



Full wwPDB EM Validation Report ⓘ

Mar 10, 2026 – 10:52 AM UTC

PDB ID : 3J1B / pdb_00003j1b
EMDB ID : EMD-5391
Title : Cryo-EM structure of 8-fold symmetric rATcpn-alpha 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 : 4.90 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:

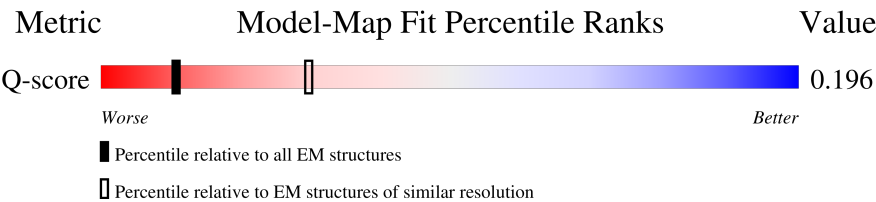
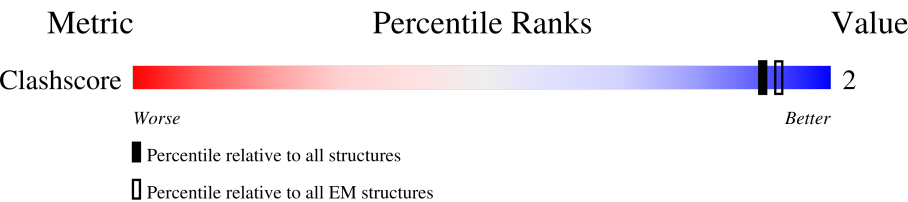
EMDB validation analysis : 0.0.1.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDb archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & 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 4.90 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	-
Q-score	-	25397	1274 (4.40 - 5.40)

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	563	17% 48% 40% • 8%
1	B	563	17% 45% 44% • 8%
1	C	563	16% 48% 40% •• 8%
1	D	563	18% 44% 45% • 8%
1	E	563	16% 45% 42% • 8%
1	F	563	16% 48% 40% • 8%

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Mol	Chain	Length	Quality of chain
1	G	563	
1	H	563	
1	I	563	
1	J	563	
1	K	563	
1	L	563	
1	M	563	
1	N	563	
1	O	563	
1	P	563	

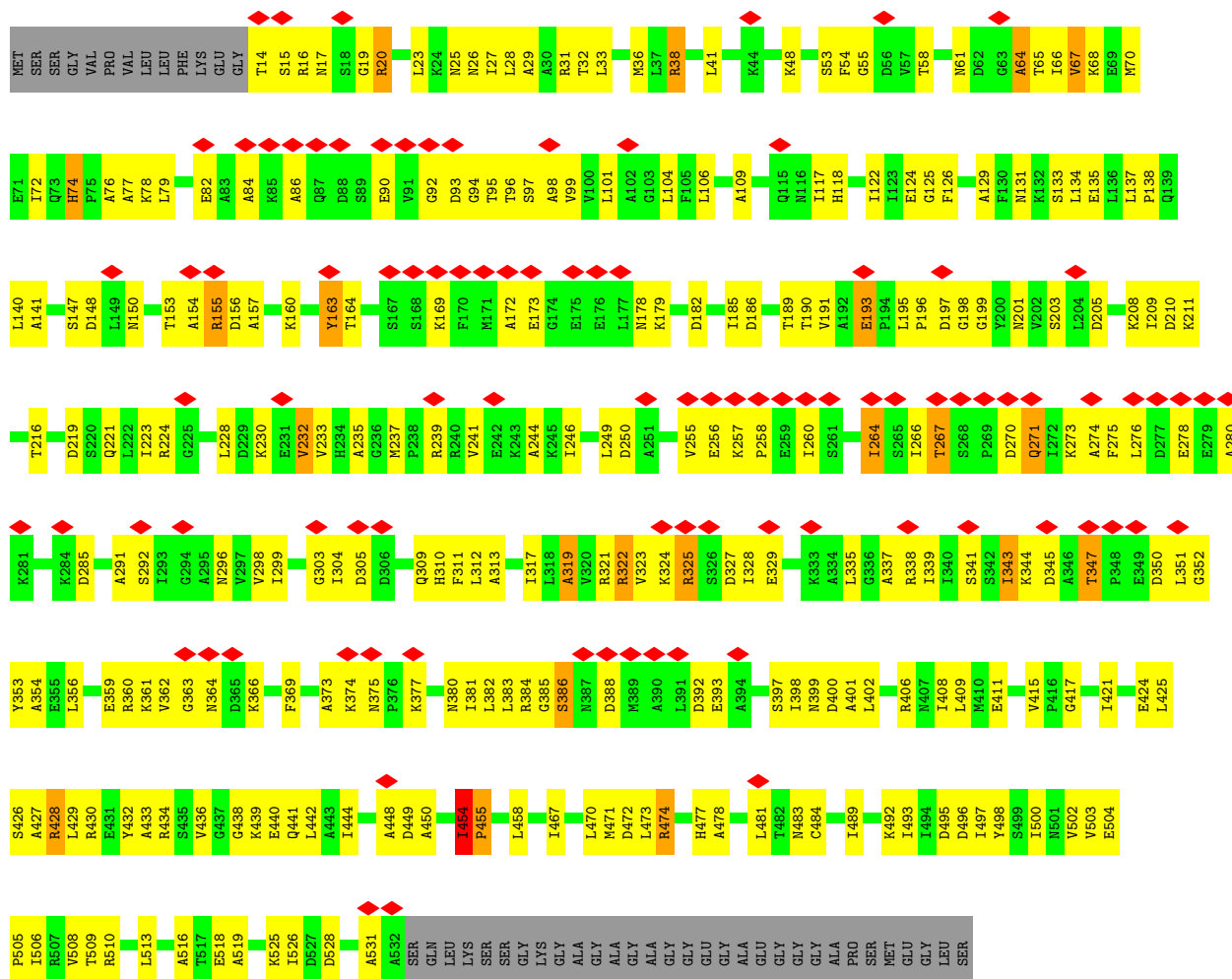
2 Entry composition

There is only 1 type of molecule in this entry. The entry contains 62992 atoms, of which 0 are hydrogens and 0 are deuteriums.

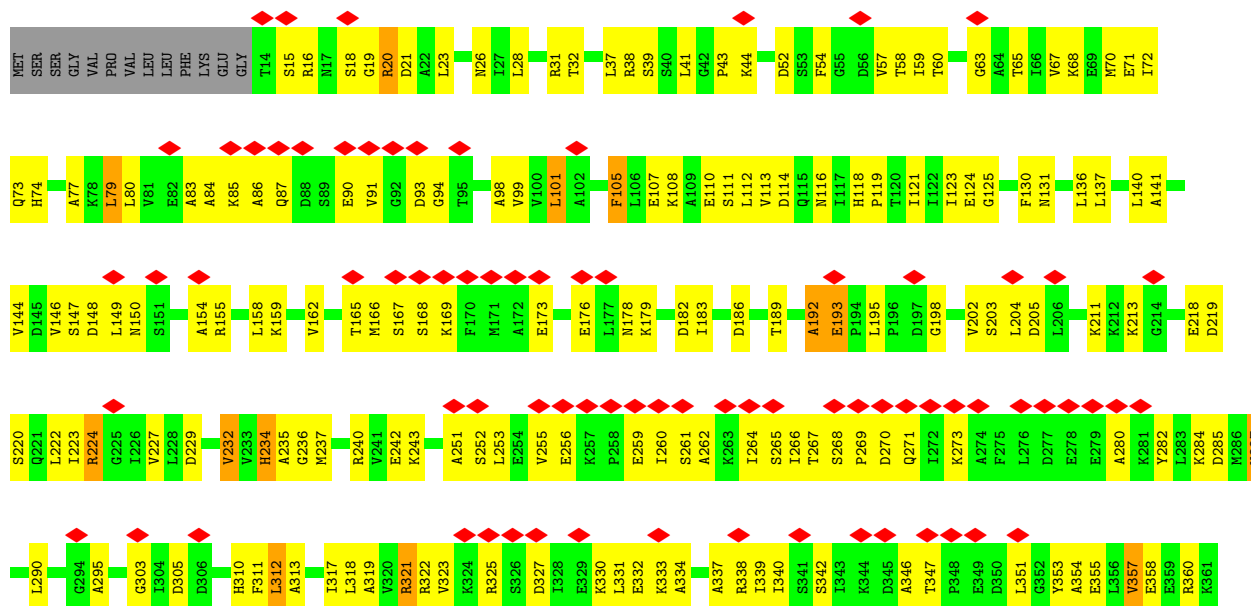
In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

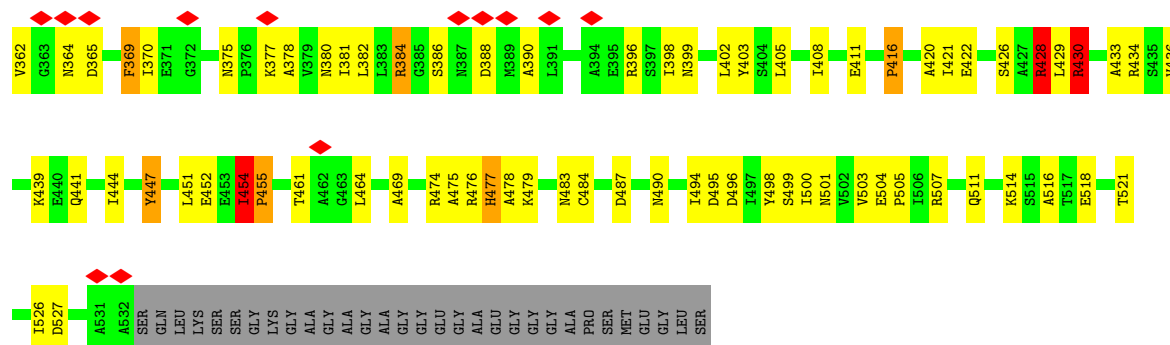
- Molecule 1 is a protein called Chaperonin alpha subunit.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	519	Total	C	N	O	S	0	0
			3937	2475	673	773	16		
1	B	519	Total	C	N	O	S	0	0
			3937	2475	673	773	16		
1	C	519	Total	C	N	O	S	0	0
			3937	2475	673	773	16		
1	D	519	Total	C	N	O	S	0	0
			3937	2475	673	773	16		
1	E	519	Total	C	N	O	S	0	0
			3937	2475	673	773	16		
1	F	519	Total	C	N	O	S	0	0
			3937	2475	673	773	16		
1	G	519	Total	C	N	O	S	0	0
			3937	2475	673	773	16		
1	H	519	Total	C	N	O	S	0	0
			3937	2475	673	773	16		
1	I	519	Total	C	N	O	S	0	0
			3937	2475	673	773	16		
1	J	519	Total	C	N	O	S	0	0
			3937	2475	673	773	16		
1	K	519	Total	C	N	O	S	0	0
			3937	2475	673	773	16		
1	L	519	Total	C	N	O	S	0	0
			3937	2475	673	773	16		
1	M	519	Total	C	N	O	S	0	0
			3937	2475	673	773	16		
1	N	519	Total	C	N	O	S	0	0
			3937	2475	673	773	16		
1	O	519	Total	C	N	O	S	0	0
			3937	2475	673	773	16		
1	P	519	Total	C	N	O	S	0	0
			3937	2475	673	773	16		

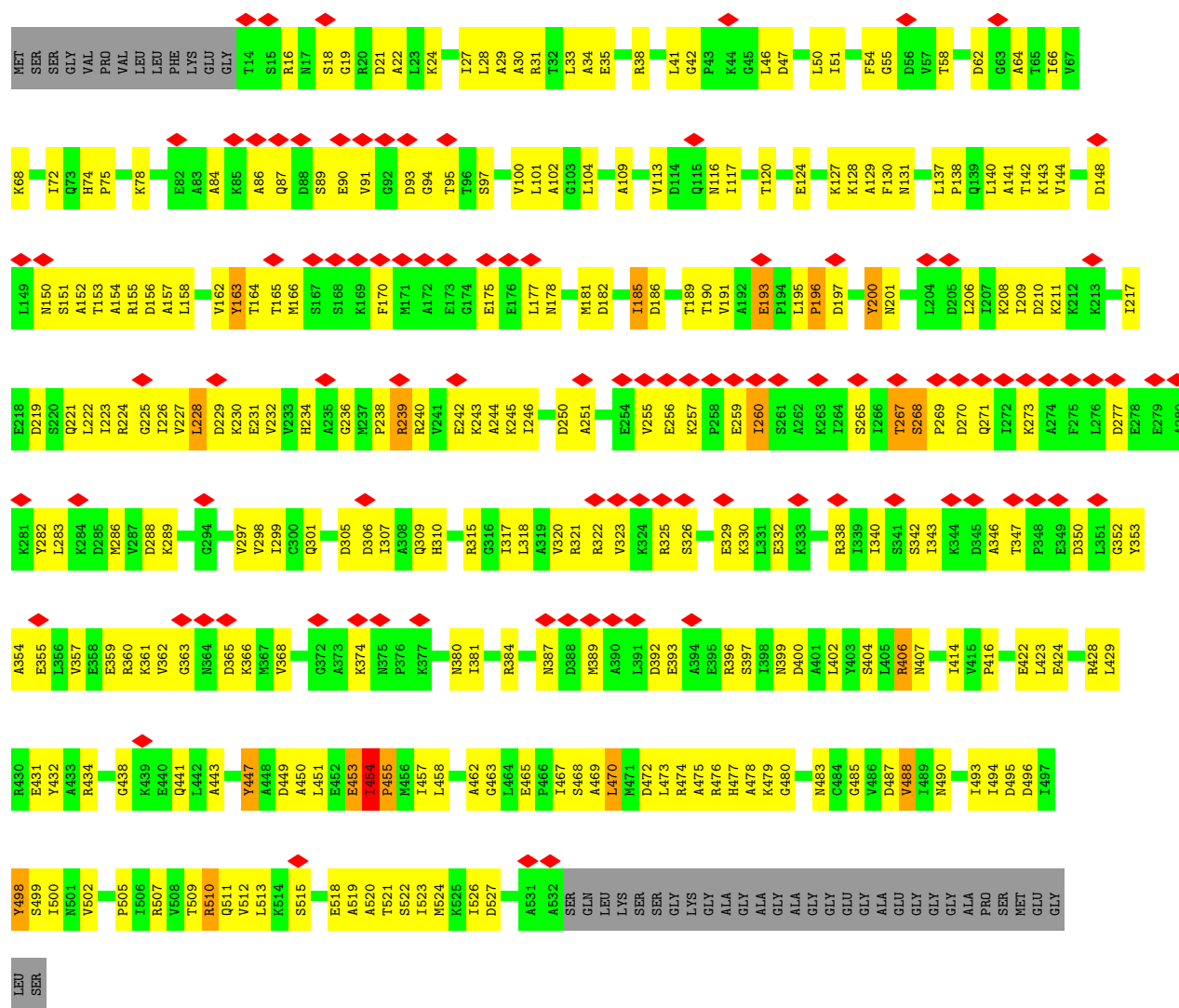


• Molecule 1: Chaperonin alpha subunit



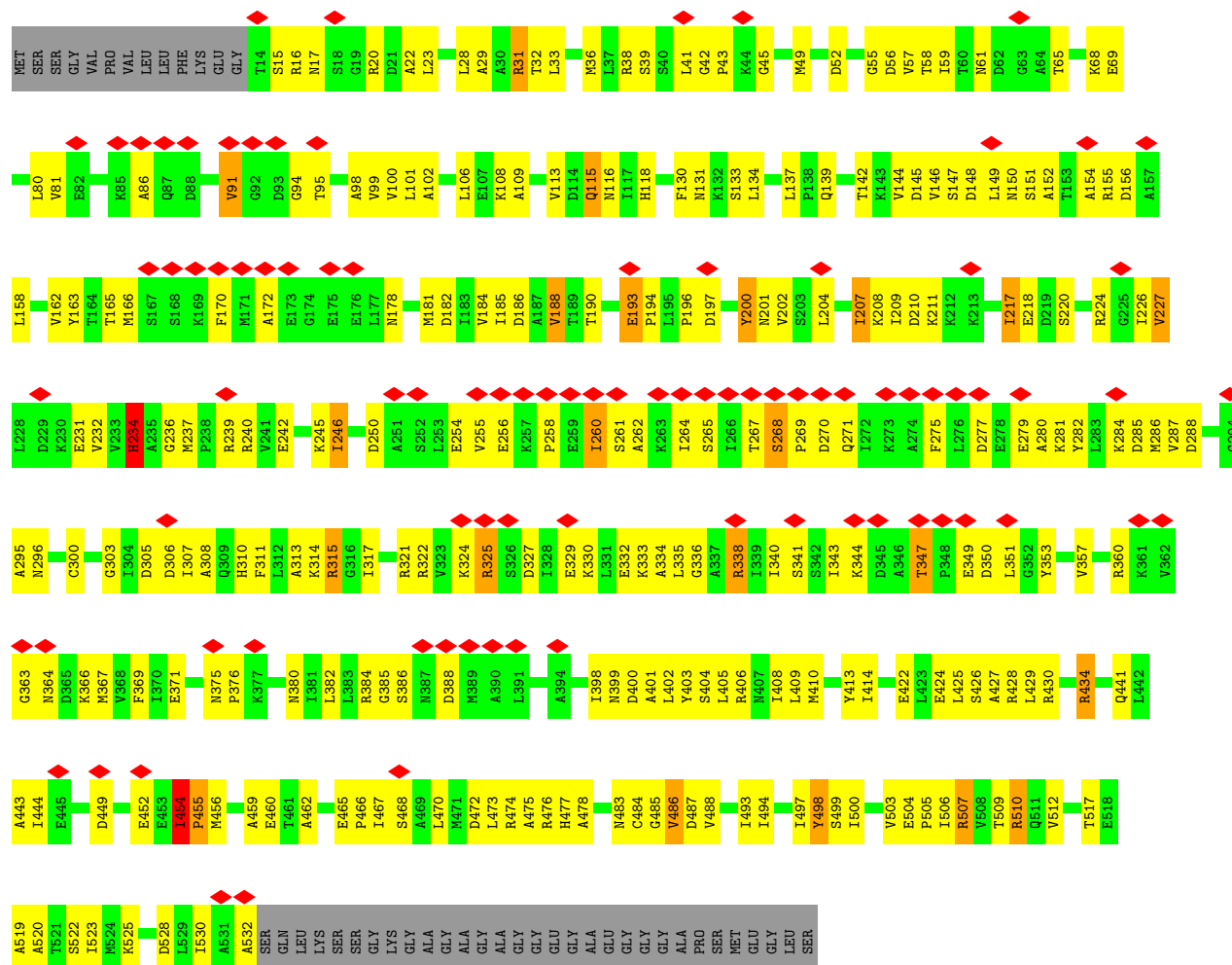


• Molecule 1: Chaperonin alpha subunit

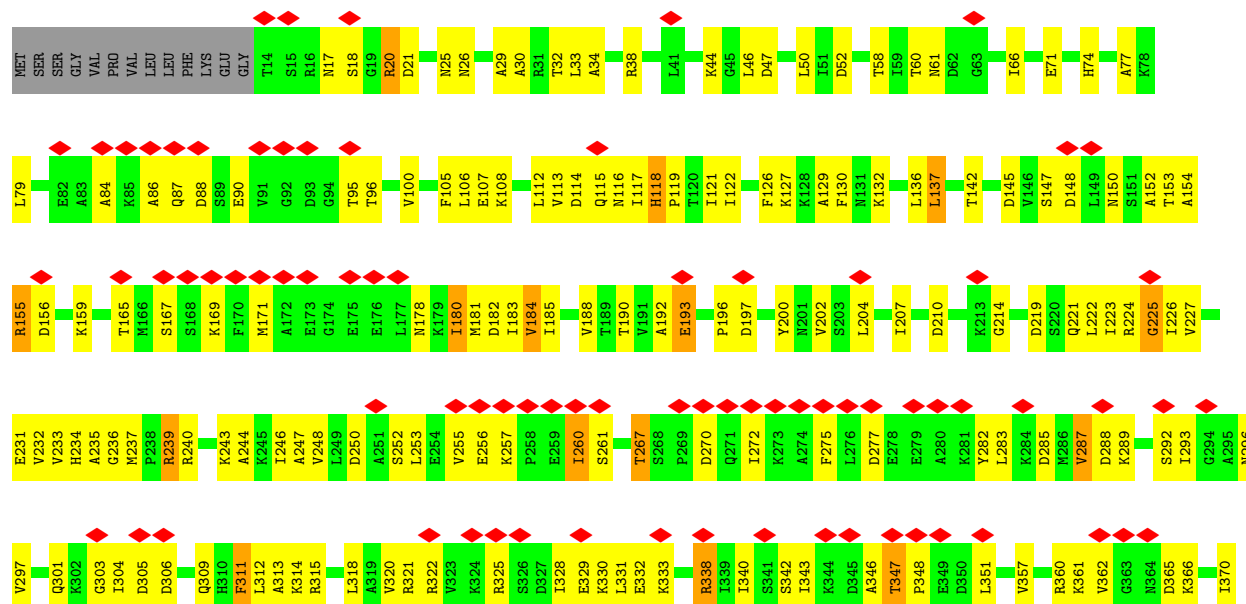


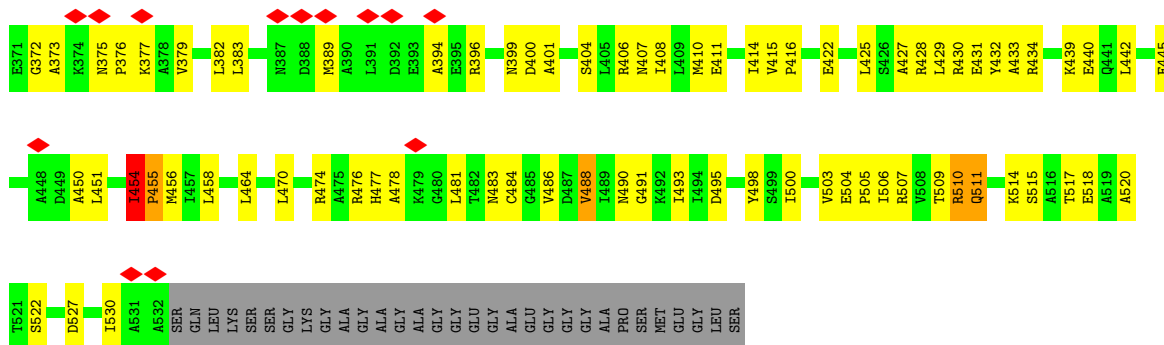
• Molecule 1: Chaperonin alpha subunit



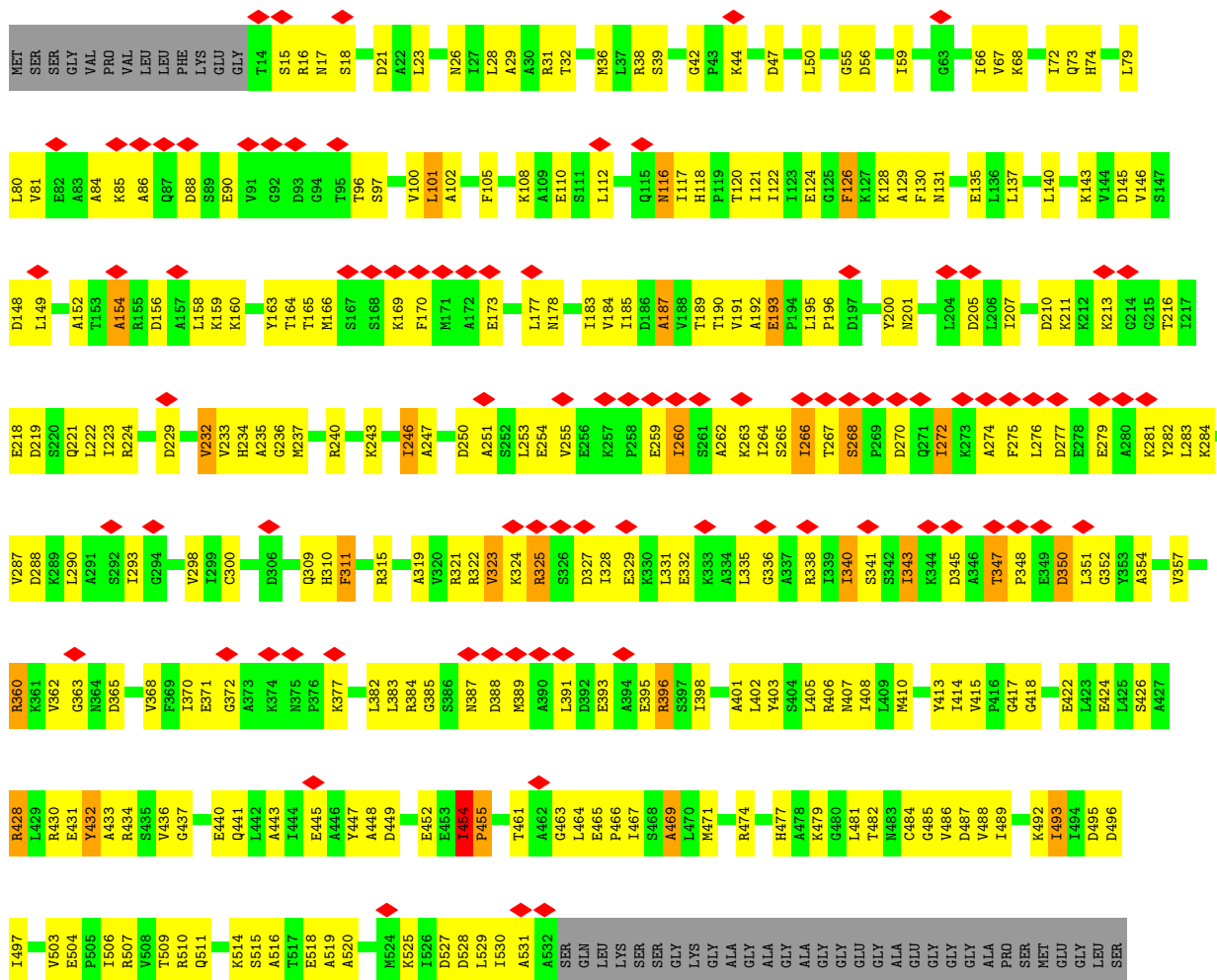


● Molecule 1: Chaperonin alpha subunit

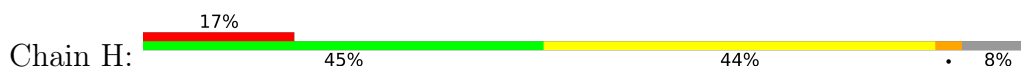




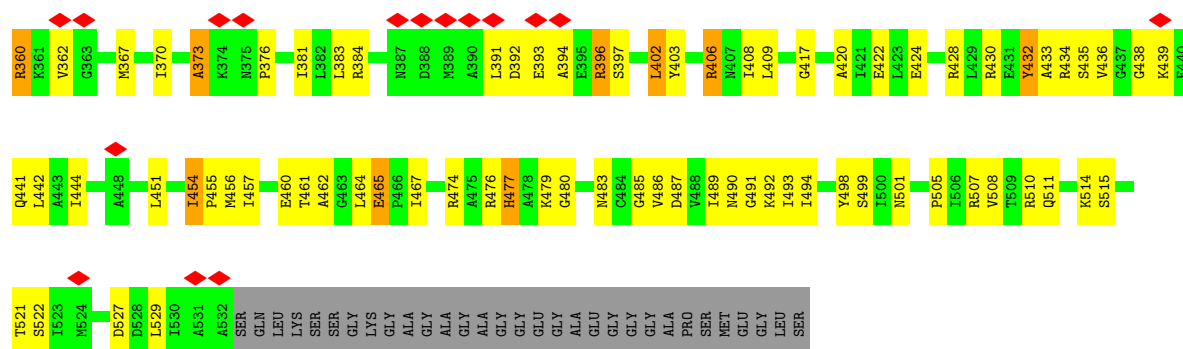
• Molecule 1: Chaperonin alpha subunit



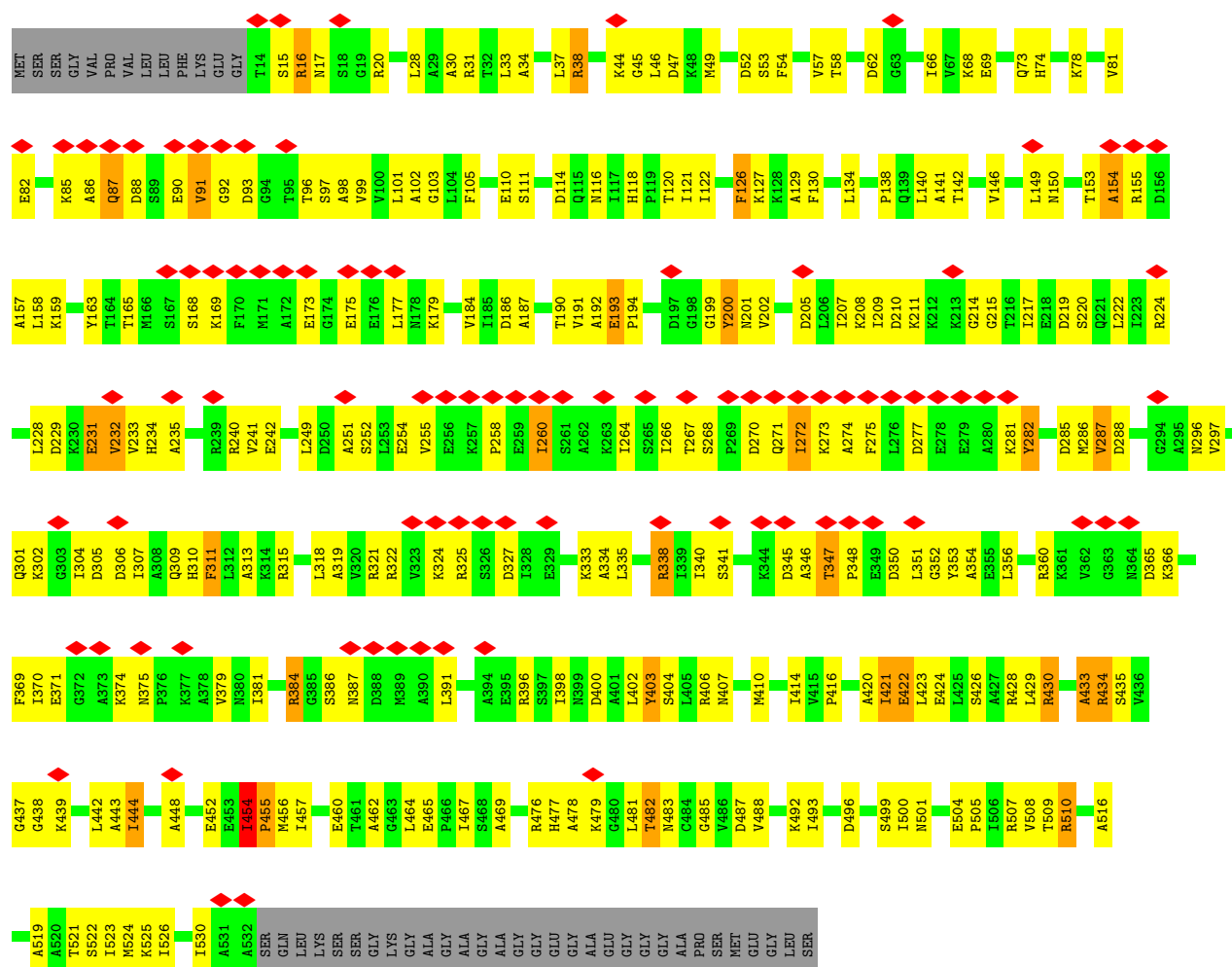
• Molecule 1: Chaperonin alpha subunit



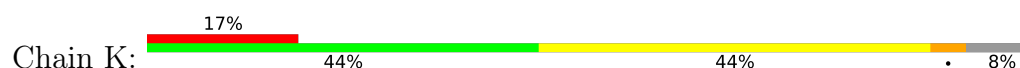


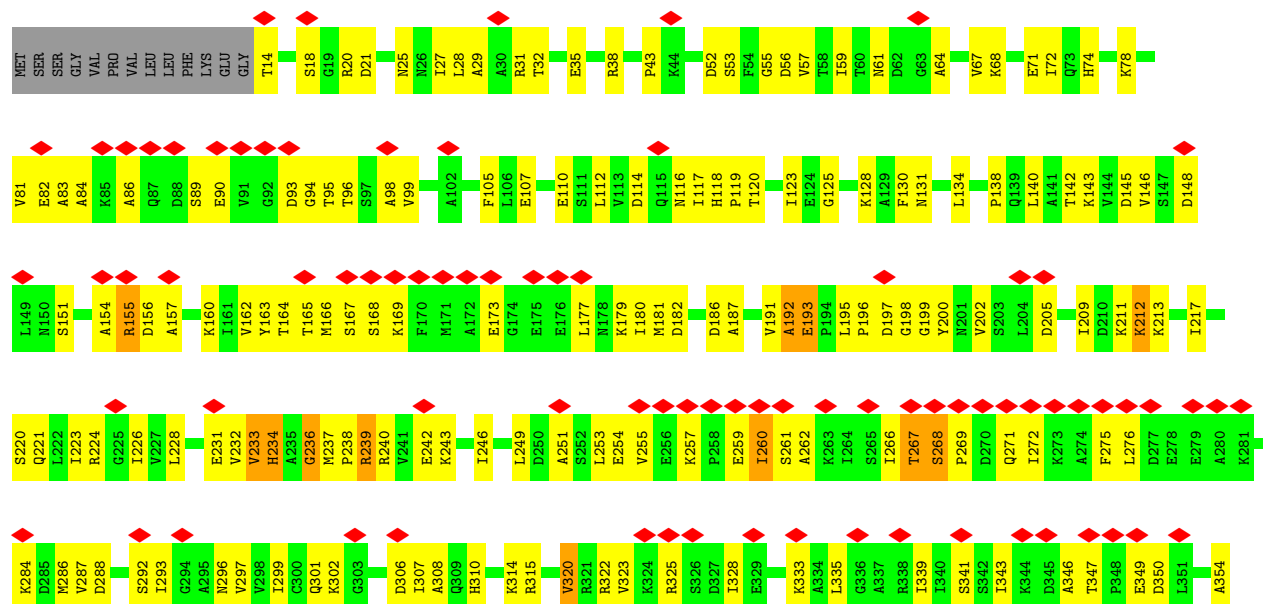


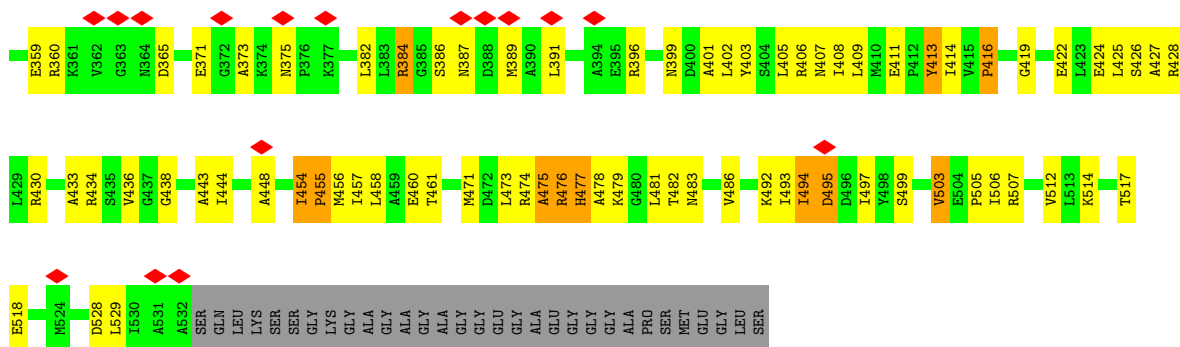
• Molecule 1: Chaperonin alpha subunit



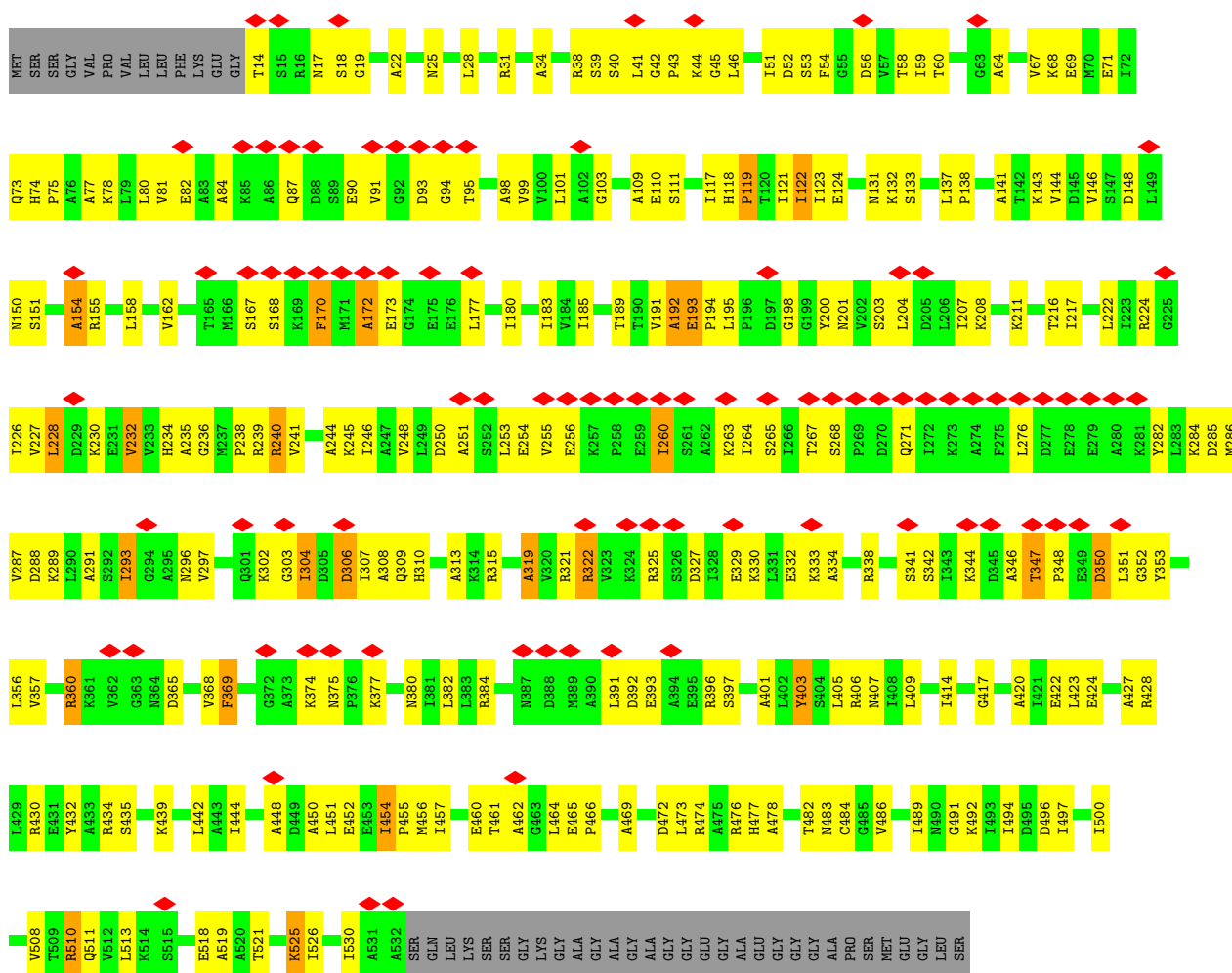
• Molecule 1: Chaperonin alpha subunit





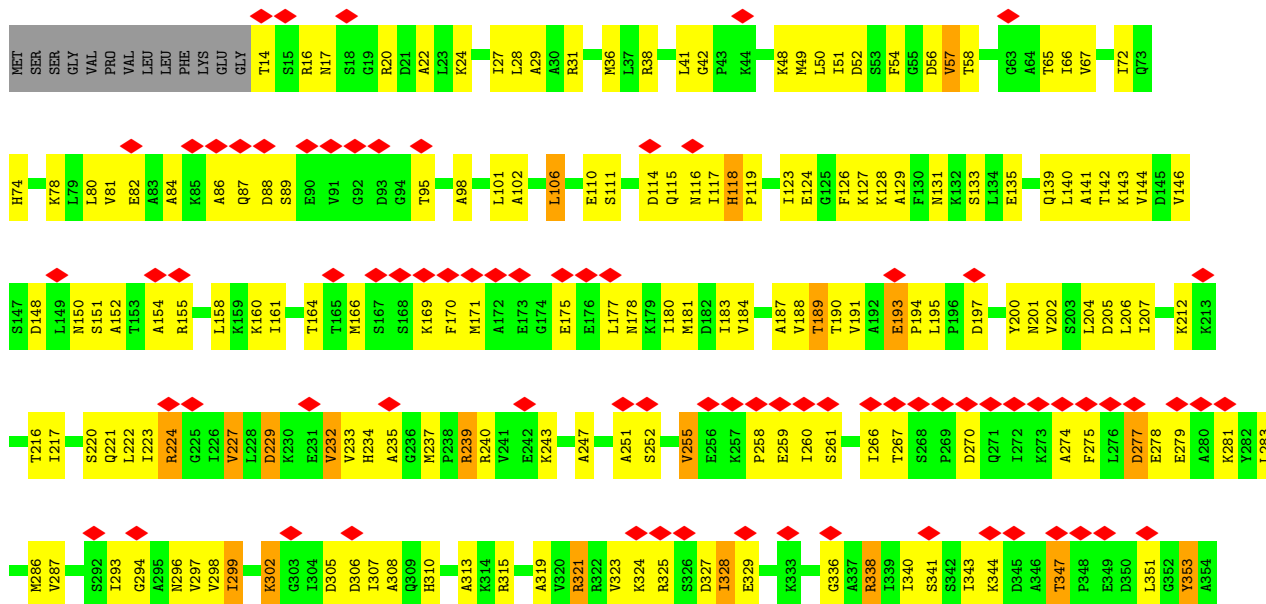


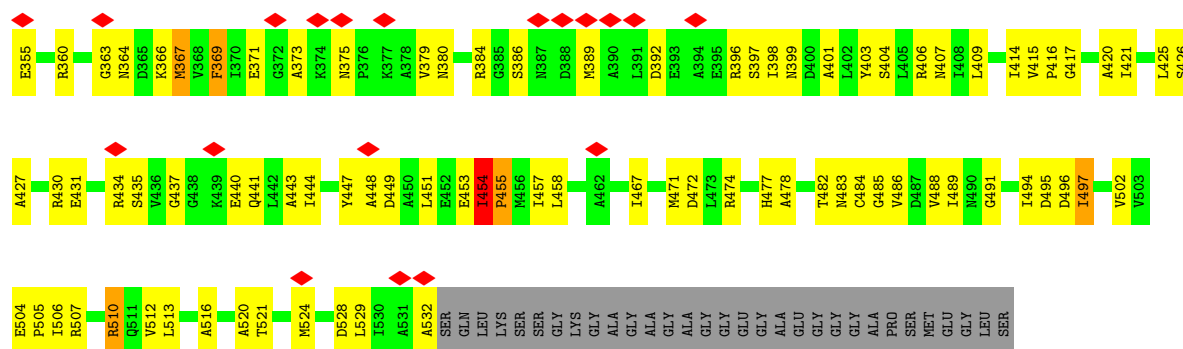
• Molecule 1: Chaperonin alpha subunit



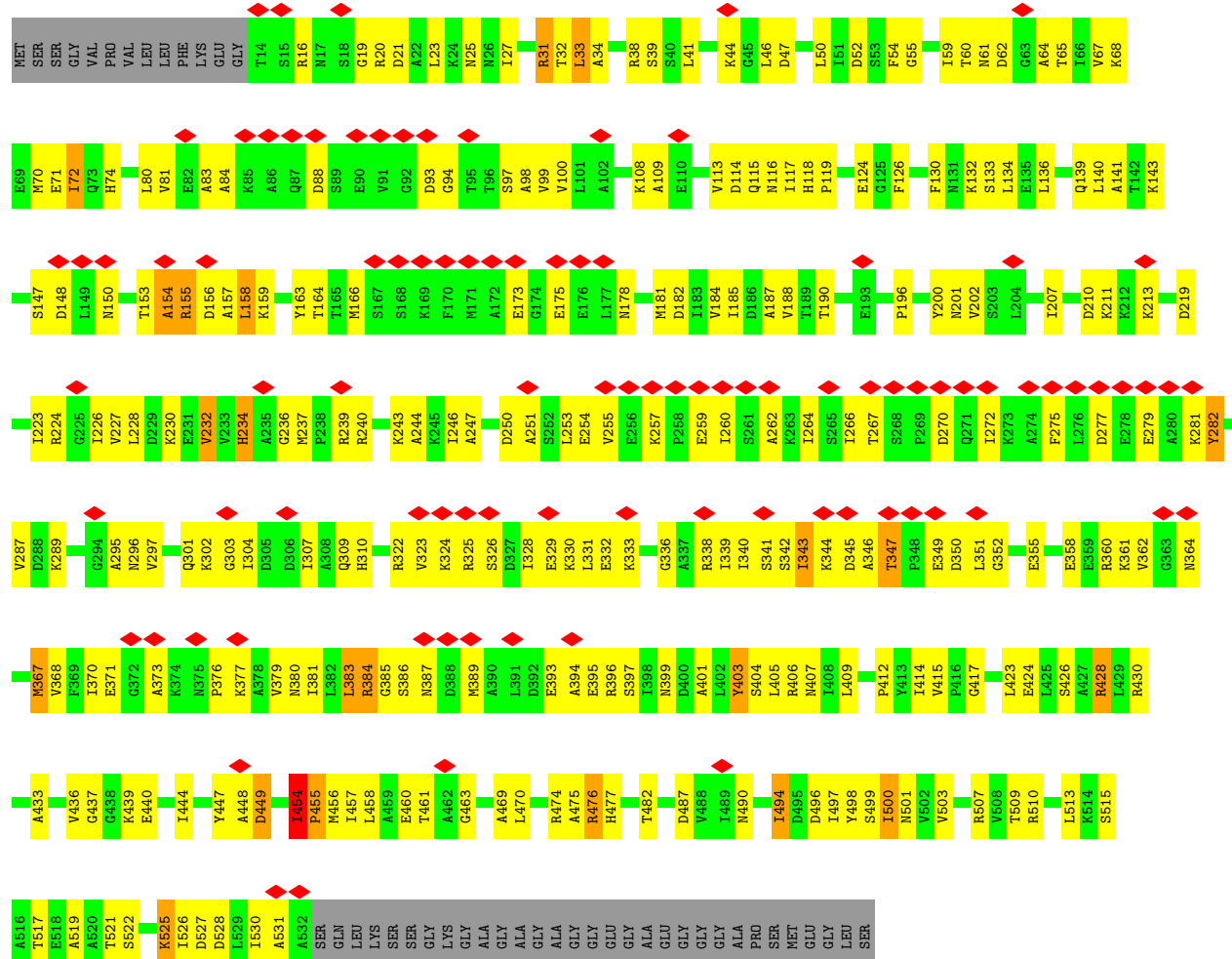
• Molecule 1: Chaperonin alpha subunit







• Molecule 1: Chaperonin alpha subunit



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C8	Depositor
Number of particles used	55460	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	13.752	Depositor
Minimum map value	-7.622	Depositor
Average map value	0.000	Depositor
Map value standard deviation	1.248	Depositor
Recommended contour level	3.3	Depositor
Map size ($\text{\AA}$)	268.704, 268.704, 268.704	wwPDB
Map dimensions	288, 288, 288	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing ($\text{\AA}$)	0.933, 0.933, 0.933	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	2.13	103/3974 (2.6%)	2.48	254/5360 (4.7%)
1	B	2.17	110/3974 (2.8%)	2.48	277/5360 (5.2%)
1	C	2.09	97/3974 (2.4%)	2.46	273/5360 (5.1%)
1	D	2.14	108/3974 (2.7%)	2.48	295/5360 (5.5%)
1	E	2.11	88/3974 (2.2%)	2.49	275/5360 (5.1%)
1	F	2.14	109/3974 (2.7%)	2.48	268/5360 (5.0%)
1	G	2.13	102/3974 (2.6%)	2.53	296/5360 (5.5%)
1	H	2.16	115/3974 (2.9%)	2.50	287/5360 (5.4%)
1	I	2.13	103/3974 (2.6%)	2.47	258/5360 (4.8%)
1	J	2.15	110/3974 (2.8%)	2.45	264/5360 (4.9%)
1	K	2.10	105/3974 (2.6%)	2.49	297/5360 (5.5%)
1	L	2.11	117/3974 (2.9%)	2.47	238/5360 (4.4%)
1	M	2.14	113/3974 (2.8%)	2.48	256/5360 (4.8%)
1	N	2.16	116/3974 (2.9%)	2.49	264/5360 (4.9%)
1	O	2.15	110/3974 (2.8%)	2.50	277/5360 (5.2%)
1	P	2.19	122/3974 (3.1%)	2.48	273/5360 (5.1%)
All	All	2.14	1728/63584 (2.7%)	2.48	4352/85760 (5.1%)

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	20
1	B	0	21
1	C	0	21
1	D	0	19
1	E	0	24
1	F	0	15
1	G	0	25
1	H	0	19
1	I	0	23

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Mol	Chain	#Chirality outliers	#Planarity outliers
1	J	0	23
1	K	0	20
1	L	0	17
1	M	0	17
1	N	0	26
1	O	0	19
1	P	0	20
All	All	0	329

All (1728) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	485	GLY	CA-C	12.42	1.63	1.52
1	L	72	ILE	CA-CB	-11.63	1.40	1.54
1	N	499	SER	CA-C	-11.08	1.37	1.52
1	F	243	LYS	CA-C	-11.05	1.40	1.53
1	M	241	VAL	CA-C	-10.96	1.39	1.52
1	C	454	ILE	CA-C	10.44	1.63	1.52
1	B	362	VAL	CA-CB	-10.29	1.41	1.54
1	I	318	LEU	CA-CB	10.25	1.66	1.53
1	J	214	GLY	C-N	10.23	1.41	1.33
1	K	526	ILE	CA-CB	-9.98	1.41	1.53
1	O	78	LYS	CA-C	9.90	1.65	1.52
1	E	367	MET	N-CA	-9.87	1.34	1.46
1	P	385	GLY	CA-C	-9.85	1.41	1.51
1	C	441	GLN	CA-CB	9.66	1.68	1.53
1	K	515	SER	N-CA	9.39	1.58	1.46
1	H	70	MET	CA-C	-9.39	1.41	1.52
1	N	96	THR	CA-C	-9.28	1.41	1.52
1	P	477	HIS	CG-ND1	-9.17	1.28	1.38
1	G	192	ALA	CA-C	9.15	1.65	1.52
1	O	298	VAL	CA-CB	-9.15	1.41	1.54
1	K	357	VAL	CA-C	-9.11	1.41	1.52
1	K	498	TYR	CA-C	9.08	1.64	1.52
1	O	111	SER	CA-C	9.05	1.64	1.52
1	B	473	LEU	C-N	8.99	1.45	1.33
1	O	180	ILE	N-CA	-8.96	1.35	1.46
1	E	260	ILE	C-N	8.95	1.45	1.33
1	H	483	ASN	CA-C	8.95	1.60	1.52
1	J	287	VAL	CA-CB	-8.94	1.44	1.54
1	F	491	GLY	CA-C	-8.93	1.39	1.51
1	P	70	MET	CA-C	-8.89	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	257	LYS	CA-C	8.84	1.60	1.52
1	K	479	LYS	N-CA	-8.83	1.34	1.46
1	F	507	ARG	CD-NE	8.80	1.58	1.46
1	P	440	GLU	N-CA	-8.78	1.34	1.46
1	P	163	TYR	CA-C	8.78	1.64	1.52
1	D	500	ILE	N-CA	8.72	1.55	1.46
1	J	297	VAL	N-CA	-8.71	1.35	1.46
1	O	486	VAL	CA-CB	-8.70	1.43	1.54
1	G	352	GLY	CA-C	-8.68	1.42	1.52
1	N	255	VAL	CA-C	8.65	1.62	1.52
1	G	431	GLU	CA-C	8.63	1.64	1.52
1	P	373	ALA	N-CA	8.58	1.56	1.46
1	P	60	THR	N-CA	8.58	1.56	1.45
1	C	290	LEU	CA-C	-8.57	1.42	1.52
1	O	65	THR	CA-C	-8.54	1.41	1.52
1	G	352	GLY	N-CA	8.53	1.52	1.44
1	P	469	ALA	C-N	8.52	1.45	1.33
1	D	476	ARG	CD-NE	8.51	1.58	1.46
1	C	382	LEU	N-CA	-8.50	1.35	1.46
1	L	448	ALA	N-CA	-8.49	1.35	1.46
1	J	360	ARG	CD-NE	8.49	1.58	1.46
1	N	243	LYS	CA-C	8.48	1.63	1.53
1	A	355	GLU	CA-C	-8.43	1.41	1.52
1	H	128	LYS	CA-C	-8.42	1.41	1.52
1	B	201	ASN	CA-CB	8.42	1.63	1.53
1	C	192	ALA	CA-C	8.39	1.64	1.52
1	B	454	ILE	CA-C	8.35	1.61	1.52
1	P	477	HIS	ND1-CE1	8.32	1.40	1.32
1	E	398	ILE	CA-CB	8.32	1.64	1.54
1	P	202	VAL	N-CA	8.32	1.56	1.46
1	O	274	ALA	C-N	8.31	1.45	1.33
1	K	347	THR	CA-CB	-8.31	1.42	1.54
1	P	72	ILE	CA-C	-8.31	1.42	1.52
1	I	491	GLY	CA-C	-8.29	1.40	1.51
1	F	227	VAL	CA-CB	-8.24	1.44	1.54
1	K	85	LYS	N-CA	-8.24	1.35	1.46
1	P	527	ASP	N-CA	8.21	1.55	1.46
1	I	164	THR	CA-CB	8.19	1.66	1.53
1	L	55	GLY	CA-C	-8.11	1.40	1.51
1	L	482	THR	CA-C	-8.11	1.43	1.53
1	D	365	ASP	N-CA	8.09	1.56	1.46
1	I	356	LEU	CA-CB	8.09	1.67	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	41	LEU	CA-CB	8.08	1.66	1.53
1	M	193	GLU	CA-C	8.06	1.61	1.52
1	M	310	HIS	CA-C	-8.06	1.42	1.52
1	H	407	ASN	C-N	8.03	1.44	1.33
1	K	242	GLU	CA-C	-8.02	1.43	1.52
1	I	19	GLY	CA-C	-8.02	1.45	1.52
1	B	36	MET	N-CA	-8.00	1.35	1.46
1	H	197	ASP	CA-C	-7.99	1.41	1.52
1	F	493	ILE	CA-C	7.99	1.61	1.52
1	I	144	VAL	CA-C	-7.98	1.42	1.52
1	M	251	ALA	CA-C	-7.98	1.42	1.53
1	C	398	ILE	N-CA	7.98	1.56	1.46
1	O	474	ARG	CA-C	7.98	1.62	1.52
1	H	193	GLU	CA-C	7.97	1.62	1.52
1	L	187	ALA	C-N	7.97	1.44	1.33
1	O	392	ASP	CA-C	-7.94	1.42	1.52
1	J	437	GLY	CA-C	-7.93	1.43	1.52
1	J	217	ILE	C-N	7.92	1.44	1.33
1	E	349	GLU	CA-CB	-7.91	1.43	1.54
1	K	274	ALA	N-CA	-7.91	1.35	1.46
1	H	198	GLY	CA-C	-7.87	1.40	1.51
1	B	373	ALA	N-CA	-7.86	1.36	1.46
1	E	227	VAL	CA-C	-7.85	1.43	1.52
1	C	240	ARG	CD-NE	7.83	1.57	1.46
1	J	509	THR	C-N	7.82	1.43	1.33
1	K	485	GLY	CA-C	-7.82	1.43	1.51
1	M	380	ASN	CA-C	7.79	1.61	1.52
1	G	300	CYS	CA-C	-7.78	1.43	1.52
1	D	326	SER	CA-CB	7.77	1.65	1.53
1	E	422	GLU	CA-C	-7.77	1.43	1.52
1	A	67	VAL	CA-CB	7.76	1.63	1.54
1	L	242	GLU	C-N	7.76	1.43	1.33
1	C	243	LYS	CA-C	-7.75	1.44	1.53
1	F	272	ILE	CA-C	-7.74	1.42	1.52
1	F	289	LYS	C-N	7.73	1.43	1.33
1	M	240	ARG	CA-C	-7.73	1.42	1.52
1	G	323	VAL	C-N	7.73	1.43	1.33
1	L	240	ARG	CD-NE	7.71	1.57	1.46
1	H	270	ASP	CA-CB	7.71	1.66	1.53
1	H	220	SER	C-N	7.70	1.43	1.33
1	B	77	ALA	C-N	7.70	1.44	1.33
1	G	433	ALA	N-CA	-7.69	1.36	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	H	297	VAL	CA-CB	7.68	1.65	1.54
1	J	46	LEU	CA-CB	7.67	1.64	1.53
1	B	360	ARG	C-O	-7.64	1.14	1.23
1	D	137	LEU	CA-CB	7.62	1.65	1.53
1	P	394	ALA	C-N	7.62	1.44	1.33
1	N	77	ALA	C-N	7.61	1.44	1.33
1	I	406	ARG	CD-NE	7.61	1.56	1.46
1	M	224	ARG	CD-NE	7.61	1.56	1.46
1	K	155	ARG	CA-C	7.60	1.62	1.52
1	F	243	LYS	CA-CB	7.60	1.65	1.53
1	H	155	ARG	CA-C	7.60	1.62	1.52
1	M	476	ARG	CA-C	7.58	1.62	1.52
1	C	44	LYS	C-N	7.58	1.40	1.33
1	E	197	ASP	CA-C	7.58	1.64	1.52
1	P	187	ALA	N-CA	-7.57	1.37	1.46
1	D	315	ARG	CD-NE	7.56	1.56	1.46
1	G	163	TYR	CA-C	7.56	1.62	1.52
1	C	390	ALA	CA-C	7.55	1.63	1.52
1	O	52	ASP	C-N	7.54	1.44	1.33
1	B	208	LYS	C-N	7.53	1.43	1.33
1	I	40	SER	CA-C	-7.53	1.42	1.52
1	B	72	ILE	CA-C	-7.53	1.43	1.52
1	L	413	TYR	CA-C	-7.52	1.43	1.52
1	M	271	GLN	CA-CB	7.52	1.66	1.53
1	I	31	ARG	CD-NE	7.51	1.56	1.46
1	O	258	PRO	CA-C	-7.50	1.43	1.52
1	J	52	ASP	C-N	7.50	1.43	1.33
1	M	417	GLY	N-CA	-7.49	1.34	1.45
1	E	148	ASP	CA-C	7.49	1.59	1.52
1	D	365	ASP	C-N	7.48	1.43	1.33
1	I	16	ARG	C-N	7.47	1.43	1.33
1	B	429	LEU	C-N	7.45	1.43	1.33
1	D	208	LYS	CA-C	-7.44	1.43	1.52
1	H	461	THR	CA-C	7.44	1.62	1.52
1	N	379	VAL	N-CA	7.41	1.54	1.46
1	G	447	TYR	CA-C	-7.41	1.42	1.52
1	K	388	ASP	N-CA	-7.41	1.35	1.46
1	F	382	LEU	N-CA	-7.37	1.37	1.46
1	H	488	VAL	CA-CB	-7.35	1.45	1.54
1	H	352	GLY	N-CA	7.35	1.51	1.44
1	P	47	ASP	CA-C	-7.33	1.43	1.52
1	P	20	ARG	CA-CB	7.33	1.65	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	229	ASP	CA-CB	7.32	1.66	1.53
1	N	503	VAL	CA-C	-7.32	1.43	1.52
1	G	385	GLY	CA-C	-7.31	1.43	1.51
1	L	162	VAL	N-CA	-7.31	1.37	1.46
1	L	138	PRO	CA-C	-7.31	1.42	1.52
1	L	296	ASN	CA-C	-7.30	1.45	1.52
1	G	253	LEU	CA-CB	7.30	1.62	1.52
1	I	321	ARG	CA-C	7.29	1.57	1.53
1	E	357	VAL	C-N	7.29	1.43	1.33
1	H	180	ILE	C-N	7.29	1.43	1.33
1	A	477	HIS	ND1-CE1	7.28	1.39	1.32
1	F	342	SER	C-N	7.28	1.43	1.33
1	I	40	SER	CA-CB	7.28	1.63	1.53
1	N	105	PHE	CA-CB	7.27	1.65	1.53
1	E	262	ALA	CA-C	-7.27	1.43	1.52
1	H	110	GLU	C-N	7.27	1.43	1.33
1	D	152	ALA	N-CA	-7.25	1.39	1.46
1	D	246	ILE	C-N	7.25	1.43	1.33
1	E	344	LYS	CA-C	-7.24	1.43	1.52
1	N	501	ASN	CA-CB	7.24	1.64	1.53
1	G	485	GLY	N-CA	-7.23	1.37	1.45
1	M	333	LYS	CA-CB	7.22	1.65	1.53
1	G	101	LEU	CA-CB	7.21	1.64	1.53
1	H	409	LEU	CA-CB	7.21	1.64	1.53
1	L	59	ILE	CA-CB	7.21	1.62	1.53
1	F	474	ARG	CD-NE	7.20	1.56	1.46
1	I	460	GLU	C-N	7.20	1.43	1.33
1	A	455	PRO	CA-CB	-7.19	1.43	1.53
1	P	510	ARG	CD-NE	7.18	1.56	1.46
1	O	375	ASN	CA-CB	7.18	1.59	1.53
1	N	289	LYS	CA-C	-7.17	1.43	1.52
1	F	130	PHE	CA-C	-7.16	1.43	1.52
1	O	397	SER	CA-C	7.16	1.62	1.52
1	I	171	MET	CA-CB	7.16	1.64	1.53
1	C	43	PRO	CA-C	-7.16	1.44	1.52
1	D	323	VAL	CA-C	-7.16	1.44	1.52
1	P	19	GLY	N-CA	7.16	1.55	1.45
1	M	265	SER	CA-CB	7.15	1.63	1.53
1	P	497	ILE	C-N	7.14	1.43	1.33
1	B	386	SER	CA-CB	7.14	1.65	1.53
1	C	15	SER	C-N	7.13	1.43	1.33
1	J	121	ILE	CA-C	-7.13	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	406	ARG	CD-NE	7.13	1.56	1.46
1	B	310	HIS	CA-CB	7.13	1.64	1.53
1	E	307	ILE	CA-C	-7.13	1.44	1.52
1	A	327	ASP	N-CA	-7.12	1.37	1.46
1	J	421	ILE	CA-C	7.12	1.61	1.52
1	K	514	LYS	N-CA	-7.12	1.37	1.46
1	K	415	VAL	C-O	-7.11	1.18	1.24
1	B	381	ILE	CA-C	-7.11	1.44	1.52
1	L	315	ARG	C-N	7.10	1.43	1.33
1	M	434	ARG	CD-NE	7.10	1.56	1.46
1	L	382	LEU	CA-C	-7.09	1.44	1.52
1	G	84	ALA	CA-C	7.09	1.61	1.52
1	G	146	VAL	CA-C	7.09	1.59	1.52
1	A	357	VAL	N-CA	-7.08	1.37	1.46
1	N	275	PHE	CA-CB	7.08	1.64	1.53
1	I	262	ALA	CA-CB	7.07	1.64	1.53
1	J	224	ARG	CD-NE	7.07	1.56	1.46
1	J	20	ARG	NE-CZ	7.07	1.40	1.33
1	M	28	LEU	N-CA	7.06	1.54	1.46
1	O	529	LEU	CA-C	-7.06	1.45	1.52
1	H	41	LEU	C-N	7.05	1.44	1.33
1	H	382	LEU	N-CA	-7.05	1.37	1.46
1	B	291	ALA	C-N	7.04	1.43	1.33
1	C	99	VAL	C-N	7.04	1.42	1.33
1	L	493	ILE	C-O	-7.04	1.16	1.24
1	K	259	GLU	CA-C	-7.04	1.43	1.52
1	L	117	ILE	N-CA	-7.03	1.37	1.46
1	E	65	THR	CA-C	7.02	1.61	1.52
1	J	496	ASP	N-CA	-7.02	1.37	1.46
1	H	271	GLN	C-N	7.01	1.42	1.33
1	H	314	LYS	CA-C	-7.01	1.43	1.52
1	J	285	ASP	N-CA	-7.01	1.38	1.46
1	G	42	GLY	C-N	-7.00	1.27	1.33
1	O	81	VAL	CA-C	-7.00	1.43	1.52
1	H	130	PHE	N-CA	-6.99	1.37	1.46
1	O	184	VAL	CA-CB	-6.99	1.45	1.54
1	M	137	LEU	CA-C	6.98	1.61	1.52
1	I	332	GLU	CA-C	-6.98	1.44	1.52
1	D	463	GLY	CA-C	-6.97	1.42	1.51
1	O	328	ILE	CA-C	-6.96	1.43	1.52
1	I	454	ILE	CA-C	6.96	1.60	1.52
1	I	393	GLU	CA-C	6.95	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	454	ILE	CA-C	6.95	1.60	1.52
1	E	520	ALA	C-O	-6.95	1.15	1.24
1	L	29	ALA	N-CA	6.95	1.54	1.46
1	A	428	ARG	CD-NE	6.94	1.55	1.46
1	A	119	PRO	CA-CB	-6.93	1.44	1.53
1	H	454	ILE	CA-C	6.93	1.60	1.52
1	I	70	MET	CA-C	-6.93	1.44	1.52
1	P	166	MET	CA-C	-6.92	1.43	1.52
1	B	325	ARG	CD-NE	6.92	1.55	1.46
1	P	240	ARG	NE-CZ	6.92	1.40	1.33
1	B	118	HIS	CA-CB	6.91	1.63	1.53
1	N	239	ARG	C-N	6.91	1.42	1.33
1	A	29	ALA	CA-C	6.91	1.61	1.52
1	G	520	ALA	CA-C	-6.90	1.43	1.52
1	M	414	ILE	N-CA	6.90	1.53	1.46
1	A	44	LYS	N-CA	-6.90	1.37	1.46
1	K	395	GLU	CA-CB	6.90	1.64	1.53
1	G	260	ILE	CA-C	-6.89	1.45	1.52
1	J	356	LEU	CA-C	-6.89	1.44	1.52
1	K	187	ALA	C-N	6.89	1.42	1.33
1	C	451	LEU	CA-C	6.88	1.61	1.52
1	F	361	LYS	CA-C	-6.87	1.44	1.52
1	E	38	ARG	CD-NE	6.86	1.55	1.46
1	F	481	LEU	CA-CB	6.86	1.65	1.53
1	I	196	PRO	N-CA	-6.86	1.38	1.47
1	O	416	PRO	N-CA	-6.85	1.39	1.46
1	F	517	THR	CA-C	-6.84	1.43	1.52
1	A	298	VAL	CA-C	6.84	1.60	1.52
1	H	489	ILE	CA-C	6.84	1.61	1.52
1	N	483	ASN	C-N	6.83	1.43	1.33
1	K	432	TYR	CA-C	-6.83	1.44	1.52
1	N	297	VAL	CA-C	6.83	1.61	1.52
1	N	156	ASP	CA-CB	6.82	1.65	1.53
1	D	186	ASP	CA-C	6.80	1.61	1.52
1	P	31	ARG	CD-NE	6.80	1.55	1.46
1	C	227	VAL	N-CA	-6.79	1.38	1.46
1	M	183	ILE	CA-CB	6.79	1.62	1.54
1	L	56	ASP	CA-C	6.79	1.61	1.52
1	M	444	ILE	N-CA	6.79	1.54	1.46
1	G	266	ILE	C-N	6.78	1.40	1.33
1	J	90	GLU	CA-C	6.78	1.61	1.52
1	D	38	ARG	CD-NE	6.78	1.55	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	H	77	ALA	N-CA	-6.78	1.37	1.46
1	I	432	TYR	CA-CB	6.78	1.64	1.53
1	P	155	ARG	CA-C	6.77	1.61	1.52
1	K	90	GLU	CA-C	6.76	1.60	1.52
1	N	194	PRO	CA-C	6.76	1.59	1.52
1	E	151	SER	CA-C	-6.75	1.44	1.52
1	L	310	HIS	CB-CG	-6.75	1.40	1.50
1	K	31	ARG	CD-NE	6.75	1.55	1.46
1	I	105	PHE	CA-CB	6.75	1.64	1.53
1	A	182	ASP	CA-CB	6.75	1.63	1.53
1	H	419	GLY	CA-C	-6.75	1.42	1.51
1	L	253	LEU	CA-CB	6.74	1.62	1.52
1	P	344	LYS	CA-C	6.74	1.61	1.52
1	K	529	LEU	CA-C	6.73	1.59	1.52
1	J	92	GLY	N-CA	6.73	1.55	1.45
1	I	435	SER	C-N	6.73	1.41	1.33
1	M	346	ALA	C-N	6.73	1.41	1.33
1	H	135	GLU	C-N	6.72	1.42	1.33
1	B	328	ILE	CB-CG1	6.72	1.66	1.53
1	H	392	ASP	CA-C	-6.72	1.43	1.52
1	A	103	GLY	CA-C	-6.71	1.44	1.52
1	N	161	ILE	N-CA	-6.70	1.38	1.46
1	B	65	THR	CA-C	-6.70	1.44	1.52
1	E	118	HIS	CA-C	6.70	1.59	1.53
1	K	492	LYS	CA-C	6.70	1.60	1.52
1	M	405	LEU	CA-C	-6.70	1.44	1.52
1	H	212	LYS	CA-CB	6.69	1.65	1.53
1	J	386	SER	CA-C	6.69	1.61	1.52
1	M	201	ASN	N-CA	-6.69	1.38	1.46
1	F	50	LEU	CA-C	-6.67	1.45	1.52
1	C	57	VAL	N-CA	-6.67	1.38	1.46
1	G	531	ALA	CA-C	-6.67	1.44	1.52
1	L	422	GLU	CA-C	6.67	1.61	1.52
1	I	408	ILE	CA-C	6.66	1.61	1.52
1	L	232	VAL	CA-C	-6.66	1.44	1.52
1	L	234	HIS	CE1-NE2	6.66	1.39	1.32
1	L	396	ARG	C-N	6.66	1.42	1.33
1	L	74	HIS	CA-CB	6.65	1.64	1.53
1	M	133	SER	CA-C	6.65	1.61	1.52
1	D	392	ASP	CA-C	-6.65	1.43	1.52
1	J	282	TYR	C-O	-6.65	1.16	1.24
1	D	128	LYS	N-CA	-6.65	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	296	ASN	CA-C	-6.65	1.45	1.52
1	O	497	ILE	CA-CB	-6.64	1.45	1.54
1	I	139	GLN	CA-C	-6.64	1.44	1.52
1	H	261	SER	CA-C	-6.64	1.44	1.52
1	A	469	ALA	CA-C	-6.64	1.43	1.52
1	N	108	LYS	C-N	6.64	1.42	1.33
1	F	362	VAL	CA-C	-6.63	1.44	1.52
1	C	287	VAL	CA-C	6.63	1.61	1.52
1	M	19	GLY	CA-C	6.63	1.61	1.51
1	F	87	GLN	N-CA	-6.62	1.37	1.46
1	K	193	GLU	CA-CB	6.62	1.63	1.54
1	I	307	ILE	CA-CB	-6.62	1.46	1.54
1	P	118	HIS	CA-CB	6.62	1.63	1.53
1	L	262	ALA	N-CA	-6.60	1.38	1.46
1	M	226	ILE	C-O	6.60	1.32	1.24
1	H	343	ILE	CA-CB	6.60	1.62	1.54
1	M	180	ILE	CA-CB	-6.60	1.46	1.54
1	M	350	ASP	N-CA	6.59	1.53	1.46
1	M	452	GLU	N-CA	-6.59	1.37	1.46
1	C	402	LEU	CA-C	6.58	1.61	1.52
1	H	195	LEU	CA-CB	6.57	1.62	1.54
1	A	423	LEU	CA-CB	6.57	1.63	1.53
1	D	90	GLU	C-N	6.57	1.42	1.33
1	E	100	VAL	CA-CB	-6.57	1.46	1.54
1	M	482	THR	C-N	6.56	1.42	1.33
1	O	323	VAL	CA-CB	6.56	1.61	1.54
1	N	461	THR	C-N	6.55	1.43	1.33
1	J	530	ILE	CA-C	6.55	1.61	1.52
1	P	259	GLU	CA-C	-6.54	1.44	1.52
1	K	257	LYS	N-CA	-6.54	1.39	1.46
1	N	299	ILE	CA-CB	6.54	1.62	1.54
1	A	15	SER	CA-CB	6.54	1.62	1.53
1	F	20	ARG	CD-NE	6.53	1.55	1.46
1	L	529	LEU	CA-C	-6.53	1.45	1.52
1	E	499	SER	C-N	6.53	1.41	1.34
1	G	357	VAL	CA-CB	-6.53	1.46	1.54
1	J	426	SER	CA-C	-6.53	1.44	1.52
1	D	128	LYS	C-O	-6.52	1.16	1.24
1	G	55	GLY	CA-C	-6.52	1.42	1.51
1	K	144	VAL	N-CA	-6.52	1.38	1.46
1	E	532	ALA	CA-C	6.52	1.66	1.52
1	H	482	THR	CA-C	-6.52	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	422	GLU	CA-CB	6.52	1.63	1.53
1	N	392	ASP	CA-C	6.51	1.61	1.52
1	M	177	LEU	CA-CB	6.51	1.63	1.53
1	D	109	ALA	C-N	6.50	1.42	1.33
1	K	476	ARG	CA-C	-6.50	1.44	1.52
1	A	20	ARG	CA-C	6.50	1.61	1.52
1	F	321	ARG	CD-NE	6.50	1.55	1.46
1	I	422	GLU	CA-C	-6.49	1.44	1.52
1	K	323	VAL	N-CA	-6.49	1.38	1.46
1	C	224	ARG	N-CA	6.49	1.54	1.46
1	N	518	GLU	N-CA	-6.48	1.38	1.46
1	L	433	ALA	C-N	6.48	1.42	1.33
1	G	529	LEU	N-CA	-6.47	1.38	1.46
1	I	302	LYS	C-N	6.47	1.38	1.33
1	J	118	HIS	CA-C	6.47	1.61	1.52
1	B	478	ALA	CA-C	-6.46	1.46	1.52
1	N	308	ALA	CA-C	6.46	1.61	1.52
1	N	366	LYS	CA-C	6.46	1.61	1.52
1	D	104	LEU	CA-CB	6.46	1.64	1.53
1	I	305	ASP	C-N	6.46	1.42	1.33
1	E	245	LYS	C-N	6.45	1.42	1.33
1	G	29	ALA	C-N	6.45	1.42	1.33
1	I	54	PHE	CA-C	6.45	1.61	1.52
1	I	227	VAL	N-CA	-6.45	1.38	1.46
1	M	477	HIS	ND1-CE1	-6.45	1.26	1.32
1	M	291	ALA	C-O	-6.45	1.16	1.24
1	M	526	ILE	CA-CB	-6.45	1.46	1.54
1	O	398	ILE	CA-C	-6.45	1.44	1.52
1	K	264	ILE	CA-CB	6.44	1.62	1.54
1	A	366	LYS	C-N	6.44	1.41	1.33
1	C	125	GLY	CA-C	6.44	1.59	1.51
1	D	260	ILE	CA-CB	6.44	1.61	1.53
1	P	339	ILE	CA-C	-6.44	1.45	1.53
1	B	430	ARG	CA-CB	-6.44	1.44	1.52
1	N	39	SER	C-N	6.43	1.42	1.33
1	A	34	ALA	N-CA	-6.43	1.38	1.46
1	L	200	TYR	CA-C	-6.43	1.44	1.52
1	B	345	ASP	CA-C	6.43	1.61	1.52
1	H	378	ALA	CA-C	-6.43	1.44	1.52
1	N	231	GLU	CA-C	6.43	1.61	1.52
1	P	140	LEU	CA-CB	6.43	1.64	1.53
1	D	189	THR	CA-C	-6.43	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	391	LEU	CA-C	6.42	1.61	1.52
1	B	360	ARG	CD-NE	6.42	1.55	1.46
1	E	156	ASP	C-N	6.42	1.42	1.33
1	N	504	GLU	C-N	6.42	1.41	1.33
1	D	338	ARG	NE-CZ	6.41	1.40	1.33
1	B	190	THR	C-N	6.40	1.42	1.33
1	K	210	ASP	C-N	6.40	1.41	1.33
1	I	391	LEU	N-CA	6.40	1.54	1.46
1	G	321	ARG	CD-NE	6.40	1.55	1.46
1	E	106	LEU	N-CA	-6.39	1.38	1.46
1	E	382	LEU	CA-C	-6.39	1.44	1.52
1	I	485	GLY	C-N	-6.39	1.25	1.33
1	J	82	GLU	N-CA	6.39	1.54	1.46
1	J	478	ALA	N-CA	-6.39	1.38	1.46
1	K	437	GLY	N-CA	6.39	1.51	1.44
1	F	226	ILE	C-N	6.38	1.41	1.33
1	H	39	SER	C-N	6.38	1.42	1.33
1	J	47	ASP	CA-CB	6.38	1.64	1.53
1	N	397	SER	C-O	6.38	1.31	1.24
1	E	264	ILE	CA-C	6.38	1.60	1.52
1	H	320	VAL	CA-C	-6.37	1.45	1.52
1	J	384	ARG	CD-NE	6.37	1.55	1.46
1	L	405	LEU	N-CA	-6.37	1.38	1.46
1	P	59	ILE	CA-CB	-6.37	1.46	1.53
1	P	253	LEU	C-N	6.37	1.41	1.33
1	M	172	ALA	CA-C	6.36	1.60	1.52
1	P	239	ARG	CA-C	6.36	1.61	1.52
1	K	305	ASP	CA-C	6.36	1.60	1.52
1	M	396	ARG	CD-NE	6.36	1.55	1.46
1	P	496	ASP	N-CA	-6.36	1.38	1.47
1	O	221	GLN	C-N	6.35	1.42	1.33
1	M	369	PHE	C-N	6.35	1.41	1.33
1	H	311	PHE	CA-CB	6.34	1.63	1.53
1	B	156	ASP	CA-C	6.34	1.61	1.52
1	H	234	HIS	ND1-CE1	6.34	1.38	1.32
1	H	444	ILE	C-O	-6.33	1.16	1.24
1	P	219	ASP	C-N	6.33	1.42	1.33
1	F	84	ALA	CA-C	6.33	1.60	1.52
1	J	215	GLY	C-O	6.33	1.27	1.24
1	P	173	GLU	CA-CB	6.33	1.64	1.53
1	P	228	LEU	CA-CB	6.33	1.61	1.53
1	G	21	ASP	C-O	-6.33	1.16	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	J	57	VAL	CA-CB	6.32	1.62	1.54
1	A	343	ILE	CA-CB	-6.32	1.46	1.54
1	I	96	THR	N-CA	-6.32	1.38	1.46
1	D	31	ARG	CD-NE	6.31	1.55	1.46
1	O	38	ARG	CD-NE	6.31	1.55	1.46
1	G	36	MET	CA-C	6.31	1.61	1.52
1	A	499	SER	CA-CB	6.31	1.64	1.53
1	D	255	VAL	CA-CB	-6.30	1.47	1.54
1	P	403	TYR	C-N	6.30	1.42	1.33
1	I	271	GLN	C-N	6.30	1.41	1.33
1	O	347	THR	CA-CB	6.29	1.63	1.54
1	P	287	VAL	CA-CB	-6.29	1.46	1.54
1	G	347	THR	N-CA	6.29	1.52	1.46
1	A	396	ARG	N-CA	6.29	1.54	1.46
1	P	395	GLU	N-CA	-6.29	1.38	1.46
1	D	97	SER	C-N	6.29	1.42	1.33
1	K	97	SER	N-CA	6.29	1.53	1.46
1	H	242	GLU	CA-CB	6.29	1.63	1.53
1	N	220	SER	CA-CB	6.29	1.63	1.53
1	O	364	ASN	C-N	6.29	1.42	1.33
1	P	397	SER	CA-C	6.29	1.60	1.52
1	A	275	PHE	N-CA	6.28	1.54	1.46
1	I	37	LEU	C-N	-6.28	1.25	1.34
1	K	397	SER	CA-CB	6.28	1.63	1.53
1	N	378	ALA	CA-C	-6.28	1.44	1.52
1	P	244	ALA	C-N	6.28	1.44	1.33
1	O	319	ALA	N-CA	-6.28	1.38	1.46
1	L	128	LYS	CA-C	-6.28	1.44	1.52
1	D	268	SER	CA-C	6.27	1.58	1.52
1	L	169	LYS	CA-CB	6.27	1.63	1.53
1	P	307	ILE	CA-C	-6.27	1.44	1.52
1	D	33	LEU	N-CA	-6.27	1.38	1.46
1	L	202	VAL	CA-C	6.27	1.60	1.52
1	E	499	SER	CA-C	-6.26	1.44	1.52
1	L	243	LYS	CA-C	-6.26	1.46	1.53
1	E	181	MET	C-N	6.26	1.42	1.33
1	I	85	LYS	N-CA	-6.25	1.38	1.46
1	E	15	SER	CA-CB	6.25	1.61	1.53
1	A	263	LYS	CA-C	-6.24	1.45	1.52
1	D	478	ALA	CA-C	-6.24	1.44	1.52
1	K	183	ILE	N-CA	6.24	1.53	1.46
1	C	213	LYS	CA-C	-6.23	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	510	ARG	CD-NE	6.23	1.54	1.46
1	J	91	VAL	CA-C	6.23	1.60	1.52
1	H	67	VAL	C-N	6.23	1.41	1.33
1	O	128	LYS	C-N	6.23	1.41	1.33
1	F	192	ALA	CA-C	6.22	1.61	1.52
1	L	503	VAL	C-N	6.22	1.42	1.33
1	G	417	GLY	CA-C	6.22	1.60	1.51
1	P	207	ILE	N-CA	-6.22	1.38	1.46
1	E	474	ARG	NE-CZ	-6.22	1.26	1.33
1	M	162	VAL	CA-CB	-6.22	1.46	1.54
1	N	323	VAL	CA-C	-6.21	1.45	1.52
1	N	497	ILE	N-CA	-6.21	1.38	1.46
1	B	444	ILE	CA-CB	6.21	1.61	1.54
1	G	85	LYS	CA-C	6.21	1.61	1.52
1	G	200	TYR	N-CA	-6.20	1.38	1.46
1	B	134	LEU	CA-C	-6.20	1.44	1.52
1	K	318	LEU	CA-CB	6.20	1.61	1.53
1	F	505	PRO	C-N	6.20	1.41	1.34
1	N	281	LYS	C-O	-6.20	1.15	1.24
1	L	28	LEU	C-N	6.20	1.42	1.33
1	N	215	GLY	C-N	6.20	1.42	1.33
1	M	500	ILE	CA-C	6.20	1.60	1.52
1	I	338	ARG	CD-NE	6.19	1.54	1.46
1	O	110	GLU	CA-CB	6.19	1.62	1.53
1	B	442	LEU	C-N	6.19	1.42	1.33
1	A	187	ALA	N-CA	-6.19	1.38	1.46
1	B	434	ARG	CD-NE	6.19	1.54	1.46
1	D	343	ILE	C-N	6.19	1.42	1.33
1	N	218	GLU	CA-C	6.19	1.61	1.52
1	B	325	ARG	N-CA	-6.19	1.38	1.46
1	H	340	ILE	N-CA	-6.18	1.38	1.46
1	N	17	ASN	CA-C	6.18	1.60	1.52
1	N	495	ASP	CA-CB	6.18	1.62	1.53
1	D	366	LYS	CA-CB	6.18	1.63	1.53
1	O	259	GLU	C-N	6.18	1.41	1.33
1	B	255	VAL	CA-C	6.18	1.60	1.52
1	G	422	GLU	N-CA	-6.18	1.39	1.46
1	O	146	VAL	CA-CB	-6.18	1.45	1.54
1	O	82	GLU	CA-CB	6.17	1.63	1.53
1	D	397	SER	CA-C	6.17	1.60	1.52
1	E	210	ASP	N-CA	-6.17	1.39	1.46
1	I	417	GLY	CA-C	-6.16	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	L	360	ARG	C-N	6.16	1.42	1.33
1	P	262	ALA	CA-CB	6.16	1.63	1.53
1	P	304	ILE	C-N	6.16	1.42	1.33
1	E	434	ARG	CA-C	-6.16	1.44	1.52
1	H	91	VAL	C-N	6.16	1.42	1.33
1	G	232	VAL	C-N	6.15	1.42	1.33
1	C	220	SER	N-CA	6.15	1.53	1.45
1	L	434	ARG	N-CA	-6.15	1.39	1.46
1	P	338	ARG	CD-NE	6.15	1.54	1.46
1	B	101	LEU	C-N	6.15	1.42	1.33
1	D	55	GLY	N-CA	6.14	1.53	1.45
1	N	434	ARG	CA-C	6.14	1.60	1.52
1	D	338	ARG	CD-NE	6.13	1.54	1.46
1	M	230	LYS	N-CA	-6.13	1.37	1.45
1	E	344	LYS	N-CA	-6.13	1.39	1.46
1	N	417	GLY	CA-C	-6.13	1.44	1.51
1	B	400	ASP	C-N	6.12	1.42	1.33
1	N	90	GLU	CA-CB	6.12	1.63	1.53
1	F	486	VAL	CA-CB	-6.12	1.46	1.54
1	M	489	ILE	C-N	6.12	1.42	1.33
1	A	149	LEU	N-CA	-6.12	1.39	1.46
1	O	477	HIS	CG-ND1	-6.12	1.31	1.38
1	H	369	PHE	N-CA	-6.11	1.38	1.46
1	H	400	ASP	CA-CB	6.11	1.63	1.53
1	M	158	LEU	CA-C	-6.11	1.44	1.52
1	C	80	LEU	C-N	6.11	1.41	1.33
1	D	513	LEU	N-CA	-6.11	1.38	1.46
1	E	202	VAL	N-CA	6.11	1.53	1.46
1	L	292	SER	CA-C	-6.11	1.45	1.52
1	G	178	ASN	N-CA	-6.11	1.39	1.46
1	H	512	VAL	CA-CB	6.11	1.62	1.54
1	J	375	ASN	CA-C	6.10	1.60	1.52
1	A	283	LEU	N-CA	-6.10	1.39	1.46
1	F	61	ASN	CA-CB	6.10	1.62	1.54
1	G	401	ALA	N-CA	-6.10	1.38	1.46
1	I	258	PRO	CA-CB	6.10	1.61	1.53
1	G	275	PHE	CA-CB	6.10	1.62	1.53
1	F	514	LYS	N-CA	-6.10	1.38	1.46
1	A	152	ALA	CA-C	6.09	1.60	1.53
1	B	199	GLY	C-N	6.09	1.41	1.33
1	A	19	GLY	N-CA	6.09	1.54	1.45
1	F	351	LEU	C-N	6.09	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	L	288	ASP	CA-C	-6.09	1.44	1.52
1	P	436	VAL	CA-CB	-6.09	1.46	1.54
1	A	284	LYS	N-CA	6.09	1.54	1.46
1	B	384	ARG	CD-NE	6.09	1.54	1.46
1	B	513	LEU	N-CA	6.08	1.54	1.46
1	C	18	SER	N-CA	6.08	1.53	1.45
1	C	251	ALA	CA-C	-6.08	1.45	1.53
1	D	251	ALA	CA-C	-6.08	1.45	1.53
1	G	398	ILE	CA-CB	-6.08	1.46	1.54
1	I	54	PHE	C-N	6.08	1.42	1.33
1	H	525	LYS	C-N	6.08	1.41	1.33
1	I	489	ILE	CA-CB	-6.08	1.46	1.54
1	F	440	GLU	N-CA	-6.08	1.38	1.46
1	G	201	ASN	C-N	6.08	1.39	1.33
1	C	39	SER	CA-CB	6.07	1.64	1.53
1	C	396	ARG	CD-NE	6.07	1.54	1.46
1	D	512	VAL	CA-CB	-6.07	1.46	1.54
1	J	516	ALA	N-CA	-6.07	1.38	1.46
1	L	89	SER	CA-CB	6.07	1.63	1.53
1	N	406	ARG	NE-CZ	6.07	1.39	1.33
1	H	38	ARG	NE-CZ	6.06	1.39	1.33
1	A	445	GLU	CA-C	6.06	1.61	1.52
1	C	305	ASP	CA-CB	6.06	1.63	1.53
1	D	299	ILE	CA-C	-6.05	1.45	1.52
1	J	306	ASP	CA-CB	6.05	1.62	1.53
1	J	318	LEU	CA-CB	6.05	1.61	1.53
1	J	260	ILE	C-O	6.05	1.30	1.24
1	N	283	LEU	N-CA	6.05	1.53	1.46
1	P	406	ARG	CA-C	-6.05	1.44	1.52
1	I	486	VAL	CA-C	6.05	1.59	1.52
1	H	117	ILE	CA-C	-6.04	1.45	1.52
1	O	72	ILE	CA-C	6.04	1.60	1.52
1	M	289	LYS	N-CA	-6.04	1.39	1.46
1	D	515	SER	C-N	6.04	1.42	1.33
1	D	286	MET	N-CA	-6.04	1.39	1.46
1	E	329	GLU	N-CA	-6.03	1.39	1.46
1	H	155	ARG	CD-NE	6.03	1.54	1.46
1	H	202	VAL	CA-C	6.03	1.60	1.53
1	B	439	LYS	CA-C	-6.03	1.44	1.52
1	B	131	ASN	CA-CB	6.03	1.63	1.53
1	G	288	ASP	CA-CB	6.03	1.63	1.53
1	H	174	GLY	N-CA	6.03	1.54	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	J	274	ALA	C-N	6.02	1.42	1.33
1	L	145	ASP	N-CA	6.02	1.53	1.46
1	D	165	THR	CA-CB	6.02	1.62	1.53
1	I	44	LYS	CA-C	-6.01	1.44	1.52
1	J	120	THR	N-CA	6.01	1.53	1.46
1	G	85	LYS	N-CA	6.01	1.53	1.46
1	H	398	ILE	CA-CB	6.01	1.62	1.54
1	N	55	GLY	C-N	6.01	1.42	1.33
1	N	441	GLN	C-N	6.01	1.42	1.33
1	A	485	GLY	N-CA	-6.00	1.37	1.44
1	N	44	LYS	C-N	6.00	1.40	1.33
1	O	443	ALA	N-CA	6.00	1.53	1.46
1	G	184	VAL	CA-CB	6.00	1.61	1.54
1	I	29	ALA	N-CA	-6.00	1.39	1.46
1	P	50	LEU	CA-CB	6.00	1.62	1.53
1	I	218	GLU	CA-C	6.00	1.60	1.52
1	N	173	GLU	CA-CB	6.00	1.63	1.53
1	O	133	SER	CA-CB	6.00	1.62	1.53
1	A	217	ILE	CA-CB	-5.99	1.46	1.54
1	L	499	SER	C-N	5.99	1.40	1.34
1	O	140	LEU	CA-C	5.99	1.61	1.52
1	O	141	ALA	CA-C	5.99	1.61	1.53
1	M	319	ALA	N-CA	-5.99	1.38	1.45
1	F	288	ASP	N-CA	-5.99	1.39	1.46
1	O	169	LYS	CA-C	5.99	1.63	1.52
1	O	158	LEU	C-N	5.99	1.41	1.33
1	K	434	ARG	NE-CZ	5.99	1.39	1.33
1	E	101	LEU	C-O	-5.99	1.17	1.24
1	J	352	GLY	N-CA	5.99	1.50	1.44
1	G	55	GLY	N-CA	5.98	1.53	1.45
1	I	195	LEU	C-N	-5.98	1.25	1.33
1	F	210	ASP	C-N	5.98	1.41	1.33
1	E	226	ILE	CA-CB	5.98	1.62	1.54
1	M	511	GLN	C-N	5.98	1.40	1.33
1	G	120	THR	CA-C	5.98	1.60	1.52
1	B	397	SER	C-N	5.98	1.41	1.33
1	K	339	ILE	C-N	5.98	1.41	1.33
1	K	39	SER	C-N	5.97	1.42	1.33
1	P	340	ILE	CA-C	-5.97	1.45	1.52
1	K	223	ILE	CA-CB	-5.97	1.47	1.54
1	M	22	ALA	CA-CB	5.97	1.62	1.53
1	B	276	LEU	CA-CB	5.97	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	K	396	ARG	CD-NE	5.96	1.54	1.46
1	P	244	ALA	CA-CB	-5.96	1.44	1.53
1	D	485	GLY	N-CA	5.96	1.50	1.45
1	J	354	ALA	N-CA	-5.96	1.38	1.45
1	K	235	ALA	N-CA	-5.96	1.38	1.46
1	P	310	HIS	ND1-CE1	5.96	1.38	1.32
1	H	300	CYS	CA-C	-5.96	1.45	1.52
1	O	344	LYS	CA-C	5.96	1.60	1.52
1	J	91	VAL	C-N	5.95	1.42	1.33
1	N	216	THR	CA-C	-5.95	1.45	1.52
1	I	118	HIS	ND1-CE1	5.95	1.38	1.32
1	I	381	ILE	CA-C	-5.95	1.45	1.52
1	N	527	ASP	C-N	5.95	1.40	1.33
1	D	141	ALA	CA-C	5.95	1.60	1.52
1	H	114	ASP	CA-CB	5.95	1.62	1.53
1	H	289	LYS	C-N	5.95	1.41	1.33
1	J	404	SER	C-N	-5.95	1.25	1.34
1	G	319	ALA	CA-CB	-5.94	1.44	1.53
1	A	122	ILE	CA-CB	5.94	1.61	1.54
1	D	400	ASP	CA-C	5.94	1.60	1.52
1	K	406	ARG	CA-CB	5.94	1.63	1.53
1	B	388	ASP	CA-CB	5.94	1.63	1.53
1	D	325	ARG	CA-CB	5.93	1.62	1.53
1	J	340	ILE	CA-CB	-5.93	1.47	1.54
1	K	243	LYS	CA-CB	5.93	1.62	1.53
1	F	184	VAL	C-N	5.93	1.41	1.33
1	L	166	MET	C-O	-5.93	1.17	1.24
1	F	150	ASN	N-CA	5.93	1.53	1.46
1	C	310	HIS	CA-C	-5.92	1.45	1.52
1	D	480	GLY	CA-C	-5.92	1.44	1.51
1	I	492	LYS	N-CA	-5.92	1.38	1.46
1	A	283	LEU	CA-CB	5.92	1.62	1.53
1	E	310	HIS	CE1-NE2	5.92	1.38	1.32
1	I	146	VAL	CA-CB	-5.92	1.46	1.54
1	J	402	LEU	N-CA	-5.92	1.39	1.46
1	A	254	GLU	CA-CB	5.92	1.64	1.53
1	M	321	ARG	N-CA	5.92	1.53	1.46
1	J	469	ALA	N-CA	-5.92	1.39	1.46
1	N	61	ASN	N-CA	-5.92	1.39	1.46
1	P	239	ARG	C-N	5.92	1.41	1.33
1	F	321	ARG	C-N	5.92	1.42	1.33
1	L	323	VAL	C-N	-5.92	1.25	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	256	GLU	N-CA	-5.92	1.39	1.46
1	I	256	GLU	CA-C	-5.92	1.45	1.52
1	F	17	ASN	CA-C	5.91	1.59	1.52
1	P	499	SER	CA-C	-5.91	1.45	1.52
1	H	55	GLY	N-CA	5.90	1.53	1.45
1	F	240	ARG	CD-NE	5.90	1.54	1.46
1	J	49	MET	CA-C	-5.90	1.45	1.52
1	A	245	LYS	CA-C	-5.90	1.45	1.52
1	P	279	GLU	C-O	-5.90	1.16	1.24
1	E	467	ILE	CA-C	5.90	1.60	1.52
1	G	100	VAL	CA-CB	-5.90	1.47	1.54
1	C	441	GLN	N-CA	-5.90	1.39	1.46
1	F	442	LEU	N-CA	-5.90	1.39	1.46
1	N	385	GLY	C-N	5.90	1.39	1.32
1	E	246	ILE	CA-CB	-5.89	1.47	1.54
1	D	307	ILE	CA-CB	-5.89	1.47	1.54
1	F	522	SER	CA-C	-5.89	1.45	1.52
1	M	260	ILE	CA-CB	-5.89	1.46	1.53
1	C	526	ILE	CA-C	-5.89	1.45	1.52
1	F	486	VAL	CA-C	-5.88	1.45	1.52
1	O	200	TYR	CA-CB	5.88	1.64	1.53
1	B	531	ALA	N-CA	5.88	1.53	1.46
1	O	379	VAL	N-CA	5.88	1.52	1.46
1	N	404	SER	CA-CB	5.88	1.63	1.53
1	O	101	LEU	C-N	5.88	1.41	1.33
1	L	112	LEU	C-N	5.88	1.41	1.33
1	D	355	GLU	CA-CB	5.88	1.62	1.53
1	J	205	ASP	N-CA	5.88	1.53	1.46
1	D	41	LEU	CA-CB	5.87	1.63	1.53
1	O	371	GLU	N-CA	5.87	1.53	1.45
1	O	474	ARG	CD-NE	5.87	1.54	1.46
1	B	312	LEU	CA-CB	5.87	1.63	1.53
1	E	142	THR	C-O	-5.87	1.17	1.24
1	K	377	LYS	N-CA	-5.87	1.38	1.46
1	A	360	ARG	NE-CZ	5.87	1.39	1.33
1	E	269	PRO	N-CD	5.87	1.55	1.47
1	L	156	ASP	C-N	5.87	1.41	1.33
1	A	224	ARG	NE-CZ	5.86	1.39	1.33
1	C	179	LYS	N-CA	5.86	1.53	1.46
1	J	33	LEU	N-CA	-5.86	1.39	1.46
1	L	242	GLU	CA-C	5.86	1.59	1.52
1	M	255	VAL	CA-CB	-5.86	1.46	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	57	VAL	CA-C	5.86	1.60	1.52
1	B	483	ASN	CA-C	-5.86	1.45	1.52
1	E	509	THR	CA-C	-5.85	1.45	1.52
1	E	314	LYS	N-CA	-5.85	1.39	1.46
1	H	310	HIS	CB-CG	5.85	1.58	1.50
1	L	243	LYS	CA-CB	5.85	1.62	1.53
1	L	471	MET	CA-C	-5.85	1.44	1.52
1	M	228	LEU	N-CA	-5.85	1.39	1.46
1	G	259	GLU	C-N	5.85	1.40	1.33
1	I	483	ASN	CA-C	-5.85	1.45	1.52
1	P	84	ALA	N-CA	-5.85	1.39	1.46
1	H	208	LYS	CA-C	-5.85	1.45	1.52
1	O	161	ILE	C-N	-5.84	1.26	1.33
1	N	15	SER	CA-C	-5.84	1.45	1.52
1	C	264	ILE	CA-CB	5.84	1.62	1.54
1	M	154	ALA	N-CA	-5.84	1.37	1.46
1	F	182	ASP	C-O	-5.84	1.17	1.24
1	M	472	ASP	CA-CB	5.84	1.62	1.53
1	P	94	GLY	CA-C	5.84	1.58	1.52
1	H	440	GLU	C-N	5.83	1.42	1.34
1	J	403	TYR	CZ-OH	5.83	1.50	1.38
1	M	285	ASP	N-CA	-5.83	1.39	1.46
1	P	147	SER	CA-CB	5.83	1.62	1.53
1	N	413	TYR	N-CA	-5.83	1.38	1.46
1	C	16	ARG	NE-CZ	5.83	1.39	1.33
1	K	27	ILE	N-CA	-5.83	1.39	1.46
1	A	206	LEU	CA-CB	5.83	1.62	1.53
1	B	426	SER	C-O	-5.83	1.17	1.24
1	C	330	LYS	N-CA	-5.83	1.39	1.46
1	M	276	LEU	CA-C	5.82	1.60	1.52
1	F	60	THR	CA-C	5.82	1.59	1.52
1	H	353	TYR	CA-C	-5.82	1.45	1.52
1	F	372	GLY	CA-C	-5.82	1.43	1.51
1	G	166	MET	N-CA	-5.82	1.39	1.46
1	C	273	LYS	N-CA	-5.82	1.38	1.46
1	H	490	ASN	C-N	5.81	1.42	1.33
1	O	504	GLU	CA-C	5.81	1.57	1.52
1	A	239	ARG	NE-CZ	5.81	1.39	1.33
1	C	269	PRO	CA-C	5.81	1.60	1.52
1	A	318	LEU	N-CA	-5.81	1.39	1.46
1	D	162	VAL	N-CA	5.81	1.53	1.46
1	D	368	VAL	N-CA	-5.81	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	P	251	ALA	N-CA	-5.81	1.38	1.46
1	J	476	ARG	CD-NE	5.81	1.54	1.46
1	L	495	ASP	C-N	5.81	1.41	1.33
1	A	16	ARG	CD-NE	5.81	1.54	1.46
1	H	325	ARG	N-CA	-5.81	1.39	1.46
1	E	261	SER	N-CA	5.80	1.53	1.46
1	E	528	ASP	N-CA	-5.80	1.38	1.45
1	L	359	GLU	CA-C	5.80	1.59	1.52
1	P	328	ILE	CA-C	-5.80	1.45	1.52
1	M	511	GLN	CA-CB	5.80	1.62	1.53
1	B	210	ASP	C-N	5.80	1.41	1.33
1	H	375	ASN	N-CA	5.79	1.54	1.46
1	P	287	VAL	CA-C	5.79	1.60	1.52
1	F	515	SER	CA-C	5.79	1.60	1.52
1	J	98	ALA	C-N	5.79	1.41	1.33
1	L	199	GLY	CA-C	-5.79	1.42	1.52
1	N	334	ALA	C-N	5.79	1.42	1.33
1	K	425	LEU	N-CA	-5.78	1.39	1.46
1	N	172	ALA	C-N	5.78	1.41	1.33
1	K	454	ILE	CA-C	5.78	1.58	1.52
1	O	321	ARG	CA-C	5.78	1.60	1.52
1	P	497	ILE	N-CA	5.78	1.54	1.46
1	C	130	PHE	CA-C	5.77	1.60	1.52
1	A	44	LYS	C-N	-5.77	1.25	1.33
1	D	256	GLU	N-CA	-5.77	1.39	1.46
1	E	31	ARG	N-CA	-5.77	1.38	1.46
1	H	79	LEU	N-CA	-5.77	1.39	1.46
1	M	43	PRO	CA-CB	5.77	1.61	1.53
1	L	307	ILE	CA-CB	5.77	1.61	1.54
1	E	22	ALA	CA-C	5.76	1.60	1.52
1	M	307	ILE	CA-CB	5.76	1.61	1.54
1	P	423	LEU	CA-CB	5.76	1.62	1.53
1	K	507	ARG	CD-NE	5.76	1.54	1.46
1	A	384	ARG	C-N	5.76	1.42	1.33
1	P	303	GLY	CA-C	-5.76	1.46	1.52
1	O	84	ALA	CA-C	-5.76	1.45	1.52
1	K	528	ASP	CA-C	-5.75	1.45	1.52
1	C	168	SER	CA-C	5.75	1.60	1.52
1	J	134	LEU	CA-C	5.75	1.60	1.52
1	D	117	ILE	CA-C	5.75	1.59	1.52
1	F	38	ARG	N-CA	-5.75	1.39	1.46
1	K	338	ARG	CD-NE	5.75	1.54	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	L	260	ILE	CA-C	-5.75	1.45	1.52
1	G	424	GLU	CA-CB	5.75	1.62	1.53
1	K	333	LYS	C-N	5.75	1.42	1.33
1	P	297	VAL	CA-CB	-5.75	1.46	1.54
1	O	74	HIS	CB-CG	-5.74	1.42	1.50
1	J	285	ASP	CA-CB	5.74	1.62	1.53
1	M	393	GLU	CA-CB	5.74	1.62	1.53
1	M	406	ARG	CD-NE	5.74	1.54	1.46
1	M	144	VAL	CA-C	-5.74	1.44	1.52
1	A	323	VAL	N-CA	-5.74	1.39	1.46
1	G	86	ALA	CA-C	5.74	1.60	1.52
1	M	351	LEU	CA-CB	5.74	1.62	1.53
1	F	167	SER	C-N	5.73	1.41	1.33
1	P	415	VAL	N-CA	5.73	1.53	1.46
1	A	381	ILE	CA-CB	5.73	1.61	1.54
1	C	140	LEU	C-N	5.73	1.41	1.33
1	D	449	ASP	CA-CB	5.73	1.62	1.53
1	E	462	ALA	N-CA	-5.73	1.38	1.46
1	N	184	VAL	CA-CB	-5.73	1.47	1.54
1	A	299	ILE	C-N	5.73	1.41	1.33
1	H	29	ALA	N-CA	-5.73	1.39	1.46
1	K	51	ILE	CA-CB	-5.73	1.47	1.54
1	N	130	PHE	N-CA	-5.73	1.39	1.46
1	A	78	LYS	CA-CB	5.72	1.62	1.53
1	H	285	ASP	C-N	5.72	1.41	1.33
1	O	187	ALA	N-CA	-5.72	1.39	1.46
1	J	45	GLY	CA-C	-5.72	1.45	1.52
1	M	508	VAL	N-CA	-5.72	1.38	1.46
1	H	233	VAL	N-CA	-5.72	1.39	1.46
1	O	22	ALA	CA-CB	5.72	1.62	1.53
1	F	225	GLY	CA-C	-5.71	1.45	1.52
1	G	156	ASP	N-CA	5.71	1.53	1.46
1	A	34	ALA	C-N	5.71	1.42	1.33
1	C	469	ALA	CA-C	-5.71	1.45	1.52
1	L	118	HIS	CE1-NE2	-5.71	1.26	1.32
1	G	336	GLY	C-N	5.71	1.40	1.33
1	O	66	ILE	C-N	5.71	1.41	1.33
1	F	126	PHE	N-CA	-5.71	1.39	1.46
1	H	415	VAL	N-CA	-5.71	1.39	1.46
1	K	139	GLN	CA-C	5.71	1.60	1.52
1	I	65	THR	N-CA	5.70	1.53	1.46
1	O	506	ILE	CA-C	5.70	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	71	GLU	CA-CB	5.70	1.61	1.53
1	B	124	GLU	C-N	5.70	1.40	1.34
1	P	247	ALA	N-CA	5.70	1.52	1.46
1	B	525	LYS	C-N	5.70	1.40	1.33
1	D	381	ILE	C-O	-5.70	1.17	1.24
1	G	96	THR	CA-C	-5.70	1.45	1.52
1	M	74	HIS	ND1-CE1	5.70	1.38	1.32
1	B	344	LYS	CA-CB	5.70	1.62	1.53
1	N	172	ALA	N-CA	-5.70	1.38	1.46
1	P	330	LYS	CA-CB	5.70	1.62	1.53
1	G	207	ILE	C-N	5.69	1.41	1.33
1	H	216	THR	C-N	5.69	1.40	1.33
1	N	477	HIS	ND1-CE1	5.69	1.38	1.32
1	F	321	ARG	CA-CB	5.69	1.63	1.53
1	L	223	ILE	CA-CB	-5.69	1.47	1.54
1	H	505	PRO	CA-C	-5.69	1.45	1.52
1	N	319	ALA	C-N	5.69	1.42	1.33
1	G	44	LYS	CA-CB	5.69	1.63	1.53
1	G	105	PHE	CA-CB	5.69	1.62	1.53
1	A	80	LEU	CA-CB	5.69	1.62	1.53
1	O	205	ASP	N-CA	-5.69	1.39	1.46
1	A	53	SER	C-N	5.68	1.41	1.33
1	N	325	ARG	CD-NE	5.68	1.54	1.46
1	E	58	THR	C-N	5.68	1.40	1.33
1	K	484	CYS	N-CA	5.68	1.53	1.45
1	K	288	ASP	C-N	5.68	1.41	1.33
1	P	340	ILE	CA-CB	5.68	1.61	1.54
1	P	347	THR	N-CA	5.68	1.53	1.46
1	M	285	ASP	C-N	5.67	1.41	1.33
1	P	113	VAL	N-CA	5.67	1.53	1.46
1	C	137	LEU	CA-CB	5.67	1.62	1.53
1	G	331	LEU	C-O	-5.67	1.17	1.24
1	I	268	SER	CA-CB	5.67	1.62	1.53
1	L	268	SER	C-N	5.67	1.41	1.34
1	J	439	LYS	CA-C	5.67	1.60	1.52
1	J	96	THR	C-N	5.67	1.41	1.33
1	K	273	LYS	C-N	5.67	1.42	1.33
1	C	313	ALA	N-CA	-5.67	1.39	1.46
1	I	480	GLY	N-CA	5.67	1.51	1.45
1	K	281	LYS	N-CA	5.67	1.53	1.46
1	L	474	ARG	CA-CB	5.67	1.62	1.53
1	A	366	LYS	CA-C	-5.66	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	150	ASN	CA-CB	5.66	1.63	1.53
1	A	321	ARG	C-N	5.66	1.41	1.33
1	F	252	SER	C-N	5.66	1.41	1.33
1	M	168	SER	CA-C	-5.66	1.45	1.52
1	E	32	THR	C-N	5.66	1.41	1.33
1	O	397	SER	N-CA	-5.66	1.39	1.46
1	H	188	VAL	C-O	-5.66	1.17	1.24
1	L	145	ASP	C-N	5.66	1.41	1.33
1	B	352	GLY	N-CA	5.65	1.49	1.44
1	M	347	THR	C-N	5.65	1.38	1.33
1	H	125	GLY	CA-C	5.65	1.59	1.51
1	N	145	ASP	CA-CB	-5.65	1.42	1.54
1	L	221	GLN	N-CA	5.65	1.52	1.45
1	F	108	LYS	CA-C	-5.65	1.45	1.52
1	D	488	VAL	CA-CB	-5.64	1.46	1.54
1	B	291	ALA	CA-C	5.64	1.60	1.52
1	D	78	LYS	C-O	-5.64	1.17	1.24
1	F	256	GLU	C-N	5.64	1.40	1.33
1	G	152	ALA	CA-CB	5.64	1.61	1.53
1	H	516	ALA	CA-C	-5.64	1.45	1.52
1	N	108	LYS	N-CA	-5.64	1.39	1.46
1	P	119	PRO	CA-CB	5.64	1.61	1.53
1	H	263	LYS	C-N	5.64	1.41	1.33
1	N	127	LYS	N-CA	-5.64	1.39	1.46
1	C	475	ALA	CA-C	5.64	1.60	1.52
1	G	327	ASP	CA-C	5.64	1.60	1.52
1	P	47	ASP	CA-CB	5.64	1.62	1.53
1	B	526	ILE	N-CA	-5.64	1.39	1.46
1	I	430	ARG	C-N	5.64	1.41	1.33
1	N	307	ILE	CA-C	-5.64	1.45	1.52
1	O	223	ILE	N-CA	5.63	1.52	1.46
1	P	487	ASP	CA-C	5.63	1.59	1.52
1	H	106	LEU	CA-CB	5.63	1.62	1.53
1	M	284	LYS	C-N	-5.63	1.26	1.33
1	M	217	ILE	N-CA	-5.63	1.39	1.46
1	M	422	GLU	CA-CB	5.63	1.62	1.53
1	M	496	ASP	N-CA	-5.63	1.39	1.46
1	J	435	SER	CA-CB	5.63	1.63	1.53
1	J	442	LEU	CB-CG	5.63	1.64	1.53
1	K	292	SER	CA-CB	5.63	1.62	1.53
1	L	271	GLN	CA-C	5.63	1.60	1.52
1	L	284	LYS	CA-C	5.63	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	118	HIS	CA-C	5.62	1.59	1.53
1	B	299	ILE	C-O	-5.62	1.18	1.24
1	H	399	ASN	C-O	-5.62	1.17	1.24
1	O	135	GLU	CA-C	5.62	1.60	1.52
1	E	170	PHE	CA-CB	5.62	1.62	1.53
1	F	399	ASN	C-N	5.62	1.41	1.33
1	G	466	PRO	N-CA	-5.62	1.40	1.47
1	N	505	PRO	N-CD	-5.62	1.39	1.47
1	F	309	GLN	C-O	-5.62	1.17	1.24
1	G	336	GLY	N-CA	5.62	1.53	1.45
1	L	339	ILE	C-O	-5.62	1.18	1.24
1	B	82	GLU	C-N	5.61	1.42	1.33
1	D	507	ARG	CD-NE	5.61	1.54	1.46
1	C	428	ARG	CD-NE	5.61	1.54	1.46
1	M	80	LEU	C-N	5.61	1.41	1.33
1	D	340	ILE	C-O	-5.60	1.18	1.24
1	E	224	ARG	CD-NE	5.60	1.54	1.46
1	G	72	ILE	N-CA	-5.60	1.39	1.46
1	D	157	ALA	CA-CB	5.60	1.62	1.53
1	F	400	ASP	CA-CB	5.60	1.62	1.53
1	I	145	ASP	CA-C	-5.60	1.45	1.52
1	N	305	ASP	CA-CB	5.60	1.62	1.53
1	B	157	ALA	C-N	5.60	1.41	1.33
1	K	407	ASN	C-N	5.60	1.41	1.33
1	M	14	THR	N-CA	5.60	1.56	1.46
1	P	114	ASP	CA-C	5.60	1.60	1.52
1	A	322	ARG	C-N	5.59	1.40	1.33
1	B	203	SER	N-CA	-5.59	1.39	1.46
1	C	334	ALA	CA-CB	5.59	1.62	1.53
1	F	272	ILE	N-CA	-5.59	1.39	1.46
1	K	143	LYS	C-N	5.59	1.41	1.33
1	K	306	ASP	C-N	5.59	1.41	1.33
1	K	342	SER	N-CA	-5.59	1.39	1.46
1	O	321	ARG	C-N	5.59	1.41	1.33
1	A	374	LYS	CA-C	-5.59	1.45	1.52
1	D	273	LYS	CA-CB	5.59	1.62	1.53
1	F	246	ILE	CA-C	-5.59	1.45	1.52
1	O	449	ASP	CA-C	5.59	1.60	1.52
1	F	225	GLY	N-CA	5.59	1.50	1.44
1	I	370	ILE	C-O	-5.58	1.18	1.24
1	B	221	GLN	C-N	5.58	1.41	1.33
1	H	522	SER	N-CA	-5.58	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	325	ARG	N-CA	-5.58	1.39	1.46
1	G	118	HIS	ND1-CE1	5.58	1.38	1.32
1	I	298	VAL	N-CA	5.58	1.52	1.46
1	M	263	LYS	CA-CB	5.58	1.60	1.53
1	K	70	MET	N-CA	-5.58	1.39	1.46
1	G	143	LYS	N-CA	5.58	1.53	1.46
1	F	314	LYS	CA-C	5.57	1.60	1.52
1	G	479	LYS	CA-CB	5.57	1.62	1.53
1	F	74	HIS	CA-C	5.57	1.59	1.53
1	O	305	ASP	N-CA	-5.57	1.38	1.45
1	F	106	LEU	C-O	-5.57	1.17	1.24
1	I	64	ALA	CA-C	5.57	1.60	1.52
1	I	182	ASP	CA-C	5.57	1.60	1.52
1	P	114	ASP	CA-CB	5.57	1.61	1.53
1	A	91	VAL	N-CA	-5.57	1.39	1.46
1	E	20	ARG	CA-C	5.57	1.60	1.52
1	F	29	ALA	C-N	5.57	1.41	1.33
1	G	229	ASP	CA-CB	5.57	1.62	1.53
1	K	429	LEU	CA-C	5.57	1.59	1.52
1	E	483	ASN	N-CA	-5.56	1.39	1.46
1	I	299	ILE	C-O	-5.56	1.18	1.24
1	K	208	LYS	CA-CB	-5.56	1.44	1.53
1	C	253	LEU	CA-CB	5.56	1.59	1.53
1	E	146	VAL	N-CA	5.56	1.53	1.46
1	O	247	ALA	CA-C	5.56	1.59	1.52
1	O	255	VAL	C-N	5.56	1.40	1.33
1	B	164	THR	CA-C	-5.56	1.45	1.52
1	A	243	LYS	N-CA	5.56	1.54	1.46
1	L	99	VAL	CA-CB	-5.56	1.47	1.54
1	N	91	VAL	C-N	5.56	1.41	1.33
1	B	141	ALA	CA-C	5.56	1.60	1.53
1	K	71	GLU	CA-CB	5.55	1.60	1.53
1	M	103	GLY	CA-C	-5.55	1.45	1.52
1	M	224	ARG	CA-C	5.55	1.59	1.52
1	B	15	SER	CA-C	-5.55	1.45	1.52
1	D	148	ASP	C-N	5.55	1.41	1.33
1	P	201	ASN	N-CA	5.55	1.53	1.45
1	K	192	ALA	CA-C	5.55	1.60	1.52
1	B	173	GLU	CA-CB	5.55	1.62	1.53
1	M	352	GLY	N-CA	-5.55	1.40	1.44
1	N	69	GLU	C-N	5.55	1.42	1.33
1	L	512	VAL	CA-CB	5.55	1.61	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	222	LEU	N-CA	5.55	1.53	1.45
1	H	146	VAL	C-O	-5.55	1.18	1.24
1	H	428	ARG	CD-NE	5.55	1.54	1.46
1	I	152	ALA	CA-CB	5.55	1.62	1.53
1	I	477	HIS	ND1-CE1	5.55	1.38	1.32
1	F	30	ALA	CA-C	5.54	1.60	1.52
1	K	240	ARG	CD-NE	5.54	1.54	1.46
1	P	336	GLY	CA-C	5.54	1.57	1.51
1	C	330	LYS	CA-C	-5.54	1.45	1.52
1	N	408	ILE	CA-CB	5.54	1.61	1.54
1	C	357	VAL	N-CA	-5.54	1.39	1.46
1	M	496	ASP	CA-CB	5.54	1.62	1.53
1	B	153	THR	C-N	5.54	1.41	1.33
1	H	213	LYS	CA-CB	5.54	1.62	1.53
1	H	522	SER	CA-CB	5.54	1.62	1.53
1	G	16	ARG	CD-NE	5.53	1.53	1.46
1	H	477	HIS	N-CA	-5.53	1.38	1.46
1	B	401	ALA	N-CA	-5.53	1.39	1.46
1	C	159	LYS	CA-C	5.53	1.59	1.52
1	N	125	GLY	CA-C	-5.53	1.44	1.51
1	H	283	LEU	CA-C	5.53	1.59	1.52
1	E	36	MET	CA-C	-5.53	1.45	1.52
1	G	372	GLY	CA-C	-5.53	1.44	1.51
1	J	85	LYS	CA-C	-5.53	1.45	1.52
1	J	184	VAL	C-O	5.53	1.30	1.24
1	O	78	LYS	N-CA	-5.53	1.39	1.46
1	D	75	PRO	CA-CB	-5.52	1.45	1.53
1	J	407	ASN	C-N	5.52	1.40	1.33
1	K	178	ASN	N-CA	-5.52	1.39	1.46
1	B	382	LEU	CA-CB	5.52	1.60	1.53
1	A	32	THR	CA-C	-5.52	1.45	1.52
1	P	99	VAL	CA-CB	5.52	1.61	1.54
1	O	259	GLU	N-CA	-5.52	1.39	1.46
1	A	125	GLY	C-O	-5.51	1.17	1.24
1	D	181	MET	N-CA	5.51	1.53	1.46
1	M	99	VAL	CA-CB	5.51	1.60	1.54
1	P	134	LEU	C-N	-5.51	1.25	1.33
1	P	264	ILE	CB-CG1	5.51	1.64	1.53
1	N	168	SER	CA-C	-5.51	1.45	1.52
1	F	79	LEU	C-O	-5.51	1.17	1.24
1	B	351	LEU	C-N	5.51	1.39	1.33
1	P	175	GLU	N-CA	-5.51	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	341	SER	CA-C	-5.51	1.45	1.52
1	F	456	MET	CA-C	-5.51	1.45	1.52
1	G	430	ARG	CD-NE	5.51	1.53	1.46
1	I	511	GLN	N-CA	-5.51	1.39	1.46
1	D	230	LYS	CA-C	5.50	1.59	1.52
1	F	503	VAL	CA-CB	5.50	1.64	1.55
1	J	127	LYS	C-N	5.50	1.41	1.34
1	L	259	GLU	C-N	5.50	1.41	1.33
1	H	366	LYS	N-CA	5.50	1.53	1.45
1	L	125	GLY	CA-C	-5.50	1.44	1.51
1	B	278	GLU	CA-C	5.50	1.59	1.52
1	J	15	SER	CA-C	-5.50	1.46	1.52
1	D	255	VAL	CA-C	5.49	1.61	1.53
1	E	101	LEU	CA-CB	5.49	1.61	1.53
1	N	81	VAL	C-N	5.49	1.41	1.33
1	A	320	VAL	CA-CB	-5.49	1.46	1.55
1	F	464	LEU	N-CA	-5.49	1.38	1.45
1	H	437	GLY	N-CA	5.49	1.48	1.44
1	J	234	HIS	CA-C	-5.49	1.46	1.52
1	L	426	SER	CA-CB	5.49	1.61	1.53
1	O	283	LEU	C-N	5.49	1.41	1.33
1	D	495	ASP	C-N	5.49	1.41	1.33
1	N	178	ASN	CA-CB	5.49	1.61	1.53
1	P	476	ARG	CD-NE	5.49	1.53	1.46
1	C	98	ALA	CA-C	-5.49	1.45	1.52
1	D	223	ILE	C-N	5.49	1.42	1.33
1	D	423	LEU	CA-CB	5.49	1.61	1.53
1	P	507	ARG	CA-C	-5.49	1.45	1.52
1	D	465	GLU	CA-C	-5.48	1.46	1.52
1	B	275	PHE	CG-CD2	5.48	1.50	1.38
1	F	235	ALA	C-N	5.48	1.41	1.33
1	E	226	ILE	N-CA	5.48	1.52	1.46
1	F	427	ALA	N-CA	-5.48	1.39	1.46
1	A	268	SER	CA-CB	5.48	1.62	1.53
1	G	263	LYS	N-CA	-5.48	1.39	1.45
1	C	63	GLY	CA-C	-5.47	1.44	1.51
1	C	234	HIS	C-O	-5.47	1.17	1.23
1	B	427	ALA	CA-CB	-5.47	1.44	1.53
1	E	366	LYS	CA-CB	5.47	1.62	1.53
1	H	442	LEU	C-N	5.47	1.41	1.33
1	L	180	ILE	CA-C	-5.47	1.45	1.52
1	D	30	ALA	C-N	5.47	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	G	443	ALA	N-CA	-5.47	1.39	1.46
1	M	44	LYS	CA-CB	5.47	1.62	1.53
1	A	48	LYS	CA-C	-5.47	1.45	1.53
1	G	108	LYS	C-O	-5.47	1.17	1.24
1	P	240	ARG	N-CA	-5.47	1.39	1.46
1	D	225	GLY	CA-C	5.46	1.59	1.52
1	G	219	ASP	N-CA	-5.46	1.39	1.46
1	J	430	ARG	N-CA	5.46	1.53	1.46
1	N	318	LEU	N-CA	5.46	1.53	1.46
1	B	195	LEU	CA-C	5.46	1.60	1.53
1	D	221	GLN	C-N	5.46	1.40	1.33
1	K	325	ARG	CD-NE	5.46	1.53	1.46
1	A	265	SER	C-N	5.46	1.40	1.34
1	B	36	MET	CA-CB	5.46	1.62	1.53
1	N	110	GLU	N-CA	-5.46	1.39	1.46
1	O	384	ARG	CD-NE	5.46	1.53	1.46
1	K	505	PRO	C-N	5.46	1.40	1.34
1	N	502	VAL	CA-CB	-5.46	1.47	1.54
1	M	365	ASP	N-CA	5.45	1.52	1.46
1	P	207	ILE	C-N	5.45	1.40	1.33
1	F	207	ILE	N-CA	-5.45	1.39	1.46
1	I	501	ASN	CA-C	-5.45	1.45	1.52
1	B	327	ASP	CA-CB	5.45	1.62	1.53
1	C	388	ASP	N-CA	-5.45	1.38	1.46
1	O	233	VAL	N-CA	5.45	1.53	1.46
1	D	227	VAL	N-CA	-5.45	1.39	1.46
1	L	320	VAL	C-N	5.45	1.41	1.33
1	P	428	ARG	CD-NE	5.45	1.53	1.46
1	P	531	ALA	CA-C	-5.45	1.46	1.52
1	H	43	PRO	N-CD	-5.44	1.40	1.47
1	B	126	PHE	N-CA	-5.44	1.39	1.46
1	G	246	ILE	CB-CG1	5.44	1.64	1.53
1	A	199	GLY	C-O	5.44	1.31	1.23
1	A	430	ARG	CD-NE	5.44	1.53	1.46
1	H	379	VAL	CA-CB	-5.43	1.46	1.54
1	K	162	VAL	CA-CB	-5.43	1.47	1.54
1	I	244	ALA	N-CA	-5.43	1.39	1.46
1	O	293	ILE	C-N	5.43	1.40	1.33
1	A	463	GLY	C-O	-5.43	1.17	1.24
1	G	418	GLY	C-N	5.43	1.39	1.33
1	J	215	GLY	CA-C	-5.43	1.45	1.52
1	J	38	ARG	CA-CB	5.43	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	430	ARG	N-CA	-5.43	1.39	1.46
1	J	129	ALA	N-CA	-5.42	1.39	1.46
1	O	56	ASP	N-CA	-5.42	1.39	1.46
1	C	369	PHE	N-CA	5.42	1.52	1.46
1	G	90	GLU	CA-C	5.42	1.59	1.52
1	F	311	PHE	N-CA	-5.42	1.39	1.46
1	M	313	ALA	N-CA	-5.42	1.39	1.46
1	N	110	GLU	CA-C	5.42	1.59	1.52
1	N	355	GLU	N-CA	5.42	1.53	1.46
1	O	42	GLY	C-N	5.42	1.39	1.34
1	P	333	LYS	CA-C	5.42	1.60	1.52
1	O	151	SER	CA-CB	5.42	1.61	1.53
1	C	355	GLU	CA-C	-5.42	1.45	1.52
1	P	405	LEU	CA-C	-5.42	1.45	1.52
1	D	381	ILE	CA-C	-5.41	1.46	1.52
1	F	253	LEU	CA-C	5.41	1.59	1.53
1	H	390	ALA	N-CA	5.41	1.53	1.46
1	A	522	SER	N-CA	-5.41	1.39	1.46
1	C	364	ASN	C-N	5.41	1.41	1.33
1	B	135	GLU	CA-C	5.41	1.60	1.52
1	M	53	SER	CA-CB	5.41	1.62	1.53
1	E	279	GLU	CA-C	5.41	1.60	1.52
1	G	121	ILE	C-O	-5.41	1.17	1.24
1	K	245	LYS	CA-C	-5.41	1.46	1.52
1	L	461	THR	N-CA	5.41	1.52	1.46
1	F	171	MET	N-CA	5.41	1.53	1.46
1	N	305	ASP	CA-C	5.41	1.59	1.52
1	A	90	GLU	CA-C	5.41	1.59	1.52
1	B	363	GLY	C-N	5.41	1.41	1.33
1	D	206	LEU	N-CA	5.41	1.53	1.46
1	L	293	ILE	CA-C	5.41	1.60	1.52
1	H	496	ASP	C-O	-5.40	1.17	1.24
1	L	306	ASP	CA-C	-5.40	1.46	1.52
1	C	259	GLU	N-CA	-5.40	1.39	1.46
1	L	118	HIS	CA-CB	5.40	1.61	1.53
1	D	490	ASN	CA-CB	5.40	1.61	1.53
1	F	312	LEU	CA-CB	5.40	1.62	1.53
1	D	384	ARG	CA-CB	5.40	1.62	1.53
1	P	81	VAL	N-CA	5.40	1.52	1.46
1	P	330	LYS	CA-C	-5.39	1.45	1.52
1	C	430	ARG	CA-C	5.39	1.59	1.53
1	E	242	GLU	C-N	5.39	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	249	LEU	C-N	5.39	1.40	1.33
1	M	521	THR	CA-C	-5.39	1.45	1.52
1	G	464	LEU	CA-CB	5.39	1.61	1.53
1	B	160	LYS	C-N	5.39	1.40	1.33
1	O	240	ARG	CA-CB	5.39	1.63	1.53
1	P	297	VAL	N-CA	-5.39	1.39	1.46
1	G	279	GLU	N-CA	5.38	1.53	1.46
1	J	439	LYS	N-CA	-5.38	1.39	1.46
1	K	357	VAL	CA-CB	-5.38	1.47	1.54
1	E	475	ALA	C-N	5.38	1.41	1.34
1	I	477	HIS	CD2-NE2	5.38	1.43	1.37
1	H	76	ALA	CA-CB	5.38	1.62	1.53
1	D	352	GLY	N-CA	5.38	1.50	1.44
1	A	47	ASP	CA-CB	5.37	1.61	1.53
1	G	415	VAL	CA-C	-5.37	1.46	1.52
1	I	325	ARG	N-CA	5.37	1.52	1.46
1	N	481	LEU	C-O	-5.37	1.17	1.23
1	O	327	ASP	CA-CB	5.37	1.62	1.53
1	B	58	THR	N-CA	-5.37	1.39	1.46
1	F	305	ASP	CA-C	-5.37	1.46	1.52
1	K	130	PHE	C-N	5.37	1.41	1.33
1	D	35	GLU	C-N	5.37	1.41	1.33
1	I	310	HIS	CD2-NE2	5.37	1.43	1.37
1	D	374	LYS	CA-CB	5.37	1.59	1.52
1	I	238	PRO	N-CD	-5.37	1.40	1.47
1	P	352	GLY	CA-C	5.37	1.58	1.52
1	B	76	ALA	CA-C	-5.36	1.45	1.52
1	C	235	ALA	N-CA	5.36	1.52	1.46
1	M	351	LEU	C-N	5.36	1.39	1.33
1	N	15	SER	CA-CB	5.36	1.60	1.53
1	N	415	VAL	CA-CB	-5.36	1.47	1.54
1	C	38	ARG	C-N	5.36	1.41	1.33
1	M	59	ILE	CA-C	-5.36	1.45	1.52
1	B	458	LEU	N-CA	5.36	1.52	1.46
1	D	320	VAL	N-CA	-5.36	1.39	1.46
1	H	422	GLU	CA-CB	5.36	1.61	1.53
1	P	444	ILE	CA-CB	-5.36	1.47	1.54
1	F	119	PRO	N-CA	-5.36	1.40	1.47
1	L	483	ASN	CA-C	-5.36	1.45	1.52
1	K	271	GLN	C-N	5.36	1.40	1.33
1	F	522	SER	N-CA	-5.35	1.39	1.46
1	N	248	VAL	CA-C	-5.35	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	496	ASP	CA-C	5.35	1.60	1.53
1	F	348	PRO	C-N	5.35	1.42	1.33
1	L	299	ILE	C-O	5.35	1.29	1.24
1	M	208	LYS	CA-C	-5.35	1.46	1.52
1	M	254	GLU	C-N	5.35	1.41	1.33
1	D	490	ASN	CA-C	-5.35	1.46	1.52
1	K	181	MET	N-CA	5.35	1.52	1.46
1	P	201	ASN	C-O	-5.35	1.17	1.24
1	B	292	SER	N-CA	-5.35	1.39	1.46
1	F	77	ALA	N-CA	-5.35	1.39	1.46
1	F	351	LEU	CA-C	5.35	1.59	1.52
1	K	212	LYS	CA-C	5.35	1.59	1.52
1	B	54	PHE	N-CA	5.35	1.52	1.46
1	D	306	ASP	C-N	5.35	1.40	1.33
1	J	479	LYS	CA-C	5.35	1.60	1.52
1	N	101	LEU	C-N	5.35	1.41	1.33
1	A	16	ARG	CA-CB	5.35	1.62	1.53
1	C	242	GLU	N-CA	-5.34	1.39	1.46
1	O	329	GLU	CA-CB	5.34	1.61	1.53
1	D	317	ILE	C-O	-5.34	1.18	1.24
1	F	510	ARG	CD-NE	5.34	1.53	1.46
1	J	457	ILE	CA-C	-5.34	1.44	1.52
1	M	51	ILE	CA-C	-5.34	1.46	1.52
1	A	266	ILE	CA-CB	-5.34	1.46	1.54
1	I	397	SER	CA-C	5.34	1.59	1.52
1	J	66	ILE	CA-C	-5.34	1.45	1.52
1	J	74	HIS	CB-CG	-5.34	1.42	1.50
1	N	468	SER	C-N	5.34	1.41	1.34
1	K	448	ALA	CA-C	5.33	1.59	1.52
1	A	434	ARG	CA-C	-5.33	1.46	1.52
1	C	516	ALA	N-CA	-5.33	1.39	1.46
1	E	523	ILE	CA-C	5.33	1.60	1.52
1	I	22	ALA	N-CA	-5.33	1.39	1.46
1	K	204	LEU	C-N	5.33	1.41	1.33
1	J	345	ASP	CA-C	5.33	1.59	1.52
1	P	332	GLU	CA-CB	5.33	1.62	1.53
1	F	239	ARG	CA-CB	5.33	1.62	1.53
1	C	518	GLU	N-CA	-5.33	1.39	1.46
1	F	105	PHE	CA-C	-5.32	1.46	1.52
1	M	216	THR	C-N	5.32	1.40	1.34
1	G	486	VAL	CA-CB	5.32	1.60	1.53
1	I	428	ARG	CD-NE	5.32	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	109	ALA	C-O	-5.32	1.17	1.24
1	L	168	SER	C-O	-5.32	1.17	1.24
1	B	182	ASP	CA-CB	5.32	1.61	1.53
1	O	243	LYS	CA-CB	5.32	1.61	1.53
1	A	299	ILE	N-CA	-5.32	1.40	1.46
1	I	45	GLY	C-N	5.31	1.41	1.33
1	M	525	LYS	C-O	-5.31	1.16	1.24
1	P	328	ILE	N-CA	-5.31	1.40	1.46
1	E	130	PHE	C-N	5.31	1.40	1.33
1	I	322	ARG	CA-CB	5.31	1.62	1.53
1	H	118	HIS	N-CA	5.30	1.52	1.45
1	P	126	PHE	CA-CB	5.30	1.61	1.53
1	G	262	ALA	CA-CB	5.30	1.62	1.53
1	E	256	GLU	C-N	5.30	1.39	1.33
1	G	210	ASP	CA-C	-5.30	1.46	1.52
1	N	65	THR	C-N	5.30	1.40	1.33
1	D	225	GLY	C-O	-5.30	1.18	1.23
1	M	244	ALA	N-CA	-5.30	1.39	1.46
1	D	431	GLU	N-CA	5.29	1.53	1.46
1	H	436	VAL	C-N	5.29	1.39	1.33
1	C	405	LEU	CA-CB	5.29	1.61	1.53
1	G	452	GLU	N-CA	5.29	1.53	1.46
1	J	28	LEU	CA-C	5.29	1.59	1.52
1	P	530	ILE	C-N	5.29	1.40	1.33
1	C	284	LYS	CA-C	5.29	1.60	1.52
1	B	343	ILE	C-N	5.29	1.40	1.33
1	E	519	ALA	N-CA	5.29	1.52	1.46
1	J	159	LYS	N-CA	5.29	1.52	1.46
1	P	130	PHE	C-O	-5.29	1.18	1.24
1	D	155	ARG	CD-NE	5.29	1.53	1.46
1	K	474	ARG	N-CA	-5.29	1.40	1.46
1	M	424	GLU	C-O	-5.29	1.17	1.24
1	E	288	ASP	CA-C	5.29	1.59	1.52
1	M	151	SER	CA-CB	5.29	1.62	1.53
1	O	302	LYS	CA-C	-5.29	1.45	1.52
1	D	359	GLU	CA-C	-5.28	1.46	1.52
1	G	160	LYS	CA-C	-5.28	1.46	1.52
1	H	27	ILE	CA-C	-5.28	1.45	1.52
1	K	197	ASP	CA-CB	5.28	1.62	1.53
1	K	234	HIS	C-N	5.28	1.41	1.34
1	B	317	ILE	CA-C	5.28	1.58	1.52
1	L	14	THR	N-CA	5.28	1.56	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	368	VAL	C-N	5.28	1.40	1.33
1	C	118	HIS	CA-C	-5.28	1.47	1.53
1	C	192	ALA	N-CA	5.28	1.53	1.46
1	O	310	HIS	CA-CB	5.28	1.61	1.53
1	C	464	LEU	CA-C	-5.28	1.46	1.52
1	P	99	VAL	N-CA	5.28	1.52	1.46
1	B	335	LEU	CA-CB	5.28	1.62	1.53
1	F	458	LEU	C-O	-5.28	1.17	1.24
1	J	52	ASP	N-CA	-5.28	1.39	1.45
1	B	516	ALA	C-N	5.27	1.41	1.33
1	D	165	THR	CA-C	-5.27	1.46	1.52
1	L	212	LYS	CA-C	-5.27	1.46	1.52
1	N	446	ALA	CA-C	5.27	1.59	1.52
1	O	143	LYS	C-N	5.27	1.40	1.33
1	P	46	LEU	CA-C	5.27	1.59	1.52
1	B	270	ASP	N-CA	-5.27	1.39	1.46
1	E	332	GLU	N-CA	-5.27	1.40	1.46
1	K	348	PRO	CA-C	-5.27	1.45	1.52
1	C	280	ALA	CA-C	5.27	1.59	1.52
1	H	205	ASP	CA-CB	5.27	1.61	1.53
1	O	407	ASN	N-CA	5.27	1.52	1.46
1	A	230	LYS	CA-CB	5.27	1.62	1.53
1	D	41	LEU	CB-CG	5.27	1.64	1.53
1	E	134	LEU	C-N	5.27	1.41	1.33
1	F	86	ALA	CA-C	5.27	1.59	1.52
1	F	192	ALA	C-O	-5.27	1.17	1.24
1	I	360	ARG	CD-NE	5.27	1.53	1.46
1	L	195	LEU	CA-C	-5.27	1.47	1.52
1	D	472	ASP	CA-CB	5.26	1.61	1.53
1	E	505	PRO	CA-C	-5.26	1.45	1.52
1	I	479	LYS	C-N	5.26	1.40	1.33
1	L	310	HIS	CG-ND1	5.26	1.44	1.38
1	N	254	GLU	N-CA	5.26	1.52	1.45
1	C	451	LEU	N-CA	-5.26	1.40	1.46
1	O	353	TYR	CG-CD1	5.26	1.50	1.39
1	F	25	ASN	CA-CB	5.26	1.61	1.53
1	G	481	LEU	CB-CG	5.26	1.64	1.53
1	I	420	ALA	CA-CB	5.26	1.61	1.53
1	M	268	SER	N-CA	5.26	1.51	1.46
1	N	228	LEU	C-N	5.26	1.41	1.33
1	P	521	THR	N-CA	5.26	1.52	1.46
1	C	123	ILE	CA-CB	-5.25	1.48	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	J	235	ALA	C-O	-5.25	1.17	1.24
1	E	139	GLN	N-CA	-5.25	1.39	1.46
1	H	332	GLU	CA-C	5.25	1.59	1.52
1	O	363	GLY	CA-C	-5.25	1.46	1.51
1	I	142	THR	C-N	5.25	1.40	1.33
1	L	93	ASP	C-N	5.25	1.40	1.33
1	O	516	ALA	C-N	5.25	1.41	1.33
1	B	210	ASP	N-CA	5.25	1.52	1.46
1	K	160	LYS	C-N	5.25	1.40	1.33
1	N	184	VAL	C-N	5.25	1.40	1.33
1	N	507	ARG	CD-NE	5.25	1.53	1.46
1	E	172	ALA	CA-C	-5.25	1.46	1.52
1	F	193	GLU	CA-C	5.24	1.59	1.52
1	K	247	ALA	N-CA	-5.24	1.39	1.46
1	G	377	LYS	N-CA	-5.24	1.39	1.46
1	N	418	GLY	CA-C	-5.24	1.44	1.51
1	C	224	ARG	CD-NE	5.24	1.53	1.46
1	J	179	LYS	N-CA	5.24	1.52	1.46
1	P	295	ALA	CA-C	-5.24	1.46	1.52
1	A	74	HIS	CA-C	5.24	1.58	1.52
1	C	85	LYS	CA-CB	5.23	1.61	1.53
1	G	221	GLN	N-CA	5.23	1.52	1.45
1	K	26	ASN	CA-CB	5.23	1.61	1.53
1	N	382	LEU	N-CA	-5.23	1.39	1.46
1	P	417	GLY	CA-C	-5.23	1.44	1.51
1	G	97	SER	CA-C	-5.23	1.46	1.52
1	J	277	ASP	CA-CB	5.23	1.61	1.53
1	L	371	GLU	C-O	-5.23	1.17	1.23
1	G	465	GLU	N-CA	-5.23	1.38	1.46
1	I	202	VAL	C-N	5.23	1.40	1.33
1	L	234	HIS	CD2-NE2	5.23	1.43	1.37
1	M	500	ILE	CA-CB	5.23	1.61	1.54
1	N	522	SER	N-CA	-5.23	1.40	1.46
1	O	494	ILE	CA-CB	-5.23	1.47	1.54
1	M	508	VAL	CA-CB	-5.22	1.47	1.54
1	O	478	ALA	C-N	5.22	1.41	1.33
1	B	408	ILE	CA-C	-5.22	1.46	1.52
1	D	91	VAL	C-N	5.22	1.41	1.33
1	K	460	GLU	C-O	5.22	1.30	1.24
1	L	460	GLU	N-CA	5.22	1.52	1.46
1	O	447	TYR	CA-CB	5.22	1.61	1.53
1	P	150	ASN	CA-C	5.22	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	23	LEU	C-O	5.22	1.30	1.24
1	M	250	ASP	C-O	-5.22	1.17	1.24
1	N	113	VAL	C-N	5.22	1.40	1.33
1	O	261	SER	C-N	5.22	1.40	1.33
1	O	392	ASP	CA-CB	5.22	1.61	1.53
1	F	113	VAL	C-N	5.21	1.40	1.33
1	M	194	PRO	C-N	-5.21	1.25	1.33
1	L	220	SER	CA-CB	5.21	1.61	1.53
1	N	308	ALA	N-CA	-5.21	1.39	1.46
1	P	140	LEU	N-CA	-5.21	1.38	1.46
1	E	321	ARG	CD-NE	5.21	1.53	1.46
1	E	61	ASN	CA-CB	5.21	1.61	1.54
1	E	218	GLU	CA-CB	5.21	1.63	1.53
1	F	182	ASP	CA-C	5.21	1.59	1.52
1	O	298	VAL	C-N	5.21	1.40	1.33
1	A	118	HIS	CG-ND1	5.21	1.44	1.38
1	C	28	LEU	CA-C	5.21	1.59	1.52
1	F	431	GLU	C-N	5.21	1.40	1.33
1	N	485	GLY	C-O	5.21	1.29	1.23
1	D	64	ALA	N-CA	-5.21	1.39	1.46
1	E	475	ALA	CA-CB	5.21	1.61	1.53
1	A	476	ARG	NE-CZ	5.20	1.38	1.33
1	C	319	ALA	CA-CB	-5.20	1.45	1.53
1	F	408	ILE	N-CA	5.20	1.52	1.46
1	L	494	ILE	CA-CB	-5.20	1.49	1.55
1	O	188	VAL	N-CA	5.20	1.52	1.46
1	O	81	VAL	C-O	-5.20	1.18	1.24
1	A	488	VAL	C-O	5.20	1.30	1.24
1	J	374	LYS	N-CA	-5.20	1.39	1.46
1	M	518	GLU	CA-CB	5.20	1.61	1.53
1	G	414	ILE	C-O	-5.20	1.18	1.23
1	J	346	ALA	CA-CB	5.20	1.62	1.53
1	L	310	HIS	CA-CB	5.20	1.61	1.53
1	A	208	LYS	CA-C	-5.20	1.46	1.52
1	A	336	GLY	CA-C	-5.20	1.43	1.51
1	G	325	ARG	NE-CZ	5.20	1.38	1.33
1	H	307	ILE	CA-C	5.20	1.59	1.52
1	J	493	ILE	CB-CG1	5.20	1.63	1.53
1	M	58	THR	CA-C	-5.20	1.46	1.52
1	P	232	VAL	C-N	5.20	1.40	1.33
1	B	97	SER	CA-C	5.19	1.59	1.52
1	K	56	ASP	CA-C	-5.19	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	K	352	GLY	N-CA	5.19	1.49	1.44
1	A	274	ALA	CA-CB	-5.19	1.45	1.53
1	A	520	ALA	CA-CB	5.19	1.61	1.53
1	J	69	GLU	CA-C	5.19	1.61	1.52
1	L	119	PRO	N-CA	5.19	1.54	1.47
1	M	222	LEU	N-CA	5.19	1.52	1.45
1	J	228	LEU	C-N	5.18	1.41	1.33
1	J	406	ARG	C-N	5.18	1.41	1.33
1	J	525	LYS	C-N	5.18	1.39	1.33
1	C	351	LEU	N-CA	-5.18	1.39	1.46
1	I	25	ASN	CA-C	5.18	1.59	1.52
1	N	373	ALA	CA-CB	-5.18	1.45	1.53
1	D	406	ARG	CZ-NH1	5.18	1.40	1.32
1	A	175	GLU	C-O	-5.18	1.18	1.24
1	B	298	VAL	N-CA	-5.18	1.40	1.46
1	J	526	ILE	CB-CG1	5.18	1.63	1.53
1	B	138	PRO	CA-CB	5.18	1.61	1.53
1	C	494	ILE	N-CA	-5.18	1.40	1.46
1	P	494	ILE	CA-C	5.18	1.58	1.52
1	K	282	TYR	CZ-OH	5.17	1.49	1.38
1	M	211	LYS	C-N	5.17	1.41	1.33
1	F	261	SER	CA-C	5.17	1.58	1.53
1	J	327	ASP	C-N	5.17	1.40	1.33
1	L	371	GLU	CA-CB	5.17	1.63	1.53
1	M	327	ASP	CA-C	5.17	1.59	1.52
1	D	361	LYS	CA-C	-5.17	1.46	1.52
1	H	20	ARG	N-CA	5.17	1.52	1.46
1	N	24	LYS	CA-C	-5.17	1.45	1.52
1	P	361	LYS	CA-C	-5.17	1.46	1.52
1	J	325	ARG	N-CA	-5.17	1.40	1.46
1	C	429	LEU	N-CA	-5.16	1.40	1.46
1	J	252	SER	N-CA	5.16	1.52	1.45
1	J	523	ILE	CA-CB	-5.16	1.47	1.54
1	O	74	HIS	CG-ND1	-5.16	1.32	1.38
1	G	96	THR	C-N	5.16	1.40	1.33
1	H	76	ALA	C-N	5.16	1.41	1.33
1	L	349	GLU	N-CA	-5.16	1.39	1.46
1	C	434	ARG	CD-NE	5.16	1.53	1.46
1	F	474	ARG	C-N	5.16	1.41	1.33
1	N	320	VAL	N-CA	-5.16	1.40	1.46
1	O	177	LEU	N-CA	-5.16	1.39	1.46
1	F	313	ALA	N-CA	-5.16	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	373	ALA	C-N	5.16	1.40	1.33
1	J	207	ILE	CA-CB	-5.15	1.47	1.54
1	O	471	MET	C-O	-5.15	1.17	1.24
1	C	360	ARG	CD-NE	5.15	1.53	1.46
1	E	285	ASP	CA-C	-5.15	1.46	1.52
1	H	113	VAL	N-CA	5.15	1.52	1.46
1	I	348	PRO	N-CA	-5.15	1.40	1.47
1	G	74	HIS	CA-CB	5.15	1.62	1.53
1	E	426	SER	C-N	5.15	1.41	1.33
1	J	201	ASN	C-N	5.15	1.40	1.33
1	J	334	ALA	CA-C	-5.15	1.45	1.52
1	N	447	TYR	CE1-CZ	5.15	1.50	1.38
1	H	175	GLU	CA-CB	5.15	1.61	1.53
1	P	232	VAL	CA-CB	-5.15	1.47	1.54
1	K	277	ASP	C-N	5.14	1.41	1.34
1	L	322	ARG	NE-CZ	5.14	1.38	1.33
1	L	328	ILE	CA-CB	5.14	1.61	1.54
1	N	250	ASP	CA-CB	5.14	1.61	1.53
1	C	521	THR	CA-C	5.14	1.59	1.52
1	J	500	ILE	C-N	5.14	1.40	1.33
1	K	519	ALA	N-CA	-5.14	1.40	1.46
1	A	372	GLY	CA-C	-5.14	1.44	1.51
1	I	383	LEU	CA-CB	5.14	1.60	1.53
1	L	117	ILE	CA-C	5.14	1.59	1.52
1	A	191	VAL	CA-CB	-5.13	1.47	1.54
1	A	526	ILE	CA-CB	-5.13	1.48	1.54
1	D	475	ALA	CA-CB	5.13	1.61	1.53
1	H	318	LEU	CA-C	-5.13	1.46	1.52
1	M	333	LYS	CA-C	5.13	1.59	1.52
1	O	144	VAL	C-N	5.13	1.40	1.33
1	P	325	ARG	CA-CB	5.13	1.61	1.53
1	F	373	ALA	CA-CB	5.13	1.61	1.53
1	J	53	SER	N-CA	5.13	1.52	1.46
1	J	381	ILE	C-O	-5.13	1.18	1.24
1	K	331	LEU	CA-C	-5.13	1.46	1.52
1	B	400	ASP	C-O	-5.13	1.18	1.24
1	C	337	ALA	CA-CB	5.13	1.60	1.53
1	N	318	LEU	CA-CB	5.13	1.59	1.53
1	C	72	ILE	CA-C	-5.13	1.46	1.52
1	H	495	ASP	CA-C	5.13	1.58	1.52
1	K	464	LEU	N-CA	5.13	1.51	1.45
1	P	34	ALA	CA-CB	-5.13	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	79	LEU	CA-C	-5.13	1.46	1.52
1	D	143	LYS	CA-CB	5.12	1.61	1.53
1	F	255	VAL	CA-CB	5.12	1.61	1.53
1	E	91	VAL	CA-CB	5.12	1.61	1.54
1	I	316	GLY	CA-C	5.12	1.58	1.51
1	I	321	ARG	C-O	5.12	1.30	1.24
1	J	273	LYS	CA-C	-5.12	1.45	1.52
1	K	158	LEU	N-CA	-5.12	1.40	1.46
1	J	74	HIS	N-CA	-5.12	1.38	1.46
1	K	123	ILE	N-CA	-5.12	1.40	1.46
1	N	144	VAL	C-N	5.12	1.40	1.33
1	P	153	THR	CA-CB	-5.12	1.45	1.53
1	B	66	ILE	C-O	-5.12	1.18	1.24
1	O	183	ILE	CA-C	-5.12	1.46	1.52
1	D	51	ILE	CA-C	5.12	1.58	1.52
1	E	455	PRO	N-CA	-5.12	1.40	1.47
1	J	492	LYS	CA-CB	5.12	1.63	1.53
1	L	267	THR	C-O	-5.12	1.17	1.24
1	L	481	LEU	CB-CG	5.12	1.63	1.53
1	A	106	LEU	N-CA	-5.12	1.40	1.46
1	G	177	LEU	CA-CB	5.12	1.61	1.53
1	I	111	SER	C-N	5.12	1.40	1.33
1	I	291	ALA	C-N	5.12	1.41	1.33
1	L	71	GLU	C-N	5.12	1.40	1.33
1	M	246	ILE	N-CA	-5.12	1.40	1.46
1	A	352	GLY	C-N	-5.11	1.26	1.33
1	B	359	GLU	CA-C	5.11	1.59	1.52
1	I	308	ALA	CA-C	5.11	1.59	1.52
1	K	342	SER	C-O	-5.11	1.17	1.23
1	J	504	GLU	CA-C	5.11	1.59	1.52
1	D	47	ASP	N-CA	-5.11	1.39	1.46
1	L	236	GLY	N-CA	-5.11	1.38	1.45
1	M	442	LEU	C-N	5.11	1.40	1.33
1	A	333	LYS	N-CA	-5.11	1.40	1.46
1	B	185	ILE	C-N	5.11	1.40	1.33
1	C	317	ILE	CA-C	5.11	1.58	1.52
1	G	469	ALA	C-N	5.11	1.40	1.33
1	F	136	LEU	N-CA	-5.10	1.39	1.46
1	O	139	GLN	C-N	5.10	1.40	1.33
1	E	282	TYR	CA-C	5.10	1.59	1.52
1	H	480	GLY	CA-C	-5.10	1.45	1.52
1	I	271	GLN	CA-C	5.10	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	J	402	LEU	CA-C	5.10	1.59	1.52
1	F	156	ASP	C-N	5.10	1.40	1.33
1	N	49	MET	CA-C	-5.10	1.46	1.52
1	P	67	VAL	C-N	5.10	1.40	1.33
1	I	242	GLU	C-N	5.09	1.40	1.33
1	K	66	ILE	N-CA	-5.09	1.40	1.46
1	M	256	GLU	CA-C	-5.09	1.46	1.52
1	M	409	LEU	CA-CB	5.09	1.61	1.53
1	A	296	ASN	CA-C	-5.09	1.46	1.52
1	N	264	ILE	N-CA	-5.09	1.40	1.46
1	B	58	THR	C-N	5.09	1.39	1.33
1	D	472	ASP	C-N	5.09	1.41	1.33
1	E	201	ASN	C-N	5.09	1.39	1.33
1	H	310	HIS	N-CA	-5.09	1.40	1.46
1	F	338	ARG	CD-NE	5.09	1.53	1.46
1	G	88	ASP	C-N	-5.09	1.26	1.33
1	L	228	LEU	CA-C	5.09	1.59	1.52
1	K	398	ILE	CA-CB	5.09	1.60	1.54
1	L	202	VAL	N-CA	-5.09	1.40	1.46
1	G	219	ASP	C-N	5.08	1.40	1.33
1	D	346	ALA	CA-C	-5.08	1.46	1.52
1	I	270	ASP	N-CA	5.08	1.52	1.46
1	L	297	VAL	N-CA	5.08	1.52	1.46
1	O	477	HIS	CA-CB	5.08	1.62	1.53
1	J	281	LYS	CA-C	5.08	1.59	1.52
1	N	88	ASP	CA-CB	5.08	1.62	1.53
1	J	467	ILE	CB-CG1	5.08	1.63	1.53
1	K	447	TYR	CA-CB	5.08	1.61	1.53
1	N	17	ASN	CA-CB	5.08	1.62	1.53
1	C	375	ASN	CA-CB	5.08	1.61	1.53
1	A	349	GLU	N-CA	-5.07	1.39	1.46
1	I	73	GLN	C-N	5.07	1.41	1.33
1	O	286	MET	N-CA	5.07	1.52	1.46
1	C	303	GLY	N-CA	5.07	1.49	1.45
1	A	511	GLN	C-N	5.07	1.40	1.33
1	F	432	TYR	CA-CB	5.07	1.61	1.53
1	H	129	ALA	C-N	5.07	1.40	1.33
1	L	302	LYS	CA-CB	5.07	1.62	1.53
1	N	48	LYS	CA-C	-5.07	1.46	1.52
1	O	220	SER	N-CA	-5.07	1.39	1.46
1	K	340	ILE	CA-CB	5.07	1.61	1.54
1	C	74	HIS	CD2-NE2	5.07	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	327	ASP	CA-CB	5.07	1.61	1.53
1	C	195	LEU	CA-CB	5.07	1.61	1.53
1	C	514	LYS	CA-C	5.07	1.59	1.52
1	L	78	LYS	N-CA	5.07	1.52	1.46
1	D	389	MET	CA-C	-5.06	1.46	1.52
1	L	373	ALA	CA-C	-5.06	1.46	1.52
1	O	48	LYS	N-CA	5.06	1.51	1.45
1	F	283	LEU	CA-C	5.06	1.59	1.52
1	L	107	GLU	N-CA	-5.06	1.39	1.46
1	B	125	GLY	C-N	5.06	1.41	1.34
1	L	238	PRO	CA-C	-5.06	1.45	1.52
1	E	80	LEU	C-N	5.06	1.40	1.33
1	G	110	GLU	CA-C	5.06	1.59	1.52
1	J	307	ILE	CA-CB	-5.06	1.48	1.54
1	P	39	SER	CA-C	-5.06	1.45	1.52
1	B	503	VAL	CA-CB	-5.06	1.49	1.54
1	C	346	ALA	N-CA	-5.05	1.39	1.46
1	O	355	GLU	CA-C	-5.05	1.46	1.52
1	B	67	VAL	CA-C	-5.05	1.46	1.52
1	G	477	HIS	ND1-CE1	5.05	1.37	1.32
1	H	172	ALA	N-CA	-5.05	1.39	1.46
1	O	206	LEU	CA-C	5.05	1.59	1.52
1	O	338	ARG	CA-CB	5.05	1.61	1.53
1	L	288	ASP	CA-CB	5.05	1.61	1.53
1	P	412	PRO	N-CD	-5.05	1.40	1.47
1	C	483	ASN	CA-CB	5.05	1.62	1.53
1	J	324	LYS	C-N	5.05	1.40	1.33
1	L	20	ARG	NE-CZ	5.05	1.38	1.33
1	C	85	LYS	CA-C	5.05	1.59	1.52
1	D	518	GLU	N-CA	-5.05	1.40	1.46
1	I	258	PRO	CA-C	5.05	1.59	1.52
1	L	140	LEU	CA-CB	5.05	1.62	1.53
1	L	271	GLN	C-N	5.05	1.40	1.33
1	M	329	GLU	N-CA	-5.05	1.40	1.46
1	B	356	LEU	N-CA	-5.04	1.39	1.46
1	D	318	LEU	CA-C	5.04	1.59	1.52
1	J	220	SER	C-N	5.04	1.40	1.33
1	O	325	ARG	CD-NE	5.04	1.53	1.46
1	A	455	PRO	N-CA	5.04	1.53	1.47
1	F	127	LYS	CA-C	5.04	1.59	1.52
1	M	110	GLU	CA-C	5.04	1.59	1.52
1	P	201	ASN	CA-CB	5.04	1.61	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	107	GLU	C-O	-5.04	1.17	1.24
1	K	145	ASP	C-O	-5.04	1.17	1.23
1	H	281	LYS	C-N	5.04	1.41	1.33
1	H	440	GLU	CA-CB	5.04	1.62	1.53
1	O	50	LEU	CA-C	-5.04	1.47	1.52
1	P	449	ASP	N-CA	-5.04	1.40	1.46
1	A	147	SER	CA-CB	5.04	1.61	1.53
1	C	91	VAL	CA-C	-5.04	1.46	1.52
1	F	315	ARG	CA-C	5.04	1.59	1.52
1	I	406	ARG	C-N	5.04	1.40	1.33
1	P	224	ARG	CA-CB	5.04	1.61	1.53
1	E	466	PRO	N-CD	-5.04	1.40	1.47
1	J	149	LEU	C-N	5.04	1.40	1.33
1	I	123	ILE	C-O	-5.04	1.18	1.24
1	L	162	VAL	CA-C	-5.04	1.46	1.52
1	O	101	LEU	CA-C	-5.04	1.46	1.52
1	G	234	HIS	CB-CG	5.03	1.57	1.50
1	A	234	HIS	CG-CD2	5.03	1.41	1.35
1	H	337	ALA	N-CA	-5.03	1.39	1.45
1	O	373	ALA	C-N	5.03	1.40	1.33
1	P	498	TYR	CB-CG	-5.03	1.40	1.51
1	E	61	ASN	C-N	5.03	1.40	1.33
1	D	191	VAL	CA-C	5.03	1.59	1.52
1	F	33	LEU	C-N	-5.03	1.27	1.33
1	F	506	ILE	CA-C	5.03	1.59	1.52
1	K	33	LEU	CA-C	5.03	1.59	1.52
1	L	341	SER	C-N	5.03	1.40	1.33
1	F	66	ILE	C-N	5.02	1.40	1.33
1	J	460	GLU	C-N	5.02	1.40	1.33
1	L	96	THR	CA-C	-5.02	1.46	1.52
1	L	148	ASP	CA-C	5.02	1.59	1.52
1	L	425	LEU	C-N	5.02	1.40	1.33
1	B	438	GLY	C-N	5.02	1.41	1.33
1	P	143	LYS	CA-CB	5.02	1.62	1.53
1	B	163	TYR	CA-C	5.02	1.59	1.52
1	E	429	LEU	CA-C	5.02	1.59	1.52
1	G	350	ASP	N-CA	5.02	1.52	1.46
1	H	122	ILE	CB-CG1	5.02	1.63	1.53
1	H	503	VAL	CA-C	-5.02	1.46	1.52
1	D	117	ILE	C-N	5.02	1.40	1.33
1	K	433	ALA	N-CA	-5.02	1.39	1.46
1	A	362	VAL	CA-CB	-5.01	1.47	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	414	ILE	N-CA	5.01	1.51	1.46
1	B	256	GLU	CB-CG	5.01	1.67	1.52
1	F	260	ILE	CA-C	-5.01	1.47	1.52
1	J	229	ASP	N-CA	-5.01	1.40	1.46
1	H	473	LEU	N-CA	-5.01	1.40	1.46
1	L	493	ILE	C-N	5.01	1.38	1.33
1	N	311	PHE	CA-CB	5.01	1.61	1.53
1	A	37	LEU	N-CA	5.01	1.52	1.46
1	G	428	ARG	CD-NE	5.00	1.53	1.46
1	M	93	ASP	C-N	-5.00	1.27	1.33
1	B	448	ALA	C-N	5.00	1.40	1.33
1	C	16	ARG	CD-NE	5.00	1.53	1.46
1	E	86	ALA	N-CA	-5.00	1.40	1.46
1	I	29	ALA	CA-C	5.00	1.59	1.52
1	M	123	ILE	N-CA	-5.00	1.41	1.46
1	D	521	THR	C-O	5.00	1.29	1.24
1	I	491	GLY	C-N	5.00	1.41	1.33
1	N	193	GLU	N-CA	-5.00	1.39	1.46

All (4352) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	170	PHE	CA-CB-CG	13.55	127.35	113.80
1	L	193	GLU	O-C-N	-13.21	113.26	121.71
1	L	438	GLY	O-C-N	-12.67	110.73	122.77
1	B	497	ILE	N-CA-C	12.40	122.19	110.53
1	F	455	PRO	CA-N-CD	-12.23	94.88	112.00
1	M	455	PRO	CA-N-CD	-12.19	94.94	112.00
1	J	481	LEU	CA-C-N	12.11	136.97	120.38
1	J	481	LEU	C-N-CA	12.11	136.97	120.38
1	D	455	PRO	CA-N-CD	-12.10	95.07	112.00
1	I	507	ARG	NE-CZ-NH2	12.06	130.05	119.20
1	D	455	PRO	CB-CA-C	12.03	131.41	111.56
1	B	455	PRO	CA-N-CD	-11.96	95.25	112.00
1	N	455	PRO	CB-CA-C	11.81	131.05	111.56
1	M	193	GLU	CA-C-O	-11.75	110.62	119.32
1	M	455	PRO	CB-CA-C	11.72	130.90	111.56
1	L	430	ARG	NE-CZ-NH2	11.71	129.74	119.20
1	H	340	ILE	O-C-N	-11.64	111.26	123.14
1	C	455	PRO	CA-N-CD	-11.42	96.02	112.00
1	J	455	PRO	CB-CA-C	11.39	130.35	111.56
1	J	455	PRO	CA-N-CD	-11.37	96.09	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	375	ASN	CA-C-O	-11.33	104.64	120.16
1	F	255	VAL	N-CA-C	11.30	124.19	108.93
1	L	455	PRO	CA-N-CD	-11.30	96.18	112.00
1	K	455	PRO	CB-CA-C	11.29	130.19	111.56
1	I	44	LYS	CA-C-N	11.20	131.06	120.98
1	I	44	LYS	C-N-CA	11.20	131.06	120.98
1	G	68	LYS	N-CA-C	11.16	123.01	111.07
1	G	406	ARG	NE-CZ-NH1	-11.03	110.47	121.50
1	H	74	HIS	CA-C-O	-11.00	112.14	119.29
1	P	455	PRO	CA-N-CD	-10.99	96.61	112.00
1	E	478	ALA	N-CA-C	-10.87	99.85	113.55
1	J	240	ARG	NE-CZ-NH2	10.81	128.93	119.20
1	M	52	ASP	CA-CB-CG	10.81	123.41	112.60
1	H	29	ALA	N-CA-C	10.80	122.63	111.07
1	L	455	PRO	CB-CA-C	10.80	129.38	111.56
1	H	128	LYS	O-C-N	-10.79	110.68	122.12
1	H	455	PRO	CA-N-CD	-10.71	97.00	112.00
1	E	430	ARG	NE-CZ-NH2	10.69	128.82	119.20
1	C	193	GLU	O-C-N	-10.67	114.88	121.71
1	B	311	PHE	CA-CB-CG	-10.62	103.18	113.80
1	F	250	ASP	CA-C-O	10.54	132.09	119.97
1	H	455	PRO	CB-CA-C	10.52	128.91	111.56
1	E	150	ASN	N-CA-CB	10.50	128.24	110.49
1	C	271	GLN	OE1-CD-NE2	-10.45	112.15	122.60
1	G	455	PRO	CB-CA-C	10.44	128.78	111.56
1	H	501	ASN	CA-CB-CG	-10.40	102.19	112.60
1	G	430	ARG	NE-CZ-NH2	10.40	128.56	119.20
1	G	126	PHE	CA-CB-CG	10.31	124.11	113.80
1	G	16	ARG	NE-CZ-NH2	10.29	128.46	119.20
1	I	259	GLU	N-CA-C	10.26	122.05	111.07
1	E	364	ASN	OD1-CG-ND2	-10.23	112.37	122.60
1	J	306	ASP	N-CA-C	10.22	123.69	111.33
1	D	197	ASP	CA-CB-CG	-10.19	102.41	112.60
1	B	455	PRO	CB-CA-C	10.19	128.37	111.56
1	D	219	ASP	CA-C-O	10.19	131.48	119.56
1	L	177	LEU	CA-C-N	10.16	133.64	120.44
1	L	177	LEU	C-N-CA	10.16	133.64	120.44
1	L	261	SER	CA-C-N	10.14	135.11	120.71
1	L	261	SER	C-N-CA	10.14	135.11	120.71
1	P	474	ARG	NE-CZ-NH2	10.09	128.28	119.20
1	E	510	ARG	NE-CZ-NH2	10.07	128.27	119.20
1	O	420	ALA	CA-C-N	10.06	133.57	120.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	420	ALA	C-N-CA	10.06	133.57	120.60
1	H	257	LYS	N-CA-C	10.02	122.36	109.64
1	I	303	GLY	CA-C-O	-10.00	114.23	122.33
1	K	455	PRO	CA-N-CD	-10.00	98.00	112.00
1	G	26	ASN	CA-CB-CG	10.00	122.60	112.60
1	I	507	ARG	NE-CZ-NH1	-9.99	111.51	121.50
1	L	375	ASN	CA-C-O	-9.99	106.48	120.16
1	N	323	VAL	CA-C-N	9.99	135.05	120.87
1	N	323	VAL	C-N-CA	9.99	135.05	120.87
1	P	455	PRO	CB-CA-C	9.98	128.02	111.56
1	C	454	ILE	O-C-N	-9.97	109.73	121.10
1	O	197	ASP	N-CA-C	9.97	121.74	111.07
1	I	477	HIS	CA-CB-CG	9.97	123.77	113.80
1	A	475	ALA	CA-C-O	9.93	131.39	119.97
1	A	421	ILE	CA-C-N	9.92	133.33	120.44
1	A	421	ILE	C-N-CA	9.92	133.33	120.44
1	E	296	ASN	OD1-CG-ND2	-9.91	112.69	122.60
1	B	369	PHE	CA-CB-CG	-9.86	103.94	113.80
1	F	159	LYS	CA-C-N	9.86	133.49	120.28
1	F	159	LYS	C-N-CA	9.86	133.49	120.28
1	K	428	ARG	NE-CZ-NH2	9.84	128.06	119.20
1	G	229	ASP	CA-C-N	9.78	135.19	120.82
1	G	229	ASP	C-N-CA	9.78	135.19	120.82
1	E	474	ARG	NE-CZ-NH2	9.76	127.99	119.20
1	M	56	ASP	CA-CB-CG	-9.76	102.84	112.60
1	L	341	SER	N-CA-C	9.74	121.49	111.07
1	E	455	PRO	CA-N-CD	-9.72	98.39	112.00
1	F	321	ARG	NE-CZ-NH2	9.70	127.93	119.20
1	B	90	GLU	N-CA-C	9.69	125.62	111.96
1	F	360	ARG	NE-CZ-NH1	-9.64	111.86	121.50
1	D	224	ARG	NE-CZ-NH1	-9.63	111.87	121.50
1	N	454	ILE	O-C-N	-9.63	110.12	121.10
1	K	362	VAL	CA-C-O	9.62	130.40	120.39
1	D	209	ILE	O-C-N	-9.60	112.89	123.26
1	I	455	PRO	CB-CA-C	9.60	127.39	111.56
1	B	360	ARG	NE-CZ-NH1	-9.58	111.92	121.50
1	I	190	THR	N-CA-C	9.58	122.92	111.33
1	K	205	ASP	CA-CB-CG	-9.58	103.02	112.60
1	C	499	SER	N-CA-C	9.55	121.69	111.28
1	P	93	ASP	CA-C-N	9.52	130.55	119.98
1	P	93	ASP	C-N-CA	9.52	130.55	119.98
1	E	405	LEU	N-CA-CB	-9.51	96.09	110.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	118	HIS	O-C-N	-9.50	113.59	121.38
1	B	138	PRO	O-C-N	-9.49	109.83	122.64
1	G	474	ARG	NE-CZ-NH1	-9.48	112.02	121.50
1	L	454	ILE	O-C-N	-9.48	110.29	121.10
1	G	345	ASP	CA-CB-CG	-9.45	103.15	112.60
1	E	488	VAL	N-CA-C	9.45	120.28	110.36
1	K	194	PRO	N-CA-CB	9.45	113.17	103.25
1	A	347	THR	O-C-N	-9.44	113.12	121.71
1	P	428	ARG	NE-CZ-NH1	-9.43	112.07	121.50
1	O	129	ALA	N-CA-C	9.37	121.09	111.07
1	K	119	PRO	CA-C-N	9.36	132.82	120.28
1	K	119	PRO	C-N-CA	9.36	132.82	120.28
1	D	384	ARG	NE-CZ-NH2	9.36	127.62	119.20
1	E	350	ASP	CA-C-N	9.33	136.56	122.65
1	E	350	ASP	C-N-CA	9.33	136.56	122.65
1	G	455	PRO	CA-N-CD	-9.33	98.94	112.00
1	N	111	SER	O-C-N	-9.31	112.48	122.07
1	H	145	ASP	CA-C-N	9.31	132.93	121.85
1	H	145	ASP	C-N-CA	9.31	132.93	121.85
1	K	113	VAL	N-CA-C	9.31	120.11	110.62
1	K	386	SER	N-CA-C	9.30	121.03	111.07
1	N	455	PRO	CA-N-CD	-9.30	98.98	112.00
1	E	530	ILE	O-C-N	-9.28	113.36	123.20
1	G	310	HIS	ND1-CE1-NE2	9.28	117.68	108.40
1	P	380	ASN	CA-CB-CG	9.28	121.88	112.60
1	A	455	PRO	CA-N-CD	-9.27	99.03	112.00
1	O	455	PRO	CB-CA-C	9.24	126.80	111.56
1	I	455	PRO	CA-N-CD	-9.22	99.09	112.00
1	K	377	LYS	N-CA-C	-9.22	102.61	114.04
1	D	507	ARG	NE-CZ-NH2	9.20	127.48	119.20
1	P	338	ARG	NE-CZ-NH1	-9.19	112.31	121.50
1	O	202	VAL	CB-CA-C	-9.18	98.61	111.28
1	P	415	VAL	CA-C-N	9.18	129.24	119.78
1	P	415	VAL	C-N-CA	9.18	129.24	119.78
1	C	287	VAL	N-CA-C	9.18	119.99	110.72
1	A	367	MET	O-C-N	-9.18	113.02	123.48
1	O	455	PRO	CA-N-CD	-9.17	99.16	112.00
1	N	430	ARG	NE-CZ-NH2	9.15	127.44	119.20
1	D	454	ILE	CA-C-O	-9.15	107.69	119.95
1	A	159	LYS	CA-C-N	9.12	133.24	120.29
1	A	159	LYS	C-N-CA	9.12	133.24	120.29
1	P	343	ILE	N-CA-C	9.11	119.91	110.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	49	MET	CA-C-O	9.10	130.19	120.36
1	P	339	ILE	N-CA-C	9.10	120.31	108.12
1	A	163	TYR	N-CA-C	9.08	121.26	111.36
1	H	434	ARG	NE-CZ-NH2	9.07	127.36	119.20
1	O	305	ASP	CA-C-N	9.06	132.79	120.38
1	O	305	ASP	C-N-CA	9.06	132.79	120.38
1	K	74	HIS	CA-C-O	-9.04	110.47	119.69
1	P	71	GLU	O-C-N	-9.03	111.59	122.96
1	K	332	GLU	CA-C-N	9.02	132.74	120.38
1	K	332	GLU	C-N-CA	9.02	132.74	120.38
1	F	322	ARG	NE-CZ-NH2	9.01	127.31	119.20
1	E	240	ARG	NE-CZ-NH2	8.98	127.29	119.20
1	B	205	ASP	O-C-N	-8.98	112.60	122.12
1	M	325	ARG	N-CA-C	8.95	122.16	111.33
1	P	362	VAL	N-CA-C	-8.91	94.74	107.75
1	D	500	ILE	CA-C-N	8.91	135.35	122.35
1	D	500	ILE	C-N-CA	8.91	135.35	122.35
1	P	454	ILE	CB-CA-C	8.91	127.57	111.36
1	J	224	ARG	NE-CZ-NH2	8.90	127.21	119.20
1	F	332	GLU	CA-C-O	8.90	130.34	121.00
1	L	486	VAL	CA-C-O	8.90	129.79	120.36
1	H	67	VAL	O-C-N	-8.89	113.20	121.91
1	D	399	ASN	O-C-N	-8.87	112.59	122.08
1	L	155	ARG	NE-CZ-NH1	-8.87	112.63	121.50
1	G	321	ARG	CA-C-N	8.86	138.47	121.54
1	G	321	ARG	C-N-CA	8.86	138.47	121.54
1	L	314	LYS	N-CA-C	8.85	120.54	111.07
1	F	190	THR	N-CA-C	8.85	122.03	111.33
1	P	116	ASN	N-CA-C	8.82	123.65	111.74
1	K	215	GLY	CA-C-O	-8.82	112.18	121.53
1	N	170	PHE	CA-CB-CG	8.82	122.62	113.80
1	P	239	ARG	N-CA-C	-8.80	102.67	113.50
1	C	474	ARG	NE-CZ-NH2	8.80	127.12	119.20
1	O	483	ASN	CA-CB-CG	-8.79	103.81	112.60
1	A	97	SER	CA-C-N	8.78	132.04	120.28
1	A	97	SER	C-N-CA	8.78	132.04	120.28
1	O	415	VAL	O-C-N	-8.78	115.58	121.72
1	J	507	ARG	NE-CZ-NH2	8.77	127.09	119.20
1	E	338	ARG	NE-CZ-NH2	8.75	127.08	119.20
1	H	423	LEU	N-CA-C	8.74	120.81	111.28
1	L	234	HIS	CB-CG-CD2	-8.74	119.84	131.20
1	B	38	ARG	N-CA-C	8.73	121.94	111.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	204	LEU	CA-C-N	8.71	132.31	120.38
1	C	204	LEU	C-N-CA	8.71	132.31	120.38
1	O	16	ARG	NE-CZ-NH2	8.71	127.04	119.20
1	A	239	ARG	NE-CZ-NH2	8.71	127.03	119.20
1	K	434	ARG	N-CA-C	8.70	120.84	111.36
1	I	321	ARG	CA-C-O	8.69	122.98	117.94
1	N	430	ARG	NE-CZ-NH1	-8.69	112.81	121.50
1	C	111	SER	CA-C-O	-8.68	111.70	120.82
1	O	482	THR	CA-C-N	8.66	133.81	120.82
1	O	482	THR	C-N-CA	8.66	133.81	120.82
1	D	141	ALA	CA-C-N	8.66	135.93	122.94
1	D	141	ALA	C-N-CA	8.66	135.93	122.94
1	O	216	THR	CA-C-N	8.66	134.50	120.30
1	O	216	THR	C-N-CA	8.66	134.50	120.30
1	G	145	ASP	CA-CB-CG	-8.65	103.95	112.60
1	J	187	ALA	N-CA-C	8.64	120.70	111.28
1	H	474	ARG	NE-CZ-NH1	-8.64	112.86	121.50
1	A	234	HIS	CA-C-N	8.63	131.66	120.44
1	A	234	HIS	C-N-CA	8.63	131.66	120.44
1	N	240	ARG	NE-CZ-NH2	8.62	126.96	119.20
1	J	467	ILE	O-C-N	-8.61	113.52	121.87
1	N	380	ASN	CA-CB-CG	8.61	121.21	112.60
1	P	364	ASN	CA-C-N	8.61	133.74	121.42
1	P	364	ASN	C-N-CA	8.61	133.74	121.42
1	O	124	GLU	N-CA-C	8.60	121.60	111.71
1	J	155	ARG	NE-CZ-NH2	8.60	126.94	119.20
1	M	158	LEU	N-CA-C	8.59	120.65	111.28
1	D	469	ALA	CA-C-N	8.59	132.49	120.29
1	D	469	ALA	C-N-CA	8.59	132.49	120.29
1	F	346	ALA	N-CA-C	8.59	122.99	110.28
1	H	324	LYS	CA-C-N	8.58	132.14	120.38
1	H	324	LYS	C-N-CA	8.58	132.14	120.38
1	I	124	GLU	N-CA-C	8.57	121.76	111.82
1	B	429	LEU	O-C-N	-8.57	112.39	122.15
1	D	325	ARG	O-C-N	-8.55	113.05	122.12
1	E	360	ARG	NE-CZ-NH1	-8.52	112.98	121.50
1	F	454	ILE	CB-CA-C	8.51	126.85	111.36
1	M	81	VAL	N-CA-C	8.50	119.31	110.72
1	K	396	ARG	NE-CZ-NH2	8.48	126.83	119.20
1	A	108	LYS	CA-C-O	8.46	130.33	120.00
1	C	223	ILE	O-C-N	-8.46	114.12	123.26
1	C	490	ASN	CA-CB-CG	-8.46	104.14	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	408	ILE	CA-C-O	8.46	129.81	120.85
1	C	211	LYS	CA-C-N	8.45	135.76	122.74
1	C	211	LYS	C-N-CA	8.45	135.76	122.74
1	I	514	LYS	N-CA-C	8.45	120.49	111.28
1	E	434	ARG	NE-CZ-NH1	-8.44	113.06	121.50
1	M	347	THR	CA-C-O	-8.44	112.25	120.26
1	I	18	SER	CA-C-N	8.44	128.11	120.10
1	I	18	SER	C-N-CA	8.44	128.11	120.10
1	E	17	ASN	OD1-CG-ND2	-8.43	114.17	122.60
1	F	100	VAL	CA-C-O	8.43	129.72	120.95
1	P	164	THR	N-CA-C	8.43	120.47	111.28
1	G	23	LEU	O-C-N	-8.43	112.54	122.15
1	J	186	ASP	O-C-N	-8.42	113.19	122.12
1	A	49	MET	O-C-N	-8.42	113.28	123.30
1	P	510	ARG	NE-CZ-NH1	-8.41	113.08	121.50
1	A	415	VAL	CA-C-N	8.41	128.91	119.83
1	A	415	VAL	C-N-CA	8.41	128.91	119.83
1	C	186	ASP	CA-C-N	8.41	131.55	120.28
1	C	186	ASP	C-N-CA	8.41	131.55	120.28
1	K	283	LEU	N-CA-C	8.41	120.07	111.07
1	L	315	ARG	NE-CZ-NH2	8.41	126.77	119.20
1	L	86	ALA	N-CA-C	8.39	121.36	111.71
1	C	384	ARG	NE-CZ-NH2	8.38	126.74	119.20
1	C	169	LYS	N-CA-C	8.37	123.33	113.20
1	L	254	GLU	CA-C-N	8.37	132.91	120.69
1	L	254	GLU	C-N-CA	8.37	132.91	120.69
1	C	112	LEU	O-C-N	-8.37	113.25	122.12
1	A	338	ARG	NE-CZ-NH2	8.37	126.73	119.20
1	P	219	ASP	CA-CB-CG	-8.37	104.23	112.60
1	I	193	GLU	CA-C-O	-8.36	112.49	120.94
1	I	510	ARG	NE-CZ-NH2	8.36	126.72	119.20
1	B	377	LYS	CA-C-O	8.35	129.57	119.97
1	H	201	ASN	CA-CB-CG	8.34	120.94	112.60
1	E	315	ARG	NE-CZ-NH2	8.34	126.70	119.20
1	I	527	ASP	CA-CB-CG	8.34	120.94	112.60
1	J	347	THR	CA-C-N	-8.33	109.43	119.84
1	J	347	THR	C-N-CA	-8.33	109.43	119.84
1	J	111	SER	O-C-N	-8.33	113.49	122.07
1	G	97	SER	N-CA-CB	8.31	122.34	110.12
1	K	339	ILE	CA-C-N	8.31	134.53	123.06
1	K	339	ILE	C-N-CA	8.31	134.53	123.06
1	O	278	GLU	N-CA-C	8.31	121.46	111.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	234	HIS	N-CA-C	8.31	122.28	110.23
1	J	102	ALA	CA-C-N	8.31	129.20	119.98
1	J	102	ALA	C-N-CA	8.31	129.20	119.98
1	L	360	ARG	NE-CZ-NH2	8.30	126.67	119.20
1	M	306	ASP	CA-CB-CG	8.29	120.89	112.60
1	C	338	ARG	NE-CZ-NH1	-8.29	113.21	121.50
1	H	340	ILE	CA-C-O	8.29	130.17	120.72
1	J	186	ASP	CA-C-O	8.29	129.34	120.55
1	H	212	LYS	CA-C-N	8.28	132.58	120.90
1	H	212	LYS	C-N-CA	8.28	132.58	120.90
1	E	33	LEU	CA-C-O	8.28	129.33	120.55
1	L	346	ALA	N-CA-C	8.28	122.24	110.23
1	A	148	ASP	CA-CB-CG	-8.27	104.33	112.60
1	H	317	ILE	O-C-N	-8.27	114.25	123.10
1	B	303	GLY	O-C-N	-8.27	115.20	123.06
1	D	89	SER	N-CA-CB	8.27	123.09	110.28
1	G	469	ALA	O-C-N	-8.26	112.73	122.15
1	O	171	MET	CG-SD-CE	-8.26	82.72	100.90
1	H	381	ILE	O-C-N	-8.25	114.52	123.18
1	D	93	ASP	CA-CB-CG	-8.25	104.35	112.60
1	L	74	HIS	CA-C-N	8.25	129.04	119.47
1	L	74	HIS	C-N-CA	8.25	129.04	119.47
1	L	236	GLY	CA-C-N	8.25	131.85	120.39
1	L	236	GLY	C-N-CA	8.25	131.85	120.39
1	M	321	ARG	NE-CZ-NH2	8.25	126.62	119.20
1	K	249	LEU	CA-C-N	8.24	131.32	120.28
1	K	249	LEU	C-N-CA	8.24	131.32	120.28
1	I	321	ARG	CA-C-N	8.24	137.27	121.54
1	I	321	ARG	C-N-CA	8.24	137.27	121.54
1	F	74	HIS	CA-C-O	-8.23	112.79	119.71
1	E	357	VAL	N-CA-C	-8.23	96.15	108.17
1	I	148	ASP	N-CA-CB	-8.23	99.58	111.84
1	B	20	ARG	CA-C-N	8.23	131.82	120.63
1	B	20	ARG	C-N-CA	8.23	131.82	120.63
1	F	322	ARG	NE-CZ-NH1	-8.23	113.27	121.50
1	I	315	ARG	NE-CZ-NH2	8.23	126.60	119.20
1	C	364	ASN	CA-CB-CG	-8.22	104.38	112.60
1	G	264	ILE	O-C-N	-8.22	113.58	123.03
1	K	485	GLY	CA-C-N	8.20	133.89	123.14
1	K	485	GLY	C-N-CA	8.20	133.89	123.14
1	E	343	ILE	N-CA-C	8.20	118.98	110.62
1	F	34	ALA	N-CA-C	8.19	119.99	111.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	97	SER	N-CA-C	8.19	120.20	111.28
1	N	228	LEU	O-C-N	-8.18	113.89	123.22
1	E	401	ALA	CA-C-N	8.18	131.91	120.29
1	E	401	ALA	C-N-CA	8.18	131.91	120.29
1	C	447	TYR	N-CA-C	-8.18	102.45	111.36
1	E	340	ILE	CA-C-N	8.18	131.07	120.44
1	E	340	ILE	C-N-CA	8.18	131.07	120.44
1	B	399	ASN	OD1-CG-ND2	-8.17	114.43	122.60
1	G	436	VAL	CA-C-N	8.16	131.65	122.67
1	G	436	VAL	C-N-CA	8.16	131.65	122.67
1	N	399	ASN	CA-CB-CG	-8.16	104.44	112.60
1	L	486	VAL	O-C-N	-8.16	114.39	123.20
1	M	131	ASN	CA-CB-CG	-8.16	104.44	112.60
1	K	489	ILE	N-CA-C	8.16	118.96	110.72
1	A	455	PRO	CB-CA-C	8.16	125.02	111.56
1	H	450	ALA	N-CA-C	8.15	120.25	111.36
1	B	328	ILE	CB-CA-C	-8.15	100.97	112.22
1	H	528	ASP	CA-CB-CG	8.15	120.75	112.60
1	O	434	ARG	N-CA-C	8.15	120.25	111.36
1	O	434	ARG	NE-CZ-NH1	-8.15	113.35	121.50
1	J	199	GLY	O-C-N	-8.14	115.51	122.92
1	M	91	VAL	O-C-N	-8.14	114.37	122.92
1	F	478	ALA	N-CA-C	-8.13	103.30	113.55
1	F	330	LYS	CA-C-O	8.13	129.04	120.42
1	P	159	LYS	CA-C-O	8.13	129.36	120.82
1	C	455	PRO	CB-CA-C	8.12	124.97	111.56
1	G	21	ASP	CA-C-N	8.12	131.51	120.38
1	G	21	ASP	C-N-CA	8.12	131.51	120.38
1	A	322	ARG	NE-CZ-NH2	8.11	126.50	119.20
1	I	302	LYS	CA-C-O	8.10	129.03	119.56
1	D	238	PRO	N-CA-C	8.10	129.15	112.47
1	I	154	ALA	CA-C-N	8.09	137.00	121.54
1	I	154	ALA	C-N-CA	8.09	137.00	121.54
1	O	313	ALA	N-CA-C	8.09	120.18	111.36
1	N	60	THR	O-C-N	-8.09	114.03	123.25
1	O	220	SER	O-C-N	-8.08	113.47	123.01
1	E	455	PRO	N-CA-CB	8.08	111.73	103.25
1	I	21	ASP	CA-C-N	8.08	131.44	120.38
1	I	21	ASP	C-N-CA	8.08	131.44	120.38
1	G	497	ILE	CA-C-N	8.07	131.44	120.38
1	G	497	ILE	C-N-CA	8.07	131.44	120.38
1	H	507	ARG	N-CA-C	8.06	122.38	112.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	190	THR	N-CA-CB	8.06	122.16	110.06
1	M	329	GLU	CA-C-O	8.06	129.10	120.55
1	M	360	ARG	NE-CZ-NH2	8.06	126.45	119.20
1	O	343	ILE	N-CA-C	8.06	118.84	110.62
1	C	118	HIS	N-CA-C	8.05	119.86	109.64
1	G	165	THR	CA-C-O	-8.05	112.02	120.55
1	O	150	ASN	CA-C-N	8.04	134.06	122.40
1	O	150	ASN	C-N-CA	8.04	134.06	122.40
1	L	25	ASN	OD1-CG-ND2	-8.04	114.56	122.60
1	N	257	LYS	CA-C-N	8.04	128.53	119.92
1	N	257	LYS	C-N-CA	8.04	128.53	119.92
1	G	169	LYS	N-CA-C	8.02	122.70	113.15
1	H	103	GLY	N-CA-C	8.02	122.35	112.73
1	N	124	GLU	N-CA-C	8.02	122.16	112.38
1	L	408	ILE	O-C-N	-8.01	113.58	121.83
1	B	386	SER	O-C-N	-8.00	111.95	122.59
1	A	495	ASP	N-CA-C	8.00	120.91	111.71
1	C	93	ASP	CA-C-N	8.00	128.85	119.98
1	C	93	ASP	C-N-CA	8.00	128.85	119.98
1	J	365	ASP	CA-CB-CG	-7.99	104.61	112.60
1	F	304	ILE	N-CA-C	7.99	119.62	108.12
1	G	184	VAL	O-C-N	-7.99	114.12	121.87
1	I	234	HIS	CA-CB-CG	7.99	121.78	113.80
1	M	167	SER	CB-CA-C	-7.98	97.28	110.85
1	N	366	LYS	N-CA-C	7.98	121.75	110.50
1	F	320	VAL	O-C-N	-7.98	114.65	123.03
1	P	93	ASP	CA-C-O	7.98	129.44	119.78
1	N	368	VAL	N-CA-CB	7.98	121.51	111.46
1	K	289	LYS	N-CA-CB	7.97	121.96	110.16
1	F	365	ASP	CA-C-N	7.96	133.44	120.94
1	F	365	ASP	C-N-CA	7.96	133.44	120.94
1	B	65	THR	N-CA-C	-7.96	102.69	111.36
1	G	154	ALA	CA-C-N	7.96	136.74	121.54
1	G	154	ALA	C-N-CA	7.96	136.74	121.54
1	J	169	LYS	N-CA-C	7.96	122.62	113.15
1	F	474	ARG	NE-CZ-NH1	-7.96	113.54	121.50
1	K	439	LYS	N-CA-C	7.95	122.41	112.87
1	A	384	ARG	O-C-N	-7.95	114.04	122.94
1	D	277	ASP	CA-CB-CG	-7.95	104.65	112.60
1	L	52	ASP	CA-C-N	7.94	130.93	120.28
1	L	52	ASP	C-N-CA	7.94	130.93	120.28
1	B	409	LEU	N-CA-C	7.94	119.56	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	308	ALA	N-CA-C	7.94	120.84	111.71
1	P	470	LEU	O-C-N	-7.92	113.11	122.15
1	C	339	ILE	N-CA-C	7.92	120.07	109.37
1	C	333	LYS	N-CA-C	7.92	121.89	111.75
1	G	477	HIS	CA-CB-CG	7.92	121.72	113.80
1	H	21	ASP	N-CA-C	-7.92	102.24	111.03
1	L	443	ALA	N-CA-C	7.91	119.98	111.36
1	K	439	LYS	CA-C-O	7.90	129.06	119.10
1	N	476	ARG	NE-CZ-NH2	7.90	126.31	119.20
1	O	421	ILE	N-CA-CB	7.90	119.28	110.51
1	D	224	ARG	NE-CZ-NH2	7.89	126.30	119.20
1	E	472	ASP	CA-CB-CG	-7.89	104.71	112.60
1	M	420	ALA	N-CA-C	-7.89	100.83	111.96
1	H	169	LYS	N-CA-C	7.89	122.74	113.20
1	H	489	ILE	N-CA-C	7.89	117.99	110.42
1	L	411	GLU	CA-C-N	7.89	129.70	119.84
1	L	411	GLU	C-N-CA	7.89	129.70	119.84
1	H	364	ASN	CA-CB-CG	-7.88	104.72	112.60
1	K	29	ALA	N-CA-C	7.88	119.50	111.07
1	L	90	GLU	CA-C-N	7.88	133.74	123.03
1	L	90	GLU	C-N-CA	7.88	133.74	123.03
1	P	20	ARG	NE-CZ-NH2	7.88	126.29	119.20
1	A	401	ALA	CA-C-N	7.88	131.47	120.29
1	A	401	ALA	C-N-CA	7.88	131.47	120.29
1	C	116	ASN	N-CA-C	7.87	122.54	111.52
1	F	38	ARG	O-C-N	-7.87	112.59	122.27
1	L	430	ARG	NE-CZ-NH1	-7.87	113.63	121.50
1	E	41	LEU	N-CA-C	7.86	121.63	110.23
1	D	22	ALA	N-CA-CB	-7.86	98.27	110.06
1	I	268	SER	O-C-N	-7.86	112.89	122.16
1	O	229	ASP	CA-C-N	7.86	132.62	120.75
1	O	229	ASP	C-N-CA	7.86	132.62	120.75
1	E	409	LEU	N-CA-C	7.85	119.92	111.36
1	B	374	LYS	N-CA-C	7.85	120.59	111.02
1	H	381	ILE	CA-C-O	7.84	128.79	120.48
1	B	472	ASP	CA-CB-CG	-7.84	104.76	112.60
1	N	183	ILE	N-CA-C	7.84	118.61	110.62
1	N	421	ILE	N-CA-C	7.83	118.58	110.36
1	H	195	LEU	O-C-N	-7.83	114.70	121.35
1	E	315	ARG	NE-CZ-NH1	-7.82	113.68	121.50
1	K	99	VAL	CA-C-O	7.81	129.08	120.95
1	H	52	ASP	CA-CB-CG	7.80	120.40	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	455	PRO	CB-CA-C	7.80	124.42	111.56
1	M	329	GLU	CA-C-N	7.80	131.36	120.29
1	M	329	GLU	C-N-CA	7.80	131.36	120.29
1	A	258	PRO	CA-C-O	-7.79	112.70	121.43
1	C	527	ASP	CA-CB-CG	7.79	120.39	112.60
1	G	515	SER	N-CA-C	7.79	122.55	112.89
1	C	511	GLN	CB-CG-CD	-7.79	99.36	112.60
1	K	52	ASP	O-C-N	-7.79	114.23	123.03
1	E	217	ILE	CA-C-N	7.78	133.16	120.63
1	E	217	ILE	C-N-CA	7.78	133.16	120.63
1	F	260	ILE	O-C-N	-7.78	113.02	122.59
1	M	95	THR	CA-C-O	7.78	128.89	120.10
1	J	99	VAL	N-CA-C	7.77	118.55	110.62
1	H	428	ARG	NE-CZ-NH2	7.77	126.19	119.20
1	I	467	ILE	N-CA-C	7.77	118.57	110.72
1	M	293	ILE	CA-C-N	7.77	132.49	122.00
1	M	293	ILE	C-N-CA	7.77	132.49	122.00
1	L	360	ARG	O-C-N	-7.77	113.80	123.27
1	I	94	GLY	O-C-N	-7.76	114.74	122.19
1	D	27	ILE	O-C-N	7.76	132.09	121.84
1	P	428	ARG	NE-CZ-NH2	7.76	126.18	119.20
1	H	254	GLU	CA-C-N	7.75	130.89	120.50
1	H	254	GLU	C-N-CA	7.75	130.89	120.50
1	J	16	ARG	N-CA-C	7.75	121.93	110.46
1	L	396	ARG	NE-CZ-NH2	7.75	126.17	119.20
1	O	169	LYS	N-CA-C	7.75	122.37	113.15
1	H	41	LEU	O-C-N	7.74	130.45	122.09
1	G	310	HIS	CE1-NE2-CD2	-7.74	101.26	109.00
1	J	437	GLY	O-C-N	-7.74	116.92	123.73
1	I	87	GLN	OE1-CD-NE2	-7.74	114.86	122.60
1	K	385	GLY	CA-C-N	7.73	130.49	120.44
1	K	385	GLY	C-N-CA	7.73	130.49	120.44
1	J	311	PHE	CA-CB-CG	-7.73	106.07	113.80
1	E	151	SER	N-CA-C	7.73	121.40	110.50
1	E	28	LEU	N-CA-C	7.73	119.70	111.28
1	F	145	ASP	CA-CB-CG	-7.72	104.88	112.60
1	M	141	ALA	CA-C-N	7.72	134.52	122.94
1	M	141	ALA	C-N-CA	7.72	134.52	122.94
1	D	223	ILE	O-C-N	-7.71	114.87	123.20
1	E	282	TYR	N-CA-C	-7.71	102.20	111.69
1	J	438	GLY	O-C-N	-7.71	115.44	122.77
1	O	126	PHE	CA-CB-CG	7.71	121.51	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	139	GLN	OE1-CD-NE2	-7.71	114.89	122.60
1	G	237	MET	CA-C-O	-7.71	112.56	120.96
1	B	347	THR	CA-C-O	-7.70	112.05	119.91
1	H	461	THR	N-CA-CB	7.70	121.44	110.12
1	N	325	ARG	NE-CZ-NH2	7.70	126.13	119.20
1	E	321	ARG	NE-CZ-NH1	-7.69	113.81	121.50
1	B	131	ASN	CA-CB-CG	-7.69	104.91	112.60
1	G	234	HIS	CB-CG-CD2	-7.69	121.20	131.20
1	N	128	LYS	O-C-N	-7.69	113.39	122.15
1	B	430	ARG	NE-CZ-NH2	7.67	126.11	119.20
1	P	414	ILE	CA-C-O	7.67	129.73	121.67
1	P	477	HIS	CB-CG-CD2	-7.67	121.22	131.20
1	G	195	LEU	CA-C-N	7.67	128.68	120.47
1	G	195	LEU	C-N-CA	7.67	128.68	120.47
1	O	454	ILE	O-C-N	-7.67	112.36	121.10
1	L	514	LYS	O-C-N	-7.65	114.01	122.12
1	M	284	LYS	CA-C-N	7.65	131.04	120.63
1	M	284	LYS	C-N-CA	7.65	131.04	120.63
1	A	54	PHE	CA-CB-CG	-7.64	106.16	113.80
1	J	260	ILE	O-C-N	-7.64	115.01	123.03
1	J	86	ALA	N-CA-C	7.63	120.49	111.71
1	P	371	GLU	CA-C-O	7.63	129.57	121.33
1	P	55	GLY	CA-C-N	7.63	132.31	121.02
1	P	55	GLY	C-N-CA	7.63	132.31	121.02
1	I	123	ILE	N-CA-C	7.63	118.37	110.36
1	O	164	THR	N-CA-C	7.63	119.23	111.07
1	L	457	ILE	CA-C-N	7.62	130.50	120.28
1	L	457	ILE	C-N-CA	7.62	130.50	120.28
1	E	145	ASP	CA-C-N	7.62	132.51	120.47
1	E	145	ASP	C-N-CA	7.62	132.51	120.47
1	N	457	ILE	CA-CB-CG1	7.62	123.35	110.40
1	D	505	PRO	N-CA-CB	7.61	110.04	103.19
1	G	347	THR	CA-C-O	-7.61	113.03	120.26
1	B	474	ARG	NE-CZ-NH2	7.61	126.04	119.20
1	H	311	PHE	CA-CB-CG	-7.60	106.20	113.80
1	O	277	ASP	CA-CB-CG	-7.60	105.00	112.60
1	G	178	ASN	CA-C-N	7.60	130.46	120.28
1	G	178	ASN	C-N-CA	7.60	130.46	120.28
1	J	96	THR	N-CA-CB	7.59	121.08	110.07
1	O	360	ARG	NE-CZ-NH2	7.59	126.03	119.20
1	O	321	ARG	NE-CZ-NH2	7.59	126.03	119.20
1	J	452	GLU	N-CA-C	7.59	121.97	112.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	292	SER	N-CA-C	7.58	119.62	111.36
1	K	310	HIS	CE1-NE2-CD2	-7.57	101.43	109.00
1	P	474	ARG	NE-CZ-NH1	-7.57	113.93	121.50
1	A	494	ILE	CB-CA-C	7.57	121.83	110.63
1	F	455	PRO	CB-CA-C	7.57	124.05	111.56
1	P	141	ALA	CA-C-N	7.57	133.66	122.99
1	P	141	ALA	C-N-CA	7.57	133.66	122.99
1	F	26	ASN	CA-C-O	7.56	128.12	119.27
1	I	108	LYS	CA-C-N	7.56	130.41	120.28
1	I	108	LYS	C-N-CA	7.56	130.41	120.28
1	N	118	HIS	CE1-NE2-CD2	-7.56	101.44	109.00
1	P	499	SER	N-CA-C	7.56	119.52	111.28
1	P	154	ALA	N-CA-C	7.55	121.81	111.39
1	P	277	ASP	CA-CB-CG	7.54	120.14	112.60
1	P	407	ASN	N-CA-C	-7.54	102.42	111.69
1	G	406	ARG	NE-CZ-NH2	7.54	125.98	119.20
1	I	184	VAL	CA-C-N	7.54	130.79	120.46
1	I	184	VAL	C-N-CA	7.54	130.79	120.46
1	B	406	ARG	NE-CZ-NH1	-7.54	113.96	121.50
1	P	98	ALA	N-CA-C	7.54	119.50	111.28
1	L	492	LYS	CA-C-N	7.54	130.65	120.63
1	L	492	LYS	C-N-CA	7.54	130.65	120.63
1	O	494	ILE	CB-CA-C	7.53	120.59	110.42
1	P	255	VAL	N-CA-C	7.52	121.67	109.78
1	A	122	ILE	N-CA-C	7.51	117.63	110.42
1	H	469	ALA	N-CA-CB	7.51	121.28	110.16
1	E	113	VAL	O-C-N	-7.51	114.59	121.87
1	H	498	TYR	O-C-N	-7.51	114.34	122.07
1	L	213	LYS	N-CA-C	7.50	119.49	110.19
1	C	351	LEU	O-C-N	-7.50	114.42	123.19
1	C	31	ARG	NE-CZ-NH2	7.49	125.94	119.20
1	O	325	ARG	NE-CZ-NH2	7.49	125.94	119.20
1	M	228	LEU	CA-C-N	7.49	131.07	120.28
1	M	228	LEU	C-N-CA	7.49	131.07	120.28
1	H	303	GLY	CA-C-O	-7.48	116.91	122.37
1	J	433	ALA	CA-C-N	7.48	130.91	120.29
1	J	433	ALA	C-N-CA	7.48	130.91	120.29
1	H	196	PRO	N-CA-C	7.47	123.69	114.35
1	A	341	SER	O-C-N	-7.47	114.02	122.09
1	C	436	VAL	N-CA-C	7.47	117.44	110.42
1	A	17	ASN	CA-CB-CG	7.47	120.07	112.60
1	F	156	ASP	CA-C-N	7.47	130.63	120.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	156	ASP	C-N-CA	7.47	130.63	120.54
1	D	357	VAL	N-CA-C	-7.47	96.65	107.78
1	O	224	ARG	NE-CZ-NH2	7.47	125.92	119.20
1	N	401	ALA	N-CA-C	7.46	120.48	111.82
1	C	16	ARG	NE-CZ-NH1	-7.46	114.04	121.50
1	N	501	ASN	CA-CB-CG	-7.46	105.14	112.60
1	J	249	LEU	N-CA-C	7.46	121.36	108.76
1	M	360	ARG	N-CA-C	-7.45	96.80	109.24
1	K	348	PRO	N-CA-CB	7.45	111.07	103.25
1	J	20	ARG	CA-C-N	7.44	130.75	120.63
1	J	20	ARG	C-N-CA	7.44	130.75	120.63
1	H	396	ARG	NE-CZ-NH2	7.44	125.89	119.20
1	A	420	ALA	N-CA-C	-7.43	101.48	111.96
1	H	474	ARG	NE-CZ-NH2	7.43	125.89	119.20
1	D	116	ASN	N-CA-C	7.43	121.92	112.86
1	P	301	GLN	CG-CD-NE2	-7.43	105.25	116.40
1	H	310	HIS	O-C-N	7.42	129.99	122.12
1	M	268	SER	O-C-N	-7.42	113.36	120.85
1	H	428	ARG	NH1-CZ-NH2	-7.42	109.66	119.30
1	G	234	HIS	CA-C-O	7.41	128.71	120.70
1	O	27	ILE	N-CA-C	-7.41	102.92	111.00
1	N	443	ALA	N-CA-C	7.41	119.36	111.28
1	P	27	ILE	N-CA-C	-7.41	103.23	110.72
1	D	239	ARG	NE-CZ-NH2	7.41	125.87	119.20
1	N	96	THR	CA-C-O	7.41	128.33	120.70
1	A	489	ILE	N-CA-C	7.40	118.13	110.36
1	J	454	ILE	CA-C-O	-7.40	110.03	119.95
1	A	62	ASP	CA-CB-CG	-7.40	105.20	112.60
1	I	226	ILE	CA-C-O	7.40	129.15	120.72
1	E	239	ARG	NE-CZ-NH1	-7.39	114.11	121.50
1	D	360	ARG	NE-CZ-NH1	-7.39	114.11	121.50
1	E	145	ASP	N-CA-C	7.39	121.58	110.64
1	I	208	LYS	O-C-N	-7.39	114.35	123.36
1	N	315	ARG	NE-CZ-NH1	-7.39	114.11	121.50
1	P	61	ASN	N-CA-CB	-7.38	99.80	110.65
1	H	250	ASP	CA-CB-CG	7.38	119.98	112.60
1	A	307	ILE	CB-CA-C	-7.38	102.53	111.97
1	I	305	ASP	N-CA-C	7.37	120.26	110.53
1	G	393	GLU	N-CA-C	7.37	119.39	111.36
1	H	456	MET	N-CA-C	-7.37	103.75	112.89
1	N	241	VAL	O-C-N	-7.37	115.30	123.26
1	O	237	MET	CA-C-O	-7.37	113.05	120.64

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	186	ASP	O-C-N	-7.37	114.31	122.12
1	N	309	GLN	CA-C-N	7.37	130.75	120.29
1	N	309	GLN	C-N-CA	7.37	130.75	120.29
1	L	116	ASN	N-CA-C	7.37	121.56	111.39
1	D	138	PRO	CA-C-N	7.36	133.01	120.71
1	D	138	PRO	C-N-CA	7.36	133.01	120.71
1	C	189	THR	CA-CB-OG1	7.36	120.64	109.60
1	H	249	LEU	CA-C-N	7.36	130.74	120.29
1	H	249	LEU	C-N-CA	7.36	130.74	120.29
1	M	519	ALA	O-C-N	-7.36	114.14	122.09
1	O	478	ALA	N-CA-C	-7.36	104.28	113.55
1	D	130	PHE	CA-CB-CG	7.36	121.16	113.80
1	G	124	GLU	N-CA-C	7.36	120.35	111.82
1	D	68	LYS	CA-C-O	7.35	128.34	120.55
1	E	155	ARG	NE-CZ-NH2	7.35	125.82	119.20
1	I	325	ARG	N-CA-C	7.35	120.23	111.33
1	O	510	ARG	NE-CZ-NH1	-7.35	114.15	121.50
1	F	204	LEU	CA-C-N	7.35	133.00	120.72
1	F	204	LEU	C-N-CA	7.35	133.00	120.72
1	K	20	ARG	NE-CZ-NH2	7.35	125.81	119.20
1	B	223	ILE	O-C-N	-7.34	115.27	123.20
1	D	182	ASP	CA-CB-CG	7.34	119.94	112.60
1	D	163	TYR	O-C-N	-7.34	114.34	122.12
1	E	145	ASP	CA-CB-CG	7.34	119.94	112.60
1	O	234	HIS	CA-C-N	7.34	131.09	120.38
1	O	234	HIS	C-N-CA	7.34	131.09	120.38
1	K	364	ASN	CA-CB-CG	-7.34	105.26	112.60
1	N	386	SER	CB-CA-C	-7.33	107.06	115.79
1	J	456	MET	N-CA-C	-7.33	104.14	113.23
1	A	185	ILE	CA-C-N	7.32	130.09	120.28
1	A	185	ILE	C-N-CA	7.32	130.09	120.28
1	N	68	LYS	CA-C-O	7.32	128.50	120.82
1	P	454	ILE	O-C-N	-7.32	112.76	121.10
1	B	341	SER	N-CA-CB	7.31	120.59	109.91
1	F	267	THR	N-CA-CB	7.31	118.76	110.35
1	N	234	HIS	CE1-NE2-CD2	-7.31	101.69	109.00
1	N	484	CYS	O-C-N	-7.31	112.87	122.59
1	L	81	VAL	O-C-N	-7.30	114.78	121.87
1	B	271	GLN	N-CA-C	7.30	121.94	112.89
1	B	397	SER	N-CA-C	7.30	119.24	111.28
1	A	399	ASN	CA-CB-CG	-7.30	105.30	112.60
1	H	454	ILE	O-C-N	-7.30	112.78	121.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	505	PRO	N-CA-CB	7.30	109.76	103.19
1	A	310	HIS	CB-CG-CD2	-7.29	121.72	131.20
1	N	157	ALA	O-C-N	-7.29	114.51	122.09
1	G	193	GLU	O-C-N	-7.28	114.51	121.57
1	F	488	VAL	N-CA-C	7.28	118.04	110.62
1	P	399	ASN	CA-C-N	7.28	130.35	120.38
1	P	399	ASN	C-N-CA	7.28	130.35	120.38
1	M	454	ILE	O-C-N	-7.27	112.82	121.10
1	F	312	LEU	CA-C-N	7.26	130.61	120.29
1	F	312	LEU	C-N-CA	7.26	130.61	120.29
1	G	59	ILE	O-C-N	-7.26	114.60	123.10
1	G	383	LEU	CA-C-O	7.26	128.03	120.40
1	B	16	ARG	NE-CZ-NH1	-7.26	114.24	121.50
1	E	444	ILE	N-CA-C	7.26	118.03	110.62
1	J	68	LYS	N-CA-C	7.26	119.20	111.28
1	J	191	VAL	CA-CB-CG1	-7.26	98.06	110.40
1	O	127	LYS	O-C-N	-7.26	114.43	122.12
1	I	347	THR	O-C-N	-7.26	114.66	122.06
1	I	155	ARG	NE-CZ-NH2	7.25	125.73	119.20
1	D	129	ALA	N-CA-C	7.25	119.19	111.28
1	B	323	VAL	CA-C-N	7.25	131.16	120.87
1	B	323	VAL	C-N-CA	7.25	131.16	120.87
1	A	229	ASP	CA-C-N	7.25	131.47	120.82
1	A	229	ASP	C-N-CA	7.25	131.47	120.82
1	F	507	ARG	NE-CZ-NH2	7.25	125.72	119.20
1	N	187	ALA	O-C-N	7.25	130.41	122.15
1	G	116	ASN	CA-CB-CG	-7.24	105.36	112.60
1	O	74	HIS	CA-C-O	-7.24	112.32	119.49
1	D	155	ARG	N-CA-C	7.24	126.22	110.80
1	L	90	GLU	N-CA-C	7.24	120.58	111.24
1	F	202	VAL	O-C-N	-7.24	115.77	122.79
1	M	122	ILE	CA-C-N	7.24	130.25	120.77
1	M	122	ILE	C-N-CA	7.24	130.25	120.77
1	H	257	LYS	CA-C-N	7.23	127.64	119.83
1	H	257	LYS	C-N-CA	7.23	127.64	119.83
1	N	415	VAL	N-CA-CB	7.23	121.33	111.21
1	F	296	ASN	CB-CA-C	7.23	120.41	109.13
1	B	264	ILE	O-C-N	-7.23	115.05	123.00
1	A	291	ALA	N-CA-C	7.23	120.20	111.82
1	B	147	SER	CB-CA-C	-7.22	102.47	111.43
1	D	396	ARG	NE-CZ-NH2	7.22	125.70	119.20
1	O	166	MET	O-C-N	-7.22	114.46	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	434	ARG	N-CA-C	7.22	119.23	111.36
1	B	436	VAL	N-CA-C	7.22	117.92	110.05
1	C	20	ARG	CA-C-N	7.22	130.26	120.44
1	C	20	ARG	C-N-CA	7.22	130.26	120.44
1	P	23	LEU	O-C-N	-7.22	113.92	122.15
1	C	74	HIS	CA-C-O	-7.22	112.58	119.80
1	J	149	LEU	CA-C-N	7.22	135.32	121.54
1	J	149	LEU	C-N-CA	7.22	135.32	121.54
1	J	379	VAL	O-C-N	-7.21	115.25	122.97
1	H	284	LYS	CA-C-N	7.21	130.17	120.65
1	H	284	LYS	C-N-CA	7.21	130.17	120.65
1	E	33	LEU	N-CA-C	7.21	119.14	111.28
1	J	460	GLU	N-CA-CB	-7.20	99.21	110.30
1	O	467	ILE	N-CA-C	7.20	117.99	110.72
1	I	201	ASN	CA-C-N	7.20	132.60	122.23
1	I	201	ASN	C-N-CA	7.20	132.60	122.23
1	I	216	THR	CA-C-N	7.20	130.64	120.42
1	I	216	THR	C-N-CA	7.20	130.64	120.42
1	N	412	PRO	N-CA-CB	-7.20	97.99	102.81
1	G	145	ASP	O-C-N	-7.20	114.45	122.72
1	L	56	ASP	CA-C-O	-7.20	112.72	120.92
1	B	496	ASP	N-CA-CB	-7.19	99.43	110.65
1	G	84	ALA	CA-C-O	-7.19	113.49	120.90
1	D	270	ASP	CA-CB-CG	-7.19	105.41	112.60
1	P	21	ASP	N-CA-C	-7.19	103.38	111.14
1	A	477	HIS	CA-C-O	7.19	128.31	119.11
1	M	90	GLU	CB-CG-CD	7.19	124.82	112.60
1	L	177	LEU	N-CA-C	-7.18	104.14	113.12
1	G	441	GLN	CA-C-O	7.18	128.03	120.42
1	E	434	ARG	NE-CZ-NH2	7.18	125.66	119.20
1	H	47	ASP	CA-CB-CG	-7.18	105.42	112.60
1	C	338	ARG	N-CA-C	-7.18	96.86	109.06
1	F	171	MET	CG-SD-CE	-7.18	85.11	100.90
1	O	14	THR	CA-C-N	7.17	132.12	121.72
1	O	14	THR	C-N-CA	7.17	132.12	121.72
1	D	380	ASN	O-C-N	-7.17	114.92	123.31
1	K	507	ARG	NE-CZ-NH1	-7.17	114.33	121.50
1	H	116	ASN	N-CA-C	7.17	121.13	111.24
1	N	139	GLN	N-CA-C	-7.17	102.66	111.40
1	F	518	GLU	CA-C-N	7.17	130.19	120.44
1	F	518	GLU	C-N-CA	7.17	130.19	120.44
1	B	310	HIS	CB-CA-C	-7.17	99.58	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	131	ASN	CA-CB-CG	7.16	119.76	112.60
1	A	21	ASP	CA-C-N	7.16	130.19	120.38
1	A	21	ASP	C-N-CA	7.16	130.19	120.38
1	I	299	ILE	O-C-N	-7.16	115.53	123.26
1	J	488	VAL	O-C-N	-7.16	114.93	121.87
1	E	258	PRO	N-CA-C	7.15	122.14	111.41
1	M	332	GLU	CA-C-N	7.15	130.82	120.38
1	M	332	GLU	C-N-CA	7.15	130.82	120.38
1	M	457	ILE	CA-C-N	7.15	129.87	120.28
1	M	457	ILE	C-N-CA	7.15	129.87	120.28
1	B	191	VAL	CA-C-N	7.15	135.19	121.54
1	B	191	VAL	C-N-CA	7.15	135.19	121.54
1	H	339	ILE	CA-C-O	7.14	129.64	121.28
1	H	406	ARG	NE-CZ-NH1	-7.14	114.36	121.50
1	D	360	ARG	NE-CZ-NH2	7.14	125.63	119.20
1	D	21	ASP	CA-C-O	7.14	128.50	121.00
1	C	476	ARG	NE-CZ-NH2	7.14	125.62	119.20
1	F	422	GLU	O-C-N	-7.14	114.38	122.09
1	P	341	SER	N-CA-C	7.14	118.71	111.07
1	M	382	LEU	O-C-N	7.12	131.34	123.22
1	N	21	ASP	N-CA-CB	-7.12	99.74	110.07
1	F	71	GLU	CB-CA-C	-7.12	100.44	111.83
1	B	339	ILE	N-CA-CB	7.12	119.45	110.05
1	O	401	ALA	CA-C-N	7.12	130.40	120.29
1	O	401	ALA	C-N-CA	7.12	130.40	120.29
1	C	421	ILE	CB-CA-C	-7.12	102.77	111.88
1	G	454	ILE	CA-C-O	-7.12	110.41	119.95
1	B	471	MET	CG-SD-CE	-7.12	85.25	100.90
1	I	454	ILE	O-C-N	-7.12	112.99	121.10
1	N	461	THR	O-C-N	-7.12	113.89	122.22
1	D	357	VAL	N-CA-CB	7.11	122.52	111.99
1	P	282	TYR	CA-C-O	7.11	128.14	120.24
1	N	315	ARG	NE-CZ-NH2	7.11	125.60	119.20
1	M	248	VAL	O-C-N	-7.11	115.66	123.20
1	P	342	SER	O-C-N	-7.11	115.80	123.26
1	K	340	ILE	CA-C-O	7.11	128.98	120.67
1	M	192	ALA	N-CA-CB	7.10	122.49	110.49
1	K	31	ARG	NE-CZ-NH2	7.10	125.59	119.20
1	C	131	ASN	CA-C-N	7.09	130.36	120.29
1	C	131	ASN	C-N-CA	7.09	130.36	120.29
1	M	407	ASN	OD1-CG-ND2	-7.09	115.51	122.60
1	I	154	ALA	CB-CA-C	7.09	121.27	111.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	270	ASP	CA-CB-CG	-7.09	105.51	112.60
1	B	169	LYS	N-CA-C	7.08	121.77	113.20
1	C	332	GLU	O-C-N	-7.08	114.67	122.03
1	P	477	HIS	CA-CB-CG	7.08	120.88	113.80
1	J	483	ASN	CA-CB-CG	7.08	119.68	112.60
1	F	396	ARG	O-C-N	-7.08	114.78	122.07
1	J	287	VAL	N-CA-C	7.07	117.21	110.42
1	B	97	SER	CA-C-N	7.07	129.76	120.28
1	B	97	SER	C-N-CA	7.07	129.76	120.28
1	N	237	MET	CA-C-O	-7.07	113.36	120.64
1	O	426	SER	CB-CA-C	-7.06	99.06	110.79
1	M	245	LYS	CA-C-N	7.06	131.94	122.90
1	M	245	LYS	C-N-CA	7.06	131.94	122.90
1	B	454	ILE	CB-CA-C	7.06	124.21	111.36
1	E	325	ARG	NE-CZ-NH2	7.06	125.55	119.20
1	B	219	ASP	N-CA-C	-7.06	104.24	112.92
1	C	74	HIS	O-C-N	7.06	128.34	121.28
1	G	205	ASP	N-CA-C	-7.05	104.14	112.89
1	C	73	GLN	N-CA-C	7.05	122.20	112.04
1	H	321	ARG	NE-CZ-NH1	-7.05	114.45	121.50
1	K	34	ALA	N-CA-C	7.05	118.61	111.07
1	J	288	ASP	CA-CB-CG	-7.05	105.55	112.60
1	M	430	ARG	NE-CZ-NH2	7.04	125.54	119.20
1	I	301	GLN	N-CA-C	7.04	119.04	111.36
1	C	65	THR	O-C-N	-7.04	113.08	122.23
1	L	234	HIS	CB-CG-ND1	7.04	133.25	122.70
1	M	296	ASN	N-CA-C	-7.04	103.32	112.68
1	B	53	SER	N-CA-C	7.03	120.75	111.75
1	A	454	ILE	O-C-N	-7.03	113.09	121.10
1	E	363	GLY	O-C-N	7.02	128.96	122.57
1	B	341	SER	O-C-N	7.02	129.33	122.03
1	L	507	ARG	NE-CZ-NH2	7.02	125.52	119.20
1	O	520	ALA	O-C-N	7.02	130.15	122.15
1	F	293	ILE	O-C-N	-7.02	114.81	121.90
1	L	414	ILE	CB-CA-C	7.02	121.22	110.55
1	G	455	PRO	CA-CB-CG	-7.02	91.17	104.50
1	J	169	LYS	N-CA-CB	-7.01	99.66	110.46
1	K	396	ARG	NH1-CZ-NH2	-7.01	110.19	119.30
1	B	430	ARG	NE-CZ-NH1	-7.00	114.50	121.50
1	H	339	ILE	O-C-N	-7.00	115.25	122.75
1	D	384	ARG	NE-CZ-NH1	-7.00	114.50	121.50
1	O	528	ASP	O-C-N	-7.00	115.93	123.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	487	ASP	CB-CA-C	7.00	121.78	110.16
1	L	239	ARG	NE-CZ-NH2	7.00	125.50	119.20
1	M	124	GLU	CB-CA-C	-7.00	97.68	110.63
1	N	116	ASN	N-CA-C	7.00	121.05	111.39
1	P	454	ILE	CA-CB-CG1	7.00	122.30	110.40
1	B	148	ASP	CA-CB-CG	-7.00	105.60	112.60
1	M	150	ASN	CA-CB-CG	7.00	119.60	112.60
1	K	442	LEU	CA-C-N	7.00	130.22	120.29
1	K	442	LEU	C-N-CA	7.00	130.22	120.29
1	L	123	ILE	CA-C-O	-6.99	114.00	121.27
1	I	338	ARG	N-CA-CB	6.99	122.56	110.81
1	N	393	GLU	N-CA-C	6.99	118.90	111.28
1	A	168	SER	N-CA-C	6.99	118.69	111.14
1	J	482	THR	CA-CB-CG2	6.99	122.38	110.50
1	O	57	VAL	N-CA-C	6.99	119.49	108.87
1	E	344	LYS	N-CA-C	6.99	118.89	111.28
1	A	152	ALA	N-CA-C	6.98	120.88	111.24
1	K	141	ALA	O-C-N	-6.98	114.89	122.85
1	M	150	ASN	N-CA-CB	6.98	122.29	110.49
1	K	19	GLY	CA-C-N	6.98	134.87	121.54
1	K	19	GLY	C-N-CA	6.98	134.87	121.54
1	O	127	LYS	CA-C-N	6.98	130.20	120.29
1	O	127	LYS	C-N-CA	6.98	130.20	120.29
1	E	220	SER	N-CA-C	6.98	120.34	110.50
1	G	102	ALA	N-CA-C	6.98	118.89	111.28
1	P	266	ILE	CA-C-O	6.98	128.27	119.48
1	F	84	ALA	CA-C-N	6.98	132.28	121.19
1	F	84	ALA	C-N-CA	6.98	132.28	121.19
1	G	507	ARG	NE-CZ-NH2	6.97	125.48	119.20
1	D	244	ALA	N-CA-C	6.97	120.85	109.76
1	L	239	ARG	NH1-CZ-NH2	-6.97	110.24	119.30
1	I	17	ASN	CA-CB-CG	-6.97	105.63	112.60
1	L	67	VAL	O-C-N	-6.96	115.09	121.91
1	L	239	ARG	N-CA-C	-6.96	104.79	113.28
1	I	87	GLN	CA-C-N	6.96	130.89	120.31
1	I	87	GLN	C-N-CA	6.96	130.89	120.31
1	L	528	ASP	CA-C-N	6.96	132.27	121.76
1	L	528	ASP	C-N-CA	6.96	132.27	121.76
1	N	278	GLU	O-C-N	-6.96	113.71	122.27
1	L	224	ARG	NE-CZ-NH2	6.96	125.46	119.20
1	G	482	THR	N-CA-C	6.96	120.09	110.35
1	I	287	VAL	N-CA-C	6.96	117.10	110.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	193	GLU	CA-C-N	-6.96	111.15	119.84
1	K	193	GLU	C-N-CA	-6.96	111.15	119.84
1	C	310	HIS	CA-CB-CG	6.95	120.75	113.80
1	I	288	ASP	O-C-N	-6.95	114.08	122.22
1	K	195	LEU	CA-C-N	6.95	126.66	119.64
1	K	195	LEU	C-N-CA	6.95	126.66	119.64
1	B	321	ARG	NE-CZ-NH1	-6.95	114.55	121.50
1	D	94	GLY	N-CA-C	6.95	121.07	112.73
1	P	124	GLU	N-CA-C	6.95	119.88	111.82
1	C	141	ALA	CA-C-N	6.95	132.79	122.99
1	C	141	ALA	C-N-CA	6.95	132.79	122.99
1	B	392	ASP	O-C-N	-6.95	114.76	122.12
1	J	158	LEU	N-CA-C	6.95	118.85	111.28
1	K	487	ASP	CA-C-N	6.94	130.32	120.53
1	K	487	ASP	C-N-CA	6.94	130.32	120.53
1	O	151	SER	N-CA-C	6.94	121.13	112.24
1	C	186	ASP	CA-C-O	6.94	127.91	120.55
1	H	375	ASN	CA-C-O	-6.94	110.65	120.16
1	D	178	ASN	N-CA-C	6.93	118.84	111.28
1	E	360	ARG	NE-CZ-NH2	6.93	125.44	119.20
1	N	137	LEU	N-CA-C	6.93	125.13	109.81
1	P	414	ILE	O-C-N	-6.93	115.34	123.04
1	F	257	LYS	CA-C-N	6.93	128.50	119.84
1	F	257	LYS	C-N-CA	6.93	128.50	119.84
1	G	474	ARG	NE-CZ-NH2	6.93	125.44	119.20
1	L	179	LYS	CB-CA-C	-6.93	99.29	110.79
1	H	341	SER	N-CA-C	6.93	118.48	111.07
1	L	67	VAL	CA-C-O	6.92	128.51	121.17
1	I	498	TYR	CB-CA-C	-6.92	98.91	110.68
1	K	264	ILE	O-C-N	-6.92	115.78	123.26
1	F	26	ASN	CA-CB-CG	-6.92	105.68	112.60
1	J	224	ARG	NE-CZ-NH1	-6.92	114.58	121.50
1	L	384	ARG	NE-CZ-NH2	6.92	125.43	119.20
1	F	196	PRO	CB-CA-C	-6.92	101.42	112.21
1	E	162	VAL	O-C-N	-6.92	113.98	121.80
1	L	21	ASP	CA-C-N	6.91	129.85	120.38
1	L	21	ASP	C-N-CA	6.91	129.85	120.38
1	C	478	ALA	N-CA-C	-6.91	104.84	113.55
1	F	74	HIS	ND1-CE1-NE2	6.91	115.31	108.40
1	J	443	ALA	N-CA-C	6.91	118.89	111.36
1	K	100	VAL	CA-C-N	6.91	129.54	120.28
1	K	100	VAL	C-N-CA	6.91	129.54	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	169	LYS	N-CA-C	6.91	121.37	113.15
1	O	407	ASN	O-C-N	-6.91	113.25	122.23
1	P	250	ASP	CA-CB-CG	6.91	119.51	112.60
1	A	209	ILE	O-C-N	-6.91	115.74	123.20
1	C	420	ALA	CA-C-N	6.91	129.51	120.60
1	C	420	ALA	C-N-CA	6.91	129.51	120.60
1	L	27	ILE	O-C-N	-6.90	112.73	121.84
1	E	118	HIS	ND1-CE1-NE2	6.90	115.30	108.40
1	N	364	ASN	CA-CB-CG	-6.90	105.70	112.60
1	O	155	ARG	N-CA-C	6.90	125.50	110.80
1	H	84	ALA	CA-C-N	6.90	131.17	120.82
1	H	84	ALA	C-N-CA	6.90	131.17	120.82
1	M	183	ILE	CB-CA-C	-6.90	102.83	112.14
1	I	182	ASP	O-C-N	-6.89	114.81	122.12
1	E	271	GLN	OE1-CD-NE2	-6.89	115.71	122.60
1	G	145	ASP	CA-C-O	6.89	128.29	121.05
1	P	456	MET	N-CA-C	-6.89	104.68	113.23
1	N	128	LYS	CA-C-O	6.89	127.72	120.42
1	A	392	ASP	CA-CB-CG	-6.89	105.71	112.60
1	A	430	ARG	CA-C-N	6.89	134.70	121.54
1	A	430	ARG	C-N-CA	6.89	134.70	121.54
1	B	360	ARG	N-CA-CB	6.89	123.47	111.00
1	G	240	ARG	O-C-N	-6.89	115.35	123.41
1	I	125	GLY	O-C-N	-6.89	114.42	122.34
1	B	33	LEU	N-CA-C	6.88	118.78	111.28
1	B	344	LYS	N-CA-C	6.88	119.65	111.33
1	A	327	ASP	CA-CB-CG	6.87	119.47	112.60
1	E	254	GLU	N-CA-CB	-6.87	98.83	111.13
1	I	321	ARG	N-CA-C	6.87	114.42	108.78
1	M	154	ALA	N-CA-C	6.87	120.88	111.39
1	A	265	SER	N-CA-C	6.87	120.19	110.23
1	I	27	ILE	CA-C-O	6.87	128.06	120.71
1	I	115	GLN	CA-C-N	6.87	132.36	122.40
1	I	115	GLN	C-N-CA	6.87	132.36	122.40
1	M	222	LEU	CA-C-N	6.87	132.53	122.99
1	M	222	LEU	C-N-CA	6.87	132.53	122.99
1	E	227	VAL	CA-C-O	-6.87	113.20	120.48
1	P	476	ARG	NE-CZ-NH1	-6.87	114.64	121.50
1	K	399	ASN	CA-CB-CG	-6.86	105.74	112.60
1	A	210	ASP	CA-CB-CG	-6.86	105.74	112.60
1	B	489	ILE	O-C-N	-6.86	114.77	121.83
1	E	504	GLU	CA-C-N	6.86	128.41	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	504	GLU	C-N-CA	6.86	128.41	119.84
1	C	322	ARG	O-C-N	-6.85	113.47	122.59
1	G	100	VAL	O-C-N	6.85	128.52	121.87
1	H	67	VAL	N-CA-CB	6.85	118.57	110.55
1	I	342	SER	O-C-N	-6.85	116.09	123.42
1	I	55	GLY	CA-C-N	6.84	131.10	121.24
1	I	55	GLY	C-N-CA	6.84	131.10	121.24
1	O	41	LEU	N-CA-C	6.84	118.53	111.14
1	F	100	VAL	N-CA-C	6.84	117.60	110.62
1	D	310	HIS	CE1-NE2-CD2	-6.84	102.16	109.00
1	D	494	ILE	CA-C-O	6.84	128.23	121.19
1	L	514	LYS	CA-C-O	6.84	127.80	120.55
1	D	151	SER	N-CA-C	6.83	118.38	111.07
1	L	354	ALA	N-CA-C	-6.83	97.83	109.24
1	C	337	ALA	N-CA-C	6.83	118.67	110.19
1	I	197	ASP	O-C-N	-6.83	113.45	122.47
1	A	189	THR	CA-CB-OG1	6.83	119.84	109.60
1	E	460	GLU	O-C-N	-6.83	113.36	122.23
1	F	445	GLU	CB-CG-CD	6.82	124.20	112.60
1	K	496	ASP	CA-CB-CG	-6.82	105.78	112.60
1	O	355	GLU	CA-C-O	6.82	127.65	120.42
1	P	153	THR	N-CA-C	-6.82	96.94	108.26
1	A	248	VAL	O-C-N	-6.82	116.02	123.18
1	P	116	ASN	CA-CB-CG	-6.82	105.78	112.60
1	K	454	ILE	CA-C-N	-6.81	111.33	119.84
1	K	454	ILE	C-N-CA	-6.81	111.33	119.84
1	F	200	TYR	CA-C-N	6.81	129.40	120.28
1	F	200	TYR	C-N-CA	6.81	129.40	120.28
1	K	475	ALA	O-C-N	-6.80	114.39	122.15
1	B	388	ASP	O-C-N	-6.80	113.55	122.59
1	G	166	MET	N-CA-C	6.80	118.69	111.28
1	B	182	ASP	N-CA-CB	-6.80	100.13	110.12
1	E	404	SER	N-CA-C	6.80	118.77	111.36
1	O	513	LEU	N-CA-C	-6.80	103.33	111.69
1	P	16	ARG	NE-CZ-NH1	-6.80	114.70	121.50
1	G	81	VAL	O-C-N	-6.80	114.83	121.83
1	M	356	LEU	O-C-N	-6.80	116.15	123.42
1	H	105	PHE	CA-CB-CG	6.80	120.60	113.80
1	J	249	LEU	CA-C-O	6.79	127.86	120.32
1	G	240	ARG	NE-CZ-NH2	6.79	125.31	119.20
1	H	289	LYS	O-C-N	-6.79	114.75	122.09
1	N	262	ALA	N-CA-C	6.79	120.23	110.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	519	ALA	CA-C-O	6.79	127.69	120.70
1	D	322	ARG	N-CA-C	6.79	125.26	110.80
1	B	415	VAL	CB-CA-C	-6.79	99.01	111.36
1	L	181	MET	CA-C-N	6.79	129.37	120.28
1	L	181	MET	C-N-CA	6.79	129.37	120.28
1	B	493	ILE	O-C-N	-6.79	115.44	122.63
1	C	113	VAL	N-CA-C	6.78	117.54	110.62
1	D	441	GLN	CA-C-N	6.78	129.37	120.28
1	D	441	GLN	C-N-CA	6.78	129.37	120.28
1	M	204	LEU	N-CA-C	6.78	120.43	111.75
1	N	469	ALA	CA-C-N	6.78	129.26	120.44
1	N	469	ALA	C-N-CA	6.78	129.26	120.44
1	F	46	LEU	N-CA-C	6.78	118.91	109.15
1	M	357	VAL	N-CA-C	-6.78	97.68	107.78
1	I	436	VAL	N-CA-C	6.78	117.77	109.30
1	N	311	PHE	N-CA-C	6.78	119.68	111.82
1	N	385	GLY	N-CA-C	6.77	125.43	110.66
1	G	23	LEU	CA-C-O	6.77	127.60	120.42
1	L	18	SER	N-CA-C	6.77	120.05	110.23
1	B	489	ILE	CA-C-N	6.77	129.90	120.29
1	B	489	ILE	C-N-CA	6.77	129.90	120.29
1	P	88	ASP	N-CA-CB	-6.76	99.16	110.39
1	B	506	ILE	N-CA-C	6.76	118.33	110.62
1	O	57	VAL	CA-CB-CG1	6.76	121.90	110.40
1	N	387	ASN	CA-CB-CG	-6.76	105.84	112.60
1	G	461	THR	CA-CB-OG1	6.76	119.74	109.60
1	C	351	LEU	CA-C-O	6.76	128.30	120.80
1	K	407	ASN	CA-CB-CG	-6.76	105.84	112.60
1	A	135	GLU	CB-CA-C	-6.75	97.85	110.01
1	G	79	LEU	O-C-N	-6.75	115.11	122.07
1	N	360	ARG	NE-CZ-NH2	6.75	125.28	119.20
1	G	59	ILE	CA-C-O	6.75	127.75	120.53
1	G	309	GLN	CA-C-O	-6.75	111.82	119.79
1	D	510	ARG	N-CA-C	6.75	119.50	111.33
1	P	328	ILE	N-CA-C	6.75	117.54	110.72
1	N	333	LYS	N-CA-C	6.75	119.50	111.33
1	P	482	THR	N-CA-C	6.75	120.72	111.54
1	A	345	ASP	CA-CB-CG	-6.75	105.85	112.60
1	D	288	ASP	N-CA-C	6.75	119.47	111.71
1	J	17	ASN	O-C-N	-6.75	115.79	123.48
1	O	414	ILE	CA-C-O	-6.75	114.59	121.67
1	F	169	LYS	N-CA-C	6.75	121.18	113.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	426	SER	CA-C-O	-6.75	113.40	120.55
1	H	430	ARG	NE-CZ-NH2	6.74	125.27	119.20
1	G	311	PHE	O-C-N	-6.74	114.47	122.15
1	N	361	LYS	O-C-N	-6.74	115.16	123.04
1	A	428	ARG	CA-C-O	6.73	127.71	119.97
1	D	414	ILE	CA-C-O	6.73	128.74	121.67
1	O	275	PHE	CA-C-O	6.73	127.55	120.42
1	P	210	ASP	CA-CB-CG	-6.73	105.87	112.60
1	D	499	SER	CB-CA-C	-6.72	98.19	110.63
1	J	423	LEU	N-CA-C	6.72	118.61	111.28
1	L	478	ALA	N-CA-C	-6.72	105.08	113.55
1	D	477	HIS	CE1-NE2-CD2	-6.72	102.28	109.00
1	H	128	LYS	CA-C-O	6.72	127.67	120.55
1	N	157	ALA	CA-C-O	6.72	128.09	120.90
1	P	237	MET	CA-C-O	-6.72	113.72	120.64
1	E	474	ARG	NH1-CZ-NH2	-6.72	110.56	119.30
1	L	157	ALA	N-CA-C	6.72	119.17	111.11
1	G	396	ARG	NE-CZ-NH1	-6.72	114.78	121.50
1	O	375	ASN	CA-C-O	-6.71	113.58	120.63
1	C	224	ARG	NE-CZ-NH2	6.71	125.24	119.20
1	C	327	ASP	CA-CB-CG	6.71	119.31	112.60
1	H	410	MET	CA-C-O	6.71	127.91	119.12
1	I	141	ALA	N-CA-C	6.71	119.96	110.23
1	M	428	ARG	NE-CZ-NH2	6.71	125.24	119.20
1	B	381	ILE	O-C-N	-6.71	116.13	123.18
1	B	256	GLU	CA-C-O	6.71	127.44	120.40
1	E	507	ARG	NE-CZ-NH2	6.71	125.24	119.20
1	E	449	ASP	O-C-N	-6.71	115.01	122.12
1	A	114	ASP	CA-CB-CG	-6.70	105.90	112.60
1	M	297	VAL	O-C-N	-6.70	115.79	122.76
1	M	67	VAL	N-CA-C	6.70	117.46	110.62
1	K	122	ILE	CA-C-N	6.70	129.24	120.60
1	K	122	ILE	C-N-CA	6.70	129.24	120.60
1	K	431	GLU	CA-C-N	6.70	129.49	120.65
1	K	431	GLU	C-N-CA	6.70	129.49	120.65
1	D	93	ASP	CA-C-N	6.70	127.41	119.98
1	D	93	ASP	C-N-CA	6.70	127.41	119.98
1	H	289	LYS	CA-C-O	6.70	127.60	120.70
1	D	195	LEU	CB-CA-C	6.69	117.93	108.76
1	D	479	LYS	N-CA-CB	-6.69	100.29	110.26
1	E	197	ASP	N-CA-C	6.69	120.35	112.72
1	M	344	LYS	CA-C-N	6.69	134.63	121.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	344	LYS	C-N-CA	6.69	134.63	121.58
1	E	231	GLU	N-CA-CB	-6.69	100.20	110.44
1	F	155	ARG	NE-CZ-NH2	6.69	125.22	119.20
1	F	456	MET	O-C-N	-6.69	113.23	122.46
1	M	384	ARG	NE-CZ-NH2	6.69	125.22	119.20
1	J	190	THR	N-CA-C	6.68	119.42	111.33
1	O	86	ALA	CA-C-N	6.68	132.04	120.68
1	O	86	ALA	C-N-CA	6.68	132.04	120.68
1	B	196	PRO	CA-C-N	6.68	133.42	120.99
1	B	196	PRO	C-N-CA	6.68	133.42	120.99
1	G	338	ARG	O-C-N	-6.68	115.45	123.27
1	A	504	GLU	CA-C-N	6.68	127.08	119.93
1	A	504	GLU	C-N-CA	6.68	127.08	119.93
1	P	289	LYS	CB-CA-C	-6.68	100.39	110.88
1	G	360	ARG	N-CA-C	-6.68	98.09	109.24
1	K	132	LYS	N-CA-C	6.68	118.56	111.28
1	L	302	LYS	CA-C-O	6.68	127.16	119.35
1	F	445	GLU	O-C-N	-6.67	113.49	122.43
1	D	509	THR	CA-C-O	6.67	127.77	120.90
1	G	73	GLN	CB-CA-C	-6.67	99.61	110.08
1	F	147	SER	CB-CA-C	-6.67	97.15	110.42
1	C	484	CYS	O-C-N	-6.67	113.73	122.59
1	F	297	VAL	CA-CB-CG1	6.67	121.73	110.40
1	O	366	LYS	N-CA-C	6.67	119.90	110.50
1	O	444	ILE	N-CA-C	6.67	117.42	110.62
1	D	102	ALA	CA-C-O	6.66	127.61	120.55
1	F	21	ASP	N-CA-C	-6.66	103.63	111.03
1	L	456	MET	N-CA-C	-6.66	104.97	113.23
1	H	42	GLY	CA-C-N	6.66	128.17	119.84
1	H	42	GLY	C-N-CA	6.66	128.17	119.84
1	K	128	LYS	O-C-N	-6.66	114.56	122.15
1	C	234	HIS	CG-CD2-NE2	6.66	113.86	107.20
1	D	27	ILE	CA-C-O	-6.66	113.59	120.71
1	E	255	VAL	CB-CA-C	-6.66	101.14	111.26
1	P	393	GLU	CA-C-N	6.66	129.86	120.28
1	P	393	GLU	C-N-CA	6.66	129.86	120.28
1	F	17	ASN	O-C-N	-6.65	115.81	123.33
1	O	367	MET	O-C-N	-6.65	115.89	123.48
1	P	20	ARG	CA-C-N	6.65	129.49	120.44
1	P	20	ARG	C-N-CA	6.65	129.49	120.44
1	C	58	THR	N-CA-CB	6.65	121.61	110.77
1	A	123	ILE	CA-C-N	6.65	130.42	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	123	ILE	C-N-CA	6.65	130.42	120.31
1	G	56	ASP	CA-CB-CG	6.65	119.25	112.60
1	I	82	GLU	CA-C-N	6.65	131.95	120.58
1	I	82	GLU	C-N-CA	6.65	131.95	120.58
1	F	318	LEU	CA-C-O	6.65	127.45	120.54
1	F	416	PRO	O-C-N	-6.65	115.66	123.10
1	N	37	LEU	N-CA-C	6.64	120.65	112.54
1	B	38	ARG	NE-CZ-NH2	6.64	125.18	119.20
1	A	97	SER	N-CA-C	6.64	118.60	111.36
1	A	102	ALA	CA-C-N	6.64	127.35	119.98
1	A	102	ALA	C-N-CA	6.64	127.35	119.98
1	E	185	ILE	O-C-N	6.64	128.31	121.87
1	I	83	ALA	CA-C-N	6.64	129.66	120.63
1	I	83	ALA	C-N-CA	6.64	129.66	120.63
1	K	169	LYS	N-CA-C	6.64	121.23	113.20
1	K	22	ALA	O-C-N	-6.64	115.08	122.12
1	O	207	ILE	O-C-N	-6.63	115.39	122.95
1	B	98	ALA	N-CA-C	6.63	118.51	111.28
1	M	401	ALA	CA-C-N	6.63	129.71	120.29
1	M	401	ALA	C-N-CA	6.63	129.71	120.29
1	P	383	LEU	N-CA-C	6.63	119.63	108.02
1	G	354	ALA	O-C-N	-6.63	115.09	123.24
1	K	310	HIS	ND1-CE1-NE2	6.63	115.03	108.40
1	L	74	HIS	CE1-NE2-CD2	-6.63	102.37	109.00
1	C	303	GLY	CA-C-O	-6.63	117.53	122.37
1	E	188	VAL	CA-C-N	6.63	129.16	120.28
1	E	188	VAL	C-N-CA	6.63	129.16	120.28
1	E	347	THR	O-C-N	-6.63	116.66	121.83
1	J	309	GLN	O-C-N	-6.63	114.12	122.27
1	O	323	VAL	N-CA-CB	6.62	118.96	111.21
1	G	360	ARG	CA-C-O	6.62	128.28	120.66
1	J	191	VAL	N-CA-CB	-6.62	100.30	111.23
1	D	474	ARG	NE-CZ-NH2	6.62	125.16	119.20
1	K	98	ALA	N-CA-C	6.62	118.49	111.28
1	J	420	ALA	N-CA-C	-6.62	102.63	111.96
1	A	450	ALA	N-CA-C	6.61	118.49	111.28
1	B	48	LYS	O-C-N	-6.61	115.56	123.03
1	B	193	GLU	O-C-N	-6.61	116.39	121.55
1	E	277	ASP	O-C-N	-6.61	114.14	122.27
1	G	173	GLU	CA-C-N	6.61	134.36	121.41
1	G	173	GLU	C-N-CA	6.61	134.36	121.41
1	A	165	THR	O-C-N	-6.61	115.27	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	190	THR	CA-C-O	6.61	127.55	120.55
1	L	173	GLU	CA-C-O	6.61	128.56	121.16
1	G	464	LEU	O-C-N	-6.60	114.53	122.65
1	D	209	ILE	CA-C-O	6.60	127.32	120.39
1	P	477	HIS	CE1-NE2-CD2	-6.60	102.40	109.00
1	J	351	LEU	O-C-N	-6.60	115.81	123.27
1	L	269	PRO	CA-C-N	6.60	129.78	120.28
1	L	269	PRO	C-N-CA	6.60	129.78	120.28
1	A	122	ILE	CA-C-N	6.59	129.11	120.60
1	A	122	ILE	C-N-CA	6.59	129.11	120.60
1	D	84	ALA	N-CA-C	6.59	118.16	110.97
1	K	333	LYS	O-C-N	-6.59	115.13	122.12
1	B	28	LEU	O-C-N	-6.59	115.13	122.12
1	G	143	LYS	CA-C-N	6.59	130.17	120.74
1	G	143	LYS	C-N-CA	6.59	130.17	120.74
1	C	229	ASP	N-CA-C	6.59	119.29	111.71
1	M	375	ASN	CA-C-O	-6.59	111.14	120.16
1	P	83	ALA	CA-C-N	6.59	129.34	120.65
1	P	83	ALA	C-N-CA	6.59	129.34	120.65
1	M	239	ARG	NE-CZ-NH2	6.58	125.12	119.20
1	P	399	ASN	CA-CB-CG	6.58	119.18	112.60
1	D	166	MET	O-C-N	-6.58	115.14	122.12
1	E	430	ARG	NH1-CZ-NH2	-6.58	110.75	119.30
1	F	183	ILE	N-CA-C	6.58	117.36	110.72
1	F	343	ILE	N-CA-C	6.58	117.33	110.62
1	L	239	ARG	CD-NE-CZ	-6.58	115.19	124.40
1	N	457	ILE	CA-CB-CG2	-6.58	99.32	110.50
1	C	514	LYS	N-CA-C	6.58	118.45	111.28
1	O	467	ILE	CB-CA-C	-6.58	103.14	112.22
1	H	389	MET	CA-C-N	6.57	132.64	121.14
1	H	389	MET	C-N-CA	6.57	132.64	121.14
1	L	286	MET	N-CA-C	6.57	119.00	111.11
1	M	132	LYS	CA-C-N	6.57	129.75	120.28
1	M	132	LYS	C-N-CA	6.57	129.75	120.28
1	A	273	LYS	O-C-N	-6.57	114.19	122.27
1	K	234	HIS	CA-C-N	6.57	129.97	120.38
1	K	234	HIS	C-N-CA	6.57	129.97	120.38
1	E	23	LEU	O-C-N	-6.57	114.66	122.15
1	H	460	GLU	CA-C-N	6.57	129.08	120.28
1	H	460	GLU	C-N-CA	6.57	129.08	120.28
1	E	487	ASP	CA-C-N	6.57	129.07	120.60
1	E	487	ASP	C-N-CA	6.57	129.07	120.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	333	LYS	N-CA-C	6.57	118.44	111.28
1	L	114	ASP	CA-CB-CG	6.57	119.17	112.60
1	D	16	ARG	NE-CZ-NH2	6.56	125.11	119.20
1	C	23	LEU	N-CA-C	6.56	118.51	111.36
1	C	183	ILE	O-C-N	-6.56	115.51	121.87
1	F	493	ILE	CA-C-N	6.56	133.12	122.69
1	F	493	ILE	C-N-CA	6.56	133.12	122.69
1	D	399	ASN	CA-CB-CG	-6.56	106.04	112.60
1	H	158	LEU	N-CA-C	6.55	118.42	111.28
1	J	93	ASP	CA-CB-CG	-6.55	106.05	112.60
1	K	145	ASP	CA-C-N	6.55	132.10	123.06
1	K	145	ASP	C-N-CA	6.55	132.10	123.06
1	O	58	THR	O-C-N	-6.55	114.89	123.28
1	O	302	LYS	O-C-N	-6.55	114.20	122.26
1	E	166	MET	CG-SD-CE	-6.55	86.49	100.90
1	P	246	ILE	CA-C-N	-6.55	112.89	122.65
1	P	246	ILE	C-N-CA	-6.55	112.89	122.65
1	I	521	THR	CA-C-N	6.55	129.59	120.29
1	I	521	THR	C-N-CA	6.55	129.59	120.29
1	P	475	ALA	N-CA-CB	-6.55	100.47	110.16
1	L	299	ILE	CA-C-O	-6.55	113.52	120.39
1	C	60	THR	O-C-N	-6.54	115.79	123.25
1	E	224	ARG	NE-CZ-NH2	6.54	125.09	119.20
1	K	38	ARG	NE-CZ-NH2	6.54	125.09	119.20
1	C	54	PHE	CA-CB-CG	6.54	120.34	113.80
1	D	193	GLU	O-C-N	-6.54	113.80	121.32
1	K	340	ILE	O-C-N	-6.54	116.12	123.18
1	I	294	GLY	CA-C-O	6.54	126.02	118.96
1	C	110	GLU	CA-C-N	6.53	128.93	120.44
1	C	110	GLU	C-N-CA	6.53	128.93	120.44
1	E	385	GLY	O-C-N	-6.53	116.10	123.61
1	P	510	ARG	NE-CZ-NH2	6.53	125.08	119.20
1	I	402	LEU	N-CA-CB	6.53	119.83	110.16
1	O	384	ARG	NE-CZ-NH2	6.53	125.08	119.20
1	J	305	ASP	CA-CB-CG	-6.53	106.07	112.60
1	K	451	LEU	N-CA-C	6.53	118.40	111.28
1	K	293	ILE	CA-C-N	6.53	130.81	122.00
1	K	293	ILE	C-N-CA	6.53	130.81	122.00
1	N	132	LYS	CA-C-N	6.53	129.03	120.28
1	N	132	LYS	C-N-CA	6.53	129.03	120.28
1	B	20	ARG	NE-CZ-NH2	6.52	125.07	119.20
1	F	270	ASP	CA-CB-CG	-6.52	106.08	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	322	ARG	N-CA-C	6.52	124.69	110.80
1	K	158	LEU	CA-C-N	6.52	128.92	120.44
1	K	158	LEU	C-N-CA	6.52	128.92	120.44
1	K	236	GLY	CA-C-N	6.52	129.75	120.49
1	K	236	GLY	C-N-CA	6.52	129.75	120.49
1	B	195	LEU	O-C-N	-6.52	113.70	121.39
1	J	313	ALA	N-CA-CB	6.52	119.91	110.20
1	O	166	MET	CA-C-O	6.52	127.46	120.55
1	F	433	ALA	N-CA-C	6.51	120.81	112.34
1	I	529	LEU	N-CA-CB	6.51	119.88	110.37
1	G	467	ILE	O-C-N	-6.51	115.29	121.87
1	F	439	LYS	CA-C-O	6.51	127.29	119.61
1	J	340	ILE	O-C-N	-6.51	116.15	123.18
1	M	148	ASP	CA-CB-CG	-6.51	106.09	112.60
1	I	180	ILE	N-CA-C	6.51	117.29	110.72
1	J	387	ASN	N-CA-CB	6.51	121.49	110.49
1	A	347	THR	CA-C-N	-6.51	111.70	119.84
1	A	347	THR	C-N-CA	-6.51	111.70	119.84
1	D	116	ASN	CA-CB-CG	-6.51	106.09	112.60
1	E	454	ILE	CB-CA-C	6.51	123.20	111.36
1	A	420	ALA	CA-C-N	6.50	133.68	121.97
1	A	420	ALA	C-N-CA	6.50	133.68	121.97
1	E	384	ARG	O-C-N	-6.50	115.68	123.03
1	B	74	HIS	CE1-NE2-CD2	-6.50	102.50	109.00
1	H	182	ASP	CA-C-N	6.50	129.37	120.46
1	H	182	ASP	C-N-CA	6.50	129.37	120.46
1	H	358	GLU	N-CA-C	6.50	119.06	109.24
1	J	242	GLU	CA-C-N	6.50	131.99	122.63
1	J	242	GLU	C-N-CA	6.50	131.99	122.63
1	P	64	ALA	CA-C-O	6.50	127.46	119.79
1	E	484	CYS	N-CA-C	6.50	120.47	110.20
1	G	233	VAL	CA-CB-CG2	6.50	121.45	110.40
1	K	341	SER	N-CA-C	6.50	124.64	110.80
1	N	305	ASP	CA-CB-CG	-6.50	106.10	112.60
1	O	117	ILE	O-C-N	-6.50	115.82	123.03
1	G	387	ASN	CB-CA-C	6.49	123.34	110.42
1	J	464	LEU	O-C-N	-6.49	115.31	122.84
1	M	173	GLU	N-CA-C	6.49	119.65	110.23
1	F	182	ASP	N-CA-CB	-6.49	100.58	110.12
1	G	146	VAL	CA-C-O	6.49	124.52	119.46
1	D	84	ALA	CA-C-O	6.49	127.81	121.00
1	E	427	ALA	CA-C-N	6.49	130.18	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	427	ALA	C-N-CA	6.49	130.18	120.31
1	B	68	LYS	N-CA-C	6.49	118.01	111.07
1	E	61	ASN	O-C-N	-6.49	115.51	122.19
1	F	431	GLU	N-CA-CB	6.49	121.45	110.49
1	P	326	SER	CA-C-N	6.49	130.17	120.31
1	P	326	SER	C-N-CA	6.49	130.17	120.31
1	G	240	ARG	CA-C-N	6.48	132.00	122.99
1	G	240	ARG	C-N-CA	6.48	132.00	122.99
1	C	342	SER	N-CA-C	6.48	120.09	109.72
1	I	344	LYS	CB-CA-C	6.48	121.55	110.79
1	K	496	ASP	N-CA-CB	-6.48	99.53	110.49
1	C	416	PRO	N-CA-CB	6.48	108.95	103.25
1	L	389	MET	N-CA-CB	-6.48	100.57	110.16
1	O	495	ASP	CA-CB-CG	-6.48	106.12	112.60
1	E	163	TYR	O-C-N	-6.48	115.25	122.12
1	A	150	ASN	N-CA-CB	6.48	121.44	110.49
1	O	31	ARG	CA-C-N	6.48	129.49	120.29
1	O	31	ARG	C-N-CA	6.48	129.49	120.29
1	B	313	ALA	CA-C-O	6.48	127.28	120.42
1	F	188	VAL	N-CA-C	6.47	117.22	110.62
1	E	250	ASP	N-CA-CB	-6.47	100.26	110.28
1	F	477	HIS	CA-CB-CG	6.47	120.27	113.80
1	O	336	GLY	O-C-N	-6.47	115.43	122.41
1	G	347	THR	O-C-N	-6.46	115.83	121.71
1	K	77	ALA	N-CA-C	-6.46	104.08	112.23
1	O	95	THR	CB-CA-C	-6.46	98.67	110.63
1	E	465	GLU	CB-CA-C	6.46	119.88	109.41
1	F	182	ASP	CA-CB-CG	-6.46	106.14	112.60
1	G	309	GLN	N-CA-CB	-6.46	100.35	110.30
1	O	106	LEU	N-CA-CB	6.46	119.61	110.12
1	P	386	SER	N-CA-C	6.46	124.56	110.80
1	C	79	LEU	O-C-N	-6.46	115.38	122.09
1	K	428	ARG	NE-CZ-NH1	-6.45	115.05	121.50
1	J	485	GLY	O-C-N	-6.45	114.32	122.70
1	B	319	ALA	N-CA-C	6.45	120.20	109.95
1	H	395	GLU	CA-C-O	-6.45	113.58	120.42
1	K	400	ASP	CA-CB-CG	6.45	119.05	112.60
1	D	338	ARG	NE-CZ-NH1	-6.45	115.06	121.50
1	K	74	HIS	CE1-NE2-CD2	-6.45	102.55	109.00
1	N	234	HIS	ND1-CE1-NE2	6.45	114.85	108.40
1	M	207	ILE	CA-CB-CG1	6.44	121.35	110.40
1	L	434	ARG	NE-CZ-NH1	-6.44	115.06	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	505	PRO	CA-C-N	6.44	131.18	120.62
1	I	505	PRO	C-N-CA	6.44	131.18	120.62
1	J	325	ARG	NE-CZ-NH2	6.44	125.00	119.20
1	M	432	TYR	CA-C-N	6.44	131.00	120.63
1	M	432	TYR	C-N-CA	6.44	131.00	120.63
1	M	238	PRO	N-CA-C	6.44	125.73	112.47
1	G	120	THR	N-CA-CB	6.44	119.58	110.12
1	N	277	ASP	O-C-N	-6.44	114.35	122.27
1	E	33	LEU	CA-C-N	6.44	129.19	120.44
1	E	33	LEU	C-N-CA	6.44	129.19	120.44
1	M	185	ILE	O-C-N	-6.44	115.63	121.87
1	E	56	ASP	CB-CA-C	-6.43	100.61	110.26
1	P	501	ASN	CA-CB-CG	6.43	119.03	112.60
1	I	487	ASP	CA-C-N	6.43	129.56	120.42
1	I	487	ASP	C-N-CA	6.43	129.56	120.42
1	K	409	LEU	N-CA-C	6.43	118.29	111.28
1	O	297	VAL	O-C-N	-6.43	116.07	122.76
1	G	148	ASP	CA-CB-CG	-6.43	106.17	112.60
1	D	75	PRO	O-C-N	-6.43	114.85	122.24
1	L	297	VAL	N-CA-C	-6.43	99.12	108.89
1	H	318	LEU	O-C-N	-6.43	115.40	123.05
1	F	500	ILE	CA-C-O	6.43	127.40	119.43
1	G	265	SER	CA-C-N	6.42	129.54	120.42
1	G	265	SER	C-N-CA	6.42	129.54	120.42
1	G	506	ILE	O-C-N	-6.42	115.59	121.89
1	J	321	ARG	NE-CZ-NH2	6.42	124.98	119.20
1	N	117	ILE	CA-C-N	6.42	130.01	120.83
1	N	117	ILE	C-N-CA	6.42	130.01	120.83
1	F	153	THR	N-CA-C	6.42	119.67	110.10
1	J	315	ARG	NE-CZ-NH2	6.42	124.98	119.20
1	N	95	THR	O-C-N	-6.42	114.71	122.22
1	O	448	ALA	N-CA-CB	-6.42	100.66	110.16
1	P	150	ASN	CA-CB-CG	6.42	119.02	112.60
1	I	373	ALA	CB-CA-C	6.42	120.81	110.16
1	L	461	THR	N-CA-CB	6.42	119.55	110.12
1	M	195	LEU	N-CA-C	-6.42	99.04	109.82
1	P	340	ILE	O-C-N	-6.42	116.13	122.93
1	G	377	LYS	N-CA-C	-6.42	103.53	112.45
1	H	269	PRO	CA-C-N	6.41	129.51	120.28
1	H	269	PRO	C-N-CA	6.41	129.51	120.28
1	P	157	ALA	O-C-N	6.41	128.67	122.07
1	A	439	LYS	N-CA-C	6.41	120.20	112.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	441	GLN	CA-C-O	6.41	127.34	119.97
1	L	260	ILE	N-CA-CB	6.41	121.95	111.44
1	C	52	ASP	CA-CB-CG	6.41	119.01	112.60
1	L	192	ALA	N-CA-C	6.41	124.45	110.80
1	O	341	SER	O-C-N	-6.41	115.17	122.09
1	D	18	SER	N-CA-C	6.41	119.06	110.35
1	H	277	ASP	O-C-N	-6.41	114.39	122.27
1	E	388	ASP	CB-CA-C	-6.40	98.96	110.23
1	F	486	VAL	O-C-N	-6.40	116.28	123.20
1	K	322	ARG	N-CA-C	6.40	124.44	110.80
1	D	211	LYS	O-C-N	-6.40	115.74	123.29
1	E	268	SER	CB-CA-C	-6.40	102.02	110.34
1	O	38	ARG	NE-CZ-NH2	6.40	124.96	119.20
1	C	444	ILE	O-C-N	-6.40	115.66	121.87
1	M	95	THR	O-C-N	-6.40	114.73	122.22
1	O	488	VAL	CB-CA-C	-6.40	103.65	112.04
1	C	155	ARG	N-CA-C	6.40	124.43	110.80
1	O	340	ILE	O-C-N	-6.39	116.47	123.18
1	P	509	THR	CA-C-O	6.39	127.52	120.80
1	O	118	HIS	N-CA-C	6.39	117.43	109.57
1	P	426	SER	O-C-N	-6.39	114.86	122.15
1	B	311	PHE	O-C-N	-6.39	114.41	122.27
1	B	425	LEU	CA-C-N	6.39	128.84	120.28
1	B	425	LEU	C-N-CA	6.39	128.84	120.28
1	F	237	MET	CA-C-O	-6.39	113.35	120.25
1	J	501	ASN	N-CA-C	6.39	120.42	112.24
1	M	154	ALA	N-CA-CB	-6.39	102.25	111.70
1	A	137	LEU	CA-C-O	-6.38	111.41	120.16
1	I	362	VAL	O-C-N	-6.38	116.43	123.20
1	O	148	ASP	CA-CB-CG	6.38	118.98	112.60
1	P	522	SER	N-CA-C	6.38	118.32	111.36
1	L	287	VAL	N-CA-C	6.38	117.13	110.62
1	K	444	ILE	CA-C-O	6.38	127.61	120.85
1	O	430	ARG	NE-CZ-NH2	6.38	124.94	119.20
1	I	392	ASP	CA-CB-CG	-6.38	106.22	112.60
1	E	43	PRO	CB-CA-C	-6.37	102.38	111.68
1	J	493	ILE	O-C-N	-6.37	115.93	122.75
1	O	54	PHE	CA-C-O	6.37	126.72	119.27
1	F	518	GLU	O-C-N	-6.37	113.95	122.23
1	P	347	THR	O-C-N	-6.37	117.39	121.85
1	F	429	LEU	O-C-N	-6.36	114.90	122.15
1	I	324	LYS	N-CA-C	6.36	118.51	110.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	71	GLU	CB-CG-CD	6.36	123.42	112.60
1	O	17	ASN	O-C-N	-6.36	115.97	123.41
1	O	380	ASN	CA-CB-CG	-6.36	106.24	112.60
1	A	483	ASN	CA-C-O	6.36	125.63	119.08
1	O	195	LEU	CA-C-O	-6.36	112.73	120.05
1	J	258	PRO	O-C-N	-6.36	115.24	123.06
1	I	322	ARG	NE-CZ-NH1	-6.35	115.15	121.50
1	O	95	THR	OG1-CB-CG2	-6.35	96.59	109.30
1	J	348	PRO	O-C-N	-6.35	114.06	122.64
1	J	434	ARG	NE-CZ-NH2	6.35	124.92	119.20
1	N	457	ILE	CA-C-N	6.35	128.79	120.28
1	N	457	ILE	C-N-CA	6.35	128.79	120.28
1	P	345	ASP	CA-CB-CG	-6.35	106.25	112.60
1	A	434	ARG	CA-C-O	6.35	127.15	120.42
1	B	189	THR	CA-C-N	6.35	129.08	120.38
1	B	189	THR	C-N-CA	6.35	129.08	120.38
1	F	517	THR	O-C-N	-6.35	113.92	122.43
1	J	205	ASP	CA-CB-CG	-6.35	106.25	112.60
1	L	134	LEU	O-C-N	-6.35	114.46	122.27
1	K	289	LYS	CA-C-N	6.35	128.78	120.28
1	K	289	LYS	C-N-CA	6.35	128.78	120.28
1	O	251	ALA	N-CA-C	6.34	119.11	110.35
1	O	38	ARG	NE-CZ-NH1	-6.34	115.16	121.50
1	H	469	ALA	CA-C-O	6.34	127.14	120.42
1	M	374	LYS	CA-C-O	6.34	127.94	120.58
1	P	164	THR	CA-C-O	-6.34	113.83	120.55
1	K	299	ILE	CA-C-O	-6.34	113.73	120.39
1	C	192	ALA	N-CA-C	6.33	124.29	110.80
1	C	434	ARG	NE-CZ-NH2	6.33	124.90	119.20
1	J	31	ARG	NE-CZ-NH2	6.33	124.90	119.20
1	F	130	PHE	CA-C-N	6.33	129.28	120.29
1	F	130	PHE	C-N-CA	6.33	129.28	120.29
1	M	122	ILE	CB-CA-C	-6.33	103.87	111.97
1	E	98	ALA	CA-C-N	-6.33	111.79	120.46
1	E	98	ALA	C-N-CA	-6.33	111.79	120.46
1	E	255	VAL	N-CA-C	6.33	117.74	109.58
1	K	114	ASP	O-C-N	-6.33	115.42	122.12
1	P	439	LYS	CA-C-O	6.33	127.27	119.05
1	B	338	ARG	N-CA-C	-6.32	97.76	108.26
1	E	57	VAL	CB-CA-C	-6.32	102.55	111.21
1	K	179	LYS	N-CA-C	6.32	118.17	111.28
1	K	203	SER	CA-C-O	-6.32	114.15	121.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	106	LEU	CB-CA-C	-6.32	100.30	110.79
1	N	350	ASP	CA-C-N	6.32	132.06	122.65
1	N	350	ASP	C-N-CA	6.32	132.06	122.65
1	E	476	ARG	NE-CZ-NH2	6.31	124.88	119.20
1	I	104	LEU	CA-C-O	6.31	127.14	119.31
1	N	338	ARG	N-CA-C	-6.31	98.09	108.76
1	P	387	ASN	CA-C-O	6.31	123.37	119.77
1	A	169	LYS	N-CA-CB	-6.31	100.20	110.42
1	D	400	ASP	N-CA-C	6.31	118.97	111.33
1	D	477	HIS	CG-CD2-NE2	6.31	113.51	107.20
1	P	401	ALA	N-CA-C	6.31	118.24	111.36
1	C	41	LEU	N-CA-C	6.31	117.85	110.97
1	D	407	ASN	O-C-N	-6.31	114.96	122.15
1	I	151	SER	O-C-N	-6.31	114.20	122.59
1	O	235	ALA	O-C-N	-6.31	115.01	122.20
1	F	509	THR	CA-C-N	6.31	129.02	120.38
1	F	509	THR	C-N-CA	6.31	129.02	120.38
1	N	427	ALA	O-C-N	-6.31	114.03	122.23
1	B	292	SER	CA-C-N	6.30	131.38	120.86
1	B	292	SER	C-N-CA	6.30	131.38	120.86
1	E	69	GLU	N-CA-C	6.30	120.69	113.19
1	G	288	ASP	CA-C-N	6.30	129.01	120.44
1	G	288	ASP	C-N-CA	6.30	129.01	120.44
1	J	268	SER	O-C-N	-6.30	117.44	121.85
1	K	465	GLU	CB-CA-C	6.30	119.51	109.62
1	L	288	ASP	CA-CB-CG	-6.30	106.30	112.60
1	N	407	ASN	CB-CG-ND2	6.30	125.85	116.40
1	O	181	MET	CG-SD-CE	-6.30	87.04	100.90
1	L	20	ARG	O-C-N	-6.30	114.21	122.59
1	O	520	ALA	CA-C-O	-6.30	113.74	120.42
1	O	437	GLY	O-C-N	-6.30	116.73	122.96
1	K	325	ARG	N-CA-C	6.29	118.94	111.33
1	O	457	ILE	CA-CB-CG1	6.29	121.10	110.40
1	D	74	HIS	CA-C-O	-6.29	114.62	119.46
1	C	355	GLU	N-CA-C	6.29	118.21	111.36
1	G	452	GLU	CA-C-O	6.29	127.10	119.49
1	B	55	GLY	O-C-N	-6.29	114.41	122.39
1	B	198	GLY	CA-C-O	6.29	126.10	119.06
1	E	329	GLU	CB-CG-CD	-6.29	101.91	112.60
1	M	461	THR	N-CA-CB	6.29	119.36	110.12
1	D	404	SER	O-C-N	-6.29	114.54	122.27
1	F	518	GLU	CA-C-O	6.29	127.22	120.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	251	ALA	CB-CA-C	-6.29	106.54	114.40
1	J	410	MET	N-CA-C	6.28	120.78	113.18
1	M	325	ARG	NE-CZ-NH2	6.28	124.86	119.20
1	K	141	ALA	CA-C-N	6.28	131.85	122.99
1	K	141	ALA	C-N-CA	6.28	131.85	122.99
1	L	506	ILE	N-CA-C	6.28	119.84	111.17
1	N	499	SER	N-CA-C	6.28	119.10	111.82
1	J	210	ASP	CA-CB-CG	-6.28	106.32	112.60
1	N	330	LYS	CA-C-O	6.28	127.07	120.42
1	C	270	ASP	CA-CB-CG	-6.27	106.33	112.60
1	E	31	ARG	CG-CD-NE	-6.27	98.20	112.00
1	E	468	SER	CA-C-O	-6.27	112.39	119.79
1	B	377	LYS	O-C-N	-6.27	114.56	122.27
1	H	206	LEU	CA-C-O	6.27	127.09	119.31
1	N	505	PRO	CA-C-N	6.27	129.37	120.53
1	N	505	PRO	C-N-CA	6.27	129.37	120.53
1	P	477	HIS	CB-CG-ND1	6.27	132.11	122.70
1	D	422	GLU	CB-CG-CD	6.27	123.26	112.60
1	N	474	ARG	NE-CZ-NH1	-6.27	115.23	121.50
1	D	24	LYS	N-CA-CB	-6.27	100.56	110.22
1	E	144	VAL	CA-C-N	6.27	132.82	121.97
1	E	144	VAL	C-N-CA	6.27	132.82	121.97
1	H	237	MET	CG-SD-CE	-6.27	87.11	100.90
1	A	446	ALA	CA-C-O	6.27	127.19	119.79
1	B	95	THR	O-C-N	-6.27	114.89	122.22
1	K	267	THR	N-CA-CB	6.27	119.56	110.47
1	L	237	MET	CA-C-O	-6.27	113.65	120.17
1	M	73	GLN	O-C-N	-6.27	114.38	122.09
1	P	270	ASP	CA-CB-CG	-6.27	106.33	112.60
1	A	454	ILE	CA-C-N	-6.26	112.01	119.84
1	A	454	ILE	C-N-CA	-6.26	112.01	119.84
1	H	275	PHE	O-C-N	-6.26	115.01	122.15
1	I	396	ARG	NE-CZ-NH1	-6.26	115.23	121.50
1	K	323	VAL	O-C-N	-6.26	116.75	123.14
1	E	181	MET	CA-C-N	6.26	128.67	120.28
1	E	181	MET	C-N-CA	6.26	128.67	120.28
1	H	96	THR	N-CA-C	-6.26	104.53	111.36
1	E	507	ARG	NE-CZ-NH1	-6.26	115.24	121.50
1	G	396	ARG	CD-NE-CZ	-6.26	115.63	124.40
1	J	428	ARG	O-C-N	-6.26	114.57	122.27
1	N	56	ASP	N-CA-C	6.26	118.79	109.59
1	O	74	HIS	CE1-NE2-CD2	-6.26	102.74	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	525	LYS	N-CA-CB	-6.26	100.86	110.44
1	D	509	THR	O-C-N	-6.26	115.27	122.03
1	L	117	ILE	CA-C-O	6.26	127.41	120.59
1	O	415	VAL	N-CA-C	-6.26	101.94	109.01
1	I	45	GLY	O-C-N	6.25	127.06	122.62
1	J	102	ALA	N-CA-CB	-6.25	100.92	110.12
1	K	321	ARG	CA-C-N	6.25	133.49	121.54
1	K	321	ARG	C-N-CA	6.25	133.49	121.54
1	E	456	MET	CA-C-O	6.25	127.06	119.31
1	F	366	LYS	O-C-N	-6.25	115.48	122.86
1	H	275	PHE	CA-C-O	6.25	127.05	120.42
1	A	87	GLN	CA-C-N	6.25	132.08	121.14
1	A	87	GLN	C-N-CA	6.25	132.08	121.14
1	B	322	ARG	N-CA-C	6.25	124.12	110.80
1	J	38	ARG	NE-CZ-NH1	-6.25	115.25	121.50
1	N	142	THR	N-CA-C	-6.25	98.71	108.90
1	M	207	ILE	N-CA-C	6.25	118.37	108.87
1	C	67	VAL	CB-CA-C	-6.25	103.60	112.22
1	H	194	PRO	CB-CA-C	6.24	121.86	111.56
1	D	332	GLU	CA-C-N	6.24	129.27	120.28
1	D	332	GLU	C-N-CA	6.24	129.27	120.28
1	N	182	ASP	N-CA-CB	-6.24	100.94	110.12
1	E	151	SER	CA-C-O	6.24	128.36	121.56
1	I	237	MET	O-C-N	-6.24	114.55	121.66
1	E	470	LEU	O-C-N	-6.24	115.04	122.15
1	J	286	MET	N-CA-C	6.24	121.66	111.37
1	N	421	ILE	N-CA-CB	6.24	117.44	110.51
1	C	150	ASN	CB-CA-C	6.24	122.83	110.42
1	G	264	ILE	CA-C-O	6.24	127.31	120.64
1	L	186	ASP	N-CA-CB	-6.24	100.95	110.12
1	B	258	PRO	CA-C-N	6.23	129.78	120.31
1	B	258	PRO	C-N-CA	6.23	129.78	120.31
1	J	396	ARG	NE-CZ-NH2	6.23	124.81	119.20
1	P	296	ASN	CA-CB-CG	-6.23	106.37	112.60
1	P	394	ALA	CA-C-N	6.23	128.91	120.44
1	P	394	ALA	C-N-CA	6.23	128.91	120.44
1	G	67	VAL	O-C-N	-6.23	115.42	121.90
1	M	52	ASP	O-C-N	-6.23	115.39	122.68
1	C	261	SER	CA-C-N	6.22	130.40	121.50
1	C	261	SER	C-N-CA	6.22	130.40	121.50
1	P	136	LEU	CA-C-O	6.22	126.44	119.41
1	K	368	VAL	O-C-N	-6.22	115.82	123.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	142	THR	N-CA-C	-6.22	99.26	109.40
1	C	101	LEU	N-CA-C	6.22	118.06	111.28
1	H	269	PRO	N-CA-CB	6.22	109.78	103.25
1	D	414	ILE	O-C-N	-6.22	116.14	123.04
1	O	435	SER	CA-C-N	6.22	129.55	120.91
1	O	435	SER	C-N-CA	6.22	129.55	120.91
1	C	114	ASP	CA-CB-CG	-6.22	106.38	112.60
1	I	147	SER	CA-C-N	6.21	130.96	122.07
1	I	147	SER	C-N-CA	6.21	130.96	122.07
1	N	370	ILE	CA-CB-CG1	6.21	120.97	110.40
1	P	339	ILE	CB-CA-C	-6.21	104.58	111.35
1	H	389	MET	N-CA-C	6.21	119.03	111.82
1	L	25	ASN	N-CA-C	-6.21	104.40	112.23
1	M	304	ILE	O-C-N	-6.21	116.16	123.05
1	I	499	SER	CB-CA-C	-6.21	97.01	109.99
1	B	360	ARG	O-C-N	-6.21	115.70	123.27
1	E	99	VAL	N-CA-C	6.21	116.95	110.62
1	G	504	GLU	O-C-N	-6.21	115.55	121.57
1	L	325	ARG	NE-CZ-NH2	6.21	124.79	119.20
1	J	507	ARG	NE-CZ-NH1	-6.20	115.30	121.50
1	H	189	THR	CB-CA-C	-6.20	100.50	110.79
1	I	474	ARG	NE-CZ-NH2	6.20	124.78	119.20
1	M	28	LEU	O-C-N	-6.20	115.55	122.12
1	O	181	MET	N-CA-C	6.20	118.04	111.28
1	B	504	GLU	O-C-N	-6.20	116.47	121.80
1	P	461	THR	CA-CB-OG1	6.20	118.89	109.60
1	M	478	ALA	CA-C-O	6.20	126.79	119.67
1	B	428	ARG	CA-C-N	6.19	129.09	120.29
1	B	428	ARG	C-N-CA	6.19	129.09	120.29
1	C	119	PRO	CA-C-N	6.19	128.87	120.38
1	C	119	PRO	C-N-CA	6.19	128.87	120.38
1	G	340	ILE	O-C-N	-6.19	116.82	123.14
1	H	110	GLU	N-CA-CB	-6.19	101.02	110.12
1	A	288	ASP	CA-C-N	6.19	128.86	120.44
1	A	288	ASP	C-N-CA	6.19	128.86	120.44
1	D	50	LEU	N-CA-CB	6.19	120.56	110.90
1	E	525	LYS	CA-C-O	6.19	126.77	119.28
1	J	371	GLU	CA-C-N	6.19	133.55	121.41
1	J	371	GLU	C-N-CA	6.19	133.55	121.41
1	J	521	THR	N-CA-CB	6.19	119.33	110.16
1	M	235	ALA	N-CA-C	6.19	119.00	111.82
1	P	224	ARG	NE-CZ-NH2	6.19	124.77	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	198	GLY	CA-C-O	6.19	125.89	119.02
1	B	364	ASN	OD1-CG-ND2	-6.19	116.41	122.60
1	C	444	ILE	CB-CA-C	-6.19	103.78	112.14
1	D	240	ARG	NE-CZ-NH1	-6.19	115.31	121.50
1	F	66	ILE	N-CA-C	6.19	116.97	110.72
1	H	375	ASN	CA-CB-CG	6.19	118.79	112.60
1	J	159	LYS	CA-C-O	6.19	127.11	120.55
1	M	496	ASP	CA-CB-CG	-6.19	106.41	112.60
1	C	322	ARG	N-CA-C	6.19	123.98	110.80
1	C	325	ARG	NE-CZ-NH2	6.19	124.77	119.20
1	L	53	SER	N-CA-C	6.19	118.02	111.28
1	P	257	LYS	O-C-N	-6.19	116.08	121.71
1	A	500	ILE	CA-C-N	6.18	131.65	122.74
1	A	500	ILE	C-N-CA	6.18	131.65	122.74
1	H	20	ARG	CD-NE-CZ	6.18	133.06	124.40
1	N	240	ARG	O-C-N	-6.18	116.17	123.41
1	O	512	VAL	CA-C-O	6.18	127.06	119.58
1	M	69	GLU	N-CA-C	6.18	120.55	113.19
1	N	396	ARG	CG-CD-NE	-6.18	98.40	112.00
1	B	84	ALA	CA-C-O	-6.18	114.51	121.00
1	C	58	THR	CB-CA-C	-6.18	100.62	110.14
1	I	422	GLU	O-C-N	-6.18	115.71	122.07
1	E	254	GLU	O-C-N	-6.17	115.86	123.33
1	F	287	VAL	N-CA-C	6.17	116.35	110.42
1	L	162	VAL	O-C-N	-6.17	115.47	121.83
1	O	123	ILE	N-CA-CB	-6.17	103.66	110.51
1	P	401	ALA	CA-C-O	6.17	126.97	120.42
1	C	318	LEU	O-C-N	-6.17	115.52	122.93
1	D	443	ALA	N-CA-C	6.17	118.09	111.36
1	G	281	LYS	O-C-N	-6.17	113.94	122.46
1	L	251	ALA	N-CA-C	6.17	118.87	110.35
1	A	502	VAL	CA-C-O	6.17	128.49	120.78
1	D	520	ALA	CA-C-N	6.17	128.55	120.28
1	D	520	ALA	C-N-CA	6.17	128.55	120.28
1	G	489	ILE	CA-C-N	6.17	128.55	120.28
1	G	489	ILE	C-N-CA	6.17	128.55	120.28
1	K	59	ILE	O-C-N	-6.17	115.88	123.10
1	P	147	SER	N-CA-C	6.17	120.13	112.24
1	L	31	ARG	NH1-CZ-NH2	6.17	127.31	119.30
1	K	360	ARG	N-CA-C	-6.16	98.95	109.24
1	O	441	GLN	CB-CG-CD	-6.16	102.12	112.60
1	C	162	VAL	O-C-N	-6.16	115.48	121.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	197	ASP	CA-C-N	6.16	132.69	121.85
1	E	197	ASP	C-N-CA	6.16	132.69	121.85
1	G	274	ALA	O-C-N	-6.16	113.96	122.46
1	O	220	SER	CA-C-N	6.16	132.46	122.29
1	O	220	SER	C-N-CA	6.16	132.46	122.29
1	P	461	THR	N-CA-CB	6.16	119.18	110.12
1	F	365	ASP	O-C-N	-6.16	116.00	122.96
1	I	315	ARG	NE-CZ-NH1	-6.16	115.34	121.50
1	J	103	GLY	CA-C-O	6.16	127.10	120.75
1	K	454	ILE	CA-C-O	-6.16	111.69	119.95
1	O	178	ASN	N-CA-C	6.16	118.00	111.28
1	P	234	HIS	CA-CB-CG	-6.16	107.64	113.80
1	P	497	ILE	CA-CB-CG2	-6.16	100.03	110.50
1	O	524	MET	CA-C-O	-6.16	112.89	119.97
1	A	475	ALA	O-C-N	-6.16	114.70	122.27
1	B	25	ASN	OD1-CG-ND2	-6.16	116.44	122.60
1	G	15	SER	N-CA-C	6.16	118.67	109.25
1	A	504	GLU	N-CA-C	-6.15	99.55	109.40
1	G	445	GLU	N-CA-C	6.15	120.05	112.54
1	I	177	LEU	N-CA-C	-6.15	105.43	113.12
1	A	133	SER	CA-C-O	6.15	127.07	120.55
1	I	457	ILE	N-CA-C	-6.15	103.20	111.44
1	P	224	ARG	CA-C-O	6.15	127.13	120.55
1	P	490	ASN	N-CA-C	6.15	118.06	111.36
1	A	285	ASP	N-CA-CB	-6.14	101.11	110.01
1	G	440	GLU	O-C-N	-6.14	114.20	122.43
1	I	91	VAL	N-CA-C	6.14	117.77	108.80
1	L	315	ARG	NE-CZ-NH1	-6.14	115.36	121.50
1	M	403	TYR	CA-CB-CG	6.14	124.95	113.90
1	F	244	ALA	CA-C-N	6.14	131.83	123.11
1	F	244	ALA	C-N-CA	6.14	131.83	123.11
1	A	398	ILE	CB-CA-C	-6.14	103.75	112.22
1	F	153	THR	CA-C-N	6.14	133.26	121.54
1	F	153	THR	C-N-CA	6.14	133.26	121.54
1	G	32	THR	N-CA-C	-6.14	104.67	111.36
1	E	498	TYR	N-CA-C	6.13	118.05	111.36
1	F	495	ASP	CA-CB-CG	-6.13	106.47	112.60
1	M	513	LEU	CA-C-O	6.13	127.03	119.79
1	F	321	ARG	NE-CZ-NH1	-6.13	115.37	121.50
1	H	518	GLU	CA-C-O	6.13	127.05	120.24
1	I	87	GLN	CA-C-O	6.13	127.02	119.97
1	O	80	LEU	N-CA-C	6.13	118.93	111.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	232	VAL	O-C-N	-6.13	114.91	122.57
1	G	528	ASP	CA-CB-CG	6.13	118.73	112.60
1	A	510	ARG	NE-CZ-NH2	6.13	124.72	119.20
1	D	131	ASN	CA-CB-CG	6.13	118.73	112.60
1	D	257	LYS	N-CA-C	6.13	116.02	108.11
1	C	346	ALA	N-CA-C	6.13	119.35	110.28
1	D	406	ARG	NE-CZ-NH2	6.13	124.71	119.20
1	F	115	GLN	CA-C-N	6.13	131.28	122.40
1	F	115	GLN	C-N-CA	6.13	131.28	122.40
1	G	424	GLU	N-CA-C	6.13	118.04	111.36
1	M	319	ALA	CA-C-O	6.13	128.51	121.28
1	D	321	ARG	CA-C-N	6.12	133.24	121.54
1	D	321	ARG	C-N-CA	6.12	133.24	121.54
1	D	498	TYR	CA-C-N	6.12	129.10	120.28
1	D	498	TYR	C-N-CA	6.12	129.10	120.28
1	G	454	ILE	O-C-N	-6.12	114.12	121.10
1	I	228	LEU	CA-C-O	6.12	127.06	120.32
1	J	391	LEU	N-CA-CB	-6.12	100.70	110.19
1	C	474	ARG	O-C-N	-6.12	115.48	122.09
1	D	228	LEU	CA-C-N	6.12	128.48	120.28
1	D	228	LEU	C-N-CA	6.12	128.48	120.28
1	A	434	ARG	NE-CZ-NH2	6.12	124.71	119.20
1	O	279	GLU	CA-C-O	6.12	127.01	119.97
1	N	277	ASP	CA-CB-CG	6.12	118.72	112.60
1	P	32	THR	CA-C-N	6.12	128.48	120.28
1	P	32	THR	C-N-CA	6.12	128.48	120.28
1	E	327	ASP	CA-C-O	6.12	127.01	120.10
1	O	28	LEU	N-CA-CB	-6.12	101.14	110.01
1	G	66	ILE	CA-C-N	6.11	128.39	120.56
1	G	66	ILE	C-N-CA	6.11	128.39	120.56
1	K	401	ALA	CA-C-N	6.11	128.47	120.28
1	K	401	ALA	C-N-CA	6.11	128.47	120.28
1	J	129	ALA	O-C-N	-6.11	115.64	122.12
1	O	57	VAL	CA-C-O	-6.11	113.26	121.02
1	G	338	ARG	NE-CZ-NH1	-6.11	115.39	121.50
1	O	484	CYS	O-C-N	-6.11	115.82	122.79
1	H	83	ALA	CA-C-N	6.11	128.71	120.65
1	H	83	ALA	C-N-CA	6.11	128.71	120.65
1	K	411	GLU	CA-C-N	6.11	127.48	119.84
1	K	411	GLU	C-N-CA	6.11	127.48	119.84
1	K	457	ILE	CA-C-N	6.11	128.47	120.28
1	K	457	ILE	C-N-CA	6.11	128.47	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	298	VAL	O-C-N	-6.11	116.27	123.05
1	G	255	VAL	N-CA-C	6.11	122.05	109.34
1	G	487	ASP	CA-C-N	6.11	130.12	120.47
1	G	487	ASP	C-N-CA	6.11	130.12	120.47
1	B	339	ILE	CB-CA-C	-6.11	102.06	111.71
1	E	86	ALA	N-CA-C	6.11	117.93	111.28
1	H	521	THR	OG1-CB-CG2	-6.11	97.09	109.30
1	J	47	ASP	CA-CB-CG	6.11	118.71	112.60
1	L	507	ARG	NE-CZ-NH1	-6.11	115.39	121.50
1	I	32	THR	CA-C-N	6.10	128.38	120.44
1	I	32	THR	C-N-CA	6.10	128.38	120.44
1	A	322	ARG	N-CA-C	6.10	123.80	110.80
1	O	227	VAL	CA-C-O	6.10	126.95	120.48
1	L	475	ALA	N-CA-CB	6.10	119.74	110.28
1	O	98	ALA	N-CA-C	6.10	117.93	111.28
1	H	485	GLY	O-C-N	-6.10	116.36	123.44
1	I	406	ARG	NE-CZ-NH2	6.10	124.69	119.20
1	L	233	VAL	CA-CB-CG2	-6.10	100.03	110.40
1	N	142	THR	CA-CB-OG1	-6.10	100.45	109.60
1	K	296	ASN	OD1-CG-ND2	-6.09	116.51	122.60
1	A	157	ALA	CA-C-N	6.09	128.44	120.28
1	A	157	ALA	C-N-CA	6.09	128.44	120.28
1	G	486	VAL	N-CA-C	6.09	116.38	107.37
1	J	454	ILE	CA-C-N	-6.08	112.23	119.84
1	J	454	ILE	C-N-CA	-6.08	112.23	119.84
1	A	492	LYS	N-CA-C	6.08	117.79	108.42
1	D	100	VAL	CA-C-N	6.08	128.43	120.28
1	D	100	VAL	C-N-CA	6.08	128.43	120.28
1	E	102	ALA	O-C-N	-6.08	115.67	122.12
1	J	165	THR	N-CA-C	6.08	117.58	111.07
1	L	217	ILE	CA-C-O	-6.08	114.06	120.57
1	C	32	THR	N-CA-CB	6.08	118.89	110.07
1	G	218	GLU	N-CA-C	6.08	120.24	112.34
1	K	283	LEU	CA-C-O	6.08	127.20	120.82
1	L	403	TYR	CB-CG-CD1	-6.08	111.68	120.80
1	M	117	ILE	N-CA-C	-6.08	99.11	107.99
1	D	338	ARG	O-C-N	-6.08	116.20	123.31
1	A	81	VAL	N-CA-C	6.08	116.82	110.62
1	F	340	ILE	CA-C-N	6.08	128.42	120.28
1	F	340	ILE	C-N-CA	6.08	128.42	120.28
1	K	74	HIS	ND1-CE1-NE2	6.08	114.47	108.40
1	J	146	VAL	CB-CA-C	-6.07	103.67	111.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	102	ALA	O-C-N	-6.07	115.68	122.12
1	J	81	VAL	N-CA-C	6.07	116.81	110.62
1	O	315	ARG	NE-CZ-NH2	6.07	124.66	119.20
1	B	195	LEU	N-CA-C	-6.07	101.72	110.40
1	B	449	ASP	CA-CB-CG	6.07	118.67	112.60
1	H	93	ASP	CA-C-O	6.07	127.12	119.78
1	I	61	ASN	CA-C-N	6.07	130.75	122.19
1	I	61	ASN	C-N-CA	6.07	130.75	122.19
1	F	370	ILE	N-CA-CB	6.07	119.11	111.46
1	K	425	LEU	N-CA-C	-6.07	104.75	111.36
1	L	365	ASP	N-CA-C	6.06	119.78	110.20
1	H	354	ALA	O-C-N	-6.06	115.87	123.27
1	L	269	PRO	N-CA-C	6.06	121.51	113.57
1	O	454	ILE	CA-C-O	-6.06	111.83	119.95
1	B	360	ARG	NE-CZ-NH2	6.06	124.65	119.20
1	C	421	ILE	N-CA-CB	6.06	117.23	110.51
1	B	500	ILE	CA-C-N	6.06	133.11	121.54
1	B	500	ILE	C-N-CA	6.06	133.11	121.54
1	I	457	ILE	CA-CB-CG2	-6.05	100.21	110.50
1	A	454	ILE	CB-CA-C	6.05	122.37	111.36
1	I	434	ARG	NE-CZ-NH1	-6.05	115.45	121.50
1	J	20	ARG	N-CA-CB	6.05	120.71	110.49
1	G	243	LYS	CG-CD-CE	6.05	125.20	111.30
1	H	171	MET	CG-SD-CE	-6.05	87.60	100.90
1	I	112	LEU	N-CA-C	6.05	117.87	111.28
1	M	46	LEU	CA-C-O	6.05	127.37	120.54
1	N	118	HIS	CG-CD2-NE2	6.04	113.25	107.20
1	E	500	ILE	CA-C-O	6.04	126.79	119.54
1	D	392	ASP	N-CA-C	6.04	118.64	111.33
1	G	398	ILE	N-CA-C	-6.04	104.62	110.72
1	I	451	LEU	N-CA-C	6.04	118.66	111.71
1	J	524	MET	N-CA-C	6.04	118.83	111.82
1	N	314	LYS	CA-C-O	6.04	126.95	120.55
1	H	523	ILE	CA-C-N	6.04	129.49	120.31
1	H	523	ILE	C-N-CA	6.04	129.49	120.31
1	D	239	ARG	N-CA-C	-6.04	105.74	113.23
1	G	56	ASP	CA-C-O	-6.04	113.75	120.70
1	K	39	SER	N-CA-C	6.04	119.75	112.38
1	N	443	ALA	CA-C-N	6.04	128.17	120.56
1	N	443	ALA	C-N-CA	6.04	128.17	120.56
1	C	339	ILE	O-C-N	-6.04	116.51	122.67
1	B	26	ASN	CA-CB-CG	6.04	118.64	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	45	GLY	N-CA-C	6.04	120.34	112.25
1	J	487	ASP	CA-CB-CG	6.03	118.63	112.60
1	O	520	ALA	N-CA-C	6.03	117.94	111.36
1	P	234	HIS	CG-CD2-NE2	6.03	113.23	107.20
1	B	155	ARG	CA-C-N	6.03	133.06	121.54
1	B	155	ARG	C-N-CA	6.03	133.06	121.54
1	F	347	THR	CB-CA-C	-6.03	100.77	109.63
1	B	528	ASP	CA-CB-CG	6.03	118.63	112.60
1	G	112	LEU	CA-C-N	6.03	128.72	120.46
1	G	112	LEU	C-N-CA	6.03	128.72	120.46
1	H	489	ILE	O-C-N	6.03	127.82	121.91
1	D	416	PRO	CB-CA-C	6.03	118.88	110.98
1	M	405	LEU	CB-CA-C	-6.03	100.60	110.85
1	N	57	VAL	CB-CA-C	-6.03	102.95	111.21
1	N	476	ARG	NE-CZ-NH1	-6.03	115.47	121.50
1	D	34	ALA	N-CA-CB	-6.03	101.26	110.12
1	L	276	LEU	O-C-N	-6.03	115.28	122.15
1	L	322	ARG	N-CA-C	6.03	123.64	110.80
1	G	497	ILE	O-C-N	-6.02	115.19	122.06
1	A	240	ARG	NE-CZ-NH2	6.02	124.62	119.20
1	C	67	VAL	N-CA-C	6.02	116.80	110.72
1	D	177	LEU	N-CA-C	-6.02	104.08	112.45
1	I	314	LYS	N-CA-C	6.02	117.84	111.28
1	P	59	ILE	N-CA-C	-6.02	98.46	107.37
1	A	321	ARG	CA-C-N	6.02	133.04	121.54
1	A	321	ARG	C-N-CA	6.02	133.04	121.54
1	B	356	LEU	O-C-N	-6.02	116.98	123.42
1	J	78	LYS	CA-C-N	6.02	128.26	120.44
1	J	78	LYS	C-N-CA	6.02	128.26	120.44
1	O	409	LEU	N-CA-C	6.02	117.84	111.28
1	P	228	LEU	CA-C-N	6.02	128.63	120.38
1	P	228	LEU	C-N-CA	6.02	128.63	120.38
1	B	228	LEU	CA-C-O	6.02	126.80	120.36
1	D	84	ALA	O-C-N	-6.02	115.77	122.03
1	O	266	ILE	CA-C-N	6.02	133.20	122.31
1	O	266	ILE	C-N-CA	6.02	133.20	122.31
1	M	74	HIS	CA-C-N	6.01	126.45	119.47
1	M	74	HIS	C-N-CA	6.01	126.45	119.47
1	C	504	GLU	CA-C-N	6.01	126.36	119.93
1	C	504	GLU	C-N-CA	6.01	126.36	119.93
1	N	240	ARG	NE-CZ-NH1	-6.01	115.49	121.50
1	O	521	THR	O-C-N	-6.01	114.88	122.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	154	ALA	CA-C-N	6.01	133.01	121.54
1	N	154	ALA	C-N-CA	6.01	133.01	121.54
1	I	241	VAL	CA-C-N	6.01	131.29	123.00
1	I	241	VAL	C-N-CA	6.01	131.29	123.00
1	I	511	GLN	N-CA-C	6.01	118.79	111.82
1	J	469	ALA	CA-C-O	6.01	126.79	120.42
1	O	115	GLN	CA-C-N	6.01	130.66	122.07
1	O	115	GLN	C-N-CA	6.01	130.66	122.07
1	N	200	TYR	CA-C-O	-6.00	114.26	120.99
1	A	350	ASP	CA-C-N	6.00	131.59	122.65
1	A	350	ASP	C-N-CA	6.00	131.59	122.65
1	H	228	LEU	CA-C-O	6.00	126.78	120.36
1	M	264	ILE	CA-C-O	6.00	128.28	120.78
1	H	118	HIS	O-C-N	6.00	127.48	121.30
1	A	292	SER	CA-C-N	6.00	129.95	120.47
1	A	292	SER	C-N-CA	6.00	129.95	120.47
1	C	340	ILE	O-C-N	-6.00	116.58	123.00
1	K	345	ASP	N-CA-C	6.00	120.46	113.20
1	A	507	ARG	NE-CZ-NH2	6.00	124.60	119.20
1	D	163	TYR	CA-C-N	6.00	128.60	120.44
1	D	163	TYR	C-N-CA	6.00	128.60	120.44
1	I	258	PRO	N-CA-C	6.00	120.92	111.38
1	C	131	ASN	CA-CB-CG	-5.99	106.61	112.60
1	E	454	ILE	O-C-N	-5.99	114.27	121.10
1	K	148	ASP	N-CA-CB	-5.99	100.33	110.46
1	O	351	LEU	N-CA-CB	5.99	120.41	110.52
1	A	505	PRO	CB-CA-C	5.99	119.25	111.64
1	B	495	ASP	CA-CB-CG	-5.99	106.61	112.60
1	G	47	ASP	CA-CB-CG	5.99	118.59	112.60
1	I	394	ALA	O-C-N	-5.99	115.21	122.22
1	I	441	GLN	OE1-CD-NE2	-5.99	116.61	122.60
1	M	248	VAL	CA-C-O	5.99	126.62	120.39
1	G	137	LEU	O-C-N	-5.99	114.44	121.32
1	B	163	TYR	N-CA-CB	-5.99	101.30	110.16
1	F	477	HIS	CE1-NE2-CD2	-5.99	103.02	109.00
1	H	201	ASN	O-C-N	-5.99	114.58	122.42
1	M	478	ALA	N-CA-C	-5.98	106.01	113.55
1	A	397	SER	CA-C-O	5.98	126.89	120.55
1	F	454	ILE	O-C-N	-5.98	114.28	121.10
1	J	141	ALA	CA-C-N	5.98	131.91	122.94
1	J	141	ALA	C-N-CA	5.98	131.91	122.94
1	N	406	ARG	N-CA-C	5.98	118.76	111.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	55	GLY	O-C-N	-5.98	115.86	122.55
1	G	350	ASP	CA-C-N	5.98	131.56	122.65
1	G	350	ASP	C-N-CA	5.98	131.56	122.65
1	N	461	THR	CA-C-O	5.98	126.86	120.10
1	D	432	TYR	CA-C-N	5.98	130.25	120.63
1	D	432	TYR	C-N-CA	5.98	130.25	120.63
1	L	205	ASP	CA-C-O	5.97	126.84	119.79
1	K	237	MET	CA-C-N	5.97	127.30	119.84
1	K	237	MET	C-N-CA	5.97	127.30	119.84
1	K	433	ALA	N-CA-C	5.97	120.10	112.34
1	M	518	GLU	CA-C-N	5.97	128.56	120.44
1	M	518	GLU	C-N-CA	5.97	128.56	120.44
1	N	21	ASP	CB-CA-C	5.97	120.34	110.90
1	O	36	MET	N-CA-C	-5.97	104.15	112.45
1	O	56	ASP	O-C-N	-5.97	116.05	123.04
1	I	47	ASP	CA-CB-CG	5.97	118.57	112.60
1	A	409	LEU	O-C-N	-5.97	115.79	122.12
1	B	141	ALA	N-CA-C	5.97	118.25	110.43
1	K	16	ARG	CD-NE-CZ	5.97	132.76	124.40
1	K	432	TYR	N-CA-C	-5.97	104.46	110.97
1	L	387	ASN	CA-CB-CG	-5.97	106.63	112.60
1	A	165	THR	CA-C-O	5.97	127.09	120.82
1	C	229	ASP	CA-C-N	5.97	129.76	120.75
1	C	229	ASP	C-N-CA	5.97	129.76	120.75
1	J	271	GLN	CA-C-O	5.97	126.71	119.31
1	F	32	THR	CA-C-N	5.97	128.28	120.28
1	F	32	THR	C-N-CA	5.97	128.28	120.28
1	F	152	ALA	CA-C-N	5.97	129.23	120.82
1	F	152	ALA	C-N-CA	5.97	129.23	120.82
1	F	178	ASN	OD1-CG-ND2	-5.97	116.63	122.60
1	J	110	GLU	O-C-N	-5.97	114.93	122.27
1	O	116	ASN	OD1-CG-ND2	5.97	128.57	122.60
1	O	440	GLU	O-C-N	-5.97	114.44	122.43
1	P	115	GLN	CA-C-N	5.97	130.60	122.19
1	P	115	GLN	C-N-CA	5.97	130.60	122.19
1	C	121	ILE	CA-C-N	5.96	128.07	120.56
1	C	121	ILE	C-N-CA	5.96	128.07	120.56
1	J	499	SER	CB-CA-C	-5.96	100.89	110.79
1	K	109	ALA	CA-C-N	5.96	128.27	120.28
1	K	109	ALA	C-N-CA	5.96	128.27	120.28
1	B	502	VAL	CA-C-N	5.96	128.64	120.35
1	B	502	VAL	C-N-CA	5.96	128.64	120.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	108	LYS	CB-CG-CD	5.96	125.01	111.30
1	I	344	LYS	CA-C-N	5.96	132.98	121.18
1	I	344	LYS	C-N-CA	5.96	132.98	121.18
1	P	324	LYS	CA-C-N	5.96	128.54	120.38
1	P	324	LYS	C-N-CA	5.96	128.54	120.38
1	B	64	ALA	CA-C-N	5.96	128.75	120.29
1	B	64	ALA	C-N-CA	5.96	128.75	120.29
1	B	341	SER	N-CA-C	5.96	117.47	110.97
1	F	306	ASP	O-C-N	-5.96	115.93	122.07
1	F	527	ASP	CA-CB-CG	5.96	118.56	112.60
1	G	484	CYS	CA-C-O	-5.96	114.07	120.92
1	J	307	ILE	O-C-N	-5.96	116.09	121.87
1	K	178	ASN	O-C-N	5.96	128.44	122.12
1	N	248	VAL	N-CA-CB	5.96	118.97	111.46
1	J	116	ASN	CA-C-O	5.96	129.03	120.51
1	A	238	PRO	N-CA-C	5.96	124.74	112.47
1	B	235	ALA	N-CA-C	5.96	118.56	111.71
1	D	144	VAL	N-CA-C	5.95	117.31	109.21
1	E	265	SER	N-CA-C	5.95	119.09	110.28
1	H	360	ARG	NE-CZ-NH1	5.95	127.45	121.50
1	N	357	VAL	N-CA-C	-5.95	99.48	108.17
1	P	500	ILE	CA-C-N	5.95	131.31	122.74
1	P	500	ILE	C-N-CA	5.95	131.31	122.74
1	M	25	ASN	OD1-CG-ND2	5.95	128.55	122.60
1	E	245	LYS	CA-C-O	5.95	126.73	120.54
1	M	484	CYS	N-CA-CB	5.95	119.33	110.29
1	G	527	ASP	CA-C-O	5.95	127.26	120.00
1	K	465	GLU	CA-C-N	5.95	127.28	119.84
1	K	465	GLU	C-N-CA	5.95	127.28	119.84
1	N	304	ILE	CA-C-N	5.95	129.15	120.71
1	N	304	ILE	C-N-CA	5.95	129.15	120.71
1	M	469	ALA	CA-C-N	5.94	128.73	120.29
1	M	469	ALA	C-N-CA	5.94	128.73	120.29
1	N	287	VAL	CA-C-N	5.94	128.84	120.28
1	N	287	VAL	C-N-CA	5.94	128.84	120.28
1	K	38	ARG	NE-CZ-NH1	-5.94	115.56	121.50
1	L	142	THR	O-C-N	-5.94	116.23	123.30
1	N	331	LEU	N-CA-C	-5.94	104.75	112.23
1	P	81	VAL	N-CA-C	5.94	116.68	110.62
1	P	406	ARG	NE-CZ-NH2	5.94	124.55	119.20
1	N	151	SER	N-CA-C	5.94	118.24	111.11
1	C	362	VAL	CA-C-O	5.94	126.56	120.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	503	VAL	CA-CB-CG2	5.94	120.49	110.40
1	H	276	LEU	CA-C-O	5.94	126.72	120.42
1	O	407	ASN	CA-CB-CG	-5.94	106.66	112.60
1	O	431	GLU	CA-C-N	5.94	128.49	120.65
1	O	431	GLU	C-N-CA	5.94	128.49	120.65
1	B	250	ASP	CA-CB-CG	5.94	118.54	112.60
1	D	322	ARG	CA-C-N	5.94	130.55	123.19
1	D	322	ARG	C-N-CA	5.94	130.55	123.19
1	F	132	LYS	CA-C-N	5.94	128.23	120.28
1	F	132	LYS	C-N-CA	5.94	128.23	120.28
1	H	330	LYS	CA-C-N	5.94	129.33	120.31
1	H	330	LYS	C-N-CA	5.94	129.33	120.31
1	J	274	ALA	CA-C-N	5.94	128.72	120.29
1	J	274	ALA	C-N-CA	5.94	128.72	120.29
1	N	163	TYR	CA-C-N	5.94	128.23	120.28
1	N	163	TYR	C-N-CA	5.94	128.23	120.28
1	O	327	ASP	CA-CB-CG	5.94	118.54	112.60
1	O	329	GLU	CB-CG-CD	-5.94	102.51	112.60
1	A	322	ARG	NE-CZ-NH1	-5.93	115.56	121.50
1	C	322	ARG	N-CA-CB	-5.93	100.46	110.49
1	E	522	SER	N-CA-CB	5.93	118.94	110.16
1	H	46	LEU	CA-C-N	5.93	129.71	120.75
1	H	46	LEU	C-N-CA	5.93	129.71	120.75
1	K	223	ILE	N-CA-C	-5.93	99.58	108.12
1	F	375	ASN	O-C-N	-5.93	114.50	121.32
1	C	439	LYS	N-CA-C	5.93	119.61	112.38
1	D	120	THR	CA-C-N	5.93	128.84	120.42
1	D	120	THR	C-N-CA	5.93	128.84	120.42
1	E	286	MET	N-CA-C	5.93	118.22	111.11
1	E	441	GLN	OE1-CD-NE2	5.93	128.53	122.60
1	I	38	ARG	NE-CZ-NH2	5.93	124.53	119.20
1	J	209	ILE	O-C-N	5.93	129.66	123.26
1	K	362	VAL	N-CA-C	-5.93	99.10	107.75
1	N	387	ASN	CB-CG-OD1	5.93	132.65	120.80
1	O	474	ARG	N-CA-C	5.92	117.41	111.07
1	L	209	ILE	CB-CA-C	-5.92	101.86	110.63
1	D	58	THR	O-C-N	-5.92	115.70	123.28
1	D	127	LYS	CA-C-N	5.92	128.22	120.28
1	D	127	LYS	C-N-CA	5.92	128.22	120.28
1	D	226	ILE	CA-C-N	5.92	130.39	122.93
1	D	226	ILE	C-N-CA	5.92	130.39	122.93
1	D	424	GLU	CA-C-O	5.92	126.78	119.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	19	GLY	CA-C-N	5.92	132.85	121.54
1	C	19	GLY	C-N-CA	5.92	132.85	121.54
1	D	153	THR	N-CA-C	5.92	118.81	110.23
1	L	249	LEU	CA-C-N	5.92	128.69	120.29
1	L	249	LEU	C-N-CA	5.92	128.69	120.29
1	B	417	GLY	N-CA-C	-5.92	104.64	112.81
1	C	173	GLU	N-CA-C	5.92	118.63	110.35
1	G	216	THR	CA-CB-OG1	5.92	118.47	109.60
1	A	113	VAL	CA-C-N	5.92	128.80	120.28
1	A	113	VAL	C-N-CA	5.92	128.80	120.28
1	D	330	LYS	O-C-N	-5.92	115.41	122.15
1	J	126	PHE	CA-CB-CG	5.92	119.72	113.80
1	O	201	ASN	CA-CB-CG	-5.92	106.69	112.60
1	D	219	ASP	O-C-N	-5.91	115.24	122.34
1	E	224	ARG	O-C-N	5.91	128.89	122.15
1	J	31	ARG	NE-CZ-NH1	-5.91	115.59	121.50
1	K	74	HIS	CA-CB-CG	-5.91	107.89	113.80
1	F	197	ASP	N-CA-C	5.91	118.48	111.33
1	J	219	ASP	O-C-N	-5.91	115.25	122.34
1	P	487	ASP	CA-C-N	5.91	128.81	120.42
1	P	487	ASP	C-N-CA	5.91	128.81	120.42
1	B	454	ILE	O-C-N	-5.91	114.36	121.10
1	G	449	ASP	N-CA-C	5.91	117.72	111.28
1	H	52	ASP	CA-C-N	5.91	128.47	120.38
1	H	52	ASP	C-N-CA	5.91	128.47	120.38
1	L	160	LYS	N-CA-C	5.91	118.50	111.71
1	A	286	MET	N-CA-C	5.91	118.20	111.11
1	J	177	LEU	CA-C-N	5.91	128.12	120.44
1	J	177	LEU	C-N-CA	5.91	128.12	120.44
1	B	19	GLY	CA-C-N	5.91	132.82	121.54
1	B	19	GLY	C-N-CA	5.91	132.82	121.54
1	F	399	ASN	CA-C-N	5.91	128.47	120.38
1	F	399	ASN	C-N-CA	5.91	128.47	120.38
1	G	131	ASN	N-CA-CB	-5.91	101.13	110.28
1	J	350	ASP	CA-C-N	5.91	130.87	122.72
1	J	350	ASP	C-N-CA	5.91	130.87	122.72
1	B	489	ILE	N-CA-C	5.90	116.68	110.72
1	J	97	SER	CB-CA-C	-5.90	100.99	110.79
1	A	425	LEU	N-CA-CB	5.90	118.90	110.16
1	M	81	VAL	CA-C-N	5.90	128.78	120.28
1	M	81	VAL	C-N-CA	5.90	128.78	120.28
1	O	477	HIS	ND1-CE1-NE2	5.90	114.30	108.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	454	ILE	CB-CA-C	5.90	122.10	111.36
1	F	504	GLU	O-C-N	-5.90	114.09	121.70
1	N	471	MET	CG-SD-CE	-5.90	87.92	100.90
1	I	225	GLY	O-C-N	-5.90	118.11	122.71
1	M	203	SER	N-CA-CB	5.90	120.46	110.49
1	O	380	ASN	N-CA-CB	-5.90	100.33	111.00
1	P	507	ARG	NE-CZ-NH2	5.90	124.51	119.20
1	G	234	HIS	CB-CG-ND1	5.89	131.54	122.70
1	A	201	ASN	CA-CB-CG	-5.89	106.71	112.60
1	B	61	ASN	CA-C-N	5.89	129.74	121.02
1	B	61	ASN	C-N-CA	5.89	129.74	121.02
1	C	37	LEU	CA-C-O	5.89	126.63	119.38
1	K	496	ASP	N-CA-C	5.89	123.35	110.80
1	P	289	LYS	O-C-N	-5.89	116.00	122.07
1	A	482	THR	CA-CB-OG1	-5.89	100.76	109.60
1	F	400	ASP	CA-C-N	5.89	128.66	120.29
1	F	400	ASP	C-N-CA	5.89	128.66	120.29
1	F	401	ALA	CA-C-N	5.89	128.66	120.29
1	F	401	ALA	C-N-CA	5.89	128.66	120.29
1	B	96	THR	CA-C-O	5.89	126.66	120.42
1	E	351	LEU	N-CA-C	-5.89	100.10	109.76
1	F	389	MET	CA-C-N	5.89	131.45	121.14
1	F	389	MET	C-N-CA	5.89	131.45	121.14
1	M	427	ALA	CA-C-N	5.89	128.65	120.29
1	M	427	ALA	C-N-CA	5.89	128.65	120.29
1	B	118	HIS	CA-CB-CG	-5.89	107.91	113.80
1	B	385	GLY	O-C-N	5.89	130.35	122.70
1	N	411	GLU	CA-C-O	-5.89	113.22	119.22
1	P	527	ASP	CA-C-O	5.89	126.90	119.95
1	A	226	ILE	O-C-N	-5.88	117.14	123.14
1	B	470	LEU	N-CA-C	5.88	117.69	111.28
1	C	262	ALA	CB-CA-C	5.88	119.43	109.84
1	D	201	ASN	CB-CA-C	-5.88	100.90	110.79
1	L	145	ASP	N-CA-C	5.88	123.33	110.80
1	M	454	ILE	CA-C-N	-5.88	112.48	119.84
1	M	454	ILE	C-N-CA	-5.88	112.48	119.84
1	K	91	VAL	O-C-N	-5.88	116.81	123.10
1	K	293	ILE	O-C-N	-5.88	115.93	121.87
1	N	137	LEU	O-C-N	-5.88	114.56	121.32
1	G	164	THR	N-CA-CB	5.88	118.54	110.01
1	F	112	LEU	O-C-N	-5.88	115.89	122.12
1	E	80	LEU	O-C-N	-5.88	115.04	122.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	66	ILE	CA-C-O	-5.88	114.12	120.47
1	I	351	LEU	O-C-N	-5.88	116.31	123.19
1	C	165	THR	N-CA-CB	5.87	118.75	110.12
1	P	266	ILE	CA-CB-CG2	5.87	120.49	110.50
1	A	432	TYR	CA-C-N	5.87	130.08	120.63
1	A	432	TYR	C-N-CA	5.87	130.08	120.63
1	B	325	ARG	N-CA-C	5.87	118.43	111.33
1	M	138	PRO	N-CA-CB	5.87	109.41	103.25
1	N	50	LEU	O-C-N	-5.87	115.37	123.12
1	J	366	LYS	CA-C-O	5.87	128.22	121.47
1	L	518	GLU	CA-C-N	5.87	128.42	120.44
1	L	518	GLU	C-N-CA	5.87	128.42	120.44
1	A	231	GLU	CA-C-O	5.87	125.84	119.15
1	C	411	GLU	O-C-N	-5.87	114.57	121.32
1	N	222	LEU	N-CA-C	5.87	119.16	110.48
1	G	234	HIS	O-C-N	-5.87	115.60	123.23
1	B	280	ALA	N-CA-CB	-5.86	100.84	110.40
1	D	428	ARG	N-CA-C	5.86	118.62	111.82
1	F	272	ILE	CB-CA-C	-5.86	104.38	112.24
1	K	246	ILE	CA-C-O	-5.86	114.20	120.59
1	C	495	ASP	CA-C-N	5.86	132.73	121.54
1	C	495	ASP	C-N-CA	5.86	132.73	121.54
1	E	307	ILE	N-CA-C	5.86	116.05	110.42
1	E	322	ARG	N-CA-C	5.86	123.28	110.80
1	F	432	TYR	CB-CA-C	5.86	119.98	110.96
1	J	154	ALA	CA-C-N	5.86	132.73	121.54
1	J	154	ALA	C-N-CA	5.86	132.73	121.54
1	D	423	LEU	O-C-N	-5.86	115.91	122.12
1	D	468	SER	N-CA-CB	5.86	119.36	110.28
1	G	395	GLU	CA-C-N	5.86	128.05	120.44
1	G	395	GLU	C-N-CA	5.86	128.05	120.44
1	K	18	SER	N-CA-C	5.86	117.85	110.24
1	M	375	ASN	OD1-CG-ND2	-5.86	116.74	122.60
1	A	338	ARG	O-C-N	-5.86	116.42	123.27
1	H	72	ILE	O-C-N	-5.86	116.25	123.10
1	C	362	VAL	O-C-N	-5.85	117.00	123.20
1	I	442	LEU	CA-C-N	5.85	128.60	120.29
1	I	442	LEU	C-N-CA	5.85	128.60	120.29
1	C	39	SER	N-CA-C	5.85	119.52	112.38
1	K	69	GLU	CA-C-O	-5.85	111.45	119.12
1	C	70	MET	N-CA-C	-5.85	100.17	109.59
1	H	97	SER	CA-C-N	5.85	128.40	120.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	97	SER	C-N-CA	5.85	128.40	120.38
1	B	257	LYS	CA-C-O	-5.85	115.62	120.71
1	J	270	ASP	CA-C-O	5.85	126.71	120.10
1	F	451	LEU	O-C-N	-5.85	115.38	122.22
1	G	343	ILE	N-CA-CB	5.85	118.49	110.54
1	G	426	SER	CA-C-O	5.85	126.75	120.55
1	N	337	ALA	N-CA-C	5.85	117.44	110.19
1	O	389	MET	O-C-N	-5.85	115.08	122.27
1	H	190	THR	CA-C-N	5.84	132.49	121.97
1	H	190	THR	C-N-CA	5.84	132.49	121.97
1	G	224	ARG	N-CA-CB	5.84	118.54	110.07
1	K	251	ALA	N-CA-C	5.84	117.53	109.29
1	A	344	LYS	N-CA-C	5.84	118.39	111.33
1	L	257	LYS	N-CA-C	5.84	117.96	109.84
1	O	204	LEU	CA-C-N	5.84	128.10	120.28
1	O	204	LEU	C-N-CA	5.84	128.10	120.28
1	P	166	MET	CA-C-N	5.84	128.10	120.28
1	P	166	MET	C-N-CA	5.84	128.10	120.28
1	H	454	ILE	CB-CA-C	5.84	121.98	111.36
1	M	287	VAL	CA-CB-CG1	5.84	120.32	110.40
1	B	137	LEU	N-CA-C	5.83	122.70	109.81
1	E	109	ALA	CA-C-N	5.83	128.58	120.29
1	E	109	ALA	C-N-CA	5.83	128.58	120.29
1	G	120	THR	CB-CA-C	-5.83	101.10	110.79
1	D	101	LEU	N-CA-C	5.83	117.64	111.28
1	F	432	TYR	O-C-N	-5.83	115.96	122.03
1	H	40	SER	CA-C-N	5.83	128.37	120.44
1	H	40	SER	C-N-CA	5.83	128.37	120.44
1	M	442	LEU	CA-C-N	5.83	128.57	120.29
1	M	442	LEU	C-N-CA	5.83	128.57	120.29
1	A	310	HIS	CB-CG-ND1	5.83	131.45	122.70
1	M	131	ASN	OD1-CG-ND2	-5.83	116.77	122.60
1	O	421	ILE	CA-C-N	5.83	128.02	120.44
1	O	421	ILE	C-N-CA	5.83	128.02	120.44
1	F	142	THR	CA-CB-CG2	5.83	120.41	110.50
1	J	430	ARG	N-CA-CB	5.83	117.80	110.45
1	O	119	PRO	CA-C-N	5.83	128.37	120.38
1	O	119	PRO	C-N-CA	5.83	128.37	120.38
1	C	323	VAL	N-CA-CB	5.83	117.98	110.99
1	M	34	ALA	O-C-N	-5.83	116.07	122.07
1	N	323	VAL	O-C-N	-5.83	116.56	123.03
1	L	310	HIS	CA-CB-CG	5.83	119.63	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	166	MET	CA-CB-CG	-5.83	102.45	114.10
1	H	197	ASP	O-C-N	-5.83	114.33	122.37
1	I	141	ALA	CA-C-O	5.83	127.60	121.19
1	N	199	GLY	N-CA-C	5.83	121.51	112.60
1	P	38	ARG	N-CA-CB	-5.83	101.25	110.28
1	M	286	MET	CA-C-N	5.82	127.90	120.56
1	M	286	MET	C-N-CA	5.82	127.90	120.56
1	M	486	VAL	CA-C-O	5.82	129.00	121.32
1	B	271	GLN	N-CA-CB	-5.82	100.91	110.40
1	F	30	ALA	N-CA-C	5.82	119.48	112.38
1	J	16	ARG	CG-CD-NE	-5.82	99.19	112.00
1	F	425	LEU	O-C-N	-5.82	115.52	122.15
1	O	296	ASN	CA-C-O	5.82	125.99	119.41
1	P	396	ARG	N-CA-C	5.82	117.30	111.07
1	D	511	GLN	N-CA-C	5.82	118.57	111.82
1	B	232	VAL	N-CA-CB	5.82	120.83	111.23
1	B	267	THR	N-CA-C	-5.82	105.51	113.30
1	J	341	SER	N-CA-CB	5.82	118.40	109.91
1	I	42	GLY	N-CA-C	5.81	124.20	112.34
1	I	223	ILE	O-C-N	-5.81	116.88	123.10
1	I	409	LEU	CA-C-O	5.81	126.71	120.55
1	N	155	ARG	N-CA-C	5.81	123.18	110.80
1	O	224	ARG	N-CA-C	5.81	117.42	111.14
1	N	411	GLU	CB-CG-CD	-5.81	102.72	112.60
1	P	469	ALA	CA-C-N	5.81	128.54	120.29
1	P	469	ALA	C-N-CA	5.81	128.54	120.29
1	C	507	ARG	CD-NE-CZ	5.81	132.53	124.40
1	F	303	GLY	CA-C-O	-5.81	117.63	122.33
1	J	465	GLU	CB-CG-CD	-5.81	102.73	112.60
1	O	20	ARG	CA-C-N	5.81	127.99	120.44
1	O	20	ARG	C-N-CA	5.81	127.99	120.44
1	E	410	MET	CG-SD-CE	-5.81	88.13	100.90
1	M	465	GLU	O-C-N	-5.81	115.27	121.42
1	A	78	LYS	CA-C-N	5.80	128.33	120.38
1	A	78	LYS	C-N-CA	5.80	128.33	120.38
1	G	511	GLN	OE1-CD-NE2	5.80	128.41	122.60
1	O	454	ILE	CB-CA-C	5.80	121.92	111.36
1	H	77	ALA	CA-C-O	5.80	126.64	119.79
1	O	114	ASP	O-C-N	-5.80	115.43	122.22
1	F	127	LYS	O-C-N	-5.80	115.97	122.12
1	I	356	LEU	CA-C-O	5.80	127.44	121.23
1	L	301	GLN	OE1-CD-NE2	-5.80	116.80	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	417	GLY	N-CA-C	-5.80	105.83	112.79
1	C	73	GLN	O-C-N	-5.80	114.47	122.30
1	D	68	LYS	N-CA-C	5.80	117.60	111.28
1	O	489	ILE	N-CA-C	5.80	116.58	110.72
1	A	502	VAL	O-C-N	-5.80	115.32	122.57
1	E	327	ASP	CA-C-N	5.80	128.65	120.42
1	E	327	ASP	C-N-CA	5.80	128.65	120.42
1	F	214	GLY	O-C-N	-5.80	115.16	122.70
1	N	232	VAL	CA-C-N	5.80	132.40	121.97
1	N	232	VAL	C-N-CA	5.80	132.40	121.97
1	C	500	ILE	CA-C-N	5.79	130.36	122.19
1	C	500	ILE	C-N-CA	5.79	130.36	122.19
1	G	277	ASP	CA-C-O	-5.79	113.31	119.97
1	H	315	ARG	NE-CZ-NH2	5.79	124.42	119.20
1	A	217	ILE	CA-C-O	5.79	126.72	120.47
1	A	501	ASN	N-CA-C	5.79	119.64	112.58
1	B	305	ASP	CA-CB-CG	-5.79	106.81	112.60
1	G	315	ARG	NE-CZ-NH2	5.79	124.41	119.20
1	I	454	ILE	CB-CA-C	5.79	121.90	111.36
1	J	97	SER	N-CA-C	5.79	117.59	111.28
1	N	33	LEU	CA-C-N	5.79	128.32	120.44
1	N	33	LEU	C-N-CA	5.79	128.32	120.44
1	D	346	ALA	N-CA-C	5.79	118.22	110.35
1	M	483	ASN	N-CA-C	5.79	123.13	110.80
1	O	453	GLU	N-CA-CB	-5.79	101.37	110.46
1	P	243	LYS	CG-CD-CE	5.79	124.62	111.30
1	A	418	GLY	N-CA-C	5.79	123.23	114.61
1	P	368	VAL	N-CA-C	5.79	116.19	107.80
1	H	87	GLN	O-C-N	-5.79	114.58	122.33
1	J	46	LEU	CA-C-N	5.79	129.33	120.82
1	J	46	LEU	C-N-CA	5.79	129.33	120.82
1	L	64	ALA	N-CA-C	-5.79	105.71	112.89
1	F	169	LYS	N-CA-CB	-5.79	101.55	110.46
1	K	155	ARG	CA-C-N	5.79	132.59	121.54
1	K	155	ARG	C-N-CA	5.79	132.59	121.54
1	P	377	LYS	O-C-N	-5.79	114.74	122.49
1	A	62	ASP	N-CA-C	5.78	118.74	110.24
1	B	118	HIS	N-CA-C	5.78	116.68	109.57
1	C	148	ASP	CA-C-N	5.78	132.59	121.54
1	C	148	ASP	C-N-CA	5.78	132.59	121.54
1	K	407	ASN	N-CA-C	5.78	117.67	111.36
1	L	333	LYS	N-CA-C	5.78	119.15	111.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	455	PRO	O-C-N	-5.78	114.83	122.64
1	F	88	ASP	O-C-N	-5.78	115.16	122.27
1	K	469	ALA	N-CA-C	5.78	117.66	111.36
1	P	33	LEU	N-CA-C	5.78	117.58	111.28
1	P	184	VAL	CB-CA-C	5.78	120.20	112.22
1	F	150	ASN	OD1-CG-ND2	5.78	128.38	122.60
1	J	163	TYR	N-CA-C	5.78	117.66	111.36
1	P	346	ALA	N-CA-C	5.78	118.83	110.28
1	H	145	ASP	CA-CB-CG	-5.78	106.82	112.60
1	M	111	SER	CA-C-N	5.78	128.02	120.28
1	M	111	SER	C-N-CA	5.78	128.02	120.28
1	N	161	ILE	CA-CB-CG1	5.78	120.22	110.40
1	B	109	ALA	CA-C-N	5.78	128.02	120.28
1	B	109	ALA	C-N-CA	5.78	128.02	120.28
1	D	163	TYR	N-CA-C	5.78	117.58	111.28
1	N	179	LYS	CA-CB-CG	-5.78	102.55	114.10
1	N	510	ARG	N-CA-C	5.78	118.32	111.33
1	O	406	ARG	N-CA-CB	-5.78	101.33	110.28
1	C	182	ASP	CA-CB-CG	5.77	118.37	112.60
1	D	473	LEU	CA-C-O	5.77	126.65	120.24
1	I	79	LEU	N-CA-C	5.77	117.25	111.07
1	A	465	GLU	O-C-N	-5.77	115.51	121.28
1	B	481	LEU	CA-C-N	5.77	131.16	122.68
1	B	481	LEU	C-N-CA	5.77	131.16	122.68
1	D	265	SER	CA-C-N	5.77	128.37	120.35
1	D	265	SER	C-N-CA	5.77	128.37	120.35
1	F	373	ALA	CA-C-O	5.77	126.48	120.30
1	H	360	ARG	NH1-CZ-NH2	-5.77	111.80	119.30
1	M	228	LEU	N-CA-C	-5.77	99.32	108.73
1	M	407	ASN	CA-C-O	-5.77	114.30	120.42
1	C	205	ASP	CA-CB-CG	-5.77	106.83	112.60
1	P	158	LEU	CA-C-N	5.77	127.94	120.44
1	P	158	LEU	C-N-CA	5.77	127.94	120.44
1	G	323	VAL	N-CA-CB	5.77	118.62	111.41
1	K	78	LYS	N-CA-CB	5.77	118.69	110.16
1	L	223	ILE	CB-CG1-CD1	5.77	125.91	113.80
1	P	182	ASP	N-CA-CB	-5.77	101.62	110.16
1	F	511	GLN	CA-C-O	-5.77	113.34	119.97
1	H	14	THR	CA-CB-OG1	-5.77	100.95	109.60
1	N	230	LYS	CA-C-N	5.77	129.46	120.75
1	N	230	LYS	C-N-CA	5.77	129.46	120.75
1	F	225	GLY	O-C-N	-5.76	116.75	122.86

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	516	ALA	CB-CA-C	-5.76	100.15	110.70
1	K	83	ALA	N-CA-C	-5.76	105.08	111.36
1	O	258	PRO	N-CA-CB	5.76	108.67	103.19
1	C	147	SER	N-CA-C	5.76	119.14	111.30
1	N	323	VAL	CG1-CB-CG2	-5.76	98.12	110.80
1	A	342	SER	O-C-N	-5.76	117.21	123.26
1	C	252	SER	CA-C-O	-5.76	114.35	120.92
1	C	83	ALA	N-CA-C	-5.76	104.97	112.23
1	L	68	LYS	N-CA-C	5.76	117.56	111.28
1	M	98	ALA	N-CA-C	5.76	117.56	111.28
1	N	117	ILE	O-C-N	-5.76	115.37	122.97
1	H	167	SER	CA-C-O	5.76	126.63	120.70
1	C	234	HIS	ND1-CG-CD2	-5.76	100.34	106.10
1	P	109	ALA	CA-C-N	5.76	127.99	120.28
1	P	109	ALA	C-N-CA	5.76	127.99	120.28
1	A	126	PHE	CA-C-N	5.75	128.46	120.29
1	A	126	PHE	C-N-CA	5.75	128.46	120.29
1	A	432	TYR	CA-CB-CG	-5.75	103.54	113.90
1	D	210	ASP	CA-CB-CG	-5.75	106.85	112.60
1	F	221	GLN	N-CA-C	5.75	118.02	108.99
1	F	247	ALA	CB-CA-C	-5.75	100.36	109.80
1	I	318	LEU	O-C-N	-5.75	116.20	123.05
1	L	57	VAL	CB-CA-C	-5.75	103.33	111.21
1	A	317	ILE	O-C-N	-5.75	117.27	123.14
1	C	26	ASN	CA-C-N	5.75	129.75	120.55
1	C	26	ASN	C-N-CA	5.75	129.75	120.55
1	H	464	LEU	N-CA-C	-5.75	102.41	110.35
1	P	117	ILE	CA-C-O	5.75	126.72	120.57
1	F	185	ILE	O-C-N	-5.75	116.30	121.87
1	M	180	ILE	CA-C-O	5.75	126.94	120.85
1	K	434	ARG	CA-C-O	5.75	126.51	120.42
1	M	91	VAL	N-CA-C	5.75	115.83	108.82
1	E	375	ASN	OD1-CG-ND2	-5.74	116.86	122.60
1	I	493	ILE	CA-C-N	-5.74	113.14	122.33
1	I	493	ILE	C-N-CA	-5.74	113.14	122.33
1	P	281	LYS	N-CA-C	-5.74	105.77	112.89
1	K	299	ILE	CB-CA-C	-5.74	102.13	110.63
1	O	386	SER	CA-C-O	5.74	126.69	120.95
1	C	87	GLN	CA-C-N	5.74	130.31	120.72
1	C	87	GLN	C-N-CA	5.74	130.31	120.72
1	F	231	GLU	CA-C-O	5.74	126.36	119.59
1	F	377	LYS	CA-C-O	5.74	125.69	119.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	158	LEU	N-CA-C	5.74	117.54	111.28
1	J	37	LEU	N-CA-C	5.74	119.54	112.54
1	J	194	PRO	CB-CA-C	5.74	121.03	111.56
1	O	123	ILE	N-CA-C	5.74	116.39	110.36
1	H	185	ILE	N-CA-C	5.74	116.47	110.62
1	K	428	ARG	N-CA-CB	5.74	119.17	110.28
1	P	100	VAL	CA-C-N	5.74	127.97	120.28
1	P	100	VAL	C-N-CA	5.74	127.97	120.28
1	B	122	ILE	CB-CA-C	-5.74	104.63	111.97
1	G	401	ALA	CA-C-N	5.74	128.44	120.29
1	G	401	ALA	C-N-CA	5.74	128.44	120.29
1	H	403	TYR	CA-C-O	-5.74	113.37	119.97
1	O	502	VAL	CA-CB-CG2	-5.74	100.65	110.40
1	E	284	LYS	O-C-N	-5.74	114.74	122.43
1	K	412	PRO	N-CA-CB	5.74	109.27	103.25
1	M	293	ILE	N-CA-C	5.74	118.22	111.05
1	M	460	GLU	CA-C-O	5.74	126.57	119.97
1	P	113	VAL	CA-C-N	5.74	127.97	120.28
1	P	113	VAL	C-N-CA	5.74	127.97	120.28
1	E	498	TYR	CB-CA-C	-5.73	101.10	110.85
1	M	282	TYR	O-C-N	-5.73	114.78	122.23
1	N	181	MET	CA-C-N	5.73	127.96	120.28
1	N	181	MET	C-N-CA	5.73	127.96	120.28
1	H	410	MET	O-C-N	-5.73	113.91	122.39
1	M	264	ILE	O-C-N	-5.73	115.41	122.57
1	D	429	LEU	N-CA-C	-5.73	105.17	111.82
1	G	389	MET	N-CA-CB	5.73	118.64	110.16
1	I	522	SER	CA-C-O	-5.73	114.35	120.42
1	K	502	VAL	O-C-N	-5.73	115.41	122.57
1	B	148	ASP	CA-C-N	5.73	130.30	122.34
1	B	148	ASP	C-N-CA	5.73	130.30	122.34
1	M	477	HIS	ND1-CE1-NE2	5.73	114.13	108.40
1	J	93	ASP	CA-C-N	5.72	126.33	119.98
1	J	93	ASP	C-N-CA	5.72	126.33	119.98
1	N	461	THR	CA-C-N	5.72	132.51	121.18
1	N	461	THR	C-N-CA	5.72	132.51	121.18
1	N	488	VAL	N-CA-C	5.72	116.46	110.62
1	O	434	ARG	NE-CZ-NH2	5.72	124.35	119.20
1	F	488	VAL	CB-CA-C	-5.72	104.42	112.14
1	K	116	ASN	N-CA-C	5.72	119.53	111.52
1	G	324	LYS	CA-C-N	5.72	128.21	120.38
1	G	324	LYS	C-N-CA	5.72	128.21	120.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	41	LEU	N-CA-C	5.72	118.00	109.59
1	B	433	ALA	N-CA-C	5.72	119.07	111.75
1	H	17	ASN	N-CA-C	-5.72	98.98	108.75
1	N	120	THR	OG1-CB-CG2	-5.72	97.87	109.30
1	N	177	LEU	N-CA-C	-5.72	105.97	113.12
1	H	435	SER	O-C-N	-5.71	114.77	122.43
1	I	396	ARG	NE-CZ-NH2	5.71	124.34	119.20
1	A	118	HIS	CA-C-N	5.71	125.56	119.28
1	A	118	HIS	C-N-CA	5.71	125.56	119.28
1	E	239	ARG	NE-CZ-NH2	5.71	124.34	119.20
1	G	410	MET	CA-C-O	5.71	126.42	119.11
1	M	94	GLY	O-C-N	-5.71	116.71	122.19
1	N	400	ASP	N-CA-C	5.71	118.24	111.33
1	A	421	ILE	O-C-N	-5.71	115.43	122.57
1	J	488	VAL	N-CA-C	5.71	116.44	110.62
1	N	239	ARG	N-CA-CB	5.71	119.23	110.61
1	J	322	ARG	NE-CZ-NH2	5.71	124.34	119.20
1	M	82	GLU	CA-C-O	5.71	126.55	120.10
1	N	150	ASN	O-C-N	-5.71	115.00	122.59
1	N	188	VAL	CA-C-N	5.71	127.93	120.28
1	N	188	VAL	C-N-CA	5.71	127.93	120.28
1	D	507	ARG	NE-CZ-NH1	-5.71	115.80	121.50
1	G	331	LEU	O-C-N	-5.71	115.65	122.15
1	K	326	SER	O-C-N	-5.71	116.07	122.12
1	J	200	TYR	O-C-N	-5.70	116.43	123.33
1	L	455	PRO	O-C-N	-5.70	114.94	122.64
1	M	439	LYS	CA-C-N	5.70	130.24	120.72
1	M	439	LYS	C-N-CA	5.70	130.24	120.72
1	C	237	MET	CG-SD-CE	-5.70	88.36	100.90
1	I	232	VAL	CA-CB-CG1	5.70	120.09	110.40
1	L	473	LEU	CA-C-O	-5.70	113.91	120.24
1	C	158	LEU	CA-C-N	5.70	127.92	120.28
1	C	158	LEU	C-N-CA	5.70	127.92	120.28
1	D	451	LEU	CA-C-N	5.70	129.72	120.60
1	D	451	LEU	C-N-CA	5.70	129.72	120.60
1	I	229	ASP	N-CA-C	5.70	119.49	112.54
1	L	224	ARG	NE-CZ-NH1	-5.70	115.80	121.50
1	E	275	PHE	CA-CB-CG	5.70	119.50	113.80
1	F	410	MET	N-CA-C	5.70	120.22	113.16
1	G	97	SER	CB-CA-C	-5.70	101.33	110.79
1	N	88	ASP	O-C-N	-5.70	114.80	122.43
1	C	447	TYR	O-C-N	-5.69	115.66	122.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	J	255	VAL	CB-CA-C	-5.69	102.04	111.32
1	C	357	VAL	CB-CA-C	-5.69	102.38	110.12
1	E	295	ALA	O-C-N	-5.69	115.93	122.93
1	G	311	PHE	CA-C-O	5.69	126.45	120.42
1	G	516	ALA	N-CA-CB	-5.69	101.72	110.20
1	H	504	GLU	CA-C-N	5.69	126.02	119.93
1	H	504	GLU	C-N-CA	5.69	126.02	119.93
1	J	105	PHE	N-CA-C	-5.69	104.69	111.69
1	D	54	PHE	CA-C-O	5.69	126.01	119.35
1	I	268	SER	CA-C-N	5.69	126.95	119.84
1	I	268	SER	C-N-CA	5.69	126.95	119.84
1	L	444	ILE	O-C-N	-5.69	116.35	121.87
1	O	279	GLU	O-C-N	-5.69	115.27	122.27
1	G	193	GLU	CA-C-O	-5.69	113.64	120.41
1	C	433	ALA	N-CA-C	5.69	119.73	112.34
1	B	322	ARG	NE-CZ-NH1	-5.68	115.81	121.50
1	D	217	ILE	CA-C-O	5.68	126.61	120.47
1	D	494	ILE	CB-CA-C	5.68	121.41	111.18
1	M	510	ARG	NE-CZ-NH1	-5.68	115.82	121.50
1	B	249	LEU	CA-C-O	5.68	126.63	120.32
1	C	31	ARG	CG-CD-NE	-5.68	99.50	112.00
1	D	509	THR	CA-C-N	5.68	128.16	120.38
1	D	509	THR	C-N-CA	5.68	128.16	120.38
1	F	188	VAL	CA-C-N	5.68	127.89	120.28
1	F	188	VAL	C-N-CA	5.68	127.89	120.28
1	I	70	MET	O-C-N	-5.68	116.59	123.29
1	K	354	ALA	O-C-N	-5.68	116.34	123.27
1	J	54	PHE	CA-CB-CG	-5.68	108.12	113.80
1	L	89	SER	CB-CA-C	-5.68	99.76	110.67
1	M	238	PRO	O-C-N	5.68	130.31	122.64
1	B	273	LYS	O-C-N	-5.68	115.28	122.27
1	B	484	CYS	CA-C-N	5.68	128.46	120.57
1	B	484	CYS	C-N-CA	5.68	128.46	120.57
1	K	99	VAL	N-CA-C	5.68	116.41	110.62
1	K	376	PRO	CB-CA-C	5.68	118.42	110.98
1	P	282	TYR	CA-C-N	5.68	127.89	120.28
1	P	282	TYR	C-N-CA	5.68	127.89	120.28
1	A	198	GLY	O-C-N	-5.68	115.18	122.39
1	C	477	HIS	CA-CB-CG	5.68	119.48	113.80
1	P	322	ARG	N-CA-C	5.68	122.89	110.80
1	A	483	ASN	CA-CB-CG	5.68	118.28	112.60
1	E	190	THR	N-CA-CB	5.68	118.57	110.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	259	GLU	O-C-N	5.68	127.92	122.07
1	H	306	ASP	CA-CB-CG	-5.67	106.92	112.60
1	N	406	ARG	N-CA-CB	-5.67	101.49	110.28
1	I	187	ALA	N-CA-C	5.67	117.46	111.28
1	H	258	PRO	N-CA-C	5.67	119.76	111.03
1	P	389	MET	CG-SD-CE	-5.67	88.42	100.90
1	P	148	ASP	CA-C-N	5.67	130.19	122.19
1	P	148	ASP	C-N-CA	5.67	130.19	122.19
1	C	74	HIS	ND1-CE1-NE2	5.67	114.07	108.40
1	D	250	ASP	CB-CA-C	5.67	120.48	110.85
1	D	392	ASP	CA-C-N	5.67	128.34	120.29
1	D	392	ASP	C-N-CA	5.67	128.34	120.29
1	A	116	ASN	N-CA-C	5.67	119.39	111.74
1	C	386	SER	O-C-N	5.67	130.13	122.59
1	G	408	ILE	CA-C-O	5.67	126.86	120.85
1	K	530	ILE	CA-C-N	5.67	131.47	122.74
1	K	530	ILE	C-N-CA	5.67	131.47	122.74
1	M	38	ARG	N-CA-C	5.67	119.45	112.54
1	C	365	ASP	CA-C-O	-5.67	114.59	121.05
1	B	421	ILE	N-CA-C	5.66	116.31	110.36
1	D	297	VAL	CA-CB-CG1	5.66	120.03	110.40
1	K	531	ALA	O-C-N	-5.66	116.68	123.31
1	E	321	ARG	NE-CZ-NH2	5.66	124.30	119.20
1	K	408	ILE	N-CA-C	5.66	116.44	110.72
1	P	272	ILE	CA-CB-CG1	5.66	120.03	110.40
1	J	322	ARG	N-CA-C	5.66	122.86	110.80
1	N	150	ASN	CA-C-O	5.66	128.60	120.51
1	I	529	LEU	CB-CA-C	5.66	118.18	110.94
1	A	510	ARG	N-CA-C	5.66	118.17	111.33
1	K	463	GLY	CA-C-O	5.66	126.79	119.44
1	G	229	ASP	CA-C-O	5.65	126.41	120.42
1	K	153	THR	OG1-CB-CG2	-5.65	97.99	109.30
1	A	406	ARG	O-C-N	-5.65	114.86	122.43
1	K	163	TYR	CA-C-N	5.65	127.86	120.28
1	K	163	TYR	C-N-CA	5.65	127.86	120.28
1	L	105	PHE	CA-C-N	5.65	127.85	120.28
1	L	105	PHE	C-N-CA	5.65	127.85	120.28
1	L	477	HIS	CA-CB-CG	5.65	119.45	113.80
1	C	149	LEU	CB-CA-C	5.65	121.67	110.42
1	C	355	GLU	O-C-N	-5.65	115.71	122.15
1	A	232	VAL	CA-C-O	5.65	127.84	120.78
1	J	477	HIS	CE1-NE2-CD2	-5.65	103.35	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	411	GLU	CA-C-O	-5.65	112.42	120.16
1	K	239	ARG	NE-CZ-NH2	5.65	124.28	119.20
1	A	88	ASP	N-CA-C	-5.64	105.89	112.89
1	J	73	GLN	CA-C-N	5.64	129.10	121.20
1	J	73	GLN	C-N-CA	5.64	129.10	121.20
1	M	341	SER	N-CA-C	5.64	117.11	111.07
1	N	420	ALA	N-CA-C	-5.64	102.92	111.56
1	E	95	THR	O-C-N	-5.64	115.62	122.22
1	F	148	ASP	N-CA-CB	-5.64	101.24	109.82
1	L	61	ASN	CA-C-N	5.64	128.85	120.95
1	L	61	ASN	C-N-CA	5.64	128.85	120.95
1	G	189	THR	N-CA-C	5.64	117.43	111.28
1	L	195	LEU	CA-C-O	-5.64	113.41	120.23
1	B	211	LYS	CA-C-O	5.64	126.53	120.38
1	B	478	ALA	N-CA-C	-5.64	105.43	112.93
1	I	392	ASP	CA-C-O	5.64	126.53	120.55
1	B	186	ASP	CA-CB-CG	5.63	118.23	112.60
1	D	209	ILE	CA-C-N	5.63	130.94	123.05
1	D	209	ILE	C-N-CA	5.63	130.94	123.05
1	K	228	LEU	N-CA-C	5.63	117.91	108.73
1	P	93	ASP	CA-CB-CG	-5.63	106.97	112.60
1	P	108	LYS	N-CA-C	5.63	118.62	111.69
1	H	31	ARG	NE-CZ-NH2	5.63	124.27	119.20
1	L	131	ASN	CA-CB-CG	-5.63	106.97	112.60
1	P	259	GLU	CA-C-O	5.63	126.39	120.42
1	H	508	VAL	CA-C-O	5.63	126.55	120.47
1	N	29	ALA	CA-C-N	5.63	128.39	120.28
1	N	29	ALA	C-N-CA	5.63	128.39	120.28
1	B	421	ILE	CB-CA-C	-5.63	104.68	111.88
1	K	207	ILE	CA-CB-CG1	5.63	119.97	110.40
1	P	355	GLU	CB-CG-CD	-5.63	103.03	112.60
1	E	330	LYS	CA-C-O	5.63	126.38	120.42
1	G	170	PHE	CA-C-N	5.63	130.16	122.34
1	G	170	PHE	C-N-CA	5.63	130.16	122.34
1	N	213	LYS	N-CA-CB	5.63	120.00	110.49
1	O	299	ILE	O-C-N	-5.62	117.19	123.26
1	D	305	ASP	N-CA-C	5.62	118.00	110.35
1	E	38	ARG	N-CA-C	5.62	118.34	111.82
1	F	411	GLU	CA-C-N	5.62	126.87	119.84
1	F	411	GLU	C-N-CA	5.62	126.87	119.84
1	F	415	VAL	N-CA-CB	-5.62	103.34	111.21
1	O	49	MET	CB-CA-C	5.62	119.88	109.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	158	LEU	CB-CA-C	-5.62	101.45	110.79
1	A	53	SER	CA-C-O	5.62	126.51	120.55
1	F	122	ILE	N-CA-C	5.62	115.82	110.42
1	K	493	ILE	O-C-N	-5.62	116.09	122.72
1	N	61	ASN	O-C-N	-5.62	114.45	122.04
1	C	166	MET	O-C-N	-5.62	115.74	122.15
1	L	428	ARG	NE-CZ-NH1	-5.62	115.88	121.50
1	M	42	GLY	CA-C-N	5.62	125.15	119.19
1	M	42	GLY	C-N-CA	5.62	125.15	119.19
1	M	121	ILE	CA-C-O	5.62	126.81	120.85
1	O	42	GLY	N-CA-C	5.62	118.74	112.00
1	D	164	THR	CB-CA-C	-5.62	102.03	110.90
1	E	426	SER	CA-C-O	5.62	126.50	120.55
1	B	450	ALA	N-CA-CB	-5.61	101.85	110.16
1	B	455	PRO	CA-CB-CG	-5.61	93.84	104.50
1	I	74	HIS	CE1-NE2-CD2	-5.61	103.39	109.00
1	J	321	ARG	CA-C-N	5.61	132.26	121.54
1	J	321	ARG	C-N-CA	5.61	132.26	121.54
1	K	17	ASN	CB-CA-C	-5.61	98.56	109.68
1	A	375	ASN	O-C-N	-5.61	114.87	121.32
1	B	129	ALA	CA-C-N	5.61	127.80	120.28
1	B	129	ALA	C-N-CA	5.61	127.80	120.28
1	B	360	ARG	N-CA-C	-5.61	99.87	109.24
1	H	490	ASN	N-CA-C	-5.61	106.56	113.41
1	L	399	ASN	CA-C-O	-5.61	114.90	121.07
1	O	457	ILE	N-CA-C	-5.61	103.92	111.44
1	B	329	GLU	N-CA-C	5.61	117.47	111.36
1	A	195	LEU	O-C-N	-5.61	116.77	121.54
1	D	190	THR	CA-C-O	5.61	126.69	120.63
1	H	51	ILE	O-C-N	-5.61	117.29	123.18
1	H	356	LEU	CA-C-O	5.61	127.39	121.33
1	A	131	ASN	CA-C-N	5.61	128.25	120.29
1	A	131	ASN	C-N-CA	5.61	128.25	120.29
1	C	380	ASN	CB-CA-C	5.61	119.85	109.70
1	F	225	GLY	N-CA-C	-5.61	104.89	112.57
1	F	343	ILE	CA-CB-CG1	5.61	119.93	110.40
1	J	327	ASP	O-C-N	-5.61	115.38	122.27
1	L	95	THR	N-CA-C	5.61	118.16	111.71
1	M	189	THR	CB-CA-C	-5.61	101.49	110.79
1	O	427	ALA	CB-CA-C	-5.61	100.44	110.70
1	B	172	ALA	CA-C-N	5.60	128.72	120.82
1	B	172	ALA	C-N-CA	5.60	128.72	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	18	SER	CA-C-O	5.60	127.44	121.05
1	K	357	VAL	O-C-N	-5.60	115.56	122.57
1	O	321	ARG	CA-C-N	5.60	132.24	121.54
1	O	321	ARG	C-N-CA	5.60	132.24	121.54
1	A	527	ASP	CA-CB-CG	5.60	118.20	112.60
1	L	226	ILE	CA-C-N	5.60	130.14	123.19
1	L	226	ILE	C-N-CA	5.60	130.14	123.19
1	P	25	ASN	N-CA-CB	-5.60	101.70	110.44
1	A	327	ASP	CA-C-O	5.60	126.41	119.97
1	G	415	VAL	O-C-N	-5.60	117.80	121.72
1	B	17	ASN	N-CA-C	-5.60	99.48	108.55
1	B	23	LEU	CA-C-O	-5.60	114.48	120.42
1	G	340	ILE	CA-C-N	5.60	127.72	120.44
1	G	340	ILE	C-N-CA	5.60	127.72	120.44
1	J	477	HIS	CG-CD2-NE2	5.60	112.80	107.20
1	K	230	LYS	CA-C-O	5.60	128.37	121.99
1	P	133	SER	CA-C-O	5.60	126.36	120.42
1	A	350	ASP	N-CA-CB	-5.60	102.83	110.56
1	D	301	GLN	N-CA-C	5.60	117.46	111.36
1	D	309	GLN	CA-C-N	5.60	127.72	120.44
1	D	309	GLN	C-N-CA	5.60	127.72	120.44
1	G	195	LEU	CA-C-O	-5.60	115.09	120.97
1	H	377	LYS	CA-C-O	5.60	125.53	119.15
1	L	402	LEU	CA-C-O	5.60	126.35	120.42
1	B	360	ARG	CA-C-O	5.60	127.09	120.66
1	M	450	ALA	N-CA-C	5.60	117.38	111.28
1	N	346	ALA	N-CA-C	5.60	118.56	110.28
1	A	210	ASP	CA-C-O	5.59	126.48	120.38
1	C	295	ALA	CA-C-O	5.59	127.13	120.70
1	C	338	ARG	NE-CZ-NH2	5.59	124.23	119.20
1	F	224	ARG	NE-CZ-NH1	-5.59	115.91	121.50
1	K	467	ILE	CA-CB-CG1	5.59	119.91	110.40
1	P	74	HIS	CA-CB-CG	5.59	119.39	113.80
1	C	477	HIS	CB-CG-CD2	-5.59	123.93	131.20
1	E	428	ARG	NE-CZ-NH1	-5.59	115.91	121.50
1	H	396	ARG	NH1-CZ-NH2	-5.59	112.03	119.30
1	O	494	ILE	O-C-N	-5.59	117.36	123.18
1	P	368	VAL	CA-C-N	-5.59	115.11	122.99
1	P	368	VAL	C-N-CA	-5.59	115.11	122.99
1	C	71	GLU	CA-C-O	-5.59	114.17	120.43
1	C	358	GLU	CA-C-O	5.59	127.72	121.40
1	C	396	ARG	NE-CZ-NH1	-5.59	115.91	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	407	ASN	CB-CG-ND2	5.59	124.79	116.40
1	B	432	TYR	CB-CG-CD1	5.59	129.18	120.80
1	C	496	ASP	O-C-N	-5.59	115.16	122.59
1	J	140	LEU	CA-C-O	5.59	126.25	119.38
1	L	416	PRO	O-C-N	-5.59	116.32	123.14
1	B	20	ARG	NH1-CZ-NH2	-5.59	112.04	119.30
1	B	99	VAL	O-C-N	-5.59	116.08	121.83
1	D	447	TYR	N-CA-C	-5.59	105.34	111.82
1	F	376	PRO	O-C-N	-5.59	116.19	123.06
1	K	502	VAL	CA-C-O	5.59	127.76	120.78
1	B	421	ILE	CA-CB-CG2	5.58	120.00	110.50
1	I	403	TYR	N-CA-C	-5.58	105.27	111.36
1	A	362	VAL	O-C-N	-5.58	117.28	123.20
1	I	117	ILE	N-CA-CB	5.58	117.69	110.99
1	K	487	ASP	CA-CB-CG	-5.58	107.02	112.60
1	P	457	ILE	CA-CB-CG1	5.58	119.89	110.40
1	F	383	LEU	CA-C-O	5.58	127.60	120.57
1	J	327	ASP	CA-CB-CG	5.58	118.18	112.60
1	P	139	GLN	OE1-CD-NE2	-5.58	117.02	122.60
1	P	515	SER	N-CA-C	5.58	120.15	113.23
1	E	399	ASN	OD1-CG-ND2	-5.58	117.02	122.60
1	K	142	THR	O-C-N	-5.58	116.66	123.30
1	G	80	LEU	N-CA-C	5.58	118.29	111.82
1	A	424	GLU	CA-C-N	5.58	128.21	120.29
1	A	424	GLU	C-N-CA	5.58	128.21	120.29
1	B	392	ASP	CA-C-N	5.58	128.21	120.29
1	B	392	ASP	C-N-CA	5.58	128.21	120.29
1	G	432	TYR	CA-C-N	5.58	129.61	120.63
1	G	432	TYR	C-N-CA	5.58	129.61	120.63
1	K	73	GLN	OE1-CD-NE2	-5.58	117.02	122.60
1	O	427	ALA	N-CA-C	5.58	118.55	111.69
1	I	74	HIS	CG-CD2-NE2	5.57	112.77	107.20
1	L	195	LEU	N-CA-C	-5.57	99.73	109.48
1	D	140	LEU	CA-C-O	-5.57	114.51	120.42
1	H	344	LYS	N-CA-C	5.57	117.35	111.28
1	J	142	THR	CA-C-N	5.57	130.85	122.99
1	J	142	THR	C-N-CA	5.57	130.85	122.99
1	A	529	LEU	N-CA-CB	5.57	118.50	110.37
1	G	224	ARG	CA-C-O	5.57	126.44	120.70
1	J	286	MET	CG-SD-CE	-5.57	88.64	100.90
1	L	67	VAL	N-CA-CB	5.57	117.07	110.55
1	E	452	GLU	CA-CB-CG	-5.57	102.96	114.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	349	GLU	CA-C-O	5.57	126.41	119.78
1	A	151	SER	CA-C-N	5.57	130.86	122.68
1	A	151	SER	C-N-CA	5.57	130.86	122.68
1	A	249	LEU	CA-C-O	5.57	126.50	120.32
1	F	20	ARG	CB-CG-CD	5.57	124.11	111.30
1	G	530	ILE	CA-C-O	5.57	126.18	120.39
1	J	510	ARG	NE-CZ-NH2	5.57	124.21	119.20
1	M	310	HIS	ND1-CE1-NE2	5.57	113.97	108.40
1	P	41	LEU	N-CA-C	5.57	118.39	110.10
1	A	406	ARG	CA-C-O	5.57	126.22	119.38
1	C	144	VAL	CA-C-N	5.57	128.61	120.71
1	C	144	VAL	C-N-CA	5.57	128.61	120.71
1	C	183	ILE	CA-C-O	5.57	126.74	120.95
1	C	461	THR	OG1-CB-CG2	-5.57	98.17	109.30
1	N	248	VAL	N-CA-C	5.56	115.87	107.80
1	I	168	SER	O-C-N	-5.56	116.22	122.12
1	N	197	ASP	CA-C-N	5.56	131.03	121.07
1	N	197	ASP	C-N-CA	5.56	131.03	121.07
1	A	526	ILE	CA-CB-CG1	-5.56	100.95	110.40
1	H	450	ALA	CB-CA-C	-5.56	101.40	110.85
1	A	343	ILE	N-CA-C	5.56	116.29	110.62
1	J	122	ILE	CB-CA-C	-5.56	104.85	111.97
1	N	96	THR	CA-C-N	5.56	127.73	120.28
1	N	96	THR	C-N-CA	5.56	127.73	120.28
1	B	138	PRO	CA-C-N	5.56	128.00	120.44
1	B	138	PRO	C-N-CA	5.56	128.00	120.44
1	C	505	PRO	CB-CA-C	5.56	118.70	111.64
1	J	211	LYS	CA-C-O	5.56	126.44	120.38
1	M	268	SER	CB-CA-C	-5.56	105.44	110.44
1	P	297	VAL	CA-CB-CG1	5.56	119.85	110.40
1	L	167	SER	CA-C-N	5.56	127.72	120.28
1	L	167	SER	C-N-CA	5.56	127.72	120.28
1	P	367	MET	O-C-N	-5.56	117.15	123.48
1	C	65	THR	CA-C-N	5.55	128.31	120.42
1	C	65	THR	C-N-CA	5.55	128.31	120.42
1	D	305	ASP	CA-C-O	-5.55	115.66	121.55
1	D	393	GLU	O-C-N	-5.55	115.82	122.15
1	K	68	LYS	N-CA-C	5.55	117.33	111.28
1	C	21	ASP	CA-C-N	5.55	127.99	120.38
1	C	21	ASP	C-N-CA	5.55	127.99	120.38
1	C	166	MET	CA-C-N	5.55	127.66	120.44
1	C	166	MET	C-N-CA	5.55	127.66	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	201	ASN	CA-CB-CG	5.55	118.15	112.60
1	H	456	MET	CA-C-N	5.55	129.84	120.29
1	H	456	MET	C-N-CA	5.55	129.84	120.29
1	J	285	ASP	CA-CB-CG	-5.55	107.05	112.60
1	E	68	LYS	N-CA-C	5.55	117.33	111.28
1	K	255	VAL	N-CA-C	5.55	116.86	109.37
1	K	368	VAL	N-CA-CB	5.55	118.45	111.46
1	L	151	SER	CA-C-N	5.55	130.05	122.34
1	L	151	SER	C-N-CA	5.55	130.05	122.34
1	H	433	ALA	N-CA-C	5.55	119.55	112.34
1	C	377	LYS	CG-CD-CE	5.55	124.06	111.30
1	G	28	LEU	N-CA-C	5.55	117.00	111.07
1	H	138	PRO	CB-CA-C	5.55	120.71	111.56
1	M	347	THR	CB-CA-C	-5.55	102.90	110.22
1	J	400	ASP	N-CA-C	5.54	118.04	111.33
1	K	408	ILE	O-C-N	-5.54	116.12	121.83
1	P	379	VAL	CA-CB-CG1	-5.54	100.98	110.40
1	A	374	LYS	N-CA-C	5.54	117.13	109.15
1	J	309	GLN	CA-C-O	5.54	126.34	119.97
1	O	505	PRO	O-C-N	5.54	129.61	122.85
1	B	309	GLN	CG-CD-NE2	5.54	124.71	116.40
1	G	396	ARG	O-C-N	-5.54	116.36	122.07
1	D	496	ASP	N-CA-CB	-5.54	101.13	110.49
1	G	118	HIS	N-CA-C	5.54	117.45	109.48
1	G	250	ASP	CA-CB-CG	5.54	118.14	112.60
1	H	412	PRO	O-C-N	-5.54	115.16	122.64
1	I	456	MET	CG-SD-CE	-5.54	88.72	100.90
1	C	454	ILE	CA-C-N	-5.54	112.92	119.84
1	C	454	ILE	C-N-CA	-5.54	112.92	119.84
1	J	114	ASP	CB-CA-C	5.54	119.98	110.79
1	C	477	HIS	CE1-NE2-CD2	-5.54	103.46	109.00
1	G	341	SER	CB-CA-C	-5.54	102.19	110.88
1	I	224	ARG	N-CA-CB	5.54	118.10	110.07
1	J	444	ILE	CA-C-O	5.54	126.71	120.95
1	O	472	ASP	N-CA-C	-5.54	105.25	112.23
1	K	101	LEU	CA-C-O	5.53	126.42	120.55
1	D	510	ARG	NE-CZ-NH2	5.53	124.18	119.20
1	F	126	PHE	CA-CB-CG	5.53	119.33	113.80
1	L	253	LEU	CB-CA-C	5.53	120.68	111.83
1	N	305	ASP	CA-C-O	-5.53	115.11	121.19
1	N	516	ALA	N-CA-CB	-5.53	101.96	110.20
1	O	66	ILE	CA-C-N	-5.53	113.59	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	66	ILE	C-N-CA	-5.53	113.59	120.56
1	J	306	ASP	CA-CB-CG	5.53	118.13	112.60
1	L	84	ALA	CA-C-N	5.53	129.98	121.19
1	L	84	ALA	C-N-CA	5.53	129.98	121.19
1	C	354	ALA	O-C-N	-5.53	116.44	123.24
1	D	474	ARG	NH1-CZ-NH2	-5.53	112.11	119.30
1	F	117	ILE	N-CA-CB	5.53	116.55	110.53
1	M	17	ASN	OD1-CG-ND2	-5.53	117.07	122.60
1	D	269	PRO	CA-C-O	-5.53	110.54	120.60
1	F	250	ASP	O-C-N	-5.53	115.47	122.27
1	G	368	VAL	O-C-N	-5.53	117.38	123.18
1	K	66	ILE	CB-CA-C	-5.53	104.59	112.22
1	K	183	ILE	O-C-N	-5.53	116.14	121.83
1	L	35	GLU	N-CA-C	-5.53	106.49	113.18
1	M	466	PRO	CA-C-N	5.53	128.27	120.42
1	M	466	PRO	C-N-CA	5.53	128.27	120.42
1	N	510	ARG	NE-CZ-NH1	-5.53	115.97	121.50
1	D	242	GLU	O-C-N	-5.52	116.73	123.30
1	A	192	ALA	N-CA-C	5.52	122.56	110.80
1	E	155	ARG	N-CA-C	5.52	122.56	110.80
1	G	486	VAL	O-C-N	-5.52	115.65	122.88
1	H	179	LYS	CA-C-N	5.52	128.03	120.46
1	H	179	LYS	C-N-CA	5.52	128.03	120.46
1	L	386	SER	O-C-N	-5.52	115.25	122.59
1	A	196	PRO	CA-C-O	-5.52	115.32	121.23
1	C	121	ILE	CB-CA-C	-5.52	104.60	112.22
1	D	51	ILE	N-CA-C	-5.52	100.44	108.17
1	I	20	ARG	CA-C-N	5.52	128.14	120.63
1	I	20	ARG	C-N-CA	5.52	128.14	120.63
1	O	117	ILE	N-CA-CB	5.52	117.61	110.99
1	O	323	VAL	N-CA-C	-5.52	99.93	107.99
1	D	505	PRO	CA-C-O	-5.52	115.31	121.32
1	K	18	SER	CB-CA-C	-5.52	99.87	109.64
1	P	526	ILE	O-C-N	-5.52	117.39	123.18
1	C	381	ILE	CB-CG1-CD1	5.52	125.38	113.80
1	B	337	ALA	O-C-N	-5.51	115.36	122.20
1	D	140	LEU	N-CA-CB	5.51	118.32	110.16
1	D	487	ASP	CA-C-N	5.51	129.37	120.55
1	D	487	ASP	C-N-CA	5.51	129.37	120.55
1	E	20	ARG	NE-CZ-NH2	5.51	124.16	119.20
1	J	310	HIS	CE1-NE2-CD2	-5.51	103.49	109.00
1	K	343	ILE	N-CA-C	5.51	116.24	110.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	200	TYR	CA-C-N	5.51	129.92	120.71
1	D	200	TYR	C-N-CA	5.51	129.92	120.71
1	D	457	ILE	CA-C-N	5.51	127.67	120.28
1	D	457	ILE	C-N-CA	5.51	127.67	120.28
1	H	193	GLU	N-CA-C	5.51	121.99	109.81
1	M	119	PRO	CA-C-N	5.51	127.67	120.28
1	M	119	PRO	C-N-CA	5.51	127.67	120.28
1	N	477	HIS	CB-CG-CD2	-5.51	124.04	131.20
1	O	392	ASP	CA-C-N	5.51	127.67	120.28
1	O	392	ASP	C-N-CA	5.51	127.67	120.28
1	D	191	VAL	N-CA-C	5.51	120.80	109.34
1	P	156	ASP	N-CA-C	5.51	122.53	110.80
1	B	258	PRO	N-CA-C	5.51	119.87	111.11
1	C	94	GLY	O-C-N	-5.51	116.90	122.19
1	N	356	LEU	O-C-N	-5.51	116.97	123.25
1	G	351	LEU	CA-C-N	-5.51	116.11	122.77
1	G	351	LEU	C-N-CA	-5.51	116.11	122.77
1	G	493	ILE	N-CA-C	5.51	117.56	109.63
1	J	232	VAL	CA-C-N	5.51	131.88	121.97
1	J	232	VAL	C-N-CA	5.51	131.88	121.97
1	K	217	ILE	CA-C-O	5.50	126.42	120.47
1	B	400	ASP	O-C-N	-5.50	116.29	122.12
1	I	46	LEU	CA-C-N	5.50	130.17	120.87
1	I	46	LEU	C-N-CA	5.50	130.17	120.87
1	N	74	HIS	CA-C-O	-5.50	115.22	119.46
1	A	389	MET	N-CA-C	-5.50	105.44	111.82
1	H	50	LEU	CA-C-N	-5.50	116.37	123.19
1	H	50	LEU	C-N-CA	-5.50	116.37	123.19
1	P	62	ASP	CA-CB-CG	5.50	118.10	112.60
1	N	351	LEU	CA-C-O	-5.50	114.69	120.80
1	A	155	ARG	NE-CZ-NH2	5.50	124.15	119.20
1	A	256	GLU	N-CA-C	-5.50	99.94	108.90
1	B	510	ARG	NE-CZ-NH2	5.50	124.15	119.20
1	D	29	ALA	N-CA-C	5.50	116.95	111.07
1	G	407	ASN	O-C-N	-5.50	115.88	122.15
1	N	195	LEU	CA-C-N	5.50	125.50	119.89
1	N	195	LEU	C-N-CA	5.50	125.50	119.89
1	B	309	GLN	CG-CD-OE1	-5.50	109.81	120.80
1	C	182	ASP	O-C-N	-5.50	116.29	122.12
1	D	354	ALA	CA-C-N	5.50	127.65	120.28
1	D	354	ALA	C-N-CA	5.50	127.65	120.28
1	K	154	ALA	O-C-N	5.50	129.60	122.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	59	ILE	N-CA-C	-5.50	99.83	107.80
1	D	196	PRO	N-CA-CB	-5.49	97.48	103.25
1	L	164	THR	N-CA-C	5.49	117.27	111.28
1	P	65	THR	OG1-CB-CG2	-5.49	98.31	109.30
1	P	519	ALA	N-CA-CB	-5.49	102.11	110.07
1	E	22	ALA	CA-C-N	5.49	128.09	120.29
1	E	22	ALA	C-N-CA	5.49	128.09	120.29
1	J	88	ASP	CA-CB-CG	5.49	118.09	112.60
1	F	456	MET	CA-C-O	5.49	126.12	119.31
1	G	465	GLU	O-C-N	-5.49	113.58	121.54
1	K	193	GLU	N-CA-C	5.49	118.53	109.58
1	C	67	VAL	N-CA-CB	5.49	118.81	110.58
1	E	234	HIS	O-C-N	-5.49	116.09	123.23
1	F	351	LEU	CA-C-N	-5.49	116.13	122.77
1	F	351	LEU	C-N-CA	-5.49	116.13	122.77
1	M	353	TYR	CB-CA-C	-5.49	100.05	109.65
1	M	435	SER	CA-CB-OG	5.49	122.08	111.10
1	F	306	ASP	CA-C-N	5.49	127.47	120.56
1	F	306	ASP	C-N-CA	5.49	127.47	120.56
1	B	266	ILE	CA-C-O	5.49	127.64	120.78
1	F	155	ARG	CB-CG-CD	5.49	123.92	111.30
1	G	471	MET	CG-SD-CE	-5.49	88.83	100.90
1	H	461	THR	CA-CB-OG1	5.49	117.83	109.60
1	I	338	ARG	N-CA-C	-5.49	98.98	108.69
1	I	456	MET	CA-C-N	5.49	129.73	120.29
1	I	456	MET	C-N-CA	5.49	129.73	120.29
1	J	370	ILE	O-C-N	-5.49	116.68	123.10
1	G	270	ASP	CA-CB-CG	-5.48	107.12	112.60
1	K	88	ASP	CA-CB-CG	5.48	118.08	112.60
1	A	133	SER	CA-C-N	5.48	128.64	120.31
1	A	133	SER	C-N-CA	5.48	128.64	120.31
1	D	384	ARG	CG-CD-NE	-5.48	99.94	112.00
1	I	38	ARG	NE-CZ-NH1	-5.48	116.02	121.50
1	N	23	LEU	O-C-N	-5.48	115.90	122.15
1	O	293	ILE	CA-C-O	-5.48	114.70	120.57
1	P	155	ARG	NE-CZ-NH2	5.48	124.13	119.20
1	L	84	ALA	CA-C-O	-5.48	115.25	121.00
1	G	166	MET	CG-SD-CE	-5.48	88.85	100.90
1	N	327	ASP	CA-CB-CG	5.48	118.08	112.60
1	A	82	GLU	N-CA-C	5.48	118.01	111.71
1	D	362	VAL	O-C-N	-5.48	117.39	123.20
1	I	108	LYS	CA-C-O	5.48	126.32	120.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	J	285	ASP	N-CA-CB	-5.48	102.13	110.07
1	K	95	THR	CA-C-N	5.48	127.89	120.44
1	K	95	THR	C-N-CA	5.48	127.89	120.44
1	F	219	ASP	O-C-N	-5.47	115.77	122.34
1	K	93	ASP	N-CA-CB	-5.47	102.04	110.42
1	A	68	LYS	O-C-N	-5.47	116.32	122.12
1	D	72	ILE	O-C-N	-5.47	115.75	122.97
1	E	371	GLU	O-C-N	-5.47	117.01	123.25
1	O	266	ILE	N-CA-C	-5.47	104.89	112.50
1	H	166	MET	N-CA-C	5.47	117.24	111.28
1	K	304	ILE	N-CA-CB	-5.47	104.38	111.82
1	M	448	ALA	CA-C-N	5.47	127.61	120.28
1	M	448	ALA	C-N-CA	5.47	127.61	120.28
1	I	110	GLU	O-C-N	-5.47	116.32	122.12
1	P	44	LYS	CA-C-N	5.47	126.40	120.44
1	P	44	LYS	C-N-CA	5.47	126.40	120.44
1	A	86	ALA	CA-C-O	5.47	126.28	120.10
1	C	227	VAL	O-C-N	-5.47	117.44	123.18
1	H	161	ILE	N-CA-CB	5.47	119.69	110.56
1	P	458	LEU	O-C-N	-5.47	116.33	122.12
1	B	150	ASN	N-CA-CB	5.46	119.73	110.49
1	D	368	VAL	N-CA-C	5.46	115.72	107.80
1	E	115	GLN	CA-C-O	5.46	126.28	119.12
1	E	324	LYS	N-CA-C	5.46	118.15	110.23
1	E	308	ALA	CA-C-N	5.46	129.97	120.68
1	E	308	ALA	C-N-CA	5.46	129.97	120.68
1	I	87	GLN	N-CA-C	5.46	118.16	111.82
1	I	442	LEU	O-C-N	-5.46	115.92	122.15
1	P	275	PHE	CA-C-N	5.46	127.87	120.44
1	P	275	PHE	C-N-CA	5.46	127.87	120.44
1	A	109	ALA	CA-C-N	5.46	128.14	120.28
1	A	109	ALA	C-N-CA	5.46	128.14	120.28
1	D	424	GLU	O-C-N	-5.46	115.55	122.27
1	G	262	ALA	N-CA-C	5.46	118.20	110.50
1	H	329	GLU	N-CA-CB	5.46	118.24	110.16
1	I	129	ALA	CA-C-N	5.46	127.60	120.28
1	I	129	ALA	C-N-CA	5.46	127.60	120.28
1	F	428	ARG	CD-NE-CZ	5.46	132.04	124.40
1	B	126	PHE	CA-C-N	5.46	127.59	120.28
1	B	126	PHE	C-N-CA	5.46	127.59	120.28
1	B	393	GLU	O-C-N	-5.46	115.93	122.15
1	L	130	PHE	O-C-N	-5.46	115.93	122.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	434	ARG	NE-CZ-NH2	5.46	124.11	119.20
1	O	29	ALA	N-CA-CB	-5.46	102.10	110.01
1	F	301	GLN	N-CA-C	5.46	116.91	111.07
1	P	381	ILE	N-CA-CB	5.46	118.67	111.25
1	B	354	ALA	N-CA-C	-5.46	100.13	109.24
1	C	268	SER	N-CA-C	-5.46	97.75	109.81
1	O	65	THR	CA-CB-OG1	5.46	117.78	109.60
1	F	21	ASP	CA-C-N	5.45	127.85	120.38
1	F	21	ASP	C-N-CA	5.45	127.85	120.38
1	G	422	GLU	N-CA-C	5.45	116.91	111.07
1	I	464	LEU	N-CA-C	-5.45	102.10	109.95
1	J	422	GLU	N-CA-CB	-5.45	102.10	110.01
1	L	89	SER	N-CA-CB	5.45	118.73	110.28
1	O	287	VAL	O-C-N	-5.45	116.58	121.87
1	I	276	LEU	N-CA-C	5.45	117.30	111.36
1	C	68	LYS	O-C-N	-5.45	116.45	122.07
1	C	483	ASN	OD1-CG-ND2	5.45	128.05	122.60
1	C	500	ILE	CA-CB-CG1	5.45	119.67	110.40
1	D	458	LEU	N-CA-CB	5.45	118.13	110.12
1	E	347	THR	CA-C-N	-5.45	113.03	119.84
1	E	347	THR	C-N-CA	-5.45	113.03	119.84
1	J	224	ARG	CD-NE-CZ	-5.45	116.77	124.40
1	J	275	PHE	N-CA-C	-5.45	105.42	111.36
1	M	168	SER	N-CA-C	5.45	117.22	111.28
1	A	35	GLU	CA-C-O	5.45	126.08	119.11
1	F	377	LYS	N-CA-C	-5.45	106.68	113.38
1	M	78	LYS	N-CA-CB	5.45	118.22	110.16
1	N	323	VAL	CA-C-O	5.45	126.40	120.57
1	O	283	LEU	O-C-N	-5.45	115.94	122.15
1	O	457	ILE	CA-CB-CG2	-5.45	101.24	110.50
1	E	200	TYR	O-C-N	-5.45	117.38	123.48
1	F	478	ALA	CB-CA-C	5.45	117.78	109.34
1	M	101	LEU	O-C-N	5.45	127.89	122.12
1	B	140	LEU	CA-C-O	5.45	126.08	119.38
1	K	39	SER	CB-CA-C	-5.45	98.83	110.32
1	K	196	PRO	CA-C-N	5.45	128.33	120.38
1	K	196	PRO	C-N-CA	5.45	128.33	120.38
1	K	505	PRO	N-CA-CB	5.45	108.97	103.25
1	N	284	LYS	CA-C-N	5.45	128.04	120.63
1	N	284	LYS	C-N-CA	5.45	128.04	120.63
1	B	366	LYS	CA-C-O	-5.44	115.56	121.87
1	G	343	ILE	CA-CB-CG1	5.44	119.66	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	204	LEU	CA-C-N	5.44	128.02	120.29
1	H	204	LEU	C-N-CA	5.44	128.02	120.29
1	I	239	ARG	N-CA-C	-5.44	106.68	113.38
1	A	54	PHE	O-C-N	-5.44	115.41	122.37
1	E	234	HIS	CA-C-O	5.44	126.58	120.70
1	G	259	GLU	N-CA-C	-5.44	105.51	111.82
1	H	501	ASN	CA-C-N	5.44	129.36	121.52
1	H	501	ASN	C-N-CA	5.44	129.36	121.52
1	L	454	ILE	CB-CA-C	5.44	121.26	111.36
1	O	363	GLY	CA-C-N	5.44	131.93	121.54
1	O	363	GLY	C-N-CA	5.44	131.93	121.54
1	E	200	TYR	N-CA-C	-5.44	100.17	108.76
1	E	61	ASN	CA-C-O	5.44	124.94	118.69
1	F	439	LYS	O-C-N	-5.44	115.26	122.33
1	E	488	VAL	CB-CA-C	-5.43	104.92	111.88
1	H	430	ARG	CA-C-N	5.43	131.92	121.54
1	H	430	ARG	C-N-CA	5.43	131.92	121.54
1	I	462	ALA	CA-C-N	5.43	129.72	120.91
1	I	462	ALA	C-N-CA	5.43	129.72	120.91
1	C	504	GLU	O-C-N	-5.43	116.30	121.57
1	D	476	ARG	N-CA-C	5.43	118.12	111.82
1	K	487	ASP	CB-CA-C	5.43	118.82	110.62
1	K	511	GLN	N-CA-C	5.43	117.28	111.36
1	O	529	LEU	CA-C-N	5.43	130.41	123.13
1	O	529	LEU	C-N-CA	5.43	130.41	123.13
1	F	250	ASP	N-CA-CB	-5.43	101.86	110.28
1	J	207	ILE	O-C-N	-5.43	116.76	122.95
1	C	130	PHE	CA-C-N	5.43	127.56	120.28
1	C	130	PHE	C-N-CA	5.43	127.56	120.28
1	E	338	ARG	NH1-CZ-NH2	-5.43	112.24	119.30
1	H	130	PHE	O-C-N	-5.43	115.96	122.15
1	H	482	THR	N-CA-C	5.43	122.36	110.80
1	I	110	GLU	CA-C-O	5.43	126.31	120.55
1	N	407	ASN	OD1-CG-ND2	-5.43	117.17	122.60
1	P	309	GLN	N-CA-C	-5.43	105.39	112.23
1	A	298	VAL	N-CA-C	5.43	117.60	108.81
1	G	128	LYS	O-C-N	-5.43	115.59	122.27
1	K	418	GLY	CA-C-N	5.43	129.76	121.51
1	K	418	GLY	C-N-CA	5.43	129.76	121.51
1	N	174	GLY	CA-C-N	5.43	128.00	120.29
1	N	174	GLY	C-N-CA	5.43	128.00	120.29
1	N	455	PRO	CA-CB-CG	-5.43	94.19	104.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	245	LYS	CA-C-O	5.43	126.18	120.54
1	D	450	ALA	CB-CA-C	-5.43	101.62	110.85
1	F	137	LEU	N-CA-C	5.43	121.80	109.81
1	K	16	ARG	N-CA-CB	-5.43	102.49	110.85
1	N	260	ILE	CA-C-O	5.43	126.84	120.71
1	A	241	VAL	CA-C-N	5.42	130.64	122.99
1	A	241	VAL	C-N-CA	5.42	130.64	122.99
1	B	38	ARG	NE-CZ-NH1	-5.42	116.08	121.50
1	D	498	TYR	CB-CG-CD2	-5.42	112.66	120.80
1	E	473	LEU	N-CA-C	-5.42	105.39	112.23
1	G	276	LEU	N-CA-C	-5.42	105.45	111.36
1	L	407	ASN	CA-C-O	-5.42	114.22	120.24
1	P	262	ALA	N-CA-C	5.42	117.73	110.35
1	G	396	ARG	NE-CZ-NH2	5.42	124.08	119.20
1	J	319	ALA	N-CA-CB	-5.42	102.17	110.85
1	K	217	ILE	CA-C-N	5.42	129.36	120.63
1	K	217	ILE	C-N-CA	5.42	129.36	120.63
1	K	466	PRO	CA-C-N	5.42	128.12	120.42
1	K	466	PRO	C-N-CA	5.42	128.12	120.42
1	B	93	ASP	CA-C-N	5.42	126.92	120.14
1	B	93	ASP	C-N-CA	5.42	126.92	120.14
1	M	154	ALA	CA-C-N	5.42	131.89	121.54
1	M	154	ALA	C-N-CA	5.42	131.89	121.54
1	D	117	ILE	N-CA-CB	5.42	116.44	110.53
1	I	494	ILE	O-C-N	-5.42	116.80	123.03
1	I	508	VAL	CA-C-N	5.42	128.00	120.63
1	I	508	VAL	C-N-CA	5.42	128.00	120.63
1	P	50	LEU	CA-C-N	-5.42	116.47	123.19
1	P	50	LEU	C-N-CA	-5.42	116.47	123.19
1	G	272	ILE	CB-CA-C	-5.42	104.98	112.24
1	K	411	GLU	O-C-N	-5.42	115.09	121.32
1	L	517	THR	CA-CB-OG1	5.42	117.73	109.60
1	N	422	GLU	N-CA-C	5.42	116.87	111.07
1	D	245	LYS	O-C-N	-5.42	116.60	123.05
1	D	526	ILE	CA-C-O	5.42	126.33	120.53
1	F	25	ASN	OD1-CG-ND2	-5.42	117.19	122.60
1	G	26	ASN	CA-C-N	5.42	128.11	120.42
1	G	26	ASN	C-N-CA	5.42	128.11	120.42
1	N	496	ASP	O-C-N	-5.42	114.86	122.87
1	D	298	VAL	CB-CA-C	5.41	120.07	110.71
1	E	209	ILE	N-CA-C	-5.41	100.33	108.12
1	J	208	LYS	CA-CB-CG	5.41	124.93	114.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	J	407	ASN	CA-CB-CG	-5.41	107.19	112.60
1	G	284	LYS	N-CA-CB	-5.41	101.89	110.28
1	G	487	ASP	CA-CB-CG	-5.41	107.19	112.60
1	H	195	LEU	CB-CA-C	5.41	117.36	109.08
1	D	150	ASN	CA-C-N	5.41	127.47	120.44
1	D	150	ASN	C-N-CA	5.41	127.47	120.44
1	D	527	ASP	O-C-N	-5.41	115.69	122.24
1	E	498	TYR	CA-C-N	5.41	128.07	120.28
1	E	498	TYR	C-N-CA	5.41	128.07	120.28
1	G	287	VAL	CA-CB-CG2	-5.41	101.20	110.40
1	H	495	ASP	N-CA-CB	-5.41	101.44	110.80
1	L	497	ILE	CA-C-O	5.41	126.31	120.47
1	N	478	ALA	N-CA-C	-5.41	106.73	113.55
1	D	363	GLY	CA-C-O	5.41	126.34	119.80
1	F	224	ARG	NH1-CZ-NH2	5.41	126.33	119.30
1	G	237	MET	CG-SD-CE	-5.41	89.00	100.90
1	J	426	SER	CB-CA-C	-5.41	101.66	110.85
1	E	332	GLU	N-CA-C	-5.41	105.08	110.97
1	L	197	ASP	N-CA-C	5.41	117.93	111.71
1	L	401	ALA	CA-C-N	5.41	127.97	120.29
1	L	401	ALA	C-N-CA	5.41	127.97	120.29
1	N	99	VAL	CA-C-O	-5.41	115.33	120.95
1	K	373	ALA	CA-C-N	5.40	127.52	120.28
1	K	373	ALA	C-N-CA	5.40	127.52	120.28
1	L	476	ARG	CG-CD-NE	-5.40	100.11	112.00
1	E	49	MET	O-C-N	-5.40	116.99	123.31
1	E	400	ASP	CA-C-O	5.40	126.46	120.63
1	H	467	ILE	O-C-N	-5.40	116.41	121.87
1	A	156	ASP	CB-CA-C	5.40	121.17	110.42
1	J	369	PHE	O-C-N	-5.40	116.87	123.30
1	O	421	ILE	CA-C-O	5.40	126.89	121.27
1	P	178	ASN	CA-C-O	-5.40	114.83	120.55
1	E	16	ARG	NE-CZ-NH2	5.40	124.06	119.20
1	F	18	SER	CA-C-N	5.40	131.99	121.41
1	F	18	SER	C-N-CA	5.40	131.99	121.41
1	J	58	THR	CB-CA-C	-5.40	101.83	110.14
1	L	286	MET	CG-SD-CE	-5.40	89.02	100.90
1	G	15	SER	CB-CA-C	-5.40	101.44	110.29
1	I	303	GLY	O-C-N	5.40	128.02	123.43
1	L	82	GLU	O-C-N	5.40	128.54	122.22
1	M	255	VAL	N-CA-CB	-5.40	102.32	111.23
1	K	82	GLU	CA-C-O	5.40	126.20	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	98	ALA	O-C-N	-5.40	116.40	122.12
1	A	245	LYS	N-CA-CB	5.39	119.27	110.37
1	D	66	ILE	CB-CA-C	-5.39	104.78	112.22
1	O	528	ASP	CA-C-O	5.39	127.00	121.23
1	F	455	PRO	N-CA-CB	5.39	108.91	103.25
1	I	32	THR	CA-C-O	-5.39	114.70	120.42
1	J	430	ARG	CA-CB-CG	-5.39	103.31	114.10
1	M	18	SER	N-CA-C	5.39	118.46	110.48
1	G	469	ALA	CA-C-N	5.39	127.50	120.28
1	G	469	ALA	C-N-CA	5.39	127.50	120.28
1	H	20	ARG	CA-C-N	5.39	127.96	120.63
1	H	20	ARG	C-N-CA	5.39	127.96	120.63
1	K	382	LEU	CA-C-O	5.39	126.13	120.36
1	N	395	GLU	N-CA-C	-5.39	105.48	111.36
1	O	310	HIS	ND1-CE1-NE2	5.39	113.79	108.40
1	L	43	PRO	N-CA-C	-5.39	106.69	114.18
1	C	405	LEU	CA-C-O	5.39	126.13	120.42
1	G	184	VAL	CA-C-N	5.39	127.84	120.46
1	G	184	VAL	C-N-CA	5.39	127.84	120.46
1	O	195	LEU	CB-CA-C	-5.39	101.38	108.76
1	H	129	ALA	N-CA-C	5.38	117.15	111.28
1	I	408	ILE	N-CA-C	5.38	116.16	110.72
1	K	437	GLY	O-C-N	-5.38	118.92	123.60
1	N	267	THR	CA-CB-OG1	5.38	117.68	109.60
1	O	84	ALA	N-CA-CB	-5.38	102.05	109.91
1	O	307	ILE	CA-C-N	5.38	128.50	120.31
1	O	307	ILE	C-N-CA	5.38	128.50	120.31
1	A	167	SER	CA-C-O	-5.38	114.85	120.55
1	C	105	PHE	CB-CA-C	-5.38	100.85	110.70
1	D	151	SER	O-C-N	-5.38	116.53	122.07
1	E	207	ILE	CA-C-N	5.38	131.37	122.33
1	E	207	ILE	C-N-CA	5.38	131.37	122.33
1	E	211	LYS	CA-C-O	5.38	126.25	120.38
1	F	313	ALA	CA-C-N	5.38	127.49	120.28
1	F	313	ALA	C-N-CA	5.38	127.49	120.28
1	F	509	THR	N-CA-CB	5.38	117.78	109.98
1	J	275	PHE	N-CA-CB	-5.38	102.19	110.16
1	M	374	LYS	CB-CA-C	-5.38	102.19	110.26
1	P	41	LEU	O-C-N	-5.38	116.28	122.95
1	I	436	VAL	CA-C-O	-5.38	114.91	121.04
1	B	274	ALA	O-C-N	-5.38	115.12	122.33
1	C	384	ARG	O-C-N	-5.38	116.95	123.03

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	121	ILE	N-CA-C	5.38	116.15	110.72
1	I	178	ASN	CA-C-N	5.38	127.49	120.28
1	I	178	ASN	C-N-CA	5.38	127.49	120.28
1	J	118	HIS	CE1-NE2-CD2	-5.38	103.62	109.00
1	K	333	LYS	CA-C-O	5.38	126.44	120.63
1	P	424	GLU	N-CA-C	5.38	117.22	111.36
1	N	153	THR	OG1-CB-CG2	-5.38	98.55	109.30
1	I	300	CYS	CB-CA-C	-5.37	101.24	110.16
1	M	87	GLN	CA-C-N	5.37	129.69	120.72
1	M	87	GLN	C-N-CA	5.37	129.69	120.72
1	N	531	ALA	N-CA-C	5.37	117.84	108.76
1	O	160	LYS	CA-C-O	-5.37	113.79	119.97
1	P	259	GLU	O-C-N	-5.37	116.03	122.15
1	P	323	VAL	N-CA-CB	5.37	117.50	111.21
1	I	474	ARG	N-CA-CB	5.37	118.02	110.12
1	G	332	GLU	CA-C-O	5.37	126.64	121.00
1	J	74	HIS	CA-CB-CG	5.37	119.17	113.80
1	C	426	SER	CB-CA-C	-5.37	101.88	110.79
1	C	521	THR	OG1-CB-CG2	-5.37	98.56	109.30
1	E	452	GLU	N-CA-C	5.37	118.93	112.38
1	H	74	HIS	CB-CG-CD2	5.37	138.18	131.20
1	I	251	ALA	CA-C-O	5.37	128.10	121.87
1	P	376	PRO	O-C-N	-5.37	116.37	123.13
1	D	148	ASP	CA-CB-CG	-5.37	107.23	112.60
1	G	149	LEU	N-CA-C	5.37	119.11	112.24
1	D	320	VAL	CA-C-O	-5.37	114.58	121.40
1	J	62	ASP	O-C-N	-5.37	116.27	122.87
1	M	77	ALA	CA-C-N	5.37	127.91	120.29
1	M	77	ALA	C-N-CA	5.37	127.91	120.29
1	M	377	LYS	CA-C-O	5.37	125.55	119.27
1	O	399	ASN	CA-CB-CG	-5.37	107.23	112.60
1	F	503	VAL	O-C-N	5.36	128.74	123.00
1	I	262	ALA	O-C-N	-5.36	115.88	123.01
1	J	74	HIS	CG-CD2-NE2	5.36	112.56	107.20
1	J	173	GLU	N-CA-C	-5.36	100.66	109.40
1	N	126	PHE	CA-CB-CG	5.36	119.16	113.80
1	O	150	ASN	N-CA-CB	5.36	120.88	112.46
1	O	338	ARG	N-CA-C	-5.36	99.36	108.26
1	N	93	ASP	CA-C-N	5.36	125.93	119.98
1	N	93	ASP	C-N-CA	5.36	125.93	119.98
1	B	77	ALA	CA-C-N	5.36	127.90	120.29
1	B	77	ALA	C-N-CA	5.36	127.90	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	137	LEU	CA-C-O	-5.36	112.82	120.16
1	L	306	ASP	O-C-N	-5.36	116.55	122.07
1	O	102	ALA	CA-C-N	5.36	125.93	119.98
1	O	102	ALA	C-N-CA	5.36	125.93	119.98
1	A	455	PRO	CA-C-N	5.36	130.52	121.14
1	A	455	PRO	C-N-CA	5.36	130.52	121.14
1	E	517	THR	CA-CB-OG1	5.36	117.64	109.60
1	G	17	ASN	CA-C-N	5.36	129.08	121.42
1	G	17	ASN	C-N-CA	5.36	129.08	121.42
1	H	337	ALA	CA-C-N	5.36	130.97	122.94
1	H	337	ALA	C-N-CA	5.36	130.97	122.94
1	K	47	ASP	CA-CB-CG	5.36	117.96	112.60
1	K	173	GLU	CA-C-N	5.36	131.91	121.41
1	K	173	GLU	C-N-CA	5.36	131.91	121.41
1	M	473	LEU	O-C-N	-5.36	115.15	122.33
1	O	467	ILE	N-CA-CB	5.36	118.61	110.58
1	P	173	GLU	CA-C-N	5.36	131.91	121.41
1	P	173	GLU	C-N-CA	5.36	131.91	121.41
1	F	375	ASN	OD1-CG-ND2	-5.36	117.25	122.60
1	H	329	GLU	N-CA-C	-5.35	105.53	111.36
1	I	120	THR	N-CA-C	5.35	117.11	111.28
1	J	105	PHE	CA-C-N	5.35	127.45	120.28
1	J	105	PHE	C-N-CA	5.35	127.45	120.28
1	E	528	ASP	O-C-N	-5.35	117.15	123.25
1	O	324	LYS	CA-C-N	5.35	127.71	120.38
1	O	324	LYS	C-N-CA	5.35	127.71	120.38
1	P	404	SER	CA-C-N	5.35	127.89	120.29
1	P	404	SER	C-N-CA	5.35	127.89	120.29
1	P	530	ILE	CA-C-O	5.35	125.95	120.39
1	C	444	ILE	CA-C-N	5.35	129.65	120.72
1	C	444	ILE	C-N-CA	5.35	129.65	120.72
1	D	397	SER	N-CA-C	5.35	117.11	111.28
1	D	428	ARG	NE-CZ-NH1	-5.35	116.15	121.50
1	E	311	PHE	N-CA-C	5.35	118.03	111.82
1	F	233	VAL	CA-C-O	-5.35	114.09	120.78
1	H	73	GLN	CA-C-O	5.35	125.08	119.03
1	L	110	GLU	N-CA-CB	-5.35	102.24	110.16
1	C	312	LEU	O-C-N	-5.35	115.69	122.27
1	N	300	CYS	CA-C-N	5.35	127.39	120.44
1	N	300	CYS	C-N-CA	5.35	127.39	120.44
1	H	224	ARG	CA-C-N	5.35	127.56	122.27
1	H	224	ARG	C-N-CA	5.35	127.56	122.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	495	ASP	N-CA-C	5.35	117.11	111.28
1	G	187	ALA	N-CA-C	5.34	117.11	111.28
1	I	86	ALA	CA-C-O	5.34	126.14	120.10
1	O	67	VAL	N-CA-C	5.34	115.55	110.42
1	H	488	VAL	N-CA-C	-5.34	107.57	111.90
1	A	29	ALA	CA-C-N	5.34	127.97	120.28
1	A	29	ALA	C-N-CA	5.34	127.97	120.28
1	C	105	PHE	CA-C-N	5.34	127.97	120.28
1	C	105	PHE	C-N-CA	5.34	127.97	120.28
1	C	331	LEU	N-CA-C	-5.34	105.62	111.82
1	D	243	LYS	CA-C-N	5.34	129.14	121.50
1	D	243	LYS	C-N-CA	5.34	129.14	121.50
1	D	350	ASP	N-CA-CB	-5.34	102.76	110.56
1	K	184	VAL	N-CA-C	5.34	116.07	110.62
1	M	155	ARG	N-CA-C	5.34	122.18	110.80
1	N	399	ASN	N-CA-C	-5.34	104.50	111.02
1	C	178	ASN	CA-CB-CG	5.34	117.94	112.60
1	G	329	GLU	CA-C-N	5.34	127.87	120.29
1	G	329	GLU	C-N-CA	5.34	127.87	120.29
1	G	402	LEU	N-CA-C	-5.34	105.54	111.36
1	H	51	ILE	CA-C-O	5.34	126.14	120.48
1	H	225	GLY	CA-C-O	-5.34	116.94	122.28
1	H	401	ALA	CA-C-N	5.34	127.87	120.29
1	H	401	ALA	C-N-CA	5.34	127.87	120.29
1	M	38	ARG	CB-CG-CD	5.34	123.58	111.30
1	N	285	ASP	CA-C-N	5.34	127.75	120.54
1	N	285	ASP	C-N-CA	5.34	127.75	120.54
1	N	362	VAL	CA-C-N	5.34	131.88	121.41
1	N	362	VAL	C-N-CA	5.34	131.88	121.41
1	E	108	LYS	O-C-N	5.34	130.13	122.28
1	I	109	ALA	N-CA-C	-5.34	105.46	111.28
1	D	222	LEU	N-CA-CB	-5.33	102.18	110.29
1	E	281	LYS	CA-C-O	5.33	125.94	119.11
1	K	74	HIS	CA-C-N	5.33	125.66	119.47
1	K	74	HIS	C-N-CA	5.33	125.66	119.47
1	A	523	ILE	CA-C-N	5.33	128.41	120.31
1	A	523	ILE	C-N-CA	5.33	128.41	120.31
1	H	94	GLY	O-C-N	-5.33	116.59	122.24
1	I	104	LEU	O-C-N	-5.33	115.10	122.46
1	I	439	LYS	CA-C-N	5.33	129.62	120.72
1	I	439	LYS	C-N-CA	5.33	129.62	120.72
1	N	152	ALA	N-CA-CB	-5.33	103.54	111.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	184	VAL	CA-C-O	-5.33	115.20	120.85
1	P	223	ILE	O-C-N	-5.33	117.42	123.18
1	J	271	GLN	OE1-CD-NE2	5.33	127.93	122.60
1	F	330	LYS	O-C-N	-5.33	116.08	122.15
1	G	17	ASN	O-C-N	-5.33	117.17	123.41
1	G	118	HIS	CA-C-O	-5.33	114.74	119.75
1	H	211	LYS	CA-C-O	5.33	126.19	120.38
1	O	310	HIS	CB-CG-CD2	-5.33	124.27	131.20
1	B	411	GLU	O-C-N	-5.33	115.19	121.32
1	C	265	SER	CA-C-O	5.33	127.60	121.47
1	L	182	ASP	N-CA-C	5.33	117.09	111.28
1	O	189	THR	CA-C-N	5.33	127.68	120.38
1	O	189	THR	C-N-CA	5.33	127.68	120.38
1	D	499	SER	N-CA-CB	5.33	118.42	110.22
1	E	137	LEU	N-CA-C	5.33	121.58	109.81
1	G	191	VAL	CA-C-O	-5.33	114.12	120.78
1	B	519	ALA	O-C-N	-5.32	116.34	122.09
1	F	52	ASP	N-CA-CB	-5.32	101.94	110.51
1	L	74	HIS	CG-CD2-NE2	5.32	112.52	107.20
1	O	212	LYS	CA-C-N	5.32	128.91	121.24
1	O	212	LYS	C-N-CA	5.32	128.91	121.24
1	P	34	ALA	N-CA-C	5.32	116.89	111.14
1	C	223	ILE	CA-C-O	5.32	125.98	120.39
1	C	287	VAL	CA-CB-CG2	-5.32	101.35	110.40
1	D	113	VAL	O-C-N	-5.32	116.71	121.87
1	F	450	ALA	N-CA-CB	-5.32	102.30	110.12
1	J	168	SER	O-C-N	-5.32	116.48	122.12
1	M	68	LYS	O-C-N	-5.32	116.59	122.07
1	D	487	ASP	CA-C-O	5.32	126.22	120.32
1	E	185	ILE	CA-C-O	-5.32	115.42	120.95
1	N	279	GLU	CA-C-N	5.32	129.72	120.68
1	N	279	GLU	C-N-CA	5.32	129.72	120.68
1	P	503	VAL	O-C-N	-5.32	117.45	122.98
1	A	80	LEU	CA-C-N	5.32	127.75	120.46
1	A	80	LEU	C-N-CA	5.32	127.75	120.46
1	C	399	ASN	O-C-N	-5.32	116.39	122.08
1	K	122	ILE	N-CA-C	5.32	115.53	110.42
1	E	81	VAL	CA-CB-CG1	5.32	119.44	110.40
1	E	208	LYS	CG-CD-CE	5.32	123.53	111.30
1	H	398	ILE	CA-C-N	5.32	128.18	120.79
1	H	398	ILE	C-N-CA	5.32	128.18	120.79
1	M	489	ILE	CA-CB-CG1	5.32	119.44	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	403	TYR	CB-CG-CD1	-5.32	112.83	120.80
1	I	93	ASP	CB-CA-C	5.32	119.12	110.24
1	J	87	GLN	CA-C-N	5.32	128.39	120.31
1	J	87	GLN	C-N-CA	5.32	128.39	120.31
1	N	483	ASN	CA-C-N	5.32	131.69	121.54
1	N	483	ASN	C-N-CA	5.32	131.69	121.54
1	O	489	ILE	CA-C-N	5.32	127.40	120.28
1	O	489	ILE	C-N-CA	5.32	127.40	120.28
1	A	410	MET	CG-SD-CE	-5.31	89.21	100.90
1	B	117	ILE	CA-CB-CG1	5.31	119.43	110.40
1	E	443	ALA	N-CA-C	5.31	117.15	111.36
1	G	290	LEU	CA-C-O	5.31	126.40	120.82
1	L	475	ALA	CB-CA-C	-5.31	100.47	110.67
1	O	440	GLU	CA-C-O	5.31	125.91	119.38
1	F	33	LEU	CA-C-O	5.31	126.18	120.55
1	H	133	SER	N-CA-C	5.31	117.07	111.28
1	J	335	LEU	N-CA-C	-5.31	106.85	113.38
1	I	30	ALA	O-C-N	5.31	128.43	122.22
1	K	230	LYS	N-CA-C	5.31	116.94	110.41
1	M	321	ARG	CA-C-N	5.31	131.68	121.54
1	M	321	ARG	C-N-CA	5.31	131.68	121.54
1	E	300	CYS	O-C-N	-5.31	117.06	123.27
1	D	519	ALA	CB-CA-C	-5.30	102.52	110.90
1	H	400	ASP	N-CA-C	5.30	117.75	111.33
1	J	101	LEU	O-C-N	-5.30	116.50	122.12
1	N	150	ASN	OD1-CG-ND2	-5.30	117.30	122.60
1	N	431	GLU	CB-CG-CD	-5.30	103.58	112.60
1	P	460	GLU	O-C-N	-5.30	116.10	122.15
1	H	187	ALA	N-CA-C	5.30	117.06	111.28
1	J	281	LYS	CA-C-O	5.30	125.90	119.11
1	O	286	MET	CB-CA-C	-5.30	101.94	110.74
1	F	165	THR	CA-C-O	5.30	126.39	120.82
1	G	130	PHE	O-C-N	-5.30	116.50	122.12
1	G	509	THR	CA-CB-CG2	5.30	119.51	110.50
1	H	332	GLU	CA-C-N	5.30	128.12	120.38
1	H	332	GLU	C-N-CA	5.30	128.12	120.38
1	K	350	ASP	CA-C-N	5.30	130.03	122.72
1	K	350	ASP	C-N-CA	5.30	130.03	122.72
1	M	39	SER	N-CA-CB	5.30	118.39	110.22
1	M	81	VAL	N-CA-CB	5.30	118.53	110.58
1	M	288	ASP	CA-CB-CG	-5.30	107.30	112.60
1	O	66	ILE	N-CA-CB	-5.30	102.63	110.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	407	ASN	CA-C-N	5.30	127.94	120.42
1	F	407	ASN	C-N-CA	5.30	127.94	120.42
1	M	330	LYS	CA-C-N	5.30	127.81	120.29
1	M	330	LYS	C-N-CA	5.30	127.81	120.29
1	M	334	ALA	N-CA-CB	-5.30	102.18	110.44
1	C	461	THR	CA-C-N	5.29	133.91	121.52
1	C	461	THR	C-N-CA	5.29	133.91	121.52
1	I	430	ARG	CA-C-N	5.29	131.65	121.54
1	I	430	ARG	C-N-CA	5.29	131.65	121.54
1	N	375	ASN	N-CA-C	5.29	121.51	109.81
1	B	467	ILE	N-CA-C	5.29	116.02	110.62
1	G	140	LEU	CA-C-N	5.29	128.23	120.71
1	G	140	LEU	C-N-CA	5.29	128.23	120.71
1	G	448	ALA	CA-C-O	5.29	126.03	120.42
1	H	146	VAL	CA-C-O	5.29	123.56	118.90
1	D	50	LEU	CB-CA-C	-5.29	102.89	110.62
1	D	470	LEU	CA-C-O	-5.29	114.81	120.42
1	M	40	SER	CB-CA-C	-5.29	101.62	110.56
1	O	217	ILE	CA-C-N	5.29	129.15	120.63
1	O	217	ILE	C-N-CA	5.29	129.15	120.63
1	P	329	GLU	CA-C-N	5.29	127.80	120.29
1	P	329	GLU	C-N-CA	5.29	127.80	120.29
1	B	440	GLU	CA-C-O	5.29	126.05	119.97
1	C	408	ILE	CB-CA-C	-5.29	104.92	112.22
1	K	494	ILE	CA-CB-CG1	5.29	119.39	110.40
1	B	509	THR	N-CA-CB	5.29	117.65	109.98
1	E	494	ILE	CB-CA-C	5.29	119.86	110.71
1	I	324	LYS	O-C-N	-5.29	116.05	122.82
1	K	297	VAL	CA-C-O	-5.29	114.69	121.40
1	C	501	ASN	CA-CB-CG	-5.28	107.32	112.60
1	E	237	MET	CA-C-O	-5.28	115.42	120.97
1	F	439	LYS	CA-C-N	5.28	128.34	120.31
1	F	439	LYS	C-N-CA	5.28	128.34	120.31
1	I	402	LEU	CB-CA-C	-5.28	101.87	110.85
1	A	249	LEU	CA-C-N	5.28	127.89	120.28
1	A	249	LEU	C-N-CA	5.28	127.89	120.28
1	H	19	GLY	CA-C-N	5.28	131.63	121.54
1	H	19	GLY	C-N-CA	5.28	131.63	121.54
1	D	522	SER	N-CA-C	-5.28	105.61	111.36
1	G	129	ALA	CA-C-N	5.28	127.36	120.28
1	G	129	ALA	C-N-CA	5.28	127.36	120.28
1	I	98	ALA	O-C-N	-5.28	116.52	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	474	ARG	CD-NE-CZ	-5.28	117.01	124.40
1	A	21	ASP	CA-CB-CG	-5.28	107.32	112.60
1	E	465	GLU	O-C-N	-5.28	115.82	121.42
1	N	69	GLU	O-C-N	-5.28	114.58	122.39
1	N	116	ASN	OD1-CG-ND2	-5.28	117.32	122.60
1	P	457	ILE	CA-CB-CG2	-5.28	101.53	110.50
1	A	443	ALA	N-CA-C	5.28	116.84	111.14
1	D	457	ILE	N-CA-C	-5.28	104.49	111.09
1	L	403	TYR	CB-CG-CD2	5.28	128.72	120.80
1	D	416	PRO	O-C-N	-5.28	116.57	123.06
1	E	115	GLN	CA-C-N	5.28	129.63	122.19
1	E	115	GLN	C-N-CA	5.28	129.63	122.19
1	O	216	THR	CA-CB-OG1	5.27	117.51	109.60
1	C	167	SER	O-C-N	5.27	127.50	122.07
1	E	371	GLU	CB-CG-CD	5.27	121.56	112.60
1	F	253	LEU	CA-C-N	5.27	130.87	122.59
1	F	253	LEU	C-N-CA	5.27	130.87	122.59
1	D	453	GLU	N-CA-C	5.27	119.71	113.28
1	H	78	LYS	CA-C-N	5.27	127.29	120.44
1	H	78	LYS	C-N-CA	5.27	127.29	120.44
1	L	31	ARG	NE-CZ-NH1	-5.27	116.23	121.50
1	O	528	ASP	CA-CB-CG	5.27	117.87	112.60
1	F	292	SER	CA-C-N	5.27	129.26	120.62
1	F	292	SER	C-N-CA	5.27	129.26	120.62
1	G	384	ARG	O-C-N	-5.27	117.08	123.03
1	I	299	ILE	CA-CB-CG1	5.27	119.36	110.40
1	J	301	GLN	OE1-CD-NE2	-5.27	117.33	122.60
1	O	306	ASP	CA-CB-CG	-5.27	107.33	112.60
1	H	213	LYS	N-CA-C	5.27	117.67	110.24
1	I	384	ARG	CD-NE-CZ	-5.27	117.03	124.40
1	M	54	PHE	N-CA-CB	-5.27	103.29	110.56
1	M	397	SER	N-CA-C	5.27	117.02	111.28
1	M	462	ALA	CA-C-O	5.27	125.90	119.05
1	M	482	THR	CA-CB-CG2	5.27	119.45	110.50
1	C	378	ALA	O-C-N	-5.27	117.05	123.16
1	I	175	GLU	O-C-N	-5.27	116.54	122.12
1	D	232	VAL	CA-C-N	5.26	131.45	121.97
1	D	232	VAL	C-N-CA	5.26	131.45	121.97
1	D	502	VAL	N-CA-CB	-5.26	106.24	112.40
1	I	355	GLU	CA-C-O	-5.26	114.84	120.42
1	K	194	PRO	CA-N-CD	-5.26	104.63	112.00
1	M	170	PHE	CA-C-N	5.26	130.10	122.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	170	PHE	C-N-CA	5.26	130.10	122.36
1	O	491	GLY	N-CA-C	-5.26	108.05	115.32
1	H	207	ILE	CB-CA-C	5.26	117.44	110.91
1	L	118	HIS	ND1-CE1-NE2	5.26	113.66	108.40
1	I	182	ASP	N-CA-CB	-5.26	102.38	110.12
1	K	141	ALA	CA-C-O	5.26	128.02	121.81
1	L	94	GLY	O-C-N	-5.26	117.14	122.19
1	M	428	ARG	NE-CZ-NH1	-5.26	116.24	121.50
1	O	74	HIS	CG-CD2-NE2	5.26	112.46	107.20
1	C	26	ASN	CA-CB-CG	5.26	117.86	112.60
1	D	342	SER	CA-C-O	-5.26	115.31	121.10
1	I	477	HIS	CE1-NE2-CD2	-5.26	103.74	109.00
1	K	222	LEU	CA-C-O	-5.26	115.83	121.56
1	M	456	MET	N-CA-C	-5.26	106.71	113.23
1	P	31	ARG	NE-CZ-NH2	5.26	123.93	119.20
1	C	222	LEU	CA-C-N	5.26	130.03	123.14
1	C	222	LEU	C-N-CA	5.26	130.03	123.14
1	G	371	GLU	N-CA-C	5.26	117.06	109.07
1	N	513	LEU	N-CA-C	-5.26	105.60	112.23
1	D	340	ILE	N-CA-C	-5.26	100.91	108.48
1	F	430	ARG	O-C-N	5.26	129.93	122.68
1	I	223	ILE	CA-C-N	5.26	127.59	120.44
1	I	223	ILE	C-N-CA	5.26	127.59	120.44
1	K	501	ASN	N-CA-CB	5.26	119.37	110.49
1	L	428	ARG	NE-CZ-NH2	5.26	123.93	119.20
1	M	84	ALA	CA-C-N	5.26	128.70	120.82
1	M	84	ALA	C-N-CA	5.26	128.70	120.82
1	N	127	LYS	N-CA-C	5.26	116.69	111.07
1	N	383	LEU	O-C-N	-5.26	116.51	123.13
1	E	454	ILE	CA-C-O	-5.25	112.91	119.95
1	A	384	ARG	CB-CG-CD	5.25	123.38	111.30
1	D	289	LYS	CA-C-O	-5.25	115.29	120.70
1	E	351	LEU	N-CA-CB	5.25	119.19	110.52
1	E	408	ILE	O-C-N	-5.25	116.42	121.83
1	G	159	LYS	CB-CG-CD	5.25	123.38	111.30
1	H	70	MET	O-C-N	-5.25	116.40	123.23
1	L	56	ASP	CA-CB-CG	5.25	117.85	112.60
1	D	152	ALA	CA-C-N	5.25	128.17	120.71
1	D	152	ALA	C-N-CA	5.25	128.17	120.71
1	D	360	ARG	O-C-N	-5.25	116.86	123.27
1	E	165	THR	OG1-CB-CG2	-5.25	98.80	109.30
1	E	170	PHE	CA-C-N	5.25	130.40	122.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	170	PHE	C-N-CA	5.25	130.40	122.68
1	G	183	ILE	N-CA-C	5.25	115.98	110.62
1	K	315	ARG	CA-CB-CG	-5.25	103.59	114.10
1	K	380	ASN	O-C-N	-5.25	117.17	123.31
1	A	211	LYS	O-C-N	-5.25	117.09	123.29
1	H	503	VAL	N-CA-C	5.25	120.26	109.34
1	I	457	ILE	CA-CB-CG1	5.25	119.32	110.40
1	L	315	ARG	CD-NE-CZ	5.25	131.75	124.40
1	I	461	THR	CA-CB-OG1	5.25	117.47	109.60
1	J	266	ILE	CA-CB-CG1	5.25	119.32	110.40
1	M	264	ILE	CA-CB-CG1	5.25	119.32	110.40
1	N	478	ALA	CB-CA-C	-5.25	101.21	109.34
1	P	181	MET	CB-CA-C	-5.25	102.08	110.79
1	B	278	GLU	O-C-N	-5.25	116.56	122.12
1	E	403	TYR	CA-C-O	-5.25	113.94	119.97
1	F	153	THR	N-CA-CB	-5.25	101.66	109.69
1	I	362	VAL	CA-C-O	5.25	125.85	120.39
1	I	434	ARG	NE-CZ-NH2	5.25	123.92	119.20
1	N	84	ALA	N-CA-C	5.25	116.69	110.97
1	J	153	THR	CA-CB-CG2	-5.25	101.58	110.50
1	K	469	ALA	N-CA-CB	-5.25	102.40	110.16
1	L	134	LEU	CA-C-O	5.25	126.00	119.97
1	C	396	ARG	O-C-N	-5.24	116.56	122.12
1	G	430	ARG	CA-C-O	5.24	130.19	122.38
1	I	185	ILE	CA-C-O	-5.24	115.50	120.95
1	G	360	ARG	NE-CZ-NH2	5.24	123.92	119.20
1	M	347	THR	O-C-N	-5.24	116.94	121.71
1	P	401	ALA	CA-C-N	5.24	127.73	120.29
1	P	401	ALA	C-N-CA	5.24	127.73	120.29
1	B	402	LEU	O-C-N	-5.24	116.56	122.12
1	G	39	SER	CA-CB-OG	5.24	121.58	111.10
1	H	299	ILE	CA-CB-CG1	5.24	119.31	110.40
1	J	150	ASN	CB-CA-C	5.24	120.85	110.42
1	N	79	LEU	N-CA-C	5.24	116.68	111.07
1	B	26	ASN	N-CA-C	-5.24	105.63	112.23
1	B	209	ILE	CA-C-O	5.24	125.91	120.36
1	C	59	ILE	N-CA-CB	5.24	118.50	111.90
1	F	338	ARG	CD-NE-CZ	5.24	131.74	124.40
1	F	520	ALA	CB-CA-C	-5.24	101.94	110.85
1	I	409	LEU	N-CA-C	5.24	116.99	111.28
1	J	275	PHE	CA-C-N	5.24	127.73	120.29
1	J	275	PHE	C-N-CA	5.24	127.73	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	349	GLU	N-CA-C	-5.24	106.84	114.12
1	L	287	VAL	CB-CA-C	-5.24	105.07	112.14
1	D	62	ASP	CA-CB-CG	5.24	117.84	112.60
1	E	59	ILE	CB-CG1-CD1	5.23	124.79	113.80
1	L	20	ARG	CA-C-N	5.23	127.56	120.65
1	L	20	ARG	C-N-CA	5.23	127.56	120.65
1	G	437	GLY	O-C-N	-5.23	119.04	123.59
1	A	233	VAL	CA-C-O	-5.23	114.24	120.78
1	F	246	ILE	CA-C-O	-5.23	114.89	120.59
1	K	428	ARG	CD-NE-CZ	5.23	131.72	124.40
1	L	346	ALA	N-CA-CB	-5.23	101.93	109.83
1	B	92	GLY	N-CA-C	5.23	120.48	114.16
1	C	77	ALA	CA-C-O	5.23	125.79	119.31
1	D	93	ASP	O-C-N	-5.23	114.60	122.28
1	I	265	SER	O-C-N	-5.23	117.26	123.22
1	H	400	ASP	O-C-N	-5.23	116.58	122.12
1	J	345	ASP	O-C-N	-5.23	114.80	122.43
1	J	374	LYS	N-CA-C	5.23	121.93	110.80
1	N	310	HIS	O-C-N	-5.23	116.19	122.15
1	O	24	LYS	CA-C-N	5.23	129.56	120.68
1	O	24	LYS	C-N-CA	5.23	129.56	120.68
1	D	310	HIS	ND1-CE1-NE2	5.22	113.62	108.40
1	G	223	ILE	CA-CB-CG1	5.22	119.28	110.40
1	I	253	LEU	CA-C-O	5.22	126.62	120.98
1	J	496	ASP	CA-C-N	5.22	127.84	120.42
1	J	496	ASP	C-N-CA	5.22	127.84	120.42
1	K	361	LYS	CA-C-O	-5.22	114.64	120.54
1	B	266	ILE	O-C-N	-5.22	116.04	122.57
1	B	380	ASN	OD1-CG-ND2	-5.22	117.38	122.60
1	J	138	PRO	CA-N-CD	-5.22	104.69	112.00
1	J	211	LYS	CB-CG-CD	5.22	123.31	111.30
1	K	29	ALA	CB-CA-C	-5.22	102.68	110.88
1	K	180	ILE	CB-CA-C	-5.22	105.09	112.14
1	L	74	HIS	ND1-CE1-NE2	5.22	113.62	108.40
1	M	392	ASP	N-CA-C	5.22	116.97	111.28
1	N	503	VAL	O-C-N	-5.22	117.51	123.10
1	O	191	VAL	N-CA-C	5.22	120.20	109.34
1	C	422	GLU	N-CA-C	5.22	116.66	111.07
1	G	496	ASP	CA-C-O	5.22	127.98	120.51
1	K	126	PHE	CA-CB-CG	5.22	119.02	113.80
1	K	239	ARG	NE-CZ-NH1	-5.22	116.28	121.50
1	D	402	LEU	O-C-N	-5.22	116.20	122.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	95	THR	CA-C-O	5.22	126.00	120.10
1	F	257	LYS	CA-C-O	-5.22	114.59	119.91
1	M	510	ARG	O-C-N	-5.22	116.66	122.09
1	B	398	ILE	O-C-N	-5.22	116.80	121.91
1	N	23	LEU	CA-C-O	5.22	125.95	120.42
1	A	52	ASP	CA-C-O	5.22	127.94	121.94
1	D	226	ILE	CA-C-O	5.22	126.67	120.72
1	K	467	ILE	CA-CB-CG2	-5.22	101.63	110.50
1	L	38	ARG	CD-NE-CZ	5.22	131.70	124.40
1	B	94	GLY	O-C-N	-5.21	116.71	122.24
1	H	207	ILE	N-CA-CB	-5.21	105.04	110.72
1	I	148	ASP	CA-C-N	5.21	131.50	121.54
1	I	148	ASP	C-N-CA	5.21	131.50	121.54
1	J	101	LEU	CA-C-O	5.21	126.08	120.55
1	M	287	VAL	N-CA-CB	5.21	116.65	110.55
1	O	89	SER	CA-C-O	-5.21	113.97	119.97
1	P	81	VAL	O-C-N	-5.21	116.81	121.87
1	P	97	SER	N-CA-C	5.21	116.97	111.28
1	E	149	LEU	CA-C-N	5.21	131.50	121.54
1	E	149	LEU	C-N-CA	5.21	131.50	121.54
1	G	122	ILE	CA-C-N	5.21	127.33	120.60
1	G	122	ILE	C-N-CA	5.21	127.33	120.60
1	G	431	GLU	CB-CG-CD	-5.21	103.74	112.60
1	N	486	VAL	O-C-N	-5.21	117.55	123.18
1	A	219	ASP	CA-CB-CG	-5.21	107.39	112.60
1	G	38	ARG	NE-CZ-NH2	5.21	123.89	119.20
1	A	306	ASP	N-CA-CB	-5.21	102.45	110.01
1	D	310	HIS	CA-CB-CG	5.21	119.01	113.80
1	K	337	ALA	CA-C-N	5.21	130.10	122.39
1	K	337	ALA	C-N-CA	5.21	130.10	122.39
1	F	47	ASP	N-CA-C	5.21	117.43	110.35
1	K	265	SER	CA-CB-OG	5.21	121.52	111.10
1	L	96	THR	CA-C-N	-5.21	113.30	120.28
1	L	96	THR	C-N-CA	-5.21	113.30	120.28
1	P	65	THR	N-CA-CB	5.21	117.96	110.20
1	B	402	LEU	N-CA-CB	5.21	117.77	110.12
1	C	176	GLU	O-C-N	-5.21	114.08	122.41
1	J	496	ASP	CA-CB-CG	-5.21	107.39	112.60
1	D	305	ASP	CA-C-N	5.21	127.25	120.28
1	D	305	ASP	C-N-CA	5.21	127.25	120.28
1	E	56	ASP	CA-C-O	5.21	126.62	120.58
1	F	483	ASN	CA-C-N	5.21	128.24	120.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	483	ASN	C-N-CA	5.21	128.24	120.95
1	G	396	ARG	CA-C-O	5.21	126.29	120.82
1	H	477	HIS	CA-CB-CG	5.21	119.00	113.80
1	H	483	ASN	CA-CB-CG	-5.21	107.39	112.60
1	K	270	ASP	CA-CB-CG	-5.21	107.39	112.60
1	A	84	ALA	CB-CA-C	5.20	118.97	110.96
1	B	237	MET	CA-C-N	5.20	126.34	119.84
1	B	237	MET	C-N-CA	5.20	126.34	119.84
1	K	181	MET	N-CA-C	5.20	116.95	111.28
1	N	51	ILE	CA-CB-CG1	5.20	119.25	110.40
1	B	324	LYS	CA-C-N	5.20	127.50	120.38
1	B	324	LYS	C-N-CA	5.20	127.50	120.38
1	C	124	GLU	N-CA-C	5.20	117.69	111.71
1	M	64	ALA	N-CA-C	-5.20	105.68	112.23
1	P	528	ASP	N-CA-C	5.20	116.75	108.79
1	B	228	LEU	O-C-N	-5.20	117.29	123.22
1	E	280	ALA	CA-C-O	5.20	125.92	119.79
1	E	287	VAL	CA-CB-CG2	-5.20	101.56	110.40
1	G	338	ARG	N-CA-C	-5.20	99.82	108.34
1	K	517	THR	O-C-N	5.20	129.40	122.43
1	N	128	LYS	CB-CA-C	-5.20	102.01	110.85
1	C	479	LYS	CA-C-O	5.20	126.01	120.24
1	E	322	ARG	NE-CZ-NH2	5.20	123.88	119.20
1	I	490	ASN	CA-CB-CG	-5.20	107.41	112.60
1	J	416	PRO	N-CA-CB	5.20	107.80	103.17
1	J	442	LEU	N-CA-C	-5.20	105.70	111.36
1	O	389	MET	CA-C-O	5.20	125.94	119.97
1	P	331	LEU	CA-C-N	5.20	131.46	121.54
1	P	331	LEU	C-N-CA	5.20	131.46	121.54
1	F	58	THR	O-C-N	-5.19	116.63	123.28
1	I	337	ALA	CA-C-N	5.19	131.06	122.33
1	I	337	ALA	C-N-CA	5.19	131.06	122.33
1	B	133	SER	CA-C-O	5.19	126.05	120.55
1	G	321	ARG	CD-NE-CZ	-5.19	117.13	124.40
1	L	243	LYS	CA-C-N	5.19	128.93	121.50
1	L	243	LYS	C-N-CA	5.19	128.93	121.50
1	P	424	GLU	CA-C-N	5.19	127.67	120.29
1	P	424	GLU	C-N-CA	5.19	127.67	120.29
1	C	189	THR	CA-CB-CG2	-5.19	101.67	110.50
1	D	124	GLU	CA-C-O	-5.19	114.00	119.97
1	G	430	ARG	NE-CZ-NH1	-5.19	116.31	121.50
1	D	523	ILE	CA-C-N	5.19	128.20	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	523	ILE	C-N-CA	5.19	128.20	120.31
1	B	228	LEU	CA-C-N	5.19	128.19	120.31
1	B	228	LEU	C-N-CA	5.19	128.19	120.31
1	F	357	VAL	N-CA-C	-5.19	100.05	107.78
1	G	210	ASP	CA-CB-CG	-5.19	107.41	112.60
1	G	495	ASP	N-CA-CB	5.19	118.31	110.42
1	H	198	GLY	CA-C-N	5.19	131.58	121.41
1	H	198	GLY	C-N-CA	5.19	131.58	121.41
1	I	159	LYS	CA-C-N	5.19	128.19	120.31
1	I	159	LYS	C-N-CA	5.19	128.19	120.31
1	J	457	ILE	CA-C-O	5.19	125.85	120.25
1	L	146	VAL	CB-CA-C	-5.19	105.33	111.97
1	N	318	LEU	O-C-N	-5.19	116.71	122.93
1	C	79	LEU	CA-C-O	5.19	126.45	120.90
1	J	519	ALA	CB-CA-C	-5.19	102.03	110.85
1	G	235	ALA	N-CA-C	5.18	117.67	111.71
1	N	188	VAL	N-CA-C	5.18	115.96	110.72
1	P	52	ASP	CA-C-N	5.18	128.19	120.31
1	P	52	ASP	C-N-CA	5.18	128.19	120.31
1	E	305	ASP	CA-CB-CG	-5.18	107.42	112.60
1	G	370	ILE	CA-C-O	5.18	126.08	120.53
1	G	441	GLN	O-C-N	-5.18	116.24	122.15
1	M	417	GLY	CA-C-N	5.18	131.57	121.41
1	M	417	GLY	C-N-CA	5.18	131.57	121.41
1	A	118	HIS	N-CA-C	5.18	116.22	109.64
1	D	438	GLY	O-C-N	-5.18	117.37	123.17
1	I	306	ASP	N-CA-C	5.18	117.60	111.33
1	J	232	VAL	CA-C-O	5.18	127.26	120.78
1	L	148	ASP	CB-CA-C	5.18	118.55	110.67
1	B	178	ASN	CA-C-N	5.18	127.22	120.28
1	B	178	ASN	C-N-CA	5.18	127.22	120.28
1	C	507	ARG	N-CA-C	5.18	118.86	112.54
1	E	510	ARG	NE-CZ-NH1	-5.18	116.32	121.50
1	H	181	MET	N-CA-CB	-5.18	102.51	110.12
1	I	262	ALA	N-CA-C	5.18	117.68	109.96
1	K	198	GLY	N-CA-C	-5.18	108.08	115.64
1	N	366	LYS	O-C-N	5.18	128.97	122.86
1	N	446	ALA	N-CA-CB	-5.18	102.32	110.30
1	A	364	ASN	N-CA-CB	5.18	119.24	110.49
1	C	428	ARG	CA-C-O	5.18	125.92	119.97
1	O	458	LEU	CA-C-O	-5.18	115.06	120.55
1	F	325	ARG	CG-CD-NE	-5.18	100.61	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	73	GLN	N-CA-CB	-5.18	101.43	110.44
1	M	132	LYS	CA-C-O	5.18	125.91	120.42
1	A	222	LEU	N-CA-CB	-5.17	102.42	110.29
1	B	179	LYS	N-CA-CB	-5.17	102.51	110.12
1	B	197	ASP	CA-CB-CG	5.17	117.78	112.60
1	E	485	GLY	O-C-N	-5.17	118.79	123.29
1	G	514	LYS	O-C-N	-5.17	116.63	122.12
1	H	360	ARG	N-CA-C	-5.17	100.60	109.24
1	J	175	GLU	CA-CB-CG	5.17	124.45	114.10
1	L	117	ILE	N-CA-C	-5.17	100.44	107.99
1	M	338	ARG	O-C-N	-5.17	116.50	123.23
1	D	74	HIS	CE1-NE2-CD2	-5.17	103.83	109.00
1	E	350	ASP	CA-C-O	5.17	125.69	119.43
1	E	470	LEU	CA-C-N	5.17	128.17	120.31
1	E	470	LEU	C-N-CA	5.17	128.17	120.31
1	A	155	ARG	N-CA-C	5.17	121.81	110.80
1	C	162	VAL	CB-CA-C	-5.17	105.08	112.22
1	D	350	ASP	CA-C-O	5.17	125.61	119.56
1	D	521	THR	CA-C-N	5.17	127.63	120.29
1	D	521	THR	C-N-CA	5.17	127.63	120.29
1	A	57	VAL	N-CA-C	5.17	116.73	108.87
1	D	90	GLU	N-CA-C	5.17	119.86	113.50
1	G	388	ASP	CA-C-N	5.17	127.63	120.29
1	G	388	ASP	C-N-CA	5.17	127.63	120.29
1	H	393	GLU	N-CA-C	5.17	116.92	111.28
1	H	507	ARG	N-CA-CB	-5.17	101.81	110.39
1	I	397	SER	N-CA-C	-5.17	105.64	111.28
1	N	99	VAL	O-C-N	5.17	126.89	121.87
1	O	471	MET	CG-SD-CE	-5.17	89.53	100.90
1	B	138	PRO	N-CD-CG	5.17	110.95	103.20
1	B	230	LYS	N-CA-C	5.17	121.81	110.80
1	E	313	ALA	CA-C-N	5.17	127.16	120.44
1	E	313	ALA	C-N-CA	5.17	127.16	120.44
1	F	227	VAL	N-CA-C	5.17	115.41	108.17
1	J	467	ILE	CA-C-O	5.17	126.33	120.95
1	K	294	GLY	O-C-N	-5.17	116.76	122.55
1	A	118	HIS	CB-CA-C	-5.17	101.36	109.52
1	D	28	LEU	O-C-N	-5.17	116.64	122.12
1	M	494	ILE	O-C-N	-5.17	118.23	123.19
1	L	268	SER	CA-C-N	-5.17	113.72	119.19
1	L	268	SER	C-N-CA	-5.17	113.72	119.19
1	E	116	ASN	CB-CA-C	-5.16	104.40	111.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	269	PRO	CA-N-CD	-5.16	104.77	112.00
1	F	224	ARG	CG-CD-NE	-5.16	100.64	112.00
1	I	402	LEU	CA-C-N	5.16	127.62	120.29
1	I	402	LEU	C-N-CA	5.16	127.62	120.29
1	J	254	GLU	CA-C-N	5.16	127.42	120.50
1	J	254	GLU	C-N-CA	5.16	127.42	120.50
1	M	60	THR	CA-CB-OG1	5.16	117.34	109.60
1	M	511	GLN	CA-C-O	-5.16	114.03	119.97
1	O	232	VAL	CA-C-O	5.16	127.23	120.78
1	A	305	ASP	CA-C-N	5.16	127.15	120.44
1	A	305	ASP	C-N-CA	5.16	127.15	120.44
1	B	246	ILE	O-C-N	-5.16	116.16	122.97
1	L	458	LEU	CD1-CG-CD2	-5.16	99.44	110.80
1	D	483	ASN	CA-CB-CG	-5.16	107.44	112.60
1	J	103	GLY	O-C-N	-5.16	117.23	122.19
1	L	473	LEU	CA-C-N	5.16	127.15	120.44
1	L	473	LEU	C-N-CA	5.16	127.15	120.44
1	G	518	GLU	CA-C-N	5.16	127.46	120.44
1	G	518	GLU	C-N-CA	5.16	127.46	120.44
1	H	323	VAL	CA-C-N	5.16	129.04	120.94
1	H	323	VAL	C-N-CA	5.16	129.04	120.94
1	H	521	THR	CA-CB-OG1	-5.16	101.86	109.60
1	N	114	ASP	O-C-N	-5.16	116.65	122.12
1	P	234	HIS	CE1-NE2-CD2	-5.16	103.84	109.00
1	A	261	SER	N-CA-CB	5.16	118.82	110.42
1	D	387	ASN	O-C-N	-5.16	115.73	122.59
1	F	142	THR	N-CA-CB	5.16	119.34	110.68
1	J	146	VAL	O-C-N	5.16	126.85	122.16
1	J	462	ALA	N-CA-CB	-5.16	101.35	110.42
1	P	234	HIS	CB-CG-CD2	-5.16	124.50	131.20
1	P	234	HIS	CB-CG-ND1	5.16	130.43	122.70
1	D	142	THR	OG1-CB-CG2	-5.15	98.99	109.30
1	G	86	ALA	CA-C-N	5.15	129.44	120.68
1	G	86	ALA	C-N-CA	5.15	129.44	120.68
1	I	296	ASN	N-CA-C	-5.15	106.94	113.43
1	M	427	ALA	O-C-N	-5.15	115.53	122.23
1	O	369	PHE	CA-C-N	5.15	129.82	123.12
1	O	369	PHE	C-N-CA	5.15	129.82	123.12
1	P	150	ASN	O-C-N	-5.15	115.73	122.59
1	A	191	VAL	CA-C-O	-5.15	114.34	120.78
1	B	86	ALA	CA-C-N	5.15	128.14	120.31
1	B	86	ALA	C-N-CA	5.15	128.14	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	454	ILE	C-N-CD	-5.15	103.88	125.00
1	J	34	ALA	O-C-N	5.15	127.38	122.07
1	K	426	SER	N-CA-C	5.15	116.98	111.36
1	M	143	LYS	N-CA-C	-5.15	100.50	108.90
1	M	325	ARG	O-C-N	-5.15	116.66	122.12
1	M	423	LEU	N-CA-CB	-5.15	102.55	110.12
1	N	502	VAL	CA-C-O	5.15	127.22	120.78
1	P	201	ASN	OD1-CG-ND2	-5.15	117.45	122.60
1	P	448	ALA	CA-C-N	5.15	127.18	120.28
1	P	448	ALA	C-N-CA	5.15	127.18	120.28
1	P	477	HIS	CG-CD2-NE2	5.15	112.35	107.20
1	H	338	ARG	CD-NE-CZ	5.15	131.61	124.40
1	K	486	VAL	CA-C-O	5.15	125.80	120.39
1	O	155	ARG	CA-C-N	5.15	131.38	121.54
1	O	155	ARG	C-N-CA	5.15	131.38	121.54
1	L	253	LEU	CA-C-O	-5.15	116.18	122.41
1	O	532	ALA	CA-C-O	-5.15	112.05	120.80
1	K	121	ILE	O-C-N	-5.15	116.53	121.83
1	L	165	THR	CA-C-O	5.15	125.88	120.42
1	N	226	ILE	O-C-N	-5.15	117.63	122.98
1	O	386	SER	CB-CA-C	-5.15	102.56	109.71
1	P	517	THR	O-C-N	-5.15	115.53	122.43
1	J	304	ILE	O-C-N	-5.15	117.34	123.05
1	M	224	ARG	CD-NE-CZ	-5.15	117.19	124.40
1	M	315	ARG	O-C-N	-5.15	114.77	122.39
1	O	129	ALA	CA-C-O	5.15	126.22	120.82
1	G	432	TYR	CB-CG-CD2	-5.14	113.08	120.80
1	H	23	LEU	CA-C-O	-5.14	114.97	120.42
1	J	482	THR	CA-C-N	5.14	132.59	122.61
1	J	482	THR	C-N-CA	5.14	132.59	122.61
1	P	59	ILE	O-C-N	-5.14	116.14	122.88
1	A	213	LYS	O-C-N	-5.14	116.33	122.65
1	C	285	ASP	CA-C-N	5.14	127.48	120.54
1	C	285	ASP	C-N-CA	5.14	127.48	120.54
1	D	271	GLN	OE1-CD-NE2	-5.14	117.46	122.60
1	E	45	GLY	CA-C-O	-5.14	116.88	121.41
1	F	422	GLU	CA-C-O	5.14	126.00	120.70
1	H	436	VAL	CA-CB-CG1	5.14	119.14	110.40
1	J	234	HIS	CB-CG-CD2	-5.14	124.51	131.20
1	L	284	LYS	CB-CG-CD	5.14	123.13	111.30
1	N	506	ILE	O-C-N	-5.14	116.85	121.89
1	B	338	ARG	CA-C-N	5.14	128.20	120.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	338	ARG	C-N-CA	5.14	128.20	120.69
1	D	434	ARG	N-CA-C	5.14	116.96	111.36
1	E	270	ASP	O-C-N	-5.14	115.95	122.27
1	G	156	ASP	CA-C-N	5.14	127.48	120.54
1	G	156	ASP	C-N-CA	5.14	127.48	120.54
1	J	391	LEU	CB-CA-C	5.14	119.97	110.56
1	J	414	ILE	N-CA-C	-5.14	100.47	108.95
1	N	296	ASN	N-CA-CB	5.14	118.22	110.30
1	E	151	SER	O-C-N	-5.14	116.80	122.86
1	F	107	GLU	CA-C-N	5.14	129.37	120.58
1	F	107	GLU	C-N-CA	5.14	129.37	120.58
1	D	498	TYR	CB-CG-CD1	5.14	128.51	120.80
1	M	282	TYR	CA-C-O	5.14	125.94	120.24
1	B	518	GLU	CA-CB-CG	5.14	124.37	114.10
1	C	178	ASN	CA-C-O	-5.14	115.11	120.55
1	F	193	GLU	O-C-N	-5.14	115.41	121.32
1	I	62	ASP	N-CA-CB	5.14	118.64	110.16
1	J	78	LYS	CA-C-O	5.14	125.86	120.42
1	O	239	ARG	N-CA-CB	5.14	118.18	110.53
1	P	74	HIS	CE1-NE2-CD2	-5.14	103.86	109.00
1	A	510	ARG	N-CA-CB	-5.13	102.36	110.06
1	A	528	ASP	O-C-N	5.13	129.38	123.17
1	E	512	VAL	O-C-N	-5.13	115.03	122.12
1	F	470	LEU	O-C-N	5.13	128.00	122.15
1	J	88	ASP	N-CA-CB	-5.13	102.32	110.28
1	J	272	ILE	CB-CA-C	-5.13	105.36	112.24
1	J	277	ASP	O-C-N	-5.13	115.95	122.27
1	K	44	LYS	CA-C-N	5.13	124.85	119.92
1	K	44	LYS	C-N-CA	5.13	124.85	119.92
1	K	79	LEU	CA-C-O	5.13	125.99	120.55
1	K	237	MET	CG-SD-CE	-5.13	89.61	100.90
1	L	499	SER	O-C-N	-5.13	114.93	122.43
1	F	181	MET	CA-C-O	-5.13	114.98	120.42
1	K	88	ASP	CA-C-N	5.13	128.11	120.31
1	K	88	ASP	C-N-CA	5.13	128.11	120.31
1	C	218	GLU	CA-C-N	5.13	130.86	122.65
1	C	218	GLU	C-N-CA	5.13	130.86	122.65
1	D	42	GLY	O-C-N	-5.13	116.64	121.77
1	D	186	ASP	CA-CB-CG	5.13	117.73	112.60
1	G	44	LYS	CA-C-N	5.13	131.47	121.41
1	G	44	LYS	C-N-CA	5.13	131.47	121.41
1	J	504	GLU	O-C-N	-5.13	116.99	121.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	346	ALA	CA-C-O	-5.13	114.54	120.49
1	E	20	ARG	NE-CZ-NH1	-5.13	116.37	121.50
1	F	292	SER	CA-C-O	5.13	125.86	120.42
1	I	25	ASN	N-CA-C	-5.13	106.18	112.90
1	L	31	ARG	CA-C-O	5.13	125.84	119.79
1	L	59	ILE	N-CA-CB	5.13	118.13	111.67
1	N	191	VAL	N-CA-C	5.13	115.27	110.30
1	A	378	ALA	O-C-N	-5.13	116.50	122.81
1	B	117	ILE	CA-C-N	5.13	128.16	120.83
1	B	117	ILE	C-N-CA	5.13	128.16	120.83
1	D	229	ASP	CA-CB-CG	-5.13	107.47	112.60
1	E	296	ASN	N-CA-C	-5.13	105.86	112.68
1	K	161	ILE	CA-CB-CG2	-5.13	101.78	110.50
1	N	68	LYS	O-C-N	-5.13	116.79	122.07
1	N	318	LEU	CA-C-O	5.13	126.07	120.58
1	A	190	THR	O-C-N	-5.12	116.69	122.12
1	B	32	THR	CA-C-O	5.12	125.85	120.42
1	M	322	ARG	NE-CZ-NH2	5.12	123.81	119.20
1	F	285	ASP	CA-C-N	5.12	127.46	120.54
1	F	285	ASP	C-N-CA	5.12	127.46	120.54
1	G	322	ARG	CG-CD-NE	-5.12	100.73	112.00
1	H	87	GLN	CA-C-N	5.12	128.10	120.31
1	H	87	GLN	C-N-CA	5.12	128.10	120.31
1	K	465	GLU	O-C-N	-5.12	116.74	121.30
1	B	441	GLN	CA-CB-CG	5.12	124.34	114.10
1	B	450	ALA	N-CA-C	5.12	116.94	111.36
1	F	394	ALA	O-C-N	-5.12	115.97	122.27
1	G	116	ASN	CB-CA-C	-5.12	104.46	111.73
1	G	268	SER	O-C-N	-5.12	116.41	121.17
1	H	41	LEU	N-CA-C	5.12	116.67	111.14
1	P	190	THR	N-CA-C	5.12	116.86	111.28
1	C	182	ASP	N-CA-CB	-5.12	102.59	110.12
1	C	364	ASN	OD1-CG-ND2	-5.12	117.48	122.60
1	E	155	ARG	CA-C-N	5.12	131.32	121.54
1	E	155	ARG	C-N-CA	5.12	131.32	121.54
1	F	129	ALA	N-CA-CB	-5.12	102.60	110.12
1	I	333	LYS	N-CA-C	5.12	118.30	111.75
1	J	346	ALA	CA-C-N	5.12	131.24	122.38
1	J	346	ALA	C-N-CA	5.12	131.24	122.38
1	K	499	SER	CB-CA-C	-5.12	101.16	110.63
1	C	90	GLU	O-C-N	-5.12	116.44	122.32
1	F	196	PRO	N-CA-C	5.12	120.56	113.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	112	LEU	N-CA-C	5.12	116.86	111.28
1	G	331	LEU	N-CA-CB	-5.12	102.59	110.16
1	H	130	PHE	CD1-CG-CD2	5.12	126.28	118.60
1	I	515	SER	N-CA-CB	-5.12	102.46	110.44
1	K	208	LYS	CA-C-N	-5.12	116.44	123.14
1	K	208	LYS	C-N-CA	-5.12	116.44	123.14
1	P	384	ARG	O-C-N	-5.12	117.22	123.10
1	C	108	LYS	CA-C-N	5.11	127.13	120.28
1	C	108	LYS	C-N-CA	5.11	127.13	120.28
1	K	95	THR	N-CA-C	5.11	117.59	111.71
1	E	178	ASN	CA-C-O	-5.11	115.13	120.55
1	E	186	ASP	CA-CB-CG	5.11	117.71	112.60
1	O	88	ASP	CA-CB-CG	5.11	117.71	112.60
1	D	185	ILE	CA-C-N	5.11	127.13	120.28
1	D	185	ILE	C-N-CA	5.11	127.13	120.28
1	E	52	ASP	O-C-N	-5.11	115.86	122.20
1	E	303	GLY	CA-C-N	5.11	130.09	122.99
1	E	303	GLY	C-N-CA	5.11	130.09	122.99
1	F	150	ASN	CA-CB-CG	-5.11	107.49	112.60
1	F	484	CYS	O-C-N	-5.11	116.64	122.93
1	H	518	GLU	CB-CA-C	-5.11	101.35	110.70
1	L	259	GLU	CA-C-O	5.11	125.26	119.18
1	P	108	LYS	CA-C-O	-5.11	114.57	120.24
1	I	238	PRO	N-CA-CB	5.11	108.61	103.25
1	N	289	LYS	O-C-N	5.11	127.33	122.07
1	B	233	VAL	N-CA-C	5.11	119.96	109.34
1	C	31	ARG	NE-CZ-NH1	-5.11	116.39	121.50
1	F	155	ARG	CA-CB-CG	5.11	124.31	114.10
1	F	425	LEU	CA-C-O	5.11	125.83	120.42
1	J	233	VAL	N-CA-C	5.11	119.96	109.34
1	N	477	HIS	CA-C-O	5.11	125.81	119.12
1	N	477	HIS	CE1-NE2-CD2	-5.11	103.89	109.00
1	B	224	ARG	NE-CZ-NH2	5.11	123.80	119.20
1	G	135	GLU	N-CA-C	-5.11	107.05	113.28
1	H	278	GLU	CB-CG-CD	5.11	121.28	112.60
1	I	19	GLY	CA-C-O	5.11	127.53	121.71
1	L	505	PRO	N-CA-C	5.11	122.99	112.47
1	D	170	PHE	CA-CB-CG	5.10	118.90	113.80
1	G	74	HIS	CE1-NE2-CD2	-5.10	103.90	109.00
1	G	236	GLY	N-CA-C	5.10	120.07	114.40
1	K	444	ILE	O-C-N	-5.10	116.57	121.83
1	A	65	THR	CA-C-N	5.10	127.45	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	65	THR	C-N-CA	5.10	127.45	120.46
1	B	16	ARG	NE-CZ-NH2	5.10	123.79	119.20
1	E	131	ASN	CB-CA-C	-5.10	102.32	110.79
1	H	379	VAL	O-C-N	-5.10	117.51	122.97
1	P	302	LYS	N-CA-C	5.10	119.49	113.16
1	G	234	HIS	CE1-NE2-CD2	-5.10	103.90	109.00
1	O	351	LEU	CA-C-O	-5.10	115.14	120.80
1	E	81	VAL	N-CA-C	5.10	115.82	110.62
1	G	309	GLN	OE1-CD-NE2	-5.10	117.50	122.60
1	H	495	ASP	CB-CA-C	5.10	118.93	109.70
1	I	182	ASP	N-CA-C	5.10	116.84	111.28
1	K	479	LYS	CA-C-N	5.10	128.41	122.19
1	K	479	LYS	C-N-CA	5.10	128.41	122.19
1	M	350	ASP	N-CA-C	-5.10	106.91	112.72
1	I	130	PHE	CA-CB-CG	-5.10	108.70	113.80
1	J	186	ASP	N-CA-CB	-5.10	102.63	110.12
1	M	483	ASN	O-C-N	-5.10	115.81	122.59
1	O	31	ARG	CB-CG-CD	5.10	123.02	111.30
1	A	217	ILE	N-CA-C	5.09	117.46	111.09
1	K	99	VAL	O-C-N	-5.09	116.93	121.87
1	O	294	GLY	CA-C-O	5.09	125.41	119.19
1	A	86	ALA	CA-C-N	5.09	129.34	120.68
1	A	86	ALA	C-N-CA	5.09	129.34	120.68
1	C	84	ALA	CA-C-N	5.09	129.29	121.19
1	C	84	ALA	C-N-CA	5.09	129.29	121.19
1	G	211	LYS	O-C-N	5.09	129.30	123.29
1	H	158	LEU	O-C-N	-5.09	116.72	122.12
1	H	179	LYS	CA-C-O	-5.09	115.15	120.55
1	L	89	SER	CA-C-N	5.09	129.13	120.88
1	L	89	SER	C-N-CA	5.09	129.13	120.88
1	L	120	THR	CA-CB-OG1	5.09	117.24	109.60
1	L	339	ILE	CA-C-O	5.09	127.04	121.13
1	P	132	LYS	CA-C-N	5.09	127.52	120.29
1	P	132	LYS	C-N-CA	5.09	127.52	120.29
1	F	74	HIS	CE1-NE2-CD2	-5.09	103.91	109.00
1	H	74	HIS	CB-CG-ND1	-5.09	115.06	122.70
1	H	329	GLU	CB-CA-C	-5.09	102.20	110.85
1	I	118	HIS	CA-C-O	-5.09	114.94	120.69
1	P	358	GLU	CA-C-O	5.09	127.15	121.40
1	E	29	ALA	N-CA-C	5.09	116.52	111.07
1	G	156	ASP	O-C-N	-5.09	115.82	122.59
1	I	236	GLY	N-CA-C	-5.09	108.65	115.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	251	ALA	O-C-N	-5.09	115.46	122.23
1	P	332	GLU	CA-C-N	5.09	127.81	120.38
1	P	332	GLU	C-N-CA	5.09	127.81	120.38
1	B	55	GLY	N-CA-C	-5.09	108.59	115.36
1	E	336	GLY	CA-C-O	5.09	126.19	119.58
1	H	189	THR	N-CA-CB	5.09	117.60	110.12
1	M	189	THR	N-CA-C	5.09	116.83	111.28
1	C	219	ASP	CA-C-N	5.09	129.83	121.39
1	C	219	ASP	C-N-CA	5.09	129.83	121.39
1	E	49	MET	N-CA-CB	5.09	119.60	110.80
1	F	476	ARG	NE-CZ-NH1	5.09	126.59	121.50
1	K	22	ALA	CA-C-O	5.09	126.12	120.63
1	P	68	LYS	O-C-N	-5.09	116.73	122.12
1	P	409	LEU	CA-C-O	-5.09	115.16	120.55
1	B	321	ARG	NE-CZ-NH2	5.08	123.78	119.20
1	A	140	LEU	N-CA-C	5.08	116.51	111.07
1	E	182	ASP	N-CA-CB	-5.08	102.65	110.12
1	F	504	GLU	CA-C-N	5.08	125.37	119.93
1	F	504	GLU	C-N-CA	5.08	125.37	119.93
1	K	208	LYS	O-C-N	-5.08	117.16	123.36
1	G	251	ALA	N-CA-C	5.08	117.08	110.53
1	H	196	PRO	CB-CA-C	-5.08	103.71	110.88
1	H	405	LEU	CA-C-N	5.08	128.03	120.31
1	H	405	LEU	C-N-CA	5.08	128.03	120.31
1	N	314	LYS	N-CA-C	5.08	116.82	111.28
1	P	437	GLY	O-C-N	-5.08	119.17	123.59
1	C	219	ASP	CA-CB-CG	-5.08	107.52	112.60
1	G	128	LYS	CG-CD-CE	5.08	122.98	111.30
1	O	496	ASP	CA-C-N	5.08	127.63	120.42
1	O	496	ASP	C-N-CA	5.08	127.63	120.42
1	P	50	LEU	N-CA-CB	5.08	118.83	110.90
1	B	65	THR	N-CA-CB	5.08	117.68	110.16
1	E	49	MET	CA-C-N	5.08	129.80	122.44
1	E	49	MET	C-N-CA	5.08	129.80	122.44
1	G	117	ILE	CB-CG1-CD1	5.08	124.46	113.80
1	H	154	ALA	N-CA-C	5.08	118.63	111.52
1	H	322	ARG	NE-CZ-NH1	5.08	126.58	121.50
1	H	508	VAL	CA-C-N	5.08	127.54	120.63
1	H	508	VAL	C-N-CA	5.08	127.54	120.63
1	I	438	GLY	O-C-N	-5.08	116.10	122.70
1	J	398	ILE	O-C-N	-5.08	116.94	121.87
1	K	319	ALA	N-CA-C	5.08	118.02	109.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	491	GLY	N-CA-C	-5.08	108.27	115.43
1	K	525	LYS	CG-CD-CE	5.08	122.98	111.30
1	C	73	GLN	CA-C-O	5.08	126.65	120.31
1	F	490	ASN	OD1-CG-ND2	-5.08	117.52	122.60
1	I	120	THR	CA-C-N	5.08	127.63	120.42
1	I	120	THR	C-N-CA	5.08	127.63	120.42
1	L	436	VAL	CA-C-N	5.08	127.97	122.69
1	L	436	VAL	C-N-CA	5.08	127.97	122.69
1	N	343	ILE	CA-C-N	5.08	127.33	120.38
1	N	343	ILE	C-N-CA	5.08	127.33	120.38
1	B	153	THR	CA-CB-CG2	-5.07	101.87	110.50
1	B	296	ASN	N-CA-C	-5.07	106.23	112.72
1	D	366	LYS	CA-C-O	5.07	127.09	121.56
1	I	88	ASP	N-CA-C	-5.07	105.94	111.82
1	J	428	ARG	CA-C-O	5.07	125.80	119.97
1	K	221	GLN	CA-C-O	-5.07	115.31	120.99
1	M	118	HIS	CG-CD2-NE2	5.07	112.27	107.20
1	N	408	ILE	O-C-N	-5.07	116.61	121.83
1	P	184	VAL	N-CA-CB	-5.07	102.97	110.58
1	A	371	GLU	CA-C-N	5.07	131.35	121.41
1	A	371	GLU	C-N-CA	5.07	131.35	121.41
1	F	476	ARG	NE-CZ-NH2	-5.07	114.64	119.20
1	H	74	HIS	CE1-NE2-CD2	-5.07	103.93	109.00
1	H	154	ALA	CA-C-N	5.07	131.23	121.54
1	H	154	ALA	C-N-CA	5.07	131.23	121.54
1	I	140	LEU	CA-C-O	-5.07	115.17	120.55
1	D	255	VAL	CB-CA-C	-5.07	104.69	111.13
1	E	288	ASP	CA-C-N	5.07	127.33	120.44
1	E	288	ASP	C-N-CA	5.07	127.33	120.44
1	E	317	ILE	O-C-N	-5.07	117.97	123.14
1	F	505	PRO	CA-C-O	-5.07	115.79	121.32
1	M	526	ILE	O-C-N	-5.07	117.86	123.18
1	N	138	PRO	N-CA-CB	5.07	108.57	103.25
1	D	524	MET	N-CA-C	5.07	117.70	111.82
1	F	246	ILE	CA-CB-CG1	5.07	119.02	110.40
1	F	282	TYR	CA-C-O	-5.07	114.61	120.24
1	N	75	PRO	CA-CB-CG	-5.07	94.87	104.50
1	B	14	THR	OG1-CB-CG2	-5.07	99.17	109.30
1	D	175	GLU	N-CA-C	5.07	116.80	111.28
1	E	333	LYS	N-CA-C	5.07	117.46	111.33
1	H	181	MET	CA-C-N	5.07	127.07	120.28
1	H	181	MET	C-N-CA	5.07	127.07	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	508	VAL	O-C-N	-5.07	116.07	121.80
1	I	465	GLU	O-C-N	-5.07	114.19	121.54
1	J	222	LEU	N-CA-CB	-5.07	102.87	110.17
1	K	23	LEU	CA-C-N	5.07	128.01	120.31
1	K	23	LEU	C-N-CA	5.07	128.01	120.31
1	N	148	ASP	CA-C-N	5.07	131.73	123.93
1	N	148	ASP	C-N-CA	5.07	131.73	123.93
1	P	154	ALA	O-C-N	-5.07	116.27	122.55
1	F	439	LYS	N-CA-C	5.07	118.93	112.34
1	J	522	SER	CA-C-N	5.07	128.61	120.30
1	J	522	SER	C-N-CA	5.07	128.61	120.30
1	N	362	VAL	N-CA-C	-5.07	100.35	107.75
1	O	384	ARG	NE-CZ-NH1	-5.07	116.44	121.50
1	A	311	PHE	O-C-N	-5.06	116.04	122.27
1	H	148	ASP	CA-C-N	5.06	131.21	121.54
1	H	148	ASP	C-N-CA	5.06	131.21	121.54
1	H	160	LYS	O-C-N	-5.06	116.04	122.27
1	A	84	ALA	CA-C-O	5.06	126.31	121.00
1	H	201	ASN	OD1-CG-ND2	5.06	127.66	122.60
1	H	462	ALA	CA-C-N	5.06	130.76	121.85
1	H	462	ALA	C-N-CA	5.06	130.76	121.85
1	I	342	SER	CA-C-N	5.06	127.40	120.46
1	I	342	SER	C-N-CA	5.06	127.40	120.46
1	J	30	ALA	N-CA-C	5.06	117.53	111.71
1	K	83	ALA	O-C-N	-5.06	116.38	122.15
1	L	350	ASP	CA-CB-CG	-5.06	107.54	112.60
1	L	424	GLU	CB-CA-C	-5.06	102.24	110.85
1	M	109	ALA	CA-C-N	5.06	127.06	120.28
1	M	109	ALA	C-N-CA	5.06	127.06	120.28
1	E	466	PRO	CA-C-N	5.06	127.61	120.42
1	E	466	PRO	C-N-CA	5.06	127.61	120.42
1	I	131	ASN	N-CA-C	5.06	117.69	111.82
1	N	460	GLU	N-CA-C	5.06	117.92	111.69
1	P	67	VAL	N-CA-CB	5.06	118.17	110.58
1	C	399	ASN	CA-C-N	5.06	127.31	120.38
1	C	399	ASN	C-N-CA	5.06	127.31	120.38
1	D	127	LYS	N-CA-C	5.06	116.48	111.07
1	D	158	LEU	CD1-CG-CD2	-5.06	99.67	110.80
1	E	322	ARG	NE-CZ-NH1	-5.06	116.44	121.50
1	H	73	GLN	N-CA-CB	-5.06	103.66	110.95
1	H	186	ASP	CA-CB-CG	5.06	117.66	112.60
1	H	465	GLU	CA-C-O	-5.06	115.51	119.66

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	303	GLY	CA-C-N	-5.06	115.42	122.71
1	M	303	GLY	C-N-CA	-5.06	115.42	122.71
1	M	322	ARG	N-CA-C	5.06	121.58	110.80
1	D	283	LEU	O-C-N	-5.06	116.38	122.15
1	H	387	ASN	N-CA-CB	5.06	119.04	110.49
1	I	235	ALA	N-CA-C	5.06	119.16	112.89
1	O	510	ARG	NE-CZ-NH2	5.06	123.75	119.20
1	P	188	VAL	CA-C-N	5.06	127.56	120.28
1	P	188	VAL	C-N-CA	5.06	127.56	120.28
1	B	375	ASN	CA-C-N	5.06	126.16	119.84
1	B	375	ASN	C-N-CA	5.06	126.16	119.84
1	D	137	LEU	CA-C-O	-5.06	113.23	120.16
1	L	308	ALA	N-CA-C	5.06	117.69	111.82
1	B	399	ASN	CB-CG-OD1	5.05	130.91	120.80
1	E	408	ILE	CB-CA-C	-5.05	105.25	112.22
1	K	61	ASN	N-CA-CB	5.05	118.33	110.80
1	K	172	ALA	CB-CA-C	-5.05	102.59	110.37
1	O	175	GLU	O-C-N	-5.05	116.76	122.12
1	P	350	ASP	CA-C-N	5.05	130.18	122.65
1	P	350	ASP	C-N-CA	5.05	130.18	122.65
1	B	78	LYS	CA-C-N	5.05	127.01	120.44
1	B	78	LYS	C-N-CA	5.05	127.01	120.44
1	D	239	ARG	NH1-CZ-NH2	-5.05	112.73	119.30
1	E	39	SER	N-CA-C	5.05	118.54	112.38
1	P	230	LYS	CG-CD-CE	5.05	122.92	111.30
1	P	494	ILE	CB-CA-C	5.05	119.75	110.71
1	C	501	ASN	OD1-CG-ND2	-5.05	117.55	122.60
1	L	255	VAL	N-CA-CB	-5.05	103.38	110.05
1	M	82	GLU	CA-C-N	5.05	129.22	120.58
1	M	82	GLU	C-N-CA	5.05	129.22	120.58
1	P	254	GLU	O-C-N	-5.05	117.62	123.33
1	C	86	ALA	O-C-N	-5.05	116.31	122.22
1	G	118	HIS	CE1-NE2-CD2	-5.05	103.95	109.00
1	H	322	ARG	N-CA-C	5.05	121.56	110.80
1	K	130	PHE	CA-CB-CG	5.05	118.85	113.80
1	L	195	LEU	N-CA-CB	5.05	120.01	110.42
1	O	78	LYS	CA-C-O	5.05	125.77	120.42
1	C	469	ALA	CA-C-O	5.05	125.78	119.97
1	L	233	VAL	CA-C-O	-5.05	114.47	120.78
1	O	477	HIS	CA-CB-CG	5.05	118.85	113.80
1	P	433	ALA	CA-C-N	5.05	127.46	120.29
1	P	433	ALA	C-N-CA	5.05	127.46	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	187	ALA	CA-C-N	5.05	127.37	120.46
1	H	187	ALA	C-N-CA	5.05	127.37	120.46
1	M	497	ILE	N-CA-C	5.05	117.40	111.09
1	B	70	MET	O-C-N	-5.04	117.32	123.27
1	C	451	LEU	N-CA-C	5.04	116.78	111.28
1	B	208	LYS	O-C-N	-5.04	117.41	123.31
1	C	183	ILE	N-CA-C	5.04	115.77	110.62
1	D	222	LEU	CA-C-N	5.04	130.00	122.99
1	D	222	LEU	C-N-CA	5.04	130.00	122.99
1	J	224	ARG	CA-C-N	5.04	128.75	121.54
1	J	224	ARG	C-N-CA	5.04	128.75	121.54
1	L	83	ALA	N-CA-C	-5.04	105.49	111.69
1	L	114	ASP	CA-C-O	5.04	125.80	120.10
1	M	351	LEU	CA-C-N	-5.04	116.67	122.77
1	M	351	LEU	C-N-CA	-5.04	116.67	122.77
1	N	483	ASN	CB-CG-ND2	-5.04	108.83	116.40
1	O	278	GLU	CB-CG-CD	-5.04	104.03	112.60
1	B	216	THR	N-CA-C	5.04	117.74	110.28
1	D	19	GLY	CA-C-N	5.04	131.17	121.54
1	D	19	GLY	C-N-CA	5.04	131.17	121.54
1	D	86	ALA	N-CA-C	5.04	116.78	111.28
1	F	87	GLN	CA-C-N	5.04	127.97	120.31
1	F	87	GLN	C-N-CA	5.04	127.97	120.31
1	H	49	MET	CB-CA-C	5.04	119.00	109.37
1	J	240	ARG	NH1-CZ-NH2	-5.04	112.75	119.30
1	E	261	SER	CA-CB-OG	5.04	121.18	111.10
1	L	74	HIS	CB-CA-C	5.04	115.95	110.15
1	P	54	PHE	CB-CA-C	-5.04	101.67	110.09
1	D	526	ILE	O-C-N	-5.04	117.20	123.10
1	E	306	ASP	O-C-N	-5.04	116.78	122.12
1	F	277	ASP	N-CA-C	5.04	118.69	112.54
1	G	391	LEU	CA-C-N	5.04	127.03	120.28
1	G	391	LEU	C-N-CA	5.04	127.03	120.28
1	J	44	LYS	N-CA-CB	5.04	118.15	110.44
1	L	186	ASP	O-C-N	-5.04	116.78	122.12
1	C	94	GLY	CA-C-N	5.04	127.53	120.28
1	C	94	GLY	C-N-CA	5.04	127.53	120.28
1	F	122	ILE	N-CA-CB	-5.04	104.66	110.55
1	N	239	ARG	CB-CA-C	-5.04	101.66	110.17
1	O	197	ASP	CA-CB-CG	-5.04	107.56	112.60
1	D	28	LEU	CA-C-O	5.04	125.89	120.55
1	D	113	VAL	CA-C-O	5.04	126.19	120.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	472	ASP	CA-C-N	5.04	129.19	120.58
1	D	472	ASP	C-N-CA	5.04	129.19	120.58
1	D	493	ILE	CA-C-O	-5.04	115.82	121.36
1	E	314	LYS	CA-C-N	5.04	131.15	121.18
1	E	314	LYS	C-N-CA	5.04	131.15	121.18
1	H	310	HIS	ND1-CE1-NE2	5.04	113.44	108.40
1	K	389	MET	CA-C-O	5.04	125.83	120.24
1	M	224	ARG	CB-CG-CD	5.04	122.88	111.30
1	B	55	GLY	CA-C-O	5.03	124.61	119.02
1	B	454	ILE	CA-CB-CG1	5.03	118.96	110.40
1	C	266	ILE	CA-CB-CG1	5.03	118.96	110.40
1	E	255	VAL	CA-CB-CG2	5.03	118.96	110.40
1	E	367	MET	CG-SD-CE	-5.03	89.83	100.90
1	H	378	ALA	O-C-N	-5.03	117.30	123.19
1	K	172	ALA	CA-C-O	5.03	124.06	118.52
1	N	58	THR	N-CA-CB	5.03	118.97	110.77
1	O	404	SER	CA-C-N	5.03	127.44	120.29
1	O	404	SER	C-N-CA	5.03	127.44	120.29
1	P	185	ILE	CB-CG1-CD1	5.03	124.37	113.80
1	N	156	ASP	N-CA-C	5.03	121.52	110.80
1	B	467	ILE	CA-C-N	5.03	127.96	120.31
1	B	467	ILE	C-N-CA	5.03	127.96	120.31
1	C	428	ARG	NE-CZ-NH1	-5.03	116.47	121.50
1	H	38	ARG	CD-NE-CZ	5.03	131.44	124.40
1	K	317	ILE	CA-CB-CG1	5.03	118.95	110.40
1	H	26	ASN	CA-CB-CG	5.03	117.63	112.60
1	K	441	GLN	O-C-N	5.03	129.07	122.33
1	M	310	HIS	CE1-NE2-CD2	-5.03	103.97	109.00
1	F	180	ILE	N-CA-C	5.03	115.80	110.72
1	F	411	GLU	O-C-N	-5.03	115.54	121.32
1	H	192	ALA	CA-C-O	-5.03	113.32	120.51
1	I	284	LYS	CA-C-N	5.03	127.29	120.65
1	I	284	LYS	C-N-CA	5.03	127.29	120.65
1	J	338	ARG	CA-C-N	5.03	127.43	120.49
1	J	338	ARG	C-N-CA	5.03	127.43	120.49
1	L	275	PHE	CA-CB-CG	-5.03	108.77	113.80
1	C	255	VAL	N-CA-C	5.03	116.87	109.63
1	E	42	GLY	N-CA-C	5.03	122.59	112.34
1	G	122	ILE	CA-CB-CG2	-5.03	101.96	110.50
1	G	287	VAL	N-CA-CB	5.03	116.43	110.55
1	G	488	VAL	N-CA-C	5.03	117.33	111.05
1	H	87	GLN	OE1-CD-NE2	-5.03	117.57	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	J	193	GLU	O-C-N	-5.03	115.54	121.32
1	D	38	ARG	N-CA-CB	-5.02	102.56	110.30
1	D	156	ASP	CB-CA-C	5.02	120.42	110.42
1	J	251	ALA	O-C-N	-5.02	116.10	122.43
1	O	190	THR	N-CA-C	5.02	117.41	111.33
1	B	104	LEU	N-CA-C	5.02	119.12	112.89
1	B	497	ILE	CA-C-N	5.02	127.01	120.28
1	B	497	ILE	C-N-CA	5.02	127.01	120.28
1	F	329	GLU	CB-CG-CD	5.02	121.14	112.60
1	G	403	TYR	N-CA-CB	5.02	118.07	110.28
1	K	14	THR	OG1-CB-CG2	-5.02	99.25	109.30
1	K	454	ILE	O-C-N	-5.02	115.37	121.10
1	N	118	HIS	CA-C-N	5.02	124.80	119.28
1	N	118	HIS	C-N-CA	5.02	124.80	119.28
1	F	118	HIS	CG-CD2-NE2	5.02	112.22	107.20
1	J	121	ILE	CA-C-N	-5.02	114.23	120.56
1	J	121	ILE	C-N-CA	-5.02	114.23	120.56
1	N	454	ILE	CB-CA-C	5.02	120.50	111.36
1	O	252	SER	CA-C-O	5.02	126.71	121.19
1	A	128	LYS	O-C-N	-5.02	116.43	122.15
1	A	460	GLU	CB-CA-C	-5.02	101.03	110.67
1	B	344	LYS	CA-C-N	5.02	131.12	121.18
1	B	344	LYS	C-N-CA	5.02	131.12	121.18
1	D	201	ASN	N-CA-CB	5.02	117.56	110.13
1	H	143	LYS	O-C-N	-5.02	117.35	123.27
1	H	302	LYS	CB-CA-C	5.02	119.10	111.02
1	M	451	LEU	CB-CA-C	-5.02	101.34	110.63
1	C	321	ARG	CA-C-N	5.02	131.12	121.54
1	C	321	ARG	C-N-CA	5.02	131.12	121.54
1	D	259	GLU	CG-CD-OE1	5.02	129.94	118.40
1	D	323	VAL	CA-CB-CG2	-5.02	101.87	110.40
1	J	98	ALA	N-CA-C	5.02	116.75	111.28
1	J	111	SER	CA-C-O	5.02	126.09	120.82
1	J	333	LYS	CB-CG-CD	5.02	122.84	111.30
1	P	449	ASP	O-C-N	-5.02	116.80	122.12
1	N	184	VAL	O-C-N	5.02	126.74	121.87
1	O	308	ALA	N-CA-C	5.02	117.64	111.82
1	P	513	LEU	O-C-N	-5.02	115.61	122.33
1	A	138	PRO	N-CA-CB	5.01	108.52	103.25
1	B	361	LYS	N-CA-C	5.01	117.78	109.46
1	C	41	LEU	N-CA-CB	-5.01	102.59	109.91
1	E	204	LEU	CA-C-N	5.01	127.41	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	204	LEU	C-N-CA	5.01	127.41	120.29
1	H	272	ILE	CB-CA-C	-5.01	103.98	112.16
1	L	32	THR	CA-C-O	-5.01	115.11	120.42
1	A	65	THR	N-CA-CB	5.01	117.58	110.16
1	G	407	ASN	CA-C-O	-5.01	115.11	120.42
1	M	198	GLY	O-C-N	5.01	128.57	122.60
1	B	498	TYR	CA-CB-CG	-5.01	104.88	113.90
1	C	251	ALA	CB-CA-C	-5.01	100.75	111.78
1	D	329	GLU	CB-CA-C	-5.01	102.33	110.85
1	F	95	THR	CB-CA-C	-5.01	101.36	110.63
1	K	313	ALA	N-CA-CB	-5.01	102.74	110.16
1	M	342	SER	O-C-N	-5.01	118.06	123.42
1	M	530	ILE	O-C-N	-5.01	117.89	123.20
1	N	351	LEU	CB-CA-C	-5.01	101.06	109.48
1	B	285	ASP	CA-C-N	5.01	128.33	120.82
1	B	285	ASP	C-N-CA	5.01	128.33	120.82
1	B	383	LEU	N-CA-C	5.01	116.86	107.99
1	C	203	SER	O-C-N	-5.01	116.64	123.15
1	D	46	LEU	CA-C-N	5.01	131.11	121.54
1	D	46	LEU	C-N-CA	5.01	131.11	121.54
1	E	118	HIS	CE1-NE2-CD2	-5.01	103.99	109.00
1	G	173	GLU	N-CA-C	5.01	117.42	109.96
1	J	157	ALA	N-CA-C	5.01	117.12	111.11
1	E	380	ASN	N-CA-CB	-5.01	102.14	110.80
1	H	469	ALA	O-C-N	-5.01	116.44	122.15
1	J	200	TYR	CA-C-O	5.01	126.61	120.60
1	A	131	ASN	OD1-CG-ND2	-5.01	117.59	122.60
1	C	107	GLU	CA-C-N	5.01	129.14	120.58
1	C	107	GLU	C-N-CA	5.01	129.14	120.58
1	E	441	GLN	N-CA-C	-5.01	105.90	111.36
1	E	459	ALA	O-C-N	-5.01	116.11	122.27
1	F	96	THR	CA-C-N	5.01	126.99	120.28
1	F	96	THR	C-N-CA	5.01	126.99	120.28
1	G	432	TYR	CB-CG-CD1	5.01	128.31	120.80
1	K	216	THR	CA-CB-OG1	5.01	117.11	109.60
1	K	262	ALA	N-CA-C	5.01	117.69	110.28
1	N	52	ASP	CA-C-N	5.01	126.99	120.28
1	N	52	ASP	C-N-CA	5.01	126.99	120.28
1	M	146	VAL	O-C-N	-5.00	115.62	122.03
1	B	489	ILE	CA-CB-CG1	5.00	118.91	110.40
1	E	332	GLU	CA-C-N	5.00	127.23	120.38
1	E	332	GLU	C-N-CA	5.00	127.23	120.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	452	GLU	N-CA-C	5.00	118.48	112.38
1	E	486	VAL	O-C-N	-5.00	117.78	123.18
1	F	289	LYS	CG-CD-CE	5.00	122.81	111.30
1	F	404	SER	O-C-N	-5.00	116.12	122.27
1	M	454	ILE	N-CA-CB	5.00	118.21	111.21
1	O	56	ASP	CA-C-O	5.00	126.39	120.69

There are no chirality outliers.

All (329) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	154	ALA	Peptide
1	A	16	ARG	Sidechain
1	A	163	TYR	Sidechain
1	A	193	GLU	Peptide
1	A	213	LYS	Peptide
1	A	231	GLU	Peptide
1	A	232	VAL	Peptide
1	A	240	ARG	Sidechain
1	A	260	ILE	Peptide
1	A	267	THR	Peptide
1	A	315	ARG	Sidechain
1	A	321	ARG	Sidechain
1	A	338	ARG	Mainchain
1	A	347	THR	Peptide
1	A	396	ARG	Sidechain
1	A	447	TYR	Sidechain
1	A	454	ILE	Mainchain
1	A	474	ARG	Sidechain
1	A	504	GLU	Peptide
1	A	507	ARG	Sidechain
1	B	154	ALA	Peptide
1	B	155	ARG	Sidechain
1	B	163	TYR	Sidechain
1	B	193	GLU	Peptide
1	B	20	ARG	Sidechain
1	B	232	VAL	Peptide
1	B	239	ARG	Sidechain
1	B	260	ILE	Peptide
1	B	267	THR	Peptide
1	B	31	ARG	Sidechain
1	B	322	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	B	325	ARG	Sidechain
1	B	347	THR	Peptide
1	B	350	ASP	Mainchain
1	B	353	TYR	Sidechain
1	B	38	ARG	Sidechain
1	B	386	SER	Mainchain
1	B	428	ARG	Sidechain
1	B	454	ILE	Mainchain
1	B	474	ARG	Sidechain
1	B	492	LYS	Peptide
1	C	154	ALA	Mainchain,Peptide
1	C	193	GLU	Peptide
1	C	20	ARG	Sidechain
1	C	224	ARG	Sidechain
1	C	232	VAL	Peptide
1	C	260	ILE	Peptide
1	C	267	THR	Peptide
1	C	282	TYR	Sidechain
1	C	311	PHE	Sidechain
1	C	321	ARG	Sidechain
1	C	347	THR	Peptide
1	C	353	TYR	Sidechain
1	C	369	PHE	Sidechain
1	C	384	ARG	Sidechain
1	C	403	TYR	Sidechain
1	C	428	ARG	Sidechain
1	C	430	ARG	Sidechain
1	C	454	ILE	Mainchain
1	C	477	HIS	Sidechain
1	C	498	TYR	Sidechain
1	D	154	ALA	Peptide
1	D	163	TYR	Sidechain
1	D	193	GLU	Peptide
1	D	196	PRO	Peptide
1	D	200	TYR	Sidechain
1	D	231	GLU	Peptide
1	D	239	ARG	Sidechain
1	D	260	ILE	Peptide
1	D	267	THR	Peptide
1	D	268	SER	Peptide
1	D	282	TYR	Sidechain
1	D	347	THR	Peptide

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Mol	Chain	Res	Type	Group
1	D	353	TYR	Sidechain
1	D	406	ARG	Sidechain
1	D	447	TYR	Sidechain
1	D	453	GLU	Sidechain
1	D	454	ILE	Mainchain
1	D	498	TYR	Sidechain
1	D	510	ARG	Sidechain
1	E	115	GLN	Mainchain
1	E	147	SER	Peptide
1	E	154	ALA	Peptide
1	E	193	GLU	Peptide
1	E	196	PRO	Peptide
1	E	200	TYR	Sidechain
1	E	232	VAL	Peptide
1	E	234	HIS	Sidechain
1	E	260	ILE	Peptide
1	E	267	THR	Peptide
1	E	268	SER	Peptide
1	E	31	ARG	Sidechain
1	E	315	ARG	Sidechain
1	E	325	ARG	Sidechain
1	E	338	ARG	Peptide
1	E	347	THR	Peptide
1	E	353	TYR	Sidechain
1	E	386	SER	Peptide
1	E	406	ARG	Sidechain
1	E	434	ARG	Sidechain
1	E	454	ILE	Mainchain
1	E	498	TYR	Sidechain
1	E	507	ARG	Sidechain
1	E	510	ARG	Sidechain
1	F	154	ALA	Peptide
1	F	155	ARG	Sidechain
1	F	193	GLU	Peptide
1	F	20	ARG	Sidechain
1	F	232	VAL	Peptide
1	F	239	ARG	Sidechain
1	F	260	ILE	Peptide
1	F	267	THR	Peptide
1	F	275	PHE	Sidechain
1	F	338	ARG	Peptide
1	F	347	THR	Peptide

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Mol	Chain	Res	Type	Group
1	F	434	ARG	Sidechain
1	F	454	ILE	Mainchain
1	F	498	TYR	Sidechain
1	F	510	ARG	Sidechain
1	G	116	ASN	Mainchain
1	G	126	PHE	Sidechain
1	G	154	ALA	Peptide
1	G	193	GLU	Peptide
1	G	196	PRO	Peptide
1	G	213	LYS	Peptide
1	G	232	VAL	Peptide
1	G	260	ILE	Peptide
1	G	267	THR	Peptide
1	G	268	SER	Peptide
1	G	282	TYR	Sidechain
1	G	31	ARG	Sidechain
1	G	311	PHE	Sidechain
1	G	325	ARG	Sidechain
1	G	347	THR	Peptide
1	G	360	ARG	Sidechain
1	G	396	ARG	Sidechain
1	G	413	TYR	Sidechain
1	G	428	ARG	Sidechain
1	G	432	TYR	Sidechain
1	G	434	ARG	Sidechain
1	G	454	ILE	Mainchain
1	G	492	LYS	Peptide
1	G	510	ARG	Sidechain
1	G	525	LYS	Mainchain
1	H	154	ALA	Peptide
1	H	16	ARG	Sidechain
1	H	170	PHE	Sidechain
1	H	191	VAL	Peptide
1	H	193	GLU	Peptide
1	H	200	TYR	Sidechain
1	H	232	VAL	Peptide
1	H	260	ILE	Peptide
1	H	267	THR	Peptide
1	H	282	TYR	Sidechain
1	H	31	ARG	Sidechain
1	H	347	THR	Peptide
1	H	360	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	H	406	ARG	Sidechain
1	H	430	ARG	Sidechain
1	H	447	TYR	Sidechain
1	H	474	ARG	Sidechain
1	H	476	ARG	Sidechain
1	H	529	LEU	Mainchain
1	I	154	ALA	Peptide
1	I	155	ARG	Sidechain
1	I	193	GLU	Peptide
1	I	200	TYR	Sidechain
1	I	213	LYS	Peptide
1	I	232	VAL	Peptide
1	I	260	ILE	Peptide
1	I	267	THR	Peptide
1	I	282	TYR	Sidechain
1	I	302	LYS	Peptide
1	I	310	HIS	Sidechain
1	I	311	PHE	Sidechain
1	I	322	ARG	Sidechain
1	I	338	ARG	Peptide
1	I	347	THR	Peptide
1	I	353	TYR	Sidechain
1	I	360	ARG	Sidechain
1	I	396	ARG	Sidechain
1	I	406	ARG	Sidechain
1	I	432	TYR	Sidechain
1	I	454	ILE	Mainchain
1	I	465	GLU	Mainchain
1	I	476	ARG	Sidechain
1	J	126	PHE	Sidechain
1	J	130	PHE	Sidechain
1	J	154	ALA	Mainchain,Peptide
1	J	16	ARG	Sidechain
1	J	193	GLU	Peptide
1	J	200	TYR	Sidechain
1	J	231	GLU	Peptide
1	J	232	VAL	Peptide
1	J	260	ILE	Peptide
1	J	267	THR	Peptide
1	J	282	TYR	Sidechain
1	J	302	LYS	Peptide
1	J	338	ARG	Peptide

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Mol	Chain	Res	Type	Group
1	J	347	THR	Peptide
1	J	353	TYR	Sidechain
1	J	38	ARG	Sidechain
1	J	384	ARG	Sidechain
1	J	403	TYR	Sidechain
1	J	430	ARG	Sidechain
1	J	434	ARG	Sidechain
1	J	454	ILE	Mainchain
1	J	510	ARG	Sidechain
1	K	126	PHE	Sidechain
1	K	154	ALA	Peptide
1	K	163	TYR	Sidechain
1	K	193	GLU	Peptide
1	K	198	GLY	Peptide
1	K	224	ARG	Sidechain
1	K	232	VAL	Peptide
1	K	260	ILE	Peptide
1	K	267	THR	Peptide
1	K	275	PHE	Sidechain
1	K	338	ARG	Peptide,Sidechain
1	K	347	THR	Peptide
1	K	403	TYR	Sidechain
1	K	413	TYR	Sidechain
1	K	42	GLY	Peptide
1	K	432	TYR	Sidechain
1	K	454	ILE	Mainchain
1	K	476	ARG	Sidechain
1	K	72	ILE	Peptide
1	L	154	ALA	Peptide
1	L	155	ARG	Sidechain
1	L	163	TYR	Sidechain
1	L	191	VAL	Peptide
1	L	193	GLU	Peptide
1	L	196	PRO	Peptide
1	L	198	GLY	Peptide
1	L	231	GLU	Peptide
1	L	239	ARG	Sidechain
1	L	260	ILE	Peptide
1	L	267	THR	Mainchain,Peptide
1	L	268	SER	Peptide
1	L	347	THR	Peptide
1	L	406	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	L	454	ILE	Mainchain
1	L	476	ARG	Sidechain
1	M	154	ALA	Peptide
1	M	191	VAL	Peptide
1	M	193	GLU	Peptide
1	M	232	VAL	Peptide
1	M	240	ARG	Sidechain
1	M	260	ILE	Peptide
1	M	267	THR	Peptide
1	M	302	LYS	Peptide
1	M	31	ARG	Sidechain
1	M	322	ARG	Sidechain
1	M	347	THR	Peptide
1	M	350	ASP	Mainchain
1	M	360	ARG	Sidechain
1	M	403	TYR	Sidechain
1	M	454	ILE	Mainchain
1	M	510	ARG	Sidechain
1	M	525	LYS	Mainchain
1	N	154	ALA	Peptide
1	N	155	ARG	Sidechain
1	N	191	VAL	Peptide
1	N	193	GLU	Peptide
1	N	213	LYS	Peptide
1	N	232	VAL	Peptide
1	N	239	ARG	Sidechain
1	N	260	ILE	Peptide
1	N	267	THR	Peptide
1	N	31	ARG	Sidechain
1	N	311	PHE	Sidechain
1	N	315	ARG	Sidechain
1	N	338	ARG	Sidechain
1	N	347	THR	Peptide
1	N	353	TYR	Sidechain
1	N	384	ARG	Sidechain
1	N	396	ARG	Sidechain
1	N	406	ARG	Sidechain
1	N	413	TYR	Sidechain
1	N	432	TYR	Sidechain
1	N	447	TYR	Sidechain
1	N	454	ILE	Mainchain
1	N	474	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	N	476	ARG	Sidechain
1	N	492	LYS	Peptide
1	N	507	ARG	Sidechain
1	O	154	ALA	Peptide
1	O	170	PHE	Sidechain
1	O	193	GLU	Peptide
1	O	224	ARG	Sidechain
1	O	232	VAL	Peptide
1	O	239	ARG	Sidechain
1	O	260	ILE	Peptide
1	O	267	THR	Peptide
1	O	302	LYS	Peptide
1	O	321	ARG	Sidechain
1	O	338	ARG	Peptide
1	O	347	THR	Peptide
1	O	353	TYR	Sidechain
1	O	369	PHE	Sidechain
1	O	396	ARG	Sidechain
1	O	403	TYR	Sidechain
1	O	454	ILE	Mainchain
1	O	507	ARG	Sidechain
1	O	510	ARG	Sidechain
1	P	154	ALA	Peptide
1	P	155	ARG	Sidechain
1	P	196	PRO	Peptide
1	P	200	TYR	Sidechain
1	P	213	LYS	Peptide
1	P	232	VAL	Peptide
1	P	260	ILE	Peptide
1	P	267	THR	Mainchain
1	P	282	TYR	Sidechain
1	P	31	ARG	Sidechain
1	P	347	THR	Peptide
1	P	360	ARG	Sidechain
1	P	384	ARG	Sidechain
1	P	403	TYR	Sidechain
1	P	428	ARG	Sidechain
1	P	447	TYR	Sidechain
1	P	454	ILE	Mainchain
1	P	476	ARG	Sidechain
1	P	525	LYS	Mainchain
1	P	72	ILE	Peptide

5.2 Too-close contacts ⓘ

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	3937	0	4104	12	0
1	B	3937	0	4104	15	0
1	C	3937	0	4104	13	0
1	D	3937	0	4104	8	0
1	E	3937	0	4104	18	0
1	F	3937	0	4104	15	0
1	G	3937	0	4104	21	0
1	H	3937	0	4104	12	0
1	I	3937	0	4104	11	0
1	J	3937	0	4104	13	0
1	K	3937	0	4104	15	0
1	L	3937	0	4104	15	0
1	M	3937	0	4104	15	0
1	N	3937	0	4104	13	0
1	O	3937	0	4104	17	0
1	P	3937	0	4104	12	0
All	All	62992	0	65664	221	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 (221) 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:K:454:ILE:HG22	1:K:455:PRO:HD2	1.67	0.77
1:I:162:VAL:HB	1:I:181:MET:HE3	1.70	0.74
1:K:232:VAL:HG11	1:K:368:VAL:HG21	1.72	0.72
1:L:343:ILE:H	1:L:343:ILE:HD12	1.56	0.69
1:J:87:GLN:HE21	1:J:91:VAL:HG22	1.60	0.66
1:F:454:ILE:HB	1:F:455:PRO:HD2	1.79	0.65
1:P:454:ILE:HB	1:P:455:PRO:HD2	1.78	0.64
1:I:229:ASP:HA	1:I:367:MET:HE3	1.79	0.64
1:G:343:ILE:H	1:G:343:ILE:HD12	1.62	0.62
1:E:234:HIS:CD2	1:E:236:GLY:H	2.17	0.62
1:H:454:ILE:HG22	1:H:455:PRO:HD2	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:454:ILE:HG22	1:G:455:PRO:HD2	1.83	0.61
1:M:304:ILE:HD11	1:M:319:ALA:HB1	1.83	0.61
1:L:234:HIS:CD2	1:L:236:GLY:H	2.18	0.61
1:C:234:HIS:CD2	1:C:236:GLY:H	2.19	0.61
1:O:227:VAL:CG1	1:O:367:MET:HE2	2.31	0.60
1:O:227:VAL:HG11	1:O:367:MET:HE2	1.84	0.59
1:P:158:LEU:HD12	1:P:158:LEU:H	1.68	0.59
1:G:185:ILE:HG23	1:G:405:LEU:HD13	1.84	0.58
1:K:234:HIS:CD2	1:K:236:GLY:H	2.20	0.58
1:A:101:LEU:HD21	1:A:513:LEU:HD12	1.85	0.58
1:N:454:ILE:CB	1:N:455:PRO:HD2	2.34	0.58
1:N:454:ILE:HB	1:N:455:PRO:HD2	1.85	0.58
1:N:334:ALA:HB1	1:N:373:ALA:HB1	1.85	0.57
1:O:51:ILE:HD12	1:O:57:VAL:HG22	1.87	0.57
1:F:234:HIS:CD2	1:F:236:GLY:H	2.23	0.57
1:D:234:HIS:CD2	1:D:236:GLY:H	2.23	0.56
1:K:41:LEU:HD22	1:K:100:VAL:HG11	1.87	0.56
1:O:118:HIS:CD2	1:P:463:GLY:HA2	2.41	0.56
1:B:505:PRO:HG2	1:B:508:VAL:HG23	1.87	0.56
1:A:234:HIS:CD2	1:A:236:GLY:H	2.24	0.55
1:F:44:LYS:HE2	1:F:488:VAL:HG12	1.89	0.55
1:J:429:LEU:HD23	1:J:448:ALA:HB2	1.89	0.55
1:E:334:ALA:HB2	1:E:376:PRO:HB3	1.87	0.55
1:M:232:VAL:HG21	1:M:368:VAL:HG21	1.88	0.54
1:C:232:VAL:HG12	1:C:232:VAL:O	2.06	0.54
1:E:454:ILE:CB	1:E:455:PRO:HD2	2.38	0.54
1:G:469:ALA:HB1	1:G:493:ILE:HD11	1.89	0.53
1:K:266:ILE:HD13	1:K:266:ILE:H	1.73	0.53
1:M:170:PHE:CE2	1:M:172:ALA:HB3	2.44	0.53
1:G:293:ILE:HG23	1:G:348:PRO:HA	1.91	0.53
1:I:63:GLY:O	1:I:67:VAL:HG22	2.09	0.52
1:N:238:PRO:O	1:N:318:LEU:HD12	2.10	0.52
1:O:87:GLN:HE21	1:O:87:GLN:HA	1.75	0.52
1:G:246:ILE:HD12	1:G:335:LEU:HD11	1.92	0.52
1:L:233:VAL:HG21	1:L:320:VAL:HA	1.91	0.52
1:N:415:VAL:HB	1:N:421:ILE:HG21	1.91	0.52
1:F:223:ILE:HG22	1:F:225:GLY:H	1.74	0.51
1:G:187:ALA:HB1	1:G:222:LEU:HG	1.90	0.51
1:F:118:HIS:CD2	1:G:463:GLY:HA2	2.46	0.51
1:B:304:ILE:CD1	1:B:319:ALA:HB1	2.41	0.51
1:J:424:GLU:HG2	1:J:482:THR:HG23	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:234:HIS:CD2	1:M:236:GLY:H	2.29	0.50
1:A:411:GLU:CD	1:A:510:ARG:HH22	2.20	0.50
1:B:304:ILE:HD11	1:B:319:ALA:HB1	1.92	0.50
1:L:211:LYS:HB2	1:L:391:LEU:HD11	1.93	0.50
1:O:454:ILE:CB	1:O:455:PRO:HD2	2.41	0.50
1:N:360:ARG:HH12	1:N:371:GLU:CD	2.19	0.50
1:E:497:ILE:H	1:E:497:ILE:HD13	1.75	0.50
1:F:454:ILE:CB	1:F:455:PRO:HD2	2.42	0.50
1:D:467:ILE:HD12	1:D:470:LEU:HD23	1.93	0.50
1:E:91:VAL:HG22	1:E:94:GLY:H	1.77	0.50
1:I:255:VAL:HG22	1:I:282:TYR:HB3	1.93	0.49
1:J:505:PRO:HG2	1:J:508:VAL:HG23	1.95	0.49
1:B:29:ALA:CB	1:B:74:HIS:CD2	2.95	0.49
1:G:454:ILE:CB	1:G:455:PRO:HD2	2.42	0.49
1:J:287:VAL:HG11	1:J:311:PHE:HB3	1.94	0.49
1:E:454:ILE:HB	1:E:455:PRO:HD2	1.95	0.49
1:J:454:ILE:HB	1:J:455:PRO:HD2	1.95	0.49
1:G:454:ILE:CG2	1:G:455:PRO:HD2	2.43	0.49
1:M:304:ILE:CD1	1:M:319:ALA:HB1	2.43	0.48
1:O:299:ILE:HG21	1:O:328:ILE:HD11	1.94	0.48
1:L:416:PRO:HA	1:L:503:VAL:HG12	1.94	0.48
1:C:146:VAL:HG11	1:C:198:GLY:HA2	1.95	0.48
1:F:530:ILE:HD12	1:G:50:LEU:HG	1.96	0.48
1:G:340:ILE:HD11	1:G:350:ASP:HB2	1.94	0.48
1:G:323:VAL:HG12	1:G:328:ILE:HG12	1.96	0.48
1:K:232:VAL:HG11	1:K:368:VAL:CG2	2.43	0.48
1:A:27:ILE:HG23	1:A:106:LEU:HB3	1.95	0.48
1:O:229:ASP:HA	1:O:367:MET:HE3	1.96	0.48
1:K:246:ILE:HD12	1:K:335:LEU:HD13	1.94	0.48
1:N:248:VAL:HG11	1:N:328:ILE:HG23	1.95	0.48
1:B:343:ILE:HD12	1:B:343:ILE:H	1.79	0.47
1:A:267:THR:C	1:A:269:PRO:HD3	2.39	0.47
1:F:180:ILE:O	1:F:184:VAL:HG23	2.15	0.47
1:H:202:VAL:HG22	1:H:203:SER:H	1.80	0.47
1:N:185:ILE:HG13	1:N:405:LEU:HD22	1.97	0.47
1:G:340:ILE:HD11	1:G:350:ASP:CB	2.45	0.47
1:N:158:LEU:HD22	1:N:158:LEU:H	1.79	0.47
1:D:462:ALA:HB2	1:D:488:VAL:HG13	1.97	0.47
1:H:287:VAL:HG11	1:H:311:PHE:HB3	1.96	0.47
1:H:334:ALA:HB1	1:H:373:ALA:HB1	1.97	0.46
1:F:287:VAL:HG11	1:F:311:PHE:HB3	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:454:ILE:CG2	1:K:455:PRO:HD2	2.42	0.46
1:O:454:ILE:HB	1:O:455:PRO:HD2	1.96	0.46
1:E:413:TYR:HB2	1:E:506:ILE:HG21	1.97	0.46
1:C:101:LEU:HD13	1:C:454:ILE:HD11	1.98	0.46
1:I:433:ALA:HB2	1:I:444:ILE:HG22	1.98	0.46
1:E:414:ILE:HD12	1:E:503:VAL:HG21	1.97	0.46
1:B:64:ALA:HA	1:B:67:VAL:HG22	1.97	0.46
1:B:264:ILE:HD13	1:B:271:GLN:HB2	1.98	0.46
1:C:287:VAL:HG13	1:C:312:LEU:HD23	1.98	0.46
1:O:485:GLY:HA3	1:O:497:ILE:HD11	1.98	0.46
1:A:158:LEU:HD22	1:A:158:LEU:H	1.81	0.45
1:B:424:GLU:HA	1:B:477:HIS:HE1	1.80	0.45
1:L:343:ILE:H	1:L:343:ILE:CD1	2.22	0.45
1:L:427:ALA:CB	1:L:477:HIS:CE1	3.00	0.45
1:A:211:LYS:HB2	1:A:391:LEU:HD21	1.98	0.45
1:J:231:GLU:CD	1:J:231:GLU:H	2.24	0.45
1:L:143:LYS:HB2	1:L:413:TYR:CE2	2.52	0.45
1:M:232:VAL:HG21	1:M:368:VAL:CG2	2.46	0.45
1:G:266:ILE:HA	1:G:272:ILE:HD11	1.98	0.45
1:K:340:ILE:HD12	1:K:340:ILE:C	2.42	0.45
1:L:266:ILE:HA	1:L:272:ILE:HD11	1.99	0.45
1:L:494:ILE:HG13	1:L:495:ASP:N	2.31	0.45
1:M:227:VAL:HG22	1:M:369:PHE:CD2	2.52	0.45
1:O:277:ASP:OD1	1:O:281:LYS:NZ	2.50	0.45
1:F:222:LEU:HD21	1:F:379:VAL:HB	1.98	0.45
1:P:430:ARG:NH2	1:P:449:ASP:OD1	2.49	0.45
1:J:454:ILE:CB	1:J:455:PRO:HD2	2.47	0.44
1:B:106:LEU:HD23	1:B:106:LEU:HA	1.90	0.44
1:M:464:LEU:HD11	1:M:492:LYS:HA	1.98	0.44
1:E:152:ALA:HA	1:E:158:LEU:HD23	1.98	0.44
1:E:217:ILE:H	1:E:217:ILE:HG13	1.63	0.44
1:J:241:VAL:HG11	1:J:296:ASN:HB3	1.99	0.44
1:M:306:ASP:HA	1:M:309:GLN:HG2	1.99	0.44
1:O:152:ALA:HB2	1:O:189:THR:HG21	2.00	0.44
1:C:105:PHE:CZ	1:C:447:TYR:CZ	3.06	0.44
1:O:255:VAL:H	1:O:255:VAL:HG23	1.52	0.44
1:P:226:ILE:HG23	1:P:370:ILE:HB	2.00	0.44
1:B:27:ILE:HG12	1:B:106:LEU:HD22	1.98	0.44
1:P:33:LEU:HD23	1:P:80:LEU:HD23	2.00	0.44
1:K:33:LEU:HD23	1:K:80:LEU:HD23	2.00	0.44
1:B:454:ILE:CB	1:B:455:PRO:HD2	2.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:254:GLU:HA	1:G:283:LEU:HD21	2.00	0.43
1:L:192:ALA:HB2	1:L:409:LEU:HD13	2.00	0.43
1:A:130:PHE:CZ	1:A:134:LEU:HD11	2.53	0.43
1:A:424:GLU:HA	1:A:477:HIS:CE1	2.52	0.43
1:B:505:PRO:HG2	1:B:508:VAL:CG2	2.48	0.43
1:N:227:VAL:HG22	1:N:369:PHE:CD2	2.52	0.43
1:C:136:LEU:HD11	1:C:428:ARG:HB2	2.01	0.43
1:D:87:GLN:HB3	1:D:95:THR:HG23	2.01	0.43
1:H:456:MET:HE3	1:H:470:LEU:HD22	2.00	0.43
1:P:343:ILE:HD12	1:P:343:ILE:H	1.84	0.43
1:A:184:VAL:O	1:A:188:VAL:HG23	2.18	0.43
1:K:343:ILE:HD12	1:K:343:ILE:H	1.84	0.43
1:F:90:GLU:HB3	1:F:511:GLN:HE22	1.83	0.43
1:E:246:ILE:HD12	1:E:335:LEU:HD13	2.00	0.43
1:H:232:VAL:HG11	1:H:318:LEU:HD11	2.01	0.43
1:D:454:ILE:HB	1:D:455:PRO:HD2	2.01	0.43
1:M:119:PRO:HA	1:M:122:ILE:HD12	2.00	0.43
1:F:331:LEU:HD12	1:F:331:LEU:HA	1.91	0.43
1:N:220:SER:HB3	1:N:383:LEU:HD12	2.01	0.43
1:E:424:GLU:HA	1:E:477:HIS:HE1	1.84	0.42
1:O:106:LEU:HD23	1:O:106:LEU:HA	1.88	0.42
1:H:233:VAL:O	1:H:234:HIS:CD2	2.73	0.42
1:L:419:GLY:HA2	1:L:455:PRO:HG3	2.01	0.42
1:G:454:ILE:HB	1:G:455:PRO:HD2	2.01	0.42
1:J:192:ALA:O	1:J:202:VAL:HG23	2.19	0.42
1:O:454:ILE:HG22	1:O:455:PRO:HD2	2.00	0.42
1:P:349:GLU:C	1:P:351:LEU:H	2.28	0.42
1:B:477:HIS:CD2	1:B:477:HIS:C	2.97	0.42
1:C:454:ILE:HG22	1:C:455:PRO:HD2	2.02	0.42
1:J:433:ALA:HB2	1:J:444:ILE:HG22	2.02	0.42
1:C:192:ALA:HB2	1:C:202:VAL:HG11	2.02	0.42
1:E:184:VAL:O	1:E:188:VAL:HG23	2.20	0.42
1:H:308:ALA:O	1:H:312:LEU:HG	2.20	0.42
1:M:293:ILE:HG23	1:M:348:PRO:HA	2.01	0.42
1:C:416:PRO:HA	1:C:503:VAL:HG12	2.01	0.42
1:L:475:ALA:O	1:L:479:LYS:HG2	2.19	0.41
1:C:79:LEU:HA	1:C:79:LEU:HD12	1.80	0.41
1:C:430:ARG:HH12	1:C:452:GLU:CD	2.29	0.41
1:H:193:GLU:HA	1:H:194:PRO:HD3	1.94	0.41
1:I:349:GLU:C	1:I:351:LEU:H	2.26	0.41
1:J:421:ILE:HG23	1:J:422:GLU:N	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:27:ILE:HG23	1:I:106:LEU:HB3	2.02	0.41
1:K:210:ASP:HB3	1:K:367:MET:HE1	2.03	0.41
1:M:192:ALA:HB1	1:M:200:TYR:CD2	2.55	0.41
1:B:454:ILE:HB	1:B:455:PRO:HD2	2.02	0.41
1:E:207:ILE:HG21	1:E:402:LEU:HD21	2.02	0.41
1:A:454:ILE:CB	1:A:455:PRO:HD2	2.51	0.41
1:L:212:LYS:O	1:L:384:ARG:HA	2.20	0.41
1:M:75:PRO:HB2	1:N:49:MET:SD	2.60	0.41
1:N:232:VAL:HG11	1:N:318:LEU:HG	2.02	0.41
1:I:402:LEU:HD23	1:I:402:LEU:HA	1.97	0.41
1:M:253:LEU:HD23	1:M:304:ILE:HG23	2.02	0.41
1:O:425:LEU:HB2	1:O:451:LEU:HD13	2.02	0.41
1:F:248:VAL:HG11	1:F:328:ILE:HG23	2.01	0.41
1:H:424:GLU:HG3	1:H:482:THR:HG23	2.02	0.41
1:F:114:ASP:C	1:F:116:ASN:H	2.28	0.41
1:J:264:ILE:HD13	1:J:272:ILE:HG12	2.02	0.41
1:E:486:VAL:HA	1:E:493:ILE:HA	2.03	0.41
1:G:101:LEU:HD11	1:G:454:ILE:HG21	2.03	0.41
1:G:363:GLY:C	1:G:365:ASP:H	2.28	0.41
1:I:312:LEU:HD13	1:I:319:ALA:HB2	2.02	0.41
1:I:373:ALA:O	1:I:376:PRO:HD3	2.20	0.41
1:I:424:GLU:HA	1:I:477:HIS:CE1	2.56	0.41
1:O:193:GLU:HA	1:O:194:PRO:HD3	1.96	0.41
1:P:227:VAL:HG11	1:P:367:MET:HE2	2.02	0.41
1:P:494:ILE:HG21	1:P:500:ILE:HD11	2.03	0.41
1:E:133:SER:HA	1:E:425:LEU:HD22	2.03	0.41
1:G:362:VAL:HG11	1:G:382:LEU:HD11	2.03	0.41
1:P:211:LYS:HA	1:P:383:LEU:HB3	2.02	0.41
1:A:454:ILE:HG22	1:A:455:PRO:HD2	2.02	0.40
1:E:193:GLU:HA	1:E:194:PRO:HD3	1.81	0.40
1:H:506:ILE:HG23	1:H:507:ARG:N	2.36	0.40
1:M:228:LEU:HD23	1:M:228:LEU:HA	1.92	0.40
1:B:241:VAL:HG12	1:B:244:ALA:HB2	2.02	0.40
1:C:357:VAL:HG22	1:C:370:ILE:HD12	2.02	0.40
1:H:454:ILE:H	1:H:454:ILE:HG13	1.77	0.40
1:D:267:THR:HG22	1:D:267:THR:O	2.21	0.40
1:E:227:VAL:HG22	1:E:369:PHE:CD2	2.56	0.40
1:F:137:LEU:HD12	1:F:137:LEU:C	2.46	0.40
1:P:234:HIS:CD2	1:P:236:GLY:H	2.39	0.40
1:D:185:ILE:HD13	1:D:185:ILE:HA	1.96	0.40
1:D:228:LEU:HD23	1:D:228:LEU:HA	1.94	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:247:ALA:HB3	1:G:298:VAL:HG22	2.03	0.40
1:K:246:ILE:HD12	1:K:335:LEU:CD1	2.51	0.40
1:K:299:ILE:HG21	1:K:328:ILE:CD1	2.51	0.40
1:L:246:ILE:HD12	1:L:335:LEU:HD13	2.03	0.40
1:K:312:LEU:HD13	1:K:319:ALA:HB2	2.04	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

There are no protein backbone outliers to report in this entry.

5.3.2 Protein sidechains [i](#)

There are no protein residues with a non-rotameric sidechain to report in this entry.

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 ⓘ

There are no chain breaks in this entry.

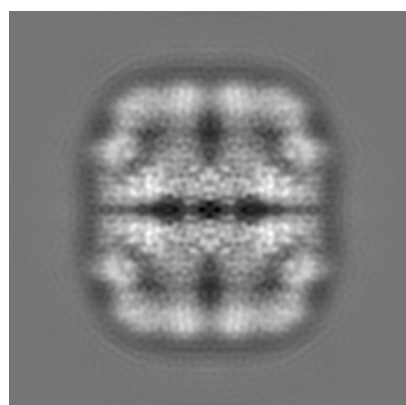
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-5391. These allow visual inspection of the internal detail of the map and identification of artifacts.

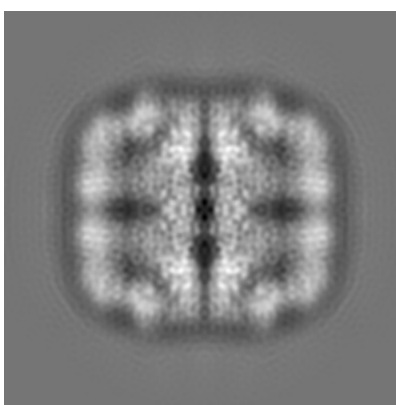
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

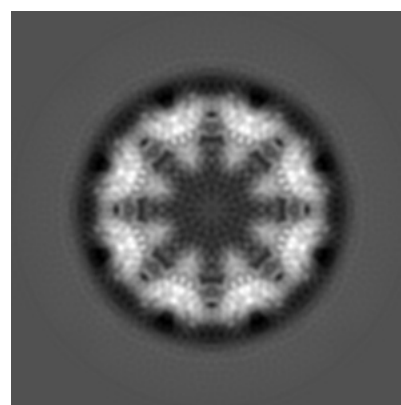
6.1.1 Primary map



X



Y

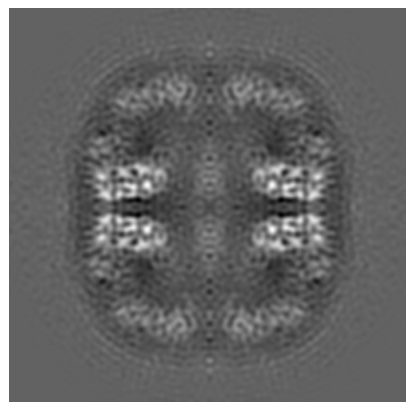


Z

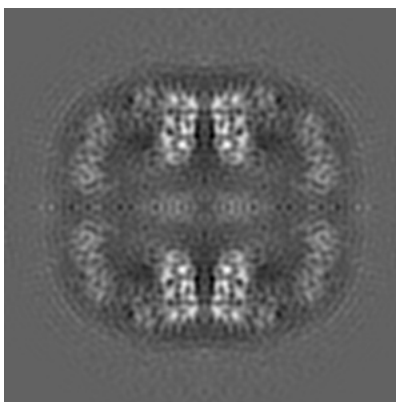
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

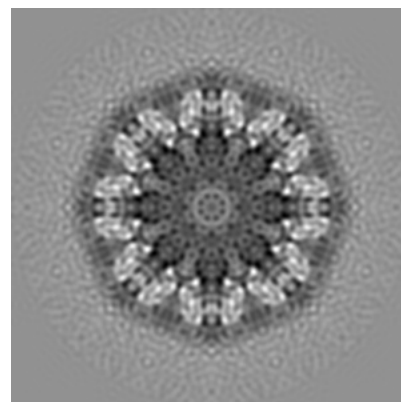
6.2.1 Primary map



X Index: 144



Y Index: 144

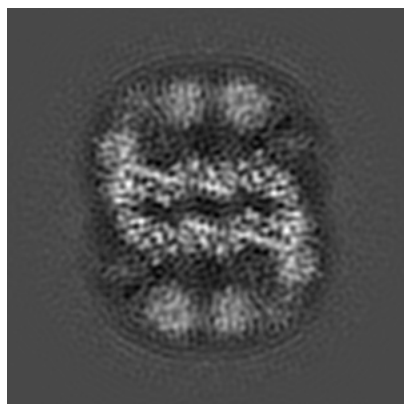


Z Index: 144

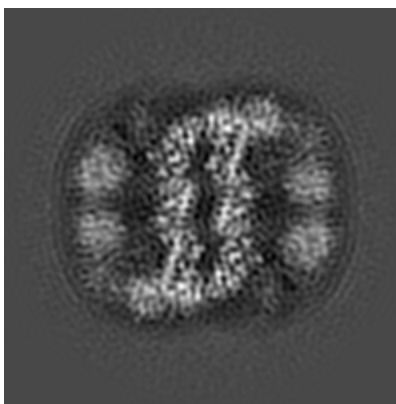
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

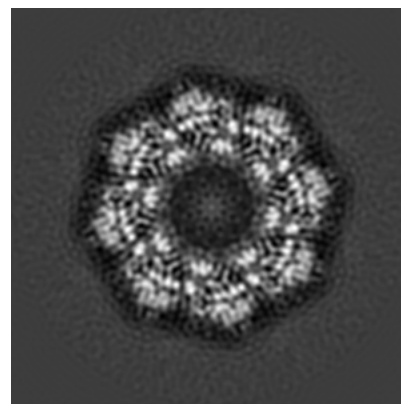
6.3.1 Primary map



X Index: 100



Y Index: 100

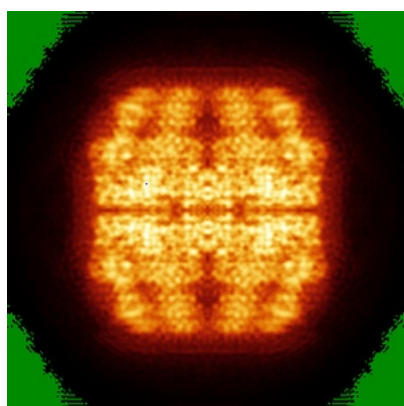


Z Index: 157

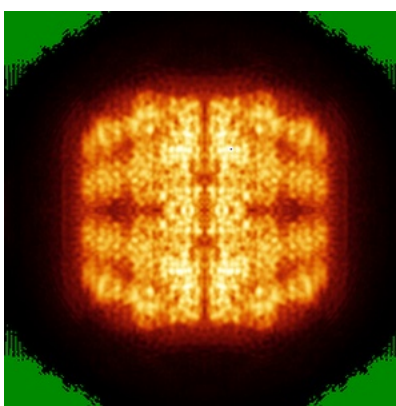
The images above show the largest variance slices of the map in three orthogonal directions.

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

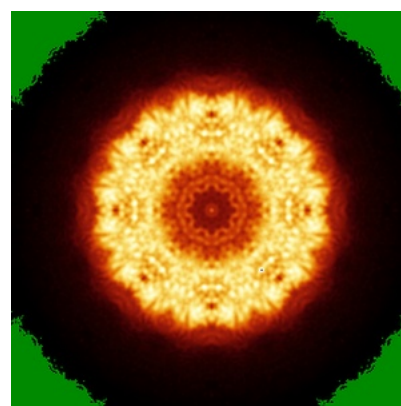
6.4.1 Primary map



X



Y

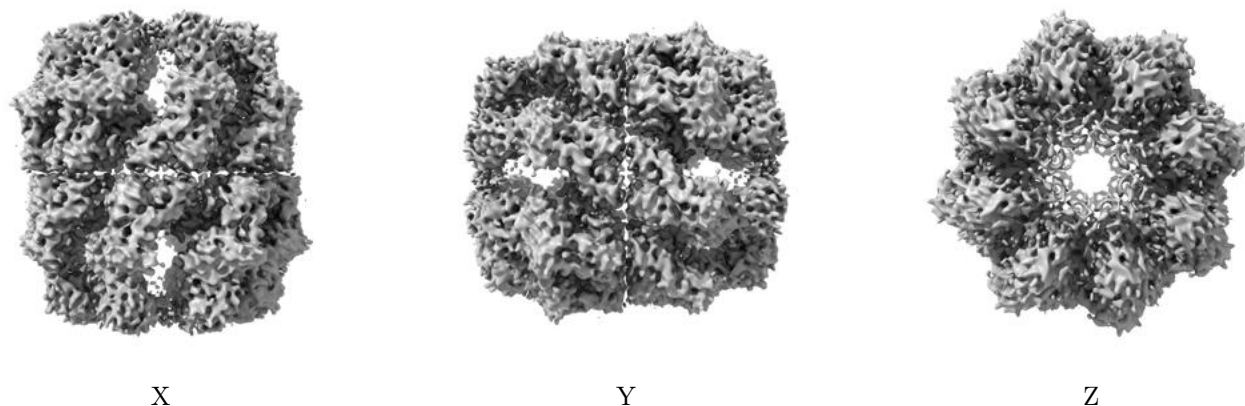


Z

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

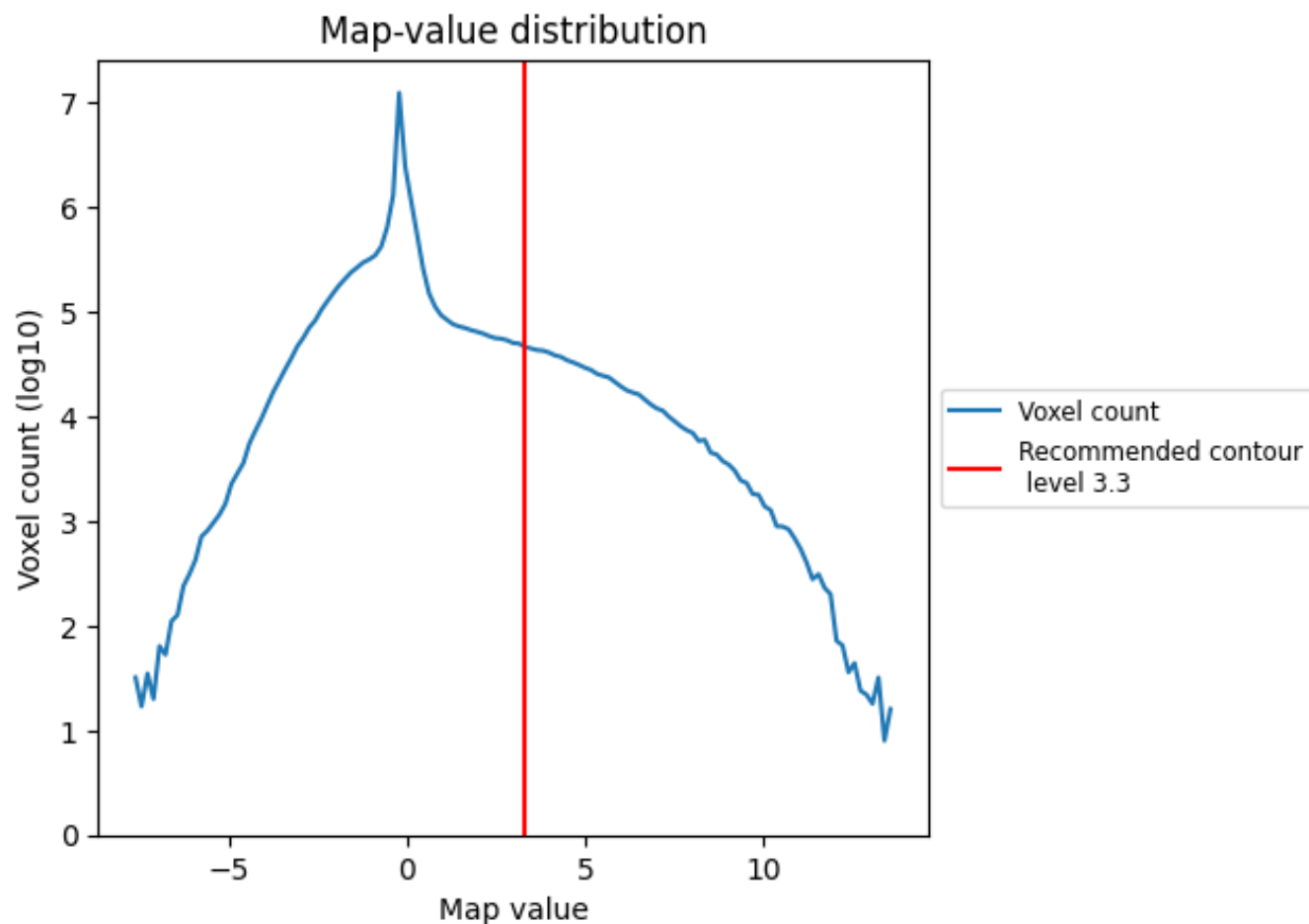
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

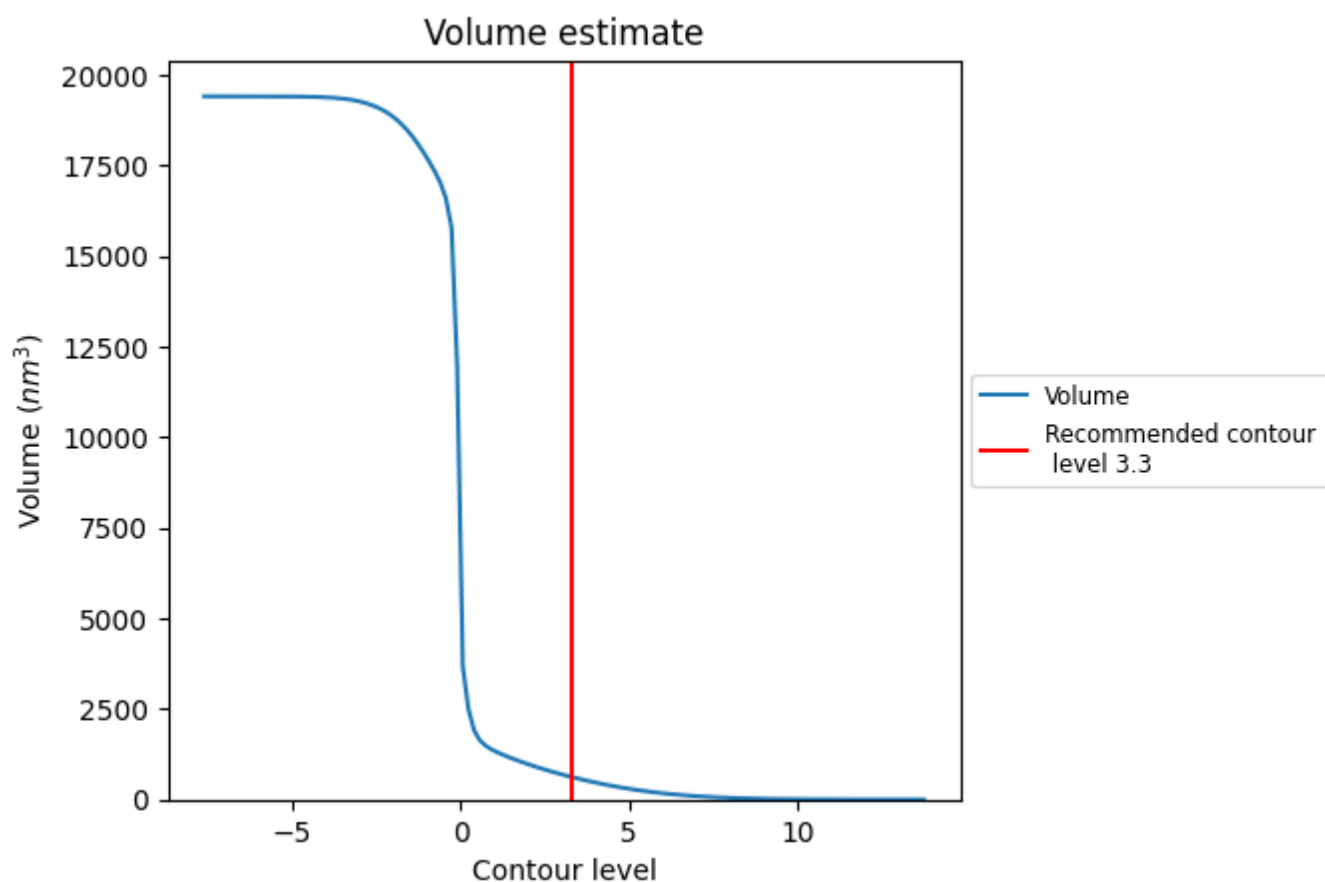
This section contains the results of statistical analysis of the map.

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.

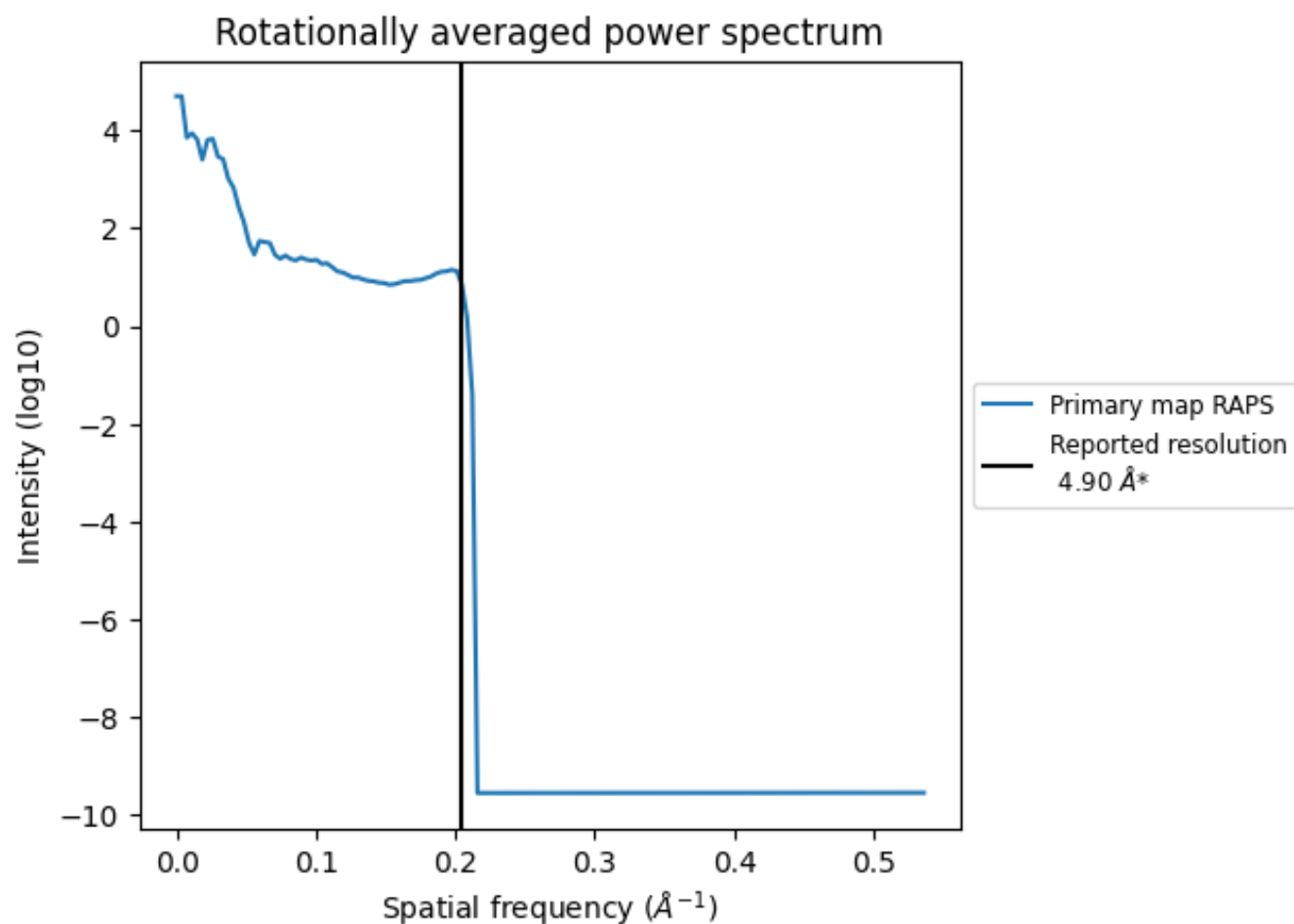
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 619 nm³; this corresponds to an approximate mass of 560 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 0.204 Å⁻¹

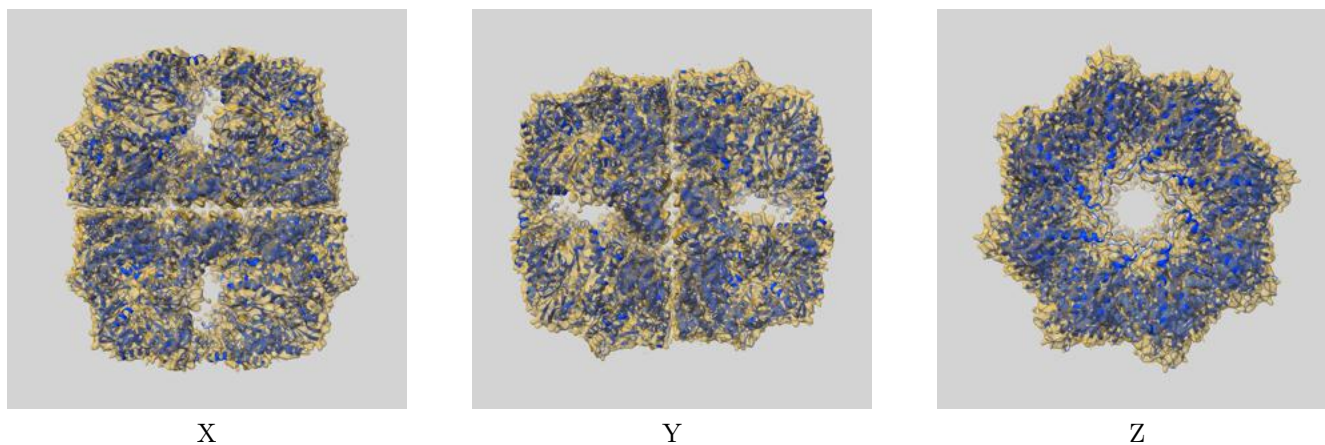
8 Fourier-Shell correlation

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

9 Map-model fit [i](#)

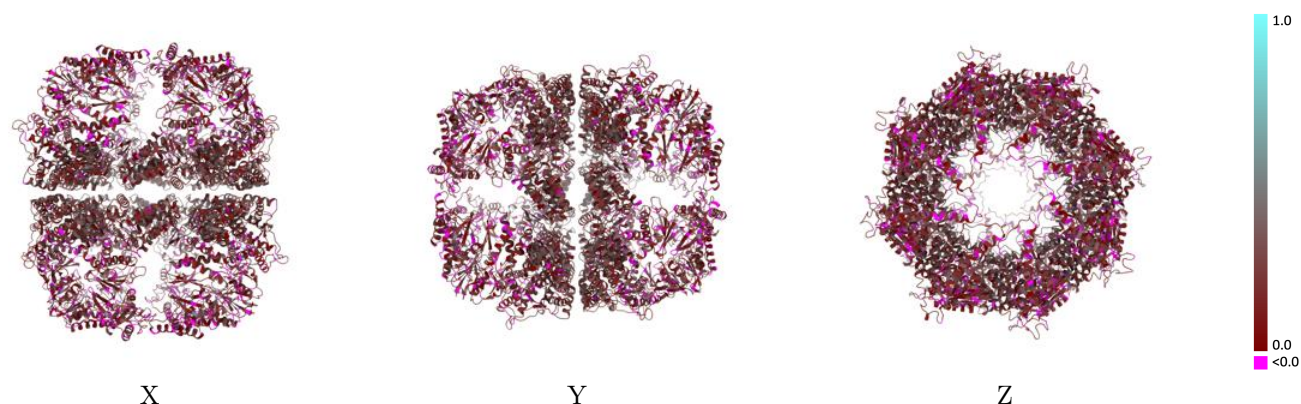
This section contains information regarding the fit between EMDB map EMD-5391 and PDB model 3J1B. Per-residue inclusion information can be found in section [3](#) on page [5](#).

9.1 Map-model overlay [i](#)



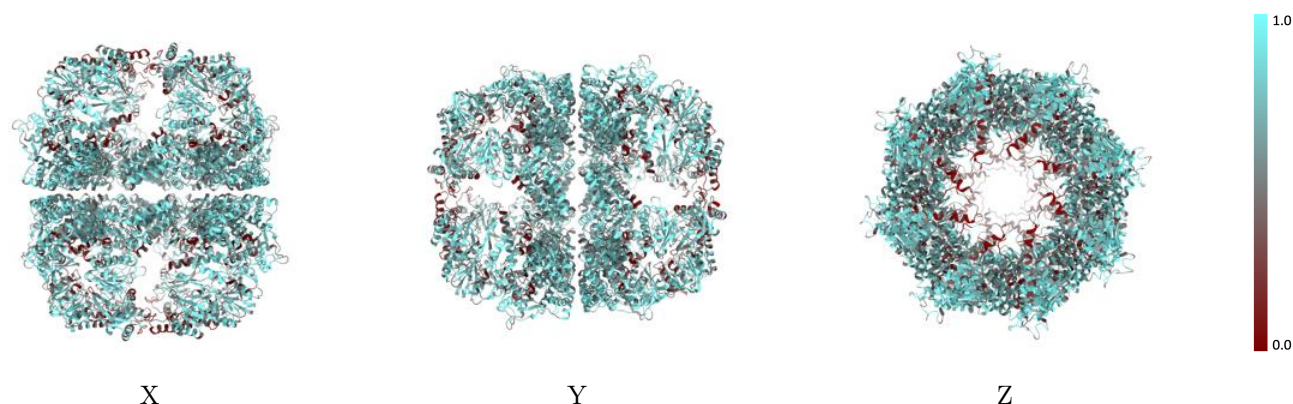
The images above show the 3D surface view of the map at the recommended contour level 3.3 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



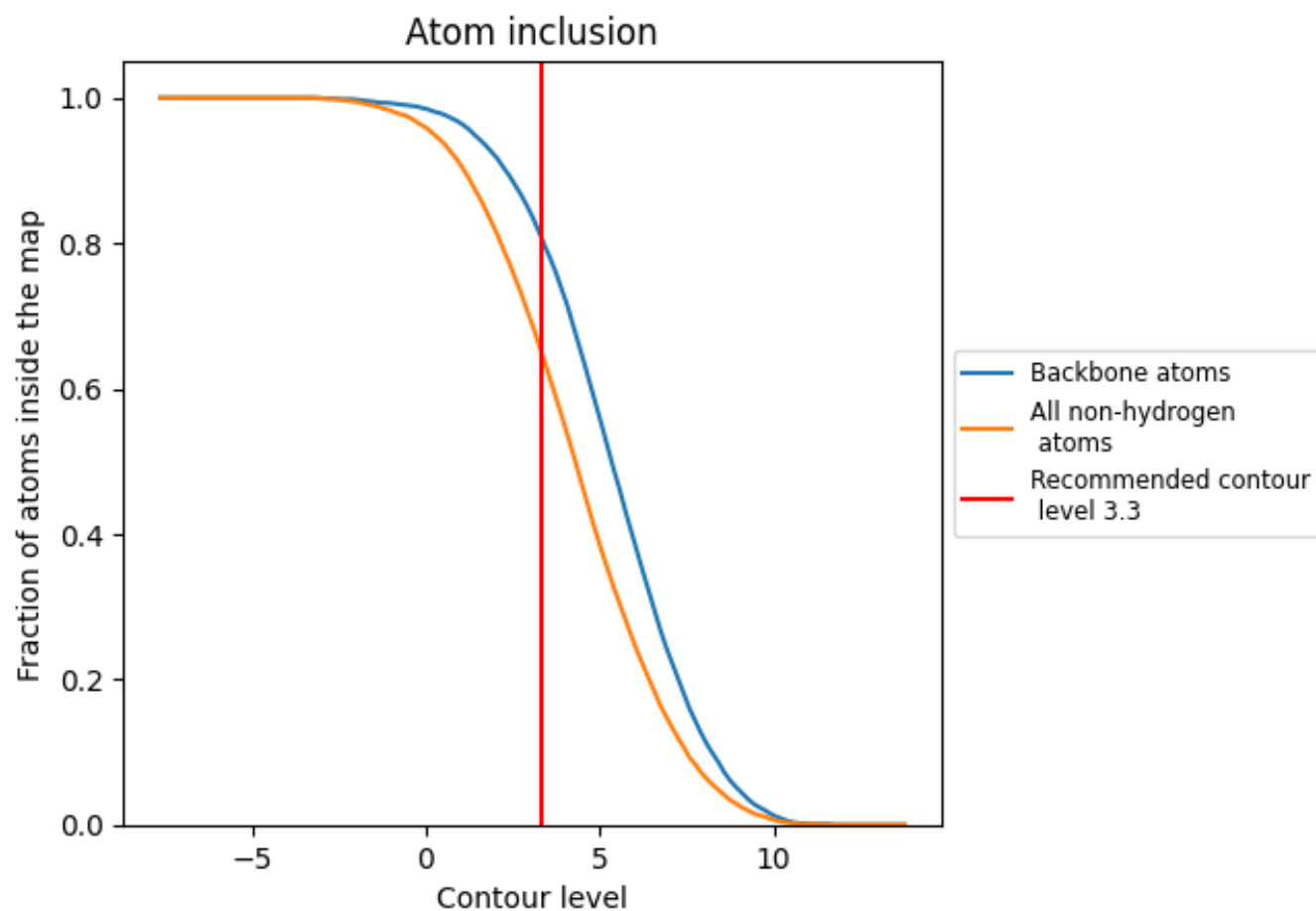
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (3.3).

9.4 Atom inclusion [i](#)



At the recommended contour level, 81% of all backbone atoms, 65% 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 (3.3) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.6530	 0.1960
A	 0.6510	 0.1990
B	 0.6530	 0.1930
C	 0.6490	 0.1970
D	 0.6580	 0.1980
E	 0.6560	 0.1960
F	 0.6560	 0.2010
G	 0.6560	 0.1970
H	 0.6470	 0.1910
I	 0.6480	 0.1950
J	 0.6520	 0.1920
K	 0.6550	 0.1960
L	 0.6480	 0.1910
M	 0.6540	 0.2000
N	 0.6500	 0.1990
O	 0.6580	 0.1960
P	 0.6600	 0.1970

