



Full wwPDB EM Validation Report ⓘ

Mar 10, 2026 – 12:26 PM UTC

PDB ID : 3J1E / pdb_00003j1e
EMDB ID : EMD-5395
Title : Cryo-EM structure of 9-fold symmetric rATcpn-beta in apo state
Authors : Zhang, K.; Wang, L.; Liu, Y.X.; Wang, X.; Gao, B.; Hu, Z.J.; Ji, G.; Chan, K.Y.; Schulten, K.; Dong, Z.Y.; Sun, F.
Deposited on : 2012-02-06
Resolution : 8.30 Å(reported)
Based on initial model : 3KO1

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

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

A user guide is available at

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

The types of validation reports are described at

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

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

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

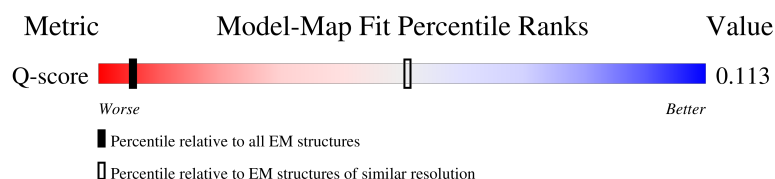
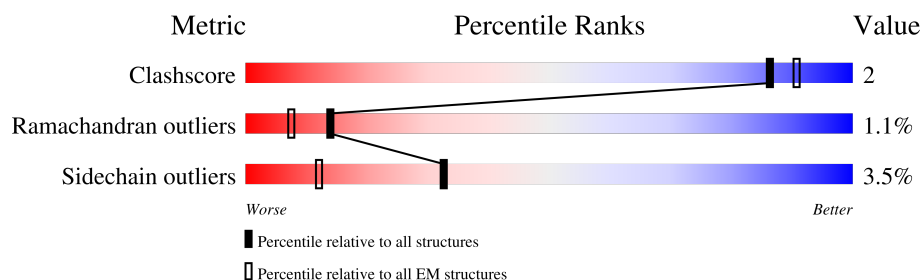
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 8.30 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	280 (7.82 - 8.80)

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

Mol	Chain	Length	Quality of chain
1	A	553	12% 46% 39% 6% 9%
1	B	553	11% 42% 43% 6% 9%
1	C	553	10% 48% 38% 5% 9%
1	D	553	11% 43% 43% 5% 9%

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Mol	Chain	Length	Quality of chain
1	E	553	
1	F	553	
1	G	553	
1	H	553	
1	I	553	
1	K	553	
1	L	553	
1	M	553	
1	N	553	
1	O	553	
1	P	553	
1	Q	553	
1	R	553	
1	S	553	

2 Entry composition

There is only 1 type of molecule in this entry. The entry contains 69282 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 Chaperonin beta subunit.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		
1	B	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		
1	C	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		
1	D	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		
1	E	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		
1	F	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		
1	G	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		
1	H	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		
1	I	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		
1	K	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		
1	L	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		
1	M	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		
1	N	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		
1	O	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		
1	P	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		
1	Q	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		
1	R	505	Total	C	N	O	S	0	0
			3849	2423	658	757	11		

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Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	S	505	3849	2423	658	757	11	0	0

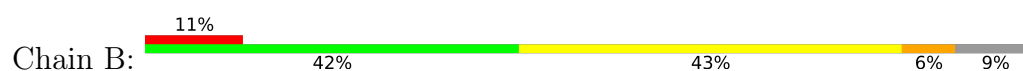
3 Residue-property plots

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry 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.

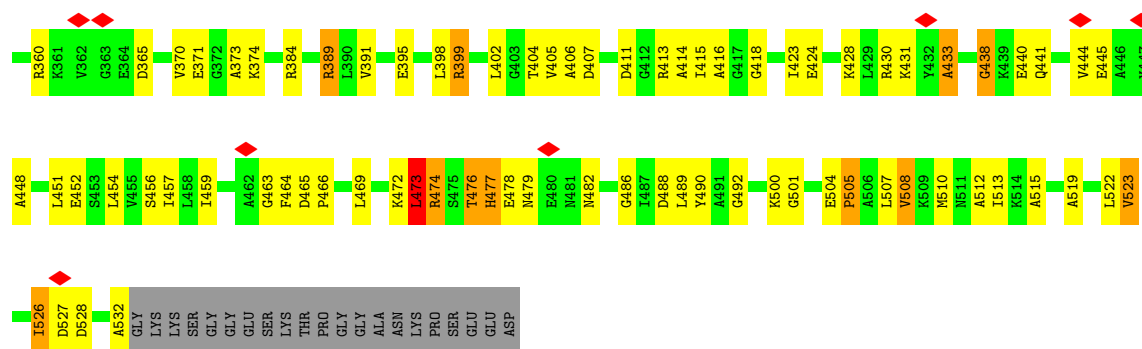
• Molecule 1: Chaperonin beta subunit



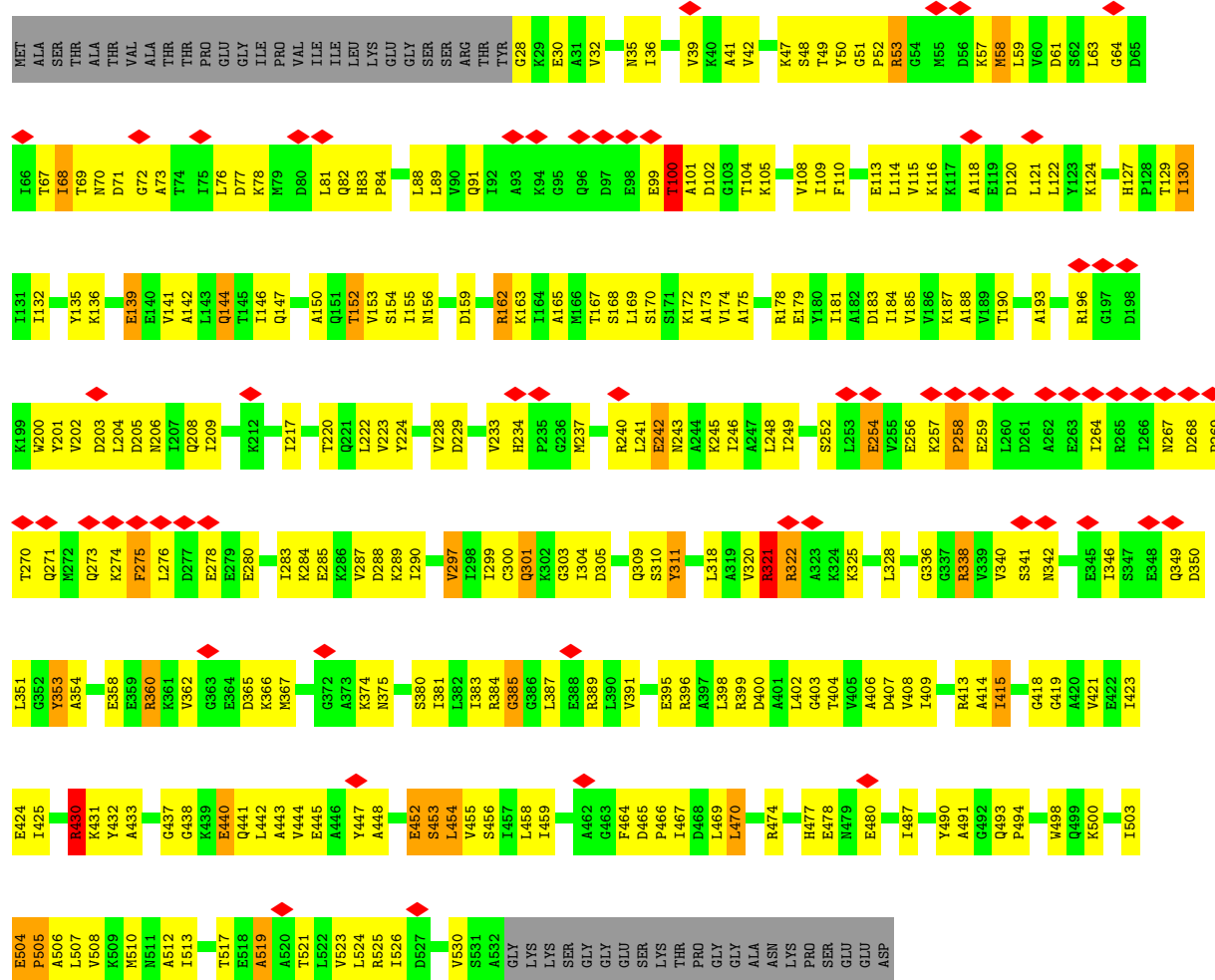
• Molecule 1: Chaperonin beta subunit





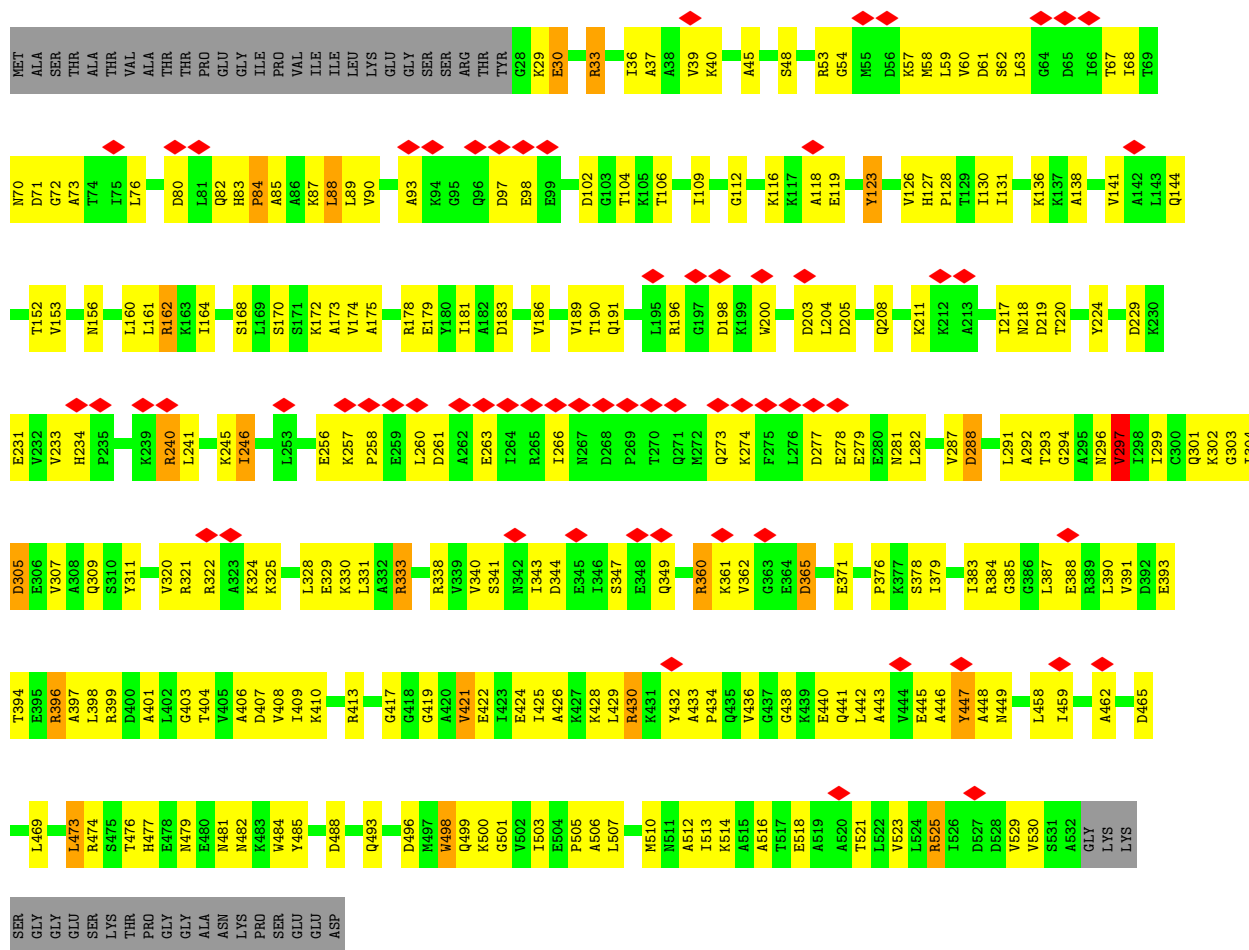


• Molecule 1: Chaperonin beta subunit

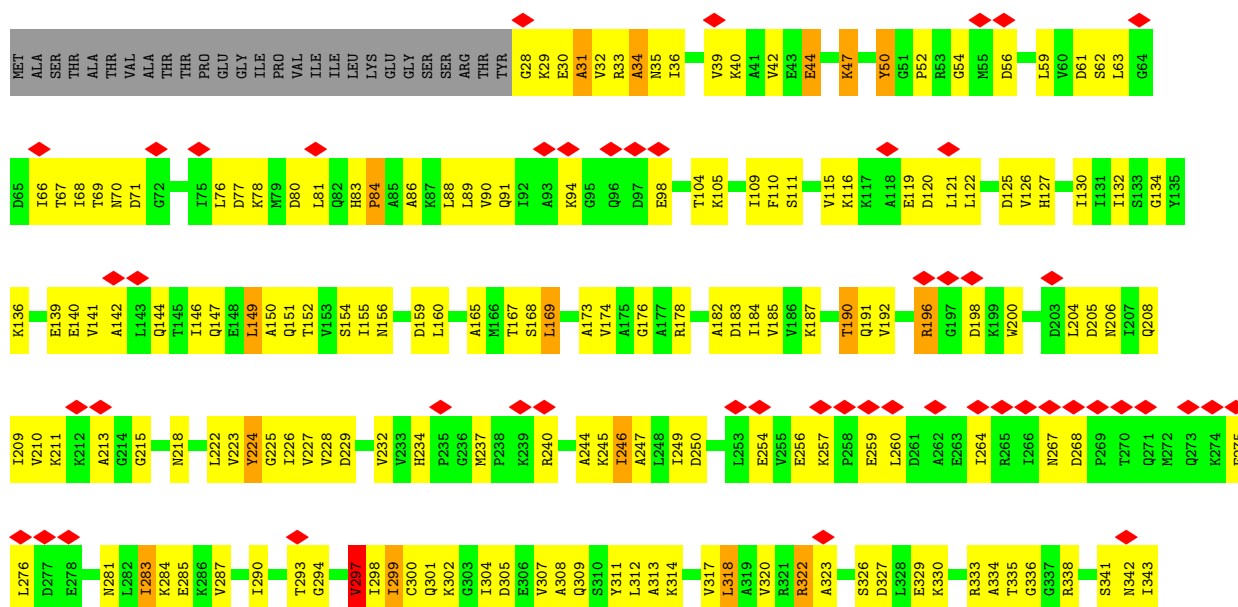


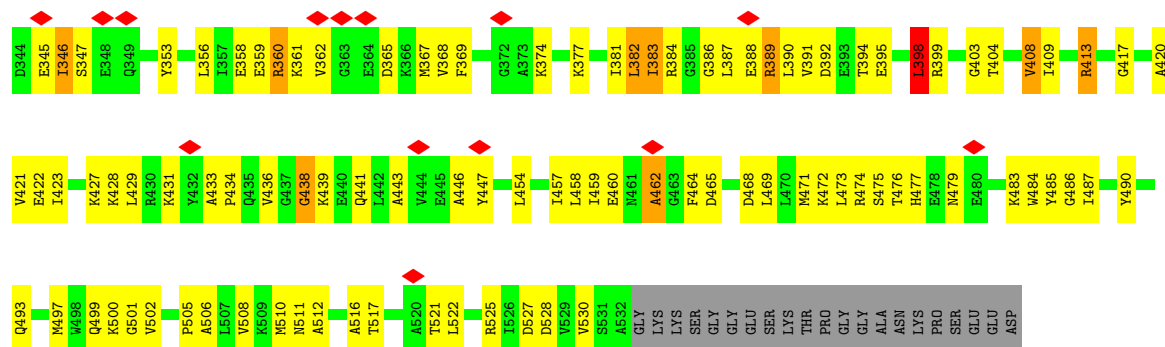
• Molecule 1: Chaperonin beta subunit



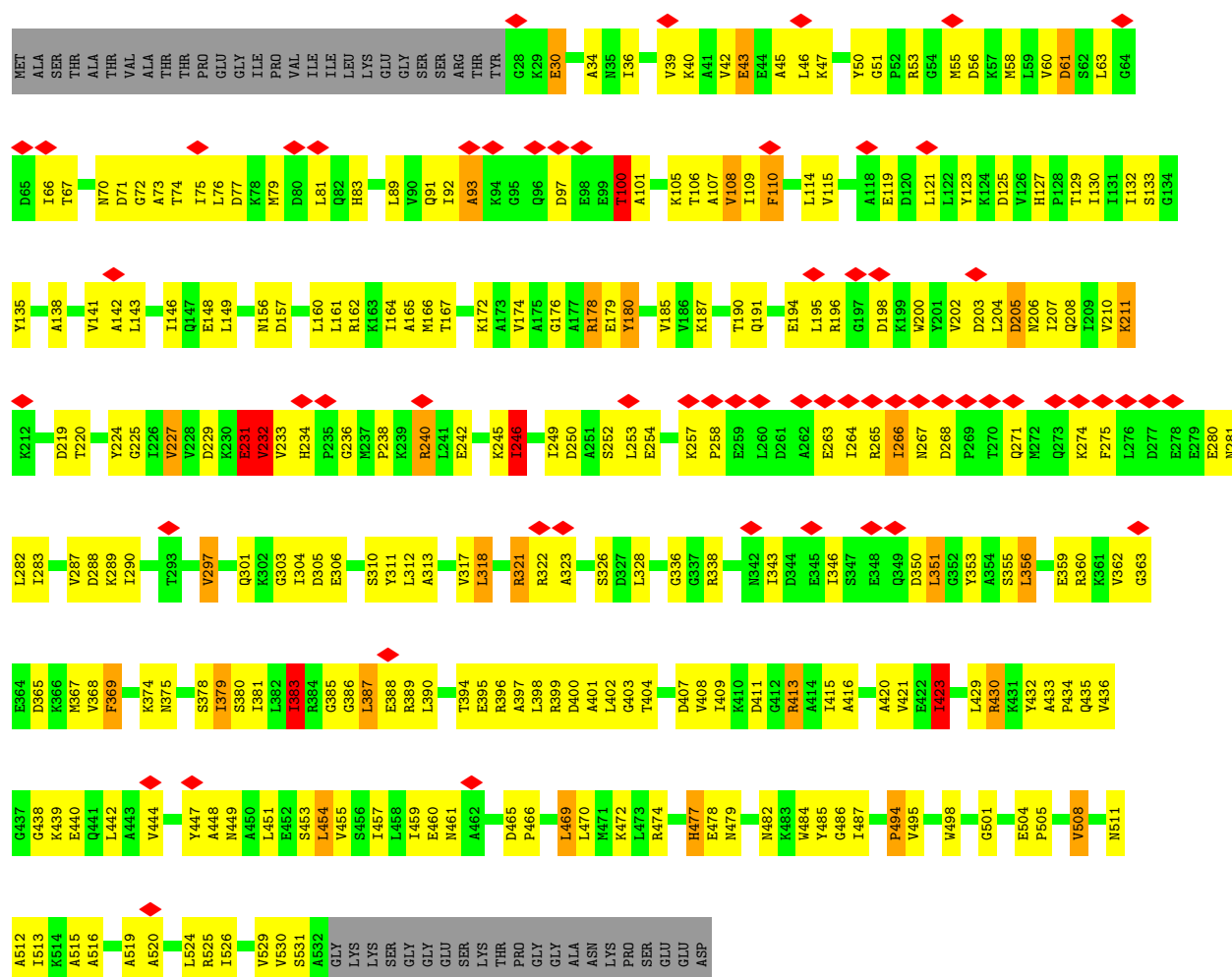


• Molecule 1: Chaperonin beta subunit



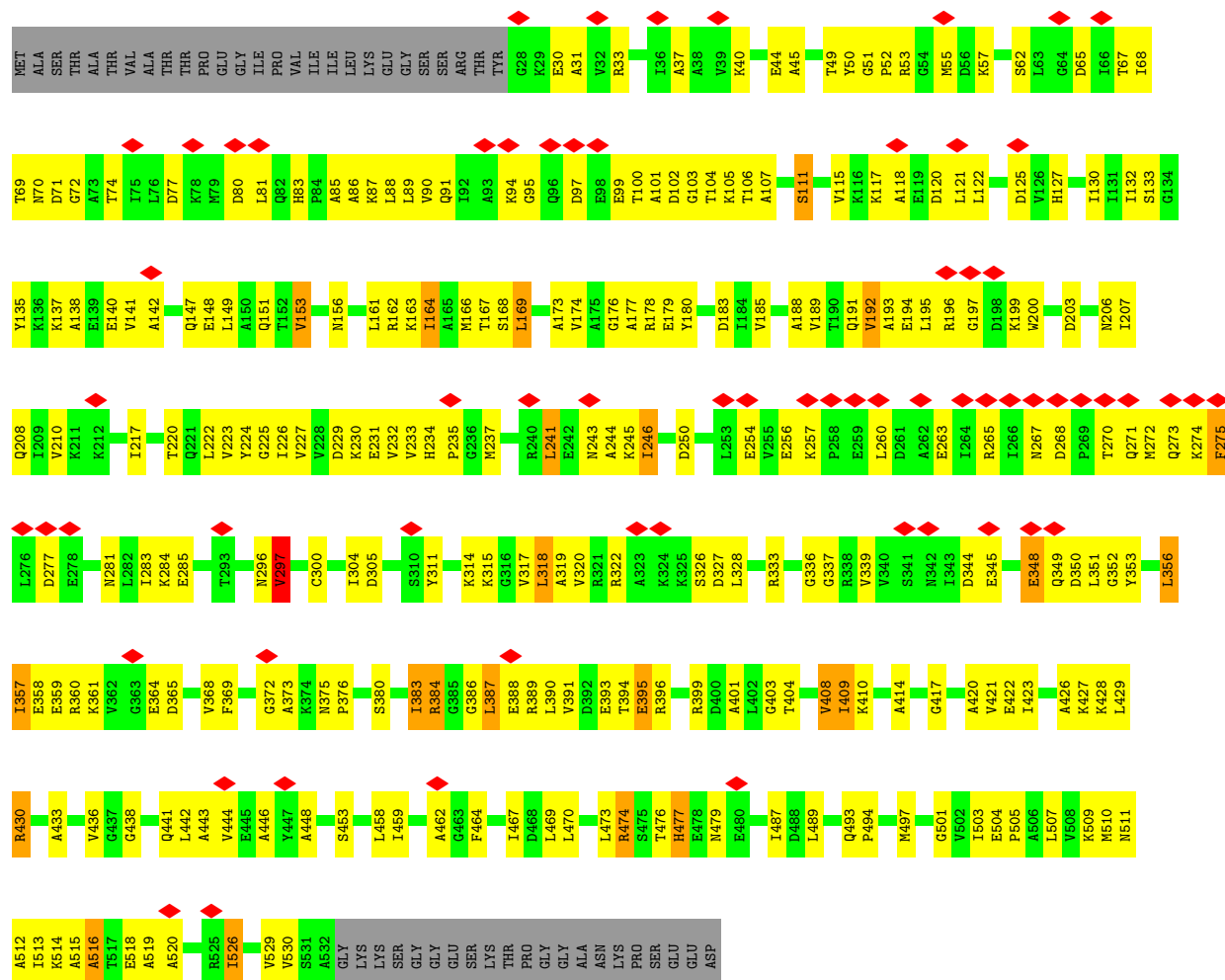


• Molecule 1: Chaperonin beta subunit

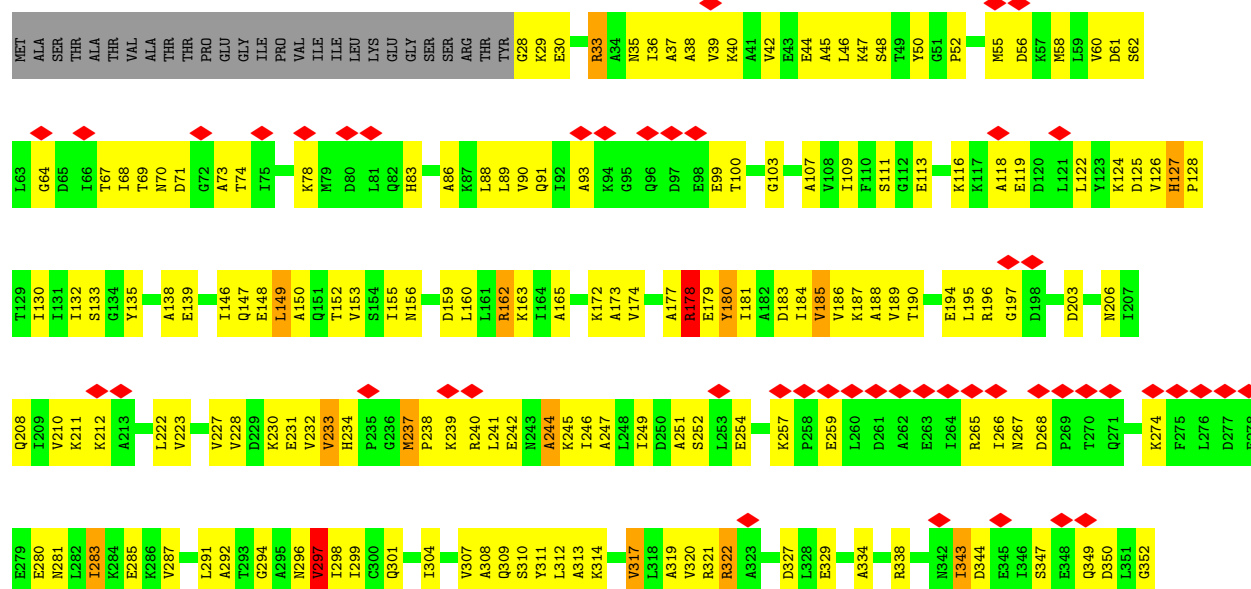
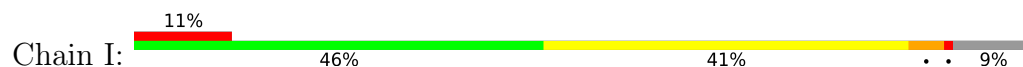


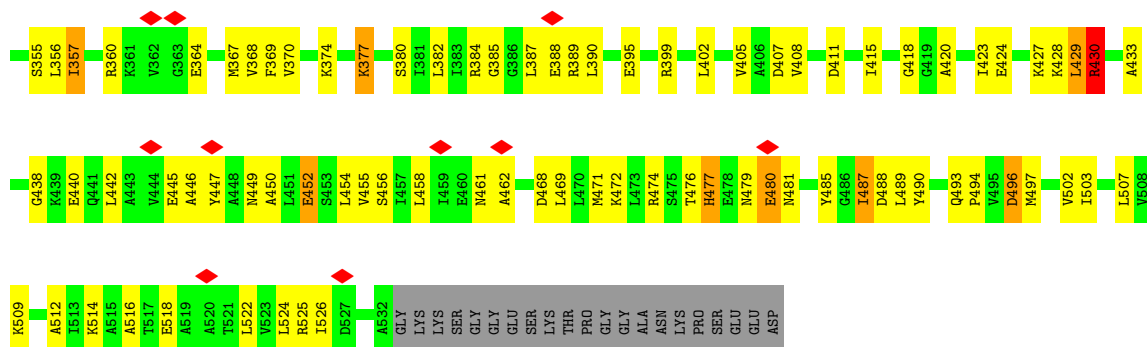
• Molecule 1: Chaperonin beta subunit



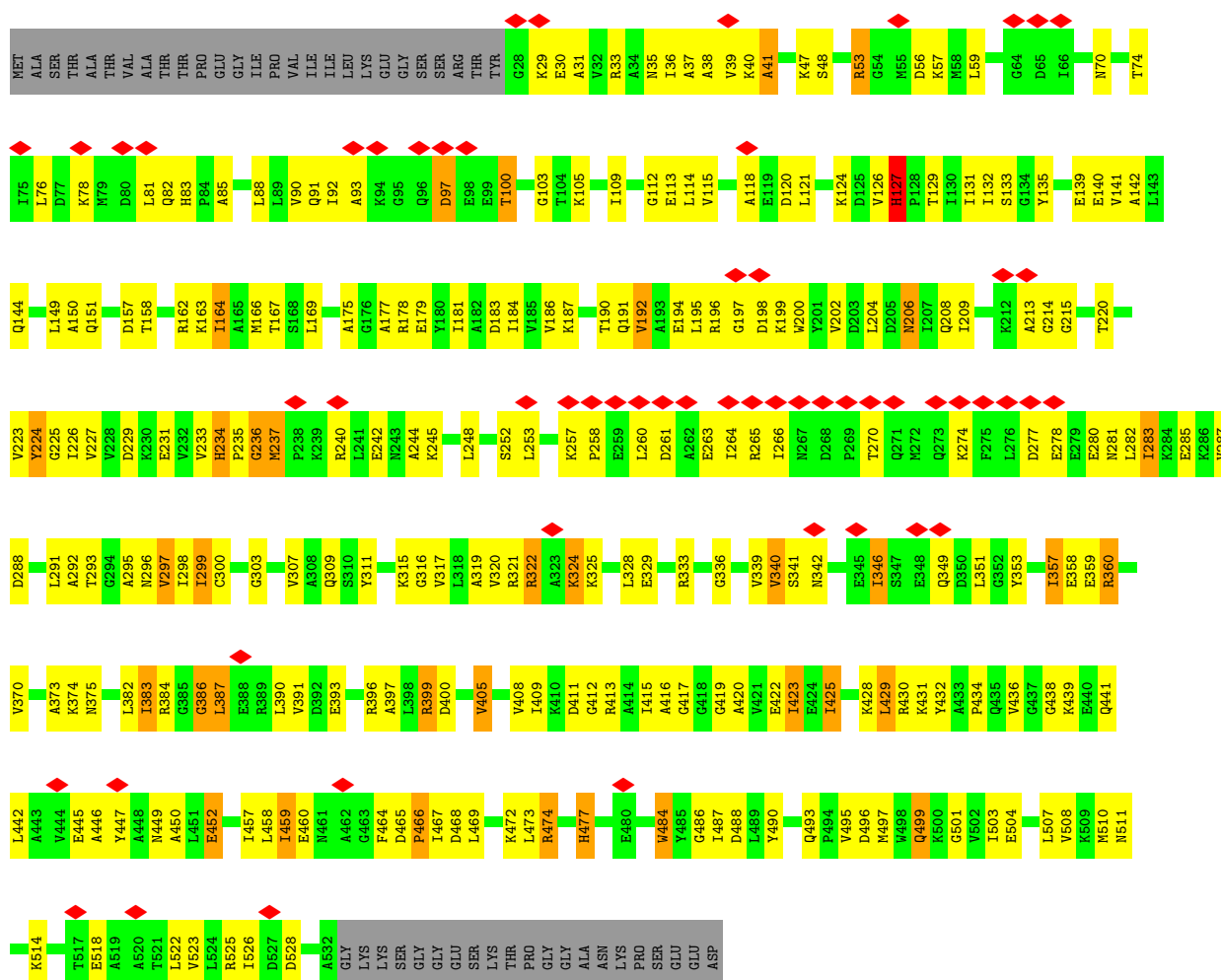


• Molecule 1: Chaperonin beta subunit

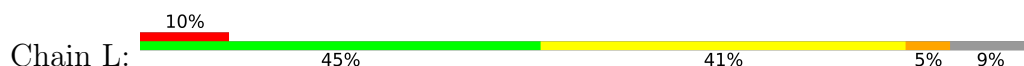


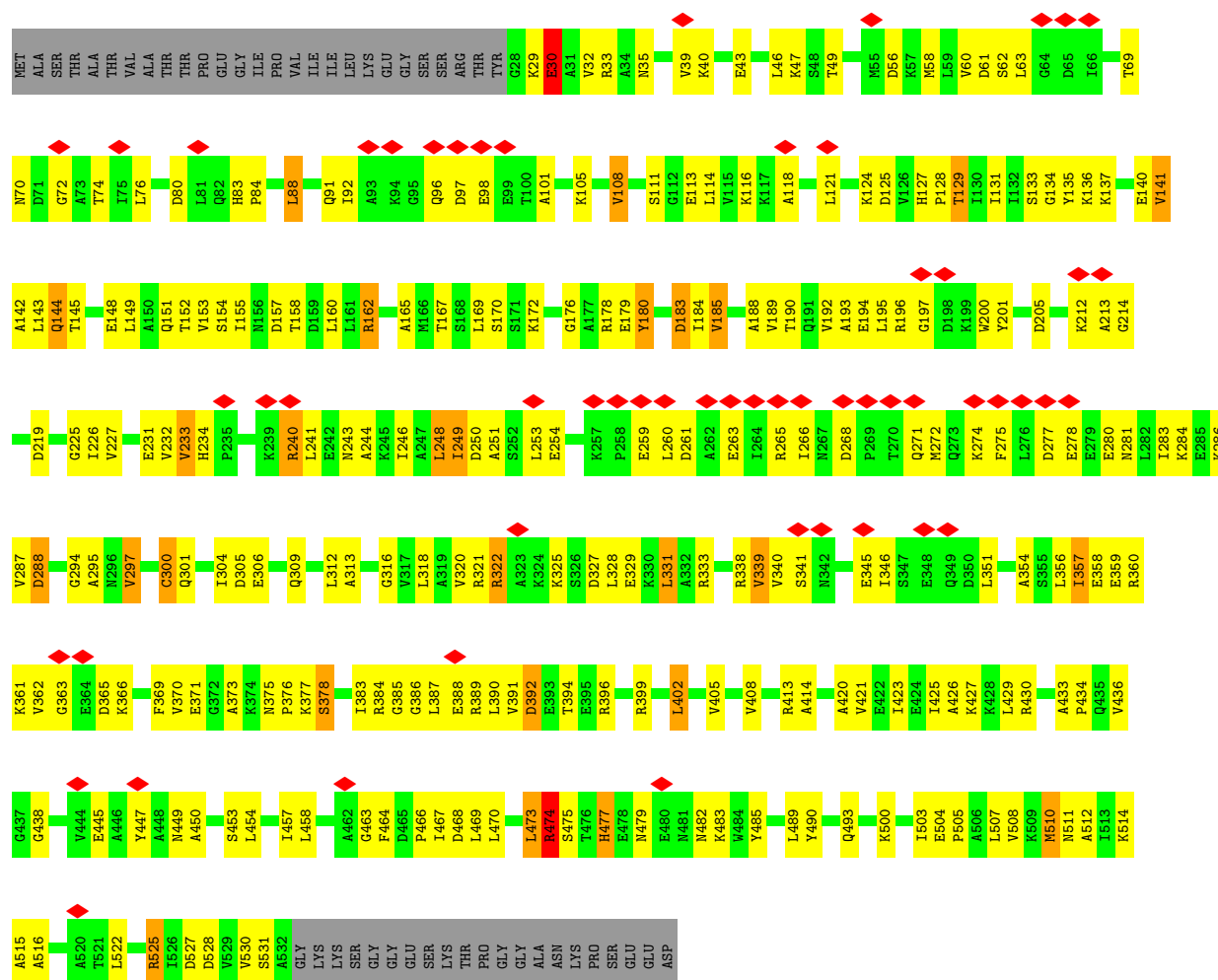


• Molecule 1: Chaperonin beta subunit

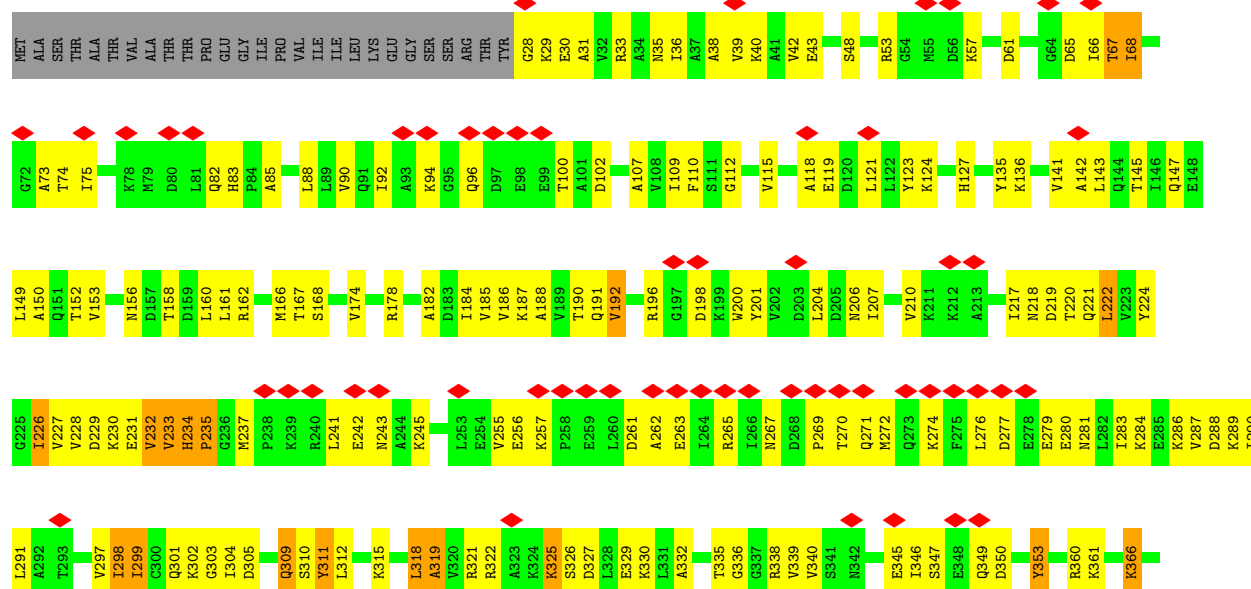


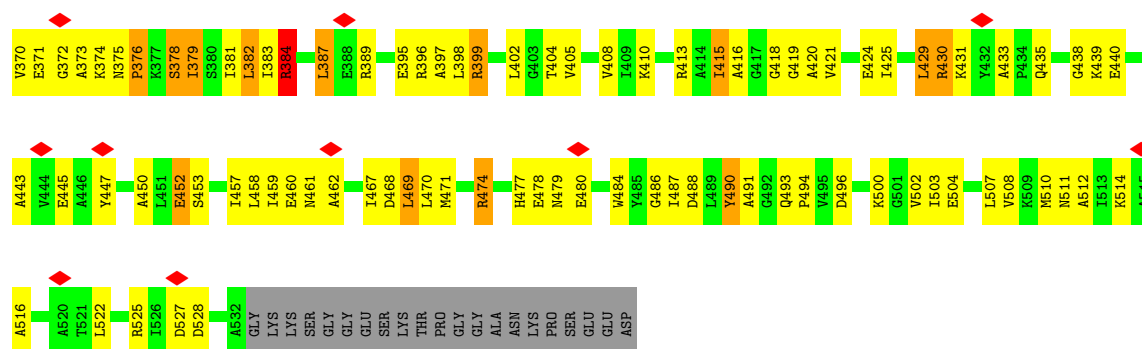
• Molecule 1: Chaperonin beta subunit



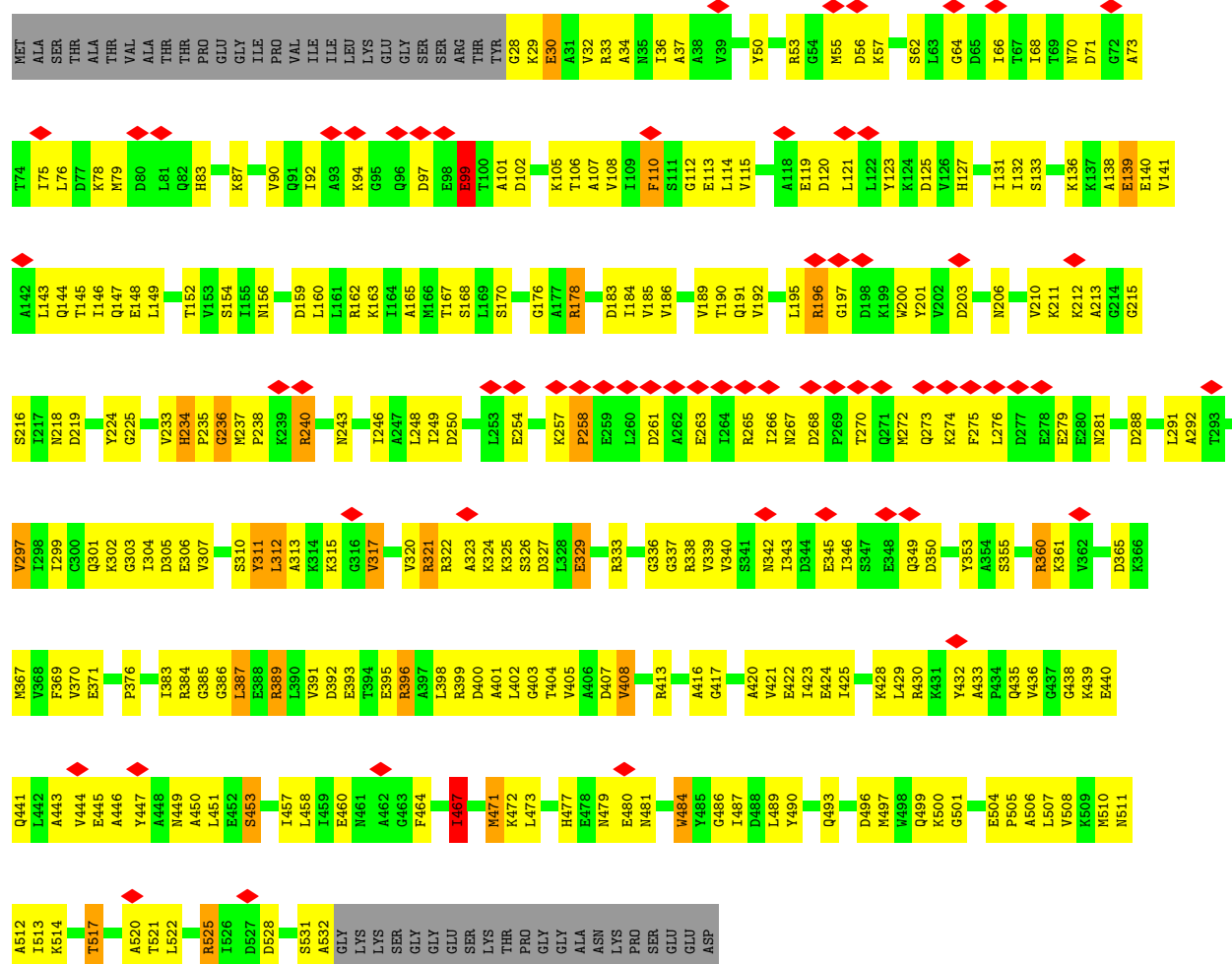


● Molecule 1: Chaperonin beta subunit



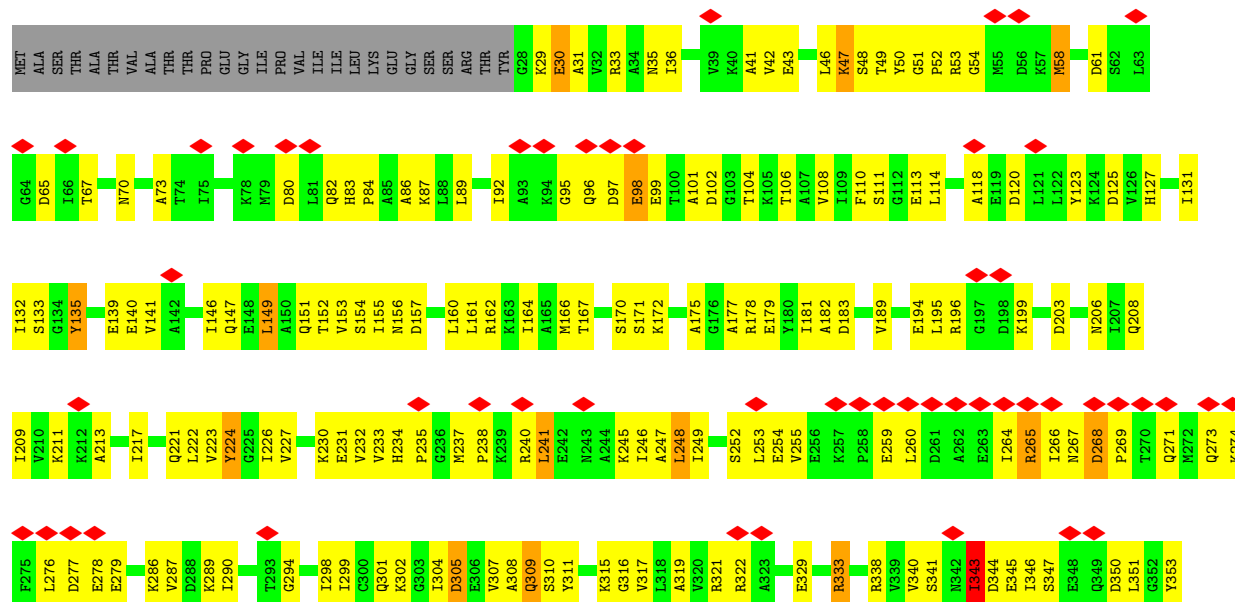


• Molecule 1: Chaperonin beta subunit

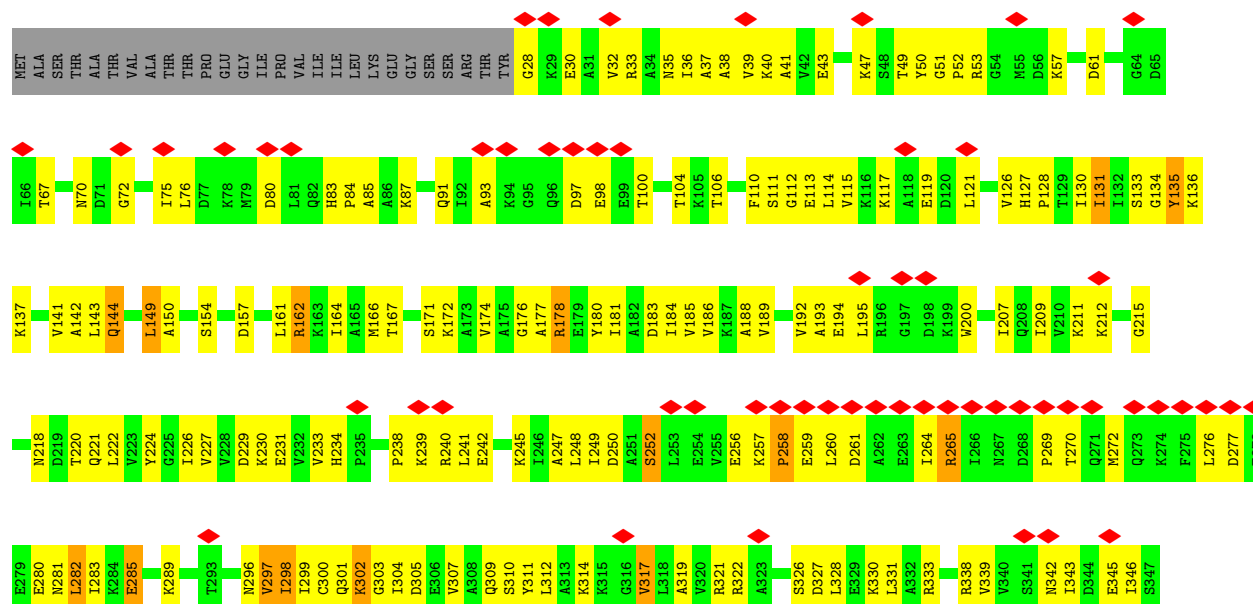


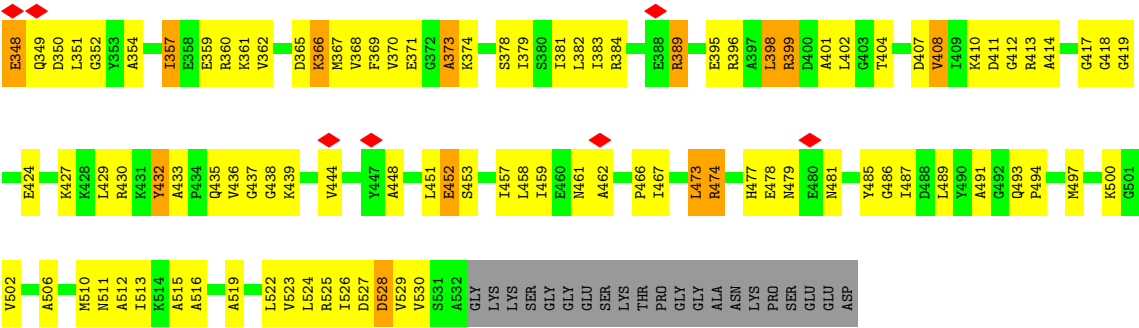
• Molecule 1: Chaperonin beta subunit











4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C9	Depositor
Number of particles used	23285	Depositor
Resolution determination method	Not provided	
CTF correction method	The whole micrograph	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	20	Depositor
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	3500	Depositor
Magnification	96000	Depositor
Image detector	GATAN ULTRASCAN 4000 (4k x 4k)	Depositor
Maximum map value	21.001	Depositor
Minimum map value	-12.849	Depositor
Average map value	0.219	Depositor
Map value standard deviation	2.045	Depositor
Recommended contour level	5	Depositor
Map size ($\text{\AA}$)	298.56, 298.56, 298.56	wwPDB
Map dimensions	160, 160, 160	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing ($\text{\AA}$)	1.8659999, 1.8659999, 1.8659999	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	A	2.11	96/3886 (2.5%)	2.48	282/5245 (5.4%)
1	B	2.15	103/3886 (2.7%)	2.45	273/5245 (5.2%)
1	C	2.17	115/3886 (3.0%)	2.43	240/5245 (4.6%)
1	D	2.19	129/3886 (3.3%)	2.51	273/5245 (5.2%)
1	E	2.14	107/3886 (2.8%)	2.50	286/5245 (5.5%)
1	F	2.13	109/3886 (2.8%)	2.45	263/5245 (5.0%)
1	G	2.11	99/3886 (2.5%)	2.45	257/5245 (4.9%)
1	H	2.12	101/3886 (2.6%)	2.50	266/5245 (5.1%)
1	I	2.12	104/3886 (2.7%)	2.47	270/5245 (5.1%)
1	K	2.13	114/3886 (2.9%)	2.44	239/5245 (4.6%)
1	L	2.16	116/3886 (3.0%)	2.47	256/5245 (4.9%)
1	M	2.15	118/3886 (3.0%)	2.45	257/5245 (4.9%)
1	N	2.14	107/3886 (2.8%)	2.53	302/5245 (5.8%)
1	O	2.16	118/3886 (3.0%)	2.44	253/5245 (4.8%)
1	P	2.16	124/3886 (3.2%)	2.47	247/5245 (4.7%)
1	Q	2.17	112/3886 (2.9%)	2.51	282/5245 (5.4%)
1	R	2.11	95/3886 (2.4%)	2.42	248/5245 (4.7%)
1	S	2.13	114/3886 (2.9%)	2.43	227/5245 (4.3%)
All	All	2.14	1981/69948 (2.8%)	2.47	4721/94410 (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	11
1	B	0	15
1	C	0	5
1	D	0	11
1	E	0	10
1	F	0	10
1	G	0	11

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Mol	Chain	#Chirality outliers	#Planarity outliers
1	H	0	8
1	I	0	8
1	K	0	12
1	L	0	8
1	M	0	10
1	N	0	15
1	O	0	7
1	P	0	9
1	Q	0	14
1	R	0	10
1	S	0	11
All	All	0	185

All (1981) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	402	LEU	CA-C	-11.96	1.37	1.52
1	D	500	LYS	N-CA	-10.83	1.36	1.46
1	F	127	HIS	ND1-CE1	10.75	1.43	1.32
1	C	243	ASN	CA-CB	10.33	1.68	1.53
1	N	353	TYR	CA-C	-10.24	1.40	1.52
1	B	36	ILE	CA-CB	-10.03	1.43	1.54
1	C	391	VAL	CA-C	9.94	1.65	1.52
1	G	413	ARG	CD-NE	9.94	1.60	1.46
1	G	253	LEU	N-CA	-9.90	1.34	1.46
1	A	467	ILE	CA-CB	-9.71	1.42	1.54
1	L	284	LYS	C-N	9.62	1.46	1.33
1	K	109	ILE	CA-CB	-9.57	1.44	1.54
1	D	318	LEU	CA-CB	9.56	1.66	1.53
1	H	352	GLY	CA-C	-9.43	1.44	1.51
1	G	107	ALA	C-N	9.43	1.45	1.33
1	G	430	ARG	CA-C	9.41	1.64	1.52
1	L	80	ASP	CA-C	-9.33	1.40	1.52
1	M	396	ARG	CA-C	-9.31	1.41	1.52
1	M	453	SER	N-CA	9.27	1.57	1.46
1	H	339	VAL	CA-C	9.14	1.62	1.52
1	M	309	GLN	CA-C	-9.09	1.40	1.52
1	D	273	GLN	CA-C	9.07	1.65	1.52
1	M	29	LYS	CA-C	9.04	1.64	1.52
1	N	440	GLU	C-N	8.96	1.45	1.33
1	N	106	THR	CA-C	-8.91	1.41	1.52
1	C	187	LYS	CA-CB	8.88	1.67	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	164	ILE	CA-C	8.76	1.63	1.52
1	H	380	SER	CA-C	-8.75	1.42	1.52
1	S	28	GLY	N-CA	8.74	1.59	1.45
1	S	258	PRO	N-CA	-8.67	1.37	1.47
1	N	345	GLU	CA-CB	8.66	1.67	1.54
1	E	338	ARG	CD-NE	8.61	1.58	1.46
1	R	172	LYS	CA-C	-8.58	1.42	1.52
1	M	469	LEU	CA-C	-8.57	1.41	1.52
1	B	510	MET	CA-C	-8.53	1.42	1.52
1	N	480	GLU	CA-C	8.52	1.64	1.52
1	S	417	GLY	N-CA	8.51	1.54	1.45
1	R	372	GLY	CA-C	-8.49	1.39	1.51
1	B	208	GLN	N-CA	-8.48	1.35	1.45
1	E	84	PRO	C-N	8.48	1.44	1.33
1	F	130	ILE	CA-CB	8.48	1.64	1.54
1	H	337	GLY	CA-C	-8.46	1.44	1.52
1	N	508	VAL	N-CA	-8.45	1.36	1.46
1	S	280	GLU	C-N	8.44	1.46	1.33
1	A	482	ASN	N-CA	-8.43	1.36	1.46
1	H	178	ARG	N-CA	-8.42	1.35	1.46
1	B	479	ASN	CA-C	-8.41	1.42	1.52
1	K	257	LYS	N-CA	8.39	1.51	1.46
1	L	83	HIS	ND1-CE1	8.39	1.41	1.32
1	O	180	TYR	CA-C	-8.38	1.42	1.52
1	S	348	GLU	C-N	8.37	1.45	1.33
1	M	418	GLY	CA-C	8.35	1.60	1.51
1	R	474	ARG	CD-NE	8.31	1.57	1.46
1	K	375	ASN	CA-C	8.31	1.61	1.52
1	K	466	PRO	C-N	8.30	1.44	1.33
1	N	94	LYS	CA-C	8.29	1.63	1.52
1	L	427	LYS	CA-CB	8.27	1.66	1.53
1	G	240	ARG	CD-NE	8.27	1.57	1.46
1	A	50	TYR	CA-CB	8.27	1.66	1.53
1	R	203	ASP	CA-CB	8.24	1.63	1.52
1	A	240	ARG	CD-NE	8.24	1.57	1.46
1	P	53	ARG	CD-NE	8.20	1.57	1.46
1	E	376	PRO	CA-C	-8.17	1.42	1.52
1	E	436	VAL	CA-CB	-8.17	1.43	1.54
1	R	404	THR	N-CA	-8.16	1.36	1.46
1	Q	402	LEU	CA-CB	8.16	1.66	1.53
1	C	196	ARG	CD-NE	8.15	1.57	1.46
1	P	278	GLU	CA-C	8.14	1.63	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	R	262	ALA	CA-C	-8.14	1.42	1.52
1	L	272	MET	CA-C	-8.14	1.42	1.52
1	M	90	VAL	CA-C	8.13	1.63	1.52
1	N	444	VAL	C-N	8.09	1.44	1.33
1	N	514	LYS	CA-C	8.09	1.63	1.52
1	Q	389	ARG	CD-NE	8.09	1.57	1.46
1	C	488	ASP	CA-CB	8.08	1.65	1.53
1	D	220	THR	CA-C	-8.07	1.42	1.53
1	B	264	ILE	CA-C	8.07	1.62	1.52
1	K	231	GLU	C-N	8.04	1.43	1.33
1	E	330	LYS	N-CA	8.03	1.56	1.46
1	A	349	GLN	CA-C	8.02	1.63	1.52
1	E	83	HIS	CB-CG	8.02	1.61	1.50
1	K	341	SER	C-N	8.01	1.44	1.33
1	L	240	ARG	CA-CB	8.00	1.66	1.53
1	R	138	ALA	C-N	8.00	1.44	1.33
1	G	204	LEU	N-CA	-8.00	1.36	1.46
1	M	508	VAL	N-CA	7.99	1.55	1.46
1	C	128	PRO	CA-CB	-7.98	1.42	1.53
1	P	89	LEU	CA-C	-7.98	1.43	1.52
1	I	135	TYR	CA-CB	7.97	1.65	1.53
1	C	28	GLY	N-CA	7.96	1.58	1.45
1	K	459	ILE	N-CA	-7.96	1.37	1.46
1	P	361	LYS	CA-CB	7.95	1.63	1.53
1	G	210	VAL	CA-C	7.92	1.61	1.52
1	B	133	SER	CA-CB	7.90	1.65	1.53
1	Q	33	ARG	CD-NE	7.90	1.57	1.46
1	F	471	MET	CA-CB	7.89	1.65	1.53
1	L	277	ASP	CA-C	-7.88	1.43	1.52
1	S	526	ILE	CA-C	7.87	1.62	1.53
1	C	165	ALA	CA-C	-7.85	1.43	1.52
1	Q	151	GLN	CA-C	7.84	1.62	1.52
1	E	123	TYR	CA-C	7.81	1.62	1.52
1	A	139	GLU	N-CA	-7.78	1.37	1.46
1	A	398	LEU	CA-C	-7.78	1.42	1.52
1	E	459	ILE	CA-C	-7.77	1.43	1.52
1	N	163	LYS	N-CA	-7.76	1.37	1.46
1	O	246	ILE	C-N	7.75	1.43	1.33
1	C	413	ARG	CA-C	7.75	1.62	1.52
1	S	401	ALA	CA-CB	7.74	1.65	1.53
1	L	333	ARG	CD-NE	7.74	1.57	1.46
1	B	405	VAL	CA-C	7.72	1.62	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	S	289	LYS	C-N	7.72	1.43	1.33
1	C	216	SER	CA-C	-7.71	1.43	1.52
1	L	124	LYS	C-N	7.71	1.44	1.33
1	H	195	LEU	C-N	7.70	1.43	1.33
1	R	258	PRO	CA-C	7.69	1.61	1.52
1	L	62	SER	N-CA	7.69	1.55	1.46
1	L	287	VAL	CA-C	-7.67	1.43	1.52
1	E	360	ARG	CD-NE	7.64	1.56	1.46
1	G	477	HIS	CE1-NE2	7.64	1.40	1.32
1	A	496	ASP	CA-CB	7.63	1.62	1.53
1	S	234	HIS	CE1-NE2	-7.61	1.25	1.32
1	D	28	GLY	N-CA	7.60	1.57	1.45
1	H	210	VAL	CA-C	-7.60	1.43	1.52
1	M	381	ILE	N-CA	7.59	1.54	1.46
1	M	186	VAL	N-CA	7.59	1.55	1.46
1	A	396	ARG	N-CA	-7.58	1.37	1.46
1	Q	461	ASN	CA-CB	7.57	1.66	1.53
1	H	368	VAL	N-CA	-7.57	1.37	1.46
1	Q	105	LYS	CA-CB	7.56	1.65	1.53
1	G	110	PHE	CA-CB	7.56	1.65	1.53
1	M	28	GLY	N-CA	7.56	1.57	1.45
1	H	91	GLN	CA-C	-7.55	1.43	1.52
1	P	183	ASP	N-CA	-7.55	1.37	1.46
1	O	98	GLU	N-CA	-7.53	1.36	1.46
1	N	235	PRO	N-CA	-7.53	1.37	1.47
1	B	347	SER	C-N	7.53	1.44	1.34
1	D	42	VAL	CA-C	7.53	1.62	1.52
1	R	186	VAL	CA-CB	-7.51	1.45	1.54
1	S	528	ASP	N-CA	-7.51	1.37	1.46
1	G	232	VAL	CA-C	7.48	1.61	1.52
1	O	178	ARG	CD-NE	7.48	1.56	1.46
1	R	384	ARG	CD-NE	7.47	1.56	1.46
1	L	357	ILE	CA-CB	7.47	1.64	1.54
1	O	338	ARG	CA-C	-7.47	1.43	1.52
1	K	39	VAL	CA-CB	-7.47	1.46	1.54
1	G	233	VAL	N-CA	7.46	1.55	1.46
1	I	194	GLU	CA-C	-7.46	1.43	1.52
1	R	397	ALA	N-CA	-7.46	1.37	1.46
1	M	39	VAL	C-N	7.46	1.43	1.33
1	F	165	ALA	CA-C	-7.46	1.43	1.52
1	L	430	ARG	CD-NE	7.45	1.56	1.46
1	P	383	ILE	CA-CB	-7.44	1.45	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	42	VAL	N-CA	7.43	1.55	1.46
1	E	127	HIS	ND1-CE1	7.41	1.40	1.32
1	B	165	ALA	CA-C	-7.39	1.43	1.52
1	M	490	TYR	CA-C	-7.39	1.45	1.53
1	D	284	LYS	C-N	7.38	1.43	1.33
1	L	70	ASN	CA-C	7.38	1.62	1.52
1	O	347	SER	CA-CB	7.38	1.66	1.53
1	A	46	LEU	CA-CB	7.37	1.64	1.53
1	K	507	LEU	CA-C	-7.37	1.43	1.52
1	B	37	ALA	CA-C	7.37	1.63	1.52
1	D	477	HIS	CA-C	-7.37	1.43	1.52
1	K	386	GLY	CA-C	-7.37	1.41	1.51
1	N	203	ASP	CA-CB	7.36	1.64	1.52
1	L	482	ASN	CA-CB	7.35	1.64	1.53
1	D	452	GLU	N-CA	-7.35	1.37	1.46
1	D	353	TYR	CA-C	7.35	1.62	1.52
1	C	248	LEU	CA-C	7.34	1.62	1.52
1	A	232	VAL	CA-C	7.33	1.61	1.52
1	K	163	LYS	CA-CB	7.33	1.65	1.53
1	D	70	ASN	C-N	7.33	1.44	1.33
1	E	218	ASN	CA-C	7.33	1.62	1.52
1	N	152	THR	CA-CB	-7.33	1.43	1.53
1	K	224	TYR	CA-CB	7.33	1.62	1.52
1	L	362	VAL	CA-CB	-7.33	1.45	1.53
1	R	299	ILE	CA-C	-7.33	1.44	1.52
1	B	322	ARG	CD-NE	7.32	1.56	1.46
1	Q	265	ARG	CA-C	-7.32	1.43	1.52
1	N	143	LEU	N-CA	-7.30	1.37	1.46
1	Q	130	ILE	CA-C	-7.30	1.43	1.52
1	P	177	ALA	CA-C	7.30	1.62	1.53
1	A	321	ARG	C-O	-7.29	1.14	1.24
1	H	71	ASP	CA-C	-7.29	1.43	1.52
1	K	467	ILE	CA-CB	-7.28	1.45	1.54
1	Q	56	ASP	CA-C	7.28	1.62	1.52
1	N	505	PRO	CA-C	7.27	1.62	1.52
1	D	237	MET	CA-C	-7.27	1.44	1.53
1	E	303	GLY	CA-C	-7.26	1.43	1.52
1	N	297	VAL	C-N	7.26	1.42	1.33
1	M	127	HIS	CG-CD2	7.25	1.43	1.35
1	I	313	ALA	N-CA	7.25	1.55	1.46
1	P	265	ARG	CD-NE	7.25	1.56	1.46
1	A	51	GLY	C-N	-7.24	1.25	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	103	GLY	CA-C	-7.24	1.44	1.52
1	F	499	GLN	CA-C	-7.22	1.43	1.52
1	P	396	ARG	CA-C	-7.22	1.44	1.52
1	D	320	VAL	CA-C	7.22	1.61	1.52
1	P	52	PRO	C-N	7.20	1.43	1.33
1	S	126	VAL	CA-C	7.20	1.60	1.52
1	C	203	ASP	CA-C	-7.20	1.43	1.52
1	F	39	VAL	CA-CB	7.20	1.62	1.54
1	K	260	LEU	N-CA	7.20	1.55	1.46
1	R	136	LYS	N-CA	7.20	1.54	1.46
1	L	530	VAL	CA-C	-7.19	1.44	1.52
1	L	345	GLU	C-N	7.19	1.42	1.33
1	A	227	VAL	CA-C	-7.19	1.43	1.52
1	S	489	LEU	N-CA	-7.18	1.36	1.46
1	H	234	HIS	ND1-CE1	7.18	1.39	1.32
1	C	166	MET	CA-C	-7.17	1.43	1.52
1	I	127	HIS	ND1-CE1	7.17	1.39	1.32
1	A	399	ARG	CD-NE	7.16	1.56	1.46
1	S	408	VAL	CA-CB	-7.16	1.45	1.54
1	N	471	MET	CA-C	7.16	1.61	1.52
1	A	303	GLY	CA-C	7.16	1.58	1.52
1	C	195	LEU	CA-CB	7.15	1.62	1.53
1	M	338	ARG	CD-NE	7.14	1.56	1.46
1	M	221	GLN	CA-C	7.14	1.61	1.52
1	D	517	THR	CA-C	-7.14	1.43	1.52
1	D	124	LYS	CA-C	7.13	1.62	1.52
1	C	173	ALA	N-CA	-7.13	1.37	1.46
1	F	313	ALA	N-CA	7.11	1.55	1.46
1	G	229	ASP	C-N	7.11	1.42	1.33
1	O	470	LEU	CA-C	7.11	1.61	1.52
1	O	268	ASP	CA-C	7.10	1.61	1.52
1	R	459	ILE	CA-CB	-7.10	1.46	1.54
1	S	144	GLN	CA-CB	7.10	1.65	1.53
1	M	487	ILE	CA-CB	7.10	1.63	1.53
1	F	477	HIS	N-CA	7.09	1.53	1.46
1	L	180	TYR	CA-C	-7.08	1.43	1.52
1	Q	127	HIS	ND1-CE1	7.08	1.39	1.32
1	C	112	GLY	C-N	7.07	1.43	1.33
1	F	168	SER	CA-CB	7.07	1.65	1.53
1	K	283	ILE	CA-C	-7.07	1.43	1.52
1	Q	103	GLY	N-CA	7.07	1.54	1.45
1	H	410	LYS	CA-C	7.06	1.62	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	494	PRO	CA-C	-7.05	1.44	1.52
1	O	457	ILE	C-O	-7.04	1.15	1.24
1	K	300	CYS	CA-C	-7.04	1.43	1.52
1	N	254	GLU	N-CA	7.04	1.54	1.45
1	C	486	GLY	CA-C	-7.03	1.42	1.51
1	E	234	HIS	ND1-CE1	7.03	1.39	1.32
1	H	118	ALA	CA-C	-7.02	1.43	1.52
1	L	32	VAL	CA-CB	-7.02	1.44	1.54
1	P	208	GLN	CA-CB	7.02	1.65	1.53
1	P	42	VAL	CA-C	7.01	1.61	1.52
1	C	84	PRO	C-N	7.01	1.42	1.33
1	I	45	ALA	CA-C	-7.00	1.43	1.52
1	K	56	ASP	CA-C	-7.00	1.44	1.52
1	N	288	ASP	CA-C	7.00	1.62	1.52
1	S	227	VAL	CA-C	-7.00	1.43	1.52
1	F	330	LYS	CA-C	-7.00	1.43	1.52
1	O	367	MET	N-CA	7.00	1.54	1.46
1	N	97	ASP	C-N	7.00	1.43	1.33
1	D	135	TYR	CA-C	6.99	1.61	1.52
1	A	404	THR	N-CA	-6.99	1.38	1.46
1	O	494	PRO	N-CA	6.99	1.55	1.47
1	L	280	GLU	N-CA	6.99	1.55	1.46
1	R	212	LYS	CA-C	6.99	1.60	1.52
1	C	322	ARG	CD-NE	6.97	1.56	1.46
1	S	75	ILE	CA-CB	6.97	1.63	1.54
1	S	432	TYR	CA-CB	6.97	1.64	1.53
1	B	207	ILE	N-CA	-6.96	1.37	1.46
1	L	508	VAL	N-CA	6.96	1.54	1.46
1	L	394	THR	CA-C	6.96	1.62	1.52
1	E	257	LYS	C-N	6.95	1.42	1.33
1	E	87	LYS	CA-C	6.95	1.61	1.52
1	D	404	THR	N-CA	-6.95	1.38	1.46
1	E	401	ALA	N-CA	-6.95	1.38	1.46
1	S	368	VAL	N-CA	-6.95	1.37	1.46
1	A	403	GLY	CA-C	-6.94	1.42	1.51
1	R	289	LYS	C-N	6.94	1.42	1.33
1	H	81	LEU	CA-C	-6.94	1.44	1.52
1	D	321	ARG	CD-NE	6.93	1.55	1.46
1	Q	413	ARG	CD-NE	6.93	1.55	1.46
1	A	47	LYS	CA-C	-6.93	1.43	1.52
1	F	302	LYS	CA-C	6.93	1.61	1.52
1	G	263	GLU	CA-CB	6.92	1.64	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	D	445	GLU	N-CA	6.92	1.54	1.46
1	N	90	VAL	C-N	6.92	1.43	1.33
1	E	404	THR	CA-C	-6.92	1.43	1.52
1	I	268	ASP	CA-C	-6.92	1.44	1.52
1	N	114	LEU	N-CA	-6.91	1.38	1.46
1	R	211	LYS	CA-C	-6.91	1.44	1.52
1	C	53	ARG	CD-NE	6.91	1.55	1.46
1	Q	120	ASP	CA-C	6.90	1.62	1.52
1	B	407	ASP	N-CA	-6.90	1.37	1.46
1	K	459	ILE	CA-C	6.89	1.61	1.52
1	M	272	MET	N-CA	-6.89	1.38	1.46
1	R	405	VAL	CA-C	-6.89	1.44	1.52
1	O	127	HIS	CB-CG	6.89	1.59	1.50
1	E	340	VAL	CA-C	-6.88	1.44	1.52
1	K	36	ILE	C-N	6.88	1.42	1.33
1	R	139	GLU	N-CA	-6.88	1.38	1.46
1	K	33	ARG	NE-CZ	6.87	1.40	1.33
1	K	157	ASP	N-CA	-6.87	1.38	1.46
1	S	413	ARG	CA-C	6.86	1.60	1.52
1	N	57	LYS	N-CA	-6.86	1.37	1.45
1	O	310	SER	N-CA	6.86	1.54	1.46
1	C	482	ASN	N-CA	-6.85	1.38	1.46
1	G	162	ARG	CA-C	6.85	1.62	1.52
1	M	257	LYS	CA-CB	6.85	1.63	1.53
1	G	101	ALA	N-CA	-6.85	1.38	1.46
1	E	391	VAL	C-N	6.84	1.42	1.33
1	D	469	LEU	N-CA	-6.84	1.38	1.46
1	K	48	SER	CA-CB	6.84	1.65	1.53
1	L	434	PRO	CA-C	-6.83	1.42	1.52
1	L	436	VAL	N-CA	-6.83	1.38	1.46
1	P	50	TYR	N-CA	-6.83	1.37	1.46
1	K	178	ARG	CD-NE	6.82	1.55	1.46
1	B	164	ILE	CA-C	6.82	1.61	1.52
1	P	189	VAL	N-CA	6.82	1.54	1.46
1	R	117	LYS	CA-C	6.82	1.62	1.52
1	I	42	VAL	C-N	6.82	1.42	1.33
1	F	154	SER	N-CA	-6.81	1.37	1.46
1	A	396	ARG	CD-NE	6.81	1.55	1.46
1	D	366	LYS	CA-C	-6.81	1.44	1.52
1	N	105	LYS	CA-C	6.81	1.61	1.52
1	H	245	LYS	C-N	6.80	1.42	1.33
1	D	73	ALA	N-CA	-6.80	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	D	432	TYR	CA-CB	6.78	1.64	1.53
1	F	358	GLU	C-N	6.78	1.42	1.33
1	D	419	GLY	CA-C	6.77	1.61	1.51
1	H	444	VAL	C-N	6.77	1.42	1.33
1	A	181	ILE	CA-CB	6.77	1.63	1.54
1	O	68	ILE	CA-CB	6.77	1.62	1.54
1	R	512	ALA	CA-C	-6.77	1.44	1.52
1	P	495	VAL	N-CA	-6.77	1.37	1.46
1	D	276	LEU	N-CA	6.76	1.55	1.46
1	M	243	ASN	CA-C	-6.76	1.45	1.53
1	N	139	GLU	CA-C	6.76	1.61	1.52
1	C	299	ILE	N-CA	-6.76	1.38	1.46
1	O	158	THR	CA-CB	-6.76	1.42	1.53
1	M	88	LEU	CA-C	-6.76	1.44	1.52
1	O	197	GLY	CA-C	6.75	1.59	1.51
1	E	384	ARG	CD-NE	6.75	1.55	1.46
1	A	346	ILE	CA-CB	6.75	1.61	1.54
1	D	423	ILE	CA-C	6.75	1.61	1.52
1	L	504	GLU	N-CA	-6.75	1.39	1.45
1	F	441	GLN	N-CA	6.74	1.54	1.46
1	O	253	LEU	CA-CB	6.74	1.62	1.53
1	I	360	ARG	CD-NE	6.73	1.55	1.46
1	D	184	ILE	CA-C	6.73	1.60	1.52
1	F	465	ASP	CA-C	6.73	1.60	1.52
1	Q	224	TYR	CA-CB	6.73	1.61	1.52
1	P	217	ILE	C-N	6.73	1.43	1.33
1	L	366	LYS	CA-C	-6.72	1.44	1.52
1	S	374	LYS	N-CA	-6.72	1.38	1.46
1	A	522	LEU	N-CA	-6.72	1.38	1.46
1	D	500	LYS	C-O	-6.72	1.16	1.24
1	H	513	ILE	N-CA	6.72	1.54	1.46
1	H	281	ASN	N-CA	-6.70	1.37	1.46
1	M	219	ASP	C-N	6.70	1.43	1.33
1	P	132	ILE	CA-C	-6.70	1.44	1.52
1	D	208	GLN	N-CA	-6.69	1.38	1.45
1	C	68	ILE	C-N	6.69	1.42	1.33
1	C	256	GLU	C-O	-6.69	1.15	1.23
1	E	204	LEU	CA-C	6.69	1.61	1.52
1	S	41	ALA	CA-C	6.69	1.61	1.52
1	C	74	THR	C-N	6.68	1.41	1.34
1	Q	306	GLU	CA-C	6.68	1.61	1.52
1	I	39	VAL	N-CA	6.68	1.54	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	P	127	HIS	CA-C	-6.68	1.46	1.53
1	M	349	GLN	N-CA	-6.68	1.37	1.46
1	G	380	SER	CA-C	-6.67	1.44	1.52
1	I	395	GLU	CA-C	-6.67	1.44	1.52
1	P	443	ALA	CA-C	6.67	1.61	1.52
1	B	265	ARG	C-N	6.67	1.41	1.33
1	D	154	SER	CA-CB	6.67	1.63	1.53
1	E	112	GLY	CA-C	6.67	1.60	1.52
1	D	163	LYS	CA-C	-6.67	1.44	1.52
1	Q	68	ILE	CA-C	6.67	1.60	1.52
1	A	524	LEU	CA-C	-6.66	1.43	1.52
1	G	411	ASP	CA-C	6.66	1.61	1.52
1	G	133	SER	CA-CB	6.66	1.63	1.53
1	G	460	GLU	N-CA	6.66	1.53	1.46
1	E	211	LYS	CA-C	-6.65	1.44	1.52
1	O	176	GLY	CA-C	-6.65	1.41	1.52
1	I	488	ASP	CA-C	6.65	1.61	1.52
1	K	522	LEU	CA-CB	6.65	1.63	1.53
1	M	510	MET	CA-C	-6.65	1.46	1.52
1	K	496	ASP	C-N	6.65	1.43	1.33
1	C	178	ARG	N-CA	6.64	1.54	1.46
1	Q	145	THR	C-N	6.64	1.41	1.33
1	M	40	LYS	CA-C	6.64	1.61	1.52
1	D	84	PRO	CA-C	6.63	1.62	1.52
1	P	73	ALA	CA-C	6.63	1.62	1.52
1	Q	446	ALA	C-O	-6.63	1.16	1.24
1	Q	374	LYS	CA-C	6.62	1.61	1.52
1	R	364	GLU	CA-C	-6.62	1.44	1.52
1	O	359	GLU	C-N	6.61	1.43	1.33
1	B	202	VAL	CA-CB	-6.61	1.46	1.54
1	D	147	GLN	CA-C	-6.61	1.44	1.52
1	E	257	LYS	CA-C	-6.61	1.45	1.52
1	N	472	LYS	C-N	-6.60	1.25	1.33
1	P	222	LEU	N-CA	-6.60	1.38	1.46
1	S	154	SER	C-N	6.60	1.41	1.34
1	P	217	ILE	CA-CB	6.60	1.64	1.54
1	O	47	LYS	CA-C	6.60	1.61	1.52
1	K	525	ARG	CA-C	6.60	1.61	1.52
1	Q	137	LYS	CA-C	6.60	1.61	1.52
1	D	91	GLN	C-N	6.59	1.42	1.33
1	O	251	ALA	C-N	6.59	1.42	1.33
1	G	274	LYS	C-N	6.59	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	H	497	MET	CA-C	-6.59	1.44	1.52
1	O	449	ASN	CA-C	6.58	1.61	1.52
1	K	396	ARG	CD-NE	6.58	1.55	1.46
1	D	270	THR	N-CA	6.58	1.54	1.46
1	E	417	GLY	C-N	6.58	1.41	1.33
1	M	186	VAL	C-N	6.58	1.42	1.33
1	L	457	ILE	CA-C	6.57	1.61	1.52
1	R	188	ALA	C-O	6.57	1.31	1.24
1	L	346	ILE	CA-C	6.57	1.60	1.52
1	S	473	LEU	CA-C	-6.57	1.44	1.52
1	L	378	SER	CA-CB	6.57	1.61	1.53
1	L	363	GLY	CA-C	-6.56	1.43	1.52
1	D	350	ASP	CA-C	-6.56	1.43	1.52
1	P	371	GLU	N-CA	-6.56	1.37	1.45
1	F	222	LEU	N-CA	-6.56	1.38	1.46
1	D	72	GLY	C-N	6.56	1.41	1.33
1	N	306	GLU	C-N	6.56	1.42	1.33
1	A	326	SER	CA-C	-6.55	1.43	1.52
1	I	280	GLU	CA-C	-6.55	1.44	1.52
1	Q	114	LEU	N-CA	-6.55	1.38	1.46
1	P	35	ASN	CA-C	6.55	1.61	1.52
1	G	495	VAL	CA-C	-6.55	1.45	1.52
1	G	60	VAL	CA-CB	-6.54	1.45	1.53
1	B	187	LYS	N-CA	-6.54	1.38	1.46
1	F	168	SER	CA-C	-6.54	1.45	1.52
1	G	472	LYS	CA-C	6.54	1.61	1.52
1	B	402	LEU	CA-CB	6.54	1.63	1.53
1	B	83	HIS	N-CA	6.53	1.55	1.46
1	D	242	GLU	CA-C	-6.53	1.44	1.52
1	B	420	ALA	C-N	6.53	1.41	1.33
1	H	200	TRP	CZ2-CH2	6.53	1.49	1.37
1	N	303	GLY	CA-C	-6.52	1.42	1.52
1	N	138	ALA	C-N	6.52	1.42	1.33
1	I	430	ARG	CD-NE	6.52	1.55	1.46
1	L	260	LEU	N-CA	-6.52	1.38	1.46
1	K	339	VAL	CA-C	-6.52	1.44	1.52
1	Q	474	ARG	C-N	6.52	1.43	1.33
1	D	102	ASP	CA-CB	6.51	1.64	1.53
1	D	127	HIS	ND1-CE1	6.51	1.39	1.32
1	E	344	ASP	N-CA	6.51	1.55	1.46
1	K	169	LEU	N-CA	-6.51	1.38	1.46
1	P	230	LYS	CA-C	6.51	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	104	THR	CB-OG1	-6.51	1.33	1.43
1	B	477	HIS	CE1-NE2	6.50	1.39	1.32
1	R	188	ALA	C-N	6.50	1.42	1.33
1	H	99	GLU	CA-C	6.50	1.61	1.52
1	Q	180	TYR	CA-C	6.50	1.61	1.52
1	D	47	LYS	CA-C	6.50	1.61	1.52
1	D	217	ILE	CA-CB	-6.50	1.45	1.54
1	F	427	LYS	CA-CB	6.50	1.64	1.53
1	O	278	GLU	CA-C	6.49	1.61	1.52
1	D	224	TYR	CA-C	-6.49	1.46	1.53
1	B	389	ARG	NE-CZ	6.48	1.40	1.33
1	E	441	GLN	C-N	6.48	1.42	1.33
1	D	200	TRP	C-N	6.48	1.42	1.33
1	F	506	ALA	CA-C	-6.48	1.43	1.52
1	R	173	ALA	N-CA	-6.48	1.38	1.46
1	E	59	LEU	C-N	6.48	1.42	1.33
1	E	63	LEU	N-CA	6.48	1.53	1.46
1	M	53	ARG	CD-NE	6.48	1.55	1.46
1	N	267	ASN	CA-C	6.48	1.61	1.52
1	Q	211	LYS	CA-C	-6.47	1.44	1.52
1	C	500	LYS	CA-C	-6.47	1.45	1.52
1	Q	416	ALA	CA-C	-6.47	1.44	1.52
1	B	361	LYS	N-CA	6.47	1.54	1.46
1	O	352	GLY	N-CA	6.47	1.51	1.44
1	R	273	GLN	CA-C	6.47	1.61	1.52
1	B	419	GLY	C-N	6.46	1.41	1.33
1	R	217	ILE	N-CA	6.46	1.55	1.46
1	E	36	ILE	C-N	6.46	1.41	1.33
1	M	118	ALA	CA-C	-6.46	1.43	1.52
1	G	367	MET	CA-C	6.45	1.60	1.52
1	N	407	ASP	N-CA	6.45	1.54	1.46
1	F	127	HIS	C-N	6.45	1.42	1.33
1	P	273	GLN	N-CA	-6.45	1.37	1.46
1	P	353	TYR	CA-CB	6.45	1.62	1.53
1	E	442	LEU	CA-C	6.45	1.61	1.52
1	I	502	VAL	CA-C	-6.45	1.45	1.52
1	O	242	GLU	N-CA	-6.45	1.37	1.46
1	B	514	LYS	N-CA	-6.44	1.38	1.46
1	L	151	GLN	CA-C	-6.44	1.45	1.52
1	N	211	LYS	CA-C	-6.44	1.44	1.52
1	F	35	ASN	C-N	6.44	1.41	1.33
1	P	177	ALA	C-O	6.44	1.31	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	162	ARG	N-CA	-6.43	1.38	1.46
1	I	163	LYS	N-CA	-6.43	1.38	1.46
1	H	505	PRO	CA-C	6.43	1.61	1.52
1	C	413	ARG	N-CA	-6.43	1.38	1.46
1	H	383	ILE	CA-C	-6.43	1.44	1.52
1	K	199	LYS	CA-C	-6.43	1.44	1.52
1	O	115	VAL	CA-CB	-6.42	1.46	1.54
1	Q	340	VAL	C-N	6.42	1.42	1.33
1	I	29	LYS	N-CA	-6.42	1.38	1.46
1	M	299	ILE	N-CA	-6.42	1.38	1.46
1	M	191	GLN	CA-C	6.42	1.61	1.52
1	G	105	LYS	CA-C	-6.42	1.44	1.52
1	L	450	ALA	N-CA	-6.42	1.38	1.46
1	M	83	HIS	C-N	6.42	1.42	1.33
1	E	505	PRO	CA-CB	6.41	1.62	1.53
1	D	453	SER	CA-CB	6.41	1.63	1.53
1	H	97	ASP	C-O	-6.41	1.16	1.24
1	F	528	ASP	N-CA	-6.41	1.38	1.46
1	I	297	VAL	N-CA	6.40	1.53	1.46
1	K	142	ALA	C-N	-6.40	1.25	1.33
1	K	445	GLU	CA-CB	6.40	1.63	1.53
1	L	425	ILE	CA-C	-6.40	1.43	1.52
1	E	388	GLU	N-CA	-6.39	1.38	1.46
1	G	81	LEU	CA-CB	6.39	1.64	1.53
1	R	526	ILE	CA-CB	6.39	1.61	1.53
1	M	112	GLY	C-N	6.38	1.42	1.33
1	S	357	ILE	CA-C	-6.38	1.45	1.52
1	G	58	MET	CA-C	-6.38	1.45	1.52
1	L	219	ASP	CA-CB	6.38	1.63	1.53
1	F	200	TRP	NE1-CE2	-6.37	1.30	1.37
1	F	497	MET	CA-C	-6.37	1.44	1.52
1	L	116	LYS	CA-CB	6.37	1.63	1.53
1	C	473	LEU	C-N	6.37	1.42	1.33
1	Q	92	ILE	N-CA	-6.37	1.38	1.46
1	Q	217	ILE	CA-CB	-6.37	1.45	1.54
1	M	486	GLY	C-N	6.37	1.41	1.33
1	A	176	GLY	C-O	-6.36	1.18	1.24
1	M	443	ALA	CA-C	-6.36	1.44	1.52
1	K	496	ASP	CA-C	-6.36	1.44	1.52
1	O	135	TYR	C-N	6.36	1.41	1.33
1	D	474	ARG	C-N	6.35	1.42	1.33
1	E	530	VAL	C-N	6.35	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	417	GLY	C-O	-6.35	1.17	1.23
1	N	115	VAL	C-N	6.34	1.41	1.33
1	N	501	GLY	CA-C	-6.34	1.42	1.51
1	M	48	SER	C-N	6.33	1.43	1.33
1	B	180	TYR	CA-CB	6.33	1.63	1.53
1	C	353	TYR	N-CA	-6.33	1.38	1.46
1	E	426	ALA	CA-C	-6.33	1.44	1.52
1	I	227	VAL	CA-C	-6.33	1.44	1.52
1	E	477	HIS	ND1-CE1	6.33	1.38	1.32
1	O	187	LYS	CA-C	6.32	1.60	1.52
1	L	338	ARG	CA-CB	6.32	1.65	1.53
1	H	453	SER	N-CA	6.32	1.54	1.46
1	L	92	ILE	N-CA	6.32	1.54	1.46
1	Q	83	HIS	ND1-CE1	6.32	1.38	1.32
1	H	193	ALA	N-CA	-6.32	1.38	1.46
1	I	83	HIS	CD2-NE2	6.31	1.44	1.37
1	O	446	ALA	CA-C	-6.31	1.45	1.52
1	O	135	TYR	CA-CB	6.31	1.63	1.53
1	O	313	ALA	CA-C	-6.31	1.44	1.52
1	H	271	GLN	CA-C	-6.31	1.44	1.52
1	P	387	LEU	CA-C	6.31	1.60	1.52
1	C	42	VAL	CA-C	6.30	1.60	1.52
1	H	393	GLU	CA-C	6.30	1.61	1.52
1	P	247	ALA	CA-C	-6.29	1.45	1.53
1	C	261	ASP	CA-CB	6.29	1.63	1.53
1	K	40	LYS	CA-C	6.29	1.60	1.52
1	P	58	MET	CA-CB	6.29	1.64	1.53
1	C	85	ALA	N-CA	-6.29	1.38	1.46
1	D	35	ASN	CA-C	6.28	1.61	1.52
1	C	217	ILE	N-CA	-6.28	1.37	1.46
1	S	194	GLU	C-N	6.28	1.42	1.33
1	F	422	GLU	CA-C	6.27	1.60	1.52
1	H	168	SER	CA-C	-6.27	1.45	1.52
1	K	333	ARG	CD-NE	6.27	1.55	1.46
1	C	234	HIS	CG-ND1	6.26	1.45	1.38
1	N	160	LEU	CA-C	-6.26	1.44	1.53
1	O	333	ARG	CD-NE	6.26	1.55	1.46
1	O	200	TRP	CA-CB	6.26	1.63	1.53
1	P	120	ASP	N-CA	-6.25	1.38	1.46
1	L	354	ALA	CA-C	-6.25	1.45	1.52
1	P	432	TYR	CZ-OH	6.25	1.51	1.38
1	S	238	PRO	C-N	6.25	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	321	ARG	CD-NE	6.25	1.54	1.46
1	B	520	ALA	CA-C	6.24	1.60	1.52
1	Q	119	GLU	CA-CB	6.24	1.63	1.53
1	M	200	TRP	NE1-CE2	6.24	1.44	1.37
1	F	125	ASP	CA-CB	6.24	1.62	1.53
1	H	153	VAL	CA-CB	-6.24	1.46	1.54
1	I	474	ARG	C-N	6.23	1.42	1.33
1	F	338	ARG	C-N	6.23	1.39	1.33
1	I	424	GLU	C-N	6.23	1.41	1.34
1	L	246	ILE	CA-CB	-6.23	1.48	1.54
1	Q	402	LEU	C-O	-6.23	1.16	1.24
1	P	316	GLY	CA-C	-6.22	1.42	1.51
1	D	406	ALA	N-CA	-6.22	1.38	1.46
1	F	136	LYS	CA-CB	6.22	1.63	1.53
1	F	522	LEU	CA-C	6.22	1.60	1.52
1	N	56	ASP	CA-C	-6.22	1.45	1.52
1	F	311	TYR	CA-C	6.22	1.60	1.52
1	R	43	GLU	CA-CB	6.22	1.63	1.53
1	G	51	GLY	CA-C	-6.21	1.43	1.51
1	B	287	VAL	C-N	6.21	1.42	1.34
1	H	272	MET	N-CA	-6.21	1.39	1.46
1	C	114	LEU	N-CA	6.21	1.53	1.46
1	E	299	ILE	C-O	-6.20	1.17	1.24
1	L	468	ASP	C-O	-6.20	1.16	1.24
1	D	109	ILE	N-CA	-6.20	1.39	1.46
1	G	389	ARG	CD-NE	6.20	1.54	1.46
1	A	175	ALA	C-N	6.20	1.38	1.33
1	C	316	GLY	CA-C	6.19	1.60	1.51
1	F	333	ARG	C-N	6.19	1.42	1.33
1	E	476	THR	C-N	6.19	1.42	1.33
1	L	43	GLU	N-CA	6.19	1.53	1.46
1	O	337	GLY	N-CA	6.19	1.51	1.44
1	O	514	LYS	CA-CB	6.19	1.62	1.53
1	Q	324	LYS	N-CA	6.19	1.54	1.46
1	Q	477	HIS	CG-CD2	6.19	1.42	1.35
1	S	272	MET	C-N	6.18	1.42	1.33
1	B	126	VAL	CA-CB	6.18	1.61	1.54
1	E	231	GLU	CA-C	6.18	1.61	1.53
1	M	39	VAL	CA-C	-6.18	1.45	1.52
1	N	360	ARG	CD-NE	6.18	1.54	1.46
1	L	165	ALA	CA-C	6.18	1.60	1.52
1	E	333	ARG	N-CA	-6.17	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	225	GLY	N-CA	-6.17	1.39	1.45
1	B	123	TYR	CA-C	-6.17	1.44	1.52
1	I	320	VAL	C-N	6.17	1.42	1.33
1	M	502	VAL	CA-CB	-6.16	1.45	1.53
1	S	209	ILE	CA-CB	-6.16	1.45	1.54
1	K	223	VAL	C-N	6.16	1.41	1.33
1	M	516	ALA	N-CA	6.16	1.53	1.46
1	P	298	ILE	C-N	6.16	1.43	1.33
1	S	149	LEU	CA-CB	6.16	1.63	1.53
1	K	47	LYS	CA-C	6.15	1.61	1.52
1	Q	425	ILE	CA-C	6.15	1.60	1.52
1	R	187	LYS	N-CA	-6.15	1.39	1.46
1	S	183	ASP	CA-C	6.15	1.60	1.52
1	S	322	ARG	CD-NE	6.15	1.54	1.46
1	E	293	THR	CA-C	6.15	1.60	1.52
1	B	264	ILE	C-N	6.15	1.42	1.33
1	P	98	GLU	CA-C	6.15	1.60	1.52
1	R	60	VAL	CA-CB	-6.15	1.46	1.53
1	A	162	ARG	N-CA	6.15	1.54	1.46
1	G	396	ARG	CA-C	6.14	1.60	1.52
1	S	437	GLY	C-N	6.14	1.42	1.33
1	B	203	ASP	CA-CB	6.14	1.61	1.53
1	A	158	THR	CA-C	-6.14	1.44	1.52
1	F	458	LEU	N-CA	6.14	1.53	1.46
1	L	76	LEU	N-CA	-6.14	1.38	1.46
1	Q	138	ALA	CA-C	6.14	1.60	1.52
1	D	139	GLU	CA-C	-6.13	1.45	1.52
1	P	199	LYS	CA-C	-6.13	1.45	1.52
1	L	127	HIS	ND1-CE1	6.13	1.38	1.32
1	P	368	VAL	C-O	-6.13	1.16	1.24
1	P	152	THR	CA-CB	6.13	1.60	1.53
1	P	310	SER	CA-C	6.13	1.61	1.52
1	P	435	GLN	C-N	6.13	1.41	1.33
1	R	459	ILE	CA-C	-6.13	1.45	1.52
1	A	31	ALA	C-N	6.12	1.41	1.34
1	N	297	VAL	CA-C	6.12	1.60	1.52
1	H	77	ASP	N-CA	-6.12	1.39	1.46
1	E	512	ALA	C-O	-6.12	1.17	1.24
1	P	397	ALA	CA-C	6.12	1.61	1.52
1	S	172	LYS	CA-CB	6.11	1.62	1.53
1	D	362	VAL	CA-C	-6.11	1.48	1.53
1	O	139	GLU	C-O	-6.11	1.17	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	174	VAL	CA-CB	-6.10	1.48	1.54
1	F	196	ARG	CA-CB	6.10	1.62	1.53
1	Q	457	ILE	C-N	6.10	1.41	1.33
1	A	258	PRO	CA-C	6.10	1.58	1.52
1	A	408	VAL	C-N	6.09	1.41	1.33
1	C	465	ASP	CA-C	6.09	1.60	1.52
1	I	173	ALA	C-N	6.09	1.42	1.33
1	G	71	ASP	CA-C	-6.09	1.44	1.52
1	H	246	ILE	C-N	6.09	1.42	1.33
1	C	225	GLY	CA-C	-6.09	1.45	1.51
1	F	224	TYR	CA-CB	6.09	1.60	1.52
1	R	59	LEU	CA-C	-6.09	1.45	1.52
1	F	141	VAL	CA-C	6.08	1.60	1.52
1	M	190	THR	CA-C	6.08	1.61	1.52
1	S	474	ARG	CD-NE	6.08	1.54	1.46
1	C	59	LEU	N-CA	-6.08	1.39	1.46
1	C	247	ALA	CA-C	6.08	1.60	1.53
1	G	72	GLY	C-N	-6.08	1.26	1.33
1	N	70	ASN	N-CA	-6.08	1.40	1.46
1	S	307	VAL	N-CA	6.08	1.54	1.46
1	S	412	GLY	CA-C	-6.08	1.43	1.51
1	M	382	LEU	N-CA	-6.07	1.39	1.46
1	A	223	VAL	CA-CB	-6.07	1.47	1.54
1	G	121	LEU	CB-CG	6.07	1.65	1.53
1	F	322	ARG	C-N	6.07	1.42	1.33
1	Q	482	ASN	CA-CB	6.07	1.61	1.53
1	H	91	GLN	CA-CB	6.07	1.62	1.53
1	H	417	GLY	C-O	-6.07	1.18	1.23
1	K	503	ILE	CA-C	6.07	1.60	1.52
1	L	515	ALA	N-CA	-6.07	1.39	1.46
1	B	83	HIS	ND1-CE1	6.07	1.38	1.32
1	D	513	ILE	CA-CB	6.07	1.62	1.54
1	N	484	TRP	NE1-CE2	6.07	1.44	1.37
1	P	133	SER	CA-CB	6.06	1.62	1.53
1	I	240	ARG	CD-NE	6.06	1.54	1.46
1	A	239	LYS	CA-CB	6.06	1.62	1.53
1	H	199	LYS	N-CA	6.06	1.53	1.46
1	I	109	ILE	CA-CB	6.05	1.60	1.54
1	P	442	LEU	N-CA	-6.05	1.39	1.46
1	A	106	THR	CA-C	-6.05	1.45	1.52
1	K	186	VAL	CA-CB	-6.05	1.47	1.54
1	P	196	ARG	CA-C	-6.05	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	34	ALA	CA-C	-6.04	1.44	1.52
1	N	107	ALA	C-O	-6.04	1.16	1.24
1	P	302	LYS	CA-CB	6.04	1.62	1.53
1	A	294	GLY	CA-C	-6.03	1.43	1.51
1	I	148	GLU	CA-C	-6.03	1.44	1.52
1	N	132	ILE	CA-C	6.03	1.60	1.52
1	E	104	THR	N-CA	-6.03	1.39	1.46
1	H	169	LEU	C-N	6.03	1.42	1.33
1	H	138	ALA	C-N	6.03	1.41	1.33
1	P	390	LEU	C-N	6.03	1.41	1.33
1	Q	131	ILE	CA-C	-6.03	1.45	1.52
1	O	397	ALA	N-CA	6.03	1.53	1.46
1	A	60	VAL	CA-CB	-6.03	1.46	1.53
1	O	212	LYS	CA-C	6.03	1.59	1.52
1	F	122	LEU	CB-CG	6.03	1.65	1.53
1	Q	273	GLN	C-N	6.03	1.42	1.33
1	Q	115	VAL	CA-CB	6.02	1.61	1.54
1	B	390	LEU	CA-CB	6.02	1.62	1.53
1	D	163	LYS	N-CA	-6.02	1.39	1.46
1	H	189	VAL	CA-CB	-6.02	1.46	1.54
1	F	234	HIS	ND1-CE1	6.02	1.38	1.32
1	K	163	LYS	CA-C	6.01	1.60	1.52
1	E	274	LYS	C-N	6.01	1.42	1.33
1	R	415	ILE	CA-CB	-6.01	1.45	1.54
1	E	440	GLU	C-N	6.01	1.41	1.33
1	G	204	LEU	CA-C	6.01	1.61	1.52
1	C	248	LEU	C-N	6.01	1.41	1.33
1	F	439	LYS	CA-C	-6.01	1.45	1.52
1	M	484	TRP	N-CA	6.01	1.53	1.46
1	A	360	ARG	CD-NE	6.00	1.54	1.46
1	N	121	LEU	CA-C	6.00	1.60	1.52
1	A	519	ALA	C-N	6.00	1.41	1.33
1	G	73	ALA	CA-C	-6.00	1.45	1.52
1	N	340	VAL	CA-CB	-6.00	1.46	1.54
1	H	526	ILE	CA-C	6.00	1.59	1.52
1	A	149	LEU	CA-CB	6.00	1.63	1.53
1	P	154	SER	CA-C	-6.00	1.44	1.52
1	M	68	ILE	CA-C	-5.99	1.45	1.52
1	C	56	ASP	N-CA	-5.99	1.38	1.45
1	P	308	ALA	CA-C	5.99	1.61	1.52
1	S	52	PRO	CA-C	5.99	1.62	1.52
1	E	233	VAL	CA-C	-5.99	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	L	160	LEU	N-CA	-5.99	1.38	1.46
1	P	493	GLN	CA-C	5.99	1.60	1.52
1	R	208	GLN	C-N	5.99	1.40	1.33
1	H	404	THR	CA-C	-5.98	1.45	1.52
1	E	89	LEU	CA-C	-5.98	1.45	1.52
1	M	470	LEU	CA-CB	5.98	1.62	1.53
1	R	119	GLU	N-CA	5.98	1.53	1.46
1	R	425	ILE	CA-C	-5.98	1.44	1.52
1	G	225	GLY	N-CA	-5.98	1.39	1.45
1	G	455	VAL	CA-CB	-5.98	1.46	1.54
1	K	457	ILE	CA-C	-5.98	1.45	1.52
1	O	485	TYR	CA-CB	5.98	1.62	1.53
1	R	462	ALA	N-CA	5.97	1.54	1.46
1	C	64	GLY	C-N	5.97	1.41	1.33
1	S	131	ILE	CA-CB	-5.97	1.46	1.54
1	F	81	LEU	CB-CG	5.97	1.65	1.53
1	F	119	GLU	C-N	-5.97	1.25	1.34
1	K	37	ALA	CA-CB	5.97	1.63	1.53
1	P	341	SER	C-N	5.97	1.41	1.33
1	S	265	ARG	CA-C	-5.97	1.45	1.52
1	A	28	GLY	N-CA	5.96	1.55	1.45
1	I	71	ASP	N-CA	-5.96	1.38	1.46
1	P	424	GLU	CA-C	5.96	1.60	1.52
1	Q	434	PRO	CA-CB	5.96	1.62	1.53
1	F	190	THR	CA-C	5.96	1.61	1.52
1	M	142	ALA	N-CA	-5.96	1.39	1.46
1	F	413	ARG	CD-NE	5.96	1.54	1.46
1	L	129	THR	CA-C	-5.96	1.44	1.52
1	K	353	TYR	CA-C	-5.96	1.45	1.52
1	D	299	ILE	N-CA	-5.96	1.39	1.46
1	F	28	GLY	N-CA	5.96	1.55	1.45
1	F	254	GLU	C-N	5.95	1.42	1.33
1	G	397	ALA	CA-CB	5.95	1.62	1.53
1	P	392	ASP	CA-C	5.95	1.60	1.52
1	Q	44	GLU	C-N	5.95	1.41	1.33
1	E	409	ILE	N-CA	5.95	1.53	1.46
1	N	457	ILE	CA-CB	-5.95	1.47	1.54
1	A	506	ALA	CA-C	5.95	1.60	1.52
1	F	358	GLU	CA-C	-5.95	1.45	1.52
1	M	255	VAL	N-CA	-5.94	1.39	1.46
1	S	67	THR	C-O	-5.94	1.17	1.23
1	E	406	ALA	C-N	5.94	1.42	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	515	ALA	CA-C	-5.94	1.45	1.52
1	K	263	GLU	CA-C	-5.93	1.45	1.52
1	S	276	LEU	CA-C	-5.93	1.44	1.52
1	N	83	HIS	CD2-NE2	5.93	1.44	1.37
1	S	154	SER	CA-C	-5.93	1.45	1.52
1	D	141	VAL	C-N	-5.92	1.26	1.33
1	O	178	ARG	C-N	5.92	1.41	1.33
1	K	127	HIS	CA-C	5.92	1.59	1.53
1	B	467	ILE	C-O	-5.92	1.17	1.24
1	F	208	GLN	CA-C	-5.92	1.45	1.52
1	K	258	PRO	C-N	5.92	1.42	1.33
1	M	504	GLU	CA-CB	5.92	1.62	1.54
1	G	242	GLU	N-CA	-5.91	1.38	1.46
1	S	75	ILE	C-N	5.91	1.41	1.33
1	I	458	LEU	CA-C	5.91	1.60	1.52
1	L	470	LEU	C-N	5.91	1.41	1.33
1	M	321	ARG	CD-NE	5.91	1.54	1.46
1	O	83	HIS	ND1-CE1	5.91	1.38	1.32
1	G	318	LEU	CA-C	-5.90	1.45	1.52
1	M	383	ILE	CA-CB	-5.90	1.46	1.54
1	Q	492	GLY	N-CA	5.90	1.53	1.45
1	I	44	GLU	N-CA	-5.90	1.38	1.46
1	P	511	ASN	CA-CB	5.90	1.63	1.53
1	K	202	VAL	C-N	5.90	1.41	1.33
1	D	174	VAL	CA-CB	-5.90	1.48	1.54
1	E	307	VAL	CA-CB	5.89	1.62	1.54
1	C	370	VAL	N-CA	5.89	1.53	1.46
1	M	410	LYS	N-CA	-5.89	1.39	1.46
1	P	29	LYS	N-CA	5.89	1.53	1.46
1	E	172	LYS	CA-C	5.89	1.61	1.53
1	H	365	ASP	N-CA	5.89	1.53	1.45
1	C	139	GLU	C-N	5.89	1.42	1.33
1	K	270	THR	C-O	-5.89	1.17	1.24
1	F	369	PHE	C-N	5.89	1.41	1.33
1	K	278	GLU	CA-C	-5.89	1.44	1.52
1	S	433	ALA	CA-C	5.89	1.60	1.52
1	B	35	ASN	C-N	5.88	1.41	1.33
1	B	473	LEU	CA-C	-5.88	1.45	1.52
1	D	109	ILE	CA-CB	-5.88	1.48	1.54
1	K	375	ASN	N-CA	-5.88	1.36	1.46
1	N	383	ILE	C-N	5.88	1.41	1.33
1	O	258	PRO	CA-C	5.88	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	223	VAL	CA-CB	-5.88	1.47	1.54
1	L	125	ASP	C-N	5.88	1.40	1.33
1	F	39	VAL	CA-C	5.88	1.59	1.52
1	D	431	LYS	CA-C	5.87	1.60	1.52
1	G	172	LYS	CA-CB	5.87	1.62	1.53
1	S	369	PHE	N-CA	-5.87	1.38	1.45
1	M	182	ALA	N-CA	5.87	1.53	1.46
1	G	378	SER	CA-C	5.87	1.60	1.52
1	O	497	MET	N-CA	-5.87	1.39	1.46
1	S	93	ALA	N-CA	5.87	1.53	1.46
1	K	293	THR	C-N	5.87	1.40	1.33
1	S	333	ARG	CA-CB	5.87	1.62	1.53
1	M	288	ASP	CA-C	5.86	1.60	1.52
1	A	238	PRO	CA-CB	5.86	1.61	1.53
1	O	404	THR	CA-C	5.86	1.60	1.52
1	Q	304	ILE	CA-C	5.86	1.59	1.52
1	Q	182	ALA	C-N	5.86	1.41	1.33
1	D	297	VAL	CA-C	5.86	1.59	1.52
1	E	160	LEU	N-CA	-5.86	1.38	1.46
1	E	383	ILE	N-CA	-5.86	1.39	1.46
1	I	274	LYS	CA-CB	5.86	1.64	1.53
1	C	233	VAL	CA-CB	-5.85	1.47	1.54
1	M	136	LYS	CA-C	5.85	1.60	1.52
1	P	371	GLU	CA-C	5.85	1.60	1.52
1	B	197	GLY	CA-C	-5.85	1.45	1.51
1	S	264	ILE	CA-C	5.85	1.59	1.52
1	E	164	ILE	CA-C	5.85	1.60	1.52
1	H	285	GLU	C-N	5.85	1.41	1.33
1	N	265	ARG	CD-NE	5.85	1.54	1.46
1	F	428	LYS	CA-CB	-5.85	1.43	1.53
1	I	107	ALA	N-CA	-5.85	1.39	1.46
1	O	39	VAL	CA-C	-5.85	1.46	1.52
1	Q	401	ALA	C-O	-5.85	1.17	1.24
1	E	203	ASP	N-CA	-5.85	1.39	1.46
1	K	162	ARG	C-N	5.85	1.41	1.33
1	R	514	LYS	C-N	5.85	1.41	1.33
1	S	185	VAL	N-CA	-5.85	1.39	1.46
1	B	505	PRO	CA-C	-5.84	1.44	1.52
1	D	156	ASN	N-CA	5.84	1.53	1.46
1	L	383	ILE	C-N	5.84	1.41	1.33
1	N	439	LYS	N-CA	-5.84	1.39	1.46
1	I	355	SER	CA-C	-5.84	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	K	184	ILE	CA-C	5.84	1.59	1.52
1	L	268	ASP	C-N	5.84	1.40	1.34
1	R	203	ASP	N-CA	5.84	1.54	1.46
1	S	444	VAL	CA-C	5.84	1.59	1.52
1	Q	408	VAL	CA-CB	-5.84	1.47	1.54
1	M	378	SER	CA-CB	5.84	1.60	1.52
1	S	247	ALA	C-N	5.84	1.41	1.33
1	O	407	ASP	CA-C	-5.84	1.44	1.52
1	S	301	GLN	CA-CB	5.83	1.63	1.53
1	H	166	MET	CA-C	5.83	1.60	1.52
1	I	514	LYS	C-N	5.83	1.41	1.33
1	B	467	ILE	CA-C	5.83	1.60	1.52
1	B	485	TYR	C-O	-5.83	1.17	1.24
1	C	360	ARG	C-N	5.83	1.41	1.33
1	F	384	ARG	CA-C	-5.83	1.45	1.52
1	G	195	LEU	N-CA	-5.83	1.39	1.46
1	L	254	GLU	N-CA	-5.83	1.39	1.46
1	N	361	LYS	C-N	5.83	1.40	1.33
1	L	155	ILE	C-O	-5.83	1.17	1.24
1	P	287	VAL	CA-C	5.83	1.59	1.52
1	Q	322	ARG	CA-CB	5.83	1.62	1.53
1	C	510	MET	CA-C	5.83	1.58	1.52
1	G	435	GLN	C-N	5.83	1.41	1.33
1	Q	47	LYS	CA-C	5.83	1.60	1.52
1	M	277	ASP	N-CA	-5.83	1.39	1.46
1	K	53	ARG	C-N	-5.82	1.26	1.33
1	P	395	GLU	CA-CB	5.82	1.62	1.53
1	C	39	VAL	CA-CB	5.82	1.60	1.54
1	C	326	SER	N-CA	-5.82	1.39	1.46
1	G	369	PHE	CA-C	-5.82	1.45	1.52
1	B	526	ILE	C-O	-5.82	1.17	1.23
1	C	466	PRO	N-CD	-5.82	1.39	1.47
1	H	436	VAL	CA-CB	-5.82	1.47	1.54
1	Q	38	ALA	C-N	5.82	1.41	1.33
1	A	150	ALA	N-CA	5.81	1.53	1.45
1	N	436	VAL	CA-C	-5.81	1.45	1.52
1	F	502	VAL	CA-CB	5.81	1.60	1.53
1	I	370	VAL	CA-CB	-5.81	1.46	1.54
1	R	109	ILE	CA-C	5.81	1.59	1.52
1	F	213	ALA	N-CA	5.80	1.53	1.46
1	O	505	PRO	CA-CB	5.80	1.62	1.53
1	H	117	LYS	N-CA	5.80	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	K	460	GLU	C-N	5.80	1.41	1.33
1	E	390	LEU	CA-C	5.80	1.60	1.52
1	S	141	VAL	C-O	5.80	1.30	1.24
1	Q	242	GLU	C-O	-5.80	1.16	1.23
1	H	519	ALA	CA-CB	5.80	1.62	1.53
1	C	192	VAL	N-CA	-5.79	1.38	1.46
1	B	195	LEU	N-CA	-5.79	1.39	1.46
1	M	410	LYS	CA-C	5.79	1.60	1.52
1	O	286	LYS	C-N	5.79	1.41	1.33
1	O	436	VAL	CA-C	5.79	1.60	1.52
1	P	181	ILE	C-N	-5.79	1.26	1.33
1	H	404	THR	C-N	5.79	1.41	1.33
1	A	437	GLY	CA-C	-5.79	1.44	1.52
1	D	184	ILE	CA-CB	-5.79	1.48	1.54
1	D	383	ILE	N-CA	-5.79	1.39	1.46
1	G	156	ASN	N-CA	-5.79	1.39	1.46
1	I	320	VAL	N-CA	-5.79	1.39	1.46
1	Q	83	HIS	CB-CG	5.79	1.58	1.50
1	E	292	ALA	CA-CB	5.79	1.63	1.53
1	N	413	ARG	CD-NE	5.79	1.54	1.46
1	R	36	ILE	C-N	5.78	1.40	1.33
1	R	178	ARG	NE-CZ	5.78	1.39	1.33
1	H	72	GLY	C-N	5.78	1.40	1.33
1	H	504	GLU	N-CA	5.78	1.51	1.45
1	N	268	ASP	CA-C	5.78	1.59	1.52
1	M	269	PRO	CA-CB	5.78	1.62	1.53
1	S	172	LYS	C-N	5.78	1.41	1.33
1	S	381	ILE	C-N	5.78	1.41	1.33
1	R	108	VAL	CA-CB	5.77	1.61	1.54
1	Q	74	THR	C-N	5.77	1.40	1.34
1	E	498	TRP	C-N	5.77	1.41	1.33
1	Q	159	ASP	CA-CB	5.77	1.63	1.53
1	E	328	LEU	CA-CB	5.77	1.62	1.53
1	H	399	ARG	C-N	5.77	1.41	1.33
1	C	35	ASN	N-CA	-5.76	1.39	1.46
1	S	51	GLY	N-CA	5.76	1.52	1.44
1	H	176	GLY	N-CA	-5.76	1.37	1.45
1	P	61	ASP	N-CA	5.76	1.53	1.45
1	P	338	ARG	N-CA	-5.76	1.39	1.46
1	S	322	ARG	CA-CB	5.76	1.61	1.53
1	D	287	VAL	CA-CB	-5.76	1.47	1.54
1	I	327	ASP	N-CA	-5.76	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	333	ARG	CD-NE	5.75	1.54	1.46
1	M	477	HIS	ND1-CE1	5.75	1.38	1.32
1	F	285	GLU	N-CA	5.75	1.53	1.46
1	S	436	VAL	C-N	5.75	1.40	1.32
1	D	254	GLU	C-N	5.75	1.41	1.33
1	F	297	VAL	C-N	-5.75	1.26	1.33
1	P	132	ILE	CA-CB	-5.75	1.47	1.54
1	F	110	PHE	N-CA	-5.75	1.39	1.46
1	S	36	ILE	CA-CB	-5.75	1.48	1.54
1	D	248	LEU	CA-C	5.75	1.60	1.52
1	P	133	SER	C-N	5.75	1.41	1.33
1	S	437	GLY	CA-C	-5.75	1.46	1.51
1	L	360	ARG	CD-NE	5.75	1.54	1.46
1	S	451	LEU	C-N	5.75	1.41	1.34
1	P	147	GLN	C-N	5.74	1.41	1.33
1	A	152	THR	CA-C	-5.74	1.45	1.52
1	A	127	HIS	CD2-NE2	5.74	1.44	1.37
1	K	384	ARG	CD-NE	5.74	1.54	1.46
1	L	60	VAL	C-N	5.74	1.41	1.33
1	L	399	ARG	CD-NE	5.74	1.54	1.46
1	F	149	LEU	CA-C	-5.74	1.45	1.52
1	S	49	THR	CA-C	-5.74	1.45	1.52
1	F	109	ILE	CA-CB	-5.73	1.48	1.54
1	H	357	ILE	CA-C	-5.73	1.46	1.52
1	G	461	ASN	C-O	-5.73	1.16	1.24
1	A	328	LEU	N-CA	-5.72	1.39	1.46
1	K	240	ARG	N-CA	-5.72	1.38	1.46
1	O	458	LEU	CA-C	5.72	1.60	1.52
1	O	117	LYS	CA-CB	5.72	1.63	1.53
1	C	299	ILE	C-N	5.72	1.41	1.33
1	D	172	LYS	N-CA	-5.72	1.38	1.45
1	K	420	ALA	CA-C	5.72	1.60	1.52
1	M	92	ILE	CA-CB	5.72	1.61	1.54
1	D	311	TYR	CA-CB	5.71	1.62	1.53
1	L	469	LEU	C-N	5.71	1.41	1.33
1	M	514	LYS	CA-CB	5.71	1.62	1.53
1	Q	454	LEU	CA-C	-5.71	1.45	1.52
1	C	35	ASN	C-N	5.71	1.41	1.33
1	D	183	ASP	C-N	5.71	1.40	1.33
1	N	313	ALA	C-N	5.70	1.41	1.34
1	Q	483	LYS	CA-CB	5.70	1.62	1.53
1	S	452	GLU	CA-C	5.70	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	H	391	VAL	CA-C	5.70	1.60	1.52
1	I	88	LEU	CA-C	-5.70	1.45	1.52
1	O	189	VAL	C-N	5.70	1.41	1.34
1	D	459	ILE	CA-C	5.70	1.59	1.52
1	L	329	GLU	CA-CB	5.70	1.62	1.53
1	O	427	LYS	CA-C	-5.70	1.45	1.52
1	P	317	VAL	CA-C	-5.70	1.47	1.53
1	G	265	ARG	CA-C	5.70	1.60	1.52
1	A	215	GLY	C-N	5.70	1.41	1.33
1	G	288	ASP	CA-C	-5.70	1.45	1.52
1	I	212	LYS	N-CA	-5.70	1.39	1.46
1	O	331	LEU	CA-C	5.70	1.60	1.52
1	Q	477	HIS	ND1-CE1	5.69	1.38	1.32
1	S	212	LYS	CA-C	-5.69	1.45	1.52
1	B	523	VAL	CA-C	5.69	1.60	1.52
1	H	464	PHE	C-N	5.69	1.41	1.32
1	K	503	ILE	C-N	5.69	1.40	1.33
1	P	467	ILE	CA-CB	5.69	1.61	1.54
1	H	234	HIS	CA-C	5.69	1.59	1.52
1	K	450	ALA	CA-CB	5.69	1.62	1.53
1	M	332	ALA	CA-C	-5.69	1.45	1.52
1	S	407	ASP	CA-C	-5.69	1.45	1.52
1	I	338	ARG	C-N	5.69	1.40	1.33
1	I	241	LEU	N-CA	-5.68	1.39	1.46
1	L	96	GLN	CA-C	-5.68	1.45	1.53
1	N	170	SER	CA-CB	5.68	1.63	1.53
1	S	222	LEU	CA-C	-5.68	1.45	1.52
1	F	226	ILE	CB-CG1	5.68	1.64	1.53
1	R	234	HIS	C-N	5.68	1.40	1.33
1	G	143	LEU	CA-CB	5.67	1.62	1.53
1	Q	201	TYR	C-N	5.67	1.40	1.33
1	R	511	ASN	N-CA	-5.67	1.39	1.46
1	O	382	LEU	CA-C	-5.67	1.45	1.52
1	B	426	ALA	CA-C	-5.67	1.47	1.53
1	A	131	ILE	C-N	5.67	1.41	1.33
1	A	481	ASN	N-CA	-5.67	1.39	1.46
1	Q	345	GLU	CA-C	-5.67	1.45	1.52
1	Q	375	ASN	CA-CB	5.67	1.62	1.52
1	S	136	LYS	CA-C	-5.67	1.45	1.52
1	P	252	SER	CA-C	5.67	1.60	1.52
1	C	354	ALA	C-N	5.66	1.41	1.33
1	I	350	ASP	C-N	5.66	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	K	329	GLU	N-CA	5.66	1.53	1.46
1	H	243	ASN	CA-CB	5.66	1.62	1.53
1	I	119	GLU	CA-C	-5.66	1.45	1.52
1	B	39	VAL	CA-C	5.66	1.59	1.52
1	I	249	ILE	CA-C	-5.66	1.45	1.52
1	P	48	SER	CA-C	5.66	1.62	1.52
1	B	239	LYS	N-CA	-5.66	1.38	1.46
1	D	474	ARG	CZ-NH1	5.66	1.40	1.32
1	F	59	LEU	CA-CB	5.66	1.62	1.53
1	L	124	LYS	CA-CB	5.66	1.62	1.53
1	Q	283	ILE	C-N	5.66	1.41	1.34
1	Q	432	TYR	CA-C	5.66	1.60	1.52
1	Q	363	GLY	N-CA	-5.65	1.37	1.45
1	S	242	GLU	C-O	-5.65	1.17	1.23
1	G	127	HIS	ND1-CE1	5.65	1.38	1.32
1	H	305	ASP	C-N	5.65	1.42	1.33
1	I	28	GLY	N-CA	5.65	1.54	1.45
1	N	312	LEU	CA-C	-5.65	1.45	1.52
1	B	125	ASP	CA-CB	5.65	1.62	1.53
1	M	478	GLU	C-N	5.65	1.40	1.33
1	N	326	SER	CA-C	5.65	1.60	1.52
1	O	38	ALA	CA-CB	5.65	1.62	1.53
1	B	194	GLU	N-CA	5.65	1.52	1.46
1	G	166	MET	C-N	5.65	1.41	1.33
1	C	156	ASN	CA-CB	-5.64	1.43	1.53
1	L	227	VAL	N-CA	-5.64	1.39	1.46
1	K	74	THR	CA-CB	5.64	1.62	1.53
1	F	468	ASP	CA-CB	5.64	1.62	1.53
1	O	436	VAL	C-N	5.64	1.41	1.33
1	D	413	ARG	CD-NE	5.64	1.54	1.46
1	K	303	GLY	N-CA	5.64	1.53	1.45
1	R	59	LEU	N-CA	-5.64	1.39	1.46
1	L	266	ILE	N-CA	-5.64	1.39	1.46
1	P	409	ILE	CA-CB	5.64	1.61	1.54
1	Q	283	ILE	C-O	-5.64	1.17	1.24
1	R	302	LYS	C-N	5.64	1.42	1.33
1	R	347	SER	N-CA	5.64	1.52	1.45
1	G	407	ASP	C-N	5.63	1.41	1.33
1	N	365	ASP	N-CA	-5.63	1.39	1.45
1	E	39	VAL	N-CA	-5.63	1.40	1.46
1	F	98	GLU	CA-CB	5.63	1.61	1.53
1	R	406	ALA	CA-C	-5.63	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	517	THR	N-CA	5.63	1.53	1.46
1	G	100	THR	C-O	-5.63	1.16	1.24
1	M	327	ASP	CA-C	5.63	1.59	1.52
1	O	471	MET	CA-CB	-5.63	1.44	1.53
1	A	371	GLU	C-N	5.63	1.41	1.33
1	E	63	LEU	CA-CB	5.63	1.61	1.53
1	F	362	VAL	CA-CB	5.63	1.61	1.54
1	G	75	ILE	N-CA	5.63	1.54	1.46
1	G	328	LEU	CA-CB	5.63	1.62	1.53
1	A	179	GLU	N-CA	5.62	1.53	1.46
1	E	220	THR	CA-C	-5.62	1.45	1.53
1	N	525	ARG	CD-NE	5.62	1.54	1.46
1	P	99	GLU	CA-C	5.62	1.61	1.52
1	F	198	ASP	N-CA	5.62	1.53	1.46
1	P	494	PRO	CA-C	-5.62	1.46	1.52
1	I	150	ALA	CA-C	-5.62	1.45	1.52
1	I	180	TYR	N-CA	-5.62	1.39	1.46
1	E	30	GLU	CA-C	5.62	1.60	1.52
1	I	418	GLY	CA-C	-5.62	1.43	1.51
1	I	477	HIS	ND1-CE1	5.62	1.38	1.32
1	I	382	LEU	CA-CB	-5.62	1.44	1.53
1	C	202	VAL	CA-CB	-5.61	1.47	1.54
1	S	164	ILE	C-O	-5.61	1.17	1.24
1	C	389	ARG	CD-NE	5.61	1.54	1.46
1	L	312	LEU	C-O	-5.61	1.17	1.24
1	A	399	ARG	NE-CZ	5.61	1.39	1.33
1	B	114	LEU	C-N	5.61	1.40	1.33
1	I	70	ASN	C-N	5.61	1.41	1.33
1	M	161	LEU	CA-C	5.61	1.60	1.52
1	R	529	VAL	C-O	-5.61	1.18	1.24
1	I	296	ASN	N-CA	5.61	1.52	1.46
1	P	411	ASP	N-CA	-5.61	1.39	1.46
1	A	402	LEU	CA-C	5.60	1.59	1.52
1	E	393	GLU	CA-CB	5.60	1.63	1.53
1	Q	250	ASP	CA-C	5.60	1.60	1.52
1	B	288	ASP	C-N	5.60	1.41	1.33
1	L	339	VAL	C-N	5.60	1.40	1.33
1	S	133	SER	CA-CB	5.60	1.62	1.53
1	G	301	GLN	CA-C	5.60	1.60	1.52
1	O	361	LYS	CA-CB	5.60	1.60	1.53
1	B	282	LEU	CA-C	5.59	1.60	1.52
1	C	326	SER	C-N	5.59	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	407	ASP	N-CA	-5.59	1.39	1.46
1	L	259	GLU	N-CA	-5.59	1.39	1.46
1	O	474	ARG	CA-C	5.59	1.60	1.52
1	H	273	GLN	C-N	5.59	1.41	1.33
1	M	425	ILE	CA-C	5.59	1.60	1.52
1	S	276	LEU	N-CA	5.59	1.53	1.46
1	S	511	ASN	CA-C	5.59	1.60	1.52
1	R	434	PRO	CA-CB	-5.59	1.45	1.53
1	A	229	ASP	CA-CB	5.59	1.62	1.53
1	G	323	ALA	N-CA	5.59	1.52	1.45
1	B	152	THR	CA-CB	-5.58	1.46	1.53
1	B	237	MET	CA-CB	5.58	1.62	1.53
1	G	75	ILE	C-N	5.58	1.41	1.33
1	G	166	MET	CA-C	5.58	1.60	1.52
1	K	411	ASP	CA-CB	5.58	1.62	1.53
1	D	259	GLU	CA-CB	5.58	1.60	1.53
1	H	105	LYS	CA-C	-5.58	1.45	1.52
1	E	394	THR	C-N	5.58	1.41	1.33
1	S	462	ALA	C-N	5.58	1.42	1.33
1	C	477	HIS	CE1-NE2	5.58	1.38	1.32
1	I	244	ALA	C-N	5.58	1.40	1.33
1	H	444	VAL	CA-CB	-5.57	1.47	1.54
1	Q	296	ASN	N-CA	5.57	1.53	1.46
1	A	162	ARG	CD-NE	5.57	1.54	1.46
1	D	346	ILE	N-CA	5.57	1.53	1.46
1	F	427	LYS	C-N	5.57	1.41	1.34
1	L	530	VAL	C-O	-5.57	1.18	1.24
1	P	503	ILE	CA-C	5.57	1.59	1.52
1	Q	298	ILE	CA-C	5.57	1.59	1.52
1	F	301	GLN	C-N	5.57	1.41	1.33
1	L	172	LYS	C-N	5.57	1.41	1.33
1	Q	495	VAL	CA-C	-5.57	1.46	1.52
1	M	398	LEU	CA-C	5.57	1.59	1.52
1	Q	229	ASP	CA-CB	5.57	1.62	1.53
1	S	413	ARG	NE-CZ	5.57	1.39	1.33
1	B	440	GLU	C-N	5.56	1.41	1.33
1	R	402	LEU	CA-C	-5.56	1.46	1.52
1	F	185	VAL	N-CA	-5.56	1.40	1.46
1	I	314	LYS	CA-CB	5.56	1.62	1.53
1	N	112	GLY	CA-C	-5.56	1.45	1.51
1	O	497	MET	C-N	5.56	1.40	1.33
1	E	449	ASN	N-CA	-5.56	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	268	ASP	C-N	-5.56	1.27	1.34
1	Q	230	LYS	N-CA	-5.56	1.39	1.46
1	M	496	ASP	CA-C	-5.55	1.45	1.52
1	Q	196	ARG	C-N	5.55	1.40	1.33
1	B	264	ILE	CA-CB	-5.55	1.47	1.54
1	H	336	GLY	CA-C	5.55	1.59	1.51
1	D	430	ARG	CD-NE	5.55	1.54	1.46
1	C	507	LEU	CA-C	5.55	1.60	1.52
1	K	132	ILE	C-N	5.55	1.41	1.33
1	S	106	THR	C-N	5.54	1.41	1.33
1	C	145	THR	CA-C	5.54	1.60	1.52
1	L	474	ARG	CD-NE	5.54	1.54	1.46
1	O	491	ALA	CA-C	5.54	1.59	1.52
1	A	234	HIS	ND1-CE1	5.54	1.38	1.32
1	L	58	MET	CA-C	-5.54	1.45	1.52
1	N	464	PHE	CA-CB	5.54	1.62	1.53
1	P	289	LYS	N-CA	5.54	1.53	1.46
1	Q	288	ASP	CA-CB	5.54	1.62	1.53
1	E	126	VAL	N-CA	5.54	1.53	1.46
1	I	388	GLU	C-N	5.54	1.41	1.33
1	R	195	LEU	N-CA	-5.54	1.39	1.46
1	G	451	LEU	N-CA	-5.54	1.39	1.46
1	B	389	ARG	C-N	5.53	1.41	1.33
1	C	395	GLU	C-N	5.53	1.41	1.33
1	K	225	GLY	N-CA	-5.53	1.40	1.45
1	P	488	ASP	CA-C	5.53	1.60	1.52
1	R	132	ILE	CA-CB	-5.53	1.47	1.54
1	O	114	LEU	CB-CG	5.53	1.64	1.53
1	A	253	LEU	C-N	5.53	1.41	1.33
1	H	443	ALA	CA-CB	5.53	1.61	1.53
1	L	136	LYS	CA-CB	5.53	1.62	1.53
1	I	163	LYS	CA-CB	5.53	1.62	1.53
1	P	171	SER	N-CA	5.52	1.53	1.46
1	O	167	THR	CA-C	5.52	1.60	1.52
1	A	333	ARG	CD-NE	5.52	1.53	1.46
1	O	443	ALA	CA-C	5.52	1.59	1.52
1	P	429	LEU	CA-C	-5.52	1.45	1.52
1	H	235	PRO	N-CD	5.52	1.55	1.47
1	I	526	ILE	CA-C	5.52	1.59	1.52
1	B	87	LYS	CA-CB	5.51	1.62	1.53
1	C	312	LEU	CA-CB	5.51	1.62	1.53
1	C	469	LEU	C-O	-5.51	1.17	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	D	48	SER	CA-CB	5.51	1.62	1.53
1	F	383	ILE	CA-CB	-5.51	1.47	1.54
1	E	529	VAL	CA-C	-5.51	1.45	1.52
1	S	115	VAL	CA-CB	-5.51	1.48	1.54
1	F	443	ALA	CA-C	5.51	1.59	1.52
1	H	199	LYS	C-N	5.51	1.41	1.33
1	L	108	VAL	CA-C	5.51	1.59	1.52
1	N	512	ALA	CA-CB	5.51	1.62	1.53
1	S	222	LEU	N-CA	-5.51	1.39	1.46
1	R	449	ASN	CA-C	5.51	1.59	1.52
1	B	452	GLU	CA-C	5.50	1.60	1.52
1	H	223	VAL	CA-C	-5.50	1.46	1.52
1	F	36	ILE	CA-CB	-5.50	1.48	1.54
1	H	320	VAL	C-N	5.50	1.40	1.33
1	M	226	ILE	CA-CB	-5.50	1.47	1.54
1	K	317	VAL	CA-C	-5.50	1.45	1.52
1	N	131	ILE	CA-C	5.50	1.60	1.52
1	G	429	LEU	C-N	5.50	1.40	1.33
1	E	258	PRO	CA-C	-5.49	1.46	1.52
1	I	329	GLU	N-CA	-5.49	1.39	1.46
1	L	243	ASN	CA-C	-5.49	1.46	1.53
1	L	134	GLY	CA-C	-5.49	1.44	1.51
1	B	201	TYR	CA-C	-5.49	1.45	1.52
1	L	153	VAL	C-O	-5.49	1.18	1.24
1	S	112	GLY	C-N	-5.49	1.26	1.33
1	Q	450	ALA	CA-C	5.49	1.59	1.52
1	C	264	ILE	CA-C	5.49	1.59	1.52
1	F	147	GLN	N-CA	-5.48	1.40	1.46
1	P	420	ALA	CA-C	-5.48	1.45	1.52
1	S	261	ASP	C-N	5.48	1.40	1.33
1	M	276	LEU	CB-CG	5.48	1.64	1.53
1	N	71	ASP	C-N	5.48	1.41	1.33
1	B	473	LEU	N-CA	-5.48	1.39	1.46
1	N	371	GLU	C-N	5.48	1.40	1.33
1	E	311	TYR	CA-CB	5.48	1.62	1.53
1	O	204	LEU	N-CA	5.48	1.53	1.46
1	A	178	ARG	CD-NE	5.47	1.53	1.46
1	N	408	VAL	C-O	-5.47	1.17	1.24
1	Q	325	LYS	C-N	-5.47	1.26	1.34
1	R	210	VAL	N-CA	-5.47	1.40	1.46
1	N	323	ALA	CA-CB	5.47	1.62	1.53
1	G	115	VAL	CA-C	5.47	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	196	ARG	N-CA	-5.47	1.39	1.46
1	F	146	ILE	CA-CB	-5.47	1.46	1.54
1	P	54	GLY	CA-C	-5.47	1.45	1.52
1	C	490	TYR	CZ-OH	5.46	1.49	1.38
1	R	221	GLN	CA-CB	5.46	1.62	1.53
1	R	127	HIS	CE1-NE2	5.46	1.38	1.32
1	B	508	VAL	C-O	-5.46	1.18	1.24
1	K	446	ALA	CA-C	-5.46	1.45	1.52
1	N	413	ARG	NE-CZ	5.46	1.39	1.33
1	M	346	ILE	CA-CB	5.46	1.59	1.54
1	Q	321	ARG	CA-C	5.46	1.59	1.52
1	I	408	VAL	CA-CB	-5.46	1.47	1.54
1	E	474	ARG	NE-CZ	-5.46	1.27	1.33
1	O	208	GLN	N-CA	5.46	1.52	1.46
1	Q	122	LEU	CA-CB	5.46	1.61	1.53
1	R	529	VAL	N-CA	-5.46	1.39	1.46
1	H	45	ALA	N-CA	-5.46	1.38	1.46
1	C	507	LEU	C-N	5.45	1.40	1.33
1	D	63	LEU	CA-C	5.45	1.60	1.52
1	H	352	GLY	C-N	5.45	1.41	1.33
1	S	459	ILE	CA-C	-5.45	1.46	1.52
1	O	34	ALA	CA-C	5.45	1.59	1.52
1	F	493	GLN	CA-C	5.45	1.59	1.52
1	I	518	GLU	C-O	-5.45	1.17	1.24
1	F	115	VAL	CA-CB	5.45	1.60	1.54
1	F	249	ILE	CA-C	5.44	1.59	1.52
1	H	359	GLU	CA-C	-5.44	1.46	1.52
1	L	473	LEU	CA-CB	5.44	1.62	1.53
1	M	192	VAL	CA-C	5.44	1.59	1.52
1	M	487	ILE	CA-C	5.44	1.59	1.52
1	C	519	ALA	CA-CB	5.44	1.61	1.53
1	E	518	GLU	CA-C	5.44	1.59	1.52
1	R	513	ILE	N-CA	-5.44	1.40	1.46
1	I	281	ASN	CA-C	5.44	1.60	1.52
1	L	445	GLU	N-CA	5.44	1.52	1.46
1	M	384	ARG	CA-C	-5.44	1.45	1.52
1	R	81	LEU	CA-C	5.44	1.59	1.52
1	M	29	LYS	C-N	5.44	1.41	1.33
1	M	109	ILE	CB-CG1	5.44	1.64	1.53
1	O	223	VAL	CA-CB	5.44	1.60	1.54
1	B	442	LEU	C-O	-5.44	1.17	1.24
1	M	511	ASN	C-N	5.44	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	D	478	GLU	CA-CB	5.43	1.62	1.53
1	P	67	THR	CA-C	-5.43	1.46	1.52
1	P	209	ILE	C-O	-5.43	1.18	1.24
1	M	270	THR	N-CA	5.43	1.52	1.46
1	C	234	HIS	ND1-CE1	5.43	1.38	1.32
1	K	191	GLN	CA-CB	5.43	1.61	1.53
1	Q	299	ILE	C-N	5.43	1.40	1.33
1	D	100	THR	CA-CB	5.43	1.62	1.53
1	L	157	ASP	CA-C	-5.43	1.45	1.53
1	M	283	ILE	CA-C	5.43	1.60	1.52
1	M	457	ILE	N-CA	5.43	1.52	1.46
1	B	40	LYS	C-N	-5.43	1.27	1.33
1	C	85	ALA	C-N	5.43	1.40	1.33
1	D	507	LEU	C-N	-5.43	1.27	1.33
1	E	84	PRO	N-CA	-5.43	1.40	1.47
1	P	403	GLY	CA-C	-5.43	1.44	1.51
1	A	334	ALA	CA-CB	5.42	1.62	1.53
1	H	267	ASN	CA-CB	5.42	1.61	1.54
1	M	318	LEU	CA-C	-5.42	1.46	1.52
1	M	321	ARG	C-N	5.42	1.40	1.33
1	O	393	GLU	CA-C	-5.42	1.45	1.52
1	B	297	VAL	N-CA	5.42	1.52	1.46
1	M	196	ARG	CD-NE	5.42	1.53	1.46
1	D	385	GLY	CA-C	5.42	1.59	1.51
1	H	197	GLY	CA-C	5.42	1.57	1.51
1	P	164	ILE	C-N	5.42	1.41	1.33
1	M	29	LYS	CA-CB	-5.42	1.44	1.53
1	O	215	GLY	CA-C	-5.42	1.43	1.52
1	F	309	GLN	CA-C	-5.42	1.45	1.52
1	Q	356	LEU	CA-C	5.42	1.58	1.52
1	Q	400	ASP	C-N	5.42	1.41	1.33
1	D	512	ALA	C-N	5.42	1.40	1.33
1	K	441	GLN	CA-C	-5.41	1.45	1.52
1	N	234	HIS	ND1-CE1	5.41	1.38	1.32
1	I	428	LYS	CA-C	-5.41	1.45	1.52
1	D	122	LEU	CA-C	5.41	1.60	1.52
1	D	374	LYS	N-CA	5.41	1.52	1.46
1	A	502	VAL	CA-C	5.41	1.58	1.53
1	E	378	SER	N-CA	-5.41	1.39	1.46
1	C	124	LYS	C-N	5.40	1.41	1.33
1	A	325	LYS	CA-C	5.40	1.60	1.52
1	F	368	VAL	CA-C	-5.40	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	K	336	GLY	N-CA	5.40	1.53	1.45
1	P	294	GLY	C-N	5.40	1.41	1.33
1	D	498	TRP	CA-C	5.40	1.59	1.52
1	K	346	ILE	CA-CB	5.40	1.60	1.54
1	L	39	VAL	C-N	5.40	1.41	1.33
1	Q	523	VAL	CA-C	-5.40	1.46	1.52
1	C	164	ILE	CA-C	5.40	1.59	1.52
1	D	168	SER	CA-CB	-5.40	1.45	1.54
1	M	322	ARG	CD-NE	5.40	1.53	1.46
1	L	304	ILE	C-O	-5.40	1.18	1.24
1	O	470	LEU	N-CA	-5.40	1.40	1.46
1	K	316	GLY	N-CA	-5.39	1.37	1.45
1	S	345	GLU	CA-C	-5.39	1.45	1.52
1	Q	240	ARG	CD-NE	5.39	1.53	1.46
1	M	88	LEU	CA-CB	5.39	1.61	1.53
1	E	349	GLN	N-CA	-5.39	1.39	1.46
1	I	493	GLN	N-CA	-5.39	1.38	1.46
1	M	395	GLU	CA-CB	5.39	1.62	1.53
1	L	105	LYS	CA-CB	5.39	1.61	1.53
1	M	309	GLN	C-N	5.39	1.41	1.34
1	O	518	GLU	C-O	5.39	1.30	1.24
1	B	379	ILE	CB-CG1	5.39	1.64	1.53
1	D	340	VAL	CA-C	-5.39	1.46	1.52
1	H	177	ALA	C-N	5.39	1.41	1.34
1	A	332	ALA	C-O	-5.38	1.17	1.24
1	A	445	GLU	C-N	5.38	1.40	1.33
1	C	205	ASP	CA-CB	5.38	1.62	1.53
1	P	49	THR	C-N	5.38	1.40	1.33
1	R	376	PRO	C-N	5.38	1.41	1.33
1	F	52	PRO	N-CD	5.38	1.55	1.47
1	S	506	ALA	CA-CB	-5.38	1.44	1.53
1	A	252	SER	CA-CB	5.38	1.62	1.53
1	C	240	ARG	C-N	5.38	1.40	1.33
1	E	172	LYS	N-CA	5.38	1.52	1.45
1	O	291	LEU	N-CA	-5.38	1.38	1.46
1	M	402	LEU	C-O	-5.38	1.17	1.24
1	C	351	LEU	C-N	5.38	1.41	1.33
1	E	57	LYS	N-CA	-5.38	1.39	1.45
1	G	40	LYS	N-CA	5.38	1.52	1.46
1	S	493	GLN	CA-CB	5.38	1.61	1.53
1	B	73	ALA	C-N	5.38	1.41	1.33
1	N	490	TYR	CA-C	5.38	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	306	GLU	N-CA	-5.38	1.39	1.46
1	P	113	GLU	C-N	5.38	1.41	1.33
1	B	50	TYR	N-CA	-5.38	1.39	1.46
1	C	250	ASP	CA-C	5.38	1.60	1.52
1	M	75	ILE	CB-CG1	5.37	1.64	1.53
1	Q	446	ALA	N-CA	-5.37	1.40	1.46
1	D	114	LEU	CB-CG	5.37	1.64	1.53
1	I	407	ASP	CA-C	-5.37	1.45	1.52
1	L	154	SER	C-O	-5.37	1.19	1.24
1	Q	225	GLY	N-CA	5.37	1.50	1.45
1	O	250	ASP	CA-CB	5.37	1.60	1.52
1	B	435	GLN	C-N	5.37	1.40	1.33
1	B	466	PRO	N-CA	-5.37	1.40	1.47
1	H	430	ARG	N-CA	-5.37	1.39	1.46
1	I	347	SER	CA-CB	5.37	1.61	1.53
1	R	85	ALA	C-N	5.37	1.40	1.33
1	G	93	ALA	CA-C	-5.37	1.45	1.52
1	K	523	VAL	N-CA	-5.37	1.40	1.46
1	A	156	ASN	CA-C	5.37	1.61	1.52
1	E	130	ILE	C-N	5.37	1.40	1.34
1	G	229	ASP	N-CA	-5.37	1.39	1.46
1	K	200	TRP	CA-C	-5.36	1.45	1.53
1	K	299	ILE	CA-CB	5.36	1.62	1.54
1	F	91	GLN	CA-CB	-5.36	1.45	1.53
1	O	366	LYS	C-N	-5.36	1.26	1.33
1	N	342	ASN	C-O	-5.36	1.18	1.24
1	O	95	GLY	C-N	5.36	1.41	1.33
1	P	96	GLN	C-N	-5.36	1.27	1.33
1	P	157	ASP	CA-C	-5.36	1.47	1.53
1	P	467	ILE	N-CA	-5.36	1.40	1.46
1	K	360	ARG	CA-C	5.36	1.59	1.52
1	L	503	ILE	C-N	5.36	1.39	1.33
1	O	233	VAL	CA-CB	-5.36	1.47	1.54
1	F	365	ASP	C-O	-5.35	1.17	1.23
1	H	65	ASP	CA-CB	5.35	1.61	1.53
1	K	197	GLY	CA-C	5.35	1.58	1.51
1	K	449	ASN	CA-CB	-5.35	1.45	1.53
1	B	494	PRO	N-CD	-5.35	1.40	1.47
1	L	516	ALA	CA-C	5.35	1.59	1.52
1	N	297	VAL	N-CA	-5.35	1.40	1.46
1	B	221	GLN	N-CA	5.35	1.52	1.45
1	D	71	ASP	N-CA	5.35	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	182	ALA	CA-C	5.35	1.59	1.52
1	M	493	GLN	CA-C	-5.35	1.46	1.52
1	O	468	ASP	N-CA	-5.35	1.40	1.46
1	C	327	ASP	CA-C	-5.35	1.45	1.52
1	M	311	TYR	CA-CB	5.35	1.61	1.53
1	Q	288	ASP	CA-C	5.35	1.59	1.52
1	Q	106	THR	C-O	-5.35	1.18	1.24
1	Q	296	ASN	CA-CB	5.35	1.62	1.53
1	A	110	PHE	CA-CB	5.34	1.61	1.53
1	R	153	VAL	CA-CB	-5.34	1.47	1.54
1	A	171	SER	CA-C	-5.34	1.45	1.52
1	C	142	ALA	N-CA	-5.34	1.39	1.46
1	G	459	ILE	C-O	-5.34	1.18	1.24
1	N	240	ARG	CA-C	-5.34	1.46	1.52
1	O	60	VAL	CA-CB	5.34	1.60	1.53
1	B	354	ALA	CA-C	-5.34	1.46	1.52
1	N	424	GLU	C-N	5.34	1.41	1.33
1	B	424	GLU	C-N	5.34	1.40	1.34
1	F	359	GLU	CA-C	-5.34	1.46	1.52
1	M	38	ALA	CA-C	5.34	1.59	1.52
1	R	403	GLY	N-CA	5.34	1.53	1.45
1	C	234	HIS	CA-C	-5.33	1.46	1.52
1	I	233	VAL	N-CA	5.33	1.52	1.46
1	C	168	SER	CA-CB	5.33	1.62	1.54
1	M	402	LEU	CA-CB	5.33	1.61	1.53
1	D	223	VAL	CA-C	-5.33	1.46	1.52
1	D	305	ASP	CA-C	5.33	1.59	1.52
1	H	162	ARG	NE-CZ	5.33	1.39	1.33
1	L	475	SER	CA-C	5.33	1.59	1.53
1	P	494	PRO	CA-CB	5.33	1.60	1.53
1	B	417	GLY	N-CA	-5.33	1.40	1.45
1	I	350	ASP	N-CA	5.33	1.53	1.46
1	K	204	LEU	CA-CB	5.33	1.62	1.53
1	P	389	ARG	CA-CB	-5.33	1.46	1.53
1	L	162	ARG	CA-CB	5.33	1.62	1.53
1	B	261	ASP	C-O	-5.32	1.18	1.24
1	D	83	HIS	C-O	-5.32	1.17	1.24
1	G	56	ASP	CA-C	-5.32	1.46	1.52
1	M	33	ARG	C-N	5.32	1.40	1.33
1	S	185	VAL	C-N	5.32	1.40	1.33
1	A	295	ALA	N-CA	-5.32	1.39	1.46
1	B	284	LYS	CA-C	5.32	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	60	VAL	N-CA	5.32	1.53	1.46
1	S	328	LEU	C-N	5.32	1.40	1.33
1	A	382	LEU	CA-CB	5.32	1.61	1.53
1	D	269	PRO	CA-C	5.32	1.61	1.52
1	I	447	TYR	CA-C	5.32	1.59	1.52
1	L	396	ARG	CD-NE	5.32	1.53	1.46
1	Q	202	VAL	CA-C	-5.32	1.45	1.52
1	P	381	ILE	CB-CG1	5.32	1.64	1.53
1	E	398	LEU	CA-CB	5.32	1.61	1.53
1	I	91	GLN	C-O	-5.32	1.17	1.24
1	D	487	ILE	CA-CB	5.32	1.60	1.53
1	E	296	ASN	N-CA	5.32	1.51	1.46
1	K	382	LEU	N-CA	-5.31	1.40	1.46
1	O	194	GLU	CA-CB	5.31	1.62	1.53
1	F	240	ARG	CA-C	-5.31	1.46	1.52
1	K	166	MET	CA-C	-5.31	1.46	1.52
1	O	499	GLN	CA-CB	5.31	1.62	1.53
1	F	462	ALA	CA-CB	-5.31	1.44	1.53
1	G	531	SER	CA-C	-5.31	1.46	1.52
1	A	496	ASP	CA-C	-5.31	1.46	1.52
1	C	141	VAL	N-CA	-5.31	1.40	1.46
1	O	130	ILE	C-N	5.31	1.40	1.34
1	P	479	ASN	CA-C	5.31	1.59	1.52
1	A	196	ARG	CD-NE	5.31	1.53	1.46
1	B	292	ALA	CA-CB	5.31	1.63	1.53
1	D	387	LEU	CA-CB	5.30	1.61	1.53
1	O	229	ASP	C-N	5.30	1.41	1.33
1	B	362	VAL	CA-C	-5.30	1.46	1.52
1	I	189	VAL	CA-CB	-5.30	1.47	1.54
1	P	47	LYS	CA-C	5.30	1.59	1.52
1	D	243	ASN	CA-C	-5.30	1.46	1.53
1	G	501	GLY	CA-C	5.30	1.59	1.51
1	M	107	ALA	C-N	-5.30	1.27	1.33
1	S	525	ARG	N-CA	-5.30	1.39	1.46
1	S	398	LEU	CA-C	5.30	1.59	1.52
1	E	282	LEU	N-CA	-5.30	1.39	1.46
1	F	267	ASN	CA-CB	5.30	1.62	1.53
1	S	524	LEU	C-N	5.30	1.41	1.33
1	C	262	ALA	N-CA	-5.29	1.39	1.46
1	D	467	ILE	C-O	-5.29	1.18	1.24
1	I	130	ILE	C-N	5.29	1.40	1.34
1	O	164	ILE	CA-C	5.29	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	242	GLU	CA-C	5.29	1.59	1.52
1	R	102	ASP	CA-CB	5.29	1.62	1.53
1	R	370	VAL	CA-C	-5.29	1.46	1.52
1	R	525	ARG	CD-NE	5.29	1.53	1.46
1	A	53	ARG	CA-C	5.29	1.60	1.52
1	C	240	ARG	CD-NE	5.29	1.53	1.46
1	K	88	LEU	CA-CB	5.29	1.61	1.53
1	P	440	GLU	N-CA	5.29	1.53	1.46
1	P	451	LEU	CA-C	5.29	1.59	1.52
1	G	231	GLU	CA-C	-5.29	1.45	1.53
1	A	39	VAL	CA-C	-5.28	1.46	1.52
1	C	309	GLN	C-N	5.28	1.41	1.34
1	K	266	ILE	CA-C	5.28	1.59	1.52
1	K	458	LEU	CA-CB	5.28	1.61	1.53
1	M	383	ILE	C-N	5.28	1.40	1.33
1	P	267	ASN	CA-C	-5.28	1.46	1.52
1	R	343	ILE	CA-CB	5.28	1.62	1.54
1	G	229	ASP	CA-CB	5.28	1.62	1.53
1	H	102	ASP	CA-C	5.28	1.59	1.52
1	H	409	ILE	CA-CB	-5.28	1.48	1.54
1	N	528	ASP	N-CA	-5.28	1.39	1.45
1	C	399	ARG	N-CA	-5.28	1.40	1.46
1	B	487	ILE	CB-CG1	5.28	1.64	1.53
1	E	458	LEU	CA-C	5.28	1.59	1.52
1	H	467	ILE	CA-CB	-5.28	1.48	1.54
1	S	83	HIS	CG-CD2	5.28	1.41	1.35
1	A	186	VAL	CA-CB	-5.28	1.48	1.54
1	I	368	VAL	CA-C	5.28	1.59	1.52
1	K	329	GLU	CA-CB	5.28	1.61	1.53
1	P	183	ASP	CA-C	5.28	1.59	1.52
1	P	378	SER	CA-CB	5.28	1.59	1.53
1	R	38	ALA	C-N	5.28	1.40	1.33
1	P	241	LEU	CA-C	5.27	1.58	1.52
1	D	127	HIS	CE1-NE2	-5.27	1.27	1.32
1	D	220	THR	CB-OG1	-5.27	1.35	1.43
1	K	144	GLN	N-CA	5.27	1.52	1.46
1	K	497	MET	CA-C	-5.27	1.46	1.52
1	Q	96	GLN	C-N	5.27	1.40	1.33
1	C	131	ILE	CA-CB	-5.27	1.47	1.54
1	C	510	MET	C-N	5.27	1.41	1.34
1	H	318	LEU	N-CA	-5.27	1.39	1.46
1	L	467	ILE	C-N	5.27	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	L	408	VAL	N-CA	5.27	1.52	1.46
1	A	244	ALA	CA-C	5.27	1.59	1.52
1	E	162	ARG	CD-NE	5.27	1.53	1.46
1	F	294	GLY	CA-C	-5.27	1.44	1.51
1	I	156	ASN	CA-C	-5.27	1.45	1.52
1	O	127	HIS	C-N	5.27	1.40	1.33
1	I	78	LYS	CA-C	-5.27	1.45	1.52
1	K	209	ILE	CA-C	-5.27	1.45	1.52
1	C	342	ASN	C-N	5.26	1.40	1.34
1	I	208	GLN	CA-C	-5.26	1.46	1.52
1	R	160	LEU	C-N	5.26	1.41	1.34
1	P	506	ALA	CA-C	5.26	1.59	1.52
1	Q	407	ASP	CA-C	5.26	1.59	1.52
1	B	429	LEU	C-N	5.26	1.40	1.33
1	C	456	SER	C-N	5.26	1.40	1.34
1	H	250	ASP	N-CA	5.26	1.53	1.46
1	I	367	MET	CA-C	-5.26	1.46	1.52
1	L	142	ALA	C-N	5.26	1.40	1.33
1	N	152	THR	C-O	-5.26	1.18	1.24
1	N	189	VAL	C-N	5.26	1.41	1.33
1	N	321	ARG	C-O	-5.26	1.17	1.23
1	Q	189	VAL	CA-C	-5.26	1.46	1.52
1	R	341	SER	CA-CB	5.26	1.62	1.53
1	R	459	ILE	C-O	-5.26	1.18	1.24
1	P	384	ARG	C-N	5.26	1.41	1.33
1	F	63	LEU	N-CA	-5.26	1.38	1.46
1	F	438	GLY	C-N	5.26	1.41	1.33
1	E	496	ASP	CA-C	5.25	1.59	1.52
1	C	228	VAL	CA-CB	-5.25	1.48	1.54
1	G	439	LYS	CA-CB	5.25	1.61	1.53
1	O	401	ALA	C-N	5.25	1.40	1.33
1	Q	36	ILE	CA-CB	-5.25	1.48	1.54
1	Q	87	LYS	C-N	5.25	1.41	1.33
1	Q	397	ALA	C-N	-5.25	1.26	1.33
1	B	380	SER	CA-C	-5.25	1.46	1.52
1	D	115	VAL	CA-CB	-5.25	1.48	1.54
1	I	320	VAL	C-O	-5.25	1.18	1.24
1	K	510	MET	CA-C	-5.25	1.46	1.52
1	L	193	ALA	CA-C	5.25	1.59	1.52
1	O	191	GLN	CA-CB	5.25	1.61	1.53
1	S	117	LYS	CA-CB	5.25	1.62	1.53
1	D	340	VAL	N-CA	5.25	1.52	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	493	GLN	C-O	-5.25	1.17	1.24
1	H	344	ASP	CA-CB	5.25	1.62	1.53
1	N	302	LYS	C-O	5.25	1.30	1.24
1	A	185	VAL	CA-CB	-5.25	1.48	1.54
1	P	516	ALA	N-CA	-5.25	1.40	1.46
1	M	452	GLU	N-CA	5.25	1.52	1.46
1	C	311	TYR	CA-CB	5.24	1.61	1.53
1	M	494	PRO	CA-C	5.24	1.58	1.52
1	I	152	THR	N-CA	-5.24	1.39	1.46
1	Q	253	LEU	CA-CB	5.24	1.60	1.53
1	S	211	LYS	CA-C	5.24	1.58	1.52
1	L	131	ILE	C-N	5.24	1.40	1.33
1	O	340	VAL	CA-C	-5.24	1.46	1.52
1	S	241	LEU	CA-CB	5.24	1.62	1.53
1	B	84	PRO	C-N	5.24	1.40	1.33
1	B	436	VAL	CA-C	5.24	1.59	1.52
1	I	83	HIS	CA-CB	5.24	1.61	1.53
1	K	114	LEU	CA-CB	5.24	1.61	1.53
1	M	57	LYS	N-CA	-5.24	1.39	1.45
1	M	445	GLU	N-CA	5.24	1.52	1.46
1	C	360	ARG	N-CA	5.24	1.52	1.46
1	K	465	ASP	CA-C	5.24	1.58	1.52
1	L	271	GLN	C-N	5.24	1.40	1.33
1	Q	219	ASP	N-CA	-5.24	1.39	1.46
1	R	144	GLN	CA-CB	5.24	1.61	1.53
1	D	285	GLU	N-CA	-5.24	1.40	1.46
1	D	432	TYR	CA-C	-5.24	1.46	1.52
1	E	281	ASN	C-N	5.24	1.41	1.33
1	K	309	GLN	N-CA	-5.24	1.40	1.46
1	K	528	ASP	C-N	5.24	1.40	1.33
1	I	122	LEU	CA-CB	5.23	1.61	1.53
1	I	265	ARG	CD-NE	5.23	1.53	1.46
1	P	472	LYS	CA-C	5.23	1.59	1.52
1	K	57	LYS	CA-C	-5.23	1.46	1.52
1	A	168	SER	N-CA	-5.23	1.39	1.46
1	I	338	ARG	CD-NE	5.23	1.53	1.46
1	S	282	LEU	CA-CB	5.23	1.61	1.53
1	E	407	ASP	C-N	5.23	1.40	1.33
1	F	377	LYS	N-CA	5.23	1.52	1.46
1	L	128	PRO	C-N	5.23	1.41	1.34
1	Q	305	ASP	CA-C	5.23	1.59	1.52
1	P	260	LEU	CA-C	5.23	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	R	101	ALA	N-CA	-5.23	1.39	1.46
1	I	181	ILE	CA-C	-5.22	1.46	1.52
1	O	147	GLN	C-O	-5.22	1.18	1.24
1	M	345	GLU	C-N	5.22	1.39	1.33
1	E	384	ARG	N-CA	-5.22	1.39	1.45
1	G	457	ILE	CA-CB	-5.22	1.48	1.54
1	L	402	LEU	CA-C	-5.22	1.46	1.52
1	N	190	THR	CB-OG1	-5.22	1.35	1.43
1	O	289	LYS	CA-CB	5.22	1.61	1.53
1	P	286	LYS	C-N	5.22	1.40	1.33
1	O	119	GLU	C-N	5.22	1.41	1.34
1	S	321	ARG	CA-C	-5.22	1.46	1.52
1	Q	411	ASP	C-N	-5.22	1.26	1.33
1	S	248	LEU	CA-C	5.22	1.59	1.52
1	L	261	ASP	CA-C	-5.21	1.46	1.52
1	P	70	ASN	N-CA	5.21	1.51	1.46
1	S	162	ARG	CD-NE	5.21	1.53	1.46
1	S	183	ASP	C-N	5.21	1.40	1.33
1	H	88	LEU	CA-CB	5.21	1.61	1.53
1	K	409	ILE	C-N	5.21	1.40	1.34
1	D	268	ASP	C-N	5.21	1.40	1.33
1	L	483	LYS	CA-C	-5.21	1.45	1.52
1	N	428	LYS	C-N	5.21	1.41	1.33
1	O	381	ILE	C-O	-5.21	1.18	1.24
1	K	39	VAL	CA-C	5.21	1.58	1.52
1	B	428	LYS	CA-C	5.21	1.59	1.52
1	M	439	LYS	C-O	-5.21	1.18	1.24
1	S	157	ASP	N-CA	-5.21	1.39	1.46
1	S	302	LYS	C-N	-5.21	1.25	1.33
1	E	525	ARG	CD-NE	5.20	1.53	1.46
1	B	206	ASN	N-CA	-5.20	1.38	1.46
1	D	271	GLN	N-CA	-5.20	1.40	1.46
1	Q	282	LEU	CA-C	-5.20	1.46	1.52
1	S	435	GLN	CA-CB	5.20	1.62	1.53
1	C	334	ALA	N-CA	-5.20	1.39	1.46
1	E	256	GLU	C-N	5.20	1.39	1.33
1	O	202	VAL	CA-C	-5.20	1.46	1.52
1	D	507	LEU	CA-CB	5.20	1.61	1.53
1	G	203	ASP	CA-CB	5.20	1.62	1.53
1	G	526	ILE	CA-CB	5.20	1.60	1.54
1	L	522	LEU	C-N	5.20	1.40	1.33
1	N	403	GLY	C-O	-5.20	1.17	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	509	LYS	C-N	5.20	1.40	1.33
1	G	148	GLU	CA-CB	5.19	1.62	1.53
1	H	174	VAL	CA-C	5.19	1.59	1.52
1	Q	89	LEU	N-CA	-5.19	1.40	1.46
1	Q	121	LEU	N-CA	5.19	1.52	1.46
1	A	450	ALA	CA-C	5.19	1.59	1.52
1	C	241	LEU	C-N	5.19	1.41	1.33
1	E	396	ARG	CD-NE	5.19	1.53	1.46
1	N	87	LYS	CA-C	5.19	1.59	1.52
1	O	221	GLN	CA-C	-5.19	1.46	1.52
1	Q	142	ALA	CA-CB	5.19	1.61	1.53
1	Q	452	GLU	C-N	5.19	1.40	1.33
1	A	95	GLY	N-CA	5.19	1.52	1.45
1	K	466	PRO	N-CD	5.19	1.55	1.47
1	M	231	GLU	CA-C	-5.19	1.45	1.53
1	S	83	HIS	CE1-NE2	-5.19	1.27	1.32
1	G	453	SER	C-N	5.19	1.40	1.33
1	K	419	GLY	N-CA	5.19	1.52	1.45
1	H	390	LEU	N-CA	-5.19	1.40	1.46
1	N	196	ARG	NE-CZ	5.19	1.38	1.33
1	N	458	LEU	N-CA	-5.19	1.40	1.46
1	R	65	ASP	C-N	5.19	1.40	1.33
1	A	449	ASN	CA-C	5.18	1.59	1.52
1	B	218	ASN	CB-CG	5.18	1.65	1.52
1	P	183	ASP	C-N	5.18	1.40	1.33
1	N	83	HIS	CG-ND1	5.18	1.44	1.38
1	E	45	ALA	N-CA	-5.18	1.39	1.46
1	N	320	VAL	N-CA	5.18	1.52	1.46
1	P	408	VAL	CA-CB	5.18	1.60	1.54
1	S	239	LYS	N-CA	-5.18	1.39	1.46
1	C	127	HIS	ND1-CE1	5.18	1.37	1.32
1	G	125	ASP	CA-CB	5.18	1.61	1.53
1	I	411	ASP	CA-CB	5.18	1.62	1.53
1	M	349	GLN	CA-C	5.18	1.59	1.52
1	O	421	VAL	N-CA	-5.18	1.39	1.46
1	R	413	ARG	CD-NE	5.18	1.53	1.46
1	C	37	ALA	CA-CB	5.18	1.61	1.53
1	C	472	LYS	CA-C	-5.18	1.45	1.52
1	S	234	HIS	ND1-CE1	5.18	1.37	1.32
1	I	259	GLU	N-CA	-5.17	1.39	1.46
1	K	195	LEU	C-N	5.17	1.40	1.33
1	N	307	VAL	N-CA	5.17	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	R	327	ASP	N-CA	-5.17	1.39	1.46
1	D	289	LYS	CA-C	5.17	1.59	1.52
1	O	147	GLN	CA-C	-5.17	1.46	1.52
1	P	420	ALA	CA-CB	5.17	1.61	1.53
1	D	424	GLU	C-N	5.17	1.39	1.34
1	I	360	ARG	C-N	5.17	1.40	1.33
1	P	466	PRO	C-N	5.17	1.40	1.33
1	S	143	LEU	C-N	5.17	1.40	1.34
1	A	431	LYS	N-CA	-5.17	1.39	1.46
1	C	125	ASP	CA-C	5.17	1.59	1.53
1	D	252	SER	CA-C	5.17	1.59	1.52
1	D	519	ALA	CA-C	-5.17	1.46	1.52
1	K	415	ILE	N-CA	5.17	1.52	1.45
1	M	235	PRO	N-CD	-5.17	1.40	1.47
1	E	256	GLU	CA-CB	5.17	1.62	1.53
1	B	492	GLY	N-CA	5.16	1.52	1.45
1	G	258	PRO	N-CD	-5.16	1.40	1.47
1	M	371	GLU	C-N	5.16	1.40	1.33
1	B	111	SER	CA-C	-5.16	1.46	1.52
1	E	428	LYS	CA-C	5.16	1.59	1.52
1	G	432	TYR	CA-CB	5.16	1.61	1.53
1	M	42	VAL	CA-CB	-5.16	1.48	1.54
1	N	263	GLU	CA-CB	5.16	1.61	1.53
1	R	529	VAL	CA-C	5.16	1.58	1.52
1	E	362	VAL	CA-C	-5.16	1.47	1.52
1	N	417	GLY	N-CA	5.16	1.51	1.45
1	O	240	ARG	CD-NE	5.16	1.53	1.46
1	O	241	LEU	N-CA	-5.16	1.39	1.46
1	Q	411	ASP	N-CA	-5.16	1.39	1.46
1	H	345	GLU	N-CA	5.16	1.53	1.45
1	I	299	ILE	C-N	5.16	1.40	1.33
1	A	63	LEU	CA-CB	5.15	1.61	1.53
1	I	317	VAL	CA-CB	-5.15	1.47	1.54
1	D	524	LEU	C-N	-5.15	1.26	1.34
1	F	298	ILE	CA-C	-5.15	1.46	1.52
1	K	495	VAL	CA-C	5.15	1.58	1.52
1	R	277	ASP	CA-CB	5.15	1.61	1.53
1	F	458	LEU	CA-C	-5.15	1.46	1.52
1	C	296	ASN	C-O	-5.15	1.17	1.24
1	G	227	VAL	N-CA	-5.15	1.39	1.46
1	G	470	LEU	CA-CB	5.15	1.61	1.53
1	N	79	MET	CA-C	5.15	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	S	502	VAL	CA-CB	5.15	1.60	1.53
1	C	254	GLU	N-CA	5.15	1.52	1.46
1	P	224	TYR	C-N	5.15	1.39	1.33
1	C	492	GLY	N-CA	5.15	1.52	1.45
1	S	85	ALA	C-N	5.15	1.40	1.33
1	L	531	SER	N-CA	-5.14	1.39	1.46
1	R	120	ASP	CA-C	5.14	1.59	1.52
1	H	127	HIS	CD2-NE2	5.14	1.43	1.37
1	I	310	SER	CA-C	5.14	1.59	1.52
1	P	345	GLU	C-N	5.14	1.39	1.33
1	R	314	LYS	CA-CB	5.14	1.62	1.53
1	A	392	ASP	C-O	5.14	1.29	1.24
1	E	190	THR	C-N	5.14	1.41	1.33
1	F	381	ILE	CA-CB	5.14	1.61	1.54
1	H	74	THR	N-CA	5.14	1.52	1.46
1	O	98	GLU	CA-C	-5.14	1.46	1.52
1	A	365	ASP	N-CA	-5.14	1.39	1.46
1	E	330	LYS	CA-CB	5.14	1.62	1.53
1	L	200	TRP	CZ2-CH2	5.13	1.47	1.37
1	P	436	VAL	N-CA	5.13	1.52	1.46
1	F	152	THR	CA-C	-5.13	1.46	1.52
1	E	387	LEU	CA-C	5.13	1.60	1.53
1	F	318	LEU	CA-CB	5.13	1.60	1.53
1	K	346	ILE	CA-C	5.13	1.58	1.52
1	L	288	ASP	CA-CB	5.13	1.61	1.53
1	S	91	GLN	CA-CB	5.13	1.61	1.53
1	M	210	VAL	C-O	-5.13	1.18	1.24
1	A	445	GLU	N-CA	5.13	1.52	1.46
1	D	168	SER	C-N	5.13	1.41	1.33
1	D	467	ILE	CA-C	5.13	1.59	1.52
1	M	304	ILE	C-O	-5.13	1.18	1.24
1	N	50	TYR	CA-C	5.13	1.59	1.52
1	O	288	ASP	CA-C	5.13	1.59	1.52
1	R	401	ALA	C-N	5.13	1.40	1.33
1	R	500	LYS	CA-C	-5.13	1.47	1.52
1	D	358	GLU	N-CA	-5.12	1.39	1.45
1	E	331	LEU	C-N	-5.12	1.26	1.33
1	H	72	GLY	C-O	5.12	1.29	1.23
1	O	66	ILE	CA-CB	5.12	1.61	1.54
1	P	462	ALA	N-CA	5.12	1.52	1.46
1	B	431	LYS	CA-CB	5.12	1.61	1.53
1	P	73	ALA	CA-CB	5.12	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	R	186	VAL	CA-C	-5.12	1.46	1.52
1	G	185	VAL	C-N	5.12	1.40	1.33
1	L	96	GLN	C-N	5.12	1.40	1.33
1	F	185	VAL	CA-CB	5.12	1.60	1.54
1	G	516	ALA	CA-C	-5.12	1.46	1.52
1	N	430	ARG	C-O	-5.12	1.18	1.24
1	E	329	GLU	C-N	5.12	1.40	1.34
1	F	516	ALA	C-N	5.12	1.40	1.33
1	I	231	GLU	C-N	5.12	1.39	1.33
1	K	390	LEU	CA-CB	5.12	1.61	1.53
1	M	174	VAL	N-CA	-5.12	1.40	1.46
1	N	29	LYS	CA-C	5.12	1.59	1.52
1	N	532	ALA	CA-C	5.12	1.63	1.52
1	H	358	GLU	CA-C	-5.12	1.46	1.52
1	K	158	THR	C-O	-5.12	1.17	1.24
1	S	70	ASN	N-CA	5.12	1.52	1.45
1	F	392	ASP	C-O	5.12	1.29	1.24
1	I	42	VAL	CA-CB	5.12	1.60	1.54
1	I	471	MET	CA-C	-5.12	1.46	1.52
1	P	499	GLN	CA-C	5.12	1.59	1.52
1	C	289	LYS	CA-CB	5.11	1.62	1.53
1	D	114	LEU	C-O	5.11	1.30	1.24
1	O	196	ARG	N-CA	-5.11	1.40	1.46
1	S	247	ALA	N-CA	-5.11	1.39	1.46
1	P	521	THR	N-CA	5.11	1.52	1.46
1	S	349	GLN	CA-CB	5.11	1.62	1.53
1	C	515	ALA	C-N	5.11	1.40	1.33
1	B	338	ARG	CD-NE	5.11	1.53	1.46
1	E	88	LEU	N-CA	-5.11	1.40	1.46
1	L	263	GLU	CA-C	-5.11	1.45	1.52
1	R	112	GLY	N-CA	-5.11	1.38	1.45
1	H	222	LEU	N-CA	-5.11	1.39	1.46
1	M	435	GLN	C-N	5.11	1.40	1.33
1	A	123	TYR	CA-C	5.10	1.59	1.52
1	A	160	LEU	CA-C	5.10	1.59	1.53
1	D	480	GLU	CA-C	5.10	1.59	1.52
1	G	289	LYS	CA-CB	5.10	1.61	1.53
1	F	50	TYR	CA-CB	5.10	1.61	1.53
1	I	285	GLU	C-N	5.10	1.40	1.33
1	M	65	ASP	C-N	5.10	1.40	1.33
1	E	347	SER	C-N	5.09	1.40	1.34
1	G	368	VAL	CA-CB	-5.09	1.47	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	H	230	LYS	C-N	-5.09	1.26	1.33
1	S	529	VAL	CA-C	-5.09	1.46	1.52
1	F	150	ALA	CA-CB	5.09	1.62	1.53
1	H	203	ASP	CA-C	5.09	1.59	1.52
1	K	164	ILE	CA-C	5.09	1.59	1.52
1	K	486	GLY	CA-C	-5.09	1.44	1.51
1	L	377	LYS	C-O	-5.09	1.18	1.24
1	N	322	ARG	NE-CZ	5.09	1.38	1.33
1	B	208	GLN	CA-C	5.09	1.59	1.52
1	N	36	ILE	CA-CB	-5.09	1.49	1.54
1	B	349	GLN	CA-C	-5.08	1.45	1.52
1	F	245	LYS	N-CA	-5.08	1.39	1.47
1	I	55	MET	CA-CB	5.08	1.61	1.53
1	L	427	LYS	N-CA	-5.08	1.40	1.46
1	N	399	ARG	CD-NE	5.08	1.53	1.46
1	R	204	LEU	C-O	-5.08	1.17	1.24
1	C	479	ASN	C-N	5.08	1.41	1.33
1	Q	154	SER	C-N	5.08	1.39	1.34
1	R	332	ALA	CA-C	-5.08	1.46	1.52
1	A	55	MET	N-CA	5.08	1.51	1.45
1	I	490	TYR	C-N	5.08	1.40	1.33
1	G	130	ILE	CA-CB	-5.08	1.48	1.54
1	D	101	ALA	CA-C	5.08	1.59	1.52
1	L	340	VAL	N-CA	-5.08	1.39	1.46
1	P	512	ALA	CA-C	5.08	1.59	1.52
1	Q	528	ASP	CA-CB	5.08	1.62	1.53
1	B	397	ALA	C-N	5.07	1.40	1.33
1	H	140	GLU	C-N	5.07	1.40	1.33
1	N	304	ILE	CA-C	-5.07	1.46	1.52
1	N	500	LYS	C-N	5.07	1.41	1.33
1	Q	387	LEU	CA-C	5.07	1.59	1.52
1	Q	450	ALA	C-N	5.07	1.40	1.33
1	A	108	VAL	C-N	5.07	1.40	1.33
1	C	181	ILE	C-N	5.07	1.40	1.33
1	D	287	VAL	N-CA	-5.07	1.40	1.46
1	G	420	ALA	CA-CB	-5.07	1.45	1.53
1	I	285	GLU	C-O	-5.07	1.18	1.24
1	S	402	LEU	C-N	-5.07	1.26	1.33
1	B	316	GLY	C-N	-5.06	1.28	1.33
1	M	242	GLU	CA-C	-5.06	1.46	1.52
1	C	513	ILE	CA-CB	-5.06	1.48	1.54
1	G	89	LEU	CA-CB	5.06	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	L	287	VAL	CA-CB	-5.06	1.48	1.54
1	R	378	SER	C-N	-5.06	1.27	1.33
1	L	525	ARG	CA-C	-5.06	1.46	1.52
1	I	230	LYS	N-CA	-5.06	1.40	1.46
1	O	242	GLU	CA-CB	5.06	1.60	1.53
1	F	299	ILE	CA-CB	-5.06	1.48	1.54
1	I	38	ALA	CA-CB	5.06	1.61	1.53
1	I	405	VAL	CA-C	5.06	1.59	1.52
1	M	210	VAL	CA-C	-5.06	1.46	1.52
1	O	269	PRO	C-N	5.06	1.40	1.33
1	P	276	LEU	CA-CB	5.06	1.62	1.53
1	Q	117	LYS	CA-C	5.06	1.59	1.52
1	G	114	LEU	CA-CB	5.06	1.61	1.53
1	D	395	GLU	CA-CB	5.05	1.61	1.53
1	E	196	ARG	CA-C	5.05	1.58	1.52
1	O	77	ASP	CA-C	-5.05	1.46	1.52
1	D	505	PRO	C-N	5.05	1.40	1.34
1	N	301	GLN	CA-C	-5.05	1.46	1.52
1	O	414	ALA	CA-CB	5.05	1.62	1.53
1	F	420	ALA	CA-C	5.05	1.59	1.52
1	K	92	ILE	CA-CB	-5.05	1.47	1.54
1	R	124	LYS	C-N	5.05	1.40	1.33
1	A	308	ALA	N-CA	-5.05	1.39	1.46
1	D	280	GLU	C-N	5.05	1.41	1.33
1	K	396	ARG	CZ-NH1	5.05	1.39	1.32
1	L	80	ASP	CA-CB	5.05	1.59	1.52
1	L	493	GLN	CA-C	5.05	1.59	1.52
1	I	360	ARG	NE-CZ	5.04	1.38	1.33
1	B	413	ARG	C-N	5.04	1.40	1.33
1	C	42	VAL	C-N	5.04	1.40	1.33
1	I	428	LYS	CA-CB	5.04	1.61	1.53
1	K	518	GLU	N-CA	-5.04	1.40	1.46
1	L	29	LYS	CA-C	5.04	1.59	1.52
1	E	406	ALA	CA-C	-5.04	1.46	1.52
1	H	284	LYS	CA-CB	5.04	1.61	1.53
1	H	317	VAL	CA-C	5.04	1.59	1.52
1	N	430	ARG	C-N	5.04	1.41	1.34
1	O	79	MET	CA-CB	5.04	1.60	1.53
1	R	132	ILE	CA-C	5.04	1.59	1.52
1	R	436	VAL	C-N	5.04	1.38	1.33
1	P	375	ASN	C-N	5.04	1.39	1.34
1	C	510	MET	CA-CB	5.04	1.62	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	116	LYS	N-CA	5.04	1.52	1.46
1	D	275	PHE	CA-C	-5.04	1.47	1.53
1	F	508	VAL	CA-CB	5.04	1.60	1.54
1	G	138	ALA	CA-C	5.04	1.59	1.52
1	P	489	LEU	N-CA	-5.04	1.39	1.46
1	D	234	HIS	ND1-CE1	5.03	1.37	1.32
1	Q	423	ILE	CA-C	-5.03	1.45	1.52
1	B	382	LEU	N-CA	-5.03	1.40	1.46
1	G	465	ASP	CA-C	5.03	1.59	1.52
1	K	192	VAL	C-N	5.03	1.40	1.33
1	C	448	ALA	C-N	5.03	1.40	1.33
1	C	505	PRO	CA-CB	-5.03	1.46	1.53
1	L	361	LYS	N-CA	-5.03	1.40	1.46
1	M	67	THR	N-CA	5.03	1.52	1.46
1	O	196	ARG	NE-CZ	5.03	1.38	1.33
1	A	216	SER	CA-C	-5.03	1.46	1.53
1	B	516	ALA	C-N	5.03	1.40	1.33
1	H	233	VAL	N-CA	-5.03	1.40	1.46
1	K	103	GLY	C-N	-5.03	1.27	1.33
1	Q	399	ARG	C-O	-5.03	1.18	1.24
1	L	35	ASN	N-CA	-5.02	1.40	1.46
1	P	309	GLN	CA-CB	5.02	1.61	1.53
1	P	399	ARG	CD-NE	5.02	1.53	1.46
1	D	297	VAL	N-CA	-5.02	1.40	1.46
1	D	523	VAL	CA-CB	5.02	1.60	1.54
1	K	199	LYS	N-CA	-5.02	1.39	1.45
1	M	528	ASP	C-O	-5.02	1.17	1.23
1	N	402	LEU	CA-C	-5.02	1.46	1.52
1	N	453	SER	C-N	5.02	1.40	1.33
1	R	477	HIS	ND1-CE1	5.02	1.37	1.32
1	S	299	ILE	C-N	5.02	1.40	1.33
1	B	381	ILE	CA-CB	-5.02	1.47	1.55
1	D	159	ASP	N-CA	5.02	1.52	1.46
1	H	55	MET	CA-C	-5.02	1.46	1.53
1	H	62	SER	N-CA	5.02	1.52	1.46
1	D	437	GLY	C-N	5.02	1.40	1.33
1	G	190	THR	CA-CB	5.02	1.61	1.53
1	I	294	GLY	C-N	5.02	1.40	1.33
1	F	225	GLY	N-CA	-5.01	1.40	1.45
1	G	474	ARG	CD-NE	5.01	1.53	1.46
1	H	458	LEU	CA-CB	5.01	1.61	1.53
1	O	266	ILE	CB-CG1	5.01	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	92	ILE	CA-CB	-5.01	1.47	1.54
1	Q	438	GLY	CA-C	-5.01	1.44	1.51
1	B	328	LEU	CA-C	5.01	1.59	1.52
1	O	332	ALA	C-O	-5.01	1.17	1.24
1	S	247	ALA	CA-C	-5.01	1.46	1.53
1	B	477	HIS	CG-ND1	-5.01	1.32	1.38
1	C	440	GLU	C-N	5.01	1.40	1.33
1	D	52	PRO	N-CA	5.01	1.53	1.47
1	D	275	PHE	C-O	5.01	1.29	1.24
1	K	280	GLU	CA-C	-5.01	1.46	1.52
1	L	158	THR	CA-C	5.01	1.59	1.52
1	N	28	GLY	N-CA	5.01	1.53	1.45
1	Q	280	GLU	C-O	-5.01	1.17	1.24
1	H	180	TYR	N-CA	-5.00	1.40	1.46
1	R	129	THR	CA-C	5.00	1.59	1.52
1	D	127	HIS	CG-ND1	-5.00	1.32	1.38
1	F	308	ALA	CA-CB	5.00	1.62	1.53
1	L	153	VAL	N-CA	-5.00	1.40	1.46
1	O	143	LEU	C-N	5.00	1.40	1.34
1	E	198	ASP	C-N	5.00	1.41	1.33
1	F	187	LYS	N-CA	-5.00	1.40	1.46
1	M	413	ARG	CZ-NH1	5.00	1.39	1.32
1	N	487	ILE	CA-C	-5.00	1.46	1.52

All (4721) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	375	ASN	CA-C-O	-13.21	110.71	119.29
1	N	265	ARG	NE-CZ-NH2	13.07	130.97	119.20
1	L	233	VAL	N-CA-C	13.03	123.91	110.62
1	P	203	ASP	CA-CB-CG	12.61	125.21	112.60
1	H	512	ALA	CA-C-N	12.15	136.27	120.60
1	H	512	ALA	C-N-CA	12.15	136.27	120.60
1	N	219	ASP	CA-CB-CG	-12.13	100.47	112.60
1	P	516	ALA	N-CA-C	12.08	125.61	111.11
1	A	417	GLY	O-C-N	-11.94	112.54	122.81
1	E	474	ARG	NE-CZ-NH2	11.75	129.78	119.20
1	D	391	VAL	CA-C-N	11.63	135.56	120.44
1	D	391	VAL	C-N-CA	11.63	135.56	120.44
1	D	127	HIS	CA-C-N	11.29	131.69	119.28
1	D	127	HIS	C-N-CA	11.29	131.69	119.28
1	E	481	ASN	CA-CB-CG	-11.15	101.45	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	178	ARG	NE-CZ-NH2	11.04	129.13	119.20
1	D	83	HIS	CA-C-O	-11.03	109.95	119.76
1	D	209	ILE	O-C-N	-10.98	112.38	123.03
1	B	155	ILE	N-CA-C	10.92	123.07	110.62
1	F	421	VAL	CA-C-N	10.74	134.83	120.65
1	F	421	VAL	C-N-CA	10.74	134.83	120.65
1	C	413	ARG	NE-CZ-NH2	10.70	128.83	119.20
1	S	352	GLY	CA-C-O	-10.65	111.64	120.91
1	Q	413	ARG	NE-CZ-NH1	-10.62	110.88	121.50
1	G	249	ILE	N-CA-C	10.49	123.14	107.51
1	O	39	VAL	N-CA-C	10.46	120.45	110.30
1	K	415	ILE	O-C-N	-10.44	112.98	122.69
1	O	461	ASN	CA-CB-CG	-10.40	102.20	112.60
1	C	413	ARG	NE-CZ-NH1	-10.30	111.20	121.50
1	L	477	HIS	CA-CB-CG	10.30	124.10	113.80
1	D	233	VAL	N-CA-C	10.28	120.29	110.42
1	K	422	GLU	CA-C-O	-10.27	110.22	121.00
1	E	403	GLY	CA-C-N	10.24	134.37	120.54
1	E	403	GLY	C-N-CA	10.24	134.37	120.54
1	F	156	ASN	OD1-CG-ND2	-10.23	112.37	122.60
1	E	325	LYS	CA-C-N	10.18	134.32	120.38
1	E	325	LYS	C-N-CA	10.18	134.32	120.38
1	H	326	SER	N-CA-C	10.07	123.52	111.33
1	Q	62	SER	N-CA-C	10.06	123.18	111.11
1	G	205	ASP	CA-CB-CG	-10.06	102.54	112.60
1	Q	465	ASP	CA-CB-CG	10.05	122.65	112.60
1	Q	277	ASP	CA-CB-CG	-10.03	102.57	112.60
1	P	178	ARG	NE-CZ-NH2	9.98	128.18	119.20
1	P	277	ASP	O-C-N	-9.95	111.34	122.09
1	B	162	ARG	O-C-N	-9.87	110.67	122.22
1	D	146	ILE	CA-C-N	9.86	133.66	120.65
1	D	146	ILE	C-N-CA	9.86	133.66	120.65
1	C	218	ASN	CA-CB-CG	-9.85	102.75	112.60
1	Q	127	HIS	N-CA-C	9.84	122.14	109.64
1	D	349	GLN	OE1-CD-NE2	9.82	132.43	122.60
1	I	88	LEU	CA-C-N	9.82	133.99	120.63
1	I	88	LEU	C-N-CA	9.82	133.99	120.63
1	H	135	TYR	CA-C-N	9.82	133.61	120.65
1	H	135	TYR	C-N-CA	9.82	133.61	120.65
1	G	114	LEU	CA-C-N	9.81	132.93	120.56
1	G	114	LEU	C-N-CA	9.81	132.93	120.56
1	P	504	GLU	CA-C-N	9.77	132.05	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	504	GLU	C-N-CA	9.77	132.05	119.84
1	L	286	LYS	CA-C-N	9.76	132.85	120.56
1	L	286	LYS	C-N-CA	9.76	132.85	120.56
1	I	159	ASP	CA-CB-CG	-9.75	102.85	112.60
1	N	114	LEU	CA-C-N	9.71	132.80	120.56
1	N	114	LEU	C-N-CA	9.71	132.80	120.56
1	N	233	VAL	N-CA-C	9.71	120.53	110.72
1	P	277	ASP	CA-C-O	9.68	130.67	120.70
1	M	35	ASN	CA-CB-CG	-9.67	102.93	112.60
1	D	169	LEU	O-C-N	-9.67	111.13	122.15
1	I	399	ARG	NE-CZ-NH2	9.64	127.88	119.20
1	I	496	ASP	CA-C-N	9.64	132.97	120.44
1	I	496	ASP	C-N-CA	9.64	132.97	120.44
1	L	97	ASP	N-CA-C	9.61	121.76	111.28
1	D	127	HIS	CA-C-O	-9.60	110.20	119.80
1	E	447	TYR	CA-C-O	9.56	130.96	120.63
1	M	325	LYS	CA-C-N	9.55	134.32	120.38
1	M	325	LYS	C-N-CA	9.55	134.32	120.38
1	B	102	ASP	CA-CB-CG	-9.52	103.08	112.60
1	D	84	PRO	CA-C-N	9.51	133.37	120.54
1	D	84	PRO	C-N-CA	9.51	133.37	120.54
1	C	277	ASP	CA-CB-CG	9.49	122.09	112.60
1	K	277	ASP	CA-CB-CG	-9.49	103.11	112.60
1	E	445	GLU	CA-C-N	9.49	133.53	120.63
1	E	445	GLU	C-N-CA	9.49	133.53	120.63
1	K	97	ASP	CA-C-O	9.49	130.61	120.55
1	A	185	VAL	CA-C-N	9.46	132.48	120.56
1	A	185	VAL	C-N-CA	9.46	132.48	120.56
1	G	369	PHE	CA-CB-CG	-9.45	104.35	113.80
1	Q	183	ASP	CA-C-N	9.42	132.75	120.60
1	Q	183	ASP	C-N-CA	9.42	132.75	120.60
1	L	243	ASN	CA-CB-CG	9.42	122.02	112.60
1	E	40	LYS	CA-C-N	9.40	132.66	120.44
1	E	40	LYS	C-N-CA	9.40	132.66	120.44
1	R	202	VAL	O-C-N	-9.38	114.53	122.97
1	O	504	GLU	O-C-N	-9.37	115.23	121.88
1	F	115	VAL	N-CA-CB	9.35	121.49	110.55
1	H	188	ALA	N-CA-C	9.34	122.63	111.33
1	M	229	ASP	CA-C-O	-9.32	110.67	120.55
1	H	493	GLN	CA-C-N	9.31	129.89	119.83
1	H	493	GLN	C-N-CA	9.31	129.89	119.83
1	H	233	VAL	N-CA-C	9.31	119.36	110.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	249	ILE	N-CA-C	9.31	121.38	107.51
1	B	384	ARG	N-CA-C	-9.29	94.41	108.99
1	R	267	ASN	OD1-CG-ND2	-9.29	113.31	122.60
1	A	411	ASP	CA-CB-CG	-9.27	103.33	112.60
1	S	510	MET	N-CA-C	-9.26	101.88	113.55
1	D	445	GLU	CA-C-N	9.25	132.47	120.44
1	D	445	GLU	C-N-CA	9.25	132.47	120.44
1	R	208	GLN	OE1-CD-NE2	-9.25	113.35	122.60
1	L	183	ASP	CA-C-N	9.24	132.87	120.77
1	L	183	ASP	C-N-CA	9.24	132.87	120.77
1	A	229	ASP	CA-CB-CG	-9.22	103.38	112.60
1	O	69	THR	O-C-N	-9.22	112.14	122.92
1	N	178	ARG	NE-CZ-NH2	9.21	127.49	119.20
1	S	115	VAL	N-CA-CB	9.18	121.29	110.55
1	P	156	ASN	CA-CB-CG	-9.17	103.43	112.60
1	P	155	ILE	O-C-N	-9.17	112.98	121.87
1	S	215	GLY	O-C-N	-9.17	114.06	122.77
1	A	73	ALA	CA-C-N	9.15	132.91	120.38
1	A	73	ALA	C-N-CA	9.15	132.91	120.38
1	M	291	LEU	CA-C-N	9.14	135.22	120.60
1	M	291	LEU	C-N-CA	9.14	135.22	120.60
1	F	525	ARG	N-CA-C	9.12	122.41	111.82
1	H	373	ALA	N-CA-CB	-9.12	97.39	110.44
1	Q	115	VAL	CA-C-N	9.10	132.67	120.65
1	Q	115	VAL	C-N-CA	9.10	132.67	120.65
1	P	395	GLU	CA-C-N	9.05	132.94	120.63
1	P	395	GLU	C-N-CA	9.05	132.94	120.63
1	S	183	ASP	CA-CB-CG	-9.04	103.56	112.60
1	H	352	GLY	O-C-N	-9.03	117.67	123.35
1	I	380	SER	O-C-N	-9.02	112.26	123.17
1	H	281	ASN	CA-CB-CG	-9.01	103.59	112.60
1	R	413	ARG	NE-CZ-NH2	9.00	127.30	119.20
1	K	264	ILE	N-CA-C	8.98	123.56	110.09
1	R	151	GLN	CA-C-O	8.97	130.21	120.71
1	G	365	ASP	N-CA-C	8.95	122.67	109.07
1	B	402	LEU	N-CA-CB	8.94	122.96	109.91
1	H	270	THR	O-C-N	-8.94	112.64	122.12
1	E	229	ASP	CA-CB-CG	8.93	121.53	112.60
1	F	298	ILE	CA-C-O	8.90	129.06	120.25
1	K	97	ASP	N-CA-C	8.89	120.97	111.28
1	I	138	ALA	CA-C-N	8.88	131.98	120.44
1	I	138	ALA	C-N-CA	8.88	131.98	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	403	GLY	CA-C-N	8.85	132.48	120.54
1	D	403	GLY	C-N-CA	8.85	132.48	120.54
1	Q	187	LYS	CA-C-N	8.84	132.12	120.28
1	Q	187	LYS	C-N-CA	8.84	132.12	120.28
1	R	274	LYS	O-C-N	-8.83	110.85	122.33
1	D	155	ILE	N-CA-C	8.82	122.08	111.05
1	E	190	THR	CA-C-N	8.81	132.80	120.29
1	E	190	THR	C-N-CA	8.81	132.80	120.29
1	A	365	ASP	CA-CB-CG	-8.81	103.79	112.60
1	S	424	GLU	N-CA-C	8.79	120.56	110.97
1	H	208	GLN	OE1-CD-NE2	-8.79	113.81	122.60
1	Q	206	ASN	OD1-CG-ND2	-8.79	113.81	122.60
1	L	375	ASN	CA-C-N	8.77	128.49	119.19
1	L	375	ASN	C-N-CA	8.77	128.49	119.19
1	E	196	ARG	NE-CZ-NH2	8.75	127.08	119.20
1	K	399	ARG	NE-CZ-NH2	8.75	127.08	119.20
1	I	230	LYS	CA-C-O	8.75	130.87	120.81
1	A	500	LYS	CA-C-O	8.74	128.26	119.08
1	N	423	ILE	O-C-N	-8.74	113.07	121.90
1	D	477	HIS	CA-CB-CG	8.72	122.52	113.80
1	E	83	HIS	CA-CB-CG	8.72	122.52	113.80
1	L	512	ALA	CA-C-N	8.72	131.54	120.56
1	L	512	ALA	C-N-CA	8.72	131.54	120.56
1	I	109	ILE	N-CA-CB	8.71	119.76	110.62
1	E	530	VAL	CA-C-O	8.70	130.07	120.59
1	N	257	LYS	CA-C-O	-8.69	112.03	119.59
1	G	504	GLU	CA-C-N	8.69	130.70	119.84
1	G	504	GLU	C-N-CA	8.69	130.70	119.84
1	K	374	LYS	N-CA-C	8.68	121.53	111.11
1	E	263	GLU	CA-C-N	8.68	132.42	120.35
1	E	263	GLU	C-N-CA	8.68	132.42	120.35
1	K	425	ILE	O-C-N	-8.64	113.17	121.90
1	I	474	ARG	NE-CZ-NH2	8.63	126.97	119.20
1	N	113	GLU	CA-C-N	8.63	131.85	120.28
1	N	113	GLU	C-N-CA	8.63	131.85	120.28
1	F	431	LYS	CA-C-N	8.63	132.18	120.44
1	F	431	LYS	C-N-CA	8.63	132.18	120.44
1	B	513	ILE	N-CA-C	8.62	119.42	110.36
1	A	324	LYS	O-C-N	-8.62	112.95	123.04
1	D	53	ARG	CA-C-N	8.62	129.10	120.31
1	D	53	ARG	C-N-CA	8.62	129.10	120.31
1	K	342	ASN	CA-CB-CG	8.62	121.22	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	206	ASN	N-CA-C	-8.61	102.90	113.15
1	F	298	ILE	O-C-N	-8.59	114.18	123.03
1	L	69	THR	CA-CB-OG1	8.59	122.48	109.60
1	H	179	GLU	CA-C-O	8.57	129.63	120.55
1	G	374	LYS	CA-C-N	8.57	133.05	121.74
1	G	374	LYS	C-N-CA	8.57	133.05	121.74
1	S	360	ARG	NE-CZ-NH2	8.55	126.90	119.20
1	G	178	ARG	NE-CZ-NH2	8.55	126.89	119.20
1	L	268	ASP	O-C-N	-8.55	113.63	121.66
1	C	428	LYS	N-CA-C	8.54	120.59	111.28
1	G	274	LYS	N-CA-C	8.54	122.80	112.38
1	R	234	HIS	CE1-NE2-CD2	-8.54	100.46	109.00
1	M	375	ASN	CA-C-N	8.54	128.53	119.05
1	M	375	ASN	C-N-CA	8.54	128.53	119.05
1	D	173	ALA	CA-C-O	8.53	129.33	119.35
1	C	244	ALA	N-CA-C	8.52	123.08	110.30
1	E	433	ALA	CA-C-O	-8.51	108.50	120.16
1	H	223	VAL	O-C-N	-8.51	114.24	123.18
1	M	178	ARG	NE-CZ-NH2	8.48	126.84	119.20
1	A	504	GLU	CA-C-N	8.48	130.44	119.84
1	A	504	GLU	C-N-CA	8.48	130.44	119.84
1	H	448	ALA	CA-C-N	8.48	131.46	120.44
1	H	448	ALA	C-N-CA	8.48	131.46	120.44
1	N	186	VAL	CB-CA-C	-8.47	101.13	111.97
1	E	229	ASP	O-C-N	-8.47	113.15	122.12
1	N	268	ASP	CA-CB-CG	-8.45	104.15	112.60
1	A	146	ILE	N-CA-C	-8.44	102.63	111.58
1	I	268	ASP	CA-CB-CG	-8.44	104.16	112.60
1	L	274	LYS	CA-C-O	8.44	132.57	120.51
1	I	516	ALA	CA-C-O	8.43	129.93	120.90
1	R	146	ILE	N-CA-C	-8.41	102.66	111.58
1	M	234	HIS	CA-CB-CG	8.41	122.21	113.80
1	M	350	ASP	CA-CB-CG	-8.41	104.19	112.60
1	O	415	ILE	CA-C-O	-8.41	113.65	121.72
1	D	456	SER	CA-C-N	8.40	131.44	120.60
1	D	456	SER	C-N-CA	8.40	131.44	120.60
1	D	196	ARG	NE-CZ-NH1	-8.39	113.11	121.50
1	D	196	ARG	NE-CZ-NH2	8.38	126.74	119.20
1	K	511	ASN	CA-CB-CG	-8.38	104.22	112.60
1	N	424	GLU	O-C-N	-8.38	112.98	122.03
1	O	168	SER	N-CA-C	-8.38	101.79	112.93
1	I	415	ILE	O-C-N	-8.37	114.01	122.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	528	ASP	CA-CB-CG	-8.36	104.24	112.60
1	S	296	ASN	OD1-CG-ND2	-8.34	114.26	122.60
1	S	479	ASN	CA-CB-CG	-8.34	104.26	112.60
1	O	360	ARG	NE-CZ-NH1	-8.34	113.16	121.50
1	G	250	ASP	CA-C-N	8.33	132.57	120.82
1	G	250	ASP	C-N-CA	8.33	132.57	120.82
1	Q	467	ILE	CA-C-O	-8.33	112.34	121.17
1	B	525	ARG	O-C-N	-8.33	112.02	122.27
1	M	424	GLU	O-C-N	-8.33	113.04	122.03
1	B	477	HIS	CE1-NE2-CD2	-8.32	100.68	109.00
1	R	139	GLU	CA-C-N	8.32	134.42	121.19
1	R	139	GLU	C-N-CA	8.32	134.42	121.19
1	G	233	VAL	CA-C-O	-8.32	112.35	121.17
1	D	465	ASP	CA-CB-CG	-8.31	104.29	112.60
1	C	350	ASP	CA-CB-CG	-8.31	104.29	112.60
1	M	339	VAL	CA-C-N	8.30	133.11	121.66
1	M	339	VAL	C-N-CA	8.30	133.11	121.66
1	R	461	ASN	OD1-CG-ND2	-8.29	114.31	122.60
1	A	329	GLU	O-C-N	-8.29	113.41	122.03
1	Q	530	VAL	O-C-N	-8.29	113.50	122.95
1	P	390	LEU	CA-C-N	8.29	131.82	120.46
1	P	390	LEU	C-N-CA	8.29	131.82	120.46
1	C	124	LYS	CA-C-N	8.28	133.87	122.19
1	C	124	LYS	C-N-CA	8.28	133.87	122.19
1	M	375	ASN	CA-C-O	-8.28	111.97	119.59
1	K	191	GLN	CA-C-N	8.27	133.64	120.82
1	K	191	GLN	C-N-CA	8.27	133.64	120.82
1	L	373	ALA	N-CA-C	8.27	120.99	110.33
1	S	327	ASP	N-CA-C	-8.27	103.33	113.50
1	F	268	ASP	CA-CB-CG	-8.26	104.34	112.60
1	N	265	ARG	NE-CZ-NH1	-8.26	113.24	121.50
1	D	414	ALA	O-C-N	-8.26	113.29	123.44
1	N	261	ASP	CA-CB-CG	-8.26	104.34	112.60
1	C	414	ALA	N-CA-C	8.24	122.85	108.75
1	G	388	GLU	N-CA-C	8.24	122.44	112.38
1	P	183	ASP	CA-C-N	8.22	131.21	120.60
1	P	183	ASP	C-N-CA	8.22	131.21	120.60
1	O	504	GLU	CA-C-N	8.22	130.12	119.84
1	O	504	GLU	C-N-CA	8.22	130.12	119.84
1	C	270	THR	O-C-N	-8.20	113.43	122.12
1	I	89	LEU	CA-C-O	-8.19	112.46	120.90
1	P	177	ALA	N-CA-C	8.18	122.43	111.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	445	GLU	CA-C-N	8.18	131.45	120.65
1	B	445	GLU	C-N-CA	8.18	131.45	120.65
1	H	234	HIS	CA-CB-CG	8.18	121.98	113.80
1	Q	276	LEU	CA-C-N	8.18	131.56	120.44
1	Q	276	LEU	C-N-CA	8.18	131.56	120.44
1	S	174	VAL	O-C-N	-8.18	113.91	122.66
1	K	413	ARG	NE-CZ-NH2	8.15	126.54	119.20
1	R	399	ARG	NE-CZ-NH2	8.15	126.54	119.20
1	A	312	LEU	CA-C-N	8.15	131.20	120.28
1	A	312	LEU	C-N-CA	8.15	131.20	120.28
1	N	250	ASP	CA-C-N	8.13	132.25	120.71
1	N	250	ASP	C-N-CA	8.13	132.25	120.71
1	I	132	ILE	N-CA-C	8.11	118.15	110.53
1	M	433	ALA	CA-C-N	8.11	129.97	119.84
1	M	433	ALA	C-N-CA	8.11	129.97	119.84
1	R	526	ILE	O-C-N	-8.11	113.84	122.68
1	R	296	ASN	CA-CB-CG	8.10	120.70	112.60
1	G	394	THR	CA-C-O	8.10	129.28	119.97
1	R	260	LEU	CA-C-N	8.09	130.96	120.44
1	R	260	LEU	C-N-CA	8.09	130.96	120.44
1	Q	290	ILE	N-CA-C	-8.08	103.02	111.58
1	R	514	LYS	N-CA-C	8.07	120.08	111.28
1	R	515	ALA	CA-C-O	8.07	129.47	121.00
1	A	372	GLY	CA-C-N	8.07	132.93	120.75
1	A	372	GLY	C-N-CA	8.07	132.93	120.75
1	F	471	MET	CA-C-O	-8.06	112.35	120.82
1	A	105	LYS	CA-C-N	8.06	131.59	120.63
1	A	105	LYS	C-N-CA	8.06	131.59	120.63
1	Q	488	ASP	CA-CB-CG	-8.05	104.55	112.60
1	R	100	THR	O-C-N	-8.05	114.23	123.33
1	I	109	ILE	CB-CA-C	-8.04	101.41	111.70
1	A	33	ARG	CA-C-N	8.04	131.39	120.54
1	A	33	ARG	C-N-CA	8.04	131.39	120.54
1	E	208	GLN	O-C-N	-8.04	113.86	123.10
1	F	146	ILE	CA-C-N	8.04	131.26	120.65
1	F	146	ILE	C-N-CA	8.04	131.26	120.65
1	C	245	LYS	CA-C-N	8.03	131.57	120.49
1	C	245	LYS	C-N-CA	8.03	131.57	120.49
1	O	232	VAL	O-C-N	-8.02	114.28	122.54
1	B	384	ARG	O-C-N	-8.02	114.27	123.33
1	F	334	ALA	N-CA-C	-8.02	103.63	113.41
1	C	220	THR	O-C-N	-8.01	113.41	122.86

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	97	ASP	CA-CB-CG	-8.01	104.59	112.60
1	C	476	THR	CA-C-N	8.00	134.98	122.26
1	C	476	THR	C-N-CA	8.00	134.98	122.26
1	H	33	ARG	CA-C-N	8.00	131.91	120.79
1	H	33	ARG	C-N-CA	8.00	131.91	120.79
1	H	511	ASN	CA-CB-CG	8.00	120.60	112.60
1	L	227	VAL	O-C-N	-7.99	114.87	123.18
1	I	247	ALA	CA-C-N	7.99	136.38	122.32
1	I	247	ALA	C-N-CA	7.99	136.38	122.32
1	I	301	GLN	CA-C-N	7.98	138.57	123.09
1	I	301	GLN	C-N-CA	7.98	138.57	123.09
1	I	445	GLU	O-C-N	-7.98	113.66	122.12
1	E	501	GLY	CA-C-N	7.97	129.14	121.65
1	E	501	GLY	C-N-CA	7.97	129.14	121.65
1	K	126	VAL	O-C-N	-7.96	114.82	123.18
1	K	360	ARG	NE-CZ-NH2	7.96	126.37	119.20
1	N	458	LEU	CA-C-N	7.96	130.59	120.56
1	N	458	LEU	C-N-CA	7.96	130.59	120.56
1	C	374	LYS	N-CA-C	7.96	120.96	111.33
1	B	132	ILE	CA-C-N	7.95	130.93	120.28
1	B	132	ILE	C-N-CA	7.95	130.93	120.28
1	C	384	ARG	CA-C-O	-7.95	112.95	121.45
1	P	392	ASP	CA-C-O	7.94	129.16	120.82
1	G	511	ASN	CA-CB-CG	-7.93	104.67	112.60
1	S	281	ASN	CA-CB-CG	-7.93	104.67	112.60
1	A	317	VAL	CA-C-N	7.93	134.37	123.11
1	A	317	VAL	C-N-CA	7.93	134.37	123.11
1	L	40	LYS	CA-C-N	7.92	130.73	120.44
1	L	40	LYS	C-N-CA	7.92	130.73	120.44
1	H	263	GLU	O-C-N	-7.92	113.13	122.15
1	R	178	ARG	CA-C-N	7.90	131.20	120.38
1	R	178	ARG	C-N-CA	7.90	131.20	120.38
1	D	83	HIS	CA-C-N	7.90	127.45	119.24
1	D	83	HIS	C-N-CA	7.90	127.45	119.24
1	O	162	ARG	NE-CZ-NH2	-7.90	112.09	119.20
1	O	399	ARG	NE-CZ-NH2	7.90	126.31	119.20
1	B	328	LEU	CA-C-N	7.89	131.07	120.65
1	B	328	LEU	C-N-CA	7.89	131.07	120.65
1	L	225	GLY	O-C-N	-7.89	115.92	123.81
1	R	477	HIS	CA-CB-CG	7.89	121.69	113.80
1	D	387	LEU	N-CA-C	7.88	120.50	110.33
1	I	356	LEU	O-C-N	-7.88	114.44	123.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	184	ILE	CA-C-N	7.88	130.77	120.60
1	L	184	ILE	C-N-CA	7.88	130.77	120.60
1	N	206	ASN	CA-CB-CG	-7.88	104.72	112.60
1	O	35	ASN	CA-CB-CG	-7.88	104.72	112.60
1	A	502	VAL	N-CA-CB	-7.87	103.70	111.89
1	O	173	ALA	CA-C-N	7.87	133.35	123.12
1	O	173	ALA	C-N-CA	7.87	133.35	123.12
1	N	176	GLY	CA-C-O	-7.86	114.41	121.64
1	E	429	LEU	CA-C-O	-7.86	112.09	120.42
1	N	323	ALA	CA-C-N	-7.86	110.94	122.65
1	N	323	ALA	C-N-CA	-7.86	110.94	122.65
1	C	148	GLU	CA-C-O	7.86	131.74	120.51
1	L	61	ASP	N-CA-C	7.85	121.57	110.50
1	F	77	ASP	CA-CB-CG	7.85	120.45	112.60
1	A	69	THR	CA-C-O	-7.85	113.04	121.36
1	K	265	ARG	NE-CZ-NH2	7.85	126.26	119.20
1	O	207	ILE	CA-C-O	7.85	128.20	120.27
1	G	433	ALA	CA-C-O	-7.84	109.41	120.16
1	B	35	ASN	OD1-CG-ND2	-7.84	114.76	122.60
1	F	293	THR	CA-CB-OG1	7.84	121.36	109.60
1	G	433	ALA	CA-C-N	7.84	129.64	119.84
1	G	433	ALA	C-N-CA	7.84	129.64	119.84
1	R	496	ASP	CA-CB-CG	7.84	120.44	112.60
1	F	76	LEU	N-CA-CB	-7.83	99.03	110.47
1	F	196	ARG	NE-CZ-NH2	7.83	126.25	119.20
1	N	185	VAL	N-CA-C	7.83	119.55	110.62
1	R	74	THR	O-C-N	-7.83	113.82	122.12
1	P	170	SER	N-CA-C	7.83	121.93	112.38
1	K	349	GLN	OE1-CD-NE2	-7.82	114.78	122.60
1	F	182	ALA	CA-C-O	7.82	129.03	120.82
1	E	433	ALA	CA-C-N	7.82	129.61	119.84
1	E	433	ALA	C-N-CA	7.82	129.61	119.84
1	L	473	LEU	CA-C-O	-7.81	110.55	120.31
1	S	345	GLU	O-C-N	-7.81	113.72	122.23
1	B	116	LYS	CA-C-N	7.80	133.09	120.60
1	B	116	LYS	C-N-CA	7.80	133.09	120.60
1	A	178	ARG	CA-C-N	7.79	131.05	120.38
1	A	178	ARG	C-N-CA	7.79	131.05	120.38
1	E	421	VAL	CA-C-N	7.79	130.93	120.65
1	E	421	VAL	C-N-CA	7.79	130.93	120.65
1	Q	82	GLN	CA-C-N	7.79	131.10	120.67
1	Q	82	GLN	C-N-CA	7.79	131.10	120.67

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Q	55	MET	CA-C-N	7.79	131.93	120.87
1	Q	55	MET	C-N-CA	7.79	131.93	120.87
1	G	287	VAL	N-CA-C	7.78	118.56	110.62
1	N	168	SER	N-CA-C	-7.78	102.58	112.93
1	B	307	VAL	CA-C-O	7.78	128.66	120.25
1	S	429	LEU	CA-C-N	7.78	130.71	120.28
1	S	429	LEU	C-N-CA	7.78	130.71	120.28
1	K	112	GLY	N-CA-C	7.78	123.80	113.37
1	M	94	LYS	N-CA-C	7.78	119.44	110.97
1	D	53	ARG	NE-CZ-NH1	7.77	129.27	121.50
1	C	328	LEU	N-CA-C	7.77	119.75	111.28
1	E	302	LYS	CA-C-N	7.76	128.44	120.60
1	E	302	LYS	C-N-CA	7.76	128.44	120.60
1	F	342	ASN	OD1-CG-ND2	-7.75	114.85	122.60
1	N	360	ARG	NE-CZ-NH2	7.75	126.17	119.20
1	G	423	ILE	O-C-N	-7.75	114.30	121.89
1	M	504	GLU	CA-C-N	7.75	129.52	119.84
1	M	504	GLU	C-N-CA	7.75	129.52	119.84
1	H	185	VAL	O-C-N	-7.74	114.31	121.89
1	M	440	GLU	CA-C-N	7.73	130.49	120.44
1	M	440	GLU	C-N-CA	7.73	130.49	120.44
1	F	403	GLY	CA-C-N	7.73	130.48	120.44
1	F	403	GLY	C-N-CA	7.73	130.48	120.44
1	I	512	ALA	CA-C-N	7.72	130.29	120.56
1	I	512	ALA	C-N-CA	7.72	130.29	120.56
1	K	320	VAL	CA-CB-CG1	7.72	123.53	110.40
1	O	339	VAL	N-CA-CB	7.72	118.94	110.53
1	M	507	LEU	CA-C-N	7.71	130.28	120.56
1	M	507	LEU	C-N-CA	7.71	130.28	120.56
1	H	388	GLU	N-CA-C	7.71	122.37	112.34
1	H	391	VAL	CA-C-N	7.71	130.47	120.44
1	H	391	VAL	C-N-CA	7.71	130.47	120.44
1	L	188	ALA	N-CA-C	7.71	120.58	111.71
1	R	59	LEU	O-C-N	7.71	132.28	123.27
1	F	33	ARG	CA-C-N	7.70	130.45	120.44
1	F	33	ARG	C-N-CA	7.70	130.45	120.44
1	K	360	ARG	NE-CZ-NH1	-7.70	113.80	121.50
1	G	524	LEU	N-CA-C	7.70	120.75	111.82
1	M	237	MET	CA-C-N	7.69	127.45	119.76
1	M	237	MET	C-N-CA	7.69	127.45	119.76
1	O	191	GLN	N-CA-C	7.69	119.74	111.36
1	R	404	THR	N-CA-C	7.69	120.34	111.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	438	GLY	CA-C-N	7.69	130.89	120.44
1	C	438	GLY	C-N-CA	7.69	130.89	120.44
1	K	140	GLU	CA-C-N	7.68	130.24	120.56
1	K	140	GLU	C-N-CA	7.68	130.24	120.56
1	R	143	LEU	N-CA-C	-7.68	102.50	111.03
1	G	265	ARG	NE-CZ-NH1	-7.68	113.82	121.50
1	N	83	HIS	CA-CB-CG	-7.68	106.12	113.80
1	M	477	HIS	CG-CD2-NE2	7.67	114.87	107.20
1	Q	240	ARG	NE-CZ-NH2	-7.67	112.30	119.20
1	N	141	VAL	N-CA-C	7.66	118.40	110.36
1	H	383	ILE	N-CA-C	7.66	120.51	108.87
1	N	401	ALA	CA-C-N	7.66	131.04	120.63
1	N	401	ALA	C-N-CA	7.66	131.04	120.63
1	I	206	ASN	OD1-CG-ND2	-7.66	114.94	122.60
1	C	290	ILE	CB-CA-C	-7.65	102.30	111.94
1	D	433	ALA	CA-C-N	7.64	129.40	119.84
1	D	433	ALA	C-N-CA	7.64	129.40	119.84
1	E	360	ARG	O-C-N	-7.64	113.84	123.24
1	P	182	ALA	CA-C-O	-7.64	112.72	120.90
1	R	305	ASP	O-C-N	-7.64	114.08	122.79
1	H	87	LYS	N-CA-C	7.64	120.49	111.71
1	E	191	GLN	CA-C-N	7.63	132.65	120.82
1	E	191	GLN	C-N-CA	7.63	132.65	120.82
1	G	268	ASP	O-C-N	-7.63	114.60	121.39
1	S	339	VAL	CB-CA-C	-7.63	101.45	110.91
1	Q	461	ASN	CA-CB-CG	-7.63	104.97	112.60
1	F	474	ARG	NE-CZ-NH2	7.63	126.06	119.20
1	B	296	ASN	CA-C-O	7.62	128.39	119.32
1	L	457	ILE	N-CA-C	7.62	119.31	110.62
1	O	204	LEU	O-C-N	-7.62	113.31	122.22
1	E	152	THR	N-CA-CB	7.62	122.09	109.60
1	G	109	ILE	N-CA-C	7.62	118.36	110.36
1	M	310	SER	N-CA-C	7.61	120.46	111.71
1	R	197	GLY	O-C-N	7.61	129.86	122.41
1	R	491	ALA	CA-C-O	7.61	128.48	120.42
1	O	480	GLU	O-C-N	-7.60	113.48	122.15
1	F	80	ASP	CA-CB-CG	-7.60	105.00	112.60
1	S	378	SER	CB-CA-C	-7.60	99.12	110.67
1	O	209	ILE	CB-CA-C	-7.59	101.69	110.73
1	B	403	GLY	CA-C-N	7.59	130.31	120.44
1	B	403	GLY	C-N-CA	7.59	130.31	120.44
1	S	359	GLU	O-C-N	-7.59	114.33	123.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	S	502	VAL	N-CA-C	7.59	114.33	106.21
1	B	396	ARG	O-C-N	7.59	129.92	122.03
1	L	91	GLN	CB-CG-CD	-7.59	99.70	112.60
1	G	351	LEU	O-C-N	-7.59	113.91	122.86
1	F	474	ARG	NE-CZ-NH1	-7.58	113.92	121.50
1	E	261	ASP	N-CA-C	-7.58	104.04	113.28
1	Q	499	GLN	CG-CD-NE2	-7.57	105.05	116.40
1	S	342	ASN	CA-CB-CG	-7.56	105.04	112.60
1	G	174	VAL	CA-C-O	7.56	129.67	121.36
1	L	195	LEU	O-C-N	-7.56	113.44	122.96
1	S	326	SER	N-CA-C	7.56	121.42	111.75
1	M	462	ALA	CA-C-N	7.55	132.99	121.51
1	M	462	ALA	C-N-CA	7.55	132.99	121.51
1	H	185	VAL	CA-C-O	7.54	128.90	121.05
1	F	420	ALA	N-CA-C	7.54	120.22	111.02
1	G	360	ARG	N-CA-CB	7.54	122.29	110.84
1	P	92	ILE	CB-CA-C	-7.53	102.15	112.24
1	D	466	PRO	N-CA-C	7.52	125.97	113.78
1	N	336	GLY	N-CA-C	-7.51	104.83	115.43
1	S	233	VAL	N-CA-C	7.51	118.28	110.62
1	R	311	TYR	CA-C-O	7.51	128.44	120.70
1	O	365	ASP	CA-CB-CG	7.51	120.11	112.60
1	A	233	VAL	O-C-N	-7.51	114.21	121.94
1	B	400	ASP	CA-CB-CG	-7.51	105.09	112.60
1	R	126	VAL	N-CA-CB	7.51	119.56	111.00
1	L	464	PHE	CA-CB-CG	-7.50	106.30	113.80
1	E	507	LEU	CA-C-N	7.50	130.00	120.56
1	E	507	LEU	C-N-CA	7.50	130.00	120.56
1	K	260	LEU	N-CA-C	7.49	120.33	111.71
1	B	257	LYS	CA-C-N	7.49	129.20	119.84
1	B	257	LYS	C-N-CA	7.49	129.20	119.84
1	S	513	ILE	CA-C-O	7.48	129.10	121.17
1	L	340	VAL	N-CA-CB	-7.48	101.91	111.64
1	P	41	ALA	CA-C-N	7.48	130.71	120.46
1	P	41	ALA	C-N-CA	7.48	130.71	120.46
1	L	503	ILE	CA-C-O	-7.48	112.93	121.75
1	Q	84	PRO	CA-C-N	7.47	130.63	120.54
1	Q	84	PRO	C-N-CA	7.47	130.63	120.54
1	E	229	ASP	N-CA-CB	-7.47	98.85	110.06
1	I	384	ARG	N-CA-C	-7.47	95.98	108.75
1	D	283	ILE	CA-CB-CG1	7.47	123.10	110.40
1	H	327	ASP	CA-C-N	7.47	130.29	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	327	ASP	C-N-CA	7.47	130.29	120.28
1	B	465	ASP	CA-C-N	7.46	127.00	119.24
1	B	465	ASP	C-N-CA	7.46	127.00	119.24
1	G	81	LEU	CA-C-N	7.46	130.28	120.28
1	G	81	LEU	C-N-CA	7.46	130.28	120.28
1	B	276	LEU	CA-C-N	7.46	130.77	120.63
1	B	276	LEU	C-N-CA	7.46	130.77	120.63
1	M	191	GLN	CA-C-N	7.45	132.27	121.02
1	M	191	GLN	C-N-CA	7.45	132.27	121.02
1	P	401	ALA	N-CA-C	7.45	119.40	111.28
1	S	524	LEU	CA-C-N	7.45	130.87	120.29
1	S	524	LEU	C-N-CA	7.45	130.87	120.29
1	C	175	ALA	CA-C-O	7.45	127.24	119.05
1	K	397	ALA	CA-C-N	7.45	130.87	120.29
1	K	397	ALA	C-N-CA	7.45	130.87	120.29
1	S	309	GLN	N-CA-C	-7.45	102.53	111.69
1	O	243	ASN	CA-CB-CG	-7.45	105.15	112.60
1	B	203	ASP	CA-C-O	7.44	128.28	120.54
1	I	228	VAL	N-CA-CB	7.44	119.48	111.00
1	C	440	GLU	CA-C-N	7.44	130.11	120.44
1	C	440	GLU	C-N-CA	7.44	130.11	120.44
1	C	336	GLY	CA-C-N	7.44	131.57	121.01
1	C	336	GLY	C-N-CA	7.44	131.57	121.01
1	H	191	GLN	CA-C-O	7.44	128.30	120.42
1	L	111	SER	N-CA-CB	7.44	120.80	110.01
1	L	445	GLU	CA-C-N	7.44	130.47	120.65
1	L	445	GLU	C-N-CA	7.44	130.47	120.65
1	O	514	LYS	CA-C-N	7.44	130.47	120.65
1	O	514	LYS	C-N-CA	7.44	130.47	120.65
1	F	384	ARG	N-CA-C	-7.43	97.75	108.60
1	L	74	THR	O-C-N	-7.43	114.24	122.12
1	L	280	GLU	N-CA-C	-7.43	102.55	111.69
1	N	279	GLU	O-C-N	-7.43	112.47	122.43
1	Q	104	THR	N-CA-CB	7.43	121.15	110.16
1	O	191	GLN	OE1-CD-NE2	-7.42	115.18	122.60
1	B	408	VAL	N-CA-C	7.42	118.19	110.62
1	S	317	VAL	O-C-N	-7.42	115.24	123.03
1	Q	270	THR	CA-C-N	7.41	130.82	120.29
1	Q	270	THR	C-N-CA	7.41	130.82	120.29
1	D	115	VAL	N-CA-CB	7.41	119.22	110.55
1	O	196	ARG	NE-CZ-NH2	7.41	125.87	119.20
1	F	409	ILE	CA-C-N	7.40	130.94	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	409	ILE	C-N-CA	7.40	130.94	120.28
1	M	261	ASP	CA-CB-CG	-7.40	105.20	112.60
1	P	33	ARG	N-CA-C	7.40	119.13	111.14
1	R	114	LEU	CA-C-N	7.40	129.88	120.56
1	R	114	LEU	C-N-CA	7.40	129.88	120.56
1	H	474	ARG	N-CA-C	7.39	121.74	112.87
1	M	360	ARG	NE-CZ-NH1	-7.39	114.11	121.50
1	Q	346	ILE	N-CA-C	7.39	119.34	109.37
1	N	435	GLN	CA-C-O	7.38	127.91	119.27
1	A	439	LYS	N-CA-C	7.38	119.11	111.14
1	H	518	GLU	CA-C-N	7.38	130.39	120.65
1	H	518	GLU	C-N-CA	7.38	130.39	120.65
1	L	511	ASN	CA-CB-CG	-7.37	105.23	112.60
1	N	440	GLU	O-C-N	-7.37	113.80	122.20
1	A	384	ARG	CA-C-O	-7.37	112.51	121.06
1	M	443	ALA	N-CA-C	7.37	118.96	111.07
1	C	83	HIS	N-CA-C	7.37	118.93	109.65
1	A	106	THR	N-CA-C	-7.36	102.86	111.03
1	F	54	GLY	CA-C-O	-7.36	113.40	122.75
1	M	304	ILE	O-C-N	-7.36	115.44	123.03
1	L	136	LYS	O-C-N	-7.36	114.20	122.08
1	L	328	LEU	CA-C-N	7.36	130.01	120.44
1	L	328	LEU	C-N-CA	7.36	130.01	120.44
1	K	373	ALA	N-CA-CB	7.36	120.76	110.17
1	L	49	THR	CA-CB-OG1	7.36	120.63	109.60
1	N	192	VAL	CA-C-N	7.36	131.19	120.82
1	N	192	VAL	C-N-CA	7.36	131.19	120.82
1	C	424	GLU	O-C-N	-7.35	114.15	122.09
1	D	399	ARG	N-CA-C	7.35	118.94	111.07
1	Q	360	ARG	NE-CZ-NH1	-7.35	114.15	121.50
1	K	417	GLY	O-C-N	-7.35	116.49	122.81
1	O	459	ILE	CA-C-N	7.35	132.87	121.19
1	O	459	ILE	C-N-CA	7.35	132.87	121.19
1	Q	408	VAL	CA-C-O	7.35	128.59	120.95
1	E	469	LEU	N-CA-C	7.34	119.28	111.28
1	P	445	GLU	CA-C-N	7.34	130.34	120.65
1	P	445	GLU	C-N-CA	7.34	130.34	120.65
1	S	207	ILE	CA-C-O	7.34	127.68	120.27
1	E	419	GLY	N-CA-C	7.33	124.75	115.21
1	P	36	ILE	CA-C-N	7.33	132.84	121.19
1	P	36	ILE	C-N-CA	7.33	132.84	121.19
1	D	523	VAL	O-C-N	-7.33	114.28	121.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	375	ASN	CA-C-N	7.33	127.95	120.04
1	P	375	ASN	C-N-CA	7.33	127.95	120.04
1	Q	66	ILE	O-C-N	-7.33	115.67	123.14
1	C	146	ILE	N-CA-C	-7.32	103.82	111.58
1	B	219	ASP	CA-CB-CG	7.32	119.92	112.60
1	N	165	ALA	CA-C-N	7.32	130.09	120.28
1	N	165	ALA	C-N-CA	7.32	130.09	120.28
1	Q	433	ALA	CA-C-O	-7.32	110.14	120.16
1	R	96	GLN	OE1-CD-NE2	-7.32	115.28	122.60
1	N	170	SER	N-CA-C	7.31	121.30	112.38
1	P	223	VAL	O-C-N	-7.31	115.51	123.18
1	I	180	TYR	N-CA-C	7.30	118.89	111.07
1	A	91	GLN	N-CA-C	7.30	119.24	111.28
1	P	83	HIS	N-CA-C	7.30	119.39	109.24
1	S	448	ALA	O-C-N	-7.30	114.21	122.09
1	F	209	ILE	O-C-N	-7.30	115.95	123.03
1	Q	478	GLU	N-CA-C	-7.30	102.67	113.61
1	H	223	VAL	CA-C-O	7.29	128.21	120.48
1	E	384	ARG	NE-CZ-NH1	7.29	128.79	121.50
1	B	82	GLN	OE1-CD-NE2	-7.29	115.31	122.60
1	D	494	PRO	N-CA-CB	7.29	109.83	103.27
1	O	510	MET	N-CA-C	-7.29	104.37	113.55
1	Q	102	ASP	CA-CB-CG	-7.29	105.31	112.60
1	P	477	HIS	N-CA-C	7.29	122.28	112.88
1	D	389	ARG	N-CA-C	-7.28	104.92	113.88
1	N	520	ALA	N-CA-C	7.28	119.90	111.02
1	G	390	LEU	N-CA-C	7.28	119.21	111.28
1	A	354	ALA	O-C-N	-7.28	114.29	123.24
1	C	30	GLU	N-CA-C	7.28	126.30	110.80
1	E	321	ARG	NE-CZ-NH2	7.28	125.75	119.20
1	K	387	LEU	CA-C-N	7.27	132.34	120.63
1	K	387	LEU	C-N-CA	7.27	132.34	120.63
1	D	264	ILE	CA-CB-CG1	7.27	122.76	110.40
1	M	346	ILE	O-C-N	-7.27	115.13	122.62
1	P	311	TYR	CA-C-N	7.27	131.37	120.31
1	P	311	TYR	C-N-CA	7.27	131.37	120.31
1	D	504	GLU	N-CA-C	7.27	120.01	108.23
1	I	183	ASP	CA-CB-CG	-7.27	105.33	112.60
1	K	70	ASN	CA-C-N	7.27	131.70	121.24
1	K	70	ASN	C-N-CA	7.27	131.70	121.24
1	Q	532	ALA	CB-CA-C	-7.26	99.60	110.50
1	O	288	ASP	CA-C-N	7.26	131.35	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	288	ASP	C-N-CA	7.26	131.35	120.31
1	B	433	ALA	O-C-N	-7.26	112.97	121.32
1	K	90	VAL	N-CA-C	7.26	120.13	111.05
1	C	53	ARG	CA-C-N	7.26	128.73	120.53
1	C	53	ARG	C-N-CA	7.26	128.73	120.53
1	R	234	HIS	CG-CD2-NE2	7.25	114.45	107.20
1	C	469	LEU	CA-C-N	7.25	129.86	120.44
1	C	469	LEU	C-N-CA	7.25	129.86	120.44
1	H	516	ALA	N-CA-C	7.24	119.80	111.11
1	L	433	ALA	CA-C-O	-7.24	110.24	120.16
1	F	256	GLU	CA-C-N	7.24	130.46	120.39
1	F	256	GLU	C-N-CA	7.24	130.46	120.39
1	Q	114	LEU	CA-C-N	7.24	129.68	120.56
1	Q	114	LEU	C-N-CA	7.24	129.68	120.56
1	A	270	THR	CA-C-N	7.23	130.56	120.29
1	A	270	THR	C-N-CA	7.23	130.56	120.29
1	F	247	ALA	CA-C-N	7.23	135.05	122.32
1	F	247	ALA	C-N-CA	7.23	135.05	122.32
1	N	479	ASN	N-CA-C	7.23	120.43	110.24
1	Q	267	ASN	CA-CB-CG	-7.22	105.38	112.60
1	O	387	LEU	CA-C-N	7.22	132.25	120.63
1	O	387	LEU	C-N-CA	7.22	132.25	120.63
1	K	487	ILE	N-CA-CB	7.22	121.00	111.90
1	O	493	GLN	CA-C-N	7.22	127.63	119.83
1	O	493	GLN	C-N-CA	7.22	127.63	119.83
1	P	104	THR	CA-C-N	7.22	129.96	120.28
1	P	104	THR	C-N-CA	7.22	129.96	120.28
1	F	268	ASP	CB-CA-C	-7.22	100.46	110.13
1	C	71	ASP	CA-C-N	7.21	135.54	121.41
1	C	71	ASP	C-N-CA	7.21	135.54	121.41
1	I	298	ILE	CB-CA-C	7.21	119.93	110.12
1	K	31	ALA	N-CA-CB	-7.21	99.45	110.20
1	N	165	ALA	O-C-N	-7.21	114.30	122.09
1	F	227	VAL	CA-C-N	7.21	131.38	122.37
1	F	227	VAL	C-N-CA	7.21	131.38	122.37
1	P	340	VAL	O-C-N	-7.21	114.67	123.10
1	Q	291	LEU	CA-C-N	7.21	132.13	120.60
1	Q	291	LEU	C-N-CA	7.21	132.13	120.60
1	O	261	ASP	CA-CB-CG	-7.20	105.40	112.60
1	E	301	GLN	N-CA-C	-7.20	103.05	112.41
1	G	375	ASN	CA-C-N	7.20	127.20	119.28
1	G	375	ASN	C-N-CA	7.20	127.20	119.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	50	TYR	CA-C-N	7.20	133.17	121.87
1	H	50	TYR	C-N-CA	7.20	133.17	121.87
1	F	185	VAL	N-CA-C	7.20	118.82	110.62
1	A	162	ARG	NE-CZ-NH2	7.19	125.67	119.20
1	F	90	VAL	N-CA-C	7.19	120.04	111.05
1	N	32	VAL	CA-C-N	7.19	129.79	120.44
1	N	32	VAL	C-N-CA	7.19	129.79	120.44
1	L	414	ALA	O-C-N	-7.18	114.60	123.44
1	E	309	GLN	CA-C-N	7.18	130.62	120.28
1	E	309	GLN	C-N-CA	7.18	130.62	120.28
1	F	522	LEU	N-CA-C	-7.18	103.53	111.36
1	K	121	LEU	O-C-N	-7.18	113.96	122.15
1	M	525	ARG	NE-CZ-NH1	-7.18	114.32	121.50
1	F	475	SER	CA-C-O	7.18	128.76	120.00
1	Q	389	ARG	CA-C-N	7.18	129.90	120.28
1	Q	389	ARG	C-N-CA	7.18	129.90	120.28
1	F	284	LYS	CA-C-N	7.17	130.20	120.44
1	F	284	LYS	C-N-CA	7.17	130.20	120.44
1	S	260	LEU	N-CA-C	-7.17	103.54	114.16
1	I	135	TYR	CA-C-N	7.17	129.76	120.44
1	I	135	TYR	C-N-CA	7.17	129.76	120.44
1	E	72	GLY	O-C-N	-7.17	115.29	122.18
1	B	165	ALA	CA-C-N	7.17	130.47	120.29
1	B	165	ALA	C-N-CA	7.17	130.47	120.29
1	C	404	THR	CA-C-N	7.17	130.28	120.46
1	C	404	THR	C-N-CA	7.17	130.28	120.46
1	R	372	GLY	CA-C-N	7.17	131.36	120.82
1	R	372	GLY	C-N-CA	7.17	131.36	120.82
1	O	519	ALA	CA-C-N	7.16	130.21	120.54
1	O	519	ALA	C-N-CA	7.16	130.21	120.54
1	O	78	LYS	N-CA-C	7.16	121.85	113.18
1	P	96	GLN	O-C-N	-7.16	112.36	121.74
1	O	178	ARG	NE-CZ-NH2	7.16	125.64	119.20
1	B	185	VAL	N-CA-C	7.16	118.78	110.62
1	C	522	LEU	CA-C-N	7.16	130.26	120.46
1	C	522	LEU	C-N-CA	7.16	130.26	120.46
1	A	82	GLN	O-C-N	-7.15	113.97	122.27
1	G	351	LEU	CA-C-N	7.15	129.30	122.36
1	G	351	LEU	C-N-CA	7.15	129.30	122.36
1	S	245	LYS	CA-C-N	7.15	130.36	120.49
1	S	245	LYS	C-N-CA	7.15	130.36	120.49
1	S	346	ILE	N-CA-C	7.15	118.80	109.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	500	LYS	CA-C-O	7.15	126.30	118.65
1	A	171	SER	O-C-N	-7.15	112.94	122.23
1	Q	525	ARG	CA-C-O	7.14	128.19	119.97
1	D	162	ARG	CA-C-N	7.14	132.45	120.88
1	D	162	ARG	C-N-CA	7.14	132.45	120.88
1	E	428	LYS	CA-C-N	7.14	130.43	120.29
1	E	428	LYS	C-N-CA	7.14	130.43	120.29
1	E	518	GLU	CA-C-N	7.14	130.07	120.65
1	E	518	GLU	C-N-CA	7.14	130.07	120.65
1	B	391	VAL	CA-C-N	7.14	129.72	120.44
1	B	391	VAL	C-N-CA	7.14	129.72	120.44
1	S	178	ARG	NE-CZ-NH2	7.13	125.62	119.20
1	B	293	THR	N-CA-C	-7.13	104.73	113.50
1	R	151	GLN	CG-CD-NE2	-7.13	105.70	116.40
1	I	61	ASP	CA-CB-CG	-7.13	105.47	112.60
1	E	447	TYR	O-C-N	-7.13	114.56	122.12
1	M	102	ASP	CA-C-N	7.13	129.32	120.34
1	M	102	ASP	C-N-CA	7.13	129.32	120.34
1	F	115	VAL	CA-C-N	7.13	130.06	120.65
1	F	115	VAL	C-N-CA	7.13	130.06	120.65
1	I	522	LEU	CA-C-N	7.13	130.22	120.46
1	I	522	LEU	C-N-CA	7.13	130.22	120.46
1	R	202	VAL	CA-C-O	7.13	126.56	120.22
1	I	334	ALA	O-C-N	-7.12	112.86	122.19
1	N	83	HIS	CA-C-N	7.12	126.38	118.97
1	N	83	HIS	C-N-CA	7.12	126.38	118.97
1	A	413	ARG	NE-CZ-NH2	7.12	125.61	119.20
1	K	287	VAL	CB-CA-C	-7.12	102.86	111.97
1	O	204	LEU	CA-C-O	7.12	128.15	120.10
1	K	468	ASP	O-C-N	-7.12	114.46	122.08
1	P	305	ASP	N-CA-C	7.12	119.49	110.24
1	G	204	LEU	N-CA-C	7.12	120.86	111.75
1	P	120	ASP	CA-CB-CG	7.12	119.72	112.60
1	L	507	LEU	CA-C-N	7.11	129.52	120.56
1	L	507	LEU	C-N-CA	7.11	129.52	120.56
1	L	98	GLU	O-C-N	-7.11	113.99	123.23
1	O	185	VAL	N-CA-C	7.11	118.72	110.62
1	N	210	VAL	O-C-N	-7.11	115.50	123.18
1	F	61	ASP	CA-CB-CG	-7.11	105.49	112.60
1	S	281	ASN	OD1-CG-ND2	-7.11	115.49	122.60
1	Q	118	ALA	CA-C-O	7.11	128.18	119.79
1	F	417	GLY	O-C-N	-7.10	115.45	122.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Q	507	LEU	CA-C-N	7.10	129.51	120.56
1	Q	507	LEU	C-N-CA	7.10	129.51	120.56
1	O	304	ILE	O-C-N	-7.10	113.70	122.57
1	B	264	ILE	N-CA-C	7.10	119.34	109.55
1	O	207	ILE	N-CA-C	-7.09	97.27	107.77
1	H	443	ALA	N-CA-C	7.09	118.66	111.07
1	H	514	LYS	CA-C-N	7.09	130.01	120.65
1	H	514	LYS	C-N-CA	7.09	130.01	120.65
1	P	329	GLU	N-CA-C	7.09	118.66	111.07
1	D	470	LEU	CA-C-O	7.09	128.26	120.82
1	N	392	ASP	CA-C-O	7.08	128.26	120.82
1	N	420	ALA	N-CA-C	7.08	119.66	111.02
1	N	517	THR	N-CA-C	7.08	119.08	111.36
1	H	268	ASP	CA-C-N	7.08	126.71	119.56
1	H	268	ASP	C-N-CA	7.08	126.71	119.56
1	N	87	LYS	CA-C-N	7.08	130.34	120.29
1	N	87	LYS	C-N-CA	7.08	130.34	120.29
1	G	179	GLU	CA-C-O	7.08	128.05	120.55
1	G	395	GLU	CA-C-N	7.08	130.07	120.44
1	G	395	GLU	C-N-CA	7.08	130.07	120.44
1	A	146	ILE	CA-C-O	-7.08	112.61	120.46
1	N	191	GLN	CA-C-N	7.08	132.46	120.29
1	N	191	GLN	C-N-CA	7.08	132.46	120.29
1	P	338	ARG	NE-CZ-NH2	-7.08	112.83	119.20
1	Q	496	ASP	CA-CB-CG	7.08	119.67	112.60
1	N	370	VAL	O-C-N	-7.07	113.73	122.57
1	G	478	GLU	N-CA-C	7.07	119.89	111.33
1	P	514	LYS	CA-C-N	7.07	129.98	120.65
1	P	514	LYS	C-N-CA	7.07	129.98	120.65
1	F	512	ALA	N-CA-C	7.06	118.62	111.07
1	I	184	ILE	CA-C-N	7.06	130.49	120.53
1	I	184	ILE	C-N-CA	7.06	130.49	120.53
1	S	229	ASP	CA-C-O	7.06	128.08	120.10
1	O	442	LEU	N-CA-C	7.06	119.87	111.33
1	Q	179	GLU	CA-C-N	7.06	129.61	120.44
1	Q	179	GLU	C-N-CA	7.06	129.61	120.44
1	Q	287	VAL	N-CA-CB	-7.06	102.29	110.55
1	L	142	ALA	N-CA-C	7.05	119.86	111.33
1	F	479	ASN	CA-C-N	7.05	129.73	120.28
1	F	479	ASN	C-N-CA	7.05	129.73	120.28
1	K	303	GLY	N-CA-C	7.05	121.70	112.25
1	S	184	ILE	N-CA-C	7.05	117.19	110.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	228	VAL	CA-CB-CG2	-7.05	98.42	110.40
1	M	413	ARG	NE-CZ-NH2	7.04	125.54	119.20
1	P	375	ASN	O-C-N	-7.04	115.52	121.23
1	Q	348	GLU	CA-C-O	7.04	128.09	120.20
1	G	43	GLU	CA-C-N	7.04	134.09	120.99
1	G	43	GLU	C-N-CA	7.04	134.09	120.99
1	I	33	ARG	CA-C-N	7.04	130.58	120.79
1	I	33	ARG	C-N-CA	7.04	130.58	120.79
1	S	36	ILE	N-CA-C	7.04	117.55	110.23
1	A	61	ASP	CA-C-N	7.04	130.03	120.38
1	A	61	ASP	C-N-CA	7.04	130.03	120.38
1	P	199	LYS	O-C-N	-7.04	115.11	123.27
1	Q	196	ARG	NE-CZ-NH2	7.04	125.53	119.20
1	O	416	ALA	O-C-N	-7.04	114.81	123.04
1	A	249	ILE	N-CA-C	7.03	117.99	107.51
1	M	152	THR	N-CA-C	7.03	119.28	109.15
1	Q	372	GLY	CA-C-N	7.03	131.16	120.82
1	Q	372	GLY	C-N-CA	7.03	131.16	120.82
1	A	105	LYS	CA-C-O	-7.02	113.11	120.55
1	O	427	LYS	CA-C-N	7.02	130.63	120.38
1	O	427	LYS	C-N-CA	7.02	130.63	120.38
1	G	141	VAL	CA-C-N	7.02	130.00	120.38
1	G	141	VAL	C-N-CA	7.02	130.00	120.38
1	H	85	ALA	CA-C-N	7.02	129.56	120.44
1	H	85	ALA	C-N-CA	7.02	129.56	120.44
1	N	458	LEU	O-C-N	-7.02	114.84	122.07
1	L	172	LYS	O-C-N	-7.01	114.86	122.85
1	F	209	ILE	CB-CA-C	7.01	119.08	110.73
1	P	441	GLN	CA-C-N	7.01	129.99	120.38
1	P	441	GLN	C-N-CA	7.01	129.99	120.38
1	R	126	VAL	CB-CA-C	-7.01	102.47	110.96
1	Q	499	GLN	CG-CD-OE1	7.01	134.82	120.80
1	G	245	LYS	CA-C-N	7.01	130.16	120.49
1	G	245	LYS	C-N-CA	7.01	130.16	120.49
1	H	225	GLY	O-C-N	-7.01	115.12	123.46
1	A	301	GLN	N-CA-C	-7.00	105.66	114.56
1	I	71	ASP	CA-CB-CG	-7.00	105.60	112.60
1	B	500	LYS	CA-C-O	7.00	126.14	118.65
1	M	230	LYS	CA-C-O	7.00	129.52	121.47
1	B	304	ILE	CA-C-N	7.00	131.10	120.82
1	B	304	ILE	C-N-CA	7.00	131.10	120.82
1	N	120	ASP	O-C-N	-6.99	113.30	122.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Q	137	LYS	CA-C-N	6.99	130.22	120.29
1	Q	137	LYS	C-N-CA	6.99	130.22	120.29
1	C	305	ASP	N-CA-C	6.99	119.33	110.24
1	A	176	GLY	CA-C-O	-6.99	114.41	120.98
1	B	331	LEU	N-CA-CB	-6.99	99.53	110.44
1	B	401	ALA	N-CA-C	6.99	119.79	111.33
1	K	415	ILE	N-CA-CB	-6.99	104.37	112.34
1	R	274	LYS	CA-C-O	6.99	127.85	119.61
1	C	105	LYS	CA-C-N	6.98	130.13	120.63
1	C	105	LYS	C-N-CA	6.98	130.13	120.63
1	C	175	ALA	O-C-N	-6.98	113.76	122.35
1	H	183	ASP	CA-C-N	6.98	129.36	120.56
1	H	183	ASP	C-N-CA	6.98	129.36	120.56
1	Q	386	GLY	O-C-N	-6.98	116.28	122.91
1	L	288	ASP	N-CA-C	6.98	118.96	111.36
1	E	211	LYS	O-C-N	-6.97	114.76	123.27
1	M	346	ILE	CA-C-O	6.97	128.55	121.58
1	S	467	ILE	N-CA-C	6.97	117.11	110.42
1	C	501	GLY	O-C-N	-6.97	113.53	122.39
1	N	273	GLN	OE1-CD-NE2	-6.97	115.63	122.60
1	P	82	GLN	CA-C-N	6.97	131.30	121.61
1	P	82	GLN	C-N-CA	6.97	131.30	121.61
1	G	381	ILE	CA-C-O	-6.97	112.12	121.32
1	D	506	ALA	N-CA-C	6.97	120.67	111.75
1	I	429	LEU	CA-C-N	6.97	129.62	120.28
1	I	429	LEU	C-N-CA	6.97	129.62	120.28
1	K	493	GLN	OE1-CD-NE2	-6.97	115.63	122.60
1	O	319	ALA	N-CA-C	6.97	120.87	109.72
1	N	32	VAL	N-CA-C	6.97	118.56	110.62
1	D	246	ILE	O-C-N	-6.96	115.30	122.75
1	B	420	ALA	N-CA-C	6.96	119.51	111.02
1	I	83	HIS	CA-C-O	-6.96	113.21	119.75
1	O	465	ASP	CA-CB-CG	6.96	119.56	112.60
1	P	390	LEU	O-C-N	-6.96	114.74	122.12
1	M	115	VAL	N-CA-CB	6.96	118.69	110.55
1	M	397	ALA	N-CA-C	6.96	119.46	111.11
1	P	316	GLY	CA-C-N	6.96	130.90	120.95
1	P	316	GLY	C-N-CA	6.96	130.90	120.95
1	O	220	THR	CA-CB-OG1	6.95	120.03	109.60
1	I	113	GLU	N-CA-C	6.95	118.94	111.36
1	M	201	TYR	CB-CG-CD1	-6.95	110.38	120.80
1	M	143	LEU	O-C-N	-6.95	114.53	122.03

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	S	117	LYS	O-C-N	-6.95	113.36	122.39
1	K	321	ARG	CA-C-N	6.95	131.99	122.34
1	K	321	ARG	C-N-CA	6.95	131.99	122.34
1	L	184	ILE	CA-C-O	-6.94	114.19	121.41
1	L	469	LEU	CA-C-O	-6.94	113.06	120.42
1	G	267	ASN	CA-C-O	6.94	126.63	118.79
1	P	514	LYS	N-CA-CB	6.94	120.32	110.12
1	M	198	ASP	CA-CB-CG	6.94	119.54	112.60
1	M	419	GLY	CA-C-N	6.93	130.43	120.79
1	M	419	GLY	C-N-CA	6.93	130.43	120.79
1	A	474	ARG	NE-CZ-NH1	-6.93	114.57	121.50
1	I	36	ILE	N-CA-CB	6.93	117.90	110.62
1	M	222	LEU	N-CA-C	-6.93	98.43	109.59
1	N	176	GLY	N-CA-C	6.93	122.52	111.64
1	R	34	ALA	CA-C-N	6.93	129.90	120.54
1	R	34	ALA	C-N-CA	6.93	129.90	120.54
1	E	204	LEU	CA-C-N	6.93	130.49	120.38
1	E	204	LEU	C-N-CA	6.93	130.49	120.38
1	C	510	MET	CA-C-N	6.92	130.83	120.31
1	C	510	MET	C-N-CA	6.92	130.83	120.31
1	H	359	GLU	O-C-N	-6.92	115.12	123.29
1	P	179	GLU	CA-C-N	6.92	129.44	120.44
1	P	179	GLU	C-N-CA	6.92	129.44	120.44
1	H	179	GLU	CA-C-N	6.92	129.44	120.44
1	H	179	GLU	C-N-CA	6.92	129.44	120.44
1	I	177	ALA	N-CA-CB	-6.92	101.72	111.62
1	D	508	VAL	N-CA-C	6.92	117.06	110.42
1	I	446	ALA	CA-C-O	6.92	128.26	121.00
1	Q	90	VAL	CA-C-N	6.92	129.55	120.28
1	Q	90	VAL	C-N-CA	6.92	129.55	120.28
1	D	179	GLU	CA-C-N	6.92	129.43	120.44
1	D	179	GLU	C-N-CA	6.92	129.43	120.44
1	K	399	ARG	NE-CZ-NH1	-6.91	114.59	121.50
1	Q	79	MET	CG-SD-CE	-6.91	85.69	100.90
1	G	91	GLN	OE1-CD-NE2	6.91	129.51	122.60
1	F	76	LEU	N-CA-C	-6.91	104.98	113.41
1	H	127	HIS	O-C-N	-6.91	113.69	121.43
1	I	149	LEU	O-C-N	-6.91	113.40	122.59
1	E	97	ASP	CA-C-N	6.91	130.51	120.71
1	E	97	ASP	C-N-CA	6.91	130.51	120.71
1	G	238	PRO	CA-C-O	-6.90	113.25	121.67
1	H	122	LEU	CA-C-N	6.90	129.53	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	122	LEU	C-N-CA	6.90	129.53	120.28
1	O	35	ASN	CA-C-N	6.90	129.50	120.60
1	O	35	ASN	C-N-CA	6.90	129.50	120.60
1	A	391	VAL	CA-C-N	6.90	129.85	120.54
1	A	391	VAL	C-N-CA	6.90	129.85	120.54
1	F	178	ARG	NE-CZ-NH2	6.90	125.41	119.20
1	C	296	ASN	OD1-CG-ND2	-6.90	115.70	122.60
1	I	352	GLY	CA-C-N	-6.89	113.27	122.99
1	I	352	GLY	C-N-CA	-6.89	113.27	122.99
1	K	390	LEU	N-CA-C	6.89	118.79	111.28
1	N	114	LEU	N-CA-C	6.89	118.80	111.28
1	B	285	GLU	CA-C-N	6.88	129.84	120.54
1	B	285	GLU	C-N-CA	6.88	129.84	120.54
1	C	194	GLU	CA-C-N	6.88	131.59	122.30
1	C	194	GLU	C-N-CA	6.88	131.59	122.30
1	O	453	SER	CA-C-N	6.88	129.83	120.54
1	O	453	SER	C-N-CA	6.88	129.83	120.54
1	B	285	GLU	N-CA-CB	6.88	119.96	109.91
1	E	240	ARG	CB-CA-C	-6.88	100.71	110.34
1	F	275	PHE	N-CA-C	-6.88	103.01	111.40
1	E	459	ILE	CB-CA-C	-6.88	103.16	111.97
1	L	197	GLY	CA-C-N	6.88	133.99	123.47
1	L	197	GLY	C-N-CA	6.88	133.99	123.47
1	B	510	MET	CA-C-O	6.88	127.58	119.67
1	A	443	ALA	CA-C-N	6.88	129.36	120.56
1	A	443	ALA	C-N-CA	6.88	129.36	120.56
1	O	122	LEU	O-C-N	-6.88	114.18	122.22
1	E	170	SER	N-CA-C	6.87	120.77	112.38
1	B	141	VAL	CA-C-O	-6.87	114.27	121.41
1	D	362	VAL	CA-C-O	6.86	128.36	121.09
1	D	290	ILE	N-CA-C	-6.86	105.07	111.45
1	E	80	ASP	CB-CA-C	6.86	120.35	111.50
1	I	67	THR	CB-CA-C	-6.86	99.58	110.14
1	R	165	ALA	CA-C-N	6.86	129.47	120.28
1	R	165	ALA	C-N-CA	6.86	129.47	120.28
1	A	423	ILE	N-CA-CB	6.86	119.04	110.47
1	H	49	THR	CA-CB-OG1	6.86	119.88	109.60
1	D	500	LYS	N-CA-C	-6.85	102.19	113.50
1	E	294	GLY	N-CA-C	-6.85	105.63	115.64
1	F	125	ASP	N-CA-C	6.85	118.93	110.91
1	L	108	VAL	N-CA-C	6.85	116.97	110.53
1	O	90	VAL	N-CA-C	6.85	117.61	110.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	343	ILE	CA-C-O	-6.85	113.17	120.64
1	D	178	ARG	NE-CZ-NH2	6.85	125.37	119.20
1	F	134	GLY	CA-C-N	6.85	129.46	120.28
1	F	134	GLY	C-N-CA	6.85	129.46	120.28
1	G	190	THR	O-C-N	-6.85	114.20	122.22
1	H	274	LYS	N-CA-C	6.85	121.09	112.87
1	I	212	LYS	O-C-N	-6.85	115.15	123.30
1	K	349	GLN	CA-C-O	6.85	127.87	119.79
1	O	165	ALA	N-CA-C	6.85	118.53	111.14
1	B	32	VAL	CA-C-N	6.84	129.75	120.44
1	B	32	VAL	C-N-CA	6.84	129.75	120.44
1	C	314	LYS	CA-C-O	6.84	127.80	119.38
1	I	509	LYS	O-C-N	-6.84	111.41	122.42
1	R	496	ASP	CA-C-O	6.84	128.33	120.60
1	A	85	ALA	N-CA-CB	6.84	120.13	109.94
1	N	310	SER	O-C-N	-6.84	114.22	122.22
1	P	233	VAL	CA-C-O	6.83	127.85	119.58
1	S	477	HIS	CG-CD2-NE2	6.83	114.03	107.20
1	M	188	ALA	N-CA-C	6.83	118.73	111.28
1	D	39	VAL	CA-CB-CG1	6.83	122.01	110.40
1	C	179	GLU	N-CA-C	6.83	119.59	111.33
1	F	244	ALA	N-CA-C	6.83	119.87	110.24
1	O	125	ASP	CA-CB-CG	-6.83	105.77	112.60
1	S	37	ALA	CA-C-N	6.83	129.76	120.54
1	S	37	ALA	C-N-CA	6.83	129.76	120.54
1	D	142	ALA	N-CA-C	6.82	119.59	111.33
1	S	303	GLY	N-CA-C	6.82	121.39	112.25
1	D	441	GLN	OE1-CD-NE2	-6.82	115.78	122.60
1	E	131	ILE	CA-C-N	6.82	129.29	120.56
1	E	131	ILE	C-N-CA	6.82	129.29	120.56
1	F	305	ASP	CA-CB-CG	-6.82	105.78	112.60
1	D	64	GLY	CA-C-N	6.82	130.39	120.71
1	D	64	GLY	C-N-CA	6.82	130.39	120.71
1	D	109	ILE	CA-C-O	-6.82	114.32	121.41
1	D	342	ASN	CA-CB-CG	-6.81	105.79	112.60
1	B	79	MET	N-CA-C	6.81	119.62	108.52
1	G	179	GLU	CA-C-N	6.81	129.29	120.44
1	G	179	GLU	C-N-CA	6.81	129.29	120.44
1	K	236	GLY	CA-C-N	6.81	131.02	120.60
1	K	236	GLY	C-N-CA	6.81	131.02	120.60
1	F	511	ASN	OD1-CG-ND2	-6.81	115.79	122.60
1	L	327	ASP	CA-C-N	6.81	129.29	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	327	ASP	C-N-CA	6.81	129.29	120.44
1	L	351	LEU	N-CA-C	6.81	121.40	109.96
1	B	32	VAL	O-C-N	-6.80	115.22	121.89
1	L	294	GLY	CA-C-O	6.80	126.14	118.86
1	E	161	LEU	CA-C-N	6.80	130.07	120.28
1	E	161	LEU	C-N-CA	6.80	130.07	120.28
1	D	42	VAL	CA-C-O	-6.79	113.88	120.95
1	Q	485	TYR	O-C-N	-6.79	115.09	123.04
1	K	37	ALA	CA-C-N	6.79	129.71	120.54
1	K	37	ALA	C-N-CA	6.79	129.71	120.54
1	L	144	GLN	CA-C-N	6.79	131.46	120.60
1	L	144	GLN	C-N-CA	6.79	131.46	120.60
1	M	231	GLU	N-CA-CB	-6.79	100.10	110.42
1	N	497	MET	CG-SD-CE	-6.79	85.97	100.90
1	M	303	GLY	CA-C-N	6.78	133.08	122.70
1	M	303	GLY	C-N-CA	6.78	133.08	122.70
1	H	469	LEU	CA-C-N	6.78	129.25	120.44
1	H	469	LEU	C-N-CA	6.78	129.25	120.44
1	A	239	LYS	CA-C-N	6.78	131.70	121.40
1	A	239	LYS	C-N-CA	6.78	131.70	121.40
1	D	464	PHE	CA-CB-CG	-6.78	107.03	113.80
1	E	347	SER	CA-C-O	6.78	129.10	121.51
1	L	338	ARG	NE-CZ-NH2	-6.78	113.10	119.20
1	Q	340	VAL	CA-C-O	6.77	127.78	120.53
1	P	477	HIS	CA-CB-CG	6.77	120.57	113.80
1	D	510	MET	CA-C-O	6.77	127.45	119.67
1	G	383	ILE	CA-C-N	6.77	133.85	121.94
1	G	383	ILE	C-N-CA	6.77	133.85	121.94
1	M	168	SER	N-CA-C	-6.77	103.68	112.68
1	P	338	ARG	O-C-N	-6.77	116.18	123.42
1	R	288	ASP	O-C-N	-6.77	113.95	122.27
1	F	388	GLU	N-CA-C	6.76	121.13	112.34
1	A	70	ASN	CA-CB-CG	6.76	119.36	112.60
1	F	205	ASP	N-CA-C	6.76	121.13	112.34
1	G	190	THR	CA-C-O	6.76	127.73	120.10
1	H	260	LEU	CA-C-N	6.76	129.33	120.28
1	H	260	LEU	C-N-CA	6.76	129.33	120.28
1	P	80	ASP	CA-CB-CG	-6.76	105.84	112.60
1	P	384	ARG	NE-CZ-NH2	-6.76	113.12	119.20
1	R	379	ILE	N-CA-C	6.76	118.67	108.80
1	D	139	GLU	CA-C-O	6.75	127.91	120.82
1	K	139	GLU	CB-CA-C	6.75	121.48	110.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	146	ILE	N-CA-C	-6.75	104.42	111.58
1	R	65	ASP	O-C-N	-6.75	114.65	122.89
1	Q	80	ASP	CA-CB-CG	-6.75	105.85	112.60
1	S	193	ALA	N-CA-C	6.75	120.17	110.24
1	O	120	ASP	CA-CB-CG	6.75	119.35	112.60
1	E	224	TYR	O-C-N	-6.75	114.28	122.71
1	R	49	THR	CA-C-O	6.75	127.14	119.18
1	I	228	VAL	N-CA-C	-6.75	97.91	108.23
1	R	391	VAL	CA-C-N	6.74	129.21	120.44
1	R	391	VAL	C-N-CA	6.74	129.21	120.44
1	G	408	VAL	CA-C-N	6.74	129.99	120.42
1	G	408	VAL	C-N-CA	6.74	129.99	120.42
1	C	185	VAL	N-CA-C	6.74	118.30	110.62
1	M	207	ILE	CA-C-O	6.74	127.08	120.27
1	Q	272	MET	N-CA-C	6.74	119.24	111.02
1	Q	115	VAL	O-C-N	-6.74	115.31	121.91
1	O	287	VAL	CB-CA-C	-6.74	103.35	111.97
1	B	296	ASN	O-C-N	-6.73	114.09	122.24
1	E	90	VAL	CA-C-N	6.73	129.30	120.28
1	E	90	VAL	C-N-CA	6.73	129.30	120.28
1	E	61	ASP	N-CA-C	6.73	119.21	110.53
1	H	510	MET	N-CA-C	-6.73	105.07	113.55
1	S	424	GLU	CB-CG-CD	6.73	124.04	112.60
1	N	257	LYS	CA-C-N	6.72	128.24	119.84
1	N	257	LYS	C-N-CA	6.72	128.24	119.84
1	R	336	GLY	CA-C-O	6.72	126.59	119.06
1	S	240	ARG	CD-NE-CZ	6.72	133.81	124.40
1	M	127	HIS	CA-C-N	6.72	126.67	119.28
1	M	127	HIS	C-N-CA	6.72	126.67	119.28
1	B	140	GLU	CA-C-N	6.72	129.57	120.77
1	B	140	GLU	C-N-CA	6.72	129.57	120.77
1	H	37	ALA	N-CA-C	6.71	122.38	111.37
1	N	133	SER	CA-C-N	6.71	127.39	119.94
1	N	133	SER	C-N-CA	6.71	127.39	119.94
1	S	477	HIS	CE1-NE2-CD2	-6.71	102.29	109.00
1	B	230	LYS	N-CA-C	6.71	119.45	109.59
1	I	60	VAL	CA-C-N	6.71	132.21	120.87
1	I	60	VAL	C-N-CA	6.71	132.21	120.87
1	A	104	THR	CA-C-N	6.71	129.27	120.28
1	A	104	THR	C-N-CA	6.71	129.27	120.28
1	I	360	ARG	NE-CZ-NH1	-6.71	114.79	121.50
1	Q	317	VAL	N-CA-C	6.71	117.36	110.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	R	426	ALA	O-C-N	-6.71	113.67	122.59
1	H	401	ALA	N-CA-C	6.71	118.24	111.07
1	A	402	LEU	N-CA-CB	6.70	119.70	109.91
1	H	70	ASN	CA-C-O	6.70	126.40	118.69
1	I	461	ASN	CA-CB-CG	-6.70	105.90	112.60
1	M	73	ALA	CA-C-O	6.70	128.44	121.07
1	N	195	LEU	O-C-N	-6.70	115.20	123.04
1	N	391	VAL	CA-C-N	6.70	129.15	120.44
1	N	391	VAL	C-N-CA	6.70	129.15	120.44
1	O	107	ALA	O-C-N	-6.70	114.40	122.11
1	Q	500	LYS	CA-C-O	6.70	126.12	119.08
1	D	447	TYR	CA-C-N	6.70	129.55	120.44
1	D	447	TYR	C-N-CA	6.70	129.55	120.44
1	L	414	ALA	CA-C-O	6.70	129.26	120.21
1	I	449	ASN	CA-CB-CG	-6.70	105.90	112.60
1	R	295	ALA	CA-C-O	-6.70	113.00	120.70
1	D	150	ALA	O-C-N	-6.70	114.25	122.82
1	A	287	VAL	CA-CB-CG2	6.69	121.78	110.40
1	H	151	GLN	CA-C-O	6.69	127.80	120.71
1	P	383	ILE	CB-CA-C	6.69	119.21	110.91
1	N	120	ASP	N-CA-C	6.69	120.54	112.38
1	P	344	ASP	CA-CB-CG	6.68	119.28	112.60
1	R	397	ALA	CA-C-N	6.68	129.78	120.29
1	R	397	ALA	C-N-CA	6.68	129.78	120.29
1	F	367	MET	CA-C-O	-6.68	114.30	121.38
1	C	305	ASP	O-C-N	-6.68	114.27	122.82
1	O	292	ALA	CA-C-O	6.68	127.51	119.10
1	C	169	LEU	CA-C-N	6.68	131.28	120.60
1	C	169	LEU	C-N-CA	6.68	131.28	120.60
1	M	141	VAL	CA-C-N	6.67	129.53	120.38
1	M	141	VAL	C-N-CA	6.67	129.53	120.38
1	M	469	LEU	O-C-N	-6.67	114.54	122.15
1	A	415	ILE	CB-CA-C	-6.67	102.05	111.19
1	C	345	GLU	CA-C-N	-6.67	111.70	121.71
1	C	345	GLU	C-N-CA	-6.67	111.70	121.71
1	L	328	LEU	CD1-CG-CD2	-6.67	96.12	110.80
1	C	33	ARG	NE-CZ-NH2	-6.67	113.19	119.20
1	E	462	ALA	CA-C-O	6.67	127.58	119.31
1	L	133	SER	N-CA-CB	-6.67	100.31	110.12
1	F	126	VAL	N-CA-C	-6.67	98.52	108.46
1	M	408	VAL	CA-C-N	6.67	129.89	120.42
1	M	408	VAL	C-N-CA	6.67	129.89	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	72	GLY	CA-C-N	6.67	131.79	121.19
1	A	72	GLY	C-N-CA	6.67	131.79	121.19
1	D	181	ILE	CA-C-N	6.66	129.54	120.54
1	D	181	ILE	C-N-CA	6.66	129.54	120.54
1	D	301	GLN	O-C-N	-6.66	114.13	122.19
1	B	108	VAL	N-CA-C	6.66	116.79	110.53
1	D	118	ALA	CA-C-N	6.66	129.21	120.28
1	D	118	ALA	C-N-CA	6.66	129.21	120.28
1	B	439	LYS	N-CA-C	6.66	118.33	111.14
1	M	174	VAL	CA-C-N	6.66	129.10	120.44
1	M	174	VAL	C-N-CA	6.66	129.10	120.44
1	M	230	LYS	O-C-N	-6.66	115.43	122.96
1	A	345	GLU	O-C-N	-6.66	115.33	122.19
1	A	505	PRO	N-CA-CB	6.66	110.24	103.25
1	I	479	ASN	CA-C-N	6.66	131.84	120.72
1	I	479	ASN	C-N-CA	6.66	131.84	120.72
1	A	338	ARG	NE-CZ-NH2	-6.66	113.21	119.20
1	G	281	ASN	CA-C-N	6.66	129.74	120.29
1	G	281	ASN	C-N-CA	6.66	129.74	120.29
1	P	65	ASP	N-CA-C	6.66	120.02	110.10
1	B	433	ALA	CA-C-N	6.65	128.16	119.84
1	B	433	ALA	C-N-CA	6.65	128.16	119.84
1	M	512	ALA	CA-C-O	6.65	127.80	120.82
1	O	526	ILE	N-CA-C	6.65	116.81	107.37
1	D	188	ALA	N-CA-C	6.65	119.36	111.71
1	R	229	ASP	CA-CB-CG	6.65	119.25	112.60
1	S	466	PRO	N-CA-C	6.65	122.98	113.47
1	E	29	LYS	N-CA-C	6.65	120.26	111.75
1	G	161	LEU	CA-C-N	6.65	129.85	120.28
1	G	161	LEU	C-N-CA	6.65	129.85	120.28
1	R	196	ARG	NE-CZ-NH2	6.65	125.18	119.20
1	C	187	LYS	CA-C-O	6.64	127.59	120.55
1	O	508	VAL	N-CA-CB	6.64	118.32	110.55
1	I	152	THR	N-CA-C	6.64	118.71	109.15
1	I	507	LEU	CA-C-O	6.64	126.91	119.41
1	M	112	GLY	O-C-N	-6.63	115.05	122.28
1	Q	528	ASP	CA-CB-CG	6.63	119.23	112.60
1	Q	79	MET	O-C-N	-6.63	115.78	123.27
1	D	525	ARG	NE-CZ-NH1	6.63	128.13	121.50
1	Q	381	ILE	O-C-N	-6.63	116.02	123.18
1	B	31	ALA	CA-C-N	6.62	129.86	120.53
1	B	31	ALA	C-N-CA	6.62	129.86	120.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	331	LEU	O-C-N	-6.62	113.39	122.46
1	H	164	ILE	CA-C-N	6.62	129.44	120.44
1	H	164	ILE	C-N-CA	6.62	129.44	120.44
1	Q	523	VAL	CA-C-N	6.62	130.37	120.31
1	Q	523	VAL	C-N-CA	6.62	130.37	120.31
1	F	109	ILE	CA-C-N	6.62	129.15	120.28
1	F	109	ILE	C-N-CA	6.62	129.15	120.28
1	Q	97	ASP	N-CA-C	6.62	118.49	111.28
1	C	528	ASP	CA-C-O	6.61	128.39	121.38
1	N	218	ASN	CA-CB-CG	-6.61	105.99	112.60
1	D	152	THR	N-CA-C	6.61	118.67	109.15
1	R	311	TYR	O-C-N	-6.61	114.95	122.09
1	O	34	ALA	CA-C-O	6.61	128.34	121.07
1	Q	490	TYR	CA-CB-CG	-6.61	102.00	113.90
1	D	271	GLN	CA-C-N	6.61	129.37	120.65
1	D	271	GLN	C-N-CA	6.61	129.37	120.65
1	P	151	GLN	OE1-CD-NE2	-6.61	115.99	122.60
1	R	39	VAL	O-C-N	-6.61	115.43	121.91
1	A	134	GLY	CA-C-N	6.61	129.13	120.28
1	A	134	GLY	C-N-CA	6.61	129.13	120.28
1	Q	449	ASN	CA-C-N	6.61	129.13	120.28
1	Q	449	ASN	C-N-CA	6.61	129.13	120.28
1	G	50	TYR	N-CA-C	6.60	120.26	109.76
1	S	494	PRO	CA-C-O	-6.60	114.17	121.23
1	K	175	ALA	N-CA-C	6.60	122.30	113.72
1	B	391	VAL	O-C-N	-6.60	115.47	121.87
1	D	418	GLY	CA-C-N	6.59	132.69	122.20
1	D	418	GLY	C-N-CA	6.59	132.69	122.20
1	G	401	ALA	CA-C-N	6.59	129.35	120.65
1	G	401	ALA	C-N-CA	6.59	129.35	120.65
1	P	464	PHE	CA-CB-CG	6.59	120.39	113.80
1	O	267	ASN	CA-CB-CG	6.59	119.19	112.60
1	H	275	PHE	CA-C-O	6.58	127.72	120.80
1	P	433	ALA	CA-C-N	6.58	128.07	119.84
1	P	433	ALA	C-N-CA	6.58	128.07	119.84
1	C	220	THR	CA-C-O	6.58	128.74	121.56
1	K	468	ASP	CA-C-O	6.58	128.31	121.07
1	L	189	VAL	CA-C-N	6.58	129.76	120.28
1	L	189	VAL	C-N-CA	6.58	129.76	120.28
1	L	390	LEU	N-CA-C	6.58	118.45	111.28
1	L	420	ALA	N-CA-C	6.58	119.05	111.02
1	L	510	MET	N-CA-C	-6.58	105.26	113.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	R	114	LEU	N-CA-C	6.58	118.45	111.28
1	A	423	ILE	O-C-N	-6.58	115.44	121.89
1	K	131	ILE	O-C-N	-6.58	115.22	121.87
1	A	157	ASP	CA-CB-CG	-6.58	106.02	112.60
1	A	211	LYS	O-C-N	-6.58	115.37	123.33
1	E	260	LEU	CA-C-O	6.58	126.38	119.14
1	A	474	ARG	NE-CZ-NH2	6.58	125.12	119.20
1	F	326	SER	N-CA-C	6.58	120.17	111.75
1	G	119	GLU	N-CA-C	6.58	118.45	111.28
1	K	281	ASN	CB-CG-ND2	6.58	126.26	116.40
1	B	40	LYS	N-CA-C	6.57	119.28	111.33
1	H	322	ARG	N-CA-C	6.57	120.61	111.74
1	S	327	ASP	CA-CB-CG	6.57	119.17	112.60
1	S	180	TYR	CA-C-N	6.57	129.75	120.42
1	S	180	TYR	C-N-CA	6.57	129.75	120.42
1	S	457	ILE	CB-CA-C	-6.57	103.44	112.04
1	E	281	ASN	CA-C-N	6.56	129.61	120.29
1	E	281	ASN	C-N-CA	6.56	129.61	120.29
1	N	449	ASN	N-CA-C	6.56	118.09	111.07
1	P	436	VAL	CA-C-N	6.56	129.97	120.91
1	P	436	VAL	C-N-CA	6.56	129.97	120.91
1	E	430	ARG	CA-C-N	6.56	129.73	120.28
1	E	430	ARG	C-N-CA	6.56	129.73	120.28
1	D	170	SER	N-CA-C	6.56	120.38	112.38
1	A	164	ILE	CA-C-N	6.56	129.36	120.44
1	A	164	ILE	C-N-CA	6.56	129.36	120.44
1	B	301	GLN	N-CA-CB	-6.55	101.11	110.81
1	O	180	TYR	CA-C-N	6.55	129.73	120.42
1	O	180	TYR	C-N-CA	6.55	129.73	120.42
1	C	69	THR	CA-CB-OG1	6.55	119.43	109.60
1	H	120	ASP	CA-C-O	6.55	127.50	120.10
1	N	322	ARG	O-C-N	-6.55	114.43	122.55
1	H	339	VAL	CB-CA-C	-6.55	101.57	111.33
1	R	471	MET	CA-C-N	6.55	129.71	120.28
1	R	471	MET	C-N-CA	6.55	129.71	120.28
1	A	224	TYR	CA-C-N	6.55	130.92	121.03
1	A	224	TYR	C-N-CA	6.55	130.92	121.03
1	G	409	ILE	N-CA-C	6.55	117.33	110.72
1	B	479	ASN	O-C-N	-6.55	115.68	123.27
1	C	451	LEU	CB-CA-C	-6.55	99.72	110.85
1	B	223	VAL	O-C-N	-6.54	116.47	123.14
1	M	83	HIS	CB-CG-ND1	6.54	132.51	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	103	GLY	O-C-N	-6.54	115.15	122.28
1	B	109	ILE	CA-C-O	-6.54	114.29	121.29
1	B	129	THR	CA-C-O	6.54	127.49	120.10
1	E	263	GLU	CA-C-O	6.54	127.98	120.00
1	N	144	GLN	OE1-CD-NE2	-6.54	116.06	122.60
1	Q	260	LEU	CA-C-O	6.54	126.34	119.14
1	K	85	ALA	CA-C-N	6.54	128.94	120.44
1	K	85	ALA	C-N-CA	6.54	128.94	120.44
1	F	34	ALA	N-CA-CB	-6.54	100.53	110.01
1	M	458	LEU	O-C-N	-6.54	115.33	122.07
1	R	204	LEU	CA-C-N	6.54	129.92	120.38
1	R	204	LEU	C-N-CA	6.54	129.92	120.38
1	D	453	SER	CA-C-N	6.53	129.36	120.54
1	D	453	SER	C-N-CA	6.53	129.36	120.54
1	K	439	LYS	CA-C-N	6.53	129.92	120.38
1	K	439	LYS	C-N-CA	6.53	129.92	120.38
1	S	189	VAL	CA-C-O	-6.53	113.19	120.96
1	C	98	GLU	CA-C-N	6.53	131.72	121.99
1	C	98	GLU	C-N-CA	6.53	131.72	121.99
1	C	205	ASP	CA-C-O	6.53	127.39	119.49
1	L	500	LYS	CA-C-O	6.53	125.81	119.08
1	A	317	VAL	O-C-N	-6.53	113.92	122.47
1	E	365	ASP	N-CA-C	6.53	120.17	109.72
1	G	305	ASP	CA-C-N	6.53	130.23	120.31
1	G	305	ASP	C-N-CA	6.53	130.23	120.31
1	C	526	ILE	CB-CA-C	-6.53	104.24	111.35
1	L	365	ASP	N-CA-C	6.53	120.68	110.17
1	B	519	ALA	CA-C-N	6.52	129.86	120.79
1	B	519	ALA	C-N-CA	6.52	129.86	120.79
1	N	339	VAL	CA-CB-CG2	6.52	121.49	110.40
1	E	62	SER	N-CA-C	6.52	120.70	112.87
1	N	200	TRP	CA-CB-CG	6.52	125.99	113.60
1	Q	415	ILE	O-C-N	-6.52	116.12	122.97
1	I	52	PRO	CB-CA-C	6.52	120.89	111.04
1	A	360	ARG	NE-CZ-NH1	-6.52	114.98	121.50
1	I	89	LEU	O-C-N	6.51	129.06	122.03
1	S	527	ASP	N-CA-CB	-6.51	100.56	110.33
1	K	213	ALA	O-C-N	-6.51	114.92	122.93
1	P	425	ILE	CA-CB-CG1	6.51	121.47	110.40
1	G	479	ASN	OD1-CG-ND2	-6.51	116.09	122.60
1	I	420	ALA	N-CA-C	6.51	118.96	111.02
1	H	470	LEU	CA-C-N	6.51	128.90	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	470	LEU	C-N-CA	6.51	128.90	120.44
1	E	446	ALA	O-C-N	6.51	129.06	122.03
1	K	351	LEU	CA-C-N	6.51	129.41	122.38
1	K	351	LEU	C-N-CA	6.51	129.41	122.38
1	F	234	HIS	CG-CD2-NE2	6.50	113.70	107.20
1	I	445	GLU	CA-C-O	6.50	127.65	120.63
1	M	233	VAL	N-CA-C	6.50	117.25	110.62
1	P	301	GLN	N-CA-C	-6.50	103.33	113.02
1	P	264	ILE	CA-C-N	6.50	129.99	120.82
1	P	264	ILE	C-N-CA	6.50	129.99	120.82
1	C	173	ALA	N-CA-C	6.50	120.07	111.75
1	A	281	ASN	OD1-CG-ND2	-6.50	116.10	122.60
1	N	212	LYS	N-CA-C	-6.50	97.64	108.75
1	P	254	GLU	N-CA-C	-6.49	99.33	109.72
1	Q	107	ALA	CA-C-O	-6.49	113.65	120.92
1	O	91	GLN	OE1-CD-NE2	-6.49	116.11	122.60
1	B	35	ASN	CA-C-O	-6.49	113.93	121.07
1	G	132	ILE	CA-C-N	6.49	128.97	120.28
1	G	132	ILE	C-N-CA	6.49	128.97	120.28
1	I	287	VAL	O-C-N	-6.49	115.55	121.91
1	A	303	GLY	N-CA-C	6.49	120.51	112.14
1	P	141	VAL	O-C-N	-6.49	115.55	121.91
1	S	176	GLY	CA-C-O	-6.48	114.92	120.30
1	D	183	ASP	N-CA-C	6.48	118.01	111.07
1	L	295	ALA	O-C-N	-6.48	114.39	123.01
1	Q	305	ASP	N-CA-C	6.48	119.17	110.35
1	F	208	GLN	CA-CB-CG	6.48	127.06	114.10
1	L	251	ALA	O-C-N	-6.48	115.21	122.86
1	L	426	ALA	CA-C-N	6.48	131.49	121.19
1	L	426	ALA	C-N-CA	6.48	131.49	121.19
1	A	373	ALA	O-C-N	-6.48	114.84	122.81
1	B	215	GLY	O-C-N	-6.48	114.28	122.70
1	B	337	GLY	O-C-N	-6.48	117.66	122.71
1	H	428	LYS	CA-C-N	6.47	129.48	120.29
1	H	428	LYS	C-N-CA	6.47	129.48	120.29
1	K	100	THR	CA-C-N	6.47	131.69	120.68
1	K	100	THR	C-N-CA	6.47	131.69	120.68
1	L	240	ARG	NE-CZ-NH2	-6.47	113.37	119.20
1	N	484	TRP	CA-CB-CG	6.47	125.90	113.60
1	P	434	PRO	N-CD-CG	6.47	112.91	103.20
1	L	88	LEU	CA-C-N	6.47	129.19	120.65
1	L	88	LEU	C-N-CA	6.47	129.19	120.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	361	LYS	CA-C-O	6.47	127.27	120.54
1	E	218	ASN	CA-CB-CG	-6.47	106.13	112.60
1	F	44	GLU	O-C-N	-6.47	113.83	122.43
1	H	494	PRO	CA-C-O	-6.47	114.31	121.23
1	I	380	SER	CA-C-O	6.47	128.71	121.40
1	O	177	ALA	O-C-N	-6.47	114.82	122.58
1	R	340	VAL	O-C-N	-6.47	116.39	123.18
1	H	115	VAL	N-CA-CB	6.47	118.11	110.55
1	I	516	ALA	O-C-N	-6.47	115.36	122.09
1	L	114	LEU	O-C-N	6.46	128.97	122.12
1	G	42	VAL	N-CA-C	6.46	116.62	110.42
1	N	183	ASP	CA-C-N	6.46	129.24	120.77
1	N	183	ASP	C-N-CA	6.46	129.24	120.77
1	N	301	GLN	N-CA-CB	-6.46	101.69	110.67
1	S	67	THR	CA-C-O	-6.46	112.32	120.20
1	C	428	LYS	CA-C-O	6.46	127.39	120.55
1	M	245	LYS	N-CA-CB	6.46	117.58	110.35
1	H	426	ALA	CA-C-N	6.45	131.45	121.19
1	H	426	ALA	C-N-CA	6.45	131.45	121.19
1	N	407	ASP	CA-CB-CG	-6.45	106.15	112.60
1	Q	289	LYS	N-CA-C	6.45	120.41	112.54
1	D	101	ALA	N-CA-C	6.45	117.97	111.07
1	P	433	ALA	CA-C-O	-6.45	111.32	120.16
1	G	487	ILE	CA-CB-CG1	6.45	121.37	110.40
1	P	141	VAL	CA-C-N	6.45	129.22	120.38
1	P	141	VAL	C-N-CA	6.45	129.22	120.38
1	R	76	LEU	CA-C-N	6.45	129.21	120.44
1	R	76	LEU	C-N-CA	6.45	129.21	120.44
1	A	240	ARG	NE-CZ-NH2	6.45	125.00	119.20
1	O	301	GLN	N-CA-C	-6.45	105.72	113.97
1	S	457	ILE	N-CA-C	6.45	117.97	110.62
1	D	504	GLU	CA-C-N	6.45	127.90	119.84
1	D	504	GLU	C-N-CA	6.45	127.90	119.84
1	K	428	LYS	N-CA-C	6.45	119.13	111.33
1	E	138	ALA	CA-C-N	6.44	128.82	120.44
1	E	138	ALA	C-N-CA	6.44	128.82	120.44
1	I	493	GLN	CA-C-N	6.44	126.79	119.83
1	I	493	GLN	C-N-CA	6.44	126.79	119.83
1	Q	447	TYR	CA-C-N	6.44	129.20	120.44
1	Q	447	TYR	C-N-CA	6.44	129.20	120.44
1	Q	146	ILE	N-CA-C	-6.44	104.75	111.58
1	D	276	LEU	CA-C-N	6.44	129.20	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	276	LEU	C-N-CA	6.44	129.20	120.44
1	L	74	THR	N-CA-C	6.44	119.12	111.33
1	K	274	LYS	N-CA-C	6.44	120.71	112.34
1	O	369	PHE	CA-CB-CG	-6.44	107.36	113.80
1	C	71	ASP	CA-CB-CG	6.44	119.04	112.60
1	I	355	SER	CB-CA-C	-6.44	100.11	110.79
1	M	274	LYS	N-CA-C	6.44	120.59	112.87
1	N	119	GLU	N-CA-C	-6.44	104.27	111.28
1	M	439	LYS	CA-C-N	6.43	129.77	120.38
1	M	439	LYS	C-N-CA	6.43	129.77	120.38
1	D	72	GLY	O-C-N	6.43	128.50	122.13
1	B	513	ILE	CA-C-N	6.43	128.90	120.28
1	B	513	ILE	C-N-CA	6.43	128.90	120.28
1	E	80	ASP	CA-C-N	6.43	133.82	121.54
1	E	80	ASP	C-N-CA	6.43	133.82	121.54
1	F	365	ASP	N-CA-CB	6.43	119.43	110.17
1	I	125	ASP	O-C-N	-6.43	114.86	122.58
1	S	371	GLU	CA-C-O	6.43	128.57	121.56
1	G	399	ARG	O-C-N	-6.43	115.45	122.07
1	I	307	VAL	CA-C-N	6.42	131.45	120.72
1	I	307	VAL	C-N-CA	6.42	131.45	120.72
1	B	127	HIS	CE1-NE2-CD2	-6.42	102.58	109.00
1	E	297	VAL	CB-CA-C	6.42	122.20	110.71
1	N	143	LEU	CA-C-O	6.42	127.52	120.90
1	P	377	LYS	O-C-N	-6.42	114.83	122.15
1	Q	352	GLY	CA-C-O	6.42	131.74	120.57
1	A	188	ALA	N-CA-C	6.42	118.28	111.28
1	E	440	GLU	CA-C-N	6.42	129.12	120.65
1	E	440	GLU	C-N-CA	6.42	129.12	120.65
1	I	327	ASP	CA-CB-CG	6.42	119.02	112.60
1	C	33	ARG	CA-C-N	6.42	129.20	120.54
1	C	33	ARG	C-N-CA	6.42	129.20	120.54
1	I	334	ALA	CA-C-O	6.42	129.11	120.13
1	M	413	ARG	N-CA-C	6.42	119.86	109.40
1	R	143	LEU	CA-C-N	6.42	129.52	120.28
1	R	143	LEU	C-N-CA	6.42	129.52	120.28
1	E	403	GLY	O-C-N	-6.41	114.36	122.70
1	E	288	ASP	CA-CB-CG	-6.41	106.19	112.60
1	F	47	LYS	N-CA-C	6.41	124.45	110.80
1	O	384	ARG	N-CA-C	-6.41	99.24	108.60
1	D	222	LEU	CB-CA-C	6.41	120.32	109.75
1	E	245	LYS	CA-C-N	6.41	129.33	120.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	245	LYS	C-N-CA	6.41	129.33	120.49
1	I	99	GLU	CA-C-N	6.41	129.81	120.71
1	I	99	GLU	C-N-CA	6.41	129.81	120.71
1	M	440	GLU	N-CA-C	6.41	119.95	111.75
1	A	33	ARG	N-CA-C	6.41	118.26	111.28
1	F	433	ALA	CA-C-N	6.41	127.85	119.84
1	F	433	ALA	C-N-CA	6.41	127.85	119.84
1	B	259	GLU	O-C-N	-6.41	113.59	121.92
1	N	196	ARG	NE-CZ-NH1	-6.41	115.09	121.50
1	O	196	ARG	NE-CZ-NH1	-6.41	115.09	121.50
1	G	208	GLN	O-C-N	-6.40	115.73	123.10
1	H	384	ARG	N-CA-C	-6.40	99.90	108.74
1	D	190	THR	CA-C-N	6.40	128.85	120.28
1	D	190	THR	C-N-CA	6.40	128.85	120.28
1	O	519	ALA	O-C-N	-6.40	115.38	122.03
1	Q	144	GLN	CA-C-N	6.40	131.41	120.72
1	Q	144	GLN	C-N-CA	6.40	131.41	120.72
1	D	414	ALA	CA-C-O	6.40	128.85	120.21
1	G	444	VAL	N-CA-C	6.40	116.56	110.42
1	R	302	LYS	CA-C-O	6.40	128.50	121.40
1	E	513	ILE	O-C-N	6.39	128.18	121.91
1	K	278	GLU	CA-C-N	6.39	130.03	120.31
1	K	278	GLU	C-N-CA	6.39	130.03	120.31
1	M	387	LEU	CA-C-N	6.39	129.71	120.38
1	M	387	LEU	C-N-CA	6.39	129.71	120.38
1	N	303	GLY	N-CA-C	6.39	122.28	112.51
1	I	240	ARG	NE-CZ-NH1	6.39	127.89	121.50
1	M	156	ASN	CA-CB-CG	-6.39	106.21	112.60
1	Q	256	GLU	O-C-N	-6.39	115.44	123.17
1	D	120	ASP	CA-CB-CG	6.38	118.98	112.60
1	F	206	ASN	CA-CB-CG	-6.38	106.22	112.60
1	Q	164	ILE	CA-C-N	6.38	129.12	120.44
1	Q	164	ILE	C-N-CA	6.38	129.12	120.44
1	D	477	HIS	CE1-NE2-CD2	-6.38	102.62	109.00
1	N	387	LEU	CA-C-N	6.38	130.81	120.60
1	N	387	LEU	C-N-CA	6.38	130.81	120.60
1	D	466	PRO	O-C-N	6.38	129.07	122.18
1	G	34	ALA	CA-C-O	6.38	128.09	121.07
1	I	203	ASP	CA-C-N	6.38	129.47	120.28
1	I	203	ASP	C-N-CA	6.38	129.47	120.28
1	K	144	GLN	CA-C-N	6.38	131.37	120.72
1	K	144	GLN	C-N-CA	6.38	131.37	120.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	132	ILE	CA-C-N	6.38	128.82	120.28
1	H	132	ILE	C-N-CA	6.38	128.82	120.28
1	M	408	VAL	CA-C-O	6.38	127.58	120.95
1	N	329	GLU	CA-C-O	6.38	127.52	120.82
1	Q	423	ILE	N-CA-C	6.37	119.97	111.17
1	G	283	ILE	O-C-N	-6.37	115.27	121.83
1	H	167	THR	O-C-N	-6.37	113.96	122.43
1	L	145	THR	CA-C-O	6.37	127.20	119.49
1	P	70	ASN	CA-C-O	6.37	125.77	119.08
1	S	250	ASP	CA-CB-CG	6.37	118.97	112.60
1	P	360	ARG	CD-NE-CZ	6.37	133.32	124.40
1	R	49	THR	CA-C-N	6.37	129.75	120.71
1	R	49	THR	C-N-CA	6.37	129.75	120.71
1	R	487	ILE	N-CA-C	6.37	117.41	107.28
1	C	39	VAL	N-CA-CB	6.37	117.56	110.62
1	C	105	LYS	N-CA-C	6.37	118.22	111.28
1	L	233	VAL	CA-CB-CG1	6.37	121.22	110.40
1	N	458	LEU	CA-C-O	6.37	127.50	120.82
1	H	420	ALA	N-CA-C	6.37	118.79	111.02
1	K	383	ILE	CA-C-N	6.37	132.31	121.87
1	K	383	ILE	C-N-CA	6.37	132.31	121.87
1	M	298	ILE	CA-C-O	6.37	128.74	120.78
1	S	38	ALA	O-C-N	-6.37	115.47	122.09
1	L	399	ARG	NE-CZ-NH1	-6.36	115.14	121.50
1	P	41	ALA	N-CA-C	6.36	117.88	111.07
1	M	480	GLU	CA-C-O	6.36	127.29	120.55
1	A	471	MET	CA-C-N	6.36	129.44	120.28
1	A	471	MET	C-N-CA	6.36	129.44	120.28
1	B	482	ASN	N-CA-CB	6.36	121.47	110.98
1	C	196	ARG	NE-CZ-NH2	6.36	124.92	119.20
1	F	359	GLU	O-C-N	-6.36	115.73	123.30
1	N	136	LYS	CA-C-N	6.36	128.80	120.28
1	N	136	LYS	C-N-CA	6.36	128.80	120.28
1	N	386	GLY	O-C-N	-6.36	115.80	122.60
1	P	102	ASP	N-CA-C	6.36	118.29	111.36
1	A	260	LEU	CA-C-O	6.36	126.04	119.05
1	D	183	ASP	CA-CB-CG	6.36	118.95	112.60
1	P	344	ASP	CA-C-O	6.36	129.02	119.23
1	B	179	GLU	N-CA-C	6.35	119.02	111.33
1	H	142	ALA	N-CA-C	6.35	119.02	111.33
1	H	351	LEU	CA-C-N	6.35	127.94	122.29
1	H	351	LEU	C-N-CA	6.35	127.94	122.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	131	ILE	CA-C-O	6.35	127.37	120.57
1	L	169	LEU	N-CA-C	6.35	119.18	111.82
1	E	419	GLY	CA-C-N	6.34	129.61	120.79
1	E	419	GLY	C-N-CA	6.34	129.61	120.79
1	F	94	LYS	N-CA-CB	6.34	119.17	109.91
1	D	258	PRO	N-CA-C	6.34	125.53	112.47
1	K	321	ARG	NE-CZ-NH2	6.34	124.91	119.20
1	O	351	LEU	CA-C-N	6.34	128.83	122.30
1	O	351	LEU	C-N-CA	6.34	128.83	122.30
1	P	31	ALA	CA-C-N	6.34	131.02	120.62
1	P	31	ALA	C-N-CA	6.34	131.02	120.62
1	Q	521	THR	CA-CB-OG1	6.34	119.11	109.60
1	B	244	ALA	N-CA-CB	-6.34	100.26	109.83
1	M	255	VAL	O-C-N	-6.34	114.79	122.59
1	S	343	ILE	O-C-N	-6.34	115.50	121.90
1	N	101	ALA	O-C-N	-6.34	113.89	122.19
1	N	405	VAL	CA-CB-CG1	6.34	121.17	110.40
1	K	504	GLU	CA-C-N	6.34	127.76	119.84
1	K	504	GLU	C-N-CA	6.34	127.76	119.84
1	K	358	GLU	O-C-N	-6.33	115.81	123.10
1	L	482	ASN	CA-CB-CG	-6.33	106.27	112.60
1	C	55	MET	N-CA-CB	-6.33	101.26	110.70
1	M	90	VAL	N-CA-C	6.33	118.96	111.05
1	M	514	LYS	N-CA-CB	6.33	119.42	110.12
1	A	35	ASN	CA-CB-CG	-6.33	106.28	112.60
1	D	402	LEU	CA-C-O	-6.33	114.36	121.00
1	D	409	ILE	N-CA-CB	6.33	118.67	110.57
1	K	142	ALA	N-CA-C	6.33	118.98	111.33
1	P	221	GLN	CA-C-N	6.33	131.45	122.72
1	P	221	GLN	C-N-CA	6.33	131.45	122.72
1	R	178	ARG	N-CA-C	6.33	119.16	111.82
1	R	433	ALA	CA-C-N	6.33	127.75	119.84
1	R	433	ALA	C-N-CA	6.33	127.75	119.84
1	D	322	ARG	N-CA-C	6.32	120.11	111.39
1	E	83	HIS	CA-C-N	6.32	125.81	119.24
1	E	83	HIS	C-N-CA	6.32	125.81	119.24
1	E	408	VAL	N-CA-C	6.32	117.07	110.62
1	I	187	LYS	CA-C-O	6.32	127.25	120.55
1	K	508	VAL	CA-C-O	6.32	127.87	121.17
1	B	190	THR	N-CA-C	6.32	119.84	111.75
1	C	288	ASP	CA-CB-CG	-6.32	106.28	112.60
1	B	449	ASN	CA-CB-CG	-6.32	106.28	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	125	ASP	N-CA-C	6.32	120.29	112.58
1	N	147	GLN	O-C-N	-6.32	114.19	122.59
1	R	512	ALA	CA-C-N	6.32	128.52	120.56
1	R	512	ALA	C-N-CA	6.32	128.52	120.56
1	D	257	LYS	N-CA-C	6.32	117.66	109.64
1	E	131	ILE	N-CA-C	6.32	118.94	111.05
1	E	360	ARG	NE-CZ-NH1	-6.32	115.19	121.50
1	K	133	SER	CA-C-N	6.32	126.95	119.94
1	K	133	SER	C-N-CA	6.32	126.95	119.94
1	M	48	SER	CA-C-O	6.32	129.01	118.91
1	E	174	VAL	O-C-N	-6.31	115.57	122.64
1	N	190	THR	N-CA-C	6.31	120.08	112.38
1	M	127	HIS	O-C-N	-6.31	114.36	121.43
1	E	304	ILE	CA-C-N	6.31	133.59	121.54
1	E	304	ILE	C-N-CA	6.31	133.59	121.54
1	F	434	PRO	N-CA-CB	6.31	109.88	103.25
1	K	151	GLN	CA-C-O	6.31	127.40	120.71
1	O	453	SER	O-C-N	-6.31	115.43	122.12
1	M	420	ALA	N-CA-C	6.31	118.72	111.02
1	Q	399	ARG	CD-NE-CZ	6.31	133.23	124.40
1	B	234	HIS	ND1-CE1-NE2	6.31	114.71	108.40
1	D	249	ILE	N-CA-C	6.31	116.47	106.88
1	R	407	ASP	CA-CB-CG	-6.31	106.29	112.60
1	C	209	ILE	O-C-N	-6.30	116.92	123.03
1	D	70	ASN	CA-CB-CG	-6.30	106.30	112.60
1	D	185	VAL	CA-C-N	6.30	128.63	120.56
1	D	185	VAL	C-N-CA	6.30	128.63	120.56
1	N	114	LEU	O-C-N	6.30	128.80	122.12
1	S	424	GLU	O-C-N	6.30	128.58	122.03
1	R	157	ASP	CA-CB-CG	-6.30	106.30	112.60
1	D	77	ASP	CB-CA-C	-6.29	100.95	110.90
1	B	176	GLY	N-CA-C	6.29	122.42	111.78
1	E	53	ARG	CA-C-O	6.29	127.02	119.59
1	H	254	GLU	CA-C-O	6.29	128.22	121.11
1	O	499	GLN	OE1-CD-NE2	-6.29	116.31	122.60
1	S	91	GLN	OE1-CD-NE2	6.29	128.89	122.60
1	L	389	ARG	CB-CG-CD	6.29	125.77	111.30
1	S	436	VAL	O-C-N	-6.29	115.75	121.91
1	H	140	GLU	CA-C-O	6.29	128.38	121.02
1	L	392	ASP	CA-CB-CG	6.29	118.89	112.60
1	N	392	ASP	O-C-N	-6.29	115.59	122.07
1	R	329	GLU	CA-C-O	6.29	127.42	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	307	VAL	CA-C-O	6.29	127.44	120.71
1	A	454	LEU	CA-C-O	6.28	127.62	120.90
1	F	360	ARG	NE-CZ-NH2	6.28	124.85	119.20
1	Q	297	VAL	O-C-N	-6.28	115.84	123.00
1	K	495	VAL	CA-C-O	-6.28	115.48	121.64
1	N	323	ALA	CA-C-O	-6.28	114.40	121.81
1	Q	66	ILE	N-CA-C	6.28	117.64	108.53
1	A	264	ILE	CA-C-N	6.28	131.35	121.56
1	A	264	ILE	C-N-CA	6.28	131.35	121.56
1	E	175	ALA	N-CA-C	-6.28	105.45	113.23
1	M	207	ILE	O-C-N	-6.28	116.65	123.18
1	B	56	ASP	CA-CB-CG	6.27	118.87	112.60
1	K	285	GLU	CA-C-N	6.27	128.59	120.44
1	K	285	GLU	C-N-CA	6.27	128.59	120.44
1	L	453	SER	CA-C-N	6.27	129.01	120.54
1	L	453	SER	C-N-CA	6.27	129.01	120.54
1	M	150	ALA	N-CA-C	6.27	118.88	110.35
1	P	237	MET	CG-SD-CE	-6.27	87.11	100.90
1	N	346	ILE	N-CA-C	6.27	117.16	108.89
1	Q	109	ILE	N-CA-C	6.27	116.94	110.36
1	Q	50	TYR	O-C-N	6.26	130.53	122.89
1	Q	391	VAL	N-CA-C	6.26	117.01	110.62
1	Q	417	GLY	O-C-N	-6.26	116.32	122.77
1	A	53	ARG	CA-C-N	6.26	127.27	120.44
1	A	53	ARG	C-N-CA	6.26	127.27	120.44
1	B	274	LYS	CA-C-N	6.26	131.17	120.71
1	B	274	LYS	C-N-CA	6.26	131.17	120.71
1	E	116	LYS	CA-C-N	6.26	130.62	120.60
1	E	116	LYS	C-N-CA	6.26	130.62	120.60
1	E	422	GLU	CB-CG-CD	6.26	123.24	112.60
1	H	453	SER	O-C-N	-6.26	115.48	122.12
1	K	484	TRP	CB-CG-CD2	6.26	135.57	126.80
1	D	187	LYS	CA-C-O	6.26	127.18	120.55
1	E	83	HIS	N-CA-C	6.26	118.50	109.48
1	A	84	PRO	CA-C-N	6.26	128.99	120.54
1	A	84	PRO	C-N-CA	6.26	128.99	120.54
1	N	152	THR	N-CA-C	6.26	118.16	109.15
1	R	458	LEU	CA-C-O	-6.26	114.25	120.82
1	I	230	LYS	O-C-N	-6.26	115.23	122.93
1	L	482	ASN	CA-C-N	6.26	128.95	120.38
1	L	482	ASN	C-N-CA	6.26	128.95	120.38
1	N	102	ASP	O-C-N	-6.26	115.02	122.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	33	ARG	CA-C-O	-6.25	113.92	120.55
1	O	29	LYS	CA-C-N	6.25	133.48	121.54
1	O	29	LYS	C-N-CA	6.25	133.48	121.54
1	E	516	ALA	N-CA-C	6.25	118.61	111.11
1	F	150	ALA	CA-C-O	6.25	128.18	121.55
1	O	343	ILE	O-C-N	-6.25	115.56	121.87
1	P	453	SER	N-CA-C	6.25	118.89	111.33
1	H	80	ASP	N-CA-CB	-6.25	100.26	109.95
1	A	413	ARG	NE-CZ-NH1	-6.25	115.25	121.50
1	F	506	ALA	O-C-N	-6.25	114.12	122.43
1	L	325	LYS	CA-C-N	6.25	129.50	120.38
1	L	325	LYS	C-N-CA	6.25	129.50	120.38
1	K	224	TYR	CA-CB-CG	-6.25	102.66	113.90
1	P	196	ARG	CA-C-O	6.25	126.96	120.40
1	S	135	TYR	N-CA-C	6.25	118.09	111.28
1	D	431	LYS	CA-C-N	6.25	128.93	120.44
1	D	431	LYS	C-N-CA	6.25	128.93	120.44
1	G	100	THR	CA-C-O	6.24	129.44	120.51
1	H	83	HIS	CA-C-N	6.24	125.73	119.24
1	H	83	HIS	C-N-CA	6.24	125.73	119.24
1	M	201	TYR	CA-C-N	6.24	132.25	122.70
1	M	201	TYR	C-N-CA	6.24	132.25	122.70
1	A	56	ASP	CA-CB-CG	6.24	118.84	112.60
1	I	241	LEU	CA-C-N	6.24	130.99	122.19
1	I	241	LEU	C-N-CA	6.24	130.99	122.19
1	Q	426	ALA	CA-C-N	6.24	130.18	120.82
1	Q	426	ALA	C-N-CA	6.24	130.18	120.82
1	B	415	ILE	CA-C-O	-6.24	114.39	121.75
1	E	398	LEU	CA-C-N	6.24	128.55	120.44
1	E	398	LEU	C-N-CA	6.24	128.55	120.44
1	I	440	GLU	CA-C-N	6.24	128.55	120.44
1	I	440	GLU	C-N-CA	6.24	128.55	120.44
1	I	458	LEU	N-CA-C	6.24	118.08	111.28
1	P	381	ILE	O-C-N	-6.24	116.44	123.18
1	P	403	GLY	CA-C-N	6.24	128.55	120.44
1	P	403	GLY	C-N-CA	6.24	128.55	120.44
1	F	327	ASP	N-CA-C	-6.24	105.83	113.50
1	D	165	ALA	CA-C-N	6.24	129.15	120.29
1	D	165	ALA	C-N-CA	6.24	129.15	120.29
1	F	110	PHE	CA-C-O	-6.24	113.94	120.55
1	G	520	ALA	N-CA-C	6.24	118.63	111.02
1	S	93	ALA	CA-C-N	6.24	128.88	120.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	S	93	ALA	C-N-CA	6.24	128.88	120.65
1	E	424	GLU	CA-C-N	6.23	130.84	120.62
1	E	424	GLU	C-N-CA	6.23	130.84	120.62
1	E	70	ASN	O-C-N	-6.23	113.67	122.15
1	L	516	ALA	O-C-N	-6.23	115.61	122.09
1	D	78	LYS	O-C-N	-6.23	113.86	122.46
1	K	194	GLU	CB-CG-CD	-6.23	102.01	112.60
1	P	127	HIS	CA-C-N	6.23	126.13	119.28
1	P	127	HIS	C-N-CA	6.23	126.13	119.28
1	H	130	ILE	CA-C-N	6.22	130.31	120.47
1	H	130	ILE	C-N-CA	6.22	130.31	120.47
1	P	344	ASP	O-C-N	-6.22	112.40	122.42
1	R	345	GLU	O-C-N	-6.22	114.85	122.20
1	O	460	GLU	CA-C-O	-6.22	113.74	121.02
1	P	50	TYR	CA-C-O	6.22	127.97	120.81
1	A	253	LEU	N-CA-C	-6.22	103.37	111.71
1	D	381	ILE	O-C-N	-6.22	116.46	123.18
1	G	322	ARG	O-C-N	-6.22	115.11	122.58
1	I	185	VAL	N-CA-C	6.22	117.71	110.62
1	K	132	ILE	O-C-N	6.22	128.37	121.90
1	K	474	ARG	NE-CZ-NH1	-6.22	115.28	121.50
1	N	108	VAL	CA-C-N	6.22	128.92	120.77
1	N	108	VAL	C-N-CA	6.22	128.92	120.77
1	N	355	SER	N-CA-C	6.22	118.06	111.28
1	A	55	MET	O-C-N	6.22	129.96	122.68
1	F	234	HIS	CE1-NE2-CD2	-6.22	102.78	109.00
1	B	130	ILE	CB-CA-C	-6.22	103.90	112.04
1	H	404	THR	N-CA-C	6.22	117.72	111.07
1	R	408	VAL	N-CA-C	6.22	116.96	110.62
1	R	437	GLY	CA-C-O	-6.22	115.41	121.75
1	S	478	GLU	N-CA-C	-6.22	104.86	112.88
1	K	416	ALA	CA-C-N	6.21	130.54	121.96
1	K	416	ALA	C-N-CA	6.21	130.54	121.96
1	M	507	LEU	CA-C-O	6.21	127.58	120.00
1	N	440	GLU	N-CA-C	6.21	119.70	111.75
1	S	458	LEU	CA-C-N	6.21	128.39	120.56
1	S	458	LEU	C-N-CA	6.21	128.39	120.56
1	F	521	THR	CA-C-O	6.21	127.02	119.38
1	G	146	ILE	N-CA-C	-6.21	104.99	111.58
1	D	156	ASN	CA-CB-CG	-6.21	106.39	112.60
1	F	479	ASN	CA-C-O	-6.21	114.48	121.81
1	N	421	VAL	CA-C-N	6.21	128.85	120.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	421	VAL	C-N-CA	6.21	128.85	120.65
1	G	451	LEU	N-CA-C	6.21	118.85	111.71
1	C	40	LYS	N-CA-C	6.21	118.84	111.33
1	N	238	PRO	N-CA-CB	-6.21	97.56	103.33
1	O	314	LYS	N-CA-C	6.21	119.02	111.82
1	Q	184	ILE	CA-C-N	6.21	129.28	120.53
1	Q	184	ILE	C-N-CA	6.21	129.28	120.53
1	F	121	LEU	CA-C-O	6.21	127.13	120.24
1	I	93	ALA	CA-C-N	6.21	128.84	120.65
1	I	93	ALA	C-N-CA	6.21	128.84	120.65
1	M	460	GLU	CB-CA-C	-6.21	100.54	110.84
1	H	390	LEU	N-CA-C	6.20	118.04	111.28
1	O	375	ASN	CA-C-N	6.20	126.10	119.28
1	O	375	ASN	C-N-CA	6.20	126.10	119.28
1	L	387	LEU	N-CA-C	6.20	118.04	110.41
1	H	530	VAL	N-CA-C	6.20	115.66	106.85
1	L	251	ALA	CA-C-O	6.20	128.32	121.56
1	Q	63	LEU	N-CA-C	-6.20	105.58	113.02
1	Q	317	VAL	CB-CA-C	-6.20	104.77	111.59
1	S	516	ALA	N-CA-C	6.20	121.60	111.37
1	N	511	ASN	CA-C-N	6.20	128.83	120.65
1	N	511	ASN	C-N-CA	6.20	128.83	120.65
1	B	219	ASP	O-C-N	-6.19	114.40	122.39
1	G	45	ALA	N-CA-C	-6.19	105.55	113.23
1	H	487	ILE	N-CA-C	6.19	117.13	107.28
1	K	237	MET	CG-SD-CE	-6.19	87.27	100.90
1	O	70	ASN	N-CA-C	-6.19	104.49	114.09
1	B	219	ASP	CA-C-O	6.19	126.92	119.43
1	H	372	GLY	O-C-N	-6.19	114.64	122.32
1	K	442	LEU	CA-C-N	6.19	128.49	120.44
1	K	442	LEU	C-N-CA	6.19	128.49	120.44
1	N	215	GLY	O-C-N	-6.19	116.24	123.17
1	S	410	LYS	O-C-N	-6.19	114.98	122.22
1	S	493	GLN	CA-C-O	-6.19	111.68	120.16
1	S	515	ALA	N-CA-CB	-6.19	100.87	109.91
1	A	437	GLY	CA-C-O	-6.19	113.78	121.02
1	B	234	HIS	CE1-NE2-CD2	-6.19	102.81	109.00
1	D	104	THR	N-CA-CB	6.19	119.32	110.16
1	D	228	VAL	N-CA-CB	-6.18	103.95	111.00
1	O	515	ALA	CA-C-N	6.18	128.89	120.54
1	O	515	ALA	C-N-CA	6.18	128.89	120.54
1	R	323	ALA	O-C-N	-6.18	115.97	122.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	42	VAL	CA-C-N	6.18	128.48	120.44
1	D	42	VAL	C-N-CA	6.18	128.48	120.44
1	D	152	THR	CB-CA-C	-6.18	101.27	110.67
1	R	466	PRO	N-CA-C	6.18	123.80	113.78
1	D	132	ILE	N-CA-C	6.18	116.34	110.53
1	D	228	VAL	CB-CA-C	6.18	118.44	110.96
1	F	191	GLN	OE1-CD-NE2	6.18	128.78	122.60
1	L	140	GLU	CA-C-N	6.18	128.35	120.56
1	L	140	GLU	C-N-CA	6.18	128.35	120.56
1	L	176	GLY	CA-C-O	6.18	127.14	121.58
1	M	40	LYS	CB-CA-C	-6.18	100.92	110.81
1	D	325	LYS	CA-C-N	6.18	129.40	120.38
1	D	325	LYS	C-N-CA	6.18	129.40	120.38
1	I	468	ASP	O-C-N	-6.18	115.47	122.08
1	K	423	ILE	CA-C-O	-6.18	113.91	120.64
1	G	479	ASN	CA-C-N	6.17	130.57	120.63
1	G	479	ASN	C-N-CA	6.17	130.57	120.63
1	K	91	GLN	N-CA-C	6.17	118.01	111.28
1	A	257	LYS	CG-CD-CE	6.17	125.50	111.30
1	F	387	LEU	CA-C-O	6.17	129.34	120.51
1	G	303	GLY	O-C-N	6.17	130.72	122.70
1	O	271	GLN	CA-C-N	6.17	129.37	120.79
1	O	271	GLN	C-N-CA	6.17	129.37	120.79
1	S	519	ALA	CA-C-N	6.17	129.37	120.79
1	S	519	ALA	C-N-CA	6.17	129.37	120.79
1	Q	60	VAL	N-CA-CB	6.17	119.44	111.67
1	I	309	GLN	OE1-CD-NE2	-6.17	116.43	122.60
1	M	42	VAL	N-CA-CB	6.17	118.93	110.54
1	F	142	ALA	N-CA-C	6.17	118.79	111.33
1	S	419	GLY	CA-C-N	6.17	129.36	120.79
1	S	419	GLY	C-N-CA	6.17	129.36	120.79
1	D	400	ASP	CA-C-N	6.17	128.86	120.54
1	D	400	ASP	C-N-CA	6.17	128.86	120.54
1	G	119	GLU	CA-C-N	6.17	129.16	120.28
1	G	119	GLU	C-N-CA	6.17	129.16	120.28
1	C	532	ALA	N-CA-CB	-6.16	101.16	110.40
1	M	115	VAL	CB-CA-C	-6.16	104.08	111.97
1	S	257	LYS	CB-CA-C	-6.16	99.94	109.62
1	D	503	ILE	CA-CB-CG1	6.16	120.88	110.40
1	A	521	THR	O-C-N	-6.16	114.69	122.27
1	D	136	LYS	O-C-N	-6.16	115.62	122.03
1	R	298	ILE	O-C-N	-6.16	114.87	122.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	68	ILE	O-C-N	-6.16	116.20	123.03
1	F	469	LEU	N-CA-C	6.16	117.99	111.28
1	L	131	ILE	CB-CA-C	-6.16	102.62	112.16
1	P	304	ILE	CA-CB-CG2	-6.16	100.03	110.50
1	P	517	THR	CB-CA-C	-6.16	100.57	110.79
1	K	282	LEU	N-CA-CB	6.15	119.27	110.16
1	K	292	ALA	N-CA-C	6.15	120.25	112.87
1	R	419	GLY	N-CA-C	6.15	123.81	115.32
1	E	36	ILE	CA-C-N	6.15	130.97	121.19
1	E	36	ILE	C-N-CA	6.15	130.97	121.19
1	E	341	SER	CB-CA-C	-6.15	100.79	110.94
1	R	291	LEU	CA-C-N	6.15	130.44	120.60
1	R	291	LEU	C-N-CA	6.15	130.44	120.60
1	R	406	ALA	N-CA-C	6.15	118.06	111.36
1	M	458	LEU	CA-C-N	6.15	128.31	120.56
1	M	458	LEU	C-N-CA	6.15	128.31	120.56
1	B	33	ARG	NE-CZ-NH1	6.15	127.65	121.50
1	B	211	LYS	O-C-N	-6.15	115.86	123.36
1	D	425	ILE	CA-C-N	6.15	130.11	120.89
1	D	425	ILE	C-N-CA	6.15	130.11	120.89
1	F	204	LEU	N-CA-C	6.15	118.78	111.71
1	R	92	ILE	O-C-N	-6.15	115.50	121.83
1	F	382	LEU	CA-C-O	6.14	127.03	120.46
1	Q	457	ILE	N-CA-CB	6.14	118.15	110.47
1	I	179	GLU	O-C-N	-6.14	115.61	122.12
1	F	490	TYR	CA-CB-CG	-6.14	102.85	113.90
1	H	65	ASP	CA-CB-CG	-6.14	106.46	112.60
1	K	97	ASP	O-C-N	-6.14	115.61	122.12
1	L	477	HIS	CE1-NE2-CD2	-6.14	102.86	109.00
1	P	384	ARG	N-CA-C	-6.14	99.35	108.99
1	B	275	PHE	O-C-N	-6.13	114.75	122.17
1	C	251	ALA	N-CA-C	6.13	118.44	110.53
1	C	196	ARG	O-C-N	-6.13	116.09	123.27
1	I	234	HIS	CA-C-N	6.13	127.26	120.45
1	I	234	HIS	C-N-CA	6.13	127.26	120.45
1	F	486	GLY	O-C-N	-6.13	114.73	122.70
1	K	391	VAL	CA-CB-CG1	6.13	120.82	110.40
1	N	471	MET	N-CA-CB	6.13	118.90	110.01
1	R	151	GLN	CG-CD-OE1	6.13	133.06	120.80
1	M	490	TYR	CA-C-N	6.13	129.63	120.31
1	M	490	TYR	C-N-CA	6.13	129.63	120.31
1	E	331	LEU	CA-C-O	6.13	126.44	119.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	90	VAL	N-CA-C	6.13	118.71	111.05
1	K	325	LYS	CA-C-N	6.13	129.32	120.38
1	K	325	LYS	C-N-CA	6.13	129.32	120.38
1	O	413	ARG	NE-CZ-NH1	-6.13	115.37	121.50
1	P	268	ASP	CA-CB-CG	-6.13	106.47	112.60
1	Q	135	TYR	N-CA-C	6.13	117.96	111.28
1	K	214	GLY	N-CA-C	6.12	118.27	112.08
1	P	135	TYR	N-CA-C	6.12	117.96	111.28
1	H	394	THR	CA-C-O	6.12	127.01	119.79
1	I	64	GLY	CA-C-O	6.12	125.07	118.95
1	N	159	ASP	CA-CB-CG	-6.12	106.48	112.60
1	D	444	VAL	N-CA-CB	6.12	117.71	110.55
1	H	304	ILE	N-CA-C	-6.12	99.24	108.17
1	N	281	ASN	CA-C-N	6.12	128.98	120.29
1	N	281	ASN	C-N-CA	6.12	128.98	120.29
1	O	257	LYS	CA-C-O	-6.12	113.78	120.69
1	C	66	ILE	O-C-N	-6.12	116.90	123.14
1	I	320	VAL	CA-CB-CG1	6.12	120.80	110.40
1	C	94	LYS	CA-C-O	6.11	127.42	121.00
1	H	421	VAL	N-CA-C	6.11	118.69	111.05
1	E	340	VAL	O-C-N	-6.11	116.25	123.03
1	F	54	GLY	N-CA-C	6.11	122.56	112.30
1	G	66	ILE	O-C-N	-6.11	116.91	123.14
1	G	83	HIS	CE1-NE2-CD2	-6.11	102.89	109.00
1	G	530	VAL	N-CA-C	-6.11	99.56	108.11
1	E	379	ILE	CA-CB-CG1	6.11	120.78	110.40
1	E	397	ALA	N-CA-C	6.11	118.72	111.33
1	B	481	ASN	N-CA-C	-6.10	105.70	113.02
1	N	369	PHE	N-CA-C	-6.10	99.95	109.72
1	S	178	ARG	NE-CZ-NH1	-6.10	115.40	121.50
1	E	37	ALA	CA-C-N	6.10	128.78	120.54
1	E	37	ALA	C-N-CA	6.10	128.78	120.54
1	N	369	PHE	CA-CB-CG	-6.10	107.70	113.80
1	B	206	ASN	OD1-CG-ND2	-6.10	116.50	122.60
1	F	264	ILE	CA-C-O	-6.10	114.55	121.75
1	A	131	ILE	CA-C-N	6.10	128.37	120.56
1	A	131	ILE	C-N-CA	6.10	128.37	120.56
1	F	329	GLU	N-CA-C	6.10	117.60	111.07
1	Q	109	ILE	CA-C-N	6.10	128.45	120.28
1	Q	109	ILE	C-N-CA	6.10	128.45	120.28
1	R	453	SER	N-CA-C	6.10	118.71	111.33
1	C	42	VAL	CA-C-N	6.10	128.37	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	42	VAL	C-N-CA	6.10	128.37	120.44
1	F	384	ARG	CA-C-O	-6.10	114.92	121.38
1	M	147	GLN	OE1-CD-NE2	-6.10	116.50	122.60
1	O	314	LYS	CA-C-O	6.10	126.98	119.97
1	B	179	GLU	CA-C-N	6.09	128.36	120.44
1	B	179	GLU	C-N-CA	6.09	128.36	120.44
1	G	356	LEU	N-CA-C	-6.09	98.32	108.32
1	H	120	ASP	O-C-N	-6.09	115.09	122.22
1	Q	182	ALA	O-C-N	-6.09	115.69	122.03
1	L	309	GLN	OE1-CD-NE2	-6.09	116.51	122.60
1	Q	376	PRO	CA-C-N	6.09	128.44	120.28
1	Q	376	PRO	C-N-CA	6.09	128.44	120.28
1	S	350	ASP	CA-C-O	6.09	126.09	119.15
1	A	161	LEU	CA-C-N	6.09	129.27	120.38
1	A	161	LEU	C-N-CA	6.09	129.27	120.38
1	A	179	GLU	CA-C-N	6.09	128.69	120.65
1	A	179	GLU	C-N-CA	6.09	128.69	120.65
1	D	398	LEU	O-C-N	6.09	129.09	122.15
1	I	172	LYS	CA-C-N	6.09	131.03	120.68
1	I	172	LYS	C-N-CA	6.09	131.03	120.68
1	L	304	ILE	N-CA-C	-6.09	99.35	108.12
1	N	445	GLU	CA-C-N	6.09	128.36	120.44
1	N	445	GLU	C-N-CA	6.09	128.36	120.44
1	M	514	LYS	N-CA-C	6.09	117.92	111.28
1	R	233	VAL	N-CA-C	6.09	116.87	110.72
1	S	36	ILE	O-C-N	6.09	128.53	121.96
1	S	366	LYS	N-CA-C	-6.09	99.80	109.23
1	C	230	LYS	O-C-N	-6.08	116.45	123.33
1	Q	109	ILE	CA-C-O	6.08	127.60	121.27
1	K	445	GLU	CA-C-N	6.08	128.35	120.44
1	K	445	GLU	C-N-CA	6.08	128.35	120.44
1	D	206	ASN	CA-CB-CG	-6.08	106.52	112.60
1	K	295	ALA	O-C-N	-6.08	115.83	123.01
1	O	131	ILE	CB-CA-C	-6.08	102.73	112.16
1	F	477	HIS	CA-C-N	6.08	128.34	120.44
1	F	477	HIS	C-N-CA	6.08	128.34	120.44
1	N	272	MET	CB-CA-C	-6.08	101.60	110.96
1	Q	443	ALA	O-C-N	-6.08	115.81	122.07
1	D	222	LEU	N-CA-C	-6.08	99.33	109.24
1	E	183	ASP	CA-CB-CG	-6.08	106.52	112.60
1	H	245	LYS	CA-C-N	6.08	128.88	120.49
1	H	245	LYS	C-N-CA	6.08	128.88	120.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	267	ASN	N-CA-CB	6.08	118.98	110.90
1	P	240	ARG	NE-CZ-NH1	6.08	127.58	121.50
1	M	83	HIS	N-CA-C	6.07	118.43	109.50
1	P	29	LYS	CA-C-N	6.07	133.14	121.54
1	P	29	LYS	C-N-CA	6.07	133.14	121.54
1	P	277	ASP	N-CA-C	-6.07	104.58	111.14
1	Q	513	ILE	CA-C-O	-6.07	114.73	121.17
1	A	135	TYR	O-C-N	-6.07	115.68	122.12
1	B	481	ASN	CA-CB-CG	-6.07	106.53	112.60
1	E	93	ALA	CA-C-N	6.07	128.66	120.65
1	E	93	ALA	C-N-CA	6.07	128.66	120.65
1	A	477	HIS	CA-CB-CG	6.07	119.87	113.80
1	G	281	ASN	CA-CB-CG	6.07	118.67	112.60
1	G	47	LYS	N-CA-C	6.07	123.72	110.80
1	H	257	LYS	CA-C-N	6.07	126.42	119.93
1	H	257	LYS	C-N-CA	6.07	126.42	119.93
1	S	396	ARG	CB-CA-C	-6.07	101.54	110.95
1	F	142	ALA	O-C-N	-6.07	115.69	122.12
1	O	375	ASN	O-C-N	-6.07	115.77	121.35
1	D	336	GLY	CA-C-O	6.06	126.03	119.06
1	G	36	ILE	N-CA-C	6.06	116.53	110.23
1	I	369	PHE	CA-C-O	6.06	127.96	121.11
1	H	433	ALA	CA-C-O	-6.06	111.86	120.16
1	O	430	ARG	CA-C-N	6.06	129.01	120.28
1	O	430	ARG	C-N-CA	6.06	129.01	120.28
1	S	93	ALA	O-C-N	-6.06	115.48	122.03
1	G	374	LYS	O-C-N	-6.06	115.70	122.12
1	G	434	PRO	CA-C-N	6.06	132.32	121.66
1	G	434	PRO	C-N-CA	6.06	132.32	121.66
1	O	360	ARG	O-C-N	-6.06	115.88	123.27
1	O	414	ALA	CA-C-N	6.06	129.32	122.48
1	O	414	ALA	C-N-CA	6.06	129.32	122.48
1	D	440	GLU	CA-C-N	6.05	128.31	120.44
1	D	440	GLU	C-N-CA	6.05	128.31	120.44
1	I	349	GLN	OE1-CD-NE2	-6.05	116.55	122.60
1	A	282	LEU	O-C-N	-6.05	115.25	122.15
1	B	208	GLN	OE1-CD-NE2	-6.05	116.55	122.60
1	G	379	ILE	CA-C-O	-6.05	115.50	121.67
1	C	519	ALA	N-CA-C	6.05	117.54	111.07
1	D	455	VAL	CB-CA-C	-6.05	102.46	112.26
1	G	142	ALA	O-C-N	6.05	128.53	122.12
1	N	236	GLY	N-CA-C	6.05	121.32	114.67

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Q	39	VAL	N-CA-CB	6.05	117.63	110.55
1	S	72	GLY	CA-C-N	6.05	129.20	120.79
1	S	72	GLY	C-N-CA	6.05	129.20	120.79
1	S	459	ILE	CA-C-N	6.05	130.81	121.19
1	S	459	ILE	C-N-CA	6.05	130.81	121.19
1	C	130	ILE	N-CA-C	-6.05	104.95	110.82
1	B	357	ILE	N-CA-C	-6.05	99.76	108.53
1	F	70	ASN	N-CA-C	-6.05	104.01	113.02
1	D	256	GLU	O-C-N	-6.04	116.15	123.10
1	R	298	ILE	CA-C-O	6.04	128.34	120.78
1	C	232	VAL	CA-C-N	6.04	128.74	120.46
1	C	232	VAL	C-N-CA	6.04	128.74	120.46
1	H	277	ASP	CA-C-O	6.04	126.92	120.70
1	O	404	THR	N-CA-C	6.04	117.54	111.07
1	S	374	LYS	CA-C-N	6.04	130.01	121.61
1	S	374	LYS	C-N-CA	6.04	130.01	121.61
1	A	504	GLU	O-C-N	-6.04	117.62	121.85
1	B	322	ARG	NE-CZ-NH2	-6.04	113.76	119.20
1	N	37	ALA	O-C-N	-6.04	114.89	122.20
1	R	80	ASP	CA-CB-CG	-6.04	106.56	112.60
1	D	398	LEU	N-CA-C	6.04	117.94	111.36
1	O	251	ALA	CA-C-O	6.04	127.61	120.66
1	I	291	LEU	CA-C-N	6.04	130.26	120.60
1	I	291	LEU	C-N-CA	6.04	130.26	120.60
1	I	304	ILE	O-C-N	-6.04	116.81	123.03
1	N	499	GLN	CA-C-N	6.04	130.31	120.23
1	N	499	GLN	C-N-CA	6.04	130.31	120.23
1	P	161	LEU	O-C-N	-6.04	115.15	122.22
1	P	322	ARG	CA-C-N	6.04	129.44	120.87
1	P	322	ARG	C-N-CA	6.04	129.44	120.87
1	A	130	ILE	CB-CA-C	-6.04	104.11	112.02
1	E	277	ASP	N-CA-CB	-6.03	101.32	110.07
1	K	488	ASP	O-C-N	-6.03	114.56	122.59
1	N	292	ALA	CA-C-N	6.03	132.36	121.92
1	N	292	ALA	C-N-CA	6.03	132.36	121.92
1	A	274	LYS	CA-C-N	6.03	130.65	120.88
1	A	274	LYS	C-N-CA	6.03	130.65	120.88
1	B	114	LEU	CA-C-O	6.03	126.94	120.55
1	G	234	HIS	CA-CB-CG	6.03	119.83	113.80
1	K	120	ASP	CA-CB-CG	-6.03	106.57	112.60
1	I	322	ARG	NH1-CZ-NH2	-6.03	111.46	119.30
1	N	125	ASP	CA-C-N	-6.03	114.59	122.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	125	ASP	C-N-CA	-6.03	114.59	122.37
1	N	237	MET	CA-C-N	-6.03	113.76	119.85
1	N	237	MET	C-N-CA	-6.03	113.76	119.85
1	O	192	VAL	CA-C-N	6.03	129.67	121.05
1	O	192	VAL	C-N-CA	6.03	129.67	121.05
1	E	106	THR	CA-C-N	6.03	129.86	120.82
1	E	106	THR	C-N-CA	6.03	129.86	120.82
1	H	57	LYS	N-CA-CB	6.03	120.50	110.85
1	M	218	ASN	CB-CG-ND2	6.03	125.44	116.40
1	A	399	ARG	CA-C-N	6.03	128.35	120.28
1	A	399	ARG	C-N-CA	6.03	128.35	120.28
1	B	530	VAL	CB-CA-C	-6.02	103.56	111.81
1	I	452	GLU	CA-C-N	6.02	128.63	120.38
1	I	452	GLU	C-N-CA	6.02	128.63	120.38
1	G	268	ASP	CA-C-N	6.02	125.64	119.56
1	G	268	ASP	C-N-CA	6.02	125.64	119.56
1	O	329	GLU	CA-C-N	6.02	128.95	120.28
1	O	329	GLU	C-N-CA	6.02	128.95	120.28
1	D	454	LEU	N-CA-C	6.02	118.33	111.11
1	R	261	ASP	CA-CB-CG	6.02	118.62	112.60
1	I	174	VAL	CA-C-N	6.02	128.34	120.28
1	I	174	VAL	C-N-CA	6.02	128.34	120.28
1	O	289	LYS	O-C-N	-6.02	114.87	122.27
1	Q	254	GLU	CB-CG-CD	-6.02	102.37	112.60
1	B	138	ALA	CA-C-N	6.01	128.26	120.44
1	B	138	ALA	C-N-CA	6.01	128.26	120.44
1	S	97	ASP	CA-CB-CG	-6.01	106.58	112.60
1	D	354	ALA	CA-C-N	6.01	128.62	120.38
1	D	354	ALA	C-N-CA	6.01	128.62	120.38
1	I	178	ARG	NE-CZ-NH1	-6.01	115.49	121.50
1	D	456	SER	N-CA-CB	6.01	118.72	110.01
1	E	320	VAL	CA-C-N	6.01	131.29	123.00
1	E	320	VAL	C-N-CA	6.01	131.29	123.00
1	O	53	ARG	NE-CZ-NH1	6.01	127.51	121.50
1	Q	475	SER	N-CA-CB	6.01	119.21	110.26
1	S	513	ILE	O-C-N	-6.01	116.02	121.91
1	I	479	ASN	CA-CB-CG	-6.01	106.59	112.60
1	O	325	LYS	CA-C-N	6.01	129.15	120.38
1	O	325	LYS	C-N-CA	6.01	129.15	120.38
1	R	94	LYS	N-CA-C	6.01	117.52	110.97
1	L	370	VAL	O-C-N	-6.00	115.06	122.57
1	F	176	GLY	CA-C-O	-6.00	114.80	121.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	374	LYS	N-CA-C	6.00	118.61	111.71
1	P	61	ASP	CA-C-N	6.00	128.32	120.28
1	P	61	ASP	C-N-CA	6.00	128.32	120.28
1	R	251	ALA	N-CA-C	6.00	118.29	110.43
1	I	480	GLU	CB-CG-CD	-6.00	102.40	112.60
1	N	99	GLU	CA-C-O	6.00	127.82	120.92
1	H	376	PRO	N-CA-C	-6.00	106.17	114.27
1	K	296	ASN	CB-CA-C	6.00	120.11	110.09
1	L	369	PHE	CA-CB-CG	6.00	119.80	113.80
1	P	457	ILE	CA-C-N	6.00	128.24	120.44
1	P	457	ILE	C-N-CA	6.00	128.24	120.44
1	S	523	VAL	N-CA-C	6.00	116.74	110.62
1	A	265	ARG	O-C-N	-5.99	116.40	123.11
1	G	380	SER	CB-CA-C	-5.99	97.50	109.79
1	H	459	ILE	CA-C-N	5.99	130.72	121.19
1	H	459	ILE	C-N-CA	5.99	130.72	121.19
1	L	141	VAL	CB-CA-C	-5.99	104.30	111.97
1	L	429	LEU	CA-C-N	5.99	128.31	120.28
1	L	429	LEU	C-N-CA	5.99	128.31	120.28
1	P	172	LYS	N-CA-C	5.99	119.28	110.59
1	E	297	VAL	N-CA-C	-5.99	99.11	108.81
1	M	302	LYS	CA-C-N	5.99	128.85	121.06
1	M	302	LYS	C-N-CA	5.99	128.85	121.06
1	N	433	ALA	CA-C-N	5.99	127.33	119.84
1	N	433	ALA	C-N-CA	5.99	127.33	119.84
1	O	68	ILE	O-C-N	-5.99	116.38	123.03
1	P	172	LYS	CA-C-N	5.99	128.56	120.65
1	P	172	LYS	C-N-CA	5.99	128.56	120.65
1	B	340	VAL	O-C-N	-5.99	115.63	122.94
1	C	234	HIS	O-C-N	-5.99	116.03	121.66
1	S	343	ILE	N-CA-C	5.99	119.44	111.17
1	E	98	GLU	N-CA-CB	5.99	118.87	109.83
1	D	453	SER	N-CA-C	5.99	118.57	111.33
1	N	496	ASP	CA-C-N	5.99	128.58	120.44
1	N	496	ASP	C-N-CA	5.99	128.58	120.44
1	E	484	TRP	CB-CG-CD2	5.98	135.18	126.80
1	F	184	ILE	N-CA-C	5.98	116.45	110.23
1	L	346	ILE	O-C-N	-5.98	116.09	122.61
1	A	449	ASN	CA-C-N	5.98	128.29	120.28
1	A	449	ASN	C-N-CA	5.98	128.29	120.28
1	I	83	HIS	N-CA-C	5.98	118.09	109.48
1	Q	58	MET	CG-SD-CE	-5.98	87.75	100.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	157	ASP	CA-CB-CG	-5.98	106.62	112.60
1	N	127	HIS	CA-C-N	5.98	125.86	119.28
1	N	127	HIS	C-N-CA	5.98	125.86	119.28
1	N	337	GLY	N-CA-C	5.98	122.34	112.30
1	F	283	ILE	N-CA-C	-5.97	104.49	111.00
1	H	352	GLY	CA-C-O	5.97	125.95	120.81
1	L	135	TYR	CB-CG-CD1	-5.97	111.84	120.80
1	L	420	ALA	O-C-N	-5.97	115.69	122.08
1	M	161	LEU	CA-C-N	5.97	128.88	120.28
1	M	161	LEU	C-N-CA	5.97	128.88	120.28
1	N	184	ILE	N-CA-CB	5.97	116.89	110.62
1	C	38	ALA	N-CA-C	5.97	118.28	111.11
1	L	61	ASP	CA-C-O	-5.97	115.05	121.56
1	R	277	ASP	CA-C-O	5.97	126.85	120.70
1	B	169	LEU	CA-C-N	5.97	130.15	120.60
1	B	169	LEU	C-N-CA	5.97	130.15	120.60
1	G	386	GLY	CA-C-N	5.97	132.94	121.54
1	G	386	GLY	C-N-CA	5.97	132.94	121.54
1	I	73	ALA	CA-C-N	5.97	128.28	120.28
1	I	73	ALA	C-N-CA	5.97	128.28	120.28
1	N	176	GLY	CA-C-N	5.97	130.88	122.46
1	N	176	GLY	C-N-CA	5.97	130.88	122.46
1	F	88	LEU	CB-CA-C	-5.97	100.71	110.85
1	B	162	ARG	CA-C-N	5.96	130.54	120.88
1	B	162	ARG	C-N-CA	5.96	130.54	120.88
1	F	31	ALA	CB-CA-C	-5.96	99.79	110.70
1	F	141	VAL	CA-CB-CG2	-5.96	100.26	110.40
1	H	133	SER	CA-C-O	-5.96	114.23	120.55
1	M	36	ILE	N-CA-C	5.96	116.62	110.36
1	D	234	HIS	CB-CG-CD2	-5.96	123.45	131.20
1	R	51	GLY	O-C-N	-5.96	115.81	121.77
1	Q	453	SER	N-CA-C	5.96	118.54	111.33
1	R	516	ALA	CA-C-N	5.96	128.27	120.28
1	R	516	ALA	C-N-CA	5.96	128.27	120.28
1	G	389	ARG	N-CA-C	-5.96	106.55	113.88
1	F	389	ARG	NE-CZ-NH1	5.96	127.46	121.50
1	M	187	LYS	CA-C-N	5.96	128.26	120.28
1	M	187	LYS	C-N-CA	5.96	128.26	120.28
1	M	256	GLU	CA-C-N	5.96	128.67	120.39
1	M	256	GLU	C-N-CA	5.96	128.67	120.39
1	B	271	GLN	N-CA-C	5.96	118.73	111.82
1	D	526	ILE	O-C-N	-5.96	115.81	122.66

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	522	LEU	CA-C-O	5.96	126.73	120.42
1	B	464	PHE	CA-CB-CG	-5.96	107.84	113.80
1	D	491	ALA	N-CA-C	5.96	119.73	112.23
1	Q	474	ARG	NE-CZ-NH2	5.96	124.56	119.20
1	S	256	GLU	N-CA-CB	-5.96	101.32	110.85
1	N	274	LYS	O-C-N	-5.95	114.67	122.59
1	I	450	ALA	N-CA-C	5.95	117.77	111.28
1	Q	456	SER	CA-C-N	5.95	128.92	120.53
1	Q	456	SER	C-N-CA	5.95	128.92	120.53
1	F	165	ALA	O-C-N	-5.95	115.66	122.09
1	F	457	ILE	CB-CA-C	-5.95	104.11	112.14
1	R	106	THR	N-CA-CB	5.95	118.61	109.98
1	A	447	TYR	CA-C-N	5.95	128.53	120.44
1	A	447	TYR	C-N-CA	5.95	128.53	120.44
1	C	67	THR	CA-C-N	5.95	130.43	122.93
1	C	67	THR	C-N-CA	5.95	130.43	122.93
1	F	62	SER	N-CA-C	5.95	118.25	111.11
1	F	501	GLY	CA-C-O	-5.95	112.62	119.10
1	G	310	SER	N-CA-CB	5.95	119.38	110.22
1	I	35	ASN	CA-C-N	5.95	128.56	120.77
1	I	35	ASN	C-N-CA	5.95	128.56	120.77
1	Q	479	ASN	OD1-CG-ND2	-5.95	116.65	122.60
1	L	341	SER	N-CA-CB	5.95	119.27	110.53
1	B	396	ARG	CA-C-O	-5.95	114.76	121.00
1	K	190	THR	CA-C-N	5.95	128.73	120.29
1	K	190	THR	C-N-CA	5.95	128.73	120.29
1	N	370	VAL	CA-C-O	5.94	128.21	120.78
1	S	493	GLN	CA-C-N	5.94	126.25	119.83
1	S	493	GLN	C-N-CA	5.94	126.25	119.83
1	A	257	LYS	N-CA-C	5.94	116.43	109.60
1	B	229	ASP	O-C-N	-5.94	115.91	122.09
1	B	430	ARG	NE-CZ-NH1	5.94	127.44	121.50
1	D	41	ALA	CA-C-N	5.94	128.60	120.46
1	D	41	ALA	C-N-CA	5.94	128.60	120.46
1	K	105	LYS	N-CA-C	5.94	117.75	111.28
1	S	98	GLU	O-C-N	-5.94	116.27	123.10
1	S	410	LYS	CA-C-O	5.94	126.81	120.10
1	G	83	HIS	CG-CD2-NE2	5.94	113.14	107.20
1	I	227	VAL	O-C-N	-5.94	117.27	123.03
1	R	264	ILE	N-CA-CB	-5.94	104.94	112.60
1	E	387	LEU	CA-C-N	5.94	130.19	120.63
1	E	387	LEU	C-N-CA	5.94	130.19	120.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	127	HIS	CB-CG-CD2	5.94	138.92	131.20
1	O	398	LEU	O-C-N	-5.94	115.38	122.15
1	R	390	LEU	CA-C-N	5.94	128.59	120.46
1	R	390	LEU	C-N-CA	5.94	128.59	120.46
1	D	328	LEU	N-CA-C	5.94	117.75	111.28
1	F	438	GLY	O-C-N	-5.94	114.98	122.70
1	F	487	ILE	N-CA-CB	-5.94	104.42	111.90
1	N	64	GLY	CA-C-N	5.94	129.30	120.87
1	N	64	GLY	C-N-CA	5.94	129.30	120.87
1	B	455	VAL	CA-C-O	-5.93	114.06	120.47
1	L	361	LYS	CA-C-N	5.93	131.41	123.10
1	L	361	LYS	C-N-CA	5.93	131.41	123.10
1	M	166	MET	N-CA-C	-5.93	104.81	111.28
1	O	323	ALA	O-C-N	-5.93	116.01	123.01
1	P	347	SER	O-C-N	-5.93	114.72	122.97
1	E	178	ARG	NE-CZ-NH2	5.93	124.54	119.20
1	E	278	GLU	N-CA-CB	-5.93	101.09	110.28
1	E	430	ARG	CD-NE-CZ	-5.93	116.10	124.40
1	I	146	ILE	CA-C-O	5.93	127.04	120.46
1	A	220	THR	CA-CB-OG1	5.93	118.49	109.60
1	H	520	ALA	O-C-N	-5.93	115.74	122.08
1	Q	246	ILE	N-CA-C	5.93	117.99	109.51
1	R	390	LEU	N-CA-C	5.93	117.74	111.28
1	D	108	VAL	N-CA-C	5.93	116.10	110.53
1	N	513	ILE	N-CA-C	5.93	116.67	110.62
1	P	102	ASP	CA-CB-CG	-5.93	106.67	112.60
1	S	51	GLY	CA-C-N	5.93	125.55	119.56
1	S	51	GLY	C-N-CA	5.93	125.55	119.56
1	D	167	THR	N-CA-C	5.92	123.42	110.80
1	B	114	LEU	CA-C-N	5.92	128.02	120.56
1	B	114	LEU	C-N-CA	5.92	128.02	120.56
1	C	339	VAL	N-CA-CB	5.92	117.75	111.00
1	N	315	LYS	N-CA-C	-5.92	105.55	112.89
1	N	416	ALA	O-C-N	-5.92	116.11	123.04
1	E	385	GLY	CA-C-N	5.92	129.19	121.85
1	E	385	GLY	C-N-CA	5.92	129.19	121.85
1	N	243	ASN	OD1-CG-ND2	-5.92	116.68	122.60
1	Q	305	ASP	O-C-N	-5.92	115.53	122.81
1	C	416	ALA	CA-C-N	5.92	130.56	122.04
1	C	416	ALA	C-N-CA	5.92	130.56	122.04
1	L	320	VAL	O-C-N	-5.92	116.77	123.10
1	I	281	ASN	CA-C-O	5.92	126.65	119.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	170	SER	N-CA-C	5.92	119.60	112.38
1	S	346	ILE	O-C-N	-5.92	116.16	122.61
1	L	234	HIS	CA-C-N	5.92	125.79	119.28
1	L	234	HIS	C-N-CA	5.92	125.79	119.28
1	D	105	LYS	N-CA-C	-5.92	104.91	111.36
1	H	296	ASN	CA-C-O	5.92	125.82	118.43
1	M	40	LYS	CA-C-N	5.92	128.53	120.54
1	M	40	LYS	C-N-CA	5.92	128.53	120.54
1	C	343	ILE	N-CA-C	5.91	119.33	111.17
1	E	413	ARG	NE-CZ-NH2	5.91	124.52	119.20
1	E	404	THR	N-CA-C	5.91	118.20	111.11
1	L	449	ASN	CA-C-O	-5.91	114.28	120.55
1	O	334	ALA	N-CA-CB	5.91	119.01	110.20
1	A	439	LYS	CA-C-N	5.91	130.14	120.63
1	A	439	LYS	C-N-CA	5.91	130.14	120.63
1	C	233	VAL	CA-CB-CG1	5.91	120.44	110.40
1	I	52	PRO	N-CA-C	-5.91	106.30	114.27
1	H	178	ARG	CG-CD-NE	-5.91	99.01	112.00
1	I	390	LEU	CA-C-N	5.91	128.81	120.42
1	I	390	LEU	C-N-CA	5.91	128.81	120.42
1	K	184	ILE	CA-C-N	5.91	128.85	120.53
1	K	184	ILE	C-N-CA	5.91	128.85	120.53
1	L	195	LEU	N-CA-C	5.91	118.27	109.59
1	M	480	GLU	O-C-N	-5.91	115.86	122.12
1	O	277	ASP	N-CA-C	-5.91	104.76	111.14
1	S	119	GLU	N-CA-C	5.91	117.72	111.28
1	S	186	VAL	CA-CB-CG2	-5.91	100.36	110.40
1	F	391	VAL	CA-CB-CG1	5.90	120.44	110.40
1	A	140	GLU	N-CA-C	5.90	121.05	111.37
1	B	304	ILE	CA-C-O	-5.90	114.97	120.22
1	H	69	THR	CA-C-N	5.90	131.01	121.98
1	H	69	THR	C-N-CA	5.90	131.01	121.98
1	H	408	VAL	O-C-N	5.90	127.60	121.87
1	Q	358	GLU	N-CA-CB	-5.90	102.23	111.56
1	F	499	GLN	CA-C-N	5.90	129.26	120.17
1	F	499	GLN	C-N-CA	5.90	129.26	120.17
1	S	221	GLN	CA-C-N	5.90	130.86	122.72
1	S	221	GLN	C-N-CA	5.90	130.86	122.72
1	D	49	THR	N-CA-CB	5.90	119.59	110.80
1	D	202	VAL	O-C-N	5.90	128.28	122.97
1	S	276	LEU	CA-C-N	5.90	128.46	120.44
1	S	276	LEU	C-N-CA	5.90	128.46	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	71	ASP	O-C-N	-5.90	115.53	122.96
1	M	141	VAL	CA-C-O	5.90	127.42	121.17
1	R	247	ALA	CB-CA-C	-5.90	101.32	111.23
1	D	113	GLU	N-CA-C	5.89	117.78	111.36
1	L	305	ASP	O-C-N	-5.89	114.75	122.59
1	B	303	GLY	N-CA-C	5.89	119.74	112.14
1	A	482	ASN	CA-C-N	5.89	128.45	120.38
1	A	482	ASN	C-N-CA	5.89	128.45	120.38
1	I	228	VAL	CB-CA-C	-5.89	103.83	110.96
1	N	83	HIS	N-CA-C	5.89	117.96	109.48
1	M	123	TYR	N-CA-C	5.89	117.70	111.28
1	M	210	VAL	O-C-N	-5.89	116.86	122.98
1	P	350	ASP	N-CA-C	-5.89	105.75	113.17
1	B	477	HIS	CG-CD2-NE2	5.89	113.09	107.20
1	K	490	TYR	N-CA-C	-5.89	106.72	114.31
1	L	249	ILE	N-CA-C	5.89	116.28	107.51
1	M	375	ASN	CA-CB-CG	-5.89	106.71	112.60
1	O	91	GLN	O-C-N	-5.89	115.88	122.12
1	G	398	LEU	CA-C-N	5.88	128.09	120.44
1	G	398	LEU	C-N-CA	5.88	128.09	120.44
1	G	459	ILE	O-C-N	5.88	127.68	121.91
1	L	234	HIS	CB-CG-CD2	-5.88	123.55	131.20
1	L	371	GLU	N-CA-C	5.88	118.80	110.50
1	R	165	ALA	N-CA-CB	5.88	118.60	110.07
1	F	218	ASN	CA-CB-CG	-5.88	106.72	112.60
1	N	102	ASP	CA-C-N	5.88	127.49	120.14
1	N	102	ASP	C-N-CA	5.88	127.49	120.14
1	P	287	VAL	N-CA-C	5.88	116.06	110.42
1	G	423	ILE	CA-CB-CG2	5.88	120.50	110.50
1	H	88	LEU	CA-C-O	5.88	126.65	120.42
1	A	83	HIS	CG-CD2-NE2	5.88	113.08	107.20
1	Q	180	TYR	CA-C-N	5.88	128.76	120.42
1	Q	180	TYR	C-N-CA	5.88	128.76	120.42
1	R	89	LEU	O-C-N	5.88	128.12	122.07
1	D	163	LYS	N-CA-C	-5.88	103.66	111.24
1	M	479	ASN	OD1-CG-ND2	-5.87	116.73	122.60
1	N	29	LYS	CB-CA-C	-5.87	100.70	110.68
1	B	70	ASN	CA-C-N	5.87	129.69	121.24
1	B	70	ASN	C-N-CA	5.87	129.69	121.24
1	D	384	ARG	N-CA-C	-5.87	99.77	108.99
1	G	138	ALA	CA-C-O	-5.87	114.20	120.42
1	R	374	LYS	N-CA-C	5.87	118.44	111.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	85	ALA	CA-C-N	5.87	128.95	120.79
1	A	85	ALA	C-N-CA	5.87	128.95	120.79
1	B	33	ARG	NE-CZ-NH2	-5.87	113.92	119.20
1	D	153	VAL	CA-CB-CG2	-5.87	100.42	110.40
1	F	213	ALA	CA-C-N	5.87	132.01	122.21
1	F	213	ALA	C-N-CA	5.87	132.01	122.21
1	F	377	LYS	CA-C-O	5.87	126.64	120.42
1	K	324	LYS	CA-C-N	5.87	128.73	120.28
1	K	324	LYS	C-N-CA	5.87	128.73	120.28
1	M	477	HIS	CE1-NE2-CD2	-5.87	103.13	109.00
1	Q	245	LYS	CA-C-N	5.87	128.59	120.49
1	Q	245	LYS	C-N-CA	5.87	128.59	120.49
1	S	110	PHE	CB-CA-C	5.87	120.53	110.79
1	S	489	LEU	CA-C-O	5.87	126.81	119.12
1	K	141	VAL	CB-CA-C	-5.87	104.46	111.97
1	P	368	VAL	N-CA-C	5.87	117.03	108.58
1	Q	138	ALA	CA-C-N	5.87	128.06	120.44
1	Q	138	ALA	C-N-CA	5.87	128.06	120.44
1	K	242	GLU	N-CA-C	5.86	119.81	109.96
1	M	340	VAL	CB-CA-C	-5.86	103.53	111.15
1	Q	83	HIS	ND1-CE1-NE2	5.86	114.26	108.40
1	S	277	ASP	O-C-N	-5.86	115.76	122.09
1	B	355	SER	O-C-N	-5.86	115.91	122.12
1	D	109	ILE	N-CA-C	5.86	116.33	110.23
1	G	360	ARG	NE-CZ-NH1	-5.86	115.64	121.50
1	Q	54	GLY	N-CA-C	5.86	118.78	112.33
1	D	32	VAL	O-C-N	-5.86	115.98	121.90
1	F	427	LYS	CB-CA-C	5.86	120.57	110.84
1	G	338	ARG	CA-CB-CG	5.86	125.82	114.10
1	H	91	GLN	N-CA-C	5.86	117.67	111.28
1	I	474	ARG	NE-CZ-NH1	-5.86	115.64	121.50
1	Q	392	ASP	CA-CB-CG	5.86	118.46	112.60
1	A	240	ARG	NH1-CZ-NH2	-5.86	111.68	119.30
1	D	278	GLU	CA-C-O	5.86	126.71	119.97
1	E	48	SER	N-CA-C	5.86	121.45	113.37
1	N	197	GLY	CA-C-N	5.86	130.69	122.08
1	N	197	GLY	C-N-CA	5.86	130.69	122.08
1	Q	358	GLU	N-CA-C	5.86	117.69	108.96
1	M	224	TYR	N-CA-CB	5.86	117.67	110.53
1	P	307	VAL	CG1-CB-CG2	-5.86	97.92	110.80
1	P	457	ILE	N-CA-CB	5.86	117.79	110.47
1	D	477	HIS	CA-C-O	5.85	126.39	119.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	525	ARG	CA-C-N	5.85	129.96	121.18
1	F	525	ARG	C-N-CA	5.85	129.96	121.18
1	H	423	ILE	CA-C-N	5.85	128.59	120.63
1	H	423	ILE	C-N-CA	5.85	128.59	120.63
1	P	110	PHE	O-C-N	5.85	128.32	122.12
1	D	229	ASP	N-CA-C	5.85	118.41	111.33
1	G	74	THR	N-CA-C	5.85	117.65	111.28
1	M	184	ILE	CA-C-N	5.85	128.78	120.53
1	M	184	ILE	C-N-CA	5.85	128.78	120.53
1	N	310	SER	CA-C-N	5.85	128.39	120.44
1	N	310	SER	C-N-CA	5.85	128.39	120.44
1	H	245	LYS	O-C-N	-5.85	114.68	122.28
1	N	210	VAL	CA-C-O	5.84	127.51	120.67
1	P	233	VAL	N-CA-C	5.84	120.62	112.50
1	R	53	ARG	N-CA-C	-5.84	104.70	112.94
1	C	523	VAL	N-CA-CB	5.84	118.48	110.54
1	E	388	GLU	O-C-N	-5.84	114.74	122.33
1	K	336	GLY	CA-C-O	5.84	125.50	119.02
1	F	374	LYS	CA-C-N	5.84	129.72	121.61
1	F	374	LYS	C-N-CA	5.84	129.72	121.61
1	O	32	VAL	O-C-N	-5.84	115.28	122.57
1	C	42	VAL	CB-CA-C	-5.83	104.26	112.14
1	P	426	ALA	N-CA-C	-5.83	98.37	110.80
1	C	504	GLU	CA-C-N	5.83	127.13	119.84
1	C	504	GLU	C-N-CA	5.83	127.13	119.84
1	G	416	ALA	O-C-N	-5.83	116.22	123.04
1	O	55	MET	CG-SD-CE	-5.83	88.07	100.90
1	D	76	LEU	N-CA-C	-5.83	106.30	113.41
1	R	261	ASP	N-CA-C	5.83	117.31	111.07
1	I	454	LEU	CA-C-N	5.83	129.86	120.30
1	I	454	LEU	C-N-CA	5.83	129.86	120.30
1	E	510	MET	N-CA-C	-5.83	106.21	113.55
1	K	400	ASP	N-CA-CB	-5.83	101.56	110.01
1	P	451	LEU	O-C-N	-5.83	115.50	122.15
1	S	399	ARG	NE-CZ-NH1	-5.83	115.67	121.50
1	P	440	GLU	CA-C-N	5.83	128.41	120.54
1	P	440	GLU	C-N-CA	5.83	128.41	120.54
1	S	516	ALA	CA-C-N	5.83	128.67	120.28
1	S	516	ALA	C-N-CA	5.83	128.67	120.28
1	M	228	VAL	CA-C-N	5.82	128.08	120.28
1	M	228	VAL	C-N-CA	5.82	128.08	120.28
1	O	74	THR	O-C-N	-5.82	115.95	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	173	ALA	N-CA-C	5.82	117.62	111.28
1	C	527	ASP	CA-CB-CG	-5.82	106.78	112.60
1	E	396	ARG	N-CA-C	-5.82	104.86	111.14
1	G	194	GLU	CA-C-N	5.82	130.16	122.42
1	G	194	GLU	C-N-CA	5.82	130.16	122.42
1	G	398	LEU	CA-C-O	-5.82	114.25	120.42
1	O	400	ASP	CA-CB-CG	-5.82	106.78	112.60
1	S	259	GLU	O-C-N	-5.82	115.76	121.93
1	A	39	VAL	CB-CA-C	5.82	119.41	111.97
1	M	429	LEU	CA-C-N	5.82	128.00	120.44
1	M	429	LEU	C-N-CA	5.82	128.00	120.44
1	H	68	ILE	O-C-N	-5.81	117.08	123.18
1	M	74	THR	N-CA-C	5.81	118.36	111.33
1	B	193	ALA	CA-C-O	5.81	127.71	121.55
1	F	394	THR	CA-C-O	5.81	126.65	119.97
1	N	450	ALA	O-C-N	-5.81	115.96	122.12
1	N	521	THR	CA-CB-OG1	5.81	118.32	109.60
1	I	196	ARG	NE-CZ-NH1	-5.81	115.69	121.50
1	R	41	ALA	CA-C-N	5.81	128.42	120.46
1	R	41	ALA	C-N-CA	5.81	128.42	120.46
1	A	505	PRO	CA-C-N	5.81	128.86	120.38
1	A	505	PRO	C-N-CA	5.81	128.86	120.38
1	I	497	MET	N-CA-C	5.81	117.28	111.07
1	I	447	TYR	CA-C-N	5.81	128.34	120.44
1	I	447	TYR	C-N-CA	5.81	128.34	120.44
1	E	90	VAL	O-C-N	-5.80	116.01	121.87
1	F	281	ASN	CA-CB-CG	-5.80	106.80	112.60
1	H	62	SER	N-CA-C	5.80	118.08	111.11
1	I	430	ARG	NE-CZ-NH1	5.80	127.30	121.50
1	Q	35	ASN	CA-CB-CG	-5.80	106.80	112.60
1	Q	167	THR	CA-C-O	5.80	126.42	119.10
1	S	365	ASP	CA-CB-CG	-5.80	106.80	112.60
1	F	472	LYS	CA-C-O	5.80	126.70	120.20
1	K	162	ARG	CA-C-N	5.80	130.28	120.88
1	K	162	ARG	C-N-CA	5.80	130.28	120.88
1	L	294	GLY	N-CA-C	-5.80	106.77	114.95
1	B	159	ASP	CA-CB-CG	-5.80	106.80	112.60
1	D	178	ARG	NE-CZ-NH1	-5.80	115.70	121.50
1	O	470	LEU	O-C-N	-5.80	116.09	122.07
1	C	222	LEU	CA-C-O	5.80	126.75	120.43
1	F	227	VAL	O-C-N	5.80	128.66	123.03
1	G	519	ALA	O-C-N	-5.80	116.10	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	245	LYS	N-CA-CB	5.80	117.02	110.35
1	L	479	ASN	CA-C-N	5.80	128.05	120.28
1	L	479	ASN	C-N-CA	5.80	128.05	120.28
1	R	326	SER	N-CA-C	5.80	118.34	111.33
1	A	468	ASP	CA-C-N	5.80	128.05	120.28
1	A	468	ASP	C-N-CA	5.80	128.05	120.28
1	F	389	ARG	CB-CA-C	-5.80	100.36	109.34
1	R	321	ARG	NE-CZ-NH2	-5.80	113.98	119.20
1	G	275	PHE	CA-CB-CG	5.79	119.59	113.80
1	Q	89	LEU	N-CA-C	5.79	117.27	111.07
1	Q	352	GLY	O-C-N	-5.79	115.17	122.70
1	H	192	VAL	CA-C-N	5.79	128.94	120.71
1	H	192	VAL	C-N-CA	5.79	128.94	120.71
1	M	503	ILE	O-C-N	-5.79	116.61	123.04
1	L	301	GLN	CA-C-O	5.79	125.75	119.15
1	L	359	GLU	CA-C-O	5.79	126.69	120.38
1	O	53	ARG	CA-C-O	5.79	125.75	119.15
1	Q	375	ASN	CA-C-O	-5.79	115.03	119.32
1	R	519	ALA	O-C-N	-5.79	116.01	122.03
1	A	244	ALA	O-C-N	-5.79	114.89	122.59
1	C	508	VAL	N-CA-C	-5.79	104.86	110.42
1	E	328	LEU	CA-C-N	5.79	128.29	120.65
1	E	328	LEU	C-N-CA	5.79	128.29	120.65
1	L	213	ALA	O-C-N	-5.79	115.69	122.81
1	A	135	TYR	CB-CG-CD2	5.79	129.48	120.80
1	A	273	GLN	OE1-CD-NE2	-5.79	116.81	122.60
1	Q	397	ALA	CA-C-O	-5.79	114.38	120.63
1	A	130	ILE	N-CA-CB	5.79	117.97	110.57
1	L	214	GLY	N-CA-C	-5.79	104.07	112.17
1	Q	77	ASP	N-CA-C	5.79	117.39	111.14
1	O	501	GLY	O-C-N	-5.78	115.00	122.34
1	D	109	ILE	CA-C-N	5.78	128.61	120.28
1	D	109	ILE	C-N-CA	5.78	128.61	120.28
1	H	358	GLU	O-C-N	-5.78	116.45	123.10
1	N	510	MET	N-CA-C	-5.78	106.26	113.55
1	F	362	VAL	CA-C-N	5.78	132.74	121.41
1	F	362	VAL	C-N-CA	5.78	132.74	121.41
1	P	155	ILE	CA-C-O	5.78	126.96	120.95
1	Q	110	PHE	CB-CG-CD2	5.78	130.53	120.70
1	S	137	LYS	N-CA-C	5.78	117.58	111.28
1	O	274	LYS	CA-C-N	5.78	130.24	120.88
1	O	274	LYS	C-N-CA	5.78	130.24	120.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	35	ASN	OD1-CG-ND2	-5.78	116.82	122.60
1	F	257	LYS	CA-C-N	5.78	127.06	119.84
1	F	257	LYS	C-N-CA	5.78	127.06	119.84
1	L	421	VAL	N-CA-C	5.78	118.31	111.09
1	O	525	ARG	O-C-N	-5.78	115.17	122.27
1	R	91	GLN	CA-C-N	5.78	128.62	120.42
1	R	91	GLN	C-N-CA	5.78	128.62	120.42
1	S	401	ALA	CA-C-N	5.78	127.95	120.44
1	S	401	ALA	C-N-CA	5.78	127.95	120.44
1	A	395	GLU	CA-C-N	5.77	127.95	120.44
1	A	395	GLU	C-N-CA	5.77	127.95	120.44
1	C	83	HIS	ND1-CE1-NE2	5.77	114.17	108.40
1	H	51	GLY	CA-C-N	5.77	125.87	119.87
1	H	51	GLY	C-N-CA	5.77	125.87	119.87
1	H	141	VAL	CB-CA-C	-5.77	104.58	111.97
1	L	35	ASN	O-C-N	5.77	128.09	122.09
1	Q	431	LYS	CA-C-N	5.77	130.35	120.71
1	Q	431	LYS	C-N-CA	5.77	130.35	120.71
1	O	140	GLU	O-C-N	-5.77	115.22	122.20
1	A	287	VAL	O-C-N	-5.77	116.25	121.91
1	F	360	ARG	NE-CZ-NH1	-5.77	115.73	121.50
1	R	127	HIS	CE1-NE2-CD2	-5.77	103.23	109.00
1	H	423	ILE	CA-CB-CG1	5.77	120.21	110.40
1	I	357	ILE	CB-CA-C	5.77	119.58	110.81
1	L	185	VAL	CA-C-N	5.77	127.83	120.56
1	L	185	VAL	C-N-CA	5.77	127.83	120.56
1	M	284	LYS	CA-C-N	5.77	127.94	120.44
1	M	284	LYS	C-N-CA	5.77	127.94	120.44
1	P	526	ILE	CB-CA-C	-5.77	101.83	111.29
1	R	470	LEU	CA-C-N	5.77	128.28	120.44
1	R	470	LEU	C-N-CA	5.77	128.28	120.44
1	B	326	SER	N-CA-C	5.76	119.13	111.75
1	F	284	LYS	N-CA-C	5.76	118.34	111.71
1	C	340	VAL	O-C-N	-5.76	116.36	123.10
1	S	500	LYS	CA-C-O	5.76	124.82	118.65
1	A	446	ALA	O-C-N	-5.76	116.14	122.07
1	K	441	GLN	CG-CD-NE2	5.76	125.04	116.40
1	N	510	MET	CA-CB-CG	-5.76	102.58	114.10
1	C	68	ILE	O-C-N	-5.76	116.64	123.03
1	D	338	ARG	CA-C-N	5.76	128.81	120.98
1	D	338	ARG	C-N-CA	5.76	128.81	120.98
1	F	404	THR	CA-C-N	5.76	128.35	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	404	THR	C-N-CA	5.76	128.35	120.46
1	G	287	VAL	N-CA-CB	-5.76	102.71	110.54
1	Q	93	ALA	N-CA-CB	-5.76	101.63	109.98
1	H	53	ARG	NE-CZ-NH2	-5.76	114.02	119.20
1	I	355	SER	N-CA-C	5.76	117.56	111.28
1	R	64	GLY	CA-C-N	5.76	129.05	120.87
1	R	64	GLY	C-N-CA	5.76	129.05	120.87
1	R	466	PRO	CA-C-N	5.76	127.81	120.56
1	R	466	PRO	C-N-CA	5.76	127.81	120.56
1	I	283	ILE	CA-C-O	-5.75	114.75	120.85
1	O	256	GLU	CA-C-O	5.75	127.44	120.99
1	B	58	MET	O-C-N	-5.75	116.46	123.19
1	B	421	VAL	CA-CB-CG2	-5.75	100.62	110.40
1	D	523	VAL	CA-C-N	5.75	128.57	120.28
1	D	523	VAL	C-N-CA	5.75	128.57	120.28
1	B	65	ASP	O-C-N	-5.75	115.82	122.95
1	B	274	LYS	O-C-N	-5.75	114.78	122.43
1	A	479	ASN	CB-CG-ND2	5.75	125.03	116.40
1	N	257	LYS	N-CA-C	5.75	117.88	109.71
1	E	200	TRP	N-CA-C	5.75	118.79	110.28
1	K	526	ILE	CA-C-O	5.75	127.91	120.95
1	L	516	ALA	N-CA-C	5.75	118.01	111.11
1	S	338	ARG	O-C-N	-5.75	116.38	123.33
1	H	375	ASN	CA-C-O	-5.75	115.55	119.29
1	H	479	ASN	OD1-CG-ND2	-5.75	116.85	122.60
1	P	194	GLU	CB-CG-CD	5.75	122.37	112.60
1	B	340	VAL	N-CA-CB	-5.74	104.45	111.00
1	C	431	LYS	N-CA-CB	-5.74	101.38	110.28
1	F	144	GLN	N-CA-CB	5.74	119.22	110.14
1	G	135	TYR	CB-CG-CD2	5.74	129.42	120.80
1	H	267	ASN	CA-CB-CG	-5.74	106.86	112.60
1	Q	446	ALA	N-CA-C	5.74	117.23	110.97
1	R	180	TYR	O-C-N	5.74	127.99	122.07
1	D	396	ARG	NE-CZ-NH2	-5.74	114.03	119.20
1	K	206	ASN	CA-C-N	5.74	131.13	122.98
1	K	206	ASN	C-N-CA	5.74	131.13	122.98
1	N	325	LYS	CA-C-N	5.74	128.76	120.38
1	N	325	LYS	C-N-CA	5.74	128.76	120.38
1	S	258	PRO	CA-C-O	-5.74	115.06	121.32
1	G	407	ASP	N-CA-C	5.74	117.62	111.36
1	Q	435	GLN	CA-C-N	5.74	128.32	120.46
1	Q	435	GLN	C-N-CA	5.74	128.32	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	28	GLY	CA-C-N	5.74	128.24	120.38
1	N	28	GLY	C-N-CA	5.74	128.24	120.38
1	O	468	ASP	N-CA-C	5.74	118.02	111.02
1	H	274	LYS	CA-C-N	5.73	130.17	120.88
1	H	274	LYS	C-N-CA	5.73	130.17	120.88
1	K	83	HIS	CA-CB-CG	-5.73	108.07	113.80
1	I	162	ARG	NE-CZ-NH2	5.73	124.36	119.20
1	N	493	GLN	OE1-CD-NE2	5.73	128.33	122.60
1	O	338	ARG	CA-C-O	5.73	126.89	120.70
1	P	110	PHE	N-CA-C	5.73	117.53	111.28
1	K	112	GLY	CA-C-O	5.73	126.60	120.30
1	K	501	GLY	CA-C-O	5.73	125.38	119.02
1	L	390	LEU	CA-C-N	5.73	128.56	120.42
1	L	390	LEU	C-N-CA	5.73	128.56	120.42
1	N	83	HIS	ND1-CE1-NE2	5.73	114.13	108.40
1	Q	86	ALA	CA-C-N	5.73	128.53	120.28
1	Q	86	ALA	C-N-CA	5.73	128.53	120.28
1	E	231	GLU	N-CA-C	5.73	117.46	110.41
1	M	284	LYS	O-C-N	-5.73	115.52	122.22
1	B	457	ILE	CA-C-O	5.73	127.01	121.05
1	E	287	VAL	O-C-N	-5.73	116.30	121.91
1	F	249	ILE	N-CA-C	5.73	116.04	107.51
1	M	227	VAL	CA-C-N	5.73	129.53	122.37
1	M	227	VAL	C-N-CA	5.73	129.53	122.37
1	S	192	VAL	CA-C-O	5.73	125.93	119.92
1	B	409	ILE	N-CA-C	-5.73	104.76	111.00
1	F	67	THR	CB-CA-C	-5.73	101.32	110.14
1	A	457	ILE	CA-C-N	5.72	127.88	120.44
1	A	457	ILE	C-N-CA	5.72	127.88	120.44
1	F	91	GLN	N-CA-C	5.72	117.52	111.28
1	M	415	ILE	O-C-N	-5.72	116.85	122.97
1	M	502	VAL	N-CA-CB	-5.72	106.51	112.06
1	C	186	VAL	N-CA-C	5.72	115.91	110.42
1	S	183	ASP	O-C-N	-5.72	116.14	122.09
1	I	190	THR	N-CA-CB	5.72	119.03	110.22
1	P	131	ILE	CA-C-N	5.72	127.88	120.56
1	P	131	ILE	C-N-CA	5.72	127.88	120.56
1	P	315	LYS	CA-C-N	5.72	130.18	120.91
1	P	315	LYS	C-N-CA	5.72	130.18	120.91
1	D	102	ASP	CA-CB-CG	-5.72	106.88	112.60
1	E	33	ARG	CG-CD-NE	-5.72	99.42	112.00
1	A	232	VAL	CA-C-N	5.72	127.84	120.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	232	VAL	C-N-CA	5.72	127.84	120.70
1	E	88	LEU	CA-C-N	5.72	128.19	120.65
1	E	88	LEU	C-N-CA	5.72	128.19	120.65
1	F	304	ILE	CA-C-N	5.72	129.92	120.94
1	F	304	ILE	C-N-CA	5.72	129.92	120.94
1	P	521	THR	CA-CB-OG1	5.72	118.17	109.60
1	R	493	GLN	OE1-CD-NE2	-5.72	116.88	122.60
1	O	360	ARG	CA-C-O	5.71	127.23	120.66
1	S	142	ALA	N-CA-C	5.71	118.24	111.33
1	F	301	GLN	N-CA-C	-5.71	106.86	113.88
1	H	375	ASN	N-CA-CB	-5.71	102.92	110.17
1	I	208	GLN	CB-CG-CD	5.71	122.31	112.60
1	O	36	ILE	N-CA-C	5.71	116.36	110.36
1	D	104	THR	CA-C-N	5.71	128.40	120.29
1	D	104	THR	C-N-CA	5.71	128.40	120.29
1	G	515	ALA	CA-C-N	5.71	128.25	120.54
1	G	515	ALA	C-N-CA	5.71	128.25	120.54
1	K	127	HIS	O-C-N	-5.71	116.70	121.38
1	L	231	GLU	O-C-N	-5.71	116.22	122.84
1	R	162	ARG	NE-CZ-NH2	-5.71	114.06	119.20
1	F	132	ILE	CA-C-N	5.71	127.86	120.44
1	F	132	ILE	C-N-CA	5.71	127.86	120.44
1	H	121	LEU	CA-C-N	5.71	127.93	120.28
1	H	121	LEU	C-N-CA	5.71	127.93	120.28
1	A	237	MET	CA-C-O	-5.70	115.47	120.60
1	A	405	VAL	O-C-N	-5.70	116.34	121.87
1	F	198	ASP	CB-CA-C	5.70	121.77	110.42
1	G	346	ILE	CA-CB-CG1	5.70	120.09	110.40
1	H	127	HIS	CB-CA-C	5.70	118.38	109.42
1	O	81	LEU	N-CA-C	-5.70	98.99	108.34
1	O	409	ILE	CA-C-N	5.70	128.49	120.28
1	O	409	ILE	C-N-CA	5.70	128.49	120.28
1	S	433	ALA	CA-C-O	-5.70	112.35	120.16
1	A	100	THR	O-C-N	-5.70	115.01	122.59
1	M	286	LYS	CA-C-N	5.70	127.74	120.56
1	M	286	LYS	C-N-CA	5.70	127.74	120.56
1	F	136	LYS	O-C-N	-5.70	115.98	122.08
1	K	293	THR	N-CA-C	-5.70	106.37	113.38
1	L	141	VAL	N-CA-CB	5.70	117.22	110.55
1	O	132	ILE	CA-C-O	5.70	127.38	121.05
1	A	309	GLN	CB-CA-C	-5.70	101.22	110.79
1	H	237	MET	CA-C-N	5.70	126.57	120.13

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	237	MET	C-N-CA	5.70	126.57	120.13
1	R	446	ALA	O-C-N	-5.70	116.10	122.03
1	L	201	TYR	CA-C-O	-5.70	114.55	120.70
1	N	291	LEU	CA-C-N	5.70	129.71	120.60
1	N	291	LEU	C-N-CA	5.70	129.71	120.60
1	P	378	SER	N-CA-C	5.70	117.35	109.15
1	Q	102	ASP	O-C-N	-5.69	114.83	122.23
1	A	50	TYR	N-CA-C	5.69	118.44	109.96
1	C	238	PRO	N-CA-C	-5.69	102.33	111.38
1	L	127	HIS	CA-CB-CG	-5.69	108.11	113.80
1	N	531	SER	N-CA-C	5.69	117.80	108.52
1	A	35	ASN	CA-C-N	5.69	128.22	120.77
1	A	35	ASN	C-N-CA	5.69	128.22	120.77
1	C	267	ASN	CA-CB-CG	-5.69	106.91	112.60
1	H	70	ASN	CA-C-N	5.69	132.41	121.54
1	H	70	ASN	C-N-CA	5.69	132.41	121.54
1	D	297	VAL	N-CA-C	-5.69	99.59	108.81
1	F	300	CYS	CA-C-O	5.69	128.09	121.49
1	N	522	LEU	N-CA-C	-5.69	105.16	111.36
1	P	84	PRO	CA-C-N	5.69	128.22	120.54
1	P	84	PRO	C-N-CA	5.69	128.22	120.54
1	A	439	LYS	O-C-N	-5.68	115.95	122.09
1	E	476	THR	CA-C-N	5.68	131.12	122.37
1	E	476	THR	C-N-CA	5.68	131.12	122.37
1	O	482	ASN	CA-C-N	5.68	128.47	120.28
1	O	482	ASN	C-N-CA	5.68	128.47	120.28
1	G	512	ALA	CA-C-N	5.68	127.93	120.60
1	G	512	ALA	C-N-CA	5.68	127.93	120.60
1	O	38	ALA	CA-C-O	-5.68	114.82	120.90
1	R	327	ASP	N-CA-C	-5.68	106.51	113.50
1	A	283	ILE	CB-CA-C	-5.68	104.38	112.22
1	G	413	ARG	NE-CZ-NH2	5.68	124.31	119.20
1	G	74	THR	CA-CB-OG1	5.68	118.12	109.60
1	H	505	PRO	CA-C-O	-5.68	110.26	120.60
1	N	439	LYS	CA-CB-CG	-5.68	102.74	114.10
1	P	419	GLY	CA-C-O	5.68	125.31	119.01
1	S	396	ARG	CA-C-N	5.68	128.21	120.54
1	S	396	ARG	C-N-CA	5.68	128.21	120.54
1	K	370	VAL	CA-C-O	5.68	127.88	120.78
1	R	196	ARG	NE-CZ-NH1	-5.68	115.82	121.50
1	B	229	ASP	CA-CB-CG	5.68	118.28	112.60
1	F	433	ALA	CA-C-O	-5.68	112.38	120.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	319	ALA	N-CA-C	5.68	118.80	109.72
1	R	56	ASP	CA-C-N	5.68	131.11	122.65
1	R	56	ASP	C-N-CA	5.68	131.11	122.65
1	R	487	ILE	CB-CA-C	-5.68	103.61	110.99
1	R	500	LYS	CA-C-O	5.68	124.72	118.65
1	B	304	ILE	N-CA-CB	5.67	119.72	112.34
1	C	243	ASN	CA-CB-CG	-5.67	106.92	112.60
1	Q	522	LEU	N-CA-C	5.67	117.55	111.36
1	A	502	VAL	N-CA-C	5.67	115.45	106.32
1	S	270	THR	CA-C-N	5.67	128.34	120.29
1	S	270	THR	C-N-CA	5.67	128.34	120.29
1	E	54	GLY	N-CA-C	5.67	118.45	111.93
1	H	111	SER	CB-CA-C	-5.67	101.98	110.88
1	D	350	ASP	O-C-N	5.67	129.93	122.33
1	E	116	LYS	O-C-N	-5.67	116.13	122.03
1	L	167	THR	CA-C-N	5.67	132.43	122.79
1	L	167	THR	C-N-CA	5.67	132.43	122.79
1	Q	61	ASP	N-CA-C	5.67	117.84	110.53
1	I	116	LYS	CA-C-N	5.67	129.67	120.60
1	I	116	LYS	C-N-CA	5.67	129.67	120.60
1	K	197	GLY	N-CA-C	5.67	122.66	114.10
1	M	124	LYS	CA-C-N	5.67	132.37	121.54
1	M	124	LYS	C-N-CA	5.67	132.37	121.54
1	N	275	PHE	N-CA-CB	5.67	118.40	110.07
1	O	37	ALA	N-CA-C	5.67	117.93	111.02
1	Q	527	ASP	CA-CB-CG	-5.67	106.93	112.60
1	R	417	GLY	O-C-N	-5.67	117.50	122.88
1	S	249	ILE	CB-CA-C	-5.67	104.05	111.81
1	S	360	ARG	NE-CZ-NH1	-5.67	115.83	121.50
1	C	402	LEU	O-C-N	-5.67	116.14	122.03
1	G	246	ILE	N-CA-C	5.66	117.61	109.51
1	I	344	ASP	CB-CA-C	-5.66	99.88	110.36
1	N	140	GLU	CA-C-N	5.66	127.91	120.60
1	N	140	GLU	C-N-CA	5.66	127.91	120.60
1	P	172	LYS	CA-C-O	-5.66	115.26	121.89
1	P	428	LYS	N-CA-C	5.66	118.22	111.71
1	Q	33	ARG	CA-C-N	5.66	128.19	120.54
1	Q	33	ARG	C-N-CA	5.66	128.19	120.54
1	S	150	ALA	N-CA-CB	5.66	118.46	110.36
1	R	39	VAL	CA-C-N	5.66	128.14	120.38
1	R	39	VAL	C-N-CA	5.66	128.14	120.38
1	F	398	LEU	CA-C-N	5.66	127.80	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	398	LEU	C-N-CA	5.66	127.80	120.44
1	H	503	ILE	N-CA-C	-5.66	100.16	108.99
1	I	155	ILE	N-CA-C	5.66	118.12	111.05
1	L	447	TYR	CA-C-N	5.66	128.13	120.44
1	L	447	TYR	C-N-CA	5.66	128.13	120.44
1	N	249	ILE	CA-C-N	5.66	128.91	120.31
1	N	249	ILE	C-N-CA	5.66	128.91	120.31
1	I	369	PHE	N-CA-C	-5.66	100.67	109.72
1	D	407	ASP	CA-C-N	5.66	128.21	120.46
1	D	407	ASP	C-N-CA	5.66	128.21	120.46
1	I	177	ALA	N-CA-C	5.66	118.99	111.30
1	N	97	ASP	CA-CB-CG	-5.66	106.94	112.60
1	N	152	THR	CA-C-O	-5.66	113.89	120.62
1	Q	392	ASP	O-C-N	-5.66	116.12	122.12
1	R	329	GLU	CA-C-N	5.66	128.42	120.28
1	R	329	GLU	C-N-CA	5.66	128.42	120.28
1	M	375	ASN	OD1-CG-ND2	-5.65	116.95	122.60
1	Q	140	GLU	CA-C-N	5.65	127.68	120.56
1	Q	140	GLU	C-N-CA	5.65	127.68	120.56
1	E	68	ILE	O-C-N	-5.65	116.75	123.03
1	M	135	TYR	CA-C-N	5.65	128.11	120.65
1	M	135	TYR	C-N-CA	5.65	128.11	120.65
1	N	338	ARG	O-C-N	-5.65	116.46	123.36
1	A	83	HIS	CA-CB-CG	5.65	119.45	113.80
1	H	271	GLN	N-CA-C	5.65	117.52	111.36
1	I	83	HIS	CA-C-N	5.65	125.12	119.24
1	I	83	HIS	C-N-CA	5.65	125.12	119.24
1	F	464	PHE	CA-CB-CG	-5.65	108.15	113.80
1	R	87	LYS	N-CA-C	5.65	117.44	111.28
1	M	156	ASN	N-CA-CB	-5.65	102.12	110.53
1	B	388	GLU	N-CA-C	5.64	119.68	112.34
1	E	361	LYS	CA-C-O	5.64	126.53	120.32
1	L	389	ARG	N-CA-C	-5.64	106.44	113.55
1	Q	449	ASN	CA-C-O	5.64	126.53	120.55
1	A	342	ASN	CB-CG-ND2	5.64	124.86	116.40
1	G	211	LYS	CA-CB-CG	5.64	125.38	114.10
1	M	527	ASP	CA-CB-CG	5.64	118.24	112.60
1	O	395	GLU	CA-C-N	5.64	128.10	120.65
1	O	395	GLU	C-N-CA	5.64	128.10	120.65
1	Q	106	THR	N-CA-CB	5.64	118.15	109.91
1	R	136	LYS	CA-C-O	5.64	126.92	121.00
1	D	59	LEU	N-CA-CB	5.64	119.63	110.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	504	GLU	CB-CG-CD	-5.64	103.01	112.60
1	A	307	VAL	CB-CA-C	-5.64	104.68	112.24
1	R	529	VAL	N-CA-C	5.64	116.06	108.17
1	S	234	HIS	ND1-CE1-NE2	5.64	114.04	108.40
1	O	408	VAL	O-C-N	-5.64	116.40	121.87
1	R	312	LEU	CA-C-N	5.64	128.29	120.29
1	R	312	LEU	C-N-CA	5.64	128.29	120.29
1	S	354	ALA	O-C-N	-5.64	116.83	123.25
1	D	228	VAL	CA-C-N	5.63	128.10	120.38
1	D	228	VAL	C-N-CA	5.63	128.10	120.38
1	F	33	ARG	CG-CD-NE	-5.63	99.60	112.00
1	I	119	GLU	O-C-N	-5.63	116.15	122.12
1	Q	319	ALA	CA-C-O	5.63	127.48	121.11
1	S	134	GLY	CA-C-N	5.63	127.83	120.28
1	S	134	GLY	C-N-CA	5.63	127.83	120.28
1	M	399	ARG	O-C-N	-5.63	116.27	122.07
1	A	496	ASP	CB-CA-C	-5.63	101.37	110.77
1	A	508	VAL	CA-C-O	5.63	127.14	121.17
1	I	377	LYS	CA-C-O	5.63	126.39	120.42
1	L	155	ILE	N-CA-C	5.63	118.94	111.17
1	P	231	GLU	O-C-N	-5.63	116.43	122.85
1	A	250	ASP	CA-C-N	5.63	128.87	120.87
1	A	250	ASP	C-N-CA	5.63	128.87	120.87
1	B	145	THR	O-C-N	-5.63	114.89	122.43
1	F	281	ASN	O-C-N	-5.63	114.89	122.43
1	G	257	LYS	CA-C-O	-5.63	112.45	120.16
1	S	298	ILE	N-CA-CB	5.63	120.52	111.23
1	E	343	ILE	CA-C-O	5.63	126.77	120.64
1	N	432	TYR	CB-CG-CD2	-5.63	112.36	120.80
1	E	181	ILE	O-C-N	-5.63	116.03	121.83
1	I	364	GLU	N-CA-C	5.63	117.86	111.11
1	L	231	GLU	N-CA-C	-5.63	102.13	110.46
1	P	401	ALA	CA-C-O	5.63	126.52	120.55
1	P	245	LYS	CA-C-N	5.62	128.25	120.49
1	P	245	LYS	C-N-CA	5.62	128.25	120.49
1	C	296	ASN	CB-CG-OD1	5.62	132.05	120.80
1	D	510	MET	CA-CB-CG	5.62	125.35	114.10
1	M	461	ASN	OD1-CG-ND2	-5.62	116.98	122.60
1	P	360	ARG	CA-C-N	5.62	130.67	122.85
1	P	360	ARG	C-N-CA	5.62	130.67	122.85
1	H	395	GLU	CA-C-O	5.62	126.43	119.97
1	M	349	GLN	CA-C-O	5.62	126.43	119.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	S	379	ILE	CB-CA-C	-5.62	103.47	111.34
1	B	78	LYS	CA-C-O	5.62	126.36	119.05
1	C	430	ARG	CA-C-N	5.62	128.85	120.31
1	C	430	ARG	C-N-CA	5.62	128.85	120.31
1	E	410	LYS	N-CA-C	5.62	118.17	111.71
1	H	72	GLY	CA-C-O	-5.62	115.26	121.05
1	P	234	HIS	CA-C-O	-5.62	114.47	119.86
1	R	420	ALA	O-C-N	5.62	127.86	122.07
1	I	197	GLY	O-C-N	5.62	127.68	122.57
1	O	241	LEU	CA-C-O	5.62	126.66	120.71
1	A	189	VAL	CG1-CB-CG2	-5.62	98.45	110.80
1	L	180	TYR	N-CA-C	5.62	117.08	111.07
1	M	90	VAL	CB-CA-C	-5.62	103.46	112.16
1	M	287	VAL	CA-C-O	-5.62	115.22	121.17
1	P	520	ALA	N-CA-C	5.62	117.85	111.11
1	Q	452	GLU	N-CA-C	-5.62	105.31	111.82
1	S	305	ASP	CA-CB-CG	5.62	118.22	112.60
1	S	481	ASN	CA-C-O	5.62	126.30	119.11
1	A	49	THR	N-CA-C	-5.61	105.19	113.61
1	B	514	LYS	N-CA-CB	5.61	118.37	110.12
1	K	391	VAL	CA-C-N	5.61	128.12	120.54
1	K	391	VAL	C-N-CA	5.61	128.12	120.54
1	R	441	GLN	CA-C-N	5.61	127.80	120.28
1	R	441	GLN	C-N-CA	5.61	127.80	120.28
1	S	486	GLY	CA-C-N	5.61	130.65	123.13
1	S	486	GLY	C-N-CA	5.61	130.65	123.13
1	P	240	ARG	O-C-N	-5.61	116.70	123.27
1	M	353	TYR	CA-C-N	5.61	131.46	121.75
1	M	353	TYR	C-N-CA	5.61	131.46	121.75
1	P	278	GLU	CA-C-N	5.61	128.84	120.31
1	P	278	GLU	C-N-CA	5.61	128.84	120.31
1	B	283	ILE	CA-CB-CG2	5.61	120.04	110.50
1	C	489	LEU	CA-C-O	5.61	126.34	119.05
1	G	402	LEU	N-CA-C	-5.61	104.86	110.97
1	B	164	ILE	CA-C-N	5.61	128.25	120.29
1	B	164	ILE	C-N-CA	5.61	128.25	120.29
1	B	327	ASP	CA-CB-CG	5.61	118.21	112.60
1	C	345	GLU	N-CA-CB	-5.61	102.45	110.80
1	M	85	ALA	CA-C-N	5.61	127.73	120.44
1	M	85	ALA	C-N-CA	5.61	127.73	120.44
1	N	340	VAL	N-CA-CB	-5.61	104.19	111.82
1	N	402	LEU	CA-C-O	5.61	126.68	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	73	ALA	CA-C-N	5.61	127.79	120.28
1	E	73	ALA	C-N-CA	5.61	127.79	120.28
1	F	386	GLY	CA-C-N	5.61	132.25	121.54
1	F	386	GLY	C-N-CA	5.61	132.25	121.54
1	L	396	ARG	CA-C-O	-5.60	114.94	120.82
1	E	71	ASP	CA-C-N	5.60	126.16	119.94
1	E	71	ASP	C-N-CA	5.60	126.16	119.94
1	G	225	GLY	O-C-N	-5.60	118.34	123.78
1	D	415	ILE	CA-C-N	5.60	129.51	121.50
1	D	415	ILE	C-N-CA	5.60	129.51	121.50
1	K	181	ILE	CB-CA-C	-5.60	104.49	112.22
1	K	277	ASP	N-CA-C	-5.60	105.09	111.14
1	M	232	VAL	CA-CB-CG2	5.60	119.92	110.40
1	O	297	VAL	O-C-N	-5.60	116.62	123.00
1	A	307	VAL	CA-C-O	-5.60	114.72	120.71
1	C	326	SER	N-CA-C	5.60	118.92	111.75
1	D	173	ALA	CA-C-N	5.60	128.00	120.50
1	D	173	ALA	C-N-CA	5.60	128.00	120.50
1	I	68	ILE	O-C-N	-5.60	116.82	123.03
1	I	128	PRO	CB-CA-C	-5.60	103.48	112.21
1	K	227	VAL	O-C-N	5.60	128.46	123.03
1	Q	303	GLY	N-CA-C	5.60	119.75	112.25
1	G	379	ILE	N-CA-C	5.59	116.97	108.80
1	K	469	LEU	O-C-N	5.59	128.05	122.12
1	L	253	LEU	CA-C-O	5.59	126.44	119.78
1	N	425	ILE	O-C-N	-5.59	115.58	122.57
1	O	518	GLU	CA-C-N	5.59	128.03	120.65
1	O	518	GLU	C-N-CA	5.59	128.03	120.65
1	B	499	GLN	CA-C-N	5.59	128.78	120.17
1	B	499	GLN	C-N-CA	5.59	128.78	120.17
1	G	164	ILE	O-C-N	-5.59	115.58	122.57
1	L	185	VAL	O-C-N	-5.59	116.35	121.94
1	S	345	GLU	CA-C-O	5.59	125.35	119.03
1	M	330	LYS	O-C-N	-5.59	115.68	122.22
1	G	129	THR	CA-C-N	5.59	127.71	120.56
1	G	129	THR	C-N-CA	5.59	127.71	120.56
1	A	106	THR	N-CA-CB	5.59	118.08	109.98
1	A	480	GLU	CA-C-N	5.59	127.77	120.28
1	A	480	GLU	C-N-CA	5.59	127.77	120.28
1	C	398	LEU	CA-C-N	5.59	127.70	120.44
1	C	398	LEU	C-N-CA	5.59	127.70	120.44
1	I	29	LYS	CA-C-N	5.59	132.21	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	29	LYS	C-N-CA	5.59	132.21	121.54
1	I	423	ILE	N-CA-C	5.59	116.99	110.62
1	N	258	PRO	N-CA-C	5.59	123.98	112.47
1	O	74	THR	CA-C-N	5.59	129.91	120.64
1	O	74	THR	C-N-CA	5.59	129.91	120.64
1	O	205	ASP	CA-CB-CG	5.59	118.19	112.60
1	R	125	ASP	CA-C-N	5.59	129.35	122.37
1	R	125	ASP	C-N-CA	5.59	129.35	122.37
1	R	413	ARG	CG-CD-NE	-5.59	99.71	112.00
1	R	250	ASP	CA-C-O	5.58	126.25	119.38
1	A	181	ILE	CA-C-O	5.58	126.77	120.85
1	A	206	ASN	OD1-CG-ND2	-5.58	117.02	122.60
1	R	183	ASP	N-CA-C	5.58	117.81	111.11
1	B	231	GLU	N-CA-C	5.58	117.74	110.43
1	C	365	ASP	N-CA-C	-5.58	100.81	109.24
1	I	56	ASP	O-C-N	-5.58	116.68	123.10
1	L	384	ARG	N-CA-C	-5.58	99.21	108.75
1	N	216	SER	CA-CB-OG	5.58	122.26	111.10
1	D	220	THR	CA-CB-CG2	-5.58	101.02	110.50
1	H	94	LYS	CA-C-N	5.58	132.35	121.41
1	H	94	LYS	C-N-CA	5.58	132.35	121.41
1	K	29	LYS	CA-C-N	5.58	132.20	121.54
1	K	29	LYS	C-N-CA	5.58	132.20	121.54
1	P	321	ARG	NE-CZ-NH1	5.58	127.08	121.50
1	B	490	TYR	N-CA-C	-5.58	107.12	114.04
1	I	139	GLU	N-CA-C	-5.58	105.10	111.07
1	I	86	ALA	CA-C-N	5.58	128.31	120.28
1	I	86	ALA	C-N-CA	5.58	128.31	120.28
1	N	389	ARG	CG-CD-NE	-5.58	99.73	112.00
1	D	507	LEU	N-CA-C	-5.58	105.59	112.90
1	A	513	ILE	CA-CB-CG1	5.57	119.88	110.40
1	B	313	ALA	N-CA-C	5.57	117.36	111.28
1	F	159	ASP	N-CA-C	5.57	119.34	112.54
1	G	232	VAL	CA-CB-CG2	5.57	119.88	110.40
1	H	497	MET	CA-C-O	5.57	126.44	120.70
1	I	405	VAL	O-C-N	5.57	127.28	121.87
1	P	387	LEU	N-CA-C	5.57	118.56	110.42
1	R	42	VAL	N-CA-CB	5.57	118.12	110.54
1	A	245	LYS	CA-C-N	5.57	127.97	120.50
1	A	245	LYS	C-N-CA	5.57	127.97	120.50
1	O	110	PHE	N-CA-C	5.57	117.35	111.28
1	A	179	GLU	CB-CG-CD	-5.57	103.13	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	259	GLU	CA-C-O	5.57	128.46	120.16
1	G	127	HIS	CB-CA-C	5.57	117.45	109.26
1	P	392	ASP	O-C-N	-5.57	116.33	122.07
1	S	439	LYS	N-CA-C	5.57	117.16	111.14
1	A	244	ALA	CA-C-N	5.57	130.43	122.08
1	A	244	ALA	C-N-CA	5.57	130.43	122.08
1	E	409	ILE	N-CA-C	-5.57	105.42	110.82
1	F	283	ILE	CA-CB-CG2	5.57	119.96	110.50
1	K	384	ARG	CA-C-O	-5.57	115.49	121.45
1	L	505	PRO	O-C-N	-5.57	115.12	122.64
1	M	141	VAL	O-C-N	-5.57	116.45	121.91
1	M	347	SER	O-C-N	-5.57	117.42	123.26
1	A	447	TYR	N-CA-C	5.57	118.06	111.33
1	H	263	GLU	N-CA-CB	5.57	118.40	110.16
1	N	162	ARG	CA-C-N	5.57	129.90	120.88
1	N	162	ARG	C-N-CA	5.57	129.90	120.88
1	Q	159	ASP	CA-CB-CG	-5.57	107.03	112.60
1	C	156	ASN	OD1-CG-ND2	-5.56	117.04	122.60
1	Q	124	LYS	N-CA-C	-5.56	106.47	113.20
1	A	482	ASN	N-CA-C	5.56	118.86	112.57
1	D	387	LEU	CA-C-N	5.56	129.58	120.63
1	D	387	LEU	C-N-CA	5.56	129.58	120.63
1	G	311	TYR	CA-C-N	5.56	128.19	120.29
1	G	311	TYR	C-N-CA	5.56	128.19	120.29
1	H	283	ILE	CB-CA-C	-5.56	104.79	112.24
1	B	320	VAL	CA-C-O	-5.56	114.16	120.67
1	E	291	LEU	CA-C-N	5.56	129.50	120.60
1	E	291	LEU	C-N-CA	5.56	129.50	120.60
1	M	372	GLY	CA-C-N	5.56	132.16	121.54
1	M	372	GLY	C-N-CA	5.56	132.16	121.54
1	P	413	ARG	NE-CZ-NH2	5.56	124.20	119.20
1	O	350	ASP	N-CA-C	5.56	117.34	111.28
1	Q	65	ASP	CA-CB-CG	-5.56	107.04	112.60
1	H	515	ALA	N-CA-C	-5.56	104.91	110.97
1	L	127	HIS	CE1-NE2-CD2	-5.56	103.44	109.00
1	N	178	ARG	CA-C-N	5.56	127.99	120.38
1	N	178	ARG	C-N-CA	5.56	127.99	120.38
1	A	306	GLU	N-CA-C	5.55	119.31	112.54
1	C	513	ILE	CA-C-N	5.55	127.66	120.44
1	C	513	ILE	C-N-CA	5.55	127.66	120.44
1	F	250	ASP	O-C-N	-5.55	115.67	122.34
1	G	387	LEU	CA-C-O	5.55	128.45	120.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	265	ARG	CG-CD-NE	-5.55	99.78	112.00
1	E	404	THR	CA-C-N	5.55	128.07	120.46
1	E	404	THR	C-N-CA	5.55	128.07	120.46
1	H	314	LYS	CA-C-N	5.55	130.86	121.14
1	H	314	LYS	C-N-CA	5.55	130.86	121.14
1	O	110	PHE	CA-C-N	5.55	127.66	120.44
1	O	110	PHE	C-N-CA	5.55	127.66	120.44
1	S	83	HIS	N-CA-C	5.55	117.66	109.50
1	D	380	SER	N-CA-CB	5.55	121.35	111.69
1	D	424	GLU	CA-C-O	5.55	126.42	120.70
1	O	251	ALA	O-C-N	-5.55	116.50	123.27
1	P	343	ILE	O-C-N	-5.55	116.26	121.87
1	B	409	ILE	CA-C-N	5.55	128.27	120.28
1	B	409	ILE	C-N-CA	5.55	128.27	120.28
1	C	37	ALA	CA-C-O	5.55	127.51	121.02
1	F	335	THR	CA-C-O	5.55	125.24	119.14
1	I	228	VAL	CA-C-N	5.55	127.98	120.38
1	I	228	VAL	C-N-CA	5.55	127.98	120.38
1	L	154	SER	CA-C-O	5.55	126.63	120.80
1	L	514	LYS	CG-CD-CE	5.55	124.06	111.30
1	O	292	ALA	O-C-N	-5.55	115.05	122.43
1	A	210	VAL	O-C-N	-5.55	117.48	123.14
1	L	316	GLY	CA-C-N	5.55	130.05	122.34
1	L	316	GLY	C-N-CA	5.55	130.05	122.34
1	C	430	ARG	NH1-CZ-NH2	-5.55	112.09	119.30
1	E	399	ARG	CA-C-N	5.55	127.65	120.44
1	E	399	ARG	C-N-CA	5.55	127.65	120.44
1	M	430	ARG	CA-C-N	5.55	128.74	120.31
1	M	430	ARG	C-N-CA	5.55	128.74	120.31
1	Q	360	ARG	NE-CZ-NH2	5.55	124.19	119.20
1	I	524	LEU	CA-C-O	5.54	126.35	119.97
1	A	521	THR	N-CA-C	5.54	118.25	111.82
1	C	448	ALA	O-C-N	5.54	128.08	122.09
1	E	488	ASP	O-C-N	-5.54	115.22	122.59
1	K	252	SER	N-CA-C	5.54	118.28	109.96
1	K	357	ILE	N-CA-C	-5.54	100.49	108.53
1	L	359	GLU	O-C-N	-5.54	116.75	123.29
1	P	274	LYS	CA-C-N	5.54	129.97	120.71
1	P	274	LYS	C-N-CA	5.54	129.97	120.71
1	L	306	GLU	N-CA-CB	5.54	118.87	110.28
1	O	529	VAL	CA-C-O	5.54	126.15	120.39
1	P	206	ASN	OD1-CG-ND2	-5.54	117.06	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	127	HIS	CA-CB-CG	5.54	119.34	113.80
1	E	93	ALA	CA-C-O	5.54	126.61	120.90
1	K	258	PRO	CA-C-O	-5.54	115.03	121.34
1	B	525	ARG	CA-C-O	5.54	126.34	119.97
1	F	78	LYS	CB-CG-CD	5.54	124.04	111.30
1	G	265	ARG	CG-CD-NE	-5.54	99.81	112.00
1	L	479	ASN	CA-CB-CG	5.54	118.14	112.60
1	O	57	LYS	N-CA-C	-5.54	100.67	109.59
1	O	516	ALA	N-CA-CB	-5.54	101.69	109.94
1	P	311	TYR	O-C-N	-5.54	115.47	122.17
1	B	46	LEU	CA-C-N	5.54	132.11	121.54
1	B	46	LEU	C-N-CA	5.54	132.11	121.54
1	K	76	LEU	CA-C-N	5.54	127.97	120.44
1	K	76	LEU	C-N-CA	5.54	127.97	120.44
1	N	489	LEU	CA-C-O	5.54	126.25	119.05
1	P	50	TYR	CA-C-N	5.54	130.56	121.87
1	P	50	TYR	C-N-CA	5.54	130.56	121.87
1	I	196	ARG	NE-CZ-NH2	5.53	124.18	119.20
1	A	44	GLU	CA-C-N	5.53	131.40	121.66
1	A	44	GLU	C-N-CA	5.53	131.40	121.66
1	F	429	LEU	N-CA-C	-5.53	105.33	111.36
1	D	384	ARG	O-C-N	-5.53	117.08	123.33
1	O	141	VAL	CA-C-O	5.53	127.03	121.17
1	P	233	VAL	O-C-N	-5.53	114.49	122.12
1	R	90	VAL	CA-C-N	5.53	127.69	120.28
1	R	90	VAL	C-N-CA	5.53	127.69	120.28
1	E	217	ILE	CA-C-O	5.53	126.71	119.85
1	K	396	ARG	CD-NE-CZ	-5.53	116.66	124.40
1	N	156	ASN	CA-C-O	5.53	126.17	119.31
1	R	173	ALA	CA-C-O	5.53	126.28	120.42
1	C	305	ASP	CA-C-N	5.53	128.71	120.31
1	C	305	ASP	C-N-CA	5.53	128.71	120.31
1	D	299	ILE	N-CA-C	-5.53	100.22	108.46
1	N	486	GLY	CA-C-N	-5.53	115.73	123.13
1	N	486	GLY	C-N-CA	-5.53	115.73	123.13
1	B	150	ALA	N-CA-C	5.52	117.82	110.53
1	C	179	GLU	CA-C-N	5.52	127.62	120.44
1	C	179	GLU	C-N-CA	5.52	127.62	120.44
1	D	470	LEU	O-C-N	-5.52	116.38	122.07
1	G	283	ILE	N-CA-C	5.52	116.30	110.72
1	H	254	GLU	O-C-N	-5.52	116.01	123.19
1	H	467	ILE	N-CA-C	5.52	115.72	110.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	254	GLU	O-C-N	-5.52	116.20	123.21
1	Q	150	ALA	N-CA-C	5.52	117.42	110.24
1	D	510	MET	N-CA-C	-5.52	106.59	113.55
1	E	219	ASP	CA-CB-CG	-5.52	107.08	112.60
1	G	123	TYR	CA-C-O	5.52	126.40	120.55
1	N	441	GLN	CA-C-N	5.52	127.68	120.28
1	N	441	GLN	C-N-CA	5.52	127.68	120.28
1	S	411	ASP	CB-CA-C	5.52	121.41	110.42
1	B	102	ASP	O-C-N	-5.52	116.27	122.12
1	I	160	LEU	O-C-N	-5.52	115.05	122.23
1	L	60	VAL	N-CA-C	5.52	115.54	107.37
1	A	35	ASN	CB-CG-OD1	5.52	131.84	120.80
1	L	225	GLY	N-CA-C	-5.52	102.69	110.75
1	L	260	LEU	CA-C-N	5.52	127.67	120.28
1	L	260	LEU	C-N-CA	5.52	127.67	120.28
1	C	240	ARG	NE-CZ-NH2	5.52	124.16	119.20
1	Q	107	ALA	N-CA-C	5.52	120.47	111.37
1	B	195	LEU	N-CA-CB	5.51	119.41	110.42
1	E	510	MET	CA-C-O	-5.51	113.33	119.67
1	M	31	ALA	CA-C-N	5.51	129.66	120.62
1	M	31	ALA	C-N-CA	5.51	129.66	120.62
1	E	279	GLU	CA-CB-CG	5.51	125.13	114.10
1	C	36	ILE	N-CA-C	5.51	116.15	110.36
1	F	276	LEU	O-C-N	-5.51	115.05	122.43
1	G	399	ARG	NE-CZ-NH1	-5.51	115.99	121.50
1	K	432	TYR	N-CA-CB	-5.51	102.08	110.07
1	M	43	GLU	N-CA-CB	5.51	118.00	110.01
1	M	315	LYS	N-CA-C	-5.51	106.06	112.89
1	E	426	ALA	CA-C-O	-5.51	112.63	120.51
1	K	208	GLN	CA-CB-CG	5.51	125.12	114.10
1	M	42	VAL	CB-CA-C	-5.51	104.70	112.14
1	M	186	VAL	CB-CA-C	-5.51	104.80	112.02
1	O	360	ARG	NE-CZ-NH2	5.51	124.16	119.20
1	A	106	THR	CA-C-O	-5.51	115.23	120.90
1	A	266	ILE	CA-CB-CG2	-5.51	101.14	110.50
1	C	160	LEU	CA-C-N	5.51	128.21	120.28
1	C	160	LEU	C-N-CA	5.51	128.21	120.28
1	E	434	PRO	N-CA-CB	5.51	109.03	103.25
1	H	40	LYS	CA-C-N	5.51	127.97	120.54
1	H	40	LYS	C-N-CA	5.51	127.97	120.54
1	I	314	LYS	N-CA-C	5.51	118.21	111.82
1	K	412	GLY	O-C-N	5.51	128.77	122.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Q	28	GLY	CA-C-N	5.51	127.92	120.38
1	Q	28	GLY	C-N-CA	5.51	127.92	120.38
1	R	110	PHE	CA-C-N	5.51	127.92	120.65
1	R	110	PHE	C-N-CA	5.51	127.92	120.65
1	R	235	PRO	CA-C-O	5.51	127.06	119.18
1	K	336	GLY	O-C-N	-5.50	115.40	122.39
1	P	108	VAL	CB-CA-C	-5.50	104.83	112.04
1	P	438	GLY	CA-C-O	5.50	130.15	120.57
1	A	178	ARG	NE-CZ-NH1	-5.50	116.00	121.50
1	F	105	LYS	CA-C-N	5.50	127.91	120.65
1	F	105	LYS	C-N-CA	5.50	127.91	120.65
1	L	283	ILE	CB-CA-C	-5.50	104.87	112.24
1	M	280	GLU	N-CA-C	-5.50	105.30	112.23
1	B	72	GLY	CA-C-N	5.50	128.43	120.79
1	B	72	GLY	C-N-CA	5.50	128.43	120.79
1	G	469	LEU	N-CA-CB	5.50	118.30	110.16
1	E	82	GLN	OE1-CD-NE2	5.50	128.10	122.60
1	S	49	THR	CA-C-N	5.50	128.52	120.71
1	S	49	THR	C-N-CA	5.50	128.52	120.71
1	M	229	ASP	N-CA-CB	-5.50	102.04	110.12
1	C	433	ALA	N-CA-C	5.49	121.95	109.81
1	Q	409	ILE	N-CA-C	5.49	115.69	110.53
1	A	115	VAL	N-CA-C	5.49	115.69	110.42
1	G	407	ASP	CA-CB-CG	-5.49	107.11	112.60
1	E	234	HIS	CA-C-N	5.49	126.70	119.84
1	E	234	HIS	C-N-CA	5.49	126.70	119.84
1	H	349	GLN	CA-C-O	5.49	125.69	119.27
1	I	265	ARG	NE-CZ-NH1	-5.49	116.01	121.50
1	G	359	GLU	O-C-N	-5.49	116.81	123.29
1	G	439	LYS	CA-C-N	5.49	128.39	120.38
1	G	439	LYS	C-N-CA	5.49	128.39	120.38
1	K	82	GLN	CB-CG-CD	5.49	121.93	112.60
1	M	35	ASN	OD1-CG-ND2	-5.49	117.11	122.60
1	C	42	VAL	N-CA-C	5.49	116.22	110.62
1	D	229	ASP	CA-C-N	5.49	128.66	120.87
1	D	229	ASP	C-N-CA	5.49	128.66	120.87
1	H	322	ARG	NH1-CZ-NH2	-5.49	112.17	119.30
1	E	119	GLU	CA-C-O	5.49	126.36	120.55
1	E	324	LYS	CA-C-O	5.49	127.30	121.05
1	G	70	ASN	CB-CG-ND2	-5.49	108.17	116.40
1	L	322	ARG	CD-NE-CZ	-5.49	116.72	124.40
1	R	125	ASP	N-CA-C	5.49	119.26	112.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	R	457	ILE	CA-C-N	5.49	127.57	120.44
1	R	457	ILE	C-N-CA	5.49	127.57	120.44
1	S	166	MET	CG-SD-CE	-5.49	88.83	100.90
1	F	304	ILE	CA-C-O	-5.48	114.53	120.67
1	N	471	MET	CG-SD-CE	-5.48	88.83	100.90
1	F	215	GLY	CA-C-O	-5.48	115.04	122.39
1	I	298	ILE	CA-C-O	5.48	125.68	120.25
1	K	405	VAL	CA-C-N	5.48	127.63	120.28
1	K	405	VAL	C-N-CA	5.48	127.63	120.28
1	L	266	ILE	N-CA-C	5.48	116.15	109.30
1	N	78	LYS	N-CA-C	5.48	119.81	113.18
1	N	237	MET	CG-SD-CE	-5.48	88.84	100.90
1	S	396	ARG	N-CA-CB	5.48	117.93	109.98
1	E	126	VAL	CA-C-N	5.48	128.10	120.65
1	E	126	VAL	C-N-CA	5.48	128.10	120.65
1	E	404	THR	O-C-N	-5.48	116.39	122.09
1	C	183	ASP	CA-CB-CG	5.48	118.08	112.60
1	H	31	ALA	CA-C-N	5.48	129.61	120.62
1	H	31	ALA	C-N-CA	5.48	129.61	120.62
1	O	69	THR	CA-C-N	5.48	130.15	121.44
1	O	69	THR	C-N-CA	5.48	130.15	121.44
1	B	162	ARG	CD-NE-CZ	5.48	132.07	124.40
1	C	36	ILE	O-C-N	5.48	127.42	121.94
1	C	76	LEU	CA-C-N	5.48	127.89	120.44
1	C	76	LEU	C-N-CA	5.48	127.89	120.44
1	M	468	ASP	CA-C-O	5.48	127.09	121.07
1	S	419	GLY	CA-C-O	-5.48	113.57	119.27
1	C	42	VAL	O-C-N	-5.48	116.56	121.87
1	A	137	LYS	CA-C-N	5.47	128.06	120.29
1	A	137	LYS	C-N-CA	5.47	128.06	120.29
1	I	440	GLU	N-CA-C	5.47	118.76	111.75
1	K	227	VAL	CA-C-O	-5.47	114.94	120.31
1	O	517	THR	N-CA-C	5.47	118.17	111.82
1	P	118	ALA	O-C-N	-5.47	115.00	122.33
1	P	351	LEU	CD1-CG-CD2	-5.47	98.75	110.80
1	C	76	LEU	N-CA-C	-5.47	106.73	113.41
1	E	85	ALA	O-C-N	-5.47	116.40	122.09
1	E	474	ARG	NH1-CZ-NH2	-5.47	112.19	119.30
1	H	57	LYS	O-C-N	-5.47	116.27	123.16
1	N	279	GLU	CA-C-O	5.47	126.11	119.38
1	Q	408	VAL	O-C-N	-5.47	116.56	121.87
1	E	465	ASP	CA-CB-CG	5.47	118.07	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Q	260	LEU	O-C-N	-5.47	115.16	122.49
1	G	494	PRO	N-CA-CB	-5.47	98.35	103.27
1	I	222	LEU	N-CA-C	-5.47	100.78	109.59
1	O	94	LYS	N-CA-C	5.47	116.93	110.97
1	A	313	ALA	N-CA-C	-5.47	105.32	111.28
1	D	205	ASP	N-CA-C	5.47	119.45	112.34
1	E	506	ALA	N-CA-C	5.47	119.45	112.34
1	I	239	LYS	CA-C-O	5.47	126.34	120.55
1	L	281	ASN	OD1-CG-ND2	-5.47	117.13	122.60
1	O	126	VAL	CA-C-N	5.47	127.99	120.39
1	O	126	VAL	C-N-CA	5.47	127.99	120.39
1	R	346	ILE	O-C-N	-5.47	116.65	122.61
1	F	336	GLY	N-CA-C	-5.46	107.66	115.64
1	I	33	ARG	CA-C-O	5.46	126.33	120.70
1	L	136	LYS	CA-C-N	5.46	127.60	120.28
1	L	136	LYS	C-N-CA	5.46	127.60	120.28
1	M	404	THR	CA-C-N	5.46	127.95	120.46
1	M	404	THR	C-N-CA	5.46	127.95	120.46
1	P	87	LYS	CA-C-O	-5.46	113.92	120.10
1	K	41	ALA	O-C-N	-5.46	116.44	122.07
1	M	315	LYS	O-C-N	-5.46	114.92	122.46
1	B	127	HIS	ND1-CE1-NE2	5.46	113.86	108.40
1	C	349	GLN	CA-C-O	5.46	125.82	119.32
1	C	444	VAL	O-C-N	-5.46	116.56	121.91
1	D	58	MET	CA-C-O	-5.46	114.74	120.80
1	H	192	VAL	CB-CA-C	5.46	119.35	111.65
1	F	493	GLN	CA-C-N	5.46	125.72	119.83
1	F	493	GLN	C-N-CA	5.46	125.72	119.83
1	I	103	GLY	CA-C-N	5.46	128.04	120.29
1	I	103	GLY	C-N-CA	5.46	128.04	120.29
1	B	161	LEU	CA-C-N	5.46	128.14	120.28
1	B	161	LEU	C-N-CA	5.46	128.14	120.28
1	C	46	LEU	CA-C-N	5.46	131.96	121.54
1	C	46	LEU	C-N-CA	5.46	131.96	121.54
1	N	445	GLU	N-CA-CB	5.46	118.24	110.06
1	S	491	ALA	CA-C-O	5.46	126.39	120.55
1	G	297	VAL	N-CA-C	-5.46	99.97	108.81
1	I	132	ILE	CA-C-N	5.46	127.85	120.38
1	I	132	ILE	C-N-CA	5.46	127.85	120.38
1	L	512	ALA	CA-C-O	5.46	126.55	120.82
1	N	75	ILE	N-CA-CB	-5.46	99.59	111.05
1	P	491	ALA	N-CA-CB	-5.46	101.51	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	436	VAL	CA-CB-CG2	5.45	119.67	110.40
1	E	443	ALA	N-CA-C	5.45	116.91	111.07
1	O	56	ASP	CA-CB-CG	-5.45	107.15	112.60
1	P	95	GLY	CA-C-N	5.45	130.86	121.86
1	P	95	GLY	C-N-CA	5.45	130.86	121.86
1	R	267	ASN	CA-CB-CG	5.45	118.05	112.60
1	D	57	LYS	CA-C-O	5.45	126.49	120.71
1	D	430	ARG	CA-C-N	5.45	128.60	120.31
1	D	430	ARG	C-N-CA	5.45	128.60	120.31
1	G	484	TRP	CB-CG-CD1	-5.45	118.72	126.90
1	P	196	ARG	O-C-N	-5.45	115.92	123.12
1	R	164	ILE	N-CA-CB	-5.45	102.24	111.23
1	S	207	ILE	CA-CB-CG2	-5.45	101.24	110.50
1	F	86	ALA	O-C-N	-5.45	116.25	122.08
1	I	188	ALA	CA-C-O	5.45	126.33	120.55
1	N	346	ILE	CA-CB-CG1	5.45	119.66	110.40
1	N	400	ASP	CA-C-N	5.45	127.58	120.28
1	N	400	ASP	C-N-CA	5.45	127.58	120.28
1	F	460	GLU	CB-CG-CD	-5.45	103.34	112.60
1	N	391	VAL	N-CA-C	5.45	116.18	110.62
1	R	122	LEU	CA-C-N	5.45	127.58	120.28
1	R	122	LEU	C-N-CA	5.45	127.58	120.28
1	H	206	ASN	CA-CB-CG	-5.44	107.16	112.60
1	E	229	ASP	CA-C-O	5.44	126.51	120.63
1	H	300	CYS	N-CA-C	-5.44	101.19	108.86
1	S	389	ARG	CG-CD-NE	-5.44	100.03	112.00
1	F	361	LYS	O-C-N	-5.44	116.81	122.96
1	H	227	VAL	O-C-N	-5.44	117.52	123.18
1	Q	29	LYS	N-CA-C	5.44	117.91	111.33
1	R	209	ILE	CA-CB-CG1	5.44	119.65	110.40
1	S	269	PRO	CB-CA-C	5.44	119.62	111.68
1	L	527	ASP	O-C-N	-5.44	115.04	122.33
1	I	147	GLN	CA-C-N	5.44	131.93	121.54
1	I	147	GLN	C-N-CA	5.44	131.93	121.54
1	N	311	TYR	CB-CG-CD1	5.44	128.96	120.80
1	P	431	LYS	N-CA-C	5.44	118.13	111.82
1	Q	338	ARG	CA-C-N	5.44	129.34	121.18
1	Q	338	ARG	C-N-CA	5.44	129.34	121.18
1	R	410	LYS	CA-C-O	5.44	126.24	120.10
1	S	330	LYS	N-CA-C	5.44	117.96	111.71
1	B	384	ARG	NE-CZ-NH1	5.43	126.93	121.50
1	G	265	ARG	NE-CZ-NH2	5.43	124.09	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	141	VAL	N-CA-CB	5.43	116.54	110.51
1	L	56	ASP	CA-C-N	5.43	131.62	122.87
1	L	56	ASP	C-N-CA	5.43	131.62	122.87
1	L	178	ARG	NE-CZ-NH1	-5.43	116.07	121.50
1	R	427	LYS	O-C-N	5.43	128.77	122.20
1	C	47	LYS	CA-C-O	5.43	128.28	120.51
1	F	223	VAL	O-C-N	-5.43	117.60	123.14
1	M	309	GLN	O-C-N	-5.43	115.17	122.23
1	O	108	VAL	N-CA-C	5.43	116.09	110.82
1	O	458	LEU	O-C-N	-5.43	116.48	122.07
1	F	226	ILE	O-C-N	-5.43	116.54	122.83
1	G	138	ALA	CA-C-N	5.43	127.87	120.54
1	G	138	ALA	C-N-CA	5.43	127.87	120.54
1	G	520	ALA	O-C-N	-5.43	116.27	122.08
1	L	72	GLY	CA-C-N	5.43	129.82	121.19
1	L	72	GLY	C-N-CA	5.43	129.82	121.19
1	L	205	ASP	CA-C-N	5.43	133.16	122.31
1	L	205	ASP	C-N-CA	5.43	133.16	122.31
1	L	454	LEU	CA-C-O	5.43	126.71	120.90
1	N	443	ALA	N-CA-C	5.43	116.88	111.07
1	P	414	ALA	O-C-N	-5.43	117.06	123.41
1	Q	257	LYS	CA-C-N	5.43	125.43	119.90
1	Q	257	LYS	C-N-CA	5.43	125.43	119.90
1	A	343	ILE	N-CA-C	5.42	117.83	111.05
1	B	71	ASP	N-CA-C	5.42	117.56	109.59
1	C	233	VAL	N-CA-C	5.42	116.15	110.62
1	C	418	GLY	N-CA-C	5.42	123.52	113.76
1	G	400	ASP	CA-CB-CG	5.42	118.03	112.60
1	G	529	VAL	CA-C-O	-5.42	114.69	120.39
1	M	119	GLU	CA-C-N	5.42	128.09	120.28
1	M	119	GLU	C-N-CA	5.42	128.09	120.28
1	N	317	VAL	O-C-N	-5.42	117.61	123.14
1	Q	525	ARG	O-C-N	-5.42	115.60	122.27
1	B	340	VAL	CA-C-O	5.42	127.00	120.65
1	D	175	ALA	O-C-N	5.42	129.13	122.84
1	B	100	THR	CA-CB-OG1	5.42	117.73	109.60
1	C	279	GLU	O-C-N	-5.42	115.60	122.27
1	O	234	HIS	CA-C-N	5.42	125.51	119.87
1	O	234	HIS	C-N-CA	5.42	125.51	119.87
1	P	46	LEU	N-CA-C	-5.42	107.21	113.88
1	A	302	LYS	CB-CA-C	-5.42	104.64	113.37
1	G	326	SER	N-CA-C	5.42	118.69	111.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	379	ILE	O-C-N	-5.42	117.04	123.00
1	A	100	THR	CA-C-N	5.42	127.54	120.28
1	A	100	THR	C-N-CA	5.42	127.54	120.28
1	B	228	VAL	CA-C-N	5.42	127.85	120.54
1	B	228	VAL	C-N-CA	5.42	127.85	120.54
1	F	237	MET	CA-C-N	5.42	126.61	119.84
1	F	237	MET	C-N-CA	5.42	126.61	119.84
1	I	314	LYS	CG-CD-CE	5.42	123.76	111.30
1	N	139	GLU	O-C-N	5.42	127.65	122.07
1	S	522	LEU	CA-C-O	5.42	126.16	120.42
1	M	83	HIS	CG-CD2-NE2	5.42	112.62	107.20
1	S	331	LEU	N-CA-CB	-5.42	101.99	110.44
1	A	113	GLU	CA-C-O	-5.42	114.68	120.42
1	A	443	ALA	O-C-N	-5.42	116.49	122.07
1	D	243	ASN	OD1-CG-ND2	-5.42	117.19	122.60
1	E	45	ALA	N-CA-CB	-5.42	101.99	110.44
1	C	428	LYS	N-CA-CB	-5.41	102.16	110.12
1	E	67	THR	CA-CB-OG1	5.41	117.72	109.60
1	E	479	ASN	CA-CB-CG	5.41	118.01	112.60
1	L	250	ASP	N-CA-CB	-5.41	101.32	110.41
1	G	179	GLU	N-CA-C	5.41	117.18	111.28
1	G	321	ARG	CD-NE-CZ	5.41	131.98	124.40
1	D	498	TRP	CE2-CD2-CE3	5.41	124.21	118.80
1	G	97	ASP	N-CA-C	5.41	116.98	111.14
1	G	448	ALA	CA-C-N	5.41	127.47	120.44
1	G	448	ALA	C-N-CA	5.41	127.47	120.44
1	A	327	ASP	CA-C-N	5.41	127.53	120.28
1	A	327	ASP	C-N-CA	5.41	127.53	120.28
1	B	201	TYR	CA-CB-CG	-5.41	104.17	113.90
1	Q	213	ALA	O-C-N	-5.41	116.16	122.81
1	R	83	HIS	CE1-NE2-CD2	-5.41	103.59	109.00
1	R	170	SER	CA-C-O	5.41	126.03	119.49
1	C	406	ALA	CA-C-N	5.41	128.53	120.31
1	C	406	ALA	C-N-CA	5.41	128.53	120.31
1	C	411	ASP	O-C-N	-5.41	115.40	122.59
1	N	449	ASN	OD1-CG-ND2	5.41	128.01	122.60
1	A	199	LYS	N-CA-C	-5.41	99.50	108.75
1	A	471	MET	CA-C-O	5.41	126.27	120.70
1	D	122	LEU	CA-C-O	5.41	126.21	120.10
1	E	261	ASP	CA-CB-CG	-5.41	107.19	112.60
1	F	184	ILE	CA-CB-CG2	5.41	119.69	110.50
1	K	452	GLU	N-CA-C	-5.41	105.55	111.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	477	HIS	CE1-NE2-CD2	-5.41	103.59	109.00
1	L	413	ARG	NE-CZ-NH1	-5.41	116.09	121.50
1	N	342	ASN	N-CA-C	5.41	117.20	108.34
1	H	156	ASN	CA-CB-CG	-5.40	107.20	112.60
1	H	229	ASP	O-C-N	-5.40	116.50	122.07
1	I	442	LEU	N-CA-CB	-5.40	102.18	110.12
1	C	36	ILE	CA-C-O	-5.40	115.65	121.27
1	D	50	TYR	N-CA-C	5.40	118.12	110.50
1	F	427	LYS	N-CA-CB	-5.40	100.54	109.72
1	G	67	THR	CA-C-O	5.40	125.97	120.24
1	R	409	ILE	CB-CA-C	-5.40	104.94	112.02
1	A	228	VAL	CA-C-N	5.40	127.52	120.28
1	A	228	VAL	C-N-CA	5.40	127.52	120.28
1	B	402	LEU	CA-C-N	5.40	126.09	119.99
1	B	402	LEU	C-N-CA	5.40	126.09	119.99
1	E	97	ASP	N-CA-C	5.40	116.85	111.07
1	E	341	SER	N-CA-CB	5.40	118.75	110.70
1	E	417	GLY	O-C-N	-5.40	118.17	122.81
1	M	271	GLN	CB-CG-CD	-5.40	103.42	112.60
1	P	522	LEU	O-C-N	-5.40	115.99	122.15
1	Q	93	ALA	CA-C-O	-5.40	115.34	120.90
1	R	237	MET	CA-C-O	-5.40	115.08	120.64
1	A	429	LEU	CA-C-N	5.40	127.51	120.28
1	A	429	LEU	C-N-CA	5.40	127.51	120.28
1	C	180	TYR	CA-C-N	5.40	128.09	120.42
1	C	180	TYR	C-N-CA	5.40	128.09	120.42
1	D	310	SER	CA-C-N	5.40	127.78	120.44
1	D	310	SER	C-N-CA	5.40	127.78	120.44
1	E	168	SER	CA-C-N	5.40	128.51	120.31
1	E	168	SER	C-N-CA	5.40	128.51	120.31
1	L	84	PRO	CA-C-N	5.40	127.83	120.54
1	L	84	PRO	C-N-CA	5.40	127.83	120.54
1	P	232	VAL	N-CA-CB	5.40	119.20	110.13
1	S	427	LYS	CA-C-N	5.40	128.05	120.28
1	S	427	LYS	C-N-CA	5.40	128.05	120.28
1	B	423	ILE	N-CA-C	5.40	118.62	111.17
1	N	449	ASN	CA-C-O	5.40	126.49	120.82
1	B	250	ASP	CB-CA-C	5.39	121.27	109.99
1	B	279	GLU	N-CA-C	5.39	117.92	111.71
1	F	83	HIS	ND1-CE1-NE2	5.39	113.79	108.40
1	L	376	PRO	N-CA-CB	5.39	109.24	103.52
1	M	322	ARG	N-CA-C	5.39	118.68	111.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	211	LYS	O-C-N	-5.39	116.81	123.33
1	C	512	ALA	CB-CA-C	-5.39	102.42	110.88
1	R	286	LYS	N-CA-C	5.39	117.85	111.33
1	S	300	CYS	CA-C-O	-5.39	115.32	121.58
1	L	113	GLU	N-CA-C	5.39	117.16	111.28
1	B	94	LYS	N-CA-CB	5.39	119.60	110.49
1	E	88	LEU	CA-C-O	5.39	126.13	120.42
1	L	33	ARG	CA-C-N	5.39	127.76	120.65
1	L	33	ARG	C-N-CA	5.39	127.76	120.65
1	O	63	LEU	CA-C-O	5.39	125.95	119.43
1	O	459	ILE	CA-C-O	-5.39	115.07	121.05
1	Q	530	VAL	CA-C-O	5.39	126.80	120.71
1	Q	526	ILE	CB-CA-C	-5.39	105.48	111.35
1	S	285	GLU	O-C-N	-5.39	116.27	122.09
1	E	128	PRO	N-CA-CB	-5.39	98.09	103.48
1	L	137	LYS	CA-C-N	5.39	127.94	120.29
1	L	137	LYS	C-N-CA	5.39	127.94	120.29
1	N	402	LEU	N-CA-CB	5.39	117.79	109.98
1	S	32	VAL	CA-C-N	5.39	127.44	120.44
1	S	32	VAL	C-N-CA	5.39	127.44	120.44
1	R	261	ASP	N-CA-CB	-5.38	102.20	110.01
1	Q	452	GLU	CA-C-N	5.38	127.75	120.38
1	Q	452	GLU	C-N-CA	5.38	127.75	120.38
1	S	188	ALA	N-CA-C	5.38	117.15	111.28
1	C	346	ILE	N-CA-CB	5.38	117.63	110.26
1	E	58	MET	CA-C-O	-5.38	115.00	120.71
1	H	103	GLY	CA-C-N	5.38	127.93	120.29
1	H	103	GLY	C-N-CA	5.38	127.93	120.29
1	H	196	ARG	NE-CZ-NH2	5.38	124.04	119.20
1	N	145	THR	CA-C-O	5.38	126.00	119.38
1	N	350	ASP	CA-CB-CG	-5.38	107.22	112.60
1	R	154	SER	CA-C-N	5.38	128.97	120.47
1	R	154	SER	C-N-CA	5.38	128.97	120.47
1	C	424	GLU	CA-C-O	5.38	126.24	120.70
1	K	320	VAL	CB-CA-C	-5.38	102.22	110.50
1	D	349	GLN	CA-C-O	5.38	126.15	119.97
1	H	106	THR	CA-C-O	-5.38	115.36	120.90
1	I	481	ASN	N-CA-CB	5.38	118.67	110.44
1	P	224	TYR	CA-C-N	5.38	131.11	120.84
1	P	224	TYR	C-N-CA	5.38	131.11	120.84
1	P	362	VAL	N-CA-C	5.38	116.15	110.72
1	C	237	MET	CA-C-N	5.38	125.28	119.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	237	MET	C-N-CA	5.38	125.28	119.85
1	L	118	ALA	CA-C-N	5.38	127.48	120.28
1	L	118	ALA	C-N-CA	5.38	127.48	120.28
1	R	459	ILE	N-CA-C	5.37	115.58	110.42
1	F	264	ILE	CA-C-N	5.37	128.47	120.95
1	F	264	ILE	C-N-CA	5.37	128.47	120.95
1	K	150	ALA	N-CA-C	5.37	117.22	110.24
1	A	190	THR	N-CA-C	5.37	118.62	111.75
1	M	265	ARG	O-C-N	-5.37	116.42	123.02
1	P	86	ALA	N-CA-C	5.37	117.55	111.11
1	I	298	ILE	CA-CB-CG1	5.37	119.52	110.40
1	L	433	ALA	CA-C-N	5.37	126.55	119.84
1	L	433	ALA	C-N-CA	5.37	126.55	119.84
1	P	140	GLU	CA-C-N	5.37	127.32	120.56
1	P	140	GLU	C-N-CA	5.37	127.32	120.56
1	B	267	ASN	OD1-CG-ND2	-5.37	117.23	122.60
1	E	530	VAL	O-C-N	-5.37	115.89	122.97
1	H	72	GLY	O-C-N	5.37	127.44	122.13
1	H	141	VAL	N-CA-C	5.37	115.57	110.42
1	I	233	VAL	O-C-N	-5.37	116.41	121.94
1	R	255	VAL	CA-C-N	5.37	130.90	122.21
1	R	255	VAL	C-N-CA	5.37	130.90	122.21
1	S	226	ILE	CA-C-N	5.37	130.60	122.98
1	S	226	ILE	C-N-CA	5.37	130.60	122.98
1	B	240	ARG	NE-CZ-NH2	-5.36	114.37	119.20
1	D	274	LYS	N-CA-C	5.36	119.31	112.87
1	G	403	GLY	CA-C-N	5.36	127.41	120.44
1	G	403	GLY	C-N-CA	5.36	127.41	120.44
1	H	231	GLU	N-CA-CB	-5.36	102.99	110.29
1	H	414	ALA	O-C-N	-5.36	116.84	123.44
1	C	474	ARG	NE-CZ-NH1	-5.36	116.14	121.50
1	G	232	VAL	N-CA-C	5.36	116.50	109.58
1	K	179	GLU	CA-C-N	5.36	127.41	120.44
1	K	179	GLU	C-N-CA	5.36	127.41	120.44
1	B	137	LYS	N-CA-C	5.36	117.82	111.33
1	C	452	GLU	CA-C-O	5.36	126.14	119.97
1	G	67	THR	OG1-CB-CG2	-5.36	98.58	109.30
1	G	306	GLU	N-CA-C	-5.36	105.60	111.82
1	G	449	ASN	CB-CG-ND2	5.36	124.44	116.40
1	N	33	ARG	CA-CB-CG	-5.36	103.38	114.10
1	O	351	LEU	CA-C-O	5.36	127.23	121.55
1	Q	295	ALA	CA-C-O	5.36	126.86	120.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	R	132	ILE	O-C-N	-5.36	116.33	121.90
1	R	272	MET	CG-SD-CE	-5.36	89.11	100.90
1	S	111	SER	N-CA-CB	5.36	117.78	110.01
1	G	505	PRO	N-CA-CB	5.36	108.88	103.25
1	M	405	VAL	CB-CA-C	-5.36	104.91	112.14
1	B	424	GLU	CA-C-N	5.36	129.41	120.62
1	B	424	GLU	C-N-CA	5.36	129.41	120.62
1	D	309	GLN	N-CA-C	-5.36	105.35	111.14
1	G	79	MET	CA-C-O	-5.36	114.93	121.36
1	O	421	VAL	CA-C-O	5.36	126.26	120.47
1	O	482	ASN	N-CA-CB	5.36	118.38	110.56
1	Q	510	MET	N-CA-C	-5.36	106.80	113.55
1	C	360	ARG	CD-NE-CZ	-5.36	116.90	124.40
1	I	122	LEU	CA-C-N	5.36	127.46	120.28
1	I	122	LEU	C-N-CA	5.36	127.46	120.28
1	I	245	LYS	N-CA-C	-5.36	98.09	107.73
1	L	121	LEU	N-CA-C	-5.36	105.10	111.69
1	L	179	GLU	CA-C-N	5.36	127.40	120.44
1	L	179	GLU	C-N-CA	5.36	127.40	120.44
1	H	68	ILE	N-CA-C	-5.35	100.67	108.17
1	L	190	THR	CA-C-N	5.35	127.89	120.29
1	L	190	THR	C-N-CA	5.35	127.89	120.29
1	M	319	ALA	N-CA-C	5.35	118.29	109.72
1	N	389	ARG	NE-CZ-NH1	5.35	126.85	121.50
1	O	104	THR	CA-C-N	5.35	127.45	120.28
1	O	104	THR	C-N-CA	5.35	127.45	120.28
1	Q	231	GLU	CA-C-N	5.35	127.75	120.63
1	Q	231	GLU	C-N-CA	5.35	127.75	120.63
1	M	279	GLU	N-CA-C	5.35	118.03	111.82
1	B	180	TYR	CB-CG-CD1	-5.35	112.77	120.80
1	Q	247	ALA	CA-C-N	5.35	131.76	121.54
1	Q	247	ALA	C-N-CA	5.35	131.76	121.54
1	B	411	ASP	CA-C-N	5.35	131.89	121.41
1	B	411	ASP	C-N-CA	5.35	131.89	121.41
1	I	148	GLU	CB-CG-CD	-5.35	103.50	112.60
1	P	125	ASP	O-C-N	-5.35	116.16	122.58
1	I	242	GLU	CA-C-N	5.35	129.77	122.34
1	I	242	GLU	C-N-CA	5.35	129.77	122.34
1	O	218	ASN	CA-C-O	5.35	125.96	119.38
1	B	195	LEU	CA-C-O	5.35	126.08	120.36
1	E	446	ALA	CA-C-O	-5.35	115.39	120.90
1	H	476	THR	OG1-CB-CG2	-5.35	98.61	109.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	389	ARG	CG-CD-NE	-5.35	100.24	112.00
1	O	105	LYS	O-C-N	-5.35	116.45	122.12
1	B	507	LEU	CA-C-N	5.34	127.30	120.56
1	B	507	LEU	C-N-CA	5.34	127.30	120.56
1	E	510	MET	N-CA-CB	5.34	118.15	110.40
1	F	169	LEU	CA-C-N	5.34	129.15	120.60
1	F	169	LEU	C-N-CA	5.34	129.15	120.60
1	L	63	LEU	CA-C-O	5.34	125.90	119.43
1	N	154	SER	CA-C-N	5.34	129.06	120.30
1	N	154	SER	C-N-CA	5.34	129.06	120.30
1	D	375	ASN	OD1-CG-ND2	5.34	127.94	122.60
1	M	289	LYS	N-CA-CB	-5.34	101.52	110.39
1	P	61	ASP	CA-CB-CG	-5.34	107.26	112.60
1	P	101	ALA	N-CA-C	5.34	117.10	111.28
1	Q	167	THR	N-CA-C	5.34	119.28	112.87
1	Q	345	GLU	O-C-N	-5.34	116.41	122.23
1	Q	468	ASP	CA-CB-CG	-5.34	107.26	112.60
1	R	150	ALA	CA-C-N	5.34	130.68	122.93
1	R	150	ALA	C-N-CA	5.34	130.68	122.93
1	R	511	ASN	CA-C-O	5.34	126.11	119.97
1	C	209	ILE	CA-C-O	5.34	125.54	120.31
1	F	229	ASP	O-C-N	-5.34	115.97	122.22
1	G	63	LEU	CA-C-O	5.34	125.74	119.28
1	G	301	GLN	N-CA-C	-5.34	106.93	113.50
1	K	183	ASP	CA-C-N	5.34	127.49	120.60
1	K	183	ASP	C-N-CA	5.34	127.49	120.60
1	P	106	THR	CA-C-N	5.34	128.83	120.82
1	P	106	THR	C-N-CA	5.34	128.83	120.82
1	S	414	ALA	CA-C-N	5.34	131.38	122.57
1	S	414	ALA	C-N-CA	5.34	131.38	122.57
1	E	338	ARG	CA-C-N	-5.34	115.70	122.37
1	E	338	ARG	C-N-CA	-5.34	115.70	122.37
1	F	395	GLU	CA-C-N	5.34	127.89	120.63
1	F	395	GLU	C-N-CA	5.34	127.89	120.63
1	P	249	ILE	O-C-N	-5.34	114.91	122.76
1	D	521	THR	CA-C-N	5.34	127.87	120.29
1	D	521	THR	C-N-CA	5.34	127.87	120.29
1	E	136	LYS	CA-C-N	5.34	127.43	120.28
1	E	136	LYS	C-N-CA	5.34	127.43	120.28
1	K	514	LYS	O-C-N	-5.34	116.46	122.12
1	N	274	LYS	CA-C-N	5.34	129.52	120.88
1	N	274	LYS	C-N-CA	5.34	129.52	120.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	467	ILE	N-CA-CB	5.34	116.79	110.55
1	O	136	LYS	N-CA-CB	5.34	117.93	109.82
1	O	487	ILE	CA-C-O	5.34	126.35	120.48
1	P	111	SER	N-CA-C	-5.34	105.36	111.07
1	S	128	PRO	CA-C-O	-5.34	111.44	119.55
1	G	77	ASP	CA-CB-CG	-5.33	107.27	112.60
1	P	139	GLU	CB-CG-CD	5.33	121.67	112.60
1	Q	285	GLU	CA-C-N	5.33	127.69	120.38
1	Q	285	GLU	C-N-CA	5.33	127.69	120.38
1	D	283	ILE	CB-CA-C	-5.33	105.09	112.24
1	G	176	GLY	O-C-N	-5.33	115.77	122.70
1	H	348	GLU	CA-CB-CG	5.33	124.77	114.10
1	M	267	ASN	OD1-CG-ND2	-5.33	117.27	122.60
1	C	172	LYS	CA-C-N	5.33	128.16	120.38
1	C	172	LYS	C-N-CA	5.33	128.16	120.38
1	D	116	LYS	CB-CA-C	-5.33	102.75	110.96
1	H	320	VAL	O-C-N	-5.33	117.42	123.18
1	L	468	ASP	N-CA-C	5.33	117.53	111.02
1	B	483	LYS	N-CA-C	5.33	118.57	111.75
1	P	321	ARG	N-CA-CB	-5.33	102.20	110.57
1	S	186	VAL	N-CA-C	5.33	115.54	110.42
1	K	288	ASP	CA-C-N	5.33	127.95	120.28
1	K	288	ASP	C-N-CA	5.33	127.95	120.28
1	O	296	ASN	N-CA-C	-5.33	106.55	113.16
1	Q	467	ILE	CA-C-N	5.33	128.20	120.79
1	Q	467	ILE	C-N-CA	5.33	128.20	120.79
1	B	390	LEU	O-C-N	-5.33	116.47	122.12
1	B	466	PRO	O-C-N	5.33	127.93	122.18
1	C	454	LEU	N-CA-C	5.33	116.77	111.07
1	D	360	ARG	NE-CZ-NH1	-5.33	116.17	121.50
1	E	505	PRO	N-CD-CG	5.33	111.19	103.20
1	G	236	GLY	O-C-N	-5.33	114.14	122.18
1	I	503	ILE	N-CA-C	-5.33	100.65	108.85
1	O	265	ARG	CD-NE-CZ	5.33	131.86	124.40
1	Q	439	LYS	CA-C-N	5.33	128.16	120.38
1	Q	439	LYS	C-N-CA	5.33	128.16	120.38
1	S	453	SER	N-CA-CB	-5.33	101.72	110.14
1	C	489	LEU	N-CA-C	5.33	119.40	113.01
1	F	398	LEU	N-CA-CB	-5.33	102.28	110.16
1	I	153	VAL	CA-C-O	5.33	125.98	120.39
1	K	226	ILE	CB-CA-C	5.33	118.98	111.63
1	N	213	ALA	CA-C-N	-5.32	115.25	121.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	213	ALA	C-N-CA	-5.32	115.25	121.85
1	Q	291	LEU	CD1-CG-CD2	5.32	122.51	110.80
1	K	220	THR	N-CA-CB	5.32	118.38	110.29
1	Q	204	LEU	N-CA-C	5.32	117.83	111.71
1	E	447	TYR	CA-C-N	5.32	127.67	120.44
1	E	447	TYR	C-N-CA	5.32	127.67	120.44
1	I	427	LYS	CA-C-N	5.32	127.41	120.28
1	I	427	LYS	C-N-CA	5.32	127.41	120.28
1	K	291	LEU	CA-C-O	5.32	125.97	119.05
1	L	153	VAL	O-C-N	-5.32	117.45	123.20
1	O	322	ARG	O-C-N	-5.32	116.19	122.58
1	S	194	GLU	CA-C-O	5.32	126.95	120.99
1	K	208	GLN	OE1-CD-NE2	-5.32	117.28	122.60
1	K	297	VAL	CA-C-O	-5.32	115.64	121.28
1	P	329	GLU	CB-CG-CD	5.32	121.64	112.60
1	D	423	ILE	CA-C-O	-5.32	114.84	120.64
1	F	178	ARG	NE-CZ-NH1	-5.32	116.18	121.50
1	F	323	ALA	CA-C-O	5.32	126.66	120.49
1	G	275	PHE	CB-CG-CD2	5.32	129.74	120.70
1	C	156	ASN	CA-CB-CG	-5.32	107.28	112.60
1	F	521	THR	O-C-N	-5.32	115.31	122.43
1	K	83	HIS	CB-CA-C	-5.32	101.12	109.52
1	K	235	PRO	N-CA-C	5.32	121.52	113.81
1	F	260	LEU	O-C-N	-5.31	115.57	121.84
1	G	436	VAL	O-C-N	5.31	127.43	121.90
1	O	370	VAL	O-C-N	-5.31	115.93	122.57
1	B	324	LYS	O-C-N	-5.31	116.74	123.01
1	H	403	GLY	CA-C-N	5.31	127.35	120.44
1	H	403	GLY	C-N-CA	5.31	127.35	120.44
1	L	378	SER	CA-C-N	5.31	130.57	122.92
1	L	378	SER	C-N-CA	5.31	130.57	122.92
1	M	479	ASN	CA-C-N	5.31	127.40	120.28
1	M	479	ASN	C-N-CA	5.31	127.40	120.28
1	N	37	ALA	CA-C-N	5.31	127.71	120.54
1	N	37	ALA	C-N-CA	5.31	127.71	120.54
1	C	257	LYS	N-CA-C	5.31	116.58	109.83
1	N	451	LEU	N-CA-C	5.31	117.15	111.36
1	B	185	VAL	CA-C-N	5.31	127.25	120.56
1	B	185	VAL	C-N-CA	5.31	127.25	120.56
1	B	224	TYR	CA-C-N	5.31	128.99	120.97
1	B	224	TYR	C-N-CA	5.31	128.99	120.97
1	D	36	ILE	N-CA-CB	5.31	116.19	110.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	282	LEU	O-C-N	-5.31	116.10	122.15
1	I	389	ARG	N-CA-C	-5.31	107.35	113.88
1	I	456	SER	CA-C-N	5.31	128.01	120.53
1	I	456	SER	C-N-CA	5.31	128.01	120.53
1	K	501	GLY	O-C-N	-5.31	115.65	122.39
1	Q	152	THR	N-CA-C	5.31	116.80	109.15
1	R	207	ILE	CB-CA-C	-5.31	103.25	110.42
1	S	240	ARG	NE-CZ-NH1	5.31	126.81	121.50
1	F	234	HIS	ND1-CE1-NE2	5.31	113.71	108.40
1	L	278	GLU	O-C-N	-5.31	115.74	122.27
1	M	190	THR	O-C-N	-5.31	116.15	122.20
1	N	507	LEU	CA-C-O	5.31	126.47	120.00
1	O	164	ILE	N-CA-C	5.31	120.38	109.34
1	Q	454	LEU	N-CA-C	5.31	116.75	111.07
1	R	92	ILE	CA-C-O	5.31	126.48	120.85
1	B	294	GLY	N-CA-C	-5.31	107.89	115.64
1	F	454	LEU	N-CA-C	5.31	117.48	111.11
1	I	343	ILE	N-CA-C	5.31	118.49	111.17
1	O	345	GLU	CA-C-O	5.31	125.44	119.18
1	B	142	ALA	N-CA-C	5.30	117.75	111.33
1	C	83	HIS	CE1-NE2-CD2	-5.30	103.70	109.00
1	C	428	LYS	CA-CB-CG	5.30	124.71	114.10
1	E	179	GLU	CA-C-O	-5.30	114.93	120.55
1	L	121	LEU	O-C-N	-5.30	115.33	122.23
1	M	121	LEU	CA-C-N	5.30	127.39	120.28
1	M	121	LEU	C-N-CA	5.30	127.39	120.28
1	A	370	VAL	CA-C-N	5.30	129.27	120.94
1	A	370	VAL	C-N-CA	5.30	129.27	120.94
1	B	83	HIS	CA-C-N	5.30	124.48	118.97
1	B	83	HIS	C-N-CA	5.30	124.48	118.97
1	E	277	ASP	CA-C-O	5.30	126.16	120.70
1	N	460	GLU	CB-CG-CD	-5.30	103.58	112.60
1	E	152	THR	CB-CA-C	-5.30	102.61	110.67
1	Q	37	ALA	O-C-N	5.30	128.62	122.20
1	M	262	ALA	O-C-N	-5.30	117.12	123.27
1	P	333	ARG	NE-CZ-NH1	5.30	126.80	121.50
1	Q	388	GLU	CB-CG-CD	5.30	121.61	112.60
1	K	261	ASP	N-CA-C	5.30	118.84	112.38
1	O	279	GLU	CA-C-O	5.30	126.09	120.10
1	A	138	ALA	N-CA-C	5.30	117.13	111.36
1	I	126	VAL	CG1-CB-CG2	-5.30	99.15	110.80
1	M	424	GLU	CA-C-O	5.30	126.36	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	353	TYR	N-CA-C	5.29	117.87	109.24
1	F	84	PRO	CA-C-N	5.29	127.69	120.54
1	F	84	PRO	C-N-CA	5.29	127.69	120.54
1	I	237	MET	CA-C-N	5.29	125.55	119.83
1	I	237	MET	C-N-CA	5.29	125.55	119.83
1	K	415	ILE	CA-CB-CG1	5.29	119.40	110.40
1	L	457	ILE	O-C-N	5.29	127.08	121.89
1	M	366	LYS	CG-CD-CE	5.29	123.47	111.30
1	Q	363	GLY	O-C-N	-5.29	115.82	122.70
1	S	321	ARG	NE-CZ-NH2	5.29	123.96	119.20
1	A	402	LEU	CB-CA-C	-5.29	102.81	110.96
1	A	455	VAL	CB-CA-C	-5.29	103.69	112.26
1	R	211	LYS	O-C-N	-5.29	116.93	123.33
1	F	356	LEU	CD1-CG-CD2	-5.29	99.16	110.80
1	Q	67	THR	N-CA-CB	5.29	119.39	110.77
1	B	459	ILE	N-CA-CB	5.29	116.74	110.55
1	E	224	TYR	CA-C-N	5.29	127.75	120.72
1	E	224	TYR	C-N-CA	5.29	127.75	120.72
1	E	448	ALA	CA-C-N	5.29	127.37	120.28
1	E	448	ALA	C-N-CA	5.29	127.37	120.28
1	F	232	VAL	N-CA-C	5.29	118.14	109.78
1	G	180	TYR	CB-CG-CD2	-5.29	112.87	120.80
1	S	177	ALA	N-CA-C	5.29	118.63	111.17
1	A	395	GLU	N-CA-CB	-5.29	102.33	110.16
1	D	338	ARG	NH1-CZ-NH2	-5.29	112.43	119.30
1	E	305	ASP	CB-CA-C	-5.29	99.90	110.42
1	F	71	ASP	CA-CB-CG	-5.29	107.31	112.60
1	M	303	GLY	O-C-N	-5.29	116.63	122.60
1	M	315	LYS	CA-C-O	5.29	125.86	119.31
1	B	146	ILE	CA-CB-CG1	-5.28	101.42	110.40
1	B	503	ILE	O-C-N	-5.28	117.17	123.04
1	C	373	ALA	O-C-N	-5.28	116.31	122.81
1	F	146	ILE	N-CA-C	-5.28	105.98	111.58
1	F	151	GLN	CB-CA-C	5.28	118.89	109.38
1	G	234	HIS	CA-C-N	5.28	126.44	119.84
1	G	234	HIS	C-N-CA	5.28	126.44	119.84
1	H	194	GLU	CA-C-N	5.28	129.45	122.42
1	H	194	GLU	C-N-CA	5.28	129.45	122.42
1	M	158	THR	CA-CB-OG1	5.28	117.52	109.60
1	N	53	ARG	CA-CB-CG	-5.28	103.53	114.10
1	P	477	HIS	CE1-NE2-CD2	-5.28	103.72	109.00
1	Q	97	ASP	CA-CB-CG	-5.28	107.32	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	S	80	ASP	CA-CB-CG	-5.28	107.32	112.60
1	B	85	ALA	CA-C-N	5.28	127.67	120.54
1	B	85	ALA	C-N-CA	5.28	127.67	120.54
1	E	281	ASN	CA-C-O	5.28	125.88	119.38
1	N	528	ASP	N-CA-CB	-5.28	102.84	111.66
1	C	116	LYS	CA-C-N	5.28	129.05	120.60
1	C	116	LYS	C-N-CA	5.28	129.05	120.60
1	C	478	GLU	N-CA-C	5.28	117.03	111.28
1	D	121	LEU	CA-C-N	5.28	127.88	120.28
1	D	121	LEU	C-N-CA	5.28	127.88	120.28
1	D	477	HIS	ND1-CE1-NE2	5.28	113.68	108.40
1	G	454	LEU	CA-C-O	5.28	126.55	120.90
1	S	104	THR	CA-C-O	5.28	126.02	120.42
1	A	285	GLU	CA-C-N	5.28	127.61	120.38
1	A	285	GLU	C-N-CA	5.28	127.61	120.38
1	G	413	ARG	NE-CZ-NH1	-5.28	116.22	121.50
1	Q	272	MET	CA-C-N	5.28	131.62	121.54
1	Q	272	MET	C-N-CA	5.28	131.62	121.54
1	C	342	ASN	CA-CB-CG	-5.28	107.32	112.60
1	H	101	ALA	N-CA-CB	-5.28	102.89	110.65
1	H	504	GLU	CA-C-N	5.28	126.44	119.84
1	H	504	GLU	C-N-CA	5.28	126.44	119.84
1	I	265	ARG	NE-CZ-NH2	5.28	123.95	119.20
1	Q	224	TYR	CA-C-N	5.28	128.19	120.91
1	Q	224	TYR	C-N-CA	5.28	128.19	120.91
1	Q	413	ARG	NH1-CZ-NH2	5.28	126.16	119.30
1	E	448	ALA	CA-C-O	-5.28	115.27	120.70
1	F	47	LYS	CB-CG-CD	5.28	123.44	111.30
1	N	360	ARG	NE-CZ-NH1	-5.28	116.22	121.50
1	A	379	ILE	O-C-N	-5.27	117.20	123.00
1	B	459	ILE	CA-C-N	5.27	129.57	121.19
1	B	459	ILE	C-N-CA	5.27	129.57	121.19
1	E	70	ASN	CA-C-O	5.27	124.99	119.51
1	F	127	HIS	CG-CD2-NE2	5.27	112.47	107.20
1	S	485	TYR	CA-CB-CG	-5.27	104.41	113.90
1	E	168	SER	N-CA-C	-5.27	105.92	112.93
1	L	528	ASP	CA-CB-CG	5.27	117.87	112.60
1	P	484	TRP	CA-CB-CG	5.27	123.61	113.60
1	D	88	LEU	N-CA-CB	5.27	117.96	110.16
1	D	440	GLU	N-CA-C	5.27	118.49	111.75
1	E	325	LYS	N-CA-C	5.27	118.49	111.75
1	K	396	ARG	NH1-CZ-NH2	-5.27	112.45	119.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	113	GLU	CA-C-O	5.27	126.00	120.42
1	R	42	VAL	O-C-N	-5.27	116.76	121.87
1	R	302	LYS	CA-C-N	5.27	126.48	120.53
1	R	302	LYS	C-N-CA	5.27	126.48	120.53
1	S	218	ASN	CA-CB-CG	-5.27	107.33	112.60
1	E	482	ASN	OD1-CG-ND2	-5.27	117.33	122.60
1	I	91	GLN	N-CA-C	5.27	117.02	111.28
1	K	233	VAL	N-CA-C	5.27	115.48	110.53
1	N	304	ILE	N-CA-C	-5.27	100.48	108.17
1	E	186	VAL	CA-C-N	5.26	127.33	120.28
1	E	186	VAL	C-N-CA	5.26	127.33	120.28
1	G	389	ARG	CA-C-N	5.26	127.33	120.28
1	G	389	ARG	C-N-CA	5.26	127.33	120.28
1	H	191	GLN	O-C-N	-5.26	116.15	122.15
1	O	179	GLU	O-C-N	5.26	127.70	122.12
1	Q	155	ILE	N-CA-C	5.26	119.41	112.04
1	M	416	ALA	O-C-N	-5.26	116.88	123.04
1	R	85	ALA	CA-C-N	5.26	127.64	120.54
1	R	85	ALA	C-N-CA	5.26	127.64	120.54
1	E	173	ALA	CA-C-O	5.26	126.53	120.90
1	H	327	ASP	CA-C-O	5.26	125.36	119.41
1	L	152	THR	N-CA-CB	5.26	118.23	109.60
1	S	322	ARG	CD-NE-CZ	5.26	131.76	124.40
1	A	115	VAL	CA-C-N	5.26	127.59	120.65
1	A	115	VAL	C-N-CA	5.26	127.59	120.65
1	A	393	GLU	CA-C-O	5.26	125.83	119.31
1	D	69	THR	CA-C-N	5.26	130.20	121.99
1	D	69	THR	C-N-CA	5.26	130.20	121.99
1	I	187	LYS	O-C-N	-5.26	116.55	122.12
1	R	436	VAL	CB-CA-C	-5.26	105.04	112.14
1	C	206	ASN	OD1-CG-ND2	-5.26	117.34	122.60
1	F	413	ARG	CD-NE-CZ	-5.26	117.04	124.40
1	A	266	ILE	N-CA-C	5.26	120.27	109.34
1	H	72	GLY	CA-C-N	5.26	129.55	121.19
1	H	72	GLY	C-N-CA	5.26	129.55	121.19
1	L	29	LYS	CA-C-N	5.26	131.58	121.54
1	L	29	LYS	C-N-CA	5.26	131.58	121.54
1	N	64	GLY	O-C-N	-5.26	116.30	122.45
1	R	386	GLY	CA-C-N	5.26	131.58	121.54
1	R	386	GLY	C-N-CA	5.26	131.58	121.54
1	S	487	ILE	CB-CA-C	-5.26	104.16	110.99
1	N	139	GLU	CA-C-O	-5.25	115.30	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	204	LEU	N-CA-C	5.25	118.48	111.75
1	P	114	LEU	O-C-N	5.25	127.69	122.12
1	H	147	GLN	CB-CG-CD	5.25	121.53	112.60
1	I	242	GLU	O-C-N	-5.25	117.23	123.22
1	M	66	ILE	CB-CA-C	-5.25	102.83	110.81
1	P	248	LEU	O-C-N	-5.25	115.61	122.59
1	Q	397	ALA	N-CA-C	5.25	117.68	111.33
1	Q	470	LEU	CB-CA-C	-5.25	102.63	110.88
1	F	446	ALA	CA-C-O	-5.25	115.49	121.00
1	G	484	TRP	CB-CG-CD2	5.25	134.15	126.80
1	H	183	ASP	CA-C-O	-5.25	115.31	120.82
1	I	100	THR	N-CA-C	5.25	117.84	110.23
1	F	104	THR	CA-C-N	5.25	127.74	120.29
1	F	104	THR	C-N-CA	5.25	127.74	120.29
1	H	386	GLY	CA-C-N	5.25	131.57	121.54
1	H	386	GLY	C-N-CA	5.25	131.57	121.54
1	I	514	LYS	CB-CA-C	-5.25	102.64	110.88
1	M	217	ILE	CA-C-O	5.25	126.36	119.85
1	N	34	ALA	O-C-N	5.25	127.48	122.07
1	O	404	THR	CB-CA-C	-5.25	102.64	110.88
1	A	140	GLU	CB-CG-CD	-5.25	103.68	112.60
1	C	152	THR	CB-CA-C	-5.25	102.39	110.26
1	I	266	ILE	CB-CA-C	-5.25	105.56	111.23
1	L	504	GLU	N-CA-C	5.25	114.34	108.25
1	O	471	MET	CB-CA-C	-5.25	102.08	110.79
1	R	168	SER	N-CA-C	-5.25	105.95	112.93
1	B	245	LYS	CA-C-N	5.25	127.53	120.50
1	B	245	LYS	C-N-CA	5.25	127.53	120.50
1	D	408	VAL	CA-C-O	5.24	126.40	120.95
1	D	474	ARG	NE-CZ-NH2	5.24	123.92	119.20
1	I	252	SER	N-CA-C	5.24	117.83	110.23
1	A	28	GLY	CA-C-N	5.24	127.56	120.38
1	A	28	GLY	C-N-CA	5.24	127.56	120.38
1	E	205	ASP	CA-CB-CG	5.24	117.84	112.60
1	K	315	LYS	N-CA-C	-5.24	106.39	112.89
1	P	43	GLU	N-CA-C	5.24	116.68	111.07
1	A	178	ARG	NE-CZ-NH2	5.24	123.92	119.20
1	A	283	ILE	CA-CB-CG1	5.24	119.31	110.40
1	C	167	THR	CA-C-N	5.24	131.70	122.79
1	C	167	THR	C-N-CA	5.24	131.70	122.79
1	H	90	VAL	CA-C-O	-5.24	115.50	120.95
1	L	212	LYS	CA-C-O	5.24	126.14	120.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	343	ILE	N-CA-C	5.24	118.40	111.17
1	N	384	ARG	O-C-N	-5.24	117.07	123.10
1	O	151	GLN	CA-C-N	5.24	129.84	121.66
1	O	151	GLN	C-N-CA	5.24	129.84	121.66
1	A	340	VAL	O-C-N	-5.24	117.64	123.03
1	A	401	ALA	O-C-N	-5.24	116.67	122.07
1	B	106	THR	N-CA-C	-5.24	105.48	111.14
1	C	135	TYR	CB-CG-CD1	-5.24	112.94	120.80
1	F	142	ALA	CA-C-O	5.24	126.29	120.63
1	M	433	ALA	N-CA-C	5.24	121.39	109.81
1	O	79	MET	O-C-N	-5.24	117.25	123.22
1	D	303	GLY	CA-C-N	5.24	130.71	122.70
1	D	303	GLY	C-N-CA	5.24	130.71	122.70
1	G	400	ASP	CA-C-N	5.24	127.30	120.28
1	G	400	ASP	C-N-CA	5.24	127.30	120.28
1	D	523	VAL	CA-CB-CG2	-5.24	101.50	110.40
1	E	119	GLU	O-C-N	-5.24	116.57	122.12
1	I	165	ALA	CA-C-N	5.24	127.73	120.29
1	I	165	ALA	C-N-CA	5.24	127.73	120.29
1	L	192	VAL	CA-C-N	5.24	128.54	121.05
1	L	192	VAL	C-N-CA	5.24	128.54	121.05
1	L	358	GLU	CA-C-O	5.24	127.05	121.45
1	P	266	ILE	N-CA-C	5.24	115.75	108.84
1	R	511	ASN	O-C-N	-5.24	115.83	122.27
1	N	324	LYS	N-CA-C	-5.23	101.18	109.76
1	R	410	LYS	O-C-N	-5.23	116.10	122.22
1	L	275	PHE	N-CA-CB	5.23	117.88	110.13
1	S	265	ARG	N-CA-C	5.23	118.06	110.42
1	B	63	LEU	O-C-N	-5.23	115.64	122.39
1	B	114	LEU	N-CA-C	5.23	116.98	111.28
1	G	336	GLY	O-C-N	-5.23	115.79	122.43
1	H	361	LYS	CG-CD-CE	5.23	123.33	111.30
1	M	452	GLU	CA-C-N	5.23	127.55	120.38
1	M	452	GLU	C-N-CA	5.23	127.55	120.38
1	R	111	SER	CA-C-O	-5.23	115.51	121.00
1	A	156	ASN	OD1-CG-ND2	-5.23	117.37	122.60
1	B	225	GLY	CA-C-O	-5.23	116.42	121.75
1	B	396	ARG	NE-CZ-NH2	-5.23	114.50	119.20
1	C	38	ALA	CA-C-N	5.23	127.23	120.70
1	C	38	ALA	C-N-CA	5.23	127.23	120.70
1	G	204	LEU	CA-C-N	5.23	129.05	120.63
1	G	204	LEU	C-N-CA	5.23	129.05	120.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	350	ASP	N-CA-C	-5.23	106.90	113.28
1	K	33	ARG	CA-C-O	-5.23	115.31	120.70
1	M	226	ILE	CA-C-N	5.23	130.32	123.11
1	M	226	ILE	C-N-CA	5.23	130.32	123.11
1	G	508	VAL	CA-CB-CG2	-5.23	101.52	110.40
1	Q	240	ARG	NE-CZ-NH1	5.23	126.73	121.50
1	S	265	ARG	CA-C-N	5.23	128.09	120.98
1	S	265	ARG	C-N-CA	5.23	128.09	120.98
1	E	60	VAL	N-CA-C	5.22	115.10	107.37
1	H	356	LEU	CA-C-N	-5.22	116.36	123.10
1	H	356	LEU	C-N-CA	-5.22	116.36	123.10
1	I	251	ALA	N-CA-C	5.22	117.28	110.43
1	O	264	ILE	N-CA-C	5.22	120.21	109.34
1	O	296	ASN	CA-CB-CG	5.22	117.83	112.60
1	R	87	LYS	O-C-N	5.22	127.66	122.12
1	R	528	ASP	CA-CB-CG	5.22	117.82	112.60
1	F	116	LYS	CA-CB-CG	5.22	124.54	114.10
1	P	391	VAL	CA-CB-CG1	5.22	119.28	110.40
1	C	489	LEU	O-C-N	-5.22	115.25	122.46
1	D	240	ARG	NE-CZ-NH2	5.22	123.90	119.20
1	H	111	SER	CA-C-N	5.22	126.67	120.14
1	H	111	SER	C-N-CA	5.22	126.67	120.14
1	N	219	ASP	CA-C-N	5.22	130.06	121.39
1	N	219	ASP	C-N-CA	5.22	130.06	121.39
1	O	384	ARG	CD-NE-CZ	-5.22	117.09	124.40
1	P	445	GLU	N-CA-CB	5.22	117.89	110.06
1	R	237	MET	CA-C-N	5.22	125.51	119.92
1	R	237	MET	C-N-CA	5.22	125.51	119.92
1	S	461	ASN	O-C-N	-5.22	115.48	122.43
1	B	325	LYS	N-CA-C	5.22	118.43	111.75
1	I	252	SER	CA-C-O	-5.22	115.45	121.19
1	I	493	GLN	O-C-N	-5.22	115.32	121.32
1	M	326	SER	N-CA-C	5.22	118.43	111.75
1	M	500	LYS	CA-C-O	5.22	124.56	119.08
1	Q	174	VAL	O-C-N	-5.22	116.05	122.57
1	E	80	ASP	N-CA-CB	-5.22	102.42	110.25
1	F	40	LYS	N-CA-C	5.22	117.64	111.33
1	N	487	ILE	CA-CB-CG1	5.22	119.27	110.40
1	B	261	ASP	N-CA-C	5.22	116.78	111.14
1	D	448	ALA	CA-C-N	5.22	127.22	120.44
1	D	448	ALA	C-N-CA	5.22	127.22	120.44
1	K	78	LYS	CA-C-N	5.22	132.56	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	78	LYS	C-N-CA	5.22	132.56	122.07
1	K	124	LYS	N-CA-C	5.22	119.51	113.20
1	O	439	LYS	CA-C-N	5.22	128.00	120.38
1	O	439	LYS	C-N-CA	5.22	128.00	120.38
1	P	470	LEU	CA-C-N	5.22	127.22	120.44
1	P	470	LEU	C-N-CA	5.22	127.22	120.44
1	B	418	GLY	N-CA-C	5.21	121.97	114.10
1	G	432	TYR	CB-CG-CD1	5.21	128.62	120.80
1	I	472	LYS	N-CA-C	5.21	117.71	111.71
1	K	196	ARG	O-C-N	-5.21	117.21	123.31
1	M	503	ILE	N-CA-CB	-5.21	103.68	112.44
1	O	40	LYS	CA-C-N	5.21	127.22	120.44
1	O	40	LYS	C-N-CA	5.21	127.22	120.44
1	O	421	VAL	N-CA-C	5.21	117.61	111.09
1	O	508	VAL	N-CA-C	-5.21	105.42	110.42
1	S	500	LYS	N-CA-C	-5.21	104.90	113.50
1	B	433	ALA	N-CA-C	5.21	121.33	109.81
1	E	428	LYS	N-CA-C	5.21	116.96	111.28
1	H	40	LYS	N-CA-CB	5.21	117.88	110.06
1	H	297	VAL	CB-CA-C	5.21	120.04	110.71
1	H	509	LYS	N-CA-C	5.21	119.35	113.15
1	F	287	VAL	N-CA-C	5.21	115.42	110.42
1	G	408	VAL	N-CA-C	-5.21	105.31	110.62
1	P	249	ILE	CA-C-O	5.21	126.78	120.74
1	B	427	LYS	CA-CB-CG	5.21	124.52	114.10
1	C	148	GLU	CB-CG-CD	5.21	121.46	112.60
1	G	200	TRP	O-C-N	-5.21	117.12	123.16
1	H	118	ALA	CA-C-N	5.21	127.26	120.28
1	H	118	ALA	C-N-CA	5.21	127.26	120.28
1	H	163	LYS	N-CA-C	-5.21	104.52	111.24
1	K	235	PRO	N-CA-CB	5.21	109.13	103.30
1	N	55	MET	CA-C-N	5.21	130.41	122.65
1	N	55	MET	C-N-CA	5.21	130.41	122.65
1	P	480	GLU	CG-CD-OE2	-5.21	106.42	118.40
1	C	319	ALA	CA-C-O	5.21	126.99	121.11
1	K	245	LYS	CA-C-N	5.21	127.67	120.49
1	K	245	LYS	C-N-CA	5.21	127.67	120.49
1	L	176	GLY	O-C-N	-5.21	117.48	122.84
1	A	57	LYS	CA-C-O	-5.21	115.19	120.71
1	I	382	LEU	N-CA-C	5.21	117.13	108.02
1	O	309	GLN	CA-C-N	5.21	127.78	120.28
1	O	309	GLN	C-N-CA	5.21	127.78	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	298	ILE	O-C-N	-5.20	117.67	123.03
1	B	428	LYS	N-CA-CB	-5.20	102.20	110.22
1	H	137	LYS	CA-C-N	5.20	127.68	120.29
1	H	137	LYS	C-N-CA	5.20	127.68	120.29
1	I	28	GLY	CA-C-N	5.20	127.98	120.38
1	I	28	GLY	C-N-CA	5.20	127.98	120.38
1	K	257	LYS	CB-CA-C	-5.20	101.70	109.56
1	Q	466	PRO	CA-C-N	5.20	127.11	120.56
1	Q	466	PRO	C-N-CA	5.20	127.11	120.56
1	C	309	GLN	CB-CG-CD	-5.20	103.76	112.60
1	L	76	LEU	CA-C-N	5.20	127.67	120.29
1	L	76	LEU	C-N-CA	5.20	127.67	120.29
1	P	231	GLU	CA-C-N	5.20	127.47	120.50
1	P	231	GLU	C-N-CA	5.20	127.47	120.50
1	B	498	TRP	N-CA-CB	5.20	117.72	109.82
1	C	90	VAL	CA-C-N	5.20	127.67	120.29
1	C	90	VAL	C-N-CA	5.20	127.67	120.29
1	I	160	LEU	CA-C-O	5.20	126.01	120.24
1	I	374	LYS	O-C-N	5.20	127.64	122.08
1	N	322	ARG	N-CA-C	5.20	118.56	111.39
1	C	464	PHE	CA-C-O	-5.20	115.69	121.51
1	G	39	VAL	CB-CA-C	5.20	118.35	111.70
1	G	466	PRO	N-CA-C	5.20	122.20	113.78
1	N	185	VAL	CA-CB-CG1	5.20	119.23	110.40
1	I	74	THR	N-CA-C	5.19	116.94	111.28
1	Q	512	ALA	N-CA-CB	-5.19	102.48	110.01
1	S	171	SER	CA-C-O	5.19	125.07	119.15
1	A	403	GLY	CA-C-N	5.19	127.19	120.44
1	A	403	GLY	C-N-CA	5.19	127.19	120.44
1	C	473	LEU	O-C-N	-5.19	115.89	122.17
1	E	211	LYS	CA-C-O	5.19	126.63	120.66
1	I	113	GLU	CA-C-O	5.19	125.92	120.42
1	L	369	PHE	CA-C-O	-5.19	115.24	121.11
1	P	380	SER	N-CA-CB	5.19	120.72	111.69
1	D	68	ILE	O-C-N	-5.19	117.73	123.18
1	E	189	VAL	CA-C-N	5.19	127.96	120.38
1	E	189	VAL	C-N-CA	5.19	127.96	120.38
1	E	432	TYR	CA-C-O	5.19	126.25	120.80
1	F	139	GLU	N-CA-C	5.19	116.62	111.07
1	M	301	GLN	CA-C-O	5.19	125.30	119.18
1	R	142	ALA	CA-C-N	5.19	127.69	120.63
1	R	142	ALA	C-N-CA	5.19	127.69	120.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	33	ARG	CA-C-N	5.19	128.00	120.79
1	B	33	ARG	C-N-CA	5.19	128.00	120.79
1	G	127	HIS	CE1-NE2-CD2	-5.19	103.81	109.00
1	K	374	LYS	CA-C-N	5.19	128.47	121.20
1	K	374	LYS	C-N-CA	5.19	128.47	121.20
1	L	399	ARG	CG-CD-NE	-5.19	100.58	112.00
1	L	405	VAL	O-C-N	-5.19	116.84	121.87
1	D	508	VAL	CA-C-O	5.19	126.67	121.17
1	G	485	TYR	CA-CB-CG	-5.19	104.56	113.90
1	L	243	ASN	CA-C-N	5.19	128.21	120.90
1	L	243	ASN	C-N-CA	5.19	128.21	120.90
1	C	109	ILE	CA-C-N	5.18	127.23	120.28
1	C	109	ILE	C-N-CA	5.18	127.23	120.28
1	G	219	ASP	CA-CB-CG	5.18	117.78	112.60
1	N	32	VAL	O-C-N	-5.18	116.81	121.89
1	N	423	ILE	CA-C-O	5.18	126.29	120.64
1	A	415	ILE	O-C-N	-5.18	117.53	122.97
1	B	238	PRO	N-CA-CB	-5.18	98.70	103.31
1	G	100	THR	CA-C-N	5.18	127.49	120.44
1	G	100	THR	C-N-CA	5.18	127.49	120.44
1	H	336	GLY	CA-C-N	5.18	125.26	120.34
1	H	336	GLY	C-N-CA	5.18	125.26	120.34
1	I	317	VAL	O-C-N	-5.18	116.82	122.83
1	N	506	ALA	O-C-N	-5.18	115.54	122.43
1	Q	409	ILE	CA-C-N	5.18	127.74	120.28
1	Q	409	ILE	C-N-CA	5.18	127.74	120.28
1	R	299	ILE	CB-CA-C	5.18	118.34	110.62
1	S	171	SER	CB-CA-C	5.18	118.67	109.65
1	S	212	LYS	N-CA-C	-5.18	101.42	109.24
1	A	299	ILE	N-CA-C	-5.18	101.02	108.48
1	B	168	SER	N-CA-C	-5.18	105.79	112.68
1	H	88	LEU	N-CA-C	5.18	117.01	111.36
1	I	37	ALA	CA-C-N	5.18	127.53	120.54
1	I	37	ALA	C-N-CA	5.18	127.53	120.54
1	L	313	ALA	CA-C-N	5.18	128.18	120.31
1	L	313	ALA	C-N-CA	5.18	128.18	120.31
1	Q	203	ASP	CA-CB-CG	-5.18	107.42	112.60
1	A	46	LEU	CA-C-N	5.18	131.43	121.54
1	A	46	LEU	C-N-CA	5.18	131.43	121.54
1	A	489	LEU	N-CA-C	-5.18	105.81	111.82
1	K	328	LEU	CB-CA-C	5.18	119.39	110.79
1	K	495	VAL	N-CA-C	5.18	116.16	108.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	300	CYS	CA-C-N	5.18	131.22	122.26
1	L	300	CYS	C-N-CA	5.18	131.22	122.26
1	Q	428	LYS	N-CA-C	5.18	117.67	111.71
1	C	257	LYS	CA-C-N	5.18	126.31	119.84
1	C	257	LYS	C-N-CA	5.18	126.31	119.84
1	N	99	GLU	O-C-N	-5.18	117.15	123.16
1	P	457	ILE	CA-CB-CG2	5.18	119.30	110.50
1	G	167	THR	OG1-CB-CG2	-5.18	98.95	109.30
1	K	113	GLU	N-CA-C	-5.18	105.72	111.36
1	Q	276	LEU	N-CA-C	5.18	118.86	112.54
1	A	53	ARG	NE-CZ-NH2	5.17	123.86	119.20
1	F	502	VAL	CB-CA-C	-5.17	106.78	112.68
1	G	252	SER	N-CA-CB	5.17	117.61	109.69
1	S	57	LYS	O-C-N	-5.17	116.64	123.16
1	B	153	VAL	O-C-N	-5.17	117.59	123.18
1	B	518	GLU	O-C-N	5.17	127.40	122.07
1	F	228	VAL	N-CA-C	-5.17	100.31	108.23
1	G	355	SER	CA-C-N	-5.17	112.85	121.64
1	G	355	SER	C-N-CA	-5.17	112.85	121.64
1	E	84	PRO	CA-C-N	5.17	127.52	120.54
1	E	84	PRO	C-N-CA	5.17	127.52	120.54
1	H	104	THR	CA-CB-OG1	-5.17	101.84	109.60
1	H	501	GLY	O-C-N	-5.17	116.23	122.38
1	M	373	ALA	O-C-N	-5.17	115.71	122.59
1	Q	343	ILE	N-CA-C	5.17	118.31	111.17
1	A	61	ASP	CA-CB-CG	-5.17	107.43	112.60
1	C	430	ARG	NE-CZ-NH2	5.17	123.85	119.20
1	D	73	ALA	CA-C-O	5.17	127.07	121.02
1	I	308	ALA	O-C-N	-5.17	115.50	122.43
1	M	435	GLN	CA-C-N	5.17	127.07	120.56
1	M	435	GLN	C-N-CA	5.17	127.07	120.56
1	B	167	THR	CA-C-O	5.17	125.61	119.10
1	B	466	PRO	CA-C-O	-5.17	111.88	120.05
1	F	173	ALA	CA-C-N	5.17	131.27	121.97
1	F	173	ALA	C-N-CA	5.17	131.27	121.97
1	M	383	ILE	CB-CA-C	-5.17	104.13	111.21
1	M	514	LYS	CB-CA-C	-5.17	102.21	110.79
1	C	244	ALA	CA-C-N	5.17	131.41	121.54
1	C	244	ALA	C-N-CA	5.17	131.41	121.54
1	D	67	THR	CB-CA-C	-5.17	103.08	110.62
1	D	300	CYS	N-CA-C	5.17	116.14	108.86
1	N	496	ASP	CA-CB-CG	-5.17	107.43	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	299	ILE	N-CA-C	-5.17	100.89	108.85
1	E	500	LYS	CA-C-O	5.17	124.50	119.08
1	K	283	ILE	O-C-N	-5.17	116.51	121.83
1	M	336	GLY	CA-C-N	5.17	128.93	121.54
1	M	336	GLY	C-N-CA	5.17	128.93	121.54
1	Q	243	ASN	CA-C-N	5.17	128.21	120.87
1	Q	243	ASN	C-N-CA	5.17	128.21	120.87
1	S	131	ILE	N-CA-C	5.17	117.51	111.05
1	A	83	HIS	CE1-NE2-CD2	-5.16	103.84	109.00
1	F	428	LYS	CA-C-N	5.16	127.62	120.29
1	F	428	LYS	C-N-CA	5.16	127.62	120.29
1	Q	43	GLU	CA-C-N	5.16	130.60	120.99
1	Q	43	GLU	C-N-CA	5.16	130.60	120.99
1	E	341	SER	O-C-N	-5.16	116.00	122.35
1	K	187	LYS	CA-C-N	5.16	127.20	120.28
1	K	187	LYS	C-N-CA	5.16	127.20	120.28
1	B	430	ARG	O-C-N	-5.16	116.65	122.12
1	E	156	ASN	CB-CG-ND2	5.16	124.14	116.40
1	I	111	SER	N-CA-CB	5.16	117.49	110.01
1	I	257	LYS	CA-C-O	-5.16	115.08	120.70
1	L	33	ARG	NE-CZ-NH2	-5.16	114.56	119.20
1	P	514	LYS	CB-CA-C	-5.16	102.22	110.79
1	Q	389	ARG	NE-CZ-NH2	5.16	123.84	119.20
1	C	87	LYS	O-C-N	-5.16	116.19	122.22
1	C	248	LEU	N-CA-C	5.16	117.71	108.17
1	D	185	VAL	CB-CA-C	-5.16	105.28	112.04
1	E	109	ILE	CA-C-N	5.16	127.19	120.28
1	E	109	ILE	C-N-CA	5.16	127.19	120.28
1	E	274	LYS	CA-C-N	5.16	129.33	120.71
1	E	274	LYS	C-N-CA	5.16	129.33	120.71
1	H	368	VAL	CA-C-N	5.16	130.91	122.81
1	H	368	VAL	C-N-CA	5.16	130.91	122.81
1	N	395	GLU	CB-CG-CD	5.16	121.37	112.60
1	P	51	GLY	CA-C-N	5.16	125.23	119.87
1	P	51	GLY	C-N-CA	5.16	125.23	119.87
1	K	129	THR	CA-C-N	5.16	127.16	120.56
1	K	129	THR	C-N-CA	5.16	127.16	120.56
1	R	504	GLU	CA-C-O	-5.16	114.97	120.28
1	B	109	ILE	N-CA-C	5.15	115.30	110.30
1	L	386	GLY	O-C-N	-5.15	117.71	122.86
1	Q	390	LEU	O-C-N	-5.15	116.66	122.12
1	S	40	LYS	CA-C-N	5.15	127.14	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	S	40	LYS	C-N-CA	5.15	127.14	120.44
1	D	406	ALA	N-CA-CB	-5.15	102.53	110.16
1	K	429	LEU	CB-CA-C	-5.15	102.09	110.85
1	G	266	ILE	N-CA-C	5.15	120.05	109.34
1	H	33	ARG	O-C-N	-5.15	116.53	122.09
1	L	466	PRO	CA-C-N	5.15	127.15	120.56
1	L	466	PRO	C-N-CA	5.15	127.15	120.56
1	M	424	GLU	CA-C-N	5.15	129.07	120.62
1	M	424	GLU	C-N-CA	5.15	129.07	120.62
1	O	101	ALA	N-CA-CB	-5.15	103.77	110.88
1	Q	105	LYS	N-CA-CB	-5.15	102.54	110.16
1	S	270	THR	CA-CB-CG2	5.15	119.26	110.50
1	F	423	ILE	O-C-N	5.15	126.94	121.89
1	B	422	GLU	CB-CG-CD	5.15	121.35	112.60
1	H	125	ASP	CA-CB-CG	-5.15	107.45	112.60
1	N	73	ALA	CA-C-N	5.15	127.43	120.38
1	N	73	ALA	C-N-CA	5.15	127.43	120.38
1	O	338	ARG	N-CA-C	-5.15	101.01	109.40
1	P	238	PRO	CA-C-O	-5.15	115.39	121.67
1	C	208	GLN	O-C-N	-5.15	117.17	123.19
1	O	367	MET	N-CA-C	5.15	116.11	108.60
1	A	443	ALA	N-CA-CB	5.14	117.47	110.01
1	B	233	VAL	N-CA-C	5.14	115.92	110.72
1	E	361	LYS	CA-C-N	5.14	129.33	122.95
1	E	361	LYS	C-N-CA	5.14	129.33	122.95
1	F	66	ILE	N-CA-CB	-5.14	101.69	111.21
1	O	85	ALA	N-CA-C	5.14	117.28	111.11
1	Q	49	THR	CB-CA-C	-5.14	101.04	109.99
1	R	244	ALA	N-CA-CB	-5.14	102.41	109.97
1	R	416	ALA	N-CA-CB	5.14	117.92	109.95
1	R	462	ALA	CA-C-O	5.14	125.69	119.31
1	H	369	PHE	O-C-N	-5.14	116.50	123.19
1	I	185	VAL	CA-C-O	5.14	126.40	121.05
1	K	393	GLU	O-C-N	-5.14	115.54	122.43
1	L	227	VAL	CA-C-N	5.14	128.80	122.37
1	L	227	VAL	C-N-CA	5.14	128.80	122.37
1	N	429	LEU	CA-C-N	5.14	127.17	120.28
1	N	429	LEU	C-N-CA	5.14	127.17	120.28
1	O	433	ALA	CA-C-O	-5.14	113.11	120.16
1	P	470	LEU	N-CA-C	5.14	116.89	111.28
1	Q	512	ALA	CB-CA-C	5.14	118.95	110.88
1	S	252	SER	N-CA-C	5.14	117.69	110.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	472	LYS	N-CA-C	5.14	117.62	111.71
1	E	399	ARG	NE-CZ-NH2	5.14	123.83	119.20
1	G	301	GLN	CB-CG-CD	5.14	121.34	112.60
1	A	232	VAL	CA-C-O	5.14	126.88	121.59
1	G	135	TYR	CA-C-N	5.14	127.93	120.79
1	G	135	TYR	C-N-CA	5.14	127.93	120.79
1	H	315	LYS	N-CA-C	-5.14	106.52	112.89
1	I	405	VAL	N-CA-C	5.14	115.86	110.62
1	N	246	ILE	N-CA-C	5.14	117.03	109.63
1	R	311	TYR	CA-C-N	5.14	127.68	120.28
1	R	311	TYR	C-N-CA	5.14	127.68	120.28
1	A	295	ALA	N-CA-CB	-5.14	101.83	109.69
1	B	364	GLU	N-CA-C	5.14	116.88	111.28
1	F	150	ALA	N-CA-C	5.14	117.33	110.35
1	F	404	THR	CB-CA-C	-5.14	102.82	110.88
1	O	446	ALA	CA-C-O	-5.14	115.61	121.00
1	R	489	LEU	N-CA-CB	5.14	118.92	110.39
1	E	29	LYS	CA-C-O	-5.13	114.45	120.20
1	F	29	LYS	N-CA-C	5.13	121.74	110.80
1	H	85	ALA	N-CA-C	5.13	117.27	111.11
1	H	373	ALA	CA-C-N	5.13	127.58	120.29
1	H	373	ALA	C-N-CA	5.13	127.58	120.29
1	K	322	ARG	NE-CZ-NH1	5.13	126.64	121.50
1	K	336	GLY	N-CA-C	-5.13	108.53	115.36
1	K	431	LYS	N-CA-C	5.13	117.61	111.71
1	Q	253	LEU	N-CA-C	-5.13	105.74	112.41
1	R	453	SER	CA-C-N	5.13	127.47	120.54
1	R	453	SER	C-N-CA	5.13	127.47	120.54
1	S	512	ALA	CA-C-N	5.13	127.03	120.56
1	S	512	ALA	C-N-CA	5.13	127.03	120.56
1	F	390	LEU	CA-C-N	5.13	127.49	120.46
1	F	390	LEU	C-N-CA	5.13	127.49	120.46
1	D	362	VAL	N-CA-CB	5.13	117.78	112.65
1	H	396	ARG	CD-NE-CZ	-5.13	117.22	124.40
1	K	423	ILE	O-C-N	5.13	127.08	121.90
1	O	123	TYR	CA-CB-CG	-5.13	104.66	113.90
1	Q	120	ASP	CA-C-N	5.13	127.58	120.29
1	Q	120	ASP	C-N-CA	5.13	127.58	120.29
1	R	155	ILE	CA-C-O	-5.13	115.08	120.57
1	B	428	LYS	N-CA-C	5.13	117.61	111.71
1	D	163	LYS	CB-CA-C	5.13	119.32	110.86
1	G	482	ASN	CB-CA-C	-5.13	102.05	110.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	101	ALA	CA-C-N	5.13	127.15	120.28
1	L	101	ALA	C-N-CA	5.13	127.15	120.28
1	M	109	ILE	CA-CB-CG1	-5.13	101.68	110.40
1	O	126	VAL	CA-C-O	5.13	126.79	120.74
1	R	384	ARG	CA-C-O	-5.13	115.61	121.40
1	A	66	ILE	O-C-N	-5.13	117.91	123.14
1	A	196	ARG	NE-CZ-NH1	-5.13	116.37	121.50
1	F	31	ALA	CA-C-N	5.13	129.03	120.62
1	F	31	ALA	C-N-CA	5.13	129.03	120.62
1	L	205	ASP	O-C-N	-5.13	115.73	122.39
1	L	390	LEU	O-C-N	-5.13	116.69	122.12
1	O	87	LYS	N-CA-C	5.13	117.61	111.71
1	O	409	ILE	CB-CG1-CD1	-5.13	103.03	113.80
1	B	469	LEU	CA-C-N	5.12	127.10	120.44
1	B	469	LEU	C-N-CA	5.12	127.10	120.44
1	C	445	GLU	N-CA-C	5.12	117.53	111.33
1	D	304	ILE	CA-C-N	5.12	128.99	120.94
1	D	304	ILE	C-N-CA	5.12	128.99	120.94
1	N	399	ARG	NE-CZ-NH2	5.12	123.81	119.20
1	P	195	LEU	O-C-N	-5.12	115.70	122.57
1	A	88	LEU	N-CA-CB	-5.12	102.58	110.16
1	D	267	ASN	OD1-CG-ND2	5.12	127.72	122.60
1	I	46	LEU	N-CA-C	-5.12	107.58	113.88
1	L	286	LYS	CB-CA-C	-5.12	102.84	110.88
1	M	413	ARG	NH1-CZ-NH2	-5.12	112.64	119.30
1	Q	38	ALA	N-CA-C	5.12	117.53	111.33
1	S	113	GLU	CA-C-N	5.12	127.15	120.28
1	S	113	GLU	C-N-CA	5.12	127.15	120.28
1	B	278	GLU	CA-C-O	5.12	125.86	119.97
1	F	530	VAL	CA-C-O	5.12	127.35	120.69
1	G	271	GLN	OE1-CD-NE2	-5.12	117.48	122.60
1	H	67	THR	CA-C-O	-5.12	113.95	120.20
1	I	210	VAL	N-CA-C	5.12	115.86	108.48
1	L	241	LEU	CA-C-O	-5.12	115.28	120.71
1	Q	389	ARG	NH1-CZ-NH2	-5.12	112.64	119.30
1	R	432	TYR	O-C-N	5.12	127.62	122.09
1	M	100	THR	CA-CB-OG1	5.12	117.28	109.60
1	P	50	TYR	O-C-N	-5.12	116.63	122.93
1	D	130	ILE	CB-CA-C	-5.12	105.32	112.02
1	F	314	LYS	CA-C-O	5.12	125.67	119.38
1	G	447	TYR	CA-C-N	5.12	127.40	120.44
1	G	447	TYR	C-N-CA	5.12	127.40	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	223	VAL	O-C-N	-5.12	117.92	123.14
1	I	291	LEU	N-CA-C	5.12	118.62	112.38
1	O	61	ASP	O-C-N	-5.12	116.76	122.75
1	H	52	PRO	CA-C-O	-5.12	111.80	118.86
1	Q	233	VAL	N-CA-C	5.12	115.84	110.62
1	B	281	ASN	CA-C-N	5.11	127.55	120.29
1	B	281	ASN	C-N-CA	5.11	127.55	120.29
1	B	288	ASP	CB-CA-C	5.11	120.49	110.67
1	C	294	GLY	CA-C-N	5.11	128.36	121.05
1	C	294	GLY	C-N-CA	5.11	128.36	121.05
1	E	333	ARG	CD-NE-CZ	5.11	131.56	124.40
1	F	420	ALA	CB-CA-C	-5.11	102.79	110.92
1	K	257	LYS	CA-C-O	-5.11	115.78	120.94
1	S	61	ASP	CA-C-N	5.11	127.44	120.54
1	S	61	ASP	C-N-CA	5.11	127.44	120.54
1	S	511	ASN	CA-C-N	5.11	127.09	120.44
1	S	511	ASN	C-N-CA	5.11	127.09	120.44
1	C	67	THR	O-C-N	-5.11	116.74	123.28
1	C	371	GLU	CB-CG-CD	-5.11	103.91	112.60
1	N	243	ASN	CA-CB-CG	-5.11	107.49	112.60
1	P	400	ASP	CA-C-N	5.11	127.13	120.28
1	P	400	ASP	C-N-CA	5.11	127.13	120.28
1	K	121	LEU	CA-C-O	5.11	125.83	120.42
1	Q	234	HIS	CE1-NE2-CD2	-5.11	103.89	109.00
1	C	277	ASP	CA-C-N	5.11	127.64	120.28
1	C	277	ASP	C-N-CA	5.11	127.64	120.28
1	Q	151	GLN	CA-C-N	5.11	129.63	121.66
1	Q	151	GLN	C-N-CA	5.11	129.63	121.66
1	Q	344	ASP	N-CA-CB	-5.11	102.59	110.46
1	A	314	LYS	N-CA-C	5.11	117.74	111.82
1	B	104	THR	N-CA-CB	5.11	117.72	110.16
1	F	345	GLU	N-CA-C	-5.11	105.82	113.89
1	G	440	GLU	CA-C-N	5.11	127.43	120.54
1	G	440	GLU	C-N-CA	5.11	127.43	120.54
1	L	69	THR	CA-C-N	5.11	130.20	122.08
1	L	69	THR	C-N-CA	5.11	130.20	122.08
1	N	146	ILE	N-CA-C	-5.11	106.17	111.58
1	O	67	THR	N-CA-CB	5.11	119.09	110.77
1	O	327	ASP	N-CA-C	-5.11	107.18	113.41
1	Q	53	ARG	CA-C-N	5.11	126.00	120.44
1	Q	53	ARG	C-N-CA	5.11	126.00	120.44
1	R	150	ALA	N-CA-C	5.11	117.29	110.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	183	ASP	CB-CA-C	5.10	118.89	110.88
1	I	83	HIS	ND1-CE1-NE2	5.10	113.50	108.40
1	I	292	ALA	CA-C-N	5.10	130.75	121.92
1	I	292	ALA	C-N-CA	5.10	130.75	121.92
1	F	443	ALA	N-CA-CB	5.10	117.41	110.01
1	K	83	HIS	N-CA-CB	5.10	117.99	109.98
1	M	471	MET	CA-C-N	5.10	127.63	120.28
1	M	471	MET	C-N-CA	5.10	127.63	120.28
1	O	353	TYR	CA-CB-CG	-5.10	104.71	113.90
1	R	303	GLY	N-CA-C	5.10	119.07	112.54
1	N	422	GLU	O-C-N	-5.10	116.72	122.03
1	S	134	GLY	O-C-N	-5.10	116.07	122.70
1	S	161	LEU	CA-C-N	5.10	127.62	120.28
1	S	161	LEU	C-N-CA	5.10	127.62	120.28
1	A	265	ARG	NE-CZ-NH2	5.10	123.79	119.20
1	C	402	LEU	CA-C-N	5.10	131.41	121.41
1	C	402	LEU	C-N-CA	5.10	131.41	121.41
1	D	441	GLN	CA-C-N	5.10	127.37	120.38
1	D	441	GLN	C-N-CA	5.10	127.37	120.38
1	D	508	VAL	N-CA-CB	-5.10	104.58	110.55
1	H	446	ALA	CA-C-O	-5.10	115.45	120.70
1	K	178	ARG	NH1-CZ-NH2	-5.10	112.67	119.30
1	N	147	GLN	CB-CG-CD	-5.10	103.93	112.60
1	Q	261	ASP	CA-CB-CG	-5.10	107.50	112.60
1	C	457	ILE	CA-C-N	5.10	127.06	120.44
1	C	457	ILE	C-N-CA	5.10	127.06	120.44
1	F	122	LEU	CA-C-N	5.10	127.11	120.28
1	F	122	LEU	C-N-CA	5.10	127.11	120.28
1	F	338	ARG	O-C-N	-5.10	117.16	123.33
1	H	185	VAL	CA-CB-CG2	-5.10	101.73	110.40
1	I	48	SER	N-CA-C	5.10	120.41	113.37
1	M	439	LYS	O-C-N	-5.10	116.58	122.09
1	N	148	GLU	O-C-N	-5.10	115.81	122.59
1	N	398	LEU	O-C-N	-5.10	116.00	122.27
1	P	97	ASP	N-CA-C	5.10	118.33	112.57
1	R	529	VAL	O-C-N	-5.10	117.83	123.18
1	B	162	ARG	CA-C-O	5.09	125.86	120.10
1	D	321	ARG	NE-CZ-NH1	5.09	126.59	121.50
1	H	464	PHE	N-CA-C	5.09	116.73	109.14
1	I	428	LYS	N-CA-CB	-5.09	102.63	110.12
1	I	211	LYS	N-CA-C	5.09	117.37	108.76
1	N	460	GLU	CA-C-N	5.09	128.75	120.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	460	GLU	C-N-CA	5.09	128.75	120.60
1	A	279	GLU	CA-C-O	5.09	125.82	119.97
1	N	464	PHE	CA-CB-CG	-5.09	108.71	113.80
1	A	327	ASP	CA-CB-CG	-5.09	107.51	112.60
1	A	482	ASN	CA-CB-CG	5.09	117.69	112.60
1	B	39	VAL	O-C-N	-5.09	116.92	121.91
1	F	510	MET	N-CA-C	-5.09	107.14	113.55
1	O	436	VAL	N-CA-C	5.09	115.81	110.62
1	Q	327	ASP	N-CA-CB	-5.09	103.05	110.53
1	R	434	PRO	O-C-N	-5.09	115.77	122.64
1	H	86	ALA	N-CA-C	-5.09	105.62	111.07
1	I	133	SER	CA-C-N	5.09	131.38	121.41
1	I	133	SER	C-N-CA	5.09	131.38	121.41
1	N	83	HIS	O-C-N	-5.09	116.77	121.30
1	K	120	ASP	CA-C-N	5.09	127.51	120.29
1	K	120	ASP	C-N-CA	5.09	127.51	120.29
1	N	481	ASN	CA-C-N	5.08	130.20	122.37
1	N	481	ASN	C-N-CA	5.08	130.20	122.37
1	O	193	ALA	CA-C-O	5.08	126.50	120.96
1	B	193	ALA	N-CA-C	5.08	117.26	110.35
1	E	499	GLN	OE1-CD-NE2	-5.08	117.52	122.60
1	M	143	LEU	CB-CA-C	-5.08	103.07	110.95
1	O	49	THR	CA-C-N	5.08	128.43	120.75
1	O	49	THR	C-N-CA	5.08	128.43	120.75
1	O	238	PRO	N-CA-C	-5.08	102.00	112.47
1	S	39	VAL	CA-C-N	5.08	127.34	120.38
1	S	39	VAL	C-N-CA	5.08	127.34	120.38
1	K	324	LYS	O-C-N	-5.08	117.26	123.16
1	M	450	ALA	CA-C-O	-5.08	115.17	120.55
1	M	467	ILE	CA-C-N	5.08	127.85	120.79
1	M	467	ILE	C-N-CA	5.08	127.85	120.79
1	N	62	SER	N-CA-C	5.08	119.75	111.37
1	P	49	THR	N-CA-C	-5.08	105.99	113.61
1	Q	297	VAL	CA-C-O	5.08	126.67	121.28
1	S	448	ALA	CA-C-N	5.08	127.09	120.28
1	S	448	ALA	C-N-CA	5.08	127.09	120.28
1	Q	69	THR	CA-CB-OG1	5.08	117.22	109.60
1	R	79	MET	CA-C-O	5.08	125.97	120.43
1	A	102	ASP	CA-CB-CG	-5.08	107.52	112.60
1	A	222	LEU	N-CA-CB	-5.08	102.15	110.43
1	A	448	ALA	CA-C-N	5.08	127.04	120.44
1	A	448	ALA	C-N-CA	5.08	127.04	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	96	GLN	CA-C-O	-5.08	116.14	121.88
1	F	32	VAL	N-CA-C	5.08	118.18	111.17
1	F	140	GLU	CA-C-N	5.08	127.15	120.60
1	F	140	GLU	C-N-CA	5.08	127.15	120.60
1	H	203	ASP	O-C-N	-5.08	115.84	122.59
1	M	96	GLN	CG-CD-NE2	-5.08	108.78	116.40
1	P	199	LYS	N-CA-C	-5.08	101.36	109.23
1	R	445	GLU	O-C-N	-5.08	116.74	122.12
1	E	118	ALA	CA-C-N	5.08	127.08	120.28
1	E	118	ALA	C-N-CA	5.08	127.08	120.28
1	E	322	ARG	O-C-N	-5.08	115.84	122.59
1	F	69	THR	CA-CB-OG1	5.08	117.22	109.60
1	H	256	GLU	O-C-N	-5.08	115.98	122.94
1	H	477	HIS	CA-CB-CG	5.08	118.88	113.80
1	O	119	GLU	CB-CG-CD	-5.08	103.97	112.60
1	C	459	ILE	N-CA-C	5.08	115.29	110.42
1	E	371	GLU	CA-C-O	5.08	127.09	121.56
1	G	304	ILE	N-CA-C	-5.08	101.01	108.11
1	H	127	HIS	CA-C-N	5.08	124.86	119.28
1	H	127	HIS	C-N-CA	5.08	124.86	119.28
1	I	124	LYS	CA-C-N	5.08	129.40	122.34
1	I	124	LYS	C-N-CA	5.08	129.40	122.34
1	L	388	GLU	N-CA-C	5.08	118.94	112.34
1	M	281	ASN	CA-C-N	5.08	127.50	120.29
1	M	281	ASN	C-N-CA	5.08	127.50	120.29
1	O	190	THR	CA-C-N	5.08	127.50	120.29
1	O	190	THR	C-N-CA	5.08	127.50	120.29
1	R	396	ARG	N-CA-CB	5.08	117.32	109.91
1	S	373	ALA	O-C-N	-5.08	115.84	122.59
1	A	424	GLU	CB-CA-C	5.07	118.92	110.90
1	C	411	ASP	CA-CB-CG	-5.07	107.53	112.60
1	D	61	ASP	CA-CB-CG	-5.07	107.53	112.60
1	D	152	THR	N-CA-CB	5.07	117.92	109.60
1	K	177	ALA	N-CA-C	5.07	118.20	111.30
1	N	327	ASP	CA-C-N	5.07	127.03	120.44
1	N	327	ASP	C-N-CA	5.07	127.03	120.44
1	O	200	TRP	O-C-N	-5.07	116.87	122.86
1	Q	477	HIS	CA-CB-CG	-5.07	108.73	113.80
1	R	245	LYS	CA-C-N	5.07	127.49	120.49
1	R	245	LYS	C-N-CA	5.07	127.49	120.49
1	S	87	LYS	N-CA-C	5.07	117.55	111.71
1	F	56	ASP	CA-CB-CG	5.07	117.67	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	404	THR	O-C-N	-5.07	116.85	122.07
1	I	118	ALA	CA-C-O	-5.07	113.81	119.79
1	K	329	GLU	N-CA-C	5.07	116.50	111.07
1	H	328	LEU	CA-C-N	5.07	127.03	120.44
1	H	328	LEU	C-N-CA	5.07	127.03	120.44
1	I	232	VAL	CA-C-O	-5.07	115.78	121.36
1	I	481	ASN	CA-C-N	5.07	130.62	122.86
1	I	481	ASN	C-N-CA	5.07	130.62	122.86
1	M	346	ILE	N-CA-C	5.07	117.79	109.78
1	N	311	TYR	CB-CG-CD2	-5.07	113.19	120.80
1	R	258	PRO	CB-CA-C	-5.07	105.33	111.46
1	A	441	GLN	CA-C-N	5.07	127.07	120.28
1	A	441	GLN	C-N-CA	5.07	127.07	120.28
1	B	233	VAL	O-C-N	-5.07	116.61	121.83
1	N	110	PHE	N-CA-C	5.07	116.81	111.28
1	Q	449	ASN	O-C-N	-5.07	116.75	122.12
1	E	278	GLU	CA-C-N	5.07	128.01	120.31
1	E	278	GLU	C-N-CA	5.07	128.01	120.31
1	B	196	ARG	CA-C-N	5.07	127.76	120.11
1	B	196	ARG	C-N-CA	5.07	127.76	120.11
1	D	380	SER	O-C-N	-5.07	117.04	123.17
1	G	187	LYS	CA-C-O	5.07	125.92	120.55
1	H	166	MET	CG-SD-CE	-5.07	89.76	100.90
1	R	104	THR	N-CA-C	-5.07	105.84	111.36
1	G	513	ILE	O-C-N	5.06	127.00	121.94
1	I	186	VAL	N-CA-C	5.06	115.28	110.42
1	I	268	ASP	N-CA-C	5.06	116.28	109.24
1	K	118	ALA	N-CA-C	5.06	118.61	112.23
1	Q	83	HIS	CA-C-O	5.06	124.86	119.80
1	S	342	ASN	O-C-N	-5.06	116.80	123.28
1	D	71	ASP	O-C-N	-5.06	115.86	122.59
1	E	485	TYR	CA-C-O	5.06	126.82	121.05
1	N	186	VAL	CA-C-N	5.06	127.06	120.28
1	N	186	VAL	C-N-CA	5.06	127.06	120.28
1	O	304	ILE	CA-C-N	5.06	131.21	121.54
1	O	304	ILE	C-N-CA	5.06	131.21	121.54
1	P	166	MET	CA-C-N	5.06	131.21	121.54
1	P	166	MET	C-N-CA	5.06	131.21	121.54
1	Q	196	ARG	O-C-N	-5.06	116.56	123.14
1	Q	205	ASP	O-C-N	-5.06	115.81	122.39
1	A	345	GLU	N-CA-CB	5.06	117.66	110.98
1	B	396	ARG	NE-CZ-NH1	5.06	126.56	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	496	ASP	CA-CB-CG	5.06	117.66	112.60
1	G	362	VAL	O-C-N	5.06	128.41	122.99
1	C	346	ILE	CA-C-O	5.06	127.13	121.11
1	G	108	VAL	CA-C-N	5.06	127.13	120.60
1	G	108	VAL	C-N-CA	5.06	127.13	120.60
1	I	433	ALA	CA-C-N	5.06	126.16	119.84
1	I	433	ALA	C-N-CA	5.06	126.16	119.84
1	A	187	LYS	N-CA-C	5.06	116.48	111.07
1	B	40	LYS	CB-CG-CD	5.06	122.93	111.30
1	B	108	VAL	CA-CB-CG1	5.06	119.00	110.40
1	F	192	VAL	CA-C-N	5.06	127.95	120.82
1	F	192	VAL	C-N-CA	5.06	127.95	120.82
1	G	264	ILE	O-C-N	-5.06	116.25	122.57
1	K	526	ILE	O-C-N	-5.06	116.84	122.66
1	S	100	THR	CA-CB-OG1	5.06	117.19	109.60
1	A	265	ARG	N-CA-C	5.06	117.80	110.42
1	R	522	LEU	CA-C-O	-5.06	115.06	120.42
1	E	131	ILE	CB-CA-C	-5.05	104.33	112.16
1	F	307	VAL	N-CA-C	-5.05	104.67	111.44
1	R	270	THR	CA-CB-OG1	5.05	117.18	109.60
1	C	303	GLY	CA-C-N	5.05	130.08	123.11
1	C	303	GLY	C-N-CA	5.05	130.08	123.11
1	I	111	SER	CB-CA-C	-5.05	102.95	110.88
1	N	487	ILE	N-CA-C	5.05	115.31	107.28
1	Q	187	LYS	N-CA-C	5.05	116.79	111.28
1	A	35	ASN	OD1-CG-ND2	-5.05	117.55	122.60
1	E	296	ASN	CA-C-O	5.05	124.28	119.08
1	H	284	LYS	CA-C-O	5.05	125.81	120.10
1	M	305	ASP	CA-CB-CG	-5.05	107.55	112.60
1	M	431	LYS	CA-C-N	5.05	127.31	120.44
1	M	431	LYS	C-N-CA	5.05	127.31	120.44
1	A	459	ILE	CA-CB-CG1	5.05	118.98	110.40
1	G	200	TRP	CA-C-N	5.05	129.89	122.77
1	G	200	TRP	C-N-CA	5.05	129.89	122.77
1	H	442	LEU	N-CA-C	5.05	117.44	111.33
1	O	37	ALA	CA-C-O	5.05	126.62	121.07
1	P	346	ILE	CA-CB-CG1	5.05	118.98	110.40
1	H	470	LEU	CA-C-O	-5.05	115.52	120.82
1	C	357	ILE	O-C-N	-5.05	117.99	123.14
1	G	165	ALA	CA-C-N	5.05	127.04	120.28
1	G	165	ALA	C-N-CA	5.05	127.04	120.28
1	N	276	LEU	O-C-N	-5.05	115.67	122.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	301	GLN	CA-C-O	5.05	124.84	119.34
1	Q	33	ARG	NE-CZ-NH2	-5.05	114.66	119.20
1	C	298	ILE	O-C-N	-5.04	116.26	122.57
1	D	208	GLN	CA-C-N	5.04	130.07	123.11
1	D	208	GLN	C-N-CA	5.04	130.07	123.11
1	K	397	ALA	O-C-N	-5.04	116.77	122.12
1	M	279	GLU	CA-C-N	5.04	129.26	120.68
1	M	279	GLU	C-N-CA	5.04	129.26	120.68
1	A	299	ILE	CA-C-O	5.04	126.57	120.67
1	B	515	ALA	CA-C-N	5.04	127.35	120.54
1	B	515	ALA	C-N-CA	5.04	127.35	120.54
1	E	261	ASP	O-C-N	-5.04	115.25	122.41
1	I	40	LYS	O-C-N	-5.04	116.78	122.12
1	K	321	ARG	O-C-N	-5.04	116.81	123.21
1	N	446	ALA	CA-C-N	5.04	127.29	120.38
1	N	446	ALA	C-N-CA	5.04	127.29	120.38
1	Q	190	THR	N-CA-C	5.04	117.51	111.71
1	Q	329	GLU	CB-CA-C	5.04	118.80	110.88
1	M	123	TYR	CA-C-O	5.04	125.89	120.55
1	R	413	ARG	NE-CZ-NH1	-5.04	116.46	121.50
1	S	384	ARG	NH1-CZ-NH2	-5.04	112.75	119.30
1	C	263	GLU	CB-CG-CD	5.04	121.17	112.60
1	G	91	GLN	CB-CG-CD	-5.04	104.03	112.60
1	G	266	ILE	CA-CB-CG1	5.04	118.97	110.40
1	G	313	ALA	N-CA-C	5.04	116.77	111.28
1	P	132	ILE	CA-C-N	5.04	127.03	120.28
1	P	132	ILE	C-N-CA	5.04	127.03	120.28
1	S	317	VAL	CA-C-N	5.04	130.27	123.11
1	S	317	VAL	C-N-CA	5.04	130.27	123.11
1	A	329	GLU	CA-C-O	5.04	126.29	121.00
1	A	330	LYS	CB-CA-C	-5.04	101.31	110.63
1	K	93	ALA	CA-C-N	5.04	127.30	120.65
1	K	93	ALA	C-N-CA	5.04	127.30	120.65
1	N	428	LYS	CA-C-N	5.04	127.44	120.29
1	N	428	LYS	C-N-CA	5.04	127.44	120.29
1	O	153	VAL	N-CA-C	-5.04	100.95	108.46
1	Q	363	GLY	CA-C-N	5.04	131.43	122.06
1	Q	363	GLY	C-N-CA	5.04	131.43	122.06
1	R	413	ARG	CD-NE-CZ	-5.04	117.35	124.40
1	K	35	ASN	CA-C-N	5.04	127.37	120.77
1	K	35	ASN	C-N-CA	5.04	127.37	120.77
1	K	288	ASP	CA-CB-CG	-5.04	107.56	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	53	ARG	N-CA-CB	-5.04	103.03	110.53
1	P	491	ALA	O-C-N	-5.04	115.51	122.46
1	D	349	GLN	CG-CD-OE1	-5.04	110.73	120.80
1	F	329	GLU	CB-CG-CD	5.04	121.16	112.60
1	G	280	GLU	N-CA-CB	-5.04	102.70	110.20
1	N	349	GLN	O-C-N	-5.04	115.68	122.43
1	A	347	SER	O-C-N	-5.03	118.03	123.42
1	B	79	MET	CB-CA-C	-5.03	101.93	110.19
1	D	367	MET	CG-SD-CE	-5.03	89.83	100.90
1	F	347	SER	CA-C-N	5.03	127.03	120.28
1	F	347	SER	C-N-CA	5.03	127.03	120.28
1	L	135	TYR	CB-CG-CD2	5.03	128.35	120.80
1	M	61	ASP	N-CA-C	5.03	116.60	110.41
1	O	471	MET	N-CA-C	5.03	116.77	111.28
1	P	221	GLN	OE1-CD-NE2	-5.03	117.57	122.60
1	R	250	ASP	O-C-N	-5.03	115.69	122.43
1	S	35	ASN	O-C-N	-5.03	116.85	122.09
1	E	168	SER	CB-CA-C	5.03	117.98	110.08
1	M	478	GLU	O-C-N	-5.03	116.79	122.12
1	O	500	LYS	CA-C-O	5.03	124.26	119.08
1	P	253	LEU	O-C-N	-5.03	116.16	122.35
1	P	413	ARG	N-CA-C	5.03	117.60	109.40
1	O	424	GLU	O-C-N	5.03	127.46	122.03
1	O	391	VAL	CG1-CB-CG2	-5.03	99.74	110.80
1	C	51	GLY	CA-C-O	-5.03	114.33	121.52
1	E	172	LYS	CA-C-N	5.03	127.33	120.54
1	E	172	LYS	C-N-CA	5.03	127.33	120.54
1	H	53	ARG	NE-CZ-NH1	5.03	126.53	121.50
1	H	197	GLY	N-CA-C	5.03	120.82	113.48
1	K	198	ASP	CA-CB-CG	-5.03	107.57	112.60
1	K	493	GLN	CA-C-N	5.03	125.26	119.83
1	K	493	GLN	C-N-CA	5.03	125.26	119.83
1	L	274	LYS	O-C-N	-5.03	115.91	122.59
1	N	235	PRO	N-CA-CB	5.03	108.51	103.48
1	Q	355	SER	N-CA-C	5.03	116.45	111.07
1	A	129	THR	CA-CB-CG2	5.03	119.04	110.50
1	B	40	LYS	CA-C-O	5.03	126.06	120.63
1	E	398	LEU	N-CA-C	5.03	116.84	111.36
1	E	521	THR	N-CA-CB	5.03	118.07	110.28
1	H	529	VAL	CA-C-N	5.03	130.13	123.10
1	H	529	VAL	C-N-CA	5.03	130.13	123.10
1	N	240	ARG	CG-CD-NE	-5.03	100.94	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	126	VAL	N-CA-CB	5.03	116.58	110.95
1	B	375	ASN	OD1-CG-ND2	-5.02	117.58	122.60
1	D	217	ILE	O-C-N	-5.02	115.47	122.05
1	C	265	ARG	N-CA-CB	5.02	117.68	109.69
1	G	53	ARG	CA-C-N	5.02	127.59	121.06
1	G	53	ARG	C-N-CA	5.02	127.59	121.06
1	K	215	GLY	CA-C-O	-5.02	115.45	122.58
1	N	92	ILE	CA-C-N	5.02	127.28	120.65
1	N	92	ILE	C-N-CA	5.02	127.28	120.65
1	S	408	VAL	N-CA-CB	-5.02	103.71	110.54
1	C	48	SER	CA-C-O	5.02	126.94	118.91
1	E	116	LYS	N-CA-C	-5.02	105.50	110.97
1	E	321	ARG	CG-CD-NE	-5.02	100.95	112.00
1	H	427	LYS	CG-CD-CE	5.02	122.85	111.30
1	B	465	ASP	O-C-N	-5.02	116.51	121.18
1	C	223	VAL	O-C-N	-5.02	117.91	123.18
1	I	487	ILE	N-CA-C	5.02	115.26	107.28
1	O	227	VAL	O-C-N	-5.02	117.96	123.18
1	P	175	ALA	CA-C-O	5.02	124.46	118.69
1	Q	119	GLU	CB-CG-CD	-5.02	104.07	112.60
1	M	83	HIS	CB-CG-CD2	-5.02	124.68	131.20
1	M	360	ARG	N-CA-CB	5.02	119.11	110.68
1	M	376	PRO	O-C-N	-5.02	116.21	122.23
1	O	304	ILE	CA-C-O	5.02	127.05	120.78
1	Q	159	ASP	O-C-N	-5.02	115.71	122.43
1	S	220	THR	N-CA-CB	5.02	117.41	109.83
1	D	144	GLN	OE1-CD-NE2	-5.02	117.58	122.60
1	K	472	LYS	N-CA-C	5.02	117.48	111.71
1	Q	100	THR	O-C-N	-5.02	117.76	123.48
1	A	188	ALA	O-C-N	-5.01	116.81	122.12
1	E	523	VAL	CA-C-O	-5.01	115.53	120.85
1	G	350	ASP	CA-CB-CG	5.01	117.61	112.60
1	G	442	LEU	O-C-N	5.01	127.44	122.12
1	H	80	ASP	CA-CB-CG	5.01	117.61	112.60
1	I	186	VAL	O-C-N	-5.01	117.00	121.91
1	O	398	LEU	CA-C-N	5.01	126.96	120.44
1	O	398	LEU	C-N-CA	5.01	126.96	120.44
1	Q	527	ASP	O-C-N	5.01	128.24	122.17
1	R	97	ASP	N-CA-C	5.01	116.75	111.28
1	S	231	GLU	CB-CG-CD	5.01	121.12	112.60
1	L	152	THR	CB-CA-C	-5.01	103.05	110.67
1	N	428	LYS	CA-C-O	5.01	125.77	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	120	ASP	CA-C-O	-5.01	114.44	120.10
1	F	341	SER	N-CA-C	5.01	119.10	112.89
1	L	91	GLN	O-C-N	5.01	127.86	122.15
1	Q	209	ILE	CA-CB-CG2	-5.01	101.98	110.50
1	G	114	LEU	N-CA-CB	-5.01	102.76	110.12
1	K	81	LEU	O-C-N	-5.01	117.18	123.04
1	K	359	GLU	N-CA-C	-5.01	101.23	109.40
1	K	499	GLN	CA-C-N	5.01	127.88	120.17
1	K	499	GLN	C-N-CA	5.01	127.88	120.17
1	N	266	ILE	N-CA-CB	5.01	116.56	110.95
1	O	193	ALA	N-CA-C	5.01	117.60	110.24
1	Q	523	VAL	O-C-N	-5.01	117.01	121.87
1	A	419	GLY	CA-C-N	5.01	127.75	120.79
1	A	419	GLY	C-N-CA	5.01	127.75	120.79
1	F	287	VAL	CA-CB-CG2	5.01	118.91	110.40
1	L	232	VAL	CA-C-O	5.01	126.59	121.58
1	A	325	LYS	N-CA-C	5.01	118.16	111.75
1	K	248	LEU	N-CA-C	5.01	117.69	108.58
1	N	62	SER	CA-C-O	5.01	126.53	120.92
1	O	399	ARG	CA-C-N	5.01	127.40	120.29
1	O	399	ARG	C-N-CA	5.01	127.40	120.29
1	E	102	ASP	CA-C-N	5.00	125.51	120.00
1	E	102	ASP	C-N-CA	5.00	125.51	120.00
1	O	217	ILE	N-CA-C	-5.00	105.03	112.04
1	A	346	ILE	O-C-N	-5.00	117.33	122.63
1	C	526	ILE	CA-C-N	5.00	129.06	120.71
1	C	526	ILE	C-N-CA	5.00	129.06	120.71
1	D	257	LYS	CA-C-N	5.00	126.09	119.84
1	D	257	LYS	C-N-CA	5.00	126.09	119.84
1	H	151	GLN	OE1-CD-NE2	-5.00	117.60	122.60
1	K	391	VAL	O-C-N	5.00	126.72	121.87
1	M	290	ILE	CA-C-O	5.00	126.06	120.71
1	O	70	ASN	CA-CB-CG	-5.00	107.60	112.60
1	O	217	ILE	O-C-N	-5.00	115.50	122.05
1	Q	202	VAL	CA-C-O	5.00	125.59	120.39
1	D	35	ASN	CB-CA-C	-5.00	102.81	110.81
1	H	387	LEU	CA-C-O	5.00	127.66	120.51
1	I	69	THR	CA-CB-OG1	5.00	117.10	109.60
1	I	384	ARG	NE-CZ-NH1	5.00	126.50	121.50
1	N	267	ASN	OD1-CG-ND2	-5.00	117.60	122.60
1	N	370	VAL	CA-C-N	5.00	130.07	120.97
1	N	370	VAL	C-N-CA	5.00	130.07	120.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	R	187	LYS	CA-C-N	5.00	126.98	120.28
1	R	187	LYS	C-N-CA	5.00	126.98	120.28

There are no chirality outliers.

All (185) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	110	PHE	Sidechain
1	A	135	TYR	Sidechain
1	A	162	ARG	Sidechain
1	A	201	TYR	Sidechain
1	A	224	TYR	Sidechain
1	A	240	ARG	Sidechain
1	A	265	ARG	Sidechain
1	A	360	ARG	Sidechain
1	A	399	ARG	Sidechain
1	A	430	ARG	Sidechain
1	A	525	ARG	Sidechain
1	B	123	TYR	Sidechain
1	B	135	TYR	Sidechain
1	B	178	ARG	Sidechain
1	B	196	ARG	Sidechain
1	B	224	TYR	Sidechain
1	B	240	ARG	Sidechain
1	B	321	ARG	Sidechain
1	B	353	TYR	Sidechain
1	B	399	ARG	Sidechain
1	B	432	TYR	Sidechain
1	B	447	TYR	Sidechain
1	B	474	ARG	Sidechain
1	B	490	TYR	Sidechain
1	B	50	TYR	Sidechain
1	B	53	ARG	Sidechain
1	C	333	ARG	Sidechain
1	C	353	TYR	Sidechain
1	C	389	ARG	Sidechain
1	C	399	ARG	Sidechain
1	C	474	ARG	Sidechain
1	D	162	ARG	Sidechain
1	D	275	PHE	Sidechain
1	D	311	TYR	Sidechain
1	D	321	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	D	322	ARG	Sidechain
1	D	338	ARG	Sidechain
1	D	353	TYR	Sidechain
1	D	360	ARG	Sidechain
1	D	430	ARG	Sidechain
1	D	490	TYR	Sidechain
1	D	53	ARG	Sidechain
1	E	123	TYR	Sidechain
1	E	162	ARG	Sidechain
1	E	240	ARG	Sidechain
1	E	33	ARG	Sidechain
1	E	333	ARG	Mainchain
1	E	360	ARG	Sidechain
1	E	396	ARG	Sidechain
1	E	430	ARG	Sidechain
1	E	447	TYR	Sidechain
1	E	525	ARG	Sidechain
1	F	196	ARG	Sidechain
1	F	224	TYR	Sidechain
1	F	322	ARG	Sidechain
1	F	353	TYR	Sidechain
1	F	360	ARG	Sidechain
1	F	389	ARG	Sidechain
1	F	399	ARG	Sidechain
1	F	413	ARG	Sidechain
1	F	447	TYR	Sidechain
1	F	50	TYR	Sidechain
1	G	110	PHE	Sidechain
1	G	178	ARG	Sidechain
1	G	180	TYR	Sidechain
1	G	196	ARG	Sidechain
1	G	224	TYR	Sidechain
1	G	240	ARG	Sidechain
1	G	321	ARG	Sidechain
1	G	353	TYR	Sidechain
1	G	413	ARG	Sidechain
1	G	430	ARG	Sidechain
1	G	525	ARG	Sidechain
1	H	224	TYR	Sidechain
1	H	265	ARG	Sidechain
1	H	275	PHE	Sidechain
1	H	311	TYR	Sidechain

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Mol	Chain	Res	Type	Group
1	H	333	ARG	Sidechain
1	H	360	ARG	Sidechain
1	H	389	ARG	Sidechain
1	H	474	ARG	Sidechain
1	I	162	ARG	Sidechain
1	I	180	TYR	Sidechain
1	I	311	TYR	Sidechain
1	I	321	ARG	Sidechain
1	I	322	ARG	Sidechain
1	I	430	ARG	Sidechain
1	I	50	TYR	Sidechain
1	I	525	ARG	Sidechain
1	K	127	HIS	Sidechain
1	K	135	TYR	Sidechain
1	K	224	TYR	Sidechain
1	K	234	HIS	Sidechain
1	K	311	TYR	Sidechain
1	K	322	ARG	Sidechain
1	K	360	ARG	Sidechain
1	K	399	ARG	Sidechain
1	K	447	TYR	Sidechain
1	K	464	PHE	Sidechain
1	K	474	ARG	Sidechain
1	K	53	ARG	Sidechain
1	L	180	TYR	Sidechain
1	L	240	ARG	Sidechain
1	L	265	ARG	Sidechain
1	L	322	ARG	Sidechain
1	L	474	ARG	Sidechain
1	L	485	TYR	Sidechain
1	L	490	TYR	Sidechain
1	L	525	ARG	Sidechain
1	M	110	PHE	Sidechain
1	M	309	GLN	Mainchain
1	M	311	TYR	Sidechain
1	M	384	ARG	Sidechain
1	M	389	ARG	Sidechain
1	M	399	ARG	Sidechain
1	M	430	ARG	Sidechain
1	M	447	TYR	Sidechain
1	M	474	ARG	Sidechain
1	M	490	TYR	Sidechain

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Mol	Chain	Res	Type	Group
1	N	110	PHE	Sidechain
1	N	123	TYR	Sidechain
1	N	178	ARG	Sidechain
1	N	196	ARG	Sidechain
1	N	201	TYR	Sidechain
1	N	224	TYR	Sidechain
1	N	240	ARG	Sidechain
1	N	311	TYR	Sidechain
1	N	321	ARG	Sidechain
1	N	333	ARG	Sidechain
1	N	360	ARG	Sidechain
1	N	389	ARG	Sidechain
1	N	396	ARG	Sidechain
1	N	447	TYR	Sidechain
1	N	525	ARG	Sidechain
1	O	178	ARG	Sidechain
1	O	180	TYR	Sidechain
1	O	33	ARG	Sidechain
1	O	396	ARG	Sidechain
1	O	432	TYR	Sidechain
1	O	447	TYR	Sidechain
1	O	525	ARG	Sidechain
1	P	123	TYR	Sidechain
1	P	135	TYR	Sidechain
1	P	162	ARG	Sidechain
1	P	224	TYR	Sidechain
1	P	265	ARG	Sidechain
1	P	333	ARG	Sidechain
1	P	384	ARG	Sidechain
1	P	474	ARG	Sidechain
1	P	480	GLU	Sidechain
1	Q	123	TYR	Sidechain
1	Q	135	TYR	Sidechain
1	Q	162	ARG	Sidechain
1	Q	29	LYS	Mainchain
1	Q	33	ARG	Sidechain
1	Q	333	ARG	Sidechain
1	Q	353	TYR	Sidechain
1	Q	432	TYR	Sidechain
1	Q	447	TYR	Sidechain
1	Q	464	PHE	Sidechain
1	Q	477	HIS	Sidechain

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Mol	Chain	Res	Type	Group
1	Q	490	TYR	Sidechain
1	Q	50	TYR	Sidechain
1	Q	525	ARG	Sidechain
1	R	135	TYR	Sidechain
1	R	162	ARG	Sidechain
1	R	201	TYR	Sidechain
1	R	240	ARG	Sidechain
1	R	265	ARG	Sidechain
1	R	333	ARG	Sidechain
1	R	338	ARG	Sidechain
1	R	389	ARG	Sidechain
1	R	399	ARG	Sidechain
1	R	432	TYR	Sidechain
1	S	135	TYR	Sidechain
1	S	162	ARG	Sidechain
1	S	178	ARG	Sidechain
1	S	224	TYR	Sidechain
1	S	311	TYR	Sidechain
1	S	389	ARG	Sidechain
1	S	399	ARG	Sidechain
1	S	432	TYR	Sidechain
1	S	474	ARG	Sidechain
1	S	50	TYR	Sidechain
1	S	53	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	3849	0	3995	15	0
1	B	3849	0	3995	19	0
1	C	3849	0	3995	18	0
1	D	3849	0	3995	15	0
1	E	3849	0	3995	6	0
1	F	3849	0	3995	15	0
1	G	3849	0	3995	22	0
1	H	3849	0	3995	21	0
1	I	3849	0	3995	15	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	K	3849	0	3995	16	0
1	L	3849	0	3995	21	0
1	M	3849	0	3995	23	0
1	N	3849	0	3995	10	0
1	O	3849	0	3995	14	0
1	P	3849	0	3995	30	0
1	Q	3849	0	3995	15	0
1	R	3849	0	3995	9	0
1	S	3849	0	3995	21	0
All	All	69282	0	71910	291	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 2.

All (291) 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)
1:G:415:ILE:HD12	1:G:421:VAL:HG21	1.72	0.71
1:D:89:LEU:HD12	1:D:519:ALA:HB1	1.73	0.71
1:G:246:ILE:HD12	1:G:246:ILE:H	1.53	0.71
1:M:153:VAL:HG22	1:M:160:LEU:HD23	1.76	0.67
1:P:474:ARG:HE	1:P:477:HIS:CE1	2.13	0.66
1:S:362:VAL:HG21	1:S:367:MET:HE2	1.78	0.65
1:B:127:HIS:CD2	1:C:463:GLY:HA2	2.34	0.63
1:H:507:LEU:HD23	1:H:507:LEU:H	1.64	0.63
1:F:246:ILE:HA	1:F:297:VAL:HG13	1.82	0.62
1:G:191:GLN:HG2	1:G:379:ILE:HD13	1.82	0.61
1:L:30:GLU:CD	1:L:30:GLU:H	2.08	0.61
1:S:167:THR:HG22	1:S:167:THR:O	2.00	0.61
1:S:297:VAL:HG21	1:S:357:ILE:HD13	1.83	0.60
1:S:367:MET:HE1	1:S:382:LEU:HD13	1.83	0.60
1:R:480:GLU:H	1:R:480:GLU:CD	2.11	0.59
1:G:100:THR:HG21	1:G:508:VAL:HG13	1.84	0.59
1:S:430:ARG:HH21	1:S:452:GLU:CD	2.12	0.58
1:K:244:ALA:HB2	1:K:357:ILE:HG22	1.84	0.58
1:M:452:GLU:CD	1:M:474:ARG:HH22	2.11	0.58
1:R:246:ILE:H	1:R:246:ILE:HD12	1.67	0.58
1:F:155:ILE:HG13	1:F:190:THR:HG22	1.86	0.57
1:G:486:GLY:O	1:G:494:PRO:HA	2.05	0.57
1:A:164:ILE:HG21	1:A:408:VAL:HG21	1.87	0.57
1:I:246:ILE:HA	1:I:297:VAL:HG13	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:423:ILE:HD13	1:C:473:LEU:HD13	1.87	0.56
1:M:220:THR:HG22	1:M:384:ARG:H	1.70	0.56
1:Q:290:ILE:HA	1:Q:346:ILE:HG21	1.88	0.56
1:D:442:LEU:H	1:D:442:LEU:HD12	1.71	0.55
1:P:153:VAL:HG22	1:P:160:LEU:CD2	2.37	0.55
1:E:473:LEU:HD13	1:E:473:LEU:C	2.31	0.55
1:M:153:VAL:HG22	1:M:160:LEU:CD2	2.36	0.55
1:H:164:ILE:HG21	1:H:408:VAL:HG21	1.89	0.54
1:L:423:ILE:HD13	1:L:473:LEU:HD13	1.90	0.54
1:A:430:ARG:HH21	1:A:452:GLU:CD	2.16	0.53
1:A:290:ILE:HA	1:A:346:ILE:HG21	1.90	0.53
1:L:297:VAL:HG21	1:L:357:ILE:HD13	1.90	0.53
1:E:246:ILE:HA	1:E:297:VAL:HG13	1.89	0.53
1:Q:467:ILE:HG22	1:Q:471:MET:HE2	1.91	0.52
1:L:474:ARG:HA	1:L:477:HIS:CD2	2.43	0.52
1:O:425:ILE:HG22	1:O:451:LEU:HD13	1.92	0.52
1:P:153:VAL:HG22	1:P:160:LEU:HD23	1.90	0.52
1:Q:220:THR:HG22	1:Q:383:ILE:HA	1.90	0.52
1:K:234:HIS:CD2	1:K:236:GLY:H	2.28	0.52
1:H:477:HIS:CG	1:H:477:HIS:O	2.63	0.52
1:B:246:ILE:HD12	1:B:246:ILE:H	1.74	0.52
1:K:127:HIS:CG	1:L:463:GLY:HA2	2.45	0.52
1:M:192:VAL:HG13	1:M:206:ASN:HB2	1.92	0.52
1:I:246:ILE:HD12	1:I:246:ILE:H	1.74	0.51
1:S:404:THR:O	1:S:408:VAL:HG23	2.10	0.51
1:B:532:ALA:HB3	1:C:61:ASP:HA	1.92	0.51
1:F:383:ILE:N	1:F:383:ILE:HD12	2.26	0.51
1:I:244:ALA:HB2	1:I:357:ILE:HG22	1.93	0.51
1:R:238:PRO:HB2	1:R:241:LEU:HD21	1.93	0.51
1:B:283:ILE:HG23	1:B:308:ALA:HB2	1.93	0.50
1:E:421:VAL:O	1:E:425:ILE:HG13	2.11	0.50
1:B:526:ILE:HD11	1:C:68:ILE:HD13	1.93	0.50
1:L:244:ALA:HB2	1:L:357:ILE:HG22	1.93	0.50
1:P:505:PRO:HB2	1:P:508:VAL:HG12	1.93	0.50
1:B:242:GLU:CD	1:B:242:GLU:H	2.19	0.50
1:R:430:ARG:HH21	1:R:452:GLU:CD	2.18	0.50
1:I:312:LEU:HD22	1:I:317:VAL:HG11	1.93	0.50
1:G:312:LEU:HD22	1:G:317:VAL:HG11	1.94	0.49
1:S:383:ILE:CD1	1:S:395:GLU:HA	2.42	0.49
1:G:220:THR:HG22	1:G:383:ILE:HA	1.94	0.49
1:S:121:LEU:HB2	1:S:131:ILE:HD11	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:185:VAL:HG13	1:I:402:LEU:HA	1.95	0.49
1:P:227:VAL:HG22	1:P:369:PHE:CD1	2.48	0.49
1:H:89:LEU:HD11	1:H:111:SER:HB3	1.95	0.49
1:K:237:MET:HE1	1:K:319:ALA:HB3	1.95	0.49
1:O:430:ARG:HH21	1:O:452:GLU:CD	2.21	0.49
1:P:213:ALA:HA	1:P:391:VAL:HG11	1.93	0.49
1:O:249:ILE:HG22	1:O:251:ALA:H	1.77	0.49
1:E:498:TRP:CZ3	1:E:503:ILE:HG23	2.48	0.49
1:K:164:ILE:HG21	1:K:408:VAL:HG21	1.95	0.49
1:C:423:ILE:HD12	1:C:477:HIS:CD2	2.47	0.48
1:F:483:LYS:HE2	1:F:484:TRP:CE2	2.48	0.48
1:L:474:ARG:HG3	1:L:477:HIS:CE1	2.48	0.48
1:D:415:ILE:HB	1:D:421:VAL:HG21	1.95	0.48
1:G:227:VAL:HG22	1:G:369:PHE:CD1	2.49	0.48
1:B:161:LEU:HD22	1:B:405:VAL:HG13	1.95	0.48
1:D:254:GLU:CD	1:D:321:ARG:HH12	2.22	0.48
1:F:312:LEU:HD22	1:F:317:VAL:HG11	1.95	0.48
1:M:149:LEU:HD21	1:M:421:VAL:HG12	1.96	0.48
1:R:164:ILE:HG21	1:R:408:VAL:HG21	1.96	0.48
1:S:298:ILE:CG2	1:S:319:ALA:HB2	2.44	0.48
1:I:178:ARG:NE	1:I:178:ARG:H	2.12	0.48
1:R:455:VAL:O	1:R:459:ILE:HG12	2.14	0.48
1:F:527:ASP:HB2	1:G:55:MET:HB3	1.95	0.47
1:D:129:THR:HG23	1:D:130:ILE:HD13	1.95	0.47
1:P:268:ASP:HB2	1:P:271:GLN:HE21	1.79	0.47
1:R:158:THR:HB	1:R:186:VAL:HG11	1.95	0.47
1:B:459:ILE:HD13	1:B:469:LEU:HB2	1.96	0.47
1:O:226:ILE:HG13	1:O:334:ALA:CB	2.45	0.47
1:P:255:VAL:HG12	1:P:279:GLU:HG3	1.96	0.47
1:H:364:GLU:CD	1:H:384:ARG:HH22	2.22	0.47
1:K:459:ILE:HG21	1:K:466:PRO:HA	1.97	0.47
1:P:248:LEU:H	1:P:248:LEU:HD12	1.79	0.47
1:B:497:MET:HB3	1:B:502:VAL:HB	1.97	0.47
1:K:253:LEU:HD11	1:K:298:ILE:HD11	1.96	0.47
1:L:88:LEU:CD1	1:M:68:ILE:HD11	2.44	0.47
1:B:248:LEU:H	1:B:248:LEU:HD22	1.80	0.47
1:A:453:SER:O	1:A:456:SER:HB2	2.15	0.47
1:H:220:THR:HG22	1:H:384:ARG:H	1.80	0.47
1:P:387:LEU:HD23	1:P:389:ARG:H	1.80	0.47
1:I:485:TYR:CE1	1:I:496:ASP:HB2	2.50	0.46
1:K:192:VAL:HG13	1:K:206:ASN:HD22	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:504:GLU:HB2	1:D:505:PRO:HD2	1.98	0.46
1:C:291:LEU:HD11	1:C:312:LEU:HD23	1.97	0.46
1:F:408:VAL:HG22	1:F:505:PRO:HG3	1.98	0.46
1:S:310:SER:O	1:S:314:LYS:HE2	2.15	0.46
1:A:106:THR:HG23	1:A:454:LEU:HD21	1.98	0.46
1:N:404:THR:O	1:N:408:VAL:HG23	2.15	0.46
1:A:225:GLY:HA3	1:A:371:GLU:HA	1.98	0.46
1:B:114:LEU:HD11	1:B:447:TYR:CD2	2.51	0.46
1:K:340:VAL:HG21	1:K:346:ILE:HD13	1.97	0.46
1:M:415:ILE:C	1:M:415:ILE:HD12	2.40	0.46
1:A:234:HIS:HB3	1:A:237:MET:HE3	1.97	0.46
1:G:423:ILE:HG23	1:G:477:HIS:CD2	2.51	0.46
1:H:217:ILE:H	1:H:217:ILE:HD12	1.81	0.46
1:I:237:MET:HE1	1:I:319:ALA:HB3	1.98	0.46
1:I:430:ARG:HH21	1:I:452:GLU:CD	2.24	0.46
1:N:477:HIS:CD2	1:N:477:HIS:O	2.69	0.46
1:O:226:ILE:HG13	1:O:334:ALA:HB2	1.98	0.46
1:M:233:VAL:HG12	1:M:319:ALA:O	2.16	0.45
1:L:248:LEU:H	1:L:248:LEU:HD22	1.81	0.45
1:P:30:GLU:CD	1:P:30:GLU:H	2.25	0.45
1:C:246:ILE:HA	1:C:297:VAL:HG13	1.97	0.45
1:I:469:LEU:HD13	1:I:487:ILE:HD11	1.98	0.45
1:P:465:ASP:HA	1:P:466:PRO:HD2	1.86	0.45
1:N:248:LEU:HD12	1:N:248:LEU:H	1.81	0.45
1:B:498:TRP:C	1:B:500:LYS:H	2.25	0.45
1:L:46:LEU:HD12	1:L:108:VAL:HG11	1.97	0.45
1:F:299:ILE:HA	1:F:320:VAL:HB	1.99	0.45
1:Q:204:LEU:O	1:Q:204:LEU:HD13	2.17	0.45
1:A:38:ALA:O	1:A:41:ALA:HB3	2.17	0.45
1:L:458:LEU:HG	1:L:489:LEU:HD11	1.98	0.45
1:M:415:ILE:HD12	1:M:415:ILE:O	2.16	0.45
1:Q:297:VAL:HG21	1:Q:357:ILE:HG21	1.98	0.45
1:Q:415:ILE:O	1:Q:503:ILE:HG23	2.16	0.45
1:Q:488:ASP:HB3	1:Q:491:ALA:HB3	1.99	0.45
1:S:252:SER:HB2	1:S:302:LYS:HD3	1.98	0.45
1:C:477:HIS:CG	1:C:477:HIS:O	2.69	0.45
1:H:192:VAL:HG21	1:H:207:ILE:CG1	2.47	0.45
1:L:162:ARG:HE	1:L:183:ASP:CG	2.25	0.45
1:H:241:LEU:HD23	1:H:318:LEU:HB2	1.99	0.45
1:G:232:VAL:HG12	1:G:318:LEU:HD21	1.99	0.44
1:N:312:LEU:HD22	1:N:317:VAL:HG11	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:290:ILE:HG21	1:B:298:ILE:HD12	1.98	0.44
1:H:383:ILE:HD13	1:H:395:GLU:HA	1.99	0.44
1:P:357:ILE:HD11	1:P:370:VAL:HG13	1.98	0.44
1:P:517:THR:O	1:P:517:THR:HG22	2.18	0.44
1:M:459:ILE:HD13	1:M:469:LEU:HB2	2.00	0.44
1:P:149:LEU:HG	1:P:483:LYS:HD2	2.00	0.44
1:F:459:ILE:O	1:F:462:ALA:HB3	2.17	0.44
1:K:38:ALA:O	1:K:41:ALA:HB3	2.17	0.44
1:O:250:ASP:OD1	1:O:302:LYS:NZ	2.50	0.44
1:B:127:HIS:CD2	1:C:463:GLY:CA	3.01	0.44
1:H:526:ILE:HD13	1:I:58:MET:HE3	2.00	0.44
1:N:234:HIS:CD2	1:N:236:GLY:H	2.36	0.44
1:Q:383:ILE:HD11	1:Q:398:LEU:HD13	2.00	0.44
1:S:348:GLU:CD	1:S:348:GLU:H	2.26	0.44
1:G:290:ILE:HD11	1:G:343:ILE:HG22	1.99	0.44
1:P:153:VAL:CG2	1:P:160:LEU:HD23	2.48	0.44
1:Q:283:ILE:HD13	1:Q:286:LYS:HD2	2.00	0.44
1:B:340:VAL:HG21	1:B:346:ILE:HD12	2.00	0.44
1:K:423:ILE:HD12	1:K:477:HIS:CG	2.52	0.44
1:M:522:LEU:HD11	1:N:68:ILE:HD13	1.99	0.44
1:P:98:GLU:HG2	1:P:508:VAL:HB	2.00	0.44
1:E:141:VAL:HA	1:E:144:GLN:HG2	2.00	0.43
1:N:393:GLU:CD	1:N:396:ARG:HE	2.25	0.43
1:O:425:ILE:HG22	1:O:451:LEU:CD1	2.47	0.43
1:H:232:VAL:HG13	1:H:319:ALA:O	2.17	0.43
1:L:233:VAL:HG23	1:L:321:ARG:HG2	1.99	0.43
1:M:335:THR:HB	1:M:353:TYR:H	1.83	0.43
1:O:244:ALA:O	1:O:353:TYR:HA	2.18	0.43
1:R:153:VAL:HG21	1:R:414:ALA:HB3	2.00	0.43
1:A:164:ILE:HG23	1:A:505:PRO:HD3	2.01	0.43
1:H:164:ILE:H	1:H:164:ILE:HG13	1.63	0.43
1:S:127:HIS:O	1:S:130:ILE:HB	2.19	0.43
1:C:433:ALA:HB1	1:C:441:GLN:HG3	2.01	0.43
1:F:398:LEU:C	1:F:398:LEU:HD13	2.42	0.43
1:G:246:ILE:H	1:G:246:ILE:CD1	2.25	0.43
1:O:195:LEU:HD23	1:O:200:TRP:HA	2.01	0.43
1:P:451:LEU:HD13	1:P:451:LEU:HA	1.85	0.43
1:O:526:ILE:HG21	1:P:58:MET:HE3	2.00	0.43
1:Q:188:ALA:O	1:Q:192:VAL:HG23	2.19	0.43
1:C:526:ILE:HD12	1:D:58:MET:HB2	2.01	0.43
1:M:241:LEU:HD12	1:M:318:LEU:HB2	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:382:LEU:C	1:M:382:LEU:HD23	2.43	0.43
1:G:106:THR:HG23	1:G:454:LEU:HD21	2.01	0.43
1:H:244:ALA:HB2	1:H:357:ILE:HG22	2.00	0.43
1:D:99:GLU:O	1:D:100:THR:HB	2.19	0.43
1:M:488:ASP:CG	1:M:491:ALA:HB3	2.44	0.43
1:H:297:VAL:HG11	1:H:357:ILE:HG21	2.01	0.43
1:I:462:ALA:HB2	1:I:489:LEU:HD22	1.99	0.43
1:K:425:ILE:O	1:K:429:LEU:HD13	2.19	0.43
1:L:88:LEU:HD11	1:M:68:ILE:HD11	1.99	0.43
1:O:473:LEU:HD12	1:O:487:ILE:HG13	2.01	0.42
1:R:291:LEU:HD11	1:R:312:LEU:HD23	2.01	0.42
1:C:161:LEU:HA	1:C:164:ILE:HG22	2.02	0.42
1:F:89:LEU:HD11	1:F:111:SER:OG	2.19	0.42
1:O:231:GLU:H	1:O:231:GLU:CD	2.26	0.42
1:S:195:LEU:HD13	1:S:200:TRP:CE2	2.54	0.42
1:B:39:VAL:HG21	1:B:523:VAL:HG21	2.01	0.42
1:C:233:VAL:HG12	1:C:319:ALA:O	2.20	0.42
1:F:527:ASP:HB2	1:G:55:MET:CB	2.49	0.42
1:Q:287:VAL:HG13	1:Q:312:LEU:HD21	2.00	0.42
1:G:205:ASP:C	1:G:207:ILE:H	2.26	0.42
1:H:462:ALA:HB2	1:H:489:LEU:HD22	2.01	0.42
1:P:427:LYS:HE3	1:P:477:HIS:CE1	2.55	0.42
1:S:312:LEU:HD22	1:S:317:VAL:HG11	2.02	0.42
1:G:231:GLU:CD	1:G:231:GLU:H	2.28	0.42
1:L:30:GLU:CD	1:L:30:GLU:N	2.77	0.42
1:M:226:ILE:HD11	1:M:378:SER:HB3	2.01	0.42
1:O:226:ILE:HD11	1:O:378:SER:HB3	2.00	0.42
1:P:226:ILE:HD11	1:P:378:SER:HB3	2.01	0.42
1:A:100:THR:HG22	1:A:103:GLY:H	1.84	0.42
1:K:383:ILE:HD13	1:K:383:ILE:HG21	1.92	0.42
1:L:185:VAL:HG13	1:L:402:LEU:HA	2.01	0.42
1:O:222:LEU:HD21	1:O:379:ILE:HD12	2.01	0.42
1:A:381:ILE:HD12	1:A:402:LEU:HD11	2.01	0.42
1:B:340:VAL:HG21	1:B:346:ILE:CD1	2.49	0.42
1:D:193:ALA:HA	1:D:201:TYR:O	2.20	0.42
1:H:226:ILE:HD13	1:H:226:ILE:HA	1.88	0.42
1:A:173:ALA:HB3	1:A:393:GLU:HG2	2.00	0.42
1:C:505:PRO:HG2	1:C:508:VAL:HB	2.02	0.42
1:D:81:LEU:HD12	1:D:81:LEU:HA	1.92	0.42
1:D:110:PHE:CD2	1:D:454:LEU:HD22	2.55	0.42
1:F:31:ALA:O	1:F:34:ALA:HB3	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:99:GLU:CD	1:N:99:GLU:H	2.27	0.42
1:S:298:ILE:HG23	1:S:319:ALA:HB2	2.00	0.42
1:I:477:HIS:O	1:I:477:HIS:CG	2.73	0.41
1:S:282:LEU:O	1:S:285:GLU:HB3	2.20	0.41
1:B:79:MET:HE3	1:B:81:LEU:HD21	2.01	0.41
1:P:423:ILE:HD13	1:P:473:LEU:HD13	2.02	0.41
1:F:343:ILE:O	1:F:346:ILE:HG22	2.20	0.41
1:G:160:LEU:HD21	1:G:498:TRP:CZ2	2.55	0.41
1:Q:237:MET:HE2	1:Q:312:LEU:HB3	2.03	0.41
1:D:245:LYS:HB3	1:D:351:LEU:HD23	2.03	0.41
1:H:430:ARG:HH11	1:H:430:ARG:HG2	1.86	0.41
1:M:234:HIS:HA	1:M:235:PRO:HD3	1.79	0.41
1:P:529:VAL:HG22	1:Q:58:MET:HE2	2.02	0.41
1:S:181:ILE:HG23	1:S:398:LEU:HD12	2.03	0.41
1:S:361:LYS:HA	1:S:366:LYS:HA	2.01	0.41
1:A:312:LEU:HD13	1:A:319:ALA:HB2	2.02	0.41
1:M:145:THR:HG22	1:M:145:THR:O	2.19	0.41
1:A:28:GLY:N	1:A:30:GLU:OE1	2.53	0.41
1:C:144:GLN:O	1:C:148:GLU:HG2	2.20	0.41
1:M:232:VAL:HG12	1:M:318:LEU:HD21	2.03	0.41
1:M:312:LEU:HD13	1:M:319:ALA:HB2	2.02	0.41
1:D:440:GLU:O	1:D:443:ALA:HB3	2.21	0.41
1:K:167:THR:O	1:K:167:THR:HG22	2.20	0.41
1:L:226:ILE:HD11	1:L:378:SER:HB3	2.03	0.41
1:P:473:LEU:HB2	1:P:487:ILE:HD11	2.02	0.41
1:D:51:GLY:HA3	1:D:458:LEU:HD12	2.02	0.41
1:D:430:ARG:HH21	1:D:452:GLU:CD	2.29	0.41
1:G:469:LEU:HD13	1:G:469:LEU:HA	1.88	0.41
1:H:107:ALA:HA	1:H:516:ALA:HB2	2.03	0.41
1:I:487:ILE:O	1:I:487:ILE:HG23	2.20	0.41
1:L:143:LEU:CD2	1:L:510:MET:HG3	2.50	0.41
1:N:467:ILE:HD11	1:N:471:MET:HE2	2.02	0.41
1:P:290:ILE:HD11	1:P:343:ILE:HG22	2.03	0.41
1:Q:39:VAL:HG11	1:Q:115:VAL:HG21	2.03	0.41
1:F:290:ILE:CG1	1:F:343:ILE:HG23	2.51	0.41
1:M:361:LYS:HA	1:M:366:LYS:HA	2.03	0.41
1:P:415:ILE:HD12	1:P:421:VAL:HG21	2.03	0.41
1:P:521:THR:HA	1:P:524:LEU:HD12	2.02	0.41
1:B:222:LEU:HD23	1:B:223:VAL:N	2.35	0.41
1:C:318:LEU:C	1:C:318:LEU:HD23	2.46	0.41
1:G:46:LEU:HD21	1:G:76:LEU:HD13	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:195:LEU:HD13	1:I:195:LEU:C	2.46	0.41
1:L:194:GLU:CD	1:L:196:ARG:HE	2.29	0.41
1:N:299:ILE:HD13	1:N:299:ILE:HG21	1.88	0.41
1:C:423:ILE:HD12	1:C:477:HIS:CG	2.57	0.40
1:P:305:ASP:O	1:P:309:GLN:HG3	2.21	0.40
1:P:379:ILE:C	1:P:379:ILE:HD12	2.45	0.40
1:S:304:ILE:HG21	1:S:304:ILE:HD13	1.86	0.40
1:G:30:GLU:CD	1:G:30:GLU:H	2.30	0.40
1:G:93:ALA:HB1	1:G:108:VAL:HG22	2.03	0.40
1:H:161:LEU:HD11	1:H:409:ILE:HD11	2.03	0.40
1:K:229:ASP:CG	1:K:324:LYS:HZ2	2.30	0.40
1:L:249:ILE:O	1:L:300:CYS:HA	2.21	0.40
1:L:331:LEU:HA	1:L:331:LEU:HD12	1.89	0.40
1:A:304:ILE:H	1:A:321:ARG:HD3	1.86	0.40
1:E:84:PRO:O	1:E:88:LEU:HG	2.21	0.40
1:H:246:ILE:H	1:H:246:ILE:HG13	1.61	0.40
1:K:430:ARG:HH21	1:K:452:GLU:CD	2.30	0.40
1:P:451:LEU:HD13	1:P:454:LEU:HD12	2.04	0.40
1:Q:329:GLU:O	1:Q:332:ALA:HB3	2.21	0.40
1:C:346:ILE:HG13	1:C:350:ASP:HB2	2.04	0.40
1:S:418:GLY:HA3	1:S:497:MET:HE2	2.02	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	503/553 (91%)	455 (90%)	40 (8%)	8 (2%)	7	38
1	B	503/553 (91%)	453 (90%)	42 (8%)	8 (2%)	7	38
1	C	503/553 (91%)	458 (91%)	42 (8%)	3 (1%)	21	59
1	D	503/553 (91%)	451 (90%)	47 (9%)	5 (1%)	12	49

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	E	503/553 (91%)	451 (90%)	49 (10%)	3 (1%)	21	59
1	F	503/553 (91%)	456 (91%)	41 (8%)	6 (1%)	10	44
1	G	503/553 (91%)	444 (88%)	50 (10%)	9 (2%)	6	34
1	H	503/553 (91%)	450 (90%)	47 (9%)	6 (1%)	10	44
1	I	503/553 (91%)	457 (91%)	41 (8%)	5 (1%)	12	49
1	K	503/553 (91%)	452 (90%)	45 (9%)	6 (1%)	10	44
1	L	503/553 (91%)	454 (90%)	44 (9%)	5 (1%)	12	49
1	M	503/553 (91%)	458 (91%)	42 (8%)	3 (1%)	21	59
1	N	503/553 (91%)	455 (90%)	41 (8%)	7 (1%)	9	40
1	O	503/553 (91%)	449 (89%)	46 (9%)	8 (2%)	7	38
1	P	503/553 (91%)	456 (91%)	41 (8%)	6 (1%)	10	44
1	Q	503/553 (91%)	454 (90%)	44 (9%)	5 (1%)	12	49
1	R	503/553 (91%)	455 (90%)	42 (8%)	6 (1%)	10	44
1	S	503/553 (91%)	450 (90%)	49 (10%)	4 (1%)	16	54
All	All	9054/9954 (91%)	8158 (90%)	793 (9%)	103 (1%)	14	46

All (103) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	H	387	LEU
1	M	387	LEU
1	N	387	LEU
1	O	264	ILE
1	R	387	LEU
1	A	30	GLU
1	D	30	GLU
1	D	100	THR
1	E	30	GLU
1	F	30	GLU
1	G	30	GLU
1	G	100	THR
1	H	95	GLY
1	K	30	GLU
1	K	386	GLY
1	K	387	LEU
1	K	438	GLY
1	O	30	GLU

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Mol	Chain	Res	Type
1	O	240	ARG
1	Q	385	GLY
1	S	438	GLY
1	A	100	THR
1	A	385	GLY
1	A	387	LEU
1	B	30	GLU
1	B	385	GLY
1	C	30	GLU
1	C	438	GLY
1	E	438	GLY
1	F	438	GLY
1	G	387	LEU
1	H	30	GLU
1	I	30	GLU
1	L	30	GLU
1	L	385	GLY
1	L	438	GLY
1	M	30	GLU
1	N	30	GLU
1	N	149	LEU
1	N	258	PRO
1	N	385	GLY
1	O	305	ASP
1	P	30	GLU
1	P	259	GLU
1	P	385	GLY
1	Q	30	GLU
1	Q	387	LEU
1	Q	438	GLY
1	S	30	GLU
1	B	148	GLU
1	B	149	LEU
1	B	438	GLY
1	D	385	GLY
1	D	438	GLY
1	E	266	ILE
1	F	149	LEU
1	G	61	ASP
1	H	149	LEU
1	I	149	LEU
1	I	387	LEU

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Mol	Chain	Res	Type
1	L	149	LEU
1	M	438	GLY
1	O	385	GLY
1	O	438	GLY
1	O	499	GLN
1	P	438	GLY
1	R	322	ARG
1	R	385	GLY
1	A	149	LEU
1	A	438	GLY
1	B	258	PRO
1	B	387	LEU
1	C	149	LEU
1	D	258	PRO
1	F	47	LYS
1	G	149	LEU
1	G	363	GLY
1	H	438	GLY
1	I	438	GLY
1	K	149	LEU
1	L	148	GLU
1	N	438	GLY
1	O	149	LEU
1	P	47	LYS
1	P	149	LEU
1	Q	149	LEU
1	R	30	GLU
1	R	149	LEU
1	R	438	GLY
1	S	373	ALA
1	A	363	GLY
1	F	259	GLU
1	G	438	GLY
1	H	148	GLU
1	K	499	GLN
1	S	149	LEU
1	F	174	VAL
1	G	266	ILE
1	G	385	GLY
1	I	385	GLY
1	N	376	PRO
1	B	215	GLY

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Mol	Chain	Res	Type
1	A	434	PRO

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	410/447 (92%)	396 (97%)	14 (3%)	32	54
1	B	410/447 (92%)	394 (96%)	16 (4%)	28	49
1	C	410/447 (92%)	397 (97%)	13 (3%)	34	56
1	D	410/447 (92%)	392 (96%)	18 (4%)	25	47
1	E	410/447 (92%)	399 (97%)	11 (3%)	39	61
1	F	410/447 (92%)	391 (95%)	19 (5%)	24	45
1	G	410/447 (92%)	396 (97%)	14 (3%)	32	54
1	H	410/447 (92%)	398 (97%)	12 (3%)	37	58
1	I	410/447 (92%)	395 (96%)	15 (4%)	30	51
1	K	410/447 (92%)	397 (97%)	13 (3%)	34	56
1	L	410/447 (92%)	396 (97%)	14 (3%)	32	54
1	M	410/447 (92%)	395 (96%)	15 (4%)	30	51
1	N	410/447 (92%)	394 (96%)	16 (4%)	28	49
1	O	410/447 (92%)	392 (96%)	18 (4%)	25	47
1	P	410/447 (92%)	400 (98%)	10 (2%)	43	64
1	Q	410/447 (92%)	399 (97%)	11 (3%)	39	61
1	R	410/447 (92%)	399 (97%)	11 (3%)	39	61
1	S	410/447 (92%)	393 (96%)	17 (4%)	27	49
All	All	7380/8046 (92%)	7123 (96%)	257 (4%)	32	53

All (257) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	94	LYS

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Mol	Chain	Res	Type
1	A	144	GLN
1	A	167	THR
1	A	185	VAL
1	A	269	PRO
1	A	297	VAL
1	A	343	ILE
1	A	369	PHE
1	A	370	VAL
1	A	382	LEU
1	A	415	ILE
1	A	422	GLU
1	A	423	ILE
1	A	473	LEU
1	B	76	LEU
1	B	83	HIS
1	B	149	LEU
1	B	242	GLU
1	B	248	LEU
1	B	273	GLN
1	B	276	LEU
1	B	297	VAL
1	B	331	LEU
1	B	356	LEU
1	B	381	ILE
1	B	392	ASP
1	B	398	LEU
1	B	473	LEU
1	B	477	HIS
1	B	509	LYS
1	C	76	LEU
1	C	128	PRO
1	C	164	ILE
1	C	167	THR
1	C	174	VAL
1	C	241	LEU
1	C	297	VAL
1	C	301	GLN
1	C	405	VAL
1	C	415	ILE
1	C	473	LEU
1	C	476	THR
1	C	523	VAL

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Mol	Chain	Res	Type
1	D	68	ILE
1	D	82	GLN
1	D	139	GLU
1	D	144	GLN
1	D	152	THR
1	D	203	ASP
1	D	204	LEU
1	D	241	LEU
1	D	242	GLU
1	D	288	ASP
1	D	297	VAL
1	D	301	GLN
1	D	341	SER
1	D	365	ASP
1	D	453	SER
1	D	470	LEU
1	D	493	GLN
1	D	530	VAL
1	E	76	LEU
1	E	153	VAL
1	E	241	LEU
1	E	246	ILE
1	E	273	GLN
1	E	288	ASP
1	E	297	VAL
1	E	305	ASP
1	E	365	ASP
1	E	473	LEU
1	E	514	LYS
1	F	44	GLU
1	F	84	PRO
1	F	160	LEU
1	F	167	THR
1	F	169	LEU
1	F	210	VAL
1	F	211	LYS
1	F	246	ILE
1	F	283	ILE
1	F	297	VAL
1	F	318	LEU
1	F	346	ILE
1	F	382	LEU

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Mol	Chain	Res	Type
1	F	398	LEU
1	F	408	VAL
1	F	436	VAL
1	F	473	LEU
1	F	476	THR
1	F	485	TYR
1	G	43	GLU
1	G	61	ASP
1	G	198	ASP
1	G	202	VAL
1	G	211	LYS
1	G	231	GLU
1	G	232	VAL
1	G	246	ILE
1	G	254	GLU
1	G	297	VAL
1	G	351	LEU
1	G	356	LEU
1	G	383	ILE
1	G	423	ILE
1	H	44	GLU
1	H	100	THR
1	H	153	VAL
1	H	169	LEU
1	H	241	LEU
1	H	297	VAL
1	H	348	GLU
1	H	356	LEU
1	H	422	GLU
1	H	429	LEU
1	H	441	GLN
1	H	473	LEU
1	I	33	ARG
1	I	47	LYS
1	I	62	SER
1	I	127	HIS
1	I	178	ARG
1	I	233	VAL
1	I	238	PRO
1	I	283	ILE
1	I	297	VAL
1	I	343	ILE

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Mol	Chain	Res	Type
1	I	377	LYS
1	I	429	LEU
1	I	455	VAL
1	I	476	THR
1	I	480	GLU
1	K	59	LEU
1	K	97	ASP
1	K	100	THR
1	K	115	VAL
1	K	283	ILE
1	K	297	VAL
1	K	299	ILE
1	K	340	VAL
1	K	405	VAL
1	K	434	PRO
1	K	436	VAL
1	K	473	LEU
1	K	484	TRP
1	L	30	GLU
1	L	47	LYS
1	L	129	THR
1	L	141	VAL
1	L	144	GLN
1	L	248	LEU
1	L	288	ASP
1	L	297	VAL
1	L	318	LEU
1	L	331	LEU
1	L	339	VAL
1	L	356	LEU
1	L	391	VAL
1	L	392	ASP
1	M	67	THR
1	M	82	GLN
1	M	167	THR
1	M	185	VAL
1	M	222	LEU
1	M	263	GLU
1	M	297	VAL
1	M	298	ILE
1	M	299	ILE
1	M	325	LYS

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Mol	Chain	Res	Type
1	M	329	GLU
1	M	370	VAL
1	M	376	PRO
1	M	379	ILE
1	M	429	LEU
1	N	30	GLU
1	N	66	ILE
1	N	76	LEU
1	N	99	GLU
1	N	139	GLU
1	N	167	THR
1	N	270	THR
1	N	297	VAL
1	N	305	ASP
1	N	329	GLU
1	N	367	MET
1	N	453	SER
1	N	467	ILE
1	N	473	LEU
1	N	484	TRP
1	N	517	THR
1	O	30	GLU
1	O	47	LYS
1	O	77	ASP
1	O	144	GLN
1	O	160	LEU
1	O	204	LEU
1	O	222	LEU
1	O	242	GLU
1	O	283	ILE
1	O	297	VAL
1	O	312	LEU
1	O	326	SER
1	O	329	GLU
1	O	343	ILE
1	O	367	MET
1	O	473	LEU
1	O	484	TRP
1	O	487	ILE
1	P	167	THR
1	P	211	LYS
1	P	235	PRO

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Mol	Chain	Res	Type
1	P	241	LEU
1	P	246	ILE
1	P	269	PRO
1	P	343	ILE
1	P	451	LEU
1	P	473	LEU
1	P	477	HIS
1	Q	43	GLU
1	Q	74	THR
1	Q	155	ILE
1	Q	167	THR
1	Q	204	LEU
1	Q	210	VAL
1	Q	317	VAL
1	Q	391	VAL
1	Q	398	LEU
1	Q	487	ILE
1	Q	510	MET
1	R	42	VAL
1	R	168	SER
1	R	297	VAL
1	R	322	ARG
1	R	367	MET
1	R	376	PRO
1	R	436	VAL
1	R	453	SER
1	R	473	LEU
1	R	480	GLU
1	R	487	ILE
1	S	33	ARG
1	S	43	GLU
1	S	47	LYS
1	S	76	LEU
1	S	84	PRO
1	S	114	LEU
1	S	144	GLN
1	S	230	LYS
1	S	258	PRO
1	S	265	ARG
1	S	283	ILE
1	S	297	VAL
1	S	351	LEU

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Mol	Chain	Res	Type
1	S	370	VAL
1	S	473	LEU
1	S	528	ASP
1	S	530	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (74) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	35	ASN
1	A	147	GLN
1	A	435	GLN
1	A	481	ASN
1	A	499	GLN
1	B	91	GLN
1	B	127	HIS
1	B	147	GLN
1	B	221	GLN
1	B	281	ASN
1	C	70	ASN
1	C	83	HIS
1	C	221	GLN
1	C	267	ASN
1	C	271	GLN
1	D	82	GLN
1	D	96	GLN
1	D	271	GLN
1	D	281	ASN
1	E	127	HIS
1	E	271	GLN
1	F	127	HIS
1	F	267	ASN
1	F	461	ASN
1	G	151	GLN
1	G	234	HIS
1	G	441	GLN
1	G	477	HIS
1	G	482	ASN
1	H	35	ASN
1	H	151	GLN
1	I	83	HIS
1	I	127	HIS
1	I	511	ASN

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Mol	Chain	Res	Type
1	K	82	GLN
1	K	127	HIS
1	K	144	GLN
1	K	206	ASN
1	K	234	HIS
1	K	435	GLN
1	K	493	GLN
1	L	35	ASN
1	L	70	ASN
1	L	156	ASN
1	L	218	ASN
1	L	234	HIS
1	L	493	GLN
1	M	83	HIS
1	M	218	ASN
1	M	221	GLN
1	N	234	HIS
1	N	271	GLN
1	N	273	GLN
1	N	342	ASN
1	O	234	HIS
1	O	243	ASN
1	O	441	GLN
1	O	477	HIS
1	O	479	ASN
1	P	96	GLN
1	P	127	HIS
1	P	271	GLN
1	P	342	ASN
1	Q	147	GLN
1	Q	221	GLN
1	Q	273	GLN
1	Q	499	GLN
1	R	82	GLN
1	S	144	GLN
1	S	191	GLN
1	S	234	HIS
1	S	267	ASN
1	S	479	ASN
1	S	481	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](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-5395. These allow visual inspection of the internal detail of the map and identification of artifacts.

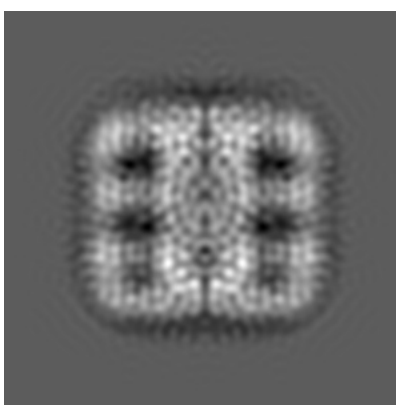
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

6.1.1 Primary map



X



Y



Z

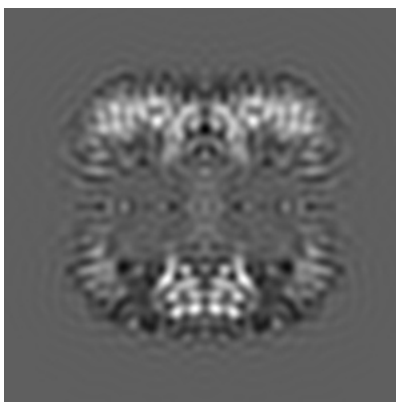
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

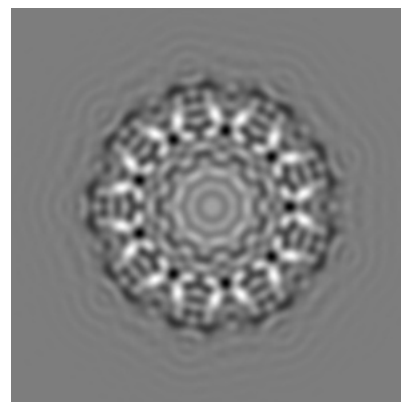
6.2.1 Primary map



X Index: 80



Y Index: 80

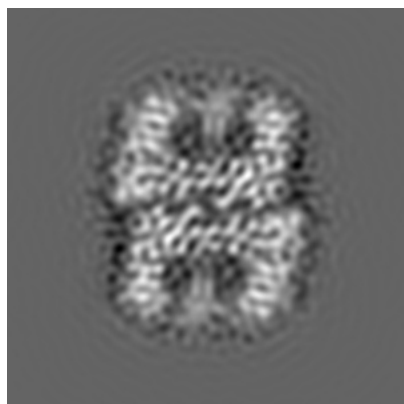


Z Index: 80

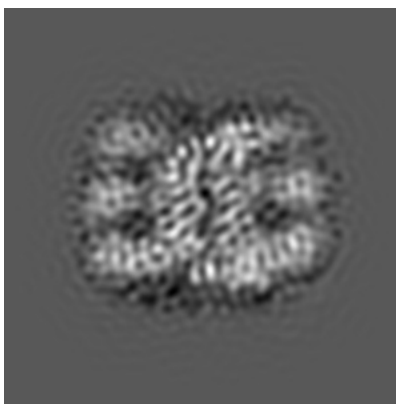
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

6.3.1 Primary map



X Index: 109



Y Index: 49

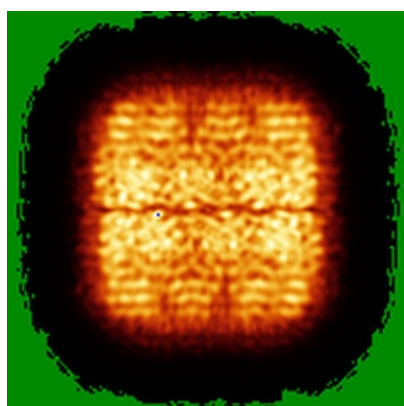


Z Index: 65

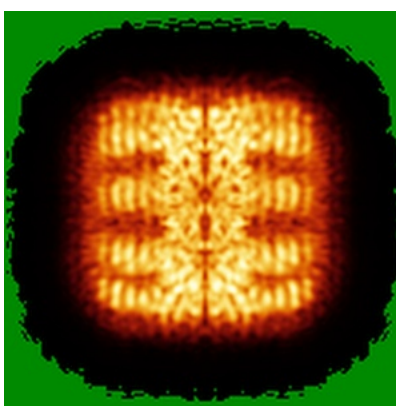
The images above show the largest variance slices of the map in three orthogonal directions.

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

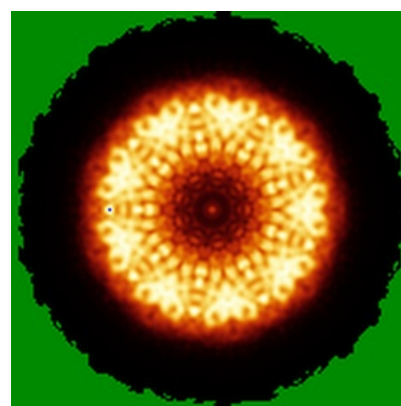
6.4.1 Primary map



X



Y

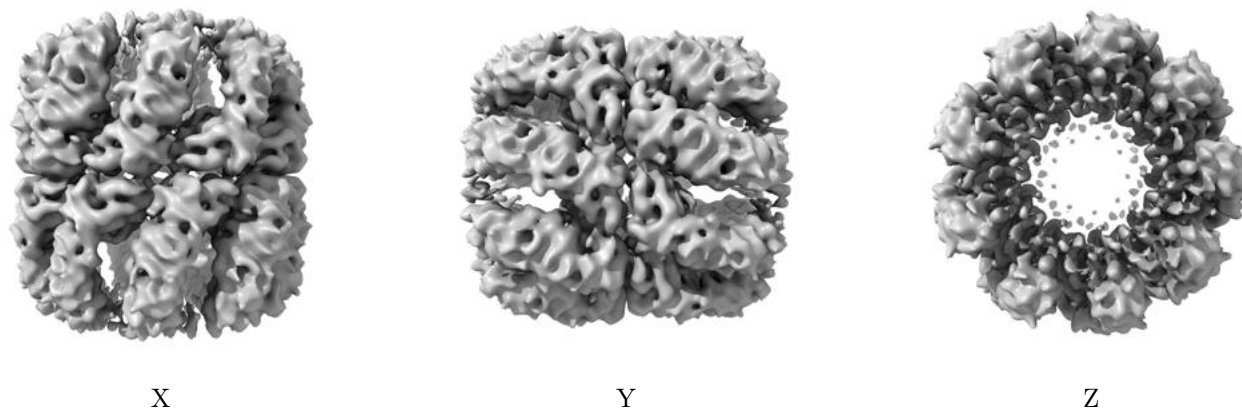


Z

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

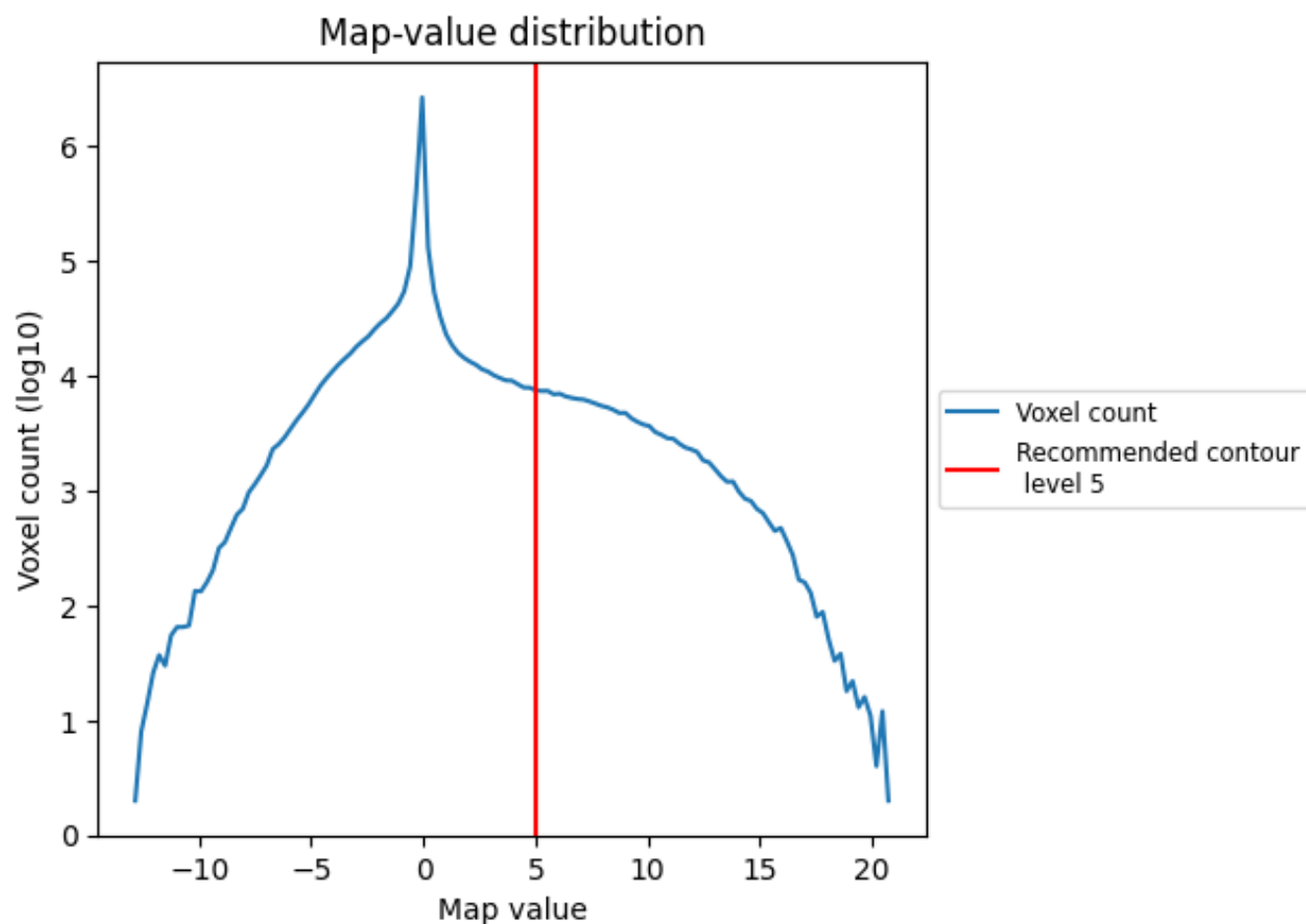
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

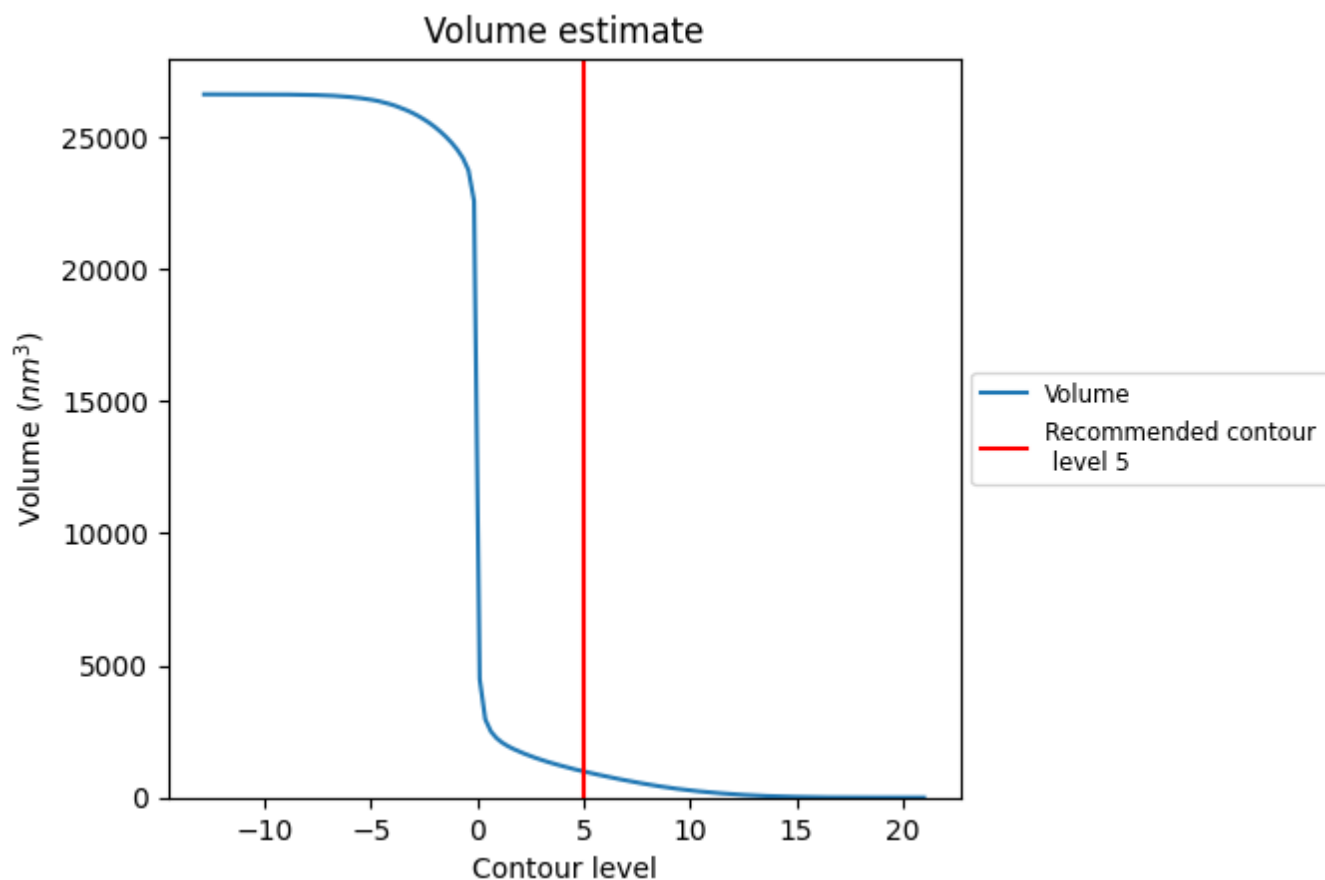
This section contains the results of statistical analysis of the map.

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.

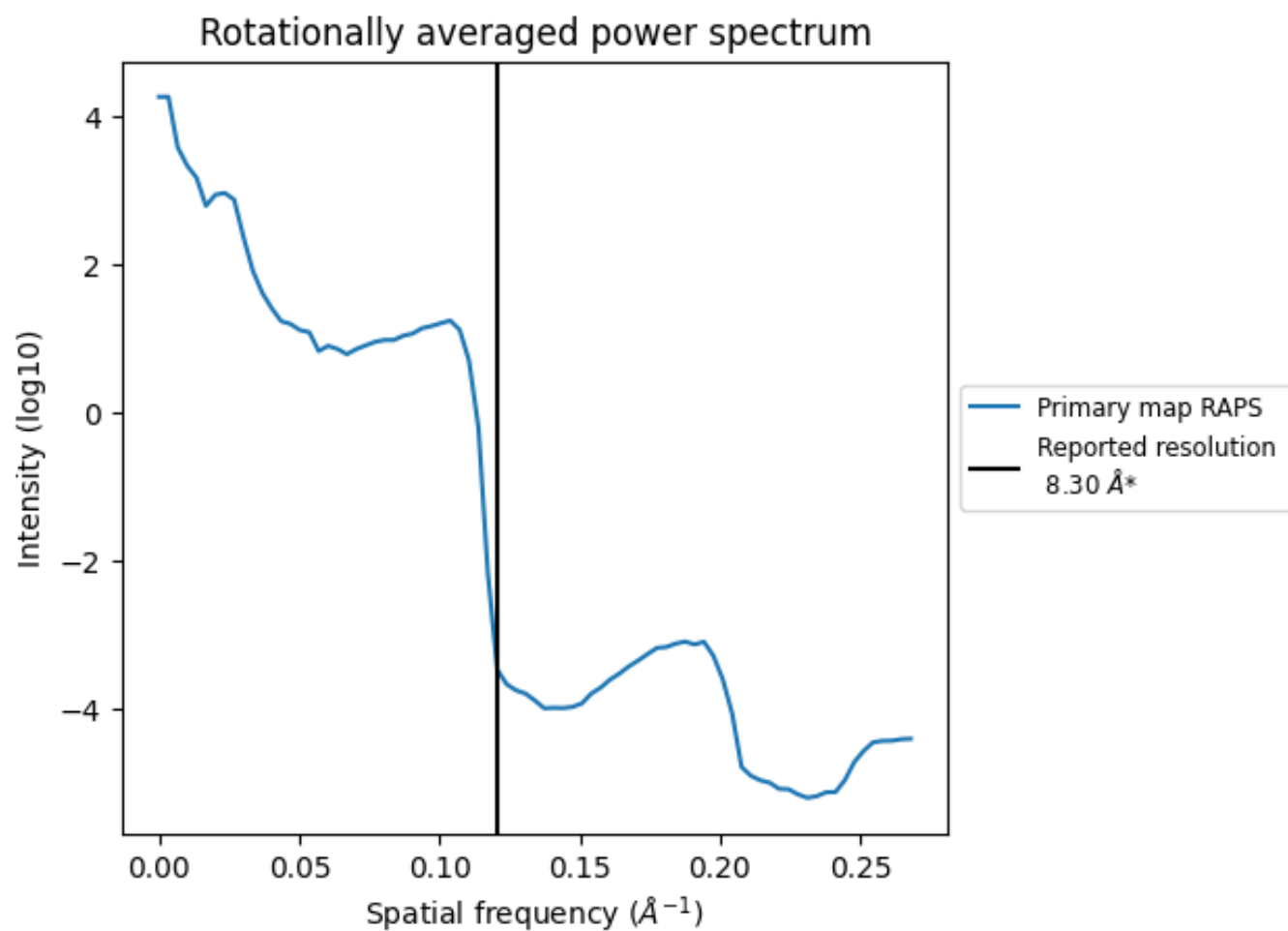
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 989 nm³; this corresponds to an approximate mass of 893 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 0.120 Å⁻¹

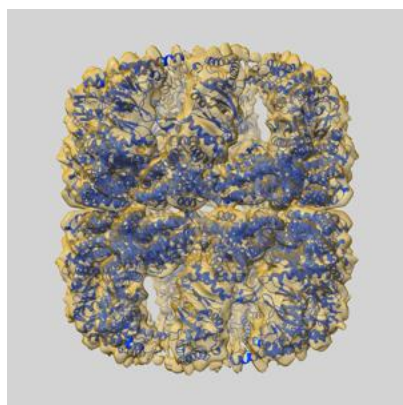
8 Fourier-Shell correlation ⓘ

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

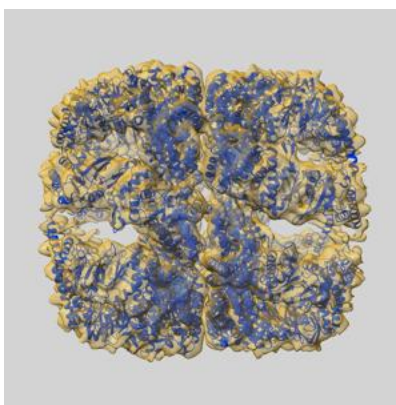
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-5395 and PDB model 3J1E. Per-residue inclusion information can be found in section [3](#) on page [6](#).

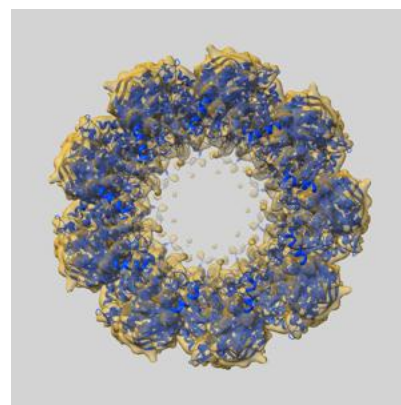
9.1 Map-model overlay [i](#)



X



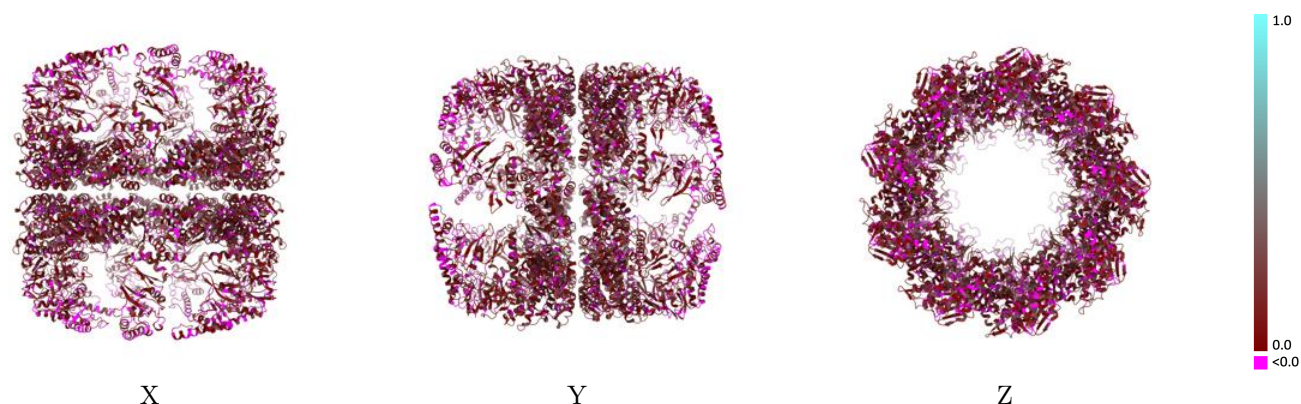
Y



Z

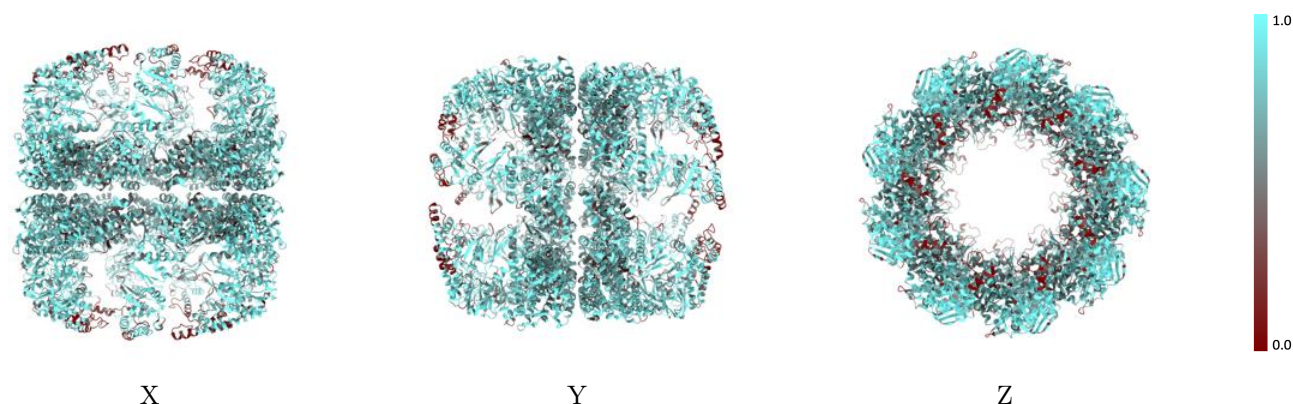
The images above show the 3D surface view of the map at the recommended contour level 5.0 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



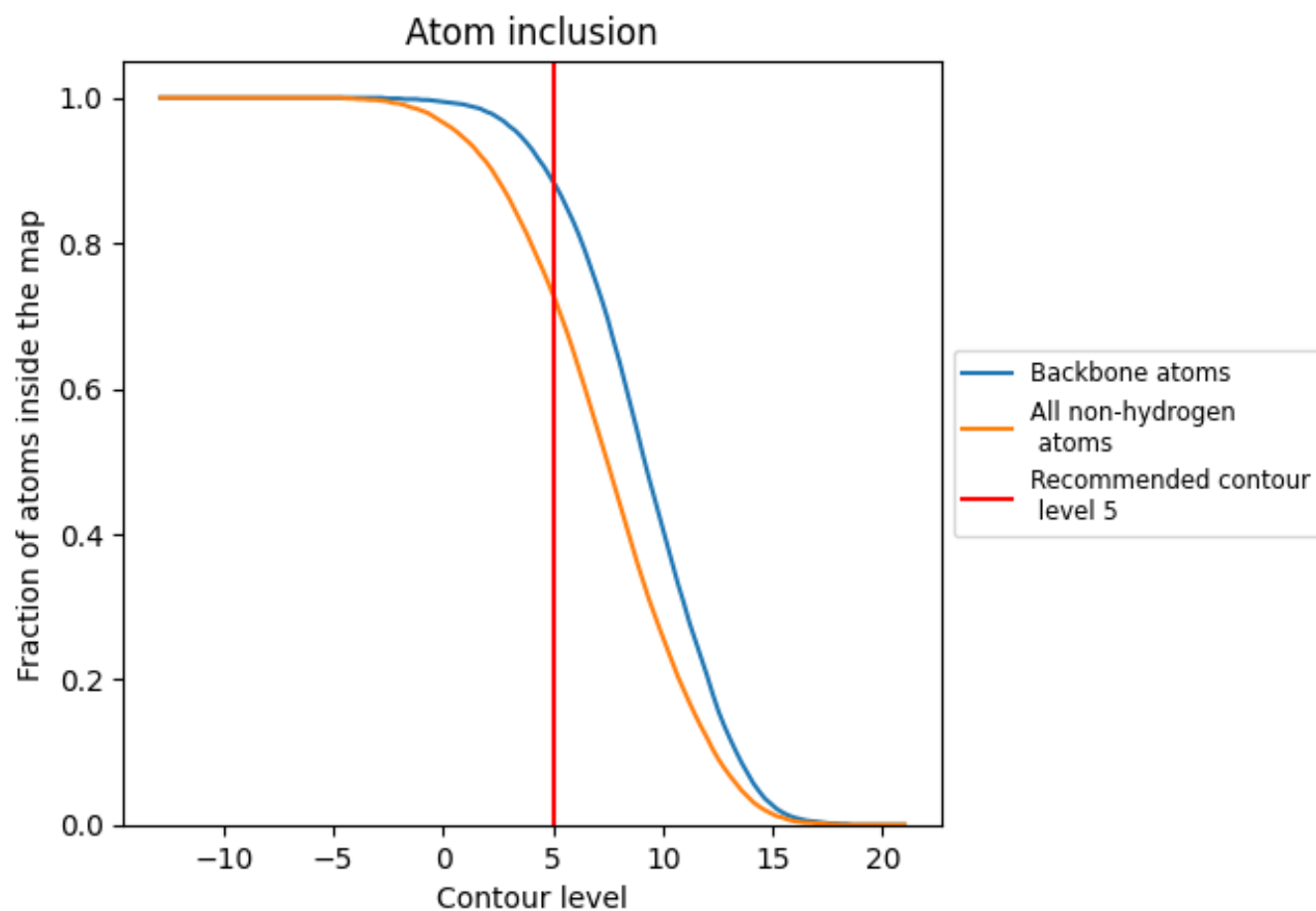
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (5).

9.4 Atom inclusion [i](#)



At the recommended contour level, 88% of all backbone atoms, 73% 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 (5) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.7300	 0.1130
A	 0.7260	 0.1160
B	 0.7330	 0.1150
C	 0.7290	 0.1140
D	 0.7290	 0.1120
E	 0.7310	 0.1160
F	 0.7320	 0.1150
G	 0.7300	 0.1120
H	 0.7280	 0.1110
I	 0.7290	 0.1140
K	 0.7320	 0.1140
L	 0.7350	 0.1120
M	 0.7320	 0.1110
N	 0.7310	 0.1130
O	 0.7360	 0.1140
P	 0.7270	 0.1130
Q	 0.7300	 0.1130
R	 0.7270	 0.1110
S	 0.7260	 0.1160

