



Full wwPDB EM Validation Report ⓘ

Mar 14, 2026 – 04:47 AM UTC

PDB ID : 5FIL / pdb_00005fil
EMDB ID : EMD-3170
Title : Bovine mitochondrial ATP synthase state 3b
Authors : Zhou, A.; Rohou, A.; Schep, D.G.; Bason, J.V.; Montgomery, M.G.; Walker, J.E.; Grigorieff, N.; Rubinstein, J.L.
Deposited on : 2015-09-28
Resolution : 7.10 Å(reported)
Based on initial models : 2XND, 2WSS, 2CLY

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:

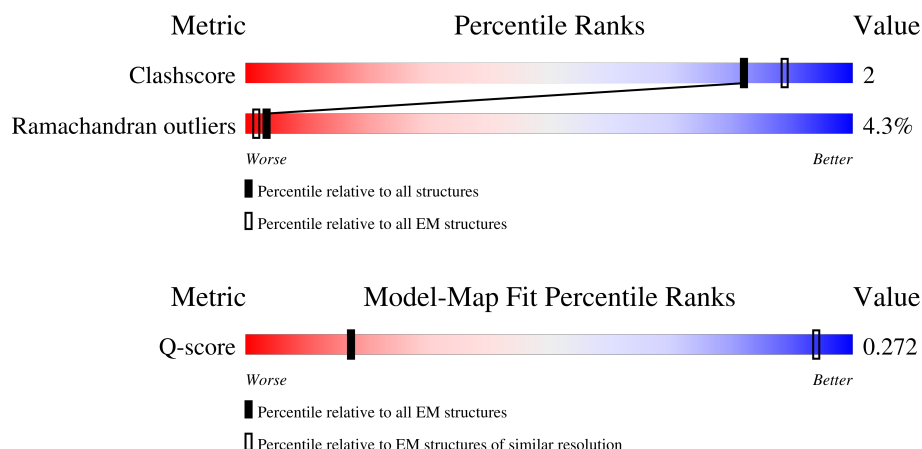
EMDB validation analysis : 0.0.1.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & 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 7.10 Å.

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



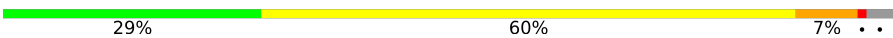
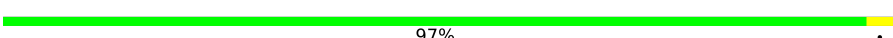
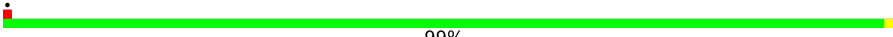
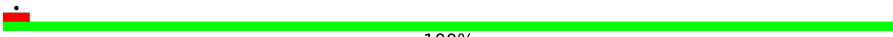
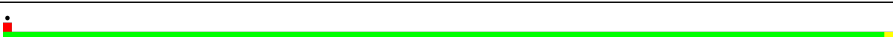
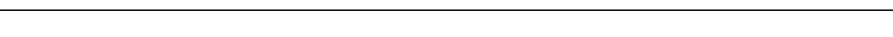
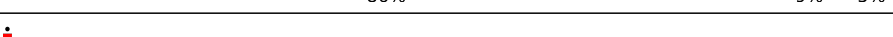
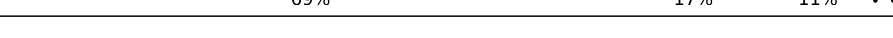
Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Q-score	-	25397	464 (6.60 - 7.60)

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

Mol	Chain	Length	Quality of chain
1	A	510	44% 51% 5%
1	B	510	43% 48% 6%
1	C	510	48% 44% 5%
2	D	482	45% 50% . .
2	E	482	37% 58% . .

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Mol	Chain	Length	Quality of chain
2	F	482	
3	G	273	
4	H	146	
5	I	50	
6	J	72	
6	K	72	
6	L	72	
6	M	72	
6	N	72	
6	O	72	
6	P	72	
6	Q	72	
7	S	190	
8	T	174	
9	U	124	
10	V	77	
11	W	217	

2 Entry composition [i](#)

There are 11 unique types of molecules in this entry. The entry contains 18546 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 ATP SYNTHASE SUBUNIT ALPHA, MITOCHONDRIAL.

Mol	Chain	Residues	Atoms				AltConf	Trace
1	A	509	Total	C	N	O	0	0
			2035	1018	509	508		
1	B	480	Total	C	N	O	0	0
			1918	960	480	478		
1	C	487	Total	C	N	O	0	0
			1948	974	487	487		

There are 3 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	481	GLY	SER	conflict	UNP P19483
B	481	GLY	SER	conflict	UNP P19483
C	481	GLY	SER	conflict	UNP P19483

- Molecule 2 is a protein called ATP SYNTHASE SUBUNIT BETA, MITOCHONDRIAL.

Mol	Chain	Residues	Atoms				AltConf	Trace
2	D	467	Total	C	N	O	0	0
			1867	934	467	466		
2	E	466	Total	C	N	O	0	0
			1863	932	466	465		
2	F	466	Total	C	N	O	0	0
			1863	932	466	465		

- Molecule 3 is a protein called ATP SYNTHASE SUBUNIT GAMMA, MITOCHONDRIAL.

Mol	Chain	Residues	Atoms				AltConf	Trace
3	G	264	Total	C	N	O	0	0
			1053	528	264	261		

- Molecule 4 is a protein called ATP SYNTHASE SUBUNIT DELTA, MITOCHONDRIAL.

Mol	Chain	Residues	Atoms				AltConf	Trace
4	H	131	Total	C	N	O	0	0
			523	262	131	130		

- Molecule 5 is a protein called ATP SYNTHASE SUBUNIT EPSILON, MITOCHONDRIAL.

Mol	Chain	Residues	Atoms				AltConf	Trace
5	I	47	Total	C	N	O	0	0
			187	94	47	46		

- Molecule 6 is a protein called ATP SYNTHASE F(0) COMPLEX SUBUNIT C1, MITOCHONDRIAL.

Mol	Chain	Residues	Atoms				AltConf	Trace
6	J	72	Total	C	N	O	0	0
			288	144	72	72		
6	K	72	Total	C	N	O	0	0
			288	144	72	72		
6	L	72	Total	C	N	O	0	0
			288	144	72	72		
6	M	72	Total	C	N	O	0	0
			288	144	72	72		
6	N	72	Total	C	N	O	0	0
			288	144	72	72		
6	O	72	Total	C	N	O	0	0
			288	144	72	72		
6	P	72	Total	C	N	O	0	0
			288	144	72	72		
6	Q	72	Total	C	N	O	0	0
			288	144	72	72		

- Molecule 7 is a protein called ATP SYNTHASE SUBUNIT O, MITOCHONDRIAL.

Mol	Chain	Residues	Atoms				AltConf	Trace
7	S	168	Total	C	N	O	0	1
			669	334	168	167		

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
S	129	THR	ALA	conflict	UNP P13621

- Molecule 8 is a protein called ATP SYNTHASE F(0) COMPLEX SUBUNIT B1, MITOCHONDRIAL.

Mol	Chain	Residues	Atoms				AltConf	Trace
8	T	174	Total	C	N	O	0	0
			697	348	174	175		

- Molecule 9 is a protein called ATP SYNTHASE SUBUNIT D, MITOCHONDRIAL.

Mol	Chain	Residues	Atoms				AltConf	Trace
9	U	122	Total	C	N	O	0	1
			485	242	122	121		

- Molecule 10 is a protein called ATP SYNTHASE-COUPPLING FACTOR 6, MITOCHONDRIAL.

Mol	Chain	Residues	Atoms				AltConf	Trace
10	V	67	Total	C	N	O	0	1
			265	132	67	66		

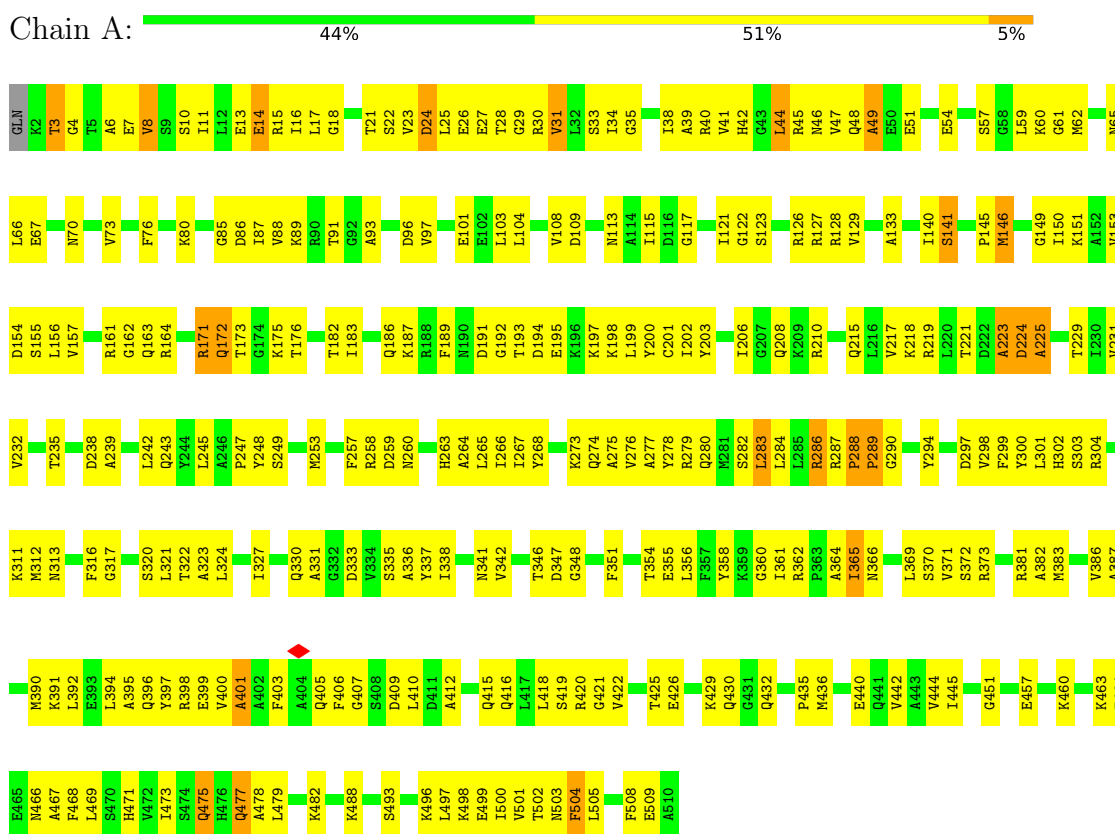
- Molecule 11 is a protein called ATP SYNTHASE SUBUNIT BETA, MITOCHONDRIAL.

Mol	Chain	Residues	Atoms				AltConf	Trace
11	W	217	Total	C	N	O	0	0
			869	434	217	218		

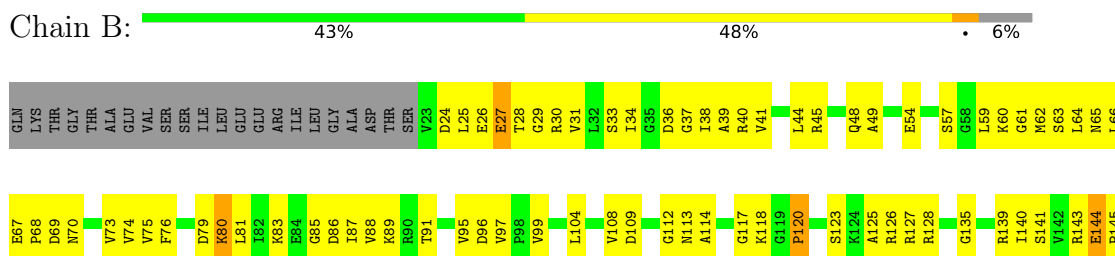
3 Residue-property plots

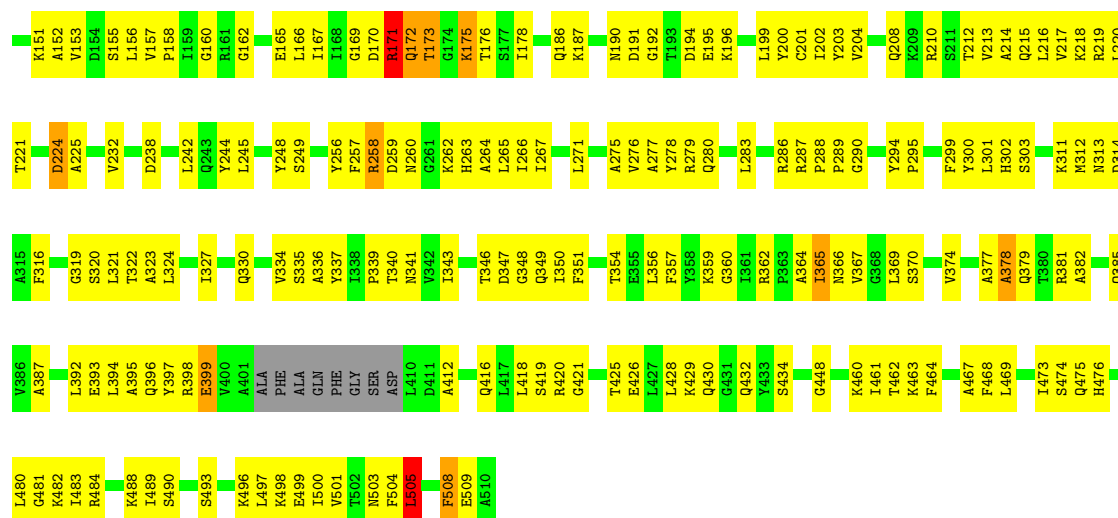
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion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

• Molecule 1: ATP SYNTHASE SUBUNIT ALPHA, MITOCHONDRIAL



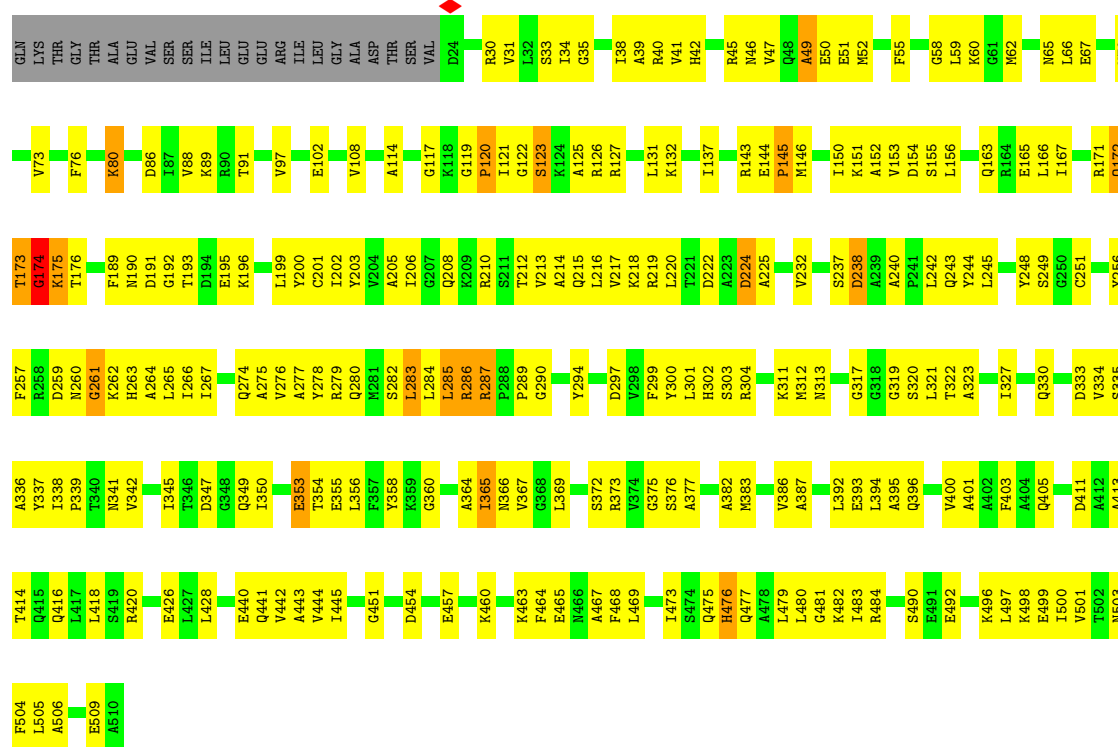
• Molecule 1: ATP SYNTHASE SUBUNIT ALPHA, MITOCHONDRIAL





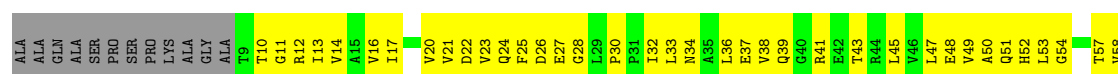
• Molecule 1: ATP SYNTHASE SUBUNIT ALPHA, MITOCHONDRIAL

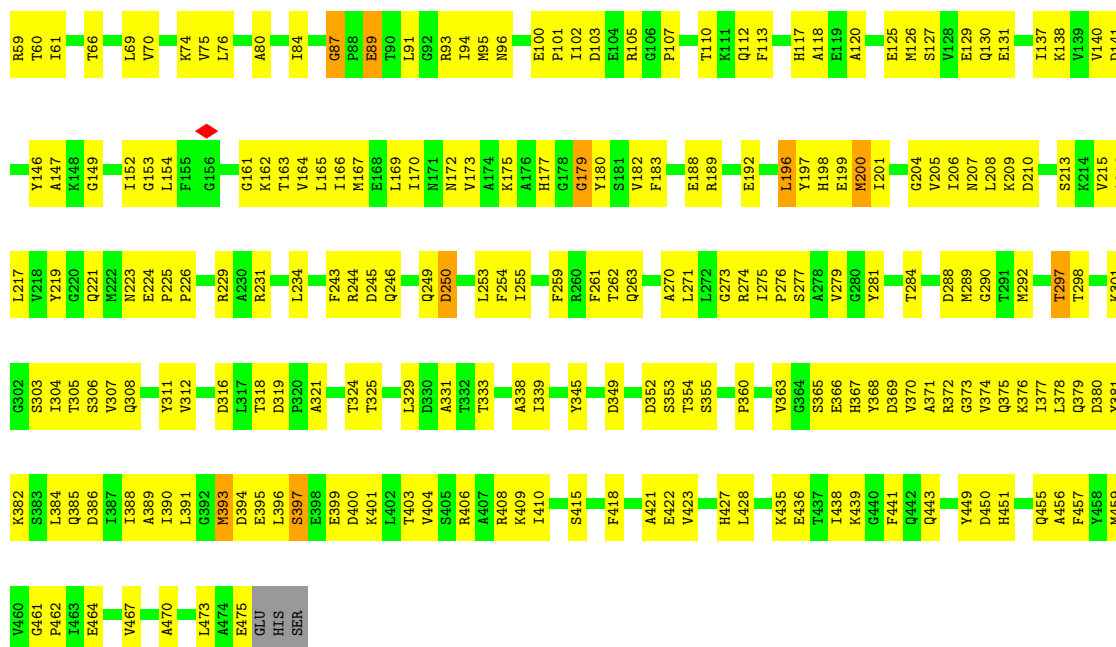
Chain C: 48% 44% 5%



• Molecule 2: ATP SYNTHASE SUBUNIT BETA, MITOCHONDRIAL

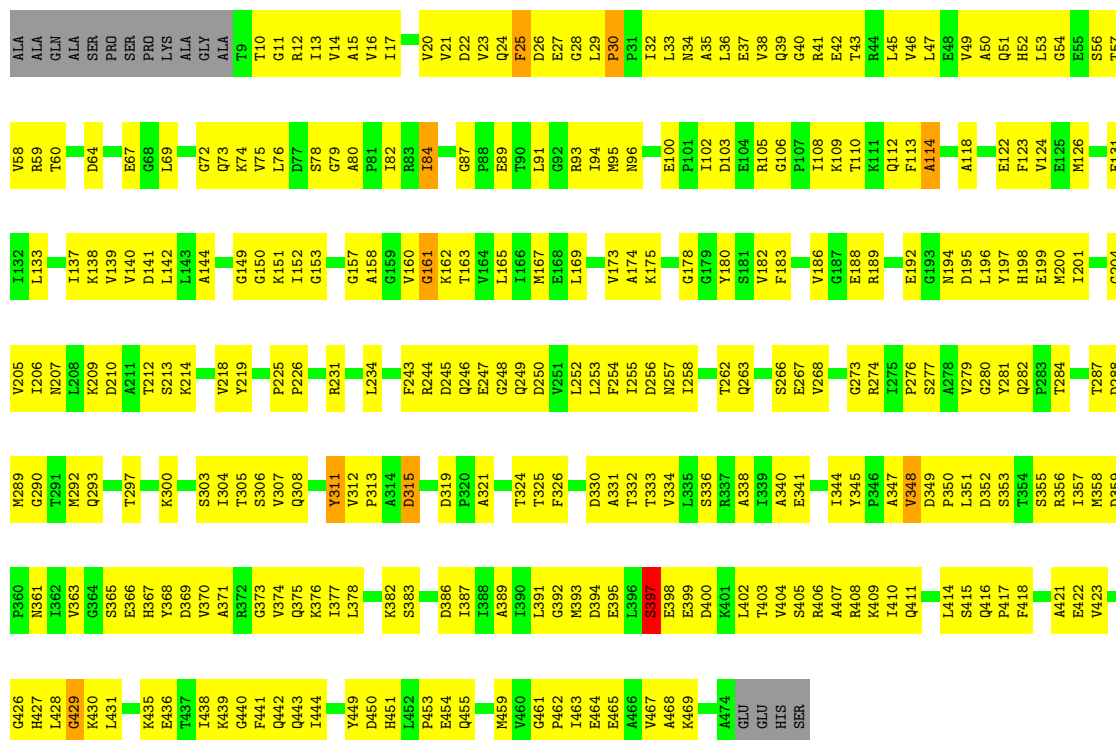
Chain D: 45% 50%





• Molecule 2: ATP SYNTHASE SUBUNIT BETA, MITOCHONDRIAL

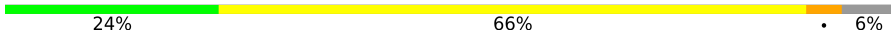
Chain E: 37% 58%



• Molecule 2: ATP SYNTHASE SUBUNIT BETA, MITOCHONDRIAL

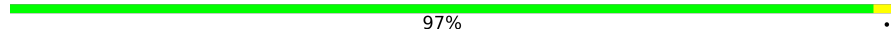
Chain F: 48% 46%

- Molecule 5: ATP SYNTHASE SUBUNIT EPSILON, MITOCHONDRIAL

Chain I:  24% 66% 6%

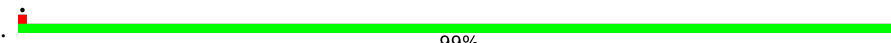


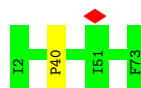
- Molecule 6: ATP SYNTHASE F(0) COMPLEX SUBUNIT C1, MITOCHONDRIAL

Chain J:  97%



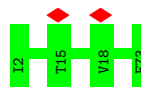
- Molecule 6: ATP SYNTHASE F(0) COMPLEX SUBUNIT C1, MITOCHONDRIAL

Chain K:  99%

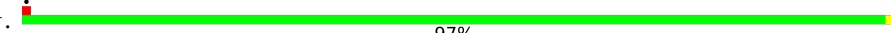


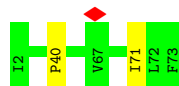
- Molecule 6: ATP SYNTHASE F(0) COMPLEX SUBUNIT C1, MITOCHONDRIAL

Chain L:  100%



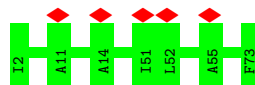
- Molecule 6: ATP SYNTHASE F(0) COMPLEX SUBUNIT C1, MITOCHONDRIAL

Chain M:  97%

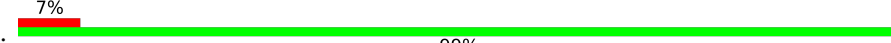


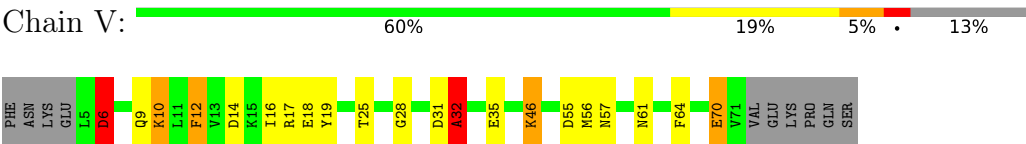
- Molecule 6: ATP SYNTHASE F(0) COMPLEX SUBUNIT C1, MITOCHONDRIAL

Chain N:  7% 100%

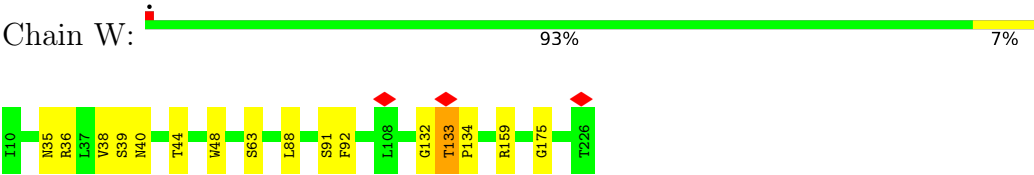


- Molecule 6: ATP SYNTHASE F(0) COMPLEX SUBUNIT C1, MITOCHONDRIAL

Chain O:  7% 99%



● Molecule 11: ATP SYNTHASE SUBUNIT BETA, MITOCHONDRIAL



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	22117	Depositor
Resolution determination method	Not provided	
CTF correction method	EACH PARTICLE	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	60.3	Depositor
Minimum defocus (nm)	1200	Depositor
Maximum defocus (nm)	4100	Depositor
Magnification	30487	Depositor
Image detector	GATAN K2 (4k x 4k)	Depositor
Maximum map value	0.424	Depositor
Minimum map value	-0.095	Depositor
Average map value	-0.001	Depositor
Map value standard deviation	0.021	Depositor
Recommended contour level	0.13	Depositor
Map size ($\text{\AA}$)	419.84, 419.84, 419.84	wwPDB
Map dimensions	256, 256, 256	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing ($\text{\AA}$)	1.64, 1.64, 1.64	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	3.17	247/2034 (12.1%)	2.53	143/2541 (5.6%)
1	B	3.19	230/1916 (12.0%)	2.58	146/2392 (6.1%)
1	C	3.09	221/1947 (11.4%)	2.50	137/2432 (5.6%)
2	D	3.12	222/1866 (11.9%)	2.58	134/2331 (5.7%)
2	E	3.21	244/1862 (13.1%)	2.60	169/2326 (7.3%)
2	F	3.07	194/1862 (10.4%)	2.60	152/2326 (6.5%)
3	G	3.59	173/1050 (16.5%)	2.86	110/1308 (8.4%)
4	H	3.95	104/522 (19.9%)	3.03	69/651 (10.6%)
5	I	3.42	25/186 (13.4%)	3.17	22/231 (9.5%)
6	J	0.51	0/287	1.01	0/357
6	K	0.50	0/287	1.00	0/357
6	L	0.51	0/287	0.98	0/357
6	M	0.50	0/287	1.04	0/357
6	N	0.50	0/287	0.99	0/357
6	O	0.51	0/287	1.02	0/357
6	P	0.50	0/287	1.00	0/357
6	Q	0.50	0/287	0.98	0/357
7	S	2.87	60/668 (9.0%)	3.01	72/834 (8.6%)
8	T	1.38	10/696 (1.4%)	1.75	10/867 (1.2%)
9	U	1.97	10/484 (2.1%)	2.94	34/604 (5.6%)
10	V	1.36	2/264 (0.8%)	2.08	7/329 (2.1%)
11	W	0.90	5/868 (0.6%)	1.42	4/1082 (0.4%)
All	All	2.82	1747/18521 (9.4%)	2.42	1209/23110 (5.2%)

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	3
1	B	0	7
1	C	0	4

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Mol	Chain	#Chirality outliers	#Planarity outliers
2	D	0	3
2	E	0	4
2	F	0	3
3	G	0	4
4	H	0	1
7	S	0	9
8	T	0	13
9	U	0	32
10	V	0	15
11	W	0	5
All	All	0	103

All (1747) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	U	96	ASP	N-CA	21.49	1.73	1.46
3	G	252	ARG	CA-C	-13.09	1.36	1.52
3	G	261	GLU	CA-C	-13.05	1.34	1.52
9	U	9	THR	N-CA	12.91	1.66	1.46
3	G	15	ASN	CA-C	-12.11	1.37	1.52
2	D	11	GLY	CA-C	-11.87	1.41	1.52
4	H	131	ILE	CA-C	-11.52	1.38	1.52
4	H	28	PHE	CA-C	-11.51	1.38	1.52
1	C	175	LYS	CA-C	-11.39	1.38	1.52
4	H	91	GLN	CA-C	-11.02	1.39	1.52
5	I	20	LYS	CA-C	-10.94	1.38	1.52
9	U	95	GLU	C-N	10.70	1.48	1.34
3	G	172	LYS	CA-C	-10.64	1.39	1.52
1	C	172	GLN	CA-C	-10.46	1.39	1.53
4	H	29	ASN	CA-C	-10.42	1.41	1.53
4	H	84	VAL	CA-C	-10.39	1.39	1.52
3	G	255	GLN	CA-C	-10.34	1.39	1.52
2	F	59	ARG	CA-C	-10.24	1.40	1.52
3	G	251	ASN	CA-C	-10.20	1.39	1.52
3	G	252	ARG	N-CA	-10.16	1.34	1.46
2	F	12	ARG	CA-C	-10.16	1.40	1.52
2	E	11	GLY	CA-C	-10.14	1.43	1.52
4	H	19	THR	CA-C	-10.12	1.40	1.52
1	A	499	GLU	CA-C	-10.10	1.39	1.52
1	C	312	MET	CA-C	-10.08	1.40	1.52
11	W	44	THR	C-O	-9.99	1.11	1.24
1	B	301	LEU	CA-C	-9.94	1.39	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	217	LEU	CA-C	-9.93	1.40	1.52
1	B	220	LEU	CA-C	-9.86	1.40	1.52
1	B	263	HIS	CA-C	-9.79	1.41	1.52
2	D	112	GLN	CA-C	-9.78	1.40	1.52
2	E	57	THR	CA-C	-9.78	1.41	1.52
3	G	172	LYS	N-CA	-9.77	1.33	1.46
3	G	171	TYR	CA-C	-9.77	1.40	1.52
5	I	15	SER	CA-C	-9.73	1.40	1.52
3	G	4	LYS	CA-C	-9.71	1.40	1.52
3	G	11	LYS	CA-C	-9.69	1.40	1.52
9	U	96	ASP	CA-C	9.69	1.66	1.52
1	B	217	VAL	CA-C	-9.68	1.41	1.52
4	H	132	GLN	N-CA	-9.68	1.34	1.46
4	H	128	ARG	CA-C	-9.64	1.40	1.52
1	C	500	ILE	CA-C	-9.64	1.41	1.52
4	H	55	LEU	CA-C	-9.64	1.41	1.52
2	E	54	GLY	CA-C	-9.63	1.41	1.52
1	A	263	HIS	CA-C	-9.54	1.41	1.52
3	G	248	LEU	CA-C	-9.54	1.43	1.52
1	A	65	ASN	CA-C	-9.53	1.41	1.52
2	E	225	PRO	CA-C	-9.53	1.46	1.51
3	G	16	ILE	CA-C	-9.48	1.41	1.52
8	T	96	ARG	CA-C	-9.47	1.40	1.52
7	S	118	CYS	CA-C	-9.45	1.43	1.53
2	F	449	TYR	CA-C	-9.45	1.43	1.53
2	F	95	MET	CA-C	-9.44	1.41	1.52
2	E	405	SER	CA-C	-9.39	1.40	1.52
4	H	92	LEU	CA-C	-9.35	1.41	1.52
2	D	12	ARG	CA-C	-9.30	1.41	1.52
1	B	175	LYS	CA-C	-9.29	1.41	1.52
3	G	170	SER	CA-C	-9.29	1.40	1.52
1	A	16	ILE	CA-C	-9.27	1.42	1.52
4	H	136	GLU	CA-C	-9.26	1.40	1.52
2	F	253	LEU	CA-C	-9.23	1.41	1.52
1	A	97	VAL	CA-C	-9.22	1.43	1.52
8	T	103	LEU	N-CA	-9.22	1.35	1.46
2	E	140	VAL	CA-C	-9.18	1.42	1.52
2	E	17	ILE	CA-C	-9.18	1.42	1.52
2	F	11	GLY	CA-C	-9.16	1.44	1.52
7	S	102	ILE	CA-C	-9.13	1.41	1.52
2	E	109	LYS	CA-C	-9.12	1.41	1.52
1	B	498	LYS	CA-C	-9.11	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	60	THR	CA-C	-9.11	1.41	1.52
2	F	329	LEU	CA-C	-9.07	1.42	1.52
4	H	129	ALA	CA-C	-9.07	1.40	1.52
2	F	84	ILE	CA-C	-9.03	1.43	1.52
3	G	242	MET	CA-C	-8.97	1.41	1.52
2	D	281	TYR	CA-C	-8.96	1.41	1.52
1	A	40	ARG	CA-C	-8.96	1.42	1.52
3	G	33	ARG	CA-C	-8.96	1.41	1.52
1	A	172	GLN	CA-C	-8.95	1.40	1.52
2	D	254	PHE	CA-C	-8.95	1.41	1.52
4	H	92	LEU	N-CA	-8.93	1.35	1.46
1	A	41	VAL	CA-C	-8.91	1.41	1.52
1	C	208	GLN	CA-C	-8.90	1.41	1.52
1	A	355	GLU	CA-C	-8.89	1.41	1.52
1	C	301	LEU	CA-C	-8.86	1.41	1.52
2	F	140	VAL	CA-C	-8.84	1.42	1.52
3	G	18	LYS	CA-C	-8.81	1.41	1.52
2	E	49	VAL	CA-C	-8.79	1.43	1.52
1	C	263	HIS	CA-C	-8.79	1.42	1.52
2	E	253	LEU	CA-C	-8.79	1.42	1.52
5	I	13	ARG	CA-C	-8.78	1.41	1.52
1	A	279	ARG	CA-C	-8.73	1.41	1.52
1	A	362	ARG	N-CA	-8.70	1.37	1.46
2	F	57	THR	CA-C	-8.69	1.42	1.52
1	B	215	GLN	CA-C	-8.69	1.41	1.52
2	E	152	ILE	CA-C	-8.67	1.42	1.52
2	E	12	ARG	CA-C	-8.67	1.41	1.52
1	A	87	ILE	CA-C	-8.66	1.42	1.52
4	H	65	VAL	CA-C	-8.63	1.43	1.52
4	H	62	LEU	CA-C	-8.63	1.42	1.52
1	B	202	ILE	CA-C	-8.58	1.41	1.52
1	C	286	ARG	CA-C	-8.57	1.41	1.52
4	H	130	GLU	CA-C	-8.56	1.41	1.52
1	C	65	ASN	CA-C	-8.54	1.42	1.52
2	E	428	LEU	CA-C	-8.54	1.41	1.52
7	S	141	PHE	CA-C	-8.54	1.40	1.52
1	C	33	SER	CA-C	-8.54	1.42	1.52
2	E	22	ASP	CA-C	-8.52	1.42	1.52
2	E	141	ASP	CA-C	-8.52	1.41	1.52
1	B	62	MET	CA-C	-8.51	1.42	1.52
4	H	93	LEU	N-CA	-8.51	1.36	1.46
1	B	219	ARG	CA-C	-8.50	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	172	GLN	CA-C	-8.47	1.40	1.52
1	B	420	ARG	CA-C	-8.47	1.41	1.52
2	D	308	GLN	CA-C	-8.46	1.42	1.52
2	F	25	PHE	CA-C	-8.45	1.42	1.52
1	B	214	ALA	CA-C	-8.41	1.42	1.52
2	F	80	ALA	CA-C	-8.40	1.42	1.52
1	A	39	ALA	CA-C	-8.39	1.42	1.52
4	H	19	THR	N-CA	-8.39	1.36	1.46
2	D	113	PHE	CA-C	-8.39	1.42	1.52
2	F	305	THR	CA-C	-8.37	1.42	1.52
1	A	127	ARG	CA-C	-8.36	1.42	1.52
3	G	219	GLU	CA-C	-8.36	1.42	1.52
2	F	254	PHE	CA-C	-8.33	1.42	1.52
3	G	31	TYR	N-CA	-8.31	1.36	1.46
3	G	213	ILE	CA-C	-8.31	1.42	1.52
2	E	51	GLN	CA-C	-8.31	1.42	1.52
1	A	464	PHE	CA-C	-8.30	1.42	1.52
1	B	349	GLN	CA-C	-8.30	1.42	1.52
1	B	126	ARG	CA-C	-8.30	1.42	1.52
1	A	38	ILE	CA-C	-8.30	1.41	1.52
2	D	57	THR	CA-C	-8.28	1.42	1.52
2	E	365	SER	CA-C	-8.28	1.41	1.52
1	C	476	HIS	CA-C	-8.28	1.40	1.52
4	H	63	VAL	CA-C	-8.28	1.42	1.52
1	B	166	LEU	CA-C	-8.27	1.42	1.52
1	C	302	HIS	CA-C	-8.25	1.41	1.52
1	B	203	TYR	CA-C	-8.24	1.42	1.52
4	H	135	ILE	CA-C	-8.23	1.43	1.52
4	H	66	HIS	CA-C	-8.23	1.41	1.52
1	C	498	LYS	CA-C	-8.22	1.42	1.52
1	A	299	PHE	CA-C	-8.19	1.42	1.52
2	E	254	PHE	CA-C	-8.19	1.42	1.52
2	D	24	GLN	CA-C	-8.17	1.42	1.52
4	H	109	LYS	CA-C	-8.16	1.42	1.52
2	E	196	LEU	CA-C	-8.15	1.42	1.52
2	E	427	HIS	CA-C	-8.15	1.42	1.52
2	E	409	LYS	CA-C	-8.14	1.42	1.52
3	G	53	GLU	CA-C	-8.14	1.46	1.52
2	F	21	VAL	CA-C	-8.10	1.42	1.52
1	A	108	VAL	CA-C	-8.06	1.43	1.52
2	D	25	PHE	CA-C	-8.04	1.42	1.52
2	F	23	VAL	CA-C	-8.04	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	498	LYS	CA-C	-8.04	1.41	1.52
2	F	306	SER	CA-C	-8.03	1.43	1.52
1	A	203	TYR	N-CA	-8.03	1.36	1.46
2	E	20	VAL	CA-C	-8.01	1.42	1.52
4	H	18	PHE	CA-C	-8.01	1.43	1.52
7	S	38	GLU	CA-C	-8.01	1.42	1.52
2	D	179	GLY	CA-C	-8.01	1.44	1.52
2	E	305	THR	CA-C	-8.01	1.42	1.52
1	A	30	ARG	CA-C	-8.00	1.43	1.52
4	H	94	ALA	CA-C	-8.00	1.43	1.52
2	E	244	ARG	CA-C	-8.00	1.43	1.52
1	A	280	GLN	CA-C	-7.99	1.42	1.52
1	A	257	PHE	CA-C	-7.98	1.42	1.52
1	C	299	PHE	CA-C	-7.97	1.42	1.52
2	F	122	GLU	CA-C	-7.97	1.43	1.52
4	H	72	THR	CA-C	-7.97	1.42	1.52
2	F	277	SER	CA-C	-7.96	1.43	1.53
2	E	410	ILE	CA-C	-7.96	1.43	1.52
2	F	244	ARG	CA-C	-7.95	1.42	1.52
3	G	256	ALA	CA-C	-7.95	1.42	1.52
1	C	50	GLU	CA-C	-7.94	1.42	1.53
4	H	103	LEU	CA-C	-7.94	1.42	1.52
2	E	45	LEU	CA-C	-7.94	1.42	1.53
2	E	366	GLU	CA-C	-7.93	1.42	1.52
2	D	75	VAL	CA-C	-7.93	1.43	1.52
3	G	36	ARG	CA-C	-7.93	1.42	1.52
1	A	146	MET	CA-C	-7.92	1.42	1.52
1	C	108	VAL	CA-C	-7.92	1.43	1.52
1	B	500	ILE	CA-C	-7.92	1.43	1.52
1	B	200	TYR	CA-C	-7.91	1.43	1.52
1	B	266	ILE	CA-C	-7.91	1.43	1.52
2	E	391	LEU	CA-C	-7.91	1.42	1.52
2	D	355	SER	CA-C	-7.89	1.42	1.52
3	G	171	TYR	N-CA	-7.89	1.36	1.45
2	E	23	VAL	CA-C	-7.88	1.43	1.52
1	B	395	ALA	CA-C	-7.88	1.42	1.52
1	B	87	ILE	CA-C	-7.88	1.43	1.52
2	E	429	GLY	CA-C	-7.86	1.42	1.52
2	F	400	ASP	N-CA	-7.86	1.37	1.46
3	G	194	ASP	CA-C	-7.86	1.42	1.52
1	A	277	ALA	CA-C	-7.84	1.42	1.52
1	C	70	ASN	CA-C	-7.84	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	H	113	GLU	CA-C	-7.83	1.42	1.52
4	H	56	GLN	CA-C	-7.82	1.43	1.52
1	A	157	VAL	CA-C	-7.82	1.44	1.52
1	B	499	GLU	CA-C	-7.81	1.42	1.52
1	B	218	LYS	CA-C	-7.80	1.43	1.52
7	S	35	VAL	CA-C	-7.79	1.44	1.52
1	A	501	VAL	CA-C	-7.79	1.43	1.52
3	G	249	THR	CA-C	-7.79	1.42	1.52
1	A	468	PHE	CA-C	-7.77	1.42	1.52
1	B	277	ALA	CA-C	-7.75	1.43	1.52
2	D	17	ILE	CA-C	-7.75	1.43	1.52
1	A	202	ILE	CA-C	-7.75	1.42	1.52
1	A	299	PHE	N-CA	-7.73	1.36	1.46
2	F	13	ILE	CA-C	-7.73	1.44	1.52
2	E	422	GLU	CA-C	-7.72	1.42	1.52
1	B	337	TYR	CA-C	-7.72	1.43	1.52
3	G	208	SER	CA-C	-7.72	1.42	1.52
1	B	39	ALA	CA-C	-7.69	1.43	1.52
1	B	316	PHE	CA-C	-7.69	1.42	1.52
1	A	67	GLU	C-N	-7.69	1.25	1.34
1	C	62	MET	CA-C	-7.68	1.43	1.52
1	B	155	SER	CA-C	-7.67	1.43	1.53
2	F	334	VAL	CA-C	-7.66	1.43	1.52
1	C	501	VAL	CA-C	-7.66	1.43	1.52
2	D	224	GLU	CA-C	-7.66	1.43	1.52
1	C	248	TYR	CA-C	-7.65	1.43	1.52
2	D	378	LEU	CA-C	-7.65	1.43	1.52
1	B	27	GLU	CA-C	-7.64	1.42	1.52
1	C	171	ARG	CA-C	-7.64	1.42	1.52
3	G	129	LYS	CA-C	-7.64	1.43	1.52
2	E	52	HIS	CA-C	-7.63	1.43	1.52
2	D	369	ASP	CA-C	-7.62	1.43	1.52
1	A	500	ILE	CA-C	-7.62	1.43	1.52
1	B	218	LYS	N-CA	-7.62	1.37	1.46
1	A	505	LEU	CA-C	-7.62	1.43	1.52
1	C	200	TYR	CA-C	-7.61	1.43	1.52
2	F	421	ALA	CA-C	-7.61	1.43	1.53
3	G	20	THR	CA-C	-7.61	1.42	1.52
1	C	155	SER	CA-C	-7.60	1.43	1.53
2	F	259	PHE	N-CA	-7.60	1.37	1.46
1	A	217	VAL	CA-C	-7.59	1.43	1.52
4	H	133	ILE	CA-C	-7.59	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	302	HIS	CA-C	-7.58	1.42	1.52
1	B	30	ARG	CA-C	-7.58	1.43	1.52
2	E	112	GLN	CA-C	-7.57	1.43	1.52
5	I	19	ALA	CA-C	-7.57	1.43	1.52
2	F	333	THR	CA-C	-7.56	1.43	1.52
1	A	73	VAL	CA-C	-7.55	1.42	1.52
2	D	162	LYS	CA-C	-7.55	1.43	1.52
2	D	246	GLN	CA-C	-7.54	1.43	1.52
3	G	16	ILE	N-CA	-7.54	1.38	1.46
2	F	196	LEU	CA-C	-7.54	1.43	1.52
4	H	139	GLU	CA-C	-7.53	1.43	1.52
3	G	5	ASP	CA-C	-7.53	1.42	1.52
3	G	259	THR	CA-C	-7.52	1.43	1.52
1	C	355	GLU	CA-C	-7.52	1.43	1.52
3	G	266	ILE	CA-C	-7.52	1.43	1.52
3	G	259	THR	N-CA	-7.52	1.37	1.46
1	C	350	ILE	CA-C	-7.51	1.44	1.52
3	G	218	LYS	CA-C	-7.51	1.42	1.52
1	B	176	THR	N-CA	-7.51	1.37	1.46
1	B	378	ALA	CA-C	-7.51	1.42	1.52
1	C	262	LYS	CA-C	-7.51	1.42	1.52
2	D	244	ARG	CA-C	-7.50	1.43	1.52
1	A	31	VAL	CA-C	-7.50	1.44	1.52
8	T	93	ASP	N-CA	-7.50	1.36	1.46
1	B	213	VAL	N-CA	-7.49	1.37	1.46
3	G	197	ASP	CA-C	-7.49	1.43	1.52
2	D	38	VAL	CA-C	-7.49	1.44	1.52
2	E	439	LYS	CA-C	-7.49	1.43	1.52
2	E	421	ALA	CA-C	-7.48	1.43	1.52
3	G	113	ARG	CA-C	-7.47	1.44	1.53
2	F	246	GLN	CA-C	-7.47	1.43	1.52
4	H	46	GLY	CA-C	-7.47	1.41	1.51
2	F	218	VAL	CA-C	-7.47	1.43	1.52
2	F	361	ASN	CA-C	-7.47	1.45	1.53
2	E	41	ARG	CA-C	-7.47	1.43	1.52
2	E	430	LYS	CA-C	-7.46	1.43	1.52
2	F	183	PHE	N-CA	-7.46	1.37	1.46
3	G	30	LYS	CA-C	-7.46	1.43	1.52
3	G	140	ASP	CA-C	-7.46	1.43	1.52
1	B	267	ILE	N-CA	-7.46	1.36	1.46
4	H	47	ILE	CA-C	-7.45	1.44	1.52
1	B	279	ARG	CA-C	-7.45	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	394	LEU	CA-C	-7.44	1.42	1.52
1	A	356	LEU	CA-C	-7.44	1.43	1.52
2	D	163	THR	N-CA	-7.44	1.37	1.46
2	E	370	VAL	CA-C	-7.44	1.43	1.52
1	A	93	ALA	CA-C	-7.43	1.44	1.52
8	T	170	LEU	N-CA	-7.43	1.36	1.46
2	F	194	ASN	CA-C	-7.43	1.43	1.52
2	D	290	GLY	CA-C	-7.43	1.44	1.52
2	D	59	ARG	CA-C	-7.41	1.43	1.52
4	H	83	THR	CA-C	-7.41	1.43	1.52
1	C	172	GLN	N-CA	-7.40	1.35	1.46
2	F	289	MET	N-CA	-7.39	1.37	1.46
4	H	111	ASN	CA-C	-7.38	1.43	1.52
2	F	61	ILE	N-CA	-7.38	1.37	1.46
5	I	16	GLN	CA-C	-7.38	1.42	1.52
1	B	501	VAL	CA-C	-7.37	1.43	1.52
1	A	128	ARG	CA-C	-7.37	1.43	1.52
2	D	95	MET	CA-C	-7.37	1.43	1.52
2	E	262	THR	CA-C	-7.37	1.43	1.52
1	B	276	VAL	CA-C	-7.36	1.43	1.52
2	D	153	GLY	CA-C	-7.35	1.47	1.52
1	B	40	ARG	CA-C	-7.33	1.44	1.52
2	F	290	GLY	CA-C	-7.33	1.44	1.52
2	E	391	LEU	N-CA	-7.33	1.37	1.46
2	E	13	ILE	CA-C	-7.33	1.44	1.52
2	E	80	ALA	CA-C	-7.32	1.43	1.52
2	E	21	VAL	CA-C	-7.31	1.43	1.52
3	G	8	ARG	CA-C	-7.31	1.43	1.52
2	E	110	THR	CA-C	-7.30	1.43	1.52
2	E	139	VAL	N-CA	-7.30	1.37	1.46
2	D	196	LEU	CA-C	-7.30	1.43	1.52
1	B	497	LEU	CA-C	-7.30	1.43	1.52
1	C	215	GLN	N-CA	-7.29	1.37	1.46
2	D	380	ASP	CA-C	-7.29	1.43	1.52
1	B	265	LEU	CA-C	-7.28	1.43	1.52
2	D	382	LYS	CA-C	-7.28	1.42	1.52
1	B	33	SER	CA-C	-7.27	1.43	1.52
2	F	41	ARG	CA-C	-7.26	1.44	1.52
1	C	199	LEU	CA-C	-7.26	1.44	1.52
3	G	153	TYR	CA-C	-7.25	1.44	1.52
4	H	27	PHE	CA-C	-7.25	1.44	1.52
2	D	305	THR	CA-C	-7.25	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	42	HIS	N-CA	-7.25	1.36	1.46
3	G	201	LEU	CA-C	-7.25	1.43	1.52
1	A	275	ALA	CA-C	-7.23	1.43	1.52
2	E	382	LYS	CA-C	-7.23	1.42	1.52
1	B	300	TYR	N-CA	-7.22	1.37	1.46
1	B	278	TYR	N-CA	-7.22	1.37	1.46
3	G	7	THR	CA-C	-7.22	1.43	1.52
1	C	150	ILE	CA-C	-7.21	1.43	1.52
2	D	141	ASP	CA-C	-7.21	1.43	1.52
1	A	416	GLN	N-CA	-7.20	1.38	1.46
2	D	188	GLU	CA-C	-7.20	1.43	1.53
2	E	308	GLN	CA-C	-7.20	1.44	1.52
1	C	31	VAL	CA-C	-7.20	1.44	1.52
2	E	126	MET	CA-C	-7.20	1.43	1.52
1	A	421	GLY	CA-C	-7.19	1.44	1.52
4	H	37	ASP	CA-C	-7.19	1.44	1.52
1	C	97	VAL	CA-C	-7.19	1.45	1.52
4	H	16	MET	CA-C	-7.18	1.43	1.52
9	U	4	LYS	N-CA	7.18	1.55	1.45
1	B	341	ASN	CA-C	-7.18	1.43	1.52
1	A	504	PHE	CA-C	-7.18	1.43	1.52
4	H	127	THR	CA-C	-7.18	1.43	1.52
1	A	203	TYR	CA-C	-7.17	1.44	1.52
4	H	85	ASN	CA-C	-7.17	1.43	1.53
2	E	406	ARG	CA-C	-7.17	1.43	1.52
1	B	65	ASN	CA-C	-7.16	1.44	1.52
4	H	53	PRO	N-CA	-7.16	1.38	1.47
2	E	450	ASP	CA-C	-7.16	1.44	1.52
1	A	33	SER	CA-C	-7.15	1.43	1.52
4	H	75	TYR	CA-C	-7.15	1.43	1.52
4	H	20	PHE	CA-C	-7.15	1.44	1.52
1	C	39	ALA	CA-C	-7.14	1.44	1.52
1	C	89	LYS	CA-C	-7.13	1.44	1.52
2	F	83	ARG	CA-C	-7.13	1.44	1.52
1	B	396	GLN	CA-C	-7.13	1.43	1.52
1	C	323	ALA	CA-C	-7.12	1.44	1.52
2	D	21	VAL	CA-C	-7.12	1.43	1.52
2	D	12	ARG	N-CA	-7.10	1.37	1.46
2	F	287	THR	CA-C	-7.10	1.43	1.52
1	A	61	GLY	CA-C	-7.10	1.44	1.51
2	D	95	MET	N-CA	-7.09	1.37	1.45
2	F	94	ILE	CA-C	-7.09	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	338	ILE	CA-C	-7.08	1.45	1.52
2	E	167	MET	CA-C	-7.08	1.43	1.52
4	H	20	PHE	N-CA	-7.08	1.37	1.46
2	D	198	HIS	CA-C	-7.07	1.43	1.52
2	F	180	TYR	CA-C	-7.07	1.43	1.52
1	A	45	ARG	CA-C	-7.07	1.43	1.52
3	G	174	GLU	CA-C	-7.07	1.44	1.52
1	B	262	LYS	CA-C	-7.07	1.43	1.53
7	S	32	LEU	CA-C	-7.06	1.43	1.52
1	A	320	SER	CA-C	-7.06	1.43	1.52
1	B	97	VAL	CA-C	-7.06	1.45	1.52
2	E	25	PHE	CA-C	-7.05	1.44	1.52
4	H	79	SER	CA-C	-7.05	1.44	1.52
2	D	163	THR	CA-C	-7.05	1.43	1.52
1	A	27	GLU	CA-C	-7.04	1.43	1.52
9	U	97	VAL	CA-C	7.04	1.61	1.52
1	B	314	ASP	CA-C	-7.04	1.43	1.52
2	E	376	LYS	CA-C	-7.04	1.43	1.52
1	B	302	HIS	CA-C	-7.03	1.43	1.52
1	B	367	VAL	CA-C	-7.03	1.44	1.52
3	G	212	ILE	CA-C	-7.03	1.43	1.52
5	I	19	ALA	N-CA	-7.03	1.37	1.46
1	A	396	GLN	CA-C	-7.02	1.43	1.52
1	C	176	THR	N-CA	-7.02	1.38	1.46
2	D	23	VAL	CA-C	-7.02	1.44	1.52
7	S	97	ASN	CA-C	-7.01	1.43	1.52
2	D	200	MET	CA-C	-7.01	1.43	1.52
2	F	438	ILE	CA-C	-7.01	1.44	1.52
1	B	108	VAL	CA-C	-7.01	1.44	1.52
1	C	166	LEU	CA-C	-7.01	1.44	1.52
1	A	415	GLN	CA-C	-7.00	1.43	1.52
2	E	206	ILE	CA-C	-7.00	1.44	1.52
1	B	153	VAL	CA-C	-7.00	1.44	1.52
3	G	69	ILE	N-CA	-7.00	1.37	1.46
3	G	211	ASN	CA-C	-7.00	1.43	1.52
4	H	43	GLY	CA-C	-7.00	1.42	1.51
3	G	257	VAL	N-CA	-6.99	1.37	1.46
2	D	51	GLN	CA-C	-6.99	1.44	1.52
4	H	82	VAL	CA-C	-6.99	1.44	1.52
5	I	14	TYR	N-CA	-6.99	1.38	1.46
3	G	202	ARG	CA-C	-6.98	1.43	1.52
3	G	214	TYR	N-CA	-6.98	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	477	GLN	CA-C	-6.98	1.43	1.52
2	D	368	TYR	CA-C	-6.97	1.44	1.52
2	D	306	SER	CA-C	-6.97	1.44	1.52
5	I	22	VAL	CA-C	-6.97	1.43	1.52
3	G	225	GLN	CA-C	-6.97	1.43	1.52
2	E	252	LEU	CA-C	-6.97	1.44	1.52
1	A	336	ALA	CA-C	-6.96	1.43	1.52
7	S	23	TYR	CA-C	-6.96	1.43	1.52
4	H	142	VAL	CA-C	-6.95	1.42	1.52
2	E	201	ILE	CA-C	-6.95	1.44	1.52
1	A	76	PHE	CA-C	-6.94	1.45	1.53
1	C	153	VAL	CA-C	-6.94	1.44	1.52
2	F	152	ILE	CA-C	-6.94	1.44	1.52
1	C	464	PHE	CA-C	-6.94	1.44	1.52
3	G	139	GLY	CA-C	-6.93	1.42	1.51
1	A	187	LYS	CA-C	-6.92	1.43	1.52
1	B	212	THR	CA-C	-6.92	1.43	1.52
2	D	377	ILE	CA-C	-6.92	1.44	1.52
2	E	455	GLN	CA-C	-6.92	1.43	1.52
3	G	29	ALA	CA-C	-6.92	1.44	1.52
2	D	49	VAL	CA-C	-6.92	1.44	1.52
2	E	58	VAL	N-CA	-6.92	1.38	1.46
1	B	421	GLY	CA-C	-6.91	1.44	1.52
2	E	306	SER	CA-C	-6.91	1.44	1.52
4	H	132	GLN	CA-C	-6.91	1.44	1.52
2	D	376	LYS	N-CA	-6.91	1.38	1.46
1	C	337	TYR	CA-C	-6.90	1.44	1.52
5	I	4	TRP	CA-C	-6.90	1.43	1.52
3	G	254	ARG	N-CA	-6.90	1.38	1.46
4	H	25	GLN	CA-C	-6.90	1.43	1.52
1	A	215	GLN	CA-C	-6.90	1.43	1.52
2	E	16	VAL	CA-C	-6.90	1.43	1.52
1	B	26	GLU	N-CA	-6.89	1.37	1.46
2	D	253	LEU	CA-C	-6.89	1.44	1.52
2	F	51	GLN	CA-C	-6.89	1.44	1.52
2	E	200	MET	CA-C	-6.89	1.43	1.52
1	C	265	LEU	CA-C	-6.88	1.44	1.52
1	C	121	ILE	N-CA	-6.88	1.38	1.46
1	C	349	GLN	CA-C	-6.88	1.44	1.52
2	D	131	GLU	CA-C	-6.86	1.44	1.52
1	A	400	VAL	N-CA	-6.85	1.37	1.46
2	E	114	ALA	CA-C	-6.85	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	448	GLY	CA-C	-6.85	1.44	1.52
2	D	60	THR	CA-C	-6.84	1.44	1.52
2	D	173	VAL	CA-C	-6.84	1.43	1.53
1	B	34	ILE	CA-C	-6.84	1.44	1.52
2	E	404	VAL	CA-C	-6.83	1.44	1.52
5	I	44	ILE	CA-C	-6.83	1.44	1.52
1	C	499	GLU	CA-C	-6.82	1.44	1.52
1	A	42	HIS	N-CA	-6.81	1.37	1.46
1	A	460	LYS	CA-C	-6.81	1.43	1.52
1	C	257	PHE	CA-C	-6.80	1.44	1.52
1	A	500	ILE	N-CA	-6.80	1.38	1.46
1	B	26	GLU	CA-C	-6.79	1.43	1.52
1	A	278	TYR	N-CA	-6.79	1.38	1.46
2	E	375	GLN	CA-C	-6.79	1.44	1.52
1	A	150	ILE	CA-C	-6.79	1.44	1.52
4	H	18	PHE	N-CA	-6.79	1.37	1.46
2	E	206	ILE	N-CA	-6.79	1.37	1.46
1	B	140	ILE	CA-C	-6.78	1.44	1.52
1	B	418	LEU	CA-C	-6.78	1.44	1.52
2	D	37	GLU	CA-C	-6.78	1.44	1.52
2	D	321	ALA	CA-C	-6.77	1.45	1.52
1	B	245	LEU	CA-C	-6.77	1.44	1.52
2	D	20	VAL	CA-C	-6.76	1.44	1.52
2	F	24	GLN	N-CA	-6.76	1.38	1.46
2	F	58	VAL	N-CA	-6.76	1.38	1.46
2	F	325	THR	CA-C	-6.76	1.44	1.52
4	H	59	ARG	CA-C	-6.76	1.44	1.52
5	I	18	CYS	CA-C	-6.76	1.44	1.52
3	G	69	ILE	CA-C	-6.76	1.44	1.52
1	B	216	LEU	CA-C	-6.76	1.44	1.52
2	D	292	MET	CA-C	-6.76	1.44	1.53
2	E	367	HIS	CA-C	-6.75	1.44	1.52
3	G	159	SER	CA-C	-6.75	1.44	1.52
1	C	266	ILE	CA-C	-6.75	1.44	1.52
7	S	157	SER	CA-C	-6.75	1.43	1.52
1	B	324	LEU	CA-C	-6.74	1.45	1.52
4	H	72	THR	N-CA	-6.74	1.37	1.46
2	D	11	GLY	N-CA	-6.74	1.38	1.44
3	G	209	LEU	CA-C	-6.74	1.44	1.52
3	G	239	ALA	CA-C	-6.74	1.44	1.52
1	A	126	ARG	CA-C	-6.74	1.44	1.52
3	G	234	ASN	CA-C	-6.74	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	200	MET	CA-C	-6.73	1.44	1.52
1	C	30	ARG	CA-C	-6.72	1.44	1.52
2	E	234	LEU	CA-C	-6.72	1.44	1.52
8	T	100	ALA	N-CA	-6.72	1.37	1.46
1	A	128	ARG	N-CA	-6.72	1.37	1.46
1	B	248	TYR	CA-C	-6.71	1.44	1.52
2	E	192	GLU	CA-C	-6.71	1.43	1.52
2	E	213	SER	CA-C	-6.71	1.43	1.52
1	A	278	TYR	CA-C	-6.71	1.44	1.52
1	C	278	TYR	N-CA	-6.71	1.38	1.46
2	E	138	LYS	CA-C	-6.71	1.44	1.52
2	D	304	ILE	CA-C	-6.71	1.44	1.52
1	C	395	ALA	CA-C	-6.71	1.44	1.52
2	F	141	ASP	CA-C	-6.71	1.44	1.52
3	G	128	PHE	CA-C	-6.70	1.44	1.52
2	D	48	GLU	CA-C	-6.69	1.44	1.52
2	D	206	ILE	CA-C	-6.69	1.44	1.52
1	C	167	ILE	CA-C	-6.69	1.44	1.52
2	D	375	GLN	CA-C	-6.69	1.44	1.52
2	F	195	ASP	CA-C	-6.69	1.44	1.52
2	F	61	ILE	CA-C	-6.69	1.44	1.52
1	A	322	THR	CA-C	-6.69	1.44	1.52
3	G	14	LYS	N-CA	-6.68	1.38	1.46
1	A	70	ASN	CA-C	-6.68	1.44	1.52
9	U	8	LYS	CA-C	6.68	1.60	1.52
1	B	41	VAL	CA-C	-6.68	1.44	1.52
5	I	43	LYS	CA-C	-6.68	1.43	1.52
1	C	126	ARG	CA-C	-6.67	1.44	1.52
1	C	394	LEU	N-CA	-6.67	1.37	1.46
1	C	51	GLU	N-CA	-6.66	1.37	1.46
2	F	20	VAL	CA-C	-6.65	1.44	1.52
1	A	198	LYS	CA-C	-6.65	1.45	1.53
7	S	37	LYS	CA-C	-6.65	1.44	1.52
1	B	476	HIS	CA-C	-6.65	1.43	1.52
2	F	166	ILE	CA-C	-6.65	1.44	1.52
1	B	25	LEU	N-CA	-6.65	1.38	1.46
1	C	59	LEU	CA-C	-6.65	1.44	1.53
2	E	404	VAL	N-CA	-6.65	1.38	1.46
1	B	499	GLU	N-CA	-6.65	1.38	1.46
1	B	219	ARG	N-CA	-6.64	1.38	1.46
1	C	299	PHE	N-CA	-6.64	1.38	1.46
2	F	217	LEU	CA-C	-6.64	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	H	123	ALA	CA-C	-6.64	1.44	1.52
1	A	153	VAL	CA-C	-6.64	1.44	1.52
2	F	47	LEU	CA-C	-6.64	1.44	1.52
3	G	22	SER	CA-C	-6.64	1.44	1.52
1	B	505	LEU	CA-C	-6.64	1.43	1.52
2	E	273	GLY	CA-C	-6.64	1.44	1.51
1	B	172	GLN	C-N	-6.63	1.25	1.33
3	G	53	GLU	N-CA	-6.63	1.38	1.46
1	A	35	GLY	CA-C	-6.62	1.42	1.51
1	C	151	LYS	CA-C	-6.61	1.44	1.52
2	F	183	PHE	CA-C	-6.61	1.44	1.52
2	E	21	VAL	N-CA	-6.61	1.38	1.46
7	S	44	GLN	CA-C	-6.61	1.43	1.52
1	B	87	ILE	N-CA	-6.61	1.38	1.46
2	F	169	LEU	CA-C	-6.61	1.44	1.52
1	B	127	ARG	CA-C	-6.60	1.44	1.52
2	F	139	VAL	N-CA	-6.60	1.38	1.46
1	B	256	TYR	CA-C	-6.60	1.44	1.52
2	D	75	VAL	N-CA	-6.59	1.38	1.46
2	D	303	SER	CA-C	-6.59	1.44	1.52
3	G	265	ILE	N-CA	-6.58	1.38	1.46
4	H	91	GLN	N-CA	-6.58	1.38	1.46
3	G	206	GLU	CA-C	-6.58	1.44	1.52
2	E	255	ILE	CA-C	-6.58	1.44	1.52
1	A	96	ASP	CA-C	-6.58	1.44	1.52
1	B	208	GLN	CA-C	-6.57	1.44	1.52
2	E	361	ASN	N-CA	-6.57	1.38	1.46
2	E	436	GLU	CA-C	-6.57	1.43	1.52
1	A	430	GLN	CA-C	-6.57	1.44	1.52
2	F	75	VAL	CA-C	-6.57	1.44	1.52
4	H	134	ARG	N-CA	-6.57	1.38	1.46
2	D	306	SER	N-CA	-6.57	1.38	1.46
2	E	60	THR	CA-C	-6.57	1.44	1.52
1	A	409	ASP	CA-C	-6.56	1.44	1.52
1	A	42	HIS	CA-C	-6.56	1.44	1.52
3	G	171	TYR	C-N	-6.56	1.24	1.33
1	A	70	ASN	N-CA	-6.55	1.38	1.46
1	A	62	MET	CA-C	-6.55	1.44	1.52
2	E	312	VAL	CA-C	-6.55	1.47	1.53
3	G	212	ILE	N-CA	-6.55	1.38	1.46
4	H	83	THR	N-CA	-6.55	1.37	1.46
7	S	41	ARG	CA-C	-6.55	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	368	TYR	N-CA	-6.54	1.38	1.46
3	G	2	THR	CA-C	-6.54	1.44	1.52
1	C	277	ALA	CA-C	-6.54	1.44	1.52
1	C	503	ASN	CA-C	-6.54	1.44	1.52
1	A	451	GLY	CA-C	-6.54	1.42	1.51
4	H	131	ILE	N-CA	-6.54	1.38	1.46
2	D	379	GLN	N-CA	-6.54	1.38	1.46
3	G	129	LYS	N-CA	-6.54	1.37	1.45
1	A	497	LEU	CA-C	-6.54	1.44	1.52
7	S	158	ILE	CA-C	-6.54	1.44	1.52
3	G	215	TYR	N-CA	-6.54	1.38	1.46
3	G	218	LYS	N-CA	-6.53	1.38	1.46
1	A	371	VAL	CA-C	-6.53	1.44	1.52
1	B	299	PHE	CA-C	-6.53	1.44	1.52
2	F	449	TYR	N-CA	-6.53	1.38	1.46
3	G	70	GLY	CA-C	-6.53	1.46	1.52
2	D	164	VAL	CA-C	-6.52	1.44	1.52
2	E	435	LYS	CA-C	-6.52	1.44	1.52
2	D	277	SER	CA-C	-6.52	1.44	1.52
2	E	246	GLN	CA-C	-6.52	1.44	1.52
3	G	240	SER	CA-C	-6.52	1.44	1.52
1	A	416	GLN	CA-C	-6.52	1.44	1.52
4	H	95	GLU	CA-C	-6.52	1.44	1.52
1	A	301	LEU	N-CA	-6.51	1.38	1.46
3	G	272	LEU	CA-C	-6.51	1.44	1.52
2	D	325	THR	CA-C	-6.51	1.44	1.52
1	C	127	ARG	CA-C	-6.51	1.44	1.52
2	E	35	ALA	CA-C	-6.51	1.44	1.52
1	A	274	GLN	CA-C	-6.51	1.44	1.52
1	B	156	LEU	CA-C	-6.51	1.44	1.52
3	G	12	SER	CA-C	-6.51	1.44	1.52
1	B	73	VAL	CA-C	-6.50	1.44	1.52
2	D	182	VAL	CA-C	-6.50	1.44	1.52
1	A	321	LEU	N-CA	-6.50	1.38	1.46
2	E	162	LYS	CA-C	-6.50	1.44	1.52
4	H	64	VAL	CA-C	-6.50	1.44	1.52
1	A	46	ASN	CA-C	-6.49	1.43	1.52
1	C	320	SER	CA-C	-6.49	1.44	1.52
2	D	439	LYS	N-CA	-6.49	1.38	1.46
1	C	280	GLN	CA-C	-6.49	1.44	1.52
2	D	183	PHE	CA-C	-6.49	1.44	1.52
2	F	331	ALA	N-CA	-6.49	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	S	86	ILE	CA-C	-6.49	1.45	1.52
1	A	488	LYS	CA-C	-6.48	1.44	1.52
2	D	58	VAL	N-CA	-6.48	1.38	1.46
2	F	251	VAL	CA-C	-6.48	1.44	1.52
1	A	122	GLY	CA-C	-6.48	1.46	1.52
2	E	74	LYS	CA-C	-6.48	1.44	1.52
2	F	231	ARG	CA-C	-6.48	1.43	1.52
2	E	76	LEU	CA-C	-6.48	1.45	1.52
2	F	308	GLN	CA-C	-6.47	1.45	1.52
4	H	89	SER	CA-C	-6.46	1.44	1.52
1	A	200	TYR	CA-C	-6.46	1.44	1.52
1	B	151	LYS	CA-C	-6.46	1.44	1.52
2	D	467	VAL	CA-C	-6.46	1.45	1.52
1	C	201	CYS	CA-C	-6.46	1.45	1.52
1	A	176	THR	N-CA	-6.46	1.38	1.46
4	H	107	ALA	CA-C	-6.45	1.44	1.52
2	D	100	GLU	CA-C	-6.45	1.46	1.52
2	D	435	LYS	CA-C	-6.45	1.44	1.52
3	G	164	ARG	CA-C	-6.43	1.44	1.52
3	G	160	ILE	CA-C	-6.43	1.44	1.52
2	F	82	ILE	CA-C	-6.43	1.44	1.52
1	A	422	VAL	CA-C	-6.42	1.44	1.52
4	H	64	VAL	N-CA	-6.42	1.38	1.46
1	A	316	PHE	CA-C	-6.42	1.44	1.52
3	G	263	ILE	CA-C	-6.42	1.45	1.52
1	A	387	ALA	CA-C	-6.42	1.44	1.52
1	A	412	ALA	CA-C	-6.42	1.44	1.52
2	F	74	LYS	CA-C	-6.42	1.44	1.52
3	G	87	LYS	CA-C	-6.41	1.44	1.52
1	C	152	ALA	CA-C	-6.41	1.44	1.52
3	G	21	LYS	N-CA	-6.40	1.38	1.46
2	D	166	ILE	CA-C	-6.40	1.44	1.52
7	S	91	GLU	CA-C	-6.40	1.44	1.52
2	D	84	ILE	CA-C	-6.40	1.45	1.52
1	B	76	PHE	CA-C	-6.39	1.46	1.53
2	E	54	GLY	N-CA	-6.39	1.39	1.45
2	E	292	MET	CA-C	-6.39	1.44	1.53
3	G	193	TYR	CA-C	-6.39	1.44	1.52
1	C	41	VAL	CA-C	-6.39	1.44	1.52
3	G	42	ARG	CA-C	-6.39	1.45	1.52
1	B	322	THR	CA-C	-6.39	1.44	1.52
3	G	243	ILE	N-CA	-6.39	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	39	ALA	N-CA	-6.38	1.38	1.46
1	A	392	LEU	N-CA	-6.38	1.38	1.46
3	G	105	ILE	CA-C	-6.38	1.45	1.52
2	D	117	HIS	CA-C	-6.37	1.44	1.52
2	E	124	VAL	N-CA	-6.37	1.38	1.46
3	G	254	ARG	CA-C	-6.37	1.44	1.52
1	B	165	GLU	CA-C	-6.37	1.44	1.52
1	B	187	LYS	CA-C	-6.37	1.44	1.52
2	D	47	LEU	CA-C	-6.36	1.45	1.52
2	D	231	ARG	CA-C	-6.36	1.44	1.52
2	D	94	ILE	CA-C	-6.36	1.44	1.52
4	H	93	LEU	CA-C	-6.36	1.45	1.53
2	F	410	ILE	CA-C	-6.35	1.44	1.52
2	D	255	ILE	CA-C	-6.35	1.44	1.52
2	E	250	ASP	CA-C	-6.35	1.44	1.52
3	G	250	PHE	N-CA	-6.35	1.38	1.46
2	D	391	LEU	CA-C	-6.34	1.44	1.52
3	G	199	ASP	N-CA	-6.33	1.38	1.46
4	H	63	VAL	N-CA	-6.33	1.39	1.46
1	C	52	MET	N-CA	-6.33	1.38	1.46
2	F	197	TYR	CA-C	-6.33	1.44	1.52
2	F	307	VAL	CA-C	-6.33	1.44	1.52
2	D	263	GLN	N-CA	-6.33	1.38	1.46
1	A	175	LYS	CA-C	-6.33	1.44	1.52
1	B	215	GLN	N-CA	-6.33	1.38	1.46
2	E	122	GLU	CA-C	-6.33	1.44	1.53
4	H	115	ALA	CA-C	-6.33	1.44	1.52
1	C	263	HIS	N-CA	-6.32	1.38	1.46
2	F	376	LYS	N-CA	-6.32	1.39	1.46
1	B	426	GLU	CA-C	-6.31	1.44	1.52
1	B	473	ILE	CA-C	-6.31	1.45	1.52
2	E	407	ALA	N-CA	-6.31	1.38	1.46
2	F	199	GLU	CA-C	-6.31	1.44	1.52
1	B	464	PHE	CA-C	-6.31	1.44	1.52
1	A	156	LEU	CA-C	-6.31	1.44	1.52
1	B	429	LYS	CA-C	-6.30	1.44	1.52
2	D	370	VAL	CA-C	-6.30	1.44	1.52
7	S	133	GLU	CA-C	-6.30	1.47	1.53
2	E	376	LYS	N-CA	-6.30	1.38	1.46
2	F	117	HIS	CA-C	-6.29	1.45	1.52
2	E	287	THR	CA-C	-6.29	1.44	1.52
4	H	138	ASN	CA-C	-6.29	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	217	VAL	CA-C	-6.29	1.44	1.52
3	G	106	ILE	CA-C	-6.29	1.45	1.52
2	F	289	MET	CA-C	-6.29	1.45	1.52
1	A	14	GLU	CA-C	-6.28	1.44	1.52
1	A	189	PHE	CA-C	-6.28	1.43	1.52
2	D	70	VAL	CA-C	-6.28	1.45	1.52
2	F	34	ASN	CA-C	-6.28	1.44	1.52
3	G	157	GLU	CA-C	-6.28	1.44	1.52
2	D	373	GLY	CA-C	-6.28	1.45	1.52
3	G	267	SER	CA-C	-6.28	1.44	1.52
5	I	45	VAL	N-CA	-6.28	1.38	1.46
2	E	253	LEU	N-CA	-6.27	1.38	1.46
2	F	162	LYS	CA-C	-6.27	1.44	1.52
2	E	161	GLY	N-CA	-6.27	1.36	1.45
2	F	263	GLN	N-CA	-6.26	1.39	1.46
1	C	476	HIS	N-CA	-6.26	1.39	1.46
2	D	292	MET	N-CA	-6.26	1.38	1.46
2	D	438	ILE	CA-C	-6.26	1.45	1.52
1	C	465	GLU	CA-C	-6.25	1.44	1.52
2	E	33	LEU	CA-C	-6.25	1.44	1.52
3	G	245	LYS	CA-C	-6.25	1.45	1.52
2	F	155	PHE	CA-C	-6.25	1.44	1.52
10	V	70	GLU	C-N	-6.25	1.24	1.33
1	C	35	GLY	CA-C	-6.24	1.43	1.51
3	G	181	LEU	CA-C	-6.24	1.44	1.52
2	E	46	VAL	N-CA	-6.24	1.38	1.46
2	F	369	ASP	CA-C	-6.24	1.44	1.52
1	C	203	TYR	CA-C	-6.24	1.45	1.52
2	D	43	THR	CA-C	-6.24	1.45	1.52
3	G	267	SER	N-CA	-6.24	1.38	1.46
3	G	127	THR	N-CA	-6.24	1.38	1.45
2	D	372	ARG	CA-C	-6.24	1.44	1.52
3	G	141	ALA	CA-C	-6.24	1.44	1.52
2	E	110	THR	N-CA	-6.23	1.37	1.45
1	C	282	SER	CA-C	-6.23	1.44	1.52
4	H	96	GLU	N-CA	-6.23	1.38	1.46
2	D	165	LEU	N-CA	-6.22	1.39	1.46
2	D	284	THR	CA-C	-6.22	1.43	1.52
2	E	59	ARG	CA-C	-6.22	1.45	1.52
2	D	177	HIS	CA-C	-6.22	1.45	1.52
2	F	37	GLU	CA-C	-6.22	1.45	1.52
1	C	333	ASP	CA-C	-6.22	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	369	LEU	CA-C	-6.22	1.43	1.52
1	C	509	GLU	CA-C	-6.22	1.44	1.52
1	A	286	ARG	CA-C	-6.21	1.44	1.52
3	G	216	SER	CA-C	-6.21	1.44	1.52
8	T	73	ASP	N-CA	-6.21	1.38	1.46
1	A	258	ARG	CA-C	-6.21	1.45	1.52
1	C	245	LEU	CA-C	-6.21	1.44	1.52
5	I	30	PHE	N-CA	-6.20	1.38	1.46
1	C	127	ARG	N-CA	-6.20	1.38	1.46
2	E	387	ILE	CA-C	-6.20	1.45	1.52
1	B	266	ILE	N-CA	-6.20	1.39	1.46
2	F	182	VAL	CA-C	-6.20	1.45	1.52
2	F	293	GLN	CA-C	-6.20	1.44	1.52
4	H	54	THR	N-CA	-6.20	1.38	1.46
1	C	216	LEU	CA-C	-6.20	1.45	1.52
2	E	312	VAL	N-CA	-6.20	1.40	1.46
7	S	15	GLU	CA-C	-6.20	1.44	1.53
1	B	203	TYR	N-CA	-6.19	1.39	1.46
2	E	399	GLU	CA-C	-6.19	1.44	1.52
1	C	284	LEU	CA-C	-6.19	1.44	1.52
3	G	228	ARG	CA-C	-6.19	1.44	1.52
7	S	37	LYS	N-CA	-6.19	1.38	1.46
1	B	28	THR	N-CA	-6.19	1.38	1.45
1	B	128	ARG	CA-C	-6.18	1.44	1.52
2	F	432	VAL	CA-C	-6.18	1.47	1.53
2	D	396	LEU	CA-C	-6.18	1.45	1.52
2	F	206	ILE	CA-C	-6.18	1.46	1.52
1	B	336	ALA	CA-C	-6.18	1.44	1.52
4	H	57	VAL	N-CA	-6.18	1.38	1.46
1	B	139	ARG	N-CA	-6.18	1.38	1.45
1	A	54	GLU	CA-C	-6.17	1.44	1.52
2	D	74	LYS	CA-C	-6.17	1.44	1.52
1	C	475	GLN	CA-C	-6.17	1.45	1.53
1	B	330	GLN	CA-C	-6.17	1.45	1.52
1	A	219	ARG	CA-C	-6.16	1.44	1.52
1	A	354	THR	CA-C	-6.16	1.44	1.52
1	C	496	LYS	CA-C	-6.16	1.44	1.52
2	E	245	ASP	CA-C	-6.16	1.44	1.52
2	E	325	THR	CA-C	-6.16	1.44	1.52
4	H	74	LYS	CA-C	-6.16	1.45	1.52
1	C	445	ILE	CA-C	-6.16	1.45	1.52
2	E	377	ILE	CA-C	-6.16	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	194	ASP	CA-C	-6.15	1.45	1.52
2	D	305	THR	N-CA	-6.15	1.38	1.46
2	F	202	GLU	CA-C	-6.15	1.44	1.52
1	B	89	LYS	CA-C	-6.15	1.45	1.52
1	B	350	ILE	N-CA	-6.15	1.38	1.46
2	F	173	VAL	CA-C	-6.15	1.45	1.52
3	G	74	ASP	N-CA	-6.14	1.39	1.46
2	E	196	LEU	N-CA	-6.14	1.38	1.46
1	B	29	GLY	CA-C	-6.13	1.45	1.51
2	D	41	ARG	CA-C	-6.13	1.45	1.53
4	H	109	LYS	N-CA	-6.13	1.39	1.46
2	F	292	MET	CA-C	-6.13	1.45	1.53
1	A	381	ARG	CA-C	-6.13	1.44	1.52
1	C	336	ALA	CA-C	-6.13	1.44	1.52
1	C	120	PRO	CA-C	-6.12	1.43	1.52
1	C	482	LYS	CA-C	-6.12	1.45	1.52
2	E	213	SER	N-CA	-6.12	1.38	1.46
7	S	42	VAL	CA-C	-6.12	1.45	1.52
2	D	262	THR	CA-C	-6.12	1.45	1.52
2	E	442	GLN	CA-C	-6.12	1.44	1.52
1	C	202	ILE	CA-C	-6.12	1.44	1.52
1	A	8	VAL	CA-C	-6.11	1.45	1.52
1	A	323	ALA	CA-C	-6.11	1.45	1.52
2	F	165	LEU	CA-C	-6.11	1.45	1.52
4	H	90	VAL	CA-C	-6.11	1.45	1.52
1	C	311	LYS	CA-C	-6.11	1.45	1.52
1	A	66	LEU	CA-C	-6.11	1.45	1.53
1	C	34	ILE	CA-C	-6.11	1.45	1.52
3	G	248	LEU	N-CA	-6.11	1.38	1.46
1	A	113	ASN	CA-C	-6.11	1.45	1.52
1	C	428	LEU	CA-C	-6.11	1.44	1.52
2	D	39	GLN	CA-C	-6.11	1.45	1.52
2	D	406	ARG	CA-C	-6.11	1.45	1.52
2	D	384	LEU	CA-C	-6.10	1.44	1.52
2	E	303	SER	CA-C	-6.10	1.45	1.52
1	B	362	ARG	N-CA	-6.10	1.40	1.46
1	B	88	VAL	CA-C	-6.10	1.45	1.52
2	F	399	GLU	CA-C	-6.10	1.45	1.52
1	A	394	LEU	CA-C	-6.09	1.44	1.52
1	C	243	GLN	CA-C	-6.09	1.45	1.52
1	C	451	GLY	CA-C	-6.09	1.43	1.51
2	E	94	ILE	CA-C	-6.09	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	T	97	ASN	N-CA	-6.09	1.38	1.46
1	A	398	ARG	CA-C	-6.09	1.45	1.52
1	B	392	LEU	N-CA	-6.09	1.39	1.46
1	A	151	LYS	CA-C	-6.08	1.45	1.52
1	C	126	ARG	N-CA	-6.08	1.38	1.45
1	C	285	LEU	CA-C	-6.08	1.44	1.52
2	F	274	ARG	CA-C	-6.08	1.44	1.52
2	D	312	VAL	CA-C	-6.08	1.48	1.53
2	F	341	GLU	CA-C	-6.08	1.44	1.52
3	G	14	LYS	CA-C	-6.08	1.45	1.52
2	E	293	GLN	CA-C	-6.07	1.44	1.52
7	S	50	LYS	N-CA	-6.07	1.39	1.46
1	C	492	GLU	CA-C	-6.07	1.45	1.52
2	E	324	THR	CA-C	-6.07	1.44	1.52
1	B	39	ALA	N-CA	-6.07	1.38	1.46
3	G	21	LYS	CA-C	-6.07	1.45	1.52
7	S	50	LYS	C-N	6.07	1.41	1.33
8	T	169	LYS	CA-C	-6.07	1.44	1.52
1	A	59	LEU	CA-C	-6.06	1.44	1.52
2	F	206	ILE	N-CA	-6.06	1.39	1.46
3	G	125	LEU	CA-C	-6.06	1.46	1.52
2	E	307	VAL	N-CA	-6.06	1.37	1.46
2	E	371	ALA	N-CA	-6.06	1.39	1.46
2	E	284	THR	CA-C	-6.06	1.44	1.52
1	B	301	LEU	N-CA	-6.05	1.39	1.46
2	D	274	ARG	CA-C	-6.05	1.45	1.52
5	I	10	SER	CA-C	-6.05	1.45	1.53
1	A	194	ASP	N-CA	-6.04	1.39	1.46
4	H	58	LEU	CA-C	-6.04	1.44	1.52
7	S	64	VAL	CA-C	-6.04	1.45	1.52
2	E	387	ILE	N-CA	-6.04	1.39	1.46
1	A	425	THR	CA-C	-6.04	1.45	1.52
11	W	48	TRP	CA-C	-6.04	1.44	1.52
2	F	255	ILE	CA-C	-6.03	1.44	1.52
1	A	386	VAL	CA-C	-6.03	1.46	1.52
2	F	262	THR	CA-C	-6.03	1.45	1.52
2	F	168	GLU	CA-C	-6.03	1.45	1.52
1	A	187	LYS	N-CA	-6.03	1.39	1.46
2	E	407	ALA	CA-C	-6.02	1.45	1.52
1	B	323	ALA	CA-C	-6.02	1.45	1.52
1	C	60	LYS	CA-C	-6.02	1.45	1.52
3	G	13	ILE	CA-C	-6.02	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	341	GLU	CA-C	-6.02	1.44	1.52
1	B	275	ALA	CA-C	-6.01	1.45	1.52
1	B	312	MET	CA-C	-6.01	1.44	1.53
2	D	165	LEU	CA-C	-6.01	1.45	1.52
2	D	441	PHE	CA-C	-6.01	1.45	1.52
3	G	204	TYR	N-CA	-6.01	1.38	1.46
7	S	5	VAL	CA-C	-6.01	1.46	1.52
5	I	16	GLN	N-CA	-6.01	1.38	1.46
1	A	35	GLY	N-CA	-6.01	1.36	1.45
1	B	354	THR	CA-C	-6.01	1.45	1.52
1	C	275	ALA	CA-C	-6.00	1.45	1.52
7	S	4	LEU	CA-C	-6.00	1.45	1.52
1	B	31	VAL	CA-C	-6.00	1.46	1.53
7	S	76	GLU	CA-C	-6.00	1.45	1.52
1	B	125	ALA	CA-C	-6.00	1.44	1.53
1	A	89	LYS	CA-C	-6.00	1.45	1.52
2	F	292	MET	N-CA	-6.00	1.38	1.46
1	B	173	THR	CA-C	-6.00	1.46	1.53
1	C	224	ASP	CA-C	-5.99	1.44	1.52
2	E	26	ASP	CA-C	-5.99	1.44	1.52
7	S	164	VAL	N-CA	-5.99	1.39	1.46
4	H	88	SER	CA-C	-5.99	1.44	1.52
1	B	167	ILE	CA-C	-5.99	1.45	1.52
2	E	199	GLU	N-CA	-5.99	1.38	1.46
1	A	399	GLU	CA-C	-5.98	1.44	1.52
1	C	145	PRO	CA-C	-5.98	1.44	1.52
2	D	140	VAL	CA-C	-5.98	1.45	1.52
2	D	321	ALA	N-CA	-5.98	1.42	1.46
2	E	183	PHE	CA-C	-5.97	1.45	1.52
2	F	53	LEU	CA-C	-5.97	1.44	1.52
2	D	371	ALA	CA-C	-5.97	1.45	1.52
2	E	95	MET	CA-C	-5.97	1.45	1.52
1	A	372	SER	N-CA	-5.97	1.39	1.46
2	D	25	PHE	N-CA	-5.97	1.38	1.46
3	G	17	GLN	N-CA	-5.97	1.39	1.46
4	H	90	VAL	N-CA	-5.97	1.39	1.46
1	A	229	THR	CA-C	-5.97	1.45	1.52
1	A	49	ALA	CA-C	-5.96	1.45	1.53
1	C	339	PRO	CA-C	-5.96	1.44	1.52
3	G	10	LEU	CA-C	-5.96	1.44	1.52
1	C	38	ILE	CA-C	-5.96	1.45	1.52
1	C	383	MET	N-CA	-5.96	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	460	LYS	CA-C	-5.96	1.44	1.52
1	C	501	VAL	N-CA	-5.96	1.39	1.46
1	B	350	ILE	CA-C	-5.95	1.46	1.52
1	C	76	PHE	CA-C	-5.95	1.45	1.52
1	A	337	TYR	CA-C	-5.95	1.45	1.52
1	B	462	THR	CA-C	-5.95	1.45	1.52
1	B	468	PHE	CA-C	-5.95	1.45	1.52
1	C	367	VAL	CA-C	-5.95	1.45	1.52
2	E	443	GLN	CA-C	-5.95	1.45	1.52
1	A	40	ARG	N-CA	-5.95	1.38	1.46
1	B	74	VAL	CA-C	-5.95	1.46	1.52
1	C	88	VAL	N-CA	-5.95	1.39	1.46
1	C	167	ILE	N-CA	-5.95	1.39	1.46
2	D	22	ASP	N-CA	-5.95	1.38	1.46
2	F	24	GLN	CA-C	-5.94	1.45	1.52
3	G	220	SER	N-CA	-5.94	1.39	1.46
1	A	276	VAL	CA-C	-5.94	1.45	1.52
1	C	358	TYR	CA-C	-5.94	1.45	1.52
1	C	481	GLY	CA-C	-5.94	1.45	1.51
2	E	469	LYS	CA-C	-5.94	1.44	1.52
1	A	280	GLN	N-CA	-5.94	1.39	1.46
2	E	75	VAL	CA-C	-5.94	1.45	1.52
2	F	459	MET	CA-C	-5.94	1.45	1.53
3	G	19	ILE	CA-C	-5.94	1.45	1.52
1	A	86	ASP	CA-C	-5.93	1.45	1.52
2	E	440	GLY	CA-C	-5.93	1.43	1.51
2	E	15	ALA	CA-C	-5.93	1.45	1.52
1	B	41	VAL	N-CA	-5.93	1.39	1.46
1	C	276	VAL	CA-C	-5.93	1.45	1.52
1	A	341	ASN	CA-C	-5.92	1.45	1.52
1	B	70	ASN	CA-C	-5.92	1.45	1.52
1	C	40	ARG	CA-C	-5.92	1.45	1.52
1	C	34	ILE	N-CA	-5.92	1.39	1.46
1	A	370	SER	CA-C	-5.92	1.45	1.52
1	B	38	ILE	CA-C	-5.92	1.44	1.52
1	B	28	THR	CA-C	-5.91	1.45	1.52
1	C	337	TYR	N-CA	-5.91	1.39	1.46
2	D	207	ASN	N-CA	-5.91	1.38	1.46
7	S	98	THR	N-CA	-5.91	1.40	1.46
2	D	45	LEU	CA-C	-5.91	1.45	1.52
2	D	137	ILE	CA-C	-5.91	1.45	1.52
1	A	282	SER	CA-C	-5.91	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	245	LYS	N-CA	-5.91	1.39	1.46
2	D	189	ARG	CA-C	-5.91	1.45	1.52
2	D	388	ILE	CA-C	-5.91	1.44	1.52
2	E	175	LYS	CA-C	-5.91	1.45	1.52
2	F	370	VAL	CA-C	-5.90	1.45	1.52
7	S	26	ALA	CA-C	-5.90	1.45	1.52
2	D	367	HIS	N-CA	-5.90	1.39	1.46
1	A	231	VAL	CA-C	-5.90	1.45	1.52
1	B	362	ARG	CA-C	-5.90	1.45	1.52
2	E	50	ALA	CA-C	-5.90	1.45	1.52
2	E	383	SER	CA-C	-5.89	1.45	1.52
1	A	276	VAL	N-CA	-5.89	1.39	1.46
2	E	37	GLU	CA-C	-5.89	1.45	1.52
2	F	167	MET	N-CA	-5.89	1.39	1.46
2	D	374	VAL	CA-C	-5.89	1.45	1.52
1	C	443	ALA	CA-C	-5.89	1.45	1.52
2	D	457	PHE	N-CA	-5.89	1.38	1.46
2	E	306	SER	N-CA	-5.89	1.38	1.46
2	E	333	THR	CA-C	-5.89	1.45	1.52
1	C	220	LEU	CA-C	-5.89	1.45	1.52
2	E	137	ILE	CA-C	-5.89	1.45	1.52
3	G	28	ALA	CA-C	-5.88	1.44	1.52
11	W	88	LEU	N-CA	-5.88	1.41	1.46
1	A	503	ASN	CA-C	-5.88	1.45	1.52
2	D	271	LEU	CA-C	-5.88	1.44	1.52
2	D	459	MET	CA-C	-5.88	1.46	1.53
3	G	114	SER	N-CA	-5.88	1.38	1.46
7	S	74	ALA	CA-C	-5.87	1.45	1.52
7	S	33	GLU	CA-C	-5.87	1.44	1.52
2	D	172	ASN	CA-C	-5.87	1.45	1.52
2	E	336	SER	CA-C	-5.87	1.45	1.52
2	D	289	MET	CA-C	-5.87	1.45	1.52
1	B	339	PRO	CA-C	-5.87	1.43	1.52
2	E	93	ARG	CA-C	-5.87	1.45	1.52
2	F	44	ARG	CA-C	-5.87	1.45	1.53
1	B	382	ALA	CA-C	-5.86	1.45	1.52
2	E	56	SER	CA-C	-5.86	1.45	1.53
2	E	292	MET	N-CA	-5.86	1.38	1.46
4	H	29	ASN	N-CA	-5.86	1.39	1.47
1	B	40	ARG	N-CA	-5.86	1.39	1.46
1	A	218	LYS	N-CA	-5.85	1.39	1.46
2	D	259	PHE	N-CA	-5.85	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	D	169	LEU	CA-C	-5.85	1.45	1.52
1	A	268	TYR	CA-C	-5.85	1.45	1.52
1	B	302	HIS	N-CA	-5.85	1.38	1.46
2	E	150	GLY	CA-C	-5.85	1.45	1.52
3	G	12	SER	N-CA	-5.85	1.38	1.46
1	C	367	VAL	N-CA	-5.84	1.39	1.46
2	E	182	VAL	CA-C	-5.84	1.45	1.52
1	C	312	MET	N-CA	-5.84	1.39	1.45
4	H	139	GLU	N-CA	-5.84	1.39	1.46
7	S	103	SER	CA-C	-5.84	1.45	1.52
1	C	405	GLN	CA-C	-5.83	1.45	1.52
1	A	245	LEU	CA-C	-5.83	1.45	1.52
1	B	461	ILE	CA-C	-5.83	1.45	1.52
2	F	331	ALA	CA-C	-5.83	1.45	1.52
2	D	379	GLN	CA-C	-5.83	1.45	1.52
3	G	9	ARG	CA-C	-5.83	1.45	1.52
1	C	55	PHE	CA-C	-5.83	1.45	1.52
2	E	189	ARG	CA-C	-5.83	1.45	1.52
1	A	243	GLN	CA-C	-5.83	1.45	1.52
1	A	463	LYS	N-CA	-5.82	1.39	1.46
2	E	36	LEU	CA-C	-5.82	1.45	1.52
2	F	27	GLU	CA-C	-5.82	1.44	1.52
2	F	58	VAL	CA-C	-5.82	1.45	1.52
1	C	212	THR	CA-C	-5.82	1.45	1.52
2	D	152	ILE	CA-C	-5.82	1.45	1.52
3	G	257	VAL	CA-C	-5.82	1.45	1.52
1	C	426	GLU	CA-C	-5.82	1.45	1.52
2	F	428	LEU	N-CA	-5.82	1.38	1.46
4	H	71	THR	CA-C	-5.82	1.45	1.53
1	A	259	ASP	CA-C	-5.82	1.44	1.52
1	A	390	MET	CA-C	-5.81	1.45	1.52
1	B	88	VAL	N-CA	-5.81	1.39	1.46
1	B	258	ARG	CA-C	-5.81	1.45	1.52
2	D	394	ASP	CA-C	-5.81	1.46	1.53
2	F	201	ILE	CA-C	-5.81	1.46	1.52
3	G	143	VAL	CA-C	-5.81	1.45	1.52
1	B	220	LEU	N-CA	-5.80	1.39	1.46
1	C	393	GLU	CA-C	-5.80	1.45	1.52
2	E	345	TYR	CA-C	-5.80	1.47	1.52
2	F	17	ILE	CA-C	-5.80	1.45	1.52
2	F	164	VAL	CA-C	-5.80	1.45	1.52
2	D	34	ASN	N-CA	-5.80	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	466	ASN	CA-C	-5.80	1.45	1.52
1	C	242	LEU	N-CA	-5.79	1.39	1.46
2	D	21	VAL	N-CA	-5.79	1.39	1.46
2	F	12	ARG	N-CA	-5.79	1.38	1.46
2	D	456	ALA	CA-C	-5.79	1.45	1.52
2	E	468	ALA	CA-C	-5.79	1.45	1.52
2	D	199	GLU	N-CA	-5.78	1.39	1.46
1	C	479	LEU	N-CA	-5.78	1.39	1.46
2	D	436	GLU	CA-C	-5.78	1.44	1.52
2	F	267	GLU	CA-C	-5.78	1.45	1.52
1	B	186	GLN	CA-C	-5.77	1.44	1.52
2	E	218	VAL	CA-C	-5.77	1.45	1.52
2	D	270	ALA	CA-C	-5.77	1.45	1.52
7	S	117	PRO	CA-C	-5.77	1.45	1.52
3	G	25	MET	CA-C	-5.77	1.45	1.52
1	B	195	GLU	CA-C	-5.77	1.45	1.52
1	C	322	THR	CA-C	-5.76	1.45	1.52
2	E	441	PHE	CA-C	-5.76	1.45	1.52
7	S	121	THR	N-CA	-5.76	1.38	1.46
4	H	42	THR	CA-C	-5.76	1.45	1.52
7	S	54	SER	CA-C	-5.76	1.45	1.52
1	C	504	PHE	CA-C	-5.75	1.45	1.52
2	D	399	GLU	CA-C	-5.75	1.45	1.52
2	D	183	PHE	N-CA	-5.75	1.39	1.46
2	F	76	LEU	CA-C	-5.75	1.45	1.52
2	E	449	TYR	CA-C	-5.75	1.44	1.52
1	A	273	LYS	CA-C	-5.75	1.45	1.52
3	G	8	ARG	N-CA	-5.75	1.39	1.46
1	A	479	LEU	CA-C	-5.74	1.45	1.52
2	D	249	GLN	CA-C	-5.74	1.45	1.53
2	F	352	ASP	CA-C	-5.74	1.45	1.52
4	H	84	VAL	N-CA	-5.74	1.39	1.46
1	C	416	GLN	CA-C	-5.74	1.45	1.52
1	C	497	LEU	CA-C	-5.74	1.45	1.52
1	A	342	VAL	CA-C	-5.74	1.45	1.52
1	B	503	ASN	CA-C	-5.74	1.45	1.52
2	D	47	LEU	N-CA	-5.74	1.39	1.46
1	C	265	LEU	N-CA	-5.74	1.39	1.46
2	E	352	ASP	CA-C	-5.74	1.45	1.52
1	A	283	LEU	CA-C	-5.73	1.45	1.52
1	C	264	ALA	CA-C	-5.73	1.45	1.52
2	E	47	LEU	CA-C	-5.73	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	432	VAL	N-CA	-5.73	1.41	1.46
1	A	330	GLN	CA-C	-5.72	1.45	1.52
2	E	183	PHE	N-CA	-5.72	1.39	1.46
2	F	306	SER	N-CA	-5.72	1.39	1.46
1	A	358	TYR	CA-C	-5.72	1.45	1.52
1	C	287	ARG	CA-C	-5.72	1.45	1.52
1	C	350	ILE	N-CA	-5.72	1.38	1.46
2	E	289	MET	CA-C	-5.72	1.45	1.52
2	F	189	ARG	CA-C	-5.72	1.45	1.52
1	A	395	ALA	CA-C	-5.72	1.45	1.52
2	D	243	PHE	CA-C	-5.72	1.44	1.52
2	E	67	GLU	CA-C	-5.71	1.45	1.52
1	B	263	HIS	N-CA	-5.71	1.39	1.46
1	B	366	ASN	CA-C	-5.71	1.45	1.52
4	H	52	VAL	CA-C	-5.71	1.47	1.52
1	A	38	ILE	N-CA	-5.71	1.39	1.46
1	C	156	LEU	CA-C	-5.71	1.45	1.52
2	E	373	GLY	CA-C	-5.71	1.45	1.52
2	F	367	HIS	N-CA	-5.71	1.39	1.46
1	A	193	THR	CA-C	-5.71	1.45	1.53
1	A	248	TYR	CA-C	-5.71	1.45	1.52
4	H	35	GLN	CA-C	-5.71	1.45	1.52
2	E	43	THR	CA-C	-5.70	1.45	1.53
1	B	425	THR	CA-C	-5.70	1.45	1.52
2	D	170	ILE	CA-C	-5.70	1.45	1.52
2	F	299	THR	CA-C	-5.70	1.45	1.53
2	F	428	LEU	CA-C	-5.70	1.45	1.52
1	B	265	LEU	N-CA	-5.69	1.39	1.46
7	S	65	LYS	N-CA	-5.69	1.39	1.46
1	A	26	GLU	CA-C	-5.69	1.45	1.52
1	A	161	ARG	CA-C	-5.69	1.45	1.52
1	C	153	VAL	N-CA	-5.69	1.39	1.46
2	E	415	SER	CA-C	-5.69	1.45	1.52
2	F	259	PHE	CA-C	-5.69	1.45	1.52
1	A	221	THR	CA-C	-5.69	1.45	1.52
2	D	167	MET	CA-C	-5.69	1.45	1.52
2	F	216	ALA	CA-C	-5.69	1.46	1.52
1	A	164	ARG	CA-C	-5.69	1.47	1.53
1	C	108	VAL	N-CA	-5.69	1.39	1.46
2	D	352	ASP	CA-C	-5.69	1.45	1.52
2	E	257	ASN	CA-C	-5.68	1.41	1.52
1	C	303	SER	CA-C	-5.68	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	20	THR	N-CA	-5.68	1.39	1.46
4	H	24	THR	N-CA	-5.68	1.39	1.46
5	I	27	LYS	CA-C	-5.68	1.45	1.53
2	F	312	VAL	CA-C	-5.68	1.47	1.52
2	D	89	GLU	N-CA	-5.67	1.38	1.46
2	F	114	ALA	CA-C	-5.67	1.45	1.52
2	F	163	THR	N-CA	-5.67	1.39	1.46
1	B	340	THR	CA-C	-5.67	1.45	1.52
2	E	263	GLN	CA-C	-5.67	1.45	1.52
1	C	267	ILE	N-CA	-5.67	1.39	1.46
2	D	415	SER	CA-C	-5.67	1.45	1.52
2	F	288	ASP	CA-C	-5.67	1.45	1.52
1	A	60	LYS	CA-C	-5.66	1.45	1.52
1	A	383	MET	N-CA	-5.66	1.39	1.46
2	D	13	ILE	CA-C	-5.66	1.46	1.52
1	C	173	THR	CA-C	-5.66	1.47	1.53
1	C	240	ALA	N-CA	-5.66	1.41	1.46
1	A	301	LEU	CA-C	-5.66	1.45	1.52
2	E	165	LEU	CA-C	-5.66	1.45	1.52
1	C	60	LYS	N-CA	-5.65	1.39	1.45
2	D	339	ILE	CA-C	-5.65	1.45	1.52
2	E	197	TYR	CA-C	-5.65	1.45	1.52
2	F	22	ASP	CA-C	-5.65	1.45	1.52
3	G	181	LEU	N-CA	-5.65	1.39	1.46
3	G	271	ALA	CA-C	-5.65	1.45	1.52
9	U	8	LYS	C-N	5.65	1.41	1.33
3	G	138	PHE	N-CA	-5.65	1.39	1.46
1	B	199	LEU	CA-C	-5.64	1.46	1.52
2	F	84	ILE	N-CA	-5.64	1.41	1.46
3	G	131	VAL	CA-C	-5.64	1.46	1.53
7	S	31	LYS	N-CA	-5.64	1.39	1.46
1	A	361	ILE	N-CA	-5.64	1.39	1.46
2	D	58	VAL	CA-C	-5.64	1.46	1.52
2	D	197	TYR	CA-C	-5.64	1.45	1.52
2	E	169	LEU	CA-C	-5.64	1.45	1.52
2	E	268	VAL	N-CA	-5.64	1.39	1.46
2	F	412	ARG	CA-C	-5.64	1.45	1.52
3	G	47	GLY	CA-C	-5.64	1.46	1.52
3	G	120	HIS	CA-C	-5.64	1.45	1.52
2	F	179	GLY	CA-C	-5.64	1.44	1.51
1	C	297	ASP	CA-C	-5.63	1.43	1.52
1	B	61	GLY	CA-C	-5.63	1.45	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	190	ASN	CA-C	-5.63	1.45	1.52
2	E	421	ALA	N-CA	-5.63	1.39	1.46
2	E	226	PRO	CA-C	-5.63	1.44	1.52
7	S	40	LEU	CA-C	-5.63	1.45	1.52
2	D	10	THR	CA-C	-5.62	1.45	1.52
2	D	307	VAL	N-CA	-5.62	1.39	1.46
2	D	422	GLU	CA-C	-5.62	1.44	1.52
2	F	218	VAL	N-CA	-5.62	1.39	1.46
3	G	241	GLU	N-CA	-5.62	1.39	1.46
4	H	103	LEU	N-CA	-5.62	1.39	1.46
1	C	287	ARG	N-CA	-5.62	1.38	1.46
7	S	30	ASN	CA-C	-5.62	1.46	1.53
1	B	213	VAL	CA-C	-5.62	1.45	1.52
2	E	378	LEU	CA-C	-5.62	1.45	1.52
2	D	138	LYS	CA-C	-5.61	1.45	1.52
2	E	459	MET	CA-C	-5.61	1.45	1.53
2	F	80	ALA	N-CA	-5.61	1.40	1.46
1	B	60	LYS	CA-C	-5.61	1.45	1.52
1	B	421	GLY	N-CA	-5.61	1.39	1.45
2	F	133	LEU	N-CA	-5.61	1.39	1.46
1	C	55	PHE	N-CA	-5.61	1.39	1.45
3	G	237	LYS	CA-C	-5.61	1.45	1.52
4	H	112	LEU	N-CA	-5.61	1.39	1.46
2	F	16	VAL	CA-C	-5.60	1.45	1.52
2	F	256	ASP	CA-C	-5.60	1.47	1.53
1	C	264	ALA	N-CA	-5.60	1.39	1.45
1	C	302	HIS	N-CA	-5.60	1.39	1.46
2	D	217	LEU	CA-C	-5.60	1.46	1.52
2	E	13	ILE	N-CA	-5.60	1.39	1.46
1	A	263	HIS	N-CA	-5.60	1.39	1.46
1	A	426	GLU	CA-C	-5.60	1.45	1.52
4	H	129	ALA	C-O	-5.60	1.17	1.24
1	C	146	MET	N-CA	-5.60	1.39	1.46
3	G	5	ASP	N-CA	-5.60	1.39	1.46
7	S	81	LEU	CA-C	-5.60	1.45	1.52
2	E	439	LYS	N-CA	-5.60	1.39	1.46
1	A	482	LYS	CA-C	-5.59	1.45	1.52
2	F	377	ILE	CA-C	-5.59	1.45	1.52
1	B	283	LEU	CA-C	-5.59	1.45	1.52
1	C	480	LEU	CA-C	-5.59	1.45	1.52
1	A	267	ILE	CA-C	-5.59	1.45	1.52
5	I	21	ALA	N-CA	-5.59	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	383	MET	CA-C	-5.59	1.45	1.52
2	D	318	THR	CA-C	-5.59	1.45	1.52
2	D	439	LYS	CA-C	-5.59	1.45	1.52
2	E	326	PHE	CA-C	-5.59	1.45	1.52
3	G	227	ALA	CA-C	-5.58	1.45	1.52
1	B	346	THR	CA-C	-5.58	1.45	1.53
4	H	17	SER	N-CA	-5.58	1.39	1.46
1	A	108	VAL	N-CA	-5.58	1.39	1.46
2	D	91	LEU	CA-C	-5.58	1.45	1.52
3	G	217	LEU	N-CA	-5.57	1.39	1.46
1	B	178	ILE	CA-C	-5.57	1.46	1.52
1	C	73	VAL	CA-C	-5.57	1.45	1.52
1	A	195	GLU	CA-C	-5.57	1.45	1.52
1	B	469	LEU	CA-C	-5.57	1.45	1.52
1	A	208	GLN	CA-C	-5.56	1.45	1.52
2	E	290	GLY	CA-C	-5.56	1.46	1.52
2	F	439	LYS	N-CA	-5.56	1.39	1.46
3	G	110	ASP	CA-C	-5.56	1.44	1.52
1	B	34	ILE	N-CA	-5.56	1.39	1.46
2	E	163	THR	N-CA	-5.56	1.39	1.46
3	G	165	PHE	N-CA	-5.56	1.39	1.46
2	F	21	VAL	N-CA	-5.56	1.39	1.46
2	F	362	ILE	CA-C	-5.56	1.46	1.52
2	E	398	GLU	CA-C	-5.55	1.45	1.52
1	A	351	PHE	CA-C	-5.55	1.45	1.52
7	S	84	ASN	CA-C	-5.55	1.45	1.52
2	D	366	GLU	CA-C	-5.55	1.46	1.52
3	G	265	ILE	CA-C	-5.55	1.46	1.52
7	S	46	LEU	N-CA	-5.55	1.39	1.46
1	A	88	VAL	N-CA	-5.54	1.39	1.46
1	B	81	LEU	CA-C	-5.54	1.46	1.52
1	B	280	GLN	N-CA	-5.54	1.39	1.46
2	E	22	ASP	N-CA	-5.54	1.39	1.46
1	A	67	GLU	CA-C	-5.54	1.44	1.52
3	G	18	LYS	N-CA	-5.54	1.39	1.46
2	F	192	GLU	CA-C	-5.54	1.45	1.52
2	D	61	ILE	N-CA	-5.54	1.39	1.46
2	D	175	LYS	CA-C	-5.54	1.46	1.52
2	F	167	MET	CA-C	-5.53	1.45	1.52
1	B	244	TYR	N-CA	-5.53	1.39	1.46
2	D	201	ILE	CA-C	-5.53	1.46	1.52
2	E	369	ASP	CA-C	-5.53	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	346	THR	CA-C	-5.53	1.45	1.52
1	B	173	THR	N-CA	-5.53	1.38	1.46
1	A	361	ILE	CA-C	-5.53	1.45	1.52
2	E	24	GLN	CA-C	-5.53	1.46	1.52
1	C	414	THR	N-CA	-5.52	1.39	1.46
2	D	173	VAL	N-CA	-5.52	1.39	1.46
1	A	366	ASN	CA-C	-5.52	1.45	1.52
3	G	29	ALA	N-CA	-5.52	1.39	1.46
1	A	218	LYS	CA-C	-5.52	1.45	1.52
1	B	475	GLN	CA-C	-5.51	1.46	1.53
2	D	36	LEU	CA-C	-5.51	1.46	1.52
2	E	218	VAL	N-CA	-5.51	1.39	1.46
2	D	80	ALA	N-CA	-5.51	1.41	1.46
1	A	186	GLN	CA-C	-5.51	1.45	1.52
7	S	21	ALA	CA-C	-5.51	1.45	1.52
2	D	408	ARG	CA-C	-5.51	1.45	1.52
1	B	171	ARG	CA-C	-5.51	1.45	1.52
1	B	504	PHE	CA-C	-5.51	1.45	1.52
3	G	127	THR	CA-C	-5.50	1.45	1.52
4	H	137	ALA	CA-C	-5.50	1.46	1.52
5	I	21	ALA	CA-C	-5.50	1.45	1.52
1	C	242	LEU	CA-C	-5.50	1.46	1.52
2	D	312	VAL	N-CA	-5.50	1.42	1.46
1	A	154	ASP	CA-C	-5.50	1.45	1.52
4	H	76	PHE	N-CA	-5.50	1.39	1.46
1	A	210	ARG	CA-C	-5.49	1.45	1.52
2	E	205	VAL	CA-C	-5.49	1.45	1.52
2	E	158	ALA	CA-C	-5.49	1.45	1.52
9	U	123	ASN	C-N	-5.49	1.25	1.33
2	D	428	LEU	CA-C	-5.49	1.45	1.52
2	D	84	ILE	N-CA	-5.49	1.41	1.46
1	C	382	ALA	CA-C	-5.49	1.45	1.52
1	C	131	LEU	CA-C	-5.48	1.46	1.52
2	E	304	ILE	CA-C	-5.48	1.45	1.52
3	G	272	LEU	N-CA	-5.48	1.39	1.46
3	G	88	GLN	N-CA	-5.48	1.39	1.46
4	H	36	VAL	CA-C	-5.48	1.45	1.52
2	E	243	PHE	CA-C	-5.48	1.45	1.52
2	E	464	GLU	CA-C	-5.48	1.45	1.52
2	D	245	ASP	CA-C	-5.48	1.45	1.52
4	H	24	THR	CA-C	-5.47	1.45	1.52
7	S	162	MET	CA-C	-5.47	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	242	LEU	N-CA	-5.47	1.39	1.46
1	A	410	LEU	N-CA	-5.47	1.39	1.46
2	D	125	GLU	CA-C	-5.47	1.45	1.52
1	C	413	ALA	CA-C	-5.47	1.45	1.52
1	C	467	ALA	CA-C	-5.47	1.46	1.52
2	E	58	VAL	CA-C	-5.47	1.46	1.52
2	E	84	ILE	C-O	-5.47	1.20	1.24
2	E	281	TYR	CA-C	-5.47	1.45	1.52
1	A	260	ASN	CA-C	-5.47	1.46	1.53
1	A	284	LEU	CA-C	-5.46	1.45	1.52
1	C	300	TYR	N-CA	-5.46	1.39	1.46
2	D	261	PHE	CA-C	-5.46	1.46	1.52
2	F	328	HIS	CA-C	-5.46	1.44	1.52
1	B	259	ASP	CA-C	-5.46	1.45	1.52
1	B	348	GLY	CA-C	-5.45	1.46	1.52
1	C	238	ASP	CA-C	-5.45	1.45	1.52
1	C	321	LEU	CA-C	-5.45	1.46	1.52
4	H	144	ALA	CA-C	-5.45	1.46	1.52
1	C	279	ARG	CA-C	-5.45	1.45	1.52
2	E	142	LEU	N-CA	-5.45	1.39	1.46
2	E	414	LEU	CA-C	-5.45	1.45	1.52
2	F	423	VAL	N-CA	-5.45	1.40	1.46
2	D	289	MET	N-CA	-5.45	1.39	1.46
2	E	153	GLY	CA-C	-5.45	1.47	1.51
2	E	423	VAL	N-CA	-5.45	1.40	1.46
1	B	75	VAL	CA-C	-5.45	1.46	1.52
2	E	374	VAL	CA-C	-5.45	1.46	1.52
2	D	365	SER	CA-C	-5.44	1.45	1.52
1	C	501	VAL	C-O	-5.44	1.18	1.24
7	S	55	LEU	N-CA	-5.44	1.39	1.46
1	A	157	VAL	N-CA	-5.44	1.39	1.46
1	C	165	GLU	CA-C	-5.44	1.46	1.52
1	C	356	LEU	CA-C	-5.44	1.46	1.52
1	C	369	LEU	CA-C	-5.44	1.45	1.52
1	B	256	TYR	N-CA	-5.44	1.39	1.46
1	B	280	GLN	CA-C	-5.44	1.45	1.52
1	B	343	ILE	CA-C	-5.44	1.45	1.52
2	E	144	ALA	N-CA	-5.44	1.41	1.46
3	G	176	LYS	CA-C	-5.43	1.46	1.52
3	G	224	GLU	CA-C	-5.43	1.45	1.52
1	A	224	ASP	CA-C	-5.43	1.45	1.52
1	B	83	LYS	N-CA	-5.43	1.39	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	3	THR	CA-C	-5.43	1.45	1.52
1	B	68	PRO	N-CA	-5.42	1.43	1.47
1	B	262	LYS	N-CA	-5.42	1.39	1.45
2	E	79	GLY	CA-C	-5.42	1.44	1.51
2	E	338	ALA	CA-C	-5.42	1.46	1.52
2	E	402	LEU	N-CA	-5.42	1.39	1.46
2	D	443	GLN	CA-C	-5.42	1.45	1.52
1	C	339	PRO	N-CA	-5.42	1.40	1.47
3	G	167	SER	N-CA	-5.42	1.39	1.46
1	A	10	SER	CA-C	-5.42	1.45	1.52
1	C	214	ALA	CA-C	-5.42	1.45	1.52
2	F	387	ILE	CA-C	-5.42	1.46	1.52
3	G	141	ALA	N-CA	-5.42	1.39	1.46
3	G	173	THR	N-CA	-5.42	1.39	1.46
1	A	225	ALA	CA-C	-5.42	1.45	1.52
2	E	11	GLY	N-CA	-5.42	1.39	1.44
1	A	127	ARG	N-CA	-5.41	1.39	1.46
2	D	234	LEU	CA-C	-5.41	1.45	1.52
2	D	376	LYS	CA-C	-5.41	1.46	1.52
3	G	233	ASP	N-CA	-5.41	1.40	1.46
1	B	467	ALA	CA-C	-5.41	1.46	1.52
1	A	445	ILE	CA-C	-5.41	1.46	1.52
1	B	397	TYR	N-CA	-5.41	1.39	1.46
1	A	442	VAL	CA-C	-5.41	1.46	1.52
2	E	408	ARG	CA-C	-5.41	1.45	1.52
5	I	11	TYR	CA-C	-5.40	1.45	1.52
1	B	216	LEU	N-CA	-5.40	1.39	1.46
1	B	356	LEU	CA-C	-5.40	1.46	1.52
2	F	83	ARG	N-CA	-5.40	1.39	1.46
1	B	327	ILE	CA-C	-5.40	1.46	1.52
1	A	429	LYS	CA-C	-5.40	1.45	1.52
1	B	152	ALA	CA-C	-5.39	1.45	1.52
1	B	257	PHE	CA-C	-5.39	1.45	1.52
1	C	274	GLN	CA-C	-5.39	1.46	1.52
2	D	367	HIS	CA-C	-5.39	1.46	1.52
2	E	443	GLN	N-CA	-5.39	1.39	1.46
1	A	176	THR	CA-C	-5.39	1.45	1.52
2	D	161	GLY	N-CA	-5.39	1.37	1.45
2	D	333	THR	CA-C	-5.39	1.46	1.52
1	B	419	SER	CA-C	-5.38	1.46	1.52
1	C	154	ASP	CA-C	-5.38	1.45	1.52
1	B	396	GLN	N-CA	-5.38	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	D	288	ASP	CA-C	-5.38	1.45	1.52
3	G	203	ASN	N-CA	-5.38	1.40	1.46
1	A	403	PHE	CA-C	-5.38	1.45	1.52
1	A	41	VAL	N-CA	-5.37	1.39	1.46
1	A	51	GLU	N-CA	-5.37	1.39	1.46
1	A	475	GLN	CA-C	-5.37	1.46	1.53
3	G	43	VAL	CA-C	-5.37	1.46	1.52
3	G	203	ASN	CA-C	-5.37	1.44	1.52
1	A	14	GLU	N-CA	-5.37	1.39	1.46
2	D	381	TYR	N-CA	-5.37	1.39	1.46
4	H	114	LYS	CA-C	-5.37	1.45	1.52
1	B	157	VAL	N-CA	-5.37	1.41	1.46
1	B	114	ALA	CA-C	-5.36	1.46	1.53
1	C	418	LEU	CA-C	-5.36	1.46	1.52
2	F	365	SER	CA-C	-5.36	1.45	1.52
7	S	119	THR	CA-C	-5.36	1.45	1.52
1	C	206	ILE	CA-C	-5.36	1.45	1.52
1	C	283	LEU	CA-C	-5.36	1.45	1.52
1	A	17	LEU	CA-C	-5.36	1.45	1.52
1	A	155	SER	CA-C	-5.36	1.46	1.53
1	A	362	ARG	CA-C	-5.36	1.46	1.52
2	E	39	GLN	CA-C	-5.36	1.45	1.52
1	B	303	SER	CA-C	-5.36	1.45	1.52
2	D	324	THR	CA-C	-5.36	1.45	1.52
7	S	148	LEU	CA-C	-5.35	1.45	1.52
1	B	474	SER	N-CA	-5.35	1.40	1.46
2	D	316	ASP	CA-C	-5.35	1.45	1.52
2	E	416	GLN	N-CA	-5.34	1.38	1.46
7	S	122	THR	CA-C	-5.34	1.46	1.52
2	E	454	GLU	CA-C	-5.34	1.45	1.52
1	A	34	ILE	CA-C	-5.34	1.45	1.52
1	C	342	VAL	CA-C	-5.34	1.46	1.52
1	C	483	ILE	CA-C	-5.34	1.45	1.52
3	G	169	ILE	N-CA	-5.34	1.39	1.46
2	F	443	GLN	CA-C	-5.33	1.46	1.52
1	B	214	ALA	N-CA	-5.33	1.40	1.46
1	C	125	ALA	CA-C	-5.33	1.45	1.53
1	A	469	LEU	CA-C	-5.33	1.46	1.52
3	G	124	PHE	CA-C	-5.33	1.45	1.53
1	C	341	ASN	CA-C	-5.33	1.46	1.52
1	C	465	GLU	N-CA	-5.33	1.40	1.46
2	F	443	GLN	N-CA	-5.33	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	10	THR	CA-C	-5.32	1.46	1.52
2	E	38	VAL	CA-C	-5.32	1.46	1.52
2	F	355	SER	N-CA	-5.32	1.39	1.46
1	A	312	MET	CA-C	-5.32	1.45	1.53
2	F	41	ARG	N-CA	-5.32	1.40	1.46
1	B	196	LYS	N-CA	-5.32	1.40	1.46
2	E	332	THR	CA-C	-5.32	1.46	1.52
2	F	100	GLU	CA-C	-5.32	1.46	1.52
2	F	373	GLY	CA-C	-5.32	1.46	1.52
7	S	148	LEU	N-CA	-5.32	1.39	1.46
1	A	297	ASP	CA-C	-5.31	1.44	1.52
1	C	225	ALA	N-CA	-5.31	1.38	1.45
1	C	356	LEU	N-CA	-5.31	1.40	1.46
2	F	250	ASP	CA-C	-5.31	1.45	1.52
7	S	104	ALA	CA-C	-5.31	1.45	1.52
1	B	140	ILE	N-CA	-5.31	1.39	1.46
1	B	187	LYS	N-CA	-5.31	1.40	1.46
2	D	57	THR	N-CA	-5.31	1.39	1.46
2	E	410	ILE	N-CA	-5.31	1.40	1.46
2	D	371	ALA	N-CA	-5.31	1.40	1.46
1	A	191	ASP	CA-C	-5.30	1.45	1.52
3	G	163	ASN	CA-C	-5.30	1.46	1.52
1	A	51	GLU	CA-C	-5.30	1.45	1.52
1	C	498	LYS	N-CA	-5.30	1.40	1.46
1	A	471	HIS	N-CA	-5.30	1.40	1.46
2	D	401	LYS	CA-C	-5.30	1.45	1.52
1	A	194	ASP	CA-C	-5.29	1.46	1.52
1	B	29	GLY	N-CA	-5.29	1.40	1.45
1	C	222	ASP	CA-C	-5.29	1.46	1.52
2	F	152	ILE	N-CA	-5.29	1.40	1.46
1	C	420	ARG	CA-C	-5.29	1.45	1.52
2	F	141	ASP	N-CA	-5.29	1.40	1.46
10	V	32	ALA	CA-C	5.29	1.59	1.52
1	B	418	LEU	N-CA	-5.29	1.40	1.46
1	C	244	TYR	N-CA	-5.29	1.40	1.46
1	C	394	LEU	CA-C	-5.29	1.45	1.52
2	E	198	HIS	CA-C	-5.29	1.45	1.52
1	C	193	THR	CA-C	-5.28	1.45	1.52
2	D	16	VAL	CA-C	-5.28	1.45	1.52
2	E	428	LEU	N-CA	-5.28	1.39	1.46
2	D	226	PRO	CA-C	-5.28	1.44	1.52
1	C	505	LEU	CA-C	-5.28	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	22	SER	N-CA	-5.28	1.40	1.46
3	G	223	SER	CA-C	-5.27	1.46	1.52
1	A	418	LEU	N-CA	-5.27	1.40	1.46
1	C	205	ALA	CA-C	-5.27	1.46	1.52
1	A	382	ALA	CA-C	-5.27	1.46	1.52
1	B	54	GLU	N-CA	-5.27	1.39	1.46
1	A	369	LEU	N-CA	-5.27	1.39	1.46
1	B	412	ALA	CA-C	-5.27	1.46	1.52
1	A	34	ILE	N-CA	-5.27	1.40	1.46
1	B	271	LEU	N-CA	-5.27	1.39	1.46
3	G	180	SER	CA-C	-5.26	1.46	1.52
1	C	294	TYR	CA-C	-5.26	1.46	1.52
2	D	301	LYS	CA-C	-5.26	1.45	1.52
2	F	234	LEU	CA-C	-5.26	1.46	1.52
3	G	68	ILE	CA-C	-5.26	1.46	1.52
1	C	401	ALA	CA-C	-5.26	1.45	1.52
2	F	237	LEU	CA-C	-5.26	1.46	1.52
1	A	104	LEU	CA-C	-5.26	1.46	1.52
1	A	294	TYR	CA-C	-5.26	1.46	1.53
1	C	460	LYS	CA-C	-5.26	1.45	1.52
2	D	33	LEU	CA-C	-5.26	1.45	1.52
1	A	265	LEU	CA-C	-5.25	1.46	1.52
1	C	276	VAL	N-CA	-5.25	1.40	1.46
2	D	53	LEU	CA-C	-5.25	1.45	1.52
2	F	197	TYR	N-CA	-5.25	1.40	1.46
4	H	125	GLU	CA-C	-5.25	1.45	1.52
1	B	178	ILE	N-CA	-5.25	1.40	1.46
2	D	199	GLU	CA-C	-5.25	1.45	1.52
3	G	209	LEU	N-CA	-5.25	1.40	1.46
7	S	142	LEU	N-CA	-5.25	1.40	1.46
1	A	440	GLU	CA-C	-5.25	1.46	1.52
1	C	39	ALA	N-CA	-5.25	1.39	1.46
2	F	334	VAL	N-CA	-5.25	1.39	1.46
1	B	144	GLU	N-CA	-5.25	1.38	1.46
2	E	50	ALA	N-CA	-5.25	1.39	1.46
2	E	288	ASP	CA-C	-5.25	1.45	1.52
2	E	386	ASP	CA-C	-5.24	1.46	1.52
2	F	307	VAL	N-CA	-5.24	1.39	1.46
3	G	170	SER	C-N	-5.24	1.26	1.33
3	G	241	GLU	CA-C	-5.24	1.46	1.52
2	F	45	LEU	CA-C	-5.24	1.46	1.53
1	C	392	LEU	N-CA	-5.24	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	400	ASP	N-CA	-5.24	1.40	1.46
4	H	135	ILE	N-CA	-5.24	1.40	1.46
1	C	88	VAL	CA-C	-5.23	1.46	1.52
1	A	488	LYS	N-CA	-5.23	1.39	1.45
2	D	219	TYR	CA-C	-5.23	1.46	1.52
1	A	29	GLY	N-CA	-5.23	1.40	1.45
1	B	482	LYS	CA-C	-5.23	1.46	1.52
1	C	442	VAL	CA-C	-5.23	1.46	1.52
11	W	133	THR	CA-C	-5.23	1.46	1.52
2	F	339	ILE	CA-C	-5.22	1.46	1.52
3	G	27	ALA	CA-C	-5.22	1.46	1.52
1	B	157	VAL	CA-C	-5.22	1.48	1.52
1	C	468	PHE	CA-C	-5.22	1.46	1.52
2	E	344	ILE	CA-C	-5.22	1.46	1.52
1	A	235	THR	CA-C	-5.22	1.46	1.53
1	A	88	VAL	CA-C	-5.22	1.46	1.52
1	B	48	GLN	CA-C	-5.22	1.46	1.52
1	C	189	PHE	CA-C	-5.22	1.45	1.52
4	H	112	LEU	CA-C	-5.22	1.46	1.52
1	A	48	GLN	CA-C	-5.22	1.46	1.52
2	F	43	THR	CA-C	-5.22	1.46	1.53
2	F	46	VAL	CA-C	-5.22	1.46	1.52
8	T	92	PHE	CA-C	-5.22	1.46	1.52
5	I	14	TYR	CA-C	-5.21	1.46	1.52
1	A	324	LEU	CA-C	-5.21	1.47	1.52
1	B	221	THR	CA-C	-5.21	1.46	1.52
1	A	432	GLN	N-CA	-5.21	1.39	1.45
1	C	369	LEU	N-CA	-5.21	1.40	1.46
1	B	481	GLY	CA-C	-5.21	1.46	1.51
1	C	174	GLY	CA-C	-5.21	1.44	1.51
2	E	231	ARG	CA-C	-5.21	1.45	1.52
3	G	222	THR	CA-C	-5.21	1.46	1.52
1	A	418	LEU	CA-C	-5.20	1.46	1.52
2	D	389	ALA	CA-C	-5.20	1.46	1.52
2	E	151	LYS	N-CA	-5.20	1.39	1.46
1	B	64	LEU	N-CA	-5.20	1.39	1.46
1	C	473	ILE	CA-C	-5.20	1.46	1.52
2	E	405	SER	N-CA	-5.20	1.40	1.46
4	H	94	ALA	N-CA	-5.20	1.39	1.46
1	C	210	ARG	CA-C	-5.20	1.46	1.52
3	G	133	ARG	CA-C	-5.20	1.45	1.52
1	A	151	LYS	N-CA	-5.20	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	186	VAL	CA-C	-5.20	1.46	1.52
2	F	447	GLY	CA-C	-5.20	1.45	1.51
3	G	202	ARG	N-CA	-5.19	1.39	1.46
7	S	82	THR	CA-C	-5.19	1.46	1.52
2	D	298	THR	N-CA	-5.19	1.40	1.46
3	G	31	TYR	CA-C	-5.19	1.46	1.52
1	B	468	PHE	N-CA	-5.19	1.40	1.46
2	F	60	THR	N-CA	-5.19	1.39	1.45
2	D	107	PRO	CA-C	-5.19	1.46	1.52
1	A	266	ILE	CA-C	-5.18	1.46	1.52
2	D	54	GLY	CA-C	-5.18	1.46	1.52
2	D	166	ILE	N-CA	-5.18	1.40	1.46
2	E	82	ILE	CA-C	-5.18	1.47	1.52
2	F	35	ALA	N-CA	-5.18	1.39	1.46
2	F	39	GLN	CA-C	-5.18	1.46	1.52
2	F	435	LYS	CA-C	-5.18	1.46	1.52
1	A	199	LEU	CA-C	-5.18	1.46	1.52
1	B	393	GLU	CA-C	-5.18	1.45	1.52
1	A	304	ARG	N-CA	-5.18	1.40	1.46
1	A	171	ARG	CA-C	-5.18	1.45	1.52
2	F	139	VAL	CA-C	-5.18	1.46	1.52
5	I	15	SER	N-CA	-5.17	1.40	1.46
2	E	411	GLN	CA-C	-5.17	1.45	1.52
1	C	366	ASN	CA-C	-5.17	1.46	1.52
1	C	469	LEU	CA-C	-5.17	1.46	1.52
7	S	25	ALA	CA-C	-5.17	1.46	1.52
1	B	201	CYS	CA-C	-5.17	1.46	1.52
1	B	204	VAL	CA-C	-5.17	1.46	1.52
1	A	182	THR	CA-C	-5.16	1.46	1.52
2	F	116	ILE	CA-C	-5.16	1.46	1.53
1	B	108	VAL	N-CA	-5.16	1.40	1.46
1	A	87	ILE	N-CA	-5.16	1.40	1.46
1	B	99	VAL	N-CA	-5.16	1.40	1.46
2	D	244	ARG	N-CA	-5.16	1.40	1.46
2	E	57	THR	N-CA	-5.16	1.39	1.45
1	A	197	LYS	CA-C	-5.16	1.45	1.52
2	F	26	ASP	CA-C	-5.16	1.45	1.52
2	E	105	ARG	CA-C	-5.16	1.46	1.53
2	E	245	ASP	N-CA	-5.15	1.39	1.46
2	D	24	GLN	N-CA	-5.15	1.39	1.46
2	D	409	LYS	N-CA	-5.15	1.40	1.46
2	F	420	VAL	CA-C	-5.15	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	351	PHE	N-CA	-5.15	1.39	1.46
1	A	183	ILE	CA-C	-5.15	1.46	1.52
1	C	251	CYS	N-CA	-5.15	1.40	1.46
1	C	463	LYS	CA-C	-5.15	1.46	1.52
2	E	140	VAL	N-CA	-5.15	1.40	1.46
2	E	14	VAL	CA-C	-5.15	1.47	1.53
3	G	3	LEU	CA-C	-5.14	1.45	1.52
3	G	54	LYS	CA-C	-5.14	1.46	1.52
1	A	311	LYS	CA-C	-5.14	1.46	1.52
2	D	61	ILE	CA-C	-5.14	1.46	1.52
1	B	428	LEU	CA-C	-5.14	1.45	1.52
1	C	218	LYS	N-CA	-5.14	1.40	1.46
1	C	440	GLU	CA-C	-5.14	1.46	1.52
1	A	16	ILE	N-CA	-5.14	1.40	1.46
2	E	34	ASN	CA-C	-5.14	1.46	1.52
2	F	133	LEU	CA-C	-5.14	1.46	1.52
1	A	502	THR	N-CA	-5.14	1.40	1.46
1	C	137	ILE	N-CA	-5.14	1.40	1.46
2	E	194	ASN	CA-C	-5.14	1.46	1.52
3	G	233	ASP	CA-C	-5.14	1.46	1.52
1	A	201	CYS	CA-C	-5.13	1.46	1.52
2	D	385	GLN	CA-C	-5.13	1.45	1.52
2	F	59	ARG	N-CA	-5.13	1.39	1.46
2	E	378	LEU	N-CA	-5.13	1.40	1.46
2	F	15	ALA	CA-C	-5.13	1.46	1.52
1	B	416	GLN	N-CA	-5.13	1.40	1.46
2	F	371	ALA	N-CA	-5.13	1.40	1.46
1	A	133	ALA	CA-C	-5.13	1.47	1.53
1	B	59	LEU	CA-C	-5.13	1.46	1.53
1	B	86	ASP	CA-C	-5.13	1.46	1.52
2	D	129	GLU	N-CA	-5.13	1.39	1.46
2	F	151	LYS	CA-C	-5.13	1.46	1.52
1	C	441	GLN	N-CA	-5.12	1.40	1.46
2	D	126	MET	CA-C	-5.12	1.46	1.52
1	C	499	GLU	N-CA	-5.12	1.40	1.46
1	B	260	ASN	N-CA	-5.12	1.40	1.46
1	C	463	LYS	N-CA	-5.11	1.40	1.46
2	E	331	ALA	N-CA	-5.11	1.39	1.46
2	F	316	ASP	CA-C	-5.11	1.46	1.52
2	F	411	GLN	CA-C	-5.11	1.46	1.52
1	B	242	LEU	CA-C	-5.11	1.46	1.52
2	D	146	TYR	CA-C	-5.11	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	51	GLU	CA-C	-5.11	1.46	1.52
2	D	368	TYR	N-CA	-5.11	1.40	1.46
7	S	107	THR	C-N	5.11	1.40	1.33
9	U	4	LYS	CA-C	5.11	1.58	1.52
1	C	259	ASP	CA-C	-5.11	1.45	1.52
2	D	27	GLU	CA-C	-5.11	1.46	1.53
2	D	325	THR	N-CA	-5.11	1.40	1.46
1	B	359	LYS	N-CA	-5.10	1.39	1.46
1	C	321	LEU	N-CA	-5.10	1.40	1.46
1	A	371	VAL	N-CA	-5.10	1.40	1.46
1	B	320	SER	CA-C	-5.10	1.46	1.52
2	E	363	VAL	CA-C	-5.10	1.46	1.52
1	B	63	SER	CA-C	-5.10	1.46	1.52
1	C	203	TYR	N-CA	-5.10	1.40	1.46
1	C	396	GLN	CA-C	-5.10	1.46	1.52
2	E	80	ALA	N-CA	-5.10	1.41	1.46
2	D	188	GLU	N-CA	-5.09	1.39	1.45
11	W	134	PRO	N-CA	-5.09	1.41	1.47
2	E	195	ASP	CA-C	-5.09	1.46	1.52
2	F	156	GLY	CA-C	-5.09	1.44	1.51
3	G	165	PHE	CA-C	-5.09	1.46	1.52
5	I	43	LYS	N-CA	-5.09	1.39	1.46
2	D	196	LEU	N-CA	-5.09	1.40	1.46
2	E	247	GLU	CA-C	-5.09	1.45	1.52
2	E	351	LEU	CA-C	-5.09	1.46	1.52
1	A	391	LYS	CA-C	-5.09	1.46	1.52
2	E	157	GLY	CA-C	-5.09	1.44	1.51
2	E	395	GLU	CA-C	-5.09	1.46	1.53
2	F	368	TYR	CA-C	-5.09	1.46	1.52
1	B	369	LEU	CA-C	-5.08	1.45	1.52
1	A	477	GLN	N-CA	-5.08	1.39	1.46
1	B	429	LYS	N-CA	-5.08	1.39	1.46
2	D	96	ASN	CA-C	-5.08	1.46	1.53
2	E	197	TYR	N-CA	-5.08	1.40	1.46
2	E	366	GLU	N-CA	-5.08	1.40	1.46
2	F	316	ASP	N-CA	-5.08	1.39	1.46
1	C	86	ASP	CA-C	-5.08	1.46	1.52
2	E	258	ILE	N-CA	-5.08	1.39	1.46
3	G	140	ASP	N-CA	-5.08	1.40	1.46
2	D	192	GLU	CA-C	-5.07	1.45	1.52
2	E	398	GLU	N-CA	-5.07	1.40	1.46
5	I	35	MET	CA-C	-5.07	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	D	331	ALA	CA-C	-5.07	1.46	1.52
7	S	85	LEU	N-CA	-5.07	1.39	1.46
1	B	224	ASP	CA-C	-5.07	1.46	1.52
2	E	334	VAL	N-CA	-5.07	1.40	1.46
1	B	67	GLU	CA-C	-5.07	1.45	1.52
2	D	456	ALA	N-CA	-5.07	1.40	1.46
2	E	188	GLU	CA-C	-5.07	1.46	1.52
2	D	329	LEU	CA-C	-5.06	1.46	1.52
2	E	32	ILE	CA-C	-5.06	1.47	1.53
2	D	331	ALA	N-CA	-5.06	1.40	1.46
2	E	274	ARG	CA-C	-5.06	1.47	1.53
2	F	111	LYS	CA-C	-5.06	1.46	1.52
1	B	139	ARG	CA-C	-5.06	1.46	1.52
2	E	389	ALA	CA-C	-5.06	1.46	1.52
1	A	509	GLU	CA-C	-5.06	1.46	1.52
3	G	105	ILE	N-CA	-5.06	1.40	1.46
1	B	66	LEU	N-CA	-5.06	1.40	1.46
1	A	473	ILE	CA-C	-5.05	1.46	1.52
1	B	394	LEU	N-CA	-5.05	1.39	1.46
1	B	395	ALA	N-CA	-5.05	1.40	1.46
2	D	400	ASP	N-CA	-5.05	1.40	1.46
2	F	171	ASN	CA-C	-5.05	1.46	1.52
3	G	240	SER	N-CA	-5.05	1.40	1.46
7	S	105	PHE	N-CA	-5.05	1.40	1.46
1	C	418	LEU	N-CA	-5.05	1.40	1.46
4	H	96	GLU	CA-C	-5.05	1.46	1.52
4	H	131	ILE	C-O	-5.05	1.18	1.24
2	D	464	GLU	CA-C	-5.05	1.46	1.52
7	S	5	VAL	N-CA	-5.05	1.40	1.46
3	G	126	VAL	CA-C	-5.05	1.47	1.52
1	A	173	THR	N-CA	-5.05	1.40	1.46
1	B	504	PHE	N-CA	-5.05	1.40	1.46
2	E	53	LEU	N-CA	-5.04	1.39	1.46
2	F	102	ILE	N-CA	-5.04	1.40	1.46
4	H	132	GLN	C-O	-5.04	1.18	1.24
1	B	104	LEU	N-CA	-5.04	1.39	1.46
2	D	250	ASP	N-CA	-5.04	1.40	1.46
2	F	421	ALA	N-CA	-5.04	1.39	1.46
7	S	118	CYS	N-CA	-5.04	1.40	1.46
2	F	236	GLY	CA-C	-5.04	1.46	1.52
1	B	385	GLN	CA-C	-5.03	1.46	1.52
2	D	443	GLN	N-CA	-5.03	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	258	ARG	N-CA	-5.03	1.40	1.46
1	C	256	TYR	N-CA	-5.03	1.40	1.46
2	D	397	SER	N-CA	-5.03	1.39	1.45
2	E	465	GLU	CA-C	-5.03	1.46	1.52
2	F	412	ARG	N-CA	-5.03	1.39	1.46
4	H	73	SER	N-CA	-5.03	1.40	1.45
1	B	264	ALA	CA-C	-5.03	1.46	1.52
2	F	439	LYS	CA-C	-5.03	1.46	1.52
3	G	246	LEU	CA-C	-5.03	1.45	1.52
7	S	33	GLU	N-CA	-5.03	1.39	1.46
8	T	51	LYS	N-CA	-5.03	1.40	1.46
1	A	469	LEU	N-CA	-5.03	1.40	1.46
7	S	139	LYS	N-CA	-5.03	1.39	1.46
2	F	310	ILE	CA-C	-5.03	1.46	1.52
1	B	286	ARG	CA-C	-5.02	1.45	1.52
4	H	61	GLY	CA-C	-5.02	1.44	1.51
2	E	300	LYS	N-CA	-5.02	1.40	1.46
2	F	338	ALA	CA-C	-5.02	1.46	1.52
2	D	390	ILE	CA-C	-5.02	1.45	1.52
2	F	332	THR	N-CA	-5.02	1.40	1.46
1	B	85	GLY	CA-C	-5.02	1.44	1.51
2	F	138	LYS	CA-C	-5.02	1.46	1.52
2	F	195	ASP	N-CA	-5.02	1.40	1.46
2	D	52	HIS	CA-C	-5.01	1.46	1.53
7	S	27	SER	CA-C	-5.01	1.46	1.52
1	A	115	ILE	CA-C	-5.01	1.46	1.52
5	I	44	ILE	N-CA	-5.01	1.40	1.46
1	C	132	LYS	CA-C	-5.01	1.46	1.53
1	A	467	ALA	CA-C	-5.01	1.46	1.52
1	C	190	ASN	N-CA	-5.01	1.39	1.46
2	D	354	THR	CA-C	-5.01	1.46	1.52
3	G	108	VAL	CA-C	-5.01	1.46	1.52
2	F	100	GLU	N-CA	-5.00	1.40	1.46
1	C	304	ARG	N-CA	-5.00	1.40	1.46
3	G	115	ILE	CA-C	-5.00	1.46	1.52
4	H	76	PHE	CA-C	-5.00	1.46	1.52
1	B	311	LYS	CA-C	-5.00	1.46	1.52
2	D	386	ASP	CA-C	-5.00	1.46	1.52
2	E	139	VAL	CA-C	-5.00	1.46	1.52
4	H	40	THR	CA-C	-5.00	1.46	1.53

All (1209) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	U	96	ASP	N-CA-C	24.01	142.48	111.75
9	U	97	VAL	N-CA-C	17.65	128.54	110.72
7	S	50	LYS	N-CA-C	-17.24	92.62	111.07
2	F	398	GLU	N-CA-C	15.49	129.52	111.71
9	U	95	GLU	CA-C-N	15.25	142.64	120.38
9	U	95	GLU	C-N-CA	15.25	142.64	120.38
7	S	52	ALA	CA-C-N	-14.68	96.86	122.26
7	S	52	ALA	C-N-CA	-14.68	96.86	122.26
2	D	399	GLU	N-CA-C	-13.89	95.76	113.12
1	B	173	THR	N-CA-C	-13.64	88.69	109.83
9	U	95	GLU	CA-C-O	-13.40	103.84	119.78
1	B	25	LEU	N-CA-C	-12.43	94.41	111.56
7	S	112	HIS	N-CA-C	-12.26	96.87	113.18
5	I	28	THR	N-CA-C	12.25	125.97	111.02
1	B	313	ASN	CA-C-N	11.99	137.54	120.28
1	B	313	ASN	C-N-CA	11.99	137.54	120.28
5	I	27	LYS	CA-C-N	11.90	137.33	120.79
5	I	27	LYS	C-N-CA	11.90	137.33	120.79
2	E	16	VAL	N-CA-C	-11.82	90.27	107.77
9	U	8	LYS	CA-C-O	-11.71	107.47	121.06
3	G	171	TYR	N-CA-C	-11.70	91.53	108.96
7	S	91	GLU	N-CA-C	-11.68	98.53	111.14
3	G	182	ASP	N-CA-C	-11.62	96.70	110.41
2	F	80	ALA	N-CA-C	-11.54	97.80	108.07
7	S	107	THR	CA-C-N	11.37	143.25	121.54
7	S	107	THR	C-N-CA	11.37	143.25	121.54
1	A	3	THR	N-CA-C	-11.37	86.59	110.80
1	C	225	ALA	N-CA-C	-11.26	99.09	113.72
1	C	334	VAL	CA-C-N	11.18	135.69	120.38
1	C	334	VAL	C-N-CA	11.18	135.69	120.38
2	E	173	VAL	N-CA-C	11.11	120.97	110.53
1	A	193	THR	N-CA-C	-11.07	94.38	109.54
1	B	490	SER	CA-C-N	11.06	135.53	120.38
1	B	490	SER	C-N-CA	11.06	135.53	120.38
2	D	20	VAL	N-CA-C	-11.02	91.82	107.80
2	E	54	GLY	N-CA-C	-10.88	100.94	112.04
2	F	449	TYR	N-CA-C	-10.81	89.18	107.23
2	D	54	GLY	N-CA-C	-10.78	101.04	112.04
7	S	50	LYS	CA-C-N	10.72	135.69	120.79
7	S	50	LYS	C-N-CA	10.72	135.69	120.79
2	F	162	LYS	N-CA-C	-10.57	99.76	111.07
9	U	96	ASP	CA-C-N	10.57	135.43	120.42
9	U	96	ASP	C-N-CA	10.57	135.43	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	102	ILE	N-CA-C	-10.53	102.74	112.43
9	U	8	LYS	CA-C-N	10.53	137.13	122.07
9	U	8	LYS	C-N-CA	10.53	137.13	122.07
4	H	29	ASN	N-CA-C	-10.41	85.81	107.37
1	C	345	ILE	N-CA-C	10.40	121.12	111.45
7	S	157	SER	N-CA-C	-10.35	88.76	110.80
11	W	44	THR	O-C-N	-10.31	109.59	122.27
3	G	46	VAL	CA-C-N	10.30	131.37	119.94
3	G	46	VAL	C-N-CA	10.30	131.37	119.94
1	A	96	ASP	N-CA-C	-10.24	93.88	109.14
3	G	134	ARG	N-CA-C	-10.23	95.01	109.24
1	A	39	ALA	N-CA-C	-10.21	91.88	108.52
3	G	119	THR	N-CA-C	-10.18	101.92	114.75
1	C	91	THR	N-CA-C	-10.17	101.00	113.50
2	D	21	VAL	N-CA-C	-10.16	93.89	108.11
1	A	67	GLU	N-CA-C	-10.04	95.25	110.50
2	E	102	ILE	N-CA-C	-10.02	102.65	112.17
2	E	214	LYS	N-CA-C	-10.01	100.21	114.12
2	D	102	ILE	N-CA-C	-9.99	102.68	112.17
1	B	509	GLU	N-CA-C	-9.98	99.83	112.90
1	C	376	SER	N-CA-C	9.96	123.37	111.82
2	D	395	GLU	N-CA-C	-9.92	100.67	113.17
3	G	109	GLY	N-CA-C	-9.87	98.79	111.72
2	E	205	VAL	N-CA-C	-9.83	101.29	110.82
2	F	207	ASN	N-CA-C	-9.81	93.27	109.07
2	F	54	GLY	N-CA-C	-9.75	99.22	111.70
1	A	288	PRO	N-CA-C	9.74	122.58	110.70
2	E	59	ARG	N-CA-C	-9.73	93.92	109.59
2	D	87	GLY	CA-C-N	9.73	129.36	119.82
2	D	87	GLY	C-N-CA	9.73	129.36	119.82
1	C	102	GLU	CA-C-N	9.70	134.54	120.38
1	C	102	GLU	C-N-CA	9.70	134.54	120.38
1	A	337	TYR	N-CA-C	-9.60	100.80	111.07
3	G	156	ASP	N-CA-C	-9.55	99.26	112.25
1	A	313	ASN	CA-C-N	9.54	133.06	120.28
1	A	313	ASN	C-N-CA	9.54	133.06	120.28
2	F	218	VAL	N-CA-C	-9.52	94.41	108.12
1	B	83	LYS	N-CA-C	-9.52	94.87	109.24
2	F	332	THR	N-CA-C	-9.51	93.40	108.90
2	E	80	ALA	N-CA-C	-9.48	99.63	108.07
1	A	362	ARG	N-CA-C	-9.46	88.28	108.73
2	D	80	ALA	N-CA-C	-9.45	99.66	108.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	20	VAL	N-CA-C	-9.43	94.13	107.80
1	B	430	GLN	N-CA-C	-9.41	92.03	108.69
2	D	118	ALA	N-CA-C	-9.39	95.45	109.81
2	F	273	GLY	N-CA-C	-9.38	102.05	114.25
1	B	81	LEU	N-CA-C	-9.38	100.71	112.72
2	D	162	LYS	CA-C-N	9.33	132.78	120.28
2	D	162	LYS	C-N-CA	9.33	132.78	120.28
9	U	96	ASP	O-C-N	-9.29	111.61	122.20
7	S	25	ALA	N-CA-C	9.28	121.16	111.14
3	G	156	ASP	CA-C-N	9.27	139.24	121.54
3	G	156	ASP	C-N-CA	9.27	139.24	121.54
4	H	54	THR	N-CA-C	-9.25	94.46	108.52
1	B	267	ILE	N-CA-C	-9.23	94.27	107.75
1	A	373	ARG	N-CA-C	-9.21	101.32	111.36
3	G	248	LEU	N-CA-C	-9.15	100.75	112.93
1	A	330	GLN	N-CA-C	-9.10	93.39	108.76
2	F	355	SER	N-CA-C	-9.09	92.12	108.48
1	C	195	GLU	N-CA-C	-9.04	102.38	113.41
5	I	29	GLU	CA-C-N	9.02	132.37	120.28
5	I	29	GLU	C-N-CA	9.02	132.37	120.28
10	V	10	LYS	CA-C-O	-9.02	110.99	120.55
1	B	91	THR	N-CA-C	-9.00	102.43	113.50
1	A	41	VAL	N-CA-C	-8.99	95.17	108.12
1	B	34	ILE	N-CA-C	-8.96	95.09	108.17
2	F	21	VAL	N-CA-C	-8.95	95.58	108.11
3	G	124	PHE	N-CA-C	-8.92	97.32	110.52
2	F	41	ARG	CA-C-N	8.89	135.57	120.72
2	F	41	ARG	C-N-CA	8.89	135.57	120.72
1	C	313	ASN	CA-C-N	8.87	132.17	120.28
1	C	313	ASN	C-N-CA	8.87	132.17	120.28
2	D	304	ILE	N-CA-C	-8.87	93.18	107.28
4	H	93	LEU	N-CA-C	-8.84	89.22	107.70
7	S	121	THR	N-CA-C	-8.80	102.67	113.41
2	E	21	VAL	N-CA-C	-8.80	95.80	108.11
2	D	162	LYS	N-CA-C	-8.77	101.68	111.07
2	F	83	ARG	N-CA-C	-8.73	95.53	109.59
2	D	24	GLN	N-CA-C	-8.72	95.03	109.07
2	D	32	ILE	N-CA-C	-8.72	95.72	108.71
1	B	67	GLU	N-CA-C	-8.71	97.26	110.50
1	A	504	PHE	CA-C-N	8.71	131.76	120.44
1	A	504	PHE	C-N-CA	8.71	131.76	120.44
1	B	118	LYS	N-CA-C	-8.70	102.74	112.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	G	85	VAL	CA-C-N	8.70	132.28	120.54
3	G	85	VAL	C-N-CA	8.70	132.28	120.54
7	S	21	ALA	N-CA-C	-8.65	101.80	111.14
2	E	17	ILE	N-CA-C	-8.64	91.22	106.61
1	C	401	ALA	N-CA-C	-8.64	101.80	111.82
1	A	123	SER	CA-C-N	8.63	132.20	120.54
1	A	123	SER	C-N-CA	8.63	132.20	120.54
3	G	190	MET	N-CA-C	-8.62	103.62	114.56
2	E	28	GLY	N-CA-C	-8.61	99.23	112.84
1	A	192	GLY	N-CA-C	-8.61	98.62	112.31
1	A	224	ASP	CA-C-N	8.59	134.35	120.60
1	A	224	ASP	C-N-CA	8.59	134.35	120.60
2	E	311	TYR	N-CA-C	-8.59	96.34	110.17
1	A	146	MET	N-CA-C	-8.58	92.52	110.80
2	D	455	GLN	CA-C-N	8.57	131.58	120.44
2	D	455	GLN	C-N-CA	8.57	131.58	120.44
7	S	135	LYS	CA-C-N	8.53	137.84	121.54
7	S	135	LYS	C-N-CA	8.53	137.84	121.54
1	B	330	GLN	N-CA-C	-8.51	94.64	108.52
1	A	400	VAL	N-CA-C	-8.50	102.76	113.22
9	U	41	LEU	CA-C-O	-8.50	112.07	121.00
4	H	84	VAL	N-CA-C	-8.49	95.36	107.75
1	B	112	GLY	N-CA-C	-8.47	103.01	115.63
4	H	90	VAL	N-CA-C	-8.47	95.84	108.46
2	F	20	VAL	N-CA-C	-8.46	95.53	107.80
2	E	210	ASP	N-CA-C	-8.46	93.25	108.48
7	S	31	LYS	N-CA-C	-8.45	103.47	112.93
4	H	83	THR	N-CA-C	-8.44	93.76	108.69
2	D	393	MET	N-CA-C	8.40	121.66	109.14
4	H	64	VAL	N-CA-C	-8.39	95.35	107.77
1	A	467	ALA	CA-C-N	8.34	131.46	120.28
1	A	467	ALA	C-N-CA	8.34	131.46	120.28
1	C	102	GLU	N-CA-C	-8.31	101.75	112.23
3	G	149	LEU	N-CA-C	-8.31	101.80	111.03
2	E	431	LEU	N-CA-C	-8.31	95.86	109.40
7	S	53	ALA	N-CA-C	-8.30	103.17	113.38
1	B	125	ALA	N-CA-C	-8.29	98.25	110.52
1	B	336	ALA	CA-C-N	8.29	131.59	120.65
1	B	336	ALA	C-N-CA	8.29	131.59	120.65
2	E	330	ASP	N-CA-C	-8.28	104.31	114.75
1	B	337	TYR	N-CA-C	-8.28	101.94	110.97
3	G	128	PHE	N-CA-C	-8.28	96.42	109.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	121	ILE	CA-C-N	8.27	127.96	120.10
1	A	121	ILE	C-N-CA	8.27	127.96	120.10
2	D	130	GLN	N-CA-C	-8.25	96.30	109.59
3	G	80	ALA	CA-C-N	8.24	131.23	120.60
3	G	80	ALA	C-N-CA	8.24	131.23	120.60
2	F	331	ALA	N-CA-C	-8.19	95.28	108.55
2	E	331	ALA	N-CA-C	-8.19	96.07	108.52
2	F	40	GLY	N-CA-C	-8.15	104.07	115.32
3	G	268	GLY	N-CA-C	-8.14	102.20	115.46
2	F	390	ILE	N-CA-C	-8.13	103.89	111.45
3	G	92	GLU	CA-C-N	8.13	137.06	121.54
3	G	92	GLU	C-N-CA	8.13	137.06	121.54
1	B	256	TYR	CA-C-O	-8.12	112.21	120.90
2	D	95	MET	N-CA-C	-8.10	96.75	109.72
1	C	289	PRO	N-CA-C	-8.10	95.79	112.47
2	D	353	SER	N-CA-C	-8.08	91.70	107.62
1	C	347	ASP	N-CA-C	-8.06	101.93	112.41
2	E	353	SER	N-CA-C	-8.05	91.51	107.69
4	H	32	ASN	CA-C-N	8.05	135.60	122.64
4	H	32	ASN	C-N-CA	8.05	135.60	122.64
1	A	35	GLY	N-CA-C	-8.04	94.12	113.18
2	E	213	SER	N-CA-C	-8.03	93.69	110.80
1	A	321	LEU	N-CA-C	-8.02	93.74	108.02
2	D	25	PHE	N-CA-C	-8.02	96.16	109.24
3	G	52	TYR	CA-C-N	8.02	134.58	122.56
3	G	52	TYR	C-N-CA	8.02	134.58	122.56
4	H	94	ALA	N-CA-C	-8.01	96.18	109.07
2	F	399	GLU	CA-C-N	8.00	130.84	120.44
2	F	399	GLU	C-N-CA	8.00	130.84	120.44
2	E	209	LYS	N-CA-C	-7.99	103.32	113.23
2	D	161	GLY	N-CA-C	-7.99	94.25	113.18
1	C	504	PHE	CA-C-N	7.98	130.82	120.44
1	C	504	PHE	C-N-CA	7.98	130.82	120.44
5	I	41	THR	CA-C-N	7.97	132.41	120.77
5	I	41	THR	C-N-CA	7.97	132.41	120.77
1	B	287	ARG	N-CA-C	-7.97	97.62	109.42
3	G	248	LEU	CA-C-N	7.96	131.28	120.38
3	G	248	LEU	C-N-CA	7.96	131.28	120.38
1	A	488	LYS	N-CA-C	-7.93	97.32	109.14
2	F	206	ILE	CA-C-N	7.93	133.94	123.00
2	F	206	ILE	C-N-CA	7.93	133.94	123.00
7	S	9	VAL	CA-C-N	7.91	135.94	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	S	9	VAL	C-N-CA	7.91	135.94	121.70
2	D	103	ASP	N-CA-C	-7.91	102.74	111.36
7	S	13	GLY	N-CA-C	-7.90	99.40	112.83
3	G	125	LEU	N-CA-C	-7.89	102.62	112.72
3	G	188	GLU	CA-C-N	7.88	136.60	121.54
3	G	188	GLU	C-N-CA	7.88	136.60	121.54
2	D	22	ASP	N-CA-C	-7.86	95.91	108.73
2	E	399	GLU	N-CA-C	-7.85	102.81	111.36
2	D	231	ARG	N-CA-C	-7.84	103.86	113.50
1	A	290	GLY	N-CA-C	-7.82	94.64	113.18
2	D	225	PRO	CA-C-N	7.82	127.38	119.24
2	D	225	PRO	C-N-CA	7.82	127.38	119.24
9	U	4	LYS	N-CA-C	7.82	121.86	109.50
5	I	3	TYR	N-CA-C	-7.81	103.82	112.72
2	D	292	MET	N-CA-C	-7.80	100.80	112.04
2	E	149	GLY	N-CA-C	-7.80	105.41	114.69
4	H	28	PHE	N-CA-C	-7.80	96.22	109.24
4	H	92	LEU	N-CA-C	-7.80	96.53	109.24
3	G	82	HIS	N-CA-C	-7.79	102.72	111.14
2	F	422	GLU	N-CA-C	-7.79	102.42	112.23
1	C	192	GLY	N-CA-C	-7.78	100.59	112.89
2	F	400	ASP	N-CA-C	-7.77	102.75	111.07
9	U	113	GLU	CA-C-O	-7.77	112.66	120.82
1	C	35	GLY	N-CA-C	-7.75	94.80	113.18
2	F	103	ASP	N-CA-C	-7.74	102.92	111.36
4	H	63	VAL	N-CA-C	-7.71	97.38	108.48
1	A	253	MET	N-CA-C	7.71	119.68	111.28
2	E	109	LYS	N-CA-C	-7.71	95.02	108.20
1	C	375	GLY	CA-C-N	7.69	132.00	120.31
1	C	375	GLY	C-N-CA	7.69	132.00	120.31
2	E	57	THR	N-CA-C	-7.69	97.42	109.72
7	S	76	GLU	CA-C-N	7.68	131.34	120.28
7	S	76	GLU	C-N-CA	7.68	131.34	120.28
2	F	105	ARG	N-CA-C	-7.67	103.48	112.92
4	H	131	ILE	N-CA-C	-7.66	103.33	110.53
3	G	272	LEU	N-CA-C	-7.66	95.10	108.20
7	S	158	ILE	N-CA-C	-7.66	99.03	109.37
1	C	119	GLY	CA-C-N	7.65	129.41	119.84
1	C	119	GLY	C-N-CA	7.65	129.41	119.84
1	C	263	HIS	N-CA-C	-7.64	95.96	108.41
1	A	91	THR	N-CA-C	-7.63	103.56	113.17
1	C	267	ILE	N-CA-C	-7.63	96.61	107.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	50	ALA	N-CA-C	-7.63	103.82	113.43
1	B	290	GLY	N-CA-C	-7.62	99.17	111.59
2	E	398	GLU	N-CA-C	7.62	120.47	111.71
1	B	28	THR	N-CA-C	-7.61	97.74	109.24
2	F	418	PHE	CA-C-N	7.61	130.48	120.28
2	F	418	PHE	C-N-CA	7.61	130.48	120.28
1	A	372	SER	N-CA-C	-7.61	94.71	108.02
4	H	135	ILE	CA-C-N	7.61	130.80	120.38
4	H	135	ILE	C-N-CA	7.61	130.80	120.38
2	F	356	ARG	CA-C-N	7.60	131.21	120.42
2	F	356	ARG	C-N-CA	7.60	131.21	120.42
2	F	361	ASN	N-CA-C	-7.59	101.25	111.96
2	E	30	PRO	N-CA-C	-7.58	101.46	110.70
7	S	90	ALA	CA-C-N	7.58	130.74	120.44
7	S	90	ALA	C-N-CA	7.58	130.74	120.44
2	D	316	ASP	N-CA-C	-7.57	98.19	108.86
1	A	140	ILE	N-CA-C	-7.57	97.12	108.17
1	B	57	SER	N-CA-C	-7.55	101.04	113.50
1	B	264	ALA	N-CA-C	-7.55	97.92	109.85
2	D	311	TYR	N-CA-C	-7.52	98.31	110.20
1	A	279	ARG	CA-C-N	7.52	130.70	120.54
1	A	279	ARG	C-N-CA	7.52	130.70	120.54
4	H	82	VAL	N-CA-C	-7.52	97.27	108.85
1	C	400	VAL	CA-C-N	7.51	131.73	120.31
1	C	400	VAL	C-N-CA	7.51	131.73	120.31
2	E	307	VAL	N-CA-C	-7.51	95.34	107.28
2	D	397	SER	N-CA-C	-7.51	98.01	109.95
2	F	63	MET	CA-C-N	7.50	135.32	122.12
2	F	63	MET	C-N-CA	7.50	135.32	122.12
2	F	219	TYR	N-CA-C	-7.49	96.73	109.24
4	H	85	ASN	N-CA-C	-7.49	98.75	110.36
1	C	260	ASN	N-CA-C	-7.48	102.07	112.25
1	B	70	ASN	N-CA-C	-7.47	98.29	108.38
2	F	463	ILE	CA-C-N	7.47	130.61	120.38
2	F	463	ILE	C-N-CA	7.47	130.61	120.38
3	G	70	GLY	N-CA-C	-7.46	97.84	111.04
2	F	118	ALA	N-CA-C	-7.45	97.73	109.50
7	S	26	ALA	N-CA-C	-7.44	103.11	111.14
2	D	423	VAL	N-CA-C	-7.43	103.22	110.72
2	E	160	VAL	N-CA-C	-7.42	103.05	110.62
2	F	11	GLY	N-CA-C	-7.42	100.30	111.14
4	H	20	PHE	N-CA-C	-7.40	96.21	108.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	30	ARG	N-CA-C	-7.38	97.70	109.59
1	A	34	ILE	CA-C-O	7.38	128.54	120.64
2	F	282	GLN	N-CA-C	-7.38	97.59	109.40
1	A	410	LEU	N-CA-C	-7.38	95.08	110.80
1	C	480	LEU	CA-C-N	7.37	128.32	119.99
1	C	480	LEU	C-N-CA	7.37	128.32	119.99
7	S	26	ALA	CA-C-N	7.37	132.91	121.19
7	S	26	ALA	C-N-CA	7.37	132.91	121.19
3	G	55	ALA	N-CA-C	-7.35	97.25	109.46
2	F	438	ILE	CA-C-N	7.35	130.00	120.44
2	F	438	ILE	C-N-CA	7.35	130.00	120.44
2	F	225	PRO	CA-C-N	7.33	127.68	119.32
2	F	225	PRO	C-N-CA	7.33	127.68	119.32
2	E	218	VAL	N-CA-C	-7.33	97.56	108.12
3	G	129	LYS	N-CA-C	-7.33	98.16	109.52
2	D	41	ARG	CA-C-N	7.32	130.09	120.28
2	D	41	ARG	C-N-CA	7.32	130.09	120.28
2	F	209	LYS	N-CA-C	-7.29	104.42	112.72
2	F	17	ILE	N-CA-C	-7.28	95.00	107.24
11	W	44	THR	CA-C-O	-7.27	111.61	119.97
7	S	134	LEU	CA-C-N	7.27	130.75	120.28
7	S	134	LEU	C-N-CA	7.27	130.75	120.28
2	D	75	VAL	N-CA-C	-7.26	97.63	108.46
2	D	209	LYS	N-CA-C	-7.26	105.34	114.56
2	F	392	GLY	N-CA-C	7.26	120.42	112.29
2	E	27	GLU	N-CA-C	-7.25	101.64	111.87
2	D	221	GLN	CA-C-N	7.25	129.99	120.28
2	D	221	GLN	C-N-CA	7.25	129.99	120.28
2	F	16	VAL	N-CA-C	-7.24	97.05	107.77
1	B	79	ASP	CA-C-N	7.24	135.37	121.54
1	B	79	ASP	C-N-CA	7.24	135.37	121.54
1	A	40	ARG	N-CA-C	-7.24	97.45	108.96
9	U	8	LYS	N-CA-C	-7.23	98.02	109.23
2	F	455	GLN	N-CA-C	-7.23	103.55	112.88
7	S	141	PHE	N-CA-C	-7.23	104.99	114.31
2	F	28	GLY	N-CA-C	-7.22	96.07	113.18
1	A	24	ASP	N-CA-C	-7.22	95.43	110.80
2	F	25	PHE	N-CA-C	-7.22	97.45	109.07
9	U	4	LYS	CA-C-N	7.21	135.32	121.54
9	U	4	LYS	C-N-CA	7.21	135.32	121.54
3	G	215	TYR	CA-C-N	7.21	130.26	120.38
3	G	215	TYR	C-N-CA	7.21	130.26	120.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	496	LYS	CA-C-N	7.21	129.81	120.44
1	B	496	LYS	C-N-CA	7.21	129.81	120.44
1	B	232	VAL	N-CA-C	-7.21	98.06	108.36
2	D	249	GLN	CA-C-N	7.20	133.84	122.17
2	D	249	GLN	C-N-CA	7.20	133.84	122.17
1	A	15	ARG	CA-C-N	7.20	129.69	120.70
1	A	15	ARG	C-N-CA	7.20	129.69	120.70
2	E	426	GLY	N-CA-C	-7.20	105.30	115.30
1	B	335	SER	N-CA-C	-7.19	103.44	111.28
2	F	115	ALA	N-CA-C	-7.18	99.65	110.28
1	B	493	SER	CA-C-N	7.17	129.77	120.44
1	B	493	SER	C-N-CA	7.17	129.77	120.44
2	F	59	ARG	N-CA-C	-7.17	98.04	109.59
1	C	299	PHE	N-CA-C	-7.17	103.40	111.14
3	G	138	PHE	N-CA-C	7.16	119.71	111.11
1	A	239	ALA	N-CA-C	-7.15	98.95	110.32
1	B	288	PRO	N-CA-C	7.15	119.42	110.70
2	F	29	LEU	N-CA-C	-7.15	97.97	109.40
2	D	149	GLY	CA-C-N	7.14	128.22	120.44
2	D	149	GLY	C-N-CA	7.14	128.22	120.44
4	H	23	PRO	N-CA-C	-7.14	104.94	113.86
1	A	336	ALA	CA-C-N	7.13	129.71	120.44
1	A	336	ALA	C-N-CA	7.13	129.71	120.44
2	E	467	VAL	CA-C-N	7.13	130.15	120.38
2	E	467	VAL	C-N-CA	7.13	130.15	120.38
1	C	173	THR	N-CA-C	-7.13	99.65	109.71
2	E	418	PHE	CA-C-N	7.13	130.41	120.29
2	E	418	PHE	C-N-CA	7.13	130.41	120.29
4	H	128	ARG	CA-C-N	7.12	130.16	120.54
4	H	128	ARG	C-N-CA	7.12	130.16	120.54
1	A	327	ILE	N-CA-C	-7.12	97.91	108.45
1	A	8	VAL	N-CA-C	-7.11	99.78	109.37
2	E	103	ASP	N-CA-C	-7.10	103.62	111.36
1	B	225	ALA	N-CA-C	-7.08	104.64	113.28
2	D	16	VAL	N-CA-C	-7.08	97.29	107.77
1	B	158	PRO	N-CA-C	-7.05	97.95	112.47
1	C	89	LYS	N-CA-C	-7.04	97.92	109.40
5	I	43	LYS	N-CA-C	-7.04	95.81	110.80
8	T	75	ILE	N-CA-C	-7.04	103.91	110.53
5	I	46	LYS	N-CA-C	-7.03	101.67	112.99
1	B	360	GLY	N-CA-C	-7.03	105.52	114.37
2	E	196	LEU	N-CA-C	-7.03	103.70	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	38	ILE	N-CA-C	-7.02	97.50	107.75
2	E	161	GLY	N-CA-C	-7.02	96.54	113.18
10	V	16	ILE	O-C-N	-7.02	113.87	121.80
1	C	126	ARG	N-CA-C	-7.01	98.65	109.24
2	D	204	GLY	N-CA-C	-7.01	105.64	115.32
2	F	307	VAL	N-CA-C	-7.01	96.14	107.28
1	B	300	TYR	CA-C-N	7.00	130.00	120.54
1	B	300	TYR	C-N-CA	7.00	130.00	120.54
2	F	212	THR	N-CA-C	-7.00	102.33	111.71
2	F	435	LYS	CA-C-N	7.00	130.95	120.31
2	F	435	LYS	C-N-CA	7.00	130.95	120.31
2	D	129	GLU	N-CA-C	-6.99	97.82	109.07
1	B	357	PHE	CA-C-N	6.98	130.20	120.29
1	B	357	PHE	C-N-CA	6.98	130.20	120.29
2	E	151	LYS	N-CA-C	-6.98	97.83	109.07
1	C	386	VAL	CA-C-N	6.98	130.20	120.29
1	C	386	VAL	C-N-CA	6.98	130.20	120.29
5	I	34	ALA	N-CA-C	6.96	119.52	111.02
2	E	280	GLY	N-CA-C	-6.96	106.17	115.21
1	B	139	ARG	N-CA-C	-6.95	99.65	110.42
2	E	53	LEU	N-CA-C	-6.94	104.07	112.54
1	A	232	VAL	N-CA-C	-6.93	98.45	108.36
1	B	156	LEU	N-CA-C	-6.93	104.97	113.50
3	G	204	TYR	N-CA-C	-6.93	96.04	110.80
2	E	450	ASP	N-CA-C	-6.92	97.97	109.46
2	E	24	GLN	N-CA-C	-6.92	97.93	109.07
4	H	19	THR	N-CA-C	-6.92	97.13	108.41
4	H	27	PHE	N-CA-C	-6.92	103.48	112.68
1	B	176	THR	N-CA-C	-6.92	103.67	111.14
1	C	360	GLY	N-CA-C	-6.90	105.94	114.92
4	H	43	GLY	N-CA-C	-6.90	96.83	113.18
5	I	33	ASN	N-CA-C	6.90	121.31	112.34
7	S	16	GLY	N-CA-C	-6.88	96.86	113.18
2	E	463	ILE	CA-C-N	6.88	129.81	120.38
2	E	463	ILE	C-N-CA	6.88	129.81	120.38
3	G	10	LEU	CA-C-N	6.88	130.35	120.79
3	G	10	LEU	C-N-CA	6.88	130.35	120.79
2	F	95	MET	N-CA-C	-6.86	99.01	109.85
2	F	204	GLY	N-CA-C	-6.86	105.76	115.43
2	D	331	ALA	N-CA-C	-6.86	97.08	108.32
1	A	7	GLU	CA-C-N	6.84	129.73	120.63
1	A	7	GLU	C-N-CA	6.84	129.73	120.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	362	ARG	N-CA-C	-6.84	93.96	108.73
1	A	127	ARG	N-CA-C	-6.84	97.06	108.75
7	S	138	LEU	CA-C-N	6.83	131.62	120.63
7	S	138	LEU	C-N-CA	6.83	131.62	120.63
3	G	39	LYS	N-CA-C	6.82	124.88	109.81
1	C	132	LYS	CA-C-N	6.82	129.87	120.39
1	C	132	LYS	C-N-CA	6.82	129.87	120.39
2	D	96	ASN	N-CA-C	-6.82	99.47	109.63
3	G	81	ILE	CA-C-N	6.81	129.71	120.44
3	G	81	ILE	C-N-CA	6.81	129.71	120.44
1	C	335	SER	N-CA-C	-6.81	103.09	111.33
2	E	397	SER	CA-C-N	6.81	130.09	120.28
2	E	397	SER	C-N-CA	6.81	130.09	120.28
2	D	47	LEU	N-CA-C	-6.81	98.11	109.07
3	G	154	GLU	N-CA-C	-6.81	96.64	108.69
1	A	435	PRO	N-CA-C	-6.80	101.24	111.57
1	A	432	GLN	N-CA-C	-6.79	99.52	110.32
2	E	94	ILE	N-CA-C	-6.79	97.95	107.80
1	C	341	ASN	CA-C-N	6.78	129.75	120.46
1	C	341	ASN	C-N-CA	6.78	129.75	120.46
1	B	265	LEU	N-CA-C	-6.78	97.31	108.76
2	D	94	ILE	N-CA-C	-6.77	97.98	107.80
2	D	393	MET	CA-C-N	6.77	131.75	122.34
2	D	393	MET	C-N-CA	6.77	131.75	122.34
2	F	396	LEU	CA-C-N	6.77	132.32	122.77
2	F	396	LEU	C-N-CA	6.77	132.32	122.77
3	G	215	TYR	N-CA-C	6.75	118.33	110.97
1	B	88	VAL	N-CA-C	-6.75	98.66	108.11
4	H	72	THR	N-CA-C	-6.75	97.58	109.06
1	A	347	ASP	CA-C-N	6.74	131.94	122.57
1	A	347	ASP	C-N-CA	6.74	131.94	122.57
2	E	110	THR	N-CA-C	-6.74	99.17	109.41
1	C	265	LEU	N-CA-C	-6.74	97.38	108.76
7	S	126	LEU	N-CA-C	6.73	120.79	111.90
1	B	488	LYS	N-CA-C	-6.72	99.47	108.74
2	E	248	GLY	CA-C-N	6.72	134.38	121.54
2	E	248	GLY	C-N-CA	6.72	134.38	121.54
2	E	225	PRO	CA-C-N	6.71	126.22	119.24
2	E	225	PRO	C-N-CA	6.71	126.22	119.24
3	G	172	LYS	N-CA-C	-6.71	97.42	108.76
2	D	273	GLY	N-CA-C	-6.70	106.45	115.36
2	F	391	LEU	N-CA-C	6.70	121.54	113.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	192	GLY	N-CA-C	-6.68	101.84	112.66
1	B	127	ARG	N-CA-C	-6.68	97.73	108.55
1	B	334	VAL	CA-C-N	6.67	129.22	120.28
1	B	334	VAL	C-N-CA	6.67	129.22	120.28
2	D	461	GLY	CA-C-N	6.67	128.17	119.84
2	D	461	GLY	C-N-CA	6.67	128.17	119.84
1	A	28	THR	N-CA-C	-6.66	99.22	109.14
2	F	316	ASP	N-CA-C	-6.66	98.39	109.24
1	C	330	GLN	N-CA-C	-6.65	99.46	110.17
1	C	403	PHE	N-CA-C	6.65	120.01	110.10
1	C	294	TYR	CA-C-N	6.65	128.15	119.84
1	C	294	TYR	C-N-CA	6.65	128.15	119.84
7	S	119	THR	N-CA-C	-6.65	96.64	110.80
2	E	95	MET	N-CA-C	-6.65	99.08	109.72
2	F	45	LEU	N-CA-C	-6.64	94.53	107.62
7	S	110	SER	CA-C-N	-6.64	116.65	122.96
7	S	110	SER	C-N-CA	-6.64	116.65	122.96
2	D	281	TYR	CA-C-O	-6.64	113.89	121.19
2	E	49	VAL	N-CA-C	-6.64	101.00	109.30
2	D	182	VAL	N-CA-C	-6.63	98.58	108.46
2	E	113	PHE	N-CA-C	-6.63	99.38	109.85
2	E	274	ARG	N-CA-C	-6.62	99.76	109.63
2	E	438	ILE	CA-C-N	6.61	129.04	120.44
2	E	438	ILE	C-N-CA	6.61	129.04	120.44
1	A	88	VAL	N-CA-C	-6.61	98.86	108.11
2	E	219	TYR	N-CA-C	-6.61	98.21	109.24
2	D	127	SER	N-CA-C	-6.60	96.88	108.23
1	C	311	LYS	N-CA-C	-6.59	97.77	108.52
2	D	27	GLU	N-CA-C	-6.59	100.20	109.69
2	F	52	HIS	N-CA-C	-6.59	95.49	107.75
3	G	4	LYS	CA-C-N	6.59	129.44	120.54
3	G	4	LYS	C-N-CA	6.59	129.44	120.54
10	V	32	ALA	O-C-N	-6.59	113.83	122.59
1	A	176	THR	N-CA-C	-6.58	104.19	111.36
2	D	147	ALA	N-CA-C	-6.58	98.99	109.59
2	D	360	PRO	N-CA-C	-6.58	105.46	114.80
1	C	122	GLY	N-CA-C	-6.58	97.59	113.18
1	B	448	GLY	N-CA-C	-6.57	104.36	112.77
9	U	4	LYS	CA-C-O	-6.56	113.43	121.11
2	E	340	ALA	CA-C-N	6.56	130.28	120.31
2	E	340	ALA	C-N-CA	6.56	130.28	120.31
4	H	100	LEU	N-CA-C	6.56	119.25	111.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	353	GLU	CA-C-N	6.56	129.07	120.28
1	C	353	GLU	C-N-CA	6.56	129.07	120.28
2	F	66	THR	N-CA-C	6.55	120.19	112.72
2	D	301	LYS	N-CA-C	-6.55	96.85	110.80
2	D	201	ILE	CA-C-N	6.55	129.38	120.54
2	D	201	ILE	C-N-CA	6.55	129.38	120.54
2	F	211	ALA	N-CA-C	-6.54	105.18	112.57
4	H	100	LEU	CA-C-N	6.54	134.03	121.54
4	H	100	LEU	C-N-CA	6.54	134.03	121.54
1	C	290	GLY	CA-C-N	6.54	131.75	121.56
1	C	290	GLY	C-N-CA	6.54	131.75	121.56
2	F	434	LEU	N-CA-C	6.53	118.40	111.28
2	D	26	ASP	N-CA-C	-6.53	105.14	113.23
3	G	39	LYS	CA-C-N	6.53	126.30	119.05
3	G	39	LYS	C-N-CA	6.53	126.30	119.05
4	H	61	GLY	N-CA-C	-6.53	97.71	113.18
2	E	118	ALA	N-CA-C	-6.53	100.55	110.14
1	C	31	VAL	N-CA-C	-6.52	100.23	108.84
1	B	294	TYR	CA-C-N	6.52	127.99	119.84
1	B	294	TYR	C-N-CA	6.52	127.99	119.84
7	S	105	PHE	CA-C-N	6.52	129.34	120.54
7	S	105	PHE	C-N-CA	6.52	129.34	120.54
1	C	88	VAL	N-CA-C	-6.52	99.04	108.17
2	D	306	SER	N-CA-C	-6.50	98.31	108.90
8	T	135	LYS	N-CA-C	-6.50	104.12	111.14
1	B	500	ILE	CA-C-N	6.50	128.75	120.56
1	B	500	ILE	C-N-CA	6.50	128.75	120.56
1	B	30	ARG	N-CA-C	-6.49	98.82	109.40
1	C	173	THR	CA-C-N	6.49	134.14	121.41
1	C	173	THR	C-N-CA	6.49	134.14	121.41
1	B	175	LYS	CA-C-O	6.49	127.64	120.82
10	V	12	PHE	CA-C-O	-6.49	113.93	121.07
1	C	163	GLN	N-CA-C	6.49	118.23	110.19
1	A	303	SER	CA-C-N	6.48	129.50	120.29
1	A	303	SER	C-N-CA	6.48	129.50	120.29
3	G	190	MET	CA-C-N	6.48	128.97	120.28
3	G	190	MET	C-N-CA	6.48	128.97	120.28
2	E	410	ILE	N-CA-C	-6.48	104.20	110.42
3	G	40	PRO	CA-C-N	6.47	129.25	120.38
3	G	40	PRO	C-N-CA	6.47	129.25	120.38
7	S	108	MET	CA-C-N	-6.47	110.48	120.31
7	S	108	MET	C-N-CA	-6.47	110.48	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	80	LYS	N-CA-C	-6.46	97.04	110.80
2	D	17	ILE	N-CA-C	-6.46	96.01	107.18
1	C	67	GLU	N-CA-C	-6.46	100.51	110.58
3	G	164	ARG	CA-C-N	6.45	130.31	120.82
3	G	164	ARG	C-N-CA	6.45	130.31	120.82
1	A	89	LYS	N-CA-C	-6.45	98.89	109.40
9	U	9	THR	N-CA-C	-6.45	102.77	111.54
1	C	80	LYS	CA-C-N	6.45	129.44	120.29
1	C	80	LYS	C-N-CA	6.45	129.44	120.29
2	F	399	GLU	N-CA-C	-6.43	104.35	111.36
1	C	501	VAL	CA-C-O	-6.42	114.36	121.17
3	G	114	SER	N-CA-C	-6.42	97.13	110.80
1	C	199	LEU	N-CA-C	-6.41	98.45	108.90
1	B	366	ASN	CA-C-N	6.41	128.76	120.56
1	B	366	ASN	C-N-CA	6.41	128.76	120.56
2	E	195	ASP	CA-C-N	6.40	129.38	120.29
2	E	195	ASP	C-N-CA	6.40	129.38	120.29
1	C	46	ASN	N-CA-C	-6.40	104.95	112.89
1	B	170	ASP	CA-C-N	6.39	133.75	121.54
1	B	170	ASP	C-N-CA	6.39	133.75	121.54
3	G	87	LYS	CA-C-N	6.39	133.75	121.54
3	G	87	LYS	C-N-CA	6.39	133.75	121.54
1	B	399	GLU	N-CA-C	6.39	120.17	112.38
2	E	174	ALA	CA-C-N	6.39	129.08	120.65
2	E	174	ALA	C-N-CA	6.39	129.08	120.65
1	A	364	ALA	CA-C-N	6.38	133.46	121.97
1	A	364	ALA	C-N-CA	6.38	133.46	121.97
2	E	349	ASP	N-CA-C	-6.38	100.68	110.32
2	F	450	ASP	N-CA-C	-6.37	97.23	110.80
1	A	497	LEU	CA-C-N	6.37	129.10	120.38
1	A	497	LEU	C-N-CA	6.37	129.10	120.38
1	A	335	SER	N-CA-C	-6.36	105.48	113.18
2	E	52	HIS	CA-C-O	6.34	127.14	120.54
3	G	123	GLN	N-CA-C	-6.34	105.83	112.93
2	D	321	ALA	CA-C-O	-6.34	113.06	119.08
2	D	363	VAL	N-CA-C	-6.33	106.56	112.83
4	H	23	PRO	CA-C-N	6.33	128.68	120.44
4	H	23	PRO	C-N-CA	6.33	128.68	120.44
7	S	35	VAL	N-CA-C	-6.33	106.36	111.81
3	G	196	ILE	N-CA-C	-6.33	96.17	109.34
2	E	276	PRO	CA-C-N	6.33	133.62	121.54
2	E	276	PRO	C-N-CA	6.33	133.62	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	444	VAL	N-CA-C	-6.32	104.11	111.00
1	A	157	VAL	N-CA-C	-6.32	95.23	108.88
4	H	94	ALA	CA-C-N	6.32	129.57	120.79
4	H	94	ALA	C-N-CA	6.32	129.57	120.79
5	I	7	ALA	N-CA-C	-6.31	99.11	109.40
3	G	191	SER	CA-C-N	6.31	130.44	120.47
3	G	191	SER	C-N-CA	6.31	130.44	120.47
1	C	365	ILE	N-CA-C	6.31	122.46	109.34
1	B	172	GLN	N-CA-C	-6.30	100.85	110.30
1	C	264	ALA	N-CA-C	-6.30	99.90	109.85
2	E	347	ALA	CA-C-N	6.30	133.31	121.97
2	E	347	ALA	C-N-CA	6.30	133.31	121.97
1	A	300	TYR	CA-C-N	6.28	129.51	120.79
1	A	300	TYR	C-N-CA	6.28	129.51	120.79
2	E	105	ARG	N-CA-C	-6.27	103.98	112.26
2	E	108	ILE	N-CA-C	-6.27	97.31	107.28
1	B	157	VAL	N-CA-C	-6.26	100.66	108.05
1	A	97	VAL	N-CA-C	-6.26	95.36	108.88
2	E	52	HIS	N-CA-C	-6.26	97.50	108.20
1	A	80	LYS	N-CA-C	-6.25	105.13	112.89
2	D	418	PHE	CA-C-N	6.25	131.15	120.71
2	D	418	PHE	C-N-CA	6.25	131.15	120.71
2	F	60	THR	N-CA-C	-6.25	99.91	109.41
4	H	88	SER	CA-C-N	-6.24	114.11	122.72
4	H	88	SER	C-N-CA	-6.24	114.11	122.72
4	H	132	GLN	CA-C-N	6.24	128.65	120.60
4	H	132	GLN	C-N-CA	6.24	128.65	120.60
1	A	162	GLY	N-CA-C	-6.24	107.66	115.08
1	A	289	PRO	N-CA-C	-6.21	99.68	112.47
2	E	370	VAL	N-CA-C	-6.20	104.46	110.72
2	D	390	ILE	N-CA-C	-6.19	106.17	113.42
3	G	132	GLY	N-CA-C	-6.19	102.02	111.24
2	E	225	PRO	O-C-N	6.19	124.16	121.31
2	E	304	ILE	N-CA-C	-6.17	97.46	107.28
1	A	264	ALA	N-CA-C	-6.17	100.10	109.85
1	C	232	VAL	N-CA-C	-6.17	99.53	108.36
2	D	277	SER	CA-C-N	6.17	129.63	120.87
2	D	277	SER	C-N-CA	6.17	129.63	120.87
2	F	42	GLU	N-CA-C	-6.17	105.01	112.54
7	S	67	LYS	N-CA-C	-6.17	103.05	111.56
1	A	38	ILE	N-CA-C	-6.17	98.75	107.75
1	A	141	SER	CA-C-N	6.16	130.42	121.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	141	SER	C-N-CA	6.16	130.42	121.18
2	E	204	GLY	N-CA-C	-6.16	106.74	115.30
2	D	105	ARG	N-CA-C	-6.15	103.07	111.56
1	B	156	LEU	CA-C-N	-6.15	117.38	123.04
1	B	156	LEU	C-N-CA	-6.15	117.38	123.04
2	E	267	GLU	N-CA-C	-6.14	104.66	111.36
1	C	66	LEU	N-CA-C	-6.14	97.70	108.20
2	D	180	TYR	N-CA-C	-6.14	101.11	109.95
7	S	7	PRO	N-CA-C	-6.13	103.22	110.70
1	B	279	ARG	CA-C-N	6.12	128.81	120.54
1	B	279	ARG	C-N-CA	6.12	128.81	120.54
4	H	131	ILE	CA-C-N	6.12	128.40	120.44
4	H	131	ILE	C-N-CA	6.12	128.40	120.44
2	D	76	LEU	CA-C-N	6.12	129.45	120.82
2	D	76	LEU	C-N-CA	6.12	129.45	120.82
1	B	109	ASP	CA-C-N	6.12	129.31	120.38
1	B	109	ASP	C-N-CA	6.12	129.31	120.38
4	H	46	GLY	N-CA-C	-6.12	98.69	113.18
1	B	299	PHE	N-CA-C	-6.11	104.54	111.14
2	E	175	LYS	N-CA-C	-6.11	104.31	110.97
9	U	19	ILE	O-C-N	-6.11	114.13	121.10
3	G	153	TYR	N-CA-C	-6.11	98.78	108.73
7	S	64	VAL	CA-C-N	6.10	128.37	120.44
7	S	64	VAL	C-N-CA	6.10	128.37	120.44
1	B	213	VAL	N-CA-C	-6.10	104.40	110.62
7	S	60	VAL	N-CA-C	-6.09	104.03	112.50
2	D	210	ASP	N-CA-C	-6.08	96.43	107.75
3	G	205	GLN	CA-C-N	6.08	133.16	121.54
3	G	205	GLN	C-N-CA	6.08	133.16	121.54
1	B	24	ASP	CA-C-N	6.08	133.56	122.50
1	B	24	ASP	C-N-CA	6.08	133.56	122.50
1	B	62	MET	N-CA-C	-6.07	99.10	109.24
2	F	138	LYS	CA-C-N	6.06	128.77	120.46
2	F	138	LYS	C-N-CA	6.06	128.77	120.46
1	C	261	GLY	CA-C-N	6.06	133.12	121.54
1	C	261	GLY	C-N-CA	6.06	133.12	121.54
2	F	106	GLY	CA-C-N	6.06	127.41	119.84
2	F	106	GLY	C-N-CA	6.06	127.41	119.84
1	B	24	ASP	CA-C-O	6.06	127.52	120.49
1	A	129	VAL	N-CA-C	-6.05	104.09	112.50
1	B	387	ALA	N-CA-C	6.05	117.95	111.36
2	F	380	ASP	CA-C-N	6.05	128.39	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	380	ASP	C-N-CA	6.05	128.39	120.28
2	E	78	SER	N-CA-C	-6.04	105.89	113.20
2	F	416	GLN	CA-C-N	6.04	126.88	120.11
2	F	416	GLN	C-N-CA	6.04	126.88	120.11
2	D	205	VAL	N-CA-C	-6.04	104.62	110.72
1	B	162	GLY	CA-C-N	6.04	129.41	120.90
1	B	162	GLY	C-N-CA	6.04	129.41	120.90
4	H	87	ASP	CA-C-N	6.04	133.07	121.54
4	H	87	ASP	C-N-CA	6.04	133.07	121.54
2	F	22	ASP	N-CA-C	-6.03	98.69	108.52
2	F	397	SER	N-CA-C	-6.03	98.45	108.34
2	E	321	ALA	N-CA-C	-6.02	104.42	112.55
8	T	100	ALA	N-CA-C	6.02	118.80	111.82
1	A	4	GLY	N-CA-C	-6.01	108.06	114.67
7	S	70	SER	N-CA-C	-6.01	105.44	112.89
3	G	258	ILE	CA-C-N	6.01	128.58	120.65
3	G	258	ILE	C-N-CA	6.01	128.58	120.65
3	G	79	GLY	CA-C-N	6.00	132.05	122.86
3	G	79	GLY	C-N-CA	6.00	132.05	122.86
1	B	463	LYS	CA-C-N	6.00	128.24	120.44
1	B	463	LYS	C-N-CA	6.00	128.24	120.44
5	I	2	ALA	N-CA-C	-6.00	98.02	110.80
1	C	30	ARG	CA-C-N	5.99	130.17	121.18
1	C	30	ARG	C-N-CA	5.99	130.17	121.18
1	C	123	SER	CA-C-N	5.99	128.62	120.54
1	C	123	SER	C-N-CA	5.99	128.62	120.54
3	G	139	GLY	CA-C-N	5.99	128.79	120.29
3	G	139	GLY	C-N-CA	5.99	128.79	120.29
2	D	410	ILE	CA-C-N	5.98	128.57	120.38
2	D	410	ILE	C-N-CA	5.98	128.57	120.38
2	D	59	ARG	N-CA-C	-5.97	99.97	109.59
2	F	442	GLN	CA-C-N	5.97	128.77	120.29
2	F	442	GLN	C-N-CA	5.97	128.77	120.29
2	E	423	VAL	N-CA-C	-5.97	104.53	110.62
3	G	180	SER	N-CA-C	-5.96	104.53	112.94
2	E	96	ASN	N-CA-C	-5.96	101.64	110.46
2	F	357	ILE	N-CA-C	5.96	116.74	110.72
4	H	40	THR	N-CA-C	-5.96	102.12	110.35
2	D	403	THR	CA-C-N	5.95	128.06	120.56
2	D	403	THR	C-N-CA	5.95	128.06	120.56
8	T	137	GLN	CA-C-O	-5.95	114.75	121.00
1	A	109	ASP	N-CA-C	-5.95	102.52	110.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	332	THR	N-CA-C	-5.95	98.95	109.06
2	F	14	VAL	N-CA-C	-5.95	107.01	112.96
2	F	76	LEU	CA-C-N	5.94	129.20	120.82
2	F	76	LEU	C-N-CA	5.94	129.20	120.82
2	E	207	ASN	N-CA-C	-5.93	99.74	109.40
3	G	21	LYS	CA-C-N	5.93	128.15	120.44
3	G	21	LYS	C-N-CA	5.93	128.15	120.44
1	A	173	THR	N-CA-C	-5.92	103.29	111.81
1	C	45	ARG	CA-C-O	5.92	126.65	119.31
2	F	96	ASN	N-CA-C	-5.92	100.65	109.94
1	B	40	ARG	N-CA-C	-5.91	99.57	108.96
2	D	349	ASP	N-CA-C	-5.91	100.67	109.42
1	B	263	HIS	N-CA-C	-5.91	98.78	108.41
1	B	33	SER	N-CA-C	-5.90	99.73	108.99
3	G	167	SER	N-CA-C	-5.89	99.19	108.14
1	A	493	SER	CA-C-N	5.88	128.48	120.54
1	A	493	SER	C-N-CA	5.88	128.48	120.54
4	H	76	PHE	N-CA-C	-5.88	99.81	109.40
1	C	49	ALA	CA-C-N	5.88	130.93	122.35
1	C	49	ALA	C-N-CA	5.88	130.93	122.35
1	C	300	TYR	CA-C-N	5.88	128.47	120.54
1	C	300	TYR	C-N-CA	5.88	128.47	120.54
2	E	20	VAL	CA-C-N	-5.88	115.44	123.14
2	E	20	VAL	C-N-CA	-5.88	115.44	123.14
1	B	96	ASP	N-CA-C	-5.87	100.49	109.41
1	B	266	ILE	N-CA-C	-5.87	100.03	108.48
3	G	107	GLY	N-CA-C	-5.87	99.28	113.18
3	G	111	LYS	N-CA-C	-5.87	106.12	113.28
5	I	18	CYS	CA-C-N	5.86	128.13	120.28
5	I	18	CYS	C-N-CA	5.86	128.13	120.28
9	U	92	GLU	CA-C-O	-5.86	112.14	120.51
1	C	237	SER	CA-C-N	5.84	132.69	121.54
1	C	237	SER	C-N-CA	5.84	132.69	121.54
2	E	29	LEU	N-CA-C	-5.84	101.42	108.14
1	C	373	ARG	CA-C-N	5.84	127.92	120.56
1	C	373	ARG	C-N-CA	5.84	127.92	120.56
2	E	334	VAL	N-CA-C	-5.84	99.34	107.80
2	D	14	VAL	N-CA-C	-5.83	107.13	112.96
9	U	94	LYS	N-CA-C	5.83	117.43	111.14
2	E	41	ARG	CA-C-N	5.83	132.66	121.54
2	E	41	ARG	C-N-CA	5.83	132.66	121.54
2	F	20	VAL	CA-C-N	-5.83	115.51	123.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	20	VAL	C-N-CA	-5.83	115.51	123.14
1	C	45	ARG	CA-C-N	5.82	131.32	121.14
1	C	45	ARG	C-N-CA	5.82	131.32	121.14
1	B	144	GLU	CA-C-N	5.82	127.11	119.84
1	B	144	GLU	C-N-CA	5.82	127.11	119.84
7	S	116	VAL	N-CA-C	5.82	121.44	108.88
1	C	219	ARG	N-CA-C	5.81	117.61	111.28
1	C	58	GLY	N-CA-C	-5.80	107.65	115.36
2	E	138	LYS	CA-C-N	5.79	128.40	120.46
2	E	138	LYS	C-N-CA	5.79	128.40	120.46
1	C	457	GLU	N-CA-C	-5.79	101.79	110.24
1	A	317	GLY	N-CA-C	-5.79	106.97	115.30
2	E	10	THR	N-CA-C	-5.79	100.46	109.72
2	F	463	ILE	N-CA-C	5.79	118.28	111.05
2	D	154	LEU	N-CA-C	5.78	119.01	107.62
2	F	205	VAL	N-CA-C	-5.77	104.89	110.72
1	C	387	ALA	CA-C-N	5.77	126.51	119.99
1	C	387	ALA	C-N-CA	5.77	126.51	119.99
3	G	175	GLU	CA-C-O	-5.77	114.36	121.06
9	U	3	ARG	CA-C-N	5.77	131.62	122.62
9	U	3	ARG	C-N-CA	5.77	131.62	122.62
1	B	202	ILE	N-CA-C	-5.76	99.24	107.77
1	B	321	LEU	N-CA-C	-5.76	98.89	108.34
1	C	333	ASP	N-CA-C	-5.75	97.05	107.75
2	D	449	TYR	N-CA-C	-5.75	106.13	114.12
5	I	32	ALA	CA-C-N	5.75	129.89	120.63
5	I	32	ALA	C-N-CA	5.75	129.89	120.63
1	C	189	PHE	N-CA-C	-5.74	105.38	112.90
8	T	89	HIS	CA-C-O	-5.74	113.61	120.10
2	F	26	ASP	N-CA-C	-5.73	105.01	113.61
2	E	87	GLY	CA-C-N	5.73	125.43	119.82
2	E	87	GLY	C-N-CA	5.73	125.43	119.82
7	S	79	SER	O-C-N	-5.73	114.73	121.32
2	E	40	GLY	N-CA-C	-5.73	107.42	115.32
7	S	86	ILE	N-CA-C	-5.72	105.54	110.74
2	D	297	THR	CA-C-N	5.71	130.97	122.86
2	D	297	THR	C-N-CA	5.71	130.97	122.86
10	V	28	GLY	CA-C-O	-5.71	113.36	121.52
2	F	430	LYS	N-CA-C	-5.70	98.80	108.26
1	B	364	ALA	CA-C-N	5.70	132.22	121.97
1	B	364	ALA	C-N-CA	5.70	132.22	121.97
2	F	250	ASP	N-CA-C	-5.70	98.44	108.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	226	PRO	CA-C-N	5.69	126.41	120.03
2	D	226	PRO	C-N-CA	5.69	126.41	120.03
10	V	19	TYR	N-CA-C	-5.69	104.98	111.07
4	H	69	ASP	N-CA-C	5.69	122.91	110.80
1	B	99	VAL	N-CA-C	-5.69	99.46	108.90
1	C	354	THR	CA-C-N	5.68	128.21	120.54
1	C	354	THR	C-N-CA	5.68	128.21	120.54
1	B	381	ARG	N-CA-C	5.68	117.47	111.28
4	H	26	VAL	N-CA-C	-5.68	100.16	108.11
2	D	208	LEU	N-CA-C	-5.68	106.57	112.93
2	E	359	ASP	N-CA-C	-5.68	101.67	108.25
8	T	92	PHE	CA-C-O	5.67	126.56	120.55
1	B	365	ILE	CA-C-N	-5.67	115.47	122.84
1	B	365	ILE	C-N-CA	-5.67	115.47	122.84
1	B	113	ASN	N-CA-C	-5.66	102.14	110.52
2	F	104	GLU	N-CA-C	-5.66	106.32	113.23
2	E	72	GLY	N-CA-C	-5.66	107.85	115.21
2	E	149	GLY	CA-C-N	5.66	126.08	120.31
2	E	149	GLY	C-N-CA	5.66	126.08	120.31
2	D	216	ALA	N-CA-C	-5.66	100.48	109.59
1	B	483	ILE	CA-C-N	5.64	127.78	120.44
1	B	483	ILE	C-N-CA	5.64	127.78	120.44
2	E	421	ALA	CA-C-N	5.64	128.89	120.31
2	E	421	ALA	C-N-CA	5.64	128.89	120.31
2	F	156	GLY	N-CA-C	-5.64	99.81	113.18
4	H	129	ALA	CA-C-O	-5.64	114.86	120.90
2	F	160	VAL	N-CA-C	-5.64	107.49	112.90
3	G	170	SER	CA-C-O	5.64	127.08	120.43
2	E	225	PRO	CA-C-O	-5.63	116.84	120.90
3	G	143	VAL	CA-C-N	5.63	128.47	120.53
3	G	143	VAL	C-N-CA	5.63	128.47	120.53
2	E	358	MET	N-CA-C	-5.63	100.01	109.07
3	G	86	ALA	CA-C-N	5.63	132.29	121.54
3	G	86	ALA	C-N-CA	5.63	132.29	121.54
4	H	98	VAL	CA-C-N	5.63	128.86	120.87
4	H	98	VAL	C-N-CA	5.63	128.86	120.87
2	F	116	ILE	N-CA-C	5.62	117.58	112.29
1	A	457	GLU	CA-C-N	5.62	125.72	119.32
1	A	457	GLU	C-N-CA	5.62	125.72	119.32
1	C	132	LYS	N-CA-C	5.62	117.94	110.53
1	B	210	ARG	CA-C-N	5.61	127.80	120.28
1	B	210	ARG	C-N-CA	5.61	127.80	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	401	ALA	CA-C-N	5.61	128.07	120.38
1	A	401	ALA	C-N-CA	5.61	128.07	120.38
1	A	348	GLY	N-CA-C	-5.61	105.91	111.85
1	C	322	THR	N-CA-C	-5.60	100.11	109.24
1	C	490	SER	N-CA-C	-5.60	101.73	110.42
2	E	64	ASP	CA-C-N	5.60	125.66	120.34
2	E	64	ASP	C-N-CA	5.60	125.66	120.34
1	B	194	ASP	N-CA-C	-5.59	98.14	107.99
1	B	484	ARG	N-CA-C	-5.59	105.08	111.07
1	A	279	ARG	O-C-N	5.59	127.83	122.07
1	C	364	ALA	CA-C-N	5.59	132.03	121.97
1	C	364	ALA	C-N-CA	5.59	132.03	121.97
2	E	195	ASP	CA-C-O	5.59	126.47	120.55
1	A	198	LYS	N-CA-C	-5.59	97.68	107.73
1	C	509	GLU	N-CA-C	-5.59	98.90	110.80
2	F	63	MET	O-C-N	5.59	128.52	122.15
1	B	95	VAL	N-CA-C	5.58	117.67	109.63
2	F	444	ILE	CA-C-N	5.58	127.76	120.28
2	F	444	ILE	C-N-CA	5.58	127.76	120.28
2	E	22	ASP	N-CA-C	-5.58	100.09	109.07
2	E	306	SER	CA-C-O	5.58	126.62	120.71
1	A	500	ILE	CA-C-O	-5.56	115.27	121.17
1	A	407	GLY	N-CA-C	-5.56	100.00	113.18
1	C	505	LEU	N-CA-C	-5.55	105.13	111.07
7	S	79	SER	CA-C-O	-5.55	112.55	120.16
1	B	169	GLY	N-CA-C	-5.54	102.60	110.63
1	C	353	GLU	CA-C-O	5.54	126.23	120.30
1	A	223	ALA	CA-C-N	5.54	132.12	121.54
1	A	223	ALA	C-N-CA	5.54	132.12	121.54
9	U	94	LYS	CA-C-N	5.53	131.64	122.73
9	U	94	LYS	C-N-CA	5.53	131.64	122.73
2	F	438	ILE	O-C-N	5.53	127.33	121.91
1	B	508	PHE	N-CA-C	-5.53	99.03	110.80
2	E	319	ASP	CA-C-N	5.53	125.62	119.32
2	E	319	ASP	C-N-CA	5.53	125.62	119.32
8	T	163	LYS	CA-C-N	5.53	128.15	120.63
8	T	163	LYS	C-N-CA	5.53	128.15	120.63
2	E	403	THR	CA-C-N	5.52	127.63	120.56
2	E	403	THR	C-N-CA	5.52	127.63	120.56
1	C	249	SER	CA-C-N	5.52	126.21	120.03
1	C	249	SER	C-N-CA	5.52	126.21	120.03
2	D	225	PRO	N-CA-C	-5.52	103.97	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	416	GLN	N-CA-C	-5.51	97.62	109.81
1	A	121	ILE	N-CA-C	-5.51	97.88	109.34
1	A	249	SER	CA-C-N	5.51	126.20	120.03
1	A	249	SER	C-N-CA	5.51	126.20	120.03
1	A	150	ILE	N-CA-C	-5.50	97.89	109.34
1	A	419	SER	CA-C-N	5.50	127.97	120.54
1	A	419	SER	C-N-CA	5.50	127.97	120.54
2	E	256	ASP	N-CA-C	-5.50	96.82	107.44
3	G	148	LEU	CA-C-N	5.50	128.11	120.63
3	G	148	LEU	C-N-CA	5.50	128.11	120.63
2	E	126	MET	N-CA-C	-5.50	100.44	109.40
1	B	480	LEU	CA-C-N	5.49	126.19	119.99
1	B	480	LEU	C-N-CA	5.49	126.19	119.99
2	E	355	SER	N-CA-C	-5.49	98.60	108.48
2	F	211	ALA	CA-C-N	5.49	132.46	121.81
2	F	211	ALA	C-N-CA	5.49	132.46	121.81
1	C	279	ARG	CA-C-N	5.49	127.95	120.54
1	C	279	ARG	C-N-CA	5.49	127.95	120.54
1	C	411	ASP	N-CA-C	-5.49	103.29	110.53
10	V	46	LYS	CA-C-O	-5.48	114.75	120.55
4	H	68	GLU	CA-C-N	5.47	132.00	121.54
4	H	68	GLU	C-N-CA	5.47	132.00	121.54
3	G	178	ILE	CA-C-N	5.47	131.99	121.54
3	G	178	ILE	C-N-CA	5.47	131.99	121.54
4	H	102	MET	N-CA-C	-5.47	105.40	113.61
2	F	338	ALA	CA-C-N	5.47	128.19	120.42
2	F	338	ALA	C-N-CA	5.47	128.19	120.42
1	B	117	GLY	N-CA-C	-5.47	105.46	114.76
3	G	102	GLU	N-CA-C	-5.47	100.40	108.99
1	C	144	GLU	CA-C-N	5.47	126.67	119.84
1	C	144	GLU	C-N-CA	5.47	126.67	119.84
7	S	98	THR	CA-C-O	-5.46	113.30	118.33
2	F	272	LEU	N-CA-C	-5.46	106.39	113.16
4	H	89	SER	N-CA-C	-5.46	100.35	109.24
2	E	266	SER	CA-C-N	5.46	128.04	120.29
2	E	266	SER	C-N-CA	5.46	128.04	120.29
1	C	403	PHE	CA-C-N	5.45	131.95	121.54
1	C	403	PHE	C-N-CA	5.45	131.95	121.54
1	B	212	THR	CA-C-N	5.45	127.92	120.46
1	B	212	THR	C-N-CA	5.45	127.92	120.46
2	D	57	THR	N-CA-C	-5.45	100.52	109.40
2	D	338	ALA	N-CA-C	5.45	117.22	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	303	SER	CA-C-N	-5.44	115.84	123.13
2	D	303	SER	C-N-CA	-5.44	115.84	123.13
1	B	249	SER	CA-C-N	5.43	126.11	120.03
1	B	249	SER	C-N-CA	5.43	126.11	120.03
3	G	140	ASP	N-CA-C	-5.43	105.44	111.36
9	U	66	VAL	CA-C-O	-5.43	115.62	121.27
3	G	262	LEU	N-CA-C	-5.42	104.77	111.33
1	B	504	PHE	CA-C-N	5.42	131.90	121.54
1	B	504	PHE	C-N-CA	5.42	131.90	121.54
1	B	44	LEU	CA-C-N	5.42	131.89	121.54
1	B	44	LEU	C-N-CA	5.42	131.89	121.54
1	C	117	GLY	N-CA-C	-5.42	107.79	115.43
2	E	182	VAL	N-CA-C	-5.42	100.39	108.46
2	D	120	ALA	CA-C-N	5.40	125.40	119.89
2	D	120	ALA	C-N-CA	5.40	125.40	119.89
2	F	23	VAL	CA-C-N	-5.40	115.49	123.05
2	F	23	VAL	C-N-CA	-5.40	115.49	123.05
1	B	347	ASP	N-CA-C	-5.40	106.47	112.57
7	S	41	ARG	CA-C-N	5.40	127.56	120.60
7	S	41	ARG	C-N-CA	5.40	127.56	120.60
1	A	360	GLY	N-CA-C	-5.40	107.91	114.92
2	F	127	SER	CA-C-N	5.40	129.00	120.47
2	F	127	SER	C-N-CA	5.40	129.00	120.47
2	F	318	THR	N-CA-C	-5.39	105.96	112.54
7	S	70	SER	O-C-N	-5.39	115.02	122.46
1	A	187	LYS	CA-C-O	-5.39	115.14	120.90
9	U	97	VAL	O-C-N	-5.38	116.28	121.83
7	S	40	LEU	CA-C-N	5.38	127.94	120.63
7	S	40	LEU	C-N-CA	5.38	127.94	120.63
2	E	133	LEU	N-CA-C	-5.38	102.03	110.36
8	T	39	LYS	CA-C-N	5.38	127.92	120.29
8	T	39	LYS	C-N-CA	5.38	127.92	120.29
1	C	454	ASP	CA-C-N	5.37	131.80	121.54
1	C	454	ASP	C-N-CA	5.37	131.80	121.54
2	E	106	GLY	CA-C-N	5.37	126.13	120.11
2	E	106	GLY	C-N-CA	5.37	126.13	120.11
1	B	432	GLN	N-CA-C	-5.37	102.93	110.50
2	F	301	LYS	N-CA-C	-5.37	101.51	109.83
1	A	202	ILE	N-CA-C	-5.37	99.83	107.77
3	G	169	ILE	CA-C-N	-5.37	111.76	121.69
3	G	169	ILE	C-N-CA	-5.37	111.76	121.69
2	D	93	ARG	N-CA-C	-5.36	100.57	108.99

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	191	ASP	N-CA-C	-5.36	106.74	113.28
2	D	277	SER	N-CA-C	-5.36	100.33	107.88
2	D	404	VAL	CA-C-N	5.35	127.45	120.28
2	D	404	VAL	C-N-CA	5.35	127.45	120.28
1	B	412	ALA	CA-C-N	5.35	128.23	120.79
1	B	412	ALA	C-N-CA	5.35	128.23	120.79
2	F	387	ILE	CA-C-N	5.35	128.92	120.47
2	F	387	ILE	C-N-CA	5.35	128.92	120.47
2	F	425	THR	N-CA-C	5.35	118.27	111.69
7	S	90	ALA	N-CA-C	5.34	116.79	110.97
2	D	13	ILE	CA-C-N	-5.33	115.81	121.84
2	D	13	ILE	C-N-CA	-5.33	115.81	121.84
2	E	123	PHE	CA-C-O	5.33	126.20	120.55
4	H	131	ILE	O-C-N	5.33	127.44	121.90
2	F	24	GLN	N-CA-C	-5.33	99.83	108.52
1	A	420	ARG	CA-C-N	5.33	125.85	119.94
1	A	420	ARG	C-N-CA	5.33	125.85	119.94
1	B	501	VAL	N-CA-C	-5.33	105.31	110.42
1	A	225	ALA	CA-C-N	5.31	127.93	120.28
1	A	225	ALA	C-N-CA	5.31	127.93	120.28
1	C	213	VAL	CA-C-N	5.31	127.40	120.28
1	C	213	VAL	C-N-CA	5.31	127.40	120.28
7	S	112	HIS	CA-C-N	5.31	140.37	122.20
7	S	112	HIS	C-N-CA	5.31	140.37	122.20
1	C	190	ASN	N-CA-C	-5.31	106.31	112.89
2	E	421	ALA	N-CA-C	-5.31	104.24	111.56
1	B	464	PHE	CA-C-N	5.30	127.39	120.28
1	B	464	PHE	C-N-CA	5.30	127.39	120.28
9	U	64	GLY	CA-C-O	-5.30	115.59	121.05
2	F	353	SER	N-CA-C	-5.30	99.88	108.41
2	F	13	ILE	CA-C-N	-5.30	115.86	121.84
2	F	13	ILE	C-N-CA	-5.30	115.86	121.84
1	A	294	TYR	CA-C-N	5.29	125.28	119.89
1	A	294	TYR	C-N-CA	5.29	125.28	119.89
4	H	16	MET	N-CA-C	-5.29	100.07	109.06
2	F	72	GLY	N-CA-C	-5.29	108.34	115.21
9	U	95	GLU	O-C-N	5.28	128.84	122.35
5	I	45	VAL	N-CA-C	-5.28	98.36	109.34
1	C	42	HIS	CA-C-N	5.28	131.75	121.41
1	C	42	HIS	C-N-CA	5.28	131.75	121.41
2	E	453	PRO	CA-C-N	5.27	127.35	120.28
2	E	453	PRO	C-N-CA	5.27	127.35	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	383	SER	N-CA-C	-5.27	105.61	111.36
2	E	406	ARG	N-CA-C	-5.27	105.61	111.36
1	A	113	ASN	N-CA-C	-5.27	99.70	108.34
1	B	191	ASP	N-CA-C	-5.27	106.85	113.28
1	B	125	ALA	CA-C-N	-5.27	113.68	122.21
1	B	125	ALA	C-N-CA	-5.27	113.68	122.21
11	W	175	GLY	CA-C-N	5.27	125.83	119.98
11	W	175	GLY	C-N-CA	5.27	125.83	119.98
2	F	58	VAL	N-CA-C	-5.27	100.78	108.99
7	S	122	THR	CA-C-N	5.26	131.59	121.54
7	S	122	THR	C-N-CA	5.26	131.59	121.54
1	A	38	ILE	CA-C-O	5.26	125.86	120.39
1	B	120	PRO	CA-C-N	5.26	131.44	121.97
1	B	120	PRO	C-N-CA	5.26	131.44	121.97
2	E	386	ASP	CA-C-N	5.26	127.29	120.56
2	E	386	ASP	C-N-CA	5.26	127.29	120.56
1	B	162	GLY	N-CA-C	-5.25	100.73	113.18
1	C	473	ILE	N-CA-C	-5.25	105.26	110.62
2	D	470	ALA	CA-C-N	5.25	127.27	120.44
2	D	470	ALA	C-N-CA	5.25	127.27	120.44
4	H	17	SER	N-CA-C	-5.25	98.76	107.99
3	G	200	VAL	CA-C-N	5.25	131.56	121.54
3	G	200	VAL	C-N-CA	5.25	131.56	121.54
2	D	461	GLY	N-CA-C	-5.24	101.64	112.34
3	G	146	LEU	N-CA-C	5.24	121.96	110.80
1	A	66	LEU	CA-C-O	5.24	126.50	120.84
2	D	345	TYR	CA-C-O	-5.23	115.13	120.63
2	E	89	GLU	CA-C-N	5.23	129.57	120.68
2	E	89	GLU	C-N-CA	5.23	129.57	120.68
2	D	43	THR	N-CA-C	-5.23	99.89	108.41
2	D	50	ALA	N-CA-C	-5.23	106.84	113.43
4	H	67	ALA	N-CA-C	-5.22	102.75	110.48
2	D	66	THR	N-CA-C	-5.22	105.19	112.03
2	E	178	GLY	CA-C-N	5.22	131.64	121.41
2	E	178	GLY	C-N-CA	5.22	131.64	121.41
4	H	118	GLU	CA-C-N	5.22	127.53	120.38
4	H	118	GLU	C-N-CA	5.22	127.53	120.38
2	D	390	ILE	CA-C-N	-5.22	114.34	122.37
2	D	390	ILE	C-N-CA	-5.22	114.34	122.37
1	A	191	ASP	N-CA-C	-5.21	106.92	113.28
4	H	62	LEU	N-CA-C	-5.21	101.26	109.50
2	F	349	ASP	N-CA-C	-5.21	99.31	108.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	G	184	ILE	N-CA-C	-5.21	104.46	111.44
1	B	135	GLY	CA-C-N	5.21	127.12	120.56
1	B	135	GLY	C-N-CA	5.21	127.12	120.56
7	S	116	VAL	CA-C-N	5.21	125.21	119.90
7	S	116	VAL	C-N-CA	5.21	125.21	119.90
1	A	509	GLU	N-CA-C	-5.20	105.05	111.40
2	D	394	ASP	N-CA-C	-5.20	104.23	111.52
2	F	456	ALA	N-CA-C	-5.20	104.32	111.81
3	G	255	GLN	CA-C-N	5.20	127.56	120.54
3	G	255	GLN	C-N-CA	5.20	127.56	120.54
4	H	133	ILE	N-CA-C	-5.20	104.90	110.36
2	E	91	LEU	N-CA-C	-5.20	103.17	110.50
2	E	356	ARG	N-CA-C	-5.20	105.79	111.82
1	A	46	ASN	N-CA-C	-5.20	106.89	113.18
1	A	22	SER	CA-C-N	5.19	131.32	121.97
1	A	22	SER	C-N-CA	5.19	131.32	121.97
7	S	47	LYS	N-CA-C	5.19	121.86	110.80
2	F	399	GLU	CA-C-O	5.19	125.92	120.42
9	U	98	LYS	O-C-N	-5.19	115.69	122.59
2	D	207	ASN	N-CA-C	-5.18	100.00	108.76
2	F	392	GLY	CA-C-N	5.18	130.63	120.99
2	F	392	GLY	C-N-CA	5.18	130.63	120.99
2	F	87	GLY	CA-C-N	5.18	124.90	119.82
2	F	87	GLY	C-N-CA	5.18	124.90	119.82
1	C	327	ILE	N-CA-C	-5.18	100.66	108.12
2	E	369	ASP	CA-C-N	5.18	127.78	120.42
2	E	369	ASP	C-N-CA	5.18	127.78	120.42
2	D	467	VAL	CA-C-N	5.18	127.17	120.44
2	D	467	VAL	C-N-CA	5.18	127.17	120.44
2	F	44	ARG	N-CA-C	-5.18	97.53	107.57
4	H	28	PHE	CA-C-N	-5.18	114.32	122.76
4	H	28	PHE	C-N-CA	-5.18	114.32	122.76
7	S	135	LYS	N-CA-C	-5.18	105.76	111.71
1	B	370	SER	N-CA-C	-5.17	102.02	110.20
2	F	313	PRO	CA-C-N	5.17	131.17	123.05
2	F	313	PRO	C-N-CA	5.17	131.17	123.05
1	A	338	ILE	N-CA-C	-5.17	106.14	112.35
9	U	98	LYS	N-CA-C	5.17	121.81	110.80
2	E	348	VAL	N-CA-C	5.17	120.08	109.34
5	I	46	LYS	CA-C-N	5.17	131.00	121.70
5	I	46	LYS	C-N-CA	5.17	131.00	121.70
1	A	505	LEU	N-CA-C	-5.16	105.55	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	73	VAL	N-CA-C	-5.16	100.21	107.75
2	D	117	HIS	N-CA-C	-5.16	98.85	107.99
2	E	47	LEU	N-CA-C	-5.16	101.29	109.59
1	B	286	ARG	CA-C-N	5.15	128.41	121.20
1	B	286	ARG	C-N-CA	5.15	128.41	121.20
2	E	209	LYS	CA-C-N	5.15	130.85	121.89
2	E	209	LYS	C-N-CA	5.15	130.85	121.89
1	B	489	ILE	N-CA-C	-5.14	100.97	108.17
1	C	366	ASN	CA-C-N	5.14	127.14	120.56
1	C	366	ASN	C-N-CA	5.14	127.14	120.56
2	F	397	SER	CA-C-N	5.14	127.67	120.28
2	F	397	SER	C-N-CA	5.14	127.67	120.28
5	I	12	ILE	N-CA-C	5.14	115.75	110.36
1	A	390	MET	CA-C-N	5.13	127.16	120.28
1	A	390	MET	C-N-CA	5.13	127.16	120.28
2	E	23	VAL	N-CA-C	-5.13	100.81	108.46
4	H	113	GLU	CA-C-N	5.13	127.47	120.54
4	H	113	GLU	C-N-CA	5.13	127.47	120.54
3	G	264	GLU	CA-C-O	5.13	125.94	120.20
1	C	484	ARG	N-CA-C	-5.13	105.58	111.07
1	A	478	ALA	CA-C-N	5.13	127.57	120.29
1	A	478	ALA	C-N-CA	5.13	127.57	120.29
2	D	127	SER	CA-C-N	5.13	129.03	120.62
2	D	127	SER	C-N-CA	5.13	129.03	120.62
1	C	372	SER	N-CA-C	-5.12	98.90	108.02
2	D	421	ALA	N-CA-C	-5.12	103.92	111.81
1	A	34	ILE	N-CA-C	-5.12	101.25	108.27
1	C	506	ALA	CA-C-N	5.12	125.64	120.00
1	C	506	ALA	C-N-CA	5.12	125.64	120.00
2	F	311	TYR	N-CA-C	-5.12	102.11	110.20
2	E	138	LYS	CA-C-O	5.12	126.19	120.82
2	F	75	VAL	N-CA-C	-5.12	100.83	108.46
2	E	34	ASN	CA-C-N	5.12	128.74	121.42
2	E	34	ASN	C-N-CA	5.12	128.74	121.42
4	H	141	LEU	CA-C-N	5.12	128.69	120.30
4	H	141	LEU	C-N-CA	5.12	128.69	120.30
2	D	25	PHE	CA-C-O	5.11	126.00	120.43
2	D	450	ASP	CA-C-N	5.11	131.31	121.54
2	D	450	ASP	C-N-CA	5.11	131.31	121.54
2	D	456	ALA	CA-C-O	5.11	126.19	120.82
2	E	255	ILE	N-CA-C	-5.11	100.29	107.75
2	F	155	PHE	N-CA-C	-5.10	102.14	110.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	S	59	TYR	N-CA-C	-5.10	99.93	110.80
2	F	347	ALA	CA-C-N	5.10	131.15	121.97
2	F	347	ALA	C-N-CA	5.10	131.15	121.97
1	A	365	ILE	N-CA-C	5.10	119.94	109.34
2	E	14	VAL	N-CA-C	-5.10	107.86	112.96
2	F	298	THR	CA-C-O	5.09	125.75	120.40
1	A	18	GLY	N-CA-C	-5.09	101.11	113.18
3	G	14	LYS	N-CA-C	-5.09	105.81	111.36
1	A	141	SER	N-CA-C	5.09	121.64	110.80
7	S	112	HIS	CA-C-O	5.09	126.29	119.47
1	A	298	VAL	N-CA-C	-5.08	104.92	112.04
1	B	467	ALA	CA-C-N	5.08	127.09	120.28
1	B	467	ALA	C-N-CA	5.08	127.09	120.28
2	E	84	ILE	CA-C-N	5.08	124.99	119.76
2	E	84	ILE	C-N-CA	5.08	124.99	119.76
1	A	10	SER	N-CA-C	-5.07	99.99	110.80
7	S	120	VAL	N-CA-C	-5.07	107.81	112.83
1	A	358	TYR	N-CA-C	-5.07	105.83	111.36
1	C	444	VAL	N-CA-C	-5.07	104.64	111.44
2	D	229	ARG	CA-C-N	5.07	127.07	120.28
2	D	229	ARG	C-N-CA	5.07	127.07	120.28
2	E	60	THR	N-CA-C	-5.07	101.59	109.14
1	A	260	ASN	N-CA-C	-5.07	104.01	111.81
2	E	444	ILE	CA-C-N	5.07	127.07	120.28
2	E	444	ILE	C-N-CA	5.07	127.07	120.28
9	U	9	THR	O-C-N	-5.07	115.77	122.40
1	A	496	LYS	CA-C-N	5.06	127.02	120.44
1	A	496	LYS	C-N-CA	5.06	127.02	120.44
3	G	199	ASP	CA-C-N	5.06	131.08	121.97
3	G	199	ASP	C-N-CA	5.06	131.08	121.97
2	F	196	LEU	CA-C-N	5.05	127.36	120.54
2	F	196	LEU	C-N-CA	5.05	127.36	120.54
3	G	3	LEU	CA-C-N	5.05	127.81	120.79
3	G	3	LEU	C-N-CA	5.05	127.81	120.79
4	H	137	ALA	N-CA-C	-5.05	105.46	110.97
2	E	356	ARG	CA-C-N	5.05	131.06	121.97
2	E	356	ARG	C-N-CA	5.05	131.06	121.97
2	F	161	GLY	N-CA-C	-5.05	101.22	113.18
3	G	77	LEU	N-CA-C	-5.05	100.05	110.80
1	A	445	ILE	CA-C-N	5.05	127.30	120.38
1	A	445	ILE	C-N-CA	5.05	127.30	120.38
1	A	247	PRO	CA-C-N	5.04	127.45	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	247	PRO	C-N-CA	5.04	127.45	120.29
2	E	131	GLU	N-CA-C	-5.04	101.75	108.86
2	F	467	VAL	CA-C-N	5.04	127.04	120.28
2	F	467	VAL	C-N-CA	5.04	127.04	120.28
1	A	361	ILE	CA-C-N	5.03	128.93	122.64
1	A	361	ILE	C-N-CA	5.03	128.93	122.64
2	E	201	ILE	CA-C-N	5.03	127.34	120.54
2	E	201	ILE	C-N-CA	5.03	127.34	120.54
2	E	315	ASP	N-CA-C	5.03	118.54	111.90
2	D	177	HIS	N-CA-C	-5.03	101.80	108.74
1	C	127	ARG	N-CA-C	-5.02	100.41	108.55
3	G	266	ILE	CA-C-N	5.02	131.13	121.54
3	G	266	ILE	C-N-CA	5.02	131.13	121.54
2	F	225	PRO	N-CA-C	-5.02	104.57	110.70
2	E	200	MET	CA-C-N	5.02	126.98	120.70
2	E	200	MET	C-N-CA	5.02	126.98	120.70
1	C	51	GLU	CA-C-N	5.02	127.98	120.95
1	C	51	GLU	C-N-CA	5.02	127.98	120.95
2	D	275	ILE	N-CA-C	-5.02	104.31	108.63
1	A	206	ILE	N-CA-C	-5.02	100.53	107.80
2	F	201	ILE	CA-C-N	5.02	127.31	120.54
2	F	201	ILE	C-N-CA	5.02	127.31	120.54
2	E	461	GLY	N-CA-C	-5.02	102.11	112.34
3	G	248	LEU	CA-C-O	5.01	126.84	120.07
7	S	51	MET	N-CA-C	5.01	117.13	111.02
1	C	155	SER	N-CA-C	-5.01	104.83	112.04
1	C	367	VAL	N-CA-C	5.01	115.24	110.53
1	C	377	ALA	N-CA-C	5.01	117.47	111.71
2	F	299	THR	N-CA-C	-5.01	103.44	110.35
1	C	196	LYS	N-CA-C	-5.00	107.46	113.21
1	C	366	ASN	N-CA-C	-5.00	100.36	108.52
9	U	114	TYR	N-CA-C	5.00	117.39	111.33

There are no chirality outliers.

All (103) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	238	ASP	Mainchain
1	A	333	ASP	Mainchain
1	A	406	PHE	Peptide
1	B	123	SER	Mainchain,Peptide
1	B	379	GLN	Peptide

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Mol	Chain	Res	Type	Group
1	B	398	ARG	Mainchain
1	B	399	GLU	Mainchain,Peptide
1	B	505	LEU	Mainchain
1	C	173	THR	Mainchain
1	C	174	GLY	Mainchain,Peptide
1	C	476	HIS	Peptide
2	D	319	ASP	Mainchain
2	D	393	MET	Mainchain
2	D	397	SER	Mainchain
2	E	25	PHE	Mainchain,Peptide
2	E	311	TYR	Mainchain
2	E	397	SER	Mainchain
2	F	158	ALA	Peptide
2	F	318	THR	Mainchain
2	F	397	SER	Mainchain
3	G	155	PHE	Mainchain
3	G	182	ASP	Mainchain
3	G	195	ASP	Mainchain,Peptide
4	H	144	ALA	Peptide
7	S	151	GLU	Peptide
7	S	152	VAL	Peptide
7	S	156	PRO	Peptide
7	S	157	SER	Mainchain
7	S	159	MET	Mainchain
7	S	161	GLY	Mainchain
7	S	52	ALA	Peptide
7	S	57	ASN	Mainchain
7	S	89	LEU	Mainchain
8	T	137	GLN	Mainchain
8	T	149	VAL	Peptide
8	T	154	ALA	Peptide
8	T	163	LYS	Mainchain
8	T	169	LYS	Mainchain
8	T	173	LYS	Peptide
8	T	22	PRO	Peptide
8	T	46	GLY	Mainchain
8	T	50	ASP	Peptide
8	T	51	LYS	Mainchain
8	T	89	HIS	Mainchain
8	T	96	ARG	Mainchain
8	T	97	ASN	Mainchain
9	U	103	PHE	Peptide

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Mol	Chain	Res	Type	Group
9	U	109	THR	Mainchain
9	U	11	ASP	Peptide
9	U	113	GLU	Mainchain
9	U	115	GLU	Mainchain,Peptide
9	U	117	GLU	Mainchain
9	U	16	GLY	Peptide
9	U	17	GLU	Peptide
9	U	19	ILE	Mainchain
9	U	20	PRO	Mainchain,Peptide
9	U	3	ARG	Mainchain,Peptide
9	U	43	THR	Mainchain
9	U	44	LEU	Peptide
9	U	59	ASN	Mainchain,Peptide
9	U	61	ALA	Peptide
9	U	64	GLY	Mainchain
9	U	8	LYS	Mainchain,Peptide
9	U	81	PRO	Mainchain
9	U	83	ASP	Peptide
9	U	9	THR	Mainchain
9	U	92	GLU	Mainchain
9	U	95	GLU	Mainchain,Peptide
9	U	96	ASP	Mainchain,Peptide
9	U	97	VAL	Peptide
9	U	98	LYS	Peptide
10	V	12	PHE	Mainchain
10	V	17	ARG	Mainchain
10	V	18	GLU	Mainchain,Peptide
10	V	25	THR	Peptide
10	V	31	ASP	Peptide
10	V	32	ALA	Mainchain
10	V	35	GLU	Mainchain
10	V	46	LYS	Mainchain
10	V	6	ASP	Peptide
10	V	61	ASN	Peptide
10	V	64	PHE	Mainchain,Peptide
10	V	70	GLU	Mainchain
10	V	9	GLN	Peptide
11	W	132	GLY	Mainchain
11	W	133	THR	Mainchain
11	W	159	ARG	Mainchain
11	W	35	ASN	Peptide
11	W	63	SER	Mainchain

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	2035	0	589	11	0
1	B	1918	0	553	5	0
1	C	1948	0	563	8	0
2	D	1867	0	533	6	0
2	E	1863	0	532	4	0
2	F	1863	0	532	7	0
3	G	1053	0	283	4	0
4	H	523	0	140	2	0
5	I	187	0	53	2	0
6	J	288	0	92	0	0
6	K	288	0	92	0	0
6	L	288	0	92	0	0
6	M	288	0	92	0	0
6	N	288	0	92	0	0
6	O	288	0	92	0	0
6	P	288	0	92	0	0
6	Q	288	0	92	0	0
7	S	669	0	179	4	0
8	T	697	0	182	3	0
9	U	485	0	118	4	0
10	V	265	0	68	3	0
11	W	869	0	226	2	0
All	All	18546	0	5287	59	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 (59) 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)
9:U:96:ASP:CA	9:U:96:ASP:N	1.73	1.46
7:S:163:ILE:O	7:S:167:GLY:O	1.88	0.90
1:B:173:THR:H	1:B:175:LYS:H	1.26	0.82
3:G:51:LEU:C	3:G:53:GLU:H	2.03	0.65
1:A:223:ALA:C	1:A:225:ALA:H	2.09	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:285:LEU:C	1:C:287:ARG:H	2.10	0.58
2:D:473:LEU:C	2:D:475:GLU:H	2.13	0.56
1:A:149:GLY:HA3	1:A:436:MET:H	1.73	0.54
2:D:87:GLY:C	2:D:89:GLU:H	2.16	0.54
3:G:155:PHE:C	3:G:157:GLU:H	2.14	0.54
3:G:167:SER:C	3:G:169:ILE:H	2.17	0.53
5:I:40:SER:C	5:I:42:ILE:H	2.17	0.52
1:A:25:LEU:C	1:A:44:LEU:H	2.19	0.51
2:D:179:GLY:HA2	2:D:250:ASP:O	2.11	0.51
7:S:146:GLN:C	7:S:148:LEU:H	2.20	0.50
1:C:353:GLU:H	1:C:365:ILE:N	2.09	0.49
3:G:183:THR:C	3:G:186:SER:H	2.21	0.49
1:C:261:GLY:O	1:C:319:GLY:HA2	2.13	0.48
1:C:49:ALA:H	2:D:69:LEU:N	2.11	0.48
1:B:144:GLU:O	1:B:160:GLY:HA2	2.15	0.47
8:T:20:ILE:H	11:W:91:SER:H	1.62	0.47
10:V:10:LYS:O	10:V:14:ASP:N	2.48	0.47
8:T:104:GLU:N	9:U:5:LEU:H	2.12	0.47
5:I:28:THR:C	5:I:31:LYS:H	2.22	0.46
2:E:417:PRO:C	2:E:429:GLY:HA2	2.41	0.46
7:S:30:ASN:C	7:S:32:LEU:H	2.24	0.46
2:F:299:THR:C	2:F:301:LYS:H	2.23	0.46
2:F:210:ASP:C	2:F:212:THR:H	2.24	0.45
1:C:261:GLY:HA2	1:C:317:GLY:HA3	1.97	0.45
1:B:49:ALA:H	2:F:69:LEU:H	1.63	0.45
4:H:80:GLY:HA3	4:H:95:GLU:H	1.82	0.45
1:A:397:TYR:O	1:A:401:ALA:N	2.50	0.44
7:S:93:GLY:C	7:S:95:LEU:H	2.26	0.44
1:A:283:LEU:C	1:A:286:ARG:H	2.25	0.43
4:H:142:VAL:O	4:H:143:LYS:C	2.61	0.43
2:D:196:LEU:O	2:D:200:MET:N	2.51	0.43
1:A:6:ALA:C	1:A:8:VAL:H	2.26	0.43
1:C:172:GLN:C	1:C:174:GLY:N	2.77	0.43
2:D:213:SER:C	2:D:215:VAL:H	2.27	0.43
1:A:49:ALA:H	2:E:69:LEU:N	2.17	0.43
1:C:172:GLN:CA	1:C:175:LYS:H	2.32	0.42
2:F:272:LEU:C	2:F:274:ARG:H	2.27	0.42
8:T:104:GLU:CA	9:U:5:LEU:H	2.32	0.42
1:A:101:GLU:C	1:A:103:LEU:H	2.26	0.42
1:A:504:PHE:O	1:A:508:PHE:N	2.52	0.42
2:F:419:GLN:N	2:F:429:GLY:H	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:447:GLY:C	2:F:449:TYR:H	2.28	0.42
9:U:100:CYS:O	9:U:101:ALA:C	2.62	0.42
2:E:84:ILE:H	2:E:114:ALA:H	1.67	0.41
11:W:38:VAL:H	11:W:39:SER:CA	2.33	0.41
1:A:31:VAL:H	1:A:85:GLY:C	2.29	0.41
2:E:313:PRO:C	2:E:315:ASP:N	2.78	0.41
10:V:55:ASP:C	10:V:57:ASN:H	2.29	0.41
1:A:475:GLN:C	1:A:477:GLN:H	2.28	0.41
1:B:171:ARG:O	1:B:172:GLN:C	2.63	0.40
1:C:283:LEU:C	1:C:286:ARG:H	2.29	0.40
2:F:455:GLN:C	2:F:457:PHE:H	2.29	0.40
1:B:258:ARG:O	1:B:319:GLY:HA3	2.22	0.40
10:V:6:ASP:C	10:V:10:LYS:H	2.29	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	507/510 (99%)	446 (88%)	37 (7%)	24 (5%)	2	16
1	B	476/510 (93%)	430 (90%)	24 (5%)	22 (5%)	2	17
1	C	231/510 (45%)	208 (90%)	14 (6%)	9 (4%)	2	19
2	D	465/482 (96%)	422 (91%)	32 (7%)	11 (2%)	4	27
2	E	464/482 (96%)	414 (89%)	29 (6%)	21 (4%)	2	17
2	F	464/482 (96%)	423 (91%)	31 (7%)	10 (2%)	5	29
3	G	258/273 (94%)	189 (73%)	42 (16%)	27 (10%)	0	6
4	H	115/146 (79%)	98 (85%)	8 (7%)	9 (8%)	1	10
5	I	45/50 (90%)	31 (69%)	10 (22%)	4 (9%)	0	8
6	J	70/72 (97%)	62 (89%)	6 (9%)	2 (3%)	3	23

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
6	K	70/72 (97%)	64 (91%)	5 (7%)	1 (1%)	9	40
6	L	70/72 (97%)	57 (81%)	13 (19%)	0	100	100
6	M	70/72 (97%)	64 (91%)	4 (6%)	2 (3%)	3	23
6	N	70/72 (97%)	61 (87%)	9 (13%)	0	100	100
6	O	70/72 (97%)	64 (91%)	5 (7%)	1 (1%)	9	40
6	P	70/72 (97%)	64 (91%)	5 (7%)	1 (1%)	9	40
6	Q	70/72 (97%)	61 (87%)	7 (10%)	2 (3%)	3	23
7	S	166/190 (87%)	107 (64%)	39 (24%)	20 (12%)	0	4
8	T	172/174 (99%)	164 (95%)	5 (3%)	3 (2%)	7	36
9	U	120/124 (97%)	95 (79%)	16 (13%)	9 (8%)	1	10
10	V	65/77 (84%)	50 (77%)	12 (18%)	3 (5%)	2	17
11	W	215/217 (99%)	195 (91%)	17 (8%)	3 (1%)	9	40
All	All	4323/4803 (90%)	3769 (87%)	370 (9%)	184 (4%)	3	17

All (184) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	13	GLU
1	A	14	GLU
1	A	21	THR
1	A	141	SER
1	A	289	PRO
1	B	45	ARG
1	B	80	LYS
1	B	171	ARG
1	B	224	ASP
1	B	377	ALA
1	B	434	SER
1	B	508	PHE
1	C	80	LYS
1	C	120	PRO
1	C	238	ASP
2	D	276	PRO
2	D	427	HIS
2	D	451	HIS
2	E	180	TYR
2	E	277	SER
2	E	348	VAL

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Mol	Chain	Res	Type
2	E	393	MET
2	E	394	ASP
2	E	397	SER
2	E	451	HIS
2	F	281	TYR
2	F	427	HIS
2	F	451	HIS
3	G	50	ALA
3	G	60	PRO
3	G	93	ALA
3	G	118	ARG
3	G	157	GLU
3	G	189	SER
3	G	196	ILE
3	G	199	ASP
3	G	250	PHE
4	H	45	PHE
4	H	49	ALA
4	H	50	ALA
4	H	51	HIS
4	H	58	LEU
4	H	59	ARG
4	H	69	ASP
4	H	101	ASP
5	I	6	GLN
7	S	47	LYS
7	S	79	SER
7	S	108	MET
7	S	116	VAL
7	S	123	ALA
7	S	124	SER
8	T	149	VAL
9	U	5	LEU
9	U	100	CYS
1	A	3	THR
1	A	11	ILE
1	A	24	ASP
1	A	163	GLN
1	A	288	PRO
1	A	331	ALA
1	B	36	ASP
1	B	69	ASP

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Mol	Chain	Res	Type
1	B	238	ASP
1	B	365	ILE
1	B	505	LEU
1	C	143	ARG
2	D	28	GLY
2	D	462	PRO
2	E	73	GLN
2	E	100	GLU
2	E	297	THR
2	E	392	GLY
2	F	158	ALA
2	F	276	PRO
2	F	348	VAL
3	G	9	ARG
3	G	77	LEU
3	G	87	LYS
3	G	116	LEU
3	G	195	ASP
3	G	200	VAL
3	G	257	VAL
7	S	11	ILE
7	S	93	GLY
7	S	136	THR
8	T	147	ARG
8	T	170	LEU
9	U	19	ILE
9	U	101	ALA
10	V	32	ALA
1	A	57	SER
1	A	171	ARG
1	A	172	GLN
1	A	224	ASP
1	C	224	ASP
2	D	297	THR
2	E	161	GLY
2	E	212	THR
2	E	249	GLN
2	E	282	GLN
2	E	350	PRO
2	E	357	ILE
2	F	249	GLN
3	G	88	GLN

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Mol	Chain	Res	Type
3	G	133	ARG
3	G	151	SER
3	G	258	ILE
3	G	269	ALA
6	J	45	GLN
7	S	10	GLN
7	S	58	PRO
7	S	63	SER
7	S	92	ASN
7	S	144	LYS
7	S	153	LYS
10	V	56	MET
1	A	23	VAL
1	A	47	VAL
1	A	146	MET
1	B	37	GLY
1	B	143	ARG
1	B	378	ALA
1	C	114	ALA
1	C	123	SER
2	D	30	PRO
2	E	42	GLU
3	G	10	LEU
3	G	51	LEU
3	G	121	SER
3	G	201	LEU
5	I	4	TRP
5	I	26	LEU
6	P	40	PRO
6	Q	44	GLN
7	S	75	LYS
7	S	149	LYS
7	S	151	GLU
9	U	20	PRO
9	U	43	THR
9	U	99	SER
11	W	36	ARG
11	W	40	ASN
11	W	92	PHE
1	A	287	ARG
1	A	365	ILE
1	A	405	GLN

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Mol	Chain	Res	Type
1	B	27	GLU
1	B	120	PRO
1	B	141	SER
1	B	289	PRO
1	C	145	PRO
2	D	110	THR
2	D	223	ASN
2	D	279	VAL
2	E	462	PRO
2	F	297	THR
2	F	396	LEU
5	I	25	ALA
6	O	39	ASN
9	U	49	PRO
1	A	44	LEU
1	A	117	GLY
1	B	295	PRO
2	D	101	PRO
3	G	169	ILE
1	B	145	PRO
1	C	47	VAL
2	E	30	PRO
2	E	279	VAL
2	F	279	VAL
6	M	40	PRO
9	U	48	PRO
10	V	6	ASP
1	A	145	PRO
1	B	374	VAL
7	S	14	ILE
3	G	168	VAL
6	J	40	PRO
6	M	71	ILE
7	S	137	VAL
4	H	52	VAL
6	K	40	PRO
6	Q	40	PRO

5.3.2 Protein sidechains ⓘ

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 [i](#)

There are no chain breaks in this entry.

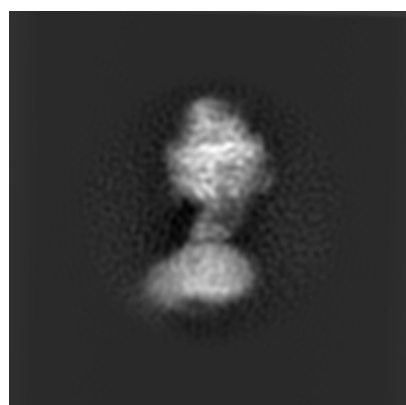
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-3170. These allow visual inspection of the internal detail of the map and identification of artifacts.

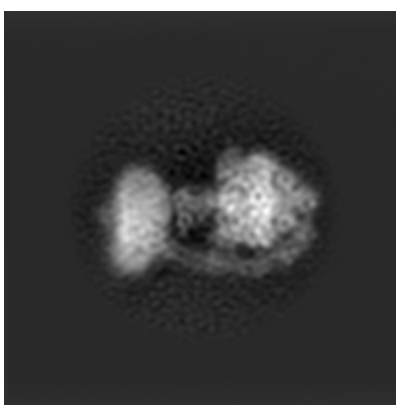
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

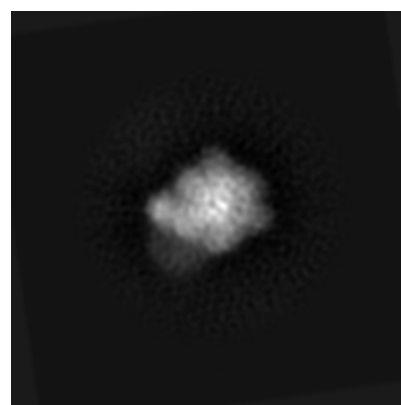
6.1.1 Primary map



X



Y

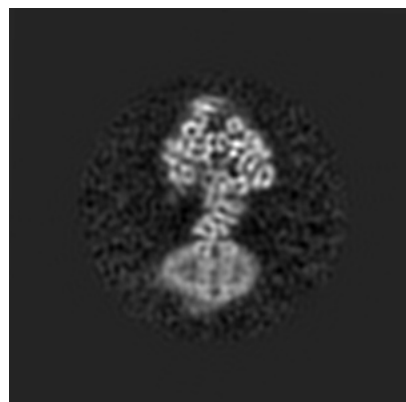


Z

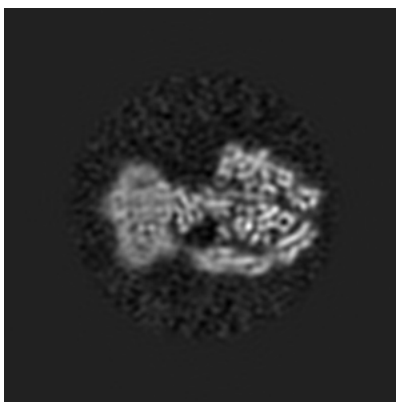
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

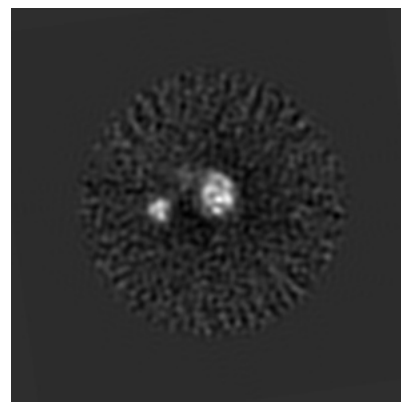
6.2.1 Primary map



X Index: 128



Y Index: 128



Z Index: 128

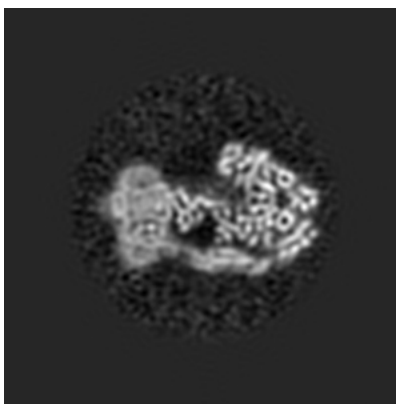
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

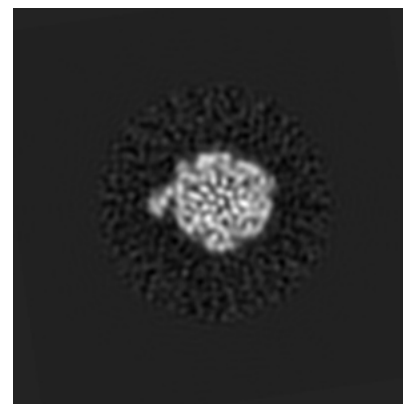
6.3.1 Primary map



X Index: 133



Y Index: 126

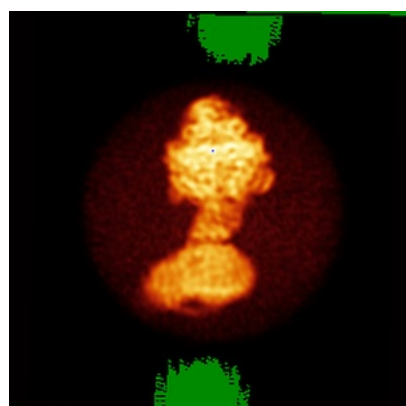


Z Index: 167

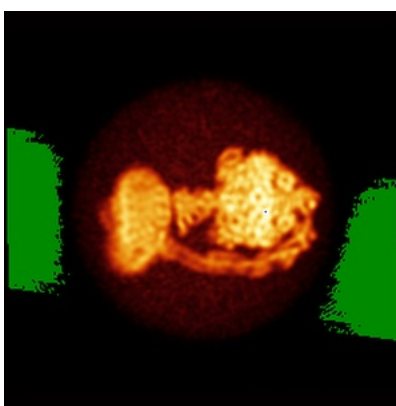
The images above show the largest variance slices of the map in three orthogonal directions.

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

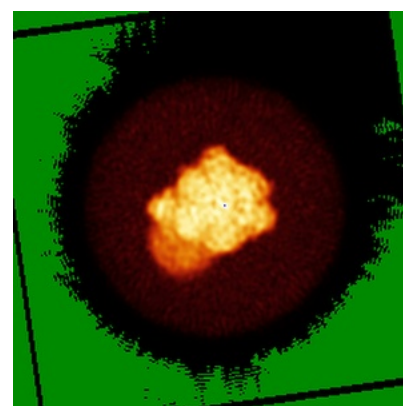
6.4.1 Primary map



X



Y



Z

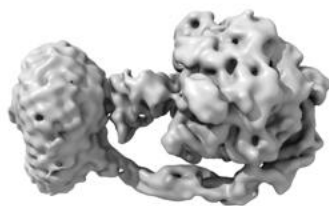
The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views [i](#)

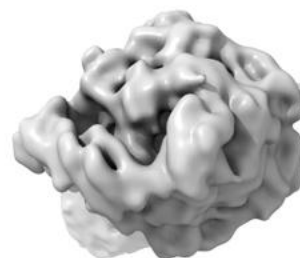
6.5.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.13. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

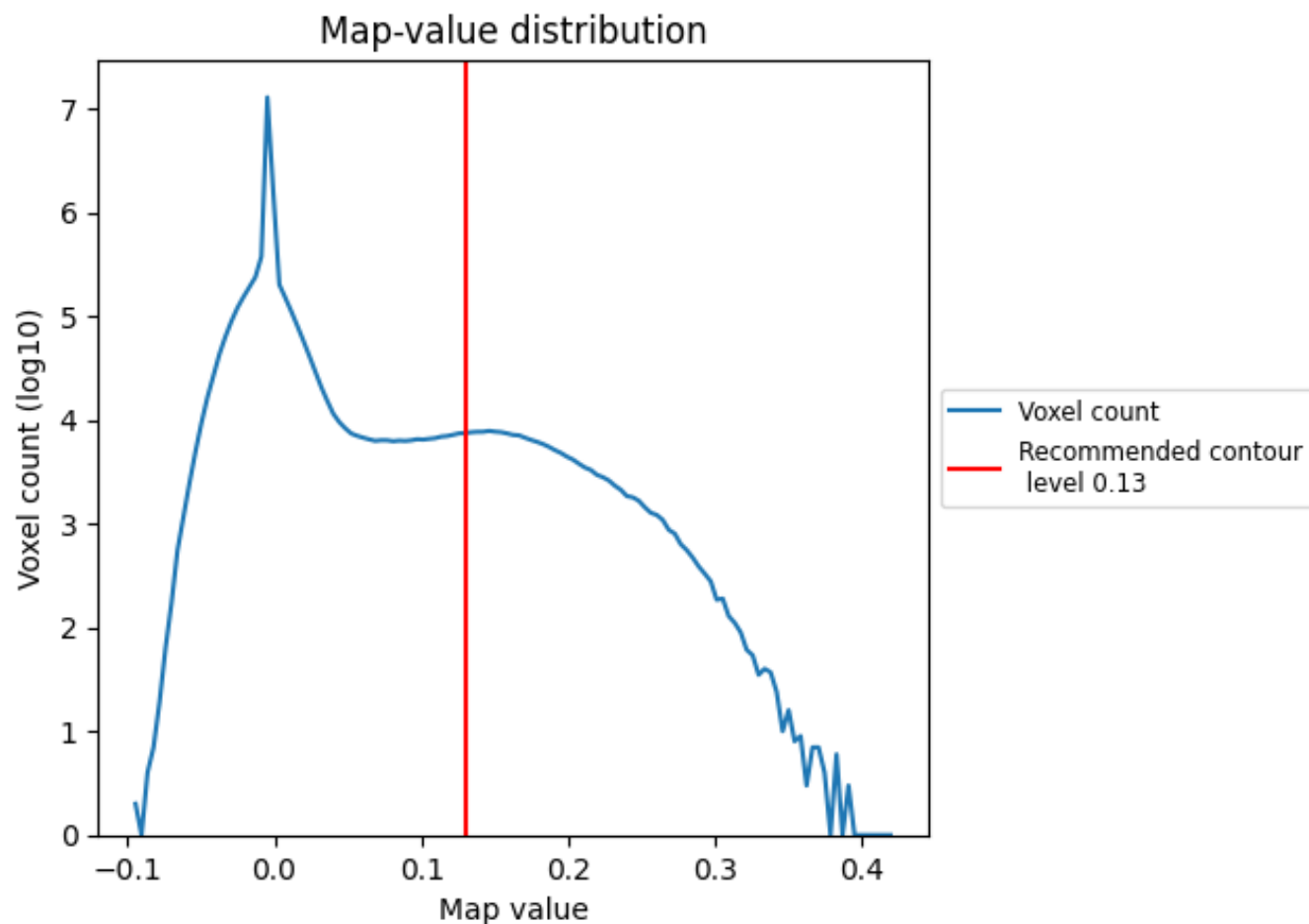
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

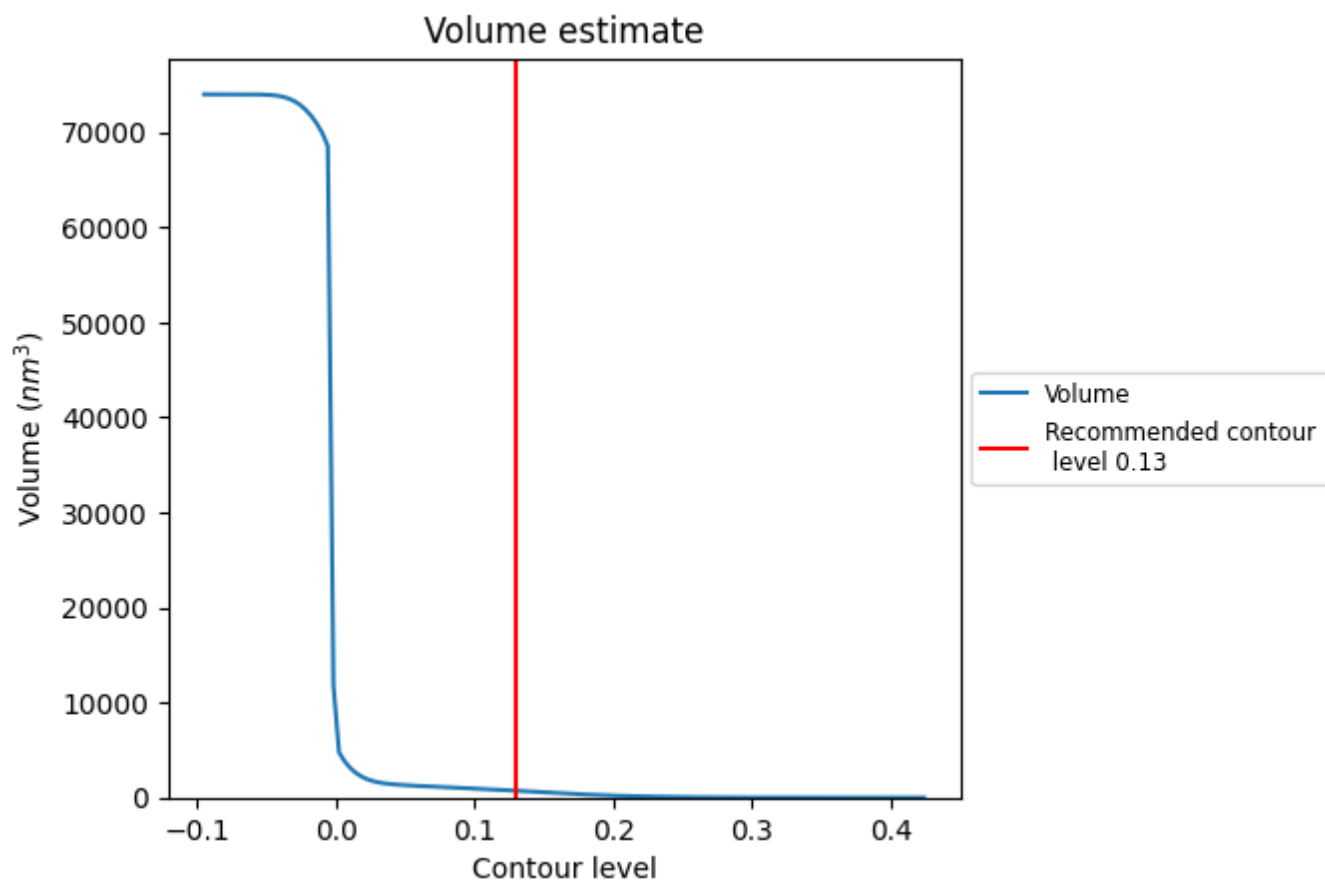
This section contains the results of statistical analysis of the map.

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.

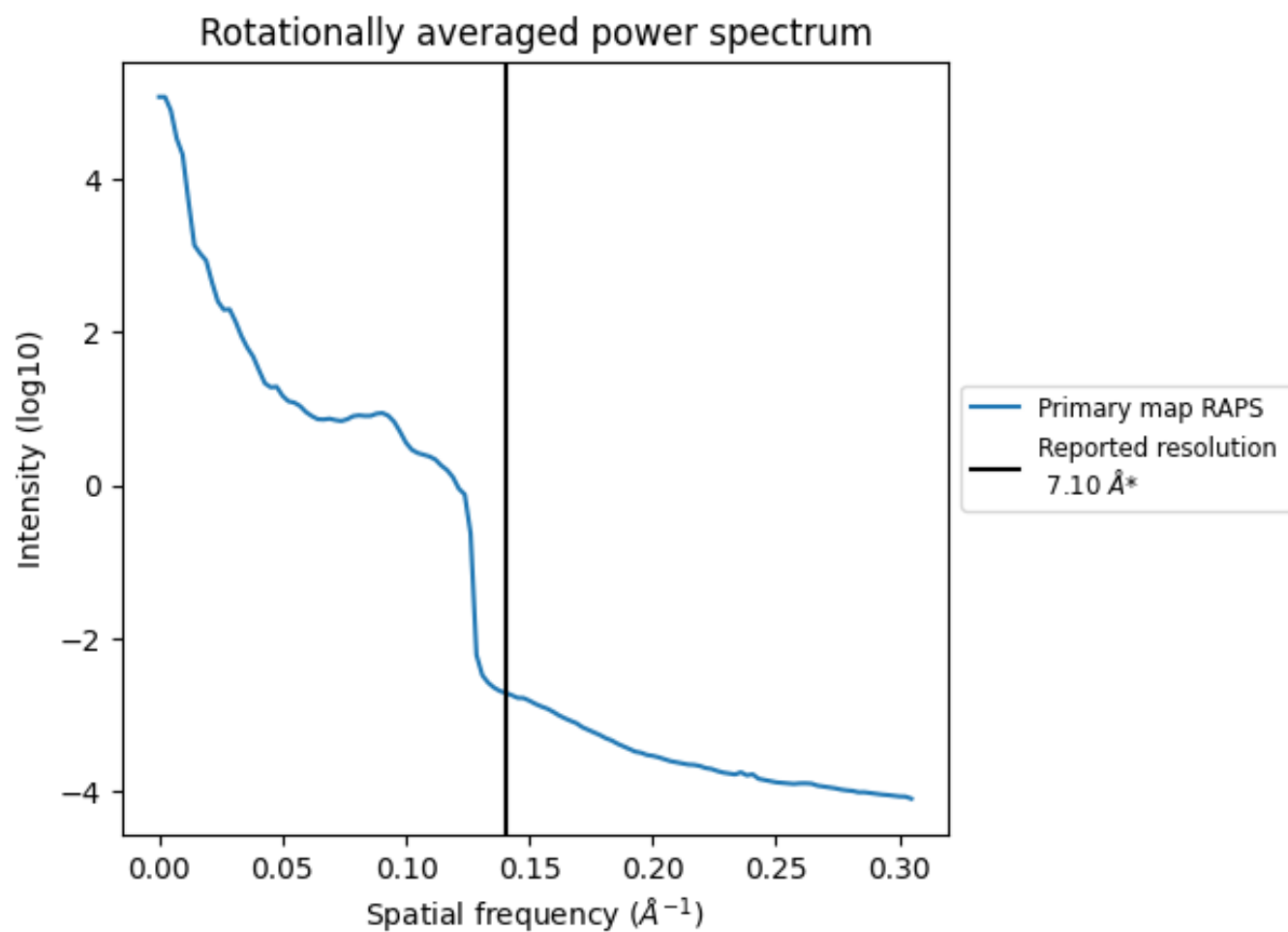
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 721 nm³; this corresponds to an approximate mass of 652 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 0.141 Å⁻¹

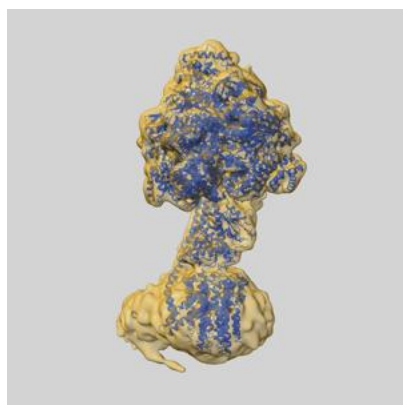
8 Fourier-Shell correlation

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

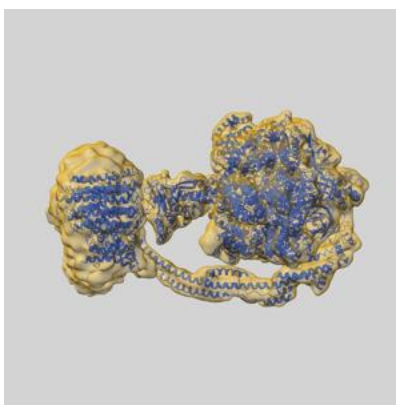
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-3170 and PDB model 5FIL. Per-residue inclusion information can be found in section 3 on page 7.

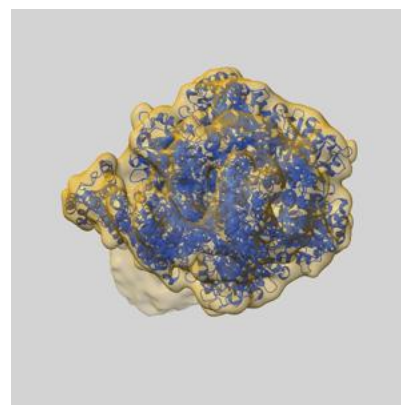
9.1 Map-model overlay [i](#)



X



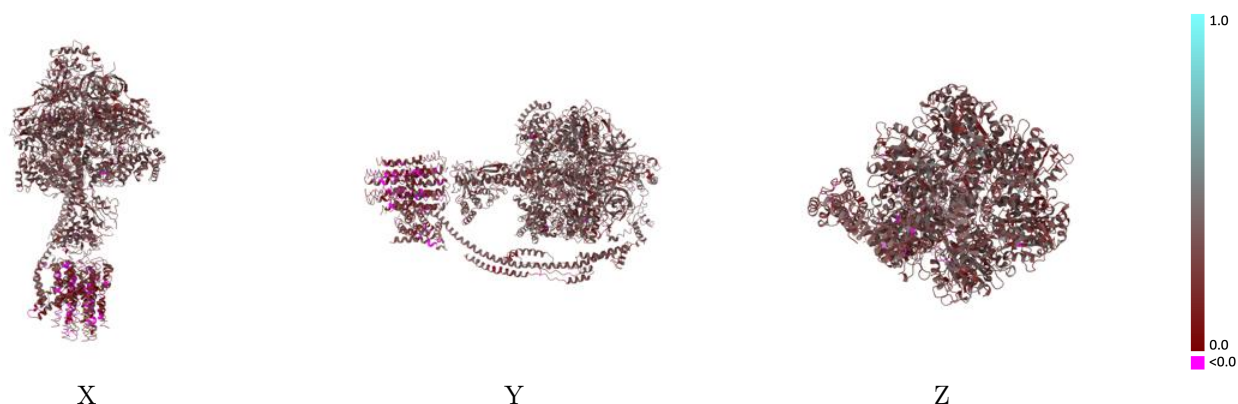
Y



Z

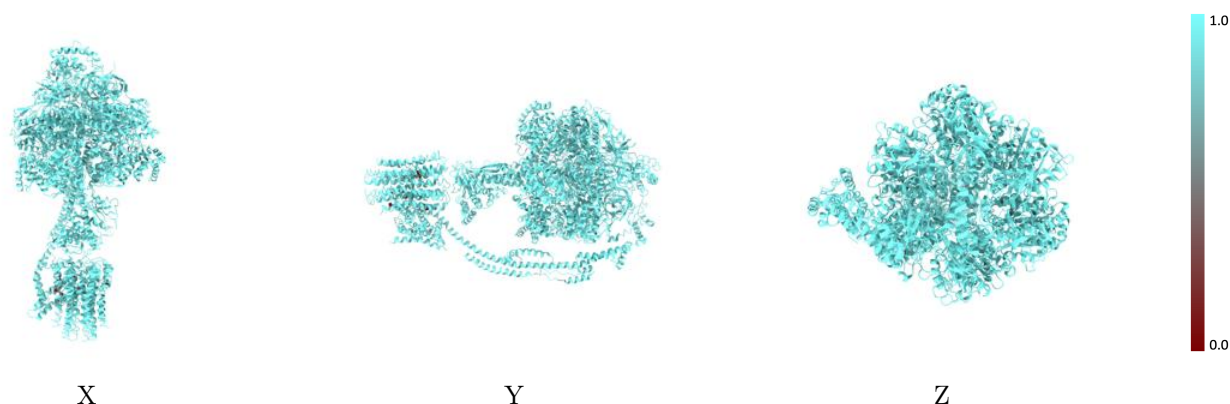
The images above show the 3D surface view of the map at the recommended contour level 0.13 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



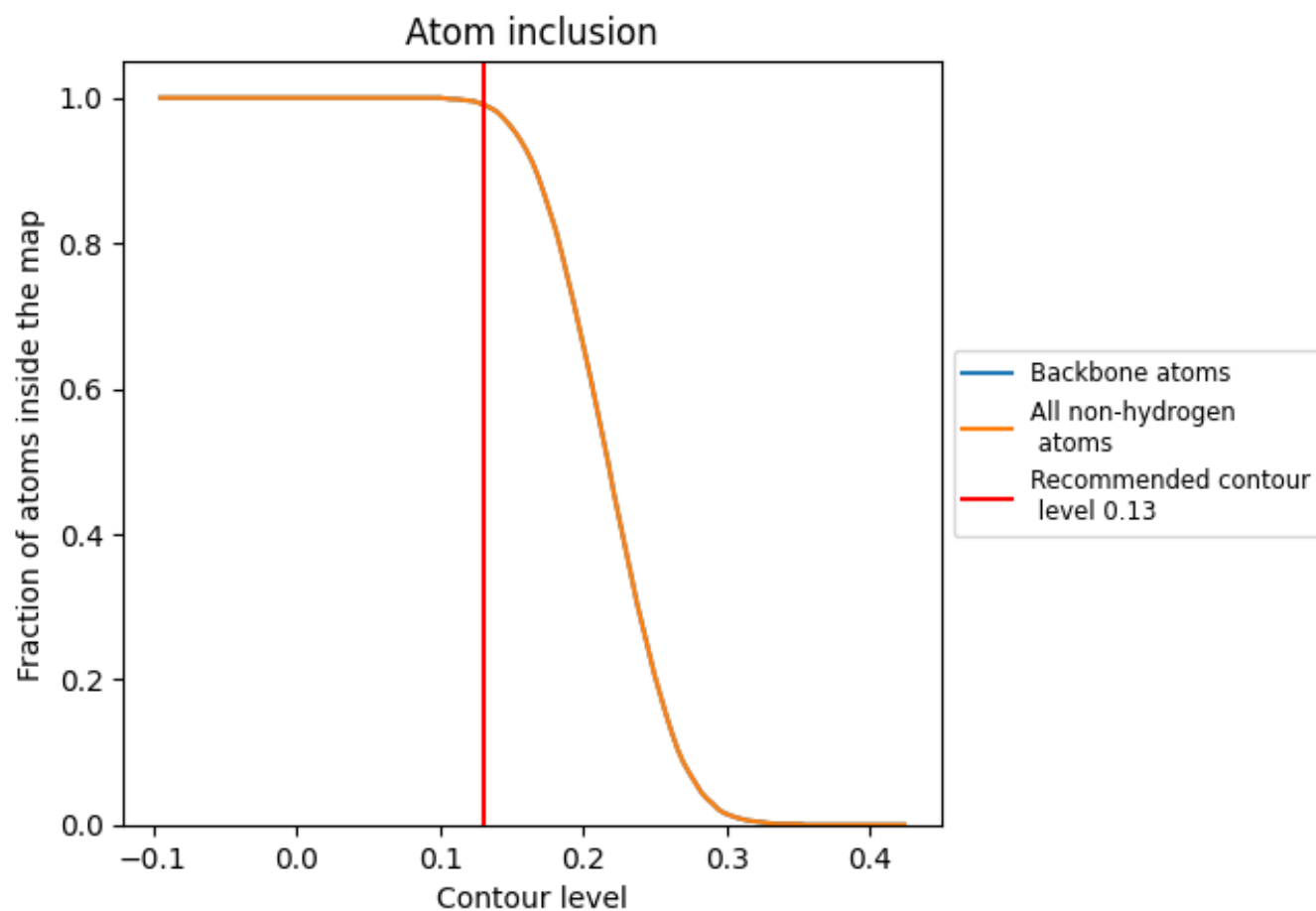
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.13).

9.4 Atom inclusion [i](#)



At the recommended contour level, 99% of all backbone atoms, 99% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.13) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.9910	 0.2720
A	 0.9930	 0.2930
B	 1.0000	 0.2990
C	 0.9960	 0.2990
D	 0.9960	 0.2910
E	 0.9990	 0.2960
F	 0.9990	 0.2980
G	 0.9970	 0.3020
H	 0.9980	 0.2860
I	 0.9890	 0.2930
J	 1.0000	 0.1790
K	 0.9720	 0.1650
L	 0.9620	 0.1580
M	 0.9830	 0.1780
N	 0.8920	 0.1230
O	 0.9030	 0.1470
P	 0.9550	 0.1070
Q	 0.9900	 0.1890
S	 0.9990	 0.3090
T	 0.9940	 0.2800
U	 0.9750	 0.2340
V	 1.0000	 0.2430
W	 0.9830	 0.2040

