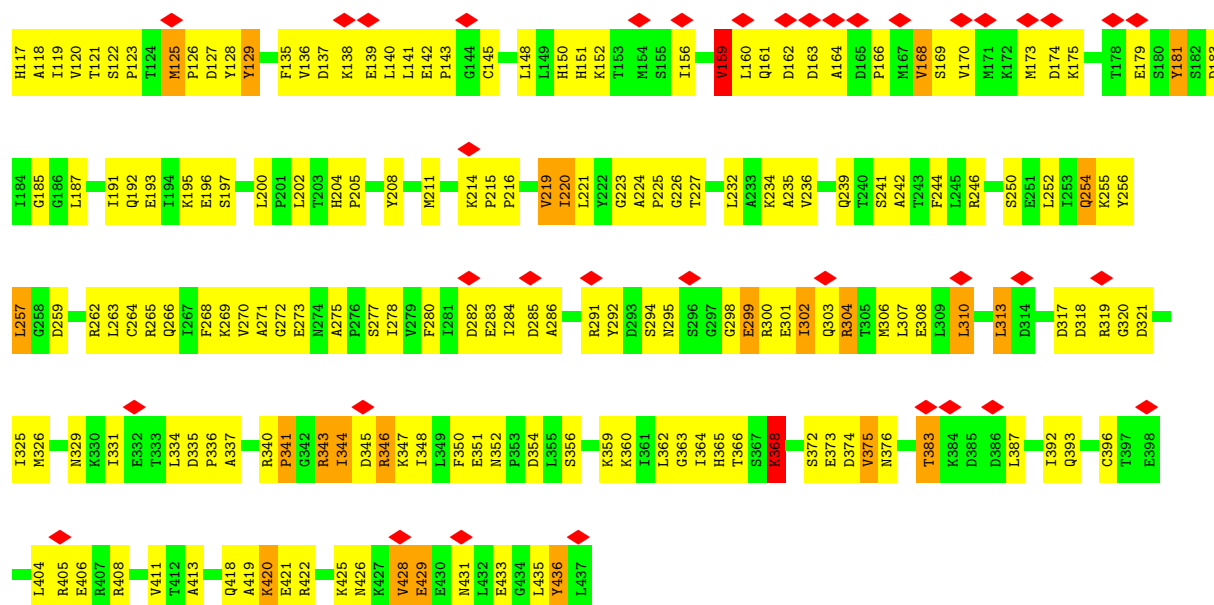


- Molecule 28: 26S proteasome regulatory subunit 7 homolog



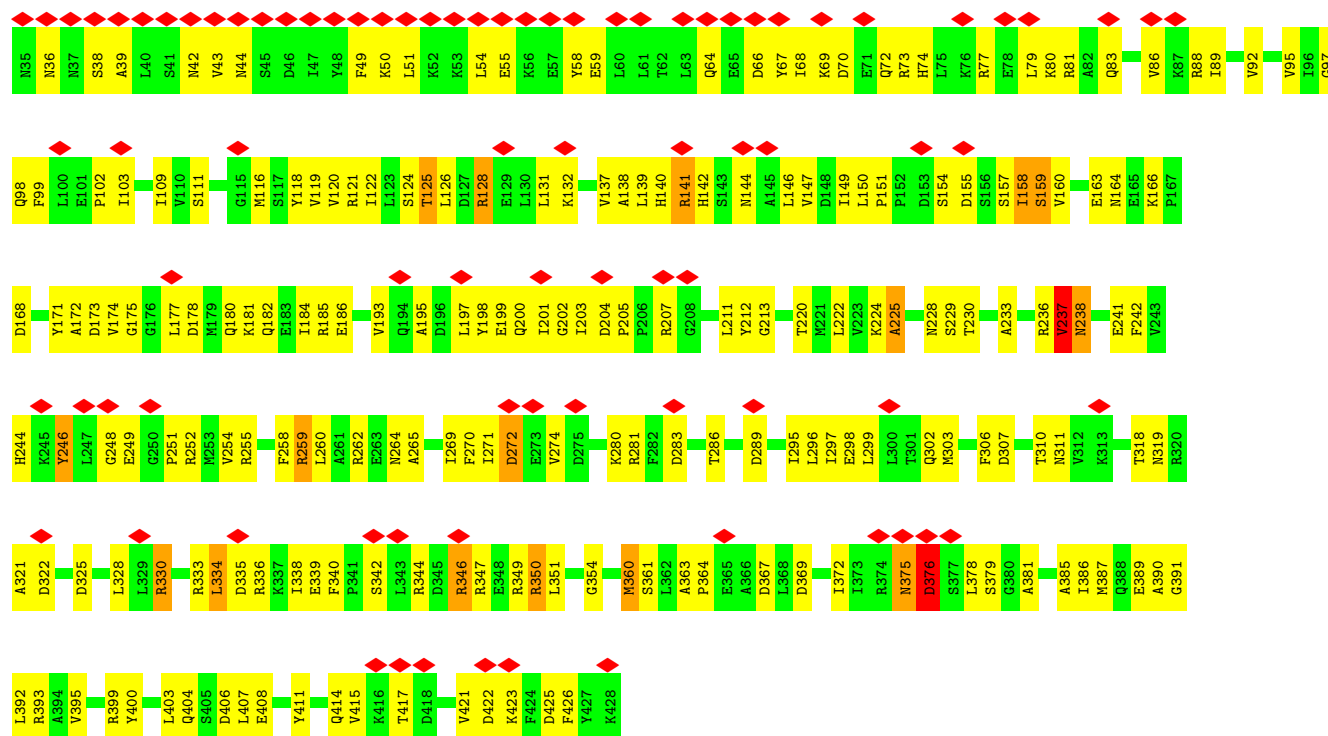
- Molecule 29: 26S proteasome regulatory subunit 4 homolog





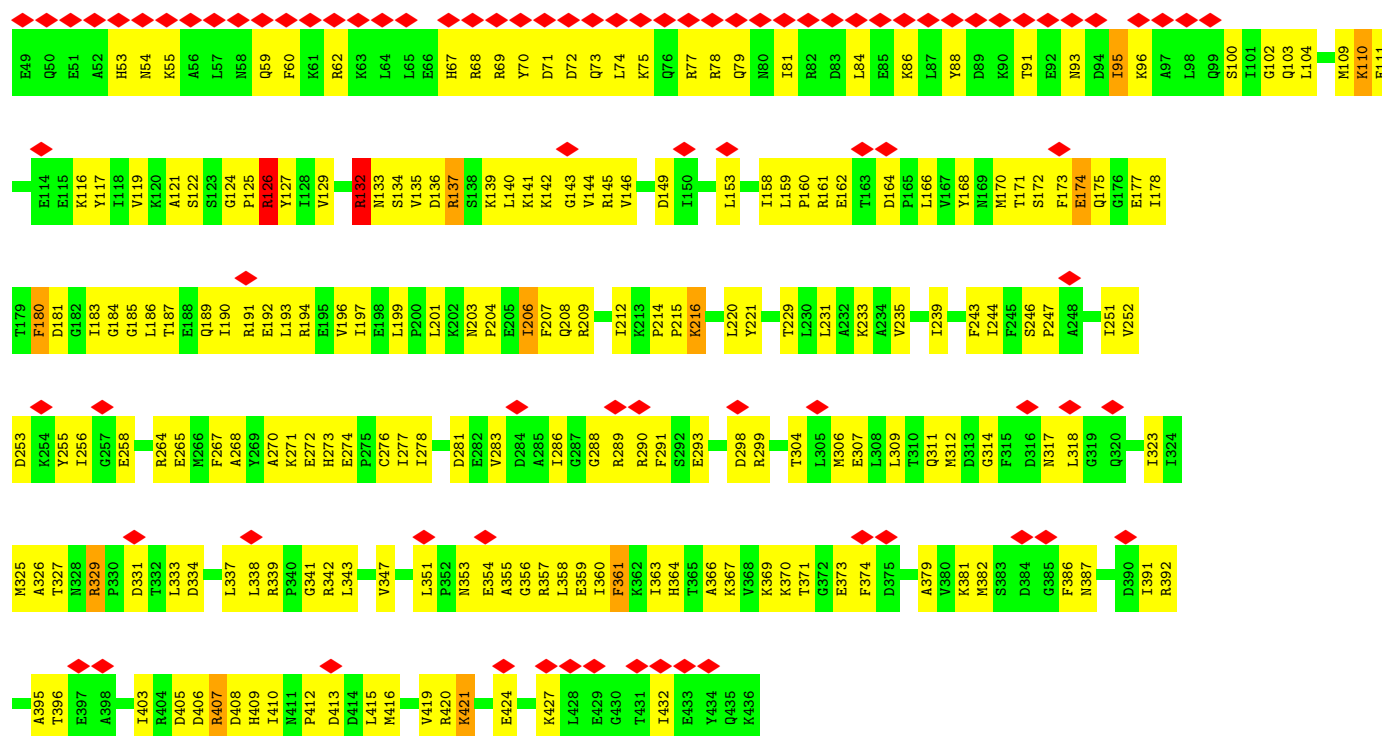
- Molecule 30: 26S proteasome regulatory subunit 6B homolog

Chain K: 21% 47% 48% ..

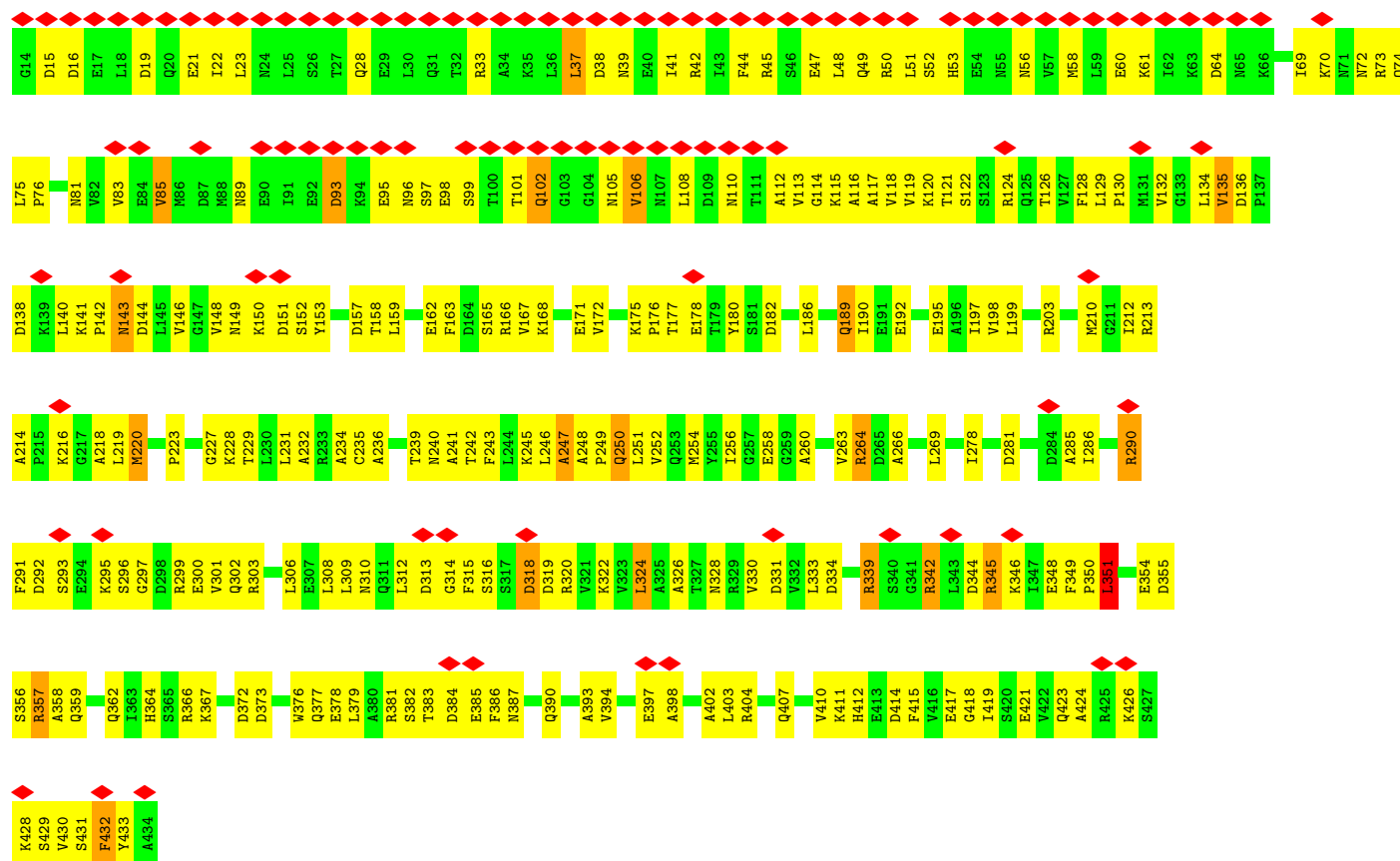
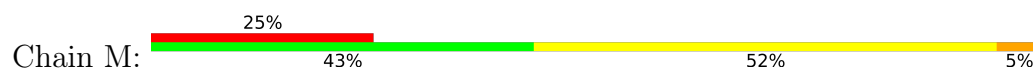


- Molecule 31: 26S proteasome subunit RPT4

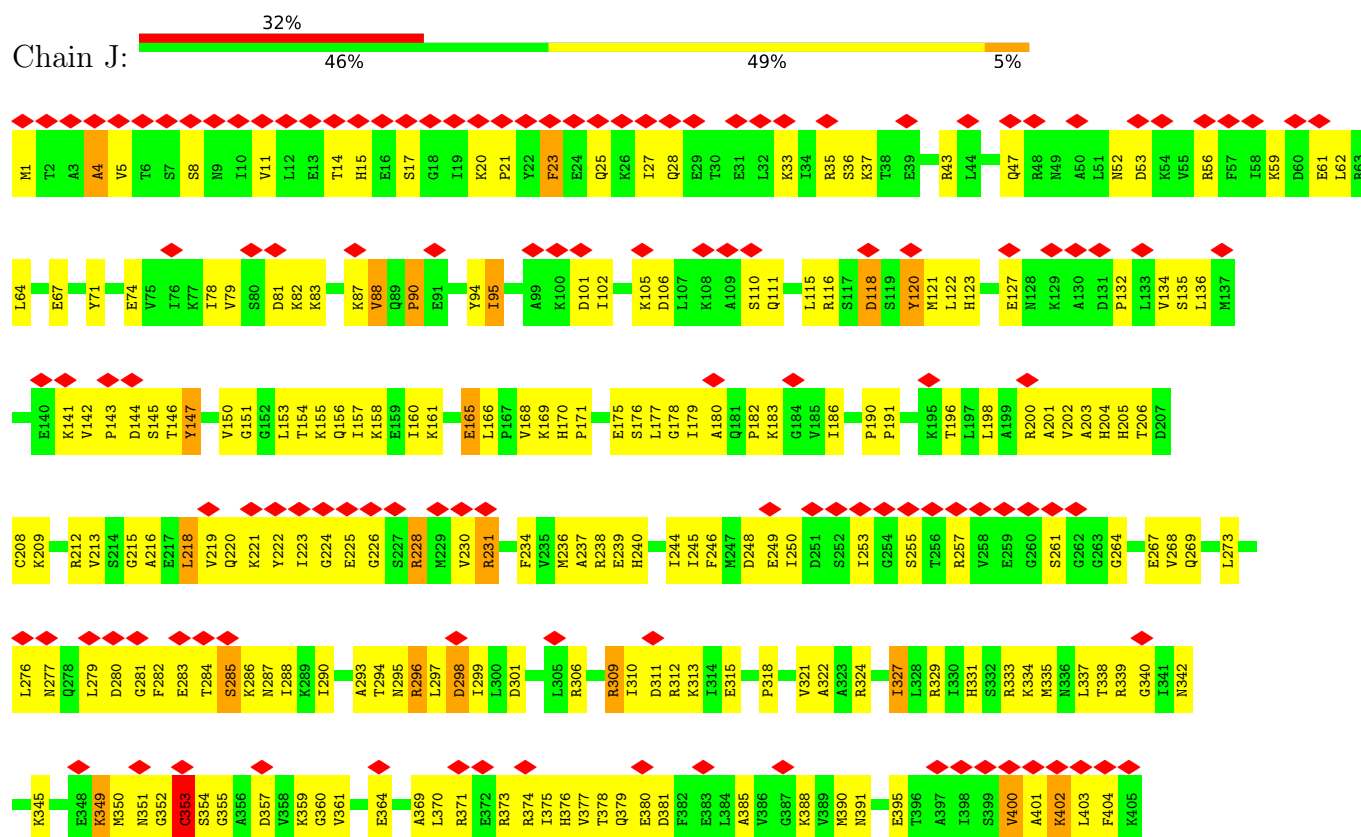
Chain L: 23% 46% 51% ..



• Molecule 32: 26S proteasome regulatory subunit 6A



• Molecule 33: 26S proteasome regulatory subunit 8 homolog



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	286500	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 ($e^-/\text{\AA}^2$)	45	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.211	Depositor
Minimum map value	-0.133	Depositor
Average map value	-0.000	Depositor
Map value standard deviation	0.006	Depositor
Recommended contour level	0.02	Depositor
Map size (Å)	529.92, 529.92, 529.92	wwPDB
Map dimensions	384, 384, 384	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.38, 1.38, 1.38	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: MG, ATP, ADP

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	2.29	84/1946 (4.3%)	2.37	115/2634 (4.4%)
1	a	2.26	65/1946 (3.3%)	2.37	130/2634 (4.9%)
2	B	2.20	63/1944 (3.2%)	2.48	129/2632 (4.9%)
2	b	2.28	66/1944 (3.4%)	2.41	119/2632 (4.5%)
3	C	2.28	69/1935 (3.6%)	2.42	124/2618 (4.7%)
3	c	2.28	74/1935 (3.8%)	2.37	107/2618 (4.1%)
4	D	2.34	75/1888 (4.0%)	2.45	113/2557 (4.4%)
4	d	2.25	74/2012 (3.7%)	2.52	140/2718 (5.2%)
5	E	2.27	73/1909 (3.8%)	2.39	105/2571 (4.1%)
5	e	2.30	74/1909 (3.9%)	2.43	121/2571 (4.7%)
6	F	2.26	71/1800 (3.9%)	2.42	123/2433 (5.1%)
6	f	2.26	69/1800 (3.8%)	2.41	108/2433 (4.4%)
7	G	2.24	68/1945 (3.5%)	2.43	130/2625 (5.0%)
7	g	2.29	79/1945 (4.1%)	2.38	118/2625 (4.5%)
8	1	2.29	59/1541 (3.8%)	2.24	69/2087 (3.3%)
8	h	2.28	70/1541 (4.5%)	2.40	98/2087 (4.7%)
9	2	2.34	67/1751 (3.8%)	2.35	98/2373 (4.1%)
9	i	2.38	74/1751 (4.2%)	2.45	118/2373 (5.0%)
10	3	2.35	68/1611 (4.2%)	2.41	90/2174 (4.1%)
10	j	2.31	70/1611 (4.3%)	2.32	83/2174 (3.8%)
11	4	2.29	67/1590 (4.2%)	2.37	85/2142 (4.0%)
11	k	2.24	59/1590 (3.7%)	2.41	94/2142 (4.4%)
12	5	2.25	61/1681 (3.6%)	2.45	118/2274 (5.2%)
12	l	2.28	64/1681 (3.8%)	2.36	84/2274 (3.7%)
13	6	2.36	74/1795 (4.1%)	2.48	130/2420 (5.4%)
13	m	2.28	66/1795 (3.7%)	2.41	111/2420 (4.6%)
14	7	2.34	82/1821 (4.5%)	2.38	105/2470 (4.3%)
14	n	2.31	78/1847 (4.2%)	2.33	101/2503 (4.0%)
15	W	2.28	58/1558 (3.7%)	2.50	96/2111 (4.5%)
16	V	2.33	89/2309 (3.9%)	2.52	174/3115 (5.6%)
17	T	2.18	74/2236 (3.3%)	2.60	174/3017 (5.8%)
18	X	2.26	35/1059 (3.3%)	2.43	62/1432 (4.3%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
19	Y	2.16	26/741 (3.5%)	2.49	61/1000 (6.1%)
20	Z	2.24	243/7123 (3.4%)	2.61	582/9645 (6.0%)
21	N	2.27	271/7273 (3.7%)	2.54	572/9822 (5.8%)
22	S	2.29	145/3967 (3.7%)	2.53	293/5355 (5.5%)
23	P	2.25	117/3664 (3.2%)	2.48	246/4940 (5.0%)
24	Q	2.24	120/3556 (3.4%)	2.51	246/4787 (5.1%)
25	R	2.23	107/3314 (3.2%)	2.59	276/4469 (6.2%)
26	U	2.25	89/2461 (3.6%)	2.48	180/3327 (5.4%)
27	O	2.27	136/3247 (4.2%)	2.59	284/4380 (6.5%)
28	H	2.27	119/3363 (3.5%)	2.50	249/4532 (5.5%)
29	I	2.27	113/3061 (3.7%)	2.52	234/4121 (5.7%)
30	K	2.29	120/3156 (3.8%)	2.41	180/4261 (4.2%)
31	L	2.32	130/3129 (4.2%)	2.41	173/4204 (4.1%)
32	M	2.31	134/3323 (4.0%)	2.39	216/4478 (4.8%)
33	J	2.28	121/3212 (3.8%)	2.46	218/4316 (5.1%)
All	All	2.28	4210/112216 (3.8%)	2.47	7582/151526 (5.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	7
1	a	0	8
2	B	0	4
2	b	0	3
3	C	0	10
3	c	0	8
4	D	0	10
4	d	0	10
5	E	0	7
5	e	0	1
6	F	0	14
6	f	0	7
7	G	0	7
7	g	0	8
8	1	0	8
8	h	0	6
9	2	0	5
9	i	0	2
10	3	0	7

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Mol	Chain	#Chirality outliers	#Planarity outliers
10	j	0	5
11	4	0	7
11	k	0	5
12	5	0	4
12	l	0	6
13	6	0	9
13	m	0	6
14	7	0	9
14	n	0	5
15	W	0	4
16	V	0	2
17	T	0	8
18	X	0	3
20	Z	0	15
21	N	0	16
22	S	0	13
23	P	0	8
24	Q	0	12
25	R	0	10
26	U	0	6
27	O	0	9
28	H	0	14
29	I	0	8
30	K	0	15
31	L	0	7
32	M	0	5
33	J	0	4
All	All	0	347

All (4210) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	Z	898	HIS	ND1-CE1	14.08	1.46	1.32
20	Z	208	VAL	CA-CB	-12.29	1.47	1.54
30	K	349	ARG	CD-NE	12.19	1.63	1.46
32	M	355	ASP	N-CA	-11.52	1.31	1.46
13	6	149	ALA	N-CA	-11.44	1.31	1.46
17	T	42	PRO	CA-C	11.43	1.63	1.52
18	X	100	TRP	NE1-CE2	11.12	1.49	1.37
14	7	161	ARG	CD-NE	11.03	1.61	1.46
33	J	331	HIS	ND1-CE1	11.00	1.43	1.32
22	S	120	SER	CA-C	-10.98	1.39	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	c	59	GLN	N-CA	-10.88	1.33	1.46
8	h	98	ASN	CA-C	-10.82	1.40	1.53
22	S	475	TYR	CA-CB	10.77	1.70	1.53
25	R	155	GLY	CA-C	-10.77	1.39	1.52
7	G	123	HIS	ND1-CE1	10.74	1.43	1.32
3	C	66	LEU	CA-C	-10.73	1.39	1.52
25	R	241	ILE	CA-C	-10.70	1.44	1.53
1	a	233	PHE	CA-C	-10.69	1.39	1.52
11	k	80	VAL	CA-C	-10.64	1.39	1.52
17	T	96	LEU	CA-C	-10.55	1.42	1.53
25	R	21	VAL	CA-C	-10.53	1.43	1.52
22	S	327	ILE	C-N	10.52	1.46	1.33
20	Z	592	GLU	CA-C	-10.48	1.39	1.52
21	N	310	ASP	N-CA	-10.47	1.33	1.46
13	6	18	GLY	CA-C	-10.46	1.41	1.52
32	M	299	ARG	NE-CZ	10.35	1.44	1.33
27	O	310	PHE	C-N	10.34	1.47	1.33
33	J	312	ARG	NE-CZ	10.31	1.44	1.33
14	7	198	ILE	CA-CB	-10.28	1.47	1.53
12	l	144	ARG	CD-NE	10.25	1.60	1.46
13	6	96	SER	CA-C	-10.18	1.40	1.52
14	7	84	VAL	C-N	10.15	1.42	1.33
24	Q	390	LEU	CA-CB	10.10	1.66	1.53
22	S	19	HIS	ND1-CE1	9.98	1.42	1.32
1	a	43	LEU	CA-C	-9.94	1.40	1.52
2	b	224	TYR	CA-C	-9.92	1.40	1.52
32	M	322	LYS	N-CA	-9.88	1.34	1.45
9	i	240	ALA	CA-C	-9.88	1.40	1.52
9	2	147	SER	CA-C	-9.83	1.40	1.52
6	F	128	TYR	CA-C	-9.82	1.40	1.52
22	S	440	ASP	C-N	9.82	1.44	1.33
21	N	355	TRP	NE1-CE2	9.74	1.48	1.37
31	L	103	GLN	CA-C	-9.71	1.41	1.52
21	N	76	GLU	CA-C	-9.67	1.40	1.52
26	U	172	GLU	CA-C	-9.59	1.40	1.52
5	e	123	PHE	C-N	9.59	1.40	1.33
7	g	75	GLY	CA-C	-9.59	1.41	1.52
16	V	171	ARG	CD-NE	9.59	1.59	1.46
8	1	158	GLU	N-CA	-9.58	1.34	1.46
15	W	137	VAL	N-CA	-9.58	1.35	1.46
23	P	348	HIS	CA-C	-9.57	1.40	1.52
9	i	236	ARG	CD-NE	9.56	1.59	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	Z	927	VAL	CA-CB	-9.56	1.42	1.54
2	b	44	VAL	CA-CB	-9.56	1.42	1.54
32	M	114	GLY	N-CA	9.56	1.52	1.44
32	M	316	SER	CA-C	-9.55	1.40	1.53
21	N	358	LYS	C-N	9.54	1.46	1.33
1	a	43	LEU	C-N	9.52	1.46	1.33
7	g	87	HIS	ND1-CE1	9.49	1.42	1.32
20	Z	440	LEU	C-N	9.46	1.45	1.33
32	M	264	ARG	NE-CZ	9.46	1.43	1.33
10	j	133	ALA	CA-C	-9.44	1.41	1.52
31	L	214	PRO	CA-C	-9.42	1.43	1.52
20	Z	551	LEU	N-CA	-9.39	1.34	1.46
33	J	240	HIS	ND1-CE1	9.38	1.42	1.32
15	W	36	ILE	N-CA	-9.38	1.35	1.46
11	4	73	TYR	N-CA	-9.37	1.34	1.46
21	N	333	SER	C-N	9.36	1.45	1.33
9	2	48	ARG	CD-NE	9.36	1.59	1.46
13	6	203	HIS	CA-C	-9.34	1.41	1.52
23	P	223	LEU	N-CA	-9.34	1.34	1.46
10	3	171	LEU	CA-C	-9.32	1.40	1.52
31	L	142	LYS	CA-CB	9.32	1.66	1.53
10	j	190	ILE	CA-C	-9.31	1.40	1.52
14	n	188	LEU	C-N	9.31	1.46	1.33
32	M	404	ARG	NE-CZ	9.31	1.43	1.33
9	2	89	GLY	N-CA	9.30	1.57	1.45
21	N	64	ILE	CA-CB	9.30	1.66	1.54
28	H	451	ILE	CA-CB	-9.29	1.41	1.54
27	O	283	HIS	ND1-CE1	9.27	1.41	1.32
10	3	28	ARG	CD-NE	9.24	1.59	1.46
25	R	324	ARG	CD-NE	9.24	1.59	1.46
29	I	135	PHE	C-N	9.23	1.42	1.33
4	D	128	PRO	CA-C	-9.22	1.43	1.52
11	4	45	SER	CA-C	-9.22	1.41	1.52
4	D	181	ARG	CD-NE	9.22	1.59	1.46
16	V	122	ASP	C-N	9.21	1.45	1.33
15	W	1	MET	C-N	9.21	1.43	1.33
1	a	244	ARG	CD-NE	9.20	1.59	1.46
27	O	122	HIS	C-O	9.15	1.30	1.23
4	D	49	ARG	CA-C	-9.15	1.40	1.53
3	c	29	ILE	CA-CB	-9.15	1.44	1.54
33	J	338	THR	CA-C	-9.15	1.41	1.52
2	B	178	ARG	NE-CZ	9.14	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	O	122	HIS	CA-C	-9.13	1.44	1.52
14	7	120	LEU	CA-C	-9.10	1.41	1.52
23	P	233	GLU	CA-C	-9.09	1.41	1.52
23	P	133	GLU	N-CA	-9.09	1.35	1.46
28	H	173	ARG	NE-CZ	9.07	1.43	1.33
30	K	423	LYS	CA-C	9.04	1.62	1.52
26	U	120	LEU	CA-C	-9.03	1.41	1.52
5	E	90	GLU	CA-C	-9.00	1.41	1.52
2	b	91	LYS	C-N	8.98	1.44	1.33
24	Q	431	SER	C-N	8.97	1.44	1.33
5	e	86	ARG	NE-CZ	8.96	1.43	1.33
16	V	191	GLY	CA-C	-8.96	1.42	1.52
10	j	181	SER	N-CA	-8.95	1.34	1.45
14	n	74	ARG	NE-CZ	8.94	1.42	1.33
31	L	264	ARG	NE-CZ	8.94	1.42	1.33
24	Q	214	THR	CA-C	-8.94	1.41	1.52
7	g	9	ASP	N-CA	-8.93	1.39	1.47
20	Z	766	HIS	ND1-CE1	8.92	1.41	1.32
2	B	38	LYS	CA-CB	8.91	1.65	1.53
30	K	36	ASN	CA-CB	8.90	1.66	1.53
9	i	254	GLU	CA-C	-8.90	1.41	1.52
2	B	184	GLU	N-CA	-8.90	1.35	1.45
31	L	71	ASP	N-CA	-8.90	1.35	1.46
12	5	247	GLY	CA-C	-8.88	1.42	1.52
5	E	75	GLY	CA-C	-8.86	1.44	1.52
3	c	141	ASP	CA-C	8.85	1.63	1.52
6	F	231	ALA	N-CA	8.84	1.57	1.46
16	V	264	GLU	CA-C	-8.83	1.41	1.52
16	V	212	MET	CA-C	-8.82	1.41	1.52
28	H	135	ASP	CA-C	-8.81	1.42	1.52
22	S	480	ARG	NE-CZ	8.79	1.42	1.33
20	Z	928	ARG	CA-C	-8.78	1.41	1.52
16	V	202	ASP	N-CA	-8.77	1.34	1.45
14	7	76	ILE	N-CA	-8.77	1.38	1.46
30	K	330	ARG	NE-CZ	8.77	1.42	1.33
1	a	38	THR	N-CA	-8.76	1.35	1.46
1	A	18	ILE	CA-C	-8.76	1.45	1.52
20	Z	468	GLU	N-CA	8.73	1.52	1.46
13	6	206	VAL	N-CA	-8.72	1.35	1.46
20	Z	28	LYS	C-N	8.69	1.45	1.33
29	I	300	ARG	CD-NE	8.69	1.58	1.46
5	E	177	GLU	CA-C	-8.67	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	L	366	ALA	CA-CB	8.67	1.66	1.53
13	m	140	GLU	N-CA	-8.67	1.35	1.46
7	G	85	GLY	N-CA	-8.67	1.35	1.45
12	5	261	ILE	N-CA	-8.66	1.36	1.46
10	3	46	TYR	CA-C	-8.65	1.42	1.53
21	N	400	ILE	CA-CB	8.63	1.64	1.54
10	3	60	VAL	N-CA	-8.62	1.36	1.46
27	O	37	LEU	CA-CB	8.61	1.64	1.53
32	M	278	ILE	CA-C	-8.61	1.41	1.52
10	j	34	LEU	C-N	8.60	1.39	1.33
5	e	41	ALA	CA-C	-8.60	1.42	1.52
3	C	227	GLN	CA-C	-8.58	1.41	1.52
32	M	320	ARG	C-N	8.57	1.44	1.33
12	5	234	ARG	NE-CZ	8.56	1.42	1.33
24	Q	206	ASN	C-N	8.56	1.45	1.33
4	D	76	SER	N-CA	-8.54	1.35	1.46
29	I	54	ARG	NE-CZ	8.53	1.42	1.33
13	m	115	VAL	CA-C	-8.53	1.42	1.52
4	D	96	HIS	ND1-CE1	8.52	1.41	1.32
7	G	46	VAL	CA-C	-8.52	1.42	1.52
11	4	71	GLU	C-N	8.52	1.45	1.33
32	M	223	PRO	CA-C	-8.52	1.44	1.52
4	D	122	GLN	CA-CB	8.52	1.59	1.53
30	K	139	LEU	CA-C	-8.51	1.42	1.52
11	k	83	PHE	CA-C	-8.50	1.41	1.52
20	Z	253	VAL	CA-CB	8.50	1.59	1.53
12	5	218	ASN	CA-CB	8.50	1.65	1.53
10	3	170	ALA	C-N	8.49	1.45	1.33
14	7	125	ILE	CA-C	-8.48	1.42	1.52
21	N	457	SER	CA-CB	8.47	1.67	1.53
21	N	264	SER	N-CA	-8.46	1.35	1.46
16	V	31	SER	CA-C	-8.46	1.41	1.52
13	6	141	ARG	CA-C	8.45	1.64	1.52
15	W	60	ARG	NE-CZ	8.44	1.42	1.33
20	Z	420	ALA	CA-C	8.42	1.63	1.52
1	A	56	GLN	CA-C	-8.41	1.41	1.53
7	g	14	VAL	CA-CB	-8.41	1.45	1.54
25	R	392	ARG	N-CA	-8.41	1.38	1.46
22	S	405	ARG	N-CA	-8.41	1.36	1.46
2	B	234	ARG	NE-CZ	8.40	1.42	1.33
21	N	247	GLU	CA-CB	8.39	1.65	1.53
9	2	65	ARG	N-CA	-8.39	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	E	62	ASP	N-CA	-8.38	1.34	1.45
8	1	81	THR	N-CA	-8.38	1.35	1.45
9	i	88	ILE	CA-CB	-8.37	1.44	1.54
23	P	154	ASP	CA-C	-8.36	1.42	1.52
8	1	71	HIS	ND1-CE1	8.35	1.40	1.32
13	6	62	ALA	CA-C	-8.34	1.42	1.53
21	N	715	ILE	CA-C	-8.34	1.42	1.52
25	R	222	ARG	CD-NE	8.33	1.57	1.46
1	a	155	TYR	CA-C	-8.33	1.42	1.52
4	d	230	ASN	C-N	8.32	1.44	1.33
21	N	786	ARG	NE-CZ	8.32	1.42	1.33
16	V	50	MET	C-N	8.32	1.41	1.32
33	J	111	GLN	CA-CB	8.31	1.64	1.53
13	m	36	ARG	NE-CZ	8.30	1.42	1.33
14	n	103	LEU	N-CA	-8.30	1.36	1.46
20	Z	613	ASP	C-N	8.29	1.43	1.33
31	L	79	GLN	N-CA	-8.28	1.35	1.46
32	M	424	ALA	CA-C	-8.27	1.41	1.52
7	G	123	HIS	CB-CG	-8.25	1.38	1.50
30	K	422	ASP	N-CA	-8.25	1.36	1.46
17	T	242	LYS	CA-C	-8.25	1.42	1.52
29	I	136	VAL	CA-CB	-8.24	1.46	1.55
9	i	107	SER	CA-C	-8.24	1.42	1.52
8	1	38	ARG	CD-NE	8.23	1.57	1.46
27	O	248	TYR	N-CA	-8.23	1.36	1.46
28	H	384	GLY	CA-C	-8.22	1.43	1.52
2	B	103	GLU	CA-C	8.22	1.63	1.52
26	U	176	ARG	CZ-NH2	8.21	1.44	1.33
14	n	232	ILE	N-CA	-8.21	1.36	1.46
13	6	36	ARG	CA-CB	8.21	1.65	1.53
9	2	236	ARG	NE-CZ	8.20	1.42	1.33
16	V	27	VAL	CA-C	-8.20	1.42	1.52
21	N	881	TYR	CA-CB	8.20	1.63	1.54
9	i	84	VAL	CA-C	-8.19	1.40	1.52
29	I	250	SER	C-N	8.18	1.45	1.33
1	A	156	LYS	CA-C	-8.18	1.43	1.52
29	I	393	GLN	N-CA	8.18	1.56	1.46
20	Z	120	SER	CA-C	-8.17	1.42	1.52
29	I	244	PHE	CA-C	-8.17	1.42	1.53
15	W	38	GLN	C-N	8.16	1.44	1.33
31	L	289	ARG	CD-NE	8.16	1.57	1.46
21	N	644	LEU	CA-C	-8.15	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	M	246	LEU	CA-C	-8.14	1.42	1.52
29	I	112	ILE	CA-C	-8.13	1.42	1.52
32	M	53	HIS	ND1-CE1	8.13	1.40	1.32
6	f	39	ARG	CD-NE	8.13	1.57	1.46
21	N	311	ILE	N-CA	-8.12	1.37	1.46
25	R	43	ARG	CZ-NH2	8.12	1.44	1.33
25	R	334	ARG	CD-NE	8.12	1.57	1.46
23	P	208	PHE	CA-C	-8.11	1.43	1.53
26	U	216	ASN	CA-CB	8.11	1.67	1.53
30	K	361	SER	CA-C	-8.11	1.42	1.52
23	P	415	TRP	NE1-CE2	8.09	1.46	1.37
10	j	98	ARG	NE-CZ	8.09	1.42	1.33
4	d	161	ALA	N-CA	-8.07	1.36	1.46
22	S	480	ARG	CD-NE	8.07	1.57	1.46
27	O	23	HIS	ND1-CE1	8.07	1.40	1.32
3	c	53	THR	N-CA	8.06	1.56	1.45
8	1	131	LEU	N-CA	-8.06	1.38	1.45
6	F	174	ARG	NE-CZ	8.05	1.42	1.33
24	Q	396	TRP	CA-C	-8.05	1.43	1.52
31	L	391	ILE	CA-CB	-8.05	1.45	1.54
12	5	197	LEU	CA-C	-8.02	1.42	1.52
27	O	206	THR	CA-C	-8.02	1.42	1.52
28	H	127	SER	CA-C	-8.02	1.42	1.52
17	T	143	SER	N-CA	-8.01	1.36	1.46
1	a	18	ILE	CA-C	-8.01	1.43	1.52
12	l	282	PHE	CA-C	-8.00	1.42	1.52
4	D	191	CYS	C-N	8.00	1.44	1.33
24	Q	128	GLU	C-N	8.00	1.42	1.32
32	M	165	SER	N-CA	-7.99	1.36	1.46
20	Z	968	ASP	CA-CB	7.99	1.64	1.53
13	6	218	ASP	CA-CB	7.99	1.65	1.54
12	l	151	VAL	CA-C	-7.99	1.42	1.52
22	S	51	ARG	NE-CZ	7.99	1.41	1.33
14	n	121	GLU	CA-CB	7.98	1.64	1.53
5	E	246	LYS	CA-C	-7.98	1.41	1.52
25	R	78	ASP	CA-C	-7.97	1.42	1.52
10	3	18	LYS	CA-C	-7.96	1.43	1.52
23	P	359	ARG	CA-C	-7.96	1.42	1.52
9	2	201	ASN	CA-C	-7.96	1.42	1.52
1	a	171	THR	CA-C	-7.95	1.43	1.52
7	G	190	ARG	CD-NE	7.95	1.57	1.46
14	7	220	ARG	NE-CZ	7.95	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	421	ASP	CA-C	-7.95	1.42	1.52
31	L	184	GLY	CA-C	-7.95	1.44	1.52
3	C	5	ARG	NE-CZ	7.94	1.41	1.33
10	3	155	GLU	CA-C	-7.94	1.45	1.52
4	d	34	VAL	CA-C	7.94	1.62	1.52
8	h	34	TYR	C-N	7.94	1.42	1.33
8	h	75	TYR	CA-C	-7.93	1.42	1.52
12	5	136	SER	N-CA	-7.92	1.36	1.46
10	j	8	ASN	C-N	7.91	1.44	1.33
24	Q	163	ARG	NE-CZ	7.91	1.41	1.33
9	2	32	ILE	CA-C	-7.91	1.42	1.52
21	N	10	LEU	CA-C	-7.91	1.42	1.52
4	d	61	PRO	N-CA	-7.90	1.37	1.47
32	M	357	ARG	NE-CZ	7.90	1.41	1.33
33	J	234	PHE	C-N	7.90	1.43	1.33
11	k	22	THR	N-CA	-7.88	1.37	1.46
16	V	156	PHE	C-N	7.88	1.44	1.33
14	n	136	ARG	CD-NE	7.87	1.57	1.46
20	Z	815	MET	N-CA	-7.86	1.36	1.46
20	Z	942	PRO	CA-CB	-7.86	1.42	1.53
29	I	335	ASP	CA-C	-7.86	1.44	1.53
30	K	81	ARG	NE-CZ	7.85	1.41	1.33
10	j	193	ASP	CA-C	-7.85	1.44	1.52
22	S	384	ARG	NE-CZ	7.83	1.41	1.33
23	P	208	PHE	CA-CB	7.83	1.61	1.53
25	R	207	ARG	CD-NE	7.83	1.57	1.46
32	M	411	LYS	N-CA	-7.83	1.36	1.45
33	J	56	ARG	CA-C	-7.83	1.42	1.52
18	X	54	GLU	CA-C	-7.82	1.43	1.52
21	N	378	ASN	CA-C	-7.82	1.43	1.52
28	H	295	PHE	C-N	7.82	1.44	1.33
9	2	167	LEU	CA-C	-7.81	1.42	1.52
9	2	72	CYS	CA-C	-7.81	1.43	1.52
16	V	66	VAL	C-N	7.80	1.43	1.33
16	V	130	GLU	C-N	7.80	1.44	1.33
25	R	270	VAL	CA-C	-7.80	1.44	1.52
13	6	75	ARG	CA-C	-7.80	1.41	1.52
3	c	234	GLU	C-N	7.80	1.43	1.33
33	J	212	ARG	CA-C	-7.79	1.43	1.52
6	F	146	GLU	CA-C	-7.79	1.43	1.52
24	Q	106	GLN	C-N	7.79	1.42	1.33
10	3	141	THR	C-N	7.79	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	M	299	ARG	CD-NE	7.78	1.57	1.46
30	K	92	VAL	CA-C	7.77	1.60	1.52
3	c	4	ARG	NE-CZ	7.76	1.41	1.33
5	E	56	SER	C-N	-7.76	1.27	1.33
13	m	203	HIS	CB-CG	-7.76	1.39	1.50
29	I	94	LYS	CA-C	-7.76	1.42	1.52
9	i	252	ILE	N-CA	-7.75	1.36	1.46
5	E	122	ARG	N-CA	-7.74	1.40	1.47
9	2	254	GLU	CA-CB	7.74	1.66	1.53
9	2	134	PRO	C-N	7.74	1.42	1.33
1	a	156	LYS	CA-C	-7.74	1.43	1.52
4	d	238	GLN	CA-C	-7.73	1.42	1.52
15	W	25	ARG	CD-NE	7.73	1.57	1.46
27	O	257	ALA	C-N	7.73	1.44	1.33
16	V	135	ARG	CD-NE	7.72	1.57	1.46
28	H	99	VAL	CA-C	-7.72	1.43	1.52
32	M	318	ASP	CA-CB	7.72	1.66	1.53
2	B	73	ALA	C-N	7.72	1.41	1.33
26	U	252	HIS	ND1-CE1	7.72	1.40	1.32
1	a	233	PHE	N-CA	-7.72	1.36	1.46
7	G	188	SER	N-CA	-7.72	1.36	1.45
9	i	170	HIS	CA-C	7.71	1.62	1.52
13	m	22	GLY	CA-C	-7.71	1.46	1.52
33	J	134	VAL	N-CA	7.70	1.55	1.46
8	1	85	GLU	CA-C	-7.70	1.42	1.52
27	O	185	PHE	CA-CB	7.69	1.65	1.53
21	N	832	HIS	C-N	7.69	1.43	1.33
24	Q	335	PHE	N-CA	7.69	1.56	1.46
23	P	224	LEU	N-CA	-7.69	1.36	1.46
13	6	13	TYR	CA-C	-7.69	1.43	1.52
20	Z	951	GLN	CA-CB	7.69	1.66	1.53
4	D	195	THR	CA-C	-7.68	1.42	1.52
16	V	190	HIS	CD2-NE2	7.68	1.46	1.37
26	U	191	THR	CA-CB	-7.67	1.41	1.53
6	f	220	THR	CA-C	7.66	1.59	1.52
10	j	38	ASN	CA-CB	7.66	1.64	1.53
13	6	179	PRO	CA-CB	7.66	1.63	1.53
1	A	77	ARG	CD-NE	7.66	1.56	1.46
21	N	34	GLN	CA-C	-7.65	1.42	1.52
33	J	246	PHE	N-CA	-7.65	1.36	1.46
32	M	354	GLU	CA-C	-7.64	1.42	1.52
9	i	129	VAL	N-CA	-7.63	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	h	175	ASP	CA-C	-7.62	1.43	1.52
10	j	62	THR	CA-C	-7.62	1.42	1.52
14	n	93	MET	CA-C	-7.62	1.42	1.52
21	N	799	VAL	CA-C	-7.62	1.42	1.53
14	7	72	VAL	CA-C	-7.60	1.45	1.53
3	c	49	GLU	CA-C	-7.60	1.43	1.52
4	D	223	ALA	N-CA	-7.60	1.36	1.46
22	S	30	GLN	N-CA	-7.60	1.37	1.46
25	R	207	ARG	NE-CZ	7.60	1.41	1.33
7	g	59	LEU	C-N	7.59	1.40	1.32
31	L	86	LYS	C-N	7.58	1.44	1.34
32	M	227	GLY	CA-C	-7.58	1.41	1.51
10	3	198	ARG	CA-C	-7.58	1.43	1.52
6	f	97	LEU	C-N	7.58	1.43	1.33
9	i	94	LEU	CA-C	-7.57	1.42	1.52
2	b	165	GLY	CA-C	-7.57	1.43	1.52
14	n	220	ARG	NE-CZ	7.57	1.41	1.33
33	J	306	ARG	CD-NE	7.57	1.56	1.46
21	N	444	HIS	ND1-CE1	7.56	1.40	1.32
9	i	215	TYR	CA-CB	7.56	1.63	1.53
24	Q	344	GLU	N-CA	-7.56	1.37	1.46
29	I	363	GLY	CA-C	-7.56	1.43	1.52
5	E	46	VAL	CA-C	-7.55	1.43	1.52
11	4	154	THR	N-CA	7.55	1.55	1.46
33	J	378	THR	N-CA	-7.55	1.37	1.45
11	k	192	VAL	CA-CB	-7.55	1.45	1.54
16	V	92	MET	CA-C	-7.55	1.43	1.52
24	Q	118	CYS	CA-C	-7.54	1.43	1.52
12	l	263	HIS	ND1-CE1	7.54	1.40	1.32
7	G	118	GLN	CA-C	-7.54	1.43	1.52
30	K	389	GLU	CA-C	-7.54	1.43	1.52
27	O	150	LEU	CA-CB	7.54	1.65	1.53
20	Z	619	ASP	CA-C	-7.53	1.40	1.52
30	K	252	ARG	CD-NE	7.53	1.56	1.46
21	N	412	TYR	C-N	7.53	1.43	1.33
1	A	123	ASN	CA-C	-7.53	1.42	1.52
3	C	63	THR	N-CA	-7.52	1.36	1.46
19	Y	53	ALA	C-N	7.52	1.41	1.33
6	f	18	ARG	CZ-NH1	7.52	1.43	1.32
22	S	346	TYR	CA-CB	7.52	1.65	1.53
31	L	337	LEU	CA-C	-7.52	1.43	1.52
31	L	60	PHE	CA-C	-7.51	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	1	104	ALA	CA-C	-7.51	1.43	1.52
23	P	103	TYR	CA-CB	7.50	1.65	1.53
26	U	156	HIS	ND1-CE1	7.50	1.40	1.32
27	O	166	ARG	NE-CZ	7.50	1.41	1.33
12	l	148	ARG	NE-CZ	7.49	1.41	1.33
2	B	91	LYS	N-CA	-7.49	1.37	1.46
4	D	47	GLU	CA-C	-7.48	1.43	1.52
8	h	31	THR	CA-C	-7.48	1.44	1.52
18	X	30	GLN	C-N	7.47	1.40	1.33
18	X	92	SER	CA-C	-7.47	1.43	1.52
21	N	698	GLY	CA-C	-7.47	1.42	1.51
5	e	39	GLY	CA-C	-7.47	1.41	1.51
21	N	238	ALA	CA-C	-7.47	1.42	1.52
21	N	371	LEU	N-CA	-7.47	1.37	1.46
4	d	182	LYS	CA-C	-7.47	1.42	1.52
9	2	143	HIS	CE1-NE2	7.47	1.40	1.32
25	R	109	LYS	CA-C	-7.47	1.43	1.52
18	X	69	ILE	CA-CB	-7.46	1.46	1.53
20	Z	510	LEU	C-N	7.46	1.39	1.33
20	Z	593	HIS	CE1-NE2	7.46	1.40	1.32
21	N	102	VAL	CA-CB	-7.46	1.45	1.54
12	l	139	ARG	NE-CZ	7.46	1.41	1.33
6	f	97	LEU	N-CA	-7.46	1.37	1.46
21	N	917	ILE	C-N	7.46	1.44	1.33
20	Z	89	LEU	CA-CB	7.45	1.65	1.53
26	U	187	SER	CA-CB	7.45	1.65	1.53
28	H	99	VAL	C-N	7.45	1.39	1.33
9	2	65	ARG	CD-NE	7.45	1.56	1.46
27	O	306	ARG	C-N	7.44	1.42	1.33
13	m	32	ALA	CA-C	-7.44	1.43	1.52
27	O	120	LYS	N-CA	-7.44	1.37	1.46
4	d	39	LYS	CA-C	-7.44	1.42	1.52
26	U	41	ALA	N-CA	-7.44	1.38	1.46
6	f	169	LYS	N-CA	-7.44	1.37	1.46
13	6	129	ALA	CA-C	-7.44	1.43	1.52
17	T	251	HIS	ND1-CE1	7.44	1.40	1.32
22	S	382	ARG	NE-CZ	7.44	1.41	1.33
25	R	275	GLU	CA-CB	7.43	1.65	1.53
21	N	624	ALA	CA-C	-7.43	1.43	1.52
29	I	97	GLU	CA-C	-7.43	1.43	1.52
2	b	78	MET	CA-C	-7.42	1.43	1.52
32	M	52	SER	CA-C	-7.42	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	Z	138	ARG	NE-CZ	7.42	1.41	1.33
28	H	305	ILE	CA-CB	-7.42	1.44	1.54
11	k	97	PRO	CA-CB	7.42	1.64	1.54
1	A	203	VAL	N-CA	-7.42	1.37	1.46
23	P	393	VAL	CA-C	-7.42	1.43	1.52
32	M	243	PHE	CA-C	-7.42	1.43	1.52
29	I	122	SER	CA-C	7.41	1.61	1.53
20	Z	826	ARG	NE-CZ	7.41	1.41	1.33
11	k	112	ASN	CA-C	7.41	1.62	1.53
28	H	101	ARG	NE-CZ	7.41	1.41	1.33
5	e	182	GLU	CA-C	-7.41	1.43	1.52
28	H	121	ASN	N-CA	-7.41	1.37	1.46
7	g	17	PRO	C-N	7.40	1.43	1.34
21	N	92	ASP	N-CA	-7.40	1.36	1.46
29	I	329	ASN	CA-C	-7.40	1.42	1.52
33	J	309	ARG	NE-CZ	7.40	1.41	1.33
32	M	310	ASN	CA-C	-7.39	1.42	1.52
3	C	231	LYS	CA-C	-7.39	1.44	1.53
33	J	120	TYR	CA-C	-7.39	1.43	1.53
13	m	23	ILE	CA-CB	-7.38	1.44	1.54
15	W	41	ARG	NE-CZ	7.38	1.41	1.33
9	2	244	GLU	C-N	7.38	1.42	1.33
6	F	133	LEU	CA-C	-7.38	1.43	1.52
21	N	820	GLU	C-N	7.38	1.43	1.33
3	c	40	ALA	CA-CB	7.37	1.63	1.53
3	c	146	TYR	CA-C	-7.37	1.43	1.52
30	K	349	ARG	CZ-NH2	7.37	1.43	1.33
4	d	25	GLU	N-CA	-7.37	1.36	1.46
11	4	85	ARG	CD-NE	7.37	1.56	1.46
4	d	5	ASP	N-CA	7.36	1.55	1.46
21	N	613	HIS	ND1-CE1	7.36	1.40	1.32
32	M	339	ARG	NE-CZ	7.36	1.41	1.33
23	P	3	ARG	CD-NE	7.36	1.56	1.46
24	Q	57	SER	N-CA	-7.36	1.37	1.46
1	A	63	LEU	CA-C	-7.36	1.42	1.52
26	U	34	VAL	CA-C	-7.36	1.43	1.52
30	K	120	VAL	N-CA	-7.35	1.37	1.46
16	V	292	ILE	CA-CB	7.35	1.63	1.54
21	N	385	VAL	CA-CB	-7.35	1.45	1.54
21	N	308	ASN	CA-C	-7.34	1.43	1.53
9	i	48	ARG	CA-CB	7.34	1.63	1.53
14	n	130	ALA	CA-C	-7.34	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	I	91	GLU	CA-C	-7.34	1.43	1.52
31	L	289	ARG	NE-CZ	7.34	1.41	1.33
12	5	237	LEU	CA-C	-7.34	1.43	1.52
5	e	165	TYR	C-N	7.33	1.43	1.33
3	c	63	THR	N-CA	-7.33	1.37	1.46
11	k	23	ARG	N-CA	-7.33	1.37	1.46
7	G	34	GLY	C-N	7.33	1.43	1.33
30	K	265	ALA	CA-C	-7.33	1.44	1.53
2	B	188	ALA	CA-C	-7.32	1.43	1.52
20	Z	231	ASP	CA-C	-7.32	1.42	1.52
6	f	110	HIS	CE1-NE2	-7.32	1.25	1.32
10	3	185	ALA	N-CA	-7.32	1.36	1.46
5	e	122	ARG	NE-CZ	7.32	1.41	1.33
21	N	896	PHE	C-N	7.32	1.44	1.33
8	h	84	THR	C-N	7.31	1.42	1.33
20	Z	813	PHE	CA-C	-7.31	1.43	1.52
10	j	107	PRO	N-CA	-7.31	1.39	1.47
24	Q	226	HIS	CD2-NE2	7.31	1.45	1.37
2	b	228	PRO	C-N	7.31	1.43	1.33
9	i	217	ARG	CD-NE	7.30	1.56	1.46
31	L	160	PRO	N-CA	7.30	1.55	1.47
3	c	139	GLY	CA-C	-7.30	1.44	1.51
16	V	225	LEU	C-N	7.30	1.43	1.33
1	a	137	LEU	CA-C	-7.30	1.43	1.52
30	K	333	ARG	CD-NE	7.30	1.56	1.46
1	A	14	ARG	CZ-NH1	7.29	1.43	1.32
30	K	244	HIS	CB-CG	-7.29	1.40	1.50
9	i	141	SER	C-N	7.29	1.43	1.33
22	S	159	ASN	CA-CB	7.29	1.64	1.53
33	J	219	VAL	CA-C	-7.29	1.42	1.52
32	M	357	ARG	N-CA	7.29	1.55	1.46
3	c	143	ARG	CD-NE	7.28	1.56	1.46
11	k	147	HIS	ND1-CE1	7.28	1.39	1.32
21	N	809	ARG	NE-CZ	7.27	1.41	1.33
2	B	157	PHE	CA-C	-7.27	1.45	1.53
25	R	313	ALA	CA-CB	7.27	1.64	1.53
3	C	236	LYS	CA-C	-7.27	1.43	1.52
4	d	29	ARG	CD-NE	7.26	1.56	1.46
21	N	754	THR	CA-C	-7.26	1.45	1.52
1	a	123	ASN	N-CA	-7.26	1.37	1.46
27	O	77	SER	CA-C	-7.26	1.43	1.52
29	I	215	PRO	C-N	-7.26	1.24	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	40	ILE	CA-CB	7.26	1.63	1.54
27	O	380	LEU	C-N	7.26	1.43	1.33
6	F	116	ALA	N-CA	-7.26	1.36	1.46
10	3	98	ARG	NE-CZ	7.25	1.41	1.33
24	Q	391	ASP	CA-C	-7.25	1.43	1.52
8	h	166	HIS	CB-CG	7.25	1.60	1.50
13	6	99	ARG	NE-CZ	7.25	1.41	1.33
21	N	269	LEU	C-N	7.25	1.44	1.34
9	2	224	VAL	CA-C	-7.24	1.43	1.52
8	h	71	HIS	ND1-CE1	7.24	1.39	1.32
21	N	740	TRP	NE1-CE2	7.24	1.45	1.37
28	H	146	VAL	CA-C	-7.24	1.43	1.52
29	I	264	CYS	CA-C	-7.24	1.43	1.52
6	f	10	THR	N-CA	7.24	1.55	1.46
5	e	80	GLY	C-O	-7.23	1.20	1.24
12	5	148	ARG	N-CA	-7.23	1.36	1.45
32	M	312	LEU	CA-C	-7.23	1.42	1.52
14	n	171	SER	N-CA	-7.22	1.37	1.45
13	6	118	ILE	CA-CB	-7.22	1.44	1.54
21	N	670	LYS	CA-CB	7.22	1.65	1.53
2	b	8	SER	CA-CB	7.22	1.65	1.53
5	E	10	ARG	NE-CZ	7.22	1.41	1.33
32	M	56	ASN	N-CA	7.22	1.55	1.46
3	c	7	ASP	CA-CB	7.21	1.65	1.53
20	Z	755	GLU	C-N	7.21	1.43	1.33
2	b	34	SER	N-CA	-7.21	1.36	1.45
2	b	194	LEU	N-CA	-7.20	1.37	1.46
3	c	194	LEU	C-N	7.20	1.43	1.33
30	K	367	ASP	CA-C	-7.20	1.43	1.52
33	J	342	ASN	N-CA	-7.20	1.37	1.46
14	7	69	PHE	CA-C	-7.20	1.43	1.52
6	f	120	THR	C-N	7.20	1.44	1.33
5	e	57	PRO	CA-CB	7.19	1.61	1.53
4	d	53	LYS	N-CA	-7.19	1.36	1.45
18	X	10	PHE	C-N	7.19	1.43	1.33
33	J	312	ARG	CZ-NH2	7.19	1.42	1.33
22	S	337	ASN	CA-C	-7.19	1.42	1.52
23	P	103	TYR	C-N	7.19	1.43	1.33
20	Z	57	LYS	N-CA	-7.19	1.36	1.46
10	j	122	ALA	CA-CB	7.19	1.65	1.53
22	S	31	VAL	CA-C	-7.18	1.44	1.52
9	2	179	GLU	N-CA	-7.18	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	2	63	LEU	C-N	7.18	1.43	1.33
20	Z	260	GLU	C-N	7.18	1.43	1.33
20	Z	553	ARG	N-CA	-7.18	1.37	1.46
6	F	203	ASP	CA-C	-7.17	1.45	1.53
15	W	166	GLU	CA-C	7.17	1.62	1.52
12	l	83	PHE	CA-CB	7.16	1.63	1.53
27	O	249	ASP	CA-C	-7.16	1.46	1.53
13	m	103	HIS	CE1-NE2	7.16	1.39	1.32
2	b	161	ALA	N-CA	-7.16	1.36	1.46
12	5	93	SER	CA-C	-7.15	1.44	1.52
24	Q	189	ARG	CA-CB	7.15	1.63	1.53
9	i	122	HIS	CG-ND1	7.15	1.46	1.38
12	l	103	SER	CA-C	-7.15	1.43	1.52
7	g	224	THR	N-CA	-7.15	1.39	1.46
4	D	136	ALA	CA-C	-7.14	1.43	1.52
5	E	154	GLN	CA-C	-7.14	1.44	1.52
33	J	95	ILE	CA-C	-7.14	1.43	1.52
26	U	263	LYS	CA-C	-7.14	1.43	1.52
32	M	314	GLY	C-N	7.14	1.43	1.34
23	P	157	ALA	CA-C	-7.14	1.43	1.52
13	6	65	PHE	CA-C	-7.14	1.43	1.52
4	D	17	ILE	CA-C	-7.13	1.43	1.52
11	4	149	ARG	NE-CZ	7.13	1.40	1.33
13	m	145	ARG	CD-NE	7.13	1.56	1.46
17	T	236	ASN	CA-C	-7.13	1.43	1.52
21	N	461	GLU	CA-C	-7.13	1.43	1.52
15	W	89	THR	N-CA	-7.12	1.37	1.46
20	Z	128	GLU	CA-CB	7.12	1.64	1.53
2	b	38	LYS	CA-C	-7.12	1.44	1.52
13	6	79	SER	C-N	7.12	1.42	1.33
30	K	334	LEU	C-N	7.12	1.42	1.33
31	L	246	SER	CA-CB	7.12	1.60	1.53
20	Z	812	ILE	CA-C	-7.12	1.43	1.52
9	2	85	THR	C-N	7.12	1.43	1.33
27	O	264	ASP	C-O	-7.12	1.15	1.24
30	K	69	LYS	CA-CB	7.12	1.64	1.53
10	3	195	VAL	CA-C	-7.11	1.43	1.52
11	4	156	GLU	N-CA	-7.11	1.37	1.46
3	c	9	ARG	CA-C	-7.11	1.43	1.52
5	E	105	GLU	N-CA	-7.11	1.36	1.45
18	X	123	ASN	N-CA	-7.11	1.37	1.46
25	R	241	ILE	N-CA	-7.11	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	X	86	ILE	CA-C	-7.11	1.43	1.52
21	N	286	LEU	CA-C	-7.11	1.43	1.52
32	M	70	LYS	C-N	7.11	1.43	1.34
27	O	137	TYR	N-CA	-7.10	1.37	1.46
30	K	109	ILE	N-CA	-7.10	1.38	1.46
21	N	274	VAL	CA-C	7.10	1.63	1.52
24	Q	37	GLN	C-N	7.10	1.43	1.33
11	k	167	GLU	CA-CB	7.09	1.64	1.53
9	2	182	LYS	CA-C	-7.09	1.43	1.52
28	H	272	ILE	C-O	-7.09	1.16	1.24
5	e	76	CYS	CA-C	-7.09	1.43	1.52
5	e	166	ARG	CD-NE	7.09	1.56	1.46
6	f	101	ARG	CD-NE	7.09	1.56	1.46
4	d	44	LEU	CA-C	-7.08	1.44	1.52
3	C	182	ASP	CA-C	-7.08	1.43	1.52
14	n	161	ARG	CD-NE	7.08	1.56	1.46
12	l	110	ILE	N-CA	-7.08	1.38	1.46
11	4	54	VAL	CA-C	-7.08	1.44	1.52
24	Q	407	ALA	CA-CB	7.08	1.65	1.53
32	M	411	LYS	CA-C	-7.08	1.43	1.52
8	1	49	LYS	C-N	7.07	1.42	1.33
32	M	252	VAL	CA-C	-7.07	1.45	1.52
1	A	178	ILE	N-CA	-7.07	1.37	1.46
7	G	138	PHE	CA-C	-7.07	1.43	1.52
20	Z	370	SER	CA-C	-7.07	1.45	1.52
31	L	146	VAL	CA-CB	-7.07	1.44	1.54
13	m	170	PRO	CA-CB	7.07	1.63	1.53
9	2	169	SER	N-CA	-7.07	1.37	1.46
21	N	741	TYR	C-N	7.07	1.43	1.33
30	K	399	ARG	CZ-NH2	7.07	1.42	1.33
14	7	164	ASN	C-O	7.06	1.29	1.24
9	i	202	VAL	CA-C	-7.06	1.43	1.52
17	T	270	ILE	CA-CB	-7.06	1.45	1.54
23	P	257	TRP	N-CA	7.06	1.55	1.46
14	n	64	GLY	C-N	7.06	1.42	1.33
16	V	193	ASN	N-CA	-7.06	1.38	1.46
9	2	249	ILE	C-N	7.06	1.43	1.33
30	K	128	ARG	NE-CZ	7.06	1.40	1.33
20	Z	201	LEU	N-CA	-7.05	1.37	1.46
5	E	210	GLU	N-CA	-7.05	1.37	1.46
20	Z	100	CYS	CA-CB	7.05	1.64	1.53
22	S	170	TYR	CA-C	-7.05	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	515	ARG	CD-NE	7.04	1.56	1.46
11	4	187	ASP	C-N	7.04	1.40	1.33
16	V	136	ALA	C-N	7.04	1.40	1.33
10	j	147	PHE	C-N	7.04	1.41	1.33
14	n	57	ALA	CA-C	-7.04	1.43	1.52
27	O	340	SER	CA-C	-7.04	1.43	1.52
8	h	57	SER	C-N	-7.04	1.25	1.33
20	Z	493	LEU	CA-C	7.04	1.61	1.52
9	2	149	ASP	CA-C	-7.04	1.43	1.52
1	a	98	LYS	N-CA	-7.03	1.37	1.46
3	c	150	THR	C-N	7.03	1.43	1.33
11	k	103	LEU	CA-C	-7.03	1.44	1.52
8	h	95	CYS	CA-C	-7.03	1.42	1.52
30	K	86	VAL	CA-CB	-7.03	1.44	1.54
32	M	419	ILE	CA-CB	7.03	1.62	1.54
2	b	159	TRP	NE1-CE2	7.03	1.45	1.37
5	E	60	GLU	CA-C	-7.03	1.44	1.52
9	i	87	LEU	N-CA	-7.03	1.37	1.46
21	N	852	ASN	C-N	7.03	1.43	1.33
7	g	224	THR	C-N	7.02	1.44	1.33
10	j	51	LEU	C-N	7.02	1.40	1.33
3	c	169	THR	CA-C	-7.02	1.44	1.52
1	a	123	ASN	CA-C	-7.02	1.43	1.52
13	m	157	PHE	CA-C	-7.02	1.44	1.52
7	G	199	ILE	CA-CB	-7.02	1.46	1.54
31	L	341	GLY	CA-C	-7.02	1.41	1.51
10	j	69	TYR	CA-C	-7.02	1.43	1.52
13	6	217	LYS	CA-CB	7.02	1.63	1.53
20	Z	767	TYR	CA-CB	7.02	1.64	1.53
13	6	124	GLU	CA-CB	7.01	1.63	1.53
23	P	373	GLU	N-CA	-7.01	1.38	1.46
29	I	145	CYS	CA-C	-7.01	1.44	1.52
20	Z	63	LEU	CA-C	-7.01	1.42	1.52
28	H	387	ASN	CA-C	-7.01	1.43	1.52
28	H	398	VAL	N-CA	-7.01	1.38	1.46
29	I	221	LEU	CA-CB	7.01	1.62	1.53
30	K	338	ILE	CA-CB	-7.01	1.45	1.54
10	3	22	ALA	CA-C	-7.00	1.43	1.52
27	O	164	PRO	CA-C	-7.00	1.44	1.52
24	Q	127	ARG	CA-C	-7.00	1.43	1.52
8	1	90	VAL	C-N	7.00	1.42	1.33
20	Z	83	THR	CA-C	7.00	1.62	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	K	119	VAL	CA-C	-7.00	1.43	1.52
17	T	202	LEU	C-N	6.99	1.43	1.33
7	g	51	GLU	N-CA	-6.99	1.37	1.46
2	B	175	LEU	N-CA	-6.99	1.37	1.46
25	R	258	LEU	N-CA	6.99	1.54	1.46
10	j	203	ARG	CD-NE	6.99	1.56	1.46
11	4	91	SER	C-N	6.99	1.42	1.33
14	7	42	THR	N-CA	-6.98	1.37	1.45
28	H	191	ILE	N-CA	-6.98	1.38	1.46
28	H	176	VAL	CA-C	-6.98	1.44	1.52
28	H	419	LEU	CA-C	6.98	1.61	1.52
9	i	198	SER	C-N	6.97	1.41	1.32
22	S	416	GLU	CA-C	6.97	1.62	1.52
23	P	65	LEU	N-CA	-6.97	1.38	1.46
33	J	79	VAL	CA-C	-6.97	1.45	1.52
10	j	35	GLY	CA-C	-6.97	1.44	1.52
26	U	124	ASP	CA-C	-6.97	1.43	1.52
27	O	318	HIS	ND1-CE1	6.96	1.39	1.32
8	h	158	GLU	CA-C	-6.96	1.43	1.52
23	P	337	HIS	ND1-CE1	6.96	1.39	1.32
5	e	127	ALA	N-CA	6.96	1.54	1.46
2	B	179	TRP	CD2-CE3	-6.96	1.29	1.40
22	S	105	PRO	CA-C	6.96	1.60	1.52
3	c	39	MET	CA-CB	6.96	1.62	1.53
1	A	104	PHE	CA-C	-6.95	1.43	1.52
23	P	288	ASN	CA-C	-6.95	1.43	1.52
7	G	193	VAL	CA-C	-6.95	1.44	1.52
14	n	101	LYS	CA-C	6.95	1.62	1.52
13	6	120	ALA	CA-C	-6.95	1.43	1.52
23	P	104	LEU	C-N	6.95	1.42	1.33
8	h	91	PHE	CA-CB	6.94	1.64	1.53
4	D	38	GLY	CA-C	-6.94	1.42	1.52
13	m	165	LYS	N-CA	-6.94	1.37	1.46
7	G	97	ALA	N-CA	-6.94	1.37	1.46
29	I	257	LEU	CA-CB	6.94	1.64	1.53
20	Z	898	HIS	CA-CB	6.94	1.63	1.53
25	R	161	ALA	CA-C	-6.94	1.44	1.52
1	a	189	SER	CA-C	-6.94	1.43	1.52
20	Z	118	VAL	CA-CB	6.94	1.63	1.54
24	Q	337	ALA	CA-C	-6.93	1.44	1.52
32	M	412	HIS	CB-CG	6.93	1.59	1.50
29	I	123	PRO	CA-C	-6.93	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	Q	280	ASN	CA-CB	6.93	1.64	1.53
5	e	10	ARG	C-N	6.93	1.41	1.33
7	G	152	GLU	C-N	6.93	1.41	1.34
23	P	81	LEU	C-N	6.93	1.42	1.33
12	5	199	GLY	CA-C	-6.93	1.45	1.52
20	Z	262	VAL	N-CA	6.93	1.54	1.46
26	U	119	LEU	CA-C	-6.93	1.43	1.52
3	c	183	ASP	CA-C	-6.92	1.43	1.52
22	S	367	TYR	CA-C	-6.92	1.43	1.52
27	O	24	PRO	CA-CB	-6.92	1.44	1.53
33	J	228	ARG	CD-NE	6.92	1.55	1.46
20	Z	826	ARG	CZ-NH2	6.92	1.42	1.33
22	S	135	ASN	CA-C	-6.92	1.43	1.52
21	N	541	ALA	C-N	6.92	1.42	1.33
24	Q	309	ARG	N-CA	-6.91	1.36	1.46
4	d	6	ARG	CD-NE	6.91	1.55	1.46
1	A	204	GLU	C-N	6.91	1.43	1.33
23	P	379	TYR	N-CA	6.91	1.55	1.46
21	N	205	SER	CA-CB	6.91	1.64	1.53
28	H	127	SER	N-CA	-6.91	1.37	1.46
12	5	235	SER	CA-C	-6.91	1.43	1.52
22	S	480	ARG	CA-CB	6.90	1.64	1.53
24	Q	431	SER	CA-C	-6.90	1.43	1.52
21	N	685	VAL	C-N	6.90	1.42	1.33
10	j	204	GLN	N-CA	-6.90	1.36	1.46
7	G	182	HIS	CB-CG	6.90	1.59	1.50
28	H	261	ARG	NE-CZ	6.90	1.40	1.33
6	F	227	GLY	CA-C	-6.89	1.43	1.52
26	U	124	ASP	C-N	6.89	1.41	1.33
8	l	54	ARG	CD-NE	6.89	1.55	1.46
1	a	104	PHE	CA-C	-6.89	1.43	1.52
7	g	224	THR	CA-C	-6.89	1.45	1.52
20	Z	117	ASP	CA-C	-6.89	1.44	1.52
2	b	30	GLN	C-N	6.89	1.42	1.33
5	E	132	ARG	NE-CZ	6.89	1.40	1.33
11	4	69	ILE	CA-CB	-6.88	1.45	1.54
26	U	303	GLU	N-CA	-6.88	1.37	1.46
28	H	344	ASP	CA-C	-6.88	1.45	1.52
5	e	19	GLY	CA-C	-6.88	1.42	1.51
20	Z	307	HIS	ND1-CE1	6.88	1.39	1.32
26	U	100	ARG	CD-NE	6.87	1.55	1.46
32	M	220	MET	N-CA	-6.87	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	H	222	ARG	NE-CZ	6.87	1.40	1.33
22	S	147	TRP	C-N	6.87	1.42	1.33
32	M	322	LYS	CA-CB	6.86	1.64	1.53
30	K	177	LEU	CA-C	-6.86	1.45	1.53
30	K	364	PRO	CA-C	6.86	1.61	1.52
12	5	143	LEU	CA-C	-6.85	1.44	1.52
2	B	189	ILE	CA-CB	-6.85	1.46	1.54
17	T	150	ARG	CD-NE	6.85	1.55	1.46
32	M	101	THR	N-CA	-6.85	1.37	1.46
27	O	114	GLN	CA-CB	6.85	1.64	1.53
27	O	183	ASN	C-N	6.85	1.43	1.33
27	O	85	SER	CA-CB	6.85	1.64	1.53
23	P	1	MET	C-N	6.84	1.42	1.33
23	P	36	LEU	N-CA	-6.84	1.38	1.46
2	b	28	VAL	N-CA	-6.84	1.38	1.46
3	c	107	PRO	CA-C	-6.84	1.44	1.52
16	V	129	PHE	C-N	6.84	1.43	1.34
28	H	432	ARG	NE-CZ	6.84	1.40	1.33
29	I	211	MET	C-N	6.84	1.42	1.33
20	Z	161	ILE	C-N	6.84	1.43	1.33
1	a	164	VAL	N-CA	-6.83	1.39	1.46
6	f	15	PRO	C-N	6.83	1.42	1.33
13	m	223	GLU	C-N	6.83	1.43	1.33
28	H	299	ARG	CD-NE	6.83	1.55	1.46
21	N	506	GLN	CA-C	-6.83	1.44	1.52
11	k	12	SER	CA-CB	6.83	1.65	1.53
3	c	129	ARG	CZ-NH2	6.82	1.42	1.33
10	3	53	ILE	CA-CB	-6.82	1.47	1.55
22	S	142	VAL	CA-C	-6.82	1.44	1.52
29	I	99	ILE	CA-C	-6.82	1.44	1.52
31	L	166	LEU	CA-CB	6.82	1.64	1.53
32	M	383	THR	N-CA	-6.82	1.37	1.46
1	A	208	THR	CA-C	-6.82	1.44	1.52
13	6	58	ILE	C-O	-6.82	1.16	1.24
22	S	61	SER	C-N	6.82	1.42	1.33
27	O	195	TYR	CA-CB	6.82	1.64	1.53
6	f	154	THR	CA-C	-6.82	1.44	1.52
23	P	344	ARG	NE-CZ	6.82	1.40	1.33
26	U	240	GLY	CA-C	-6.82	1.42	1.51
9	i	161	LEU	N-CA	-6.81	1.38	1.46
22	S	50	PRO	N-CD	-6.81	1.38	1.47
3	c	113	ARG	CD-NE	6.81	1.55	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	283	THR	CA-C	-6.81	1.44	1.52
27	O	165	LEU	C-N	6.81	1.42	1.33
33	J	153	LEU	CA-C	-6.81	1.44	1.53
17	T	214	GLU	C-N	6.81	1.43	1.34
32	M	364	HIS	ND1-CE1	6.81	1.39	1.32
11	k	26	SER	N-CA	-6.80	1.37	1.46
2	b	135	LEU	N-CA	-6.80	1.37	1.46
3	c	18	ARG	NE-CZ	6.80	1.40	1.33
10	j	139	SER	C-N	6.80	1.41	1.33
14	7	163	VAL	N-CA	-6.80	1.39	1.46
2	b	23	TYR	CA-C	-6.80	1.44	1.52
21	N	381	GLU	CA-CB	6.80	1.62	1.53
25	R	302	ALA	CA-C	-6.80	1.44	1.52
7	G	132	PHE	CA-C	-6.80	1.44	1.52
23	P	123	ARG	CD-NE	6.79	1.55	1.46
32	M	339	ARG	CA-C	-6.79	1.43	1.52
20	Z	593	HIS	ND1-CE1	6.79	1.39	1.32
21	N	483	LEU	CA-C	-6.79	1.44	1.52
23	P	46	THR	CA-C	-6.79	1.44	1.52
32	M	149	ASN	N-CA	-6.79	1.37	1.46
33	J	285	SER	CA-CB	6.79	1.65	1.53
8	h	50	ILE	N-CA	-6.79	1.37	1.46
10	j	61	THR	C-N	6.79	1.42	1.33
20	Z	151	HIS	CE1-NE2	-6.79	1.25	1.32
8	1	66	ASP	C-N	6.79	1.42	1.33
10	3	178	ASP	N-CA	-6.79	1.37	1.46
16	V	221	TRP	NE1-CE2	6.79	1.45	1.37
20	Z	236	PHE	CA-C	-6.79	1.44	1.52
28	H	333	MET	CA-CB	6.79	1.63	1.53
13	m	75	ARG	CD-NE	6.79	1.55	1.46
32	M	220	MET	CA-C	-6.79	1.44	1.52
33	J	191	PRO	N-CD	-6.79	1.38	1.47
1	a	135	ARG	CD-NE	6.78	1.55	1.46
7	g	81	LEU	N-CA	-6.78	1.37	1.46
1	A	193	HIS	ND1-CE1	6.78	1.39	1.32
5	E	190	SER	CA-C	-6.78	1.44	1.52
30	K	350	ARG	NE-CZ	6.78	1.40	1.33
29	I	300	ARG	NE-CZ	6.78	1.40	1.33
32	M	130	PRO	CA-C	-6.78	1.46	1.52
6	f	190	ILE	CA-CB	-6.78	1.46	1.54
16	V	49	VAL	C-N	6.78	1.42	1.33
6	F	126	ARG	N-CA	-6.77	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	6	215	VAL	C-N	6.77	1.41	1.33
18	X	77	PRO	C-N	6.77	1.42	1.33
33	J	177	LEU	CA-C	-6.77	1.44	1.52
14	7	157	ASP	C-O	6.77	1.31	1.24
32	M	166	ARG	NE-CZ	6.77	1.40	1.33
14	7	239	LEU	CA-C	-6.77	1.44	1.52
14	7	136	ARG	CZ-NH1	6.76	1.42	1.32
28	H	257	THR	C-N	6.76	1.42	1.33
22	S	240	ASP	N-CA	6.76	1.54	1.46
13	m	56	ASP	N-CA	6.76	1.54	1.46
17	T	84	GLN	CA-C	-6.76	1.44	1.52
10	3	197	LYS	C-N	6.76	1.42	1.33
12	5	128	GLN	C-N	6.76	1.42	1.33
30	K	392	LEU	CA-C	-6.76	1.44	1.52
8	h	23	LEU	N-CA	-6.76	1.37	1.45
14	7	46	SER	C-N	6.76	1.42	1.33
29	I	383	THR	N-CA	-6.75	1.38	1.46
2	B	239	THR	N-CA	-6.75	1.36	1.45
15	W	159	ALA	CA-CB	6.75	1.63	1.53
11	k	45	SER	CA-C	-6.75	1.44	1.52
14	n	106	GLU	C-N	6.75	1.43	1.34
21	N	900	ASN	CA-C	-6.75	1.44	1.52
7	G	234	ASP	CA-C	-6.75	1.44	1.52
21	N	914	VAL	CA-C	-6.75	1.44	1.52
32	M	313	ASP	C-N	6.75	1.42	1.33
22	S	174	ARG	N-CA	-6.74	1.38	1.46
30	K	344	ARG	CD-NE	6.74	1.55	1.46
23	P	372	THR	C-N	6.74	1.42	1.33
7	g	13	SER	CA-C	-6.74	1.44	1.52
28	H	368	PRO	CA-C	-6.74	1.45	1.52
1	a	14	ARG	NE-CZ	6.74	1.40	1.33
14	7	210	ILE	CA-CB	-6.74	1.46	1.54
12	l	86	GLY	C-N	6.73	1.41	1.33
13	6	169	GLU	C-N	-6.73	1.26	1.33
25	R	409	GLY	N-CA	-6.73	1.37	1.45
12	5	135	GLY	C-N	6.73	1.43	1.33
28	H	132	GLN	N-CA	-6.73	1.41	1.47
6	F	204	GLU	CA-C	6.73	1.61	1.52
20	Z	262	VAL	C-N	6.73	1.43	1.34
33	J	395	GLU	N-CA	-6.73	1.38	1.46
20	Z	877	THR	CA-C	6.73	1.61	1.52
26	U	16	LEU	CA-C	-6.73	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	104	VAL	CA-CB	-6.72	1.47	1.54
21	N	535	LEU	C-N	6.72	1.42	1.33
6	f	37	GLY	C-N	6.72	1.42	1.33
16	V	204	HIS	ND1-CE1	6.72	1.39	1.32
20	Z	467	VAL	CA-CB	-6.72	1.45	1.53
27	O	110	ASP	CA-C	-6.72	1.43	1.52
5	e	124	GLY	C-N	6.72	1.43	1.33
1	A	226	GLY	CA-C	-6.71	1.45	1.51
6	F	223	THR	CA-C	-6.71	1.44	1.52
21	N	920	VAL	CA-C	6.71	1.62	1.52
4	D	233	VAL	CA-C	-6.71	1.44	1.52
21	N	260	ASP	C-N	6.71	1.42	1.33
21	N	546	LEU	CA-CB	6.71	1.64	1.53
18	X	11	ARG	NE-CZ	6.71	1.40	1.33
20	Z	134	SER	CA-CB	6.71	1.64	1.53
23	P	202	LYS	CA-CB	6.71	1.64	1.53
25	R	403	LEU	CA-C	-6.70	1.44	1.52
28	H	305	ILE	N-CA	-6.70	1.37	1.46
5	E	193	LEU	CA-CB	6.70	1.63	1.53
7	g	190	ARG	NE-CZ	6.70	1.40	1.33
28	H	162	ARG	CA-CB	6.70	1.63	1.53
9	i	250	CYS	N-CA	-6.70	1.38	1.45
4	d	48	ARG	NE-CZ	6.70	1.40	1.33
24	Q	213	GLN	C-N	6.70	1.42	1.33
25	R	210	TYR	CA-C	-6.70	1.44	1.52
5	e	93	ARG	CA-C	-6.69	1.44	1.52
5	E	69	GLU	N-CA	-6.69	1.37	1.46
8	l	177	SER	N-CA	-6.69	1.37	1.46
18	X	75	TRP	C-N	6.69	1.41	1.33
11	4	93	ARG	CD-NE	6.69	1.55	1.46
11	4	154	THR	CA-C	-6.69	1.44	1.52
20	Z	623	ARG	CD-NE	6.69	1.55	1.46
20	Z	962	ARG	NE-CZ	6.69	1.40	1.33
27	O	316	ALA	N-CA	-6.69	1.38	1.46
11	4	86	GLN	N-CA	-6.69	1.38	1.46
20	Z	963	ALA	N-CA	6.69	1.54	1.46
3	c	50	ARG	CZ-NH2	6.69	1.42	1.33
14	n	68	ARG	CD-NE	6.69	1.55	1.46
22	S	387	VAL	C-N	6.69	1.42	1.33
3	c	19	LEU	CA-C	-6.68	1.44	1.52
3	c	203	SER	N-CA	-6.68	1.37	1.46
4	D	58	ARG	CA-C	-6.68	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	H	217	GLN	CA-CB	6.68	1.64	1.53
25	R	145	GLY	CA-C	6.68	1.61	1.51
33	J	290	ILE	C-N	6.68	1.42	1.33
1	a	82	VAL	N-CA	-6.68	1.38	1.46
7	g	222	SER	N-CA	-6.67	1.38	1.46
22	S	156	VAL	N-CA	-6.67	1.38	1.46
14	n	215	ARG	CA-CB	-6.67	1.42	1.53
21	N	727	THR	C-O	-6.67	1.16	1.24
21	N	756	THR	C-N	6.67	1.41	1.33
6	F	114	ASP	CA-CB	6.67	1.64	1.53
5	E	215	ASN	N-CA	6.67	1.54	1.46
26	U	181	GLN	C-N	6.67	1.42	1.33
25	R	255	VAL	C-N	6.66	1.42	1.33
3	c	128	LEU	CA-C	-6.66	1.44	1.52
27	O	147	ARG	NE-CZ	6.66	1.40	1.33
33	J	225	GLU	CA-C	-6.66	1.43	1.52
14	n	226	ARG	NE-CZ	6.66	1.40	1.33
21	N	656	ALA	N-CA	-6.66	1.38	1.46
8	1	25	ALA	N-CA	-6.65	1.38	1.46
20	Z	550	PHE	C-O	-6.65	1.16	1.24
33	J	334	LYS	C-N	6.65	1.42	1.33
27	O	68	LYS	CA-C	-6.65	1.44	1.52
7	g	204	HIS	CG-ND1	-6.65	1.30	1.38
10	j	198	ARG	NE-CZ	6.65	1.40	1.33
5	e	170	LYS	CA-C	-6.64	1.44	1.52
9	2	243	LYS	CA-C	-6.64	1.44	1.52
12	5	141	HIS	ND1-CE1	6.64	1.39	1.32
10	3	120	PHE	C-N	6.64	1.42	1.33
11	4	124	THR	N-CA	-6.64	1.38	1.46
29	I	396	CYS	CA-CB	6.64	1.63	1.53
21	N	584	ARG	CD-NE	6.64	1.55	1.46
22	S	24	LYS	CA-CB	6.64	1.63	1.53
6	f	75	ALA	C-O	-6.63	1.19	1.23
10	j	114	SER	C-N	6.63	1.43	1.33
23	P	338	TRP	NE1-CE2	6.63	1.44	1.37
29	I	235	ALA	C-N	6.63	1.41	1.33
30	K	147	VAL	CA-CB	-6.63	1.46	1.54
14	7	215	ARG	CZ-NH2	6.63	1.42	1.33
11	k	106	GLY	N-CA	-6.63	1.39	1.45
4	D	38	GLY	C-N	6.63	1.43	1.33
28	H	364	ALA	N-CA	-6.63	1.38	1.46
27	O	216	ASP	CA-C	-6.63	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	S	352	VAL	CA-C	-6.63	1.44	1.52
29	I	308	GLU	C-N	6.63	1.42	1.34
30	K	109	ILE	CA-CB	-6.63	1.46	1.54
7	g	169	ARG	CZ-NH1	6.62	1.42	1.32
5	E	66	LYS	C-N	6.62	1.41	1.33
12	l	244	ALA	N-CA	-6.62	1.37	1.46
33	J	231	ARG	CD-NE	6.62	1.55	1.46
12	5	259	GLY	C-N	6.62	1.42	1.33
24	Q	419	LEU	CA-C	-6.62	1.44	1.52
26	U	37	ILE	CA-C	-6.62	1.44	1.52
14	n	252	TRP	CA-C	-6.62	1.44	1.52
8	1	131	LEU	CA-CB	6.62	1.62	1.53
31	L	119	VAL	N-CA	-6.62	1.38	1.46
1	A	167	LYS	C-N	6.62	1.41	1.33
20	Z	945	ILE	CA-CB	-6.62	1.46	1.54
8	h	28	ARG	NE-CZ	6.61	1.40	1.33
12	5	109	VAL	CA-C	-6.61	1.44	1.52
9	2	116	LEU	CB-CG	6.61	1.66	1.53
3	C	39	MET	N-CA	-6.61	1.38	1.46
21	N	214	LEU	N-CA	6.61	1.54	1.46
21	N	613	HIS	CE1-NE2	-6.61	1.25	1.32
8	1	115	ASN	CA-C	-6.61	1.44	1.52
22	S	427	ILE	N-CA	-6.61	1.37	1.46
24	Q	189	ARG	CZ-NH1	6.61	1.42	1.32
24	Q	199	THR	CA-C	6.61	1.61	1.52
25	R	167	LYS	C-N	6.61	1.42	1.33
1	a	77	ARG	CD-NE	6.61	1.55	1.46
5	e	100	ASN	CA-CB	6.61	1.64	1.53
6	f	170	THR	CA-C	-6.60	1.44	1.52
9	i	54	ILE	N-CA	-6.60	1.38	1.46
23	P	210	ASN	N-CA	6.60	1.51	1.45
12	5	81	PHE	CA-C	-6.60	1.44	1.52
17	T	60	ARG	NE-CZ	6.60	1.40	1.33
21	N	436	ASP	C-N	6.60	1.42	1.33
13	6	46	ARG	NE-CZ	6.60	1.40	1.33
3	c	45	VAL	CA-C	-6.60	1.44	1.52
3	C	88	ILE	CA-C	-6.60	1.44	1.52
27	O	28	GLN	CA-C	6.60	1.61	1.52
21	N	779	GLU	CA-C	-6.60	1.44	1.53
21	N	555	ILE	CA-C	6.60	1.61	1.52
15	W	42	ASN	C-N	6.59	1.42	1.33
23	P	107	SER	N-CA	-6.59	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	V	51	GLY	CA-C	-6.59	1.45	1.51
7	g	87	HIS	CA-C	-6.59	1.43	1.52
4	D	84	ILE	C-N	6.59	1.42	1.33
24	Q	213	GLN	CA-C	-6.59	1.44	1.52
11	k	3	ILE	CA-C	-6.59	1.43	1.53
11	4	71	GLU	N-CA	-6.59	1.36	1.45
21	N	400	ILE	CA-C	-6.59	1.44	1.52
23	P	86	HIS	ND1-CE1	6.59	1.39	1.32
24	Q	12	ARG	NE-CZ	6.59	1.40	1.33
33	J	33	LYS	CA-C	-6.58	1.44	1.52
14	7	108	ALA	C-N	6.58	1.42	1.33
18	X	108	ASN	C-N	6.58	1.40	1.33
21	N	921	ARG	NE-CZ	6.58	1.40	1.33
31	L	339	ARG	NE-CZ	6.58	1.40	1.33
19	Y	39	PRO	CA-CB	-6.58	1.43	1.53
23	P	22	PRO	CA-CB	-6.58	1.44	1.53
9	i	220	LEU	N-CA	-6.58	1.38	1.46
26	U	80	CYS	CA-C	-6.58	1.43	1.52
33	J	329	ARG	CD-NE	6.58	1.55	1.46
30	K	339	GLU	N-CA	-6.57	1.38	1.46
33	J	123	HIS	ND1-CE1	6.57	1.39	1.32
14	n	258	ILE	CA-CB	-6.57	1.46	1.54
17	T	110	LEU	N-CA	-6.57	1.38	1.46
29	I	277	SER	C-N	6.57	1.42	1.33
12	l	241	HIS	ND1-CE1	6.57	1.39	1.32
32	M	61	LYS	CA-C	-6.56	1.44	1.52
10	j	129	CYS	C-N	6.56	1.41	1.33
4	D	63	LYS	C-N	6.56	1.41	1.33
13	6	115	VAL	CA-C	-6.56	1.44	1.52
1	A	118	ALA	N-CA	-6.55	1.38	1.46
6	F	164	ARG	CD-NE	6.55	1.55	1.46
13	6	73	VAL	C-N	6.55	1.42	1.33
8	h	164	ILE	CA-CB	6.55	1.63	1.54
33	J	56	ARG	CD-NE	6.55	1.55	1.46
4	d	172	ARG	NE-CZ	6.55	1.40	1.33
7	g	189	ALA	CA-C	-6.55	1.43	1.52
7	G	141	VAL	C-O	-6.55	1.17	1.24
18	X	35	ILE	CA-C	-6.55	1.44	1.52
2	b	35	LEU	CA-C	-6.55	1.44	1.52
13	m	38	ILE	CA-C	-6.55	1.45	1.52
16	V	260	GLU	C-N	6.55	1.42	1.33
29	I	387	LEU	C-N	6.55	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	K	399	ARG	NE-CZ	6.55	1.40	1.33
31	L	342	ARG	NE-CZ	6.55	1.40	1.33
4	d	97	ARG	NE-CZ	6.54	1.40	1.33
27	O	122	HIS	ND1-CE1	6.54	1.39	1.32
10	3	36	VAL	CA-CB	-6.54	1.48	1.55
21	N	237	LEU	CA-CB	6.54	1.63	1.53
21	N	584	ARG	NE-CZ	6.54	1.40	1.33
14	7	137	ARG	NE-CZ	6.54	1.40	1.33
28	H	165	PRO	C-N	6.54	1.43	1.33
5	E	188	HIS	ND1-CE1	6.54	1.39	1.32
12	5	93	SER	N-CA	-6.53	1.39	1.46
12	5	106	VAL	CA-C	-6.53	1.45	1.52
16	V	107	TRP	N-CA	-6.53	1.37	1.45
23	P	290	LEU	N-CA	-6.53	1.38	1.46
26	U	94	HIS	ND1-CE1	6.53	1.39	1.32
13	6	221	ARG	CD-NE	6.53	1.55	1.46
27	O	75	GLN	C-N	6.53	1.42	1.33
16	V	23	THR	N-CA	-6.52	1.38	1.46
22	S	203	SER	C-N	6.52	1.42	1.33
8	h	173	LYS	C-N	6.52	1.43	1.33
1	a	106	TYR	CA-C	-6.52	1.44	1.52
2	b	144	GLY	CA-C	-6.52	1.45	1.52
12	l	101	VAL	CA-CB	-6.52	1.46	1.53
30	K	77	ARG	CA-CB	6.52	1.63	1.53
23	P	232	ARG	CZ-NH1	6.51	1.41	1.32
24	Q	156	ALA	N-CA	-6.51	1.38	1.46
29	I	303	GLN	N-CA	-6.51	1.38	1.46
14	n	102	ASP	N-CA	-6.51	1.38	1.46
31	L	358	LEU	CA-C	-6.51	1.44	1.52
6	f	142	ALA	C-N	6.51	1.41	1.33
20	Z	95	THR	N-CA	6.51	1.54	1.46
21	N	602	VAL	CA-C	6.51	1.58	1.52
14	n	113	LEU	C-N	6.51	1.42	1.33
27	O	277	ILE	C-N	6.51	1.40	1.34
1	A	193	HIS	N-CA	6.51	1.53	1.45
6	F	16	THR	C-N	6.51	1.43	1.33
15	W	27	GLU	CA-C	-6.51	1.43	1.52
13	m	34	ASP	CA-CB	6.51	1.64	1.53
31	L	373	GLU	N-CA	-6.51	1.38	1.46
12	l	156	LYS	N-CA	6.50	1.54	1.46
20	Z	751	ASP	CA-C	-6.50	1.44	1.52
28	H	236	ALA	CA-C	-6.50	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	1	86	THR	CA-C	-6.50	1.44	1.52
11	4	4	ILE	CA-C	-6.50	1.44	1.52
20	Z	33	GLU	CA-C	-6.50	1.48	1.52
20	Z	452	LEU	CA-CB	6.50	1.64	1.53
27	O	102	LEU	N-CA	-6.50	1.38	1.46
21	N	567	ALA	C-N	6.50	1.42	1.33
21	N	753	PHE	CA-C	-6.50	1.44	1.52
1	a	22	GLU	C-N	6.50	1.42	1.33
5	e	226	ASP	CA-C	-6.50	1.47	1.52
7	G	130	ARG	CZ-NH2	6.50	1.41	1.33
25	R	223	ASN	C-N	6.50	1.43	1.33
2	B	194	LEU	N-CA	-6.50	1.38	1.46
5	E	236	THR	CA-C	-6.50	1.44	1.52
6	F	51	ARG	CZ-NH2	6.50	1.41	1.33
1	A	185	HIS	ND1-CE1	6.49	1.39	1.32
31	L	162	GLU	N-CA	-6.49	1.38	1.45
4	d	200	LEU	CA-CB	6.49	1.64	1.53
11	k	46	PHE	CA-C	-6.49	1.44	1.52
27	O	369	ARG	CA-CB	6.49	1.64	1.53
3	c	15	PRO	N-CD	-6.49	1.38	1.47
4	d	220	ASP	C-N	6.49	1.41	1.33
27	O	244	ASN	C-N	6.49	1.42	1.33
20	Z	22	LYS	CA-CB	6.49	1.66	1.54
26	U	58	GLU	CA-C	-6.49	1.44	1.52
5	e	15	PHE	C-N	6.49	1.42	1.33
12	l	146	LYS	CA-C	-6.48	1.45	1.53
18	X	130	ASN	N-CA	-6.48	1.38	1.46
21	N	496	GLU	CA-C	-6.48	1.44	1.52
10	j	141	THR	N-CA	6.48	1.54	1.45
17	T	35	ILE	CB-CG1	6.48	1.66	1.53
5	e	102	TYR	N-CA	-6.47	1.37	1.46
10	j	32	GLN	CA-C	6.47	1.58	1.53
2	B	155	SER	CA-C	-6.47	1.43	1.53
14	7	42	THR	CA-C	-6.47	1.44	1.52
32	M	218	ALA	CA-C	-6.47	1.44	1.52
12	5	108	LYS	N-CA	-6.47	1.39	1.46
20	Z	8	LYS	CA-CB	6.46	1.65	1.53
14	7	93	MET	CA-C	-6.46	1.44	1.52
14	7	245	LEU	N-CA	-6.46	1.37	1.45
25	R	276	LEU	C-N	6.46	1.42	1.33
2	b	173	THR	CA-C	6.46	1.61	1.52
5	e	107	ILE	CA-C	-6.46	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	F	208	VAL	N-CA	-6.46	1.38	1.46
14	n	62	SER	N-CA	-6.46	1.38	1.45
20	Z	763	HIS	ND1-CE1	6.46	1.39	1.32
25	R	379	CYS	CA-C	-6.46	1.44	1.52
33	J	71	TYR	N-CA	-6.46	1.37	1.45
5	e	201	LEU	CA-C	-6.46	1.43	1.52
6	f	134	ILE	C-N	6.45	1.40	1.33
8	1	28	ARG	C-N	6.45	1.41	1.33
16	V	149	GLY	CA-C	-6.45	1.44	1.52
19	Y	65	ASP	N-CA	-6.45	1.40	1.46
24	Q	314	PHE	N-CA	-6.45	1.38	1.46
26	U	243	ASP	CA-CB	6.45	1.63	1.53
29	I	291	ARG	CZ-NH1	6.45	1.41	1.32
14	n	111	ASN	CA-C	-6.45	1.45	1.52
30	K	137	VAL	C-N	6.45	1.42	1.33
13	6	117	THR	CA-C	-6.45	1.45	1.52
2	b	128	ARG	NE-CZ	6.45	1.40	1.33
10	j	34	LEU	CA-C	-6.45	1.44	1.52
2	B	4	ARG	NE-CZ	6.45	1.40	1.33
21	N	394	ARG	CZ-NH1	6.45	1.41	1.32
20	Z	891	PRO	CA-C	-6.44	1.45	1.52
9	2	152	TYR	C-N	6.44	1.42	1.33
31	L	325	MET	CA-C	-6.44	1.45	1.52
20	Z	73	GLU	C-N	6.44	1.42	1.33
11	k	113	LYS	CA-C	-6.44	1.44	1.52
23	P	150	GLU	CA-CB	6.44	1.63	1.53
27	O	156	THR	C-N	6.44	1.42	1.33
29	I	129	TYR	C-N	6.44	1.39	1.33
5	e	193	LEU	N-CA	-6.43	1.38	1.46
7	G	161	LYS	CA-C	-6.43	1.43	1.52
21	N	606	VAL	CA-CB	6.43	1.63	1.54
31	L	253	ASP	N-CA	-6.43	1.38	1.45
10	j	11	ILE	CA-C	-6.43	1.44	1.52
20	Z	324	GLU	N-CA	-6.43	1.38	1.46
20	Z	397	ASP	N-CA	-6.43	1.37	1.46
8	1	24	GLY	C-N	6.42	1.41	1.33
23	P	238	ALA	C-N	6.42	1.42	1.33
15	W	93	ILE	CA-C	-6.42	1.44	1.52
15	W	123	ASP	N-CA	-6.42	1.38	1.46
28	H	373	ARG	NE-CZ	6.42	1.40	1.33
2	B	112	SER	C-N	6.42	1.42	1.33
21	N	294	PRO	N-CD	6.42	1.56	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	O	40	GLN	N-CA	-6.42	1.38	1.46
12	l	96	THR	CA-C	-6.42	1.44	1.52
13	6	214	ILE	CA-C	-6.42	1.44	1.52
20	Z	74	SER	C-N	6.42	1.41	1.33
7	G	228	HIS	CA-CB	6.42	1.61	1.53
13	6	83	TYR	CA-C	-6.42	1.44	1.52
28	H	352	MET	N-CA	-6.42	1.38	1.46
5	E	35	SER	CA-C	-6.42	1.44	1.52
18	X	78	ILE	N-CA	-6.42	1.39	1.46
8	h	50	ILE	C-N	6.41	1.42	1.33
9	2	75	ALA	CA-C	-6.41	1.44	1.52
31	L	314	GLY	C-O	-6.41	1.19	1.24
33	J	123	HIS	CA-C	-6.41	1.46	1.52
3	C	91	ALA	CA-C	-6.41	1.44	1.52
30	K	281	ARG	NE-CZ	6.41	1.40	1.33
31	L	137	ARG	CD-NE	6.41	1.55	1.46
29	I	73	GLU	C-N	6.41	1.42	1.33
6	f	86	ASN	N-CA	-6.41	1.38	1.46
5	E	107	ILE	N-CA	-6.41	1.38	1.46
17	T	180	ILE	C-N	6.41	1.42	1.34
15	W	51	LEU	CA-C	-6.40	1.45	1.52
18	X	121	ILE	CA-CB	-6.40	1.45	1.54
2	B	23	TYR	CA-CB	6.40	1.63	1.53
11	4	151	ASP	CA-CB	6.40	1.64	1.53
1	a	113	PRO	CA-C	-6.40	1.44	1.52
5	e	211	LYS	CA-C	6.40	1.62	1.53
27	O	233	LEU	C-N	6.40	1.43	1.33
29	I	197	SER	N-CA	-6.40	1.38	1.46
28	H	112	SER	CA-C	-6.40	1.45	1.53
24	Q	423	VAL	N-CA	6.39	1.54	1.46
4	d	111	ARG	CD-NE	6.39	1.55	1.46
16	V	304	ALA	CA-C	-6.39	1.44	1.52
20	Z	454	GLY	CA-C	6.39	1.59	1.51
1	A	242	GLU	CA-CB	6.39	1.63	1.53
1	A	18	ILE	C-N	6.39	1.41	1.33
27	O	100	ASP	N-CA	-6.39	1.38	1.46
30	K	121	ARG	CD-NE	6.39	1.55	1.46
9	2	236	ARG	CA-C	-6.38	1.44	1.52
20	Z	537	THR	N-CA	-6.38	1.38	1.46
3	c	39	MET	N-CA	-6.38	1.38	1.46
21	N	731	VAL	CA-CB	-6.38	1.46	1.54
10	j	131	ASP	CA-CB	6.38	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	J	324	ARG	N-CA	-6.38	1.38	1.46
4	D	197	ARG	CZ-NH1	6.38	1.41	1.32
31	L	387	ASN	CA-C	-6.38	1.44	1.52
2	B	201	GLU	CA-CB	6.38	1.64	1.53
30	K	51	LEU	CA-CB	6.38	1.63	1.53
5	E	61	SER	CA-CB	-6.38	1.44	1.53
11	k	184	VAL	CA-CB	-6.37	1.46	1.54
13	6	147	GLY	CA-C	-6.37	1.44	1.51
20	Z	292	ASP	CA-C	6.37	1.61	1.52
2	b	241	GLN	CA-CB	6.37	1.63	1.53
13	m	58	ILE	C-N	6.37	1.43	1.33
9	2	48	ARG	CZ-NH2	6.37	1.41	1.33
4	d	53	LYS	C-N	6.37	1.42	1.33
8	1	31	THR	N-CA	-6.37	1.39	1.46
28	H	446	ALA	C-N	6.37	1.42	1.33
31	L	333	LEU	CA-CB	6.37	1.64	1.53
12	5	233	LYS	CA-C	-6.37	1.45	1.52
23	P	274	GLY	C-N	6.37	1.42	1.33
31	L	78	ARG	CD-NE	6.37	1.55	1.46
6	f	67	ASP	N-CA	-6.36	1.38	1.46
2	B	66	LEU	C-N	6.36	1.41	1.33
20	Z	589	SER	N-CA	-6.36	1.37	1.46
20	Z	591	ILE	CA-C	-6.36	1.44	1.52
28	H	353	PHE	CA-C	-6.36	1.45	1.52
5	e	206	GLN	C-N	6.36	1.40	1.33
1	A	105	ARG	CZ-NH2	6.36	1.41	1.33
22	S	80	VAL	C-N	6.36	1.41	1.33
7	g	70	VAL	CA-C	-6.36	1.44	1.52
7	G	41	LYS	CA-C	-6.36	1.45	1.52
6	F	36	VAL	CA-C	-6.36	1.44	1.52
11	4	164	CYS	CA-C	-6.36	1.44	1.52
21	N	186	ILE	CA-CB	-6.36	1.46	1.54
1	a	100	GLU	CA-C	-6.36	1.44	1.52
3	c	9	ARG	NE-CZ	6.36	1.40	1.33
15	W	156	GLU	N-CA	-6.36	1.38	1.46
30	K	406	ASP	CA-C	-6.36	1.44	1.52
33	J	212	ARG	CD-NE	6.36	1.55	1.46
4	D	141	ARG	NE-CZ	6.35	1.40	1.33
16	V	180	LEU	N-CA	-6.35	1.38	1.46
21	N	888	ASP	CA-CB	6.35	1.63	1.53
11	k	130	TYR	N-CA	-6.35	1.38	1.46
13	m	190	LYS	CA-C	-6.35	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	202	VAL	C-N	6.35	1.41	1.33
3	C	159	GLY	CA-C	-6.35	1.44	1.52
32	M	182	ASP	CA-C	-6.35	1.44	1.52
4	d	150	THR	CA-CB	-6.35	1.43	1.53
7	g	54	ILE	N-CA	-6.35	1.38	1.46
11	k	167	GLU	C-N	6.35	1.42	1.33
12	l	166	LYS	C-N	6.35	1.41	1.33
20	Z	244	ARG	CZ-NH2	6.35	1.41	1.33
4	D	60	THR	CA-C	-6.34	1.45	1.52
7	G	165	THR	N-CA	-6.34	1.38	1.46
14	7	78	VAL	N-CA	-6.34	1.38	1.46
1	A	111	ASP	CA-CB	6.34	1.63	1.53
1	A	135	ARG	CA-C	-6.34	1.43	1.52
13	6	110	PHE	CA-C	-6.34	1.44	1.52
7	g	93	ARG	CA-C	-6.34	1.44	1.52
22	S	94	LYS	C-N	6.34	1.42	1.33
31	L	122	SER	CA-CB	6.34	1.60	1.52
11	k	146	HIS	ND1-CE1	6.34	1.38	1.32
6	F	231	ALA	CA-C	6.34	1.61	1.52
2	b	56	ALA	C-N	6.33	1.42	1.33
10	j	140	GLY	C-O	-6.33	1.19	1.24
20	Z	337	GLU	N-CA	-6.33	1.38	1.46
30	K	142	HIS	ND1-CE1	6.33	1.38	1.32
6	f	131	GLY	N-CA	-6.33	1.36	1.45
21	N	108	MET	C-N	6.33	1.42	1.33
29	I	325	ILE	CA-CB	-6.33	1.46	1.54
9	i	222	PRO	C-N	6.33	1.41	1.33
25	R	408	ASP	CA-CB	6.33	1.63	1.53
25	R	385	ASN	CA-C	6.33	1.60	1.52
27	O	384	MET	C-N	6.33	1.43	1.33
27	O	387	ARG	CD-NE	6.33	1.55	1.46
21	N	289	ILE	C-N	6.33	1.43	1.33
9	i	170	HIS	ND1-CE1	6.33	1.38	1.32
8	h	45	ARG	CZ-NH2	6.33	1.41	1.33
20	Z	164	VAL	CA-CB	6.32	1.62	1.54
9	i	138	HIS	ND1-CE1	6.32	1.38	1.32
1	A	99	ALA	N-CA	-6.32	1.38	1.46
25	R	316	LEU	C-N	6.32	1.40	1.33
10	3	152	SER	N-CA	-6.32	1.38	1.46
22	S	304	SER	CA-C	-6.32	1.44	1.52
9	i	54	ILE	CA-C	-6.32	1.44	1.52
21	N	175	ASP	C-N	6.32	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	l	101	VAL	CA-C	-6.32	1.46	1.53
31	L	407	ARG	CZ-NH2	6.32	1.41	1.33
9	2	59	ASN	N-CA	-6.31	1.38	1.46
14	7	124	TYR	CA-C	-6.31	1.44	1.52
7	g	72	ARG	NE-CZ	6.31	1.40	1.33
11	4	84	VAL	CA-CB	-6.31	1.46	1.54
33	J	43	ARG	CZ-NH1	6.31	1.41	1.32
32	M	203	ARG	C-N	6.31	1.42	1.33
20	Z	831	LEU	N-CA	-6.31	1.38	1.46
20	Z	846	PHE	CA-C	-6.31	1.44	1.52
22	S	216	LYS	N-CA	-6.31	1.38	1.46
32	M	385	GLU	CA-CB	-6.31	1.44	1.53
23	P	130	ILE	CA-C	-6.31	1.44	1.52
2	b	190	HIS	C-N	6.30	1.41	1.33
7	g	228	HIS	CE1-NE2	-6.30	1.26	1.32
13	6	210	LEU	N-CA	-6.30	1.38	1.46
33	J	404	PHE	N-CA	-6.30	1.38	1.46
21	N	750	SER	C-N	6.30	1.42	1.33
12	l	212	TYR	CZ-OH	6.30	1.51	1.38
21	N	526	TYR	CA-CB	6.30	1.64	1.53
28	H	284	VAL	CA-C	-6.30	1.47	1.53
28	H	367	ARG	C-N	6.30	1.42	1.33
31	L	140	LEU	C-N	6.30	1.41	1.33
6	f	6	TYR	N-CA	-6.30	1.37	1.46
6	f	170	THR	N-CA	-6.30	1.38	1.46
27	O	15	ARG	C-N	6.30	1.41	1.33
6	F	78	ALA	N-CA	-6.29	1.40	1.46
6	f	119	ASN	CA-C	-6.29	1.44	1.52
7	g	204	HIS	CB-CG	6.29	1.58	1.50
9	i	88	ILE	N-CA	6.29	1.54	1.46
9	2	189	GLN	CA-C	-6.29	1.44	1.52
12	5	234	ARG	CD-NE	6.29	1.55	1.46
21	N	573	HIS	ND1-CE1	6.29	1.38	1.32
32	M	394	VAL	C-N	6.29	1.41	1.33
15	W	164	PRO	CA-C	-6.29	1.45	1.52
31	L	136	ASP	N-CA	-6.29	1.38	1.46
31	L	88	TYR	N-CA	-6.29	1.37	1.46
8	h	191	GLY	CA-C	-6.29	1.43	1.51
25	R	113	LEU	N-CA	-6.28	1.38	1.46
31	L	153	LEU	CA-C	-6.28	1.45	1.53
12	l	214	VAL	C-N	6.28	1.41	1.33
1	a	167	LYS	CA-C	-6.28	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	6	203	HIS	C-N	6.28	1.41	1.33
23	P	272	PRO	CA-C	-6.27	1.45	1.52
24	Q	51	ARG	C-N	6.27	1.42	1.33
9	2	214	GLU	CA-C	-6.27	1.44	1.53
12	5	247	GLY	C-N	6.27	1.42	1.33
27	O	236	HIS	CG-CD2	6.27	1.42	1.35
33	J	311	ASP	C-O	6.27	1.31	1.24
21	N	375	HIS	ND1-CE1	6.27	1.38	1.32
26	U	153	THR	CA-C	-6.27	1.44	1.52
4	d	203	VAL	CA-C	6.27	1.60	1.52
9	2	99	THR	C-N	6.27	1.42	1.33
32	M	149	ASN	CA-CB	6.27	1.63	1.53
2	b	232	GLY	N-CA	6.27	1.53	1.44
18	X	55	LYS	N-CA	-6.27	1.37	1.45
31	L	412	PRO	CA-C	-6.27	1.42	1.52
32	M	195	GLU	N-CA	-6.27	1.38	1.46
23	P	255	ALA	C-O	-6.27	1.16	1.24
2	B	30	GLN	C-O	-6.26	1.16	1.24
21	N	398	ARG	CD-NE	6.26	1.55	1.46
21	N	204	SER	N-CA	-6.26	1.39	1.46
14	7	98	ARG	CA-C	-6.26	1.44	1.52
7	g	115	ARG	NE-CZ	6.26	1.40	1.33
23	P	400	VAL	CA-C	-6.26	1.44	1.52
10	j	88	THR	C-O	-6.26	1.16	1.24
14	n	124	TYR	N-CA	-6.26	1.38	1.46
14	7	137	ARG	CZ-NH1	6.26	1.41	1.32
17	T	108	LEU	CA-CB	6.26	1.63	1.53
18	X	61	LEU	C-N	6.26	1.40	1.33
33	J	222	TYR	CA-C	6.26	1.60	1.52
7	g	16	SER	C-N	6.25	1.41	1.33
11	4	69	ILE	C-N	6.25	1.42	1.33
13	6	220	VAL	CA-CB	-6.25	1.47	1.54
29	I	85	PHE	CA-C	-6.25	1.44	1.52
29	I	126	PRO	CA-CB	-6.25	1.45	1.53
3	c	210	ARG	CZ-NH2	6.25	1.41	1.33
9	i	86	GLN	N-CA	-6.25	1.38	1.46
6	F	20	PHE	CA-C	-6.25	1.44	1.52
10	3	196	VAL	CA-C	-6.25	1.45	1.52
21	N	175	ASP	CA-CB	6.25	1.64	1.53
27	O	332	ILE	CA-C	-6.25	1.44	1.52
29	I	127	ASP	CA-C	-6.25	1.45	1.52
29	I	265	ARG	NE-CZ	6.25	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	L	347	VAL	CA-C	-6.25	1.45	1.52
16	V	87	PHE	CA-C	-6.25	1.44	1.52
17	T	123	HIS	ND1-CE1	6.25	1.38	1.32
20	Z	956	LEU	CA-C	-6.25	1.44	1.53
23	P	209	LYS	C-N	6.25	1.40	1.32
8	1	153	GLU	N-CA	-6.25	1.38	1.46
32	M	404	ARG	CD-NE	6.25	1.54	1.46
4	D	183	GLU	CA-C	-6.24	1.45	1.52
21	N	361	ASN	CA-C	6.24	1.60	1.53
21	N	458	ALA	CA-C	-6.24	1.45	1.53
15	W	34	GLU	CA-CB	6.24	1.63	1.53
27	O	133	ILE	CA-C	6.24	1.60	1.52
7	g	149	TYR	CA-C	-6.24	1.44	1.52
22	S	323	LEU	C-N	6.24	1.42	1.33
24	Q	39	SER	CA-C	-6.24	1.44	1.52
27	O	242	ILE	CA-CB	6.24	1.61	1.54
29	I	259	ASP	N-CA	-6.24	1.38	1.46
31	L	199	LEU	N-CA	-6.24	1.41	1.46
4	D	208	LYS	CA-C	6.24	1.61	1.52
13	6	168	TYR	N-CA	-6.24	1.37	1.45
21	N	602	VAL	CA-CB	6.24	1.58	1.53
32	M	121	THR	CA-C	-6.24	1.44	1.53
33	J	228	ARG	NE-CZ	6.24	1.40	1.33
12	l	283	ASN	N-CA	-6.24	1.40	1.46
9	i	52	GLY	C-N	-6.24	1.27	1.34
3	C	183	ASP	CA-C	-6.24	1.45	1.53
29	I	179	GLU	N-CA	-6.24	1.38	1.46
24	Q	168	LEU	CA-CB	6.23	1.57	1.53
32	M	219	LEU	C-N	6.23	1.41	1.33
7	g	16	SER	CA-CB	6.23	1.62	1.53
20	Z	3	ASP	CA-CB	6.23	1.61	1.53
20	Z	797	THR	CB-OG1	-6.23	1.33	1.43
28	H	340	LEU	CA-CB	6.23	1.64	1.53
31	L	274	GLU	CA-CB	-6.23	1.43	1.53
14	n	102	ASP	CA-C	-6.23	1.44	1.52
14	n	122	PRO	C-N	6.23	1.42	1.34
5	E	128	SER	CA-C	-6.23	1.45	1.53
33	J	67	GLU	CA-C	-6.23	1.46	1.53
4	d	58	ARG	CD-NE	6.23	1.54	1.46
8	h	132	PRO	C-O	6.23	1.31	1.24
20	Z	103	TYR	CA-C	-6.23	1.45	1.52
31	L	283	VAL	CA-CB	6.23	1.61	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	3	167	ILE	C-N	6.22	1.42	1.33
22	S	328	PRO	N-CA	-6.22	1.40	1.46
26	U	275	VAL	CA-CB	6.22	1.62	1.54
9	2	140	PHE	CA-C	-6.22	1.44	1.52
1	a	90	ALA	N-CA	-6.22	1.39	1.46
4	d	108	TYR	CA-C	-6.22	1.44	1.52
9	i	227	GLU	CA-C	-6.22	1.44	1.52
6	F	31	GLN	N-CA	-6.22	1.37	1.46
20	Z	131	LYS	C-N	6.22	1.42	1.34
22	S	491	GLU	CA-C	-6.22	1.45	1.52
32	M	41	ILE	C-N	6.22	1.43	1.33
10	3	111	GLY	C-N	6.22	1.41	1.33
26	U	70	HIS	ND1-CE1	6.22	1.38	1.32
1	a	196	GLU	CA-CB	6.21	1.64	1.53
11	k	16	ALA	CA-C	-6.21	1.44	1.52
23	P	143	LEU	N-CA	-6.21	1.38	1.46
12	5	148	ARG	NE-CZ	6.21	1.39	1.33
4	d	49	ARG	NE-CZ	6.21	1.39	1.33
7	g	157	TYR	N-CA	-6.21	1.38	1.45
2	B	230	ASP	CA-CB	6.21	1.63	1.53
30	K	184	ILE	N-CA	-6.21	1.38	1.46
33	J	364	GLU	CA-C	6.21	1.60	1.52
5	e	224	LYS	CA-CB	6.21	1.63	1.53
20	Z	561	ASP	N-CA	6.21	1.53	1.46
28	H	446	ALA	N-CA	-6.21	1.39	1.46
12	l	234	ARG	CD-NE	6.20	1.54	1.46
7	G	214	LEU	CA-CB	6.20	1.62	1.53
11	4	23	ARG	NE-CZ	6.20	1.39	1.33
16	V	146	SER	C-N	6.20	1.40	1.33
20	Z	626	PRO	C-N	6.20	1.42	1.33
10	3	116	SER	CA-C	-6.20	1.44	1.52
14	7	152	VAL	N-CA	-6.20	1.39	1.46
14	7	194	ARG	CD-NE	6.20	1.54	1.46
21	N	914	VAL	N-CA	-6.20	1.38	1.46
2	B	172	LYS	CA-C	-6.20	1.44	1.52
3	C	182	ASP	CA-CB	6.20	1.64	1.53
26	U	100	ARG	CZ-NH1	6.20	1.41	1.32
31	L	343	LEU	CA-C	-6.20	1.45	1.52
24	Q	428	GLU	N-CA	-6.20	1.38	1.46
26	U	292	ILE	C-N	6.20	1.42	1.33
1	a	130	GLN	CA-CB	6.20	1.63	1.54
3	C	220	ALA	CA-CB	6.20	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	6	99	ARG	CZ-NH1	6.20	1.41	1.32
8	h	152	ARG	CD-NE	6.19	1.54	1.46
11	k	73	TYR	CA-CB	6.19	1.64	1.53
21	N	162	ARG	NE-CZ	6.19	1.39	1.33
8	h	165	LYS	CA-CB	6.19	1.62	1.53
11	4	40	PRO	N-CA	-6.19	1.39	1.47
30	K	168	ASP	N-CA	-6.19	1.37	1.46
21	N	868	VAL	CA-CB	-6.19	1.46	1.54
6	f	221	PRO	N-CD	-6.19	1.39	1.47
10	3	129	CYS	C-N	6.19	1.40	1.33
21	N	155	GLY	C-N	6.19	1.41	1.33
4	d	172	ARG	CA-C	-6.19	1.44	1.52
23	P	190	LYS	CA-CB	6.19	1.63	1.53
27	O	368	ASP	CA-C	-6.19	1.45	1.52
16	V	163	ALA	CA-CB	6.18	1.63	1.53
20	Z	616	LEU	CA-C	-6.18	1.44	1.52
33	J	359	LYS	C-N	6.18	1.41	1.33
8	h	130	LYS	CA-CB	6.18	1.62	1.53
9	2	128	ILE	CA-C	-6.18	1.44	1.52
24	Q	88	PHE	CA-CB	6.18	1.62	1.53
1	a	202	VAL	CA-CB	6.18	1.63	1.54
1	A	164	VAL	CA-CB	-6.18	1.46	1.55
25	R	352	SER	CA-CB	6.18	1.62	1.53
5	e	137	PRO	CA-C	-6.18	1.47	1.53
15	W	23	ARG	CD-NE	6.18	1.54	1.46
31	L	149	ASP	CA-CB	6.18	1.63	1.53
13	6	229	ARG	NE-CZ	6.17	1.39	1.33
17	T	186	ARG	NE-CZ	6.17	1.39	1.33
29	I	192	GLN	CA-CB	6.17	1.61	1.53
31	L	420	ARG	CD-NE	6.17	1.54	1.46
24	Q	429	LYS	C-N	6.17	1.42	1.33
32	M	309	LEU	N-CA	-6.17	1.38	1.46
7	g	93	ARG	NE-CZ	6.17	1.39	1.33
5	E	249	ALA	CA-C	-6.17	1.44	1.52
17	T	224	ARG	CD-NE	6.17	1.54	1.46
21	N	695	ALA	C-N	6.17	1.42	1.33
24	Q	51	ARG	NE-CZ	6.17	1.39	1.33
4	d	194	LEU	N-CA	-6.17	1.38	1.46
9	2	199	GLY	C-N	6.17	1.39	1.33
22	S	305	LYS	C-N	6.17	1.42	1.33
26	U	30	ASN	CA-C	6.17	1.60	1.52
28	H	91	LEU	CA-CB	6.17	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	M	22	ILE	CA-CB	-6.17	1.46	1.54
25	R	296	LEU	C-N	6.17	1.42	1.33
5	e	135	SER	CA-C	-6.16	1.44	1.52
12	5	122	GLY	C-N	6.16	1.38	1.33
4	d	97	ARG	CA-C	-6.16	1.44	1.52
24	Q	425	GLN	N-CA	-6.16	1.38	1.46
28	H	403	ARG	CZ-NH1	6.16	1.41	1.32
10	j	45	HIS	ND1-CE1	6.16	1.38	1.32
22	S	218	LEU	CA-C	-6.16	1.44	1.52
6	f	99	PHE	CA-C	-6.16	1.44	1.52
6	f	112	LEU	CA-C	-6.16	1.44	1.52
10	3	183	TRP	N-CA	-6.16	1.38	1.46
23	P	178	GLN	CA-C	-6.16	1.44	1.52
25	R	82	ASP	CA-CB	6.16	1.63	1.53
10	3	180	LEU	N-CA	-6.15	1.38	1.46
6	f	145	LEU	CA-C	-6.15	1.45	1.52
9	i	222	PRO	N-CA	-6.15	1.39	1.47
21	N	19	SER	CA-CB	6.15	1.63	1.53
23	P	231	LYS	C-N	6.15	1.42	1.33
33	J	208	CYS	CA-C	-6.15	1.45	1.52
4	d	11	PHE	N-CA	-6.15	1.38	1.46
11	4	190	ARG	NE-CZ	6.15	1.39	1.33
21	N	879	SER	CA-C	-6.15	1.45	1.52
22	S	353	LYS	CA-C	-6.15	1.44	1.52
24	Q	55	GLU	CA-C	-6.15	1.45	1.52
30	K	95	VAL	CA-CB	-6.15	1.45	1.55
14	7	118	GLU	CA-C	-6.15	1.43	1.52
26	U	67	PHE	C-N	6.15	1.41	1.33
31	L	370	LYS	CA-C	-6.15	1.45	1.52
3	c	70	ASN	CA-C	-6.14	1.45	1.52
20	Z	959	HIS	ND1-CE1	6.14	1.38	1.32
26	U	32	ARG	NE-CZ	6.14	1.39	1.33
4	d	166	ARG	NE-CZ	6.14	1.39	1.33
5	e	203	ILE	C-N	6.14	1.42	1.34
3	C	223	GLY	C-N	6.14	1.42	1.33
8	1	195	LEU	C-N	6.14	1.40	1.33
27	O	14	LEU	CA-CB	6.14	1.62	1.53
31	L	298	ASP	CA-CB	6.14	1.64	1.53
23	P	9	ALA	CA-C	-6.14	1.45	1.52
20	Z	195	PHE	C-N	6.14	1.42	1.33
20	Z	937	GLY	N-CA	-6.14	1.39	1.45
22	S	420	GLU	CA-CB	6.14	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	Q	27	TYR	N-CA	-6.14	1.38	1.46
25	R	75	GLY	CA-C	-6.14	1.43	1.51
20	Z	453	LEU	CA-C	-6.14	1.44	1.52
12	l	143	LEU	CA-C	6.14	1.60	1.52
24	Q	432	VAL	C-N	6.14	1.42	1.33
25	R	61	PRO	C-N	6.14	1.42	1.34
31	L	191	ARG	NE-CZ	6.14	1.39	1.33
11	k	5	LEU	CA-C	-6.13	1.45	1.52
14	n	135	GLN	CA-C	-6.13	1.44	1.52
2	B	213	ILE	CA-C	-6.13	1.45	1.52
7	G	44	ASP	N-CA	-6.13	1.37	1.46
25	R	353	MET	N-CA	-6.13	1.38	1.46
27	O	376	GLN	N-CA	-6.13	1.39	1.46
31	L	91	THR	C-N	6.13	1.43	1.33
1	a	86	PRO	C-N	6.13	1.40	1.33
10	3	55	GLY	C-N	6.13	1.42	1.33
11	4	45	SER	C-N	6.13	1.42	1.33
19	Y	63	ASN	N-CA	6.13	1.53	1.45
23	P	116	ILE	CA-CB	-6.13	1.46	1.54
14	n	137	ARG	CZ-NH1	6.13	1.41	1.32
23	P	138	ARG	CZ-NH2	6.13	1.41	1.33
33	J	111	GLN	C-O	-6.13	1.16	1.24
1	A	193	HIS	CE1-NE2	-6.13	1.26	1.32
4	D	38	GLY	N-CA	-6.13	1.38	1.45
5	E	88	MET	CA-C	-6.13	1.44	1.52
16	V	196	TYR	N-CA	-6.13	1.38	1.46
17	T	139	ASP	CA-C	-6.13	1.45	1.52
26	U	204	LEU	N-CA	-6.13	1.39	1.46
25	R	423	LEU	CA-CB	6.13	1.62	1.53
20	Z	829	GLN	CA-C	6.12	1.60	1.52
1	A	136	PRO	C-N	6.12	1.41	1.33
30	K	36	ASN	N-CA	-6.12	1.37	1.46
7	g	64	ASN	N-CA	-6.12	1.38	1.45
6	F	106	GLU	CA-C	-6.12	1.45	1.52
27	O	72	LYS	C-N	6.12	1.41	1.33
33	J	327	ILE	CA-C	-6.12	1.44	1.52
14	7	68	ARG	NE-CZ	6.12	1.39	1.33
23	P	262	SER	C-N	6.12	1.42	1.33
12	l	165	TYR	CA-CB	6.12	1.60	1.53
4	D	7	ALA	CA-CB	6.12	1.62	1.53
5	e	71	ASP	C-N	6.11	1.42	1.34
27	O	269	LEU	CA-CB	6.11	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	k	188	GLY	C-N	6.11	1.41	1.33
14	n	161	ARG	CZ-NH1	6.11	1.41	1.32
17	T	175	ASP	C-N	6.11	1.42	1.33
5	E	166	ARG	NE-CZ	6.11	1.39	1.33
8	1	183	ARG	CZ-NH1	6.11	1.41	1.32
24	Q	49	LYS	C-N	6.11	1.41	1.33
10	j	46	TYR	CA-C	-6.11	1.45	1.52
4	D	70	HIS	ND1-CE1	6.11	1.38	1.32
8	1	166	HIS	CG-CD2	-6.11	1.29	1.35
10	3	110	ALA	N-CA	-6.11	1.38	1.46
23	P	418	ASN	CA-CB	6.11	1.62	1.53
31	L	84	LEU	N-CA	-6.11	1.38	1.46
10	3	68	ARG	CD-NE	6.10	1.54	1.46
9	i	104	ARG	NE-CZ	6.10	1.39	1.33
6	F	36	VAL	N-CA	-6.10	1.39	1.46
20	Z	172	ASP	CA-C	-6.10	1.46	1.52
5	e	164	PHE	CA-C	-6.10	1.45	1.52
7	G	150	MET	CA-C	-6.10	1.45	1.52
19	Y	49	ILE	N-CA	-6.10	1.39	1.46
25	R	99	TYR	C-N	6.10	1.41	1.33
28	H	168	ILE	CA-C	-6.10	1.45	1.52
8	1	122	ILE	CA-C	-6.10	1.46	1.52
21	N	585	ARG	NE-CZ	6.10	1.39	1.33
21	N	880	ARG	CD-NE	6.10	1.54	1.46
33	J	5	VAL	CA-CB	-6.10	1.47	1.54
10	j	55	GLY	CA-C	6.10	1.59	1.52
26	U	24	ARG	CA-C	-6.10	1.44	1.52
28	H	88	ARG	CD-NE	6.10	1.54	1.46
5	e	105	GLU	CA-C	-6.09	1.45	1.52
13	m	191	LEU	C-O	6.09	1.31	1.24
14	7	185	ASN	CA-CB	6.09	1.61	1.53
8	h	63	ALA	CA-C	-6.09	1.44	1.52
8	1	27	SER	CA-CB	6.09	1.63	1.53
20	Z	728	LYS	C-N	6.09	1.42	1.33
7	g	95	GLU	N-CA	-6.09	1.39	1.46
33	J	327	ILE	C-N	6.09	1.42	1.34
8	h	166	HIS	ND1-CE1	6.09	1.38	1.32
14	n	78	VAL	C-N	6.09	1.42	1.33
27	O	48	PHE	CG-CD2	6.09	1.51	1.38
23	P	281	ILE	N-CA	-6.08	1.37	1.46
6	f	148	GLN	CA-C	-6.08	1.43	1.52
13	6	164	PHE	CA-CB	6.08	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	Z	773	ARG	CZ-NH2	6.08	1.41	1.33
21	N	866	TYR	C-N	6.08	1.41	1.33
16	V	273	ARG	CA-CB	6.08	1.60	1.53
22	S	394	ILE	N-CA	-6.08	1.39	1.46
13	m	90	LYS	CA-C	6.08	1.60	1.52
3	C	136	ILE	CA-CB	-6.08	1.46	1.54
25	R	310	GLU	N-CA	-6.08	1.39	1.46
11	k	183	ILE	N-CA	-6.08	1.38	1.46
1	A	90	ALA	C-N	6.08	1.42	1.33
25	R	286	LEU	C-N	6.08	1.41	1.33
29	I	270	VAL	N-CA	6.08	1.53	1.46
13	m	229	ARG	CD-NE	6.07	1.54	1.46
6	F	113	CYS	CA-C	-6.07	1.45	1.52
8	1	143	ILE	N-CA	-6.07	1.38	1.46
9	2	115	HIS	CG-ND1	-6.07	1.31	1.38
9	2	187	ALA	CA-C	-6.07	1.45	1.52
26	U	145	ASP	N-CA	-6.07	1.39	1.46
18	X	89	LEU	CA-C	-6.07	1.45	1.52
26	U	228	LYS	CA-C	-6.07	1.45	1.52
29	I	362	LEU	C-N	6.07	1.41	1.33
31	L	161	ARG	CD-NE	6.07	1.54	1.46
14	n	194	ARG	NE-CZ	6.07	1.39	1.33
26	U	138	VAL	CA-CB	-6.07	1.47	1.54
5	e	247	GLU	N-CA	-6.07	1.38	1.46
7	G	142	ASP	C-N	6.07	1.42	1.33
25	R	325	HIS	CE1-NE2	-6.07	1.26	1.32
2	b	58	SER	CA-CB	6.06	1.63	1.53
11	k	141	PHE	CA-C	6.06	1.60	1.52
5	E	166	ARG	CA-C	-6.06	1.45	1.52
19	Y	65	ASP	CA-C	-6.06	1.45	1.53
8	h	182	ILE	N-CA	-6.06	1.38	1.46
26	U	199	GLY	C-N	6.06	1.42	1.33
9	i	199	GLY	C-O	-6.06	1.17	1.23
2	b	226	GLY	C-N	6.06	1.39	1.33
3	c	92	ARG	CD-NE	6.06	1.54	1.46
6	f	143	HIS	CA-C	-6.06	1.45	1.52
22	S	128	ILE	C-N	6.06	1.40	1.33
8	1	55	SER	CA-C	-6.06	1.45	1.52
21	N	113	ALA	N-CA	-6.06	1.39	1.46
31	L	323	ILE	CA-C	-6.06	1.44	1.52
7	G	65	VAL	C-N	6.05	1.44	1.34
16	V	256	GLU	C-N	6.05	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Y	88	ASN	C-N	6.05	1.41	1.33
21	N	318	LYS	N-CA	-6.05	1.39	1.46
11	k	149	ARG	CZ-NH2	6.05	1.41	1.33
12	l	254	HIS	CE1-NE2	6.05	1.38	1.32
3	c	143	ARG	NE-CZ	6.05	1.39	1.33
8	h	41	ASP	CA-CB	6.05	1.62	1.53
5	E	219	LEU	CA-C	-6.05	1.45	1.52
15	W	137	VAL	CA-C	-6.05	1.45	1.52
21	N	638	ILE	N-CA	-6.05	1.39	1.46
27	O	202	SER	CA-C	-6.05	1.45	1.52
7	g	147	HIS	CB-CG	-6.05	1.41	1.50
16	V	295	VAL	CA-C	-6.05	1.45	1.52
20	Z	804	ASP	CA-C	-6.05	1.45	1.52
21	N	222	TYR	CA-C	-6.05	1.44	1.52
24	Q	28	LEU	C-N	6.05	1.41	1.33
32	M	364	HIS	CA-CB	6.05	1.63	1.53
14	n	98	ARG	CZ-NH2	6.05	1.41	1.33
11	k	23	ARG	CD-NE	6.04	1.54	1.46
21	N	439	VAL	CA-CB	-6.04	1.46	1.54
1	A	181	ASN	C-O	-6.04	1.17	1.24
21	N	426	ILE	C-N	6.04	1.41	1.33
30	K	70	ASP	CA-CB	6.04	1.62	1.53
2	B	110	LEU	CA-C	-6.04	1.45	1.52
22	S	335	GLN	CA-C	-6.04	1.44	1.52
25	R	159	SER	CA-CB	6.04	1.62	1.53
16	V	287	THR	N-CA	-6.04	1.38	1.46
4	d	123	SER	CA-C	-6.04	1.45	1.52
11	k	111	LYS	CA-C	-6.04	1.44	1.52
13	6	53	ASP	CA-C	-6.04	1.45	1.52
16	V	175	SER	C-N	6.04	1.41	1.33
3	c	184	MET	CA-C	-6.04	1.45	1.52
4	D	237	GLU	CA-CB	6.04	1.62	1.53
32	M	358	ALA	C-N	6.04	1.41	1.33
22	S	134	ILE	CA-CB	6.03	1.62	1.54
32	M	166	ARG	CA-CB	6.03	1.62	1.53
2	b	178	ARG	CZ-NH2	6.03	1.41	1.33
2	B	148	TYR	C-N	6.03	1.41	1.33
2	b	161	ALA	CA-C	-6.03	1.44	1.52
3	c	242	THR	C-N	6.03	1.42	1.33
8	h	22	ILE	CA-C	-6.03	1.45	1.52
1	A	227	VAL	N-CA	-6.03	1.39	1.46
17	T	12	SER	CA-C	-6.03	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	f	86	ASN	CA-C	-6.03	1.45	1.52
26	U	285	ILE	N-CA	6.03	1.53	1.46
11	4	147	HIS	CG-CD2	-6.03	1.29	1.35
24	Q	219	ASP	CA-C	-6.03	1.45	1.52
30	K	259	ARG	NE-CZ	6.03	1.39	1.33
20	Z	124	MET	CA-CB	6.02	1.62	1.53
10	3	104	PHE	C-N	6.02	1.42	1.33
4	D	87	GLU	CA-C	-6.02	1.45	1.52
13	6	93	SER	C-N	6.02	1.41	1.33
22	S	94	LYS	CA-C	-6.02	1.45	1.52
6	F	164	ARG	NE-CZ	6.02	1.39	1.33
16	V	109	HIS	ND1-CE1	6.02	1.38	1.32
19	Y	86	ARG	NE-CZ	6.02	1.39	1.33
3	C	49	GLU	C-N	6.02	1.41	1.33
18	X	101	LEU	N-CA	6.02	1.53	1.46
1	A	20	SER	N-CA	-6.01	1.37	1.46
12	5	102	ALA	CA-C	-6.01	1.45	1.52
19	Y	27	LYS	N-CA	-6.01	1.38	1.46
20	Z	204	CYS	CA-CB	6.01	1.61	1.53
31	L	171	THR	C-N	6.01	1.41	1.33
6	f	56	LEU	C-N	6.01	1.41	1.33
27	O	334	LEU	C-N	6.01	1.40	1.33
3	C	51	LYS	N-CA	-6.01	1.38	1.46
18	X	110	PRO	CA-C	-6.01	1.45	1.52
1	A	214	LEU	N-CA	6.01	1.54	1.46
21	N	634	LEU	CA-C	-6.01	1.45	1.52
24	Q	170	ASP	CA-CB	6.01	1.62	1.53
10	j	90	LEU	CA-CB	6.01	1.63	1.53
22	S	486	LYS	N-CA	-6.01	1.39	1.46
11	4	16	ALA	CA-C	-6.00	1.45	1.52
8	h	137	GLY	CA-C	-6.00	1.43	1.51
12	5	196	ARG	NE-CZ	6.00	1.39	1.33
31	L	191	ARG	CA-CB	6.00	1.63	1.53
1	a	63	LEU	C-N	6.00	1.41	1.33
12	l	241	HIS	CA-C	6.00	1.60	1.52
2	B	183	LEU	CA-C	-6.00	1.45	1.52
4	D	185	PRO	CA-C	-6.00	1.45	1.52
24	Q	6	SER	CA-C	-6.00	1.45	1.52
12	5	101	VAL	CA-C	-6.00	1.46	1.52
27	O	53	LYS	CA-C	-6.00	1.44	1.52
8	h	183	ARG	NE-CZ	6.00	1.39	1.33
21	N	96	GLN	C-N	6.00	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	164	ASP	C-N	6.00	1.41	1.33
3	C	96	GLN	C-N	6.00	1.41	1.33
22	S	326	ASP	CA-C	6.00	1.59	1.52
24	Q	352	GLU	C-N	6.00	1.38	1.33
5	e	159	GLU	CA-C	-6.00	1.44	1.52
8	h	71	HIS	CD2-NE2	5.99	1.44	1.37
19	Y	68	GLU	N-CA	5.99	1.53	1.45
22	S	399	TYR	N-CA	-5.99	1.39	1.46
27	O	235	HIS	CB-CG	-5.99	1.41	1.50
7	g	229	LYS	CA-C	-5.99	1.45	1.52
27	O	164	PRO	N-CA	-5.99	1.39	1.47
5	e	98	THR	C-N	5.99	1.42	1.34
20	Z	940	GLY	N-CA	-5.99	1.36	1.45
21	N	346	ASN	CA-CB	5.99	1.61	1.53
24	Q	26	VAL	CA-CB	-5.99	1.47	1.54
25	R	261	LEU	C-N	5.99	1.41	1.33
9	2	225	ARG	NE-CZ	5.99	1.39	1.33
22	S	91	ASN	C-N	5.99	1.42	1.33
27	O	128	LEU	CA-CB	5.99	1.63	1.53
3	c	23	GLU	C-O	-5.99	1.17	1.24
13	m	100	ASN	C-N	5.99	1.41	1.34
17	T	80	ASN	C-O	-5.99	1.17	1.24
2	b	70	ASP	CA-C	-5.99	1.44	1.52
13	m	71	ALA	CA-C	5.99	1.60	1.52
10	3	28	ARG	NE-CZ	5.99	1.39	1.33
32	M	126	THR	CA-C	-5.99	1.45	1.52
10	3	40	PHE	CA-C	-5.98	1.45	1.52
21	N	267	GLN	CA-CB	5.98	1.62	1.53
7	g	160	TYR	CA-C	-5.98	1.45	1.52
8	h	79	TYR	CA-CB	5.98	1.62	1.54
24	Q	416	VAL	C-N	5.98	1.41	1.33
33	J	333	ARG	CD-NE	5.98	1.54	1.46
23	P	214	GLU	N-CA	-5.98	1.39	1.46
28	H	318	ARG	NE-CZ	5.98	1.39	1.33
6	f	9	ASP	CA-C	-5.98	1.45	1.52
3	C	182	ASP	N-CA	5.98	1.53	1.46
12	5	252	LEU	N-CA	-5.98	1.38	1.45
17	T	74	ASN	C-N	5.98	1.41	1.33
29	I	175	LYS	N-CA	-5.98	1.38	1.46
30	K	180	GLN	C-N	5.98	1.41	1.33
23	P	361	THR	C-N	5.98	1.42	1.34
28	H	462	ARG	CD-NE	5.98	1.54	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	L	276	CYS	N-CA	-5.98	1.38	1.45
4	d	48	ARG	CA-CB	5.97	1.62	1.53
4	d	73	LEU	CA-C	-5.97	1.45	1.52
1	A	120	ARG	CZ-NH1	5.97	1.41	1.32
1	A	215	GLY	C-N	5.97	1.41	1.33
14	n	146	ALA	CA-C	-5.97	1.45	1.52
30	K	43	VAL	CA-CB	-5.97	1.46	1.54
9	i	175	LEU	CA-C	-5.97	1.45	1.52
21	N	683	LEU	C-N	5.97	1.41	1.33
28	H	437	VAL	C-N	5.97	1.41	1.33
33	J	231	ARG	CZ-NH1	5.97	1.41	1.32
4	d	188	VAL	CA-CB	-5.97	1.46	1.54
9	i	49	SER	CA-C	-5.97	1.45	1.52
7	g	177	GLU	CA-C	-5.97	1.45	1.52
1	A	140	ILE	N-CA	-5.97	1.39	1.46
9	2	209	ILE	CA-C	-5.97	1.45	1.52
21	N	420	THR	N-CA	5.97	1.53	1.46
32	M	28	GLN	CA-C	-5.97	1.45	1.52
2	b	135	LEU	CB-CG	5.96	1.65	1.53
11	k	144	LEU	C-N	5.96	1.42	1.34
4	D	96	HIS	CE1-NE2	5.96	1.38	1.32
21	N	58	ARG	NE-CZ	5.96	1.39	1.33
33	J	283	GLU	CA-C	-5.96	1.44	1.52
28	H	234	ARG	CA-CB	5.96	1.62	1.53
24	Q	250	THR	C-N	5.96	1.41	1.33
10	3	204	GLN	CA-C	-5.96	1.45	1.52
15	W	101	ARG	CD-NE	5.96	1.54	1.46
22	S	155	LEU	C-N	5.96	1.41	1.33
13	m	225	TYR	N-CA	-5.96	1.38	1.46
28	H	163	VAL	N-CA	-5.96	1.39	1.46
13	6	102	GLN	CA-CB	5.96	1.62	1.53
11	4	2	ASP	C-N	5.95	1.40	1.33
20	Z	398	LYS	CA-CB	5.95	1.62	1.53
6	f	186	PRO	CA-CB	5.95	1.62	1.53
8	h	59	ALA	C-N	5.95	1.42	1.33
11	4	154	THR	C-N	5.95	1.42	1.33
21	N	556	ALA	CA-C	-5.95	1.45	1.52
22	S	381	VAL	N-CA	5.95	1.53	1.46
12	l	197	LEU	N-CA	-5.95	1.38	1.46
13	m	16	ASN	C-N	5.95	1.41	1.33
16	V	220	GLN	N-CA	-5.95	1.38	1.46
25	R	81	HIS	CG-CD2	5.95	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	b	224	TYR	CA-CB	5.95	1.63	1.53
12	5	253	TYR	N-CA	-5.95	1.38	1.45
27	O	318	HIS	C-N	5.95	1.39	1.33
32	M	421	GLU	C-N	5.95	1.41	1.33
1	a	206	ALA	C-N	5.94	1.41	1.33
6	f	205	SER	C-N	5.94	1.41	1.33
5	E	13	SER	CA-CB	5.94	1.60	1.53
14	7	189	ARG	CZ-NH2	5.94	1.41	1.33
27	O	33	TYR	CA-C	5.94	1.60	1.52
2	b	3	ASP	N-CA	-5.94	1.38	1.46
3	c	217	ARG	CZ-NH1	5.94	1.41	1.32
16	V	75	GLY	CA-C	-5.94	1.43	1.51
26	U	112	LYS	N-CA	-5.94	1.39	1.46
26	U	239	LEU	CA-CB	5.94	1.63	1.53
29	I	150	HIS	ND1-CE1	5.94	1.38	1.32
17	T	186	ARG	CD-NE	5.93	1.54	1.46
20	Z	14	GLU	C-O	-5.93	1.16	1.24
21	N	480	ALA	C-N	5.93	1.42	1.34
27	O	23	HIS	N-CA	-5.93	1.41	1.46
7	g	49	ALA	CA-C	-5.93	1.45	1.52
7	G	228	HIS	ND1-CE1	5.93	1.38	1.32
22	S	362	SER	C-N	5.93	1.41	1.33
31	L	273	HIS	ND1-CE1	5.93	1.38	1.32
31	L	274	GLU	CA-C	-5.93	1.46	1.53
2	B	250	LEU	CB-CG	5.93	1.65	1.53
2	b	25	LEU	C-N	5.93	1.42	1.33
9	i	220	LEU	CA-C	-5.93	1.45	1.52
20	Z	457	ILE	N-CA	-5.93	1.39	1.46
20	Z	525	MET	N-CA	-5.93	1.38	1.46
21	N	171	LYS	CA-C	-5.93	1.45	1.52
26	U	66	TRP	C-N	5.93	1.41	1.33
2	B	196	LEU	CA-C	-5.93	1.44	1.52
3	C	50	ARG	CD-NE	5.93	1.54	1.46
3	C	66	LEU	CA-CB	5.93	1.62	1.53
3	C	179	ASP	CA-C	-5.93	1.44	1.52
4	D	58	ARG	CZ-NH2	5.93	1.41	1.33
26	U	50	ASN	CA-C	-5.93	1.45	1.52
4	D	66	LYS	CA-C	-5.93	1.45	1.52
10	3	74	TYR	N-CA	-5.93	1.39	1.46
17	T	260	ILE	N-CA	-5.93	1.39	1.46
21	N	340	HIS	ND1-CE1	5.93	1.38	1.32
33	J	321	VAL	CA-C	5.93	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	5	196	ARG	C-N	5.92	1.41	1.33
24	Q	189	ARG	CA-C	-5.92	1.48	1.53
1	A	50	CYS	CA-C	-5.92	1.45	1.52
8	1	36	ALA	N-CA	-5.92	1.38	1.46
8	h	85	GLU	C-N	5.92	1.41	1.33
14	7	191	VAL	C-N	5.92	1.41	1.33
26	U	272	GLU	CA-CB	5.92	1.62	1.53
3	c	214	ALA	CA-C	-5.92	1.45	1.52
7	G	192	ALA	CA-C	-5.92	1.44	1.52
25	R	383	ARG	CD-NE	5.92	1.54	1.46
32	M	212	ILE	CA-C	-5.92	1.45	1.52
3	c	185	LYS	CA-C	-5.92	1.45	1.52
6	f	229	ALA	C-N	5.92	1.40	1.34
8	h	134	ALA	C-N	5.92	1.40	1.33
23	P	370	ASP	CA-CB	5.92	1.62	1.53
25	R	345	TYR	C-O	-5.92	1.17	1.24
13	m	62	ALA	N-CA	-5.92	1.39	1.46
24	Q	16	ASN	CA-C	5.92	1.61	1.52
33	J	204	HIS	CE1-NE2	5.92	1.38	1.32
2	b	242	GLU	CA-C	-5.91	1.45	1.52
9	i	244	GLU	C-N	5.91	1.41	1.33
4	D	238	GLN	CA-CB	5.91	1.62	1.53
29	I	422	ARG	CD-NE	5.91	1.54	1.46
32	M	69	ILE	N-CA	-5.91	1.39	1.46
12	5	139	ARG	NE-CZ	5.91	1.39	1.33
9	2	32	ILE	CA-CB	-5.91	1.46	1.54
33	J	179	ILE	N-CA	-5.91	1.39	1.46
2	b	163	ALA	C-O	5.90	1.31	1.23
30	K	64	GLN	N-CA	-5.90	1.38	1.46
4	D	175	LEU	N-CA	-5.90	1.38	1.46
16	V	292	ILE	CA-C	-5.90	1.45	1.52
20	Z	839	SER	C-N	5.90	1.41	1.33
21	N	418	ASP	CA-C	5.90	1.60	1.52
22	S	382	ARG	CD-NE	5.90	1.54	1.46
20	Z	711	SER	C-N	5.90	1.41	1.33
7	G	213	GLU	CA-C	-5.90	1.45	1.52
11	4	30	ASP	C-N	5.90	1.41	1.33
16	V	134	SER	N-CA	-5.90	1.38	1.46
4	d	141	ARG	NE-CZ	5.89	1.39	1.33
22	S	210	LEU	C-O	-5.89	1.17	1.24
28	H	289	ARG	NE-CZ	5.89	1.39	1.33
5	e	72	ARG	CZ-NH2	5.89	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	j	155	GLU	CA-C	-5.89	1.44	1.52
20	Z	389	PHE	N-CA	-5.89	1.38	1.46
8	h	138	SER	C-N	5.89	1.42	1.33
28	H	143	ALA	CA-C	-5.89	1.45	1.52
23	P	167	THR	C-N	5.89	1.42	1.33
24	Q	29	SER	C-N	5.89	1.41	1.33
13	m	218	ASP	C-N	5.89	1.37	1.33
5	E	53	ARG	CA-C	-5.89	1.44	1.52
25	R	98	LEU	C-N	5.89	1.42	1.33
25	R	175	ALA	N-CA	-5.89	1.39	1.46
6	F	35	THR	N-CA	5.88	1.53	1.45
19	Y	59	ILE	CA-C	-5.88	1.45	1.52
20	Z	250	VAL	C-N	5.88	1.41	1.33
23	P	240	TYR	C-N	5.88	1.42	1.34
5	E	92	ALA	CA-C	-5.88	1.45	1.52
8	1	27	SER	C-N	5.88	1.41	1.33
4	d	102	ASP	CA-C	-5.88	1.45	1.52
12	l	94	ARG	CZ-NH1	5.88	1.41	1.32
20	Z	833	GLN	CA-C	5.88	1.60	1.52
11	4	24	GLY	N-CA	-5.88	1.36	1.45
16	V	52	LEU	CA-C	-5.88	1.45	1.52
22	S	374	ASP	CA-C	5.88	1.60	1.52
31	L	369	LYS	CA-C	-5.88	1.45	1.52
11	k	86	GLN	CA-CB	5.88	1.62	1.53
5	E	31	ILE	N-CA	-5.88	1.38	1.46
13	6	224	PHE	N-CA	-5.88	1.39	1.46
21	N	330	THR	CA-C	-5.88	1.45	1.52
9	i	66	ILE	C-N	5.88	1.40	1.33
13	6	128	GLY	C-N	5.88	1.41	1.33
20	Z	760	HIS	ND1-CE1	5.88	1.38	1.32
21	N	104	LYS	N-CA	-5.88	1.39	1.46
21	N	298	TYR	N-CA	-5.88	1.39	1.46
22	S	95	PHE	C-N	5.88	1.41	1.33
27	O	15	ARG	CZ-NH2	5.88	1.41	1.33
29	I	302	ILE	CB-CG1	5.88	1.65	1.53
31	L	265	GLU	CA-C	-5.87	1.45	1.52
32	M	152	SER	N-CA	-5.87	1.38	1.46
7	g	77	VAL	CA-CB	-5.87	1.46	1.54
13	m	133	PHE	CA-C	-5.87	1.45	1.52
2	B	177	LYS	C-N	5.87	1.42	1.33
23	P	171	MET	CA-C	-5.87	1.45	1.52
5	E	137	PRO	N-CA	-5.87	1.40	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	95	SER	CA-C	-5.87	1.45	1.52
31	L	171	THR	CA-C	-5.87	1.44	1.52
31	L	215	PRO	CA-C	5.87	1.59	1.52
7	g	130	ARG	CZ-NH1	5.87	1.41	1.32
11	k	23	ARG	CZ-NH1	5.87	1.41	1.32
22	S	20	HIS	N-CA	5.87	1.53	1.46
22	S	155	LEU	CA-C	-5.87	1.45	1.52
10	j	72	ASN	N-CA	5.86	1.53	1.46
6	F	160	ALA	CA-C	-5.86	1.45	1.52
13	6	97	ALA	CA-C	-5.86	1.45	1.52
21	N	231	ASN	CA-CB	5.86	1.62	1.53
21	N	607	GLN	CA-CB	5.86	1.62	1.53
12	l	268	VAL	C-N	5.86	1.42	1.33
5	e	76	CYS	C-N	5.86	1.41	1.33
20	Z	784	SER	CA-C	-5.86	1.43	1.52
31	L	78	ARG	CZ-NH2	5.86	1.41	1.33
7	g	58	LEU	C-N	5.86	1.41	1.33
14	7	202	THR	C-N	5.86	1.40	1.34
25	R	321	TYR	C-O	-5.86	1.18	1.24
32	M	167	VAL	CA-CB	5.86	1.61	1.54
5	E	135	SER	C-N	5.86	1.39	1.33
13	6	89	ASP	CA-C	-5.86	1.45	1.53
1	a	101	ALA	C-N	5.85	1.41	1.33
15	W	92	GLN	N-CA	-5.85	1.39	1.46
9	i	219	TYR	CA-CB	5.85	1.62	1.53
14	7	194	ARG	NE-CZ	5.85	1.39	1.33
18	X	25	THR	CA-C	-5.85	1.44	1.52
20	Z	849	ARG	CD-NE	5.85	1.54	1.46
5	e	188	HIS	CD2-NE2	5.85	1.44	1.37
33	J	144	ASP	N-CA	-5.85	1.38	1.45
1	a	191	ILE	CA-C	5.85	1.59	1.52
1	a	235	THR	CA-C	-5.85	1.45	1.52
4	d	197	ARG	NE-CZ	5.85	1.39	1.33
2	B	133	SER	N-CA	-5.84	1.39	1.46
22	S	438	HIS	ND1-CE1	5.84	1.38	1.32
23	P	235	LEU	C-N	5.84	1.41	1.33
4	d	15	GLY	C-N	5.84	1.38	1.33
23	P	176	LYS	C-N	5.84	1.41	1.33
24	Q	58	ILE	CA-CB	5.84	1.61	1.54
31	L	74	LEU	N-CA	-5.84	1.39	1.46
33	J	154	THR	N-CA	-5.84	1.38	1.46
9	i	101	ARG	CD-NE	5.84	1.54	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	d	106	VAL	C-N	5.84	1.41	1.33
4	D	177	LYS	C-N	5.84	1.41	1.33
12	5	208	GLN	CA-CB	5.84	1.64	1.53
21	N	510	HIS	CB-CG	5.84	1.58	1.50
27	O	78	VAL	CA-C	-5.84	1.45	1.52
29	I	211	MET	C-O	-5.84	1.17	1.24
13	m	147	GLY	C-N	5.83	1.42	1.33
19	Y	20	LYS	CA-C	-5.83	1.45	1.52
13	m	130	VAL	N-CA	-5.83	1.39	1.46
21	N	577	SER	CA-CB	5.83	1.63	1.53
28	H	333	MET	CA-C	-5.83	1.45	1.52
9	2	219	TYR	CA-CB	5.83	1.62	1.53
12	5	154	ALA	C-N	5.83	1.41	1.33
24	Q	220	LEU	CA-C	-5.83	1.45	1.52
30	K	97	GLY	CA-C	-5.83	1.46	1.52
3	c	198	SER	C-O	5.83	1.31	1.24
13	6	166	ASN	CA-CB	5.83	1.61	1.53
15	W	22	PRO	C-N	5.83	1.41	1.33
23	P	113	ASN	CA-C	5.83	1.60	1.52
8	h	182	ILE	CA-C	5.83	1.59	1.52
5	E	9	ASP	CA-C	5.83	1.60	1.52
11	k	117	TYR	CA-C	-5.83	1.45	1.52
22	S	259	TYR	CA-CB	5.83	1.64	1.53
23	P	239	GLN	C-O	5.83	1.30	1.24
24	Q	255	TYR	C-N	5.83	1.41	1.33
28	H	132	GLN	C-O	-5.83	1.19	1.23
30	K	197	LEU	C-O	-5.83	1.17	1.24
30	K	203	ILE	CA-CB	-5.83	1.46	1.54
1	a	166	TYR	C-N	5.82	1.41	1.33
29	I	340	ARG	CZ-NH2	5.82	1.41	1.33
33	J	269	GLN	N-CA	-5.82	1.39	1.46
10	j	180	LEU	N-CA	-5.82	1.39	1.46
12	l	202	PHE	C-N	5.82	1.41	1.33
10	3	109	VAL	C-O	-5.82	1.17	1.24
10	3	145	GLN	CA-C	-5.82	1.45	1.52
11	4	138	PHE	CA-C	-5.82	1.45	1.52
8	1	108	VAL	N-CA	-5.82	1.39	1.46
1	A	125	SER	CA-C	-5.82	1.45	1.52
1	A	247	ALA	C-O	-5.82	1.16	1.24
3	C	189	ALA	C-N	5.82	1.41	1.33
14	7	205	VAL	CA-CB	5.82	1.61	1.54
16	V	88	GLN	N-CA	-5.82	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	Z	300	ALA	CA-C	-5.82	1.45	1.52
21	N	24	ALA	N-CA	-5.82	1.39	1.46
10	3	85	GLU	CA-C	-5.82	1.45	1.52
22	S	55	ARG	CA-C	-5.82	1.45	1.52
3	c	144	TYR	CA-C	-5.81	1.45	1.52
16	V	72	PRO	CA-C	5.81	1.59	1.52
10	3	203	ARG	NE-CZ	5.81	1.39	1.33
12	5	233	LYS	CA-CB	5.81	1.62	1.53
28	H	318	ARG	CA-C	5.81	1.60	1.52
32	M	397	GLU	N-CA	-5.81	1.39	1.46
32	M	412	HIS	CE1-NE2	-5.81	1.26	1.32
21	N	344	THR	CA-C	-5.81	1.45	1.52
14	n	146	ALA	N-CA	-5.81	1.38	1.46
1	A	46	ARG	CZ-NH2	5.81	1.41	1.33
16	V	259	LYS	C-N	5.81	1.41	1.33
32	M	134	LEU	C-N	5.81	1.41	1.33
12	l	82	ARG	NE-CZ	5.81	1.39	1.33
4	D	239	GLU	N-CA	-5.81	1.39	1.46
9	2	74	GLY	C-N	5.81	1.41	1.33
28	H	388	ILE	CA-C	-5.81	1.44	1.52
6	f	97	LEU	CA-CB	5.80	1.62	1.53
13	m	44	ASN	N-CA	-5.80	1.39	1.46
14	n	205	VAL	CA-C	-5.80	1.44	1.52
16	V	20	ARG	NE-CZ	5.80	1.39	1.33
17	T	206	LYS	CA-C	-5.80	1.45	1.52
23	P	185	GLU	CA-C	-5.80	1.45	1.52
33	J	349	LYS	C-N	5.80	1.41	1.33
1	A	139	VAL	N-CA	-5.80	1.39	1.46
20	Z	628	ASN	N-CA	-5.80	1.39	1.46
25	R	392	ARG	NE-CZ	5.80	1.39	1.33
1	a	228	ALA	CA-C	-5.80	1.45	1.52
11	4	95	ARG	CD-NE	5.80	1.54	1.46
31	L	68	ARG	N-CA	-5.80	1.39	1.46
32	M	19	ASP	C-O	-5.80	1.16	1.24
32	M	110	ASN	CA-C	-5.80	1.45	1.52
4	D	151	GLU	N-CA	-5.80	1.38	1.46
4	D	203	VAL	C-N	5.80	1.39	1.33
20	Z	480	ASN	C-N	5.80	1.41	1.34
24	Q	40	ALA	CA-C	5.80	1.60	1.52
32	M	167	VAL	CA-C	-5.80	1.45	1.52
25	R	209	ARG	NE-CZ	5.80	1.39	1.33
21	N	908	ARG	CZ-NH2	5.80	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	Z	307	HIS	CE1-NE2	-5.79	1.26	1.32
22	S	19	HIS	CB-CG	5.79	1.58	1.50
24	Q	12	ARG	CZ-NH1	5.79	1.40	1.32
27	O	357	ILE	CB-CG1	5.79	1.65	1.53
4	d	139	ASP	N-CA	-5.79	1.37	1.45
6	f	165	SER	C-N	5.79	1.41	1.33
27	O	322	ASP	N-CA	-5.79	1.39	1.46
30	K	260	LEU	CA-C	-5.79	1.45	1.52
24	Q	276	ASP	C-N	5.79	1.42	1.33
28	H	403	ARG	NE-CZ	5.79	1.39	1.33
11	4	80	VAL	N-CA	-5.79	1.39	1.46
20	Z	59	ASP	N-CA	-5.79	1.39	1.46
32	M	350	PRO	CA-C	-5.79	1.44	1.52
4	D	41	CYS	CA-C	-5.79	1.45	1.52
6	F	45	VAL	C-O	-5.79	1.18	1.24
14	7	73	GLU	CA-C	5.79	1.60	1.52
20	Z	462	VAL	CA-CB	5.79	1.62	1.54
24	Q	357	VAL	C-N	5.79	1.41	1.33
12	l	263	HIS	CG-ND1	5.78	1.44	1.38
20	Z	703	SER	CA-C	5.78	1.60	1.52
32	M	102	GLN	C-N	5.78	1.42	1.33
5	E	192	THR	CA-C	-5.78	1.45	1.52
22	S	350	LYS	N-CA	-5.78	1.39	1.46
4	D	189	GLU	CA-C	-5.78	1.45	1.52
11	4	39	SER	C-N	-5.78	1.28	1.34
13	6	79	SER	CA-C	-5.78	1.44	1.52
20	Z	288	LEU	CA-C	-5.78	1.45	1.52
28	H	169	GLU	CA-C	-5.78	1.46	1.52
31	L	192	GLU	N-CA	-5.78	1.38	1.46
13	6	65	PHE	CA-CB	5.78	1.61	1.53
21	N	450	ILE	N-CA	-5.78	1.38	1.46
22	S	404	LEU	CA-C	5.78	1.60	1.52
30	K	330	ARG	CZ-NH2	5.78	1.41	1.33
17	T	193	THR	C-N	5.77	1.41	1.33
4	d	236	ILE	CA-C	5.77	1.60	1.52
3	C	125	HIS	CA-CB	5.77	1.62	1.53
20	Z	212	LEU	CA-C	-5.77	1.45	1.52
24	Q	151	TYR	CA-C	-5.77	1.45	1.52
14	n	167	GLY	CA-C	-5.77	1.43	1.51
2	B	128	ARG	CZ-NH2	5.77	1.41	1.33
7	G	160	TYR	CA-C	-5.77	1.45	1.52
21	N	324	LYS	CA-CB	5.77	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	540	LEU	CA-CB	5.77	1.63	1.53
4	d	148	TYR	C-N	5.77	1.41	1.33
2	B	18	LEU	CA-CB	5.77	1.61	1.53
16	V	29	ILE	N-CA	-5.77	1.39	1.46
17	T	67	LEU	C-O	-5.77	1.17	1.24
24	Q	407	ALA	CA-C	-5.77	1.45	1.52
27	O	134	ALA	CA-C	-5.77	1.45	1.52
4	d	21	GLU	CA-C	-5.77	1.45	1.52
16	V	302	SER	N-CA	-5.77	1.39	1.46
23	P	138	ARG	C-N	5.77	1.40	1.33
13	m	167	GLN	CA-C	-5.76	1.45	1.52
15	W	25	ARG	NE-CZ	5.76	1.39	1.33
28	H	173	ARG	CA-C	-5.76	1.45	1.52
6	f	105	VAL	N-CA	-5.76	1.39	1.46
7	g	31	VAL	CA-CB	-5.76	1.46	1.54
8	h	32	GLY	C-N	5.76	1.43	1.33
5	E	200	VAL	N-CA	-5.76	1.39	1.46
14	7	169	THR	CA-C	-5.76	1.45	1.52
26	U	44	SER	CA-C	-5.76	1.45	1.52
21	N	499	HIS	CG-ND1	-5.76	1.31	1.38
5	e	136	ARG	CA-CB	5.76	1.61	1.53
25	R	384	VAL	CA-CB	-5.76	1.47	1.54
33	J	351	ASN	CA-C	-5.76	1.45	1.52
13	m	214	ILE	CA-C	-5.76	1.45	1.52
7	G	149	TYR	CA-C	-5.76	1.45	1.52
20	Z	60	ASP	N-CA	-5.76	1.38	1.46
21	N	813	ARG	NE-CZ	5.76	1.39	1.33
26	U	276	ILE	CA-CB	-5.76	1.47	1.54
14	n	177	THR	N-CA	-5.75	1.38	1.45
6	F	71	GLY	N-CA	-5.75	1.39	1.45
28	H	450	VAL	CA-CB	-5.75	1.47	1.54
11	k	181	VAL	N-CA	-5.75	1.39	1.46
28	H	152	ILE	CA-CB	-5.75	1.46	1.54
9	i	160	SER	CA-C	-5.75	1.45	1.52
21	N	206	ILE	N-CA	-5.75	1.39	1.46
8	h	134	ALA	N-CA	-5.75	1.38	1.45
10	j	190	ILE	N-CA	-5.75	1.38	1.46
17	T	43	ASP	CA-C	-5.75	1.46	1.53
24	Q	13	ARG	CA-CB	5.75	1.62	1.53
28	H	43	ALA	N-CA	-5.75	1.40	1.46
33	J	236	MET	CA-C	-5.75	1.45	1.52
33	J	87	LYS	C-N	5.75	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	2	120	GLN	C-N	5.74	1.42	1.33
14	7	113	LEU	C-N	5.74	1.41	1.33
14	7	223	ARG	CD-NE	5.74	1.54	1.46
19	Y	26	LYS	CA-C	-5.74	1.44	1.52
32	M	295	LYS	CA-C	-5.74	1.45	1.52
8	h	57	SER	CA-C	-5.74	1.45	1.52
1	A	198	SER	CA-CB	5.74	1.62	1.53
5	E	151	ASP	CA-C	-5.74	1.44	1.52
20	Z	214	HIS	ND1-CE1	5.74	1.38	1.32
20	Z	882	LEU	C-N	5.74	1.41	1.33
24	Q	28	LEU	CA-C	-5.74	1.45	1.52
6	f	37	GLY	N-CA	5.74	1.51	1.45
4	D	181	ARG	CA-CB	5.74	1.62	1.53
9	2	237	GLY	C-N	5.74	1.41	1.33
16	V	284	ALA	CA-C	-5.74	1.45	1.52
31	L	59	GLN	N-CA	5.74	1.53	1.46
7	g	100	LYS	C-N	5.74	1.41	1.33
11	k	139	TYR	CA-C	5.74	1.60	1.52
5	E	119	LEU	C-N	-5.74	1.26	1.34
13	6	20	ILE	N-CA	-5.74	1.39	1.46
17	T	71	GLN	C-N	5.73	1.41	1.33
23	P	232	ARG	CZ-NH2	5.73	1.41	1.33
28	H	322	GLY	N-CA	5.73	1.52	1.45
29	I	58	LYS	CA-CB	5.73	1.62	1.53
4	D	13	PRO	N-CA	-5.73	1.40	1.47
8	1	176	GLY	C-N	5.73	1.41	1.33
14	7	133	MET	CA-CB	5.73	1.62	1.53
18	X	59	ARG	C-N	5.73	1.41	1.33
27	O	235	HIS	ND1-CE1	5.73	1.38	1.32
10	j	153	LEU	C-N	5.73	1.41	1.33
20	Z	395	CYS	C-N	5.73	1.41	1.33
22	S	315	LYS	CA-C	-5.73	1.45	1.52
30	K	407	LEU	C-O	-5.73	1.17	1.24
8	1	193	GLU	N-CA	-5.73	1.39	1.46
8	h	93	GLU	C-N	5.73	1.42	1.33
31	L	327	THR	CA-C	-5.73	1.45	1.52
15	W	40	LYS	C-N	5.73	1.41	1.33
13	m	175	LYS	CA-C	-5.72	1.44	1.52
3	C	54	SER	N-CA	-5.72	1.38	1.46
12	5	263	HIS	CA-C	-5.72	1.45	1.52
1	A	140	ILE	CA-CB	-5.72	1.47	1.54
23	P	124	VAL	C-N	5.72	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	Q	292	GLN	C-N	5.72	1.41	1.33
2	b	168	SER	C-N	5.72	1.41	1.33
1	A	136	PRO	N-CA	-5.72	1.40	1.47
17	T	224	ARG	NE-CZ	5.72	1.39	1.33
32	M	372	ASP	C-N	5.72	1.41	1.33
7	g	52	LYS	N-CA	-5.72	1.39	1.46
2	B	190	HIS	ND1-CE1	5.72	1.38	1.32
22	S	139	HIS	C-N	5.72	1.41	1.33
3	c	76	ALA	N-CA	-5.71	1.39	1.46
33	J	404	PHE	CA-CB	5.71	1.61	1.53
4	d	111	ARG	CZ-NH1	5.71	1.40	1.32
18	X	57	VAL	CA-C	-5.71	1.45	1.52
28	H	304	CYS	CA-C	-5.71	1.45	1.52
14	n	196	SER	C-N	5.71	1.41	1.33
14	n	206	ALA	C-N	5.71	1.41	1.33
3	C	96	GLN	CA-C	-5.71	1.45	1.52
25	R	351	LYS	N-CA	-5.71	1.39	1.46
29	I	159	VAL	CA-CB	-5.71	1.46	1.54
6	f	93	ASN	C-N	5.71	1.41	1.34
20	Z	93	ARG	CD-NE	5.71	1.54	1.46
22	S	464	ARG	NE-CZ	5.71	1.39	1.33
24	Q	358	GLU	N-CA	-5.71	1.39	1.46
30	K	88	ARG	CD-NE	5.71	1.54	1.46
5	e	247	GLU	CA-C	5.71	1.60	1.52
10	j	54	THR	CA-C	-5.71	1.46	1.53
10	j	125	ASP	CA-C	5.71	1.60	1.52
1	A	152	PRO	N-CA	-5.71	1.40	1.47
16	V	299	GLY	N-CA	-5.71	1.38	1.45
5	e	99	HIS	CA-C	-5.71	1.45	1.52
8	h	122	ILE	CA-C	-5.71	1.47	1.52
10	3	130	ILE	CA-C	-5.71	1.46	1.52
12	5	164	GLN	CA-C	5.71	1.60	1.52
23	P	236	GLU	C-N	5.71	1.41	1.33
27	O	41	LEU	N-CA	5.71	1.53	1.46
29	I	421	GLU	CA-CB	5.71	1.62	1.53
32	M	281	ASP	CA-C	5.71	1.59	1.52
3	c	224	GLU	C-N	5.70	1.40	1.33
1	A	236	LEU	CA-C	-5.70	1.45	1.52
11	4	117	TYR	N-CA	-5.70	1.38	1.46
23	P	135	GLU	CA-C	-5.70	1.45	1.52
29	I	291	ARG	CD-NE	5.70	1.54	1.46
32	M	231	LEU	N-CA	-5.70	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	l	144	ARG	NE-CZ	5.70	1.39	1.33
15	W	157	PHE	CA-CB	5.70	1.62	1.53
25	R	321	TYR	CA-C	5.70	1.59	1.52
28	H	261	ARG	CA-CB	5.70	1.62	1.53
29	I	404	LEU	CB-CG	5.70	1.64	1.53
31	L	136	ASP	C-N	5.70	1.41	1.33
9	2	61	ALA	CA-C	5.70	1.59	1.52
16	V	254	ARG	CZ-NH2	5.70	1.40	1.33
21	N	43	LEU	C-O	5.70	1.30	1.24
27	O	185	PHE	CA-C	-5.70	1.45	1.52
29	I	112	ILE	CA-CB	-5.70	1.47	1.54
21	N	384	LYS	CA-C	-5.70	1.45	1.52
21	N	784	TYR	CA-C	5.70	1.58	1.52
5	e	36	THR	CA-C	-5.70	1.45	1.52
11	k	109	LYS	CA-C	-5.70	1.44	1.52
14	n	226	ARG	C-O	-5.70	1.17	1.24
5	E	122	ARG	CD-NE	5.70	1.54	1.46
20	Z	167	ASP	CA-C	-5.70	1.44	1.52
32	M	50	ARG	N-CA	-5.70	1.39	1.46
2	b	234	ARG	CD-NE	5.69	1.54	1.46
11	k	43	LEU	C-N	5.69	1.41	1.33
8	h	36	ALA	CA-CB	5.69	1.62	1.53
15	W	196	SER	C-O	-5.69	1.16	1.24
29	I	429	GLU	N-CA	-5.69	1.38	1.46
6	f	10	THR	C-N	5.69	1.39	1.33
12	l	167	GLY	C-N	5.69	1.41	1.33
19	Y	62	GLU	CA-C	-5.69	1.45	1.52
8	l	171	ALA	N-CA	-5.69	1.39	1.46
7	g	232	LYS	CA-C	-5.69	1.45	1.52
5	E	122	ARG	NE-CZ	5.69	1.39	1.33
6	F	131	GLY	CA-C	-5.69	1.48	1.52
21	N	612	SER	N-CA	-5.69	1.38	1.46
22	S	236	LEU	C-N	5.69	1.41	1.33
27	O	68	LYS	C-N	5.69	1.40	1.33
31	L	88	TYR	C-N	5.69	1.42	1.33
4	d	6	ARG	NE-CZ	5.68	1.39	1.33
2	B	190	HIS	CA-C	-5.68	1.45	1.52
17	T	42	PRO	N-CA	-5.68	1.41	1.47
31	L	379	ALA	C-N	5.68	1.40	1.34
33	J	374	ARG	NE-CZ	5.68	1.39	1.33
13	m	157	PHE	CA-CB	5.68	1.62	1.53
30	K	50	LYS	C-N	5.68	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	O	292	CYS	C-N	5.68	1.41	1.33
32	M	117	ALA	C-O	-5.68	1.17	1.24
21	N	637	ALA	CA-C	-5.68	1.45	1.52
22	S	141	LEU	CA-C	-5.68	1.45	1.52
26	U	35	GLY	CA-C	-5.68	1.47	1.52
8	h	204	GLN	N-CA	-5.68	1.39	1.46
9	i	64	HIS	ND1-CE1	5.68	1.38	1.32
20	Z	430	LEU	CA-C	-5.68	1.45	1.52
13	m	99	ARG	C-N	5.67	1.41	1.33
10	3	193	ASP	N-CA	-5.67	1.38	1.46
23	P	425	HIS	ND1-CE1	5.67	1.38	1.32
26	U	136	ALA	CA-C	-5.67	1.45	1.52
30	K	242	PHE	CA-CB	5.67	1.63	1.53
1	a	80	GLY	N-CA	-5.67	1.39	1.44
16	V	101	ASP	CA-CB	5.67	1.61	1.53
2	B	246	ARG	CD-NE	5.67	1.54	1.46
7	g	183	HIS	N-CA	-5.67	1.39	1.46
10	j	170	ALA	CA-C	-5.67	1.45	1.52
17	T	253	GLU	N-CA	-5.67	1.38	1.45
30	K	387	MET	CA-CB	5.67	1.62	1.53
7	g	113	ALA	N-CA	-5.67	1.39	1.46
1	A	168	ALA	CA-C	-5.67	1.45	1.52
9	2	120	GLN	CA-C	-5.67	1.45	1.53
29	I	282	ASP	CA-CB	5.67	1.60	1.53
32	M	213	ARG	CA-C	-5.67	1.45	1.52
11	4	168	LEU	CA-C	-5.67	1.45	1.52
24	Q	142	ALA	N-CA	-5.67	1.39	1.46
27	O	23	HIS	C-O	-5.67	1.19	1.24
12	l	129	PHE	C-N	5.66	1.41	1.34
12	l	149	ILE	C-N	5.66	1.41	1.33
10	3	177	ARG	NE-CZ	5.66	1.39	1.33
19	Y	84	TYR	C-N	5.66	1.41	1.33
20	Z	342	LEU	CA-C	-5.66	1.45	1.52
24	Q	186	HIS	ND1-CE1	5.66	1.38	1.32
33	J	142	VAL	N-CA	-5.66	1.39	1.46
7	G	50	VAL	N-CA	-5.66	1.39	1.46
21	N	203	ARG	CA-CB	5.66	1.62	1.53
20	Z	282	ILE	CA-C	-5.66	1.45	1.52
25	R	139	GLU	CA-C	-5.66	1.45	1.52
28	H	367	ARG	CA-C	-5.66	1.47	1.53
12	5	181	ARG	N-CA	-5.66	1.38	1.46
6	f	39	ARG	NE-CZ	5.66	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	1	199	PRO	C-N	5.66	1.41	1.33
22	S	143	GLN	CA-C	-5.66	1.45	1.52
8	h	149	LYS	C-N	5.66	1.41	1.33
9	i	45	ALA	C-N	5.66	1.41	1.33
6	F	154	THR	CA-C	-5.66	1.45	1.52
11	4	6	GLY	C-N	-5.66	1.26	1.33
29	I	159	VAL	C-N	5.66	1.41	1.33
26	U	24	ARG	CD-NE	5.65	1.54	1.46
9	i	33	VAL	CA-C	-5.65	1.45	1.52
27	O	340	SER	C-N	5.65	1.41	1.33
12	l	159	SER	C-N	5.65	1.41	1.33
7	G	50	VAL	CA-CB	-5.65	1.47	1.54
17	T	242	LYS	C-N	5.65	1.41	1.33
19	Y	30	GLU	C-N	5.65	1.39	1.32
31	L	75	LYS	CA-C	-5.65	1.44	1.52
1	A	176	GLN	C-N	5.65	1.41	1.33
4	D	156	TYR	CA-C	-5.65	1.45	1.52
8	1	85	GLU	C-N	5.65	1.41	1.33
3	C	210	ARG	NE-CZ	5.65	1.39	1.33
11	4	67	TYR	C-O	-5.65	1.17	1.24
7	g	125	LEU	N-CA	5.65	1.53	1.45
2	b	172	LYS	N-CA	-5.64	1.39	1.46
12	l	106	VAL	CA-CB	5.64	1.60	1.54
20	Z	960	GLY	C-N	5.64	1.40	1.33
30	K	351	LEU	C-N	5.64	1.41	1.33
14	7	155	ASN	CA-CB	5.64	1.62	1.53
20	Z	463	HIS	ND1-CE1	5.64	1.38	1.32
18	X	12	ALA	CA-CB	-5.64	1.44	1.53
25	R	324	ARG	CZ-NH2	5.64	1.40	1.33
12	l	190	VAL	CA-C	-5.64	1.45	1.52
13	m	196	PHE	N-CA	-5.64	1.39	1.46
4	D	214	VAL	CA-C	-5.64	1.45	1.52
7	G	57	LYS	CA-C	-5.64	1.44	1.52
17	T	82	PHE	CA-C	-5.64	1.45	1.52
18	X	29	VAL	CA-C	-5.64	1.45	1.52
20	Z	177	THR	CA-CB	-5.64	1.44	1.53
2	B	193	LEU	C-N	5.64	1.41	1.33
24	Q	268	SER	CA-C	-5.64	1.45	1.52
26	U	301	ILE	CA-C	5.64	1.59	1.52
6	F	105	VAL	C-N	5.64	1.41	1.33
17	T	258	ASN	CA-C	-5.64	1.45	1.53
20	Z	486	SER	CA-CB	5.64	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	J	196	THR	N-CA	-5.64	1.39	1.46
3	c	10	THR	N-CA	5.63	1.53	1.46
6	F	58	SER	CA-C	-5.63	1.45	1.53
17	T	192	ASN	CA-CB	5.63	1.62	1.53
20	Z	715	ALA	C-N	5.63	1.41	1.33
24	Q	58	ILE	C-N	5.63	1.41	1.34
24	Q	357	VAL	CA-C	-5.63	1.45	1.52
30	K	138	ALA	N-CA	-5.63	1.39	1.46
30	K	181	LYS	N-CA	-5.63	1.39	1.46
6	F	79	PRO	N-CA	-5.63	1.40	1.47
7	G	45	GLY	C-N	5.63	1.40	1.33
21	N	573	HIS	C-N	5.63	1.41	1.33
8	h	145	GLY	C-N	5.63	1.41	1.33
9	i	150	VAL	N-CA	-5.63	1.39	1.46
15	W	82	GLU	C-N	5.63	1.41	1.33
22	S	24	LYS	C-N	5.63	1.41	1.33
27	O	23	HIS	CD2-NE2	5.63	1.44	1.37
29	I	428	VAL	C-N	5.63	1.41	1.33
20	Z	9	GLN	C-N	5.63	1.41	1.33
22	S	437	ASN	N-CA	-5.63	1.39	1.46
22	S	489	GLN	CA-CB	5.63	1.62	1.53
5	e	242	GLU	CA-CB	5.63	1.62	1.53
8	h	57	SER	CA-CB	5.63	1.60	1.53
11	4	173	PRO	N-CD	-5.63	1.39	1.47
11	4	174	MET	CA-CB	5.63	1.63	1.53
12	5	171	SER	C-N	5.63	1.40	1.33
13	6	186	GLU	CA-CB	5.63	1.62	1.53
30	K	201	ILE	N-CA	-5.63	1.39	1.46
33	J	213	VAL	CA-CB	-5.63	1.47	1.54
2	b	151	ASP	CA-CB	5.63	1.61	1.54
9	i	188	ILE	CA-CB	5.63	1.62	1.54
6	F	193	GLY	N-CA	-5.63	1.37	1.45
13	6	105	LEU	CB-CG	5.63	1.64	1.53
21	N	686	ILE	CA-C	-5.63	1.46	1.52
23	P	145	GLU	N-CA	5.63	1.53	1.46
30	K	330	ARG	CD-NE	5.62	1.54	1.46
32	M	241	ALA	CA-C	-5.62	1.45	1.52
1	a	209	HIS	CB-CG	5.62	1.58	1.50
2	b	38	LYS	C-O	-5.62	1.17	1.24
3	c	34	THR	N-CA	-5.62	1.39	1.46
4	d	45	GLY	CA-C	-5.62	1.46	1.52
6	f	69	HIS	C-N	5.62	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	7	80	ASP	CA-CB	5.62	1.62	1.53
26	U	212	ASP	CA-CB	5.62	1.62	1.53
31	L	78	ARG	N-CA	-5.62	1.39	1.46
17	T	184	ALA	N-CA	-5.62	1.39	1.46
29	I	181	TYR	CA-C	-5.62	1.45	1.52
6	F	107	ARG	N-CA	-5.62	1.39	1.46
1	a	51	THR	CA-C	-5.62	1.45	1.52
11	4	184	VAL	CA-CB	-5.62	1.45	1.53
12	5	234	ARG	CA-CB	5.62	1.62	1.53
15	W	86	HIS	CB-CG	5.62	1.58	1.50
1	a	139	VAL	C-N	5.62	1.40	1.33
20	Z	258	PRO	CA-CB	-5.62	1.46	1.54
3	C	165	VAL	CA-C	5.62	1.59	1.52
21	N	212	ASP	C-N	5.62	1.42	1.33
22	S	387	VAL	CA-C	5.62	1.59	1.52
25	R	71	LEU	C-N	5.62	1.41	1.33
28	H	132	GLN	CA-C	-5.62	1.48	1.52
7	g	204	HIS	C-N	5.61	1.41	1.33
9	i	133	ASP	CA-C	-5.61	1.45	1.52
22	S	45	THR	CA-C	-5.61	1.45	1.52
6	f	118	LYS	CA-CB	5.61	1.63	1.53
11	k	68	SER	N-CA	-5.61	1.39	1.46
13	m	48	GLU	CA-CB	5.61	1.62	1.53
8	l	137	GLY	CA-C	-5.61	1.45	1.52
29	I	173	MET	CA-C	-5.61	1.46	1.52
5	e	20	ARG	NE-CZ	5.61	1.39	1.33
17	T	194	GLU	N-CA	-5.61	1.39	1.46
21	N	653	ARG	NE-CZ	5.61	1.39	1.33
22	S	347	HIS	C-N	5.61	1.41	1.33
32	M	297	GLY	CA-C	-5.61	1.44	1.51
1	A	231	ASP	CA-CB	5.61	1.61	1.53
11	4	67	TYR	CA-CB	5.61	1.62	1.53
21	N	223	LEU	N-CA	-5.61	1.39	1.46
24	Q	247	HIS	CA-C	-5.61	1.45	1.52
28	H	396	MET	CA-C	-5.61	1.45	1.52
1	A	174	LYS	CA-C	-5.61	1.44	1.52
9	2	95	HIS	ND1-CE1	5.61	1.38	1.32
16	V	123	VAL	N-CA	-5.61	1.39	1.46
21	N	320	SER	N-CA	-5.61	1.39	1.46
22	S	226	ASP	CA-C	-5.61	1.45	1.52
5	E	73	HIS	CA-C	-5.61	1.45	1.52
21	N	816	LYS	N-CA	-5.61	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	S	472	HIS	ND1-CE1	5.61	1.38	1.32
6	f	84	LEU	CA-CB	5.60	1.62	1.53
9	i	127	LEU	CA-CB	5.60	1.63	1.53
9	i	167	LEU	C-O	-5.60	1.17	1.24
7	G	197	ALA	CA-C	-5.60	1.45	1.52
2	b	130	PHE	C-N	5.60	1.41	1.33
5	E	99	HIS	ND1-CE1	5.60	1.38	1.32
11	4	107	TYR	N-CA	-5.60	1.39	1.46
28	H	249	TYR	CZ-OH	5.60	1.49	1.38
7	g	147	HIS	ND1-CE1	5.60	1.38	1.32
1	A	39	ASN	N-CA	-5.60	1.38	1.46
7	G	192	ALA	C-N	5.60	1.41	1.33
10	3	13	VAL	CA-CB	-5.60	1.47	1.54
10	j	60	VAL	C-N	5.60	1.41	1.33
9	2	245	SER	N-CA	-5.60	1.39	1.46
15	W	147	ILE	C-N	5.60	1.42	1.33
21	N	609	LEU	C-N	5.60	1.41	1.33
25	R	331	ARG	C-N	5.60	1.41	1.33
26	U	252	HIS	CG-CD2	-5.60	1.29	1.35
27	O	269	LEU	C-N	5.60	1.41	1.33
30	K	38	SER	C-N	5.60	1.41	1.33
2	b	178	ARG	CD-NE	5.60	1.54	1.46
6	f	204	GLU	C-N	5.60	1.41	1.33
14	n	167	GLY	C-N	5.60	1.40	1.33
6	F	137	TYR	N-CA	-5.60	1.39	1.46
16	V	194	ARG	NE-CZ	5.60	1.39	1.33
21	N	833	GLU	C-N	5.60	1.41	1.33
30	K	303	MET	CA-CB	5.60	1.62	1.53
7	G	68	GLN	CA-C	-5.60	1.45	1.52
4	d	121	THR	C-O	-5.59	1.16	1.24
14	7	90	ILE	N-CA	-5.59	1.39	1.46
22	S	388	ILE	C-N	5.59	1.41	1.33
27	O	247	ASN	CA-C	5.59	1.60	1.52
7	g	180	VAL	CA-CB	-5.59	1.47	1.54
15	W	190	ILE	CA-CB	-5.59	1.46	1.54
20	Z	562	TRP	N-CA	-5.59	1.39	1.46
22	S	87	SER	CA-C	-5.59	1.45	1.52
3	c	146	TYR	C-N	5.59	1.41	1.33
4	D	70	HIS	N-CA	-5.59	1.40	1.46
9	2	65	ARG	NE-CZ	5.59	1.39	1.33
12	5	83	PHE	C-N	5.59	1.41	1.33
20	Z	928	ARG	CZ-NH1	5.59	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	383	ARG	N-CA	-5.59	1.38	1.45
7	G	86	ARG	NE-CZ	5.59	1.39	1.33
22	S	21	SER	CA-CB	5.59	1.62	1.53
33	J	237	ALA	C-O	-5.59	1.17	1.24
9	2	70	ILE	C-N	5.59	1.41	1.33
32	M	423	GLN	C-N	5.59	1.41	1.34
14	n	70	ASN	CB-CG	5.58	1.66	1.52
6	F	92	CYS	CA-C	5.58	1.60	1.52
23	P	19	GLU	CA-CB	5.58	1.62	1.53
27	O	262	ASP	CA-CB	5.58	1.61	1.53
28	H	435	ARG	CZ-NH1	5.58	1.40	1.32
33	J	239	GLU	C-N	5.58	1.41	1.33
3	C	217	ARG	CZ-NH1	5.58	1.40	1.32
22	S	93	LEU	CA-C	-5.58	1.45	1.52
26	U	130	VAL	C-N	5.58	1.40	1.33
29	I	360	LYS	CA-C	-5.58	1.45	1.52
3	c	41	SER	CA-CB	5.58	1.60	1.53
12	l	234	ARG	CZ-NH1	5.58	1.40	1.32
14	7	75	LEU	C-N	5.58	1.38	1.33
20	Z	97	PRO	N-CD	-5.58	1.40	1.47
29	I	100	ARG	NE-CZ	5.58	1.39	1.33
30	K	408	GLU	CA-CB	5.58	1.62	1.53
16	V	287	THR	CA-C	-5.58	1.45	1.52
10	j	21	VAL	CA-CB	5.58	1.63	1.54
10	3	136	PHE	N-CA	-5.58	1.39	1.46
10	3	187	VAL	N-CA	-5.58	1.39	1.46
28	H	74	THR	CA-C	-5.58	1.45	1.52
21	N	58	ARG	CA-CB	5.58	1.62	1.53
29	I	426	ASN	C-N	5.58	1.41	1.33
22	S	151	GLU	CA-C	-5.58	1.45	1.52
23	P	102	GLU	N-CA	-5.58	1.39	1.46
30	K	417	THR	N-CA	-5.58	1.38	1.46
16	V	221	TRP	CA-CB	5.57	1.62	1.53
22	S	469	ASN	CA-C	-5.57	1.45	1.52
24	Q	329	GLU	CA-CB	5.57	1.62	1.53
32	M	42	ARG	CZ-NH1	5.57	1.40	1.32
9	2	53	PRO	CA-C	-5.57	1.42	1.52
20	Z	438	LYS	C-N	5.57	1.41	1.33
10	j	197	LYS	CA-CB	5.57	1.60	1.53
25	R	276	LEU	CA-C	-5.57	1.45	1.52
28	H	187	LEU	C-N	5.57	1.40	1.33
32	M	344	ASP	CA-CB	5.57	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	140	ILE	CA-CB	-5.57	1.47	1.54
7	g	142	ASP	CA-CB	5.57	1.62	1.53
23	P	64	ASP	CA-C	-5.57	1.45	1.52
24	Q	75	ARG	CZ-NH1	5.57	1.40	1.32
28	H	158	GLY	C-N	5.57	1.41	1.33
3	c	92	ARG	CZ-NH2	5.57	1.40	1.33
9	i	252	ILE	C-N	5.57	1.41	1.33
14	n	52	GLY	N-CA	-5.57	1.40	1.45
5	E	220	SER	CA-C	-5.57	1.45	1.52
21	N	288	ASN	C-N	5.57	1.40	1.33
29	I	236	VAL	CA-CB	5.57	1.61	1.54
30	K	281	ARG	CZ-NH2	5.57	1.40	1.33
4	D	235	GLN	N-CA	-5.57	1.39	1.46
5	E	224	LYS	N-CA	-5.57	1.39	1.46
21	N	561	GLY	CA-C	-5.57	1.43	1.51
29	I	83	LYS	C-N	5.57	1.41	1.34
23	P	169	GLY	C-N	5.56	1.41	1.33
5	e	25	GLU	CA-CB	5.56	1.62	1.53
14	n	68	ARG	NE-CZ	5.56	1.39	1.33
17	T	156	SER	N-CA	-5.56	1.37	1.46
23	P	201	ARG	CA-C	-5.56	1.44	1.52
27	O	370	LEU	CA-C	-5.56	1.45	1.52
22	S	214	MET	N-CA	5.56	1.53	1.46
9	i	51	GLN	N-CA	-5.56	1.40	1.46
12	l	93	SER	CA-C	-5.56	1.45	1.52
3	C	14	SER	CA-CB	5.56	1.59	1.53
4	D	7	ALA	CA-C	-5.56	1.45	1.52
25	R	306	PRO	N-CD	-5.56	1.40	1.47
29	I	61	ARG	N-CA	-5.56	1.39	1.46
8	h	145	GLY	C-O	5.56	1.30	1.24
10	j	124	PHE	C-N	5.56	1.41	1.33
1	A	172	GLY	CA-C	-5.56	1.44	1.51
23	P	246	GLN	C-N	5.56	1.40	1.33
25	R	96	GLN	N-CA	5.56	1.53	1.46
26	U	179	ARG	CD-NE	5.56	1.54	1.46
7	g	138	PHE	CA-C	-5.56	1.45	1.52
9	i	244	GLU	CA-C	-5.56	1.45	1.52
21	N	601	THR	C-N	5.56	1.41	1.34
2	b	139	HIS	CE1-NE2	-5.55	1.26	1.32
12	l	78	THR	N-CA	-5.55	1.39	1.46
11	4	90	LYS	N-CA	-5.55	1.39	1.46
13	6	104	LEU	N-CA	-5.55	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	V	233	LYS	N-CA	5.55	1.53	1.46
20	Z	845	LEU	C-N	5.55	1.40	1.33
21	N	188	TYR	CA-CB	5.55	1.62	1.53
21	N	663	ILE	CA-CB	-5.55	1.47	1.54
16	V	139	VAL	CA-C	-5.55	1.45	1.52
19	Y	43	TRP	NE1-CE2	5.55	1.43	1.37
20	Z	324	GLU	CA-C	-5.55	1.45	1.52
27	O	217	LEU	CA-C	-5.55	1.45	1.52
10	3	131	ASP	CA-C	-5.55	1.45	1.52
16	V	42	ARG	NE-CZ	5.55	1.39	1.33
20	Z	730	ALA	CA-C	5.55	1.59	1.52
21	N	231	ASN	CA-C	-5.55	1.45	1.52
4	d	240	LYS	C-N	5.55	1.41	1.33
9	i	88	ILE	C-N	5.54	1.40	1.33
8	l	18	LYS	CA-C	-5.54	1.45	1.52
14	n	194	ARG	CA-C	-5.54	1.46	1.53
14	n	154	SER	CA-C	-5.54	1.45	1.52
14	n	186	PRO	N-CD	-5.54	1.40	1.47
2	B	114	VAL	CA-CB	5.54	1.61	1.54
6	F	135	ILE	CA-C	-5.54	1.48	1.52
6	F	230	VAL	CA-CB	-5.54	1.48	1.54
24	Q	88	PHE	CA-C	5.54	1.59	1.52
25	R	184	GLN	CA-C	-5.54	1.45	1.52
29	I	86	GLU	C-N	5.54	1.41	1.33
14	7	77	PRO	C-O	-5.54	1.16	1.24
17	T	155	GLY	C-N	5.54	1.39	1.33
7	g	145	GLY	C-N	5.54	1.41	1.33
26	U	131	GLY	C-O	-5.54	1.18	1.23
29	I	168	VAL	N-CA	-5.54	1.39	1.46
32	M	98	GLU	CA-CB	5.54	1.61	1.53
6	f	139	LYS	N-CA	-5.54	1.38	1.46
3	C	4	ARG	CA-CB	5.54	1.62	1.53
4	D	49	ARG	C-N	5.54	1.41	1.33
18	X	38	ASN	C-N	5.54	1.41	1.33
20	Z	406	TRP	N-CA	5.54	1.53	1.46
31	L	357	ARG	CZ-NH2	5.54	1.40	1.33
11	k	124	THR	CA-C	-5.53	1.46	1.52
32	M	234	ALA	C-N	5.53	1.41	1.34
32	M	328	ASN	CA-CB	5.53	1.62	1.53
1	a	12	TYR	CA-C	-5.53	1.45	1.52
11	k	105	GLY	CA-C	-5.53	1.47	1.52
13	m	193	ARG	CZ-NH2	5.53	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	h	29	THR	N-CA	-5.53	1.40	1.46
21	N	763	GLY	C-O	-5.53	1.17	1.24
5	e	231	TYR	N-CA	-5.53	1.39	1.46
14	7	198	ILE	CA-C	-5.53	1.47	1.52
21	N	200	SER	CA-CB	5.53	1.61	1.53
21	N	794	LYS	CA-C	-5.53	1.45	1.52
25	R	134	TRP	C-N	5.53	1.40	1.33
27	O	69	PHE	CA-C	-5.53	1.44	1.52
4	d	241	GLN	CA-C	-5.53	1.45	1.52
7	g	189	ALA	C-N	5.53	1.41	1.33
14	7	132	VAL	CA-CB	-5.53	1.46	1.54
21	N	220	CYS	CA-CB	5.53	1.62	1.53
22	S	466	LYS	C-O	-5.53	1.17	1.24
32	M	236	ALA	N-CA	-5.53	1.39	1.46
33	J	204	HIS	ND1-CE1	5.53	1.38	1.32
15	W	128	LEU	C-O	-5.52	1.17	1.24
20	Z	219	ASP	CA-CB	5.52	1.61	1.53
20	Z	884	THR	CA-C	-5.52	1.45	1.52
32	M	407	GLN	C-N	5.52	1.41	1.33
1	a	105	ARG	NE-CZ	5.52	1.39	1.33
3	c	111	LEU	C-N	5.52	1.41	1.33
14	n	164	ASN	CA-CB	5.52	1.61	1.53
15	W	41	ARG	CD-NE	5.52	1.53	1.46
13	6	42	SER	CA-C	-5.52	1.46	1.52
20	Z	840	ARG	NE-CZ	5.52	1.39	1.33
22	S	279	ILE	CB-CG1	5.52	1.64	1.53
9	2	201	ASN	C-N	5.52	1.40	1.33
10	3	15	MET	C-N	5.52	1.41	1.33
29	I	191	ILE	C-N	5.52	1.40	1.33
4	d	172	ARG	N-CA	-5.52	1.39	1.46
31	L	206	ILE	N-CA	-5.52	1.40	1.46
1	a	69	VAL	CA-CB	-5.51	1.47	1.54
11	k	17	SER	CA-C	-5.51	1.45	1.52
6	F	203	ASP	CA-CB	5.51	1.61	1.53
8	1	142	PHE	C-N	5.51	1.40	1.34
22	S	21	SER	C-N	5.51	1.40	1.33
23	P	330	GLY	C-N	5.51	1.41	1.33
26	U	257	ILE	CA-C	-5.51	1.45	1.52
27	O	277	ILE	N-CA	5.51	1.51	1.46
30	K	408	GLU	N-CA	5.51	1.52	1.46
31	L	185	GLY	C-N	5.51	1.41	1.33
33	J	226	GLY	CA-C	-5.51	1.42	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	d	125	GLY	N-CA	-5.51	1.36	1.45
3	C	229	ILE	CA-CB	-5.51	1.47	1.53
24	Q	433	LEU	CA-CB	5.51	1.62	1.53
1	A	86	PRO	CA-C	-5.51	1.45	1.52
11	4	54	VAL	CA-CB	-5.51	1.47	1.54
20	Z	248	TYR	CA-C	-5.51	1.45	1.52
31	L	186	LEU	N-CA	-5.51	1.39	1.46
1	a	242	GLU	N-CA	-5.51	1.39	1.46
5	e	53	ARG	NE-CZ	5.51	1.39	1.33
14	n	261	TYR	CA-CB	5.51	1.62	1.53
6	F	221	PRO	C-N	5.51	1.41	1.33
20	Z	912	PHE	CA-CB	5.51	1.62	1.53
30	K	158	ILE	CA-CB	-5.51	1.46	1.54
32	M	159	LEU	N-CA	-5.51	1.36	1.46
2	b	179	TRP	NE1-CE2	5.51	1.43	1.37
20	Z	93	ARG	NE-CZ	5.51	1.39	1.33
29	I	208	TYR	CA-CB	5.51	1.62	1.53
5	E	38	ILE	CA-CB	-5.50	1.46	1.55
1	a	78	THR	CA-C	-5.50	1.45	1.52
1	A	85	GLY	C-N	-5.50	1.26	1.33
3	C	125	HIS	CA-C	-5.50	1.46	1.52
31	L	214	PRO	N-CD	-5.50	1.40	1.47
9	i	48	ARG	CZ-NH1	5.50	1.40	1.32
3	C	107	PRO	N-CA	5.50	1.54	1.47
5	E	72	ARG	CD-NE	5.50	1.53	1.46
14	7	71	GLY	CA-C	-5.50	1.43	1.51
20	Z	145	ASP	CA-CB	5.50	1.60	1.53
21	N	384	LYS	C-N	5.50	1.40	1.33
22	S	161	LYS	N-CA	-5.50	1.40	1.46
28	H	384	GLY	C-N	5.50	1.41	1.33
13	6	15	ASP	CA-CB	5.50	1.63	1.53
18	X	62	ASP	CA-CB	5.50	1.61	1.54
4	d	87	GLU	C-N	5.50	1.41	1.34
5	e	51	GLU	CA-C	-5.50	1.46	1.52
10	j	29	LEU	CA-C	-5.50	1.46	1.52
22	S	195	ALA	CA-C	5.50	1.60	1.52
24	Q	73	LYS	CA-CB	5.50	1.62	1.53
27	O	118	GLY	N-CA	-5.50	1.37	1.45
31	L	373	GLU	CA-CB	5.50	1.61	1.53
20	Z	124	MET	CG-SD	5.50	1.94	1.80
20	Z	165	TYR	CB-CG	-5.50	1.39	1.51
1	A	98	LYS	N-CA	5.50	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	215	GLY	CA-C	-5.50	1.45	1.51
27	O	318	HIS	CD2-NE2	5.50	1.43	1.37
2	b	162	THR	N-CA	5.49	1.52	1.46
3	c	150	THR	CA-C	-5.49	1.45	1.52
4	d	228	GLU	CA-C	-5.49	1.45	1.52
3	C	187	ASP	CA-C	-5.49	1.45	1.52
3	C	210	ARG	CA-C	-5.49	1.45	1.52
20	Z	56	LEU	CA-CB	5.49	1.61	1.53
29	I	319	ARG	NE-CZ	5.49	1.39	1.33
29	I	422	ARG	CZ-NH2	5.49	1.40	1.33
31	L	137	ARG	CZ-NH1	5.49	1.40	1.32
20	Z	44	LYS	CA-CB	5.49	1.63	1.53
31	L	104	LEU	CA-C	5.49	1.60	1.52
13	m	206	VAL	N-CA	-5.49	1.39	1.46
1	A	60	PRO	CA-CB	5.49	1.61	1.53
20	Z	214	HIS	CG-CD2	5.49	1.41	1.35
26	U	155	LEU	C-N	5.49	1.40	1.33
31	L	391	ILE	CA-C	-5.49	1.46	1.52
2	b	246	ARG	CD-NE	5.49	1.53	1.46
6	F	94	TYR	CA-CB	5.49	1.62	1.53
16	V	142	ASP	C-N	5.49	1.41	1.34
20	Z	969	GLU	N-CA	5.49	1.53	1.46
26	U	24	ARG	N-CA	5.49	1.53	1.46
30	K	132	LYS	N-CA	-5.49	1.42	1.46
32	M	366	ARG	NE-CZ	5.49	1.39	1.33
33	J	161	LYS	C-N	5.49	1.40	1.33
6	f	74	LEU	CA-CB	5.49	1.62	1.53
27	O	318	HIS	CB-CG	-5.49	1.42	1.50
8	h	47	HIS	CB-CG	-5.49	1.42	1.50
4	D	141	ARG	CZ-NH1	5.49	1.40	1.32
19	Y	3	THR	C-N	5.49	1.39	1.33
11	k	190	ARG	CA-C	-5.48	1.46	1.52
4	D	210	ILE	N-CA	5.48	1.52	1.46
16	V	223	SER	CA-CB	5.48	1.62	1.53
23	P	382	ASP	N-CA	-5.48	1.39	1.46
29	I	117	HIS	ND1-CE1	5.48	1.38	1.32
33	J	87	LYS	CA-C	-5.48	1.45	1.52
8	1	86	THR	C-N	5.48	1.41	1.33
16	V	182	LYS	CA-CB	5.48	1.61	1.53
23	P	362	LEU	C-N	5.48	1.40	1.33
3	C	164	SER	N-CA	-5.48	1.39	1.46
20	Z	453	LEU	CA-CB	5.48	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	P	143	LEU	CA-C	-5.48	1.45	1.52
27	O	291	ILE	N-CA	-5.48	1.40	1.46
7	g	42	CYS	N-CA	-5.48	1.39	1.45
21	N	43	LEU	CA-C	-5.47	1.45	1.52
21	N	240	GLN	CA-CB	5.47	1.61	1.53
23	P	225	VAL	C-N	5.47	1.40	1.33
23	P	404	LYS	CA-C	5.47	1.59	1.53
24	Q	222	SER	N-CA	-5.47	1.39	1.46
27	O	210	ARG	CA-C	5.47	1.59	1.52
14	n	61	GLY	CA-C	-5.47	1.44	1.51
7	G	20	ARG	CZ-NH2	5.47	1.40	1.33
9	2	96	SER	C-N	5.47	1.41	1.33
20	Z	339	PHE	CA-C	5.47	1.60	1.52
20	Z	601	VAL	N-CA	-5.47	1.39	1.46
22	S	363	THR	C-N	5.47	1.40	1.34
26	U	204	LEU	C-N	5.47	1.41	1.33
22	S	483	GLU	C-O	-5.47	1.17	1.24
27	O	164	PRO	CA-CB	5.47	1.61	1.53
3	c	85	GLU	CA-CB	5.47	1.62	1.53
10	3	199	TYR	N-CA	-5.47	1.39	1.46
15	W	131	THR	N-CA	-5.47	1.39	1.46
29	I	246	ARG	CA-C	-5.47	1.46	1.52
33	J	200	ARG	CZ-NH2	5.47	1.40	1.33
19	Y	85	LYS	CA-C	-5.47	1.45	1.52
21	N	754	THR	C-N	5.47	1.40	1.33
9	i	106	VAL	C-N	5.47	1.41	1.33
10	j	152	SER	C-N	5.47	1.41	1.33
10	j	179	ALA	CA-C	5.47	1.59	1.52
11	k	132	ALA	CA-C	-5.47	1.46	1.52
2	B	29	LYS	C-N	5.47	1.41	1.34
14	7	78	VAL	C-N	5.47	1.41	1.33
14	7	146	ALA	C-N	5.46	1.40	1.33
19	Y	84	TYR	N-CA	-5.46	1.39	1.46
21	N	433	THR	N-CA	5.46	1.52	1.45
21	N	503	THR	C-N	5.46	1.42	1.33
30	K	222	LEU	C-N	5.46	1.40	1.33
7	g	141	VAL	CA-C	-5.46	1.45	1.52
3	C	38	ILE	CA-C	-5.46	1.45	1.52
14	7	116	ALA	CA-CB	5.46	1.62	1.53
30	K	255	ARG	CZ-NH1	5.46	1.40	1.32
32	M	113	VAL	CA-C	-5.46	1.45	1.52
13	m	109	ARG	NE-CZ	5.46	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	G	137	ILE	C-N	5.46	1.40	1.33
20	Z	921	GLU	N-CA	-5.46	1.38	1.46
28	H	105	ILE	CA-CB	-5.46	1.47	1.54
33	J	35	ARG	NE-CZ	5.46	1.39	1.33
33	J	132	PRO	C-N	5.46	1.41	1.33
12	l	278	GLU	CA-C	5.46	1.59	1.52
6	F	89	ARG	NE-CZ	5.46	1.39	1.33
33	J	391	ASN	CA-CB	5.46	1.61	1.53
3	C	123	THR	CB-OG1	-5.45	1.35	1.43
4	D	166	ARG	CD-NE	5.45	1.53	1.46
14	7	62	SER	N-CA	-5.45	1.38	1.45
20	Z	262	VAL	CA-CB	-5.45	1.47	1.54
6	f	174	ARG	N-CA	-5.45	1.39	1.46
2	B	83	ARG	CZ-NH1	5.45	1.40	1.32
30	K	346	ARG	CZ-NH1	5.45	1.40	1.32
5	e	57	PRO	CA-C	-5.45	1.46	1.52
6	f	219	ASP	N-CA	-5.45	1.40	1.46
3	C	44	ILE	C-O	-5.45	1.18	1.24
4	d	195	THR	C-N	5.45	1.40	1.33
5	e	65	GLU	N-CA	-5.45	1.39	1.46
14	7	60	LEU	CA-C	-5.45	1.45	1.52
21	N	773	MET	CA-CB	5.45	1.62	1.53
28	H	300	THR	N-CA	5.45	1.52	1.46
6	f	147	PHE	N-CA	-5.45	1.39	1.46
7	g	38	ILE	CA-C	-5.45	1.45	1.52
10	3	14	ALA	CA-CB	-5.45	1.44	1.53
13	6	198	SER	C-N	5.45	1.41	1.33
21	N	816	LYS	CA-CB	5.45	1.61	1.53
23	P	36	LEU	C-N	5.45	1.41	1.33
27	O	334	LEU	CA-C	-5.45	1.45	1.52
29	I	138	LYS	C-N	5.45	1.41	1.33
1	A	15	HIS	N-CA	-5.44	1.39	1.46
20	Z	559	LYS	C-N	5.44	1.41	1.34
21	N	171	LYS	N-CA	-5.44	1.39	1.46
24	Q	46	VAL	C-N	5.44	1.41	1.33
30	K	212	TYR	C-N	5.44	1.41	1.33
30	K	336	ARG	NE-CZ	5.44	1.39	1.33
7	g	60	VAL	N-CA	5.44	1.52	1.46
8	h	16	THR	CA-C	-5.44	1.46	1.52
13	m	75	ARG	CZ-NH1	5.44	1.40	1.32
1	A	81	MET	CA-C	-5.44	1.46	1.52
12	5	201	ILE	CA-CB	-5.44	1.46	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	300	ASN	C-O	-5.44	1.17	1.24
21	N	515	ARG	NE-CZ	5.44	1.39	1.33
32	M	249	PRO	C-N	5.44	1.41	1.33
4	D	46	CYS	CA-C	5.44	1.59	1.52
16	V	40	HIS	ND1-CE1	5.44	1.38	1.32
23	P	435	LYS	CA-CB	-5.44	1.44	1.53
24	Q	282	LEU	CA-C	-5.44	1.46	1.52
26	U	10	ILE	CA-CB	-5.44	1.47	1.54
14	n	173	PRO	N-CD	-5.44	1.40	1.47
17	T	106	ILE	N-CA	-5.44	1.40	1.46
27	O	97	LYS	N-CA	-5.44	1.40	1.46
1	A	113	PRO	CA-CB	-5.44	1.47	1.53
4	D	155	ILE	CB-CG1	5.44	1.64	1.53
22	S	54	TRP	C-N	5.44	1.40	1.33
25	R	304	TYR	CA-C	-5.44	1.45	1.52
33	J	400	VAL	CA-C	-5.44	1.45	1.52
6	f	54	ASP	C-N	5.44	1.41	1.33
1	a	124	LEU	CA-CB	5.43	1.62	1.53
5	e	122	ARG	N-CA	-5.43	1.39	1.46
7	g	225	ASN	N-CA	-5.43	1.38	1.46
19	Y	67	VAL	CA-CB	-5.43	1.48	1.54
20	Z	798	ARG	CD-NE	5.43	1.53	1.46
21	N	146	LYS	CA-C	5.43	1.60	1.52
29	I	298	GLY	CA-C	-5.43	1.45	1.52
14	n	183	MET	CA-C	-5.43	1.45	1.52
14	7	46	SER	CA-C	-5.43	1.45	1.52
20	Z	151	HIS	CB-CG	5.43	1.57	1.50
21	N	137	PHE	CA-CB	5.43	1.61	1.53
33	J	88	VAL	CA-CB	5.43	1.60	1.54
33	J	228	ARG	CA-C	-5.43	1.45	1.52
8	1	96	TYR	N-CA	-5.43	1.39	1.46
3	C	96	GLN	CA-CB	-5.43	1.44	1.53
24	Q	106	GLN	CA-CB	-5.43	1.45	1.53
4	d	141	ARG	CZ-NH1	5.43	1.40	1.32
2	B	243	ILE	CA-C	-5.43	1.44	1.52
27	O	243	VAL	C-N	5.43	1.41	1.33
33	J	264	GLY	C-O	-5.43	1.17	1.23
5	e	114	GLN	CA-CB	5.43	1.61	1.53
5	E	34	GLY	CA-C	-5.43	1.42	1.52
23	P	83	SER	C-N	5.43	1.41	1.33
25	R	313	ALA	CA-C	-5.43	1.45	1.52
26	U	143	VAL	CA-CB	-5.43	1.47	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	O	385	GLU	CA-CB	5.43	1.62	1.53
29	I	164	ALA	CA-C	-5.43	1.46	1.52
9	i	211	LYS	CA-C	-5.42	1.46	1.52
20	Z	62	SER	CA-C	-5.42	1.45	1.52
31	L	133	ASN	C-N	5.42	1.41	1.33
1	a	217	GLU	CA-C	-5.42	1.45	1.52
13	m	89	ASP	N-CA	-5.42	1.38	1.46
20	Z	118	VAL	CA-C	5.42	1.59	1.52
20	Z	901	PHE	CA-CB	5.42	1.60	1.53
31	L	392	ARG	N-CA	-5.42	1.39	1.46
33	J	200	ARG	CA-CB	5.42	1.61	1.53
25	R	335	ARG	NE-CZ	5.42	1.39	1.33
26	U	296	ILE	CB-CG1	5.42	1.64	1.53
11	4	40	PRO	CA-C	5.42	1.60	1.52
20	Z	481	PRO	N-CA	-5.42	1.40	1.47
22	S	27	GLU	C-N	5.42	1.41	1.33
28	H	390	ARG	CZ-NH1	5.42	1.40	1.32
22	S	55	ARG	CZ-NH1	5.42	1.40	1.32
23	P	61	LYS	C-O	-5.42	1.17	1.24
30	K	297	ILE	N-CA	-5.42	1.39	1.46
31	L	416	MET	C-N	5.42	1.41	1.33
7	g	77	VAL	CA-C	5.42	1.59	1.52
7	g	131	PRO	CA-CB	5.42	1.61	1.53
10	3	193	ASP	C-N	5.42	1.40	1.33
24	Q	339	TYR	C-N	5.42	1.41	1.33
26	U	207	VAL	C-O	-5.42	1.17	1.24
4	d	232	TYR	C-N	5.41	1.40	1.33
10	3	85	GLU	N-CA	5.41	1.53	1.46
11	4	117	TYR	CA-C	-5.41	1.45	1.52
21	N	213	PHE	CA-CB	5.41	1.62	1.53
21	N	730	VAL	C-N	5.41	1.40	1.33
25	R	422	ARG	CZ-NH1	5.41	1.40	1.32
33	J	306	ARG	NE-CZ	5.41	1.39	1.33
8	h	11	SER	C-O	-5.41	1.17	1.24
2	B	53	SER	C-N	5.41	1.39	1.33
7	G	57	LYS	C-N	5.41	1.40	1.33
20	Z	159	LEU	CA-CB	5.41	1.61	1.53
31	L	197	ILE	CA-CB	-5.41	1.49	1.55
18	X	11	ARG	CA-CB	5.41	1.60	1.53
31	L	231	LEU	CA-CB	5.41	1.61	1.53
7	G	108	PRO	C-N	5.41	1.39	1.33
21	N	839	ARG	CD-NE	5.41	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	20	ARG	NE-CZ	5.41	1.39	1.33
28	H	59	ILE	C-N	5.41	1.41	1.33
13	6	14	GLY	CA-C	-5.41	1.44	1.51
15	W	96	LEU	C-N	5.41	1.41	1.33
23	P	69	ARG	CA-CB	5.41	1.60	1.53
27	O	258	LEU	N-CA	-5.41	1.39	1.46
29	I	265	ARG	N-CA	5.41	1.53	1.46
30	K	414	GLN	CA-C	5.41	1.59	1.53
2	b	4	ARG	NE-CZ	5.40	1.39	1.33
6	f	66	CYS	N-CA	-5.40	1.39	1.46
7	g	136	THR	C-N	5.40	1.40	1.33
6	F	77	LEU	N-CA	-5.40	1.39	1.46
17	T	239	SER	N-CA	-5.40	1.40	1.46
31	L	267	PHE	CA-CB	5.40	1.62	1.53
2	b	245	ASP	CA-CB	5.40	1.61	1.53
3	C	237	ASP	C-N	5.40	1.40	1.34
20	Z	117	ASP	C-O	5.40	1.30	1.24
21	N	431	SER	CA-CB	5.40	1.60	1.53
7	g	198	LYS	CA-C	-5.40	1.45	1.52
12	l	189	TYR	CA-C	-5.40	1.46	1.52
10	3	63	LEU	N-CA	-5.40	1.39	1.46
22	S	34	LEU	C-O	-5.40	1.17	1.24
29	I	128	TYR	CG-CD1	5.40	1.50	1.39
31	L	141	LYS	CA-C	-5.40	1.46	1.52
8	1	76	THR	CA-CB	5.40	1.62	1.53
21	N	342	GLY	CA-C	-5.40	1.44	1.51
28	H	372	ASP	C-N	5.40	1.40	1.33
5	E	93	ARG	N-CA	5.40	1.52	1.46
7	G	204	HIS	ND1-CE1	5.40	1.38	1.32
11	4	29	LYS	CA-C	-5.40	1.46	1.52
21	N	762	ARG	C-O	-5.40	1.17	1.24
3	c	3	SER	CA-C	-5.39	1.44	1.52
9	i	125	ALA	N-CA	-5.39	1.39	1.46
8	1	184	MET	N-CA	-5.39	1.39	1.45
17	T	246	GLU	N-CA	-5.39	1.39	1.46
20	Z	727	GLU	CA-CB	5.39	1.62	1.53
22	S	46	LEU	N-CA	-5.39	1.39	1.46
24	Q	124	PHE	CA-C	-5.39	1.45	1.52
26	U	227	GLY	CA-C	-5.39	1.45	1.51
7	g	205	GLU	CA-C	-5.39	1.44	1.52
9	i	63	LEU	C-N	5.39	1.40	1.33
11	k	126	VAL	C-O	-5.39	1.17	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	155	GLY	CA-C	-5.39	1.44	1.51
17	T	49	ASP	CA-CB	5.39	1.63	1.53
20	Z	477	TYR	N-CA	-5.39	1.39	1.46
20	Z	502	ASN	C-N	5.39	1.41	1.33
24	Q	82	THR	C-N	5.39	1.41	1.33
26	U	182	ALA	C-N	5.39	1.41	1.33
28	H	405	GLU	C-N	5.39	1.41	1.33
17	T	240	LYS	C-N	5.39	1.40	1.33
19	Y	70	ASP	N-CA	-5.39	1.39	1.46
20	Z	920	GLY	C-O	-5.39	1.18	1.24
28	H	210	ASP	CA-CB	5.39	1.62	1.53
11	4	121	TYR	N-CA	5.39	1.53	1.46
24	Q	156	ALA	CA-CB	5.39	1.61	1.53
25	R	27	SER	CA-CB	-5.39	1.44	1.53
28	H	374	LYS	C-N	5.39	1.40	1.33
6	f	49	LEU	CA-C	-5.39	1.46	1.52
3	C	243	GLY	CA-C	-5.39	1.44	1.51
12	5	228	ALA	CA-C	-5.39	1.45	1.52
15	W	125	LEU	N-CA	-5.39	1.39	1.46
26	U	14	VAL	CA-CB	-5.39	1.47	1.54
2	B	82	TYR	CA-C	-5.38	1.45	1.52
7	G	37	SER	CA-C	-5.38	1.46	1.52
7	G	119	TYR	N-CA	-5.38	1.39	1.46
12	5	277	GLU	C-N	5.38	1.40	1.33
16	V	234	GLU	CA-C	-5.38	1.45	1.52
20	Z	261	ASP	CA-CB	5.38	1.61	1.53
21	N	269	LEU	CA-C	-5.38	1.46	1.52
24	Q	426	LEU	N-CA	5.38	1.52	1.46
25	R	224	PHE	CA-C	-5.38	1.45	1.52
32	M	339	ARG	CD-NE	5.38	1.53	1.46
13	m	38	ILE	N-CA	-5.38	1.40	1.46
9	2	83	ALA	N-CA	-5.38	1.39	1.46
20	Z	620	LEU	CA-CB	5.38	1.62	1.53
20	Z	279	THR	CA-CB	5.38	1.62	1.53
24	Q	299	MET	CA-CB	5.38	1.62	1.53
6	f	69	HIS	CA-C	-5.38	1.47	1.52
25	R	263	ARG	NE-CZ	5.38	1.39	1.33
26	U	161	ILE	CA-C	-5.38	1.46	1.52
13	6	44	ASN	C-N	5.38	1.40	1.33
15	W	98	LEU	CA-C	-5.38	1.45	1.52
15	W	100	HIS	ND1-CE1	5.38	1.38	1.32
15	W	179	ARG	CZ-NH1	5.38	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	Z	327	GLN	C-N	5.38	1.40	1.33
21	N	39	ILE	C-N	5.38	1.40	1.33
31	L	355	ALA	N-CA	-5.38	1.40	1.46
33	J	402	LYS	CA-C	-5.38	1.45	1.53
5	e	13	SER	N-CA	-5.38	1.38	1.46
8	h	140	SER	C-N	5.38	1.40	1.33
13	m	179	PRO	C-N	5.38	1.40	1.33
1	A	162	TYR	N-CA	5.38	1.52	1.45
20	Z	40	GLU	CA-C	5.38	1.60	1.52
26	U	66	TRP	N-CA	-5.38	1.39	1.45
28	H	62	ARG	C-N	5.38	1.40	1.33
30	K	421	VAL	N-CA	5.38	1.53	1.46
21	N	208	ARG	CD-NE	5.38	1.53	1.46
2	b	129	PRO	CA-C	-5.37	1.45	1.52
5	E	24	VAL	CA-CB	-5.37	1.47	1.54
20	Z	575	MET	CG-SD	5.37	1.94	1.80
21	N	231	ASN	N-CA	-5.37	1.39	1.46
24	Q	407	ALA	C-N	5.37	1.41	1.33
26	U	179	ARG	NE-CZ	5.37	1.39	1.33
32	M	116	ALA	CA-C	-5.37	1.46	1.52
12	l	117	LEU	CA-C	-5.37	1.46	1.52
13	6	140	GLU	CA-CB	5.37	1.62	1.53
17	T	34	LEU	C-N	5.37	1.40	1.33
17	T	99	SER	CA-CB	5.37	1.62	1.53
21	N	749	LEU	N-CA	-5.37	1.39	1.46
23	P	14	SER	C-N	5.37	1.41	1.34
23	P	361	THR	CA-C	-5.37	1.45	1.52
25	R	407	GLY	N-CA	-5.37	1.39	1.45
29	I	166	PRO	CA-C	-5.37	1.45	1.52
11	k	190	ARG	C-N	5.37	1.41	1.33
10	3	133	ALA	CA-C	5.37	1.59	1.52
17	T	163	LEU	CA-C	-5.37	1.45	1.52
5	e	144	ILE	C-N	5.37	1.40	1.33
11	k	39	SER	CA-C	-5.37	1.47	1.52
3	C	102	TYR	C-N	5.37	1.41	1.33
12	5	263	HIS	CE1-NE2	-5.37	1.27	1.32
7	G	183	HIS	ND1-CE1	5.37	1.38	1.32
21	N	14	ARG	NE-CZ	5.37	1.39	1.33
23	P	431	HIS	ND1-CE1	5.37	1.38	1.32
14	7	47	MET	SD-CE	5.37	1.93	1.79
26	U	215	ILE	C-N	5.37	1.41	1.33
27	O	199	LEU	C-N	5.37	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	d	181	ARG	NE-CZ	5.36	1.39	1.33
16	V	70	ALA	C-N	5.36	1.41	1.33
21	N	442	LEU	CA-C	-5.36	1.46	1.52
30	K	186	GLU	CA-C	-5.36	1.45	1.52
32	M	189	GLN	C-N	5.36	1.40	1.33
4	D	152	PRO	CA-CB	-5.36	1.46	1.53
14	7	106	GLU	C-N	5.36	1.41	1.33
22	S	232	MET	C-O	-5.36	1.17	1.24
3	C	22	VAL	CA-CB	-5.36	1.47	1.54
23	P	364	ARG	CZ-NH2	5.36	1.40	1.33
24	Q	255	TYR	CA-C	-5.36	1.45	1.52
32	M	319	ASP	C-N	5.36	1.41	1.33
6	F	63	ILE	C-N	5.36	1.40	1.33
24	Q	158	ILE	C-N	5.36	1.41	1.33
13	m	117	THR	CB-OG1	-5.36	1.35	1.43
11	4	69	ILE	C-O	-5.36	1.17	1.24
14	7	62	SER	CA-C	-5.36	1.45	1.53
21	N	325	PHE	CA-C	-5.36	1.45	1.52
22	S	324	MET	CA-CB	5.36	1.61	1.53
24	Q	268	SER	N-CA	-5.36	1.39	1.46
32	M	178	GLU	N-CA	-5.36	1.39	1.45
14	n	170	TYR	C-N	5.36	1.40	1.33
9	2	47	THR	N-CA	5.36	1.52	1.46
13	6	10	PHE	CA-C	-5.36	1.46	1.52
23	P	348	HIS	CB-CG	5.36	1.57	1.50
14	7	155	ASN	N-CA	-5.35	1.39	1.46
1	a	15	HIS	ND1-CE1	5.35	1.38	1.32
3	C	92	ARG	CZ-NH2	5.35	1.40	1.33
20	Z	193	PHE	CA-CB	5.35	1.61	1.53
25	R	201	GLY	C-N	5.35	1.41	1.33
13	m	119	ILE	C-O	-5.35	1.17	1.23
33	J	339	ARG	CA-C	-5.35	1.46	1.52
5	E	166	ARG	CA-CB	5.35	1.60	1.53
12	5	273	TRP	NE1-CE2	5.35	1.43	1.37
23	P	320	PRO	CA-C	-5.35	1.46	1.52
30	K	335	ASP	N-CA	-5.35	1.39	1.46
4	d	228	GLU	N-CA	5.35	1.52	1.46
14	n	164	ASN	C-O	-5.35	1.17	1.24
14	7	226	ARG	CD-NE	5.35	1.53	1.46
15	W	71	LYS	N-CA	-5.35	1.39	1.46
21	N	5	THR	CA-C	-5.35	1.46	1.52
22	S	270	ALA	C-N	5.35	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	159	SER	N-CA	-5.35	1.39	1.46
5	e	155	LEU	CA-C	-5.35	1.46	1.52
8	h	91	PHE	N-CA	-5.35	1.40	1.46
9	2	209	ILE	C-N	5.35	1.40	1.33
18	X	117	LYS	CA-C	-5.35	1.46	1.52
2	b	204	PHE	C-O	-5.34	1.18	1.24
6	F	62	LYS	CA-C	-5.34	1.45	1.52
25	R	161	ALA	N-CA	-5.34	1.39	1.46
30	K	185	ARG	CZ-NH2	5.34	1.40	1.33
1	A	40	ILE	C-N	5.34	1.41	1.33
20	Z	725	GLU	CA-CB	5.34	1.61	1.53
29	I	348	ILE	N-CA	-5.34	1.39	1.46
30	K	318	THR	N-CA	-5.34	1.39	1.46
31	L	209	ARG	CZ-NH1	5.34	1.40	1.32
5	e	59	LEU	CA-C	-5.34	1.46	1.52
1	A	225	VAL	C-N	5.34	1.40	1.32
31	L	77	ARG	NE-CZ	5.34	1.39	1.33
2	b	146	SER	CA-C	-5.34	1.45	1.52
7	g	178	LYS	CA-CB	5.34	1.62	1.53
14	n	153	GLN	CA-CB	5.34	1.61	1.53
1	A	225	VAL	CA-CB	-5.34	1.47	1.54
4	D	169	LYS	CA-C	-5.34	1.46	1.52
5	E	93	ARG	CA-C	-5.34	1.45	1.52
18	X	102	GLN	CA-CB	5.34	1.62	1.53
20	Z	941	ARG	NE-CZ	5.34	1.39	1.33
22	S	211	ARG	NE-CZ	5.34	1.39	1.33
28	H	285	GLY	CA-C	-5.34	1.44	1.51
3	c	22	VAL	N-CA	-5.34	1.40	1.46
1	A	83	VAL	CA-CB	-5.34	1.48	1.54
22	S	280	ASN	CA-CB	5.34	1.61	1.53
13	m	203	HIS	N-CA	-5.34	1.39	1.45
17	T	106	ILE	CA-CB	5.34	1.60	1.54
27	O	26	PHE	CA-CB	5.34	1.61	1.53
29	I	166	PRO	N-CD	-5.34	1.40	1.47
31	L	334	ASP	C-N	-5.34	1.27	1.33
5	e	145	ALA	CA-C	-5.33	1.45	1.53
9	i	231	SER	CA-C	-5.33	1.45	1.52
12	l	100	TRP	NE1-CE2	5.33	1.43	1.37
10	3	15	MET	CA-C	-5.33	1.46	1.52
21	N	629	CYS	C-N	5.33	1.41	1.33
23	P	276	LEU	CA-C	-5.33	1.45	1.52
6	f	203	ASP	CA-C	-5.33	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	T	228	ILE	CA-C	5.33	1.59	1.52
21	N	205	SER	C-N	5.33	1.40	1.33
30	K	295	ILE	CA-CB	5.33	1.61	1.54
8	h	196	ILE	N-CA	-5.33	1.39	1.46
10	j	171	LEU	C-N	5.33	1.40	1.33
13	m	229	ARG	CZ-NH1	5.33	1.40	1.32
12	5	179	TYR	CZ-OH	5.33	1.49	1.38
20	Z	147	GLU	C-O	-5.33	1.17	1.24
20	Z	214	HIS	N-CA	-5.33	1.39	1.46
20	Z	963	ALA	CA-CB	5.33	1.62	1.53
21	N	136	ILE	CA-C	-5.33	1.45	1.52
3	c	94	HIS	CD2-NE2	5.33	1.43	1.37
1	A	206	ALA	C-N	5.33	1.40	1.33
8	1	47	HIS	CE1-NE2	-5.33	1.27	1.32
11	4	174	MET	C-N	5.33	1.41	1.33
3	c	185	LYS	CA-CB	5.33	1.61	1.53
32	M	301	VAL	CA-C	5.33	1.59	1.52
7	g	167	LYS	CA-C	-5.33	1.45	1.52
13	6	44	ASN	N-CA	-5.33	1.39	1.46
16	V	114	PHE	CA-C	-5.33	1.46	1.52
31	L	121	ALA	N-CA	-5.33	1.39	1.45
7	g	76	CYS	N-CA	-5.32	1.39	1.46
12	l	275	VAL	CA-C	-5.32	1.46	1.52
14	n	191	VAL	C-N	5.32	1.40	1.33
21	N	597	ARG	NE-CZ	5.32	1.39	1.33
23	P	218	LEU	N-CA	-5.32	1.40	1.46
27	O	94	GLU	C-N	5.32	1.41	1.33
30	K	207	ARG	CZ-NH2	5.32	1.40	1.33
21	N	592	GLY	C-N	5.32	1.41	1.33
6	f	219	ASP	CA-C	-5.32	1.46	1.52
13	m	201	GLU	N-CA	-5.32	1.40	1.46
20	Z	759	ARG	C-O	-5.32	1.17	1.24
21	N	67	LYS	C-O	-5.32	1.17	1.24
25	R	383	ARG	NE-CZ	5.32	1.39	1.33
28	H	279	LEU	C-N	5.32	1.40	1.33
2	B	45	ILE	CA-CB	-5.32	1.46	1.55
3	C	42	ASP	CA-C	-5.32	1.47	1.52
4	D	97	ARG	CZ-NH2	5.32	1.40	1.33
7	G	204	HIS	N-CA	-5.32	1.39	1.46
17	T	135	ASN	CA-C	-5.32	1.46	1.52
1	a	36	ASN	CA-CB	5.32	1.61	1.53
15	W	108	GLN	CA-C	-5.32	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	b	50	LYS	CA-CB	5.31	1.65	1.54
20	Z	570	LEU	C-N	5.31	1.41	1.33
21	N	198	THR	C-N	5.31	1.41	1.33
26	U	68	LEU	C-N	5.31	1.41	1.33
1	A	52	VAL	CA-C	-5.31	1.46	1.52
5	E	86	ARG	CD-NE	5.31	1.53	1.46
11	4	177	LYS	CA-C	-5.31	1.45	1.53
12	5	165	TYR	CA-CB	5.31	1.61	1.53
21	N	623	PHE	CA-C	-5.31	1.46	1.52
8	h	156	SER	N-CA	-5.31	1.38	1.45
21	N	82	ALA	N-CA	-5.31	1.40	1.46
21	N	85	ALA	CA-C	-5.31	1.45	1.52
22	S	358	LYS	CA-CB	5.31	1.61	1.53
5	E	55	THR	CA-C	-5.31	1.45	1.52
15	W	36	ILE	CA-CB	-5.31	1.47	1.54
30	K	185	ARG	CD-NE	5.31	1.53	1.46
5	e	219	LEU	CB-CG	5.31	1.64	1.53
3	C	230	PHE	N-CA	5.31	1.52	1.46
8	1	130	LYS	CA-CB	5.31	1.62	1.53
25	R	243	LEU	CA-C	-5.31	1.46	1.52
33	J	62	LEU	N-CA	-5.31	1.40	1.46
8	h	190	ALA	CA-CB	5.31	1.62	1.53
6	F	209	ASP	CA-C	-5.31	1.45	1.52
22	S	385	SER	CA-CB	5.31	1.61	1.53
26	U	114	THR	CA-C	-5.31	1.46	1.52
12	l	154	ALA	N-CA	-5.30	1.40	1.46
12	l	105	THR	CA-C	-5.30	1.45	1.52
5	E	147	HIS	CA-C	-5.30	1.46	1.52
14	7	251	LYS	C-O	-5.30	1.17	1.24
22	S	197	SER	CA-CB	5.30	1.62	1.53
24	Q	412	ALA	CA-C	-5.30	1.46	1.52
7	g	129	VAL	N-CA	-5.30	1.40	1.46
9	i	137	SER	CA-C	-5.30	1.46	1.52
21	N	261	LEU	C-N	5.30	1.40	1.33
21	N	417	ARG	CZ-NH1	5.30	1.40	1.32
22	S	303	ASN	N-CA	-5.30	1.39	1.45
4	d	217	PRO	C-N	5.29	1.41	1.33
13	m	204	ILE	CB-CG1	5.29	1.64	1.53
3	c	229	ILE	C-O	-5.29	1.18	1.24
20	Z	907	GLY	CA-C	-5.29	1.48	1.52
4	D	165	GLY	C-N	5.29	1.40	1.33
5	E	101	LEU	N-CA	-5.29	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	Z	99	LEU	CA-CB	5.29	1.61	1.53
21	N	832	HIS	CD2-NE2	5.29	1.43	1.37
4	D	175	LEU	C-N	5.29	1.41	1.34
8	1	138	SER	CA-C	-5.29	1.45	1.52
33	J	205	HIS	ND1-CE1	5.29	1.37	1.32
1	a	245	LEU	C-N	5.29	1.39	1.34
18	X	33	ILE	CA-C	-5.29	1.46	1.52
25	R	282	THR	C-N	5.29	1.40	1.33
26	U	66	TRP	NE1-CE2	5.29	1.43	1.37
26	U	203	LYS	C-N	5.29	1.40	1.33
27	O	15	ARG	NE-CZ	5.29	1.38	1.33
27	O	296	LEU	CA-CB	5.29	1.61	1.53
28	H	94	GLU	CA-C	-5.29	1.45	1.52
33	J	359	LYS	N-CA	-5.29	1.39	1.46
15	W	95	GLN	CA-C	5.29	1.59	1.52
20	Z	629	VAL	C-N	5.29	1.40	1.33
21	N	126	LYS	CA-C	5.29	1.60	1.53
32	M	38	ASP	C-N	5.29	1.41	1.33
7	g	195	GLN	CA-CB	5.29	1.61	1.53
21	N	406	TYR	N-CA	-5.29	1.39	1.46
29	I	257	LEU	N-CA	-5.29	1.40	1.46
30	K	38	SER	CA-C	-5.29	1.46	1.52
4	d	197	ARG	CZ-NH1	5.28	1.40	1.32
8	h	25	ALA	CA-C	-5.28	1.46	1.52
11	k	62	ALA	CA-CB	5.28	1.61	1.53
12	l	253	TYR	CA-C	-5.28	1.46	1.52
27	O	215	TYR	CA-CB	5.28	1.61	1.53
29	I	436	TYR	C-N	5.28	1.40	1.33
23	P	331	GLY	C-N	5.28	1.41	1.33
31	L	145	ARG	CZ-NH1	5.28	1.40	1.32
7	g	90	ASN	CA-C	-5.28	1.46	1.52
7	G	121	GLN	N-CA	-5.28	1.39	1.46
8	1	177	SER	CA-C	5.28	1.60	1.52
22	S	400	LYS	CA-CB	5.28	1.61	1.53
27	O	235	HIS	N-CA	5.28	1.52	1.46
29	I	166	PRO	C-N	5.28	1.41	1.34
6	f	82	ARG	C-O	-5.28	1.17	1.24
7	G	77	VAL	CA-CB	-5.28	1.47	1.54
33	J	231	ARG	CA-CB	5.28	1.61	1.53
2	B	129	PRO	C-N	5.28	1.40	1.33
10	3	117	GLY	CA-C	5.28	1.58	1.51
29	I	273	GLU	CA-CB	5.28	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	L	62	ARG	NE-CZ	5.28	1.38	1.33
8	h	54	ARG	CZ-NH1	5.28	1.40	1.32
9	i	205	CYS	CA-CB	5.28	1.62	1.53
10	j	129	CYS	N-CA	-5.28	1.39	1.46
1	A	209	HIS	CE1-NE2	5.28	1.37	1.32
17	T	139	ASP	CA-CB	5.28	1.60	1.53
20	Z	856	HIS	ND1-CE1	5.28	1.37	1.32
27	O	189	TYR	C-N	5.28	1.40	1.33
3	c	130	PRO	CA-CB	5.27	1.62	1.53
16	V	189	ILE	C-N	5.27	1.40	1.33
24	Q	219	ASP	CA-CB	5.27	1.61	1.53
3	c	35	ALA	CA-C	-5.27	1.46	1.52
5	e	64	ILE	N-CA	-5.27	1.40	1.46
17	T	15	PHE	CA-CB	5.27	1.61	1.53
30	K	111	SER	CA-C	-5.27	1.46	1.52
33	J	355	GLY	C-N	5.27	1.40	1.33
27	O	369	ARG	NE-CZ	5.27	1.38	1.33
6	F	137	TYR	CA-C	-5.27	1.46	1.52
6	F	166	GLN	CA-CB	5.27	1.61	1.53
19	Y	69	VAL	C-O	-5.27	1.19	1.24
22	S	318	CYS	CA-C	5.27	1.59	1.52
26	U	265	LEU	C-N	5.27	1.41	1.33
6	f	160	ALA	C-O	-5.27	1.17	1.23
7	g	158	TRP	C-N	5.27	1.41	1.33
11	4	96	ARG	CZ-NH2	5.27	1.40	1.33
17	T	105	LEU	C-N	5.27	1.40	1.33
19	Y	36	GLU	CG-CD	5.27	1.65	1.52
21	N	535	LEU	CA-CB	-5.27	1.45	1.53
25	R	105	LYS	C-N	5.27	1.40	1.33
27	O	356	ARG	CZ-NH2	5.27	1.40	1.33
28	H	462	ARG	CZ-NH2	5.27	1.40	1.33
29	I	295	ASN	N-CA	-5.27	1.39	1.46
11	4	74	GLU	CA-C	-5.27	1.46	1.52
20	Z	312	TYR	C-N	5.27	1.40	1.33
23	P	429	ILE	C-O	-5.27	1.17	1.24
6	f	213	ILE	CA-C	-5.26	1.46	1.52
11	k	27	VAL	CA-C	-5.26	1.47	1.52
11	4	13	VAL	CA-CB	-5.26	1.48	1.54
16	V	26	THR	N-CA	-5.26	1.39	1.46
20	Z	528	LEU	CA-CB	5.26	1.61	1.53
28	H	173	ARG	CZ-NH2	5.26	1.40	1.33
12	5	205	GLY	CA-C	-5.26	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	L	126	ARG	CD-NE	5.26	1.53	1.46
7	G	66	LYS	C-N	5.26	1.40	1.33
9	2	121	GLY	C-N	5.26	1.40	1.33
22	S	334	HIS	ND1-CE1	5.26	1.37	1.32
31	L	146	VAL	CA-C	-5.26	1.46	1.52
16	V	67	ASP	CA-C	-5.26	1.46	1.52
16	V	227	MET	C-N	5.26	1.39	1.33
16	V	228	TYR	C-N	5.26	1.40	1.33
22	S	227	ASN	N-CA	-5.26	1.40	1.46
29	I	350	PHE	CA-C	-5.26	1.46	1.52
31	L	317	ASN	CA-CB	5.26	1.62	1.53
33	J	102	ILE	CA-C	-5.26	1.46	1.52
33	J	186	ILE	CA-CB	-5.26	1.48	1.54
13	m	130	VAL	C-N	5.26	1.40	1.33
16	V	274	GLN	CA-CB	5.26	1.62	1.53
25	R	143	GLN	CA-CB	5.26	1.61	1.53
33	J	360	GLY	CA-C	-5.26	1.44	1.51
3	c	217	ARG	N-CA	-5.26	1.39	1.46
1	A	228	ALA	CA-CB	5.26	1.60	1.53
8	1	14	ALA	N-CA	-5.26	1.39	1.45
10	3	199	TYR	CA-CB	5.26	1.60	1.53
31	L	170	MET	C-N	5.26	1.41	1.33
33	J	293	ALA	C-N	5.26	1.41	1.33
10	3	143	SER	CA-C	-5.25	1.45	1.52
21	N	700	CYS	CA-C	-5.25	1.46	1.52
27	O	306	ARG	CD-NE	5.25	1.53	1.46
5	e	177	GLU	CA-C	-5.25	1.46	1.52
17	T	25	LYS	CA-C	-5.25	1.45	1.52
8	h	80	GLY	CA-C	-5.25	1.46	1.52
7	G	32	GLU	CA-C	-5.25	1.45	1.52
10	3	187	VAL	CA-C	-5.25	1.46	1.52
20	Z	860	GLY	CA-C	5.25	1.59	1.51
32	M	331	ASP	N-CA	-5.25	1.40	1.46
7	G	190	ARG	C-O	-5.25	1.17	1.24
14	7	214	MET	CA-C	-5.25	1.46	1.52
27	O	83	LEU	CA-C	-5.25	1.46	1.52
3	C	88	ILE	CA-CB	5.25	1.61	1.54
17	T	168	SER	N-CA	-5.25	1.40	1.46
27	O	290	LYS	CA-CB	5.25	1.61	1.53
27	O	356	ARG	C-N	5.25	1.40	1.33
28	H	385	ARG	N-CA	-5.25	1.39	1.46
31	L	135	VAL	CA-CB	-5.25	1.47	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	i	164	MET	CA-C	-5.25	1.46	1.52
28	H	182	ASN	N-CA	-5.25	1.39	1.46
28	H	331	ARG	CA-CB	5.25	1.61	1.53
29	I	113	ILE	CB-CG1	5.25	1.64	1.53
31	L	81	ILE	CA-CB	-5.25	1.47	1.54
20	Z	727	GLU	C-N	5.25	1.40	1.33
12	l	116	LEU	C-N	5.24	1.41	1.33
2	B	13	SER	CA-CB	5.24	1.60	1.53
21	N	33	ASP	CA-C	-5.24	1.45	1.52
22	S	412	ASN	CA-C	-5.24	1.46	1.53
24	Q	202	ARG	NE-CZ	5.24	1.38	1.33
30	K	159	SER	N-CA	-5.24	1.40	1.46
31	L	381	LYS	C-N	5.24	1.41	1.33
6	f	79	PRO	CA-CB	-5.24	1.46	1.53
9	i	126	TYR	CZ-OH	5.24	1.49	1.38
12	l	238	ALA	N-CA	5.24	1.52	1.46
4	D	227	GLU	CA-CB	5.24	1.61	1.53
20	Z	121	ILE	N-CA	-5.24	1.40	1.46
2	B	172	LYS	N-CA	-5.24	1.39	1.46
20	Z	940	GLY	CA-C	-5.24	1.44	1.51
21	N	759	ILE	CA-C	5.24	1.59	1.52
26	U	127	GLN	C-N	5.24	1.40	1.33
2	B	74	VAL	CA-C	-5.24	1.46	1.52
26	U	201	GLN	C-N	5.24	1.40	1.33
31	L	331	ASP	C-N	5.24	1.40	1.33
13	m	129	ALA	N-CA	-5.24	1.39	1.45
1	A	50	CYS	N-CA	-5.24	1.39	1.46
20	Z	200	THR	N-CA	-5.24	1.39	1.46
21	N	360	GLN	CA-C	-5.24	1.46	1.52
21	N	794	LYS	C-O	-5.24	1.18	1.24
28	H	256	LYS	C-N	5.24	1.40	1.33
2	b	129	PRO	C-N	5.23	1.40	1.33
9	2	236	ARG	CZ-NH1	5.23	1.40	1.32
10	3	39	LYS	N-CA	-5.23	1.40	1.46
16	V	237	ASN	C-O	-5.23	1.17	1.24
12	5	251	ASN	C-N	5.23	1.41	1.33
25	R	280	ILE	CA-C	-5.23	1.46	1.52
31	L	326	ALA	N-CA	-5.23	1.39	1.45
2	b	30	GLN	CA-C	-5.23	1.46	1.52
12	l	221	TRP	CA-CB	5.23	1.61	1.53
8	1	58	ALA	CA-C	-5.23	1.46	1.52
15	W	162	ASN	CA-C	-5.23	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	S	154	GLN	C-N	5.23	1.40	1.33
25	R	176	ARG	CD-NE	5.23	1.53	1.46
33	J	282	PHE	CA-CB	5.23	1.61	1.53
10	j	63	LEU	CA-CB	5.23	1.62	1.53
13	m	130	VAL	C-O	-5.23	1.18	1.24
30	K	385	ALA	C-O	-5.23	1.17	1.24
4	d	119	ARG	CD-NE	5.23	1.53	1.46
9	i	161	LEU	CA-CB	5.23	1.61	1.53
14	n	182	HIS	N-CA	-5.23	1.41	1.46
3	C	108	VAL	CA-C	-5.23	1.46	1.52
16	V	209	GLU	CA-CB	5.23	1.61	1.53
22	S	158	PHE	CA-C	5.23	1.59	1.52
24	Q	139	ILE	C-N	5.23	1.41	1.33
25	R	82	ASP	C-N	5.23	1.41	1.33
13	6	121	GLY	CA-C	-5.23	1.46	1.52
28	H	350	LYS	N-CA	-5.23	1.39	1.46
32	M	242	THR	N-CA	-5.23	1.39	1.46
10	j	97	GLU	N-CA	-5.22	1.39	1.46
10	j	123	GLY	CA-C	-5.22	1.47	1.52
14	n	73	GLU	CA-C	-5.22	1.46	1.52
20	Z	897	HIS	CB-CG	5.22	1.57	1.50
27	O	382	LYS	CA-C	-5.22	1.46	1.52
30	K	299	LEU	CA-CB	5.22	1.61	1.53
20	Z	798	ARG	CA-CB	5.22	1.61	1.53
23	P	47	ARG	NE-CZ	5.22	1.38	1.33
24	Q	177	VAL	C-N	5.22	1.41	1.33
29	I	121	THR	N-CA	-5.22	1.39	1.46
13	m	194	ASP	CA-C	-5.22	1.46	1.52
2	B	4	ARG	CD-NE	5.22	1.53	1.46
14	7	92	ASP	C-N	5.22	1.40	1.33
16	V	209	GLU	N-CA	-5.22	1.40	1.46
30	K	259	ARG	C-N	5.22	1.41	1.33
31	L	204	PRO	C-N	5.22	1.41	1.33
33	J	145	SER	CA-CB	-5.22	1.44	1.53
9	i	194	ASN	N-CA	-5.22	1.39	1.45
14	7	110	ASP	CA-C	-5.22	1.45	1.52
18	X	35	ILE	N-CA	5.22	1.52	1.46
20	Z	616	LEU	C-N	5.22	1.40	1.33
21	N	890	PHE	C-N	5.22	1.37	1.33
31	L	70	TYR	CA-C	-5.22	1.46	1.52
33	J	321	VAL	N-CA	-5.22	1.40	1.46
2	b	107	THR	N-CA	-5.22	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	i	204	VAL	CA-CB	-5.22	1.46	1.55
10	3	66	MET	CA-C	-5.22	1.46	1.52
21	N	829	LYS	C-N	5.22	1.40	1.33
23	P	342	GLN	N-CA	-5.22	1.40	1.46
29	I	63	GLU	N-CA	-5.22	1.40	1.46
29	I	313	LEU	N-CA	-5.22	1.39	1.46
30	K	280	LYS	CA-C	-5.22	1.45	1.52
32	M	122	SER	CA-CB	5.22	1.62	1.53
14	n	123	SER	CA-CB	5.21	1.61	1.53
14	n	234	ASP	CA-C	-5.21	1.46	1.52
14	n	245	LEU	CA-C	-5.21	1.46	1.52
17	T	252	GLU	N-CA	-5.21	1.42	1.47
21	N	801	THR	CA-C	-5.21	1.45	1.52
24	Q	406	ASP	N-CA	-5.21	1.40	1.46
24	Q	358	GLU	CA-CB	5.21	1.62	1.53
8	h	120	TYR	CZ-OH	5.21	1.49	1.38
10	j	26	ASP	CA-CB	5.21	1.60	1.53
2	B	125	GLY	CA-C	-5.21	1.41	1.52
3	C	94	HIS	CG-CD2	5.21	1.41	1.35
6	F	60	GLN	CA-C	-5.21	1.46	1.52
31	L	357	ARG	C-N	-5.21	1.26	1.33
4	D	158	SER	C-N	5.21	1.40	1.33
32	M	426	LYS	C-N	5.21	1.41	1.33
7	G	28	VAL	CA-CB	-5.21	1.47	1.54
8	1	12	ILE	CA-C	-5.21	1.46	1.52
21	N	88	ARG	CA-CB	5.21	1.61	1.53
27	O	173	SER	N-CA	-5.21	1.40	1.46
31	L	129	VAL	CA-C	-5.21	1.46	1.52
33	J	127	GLU	N-CA	-5.21	1.40	1.46
3	c	219	GLY	CA-C	-5.21	1.43	1.51
10	j	53	ILE	CA-C	-5.21	1.46	1.52
5	E	52	LYS	N-CA	5.21	1.53	1.46
14	7	241	PHE	CA-CB	5.21	1.62	1.53
20	Z	516	THR	N-CA	-5.21	1.40	1.46
21	N	51	ASP	CA-CB	5.21	1.61	1.53
21	N	379	LEU	C-O	-5.21	1.17	1.23
21	N	467	LYS	N-CA	-5.21	1.39	1.46
22	S	144	LEU	N-CA	-5.21	1.40	1.46
32	M	23	LEU	CA-CB	5.21	1.61	1.53
32	M	251	LEU	C-N	5.21	1.40	1.33
5	E	59	LEU	C-N	5.21	1.40	1.33
13	6	190	LYS	C-N	5.20	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	498	ILE	CA-C	-5.20	1.46	1.52
23	P	356	TYR	CA-C	-5.20	1.45	1.52
27	O	72	LYS	CA-C	-5.20	1.45	1.52
31	L	382	MET	N-CA	-5.20	1.40	1.46
22	S	187	ILE	CA-CB	-5.20	1.48	1.54
25	R	164	THR	C-O	5.20	1.30	1.24
28	H	237	THR	CA-C	-5.20	1.46	1.52
9	i	65	ARG	CZ-NH1	5.20	1.40	1.32
14	7	115	ASP	C-N	5.20	1.41	1.33
20	Z	240	ASN	N-CA	-5.20	1.40	1.46
22	S	84	ASP	C-N	5.20	1.41	1.34
25	R	419	ALA	CA-C	-5.20	1.46	1.52
29	I	161	GLN	CA-C	-5.20	1.46	1.52
32	M	403	LEU	CA-C	-5.20	1.46	1.52
17	T	166	SER	CA-CB	5.20	1.62	1.53
23	P	262	SER	CA-CB	5.20	1.61	1.53
23	P	280	LEU	CA-C	-5.20	1.45	1.52
29	I	74	GLU	CA-C	-5.20	1.46	1.52
31	L	244	ILE	N-CA	-5.20	1.39	1.46
32	M	322	LYS	C-N	5.20	1.39	1.33
12	l	197	LEU	C-N	5.20	1.40	1.33
30	K	116	MET	CA-C	-5.20	1.46	1.52
21	N	785	PRO	N-CA	-5.20	1.40	1.47
21	N	819	LYS	CA-C	-5.20	1.46	1.52
23	P	44	LYS	CA-CB	5.20	1.60	1.53
4	d	9	SER	CA-C	-5.19	1.46	1.52
5	E	155	LEU	CA-C	-5.19	1.46	1.52
20	Z	169	VAL	N-CA	-5.19	1.40	1.46
27	O	124	ASP	CA-C	-5.19	1.46	1.52
30	K	230	THR	CA-C	-5.19	1.46	1.52
10	j	80	ARG	CZ-NH2	5.19	1.40	1.33
11	4	14	ILE	N-CA	-5.19	1.39	1.46
20	Z	229	SER	N-CA	-5.19	1.39	1.46
23	P	72	TRP	CA-CB	5.19	1.62	1.53
2	B	186	GLU	CA-C	5.19	1.59	1.52
5	E	20	ARG	NE-CZ	5.19	1.38	1.33
5	E	191	LEU	CA-C	-5.19	1.46	1.52
6	F	102	LYS	CA-C	-5.19	1.46	1.52
12	5	188	TYR	CA-C	-5.19	1.46	1.52
20	Z	240	ASN	CG-ND2	5.19	1.44	1.33
20	Z	840	ARG	C-N	5.19	1.40	1.33
20	Z	909	ARG	CZ-NH1	5.19	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	505	SER	C-N	5.19	1.40	1.33
24	Q	260	GLN	CA-C	-5.19	1.46	1.52
29	I	406	GLU	CA-C	-5.19	1.45	1.52
1	A	219	SER	CA-CB	5.19	1.61	1.53
8	1	166	HIS	CA-CB	5.19	1.61	1.53
20	Z	160	GLU	C-N	5.19	1.40	1.33
24	Q	332	ARG	NE-CZ	5.19	1.38	1.33
25	R	145	GLY	C-N	5.19	1.41	1.33
3	C	3	SER	CA-CB	5.19	1.61	1.53
4	D	24	LEU	CA-C	-5.19	1.46	1.52
5	E	50	VAL	CA-C	-5.19	1.46	1.52
9	2	125	ALA	N-CA	-5.19	1.39	1.46
17	T	260	ILE	C-N	5.19	1.40	1.33
8	1	38	ARG	CZ-NH2	5.19	1.40	1.33
21	N	329	HIS	ND1-CE1	5.19	1.37	1.32
2	b	43	VAL	N-CA	-5.18	1.40	1.46
11	k	96	ARG	CD-NE	5.18	1.53	1.46
6	F	47	VAL	CA-C	-5.18	1.46	1.52
16	V	293	VAL	CA-CB	-5.18	1.47	1.54
20	Z	316	ALA	CA-CB	5.18	1.61	1.53
27	O	303	LYS	CA-CB	5.18	1.61	1.53
30	K	150	LEU	C-N	5.18	1.39	1.33
9	i	225	ARG	CZ-NH2	5.18	1.40	1.33
4	D	189	GLU	C-N	5.18	1.40	1.33
21	N	559	TYR	CA-CB	5.18	1.61	1.53
29	I	343	ARG	C-N	5.18	1.39	1.33
30	K	259	ARG	N-CA	-5.18	1.40	1.46
31	L	174	GLU	C-N	5.18	1.39	1.33
2	b	214	ILE	C-N	5.18	1.41	1.33
16	V	86	VAL	CA-C	-5.18	1.46	1.52
1	a	110	TYR	CA-C	-5.18	1.46	1.52
8	h	17	PHE	N-CA	-5.18	1.39	1.45
14	n	148	ILE	CA-CB	-5.18	1.48	1.54
14	n	194	ARG	CD-NE	5.18	1.53	1.46
21	N	463	TYR	CA-CB	5.18	1.61	1.53
30	K	144	ASN	C-N	5.18	1.40	1.33
31	L	403	ILE	CA-CB	-5.18	1.47	1.54
12	5	218	ASN	C-N	5.18	1.40	1.33
15	W	170	HIS	ND1-CE1	5.18	1.37	1.32
21	N	566	SER	CA-C	-5.18	1.46	1.52
3	c	69	LEU	N-CA	-5.18	1.39	1.46
7	G	109	ILE	C-N	5.18	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	3	24	ALA	N-CA	5.18	1.52	1.45
2	b	157	PHE	CB-CG	-5.17	1.38	1.50
9	i	91	ASN	CA-CB	5.17	1.61	1.53
13	6	128	GLY	CA-C	-5.17	1.46	1.52
25	R	81	HIS	CA-C	5.17	1.59	1.52
32	M	48	LEU	C-N	5.17	1.40	1.33
3	C	90	THR	CA-C	-5.17	1.46	1.52
15	W	85	LEU	CA-C	-5.17	1.46	1.52
16	V	84	ASP	CA-C	-5.17	1.46	1.52
25	R	313	ALA	C-N	5.17	1.40	1.33
4	d	218	ASP	C-N	5.17	1.41	1.33
7	g	136	THR	CA-C	-5.17	1.46	1.52
7	g	187	LEU	C-O	-5.17	1.17	1.23
3	C	225	VAL	CA-C	-5.17	1.46	1.52
3	C	229	ILE	CA-C	-5.17	1.46	1.52
7	G	218	TRP	NE1-CE2	5.17	1.43	1.37
8	1	144	TYR	N-CA	5.17	1.52	1.46
13	6	199	ALA	CA-C	-5.17	1.46	1.52
14	7	134	TYR	N-CA	-5.17	1.40	1.46
17	T	108	LEU	C-O	-5.17	1.18	1.24
21	N	758	VAL	CA-CB	5.17	1.60	1.53
26	U	127	GLN	CA-C	-5.17	1.45	1.52
4	D	59	ILE	C-O	5.17	1.30	1.24
9	i	120	GLN	CA-C	5.17	1.60	1.53
10	j	75	LYS	CA-C	-5.17	1.45	1.52
20	Z	287	ARG	CZ-NH1	5.17	1.40	1.32
21	N	334	VAL	N-CA	-5.17	1.40	1.46
30	K	306	PHE	C-N	5.17	1.40	1.33
10	j	84	PRO	C-N	5.17	1.40	1.33
12	l	77	THR	CA-C	5.17	1.58	1.52
3	C	186	VAL	N-CA	-5.17	1.39	1.46
4	D	83	ARG	C-N	5.17	1.40	1.33
21	N	308	ASN	CA-CB	5.17	1.60	1.53
23	P	280	LEU	C-N	5.17	1.39	1.34
26	U	223	HIS	N-CA	-5.17	1.40	1.46
27	O	307	MET	CA-C	-5.17	1.46	1.52
28	H	162	ARG	N-CA	-5.17	1.39	1.46
29	I	54	ARG	CA-CB	5.17	1.62	1.53
10	j	198	ARG	CA-C	-5.17	1.46	1.52
20	Z	357	ILE	CA-C	-5.17	1.45	1.52
20	Z	931	GLN	CA-CB	5.17	1.62	1.53
27	O	95	SER	CA-C	-5.17	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	H	375	VAL	CA-C	5.17	1.59	1.52
32	M	417	GLU	N-CA	-5.17	1.39	1.46
8	h	54	ARG	NE-CZ	5.16	1.38	1.33
1	A	59	VAL	N-CA	-5.16	1.40	1.46
11	4	101	ASN	CG-ND2	5.16	1.44	1.33
21	N	686	ILE	N-CA	-5.16	1.40	1.46
24	Q	113	ASP	N-CA	-5.16	1.40	1.46
31	L	387	ASN	CA-CB	5.16	1.62	1.54
1	a	150	LEU	C-N	5.16	1.41	1.33
6	F	153	VAL	N-CA	-5.16	1.40	1.46
10	3	67	PHE	C-N	5.16	1.40	1.33
21	N	851	GLU	CB-CG	5.16	1.68	1.52
11	k	34	LYS	CA-C	-5.16	1.45	1.52
2	B	165	GLY	N-CA	-5.16	1.38	1.45
3	C	92	ARG	CD-NE	5.16	1.53	1.46
15	W	28	ALA	N-CA	-5.16	1.40	1.46
16	V	216	LEU	N-CA	-5.16	1.38	1.46
17	T	245	TYR	CA-C	-5.16	1.46	1.52
23	P	123	ARG	C-N	5.16	1.40	1.33
24	Q	255	TYR	N-CA	-5.16	1.40	1.46
32	M	269	LEU	N-CA	-5.16	1.40	1.46
1	A	159	PRO	C-N	5.16	1.40	1.33
3	C	94	HIS	ND1-CE1	5.16	1.37	1.32
11	4	36	ARG	N-CA	5.16	1.52	1.46
16	V	238	LEU	CA-CB	5.16	1.61	1.53
2	b	74	VAL	CA-C	-5.16	1.46	1.52
6	F	9	ASP	CA-C	-5.16	1.46	1.52
12	5	156	LYS	CA-C	5.16	1.59	1.52
9	i	217	ARG	CZ-NH2	5.16	1.40	1.33
10	j	96	TYR	N-CA	-5.16	1.39	1.46
11	k	125	LYS	C-N	5.16	1.40	1.33
5	E	205	LYS	C-N	5.16	1.41	1.33
15	W	172	LEU	C-N	5.16	1.40	1.33
26	U	66	TRP	CZ2-CH2	5.16	1.47	1.37
27	O	342	ASP	N-CA	-5.16	1.39	1.45
31	L	116	LYS	C-N	5.16	1.40	1.33
5	e	38	ILE	CA-C	-5.15	1.46	1.52
17	T	249	MET	C-N	5.15	1.41	1.33
21	N	708	ALA	CA-C	-5.15	1.46	1.52
32	M	415	PHE	CA-CB	5.15	1.61	1.53
1	a	164	VAL	CA-CB	-5.15	1.50	1.55
6	f	55	GLU	N-CA	-5.15	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	k	159	ASP	C-N	5.15	1.41	1.33
12	l	283	ASN	C-N	5.15	1.41	1.33
14	n	109	TYR	CA-C	-5.15	1.46	1.52
4	D	220	ASP	CA-C	-5.15	1.46	1.53
6	F	53	ALA	CA-C	-5.15	1.46	1.53
13	6	173	ASN	CA-C	-5.15	1.46	1.53
24	Q	260	GLN	C-N	5.15	1.40	1.33
28	H	359	ASN	CA-C	-5.15	1.45	1.52
32	M	124	ARG	C-N	5.15	1.40	1.33
4	d	249	LYS	CA-C	-5.15	1.46	1.52
14	7	95	HIS	ND1-CE1	5.15	1.37	1.32
22	S	373	LYS	CA-C	-5.15	1.46	1.52
4	D	90	ARG	N-CA	5.15	1.52	1.46
3	c	105	ASP	C-N	5.15	1.38	1.33
7	G	151	LEU	N-CA	-5.15	1.40	1.46
12	5	86	GLY	C-N	5.15	1.40	1.33
12	5	124	ALA	CA-C	-5.15	1.46	1.52
22	S	51	ARG	CD-NE	5.15	1.53	1.46
22	S	326	ASP	C-O	-5.15	1.18	1.24
30	K	198	TYR	C-N	5.15	1.41	1.33
31	L	363	ILE	CA-C	-5.15	1.44	1.52
27	O	346	GLU	CA-C	-5.15	1.46	1.53
4	D	121	THR	C-N	5.14	1.39	1.33
13	6	105	LEU	N-CA	-5.14	1.40	1.46
24	Q	248	ASN	CA-C	5.14	1.59	1.52
31	L	109	MET	N-CA	-5.14	1.39	1.46
31	L	318	LEU	CA-C	-5.14	1.46	1.52
1	a	131	ARG	CD-NE	5.14	1.53	1.46
1	a	174	LYS	C-N	5.14	1.41	1.33
12	l	156	LYS	C-N	5.14	1.40	1.33
7	G	74	ILE	CA-C	-5.14	1.46	1.52
28	H	77	ALA	C-N	5.14	1.39	1.34
13	6	122	LEU	N-CA	-5.14	1.39	1.45
14	7	177	THR	N-CA	-5.14	1.39	1.45
20	Z	37	GLN	CA-CB	5.14	1.62	1.53
21	N	459	ASN	N-CA	5.14	1.52	1.46
8	h	125	GLY	CA-C	-5.14	1.44	1.51
10	j	65	GLU	CA-CB	5.14	1.62	1.53
2	B	216	ASP	N-CA	-5.14	1.39	1.45
12	5	222	ASP	CA-CB	5.14	1.60	1.52
20	Z	192	GLY	N-CA	-5.14	1.39	1.45
20	Z	388	GLY	CA-C	5.14	1.57	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	640	VAL	C-N	5.14	1.41	1.33
21	N	924	LYS	CA-CB	5.14	1.61	1.53
27	O	326	HIS	N-CA	5.14	1.52	1.46
31	L	419	VAL	CA-C	-5.14	1.46	1.52
33	J	388	LYS	N-CA	-5.14	1.40	1.46
30	K	248	GLY	C-N	5.14	1.41	1.33
2	b	11	THR	C-N	5.14	1.40	1.33
5	e	166	ARG	CZ-NH1	5.14	1.40	1.32
12	l	236	ILE	C-O	-5.14	1.17	1.24
11	4	116	LEU	N-CA	-5.14	1.39	1.46
15	W	72	ILE	N-CA	5.14	1.52	1.46
15	W	191	ILE	C-N	5.14	1.41	1.33
17	T	240	LYS	C-O	-5.14	1.18	1.24
21	N	554	THR	CA-CB	5.14	1.61	1.53
26	U	256	ASN	CA-C	-5.14	1.46	1.52
27	O	11	LEU	C-N	5.14	1.40	1.33
28	H	359	ASN	CA-CB	5.14	1.61	1.53
32	M	141	LYS	N-CA	-5.14	1.38	1.46
10	3	95	LEU	CA-C	-5.13	1.46	1.52
22	S	343	LEU	C-N	5.13	1.40	1.33
24	Q	244	GLU	CA-C	-5.13	1.45	1.52
33	J	339	ARG	CZ-NH1	5.13	1.40	1.32
7	g	12	ASN	CG-ND2	5.13	1.44	1.33
10	j	45	HIS	CA-C	-5.13	1.46	1.52
6	F	145	LEU	CA-C	-5.13	1.46	1.52
20	Z	186	GLY	CA-C	-5.13	1.43	1.51
20	Z	483	THR	C-N	5.13	1.40	1.33
21	N	694	LEU	CA-C	-5.13	1.46	1.52
9	i	245	SER	CA-C	-5.13	1.46	1.52
10	j	65	GLU	CA-C	-5.13	1.45	1.52
14	n	241	PHE	N-CA	-5.13	1.40	1.46
2	B	26	THR	CA-C	-5.13	1.46	1.52
6	F	24	TYR	CZ-OH	5.13	1.48	1.38
14	7	185	ASN	C-O	-5.13	1.19	1.24
26	U	79	MET	CA-C	-5.13	1.46	1.52
30	K	244	HIS	CG-ND1	5.13	1.43	1.38
28	H	97	LEU	N-CA	-5.13	1.40	1.46
33	J	296	ARG	CD-NE	5.13	1.53	1.46
5	e	214	GLU	N-CA	-5.13	1.39	1.46
8	h	41	ASP	C-N	5.13	1.41	1.33
13	m	110	PHE	C-N	5.13	1.40	1.33
4	D	107	GLU	C-N	5.13	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	2	217	ARG	CD-NE	5.13	1.53	1.46
15	W	17	ARG	CD-NE	5.13	1.53	1.46
22	S	331	SER	N-CA	-5.13	1.40	1.46
26	U	284	SER	C-N	5.13	1.40	1.33
32	M	345	ARG	NE-CZ	5.13	1.38	1.33
32	M	16	ASP	CA-C	-5.13	1.46	1.52
4	d	183	GLU	CA-C	-5.12	1.47	1.52
7	g	20	ARG	CZ-NH1	5.12	1.40	1.32
33	J	322	ALA	CA-C	-5.12	1.46	1.52
13	m	116	HIS	CE1-NE2	5.12	1.37	1.32
11	4	126	VAL	N-CA	-5.12	1.40	1.46
20	Z	242	PHE	CA-C	-5.12	1.46	1.52
22	S	93	LEU	N-CA	-5.12	1.40	1.46
26	U	169	ILE	C-O	-5.12	1.18	1.24
30	K	172	ALA	C-N	5.12	1.40	1.33
30	K	354	GLY	N-CA	-5.12	1.39	1.45
33	J	373	ARG	CZ-NH2	5.12	1.40	1.33
10	j	116	SER	C-N	5.12	1.40	1.33
11	4	133	HIS	CA-CB	5.12	1.62	1.53
21	N	36	TRP	NE1-CE2	5.12	1.43	1.37
25	R	43	ARG	CD-NE	5.12	1.53	1.46
30	K	244	HIS	CD2-NE2	5.12	1.43	1.37
20	Z	886	VAL	C-O	-5.12	1.17	1.24
30	K	204	ASP	CA-CB	5.12	1.61	1.53
30	K	262	ARG	C-N	5.12	1.40	1.33
5	e	35	SER	CA-C	-5.12	1.46	1.52
10	j	12	VAL	CA-CB	5.12	1.61	1.54
4	D	15	GLY	C-N	5.12	1.40	1.33
4	D	127	ARG	NE-CZ	5.12	1.38	1.33
5	E	98	THR	CA-CB	-5.12	1.45	1.53
13	6	116	HIS	ND1-CE1	5.12	1.37	1.32
20	Z	106	TRP	NE1-CE2	5.12	1.43	1.37
20	Z	144	SER	CA-C	-5.12	1.46	1.52
20	Z	608	TYR	N-CA	-5.12	1.39	1.46
24	Q	162	LEU	CA-CB	5.12	1.62	1.54
28	H	148	ASN	N-CA	-5.12	1.39	1.46
6	F	134	ILE	N-CA	-5.12	1.39	1.46
14	7	149	VAL	C-N	5.12	1.40	1.33
15	W	40	LYS	N-CA	-5.12	1.40	1.46
22	S	343	LEU	CA-CB	5.12	1.60	1.53
29	I	307	LEU	CB-CG	5.12	1.63	1.53
30	K	238	ASN	N-CA	-5.12	1.39	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	K	318	THR	C-N	5.12	1.41	1.33
4	d	90	ARG	CZ-NH1	5.12	1.40	1.32
1	A	48	LYS	CA-CB	-5.12	1.45	1.53
4	D	91	VAL	C-N	5.12	1.40	1.34
25	R	405	LYS	N-CA	-5.12	1.40	1.46
28	H	436	LYS	C-N	5.12	1.40	1.33
10	3	119	PRO	N-CA	-5.11	1.40	1.47
21	N	87	ASP	CA-C	-5.11	1.46	1.52
27	O	170	SER	C-N	5.11	1.40	1.33
28	H	246	ILE	CA-C	-5.11	1.46	1.52
3	C	40	ALA	N-CA	-5.11	1.40	1.46
10	3	186	VAL	C-N	5.11	1.40	1.33
14	7	193	ASP	CA-C	-5.11	1.46	1.53
33	J	395	GLU	CA-C	-5.11	1.46	1.52
1	a	129	THR	CA-C	-5.11	1.45	1.52
4	d	114	ALA	N-CA	5.11	1.52	1.46
4	d	232	TYR	CA-CB	5.11	1.61	1.53
7	G	29	LYS	CA-C	5.11	1.59	1.52
7	G	130	ARG	CZ-NH1	5.11	1.40	1.32
13	6	60	MET	CA-C	-5.11	1.46	1.52
21	N	340	HIS	CA-C	-5.11	1.45	1.52
6	f	233	TYR	C-O	-5.11	1.17	1.24
13	m	219	GLY	C-N	5.11	1.40	1.33
21	N	579	SER	CA-C	5.11	1.59	1.52
25	R	172	LEU	C-O	-5.11	1.18	1.24
31	L	386	PHE	C-O	-5.11	1.17	1.23
33	J	64	LEU	N-CA	-5.11	1.39	1.46
6	f	197	ILE	CA-C	-5.11	1.46	1.52
2	B	17	LYS	CA-CB	5.11	1.62	1.53
4	D	96	HIS	CG-ND1	-5.11	1.32	1.38
8	1	164	ILE	N-CA	-5.11	1.40	1.46
10	3	15	MET	CA-CB	5.11	1.64	1.53
17	T	170	ASN	C-N	5.11	1.40	1.33
20	Z	742	GLY	CA-C	5.11	1.57	1.52
21	N	686	ILE	C-N	5.11	1.40	1.33
22	S	462	ASP	CA-C	5.11	1.59	1.52
27	O	366	MET	CA-CB	5.11	1.61	1.53
29	I	302	ILE	CA-C	-5.11	1.46	1.52
2	b	239	THR	CA-CB	-5.11	1.45	1.53
5	e	228	PHE	N-CA	-5.11	1.40	1.46
16	V	82	ALA	C-N	5.11	1.39	1.33
27	O	242	ILE	C-N	5.11	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	M	245	LYS	N-CA	-5.11	1.39	1.46
33	J	401	ALA	CA-C	-5.11	1.46	1.52
3	c	128	LEU	N-CA	-5.10	1.39	1.46
11	k	181	VAL	CA-C	-5.10	1.46	1.52
12	l	121	ALA	C-N	5.10	1.41	1.33
7	G	152	GLU	CA-CB	5.10	1.60	1.53
24	Q	127	ARG	CA-CB	5.10	1.61	1.53
2	b	186	GLU	CA-C	5.10	1.59	1.52
13	6	160	ASN	CA-C	5.10	1.59	1.52
20	Z	938	GLN	CA-CB	5.10	1.61	1.53
21	N	169	ALA	C-N	5.10	1.40	1.33
22	S	220	ILE	CA-C	5.10	1.59	1.52
31	L	309	LEU	N-CA	-5.10	1.40	1.46
14	n	185	ASN	C-N	5.10	1.41	1.33
2	B	128	ARG	CA-C	-5.10	1.46	1.52
20	Z	433	LEU	N-CA	-5.10	1.39	1.46
21	N	574	VAL	N-CA	-5.10	1.40	1.46
31	L	161	ARG	NE-CZ	5.10	1.38	1.33
4	d	85	LEU	C-O	-5.10	1.17	1.24
1	A	140	ILE	CA-C	-5.10	1.46	1.52
2	B	55	LEU	N-CA	-5.10	1.39	1.46
11	4	90	LYS	CA-CB	5.10	1.61	1.53
22	S	479	MET	N-CA	-5.10	1.40	1.46
33	J	268	VAL	CA-CB	-5.10	1.48	1.54
1	a	57	LYS	CA-C	-5.10	1.46	1.52
1	a	232	LYS	CA-CB	-5.10	1.45	1.53
12	5	94	ARG	CZ-NH2	5.10	1.40	1.33
12	5	282	PHE	CA-C	-5.10	1.46	1.52
14	7	124	TYR	CA-CB	5.10	1.61	1.53
15	W	51	LEU	C-O	-5.10	1.18	1.24
20	Z	601	VAL	CA-CB	-5.10	1.47	1.54
28	H	216	ASP	CA-CB	5.10	1.61	1.53
28	H	292	ARG	CD-NE	5.10	1.53	1.46
29	I	219	VAL	CA-C	-5.10	1.46	1.52
8	1	15	VAL	CA-C	-5.10	1.46	1.52
21	N	441	VAL	CA-C	-5.10	1.46	1.52
5	e	70	ILE	C-N	5.09	1.39	1.33
1	A	101	ALA	CA-C	-5.09	1.46	1.52
1	A	114	CYS	CA-CB	-5.09	1.45	1.53
17	T	79	GLU	CA-C	-5.09	1.46	1.52
21	N	47	GLU	CA-CB	5.09	1.61	1.53
21	N	85	ALA	N-CA	-5.09	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	Q	25	GLN	CA-CB	5.09	1.61	1.53
24	Q	209	TYR	CA-CB	5.09	1.61	1.53
27	O	140	LYS	N-CA	5.09	1.52	1.46
6	f	98	VAL	C-N	5.09	1.40	1.33
5	E	106	ASP	C-N	5.09	1.39	1.33
5	e	248	ALA	N-CA	-5.09	1.40	1.46
3	C	28	SER	N-CA	-5.09	1.39	1.46
6	F	26	LEU	N-CA	5.09	1.52	1.46
6	F	73	SER	C-O	-5.09	1.17	1.23
8	l	21	VAL	N-CA	-5.09	1.40	1.46
15	W	110	ILE	CA-CB	-5.09	1.47	1.54
22	S	40	GLU	C-O	-5.09	1.18	1.24
28	H	409	ARG	CD-NE	5.09	1.53	1.46
32	M	303	ARG	CD-NE	5.09	1.53	1.46
5	e	133	LEU	CA-C	-5.09	1.46	1.52
10	j	50	PHE	C-O	-5.09	1.18	1.24
1	A	125	SER	C-N	5.09	1.40	1.33
2	B	190	HIS	CE1-NE2	-5.09	1.27	1.32
9	2	160	SER	N-CA	-5.09	1.40	1.46
13	6	76	PHE	C-O	-5.09	1.18	1.24
20	Z	594	PRO	N-CA	-5.09	1.40	1.47
24	Q	252	HIS	CA-CB	5.09	1.62	1.53
32	M	89	ASN	N-CA	-5.09	1.40	1.46
33	J	224	GLY	CA-C	5.09	1.58	1.51
14	n	200	LYS	CA-C	-5.09	1.45	1.52
2	B	66	LEU	N-CA	-5.09	1.39	1.46
13	m	207	GLY	CA-C	-5.09	1.46	1.51
18	X	95	GLU	C-N	5.09	1.40	1.33
23	P	148	LYS	C-N	5.09	1.40	1.33
27	O	235	HIS	CE1-NE2	-5.09	1.27	1.32
31	L	122	SER	N-CA	-5.09	1.40	1.46
8	h	24	GLY	CA-C	5.08	1.59	1.51
29	I	156	ILE	CA-C	-5.08	1.48	1.53
31	L	137	ARG	CZ-NH2	5.08	1.40	1.33
3	c	227	GLN	N-CA	-5.08	1.39	1.46
14	n	44	VAL	CA-CB	-5.08	1.48	1.54
14	n	243	LYS	N-CA	-5.08	1.40	1.45
20	Z	139	LEU	C-O	-5.08	1.17	1.24
24	Q	247	HIS	ND1-CE1	5.08	1.37	1.32
25	R	31	PHE	C-O	-5.08	1.18	1.24
11	k	45	SER	C-N	5.08	1.40	1.33
12	l	281	SER	C-N	5.08	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	189	ILE	N-CA	-5.08	1.40	1.46
11	4	164	CYS	CA-CB	5.08	1.61	1.53
14	7	136	ARG	CA-C	-5.08	1.45	1.52
15	W	48	THR	CA-C	-5.08	1.46	1.52
23	P	57	GLU	N-CA	-5.08	1.40	1.46
29	I	283	GLU	CA-CB	5.08	1.62	1.53
14	n	223	ARG	NE-CZ	5.08	1.38	1.33
33	J	170	HIS	CA-CB	5.08	1.61	1.53
3	C	25	ALA	CA-C	-5.08	1.46	1.52
13	6	120	ALA	N-CA	-5.08	1.39	1.46
17	T	96	LEU	CA-CB	5.08	1.59	1.52
20	Z	267	THR	CA-CB	5.08	1.61	1.53
20	Z	774	ARG	CZ-NH1	5.08	1.39	1.32
21	N	14	ARG	CZ-NH1	5.08	1.39	1.32
24	Q	408	THR	N-CA	-5.08	1.40	1.46
29	I	265	ARG	CD-NE	5.08	1.53	1.46
5	e	205	LYS	C-N	5.08	1.40	1.33
25	R	157	SER	CA-CB	5.08	1.61	1.53
5	E	157	HIS	C-O	-5.08	1.18	1.24
15	W	9	VAL	CA-CB	-5.08	1.48	1.54
21	N	375	HIS	CG-ND1	-5.08	1.32	1.38
21	N	509	GLN	C-N	5.08	1.40	1.33
21	N	598	ASP	N-CA	-5.08	1.40	1.46
28	H	238	LEU	CA-CB	5.08	1.61	1.53
32	M	232	ALA	C-N	5.08	1.40	1.33
8	l	129	HIS	CA-C	-5.07	1.46	1.52
17	T	94	HIS	CA-C	-5.07	1.46	1.52
23	P	115	ARG	NE-CZ	5.07	1.38	1.33
12	l	238	ALA	CA-CB	5.07	1.61	1.53
13	m	47	TYR	CA-C	-5.07	1.46	1.52
13	m	198	SER	CA-CB	5.07	1.61	1.53
6	F	64	ILE	CA-C	-5.07	1.46	1.52
6	F	202	ARG	CD-NE	5.07	1.53	1.46
11	4	132	ALA	C-N	5.07	1.39	1.33
19	Y	66	ASP	CA-C	5.07	1.59	1.52
22	S	44	THR	N-CA	-5.07	1.39	1.46
22	S	233	LEU	CA-C	-5.07	1.46	1.52
23	P	365	LEU	CA-C	-5.07	1.45	1.52
31	L	271	LYS	N-CA	-5.07	1.39	1.46
8	h	127	SER	N-CA	-5.07	1.40	1.46
1	A	122	ALA	CA-C	-5.07	1.46	1.52
16	V	22	ASP	C-N	5.07	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	H	438	ALA	N-CA	-5.07	1.39	1.45
29	I	428	VAL	CA-CB	-5.07	1.49	1.54
33	J	297	LEU	CA-CB	5.07	1.61	1.53
12	l	247	GLY	C-N	-5.07	1.26	1.33
9	2	52	GLY	C-N	5.07	1.40	1.34
16	V	188	LEU	C-O	-5.07	1.18	1.24
27	O	339	GLY	N-CA	-5.07	1.40	1.45
12	l	176	ILE	CA-CB	5.07	1.60	1.54
5	E	86	ARG	CA-CB	5.07	1.61	1.53
6	F	143	HIS	ND1-CE1	5.07	1.37	1.32
23	P	350	LEU	C-O	-5.07	1.17	1.24
25	R	67	CYS	N-CA	-5.07	1.39	1.46
25	R	187	VAL	C-N	5.07	1.40	1.33
26	U	230	GLN	C-N	5.07	1.41	1.33
27	O	300	VAL	CA-C	5.07	1.59	1.52
28	H	222	ARG	C-N	5.07	1.41	1.34
29	I	254	GLN	CA-CB	5.07	1.62	1.53
4	d	106	VAL	CA-CB	-5.06	1.47	1.54
14	n	40	THR	C-O	-5.06	1.17	1.23
22	S	374	ASP	C-N	5.06	1.40	1.33
30	K	255	ARG	C-N	5.06	1.40	1.33
31	L	126	ARG	NE-CZ	5.06	1.38	1.33
31	L	276	CYS	C-N	5.06	1.40	1.33
5	e	25	GLU	CA-C	5.06	1.59	1.52
11	k	32	ASP	N-CA	-5.06	1.39	1.46
12	l	137	GLN	CD-NE2	5.06	1.43	1.33
17	T	238	GLN	CA-C	-5.06	1.46	1.52
20	Z	157	LEU	N-CA	-5.06	1.40	1.46
27	O	122	HIS	CA-CB	5.06	1.63	1.53
27	O	309	SER	CA-C	-5.06	1.46	1.53
28	H	115	THR	CB-OG1	-5.06	1.35	1.43
33	J	244	ILE	CA-CB	-5.06	1.47	1.54
4	d	220	ASP	CA-CB	5.06	1.59	1.53
24	Q	169	ASP	C-N	5.06	1.41	1.33
4	d	171	VAL	N-CA	-5.06	1.40	1.46
3	C	169	THR	C-O	-5.06	1.18	1.24
5	E	136	ARG	CD-NE	5.06	1.53	1.46
8	1	45	ARG	NE-CZ	5.06	1.38	1.33
9	2	126	TYR	N-CA	-5.06	1.40	1.46
22	S	47	THR	C-N	5.06	1.40	1.33
24	Q	25	GLN	C-N	5.06	1.40	1.33
26	U	286	ILE	N-CA	-5.06	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	H	283	TYR	C-N	5.06	1.38	1.33
1	A	185	HIS	CG-CD2	-5.06	1.30	1.35
6	F	6	TYR	CB-CG	-5.06	1.40	1.51
21	N	256	GLN	C-N	5.06	1.40	1.33
28	H	341	ASP	CA-CB	5.06	1.62	1.53
30	K	111	SER	N-CA	-5.06	1.40	1.46
30	K	271	ILE	CA-C	-5.06	1.46	1.52
9	i	142	ILE	CA-C	-5.06	1.46	1.52
3	c	54	SER	CA-CB	5.05	1.62	1.53
7	g	52	LYS	C-N	5.05	1.40	1.33
14	7	53	VAL	N-CA	5.05	1.51	1.46
25	R	141	TYR	C-N	5.05	1.41	1.34
28	H	400	ARG	CZ-NH2	5.05	1.40	1.33
33	J	385	ALA	N-CA	5.05	1.52	1.46
8	1	48	ASP	C-N	5.05	1.41	1.34
1	a	113	PRO	C-O	-5.05	1.18	1.23
8	h	105	GLY	C-N	5.05	1.40	1.33
10	j	76	LEU	CA-C	-5.05	1.46	1.52
1	A	143	PHE	CG-CD1	5.05	1.49	1.38
7	G	37	SER	N-CA	-5.05	1.40	1.46
25	R	44	LYS	C-O	-5.05	1.17	1.24
33	J	4	ALA	N-CA	-5.05	1.41	1.46
33	J	369	ALA	C-N	5.05	1.40	1.33
5	e	127	ALA	CA-C	-5.05	1.46	1.52
1	A	15	HIS	CD2-NE2	5.05	1.43	1.37
1	A	193	HIS	C-N	5.05	1.40	1.33
16	V	128	SER	CA-C	-5.05	1.46	1.52
25	R	165	GLY	CA-C	-5.05	1.46	1.51
26	U	57	GLU	CA-C	-5.05	1.46	1.52
29	I	368	LYS	C-N	5.05	1.40	1.33
11	4	92	ILE	CA-CB	-5.05	1.47	1.54
13	6	38	ILE	CA-C	-5.05	1.47	1.52
27	O	112	LYS	N-CA	-5.05	1.40	1.46
31	L	100	SER	CA-C	-5.05	1.46	1.52
5	e	57	PRO	N-CA	-5.05	1.44	1.47
10	3	28	ARG	N-CA	-5.05	1.39	1.46
12	5	210	PHE	CA-C	-5.05	1.46	1.52
21	N	82	ALA	C-N	5.05	1.41	1.33
24	Q	164	GLU	C-N	5.05	1.40	1.33
29	I	68	HIS	ND1-CE1	5.05	1.37	1.32
10	3	92	SER	CA-C	-5.04	1.46	1.52
18	X	73	THR	CA-C	-5.04	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	2	89	GLY	C-N	5.04	1.40	1.33
9	2	167	LEU	C-O	-5.04	1.18	1.24
15	W	139	VAL	N-CA	5.04	1.52	1.46
20	Z	905	ASN	C-N	5.04	1.39	1.33
21	N	341	ALA	CA-C	-5.04	1.46	1.52
21	N	600	THR	C-N	5.04	1.41	1.33
31	L	220	LEU	CA-C	-5.04	1.46	1.52
32	M	47	GLU	N-CA	-5.04	1.39	1.46
32	M	426	LYS	N-CA	-5.04	1.41	1.46
1	a	97	ALA	N-CA	-5.04	1.40	1.46
3	c	94	HIS	CE1-NE2	-5.04	1.27	1.32
8	h	187	LEU	CA-CB	5.04	1.61	1.53
14	n	123	SER	N-CA	5.04	1.52	1.46
4	D	14	ASP	N-CA	-5.04	1.41	1.46
6	F	43	HIS	ND1-CE1	5.04	1.37	1.32
10	3	34	LEU	C-N	5.04	1.36	1.33
14	7	86	ILE	CB-CG1	5.04	1.63	1.53
22	S	18	LEU	N-CA	5.04	1.55	1.46
3	c	24	TYR	CA-CB	5.04	1.61	1.53
8	1	12	ILE	N-CA	-5.04	1.40	1.46
17	T	270	ILE	CB-CG1	5.04	1.63	1.53
21	N	642	ASP	N-CA	-5.04	1.42	1.46
33	J	182	PRO	C-O	-5.04	1.17	1.24
2	b	99	ARG	NE-CZ	5.04	1.38	1.33
9	i	85	THR	N-CA	-5.04	1.40	1.46
3	C	237	ASP	CA-CB	5.04	1.61	1.53
12	5	249	SER	N-CA	-5.04	1.39	1.45
21	N	570	ARG	C-O	-5.04	1.18	1.24
23	P	364	ARG	NE-CZ	5.04	1.38	1.33
24	Q	276	ASP	CA-CB	5.04	1.61	1.53
30	K	262	ARG	NE-CZ	5.04	1.38	1.33
33	J	369	ALA	CA-C	-5.04	1.46	1.52
2	b	202	GLY	C-N	5.04	1.40	1.33
1	a	140	ILE	C-N	5.04	1.40	1.33
14	n	236	ASN	C-N	5.04	1.40	1.33
7	G	91	ARG	NE-CZ	5.04	1.38	1.33
14	7	112	PRO	N-CD	5.04	1.54	1.47
21	N	26	GLU	CA-CB	5.04	1.61	1.53
22	S	267	SER	N-CA	5.04	1.52	1.46
25	R	47	ALA	CA-C	5.04	1.59	1.52
28	H	328	GLU	CA-CB	5.04	1.61	1.53
32	M	53	HIS	N-CA	-5.04	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	M	228	LYS	CA-C	5.04	1.59	1.52
1	a	78	THR	C-N	5.03	1.39	1.33
14	n	135	GLN	CA-CB	5.03	1.61	1.53
21	N	309	ILE	CA-CB	5.03	1.60	1.54
22	S	36	LYS	C-N	5.03	1.40	1.33
24	Q	160	ASP	CA-CB	5.03	1.61	1.53
25	R	263	ARG	CZ-NH2	5.03	1.40	1.33
6	F	198	SER	CA-C	-5.03	1.45	1.52
15	W	146	GLU	CA-CB	5.03	1.61	1.53
30	K	381	ALA	C-N	5.03	1.40	1.33
2	b	96	SER	CA-C	-5.03	1.46	1.52
4	d	55	GLN	N-CA	-5.03	1.40	1.46
6	f	76	GLY	C-N	5.03	1.40	1.33
13	m	212	ILE	C-N	5.03	1.40	1.33
2	B	81	ASP	CA-C	-5.03	1.46	1.52
7	G	158	TRP	NE1-CE2	-5.03	1.31	1.37
21	N	26	GLU	C-N	-5.03	1.27	1.33
21	N	813	ARG	CZ-NH2	5.03	1.40	1.33
28	H	336	LEU	N-CA	-5.03	1.40	1.46
6	f	64	ILE	N-CA	-5.03	1.39	1.46
11	k	7	ILE	CA-C	-5.03	1.46	1.52
14	n	150	ALA	CA-C	-5.03	1.46	1.52
5	E	190	SER	C-N	5.03	1.40	1.33
6	F	179	PHE	CA-CB	5.03	1.61	1.53
14	7	220	ARG	CZ-NH1	5.03	1.39	1.32
20	Z	523	ALA	CA-CB	-5.03	1.46	1.53
32	M	115	LYS	C-N	5.03	1.40	1.33
32	M	346	LYS	C-N	5.03	1.41	1.33
33	J	248	ASP	N-CA	-5.03	1.40	1.46
3	c	151	SER	CA-C	-5.03	1.46	1.52
7	g	169	ARG	C-N	5.03	1.40	1.33
4	D	131	VAL	CA-C	-5.03	1.46	1.52
5	E	109	VAL	C-N	5.03	1.40	1.33
20	Z	126	TYR	C-N	5.03	1.41	1.33
21	N	437	GLU	N-CA	-5.03	1.40	1.46
21	N	786	ARG	CD-NE	5.03	1.53	1.46
30	K	386	ILE	CA-C	5.03	1.59	1.52
33	J	377	VAL	N-CA	-5.03	1.40	1.46
5	E	108	ASN	C-N	5.02	1.40	1.33
16	V	58	VAL	N-CA	5.02	1.51	1.46
22	S	294	ILE	C-N	5.02	1.40	1.33
3	C	9	ARG	NE-CZ	5.02	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	F	24	TYR	C-N	5.02	1.40	1.33
7	G	217	SER	N-CA	-5.02	1.39	1.45
14	7	200	LYS	C-N	5.02	1.40	1.33
19	Y	82	ASP	CA-CB	5.02	1.61	1.53
20	Z	805	LEU	C-N	5.02	1.40	1.33
22	S	464	ARG	C-N	5.02	1.40	1.33
24	Q	55	GLU	CA-CB	5.02	1.61	1.53
25	R	365	ASP	CA-CB	5.02	1.61	1.53
30	K	199	GLU	C-N	5.02	1.40	1.33
3	C	184	MET	C-O	-5.02	1.17	1.23
6	F	168	ALA	CA-C	-5.02	1.46	1.52
21	N	716	GLN	CA-CB	-5.02	1.45	1.53
30	K	251	PRO	N-CA	5.02	1.54	1.47
31	L	403	ILE	CA-C	5.02	1.59	1.52
3	c	75	VAL	C-N	5.02	1.40	1.33
10	j	190	ILE	CA-CB	-5.02	1.47	1.53
14	n	202	THR	N-CA	-5.02	1.40	1.45
17	T	24	GLU	CA-C	5.02	1.59	1.52
22	S	367	TYR	N-CA	-5.02	1.40	1.46
26	U	102	SER	N-CA	-5.02	1.39	1.46
27	O	364	THR	CA-C	-5.02	1.46	1.52
30	K	393	ARG	CD-NE	5.02	1.53	1.46
32	M	387	ASN	C-N	5.02	1.40	1.33
14	n	50	ASP	CA-C	-5.02	1.46	1.52
3	C	92	ARG	N-CA	-5.02	1.40	1.46
6	F	72	LEU	CA-C	-5.02	1.46	1.52
23	P	423	LEU	CA-CB	5.02	1.61	1.53
27	O	28	GLN	CA-CB	5.02	1.61	1.53
27	O	232	GLU	C-N	5.02	1.40	1.33
13	m	173	ASN	C-N	5.02	1.42	1.33
32	M	106	VAL	C-N	5.02	1.40	1.33
3	c	156	ASN	C-N	5.01	1.41	1.33
3	c	161	LYS	CA-C	-5.01	1.46	1.52
1	A	57	LYS	CA-C	-5.01	1.47	1.53
2	B	230	ASP	C-O	-5.01	1.18	1.23
17	T	17	ASN	CG-ND2	5.01	1.43	1.33
20	Z	909	ARG	NE-CZ	5.01	1.38	1.33
21	N	4	THR	N-CA	5.01	1.55	1.46
23	P	3	ARG	C-N	5.01	1.40	1.33
28	H	313	ALA	CA-CB	5.01	1.60	1.53
29	I	187	LEU	CA-CB	5.01	1.60	1.53
7	g	129	VAL	CA-C	-5.01	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	k	40	PRO	N-CA	5.01	1.54	1.47
7	G	199	ILE	C-N	5.01	1.40	1.33
9	2	170	HIS	ND1-CE1	5.01	1.37	1.32
20	Z	29	ASP	N-CA	-5.01	1.40	1.46
25	R	146	ASP	C-N	5.01	1.40	1.33
28	H	259	CYS	C-N	5.01	1.40	1.33
32	M	254	MET	CA-C	-5.01	1.45	1.52
3	c	74	ALA	CA-C	-5.01	1.46	1.52
14	7	73	GLU	CA-CB	5.01	1.61	1.53
24	Q	332	ARG	CD-NE	5.01	1.53	1.46
5	e	29	GLU	CA-C	-5.01	1.45	1.52
2	B	11	THR	N-CA	-5.01	1.39	1.45
3	C	49	GLU	N-CA	-5.01	1.40	1.46
21	N	50	TYR	CA-C	-5.01	1.46	1.52
13	m	133	PHE	N-CA	-5.01	1.39	1.45
16	V	169	GLU	CA-CB	5.01	1.60	1.53
20	Z	516	THR	C-N	5.01	1.40	1.33
2	b	168	SER	N-CA	5.00	1.52	1.46
4	d	251	LYS	C-N	5.00	1.40	1.33
7	G	93	ARG	NE-CZ	5.00	1.38	1.33
22	S	147	TRP	C-O	-5.00	1.18	1.24
33	J	52	ASN	C-N	5.00	1.40	1.33
6	f	146	GLU	C-O	-5.00	1.18	1.24
10	j	88	THR	CA-C	-5.00	1.46	1.52
9	2	115	HIS	C-N	5.00	1.40	1.33
11	4	32	ASP	C-N	5.00	1.40	1.33
14	7	68	ARG	N-CA	-5.00	1.39	1.46
20	Z	244	ARG	CD-NE	5.00	1.53	1.46
22	S	271	ARG	NE-CZ	5.00	1.38	1.33
27	O	213	LEU	CA-CB	5.00	1.61	1.53
32	M	378	GLU	C-N	5.00	1.40	1.33
33	J	310	ILE	CA-C	-5.00	1.46	1.52
7	g	122	ALA	C-O	-5.00	1.18	1.24
10	j	42	LYS	C-N	5.00	1.40	1.33
11	k	24	GLY	C-O	-5.00	1.17	1.23
13	m	186	GLU	N-CA	5.00	1.52	1.46
17	T	78	PHE	CA-CB	5.00	1.61	1.53
21	N	251	GLU	N-CA	-5.00	1.40	1.46
22	S	66	GLN	N-CA	-5.00	1.40	1.46
26	U	192	ASN	C-N	5.00	1.40	1.33
29	I	374	ASP	CA-CB	5.00	1.61	1.54
29	I	405	ARG	CD-NE	5.00	1.53	1.46

All (7582) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	e	80	GLY	N-CA-C	-14.81	95.81	111.21
2	B	53	SER	N-CA-C	-13.25	96.28	108.07
15	W	163	ASN	O-C-N	-13.17	113.28	121.71
13	6	86	ASP	CA-CB-CG	-12.69	99.91	112.60
13	6	203	HIS	CA-CB-CG	-12.51	101.29	113.80
28	H	167	ASP	CA-CB-CG	-12.45	100.15	112.60
17	T	132	HIS	CA-C-N	12.14	136.68	120.77
17	T	132	HIS	C-N-CA	12.14	136.68	120.77
21	N	591	LEU	CA-C-N	12.10	133.66	119.99
21	N	591	LEU	C-N-CA	12.10	133.66	119.99
16	V	80	VAL	N-CA-C	-12.03	101.36	112.90
13	m	127	LYS	CA-C-N	11.96	131.40	119.92
13	m	127	LYS	C-N-CA	11.96	131.40	119.92
28	H	360	THR	N-CA-C	-11.89	98.87	113.50
21	N	581	ASP	CA-CB-CG	-11.77	100.83	112.60
17	T	258	ASN	CA-CB-CG	-11.71	100.89	112.60
17	T	256	LYS	N-CA-C	-11.63	101.36	114.62
10	j	36	VAL	N-CA-C	-11.29	102.75	111.90
14	7	198	ILE	N-CA-CB	11.23	117.58	110.50
3	C	216	ILE	O-C-N	-11.19	112.90	122.97
25	R	266	LEU	CA-C-N	11.12	134.90	120.44
25	R	266	LEU	C-N-CA	11.12	134.90	120.44
24	Q	208	ILE	N-CA-C	-11.11	101.85	112.29
2	B	12	PHE	CA-CB-CG	-11.11	102.69	113.80
20	Z	340	LEU	N-CA-C	-10.93	100.44	113.88
20	Z	191	SER	CA-C-N	10.92	132.01	120.00
20	Z	191	SER	C-N-CA	10.92	132.01	120.00
20	Z	258	PRO	N-CA-C	10.84	123.92	110.70
31	L	132	ARG	N-CA-C	-10.81	94.52	110.52
15	W	69	PHE	CA-C-N	10.72	131.79	120.00
15	W	69	PHE	C-N-CA	10.72	131.79	120.00
20	Z	252	CYS	CA-C-N	10.71	126.98	120.24
20	Z	252	CYS	C-N-CA	10.71	126.98	120.24
27	O	231	GLY	CA-C-N	10.68	134.59	120.28
27	O	231	GLY	C-N-CA	10.68	134.59	120.28
10	3	10	GLY	CA-C-O	-10.63	115.31	122.22
10	3	172	LEU	N-CA-C	10.61	122.43	111.07
16	V	204	HIS	CE1-NE2-CD2	-10.58	98.42	109.00
20	Z	64	TYR	N-CA-C	-10.52	99.18	113.18
20	Z	206	ASP	CA-CB-CG	-10.51	102.09	112.60
21	N	399	PHE	CA-CB-CG	-10.49	103.31	113.80
5	E	215	ASN	CA-CB-CG	-10.47	102.13	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	Q	162	LEU	N-CA-C	-10.44	99.05	112.93
7	G	144	ASN	CA-CB-CG	-10.42	102.18	112.60
29	I	125	MET	CA-C-O	-10.40	105.91	120.16
11	4	94	SER	CA-C-N	10.38	134.19	120.28
11	4	94	SER	C-N-CA	10.38	134.19	120.28
2	b	151	ASP	CA-C-N	10.37	130.13	119.56
2	b	151	ASP	C-N-CA	10.37	130.13	119.56
2	B	151	ASP	CA-C-N	10.36	130.13	119.56
2	B	151	ASP	C-N-CA	10.36	130.13	119.56
23	P	74	ASP	CA-CB-CG	10.34	122.94	112.60
5	e	249	ALA	N-CA-C	-10.32	100.00	112.59
8	h	170	GLN	OE1-CD-NE2	-10.29	112.31	122.60
15	W	196	SER	N-CA-C	-10.26	99.86	114.12
29	I	122	SER	CA-C-O	-10.21	109.22	120.25
25	R	417	TYR	CA-C-N	10.17	131.23	119.94
25	R	417	TYR	C-N-CA	10.17	131.23	119.94
17	T	75	PHE	CA-CB-CG	-10.13	103.67	113.80
9	i	59	ASN	CA-CB-CG	-10.12	102.47	112.60
5	E	15	PHE	CA-C-N	10.11	139.90	121.70
5	E	15	PHE	C-N-CA	10.11	139.90	121.70
29	I	350	PHE	CA-CB-CG	-10.10	103.70	113.80
7	g	64	ASN	CA-CB-CG	-10.10	102.50	112.60
4	d	228	GLU	CA-C-N	10.09	133.28	120.56
4	d	228	GLU	C-N-CA	10.09	133.28	120.56
11	4	177	LYS	N-CA-C	10.08	124.88	112.58
1	A	20	SER	CA-C-N	10.07	129.69	119.82
1	A	20	SER	C-N-CA	10.07	129.69	119.82
6	F	20	PHE	CA-CB-CG	-10.03	103.77	113.80
23	P	402	PHE	CA-CB-CG	-10.02	103.78	113.80
20	Z	732	ILE	CA-C-N	9.99	134.61	120.42
20	Z	732	ILE	C-N-CA	9.99	134.61	120.42
22	S	189	LEU	N-CA-C	9.95	123.37	111.33
20	Z	110	ASN	CA-CB-CG	-9.95	102.65	112.60
29	I	268	PHE	CA-CB-CG	-9.91	103.89	113.80
3	c	231	LYS	CA-C-N	9.87	130.14	119.87
3	c	231	LYS	C-N-CA	9.87	130.14	119.87
21	N	383	LYS	CA-C-N	9.86	133.50	120.28
21	N	383	LYS	C-N-CA	9.86	133.50	120.28
32	M	266	ALA	CA-C-O	9.86	130.87	120.42
20	Z	45	LEU	CA-C-N	9.85	133.48	120.28
20	Z	45	LEU	C-N-CA	9.85	133.48	120.28
21	N	340	HIS	CG-CD2-NE2	9.84	117.04	107.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	J	299	ILE	N-CA-C	-9.82	101.14	113.22
27	O	206	THR	CA-C-N	9.81	135.23	120.31
27	O	206	THR	C-N-CA	9.81	135.23	120.31
21	N	361	ASN	CA-CB-CG	9.81	122.41	112.60
27	O	49	PHE	CA-CB-CG	-9.81	103.99	113.80
32	M	285	ALA	N-CA-C	-9.81	100.49	114.12
31	L	246	SER	O-C-N	-9.79	113.31	121.44
20	Z	836	SER	CA-C-N	9.78	134.18	120.29
20	Z	836	SER	C-N-CA	9.78	134.18	120.29
9	2	81	THR	CA-C-N	9.78	133.77	120.38
9	2	81	THR	C-N-CA	9.78	133.77	120.38
2	b	66	LEU	CA-C-O	-9.70	109.86	120.43
27	O	246	SER	N-CA-C	9.70	121.45	111.07
27	O	304	ASN	CA-C-O	9.67	129.54	118.90
32	M	334	ASP	CA-CB-CG	9.67	122.27	112.60
2	b	133	SER	N-CA-C	-9.66	93.65	109.40
20	Z	619	ASP	CA-CB-CG	9.62	122.22	112.60
4	D	127	ARG	N-CA-C	-9.61	98.78	110.31
17	T	237	ASN	CA-C-N	9.60	132.92	120.44
17	T	237	ASN	C-N-CA	9.60	132.92	120.44
20	Z	172	ASP	N-CA-C	-9.60	100.16	112.93
21	N	896	PHE	CA-CB-CG	-9.60	104.20	113.80
32	M	250	GLN	CA-C-N	9.60	132.92	120.44
32	M	250	GLN	C-N-CA	9.60	132.92	120.44
20	Z	548	ASP	CA-CB-CG	9.60	122.20	112.60
29	I	77	SER	CA-C-O	-9.57	108.96	119.97
5	e	215	ASN	OD1-CG-ND2	9.54	132.14	122.60
5	E	193	LEU	N-CA-C	9.54	121.68	111.28
3	c	158	THR	CA-C-N	9.54	131.31	120.53
3	c	158	THR	C-N-CA	9.54	131.31	120.53
6	F	4	ASN	OD1-CG-ND2	-9.53	113.07	122.60
1	A	218	PHE	CA-CB-CG	-9.51	104.29	113.80
20	Z	468	GLU	CA-C-N	9.51	129.34	120.21
20	Z	468	GLU	C-N-CA	9.51	129.34	120.21
32	M	433	TYR	N-CA-C	-9.51	100.08	114.16
22	S	121	VAL	CA-C-N	9.50	132.79	120.44
22	S	121	VAL	C-N-CA	9.50	132.79	120.44
6	f	42	THR	O-C-N	-9.48	110.87	122.25
5	E	51	GLU	N-CA-C	-9.48	93.88	108.96
20	Z	215	ASN	O-C-N	9.46	132.93	122.15
6	f	174	ARG	NE-CZ-NH2	-9.44	110.70	119.20
12	l	241	HIS	CB-CG-CD2	-9.43	118.94	131.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	a	189	SER	N-CA-C	9.43	121.64	111.36
5	e	13	SER	N-CA-C	-9.42	96.59	110.06
18	X	69	ILE	N-CA-C	-9.42	97.52	107.60
26	U	116	ASN	N-CA-C	-9.42	95.11	109.14
6	f	174	ARG	NE-CZ-NH1	9.41	130.91	121.50
13	6	222	LYS	N-CA-C	-9.41	95.02	110.17
9	2	119	TYR	N-CA-C	-9.36	101.55	113.72
26	U	224	THR	CA-C-N	9.35	132.34	120.56
26	U	224	THR	C-N-CA	9.35	132.34	120.56
23	P	210	ASN	CA-CB-CG	-9.34	103.26	112.60
5	E	228	PHE	CA-CB-CG	-9.34	104.46	113.80
20	Z	715	ALA	N-CA-C	9.34	121.46	111.28
3	c	222	ASP	CA-CB-CG	-9.34	103.26	112.60
11	k	84	VAL	N-CA-C	9.34	119.39	110.42
16	V	94	MET	CA-C-O	9.33	130.31	120.42
20	Z	885	ALA	CA-C-N	9.33	135.08	120.34
20	Z	885	ALA	C-N-CA	9.33	135.08	120.34
20	Z	780	MET	CA-C-N	9.33	130.33	119.98
20	Z	780	MET	C-N-CA	9.33	130.33	119.98
20	Z	876	VAL	CA-C-N	9.32	132.76	120.28
20	Z	876	VAL	C-N-CA	9.32	132.76	120.28
13	m	177	LYS	CA-C-N	9.31	133.31	120.65
13	m	177	LYS	C-N-CA	9.31	133.31	120.65
10	j	107	PRO	CA-C-N	9.30	135.91	122.99
10	j	107	PRO	C-N-CA	9.30	135.91	122.99
21	N	90	ASP	CA-C-N	9.30	132.28	120.56
21	N	90	ASP	C-N-CA	9.30	132.28	120.56
16	V	185	ILE	CA-C-N	9.30	132.53	120.44
16	V	185	ILE	C-N-CA	9.30	132.53	120.44
10	3	193	ASP	N-CA-C	-9.29	102.45	113.88
21	N	113	ALA	CA-C-N	9.29	132.72	120.28
21	N	113	ALA	C-N-CA	9.29	132.72	120.28
22	S	330	LEU	CA-C-N	9.28	133.06	120.54
22	S	330	LEU	C-N-CA	9.28	133.06	120.54
30	K	132	LYS	O-C-N	-9.28	113.05	120.38
21	N	394	ARG	NE-CZ-NH2	9.26	127.54	119.20
5	E	185	ASN	N-CA-C	-9.26	101.55	113.12
7	G	152	GLU	CA-C-O	-9.25	110.69	120.87
3	c	210	ARG	NE-CZ-NH2	-9.25	110.87	119.20
12	l	126	ASP	CA-C-O	-9.25	111.11	120.82
20	Z	593	HIS	N-CA-C	-9.25	96.18	108.11
9	i	88	ILE	CA-C-N	9.22	130.18	119.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	i	88	ILE	C-N-CA	9.22	130.18	119.94
12	5	210	PHE	CA-CB-CG	-9.20	104.60	113.80
33	J	331	HIS	CA-CB-CG	-9.20	104.60	113.80
27	O	153	LEU	N-CA-C	9.20	122.49	111.82
3	C	8	SER	O-C-N	9.19	132.02	122.09
30	K	425	ASP	N-CA-C	-9.15	101.04	113.30
5	e	34	GLY	N-CA-C	-9.14	99.52	112.60
4	d	172	ARG	CA-C-N	9.14	132.32	120.44
4	d	172	ARG	C-N-CA	9.14	132.32	120.44
29	I	411	VAL	CA-C-O	9.13	130.53	120.48
33	J	318	PRO	CA-C-N	9.13	131.25	119.84
33	J	318	PRO	C-N-CA	9.13	131.25	119.84
29	I	169	SER	CA-C-N	9.12	132.96	120.46
29	I	169	SER	C-N-CA	9.12	132.96	120.46
17	T	202	LEU	CA-C-O	9.12	130.48	120.63
24	Q	307	ASN	CA-CB-CG	-9.12	103.48	112.60
33	J	391	ASN	N-CA-C	-9.11	101.43	111.36
33	J	267	GLU	N-CA-C	-9.09	101.32	111.14
2	B	124	SER	N-CA-CB	9.08	125.84	110.49
22	S	191	HIS	CA-C-N	9.05	132.21	120.44
22	S	191	HIS	C-N-CA	9.05	132.21	120.44
29	I	59	LEU	CA-C-N	9.05	133.14	120.29
29	I	59	LEU	C-N-CA	9.05	133.14	120.29
29	I	383	THR	CA-C-N	9.03	135.75	121.66
29	I	383	THR	C-N-CA	9.03	135.75	121.66
18	X	62	ASP	CA-C-O	-9.03	112.34	120.56
20	Z	211	PHE	CA-C-N	9.03	132.18	120.44
20	Z	211	PHE	C-N-CA	9.03	132.18	120.44
22	S	118	PHE	CA-CB-CG	-9.02	104.78	113.80
25	R	334	ARG	CA-C-N	9.02	133.10	120.29
25	R	334	ARG	C-N-CA	9.02	133.10	120.29
18	X	102	GLN	OE1-CD-NE2	9.02	131.62	122.60
21	N	678	ILE	CA-C-O	-9.02	111.29	120.85
29	I	183	ASP	N-CA-CB	9.02	123.84	110.49
20	Z	201	LEU	N-CA-C	-9.01	100.61	111.69
24	Q	178	HIS	CE1-NE2-CD2	-9.00	100.00	109.00
28	H	112	SER	CA-C-N	9.00	133.52	120.38
28	H	112	SER	C-N-CA	9.00	133.52	120.38
9	i	152	TYR	N-CA-C	-8.99	100.12	113.61
20	Z	456	GLY	O-C-N	8.99	131.03	122.13
20	Z	398	LYS	CA-C-O	-8.98	111.29	120.90
21	N	796	VAL	CA-C-O	8.98	130.37	120.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	160	LYS	N-CA-C	-8.97	103.16	114.56
24	Q	407	ALA	CA-C-N	8.96	132.29	120.28
24	Q	407	ALA	C-N-CA	8.96	132.29	120.28
25	R	209	ARG	NE-CZ-NH2	-8.96	111.13	119.20
25	R	271	ILE	N-CA-C	-8.96	102.13	110.82
20	Z	759	ARG	CA-C-N	8.95	133.17	120.28
20	Z	759	ARG	C-N-CA	8.95	133.17	120.28
21	N	340	HIS	CE1-NE2-CD2	-8.95	100.05	109.00
5	e	112	LEU	CA-C-N	8.93	132.05	120.44
5	e	112	LEU	C-N-CA	8.93	132.05	120.44
26	U	129	GLY	O-C-N	8.93	130.14	122.64
20	Z	701	ILE	CA-C-N	8.92	132.04	120.44
20	Z	701	ILE	C-N-CA	8.92	132.04	120.44
24	Q	402	THR	CA-C-N	8.92	129.48	119.93
24	Q	402	THR	C-N-CA	8.92	129.48	119.93
12	5	251	ASN	CA-CB-CG	-8.92	103.68	112.60
20	Z	211	PHE	CA-CB-CG	-8.92	104.88	113.80
23	P	342	GLN	CA-C-N	8.91	132.22	120.28
23	P	342	GLN	C-N-CA	8.91	132.22	120.28
28	H	119	ASN	CA-CB-CG	-8.91	103.69	112.60
20	Z	720	LYS	O-C-N	-8.91	112.89	122.07
3	c	107	PRO	CA-C-N	8.90	133.06	120.42
3	c	107	PRO	C-N-CA	8.90	133.06	120.42
21	N	170	LEU	CA-C-N	8.89	132.19	120.28
21	N	170	LEU	C-N-CA	8.89	132.19	120.28
4	d	151	GLU	CA-C-N	8.89	129.06	119.28
4	d	151	GLU	C-N-CA	8.89	129.06	119.28
2	B	151	ASP	CA-C-O	-8.88	111.97	120.94
7	g	137	ILE	N-CA-C	-8.88	94.63	107.77
3	C	91	ALA	CA-C-N	8.86	132.16	120.28
3	C	91	ALA	C-N-CA	8.86	132.16	120.28
14	7	186	PRO	CA-C-N	8.86	132.16	120.28
14	7	186	PRO	C-N-CA	8.86	132.16	120.28
16	V	255	ILE	O-C-N	8.86	130.06	122.09
3	c	89	ASN	CA-CB-CG	-8.85	103.75	112.60
25	R	163	SER	CA-C-N	8.85	131.94	120.44
25	R	163	SER	C-N-CA	8.85	131.94	120.44
20	Z	271	ILE	N-CA-CB	8.84	120.89	110.55
22	S	61	SER	N-CA-C	8.84	120.92	111.28
11	k	193	ASP	CA-C-O	8.83	129.22	119.15
20	Z	924	LYS	CA-C-N	8.83	131.74	120.70
20	Z	924	LYS	C-N-CA	8.83	131.74	120.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	U	126	LYS	N-CA-C	-8.82	102.65	113.41
4	d	138	PHE	CA-CB-CG	-8.82	104.98	113.80
1	a	90	ALA	O-C-N	-8.81	112.99	122.07
20	Z	718	ASP	CA-C-N	8.81	129.94	119.99
20	Z	718	ASP	C-N-CA	8.81	129.94	119.99
28	H	281	GLN	CA-C-N	8.80	132.41	120.44
28	H	281	GLN	C-N-CA	8.80	132.41	120.44
8	1	37	ASN	CA-CB-CG	-8.80	103.80	112.60
15	W	20	ASP	N-CA-CB	8.80	123.05	110.12
25	R	368	LEU	N-CA-C	8.79	120.86	111.28
21	N	623	PHE	CA-CB-CG	-8.77	105.03	113.80
16	V	161	THR	CA-C-N	8.77	129.68	119.94
16	V	161	THR	C-N-CA	8.77	129.68	119.94
17	T	112	ASN	CA-C-N	8.77	132.03	120.28
17	T	112	ASN	C-N-CA	8.77	132.03	120.28
28	H	185	LEU	CA-C-N	8.77	129.46	119.99
28	H	185	LEU	C-N-CA	8.77	129.46	119.99
2	b	54	PRO	N-CA-CB	8.77	111.65	103.41
21	N	208	ARG	CA-C-O	8.77	129.71	120.42
6	f	205	SER	O-C-N	-8.76	110.94	122.59
9	i	114	GLN	CA-C-N	8.76	132.01	120.28
9	i	114	GLN	C-N-CA	8.76	132.01	120.28
6	f	175	THR	N-CA-C	-8.75	102.53	113.02
5	E	234	GLU	O-C-N	-8.74	112.85	122.12
21	N	297	ASP	CA-C-N	8.74	131.99	120.28
21	N	297	ASP	C-N-CA	8.74	131.99	120.28
31	L	216	LYS	N-CA-C	-8.74	95.27	108.99
21	N	437	GLU	CA-C-N	8.72	131.97	120.28
21	N	437	GLU	C-N-CA	8.72	131.97	120.28
29	I	254	GLN	OE1-CD-NE2	8.72	131.32	122.60
2	B	115	ALA	CA-C-N	8.71	133.55	120.31
2	B	115	ALA	C-N-CA	8.71	133.55	120.31
9	i	181	ILE	N-CA-C	8.70	119.50	110.62
25	R	230	LEU	N-CA-C	8.70	120.84	111.36
15	W	87	MET	CA-C-N	8.69	131.74	120.44
15	W	87	MET	C-N-CA	8.69	131.74	120.44
27	O	386	ALA	CA-C-N	8.69	133.21	120.87
27	O	386	ALA	C-N-CA	8.69	133.21	120.87
6	f	114	ASP	CA-CB-CG	-8.69	103.91	112.60
23	P	151	GLY	N-CA-C	-8.69	105.11	114.67
20	Z	869	ASP	CA-CB-CG	-8.68	103.92	112.60
13	m	106	TYR	CA-C-N	8.68	129.61	119.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	m	106	TYR	C-N-CA	8.68	129.61	119.98
21	N	396	SER	N-CA-C	-8.68	102.83	113.50
4	D	217	PRO	CA-C-O	-8.67	111.50	121.56
20	Z	40	GLU	N-CA-C	-8.67	101.30	112.23
25	R	401	HIS	ND1-CE1-NE2	8.67	117.07	108.40
21	N	329	HIS	CA-C-O	-8.66	111.37	120.55
14	7	41	GLY	N-CA-C	-8.66	97.84	111.18
32	M	56	ASN	CA-CB-CG	-8.66	103.94	112.60
33	J	351	ASN	N-CA-C	-8.66	102.30	113.12
17	T	47	GLN	OE1-CD-NE2	-8.65	113.95	122.60
7	G	87	HIS	CE1-NE2-CD2	-8.64	100.36	109.00
11	k	5	LEU	CA-C-N	8.63	128.14	122.18
11	k	5	LEU	C-N-CA	8.63	128.14	122.18
10	3	81	ALA	O-C-N	-8.63	112.95	122.79
22	S	313	SER	CA-C-N	8.63	132.55	120.29
22	S	313	SER	C-N-CA	8.63	132.55	120.29
7	g	130	ARG	CA-C-O	-8.63	112.08	119.76
27	O	298	GLU	CA-C-N	8.63	131.84	120.28
27	O	298	GLU	C-N-CA	8.63	131.84	120.28
21	N	30	ASN	CA-CB-CG	-8.62	103.98	112.60
21	N	642	ASP	O-C-N	-8.62	112.81	120.48
3	C	94	HIS	ND1-CE1-NE2	8.62	117.02	108.40
9	2	105	VAL	CA-C-N	8.62	134.08	120.47
9	2	105	VAL	C-N-CA	8.62	134.08	120.47
24	Q	271	MET	N-CA-C	8.62	121.81	111.82
17	T	75	PHE	CA-C-N	8.61	132.76	120.79
17	T	75	PHE	C-N-CA	8.61	132.76	120.79
17	T	216	GLU	CA-C-N	8.61	132.15	120.44
17	T	216	GLU	C-N-CA	8.61	132.15	120.44
20	Z	714	ASP	CA-C-N	8.61	131.82	120.28
20	Z	714	ASP	C-N-CA	8.61	131.82	120.28
22	S	382	ARG	NE-CZ-NH2	-8.61	111.45	119.20
13	6	125	ASP	CA-CB-CG	-8.59	104.01	112.60
27	O	73	ILE	CA-C-N	8.59	132.93	120.82
27	O	73	ILE	C-N-CA	8.59	132.93	120.82
20	Z	630	LYS	CA-C-N	8.58	129.69	119.99
20	Z	630	LYS	C-N-CA	8.58	129.69	119.99
20	Z	468	GLU	CA-C-O	-8.57	113.88	120.48
1	A	250	GLU	N-CA-C	-8.57	101.82	113.30
6	F	175	THR	N-CA-C	-8.57	102.74	113.02
20	Z	712	ASP	N-CA-C	-8.56	101.91	111.07
30	K	44	ASN	CA-CB-CG	8.56	121.16	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	241	PHE	CA-C-N	8.56	133.74	121.50
14	7	241	PHE	C-N-CA	8.56	133.74	121.50
22	S	458	GLN	CA-C-N	8.56	131.75	120.28
22	S	458	GLN	C-N-CA	8.56	131.75	120.28
24	Q	301	ALA	CA-C-N	8.55	132.56	120.42
24	Q	301	ALA	C-N-CA	8.55	132.56	120.42
23	P	64	ASP	CA-CB-CG	-8.55	104.05	112.60
13	6	50	LYS	CA-C-O	8.55	128.29	118.55
14	7	118	GLU	CA-C-O	8.54	129.03	120.32
22	S	81	LEU	O-C-N	-8.54	112.78	122.86
19	Y	32	ASP	CA-CB-CG	-8.53	104.07	112.60
20	Z	513	ALA	CB-CA-C	8.53	123.23	111.63
9	2	45	ALA	CA-C-O	-8.53	112.34	121.38
26	U	25	THR	N-CA-C	-8.53	102.89	113.38
16	V	111	HIS	N-CA-C	-8.52	96.34	109.64
20	Z	531	ALA	CA-C-N	8.52	131.70	120.28
20	Z	531	ALA	C-N-CA	8.52	131.70	120.28
28	H	198	MET	N-CA-C	-8.51	101.34	112.41
26	U	200	LEU	CA-C-O	-8.51	111.94	120.70
11	k	149	ARG	CA-C-O	-8.50	110.85	120.03
20	Z	233	LEU	O-C-N	-8.50	111.55	121.32
25	R	274	PRO	CA-C-N	8.49	131.99	120.44
25	R	274	PRO	C-N-CA	8.49	131.99	120.44
22	S	139	HIS	O-C-N	8.48	131.11	122.12
4	d	61	PRO	N-CA-CB	8.48	110.82	103.36
33	J	59	LYS	N-CA-C	8.48	120.52	111.28
27	O	245	ASP	CA-C-N	8.48	131.46	120.44
27	O	245	ASP	C-N-CA	8.48	131.46	120.44
1	a	89	ASP	CA-C-N	8.47	131.46	120.44
1	a	89	ASP	C-N-CA	8.47	131.46	120.44
20	Z	475	GLN	CA-C-O	-8.46	111.58	120.55
7	g	239	ALA	CA-C-N	8.46	131.22	120.56
7	g	239	ALA	C-N-CA	8.46	131.22	120.56
22	S	253	PHE	CA-C-N	8.46	132.43	120.42
22	S	253	PHE	C-N-CA	8.46	132.43	120.42
1	a	226	GLY	CA-C-O	-8.45	114.35	120.94
24	Q	238	TYR	CB-CA-C	-8.45	96.77	110.79
6	f	16	THR	N-CA-C	-8.45	102.53	112.92
25	R	133	ALA	CA-C-N	8.45	132.28	120.29
25	R	133	ALA	C-N-CA	8.45	132.28	120.29
14	7	163	VAL	O-C-N	-8.44	113.62	122.82
22	S	20	HIS	CE1-NE2-CD2	-8.44	100.56	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	6	109	ARG	NE-CZ-NH2	-8.43	111.61	119.20
28	H	121	ASN	N-CA-C	-8.43	100.98	112.03
1	a	181	ASN	CA-CB-CG	-8.43	104.17	112.60
4	d	83	ARG	NE-CZ-NH2	8.43	126.78	119.20
1	A	19	PHE	CA-CB-CG	-8.42	105.38	113.80
21	N	607	GLN	CA-C-N	8.42	132.24	120.29
21	N	607	GLN	C-N-CA	8.42	132.24	120.29
7	g	216	ILE	N-CA-C	-8.41	96.00	108.45
1	a	125	SER	CA-C-N	8.41	131.55	120.28
1	a	125	SER	C-N-CA	8.41	131.55	120.28
2	b	94	HIS	ND1-CE1-NE2	8.41	116.81	108.40
8	h	80	GLY	CA-C-O	-8.41	116.43	122.23
5	E	188	HIS	CA-C-N	8.40	131.36	120.44
5	E	188	HIS	C-N-CA	8.40	131.36	120.44
26	U	17	SER	N-CA-C	8.40	120.06	111.07
21	N	663	ILE	N-CA-C	-8.40	102.67	110.82
24	Q	38	SER	N-CA-C	8.40	121.49	111.33
25	R	371	PHE	CA-C-N	8.39	125.53	120.24
25	R	371	PHE	C-N-CA	8.39	125.53	120.24
25	R	190	LYS	N-CA-C	8.39	120.05	111.07
14	7	212	ASN	CA-CB-CG	-8.39	104.21	112.60
23	P	336	HIS	CE1-NE2-CD2	-8.39	100.61	109.00
24	Q	370	THR	N-CA-C	8.38	120.04	111.07
21	N	65	ALA	N-CA-C	8.38	120.03	111.07
27	O	11	LEU	CA-C-N	8.37	131.50	120.28
27	O	11	LEU	C-N-CA	8.37	131.50	120.28
30	K	79	LEU	N-CA-C	-8.37	101.40	111.69
10	3	131	ASP	CA-CB-CG	-8.36	104.24	112.60
19	Y	82	ASP	CA-CB-CG	-8.36	104.24	112.60
21	N	81	TYR	CA-C-N	8.36	131.31	120.44
21	N	81	TYR	C-N-CA	8.36	131.31	120.44
5	E	181	ALA	O-C-N	-8.35	113.27	122.12
25	R	367	ASP	N-CA-C	-8.35	101.42	111.69
25	R	270	VAL	N-CA-C	-8.35	105.02	111.62
20	Z	387	ASN	CA-CB-CG	-8.35	104.25	112.60
20	Z	74	SER	CA-C-N	8.34	131.36	120.60
20	Z	74	SER	C-N-CA	8.34	131.36	120.60
25	R	229	LYS	CA-C-O	8.34	129.57	120.82
11	k	128	LEU	N-CA-C	-8.33	97.36	108.11
4	d	77	GLY	N-CA-C	-8.33	103.14	111.56
10	3	51	LEU	O-C-N	-8.33	112.62	123.28
32	M	362	GLN	OE1-CD-NE2	8.33	130.93	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	h	136	ALA	N-CA-C	-8.32	96.05	108.79
24	Q	390	LEU	O-C-N	-8.32	113.73	123.22
20	Z	397	ASP	CA-C-N	8.32	131.77	120.54
20	Z	397	ASP	C-N-CA	8.32	131.77	120.54
20	Z	475	GLN	CA-C-N	8.32	131.42	120.28
20	Z	475	GLN	C-N-CA	8.32	131.42	120.28
28	H	191	ILE	N-CA-C	-8.31	104.37	113.43
4	D	82	SER	O-C-N	8.31	130.93	122.12
17	T	99	SER	CA-C-N	8.31	132.09	120.29
17	T	99	SER	C-N-CA	8.31	132.09	120.29
20	Z	781	GLY	CA-C-N	8.31	131.84	120.46
20	Z	781	GLY	C-N-CA	8.31	131.84	120.46
23	P	362	LEU	CA-C-N	8.31	131.24	120.44
23	P	362	LEU	C-N-CA	8.31	131.24	120.44
32	M	387	ASN	CA-CB-CG	-8.30	104.30	112.60
33	J	202	VAL	N-CA-C	-8.30	102.73	110.53
1	A	199	TRP	CA-C-N	8.30	131.40	120.28
1	A	199	TRP	C-N-CA	8.30	131.40	120.28
20	Z	208	VAL	O-C-N	-8.29	115.11	120.42
25	R	239	THR	N-CA-C	-8.30	95.38	108.90
15	W	83	GLY	CA-C-N	8.29	137.37	121.54
15	W	83	GLY	C-N-CA	8.29	137.37	121.54
21	N	130	ASP	CA-C-N	8.29	128.25	119.05
21	N	130	ASP	C-N-CA	8.29	128.25	119.05
5	E	115	SER	N-CA-C	8.28	120.31	111.28
29	I	422	ARG	CA-C-O	-8.28	111.64	120.42
6	f	185	ASN	O-C-N	8.27	127.57	121.12
17	T	244	ASP	CA-C-O	-8.27	112.14	120.82
28	H	299	ARG	CA-C-N	8.27	131.19	120.44
28	H	299	ARG	C-N-CA	8.27	131.19	120.44
8	h	91	PHE	O-C-N	8.27	130.59	122.07
20	Z	258	PRO	CA-C-O	-8.27	108.58	120.56
33	J	127	GLU	CA-C-O	-8.27	112.14	120.82
10	j	99	ARG	N-CA-C	-8.26	102.23	111.07
28	H	70	LYS	CA-C-N	8.26	132.44	120.71
28	H	70	LYS	C-N-CA	8.26	132.44	120.71
6	f	124	GLY	CA-C-N	8.26	132.74	121.01
6	f	124	GLY	C-N-CA	8.26	132.74	121.01
6	F	13	PHE	CA-C-N	8.25	136.56	121.70
6	F	13	PHE	C-N-CA	8.25	136.56	121.70
20	Z	1	MET	CA-C-N	8.25	131.56	120.50
20	Z	1	MET	C-N-CA	8.25	131.56	120.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	E	92	ALA	N-CA-CB	8.25	122.25	110.12
24	Q	23	ALA	CA-C-N	8.25	131.33	120.28
24	Q	23	ALA	C-N-CA	8.25	131.33	120.28
1	A	96	ARG	NE-CZ-NH2	-8.25	111.78	119.20
20	Z	511	PRO	N-CA-CB	8.25	110.21	101.88
14	7	123	SER	CB-CA-C	-8.24	96.84	110.85
5	e	57	PRO	N-CA-C	-8.24	104.13	114.68
9	i	211	LYS	CA-C-O	-8.24	111.50	121.06
2	B	239	THR	N-CA-CB	8.24	122.14	110.36
17	T	73	PHE	CA-CB-CG	-8.24	105.56	113.80
5	E	159	GLU	CA-C-O	-8.23	111.73	120.87
17	T	243	ALA	CA-C-O	-8.23	112.17	120.82
27	O	167	ILE	N-CA-CB	8.23	120.19	110.55
2	B	70	ASP	CA-CB-CG	-8.23	104.37	112.60
20	Z	56	LEU	N-CA-C	-8.23	98.11	109.71
29	I	375	VAL	N-CA-CB	8.23	119.95	110.49
19	Y	35	PHE	CA-CB-CG	8.22	122.02	113.80
25	R	29	LYS	N-CA-C	8.22	120.32	111.36
31	L	199	LEU	CA-C-O	-8.22	110.90	118.79
16	V	114	PHE	CA-CB-CG	-8.21	105.59	113.80
9	i	249	ILE	N-CA-C	-8.21	105.14	113.10
24	Q	104	PHE	CA-C-N	8.21	131.28	120.28
24	Q	104	PHE	C-N-CA	8.21	131.28	120.28
32	M	128	PHE	CA-CB-CG	8.21	122.01	113.80
4	d	86	ILE	N-CA-C	-8.20	102.44	110.72
27	O	293	LEU	CA-C-N	8.20	131.26	120.28
27	O	293	LEU	C-N-CA	8.20	131.26	120.28
33	J	250	ILE	N-CA-C	-8.19	102.87	110.82
17	T	202	LEU	O-C-N	-8.19	113.44	122.12
20	Z	131	LYS	CA-C-O	8.18	128.85	119.27
12	5	124	ALA	CA-C-N	8.18	131.08	120.44
12	5	124	ALA	C-N-CA	8.18	131.08	120.44
1	A	101	ALA	N-CA-C	8.18	120.19	111.28
20	Z	720	LYS	CA-C-N	8.18	131.07	120.44
20	Z	720	LYS	C-N-CA	8.18	131.07	120.44
11	k	137	GLY	CA-C-N	8.17	132.05	120.28
11	k	137	GLY	C-N-CA	8.17	132.05	120.28
24	Q	222	SER	CA-C-N	8.17	129.22	119.99
24	Q	222	SER	C-N-CA	8.17	129.22	119.99
33	J	228	ARG	CA-C-N	8.17	131.58	120.38
33	J	228	ARG	C-N-CA	8.17	131.58	120.38
20	Z	593	HIS	CE1-NE2-CD2	-8.17	100.83	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	Q	263	LYS	N-CA-C	8.16	120.18	111.28
25	R	28	GLU	O-C-N	8.16	130.48	122.07
21	N	366	THR	CA-C-N	8.16	131.05	120.44
21	N	366	THR	C-N-CA	8.16	131.05	120.44
27	O	122	HIS	CB-CG-CD2	-8.16	120.59	131.20
25	R	272	ASP	CA-CB-CG	-8.16	104.44	112.60
5	E	182	GLU	N-CA-C	8.16	121.72	111.69
26	U	226	LEU	CA-C-N	8.16	129.21	119.99
26	U	226	LEU	C-N-CA	8.16	129.21	119.99
28	H	231	SER	CA-C-N	8.16	128.85	120.04
28	H	231	SER	C-N-CA	8.16	128.85	120.04
28	H	155	PHE	CA-CB-CG	-8.15	105.64	113.80
9	i	224	VAL	CA-C-N	8.15	133.08	121.02
9	i	224	VAL	C-N-CA	8.15	133.08	121.02
20	Z	413	ASP	CA-C-N	8.14	129.02	119.98
20	Z	413	ASP	C-N-CA	8.14	129.02	119.98
13	m	162	VAL	N-CA-CB	8.14	119.63	111.57
10	3	48	HIS	CE1-NE2-CD2	-8.14	100.86	109.00
3	C	94	HIS	CE1-NE2-CD2	-8.13	100.87	109.00
23	P	114	THR	CA-C-N	8.13	131.01	120.44
23	P	114	THR	C-N-CA	8.13	131.01	120.44
21	N	881	TYR	O-C-N	8.13	129.76	120.58
8	1	122	ILE	CA-C-N	8.12	130.00	119.84
8	1	122	ILE	C-N-CA	8.12	130.00	119.84
23	P	124	VAL	CB-CA-C	-8.12	101.01	112.22
17	T	60	ARG	CA-C-N	8.11	130.94	120.56
17	T	60	ARG	C-N-CA	8.11	130.94	120.56
29	I	291	ARG	N-CA-C	-8.11	96.01	109.07
19	Y	14	ILE	N-CA-C	-8.11	96.44	108.12
10	3	20	CYS	O-C-N	8.10	132.09	123.42
26	U	42	ASN	CA-CB-CG	-8.10	104.50	112.60
30	K	49	PHE	CA-CB-CG	-8.10	105.70	113.80
22	S	72	GLU	CA-C-N	8.10	130.97	120.44
22	S	72	GLU	C-N-CA	8.10	130.97	120.44
6	F	35	THR	N-CA-C	-8.10	96.68	109.23
21	N	626	GLY	CA-C-N	8.10	131.92	120.42
21	N	626	GLY	C-N-CA	8.10	131.92	120.42
5	e	86	ARG	NE-CZ-NH1	-8.09	113.41	121.50
26	U	281	LEU	CA-C-N	8.09	131.55	120.46
26	U	281	LEU	C-N-CA	8.09	131.55	120.46
28	H	174	VAL	CA-C-N	8.09	129.42	121.57
28	H	174	VAL	C-N-CA	8.09	129.42	121.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	Q	176	ASP	CA-CB-CG	-8.09	104.51	112.60
22	S	85	SER	N-CA-C	8.08	121.20	111.82
29	I	67	ASP	CA-CB-CG	-8.08	104.52	112.60
1	a	147	ASP	CA-C-N	8.08	135.87	122.54
1	a	147	ASP	C-N-CA	8.08	135.87	122.54
20	Z	398	LYS	O-C-N	8.08	130.49	122.09
20	Z	91	PHE	CA-CB-CG	8.07	121.87	113.80
23	P	30	ASN	CA-CB-CG	-8.07	104.53	112.60
33	J	15	HIS	CA-CB-CG	-8.07	105.73	113.80
25	R	179	PHE	CA-C-N	8.07	130.93	120.44
25	R	179	PHE	C-N-CA	8.07	130.93	120.44
28	H	385	ARG	NE-CZ-NH2	8.07	126.46	119.20
15	W	20	ASP	O-C-N	8.06	130.67	122.12
29	I	219	VAL	N-CA-C	-8.06	95.75	108.81
21	N	59	GLU	CA-C-N	8.06	132.56	120.31
21	N	59	GLU	C-N-CA	8.06	132.56	120.31
1	a	133	TYR	O-C-N	8.06	131.34	122.15
28	H	43	ALA	N-CA-C	8.06	124.41	113.77
2	B	41	ASN	OD1-CG-ND2	-8.06	114.54	122.60
15	W	12	ASN	CA-CB-CG	-8.06	104.54	112.60
20	Z	404	ASP	CA-CB-CG	-8.06	104.54	112.60
2	b	18	LEU	CA-C-N	8.05	128.72	119.94
2	b	18	LEU	C-N-CA	8.05	128.72	119.94
6	F	202	ARG	NE-CZ-NH2	8.05	126.44	119.20
26	U	124	ASP	CA-CB-CG	-8.05	104.55	112.60
14	n	46	SER	O-C-N	-8.05	116.17	123.41
18	X	55	LYS	CA-C-N	8.04	127.81	119.76
18	X	55	LYS	C-N-CA	8.04	127.81	119.76
15	W	146	GLU	N-CA-C	-8.04	102.51	112.88
21	N	399	PHE	CA-C-N	8.04	130.69	120.56
21	N	399	PHE	C-N-CA	8.04	130.69	120.56
20	Z	24	THR	CA-C-O	-8.03	109.16	120.16
7	G	172	ALA	CA-C-N	8.03	131.04	120.28
7	G	172	ALA	C-N-CA	8.03	131.04	120.28
32	M	382	SER	CA-C-N	8.03	132.80	121.24
32	M	382	SER	C-N-CA	8.03	132.80	121.24
20	Z	497	PHE	CA-CB-CG	-8.02	105.78	113.80
17	T	49	ASP	CA-CB-CG	-8.02	104.58	112.60
23	P	57	GLU	CA-C-N	8.02	131.80	120.42
23	P	57	GLU	C-N-CA	8.02	131.80	120.42
4	D	10	ILE	CA-C-N	8.01	132.08	120.71
4	D	10	ILE	C-N-CA	8.01	132.08	120.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	1	107	ILE	N-CA-C	-8.01	96.92	108.53
21	N	805	SER	N-CA-CB	8.00	122.00	110.16
23	P	223	LEU	N-CA-CB	8.00	122.00	110.16
12	5	240	ALA	N-CA-C	8.00	120.91	111.71
7	g	13	SER	CA-C-N	7.99	132.76	120.13
7	g	13	SER	C-N-CA	7.99	132.76	120.13
6	F	99	PHE	CA-C-O	-7.99	110.16	119.59
21	N	379	LEU	N-CA-C	-7.98	103.75	113.97
24	Q	132	PHE	CA-CB-CG	-7.98	105.82	113.80
21	N	624	ALA	CA-C-O	-7.98	112.44	120.82
31	L	317	ASN	N-CA-C	-7.98	97.77	110.14
1	a	225	VAL	CA-C-N	7.98	127.08	121.65
1	a	225	VAL	C-N-CA	7.98	127.08	121.65
25	R	81	HIS	ND1-CE1-NE2	7.98	116.38	108.40
4	d	96	HIS	CE1-NE2-CD2	-7.98	101.02	109.00
10	3	106	GLY	CA-C-N	7.98	127.74	119.76
10	3	106	GLY	C-N-CA	7.98	127.74	119.76
1	a	113	PRO	CA-C-N	7.97	130.97	120.28
1	a	113	PRO	C-N-CA	7.97	130.97	120.28
25	R	320	LYS	N-CA-C	-7.97	101.70	112.94
2	B	18	LEU	CA-C-N	7.96	128.82	119.98
2	B	18	LEU	C-N-CA	7.96	128.82	119.98
28	H	121	ASN	OD1-CG-ND2	7.96	130.56	122.60
2	B	227	ILE	N-CA-C	-7.96	98.66	107.73
28	H	326	ASP	CA-C-N	7.96	130.95	120.28
28	H	326	ASP	C-N-CA	7.96	130.95	120.28
33	J	178	GLY	CA-C-N	7.96	131.16	120.50
33	J	178	GLY	C-N-CA	7.96	131.16	120.50
30	K	140	HIS	CA-C-N	7.95	130.78	120.44
30	K	140	HIS	C-N-CA	7.95	130.78	120.44
20	Z	874	ASN	CA-CB-CG	7.94	120.54	112.60
30	K	39	ALA	N-CA-C	-7.94	102.89	112.58
1	A	176	GLN	OE1-CD-NE2	7.94	130.54	122.60
11	k	169	GLU	CA-C-N	7.93	130.76	120.44
11	k	169	GLU	C-N-CA	7.93	130.76	120.44
15	W	151	THR	N-CA-C	-7.93	97.32	109.85
5	e	122	ARG	NE-CZ-NH2	-7.93	112.06	119.20
20	Z	941	ARG	CA-C-N	7.93	129.75	119.84
20	Z	941	ARG	C-N-CA	7.93	129.75	119.84
28	H	76	LEU	N-CA-CB	7.93	123.89	110.49
7	g	130	ARG	CA-C-N	7.92	127.94	119.78
7	g	130	ARG	C-N-CA	7.92	127.94	119.78

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
18	X	62	ASP	CB-CA-C	7.92	120.43	110.76
25	R	296	LEU	CA-C-O	7.92	128.86	120.70
21	N	148	SER	N-CA-CB	7.91	123.86	110.49
3	C	195	LYS	N-CA-C	7.91	119.98	111.36
13	6	143	GLN	N-CA-C	-7.91	104.78	114.75
28	H	142	ASP	CA-CB-CG	-7.91	104.69	112.60
3	C	61	THR	N-CA-C	-7.91	101.24	113.02
23	P	129	LYS	CA-C-O	-7.91	110.19	118.65
27	O	196	LEU	CA-C-O	-7.91	112.04	120.42
20	Z	276	ASN	N-CA-C	7.90	122.18	112.23
21	N	390	LEU	CA-C-O	-7.90	112.09	120.70
4	d	63	LYS	N-CA-C	-7.90	103.54	113.02
9	i	159	GLY	CA-C-N	7.90	131.20	120.54
9	i	159	GLY	C-N-CA	7.90	131.20	120.54
1	A	15	HIS	CE1-NE2-CD2	-7.90	101.10	109.00
9	2	107	SER	CA-C-N	7.90	130.86	120.28
9	2	107	SER	C-N-CA	7.90	130.86	120.28
31	L	168	TYR	CB-CG-CD1	-7.89	108.96	120.80
25	R	243	LEU	CA-C-N	7.89	132.66	120.75
25	R	243	LEU	C-N-CA	7.89	132.66	120.75
32	M	72	ASN	CA-CB-CG	-7.89	104.71	112.60
17	T	266	TYR	CA-C-N	7.89	130.85	120.28
17	T	266	TYR	C-N-CA	7.89	130.85	120.28
21	N	578	ASP	CA-CB-CG	-7.89	104.71	112.60
31	L	364	HIS	CA-CB-CG	-7.88	105.92	113.80
7	G	60	VAL	CA-C-O	-7.88	114.50	119.15
21	N	729	SER	N-CA-CB	7.88	121.44	110.01
25	R	409	GLY	CA-C-O	-7.87	112.64	120.75
27	O	203	THR	N-CA-C	-7.87	103.41	113.16
21	N	27	SER	CA-C-N	7.86	131.23	120.46
21	N	27	SER	C-N-CA	7.86	131.23	120.46
4	d	134	LEU	CA-C-O	-7.86	111.89	120.30
18	X	21	SER	N-CA-C	-7.85	104.86	114.75
22	S	30	GLN	N-CA-C	7.85	119.84	111.28
27	O	92	PHE	CA-CB-CG	-7.85	105.95	113.80
20	Z	194	GLU	N-CA-CB	7.85	121.66	110.12
32	M	73	ARG	NE-CZ-NH2	7.85	126.26	119.20
4	d	254	HIS	ND1-CE1-NE2	7.84	116.24	108.40
13	6	203	HIS	CA-C-N	7.84	134.95	122.56
13	6	203	HIS	C-N-CA	7.84	134.95	122.56
1	a	41	ASN	CA-CB-CG	-7.84	104.76	112.60
11	4	98	TYR	N-CA-C	-7.84	95.25	108.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	R	23	ASN	CA-CB-CG	-7.83	104.77	112.60
25	R	167	LYS	CB-CA-C	-7.83	98.59	110.88
2	b	89	SER	N-CA-CB	7.83	121.75	110.16
29	I	142	GLU	N-CA-C	-7.83	95.59	108.82
23	P	192	ASP	CA-CB-CG	-7.82	104.78	112.60
30	K	238	ASN	CA-CB-CG	-7.82	104.78	112.60
21	N	441	VAL	CA-C-N	7.82	130.60	120.44
21	N	441	VAL	C-N-CA	7.82	130.60	120.44
28	H	187	LEU	CA-C-O	-7.82	113.50	119.59
4	d	132	SER	N-CA-C	-7.81	96.20	109.24
33	J	301	ASP	CA-C-N	7.81	127.47	119.19
33	J	301	ASP	C-N-CA	7.81	127.47	119.19
13	6	150	ALA	CA-C-N	7.81	131.08	120.54
13	6	150	ALA	C-N-CA	7.81	131.08	120.54
18	X	36	LYS	CA-C-N	7.81	127.87	119.28
18	X	36	LYS	C-N-CA	7.81	127.87	119.28
9	i	66	ILE	N-CA-CB	7.80	118.81	110.62
10	3	157	ASN	OD1-CG-ND2	-7.80	114.80	122.60
24	Q	399	VAL	N-CA-C	-7.80	97.19	108.11
2	b	157	PHE	CA-C-N	7.80	128.42	119.99
2	b	157	PHE	C-N-CA	7.80	128.42	119.99
14	n	177	THR	CA-C-O	-7.80	112.50	121.47
20	Z	102	ILE	CA-C-N	7.80	130.57	120.44
20	Z	102	ILE	C-N-CA	7.80	130.57	120.44
11	k	174	MET	CG-SD-CE	-7.79	83.75	100.90
21	N	334	VAL	CA-C-N	7.79	131.36	120.29
21	N	334	VAL	C-N-CA	7.79	131.36	120.29
26	U	49	THR	CA-C-O	-7.79	112.21	120.55
5	E	168	ASN	CA-CB-CG	-7.79	104.81	112.60
6	f	183	ASP	CA-CB-CG	7.79	120.39	112.60
13	6	51	VAL	N-CA-C	7.79	114.54	106.21
2	B	169	VAL	N-CA-C	7.79	117.89	110.42
8	1	28	ARG	N-CA-CB	7.78	121.41	109.97
13	6	97	ALA	O-C-N	-7.78	113.87	122.12
24	Q	266	LEU	CA-C-N	7.78	131.05	120.54
24	Q	266	LEU	C-N-CA	7.78	131.05	120.54
32	M	263	VAL	CB-CA-C	-7.78	102.01	111.97
28	H	305	ILE	O-C-N	-7.78	115.09	123.18
8	h	102	LEU	N-CA-CB	7.78	122.78	110.65
9	2	135	THR	O-C-N	-7.78	113.01	122.65
12	5	157	ILE	CA-C-N	7.77	131.03	120.38
12	5	157	ILE	C-N-CA	7.77	131.03	120.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	V	94	MET	N-CA-C	7.77	119.83	111.36
2	b	128	ARG	CA-C-N	7.77	127.72	120.03
2	b	128	ARG	C-N-CA	7.77	127.72	120.03
4	D	12	SER	CA-C-O	-7.77	112.81	120.97
9	2	108	ALA	N-CA-CB	7.77	121.54	110.12
3	C	225	VAL	N-CA-CB	7.76	118.99	110.53
14	7	211	VAL	CA-C-N	7.76	130.53	120.44
14	7	211	VAL	C-N-CA	7.76	130.53	120.44
31	L	406	ASP	CA-CB-CG	-7.76	104.84	112.60
7	G	120	VAL	CA-C-N	7.76	131.31	120.29
7	G	120	VAL	C-N-CA	7.76	131.31	120.29
25	R	43	ARG	CA-C-O	7.76	129.01	120.63
27	O	282	GLN	OE1-CD-NE2	7.76	130.36	122.60
22	S	399	TYR	CB-CA-C	-7.75	98.91	110.62
28	H	253	GLY	O-C-N	-7.75	113.38	122.45
14	n	187	LEU	CA-C-N	7.74	130.51	120.44
14	n	187	LEU	C-N-CA	7.74	130.51	120.44
11	k	89	ALA	N-CA-CB	7.74	121.23	110.01
5	e	15	PHE	O-C-N	-7.74	113.09	123.15
9	2	45	ALA	O-C-N	7.74	131.38	123.26
21	N	567	ALA	CA-C-N	7.74	131.41	120.42
21	N	567	ALA	C-N-CA	7.74	131.41	120.42
26	U	240	GLY	CA-C-N	7.73	135.09	123.96
26	U	240	GLY	C-N-CA	7.73	135.09	123.96
3	C	120	GLN	CA-C-N	7.73	128.69	120.03
3	C	120	GLN	C-N-CA	7.73	128.69	120.03
30	K	160	VAL	N-CA-CB	7.73	119.81	111.00
12	l	272	PHE	CA-CB-CG	-7.73	106.07	113.80
20	Z	734	ASP	CA-C-N	7.73	131.41	120.28
20	Z	734	ASP	C-N-CA	7.73	131.41	120.28
4	d	240	LYS	CA-C-N	7.73	130.64	120.28
4	d	240	LYS	C-N-CA	7.73	130.64	120.28
27	O	112	LYS	CA-C-O	7.73	128.61	120.42
28	H	231	SER	O-C-N	-7.73	115.82	121.23
21	N	419	THR	CA-CB-OG1	7.72	121.19	109.60
1	A	167	LYS	N-CA-C	-7.72	102.19	111.69
17	T	11	LEU	N-CA-C	7.72	119.70	111.28
20	Z	251	ALA	O-C-N	7.72	130.30	122.12
3	C	129	ARG	N-CA-CB	7.72	121.38	110.11
17	T	143	SER	CA-C-N	7.72	130.47	120.44
17	T	143	SER	C-N-CA	7.72	130.47	120.44
4	D	11	PHE	CA-CB-CG	-7.71	106.09	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	U	145	ASP	CA-C-N	7.71	133.33	121.53
26	U	145	ASP	C-N-CA	7.71	133.33	121.53
20	Z	166	ASN	CA-CB-CG	-7.71	104.89	112.60
10	j	147	PHE	CA-CB-CG	-7.71	106.09	113.80
21	N	641	LEU	CA-C-N	7.70	130.58	120.26
21	N	641	LEU	C-N-CA	7.70	130.58	120.26
8	h	172	ILE	N-CA-CB	7.70	119.56	110.55
7	G	140	GLY	N-CA-C	-7.70	100.19	110.74
20	Z	878	LEU	CA-C-N	7.69	130.59	120.28
20	Z	878	LEU	C-N-CA	7.69	130.59	120.28
2	B	158	PRO	CA-C-O	-7.69	112.25	121.48
31	L	258	GLU	N-CA-C	-7.69	102.90	111.82
12	l	216	ASP	CA-CB-CG	-7.69	104.91	112.60
27	O	64	ASN	N-CA-CB	7.69	121.22	110.07
28	H	130	ASN	CA-C-N	7.69	130.43	120.44
28	H	130	ASN	C-N-CA	7.69	130.43	120.44
27	O	55	THR	CA-C-O	-7.68	113.69	120.60
4	D	209	ASN	N-CA-C	-7.68	104.40	114.31
7	G	71	ASP	CA-CB-CG	-7.68	104.92	112.60
24	Q	157	LEU	CA-C-O	-7.68	112.28	120.42
25	R	406	GLN	CA-C-N	7.68	130.01	120.34
25	R	406	GLN	C-N-CA	7.68	130.01	120.34
29	I	204	HIS	CA-C-O	-7.68	113.60	119.59
5	E	168	ASN	N-CA-C	-7.67	104.05	113.41
20	Z	448	LYS	CA-C-N	7.67	130.88	120.44
20	Z	448	LYS	C-N-CA	7.67	130.88	120.44
13	6	102	GLN	N-CA-CB	7.67	121.57	110.06
21	N	499	HIS	CB-CG-CD2	-7.67	121.23	131.20
9	i	39	ASN	CA-CB-CG	-7.67	104.93	112.60
2	B	189	ILE	N-CA-C	7.67	118.44	110.62
14	n	167	GLY	CA-C-N	7.66	131.40	120.98
14	n	167	GLY	C-N-CA	7.66	131.40	120.98
31	L	178	ILE	N-CA-C	-7.66	98.24	108.35
28	H	59	ILE	O-C-N	-7.66	114.44	121.87
24	Q	372	GLN	N-CA-CB	7.65	121.48	110.16
31	L	208	GLN	OE1-CD-NE2	7.65	130.25	122.60
27	O	32	PHE	CA-CB-CG	-7.65	106.15	113.80
14	n	84	VAL	CB-CA-C	-7.65	101.63	110.73
32	M	356	SER	CA-C-N	7.65	130.86	120.38
32	M	356	SER	C-N-CA	7.65	130.86	120.38
31	L	395	ALA	CA-C-N	7.64	131.14	120.29
31	L	395	ALA	C-N-CA	7.64	131.14	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	e	86	ARG	NH1-CZ-NH2	7.64	129.24	119.30
8	h	41	ASP	N-CA-C	-7.64	94.42	108.02
20	Z	338	HIS	ND1-CE1-NE2	7.64	116.04	108.40
27	O	167	ILE	O-C-N	7.64	129.40	121.91
14	n	105	THR	CA-C-N	7.64	130.37	120.44
14	n	105	THR	C-N-CA	7.64	130.37	120.44
4	d	183	GLU	CA-C-N	7.64	128.25	120.38
4	d	183	GLU	C-N-CA	7.64	128.25	120.38
20	Z	622	HIS	CA-C-N	7.64	130.37	120.44
20	Z	622	HIS	C-N-CA	7.64	130.37	120.44
11	4	170	LYS	O-C-N	-7.64	113.44	122.15
9	2	145	HIS	N-CA-C	-7.64	103.42	112.89
20	Z	445	PRO	CA-C-N	7.64	130.51	120.28
20	Z	445	PRO	C-N-CA	7.64	130.51	120.28
28	H	447	VAL	O-C-N	-7.64	114.46	121.87
14	7	216	VAL	CA-C-O	-7.63	112.76	120.85
20	Z	310	LEU	CA-C-N	7.63	131.13	120.29
20	Z	310	LEU	C-N-CA	7.63	131.13	120.29
27	O	245	ASP	CA-CB-CG	-7.62	104.97	112.60
20	Z	614	VAL	N-CA-C	-7.62	103.50	111.58
1	A	89	ASP	CA-C-N	7.62	130.34	120.44
1	A	89	ASP	C-N-CA	7.62	130.34	120.44
33	J	390	MET	CA-C-N	7.62	131.11	120.29
33	J	390	MET	C-N-CA	7.62	131.11	120.29
33	J	101	ASP	N-CA-C	-7.61	104.23	113.97
20	Z	283	ALA	N-CA-CB	7.61	121.48	110.06
26	U	94	HIS	CG-CD2-NE2	7.61	114.81	107.20
20	Z	184	SER	N-CA-C	7.61	120.24	111.11
25	R	264	THR	N-CA-C	7.61	120.65	111.82
5	E	206	GLN	CA-C-O	-7.61	112.36	120.42
33	J	206	THR	CA-C-N	7.61	136.07	121.54
33	J	206	THR	C-N-CA	7.61	136.07	121.54
25	R	265	ASP	N-CA-C	-7.60	103.46	112.89
31	L	343	LEU	N-CA-C	-7.60	97.86	109.95
33	J	324	ARG	N-CA-C	7.60	119.56	111.28
4	d	239	GLU	CB-CG-CD	-7.59	99.69	112.60
13	m	76	PHE	CA-CB-CG	-7.59	106.21	113.80
12	5	119	THR	N-CA-CB	7.59	121.99	110.45
22	S	73	THR	CA-C-N	7.59	130.46	120.28
22	S	73	THR	C-N-CA	7.59	130.46	120.28
27	O	183	ASN	N-CA-CB	7.59	123.33	110.49
32	M	45	ARG	N-CA-C	7.58	119.55	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	P	217	LYS	CA-C-N	7.58	130.44	120.28
23	P	217	LYS	C-N-CA	7.58	130.44	120.28
5	e	209	GLU	N-CA-C	-7.58	103.10	112.88
6	F	171	TYR	N-CA-C	-7.58	103.09	111.36
16	V	65	VAL	CA-C-N	7.58	131.58	120.74
16	V	65	VAL	C-N-CA	7.58	131.58	120.74
27	O	48	PHE	CA-CB-CG	-7.58	106.22	113.80
27	O	277	ILE	CA-C-O	-7.58	114.81	119.51
15	W	93	ILE	O-C-N	7.58	129.22	121.87
2	b	171	ALA	N-CA-C	7.58	119.17	111.07
8	1	80	GLY	CA-C-N	7.58	130.92	120.39
8	1	80	GLY	C-N-CA	7.58	130.92	120.39
13	m	70	ASP	CA-C-O	-7.57	112.87	120.82
23	P	345	VAL	CA-C-O	-7.57	112.82	120.85
32	M	377	GLN	CA-C-N	7.57	130.28	120.44
32	M	377	GLN	C-N-CA	7.57	130.28	120.44
7	g	183	HIS	CA-C-O	-7.57	112.50	119.62
20	Z	361	HIS	ND1-CE1-NE2	7.57	115.97	108.40
23	P	47	ARG	N-CA-CB	7.57	123.28	110.49
13	m	63	ASN	CA-CB-CG	-7.57	105.03	112.60
27	O	283	HIS	CA-C-N	7.56	130.42	120.28
27	O	283	HIS	C-N-CA	7.56	130.42	120.28
20	Z	759	ARG	N-CA-C	7.56	119.60	111.36
25	R	396	LYS	CA-C-N	7.56	130.74	120.38
25	R	396	LYS	C-N-CA	7.56	130.74	120.38
8	h	100	ASP	N-CA-C	-7.56	103.89	113.72
1	A	36	ASN	N-CA-C	-7.56	103.13	112.88
20	Z	528	LEU	CA-C-N	7.56	130.72	120.44
20	Z	528	LEU	C-N-CA	7.56	130.72	120.44
20	Z	919	GLU	N-CA-C	-7.56	104.59	113.88
4	D	67	ILE	N-CA-C	-7.55	104.42	111.45
13	m	180	LEU	N-CA-CB	7.55	121.15	110.36
13	m	203	HIS	CA-CB-CG	7.55	121.35	113.80
28	H	378	SER	CA-C-O	-7.55	112.61	121.44
6	F	210	ASN	N-CA-C	-7.55	103.92	113.43
15	W	37	PHE	CA-C-N	7.54	130.39	120.28
15	W	37	PHE	C-N-CA	7.54	130.39	120.28
21	N	250	ASP	CA-C-N	7.54	131.00	120.29
21	N	250	ASP	C-N-CA	7.54	131.00	120.29
21	N	389	TYR	CA-C-N	7.54	132.14	120.68
21	N	389	TYR	C-N-CA	7.54	132.14	120.68
27	O	79	VAL	CA-C-N	7.54	130.38	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	O	79	VAL	C-N-CA	7.54	130.38	120.28
25	R	168	ILE	CA-C-N	7.53	130.37	120.28
25	R	168	ILE	C-N-CA	7.53	130.37	120.28
4	d	59	ILE	O-C-N	7.53	129.85	122.25
16	V	219	GLU	N-CA-C	-7.53	102.32	112.26
15	W	57	ALA	N-CA-CB	7.53	123.22	110.49
23	P	136	ARG	CA-C-N	7.52	131.74	120.31
23	P	136	ARG	C-N-CA	7.52	131.74	120.31
21	N	427	ILE	CB-CA-C	-7.52	101.99	112.14
20	Z	623	ARG	N-CA-C	7.51	119.11	111.07
25	R	223	ASN	N-CA-C	-7.51	94.80	110.80
14	7	92	ASP	CA-C-N	7.51	130.66	120.44
14	7	92	ASP	C-N-CA	7.51	130.66	120.44
7	g	208	LYS	CA-C-O	7.51	128.83	119.59
23	P	410	GLN	CA-C-O	7.51	128.51	120.55
20	Z	782	ILE	CA-C-N	7.51	130.75	120.46
20	Z	782	ILE	C-N-CA	7.51	130.75	120.46
12	5	184	GLY	CA-C-N	7.51	127.94	119.83
12	5	184	GLY	C-N-CA	7.51	127.94	119.83
28	H	383	GLU	O-C-N	7.51	130.71	122.15
20	Z	926	ASN	OD1-CG-ND2	7.50	130.10	122.60
21	N	10	LEU	CA-C-O	-7.50	112.59	120.55
21	N	674	GLN	CG-CD-NE2	7.50	127.66	116.40
33	J	282	PHE	CA-CB-CG	7.50	121.30	113.80
9	i	196	LEU	N-CA-C	-7.50	103.69	114.12
27	O	365	LYS	CA-C-N	7.50	130.19	120.44
27	O	365	LYS	C-N-CA	7.50	130.19	120.44
4	d	187	THR	CA-C-N	7.50	131.07	120.42
4	d	187	THR	C-N-CA	7.50	131.07	120.42
11	k	144	LEU	CA-C-O	-7.50	111.35	119.97
2	B	135	LEU	N-CA-C	-7.50	97.02	109.24
25	R	125	GLU	N-CA-CB	7.50	123.16	110.49
7	G	117	GLY	CA-C-N	7.49	130.32	120.28
7	G	117	GLY	C-N-CA	7.49	130.32	120.28
19	Y	68	GLU	N-CA-C	-7.49	97.73	109.72
27	O	270	ILE	O-C-N	-7.49	114.11	121.83
28	H	180	LYS	N-CA-C	-7.49	94.85	110.80
16	V	204	HIS	CG-CD2-NE2	7.49	114.69	107.20
2	B	237	LYS	N-CA-CB	7.48	120.97	109.97
6	F	92	CYS	N-CA-CB	7.48	121.23	110.16
6	F	111	LEU	CA-C-N	7.48	130.31	120.28
6	F	111	LEU	C-N-CA	7.48	130.31	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	j	48	HIS	CG-CD2-NE2	7.48	114.68	107.20
9	i	223	ASN	CA-CB-CG	-7.48	105.12	112.60
25	R	408	ASP	CA-C-O	7.48	128.34	120.42
27	O	176	SER	CA-C-N	7.48	130.30	120.28
27	O	176	SER	C-N-CA	7.48	130.30	120.28
25	R	40	ILE	CA-C-N	7.47	130.30	120.28
25	R	40	ILE	C-N-CA	7.47	130.30	120.28
16	V	204	HIS	ND1-CE1-NE2	7.47	115.87	108.40
6	f	13	PHE	CA-C-O	-7.47	112.80	121.16
11	k	13	VAL	N-CA-C	-7.46	97.72	108.17
15	W	147	ILE	N-CA-C	-7.46	105.86	113.10
26	U	110	PHE	CA-CB-CG	-7.46	106.34	113.80
27	O	245	ASP	CA-C-O	-7.46	112.80	121.16
7	g	10	LEU	N-CA-C	-7.46	104.02	113.72
21	N	436	ASP	N-CA-C	-7.46	97.52	109.76
4	d	203	VAL	N-CA-CB	7.46	118.75	110.62
21	N	664	LEU	CA-C-N	7.46	131.95	121.66
21	N	664	LEU	C-N-CA	7.46	131.95	121.66
7	g	146	ALA	N-CA-CB	7.46	121.32	110.06
10	3	65	GLU	CA-C-N	7.46	130.13	120.44
10	3	65	GLU	C-N-CA	7.46	130.13	120.44
12	5	281	SER	N-CA-CB	7.46	120.59	110.38
2	b	150	VAL	N-CA-C	-7.45	97.61	108.71
2	B	66	LEU	N-CA-C	-7.45	97.10	109.24
10	3	122	ALA	CA-C-N	7.45	127.99	121.58
10	3	122	ALA	C-N-CA	7.45	127.99	121.58
23	P	307	GLU	CA-C-O	-7.45	112.05	120.32
1	a	94	ALA	N-CA-CB	7.45	121.07	110.12
6	f	14	SER	N-CA-CB	7.45	123.16	110.50
25	R	318	PRO	N-CA-CB	7.45	110.41	103.41
7	g	116	LEU	CA-C-N	7.45	128.25	119.98
7	g	116	LEU	C-N-CA	7.45	128.25	119.98
21	N	201	LYS	N-CA-CB	7.45	121.18	110.16
28	H	271	PHE	N-CA-C	-7.45	96.13	108.34
16	V	59	ASP	CA-CB-CG	7.44	120.04	112.60
3	c	84	ALA	CA-C-N	7.44	131.00	120.28
3	c	84	ALA	C-N-CA	7.44	131.00	120.28
6	f	154	THR	CA-C-N	7.44	133.49	123.00
6	f	154	THR	C-N-CA	7.44	133.49	123.00
3	c	239	LEU	N-CA-C	-7.44	103.67	112.89
5	e	123	PHE	CA-CB-CG	-7.44	106.36	113.80
1	A	188	LYS	CA-C-N	7.43	130.85	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	188	LYS	C-N-CA	7.43	130.85	120.29
2	B	236	ARG	CA-C-N	7.43	131.42	120.87
2	B	236	ARG	C-N-CA	7.43	131.42	120.87
13	m	21	LEU	N-CA-C	-7.43	95.67	107.93
7	g	129	VAL	CA-C-N	7.43	135.05	120.94
7	g	129	VAL	C-N-CA	7.43	135.05	120.94
20	Z	739	ALA	N-CA-CB	7.43	121.04	110.12
21	N	686	ILE	O-C-N	7.43	129.19	121.91
33	J	122	LEU	CB-CA-C	-7.43	98.31	109.90
13	m	82	TRP	CB-CG-CD2	-7.42	116.41	126.80
25	R	399	GLN	N-CA-C	-7.42	102.88	112.23
27	O	153	LEU	CA-C-N	7.42	130.23	120.28
27	O	153	LEU	C-N-CA	7.42	130.23	120.28
21	N	349	ILE	N-CA-CB	7.42	119.23	110.55
25	R	374	ASN	CA-CB-CG	-7.42	105.18	112.60
7	G	208	LYS	CA-C-N	7.41	130.54	120.38
7	G	208	LYS	C-N-CA	7.41	130.54	120.38
14	n	121	GLU	N-CA-CB	7.41	119.19	109.55
5	E	178	GLY	CA-C-N	7.41	130.52	120.44
5	E	178	GLY	C-N-CA	7.41	130.52	120.44
17	T	150	ARG	NE-CZ-NH2	-7.41	112.53	119.20
20	Z	319	THR	CA-C-N	7.41	130.53	120.38
20	Z	319	THR	C-N-CA	7.41	130.53	120.38
21	N	746	ALA	CA-C-O	7.41	126.94	119.97
20	Z	897	HIS	CE1-NE2-CD2	-7.41	101.59	109.00
24	Q	293	SER	CA-C-N	7.41	130.21	120.28
24	Q	293	SER	C-N-CA	7.41	130.21	120.28
29	I	285	ASP	CA-CB-CG	-7.41	105.19	112.60
6	F	77	LEU	CA-C-N	7.40	130.18	120.26
6	F	77	LEU	C-N-CA	7.40	130.18	120.26
12	l	170	LEU	N-CA-CB	7.40	121.94	109.87
22	S	476	LEU	CA-C-N	7.40	130.03	120.56
22	S	476	LEU	C-N-CA	7.40	130.03	120.56
4	D	166	ARG	NE-CZ-NH1	-7.40	114.10	121.50
23	P	240	TYR	CB-CG-CD1	7.40	131.90	120.80
3	c	181	LYS	N-CA-C	-7.40	97.94	108.96
4	D	49	ARG	NE-CZ-NH2	7.39	125.85	119.20
12	l	255	VAL	N-CA-CB	7.39	119.85	111.21
32	M	333	LEU	N-CA-C	7.39	120.40	110.35
10	j	91	VAL	CA-C-N	7.38	130.04	120.44
10	j	91	VAL	C-N-CA	7.38	130.04	120.44
6	F	14	SER	N-CA-CB	7.38	123.05	110.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	4	114	PRO	CA-C-O	-7.38	112.99	121.56
10	3	170	ALA	CA-C-O	-7.38	112.72	120.55
23	P	226	LYS	CA-C-N	7.38	130.12	120.60
23	P	226	LYS	C-N-CA	7.38	130.12	120.60
9	i	67	SER	N-CA-C	-7.38	99.69	108.25
11	k	164	CYS	CA-C-N	7.38	129.86	120.56
11	k	164	CYS	C-N-CA	7.38	129.86	120.56
10	3	157	ASN	CB-CG-ND2	7.37	127.46	116.40
9	2	137	SER	N-CA-C	-7.37	98.09	109.52
25	R	56	GLU	N-CA-C	7.37	119.10	111.14
2	B	74	VAL	N-CA-C	-7.37	98.63	108.06
1	a	14	ARG	N-CA-C	-7.37	102.55	112.94
12	l	282	PHE	CA-CB-CG	-7.37	106.44	113.80
23	P	248	ASP	CA-C-N	7.37	130.37	120.65
23	P	248	ASP	C-N-CA	7.37	130.37	120.65
7	g	123	HIS	CE1-NE2-CD2	-7.36	101.64	109.00
11	4	53	THR	CA-C-O	-7.36	113.09	120.82
22	S	379	LEU	CA-C-N	7.36	130.88	120.28
22	S	379	LEU	C-N-CA	7.36	130.88	120.28
21	N	149	GLU	CA-C-O	7.36	128.17	120.30
9	i	176	THR	CA-C-N	7.35	130.00	120.44
9	i	176	THR	C-N-CA	7.35	130.00	120.44
24	Q	326	MET	CA-C-N	7.35	133.88	120.79
24	Q	326	MET	C-N-CA	7.35	133.88	120.79
9	i	247	VAL	O-C-N	-7.35	115.14	123.00
20	Z	18	ILE	CB-CA-C	-7.35	102.29	111.92
21	N	208	ARG	O-C-N	-7.35	113.77	122.15
20	Z	593	HIS	CG-CD2-NE2	7.35	114.55	107.20
22	S	208	ILE	CA-C-N	7.34	129.81	120.56
22	S	208	ILE	C-N-CA	7.34	129.81	120.56
28	H	336	LEU	CA-C-N	7.34	130.52	120.46
28	H	336	LEU	C-N-CA	7.34	130.52	120.46
29	I	373	GLU	N-CA-C	-7.34	104.70	112.93
33	J	215	GLY	N-CA-C	-7.34	103.77	115.08
18	X	116	ALA	N-CA-C	-7.34	95.16	110.80
9	2	138	HIS	CA-CB-CG	-7.34	106.46	113.80
22	S	62	SER	CA-C-N	7.34	130.71	120.29
22	S	62	SER	C-N-CA	7.34	130.71	120.29
14	n	121	GLU	CA-C-N	7.34	127.20	119.05
14	n	121	GLU	C-N-CA	7.34	127.20	119.05
1	A	14	ARG	N-CA-C	-7.34	99.56	110.06
16	V	215	ASN	CA-CB-CG	-7.34	105.26	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	S	198	SER	N-CA-CB	7.33	122.89	110.49
24	Q	13	ARG	O-C-N	7.33	129.72	122.09
24	Q	367	GLY	N-CA-C	-7.33	105.96	114.69
27	O	255	LEU	CA-C-O	7.33	128.52	120.82
21	N	438	ASP	CB-CA-C	-7.33	98.62	110.79
2	b	102	GLY	CA-C-O	7.33	127.16	119.02
2	b	168	SER	N-CA-CB	7.32	121.00	110.16
13	m	230	ASP	CA-CB-CG	-7.32	105.28	112.60
3	C	64	GLU	N-CA-C	-7.32	103.92	112.92
24	Q	12	ARG	NE-CZ-NH1	-7.32	114.18	121.50
29	I	216	PRO	CA-C-O	-7.32	113.34	121.32
29	I	225	PRO	CA-C-O	-7.32	113.07	121.56
33	J	17	SER	CA-C-N	7.32	129.56	120.34
33	J	17	SER	C-N-CA	7.32	129.56	120.34
33	J	240	HIS	CE1-NE2-CD2	-7.32	101.68	109.00
6	f	5	ASN	N-CA-C	-7.32	101.49	112.54
2	b	90	ARG	CA-C-N	7.32	130.68	120.29
2	b	90	ARG	C-N-CA	7.32	130.68	120.29
25	R	378	ASN	OD1-CG-ND2	-7.31	115.29	122.60
20	Z	830	LEU	CA-C-N	7.31	129.95	120.44
20	Z	830	LEU	C-N-CA	7.31	129.95	120.44
23	P	240	TYR	CB-CG-CD2	-7.31	109.83	120.80
24	Q	95	LYS	CA-C-N	7.31	129.78	120.56
24	Q	95	LYS	C-N-CA	7.31	129.78	120.56
32	M	89	ASN	CA-CB-CG	-7.31	105.29	112.60
1	a	115	ASP	CA-CB-CG	-7.31	105.29	112.60
2	B	187	ASP	CA-C-N	7.31	130.07	120.28
2	B	187	ASP	C-N-CA	7.31	130.07	120.28
5	E	183	LEU	CA-C-N	7.31	130.07	120.28
5	E	183	LEU	C-N-CA	7.31	130.07	120.28
23	P	381	SER	CA-C-N	7.31	130.07	120.28
23	P	381	SER	C-N-CA	7.31	130.07	120.28
25	R	272	ASP	N-CA-C	-7.31	104.39	112.72
27	O	364	THR	CA-C-N	7.30	130.07	120.28
27	O	364	THR	C-N-CA	7.30	130.07	120.28
29	I	291	ARG	N-CA-CB	7.30	122.04	110.57
30	K	200	GLN	N-CA-C	7.30	119.88	111.11
22	S	469	ASN	CA-CB-CG	-7.30	105.30	112.60
28	H	305	ILE	CA-C-O	7.30	127.64	120.27
29	I	223	GLY	N-CA-C	-7.30	100.73	110.58
16	V	42	ARG	NE-CZ-NH1	-7.30	114.20	121.50
2	b	53	SER	N-CA-C	-7.29	101.66	108.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	Z	328	ASP	CA-CB-CG	7.29	119.89	112.60
12	I	254	HIS	ND1-CE1-NE2	7.29	115.69	108.40
18	X	26	PRO	CA-C-O	-7.29	113.37	121.32
4	D	209	ASN	CA-C-O	7.29	126.86	118.77
16	V	190	HIS	CE1-NE2-CD2	-7.29	101.71	109.00
5	e	222	ILE	CA-C-O	7.29	127.47	120.25
1	A	65	ASP	CA-C-N	7.29	126.92	119.19
1	A	65	ASP	C-N-CA	7.29	126.92	119.19
2	B	136	ILE	N-CA-CB	7.29	120.97	112.15
16	V	220	GLN	N-CA-C	-7.29	102.73	111.69
31	L	110	LYS	CA-C-N	7.29	131.10	120.82
31	L	110	LYS	C-N-CA	7.29	131.10	120.82
2	b	170	ALA	N-CA-CB	7.28	120.63	110.07
11	4	53	THR	CA-C-N	7.28	129.88	120.56
11	4	53	THR	C-N-CA	7.28	129.88	120.56
17	T	267	ALA	N-CA-CB	7.28	120.83	110.12
31	L	162	GLU	CA-C-O	-7.28	112.75	121.56
30	K	423	LYS	N-CA-C	-7.28	101.48	113.50
32	M	349	PHE	CA-CB-CG	-7.28	106.52	113.80
6	f	120	THR	N-CA-C	-7.28	104.20	113.23
8	h	39	VAL	CA-CB-CG1	-7.28	98.02	110.40
11	k	63	ASN	CA-C-N	7.28	130.44	120.46
11	k	63	ASN	C-N-CA	7.28	130.44	120.46
13	6	103	HIS	CB-CG-CD2	-7.28	121.74	131.20
20	Z	351	PRO	CA-C-N	7.28	130.34	120.44
20	Z	351	PRO	C-N-CA	7.28	130.34	120.44
26	U	173	HIS	ND1-CE1-NE2	7.27	115.67	108.40
3	c	231	LYS	CA-C-O	-7.27	112.74	120.88
24	Q	180	LEU	CA-C-N	7.27	130.02	120.28
24	Q	180	LEU	C-N-CA	7.27	130.02	120.28
11	4	17	SER	CA-CB-OG	7.27	125.64	111.10
25	R	48	GLU	CA-C-N	7.27	130.02	120.28
25	R	48	GLU	C-N-CA	7.27	130.02	120.28
7	g	215	GLU	N-CA-C	-7.27	97.56	109.40
24	Q	166	LYS	N-CA-C	-7.27	103.51	112.88
19	Y	55	THR	N-CA-C	-7.26	100.44	111.56
24	Q	416	VAL	CA-C-N	7.26	128.20	119.99
24	Q	416	VAL	C-N-CA	7.26	128.20	119.99
21	N	797	GLU	N-CA-C	7.26	119.20	111.28
17	T	206	LYS	CA-C-N	7.26	129.88	120.44
17	T	206	LYS	C-N-CA	7.26	129.88	120.44
25	R	188	LYS	CA-C-N	7.26	130.01	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	R	188	LYS	C-N-CA	7.26	130.01	120.28
4	d	28	LYS	CB-CA-C	-7.26	97.21	110.63
21	N	129	ILE	CA-C-N	7.25	130.39	120.67
21	N	129	ILE	C-N-CA	7.25	130.39	120.67
27	O	23	HIS	CA-C-O	-7.25	111.62	118.73
21	N	239	LEU	CA-C-N	7.25	130.00	120.28
21	N	239	LEU	C-N-CA	7.25	130.00	120.28
9	i	206	VAL	O-C-N	-7.25	115.57	123.18
15	W	77	HIS	N-CA-CB	7.25	121.38	110.22
21	N	16	ASN	N-CA-C	7.25	119.26	111.36
20	Z	206	ASP	N-CA-C	7.25	118.97	111.14
28	H	258	LEU	CA-C-O	7.25	128.46	120.63
3	c	61	THR	N-CA-C	-7.25	103.44	114.16
14	n	153	GLN	CA-C-N	7.24	132.82	120.72
14	n	153	GLN	C-N-CA	7.24	132.82	120.72
20	Z	504	GLU	N-CA-C	7.24	119.25	111.36
28	H	69	VAL	CA-C-N	7.24	134.74	121.70
28	H	69	VAL	C-N-CA	7.24	134.74	121.70
30	K	330	ARG	N-CA-CB	7.24	118.80	110.03
15	W	20	ASP	CB-CA-C	-7.24	98.77	110.79
21	N	422	TYR	O-C-N	7.24	129.53	122.07
20	Z	56	LEU	N-CA-CB	7.24	118.46	110.35
12	l	149	ILE	CA-C-O	7.24	128.82	121.58
23	P	36	LEU	CA-C-N	7.24	130.29	120.38
23	P	36	LEU	C-N-CA	7.24	130.29	120.38
2	B	183	LEU	N-CA-C	-7.24	98.02	109.23
8	l	141	THR	N-CA-CB	7.24	120.87	110.16
33	J	371	ARG	N-CA-C	7.24	119.17	111.28
2	b	171	ALA	CA-C-N	7.23	131.31	120.31
2	b	171	ALA	C-N-CA	7.23	131.31	120.31
1	A	233	PHE	CA-CB-CG	-7.23	106.57	113.80
16	V	184	ASN	N-CA-C	-7.23	103.77	112.59
18	X	109	LEU	CA-C-N	7.23	127.67	119.93
18	X	109	LEU	C-N-CA	7.23	127.67	119.93
6	f	108	ALA	CA-C-O	7.23	128.28	119.97
7	g	112	PHE	CA-C-N	7.23	129.97	120.28
7	g	112	PHE	C-N-CA	7.23	129.97	120.28
14	7	44	VAL	N-CA-C	-7.23	97.75	108.45
17	T	90	PHE	CA-CB-CG	7.23	121.03	113.80
28	H	281	GLN	OE1-CD-NE2	7.23	129.83	122.60
2	B	241	GLN	O-C-N	7.23	129.51	122.07
13	6	104	LEU	CB-CA-C	-7.23	99.53	110.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	J	37	LYS	O-C-N	7.23	130.39	122.15
20	Z	399	LEU	CA-C-N	7.23	129.66	120.56
20	Z	399	LEU	C-N-CA	7.23	129.66	120.56
8	h	19	ASP	CA-CB-CG	-7.22	105.38	112.60
12	5	270	GLU	CA-C-N	7.22	129.96	120.28
12	5	270	GLU	C-N-CA	7.22	129.96	120.28
21	N	11	ALA	CA-C-O	7.22	128.21	120.55
20	Z	939	ALA	N-CA-CB	7.22	122.69	110.49
17	T	254	ASP	N-CA-C	-7.22	104.07	113.17
20	Z	491	LEU	N-CA-CB	7.22	120.84	110.16
3	C	14	SER	CA-C-N	7.22	126.84	119.19
3	C	14	SER	C-N-CA	7.22	126.84	119.19
1	a	46	ARG	N-CA-CB	7.21	122.18	110.42
7	g	221	LEU	N-CA-C	7.21	120.01	111.71
11	k	185	ASP	CA-CB-CG	7.21	119.81	112.60
32	M	39	ASN	OD1-CG-ND2	7.21	129.81	122.60
3	c	120	GLN	O-C-N	7.21	129.76	122.12
20	Z	792	VAL	CA-C-N	7.21	129.94	120.28
20	Z	792	VAL	C-N-CA	7.21	129.94	120.28
27	O	125	GLY	CA-C-N	7.21	130.34	120.46
27	O	125	GLY	C-N-CA	7.21	130.34	120.46
27	O	381	GLY	CA-C-N	7.21	130.25	120.44
27	O	381	GLY	C-N-CA	7.21	130.25	120.44
27	O	112	LYS	N-CA-C	7.21	119.22	111.36
21	N	287	LEU	CA-C-N	7.21	130.52	120.29
21	N	287	LEU	C-N-CA	7.21	130.52	120.29
28	H	221	LEU	CA-C-N	7.21	130.66	120.28
28	H	221	LEU	C-N-CA	7.21	130.66	120.28
28	H	400	ARG	N-CA-C	-7.20	104.49	113.28
23	P	82	LEU	N-CA-CB	7.20	120.45	110.01
16	V	74	SER	N-CA-C	-7.20	104.11	114.12
23	P	134	VAL	CA-C-N	7.20	129.92	120.28
23	P	134	VAL	C-N-CA	7.20	129.92	120.28
6	F	67	ASP	O-C-N	-7.20	115.29	122.99
17	T	249	MET	N-CA-C	-7.20	97.39	108.76
25	R	43	ARG	O-C-N	-7.20	114.49	122.12
4	D	97	ARG	CA-C-N	7.19	130.22	120.44
4	D	97	ARG	C-N-CA	7.19	130.22	120.44
24	Q	349	LYS	N-CA-C	7.19	119.12	111.28
21	N	814	ALA	N-CA-C	7.19	119.98	111.71
9	i	181	ILE	CB-CA-C	-7.19	102.43	112.14
27	O	184	ASP	CA-C-N	7.19	130.50	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	O	184	ASP	C-N-CA	7.19	130.50	120.29
8	h	182	ILE	N-CA-C	-7.19	98.08	108.36
12	5	108	LYS	N-CA-C	-7.19	103.06	112.41
13	m	201	GLU	CA-C-O	7.19	128.10	120.70
4	D	178	ASN	OD1-CG-ND2	-7.19	115.41	122.60
16	V	304	ALA	N-CA-CB	7.19	120.49	110.07
20	Z	410	THR	N-CA-CB	7.18	121.37	110.45
20	Z	776	VAL	CA-C-O	-7.18	110.32	119.95
25	R	246	TYR	CB-CG-CD2	-7.18	110.03	120.80
10	j	48	HIS	CE1-NE2-CD2	-7.18	101.82	109.00
17	T	188	GLU	CA-C-N	7.18	129.75	120.56
17	T	188	GLU	C-N-CA	7.18	129.75	120.56
1	a	177	GLU	CA-C-N	7.17	130.61	120.42
1	a	177	GLU	C-N-CA	7.17	130.61	120.42
20	Z	338	HIS	CE1-NE2-CD2	-7.17	101.83	109.00
24	Q	190	ASN	N-CA-CB	7.17	122.62	110.71
1	a	33	LYS	N-CA-C	-7.17	102.83	112.94
27	O	235	HIS	ND1-CE1-NE2	7.17	115.57	108.40
11	k	180	ILE	N-CA-C	-7.17	98.16	108.48
13	6	149	ALA	CB-CA-C	-7.17	95.75	110.38
20	Z	303	ASP	CA-C-O	-7.17	111.70	118.73
6	f	116	ALA	CA-C-N	7.17	130.47	120.29
6	f	116	ALA	C-N-CA	7.17	130.47	120.29
13	6	61	SER	N-CA-C	-7.17	96.88	109.06
21	N	637	ALA	CA-C-N	7.17	130.28	120.46
21	N	637	ALA	C-N-CA	7.17	130.28	120.46
22	S	485	LYS	N-CA-C	7.17	119.17	111.36
29	I	122	SER	CA-C-N	7.17	128.07	120.12
29	I	122	SER	C-N-CA	7.17	128.07	120.12
6	f	13	PHE	CA-C-N	7.16	134.59	121.70
6	f	13	PHE	C-N-CA	7.16	134.59	121.70
30	K	180	GLN	N-CA-CB	7.16	120.76	110.16
31	L	243	PHE	CA-CB-CG	-7.16	106.64	113.80
32	M	359	GLN	CA-C-N	7.16	129.65	120.70
32	M	359	GLN	C-N-CA	7.16	129.65	120.70
26	U	248	ASP	CA-C-N	7.16	130.27	120.46
26	U	248	ASP	C-N-CA	7.16	130.27	120.46
28	H	298	ALA	CA-C-N	7.16	129.88	120.28
28	H	298	ALA	C-N-CA	7.16	129.88	120.28
5	e	144	ILE	O-C-N	7.16	130.49	122.68
1	A	151	GLY	CA-C-N	7.16	127.59	119.93
1	A	151	GLY	C-N-CA	7.16	127.59	119.93

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	53	ASP	N-CA-C	-7.16	103.71	113.30
27	O	60	ARG	CA-C-N	7.16	130.46	120.29
27	O	60	ARG	C-N-CA	7.16	130.46	120.29
33	J	168	VAL	CA-C-N	7.16	129.88	120.28
33	J	168	VAL	C-N-CA	7.16	129.88	120.28
17	T	78	PHE	N-CA-CB	7.16	120.61	109.94
8	h	135	ILE	N-CA-CB	7.16	123.10	111.36
24	Q	294	ARG	N-CA-C	-7.16	103.48	111.28
3	C	142	ASP	CA-C-N	7.16	129.74	120.44
3	C	142	ASP	C-N-CA	7.16	129.74	120.44
31	L	381	LYS	CA-C-N	7.16	130.45	120.29
31	L	381	LYS	C-N-CA	7.16	130.45	120.29
14	7	211	VAL	N-CA-C	7.15	117.87	110.36
1	A	97	ALA	N-CA-C	7.15	118.72	111.07
1	a	24	ARG	CD-NE-CZ	-7.15	114.39	124.40
1	a	173	PRO	N-CA-CB	7.15	110.11	103.46
2	b	239	THR	CA-C-N	7.15	129.86	120.28
2	b	239	THR	C-N-CA	7.15	129.86	120.28
5	e	239	LEU	N-CA-C	7.15	119.93	111.71
12	l	254	HIS	CE1-NE2-CD2	-7.15	101.85	109.00
13	m	80	VAL	CA-C-N	7.15	129.74	120.44
13	m	80	VAL	C-N-CA	7.15	129.74	120.44
10	3	125	ASP	CA-CB-CG	-7.15	105.45	112.60
20	Z	391	ASN	CA-CB-CG	-7.15	105.45	112.60
21	N	112	GLU	CA-C-N	7.15	129.73	120.44
21	N	112	GLU	C-N-CA	7.15	129.73	120.44
18	X	62	ASP	CA-C-N	7.15	128.77	119.84
18	X	62	ASP	C-N-CA	7.15	128.77	119.84
21	N	89	PHE	CA-C-N	7.14	129.85	120.28
21	N	89	PHE	C-N-CA	7.14	129.85	120.28
26	U	217	LYS	CA-C-N	7.14	135.18	121.54
26	U	217	LYS	C-N-CA	7.14	135.18	121.54
33	J	327	ILE	CA-C-N	7.14	130.57	120.28
33	J	327	ILE	C-N-CA	7.14	130.57	120.28
3	c	161	LYS	N-CA-C	-7.14	104.19	113.12
30	K	391	GLY	O-C-N	-7.14	114.13	122.34
17	T	28	PRO	CA-C-O	-7.14	110.21	120.56
9	i	170	HIS	CE1-NE2-CD2	-7.14	101.86	109.00
16	V	293	VAL	N-CA-C	7.14	117.93	110.72
33	J	11	VAL	CA-C-O	-7.14	111.86	120.78
21	N	910	PRO	N-CA-C	-7.13	105.55	114.68
22	S	127	THR	N-CA-C	-7.13	102.92	111.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	L	194	ARG	NE-CZ-NH1	7.13	128.63	121.50
31	L	117	TYR	CA-CB-CG	-7.13	101.07	113.90
32	M	412	HIS	O-C-N	7.13	131.03	122.27
3	C	122	TYR	CA-C-O	-7.12	111.38	119.79
21	N	681	ASN	OD1-CG-ND2	7.12	129.72	122.60
33	J	179	ILE	CA-C-O	7.12	129.19	121.36
14	7	206	ALA	CA-C-O	-7.12	113.00	120.55
30	K	74	HIS	ND1-CE1-NE2	7.12	115.52	108.40
9	2	86	GLN	N-CA-C	7.12	118.68	111.07
15	W	137	VAL	CB-CA-C	-7.12	100.10	110.63
21	N	173	LYS	O-C-N	7.12	131.10	122.35
25	R	325	HIS	CA-C-N	7.12	129.69	120.44
25	R	325	HIS	C-N-CA	7.12	129.69	120.44
33	J	385	ALA	CA-C-N	7.12	129.53	120.56
33	J	385	ALA	C-N-CA	7.12	129.53	120.56
22	S	339	GLN	OE1-CD-NE2	-7.11	115.49	122.60
23	P	336	HIS	CG-CD2-NE2	7.11	114.31	107.20
33	J	355	GLY	CA-C-N	7.11	129.69	120.44
33	J	355	GLY	C-N-CA	7.11	129.69	120.44
10	j	130	ILE	N-CA-CB	7.11	119.06	110.31
17	T	185	ILE	N-CA-C	-7.11	103.54	110.72
28	H	261	ARG	NE-CZ-NH1	-7.11	114.39	121.50
31	L	67	HIS	CA-CB-CG	-7.11	106.69	113.80
20	Z	295	ARG	CA-C-O	7.11	128.13	120.10
21	N	206	ILE	CA-C-N	7.11	130.52	120.28
21	N	206	ILE	C-N-CA	7.11	130.52	120.28
21	N	649	VAL	CA-C-N	7.11	129.68	120.44
21	N	649	VAL	C-N-CA	7.11	129.68	120.44
23	P	172	GLU	CA-C-N	7.11	129.81	120.28
23	P	172	GLU	C-N-CA	7.11	129.81	120.28
22	S	333	PHE	CA-CB-CG	-7.11	106.69	113.80
28	H	177	ASP	N-CA-C	-7.11	98.02	109.96
2	B	142	PHE	CB-CA-C	-7.11	99.99	109.16
26	U	19	LEU	CA-C-N	7.11	130.10	120.44
26	U	19	LEU	C-N-CA	7.11	130.10	120.44
5	e	222	ILE	N-CA-C	-7.10	97.20	107.78
8	h	53	CYS	CA-C-O	-7.10	112.44	120.32
3	C	4	ARG	CA-C-N	7.10	130.11	120.38
3	C	4	ARG	C-N-CA	7.10	130.11	120.38
21	N	430	ASN	CA-CB-CG	-7.10	105.50	112.60
21	N	373	VAL	N-CA-C	-7.10	103.55	110.72
22	S	90	LYS	CA-C-O	-7.10	113.02	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	H	175	GLY	N-CA-C	-7.10	99.05	111.62
21	N	222	TYR	N-CA-C	-7.10	104.77	113.50
22	S	159	ASN	CA-C-N	7.10	129.79	120.28
22	S	159	ASN	C-N-CA	7.10	129.79	120.28
23	P	238	ALA	N-CA-CB	7.10	120.56	110.12
20	Z	925	VAL	O-C-N	7.10	129.25	121.94
2	B	180	ASN	CA-CB-CG	-7.10	105.50	112.60
13	m	209	GLY	CA-C-O	-7.09	113.83	120.57
8	1	162	ASP	N-CA-C	7.09	121.69	112.89
18	X	130	ASN	CB-CA-C	-7.09	99.74	110.88
13	6	88	ASN	CA-CB-CG	-7.09	105.51	112.60
6	F	147	PHE	N-CA-C	-7.09	97.65	109.07
13	6	159	ASP	N-CA-C	-7.09	104.10	112.89
20	Z	361	HIS	CE1-NE2-CD2	-7.09	101.91	109.00
16	V	133	ASN	CA-CB-CG	7.09	119.69	112.60
23	P	93	ILE	CA-C-O	-7.09	113.58	120.95
13	6	103	HIS	CA-CB-CG	-7.09	106.71	113.80
12	5	155	SER	N-CA-CB	7.08	120.69	110.06
21	N	10	LEU	CA-C-N	7.08	129.77	120.28
21	N	10	LEU	C-N-CA	7.08	129.77	120.28
27	O	189	TYR	CA-C-N	7.08	130.08	120.44
27	O	189	TYR	C-N-CA	7.08	130.08	120.44
25	R	401	HIS	CE1-NE2-CD2	-7.08	101.92	109.00
27	O	293	LEU	O-C-N	-7.08	114.72	122.09
29	I	234	LYS	CA-C-N	7.08	129.65	120.44
29	I	234	LYS	C-N-CA	7.08	129.65	120.44
3	c	179	ASP	CA-CB-CG	-7.08	105.52	112.60
31	L	364	HIS	ND1-CE1-NE2	7.08	115.48	108.40
12	l	89	VAL	N-CA-C	-7.08	98.20	108.11
20	Z	625	THR	CA-C-N	7.08	128.69	119.84
20	Z	625	THR	C-N-CA	7.08	128.69	119.84
21	N	852	ASN	OD1-CG-ND2	7.08	129.68	122.60
27	O	236	HIS	ND1-CE1-NE2	7.08	115.47	108.40
27	O	366	MET	CA-C-N	7.08	129.76	120.28
27	O	366	MET	C-N-CA	7.08	129.76	120.28
14	n	70	ASN	CA-C-N	7.07	132.36	120.91
14	n	70	ASN	C-N-CA	7.07	132.36	120.91
11	4	32	ASP	CA-CB-CG	7.07	119.67	112.60
15	W	156	GLU	CA-C-N	7.07	129.63	120.44
15	W	156	GLU	C-N-CA	7.07	129.63	120.44
24	Q	280	ASN	CA-C-O	-7.07	113.42	120.70
21	N	404	SER	N-CA-CB	7.07	120.73	110.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	c	221	ASN	N-CA-CB	7.07	120.34	110.17
31	L	432	ILE	CA-C-N	7.07	131.42	120.75
31	L	432	ILE	C-N-CA	7.07	131.42	120.75
21	N	444	HIS	CA-CB-CG	7.06	120.86	113.80
3	c	210	ARG	NE-CZ-NH1	7.06	128.56	121.50
21	N	231	ASN	N-CA-CB	7.06	120.61	110.16
21	N	230	VAL	O-C-N	-7.06	114.56	121.83
23	P	254	GLU	CA-C-N	7.06	129.74	120.28
23	P	254	GLU	C-N-CA	7.06	129.74	120.28
5	E	73	HIS	ND1-CE1-NE2	7.06	115.46	108.40
10	3	48	HIS	ND1-CE1-NE2	7.06	115.46	108.40
12	5	158	LEU	N-CA-C	7.06	119.87	111.33
20	Z	806	GLU	CA-C-N	7.05	129.59	120.56
20	Z	806	GLU	C-N-CA	7.05	129.59	120.56
24	Q	315	ASN	CA-C-O	-7.05	113.07	120.55
25	R	204	TRP	CD2-CE2-CZ2	-7.05	115.34	122.40
33	J	231	ARG	NE-CZ-NH2	7.05	125.55	119.20
3	C	58	GLU	N-CA-CB	7.05	120.36	109.85
17	T	83	ASN	OD1-CG-ND2	-7.05	115.55	122.60
6	F	15	PRO	CA-C-O	-7.05	109.65	118.81
24	Q	428	GLU	O-C-N	-7.05	114.11	122.15
2	b	157	PHE	CB-CA-C	-7.05	100.79	110.16
1	A	197	GLU	CA-C-N	7.04	131.49	121.42
1	A	197	GLU	C-N-CA	7.04	131.49	121.42
28	H	177	ASP	N-CA-CB	7.04	121.64	110.23
12	5	260	TRP	N-CA-C	-7.04	99.13	110.32
5	e	130	GLU	CA-C-N	7.04	132.43	122.72
5	e	130	GLU	C-N-CA	7.04	132.43	122.72
1	a	84	ASN	CA-CB-CG	-7.03	105.57	112.60
13	m	184	SER	CA-C-O	-7.03	113.21	121.44
3	C	32	ALA	CA-C-N	7.03	135.19	121.41
3	C	32	ALA	C-N-CA	7.03	135.19	121.41
4	D	61	PRO	CB-CA-C	7.03	120.19	110.98
20	Z	518	LEU	CA-C-N	7.03	127.28	119.90
20	Z	518	LEU	C-N-CA	7.03	127.28	119.90
28	H	461	SER	CA-C-N	7.03	130.27	120.29
28	H	461	SER	C-N-CA	7.03	130.27	120.29
7	g	127	ASN	CB-CA-C	-7.03	98.84	110.72
14	7	78	VAL	N-CA-C	-7.03	98.27	108.11
1	a	27	GLN	OE1-CD-NE2	-7.03	115.58	122.60
3	c	79	GLY	N-CA-C	-7.03	101.39	110.38
16	V	22	ASP	N-CA-CB	7.03	122.36	110.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	S	339	GLN	CA-C-N	7.03	130.99	120.31
22	S	339	GLN	C-N-CA	7.03	130.99	120.31
28	H	95	HIS	CE1-NE2-CD2	-7.03	101.97	109.00
10	3	69	TYR	CA-C-O	7.02	128.00	120.55
17	T	172	SER	CA-C-N	7.02	132.60	121.08
17	T	172	SER	C-N-CA	7.02	132.60	121.08
5	e	236	THR	CA-C-O	-7.02	113.11	120.55
24	Q	433	LEU	O-C-N	7.02	130.16	122.15
25	R	73	ASN	N-CA-C	-7.02	95.84	110.80
11	k	21	VAL	CB-CA-C	-7.02	100.08	110.33
22	S	406	ASP	CA-CB-CG	-7.02	105.58	112.60
16	V	192	LEU	N-CA-CB	7.02	120.19	110.01
14	7	236	ASN	CA-CB-CG	-7.02	105.58	112.60
20	Z	399	LEU	N-CA-C	7.02	119.96	111.82
12	5	167	GLY	N-CA-C	-7.01	105.38	115.27
25	R	324	ARG	N-CA-C	-7.01	104.87	113.50
23	P	310	ARG	CA-C-N	7.01	129.83	120.58
23	P	310	ARG	C-N-CA	7.01	129.83	120.58
17	T	174	PHE	CA-CB-CG	7.01	120.81	113.80
24	Q	163	ARG	NE-CZ-NH2	-7.01	112.89	119.20
30	K	302	GLN	OE1-CD-NE2	7.00	129.60	122.60
32	M	328	ASN	OD1-CG-ND2	-7.00	115.60	122.60
26	U	157	LEU	O-C-N	-7.00	115.78	121.80
29	I	334	LEU	CA-C-N	7.00	130.17	120.65
29	I	334	LEU	C-N-CA	7.00	130.17	120.65
21	N	366	THR	O-C-N	7.00	129.28	122.07
22	S	452	TYR	N-CA-C	-7.00	104.63	113.72
29	I	224	ALA	CA-C-N	7.00	126.98	119.78
29	I	224	ALA	C-N-CA	7.00	126.98	119.78
3	c	70	ASN	N-CA-CB	6.99	122.61	111.56
4	D	96	HIS	CA-CB-CG	6.99	120.79	113.80
12	5	266	HIS	N-CA-C	-6.99	96.94	108.76
13	6	182	TYR	N-CA-C	-6.99	99.20	110.32
27	O	305	ILE	CB-CA-C	-6.99	103.90	111.59
6	f	130	VAL	CA-C-O	-6.99	114.39	121.59
13	m	87	HIS	N-CA-C	-6.99	103.87	112.88
12	5	266	HIS	CA-CB-CG	-6.99	106.81	113.80
30	K	157	SER	N-CA-C	-6.98	104.79	113.38
1	a	123	ASN	N-CA-CB	6.98	120.49	110.16
13	m	98	ALA	CA-C-N	6.98	129.94	120.38
13	m	98	ALA	C-N-CA	6.98	129.94	120.38
13	m	116	HIS	CE1-NE2-CD2	-6.98	102.02	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	J	166	LEU	CA-C-O	-6.98	111.57	118.34
1	a	72	ILE	N-CA-CB	6.98	120.46	111.67
10	3	170	ALA	O-C-N	6.98	129.52	122.12
12	l	284	ASN	N-CA-CB	6.97	120.59	110.20
3	C	4	ARG	N-CA-CB	6.97	120.52	110.06
11	4	39	SER	CA-C-N	6.97	127.86	120.12
11	4	39	SER	C-N-CA	6.97	127.86	120.12
14	7	197	ASP	CA-CB-CG	-6.97	105.62	112.60
25	R	81	HIS	CE1-NE2-CD2	-6.97	102.03	109.00
6	F	169	LYS	O-C-N	6.97	130.38	122.22
9	2	174	ASP	N-CA-CB	6.97	122.27	110.49
21	N	743	PHE	CA-C-O	-6.97	111.58	118.34
21	N	219	ASN	CA-CB-CG	6.97	119.57	112.60
6	F	220	THR	CA-C-N	6.97	126.89	119.85
6	F	220	THR	C-N-CA	6.97	126.89	119.85
22	S	390	THR	N-CA-CB	6.97	120.37	110.12
11	k	10	GLN	N-CA-C	6.97	121.23	112.87
2	B	31	GLY	CA-C-O	-6.97	114.95	122.47
21	N	59	GLU	CB-CG-CD	-6.97	100.76	112.60
21	N	400	ILE	CA-C-O	-6.97	113.79	121.17
3	c	94	HIS	N-CA-CB	6.96	120.36	110.12
32	M	106	VAL	CA-C-O	6.96	129.48	120.78
6	f	184	GLY	CA-C-N	6.96	128.41	122.28
6	f	184	GLY	C-N-CA	6.96	128.41	122.28
21	N	190	LEU	CB-CA-C	-6.96	97.96	110.70
1	A	50	CYS	N-CA-C	-6.96	99.14	108.74
16	V	167	ASN	N-CA-CB	6.96	122.25	110.49
21	N	369	ALA	N-CA-C	6.96	121.03	112.54
24	Q	110	SER	N-CA-CB	6.96	122.25	110.49
23	P	326	ASP	N-CA-CB	6.96	119.91	110.38
6	f	89	ARG	NE-CZ-NH2	-6.96	112.94	119.20
2	B	30	GLN	N-CA-C	6.96	119.89	111.82
4	D	70	HIS	ND1-CE1-NE2	6.96	115.36	108.40
6	F	212	SER	N-CA-C	-6.96	96.72	108.26
14	7	211	VAL	O-C-N	6.96	128.90	121.94
20	Z	388	GLY	CA-C-N	6.96	131.73	120.60
20	Z	388	GLY	C-N-CA	6.96	131.73	120.60
1	a	189	SER	CA-C-N	6.95	132.58	122.36
1	a	189	SER	C-N-CA	6.95	132.58	122.36
21	N	281	GLY	CA-C-O	6.95	126.47	118.96
21	N	621	THR	N-CA-CB	6.95	121.06	110.28
29	I	284	ILE	N-CA-C	-6.95	104.81	112.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	M	342	ARG	N-CA-C	-6.95	103.94	113.18
12	5	131	GLU	N-CA-CB	6.95	120.74	110.53
30	K	369	ASP	N-CA-C	-6.95	104.80	113.28
30	K	386	ILE	CA-C-N	6.95	130.16	120.29
30	K	386	ILE	C-N-CA	6.95	130.16	120.29
31	L	273	HIS	N-CA-C	-6.95	103.14	112.94
28	H	141	GLU	CA-C-O	-6.95	113.52	121.72
3	c	4	ARG	CA-C-N	6.95	129.92	120.54
3	c	4	ARG	C-N-CA	6.95	129.92	120.54
14	n	247	VAL	N-CA-CB	6.95	118.29	110.72
15	W	168	THR	N-CA-C	-6.95	97.02	108.76
22	S	285	ASP	N-CA-C	-6.95	97.02	108.76
23	P	439	MET	CG-SD-CE	-6.95	85.62	100.90
30	K	141	ARG	N-CA-CB	6.95	120.08	110.01
5	e	222	ILE	O-C-N	-6.94	115.88	123.03
6	F	110	HIS	CA-CB-CG	-6.94	106.86	113.80
21	N	445	GLY	CA-C-N	6.94	130.15	120.29
21	N	445	GLY	C-N-CA	6.94	130.15	120.29
22	S	183	LEU	N-CA-C	-6.94	103.64	111.14
14	n	53	VAL	O-C-N	-6.94	115.26	122.82
10	3	104	PHE	N-CA-C	-6.94	95.24	107.73
14	7	155	ASN	OD1-CG-ND2	-6.94	115.66	122.60
33	J	200	ARG	NE-CZ-NH2	-6.94	112.96	119.20
16	V	235	GLU	O-C-N	-6.94	114.93	122.07
6	F	221	PRO	N-CA-CB	6.93	109.78	103.33
20	Z	539	ASN	OD1-CG-ND2	-6.93	115.67	122.60
5	e	196	ALA	CA-C-N	6.93	130.13	120.29
5	e	196	ALA	C-N-CA	6.93	130.13	120.29
4	D	173	GLU	N-CA-CB	6.93	120.06	110.01
1	A	199	TRP	N-CA-C	6.93	120.99	112.54
30	K	422	ASP	CA-CB-CG	6.93	119.53	112.60
2	B	170	ALA	O-C-N	-6.93	114.61	122.09
29	I	337	ALA	CB-CA-C	-6.92	99.29	110.79
19	Y	5	VAL	CA-C-O	6.92	129.43	120.78
20	Z	845	LEU	N-CA-C	-6.92	103.66	111.07
1	a	171	THR	CA-C-O	6.92	128.63	121.23
2	b	232	GLY	CA-C-N	6.92	128.49	119.84
2	b	232	GLY	C-N-CA	6.92	128.49	119.84
19	Y	2	SER	N-CA-C	-6.92	97.83	108.76
23	P	41	VAL	CB-CA-C	-6.92	101.44	112.16
3	C	171	ALA	N-CA-C	6.92	118.47	111.07
1	A	35	THR	N-CA-C	6.91	119.66	111.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	E	234	GLU	CA-C-N	6.91	132.40	120.58
5	E	234	GLU	C-N-CA	6.91	132.40	120.58
17	T	84	GLN	CA-C-N	6.91	129.54	120.28
17	T	84	GLN	C-N-CA	6.91	129.54	120.28
20	Z	810	ASN	CA-CB-CG	-6.91	105.69	112.60
22	S	148	ASP	CA-C-N	6.91	129.43	120.44
22	S	148	ASP	C-N-CA	6.91	129.43	120.44
26	U	146	ASP	N-CA-C	-6.91	102.26	110.41
23	P	37	ASP	N-CA-CB	6.91	120.42	110.06
20	Z	912	PHE	CA-C-N	6.91	131.60	120.55
20	Z	912	PHE	C-N-CA	6.91	131.60	120.55
32	M	415	PHE	CA-C-N	6.91	131.38	120.47
32	M	415	PHE	C-N-CA	6.91	131.38	120.47
31	L	181	ASP	CA-CB-CG	6.90	119.50	112.60
4	D	109	LEU	CA-C-N	6.90	129.82	120.44
4	D	109	LEU	C-N-CA	6.90	129.82	120.44
21	N	227	LYS	CA-C-N	6.90	130.22	120.42
21	N	227	LYS	C-N-CA	6.90	130.22	120.42
29	I	112	ILE	CB-CA-C	6.90	120.84	110.63
6	f	233	TYR	N-CA-C	-6.90	103.40	114.09
21	N	89	PHE	CA-CB-CG	-6.90	106.90	113.80
14	7	245	LEU	N-CA-CB	6.90	120.10	110.17
6	f	189	LEU	CA-C-N	6.89	129.38	120.56
6	f	189	LEU	C-N-CA	6.89	129.38	120.56
7	G	239	ALA	N-CA-C	-6.89	103.69	111.14
32	M	64	ASP	N-CA-C	-6.89	103.84	111.36
14	7	45	ILE	N-CA-C	-6.89	97.58	108.95
21	N	824	ASN	CA-CB-CG	6.89	119.49	112.60
20	Z	567	ALA	N-CA-CB	6.89	120.06	110.07
20	Z	743	ILE	CA-C-N	6.89	129.51	120.28
20	Z	743	ILE	C-N-CA	6.89	129.51	120.28
27	O	123	GLY	N-CA-C	-6.89	104.78	115.73
4	D	104	VAL	CA-C-N	6.89	132.28	122.09
4	D	104	VAL	C-N-CA	6.89	132.28	122.09
28	H	95	HIS	ND1-CE1-NE2	6.89	115.29	108.40
29	I	418	GLN	CA-C-O	6.89	127.72	120.42
2	b	89	SER	CB-CA-C	-6.88	99.15	110.85
32	M	144	ASP	CA-CB-CG	6.88	119.48	112.60
13	6	81	LYS	N-CA-CB	6.88	122.12	110.49
32	M	44	PHE	CA-C-O	6.88	127.72	120.42
32	M	165	SER	CA-C-N	6.88	130.06	120.29
32	M	165	SER	C-N-CA	6.88	130.06	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	a	96	ARG	CA-C-N	6.88	129.50	120.28
1	a	96	ARG	C-N-CA	6.88	129.50	120.28
4	D	207	ALA	N-CA-C	-6.88	104.46	112.92
28	H	206	VAL	O-C-N	6.88	130.11	123.03
15	W	48	THR	CA-C-O	-6.87	113.64	121.40
17	T	29	PRO	CA-C-N	6.87	131.57	120.30
17	T	29	PRO	C-N-CA	6.87	131.57	120.30
20	Z	601	VAL	CA-C-N	6.87	129.37	120.44
20	Z	601	VAL	C-N-CA	6.87	129.37	120.44
22	S	380	CYS	CA-C-N	6.87	130.18	120.42
22	S	380	CYS	C-N-CA	6.87	130.18	120.42
7	G	45	GLY	CA-C-N	6.87	132.12	122.23
7	G	45	GLY	C-N-CA	6.87	132.12	122.23
21	N	717	LEU	CA-C-O	-6.87	111.58	119.14
31	L	374	PHE	CA-C-N	6.87	133.88	122.54
31	L	374	PHE	C-N-CA	6.87	133.88	122.54
11	k	42	THR	CA-C-O	6.87	128.73	120.28
2	B	16	GLY	N-CA-C	-6.87	102.91	111.70
25	R	251	THR	N-CA-CB	6.87	120.32	110.16
16	V	279	HIS	ND1-CE1-NE2	6.87	115.27	108.40
20	Z	897	HIS	ND1-CE1-NE2	6.87	115.27	108.40
31	L	95	ILE	CA-C-N	6.87	130.04	120.29
31	L	95	ILE	C-N-CA	6.87	130.04	120.29
7	G	33	ASN	CA-CB-CG	-6.86	105.74	112.60
8	1	149	LYS	CA-C-O	6.86	127.89	119.79
30	K	325	ASP	N-CA-C	-6.86	101.42	109.93
13	6	84	HIS	CB-CG-CD2	-6.86	122.28	131.20
20	Z	523	ALA	N-CA-C	-6.86	104.90	112.72
25	R	236	ALA	N-CA-C	6.86	118.83	111.36
25	R	259	PHE	CA-CB-CG	6.86	120.66	113.80
31	L	307	GLU	N-CA-CB	6.86	120.01	110.07
2	b	56	ALA	N-CA-CB	6.86	120.05	109.97
8	h	195	LEU	N-CA-C	-6.86	98.89	109.52
12	l	126	ASP	CA-C-N	6.85	130.02	120.29
12	l	126	ASP	C-N-CA	6.85	130.02	120.29
13	m	54	CYS	N-CA-C	-6.85	104.59	114.12
21	N	446	ALA	N-CA-C	-6.85	103.89	111.36
5	e	236	THR	O-C-N	6.85	129.38	122.12
4	D	110	THR	N-CA-C	-6.85	103.74	111.14
20	Z	238	ASP	CA-C-N	6.85	129.76	120.38
20	Z	238	ASP	C-N-CA	6.85	129.76	120.38
24	Q	199	THR	CA-C-N	6.85	129.46	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	Q	199	THR	C-N-CA	6.85	129.46	120.28
16	V	212	MET	O-C-N	6.85	129.38	122.12
24	Q	226	HIS	ND1-CE1-NE2	6.85	115.25	108.40
21	N	378	ASN	OD1-CG-ND2	6.84	129.44	122.60
28	H	284	VAL	CB-CA-C	-6.84	104.55	111.80
12	l	211	ALA	CA-C-N	6.84	129.78	120.54
12	l	211	ALA	C-N-CA	6.84	129.78	120.54
26	U	125	VAL	CB-CA-C	-6.84	103.16	111.85
32	M	167	VAL	N-CA-C	6.84	117.60	110.62
3	C	66	LEU	N-CA-CB	6.84	121.31	110.57
13	6	73	VAL	N-CA-C	-6.84	104.33	111.58
3	c	49	GLU	N-CA-C	-6.84	98.06	109.07
16	V	288	LEU	N-CA-C	6.84	118.53	111.14
5	e	25	GLU	CA-C-N	6.84	129.44	120.28
5	e	25	GLU	C-N-CA	6.84	129.44	120.28
5	e	72	ARG	CG-CD-NE	-6.84	96.96	112.00
18	X	40	GLU	CA-C-N	6.84	131.84	122.34
18	X	40	GLU	C-N-CA	6.84	131.84	122.34
30	K	376	ASP	N-CA-C	-6.84	104.83	113.72
16	V	42	ARG	NE-CZ-NH2	6.83	125.35	119.20
32	M	349	PHE	N-CA-C	-6.83	98.98	109.64
7	g	22	PHE	CA-C-N	6.83	134.00	121.70
7	g	22	PHE	C-N-CA	6.83	134.00	121.70
16	V	153	ILE	N-CA-C	-6.83	99.33	108.35
20	Z	46	LYS	CA-C-N	6.83	129.73	120.44
20	Z	46	LYS	C-N-CA	6.83	129.73	120.44
32	M	351	LEU	CA-C-N	6.83	126.86	119.89
32	M	351	LEU	C-N-CA	6.83	126.86	119.89
8	1	153	GLU	N-CA-CB	6.83	122.03	110.49
12	5	83	PHE	N-CA-C	-6.83	98.64	108.07
12	l	249	SER	N-CA-C	-6.83	98.69	109.07
32	M	33	ARG	CA-C-N	6.83	132.26	120.58
32	M	33	ARG	C-N-CA	6.83	132.26	120.58
1	A	33	LYS	N-CA-C	-6.82	104.08	112.88
7	G	105	THR	O-C-N	-6.82	117.08	121.85
30	K	79	LEU	CA-C-O	-6.82	112.67	120.24
2	b	66	LEU	N-CA-C	-6.82	98.12	109.24
7	g	93	ARG	CD-NE-CZ	-6.82	114.85	124.40
4	D	223	ALA	CA-C-O	-6.82	112.99	120.36
7	G	144	ASN	OD1-CG-ND2	6.82	129.42	122.60
13	6	15	ASP	CA-C-O	6.82	128.70	121.33
13	6	50	LYS	CA-C-N	6.82	128.06	121.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	6	50	LYS	C-N-CA	6.82	128.06	121.65
21	N	897	LYS	N-CA-C	-6.82	104.58	113.17
22	S	466	LYS	CA-C-N	6.82	129.97	120.29
22	S	466	LYS	C-N-CA	6.82	129.97	120.29
4	d	16	HIS	CE1-NE2-CD2	-6.82	102.18	109.00
33	J	249	GLU	CA-C-N	6.82	130.49	120.74
33	J	249	GLU	C-N-CA	6.82	130.49	120.74
1	a	13	ASP	CA-C-N	6.82	132.87	122.37
1	a	13	ASP	C-N-CA	6.82	132.87	122.37
8	h	179	GLY	CA-C-O	6.82	128.11	121.63
20	Z	83	THR	N-CA-C	-6.82	103.91	111.82
22	S	396	SER	CA-C-N	6.82	129.30	120.44
22	S	396	SER	C-N-CA	6.82	129.30	120.44
26	U	20	ASP	CA-C-N	6.82	130.33	120.38
26	U	20	ASP	C-N-CA	6.82	130.33	120.38
33	J	276	LEU	CA-C-N	6.82	129.30	120.44
33	J	276	LEU	C-N-CA	6.82	129.30	120.44
13	m	30	VAL	O-C-N	-6.81	115.81	123.10
12	l	128	GLN	CA-C-N	6.81	129.90	120.63
12	l	128	GLN	C-N-CA	6.81	129.90	120.63
12	l	280	GLY	O-C-N	6.81	129.09	122.41
13	6	102	GLN	CB-CA-C	-6.81	99.10	110.68
17	T	221	ALA	CA-C-N	6.81	129.41	120.28
17	T	221	ALA	C-N-CA	6.81	129.41	120.28
23	P	264	ILE	CA-C-N	6.81	129.39	120.60
23	P	264	ILE	C-N-CA	6.81	129.39	120.60
26	U	217	LYS	CA-C-O	-6.81	111.44	119.48
29	I	363	GLY	CA-C-N	6.81	130.09	120.42
29	I	363	GLY	C-N-CA	6.81	130.09	120.42
3	C	6	TYR	CA-C-N	6.81	130.48	120.95
3	C	6	TYR	C-N-CA	6.81	130.48	120.95
5	E	154	GLN	O-C-N	-6.81	115.37	123.27
21	N	166	ILE	CA-C-N	6.81	129.29	120.44
21	N	166	ILE	C-N-CA	6.81	129.29	120.44
30	K	128	ARG	N-CA-C	-6.81	104.59	113.17
16	V	101	ASP	CA-CB-CG	-6.81	105.79	112.60
32	M	15	ASP	CA-CB-CG	6.81	119.41	112.60
24	Q	73	LYS	CA-C-N	6.80	129.40	120.28
24	Q	73	LYS	C-N-CA	6.80	129.40	120.28
26	U	171	VAL	CA-C-N	6.80	129.40	120.28
26	U	171	VAL	C-N-CA	6.80	129.40	120.28
27	O	297	ILE	O-C-N	6.80	128.84	121.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	f	99	PHE	CA-C-N	6.80	131.78	122.19
6	f	99	PHE	C-N-CA	6.80	131.78	122.19
5	E	188	HIS	CG-CD2-NE2	6.80	114.00	107.20
8	h	195	LEU	N-CA-CB	6.80	123.38	111.55
8	l	127	SER	N-CA-C	-6.80	98.97	109.24
24	Q	26	VAL	N-CA-C	6.80	117.56	110.62
28	H	411	CYS	CB-CA-C	-6.80	102.62	110.17
3	c	194	LEU	CA-C-N	6.80	129.39	120.28
3	c	194	LEU	C-N-CA	6.80	129.39	120.28
13	m	142	GLU	N-CA-CB	6.80	122.22	111.20
25	R	94	PHE	CA-C-O	-6.80	114.35	122.03
28	H	141	GLU	CA-C-N	6.80	129.94	120.29
28	H	141	GLU	C-N-CA	6.80	129.94	120.29
12	5	232	GLY	CA-C-N	6.80	129.62	120.65
12	5	232	GLY	C-N-CA	6.80	129.62	120.65
21	N	417	ARG	NE-CZ-NH2	6.80	125.32	119.20
8	l	16	THR	N-CA-C	6.80	119.72	110.55
30	K	163	GLU	O-C-N	6.80	129.32	122.12
31	L	408	ASP	CA-CB-CG	-6.80	105.80	112.60
33	J	349	LYS	CA-C-O	6.80	127.75	120.55
1	A	108	TYR	O-C-N	-6.79	115.19	122.19
21	N	211	PHE	O-C-N	6.79	129.07	122.07
23	P	306	ASN	CA-CB-CG	-6.79	105.81	112.60
23	P	326	ASP	CA-C-O	-6.79	114.25	121.99
27	O	29	PHE	CB-CA-C	-6.79	99.52	110.79
6	f	219	ASP	N-CA-C	-6.79	104.12	114.16
5	e	49	GLY	N-CA-C	-6.79	100.32	111.38
4	D	102	ASP	O-C-N	-6.79	113.52	121.32
20	Z	721	ASN	CB-CG-ND2	-6.79	106.22	116.40
24	Q	334	HIS	CE1-NE2-CD2	-6.79	102.22	109.00
27	O	23	HIS	CA-C-N	6.79	126.74	119.28
27	O	23	HIS	C-N-CA	6.79	126.74	119.28
29	I	111	GLU	N-CA-C	-6.78	98.41	108.79
2	B	101	TYR	CB-CG-CD1	6.78	130.97	120.80
17	T	251	HIS	CE1-NE2-CD2	-6.78	102.22	109.00
30	K	177	LEU	CA-C-N	6.78	129.92	120.29
30	K	177	LEU	C-N-CA	6.78	129.92	120.29
9	i	80	ASP	N-CA-C	-6.78	104.98	113.18
10	j	159	GLU	CA-C-O	-6.78	113.31	120.70
7	G	238	GLU	CA-C-N	6.78	129.66	120.44
7	G	238	GLU	C-N-CA	6.78	129.66	120.44
29	I	118	ALA	N-CA-C	-6.78	98.77	109.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	n	249	ASN	CA-C-N	6.78	130.98	120.75
14	n	249	ASN	C-N-CA	6.78	130.98	120.75
20	Z	747	ALA	CB-CA-C	-6.78	99.54	110.79
28	H	96	PRO	O-C-N	6.78	133.97	121.10
31	L	360	ILE	CA-C-N	6.78	129.36	120.28
31	L	360	ILE	C-N-CA	6.78	129.36	120.28
4	d	213	THR	CA-C-O	-6.77	113.53	120.71
12	l	77	THR	N-CA-C	-6.77	97.21	108.32
5	E	237	ALA	CB-CA-C	-6.77	99.33	110.85
29	I	214	LYS	CA-C-O	-6.77	113.73	119.76
20	Z	26	ASN	OD1-CG-ND2	-6.77	115.83	122.60
17	T	91	SER	CA-C-N	6.77	134.47	121.54
17	T	91	SER	C-N-CA	6.77	134.47	121.54
20	Z	614	VAL	CB-CA-C	-6.77	103.41	111.94
29	I	60	LEU	N-CA-C	-6.77	103.98	111.36
22	S	291	GLU	O-C-N	6.77	129.04	122.07
24	Q	101	ILE	N-CA-CB	6.77	118.47	110.55
29	I	92	GLU	N-CA-C	-6.77	103.98	111.36
4	d	80	ALA	N-CA-C	-6.76	103.05	112.45
22	S	489	GLN	OE1-CD-NE2	6.76	129.37	122.60
25	R	101	GLU	N-CA-C	6.76	119.22	111.11
29	I	373	GLU	O-C-N	-6.76	113.71	122.37
31	L	364	HIS	CB-CG-CD2	-6.76	122.41	131.20
13	m	208	ASP	CA-CB-CG	-6.76	105.84	112.60
20	Z	353	VAL	CA-C-N	6.76	127.31	119.47
20	Z	353	VAL	C-N-CA	6.76	127.31	119.47
22	S	349	THR	N-CA-C	6.76	118.73	111.36
27	O	7	ILE	CA-C-N	6.76	129.34	120.28
27	O	7	ILE	C-N-CA	6.76	129.34	120.28
33	J	183	LYS	CA-C-N	6.76	127.43	120.60
33	J	183	LYS	C-N-CA	6.76	127.43	120.60
15	W	142	ILE	CA-CB-CG2	6.76	121.99	110.50
23	P	419	VAL	N-CA-C	6.76	116.91	110.42
27	O	123	GLY	CA-C-N	6.76	129.23	120.44
27	O	123	GLY	C-N-CA	6.76	129.23	120.44
29	I	191	ILE	O-C-N	6.76	128.70	121.87
29	I	204	HIS	CA-C-N	6.76	127.34	120.04
29	I	204	HIS	C-N-CA	6.76	127.34	120.04
27	O	134	ALA	CA-C-O	-6.76	113.72	120.82
9	2	143	HIS	CE1-NE2-CD2	-6.76	102.24	109.00
20	Z	48	ASP	CA-CB-CG	-6.76	105.84	112.60
20	Z	136	ARG	NE-CZ-NH2	-6.76	113.12	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	Z	829	GLN	N-CA-C	6.76	118.64	111.28
2	B	40	THR	N-CA-C	-6.75	103.48	113.61
24	Q	346	ASN	CA-CB-CG	-6.75	105.85	112.60
7	G	47	VAL	CA-C-O	6.75	127.09	120.27
20	Z	199	ASP	CA-CB-CG	-6.75	105.85	112.60
22	S	460	VAL	N-CA-C	6.75	117.51	110.62
15	W	183	GLU	CA-C-O	-6.75	113.27	120.42
27	O	87	LYS	N-CA-C	-6.75	104.94	113.72
32	M	299	ARG	N-CA-C	-6.75	102.24	110.88
19	Y	37	ASP	N-CA-C	6.75	118.29	111.07
20	Z	351	PRO	N-CA-C	-6.75	106.89	114.92
1	a	174	LYS	N-CA-C	-6.75	105.03	112.72
1	a	205	PHE	N-CA-C	-6.74	103.93	111.28
7	g	220	SER	CA-C-O	-6.74	112.51	120.60
20	Z	935	THR	CA-C-N	6.74	130.59	120.75
20	Z	935	THR	C-N-CA	6.74	130.59	120.75
16	V	262	THR	N-CA-CB	6.74	121.88	110.49
1	a	61	ASP	CA-C-N	6.74	129.85	120.29
1	a	61	ASP	C-N-CA	6.74	129.85	120.29
10	3	67	PHE	N-CA-CB	6.74	120.02	110.12
19	Y	48	THR	CA-C-N	6.74	129.05	120.56
19	Y	48	THR	C-N-CA	6.74	129.05	120.56
21	N	735	MET	CA-C-N	6.74	129.31	120.28
21	N	735	MET	C-N-CA	6.74	129.31	120.28
26	U	18	ALA	CA-C-N	6.73	129.85	120.29
26	U	18	ALA	C-N-CA	6.73	129.85	120.29
8	h	19	ASP	N-CA-C	-6.73	105.22	113.50
12	5	254	HIS	CG-CD2-NE2	6.73	113.93	107.20
13	6	194	ASP	N-CA-C	6.73	118.70	111.36
23	P	221	TYR	CB-CA-C	-6.73	99.41	110.85
4	d	116	VAL	N-CA-CB	6.73	119.18	110.57
3	C	207	THR	CA-C-N	6.73	129.97	120.28
3	C	207	THR	C-N-CA	6.73	129.97	120.28
10	3	83	GLU	CA-C-N	6.73	126.42	119.56
10	3	83	GLU	C-N-CA	6.73	126.42	119.56
20	Z	483	THR	CA-CB-OG1	6.72	119.69	109.60
7	g	153	PRO	N-CA-C	-6.72	106.13	114.20
16	V	148	LYS	N-CA-C	-6.72	99.10	109.52
19	Y	22	GLU	CA-C-N	6.72	129.18	120.44
19	Y	22	GLU	C-N-CA	6.72	129.18	120.44
20	Z	207	ILE	N-CA-C	-6.72	104.95	113.22
21	N	386	MET	CG-SD-CE	-6.72	86.11	100.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	210	SER	N-CA-C	6.72	119.44	111.71
8	h	157	LYS	N-CA-C	6.72	118.60	111.28
11	4	25	ILE	CA-CB-CG1	6.72	121.82	110.40
13	6	80	VAL	N-CA-CB	6.72	118.41	110.55
21	N	268	GLN	N-CA-C	6.72	118.60	111.28
24	Q	424	ASP	N-CA-C	-6.72	104.03	111.36
25	R	216	ILE	CA-C-N	6.72	129.18	120.44
25	R	216	ILE	C-N-CA	6.72	129.18	120.44
10	j	22	ALA	N-CA-C	-6.72	98.44	108.99
26	U	262	GLN	OE1-CD-NE2	6.72	129.32	122.60
21	N	233	ASN	OD1-CG-ND2	6.72	129.32	122.60
5	E	196	ALA	CA-C-N	6.71	129.28	120.28
5	E	196	ALA	C-N-CA	6.71	129.28	120.28
13	6	131	TYR	CA-C-O	-6.71	113.52	121.11
5	e	240	ILE	CA-C-O	-6.71	113.73	120.85
16	V	181	ASN	N-CA-CB	6.71	123.37	111.69
32	M	258	GLU	N-CA-C	-6.71	105.06	113.18
8	h	129	HIS	CA-CB-CG	6.71	120.51	113.80
9	i	225	ARG	CA-C-O	-6.71	112.98	120.70
9	2	145	HIS	ND1-CE1-NE2	6.71	115.11	108.40
20	Z	548	ASP	CA-C-N	6.71	129.82	120.29
20	Z	548	ASP	C-N-CA	6.71	129.82	120.29
21	N	301	THR	N-CA-CB	6.71	119.74	110.01
32	M	44	PHE	N-CA-C	6.71	118.67	111.36
14	n	36	GLN	CA-C-O	-6.71	114.33	120.50
14	7	213	ALA	N-CA-C	6.71	118.59	111.28
20	Z	56	LEU	CB-CA-C	-6.71	102.14	112.07
31	L	256	ILE	N-CA-CB	-6.71	104.92	111.89
33	J	324	ARG	CA-C-N	6.71	129.81	120.29
33	J	324	ARG	C-N-CA	6.71	129.81	120.29
4	D	70	HIS	CE1-NE2-CD2	-6.71	102.30	109.00
28	H	428	MET	N-CA-C	-6.71	104.05	111.36
20	Z	751	ASP	CA-CB-CG	-6.70	105.90	112.60
21	N	58	ARG	CA-C-O	6.70	127.87	120.63
12	5	227	ASP	CA-CB-CG	-6.70	105.90	112.60
30	K	322	ASP	N-CA-CB	6.70	121.11	110.73
33	J	23	PHE	CA-CB-CG	6.70	120.50	113.80
9	i	123	ILE	N-CA-C	-6.70	98.09	107.80
12	l	121	ALA	N-CA-C	-6.70	98.54	108.79
14	n	221	ASP	CA-CB-CG	6.70	119.30	112.60
20	Z	380	ASN	CA-CB-CG	-6.70	105.90	112.60
21	N	856	PHE	CA-CB-CG	-6.70	107.10	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	S	182	LYS	CA-C-N	6.70	129.55	120.44
22	S	182	LYS	C-N-CA	6.70	129.55	120.44
27	O	39	PHE	CA-CB-CG	-6.70	107.10	113.80
4	d	46	CYS	CA-C-N	6.70	131.08	121.50
4	d	46	CYS	C-N-CA	6.70	131.08	121.50
13	m	48	GLU	CA-C-N	6.70	128.21	119.84
13	m	48	GLU	C-N-CA	6.70	128.21	119.84
7	g	82	ILE	O-C-N	-6.70	113.47	121.10
32	M	247	ALA	CB-CA-C	6.70	121.82	109.70
4	d	216	LYS	O-C-N	-6.69	115.66	121.35
6	f	78	ALA	CA-C-N	6.69	126.64	119.28
6	f	78	ALA	C-N-CA	6.69	126.64	119.28
12	l	195	THR	N-CA-CB	6.69	119.88	110.04
14	n	124	TYR	CB-CG-CD1	6.69	130.84	120.80
30	K	122	ILE	N-CA-C	-6.69	98.83	108.53
27	O	31	LYS	CB-CA-C	-6.69	100.38	110.88
11	k	146	HIS	CG-CD2-NE2	6.69	113.89	107.20
6	F	86	ASN	CA-CB-CG	-6.69	105.91	112.60
17	T	69	SER	CA-C-N	6.69	129.92	120.42
17	T	69	SER	C-N-CA	6.69	129.92	120.42
11	k	84	VAL	CA-C-N	6.68	129.24	120.28
11	k	84	VAL	C-N-CA	6.68	129.24	120.28
31	L	334	ASP	CA-C-O	-6.68	113.22	120.17
13	6	39	THR	N-CA-C	-6.68	96.64	108.13
9	2	221	THR	CA-C-O	-6.68	113.44	119.59
9	2	77	THR	CA-C-N	6.68	129.23	120.28
9	2	77	THR	C-N-CA	6.68	129.23	120.28
17	T	197	TYR	CB-CG-CD1	6.68	130.82	120.80
5	E	192	THR	CA-C-O	-6.68	114.28	121.56
23	P	336	HIS	ND1-CE1-NE2	6.68	115.08	108.40
2	B	43	VAL	CA-C-O	-6.68	113.42	120.76
2	B	62	SER	O-C-N	6.68	131.22	123.41
7	G	66	LYS	N-CA-C	-6.68	102.64	113.19
1	a	13	ASP	CA-CB-CG	6.67	119.28	112.60
9	2	236	ARG	O-C-N	6.67	130.83	123.22
4	D	105	THR	CA-C-N	6.67	129.60	120.46
4	D	105	THR	C-N-CA	6.67	129.60	120.46
2	b	79	GLY	CA-C-O	-6.67	111.98	121.52
4	d	254	HIS	CE1-NE2-CD2	-6.67	102.33	109.00
31	L	312	MET	CA-CB-CG	-6.67	100.76	114.10
19	Y	74	THR	CA-C-O	-6.67	113.82	120.82
23	P	394	ASN	OD1-CG-ND2	-6.67	115.93	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	j	70	LYS	CA-C-N	6.67	129.11	120.44
10	j	70	LYS	C-N-CA	6.67	129.11	120.44
22	S	243	ASN	CB-CG-ND2	-6.67	106.40	116.40
32	M	417	GLU	CA-C-N	6.67	128.69	120.22
32	M	417	GLU	C-N-CA	6.67	128.69	120.22
25	R	224	PHE	N-CA-C	-6.66	105.18	113.38
26	U	54	LEU	N-CA-C	-6.66	98.62	109.82
33	J	231	ARG	NE-CZ-NH1	-6.66	114.84	121.50
6	F	64	ILE	O-C-N	6.66	130.26	123.20
32	M	248	ALA	O-C-N	-6.66	113.66	121.32
21	N	163	LEU	N-CA-C	-6.66	103.19	112.45
29	I	156	ILE	N-CA-CB	6.66	119.09	111.90
1	A	32	PHE	CA-CB-CG	-6.66	107.14	113.80
23	P	210	ASN	CA-C-O	-6.66	114.05	120.64
27	O	26	PHE	CA-C-N	6.66	129.20	120.28
27	O	26	PHE	C-N-CA	6.66	129.20	120.28
30	K	298	GLU	CA-C-N	6.66	129.10	120.44
30	K	298	GLU	C-N-CA	6.66	129.10	120.44
33	J	53	ASP	N-CA-CB	6.66	119.91	110.12
10	j	84	PRO	N-CA-CB	6.66	110.41	103.15
1	A	117	LEU	CA-C-N	6.66	129.09	120.44
1	A	117	LEU	C-N-CA	6.66	129.09	120.44
5	E	194	LYS	N-CA-C	-6.66	104.64	112.89
20	Z	586	GLU	CA-C-N	6.66	129.09	120.44
20	Z	586	GLU	C-N-CA	6.66	129.09	120.44
23	P	417	HIS	N-CA-CB	6.66	119.66	110.01
32	M	223	PRO	N-CA-C	-6.66	102.58	110.70
32	M	376	TRP	CB-CG-CD2	-6.66	117.48	126.80
20	Z	866	VAL	CA-C-N	6.65	129.86	120.28
20	Z	866	VAL	C-N-CA	6.65	129.86	120.28
8	h	143	ILE	CA-C-N	6.65	129.50	120.38
8	h	143	ILE	C-N-CA	6.65	129.50	120.38
33	J	321	VAL	CA-C-N	6.65	129.49	120.44
33	J	321	VAL	C-N-CA	6.65	129.49	120.44
33	J	329	ARG	CD-NE-CZ	-6.65	115.09	124.40
21	N	368	THR	N-CA-CB	6.65	120.00	110.16
26	U	21	HIS	CG-CD2-NE2	6.65	113.85	107.20
27	O	309	SER	CA-C-N	6.65	129.86	120.28
27	O	309	SER	C-N-CA	6.65	129.86	120.28
28	H	416	GLY	CA-C-N	6.65	131.99	120.68
28	H	416	GLY	C-N-CA	6.65	131.99	120.68
4	d	69	SER	N-CA-C	-6.65	104.75	112.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	P	189	LEU	CA-C-N	6.65	129.85	120.28
23	P	189	LEU	C-N-CA	6.65	129.85	120.28
11	k	31	SER	CA-C-O	6.64	126.06	119.08
20	Z	108	ASP	CA-C-N	6.64	126.42	119.05
20	Z	108	ASP	C-N-CA	6.64	126.42	119.05
20	Z	951	GLN	N-CA-CB	6.64	121.72	110.49
29	I	120	VAL	CA-CB-CG1	-6.64	99.10	110.40
30	K	174	VAL	CA-C-O	-6.64	114.05	121.36
4	D	157	SER	N-CA-C	-6.64	98.56	108.99
20	Z	906	ALA	CA-C-N	6.64	128.80	122.36
20	Z	906	ALA	C-N-CA	6.64	128.80	122.36
21	N	455	MET	CG-SD-CE	-6.64	86.30	100.90
32	M	58	MET	CA-C-N	6.64	131.96	120.68
32	M	58	MET	C-N-CA	6.64	131.96	120.68
10	3	189	ILE	N-CA-C	-6.64	99.02	108.58
19	Y	71	ASP	CA-CB-CG	6.64	119.24	112.60
21	N	396	SER	CA-C-O	-6.64	111.84	119.14
23	P	396	PRO	CA-C-N	6.64	134.22	121.54
23	P	396	PRO	C-N-CA	6.64	134.22	121.54
5	e	15	PHE	N-CA-C	-6.63	99.24	109.52
5	e	91	HIS	CE1-NE2-CD2	-6.63	102.37	109.00
23	P	411	LEU	N-CA-CB	6.63	119.98	110.16
10	j	155	GLU	CA-C-N	6.63	128.13	119.84
10	j	155	GLU	C-N-CA	6.63	128.13	119.84
12	l	261	ILE	N-CA-C	-6.63	98.91	108.53
29	I	204	HIS	ND1-CE1-NE2	6.63	115.03	108.40
31	L	209	ARG	CA-C-N	6.63	130.95	120.47
31	L	209	ARG	C-N-CA	6.63	130.95	120.47
25	R	169	ASP	CA-C-N	6.63	129.05	120.56
25	R	169	ASP	C-N-CA	6.63	129.05	120.56
32	M	426	LYS	CA-C-O	6.63	125.75	118.65
33	J	322	ALA	CA-C-N	6.63	129.16	120.28
33	J	322	ALA	C-N-CA	6.63	129.16	120.28
4	d	85	LEU	CA-C-N	6.63	129.83	120.42
4	d	85	LEU	C-N-CA	6.63	129.83	120.42
5	E	179	ALA	N-CA-C	6.63	118.30	111.14
6	F	78	ALA	O-C-N	-6.63	114.58	120.48
2	B	193	LEU	CA-C-O	-6.63	113.40	120.42
6	F	104	ALA	CA-C-N	6.63	129.83	120.42
6	F	104	ALA	C-N-CA	6.63	129.83	120.42
12	5	92	ASP	N-CA-C	-6.62	100.16	109.69
13	6	179	PRO	CA-C-N	6.62	131.34	120.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	6	179	PRO	C-N-CA	6.62	131.34	120.94
16	V	193	ASN	CA-C-N	6.62	129.48	120.54
16	V	193	ASN	C-N-CA	6.62	129.48	120.54
21	N	534	ASP	CA-C-N	6.62	129.69	120.29
21	N	534	ASP	C-N-CA	6.62	129.69	120.29
21	N	809	ARG	CD-NE-CZ	6.62	133.67	124.40
1	a	158	ASP	CA-C-O	-6.62	114.25	120.34
21	N	205	SER	CA-C-N	6.62	129.82	120.42
21	N	205	SER	C-N-CA	6.62	129.82	120.42
33	J	245	ILE	N-CA-C	-6.62	101.03	109.30
13	6	101	ILE	O-C-N	6.62	128.56	121.94
7	g	220	SER	CA-C-N	6.62	129.81	120.28
7	g	220	SER	C-N-CA	6.62	129.81	120.28
14	n	115	ASP	CA-CB-CG	6.62	119.22	112.60
7	G	228	HIS	CE1-NE2-CD2	-6.62	102.39	109.00
30	K	195	ALA	CA-C-O	6.62	127.58	119.97
21	N	345	ASP	CA-CB-CG	-6.61	105.99	112.60
6	f	149	PRO	CA-C-N	6.61	129.68	120.29
6	f	149	PRO	C-N-CA	6.61	129.68	120.29
28	H	45	TYR	N-CA-C	-6.61	105.75	113.88
8	h	89	SER	CB-CA-C	-6.61	99.82	110.79
23	P	93	ILE	N-CA-C	6.61	117.36	110.62
25	R	116	LYS	CA-C-N	6.61	129.12	120.60
25	R	116	LYS	C-N-CA	6.61	129.12	120.60
25	R	246	TYR	CB-CG-CD1	6.60	130.70	120.80
32	M	216	LYS	N-CA-C	-6.60	103.70	113.61
23	P	319	GLU	CB-CG-CD	-6.60	101.38	112.60
19	Y	19	LYS	N-CA-C	-6.60	104.17	111.82
8	1	65	ALA	CA-C-N	6.60	129.12	120.28
8	1	65	ALA	C-N-CA	6.60	129.12	120.28
4	d	150	THR	N-CA-C	-6.60	99.92	110.14
9	i	170	HIS	CG-CD2-NE2	6.59	113.79	107.20
10	j	44	PHE	CA-CB-CG	-6.59	107.20	113.80
4	D	11	PHE	CB-CG-CD1	6.59	131.91	120.70
20	Z	465	GLY	N-CA-C	-6.59	106.22	115.32
20	Z	489	ALA	N-CA-CB	6.59	119.92	110.16
22	S	63	LEU	CA-C-N	6.59	129.01	120.44
22	S	63	LEU	C-N-CA	6.59	129.01	120.44
22	S	338	MET	CA-C-N	6.59	129.12	120.28
22	S	338	MET	C-N-CA	6.59	129.12	120.28
22	S	276	LEU	CA-C-N	6.59	129.01	120.44
22	S	276	LEU	C-N-CA	6.59	129.01	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	R	187	VAL	O-C-N	6.59	128.62	121.83
6	F	44	ALA	CA-C-O	-6.59	113.71	121.16
7	G	127	ASN	N-CA-CB	6.59	120.25	110.49
21	N	268	GLN	CA-C-N	6.59	129.01	120.44
21	N	268	GLN	C-N-CA	6.59	129.01	120.44
33	J	331	HIS	CA-C-N	6.59	132.67	121.14
33	J	331	HIS	C-N-CA	6.59	132.67	121.14
23	P	163	LEU	N-CA-C	6.59	118.12	111.07
30	K	307	ASP	CA-CB-CG	6.59	119.19	112.60
25	R	153	THR	O-C-N	6.59	129.66	122.15
11	k	54	VAL	CA-C-N	6.59	129.11	120.28
11	k	54	VAL	C-N-CA	6.59	129.11	120.28
25	R	102	LEU	CA-C-N	6.59	129.00	120.44
25	R	102	LEU	C-N-CA	6.59	129.00	120.44
32	M	101	THR	N-CA-C	-6.59	98.66	109.40
13	6	48	GLU	CA-C-N	6.58	126.56	119.78
13	6	48	GLU	C-N-CA	6.58	126.56	119.78
25	R	172	LEU	N-CA-CB	6.58	119.91	110.16
29	I	343	ARG	N-CA-C	-6.58	105.82	114.31
6	f	165	SER	CA-C-N	6.58	129.10	120.28
6	f	165	SER	C-N-CA	6.58	129.10	120.28
20	Z	298	PHE	CA-CB-CG	-6.58	107.22	113.80
21	N	870	ASN	CA-CB-CG	6.58	119.18	112.60
21	N	704	GLY	CA-C-N	6.58	129.77	120.42
21	N	704	GLY	C-N-CA	6.58	129.77	120.42
1	A	15	HIS	ND1-CE1-NE2	6.58	114.98	108.40
13	m	216	THR	N-CA-C	-6.58	99.41	109.41
2	b	40	THR	CA-C-O	6.58	127.01	119.18
11	4	23	ARG	NE-CZ-NH1	-6.58	114.92	121.50
20	Z	511	PRO	CB-CA-C	-6.58	101.80	109.89
29	I	299	GLU	CA-C-N	6.58	129.09	120.28
29	I	299	GLU	C-N-CA	6.58	129.09	120.28
25	R	142	ALA	CA-C-N	6.58	129.09	120.28
25	R	142	ALA	C-N-CA	6.58	129.09	120.28
27	O	76	LEU	CA-C-N	6.58	128.99	120.44
27	O	76	LEU	C-N-CA	6.58	128.99	120.44
4	d	224	LEU	CA-C-O	6.57	127.97	120.54
16	V	194	ARG	NE-CZ-NH2	-6.57	113.28	119.20
20	Z	739	ALA	CA-C-O	-6.57	113.58	120.55
30	K	178	ASP	CA-C-N	6.57	128.98	120.44
30	K	178	ASP	C-N-CA	6.57	128.98	120.44
11	k	8	ARG	CB-CA-C	-6.57	99.92	111.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	3	40	PHE	CA-CB-CG	6.57	120.37	113.80
19	Y	26	LYS	N-CA-C	6.57	120.40	112.38
29	I	137	ASP	N-CA-C	-6.57	99.32	109.24
30	K	338	ILE	N-CA-C	-6.57	98.92	108.71
32	M	414	ASP	N-CA-CB	6.57	120.42	110.30
7	g	57	LYS	N-CA-C	-6.57	105.14	113.02
8	h	102	LEU	N-CA-C	-6.57	97.70	108.41
20	Z	286	VAL	CA-C-O	6.57	127.78	120.95
7	G	244	GLN	CB-CG-CD	-6.57	101.44	112.60
24	Q	188	LEU	N-CA-C	-6.57	105.23	113.18
2	B	99	ARG	CD-NE-CZ	-6.57	115.21	124.40
22	S	206	GLN	N-CA-CB	6.56	120.68	110.44
8	1	84	THR	O-C-N	6.56	129.08	122.12
21	N	585	ARG	N-CA-C	6.56	118.09	111.07
31	L	339	ARG	CA-C-N	6.56	127.59	119.98
31	L	339	ARG	C-N-CA	6.56	127.59	119.98
14	n	63	TYR	N-CA-C	-6.56	100.55	109.54
6	F	46	LEU	CA-C-N	6.56	131.57	123.17
6	F	46	LEU	C-N-CA	6.56	131.57	123.17
7	G	204	HIS	ND1-CE1-NE2	6.56	114.96	108.40
26	U	217	LYS	N-CA-C	-6.56	103.69	112.94
30	K	74	HIS	CE1-NE2-CD2	-6.56	102.44	109.00
31	L	351	LEU	N-CA-C	-6.56	101.50	109.83
10	3	100	PHE	CA-CB-CG	-6.55	107.25	113.80
17	T	49	ASP	N-CA-C	-6.55	105.28	113.28
20	Z	757	SER	CA-C-N	6.55	129.90	120.79
20	Z	757	SER	C-N-CA	6.55	129.90	120.79
24	Q	335	PHE	CA-C-N	6.55	129.60	120.29
24	Q	335	PHE	C-N-CA	6.55	129.60	120.29
27	O	160	LYS	N-CA-C	-6.55	101.70	110.55
30	K	322	ASP	N-CA-C	-6.55	104.42	112.88
33	J	20	LYS	CA-C-N	6.55	126.18	119.56
33	J	20	LYS	C-N-CA	6.55	126.18	119.56
12	5	194	GLY	N-CA-C	-6.55	105.86	115.63
17	T	185	ILE	N-CA-CB	6.55	120.41	110.58
20	Z	711	SER	N-CA-C	6.55	119.26	111.33
21	N	240	GLN	CA-C-O	-6.55	113.61	120.55
31	L	278	ILE	N-CA-C	-6.55	99.00	108.17
11	4	113	LYS	O-C-N	-6.55	114.43	122.16
21	N	36	TRP	CB-CG-CD2	-6.55	117.63	126.80
26	U	108	GLU	CA-C-N	6.55	129.59	120.29
26	U	108	GLU	C-N-CA	6.55	129.59	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	4	69	ILE	N-CA-C	-6.55	103.86	111.00
21	N	589	ILE	CA-C-N	6.55	129.71	120.28
21	N	589	ILE	C-N-CA	6.55	129.71	120.28
20	Z	375	ASP	CA-C-O	-6.54	113.71	121.11
2	B	7	PHE	CA-CB-CG	-6.54	107.26	113.80
19	Y	80	GLU	N-CA-CB	-6.54	100.48	110.16
21	N	163	LEU	CA-C-N	6.54	129.58	120.29
21	N	163	LEU	C-N-CA	6.54	129.58	120.29
21	N	766	GLN	OE1-CD-NE2	6.54	129.14	122.60
33	J	74	GLU	CB-CG-CD	-6.54	101.48	112.60
8	h	174	TRP	CB-CG-CD2	-6.54	117.64	126.80
11	k	163	LEU	CA-C-N	6.54	129.33	120.44
11	k	163	LEU	C-N-CA	6.54	129.33	120.44
4	D	151	GLU	O-C-N	6.54	128.84	121.32
25	R	151	GLU	CA-C-N	6.54	129.33	120.44
25	R	151	GLU	C-N-CA	6.54	129.33	120.44
30	K	346	ARG	CA-C-O	-6.54	112.45	119.97
7	g	76	CYS	N-CA-C	-6.54	97.12	108.69
13	m	87	HIS	ND1-CE1-NE2	6.54	114.94	108.40
13	6	51	VAL	CA-C-O	-6.54	116.94	122.63
20	Z	827	LEU	CA-C-N	6.54	129.04	120.28
20	Z	827	LEU	C-N-CA	6.54	129.04	120.28
24	Q	219	ASP	N-CA-C	-6.54	104.23	111.36
28	H	280	VAL	O-C-N	6.54	129.79	122.67
1	A	162	TYR	N-CA-C	-6.54	100.01	110.14
3	C	108	VAL	CA-C-N	6.54	129.04	120.28
3	C	108	VAL	C-N-CA	6.54	129.04	120.28
6	F	57	SER	N-CA-CB	6.54	119.65	110.04
20	Z	302	SER	CB-CA-C	-6.54	100.08	110.86
12	l	157	ILE	CA-C-O	-6.53	113.19	120.96
21	N	267	GLN	O-C-N	-6.53	115.19	122.12
22	S	138	MET	CA-C-N	6.53	129.03	120.28
22	S	138	MET	C-N-CA	6.53	129.03	120.28
23	P	238	ALA	CA-C-O	-6.53	113.62	120.55
27	O	345	ASN	N-CA-C	-6.53	104.71	114.64
8	h	69	GLN	CB-CG-CD	-6.53	101.50	112.60
9	i	78	ALA	CA-C-N	6.53	129.56	120.29
9	i	78	ALA	C-N-CA	6.53	129.56	120.29
26	U	278	ILE	N-CA-CB	6.53	119.42	110.54
32	M	177	THR	N-CA-CB	6.53	119.68	109.69
33	J	374	ARG	N-CA-C	-6.53	102.38	110.41
11	k	79	ALA	CA-C-N	6.53	128.79	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	k	79	ALA	C-N-CA	6.53	128.79	120.56
14	n	81	ASN	CA-CB-CG	6.53	119.13	112.60
24	Q	398	TYR	CB-CG-CD1	-6.53	111.00	120.80
23	P	282	HIS	CE1-NE2-CD2	-6.53	102.47	109.00
22	S	258	GLU	N-CA-CB	6.53	121.52	110.49
22	S	480	ARG	N-CA-C	6.53	119.39	111.82
32	M	358	ALA	N-CA-CB	6.53	119.82	110.16
3	C	171	ALA	CA-C-N	6.53	129.56	120.29
3	C	171	ALA	C-N-CA	6.53	129.56	120.29
23	P	276	LEU	N-CA-CB	6.53	119.71	110.12
24	Q	184	VAL	CB-CA-C	-6.53	103.21	112.22
27	O	122	HIS	CB-CG-ND1	6.53	132.49	122.70
29	I	140	LEU	N-CA-C	-6.53	105.47	113.50
20	Z	183	LYS	N-CA-C	6.52	119.44	110.24
20	Z	616	LEU	CA-C-O	-6.52	113.50	120.42
8	h	62	GLN	N-CA-C	6.52	118.39	111.28
9	i	208	GLU	CA-C-N	6.52	132.65	121.63
9	i	208	GLU	C-N-CA	6.52	132.65	121.63
25	R	268	SER	CA-C-O	6.52	127.42	120.70
10	3	59	ASP	CA-C-N	6.52	128.77	120.56
10	3	59	ASP	C-N-CA	6.52	128.77	120.56
22	S	467	PHE	CA-CB-CG	-6.52	107.28	113.80
32	M	44	PHE	CA-C-N	6.52	129.02	120.28
32	M	44	PHE	C-N-CA	6.52	129.02	120.28
4	d	39	LYS	CB-CA-C	-6.52	98.65	109.99
30	K	330	ARG	NE-CZ-NH2	-6.52	113.33	119.20
10	j	162	ASP	CA-C-N	6.52	129.66	120.28
10	j	162	ASP	C-N-CA	6.52	129.66	120.28
15	W	20	ASP	N-CA-C	6.52	118.38	111.28
22	S	19	HIS	CG-CD2-NE2	6.52	113.72	107.20
17	T	269	SER	N-CA-CB	6.51	120.38	110.28
31	L	247	PRO	CA-C-O	-6.51	114.26	121.23
13	6	204	ILE	O-C-N	-6.51	113.64	122.11
29	I	202	LEU	CA-C-N	6.51	129.49	120.63
29	I	202	LEU	C-N-CA	6.51	129.49	120.63
20	Z	487	SER	CA-C-N	6.51	129.54	120.29
20	Z	487	SER	C-N-CA	6.51	129.54	120.29
21	N	222	TYR	CA-C-N	6.51	129.01	120.28
21	N	222	TYR	C-N-CA	6.51	129.01	120.28
21	N	677	ASP	CA-CB-CG	-6.51	106.09	112.60
23	P	395	ARG	NH1-CZ-NH2	-6.51	110.83	119.30
29	I	152	LYS	N-CA-C	-6.51	102.84	111.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	i	162	ALA	N-CA-C	6.51	118.04	111.07
14	7	157	ASP	CA-CB-CG	-6.51	106.09	112.60
21	N	675	VAL	O-C-N	6.51	129.16	121.80
27	O	139	LEU	N-CA-C	-6.51	104.60	112.54
27	O	318	HIS	CE1-NE2-CD2	-6.51	102.49	109.00
6	F	35	THR	CA-C-N	6.51	131.66	123.14
6	F	35	THR	C-N-CA	6.51	131.66	123.14
12	l	218	ASN	CA-CB-CG	6.51	119.11	112.60
6	F	63	ILE	CA-C-O	6.51	127.22	120.39
9	2	252	ILE	N-CA-C	-6.51	98.14	107.77
27	O	371	VAL	CB-CA-C	-6.51	103.36	112.14
7	g	113	ALA	CA-C-N	6.50	128.90	120.44
7	g	113	ALA	C-N-CA	6.50	128.90	120.44
1	A	191	ILE	N-CA-C	-6.50	99.36	108.27
9	2	88	ILE	CA-CB-CG1	6.50	121.46	110.40
3	c	129	ARG	CA-C-N	6.50	126.96	120.52
3	c	129	ARG	C-N-CA	6.50	126.96	120.52
10	j	144	ASP	N-CA-C	-6.50	104.28	111.36
14	7	247	VAL	N-CA-CB	6.50	118.41	111.00
20	Z	462	VAL	N-CA-CB	6.50	121.95	111.23
21	N	205	SER	N-CA-CB	6.50	119.67	110.12
21	N	257	ILE	CA-C-N	6.50	129.52	120.29
21	N	257	ILE	C-N-CA	6.50	129.52	120.29
23	P	223	LEU	CB-CA-C	-6.50	99.80	110.85
6	f	43	HIS	CE1-NE2-CD2	-6.50	102.50	109.00
5	E	213	ASP	N-CA-C	-6.50	99.78	108.74
19	Y	86	ARG	NE-CZ-NH2	6.50	125.05	119.20
26	U	135	ASP	N-CA-C	-6.50	99.33	109.72
29	I	354	ASP	CA-CB-CG	-6.50	106.10	112.60
32	M	118	VAL	CA-CB-CG2	-6.50	99.36	110.40
8	1	167	SER	CB-CA-C	-6.49	100.69	110.88
21	N	877	GLN	CA-C-N	6.49	128.88	120.44
21	N	877	GLN	C-N-CA	6.49	128.88	120.44
28	H	89	GLN	OE1-CD-NE2	-6.49	116.11	122.60
16	V	86	VAL	CA-C-N	6.49	128.98	120.28
16	V	86	VAL	C-N-CA	6.49	128.98	120.28
16	V	284	ALA	CA-C-N	6.49	128.88	120.44
16	V	284	ALA	C-N-CA	6.49	128.88	120.44
3	C	103	ASN	CA-CB-CG	6.49	119.09	112.60
3	C	201	THR	CA-CB-OG1	6.49	119.34	109.60
13	6	66	ALA	N-CA-C	6.49	118.35	111.28
16	V	135	ARG	N-CA-C	-6.49	102.72	111.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	M	114	GLY	N-CA-C	-6.49	102.18	111.20
21	N	865	PRO	O-C-N	6.49	131.06	123.14
27	O	229	ASN	N-CA-C	-6.49	103.69	112.26
32	M	390	GLN	CA-C-N	6.49	129.62	120.28
32	M	390	GLN	C-N-CA	6.49	129.62	120.28
33	J	202	VAL	CA-C-N	6.49	128.97	120.28
33	J	202	VAL	C-N-CA	6.49	128.97	120.28
5	E	97	VAL	N-CA-CB	6.49	120.31	110.58
26	U	260	ASN	CA-C-N	6.49	128.97	120.28
26	U	260	ASN	C-N-CA	6.49	128.97	120.28
13	6	194	ASP	CA-C-N	6.49	128.87	120.44
13	6	194	ASP	C-N-CA	6.49	128.87	120.44
32	M	247	ALA	CA-C-O	-6.49	113.12	120.32
9	i	151	GLY	N-CA-C	-6.48	97.82	113.18
6	F	7	ASP	N-CA-C	-6.48	105.41	113.38
20	Z	927	VAL	N-CA-C	-6.48	98.79	108.12
31	L	361	PHE	CA-CB-CG	-6.48	107.32	113.80
2	b	149	GLN	CB-CG-CD	-6.48	101.58	112.60
2	B	241	GLN	CA-C-O	-6.48	114.02	120.82
16	V	164	LEU	CA-C-N	6.48	129.62	120.42
16	V	164	LEU	C-N-CA	6.48	129.62	120.42
22	S	77	THR	CA-C-N	6.48	129.33	120.46
22	S	77	THR	C-N-CA	6.48	129.33	120.46
28	H	174	VAL	O-C-N	-6.48	115.61	123.00
31	L	70	TYR	CA-C-N	6.48	128.96	120.28
31	L	70	TYR	C-N-CA	6.48	128.96	120.28
29	I	351	GLU	N-CA-C	-6.48	99.98	109.18
6	F	112	LEU	CA-C-N	6.47	128.86	120.44
6	F	112	LEU	C-N-CA	6.47	128.86	120.44
11	4	160	LEU	CA-C-N	6.47	129.60	120.28
11	4	160	LEU	C-N-CA	6.47	129.60	120.28
22	S	97	THR	CA-C-N	6.47	130.01	120.95
22	S	97	THR	C-N-CA	6.47	130.01	120.95
4	D	189	GLU	N-CA-CB	6.47	119.74	110.16
12	5	262	TYR	CB-CA-C	6.47	120.42	109.80
20	Z	134	SER	N-CA-C	6.47	119.33	111.82
20	Z	436	LEU	CA-C-N	6.47	129.25	120.38
20	Z	436	LEU	C-N-CA	6.47	129.25	120.38
25	R	128	LEU	CA-C-N	6.47	131.52	120.71
25	R	128	LEU	C-N-CA	6.47	131.52	120.71
14	7	257	ASP	CA-CB-CG	-6.47	106.13	112.60
22	S	148	ASP	O-C-N	6.47	128.74	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	k	111	LYS	CA-C-N	6.47	131.33	122.34
11	k	111	LYS	C-N-CA	6.47	131.33	122.34
16	V	273	ARG	CA-C-N	6.47	133.90	121.54
16	V	273	ARG	C-N-CA	6.47	133.90	121.54
1	A	168	ALA	N-CA-C	-6.47	98.31	108.14
31	L	277	ILE	O-C-N	6.47	130.06	123.07
15	W	162	ASN	CA-CB-CG	6.47	119.07	112.60
10	j	188	TYR	CB-CA-C	-6.46	97.75	109.38
12	l	83	PHE	N-CA-C	-6.46	100.31	108.45
4	D	233	VAL	N-CA-CB	-6.46	102.99	110.55
31	L	304	THR	N-CA-CB	6.46	119.83	110.20
2	B	47	THR	CA-C-N	6.46	132.30	122.93
2	B	47	THR	C-N-CA	6.46	132.30	122.93
1	A	28	VAL	CA-C-N	6.46	128.94	120.28
1	A	28	VAL	C-N-CA	6.46	128.94	120.28
11	4	122	LEU	CA-C-N	6.46	134.07	121.41
11	4	122	LEU	C-N-CA	6.46	134.07	121.41
20	Z	230	ILE	CA-C-N	6.46	133.97	121.18
20	Z	230	ILE	C-N-CA	6.46	133.97	121.18
21	N	311	ILE	CA-C-N	6.46	128.43	120.22
21	N	311	ILE	C-N-CA	6.46	128.43	120.22
23	P	265	VAL	CA-C-N	6.46	129.18	120.65
23	P	265	VAL	C-N-CA	6.46	129.18	120.65
24	Q	162	LEU	CA-C-N	6.46	129.26	120.54
24	Q	162	LEU	C-N-CA	6.46	129.26	120.54
27	O	216	ASP	CA-CB-CG	-6.46	106.14	112.60
27	O	278	PRO	CA-C-N	6.46	129.31	120.46
27	O	278	PRO	C-N-CA	6.46	129.31	120.46
10	j	72	ASN	CA-CB-CG	-6.46	106.14	112.60
16	V	204	HIS	CA-CB-CG	6.46	120.26	113.80
17	T	122	PHE	N-CA-C	6.46	118.01	110.97
32	M	142	PRO	N-CA-CB	-6.46	97.46	103.27
22	S	429	ASP	CB-CA-C	-6.46	97.32	109.72
16	V	34	LEU	O-C-N	6.46	128.72	122.07
27	O	61	LEU	O-C-N	6.46	129.51	122.15
29	I	139	GLU	N-CA-C	-6.46	103.84	112.94
25	R	41	GLU	CB-CG-CD	6.46	123.57	112.60
24	Q	238	TYR	N-CA-C	6.45	118.31	111.28
4	d	189	GLU	CA-C-N	6.45	129.57	120.28
4	d	189	GLU	C-N-CA	6.45	129.57	120.28
14	7	135	GLN	CA-C-N	6.45	132.43	121.14
14	7	135	GLN	C-N-CA	6.45	132.43	121.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	W	8	LEU	O-C-N	6.45	130.57	123.22
16	V	171	ARG	N-CA-CB	6.45	119.61	110.12
21	N	656	ALA	CB-CA-C	-6.45	100.08	110.79
20	Z	952	SER	O-C-N	-6.45	116.04	123.33
4	d	13	PRO	N-CA-C	-6.45	106.43	114.68
9	i	145	HIS	CE1-NE2-CD2	-6.45	102.55	109.00
2	B	106	PRO	CA-C-N	6.45	129.45	120.29
2	B	106	PRO	C-N-CA	6.45	129.45	120.29
6	F	78	ALA	CA-C-N	6.45	126.37	119.28
6	F	78	ALA	C-N-CA	6.45	126.37	119.28
26	U	72	TYR	CA-C-N	6.45	128.81	120.56
26	U	72	TYR	C-N-CA	6.45	128.81	120.56
4	d	172	ARG	CA-C-O	-6.45	113.59	120.42
11	4	133	HIS	CA-C-O	-6.45	114.37	121.33
29	I	115	ASP	N-CA-CB	6.45	121.39	110.49
9	2	154	LEU	CA-C-O	6.45	128.65	121.11
22	S	165	PRO	CA-C-N	6.45	128.92	120.28
22	S	165	PRO	C-N-CA	6.45	128.92	120.28
29	I	102	ASN	CA-CB-CG	-6.45	106.16	112.60
21	N	730	VAL	O-C-N	6.44	128.22	121.91
33	J	201	ALA	CA-C-N	6.44	128.81	120.56
33	J	201	ALA	C-N-CA	6.44	128.81	120.56
3	c	159	GLY	N-CA-C	-6.44	104.29	112.54
5	e	176	SER	CA-C-O	6.44	127.58	120.82
11	k	172	MET	CA-C-O	-6.44	113.66	120.23
8	h	127	SER	N-CA-C	-6.44	96.89	108.48
6	F	216	VAL	O-C-N	6.44	130.56	123.09
17	T	171	ILE	N-CA-C	6.44	117.74	109.30
24	Q	51	ARG	NE-CZ-NH2	6.44	125.00	119.20
28	H	137	ASP	CA-C-N	6.44	130.29	120.82
28	H	137	ASP	C-N-CA	6.44	130.29	120.82
11	k	2	ASP	N-CA-C	-6.44	98.88	108.99
20	Z	97	PRO	CA-C-N	6.44	128.91	120.28
20	Z	97	PRO	C-N-CA	6.44	128.91	120.28
28	H	364	ALA	CB-CA-C	-6.44	99.91	110.85
12	l	165	TYR	CA-C-N	-6.44	113.84	122.72
12	l	165	TYR	C-N-CA	-6.44	113.84	122.72
21	N	394	ARG	CG-CD-NE	-6.44	97.84	112.00
2	b	243	ILE	CA-C-N	6.43	130.09	120.31
2	b	243	ILE	C-N-CA	6.43	130.09	120.31
14	n	225	SER	N-CA-C	-6.43	98.89	108.99
3	c	180	TYR	CB-CG-CD1	6.43	130.45	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	d	171	VAL	N-CA-C	6.43	117.22	110.72
31	L	392	ARG	NE-CZ-NH2	-6.43	113.41	119.20
33	J	294	THR	CA-C-N	6.43	129.42	120.29
33	J	294	THR	C-N-CA	6.43	129.42	120.29
12	5	88	ILE	O-C-N	6.43	130.17	123.03
12	5	190	VAL	CA-C-O	-6.43	113.38	120.84
27	O	343	GLN	N-CA-C	-6.43	103.44	113.02
11	k	21	VAL	N-CA-CB	6.43	120.91	111.52
27	O	191	THR	N-CA-CB	6.43	119.33	110.01
15	W	24	THR	N-CA-C	-6.43	99.56	109.52
33	J	240	HIS	CG-CD2-NE2	6.43	113.63	107.20
27	O	61	LEU	CA-C-N	6.42	129.21	120.54
27	O	61	LEU	C-N-CA	6.42	129.21	120.54
27	O	93	ASP	CA-CB-CG	-6.42	106.17	112.60
32	M	85	VAL	CA-C-N	6.42	129.18	120.44
32	M	85	VAL	C-N-CA	6.42	129.18	120.44
17	T	127	GLN	CA-C-N	6.42	129.41	120.29
17	T	127	GLN	C-N-CA	6.42	129.41	120.29
27	O	147	ARG	CB-CA-C	-6.42	100.80	110.88
22	S	35	LEU	CA-C-N	6.42	128.79	120.44
22	S	35	LEU	C-N-CA	6.42	128.79	120.44
21	N	410	LEU	CA-C-N	6.42	128.65	120.56
21	N	410	LEU	C-N-CA	6.42	128.65	120.56
21	N	598	ASP	N-CA-C	-6.42	96.79	108.02
22	S	19	HIS	CE1-NE2-CD2	-6.42	102.58	109.00
25	R	106	ASN	CA-CB-CG	-6.42	106.18	112.60
28	H	269	ALA	N-CA-C	-6.42	99.66	109.41
1	A	15	HIS	CA-CB-CG	-6.42	107.38	113.80
5	E	66	LYS	CA-C-N	6.42	131.15	123.19
5	E	66	LYS	C-N-CA	6.42	131.15	123.19
6	F	22	VAL	N-CA-C	-6.42	103.30	112.35
10	3	134	LYS	N-CA-C	-6.42	102.85	112.54
3	C	94	HIS	CG-CD2-NE2	6.41	113.61	107.20
7	G	44	ASP	CA-CB-CG	-6.41	106.19	112.60
21	N	599	TYR	N-CA-C	-6.41	104.70	113.30
31	L	208	GLN	CA-C-N	6.41	129.12	120.65
31	L	208	GLN	C-N-CA	6.41	129.12	120.65
7	G	123	HIS	CG-CD2-NE2	6.41	113.61	107.20
15	W	122	ARG	CA-C-N	6.41	128.87	120.28
15	W	122	ARG	C-N-CA	6.41	128.87	120.28
28	H	292	ARG	CA-C-N	6.41	131.58	120.68
28	H	292	ARG	C-N-CA	6.41	131.58	120.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	203	VAL	N-CA-C	-6.41	106.48	112.83
21	N	569	LYS	CA-C-N	6.41	129.39	120.29
21	N	569	LYS	C-N-CA	6.41	129.39	120.29
5	E	91	HIS	CE1-NE2-CD2	-6.41	102.59	109.00
11	4	170	LYS	N-CA-C	6.41	118.34	111.36
12	5	266	HIS	CA-C-N	6.41	129.81	120.71
12	5	266	HIS	C-N-CA	6.41	129.81	120.71
15	W	77	HIS	CB-CA-C	-6.41	98.77	110.63
9	i	65	ARG	NE-CZ-NH2	6.41	124.97	119.20
25	R	49	PHE	CA-CB-CG	-6.41	107.39	113.80
8	h	203	GLU	N-CA-C	-6.41	105.43	113.18
20	Z	151	HIS	N-CA-C	-6.41	106.00	113.88
21	N	254	SER	CA-C-N	6.41	129.39	120.29
21	N	254	SER	C-N-CA	6.41	129.39	120.29
21	N	850	LYS	CA-C-N	6.41	133.22	121.94
21	N	850	LYS	C-N-CA	6.41	133.22	121.94
4	D	139	ASP	CA-CB-CG	-6.40	106.20	112.60
27	O	326	HIS	CA-C-N	6.40	128.86	120.28
27	O	326	HIS	C-N-CA	6.40	128.86	120.28
29	I	160	LEU	N-CA-C	-6.40	105.22	113.16
10	j	125	ASP	CA-C-N	6.40	129.14	120.44
10	j	125	ASP	C-N-CA	6.40	129.14	120.44
4	D	6	ARG	O-C-N	-6.40	115.31	122.86
5	E	40	ILE	N-CA-CB	6.40	120.24	111.41
6	F	230	VAL	CA-C-N	6.40	132.34	121.14
6	F	230	VAL	C-N-CA	6.40	132.34	121.14
31	L	159	LEU	CA-C-N	6.40	126.37	120.03
31	L	159	LEU	C-N-CA	6.40	126.37	120.03
21	N	896	PHE	N-CA-C	6.40	119.76	110.42
25	R	336	LYS	CB-CA-C	-6.40	100.17	110.79
17	T	194	GLU	N-CA-C	6.40	117.91	111.07
19	Y	83	ARG	N-CA-CB	6.40	119.65	110.06
22	S	356	ASP	CA-C-N	6.40	129.37	120.29
22	S	356	ASP	C-N-CA	6.40	129.37	120.29
26	U	71	ASN	O-C-N	6.40	130.14	122.27
33	J	257	ARG	CA-C-N	6.39	128.62	120.56
33	J	257	ARG	C-N-CA	6.39	128.62	120.56
1	A	85	GLY	CA-C-N	6.39	126.36	119.78
1	A	85	GLY	C-N-CA	6.39	126.36	119.78
13	6	173	ASN	N-CA-CB	6.39	121.16	111.70
20	Z	270	SER	CA-C-O	-6.39	112.62	119.97
11	k	136	SER	CA-C-O	6.39	127.32	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	S	156	VAL	N-CA-C	6.39	117.14	110.62
4	d	121	THR	N-CA-CB	6.39	120.14	110.30
16	V	296	LEU	CA-C-N	6.39	129.13	120.44
16	V	296	LEU	C-N-CA	6.39	129.13	120.44
11	4	29	LYS	N-CA-CB	6.39	121.85	110.80
24	Q	416	VAL	CA-CB-CG2	-6.39	99.54	110.40
29	I	205	PRO	N-CA-C	-6.39	105.65	114.27
33	J	27	ILE	CA-C-O	6.39	127.15	120.25
3	C	230	PHE	CA-C-N	6.38	130.39	120.68
3	C	230	PHE	C-N-CA	6.38	130.39	120.68
8	1	157	LYS	CA-C-O	6.38	127.32	120.55
9	2	220	LEU	N-CA-CB	6.38	121.84	110.80
22	S	156	VAL	CA-C-O	6.38	127.59	120.95
11	k	170	LYS	N-CA-C	6.38	117.90	111.07
22	S	95	PHE	CA-C-O	6.38	127.52	120.82
23	P	385	ASN	CA-CB-CG	-6.38	106.22	112.60
12	l	131	GLU	CA-C-N	6.38	129.35	120.29
12	l	131	GLU	C-N-CA	6.38	129.35	120.29
3	C	26	LEU	CA-C-N	6.38	129.12	120.38
3	C	26	LEU	C-N-CA	6.38	129.12	120.38
13	6	78	ASN	O-C-N	6.38	128.88	122.12
15	W	165	GLN	CA-C-N	6.38	128.83	120.28
15	W	165	GLN	C-N-CA	6.38	128.83	120.28
21	N	881	TYR	CA-C-O	-6.38	115.15	119.68
26	U	117	ASN	CA-C-O	-6.38	114.08	119.76
20	Z	789	GLN	N-CA-CB	6.38	121.27	110.49
27	O	371	VAL	CA-CB-CG2	-6.38	99.56	110.40
33	J	222	TYR	N-CA-C	-6.38	105.43	113.72
6	f	12	THR	CA-C-N	6.38	129.93	120.87
6	f	12	THR	C-N-CA	6.38	129.93	120.87
8	1	87	ALA	CA-C-N	6.38	128.83	120.28
8	1	87	ALA	C-N-CA	6.38	128.83	120.28
32	M	213	ARG	CA-C-N	6.38	131.24	121.03
32	M	213	ARG	C-N-CA	6.38	131.24	121.03
11	k	140	THR	CA-C-O	-6.38	112.12	119.14
20	Z	223	LEU	CA-C-N	6.38	128.82	120.28
20	Z	223	LEU	C-N-CA	6.38	128.82	120.28
24	Q	23	ALA	O-C-N	-6.38	114.88	122.15
2	b	145	PHE	N-CA-CB	6.37	119.98	110.29
7	g	197	ALA	N-CA-C	6.37	118.31	111.36
10	3	36	VAL	N-CA-C	-6.37	105.62	111.67
12	5	284	ASN	CA-CB-CG	6.37	118.97	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	887	ASP	N-CA-C	-6.37	104.41	111.36
30	K	274	VAL	N-CA-C	-6.37	105.12	111.88
12	l	196	ARG	CA-C-O	6.37	128.88	120.15
4	D	229	ILE	CA-C-N	6.37	128.72	120.44
4	D	229	ILE	C-N-CA	6.37	128.72	120.44
28	H	173	ARG	NE-CZ-NH1	-6.37	115.13	121.50
29	I	119	ILE	CB-CA-C	6.37	120.05	111.19
9	i	232	TYR	N-CA-C	-6.37	102.80	110.44
10	3	132	GLU	N-CA-C	-6.37	99.26	109.96
16	V	160	ASP	CA-CB-CG	6.37	118.97	112.60
7	G	84	ASP	CA-C-N	6.37	127.01	120.00
7	G	84	ASP	C-N-CA	6.37	127.01	120.00
14	7	50	ASP	CA-CB-CG	6.37	118.97	112.60
16	V	268	THR	CA-C-N	6.37	129.10	120.44
16	V	268	THR	C-N-CA	6.37	129.10	120.44
30	K	193	VAL	N-CA-CB	6.37	122.30	110.77
12	l	284	ASN	N-CA-C	-6.36	103.86	111.69
7	G	60	VAL	N-CA-C	6.36	114.19	107.76
22	S	26	ALA	CA-C-N	6.36	129.10	120.38
22	S	26	ALA	C-N-CA	6.36	129.10	120.38
28	H	321	ASP	CA-CB-CG	6.36	118.96	112.60
2	b	140	ASP	CA-CB-CG	6.36	118.96	112.60
26	U	253	ASP	CB-CA-C	-6.36	100.85	110.90
1	A	178	ILE	O-C-N	6.36	128.38	121.83
12	5	227	ASP	CA-C-N	6.36	128.80	120.28
12	5	227	ASP	C-N-CA	6.36	128.80	120.28
16	V	206	THR	N-CA-C	-6.36	100.56	110.42
24	Q	78	ILE	N-CA-CB	6.36	120.11	111.21
24	Q	252	HIS	CE1-NE2-CD2	-6.36	102.64	109.00
33	J	143	PRO	N-CA-C	-6.36	99.37	112.47
10	3	75	LYS	O-C-N	-6.36	114.91	122.15
16	V	31	SER	N-CA-C	6.36	118.21	111.28
23	P	404	LYS	CA-C-N	6.36	126.69	119.83
23	P	404	LYS	C-N-CA	6.36	126.69	119.83
32	M	351	LEU	N-CA-CB	6.36	117.11	109.74
33	J	83	LYS	N-CA-CB	6.36	121.50	111.20
7	g	231	VAL	N-CA-C	-6.35	99.24	108.71
8	h	60	ASP	CA-CB-CG	6.35	118.95	112.60
13	m	66	ALA	N-CA-C	6.35	118.21	111.28
21	N	717	LEU	O-C-N	6.35	131.00	122.49
31	L	268	ALA	CA-C-N	6.35	128.70	120.44
31	L	268	ALA	C-N-CA	6.35	128.70	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	J	297	LEU	N-CA-C	-6.35	104.79	113.30
28	H	202	GLU	N-CA-C	-6.35	104.69	112.88
9	2	166	VAL	CA-C-N	6.35	129.11	120.54
9	2	166	VAL	C-N-CA	6.35	129.11	120.54
20	Z	959	HIS	N-CA-C	-6.35	104.99	114.64
33	J	20	LYS	CA-C-O	-6.35	111.46	120.16
17	T	184	ALA	CA-C-N	6.35	129.43	120.42
17	T	184	ALA	C-N-CA	6.35	129.43	120.42
18	X	10	PHE	CA-CB-CG	-6.35	107.45	113.80
33	J	88	VAL	CA-C-N	6.35	128.03	120.09
33	J	88	VAL	C-N-CA	6.35	128.03	120.09
10	3	45	HIS	CE1-NE2-CD2	-6.34	102.66	109.00
21	N	492	THR	N-CA-C	-6.34	103.63	112.45
21	N	692	GLU	CA-C-N	6.34	128.07	120.14
21	N	692	GLU	C-N-CA	6.34	128.07	120.14
21	N	701	VAL	CA-C-O	-6.34	114.35	120.95
22	S	419	VAL	N-CA-C	-6.34	104.15	110.62
29	I	70	LEU	CA-C-N	6.34	128.78	120.28
29	I	70	LEU	C-N-CA	6.34	128.78	120.28
32	M	263	VAL	N-CA-C	6.34	116.51	110.42
21	N	113	ALA	N-CA-C	6.34	117.86	111.07
23	P	257	TRP	N-CA-CB	6.34	120.07	110.30
26	U	53	ALA	N-CA-C	6.34	118.98	110.35
9	i	128	ILE	N-CA-CB	6.34	117.63	110.72
6	F	69	HIS	ND1-CE1-NE2	6.34	114.74	108.40
10	3	184	GLY	O-C-N	6.34	129.47	122.68
17	T	180	ILE	N-CA-C	-6.34	104.33	110.42
24	Q	178	HIS	ND1-CE1-NE2	6.34	114.74	108.40
26	U	21	HIS	CE1-NE2-CD2	-6.34	102.66	109.00
32	M	410	VAL	N-CA-C	-6.34	99.34	108.53
1	a	117	LEU	CA-C-N	6.34	128.77	120.28
1	a	117	LEU	C-N-CA	6.34	128.77	120.28
14	7	218	TYR	N-CA-C	-6.34	104.24	112.23
11	4	7	ILE	N-CA-C	-6.34	98.34	107.78
21	N	41	ASN	CB-CA-C	-6.34	100.27	110.79
26	U	94	HIS	CE1-NE2-CD2	-6.34	102.66	109.00
33	J	223	ILE	N-CA-C	-6.34	96.16	109.34
13	m	176	VAL	CA-C-N	6.33	130.48	121.42
13	m	176	VAL	C-N-CA	6.33	130.48	121.42
31	L	125	PRO	CA-C-N	6.33	129.87	120.87
31	L	125	PRO	C-N-CA	6.33	129.87	120.87
10	3	83	GLU	N-CA-C	-6.33	101.87	110.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	V	188	LEU	CA-C-N	6.33	128.54	120.56
16	V	188	LEU	C-N-CA	6.33	128.54	120.56
21	N	338	PHE	CA-C-N	6.33	128.77	120.28
21	N	338	PHE	C-N-CA	6.33	128.77	120.28
20	Z	362	LEU	CA-C-N	6.33	128.76	120.28
20	Z	362	LEU	C-N-CA	6.33	128.76	120.28
28	H	91	LEU	CA-C-N	6.33	126.11	120.10
28	H	91	LEU	C-N-CA	6.33	126.11	120.10
28	H	314	VAL	N-CA-CB	6.33	121.68	111.23
28	H	417	ALA	CA-C-N	6.33	129.28	120.29
28	H	417	ALA	C-N-CA	6.33	129.28	120.29
30	K	342	SER	N-CA-C	-6.33	104.71	112.88
13	6	87	HIS	CA-C-O	6.33	126.78	120.32
21	N	300	ASN	N-CA-CB	6.33	119.19	110.01
28	H	82	TRP	CA-CB-CG	6.33	125.63	113.60
21	N	761	ILE	O-C-N	-6.33	116.49	123.20
29	I	111	GLU	N-CA-CB	6.33	121.37	111.56
1	A	192	ASP	CA-CB-CG	6.33	118.93	112.60
3	C	22	VAL	N-CA-C	-6.33	104.33	110.72
21	N	438	ASP	O-C-N	6.33	128.82	122.12
24	Q	337	ALA	CA-C-N	6.33	128.75	120.28
24	Q	337	ALA	C-N-CA	6.33	128.75	120.28
29	I	419	ALA	CA-C-N	6.33	128.75	120.28
29	I	419	ALA	C-N-CA	6.33	128.75	120.28
8	1	192	VAL	O-C-N	-6.32	116.50	123.20
22	S	359	LYS	CA-C-N	6.32	129.04	120.44
22	S	359	LYS	C-N-CA	6.32	129.04	120.44
23	P	52	LEU	CA-C-N	6.32	128.75	120.28
23	P	52	LEU	C-N-CA	6.32	128.75	120.28
1	A	247	ALA	N-CA-C	-6.32	105.53	113.18
20	Z	758	LEU	CA-C-N	6.32	129.27	120.29
20	Z	758	LEU	C-N-CA	6.32	129.27	120.29
28	H	431	ILE	CA-C-N	6.32	129.27	120.29
28	H	431	ILE	C-N-CA	6.32	129.27	120.29
3	c	29	ILE	CA-C-O	6.32	127.27	119.43
3	C	94	HIS	N-CA-C	6.32	118.98	111.71
21	N	387	ALA	CA-C-N	6.32	126.01	119.56
21	N	387	ALA	C-N-CA	6.32	126.01	119.56
21	N	552	ALA	CB-CA-C	-6.32	100.30	110.79
24	Q	319	LYS	N-CA-CB	6.32	120.08	110.28
33	J	287	ASN	N-CA-C	-6.32	105.23	114.39
3	c	25	ALA	CA-C-O	-6.32	113.85	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	U	117	ASN	CA-C-N	6.32	126.69	119.93
26	U	117	ASN	C-N-CA	6.32	126.69	119.93
29	I	195	LYS	CA-CB-CG	-6.32	101.46	114.10
22	S	270	ALA	CB-CA-C	-6.32	100.30	110.79
22	S	339	GLN	CG-CD-OE1	6.32	133.44	120.80
8	1	71	HIS	CE1-NE2-CD2	-6.32	102.69	109.00
10	3	20	CYS	CA-C-O	-6.32	114.47	121.23
21	N	735	MET	CG-SD-CE	-6.32	87.00	100.90
9	i	37	PHE	CA-C-N	6.31	129.06	120.54
9	i	37	PHE	C-N-CA	6.31	129.06	120.54
7	G	26	TYR	N-CA-CB	6.31	119.40	110.12
6	F	175	THR	CA-C-N	6.31	128.74	120.28
6	F	175	THR	C-N-CA	6.31	128.74	120.28
21	N	556	ALA	N-CA-C	6.31	117.82	111.07
31	L	391	ILE	CA-C-N	6.31	129.37	120.28
31	L	391	ILE	C-N-CA	6.31	129.37	120.28
3	C	70	ASN	CA-CB-CG	6.31	118.91	112.60
21	N	16	ASN	CA-CB-CG	6.31	118.91	112.60
22	S	30	GLN	CA-C-N	6.31	128.51	120.56
22	S	30	GLN	C-N-CA	6.31	128.51	120.56
32	M	379	LEU	CA-C-O	-6.31	113.86	120.55
12	5	82	ARG	NE-CZ-NH1	-6.31	115.19	121.50
21	N	513	ILE	N-CA-CB	6.31	118.64	110.57
24	Q	216	ALA	CA-C-N	6.31	129.25	120.29
24	Q	216	ALA	C-N-CA	6.31	129.25	120.29
29	I	204	HIS	CE1-NE2-CD2	-6.31	102.69	109.00
31	L	289	ARG	N-CA-CB	6.31	119.46	110.44
2	b	151	ASP	CA-C-O	-6.31	114.57	120.94
7	G	156	SER	CA-C-O	-6.31	114.03	120.71
15	W	106	GLN	CA-C-N	6.30	130.27	120.75
15	W	106	GLN	C-N-CA	6.30	130.27	120.75
22	S	271	ARG	NE-CZ-NH2	-6.30	113.53	119.20
27	O	232	GLU	CA-C-N	6.30	128.73	120.28
27	O	232	GLU	C-N-CA	6.30	128.73	120.28
17	T	137	GLU	CB-CG-CD	-6.30	101.88	112.60
5	e	20	ARG	NE-CZ-NH2	-6.30	113.53	119.20
2	B	4	ARG	N-CA-C	-6.30	105.06	114.64
16	V	83	VAL	N-CA-C	-6.30	98.55	107.75
25	R	378	ASN	N-CA-C	6.30	118.90	111.02
9	i	216	LEU	N-CA-CB	6.30	117.41	110.35
12	l	185	PRO	N-CD-CG	6.30	112.65	103.20
20	Z	145	ASP	O-C-N	6.30	131.07	123.13

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	923	MET	CA-C-N	6.30	129.01	120.44
21	N	923	MET	C-N-CA	6.30	129.01	120.44
23	P	174	SER	O-C-N	6.30	128.80	122.12
29	I	141	LEU	N-CA-C	-6.30	99.43	109.76
29	I	356	SER	CA-C-N	6.30	129.88	120.31
29	I	356	SER	C-N-CA	6.30	129.88	120.31
9	2	170	HIS	ND1-CE1-NE2	6.30	114.70	108.40
12	5	256	THR	CA-C-N	6.30	128.72	120.28
12	5	256	THR	C-N-CA	6.30	128.72	120.28
23	P	225	VAL	O-C-N	-6.30	115.76	121.87
13	6	144	CYS	N-CA-C	-6.29	99.11	108.99
5	e	15	PHE	CA-C-N	6.29	133.03	121.70
5	e	15	PHE	C-N-CA	6.29	133.03	121.70
10	3	60	VAL	N-CA-CB	6.29	117.91	110.55
21	N	384	LYS	CA-C-O	6.29	127.22	120.55
22	S	321	GLN	N-CA-C	6.29	117.80	111.07
23	P	50	SER	CA-C-N	6.29	129.00	120.44
23	P	50	SER	C-N-CA	6.29	129.00	120.44
25	R	171	MET	N-CA-C	6.29	118.95	111.71
25	R	305	PHE	CA-C-O	-6.29	112.75	118.79
26	U	76	MET	CA-C-N	6.29	129.04	120.54
26	U	76	MET	C-N-CA	6.29	129.04	120.54
8	h	42	LYS	N-CA-C	-6.29	105.24	113.17
19	Y	58	ASN	CA-CB-CG	6.29	118.89	112.60
10	j	136	PHE	CA-CB-CG	-6.29	107.51	113.80
10	j	202	MET	CA-C-N	6.29	129.69	120.82
10	j	202	MET	C-N-CA	6.29	129.69	120.82
20	Z	320	SER	CA-C-N	6.29	129.00	120.38
20	Z	320	SER	C-N-CA	6.29	129.00	120.38
7	g	218	TRP	CA-CB-CG	6.29	125.55	113.60
11	k	182	LYS	CB-CA-C	-6.29	98.65	109.65
12	5	142	GLU	CA-C-N	6.29	129.22	120.29
12	5	142	GLU	C-N-CA	6.29	129.22	120.29
16	V	289	GLU	N-CA-CB	6.29	119.36	110.12
20	Z	728	LYS	N-CA-CB	6.29	119.22	109.97
29	I	262	ARG	N-CA-CB	6.29	119.47	110.16
32	M	377	GLN	O-C-N	6.29	128.55	122.07
33	J	379	GLN	OE1-CD-NE2	-6.29	116.31	122.60
22	S	225	HIS	CB-CG-CD2	-6.29	123.03	131.20
22	S	462	ASP	CA-CB-CG	6.29	118.89	112.60
21	N	213	PHE	CA-CB-CG	-6.29	107.51	113.80
29	I	280	PHE	CA-CB-CG	6.29	120.09	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	M	247	ALA	N-CA-C	-6.29	98.14	108.76
1	a	65	ASP	CA-C-N	6.28	125.85	119.19
1	a	65	ASP	C-N-CA	6.28	125.85	119.19
20	Z	438	LYS	CA-C-N	6.28	128.70	120.28
20	Z	438	LYS	C-N-CA	6.28	128.70	120.28
26	U	28	LYS	N-CA-C	-6.28	100.26	109.18
27	O	177	GLN	CA-C-O	6.28	127.21	120.55
3	C	134	SER	N-CA-C	-6.28	97.58	108.69
25	R	318	PRO	CA-C-O	-6.28	110.19	118.86
32	M	214	ALA	CA-C-O	-6.28	113.97	120.87
32	M	364	HIS	CA-CB-CG	-6.28	107.52	113.80
33	J	154	THR	O-C-N	6.28	130.74	122.33
3	C	213	PHE	O-C-N	-6.28	116.27	123.42
23	P	175	GLU	CB-CG-CD	-6.28	101.93	112.60
30	K	421	VAL	CA-C-N	6.28	128.93	120.65
30	K	421	VAL	C-N-CA	6.28	128.93	120.65
33	J	377	VAL	N-CA-CB	6.28	118.15	111.00
3	C	192	LEU	O-C-N	-6.27	115.00	122.15
21	N	68	VAL	CA-C-N	6.27	129.85	120.31
21	N	68	VAL	C-N-CA	6.27	129.85	120.31
24	Q	253	ASN	N-CA-C	-6.27	104.88	114.16
20	Z	825	ALA	N-CA-CB	6.27	121.09	110.49
24	Q	269	LYS	CA-C-N	6.27	129.32	120.42
24	Q	269	LYS	C-N-CA	6.27	129.32	120.42
22	S	320	ILE	CA-C-N	6.27	128.59	120.44
22	S	320	ILE	C-N-CA	6.27	128.59	120.44
32	M	377	GLN	CA-C-O	-6.27	114.24	120.82
13	m	187	GLU	CA-C-N	6.27	128.58	120.56
13	m	187	GLU	C-N-CA	6.27	128.58	120.56
7	G	46	VAL	CA-C-O	6.27	127.64	121.19
11	4	135	TYR	CA-C-N	6.27	129.19	120.29
11	4	135	TYR	C-N-CA	6.27	129.19	120.29
22	S	47	THR	CB-CA-C	6.27	122.89	110.42
29	I	95	GLN	CB-CA-C	-6.27	101.04	110.88
6	F	99	PHE	CB-CA-C	-6.27	100.13	110.72
32	M	150	LYS	CA-C-N	6.27	129.50	120.79
32	M	150	LYS	C-N-CA	6.27	129.50	120.79
1	A	34	ALA	CA-C-N	6.26	129.30	120.28
1	A	34	ALA	C-N-CA	6.26	129.30	120.28
20	Z	602	LEU	CA-C-N	6.26	130.91	120.64
20	Z	602	LEU	C-N-CA	6.26	130.91	120.64
26	U	203	LYS	CA-C-N	6.26	128.68	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	U	203	LYS	C-N-CA	6.26	128.68	120.28
30	K	158	ILE	N-CA-C	-6.26	100.39	109.29
30	K	364	PRO	N-CA-C	-6.26	106.52	114.35
33	J	277	ASN	O-C-N	-6.26	115.62	122.07
1	A	185	HIS	CA-CB-CG	6.26	120.06	113.80
2	B	203	GLU	N-CA-CB	6.26	119.19	110.17
24	Q	65	TYR	CA-C-N	6.26	133.24	121.97
24	Q	65	TYR	C-N-CA	6.26	133.24	121.97
5	E	91	HIS	ND1-CE1-NE2	6.26	114.66	108.40
7	G	123	HIS	CA-CB-CG	6.26	120.06	113.80
20	Z	754	LYS	N-CA-C	6.26	118.11	111.28
6	F	89	ARG	NE-CZ-NH2	6.26	124.83	119.20
16	V	160	ASP	CA-C-N	6.26	129.29	120.28
16	V	160	ASP	C-N-CA	6.26	129.29	120.28
27	O	283	HIS	CB-CG-CD2	-6.26	123.06	131.20
6	f	174	ARG	CA-C-O	6.26	127.25	120.55
13	m	228	LYS	CA-C-N	6.26	131.81	123.05
13	m	228	LYS	C-N-CA	6.26	131.81	123.05
4	D	96	HIS	CB-CG-CD2	-6.26	123.06	131.20
26	U	225	ILE	N-CA-CB	6.26	117.87	110.55
28	H	452	SER	CA-C-N	6.26	126.89	119.94
28	H	452	SER	C-N-CA	6.26	126.89	119.94
33	J	122	LEU	N-CA-CB	6.26	119.26	109.69
10	3	152	SER	CA-C-N	6.25	129.14	120.63
10	3	152	SER	C-N-CA	6.25	129.14	120.63
13	6	163	ASN	N-CA-C	-6.25	105.69	113.38
33	J	324	ARG	NE-CZ-NH1	6.25	127.75	121.50
4	d	166	ARG	N-CA-CB	6.25	119.16	109.97
17	T	23	CYS	CB-CA-C	-6.25	101.06	110.88
20	Z	829	GLN	CA-C-O	-6.25	113.92	120.55
10	j	68	ARG	N-CA-CB	6.25	119.31	110.12
14	n	197	ASP	CA-CB-CG	-6.25	106.35	112.60
13	6	78	ASN	CA-C-O	-6.25	113.92	120.55
16	V	73	GLN	OE1-CD-NE2	6.25	128.85	122.60
20	Z	484	LYS	N-CA-CB	6.25	119.31	110.12
24	Q	100	LEU	CA-C-O	-6.25	114.25	120.82
24	Q	163	ARG	NE-CZ-NH1	6.25	127.75	121.50
1	a	46	ARG	CB-CA-C	-6.25	100.06	110.19
6	f	185	ASN	CA-C-O	-6.25	115.07	121.32
7	G	245	LYS	O-C-N	-6.25	114.58	122.27
12	5	94	ARG	NE-CZ-NH1	6.25	127.75	121.50
27	O	88	ASP	CA-CB-CG	-6.25	106.35	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	I	125	MET	N-CA-CB	6.25	121.49	110.37
30	K	66	ASP	CA-CB-CG	-6.25	106.35	112.60
1	A	123	ASN	CA-CB-CG	-6.25	106.35	112.60
16	V	125	THR	O-C-N	-6.25	115.64	122.07
19	Y	23	GLU	N-CA-C	6.25	117.75	111.07
21	N	584	ARG	NH1-CZ-NH2	-6.25	111.18	119.30
22	S	20	HIS	CG-CD2-NE2	6.25	113.45	107.20
22	S	201	ILE	CA-C-O	6.25	127.00	120.25
3	c	186	VAL	CB-CA-C	-6.24	102.14	112.26
8	1	131	LEU	CA-C-N	6.24	127.64	119.84
8	1	131	LEU	C-N-CA	6.24	127.64	119.84
29	I	82	LEU	N-CA-CB	6.24	119.40	110.16
30	K	244	HIS	CA-C-N	6.24	128.65	120.28
30	K	244	HIS	C-N-CA	6.24	128.65	120.28
10	3	44	PHE	N-CA-C	-6.24	99.81	109.24
2	b	98	LYS	N-CA-CB	6.24	119.06	110.01
7	G	105	THR	CA-C-N	6.24	126.57	119.83
7	G	105	THR	C-N-CA	6.24	126.57	119.83
13	6	104	LEU	CA-C-N	6.24	128.89	120.65
13	6	104	LEU	C-N-CA	6.24	128.89	120.65
28	H	190	ARG	CA-C-N	6.24	130.02	122.16
28	H	190	ARG	C-N-CA	6.24	130.02	122.16
14	7	51	ASN	N-CA-C	-6.24	105.31	113.17
20	Z	628	ASN	CA-C-N	6.24	129.01	120.46
20	Z	628	ASN	C-N-CA	6.24	129.01	120.46
30	K	59	GLU	N-CA-C	-6.24	105.49	113.23
14	7	148	ILE	N-CA-C	-6.24	99.49	108.53
21	N	107	GLU	N-CA-CB	6.24	119.05	110.01
9	i	234	PHE	CA-C-O	6.24	126.77	120.03
3	C	42	ASP	CA-CB-CG	6.24	118.83	112.60
26	U	145	ASP	CB-CA-C	-6.24	100.70	110.74
28	H	208	TYR	CA-C-N	6.24	128.92	120.38
28	H	208	TYR	C-N-CA	6.24	128.92	120.38
18	X	128	VAL	CA-C-O	-6.23	114.24	120.85
24	Q	190	ASN	O-C-N	-6.23	115.77	123.44
20	Z	711	SER	CA-C-N	6.23	128.54	120.44
20	Z	711	SER	C-N-CA	6.23	128.54	120.44
22	S	120	SER	N-CA-C	6.23	117.87	111.14
25	R	136	ASN	N-CA-C	6.23	118.88	111.71
28	H	385	ARG	NE-CZ-NH1	-6.23	115.27	121.50
3	C	189	ALA	CA-C-N	6.23	129.00	120.46
3	C	189	ALA	C-N-CA	6.23	129.00	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	F	67	ASP	CA-C-O	6.23	127.98	121.31
30	K	422	ASP	CA-C-N	6.23	129.76	120.17
30	K	422	ASP	C-N-CA	6.23	129.76	120.17
33	J	1	MET	CA-C-N	6.23	130.59	121.31
33	J	1	MET	C-N-CA	6.23	130.59	121.31
10	j	52	GLY	N-CA-C	-6.23	100.10	111.25
13	m	116	HIS	CG-CD2-NE2	6.23	113.43	107.20
7	G	152	GLU	CA-C-N	6.23	125.92	119.82
7	G	152	GLU	C-N-CA	6.23	125.92	119.82
13	6	174	GLY	CA-C-O	6.23	125.92	119.01
20	Z	729	GLU	CA-C-O	6.23	127.04	119.38
8	h	65	ALA	N-CA-C	6.23	118.87	111.71
7	G	160	TYR	N-CA-CB	6.23	122.06	111.66
12	l	132	THR	CA-C-O	-6.23	113.82	120.42
2	B	109	LEU	CA-C-O	-6.23	114.29	120.70
13	6	41	TYR	CB-CG-CD2	6.23	130.14	120.80
15	W	15	TYR	N-CA-C	-6.23	104.85	112.88
16	V	83	VAL	O-C-N	6.23	129.80	123.20
23	P	309	MET	CA-C-O	6.23	127.74	120.89
28	H	458	SER	N-CA-C	6.23	119.24	109.96
24	Q	154	SER	CA-C-N	6.22	129.77	120.31
24	Q	154	SER	C-N-CA	6.22	129.77	120.31
30	K	80	LYS	N-CA-CB	6.22	119.27	110.12
2	b	163	ALA	CA-C-N	6.22	131.19	122.23
2	b	163	ALA	C-N-CA	6.22	131.19	122.23
14	n	50	ASP	CA-CB-CG	6.22	118.82	112.60
4	D	37	LYS	CA-C-N	6.22	128.43	122.27
4	D	37	LYS	C-N-CA	6.22	128.43	122.27
11	4	54	VAL	CA-C-N	6.22	129.13	120.29
11	4	54	VAL	C-N-CA	6.22	129.13	120.29
29	I	75	PHE	CB-CG-CD2	6.22	131.28	120.70
6	F	218	LYS	CA-C-N	6.22	131.99	122.29
6	F	218	LYS	C-N-CA	6.22	131.99	122.29
23	P	93	ILE	O-C-N	6.22	127.91	121.87
10	j	67	PHE	CA-C-N	6.22	128.61	120.28
10	j	67	PHE	C-N-CA	6.22	128.61	120.28
20	Z	818	CYS	CA-C-N	6.22	126.72	119.94
20	Z	818	CYS	C-N-CA	6.22	126.72	119.94
24	Q	247	HIS	CE1-NE2-CD2	-6.22	102.78	109.00
22	S	133	GLU	CA-C-N	6.22	128.98	120.46
22	S	133	GLU	C-N-CA	6.22	128.98	120.46
26	U	21	HIS	ND1-CE1-NE2	6.22	114.62	108.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	K	260	LEU	CA-C-N	6.22	128.52	120.44
30	K	260	LEU	C-N-CA	6.22	128.52	120.44
9	i	175	LEU	CA-C-N	6.21	132.01	120.95
9	i	175	LEU	C-N-CA	6.21	132.01	120.95
7	G	147	HIS	CA-CB-CG	-6.21	107.58	113.80
22	S	389	LYS	CA-C-N	6.21	128.61	120.28
22	S	389	LYS	C-N-CA	6.21	128.61	120.28
23	P	178	GLN	O-C-N	-6.21	115.53	122.12
7	g	24	VAL	CB-CA-C	-6.21	102.98	112.05
29	I	162	ASP	CA-CB-CG	-6.21	106.39	112.60
29	I	366	THR	N-CA-C	-6.21	105.74	113.38
11	4	118	GLN	OE1-CD-NE2	6.21	128.81	122.60
10	j	163	LEU	CA-C-O	-6.21	113.08	120.10
13	m	94	ILE	O-C-N	6.21	127.89	121.87
17	T	16	GLU	CA-C-N	6.21	128.60	120.28
17	T	16	GLU	C-N-CA	6.21	128.60	120.28
31	L	283	VAL	N-CA-C	-6.21	106.39	111.91
14	n	123	SER	CA-C-N	6.21	128.88	120.44
14	n	123	SER	C-N-CA	6.21	128.88	120.44
10	3	161	GLU	CA-C-O	-6.21	113.84	120.42
11	4	155	GLU	CA-C-N	6.21	129.74	120.31
11	4	155	GLU	C-N-CA	6.21	129.74	120.31
20	Z	173	ALA	CA-C-N	6.21	133.39	121.54
20	Z	173	ALA	C-N-CA	6.21	133.39	121.54
32	M	278	ILE	N-CA-CB	6.21	118.47	111.21
23	P	375	GLN	N-CA-C	6.21	118.04	111.28
29	I	295	ASN	N-CA-CB	6.21	120.59	110.17
32	M	281	ASP	N-CA-C	-6.21	99.58	109.76
10	j	100	PHE	CA-C-N	6.20	131.61	121.87
10	j	100	PHE	C-N-CA	6.20	131.61	121.87
20	Z	807	VAL	N-CA-CB	6.20	118.51	110.57
21	N	150	LEU	CA-C-N	6.20	128.59	120.28
21	N	150	LEU	C-N-CA	6.20	128.59	120.28
23	P	86	HIS	CE1-NE2-CD2	-6.20	102.80	109.00
8	l	60	ASP	CA-CB-CG	-6.20	106.40	112.60
4	d	163	THR	N-CA-C	-6.20	98.97	108.76
13	m	185	VAL	CA-C-N	6.20	131.18	120.58
13	m	185	VAL	C-N-CA	6.20	131.18	120.58
20	Z	156	HIS	CB-CA-C	-6.20	101.14	110.88
20	Z	715	ALA	O-C-N	6.20	128.69	122.12
22	S	252	ASP	CA-CB-CG	6.20	118.80	112.60
9	2	118	LYS	N-CA-CB	6.20	120.82	110.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	c	193	ALA	CA-C-O	-6.20	113.98	120.55
16	V	41	GLY	CA-C-N	6.20	129.09	120.29
16	V	41	GLY	C-N-CA	6.20	129.09	120.29
22	S	229	THR	N-CA-CB	6.20	119.33	110.16
23	P	128	ASN	CA-CB-CG	-6.20	106.40	112.60
8	l	141	THR	N-CA-C	-6.19	104.61	111.36
20	Z	12	ILE	O-C-N	-6.19	115.45	121.83
26	U	156	HIS	ND1-CE1-NE2	6.19	114.59	108.40
21	N	617	VAL	CA-C-N	6.19	128.58	120.28
21	N	617	VAL	C-N-CA	6.19	128.58	120.28
28	H	400	ARG	NE-CZ-NH1	6.19	127.69	121.50
29	I	301	GLU	CA-C-N	6.19	129.21	120.42
29	I	301	GLU	C-N-CA	6.19	129.21	120.42
32	M	136	ASP	CA-CB-CG	6.19	118.79	112.60
32	M	151	ASP	CA-CB-CG	-6.19	106.41	112.60
33	J	155	LYS	N-CA-C	-6.19	104.53	111.28
5	e	138	PHE	CA-CB-CG	-6.19	107.61	113.80
29	I	255	LYS	CA-C-O	6.19	126.69	119.32
5	e	91	HIS	ND1-CE1-NE2	6.19	114.59	108.40
15	W	55	ALA	O-C-N	6.19	129.61	122.99
22	S	394	ILE	CA-C-N	6.19	130.45	120.30
22	S	394	ILE	C-N-CA	6.19	130.45	120.30
22	S	244	ASN	CA-CB-CG	-6.19	106.41	112.60
27	O	98	TYR	CB-CG-CD2	-6.18	111.52	120.80
13	m	88	ASN	O-C-N	6.18	130.63	122.47
17	T	162	ASP	CA-CB-CG	-6.18	106.42	112.60
25	R	248	SER	CA-C-O	-6.18	114.33	120.82
29	I	435	LEU	CA-C-N	6.18	134.30	121.32
29	I	435	LEU	C-N-CA	6.18	134.30	121.32
21	N	517	LEU	CA-C-N	6.18	129.07	120.29
21	N	517	LEU	C-N-CA	6.18	129.07	120.29
31	L	177	GLU	CA-C-N	6.18	131.95	122.25
31	L	177	GLU	C-N-CA	6.18	131.95	122.25
27	O	195	TYR	CA-C-N	6.18	129.06	120.29
27	O	195	TYR	C-N-CA	6.18	129.06	120.29
32	M	99	SER	N-CA-C	-6.18	104.62	111.36
33	J	267	GLU	N-CA-CB	6.18	119.03	110.07
5	e	21	LEU	CB-CA-C	6.18	119.78	109.89
21	N	256	GLN	CB-CA-C	-6.18	101.14	110.90
22	S	473	ASP	CA-C-N	6.18	128.56	120.28
22	S	473	ASP	C-N-CA	6.18	128.56	120.28
7	g	14	VAL	CB-CA-C	-6.18	103.28	111.13

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	143	ARG	CA-C-N	6.18	131.88	122.37
3	C	143	ARG	C-N-CA	6.18	131.88	122.37
24	Q	280	ASN	O-C-N	6.18	128.76	122.09
21	N	583	VAL	O-C-N	-6.17	115.88	121.87
23	P	221	TYR	N-CA-C	6.17	118.09	111.36
27	O	297	ILE	CA-C-N	6.17	128.47	120.44
27	O	297	ILE	C-N-CA	6.17	128.47	120.44
25	R	408	ASP	CA-C-N	6.17	126.83	119.98
25	R	408	ASP	C-N-CA	6.17	126.83	119.98
32	M	384	ASP	CB-CA-C	6.17	119.63	110.62
20	Z	743	ILE	CB-CA-C	-6.17	104.07	111.97
24	Q	294	ARG	CA-C-N	6.17	127.85	120.14
24	Q	294	ARG	C-N-CA	6.17	127.85	120.14
28	H	394	LYS	N-CA-C	-6.17	104.66	111.82
16	V	238	LEU	O-C-N	6.17	128.75	122.09
23	P	365	LEU	N-CA-C	6.17	118.81	111.71
13	m	156	PRO	CA-C-N	6.17	128.83	120.44
13	m	156	PRO	C-N-CA	6.17	128.83	120.44
4	D	21	GLU	CA-C-N	6.17	128.54	120.28
4	D	21	GLU	C-N-CA	6.17	128.54	120.28
17	T	179	ASP	CA-C-N	6.17	128.33	120.56
17	T	179	ASP	C-N-CA	6.17	128.33	120.56
21	N	113	ALA	CA-C-O	-6.17	114.34	120.82
24	Q	258	ALA	CA-C-N	6.17	129.05	120.29
24	Q	258	ALA	C-N-CA	6.17	129.05	120.29
14	7	207	GLU	CA-C-N	6.17	128.54	120.28
14	7	207	GLU	C-N-CA	6.17	128.54	120.28
17	T	252	GLU	CA-C-O	6.17	126.77	118.38
24	Q	215	VAL	CA-C-N	6.17	128.46	120.44
24	Q	215	VAL	C-N-CA	6.17	128.46	120.44
8	h	46	VAL	CB-CA-C	-6.17	103.13	110.84
12	l	271	LEU	N-CA-C	6.17	118.08	111.36
24	Q	274	LEU	N-CA-C	-6.17	101.02	109.71
27	O	250	TRP	CA-C-N	6.17	128.82	120.44
27	O	250	TRP	C-N-CA	6.17	128.82	120.44
9	i	179	GLU	CA-C-N	6.16	128.45	120.44
9	i	179	GLU	C-N-CA	6.16	128.45	120.44
12	l	200	ASP	N-CA-C	-6.16	105.45	114.39
15	W	53	SER	N-CA-C	-6.16	100.25	110.17
29	I	192	GLN	CB-CG-CD	-6.16	102.12	112.60
32	M	119	VAL	O-C-N	-6.16	116.57	122.98
21	N	71	ASN	CA-C-N	6.16	128.54	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	71	ASN	C-N-CA	6.16	128.54	120.28
28	H	145	TYR	N-CA-C	-6.16	99.36	108.79
32	M	412	HIS	CA-C-N	6.16	129.04	120.29
32	M	412	HIS	C-N-CA	6.16	129.04	120.29
5	e	73	HIS	CA-CB-CG	6.16	119.96	113.80
5	e	163	THR	O-C-N	-6.16	115.66	123.24
2	B	193	LEU	O-C-N	6.16	129.17	122.15
6	F	23	GLU	CA-C-N	6.16	128.53	120.28
6	F	23	GLU	C-N-CA	6.16	128.53	120.28
2	b	14	PRO	N-CA-CB	6.16	110.05	103.52
2	b	46	ALA	CA-C-O	6.16	128.12	120.54
8	h	58	ALA	N-CA-C	6.16	117.66	111.07
21	N	559	TYR	CA-C-N	6.16	129.46	120.71
21	N	559	TYR	C-N-CA	6.16	129.46	120.71
22	S	69	LEU	N-CA-CB	6.16	120.90	110.49
24	Q	300	LYS	N-CA-C	-6.16	105.25	112.89
30	K	346	ARG	NE-CZ-NH1	-6.16	115.34	121.50
31	L	196	VAL	CB-CA-C	-6.16	105.39	111.30
7	G	130	ARG	CA-C-N	6.16	125.92	119.76
7	G	130	ARG	C-N-CA	6.16	125.92	119.76
25	R	307	TYR	N-CA-CB	6.16	119.17	110.12
6	f	44	ALA	N-CA-C	-6.16	100.12	109.85
9	i	132	VAL	O-C-N	-6.16	116.38	122.97
24	Q	336	ASN	O-C-N	6.16	129.17	122.15
1	a	197	GLU	CB-CG-CD	-6.15	102.14	112.60
21	N	802	ALA	N-CA-C	-6.15	104.57	111.28
11	k	169	GLU	N-CA-C	6.15	118.07	111.36
1	A	187	LYS	O-C-N	6.15	130.23	122.23
5	E	191	LEU	N-CA-CB	6.15	122.14	111.13
13	6	54	CYS	N-CA-C	-6.15	104.17	113.89
21	N	680	LYS	CA-C-N	6.15	128.53	120.28
21	N	680	LYS	C-N-CA	6.15	128.53	120.28
23	P	374	SER	N-CA-CB	6.15	118.93	110.01
23	P	429	ILE	CA-C-N	6.15	131.32	120.74
23	P	429	ILE	C-N-CA	6.15	131.32	120.74
29	I	109	LEU	CB-CA-C	-6.15	101.32	110.67
4	D	80	ALA	CA-C-N	6.15	129.66	120.31
4	D	80	ALA	C-N-CA	6.15	129.66	120.31
6	f	34	VAL	CA-C-N	6.15	132.76	121.94
6	f	34	VAL	C-N-CA	6.15	132.76	121.94
32	M	213	ARG	O-C-N	-6.15	116.03	123.10
7	g	182	HIS	CA-C-O	6.15	126.94	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	l	130	TRP	CB-CG-CD2	-6.15	118.19	126.80
13	6	46	ARG	NE-CZ-NH1	-6.15	115.35	121.50
20	Z	338	HIS	CG-CD2-NE2	6.15	113.35	107.20
11	k	170	LYS	CB-CA-C	-6.15	101.23	110.88
3	c	31	HIS	CE1-NE2-CD2	-6.14	102.86	109.00
7	g	109	ILE	N-CA-CB	6.14	119.81	111.21
8	l	108	VAL	O-C-N	-6.14	116.62	123.26
15	W	184	ASN	OD1-CG-ND2	-6.14	116.46	122.60
20	Z	37	GLN	OE1-CD-NE2	6.14	128.74	122.60
21	N	102	VAL	O-C-N	6.14	127.83	121.87
28	H	347	GLY	N-CA-C	-6.14	102.08	112.77
3	C	182	ASP	N-CA-C	-6.14	105.79	113.28
13	m	183	LEU	CA-C-N	6.14	132.23	122.59
13	m	183	LEU	C-N-CA	6.14	132.23	122.59
9	2	252	ILE	N-CA-CB	6.14	120.17	111.82
12	5	128	GLN	CA-C-N	6.14	128.75	120.65
12	5	128	GLN	C-N-CA	6.14	128.75	120.65
13	6	93	SER	CA-C-N	6.14	128.87	120.46
13	6	93	SER	C-N-CA	6.14	128.87	120.46
16	V	30	SER	CA-C-N	6.14	128.51	120.28
16	V	30	SER	C-N-CA	6.14	128.51	120.28
14	n	211	VAL	CA-CB-CG2	-6.14	99.97	110.40
2	B	86	VAL	N-CA-C	-6.14	104.31	111.00
27	O	58	ARG	CA-C-N	6.14	129.01	120.29
27	O	58	ARG	C-N-CA	6.14	129.01	120.29
6	F	8	GLY	N-CA-C	6.14	121.59	113.37
21	N	293	LEU	CA-C-N	6.14	126.32	119.32
21	N	293	LEU	C-N-CA	6.14	126.32	119.32
23	P	282	HIS	CG-CD2-NE2	6.14	113.34	107.20
2	B	246	ARG	N-CA-C	-6.13	105.28	112.89
21	N	415	PHE	CA-C-O	6.13	125.40	119.08
21	N	717	LEU	N-CA-C	-6.13	105.96	113.50
23	P	287	ASP	CA-C-N	6.13	129.00	120.29
23	P	287	ASP	C-N-CA	6.13	129.00	120.29
29	I	374	ASP	N-CA-C	-6.13	106.12	113.97
6	F	123	TYR	N-CA-CB	6.13	120.64	110.52
24	Q	246	TYR	N-CA-C	6.13	118.93	111.82
28	H	265	ASN	CA-CB-CG	6.13	118.73	112.60
3	c	208	TYR	N-CA-C	6.13	117.96	111.28
10	j	150	CYS	N-CA-CB	6.13	118.96	110.07
14	7	215	ARG	N-CA-C	6.13	118.47	111.11
20	Z	717	THR	N-CA-CB	6.13	119.13	110.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	U	241	THR	CA-C-O	-6.13	114.75	120.94
2	b	120	GLU	N-CA-CB	6.13	119.36	110.47
3	C	59	GLN	N-CA-C	-6.13	103.51	113.19
27	O	216	ASP	CA-C-N	6.13	128.49	120.28
27	O	216	ASP	C-N-CA	6.13	128.49	120.28
31	L	134	SER	N-CA-C	-6.13	103.93	112.45
24	Q	101	ILE	CB-CA-C	-6.13	104.13	111.97
24	Q	178	HIS	CG-CD2-NE2	6.13	113.33	107.20
10	j	19	ASP	CA-CB-CG	6.12	118.72	112.60
16	V	18	THR	CA-CB-OG1	6.12	118.79	109.60
11	k	152	MET	N-CA-CB	6.12	119.02	110.26
3	C	45	VAL	N-CA-C	-6.12	99.60	108.17
24	Q	149	LYS	N-CA-CB	6.12	123.81	113.10
20	Z	419	VAL	CB-CA-C	6.12	120.66	112.22
21	N	356	LEU	N-CA-C	-6.12	104.69	111.36
27	O	380	LEU	CA-C-N	6.12	127.99	120.22
27	O	380	LEU	C-N-CA	6.12	127.99	120.22
20	Z	346	LEU	CA-C-O	-6.12	114.07	120.55
22	S	38	LEU	CA-C-N	6.12	128.48	120.28
22	S	38	LEU	C-N-CA	6.12	128.48	120.28
26	U	77	ASN	CA-CB-CG	-6.12	106.48	112.60
14	n	171	SER	N-CA-C	-6.12	100.66	110.14
20	Z	486	SER	CB-CA-C	-6.12	98.93	110.67
22	S	72	GLU	CA-C-O	6.12	127.03	120.55
27	O	68	LYS	CA-C-N	6.12	133.10	122.95
27	O	68	LYS	C-N-CA	6.12	133.10	122.95
28	H	333	MET	CA-C-N	6.12	131.84	121.14
28	H	333	MET	C-N-CA	6.12	131.84	121.14
33	J	218	LEU	N-CA-C	6.12	117.74	111.14
2	B	231	LYS	N-CA-CB	6.11	120.73	110.77
20	Z	511	PRO	N-CA-C	-6.11	106.06	114.98
20	Z	206	ASP	CB-CA-C	-6.11	101.24	110.90
9	i	207	MET	CG-SD-CE	-6.11	87.46	100.90
12	l	270	GLU	CA-C-N	6.11	128.97	120.29
12	l	270	GLU	C-N-CA	6.11	128.97	120.29
10	3	103	TYR	N-CA-C	-6.11	100.55	110.20
22	S	478	SER	O-C-N	6.11	129.12	122.15
27	O	145	LYS	N-CA-C	-6.11	104.70	111.36
29	I	270	VAL	O-C-N	6.11	128.12	121.83
8	h	102	LEU	CA-C-N	-6.11	114.15	123.07
8	h	102	LEU	C-N-CA	-6.11	114.15	123.07
18	X	111	LEU	N-CA-C	-6.11	99.90	109.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	Z	913	ILE	N-CA-C	-6.11	104.34	111.00
5	e	136	ARG	N-CA-CB	6.11	119.86	111.25
15	W	142	ILE	CB-CA-C	6.11	118.35	110.96
22	S	118	PHE	N-CA-CB	6.11	120.81	110.49
23	P	148	LYS	N-CA-C	6.11	117.94	111.28
30	K	89	ILE	N-CA-C	-6.11	105.42	111.77
33	J	170	HIS	CA-CB-CG	6.11	119.91	113.80
9	i	201	ASN	CA-C-N	6.11	131.65	122.98
9	i	201	ASN	C-N-CA	6.11	131.65	122.98
11	4	133	HIS	O-C-N	6.11	130.21	123.25
27	O	85	SER	O-C-N	-6.11	115.08	122.22
29	I	135	PHE	CA-CB-CG	-6.11	107.69	113.80
19	Y	65	ASP	N-CA-C	-6.10	103.17	112.99
22	S	310	LEU	CA-C-O	-6.10	112.95	119.97
24	Q	332	ARG	CA-C-O	-6.10	114.41	120.82
1	a	123	ASN	CA-C-N	6.10	129.58	120.31
1	a	123	ASN	C-N-CA	6.10	129.58	120.31
13	m	197	THR	CB-CA-C	-6.10	100.48	110.85
14	n	40	THR	CA-CB-OG1	6.10	118.75	109.60
15	W	140	ASP	N-CA-CB	6.10	120.15	110.57
27	O	342	ASP	CA-CB-CG	-6.10	106.50	112.60
29	I	294	SER	CA-C-N	6.10	130.53	122.30
29	I	294	SER	C-N-CA	6.10	130.53	122.30
30	K	375	ASN	N-CA-C	-6.10	100.69	110.14
1	a	82	VAL	N-CA-C	-6.10	99.57	108.11
6	F	85	SER	CA-C-O	-6.10	114.09	120.55
15	W	139	VAL	CA-CB-CG2	6.10	120.77	110.40
20	Z	122	LEU	N-CA-C	-6.10	105.33	112.89
21	N	514	THR	CA-CB-OG1	6.10	118.75	109.60
1	a	69	VAL	N-CA-C	-6.09	99.52	108.54
6	F	11	VAL	CA-C-O	6.09	128.40	120.78
27	O	79	VAL	CA-C-O	6.09	127.09	120.57
28	H	63	ILE	N-CA-CB	6.09	118.37	110.57
20	Z	210	TYR	CA-C-N	6.09	128.44	120.28
20	Z	210	TYR	C-N-CA	6.09	128.44	120.28
20	Z	740	VAL	N-CA-C	6.09	116.87	110.72
24	Q	249	LEU	N-CA-C	-6.09	99.34	109.46
7	g	241	ASP	CA-C-O	-6.09	114.09	120.55
17	T	64	VAL	CA-C-N	6.09	127.75	120.14
17	T	64	VAL	C-N-CA	6.09	127.75	120.14
21	N	591	LEU	CB-CA-C	-6.09	100.68	110.79
27	O	75	GLN	CA-C-N	6.09	128.44	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	O	75	GLN	C-N-CA	6.09	128.44	120.28
27	O	265	LYS	CA-C-N	6.09	128.94	120.29
27	O	265	LYS	C-N-CA	6.09	128.94	120.29
20	Z	959	HIS	CG-CD2-NE2	6.09	113.29	107.20
24	Q	193	LYS	CA-C-N	6.09	128.94	120.29
24	Q	193	LYS	C-N-CA	6.09	128.94	120.29
1	a	54	ILE	N-CA-C	-6.09	99.47	108.85
6	f	43	HIS	ND1-CE1-NE2	6.09	114.49	108.40
25	R	221	VAL	CA-CB-CG2	6.09	120.75	110.40
32	M	151	ASP	CB-CA-C	-6.09	101.24	110.92
12	5	84	GLN	CA-C-N	6.09	127.95	120.22
12	5	84	GLN	C-N-CA	6.09	127.95	120.22
23	P	43	GLU	CB-CA-C	-6.09	102.66	111.91
28	H	370	ARG	NE-CZ-NH2	6.09	124.68	119.20
20	Z	556	ILE	CA-CB-CG1	6.08	120.74	110.40
30	K	254	VAL	CA-C-O	-6.08	114.62	120.95
14	7	237	THR	N-CA-C	-6.08	104.66	114.09
27	O	177	GLN	N-CA-C	6.08	117.91	111.28
28	H	106	ILE	N-CA-C	-6.08	99.48	108.85
32	M	229	THR	N-CA-CB	6.08	119.17	110.16
33	J	81	ASP	N-CA-C	-6.08	104.36	112.94
9	2	194	ASN	N-CA-C	-6.08	103.56	111.71
11	4	180	ILE	N-CA-C	-6.08	99.66	108.36
29	I	346	ARG	NE-CZ-NH1	6.08	127.58	121.50
24	Q	411	SER	CA-C-O	6.08	126.85	119.31
29	I	365	HIS	ND1-CE1-NE2	6.08	114.48	108.40
11	k	65	GLN	CB-CG-CD	-6.08	102.27	112.60
12	l	130	TRP	CB-CG-CD1	6.08	136.02	126.90
13	6	83	TYR	CA-C-O	-6.08	114.44	120.70
16	V	192	LEU	O-C-N	6.08	128.33	122.07
20	Z	453	LEU	CA-C-N	6.08	127.94	120.22
20	Z	453	LEU	C-N-CA	6.08	127.94	120.22
5	e	90	GLU	CA-C-N	6.08	128.92	120.29
5	e	90	GLU	C-N-CA	6.08	128.92	120.29
1	A	16	ILE	N-CA-C	-6.08	99.84	108.65
7	G	169	ARG	CA-C-N	6.08	128.70	120.44
7	G	169	ARG	C-N-CA	6.08	128.70	120.44
10	j	38	ASN	N-CA-C	-6.07	104.52	112.41
3	C	63	THR	N-CA-CB	6.07	120.76	110.49
4	D	235	GLN	CA-C-N	6.07	128.78	120.46
4	D	235	GLN	C-N-CA	6.07	128.78	120.46
13	6	30	VAL	N-CA-CB	6.07	120.08	111.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	Z	562	TRP	CB-CG-CD2	-6.07	118.30	126.80
24	Q	86	MET	CB-CA-C	-6.07	99.01	110.67
27	O	148	ASP	N-CA-CB	6.07	120.30	110.40
33	J	203	ALA	CA-C-O	6.07	126.99	120.55
5	e	132	ARG	N-CA-C	-6.07	99.34	109.24
10	j	163	LEU	N-CA-C	-6.07	104.73	111.71
12	l	112	ILE	N-CA-C	-6.07	105.81	111.45
16	V	65	VAL	N-CA-C	-6.07	99.00	107.80
27	O	25	LEU	N-CA-C	6.07	118.67	111.33
9	i	86	GLN	CA-C-N	6.07	128.91	120.29
9	i	86	GLN	C-N-CA	6.07	128.91	120.29
25	R	331	ARG	NE-CZ-NH2	6.07	124.66	119.20
26	U	237	PRO	N-CA-C	6.07	120.74	111.15
16	V	142	ASP	CB-CA-C	-6.07	103.10	110.08
19	Y	83	ARG	O-C-N	6.07	128.55	122.12
23	P	306	ASN	N-CA-C	-6.07	100.50	109.11
31	L	229	THR	N-CA-CB	6.07	119.24	110.20
7	g	106	PRO	CA-C-O	-6.06	114.74	121.23
3	C	46	LEU	N-CA-CB	6.06	120.87	110.68
5	E	58	LEU	N-CA-C	-6.06	105.46	112.92
20	Z	98	ASP	CA-C-N	6.06	128.90	120.29
20	Z	98	ASP	C-N-CA	6.06	128.90	120.29
3	C	188	ASP	CA-C-N	6.06	128.40	120.28
3	C	188	ASP	C-N-CA	6.06	128.40	120.28
28	H	249	TYR	N-CA-CB	6.06	121.98	111.13
11	k	162	LYS	CA-C-N	6.06	128.90	120.29
11	k	162	LYS	C-N-CA	6.06	128.90	120.29
10	3	18	LYS	CA-C-N	6.06	131.47	122.74
10	3	18	LYS	C-N-CA	6.06	131.47	122.74
21	N	201	LYS	CB-CA-C	-6.06	100.55	110.85
30	K	414	GLN	CA-C-O	-6.06	114.46	122.03
31	L	299	ARG	N-CA-C	-6.06	105.38	112.89
6	f	164	ARG	CB-CA-C	-6.06	103.13	111.73
8	h	147	CYS	N-CA-CB	6.06	119.13	110.16
8	1	138	SER	N-CA-C	-6.06	106.22	113.97
10	3	50	PHE	CA-CB-CG	-6.06	107.74	113.80
17	T	155	GLY	N-CA-C	-6.06	105.15	115.08
20	Z	29	ASP	CA-C-N	6.06	128.31	120.44
20	Z	29	ASP	C-N-CA	6.06	128.31	120.44
25	R	148	ASP	N-CA-C	-6.06	104.59	111.07
27	O	16	MET	N-CA-C	6.06	117.55	111.07
27	O	348	VAL	N-CA-CB	6.06	119.09	111.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	142	ASP	O-C-N	-6.06	114.72	122.78
5	e	110	GLU	N-CA-C	6.05	117.55	111.07
9	i	115	HIS	CA-C-N	6.05	129.51	120.31
9	i	115	HIS	C-N-CA	6.05	129.51	120.31
1	A	34	ALA	CA-C-O	6.05	125.49	118.77
20	Z	80	SER	N-CA-CB	6.05	122.38	112.63
24	Q	398	TYR	N-CA-C	-6.05	99.37	109.24
28	H	284	VAL	CA-C-N	6.05	133.28	121.41
28	H	284	VAL	C-N-CA	6.05	133.28	121.41
31	L	264	ARG	CA-C-N	6.05	128.39	120.28
31	L	264	ARG	C-N-CA	6.05	128.39	120.28
9	i	141	SER	N-CA-C	-6.05	99.85	109.23
10	j	112	ILE	CB-CA-C	-6.05	101.89	110.12
11	k	85	ARG	CA-C-N	6.05	128.67	120.44
11	k	85	ARG	C-N-CA	6.05	128.67	120.44
15	W	160	ALA	O-C-N	6.05	128.53	122.12
20	Z	841	GLU	N-CA-C	-6.05	98.40	108.75
20	Z	945	ILE	N-CA-C	6.05	117.02	108.36
21	N	867	LYS	N-CA-C	-6.05	100.12	109.14
31	L	286	ILE	N-CA-C	-6.05	107.39	113.20
5	e	113	THR	N-CA-C	-6.05	104.60	111.07
33	J	376	HIS	ND1-CE1-NE2	6.05	114.45	108.40
14	n	212	ASN	N-CA-C	6.05	118.65	111.33
20	Z	364	ASN	CA-C-N	6.05	130.96	120.68
20	Z	364	ASN	C-N-CA	6.05	130.96	120.68
7	G	199	ILE	CA-CB-CG1	6.05	120.68	110.40
8	l	162	ASP	CA-CB-CG	6.05	118.65	112.60
15	W	72	ILE	CA-C-N	6.05	128.38	120.28
15	W	72	ILE	C-N-CA	6.05	128.38	120.28
26	U	155	LEU	N-CA-C	-6.05	99.85	109.59
28	H	46	ALA	O-C-N	6.05	129.04	122.15
33	J	340	GLY	N-CA-C	-6.05	106.62	115.63
28	H	132	GLN	N-CA-C	-6.04	104.75	113.21
30	K	367	ASP	N-CA-C	-6.04	99.50	108.99
32	M	192	GLU	CB-CA-C	-6.04	100.57	110.85
11	k	195	PHE	CA-CB-CG	-6.04	107.76	113.80
22	S	230	LYS	N-CA-C	6.04	117.54	111.07
23	P	40	LEU	N-CA-C	-6.04	104.77	111.36
28	H	335	GLU	CA-C-N	6.04	128.30	120.44
28	H	335	GLU	C-N-CA	6.04	128.30	120.44
17	T	95	LYS	N-CA-C	-6.04	97.93	110.80
21	N	463	TYR	O-C-N	-6.04	115.85	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	S	163	VAL	CA-C-O	-6.04	113.94	120.47
24	Q	29	SER	CA-C-N	6.04	128.69	120.54
24	Q	29	SER	C-N-CA	6.04	128.69	120.54
25	R	46	ALA	CA-C-N	6.04	128.87	120.29
25	R	46	ALA	C-N-CA	6.04	128.87	120.29
30	K	166	LYS	CA-C-O	-6.04	114.07	120.23
32	M	315	PHE	CA-CB-CG	-6.04	107.76	113.80
25	R	270	VAL	O-C-N	6.04	126.63	121.98
26	U	252	HIS	CG-CD2-NE2	6.04	113.24	107.20
29	I	341	PRO	N-CA-C	6.04	120.71	111.11
31	L	392	ARG	N-CA-C	-6.04	104.77	111.71
33	J	224	GLY	N-CA-C	-6.04	106.92	115.43
1	a	186	PHE	CA-CB-CG	-6.04	107.76	113.80
16	V	166	ASN	N-CA-C	-6.04	105.78	113.02
31	L	421	LYS	CA-C-N	6.04	128.73	120.46
31	L	421	LYS	C-N-CA	6.04	128.73	120.46
7	g	59	LEU	O-C-N	-6.04	115.23	122.65
10	j	178	ASP	N-CA-C	-6.04	99.97	109.50
25	R	55	LYS	CA-C-N	6.04	128.65	120.44
25	R	55	LYS	C-N-CA	6.04	128.65	120.44
7	G	234	ASP	CA-C-N	6.03	128.37	120.28
7	G	234	ASP	C-N-CA	6.03	128.37	120.28
11	4	34	LYS	CB-CA-C	-6.03	101.78	111.86
16	V	78	VAL	CA-CB-CG2	-6.03	100.14	110.40
24	Q	405	GLN	N-CA-C	-6.03	99.88	109.23
28	H	168	ILE	N-CA-CB	6.03	118.27	111.21
8	1	29	THR	N-CA-CB	6.03	120.60	110.77
16	V	73	GLN	CA-C-O	6.03	127.58	120.58
22	S	294	ILE	CA-C-O	-6.03	114.78	121.17
25	R	241	ILE	O-C-N	6.03	128.33	122.30
25	R	411	LEU	CA-C-N	6.03	128.36	120.28
25	R	411	LEU	C-N-CA	6.03	128.36	120.28
31	L	60	PHE	CA-CB-CG	-6.03	107.77	113.80
3	C	67	TYR	O-C-N	6.03	130.63	123.33
21	N	338	PHE	CA-C-O	-6.03	114.03	120.42
25	R	323	ASN	N-CA-C	-6.03	105.00	112.90
11	k	163	LEU	N-CA-CB	6.03	119.08	110.16
20	Z	201	LEU	CA-C-N	6.03	128.36	120.28
20	Z	201	LEU	C-N-CA	6.03	128.36	120.28
21	N	243	LYS	CA-C-O	6.03	126.90	119.79
24	Q	97	LEU	CA-C-O	-6.03	114.16	120.55
28	H	131	GLN	CA-C-O	6.03	127.15	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	L	408	ASP	N-CA-C	-6.03	105.85	112.72
2	B	94	HIS	CG-CD2-NE2	6.02	113.22	107.20
4	D	227	GLU	N-CA-CB	6.02	118.74	110.01
7	G	53	LEU	N-CA-CB	6.02	118.82	109.97
12	5	259	GLY	N-CA-C	-6.02	102.37	110.56
20	Z	615	LEU	CA-C-O	-6.02	114.17	120.55
21	N	348	PHE	CA-CB-CG	-6.02	107.78	113.80
28	H	116	THR	CA-C-N	6.02	131.38	121.99
28	H	116	THR	C-N-CA	6.02	131.38	121.99
30	K	102	PRO	CA-C-O	-6.02	114.72	122.13
30	K	237	VAL	N-CA-CB	6.02	121.17	111.23
31	L	168	TYR	CB-CG-CD2	6.02	129.83	120.80
32	M	398	ALA	CA-C-O	6.02	127.34	120.90
16	V	111	HIS	CG-CD2-NE2	6.02	113.22	107.20
3	c	203	SER	CA-C-N	6.02	128.63	120.44
3	c	203	SER	C-N-CA	6.02	128.63	120.44
5	e	175	GLY	CA-C-N	6.02	128.27	120.44
5	e	175	GLY	C-N-CA	6.02	128.27	120.44
6	f	199	GLN	CB-CA-C	6.02	120.85	110.01
20	Z	214	HIS	ND1-CE1-NE2	6.02	114.42	108.40
29	I	122	SER	N-CA-C	-6.02	102.19	109.83
30	K	229	SER	CA-C-O	-6.02	114.04	120.42
12	l	118	GLY	O-C-N	6.02	128.72	123.36
4	D	54	LEU	N-CA-CB	6.02	120.66	110.49
20	Z	611	THR	N-CA-C	-6.02	103.18	110.88
21	N	701	VAL	CA-C-N	6.02	128.34	120.28
21	N	701	VAL	C-N-CA	6.02	128.34	120.28
28	H	306	ILE	N-CA-CB	6.02	118.25	111.21
29	I	310	LEU	N-CA-C	6.02	117.84	111.28
32	M	195	GLU	CA-C-O	-6.02	114.17	120.55
20	Z	142	ASP	CA-CB-CG	6.02	118.62	112.60
3	c	191	GLU	CA-C-O	-6.01	114.05	120.42
16	V	193	ASN	OD1-CG-ND2	6.01	128.62	122.60
20	Z	921	GLU	N-CA-C	-6.01	96.52	109.81
25	R	32	LEU	CA-C-N	6.01	128.34	120.28
25	R	32	LEU	C-N-CA	6.01	128.34	120.28
31	L	183	ILE	O-C-N	6.01	129.31	122.93
32	M	190	ILE	CA-CB-CG1	6.01	120.62	110.40
32	M	386	PHE	CA-CB-CG	6.01	119.81	113.80
16	V	85	ASP	N-CA-C	6.01	117.92	111.36
27	O	294	MET	CA-C-O	-6.01	114.18	120.55
20	Z	931	GLN	CB-CG-CD	-6.01	102.38	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	b	231	LYS	N-CA-C	-6.01	98.60	108.76
11	4	46	PHE	CA-C-O	-6.01	114.09	121.06
20	Z	151	HIS	ND1-CE1-NE2	6.01	114.41	108.40
3	c	166	GLY	CA-C-N	6.01	133.01	121.54
3	c	166	GLY	C-N-CA	6.01	133.01	121.54
21	N	344	THR	CB-CA-C	6.01	119.65	109.80
25	R	196	SER	CA-CB-OG	-6.01	99.09	111.10
27	O	307	MET	N-CA-C	6.01	118.42	108.99
9	2	167	LEU	N-CA-CB	6.00	118.89	109.94
24	Q	404	ASN	OD1-CG-ND2	6.00	128.60	122.60
7	G	161	LYS	N-CA-C	-6.00	106.56	114.31
7	G	238	GLU	CB-CG-CD	-6.00	102.39	112.60
8	1	57	SER	O-C-N	6.00	130.31	122.93
17	T	124	SER	CA-C-N	6.00	128.81	120.29
17	T	124	SER	C-N-CA	6.00	128.81	120.29
22	S	32	GLN	CB-CG-CD	-6.00	102.39	112.60
28	H	465	GLN	CA-C-N	6.00	128.81	120.29
28	H	465	GLN	C-N-CA	6.00	128.81	120.29
33	J	21	PRO	N-CA-CB	6.00	109.27	103.51
5	E	238	GLU	CA-C-N	6.00	128.32	120.28
5	E	238	GLU	C-N-CA	6.00	128.32	120.28
20	Z	185	ASP	CA-CB-CG	-6.00	106.60	112.60
29	I	241	SER	CB-CA-C	-6.00	103.37	111.89
5	e	160	PRO	N-CA-C	-6.00	106.17	114.27
2	B	130	PHE	O-C-N	-6.00	115.43	122.81
11	4	122	LEU	O-C-N	-6.00	115.76	122.12
24	Q	392	GLN	OE1-CD-NE2	6.00	128.60	122.60
12	l	192	SER	N-CA-CB	-6.00	101.06	110.06
11	4	84	VAL	CA-CB-CG2	-6.00	100.20	110.40
18	X	129	LEU	CA-C-N	6.00	128.23	120.44
18	X	129	LEU	C-N-CA	6.00	128.23	120.44
21	N	306	ASN	CA-CB-CG	-6.00	106.60	112.60
12	5	209	THR	CA-C-N	6.00	128.31	120.28
12	5	209	THR	C-N-CA	6.00	128.31	120.28
25	R	235	LEU	CB-CA-C	-6.00	101.47	110.88
8	h	159	GLU	O-C-N	5.99	128.56	122.09
2	B	243	ILE	CB-CA-C	-5.99	102.55	112.26
26	U	70	HIS	CE1-NE2-CD2	-5.99	103.01	109.00
2	b	94	HIS	CA-CB-CG	-5.99	107.81	113.80
16	V	75	GLY	CA-C-N	5.99	130.73	120.72
16	V	75	GLY	C-N-CA	5.99	130.73	120.72
32	M	431	SER	N-CA-CB	5.99	121.21	111.74

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	36	VAL	CA-C-O	-5.99	114.17	120.76
22	S	397	LEU	N-CA-CB	5.99	118.70	110.01
3	C	235	ILE	CB-CA-C	-5.99	104.18	112.02
21	N	889	ARG	NE-CZ-NH2	5.99	124.59	119.20
22	S	275	TYR	CA-C-N	5.99	129.80	120.82
22	S	275	TYR	C-N-CA	5.99	129.80	120.82
25	R	297	TYR	N-CA-CB	5.99	118.92	110.12
26	U	190	LEU	CA-C-O	-5.99	114.20	120.55
31	L	281	ASP	CB-CA-C	-5.99	99.42	109.48
4	d	134	LEU	N-CA-C	-5.99	98.65	108.41
12	5	83	PHE	CA-C-N	5.99	128.79	120.29
12	5	83	PHE	C-N-CA	5.99	128.79	120.29
21	N	74	GLU	CB-CG-CD	-5.99	102.42	112.60
23	P	307	GLU	O-C-N	5.99	130.31	123.31
25	R	172	LEU	N-CA-C	-5.99	104.83	111.36
27	O	332	ILE	CA-C-N	5.99	128.79	120.29
27	O	332	ILE	C-N-CA	5.99	128.79	120.29
6	f	176	LEU	CB-CA-C	-5.99	100.85	110.79
4	D	114	ALA	CA-C-N	5.99	127.82	120.22
4	D	114	ALA	C-N-CA	5.99	127.82	120.22
28	H	436	LYS	N-CA-C	-5.99	106.96	114.56
2	b	26	THR	N-CA-CB	5.98	119.02	110.16
12	5	126	ASP	CA-CB-CG	-5.98	106.62	112.60
20	Z	754	LYS	O-C-N	-5.98	115.78	122.12
22	S	20	HIS	CA-C-O	-5.98	114.21	120.55
22	S	87	SER	CA-C-N	5.98	128.30	120.28
22	S	87	SER	C-N-CA	5.98	128.30	120.28
24	Q	273	ASN	OD1-CG-ND2	5.98	128.58	122.60
1	a	54	ILE	CA-C-O	-5.98	113.42	121.32
9	i	89	GLY	N-CA-C	-5.98	105.56	112.50
6	F	8	GLY	O-C-N	5.98	128.80	122.28
8	1	14	ALA	N-CA-CB	5.98	122.65	111.52
10	3	183	TRP	N-CA-CB	5.98	120.60	110.49
12	5	285	VAL	CA-C-N	5.98	128.75	120.49
12	5	285	VAL	C-N-CA	5.98	128.75	120.49
13	6	101	ILE	CA-C-O	-5.98	115.05	121.27
31	L	283	VAL	N-CA-CB	5.98	119.39	112.39
32	M	81	ASN	N-CA-C	-5.98	100.21	109.24
3	C	113	ARG	O-C-N	-5.98	114.92	122.27
6	F	62	LYS	N-CA-C	-5.98	105.95	113.72
19	Y	40	ILE	CA-C-N	5.98	128.29	120.28
19	Y	40	ILE	C-N-CA	5.98	128.29	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	Z	827	LEU	N-CA-C	-5.98	104.68	111.14
21	N	796	VAL	O-C-N	-5.98	115.67	121.83
28	H	312	ASP	N-CA-CB	5.98	119.55	110.28
11	4	13	VAL	N-CA-C	-5.98	99.74	108.11
13	6	136	VAL	N-CA-C	-5.98	105.02	110.82
27	O	169	ASN	CA-C-N	5.98	128.29	120.28
27	O	169	ASN	C-N-CA	5.98	128.29	120.28
11	k	177	LYS	CB-CA-C	-5.97	103.41	111.89
1	A	135	ARG	CA-C-N	5.97	126.17	119.90
1	A	135	ARG	C-N-CA	5.97	126.17	119.90
4	D	227	GLU	CB-CA-C	-5.97	101.50	110.88
15	W	164	PRO	N-CA-CB	5.97	108.65	103.27
30	K	330	ARG	CA-C-N	5.97	126.32	119.93
30	K	330	ARG	C-N-CA	5.97	126.32	119.93
33	J	376	HIS	N-CA-C	-5.97	99.65	108.79
14	n	145	ASN	OD1-CG-ND2	-5.97	116.63	122.60
3	C	119	LYS	CA-C-N	5.97	128.28	120.28
3	C	119	LYS	C-N-CA	5.97	128.28	120.28
12	5	96	THR	CA-CB-OG1	5.97	118.56	109.60
21	N	639	ASP	CA-C-N	5.97	128.90	120.42
21	N	639	ASP	C-N-CA	5.97	128.90	120.42
7	g	94	GLU	O-C-N	5.97	128.54	122.09
3	C	187	ASP	CA-C-O	-5.97	114.55	120.82
20	Z	396	ASN	N-CA-C	-5.97	98.54	108.75
1	a	15	HIS	CA-CB-CG	-5.97	107.83	113.80
1	A	26	TYR	CA-CB-CG	-5.97	103.15	113.90
1	A	239	GLU	CA-C-N	5.97	129.38	120.31
1	A	239	GLU	C-N-CA	5.97	129.38	120.31
19	Y	7	ALA	CB-CA-C	-5.97	100.70	110.85
21	N	142	GLU	N-CA-C	5.97	118.58	111.71
21	N	170	LEU	N-CA-CB	5.97	118.73	110.07
21	N	468	GLU	CA-C-N	5.97	128.90	120.42
21	N	468	GLU	C-N-CA	5.97	128.90	120.42
33	J	154	THR	CA-C-O	-5.97	112.75	119.79
2	b	157	PHE	CA-CB-CG	-5.97	107.83	113.80
5	E	112	LEU	CA-C-N	5.97	128.20	120.44
5	E	112	LEU	C-N-CA	5.97	128.20	120.44
20	Z	552	GLU	CA-C-N	5.97	128.76	120.29
20	Z	552	GLU	C-N-CA	5.97	128.76	120.29
22	S	37	VAL	CA-CB-CG2	5.97	120.55	110.40
5	e	19	GLY	O-C-N	5.97	130.46	122.70
14	n	141	ASN	CA-CB-CG	-5.97	106.63	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	6	135	PRO	N-CA-CB	5.97	109.24	103.51
24	Q	334	HIS	CA-C-O	-5.97	112.04	119.38
4	d	229	ILE	O-C-N	5.96	127.75	121.91
22	S	347	HIS	N-CA-C	5.96	118.57	111.71
17	T	159	LYS	CA-C-N	5.96	128.19	120.44
17	T	159	LYS	C-N-CA	5.96	128.19	120.44
26	U	227	GLY	CA-C-N	5.96	128.76	120.29
26	U	227	GLY	C-N-CA	5.96	128.76	120.29
27	O	126	ILE	N-CA-C	5.96	116.70	110.62
29	I	364	ILE	N-CA-C	-5.96	104.70	110.72
4	d	9	SER	N-CA-C	-5.96	98.56	108.34
10	j	173	ASN	N-CA-C	5.96	117.78	111.28
15	W	64	THR	N-CA-CB	5.96	119.61	110.49
28	H	278	GLU	CA-C-N	5.96	128.86	120.28
28	H	278	GLU	C-N-CA	5.96	128.86	120.28
22	S	381	VAL	N-CA-C	-5.96	104.70	110.72
32	M	379	LEU	O-C-N	5.96	128.44	122.12
32	M	150	LYS	N-CA-C	5.96	117.58	111.14
7	g	111	ALA	CA-C-N	5.96	128.75	120.29
7	g	111	ALA	C-N-CA	5.96	128.75	120.29
8	h	156	SER	CA-C-N	5.96	128.26	120.28
8	h	156	SER	C-N-CA	5.96	128.26	120.28
3	C	20	TYR	CB-CG-CD2	-5.96	111.86	120.80
5	E	172	ILE	N-CA-C	-5.96	99.15	108.86
6	F	221	PRO	CA-C-O	-5.96	114.40	121.67
17	T	168	SER	N-CA-CB	5.96	118.88	110.12
20	Z	593	HIS	CA-C-N	5.96	125.83	119.28
20	Z	593	HIS	C-N-CA	5.96	125.83	119.28
33	J	160	ILE	CA-C-O	5.96	126.79	119.58
16	V	183	ALA	CA-C-O	-5.96	113.12	119.97
21	N	527	GLY	CA-C-N	5.96	128.26	120.28
21	N	527	GLY	C-N-CA	5.96	128.26	120.28
31	L	164	ASP	CA-CB-CG	5.96	118.56	112.60
4	d	144	GLU	CA-C-O	-5.95	114.78	119.66
4	d	162	GLN	O-C-N	-5.95	117.01	123.26
2	B	179	TRP	CE2-CD2-CE3	5.95	124.75	118.80
22	S	248	ASP	CA-C-N	5.95	129.36	120.31
22	S	248	ASP	C-N-CA	5.95	129.36	120.31
24	Q	247	HIS	ND1-CE1-NE2	5.95	114.35	108.40
32	M	199	LEU	N-CA-CB	5.95	119.66	110.43
2	b	108	LYS	CA-C-N	5.95	128.25	120.28
2	b	108	LYS	C-N-CA	5.95	128.25	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	4	36	ARG	N-CA-CB	5.95	121.09	110.80
21	N	314	LEU	N-CA-C	5.95	117.84	111.36
23	P	173	MET	CA-C-N	5.95	128.25	120.28
23	P	173	MET	C-N-CA	5.95	128.25	120.28
24	Q	434	TYR	CB-CG-CD2	-5.95	111.87	120.80
6	f	18	ARG	CD-NE-CZ	-5.95	116.07	124.40
22	S	180	ASN	CA-CB-CG	5.95	118.55	112.60
6	F	223	THR	N-CA-C	-5.95	98.95	109.06
10	3	190	ILE	N-CA-C	-5.95	96.03	106.61
25	R	216	ILE	N-CA-C	5.95	116.73	110.72
3	C	193	ALA	CA-C-N	5.95	128.17	120.44
3	C	193	ALA	C-N-CA	5.95	128.17	120.44
23	P	111	ASP	CA-C-N	5.95	128.25	120.28
23	P	111	ASP	C-N-CA	5.95	128.25	120.28
25	R	34	THR	CA-C-O	-5.95	114.58	120.82
33	J	4	ALA	CA-C-N	5.95	128.17	120.56
33	J	4	ALA	C-N-CA	5.95	128.17	120.56
33	J	150	VAL	CA-C-N	5.95	133.06	121.41
33	J	150	VAL	C-N-CA	5.95	133.06	121.41
21	N	584	ARG	NE-CZ-NH1	5.94	127.44	121.50
30	K	213	GLY	N-CA-C	-5.94	100.22	112.34
13	m	225	TYR	N-CA-C	-5.94	98.59	108.75
5	E	97	VAL	CA-CB-CG2	-5.94	100.30	110.40
12	5	255	VAL	CA-CB-CG2	-5.94	100.30	110.40
13	6	96	SER	CA-C-N	5.94	128.24	120.28
13	6	96	SER	C-N-CA	5.94	128.24	120.28
21	N	574	VAL	N-CA-CB	5.94	117.50	110.55
27	O	66	VAL	N-CA-C	5.94	116.68	110.62
29	I	232	LEU	CA-C-N	5.94	128.24	120.28
29	I	232	LEU	C-N-CA	5.94	128.24	120.28
29	I	433	GLU	CB-CA-C	-5.94	100.17	110.09
30	K	151	PRO	CA-C-O	-5.94	111.94	120.56
30	K	319	ASN	OD1-CG-ND2	5.94	128.54	122.60
5	e	99	HIS	CE1-NE2-CD2	-5.94	103.06	109.00
4	D	36	VAL	N-CA-C	-5.94	99.66	108.45
20	Z	37	GLN	CA-C-N	5.94	128.84	120.28
20	Z	37	GLN	C-N-CA	5.94	128.84	120.28
29	I	108	THR	N-CA-C	-5.94	98.72	108.76
10	j	176	ASP	N-CA-C	-5.94	106.00	113.72
14	n	72	VAL	N-CA-CB	-5.94	103.92	111.64
27	O	215	TYR	CA-C-N	5.94	128.72	120.29
27	O	215	TYR	C-N-CA	5.94	128.72	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	J	335	MET	CA-C-N	5.94	130.26	120.94
33	J	335	MET	C-N-CA	5.94	130.26	120.94
22	S	347	HIS	ND1-CE1-NE2	5.94	114.34	108.40
1	a	161	GLY	O-C-N	5.93	129.06	122.47
7	G	130	ARG	N-CA-C	-5.93	102.17	109.65
16	V	216	LEU	N-CA-C	-5.93	105.62	114.64
17	T	200	LEU	CA-C-N	5.93	125.89	119.78
17	T	200	LEU	C-N-CA	5.93	125.89	119.78
23	P	53	ALA	CA-C-N	5.93	128.72	120.29
23	P	53	ALA	C-N-CA	5.93	128.72	120.29
25	R	40	ILE	O-C-N	5.93	127.63	121.87
7	g	11	SER	N-CA-C	-5.93	100.12	108.96
8	h	166	HIS	CA-CB-CG	-5.93	107.87	113.80
1	A	242	GLU	CA-C-N	5.93	128.23	120.28
1	A	242	GLU	C-N-CA	5.93	128.23	120.28
12	5	173	GLY	N-CA-C	-5.93	99.12	113.18
20	Z	224	LEU	CA-C-N	5.93	128.55	120.54
20	Z	224	LEU	C-N-CA	5.93	128.55	120.54
25	R	44	LYS	N-CA-C	-5.93	106.08	113.38
31	L	143	GLY	CA-C-N	5.93	128.45	120.50
31	L	143	GLY	C-N-CA	5.93	128.45	120.50
32	M	51	LEU	N-CA-CB	5.93	118.94	110.16
32	M	331	ASP	CA-C-O	5.93	126.81	120.70
33	J	115	LEU	N-CA-C	-5.93	100.13	109.50
6	f	10	THR	N-CA-C	-5.93	105.91	113.02
1	A	216	THR	N-CA-C	-5.93	99.68	108.99
22	S	39	ASN	CA-CB-CG	-5.93	106.67	112.60
11	k	124	THR	CA-C-N	5.93	129.90	121.42
11	k	124	THR	C-N-CA	5.93	129.90	121.42
31	L	253	ASP	CA-C-N	5.93	128.15	120.44
31	L	253	ASP	C-N-CA	5.93	128.15	120.44
5	e	123	PHE	N-CA-CB	5.93	118.73	110.26
13	m	56	ASP	N-CA-CB	5.93	120.51	110.49
4	D	56	ASP	N-CA-CB	5.93	118.50	110.38
11	4	59	TYR	CA-C-N	5.93	128.84	120.42
11	4	59	TYR	C-N-CA	5.93	128.84	120.42
15	W	136	ASN	OD1-CG-ND2	-5.93	116.67	122.60
20	Z	706	LYS	CA-C-N	5.92	128.22	120.28
20	Z	706	LYS	C-N-CA	5.92	128.22	120.28
23	P	137	ALA	N-CA-C	-5.92	104.95	111.82
25	R	350	LEU	N-CA-C	-5.92	104.90	111.36
13	m	136	VAL	CB-CA-C	-5.92	104.33	111.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	180	ILE	N-CA-CB	5.92	117.48	110.55
5	E	64	ILE	N-CA-C	-5.92	100.05	108.58
5	E	150	ASP	CA-C-O	5.92	125.31	118.97
13	6	40	ASP	CB-CA-C	-5.92	109.76	116.63
21	N	129	ILE	N-CA-C	-5.92	99.79	108.97
22	S	463	GLU	O-C-N	5.92	128.17	122.07
26	U	21	HIS	CA-C-N	5.92	128.21	120.28
26	U	21	HIS	C-N-CA	5.92	128.21	120.28
2	b	12	PHE	N-CA-CB	5.92	119.28	110.29
11	k	182	LYS	N-CA-CB	5.92	120.75	110.81
7	G	183	HIS	ND1-CE1-NE2	5.92	114.32	108.40
9	2	68	PRO	N-CA-C	5.92	124.66	112.47
17	T	135	ASN	CA-C-N	5.92	128.21	120.28
17	T	135	ASN	C-N-CA	5.92	128.21	120.28
20	Z	876	VAL	O-C-N	-5.92	115.89	121.87
24	Q	43	GLY	CA-C-O	5.92	130.87	120.57
27	O	220	SER	N-CA-C	5.92	118.49	111.33
29	I	74	GLU	CA-C-N	5.92	128.13	120.44
29	I	74	GLU	C-N-CA	5.92	128.13	120.44
9	2	95	HIS	O-C-N	5.92	128.16	122.07
14	7	126	PHE	CA-C-N	5.92	128.53	120.54
14	7	126	PHE	C-N-CA	5.92	128.53	120.54
18	X	87	PHE	N-CA-C	-5.92	99.55	108.96
20	Z	54	GLU	N-CA-C	5.92	117.81	111.36
2	B	90	ARG	N-CA-C	-5.92	104.83	111.28
21	N	922	GLN	CA-C-N	5.92	128.13	120.44
21	N	922	GLN	C-N-CA	5.92	128.13	120.44
10	j	36	VAL	CA-CB-CG2	-5.91	100.35	110.40
12	l	83	PHE	CA-CB-CG	5.91	119.71	113.80
14	7	169	THR	N-CA-CB	5.91	119.81	110.23
23	P	419	VAL	CA-C-N	5.91	128.13	120.44
23	P	419	VAL	C-N-CA	5.91	128.13	120.44
2	B	82	TYR	CB-CA-C	-5.91	100.80	110.85
18	X	77	PRO	O-C-N	5.91	130.62	122.64
20	Z	197	LYS	CA-C-N	5.91	128.13	120.44
20	Z	197	LYS	C-N-CA	5.91	128.13	120.44
20	Z	967	THR	CA-C-N	5.91	131.33	123.05
20	Z	967	THR	C-N-CA	5.91	131.33	123.05
27	O	39	PHE	O-C-N	5.91	128.89	122.15
30	K	395	VAL	CA-C-N	5.91	128.20	120.28
30	K	395	VAL	C-N-CA	5.91	128.20	120.28
31	L	73	GLN	CA-C-N	5.91	128.69	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	L	73	GLN	C-N-CA	5.91	128.69	120.29
32	M	432	PHE	N-CA-C	-5.91	103.22	110.61
17	T	238	GLN	N-CA-C	5.91	117.39	111.07
21	N	875	LEU	O-C-N	5.91	126.65	121.39
25	R	349	SER	CA-C-N	5.91	128.68	120.29
25	R	349	SER	C-N-CA	5.91	128.68	120.29
30	K	271	ILE	CA-C-N	5.91	129.01	120.79
30	K	271	ILE	C-N-CA	5.91	129.01	120.79
3	c	162	ALA	N-CA-C	-5.91	98.98	108.55
21	N	249	ASN	CA-CB-CG	-5.91	106.69	112.60
22	S	182	LYS	N-CA-C	-5.91	106.20	113.41
20	Z	71	LEU	N-CA-C	-5.91	104.92	111.36
4	d	211	GLU	N-CA-C	-5.91	100.17	109.50
11	k	111	LYS	N-CA-C	-5.91	106.24	113.50
28	H	182	ASN	N-CA-C	-5.91	98.98	108.55
29	I	113	ILE	N-CA-C	-5.91	99.97	108.53
14	7	234	ASP	CA-CB-CG	5.90	118.50	112.60
19	Y	19	LYS	N-CA-CB	5.90	119.43	110.28
28	H	384	GLY	CA-C-N	5.90	130.05	120.60
28	H	384	GLY	C-N-CA	5.90	130.05	120.60
30	K	255	ARG	CB-CA-C	-5.90	100.99	110.79
20	Z	80	SER	CA-C-N	5.90	131.35	122.68
20	Z	80	SER	C-N-CA	5.90	131.35	122.68
25	R	42	GLN	CA-C-N	5.90	128.47	120.38
25	R	42	GLN	C-N-CA	5.90	128.47	120.38
29	I	337	ALA	CA-C-N	5.90	128.19	120.28
29	I	337	ALA	C-N-CA	5.90	128.19	120.28
6	F	138	ASP	CA-CB-CG	5.90	118.50	112.60
21	N	182	ASN	OD1-CG-ND2	-5.90	116.70	122.60
26	U	29	GLU	CB-CA-C	-5.90	99.92	109.72
28	H	328	GLU	CA-C-O	5.90	126.75	119.79
29	I	215	PRO	CA-C-N	5.90	126.24	119.93
29	I	215	PRO	C-N-CA	5.90	126.24	119.93
8	1	181	VAL	CA-C-O	5.90	127.48	121.58
21	N	110	VAL	O-C-N	-5.90	116.15	121.87
1	a	89	ASP	O-C-N	-5.90	114.32	122.46
4	d	212	ILE	CA-C-O	5.90	126.09	120.25
4	D	190	GLU	CA-C-N	5.90	128.66	120.29
4	D	190	GLU	C-N-CA	5.90	128.66	120.29
12	5	211	ALA	O-C-N	5.90	128.37	122.12
23	P	310	ARG	NE-CZ-NH2	5.90	124.51	119.20
27	O	103	LYS	N-CA-C	-5.90	104.76	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	176	LEU	N-CA-CB	5.90	118.79	110.12
22	S	255	SER	CA-C-N	5.90	128.50	120.54
22	S	255	SER	C-N-CA	5.90	128.50	120.54
8	h	71	HIS	CE1-NE2-CD2	-5.89	103.11	109.00
20	Z	946	THR	CA-C-O	5.89	126.80	120.32
25	R	240	SER	CA-C-N	5.89	128.56	122.96
25	R	240	SER	C-N-CA	5.89	128.56	122.96
29	I	406	GLU	CB-CG-CD	-5.89	102.58	112.60
31	L	69	ARG	CA-C-N	5.89	128.66	120.29
31	L	69	ARG	C-N-CA	5.89	128.66	120.29
31	L	396	THR	CA-CB-OG1	-5.89	100.76	109.60
32	M	302	GLN	CB-CG-CD	-5.89	102.58	112.60
11	4	81	SER	CA-C-O	-5.89	114.31	120.55
16	V	279	HIS	CE1-NE2-CD2	-5.89	103.11	109.00
27	O	65	PHE	CA-CB-CG	-5.89	107.91	113.80
29	I	431	ASN	CA-CB-CG	-5.89	106.71	112.60
3	C	150	THR	CA-C-O	-5.89	114.34	120.70
5	e	221	CYS	O-C-N	-5.89	114.87	122.94
11	k	12	SER	N-CA-CB	5.89	120.69	111.56
24	Q	226	HIS	CE1-NE2-CD2	-5.89	103.11	109.00
26	U	90	ILE	N-CA-C	-5.89	107.01	112.43
26	U	180	ASP	CA-CB-CG	5.89	118.49	112.60
28	H	333	MET	O-C-N	-5.89	115.88	122.12
14	n	207	GLU	O-C-N	5.89	128.21	122.09
14	7	200	LYS	CB-CA-C	-5.89	98.70	110.42
27	O	186	ASN	O-C-N	5.89	128.36	122.12
1	A	244	ARG	N-CA-C	5.89	118.65	111.82
9	2	152	TYR	N-CA-C	-5.89	106.14	113.38
16	V	189	ILE	N-CA-CB	5.89	117.44	110.55
17	T	112	ASN	CA-CB-CG	5.89	118.49	112.60
21	N	767	ALA	N-CA-C	-5.89	101.21	109.69
25	R	171	MET	CA-C-N	5.89	128.65	120.29
25	R	171	MET	C-N-CA	5.89	128.65	120.29
27	O	53	LYS	N-CA-C	-5.89	106.10	113.28
27	O	363	ILE	CA-C-N	5.89	128.09	120.44
27	O	363	ILE	C-N-CA	5.89	128.09	120.44
1	a	83	VAL	CB-CA-C	-5.88	101.92	110.63
4	d	181	ARG	N-CA-C	-5.88	105.93	113.23
3	C	4	ARG	NE-CZ-NH2	5.88	124.50	119.20
4	D	96	HIS	CE1-NE2-CD2	-5.88	103.11	109.00
7	G	117	GLY	O-C-N	5.88	127.84	122.19
8	1	104	ALA	N-CA-C	-5.88	99.75	108.99

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	5	191	ASP	N-CA-C	-5.88	100.12	109.07
14	7	140	MET	N-CA-CB	5.88	120.44	110.49
17	T	81	TYR	CA-C-N	5.88	128.48	120.54
17	T	81	TYR	C-N-CA	5.88	128.48	120.54
20	Z	575	MET	N-CA-CB	5.88	118.81	109.51
23	P	76	ASN	CA-C-N	5.88	128.17	120.28
23	P	76	ASN	C-N-CA	5.88	128.17	120.28
23	P	357	TYR	O-C-N	-5.88	116.35	122.94
24	Q	367	GLY	O-C-N	-5.88	116.00	122.65
30	K	44	ASN	CA-C-N	5.88	130.55	120.72
30	K	44	ASN	C-N-CA	5.88	130.55	120.72
1	A	237	SER	CA-C-O	-5.88	115.31	121.55
9	2	203	ASP	N-CA-CB	5.88	120.22	110.63
12	5	177	CYS	N-CA-C	-5.88	99.81	109.40
26	U	29	GLU	N-CA-CB	5.88	118.71	109.83
1	a	97	ALA	CA-C-N	5.88	128.16	120.28
1	a	97	ALA	C-N-CA	5.88	128.16	120.28
2	b	207	ASP	O-C-N	-5.88	114.06	122.41
3	C	202	ASP	N-CA-C	-5.88	104.60	113.89
5	E	40	ILE	N-CA-C	-5.88	99.88	108.11
6	F	117	GLN	CA-C-O	-5.88	114.32	120.55
11	4	17	SER	CA-C-N	5.88	129.06	120.71
11	4	17	SER	C-N-CA	5.88	129.06	120.71
31	L	405	ASP	CA-CB-CG	-5.88	106.72	112.60
5	e	215	ASN	N-CA-C	-5.88	105.30	112.88
11	k	25	ILE	CB-CA-C	5.88	121.58	110.94
12	5	186	THR	CA-C-O	-5.88	112.06	120.11
27	O	102	LEU	N-CA-CB	5.88	118.76	110.12
9	2	174	ASP	CA-CB-CG	-5.88	106.72	112.60
12	5	112	ILE	O-C-N	5.88	129.87	121.82
32	M	403	LEU	CA-C-N	5.88	128.08	120.44
32	M	403	LEU	C-N-CA	5.88	128.08	120.44
22	S	235	ASN	N-CA-CB	5.88	118.86	110.16
29	I	204	HIS	CA-CB-CG	-5.88	107.92	113.80
29	I	326	MET	N-CA-CB	5.88	120.39	110.69
33	J	261	SER	O-C-N	-5.88	114.77	122.59
4	D	238	GLN	OE1-CD-NE2	5.88	128.47	122.60
17	T	110	LEU	N-CA-C	5.88	117.68	111.28
2	B	218	ASN	OD1-CG-ND2	5.87	128.47	122.60
9	2	145	HIS	CE1-NE2-CD2	-5.87	103.13	109.00
13	6	46	ARG	NE-CZ-NH2	5.87	124.49	119.20
23	P	367	GLU	CA-C-N	5.87	128.63	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	P	367	GLU	C-N-CA	5.87	128.63	120.29
24	Q	224	ILE	N-CA-C	-5.87	103.75	111.09
26	U	232	VAL	N-CA-CB	5.87	118.53	110.54
26	U	294	ASN	N-CA-CB	5.87	119.97	110.40
30	K	406	ASP	CB-CA-C	-5.87	101.66	110.88
31	L	203	ASN	N-CA-CB	5.87	120.82	110.37
14	n	225	SER	CA-C-N	5.87	128.63	120.29
14	n	225	SER	C-N-CA	5.87	128.63	120.29
16	V	137	VAL	CA-C-O	-5.87	116.08	121.72
24	Q	261	VAL	CA-C-O	-5.87	114.84	120.95
8	h	113	ASP	CA-CB-CG	-5.87	106.73	112.60
21	N	800	ALA	N-CA-CB	5.87	118.84	110.16
27	O	145	LYS	N-CA-CB	5.87	118.84	110.16
28	H	236	ALA	CA-C-O	-5.87	113.72	120.24
11	4	10	GLN	CB-CA-C	-5.87	104.00	111.22
13	6	19	THR	OG1-CB-CG2	-5.87	97.56	109.30
33	J	248	ASP	CA-CB-CG	5.87	118.47	112.60
12	5	101	VAL	CA-C-N	5.87	128.07	120.44
12	5	101	VAL	C-N-CA	5.87	128.07	120.44
18	X	27	ILE	O-C-N	-5.87	114.41	121.10
20	Z	330	ILE	N-CA-CB	-5.87	103.06	110.57
22	S	122	ASN	N-CA-CB	5.87	118.52	110.01
32	M	293	SER	CB-CA-C	-5.87	99.62	109.65
33	J	403	LEU	CA-C-N	5.87	130.81	122.72
33	J	403	LEU	C-N-CA	5.87	130.81	122.72
4	d	184	PRO	CA-C-N	5.86	126.20	119.93
4	d	184	PRO	C-N-CA	5.86	126.20	119.93
17	T	13	ILE	CA-C-N	5.86	128.62	120.29
17	T	13	ILE	C-N-CA	5.86	128.62	120.29
17	T	197	TYR	CB-CG-CD2	-5.86	112.00	120.80
27	O	236	HIS	CA-C-N	5.86	127.17	119.84
27	O	236	HIS	C-N-CA	5.86	127.17	119.84
32	M	110	ASN	CA-C-O	-5.86	114.20	120.42
20	Z	380	ASN	CA-C-O	5.86	126.74	120.70
32	M	132	VAL	N-CA-CB	5.86	118.03	110.99
6	F	177	ASP	CA-CB-CG	-5.86	106.74	112.60
13	6	85	PHE	CA-CB-CG	-5.86	107.94	113.80
20	Z	522	THR	CA-CB-CG2	-5.86	100.54	110.50
7	G	224	THR	N-CA-C	-5.86	105.98	114.12
20	Z	476	ASP	CA-C-N	5.86	128.61	120.29
20	Z	476	ASP	C-N-CA	5.86	128.61	120.29
23	P	329	PHE	N-CA-C	-5.86	101.51	109.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	R	167	LYS	N-CA-CB	5.86	118.50	110.01
6	f	150	SER	N-CA-C	-5.86	104.98	111.36
6	F	31	GLN	N-CA-C	-5.86	105.63	112.89
15	W	77	HIS	CE1-NE2-CD2	-5.86	103.14	109.00
17	T	23	CYS	CA-C-N	5.86	128.05	120.44
17	T	23	CYS	C-N-CA	5.86	128.05	120.44
3	c	103	ASN	CA-CB-CG	-5.85	106.75	112.60
14	7	59	ASN	CA-C-O	5.85	128.37	120.47
21	N	750	SER	N-CA-C	5.85	118.44	111.71
25	R	266	LEU	O-C-N	-5.85	115.48	122.15
15	W	25	ARG	CD-NE-CZ	-5.85	116.21	124.40
22	S	347	HIS	CE1-NE2-CD2	-5.85	103.15	109.00
22	S	453	ASP	CA-C-N	5.85	131.78	122.59
22	S	453	ASP	C-N-CA	5.85	131.78	122.59
4	d	68	ASP	O-C-N	-5.85	114.81	122.59
26	U	86	LYS	CA-C-N	5.85	130.20	121.72
26	U	86	LYS	C-N-CA	5.85	130.20	121.72
8	h	95	CYS	CA-C-N	5.85	130.62	120.68
8	h	95	CYS	C-N-CA	5.85	130.62	120.68
10	j	64	ASN	N-CA-C	-5.85	104.50	111.69
10	j	186	VAL	CA-C-O	5.85	126.56	120.36
14	7	141	ASN	N-CA-C	-5.85	98.08	108.55
23	P	236	GLU	CA-C-N	5.85	127.93	120.56
23	P	236	GLU	C-N-CA	5.85	127.93	120.56
28	H	207	THR	CA-C-O	-5.85	115.35	121.55
31	L	189	GLN	OE1-CD-NE2	5.85	128.45	122.60
4	d	107	GLU	CB-CA-C	-5.85	101.08	110.79
12	5	271	LEU	CA-C-N	5.85	128.04	120.44
12	5	271	LEU	C-N-CA	5.85	128.04	120.44
14	7	244	ASN	CA-C-N	5.85	130.12	120.94
14	7	244	ASN	C-N-CA	5.85	130.12	120.94
8	h	39	VAL	CA-C-N	5.85	129.41	120.82
8	h	39	VAL	C-N-CA	5.85	129.41	120.82
4	D	150	THR	O-C-N	-5.85	115.28	123.11
25	R	409	GLY	O-C-N	5.85	127.80	122.19
4	D	40	ASN	OD1-CG-ND2	5.84	128.44	122.60
9	2	232	TYR	N-CA-C	-5.84	103.58	112.99
20	Z	42	ASP	CA-CB-CG	-5.84	106.76	112.60
21	N	415	PHE	N-CA-C	-5.84	103.95	113.19
22	S	323	LEU	O-C-N	-5.84	115.92	122.12
26	U	135	ASP	CA-CB-CG	5.84	118.44	112.60
13	6	51	VAL	N-CA-CB	5.84	118.12	112.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	P	192	ASP	N-CA-CB	5.84	120.33	110.69
25	R	385	ASN	N-CA-C	-5.84	106.49	113.97
4	d	192	VAL	CA-C-O	-5.84	114.66	120.85
6	f	117	GLN	OE1-CD-NE2	5.84	128.44	122.60
8	1	58	ALA	N-CA-CB	5.84	118.80	110.16
30	K	391	GLY	CA-C-N	5.84	128.58	120.29
30	K	391	GLY	C-N-CA	5.84	128.58	120.29
33	J	176	SER	CA-C-N	5.84	128.58	120.29
33	J	176	SER	C-N-CA	5.84	128.58	120.29
15	W	171	LEU	N-CA-C	-5.84	99.72	109.24
20	Z	881	ILE	CA-C-O	-5.84	114.57	121.05
1	A	93	ALA	CA-C-O	5.84	126.68	119.97
10	3	119	PRO	CA-C-O	-5.84	114.79	121.56
14	7	138	SER	N-CA-CB	5.84	118.80	110.16
15	W	106	GLN	OE1-CD-NE2	-5.84	116.76	122.60
28	H	237	THR	CA-C-N	5.84	128.38	120.44
28	H	237	THR	C-N-CA	5.84	128.38	120.44
29	I	116	ASP	N-CA-CB	5.84	121.59	112.25
9	2	32	ILE	N-CA-C	-5.83	99.81	108.45
16	V	40	HIS	CA-CB-CG	-5.83	107.97	113.80
7	g	120	VAL	CA-C-N	5.83	128.57	120.29
7	g	120	VAL	C-N-CA	5.83	128.57	120.29
14	n	155	ASN	OD1-CG-ND2	-5.83	116.77	122.60
9	2	206	VAL	CA-C-N	5.83	130.96	122.85
9	2	206	VAL	C-N-CA	5.83	130.96	122.85
17	T	234	TYR	CB-CG-CD1	-5.83	112.05	120.80
21	N	283	ASP	CA-CB-CG	-5.83	106.77	112.60
10	j	131	ASP	N-CA-C	-5.83	97.81	108.02
13	m	213	LEU	N-CA-C	-5.83	99.78	109.46
14	n	174	THR	CA-C-O	5.83	127.00	120.70
2	B	129	PRO	N-CA-CB	5.83	108.75	103.33
7	G	74	ILE	CA-C-N	5.83	127.30	120.71
7	G	74	ILE	C-N-CA	5.83	127.30	120.71
7	G	191	GLU	CA-CB-CG	5.83	125.76	114.10
10	3	38	ASN	CA-C-O	5.83	126.27	120.32
21	N	854	GLU	CA-C-N	5.83	130.86	122.35
21	N	854	GLU	C-N-CA	5.83	130.86	122.35
26	U	10	ILE	N-CA-C	-5.83	99.77	108.46
32	M	89	ASN	N-CA-CB	5.83	119.96	110.17
12	5	189	TYR	CB-CA-C	5.83	120.12	110.74
17	T	28	PRO	CA-C-N	5.83	125.69	119.28
17	T	28	PRO	C-N-CA	5.83	125.69	119.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	Z	271	ILE	O-C-N	5.83	127.62	121.91
20	Z	308	LYS	CA-C-N	5.83	132.67	121.54
20	Z	308	LYS	C-N-CA	5.83	132.67	121.54
21	N	68	VAL	CB-CA-C	5.83	120.01	112.14
21	N	71	ASN	N-CA-C	5.83	118.58	111.82
22	S	82	TYR	CB-CG-CD2	-5.83	112.06	120.80
22	S	293	ILE	N-CA-CB	5.83	119.32	110.58
25	R	260	THR	CA-C-O	-5.83	112.89	120.00
29	I	59	LEU	CB-CA-C	-5.83	101.12	110.79
30	K	58	TYR	N-CA-CB	5.83	119.36	110.44
30	K	109	ILE	N-CA-CB	5.83	119.45	111.41
31	L	359	GLU	N-CA-CB	5.83	118.52	110.07
6	f	189	LEU	CB-CA-C	-5.83	100.94	110.85
12	l	256	THR	CA-C-N	5.83	128.56	120.29
12	l	256	THR	C-N-CA	5.83	128.56	120.29
4	D	64	VAL	N-CA-C	-5.83	99.14	107.77
22	S	226	ASP	CA-C-N	5.83	128.37	120.44
22	S	226	ASP	C-N-CA	5.83	128.37	120.44
23	P	274	GLY	CA-C-N	5.83	128.09	120.28
23	P	274	GLY	C-N-CA	5.83	128.09	120.28
2	b	208	THR	N-CA-C	-5.83	106.02	114.12
2	b	227	ILE	CA-C-N	5.83	126.33	120.04
2	b	227	ILE	C-N-CA	5.83	126.33	120.04
7	g	16	SER	CA-C-O	-5.83	114.46	120.87
9	2	95	HIS	CA-C-O	-5.83	114.70	120.82
17	T	149	ASP	CA-C-N	5.83	128.56	120.29
17	T	149	ASP	C-N-CA	5.83	128.56	120.29
18	X	16	GLU	CA-C-N	5.83	128.09	120.28
18	X	16	GLU	C-N-CA	5.83	128.09	120.28
22	S	443	ILE	N-CA-C	-5.83	100.01	108.17
25	R	43	ARG	NE-CZ-NH1	5.83	127.33	121.50
27	O	375	ASP	N-CA-C	-5.83	104.93	111.28
30	K	146	LEU	N-CA-CB	-5.83	101.87	110.49
9	i	179	GLU	N-CA-C	5.82	117.71	111.36
1	A	42	SER	CA-C-O	-5.82	114.31	121.06
8	1	16	THR	CA-CB-CG2	-5.82	100.60	110.50
20	Z	243	GLN	N-CA-C	-5.82	105.06	111.82
21	N	267	GLN	N-CA-CB	5.82	118.68	110.12
22	S	118	PHE	CA-C-N	5.82	129.11	120.90
22	S	118	PHE	C-N-CA	5.82	129.11	120.90
24	Q	40	ALA	N-CA-CB	5.82	120.33	110.49
14	n	148	ILE	N-CA-C	-5.82	100.10	108.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	J	313	LYS	CA-C-O	-5.82	114.04	120.33
1	A	115	ASP	O-C-N	5.82	128.29	122.12
21	N	121	GLU	N-CA-C	-5.82	105.02	111.36
21	N	223	LEU	CA-C-N	5.82	128.36	120.44
21	N	223	LEU	C-N-CA	5.82	128.36	120.44
21	N	857	TYR	N-CA-C	-5.82	106.15	113.72
2	b	234	ARG	CA-C-N	5.82	129.82	121.50
2	b	234	ARG	C-N-CA	5.82	129.82	121.50
28	H	233	GLU	CB-CA-C	-5.82	101.13	110.79
9	i	138	HIS	CA-CB-CG	-5.82	107.98	113.80
12	l	109	VAL	CA-C-N	5.82	129.64	122.37
12	l	109	VAL	C-N-CA	5.82	129.64	122.37
7	G	207	ASN	CA-CB-CG	-5.82	106.78	112.60
11	4	70	ARG	CA-C-O	5.82	126.72	120.55
16	V	275	ASP	CA-C-N	5.82	125.36	119.19
16	V	275	ASP	C-N-CA	5.82	125.36	119.19
25	R	28	GLU	CA-C-O	-5.82	114.71	120.82
30	K	237	VAL	CA-C-N	5.82	132.58	122.81
30	K	237	VAL	C-N-CA	5.82	132.58	122.81
32	M	176	PRO	CA-C-N	5.82	129.02	120.82
32	M	176	PRO	C-N-CA	5.82	129.02	120.82
21	N	801	THR	CA-CB-OG1	5.82	118.32	109.60
2	B	13	SER	CA-C-N	5.81	125.51	119.64
2	B	13	SER	C-N-CA	5.81	125.51	119.64
12	5	214	VAL	CA-C-N	5.81	128.07	120.28
12	5	214	VAL	C-N-CA	5.81	128.07	120.28
23	P	91	LEU	N-CA-C	-5.81	103.76	111.96
29	I	343	ARG	N-CA-CB	5.81	118.63	110.90
6	f	22	VAL	N-CA-C	-5.81	103.65	111.44
7	g	15	PHE	CB-CA-C	-5.81	99.18	109.70
2	B	145	PHE	N-CA-CB	5.81	118.84	110.06
9	2	187	ALA	CA-C-N	5.81	128.67	120.42
9	2	187	ALA	C-N-CA	5.81	128.67	120.42
20	Z	187	SER	CA-C-N	5.81	131.85	122.14
20	Z	187	SER	C-N-CA	5.81	131.85	122.14
20	Z	800	SER	CA-C-N	5.81	128.39	120.54
20	Z	800	SER	C-N-CA	5.81	128.39	120.54
21	N	367	ALA	CA-C-N	5.81	128.54	120.29
21	N	367	ALA	C-N-CA	5.81	128.54	120.29
27	O	65	PHE	N-CA-C	5.81	117.61	111.28
14	7	98	ARG	CA-C-N	5.81	128.07	120.28
14	7	98	ARG	C-N-CA	5.81	128.07	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	P	363	LEU	CA-C-N	5.81	128.54	120.29
23	P	363	LEU	C-N-CA	5.81	128.54	120.29
31	L	193	LEU	N-CA-C	-5.81	104.54	111.69
9	i	188	ILE	O-C-N	-5.81	115.23	121.80
5	E	147	HIS	ND1-CE1-NE2	5.81	114.21	108.40
6	F	27	GLU	CB-CG-CD	-5.81	102.72	112.60
13	6	168	TYR	N-CA-C	-5.81	100.58	109.41
18	X	43	LEU	N-CA-C	-5.81	105.81	114.64
27	O	176	SER	CB-CA-C	-5.81	101.15	110.79
31	L	329	ARG	NE-CZ-NH2	5.81	124.43	119.20
17	T	57	ILE	CA-C-O	-5.81	114.69	120.85
20	Z	326	VAL	CB-CA-C	-5.81	104.41	112.02
20	Z	891	PRO	CA-C-O	-5.81	114.87	122.19
1	A	43	LEU	N-CA-C	-5.81	98.03	108.48
5	E	36	THR	N-CA-C	5.81	118.43	110.24
21	N	133	LEU	O-C-N	5.81	128.27	122.12
6	f	143	HIS	CE1-NE2-CD2	-5.80	103.20	109.00
8	1	184	MET	CG-SD-CE	-5.80	88.13	100.90
12	5	231	LEU	CA-C-N	5.80	126.39	120.00
12	5	231	LEU	C-N-CA	5.80	126.39	120.00
24	Q	321	TYR	CA-C-N	5.80	127.99	120.44
24	Q	321	TYR	C-N-CA	5.80	127.99	120.44
25	R	194	VAL	O-C-N	5.80	127.73	121.87
5	e	147	HIS	CB-CA-C	-5.80	99.50	109.65
10	3	92	SER	CA-C-N	5.80	128.53	120.29
10	3	92	SER	C-N-CA	5.80	128.53	120.29
23	P	28	ALA	N-CA-C	5.80	118.38	111.71
1	a	34	ALA	N-CA-C	-5.80	104.38	113.02
11	4	122	LEU	N-CA-C	5.80	117.60	111.28
17	T	165	GLN	N-CA-CB	5.80	118.75	110.16
20	Z	41	GLU	CA-C-N	5.80	128.05	120.28
20	Z	41	GLU	C-N-CA	5.80	128.05	120.28
30	K	205	PRO	CA-C-N	5.80	126.10	119.83
30	K	205	PRO	C-N-CA	5.80	126.10	119.83
3	c	9	ARG	O-C-N	-5.80	114.88	122.59
3	c	96	GLN	CA-C-N	5.80	127.98	120.44
3	c	96	GLN	C-N-CA	5.80	127.98	120.44
5	e	11	GLY	CA-C-O	-5.80	115.94	121.62
12	5	128	GLN	N-CA-CB	5.80	118.42	110.01
21	N	119	LYS	N-CA-C	-5.80	106.34	113.41
5	E	176	SER	N-CA-C	5.80	117.60	111.28
7	G	141	VAL	O-C-N	5.80	129.46	123.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	99	SER	O-C-N	-5.80	117.22	123.42
19	Y	67	VAL	N-CA-CB	-5.80	103.77	110.55
24	Q	218	LEU	CA-C-N	5.80	128.52	120.29
24	Q	218	LEU	C-N-CA	5.80	128.52	120.29
2	B	15	SER	N-CA-C	-5.79	105.79	112.92
20	Z	437	ASP	CA-C-N	5.79	128.36	120.54
20	Z	437	ASP	C-N-CA	5.79	128.36	120.54
25	R	318	PRO	N-CA-C	-5.79	106.90	114.03
4	d	207	ALA	CA-C-N	5.79	128.52	120.29
4	d	207	ALA	C-N-CA	5.79	128.52	120.29
13	6	143	GLN	CB-CA-C	-5.79	101.69	109.16
20	Z	550	PHE	O-C-N	5.79	128.35	122.09
20	Z	603	VAL	CA-C-N	5.79	127.38	120.14
20	Z	603	VAL	C-N-CA	5.79	127.38	120.14
1	a	247	ALA	N-CA-C	-5.79	106.17	113.18
4	d	109	LEU	O-C-N	5.79	128.75	122.15
13	m	111	PHE	N-CA-C	-5.79	100.67	109.30
13	m	138	SER	N-CA-CB	5.79	120.28	110.49
15	W	86	HIS	N-CA-CB	5.79	119.94	110.39
22	S	148	ASP	CA-CB-CG	5.79	118.39	112.60
7	g	228	HIS	ND1-CE1-NE2	5.79	114.19	108.40
8	h	152	ARG	O-C-N	-5.79	116.21	123.27
4	D	162	GLN	OE1-CD-NE2	5.79	128.39	122.60
13	6	88	ASN	OD1-CG-ND2	-5.79	116.81	122.60
20	Z	364	ASN	CB-CA-C	-5.79	101.01	110.85
29	I	304	ARG	NE-CZ-NH1	5.79	127.29	121.50
2	b	170	ALA	N-CA-C	-5.79	104.89	111.14
2	b	195	THR	N-CA-C	-5.79	104.57	111.69
7	g	191	GLU	CB-CG-CD	5.79	122.44	112.60
16	V	256	GLU	N-CA-C	-5.79	105.05	111.36
20	Z	718	ASP	N-CA-C	-5.79	104.88	111.07
22	S	440	ASP	N-CA-C	-5.79	105.84	114.64
2	B	201	GLU	CB-CG-CD	5.79	122.44	112.60
27	O	295	THR	O-C-N	5.79	128.75	122.15
31	L	180	PHE	N-CA-C	-5.79	106.45	112.93
32	M	60	GLU	CA-C-N	5.79	128.51	120.29
32	M	60	GLU	C-N-CA	5.79	128.51	120.29
20	Z	766	HIS	N-CA-C	5.79	117.58	111.28
2	b	213	ILE	N-CA-C	-5.78	100.14	108.53
8	h	14	ALA	N-CA-CB	5.78	121.23	110.99
10	j	111	GLY	CA-C-O	5.78	126.82	121.38
1	A	39	ASN	CA-CB-CG	-5.78	106.82	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	2	180	ALA	CA-C-N	5.78	128.63	120.42
9	2	180	ALA	C-N-CA	5.78	128.63	120.42
17	T	141	LEU	CA-C-N	5.78	128.61	120.28
17	T	141	LEU	C-N-CA	5.78	128.61	120.28
26	U	179	ARG	CA-CB-CG	-5.78	102.53	114.10
1	A	177	GLU	N-CA-C	5.78	117.58	111.28
30	K	363	ALA	N-CA-CB	5.78	118.76	110.03
2	b	214	ILE	CA-C-O	5.78	128.00	120.78
2	B	55	LEU	N-CA-C	-5.78	105.72	112.89
17	T	169	GLN	OE1-CD-NE2	5.78	128.38	122.60
23	P	410	GLN	CA-C-N	5.78	128.50	120.29
23	P	410	GLN	C-N-CA	5.78	128.50	120.29
25	R	296	LEU	CA-C-N	5.78	128.03	120.28
25	R	296	LEU	C-N-CA	5.78	128.03	120.28
29	I	278	ILE	N-CA-C	-5.78	100.16	108.48
32	M	240	ASN	CA-C-O	-5.78	114.89	121.65
10	j	100	PHE	CB-CA-C	-5.78	99.72	109.72
26	U	62	ASN	CA-CB-CG	-5.78	106.82	112.60
29	I	102	ASN	CA-C-O	5.78	125.11	119.22
29	I	183	ASP	CA-CB-CG	-5.78	106.82	112.60
2	B	43	VAL	N-CA-C	-5.78	99.90	108.45
28	H	57	LYS	N-CA-C	5.78	117.58	111.28
6	f	37	GLY	N-CA-C	-5.78	101.08	111.19
1	A	204	GLU	CA-C-N	5.78	128.02	120.28
1	A	204	GLU	C-N-CA	5.78	128.02	120.28
14	7	164	ASN	N-CA-C	-5.78	100.26	108.23
20	Z	38	LEU	N-CA-C	-5.78	105.07	111.71
21	N	591	LEU	O-C-N	-5.78	116.00	122.12
22	S	341	SER	O-C-N	5.78	129.74	122.23
25	R	250	ALA	CA-C-N	5.78	128.49	120.29
25	R	250	ALA	C-N-CA	5.78	128.49	120.29
27	O	98	TYR	CB-CG-CD1	5.78	129.46	120.80
27	O	105	GLN	CA-C-N	5.78	128.60	120.28
27	O	105	GLN	C-N-CA	5.78	128.60	120.28
28	H	320	ASP	CA-CB-CG	-5.78	106.83	112.60
13	6	29	ALA	O-C-N	-5.77	116.67	123.25
17	T	172	SER	O-C-N	-5.77	114.91	122.59
21	N	191	THR	N-CA-CB	5.77	118.61	110.12
4	D	91	VAL	O-C-N	-5.77	115.88	121.83
17	T	237	ASN	CA-C-O	5.77	126.86	120.80
20	Z	866	VAL	N-CA-C	-5.77	105.10	110.53
22	S	469	ASN	N-CA-CB	5.77	119.19	110.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	O	365	LYS	CA-C-O	-5.77	114.43	120.55
14	n	196	SER	CB-CA-C	5.77	120.47	110.72
5	E	223	THR	CA-C-N	5.77	127.94	120.44
5	E	223	THR	C-N-CA	5.77	127.94	120.44
21	N	685	VAL	CA-C-N	5.77	127.83	120.56
21	N	685	VAL	C-N-CA	5.77	127.83	120.56
4	D	103	PRO	CA-C-O	-5.77	114.53	122.15
4	D	144	GLU	CA-C-N	5.77	125.70	119.76
4	D	144	GLU	C-N-CA	5.77	125.70	119.76
4	D	152	PRO	CA-C-N	5.77	128.33	120.54
4	D	152	PRO	C-N-CA	5.77	128.33	120.54
21	N	41	ASN	OD1-CG-ND2	-5.77	116.83	122.60
21	N	131	PRO	CA-C-N	5.77	128.48	120.29
21	N	131	PRO	C-N-CA	5.77	128.48	120.29
14	n	92	ASP	N-CA-CB	5.77	118.70	110.16
6	F	63	ILE	O-C-N	-5.77	117.03	123.26
6	F	109	GLY	N-CA-C	-5.77	105.64	113.37
21	N	605	ILE	N-CA-C	5.77	115.96	110.42
4	D	88	LYS	N-CA-C	5.77	117.56	111.28
23	P	208	PHE	CA-CB-CG	5.77	119.57	113.80
28	H	350	LYS	O-C-N	-5.77	116.44	123.19
32	M	44	PHE	O-C-N	-5.77	115.58	122.15
4	d	89	ALA	CA-C-N	5.76	127.94	120.44
4	d	89	ALA	C-N-CA	5.76	127.94	120.44
20	Z	927	VAL	CA-C-O	-5.76	114.25	120.36
21	N	617	VAL	CA-C-O	5.76	126.96	120.85
27	O	30	GLU	CA-C-N	5.76	127.94	120.44
27	O	30	GLU	C-N-CA	5.76	127.94	120.44
4	D	216	LYS	CA-C-O	-5.76	113.45	120.54
6	F	82	ARG	O-C-N	-5.76	114.61	122.33
19	Y	20	LYS	N-CA-CB	5.76	118.59	110.12
10	j	95	LEU	CB-CA-C	-5.76	101.59	110.81
7	G	87	HIS	CG-CD2-NE2	5.76	112.96	107.20
19	Y	39	PRO	N-CA-C	-5.76	106.17	114.18
22	S	117	SER	N-CA-C	-5.76	106.15	112.72
27	O	110	ASP	N-CA-C	5.76	119.57	112.54
30	K	119	VAL	N-CA-CB	5.76	119.47	112.10
2	b	242	GLU	CA-C-N	5.76	128.60	120.42
2	b	242	GLU	C-N-CA	5.76	128.60	120.42
7	g	146	ALA	N-CA-C	-5.76	101.10	110.20
5	E	206	GLN	O-C-N	5.76	128.72	122.15
20	Z	953	THR	CA-C-N	5.76	125.67	119.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	Z	953	THR	C-N-CA	5.76	125.67	119.85
25	R	321	TYR	CA-C-O	5.76	125.80	118.54
29	I	98	GLU	CA-C-N	5.76	127.82	120.56
29	I	98	GLU	C-N-CA	5.76	127.82	120.56
2	b	99	ARG	O-C-N	-5.76	116.10	122.09
5	e	182	GLU	N-CA-CB	5.76	118.68	110.16
8	h	84	THR	CA-C-N	5.76	130.34	121.19
8	h	84	THR	C-N-CA	5.76	130.34	121.19
6	F	114	ASP	N-CA-CB	5.76	119.78	110.40
13	6	183	LEU	N-CA-C	-5.76	100.01	109.40
21	N	390	LEU	CA-C-N	5.76	125.76	119.89
21	N	390	LEU	C-N-CA	5.76	125.76	119.89
23	P	144	VAL	CA-C-O	-5.76	114.75	120.85
29	I	317	ASP	CA-C-N	5.76	131.15	122.68
29	I	317	ASP	C-N-CA	5.76	131.15	122.68
1	a	153	SER	O-C-N	5.76	130.14	123.17
11	4	39	SER	N-CA-CB	5.76	120.61	110.37
29	I	95	GLN	CA-C-O	-5.76	114.78	120.82
7	G	204	HIS	CE1-NE2-CD2	-5.75	103.25	109.00
21	N	573	HIS	CA-C-N	5.75	127.81	120.56
21	N	573	HIS	C-N-CA	5.75	127.81	120.56
12	l	212	TYR	N-CA-CB	5.75	118.51	109.94
14	7	254	PHE	N-CA-C	-5.75	106.22	113.18
25	R	25	GLU	CB-CA-C	-5.75	101.07	110.85
27	O	29	PHE	CA-C-N	5.75	127.99	120.28
27	O	29	PHE	C-N-CA	5.75	127.99	120.28
32	M	418	GLY	CA-C-N	5.75	127.81	120.56
32	M	418	GLY	C-N-CA	5.75	127.81	120.56
2	B	122	THR	N-CA-C	-5.75	106.03	113.16
20	Z	189	ALA	CA-C-N	5.75	128.46	120.29
20	Z	189	ALA	C-N-CA	5.75	128.46	120.29
22	S	468	ALA	CA-C-N	5.75	130.46	120.68
22	S	468	ALA	C-N-CA	5.75	130.46	120.68
3	C	138	ALA	O-C-N	-5.75	116.77	123.27
14	7	37	PRO	N-CA-C	-5.75	102.83	111.57
10	3	35	GLY	O-C-N	-5.75	119.10	123.35
13	6	31	LEU	N-CA-CB	5.75	119.79	110.77
17	T	245	TYR	CA-C-O	-5.75	114.46	120.55
26	U	264	ALA	O-C-N	5.75	128.21	122.12
28	H	361	LEU	CA-C-N	5.75	128.65	120.49
28	H	361	LEU	C-N-CA	5.75	128.65	120.49
2	b	126	GLY	O-C-N	5.75	129.95	122.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	38	GLU	CA-C-O	-5.75	114.33	120.42
24	Q	308	ASN	CA-C-N	5.75	130.74	122.35
24	Q	308	ASN	C-N-CA	5.75	130.74	122.35
32	M	357	ARG	NE-CZ-NH1	-5.75	115.75	121.50
33	J	14	THR	CA-CB-OG1	5.75	118.22	109.60
8	1	105	GLY	N-CA-C	-5.75	99.56	113.18
3	c	133	VAL	CA-C-O	-5.74	115.19	121.28
7	g	26	TYR	N-CA-C	5.74	118.31	111.71
12	l	279	GLU	O-C-N	-5.74	114.59	122.46
21	N	925	ASP	CA-CB-CG	5.74	118.34	112.60
25	R	188	LYS	CA-C-O	-5.74	114.46	120.55
7	g	184	PRO	N-CD-CG	5.74	111.81	103.20
4	D	95	SER	O-C-N	-5.74	115.21	122.27
12	5	237	LEU	CA-C-O	-5.74	114.76	120.90
21	N	267	GLN	CA-C-O	5.74	126.64	120.55
3	c	202	ASP	N-CA-C	-5.74	105.59	112.59
5	E	80	GLY	N-CA-C	-5.74	99.58	113.18
8	1	111	TYR	N-CA-C	-5.74	99.54	108.90
17	T	190	ALA	CA-C-N	5.74	127.97	120.28
17	T	190	ALA	C-N-CA	5.74	127.97	120.28
20	Z	865	ASP	CA-C-N	5.74	127.91	120.56
20	Z	865	ASP	C-N-CA	5.74	127.91	120.56
28	H	188	PRO	CA-C-O	-5.74	112.24	120.56
31	L	307	GLU	CB-CA-C	-5.74	101.83	110.90
10	j	11	ILE	N-CA-CB	5.74	122.52	111.62
10	3	159	GLU	CA-C-N	5.74	125.59	119.28
10	3	159	GLU	C-N-CA	5.74	125.59	119.28
16	V	94	MET	O-C-N	-5.74	115.61	122.15
16	V	105	VAL	CB-CA-C	-5.74	104.08	111.20
33	J	288	ILE	N-CA-C	-5.74	98.16	107.28
33	J	380	GLU	CA-C-O	-5.74	113.37	119.97
4	d	189	GLU	N-CA-CB	5.74	118.55	110.12
9	i	88	ILE	N-CA-C	-5.74	105.27	113.07
11	k	90	LYS	N-CA-C	5.74	119.38	112.38
11	k	156	GLU	CA-C-N	5.74	126.31	120.00
11	k	156	GLU	C-N-CA	5.74	126.31	120.00
25	R	369	GLY	N-CA-C	-5.74	107.80	115.32
26	U	82	LYS	O-C-N	-5.74	115.21	122.27
27	O	119	SER	N-CA-CB	5.74	120.19	110.49
29	I	252	LEU	CA-C-N	5.74	130.16	122.93
29	I	252	LEU	C-N-CA	5.74	130.16	122.93
31	L	111	GLU	N-CA-CB	5.74	118.47	109.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	d	188	VAL	CB-CA-C	-5.74	104.31	112.22
5	e	224	LYS	N-CA-C	5.74	117.61	111.36
5	e	240	ILE	N-CA-C	-5.74	104.93	110.72
10	j	98	ARG	CA-C-N	5.74	127.89	120.44
10	j	98	ARG	C-N-CA	5.74	127.89	120.44
20	Z	618	GLN	CB-CG-CD	-5.74	102.85	112.60
20	Z	856	HIS	N-CA-C	-5.74	106.44	113.50
28	H	112	SER	CB-CA-C	-5.74	104.17	111.86
33	J	295	ASN	O-C-N	5.74	128.69	122.15
21	N	769	PRO	N-CA-C	-5.73	100.66	112.47
5	e	176	SER	N-CA-CB	5.73	118.32	110.01
4	D	71	VAL	CB-CA-C	-5.73	102.68	110.42
6	F	49	LEU	CA-C-N	5.73	131.40	120.97
6	F	49	LEU	C-N-CA	5.73	131.40	120.97
15	W	157	PHE	CA-C-N	5.73	128.31	120.46
15	W	157	PHE	C-N-CA	5.73	128.31	120.46
15	W	174	VAL	CA-C-N	5.73	129.03	120.83
15	W	174	VAL	C-N-CA	5.73	129.03	120.83
20	Z	280	ASP	CA-C-N	5.73	127.89	120.44
20	Z	280	ASP	C-N-CA	5.73	127.89	120.44
25	R	317	ILE	CA-C-N	5.73	125.83	119.87
25	R	317	ILE	C-N-CA	5.73	125.83	119.87
28	H	339	GLN	N-CA-C	-5.73	106.33	113.38
31	L	379	ALA	CB-CA-C	-5.73	101.10	110.85
32	M	148	VAL	N-CA-C	-5.73	100.78	108.35
2	b	122	THR	CA-CB-OG1	5.73	118.19	109.60
1	A	66	PRO	CA-C-N	5.73	127.96	120.28
1	A	66	PRO	C-N-CA	5.73	127.96	120.28
9	2	238	THR	CA-C-N	5.73	131.40	120.97
9	2	238	THR	C-N-CA	5.73	131.40	120.97
32	M	423	GLN	CA-C-N	5.73	129.02	120.31
32	M	423	GLN	C-N-CA	5.73	129.02	120.31
12	l	94	ARG	CD-NE-CZ	-5.73	116.38	124.40
10	3	48	HIS	CA-CB-CG	5.73	119.53	113.80
11	4	190	ARG	NE-CZ-NH2	-5.73	114.04	119.20
20	Z	318	LYS	O-C-N	-5.73	116.17	122.07
27	O	167	ILE	CA-C-O	-5.73	115.10	121.17
7	g	127	ASN	CA-CB-CG	-5.73	106.87	112.60
9	i	151	GLY	CA-C-N	5.73	131.22	122.29
9	i	151	GLY	C-N-CA	5.73	131.22	122.29
13	6	197	THR	CA-C-N	5.73	128.23	120.44
13	6	197	THR	C-N-CA	5.73	128.23	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	611	LYS	N-CA-C	-5.73	105.95	113.17
31	L	246	SER	CA-C-N	5.73	126.02	119.83
31	L	246	SER	C-N-CA	5.73	126.02	119.83
6	F	125	GLY	N-CA-C	-5.73	104.91	112.81
30	K	99	PHE	N-CA-C	5.73	118.01	109.59
2	b	86	VAL	N-CA-C	-5.72	104.76	111.00
5	e	150	ASP	CA-CB-CG	-5.72	106.88	112.60
11	k	191	GLN	OE1-CD-NE2	5.72	128.32	122.60
3	C	218	LYS	N-CA-C	-5.72	106.06	113.16
17	T	236	ASN	N-CA-CB	5.72	118.63	110.16
20	Z	332	ASN	O-C-N	-5.72	115.91	122.89
27	O	185	PHE	N-CA-C	-5.72	105.12	111.36
3	c	117	ASP	CA-C-O	-5.72	114.35	120.42
5	e	75	GLY	N-CA-C	-5.72	102.78	111.14
5	e	211	LYS	N-CA-C	-5.72	102.05	110.52
9	i	171	TRP	CA-C-N	5.72	131.52	122.36
9	i	171	TRP	C-N-CA	5.72	131.52	122.36
11	k	52	ASP	N-CA-C	-5.72	105.12	111.36
7	G	127	ASN	CA-CB-CG	-5.72	106.88	112.60
20	Z	189	ALA	N-CA-C	-5.72	106.64	113.97
20	Z	602	LEU	N-CA-C	5.72	117.19	111.07
20	Z	751	ASP	CA-C-N	5.72	128.54	120.42
20	Z	751	ASP	C-N-CA	5.72	128.54	120.42
22	S	183	LEU	CB-CA-C	-5.72	101.86	110.90
24	Q	214	THR	N-CA-CB	5.72	118.53	110.12
24	Q	275	ILE	CA-CB-CG1	5.72	120.13	110.40
10	3	113	ASN	CA-CB-CG	-5.72	106.88	112.60
17	T	261	GLU	CA-C-N	5.72	128.41	120.29
17	T	261	GLU	C-N-CA	5.72	128.41	120.29
10	j	35	GLY	O-C-N	-5.72	119.12	123.35
3	C	105	ASP	N-CA-C	-5.72	101.38	109.96
14	7	50	ASP	N-CA-C	5.72	117.19	111.07
21	N	58	ARG	NE-CZ-NH2	5.72	124.35	119.20
23	P	289	ASN	CA-C-O	-5.72	113.39	119.97
4	d	185	PRO	CA-C-N	5.72	128.22	120.44
4	d	185	PRO	C-N-CA	5.72	128.22	120.44
10	j	81	ALA	CA-C-N	5.72	128.16	120.50
10	j	81	ALA	C-N-CA	5.72	128.16	120.50
11	4	93	ARG	CB-CG-CD	5.72	124.45	111.30
15	W	150	ASN	N-CA-C	-5.72	101.06	109.81
16	V	117	TRP	N-CA-C	-5.72	98.62	110.80
5	e	239	LEU	CA-C-N	5.72	128.54	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	e	239	LEU	C-N-CA	5.72	128.54	120.42
2	B	151	ASP	CB-CA-C	5.72	118.19	109.56
13	6	177	LYS	CA-C-N	5.72	128.34	120.39
13	6	177	LYS	C-N-CA	5.72	128.34	120.39
21	N	57	ASP	CA-C-N	5.72	128.21	120.38
21	N	57	ASP	C-N-CA	5.72	128.21	120.38
21	N	183	VAL	O-C-N	-5.72	116.33	121.87
23	P	58	VAL	N-CA-C	-5.72	104.95	110.72
24	Q	409	TYR	CB-CG-CD1	5.72	129.38	120.80
31	L	81	ILE	N-CA-C	-5.72	103.78	111.44
33	J	345	LYS	O-C-N	5.72	129.30	122.27
7	g	190	ARG	CA-C-N	5.71	129.00	120.31
7	g	190	ARG	C-N-CA	5.71	129.00	120.31
8	1	183	ARG	N-CA-C	-5.71	101.56	110.42
14	7	234	ASP	N-CA-C	-5.71	100.97	110.17
21	N	345	ASP	N-CA-C	-5.71	98.63	110.80
30	K	249	GLU	N-CA-C	-5.71	106.31	113.28
6	f	29	ILE	N-CA-C	-5.71	104.77	111.00
7	G	101	LYS	N-CA-CB	-5.71	101.70	110.16
20	Z	714	ASP	N-CA-C	5.71	117.18	111.07
26	U	17	SER	CA-CB-OG	5.71	122.53	111.10
29	I	136	VAL	CA-C-O	-5.71	116.41	121.09
13	m	110	PHE	CA-CB-CG	-5.71	108.09	113.80
5	E	183	LEU	N-CA-C	-5.71	105.06	111.28
14	7	175	LEU	N-CA-CB	-5.71	100.90	111.52
16	V	300	VAL	CA-C-O	5.71	126.90	120.85
17	T	61	ILE	CA-C-N	5.71	127.93	120.28
17	T	61	ILE	C-N-CA	5.71	127.93	120.28
17	T	77	SER	N-CA-CB	5.71	118.29	110.01
24	Q	157	LEU	O-C-N	5.71	128.66	122.15
32	M	152	SER	N-CA-C	-5.71	99.11	108.76
33	J	25	GLN	CA-C-N	5.71	127.93	120.28
33	J	25	GLN	C-N-CA	5.71	127.93	120.28
33	J	209	LYS	CA-C-O	-5.71	115.50	121.55
14	n	101	LYS	CA-C-N	5.71	130.34	120.58
14	n	101	LYS	C-N-CA	5.71	130.34	120.58
5	E	90	GLU	N-CA-CB	5.71	118.35	110.07
6	F	16	THR	CA-C-O	5.71	126.03	119.35
17	T	78	PHE	CA-C-N	5.71	127.93	120.28
17	T	78	PHE	C-N-CA	5.71	127.93	120.28
19	Y	24	ILE	CA-C-O	5.71	126.82	120.71
22	S	405	ARG	CA-C-N	5.71	128.21	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	S	405	ARG	C-N-CA	5.71	128.21	120.44
25	R	267	LYS	O-C-N	-5.71	116.19	122.07
29	I	272	GLY	O-C-N	-5.71	116.71	122.19
31	L	339	ARG	O-C-N	-5.71	114.75	121.32
33	J	144	ASP	N-CA-C	-5.71	100.03	108.99
9	i	105	VAL	O-C-N	-5.71	116.33	121.87
9	i	252	ILE	N-CA-C	-5.71	101.45	109.21
12	5	153	ALA	CA-C-O	5.71	126.57	120.24
25	R	338	TYR	N-CA-C	-5.71	105.14	111.36
28	H	219	GLU	O-C-N	5.71	130.08	122.43
28	H	457	PHE	CA-CB-CG	-5.71	108.09	113.80
19	Y	87	GLU	N-CA-C	5.71	117.50	111.28
22	S	287	SER	CA-C-O	5.71	126.58	120.70
8	1	178	SER	CA-C-N	5.70	128.66	120.56
8	1	178	SER	C-N-CA	5.70	128.66	120.56
21	N	832	HIS	CE1-NE2-CD2	-5.70	103.30	109.00
25	R	146	ASP	CA-C-N	5.70	128.20	120.44
25	R	146	ASP	C-N-CA	5.70	128.20	120.44
29	I	266	GLN	N-CA-C	-5.70	105.05	112.23
31	L	71	ASP	CA-C-O	-5.70	114.50	120.55
32	M	430	VAL	CB-CA-C	-5.70	101.94	111.29
21	N	753	PHE	CB-CA-C	-5.70	101.66	110.78
25	R	170	VAL	CA-CB-CG2	-5.70	100.71	110.40
4	d	117	GLN	CA-C-N	5.70	127.92	120.28
4	d	117	GLN	C-N-CA	5.70	127.92	120.28
10	3	136	PHE	CA-CB-CG	-5.70	108.10	113.80
18	X	72	GLU	O-C-N	-5.70	115.11	121.84
22	S	432	ILE	CB-CA-C	5.70	119.49	112.02
23	P	303	PHE	CA-CB-CG	-5.70	108.10	113.80
33	J	118	ASP	CA-C-N	5.70	128.95	120.17
33	J	118	ASP	C-N-CA	5.70	128.95	120.17
33	J	255	SER	CB-CA-C	-5.70	101.93	110.88
5	e	136	ARG	CB-CG-CD	5.70	124.41	111.30
22	S	132	ALA	N-CA-C	5.70	122.94	110.80
24	Q	71	LYS	O-C-N	5.70	130.17	122.59
4	d	212	ILE	N-CA-C	-5.70	99.29	107.78
1	A	95	LEU	CA-C-O	-5.70	114.83	120.70
3	C	67	TYR	CA-C-O	-5.70	113.76	120.60
23	P	337	HIS	N-CA-C	-5.70	107.33	114.56
30	K	195	ALA	CA-C-N	5.70	127.91	120.28
30	K	195	ALA	C-N-CA	5.70	127.91	120.28
20	Z	605	SER	CB-CA-C	-5.70	101.34	110.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	859	ASN	N-CA-C	-5.70	98.67	110.80
21	N	895	LYS	N-CA-C	5.70	117.88	110.53
26	U	285	ILE	CA-C-N	5.70	127.74	120.56
26	U	285	ILE	C-N-CA	5.70	127.74	120.56
31	L	117	TYR	N-CA-C	-5.70	100.85	109.85
4	d	78	LEU	N-CA-CB	5.69	118.40	109.69
14	n	121	GLU	O-C-N	-5.69	113.03	121.12
5	E	79	SER	O-C-N	-5.69	116.44	123.44
1	a	20	SER	CA-C-N	5.69	126.07	119.47
1	a	20	SER	C-N-CA	5.69	126.07	119.47
7	G	182	HIS	N-CA-CB	5.69	118.55	110.13
15	W	176	PRO	CA-C-N	5.69	130.81	121.87
15	W	176	PRO	C-N-CA	5.69	130.81	121.87
20	Z	518	LEU	CB-CA-C	-5.69	102.31	109.31
24	Q	165	PHE	CB-CG-CD1	5.69	130.38	120.70
27	O	105	GLN	CA-C-O	-5.69	114.84	120.82
27	O	344	VAL	N-CA-C	-5.69	107.72	113.47
32	M	214	ALA	O-C-N	5.69	127.63	121.60
13	m	199	ALA	O-C-N	5.69	128.15	122.12
9	2	226	GLU	N-CA-C	-5.69	101.21	110.20
13	6	29	ALA	N-CA-CB	5.69	121.16	111.66
21	N	702	ALA	CA-C-N	5.69	127.84	120.44
21	N	702	ALA	C-N-CA	5.69	127.84	120.44
24	Q	143	THR	CA-CB-OG1	5.69	118.14	109.60
27	O	106	PHE	CB-CG-CD1	5.69	130.37	120.70
5	e	174	SER	N-CA-C	-5.69	105.00	111.14
14	n	211	VAL	N-CA-CB	5.69	116.59	110.62
20	Z	879	ALA	N-CA-CB	5.69	118.48	110.12
23	P	435	LYS	CA-C-N	5.69	130.22	120.72
23	P	435	LYS	C-N-CA	5.69	130.22	120.72
26	U	204	LEU	O-C-N	-5.69	116.09	122.12
30	K	205	PRO	CA-C-O	-5.69	112.31	120.56
7	G	109	ILE	CA-C-O	-5.69	112.33	119.95
15	W	143	ASN	N-CA-C	-5.69	100.13	109.40
25	R	31	PHE	CA-CB-CG	-5.69	108.11	113.80
4	d	48	ARG	NE-CZ-NH2	-5.68	114.08	119.20
9	i	182	LYS	CA-C-O	-5.68	114.53	120.55
19	Y	85	LYS	CA-C-N	5.68	130.23	121.19
19	Y	85	LYS	C-N-CA	5.68	130.23	121.19
25	R	208	ASN	CA-C-N	5.68	128.36	120.29
25	R	208	ASN	C-N-CA	5.68	128.36	120.29
27	O	110	ASP	CA-C-N	5.68	127.83	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	O	110	ASP	C-N-CA	5.68	127.83	120.44
9	i	233	LYS	N-CA-C	-5.68	102.11	110.52
2	B	219	PRO	N-CA-C	-5.68	106.73	114.80
10	3	203	ARG	NH1-CZ-NH2	5.68	126.69	119.30
27	O	309	SER	N-CA-CB	5.68	119.09	110.45
28	H	87	ASP	CA-CB-CG	5.68	118.28	112.60
13	m	68	ASP	N-CA-C	-5.68	105.00	111.14
10	3	28	ARG	CD-NE-CZ	-5.68	116.45	124.40
15	W	155	ASP	CA-C-N	5.68	128.21	120.54
15	W	155	ASP	C-N-CA	5.68	128.21	120.54
3	c	221	ASN	CA-C-N	5.68	130.64	122.40
3	c	221	ASN	C-N-CA	5.68	130.64	122.40
14	n	242	LYS	CB-CA-C	-5.68	101.44	110.81
2	B	94	HIS	CE1-NE2-CD2	-5.68	103.32	109.00
21	N	588	VAL	CA-C-N	5.68	128.54	120.53
21	N	588	VAL	C-N-CA	5.68	128.54	120.53
24	Q	387	TYR	CA-C-O	-5.68	114.93	122.03
30	K	175	GLY	N-CA-C	-5.68	99.72	113.18
8	h	135	ILE	N-CA-C	-5.68	100.86	108.35
7	G	136	THR	N-CA-C	-5.68	100.64	109.72
31	L	53	HIS	CA-C-O	5.68	125.62	119.15
10	3	144	ASP	CA-CB-CG	5.68	118.28	112.60
21	N	633	GLY	N-CA-C	5.68	118.46	111.93
28	H	466	TYR	CA-CB-CG	-5.68	103.68	113.90
30	K	289	ASP	CA-CB-CG	-5.68	106.92	112.60
31	L	173	PHE	N-CA-CB	5.68	118.31	109.85
4	d	59	ILE	N-CA-CB	-5.67	105.97	112.21
11	k	109	LYS	N-CA-C	-5.67	106.36	113.28
11	4	164	CYS	N-CA-CB	5.67	118.46	110.12
22	S	216	LYS	O-C-N	-5.67	116.11	122.12
28	H	129	SER	N-CA-CB	5.67	118.45	110.90
29	I	183	ASP	CA-C-N	5.67	129.74	121.80
29	I	183	ASP	C-N-CA	5.67	129.74	121.80
6	f	214	ALA	N-CA-C	-5.67	100.08	108.99
6	F	219	ASP	CA-C-O	5.67	125.87	119.18
8	1	113	ASP	CB-CA-C	-5.67	100.32	110.70
14	7	166	LEU	N-CA-CB	-5.67	101.49	110.28
24	Q	425	GLN	CA-C-N	5.67	128.20	120.54
24	Q	425	GLN	C-N-CA	5.67	128.20	120.54
3	c	15	PRO	CB-CA-C	-5.67	103.80	111.85
28	H	132	GLN	OE1-CD-NE2	-5.67	116.93	122.60
1	a	185	HIS	ND1-CE1-NE2	5.67	114.07	108.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	f	137	TYR	N-CA-C	-5.67	99.05	108.34
13	m	148	GLY	CA-C-N	5.67	128.34	120.63
13	m	148	GLY	C-N-CA	5.67	128.34	120.63
11	4	143	LEU	CB-CA-C	-5.67	100.33	110.70
16	V	233	LYS	CA-C-N	5.67	127.88	120.28
16	V	233	LYS	C-N-CA	5.67	127.88	120.28
29	I	277	SER	O-C-N	5.67	129.71	123.25
33	J	354	SER	O-C-N	5.67	129.85	123.27
3	c	214	ALA	O-C-N	-5.67	117.36	123.42
7	G	131	PRO	N-CA-CB	5.67	108.61	103.34
20	Z	157	LEU	N-CA-C	5.67	118.23	111.71
23	P	214	GLU	N-CA-C	5.67	117.13	111.07
26	U	55	PRO	CA-C-O	-5.67	114.68	121.48
26	U	128	GLN	CA-C-O	5.67	126.72	120.71
5	E	188	HIS	N-CA-C	-5.67	100.87	108.86
15	W	188	SER	N-CA-CB	5.67	118.13	110.14
28	H	55	ASP	CA-CB-CG	5.67	118.27	112.60
29	I	298	GLY	CA-C-N	5.67	128.44	120.28
29	I	298	GLY	C-N-CA	5.67	128.44	120.28
30	K	379	SER	CA-C-N	5.67	130.48	120.74
30	K	379	SER	C-N-CA	5.67	130.48	120.74
4	d	96	HIS	CA-CB-CG	5.66	119.46	113.80
19	Y	7	ALA	N-CA-C	5.66	117.53	111.36
24	Q	118	CYS	O-C-N	5.66	127.90	122.07
27	O	322	ASP	CA-C-O	-5.66	114.87	120.70
4	d	199	LEU	CA-C-O	5.66	126.42	120.42
7	G	43	ASN	OD1-CG-ND2	-5.66	116.94	122.60
7	G	190	ARG	CA-C-N	5.66	128.91	120.31
7	G	190	ARG	C-N-CA	5.66	128.91	120.31
10	3	148	GLY	CA-C-O	-5.66	114.89	121.00
11	4	18	SER	CB-CA-C	-5.66	100.32	109.72
12	5	148	ARG	CB-CA-C	-5.66	99.04	109.46
21	N	715	ILE	N-CA-CB	5.66	118.48	111.41
30	K	155	ASP	N-CA-C	5.66	119.66	111.56
11	k	87	GLU	CB-CA-C	-5.66	101.23	110.85
7	G	234	ASP	N-CA-CB	5.66	118.54	110.16
28	H	203	LYS	N-CA-CB	5.66	120.44	110.37
33	J	354	SER	N-CA-C	-5.66	100.46	109.23
2	B	205	ASN	O-C-N	5.66	129.20	123.26
18	X	72	GLU	CA-C-O	5.66	124.70	118.65
26	U	110	PHE	CA-C-N	5.66	128.91	120.31
26	U	110	PHE	C-N-CA	5.66	128.91	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	f	137	TYR	CA-CB-CG	-5.66	103.72	113.90
5	E	107	ILE	CA-C-O	-5.66	115.14	121.36
7	G	124	THR	CA-CB-OG1	5.66	118.08	109.60
20	Z	46	LYS	N-CA-CB	5.66	118.43	110.12
20	Z	593	HIS	N-CA-CB	5.66	118.63	110.77
26	U	162	GLU	N-CA-C	-5.66	100.11	108.99
27	O	310	PHE	CB-CG-CD2	-5.66	111.09	120.70
4	D	42	VAL	CA-CB-CG2	5.65	120.01	110.40
1	a	185	HIS	CE1-NE2-CD2	-5.65	103.35	109.00
1	a	204	GLU	N-CA-CB	5.65	118.20	110.01
8	h	57	SER	CA-C-N	5.65	127.79	120.44
8	h	57	SER	C-N-CA	5.65	127.79	120.44
20	Z	918	ASP	CA-CB-CG	5.65	118.25	112.60
24	Q	230	LYS	CA-C-N	5.65	130.30	121.76
24	Q	230	LYS	C-N-CA	5.65	130.30	121.76
25	R	393	PRO	N-CA-C	-5.65	106.73	114.98
28	H	408	SER	CA-C-N	5.65	127.85	120.28
28	H	408	SER	C-N-CA	5.65	127.85	120.28
5	e	145	ALA	CA-C-N	-5.65	113.11	120.91
5	e	145	ALA	C-N-CA	-5.65	113.11	120.91
3	C	106	ILE	CA-C-N	5.65	126.90	119.84
3	C	106	ILE	C-N-CA	5.65	126.90	119.84
20	Z	879	ALA	CB-CA-C	-5.65	101.41	110.79
25	R	412	THR	N-CA-C	-5.65	105.12	111.28
29	I	220	ILE	N-CA-C	-5.65	99.41	107.77
3	c	224	GLU	CA-C-N	5.65	128.66	120.98
3	c	224	GLU	C-N-CA	5.65	128.66	120.98
5	e	147	HIS	CE1-NE2-CD2	-5.65	103.35	109.00
9	i	148	THR	O-C-N	-5.65	116.50	123.33
4	D	192	VAL	CB-CA-C	-5.65	104.42	112.22
2	B	193	LEU	CB-CA-C	-5.65	101.25	110.85
21	N	474	SER	CA-C-O	-5.65	114.98	121.19
23	P	86	HIS	CB-CG-CD2	-5.65	123.86	131.20
23	P	152	LYS	CA-C-N	5.65	128.49	120.53
23	P	152	LYS	C-N-CA	5.65	128.49	120.53
23	P	215	SER	CA-C-N	5.65	128.31	120.29
23	P	215	SER	C-N-CA	5.65	128.31	120.29
23	P	266	TYR	N-CA-CB	5.65	118.15	109.91
28	H	240	ILE	CA-CB-CG1	5.65	120.00	110.40
4	D	209	ASN	O-C-N	-5.65	116.13	122.34
2	B	192	ALA	CA-C-N	5.64	128.30	120.29
2	B	192	ALA	C-N-CA	5.64	128.30	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	178	LYS	N-CA-C	5.64	117.43	111.28
20	Z	160	GLU	CA-C-N	5.64	128.19	120.46
20	Z	160	GLU	C-N-CA	5.64	128.19	120.46
21	N	707	ASN	CA-CB-CG	-5.64	106.95	112.60
25	R	334	ARG	NE-CZ-NH2	-5.64	114.12	119.20
26	U	131	GLY	CA-C-N	5.64	128.24	120.39
26	U	131	GLY	C-N-CA	5.64	128.24	120.39
30	K	375	ASN	OD1-CG-ND2	5.64	128.25	122.60
31	L	338	LEU	O-C-N	5.64	128.10	122.12
20	Z	484	LYS	CA-C-N	5.64	127.78	120.56
20	Z	484	LYS	C-N-CA	5.64	127.78	120.56
22	S	256	LYS	O-C-N	5.64	127.96	122.09
23	P	293	LEU	O-C-N	-5.64	116.62	122.94
27	O	143	LEU	CA-C-N	5.64	128.43	120.42
27	O	143	LEU	C-N-CA	5.64	128.43	120.42
29	I	150	HIS	CA-CB-CG	-5.64	108.16	113.80
32	M	49	GLN	N-CA-CB	5.64	118.41	110.12
8	h	67	ILE	CA-C-N	5.64	128.19	120.46
8	h	67	ILE	C-N-CA	5.64	128.19	120.46
13	m	208	ASP	N-CA-CB	5.64	120.02	110.49
28	H	54	ASN	N-CA-CB	5.64	118.51	110.16
29	I	174	ASP	N-CA-C	-5.64	99.22	108.41
20	Z	289	GLY	N-CA-C	-5.64	105.18	114.76
1	a	59	VAL	CA-C-N	5.64	125.16	119.19
1	a	59	VAL	C-N-CA	5.64	125.16	119.19
4	d	93	ALA	CA-C-N	5.64	131.00	121.14
4	d	93	ALA	C-N-CA	5.64	131.00	121.14
14	n	249	ASN	O-C-N	-5.64	115.09	122.59
14	7	49	TYR	N-CA-CB	5.64	121.02	110.87
1	a	112	MET	O-C-N	-5.63	116.28	121.30
6	f	62	LYS	N-CA-C	-5.63	104.99	113.89
12	l	189	TYR	N-CA-C	-5.63	100.52	109.59
5	E	58	LEU	CA-C-N	5.63	129.56	121.50
5	E	58	LEU	C-N-CA	5.63	129.56	121.50
22	S	371	LEU	CA-C-N	5.63	128.29	120.29
22	S	371	LEU	C-N-CA	5.63	128.29	120.29
24	Q	253	ASN	CA-CB-CG	-5.63	106.97	112.60
33	J	186	ILE	N-CA-CB	5.63	117.75	110.99
17	T	180	ILE	CA-C-N	5.63	128.39	120.28
17	T	180	ILE	C-N-CA	5.63	128.39	120.28
21	N	289	ILE	N-CA-C	5.63	116.41	110.72
13	6	181	LYS	CA-C-N	5.63	131.70	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	6	181	LYS	C-N-CA	5.63	131.70	122.07
16	V	138	ALA	N-CA-C	-5.63	99.11	108.34
17	T	86	LYS	O-C-N	-5.63	114.84	121.32
21	N	465	ALA	CA-C-N	5.63	128.29	120.29
21	N	465	ALA	C-N-CA	5.63	128.29	120.29
23	P	437	GLU	N-CA-CB	5.63	118.15	109.98
8	1	155	MET	CA-C-N	5.63	129.25	120.75
8	1	155	MET	C-N-CA	5.63	129.25	120.75
9	2	251	ASP	CA-C-O	-5.63	114.13	121.73
25	R	219	LEU	N-CA-CB	5.63	119.01	110.28
29	I	270	VAL	CA-C-N	5.63	127.82	120.28
29	I	270	VAL	C-N-CA	5.63	127.82	120.28
3	c	113	ARG	NE-CZ-NH2	5.63	124.27	119.20
4	d	241	GLN	CA-C-N	5.63	127.82	120.28
4	d	241	GLN	C-N-CA	5.63	127.82	120.28
7	g	144	ASN	N-CA-CB	5.63	118.63	110.47
10	3	149	MET	CA-C-N	5.63	128.14	120.54
10	3	149	MET	C-N-CA	5.63	128.14	120.54
20	Z	747	ALA	N-CA-CB	5.63	118.39	110.12
25	R	366	ASN	O-C-N	5.63	127.87	122.07
29	I	227	THR	N-CA-C	-5.63	105.62	112.88
2	b	111	VAL	O-C-N	5.63	127.33	121.87
7	G	21	ASN	CA-C-O	-5.63	114.81	120.77
17	T	54	ASP	CA-CB-CG	-5.63	106.97	112.60
21	N	826	GLU	CA-C-N	5.63	127.75	120.44
21	N	826	GLU	C-N-CA	5.63	127.75	120.44
23	P	349	ASN	N-CA-CB	5.62	118.39	110.12
25	R	381	ILE	CA-C-O	5.62	126.32	120.36
27	O	211	GLN	OE1-CD-NE2	5.62	128.22	122.60
3	c	9	ARG	N-CA-CB	5.62	120.00	110.49
1	A	122	ALA	CB-CA-C	-5.62	101.46	110.79
3	C	191	GLU	N-CA-C	5.62	117.49	111.36
6	F	41	ASN	CA-CB-CG	-5.62	106.98	112.60
12	5	93	SER	CB-CA-C	-5.62	100.34	110.35
20	Z	66	ALA	CA-C-N	5.62	128.09	120.38
20	Z	66	ALA	C-N-CA	5.62	128.09	120.38
21	N	521	LEU	N-CA-C	-5.62	105.23	111.36
22	S	217	PHE	N-CA-C	5.62	118.34	111.82
23	P	265	VAL	N-CA-C	-5.62	104.45	110.36
26	U	3	LEU	N-CA-C	-5.62	105.76	113.30
32	M	373	ASP	CB-CA-C	-5.62	101.45	110.79
6	f	8	GLY	N-CA-C	-5.62	99.86	113.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	f	115	LYS	CA-C-O	-5.62	114.46	120.42
17	T	161	TRP	CA-C-N	5.62	128.27	120.29
17	T	161	TRP	C-N-CA	5.62	128.27	120.29
20	Z	151	HIS	CG-CD2-NE2	5.62	112.82	107.20
27	O	9	THR	CA-C-N	5.62	128.16	120.46
27	O	9	THR	C-N-CA	5.62	128.16	120.46
27	O	179	PHE	N-CA-C	5.62	117.49	111.36
30	K	255	ARG	CA-C-N	5.62	127.81	120.28
30	K	255	ARG	C-N-CA	5.62	127.81	120.28
19	Y	25	ASN	N-CA-CB	5.62	118.38	110.12
21	N	230	VAL	CA-C-O	5.62	126.81	120.85
23	P	216	LEU	CA-C-N	5.62	127.81	120.28
23	P	216	LEU	C-N-CA	5.62	127.81	120.28
5	e	22	PHE	N-CA-C	-5.62	104.64	112.45
11	k	99	GLN	OE1-CD-NE2	5.62	128.22	122.60
14	n	171	SER	CA-C-O	-5.62	114.76	121.56
2	B	141	GLU	N-CA-C	5.62	120.13	113.16
11	4	98	TYR	N-CA-CB	5.62	119.93	110.77
16	V	156	PHE	CA-C-N	5.62	131.56	122.29
16	V	156	PHE	C-N-CA	5.62	131.56	122.29
17	T	264	MET	CA-C-N	5.62	127.81	120.28
17	T	264	MET	C-N-CA	5.62	127.81	120.28
20	Z	413	ASP	CA-CB-CG	-5.62	106.98	112.60
24	Q	254	SER	CB-CA-C	-5.62	99.90	110.01
32	M	303	ARG	N-CA-C	5.62	117.40	111.28
13	m	61	SER	CB-CA-C	-5.62	99.82	109.65
13	m	196	PHE	CA-C-N	5.62	128.27	120.29
13	m	196	PHE	C-N-CA	5.62	128.27	120.29
15	W	185	ILE	N-CA-C	-5.62	105.05	110.72
33	J	150	VAL	CB-CA-C	-5.62	104.66	112.02
1	a	16	ILE	CA-C-O	-5.62	113.76	120.78
4	d	24	LEU	CB-CA-C	-5.62	101.47	110.79
8	h	133	TYR	N-CA-C	-5.62	99.98	108.52
16	V	291	ASN	OD1-CG-ND2	5.62	128.22	122.60
18	X	45	PHE	CA-CB-CG	-5.62	108.18	113.80
25	R	121	GLU	CA-C-N	5.62	127.74	120.44
25	R	121	GLU	C-N-CA	5.62	127.74	120.44
27	O	269	LEU	CA-C-N	5.62	128.39	120.42
27	O	269	LEU	C-N-CA	5.62	128.39	120.42
5	e	148	ASP	N-CA-C	-5.61	100.82	109.52
9	i	211	LYS	CA-C-N	5.61	129.07	120.82
9	i	211	LYS	C-N-CA	5.61	129.07	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	i	214	GLU	N-CA-CB	5.61	119.38	110.57
29	I	318	ASP	O-C-N	5.61	129.77	122.86
3	c	39	MET	CB-CA-C	-5.61	101.64	110.79
10	j	61	THR	N-CA-CB	5.61	118.44	110.13
13	6	140	GLU	O-C-N	5.61	129.77	123.48
23	P	86	HIS	CG-CD2-NE2	5.61	112.81	107.20
23	P	390	TYR	CB-CG-CD1	5.61	129.22	120.80
27	O	362	GLN	CA-C-N	5.61	128.15	120.46
27	O	362	GLN	C-N-CA	5.61	128.15	120.46
29	I	334	LEU	CB-CA-C	-5.61	99.13	109.46
5	e	147	HIS	ND1-CE1-NE2	5.61	114.01	108.40
11	k	85	ARG	NE-CZ-NH2	5.61	124.25	119.20
5	E	179	ALA	CB-CA-C	-5.61	102.03	110.90
6	F	104	ALA	CB-CA-C	5.61	119.66	109.62
11	4	194	ASP	N-CA-CB	5.61	119.55	110.41
9	i	208	GLU	N-CA-C	-5.61	100.54	109.23
12	5	275	VAL	CA-CB-CG1	5.61	119.93	110.40
22	S	437	ASN	N-CA-CB	5.61	119.40	110.65
25	R	260	THR	O-C-N	5.61	130.52	122.28
27	O	329	MET	N-CA-C	5.61	117.39	111.28
31	L	191	ARG	N-CA-C	5.61	118.59	111.69
1	a	35	THR	CA-C-N	5.61	131.00	122.37
1	a	35	THR	C-N-CA	5.61	131.00	122.37
1	a	63	LEU	CA-C-N	5.61	128.67	120.71
1	a	63	LEU	C-N-CA	5.61	128.67	120.71
5	e	83	ALA	CB-CA-C	-5.61	98.95	110.38
6	f	80	ASP	CA-C-N	5.61	128.83	120.31
6	f	80	ASP	C-N-CA	5.61	128.83	120.31
9	i	206	VAL	CA-C-O	5.61	126.42	120.48
3	C	198	SER	N-CA-CB	5.61	118.97	110.28
5	E	130	GLU	O-C-N	5.61	130.19	123.13
7	G	106	PRO	CA-C-O	-5.61	115.23	121.23
22	S	137	PHE	N-CA-C	5.61	117.39	111.28
22	S	469	ASN	CA-C-N	5.61	127.79	120.28
22	S	469	ASN	C-N-CA	5.61	127.79	120.28
23	P	133	GLU	CB-CG-CD	-5.61	103.07	112.60
27	O	362	GLN	CA-C-O	-5.61	113.52	119.97
32	M	105	ASN	N-CA-C	-5.61	101.73	110.42
21	N	499	HIS	N-CA-CB	5.60	118.36	110.12
4	d	254	HIS	CG-CD2-NE2	5.60	112.80	107.20
1	A	130	GLN	N-CA-C	-5.60	105.13	112.41
20	Z	400	ILE	CA-C-N	5.60	127.62	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	Z	400	ILE	C-N-CA	5.60	127.62	120.56
20	Z	562	TRP	CE2-CD2-CE3	5.60	124.40	118.80
28	H	232	PRO	CA-C-O	5.60	125.96	118.90
30	K	205	PRO	N-CA-C	-5.60	103.87	110.70
27	O	343	GLN	CA-C-N	5.60	128.36	122.14
27	O	343	GLN	C-N-CA	5.60	128.36	122.14
2	B	124	SER	CA-C-N	5.60	128.69	121.13
2	B	124	SER	C-N-CA	5.60	128.69	121.13
13	6	163	ASN	OD1-CG-ND2	5.60	128.20	122.60
16	V	298	ALA	CA-C-N	5.60	127.33	120.22
16	V	298	ALA	C-N-CA	5.60	127.33	120.22
21	N	729	SER	CB-CA-C	-5.60	102.09	110.88
27	O	272	VAL	O-C-N	-5.60	116.08	121.90
32	M	308	LEU	CA-C-O	-5.60	114.48	120.42
5	e	41	ALA	N-CA-CB	5.60	120.08	110.68
7	g	213	GLU	O-C-N	5.60	129.96	123.30
12	l	84	GLN	CB-CG-CD	-5.60	103.08	112.60
15	W	197	SER	N-CA-CB	5.60	120.01	110.50
21	N	729	SER	O-C-N	5.60	127.84	122.07
22	S	360	PHE	CA-C-N	5.60	127.78	120.28
22	S	360	PHE	C-N-CA	5.60	127.78	120.28
24	Q	421	LYS	O-C-N	5.60	127.84	122.07
30	K	55	GLU	CB-CG-CD	-5.60	103.08	112.60
32	M	291	PHE	CA-CB-CG	-5.60	108.20	113.80
8	h	92	LYS	CB-CA-C	-5.60	102.09	110.88
3	C	184	MET	N-CA-C	-5.60	99.18	108.75
5	E	25	GLU	CA-C-N	5.60	127.78	120.28
5	E	25	GLU	C-N-CA	5.60	127.78	120.28
7	G	54	ILE	N-CA-C	-5.60	98.38	106.88
18	X	45	PHE	CA-C-N	5.60	129.30	121.24
18	X	45	PHE	C-N-CA	5.60	129.30	121.24
32	M	300	GLU	N-CA-C	-5.60	105.49	112.93
3	c	142	ASP	CA-C-O	5.59	126.32	119.05
13	m	69	GLY	CA-C-N	5.59	127.71	120.44
13	m	69	GLY	C-N-CA	5.59	127.71	120.44
1	A	83	VAL	N-CA-CB	5.59	119.13	111.41
3	C	3	SER	CA-C-N	5.59	128.04	120.38
3	C	3	SER	C-N-CA	5.59	128.04	120.38
3	C	204	SER	O-C-N	5.59	129.93	122.43
4	D	104	VAL	N-CA-C	5.59	118.62	109.78
16	V	214	MET	CG-SD-CE	-5.59	88.59	100.90
22	S	208	ILE	N-CA-CB	5.59	118.97	110.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	I	331	ILE	CA-C-N	5.59	131.77	122.54
29	I	331	ILE	C-N-CA	5.59	131.77	122.54
1	a	85	GLY	CA-C-N	5.59	125.59	119.89
1	a	85	GLY	C-N-CA	5.59	125.59	119.89
31	L	371	THR	N-CA-CB	5.59	119.16	110.44
32	M	378	GLU	O-C-N	5.59	127.83	122.07
3	c	117	ASP	CA-CB-CG	-5.59	107.01	112.60
13	m	22	GLY	CA-C-O	-5.59	115.49	120.75
6	F	43	HIS	ND1-CE1-NE2	5.59	113.99	108.40
7	G	74	ILE	N-CA-CB	5.59	119.26	112.10
7	G	248	ASN	CA-CB-CG	-5.59	107.01	112.60
22	S	290	ASN	CB-CA-C	-5.59	102.10	110.88
24	Q	394	ASN	N-CA-C	-5.59	105.81	113.30
29	I	266	GLN	CB-CG-CD	-5.59	103.09	112.60
27	O	235	HIS	CE1-NE2-CD2	-5.59	103.41	109.00
30	K	124	SER	CA-C-O	-5.59	115.56	121.88
30	K	390	ALA	CA-C-N	5.59	127.38	120.34
30	K	390	ALA	C-N-CA	5.59	127.38	120.34
21	N	487	LEU	N-CA-CB	5.59	118.94	110.28
9	i	143	HIS	ND1-CE1-NE2	5.59	113.99	108.40
16	V	212	MET	CA-C-O	-5.59	114.63	120.55
21	N	161	TYR	N-CA-C	-5.59	104.37	110.91
21	N	509	GLN	CA-C-N	5.59	129.04	121.05
21	N	509	GLN	C-N-CA	5.59	129.04	121.05
21	N	585	ARG	CA-C-N	5.59	127.77	120.28
21	N	585	ARG	C-N-CA	5.59	127.77	120.28
29	I	55	CYS	CA-C-O	5.59	126.34	120.42
30	K	298	GLU	O-C-N	-5.59	115.78	122.15
31	L	137	ARG	NE-CZ-NH2	-5.59	114.17	119.20
14	7	174	THR	CA-CB-OG1	5.58	117.98	109.60
16	V	83	VAL	N-CA-CB	5.58	118.90	111.64
20	Z	546	ILE	O-C-N	5.58	127.58	121.83
21	N	73	GLY	N-CA-C	-5.58	107.08	114.95
21	N	160	GLY	CA-C-N	5.58	131.36	122.93
21	N	160	GLY	C-N-CA	5.58	131.36	122.93
25	R	273	SER	CA-C-N	5.58	125.42	119.28
25	R	273	SER	C-N-CA	5.58	125.42	119.28
16	V	190	HIS	ND1-CE1-NE2	5.58	113.98	108.40
21	N	500	ASP	CB-CA-C	-5.58	101.36	110.85
21	N	521	LEU	CA-C-O	-5.58	114.50	120.42
22	S	270	ALA	N-CA-C	5.58	117.37	111.28
24	Q	90	LYS	CA-C-N	5.58	127.76	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	Q	90	LYS	C-N-CA	5.58	127.76	120.28
25	R	267	LYS	CA-C-N	5.58	128.03	120.44
25	R	267	LYS	C-N-CA	5.58	128.03	120.44
29	I	125	MET	CA-C-N	5.58	125.34	119.76
29	I	125	MET	C-N-CA	5.58	125.34	119.76
29	I	181	TYR	N-CA-CB	5.58	118.49	110.06
6	f	108	ALA	CA-C-N	5.58	126.14	120.00
6	f	108	ALA	C-N-CA	5.58	126.14	120.00
13	m	151	ALA	CB-CA-C	-5.58	101.53	110.79
13	6	97	ALA	N-CA-CB	5.58	118.32	110.12
16	V	122	ASP	CA-C-O	-5.58	112.39	119.31
22	S	88	PHE	CA-CB-CG	5.58	119.38	113.80
13	m	194	ASP	N-CA-C	5.58	117.44	111.36
3	C	123	THR	CA-C-N	5.58	128.21	120.29
3	C	123	THR	C-N-CA	5.58	128.21	120.29
7	G	203	ALA	CA-C-O	5.58	126.03	119.28
20	Z	50	GLU	CA-C-N	5.58	128.21	120.29
20	Z	50	GLU	C-N-CA	5.58	128.21	120.29
20	Z	475	GLN	N-CA-C	5.58	117.36	111.28
14	n	215	ARG	CA-C-O	-5.58	114.64	120.55
2	B	9	LEU	N-CA-C	-5.58	106.47	113.72
4	D	222	VAL	N-CA-C	-5.58	100.19	108.45
16	V	238	LEU	CA-C-O	-5.58	114.95	120.70
20	Z	155	ARG	NE-CZ-NH1	5.58	127.08	121.50
21	N	489	MET	CA-C-N	5.58	132.19	121.54
21	N	489	MET	C-N-CA	5.58	132.19	121.54
23	P	357	TYR	N-CA-C	-5.58	102.27	110.52
28	H	241	ASP	CA-C-O	-5.58	115.09	119.66
3	c	76	ALA	N-CA-C	-5.58	100.61	109.59
13	m	84	HIS	O-C-N	5.58	128.75	122.22
14	n	57	ALA	N-CA-C	-5.58	99.95	108.76
20	Z	435	GLN	CA-C-O	5.58	126.33	120.42
21	N	512	ASN	N-CA-C	-5.58	105.28	111.36
24	Q	4	PRO	CB-CA-C	5.58	121.93	113.06
5	e	72	ARG	NE-CZ-NH2	-5.58	114.18	119.20
21	N	431	SER	N-CA-C	-5.58	104.90	112.26
25	R	348	LEU	O-C-N	-5.58	116.89	123.25
32	M	313	ASP	CA-C-N	5.58	127.30	120.22
32	M	313	ASP	C-N-CA	5.58	127.30	120.22
33	J	166	LEU	N-CA-CB	5.58	119.07	110.43
7	G	130	ARG	CD-NE-CZ	-5.57	116.60	124.40
8	1	88	ALA	N-CA-C	5.57	117.36	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	164	ASN	N-CA-CB	5.57	118.42	110.51
20	Z	902	TYR	CA-C-N	5.57	133.01	123.03
20	Z	902	TYR	C-N-CA	5.57	133.01	123.03
21	N	36	TRP	CB-CG-CD1	5.57	135.26	126.90
24	Q	332	ARG	N-CA-C	5.57	117.03	111.07
25	R	419	ALA	CA-C-N	5.57	127.69	120.44
25	R	419	ALA	C-N-CA	5.57	127.69	120.44
26	U	75	ASN	N-CA-CB	5.57	118.09	110.01
30	K	212	TYR	N-CA-C	-5.57	101.50	110.14
20	Z	326	VAL	N-CA-CB	5.57	117.70	110.57
27	O	129	ILE	N-CA-C	5.57	116.35	110.72
33	J	268	VAL	O-C-N	-5.57	116.47	121.87
2	b	168	SER	CA-C-N	5.57	128.09	120.46
2	b	168	SER	C-N-CA	5.57	128.09	120.46
2	b	193	LEU	CA-C-N	5.57	128.78	120.31
2	b	193	LEU	C-N-CA	5.57	128.78	120.31
1	A	40	ILE	N-CA-C	-5.57	100.31	108.11
7	G	64	ASN	OD1-CG-ND2	5.57	128.17	122.60
15	W	27	GLU	CA-C-N	5.57	128.20	120.29
15	W	27	GLU	C-N-CA	5.57	128.20	120.29
21	N	215	MET	N-CA-CB	5.57	118.40	110.16
21	N	365	PHE	N-CA-C	-5.57	105.21	111.28
30	K	228	ASN	CA-C-N	5.57	128.20	120.29
30	K	228	ASN	C-N-CA	5.57	128.20	120.29
27	O	236	HIS	CE1-NE2-CD2	-5.57	103.43	109.00
4	d	225	SER	N-CA-C	-5.57	103.56	110.41
13	m	39	THR	N-CA-CB	5.57	119.23	110.71
9	2	111	MET	N-CA-CB	5.57	118.40	110.16
17	T	135	ASN	CA-CB-CG	-5.57	107.03	112.60
19	Y	34	GLU	CA-C-N	5.57	128.19	120.29
19	Y	34	GLU	C-N-CA	5.57	128.19	120.29
20	Z	326	VAL	N-CA-C	-5.57	105.30	110.53
22	S	272	TYR	N-CA-C	-5.57	105.13	111.14
24	Q	220	LEU	N-CA-C	5.57	117.15	111.14
33	J	253	ILE	N-CA-C	-5.57	99.53	107.77
9	i	213	ALA	N-CA-C	-5.57	100.22	109.46
13	m	20	ILE	CA-CB-CG1	5.57	119.86	110.40
3	C	11	THR	N-CA-CB	5.57	122.27	111.53
3	C	27	GLU	CA-C-O	-5.57	114.62	120.63
21	N	64	ILE	N-CA-CB	5.57	118.11	110.54
22	S	484	ASP	CA-CB-CG	-5.57	107.03	112.60
23	P	336	HIS	CA-CB-CG	-5.57	108.23	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	Q	273	ASN	CA-C-N	5.57	129.80	122.06
24	Q	273	ASN	C-N-CA	5.57	129.80	122.06
25	R	183	ASP	CA-CB-CG	-5.57	107.03	112.60
1	a	226	GLY	N-CA-C	-5.56	101.72	111.46
4	d	133	THR	CA-CB-OG1	5.56	117.95	109.60
7	g	50	VAL	CA-C-N	5.56	129.25	121.24
7	g	50	VAL	C-N-CA	5.56	129.25	121.24
10	3	64	ASN	CA-C-O	5.56	126.66	120.82
27	O	255	LEU	N-CA-CB	5.56	118.08	110.01
4	d	16	HIS	CB-CG-CD2	-5.56	123.97	131.20
1	A	105	ARG	CA-C-N	5.56	128.19	120.29
1	A	105	ARG	C-N-CA	5.56	128.19	120.29
4	d	141	ARG	N-CA-CB	5.56	119.89	110.49
11	4	29	LYS	CB-CA-C	-5.56	99.63	109.70
22	S	353	LYS	CG-CD-CE	5.56	124.09	111.30
3	c	208	TYR	CA-C-O	5.56	126.44	120.55
9	2	147	SER	CA-C-O	-5.56	114.72	121.28
20	Z	198	GLU	CA-C-O	5.56	126.66	120.82
21	N	654	GLN	OE1-CD-NE2	5.56	128.16	122.60
25	R	21	VAL	CA-C-O	-5.56	114.12	118.85
27	O	23	HIS	CE1-NE2-CD2	-5.56	103.44	109.00
3	c	80	LEU	N-CA-C	-5.56	101.48	110.32
7	g	141	VAL	N-CA-CB	5.56	119.38	111.82
10	j	92	SER	CA-C-N	5.56	128.18	120.29
10	j	92	SER	C-N-CA	5.56	128.18	120.29
14	n	82	THR	CA-C-N	5.56	130.42	123.14
14	n	82	THR	C-N-CA	5.56	130.42	123.14
2	B	216	ASP	N-CA-C	-5.56	100.91	109.52
3	C	71	ASP	N-CA-C	5.56	119.57	112.34
7	G	42	CYS	N-CA-C	-5.56	102.23	110.46
25	R	114	ASN	OD1-CG-ND2	-5.56	117.04	122.60
29	I	265	ARG	NE-CZ-NH1	-5.56	115.94	121.50
29	I	294	SER	N-CA-C	-5.56	107.14	114.31
32	M	16	ASP	CA-CB-CG	-5.56	107.04	112.60
1	A	174	LYS	CA-C-O	5.56	126.39	119.78
12	5	257	GLU	CB-CG-CD	-5.56	103.16	112.60
29	I	354	ASP	N-CA-CB	5.56	118.99	110.49
8	h	70	TYR	N-CA-C	-5.55	105.31	111.36
1	A	219	SER	N-CA-CB	5.55	119.04	110.60
6	F	88	LEU	CA-C-O	-5.55	114.99	120.82
24	Q	325	LEU	CA-C-N	5.55	128.75	120.31
24	Q	325	LEU	C-N-CA	5.55	128.75	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	U	182	ALA	CA-C-O	-5.55	114.98	120.70
10	3	120	PHE	N-CA-C	-5.55	98.48	108.48
17	T	105	LEU	CA-C-O	-5.55	114.53	120.42
21	N	127	ASP	CA-C-N	5.55	128.31	120.42
21	N	127	ASP	C-N-CA	5.55	128.31	120.42
21	N	443	LEU	CA-C-N	5.55	127.99	120.44
21	N	443	LEU	C-N-CA	5.55	127.99	120.44
25	R	171	MET	N-CA-CB	5.55	118.77	110.22
6	F	64	ILE	CA-C-O	-5.55	114.62	120.39
6	F	186	PRO	CA-C-N	5.55	127.99	120.38
6	F	186	PRO	C-N-CA	5.55	127.99	120.38
24	Q	165	PHE	CB-CG-CD2	-5.55	111.26	120.70
24	Q	357	VAL	CA-C-N	5.55	128.59	120.71
24	Q	357	VAL	C-N-CA	5.55	128.59	120.71
25	R	245	SER	N-CA-C	5.55	122.62	110.80
9	i	171	TRP	N-CA-CB	5.55	118.51	109.69
9	i	225	ARG	O-C-N	5.55	130.39	123.01
11	k	110	LYS	N-CA-C	-5.55	105.63	112.90
3	C	141	ASP	N-CA-CB	5.55	120.93	111.66
7	G	17	PRO	N-CA-CB	5.55	108.74	103.19
13	6	70	ASP	CA-CB-CG	-5.55	107.05	112.60
24	Q	334	HIS	CG-CD2-NE2	5.55	112.75	107.20
24	Q	352	GLU	CA-C-N	-5.55	114.61	120.94
24	Q	352	GLU	C-N-CA	-5.55	114.61	120.94
26	U	191	THR	N-CA-C	-5.55	105.31	111.36
28	H	246	ILE	CA-C-O	-5.55	114.18	120.67
14	n	116	ALA	N-CA-CB	-5.55	101.11	110.49
14	n	216	VAL	CA-CB-CG1	5.55	119.83	110.40
1	A	169	THR	N-CA-C	-5.55	100.30	108.79
21	N	254	SER	CB-CA-C	-5.55	101.58	110.79
26	U	132	LEU	CB-CA-C	-5.55	100.75	109.52
2	B	234	ARG	CD-NE-CZ	-5.55	116.64	124.40
20	Z	856	HIS	CE1-NE2-CD2	-5.55	103.45	109.00
24	Q	251	THR	N-CA-C	-5.55	103.06	110.55
28	H	120	ASN	OD1-CG-ND2	5.55	128.15	122.60
29	I	254	GLN	CG-CD-OE1	-5.55	109.70	120.80
2	B	84	VAL	CA-CB-CG1	-5.54	100.97	110.40
2	B	133	SER	CB-CA-C	-5.54	99.56	109.71
21	N	768	ILE	CA-CB-CG1	5.54	119.83	110.40
22	S	55	ARG	NE-CZ-NH2	-5.54	114.21	119.20
22	S	199	GLU	N-CA-C	-5.54	101.44	110.20
22	S	297	ILE	CA-C-N	5.54	128.16	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	S	297	ILE	C-N-CA	5.54	128.16	120.29
9	i	176	THR	N-CA-CB	5.54	117.83	110.29
12	l	221	TRP	O-C-N	5.54	127.78	122.07
2	B	11	THR	CA-C-O	-5.54	114.95	121.44
4	D	74	SER	CA-C-O	-5.54	114.97	121.46
20	Z	949	ILE	N-CA-C	5.54	117.98	111.05
25	R	207	ARG	CA-C-N	5.54	127.71	120.28
25	R	207	ARG	C-N-CA	5.54	127.71	120.28
25	R	349	SER	N-CA-C	-5.54	101.83	110.42
6	f	44	ALA	N-CA-CB	5.54	120.18	111.20
29	I	376	ASN	CA-C-N	5.54	127.70	120.28
29	I	376	ASN	C-N-CA	5.54	127.70	120.28
8	h	18	LYS	CA-C-O	-5.54	114.65	120.63
23	P	4	ASP	CA-CB-CG	-5.54	107.06	112.60
7	g	170	GLN	CB-CG-CD	-5.54	103.18	112.60
6	F	38	LEU	O-C-N	-5.54	117.07	123.33
6	F	64	ILE	N-CA-C	-5.54	99.66	107.75
12	5	257	GLU	O-C-N	5.54	127.99	122.12
28	H	333	MET	N-CA-C	5.54	117.32	111.28
14	7	230	LEU	CA-C-O	-5.54	114.38	120.36
20	Z	215	ASN	CA-CB-CG	-5.54	107.06	112.60
26	U	42	ASN	OD1-CG-ND2	-5.54	117.06	122.60
28	H	117	THR	N-CA-C	-5.54	105.14	113.89
33	J	216	ALA	N-CA-CB	5.54	119.71	110.85
1	a	204	GLU	CA-C-N	5.54	127.70	120.28
1	a	204	GLU	C-N-CA	5.54	127.70	120.28
4	D	56	ASP	CA-CB-CG	5.54	118.14	112.60
17	T	28	PRO	N-CA-C	5.54	117.45	110.70
28	H	251	PRO	CA-C-O	-5.54	112.53	120.56
28	H	354	ALA	CA-C-O	-5.54	114.37	120.24
32	M	239	THR	CA-C-N	5.54	130.03	122.34
32	M	239	THR	C-N-CA	5.54	130.03	122.34
13	m	191	LEU	CA-C-O	-5.53	114.68	120.55
15	W	140	ASP	CA-CB-CG	-5.53	107.07	112.60
24	Q	320	GLN	CA-C-O	-5.53	112.96	119.05
28	H	156	VAL	N-CA-C	-5.53	99.91	107.99
33	J	353	CYS	CA-C-N	5.53	131.42	122.29
33	J	353	CYS	C-N-CA	5.53	131.42	122.29
4	d	68	ASP	N-CA-C	-5.53	99.02	110.80
6	F	56	LEU	CA-C-N	5.53	129.10	120.75
6	F	56	LEU	C-N-CA	5.53	129.10	120.75
24	Q	167	LYS	N-CA-C	-5.53	105.14	112.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	R	391	ASN	OD1-CG-ND2	-5.53	117.07	122.60
6	f	107	ARG	CA-C-N	5.53	128.72	120.31
6	f	107	ARG	C-N-CA	5.53	128.72	120.31
13	m	196	PHE	O-C-N	-5.53	115.47	122.27
13	6	185	VAL	CA-C-N	5.53	127.63	120.44
13	6	185	VAL	C-N-CA	5.53	127.63	120.44
18	X	16	GLU	CA-C-O	-5.53	115.53	121.56
18	X	20	ASP	CA-C-N	5.53	131.14	121.52
18	X	20	ASP	C-N-CA	5.53	131.14	121.52
19	Y	46	GLY	N-CA-C	-5.53	100.07	113.18
26	U	79	MET	CA-C-N	5.53	128.72	120.31
26	U	79	MET	C-N-CA	5.53	128.72	120.31
30	K	372	ILE	O-C-N	5.53	127.84	122.25
33	J	47	GLN	N-CA-C	-5.53	105.17	111.14
33	J	106	ASP	CA-C-N	5.53	129.99	122.19
33	J	106	ASP	C-N-CA	5.53	129.99	122.19
20	Z	247	GLN	CA-C-N	5.53	127.96	120.44
20	Z	247	GLN	C-N-CA	5.53	127.96	120.44
31	L	159	LEU	CA-C-O	-5.53	114.21	120.46
4	d	16	HIS	ND1-CE1-NE2	5.53	113.93	108.40
8	h	87	ALA	CA-C-N	5.53	128.14	120.29
8	h	87	ALA	C-N-CA	5.53	128.14	120.29
9	i	145	HIS	ND1-CE1-NE2	5.53	113.93	108.40
16	V	227	MET	CA-C-N	5.53	130.47	121.74
16	V	227	MET	C-N-CA	5.53	130.47	121.74
26	U	188	ILE	CB-CA-C	-5.53	104.83	112.24
26	U	207	VAL	CA-C-N	5.53	128.27	120.42
26	U	207	VAL	C-N-CA	5.53	128.27	120.42
27	O	67	SER	N-CA-CB	5.53	118.24	110.12
32	M	232	ALA	N-CA-C	5.53	117.31	111.28
32	M	404	ARG	CD-NE-CZ	-5.53	116.66	124.40
4	D	167	ASN	CA-CB-CG	-5.53	107.08	112.60
13	6	52	PHE	CA-CB-CG	-5.53	108.27	113.80
26	U	197	LEU	CB-CA-C	-5.53	101.62	110.79
27	O	354	GLN	CB-CG-CD	-5.53	103.20	112.60
8	h	66	ASP	CA-CB-CG	-5.52	107.08	112.60
14	n	107	ASN	CA-C-N	5.52	128.71	120.31
14	n	107	ASN	C-N-CA	5.52	128.71	120.31
3	C	133	VAL	N-CA-C	-5.52	99.86	108.81
7	G	248	ASN	OD1-CG-ND2	-5.52	117.08	122.60
12	5	109	VAL	O-C-N	-5.52	117.21	123.18
29	I	174	ASP	CA-C-N	-5.52	111.03	121.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	I	174	ASP	C-N-CA	-5.52	111.03	121.63
11	k	145	ASP	CB-CA-C	-5.52	100.41	110.63
14	n	103	LEU	N-CA-C	5.52	117.30	111.28
6	F	85	SER	O-C-N	5.52	127.97	122.12
20	Z	89	LEU	O-C-N	-5.52	116.38	122.07
20	Z	744	ALA	CA-C-N	5.52	127.68	120.28
20	Z	744	ALA	C-N-CA	5.52	127.68	120.28
27	O	370	LEU	N-CA-CB	5.52	118.81	110.30
29	I	215	PRO	N-CD-CG	5.52	111.48	103.20
33	J	277	ASN	CA-C-N	5.52	128.70	120.31
33	J	277	ASN	C-N-CA	5.52	128.70	120.31
5	e	180	GLN	CB-CG-CD	-5.52	103.22	112.60
6	f	4	ASN	OD1-CG-ND2	5.52	128.12	122.60
12	5	234	ARG	NE-CZ-NH2	-5.52	114.23	119.20
20	Z	81	SER	CA-C-O	-5.52	115.29	122.14
21	N	454	ALA	N-CA-C	-5.52	106.43	112.72
31	L	201	LEU	O-C-N	-5.52	116.13	122.09
9	i	112	LEU	CA-C-N	5.52	127.99	120.54
9	i	112	LEU	C-N-CA	5.52	127.99	120.54
14	n	208	GLU	CA-C-O	-5.52	114.99	120.90
22	S	356	ASP	CB-CA-C	-5.52	101.00	110.22
2	b	93	ALA	N-CA-CB	5.52	118.33	110.16
4	d	240	LYS	CB-CA-C	-5.52	102.22	110.88
13	m	130	VAL	N-CA-C	-5.52	100.11	108.17
12	5	219	TYR	CB-CA-C	5.52	118.88	109.72
21	N	209	LYS	O-C-N	-5.52	115.86	122.15
21	N	733	LEU	N-CA-CB	5.52	118.33	110.16
23	P	63	VAL	CA-C-N	5.52	127.61	120.44
23	P	63	VAL	C-N-CA	5.52	127.61	120.44
25	R	299	SER	CA-C-N	5.52	129.39	121.50
25	R	299	SER	C-N-CA	5.52	129.39	121.50
27	O	104	ALA	O-C-N	-5.52	116.39	122.07
31	L	272	GLU	N-CA-C	-5.52	106.55	113.72
7	G	127	ASN	CB-CA-C	-5.52	100.88	110.09
21	N	293	LEU	O-C-N	-5.52	115.57	120.48
26	U	280	ASN	OD1-CG-ND2	-5.52	117.08	122.60
28	H	392	HIS	N-CA-CB	5.52	118.60	110.33
29	I	128	TYR	CA-C-N	5.52	131.17	122.34
29	I	128	TYR	C-N-CA	5.52	131.17	122.34
4	d	119	ARG	CA-CB-CG	5.51	125.13	114.10
4	d	244	GLN	O-C-N	5.51	127.97	122.12
14	n	149	VAL	CA-CB-CG2	-5.51	101.03	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	169	LYS	CA-C-O	-5.51	114.58	120.42
21	N	38	GLU	O-C-N	5.51	128.44	122.15
10	j	98	ARG	N-CA-C	-5.51	103.70	110.65
16	V	285	ASP	CA-CB-CG	-5.51	107.09	112.60
2	b	128	ARG	NE-CZ-NH2	5.51	124.16	119.20
12	l	277	GLU	N-CA-CB	-5.51	102.00	110.16
7	G	183	HIS	CE1-NE2-CD2	-5.51	103.49	109.00
10	3	120	PHE	O-C-N	-5.51	116.66	123.44
12	5	208	GLN	CB-CG-CD	-5.51	103.23	112.60
17	T	165	GLN	OE1-CD-NE2	-5.51	117.09	122.60
23	P	341	LEU	N-CA-C	5.51	117.29	111.28
30	K	299	LEU	CA-C-N	5.51	128.12	120.29
30	K	299	LEU	C-N-CA	5.51	128.12	120.29
12	5	277	GLU	CA-C-N	5.51	127.92	120.65
12	5	277	GLU	C-N-CA	5.51	127.92	120.65
16	V	48	GLU	CB-CA-C	5.51	118.84	109.53
20	Z	725	GLU	CB-CG-CD	-5.51	103.23	112.60
20	Z	851	ALA	CA-C-N	5.51	128.22	120.28
20	Z	851	ALA	C-N-CA	5.51	128.22	120.28
22	S	422	MET	CA-C-N	5.51	128.24	120.42
22	S	422	MET	C-N-CA	5.51	128.24	120.42
23	P	15	GLN	OE1-CD-NE2	-5.51	117.09	122.60
28	H	286	GLU	N-CA-C	-5.51	104.91	111.69
4	d	78	LEU	CB-CA-C	-5.51	101.31	109.90
11	k	108	ASP	CA-CB-CG	-5.51	107.09	112.60
11	k	152	MET	N-CA-C	5.51	117.65	110.43
10	3	57	ALA	N-CA-C	5.51	117.36	111.36
11	4	118	GLN	O-C-N	-5.51	116.88	123.27
12	5	284	ASN	N-CA-C	-5.51	105.92	113.30
20	Z	61	SER	N-CA-CB	5.51	118.31	110.16
25	R	106	ASN	CA-C-N	5.51	127.60	120.44
25	R	106	ASN	C-N-CA	5.51	127.60	120.44
25	R	153	THR	CA-C-O	-5.51	114.58	120.42
29	I	200	LEU	CA-C-O	-5.51	113.00	118.34
29	I	352	ASN	CA-C-O	-5.51	114.44	120.17
1	a	67	THR	N-CA-C	-5.50	105.18	111.07
16	V	146	SER	N-CA-CB	5.50	118.01	109.48
19	Y	77	LEU	CA-C-N	5.50	127.93	120.44
19	Y	77	LEU	C-N-CA	5.50	127.93	120.44
20	Z	219	ASP	CA-C-N	5.50	127.66	120.28
20	Z	219	ASP	C-N-CA	5.50	127.66	120.28
21	N	362	TRP	CA-C-N	5.50	127.66	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	362	TRP	C-N-CA	5.50	127.66	120.28
28	H	435	ARG	CD-NE-CZ	-5.50	116.69	124.40
29	I	252	LEU	O-C-N	-5.50	114.39	122.43
32	M	75	LEU	O-C-N	-5.50	114.55	121.21
12	l	194	GLY	N-CA-C	-5.50	106.98	116.01
14	n	185	ASN	CA-C-N	5.50	125.59	119.32
14	n	185	ASN	C-N-CA	5.50	125.59	119.32
16	V	120	SER	O-C-N	5.50	127.95	122.12
21	N	19	SER	CA-C-N	5.50	128.23	120.42
21	N	19	SER	C-N-CA	5.50	128.23	120.42
5	e	74	ILE	CA-C-O	5.50	126.43	120.43
11	k	121	TYR	N-CA-C	-5.50	105.44	111.82
12	l	241	HIS	CB-CG-ND1	5.50	130.95	122.70
1	A	59	VAL	N-CA-CB	5.50	118.91	111.21
5	E	101	LEU	CA-C-O	5.50	126.37	120.70
7	G	87	HIS	ND1-CE1-NE2	5.50	113.90	108.40
15	W	58	ASN	OD1-CG-ND2	5.50	128.10	122.60
20	Z	710	SER	CA-C-O	-5.50	115.04	120.82
20	Z	717	THR	CA-C-N	5.50	127.59	120.44
20	Z	717	THR	C-N-CA	5.50	127.59	120.44
23	P	4	ASP	N-CA-C	-5.50	106.15	112.92
31	L	424	GLU	N-CA-C	5.50	116.96	111.07
5	E	234	GLU	CB-CA-C	-5.50	101.66	110.79
7	G	216	ILE	N-CA-C	-5.50	99.90	108.81
20	Z	946	THR	O-C-N	-5.50	116.78	123.27
21	N	613	HIS	CG-CD2-NE2	5.50	112.70	107.20
24	Q	26	VAL	N-CA-CB	5.50	118.02	110.54
24	Q	189	ARG	NE-CZ-NH1	-5.50	116.00	121.50
12	l	275	VAL	CA-C-O	-5.50	115.02	120.85
13	m	155	MET	CG-SD-CE	-5.50	88.81	100.90
13	6	93	SER	CA-C-O	5.50	128.26	121.94
21	N	251	GLU	N-CA-C	-5.50	105.37	111.36
23	P	165	VAL	N-CA-C	-5.50	107.39	112.83
28	H	362	ASP	CA-C-N	5.50	125.85	119.47
28	H	362	ASP	C-N-CA	5.50	125.85	119.47
33	J	361	VAL	N-CA-C	-5.50	104.07	111.44
21	N	741	TYR	N-CA-C	-5.50	106.74	113.50
24	Q	212	THR	CA-C-N	5.50	128.09	120.29
24	Q	212	THR	C-N-CA	5.50	128.09	120.29
4	d	201	GLU	N-CA-CB	5.49	118.14	110.07
21	N	725	LEU	CA-C-O	-5.49	114.77	121.36
9	i	204	VAL	N-CA-C	-5.49	99.91	108.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	m	9	GLN	OE1-CD-NE2	5.49	128.09	122.60
13	6	29	ALA	CA-C-O	5.49	127.26	121.33
28	H	257	THR	CA-C-N	5.49	127.90	120.38
28	H	257	THR	C-N-CA	5.49	127.90	120.38
4	D	95	SER	CA-C-O	5.49	126.28	119.97
7	G	157	TYR	N-CA-C	-5.49	100.72	109.07
13	6	19	THR	N-CA-C	-5.49	99.36	108.75
19	Y	60	TRP	CE2-CD2-CE3	5.49	124.29	118.80
21	N	36	TRP	O-C-N	5.49	129.61	122.42
23	P	132	VAL	CA-C-O	-5.49	113.92	120.78
25	R	225	LYS	N-CA-C	5.49	117.27	111.28
30	K	64	GLN	CB-CG-CD	-5.49	103.27	112.60
1	a	101	ALA	N-CA-C	5.49	117.26	111.28
13	m	13	TYR	N-CA-CB	5.49	120.93	111.00
1	A	188	LYS	N-CA-C	-5.49	104.70	111.40
5	E	84	ASP	O-C-N	5.49	129.02	122.27
12	5	125	ALA	CA-C-N	5.49	128.18	120.28
12	5	125	ALA	C-N-CA	5.49	128.18	120.28
20	Z	190	THR	O-C-N	5.49	128.41	122.15
21	N	547	LEU	CA-C-O	5.49	126.28	119.97
27	O	192	SER	CA-C-O	-5.49	114.60	120.42
31	L	252	VAL	CA-C-O	-5.49	114.06	120.75
6	f	75	ALA	CA-C-O	5.49	125.84	118.38
3	C	24	TYR	CB-CG-CD2	-5.49	112.57	120.80
9	2	71	TRP	N-CA-CB	5.49	119.12	110.23
19	Y	66	ASP	CA-C-O	5.49	125.71	119.18
1	a	23	GLY	O-C-N	-5.49	115.77	122.30
1	a	87	ILE	CA-C-O	-5.49	112.60	119.95
10	3	188	TYR	CA-C-N	5.49	129.44	122.37
10	3	188	TYR	C-N-CA	5.49	129.44	122.37
21	N	713	VAL	CA-C-O	-5.49	114.92	121.28
23	P	81	LEU	CA-C-N	5.49	127.57	120.44
23	P	81	LEU	C-N-CA	5.49	127.57	120.44
25	R	342	LEU	CA-C-N	5.49	128.18	120.28
25	R	342	LEU	C-N-CA	5.49	128.18	120.28
28	H	303	ALA	N-CA-CB	5.49	119.76	110.49
31	L	187	THR	CA-CB-OG1	5.49	117.83	109.60
13	6	141	ARG	CG-CD-NE	-5.48	99.94	112.00
20	Z	867	PHE	CA-CB-CG	5.48	119.28	113.80
8	h	142	PHE	N-CA-C	-5.48	106.50	114.12
10	j	133	ALA	O-C-N	-5.48	117.50	123.26
14	n	163	VAL	CB-CA-C	5.48	121.05	111.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	176	LEU	O-C-N	-5.48	114.89	122.46
10	3	139	SER	CA-C-O	5.48	127.19	121.38
14	7	216	VAL	N-CA-C	-5.48	105.18	110.72
16	V	214	MET	CA-C-N	5.48	129.26	121.42
16	V	214	MET	C-N-CA	5.48	129.26	121.42
16	V	274	GLN	CA-C-N	5.48	128.11	120.65
16	V	274	GLN	C-N-CA	5.48	128.11	120.65
20	Z	876	VAL	CA-C-O	5.48	126.44	120.57
21	N	472	ASN	CA-CB-CG	-5.48	107.12	112.60
22	S	142	VAL	N-CA-CB	5.48	118.00	110.54
31	L	361	PHE	N-CA-C	-5.48	105.31	111.28
9	2	209	ILE	N-CA-C	-5.48	100.69	108.58
20	Z	532	HIS	CA-CB-CG	5.48	119.28	113.80
24	Q	194	SER	CA-C-N	5.48	127.89	120.44
24	Q	194	SER	C-N-CA	5.48	127.89	120.44
33	J	357	ASP	N-CA-CB	5.48	118.18	110.12
2	b	179	TRP	O-C-N	5.48	129.48	123.01
9	2	102	GLU	CA-C-N	5.48	125.95	120.14
9	2	102	GLU	C-N-CA	5.48	125.95	120.14
28	H	367	ARG	CA-C-N	5.48	125.48	119.89
28	H	367	ARG	C-N-CA	5.48	125.48	119.89
31	L	55	LYS	N-CA-CB	5.48	118.74	110.30
7	g	58	LEU	N-CA-CB	5.48	118.77	110.28
7	g	132	PHE	CA-CB-CG	-5.48	108.32	113.80
2	B	171	ALA	N-CA-C	5.48	116.93	111.07
9	2	46	ASP	N-CA-C	-5.48	102.09	110.14
24	Q	249	LEU	N-CA-CB	5.48	119.20	110.16
25	R	285	ALA	CA-C-N	5.48	128.07	120.29
25	R	285	ALA	C-N-CA	5.48	128.07	120.29
11	k	109	LYS	O-C-N	-5.48	114.63	122.41
21	N	332	VAL	N-CA-C	-5.48	105.51	110.82
29	I	161	GLN	CA-C-N	5.48	127.62	120.28
29	I	161	GLN	C-N-CA	5.48	127.62	120.28
4	d	234	THR	N-CA-CB	5.47	118.17	110.12
6	f	135	ILE	CA-CB-CG1	5.47	119.71	110.40
14	n	54	ILE	N-CA-C	-5.47	100.42	108.85
2	B	113	GLU	CB-CG-CD	-5.47	103.30	112.60
4	D	225	SER	N-CA-CB	5.47	118.77	110.45
28	H	454	TYR	N-CA-CB	5.47	118.41	110.47
32	M	266	ALA	O-C-N	-5.47	115.91	122.15
3	C	216	ILE	CA-C-O	5.47	125.09	120.22
9	2	121	GLY	CA-C-N	5.47	127.55	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	2	121	GLY	C-N-CA	5.47	127.55	120.44
11	4	21	VAL	N-CA-C	-5.47	100.60	108.48
14	7	74	ARG	N-CA-C	-5.47	104.47	113.50
24	Q	37	GLN	O-C-N	5.47	128.39	122.15
29	I	286	ALA	N-CA-C	5.47	118.00	111.71
30	K	415	VAL	N-CA-C	-5.47	97.96	109.34
5	e	100	ASN	CA-CB-CG	5.47	118.07	112.60
2	B	114	VAL	N-CA-C	-5.47	104.89	112.50
27	O	212	GLN	N-CA-CB	5.47	118.26	110.16
11	k	141	PHE	N-CA-CB	5.47	118.76	110.28
2	B	176	GLU	O-C-N	5.47	128.38	122.15
2	B	223	GLY	N-CA-C	-5.47	107.81	114.92
5	E	99	HIS	ND1-CE1-NE2	5.47	113.87	108.40
16	V	112	PRO	CB-CA-C	-5.47	102.53	111.56
27	O	314	SER	CA-C-O	-5.47	114.75	120.55
28	H	427	GLY	CA-C-N	5.47	128.06	120.29
28	H	427	GLY	C-N-CA	5.47	128.06	120.29
31	L	133	ASN	N-CA-C	-5.47	105.82	112.88
20	Z	349	THR	CA-C-N	5.47	129.29	121.42
20	Z	349	THR	C-N-CA	5.47	129.29	121.42
22	S	480	ARG	NE-CZ-NH1	-5.47	116.03	121.50
27	O	47	LYS	CA-CB-CG	5.47	125.03	114.10
28	H	187	LEU	CA-C-N	5.47	126.01	120.38
28	H	187	LEU	C-N-CA	5.47	126.01	120.38
29	I	273	GLU	CB-CG-CD	-5.47	103.31	112.60
33	J	165	GLU	CA-C-N	5.47	126.92	120.09
33	J	165	GLU	C-N-CA	5.47	126.92	120.09
2	B	21	ILE	N-CA-CB	5.46	120.66	110.77
18	X	104	LYS	CA-C-O	-5.46	112.69	120.51
21	N	34	GLN	CB-CG-CD	-5.46	103.31	112.60
21	N	602	VAL	CA-C-O	-5.46	114.20	118.85
23	P	277	GLN	N-CA-C	-5.46	105.22	111.07
25	R	169	ASP	N-CA-C	5.46	117.24	111.28
27	O	117	ASN	O-C-N	5.46	128.38	122.15
30	K	42	ASN	N-CA-C	-5.46	105.41	111.36
31	L	265	GLU	N-CA-CB	5.46	118.15	110.12
14	n	144	TRP	CE3-CZ3-CH2	-5.46	114.00	121.10
11	4	62	ALA	CA-C-N	5.46	127.86	120.65
11	4	62	ALA	C-N-CA	5.46	127.86	120.65
20	Z	792	VAL	N-CA-CB	5.46	117.97	110.54
23	P	67	ALA	N-CA-C	5.46	117.23	111.28
25	R	301	TYR	CA-C-O	5.46	124.97	118.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	197	LEU	CA-C-N	5.46	128.61	120.31
3	C	197	LEU	C-N-CA	5.46	128.61	120.31
13	6	100	ASN	CA-C-O	-5.46	114.63	120.42
16	V	266	LEU	O-C-N	-5.46	115.92	122.15
20	Z	478	VAL	CA-C-N	5.46	127.60	120.28
20	Z	478	VAL	C-N-CA	5.46	127.60	120.28
20	Z	561	ASP	CA-CB-CG	5.46	118.06	112.60
27	O	283	HIS	CB-CG-ND1	5.46	130.89	122.70
30	K	283	ASP	CA-C-N	5.46	130.39	122.36
30	K	283	ASP	C-N-CA	5.46	130.39	122.36
1	a	114	CYS	CA-C-N	5.46	127.91	120.54
1	a	114	CYS	C-N-CA	5.46	127.91	120.54
3	C	143	ARG	N-CA-C	5.46	116.91	111.07
6	F	213	ILE	N-CA-C	-5.46	100.44	108.85
25	R	331	ARG	CA-C-N	5.46	128.04	120.29
25	R	331	ARG	C-N-CA	5.46	128.04	120.29
28	H	229	LEU	CA-C-N	5.46	127.87	120.44
28	H	229	LEU	C-N-CA	5.46	127.87	120.44
33	J	28	GLN	N-CA-C	5.46	118.15	111.82
7	g	123	HIS	CG-CD2-NE2	5.46	112.66	107.20
7	g	203	ALA	CB-CA-C	-5.46	101.93	110.94
13	6	12	PRO	N-CA-C	-5.46	107.01	114.98
15	W	16	SER	N-CA-C	-5.46	106.50	112.72
24	Q	362	ILE	CA-C-N	5.46	127.59	120.28
24	Q	362	ILE	C-N-CA	5.46	127.59	120.28
1	a	172	GLY	CA-C-N	5.46	125.15	119.64
1	a	172	GLY	C-N-CA	5.46	125.15	119.64
7	g	107	ILE	CB-CG1-CD1	5.46	125.26	113.80
1	A	143	PHE	CA-CB-CG	-5.46	108.34	113.80
9	2	218	ASN	O-C-N	-5.46	116.03	122.58
16	V	27	VAL	N-CA-CB	5.46	117.59	111.21
17	T	76	ASP	CA-C-N	5.46	127.53	120.44
17	T	76	ASP	C-N-CA	5.46	127.53	120.44
20	Z	505	VAL	CA-C-O	5.46	127.11	121.05
21	N	607	GLN	N-CA-C	-5.46	105.33	111.28
22	S	488	GLN	CA-C-N	5.46	128.99	120.75
22	S	488	GLN	C-N-CA	5.46	128.99	120.75
24	Q	228	GLU	CA-C-O	-5.46	113.93	120.10
7	g	64	ASN	N-CA-C	-5.46	101.00	109.24
7	G	228	HIS	CB-CG-CD2	-5.46	124.11	131.20
1	a	22	GLU	N-CA-C	-5.45	106.47	113.23
8	1	163	PHE	CA-C-N	5.45	127.93	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	1	163	PHE	C-N-CA	5.45	127.93	120.46
20	Z	52	LEU	CA-C-N	5.45	127.93	120.46
20	Z	52	LEU	C-N-CA	5.45	127.93	120.46
22	S	134	ILE	CA-C-N	5.45	127.59	120.28
22	S	134	ILE	C-N-CA	5.45	127.59	120.28
22	S	380	CYS	N-CA-CB	5.45	118.62	110.22
32	M	175	LYS	N-CA-C	-5.45	102.78	110.31
12	1	148	ARG	CA-C-N	5.45	127.93	120.35
12	1	148	ARG	C-N-CA	5.45	127.93	120.35
15	W	86	HIS	CB-CA-C	-5.45	102.15	111.31
2	b	90	ARG	CD-NE-CZ	5.45	132.03	124.40
2	b	173	THR	N-CA-C	-5.45	105.42	111.36
2	b	188	ALA	CA-C-N	5.45	127.93	120.46
2	b	188	ALA	C-N-CA	5.45	127.93	120.46
8	1	118	GLU	CA-C-N	-5.45	114.84	122.75
8	1	118	GLU	C-N-CA	-5.45	114.84	122.75
17	T	21	ALA	CA-C-N	5.45	127.53	120.44
17	T	21	ALA	C-N-CA	5.45	127.53	120.44
21	N	719	ASN	CA-CB-CG	-5.45	107.15	112.60
26	U	71	ASN	CA-CB-CG	-5.45	107.15	112.60
32	M	135	VAL	N-CA-CB	5.45	117.21	111.00
12	5	248	GLY	N-CA-C	-5.45	100.27	113.18
21	N	794	LYS	CA-C-N	5.45	128.03	120.29
21	N	794	LYS	C-N-CA	5.45	128.03	120.29
21	N	820	GLU	CA-C-N	5.45	127.58	120.28
21	N	820	GLU	C-N-CA	5.45	127.58	120.28
24	Q	76	GLU	CA-C-N	5.45	128.12	120.28
24	Q	76	GLU	C-N-CA	5.45	128.12	120.28
27	O	31	LYS	N-CA-CB	5.45	117.91	110.01
30	K	139	LEU	N-CA-C	-5.45	101.24	109.85
4	d	35	GLY	N-CA-C	-5.45	100.27	113.18
8	1	91	PHE	CA-CB-CG	-5.45	108.35	113.80
9	2	95	HIS	CE1-NE2-CD2	-5.45	103.55	109.00
20	Z	810	ASN	OD1-CG-ND2	5.45	128.05	122.60
27	O	83	LEU	N-CA-CB	5.45	118.13	110.12
12	1	77	THR	N-CA-CB	5.45	119.77	110.57
4	D	118	GLN	CA-C-N	5.45	128.02	120.29
4	D	118	GLN	C-N-CA	5.45	128.02	120.29
16	V	119	SER	CA-C-O	-5.45	115.68	121.94
16	V	268	THR	N-CA-C	-5.45	104.76	111.40
17	T	100	ASP	CA-CB-CG	-5.45	107.16	112.60
27	O	95	SER	CA-C-N	5.45	127.52	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	O	95	SER	C-N-CA	5.45	127.52	120.44
31	L	268	ALA	CA-C-O	-5.45	113.71	119.97
5	E	233	ASN	N-CA-C	-5.44	105.37	112.23
1	A	99	ALA	CA-C-O	-5.44	115.11	120.82
20	Z	748	LEU	O-C-N	5.44	127.67	122.07
23	P	348	HIS	CA-C-N	5.44	127.57	120.28
23	P	348	HIS	C-N-CA	5.44	127.57	120.28
29	I	347	LYS	CA-C-O	-5.44	113.39	120.25
32	M	381	ARG	CA-C-N	5.44	128.02	120.29
32	M	381	ARG	C-N-CA	5.44	128.02	120.29
5	e	44	GLU	N-CA-C	-5.44	106.65	113.72
11	k	138	PHE	CA-CB-CG	5.44	119.24	113.80
11	k	165	VAL	O-C-N	5.44	127.24	121.91
2	B	217	GLU	CB-CA-C	5.44	118.75	109.72
20	Z	120	SER	N-CA-C	5.44	117.29	111.36
23	P	404	LYS	N-CA-C	5.44	117.31	109.48
24	Q	12	ARG	CA-CB-CG	5.44	124.98	114.10
27	O	289	GLN	OE1-CD-NE2	-5.44	117.16	122.60
32	M	412	HIS	CA-C-O	-5.44	113.71	119.97
33	J	144	ASP	CA-CB-CG	-5.44	107.16	112.60
33	J	318	PRO	N-CA-CB	-5.44	97.80	103.08
11	k	167	GLU	CA-C-N	5.44	127.57	120.28
11	k	167	GLU	C-N-CA	5.44	127.57	120.28
12	l	131	GLU	N-CA-CB	5.44	118.68	110.30
13	m	65	PHE	N-CA-C	-5.44	100.31	109.07
21	N	18	ASP	O-C-N	5.44	128.35	122.15
21	N	329	HIS	CA-CB-CG	5.44	119.24	113.80
33	J	141	LYS	CA-C-N	5.44	132.19	122.13
33	J	141	LYS	C-N-CA	5.44	132.19	122.13
3	C	54	SER	N-CA-CB	5.44	119.82	111.56
25	R	45	GLU	N-CA-C	-5.44	105.43	111.36
29	I	140	LEU	CA-C-O	5.44	125.12	119.14
14	n	253	ASP	CA-C-O	5.44	126.07	119.11
20	Z	100	CYS	O-C-N	-5.44	115.86	122.22
24	Q	331	THR	CA-C-O	-5.44	114.79	120.55
24	Q	425	GLN	CB-CG-CD	-5.44	103.36	112.60
32	M	355	ASP	N-CA-C	5.44	118.13	111.82
6	f	10	THR	CA-C-N	-5.43	115.17	122.72
6	f	10	THR	C-N-CA	-5.43	115.17	122.72
2	B	134	LEU	N-CA-C	-5.43	101.31	109.95
10	3	197	LYS	CG-CD-CE	5.43	123.80	111.30
20	Z	363	ASP	N-CA-CB	5.43	118.11	110.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	L	410	ILE	CB-CA-C	-5.43	104.38	110.96
4	D	201	GLU	N-CA-C	-5.43	104.23	111.24
6	F	146	GLU	N-CA-C	-5.43	100.04	108.90
13	6	169	GLU	CA-C-O	-5.43	114.57	120.87
22	S	137	PHE	CA-CB-CG	5.43	119.23	113.80
23	P	248	ASP	N-CA-C	5.43	117.20	111.28
30	K	399	ARG	CA-C-N	5.43	127.50	120.44
30	K	399	ARG	C-N-CA	5.43	127.50	120.44
32	M	140	LEU	N-CA-CB	5.43	117.96	109.97
3	c	86	ILE	N-CA-CB	5.43	117.52	110.57
5	E	182	GLU	CA-C-N	5.43	127.56	120.28
5	E	182	GLU	C-N-CA	5.43	127.56	120.28
13	6	180	LEU	N-CA-C	-5.43	102.84	110.50
16	V	289	GLU	O-C-N	5.43	127.88	122.12
20	Z	635	ALA	N-CA-CB	5.43	118.55	110.40
22	S	267	SER	N-CA-C	-5.43	104.78	111.40
7	g	150	MET	CA-C-O	-5.43	114.84	120.70
5	E	141	ALA	N-CA-C	-5.43	101.03	109.72
12	5	210	PHE	CA-C-N	5.43	127.56	120.28
12	5	210	PHE	C-N-CA	5.43	127.56	120.28
21	N	171	LYS	CA-C-O	-5.43	114.80	120.55
21	N	350	LYS	N-CA-C	5.43	117.28	111.36
21	N	421	ASP	CA-CB-CG	-5.43	107.17	112.60
25	R	140	TYR	CA-CB-CG	-5.43	104.13	113.90
30	K	233	ALA	CA-C-O	5.43	127.72	121.47
9	2	95	HIS	ND1-CE1-NE2	5.43	113.83	108.40
11	4	85	ARG	CA-C-N	5.43	127.55	120.28
11	4	85	ARG	C-N-CA	5.43	127.55	120.28
14	7	47	MET	CA-C-O	-5.43	115.63	121.38
29	I	408	ARG	NH1-CZ-NH2	-5.43	112.24	119.30
31	L	172	SER	CA-C-O	-5.43	114.77	120.63
33	J	147	TYR	CB-CG-CD1	5.43	128.94	120.80
8	h	50	ILE	N-CA-CB	5.43	119.39	112.34
10	j	93	SER	CA-C-O	-5.43	114.67	120.42
1	A	61	ASP	CA-CB-CG	-5.43	107.17	112.60
10	3	181	SER	CA-C-O	-5.43	115.55	121.14
25	R	352	SER	CA-C-N	5.43	128.00	120.29
25	R	352	SER	C-N-CA	5.43	128.00	120.29
28	H	135	ASP	CA-CB-CG	-5.43	107.17	112.60
6	f	110	HIS	N-CA-C	-5.42	105.39	112.23
8	h	89	SER	N-CA-C	5.42	117.19	111.28
5	E	140	VAL	N-CA-C	-5.42	100.66	108.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	3	192	LYS	N-CA-CB	5.42	118.34	110.47
21	N	371	LEU	CA-C-O	-5.42	114.80	120.55
5	E	118	ASP	CA-CB-CG	5.42	118.02	112.60
23	P	200	SER	CA-C-O	5.42	126.30	120.55
32	M	379	LEU	N-CA-CB	5.42	118.09	110.12
3	C	215	THR	CA-C-N	5.42	130.97	122.84
3	C	215	THR	C-N-CA	5.42	130.97	122.84
16	V	191	GLY	CA-C-N	5.42	127.49	120.44
16	V	191	GLY	C-N-CA	5.42	127.49	120.44
20	Z	318	LYS	CA-C-O	5.42	126.51	120.82
28	H	191	ILE	CA-CB-CG1	5.42	119.61	110.40
13	6	65	PHE	CA-CB-CG	-5.42	108.38	113.80
19	Y	53	ALA	N-CA-C	-5.42	104.93	112.03
22	S	20	HIS	ND1-CE1-NE2	5.42	113.82	108.40
5	E	127	ALA	CA-C-O	5.42	126.72	121.14
14	7	59	ASN	O-C-N	-5.42	116.20	123.14
18	X	25	THR	CA-C-N	5.42	125.73	119.93
18	X	25	THR	C-N-CA	5.42	125.73	119.93
22	S	142	VAL	CA-C-O	-5.42	115.31	120.95
31	L	413	ASP	CA-C-N	5.42	128.55	120.31
31	L	413	ASP	C-N-CA	5.42	128.55	120.31
1	a	200	GLU	N-CA-C	-5.42	105.46	111.36
13	m	67	ALA	CA-C-N	5.42	127.81	120.44
13	m	67	ALA	C-N-CA	5.42	127.81	120.44
11	4	2	ASP	O-C-N	-5.42	115.45	121.84
16	V	278	LYS	CA-C-N	5.42	128.54	120.31
16	V	278	LYS	C-N-CA	5.42	128.54	120.31
22	S	138	MET	CA-C-O	-5.42	114.81	120.55
27	O	186	ASN	CA-C-N	5.42	127.98	120.29
27	O	186	ASN	C-N-CA	5.42	127.98	120.29
29	I	242	ALA	CA-C-O	-5.42	115.04	121.16
20	Z	813	PHE	CA-C-N	5.42	127.81	120.44
20	Z	813	PHE	C-N-CA	5.42	127.81	120.44
4	d	96	HIS	ND1-CE1-NE2	5.41	113.81	108.40
13	m	218	ASP	CA-C-O	5.41	125.68	119.35
20	Z	269	TYR	CA-C-O	-5.41	115.11	120.90
21	N	157	ALA	N-CA-CB	5.41	118.67	110.28
22	S	225	HIS	CB-CG-ND1	5.41	130.82	122.70
22	S	406	ASP	N-CA-C	-5.41	105.29	111.14
30	K	271	ILE	CB-CA-C	5.41	118.72	111.19
6	f	124	GLY	N-CA-C	-5.41	108.25	114.69
25	R	187	VAL	N-CA-C	-5.41	105.25	110.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	a	244	ARG	NE-CZ-NH2	-5.41	114.33	119.20
19	Y	87	GLU	CA-C-O	5.41	126.28	120.55
20	Z	470	ALA	CA-C-N	5.41	128.94	120.82
20	Z	470	ALA	C-N-CA	5.41	128.94	120.82
21	N	371	LEU	N-CA-CB	5.41	118.07	110.12
24	Q	257	LYS	CA-C-O	-5.41	112.94	119.27
27	O	103	LYS	CA-C-N	5.41	127.47	120.44
27	O	103	LYS	C-N-CA	5.41	127.47	120.44
33	J	82	LYS	N-CA-CB	5.41	119.63	110.49
33	J	90	PRO	N-CA-C	-5.41	101.33	112.47
6	f	105	VAL	N-CA-CB	5.41	118.69	110.58
9	i	41	VAL	N-CA-C	-5.41	100.69	108.42
17	T	99	SER	N-CA-C	-5.41	100.51	108.79
21	N	143	LYS	CA-C-O	5.41	126.28	120.55
22	S	221	ALA	CA-C-N	5.41	127.97	120.29
22	S	221	ALA	C-N-CA	5.41	127.97	120.29
24	Q	168	LEU	N-CA-C	-5.41	99.02	109.24
29	I	271	ALA	N-CA-CB	5.41	118.07	110.12
33	J	204	HIS	ND1-CG-CD2	5.41	111.51	106.10
2	b	118	MET	CA-C-N	5.41	127.53	120.28
2	b	118	MET	C-N-CA	5.41	127.53	120.28
5	E	25	GLU	CB-CG-CD	-5.41	103.41	112.60
26	U	112	LYS	CA-C-O	5.41	126.50	120.82
33	J	202	VAL	CA-C-O	-5.41	115.05	121.05
8	h	165	LYS	CB-CA-C	-5.41	102.39	110.88
20	Z	837	TYR	CA-C-N	5.41	127.47	120.44
20	Z	837	TYR	C-N-CA	5.41	127.47	120.44
31	L	172	SER	O-C-N	5.41	127.85	122.12
32	M	367	LYS	CA-C-O	-5.41	113.41	119.79
13	6	97	ALA	CB-CA-C	-5.40	101.82	110.79
1	a	187	LYS	CA-C-N	5.40	127.79	120.44
1	a	187	LYS	C-N-CA	5.40	127.79	120.44
6	f	6	TYR	N-CA-C	-5.40	106.69	113.28
6	f	149	PRO	N-CA-C	-5.40	106.67	114.18
12	l	272	PHE	N-CA-C	5.40	117.61	111.02
26	U	262	GLN	O-C-N	-5.40	116.39	122.12
29	I	320	GLY	CA-C-O	5.40	129.97	120.57
13	6	104	LEU	CA-C-O	-5.40	115.15	120.82
22	S	242	LEU	CA-C-O	-5.40	114.00	120.10
30	K	202	GLY	O-C-N	5.40	128.73	122.30
33	J	8	SER	N-CA-CB	5.40	120.68	111.66
4	d	168	SER	CA-C-O	5.40	126.14	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	g	30	ALA	CA-C-O	5.40	126.18	119.97
9	2	143	HIS	CG-CD2-NE2	5.40	112.60	107.20
10	3	67	PHE	CA-CB-CG	-5.40	108.40	113.80
22	S	248	ASP	CB-CA-C	-5.40	101.83	110.79
29	I	226	GLY	O-C-N	-5.40	115.66	122.41
7	g	51	GLU	CB-CG-CD	-5.40	103.43	112.60
14	n	64	GLY	O-C-N	-5.40	115.68	122.70
12	5	225	VAL	CA-CB-CG2	-5.40	101.22	110.40
14	7	42	THR	O-C-N	5.40	129.40	123.25
28	H	302	LYS	N-CA-CB	5.40	119.24	110.17
9	2	196	LEU	N-CA-C	-5.40	107.06	113.97
20	Z	541	ASP	CA-C-N	5.40	131.68	121.97
20	Z	541	ASP	C-N-CA	5.40	131.68	121.97
22	S	81	LEU	CA-C-N	5.40	129.38	122.64
22	S	81	LEU	C-N-CA	5.40	129.38	122.64
28	H	423	CYS	N-CA-CB	5.40	117.83	110.01
2	b	79	GLY	CA-C-N	5.39	125.04	119.05
2	b	79	GLY	C-N-CA	5.39	125.04	119.05
9	i	177	LYS	CA-C-O	5.39	126.48	120.82
14	n	101	LYS	CB-CG-CD	-5.39	98.89	111.30
6	F	185	ASN	CA-C-N	5.39	125.06	119.56
6	F	185	ASN	C-N-CA	5.39	125.06	119.56
12	5	95	ALA	N-CA-C	-5.39	98.58	108.02
13	6	198	SER	N-CA-C	-5.39	105.31	111.14
29	I	275	ALA	O-C-N	-5.39	115.75	121.30
30	K	154	SER	O-C-N	5.39	128.94	122.79
2	b	180	ASN	N-CA-C	-5.39	101.16	109.52
9	i	122	HIS	CB-CG-CD2	-5.39	124.19	131.20
9	i	246	ILE	N-CA-C	-5.39	100.71	108.48
4	D	211	GLU	N-CA-C	-5.39	100.98	109.50
5	E	62	ASP	N-CA-C	-5.39	106.71	113.72
11	4	75	LEU	N-CA-C	-5.39	102.06	110.42
11	4	166	GLN	O-C-N	5.39	128.30	122.15
17	T	249	MET	CG-SD-CE	-5.39	89.04	100.90
28	H	191	ILE	CA-C-N	5.39	126.83	120.09
28	H	191	ILE	C-N-CA	5.39	126.83	120.09
31	L	181	ASP	N-CA-C	-5.39	106.75	113.38
32	M	83	VAL	CB-CA-C	-5.39	105.07	111.97
8	h	108	VAL	O-C-N	-5.39	116.79	123.10
6	F	233	TYR	CA-C-O	-5.39	114.02	120.65
13	6	11	ASN	CA-CB-CG	-5.39	107.21	112.60
29	I	163	ASP	O-C-N	5.39	129.49	122.86

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	12	ASN	O-C-N	5.39	127.40	121.85
7	G	139	GLY	CA-C-O	-5.39	115.72	121.38
7	G	226	GLY	CA-C-N	5.39	131.46	122.73
7	G	226	GLY	C-N-CA	5.39	131.46	122.73
15	W	128	LEU	CA-C-N	5.39	127.50	120.28
15	W	128	LEU	C-N-CA	5.39	127.50	120.28
17	T	267	ALA	CB-CA-C	-5.39	101.84	110.79
21	N	391	PRO	CA-C-O	-5.39	115.39	121.43
23	P	131	PHE	CA-C-N	5.39	131.67	121.97
23	P	131	PHE	C-N-CA	5.39	131.67	121.97
27	O	216	ASP	N-CA-CB	5.39	118.14	110.16
33	J	369	ALA	N-CA-C	-5.39	105.49	111.36
30	K	54	LEU	CD1-CG-CD2	-5.39	98.94	110.80
5	e	8	TYR	CA-CB-CG	-5.39	104.21	113.90
5	e	228	PHE	CA-CB-CG	5.39	119.19	113.80
21	N	427	ILE	N-CA-CB	5.39	117.86	110.54
22	S	23	LYS	N-CA-C	5.39	116.83	111.07
23	P	285	GLN	N-CA-C	5.39	117.15	111.28
27	O	23	HIS	CA-CB-CG	5.39	119.19	113.80
33	J	375	ILE	CA-C-O	5.39	124.07	119.38
4	d	189	GLU	CB-CA-C	-5.38	101.85	110.79
12	l	263	HIS	CA-CB-CG	-5.38	108.42	113.80
5	E	159	GLU	O-C-N	5.38	126.05	121.20
13	6	154	ILE	CA-C-O	-5.38	114.48	120.46
13	6	221	ARG	NE-CZ-NH2	5.38	124.05	119.20
20	Z	319	THR	CA-CB-CG2	-5.38	101.34	110.50
22	S	143	GLN	OE1-CD-NE2	5.38	127.98	122.60
26	U	161	ILE	CA-C-N	5.38	131.38	121.85
26	U	161	ILE	C-N-CA	5.38	131.38	121.85
1	a	193	HIS	CA-C-N	5.38	127.71	120.50
1	a	193	HIS	C-N-CA	5.38	127.71	120.50
7	G	4	ILE	N-CA-CB	5.38	120.65	111.50
23	P	88	GLN	O-C-N	-5.38	115.43	122.59
23	P	182	GLU	O-C-N	5.38	127.83	122.12
1	a	110	TYR	CD1-CG-CD2	5.38	126.17	118.10
1	a	221	ASN	CA-CB-CG	-5.38	107.22	112.60
12	l	105	THR	CA-CB-OG1	5.38	117.67	109.60
1	A	234	PHE	CA-CB-CG	-5.38	108.42	113.80
16	V	289	GLU	CA-C-O	-5.38	114.85	120.55
21	N	21	LYS	CB-CA-C	-5.38	100.34	110.67
21	N	176	GLN	CA-C-N	5.38	127.93	120.29
21	N	176	GLN	C-N-CA	5.38	127.93	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	P	341	LEU	CA-C-N	5.38	127.49	120.28
23	P	341	LEU	C-N-CA	5.38	127.49	120.28
26	U	229	LEU	CA-C-O	5.38	126.12	120.42
6	f	204	GLU	N-CA-C	-5.38	107.08	113.97
9	i	84	VAL	CA-CB-CG2	-5.38	101.25	110.40
14	n	109	TYR	CB-CG-CD1	5.38	128.87	120.80
8	l	158	GLU	CA-C-O	-5.38	113.78	119.97
27	O	147	ARG	N-CA-CB	5.38	117.81	110.01
4	d	48	ARG	N-CA-C	-5.38	99.64	108.41
5	e	78	MET	CA-C-N	5.38	131.40	121.94
5	e	78	MET	C-N-CA	5.38	131.40	121.94
10	j	18	LYS	CA-C-O	5.38	126.33	120.58
11	k	3	ILE	CA-C-O	-5.38	116.20	121.58
14	7	223	ARG	CA-C-O	-5.38	114.05	120.55
20	Z	562	TRP	N-CA-CB	5.38	117.81	110.01
29	I	320	GLY	O-C-N	-5.38	115.71	122.70
7	g	43	ASN	CA-CB-CG	5.38	117.97	112.60
9	2	68	PRO	N-CD-CG	5.38	111.26	103.20
16	V	152	VAL	CA-C-N	5.38	130.69	122.25
16	V	152	VAL	C-N-CA	5.38	130.69	122.25
30	K	126	LEU	N-CA-CB	5.38	119.71	110.68
9	2	190	ALA	CA-C-O	5.37	125.56	119.27
32	M	198	VAL	N-CA-C	5.37	116.15	110.72
32	M	300	GLU	CA-C-N	5.37	127.53	120.60
32	M	300	GLU	C-N-CA	5.37	127.53	120.60
20	Z	257	PRO	CA-C-O	-5.37	112.77	120.56
20	Z	560	THR	CA-C-N	5.37	127.42	120.44
20	Z	560	THR	C-N-CA	5.37	127.42	120.44
23	P	348	HIS	CA-CB-CG	5.37	119.17	113.80
3	c	169	THR	CA-C-N	5.37	127.42	120.44
3	c	169	THR	C-N-CA	5.37	127.42	120.44
6	F	93	ASN	CA-C-N	5.37	128.01	120.28
6	F	93	ASN	C-N-CA	5.37	128.01	120.28
23	P	289	ASN	O-C-N	5.37	128.88	122.27
14	7	235	LYS	O-C-N	5.37	130.03	122.41
21	N	177	ASP	CA-CB-CG	5.37	117.97	112.60
21	N	204	SER	CA-C-N	5.37	127.47	120.28
21	N	204	SER	C-N-CA	5.37	127.47	120.28
21	N	215	MET	N-CA-C	-5.37	105.51	111.36
21	N	318	LYS	N-CA-C	5.37	116.81	111.07
21	N	339	MET	CG-SD-CE	-5.37	89.09	100.90
21	N	418	ASP	O-C-N	5.37	127.60	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	M	234	ALA	CA-C-N	5.37	128.01	120.28
32	M	234	ALA	C-N-CA	5.37	128.01	120.28
2	B	89	SER	CA-C-N	5.37	127.47	120.28
2	B	89	SER	C-N-CA	5.37	127.47	120.28
27	O	392	TRP	N-CA-C	-5.37	100.77	108.60
1	a	112	MET	CA-C-N	5.37	125.12	119.76
1	a	112	MET	C-N-CA	5.37	125.12	119.76
2	b	99	ARG	CA-C-O	5.37	126.64	120.90
8	h	138	SER	CA-C-N	5.37	131.92	121.41
8	h	138	SER	C-N-CA	5.37	131.92	121.41
6	F	69	HIS	CE1-NE2-CD2	-5.37	103.63	109.00
11	4	71	GLU	CA-C-N	5.37	129.98	122.36
11	4	71	GLU	C-N-CA	5.37	129.98	122.36
24	Q	15	VAL	O-C-N	5.37	127.17	121.91
26	U	46	ILE	CA-C-O	-5.37	114.20	121.02
32	M	348	GLU	CB-CG-CD	-5.37	103.48	112.60
8	h	158	GLU	CA-C-N	5.36	127.73	120.44
8	h	158	GLU	C-N-CA	5.36	127.73	120.44
3	C	97	ASN	N-CA-C	5.36	116.81	111.07
19	Y	18	LYS	CG-CD-CE	5.36	123.64	111.30
20	Z	85	VAL	CA-C-O	-5.36	112.76	119.95
20	Z	257	PRO	CA-C-N	5.36	125.90	120.38
20	Z	257	PRO	C-N-CA	5.36	125.90	120.38
33	J	136	LEU	CB-CA-C	-5.36	101.73	110.85
1	a	87	ILE	O-C-N	-5.36	114.99	121.10
6	f	156	LEU	CA-C-N	5.36	128.46	120.31
6	f	156	LEU	C-N-CA	5.36	128.46	120.31
8	h	98	ASN	CA-CB-CG	-5.36	107.24	112.60
9	2	178	GLU	N-CA-C	-5.36	105.88	112.90
13	6	223	GLU	N-CA-C	-5.36	98.91	108.13
16	V	266	LEU	CA-C-O	5.36	126.10	120.42
17	T	182	LYS	CB-CA-C	-5.36	102.43	110.90
18	X	23	LEU	CA-C-N	5.36	129.98	121.99
18	X	23	LEU	C-N-CA	5.36	129.98	121.99
20	Z	520	ILE	N-CA-CB	5.36	120.08	111.23
22	S	164	ILE	CA-C-N	5.36	125.18	119.28
22	S	164	ILE	C-N-CA	5.36	125.18	119.28
30	K	173	ASP	CA-CB-CG	-5.36	107.24	112.60
8	h	194	ARG	NE-CZ-NH2	-5.36	114.38	119.20
20	Z	557	GLU	N-CA-C	-5.36	104.45	112.54
6	f	224	ILE	N-CA-CB	5.36	118.80	111.41
8	h	91	PHE	CA-C-O	-5.36	115.19	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	i	234	PHE	CA-CB-CG	-5.36	108.44	113.80
8	l	129	HIS	CA-CB-CG	5.36	119.16	113.80
16	V	133	ASN	OD1-CG-ND2	-5.36	117.24	122.60
23	P	227	ILE	CA-C-O	5.36	126.84	121.27
27	O	97	LYS	N-CA-C	5.36	116.80	111.07
4	d	137	GLY	N-CA-C	-5.36	102.78	110.38
10	j	11	ILE	CA-C-O	-5.36	115.67	121.19
7	G	123	HIS	CE1-NE2-CD2	-5.36	103.64	109.00
20	Z	713	LYS	N-CA-CB	5.36	117.78	110.01
21	N	829	LYS	CB-CG-CD	5.36	123.62	111.30
6	f	52	ASN	CA-CB-CG	5.35	117.95	112.60
10	j	145	GLN	CA-C-N	5.35	127.77	120.54
10	j	145	GLN	C-N-CA	5.35	127.77	120.54
1	A	157	THR	N-CA-C	-5.35	102.12	110.42
7	G	147	HIS	ND1-CE1-NE2	5.35	113.75	108.40
25	R	111	LYS	CA-C-N	5.35	127.77	120.54
25	R	111	LYS	C-N-CA	5.35	127.77	120.54
25	R	308	LEU	O-C-N	-5.35	116.44	122.12
32	M	309	LEU	CB-CA-C	-5.35	100.39	110.67
4	d	118	GLN	CA-C-N	5.35	127.89	120.29
4	d	118	GLN	C-N-CA	5.35	127.89	120.29
6	f	116	ALA	CA-C-O	-5.35	114.30	120.24
3	C	50	ARG	CA-C-O	-5.35	115.72	121.56
9	2	85	THR	N-CA-CB	5.35	118.54	110.30
10	3	59	ASP	CA-CB-CG	5.35	117.95	112.60
12	5	273	TRP	O-C-N	5.35	129.50	122.33
15	W	131	THR	N-CA-C	5.35	117.11	111.28
21	N	618	ARG	NE-CZ-NH2	-5.35	114.38	119.20
22	S	74	LEU	CA-C-N	5.35	127.45	120.28
22	S	74	LEU	C-N-CA	5.35	127.45	120.28
24	Q	88	PHE	CA-CB-CG	-5.35	108.45	113.80
28	H	445	LYS	N-CA-CB	5.35	118.09	110.06
33	J	106	ASP	N-CA-C	-5.35	107.12	113.97
3	c	107	PRO	N-CA-CB	5.35	108.00	103.35
16	V	20	ARG	NE-CZ-NH1	-5.35	116.15	121.50
20	Z	118	VAL	N-CA-C	5.35	116.08	110.62
24	Q	14	LEU	N-CA-CB	5.35	118.46	110.22
1	a	110	TYR	CG-CD2-CE2	-5.35	113.18	121.20
3	c	131	PHE	CA-C-O	-5.35	114.60	120.43
6	f	186	PRO	N-CD-CG	5.35	111.22	103.20
8	l	44	THR	CA-CB-CG2	5.35	119.59	110.50
11	4	186	LYS	N-CA-C	-5.35	106.43	113.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	5	77	THR	N-CA-C	-5.35	99.41	110.80
20	Z	121	ILE	N-CA-C	-5.35	105.50	110.53
23	P	283	LYS	CG-CD-CE	5.35	123.60	111.30
31	L	173	PHE	CB-CA-C	-5.35	101.33	109.89
31	L	298	ASP	CA-CB-CG	5.35	117.95	112.60
32	M	251	LEU	CB-CA-C	-5.35	102.48	110.88
4	d	251	LYS	CA-C-N	5.35	127.44	120.28
4	d	251	LYS	C-N-CA	5.35	127.44	120.28
12	l	275	VAL	O-C-N	5.35	127.34	121.83
21	N	394	ARG	NE-CZ-NH1	-5.35	116.15	121.50
33	J	286	LYS	CA-C-N	5.35	130.16	121.98
33	J	286	LYS	C-N-CA	5.35	130.16	121.98
10	3	114	SER	CA-C-O	5.35	126.10	119.79
24	Q	97	LEU	O-C-N	5.35	127.79	122.12
7	g	244	GLN	CA-C-O	-5.34	114.89	120.55
5	E	146	GLY	CA-C-O	-5.34	116.30	121.75
22	S	274	PHE	N-CA-C	-5.34	105.53	111.36
24	Q	371	GLN	CA-C-N	5.34	127.88	120.29
24	Q	371	GLN	C-N-CA	5.34	127.88	120.29
1	a	214	LEU	N-CA-C	-5.34	106.60	113.23
16	V	188	LEU	CA-C-O	-5.34	115.18	120.90
19	Y	82	ASP	CA-C-N	5.34	127.70	120.38
19	Y	82	ASP	C-N-CA	5.34	127.70	120.38
20	Z	489	ALA	CB-CA-C	-5.34	101.77	110.85
20	Z	958	ASN	N-CA-C	-5.34	101.06	109.50
27	O	277	ILE	N-CA-CB	-5.34	106.71	112.37
29	I	373	GLU	CA-C-O	5.34	126.16	119.59
8	h	131	LEU	CA-C-N	5.34	127.35	120.89
8	h	131	LEU	C-N-CA	5.34	127.35	120.89
5	E	191	LEU	CA-C-N	5.34	129.33	120.94
5	E	191	LEU	C-N-CA	5.34	129.33	120.94
7	G	206	ASP	N-CA-CB	5.34	118.49	110.53
15	W	21	PHE	CA-CB-CG	-5.34	108.46	113.80
20	Z	277	GLU	CA-C-N	5.34	130.49	121.14
20	Z	277	GLU	C-N-CA	5.34	130.49	121.14
20	Z	558	LEU	O-C-N	5.34	129.17	122.23
20	Z	969	GLU	CA-C-O	-5.34	114.78	120.92
21	N	820	GLU	O-C-N	5.34	129.49	122.33
22	S	155	LEU	N-CA-CB	5.34	117.75	110.01
23	P	438	ILE	N-CA-C	5.34	116.07	110.62
27	O	102	LEU	CA-C-N	5.34	127.38	120.44
27	O	102	LEU	C-N-CA	5.34	127.38	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	M	316	SER	CA-C-N	5.34	128.81	120.75
32	M	316	SER	C-N-CA	5.34	128.81	120.75
7	g	84	ASP	CA-C-N	5.34	127.00	120.22
7	g	84	ASP	C-N-CA	5.34	127.00	120.22
8	h	158	GLU	O-C-N	5.34	127.78	122.12
10	j	119	PRO	N-CD-CG	5.34	111.21	103.20
3	C	216	ILE	N-CA-CB	5.34	119.28	112.34
9	2	170	HIS	CG-CD2-NE2	5.34	112.54	107.20
22	S	164	ILE	O-C-N	-5.34	115.01	121.10
28	H	57	LYS	N-CA-CB	5.34	117.97	110.12
28	H	103	THR	N-CA-C	-5.34	107.42	114.04
33	J	203	ALA	O-C-N	-5.34	116.46	122.12
21	N	361	ASN	CA-C-N	5.34	129.63	120.72
21	N	361	ASN	C-N-CA	5.34	129.63	120.72
9	2	36	LYS	CA-C-O	-5.34	114.61	120.69
16	V	102	GLN	N-CA-C	-5.34	100.81	108.60
16	V	232	GLU	N-CA-C	-5.34	106.27	112.89
16	V	243	SER	CA-C-N	5.34	129.14	120.60
16	V	243	SER	C-N-CA	5.34	129.14	120.60
20	Z	945	ILE	CA-C-N	5.34	130.52	123.05
20	Z	945	ILE	C-N-CA	5.34	130.52	123.05
21	N	165	ILE	CB-CA-C	-5.34	104.86	112.22
22	S	66	GLN	N-CA-CB	-5.34	102.27	110.01
4	D	91	VAL	CA-C-N	5.33	127.96	120.28
4	D	91	VAL	C-N-CA	5.33	127.96	120.28
21	N	623	PHE	N-CA-C	5.33	117.17	111.36
24	Q	338	LEU	CA-C-N	5.33	127.74	120.54
24	Q	338	LEU	C-N-CA	5.33	127.74	120.54
26	U	60	GLU	N-CA-C	-5.33	105.42	112.94
29	I	100	ARG	NE-CZ-NH2	-5.33	114.40	119.20
12	l	213	GLY	O-C-N	5.33	129.63	122.70
19	Y	30	GLU	N-CA-C	-5.33	106.62	113.02
25	R	116	LYS	CA-C-O	-5.33	115.19	120.90
30	K	220	THR	CA-C-N	5.33	128.42	120.31
30	K	220	THR	C-N-CA	5.33	128.42	120.31
32	M	120	LYS	O-C-N	5.33	129.56	123.27
32	M	171	GLU	O-C-N	-5.33	116.93	122.96
33	J	313	LYS	O-C-N	5.33	130.16	123.12
10	j	54	THR	N-CA-CB	5.33	118.72	109.18
6	F	148	GLN	N-CA-C	-5.33	103.46	110.39
8	1	137	GLY	N-CA-C	-5.33	105.22	112.52
16	V	302	SER	CB-CA-C	-5.33	102.48	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Y	66	ASP	CA-C-N	5.33	127.28	120.56
19	Y	66	ASP	C-N-CA	5.33	127.28	120.56
22	S	132	ALA	CA-C-N	5.33	127.42	120.28
22	S	132	ALA	C-N-CA	5.33	127.42	120.28
23	P	112	LEU	N-CA-CB	5.33	117.96	110.12
23	P	309	MET	O-C-N	-5.33	117.51	123.48
3	c	228	LYS	N-CA-C	-5.33	99.72	108.41
6	f	186	PRO	N-CA-C	-5.33	106.59	113.57
25	R	410	LEU	CA-C-N	5.33	127.42	120.28
25	R	410	LEU	C-N-CA	5.33	127.42	120.28
33	J	315	GLU	CB-CG-CD	-5.33	103.54	112.60
13	m	84	HIS	CE1-NE2-CD2	-5.33	103.67	109.00
12	5	275	VAL	CA-C-N	5.33	127.37	120.44
12	5	275	VAL	C-N-CA	5.33	127.37	120.44
20	Z	837	TYR	CA-CB-CG	-5.33	104.31	113.90
21	N	573	HIS	CB-CA-C	-5.33	101.95	110.79
27	O	300	VAL	CA-C-O	-5.33	115.14	121.05
31	L	124	GLY	O-C-N	5.33	127.10	121.77
32	M	235	CYS	N-CA-C	-5.33	105.58	111.71
11	k	96	ARG	NE-CZ-NH1	5.33	126.83	121.50
12	5	263	HIS	CA-CB-CG	-5.33	108.47	113.80
17	T	35	ILE	CA-C-N	5.33	127.85	120.29
17	T	35	ILE	C-N-CA	5.33	127.85	120.29
25	R	378	ASN	CB-CG-OD1	5.33	131.45	120.80
27	O	169	ASN	CA-C-O	-5.33	115.22	120.70
27	O	276	LYS	O-C-N	5.33	127.56	122.07
30	K	339	GLU	CB-CA-C	-5.33	100.53	109.48
32	M	74	GLN	N-CA-CB	5.33	117.84	110.17
32	M	382	SER	O-C-N	5.33	128.22	122.15
3	C	124	GLN	N-CA-C	5.32	117.16	111.36
20	Z	93	ARG	CA-C-O	-5.32	112.87	120.16
23	P	117	SER	N-CA-C	5.32	117.83	111.71
33	J	255	SER	N-CA-CB	5.32	117.73	110.01
13	m	225	TYR	O-C-N	-5.32	117.18	123.41
14	n	93	MET	CA-C-N	5.32	127.94	120.28
14	n	93	MET	C-N-CA	5.32	127.94	120.28
9	2	178	GLU	CA-C-N	5.32	127.67	120.65
9	2	178	GLU	C-N-CA	5.32	127.67	120.65
31	L	265	GLU	CA-C-N	5.32	127.41	120.28
31	L	265	GLU	C-N-CA	5.32	127.41	120.28
33	J	309	ARG	N-CA-C	-5.32	99.47	110.80
2	b	53	SER	CA-C-N	5.32	125.40	119.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	b	53	SER	C-N-CA	5.32	125.40	119.87
4	d	102	ASP	CA-C-N	5.32	125.30	120.03
4	d	102	ASP	C-N-CA	5.32	125.30	120.03
20	Z	118	VAL	CA-C-N	5.32	127.41	120.28
20	Z	118	VAL	C-N-CA	5.32	127.41	120.28
21	N	292	GLY	CA-C-N	5.32	127.39	120.26
21	N	292	GLY	C-N-CA	5.32	127.39	120.26
31	L	233	LYS	O-C-N	-5.32	116.59	122.07
33	J	218	LEU	N-CA-CB	-5.32	102.35	110.07
21	N	446	ALA	N-CA-CB	5.32	118.03	110.16
21	N	709	GLY	CA-C-N	5.32	128.81	121.26
21	N	709	GLY	C-N-CA	5.32	128.81	121.26
24	Q	252	HIS	CG-CD2-NE2	5.32	112.52	107.20
28	H	408	SER	O-C-N	5.32	128.21	122.15
5	e	124	GLY	O-C-N	5.32	127.95	123.43
12	5	254	HIS	CE1-NE2-CD2	-5.32	103.68	109.00
23	P	72	TRP	CE2-CD2-CE3	5.32	124.12	118.80
29	I	94	LYS	CA-C-N	5.32	127.35	120.44
29	I	94	LYS	C-N-CA	5.32	127.35	120.44
29	I	306	MET	CG-SD-CE	-5.32	89.20	100.90
5	E	99	HIS	CA-C-O	-5.32	113.86	119.97
9	2	57	ASP	CA-CB-CG	5.32	117.92	112.60
11	4	106	GLY	O-C-N	5.32	129.08	123.45
12	5	214	VAL	N-CA-C	5.32	115.52	110.42
21	N	497	ALA	CA-C-N	5.32	127.97	120.42
21	N	497	ALA	C-N-CA	5.32	127.97	120.42
21	N	642	ASP	CA-C-N	5.32	126.02	120.12
21	N	642	ASP	C-N-CA	5.32	126.02	120.12
27	O	74	ASN	CA-C-N	5.32	127.93	120.28
27	O	74	ASN	C-N-CA	5.32	127.93	120.28
30	K	200	GLN	CA-C-N	5.32	129.02	120.30
30	K	200	GLN	C-N-CA	5.32	129.02	120.30
31	L	207	PHE	CA-CB-CG	-5.32	108.48	113.80
9	i	192	ILE	N-CA-C	5.31	116.09	110.72
7	G	70	VAL	CB-CA-C	-5.31	103.25	110.42
15	W	140	ASP	N-CA-C	-5.31	100.52	109.07
18	X	67	ILE	N-CA-C	-5.31	100.81	108.89
24	Q	142	ALA	CA-C-N	5.31	127.40	120.28
24	Q	142	ALA	C-N-CA	5.31	127.40	120.28
30	K	142	HIS	CB-CG-CD2	-5.31	124.29	131.20
2	b	213	ILE	CA-CB-CG2	-5.31	101.47	110.50
12	l	100	TRP	CA-C-N	5.31	129.55	122.01

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	l	100	TRP	C-N-CA	5.31	129.55	122.01
27	O	255	LEU	O-C-N	-5.31	116.60	122.07
32	M	21	GLU	CA-C-O	-5.31	112.72	119.31
33	J	157	ILE	CA-C-O	5.31	126.25	120.57
33	J	204	HIS	CE1-NE2-CD2	-5.31	103.69	109.00
5	e	163	THR	N-CA-C	-5.31	101.11	109.50
6	f	175	THR	O-C-N	-5.31	115.54	122.39
16	V	228	TYR	CB-CA-C	-5.31	101.84	112.99
33	J	198	LEU	O-C-N	-5.31	116.01	122.22
10	j	123	GLY	CA-C-O	-5.31	116.64	121.47
14	7	105	THR	CA-C-N	5.31	127.83	120.29
14	7	105	THR	C-N-CA	5.31	127.83	120.29
21	N	801	THR	CA-CB-CG2	-5.31	101.47	110.50
22	S	323	LEU	CB-CA-C	-5.31	101.98	110.79
32	M	143	ASN	N-CA-CB	5.31	119.46	110.49
21	N	53	ASP	N-CA-CB	5.31	118.62	110.61
25	R	91	TRP	N-CA-C	-5.31	106.03	112.88
30	K	131	LEU	N-CA-C	-5.31	106.80	113.28
20	Z	144	SER	N-CA-C	-5.31	100.67	108.79
22	S	225	HIS	CE1-NE2-CD2	-5.31	103.69	109.00
26	U	239	LEU	CA-C-N	5.31	128.79	121.26
26	U	239	LEU	C-N-CA	5.31	128.79	121.26
33	J	337	LEU	N-CA-C	-5.31	101.38	108.86
5	e	226	ASP	N-CA-C	-5.30	105.78	113.21
7	g	26	TYR	CB-CA-C	-5.30	100.82	110.63
8	h	16	THR	CA-C-O	5.30	126.69	120.80
19	Y	44	ALA	CA-C-O	-5.30	114.97	121.28
20	Z	408	TYR	O-C-N	-5.30	115.32	122.43
21	N	183	VAL	CA-CB-CG1	5.30	119.42	110.40
21	N	264	SER	CA-C-O	-5.30	114.80	120.42
22	S	348	LEU	N-CA-CB	5.30	117.70	110.01
23	P	230	HIS	ND1-CE1-NE2	5.30	113.70	108.40
25	R	241	ILE	CA-C-O	-5.30	115.47	121.09
28	H	64	LYS	CB-CA-C	-5.30	100.48	110.67
29	I	262	ARG	CB-CA-C	-5.30	101.83	110.85
31	L	410	ILE	CA-C-N	5.30	128.72	120.60
31	L	410	ILE	C-N-CA	5.30	128.72	120.60
12	l	162	VAL	O-C-N	-5.30	116.73	121.87
7	G	5	GLY	N-CA-C	-5.30	104.78	111.72
16	V	93	ASP	CA-C-N	5.30	127.82	120.29
16	V	93	ASP	C-N-CA	5.30	127.82	120.29
20	Z	621	LEU	CA-C-O	5.30	126.17	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	K	211	LEU	CB-CA-C	-5.30	102.21	110.74
1	a	43	LEU	N-CA-C	-5.30	98.94	108.48
3	c	183	ASP	CA-C-N	5.30	129.26	120.94
3	c	183	ASP	C-N-CA	5.30	129.26	120.94
4	d	217	PRO	O-C-N	5.30	129.32	122.91
2	B	105	PRO	CA-C-N	5.30	126.47	119.84
2	B	105	PRO	C-N-CA	5.30	126.47	119.84
20	Z	550	PHE	CA-C-O	-5.30	115.24	120.70
24	Q	298	ALA	O-C-N	-5.30	116.61	122.07
29	I	413	ALA	O-C-N	-5.30	116.50	122.12
30	K	199	GLU	CA-C-N	5.30	127.69	120.54
30	K	199	GLU	C-N-CA	5.30	127.69	120.54
31	L	253	ASP	N-CA-C	5.30	118.27	110.59
4	d	209	ASN	CA-CB-CG	5.30	117.90	112.60
17	T	219	LYS	CA-C-O	-5.30	114.93	120.55
5	e	158	ALA	CB-CA-C	5.30	118.88	109.72
12	5	186	THR	N-CA-CB	5.30	119.33	110.59
20	Z	600	GLU	N-CA-CB	5.30	117.91	110.12
22	S	248	ASP	N-CA-CB	5.30	117.91	110.12
22	S	476	LEU	N-CA-C	5.30	116.86	111.14
24	Q	11	ALA	CA-C-O	-5.30	115.26	120.82
25	R	184	GLN	CA-C-O	-5.30	113.42	119.41
26	U	122	ILE	N-CA-C	-5.30	98.83	106.88
28	H	144	LYS	N-CA-C	-5.30	102.62	110.46
30	K	351	LEU	CB-CA-C	-5.30	102.00	110.79
32	M	118	VAL	CG1-CB-CG2	5.30	122.45	110.80
32	M	299	ARG	NE-CZ-NH2	-5.30	114.43	119.20
23	P	41	VAL	CA-CB-CG2	-5.29	101.40	110.40
29	I	365	HIS	CE1-NE2-CD2	-5.29	103.70	109.00
12	5	285	VAL	N-CA-CB	5.29	118.13	111.46
16	V	86	VAL	CA-C-O	-5.29	115.44	120.95
17	T	156	SER	CA-C-N	5.29	128.36	120.31
17	T	156	SER	C-N-CA	5.29	128.36	120.31
20	Z	85	VAL	O-C-N	-5.29	115.07	121.10
20	Z	522	THR	CA-C-N	-5.29	114.21	122.73
20	Z	522	THR	C-N-CA	-5.29	114.21	122.73
21	N	461	GLU	CA-C-O	-5.29	114.81	120.42
21	N	891	VAL	O-C-N	-5.29	118.01	121.72
27	O	33	TYR	N-CA-CB	5.29	117.90	110.12
31	L	214	PRO	CB-CA-C	5.29	117.38	110.92
2	b	34	SER	N-CA-C	-5.29	100.68	108.99
2	b	144	GLY	N-CA-C	-5.29	103.01	112.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	b	208	THR	O-C-N	-5.29	116.13	122.27
2	B	210	GLU	CA-C-N	5.29	131.30	122.73
2	B	210	GLU	C-N-CA	5.29	131.30	122.73
9	2	115	HIS	CE1-NE2-CD2	-5.29	103.71	109.00
11	4	138	PHE	CA-C-N	5.29	127.90	120.28
11	4	138	PHE	C-N-CA	5.29	127.90	120.28
15	W	100	HIS	ND1-CE1-NE2	5.29	113.69	108.40
17	T	41	ILE	CA-C-N	5.29	127.14	121.00
17	T	41	ILE	C-N-CA	5.29	127.14	121.00
18	X	54	GLU	CA-C-N	5.29	128.70	120.60
18	X	54	GLU	C-N-CA	5.29	128.70	120.60
21	N	586	ALA	CA-C-N	5.29	128.35	120.31
21	N	586	ALA	C-N-CA	5.29	128.35	120.31
31	L	192	GLU	CA-C-O	5.29	125.89	119.38
32	M	138	ASP	N-CA-C	-5.29	106.67	113.23
25	R	209	ARG	CA-C-N	5.29	127.32	120.44
25	R	209	ARG	C-N-CA	5.29	127.32	120.44
4	d	96	HIS	CG-CD2-NE2	5.29	112.49	107.20
4	d	173	GLU	CA-C-N	5.29	127.37	120.28
4	d	173	GLU	C-N-CA	5.29	127.37	120.28
9	i	115	HIS	CA-C-O	-5.29	114.94	120.55
27	O	118	GLY	N-CA-C	-5.29	100.65	113.18
31	L	367	LYS	CB-CG-CD	5.29	123.46	111.30
33	J	221	LYS	N-CA-C	-5.29	105.14	113.02
4	d	144	GLU	CA-CB-CG	5.29	124.67	114.10
2	B	74	VAL	N-CA-CB	5.29	118.33	111.19
18	X	30	GLN	N-CA-CB	5.29	121.36	111.53
28	H	57	LYS	CA-C-N	5.29	127.80	120.29
28	H	57	LYS	C-N-CA	5.29	127.80	120.29
28	H	76	LEU	N-CA-C	-5.29	99.54	110.80
30	K	137	VAL	CA-C-O	-5.29	116.16	121.45
2	b	54	PRO	N-CA-C	-5.29	107.53	114.03
8	h	200	ASP	CA-CB-CG	-5.29	107.31	112.60
10	j	155	GLU	N-CA-C	-5.29	101.39	109.64
14	n	227	ASN	OD1-CG-ND2	-5.29	117.31	122.60
5	E	239	LEU	N-CA-CB	5.29	117.89	110.12
17	T	105	LEU	CA-C-N	5.29	127.22	120.56
17	T	105	LEU	C-N-CA	5.29	127.22	120.56
17	T	163	LEU	O-C-N	-5.29	116.04	122.22
18	X	71	GLY	CA-C-N	5.29	128.31	120.17
18	X	71	GLY	C-N-CA	5.29	128.31	120.17
19	Y	15	ASP	CA-CB-CG	-5.29	107.31	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	386	MET	CA-C-N	5.29	127.34	120.26
21	N	386	MET	C-N-CA	5.29	127.34	120.26
27	O	136	THR	O-C-N	-5.29	116.52	122.12
29	I	344	ILE	N-CA-CB	5.29	118.86	112.10
30	K	295	ILE	CB-CA-C	-5.29	105.00	112.14
1	a	144	VAL	N-CA-CB	5.28	120.58	111.39
4	d	54	LEU	CB-CA-C	-5.28	104.44	111.63
8	h	154	ASN	N-CA-CB	5.28	119.42	110.49
9	i	87	LEU	N-CA-C	5.28	117.12	111.36
1	A	233	PHE	N-CA-C	-5.28	100.29	108.90
2	B	150	VAL	N-CA-C	-5.28	100.84	108.71
4	D	18	PHE	CB-CG-CD1	-5.28	111.72	120.70
10	3	7	ILE	CA-C-O	-5.28	115.64	121.29
12	5	176	ILE	N-CA-CB	5.28	116.48	110.72
14	7	97	GLU	CA-C-N	5.28	129.62	120.58
14	7	97	GLU	C-N-CA	5.28	129.62	120.58
20	Z	713	LYS	CA-C-N	5.28	127.31	120.44
20	Z	713	LYS	C-N-CA	5.28	127.31	120.44
25	R	92	ILE	CA-C-N	5.28	128.35	120.90
25	R	92	ILE	C-N-CA	5.28	128.35	120.90
26	U	215	ILE	O-C-N	-5.28	116.26	122.07
31	L	366	ALA	O-C-N	5.28	127.72	122.12
32	M	432	PHE	CA-CB-CG	5.28	119.08	113.80
17	T	234	TYR	CB-CG-CD2	5.28	128.72	120.80
18	X	40	GLU	CA-C-O	-5.28	113.09	119.27
20	Z	604	GLY	CA-C-N	5.28	127.36	120.28
20	Z	604	GLY	C-N-CA	5.28	127.36	120.28
25	R	59	MET	N-CA-C	-5.28	106.70	112.72
7	g	131	PRO	CB-CA-C	-5.28	104.47	111.23
17	T	111	LEU	CA-C-N	5.28	127.79	120.29
17	T	111	LEU	C-N-CA	5.28	127.79	120.29
23	P	29	GLN	O-C-N	-5.28	116.13	122.15
23	P	219	GLU	CA-C-N	5.28	127.31	120.44
23	P	219	GLU	C-N-CA	5.28	127.31	120.44
28	H	257	THR	N-CA-CB	5.28	117.88	110.12
31	L	72	ASP	CB-CA-C	-5.28	102.03	110.79
32	M	93	ASP	O-C-N	-5.28	118.01	123.29
33	J	268	VAL	CA-C-N	5.28	127.31	120.44
33	J	268	VAL	C-N-CA	5.28	127.31	120.44
5	E	153	TYR	CA-C-O	-5.28	114.85	120.92
31	L	299	ARG	CA-C-N	5.28	127.35	120.28
31	L	299	ARG	C-N-CA	5.28	127.35	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	b	174	PHE	CA-C-N	5.28	127.88	120.28
2	b	174	PHE	C-N-CA	5.28	127.88	120.28
3	c	31	HIS	CG-CD2-NE2	5.28	112.48	107.20
7	g	238	GLU	N-CA-CB	5.28	118.46	110.28
8	h	51	TRP	CD2-CE2-CZ2	-5.28	117.12	122.40
13	6	113	TYR	N-CA-CB	5.28	118.47	110.45
26	U	34	VAL	N-CA-C	-5.28	100.26	108.86
30	K	403	LEU	N-CA-C	-5.28	102.67	110.48
7	g	160	TYR	N-CA-C	-5.28	100.72	108.79
13	m	22	GLY	N-CA-C	-5.28	102.64	110.71
13	m	144	CYS	N-CA-C	-5.28	100.42	108.76
12	5	168	ALA	N-CA-C	-5.28	106.89	113.38
9	i	180	ALA	N-CA-CB	5.27	117.66	110.01
14	7	173	PRO	CA-C-O	-5.27	111.84	118.86
16	V	111	HIS	CA-CB-CG	-5.27	108.53	113.80
21	N	40	SER	CA-C-N	5.27	127.35	120.28
21	N	40	SER	C-N-CA	5.27	127.35	120.28
21	N	113	ALA	O-C-N	5.27	127.50	122.07
21	N	813	ARG	CA-C-N	5.27	127.88	120.28
21	N	813	ARG	C-N-CA	5.27	127.88	120.28
23	P	21	PHE	CA-C-O	-5.27	113.22	118.34
32	M	38	ASP	N-CA-C	-5.27	105.58	112.23
3	c	237	ASP	N-CA-C	5.27	117.03	111.28
6	f	185	ASN	CA-CB-CG	-5.27	107.33	112.60
6	F	117	GLN	CB-CA-C	-5.27	102.04	110.79
8	1	63	ALA	N-CA-C	5.27	117.03	111.28
15	W	67	ALA	N-CA-C	-5.27	106.24	113.30
21	N	259	PHE	N-CA-CB	5.27	117.96	110.16
29	I	143	PRO	CB-CA-C	5.27	118.34	111.64
2	b	175	LEU	N-CA-CB	5.27	118.34	110.22
2	b	241	GLN	CA-C-N	5.27	127.34	120.28
2	b	241	GLN	C-N-CA	5.27	127.34	120.28
14	7	214	MET	CA-C-N	5.27	127.66	120.54
14	7	214	MET	C-N-CA	5.27	127.66	120.54
18	X	69	ILE	N-CA-CB	5.27	118.41	111.40
23	P	184	MET	CA-C-N	5.27	127.29	120.44
23	P	184	MET	C-N-CA	5.27	127.29	120.44
5	e	98	THR	CA-CB-OG1	5.27	117.50	109.60
1	A	49	ASP	N-CA-C	-5.27	105.13	112.03
9	2	170	HIS	CE1-NE2-CD2	-5.27	103.73	109.00
21	N	134	THR	O-C-N	5.27	127.71	122.12
21	N	244	LYS	N-CA-C	-5.27	105.62	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	L	251	ILE	O-C-N	-5.27	116.93	122.20
2	b	139	HIS	CB-CG-ND1	5.27	130.60	122.70
4	d	5	ASP	N-CA-C	-5.27	105.92	114.09
13	m	99	ARG	CA-C-O	5.27	126.32	120.63
18	X	33	ILE	O-C-N	-5.27	117.49	123.18
25	R	214	TYR	CA-C-N	5.27	125.94	119.99
25	R	214	TYR	C-N-CA	5.27	125.94	119.99
33	J	105	LYS	N-CA-C	-5.27	106.53	113.17
16	V	142	ASP	CA-CB-CG	-5.27	107.33	112.60
20	Z	529	ALA	CA-C-N	5.27	127.77	120.29
20	Z	529	ALA	C-N-CA	5.27	127.77	120.29
23	P	195	GLN	OE1-CD-NE2	5.27	127.87	122.60
26	U	212	ASP	CA-CB-CG	-5.27	107.33	112.60
27	O	159	LYS	CA-C-O	5.27	126.09	120.24
27	O	313	ILE	CA-C-N	5.27	127.34	120.28
27	O	313	ILE	C-N-CA	5.27	127.34	120.28
32	M	105	ASN	CB-CA-C	-5.27	101.11	109.80
7	g	66	LYS	N-CA-C	-5.26	105.52	112.94
13	m	37	ASN	CA-CB-CG	-5.26	107.33	112.60
21	N	438	ASP	CA-C-N	5.26	127.90	120.42
21	N	438	ASP	C-N-CA	5.26	127.90	120.42
22	S	329	GLU	O-C-N	-5.26	115.86	123.07
23	P	235	LEU	N-CA-C	-5.26	105.54	111.28
29	I	263	LEU	O-C-N	-5.26	116.15	122.15
33	J	166	LEU	CA-C-N	5.26	124.96	119.64
33	J	166	LEU	C-N-CA	5.26	124.96	119.64
2	b	216	ASP	N-CA-C	-5.26	101.41	109.41
9	2	188	ILE	CA-C-O	-5.26	115.27	120.85
10	3	187	VAL	O-C-N	-5.26	117.61	123.03
11	4	112	ASN	CA-CB-CG	-5.26	107.34	112.60
23	P	299	LEU	N-CA-C	5.26	117.10	111.36
10	j	104	PHE	CB-CA-C	-5.26	104.23	112.12
12	l	195	THR	N-CA-C	-5.26	103.19	110.35
10	3	70	LYS	CA-C-O	-5.26	115.28	120.70
21	N	245	LEU	N-CA-CB	-5.26	101.82	110.40
21	N	510	HIS	N-CA-CB	5.26	117.64	109.48
25	R	328	PHE	CA-C-N	5.26	127.60	120.44
25	R	328	PHE	C-N-CA	5.26	127.60	120.44
26	U	190	LEU	O-C-N	5.26	127.70	122.12
5	E	188	HIS	CE1-NE2-CD2	-5.26	103.74	109.00
13	6	55	GLY	N-CA-C	-5.26	105.81	112.65
21	N	128	ILE	N-CA-C	-5.26	105.41	110.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	I	58	LYS	CB-CA-C	-5.26	101.91	110.85
10	3	31	SER	CA-C-O	-5.26	114.48	120.32
16	V	195	HIS	CB-CG-CD2	-5.26	124.36	131.20
22	S	130	VAL	N-CA-C	-5.26	106.31	111.88
13	m	204	ILE	CA-C-O	5.26	124.87	119.35
3	C	18	ARG	N-CA-C	5.26	117.06	109.07
4	D	120	TYR	CB-CG-CD2	-5.26	112.92	120.80
27	O	177	GLN	CA-C-N	5.26	127.59	120.44
27	O	177	GLN	C-N-CA	5.26	127.59	120.44
31	L	270	ALA	N-CA-CB	5.26	117.85	110.12
31	L	311	GLN	CG-CD-NE2	-5.26	108.52	116.40
4	d	225	SER	CA-C-N	5.25	127.32	120.28
4	d	225	SER	C-N-CA	5.25	127.32	120.28
9	2	242	LEU	O-C-N	-5.25	116.66	122.07
31	L	54	ASN	N-CA-C	-5.25	105.72	111.82
32	M	387	ASN	CB-CG-OD1	5.25	131.31	120.80
6	f	204	GLU	CA-C-N	5.25	131.58	121.54
6	f	204	GLU	C-N-CA	5.25	131.58	121.54
14	7	70	ASN	CA-CB-CG	5.25	117.85	112.60
17	T	176	SER	N-CA-C	-5.25	106.13	112.54
19	Y	48	THR	N-CA-C	5.25	117.65	110.24
23	P	321	VAL	O-C-N	5.25	125.84	121.85
24	Q	140	LYS	N-CA-C	5.25	117.09	111.36
24	Q	217	GLU	N-CA-CB	5.25	117.94	110.16
25	R	90	GLU	CA-C-O	5.25	125.57	119.32
26	U	63	SER	N-CA-C	-5.25	107.05	112.93
28	H	139	ASP	N-CA-C	-5.25	106.65	114.64
28	H	177	ASP	CA-C-O	5.25	126.96	120.92
30	K	193	VAL	CB-CA-C	-5.25	103.75	112.26
3	c	69	LEU	N-CA-C	-5.25	105.15	112.45
4	d	60	THR	CA-C-N	5.25	125.41	119.90
4	d	60	THR	C-N-CA	5.25	125.41	119.90
5	E	218	GLN	OE1-CD-NE2	-5.25	117.35	122.60
8	1	152	ARG	O-C-N	5.25	129.57	122.59
10	3	66	MET	CA-C-N	5.25	127.32	120.28
10	3	66	MET	C-N-CA	5.25	127.32	120.28
22	S	334	HIS	ND1-CE1-NE2	5.25	113.65	108.40
27	O	23	HIS	CG-CD2-NE2	5.25	112.45	107.20
29	I	334	LEU	N-CA-CB	5.25	118.27	110.29
32	M	22	ILE	N-CA-C	-5.25	105.42	110.72
24	Q	364	LYS	CB-CG-CD	-5.25	99.22	111.30
25	R	286	LEU	CA-C-N	5.25	127.27	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	R	286	LEU	C-N-CA	5.25	127.27	120.44
27	O	71	ASP	N-CA-CB	5.25	121.30	111.43
2	b	160	LYS	N-CA-C	-5.25	107.54	114.31
10	j	177	ARG	CD-NE-CZ	-5.25	117.05	124.40
13	m	73	VAL	CA-CB-CG2	-5.25	101.48	110.40
7	G	197	ALA	CA-C-N	5.25	127.74	120.29
7	G	197	ALA	C-N-CA	5.25	127.74	120.29
8	1	71	HIS	ND1-CE1-NE2	5.25	113.65	108.40
24	Q	176	ASP	N-CA-CB	5.25	117.83	110.12
27	O	135	ARG	CB-CA-C	-5.25	102.08	110.79
28	H	191	ILE	CA-C-O	5.25	123.95	118.96
30	K	186	GLU	CB-CG-CD	-5.25	103.68	112.60
9	i	103	PRO	N-CA-CB	5.25	108.76	103.25
13	m	97	ALA	CA-C-N	5.25	128.08	120.79
13	m	97	ALA	C-N-CA	5.25	128.08	120.79
13	m	189	ILE	N-CA-CB	5.25	117.67	110.54
12	5	130	TRP	CB-CA-C	-5.25	99.47	110.17
28	H	199	THR	N-CA-C	-5.25	105.54	112.94
28	H	405	GLU	O-C-N	5.25	128.13	122.15
2	B	139	HIS	CE1-NE2-CD2	-5.25	103.75	109.00
15	W	121	SER	CB-CA-C	-5.25	100.23	109.62
21	N	616	HIS	CA-C-O	5.25	125.98	120.42
28	H	432	ARG	NE-CZ-NH1	-5.25	116.25	121.50
33	J	238	ARG	CA-C-N	5.25	127.74	120.29
33	J	238	ARG	C-N-CA	5.25	127.74	120.29
6	f	131	GLY	O-C-N	5.24	129.52	122.70
6	f	224	ILE	O-C-N	-5.24	117.60	123.26
7	g	87	HIS	CG-CD2-NE2	5.24	112.44	107.20
8	h	116	LYS	CG-CD-CE	5.24	123.36	111.30
1	A	229	THR	CA-C-O	-5.24	115.07	120.89
2	B	234	ARG	CA-C-N	5.24	128.92	121.42
2	B	234	ARG	C-N-CA	5.24	128.92	121.42
20	Z	599	ILE	N-CA-CB	-5.24	103.41	110.54
21	N	507	GLU	N-CA-C	5.24	117.08	111.36
22	S	156	VAL	O-C-N	-5.24	116.78	121.87
25	R	180	PHE	CA-CB-CG	5.24	119.04	113.80
31	L	353	ASN	CA-CB-CG	-5.24	107.36	112.60
32	M	393	ALA	N-CA-CB	5.24	117.92	110.16
28	H	394	LYS	N-CA-CB	5.24	118.41	110.28
7	G	55	THR	N-CA-C	-5.24	106.89	113.28
7	G	196	ALA	CA-C-N	5.24	127.25	120.44
7	G	196	ALA	C-N-CA	5.24	127.25	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	4	63	ASN	N-CA-C	5.24	116.68	110.97
20	Z	375	ASP	CA-CB-CG	-5.24	107.36	112.60
21	N	330	THR	N-CA-C	-5.24	105.57	111.28
29	I	75	PHE	CB-CG-CD1	-5.24	111.79	120.70
1	A	52	VAL	N-CA-C	-5.24	100.66	108.46
22	S	59	ASP	O-C-N	5.24	127.67	122.12
7	g	82	ILE	CA-C-N	5.24	124.86	119.05
7	g	82	ILE	C-N-CA	5.24	124.86	119.05
11	k	126	VAL	N-CA-CB	5.24	119.87	111.23
24	Q	221	MET	CA-C-O	5.24	126.02	120.10
1	a	15	HIS	N-CA-C	-5.24	106.68	114.64
1	a	115	ASP	N-CA-CB	5.24	117.74	109.94
4	D	152	PRO	CA-C-O	-5.24	111.37	119.64
6	F	76	GLY	O-C-N	5.24	129.51	122.70
8	l	49	LYS	O-C-N	-5.24	115.09	122.26
21	N	353	LEU	O-C-N	-5.24	115.79	120.92
21	N	816	LYS	O-C-N	5.24	128.12	122.15
26	U	58	GLU	CA-CB-CG	5.24	124.57	114.10
26	U	290	ASP	CA-C-N	5.24	127.72	120.29
26	U	290	ASP	C-N-CA	5.24	127.72	120.29
5	e	113	THR	CA-C-N	5.23	127.29	120.28
5	e	113	THR	C-N-CA	5.23	127.29	120.28
7	g	205	GLU	CB-CA-C	-5.23	101.71	110.56
8	h	107	ILE	N-CA-C	-5.23	100.11	107.75
20	Z	244	ARG	CB-CA-C	-5.23	102.66	110.88
26	U	167	GLU	CB-CG-CD	-5.23	103.70	112.60
1	a	114	CYS	O-C-N	5.23	127.67	122.12
1	a	249	ALA	N-CA-C	-5.23	106.74	113.23
3	c	86	ILE	N-CA-C	-5.23	105.61	110.53
5	e	30	ALA	N-CA-C	-5.23	106.75	112.72
6	f	13	PHE	CA-CB-CG	5.23	119.03	113.80
8	h	147	CYS	CA-C-N	5.23	127.72	120.29
8	h	147	CYS	C-N-CA	5.23	127.72	120.29
9	i	154	LEU	N-CA-C	-5.23	101.34	109.24
14	n	64	GLY	CA-C-N	5.23	127.24	120.44
14	n	64	GLY	C-N-CA	5.23	127.24	120.44
16	V	296	LEU	N-CA-CB	5.23	117.60	110.01
24	Q	419	LEU	CA-C-N	5.23	127.72	120.29
24	Q	419	LEU	C-N-CA	5.23	127.72	120.29
25	R	209	ARG	NH1-CZ-NH2	5.23	126.10	119.30
26	U	90	ILE	CA-CB-CG1	5.23	119.30	110.40
30	K	225	ALA	CB-CA-C	-5.23	102.44	110.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	m	226	GLU	N-CA-C	5.23	117.61	110.55
6	F	5	ASN	CA-C-N	5.23	131.53	121.18
6	F	5	ASN	C-N-CA	5.23	131.53	121.18
33	J	373	ARG	CA-C-O	5.23	126.85	120.57
9	i	215	TYR	CB-CG-CD2	-5.23	112.96	120.80
24	Q	136	SER	CA-C-N	5.23	127.81	120.28
24	Q	136	SER	C-N-CA	5.23	127.81	120.28
29	I	185	GLY	N-CA-C	-5.23	100.79	113.18
7	g	171	SER	CA-C-N	5.23	127.28	120.28
7	g	171	SER	C-N-CA	5.23	127.28	120.28
20	Z	522	THR	N-CA-C	-5.23	106.14	112.88
27	O	177	GLN	O-C-N	-5.23	116.58	122.12
28	H	82	TRP	CD2-CE2-CZ2	-5.23	117.17	122.40
33	J	160	ILE	CA-CB-CG1	5.23	119.29	110.40
4	d	44	LEU	CA-C-N	5.23	125.79	122.18
4	d	44	LEU	C-N-CA	5.23	125.79	122.18
8	h	157	LYS	CA-C-O	5.23	126.09	120.55
21	N	837	LYS	CA-C-O	5.23	124.57	119.08
24	Q	17	GLU	O-C-N	5.23	129.54	122.59
28	H	134	THR	N-CA-C	-5.23	106.90	113.28
6	f	219	ASP	CA-CB-CG	-5.22	107.38	112.60
7	g	212	PHE	CA-C-O	-5.22	115.69	121.33
10	j	198	ARG	CA-C-O	5.22	125.78	120.24
17	T	82	PHE	CG-CD2-CE2	5.22	129.58	120.70
21	N	99	GLU	N-CA-C	-5.22	106.49	112.92
21	N	865	PRO	CA-C-O	-5.22	115.64	122.12
23	P	69	ARG	NE-CZ-NH2	-5.22	114.50	119.20
25	R	141	TYR	CB-CA-C	-5.22	101.97	110.85
25	R	398	ALA	N-CA-C	5.22	116.98	111.28
26	U	40	ASP	CA-CB-CG	-5.22	107.38	112.60
28	H	266	ARG	CA-C-N	5.22	127.23	120.44
28	H	266	ARG	C-N-CA	5.22	127.23	120.44
29	I	65	ILE	CB-CA-C	-5.22	105.01	112.22
33	J	21	PRO	O-C-N	5.22	129.41	122.30
3	c	26	LEU	CA-C-N	5.22	127.28	120.28
3	c	26	LEU	C-N-CA	5.22	127.28	120.28
5	e	20	ARG	O-C-N	-5.22	117.83	123.42
5	e	194	LYS	CA-C-N	5.22	130.28	121.14
5	e	194	LYS	C-N-CA	5.22	130.28	121.14
1	A	195	ASN	CA-C-N	5.22	131.51	121.54
1	A	195	ASN	C-N-CA	5.22	131.51	121.54
12	5	237	LEU	O-C-N	5.22	127.52	122.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	T	50	ILE	N-CA-C	-5.22	105.44	110.72
20	Z	344	LYS	CA-C-N	5.22	127.23	120.44
20	Z	344	LYS	C-N-CA	5.22	127.23	120.44
23	P	203	ILE	CB-CA-C	5.22	117.39	110.91
23	P	347	GLU	CA-C-N	5.22	127.71	120.29
23	P	347	GLU	C-N-CA	5.22	127.71	120.29
25	R	154	LEU	N-CA-C	-5.22	106.86	113.18
32	M	330	VAL	CA-C-N	5.22	127.54	120.44
32	M	330	VAL	C-N-CA	5.22	127.54	120.44
7	g	234	ASP	CA-C-N	5.22	127.28	120.28
7	g	234	ASP	C-N-CA	5.22	127.28	120.28
8	h	171	ALA	CA-C-N	5.22	127.14	120.56
8	h	171	ALA	C-N-CA	5.22	127.14	120.56
21	N	203	ARG	CA-C-N	5.22	127.23	120.44
21	N	203	ARG	C-N-CA	5.22	127.23	120.44
3	c	24	TYR	N-CA-C	5.22	117.05	111.36
6	f	186	PRO	CA-C-N	5.22	127.59	120.54
6	f	186	PRO	C-N-CA	5.22	127.59	120.54
13	m	164	PHE	N-CA-CB	5.22	120.60	112.25
8	l	195	LEU	N-CA-C	-5.22	101.43	109.52
16	V	158	LEU	N-CA-C	-5.22	100.39	108.90
19	Y	83	ARG	CA-C-O	-5.22	114.99	120.63
26	U	160	THR	CA-C-N	-5.22	115.40	122.92
26	U	160	THR	C-N-CA	-5.22	115.40	122.92
20	Z	550	PHE	CA-C-N	5.22	127.27	120.28
20	Z	550	PHE	C-N-CA	5.22	127.27	120.28
25	R	202	GLY	CA-C-N	-5.22	115.64	123.00
25	R	202	GLY	C-N-CA	-5.22	115.64	123.00
4	d	147	LEU	O-C-N	-5.22	116.60	123.28
7	g	183	HIS	CA-C-N	5.22	126.36	119.84
7	g	183	HIS	C-N-CA	5.22	126.36	119.84
14	n	40	THR	CA-C-N	5.22	129.16	121.96
14	n	40	THR	C-N-CA	5.22	129.16	121.96
5	E	128	SER	N-CA-C	5.22	117.78	109.02
9	2	120	GLN	OE1-CD-NE2	5.22	127.82	122.60
16	V	215	ASN	OD1-CG-ND2	5.22	127.82	122.60
25	R	271	ILE	CA-CB-CG2	5.22	119.37	110.50
30	K	258	PHE	CA-C-N	5.22	127.27	120.28
30	K	258	PHE	C-N-CA	5.22	127.27	120.28
33	J	244	ILE	N-CA-C	-5.22	98.16	107.18
3	c	83	ASP	CA-CB-CG	-5.21	107.39	112.60
4	D	46	CYS	N-CA-CB	5.21	121.23	111.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	78	VAL	CA-C-N	5.21	131.63	121.41
14	7	78	VAL	C-N-CA	5.21	131.63	121.41
20	Z	444	GLU	CB-CG-CD	-5.21	103.74	112.60
21	N	86	LYS	N-CA-CB	5.21	119.30	110.49
22	S	40	GLU	O-C-N	5.21	127.44	122.07
22	S	139	HIS	CA-C-N	5.21	127.27	120.28
22	S	139	HIS	C-N-CA	5.21	127.27	120.28
24	Q	3	LEU	O-C-N	-5.21	115.84	120.48
30	K	116	MET	CG-SD-CE	-5.21	89.43	100.90
5	E	50	VAL	CA-C-N	5.21	129.34	122.30
5	E	50	VAL	C-N-CA	5.21	129.34	122.30
20	Z	757	SER	N-CA-CB	5.21	118.36	110.28
23	P	226	LYS	CA-C-O	-5.21	115.35	120.82
32	M	429	SER	O-C-N	5.21	128.85	122.75
4	d	249	LYS	CA-C-N	5.21	127.26	120.28
4	d	249	LYS	C-N-CA	5.21	127.26	120.28
7	g	68	GLN	N-CA-C	-5.21	101.38	109.72
6	F	19	LEU	N-CA-C	-5.21	100.54	109.24
6	F	187	ASP	CA-CB-CG	-5.21	107.39	112.60
20	Z	524	ALA	CA-C-N	5.21	128.94	120.60
20	Z	524	ALA	C-N-CA	5.21	128.94	120.60
23	P	358	SER	N-CA-C	-5.21	106.25	113.18
27	O	186	ASN	CA-C-O	-5.21	115.03	120.55
28	H	103	THR	CA-C-N	-5.21	112.78	121.64
28	H	103	THR	C-N-CA	-5.21	112.78	121.64
30	K	311	ASN	CB-CA-C	-5.21	99.95	109.54
2	b	105	PRO	CA-C-N	5.21	126.35	119.84
2	b	105	PRO	C-N-CA	5.21	126.35	119.84
8	h	23	LEU	N-CA-C	-5.21	102.06	110.14
20	Z	566	LEU	CA-C-N	5.21	127.53	120.44
20	Z	566	LEU	C-N-CA	5.21	127.53	120.44
21	N	336	ASN	CB-CA-C	-5.21	102.70	110.88
21	N	592	GLY	CA-C-O	5.21	126.42	121.05
23	P	34	SER	N-CA-C	5.21	117.04	111.36
7	g	14	VAL	CA-C-N	5.21	130.76	122.74
7	g	14	VAL	C-N-CA	5.21	130.76	122.74
12	l	221	TRP	CE2-CD2-CE3	5.21	124.01	118.80
8	1	204	GLN	N-CA-CB	5.21	117.87	110.16
9	2	91	ASN	O-C-N	5.21	128.68	122.27
18	X	39	GLU	CA-C-N	5.21	130.83	121.66
18	X	39	GLU	C-N-CA	5.21	130.83	121.66
29	I	286	ALA	O-C-N	5.21	128.31	122.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	45	VAL	O-C-N	5.21	128.65	123.18
7	G	111	ALA	CA-C-N	5.21	129.53	120.68
7	G	111	ALA	C-N-CA	5.21	129.53	120.68
14	7	226	ARG	NE-CZ-NH2	-5.21	114.52	119.20
14	7	259	LYS	CB-CA-C	-5.21	104.99	113.37
21	N	318	LYS	CA-C-N	5.21	127.26	120.28
21	N	318	LYS	C-N-CA	5.21	127.26	120.28
21	N	527	GLY	N-CA-C	-5.21	108.44	115.36
23	P	237	VAL	N-CA-CB	5.21	116.64	110.55
31	L	339	ARG	NE-CZ-NH1	-5.21	116.30	121.50
3	c	230	PHE	N-CA-CB	5.20	117.62	109.97
2	B	44	VAL	N-CA-C	-5.20	100.99	108.48
20	Z	453	LEU	O-C-N	5.20	127.64	122.12
30	K	254	VAL	O-C-N	5.20	126.92	121.87
9	i	217	ARG	NE-CZ-NH1	5.20	126.70	121.50
6	F	127	PRO	CA-C-N	5.20	129.69	122.77
6	F	127	PRO	C-N-CA	5.20	129.69	122.77
24	Q	226	HIS	CA-C-N	5.20	127.68	120.29
24	Q	226	HIS	C-N-CA	5.20	127.68	120.29
27	O	269	LEU	N-CA-C	5.20	116.76	111.14
28	H	140	ASP	N-CA-C	-5.20	101.79	109.18
4	d	236	ILE	CA-CB-CG2	5.20	119.34	110.50
6	F	119	ASN	CA-CB-CG	-5.20	107.40	112.60
13	6	38	ILE	CA-CB-CG1	5.20	119.24	110.40
16	V	63	VAL	CA-C-O	5.20	126.09	120.53
20	Z	67	SER	O-C-N	-5.20	116.61	122.12
21	N	450	ILE	N-CA-CB	5.20	120.18	110.77
22	S	192	GLU	CA-C-N	5.20	127.20	120.44
22	S	192	GLU	C-N-CA	5.20	127.20	120.44
28	H	99	VAL	N-CA-CB	5.20	116.39	110.72
4	d	14	ASP	N-CA-C	-5.20	106.78	113.23
4	D	166	ARG	NE-CZ-NH2	5.20	123.88	119.20
13	6	111	PHE	CA-C-N	5.20	125.18	120.03
13	6	111	PHE	C-N-CA	5.20	125.18	120.03
16	V	109	HIS	CE1-NE2-CD2	-5.20	103.80	109.00
20	Z	702	LYS	N-CA-CB	5.20	117.55	110.01
29	I	425	LYS	CA-C-O	-5.20	114.91	120.42
11	k	63	ASN	CA-C-O	-5.20	114.91	120.42
18	X	132	SER	N-CA-C	-5.20	104.92	113.50
30	K	310	THR	CA-C-N	5.20	129.10	120.94
30	K	310	THR	C-N-CA	5.20	129.10	120.94
31	L	291	PHE	CB-CA-C	-5.20	110.16	117.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	b	135	LEU	N-CA-CB	5.20	118.90	110.43
12	l	274	LYS	CA-C-N	5.20	127.80	120.42
12	l	274	LYS	C-N-CA	5.20	127.80	120.42
5	E	166	ARG	NE-CZ-NH2	-5.20	114.52	119.20
6	F	176	LEU	N-CA-C	5.20	116.94	111.28
17	T	237	ASN	CA-CB-CG	-5.20	107.40	112.60
21	N	90	ASP	CA-CB-CG	-5.20	107.41	112.60
23	P	211	PRO	CA-C-N	5.20	127.24	120.28
23	P	211	PRO	C-N-CA	5.20	127.24	120.28
24	Q	360	SER	O-C-N	5.20	128.30	122.22
32	M	383	THR	N-CA-CB	5.20	117.71	109.71
33	J	143	PRO	N-CD-CG	5.20	110.99	103.20
9	2	195	ASP	CA-C-N	-5.19	113.59	122.11
9	2	195	ASP	C-N-CA	-5.19	113.59	122.11
13	6	208	ASP	N-CA-CB	5.19	119.27	110.49
26	U	225	ILE	CA-C-N	5.19	127.24	120.28
26	U	225	ILE	C-N-CA	5.19	127.24	120.28
13	m	85	PHE	CA-CB-CG	-5.19	108.61	113.80
18	X	9	LYS	CA-CB-CG	-5.19	103.72	114.10
20	Z	402	ASP	O-C-N	5.19	129.14	122.39
20	Z	528	LEU	N-CA-CB	5.19	117.75	110.12
23	P	375	GLN	CB-CA-C	-5.19	102.17	110.79
28	H	52	THR	CA-C-N	5.19	127.24	120.28
28	H	52	THR	C-N-CA	5.19	127.24	120.28
29	I	197	SER	N-CA-C	5.19	119.67	112.45
31	L	67	HIS	ND1-CE1-NE2	5.19	113.59	108.40
2	b	155	SER	N-CA-C	-5.19	102.10	110.14
3	c	127	GLY	CA-C-N	5.19	130.46	122.93
3	c	127	GLY	C-N-CA	5.19	130.46	122.93
5	e	160	PRO	CB-CA-C	5.19	118.88	111.04
9	i	194	ASN	CA-C-O	5.19	124.52	118.97
1	A	211	ILE	CA-C-O	-5.19	115.35	120.85
12	5	110	ILE	CA-C-O	-5.19	115.60	120.22
18	X	28	PRO	N-CA-C	5.19	119.36	111.11
20	Z	764	LEU	N-CA-C	-5.19	105.70	111.36
21	N	802	ALA	N-CA-CB	5.19	117.75	110.12
29	I	269	LYS	N-CA-C	-5.19	105.70	111.36
7	G	103	TYR	O-C-N	5.19	127.53	122.19
13	6	230	ASP	CA-CB-CG	-5.19	107.41	112.60
20	Z	959	HIS	CE1-NE2-CD2	-5.19	103.81	109.00
21	N	438	ASP	N-CA-C	5.19	116.94	111.28
22	S	196	ARG	N-CA-CB	5.19	119.13	110.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	U	175	LEU	CB-CA-C	-5.19	101.38	109.84
27	O	203	THR	N-CA-CB	5.19	118.38	110.44
1	a	188	LYS	N-CA-C	-5.19	105.54	111.14
13	m	212	ILE	N-CA-CB	5.19	118.44	111.90
2	B	100	ILE	CB-CA-C	-5.19	105.83	110.91
7	G	98	SER	N-CA-CB	5.19	117.84	110.16
8	1	49	LYS	CA-C-O	5.19	125.80	119.78
20	Z	741	LEU	N-CA-C	-5.19	105.70	111.36
22	S	369	GLN	CA-C-N	5.19	127.50	120.44
22	S	369	GLN	C-N-CA	5.19	127.50	120.44
26	U	152	LYS	N-CA-C	-5.19	100.72	109.07
26	U	289	ASP	CA-C-N	5.19	127.23	120.28
26	U	289	ASP	C-N-CA	5.19	127.23	120.28
8	1	78	GLN	CB-CA-C	-5.19	100.76	109.27
30	K	68	ILE	N-CA-C	-5.19	105.97	113.07
1	A	22	GLU	CA-C-N	5.18	128.62	121.26
1	A	22	GLU	C-N-CA	5.18	128.62	121.26
4	D	212	ILE	CB-CG1-CD1	5.18	124.69	113.80
14	7	175	LEU	N-CA-C	5.18	117.13	108.99
20	Z	760	HIS	CE1-NE2-CD2	-5.18	103.82	109.00
25	R	318	PRO	CA-N-CD	-5.18	104.74	112.00
27	O	320	PRO	CA-C-O	-5.18	115.58	121.96
33	J	135	SER	CA-C-N	5.18	127.65	120.29
33	J	135	SER	C-N-CA	5.18	127.65	120.29
33	J	200	ARG	O-C-N	5.18	127.61	122.12
11	k	88	LEU	N-CA-C	-5.18	105.81	111.82
14	n	144	TRP	CB-CG-CD2	-5.18	119.55	126.80
5	E	114	GLN	CG-CD-NE2	-5.18	108.63	116.40
9	2	91	ASN	CB-CA-C	-5.18	100.72	110.67
10	3	134	LYS	CA-C-N	5.18	127.86	121.64
10	3	134	LYS	C-N-CA	5.18	127.86	121.64
15	W	106	GLN	CB-CG-CD	-5.18	103.79	112.60
20	Z	910	PRO	CA-C-O	-5.18	111.17	120.60
23	P	10	ASP	CA-C-N	5.18	127.22	120.28
23	P	10	ASP	C-N-CA	5.18	127.22	120.28
32	M	73	ARG	NE-CZ-NH1	-5.18	116.32	121.50
10	j	27	LEU	N-CA-C	-5.18	105.30	113.02
6	F	224	ILE	N-CA-C	-5.18	100.92	108.17
7	G	56	SER	N-CA-C	-5.18	101.03	108.60
7	G	192	ALA	CA-C-N	5.18	127.56	120.46
7	G	192	ALA	C-N-CA	5.18	127.56	120.46
14	7	89	ASP	O-C-N	5.18	129.10	123.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	a	79	ILE	CA-C-N	5.18	128.06	122.16
1	a	79	ILE	C-N-CA	5.18	128.06	122.16
4	d	221	ILE	N-CA-C	-5.18	100.92	108.17
3	C	28	SER	CA-C-O	5.18	125.73	119.31
15	W	25	ARG	CA-C-N	5.18	127.64	120.29
15	W	25	ARG	C-N-CA	5.18	127.64	120.29
21	N	50	TYR	CA-C-N	5.18	127.64	120.29
21	N	50	TYR	C-N-CA	5.18	127.64	120.29
21	N	671	LEU	O-C-N	-5.18	115.86	122.34
21	N	364	LYS	CA-C-N	5.18	127.22	120.28
21	N	364	LYS	C-N-CA	5.18	127.22	120.28
23	P	129	LYS	O-C-N	5.18	127.95	121.84
27	O	44	SER	CA-C-O	-5.18	114.02	119.97
31	L	354	GLU	N-CA-CB	5.18	118.19	110.22
2	b	238	LEU	N-CA-CB	5.18	118.87	110.43
2	b	245	ASP	N-CA-CB	5.18	117.82	110.16
3	c	17	GLY	O-C-N	-5.18	117.13	122.51
5	e	111	SER	N-CA-CB	5.18	118.30	110.28
7	g	123	HIS	ND1-CE1-NE2	5.18	113.58	108.40
2	B	191	ILE	CB-CA-C	-5.18	105.26	112.04
3	C	31	HIS	CE1-NE2-CD2	-5.18	103.82	109.00
4	D	64	VAL	CB-CA-C	-5.18	103.43	110.42
17	T	43	ASP	CA-C-N	5.18	131.43	121.54
17	T	43	ASP	C-N-CA	5.18	131.43	121.54
18	X	38	ASN	N-CA-CB	5.18	119.24	110.49
20	Z	875	LYS	N-CA-CB	5.18	119.58	111.56
22	S	230	LYS	CB-CA-C	-5.18	102.75	110.88
27	O	316	ALA	O-C-N	-5.18	116.63	122.12
30	K	344	ARG	N-CA-CB	5.18	121.16	111.53
1	a	58	LYS	O-C-N	5.17	129.92	123.19
2	b	234	ARG	NE-CZ-NH1	-5.17	116.33	121.50
9	i	64	HIS	ND1-CE1-NE2	5.17	113.57	108.40
1	A	181	ASN	CA-CB-CG	-5.17	107.42	112.60
15	W	135	ASN	CA-C-N	5.17	131.43	121.54
15	W	135	ASN	C-N-CA	5.17	131.43	121.54
16	V	78	VAL	N-CA-CB	5.17	119.77	111.23
22	S	76	PHE	CA-C-N	5.17	127.21	120.28
22	S	76	PHE	C-N-CA	5.17	127.21	120.28
22	S	96	ILE	CA-C-N	5.17	131.42	121.54
22	S	96	ILE	C-N-CA	5.17	131.42	121.54
22	S	281	ALA	O-C-N	-5.17	116.64	122.12
29	I	392	ILE	CA-C-N	5.17	127.22	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	I	392	ILE	C-N-CA	5.17	127.22	120.28
7	g	164	ALA	CA-C-N	5.17	132.41	121.91
7	g	164	ALA	C-N-CA	5.17	132.41	121.91
4	D	55	GLN	N-CA-C	-5.17	101.27	109.96
7	G	7	GLY	N-CA-C	-5.17	100.92	113.18
12	5	151	VAL	CA-C-N	5.17	128.17	120.31
12	5	151	VAL	C-N-CA	5.17	128.17	120.31
22	S	328	PRO	N-CA-C	-5.17	103.71	111.57
25	R	387	ILE	N-CA-C	-5.17	101.20	109.17
29	I	116	ASP	CA-CB-CG	-5.17	107.43	112.60
9	i	128	ILE	N-CA-C	-5.17	101.13	108.58
3	C	28	SER	N-CA-C	5.17	119.30	112.89
20	Z	516	THR	CA-C-N	5.17	127.21	120.28
20	Z	516	THR	C-N-CA	5.17	127.21	120.28
20	Z	701	ILE	CA-C-O	-5.17	115.04	120.57
21	N	235	ALA	N-CA-C	5.17	117.00	111.36
24	Q	345	SER	N-CA-CB	5.17	117.72	110.12
25	R	343	GLU	CA-C-O	-5.17	114.26	120.10
29	I	98	GLU	O-C-N	5.17	127.60	122.12
30	K	203	ILE	O-C-N	5.17	128.36	122.98
2	b	238	LEU	CA-C-O	5.17	126.06	120.43
12	l	136	SER	N-CA-C	-5.17	105.56	111.14
14	n	155	ASN	CB-CA-C	-5.17	99.05	109.55
9	2	150	VAL	O-C-N	-5.17	117.38	122.76
27	O	239	MET	CB-CA-C	-5.17	100.97	109.65
2	B	105	PRO	N-CD-CG	5.17	110.95	103.20
2	B	119	GLN	O-C-N	-5.17	116.64	122.12
3	C	38	ILE	CA-C-N	5.17	129.56	122.84
3	C	38	ILE	C-N-CA	5.17	129.56	122.84
14	7	76	ILE	N-CA-C	-5.17	101.98	107.77
18	X	79	LYS	CB-CG-CD	5.17	123.19	111.30
20	Z	28	LYS	CA-C-N	5.17	127.16	120.44
20	Z	28	LYS	C-N-CA	5.17	127.16	120.44
21	N	784	TYR	CA-C-O	-5.17	115.52	120.64
26	U	278	ILE	CA-C-N	5.17	127.20	120.28
26	U	278	ILE	C-N-CA	5.17	127.20	120.28
28	H	171	GLY	N-CA-C	-5.17	108.20	114.92
29	I	321	ASP	CA-CB-CG	5.17	117.77	112.60
2	b	198	GLU	CA-C-O	5.17	125.94	119.59
3	c	26	LEU	N-CA-C	-5.17	105.83	111.82
3	c	108	VAL	CA-C-N	5.17	127.16	120.44
3	c	108	VAL	C-N-CA	5.17	127.16	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	g	175	GLU	N-CA-C	-5.17	106.48	112.89
8	h	174	TRP	CB-CG-CD1	5.17	134.65	126.90
15	W	135	ASN	OD1-CG-ND2	5.17	127.77	122.60
18	X	86	ILE	CB-CA-C	5.17	118.28	110.63
20	Z	343	ALA	N-CA-C	5.17	116.91	111.28
21	N	715	ILE	CB-CA-C	-5.17	104.08	111.31
22	S	40	GLU	N-CA-C	5.17	116.60	111.07
25	R	28	GLU	N-CA-CB	5.17	117.50	110.01
25	R	76	GLN	N-CA-CB	5.17	119.22	110.49
30	K	198	TYR	CA-CB-CG	-5.17	104.60	113.90
31	L	175	GLN	N-CA-C	-5.17	101.22	109.07
32	M	249	PRO	CA-C-N	5.17	127.20	120.28
32	M	249	PRO	C-N-CA	5.17	127.20	120.28
32	M	382	SER	CA-C-O	-5.17	114.94	120.42
2	b	107	THR	CA-C-N	5.17	127.15	120.44
2	b	107	THR	C-N-CA	5.17	127.15	120.44
10	j	11	ILE	CB-CA-C	-5.17	101.88	111.18
4	D	227	GLU	N-CA-C	5.17	116.60	111.07
14	7	107	ASN	N-CA-CB	5.17	117.71	110.12
15	W	192	LEU	N-CA-C	-5.17	107.00	113.72
21	N	283	ASP	CA-C-N	5.17	124.86	119.64
21	N	283	ASP	C-N-CA	5.17	124.86	119.64
26	U	297	GLN	CA-C-N	5.17	127.72	120.28
26	U	297	GLN	C-N-CA	5.17	127.72	120.28
3	c	208	TYR	O-C-N	-5.16	116.65	122.12
9	i	163	ALA	O-C-N	5.16	128.45	122.20
21	N	256	GLN	O-C-N	5.16	127.67	122.09
13	m	34	ASP	CA-C-N	5.16	130.32	122.37
13	m	34	ASP	C-N-CA	5.16	130.32	122.37
27	O	145	LYS	CA-C-N	5.16	127.20	120.28
27	O	145	LYS	C-N-CA	5.16	127.20	120.28
2	b	37	ILE	N-CA-C	-5.16	100.69	108.12
5	e	173	GLY	CA-C-N	5.16	127.46	120.44
5	e	173	GLY	C-N-CA	5.16	127.46	120.44
2	B	180	ASN	O-C-N	5.16	129.13	123.25
20	Z	819	GLY	CA-C-O	-5.16	115.12	120.90
21	N	738	GLN	OE1-CD-NE2	-5.16	117.44	122.60
23	P	348	HIS	CE1-NE2-CD2	-5.16	103.84	109.00
26	U	54	LEU	CA-C-N	5.16	125.56	119.99
26	U	54	LEU	C-N-CA	5.16	125.56	119.99
28	H	233	GLU	N-CA-CB	5.16	117.70	110.12
33	J	116	ARG	CG-CD-NE	-5.16	100.65	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	d	36	VAL	N-CA-C	-5.16	100.82	108.45
4	d	246	GLN	CB-CG-CD	-5.16	103.83	112.60
1	A	75	ILE	N-CA-C	-5.16	107.80	112.96
2	B	142	PHE	CA-CB-CG	-5.16	108.64	113.80
2	B	178	ARG	N-CA-CB	5.16	118.12	110.49
4	D	100	LEU	CB-CA-C	-5.16	100.89	109.55
21	N	606	VAL	CA-C-N	5.16	127.19	120.28
21	N	606	VAL	C-N-CA	5.16	127.19	120.28
25	R	173	THR	CA-C-N	5.16	127.53	120.46
25	R	173	THR	C-N-CA	5.16	127.53	120.46
20	Z	817	LEU	CA-C-N	5.16	127.61	120.29
20	Z	817	LEU	C-N-CA	5.16	127.61	120.29
21	N	329	HIS	CG-CD2-NE2	5.16	112.36	107.20
21	N	513	ILE	CA-C-N	5.16	127.61	120.29
21	N	513	ILE	C-N-CA	5.16	127.61	120.29
6	f	108	ALA	O-C-N	-5.16	115.93	122.27
20	Z	355	GLU	CB-CA-C	-5.16	102.23	110.79
22	S	20	HIS	O-C-N	5.16	127.58	122.12
24	Q	105	GLU	CA-C-O	-5.16	115.08	120.55
30	K	149	ILE	O-C-N	-5.16	117.45	122.97
5	E	36	THR	N-CA-CB	5.15	117.89	109.69
19	Y	75	ASN	CA-CB-CG	-5.15	107.45	112.60
33	J	221	LYS	CA-CB-CG	5.15	124.41	114.10
5	e	108	ASN	CA-C-N	5.15	127.52	120.46
5	e	108	ASN	C-N-CA	5.15	127.52	120.46
10	j	170	ALA	N-CA-C	-5.15	105.56	111.07
2	B	99	ARG	NE-CZ-NH2	5.15	123.84	119.20
11	4	157	GLY	CA-C-N	5.15	127.19	120.28
11	4	157	GLY	C-N-CA	5.15	127.19	120.28
21	N	479	GLU	N-CA-CB	5.15	117.54	110.07
21	N	770	LYS	CA-C-N	5.15	128.16	120.95
21	N	770	LYS	C-N-CA	5.15	128.16	120.95
23	P	336	HIS	N-CA-C	-5.15	107.16	112.93
25	R	244	THR	CB-CA-C	5.15	118.84	109.62
28	H	99	VAL	CA-CB-CG2	-5.15	101.64	110.40
29	I	420	LYS	O-C-N	5.15	127.58	122.12
3	c	237	ASP	CA-CB-CG	-5.15	107.45	112.60
7	g	177	GLU	CA-C-O	5.15	125.88	120.42
14	n	124	TYR	O-C-N	5.15	127.65	122.09
12	5	221	TRP	CG-CD2-CE3	-5.15	128.75	133.90
16	V	24	LYS	CB-CA-C	5.15	118.03	109.53
21	N	84	ALA	CA-C-N	5.15	127.18	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	84	ALA	C-N-CA	5.15	127.18	120.28
25	R	305	PHE	O-C-N	5.15	124.45	120.38
26	U	252	HIS	CE1-NE2-CD2	-5.15	103.85	109.00
29	I	162	ASP	CA-C-N	5.15	130.25	122.68
29	I	162	ASP	C-N-CA	5.15	130.25	122.68
32	M	319	ASP	CA-CB-CG	-5.15	107.45	112.60
14	n	226	ARG	O-C-N	-5.15	116.28	122.15
20	Z	452	LEU	CA-C-N	5.15	127.18	120.28
20	Z	452	LEU	C-N-CA	5.15	127.18	120.28
24	Q	389	VAL	N-CA-C	-5.15	100.83	108.45
3	c	108	VAL	CA-C-O	-5.15	115.39	120.85
4	d	43	VAL	CA-C-O	5.15	125.35	120.25
1	A	130	GLN	CA-C-O	-5.15	113.72	119.95
10	3	72	ASN	CB-CG-ND2	5.15	124.12	116.40
21	N	174	LEU	CA-C-N	5.15	131.37	121.54
21	N	174	LEU	C-N-CA	5.15	131.37	121.54
29	I	142	GLU	CA-C-O	-5.15	114.98	120.28
30	K	347	ARG	N-CA-C	-5.15	105.36	111.69
31	L	356	GLY	CA-C-O	-5.15	111.61	120.57
5	e	85	ALA	N-CA-C	-5.15	106.26	112.54
7	g	228	HIS	CE1-NE2-CD2	-5.15	103.85	109.00
7	G	115	ARG	NE-CZ-NH2	5.15	123.83	119.20
21	N	192	LEU	CB-CA-C	-5.15	102.80	110.88
24	Q	227	CYS	CA-C-N	5.15	127.69	120.28
24	Q	227	CYS	C-N-CA	5.15	127.69	120.28
32	M	214	ALA	CB-CA-C	5.15	119.03	109.51
32	M	286	ILE	O-C-N	5.15	126.72	122.09
2	b	243	ILE	N-CA-C	-5.14	105.52	110.72
3	c	19	LEU	CA-C-N	5.14	128.54	120.82
3	c	19	LEU	C-N-CA	5.14	128.54	120.82
6	f	151	GLY	CA-C-N	5.14	129.44	122.19
6	f	151	GLY	C-N-CA	5.14	129.44	122.19
4	D	166	ARG	CA-C-O	-5.14	115.40	121.16
7	G	56	SER	O-C-N	-5.14	117.86	123.26
21	N	346	ASN	N-CA-C	-5.14	106.31	112.59
25	R	339	ALA	CB-CA-C	-5.14	102.25	110.79
12	l	189	TYR	O-C-N	5.14	129.74	123.21
14	n	122	PRO	O-C-N	5.14	128.40	122.23
14	n	191	VAL	CA-C-O	-5.14	114.84	120.96
6	F	216	VAL	CA-C-N	-5.14	117.59	122.17
6	F	216	VAL	C-N-CA	-5.14	117.59	122.17
12	5	241	HIS	CE1-NE2-CD2	-5.14	103.86	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	I	242	ALA	N-CA-C	-5.14	101.77	109.95
30	K	66	ASP	CA-C-O	5.14	125.87	120.42
5	e	58	LEU	N-CA-C	-5.14	105.75	112.23
8	1	164	ILE	CA-C-N	5.14	127.12	120.44
8	1	164	ILE	C-N-CA	5.14	127.12	120.44
1	a	71	TYR	N-CA-C	-5.14	99.86	110.80
7	g	163	ALA	O-C-N	5.14	129.39	123.17
9	2	85	THR	CA-CB-CG2	-5.14	101.76	110.50
17	T	37	ASN	CB-CG-ND2	5.14	124.11	116.40
22	S	209	ILE	O-C-N	5.14	126.95	121.91
3	c	46	LEU	N-CA-CB	5.14	119.31	110.68
9	i	186	ASP	N-CA-C	-5.14	106.52	112.89
14	7	133	MET	CA-C-N	5.14	127.48	120.54
14	7	133	MET	C-N-CA	5.14	127.48	120.54
20	Z	737	ALA	CA-C-O	5.14	125.87	120.42
21	N	417	ARG	CA-C-N	5.14	127.12	120.44
21	N	417	ARG	C-N-CA	5.14	127.12	120.44
31	L	204	PRO	N-CA-CB	5.14	108.39	102.33
32	M	232	ALA	N-CA-CB	-5.14	102.57	110.12
5	e	151	ASP	CA-CB-CG	5.14	117.74	112.60
1	A	110	TYR	CA-CB-CG	5.14	123.15	113.90
15	W	44	ASN	CA-CB-CG	5.14	117.74	112.60
17	T	86	LYS	CA-C-N	5.14	124.93	119.28
17	T	86	LYS	C-N-CA	5.14	124.93	119.28
20	Z	183	LYS	CA-C-N	5.14	127.47	120.54
20	Z	183	LYS	C-N-CA	5.14	127.47	120.54
20	Z	562	TRP	CG-CD2-CE3	-5.14	128.76	133.90
21	N	337	GLY	N-CA-C	5.14	118.86	112.64
21	N	754	THR	CB-CA-C	-5.14	102.48	109.42
23	P	215	SER	CA-CB-OG	-5.14	100.83	111.10
28	H	422	VAL	CA-C-N	5.14	127.12	120.44
28	H	422	VAL	C-N-CA	5.14	127.12	120.44
29	I	205	PRO	CA-C-N	5.14	127.58	120.29
29	I	205	PRO	C-N-CA	5.14	127.58	120.29
21	N	291	SER	N-CA-C	-5.13	105.76	111.36
5	e	74	ILE	N-CA-C	5.13	115.66	108.17
16	V	55	GLY	CA-C-O	-5.13	115.72	121.21
21	N	256	GLN	CA-C-O	-5.13	115.41	120.70
21	N	378	ASN	CB-CG-OD1	-5.13	110.53	120.80
21	N	594	VAL	CB-CA-C	-5.13	104.20	112.16
28	H	404	TRP	CD2-CE2-CZ2	-5.13	117.27	122.40
30	K	252	ARG	N-CA-C	-5.13	105.87	111.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	a	191	ILE	CA-C-O	-5.13	116.55	121.63
14	n	244	ASN	CA-C-N	5.13	129.00	120.94
14	n	244	ASN	C-N-CA	5.13	129.00	120.94
9	2	229	GLN	N-CA-C	-5.13	106.80	113.16
20	Z	215	ASN	CA-C-O	-5.13	114.98	120.42
22	S	322	LEU	N-CA-C	5.13	116.87	111.28
28	H	457	PHE	N-CA-C	-5.13	106.33	112.59
11	k	166	GLN	CA-C-O	-5.13	115.11	120.55
1	A	21	PRO	N-CA-CB	5.13	108.39	103.52
14	7	206	ALA	N-CA-CB	5.13	117.66	110.12
20	Z	151	HIS	CE1-NE2-CD2	-5.13	103.87	109.00
8	h	130	LYS	CB-CA-C	5.13	117.99	109.53
13	m	184	SER	O-C-N	5.13	129.82	123.15
2	B	142	PHE	CA-C-O	5.13	124.32	118.47
3	C	130	PRO	CA-C-O	-5.13	115.54	121.95
11	4	86	GLN	N-CA-CB	5.13	117.66	110.12
12	5	233	LYS	N-CA-C	-5.13	105.38	110.97
13	6	105	LEU	CA-C-N	5.13	127.67	120.28
13	6	105	LEU	C-N-CA	5.13	127.67	120.28
21	N	117	TYR	N-CA-CB	5.13	117.75	110.16
25	R	130	GLN	CA-C-N	5.13	127.15	120.28
25	R	130	GLN	C-N-CA	5.13	127.15	120.28
25	R	160	LYS	CA-C-O	5.13	127.86	121.81
31	L	293	GLU	N-CA-C	-5.13	99.88	110.80
32	M	165	SER	O-C-N	-5.13	116.22	122.22
6	f	115	LYS	CB-CG-CD	5.13	123.09	111.30
7	g	21	ASN	CA-C-O	-5.13	113.18	120.51
9	i	99	THR	CA-CB-CG2	-5.13	101.79	110.50
11	k	66	LEU	N-CA-C	-5.13	105.69	111.28
6	F	165	SER	CA-C-N	5.13	127.57	120.29
6	F	165	SER	C-N-CA	5.13	127.57	120.29
11	4	144	LEU	N-CA-C	-5.13	105.77	111.36
20	Z	362	LEU	O-C-N	-5.13	116.22	122.22
21	N	734	VAL	CA-C-N	5.13	127.15	120.28
21	N	734	VAL	C-N-CA	5.13	127.15	120.28
25	R	59	MET	CA-C-N	5.13	127.35	120.58
25	R	59	MET	C-N-CA	5.13	127.35	120.58
27	O	104	ALA	CA-C-N	5.13	127.10	120.44
27	O	104	ALA	C-N-CA	5.13	127.10	120.44
30	K	198	TYR	N-CA-C	-5.13	105.77	111.36
33	J	220	GLN	CG-CD-NE2	-5.13	108.71	116.40
3	c	125	HIS	CE1-NE2-CD2	-5.12	103.88	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	4	107	TYR	CA-C-O	5.12	125.78	120.40
14	7	141	ASN	CA-CB-CG	5.12	117.72	112.60
21	N	427	ILE	CA-C-O	-5.12	115.62	120.95
25	R	93	LYS	CA-C-N	5.12	130.07	120.95
25	R	93	LYS	C-N-CA	5.12	130.07	120.95
5	e	96	ALA	CA-C-O	5.12	125.98	120.55
9	i	81	THR	N-CA-C	-5.12	105.61	111.14
11	k	21	VAL	CA-CB-CG1	5.12	119.11	110.40
22	S	376	THR	CA-C-N	5.12	127.15	120.28
22	S	376	THR	C-N-CA	5.12	127.15	120.28
24	Q	74	LEU	CA-C-N	5.12	131.32	121.54
24	Q	74	LEU	C-N-CA	5.12	131.32	121.54
25	R	333	MET	CA-C-N	5.12	127.14	120.28
25	R	333	MET	C-N-CA	5.12	127.14	120.28
26	U	171	VAL	CB-CA-C	5.12	118.73	112.02
27	O	211	GLN	CB-CG-CD	-5.12	103.89	112.60
27	O	259	THR	N-CA-C	5.12	116.55	111.07
3	c	87	LEU	N-CA-CB	-5.12	102.05	110.40
1	A	219	SER	N-CA-C	-5.12	102.57	109.95
2	B	23	TYR	CB-CG-CD2	-5.12	113.12	120.80
12	5	236	ILE	N-CA-C	-5.12	105.55	110.72
13	6	75	ARG	NE-CZ-NH2	5.12	123.81	119.20
16	V	24	LYS	CA-C-N	5.12	128.12	120.95
16	V	24	LYS	C-N-CA	5.12	128.12	120.95
23	P	366	ASN	N-CA-CB	5.12	117.65	110.12
32	M	157	ASP	CA-C-O	5.12	126.79	121.31
12	5	261	ILE	N-CA-CB	5.12	118.47	111.41
14	7	257	ASP	CA-C-N	5.12	128.88	122.43
14	7	257	ASP	C-N-CA	5.12	128.88	122.43
31	L	290	ARG	CA-C-O	-5.12	115.12	120.55
32	M	39	ASN	CA-C-N	5.12	128.09	120.31
32	M	39	ASN	C-N-CA	5.12	128.09	120.31
3	c	119	LYS	CA-C-N	5.12	127.14	120.28
3	c	119	LYS	C-N-CA	5.12	127.14	120.28
5	e	166	ARG	O-C-N	-5.12	117.24	123.13
10	j	112	ILE	N-CA-C	-5.12	100.15	107.78
6	F	24	TYR	N-CA-C	5.12	116.86	111.28
20	Z	605	SER	CA-C-N	5.12	127.56	120.29
20	Z	605	SER	C-N-CA	5.12	127.56	120.29
22	S	174	ARG	N-CA-C	5.12	116.86	111.28
24	Q	265	MET	CG-SD-CE	-5.12	89.64	100.90
29	I	376	ASN	N-CA-C	-5.12	97.40	107.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	128	TYR	CA-C-N	5.12	127.90	120.79
14	7	128	TYR	C-N-CA	5.12	127.90	120.79
21	N	558	ALA	N-CA-C	5.12	116.86	111.28
32	M	349	PHE	N-CA-CB	5.12	118.64	109.94
33	J	298	ASP	CA-C-N	5.12	129.14	121.77
33	J	298	ASP	C-N-CA	5.12	129.14	121.77
2	b	234	ARG	N-CA-C	-5.12	106.89	113.23
6	f	110	HIS	CA-C-O	-5.12	113.75	119.79
12	l	174	THR	CA-CB-CG2	5.12	119.20	110.50
5	E	32	LYS	CA-C-O	5.12	125.47	119.28
21	N	297	ASP	CA-CB-CG	-5.12	107.48	112.60
21	N	420	THR	CA-C-N	5.12	127.14	120.28
21	N	420	THR	C-N-CA	5.12	127.14	120.28
22	S	278	LYS	O-C-N	5.12	127.61	122.09
24	Q	145	HIS	CA-CB-CG	5.12	118.92	113.80
30	K	58	TYR	CB-CA-C	-5.12	100.80	110.01
30	K	142	HIS	CA-CB-CG	-5.12	108.68	113.80
3	c	43	GLY	N-CA-C	-5.11	103.59	110.80
12	l	138	CYS	N-CA-CB	5.11	118.12	110.19
3	C	34	THR	CA-C-O	-5.11	115.04	120.92
5	E	164	PHE	CA-CB-CG	-5.11	108.69	113.80
21	N	234	ASP	CA-CB-CG	-5.11	107.49	112.60
21	N	665	ILE	O-C-N	-5.11	117.13	122.81
30	K	199	GLU	N-CA-CB	5.11	117.73	110.16
7	g	241	ASP	CA-C-N	5.11	127.08	120.44
7	g	241	ASP	C-N-CA	5.11	127.08	120.44
2	B	56	ALA	N-CA-C	-5.11	103.29	110.50
13	6	12	PRO	CA-C-O	-5.11	112.60	118.38
1	a	174	LYS	N-CA-CB	5.11	118.31	110.70
9	i	157	GLY	N-CA-C	-5.11	104.83	111.52
1	A	18	ILE	CA-C-O	5.11	125.72	121.68
7	G	57	LYS	N-CA-C	-5.11	106.64	112.92
8	1	185	VAL	N-CA-C	-5.11	100.76	108.12
20	Z	884	THR	CA-CB-OG1	-5.11	101.93	109.60
20	Z	892	SER	N-CA-C	-5.11	102.19	110.32
26	U	87	GLU	CB-CA-C	-5.11	101.91	110.29
31	L	306	MET	CG-SD-CE	-5.11	89.66	100.90
10	j	33	SER	CA-C-N	5.11	128.81	121.50
10	j	33	SER	C-N-CA	5.11	128.81	121.50
1	A	114	CYS	N-CA-C	5.11	116.85	111.28
20	Z	454	GLY	O-C-N	5.11	127.85	122.28
23	P	227	ILE	O-C-N	-5.11	116.83	121.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	H	155	PHE	CA-C-N	5.11	129.44	122.90
28	H	155	PHE	C-N-CA	5.11	129.44	122.90
9	i	122	HIS	ND1-CE1-NE2	5.11	113.51	108.40
14	n	214	MET	CA-C-N	5.11	127.12	120.28
14	n	214	MET	C-N-CA	5.11	127.12	120.28
4	D	202	VAL	CA-C-N	5.11	127.08	120.70
4	D	202	VAL	C-N-CA	5.11	127.08	120.70
12	5	281	SER	CA-C-O	-5.11	116.17	121.99
21	N	267	GLN	CB-CA-C	-5.11	102.31	110.79
26	U	232	VAL	CA-C-O	5.11	126.26	120.95
27	O	218	SER	N-CA-C	-5.11	105.79	111.36
33	J	36	SER	CA-C-N	5.11	127.54	120.29
33	J	36	SER	C-N-CA	5.11	127.54	120.29
4	d	33	ALA	N-CA-C	-5.11	101.08	109.40
5	e	20	ARG	CA-C-N	5.11	128.10	120.95
5	e	20	ARG	C-N-CA	5.11	128.10	120.95
5	E	192	THR	CA-CB-OG1	5.11	117.26	109.60
11	4	41	HIS	N-CA-C	-5.11	105.34	112.03
11	4	185	ASP	CA-C-O	-5.11	115.22	120.89
14	7	170	TYR	CB-CG-CD2	5.11	128.46	120.80
16	V	233	LYS	O-C-N	-5.11	116.58	122.09
21	N	216	ASN	N-CA-CB	5.11	118.08	110.22
29	I	192	GLN	N-CA-C	-5.11	106.80	112.57
30	K	125	THR	N-CA-CB	5.11	119.79	112.08
1	A	49	ASP	CA-CB-CG	-5.10	107.50	112.60
3	C	153	PRO	N-CA-CB	5.10	108.21	103.41
1	a	119	LYS	CG-CD-CE	5.10	123.04	111.30
13	m	72	LEU	N-CA-C	-5.10	105.80	112.23
2	B	129	PRO	CA-C-O	-5.10	115.44	121.67
21	N	252	GLY	CA-C-N	5.10	127.12	120.28
21	N	252	GLY	C-N-CA	5.10	127.12	120.28
21	N	421	ASP	O-C-N	5.10	127.53	122.12
12	l	207	GLY	O-C-N	-5.10	116.07	122.70
2	B	83	ARG	NE-CZ-NH1	-5.10	116.40	121.50
8	1	55	SER	CA-C-O	-5.10	115.97	121.38
9	2	150	VAL	N-CA-C	-5.10	101.30	109.20
23	P	77	GLU	CA-C-O	-5.10	115.15	120.55
26	U	84	ASN	OD1-CG-ND2	-5.10	117.50	122.60
27	O	165	LEU	CA-C-N	5.10	127.07	120.44
27	O	165	LEU	C-N-CA	5.10	127.07	120.44
30	K	246	TYR	N-CA-CB	5.10	118.72	110.41
1	a	27	GLN	CA-C-N	5.10	128.66	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	a	27	GLN	C-N-CA	5.10	128.66	120.30
11	4	3	ILE	O-C-N	-5.10	117.12	122.83
20	Z	276	ASN	CB-CG-ND2	-5.10	108.75	116.40
21	N	505	SER	N-CA-CB	5.10	117.61	110.12
27	O	369	ARG	CB-CA-C	-5.10	101.20	110.63
10	j	198	ARG	N-CA-C	-5.10	99.98	108.34
3	C	128	LEU	CA-C-O	-5.10	115.39	121.56
20	Z	46	LYS	CA-C-O	-5.10	115.15	120.55
21	N	590	ALA	CA-C-N	5.10	127.11	120.28
21	N	590	ALA	C-N-CA	5.10	127.11	120.28
26	U	157	LEU	CA-C-N	5.10	125.10	119.90
26	U	157	LEU	C-N-CA	5.10	125.10	119.90
33	J	61	GLU	CA-C-N	5.10	127.11	120.28
33	J	61	GLU	C-N-CA	5.10	127.11	120.28
3	C	44	ILE	N-CA-C	-5.09	100.87	108.46
6	F	36	VAL	CA-C-N	5.09	126.05	122.33
6	F	36	VAL	C-N-CA	5.09	126.05	122.33
21	N	372	GLY	N-CA-C	-5.09	109.07	114.67
22	S	121	VAL	N-CA-C	5.09	115.82	110.62
25	R	401	HIS	CA-C-N	5.09	127.11	120.28
25	R	401	HIS	C-N-CA	5.09	127.11	120.28
7	G	241	ASP	CA-C-N	5.09	127.42	120.54
7	G	241	ASP	C-N-CA	5.09	127.42	120.54
19	Y	69	VAL	CA-C-O	5.09	124.09	119.20
23	P	288	ASN	N-CA-C	-5.09	105.81	111.36
25	R	257	GLY	CA-C-N	5.09	127.42	120.54
25	R	257	GLY	C-N-CA	5.09	127.42	120.54
29	I	151	HIS	CG-CD2-NE2	5.09	112.29	107.20
3	c	11	THR	N-CA-C	-5.09	102.57	109.54
4	d	149	GLN	OE1-CD-NE2	-5.09	117.51	122.60
4	d	235	GLN	CA-C-O	-5.09	115.46	120.70
5	e	125	GLU	N-CA-C	-5.09	106.48	113.30
7	g	245	LYS	CA-C-N	5.09	127.52	120.29
7	g	245	LYS	C-N-CA	5.09	127.52	120.29
12	l	146	LYS	N-CA-CB	5.09	119.78	111.74
2	B	22	ASP	CA-C-O	5.09	125.82	120.42
7	G	184	PRO	N-CA-C	-5.09	107.98	114.35
20	Z	213	LYS	N-CA-CB	-5.09	102.39	110.28
24	Q	363	SER	CA-C-N	5.09	127.10	120.28
24	Q	363	SER	C-N-CA	5.09	127.10	120.28
26	U	152	LYS	CA-C-N	5.09	130.22	121.87
26	U	152	LYS	C-N-CA	5.09	130.22	121.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	H	158	GLY	N-CA-C	-5.09	105.22	112.55
31	L	432	ILE	CB-CA-C	-5.09	103.57	110.90
12	l	76	THR	CA-CB-OG1	5.09	117.23	109.60
12	l	241	HIS	ND1-CE1-NE2	5.09	113.49	108.40
3	C	191	GLU	O-C-N	5.09	127.95	122.15
13	6	163	ASN	CB-CA-C	5.09	118.51	109.65
14	7	176	ALA	O-C-N	-5.09	117.25	123.10
17	T	269	SER	CB-CA-C	-5.09	100.90	110.67
20	Z	928	ARG	CB-CA-C	-5.09	101.13	109.53
21	N	96	GLN	CA-C-N	5.09	130.04	121.14
21	N	96	GLN	C-N-CA	5.09	130.04	121.14
22	S	334	HIS	CA-C-N	5.09	130.76	122.67
22	S	334	HIS	C-N-CA	5.09	130.76	122.67
23	P	290	LEU	N-CA-CB	5.09	118.06	110.22
25	R	197	MET	CA-C-O	5.09	125.24	119.18
26	U	99	LEU	N-CA-C	-5.09	103.68	110.55
26	U	237	PRO	CB-CA-C	-5.09	105.10	111.56
27	O	71	ASP	CA-CB-CG	-5.09	107.51	112.60
28	H	317	ALA	N-CA-CB	5.09	117.52	109.83
14	n	208	GLU	CB-CG-CD	5.09	121.25	112.60
1	A	209	HIS	CE1-NE2-CD2	-5.09	103.91	109.00
21	N	674	GLN	N-CA-C	5.09	117.72	111.82
32	M	152	SER	CA-C-O	5.09	125.97	120.32
33	J	250	ILE	CA-C-N	5.09	129.78	122.40
33	J	250	ILE	C-N-CA	5.09	129.78	122.40
2	B	97	TYR	CB-CG-CD1	-5.09	113.17	120.80
4	D	110	THR	CA-C-O	-5.09	115.46	120.70
13	6	101	ILE	CA-C-N	5.09	127.35	120.38
13	6	101	ILE	C-N-CA	5.09	127.35	120.38
21	N	291	SER	N-CA-CB	5.09	117.69	110.16
22	S	379	LEU	N-CA-CB	5.09	118.17	110.28
28	H	440	GLU	CA-C-N	5.09	127.09	120.28
28	H	440	GLU	C-N-CA	5.09	127.09	120.28
23	P	348	HIS	N-CA-CB	5.08	117.69	110.16
28	H	370	ARG	CB-CA-C	-5.08	102.60	109.16
2	b	245	ASP	N-CA-C	-5.08	105.82	111.36
4	d	198	SER	N-CA-C	5.08	116.90	111.36
8	h	44	THR	N-CA-C	-5.08	101.11	109.40
14	n	77	PRO	N-CA-CB	5.08	108.02	103.19
5	E	168	ASN	OD1-CG-ND2	-5.08	117.52	122.60
6	F	169	LYS	N-CA-C	5.08	117.56	111.71
14	7	90	ILE	CA-C-N	5.08	127.05	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	90	ILE	C-N-CA	5.08	127.05	120.44
18	X	105	ASN	OD1-CG-ND2	5.08	127.68	122.60
19	Y	63	ASN	OD1-CG-ND2	5.08	127.68	122.60
31	L	277	ILE	CA-C-O	-5.08	114.89	120.43
1	a	159	PRO	N-CA-C	5.08	120.45	113.84
4	d	68	ASP	CA-CB-CG	-5.08	107.52	112.60
10	j	99	ARG	CA-C-O	-5.08	115.48	120.82
13	6	174	GLY	CA-C-N	5.08	127.51	120.29
13	6	174	GLY	C-N-CA	5.08	127.51	120.29
14	7	83	VAL	CA-CB-CG1	5.08	119.04	110.40
14	7	185	ASN	CA-CB-CG	5.08	117.68	112.60
15	W	9	VAL	CB-CA-C	-5.08	103.54	110.96
18	X	16	GLU	N-CA-CB	5.08	117.49	110.17
30	K	163	GLU	CA-C-O	-5.08	115.16	120.55
32	M	37	LEU	CB-CA-C	-5.08	100.86	110.01
1	a	117	LEU	N-CA-CB	-5.08	102.41	110.28
20	Z	75	ILE	N-CA-CB	5.08	116.15	110.51
21	N	417	ARG	NE-CZ-NH1	-5.08	116.42	121.50
27	O	326	HIS	ND1-CE1-NE2	5.08	113.48	108.40
1	a	229	THR	N-CA-CB	5.08	118.27	109.18
5	e	20	ARG	NH1-CZ-NH2	5.08	125.90	119.30
7	g	114	ASP	CA-CB-CG	5.08	117.68	112.60
1	A	36	ASN	O-C-N	-5.08	116.20	122.25
9	2	173	GLN	N-CA-CB	5.08	117.43	109.97
13	6	53	ASP	CA-C-O	-5.08	116.02	121.56
22	S	192	GLU	O-C-N	-5.08	116.84	122.07
22	S	332	PHE	CA-CB-CG	5.08	118.88	113.80
27	O	82	LEU	CA-C-N	5.08	127.09	120.28
27	O	82	LEU	C-N-CA	5.08	127.09	120.28
5	E	113	THR	O-C-N	5.08	127.30	122.07
25	R	150	ALA	CA-C-N	5.08	127.50	120.29
25	R	150	ALA	C-N-CA	5.08	127.50	120.29
32	M	402	ALA	N-CA-CB	5.08	118.04	110.22
7	g	173	LYS	CB-CA-C	-5.08	102.36	110.79
20	Z	912	PHE	CA-C-O	-5.08	115.61	121.19
20	Z	925	VAL	CB-CA-C	-5.08	105.47	111.81
26	U	266	THR	CA-C-O	-5.08	115.04	120.42
31	L	96	LYS	CA-CB-CG	5.08	124.25	114.10
9	i	186	ASP	CA-CB-CG	5.07	117.67	112.60
9	i	238	THR	CA-C-O	5.07	125.80	120.42
13	m	228	LYS	CA-C-O	-5.07	115.48	121.16
5	E	168	ASN	CA-C-O	-5.07	113.68	119.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	7	136	ARG	CD-NE-CZ	-5.07	117.30	124.40
20	Z	430	LEU	CA-C-O	-5.07	115.49	120.82
21	N	486	GLY	CA-C-N	5.07	128.02	120.31
21	N	486	GLY	C-N-CA	5.07	128.02	120.31
21	N	670	LYS	CA-C-O	5.07	124.72	119.14
23	P	382	ASP	CA-CB-CG	5.07	117.67	112.60
25	R	71	LEU	N-CA-C	-5.07	99.53	108.20
26	U	33	CYS	CB-CA-C	5.07	118.00	109.48
26	U	109	LEU	N-CA-C	-5.07	105.83	111.36
28	H	356	ASN	CA-CB-CG	-5.07	107.53	112.60
2	b	194	LEU	O-C-N	-5.07	116.03	122.27
9	i	166	VAL	CB-CA-C	5.07	118.46	111.97
2	B	142	PHE	N-CA-CB	5.07	118.55	111.15
3	C	93	ILE	O-C-N	5.07	127.17	121.90
17	T	47	GLN	CA-C-O	5.07	125.81	120.33
20	Z	622	HIS	CE1-NE2-CD2	-5.07	103.93	109.00
23	P	243	GLU	CA-C-N	5.07	127.14	120.60
23	P	243	GLU	C-N-CA	5.07	127.14	120.60
26	U	219	LEU	N-CA-CB	5.07	115.22	109.49
27	O	262	ASP	CB-CA-C	-5.07	101.16	109.53
28	H	331	ARG	CB-CA-C	-5.07	102.37	110.79
31	L	427	LYS	CA-CB-CG	5.07	124.24	114.10
32	M	306	LEU	N-CA-C	-5.07	105.84	112.23
12	5	125	ALA	N-CA-CB	5.07	117.36	110.01
16	V	276	PRO	CA-C-N	5.07	127.03	120.44
16	V	276	PRO	C-N-CA	5.07	127.03	120.44
17	T	91	SER	N-CA-CB	5.07	117.40	109.85
21	N	246	LYS	CB-CA-C	-5.07	102.38	110.79
24	Q	169	ASP	CA-C-N	5.07	129.75	122.35
24	Q	169	ASP	C-N-CA	5.07	129.75	122.35
1	a	110	TYR	CB-CG-CD2	-5.07	113.20	120.80
3	c	156	ASN	N-CA-C	-5.07	101.03	108.99
8	h	91	PHE	N-CA-C	5.07	116.49	111.07
13	6	184	SER	N-CA-CB	5.07	117.69	110.44
17	T	200	LEU	CA-C-O	-5.07	114.74	119.91
21	N	154	LEU	N-CA-CB	5.07	117.57	110.12
21	N	510	HIS	CG-CD2-NE2	5.07	112.27	107.20
22	S	270	ALA	CA-C-N	5.07	128.01	120.31
22	S	270	ALA	C-N-CA	5.07	128.01	120.31
28	H	100	ALA	CA-C-O	-5.07	114.53	121.98
28	H	400	ARG	NH1-CZ-NH2	-5.07	112.71	119.30
28	H	439	THR	CA-CB-OG1	5.07	117.20	109.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	I	239	GLN	CB-CA-C	-5.07	102.89	110.90
7	g	20	ARG	CG-CD-NE	-5.07	100.86	112.00
11	k	133	HIS	N-CA-CB	5.07	119.22	111.22
13	m	172	THR	CA-C-N	5.07	129.81	122.36
13	m	172	THR	C-N-CA	5.07	129.81	122.36
7	G	213	GLU	N-CA-C	-5.07	100.64	108.90
9	2	181	ILE	N-CA-C	-5.07	105.60	110.72
14	7	138	SER	CB-CA-C	-5.07	102.24	110.85
16	V	73	GLN	O-C-N	-5.07	116.58	122.96
20	Z	882	LEU	N-CA-C	5.07	118.72	112.54
22	S	208	ILE	CB-CA-C	-5.07	105.23	112.22
24	Q	194	SER	N-CA-C	-5.07	105.84	111.36
29	I	345	ASP	N-CA-CB	5.07	117.63	110.13
6	f	135	ILE	O-C-N	-5.06	117.98	122.69
11	4	104	ILE	O-C-N	-5.06	117.17	123.10
27	O	299	THR	CA-C-O	5.06	125.92	120.55
8	h	63	ALA	CA-C-O	-5.06	115.48	120.90
13	m	216	THR	CA-CB-OG1	5.06	117.19	109.60
21	N	500	ASP	CA-CB-CG	-5.06	107.54	112.60
22	S	20	HIS	CB-CA-C	-5.06	102.39	110.79
29	I	148	LEU	N-CA-CB	5.06	118.50	110.55
5	e	56	SER	O-C-N	-5.06	117.96	121.65
8	h	169	SER	N-CA-C	-5.06	105.84	111.36
14	n	126	PHE	O-C-N	5.06	127.28	122.07
9	2	140	PHE	CA-CB-CG	-5.06	108.74	113.80
20	Z	91	PHE	N-CA-CB	5.06	118.24	110.70
28	H	232	PRO	CA-C-N	5.06	127.06	120.28
28	H	232	PRO	C-N-CA	5.06	127.06	120.28
5	e	14	THR	CA-C-N	5.06	130.53	122.59
5	e	14	THR	C-N-CA	5.06	130.53	122.59
5	e	72	ARG	NE-CZ-NH1	5.06	126.56	121.50
6	f	116	ALA	N-CA-CB	5.06	117.74	110.20
7	g	136	THR	CB-CA-C	5.06	119.30	109.33
2	B	202	GLY	CA-C-O	-5.06	116.21	122.03
3	C	82	ALA	CA-C-N	5.06	127.06	120.28
3	C	82	ALA	C-N-CA	5.06	127.06	120.28
3	C	83	ASP	CA-CB-CG	-5.06	107.54	112.60
4	D	37	LYS	N-CA-CB	5.06	118.83	110.69
5	E	68	VAL	CA-C-N	5.06	128.73	121.50
5	E	68	VAL	C-N-CA	5.06	128.73	121.50
13	6	180	LEU	N-CA-CB	5.06	117.45	110.17
15	W	82	GLU	CA-C-O	-5.06	115.44	121.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	W	142	ILE	O-C-N	-5.06	116.77	122.94
20	Z	99	LEU	CA-C-N	5.06	127.57	120.28
20	Z	99	LEU	C-N-CA	5.06	127.57	120.28
20	Z	527	SER	N-CA-C	-5.06	105.86	112.23
21	N	18	ASP	CA-CB-CG	5.06	117.66	112.60
22	S	473	ASP	N-CA-CB	5.06	117.65	110.16
28	H	92	GLY	CA-C-N	-5.06	116.01	122.79
28	H	92	GLY	C-N-CA	-5.06	116.01	122.79
30	K	330	ARG	CB-CA-C	-5.06	101.57	108.86
7	g	127	ASN	N-CA-C	-5.06	106.36	112.88
7	G	95	GLU	N-CA-CB	5.06	117.64	110.16
13	6	60	MET	CG-SD-CE	-5.06	89.77	100.90
16	V	115	GLY	O-C-N	-5.06	117.56	122.77
19	Y	25	ASN	OD1-CG-ND2	5.06	127.66	122.60
22	S	323	LEU	CA-C-O	5.06	125.91	120.55
23	P	378	THR	N-CA-C	5.06	116.48	111.07
25	R	305	PHE	N-CA-CB	5.06	116.39	110.42
27	O	160	LYS	CA-C-N	5.06	128.00	120.31
27	O	160	LYS	C-N-CA	5.06	128.00	120.31
28	H	178	ARG	NE-CZ-NH2	-5.06	114.65	119.20
28	H	321	ASP	CA-C-O	-5.06	115.19	121.11
32	M	197	ILE	CA-C-O	-5.06	114.46	120.78
2	B	102	GLY	O-C-N	5.06	128.81	122.39
2	B	231	LYS	N-CA-C	-5.06	99.87	108.26
9	2	159	GLY	N-CA-C	-5.06	106.90	115.34
19	Y	52	ASN	N-CA-C	-5.06	101.86	109.85
20	Z	549	ASN	CA-CB-CG	5.06	117.66	112.60
22	S	228	GLU	N-CA-C	5.06	116.48	111.07
23	P	54	SER	CA-C-N	5.06	129.16	120.72
23	P	54	SER	C-N-CA	5.06	129.16	120.72
23	P	121	THR	N-CA-CB	5.06	117.79	110.26
23	P	333	ALA	CA-C-N	5.06	129.16	120.72
23	P	333	ALA	C-N-CA	5.06	129.16	120.72
29	I	359	LYS	CA-C-O	5.06	125.78	119.97
29	I	383	THR	CA-CB-OG1	-5.06	102.02	109.60
4	d	53	LYS	CG-CD-CE	5.05	122.92	111.30
13	m	82	TRP	CD2-CE2-CZ2	-5.05	117.34	122.40
11	4	173	PRO	N-CA-C	-5.05	107.62	114.80
14	7	70	ASN	OD1-CG-ND2	5.05	127.66	122.60
21	N	724	THR	CA-C-N	5.05	130.71	122.07
21	N	724	THR	C-N-CA	5.05	130.71	122.07
26	U	256	ASN	O-C-N	-5.05	116.86	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	O	78	VAL	CA-C-N	5.05	128.46	120.47
27	O	78	VAL	C-N-CA	5.05	128.46	120.47
2	b	93	ALA	CB-CA-C	-5.05	102.26	110.85
4	d	48	ARG	NE-CZ-NH1	5.05	126.55	121.50
3	C	114	ARG	NH1-CZ-NH2	5.05	125.87	119.30
13	6	149	ALA	N-CA-CB	5.05	118.08	110.30
20	Z	37	GLN	N-CA-CB	5.05	118.17	110.44
21	N	794	LYS	N-CA-C	5.05	116.79	111.28
28	H	170	GLU	CA-CB-CG	5.05	124.21	114.10
3	c	227	GLN	CA-C-O	5.05	126.35	120.49
13	m	11	ASN	CB-CG-ND2	5.05	123.98	116.40
7	G	239	ALA	CA-C-N	5.05	126.92	120.56
7	G	239	ALA	C-N-CA	5.05	126.92	120.56
13	6	162	VAL	CA-C-O	-5.05	115.88	120.73
32	M	290	ARG	CB-CA-C	-5.05	100.37	110.42
32	M	372	ASP	CB-CA-C	5.05	119.10	110.01
13	m	84	HIS	ND1-CE1-NE2	5.05	113.45	108.40
10	3	76	LEU	O-C-N	-5.05	116.39	122.15
22	S	414	ASP	CA-CB-CG	-5.05	107.55	112.60
23	P	375	GLN	N-CA-CB	5.05	117.54	110.12
27	O	114	GLN	N-CA-C	5.05	116.78	111.28
33	J	35	ARG	CA-C-O	-5.05	113.83	119.79
33	J	158	LYS	CG-CD-CE	5.05	122.91	111.30
9	i	58	LYS	N-CA-C	-5.05	105.86	111.36
2	B	228	PRO	N-CA-CB	5.05	108.55	103.25
17	T	135	ASN	O-C-N	5.05	127.91	122.15
23	P	240	TYR	CA-C-O	5.05	126.12	120.82
23	P	385	ASN	CB-CG-ND2	5.05	123.97	116.40
32	M	232	ALA	CA-C-N	5.05	127.46	120.29
32	M	232	ALA	C-N-CA	5.05	127.46	120.29
11	k	165	VAL	CA-C-O	-5.05	115.82	121.17
3	C	91	ALA	CB-CA-C	-5.05	102.93	110.90
21	N	57	ASP	CA-CB-CG	5.05	117.65	112.60
21	N	383	LYS	N-CA-CB	5.05	117.63	110.16
3	C	20	TYR	CB-CG-CD1	5.04	128.37	120.80
20	Z	266	LYS	N-CA-CB	5.04	117.46	109.94
24	Q	336	ASN	N-CA-CB	5.04	117.63	110.16
25	R	248	SER	O-C-N	5.04	127.27	122.07
29	I	68	HIS	CE1-NE2-CD2	-5.04	103.95	109.00
8	h	147	CYS	N-CA-C	-5.04	105.86	111.36
4	D	24	LEU	CA-C-O	-5.04	115.20	120.55
9	2	41	VAL	O-C-N	-5.04	118.35	123.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	3	9	GLY	O-C-N	5.04	129.26	122.70
16	V	256	GLU	N-CA-CB	5.04	117.62	110.16
24	Q	31	LEU	N-CA-C	5.04	117.16	111.11
29	I	421	GLU	CB-CG-CD	-5.04	104.03	112.60
30	K	182	GLN	CA-C-N	5.04	127.00	120.44
30	K	182	GLN	C-N-CA	5.04	127.00	120.44
9	i	70	ILE	CA-CB-CG1	5.04	118.97	110.40
13	m	48	GLU	CA-C-O	-5.04	113.25	120.16
6	F	134	ILE	N-CA-CB	5.04	118.19	111.64
9	2	238	THR	CA-C-O	5.04	126.11	120.82
21	N	495	PRO	CA-C-N	5.04	127.04	120.28
21	N	495	PRO	C-N-CA	5.04	127.04	120.28
24	Q	102	GLU	N-CA-C	5.04	116.47	111.07
24	Q	110	SER	N-CA-C	-5.04	100.06	110.80
24	Q	247	HIS	CG-CD2-NE2	5.04	112.24	107.20
26	U	164	GLU	CA-C-N	5.04	127.80	120.79
26	U	164	GLU	C-N-CA	5.04	127.80	120.79
13	6	15	ASP	O-C-N	-5.04	117.50	123.25
20	Z	903	MET	N-CA-CB	-5.04	103.49	111.05
21	N	698	GLY	CA-C-O	5.04	125.84	120.30
9	i	221	THR	CA-C-N	5.04	126.14	119.84
9	i	221	THR	C-N-CA	5.04	126.14	119.84
10	j	172	LEU	O-C-N	5.04	127.26	122.07
6	F	21	GLN	OE1-CD-NE2	-5.04	117.56	122.60
9	2	207	MET	O-C-N	5.04	129.07	122.87
20	Z	337	GLU	CA-C-O	-5.04	115.51	120.70
21	N	509	GLN	N-CA-C	-5.04	107.17	113.72
28	H	234	ARG	N-CA-C	5.04	116.85	111.36
28	H	404	TRP	CE2-CD2-CE3	5.04	123.84	118.80
29	I	275	ALA	N-CA-CB	5.04	117.89	109.98
8	h	154	ASN	CA-CB-CG	-5.04	107.56	112.60
8	1	21	VAL	N-CA-C	-5.04	100.65	108.81
21	N	544	GLU	CA-C-N	5.04	127.44	120.29
21	N	544	GLU	C-N-CA	5.04	127.44	120.29
23	P	86	HIS	CB-CG-ND1	5.04	130.25	122.70
3	c	148	LEU	CB-CA-C	-5.04	99.38	109.35
1	A	243	GLU	CA-C-O	-5.04	115.21	120.55
20	Z	429	ASN	OD1-CG-ND2	-5.04	117.56	122.60
20	Z	804	ASP	CA-C-N	5.04	131.16	121.54
20	Z	804	ASP	C-N-CA	5.04	131.16	121.54
24	Q	402	THR	O-C-N	-5.04	115.53	121.32
33	J	322	ALA	O-C-N	-5.04	116.65	122.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	a	46	ARG	CD-NE-CZ	-5.03	117.35	124.40
2	b	139	HIS	CE1-NE2-CD2	-5.03	103.97	109.00
4	d	47	GLU	CA-C-O	-5.03	114.95	120.69
2	B	10	THR	CA-C-O	5.03	126.07	120.43
16	V	86	VAL	O-C-N	5.03	126.75	121.87
20	Z	379	GLN	N-CA-C	-5.03	106.40	112.54
21	N	459	ASN	N-CA-C	-5.03	101.55	109.25
24	Q	361	HIS	CA-C-N	5.03	127.57	120.42
24	Q	361	HIS	C-N-CA	5.03	127.57	120.42
28	H	450	VAL	CB-CA-C	5.03	118.61	112.02
31	L	102	GLY	O-C-N	-5.03	116.01	123.11
32	M	144	ASP	CA-C-O	-5.03	115.47	121.16
33	J	146	THR	CA-C-N	5.03	127.96	120.31
33	J	146	THR	C-N-CA	5.03	127.96	120.31
33	J	156	GLN	N-CA-CB	-5.03	102.47	110.22
4	d	148	TYR	CA-CB-CG	-5.03	104.84	113.90
5	e	188	HIS	CE1-NE2-CD2	-5.03	103.97	109.00
6	f	9	ASP	CA-CB-CG	-5.03	107.57	112.60
21	N	236	GLY	O-C-N	-5.03	116.91	122.24
26	U	181	GLN	CA-C-N	5.03	127.28	120.44
26	U	181	GLN	C-N-CA	5.03	127.28	120.44
1	a	68	THR	CA-C-O	5.03	125.55	119.31
3	c	105	ASP	CA-C-O	-5.03	115.32	121.05
5	e	35	SER	CA-C-N	5.03	129.41	121.56
5	e	35	SER	C-N-CA	5.03	129.41	121.56
6	F	189	LEU	CA-C-O	5.03	125.75	120.42
10	3	66	MET	CG-SD-CE	-5.03	89.83	100.90
15	W	186	ALA	N-CA-CB	5.03	117.60	110.16
20	Z	416	THR	N-CA-CB	5.03	117.31	110.01
25	R	285	ALA	O-C-N	-5.03	116.79	122.12
25	R	343	GLU	CA-C-N	5.03	130.51	121.66
25	R	343	GLU	C-N-CA	5.03	130.51	121.66
1	a	99	ALA	CA-C-N	5.03	127.02	120.28
1	a	99	ALA	C-N-CA	5.03	127.02	120.28
9	i	33	VAL	CA-CB-CG2	5.03	118.95	110.40
20	Z	443	ASP	CA-CB-CG	-5.03	107.57	112.60
20	Z	517	ASP	N-CA-C	5.03	116.76	111.28
23	P	225	VAL	CA-CB-CG1	5.03	118.95	110.40
27	O	8	ASP	CA-CB-CG	-5.03	107.57	112.60
28	H	349	ILE	CA-CB-CG2	-5.03	101.95	110.50
28	H	403	ARG	N-CA-C	-5.03	97.58	107.69
1	a	175	GLN	CA-C-N	5.03	127.02	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	a	175	GLN	C-N-CA	5.03	127.02	120.28
14	n	204	GLN	CA-C-O	5.03	125.15	119.27
13	6	84	HIS	CA-CB-CG	-5.03	108.77	113.80
22	S	115	PRO	CA-C-N	5.03	127.28	120.44
22	S	115	PRO	C-N-CA	5.03	127.28	120.44
26	U	212	ASP	CA-C-N	5.03	129.12	120.72
26	U	212	ASP	C-N-CA	5.03	129.12	120.72
27	O	64	ASN	CA-CB-CG	5.03	117.63	112.60
30	K	224	LYS	N-CA-CB	5.03	117.43	109.94
31	L	347	VAL	N-CA-CB	5.03	116.20	110.72
32	M	326	ALA	CB-CA-C	-5.03	100.60	109.70
33	J	381	ASP	CA-C-O	-5.03	115.22	120.55
9	i	114	GLN	OE1-CD-NE2	-5.03	117.58	122.60
7	G	86	ARG	CA-C-O	5.03	125.56	119.38
8	1	164	ILE	O-C-N	5.03	126.74	121.87
12	5	260	TRP	CZ3-CH2-CZ2	-5.03	114.97	121.50
13	6	104	LEU	N-CA-CB	5.03	117.30	110.01
16	V	201	ILE	N-CA-C	-5.03	101.08	108.11
16	V	260	GLU	N-CA-C	-5.03	100.71	108.90
20	Z	826	ARG	CA-C-N	5.03	127.28	120.44
20	Z	826	ARG	C-N-CA	5.03	127.28	120.44
20	Z	893	PHE	CB-CG-CD1	5.03	129.24	120.70
21	N	406	TYR	CA-C-N	5.03	129.59	120.79
21	N	406	TYR	C-N-CA	5.03	129.59	120.79
22	S	177	ASN	OD1-CG-ND2	5.03	127.63	122.60
2	B	196	LEU	CA-C-O	5.02	125.54	119.11
22	S	334	HIS	CE1-NE2-CD2	-5.02	103.98	109.00
10	j	52	GLY	CA-C-O	-5.02	116.35	120.92
20	Z	109	PRO	CB-CA-C	-5.02	104.33	112.62
25	R	203	ASP	CA-CB-CG	-5.02	107.58	112.60
25	R	309	LEU	CB-CA-C	-5.02	102.31	110.85
26	U	81	LYS	CA-C-N	5.02	127.94	120.31
26	U	81	LYS	C-N-CA	5.02	127.94	120.31
27	O	310	PHE	N-CA-C	-5.02	105.93	111.71
28	H	353	PHE	CA-CB-CG	-5.02	108.78	113.80
8	h	181	VAL	CA-C-O	5.02	127.06	120.78
28	H	158	GLY	O-C-N	5.02	129.58	122.80
33	J	297	LEU	N-CA-CB	5.02	118.19	110.61
11	k	147	HIS	CA-C-O	-5.02	113.62	119.14
12	l	198	LYS	CB-CA-C	5.02	118.08	109.80
1	A	92	ASN	O-C-N	-5.02	116.43	122.15
3	C	176	LEU	CB-CA-C	-5.02	102.46	110.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	G	86	ARG	O-C-N	-5.02	115.70	122.43
16	V	205	LYS	CB-CA-C	-5.02	100.53	109.71
20	Z	221	VAL	N-CA-CB	5.02	117.37	110.54
23	P	418	ASN	O-C-N	-5.02	116.80	122.12
24	Q	170	ASP	O-C-N	5.02	129.10	122.47
33	J	150	VAL	O-C-N	5.02	127.12	121.90
5	e	192	THR	N-CA-C	-5.02	103.03	110.46
9	i	110	GLN	OE1-CD-NE2	-5.02	117.58	122.60
11	k	8	ARG	NE-CZ-NH2	-5.02	114.68	119.20
4	D	134	LEU	CA-C-O	-5.02	115.13	120.40
17	T	10	SER	CA-C-N	5.02	127.00	120.28
17	T	10	SER	C-N-CA	5.02	127.00	120.28
20	Z	380	ASN	CA-C-N	5.02	127.00	120.28
20	Z	380	ASN	C-N-CA	5.02	127.00	120.28
21	N	169	ALA	N-CA-C	5.02	116.44	111.07
21	N	444	HIS	CG-CD2-NE2	5.02	112.22	107.20
21	N	642	ASP	CA-C-O	-5.02	113.81	118.73
24	Q	223	GLY	O-C-N	-5.02	117.16	122.13
14	n	215	ARG	CA-C-N	5.02	127.54	120.42
14	n	215	ARG	C-N-CA	5.02	127.54	120.42
12	5	88	ILE	N-CA-C	-5.02	101.19	108.36
29	I	96	LEU	N-CA-CB	5.02	117.41	109.94
33	J	180	ALA	N-CA-C	-5.02	101.58	109.25
9	i	163	ALA	CA-C-N	5.01	127.00	120.28
9	i	163	ALA	C-N-CA	5.01	127.00	120.28
1	A	38	THR	CA-C-O	5.01	124.66	119.14
1	A	64	LEU	N-CA-CB	5.01	117.34	109.97
4	D	81	ASP	CA-C-N	5.01	127.00	120.28
4	D	81	ASP	C-N-CA	5.01	127.00	120.28
20	Z	259	PRO	N-CD-CG	5.01	110.72	103.20
22	S	470	GLN	CA-C-N	5.01	127.41	120.29
22	S	470	GLN	C-N-CA	5.01	127.41	120.29
29	I	193	GLU	CA-C-O	5.01	125.33	119.06
30	K	360	MET	CB-CA-C	-5.01	100.53	111.71
31	L	161	ARG	CB-CA-C	-5.01	101.40	109.72
31	L	239	ILE	N-CA-C	-5.01	105.53	111.00
9	2	110	GLN	CB-CA-C	-5.01	102.33	110.85
21	N	206	ILE	N-CA-CB	5.01	118.10	110.58
21	N	339	MET	CB-CA-C	-5.01	102.47	110.79
24	Q	135	HIS	ND1-CE1-NE2	5.01	113.41	108.40
3	c	176	LEU	CA-C-N	5.01	127.50	120.28
3	c	176	LEU	C-N-CA	5.01	127.50	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	e	218	GLN	CA-C-O	-5.01	114.59	120.60
11	k	19	LYS	N-CA-C	5.01	116.55	111.14
14	n	46	SER	CA-C-O	5.01	126.62	121.06
20	Z	760	HIS	CA-CB-CG	-5.01	108.79	113.80
21	N	674	GLN	OE1-CD-NE2	-5.01	117.59	122.60
22	S	371	LEU	CA-C-O	-5.01	114.44	120.10
23	P	415	TRP	CA-C-N	5.01	127.00	120.28
23	P	415	TRP	C-N-CA	5.01	127.00	120.28
24	Q	223	GLY	CA-C-N	5.01	128.52	120.30
24	Q	223	GLY	C-N-CA	5.01	128.52	120.30
26	U	107	ASN	OD1-CG-ND2	-5.01	117.59	122.60
26	U	204	LEU	N-CA-CB	5.01	117.49	110.12
27	O	226	LYS	CA-C-O	5.01	127.67	120.51
29	I	82	LEU	CA-C-O	5.01	125.73	120.42
7	g	110	PRO	N-CA-CB	-5.01	98.70	103.51
13	m	167	GLN	OE1-CD-NE2	5.01	127.61	122.60
14	n	74	ARG	CA-C-N	-5.01	114.26	121.42
14	n	74	ARG	C-N-CA	-5.01	114.26	121.42
20	Z	831	LEU	CA-C-N	5.01	126.99	120.28
20	Z	831	LEU	C-N-CA	5.01	126.99	120.28
21	N	263	SER	CA-C-O	5.01	125.91	120.55
21	N	771	PHE	N-CA-CB	5.01	117.31	109.85
29	I	161	GLN	OE1-CD-NE2	-5.01	117.59	122.60
3	c	200	THR	N-CA-C	-5.01	107.21	113.72
6	F	93	ASN	N-CA-C	5.01	116.82	111.36
6	F	128	TYR	N-CA-C	-5.01	100.57	108.73
9	2	94	LEU	O-C-N	5.01	127.30	122.09
27	O	320	PRO	N-CA-C	-5.01	102.12	111.03
14	n	162	TYR	CB-CG-CD2	-5.01	113.29	120.80
2	B	68	THR	O-C-N	-5.01	115.56	121.32
18	X	28	PRO	N-CA-CB	5.01	107.53	103.32
20	Z	625	THR	CA-C-O	-5.01	113.82	118.73
20	Z	878	LEU	CB-CA-C	-5.01	101.37	110.63
21	N	728	LYS	N-CA-CB	5.01	117.48	110.12
25	R	211	LYS	CA-C-O	-5.01	115.24	120.55
25	R	332	GLU	N-CA-CB	5.01	117.57	110.16
32	M	386	PHE	N-CA-CB	5.01	118.57	110.41
22	S	456	ASP	CA-C-O	-5.00	113.72	118.33
24	Q	34	ASP	N-CA-CB	5.00	117.27	110.01
30	K	72	GLN	CA-C-N	5.00	127.40	120.29
30	K	72	GLN	C-N-CA	5.00	127.40	120.29
32	M	404	ARG	O-C-N	5.00	127.23	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	k	155	GLU	N-CA-C	-5.00	105.93	112.23
13	m	187	GLU	N-CA-C	-5.00	105.72	111.07
1	A	104	PHE	N-CA-C	-5.00	105.91	111.36
9	2	108	ALA	CB-CA-C	-5.00	102.48	110.79
11	4	93	ARG	NE-CZ-NH2	5.00	123.70	119.20
14	7	85	GLY	O-C-N	-5.00	119.20	123.80
15	W	115	CYS	CB-CA-C	-5.00	101.72	110.17
16	V	64	ASN	CA-CB-CG	-5.00	107.60	112.60
20	Z	611	THR	CA-C-O	5.00	127.12	121.32
21	N	606	VAL	N-CA-C	-5.00	107.05	112.80
24	Q	245	SER	CA-C-O	5.00	125.72	120.42
24	Q	334	HIS	ND1-CE1-NE2	5.00	113.40	108.40
26	U	111	LYS	CA-C-N	5.00	126.94	120.44
26	U	111	LYS	C-N-CA	5.00	126.94	120.44
31	L	364	HIS	CE1-NE2-CD2	-5.00	104.00	109.00
14	n	157	ASP	O-C-N	-5.00	116.66	122.81
4	D	48	ARG	O-C-N	-5.00	117.35	123.30
4	D	126	VAL	CA-CB-CG2	5.00	118.90	110.40
20	Z	948	TRP	CA-C-N	5.00	128.37	120.47
20	Z	948	TRP	C-N-CA	5.00	128.37	120.47
22	S	34	LEU	CA-C-N	5.00	126.94	120.44
22	S	34	LEU	C-N-CA	5.00	126.94	120.44

There are no chirality outliers.

All (347) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
8	1	133	TYR	Sidechain
8	1	144	TYR	Sidechain
8	1	146	TYR	Sidechain
8	1	152	ARG	Sidechain
8	1	198	TYR	Sidechain
8	1	34	TYR	Sidechain
8	1	70	TYR	Sidechain
8	1	79	TYR	Sidechain
9	2	119	TYR	Sidechain
9	2	152	TYR	Sidechain
9	2	153	TYR	Sidechain
9	2	217	ARG	Sidechain
9	2	65	ARG	Sidechain
10	3	164	PHE	Sidechain
10	3	177	ARG	Sidechain

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Mol	Chain	Res	Type	Group
10	3	203	ARG	Sidechain
10	3	74	TYR	Sidechain
10	3	87	PHE	Sidechain
10	3	96	TYR	Sidechain
10	3	98	ARG	Sidechain
11	4	149	ARG	Sidechain
11	4	190	ARG	Sidechain
11	4	23	ARG	Sidechain
11	4	36	ARG	Sidechain
11	4	46	PHE	Sidechain
11	4	59	TYR	Sidechain
11	4	67	TYR	Sidechain
12	5	139	ARG	Sidechain
12	5	179	TYR	Sidechain
12	5	242	ARG	Sidechain
12	5	83	PHE	Sidechain
13	6	10	PHE	Sidechain
13	6	114	TYR	Sidechain
13	6	13	TYR	Sidechain
13	6	168	TYR	Sidechain
13	6	182	TYR	Sidechain
13	6	229	ARG	Peptide
13	6	36	ARG	Sidechain
13	6	41	TYR	Sidechain
13	6	83	TYR	Sidechain
14	7	109	TYR	Sidechain
14	7	134	TYR	Sidechain
14	7	136	ARG	Sidechain
14	7	162	TYR	Sidechain
14	7	170	TYR	Sidechain
14	7	49	TYR	Sidechain
14	7	63	TYR	Sidechain
14	7	74	ARG	Sidechain
14	7	95	HIS	Sidechain
1	A	106	TYR	Sidechain
1	A	110	TYR	Sidechain
1	A	128	TYR	Sidechain
1	A	131	ARG	Sidechain
1	A	135	ARG	Sidechain
1	A	233	PHE	Sidechain
1	A	24	ARG	Sidechain
2	B	128	ARG	Sidechain

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Mol	Chain	Res	Type	Group
2	B	156	TYR	Sidechain
2	B	246	ARG	Sidechain
2	B	97	TYR	Sidechain
3	C	114	ARG	Sidechain
3	C	137	TYR	Sidechain
3	C	146	TYR	Sidechain
3	C	149	TYR	Sidechain
3	C	18	ARG	Sidechain
3	C	208	TYR	Sidechain
3	C	217	ARG	Sidechain
3	C	226	TYR	Sidechain
3	C	230	PHE	Sidechain
3	C	50	ARG	Sidechain
4	D	120	TYR	Sidechain
4	D	141	ARG	Sidechain
4	D	16	HIS	Peptide
4	D	18	PHE	Sidechain
4	D	232	TYR	Sidechain
4	D	4	TYR	Sidechain
4	D	49	ARG	Sidechain
4	D	58	ARG	Sidechain
4	D	90	ARG	Sidechain
4	D	97	ARG	Sidechain
5	E	136	ARG	Sidechain
5	E	165	TYR	Sidechain
5	E	20	ARG	Sidechain
5	E	228	PHE	Sidechain
5	E	231	TYR	Sidechain
5	E	26	TYR	Sidechain
5	E	8	TYR	Sidechain
6	F	101	ARG	Sidechain
6	F	107	ARG	Sidechain
6	F	123	TYR	Sidechain
6	F	126	ARG	Sidechain
6	F	147	PHE	Sidechain
6	F	157	TYR	Sidechain
6	F	164	ARG	Sidechain
6	F	18	ARG	Peptide,Mainchain
6	F	202	ARG	Sidechain
6	F	21	GLN	Sidechain
6	F	233	TYR	Sidechain
6	F	24	TYR	Sidechain

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Mol	Chain	Res	Type	Group
6	F	94	TYR	Sidechain
7	G	13	SER	Peptide
7	G	157	TYR	Sidechain
7	G	20	ARG	Sidechain
7	G	21	ASN	Peptide
7	G	242	PHE	Sidechain
7	G	91	ARG	Sidechain
7	G	93	ARG	Sidechain
28	H	145	TYR	Sidechain
28	H	173	ARG	Sidechain
28	H	178	ARG	Sidechain
28	H	190	ARG	Sidechain
28	H	234	ARG	Sidechain
28	H	261	ARG	Sidechain
28	H	266	ARG	Sidechain
28	H	283	TYR	Sidechain
28	H	307	PHE	Sidechain
28	H	342	GLY	Peptide
28	H	357	ARG	Sidechain
28	H	420	ARG	Sidechain
28	H	462	ARG	Sidechain
28	H	69	VAL	Peptide
29	I	100	ARG	Sidechain
29	I	129	TYR	Sidechain
29	I	181	TYR	Sidechain
29	I	256	TYR	Sidechain
29	I	292	TYR	Sidechain
29	I	304	ARG	Sidechain
29	I	436	TYR	Sidechain
29	I	54	ARG	Sidechain
33	J	120	TYR	Sidechain
33	J	147	TYR	Sidechain
33	J	88	VAL	Peptide
33	J	94	TYR	Sidechain
30	K	118	TYR	Sidechain
30	K	128	ARG	Sidechain
30	K	141	ARG	Sidechain
30	K	236	ARG	Peptide,Sidechain,Mainchain
30	K	246	TYR	Sidechain
30	K	330	ARG	Sidechain
30	K	340	PHE	Sidechain
30	K	350	ARG	Sidechain

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Mol	Chain	Res	Type	Group
30	K	400	TYR	Sidechain
30	K	411	TYR	Sidechain
30	K	426	PHE	Sidechain
30	K	67	TYR	Sidechain
30	K	73	ARG	Sidechain
31	L	126	ARG	Sidechain
31	L	127	TYR	Sidechain
31	L	137	ARG	Sidechain
31	L	180	PHE	Sidechain
31	L	221	TYR	Sidechain
31	L	255	TYR	Sidechain
31	L	329	ARG	Sidechain
32	M	153	TYR	Sidechain
32	M	180	TYR	Sidechain
32	M	342	ARG	Sidechain
32	M	345	ARG	Sidechain
32	M	357	ARG	Sidechain
21	N	161	TYR	Sidechain
21	N	222	TYR	Sidechain
21	N	23	TYR	Sidechain
21	N	282	TYR	Sidechain
21	N	338	PHE	Sidechain
21	N	389	TYR	Sidechain
21	N	394	ARG	Sidechain
21	N	463	TYR	Sidechain
21	N	50	TYR	Sidechain
21	N	515	ARG	Sidechain
21	N	580	ASN	Peptide
21	N	736	PHE	Sidechain
21	N	809	ARG	Sidechain
21	N	881	TYR	Sidechain
21	N	894	ARG	Sidechain
21	N	906	ARG	Sidechain
27	O	135	ARG	Sidechain
27	O	172	TYR	Sidechain
27	O	178	TYR	Sidechain
27	O	190	TYR	Sidechain
27	O	228	TYR	Sidechain
27	O	306	ARG	Sidechain
27	O	32	PHE	Sidechain
27	O	330	ARG	Sidechain
27	O	70	TYR	Sidechain

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Mol	Chain	Res	Type	Group
23	P	103	TYR	Sidechain
23	P	13	TYR	Sidechain
23	P	234	TYR	Sidechain
23	P	240	TYR	Sidechain
23	P	273	TYR	Sidechain
23	P	3	ARG	Sidechain
23	P	318	TYR	Sidechain
23	P	359	ARG	Sidechain
24	Q	135	HIS	Sidechain
24	Q	151	TYR	Sidechain
24	Q	161	LEU	Peptide
24	Q	189	ARG	Sidechain
24	Q	20	TYR	Sidechain
24	Q	209	TYR	Sidechain
24	Q	246	TYR	Sidechain
24	Q	286	TYR	Sidechain
24	Q	291	TYR	Sidechain
24	Q	354	PHE	Peptide,Sidechain
24	Q	65	TYR	Sidechain
25	R	123	ASP	Peptide
25	R	181	TYR	Sidechain
25	R	209	ARG	Sidechain
25	R	24	TYR	Sidechain
25	R	252	TYR	Sidechain
25	R	304	TYR	Sidechain
25	R	357	PHE	Sidechain
25	R	417	TYR	Sidechain
25	R	70	TYR	Peptide
25	R	99	TYR	Sidechain
22	S	118	PHE	Sidechain
22	S	186	TYR	Sidechain
22	S	197	SER	Peptide
22	S	211	ARG	Sidechain
22	S	241	PHE	Sidechain
22	S	25	TYR	Sidechain
22	S	273	PHE	Sidechain
22	S	275	TYR	Sidechain
22	S	334	HIS	Sidechain
22	S	346	TYR	Sidechain
22	S	425	ARG	Sidechain
22	S	64	ARG	Sidechain
22	S	82	TYR	Sidechain

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Mol	Chain	Res	Type	Group
17	T	109	TYR	Sidechain
17	T	144	TYR	Sidechain
17	T	20	TYR	Sidechain
17	T	210	PHE	Sidechain
17	T	220	PHE	Sidechain
17	T	245	TYR	Sidechain
17	T	266	TYR	Sidechain
17	T	81	TYR	Sidechain
26	U	113	TYR	Sidechain
26	U	176	ARG	Sidechain
26	U	179	ARG	Sidechain
26	U	277	TYR	Sidechain
26	U	288	PHE	Sidechain
26	U	67	PHE	Sidechain
16	V	171	ARG	Sidechain
16	V	228	TYR	Sidechain
15	W	101	ARG	Sidechain
15	W	15	TYR	Sidechain
15	W	164	PRO	Peptide
15	W	41	ARG	Sidechain
18	X	11	ARG	Sidechain
18	X	51	ARG	Sidechain
18	X	97	TYR	Sidechain
20	Z	126	TYR	Sidechain
20	Z	202	ARG	Sidechain
20	Z	210	TYR	Sidechain
20	Z	269	TYR	Sidechain
20	Z	341	TYR	Sidechain
20	Z	358	TYR	Sidechain
20	Z	408	TYR	Sidechain
20	Z	426	TYR	Sidechain
20	Z	477	TYR	Sidechain
20	Z	574	TYR	Sidechain
20	Z	623	ARG	Sidechain
20	Z	64	TYR	Sidechain
20	Z	738	TYR	Sidechain
20	Z	766	HIS	Sidechain
20	Z	838	TYR	Sidechain
1	a	108	TYR	Sidechain
1	a	133	TYR	Sidechain
1	a	14	ARG	Sidechain
1	a	143	PHE	Sidechain

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Mol	Chain	Res	Type	Group
1	a	162	TYR	Sidechain
1	a	26	TYR	Sidechain
1	a	46	ARG	Sidechain
1	a	77	ARG	Sidechain
2	b	104	TYR	Sidechain
2	b	128	ARG	Sidechain
2	b	75	TYR	Sidechain
3	c	102	TYR	Sidechain
3	c	129	ARG	Sidechain
3	c	144	TYR	Sidechain
3	c	146	TYR	Sidechain
3	c	149	TYR	Sidechain
3	c	210	ARG	Sidechain
3	c	226	TYR	Sidechain
3	c	230	PHE	Sidechain
4	d	112	TYR	Sidechain
4	d	120	TYR	Sidechain
4	d	148	TYR	Sidechain
4	d	181	ARG	Sidechain
4	d	197	ARG	Sidechain
4	d	22	TYR	Sidechain
4	d	48	ARG	Sidechain
4	d	75	PHE	Sidechain
4	d	83	ARG	Sidechain
4	d	90	ARG	Sidechain
5	e	102	TYR	Sidechain
6	f	123	TYR	Sidechain
6	f	147	PHE	Sidechain
6	f	171	TYR	Sidechain
6	f	18	ARG	Peptide,Sidechain
6	f	20	PHE	Sidechain
6	f	51	ARG	Sidechain
7	g	103	TYR	Sidechain
7	g	13	SER	Peptide
7	g	130	ARG	Sidechain
7	g	21	ASN	Peptide,Mainchain
7	g	72	ARG	Sidechain
7	g	8	TYR	Sidechain
7	g	93	ARG	Sidechain
8	h	144	TYR	Sidechain
8	h	163	PHE	Sidechain
8	h	183	ARG	Sidechain

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Mol	Chain	Res	Type	Group
8	h	202	TYR	Sidechain
8	h	34	TYR	Sidechain
8	h	79	TYR	Sidechain
9	i	215	TYR	Sidechain
9	i	219	TYR	Sidechain
10	j	124	PHE	Sidechain
10	j	177	ARG	Sidechain
10	j	199	TYR	Sidechain
10	j	28	ARG	Sidechain
10	j	80	ARG	Sidechain
11	k	117	TYR	Sidechain
11	k	23	ARG	Sidechain
11	k	59	TYR	Sidechain
11	k	70	ARG	Sidechain
11	k	98	TYR	Sidechain
12	l	163	TYR	Sidechain
12	l	189	TYR	Sidechain
12	l	196	ARG	Sidechain
12	l	219	TYR	Sidechain
12	l	245	TYR	Sidechain
12	l	81	PHE	Sidechain
13	m	157	PHE	Sidechain
13	m	221	ARG	Sidechain
13	m	41	TYR	Sidechain
13	m	52	PHE	Sidechain
13	m	85	PHE	Sidechain
13	m	87	HIS	Peptide
14	n	161	ARG	Sidechain
14	n	220	ARG	Sidechain
14	n	49	TYR	Sidechain
14	n	63	TYR	Sidechain
14	n	68	ARG	Sidechain

5.2 Too-close contacts [i](#)

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	1908	0	1901	7	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	a	1908	0	1901	8	0
2	B	1907	0	1917	5	0
2	b	1907	0	1917	3	0
3	C	1905	0	1901	2	0
3	c	1905	0	1901	9	0
4	D	1859	0	1875	4	0
4	d	1982	0	1993	4	0
5	E	1883	0	1851	6	0
5	e	1883	0	1851	5	0
6	F	1773	0	1775	5	0
6	f	1773	0	1775	4	0
7	G	1905	0	1897	5	0
7	g	1905	0	1897	1	0
8	1	1512	0	1478	1	0
8	h	1512	0	1478	2	0
9	2	1720	0	1716	4	0
9	i	1720	0	1716	4	0
10	3	1581	0	1571	1	0
10	j	1581	0	1571	2	0
11	4	1562	0	1569	2	0
11	k	1562	0	1569	4	0
12	5	1644	0	1592	5	0
12	l	1644	0	1592	2	0
13	6	1757	0	1708	0	0
13	m	1757	0	1708	3	0
14	7	1790	0	1790	4	0
14	n	1816	0	1818	9	0
15	W	1535	0	1542	3	0
16	V	2274	0	2273	2	0
17	T	2193	0	2161	4	0
18	X	1033	0	1017	1	0
19	Y	731	0	675	1	0
20	Z	7006	0	6932	26	0
21	N	7158	0	7226	14	0
22	S	3895	0	3938	9	0
23	P	3609	0	3694	4	0
24	Q	3499	0	3524	16	0
25	R	3259	0	3263	10	0
26	U	2427	0	2462	8	0
27	O	3186	0	3213	7	0
28	H	3313	0	3321	1	0
29	I	3022	0	3092	11	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
30	K	3113	0	3169	11	0
31	L	3083	0	3157	6	0
32	M	3285	0	3323	13	0
33	J	3171	0	3313	10	0
34	H	31	0	12	0	0
34	I	31	0	12	0	0
34	K	31	0	12	0	0
34	L	31	0	12	0	0
34	M	31	0	12	0	0
35	H	2	0	0	0	0
35	I	1	0	0	0	0
35	J	1	0	0	0	0
35	K	1	0	0	0	0
35	L	1	0	0	0	0
36	J	27	0	12	1	0
All	All	110541	0	110595	236	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 1.

All (236) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:c:5:ARG:HH22	6:f:5:ASN:HB3	1.61	0.65
21:N:443:LEU:HD21	21:N:469:VAL:HG13	1.79	0.64
17:T:195:LEU:HD12	22:S:428:ARG:HA	1.82	0.60
20:Z:161:ILE:HG23	20:Z:214:HIS:CE1	2.36	0.59
15:W:5:ALA:HB3	15:W:101:ARG:HH11	1.67	0.59
24:Q:347:LEU:HD22	24:Q:377:LEU:HD21	1.84	0.58
14:7:162:TYR:HB2	14:7:175:LEU:HD21	1.86	0.57
20:Z:763:HIS:CE1	20:Z:870:ALA:HB2	2.39	0.57
5:e:157:HIS:CE1	5:e:159:GLU:HG2	2.39	0.57
15:W:174:VAL:HG13	15:W:184:ASN:HB3	1.87	0.56
27:O:306:ARG:HE	27:O:306:ARG:HA	1.69	0.56
26:U:298:ASN:HA	26:U:301:ILE:HD12	1.87	0.55
24:Q:227:CYS:SG	24:Q:334:HIS:HE1	2.30	0.55
5:E:73:HIS:H	5:E:73:HIS:CD2	2.23	0.55
12:5:130:TRP:CE3	12:5:161:LEU:HD21	2.41	0.55
14:7:78:VAL:HG21	14:7:100:LEU:HD22	1.89	0.55
3:c:152:ASN:HB2	3:c:153:PRO:HD2	1.88	0.55
29:I:220:ILE:HG13	29:I:344:ILE:HG21	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:M:163:PHE:H	32:M:168:LYS:HE2	1.71	0.54
20:Z:611:THR:HA	21:N:813:ARG:HH21	1.73	0.54
21:N:284:PRO:HA	21:N:287:LEU:HD12	1.90	0.54
1:a:41:ASN:H	1:a:56:GLN:HE21	1.56	0.53
32:M:260:ALA:HB1	32:M:264:ARG:HH12	1.73	0.53
1:A:15:HIS:CE1	7:G:7:GLY:HA3	2.44	0.53
14:n:74:ARG:HG2	14:n:93:MET:HE2	1.91	0.53
6:f:156:LEU:HD22	6:f:159:THR:HB	1.91	0.53
24:Q:227:CYS:SG	24:Q:334:HIS:CE1	3.02	0.53
26:U:190:LEU:HD13	27:O:391:ILE:HG22	1.90	0.53
32:M:256:ILE:HD12	32:M:256:ILE:H	1.72	0.53
29:I:196:GLU:HB2	29:I:346:ARG:HH12	1.74	0.53
2:B:17:LYS:H	3:C:28:SER:HB3	1.73	0.52
25:R:259:PHE:CE2	25:R:332:GLU:HG2	2.43	0.52
20:Z:759:ARG:HH11	20:Z:789:GLN:HG3	1.74	0.52
9:2:181:ILE:HG13	9:2:204:VAL:HG11	1.92	0.52
20:Z:24:THR:HB	20:Z:25:PRO:HD3	1.90	0.52
33:J:327:ILE:HG23	36:J:501:ADP:C2	2.45	0.52
5:E:85:ALA:HB2	5:E:140:VAL:HG21	1.90	0.52
27:O:92:PHE:CE1	27:O:139:LEU:HD13	2.45	0.52
1:a:81:MET:HE3	1:a:141:LEU:HD22	1.91	0.52
24:Q:85:MET:HE2	24:Q:97:LEU:HD13	1.92	0.52
17:T:139:ASP:HA	17:T:142:LEU:HB2	1.91	0.51
17:T:32:ILE:HG13	21:N:17:GLN:HE22	1.75	0.51
14:n:133:MET:HE2	14:n:147:ILE:HD12	1.92	0.51
25:R:47:ALA:HB1	25:R:91:TRP:CD2	2.46	0.51
12:l:81:PHE:CD1	12:l:215:LEU:HD11	2.46	0.51
4:d:192:VAL:HG11	4:d:232:TYR:CE2	2.46	0.50
26:U:257:ILE:HG22	26:U:261:LEU:HD22	1.92	0.50
30:K:346:ARG:HH22	30:K:376:ASP:HA	1.76	0.50
7:G:204:HIS:O	7:G:204:HIS:CG	2.63	0.50
3:c:94:HIS:CD2	3:c:114:ARG:HG2	2.47	0.50
32:M:220:MET:HE2	32:M:324:LEU:HD22	1.93	0.50
10:j:183:TRP:HE1	12:5:241:HIS:CE1	2.30	0.49
1:A:174:LYS:HD3	1:A:214:LEU:HD22	1.94	0.49
30:K:270:PHE:CE2	30:K:272:ASP:HA	2.46	0.49
1:A:171:THR:HG22	1:A:172:GLY:N	2.27	0.49
2:B:109:LEU:HD13	2:B:109:LEU:C	2.38	0.49
20:Z:307:HIS:CG	20:Z:308:LYS:N	2.80	0.49
14:n:198:ILE:HB	14:n:199:PRO:HD3	1.95	0.49
28:H:279:LEU:HB3	28:H:332:THR:HG21	1.92	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:78:ALA:HB3	6:F:79:PRO:HD3	1.95	0.49
9:2:208:GLU:HB2	9:2:211:LYS:HB2	1.94	0.49
4:D:109:LEU:O	4:D:113:VAL:HG23	2.13	0.48
22:S:403:SER:HA	22:S:442:PHE:HA	1.94	0.48
5:e:168:ASN:HB3	5:e:187:TRP:CZ2	2.48	0.48
6:F:71:GLY:HA3	6:F:222:PHE:CZ	2.49	0.48
20:Z:354:PRO:HB2	20:Z:428:TRP:HE1	1.78	0.48
20:Z:910:PRO:HA	20:Z:940:GLY:HA2	1.96	0.48
32:M:96:ASN:HD21	32:M:102:GLN:HG2	1.79	0.48
9:i:43:ILE:HG22	9:i:207:MET:HE1	1.95	0.48
20:Z:499:GLY:CA	20:Z:861:THR:HG21	2.43	0.48
21:N:87:ASP:CG	21:N:88:ARG:H	2.21	0.48
27:O:223:LEU:HD23	27:O:287:LEU:HD13	1.96	0.48
1:a:52:VAL:HG11	1:a:203:VAL:HA	1.96	0.47
11:k:107:TYR:CE1	11:k:186:LYS:HB3	2.49	0.47
20:Z:499:GLY:HA2	20:Z:861:THR:HG21	1.95	0.47
25:R:62:TYR:CD2	25:R:66:LEU:HD11	2.49	0.47
29:I:372:SER:O	29:I:375:VAL:HG22	2.14	0.47
21:N:314:LEU:HB3	21:N:348:PHE:CE1	2.48	0.47
22:S:74:LEU:HD21	22:S:103:SER:HB2	1.97	0.47
32:M:247:ALA:HB3	32:M:250:GLN:HE21	1.80	0.47
21:N:325:PHE:HB2	21:N:328:PHE:HB2	1.96	0.47
4:d:44:LEU:HD12	4:d:72:VAL:HG23	1.97	0.47
8:h:17:PHE:CE1	8:h:22:ILE:HG13	2.50	0.47
11:k:4:ILE:HG12	11:k:103:LEU:HD12	1.95	0.47
1:A:203:VAL:HG12	1:A:207:ILE:HD12	1.97	0.47
30:K:375:ASN:HD22	30:K:378:LEU:HB2	1.80	0.47
25:R:62:TYR:CE2	25:R:180:PHE:CZ	3.03	0.46
30:K:158:ILE:HG22	30:K:159:SER:H	1.80	0.46
7:G:204:HIS:O	7:G:204:HIS:CD2	2.67	0.46
21:N:174:LEU:HD13	21:N:217:MET:HE1	1.95	0.46
25:R:62:TYR:CE2	25:R:66:LEU:HD11	2.51	0.46
13:m:23:ILE:HB	13:m:30:VAL:HG23	1.97	0.46
6:F:207:THR:H	6:F:210:ASN:HB2	1.79	0.46
30:K:83:GLN:HE21	30:K:125:THR:HG21	1.80	0.46
31:L:139:LYS:HD3	31:L:158:ILE:HD13	1.97	0.46
3:c:177:GLN:HA	4:d:54:LEU:HD11	1.97	0.46
5:e:127:ALA:HB2	6:f:125:GLY:HA2	1.98	0.46
22:S:139:HIS:CG	22:S:159:ASN:HD21	2.33	0.46
1:a:53:VAL:HG21	1:a:82:VAL:HG21	1.98	0.46
29:I:313:LEU:HD23	29:I:343:ARG:HD3	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:157:THR:HG22	1:a:163:TYR:HB3	1.98	0.45
4:D:23:ALA:O	4:D:26:ALA:HB3	2.16	0.45
24:Q:27:TYR:CD2	24:Q:68:MET:HE3	2.51	0.45
5:e:142:LEU:HB2	5:e:158:ALA:HB3	1.98	0.45
14:n:52:GLY:HA3	14:n:233:ILE:O	2.16	0.45
23:P:144:VAL:HG13	23:P:156:ALA:HB1	1.98	0.45
33:J:350:MET:HE3	33:J:352:GLY:HA2	1.99	0.45
21:N:314:LEU:HD12	21:N:314:LEU:H	1.81	0.45
23:P:399:ILE:HD12	23:P:401:ASN:HD21	1.82	0.45
32:M:93:ASP:HB3	32:M:95:GLU:H	1.81	0.45
32:M:351:LEU:HD12	32:M:351:LEU:H	1.82	0.45
8:h:129:HIS:CE1	14:n:72:VAL:HG11	2.51	0.45
24:Q:405:GLN:HE22	25:R:395:ASN:HA	1.82	0.45
5:E:161:SER:HB3	32:M:432:PHE:CE1	2.52	0.44
12:5:188:TYR:CE2	12:5:198:LYS:HB3	2.52	0.44
32:M:186:LEU:HB3	32:M:189:GLN:HE21	1.82	0.44
32:M:351:LEU:HD12	32:M:351:LEU:N	2.32	0.44
25:R:258:LEU:HD21	25:R:293:THR:HA	1.99	0.44
31:L:95:ILE:H	31:L:95:ILE:HG12	1.55	0.44
17:T:70:ILE:HD11	17:T:78:PHE:CE1	2.52	0.44
24:Q:252:HIS:CG	24:Q:253:ASN:H	2.35	0.44
27:O:75:GLN:HE21	27:O:109:LEU:HD23	1.82	0.44
33:J:273:LEU:HD23	33:J:309:ARG:HE	1.82	0.44
20:Z:842:GLN:HE21	20:Z:845:LEU:HD22	1.81	0.44
23:P:344:ARG:HH11	23:P:344:ARG:HG2	1.83	0.44
24:Q:409:TYR:O	24:Q:412:ALA:HB3	2.17	0.44
30:K:296:LEU:HD23	33:J:218:LEU:HD21	2.00	0.44
21:N:443:LEU:CD2	21:N:469:VAL:HG13	2.46	0.44
25:R:243:LEU:HD23	25:R:243:LEU:HA	1.85	0.44
14:7:158:GLN:H	14:7:158:GLN:CD	2.26	0.44
22:S:404:LEU:HD23	22:S:404:LEU:H	1.81	0.44
3:c:136:ILE:HD13	3:c:163:ILE:HG23	2.00	0.44
9:i:66:ILE:HG23	9:i:89:GLY:HA2	1.99	0.44
11:k:22:THR:HG21	11:4:173:PRO:HB3	1.99	0.44
6:f:81:ALA:HB2	6:f:130:VAL:HG21	2.00	0.44
1:a:133:TYR:HB3	2:b:5:TYR:CE1	2.53	0.43
20:Z:96:TYR:CE1	20:Z:156:HIS:CE1	3.07	0.43
20:Z:738:TYR:CE2	29:I:70:LEU:HD22	2.54	0.43
24:Q:252:HIS:CG	24:Q:253:ASN:N	2.85	0.43
20:Z:912:PHE:CE1	20:Z:920:GLY:HA2	2.54	0.43
24:Q:138:SER:HB3	24:Q:161:LEU:HD21	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:Z:592:GLU:O	20:Z:593:HIS:CD2	2.71	0.43
25:R:414:LEU:HD13	26:U:266:THR:HG21	1.99	0.43
1:a:83:VAL:HG13	1:a:141:LEU:HD23	2.01	0.43
11:k:67:TYR:HB3	11:k:75:LEU:HD11	2.00	0.43
21:N:140:MET:HE3	33:J:23:PHE:HE1	1.82	0.43
5:E:79:SER:HB3	5:E:172:ILE:HD12	2.00	0.43
12:5:267:ASP:O	12:5:271:LEU:HB2	2.17	0.43
6:F:31:GLN:HE22	32:M:428:LYS:HA	1.84	0.43
31:L:407:ARG:HH22	31:L:409:HIS:CD2	2.37	0.43
13:m:28:PHE:HZ	13:m:188:VAL:HG21	1.82	0.43
3:C:66:LEU:HD13	3:C:66:LEU:HA	1.94	0.43
27:O:266:PHE:O	27:O:270:ILE:HG22	2.18	0.43
12:5:94:ARG:HH21	12:5:104:GLN:HE22	1.67	0.43
22:S:169:CYS:HA	33:J:4:ALA:HB3	1.99	0.42
30:K:328:LEU:HB3	30:K:334:LEU:HD12	2.00	0.42
9:i:113:LYS:HA	9:i:142:ILE:HD11	2.00	0.42
19:Y:54:VAL:HG11	19:Y:60:TRP:CH2	2.55	0.42
13:m:16:ASN:HD21	14:n:168:VAL:HG11	1.84	0.42
20:Z:611:THR:HA	21:N:813:ARG:NH2	2.35	0.42
24:Q:19:GLN:HG3	24:Q:21:ASN:H	1.85	0.42
24:Q:171:LYS:HG2	24:Q:173:SER:H	1.85	0.42
29:I:368:LYS:H	29:I:368:LYS:HD3	1.83	0.42
30:K:360:MET:SD	31:L:212:ILE:HD13	2.60	0.42
1:A:171:THR:HG22	1:A:172:GLY:H	1.84	0.42
16:V:59:ASP:CG	16:V:60:ASP:H	2.27	0.42
25:R:164:THR:HA	25:R:167:LYS:HG3	2.00	0.42
29:I:299:GLU:HA	29:I:302:ILE:HD12	2.00	0.42
7:g:150:MET:HB3	7:g:160:TYR:CE2	2.54	0.42
14:n:76:ILE:HD13	14:n:97:GLU:HG3	2.01	0.42
33:J:165:GLU:HG2	33:J:169:LYS:HD2	2.02	0.42
20:Z:369:PHE:HA	20:Z:390:LEU:HD21	2.02	0.42
9:2:249:ILE:HD13	10:3:45:HIS:CE1	2.54	0.42
20:Z:769:ASN:HD22	20:Z:773:ARG:HH22	1.66	0.42
20:Z:873:LEU:HD12	20:Z:873:LEU:H	1.85	0.42
22:S:74:LEU:O	22:S:78:VAL:HG23	2.19	0.42
22:S:254:ILE:HD11	22:S:279:ILE:HD13	2.02	0.42
33:J:296:ARG:HB3	33:J:298:ASP:H	1.84	0.42
1:A:96:ARG:O	1:A:100:GLU:HG2	2.20	0.42
5:E:123:PHE:CE2	5:E:137:PRO:HB3	2.55	0.42
20:Z:566:LEU:HD22	20:Z:566:LEU:HA	1.96	0.42
3:c:91:ALA:HB2	3:c:115:LEU:HD21	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:50:VAL:HG12	7:G:67:ILE:HD11	2.02	0.41
9:2:188:ILE:O	9:2:192:ILE:HG13	2.20	0.41
20:Z:842:GLN:NE2	20:Z:845:LEU:HD22	2.35	0.41
22:S:81:LEU:HD13	22:S:123:THR:CG2	2.50	0.41
24:Q:97:LEU:HD23	24:Q:133:LEU:HD11	2.01	0.41
24:Q:426:LEU:HD23	26:U:270:ASN:HD22	1.85	0.41
21:N:31:VAL:HA	21:N:34:GLN:HB2	2.02	0.41
29:I:428:VAL:O	29:I:428:VAL:HG22	2.20	0.41
30:K:98:GLN:HE21	30:K:259:ARG:HH22	1.68	0.41
2:B:227:ILE:HD13	2:B:227:ILE:HA	1.83	0.41
29:I:310:LEU:HB3	29:I:343:ARG:HH12	1.85	0.41
3:c:186:VAL:HG23	3:c:187:ASP:N	2.35	0.41
4:D:90:ARG:HH22	11:4:69:ILE:HB	1.86	0.41
18:X:101:LEU:HG	18:X:103:GLU:H	1.85	0.41
23:P:435:LYS:HG2	26:U:99:LEU:HD21	2.02	0.41
27:O:202:SER:HB3	27:O:204:SER:H	1.85	0.41
2:b:51:SER:HB3	2:b:56:ALA:HB3	2.02	0.41
14:7:136:ARG:HB3	14:7:142:PRO:HA	2.03	0.41
16:V:24:LYS:HB3	16:V:199:LEU:HD23	2.03	0.41
21:N:786:ARG:HA	21:N:786:ARG:HH11	1.86	0.41
24:Q:232:TYR:HB2	24:Q:272:LEU:HG	2.02	0.41
1:a:83:VAL:HG11	1:a:90:ALA:HB2	2.03	0.41
4:D:134:LEU:HD23	4:D:149:GLN:HB2	2.02	0.41
15:W:92:GLN:HE22	26:U:62:ASN:HD22	1.69	0.41
20:Z:307:HIS:CD2	20:Z:309:GLN:H	2.39	0.41
9:i:166:VAL:HG21	9:i:190:ALA:HB2	2.03	0.41
3:c:50:ARG:HH12	3:c:59:GLN:HA	1.86	0.41
2:B:197:LYS:HA	2:B:204:PHE:CE1	2.56	0.41
7:G:205:GLU:HA	7:G:208:LYS:HB3	2.02	0.41
33:J:171:PRO:O	33:J:175:GLU:HG2	2.20	0.41
2:b:103:GLU:OE2	10:j:86:THR:HG22	2.20	0.41
20:Z:743:ILE:HD13	20:Z:780:MET:HE2	2.02	0.41
30:K:238:ASN:HB2	30:K:241:GLU:HG2	2.02	0.41
31:L:132:ARG:HD2	31:L:132:ARG:HA	1.93	0.41
31:L:407:ARG:NH2	31:L:409:HIS:CD2	2.89	0.41
32:M:135:VAL:HG13	32:M:158:THR:HG23	2.03	0.41
20:Z:862:MET:HE2	20:Z:886:VAL:HG23	2.04	0.41
29:I:383:THR:HG21	29:I:420:LYS:HE3	2.03	0.41
30:K:171:TYR:CD2	30:K:225:ALA:HB1	2.56	0.41
3:c:54:SER:HB2	3:c:57:LEU:HB2	2.02	0.40
5:e:203:ILE:O	5:e:207:VAL:HG22	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:Z:770:GLU:H	20:Z:770:GLU:HG2	1.64	0.40
12:l:241:HIS:CE1	12:l:285:VAL:HG21	2.56	0.40
1:A:227:VAL:HG12	1:A:229:THR:HG23	2.03	0.40
8:1:86:THR:O	8:1:90:VAL:HG23	2.20	0.40
26:U:35:GLY:HA2	26:U:54:LEU:HG	2.03	0.40
4:d:177:LYS:C	4:d:178:ASN:HD22	2.30	0.40
14:n:48:LYS:HA	14:n:53:VAL:HG12	2.03	0.40
14:n:95:HIS:O	14:n:95:HIS:CG	2.74	0.40
2:B:55:LEU:HD23	2:B:55:LEU:HA	1.97	0.40
5:E:121:LEU:HD11	6:F:126:ARG:HH22	1.86	0.40
20:Z:322:GLU:HG3	20:Z:327:GLN:HG3	2.02	0.40
24:Q:25:GLN:HA	24:Q:28:LEU:HD12	2.04	0.40
29:I:170:VAL:HA	33:J:231:ARG:HG2	2.03	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	239/241 (99%)	221 (92%)	16 (7%)	2 (1%)	16	52
1	a	239/241 (99%)	224 (94%)	11 (5%)	4 (2%)	7	36
2	B	247/249 (99%)	226 (92%)	18 (7%)	3 (1%)	10	42
2	b	247/249 (99%)	228 (92%)	13 (5%)	6 (2%)	4	30
3	C	242/244 (99%)	232 (96%)	10 (4%)	0	100	100
3	c	242/244 (99%)	228 (94%)	12 (5%)	2 (1%)	16	52
4	D	235/251 (94%)	217 (92%)	13 (6%)	5 (2%)	5	32
4	d	249/251 (99%)	232 (93%)	16 (6%)	1 (0%)	30	65
5	E	242/244 (99%)	224 (93%)	15 (6%)	3 (1%)	10	42
5	e	242/244 (99%)	224 (93%)	16 (7%)	2 (1%)	16	52

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
6	F	229/231 (99%)	212 (93%)	15 (7%)	2 (1%)	14	49
6	f	229/231 (99%)	217 (95%)	9 (4%)	3 (1%)	9	41
7	G	243/245 (99%)	230 (95%)	11 (4%)	2 (1%)	16	52
7	g	243/245 (99%)	230 (95%)	11 (4%)	2 (1%)	16	52
8	1	194/196 (99%)	185 (95%)	6 (3%)	3 (2%)	8	39
8	h	194/196 (99%)	176 (91%)	14 (7%)	4 (2%)	5	32
9	2	224/226 (99%)	210 (94%)	13 (6%)	1 (0%)	30	65
9	i	224/226 (99%)	208 (93%)	14 (6%)	2 (1%)	14	49
10	3	202/204 (99%)	181 (90%)	20 (10%)	1 (0%)	24	61
10	j	202/204 (99%)	184 (91%)	14 (7%)	4 (2%)	6	33
11	4	193/195 (99%)	178 (92%)	12 (6%)	3 (2%)	7	37
11	k	193/195 (99%)	177 (92%)	14 (7%)	2 (1%)	12	46
12	5	210/212 (99%)	196 (93%)	14 (7%)	0	100	100
12	l	210/212 (99%)	196 (93%)	9 (4%)	5 (2%)	4	30
13	6	220/222 (99%)	200 (91%)	17 (8%)	3 (1%)	9	39
13	m	220/222 (99%)	203 (92%)	15 (7%)	2 (1%)	14	49
14	7	227/232 (98%)	197 (87%)	23 (10%)	7 (3%)	3	25
14	n	230/232 (99%)	206 (90%)	18 (8%)	6 (3%)	4	28
15	W	195/197 (99%)	181 (93%)	6 (3%)	8 (4%)	2	20
16	V	287/289 (99%)	265 (92%)	16 (6%)	6 (2%)	5	32
17	T	264/266 (99%)	238 (90%)	23 (9%)	3 (1%)	11	44
18	X	125/127 (98%)	105 (84%)	15 (12%)	5 (4%)	2	21
19	Y	87/89 (98%)	73 (84%)	11 (13%)	3 (3%)	3	23
20	Z	902/970 (93%)	813 (90%)	71 (8%)	18 (2%)	6	33
21	N	920/922 (100%)	861 (94%)	43 (5%)	16 (2%)	7	36
22	S	473/475 (100%)	438 (93%)	24 (5%)	11 (2%)	5	31
23	P	438/440 (100%)	410 (94%)	18 (4%)	10 (2%)	5	31
24	Q	432/434 (100%)	393 (91%)	28 (6%)	11 (2%)	4	29
25	R	403/405 (100%)	377 (94%)	18 (4%)	8 (2%)	6	33
26	U	302/304 (99%)	290 (96%)	9 (3%)	3 (1%)	12	46
27	O	386/388 (100%)	371 (96%)	14 (4%)	1 (0%)	36	70

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
28	H	424/426 (100%)	380 (90%)	32 (8%)	12 (3%)	4	27
29	I	383/385 (100%)	362 (94%)	15 (4%)	6 (2%)	7	37
30	K	392/394 (100%)	363 (93%)	25 (6%)	4 (1%)	12	46
31	L	386/388 (100%)	365 (95%)	18 (5%)	3 (1%)	16	52
32	M	419/421 (100%)	379 (90%)	32 (8%)	8 (2%)	6	34
33	J	403/405 (100%)	362 (90%)	29 (7%)	12 (3%)	3	25
All	All	13932/14109 (99%)	12868 (92%)	836 (6%)	228 (2%)	10	37

All (228) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	a	196	GLU
5	e	16	SER
11	k	4	ILE
1	A	196	GLU
7	G	9	ASP
8	1	153	GLU
10	3	183	TRP
11	4	151	ASP
15	W	57	ALA
15	W	84	LYS
15	W	149	GLN
16	V	196	TYR
16	V	274	GLN
18	X	116	ALA
20	Z	85	VAL
20	Z	462	VAL
20	Z	802	ASP
20	Z	926	ASN
21	N	832	HIS
21	N	915	ALA
24	Q	40	ALA
24	Q	46	VAL
24	Q	110	SER
25	R	76	GLN
25	R	125	GLU
25	R	280	ILE
25	R	395	ASN
28	H	70	LYS
28	H	76	LEU

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Mol	Chain	Res	Type
28	H	194	SER
29	I	87	LYS
29	I	115	ASP
29	I	125	MET
30	K	237	VAL
31	L	174	GLU
32	M	97	SER
32	M	112	ALA
33	J	118	ASP
33	J	353	CYS
1	a	13	ASP
2	b	219	PRO
10	j	7	ILE
4	D	50	SER
4	D	218	ASP
5	E	9	ASP
6	F	14	SER
7	G	22	PHE
8	1	126	GLY
11	4	11	ASP
14	7	140	MET
14	7	199	PRO
15	W	190	ILE
17	T	131	LYS
20	Z	309	GLN
20	Z	825	ALA
21	N	87	ASP
21	N	718	GLU
21	N	739	PHE
21	N	859	ASN
21	N	861	TYR
21	N	894	ARG
22	S	102	SER
22	S	198	SER
22	S	258	GLU
23	P	47	ARG
23	P	86	HIS
23	P	130	ILE
23	P	327	LEU
25	R	223	ASN
28	H	152	ILE
29	I	86	GLU

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Mol	Chain	Res	Type
29	I	159	VAL
31	L	288	GLY
33	J	110	SER
33	J	151	GLY
33	J	230	VAL
2	b	97	TYR
3	c	167	ALA
6	f	14	SER
7	g	207	ASN
8	h	27	SER
9	i	146	GLY
12	l	286	ILE
13	m	208	ASP
14	n	35	GLN
14	n	80	ASP
4	D	5	ASP
4	D	15	GLY
5	E	16	SER
6	F	222	PHE
13	6	27	ASP
15	W	165	GLN
15	W	179	ARG
15	W	191	ILE
17	T	140	SER
18	X	38	ASN
18	X	94	ASN
18	X	107	GLY
19	Y	13	LYS
20	Z	57	LYS
20	Z	578	GLY
20	Z	727	GLU
20	Z	885	ALA
20	Z	939	ALA
20	Z	940	GLY
20	Z	947	GLY
21	N	858	LYS
22	S	257	LEU
22	S	263	ASP
23	P	6	PRO
23	P	328	ALA
24	Q	44	ALA
24	Q	70	ALA

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Mol	Chain	Res	Type
24	Q	252	HIS
25	R	82	ASP
27	O	119	SER
28	H	188	PRO
28	H	412	PRO
29	I	429	GLU
30	K	164	ASN
30	K	321	ALA
31	L	110	LYS
33	J	90	PRO
33	J	285	SER
1	a	76	SER
4	d	141	ARG
6	f	205	SER
6	f	221	PRO
7	g	22	PHE
8	h	138	SER
10	j	8	ASN
10	j	157	ASN
12	l	147	GLU
14	n	110	ASP
14	n	249	ASN
2	B	232	GLY
5	E	53	ARG
9	2	174	ASP
16	V	61	TYR
16	V	185	ILE
17	T	132	HIS
19	Y	45	ASN
20	Z	397	ASP
21	N	31	VAL
21	N	490	LEU
21	N	882	ILE
22	S	152	LEU
22	S	225	HIS
23	P	331	GLY
24	Q	71	LYS
24	Q	75	ARG
25	R	238	PHE
26	U	133	PRO
28	H	190	ARG
28	H	203	LYS

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Mol	Chain	Res	Type
28	H	215	LYS
28	H	315	GLY
28	H	324	GLY
30	K	103	ILE
32	M	318	ASP
32	M	339	ARG
2	b	4	ARG
2	b	124	SER
3	c	42	ASP
5	e	53	ARG
8	h	39	VAL
8	h	49	LYS
12	l	114	PRO
12	l	115	PHE
14	n	117	GLU
1	A	60	PRO
8	1	123	PRO
13	6	48	GLU
14	7	43	SER
14	7	80	ASP
14	7	110	ASP
14	7	116	ALA
14	7	244	ASN
16	V	262	THR
18	X	95	GLU
20	Z	5	SER
20	Z	82	MET
20	Z	233	LEU
21	N	785	PRO
21	N	853	ASP
22	S	96	ILE
22	S	118	PHE
22	S	126	LYS
23	P	7	ILE
23	P	397	ALA
25	R	245	SER
26	U	150	THR
26	U	180	ASP
28	H	314	VAL
32	M	106	VAL
32	M	290	ARG
33	J	228	ARG

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Mol	Chain	Res	Type
33	J	281	GLY
2	b	17	LYS
2	b	220	ASP
10	j	156	PRO
14	n	119	ALA
2	B	106	PRO
4	D	102	ASP
13	6	137	GLY
16	V	22	ASP
19	Y	70	ASP
20	Z	25	PRO
21	N	791	ALA
23	P	5	ALA
24	Q	49	LYS
24	Q	128	GLU
32	M	143	ASN
32	M	292	ASP
33	J	280	ASP
33	J	284	THR
12	l	173	GLY
21	N	914	VAL
9	i	222	PRO
11	k	178	GLY
22	S	451	ILE
33	J	190	PRO
13	m	49	PRO
2	B	32	VAL
15	W	178	PRO
1	a	16	ILE
11	4	150	PRO
24	Q	66	VAL

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.

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	206/206 (100%)	198 (96%)	8 (4%)	28	51
1	a	206/206 (100%)	193 (94%)	13 (6%)	16	40
2	B	208/208 (100%)	200 (96%)	8 (4%)	29	51
2	b	208/208 (100%)	201 (97%)	7 (3%)	32	55
3	C	203/203 (100%)	196 (97%)	7 (3%)	32	55
3	c	203/203 (100%)	203 (100%)	0	100	100
4	D	210/224 (94%)	205 (98%)	5 (2%)	43	63
4	d	224/224 (100%)	223 (100%)	1 (0%)	84	83
5	E	200/200 (100%)	188 (94%)	12 (6%)	17	42
5	e	200/200 (100%)	194 (97%)	6 (3%)	36	57
6	F	190/190 (100%)	183 (96%)	7 (4%)	30	52
6	f	190/190 (100%)	186 (98%)	4 (2%)	47	65
7	G	202/202 (100%)	200 (99%)	2 (1%)	68	76
7	g	202/202 (100%)	196 (97%)	6 (3%)	36	57
8	1	162/162 (100%)	161 (99%)	1 (1%)	78	80
8	h	162/162 (100%)	156 (96%)	6 (4%)	30	52
9	2	185/185 (100%)	181 (98%)	4 (2%)	45	64
9	i	185/185 (100%)	180 (97%)	5 (3%)	39	60
10	3	172/172 (100%)	166 (96%)	6 (4%)	32	54
10	j	172/172 (100%)	169 (98%)	3 (2%)	53	68
11	4	173/173 (100%)	169 (98%)	4 (2%)	44	64
11	k	173/173 (100%)	166 (96%)	7 (4%)	28	50
12	5	169/169 (100%)	164 (97%)	5 (3%)	36	57
12	l	169/169 (100%)	165 (98%)	4 (2%)	43	63
13	6	185/185 (100%)	180 (97%)	5 (3%)	39	60
13	m	185/185 (100%)	177 (96%)	8 (4%)	26	49
14	7	195/198 (98%)	191 (98%)	4 (2%)	47	65
14	n	198/198 (100%)	190 (96%)	8 (4%)	28	50
15	W	171/171 (100%)	168 (98%)	3 (2%)	51	67
16	V	253/253 (100%)	246 (97%)	7 (3%)	38	59

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
17	T	249/249 (100%)	242 (97%)	7 (3%)	38	59
18	X	116/116 (100%)	108 (93%)	8 (7%)	14	38
19	Y	81/81 (100%)	77 (95%)	4 (5%)	22	46
20	Z	773/828 (93%)	748 (97%)	25 (3%)	34	56
21	N	776/776 (100%)	758 (98%)	18 (2%)	44	64
22	S	447/447 (100%)	441 (99%)	6 (1%)	61	72
23	P	412/412 (100%)	404 (98%)	8 (2%)	50	67
24	Q	391/391 (100%)	380 (97%)	11 (3%)	38	59
25	R	356/356 (100%)	348 (98%)	8 (2%)	45	64
26	U	277/277 (100%)	269 (97%)	8 (3%)	37	58
27	O	363/363 (100%)	349 (96%)	14 (4%)	28	51
28	H	361/361 (100%)	351 (97%)	10 (3%)	38	59
29	I	342/342 (100%)	333 (97%)	9 (3%)	40	61
30	K	346/346 (100%)	339 (98%)	7 (2%)	48	66
31	L	332/332 (100%)	321 (97%)	11 (3%)	33	55
32	M	364/364 (100%)	352 (97%)	12 (3%)	33	55
33	J	352/352 (100%)	343 (97%)	9 (3%)	40	61
All	All	12099/12171 (99%)	11758 (97%)	341 (3%)	38	59

All (341) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	a	13	ASP
1	a	16	ILE
1	a	43	LEU
1	a	59	VAL
1	a	86	PRO
1	a	119	LYS
1	a	139	VAL
1	a	171	THR
1	a	175	GLN
1	a	181	ASN
1	a	188	LYS
1	a	219	SER
1	a	248	ILE
2	b	53	SER

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Mol	Chain	Res	Type
2	b	86	VAL
2	b	92	VAL
2	b	118	MET
2	b	124	SER
2	b	132	VAL
2	b	233	PRO
4	d	178	ASN
5	e	22	PHE
5	e	78	MET
5	e	82	THR
5	e	121	LEU
5	e	136	ARG
5	e	222	ILE
6	f	72	LEU
6	f	74	LEU
6	f	161	ILE
6	f	189	LEU
7	g	11	SER
7	g	46	VAL
7	g	134	VAL
7	g	185	GLU
7	g	218	TRP
7	g	231	VAL
8	h	84	THR
8	h	116	LYS
8	h	121	THR
8	h	135	ILE
8	h	144	TYR
8	h	173	LYS
9	i	60	CYS
9	i	148	THR
9	i	201	ASN
9	i	209	ILE
9	i	243	LYS
10	j	11	ILE
10	j	33	SER
10	j	172	LEU
11	k	7	ILE
11	k	31	SER
11	k	32	ASP
11	k	75	LEU
11	k	169	GLU

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Mol	Chain	Res	Type
11	k	180	ILE
11	k	192	VAL
12	l	79	LEU
12	l	109	VAL
12	l	181	ARG
12	l	258	ASP
13	m	11	ASN
13	m	30	VAL
13	m	94	ILE
13	m	115	VAL
13	m	119	ILE
13	m	130	VAL
13	m	135	PRO
13	m	136	VAL
14	n	36	GLN
14	n	86	ILE
14	n	113	LEU
14	n	115	ASP
14	n	152	VAL
14	n	165	LEU
14	n	182	HIS
14	n	216	VAL
1	A	16	ILE
1	A	17	THR
1	A	53	VAL
1	A	110	TYR
1	A	131	ARG
1	A	139	VAL
1	A	175	GLN
1	A	216	THR
2	B	20	GLN
2	B	21	ILE
2	B	35	LEU
2	B	37	ILE
2	B	107	THR
2	B	118	MET
2	B	162	THR
2	B	179	TRP
3	C	63	THR
3	C	66	LEU
3	C	80	LEU
3	C	154	SER

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Mol	Chain	Res	Type
3	C	161	LYS
3	C	207	THR
3	C	232	PRO
4	D	11	PHE
4	D	62	SER
4	D	118	GLN
4	D	152	PRO
4	D	194	LEU
5	E	14	THR
5	E	20	ARG
5	E	22	PHE
5	E	38	ILE
5	E	68	VAL
5	E	76	CYS
5	E	109	VAL
5	E	112	LEU
5	E	136	ARG
5	E	144	ILE
5	E	164	PHE
5	E	214	GLU
6	F	5	ASN
6	F	57	SER
6	F	72	LEU
6	F	74	LEU
6	F	80	ASP
6	F	117	GLN
6	F	161	ILE
7	G	83	PRO
7	G	185	GLU
8	1	135	ILE
9	2	106	VAL
9	2	156	LEU
9	2	167	LEU
9	2	241	VAL
10	3	49	VAL
10	3	82	ILE
10	3	118	LYS
10	3	147	PHE
10	3	150	CYS
10	3	192	LYS
11	4	29	LYS
11	4	110	LYS

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Mol	Chain	Res	Type
11	4	124	THR
11	4	141	PHE
12	5	79	LEU
12	5	128	GLN
12	5	164	GLN
12	5	181	ARG
12	5	268	VAL
13	6	39	THR
13	6	51	VAL
13	6	108	LYS
13	6	115	VAL
13	6	123	ASP
14	7	39	VAL
14	7	95	HIS
14	7	152	VAL
14	7	186	PRO
15	W	2	VAL
15	W	139	VAL
15	W	171	LEU
16	V	24	LYS
16	V	27	VAL
16	V	58	VAL
16	V	80	VAL
16	V	188	LEU
16	V	199	LEU
16	V	259	LYS
17	T	85	LEU
17	T	138	ASP
17	T	140	SER
17	T	171	ILE
17	T	200	LEU
17	T	248	GLU
17	T	254	ASP
18	X	14	VAL
18	X	18	ASN
18	X	35	ILE
18	X	38	ASN
18	X	63	PRO
18	X	87	PHE
18	X	90	VAL
18	X	128	VAL
19	Y	18	LYS

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Mol	Chain	Res	Type
19	Y	21	ASN
19	Y	57	THR
19	Y	74	THR
20	Z	63	LEU
20	Z	120	SER
20	Z	154	ILE
20	Z	210	TYR
20	Z	213	LYS
20	Z	221	VAL
20	Z	284	LEU
20	Z	317	GLN
20	Z	340	LEU
20	Z	462	VAL
20	Z	534	PHE
20	Z	546	ILE
20	Z	548	ASP
20	Z	566	LEU
20	Z	609	THR
20	Z	722	ASP
20	Z	728	LYS
20	Z	741	LEU
20	Z	756	MET
20	Z	817	LEU
20	Z	850	LEU
20	Z	859	LYS
20	Z	874	ASN
20	Z	945	ILE
20	Z	949	ILE
21	N	263	SER
21	N	318	LYS
21	N	381	GLU
21	N	417	ARG
21	N	436	ASP
21	N	492	THR
21	N	508	THR
21	N	530	GLU
21	N	546	LEU
21	N	724	THR
21	N	734	VAL
21	N	773	MET
21	N	809	ARG
21	N	824	ASN

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Mol	Chain	Res	Type
21	N	829	LYS
21	N	862	SER
21	N	869	ASP
21	N	919	THR
22	S	92	LEU
22	S	93	LEU
22	S	105	PRO
22	S	293	ILE
22	S	392	ILE
22	S	475	TYR
23	P	6	PRO
23	P	75	LEU
23	P	129	LYS
23	P	163	LEU
23	P	203	ILE
23	P	208	PHE
23	P	308	LEU
23	P	309	MET
24	Q	26	VAL
24	Q	79	PRO
24	Q	94	VAL
24	Q	122	ILE
24	Q	157	LEU
24	Q	174	LEU
24	Q	195	LYS
24	Q	198	LEU
24	Q	222	SER
24	Q	287	THR
24	Q	403	PRO
25	R	22	PRO
25	R	33	LEU
25	R	72	VAL
25	R	98	LEU
25	R	110	ILE
25	R	184	GLN
25	R	199	GLU
25	R	380	VAL
26	U	28	LYS
26	U	89	LEU
26	U	106	ILE
26	U	140	ILE
26	U	229	LEU

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Mol	Chain	Res	Type
26	U	246	GLU
26	U	257	ILE
26	U	261	LEU
27	O	9	THR
27	O	57	LEU
27	O	98	TYR
27	O	110	ASP
27	O	126	ILE
27	O	144	VAL
27	O	166	ARG
27	O	182	LYS
27	O	185	PHE
27	O	237	PRO
27	O	258	LEU
27	O	307	MET
27	O	343	GLN
27	O	378	GLU
28	H	163	VAL
28	H	174	VAL
28	H	195	VAL
28	H	203	LYS
28	H	208	TYR
28	H	240	ILE
28	H	268	ASP
28	H	280	VAL
28	H	389	PHE
28	H	459	SER
29	I	71	LEU
29	I	159	VAL
29	I	168	VAL
29	I	219	VAL
29	I	254	GLN
29	I	257	LEU
29	I	336	PRO
29	I	341	PRO
29	I	368	LYS
30	K	237	VAL
30	K	264	ASN
30	K	269	ILE
30	K	272	ASP
30	K	286	THR
30	K	376	ASP

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Mol	Chain	Res	Type
30	K	404	GLN
31	L	93	ASN
31	L	126	ARG
31	L	132	ARG
31	L	144	VAL
31	L	190	ILE
31	L	206	ILE
31	L	216	LYS
31	L	235	VAL
31	L	361	PHE
31	L	415	LEU
31	L	421	LYS
32	M	37	LEU
32	M	76	PRO
32	M	85	VAL
32	M	108	LEU
32	M	129	LEU
32	M	146	VAL
32	M	162	GLU
32	M	172	VAL
32	M	210	MET
32	M	296	SER
32	M	324	LEU
32	M	351	LEU
33	J	78	ILE
33	J	95	ILE
33	J	121	MET
33	J	279	LEU
33	J	349	LYS
33	J	353	CYS
33	J	370	LEU
33	J	400	VAL
33	J	402	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (309) such sidechains are listed below:

Mol	Chain	Res	Type
1	a	15	HIS
1	a	27	GLN
1	a	39	ASN
1	a	56	GLN
1	a	92	ASN

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Mol	Chain	Res	Type
1	a	123	ASN
1	a	130	GLN
1	a	184	ASN
1	a	195	ASN
1	a	209	HIS
1	a	251	GLN
2	b	149	GLN
2	b	190	HIS
2	b	241	GLN
2	b	244	ASN
3	c	94	HIS
3	c	125	HIS
4	d	19	GLN
4	d	94	GLN
4	d	96	HIS
4	d	122	GLN
4	d	167	ASN
4	d	178	ASN
4	d	235	GLN
4	d	238	GLN
4	d	243	GLN
5	e	23	GLN
5	e	100	ASN
5	e	147	HIS
5	e	157	HIS
5	e	168	ASN
5	e	218	GLN
5	e	225	GLN
6	f	110	HIS
6	f	117	GLN
6	f	119	ASN
7	g	12	ASN
7	g	21	ASN
7	g	87	HIS
7	g	183	HIS
8	h	37	ASN
8	h	71	HIS
8	h	98	ASN
8	h	166	HIS
8	h	204	GLN
9	i	59	ASN
9	i	91	ASN

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Mol	Chain	Res	Type
9	i	95	HIS
10	j	38	ASN
10	j	64	ASN
10	j	89	GLN
10	j	173	ASN
11	k	37	GLN
11	k	65	GLN
11	k	133	HIS
12	l	84	GLN
12	l	241	HIS
12	l	265	ASN
12	l	266	HIS
12	l	283	ASN
13	m	16	ASN
13	m	87	HIS
13	m	88	ASN
13	m	103	HIS
14	n	95	HIS
14	n	141	ASN
14	n	164	ASN
14	n	246	GLN
1	A	15	HIS
1	A	41	ASN
1	A	176	GLN
1	A	181	ASN
1	A	184	ASN
1	A	185	HIS
1	A	193	HIS
2	B	94	HIS
2	B	139	HIS
2	B	149	GLN
2	B	190	HIS
2	B	218	ASN
3	C	31	HIS
3	C	89	ASN
3	C	103	ASN
3	C	156	ASN
3	C	221	ASN
4	D	96	HIS
4	D	167	ASN
5	E	73	HIS
5	E	157	HIS

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Mol	Chain	Res	Type
5	E	185	ASN
5	E	188	HIS
5	E	216	ASN
6	F	21	GLN
6	F	60	GLN
6	F	117	GLN
6	F	121	GLN
6	F	185	ASN
6	F	210	ASN
7	G	87	HIS
7	G	90	ASN
7	G	183	HIS
7	G	204	HIS
8	1	71	HIS
8	1	78	GLN
8	1	129	HIS
9	2	143	HIS
9	2	218	ASN
10	3	32	GLN
10	3	45	HIS
11	4	41	HIS
11	4	55	GLN
11	4	133	HIS
11	4	166	GLN
12	5	141	HIS
12	5	160	ASN
12	5	208	GLN
12	5	283	ASN
13	6	100	ASN
13	6	103	HIS
13	6	163	ASN
13	6	166	ASN
14	7	35	GLN
14	7	81	ASN
14	7	153	GLN
14	7	185	ASN
14	7	204	GLN
14	7	236	ASN
15	W	29	GLN
15	W	38	GLN
15	W	80	GLN
15	W	92	GLN

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Mol	Chain	Res	Type
15	W	100	HIS
15	W	136	ASN
15	W	162	ASN
15	W	170	HIS
16	V	73	GLN
16	V	88	GLN
16	V	102	GLN
16	V	131	GLN
16	V	200	ASN
16	V	291	ASN
17	T	74	ASN
17	T	135	ASN
17	T	236	ASN
17	T	238	GLN
17	T	272	ASN
18	X	102	GLN
18	X	112	ASN
19	Y	45	ASN
19	Y	63	ASN
20	Z	26	ASN
20	Z	77	ASN
20	Z	151	HIS
20	Z	156	HIS
20	Z	214	HIS
20	Z	235	GLN
20	Z	307	HIS
20	Z	317	GLN
20	Z	347	ASN
20	Z	378	GLN
20	Z	387	ASN
20	Z	391	ASN
20	Z	405	ASN
20	Z	429	ASN
20	Z	434	GLN
20	Z	463	HIS
20	Z	549	ASN
20	Z	593	HIS
20	Z	763	HIS
20	Z	769	ASN
20	Z	789	GLN
20	Z	823	ASN
20	Z	842	GLN

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Mol	Chain	Res	Type
20	Z	856	HIS
20	Z	868	ASN
20	Z	926	ASN
20	Z	959	HIS
21	N	17	GLN
21	N	30	ASN
21	N	176	GLN
21	N	199	ASN
21	N	226	ASN
21	N	256	GLN
21	N	267	GLN
21	N	300	ASN
21	N	305	ASN
21	N	315	ASN
21	N	346	ASN
21	N	352	ASN
21	N	375	HIS
21	N	525	ASN
21	N	564	ASN
21	N	613	HIS
21	N	614	ASN
21	N	703	GLN
21	N	738	GLN
21	N	772	GLN
21	N	877	GLN
21	N	922	GLN
22	S	99	ASN
22	S	122	ASN
22	S	139	HIS
22	S	159	ASN
22	S	177	ASN
22	S	180	ASN
22	S	205	ASN
22	S	225	HIS
22	S	244	ASN
22	S	302	HIS
22	S	303	ASN
22	S	321	GLN
22	S	378	GLN
22	S	437	ASN
22	S	489	GLN
23	P	29	GLN

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Mol	Chain	Res	Type
23	P	94	GLN
23	P	98	GLN
23	P	128	ASN
23	P	230	HIS
23	P	263	HIS
23	P	296	GLN
23	P	323	ASN
23	P	337	HIS
23	P	385	ASN
23	P	401	ASN
24	Q	54	GLN
24	Q	63	GLN
24	Q	106	GLN
24	Q	178	HIS
24	Q	186	HIS
24	Q	252	HIS
24	Q	260	GLN
24	Q	280	ASN
24	Q	308	ASN
24	Q	334	HIS
24	Q	336	ASN
24	Q	361	HIS
24	Q	405	GLN
25	R	23	ASN
25	R	42	GLN
25	R	130	GLN
25	R	143	GLN
25	R	374	ASN
25	R	385	ASN
25	R	391	ASN
25	R	399	GLN
26	U	26	GLN
26	U	116	ASN
26	U	238	ASN
26	U	252	HIS
26	U	270	ASN
27	O	23	HIS
27	O	64	ASN
27	O	74	ASN
27	O	75	GLN
27	O	105	GLN
27	O	107	GLN

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Mol	Chain	Res	Type
27	O	116	ASN
27	O	141	ASN
27	O	169	ASN
27	O	175	ASN
27	O	212	GLN
27	O	374	ASN
27	O	389	GLN
28	H	95	HIS
28	H	124	ASN
28	H	151	GLN
28	H	182	ASN
28	H	327	ASN
28	H	356	ASN
28	H	413	ASN
28	H	465	GLN
29	I	117	HIS
29	I	151	HIS
29	I	161	GLN
29	I	204	HIS
29	I	254	GLN
29	I	311	ASN
29	I	352	ASN
29	I	365	HIS
29	I	370	ASN
30	K	83	GLN
30	K	98	GLN
30	K	144	ASN
30	K	285	GLN
30	K	302	GLN
30	K	311	ASN
30	K	319	ASN
30	K	375	ASN
31	L	73	GLN
31	L	79	GLN
31	L	189	GLN
31	L	320	GLN
31	L	387	ASN
31	L	393	ASN
31	L	409	HIS
31	L	435	GLN
32	M	55	ASN
32	M	96	ASN

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Mol	Chain	Res	Type
32	M	110	ASN
32	M	189	GLN
32	M	250	GLN
32	M	375	ASN
32	M	423	GLN
33	J	204	HIS
33	J	205	HIS
33	J	331	HIS
33	J	376	HIS
33	J	393	ASN

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](#)

Of 12 ligands modelled in this entry, 6 are monoatomic - leaving 6 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. 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 $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# $ Z > 2$	Counts	RMSZ	# $ Z > 2$
34	ATP	I	501	-	32,33,33	3.41	6 (18%)	48,52,52	1.39	6 (12%)
34	ATP	M	501	35	32,33,33	5.24	7 (21%)	48,52,52	1.68	10 (20%)
34	ATP	L	501	-	32,33,33	3.15	3 (9%)	48,52,52	1.42	7 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
34	ATP	H	501	35	32,33,33	3.20	8 (25%)	48,52,52	1.32	6 (12%)
36	ADP	J	501	-	28,29,29	1.55	4 (14%)	43,45,45	1.24	6 (13%)
34	ATP	K	501	35	32,33,33	3.60	5 (15%)	48,52,52	1.16	5 (10%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
34	ATP	I	501	-	-	6/22/38/38	0/3/3/3
34	ATP	M	501	35	-	3/22/38/38	0/3/3/3
34	ATP	L	501	-	-	2/22/38/38	0/3/3/3
34	ATP	H	501	35	-	9/22/38/38	0/3/3/3
36	ADP	J	501	-	-	5/16/32/32	0/3/3/3
34	ATP	K	501	35	-	5/22/38/38	0/3/3/3

All (33) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	M	501	ATP	PB-O3B	20.54	1.81	1.59
34	M	501	ATP	PB-O3A	19.47	1.80	1.59
34	K	501	ATP	PB-O3B	15.69	1.76	1.59
34	I	501	ATP	PB-O3A	12.66	1.73	1.59
34	L	501	ATP	PB-O3B	12.56	1.73	1.59
34	I	501	ATP	PB-O3B	12.53	1.73	1.59
34	H	501	ATP	PB-O3A	11.73	1.72	1.59
34	H	501	ATP	PB-O3B	11.56	1.72	1.59
34	K	501	ATP	PB-O3A	11.47	1.71	1.59
34	L	501	ATP	PB-O3A	10.94	1.71	1.59
34	M	501	ATP	PA-O3A	5.85	1.65	1.59
36	J	501	ADP	PA-O3A	5.00	1.64	1.59
34	I	501	ATP	PA-O3A	4.14	1.64	1.59
34	H	501	ATP	C5-N7	-3.28	1.33	1.39
34	I	501	ATP	C5-N7	2.83	1.44	1.39
36	J	501	ADP	O4'-C1'	2.68	1.48	1.42
34	K	501	ATP	C4-N3	2.62	1.39	1.34
36	J	501	ADP	C2-N1	-2.47	1.29	1.33
34	M	501	ATP	O2'-C2'	-2.38	1.37	1.43
34	M	501	ATP	C5-N7	-2.33	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	H	501	ATP	PA-O3A	2.32	1.62	1.59
34	H	501	ATP	PG-O2G	-2.29	1.46	1.54
34	M	501	ATP	PA-O2A	-2.25	1.44	1.55
34	M	501	ATP	C3'-C4'	2.24	1.58	1.53
34	I	501	ATP	C4-N9	2.15	1.42	1.37
36	J	501	ADP	PA-O2A	-2.14	1.45	1.55
34	I	501	ATP	C6-N6	2.08	1.39	1.34
34	H	501	ATP	C4-N3	-2.07	1.30	1.34
34	K	501	ATP	PA-O3A	-2.06	1.57	1.59
34	K	501	ATP	C6-N6	2.05	1.39	1.34
34	L	501	ATP	C5-C6	2.03	1.46	1.41
34	H	501	ATP	C4-N9	2.03	1.41	1.37
34	H	501	ATP	O4'-C4'	2.02	1.49	1.45

All (40) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	M	501	ATP	C4-C5-N7	-5.14	104.70	110.58
34	H	501	ATP	C5-N7-C8	3.99	109.73	103.45
34	M	501	ATP	C6-C5-C4	3.88	122.48	117.18
34	M	501	ATP	C5-N7-C8	3.81	109.44	103.45
34	L	501	ATP	O4'-C1'-N9	3.76	115.31	108.09
34	L	501	ATP	N6-C6-N1	3.75	126.74	118.38
34	I	501	ATP	N6-C6-N1	3.43	126.01	118.38
34	M	501	ATP	C5-C4-N9	3.40	109.51	105.81
34	L	501	ATP	C5-N7-C8	3.17	108.43	103.45
34	L	501	ATP	N9-C8-N7	-3.00	109.68	113.94
34	H	501	ATP	N9-C8-N7	-2.99	109.70	113.94
34	K	501	ATP	N3-C2-N1	2.93	133.01	128.58
36	J	501	ADP	N6-C6-N1	2.91	124.86	118.38
34	I	501	ATP	C4-C5-N7	-2.79	107.39	110.58
34	H	501	ATP	N6-C6-N1	2.75	124.50	118.38
34	H	501	ATP	C2'-C3'-C4'	-2.59	97.59	102.61
34	I	501	ATP	C5-C4-N9	2.57	108.62	105.81
34	K	501	ATP	C2-N3-C4	-2.55	105.60	111.83
34	I	501	ATP	C4-N9-C8	-2.55	103.06	105.74
34	M	501	ATP	O3G-PG-O2G	2.54	117.31	107.80
34	M	501	ATP	O2B-PB-O1B	2.52	124.19	112.44
34	I	501	ATP	O4'-C1'-N9	2.51	112.92	108.09
34	K	501	ATP	N6-C6-N1	2.50	123.95	118.38
34	L	501	ATP	N3-C2-N1	2.46	132.30	128.58
34	M	501	ATP	O3B-PB-O1B	-2.45	103.32	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	K	501	ATP	O4'-C1'-N9	2.39	112.67	108.09
36	J	501	ADP	C2'-C3'-C4'	2.30	107.05	102.61
34	M	501	ATP	N6-C6-N1	2.24	123.38	118.38
34	M	501	ATP	N9-C8-N7	-2.23	110.77	113.94
34	M	501	ATP	O4'-C1'-N9	2.20	112.31	108.09
36	J	501	ADP	C5-N7-C8	2.15	106.82	103.45
36	J	501	ADP	O3A-PB-O1B	-2.14	99.75	111.04
36	J	501	ADP	O3B-PB-O3A	2.14	111.80	104.64
34	L	501	ATP	O3'-C3'-C2'	2.12	118.62	111.82
34	I	501	ATP	C6-C5-C4	2.10	120.05	117.18
34	H	501	ATP	O3G-PG-O2G	2.09	115.64	107.80
34	L	501	ATP	O3G-PG-O2G	2.09	115.62	107.80
34	K	501	ATP	C5'-C4'-C3'	2.08	122.71	115.21
36	J	501	ADP	O4'-C1'-N9	2.07	112.06	108.09
34	H	501	ATP	N3-C4-N9	-2.05	123.68	127.17

There are no chirality outliers.

All (30) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
34	H	501	ATP	C5'-O5'-PA-O1A
34	H	501	ATP	C5'-O5'-PA-O3A
34	I	501	ATP	C5'-O5'-PA-O3A
34	K	501	ATP	C5'-O5'-PA-O2A
34	K	501	ATP	C5'-O5'-PA-O3A
34	L	501	ATP	C5'-O5'-PA-O2A
34	L	501	ATP	C5'-O5'-PA-O3A
34	M	501	ATP	C5'-O5'-PA-O2A
36	J	501	ADP	PA-O3A-PB-O3B
36	J	501	ADP	C5'-O5'-PA-O1A
36	J	501	ADP	C5'-O5'-PA-O2A
36	J	501	ADP	C5'-O5'-PA-O3A
34	I	501	ATP	PA-O3A-PB-O1B
34	H	501	ATP	PB-O3B-PG-O2G
34	I	501	ATP	C5'-O5'-PA-O1A
34	K	501	ATP	C5'-O5'-PA-O1A
34	M	501	ATP	C5'-O5'-PA-O3A
34	H	501	ATP	C4'-C5'-O5'-PA
34	I	501	ATP	PG-O3B-PB-O2B
34	I	501	ATP	PA-O3A-PB-O2B
34	K	501	ATP	PA-O3A-PB-O1B
34	K	501	ATP	PA-O3A-PB-O2B

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Mol	Chain	Res	Type	Atoms
34	M	501	ATP	C4'-C5'-O5'-PA
34	H	501	ATP	PB-O3A-PA-O2A
34	I	501	ATP	C4'-C5'-O5'-PA
34	H	501	ATP	PB-O3B-PG-O3G
36	J	501	ADP	PA-O3A-PB-O2B
34	H	501	ATP	PG-O3B-PB-O1B
34	H	501	ATP	PG-O3B-PB-O2B
34	H	501	ATP	PB-O3A-PA-O1A

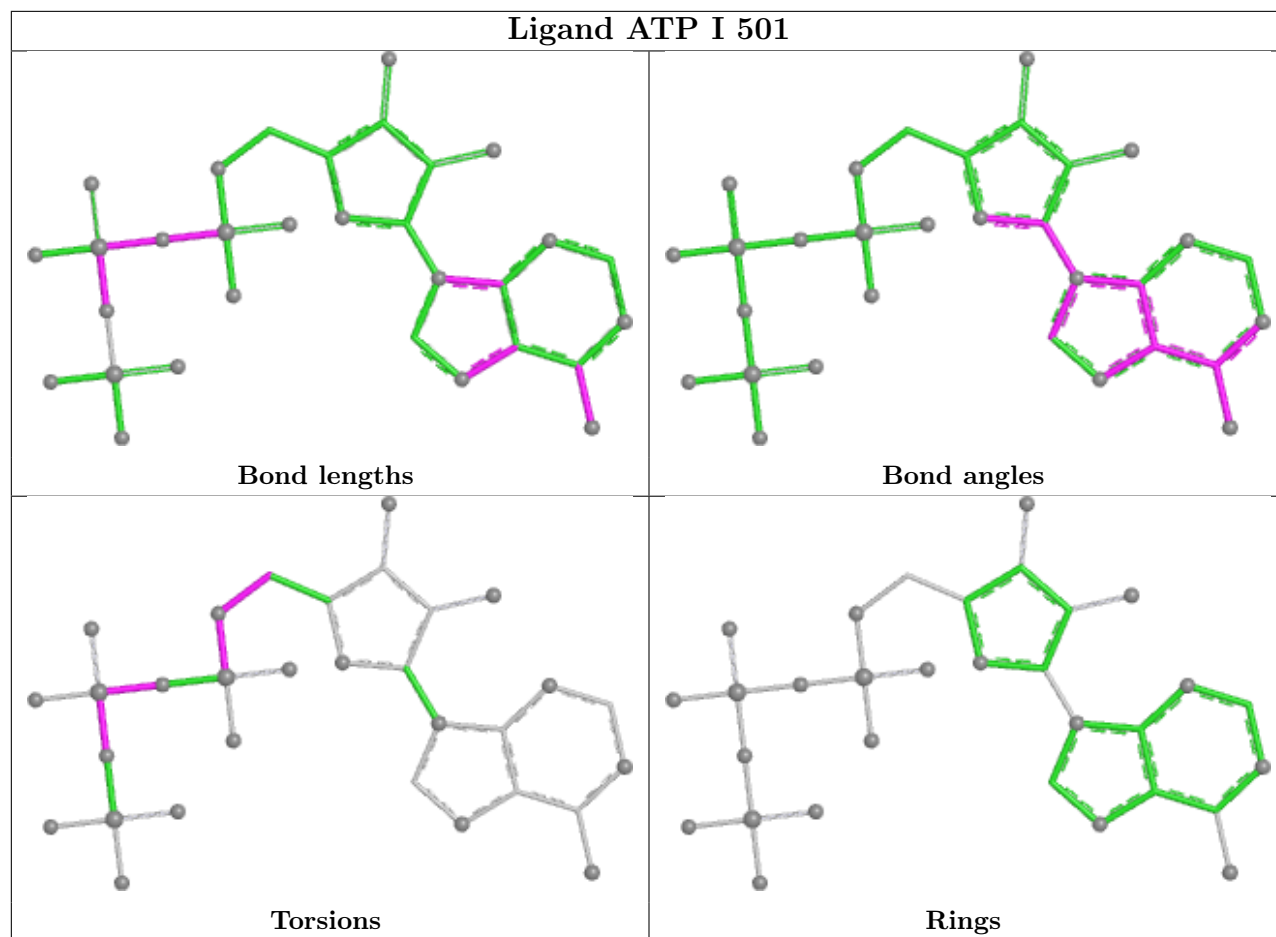
There are no ring outliers.

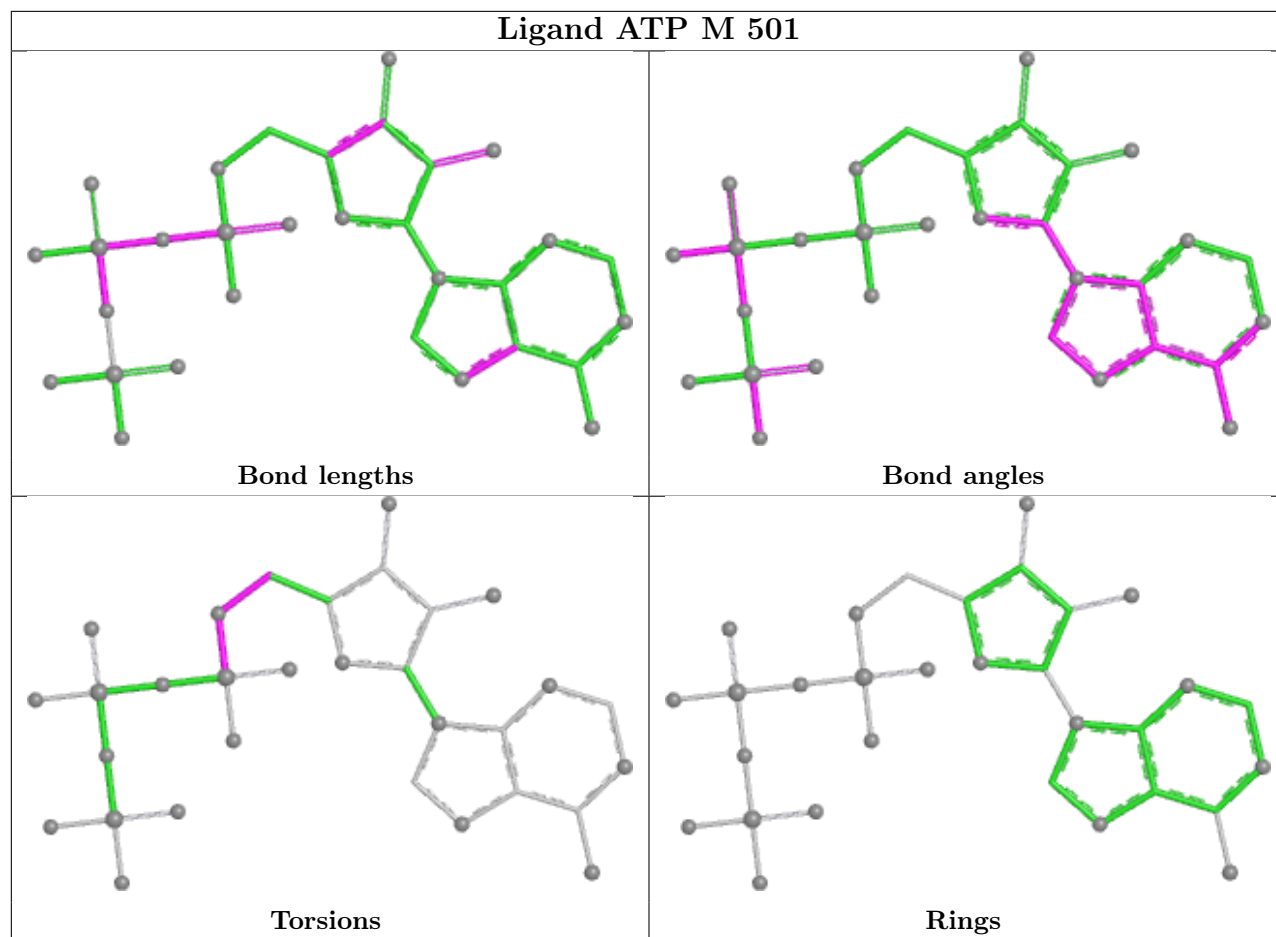
1 monomer is involved in 1 short contact:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
36	J	501	ADP	1	0

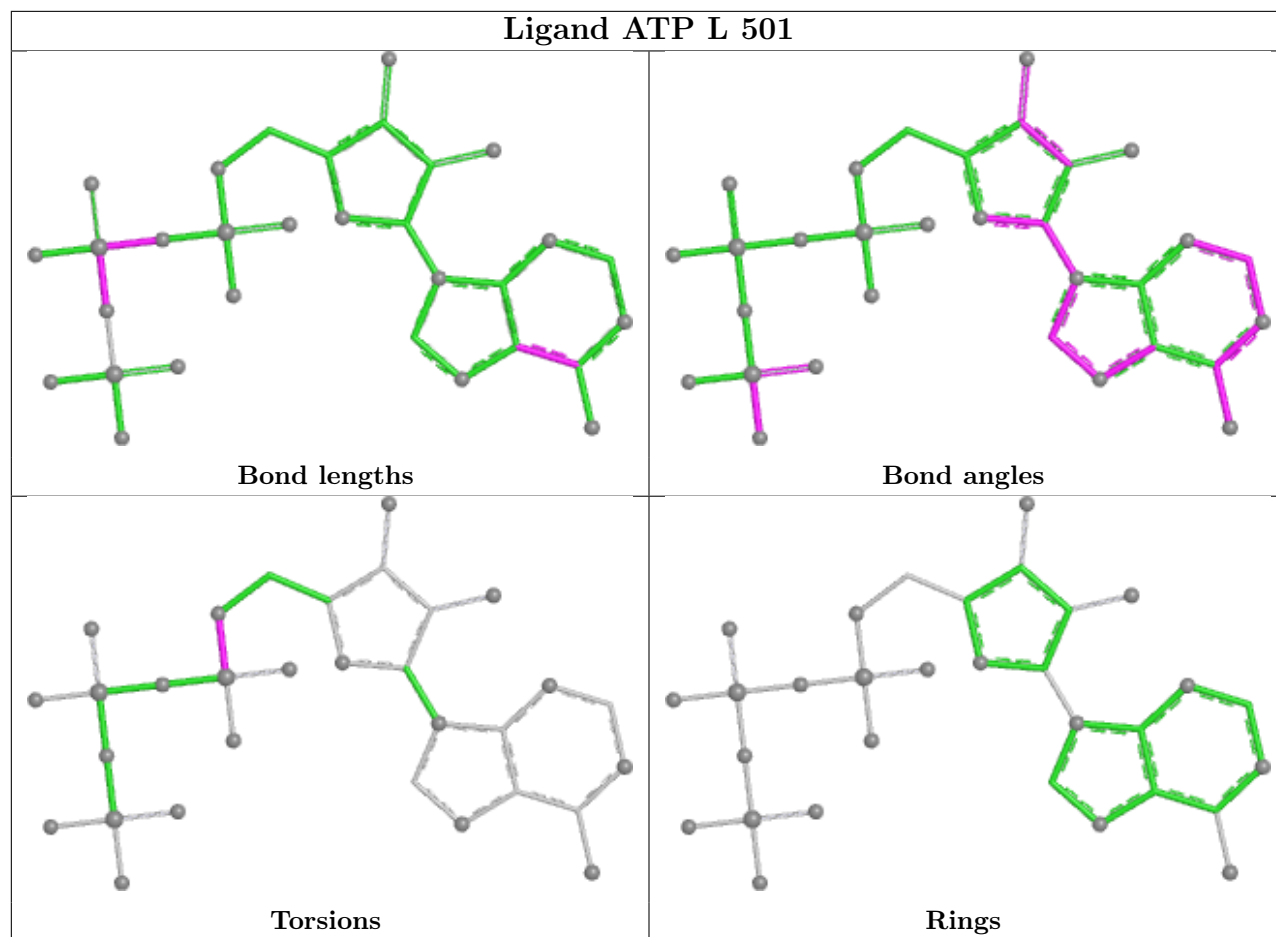
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

Ligand ATP I 501

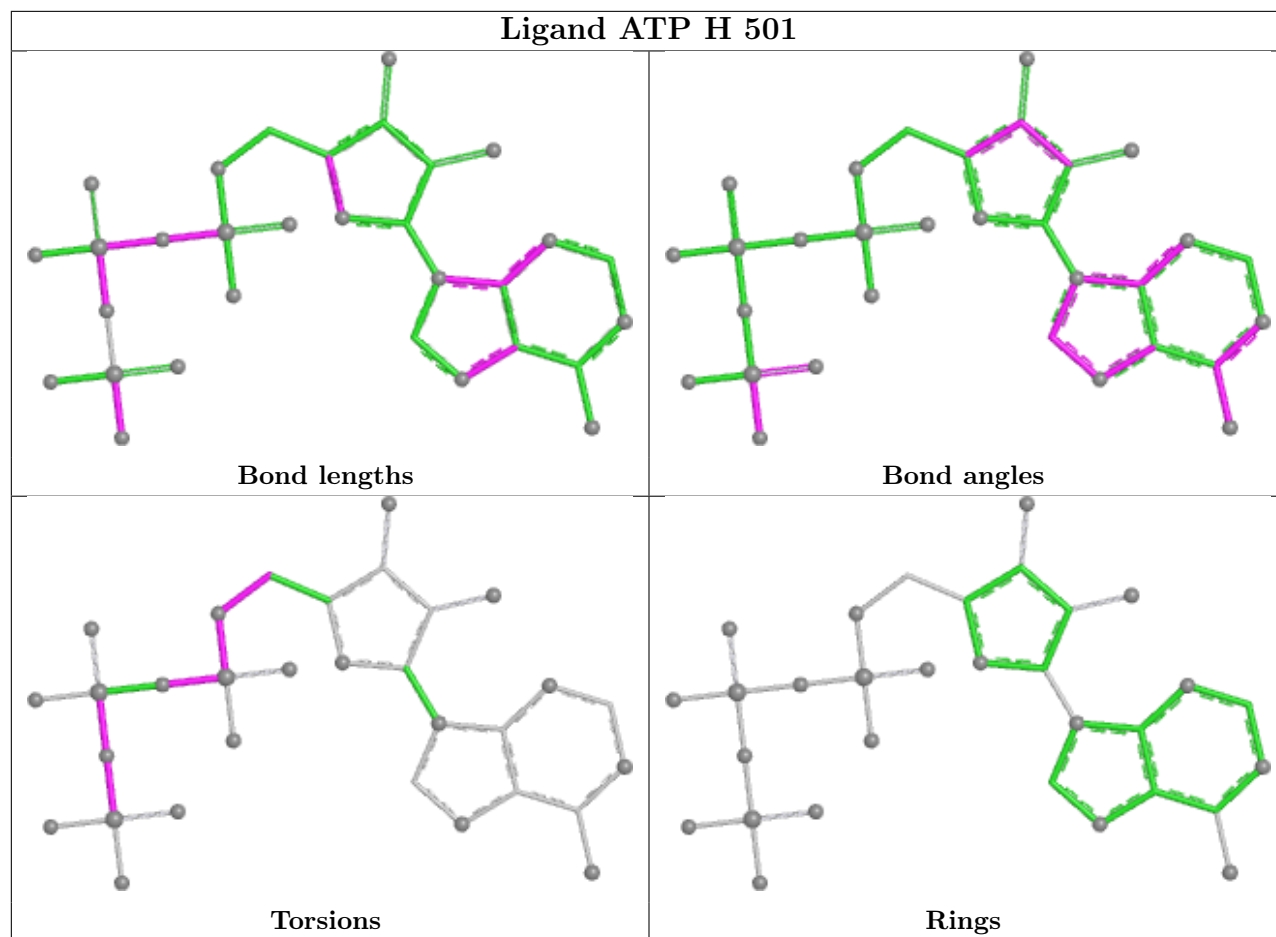




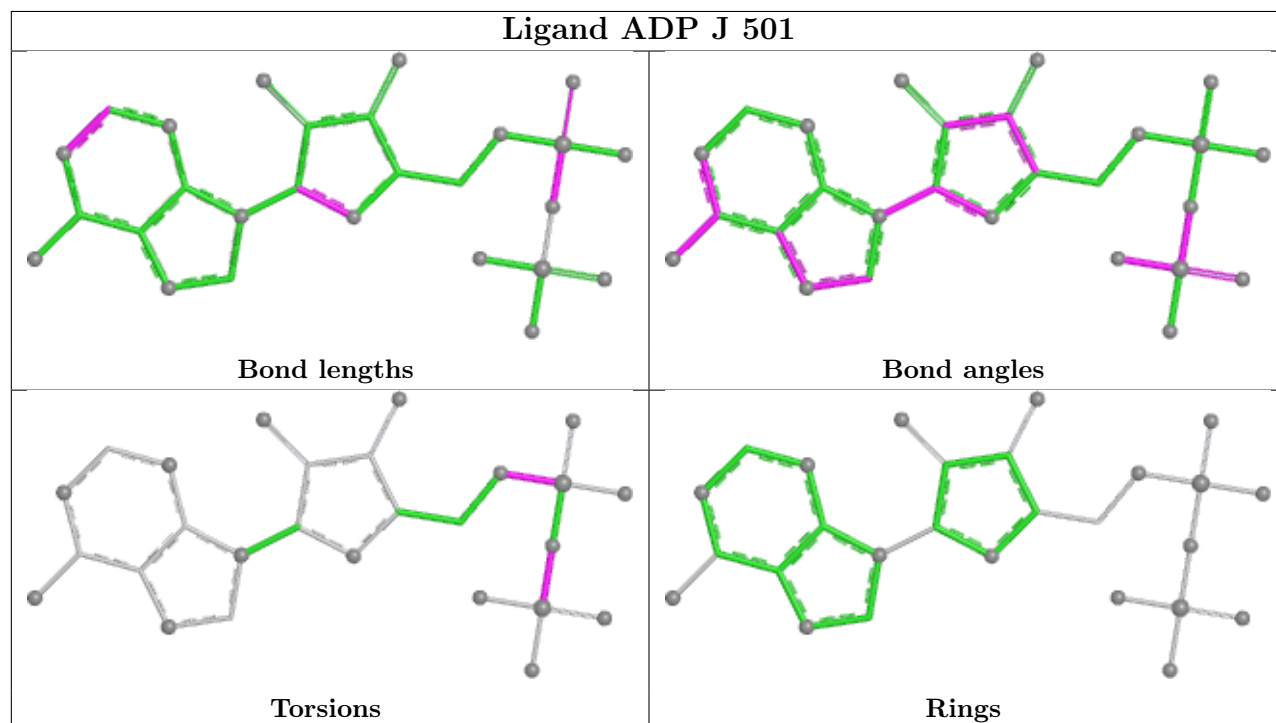
Ligand ATP L 501

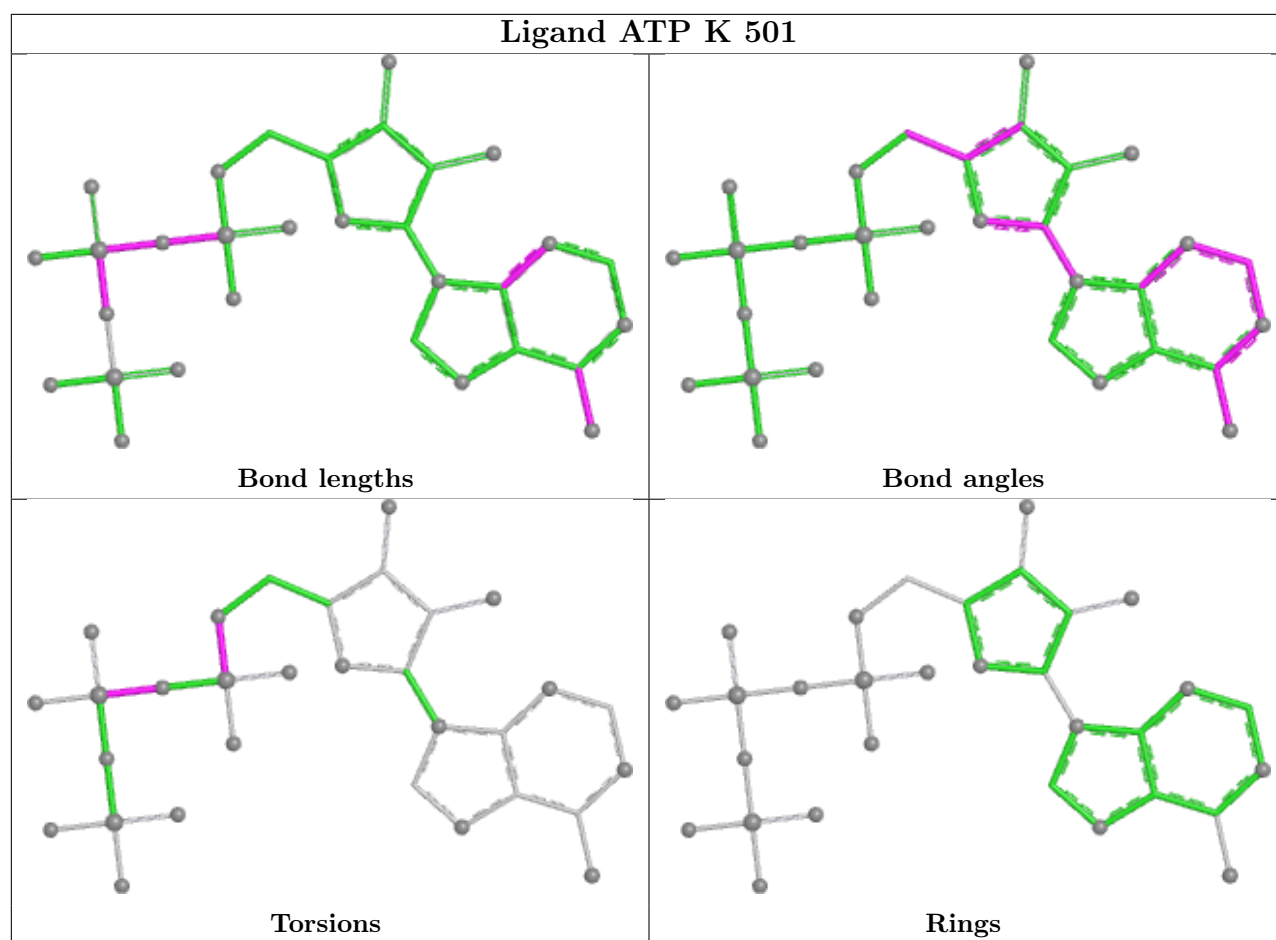


Ligand ATP H 501



Ligand ADP J 501





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.

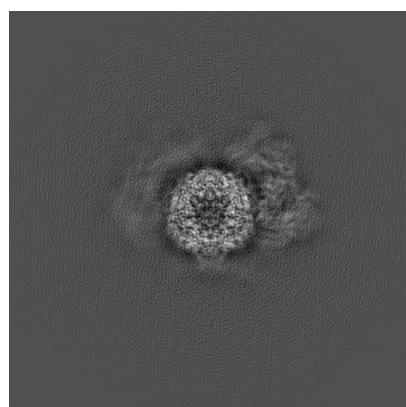
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-3534. These allow visual inspection of the internal detail of the map and identification of artifacts.

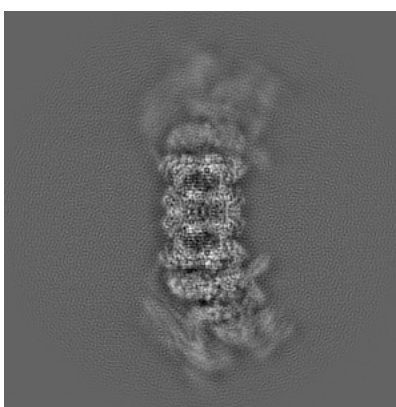
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

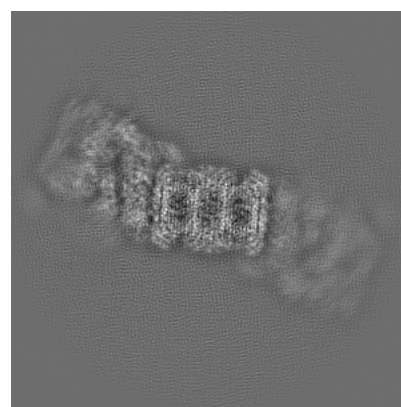
6.1.1 Primary map



X



Y

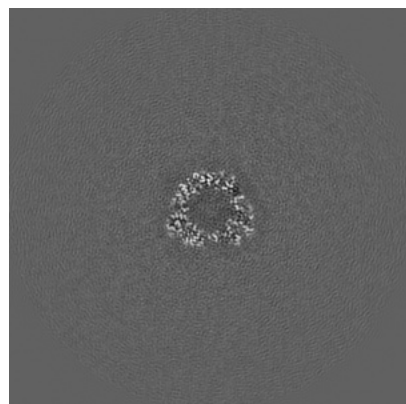


Z

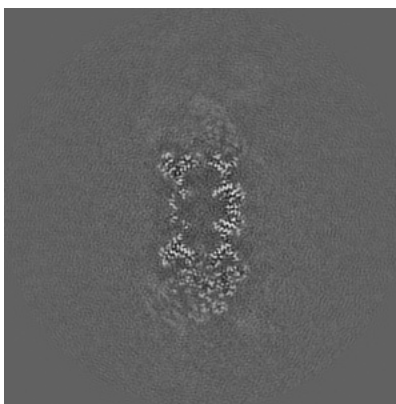
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

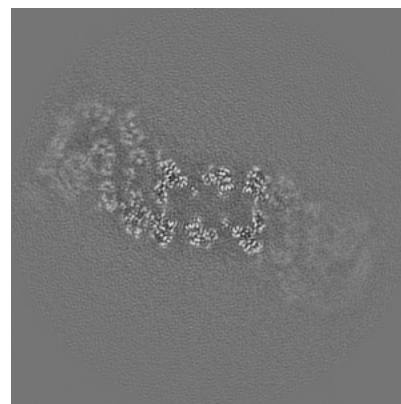
6.2.1 Primary map



X Index: 192



Y Index: 192

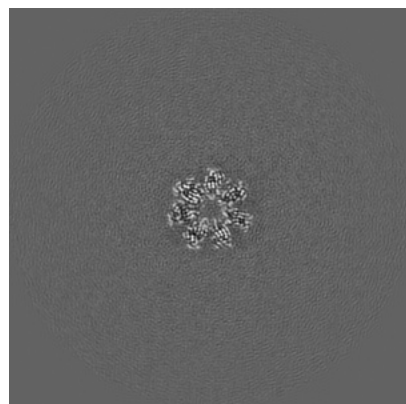


Z Index: 192

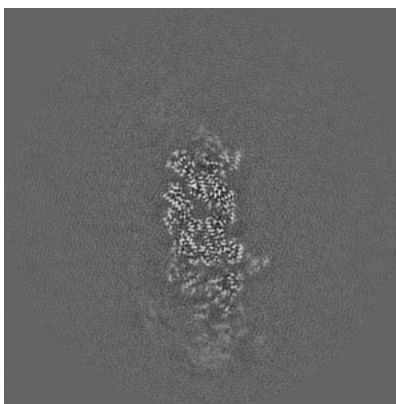
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

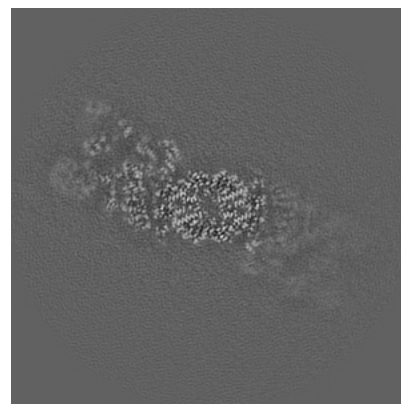
6.3.1 Primary map



X Index: 177



Y Index: 212

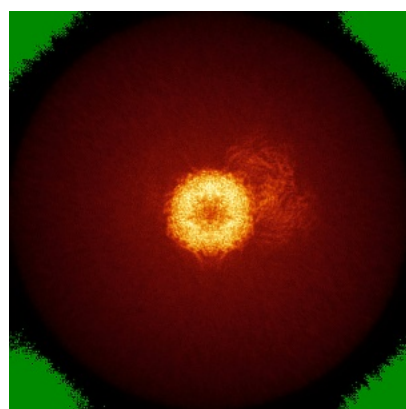


Z Index: 208

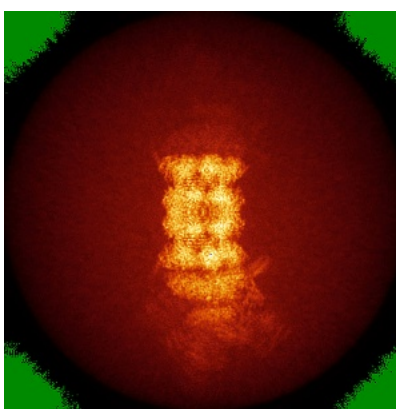
The images above show the largest variance slices of the map in three orthogonal directions.

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

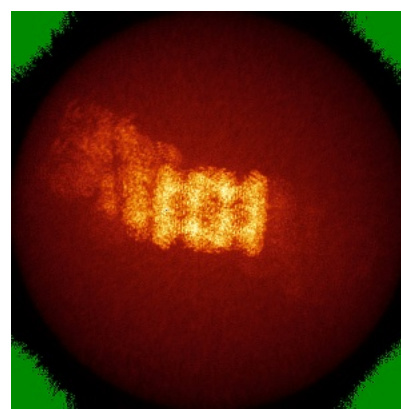
6.4.1 Primary map



X



Y

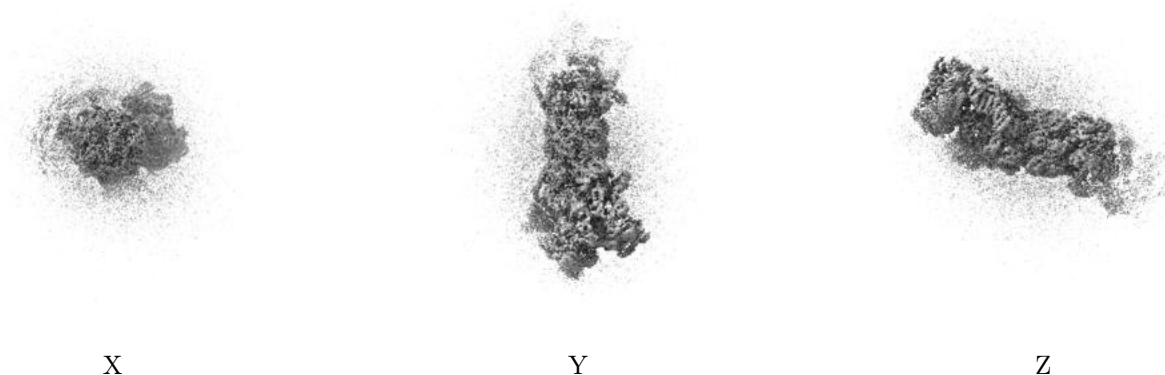


Z

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 0.02. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

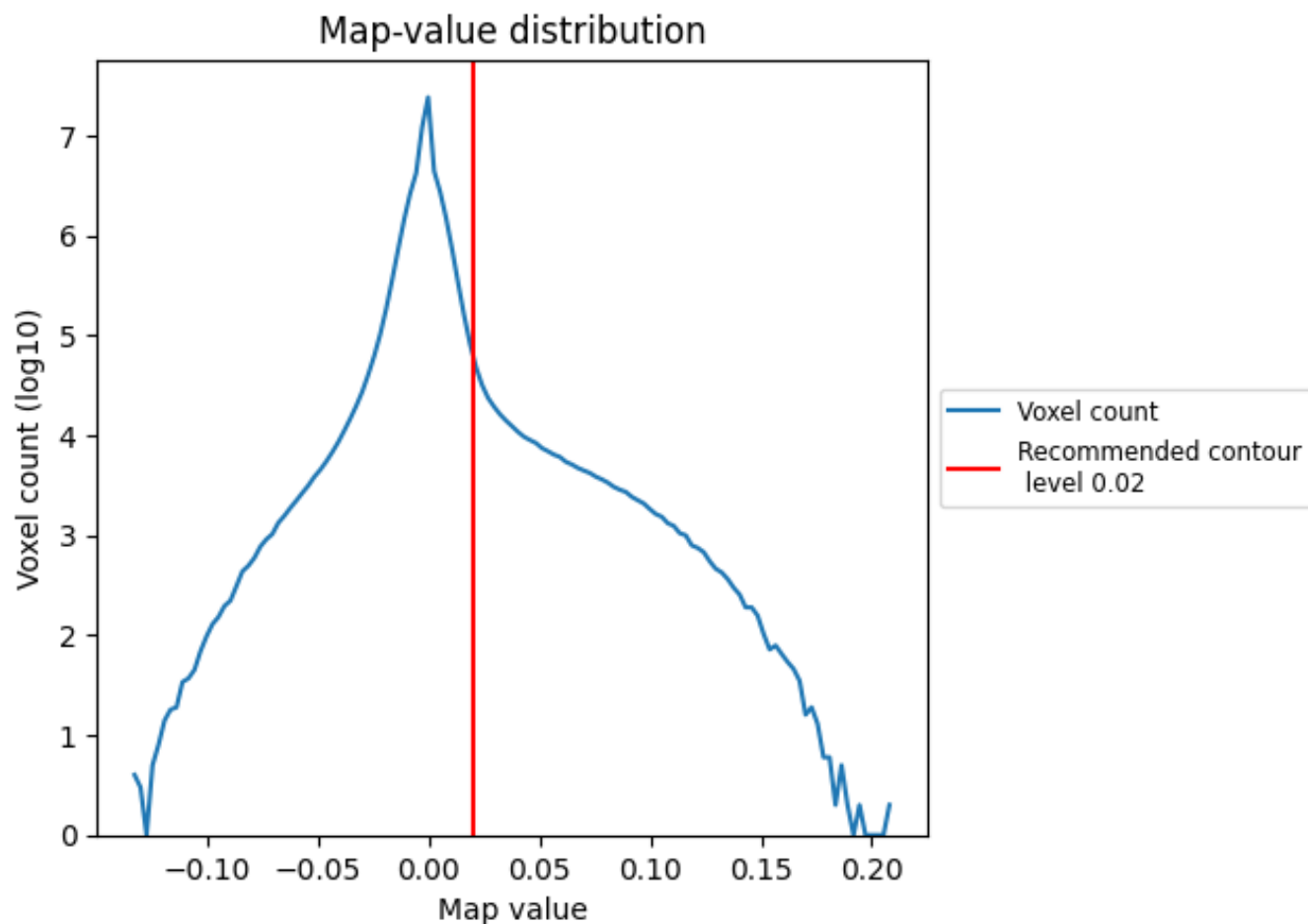
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

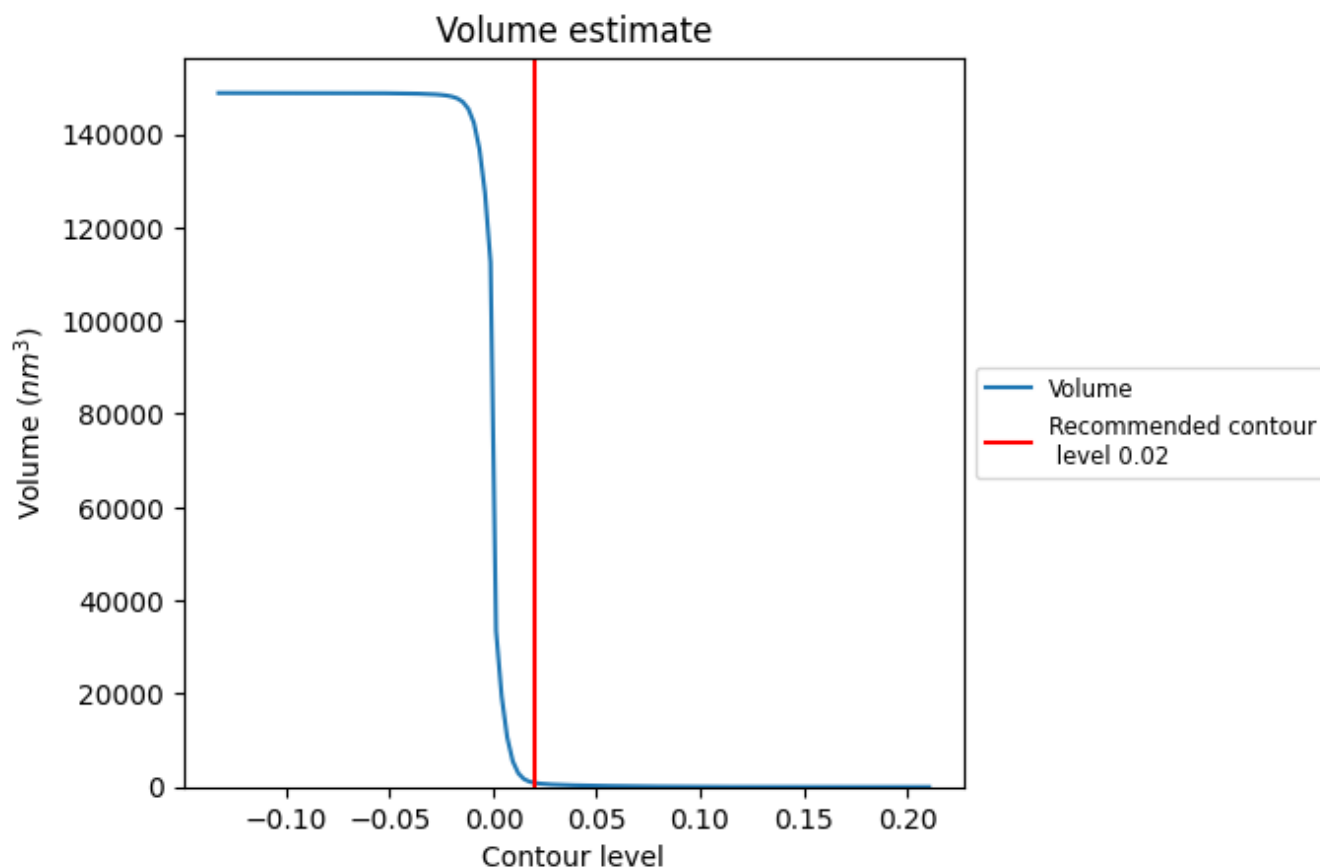
This section contains the results of statistical analysis of the map.

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.

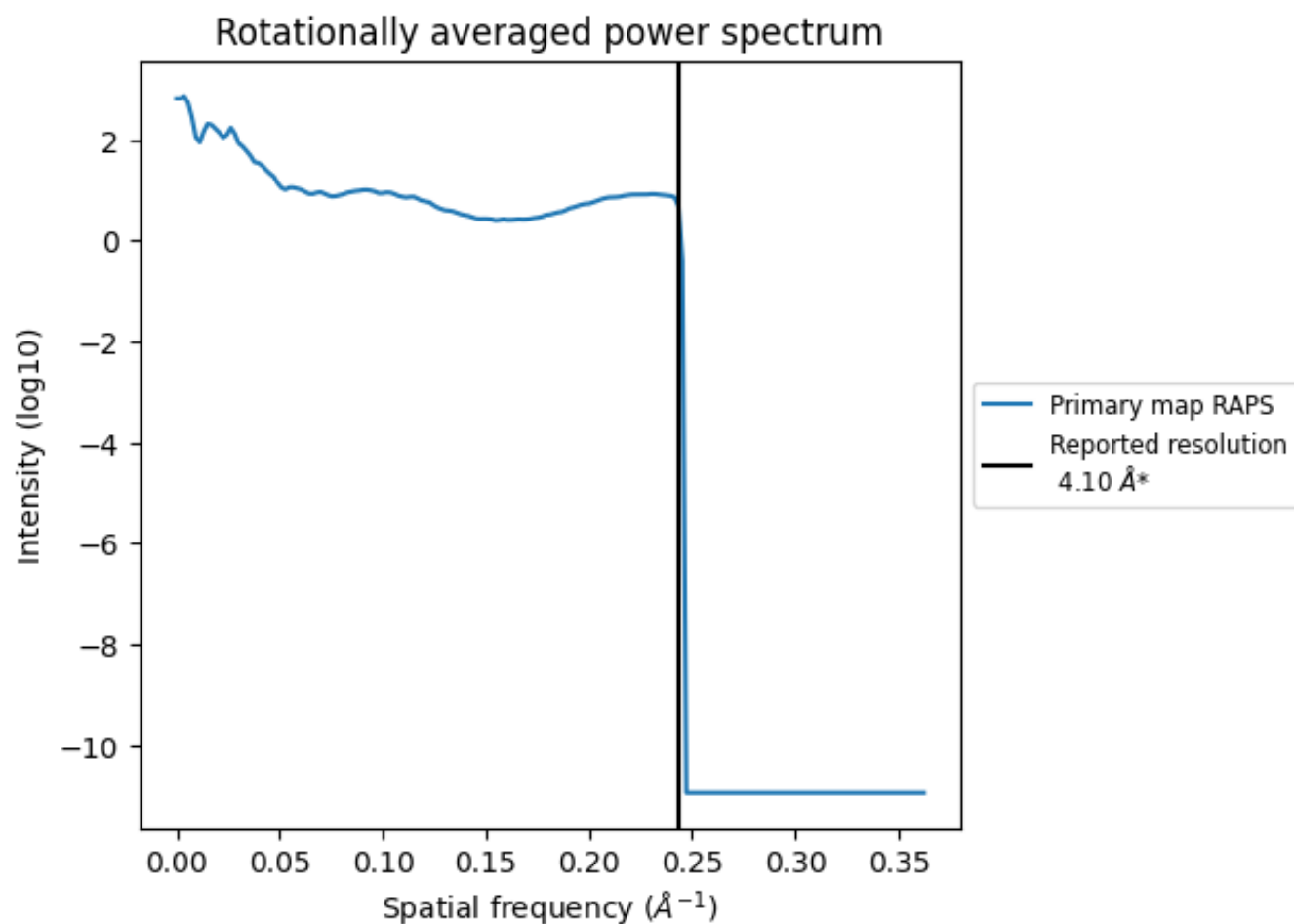
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 881 nm^3 ; this corresponds to an approximate mass of 796 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 0.244 Å⁻¹

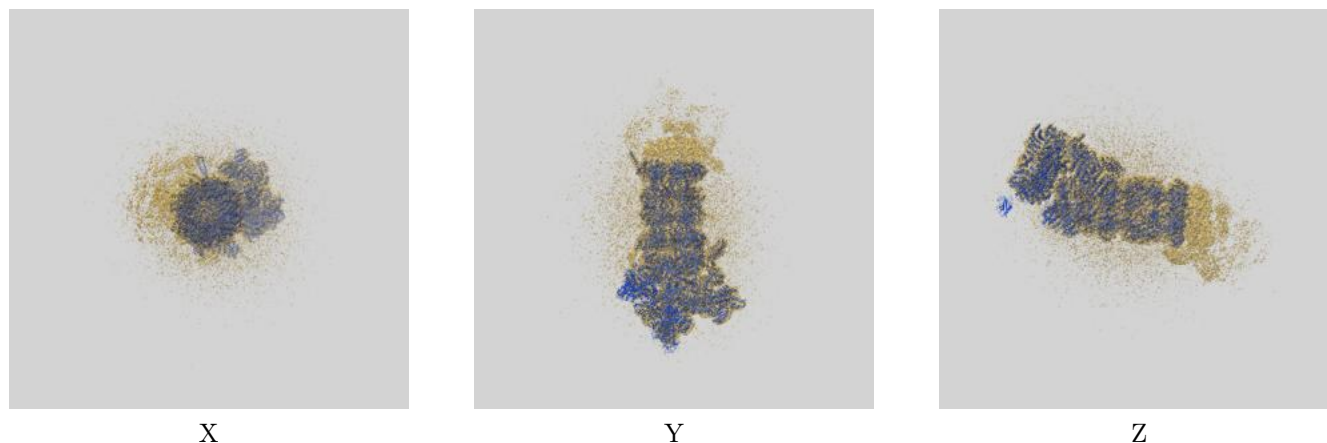
8 Fourier-Shell correlation

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

9 Map-model fit [i](#)

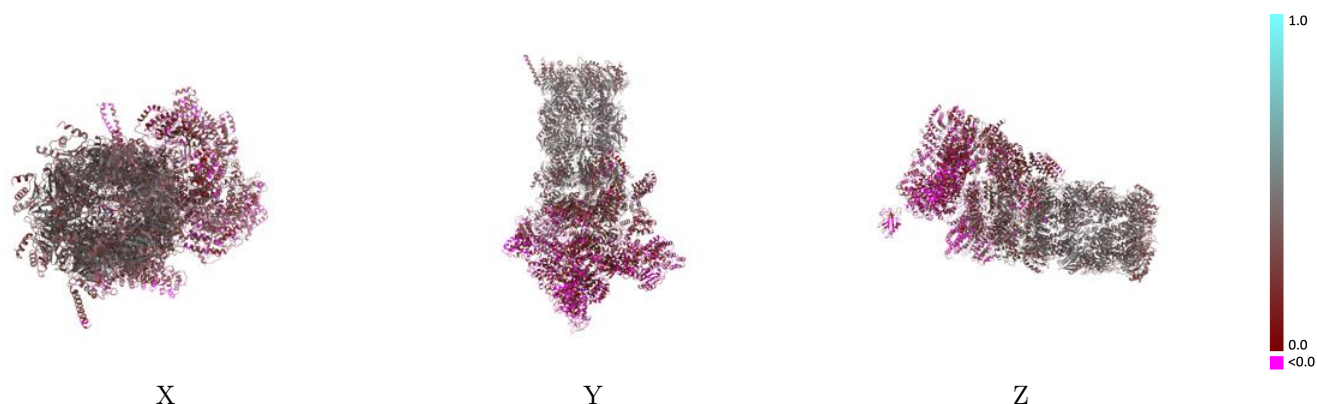
This section contains information regarding the fit between EMDB map EMD-3534 and PDB model 6FVT. Per-residue inclusion information can be found in section 3 on page 13.

9.1 Map-model overlay [i](#)



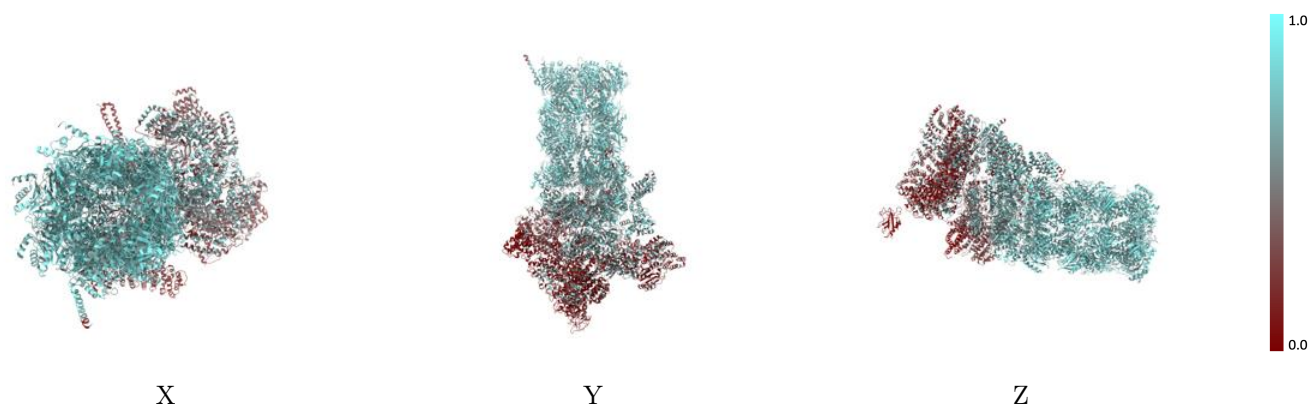
The images above show the 3D surface view of the map at the recommended contour level 0.02 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



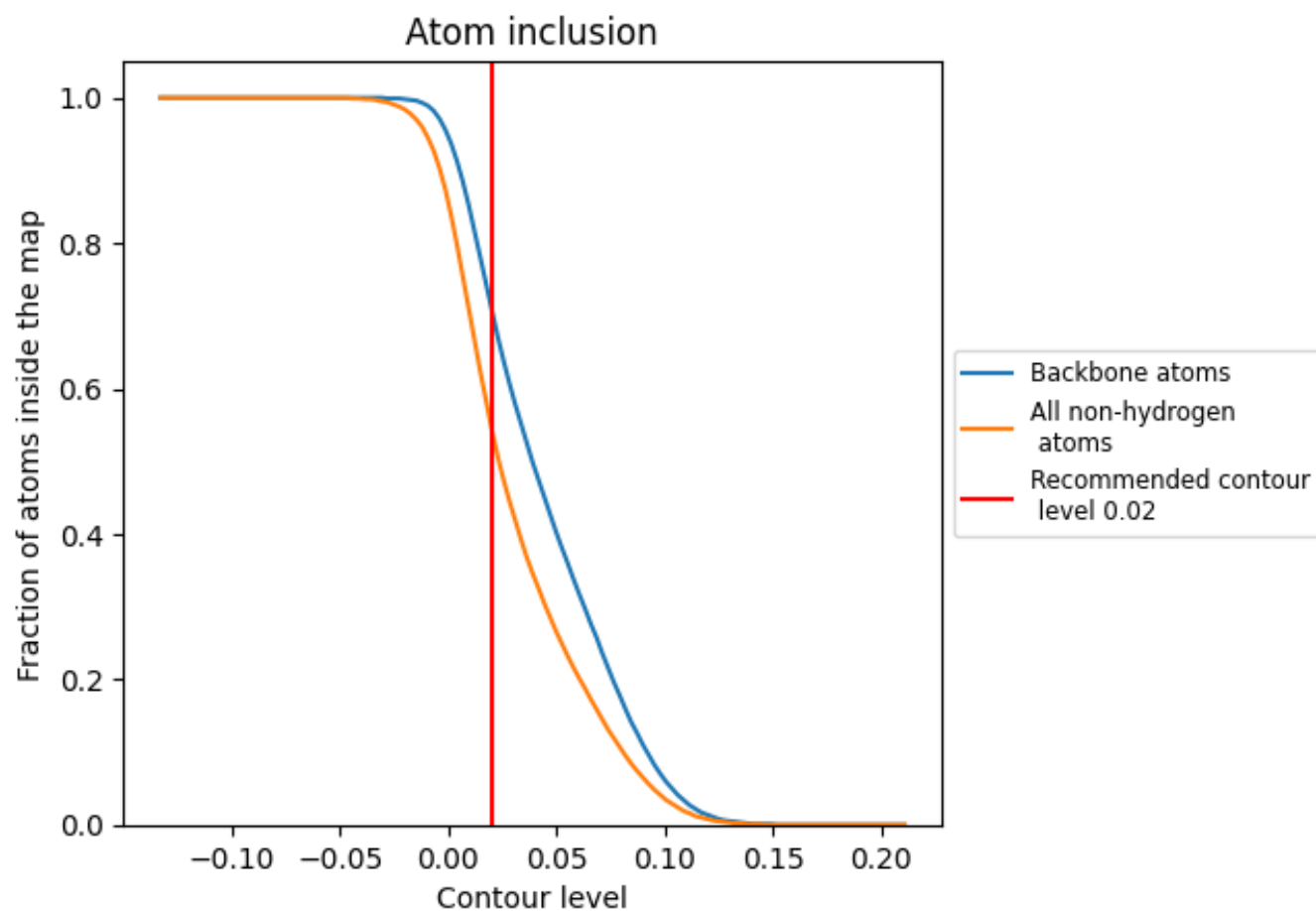
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.02).

9.4 Atom inclusion [i](#)



At the recommended contour level, 71% of all backbone atoms, 55% 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 (0.02) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.5460	 0.2540
1	 0.7740	 0.3920
2	 0.7550	 0.3840
3	 0.7600	 0.4000
4	 0.7550	 0.3830
5	 0.7790	 0.3970
6	 0.7690	 0.3870
7	 0.7870	 0.3900
A	 0.7430	 0.3520
B	 0.7370	 0.3720
C	 0.7310	 0.3670
D	 0.7470	 0.3640
E	 0.7100	 0.3500
F	 0.7480	 0.3750
G	 0.7470	 0.3640
H	 0.5620	 0.2690
I	 0.5740	 0.2590
J	 0.5070	 0.2250
K	 0.5740	 0.2430
L	 0.5750	 0.2510
M	 0.5370	 0.2540
N	 0.1710	 0.0720
O	 0.3340	 0.1040
P	 0.5780	 0.1840
Q	 0.5920	 0.1990
R	 0.4790	 0.1640
S	 0.3180	 0.1160
T	 0.2540	 0.1190
U	 0.3470	 0.1260
V	 0.3970	 0.1480
W	 0.1260	 0.0520
X	 0.0040	 0.0270
Y	 0.2030	 0.0560
Z	 0.1110	 0.0900
a	 0.7320	 0.3490



Continued on next page...

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Chain	Atom inclusion	Q-score
b	 0.7180	 0.3470
c	 0.7120	 0.3430
d	 0.7190	 0.3460
e	 0.7160	 0.3480
f	 0.7420	 0.3560
g	 0.7330	 0.3540
h	 0.7810	 0.3900
i	 0.7500	 0.3790
j	 0.7470	 0.3840
k	 0.7650	 0.3960
l	 0.7970	 0.4080
m	 0.7720	 0.3870
n	 0.7830	 0.3850