



Full wwPDB EM Validation Report ⓘ

Mar 10, 2026 – 01:46 PM UTC

PDB ID : 5FIK / pdb_00005fik
EMDB ID : EMD-3169
Title : Bovine mitochondrial ATP synthase state 3a
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 : 6.40 Å(reported)
Based on initial models : 2CLY, 2WSS, 2XND

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

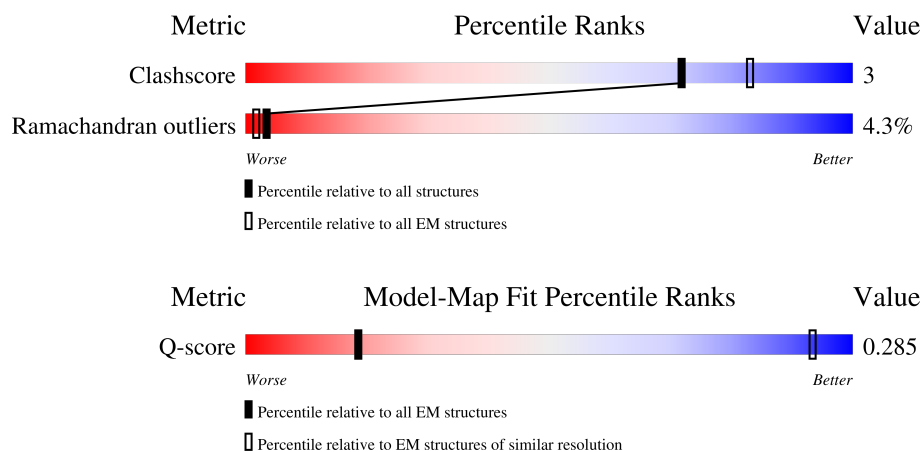
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 6.40 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.



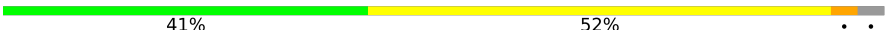
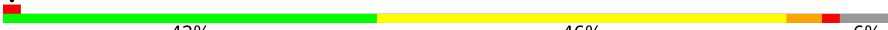
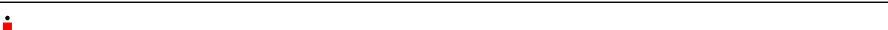
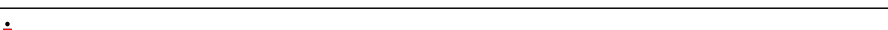
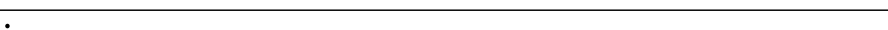
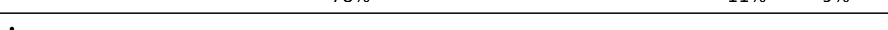
Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Q-score	-	25397	544 (5.90 - 6.90)

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% 52% ..
1	B	510	42% 49% 6%
1	C	510	42% 51% 5%
2	D	482	44% 51% ..
2	E	482	43% 51% ..

Continued on next page...

Continued from previous page...

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 18545 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
			1947	974	487	486		

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		

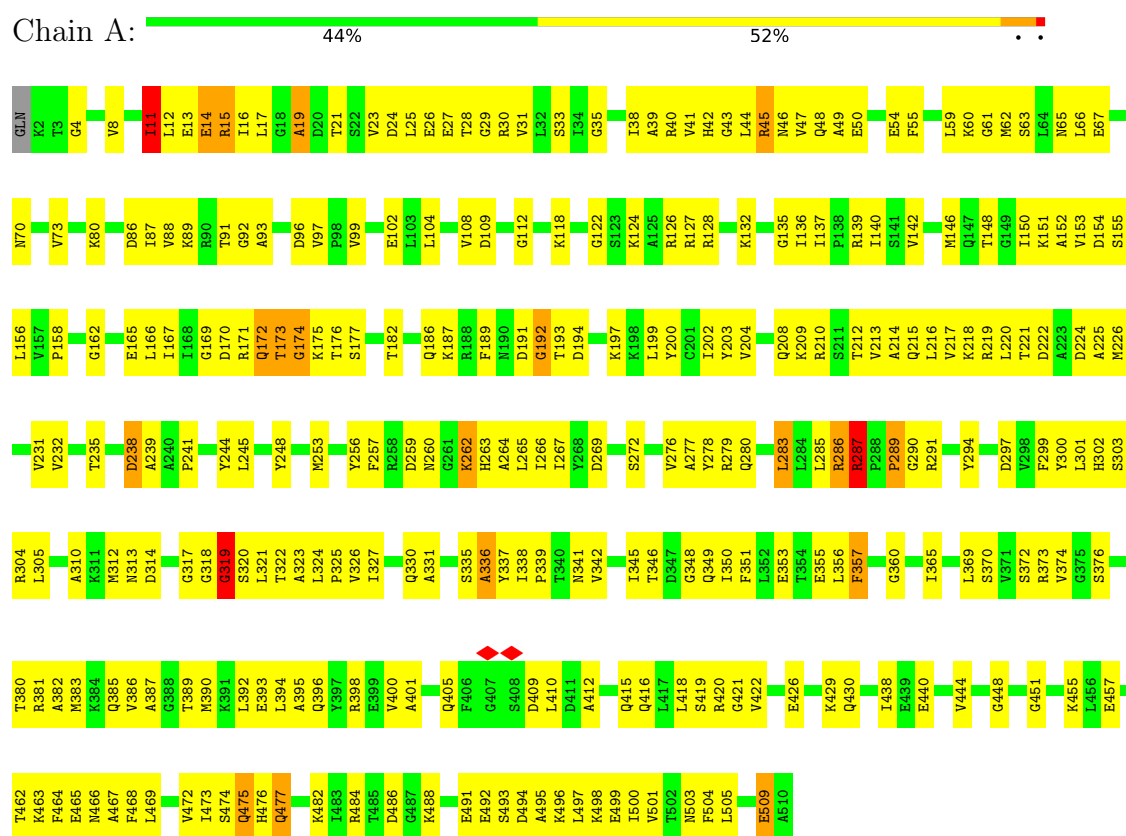
- Molecule 11 is a protein called ATP SYNTHASE SUBUNIT BETA, MITOCHONDRIAL.

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

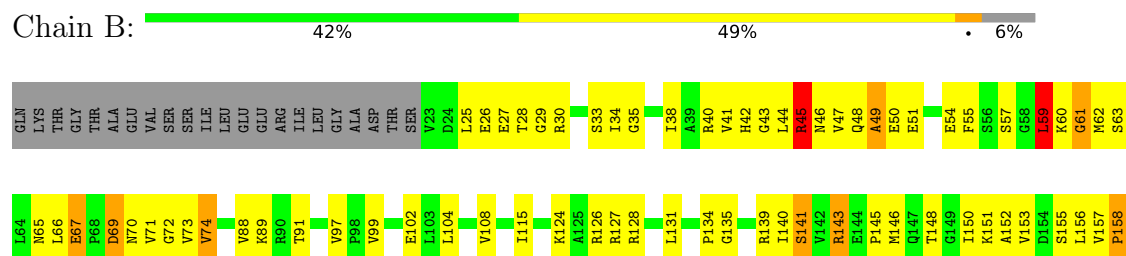
3 Residue-property plots

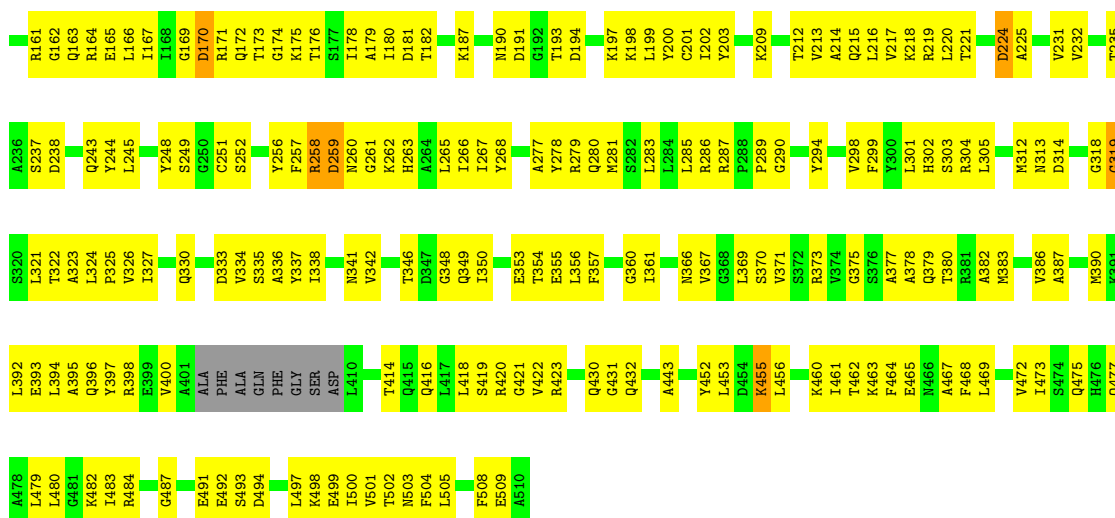
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion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



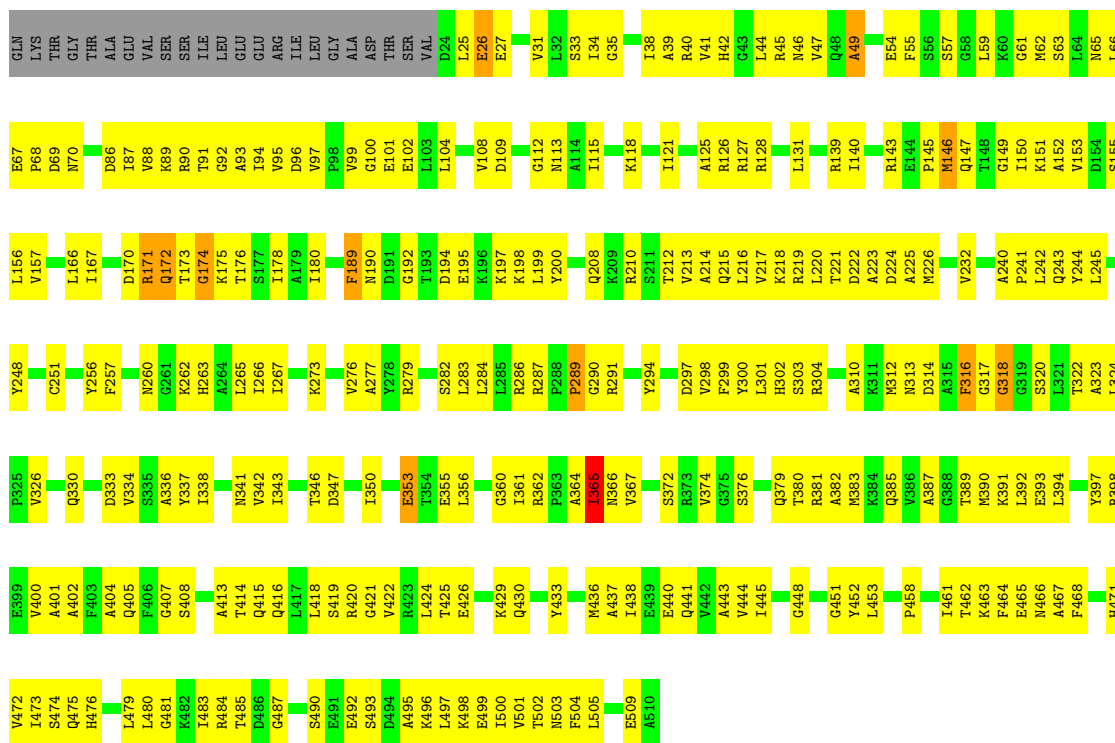
• Molecule 1: ATP SYNTHASE SUBUNIT ALPHA, MITOCHONDRIAL





• Molecule 1: ATP SYNTHASE SUBUNIT ALPHA, MITOCHONDRIAL

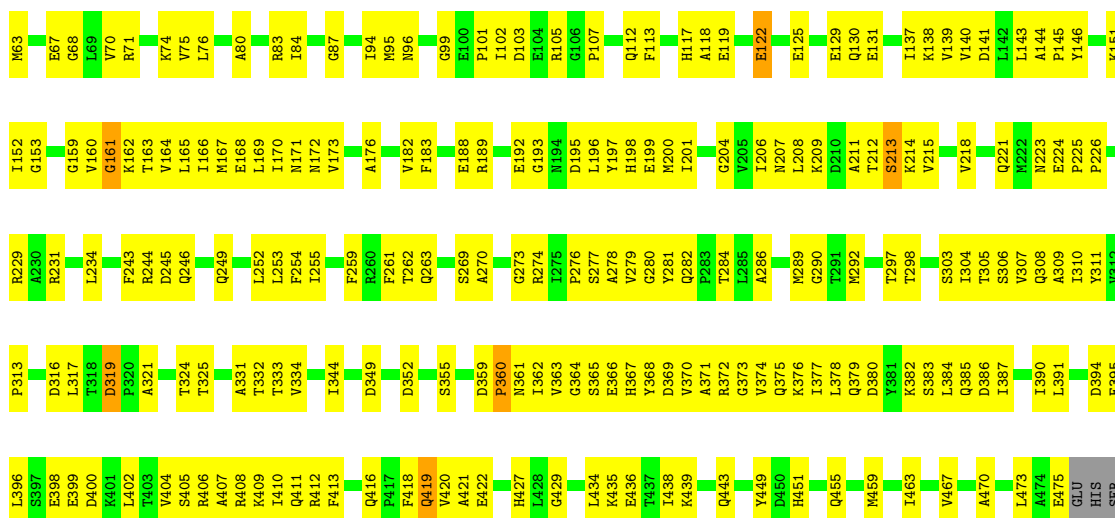
Chain C: 42% 51% 5%



• Molecule 2: ATP SYNTHASE SUBUNIT BETA, MITOCHONDRIAL

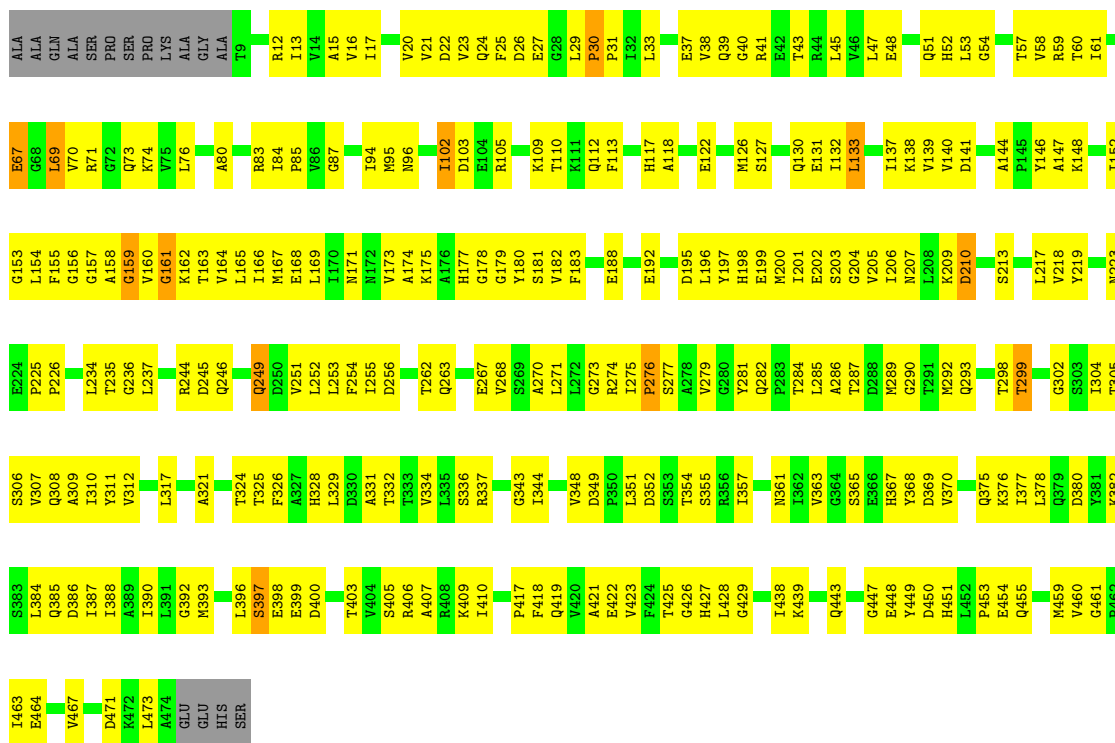
Chain D: 44% 51%





• Molecule 2: ATP SYNTHASE SUBUNIT BETA, MITOCHONDRIAL

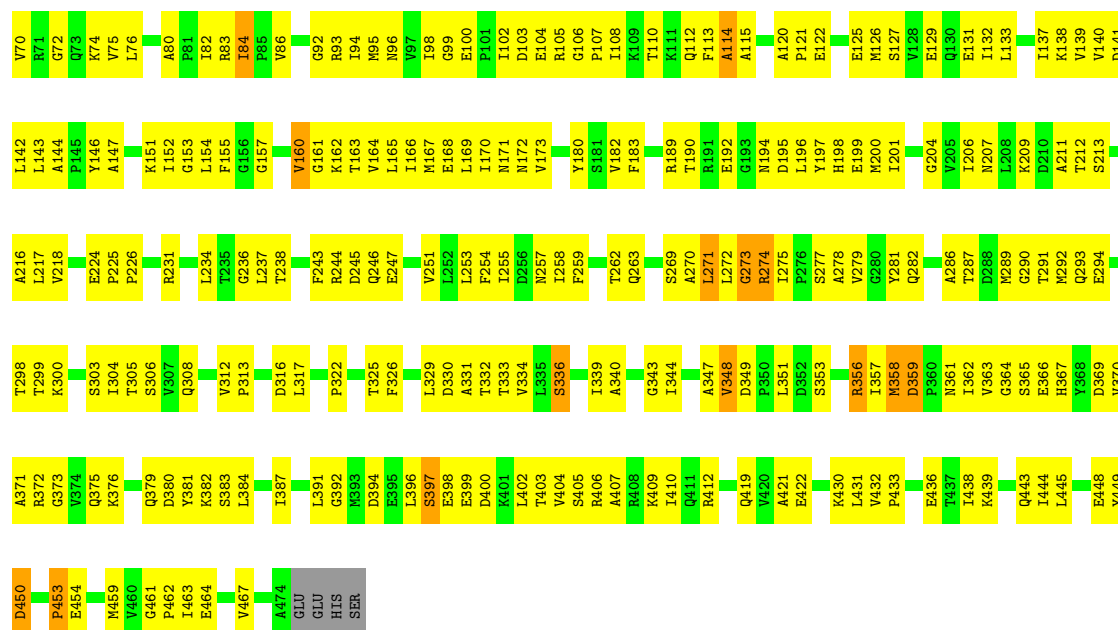
Chain E: 43% 51% ..



• Molecule 2: ATP SYNTHASE SUBUNIT BETA, MITOCHONDRIAL

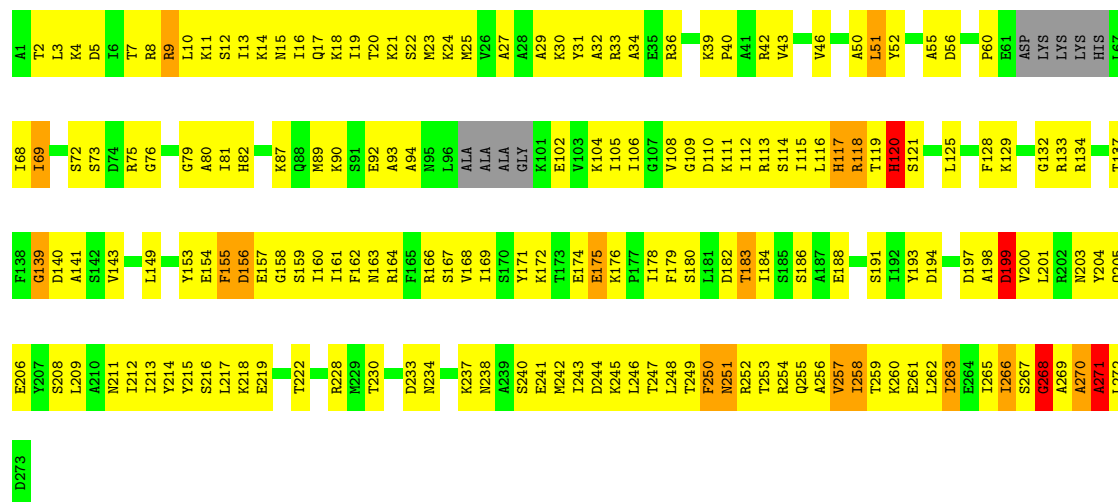
Chain F: 41% 52% ..





• Molecule 3: ATP SYNTHASE SUBUNIT GAMMA, MITOCHONDRIAL

Chain G: 31% 58% 6% ..



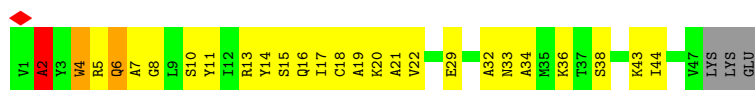
• Molecule 4: ATP SYNTHASE SUBUNIT DELTA, MITOCHONDRIAL

Chain H: 26% 60% 10%

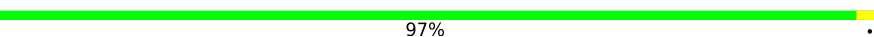


- Molecule 5: ATP SYNTHASE SUBUNIT EPSILON, MITOCHONDRIAL

Chain I:  42% 46% 6%

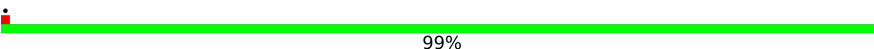


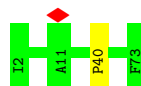
- Molecule 6: ATP SYNTHASE F(0) COMPLEX SUBUNIT C1, MITOCHONDRIAL

Chain J:  97%

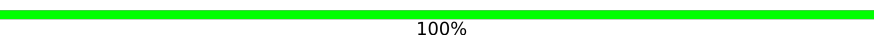


- Molecule 6: ATP SYNTHASE F(0) COMPLEX SUBUNIT C1, MITOCHONDRIAL

Chain K:  99%



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

Chain L:  100%

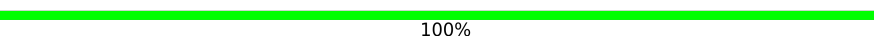
There are no outlier residues recorded for this chain.

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

Chain M:  97%

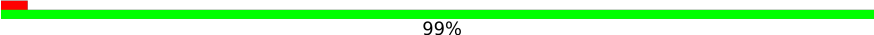


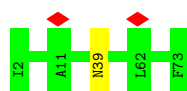
- Molecule 6: ATP SYNTHASE F(0) COMPLEX SUBUNIT C1, MITOCHONDRIAL

Chain N:  100%

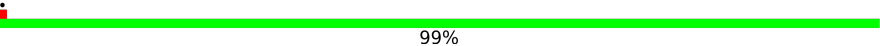
There are no outlier residues recorded for this chain.

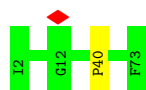
- Molecule 6: ATP SYNTHASE F(0) COMPLEX SUBUNIT C1, MITOCHONDRIAL

Chain O:  99%

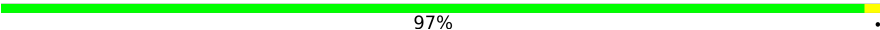


- Molecule 6: ATP SYNTHASE F(0) COMPLEX SUBUNIT C1, MITOCHONDRIAL

Chain P:  99%



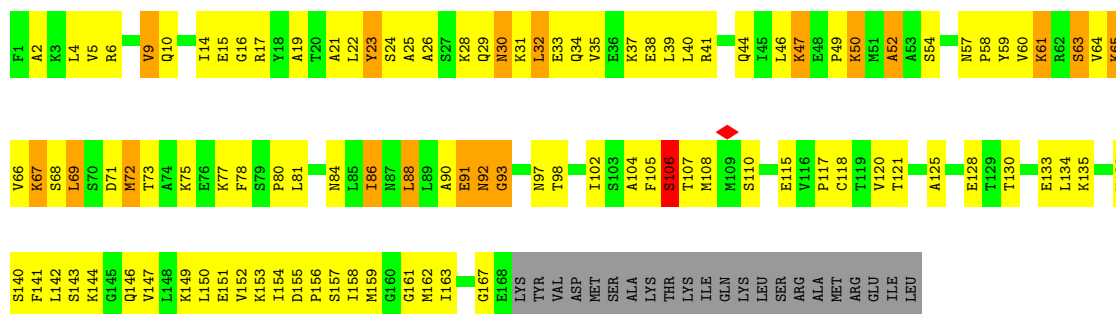
- Molecule 6: ATP SYNTHASE F(0) COMPLEX SUBUNIT C1, MITOCHONDRIAL

Chain Q:  97%



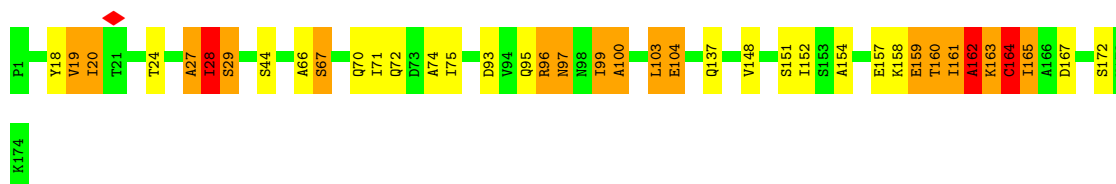
- Molecule 7: ATP SYNTHASE SUBUNIT O, MITOCHONDRIAL

Chain S:  32% 46% 9% 12%



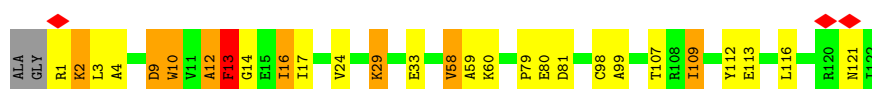
- Molecule 8: ATP SYNTHASE F(0) COMPLEX SUBUNIT B1, MITOCHONDRIAL

Chain T:  78% 11% 9%



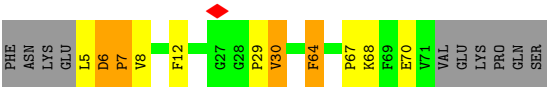
- Molecule 9: ATP SYNTHASE SUBUNIT D, MITOCHONDRIAL

Chain U:  76% 15% 6%

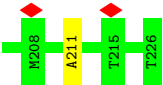
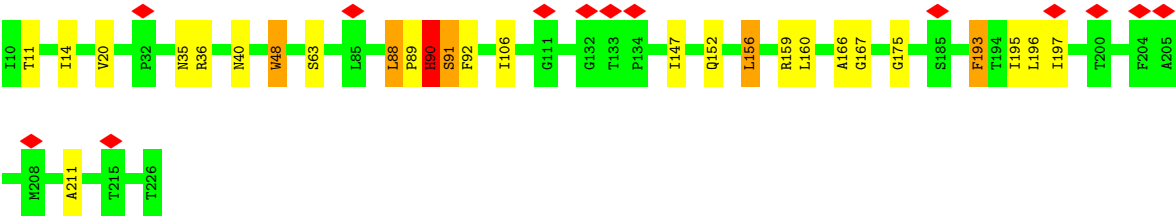
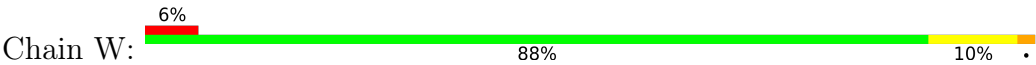


- Molecule 10: ATP SYNTHASE-COUPLING FACTOR 6, MITOCHONDRIAL

Chain V:  73% 9% 5% 13%



• 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	24140	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	0.515	Depositor
Minimum map value	-0.094	Depositor
Average map value	-0.001	Depositor
Map value standard deviation	0.022	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	3.10	230/2034 (11.3%)	2.54	151/2541 (5.9%)
1	B	3.14	230/1916 (12.0%)	2.45	124/2392 (5.2%)
1	C	3.20	230/1946 (11.8%)	2.46	121/2431 (5.0%)
2	D	3.10	216/1866 (11.6%)	2.47	123/2331 (5.3%)
2	E	3.15	216/1862 (11.6%)	2.58	149/2326 (6.4%)
2	F	3.18	231/1862 (12.4%)	2.55	143/2326 (6.1%)
3	G	3.62	177/1050 (16.9%)	2.66	78/1308 (6.0%)
4	H	3.91	110/522 (21.1%)	2.82	47/651 (7.2%)
5	I	3.52	30/186 (16.1%)	2.19	7/231 (3.0%)
6	J	0.51	0/287	1.01	0/357
6	K	0.51	0/287	0.99	0/357
6	L	0.53	0/287	0.99	0/357
6	M	0.49	0/287	1.03	0/357
6	N	0.51	0/287	0.99	0/357
6	O	0.51	0/287	1.02	0/357
6	P	0.49	0/287	1.00	0/357
6	Q	0.50	0/287	0.98	0/357
7	S	2.97	63/668 (9.4%)	3.19	66/834 (7.9%)
8	T	1.96	28/696 (4.0%)	2.63	37/867 (4.3%)
9	U	1.71	11/484 (2.3%)	2.36	21/604 (3.5%)
10	V	1.31	3/264 (1.1%)	2.31	8/329 (2.4%)
11	W	1.49	8/868 (0.9%)	1.87	16/1082 (1.5%)
All	All	2.85	1783/18520 (9.6%)	2.39	1091/23109 (4.7%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	4
1	B	0	2
1	C	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
2	D	0	6
2	E	0	2
2	F	0	2
3	G	0	4
4	H	0	2
7	S	0	5
8	T	0	21
9	U	0	14
10	V	0	6
11	W	0	10
All	All	0	79

All (1783) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	T	28	ILE	CA-C	16.67	1.74	1.52
3	G	261	GLU	CA-C	-13.21	1.34	1.52
3	G	248	LEU	CA-C	-13.19	1.41	1.52
9	U	10	TRP	N-CA	12.72	1.63	1.46
1	C	404	ALA	CA-C	-12.29	1.42	1.53
4	H	28	PHE	CA-C	-12.20	1.37	1.52
8	T	161	ILE	C-O	-12.10	1.09	1.24
2	F	366	GLU	CA-C	-11.83	1.38	1.52
4	H	91	GLN	CA-C	-11.75	1.38	1.52
1	B	337	TYR	CA-C	-10.75	1.39	1.52
11	W	88	LEU	CA-C	10.75	1.66	1.52
7	S	155	ASP	N-CA	-10.58	1.38	1.46
2	D	12	ARG	CA-C	-10.55	1.39	1.52
5	I	15	SER	CA-C	-10.52	1.39	1.52
3	G	252	ARG	CA-C	-10.44	1.39	1.52
2	F	254	PHE	CA-C	-10.16	1.40	1.52
1	C	175	LYS	CA-C	-10.16	1.40	1.52
9	U	13	PHE	CA-C	10.14	1.66	1.52
4	H	62	LEU	CA-C	-10.12	1.40	1.52
1	C	172	GLN	CA-C	-10.04	1.40	1.53
2	E	51	GLN	CA-C	-9.99	1.40	1.52
1	A	30	ARG	CA-C	-9.94	1.40	1.52
3	G	255	GLN	CA-C	-9.93	1.40	1.52
1	A	301	LEU	CA-C	-9.91	1.39	1.52
3	G	242	MET	CA-C	-9.83	1.40	1.52
4	H	85	ASN	CA-C	-9.80	1.40	1.53
5	I	20	LYS	CA-C	-9.74	1.40	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	H	139	GLU	CA-C	-9.71	1.40	1.52
3	G	254	ARG	CA-C	-9.69	1.40	1.52
2	E	140	VAL	CA-C	-9.66	1.41	1.52
3	G	219	GLU	CA-C	-9.59	1.40	1.52
2	F	11	GLY	CA-C	-9.54	1.43	1.52
1	B	299	PHE	CA-C	-9.50	1.40	1.52
2	D	11	GLY	CA-C	-9.47	1.43	1.52
1	A	97	VAL	CA-C	-9.46	1.43	1.52
2	E	196	LEU	CA-C	-9.42	1.40	1.52
1	C	500	ILE	CA-C	-9.41	1.41	1.52
2	F	12	ARG	CA-C	-9.37	1.41	1.52
3	G	265	ILE	CA-C	-9.37	1.41	1.52
1	B	33	SER	CA-C	-9.31	1.41	1.52
2	D	153	GLY	CA-C	-9.30	1.45	1.52
3	G	251	ASN	CA-C	-9.29	1.40	1.52
2	E	12	ARG	CA-C	-9.24	1.41	1.52
4	H	19	THR	CA-C	-9.23	1.41	1.52
2	F	25	PHE	CA-C	-9.19	1.41	1.52
4	H	53	PRO	CA-C	-9.19	1.42	1.52
8	T	164	CYS	CA-C	9.19	1.65	1.52
1	C	176	THR	N-CA	-9.14	1.35	1.46
4	H	133	ILE	CA-C	-9.13	1.41	1.52
5	I	16	GLN	CA-C	-9.11	1.40	1.52
2	D	198	HIS	CA-C	-9.09	1.40	1.52
2	F	51	GLN	CA-C	-9.08	1.41	1.52
3	G	159	SER	CA-C	-9.08	1.41	1.52
1	A	464	PHE	CA-C	-9.06	1.41	1.52
5	I	10	SER	CA-C	-9.04	1.41	1.52
1	B	62	MET	CA-C	-9.00	1.41	1.52
8	T	93	ASP	N-CA	-8.98	1.35	1.46
1	B	501	VAL	CA-C	-8.97	1.41	1.52
4	H	74	LYS	CA-C	-8.95	1.42	1.52
1	C	476	HIS	CA-C	-8.94	1.40	1.52
3	G	22	SER	CA-C	-8.90	1.41	1.52
4	H	65	VAL	CA-C	-8.90	1.44	1.52
2	D	173	VAL	CA-C	-8.87	1.41	1.52
1	B	203	TYR	CA-C	-8.87	1.42	1.52
4	H	58	LEU	CA-C	-8.86	1.42	1.52
4	H	19	THR	N-CA	-8.86	1.35	1.46
3	G	263	ILE	CA-C	-8.85	1.41	1.52
1	B	302	HIS	CA-C	-8.82	1.40	1.52
2	F	24	GLN	CA-C	-8.81	1.42	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	244	ARG	CA-C	-8.81	1.41	1.52
4	H	92	LEU	N-CA	-8.79	1.35	1.46
4	H	20	PHE	CA-C	-8.79	1.42	1.52
3	G	167	SER	CA-C	-8.77	1.42	1.52
10	V	6	ASP	C-O	-8.76	1.13	1.24
4	H	135	ILE	CA-C	-8.75	1.42	1.52
1	C	464	PHE	CA-C	-8.75	1.41	1.52
2	E	37	GLU	CA-C	-8.75	1.42	1.52
1	C	217	VAL	CA-C	-8.74	1.42	1.52
1	A	41	VAL	CA-C	-8.73	1.41	1.52
1	C	501	VAL	CA-C	-8.73	1.42	1.52
9	U	13	PHE	N-CA	8.73	1.57	1.46
3	G	249	THR	CA-C	-8.69	1.41	1.52
2	F	449	TYR	CA-C	-8.67	1.42	1.52
2	E	429	GLY	CA-C	-8.66	1.46	1.52
3	G	252	ARG	N-CA	-8.66	1.35	1.46
2	F	253	LEU	CA-C	-8.65	1.42	1.52
3	G	15	ASN	CA-C	-8.64	1.42	1.52
3	G	128	PHE	CA-C	-8.63	1.42	1.52
3	G	18	LYS	CA-C	-8.62	1.42	1.52
3	G	43	VAL	N-CA	-8.61	1.36	1.46
1	A	217	VAL	CA-C	-8.61	1.41	1.52
1	A	65	ASN	CA-C	-8.60	1.42	1.52
2	F	152	ILE	CA-C	-8.58	1.42	1.52
2	F	140	VAL	CA-C	-8.55	1.42	1.52
2	E	57	THR	CA-C	-8.54	1.42	1.52
1	C	263	HIS	CA-C	-8.53	1.42	1.52
3	G	208	SER	CA-C	-8.53	1.41	1.52
2	F	60	THR	CA-C	-8.52	1.42	1.52
4	H	75	TYR	CA-C	-8.51	1.42	1.52
4	H	94	ALA	CA-C	-8.51	1.42	1.52
2	D	306	SER	CA-C	-8.50	1.42	1.52
7	S	38	GLU	CA-C	-8.48	1.41	1.52
4	H	29	ASN	CA-C	-8.47	1.43	1.53
2	E	25	PHE	CA-C	-8.47	1.42	1.52
4	H	92	LEU	CA-C	-8.46	1.42	1.52
2	E	17	ILE	CA-C	-8.46	1.42	1.52
11	W	156	LEU	CA-C	-8.46	1.41	1.52
9	U	113	GLU	CA-C	-8.46	1.42	1.52
2	F	333	THR	CA-C	-8.45	1.42	1.52
1	A	302	HIS	CA-C	-8.45	1.41	1.52
2	F	165	LEU	CA-C	-8.44	1.42	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	H	93	LEU	N-CA	-8.45	1.36	1.46
4	H	37	ASP	CA-C	-8.44	1.42	1.52
2	D	51	GLN	CA-C	-8.43	1.42	1.52
4	H	111	ASN	CA-C	-8.43	1.42	1.52
2	E	162	LYS	CA-C	-8.41	1.42	1.52
1	C	153	VAL	CA-C	-8.41	1.42	1.52
1	C	350	ILE	CA-C	-8.41	1.43	1.52
1	C	89	LYS	CA-C	-8.40	1.42	1.52
3	G	42	ARG	CA-C	-8.37	1.42	1.52
2	F	23	VAL	CA-C	-8.36	1.42	1.52
1	C	301	LEU	CA-C	-8.35	1.41	1.52
2	E	152	ILE	CA-C	-8.35	1.42	1.52
2	E	244	ARG	CA-C	-8.34	1.42	1.52
1	B	263	HIS	CA-C	-8.34	1.42	1.52
7	S	134	LEU	CA-C	-8.33	1.45	1.52
4	H	128	ARG	CA-C	-8.32	1.42	1.52
1	C	257	PHE	CA-C	-8.32	1.42	1.52
1	A	203	TYR	CA-C	-8.30	1.42	1.52
3	G	269	ALA	N-CA	-8.30	1.38	1.46
8	T	158	LYS	CA-C	-8.30	1.38	1.52
1	C	356	LEU	CA-C	-8.28	1.42	1.52
2	F	21	VAL	CA-C	-8.26	1.42	1.52
2	F	410	ILE	CA-C	-8.25	1.42	1.52
2	D	333	THR	CA-C	-8.23	1.42	1.52
2	F	375	GLN	CA-C	-8.23	1.42	1.52
1	C	70	ASN	CA-C	-8.22	1.42	1.52
2	D	57	THR	CA-C	-8.22	1.42	1.52
1	A	492	GLU	CA-C	-8.21	1.42	1.52
4	H	142	VAL	CA-C	-8.19	1.42	1.52
4	H	55	LEU	CA-C	-8.18	1.42	1.52
3	G	259	THR	CA-C	-8.18	1.42	1.52
1	B	55	PHE	CA-C	-8.18	1.42	1.52
1	A	500	ILE	CA-C	-8.17	1.42	1.52
2	D	140	VAL	CA-C	-8.16	1.42	1.52
1	C	216	LEU	CA-C	-8.15	1.42	1.52
2	E	153	GLY	CA-C	-8.14	1.45	1.51
2	E	274	ARG	CA-C	-8.14	1.43	1.52
7	S	35	VAL	CA-C	-8.14	1.44	1.52
1	C	208	GLN	CA-C	-8.13	1.43	1.52
1	C	393	GLU	CA-C	-8.13	1.41	1.52
2	F	303	SER	CA-C	-8.13	1.42	1.52
1	C	262	LYS	CA-C	-8.12	1.43	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	464	PHE	CA-C	-8.11	1.42	1.52
3	G	174	GLU	CA-C	-8.10	1.42	1.52
1	A	314	ASP	CA-C	-8.09	1.42	1.52
2	E	21	VAL	CA-C	-8.08	1.42	1.52
2	F	84	ILE	CA-C	-8.08	1.43	1.52
2	F	94	ILE	CA-C	-8.08	1.42	1.52
1	C	481	GLY	CA-C	-8.07	1.42	1.51
2	E	131	GLU	CA-C	-8.06	1.42	1.52
1	B	202	ILE	CA-C	-8.05	1.42	1.52
1	A	202	ILE	CA-C	-8.05	1.42	1.52
2	D	225	PRO	CA-C	-8.01	1.46	1.52
7	S	91	GLU	CA-C	-8.01	1.42	1.52
1	B	500	ILE	CA-C	-7.98	1.43	1.52
2	E	245	ASP	CA-C	-7.98	1.42	1.52
1	A	475	GLN	CA-C	-7.97	1.43	1.53
1	B	166	LEU	CA-C	-7.97	1.42	1.52
2	E	348	VAL	CA-C	-7.96	1.43	1.52
2	D	404	VAL	CA-C	-7.94	1.43	1.52
11	W	88	LEU	N-CA	-7.94	1.34	1.46
3	G	52	TYR	CA-C	-7.92	1.42	1.52
1	A	87	ILE	CA-C	-7.91	1.43	1.52
1	C	65	ASN	CA-C	-7.90	1.43	1.52
1	C	299	PHE	CA-C	-7.90	1.42	1.52
1	A	150	ILE	CA-C	-7.89	1.42	1.52
2	E	199	GLU	CA-C	-7.89	1.42	1.52
2	D	367	HIS	CA-C	-7.88	1.42	1.52
3	G	254	ARG	N-CA	-7.88	1.37	1.46
4	H	113	GLU	CA-C	-7.88	1.42	1.52
2	E	13	ILE	CA-C	-7.87	1.44	1.52
1	C	337	TYR	CA-C	-7.87	1.42	1.52
1	C	282	SER	CA-C	-7.86	1.42	1.52
2	D	17	ILE	CA-C	-7.86	1.42	1.52
3	G	108	VAL	CA-C	-7.86	1.42	1.52
2	E	253	LEU	CA-C	-7.86	1.43	1.52
2	F	173	VAL	CA-C	-7.85	1.42	1.52
1	A	499	GLU	CA-C	-7.85	1.42	1.52
2	E	409	LYS	CA-C	-7.84	1.42	1.52
1	B	26	GLU	CA-C	-7.84	1.42	1.52
1	B	482	LYS	CA-C	-7.84	1.42	1.52
8	T	161	ILE	CA-C	-7.84	1.42	1.52
1	C	33	SER	CA-C	-7.83	1.43	1.52
5	I	6	GLN	CA-C	-7.83	1.41	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	498	LYS	CA-C	-7.82	1.42	1.52
7	S	86	ILE	CA-C	-7.81	1.43	1.52
7	S	37	LYS	CA-C	-7.79	1.42	1.52
2	F	57	THR	CA-C	-7.78	1.43	1.52
1	A	351	PHE	CA-C	-7.78	1.43	1.52
3	G	4	LYS	CA-C	-7.77	1.43	1.52
2	E	246	GLN	CA-C	-7.75	1.42	1.52
1	A	127	ARG	CA-C	-7.74	1.42	1.52
3	G	16	ILE	CA-C	-7.72	1.43	1.52
2	F	74	LYS	CA-C	-7.71	1.42	1.52
4	H	20	PHE	N-CA	-7.71	1.37	1.46
5	I	13	ARG	CA-C	-7.71	1.42	1.52
3	G	213	ILE	CA-C	-7.70	1.43	1.52
2	D	281	TYR	CA-C	-7.70	1.42	1.52
2	E	48	GLU	CA-C	-7.70	1.43	1.52
1	C	166	LEU	CA-C	-7.69	1.43	1.52
2	D	199	GLU	CA-C	-7.69	1.42	1.52
2	D	375	GLN	CA-C	-7.69	1.42	1.52
2	E	74	LYS	CA-C	-7.69	1.43	1.52
2	D	20	VAL	CA-C	-7.68	1.42	1.52
7	S	23	TYR	CA-C	-7.66	1.42	1.52
3	G	269	ALA	CA-C	-7.63	1.44	1.52
1	B	314	ASP	CA-C	-7.63	1.42	1.52
4	H	45	PHE	CA-C	-7.62	1.43	1.52
1	A	67	GLU	C-N	-7.62	1.26	1.34
2	E	376	LYS	N-CA	-7.61	1.37	1.46
3	G	204	TYR	CA-C	-7.61	1.42	1.52
4	H	73	SER	CA-C	-7.60	1.43	1.52
4	H	143	LYS	CA-C	-7.60	1.42	1.52
2	D	308	GLN	CA-C	-7.60	1.43	1.52
2	F	163	THR	N-CA	-7.60	1.37	1.46
2	F	122	GLU	CA-C	-7.59	1.42	1.53
1	B	380	THR	CA-C	-7.58	1.44	1.52
7	S	158	ILE	CA-C	-7.58	1.44	1.53
5	I	2	ALA	CA-C	-7.58	1.42	1.52
5	I	44	ILE	N-CA	-7.58	1.37	1.46
2	D	163	THR	N-CA	-7.56	1.37	1.46
7	S	157	SER	CA-C	-7.56	1.42	1.52
4	H	76	PHE	N-CA	-7.55	1.36	1.46
1	B	34	ILE	CA-C	-7.55	1.43	1.52
2	D	408	ARG	N-CA	-7.54	1.37	1.46
1	C	62	MET	CA-C	-7.52	1.43	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	320	SER	CA-C	-7.51	1.43	1.52
4	H	56	GLN	CA-C	-7.51	1.43	1.52
1	A	263	HIS	CA-C	-7.50	1.43	1.52
2	F	312	VAL	CA-C	-7.50	1.45	1.52
3	G	241	GLU	CA-C	-7.50	1.43	1.52
3	G	12	SER	CA-C	-7.50	1.42	1.52
1	A	155	SER	CA-C	-7.50	1.43	1.53
1	C	314	ASP	CA-C	-7.49	1.42	1.52
1	A	221	THR	CA-C	-7.48	1.43	1.52
2	F	275	ILE	N-CA	-7.48	1.40	1.46
1	A	11	ILE	CA-C	-7.47	1.43	1.52
1	C	63	SER	CA-C	-7.47	1.43	1.52
1	C	41	VAL	CA-C	-7.47	1.43	1.52
2	E	438	ILE	CA-C	-7.46	1.43	1.52
1	A	208	GLN	CA-C	-7.45	1.43	1.52
1	A	256	TYR	CA-C	-7.45	1.43	1.52
2	D	59	ARG	CA-C	-7.45	1.43	1.52
4	H	93	LEU	CA-C	-7.44	1.44	1.53
1	C	88	VAL	CA-C	-7.43	1.43	1.52
1	B	73	VAL	CA-C	-7.43	1.42	1.52
4	H	27	PHE	CA-C	-7.43	1.44	1.52
2	F	198	HIS	CA-C	-7.42	1.42	1.52
2	D	60	THR	CA-C	-7.41	1.43	1.52
2	D	37	GLU	CA-C	-7.40	1.43	1.52
1	C	497	LEU	CA-C	-7.40	1.43	1.52
1	B	256	TYR	CA-C	-7.39	1.43	1.52
1	C	248	TYR	CA-C	-7.39	1.43	1.52
2	D	368	TYR	N-CA	-7.39	1.37	1.46
2	D	95	MET	CA-C	-7.38	1.43	1.52
1	B	221	THR	CA-C	-7.38	1.43	1.52
3	G	212	ILE	CA-C	-7.38	1.43	1.52
1	B	324	LEU	CA-C	-7.38	1.45	1.52
1	B	355	GLU	N-CA	-7.38	1.37	1.46
2	F	325	THR	CA-C	-7.38	1.43	1.52
2	F	367	HIS	N-CA	-7.37	1.37	1.46
4	H	29	ASN	N-CA	-7.37	1.37	1.46
1	B	97	VAL	CA-C	-7.37	1.45	1.52
1	A	477	GLN	N-CA	-7.36	1.37	1.46
2	F	298	THR	CA-C	-7.36	1.45	1.53
2	E	58	VAL	N-CA	-7.36	1.37	1.46
1	C	392	LEU	N-CA	-7.35	1.37	1.46
2	E	20	VAL	CA-C	-7.35	1.43	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	166	ILE	CA-C	-7.35	1.43	1.52
2	E	277	SER	CA-C	-7.35	1.44	1.53
2	E	33	LEU	CA-C	-7.34	1.43	1.52
1	B	65	ASN	CA-C	-7.34	1.43	1.52
1	C	245	LEU	CA-C	-7.34	1.43	1.52
2	F	61	ILE	N-CA	-7.34	1.37	1.46
2	E	421	ALA	CA-C	-7.33	1.43	1.52
1	A	299	PHE	CA-C	-7.33	1.43	1.52
3	G	256	ALA	CA-C	-7.33	1.42	1.52
1	B	267	ILE	CA-C	-7.33	1.43	1.52
4	H	21	ALA	N-CA	-7.33	1.37	1.46
1	C	341	ASN	CA-C	-7.33	1.43	1.52
2	E	375	GLN	CA-C	-7.32	1.43	1.52
2	D	164	VAL	CA-C	-7.32	1.44	1.52
2	D	21	VAL	CA-C	-7.32	1.43	1.52
4	H	38	VAL	N-CA	-7.32	1.37	1.46
4	H	81	SER	CA-C	-7.32	1.43	1.52
7	S	67	LYS	N-CA	-7.31	1.38	1.46
1	B	280	GLN	CA-C	-7.31	1.43	1.52
1	C	171	ARG	CA-C	-7.31	1.43	1.52
1	A	466	ASN	CA-C	-7.31	1.43	1.52
2	F	245	ASP	CA-C	-7.31	1.43	1.52
2	E	254	PHE	CA-C	-7.29	1.43	1.52
1	A	283	LEU	CA-C	-7.28	1.43	1.52
2	D	416	GLN	CA-C	-7.28	1.46	1.52
4	H	66	HIS	CA-C	-7.27	1.43	1.52
1	A	304	ARG	CA-C	-7.27	1.43	1.52
2	F	59	ARG	CA-C	-7.27	1.44	1.52
2	D	391	LEU	CA-C	-7.27	1.43	1.52
3	G	163	ASN	CA-C	-7.27	1.43	1.52
3	G	11	LYS	CA-C	-7.26	1.43	1.52
3	G	206	GLU	CA-C	-7.26	1.43	1.52
3	G	21	LYS	N-CA	-7.26	1.37	1.46
1	C	421	GLY	CA-C	-7.25	1.44	1.52
7	S	159	MET	CA-C	-7.24	1.43	1.52
1	A	40	ARG	CA-C	-7.23	1.44	1.52
3	G	245	LYS	CA-C	-7.23	1.43	1.52
1	A	175	LYS	CA-C	-7.23	1.43	1.52
1	A	39	ALA	CA-C	-7.22	1.43	1.52
2	E	21	VAL	N-CA	-7.21	1.37	1.46
3	G	105	ILE	CA-C	-7.21	1.44	1.52
1	A	337	TYR	CA-C	-7.20	1.43	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	S	141	PHE	CA-C	-7.20	1.45	1.53
1	A	387	ALA	CA-C	-7.19	1.43	1.52
1	B	30	ARG	CA-C	-7.19	1.43	1.52
2	D	384	LEU	CA-C	-7.19	1.42	1.52
1	C	501	VAL	N-CA	-7.18	1.38	1.46
7	S	28	LYS	CA-C	-7.18	1.43	1.52
1	B	336	ALA	CA-C	-7.18	1.43	1.52
2	F	399	GLU	CA-C	-7.17	1.43	1.52
1	B	394	LEU	CA-C	-7.17	1.43	1.52
7	S	59	TYR	N-CA	-7.17	1.37	1.46
2	F	380	ASP	CA-C	-7.17	1.43	1.52
1	C	151	LYS	CA-C	-7.17	1.43	1.52
2	E	455	GLN	CA-C	-7.17	1.42	1.52
2	E	439	LYS	N-CA	-7.16	1.37	1.46
2	E	290	GLY	CA-C	-7.16	1.44	1.52
3	G	250	PHE	N-CA	-7.16	1.36	1.46
1	B	395	ALA	CA-C	-7.16	1.43	1.52
2	F	369	ASP	CA-C	-7.16	1.43	1.52
7	S	15	GLU	CA-C	-7.15	1.44	1.53
2	E	169	LEU	CA-C	-7.14	1.43	1.52
1	A	381	ARG	CA-C	-7.14	1.43	1.52
4	H	83	THR	CA-C	-7.13	1.43	1.52
3	G	215	TYR	N-CA	-7.13	1.38	1.46
1	A	266	ILE	CA-C	-7.13	1.44	1.52
1	A	172	GLN	CA-C	-7.13	1.43	1.52
1	B	89	LYS	CA-C	-7.12	1.44	1.52
2	F	131	GLU	CA-C	-7.12	1.43	1.52
4	H	139	GLU	N-CA	-7.12	1.38	1.46
8	T	165	ILE	N-CA	7.12	1.55	1.46
2	F	382	LYS	CA-C	-7.11	1.43	1.52
2	E	183	PHE	N-CA	-7.11	1.37	1.46
1	A	200	TYR	CA-C	-7.11	1.44	1.52
2	F	371	ALA	N-CA	-7.11	1.38	1.46
2	F	373	GLY	CA-C	-7.11	1.44	1.52
4	H	18	PHE	CA-C	-7.11	1.44	1.52
3	G	139	GLY	CA-C	-7.10	1.41	1.51
11	W	90	HIS	CA-C	-7.10	1.43	1.52
3	G	259	THR	N-CA	-7.10	1.38	1.46
2	D	303	SER	CA-C	-7.09	1.43	1.52
2	E	218	VAL	CA-C	-7.08	1.43	1.52
1	A	356	LEU	CA-C	-7.07	1.43	1.52
2	F	292	MET	CA-C	-7.07	1.43	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	D	22	ASP	CA-C	-7.07	1.44	1.52
8	T	29	SER	N-CA	7.07	1.55	1.46
2	E	70	VAL	CA-C	-7.06	1.45	1.52
2	F	160	VAL	CA-C	-7.06	1.43	1.52
2	F	206	ILE	CA-C	-7.05	1.45	1.53
1	A	257	PHE	CA-C	-7.04	1.43	1.52
2	D	70	VAL	CA-C	-7.04	1.44	1.52
2	D	188	GLU	CA-C	-7.04	1.43	1.53
1	B	220	LEU	CA-C	-7.04	1.43	1.52
1	B	277	ALA	CA-C	-7.04	1.43	1.52
7	S	88	LEU	N-CA	-7.04	1.37	1.46
2	F	331	ALA	CA-C	-7.03	1.43	1.52
2	E	80	ALA	CA-C	-7.03	1.44	1.52
1	B	294	TYR	CA-C	-7.02	1.43	1.52
1	B	213	VAL	N-CA	-7.02	1.38	1.46
1	B	499	GLU	CA-C	-7.02	1.43	1.52
1	B	153	VAL	CA-C	-7.01	1.44	1.52
1	B	176	THR	N-CA	-7.01	1.38	1.46
1	A	153	VAL	CA-C	-7.01	1.44	1.52
1	B	258	ARG	CA-C	-7.01	1.44	1.52
2	F	37	GLU	CA-C	-7.01	1.44	1.52
2	F	290	GLY	CA-C	-7.01	1.44	1.52
3	G	257	VAL	CA-C	-7.01	1.43	1.52
2	F	197	TYR	N-CA	-7.00	1.38	1.46
4	H	63	VAL	CA-C	-7.00	1.44	1.52
3	G	217	LEU	CA-C	-7.00	1.43	1.52
1	C	312	MET	CA-C	-7.00	1.44	1.52
1	A	203	TYR	N-CA	-6.99	1.37	1.46
1	B	349	GLN	CA-C	-6.99	1.43	1.52
1	B	41	VAL	CA-C	-6.99	1.44	1.52
1	C	174	GLY	CA-C	-6.99	1.42	1.51
1	C	338	ILE	CA-C	-6.98	1.46	1.52
1	C	448	GLY	CA-C	-6.98	1.44	1.52
1	C	286	ARG	CA-C	-6.98	1.44	1.53
2	D	290	GLY	CA-C	-6.97	1.44	1.52
2	D	370	VAL	CA-C	-6.97	1.43	1.52
1	B	299	PHE	N-CA	-6.97	1.38	1.46
3	G	228	ARG	CA-C	-6.97	1.43	1.52
1	A	38	ILE	CA-C	-6.97	1.43	1.52
2	D	325	THR	CA-C	-6.96	1.43	1.52
2	D	244	ARG	CA-C	-6.96	1.43	1.52
4	H	131	ILE	N-CA	-6.96	1.38	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	283	LEU	CA-C	-6.96	1.43	1.52
2	D	197	TYR	CA-C	-6.96	1.44	1.52
2	E	197	TYR	CA-C	-6.96	1.43	1.52
7	S	33	GLU	CA-C	-6.96	1.43	1.52
2	E	311	TYR	CA-C	-6.95	1.44	1.52
2	F	218	VAL	CA-C	-6.95	1.44	1.52
1	C	287	ARG	CA-C	-6.95	1.44	1.52
4	H	132	GLN	CA-C	-6.94	1.44	1.52
3	G	116	LEU	N-CA	-6.93	1.37	1.46
1	A	60	LYS	CA-C	-6.91	1.43	1.52
3	G	8	ARG	CA-C	-6.91	1.44	1.52
3	G	160	ILE	CA-C	-6.91	1.43	1.52
2	E	306	SER	CA-C	-6.91	1.44	1.52
2	E	58	VAL	CA-C	-6.91	1.44	1.52
3	G	157	GLU	N-CA	-6.91	1.38	1.46
8	T	103	LEU	N-CA	-6.91	1.38	1.46
1	A	73	VAL	CA-C	-6.91	1.43	1.52
3	G	36	ARG	CA-C	-6.91	1.44	1.52
1	A	420	ARG	CA-C	-6.90	1.43	1.52
2	D	376	LYS	N-CA	-6.90	1.38	1.46
2	E	83	ARG	CA-C	-6.90	1.44	1.52
1	A	350	ILE	CA-C	-6.90	1.45	1.52
2	D	278	ALA	CA-C	-6.90	1.44	1.52
2	F	438	ILE	CA-C	-6.89	1.44	1.52
3	G	16	ILE	N-CA	-6.89	1.38	1.46
2	D	373	GLY	CA-C	-6.89	1.44	1.52
2	D	410	ILE	CA-C	-6.89	1.44	1.52
2	F	329	LEU	CA-C	-6.89	1.43	1.53
2	E	363	VAL	CA-C	-6.88	1.45	1.53
7	S	162	MET	CA-C	-6.88	1.43	1.52
3	G	18	LYS	N-CA	-6.88	1.38	1.46
1	B	219	ARG	CA-C	-6.88	1.43	1.52
2	E	84	ILE	CA-C	-6.88	1.44	1.52
1	C	496	LYS	CA-C	-6.87	1.43	1.52
1	C	26	GLU	N-CA	-6.86	1.37	1.46
1	C	279	ARG	CA-C	-6.86	1.44	1.52
1	B	421	GLY	CA-C	-6.86	1.44	1.52
2	E	406	ARG	CA-C	-6.85	1.43	1.52
3	G	214	TYR	N-CA	-6.85	1.38	1.46
11	W	166	ALA	CA-C	-6.85	1.43	1.52
2	F	376	LYS	N-CA	-6.85	1.38	1.46
8	T	20	ILE	N-CA	6.85	1.54	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	492	GLU	CA-C	-6.85	1.44	1.52
2	D	304	ILE	CA-C	-6.85	1.43	1.52
1	A	370	SER	CA-C	-6.84	1.44	1.52
2	E	410	ILE	CA-C	-6.84	1.44	1.52
1	B	34	ILE	N-CA	-6.84	1.38	1.46
1	B	67	GLU	C-N	-6.83	1.27	1.34
2	F	162	LYS	CA-C	-6.83	1.44	1.52
2	D	372	ARG	CA-C	-6.83	1.43	1.52
4	H	82	VAL	CA-C	-6.82	1.44	1.52
3	G	50	ALA	CA-C	-6.82	1.44	1.52
1	A	277	ALA	CA-C	-6.82	1.44	1.52
1	C	86	ASP	CA-C	-6.82	1.44	1.52
2	E	192	GLU	CA-C	-6.81	1.43	1.52
3	G	244	ASP	CA-C	-6.81	1.43	1.52
4	H	138	ASN	CA-C	-6.81	1.44	1.52
2	E	443	GLN	CA-C	-6.81	1.44	1.52
1	B	279	ARG	CA-C	-6.80	1.44	1.52
3	G	199	ASP	N-CA	-6.80	1.37	1.46
2	F	80	ALA	CA-C	-6.80	1.44	1.52
1	A	14	GLU	CA-C	-6.80	1.43	1.52
2	F	61	ILE	CA-C	-6.79	1.44	1.52
2	F	201	ILE	CA-C	-6.79	1.44	1.52
1	A	89	LYS	CA-C	-6.78	1.44	1.52
2	F	95	MET	CA-C	-6.78	1.44	1.52
1	B	156	LEU	CA-C	-6.77	1.43	1.52
1	B	396	GLN	CA-C	-6.77	1.44	1.52
1	A	346	THR	CA-C	-6.77	1.43	1.53
1	B	278	TYR	CA-C	-6.76	1.44	1.52
10	V	64	PHE	N-CA	-6.76	1.37	1.45
3	G	5	ASP	CA-C	-6.76	1.43	1.52
3	G	188	GLU	CA-C	-6.76	1.46	1.53
7	S	144	LYS	N-CA	-6.76	1.40	1.46
1	B	200	TYR	CA-C	-6.76	1.44	1.52
2	D	24	GLN	CA-C	-6.75	1.44	1.52
1	A	264	ALA	CA-C	-6.75	1.44	1.52
1	A	312	MET	CA-C	-6.75	1.44	1.52
1	A	395	ALA	CA-C	-6.75	1.44	1.52
2	F	432	VAL	CA-C	-6.75	1.45	1.52
2	F	365	SER	N-CA	-6.74	1.37	1.46
3	G	164	ARG	N-CA	-6.74	1.37	1.46
1	A	390	MET	CA-C	-6.73	1.44	1.52
1	A	220	LEU	CA-C	-6.73	1.44	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	357	PHE	CA-C	-6.73	1.43	1.52
2	E	167	MET	CA-C	-6.73	1.44	1.52
1	B	248	TYR	CA-C	-6.73	1.44	1.52
1	A	294	TYR	CA-C	-6.73	1.43	1.52
2	F	33	LEU	CA-C	-6.73	1.43	1.52
3	G	253	THR	CA-C	-6.73	1.43	1.52
5	I	4	TRP	CA-C	-6.72	1.46	1.53
2	E	382	LYS	CA-C	-6.72	1.43	1.52
8	T	159	GLU	CA-C	-6.72	1.44	1.52
4	H	136	GLU	N-CA	-6.72	1.38	1.46
2	D	407	ALA	CA-C	-6.71	1.44	1.52
1	C	217	VAL	N-CA	-6.71	1.39	1.46
2	D	399	GLU	CA-C	-6.71	1.43	1.52
3	G	249	THR	N-CA	-6.71	1.38	1.46
1	A	305	LEU	N-CA	-6.71	1.38	1.46
3	G	209	LEU	CA-C	-6.71	1.44	1.52
4	H	47	ILE	CA-C	-6.70	1.45	1.52
1	A	323	ALA	CA-C	-6.69	1.44	1.52
1	B	167	ILE	N-CA	-6.69	1.38	1.46
1	C	212	THR	CA-C	-6.69	1.44	1.52
1	C	303	SER	CA-C	-6.68	1.44	1.52
1	A	341	ASN	CA-C	-6.68	1.44	1.52
1	C	499	GLU	CA-C	-6.68	1.44	1.52
1	B	473	ILE	CA-C	-6.68	1.44	1.52
1	C	302	HIS	CA-C	-6.68	1.43	1.52
1	A	412	ALA	CA-C	-6.68	1.44	1.52
1	B	70	ASN	CA-C	-6.68	1.44	1.52
2	D	113	PHE	CA-C	-6.67	1.44	1.52
2	D	292	MET	CA-C	-6.67	1.44	1.53
2	D	378	LEU	CA-C	-6.67	1.44	1.52
1	B	326	VAL	N-CA	-6.67	1.38	1.46
1	C	263	HIS	N-CA	-6.65	1.38	1.46
1	B	266	ILE	CA-C	-6.65	1.44	1.52
2	D	200	MET	CA-C	-6.65	1.44	1.52
2	F	151	LYS	CA-C	-6.65	1.44	1.52
1	B	501	VAL	N-CA	-6.65	1.38	1.46
1	B	503	ASN	CA-C	-6.65	1.44	1.52
4	H	21	ALA	CA-C	-6.64	1.44	1.52
5	I	34	ALA	CA-C	-6.64	1.44	1.52
1	C	451	GLY	CA-C	-6.64	1.43	1.51
2	E	171	ASN	CA-C	-6.63	1.44	1.52
3	G	23	MET	CA-C	-6.63	1.43	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	267	ILE	N-CA	-6.63	1.37	1.46
2	F	370	VAL	CA-C	-6.63	1.44	1.52
2	E	159	GLY	CA-C	-6.62	1.42	1.51
2	F	58	VAL	N-CA	-6.62	1.38	1.46
4	H	46	GLY	CA-C	-6.62	1.42	1.51
1	A	262	LYS	CA-C	-6.62	1.43	1.52
1	A	33	SER	CA-C	-6.62	1.44	1.52
1	B	468	PHE	CA-C	-6.62	1.44	1.52
7	S	64	VAL	CA-C	-6.62	1.44	1.52
1	B	151	LYS	CA-C	-6.61	1.44	1.52
2	D	305	THR	CA-C	-6.61	1.44	1.52
2	D	394	ASP	CA-C	-6.61	1.44	1.53
2	F	169	LEU	CA-C	-6.61	1.44	1.52
1	C	266	ILE	CA-C	-6.61	1.44	1.52
2	D	84	ILE	CA-C	-6.61	1.45	1.52
3	G	143	VAL	CA-C	-6.61	1.44	1.52
1	C	156	LEU	CA-C	-6.60	1.44	1.52
2	E	307	VAL	N-CA	-6.60	1.37	1.46
2	E	31	PRO	CA-C	-6.60	1.45	1.53
1	B	497	LEU	CA-C	-6.60	1.44	1.52
1	A	126	ARG	CA-C	-6.59	1.44	1.52
2	E	292	MET	CA-C	-6.59	1.44	1.53
1	A	451	GLY	CA-C	-6.59	1.42	1.51
1	C	55	PHE	CA-C	-6.59	1.44	1.52
2	F	152	ILE	N-CA	-6.59	1.38	1.46
1	B	327	ILE	CA-C	-6.59	1.44	1.52
2	E	182	VAL	CA-C	-6.59	1.44	1.52
7	S	97	ASN	CA-C	-6.59	1.43	1.52
2	F	398	GLU	CA-C	-6.58	1.43	1.52
1	C	394	LEU	CA-C	-6.58	1.43	1.52
1	A	166	LEU	CA-C	-6.58	1.44	1.52
1	B	172	GLN	CA-C	-6.58	1.44	1.52
1	C	108	VAL	CA-C	-6.56	1.45	1.52
1	C	466	ASN	CA-C	-6.56	1.44	1.52
1	A	55	PHE	CA-C	-6.56	1.43	1.53
1	A	324	LEU	CA-C	-6.56	1.46	1.52
2	D	224	GLU	CA-C	-6.55	1.44	1.52
2	D	366	GLU	CA-C	-6.55	1.44	1.52
2	D	369	ASP	CA-C	-6.55	1.44	1.52
2	D	84	ILE	N-CA	-6.55	1.40	1.46
2	F	334	VAL	N-CA	-6.55	1.38	1.46
2	D	206	ILE	CA-C	-6.55	1.45	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	289	MET	CA-C	-6.55	1.44	1.52
1	B	212	THR	CA-C	-6.54	1.44	1.52
2	D	168	GLU	N-CA	-6.54	1.38	1.46
2	F	75	VAL	CA-C	-6.54	1.44	1.52
7	S	41	ARG	CA-C	-6.54	1.44	1.52
3	G	20	THR	CA-C	-6.54	1.44	1.52
1	C	42	HIS	N-CA	-6.54	1.37	1.46
1	B	40	ARG	CA-C	-6.54	1.44	1.52
5	I	18	CYS	CA-C	-6.54	1.44	1.52
1	C	220	LEU	CA-C	-6.54	1.44	1.52
1	C	88	VAL	N-CA	-6.53	1.38	1.46
1	C	167	ILE	N-CA	-6.53	1.38	1.46
2	D	213	SER	CA-C	-6.53	1.44	1.52
5	I	36	LYS	CA-C	-6.53	1.44	1.52
2	D	75	VAL	CA-C	-6.53	1.44	1.52
2	D	172	ASN	CA-C	-6.53	1.44	1.52
1	B	286	ARG	CA-C	-6.52	1.44	1.52
1	B	54	GLU	CA-C	-6.52	1.44	1.52
2	F	142	LEU	N-CA	-6.52	1.38	1.46
2	D	231	ARG	CA-C	-6.52	1.43	1.52
2	D	23	VAL	CA-C	-6.51	1.44	1.52
2	E	234	LEU	CA-C	-6.51	1.44	1.52
3	G	248	LEU	N-CA	-6.51	1.38	1.46
1	C	505	LEU	CA-C	-6.51	1.44	1.52
2	E	67	GLU	CA-C	-6.51	1.44	1.52
1	A	468	PHE	CA-C	-6.51	1.44	1.52
1	A	493	SER	CA-C	-6.51	1.44	1.52
2	E	202	GLU	CA-C	-6.51	1.44	1.52
3	G	34	ALA	CA-C	-6.51	1.44	1.52
1	A	496	LYS	CA-C	-6.50	1.44	1.52
2	E	45	LEU	CA-C	-6.50	1.44	1.53
2	E	287	THR	CA-C	-6.50	1.44	1.52
1	C	256	TYR	N-CA	-6.50	1.38	1.46
3	G	141	ALA	CA-C	-6.49	1.44	1.52
4	H	63	VAL	N-CA	-6.49	1.38	1.46
2	F	196	LEU	CA-C	-6.49	1.44	1.52
3	G	272	LEU	CA-C	-6.49	1.45	1.52
2	D	13	ILE	CA-C	-6.48	1.45	1.52
1	A	416	GLN	CA-C	-6.48	1.44	1.52
5	I	20	LYS	N-CA	-6.48	1.38	1.46
1	C	362	ARG	N-CA	-6.47	1.39	1.46
1	A	429	LYS	CA-C	-6.47	1.44	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	200	MET	CA-C	-6.47	1.44	1.52
1	A	219	ARG	CA-C	-6.46	1.44	1.52
1	A	42	HIS	N-CA	-6.46	1.37	1.46
3	G	89	MET	CA-C	-6.46	1.44	1.52
2	D	52	HIS	CA-C	-6.46	1.44	1.52
2	E	388	ILE	CA-C	-6.45	1.44	1.52
3	G	234	ASN	CA-C	-6.45	1.44	1.52
1	B	217	VAL	CA-C	-6.45	1.44	1.52
2	E	308	GLN	CA-C	-6.44	1.45	1.52
1	A	501	VAL	CA-C	-6.44	1.45	1.52
1	C	139	ARG	CA-C	-6.44	1.44	1.53
1	C	463	LYS	N-CA	-6.44	1.38	1.46
2	F	12	ARG	N-CA	-6.44	1.38	1.46
2	E	95	MET	CA-C	-6.43	1.45	1.52
4	H	76	PHE	CA-C	-6.43	1.44	1.52
7	S	21	ALA	CA-C	-6.43	1.44	1.52
1	C	40	ARG	CA-C	-6.43	1.44	1.52
2	E	180	TYR	CA-C	-6.43	1.44	1.52
2	F	39	GLN	CA-C	-6.43	1.44	1.52
1	B	173	THR	CA-C	-6.43	1.44	1.52
2	E	113	PHE	CA-C	-6.42	1.45	1.52
1	B	301	LEU	N-CA	-6.42	1.38	1.46
2	E	60	THR	CA-C	-6.42	1.44	1.52
2	E	310	ILE	CA-C	-6.42	1.44	1.52
2	E	351	LEU	CA-C	-6.41	1.46	1.53
4	H	89	SER	CA-C	-6.41	1.44	1.52
7	S	44	GLN	CA-C	-6.41	1.44	1.52
4	H	54	THR	N-CA	-6.41	1.38	1.46
2	D	307	VAL	N-CA	-6.41	1.37	1.46
2	D	355	SER	CA-C	-6.41	1.44	1.52
2	D	421	ALA	CA-C	-6.41	1.46	1.53
2	F	139	VAL	N-CA	-6.40	1.39	1.46
1	A	154	ASP	CA-C	-6.40	1.43	1.52
1	B	419	SER	CA-C	-6.40	1.45	1.52
1	C	199	LEU	CA-C	-6.40	1.44	1.52
1	C	490	SER	CA-C	-6.40	1.45	1.52
4	H	75	TYR	N-CA	-6.40	1.37	1.45
3	G	193	TYR	CA-C	-6.39	1.44	1.52
8	T	167	ASP	N-CA	-6.39	1.38	1.46
2	F	430	LYS	CA-C	-6.39	1.44	1.52
7	S	34	GLN	CA-C	-6.39	1.44	1.52
1	B	498	LYS	CA-C	-6.39	1.44	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	440	GLU	CA-C	-6.39	1.44	1.52
3	G	51	LEU	CA-C	-6.39	1.44	1.52
8	T	159	GLU	C-N	-6.39	1.25	1.33
3	G	176	LYS	N-CA	-6.38	1.41	1.46
2	E	252	LEU	CA-C	-6.38	1.45	1.52
1	C	468	PHE	CA-C	-6.38	1.44	1.52
1	C	31	VAL	CA-C	-6.37	1.45	1.52
3	G	33	ARG	N-CA	-6.37	1.38	1.46
2	E	255	ILE	CA-C	-6.37	1.44	1.52
3	G	29	ALA	CA-C	-6.37	1.44	1.52
2	D	61	ILE	N-CA	-6.36	1.38	1.46
1	B	262	LYS	CA-C	-6.36	1.44	1.52
2	D	74	LYS	CA-C	-6.36	1.44	1.52
4	H	91	GLN	N-CA	-6.36	1.38	1.46
2	F	58	VAL	CA-C	-6.36	1.44	1.52
2	D	284	THR	CA-C	-6.35	1.43	1.52
8	T	71	ILE	N-CA	6.35	1.53	1.45
1	C	25	LEU	CA-C	-6.35	1.44	1.52
1	C	320	SER	CA-C	-6.35	1.44	1.52
1	C	473	ILE	CA-C	-6.35	1.45	1.52
2	D	334	VAL	N-CA	-6.35	1.38	1.46
1	B	165	GLU	CA-C	-6.34	1.45	1.52
1	C	126	ARG	CA-C	-6.34	1.44	1.52
2	D	435	LYS	CA-C	-6.34	1.44	1.52
1	C	38	ILE	CA-C	-6.33	1.44	1.52
2	F	287	THR	CA-C	-6.33	1.44	1.52
2	E	336	SER	CA-C	-6.33	1.45	1.52
1	B	361	ILE	CA-C	-6.33	1.44	1.52
1	B	502	THR	CA-C	-6.32	1.44	1.52
2	E	332	THR	CA-C	-6.32	1.44	1.52
1	C	243	GLN	CA-C	-6.32	1.44	1.52
2	D	365	SER	CA-C	-6.32	1.44	1.52
7	S	32	LEU	CA-C	-6.32	1.44	1.52
7	S	84	ASN	CA-C	-6.32	1.44	1.52
8	T	160	THR	N-CA	-6.32	1.38	1.46
1	A	338	ILE	CA-C	-6.32	1.47	1.52
8	T	27	ALA	CA-C	-6.32	1.44	1.52
7	S	39	LEU	N-CA	-6.31	1.38	1.46
1	C	366	ASN	CA-C	-6.31	1.44	1.52
2	D	406	ARG	CA-C	-6.31	1.44	1.52
2	E	399	GLU	CA-C	-6.31	1.44	1.52
1	A	24	ASP	CA-C	-6.31	1.44	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	215	GLN	CA-C	-6.30	1.44	1.52
3	G	21	LYS	CA-C	-6.30	1.44	1.52
1	B	330	GLN	CA-C	-6.30	1.45	1.52
2	D	80	ALA	CA-C	-6.30	1.45	1.52
1	A	336	ALA	CA-C	-6.30	1.44	1.52
1	B	46	ASN	CA-C	-6.30	1.44	1.52
2	F	305	THR	CA-C	-6.30	1.45	1.52
3	G	5	ASP	N-CA	-6.30	1.38	1.46
2	F	259	PHE	CA-C	-6.30	1.44	1.52
7	S	90	ALA	CA-C	-6.30	1.44	1.52
1	B	460	LYS	CA-C	-6.29	1.44	1.52
3	G	166	ARG	CA-C	-6.29	1.44	1.52
2	F	400	ASP	CA-C	-6.29	1.44	1.52
2	D	31	PRO	CA-C	-6.29	1.45	1.52
2	D	405	SER	N-CA	-6.29	1.38	1.46
1	C	214	ALA	CA-C	-6.29	1.44	1.52
1	A	127	ARG	N-CA	-6.28	1.38	1.46
1	A	176	THR	N-CA	-6.28	1.38	1.46
2	E	54	GLY	CA-C	-6.28	1.45	1.52
2	D	436	GLU	CA-C	-6.27	1.44	1.52
2	F	439	LYS	N-CA	-6.27	1.39	1.46
1	A	67	GLU	CA-C	-6.27	1.42	1.52
1	A	484	ARG	CA-C	-6.27	1.44	1.52
1	B	422	VAL	CA-C	-6.27	1.44	1.52
1	C	97	VAL	CA-C	-6.27	1.46	1.52
2	D	163	THR	CA-C	-6.27	1.44	1.52
3	G	237	LYS	CA-C	-6.27	1.44	1.52
1	A	218	LYS	N-CA	-6.27	1.38	1.46
2	D	443	GLN	CA-C	-6.26	1.44	1.52
2	E	183	PHE	CA-C	-6.26	1.45	1.52
2	D	246	GLN	CA-C	-6.26	1.44	1.52
1	C	167	ILE	CA-C	-6.26	1.44	1.52
2	E	236	GLY	CA-C	-6.26	1.45	1.52
1	B	182	THR	CA-C	-6.26	1.44	1.52
2	F	409	LYS	CA-C	-6.26	1.44	1.52
1	C	503	ASN	CA-C	-6.25	1.44	1.52
1	B	48	GLN	CA-C	-6.25	1.44	1.52
2	F	164	VAL	CA-C	-6.25	1.45	1.52
1	A	88	VAL	N-CA	-6.25	1.39	1.46
2	D	152	ILE	CA-C	-6.25	1.45	1.52
7	S	88	LEU	CA-C	-6.25	1.45	1.52
2	F	274	ARG	CA-C	-6.24	1.45	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	230	THR	CA-C	-6.24	1.44	1.52
4	H	43	GLY	CA-C	-6.24	1.45	1.51
1	B	218	LYS	CA-C	-6.24	1.44	1.52
1	B	176	THR	CA-C	-6.23	1.45	1.52
1	C	128	ARG	CA-C	-6.23	1.44	1.52
1	C	479	LEU	CA-C	-6.23	1.44	1.52
2	E	324	THR	CA-C	-6.23	1.44	1.52
2	E	355	SER	N-CA	-6.23	1.38	1.46
1	B	418	LEU	CA-C	-6.22	1.45	1.52
2	F	197	TYR	CA-C	-6.22	1.44	1.52
2	F	226	PRO	CA-C	-6.22	1.43	1.52
5	I	17	ILE	CA-C	-6.22	1.43	1.52
11	W	167	GLY	N-CA	-6.22	1.38	1.45
1	C	147	GLN	CA-C	-6.22	1.45	1.52
2	D	376	LYS	CA-C	-6.22	1.45	1.52
7	S	22	LEU	N-CA	-6.22	1.38	1.46
1	A	500	ILE	N-CA	-6.21	1.39	1.46
2	E	267	GLU	CA-C	-6.21	1.44	1.52
3	G	32	ALA	CA-C	-6.21	1.45	1.52
2	F	154	LEU	CA-C	-6.21	1.45	1.53
2	E	117	HIS	CA-C	-6.20	1.45	1.52
2	F	445	LEU	CA-C	-6.20	1.44	1.52
3	G	172	LYS	CA-C	-6.20	1.45	1.52
2	D	169	LEU	CA-C	-6.20	1.44	1.52
2	F	436	GLU	CA-C	-6.20	1.44	1.52
2	E	377	ILE	CA-C	-6.19	1.45	1.52
1	C	200	TYR	CA-C	-6.19	1.45	1.52
4	H	71	THR	CA-C	-6.19	1.45	1.52
1	C	424	LEU	CA-C	-6.19	1.44	1.52
2	D	12	ARG	N-CA	-6.19	1.38	1.46
3	G	162	PHE	CA-C	-6.19	1.45	1.52
4	H	131	ILE	CA-C	-6.19	1.45	1.52
2	D	47	LEU	CA-C	-6.18	1.45	1.52
2	E	325	THR	CA-C	-6.18	1.44	1.52
2	E	405	SER	CA-C	-6.18	1.44	1.52
3	G	272	LEU	N-CA	-6.18	1.38	1.45
2	F	22	ASP	CA-C	-6.17	1.45	1.52
2	F	405	SER	CA-C	-6.17	1.44	1.52
1	B	367	VAL	CA-C	-6.17	1.45	1.52
1	B	398	ARG	CA-C	-6.17	1.44	1.52
2	D	439	LYS	N-CA	-6.17	1.39	1.46
2	F	70	VAL	CA-C	-6.17	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	246	LEU	CA-C	-6.17	1.44	1.52
1	C	174	GLY	N-CA	-6.17	1.36	1.45
1	B	354	THR	CA-C	-6.17	1.44	1.52
2	F	47	LEU	CA-C	-6.17	1.45	1.52
3	G	270	ALA	CA-C	-6.17	1.44	1.52
2	F	263	GLN	N-CA	-6.16	1.39	1.46
2	E	147	ALA	CA-C	-6.16	1.44	1.52
1	B	397	TYR	N-CA	-6.16	1.39	1.46
2	F	371	ALA	CA-C	-6.16	1.45	1.52
2	E	84	ILE	N-CA	-6.15	1.39	1.46
1	A	214	ALA	CA-C	-6.15	1.45	1.52
2	E	163	THR	N-CA	-6.15	1.39	1.46
1	B	341	ASN	CA-C	-6.15	1.45	1.52
2	E	160	VAL	N-CA	-6.15	1.38	1.46
2	E	168	GLU	CA-C	-6.15	1.44	1.52
2	F	308	GLN	CA-C	-6.15	1.45	1.52
1	B	173	THR	N-CA	-6.14	1.38	1.46
3	G	218	LYS	CA-C	-6.14	1.44	1.52
1	C	89	LYS	N-CA	-6.13	1.38	1.46
1	A	321	LEU	N-CA	-6.13	1.38	1.46
2	D	196	LEU	CA-C	-6.13	1.44	1.52
2	E	387	ILE	N-CA	-6.13	1.39	1.46
3	G	43	VAL	CA-C	-6.13	1.45	1.52
8	T	160	THR	CA-C	-6.13	1.45	1.52
2	D	54	GLY	CA-C	-6.12	1.45	1.52
2	E	235	THR	CA-C	-6.12	1.45	1.52
1	A	245	LEU	CA-C	-6.12	1.45	1.52
1	B	267	ILE	N-CA	-6.12	1.38	1.46
1	A	448	GLY	CA-C	-6.12	1.45	1.52
1	B	108	VAL	CA-C	-6.12	1.45	1.52
2	D	182	VAL	CA-C	-6.12	1.45	1.52
7	S	143	SER	CA-C	-6.12	1.44	1.53
1	A	279	ARG	CA-C	-6.12	1.45	1.52
2	D	21	VAL	N-CA	-6.12	1.39	1.46
2	F	412	ARG	CA-C	-6.12	1.44	1.52
1	B	61	GLY	CA-C	-6.11	1.45	1.51
2	D	38	VAL	CA-C	-6.11	1.45	1.52
2	D	245	ASP	CA-C	-6.11	1.44	1.52
2	F	236	GLY	CA-C	-6.11	1.45	1.52
1	A	504	PHE	N-CA	-6.11	1.39	1.46
1	C	480	LEU	CA-C	-6.11	1.45	1.52
1	B	499	GLU	N-CA	-6.11	1.38	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	61	ILE	CA-C	-6.11	1.45	1.52
1	C	324	LEU	CA-C	-6.11	1.46	1.52
2	D	380	ASP	CA-C	-6.11	1.45	1.52
5	I	5	ARG	CA-C	-6.10	1.44	1.52
5	I	11	TYR	CA-C	-6.10	1.44	1.52
7	S	102	ILE	CA-C	-6.10	1.45	1.52
2	E	196	LEU	N-CA	-6.10	1.38	1.46
1	C	218	LYS	N-CA	-6.10	1.39	1.46
2	F	168	GLU	N-CA	-6.10	1.39	1.46
2	F	183	PHE	CA-C	-6.10	1.45	1.52
8	T	97	ASN	N-CA	6.10	1.53	1.46
1	B	198	LYS	CA-C	-6.10	1.44	1.53
2	F	17	ILE	CA-C	-6.10	1.45	1.52
5	I	21	ALA	CA-C	-6.09	1.44	1.52
8	T	24	THR	N-CA	-6.09	1.39	1.46
1	A	326	VAL	N-CA	-6.09	1.39	1.46
1	B	348	GLY	CA-C	-6.09	1.45	1.52
4	H	112	LEU	N-CA	-6.09	1.38	1.46
1	A	27	GLU	CA-C	-6.09	1.45	1.52
1	A	386	VAL	CA-C	-6.09	1.46	1.52
2	F	171	ASN	CA-C	-6.09	1.45	1.52
2	F	25	PHE	N-CA	-6.08	1.38	1.46
1	C	244	TYR	N-CA	-6.08	1.39	1.46
1	A	216	LEU	CA-C	-6.08	1.45	1.52
2	D	49	VAL	CA-C	-6.08	1.46	1.52
1	A	497	LEU	CA-C	-6.08	1.45	1.52
2	D	402	LEU	CA-C	-6.08	1.45	1.52
2	F	173	VAL	N-CA	-6.07	1.38	1.46
1	A	287	ARG	CA-C	-6.07	1.47	1.53
4	H	26	VAL	CA-C	-6.07	1.45	1.52
1	A	504	PHE	CA-C	-6.07	1.45	1.52
1	C	468	PHE	N-CA	-6.07	1.39	1.46
2	E	263	GLN	N-CA	-6.07	1.39	1.46
1	C	131	LEU	CA-C	-6.07	1.44	1.52
1	C	276	VAL	CA-C	-6.07	1.45	1.52
3	G	4	LYS	C-N	-6.07	1.26	1.33
7	S	158	ILE	N-CA	-6.06	1.40	1.46
4	H	22	SER	N-CA	-6.06	1.39	1.46
3	G	109	GLY	CA-C	-6.06	1.43	1.51
1	A	187	LYS	CA-C	-6.05	1.44	1.52
3	G	104	LYS	CA-C	-6.05	1.45	1.52
2	D	41	ARG	CA-C	-6.05	1.45	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	437	ALA	CA-C	-6.05	1.45	1.52
2	F	199	GLU	CA-C	-6.04	1.44	1.52
1	B	150	ILE	CA-C	-6.04	1.45	1.52
3	G	24	LYS	N-CA	-6.04	1.39	1.46
3	G	172	LYS	N-CA	-6.04	1.38	1.46
1	C	441	GLN	N-CA	-6.04	1.39	1.46
2	E	201	ILE	CA-C	-6.04	1.45	1.52
2	F	400	ASP	N-CA	-6.04	1.39	1.46
1	B	199	LEU	CA-C	-6.03	1.45	1.52
1	B	483	ILE	CA-C	-6.03	1.45	1.52
1	C	267	ILE	CA-C	-6.03	1.44	1.52
1	C	465	GLU	CA-C	-6.03	1.45	1.52
1	B	218	LYS	N-CA	-6.03	1.39	1.46
1	B	244	TYR	N-CA	-6.03	1.39	1.46
5	I	19	ALA	CA-C	-6.03	1.45	1.52
1	A	29	GLY	CA-C	-6.03	1.45	1.51
2	F	189	ARG	CA-C	-6.02	1.45	1.52
2	F	195	ASP	CA-C	-6.02	1.45	1.52
1	A	473	ILE	CA-C	-6.02	1.45	1.52
1	A	503	ASN	CA-C	-6.02	1.45	1.52
2	E	155	PHE	CA-C	-6.02	1.45	1.52
2	D	459	MET	CA-C	-6.02	1.45	1.53
1	C	336	ALA	CA-C	-6.02	1.45	1.52
1	B	390	MET	CA-C	-6.01	1.45	1.52
1	B	461	ILE	CA-C	-6.01	1.45	1.52
4	H	77	VAL	CA-C	-6.01	1.45	1.52
1	B	463	LYS	CA-C	-6.01	1.45	1.52
1	B	179	ALA	CA-C	-6.01	1.45	1.52
2	E	137	ILE	CA-C	-6.01	1.45	1.52
2	E	148	LYS	CA-C	-6.00	1.48	1.53
2	F	13	ILE	CA-C	-6.00	1.46	1.52
2	F	316	ASP	CA-C	-6.00	1.45	1.52
2	F	165	LEU	N-CA	-6.00	1.39	1.46
2	E	94	ILE	CA-C	-6.00	1.45	1.52
2	E	369	ASP	CA-C	-6.00	1.45	1.52
4	H	90	VAL	CA-C	-6.00	1.45	1.52
1	A	39	ALA	N-CA	-5.99	1.39	1.46
1	A	151	LYS	CA-C	-5.99	1.45	1.52
2	F	387	ILE	CA-C	-5.99	1.45	1.52
1	A	248	TYR	CA-C	-5.99	1.44	1.52
1	B	214	ALA	CA-C	-5.99	1.45	1.52
2	D	141	ASP	N-CA	-5.99	1.39	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	141	ASP	CA-C	-5.99	1.45	1.52
1	B	469	LEU	CA-C	-5.98	1.45	1.52
2	E	139	VAL	N-CA	-5.98	1.39	1.46
4	H	36	VAL	CA-C	-5.98	1.45	1.52
2	D	139	VAL	N-CA	-5.97	1.39	1.46
3	G	69	ILE	CA-C	-5.97	1.45	1.52
2	D	58	VAL	N-CA	-5.97	1.39	1.46
2	E	271	LEU	CA-C	-5.97	1.44	1.52
2	D	306	SER	N-CA	-5.97	1.38	1.46
8	T	28	ILE	N-CA	-5.96	1.38	1.46
2	E	59	ARG	CA-C	-5.96	1.45	1.52
1	A	238	ASP	CA-C	-5.96	1.44	1.52
4	H	16	MET	CA-C	-5.96	1.45	1.52
1	B	420	ARG	CA-C	-5.96	1.45	1.52
1	C	475	GLN	CA-C	-5.96	1.45	1.52
2	E	24	GLN	N-CA	-5.96	1.38	1.46
3	G	154	GLU	CA-C	-5.96	1.44	1.53
7	S	140	SER	CA-C	-5.96	1.45	1.52
1	A	505	LEU	CA-C	-5.96	1.45	1.52
1	C	49	ALA	CA-C	-5.96	1.45	1.52
3	G	241	GLU	N-CA	-5.95	1.39	1.46
1	C	222	ASP	CA-C	-5.95	1.45	1.52
9	U	10	TRP	CA-C	5.95	1.60	1.52
1	A	193	THR	CA-C	-5.95	1.45	1.53
1	B	198	LYS	N-CA	-5.95	1.38	1.46
1	C	90	ARG	CA-C	-5.95	1.45	1.52
1	A	31	VAL	CA-C	-5.94	1.46	1.53
1	A	88	VAL	CA-C	-5.94	1.45	1.52
2	D	409	LYS	CA-C	-5.94	1.45	1.52
3	G	137	THR	CA-C	-5.94	1.45	1.52
3	G	75	ARG	CA-C	-5.94	1.44	1.53
1	A	382	ALA	CA-C	-5.93	1.45	1.52
5	I	43	LYS	CA-C	-5.93	1.45	1.52
2	E	385	GLN	CA-C	-5.93	1.44	1.52
2	F	146	TYR	CA-C	-5.93	1.45	1.53
1	A	128	ARG	CA-C	-5.93	1.45	1.52
1	A	345	ILE	CA-C	-5.92	1.44	1.52
8	T	71	ILE	CA-C	-5.92	1.46	1.52
2	D	359	ASP	CA-C	-5.92	1.45	1.52
3	G	247	THR	CA-C	-5.92	1.42	1.52
1	C	361	ILE	CA-C	-5.92	1.45	1.52
3	G	183	THR	N-CA	-5.92	1.38	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	246	GLN	CA-C	-5.92	1.45	1.52
1	B	128	ARG	CA-C	-5.91	1.45	1.52
1	B	303	SER	CA-C	-5.91	1.45	1.52
2	F	380	ASP	N-CA	-5.91	1.39	1.46
5	I	16	GLN	N-CA	-5.91	1.38	1.46
1	B	465	GLU	CA-C	-5.91	1.45	1.52
2	E	206	ILE	CA-C	-5.91	1.46	1.52
2	D	289	MET	CA-C	-5.90	1.45	1.52
2	E	407	ALA	N-CA	-5.90	1.39	1.46
1	A	199	LEU	CA-C	-5.90	1.45	1.52
3	G	260	LYS	CA-C	-5.90	1.44	1.52
1	B	74	VAL	CA-C	-5.90	1.46	1.52
2	F	143	LEU	CA-C	-5.89	1.45	1.52
2	F	402	LEU	CA-C	-5.89	1.45	1.52
1	C	426	GLU	CA-C	-5.89	1.45	1.52
1	C	438	ILE	CA-C	-5.89	1.45	1.52
4	H	72	THR	CA-C	-5.89	1.45	1.52
8	T	97	ASN	CA-C	-5.89	1.45	1.52
1	B	155	SER	CA-C	-5.89	1.45	1.53
1	B	350	ILE	CA-C	-5.89	1.46	1.52
2	D	324	THR	CA-C	-5.88	1.45	1.52
2	F	182	VAL	CA-C	-5.88	1.45	1.52
1	B	127	ARG	CA-C	-5.88	1.45	1.52
7	S	98	THR	N-CA	-5.88	1.40	1.46
2	D	189	ARG	CA-C	-5.88	1.45	1.52
4	H	129	ALA	CA-C	-5.88	1.45	1.52
1	A	302	HIS	N-CA	-5.88	1.38	1.46
2	E	312	VAL	N-CA	-5.87	1.39	1.46
2	F	144	ALA	N-CA	-5.87	1.40	1.46
2	D	137	ILE	CA-C	-5.87	1.45	1.52
4	H	102	MET	CA-C	-5.87	1.44	1.52
2	F	364	GLY	N-CA	-5.87	1.36	1.45
1	C	389	THR	CA-C	-5.87	1.45	1.52
7	S	72	MET	CA-C	-5.87	1.44	1.52
2	E	262	THR	CA-C	-5.87	1.45	1.52
2	F	20	VAL	CA-C	-5.86	1.45	1.52
2	D	165	LEU	CA-C	-5.86	1.45	1.52
2	E	367	HIS	CA-C	-5.86	1.45	1.52
2	F	34	ASN	CA-C	-5.86	1.45	1.52
4	H	72	THR	N-CA	-5.86	1.38	1.46
1	A	226	MET	N-CA	-5.86	1.39	1.46
2	E	334	VAL	CA-C	-5.86	1.45	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	218	LYS	CA-C	-5.86	1.45	1.52
2	E	23	VAL	CA-C	-5.86	1.45	1.52
2	F	379	GLN	CA-C	-5.86	1.45	1.52
7	S	104	ALA	CA-C	-5.85	1.45	1.52
2	E	365	SER	CA-C	-5.85	1.44	1.52
1	A	287	ARG	C-N	-5.85	1.26	1.33
1	C	189	PHE	CA-C	-5.85	1.44	1.52
2	D	386	ASP	CA-C	-5.85	1.44	1.52
2	D	405	SER	CA-C	-5.85	1.45	1.52
2	E	405	SER	N-CA	-5.85	1.39	1.46
4	H	67	ALA	CA-C	-5.85	1.45	1.53
2	E	38	VAL	CA-C	-5.85	1.46	1.52
1	B	209	LYS	CA-C	-5.85	1.45	1.52
3	G	161	ILE	N-CA	-5.85	1.39	1.46
2	E	423	VAL	N-CA	-5.84	1.39	1.46
1	C	452	TYR	CA-C	-5.84	1.44	1.52
8	T	103	LEU	CA-C	5.84	1.60	1.52
1	C	210	ARG	CA-C	-5.84	1.45	1.52
3	G	140	ASP	CA-C	-5.84	1.45	1.52
2	D	165	LEU	N-CA	-5.84	1.39	1.46
1	A	469	LEU	CA-C	-5.83	1.45	1.52
3	G	266	ILE	CA-C	-5.83	1.46	1.53
1	C	150	ILE	CA-C	-5.83	1.45	1.52
1	C	379	GLN	CA-C	-5.83	1.45	1.52
3	G	258	ILE	CA-C	-5.83	1.45	1.52
3	G	214	TYR	CA-C	-5.82	1.45	1.52
1	A	108	VAL	CA-C	-5.82	1.45	1.52
1	B	378	ALA	CA-C	-5.82	1.47	1.53
1	C	433	TYR	CA-C	-5.82	1.45	1.53
2	D	319	ASP	CA-C	-5.82	1.46	1.53
1	A	269	ASP	CA-C	-5.81	1.45	1.53
1	A	498	LYS	CA-C	-5.81	1.45	1.52
1	B	157	VAL	CA-C	-5.81	1.46	1.52
1	B	369	LEU	CA-C	-5.81	1.44	1.52
1	C	284	LEU	CA-C	-5.81	1.44	1.52
1	C	484	ARG	CA-C	-5.80	1.45	1.52
2	F	257	ASN	CA-C	-5.80	1.40	1.52
4	H	61	GLY	CA-C	-5.80	1.43	1.51
1	B	251	CYS	N-CA	-5.80	1.39	1.46
2	E	304	ILE	CA-C	-5.80	1.45	1.52
3	G	212	ILE	N-CA	-5.80	1.39	1.46
1	A	96	ASP	CA-C	-5.80	1.45	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	302	HIS	N-CA	-5.80	1.38	1.46
3	G	250	PHE	CA-C	-5.79	1.45	1.52
1	C	127	ARG	CA-C	-5.79	1.45	1.52
4	H	57	VAL	CA-C	-5.79	1.45	1.52
3	G	255	GLN	N-CA	-5.79	1.39	1.46
2	E	370	VAL	CA-C	-5.79	1.45	1.52
3	G	233	ASP	CA-C	-5.79	1.45	1.52
1	C	54	GLU	CA-C	-5.78	1.45	1.52
2	E	237	LEU	CA-C	-5.78	1.45	1.52
4	H	143	LYS	N-CA	-5.78	1.39	1.46
2	F	404	VAL	CA-C	-5.78	1.45	1.52
1	C	498	LYS	N-CA	-5.78	1.39	1.46
2	E	226	PRO	CA-C	-5.78	1.44	1.52
5	I	22	VAL	CA-C	-5.78	1.45	1.52
1	B	479	LEU	CA-C	-5.78	1.45	1.52
1	C	221	THR	CA-C	-5.78	1.45	1.52
2	F	293	GLN	CA-C	-5.78	1.45	1.52
2	F	153	GLY	CA-C	-5.77	1.43	1.51
3	G	222	THR	CA-C	-5.77	1.45	1.52
4	H	132	GLN	N-CA	-5.77	1.39	1.46
1	A	463	LYS	N-CA	-5.77	1.39	1.46
3	G	12	SER	N-CA	-5.77	1.38	1.46
2	E	256	ASP	CA-C	-5.76	1.46	1.53
3	G	117	HIS	CA-C	-5.76	1.45	1.52
1	B	508	PHE	CA-C	-5.76	1.45	1.52
2	E	378	LEU	CA-C	-5.76	1.45	1.52
2	E	422	GLU	CA-C	-5.76	1.45	1.52
3	G	171	TYR	CA-C	-5.76	1.45	1.52
1	A	222	ASP	CA-C	-5.75	1.45	1.52
1	C	213	VAL	N-CA	-5.75	1.39	1.46
1	C	471	HIS	N-CA	-5.75	1.39	1.46
2	F	255	ILE	CA-C	-5.75	1.45	1.52
2	D	331	ALA	N-CA	-5.75	1.39	1.46
2	D	399	GLU	N-CA	-5.75	1.38	1.46
2	E	293	GLN	N-CA	-5.75	1.39	1.46
4	H	141	LEU	CA-C	-5.75	1.45	1.52
1	B	203	TYR	N-CA	-5.75	1.39	1.46
2	E	284	THR	CA-C	-5.75	1.44	1.52
1	B	305	LEU	CA-C	-5.74	1.45	1.52
1	C	146	MET	CA-C	-5.74	1.45	1.52
1	C	242	LEU	CA-C	-5.74	1.45	1.52
1	C	39	ALA	CA-C	-5.74	1.45	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	278	ALA	CA-C	-5.74	1.45	1.52
1	A	398	ARG	CA-C	-5.74	1.45	1.52
1	A	291	ARG	CA-C	-5.73	1.45	1.52
2	F	141	ASP	CA-C	-5.73	1.45	1.52
1	A	422	VAL	CA-C	-5.73	1.45	1.52
4	H	77	VAL	N-CA	-5.73	1.39	1.46
1	A	416	GLN	N-CA	-5.73	1.39	1.46
1	B	60	LYS	CA-C	-5.73	1.45	1.52
2	E	109	LYS	CA-C	-5.73	1.45	1.52
3	G	164	ARG	CA-C	-5.73	1.45	1.52
2	F	48	GLU	CA-C	-5.73	1.45	1.52
1	B	337	TYR	N-CA	-5.72	1.39	1.46
1	C	59	LEU	CA-C	-5.72	1.45	1.52
1	C	465	GLU	N-CA	-5.72	1.39	1.46
2	F	190	THR	CA-C	-5.72	1.45	1.52
2	F	298	THR	N-CA	-5.72	1.39	1.46
2	F	459	MET	CA-C	-5.72	1.45	1.52
2	E	321	ALA	N-CA	-5.72	1.42	1.46
2	E	177	HIS	CA-C	-5.72	1.45	1.52
1	A	93	ALA	CA-C	-5.71	1.45	1.52
1	A	330	GLN	CA-C	-5.71	1.45	1.52
2	D	379	GLN	N-CA	-5.71	1.39	1.46
2	F	431	LEU	CA-C	-5.71	1.45	1.52
1	A	210	ARG	CA-C	-5.71	1.45	1.52
1	C	419	SER	CA-C	-5.71	1.45	1.52
2	F	113	PHE	CA-C	-5.71	1.45	1.52
1	A	265	LEU	N-CA	-5.70	1.39	1.46
1	B	243	GLN	CA-C	-5.70	1.45	1.52
2	F	262	THR	CA-C	-5.70	1.45	1.52
2	D	162	LYS	CA-C	-5.70	1.45	1.52
1	C	485	THR	CA-C	-5.70	1.45	1.52
7	S	144	LYS	CA-C	-5.70	1.46	1.52
1	C	413	ALA	CA-C	-5.70	1.45	1.52
2	D	167	MET	CA-C	-5.70	1.45	1.52
2	F	376	LYS	CA-C	-5.70	1.45	1.52
2	F	443	GLN	CA-C	-5.70	1.45	1.52
2	D	117	HIS	CA-C	-5.70	1.45	1.52
2	D	449	TYR	CA-C	-5.70	1.46	1.53
2	F	24	GLN	N-CA	-5.70	1.39	1.46
9	U	16	ILE	CA-C	-5.70	1.46	1.52
1	C	467	ALA	CA-C	-5.69	1.45	1.52
1	B	55	PHE	N-CA	-5.69	1.39	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	280	GLN	CA-C	-5.69	1.45	1.52
2	F	419	GLN	CA-C	-5.69	1.45	1.52
1	B	259	ASP	CA-C	-5.69	1.44	1.52
2	E	460	VAL	CA-C	-5.69	1.47	1.52
1	B	265	LEU	CA-C	-5.68	1.45	1.52
1	C	297	ASP	CA-C	-5.68	1.43	1.52
1	A	338	ILE	N-CA	-5.68	1.40	1.46
1	B	382	ALA	CA-C	-5.68	1.45	1.52
2	F	286	ALA	CA-C	-5.68	1.45	1.52
5	I	4	TRP	N-CA	-5.68	1.39	1.46
1	B	387	ALA	CA-C	-5.68	1.45	1.52
1	C	69	ASP	CA-C	-5.68	1.45	1.52
1	A	394	LEU	CA-C	-5.68	1.45	1.52
2	E	225	PRO	CA-C	-5.68	1.46	1.52
2	D	16	VAL	CA-C	-5.67	1.45	1.52
1	B	257	PHE	CA-C	-5.67	1.45	1.52
1	B	431	GLY	CA-C	-5.67	1.46	1.52
1	B	283	LEU	CA-C	-5.67	1.45	1.52
3	G	243	ILE	N-CA	-5.67	1.40	1.46
7	S	46	LEU	CA-C	-5.67	1.45	1.52
2	E	421	ALA	N-CA	-5.67	1.39	1.46
3	G	116	LEU	CA-C	-5.66	1.45	1.52
1	A	383	MET	N-CA	-5.66	1.39	1.46
1	A	86	ASP	CA-C	-5.66	1.45	1.52
3	G	218	LYS	N-CA	-5.66	1.39	1.46
2	D	141	ASP	CA-C	-5.66	1.45	1.52
2	D	168	GLU	CA-C	-5.66	1.45	1.52
2	F	243	PHE	CA-C	-5.66	1.44	1.52
2	D	374	VAL	CA-C	-5.65	1.46	1.52
7	S	121	THR	CA-C	-5.65	1.45	1.52
1	B	386	VAL	CA-C	-5.65	1.46	1.52
1	A	16	ILE	CA-C	-5.65	1.46	1.52
2	D	261	PHE	N-CA	-5.65	1.39	1.46
1	C	483	ILE	CA-C	-5.64	1.45	1.52
2	F	126	MET	CA-C	-5.64	1.45	1.52
9	U	116	LEU	N-CA	-5.64	1.39	1.46
1	A	186	GLN	CA-C	-5.64	1.44	1.52
1	A	326	VAL	CA-C	-5.64	1.46	1.52
1	B	342	VAL	CA-C	-5.64	1.45	1.52
1	A	430	GLN	N-CA	-5.64	1.39	1.46
2	D	201	ILE	CA-C	-5.64	1.46	1.52
1	C	443	ALA	CA-C	-5.63	1.45	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	D	80	ALA	N-CA	-5.63	1.40	1.46
2	D	61	ILE	CA-C	-5.63	1.45	1.52
3	G	90	LYS	N-CA	-5.63	1.39	1.46
3	G	265	ILE	N-CA	-5.63	1.39	1.46
1	B	480	LEU	CA-C	-5.62	1.45	1.52
2	D	371	ALA	CA-C	-5.62	1.45	1.52
2	D	139	VAL	CA-C	-5.62	1.45	1.52
2	F	167	MET	CA-C	-5.62	1.45	1.52
2	E	329	LEU	CA-C	-5.62	1.45	1.52
2	E	195	ASP	CA-C	-5.62	1.45	1.52
1	A	239	ALA	CA-C	-5.61	1.45	1.52
1	A	492	GLU	N-CA	-5.61	1.39	1.46
1	C	474	SER	N-CA	-5.61	1.39	1.46
2	D	270	ALA	CA-C	-5.61	1.45	1.52
3	G	106	ILE	CA-C	-5.61	1.45	1.52
2	D	234	LEU	CA-C	-5.61	1.45	1.52
2	E	198	HIS	CA-C	-5.61	1.45	1.52
1	C	390	MET	CA-C	-5.61	1.45	1.52
2	F	172	ASN	CA-C	-5.61	1.45	1.52
1	B	178	ILE	CA-C	-5.61	1.46	1.52
2	E	305	THR	CA-C	-5.61	1.45	1.52
1	C	415	GLN	CA-C	-5.60	1.45	1.52
1	A	426	GLU	CA-C	-5.60	1.45	1.52
1	C	401	ALA	CA-C	-5.60	1.45	1.52
2	E	154	LEU	CA-C	-5.60	1.45	1.52
2	F	107	PRO	CA-C	-5.60	1.46	1.52
2	F	363	VAL	CA-C	-5.60	1.45	1.52
4	H	82	VAL	N-CA	-5.60	1.39	1.46
4	H	35	GLN	CA-C	-5.60	1.45	1.52
2	D	207	ASN	N-CA	-5.59	1.39	1.45
1	C	380	THR	CA-C	-5.59	1.45	1.52
2	E	454	GLU	CA-C	-5.59	1.45	1.52
1	B	63	SER	CA-C	-5.59	1.45	1.52
2	F	217	LEU	CA-C	-5.59	1.46	1.52
3	G	158	GLY	CA-C	-5.59	1.44	1.51
4	H	84	VAL	CA-C	-5.59	1.45	1.52
7	S	25	ALA	CA-C	-5.59	1.45	1.52
2	E	15	ALA	CA-C	-5.59	1.45	1.52
1	A	469	LEU	N-CA	-5.58	1.39	1.46
2	E	268	VAL	N-CA	-5.58	1.39	1.46
2	F	367	HIS	CA-C	-5.58	1.45	1.52
7	S	26	ALA	CA-C	-5.58	1.45	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	S	30	ASN	CA-C	-5.58	1.45	1.53
1	B	139	ARG	CA-C	-5.58	1.45	1.52
4	H	90	VAL	N-CA	-5.58	1.39	1.46
1	A	231	VAL	CA-C	-5.58	1.45	1.52
1	B	469	LEU	N-CA	-5.58	1.39	1.46
1	C	337	TYR	N-CA	-5.58	1.39	1.46
2	D	58	VAL	CA-C	-5.58	1.45	1.52
2	D	289	MET	N-CA	-5.58	1.39	1.46
2	E	282	GLN	CA-C	-5.58	1.46	1.52
8	T	72	GLN	N-CA	-5.58	1.39	1.46
3	G	157	GLU	CA-C	-5.57	1.46	1.52
1	A	495	ALA	CA-C	-5.57	1.45	1.52
1	C	342	VAL	N-CA	-5.57	1.39	1.46
3	G	216	SER	CA-C	-5.57	1.45	1.52
1	A	155	SER	N-CA	-5.57	1.39	1.46
2	F	450	ASP	CA-C	-5.57	1.45	1.52
1	C	277	ALA	CA-C	-5.57	1.45	1.52
2	F	36	LEU	CA-C	-5.57	1.46	1.52
3	G	2	THR	CA-C	-5.57	1.45	1.52
4	H	103	LEU	CA-C	-5.57	1.46	1.52
5	I	19	ALA	N-CA	-5.57	1.39	1.46
10	V	70	GLU	C-N	-5.57	1.25	1.33
1	B	414	THR	CA-C	-5.57	1.45	1.52
2	D	298	THR	CA-C	-5.56	1.46	1.52
1	B	472	VAL	CA-C	-5.56	1.44	1.52
3	G	129	LYS	N-CA	-5.56	1.38	1.45
3	G	238	ASN	CA-C	-5.56	1.45	1.52
1	B	213	VAL	CA-C	-5.56	1.45	1.52
1	B	281	MET	N-CA	-5.56	1.39	1.46
2	D	195	ASP	CA-C	-5.56	1.45	1.52
1	C	34	ILE	N-CA	-5.56	1.39	1.46
2	D	371	ALA	N-CA	-5.56	1.39	1.46
4	H	64	VAL	N-CA	-5.56	1.38	1.46
2	E	126	MET	CA-C	-5.55	1.45	1.52
2	E	361	ASN	CA-C	-5.55	1.46	1.53
1	B	268	TYR	CA-C	-5.55	1.45	1.52
1	C	420	ARG	CA-C	-5.55	1.45	1.52
1	C	87	ILE	CA-C	-5.55	1.46	1.52
2	D	263	GLN	N-CA	-5.55	1.39	1.46
4	H	36	VAL	N-CA	-5.55	1.39	1.46
2	D	413	PHE	N-CA	-5.55	1.39	1.46
2	F	224	GLU	CA-C	-5.55	1.45	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	449	TYR	N-CA	-5.55	1.39	1.46
2	D	276	PRO	CA-C	-5.55	1.44	1.52
3	G	211	ASN	CA-C	-5.55	1.45	1.52
4	H	130	GLU	CA-C	-5.55	1.45	1.52
2	E	213	SER	CA-C	-5.54	1.45	1.53
5	I	43	LYS	N-CA	-5.54	1.39	1.46
3	G	73	SER	CA-C	-5.54	1.45	1.53
7	S	105	PHE	N-CA	-5.54	1.39	1.46
1	C	394	LEU	N-CA	-5.54	1.39	1.46
2	E	286	ALA	CA-C	-5.54	1.45	1.52
2	F	194	ASN	CA-C	-5.54	1.45	1.52
2	E	168	GLU	N-CA	-5.54	1.39	1.46
1	A	54	GLU	N-CA	-5.54	1.39	1.46
1	A	177	SER	CA-C	-5.54	1.45	1.52
1	A	324	LEU	N-CA	-5.54	1.40	1.46
2	D	368	TYR	CA-C	-5.54	1.45	1.52
2	F	331	ALA	N-CA	-5.54	1.39	1.46
1	B	383	MET	CA-C	-5.53	1.45	1.52
2	F	306	SER	CA-C	-5.53	1.45	1.52
2	E	141	ASP	N-CA	-5.53	1.39	1.46
1	C	140	ILE	N-CA	-5.53	1.39	1.46
1	B	467	ALA	CA-C	-5.53	1.45	1.52
1	A	494	ASP	CA-C	-5.52	1.45	1.52
2	E	217	LEU	CA-C	-5.52	1.46	1.52
3	G	183	THR	CA-C	-5.52	1.45	1.52
1	C	34	ILE	CA-C	-5.51	1.45	1.52
2	F	196	LEU	N-CA	-5.51	1.39	1.46
1	C	453	LEU	CA-C	-5.51	1.45	1.52
1	A	482	LYS	CA-C	-5.51	1.45	1.52
1	A	104	LEU	CA-C	-5.51	1.45	1.52
2	D	39	GLN	CA-C	-5.51	1.45	1.52
1	C	416	GLN	CA-C	-5.51	1.46	1.52
4	H	25	GLN	CA-C	-5.51	1.45	1.52
1	A	266	ILE	N-CA	-5.50	1.40	1.46
2	D	470	ALA	CA-C	-5.50	1.45	1.52
2	E	22	ASP	CA-C	-5.50	1.46	1.52
1	C	418	LEU	CA-C	-5.50	1.45	1.52
1	A	342	VAL	CA-C	-5.50	1.45	1.52
1	B	197	LYS	CA-C	-5.50	1.47	1.53
1	C	140	ILE	CA-C	-5.50	1.46	1.52
1	C	322	THR	CA-C	-5.50	1.46	1.52
1	C	383	MET	N-CA	-5.50	1.39	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	S	6	ARG	N-CA	-5.50	1.41	1.46
2	D	253	LEU	CA-C	-5.50	1.46	1.52
2	D	316	ASP	N-CA	-5.49	1.38	1.45
1	C	398	ARG	CA-C	-5.49	1.45	1.52
3	G	268	GLY	CA-C	-5.49	1.44	1.51
7	S	4	LEU	CA-C	-5.49	1.46	1.52
1	B	443	ALA	CA-C	-5.49	1.45	1.52
2	D	259	PHE	N-CA	-5.49	1.39	1.46
2	E	163	THR	CA-C	-5.49	1.45	1.52
3	G	14	LYS	N-CA	-5.49	1.39	1.46
1	C	422	VAL	CA-C	-5.49	1.45	1.52
2	D	398	GLU	CA-C	-5.48	1.44	1.52
2	F	334	VAL	CA-C	-5.48	1.45	1.52
3	G	114	SER	CA-C	-5.48	1.45	1.52
7	S	24	SER	N-CA	-5.48	1.39	1.46
1	B	423	ARG	CA-C	-5.48	1.45	1.52
2	E	139	VAL	CA-C	-5.48	1.45	1.52
1	B	199	LEU	N-CA	-5.48	1.39	1.46
2	F	231	ARG	CA-C	-5.48	1.45	1.52
1	C	372	SER	CA-C	-5.47	1.46	1.52
2	F	361	ASN	CA-C	-5.47	1.45	1.52
2	E	309	ALA	CA-C	-5.47	1.45	1.52
2	D	262	THR	CA-C	-5.47	1.46	1.52
4	H	128	ARG	N-CA	-5.47	1.39	1.46
1	A	264	ALA	N-CA	-5.47	1.38	1.45
1	C	414	THR	N-CA	-5.47	1.39	1.46
2	D	183	PHE	CA-C	-5.47	1.46	1.52
2	F	183	PHE	N-CA	-5.46	1.39	1.46
1	B	67	GLU	CA-C	-5.46	1.45	1.52
9	U	121	ASN	C-N	-5.46	1.25	1.33
2	D	196	LEU	N-CA	-5.46	1.39	1.46
7	S	5	VAL	CA-C	-5.46	1.45	1.52
2	F	344	ILE	CA-C	-5.46	1.46	1.52
1	B	323	ALA	CA-C	-5.46	1.46	1.52
3	G	82	HIS	CA-C	-5.46	1.45	1.52
1	A	299	PHE	N-CA	-5.45	1.39	1.46
2	D	171	ASN	N-CA	-5.45	1.39	1.46
3	G	56	ASP	N-CA	-5.45	1.39	1.46
7	S	32	LEU	N-CA	-5.45	1.39	1.46
1	C	291	ARG	CA-C	-5.45	1.46	1.52
2	D	192	GLU	CA-C	-5.45	1.45	1.52
2	E	390	ILE	CA-C	-5.45	1.45	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	271	LEU	CA-C	-5.45	1.45	1.52
2	F	291	THR	N-CA	-5.45	1.39	1.46
4	H	30	SER	CA-C	-5.45	1.46	1.53
1	A	140	ILE	N-CA	-5.45	1.39	1.46
1	C	61	GLY	CA-C	-5.45	1.45	1.51
1	C	397	TYR	N-CA	-5.45	1.39	1.46
1	A	212	THR	CA-C	-5.45	1.45	1.52
1	A	496	LYS	N-CA	-5.45	1.39	1.46
1	B	74	VAL	N-CA	-5.45	1.39	1.46
1	B	167	ILE	CA-C	-5.45	1.45	1.52
2	E	47	LEU	CA-C	-5.45	1.46	1.52
2	E	218	VAL	N-CA	-5.45	1.39	1.46
1	C	387	ALA	CA-C	-5.44	1.45	1.52
1	C	367	VAL	N-CA	-5.44	1.40	1.46
1	A	66	LEU	CA-C	-5.44	1.46	1.53
1	B	216	LEU	CA-C	-5.44	1.46	1.52
1	B	45	ARG	CA-C	-5.44	1.45	1.52
2	D	377	ILE	CA-C	-5.44	1.45	1.52
3	G	14	LYS	CA-C	-5.44	1.45	1.52
1	C	113	ASN	CA-C	-5.44	1.45	1.52
3	G	133	ARG	CA-C	-5.44	1.46	1.53
2	E	246	GLN	N-CA	-5.43	1.39	1.46
2	F	237	LEU	CA-C	-5.43	1.46	1.52
4	H	135	ILE	N-CA	-5.43	1.40	1.46
1	A	349	GLN	CA-C	-5.43	1.45	1.52
1	B	194	ASP	CA-C	-5.43	1.46	1.52
2	E	181	SER	CA-C	-5.43	1.45	1.52
1	B	245	LEU	CA-C	-5.43	1.45	1.52
2	D	387	ILE	N-CA	-5.43	1.40	1.46
1	C	496	LYS	N-CA	-5.43	1.39	1.46
3	G	113	ARG	CA-C	-5.43	1.47	1.53
1	A	322	THR	CA-C	-5.42	1.46	1.52
1	C	39	ALA	N-CA	-5.42	1.39	1.46
2	D	83	ARG	CA-C	-5.42	1.46	1.52
4	H	39	PRO	CA-C	-5.42	1.44	1.52
9	U	81	ASP	CA-C	-5.42	1.45	1.52
1	C	251	CYS	N-CA	-5.42	1.40	1.46
2	D	395	GLU	N-CA	-5.42	1.38	1.46
2	F	289	MET	N-CA	-5.42	1.39	1.46
3	G	262	LEU	N-CA	-5.42	1.39	1.46
1	A	139	ARG	CA-C	-5.42	1.45	1.52
1	C	223	ALA	N-CA	-5.42	1.39	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	138	LYS	CA-C	-5.42	1.46	1.52
1	A	430	GLN	CA-C	-5.42	1.46	1.52
1	A	70	ASN	N-CA	-5.41	1.39	1.46
1	A	380	THR	CA-C	-5.41	1.45	1.52
2	D	400	ASP	CA-C	-5.41	1.46	1.52
8	T	161	ILE	N-CA	-5.41	1.39	1.46
1	B	175	LYS	CA-C	-5.41	1.46	1.52
1	B	263	HIS	N-CA	-5.41	1.39	1.46
2	E	200	MET	CA-C	-5.41	1.45	1.52
3	G	209	LEU	N-CA	-5.41	1.39	1.46
1	A	260	ASN	CA-C	-5.41	1.46	1.53
1	A	137	ILE	N-CA	-5.41	1.40	1.46
2	D	321	ALA	N-CA	-5.41	1.42	1.46
2	E	419	GLN	CA-C	-5.41	1.46	1.52
2	F	313	PRO	CA-C	-5.41	1.46	1.52
2	D	107	PRO	CA-C	-5.40	1.47	1.53
2	F	75	VAL	N-CA	-5.40	1.39	1.46
1	B	152	ALA	CA-C	-5.40	1.45	1.52
2	F	53	LEU	CA-C	-5.40	1.45	1.52
1	B	49	ALA	N-CA	-5.40	1.39	1.46
1	C	462	THR	CA-C	-5.40	1.45	1.52
2	E	206	ILE	N-CA	-5.40	1.40	1.46
1	B	27	GLU	CA-C	-5.40	1.45	1.52
1	B	187	LYS	CA-C	-5.40	1.45	1.52
2	F	325	THR	N-CA	-5.39	1.39	1.46
3	G	25	MET	CA-C	-5.39	1.45	1.52
2	D	166	ILE	CA-C	-5.39	1.46	1.52
2	E	165	LEU	CA-C	-5.39	1.46	1.52
1	C	382	ALA	CA-C	-5.39	1.46	1.52
1	B	338	ILE	N-CA	-5.39	1.40	1.46
1	C	445	ILE	CA-C	-5.39	1.46	1.52
2	D	349	ASP	CA-C	-5.39	1.47	1.52
2	E	274	ARG	N-CA	-5.38	1.39	1.45
2	F	138	LYS	CA-C	-5.38	1.46	1.52
1	B	145	PRO	CA-C	-5.38	1.47	1.53
1	C	500	ILE	N-CA	-5.38	1.40	1.46
2	D	36	LEU	CA-C	-5.38	1.46	1.52
1	A	63	SER	CA-C	-5.38	1.46	1.52
1	B	256	TYR	N-CA	-5.38	1.40	1.46
1	C	318	GLY	CA-C	-5.38	1.44	1.51
1	B	279	ARG	N-CA	-5.38	1.40	1.46
1	C	492	GLU	N-CA	-5.38	1.40	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	H	17	SER	CA-C	-5.38	1.46	1.52
1	A	462	THR	CA-C	-5.38	1.45	1.52
2	D	305	THR	N-CA	-5.38	1.39	1.46
3	G	267	SER	CA-C	-5.38	1.45	1.52
8	T	164	CYS	N-CA	5.38	1.53	1.46
1	B	166	LEU	N-CA	-5.38	1.39	1.46
2	D	200	MET	N-CA	-5.37	1.39	1.46
1	B	356	LEU	CA-C	-5.37	1.45	1.52
1	A	429	LYS	N-CA	-5.36	1.39	1.46
2	F	76	LEU	CA-C	-5.36	1.46	1.52
1	B	60	LYS	N-CA	-5.36	1.39	1.45
4	H	114	LYS	CA-C	-5.36	1.45	1.52
1	B	66	LEU	CA-C	-5.36	1.46	1.52
2	D	67	GLU	CA-C	-5.36	1.45	1.52
2	D	254	PHE	CA-C	-5.36	1.46	1.52
2	F	326	PHE	CA-C	-5.36	1.45	1.52
4	H	112	LEU	CA-C	-5.36	1.45	1.52
2	E	349	ASP	CA-C	-5.36	1.46	1.52
2	F	403	THR	N-CA	-5.36	1.39	1.46
1	B	260	ASN	N-CA	-5.35	1.40	1.46
1	C	93	ALA	CA-C	-5.35	1.46	1.52
2	F	192	GLU	CA-C	-5.35	1.45	1.52
3	G	203	ASN	CA-C	-5.35	1.43	1.52
4	H	41	GLN	CA-C	-5.35	1.45	1.52
3	G	31	TYR	N-CA	-5.35	1.40	1.46
7	S	142	LEU	N-CA	-5.35	1.39	1.46
1	B	393	GLU	CA-C	-5.34	1.45	1.52
2	F	216	ALA	CA-C	-5.34	1.46	1.52
1	B	462	THR	CA-C	-5.34	1.45	1.52
2	D	374	VAL	N-CA	-5.34	1.40	1.46
1	A	393	GLU	CA-C	-5.34	1.45	1.52
1	B	215	GLN	CA-C	-5.34	1.45	1.52
7	S	157	SER	N-CA	-5.34	1.39	1.46
4	H	115	ALA	CA-C	-5.33	1.46	1.52
2	D	382	LYS	CA-C	-5.33	1.45	1.52
7	S	92	ASN	N-CA	-5.33	1.39	1.46
2	F	147	ALA	CA-C	-5.33	1.46	1.52
1	B	421	GLY	N-CA	-5.33	1.39	1.45
3	G	40	PRO	CA-C	-5.33	1.44	1.52
2	F	180	TYR	CA-C	-5.33	1.46	1.53
3	G	217	LEU	N-CA	-5.33	1.40	1.46
1	A	263	HIS	N-CA	-5.33	1.40	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	467	VAL	CA-C	-5.32	1.46	1.52
2	F	141	ASP	N-CA	-5.32	1.40	1.46
2	D	387	ILE	CA-C	-5.32	1.46	1.52
1	A	421	GLY	CA-C	-5.32	1.46	1.52
1	B	38	ILE	CA-C	-5.32	1.45	1.52
1	A	389	THR	CA-C	-5.32	1.46	1.52
1	B	25	LEU	CA-C	-5.32	1.47	1.53
1	B	140	ILE	N-CA	-5.32	1.40	1.46
1	B	321	LEU	CA-C	-5.32	1.46	1.52
2	E	407	ALA	CA-C	-5.32	1.45	1.52
1	A	303	SER	CA-C	-5.32	1.46	1.52
2	D	112	GLN	CA-C	-5.31	1.46	1.52
1	A	290	GLY	CA-C	-5.31	1.44	1.51
1	C	326	VAL	N-CA	-5.31	1.40	1.46
7	S	37	LYS	N-CA	-5.31	1.39	1.46
1	B	201	CYS	CA-C	-5.30	1.46	1.52
2	F	322	PRO	CA-C	-5.30	1.43	1.52
7	S	46	LEU	N-CA	-5.30	1.39	1.46
5	I	33	ASN	CA-C	-5.30	1.45	1.52
1	C	509	GLU	CA-C	-5.30	1.45	1.52
2	D	170	ILE	CA-C	-5.30	1.46	1.52
3	G	243	ILE	CA-C	-5.30	1.46	1.52
1	A	244	TYR	N-CA	-5.30	1.40	1.46
1	A	440	GLU	CA-C	-5.30	1.45	1.52
1	C	219	ARG	CA-C	-5.30	1.45	1.52
1	A	259	ASP	CA-C	-5.29	1.45	1.52
1	C	355	GLU	CA-C	-5.29	1.45	1.52
2	D	24	GLN	N-CA	-5.29	1.39	1.46
2	D	274	ARG	CA-C	-5.29	1.46	1.53
2	E	96	ASN	CA-C	-5.29	1.46	1.53
1	C	155	SER	CA-C	-5.29	1.46	1.53
1	A	276	VAL	N-CA	-5.29	1.40	1.46
1	A	304	ARG	N-CA	-5.29	1.39	1.46
1	B	312	MET	CA-C	-5.29	1.45	1.53
2	F	351	LEU	CA-C	-5.29	1.45	1.52
3	G	3	LEU	N-CA	-5.29	1.39	1.46
3	G	17	GLN	CA-C	-5.28	1.45	1.52
2	E	326	PHE	CA-C	-5.28	1.46	1.52
1	B	124	LYS	CA-C	-5.28	1.45	1.52
4	H	83	THR	N-CA	-5.28	1.39	1.46
1	A	46	ASN	CA-C	-5.28	1.45	1.52
2	F	422	GLU	CA-C	-5.28	1.45	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	448	GLU	CA-C	-5.28	1.46	1.52
5	I	15	SER	N-CA	-5.28	1.40	1.46
1	A	474	SER	N-CA	-5.27	1.39	1.46
2	D	427	HIS	CA-C	-5.27	1.46	1.52
1	C	323	ALA	CA-C	-5.27	1.46	1.52
2	F	372	ARG	CA-C	-5.27	1.45	1.52
1	C	499	GLU	N-CA	-5.27	1.39	1.46
2	E	410	ILE	N-CA	-5.27	1.40	1.46
1	A	17	LEU	N-CA	-5.27	1.39	1.46
1	A	213	VAL	N-CA	-5.27	1.40	1.46
1	A	392	LEU	N-CA	-5.27	1.39	1.46
2	D	385	GLN	CA-C	-5.27	1.45	1.52
1	A	41	VAL	N-CA	-5.26	1.40	1.46
2	D	129	GLU	CA-C	-5.26	1.46	1.52
2	F	293	GLN	N-CA	-5.26	1.40	1.46
2	E	328	HIS	CA-C	-5.26	1.45	1.52
3	G	19	ILE	CA-C	-5.26	1.46	1.52
1	B	215	GLN	N-CA	-5.26	1.40	1.46
1	C	226	MET	N-CA	-5.26	1.39	1.46
3	G	68	ILE	N-CA	-5.26	1.40	1.46
2	D	151	LYS	CA-C	-5.26	1.46	1.52
2	F	371	ALA	C-O	-5.26	1.18	1.24
3	G	13	ILE	CA-C	-5.26	1.44	1.52
2	E	175	LYS	N-CA	-5.25	1.40	1.46
2	F	112	GLN	CA-C	-5.25	1.46	1.52
2	E	355	SER	CA-C	-5.25	1.46	1.52
2	F	26	ASP	CA-C	-5.25	1.46	1.52
3	G	105	ILE	N-CA	-5.25	1.40	1.46
1	B	216	LEU	N-CA	-5.25	1.40	1.46
1	C	265	LEU	CA-C	-5.25	1.46	1.52
2	F	305	THR	N-CA	-5.24	1.39	1.46
8	T	99	ILE	CA-C	-5.24	1.46	1.52
1	A	276	VAL	CA-C	-5.24	1.46	1.52
1	A	421	GLY	N-CA	-5.24	1.39	1.45
2	D	370	VAL	N-CA	-5.24	1.40	1.46
2	F	144	ALA	CA-C	-5.24	1.46	1.52
1	B	430	GLN	CA-C	-5.24	1.46	1.52
2	F	274	ARG	N-CA	-5.24	1.39	1.45
1	C	495	ALA	CA-C	-5.24	1.46	1.52
2	E	459	MET	CA-C	-5.24	1.45	1.52
2	E	275	ILE	N-CA	-5.24	1.41	1.47
3	G	205	GLN	CA-C	-5.24	1.45	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	452	TYR	CA-C	-5.23	1.46	1.52
1	A	142	VAL	CA-C	-5.23	1.48	1.53
1	B	50	GLU	CA-C	-5.23	1.45	1.52
1	B	370	SER	CA-C	-5.23	1.45	1.52
1	C	180	ILE	CA-C	-5.23	1.46	1.52
2	D	382	LYS	N-CA	-5.23	1.39	1.46
2	F	330	ASP	CA-C	-5.23	1.45	1.52
1	A	472	VAL	CA-C	-5.23	1.45	1.52
1	B	126	ARG	CA-C	-5.22	1.46	1.52
5	I	13	ARG	N-CA	-5.22	1.40	1.46
1	B	182	THR	N-CA	-5.22	1.40	1.46
2	D	119	GLU	CA-C	-5.22	1.46	1.52
2	E	425	THR	CA-C	-5.22	1.46	1.52
1	C	241	PRO	CA-C	-5.21	1.44	1.52
3	G	271	ALA	CA-C	-5.21	1.45	1.52
2	F	133	LEU	CA-C	-5.21	1.46	1.52
7	S	135	LYS	CA-C	-5.21	1.46	1.52
1	C	70	ASN	N-CA	-5.21	1.39	1.46
1	A	66	LEU	N-CA	-5.21	1.39	1.46
1	C	99	VAL	N-CA	-5.21	1.40	1.46
2	E	57	THR	N-CA	-5.21	1.39	1.46
2	F	382	LYS	N-CA	-5.21	1.39	1.46
4	H	97	ALA	CA-C	-5.21	1.46	1.52
7	S	67	LYS	CA-C	-5.21	1.45	1.52
2	E	154	LEU	N-CA	-5.21	1.39	1.46
4	H	64	VAL	CA-C	-5.21	1.46	1.52
1	A	369	LEU	CA-C	-5.20	1.45	1.52
2	E	127	SER	CA-C	-5.20	1.46	1.52
2	E	464	GLU	CA-C	-5.20	1.45	1.52
2	D	152	ILE	N-CA	-5.20	1.40	1.46
2	F	80	ALA	N-CA	-5.20	1.41	1.46
1	B	69	ASP	CA-C	-5.20	1.45	1.52
1	B	494	ASP	CA-C	-5.19	1.46	1.52
1	A	152	ALA	CA-C	-5.19	1.45	1.52
2	E	158	ALA	CA-C	-5.19	1.45	1.52
2	D	331	ALA	CA-C	-5.19	1.46	1.52
2	E	175	LYS	CA-C	-5.19	1.46	1.52
2	F	336	SER	CA-C	-5.19	1.46	1.52
2	D	218	VAL	CA-C	-5.19	1.46	1.52
1	B	504	PHE	N-CA	-5.18	1.40	1.46
2	D	17	ILE	N-CA	-5.18	1.39	1.46
2	D	255	ILE	CA-C	-5.18	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	215	GLN	N-CA	-5.18	1.40	1.46
2	E	439	LYS	CA-C	-5.18	1.46	1.52
2	F	170	ILE	N-CA	-5.18	1.40	1.46
2	D	412	ARG	CA-C	-5.18	1.45	1.52
1	B	493	SER	CA-C	-5.18	1.46	1.52
2	D	411	GLN	CA-C	-5.18	1.45	1.52
2	D	467	VAL	CA-C	-5.18	1.46	1.52
2	E	473	LEU	CA-C	-5.18	1.46	1.52
3	G	234	ASN	N-CA	-5.17	1.40	1.46
1	B	51	GLU	CA-C	-5.17	1.46	1.52
2	F	244	ARG	N-CA	-5.17	1.40	1.46
3	G	156	ASP	CA-C	-5.17	1.45	1.52
9	U	33	GLU	CA-C	-5.17	1.46	1.52
1	A	356	LEU	N-CA	-5.17	1.40	1.46
3	G	169	ILE	N-CA	-5.17	1.40	1.46
1	A	355	GLU	CA-C	-5.17	1.45	1.52
1	B	492	GLU	N-CA	-5.17	1.40	1.46
1	C	438	ILE	N-CA	-5.17	1.40	1.46
2	D	252	LEU	CA-C	-5.17	1.46	1.52
2	F	200	MET	N-CA	-5.17	1.39	1.46
2	F	383	SER	N-CA	-5.17	1.40	1.46
1	B	392	LEU	N-CA	-5.17	1.40	1.46
1	C	215	GLN	N-CA	-5.17	1.40	1.46
4	H	24	THR	N-CA	-5.16	1.39	1.45
1	A	50	GLU	CA-C	-5.16	1.46	1.53
1	A	70	ASN	CA-C	-5.16	1.46	1.52
1	A	278	TYR	CA-C	-5.16	1.46	1.52
2	D	20	VAL	N-CA	-5.16	1.40	1.46
4	H	114	LYS	N-CA	-5.16	1.40	1.46
1	A	132	LYS	CA-C	-5.16	1.45	1.53
1	A	301	LEU	N-CA	-5.16	1.40	1.46
2	D	59	ARG	N-CA	-5.16	1.39	1.46
4	H	31	ALA	CA-C	-5.16	1.46	1.52
1	B	335	SER	N-CA	-5.15	1.40	1.46
1	A	43	GLY	CA-C	-5.15	1.44	1.51
2	D	96	ASN	CA-C	-5.15	1.46	1.53
2	E	102	ILE	N-CA	-5.15	1.40	1.46
4	H	24	THR	CA-C	-5.15	1.46	1.52
1	A	165	GLU	CA-C	-5.15	1.46	1.52
1	A	272	SER	CA-C	-5.15	1.46	1.52
2	D	25	PHE	CA-C	-5.15	1.46	1.52
2	F	160	VAL	N-CA	-5.15	1.40	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	W	11	THR	C-O	-5.15	1.19	1.24
1	C	304	ARG	N-CA	-5.15	1.40	1.46
1	C	429	LYS	CA-C	-5.15	1.46	1.53
5	I	29	GLU	CA-C	-5.15	1.46	1.52
2	E	384	LEU	CA-C	-5.15	1.45	1.52
2	F	294	GLU	CA-C	-5.15	1.45	1.52
2	D	144	ALA	N-CA	-5.14	1.40	1.46
2	F	93	ARG	CA-C	-5.14	1.46	1.52
1	A	215	GLN	CA-C	-5.14	1.46	1.52
2	E	24	GLN	CA-C	-5.14	1.46	1.52
1	B	180	ILE	CA-C	-5.14	1.46	1.52
1	A	392	LEU	CA-C	-5.14	1.46	1.52
2	E	200	MET	N-CA	-5.14	1.39	1.46
2	F	225	PRO	CA-C	-5.14	1.47	1.52
1	C	502	THR	CA-C	-5.14	1.46	1.52
3	G	149	LEU	CA-C	-5.14	1.46	1.52
3	G	215	TYR	CA-C	-5.14	1.46	1.52
11	W	211	ALA	N-CA	-5.13	1.40	1.46
2	E	400	ASP	N-CA	-5.13	1.40	1.46
1	B	303	SER	N-CA	-5.13	1.40	1.46
8	T	104	GLU	CA-C	-5.13	1.46	1.52
1	A	465	GLU	CA-C	-5.13	1.46	1.52
2	E	418	PHE	CA-C	-5.13	1.46	1.52
2	D	161	GLY	N-CA	-5.12	1.38	1.45
1	B	322	THR	CA-C	-5.12	1.46	1.52
1	C	342	VAL	CA-C	-5.12	1.46	1.52
2	F	399	GLU	N-CA	-5.12	1.40	1.46
3	G	55	ALA	CA-C	-5.12	1.46	1.52
4	H	109	LYS	CA-C	-5.12	1.46	1.52
1	A	256	TYR	N-CA	-5.12	1.40	1.46
1	B	465	GLU	N-CA	-5.12	1.40	1.46
2	E	53	LEU	CA-C	-5.12	1.45	1.52
1	C	481	GLY	N-CA	-5.12	1.39	1.45
2	E	449	TYR	CA-C	-5.12	1.45	1.52
2	F	52	HIS	CA-C	-5.12	1.46	1.53
1	A	232	VAL	CA-C	-5.12	1.46	1.52
1	A	325	PRO	CA-C	-5.11	1.45	1.52
2	F	381	TYR	CA-C	-5.11	1.46	1.52
3	G	30	LYS	N-CA	-5.11	1.40	1.46
4	H	66	HIS	N-CA	-5.11	1.39	1.46
1	C	226	MET	CA-C	-5.11	1.45	1.52
2	D	332	THR	CA-C	-5.11	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	I	14	TYR	N-CA	-5.11	1.40	1.46
1	C	223	ALA	CA-C	-5.11	1.45	1.52
2	D	309	ALA	CA-C	-5.11	1.46	1.52
1	A	87	ILE	N-CA	-5.11	1.40	1.46
2	F	421	ALA	CA-C	-5.11	1.45	1.52
3	G	7	THR	CA-C	-5.11	1.46	1.52
3	G	194	ASP	CA-C	-5.11	1.46	1.52
3	G	27	ALA	CA-C	-5.10	1.46	1.52
3	G	19	ILE	N-CA	-5.10	1.40	1.46
2	D	221	GLN	CA-C	-5.10	1.46	1.53
1	C	343	ILE	CA-C	-5.10	1.46	1.52
2	D	344	ILE	CA-C	-5.10	1.47	1.52
2	E	166	ILE	CA-C	-5.10	1.46	1.52
4	H	119	LEU	CA-C	-5.10	1.46	1.52
2	E	80	ALA	N-CA	-5.09	1.41	1.46
2	E	311	TYR	N-CA	-5.09	1.40	1.46
2	E	368	TYR	N-CA	-5.09	1.40	1.46
4	H	133	ILE	N-CA	-5.09	1.40	1.46
7	S	150	LEU	CA-C	-5.09	1.46	1.52
1	B	468	PHE	N-CA	-5.09	1.40	1.46
1	C	240	ALA	N-CA	-5.09	1.41	1.46
2	D	125	GLU	CA-C	-5.09	1.45	1.52
7	S	57	ASN	CA-C	-5.09	1.46	1.52
7	S	59	TYR	CA-C	-5.08	1.45	1.52
1	A	418	LEU	N-CA	-5.08	1.40	1.46
2	F	137	ILE	CA-C	-5.08	1.46	1.52
2	F	132	ILE	N-CA	-5.08	1.39	1.46
2	F	234	LEU	CA-C	-5.08	1.46	1.52
2	E	298	THR	CA-C	-5.08	1.46	1.53
2	E	201	ILE	N-CA	-5.08	1.40	1.46
2	E	334	VAL	N-CA	-5.08	1.40	1.46
3	G	9	ARG	N-CA	-5.08	1.39	1.46
1	C	87	ILE	N-CA	-5.07	1.40	1.46
2	F	22	ASP	N-CA	-5.07	1.40	1.46
1	A	241	PRO	CA-C	-5.07	1.44	1.52
2	E	84	ILE	C-N	-5.07	1.27	1.33
7	S	34	GLN	N-CA	-5.07	1.40	1.46
1	B	161	ARG	CA-C	-5.07	1.46	1.52
1	B	349	GLN	N-CA	-5.07	1.39	1.45
2	F	407	ALA	N-CA	-5.07	1.40	1.46
1	C	476	HIS	N-CA	-5.07	1.40	1.46
1	C	178	ILE	N-CA	-5.06	1.40	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	304	ARG	CA-C	-5.06	1.46	1.52
2	F	384	LEU	CA-C	-5.06	1.45	1.52
4	H	18	PHE	N-CA	-5.06	1.40	1.46
1	B	54	GLU	N-CA	-5.06	1.39	1.46
2	D	131	GLU	CA-C	-5.06	1.46	1.52
2	E	396	LEU	CA-C	-5.06	1.46	1.52
2	F	95	MET	N-CA	-5.06	1.39	1.45
1	C	273	LYS	CA-C	-5.05	1.46	1.52
1	C	300	TYR	N-CA	-5.05	1.40	1.46
2	E	22	ASP	N-CA	-5.05	1.40	1.46
2	E	188	GLU	CA-C	-5.05	1.46	1.52
1	B	104	LEU	CA-C	-5.05	1.46	1.52
1	A	216	LEU	N-CA	-5.05	1.40	1.46
1	B	252	SER	CA-C	-5.05	1.46	1.52
1	B	477	GLN	CA-C	-5.05	1.45	1.52
2	F	170	ILE	CA-C	-5.05	1.46	1.52
3	G	184	ILE	CA-C	-5.05	1.45	1.52
1	C	35	GLY	CA-C	-5.05	1.44	1.51
2	D	383	SER	CA-C	-5.05	1.46	1.52
2	F	258	ILE	N-CA	-5.05	1.39	1.46
3	G	240	SER	CA-C	-5.05	1.46	1.52
1	B	181	ASP	CA-C	-5.05	1.45	1.52
3	G	206	GLU	N-CA	-5.05	1.39	1.46
1	C	367	VAL	CA-C	-5.04	1.46	1.52
2	F	115	ALA	CA-C	-5.04	1.46	1.52
1	B	418	LEU	N-CA	-5.04	1.40	1.46
1	A	99	VAL	N-CA	-5.04	1.40	1.46
1	C	35	GLY	N-CA	-5.04	1.38	1.45
2	E	179	GLY	CA-C	-5.04	1.44	1.51
2	E	471	ASP	CA-C	-5.04	1.46	1.52
2	D	286	ALA	CA-C	-5.04	1.46	1.52
2	F	166	ILE	N-CA	-5.04	1.40	1.46
2	F	365	SER	CA-C	-5.04	1.45	1.52
2	D	325	THR	N-CA	-5.03	1.40	1.46
9	U	113	GLU	N-CA	5.03	1.52	1.46
2	D	146	TYR	CA-C	-5.03	1.46	1.53
2	D	360	PRO	CA-C	-5.03	1.45	1.52
1	B	432	GLN	CA-C	-5.03	1.46	1.52
2	D	313	PRO	CA-C	-5.03	1.46	1.52
3	G	175	GLU	N-CA	-5.03	1.39	1.45
1	A	182	THR	CA-C	-5.03	1.46	1.52
1	B	508	PHE	N-CA	-5.03	1.40	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	425	THR	N-CA	-5.03	1.40	1.46
1	C	475	GLN	N-CA	-5.03	1.40	1.46
2	F	392	GLY	N-CA	5.03	1.52	1.45
3	G	228	ARG	N-CA	-5.03	1.40	1.46
1	B	475	GLN	CA-C	-5.02	1.47	1.53
1	B	304	ARG	N-CA	-5.02	1.40	1.46
5	I	17	ILE	N-CA	-5.02	1.39	1.46
1	A	59	LEU	CA-C	-5.02	1.46	1.53
1	C	152	ALA	N-CA	-5.02	1.40	1.46
2	D	94	ILE	CA-C	-5.02	1.46	1.52
2	E	380	ASP	CA-C	-5.02	1.46	1.52
2	F	339	ILE	CA-C	-5.02	1.46	1.52
2	D	15	ALA	CA-C	-5.02	1.46	1.52
2	E	305	THR	N-CA	-5.02	1.40	1.46
2	F	392	GLY	C-N	5.02	1.41	1.33
2	F	206	ILE	N-CA	-5.02	1.41	1.46
1	B	416	GLN	N-CA	-5.01	1.40	1.46
1	C	157	VAL	N-CA	-5.01	1.40	1.46
1	C	402	ALA	N-CA	-5.01	1.40	1.46
2	D	22	ASP	N-CA	-5.01	1.40	1.46
2	E	182	VAL	N-CA	-5.01	1.40	1.46
1	B	278	TYR	N-CA	-5.01	1.40	1.46
2	E	299	THR	CA-C	-5.01	1.46	1.52
4	H	94	ALA	N-CA	-5.01	1.40	1.46
7	S	90	ALA	N-CA	-5.01	1.40	1.46
1	A	339	PRO	CA-C	-5.01	1.45	1.52
2	F	464	GLU	CA-C	-5.01	1.46	1.52
1	C	472	VAL	CA-C	-5.01	1.45	1.52
2	E	289	MET	CA-C	-5.01	1.46	1.52
4	H	27	PHE	N-CA	-5.01	1.39	1.46
2	E	69	LEU	CA-C	-5.00	1.46	1.52
2	F	96	ASN	CA-C	-5.00	1.46	1.53
1	B	59	LEU	CA-C	-5.00	1.46	1.52
1	B	325	PRO	CA-C	-5.00	1.45	1.52

All (1091) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	S	110	SER	CA-C-N	28.38	160.72	120.42
7	S	110	SER	C-N-CA	28.38	160.72	120.42
8	T	161	ILE	CA-C-O	-26.27	87.94	120.78
10	V	6	ASP	O-C-N	-19.32	99.10	121.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	T	162	ALA	N-CA-C	18.58	141.33	114.39
8	T	71	ILE	N-CA-C	-16.95	98.17	111.90
9	U	10	TRP	N-CA-C	-16.81	93.19	114.04
2	E	173	VAL	N-CA-C	16.61	126.14	110.53
10	V	6	ASP	CA-C-O	-16.48	97.58	120.16
2	D	399	GLU	N-CA-C	-14.23	95.33	113.12
2	F	391	LEU	N-CA-C	14.20	130.84	113.23
4	H	22	SER	N-CA-C	-13.83	95.77	108.22
1	C	313	ASN	CA-C-N	13.29	139.41	120.28
1	C	313	ASN	C-N-CA	13.29	139.41	120.28
8	T	19	VAL	CA-C-O	-13.21	104.26	120.78
7	S	134	LEU	N-CA-C	-12.73	94.69	112.13
1	A	136	ILE	CA-C-N	12.61	128.18	120.24
1	A	136	ILE	C-N-CA	12.61	128.18	120.24
2	F	83	ARG	N-CA-C	-12.37	89.24	109.40
8	T	164	CYS	O-C-N	-12.22	106.34	122.59
8	T	158	LYS	O-C-N	12.16	141.86	122.41
1	C	174	GLY	N-CA-C	-11.96	92.81	114.46
2	F	80	ALA	N-CA-C	-11.90	97.48	108.07
7	S	71	ASP	CA-C-N	11.89	143.18	121.41
7	S	71	ASP	C-N-CA	11.89	143.18	121.41
7	S	150	LEU	N-CA-C	-11.78	89.22	108.41
2	E	160	VAL	N-CA-C	-11.70	98.25	111.00
4	H	20	PHE	N-CA-C	-11.66	89.22	108.34
8	T	161	ILE	CA-C-N	-11.65	104.16	121.98
8	T	161	ILE	C-N-CA	-11.65	104.16	121.98
2	E	41	ARG	CA-C-N	11.54	135.44	120.44
2	E	41	ARG	C-N-CA	11.54	135.44	120.44
2	D	395	GLU	N-CA-C	-11.38	98.05	113.30
2	E	349	ASP	N-CA-C	-11.37	93.43	109.24
3	G	125	LEU	N-CA-C	-11.31	98.24	112.72
2	F	304	ILE	N-CA-C	-11.22	89.44	107.28
2	E	54	GLY	N-CA-C	-11.18	100.64	112.04
1	C	88	VAL	N-CA-C	-11.13	92.59	108.17
3	G	121	SER	N-CA-C	-11.12	96.45	113.02
2	D	54	GLY	N-CA-C	-11.06	100.76	112.04
2	F	275	ILE	N-CA-C	-11.00	95.25	108.45
8	T	158	LYS	CA-C-O	-10.97	101.35	118.91
3	G	42	ARG	CA-C-N	10.94	134.71	120.60
3	G	42	ARG	C-N-CA	10.94	134.71	120.60
3	G	272	LEU	N-CA-C	-10.75	93.47	110.14
1	A	313	ASN	CA-C-N	10.65	134.55	120.28

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	313	ASN	C-N-CA	10.65	134.55	120.28
1	C	91	THR	N-CA-C	-10.57	100.50	113.50
3	G	248	LEU	CA-C-N	10.55	134.83	120.38
3	G	248	LEU	C-N-CA	10.55	134.83	120.38
8	T	158	LYS	CA-C-N	10.44	139.22	122.11
8	T	158	LYS	C-N-CA	10.44	139.22	122.11
2	D	80	ALA	N-CA-C	-10.40	98.81	108.07
1	A	225	ALA	CA-C-N	10.37	135.22	120.28
1	A	225	ALA	C-N-CA	10.37	135.22	120.28
1	C	45	ARG	CA-C-N	10.31	135.12	120.28
1	C	45	ARG	C-N-CA	10.31	135.12	120.28
1	B	91	THR	N-CA-C	-10.24	100.91	113.50
9	U	13	PHE	CA-C-N	10.21	141.43	121.41
9	U	13	PHE	C-N-CA	10.21	141.43	121.41
1	C	317	GLY	N-CA-C	-10.14	103.02	115.08
1	B	313	ASN	CA-C-N	10.10	134.83	120.28
1	B	313	ASN	C-N-CA	10.10	134.83	120.28
2	F	84	ILE	N-CA-C	-10.09	100.91	109.19
1	A	267	ILE	N-CA-C	-10.09	93.02	107.75
9	U	9	ASP	CA-C-O	-10.04	109.49	120.33
1	A	4	GLY	N-CA-C	-10.01	89.47	113.18
2	D	20	VAL	N-CA-C	-10.00	93.30	107.80
2	E	355	SER	N-CA-C	-9.84	91.27	108.69
1	C	504	PHE	CA-C-N	9.83	133.22	120.44
1	C	504	PHE	C-N-CA	9.83	133.22	120.44
2	E	20	VAL	N-CA-C	-9.79	93.61	107.80
4	H	64	VAL	N-CA-C	-9.71	90.92	107.24
4	H	63	VAL	N-CA-C	-9.68	94.62	108.17
1	B	67	GLU	N-CA-C	-9.64	95.85	110.50
7	S	35	VAL	N-CA-C	-9.63	103.53	111.81
2	E	16	VAL	N-CA-C	-9.54	93.66	107.77
2	E	30	PRO	N-CA-C	-9.48	99.13	110.70
10	V	5	LEU	CA-C-N	9.42	144.80	121.80
10	V	5	LEU	C-N-CA	9.42	144.80	121.80
4	H	75	TYR	N-CA-C	-9.40	94.78	109.07
1	B	25	LEU	N-CA-C	-9.37	98.84	110.65
2	F	366	GLU	CA-C-N	9.34	133.14	120.54
2	F	366	GLU	C-N-CA	9.34	133.14	120.54
8	T	159	GLU	CA-C-O	9.33	128.95	118.97
2	D	162	LYS	CA-C-N	9.31	132.76	120.28
2	D	162	LYS	C-N-CA	9.31	132.76	120.28
4	H	82	VAL	N-CA-C	-9.31	94.52	108.85

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	54	GLY	N-CA-C	-9.29	99.16	112.17
2	E	80	ALA	N-CA-C	-9.28	99.81	108.07
1	A	88	VAL	N-CA-C	-9.27	95.14	108.11
1	B	330	GLN	N-CA-C	-9.26	93.32	108.41
11	W	48	TRP	N-CA-C	9.25	122.34	111.71
11	W	193	PHE	N-CA-C	-9.19	101.24	111.07
7	S	107	THR	CA-C-N	9.15	139.02	121.54
7	S	107	THR	C-N-CA	9.15	139.02	121.54
2	E	103	ASP	N-CA-C	-9.05	101.49	111.36
2	F	20	VAL	N-CA-C	-9.04	94.69	107.80
5	I	7	ALA	N-CA-C	-9.02	102.83	112.93
9	U	2	LYS	N-CA-C	9.00	129.98	110.80
2	F	24	GLN	N-CA-C	-8.95	94.66	109.07
1	A	509	GLU	N-CA-C	-8.89	91.86	110.80
2	F	189	ARG	N-CA-C	-8.89	94.75	109.24
1	C	337	TYR	N-CA-C	-8.88	101.57	111.07
1	C	102	GLU	N-CA-C	-8.87	102.47	113.38
2	D	420	VAL	N-CA-C	-8.79	104.91	113.53
1	B	353	GLU	CA-C-N	8.75	132.01	120.28
1	B	353	GLU	C-N-CA	8.75	132.01	120.28
3	G	248	LEU	N-CA-C	-8.72	100.18	112.13
2	D	161	GLY	N-CA-C	-8.72	92.51	113.18
2	F	21	VAL	N-CA-C	-8.71	95.91	108.11
1	B	225	ALA	CA-C-N	8.70	132.80	120.28
1	B	225	ALA	C-N-CA	8.70	132.80	120.28
2	E	118	ALA	N-CA-C	-8.69	97.37	110.14
2	E	292	MET	N-CA-C	-8.65	99.59	112.04
3	G	2	THR	N-CA-C	-8.62	97.52	110.28
1	A	419	SER	CA-C-N	8.60	132.15	120.54
1	A	419	SER	C-N-CA	8.60	132.15	120.54
4	H	27	PHE	N-CA-C	-8.60	101.24	112.68
1	A	373	ARG	N-CA-C	-8.59	102.00	111.36
3	G	120	HIS	N-CA-C	-8.58	99.90	110.88
2	E	21	VAL	N-CA-C	-8.57	96.12	108.11
2	D	16	VAL	N-CA-C	-8.55	95.11	107.77
9	U	1	ARG	CA-C-O	-8.54	106.28	120.80
4	H	92	LEU	N-CA-C	-8.51	95.36	109.24
11	W	88	LEU	O-C-N	-8.50	111.54	121.32
2	E	393	MET	CA-C-N	8.49	131.48	120.44
2	E	393	MET	C-N-CA	8.49	131.48	120.44
1	C	336	ALA	CA-C-N	8.48	131.47	120.44
1	C	336	ALA	C-N-CA	8.48	131.47	120.44

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	110	THR	N-CA-C	-8.48	96.44	109.24
1	C	96	ASP	N-CA-C	-8.47	96.52	109.14
2	D	209	LYS	N-CA-C	-8.46	102.98	113.38
3	G	157	GLU	N-CA-C	-8.46	94.47	108.34
1	A	353	GLU	CA-C-N	8.42	131.56	120.28
1	A	353	GLU	C-N-CA	8.42	131.56	120.28
2	F	207	ASN	N-CA-C	-8.42	95.95	109.76
3	G	116	LEU	N-CA-C	-8.35	94.39	108.26
2	D	138	LYS	CA-C-N	8.33	131.87	120.46
2	D	138	LYS	C-N-CA	8.33	131.87	120.46
2	E	12	ARG	N-CA-C	-8.33	95.83	109.40
2	F	59	ARG	N-CA-C	-8.32	95.67	109.07
2	E	363	VAL	N-CA-C	-8.31	100.99	110.05
4	H	76	PHE	N-CA-C	-8.31	95.85	109.40
2	E	307	VAL	N-CA-C	-8.31	94.07	107.28
1	C	225	ALA	N-CA-C	-8.28	102.62	112.89
1	C	334	VAL	CA-C-N	8.28	132.47	120.38
1	C	334	VAL	C-N-CA	8.28	132.47	120.38
2	F	298	THR	N-CA-C	-8.27	93.41	107.23
1	B	193	THR	N-CA-C	-8.27	100.65	110.41
1	C	125	ALA	N-CA-C	-8.27	98.29	110.52
3	G	154	GLU	N-CA-C	-8.26	89.65	107.49
2	D	231	ARG	N-CA-C	-8.26	102.99	113.23
1	A	290	GLY	N-CA-C	-8.23	93.67	113.18
1	A	500	ILE	CA-C-N	8.22	130.91	120.56
1	A	500	ILE	C-N-CA	8.22	130.91	120.56
8	T	97	ASN	N-CA-C	8.21	120.96	111.11
2	E	174	ALA	CA-C-N	8.21	131.79	120.63
2	E	174	ALA	C-N-CA	8.21	131.79	120.63
2	D	213	SER	N-CA-C	-8.20	97.66	109.96
3	G	46	VAL	CA-C-N	8.19	129.03	119.94
3	G	46	VAL	C-N-CA	8.19	129.03	119.94
1	A	39	ALA	N-CA-C	-8.18	95.18	108.52
1	B	508	PHE	N-CA-C	-8.17	96.67	108.60
5	I	43	LYS	N-CA-C	-8.17	95.58	108.90
3	G	69	ILE	CA-C-N	8.15	128.08	120.34
3	G	69	ILE	C-N-CA	8.15	128.08	120.34
3	G	153	TYR	N-CA-C	-8.15	97.37	110.32
2	D	162	LYS	N-CA-C	-8.13	102.37	111.07
2	E	29	LEU	N-CA-C	-8.12	98.79	110.40
2	E	84	ILE	N-CA-C	-8.12	102.53	109.19
1	C	89	LYS	N-CA-C	-8.10	96.20	109.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	S	72	MET	N-CA-C	-8.08	102.36	114.64
1	B	44	LEU	CA-C-N	8.07	136.96	121.54
1	B	44	LEU	C-N-CA	8.07	136.96	121.54
7	S	69	LEU	CA-C-N	8.07	131.43	120.38
7	S	69	LEU	C-N-CA	8.07	131.43	120.38
2	D	422	GLU	N-CA-C	-8.06	102.70	112.54
8	T	162	ALA	O-C-N	-8.06	113.89	122.19
1	A	488	LYS	N-CA-C	-8.05	97.14	109.14
1	B	500	ILE	CA-C-N	8.05	130.70	120.56
1	B	500	ILE	C-N-CA	8.05	130.70	120.56
2	D	21	VAL	N-CA-C	-8.02	96.88	108.11
2	D	87	GLY	CA-C-N	8.02	127.68	119.82
2	D	87	GLY	C-N-CA	8.02	127.68	119.82
1	A	40	ARG	N-CA-C	-8.01	96.23	108.96
1	C	198	LYS	N-CA-C	-8.00	95.46	109.06
3	G	3	LEU	CA-C-N	7.99	131.90	120.79
3	G	3	LEU	C-N-CA	7.99	131.90	120.79
1	B	173	THR	N-CA-C	-7.99	100.54	111.56
2	F	370	VAL	N-CA-C	-7.98	102.66	110.72
1	A	289	PRO	N-CA-C	-7.97	96.04	112.47
3	G	265	ILE	N-CA-C	-7.97	103.03	110.53
2	F	196	LEU	CA-C-N	7.96	131.29	120.54
2	F	196	LEU	C-N-CA	7.96	131.29	120.54
1	A	124	LYS	N-CA-C	-7.94	104.75	114.75
7	S	9	VAL	CA-C-N	7.93	135.98	121.70
7	S	9	VAL	C-N-CA	7.93	135.98	121.70
8	T	28	ILE	O-C-N	-7.91	112.69	122.57
1	C	26	GLU	N-CA-C	-7.90	93.97	110.80
3	G	4	LYS	CA-C-N	7.90	131.20	120.38
3	G	4	LYS	C-N-CA	7.90	131.20	120.38
2	D	17	ILE	N-CA-C	-7.88	92.95	109.34
8	T	159	GLU	N-CA-C	7.87	124.04	113.97
11	W	193	PHE	CA-C-O	-7.87	112.56	120.82
3	G	179	PHE	CA-C-N	7.85	131.58	120.28
3	G	179	PHE	C-N-CA	7.85	131.58	120.28
1	B	290	GLY	N-CA-C	-7.84	96.69	111.66
7	S	24	SER	N-CA-C	-7.80	104.28	113.88
1	B	170	ASP	CA-C-N	7.78	136.41	121.54
1	B	170	ASP	C-N-CA	7.78	136.41	121.54
4	H	40	THR	N-CA-C	-7.78	100.49	110.53
3	G	119	THR	N-CA-C	-7.78	103.85	112.72
1	B	360	GLY	N-CA-C	-7.78	104.81	114.92

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	331	ALA	N-CA-C	-7.77	96.71	108.52
1	A	102	GLU	N-CA-C	-7.77	103.38	113.17
9	U	29	LYS	O-C-N	-7.77	113.77	122.08
3	G	108	VAL	N-CA-C	-7.76	96.67	107.99
2	E	133	LEU	N-CA-C	-7.75	98.75	110.14
2	D	319	ASP	N-CA-C	-7.74	98.73	109.71
1	B	327	ILE	N-CA-C	-7.73	96.99	108.12
2	D	102	ILE	N-CA-C	-7.72	105.03	112.29
2	D	225	PRO	CA-C-O	-7.71	114.64	120.73
8	T	74	ALA	N-CA-C	7.71	120.80	111.40
2	F	138	LYS	CA-C-N	7.70	131.38	120.53
2	F	138	LYS	C-N-CA	7.70	131.38	120.53
2	E	273	GLY	N-CA-C	-7.69	104.61	115.30
2	E	27	GLU	N-CA-C	-7.68	98.03	108.86
1	A	41	VAL	N-CA-C	-7.66	97.09	108.12
2	F	399	GLU	N-CA-C	-7.66	103.01	111.36
1	A	385	GLN	CA-C-N	-7.65	113.32	122.35
1	A	385	GLN	C-N-CA	-7.65	113.32	122.35
4	H	93	LEU	N-CA-C	-7.63	91.76	107.70
1	A	202	ILE	N-CA-C	-7.62	96.49	107.77
9	U	4	ALA	N-CA-C	-7.61	97.61	109.25
8	T	75	ILE	N-CA-C	-7.61	103.12	110.42
1	A	476	HIS	CA-C-N	7.60	130.80	120.38
1	A	476	HIS	C-N-CA	7.60	130.80	120.38
7	S	106	SER	CA-C-N	7.59	136.04	121.54
7	S	106	SER	C-N-CA	7.59	136.04	121.54
2	F	161	GLY	N-CA-C	-7.59	102.67	115.34
11	W	152	GLN	CA-C-N	7.59	128.27	119.47
11	W	152	GLN	C-N-CA	7.59	128.27	119.47
2	D	162	LYS	CA-C-O	7.59	128.78	120.82
1	A	438	ILE	N-CA-C	7.58	118.35	110.62
7	S	73	THR	N-CA-C	-7.58	102.37	111.69
1	B	260	ASN	N-CA-C	-7.58	100.14	111.81
1	A	91	THR	N-CA-C	-7.57	104.07	113.38
1	A	25	LEU	N-CA-C	-7.57	100.74	111.56
2	E	399	GLU	N-CA-C	-7.55	102.98	111.14
1	A	96	ASP	N-CA-C	-7.54	97.90	109.14
2	F	432	VAL	N-CA-C	-7.54	92.59	108.88
7	S	142	LEU	N-CA-C	-7.53	94.75	110.80
2	E	213	SER	N-CA-C	-7.53	98.81	110.17
3	G	269	ALA	N-CA-C	-7.52	101.09	113.50
1	B	198	LYS	N-CA-C	-7.52	90.26	107.48

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	356	ARG	N-CA-C	-7.51	104.09	113.18
7	S	157	SER	N-CA-C	-7.51	94.80	110.80
1	C	402	ALA	N-CA-C	-7.50	102.46	111.69
1	C	458	PRO	N-CA-C	7.50	124.92	113.75
4	H	90	VAL	N-CA-C	-7.50	97.29	108.46
2	F	397	SER	CA-C-N	7.49	131.07	120.28
2	F	397	SER	C-N-CA	7.49	131.07	120.28
7	S	31	LYS	N-CA-C	-7.49	105.03	112.97
8	T	70	GLN	CA-C-N	7.47	129.91	122.66
8	T	70	GLN	C-N-CA	7.47	129.91	122.66
9	U	13	PHE	O-C-N	-7.47	112.66	122.59
7	S	16	GLY	N-CA-C	-7.47	95.48	113.18
1	A	457	GLU	N-CA-C	-7.46	100.68	109.93
1	A	175	LYS	N-CA-C	-7.46	103.15	111.28
1	A	148	THR	N-CA-C	-7.45	105.10	114.56
2	D	26	ASP	N-CA-C	-7.45	104.59	112.93
2	F	93	ARG	N-CA-C	-7.44	97.27	109.40
1	A	263	HIS	N-CA-C	-7.44	96.28	108.41
1	C	173	THR	N-CA-C	-7.44	103.93	113.16
8	T	28	ILE	N-CA-C	-7.44	93.86	109.34
1	A	232	VAL	N-CA-C	-7.44	97.72	108.36
2	F	204	GLY	N-CA-C	-7.44	105.06	115.32
1	C	35	GLY	N-CA-C	-7.43	95.56	113.18
2	E	218	VAL	N-CA-C	-7.41	97.45	108.12
3	G	167	SER	N-CA-C	-7.40	96.89	108.14
1	A	409	ASP	N-CA-C	-7.39	102.80	112.41
1	B	225	ALA	N-CA-C	-7.38	104.27	113.28
8	T	67	SER	O-C-N	-7.37	114.31	122.12
2	F	212	THR	N-CA-C	-7.36	99.53	110.06
1	A	173	THR	N-CA-C	-7.36	104.19	113.02
7	S	58	PRO	N-CA-C	-7.36	103.95	114.18
3	G	149	LEU	N-CA-C	-7.36	102.86	111.03
2	F	277	SER	N-CA-C	-7.34	98.69	109.63
9	U	4	ALA	O-C-N	-7.34	114.00	123.02
7	S	162	MET	N-CA-C	7.33	120.14	111.71
2	F	137	ILE	N-CA-C	-7.33	96.60	107.51
1	C	289	PRO	N-CA-C	-7.32	97.40	112.47
2	F	63	MET	CA-C-N	7.31	135.84	122.02
2	F	63	MET	C-N-CA	7.31	135.84	122.02
2	D	201	ILE	CA-C-N	7.31	130.41	120.54
2	D	201	ILE	C-N-CA	7.31	130.41	120.54
1	B	237	SER	CA-C-N	7.30	135.49	121.54

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	237	SER	C-N-CA	7.30	135.49	121.54
2	F	349	ASP	N-CA-C	-7.30	95.15	109.10
2	D	310	ILE	CA-C-N	7.30	131.86	121.42
2	D	310	ILE	C-N-CA	7.30	131.86	121.42
2	F	76	LEU	CA-C-N	7.29	131.11	120.82
2	F	76	LEU	C-N-CA	7.29	131.11	120.82
2	E	22	ASP	N-CA-C	-7.29	97.33	109.07
2	F	108	ILE	N-CA-C	-7.29	99.31	109.45
9	U	9	ASP	CA-C-N	7.29	135.33	122.42
9	U	9	ASP	C-N-CA	7.29	135.33	122.42
1	B	140	ILE	CA-C-N	7.29	135.46	121.54
1	B	140	ILE	C-N-CA	7.29	135.46	121.54
8	T	96	ARG	N-CA-C	-7.28	102.38	111.11
1	A	299	PHE	N-CA-C	-7.27	103.28	111.14
2	D	366	GLU	CA-C-N	7.27	130.36	120.54
2	D	366	GLU	C-N-CA	7.27	130.36	120.54
1	B	491	GLU	CA-C-N	7.27	129.89	120.44
1	B	491	GLU	C-N-CA	7.27	129.89	120.44
2	D	304	ILE	N-CA-C	-7.27	95.72	107.28
2	E	422	GLU	N-CA-C	-7.25	103.41	111.82
2	F	92	GLY	N-CA-C	-7.25	105.06	115.64
7	S	139	LYS	N-CA-C	-7.25	104.06	113.12
1	A	337	TYR	N-CA-C	-7.24	103.32	111.07
2	E	87	GLY	CA-C-N	7.23	126.91	119.82
2	E	87	GLY	C-N-CA	7.23	126.91	119.82
7	S	154	ILE	CA-C-N	7.23	129.84	120.44
7	S	154	ILE	C-N-CA	7.23	129.84	120.44
2	F	463	ILE	CA-C-N	7.22	130.28	120.38
2	F	463	ILE	C-N-CA	7.22	130.28	120.38
1	C	330	GLN	N-CA-C	-7.22	102.77	112.94
1	C	146	MET	N-CA-C	-7.21	95.43	110.80
2	F	453	PRO	CA-C-N	7.21	129.93	120.28
2	F	453	PRO	C-N-CA	7.21	129.93	120.28
2	F	96	ASN	N-CA-C	-7.20	101.55	110.41
1	B	249	SER	CA-C-N	7.20	128.09	120.03
1	B	249	SER	C-N-CA	7.20	128.09	120.03
1	A	70	ASN	N-CA-C	-7.19	98.67	108.38
8	T	162	ALA	CA-C-N	-7.19	107.80	121.54
8	T	162	ALA	C-N-CA	-7.19	107.80	121.54
3	G	242	MET	N-CA-C	7.19	119.11	111.28
2	D	361	ASN	N-CA-C	-7.18	103.39	111.07
2	D	280	GLY	N-CA-C	-7.16	105.90	115.21

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	504	PHE	CA-C-N	7.16	129.75	120.44
1	A	504	PHE	C-N-CA	7.16	129.75	120.44
1	B	467	ALA	CA-C-N	7.16	129.88	120.28
1	B	467	ALA	C-N-CA	7.16	129.88	120.28
1	B	334	VAL	CA-C-N	7.16	130.74	120.79
1	B	334	VAL	C-N-CA	7.16	130.74	120.79
2	E	17	ILE	N-CA-C	-7.16	93.87	106.61
1	C	95	VAL	CA-C-N	7.14	133.78	122.36
1	C	95	VAL	C-N-CA	7.14	133.78	122.36
1	C	101	GLU	N-CA-C	-7.13	102.69	112.03
1	C	310	ALA	CA-C-N	7.13	133.05	123.00
1	C	310	ALA	C-N-CA	7.13	133.05	123.00
2	E	40	GLY	N-CA-C	-7.11	105.51	115.32
2	D	99	GLY	N-CA-C	-7.11	104.69	114.64
7	S	155	ASP	CA-C-O	-7.10	112.33	119.08
1	C	225	ALA	CA-C-N	7.10	130.50	120.28
1	C	225	ALA	C-N-CA	7.10	130.50	120.28
10	V	6	ASP	N-CA-C	7.10	125.50	109.81
2	D	204	GLY	N-CA-C	-7.09	106.00	115.21
8	T	96	ARG	CA-C-O	-7.08	113.32	120.90
8	T	19	VAL	CA-C-N	7.08	134.57	122.67
8	T	19	VAL	C-N-CA	7.08	134.57	122.67
1	B	99	VAL	N-CA-C	-7.07	97.28	108.95
2	E	59	ARG	N-CA-C	-7.06	98.22	109.59
2	D	103	ASP	N-CA-C	-7.06	103.63	111.82
1	A	430	GLN	N-CA-C	-7.06	95.78	108.48
1	B	263	HIS	N-CA-C	-7.05	96.92	108.41
1	B	34	ILE	N-CA-C	-7.05	98.62	108.27
2	F	362	ILE	N-CA-C	-7.04	105.86	112.83
1	C	113	ASN	N-CA-C	-7.04	97.94	108.99
1	A	415	GLN	CA-C-N	7.03	129.93	120.65
1	A	415	GLN	C-N-CA	7.03	129.93	120.65
3	G	105	ILE	N-CA-C	-7.03	97.41	108.86
4	H	83	THR	N-CA-C	-7.02	96.27	108.69
3	G	111	LYS	N-CA-C	-7.00	104.74	113.28
7	S	72	MET	CA-C-N	-7.00	108.62	120.58
7	S	72	MET	C-N-CA	-7.00	108.62	120.58
1	B	45	ARG	N-CA-C	6.99	125.68	110.80
1	B	162	GLY	CA-C-N	6.99	134.89	121.54
1	B	162	GLY	C-N-CA	6.99	134.89	121.54
1	C	400	VAL	CA-C-N	6.98	130.21	120.29
1	C	400	VAL	C-N-CA	6.98	130.21	120.29

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	80	LYS	N-CA-C	-6.98	104.73	113.18
1	B	455	LYS	N-CA-C	-6.98	95.94	110.80
2	D	145	PRO	N-CA-C	-6.98	98.10	112.47
1	A	467	ALA	CA-C-N	6.97	129.62	120.28
1	A	467	ALA	C-N-CA	6.97	129.62	120.28
2	E	317	LEU	CA-C-N	6.97	129.94	120.38
2	E	317	LEU	C-N-CA	6.97	129.94	120.38
2	D	212	THR	N-CA-C	-6.96	101.95	111.56
4	H	137	ALA	CA-C-N	6.96	129.61	120.28
4	H	137	ALA	C-N-CA	6.96	129.61	120.28
1	B	40	ARG	N-CA-C	-6.96	97.91	109.46
11	W	88	LEU	CA-C-O	6.96	129.69	120.16
1	B	28	THR	N-CA-C	-6.95	98.75	109.24
2	E	156	GLY	CA-C-N	6.94	135.02	121.41
2	E	156	GLY	C-N-CA	6.94	135.02	121.41
1	A	174	GLY	N-CA-C	-6.94	96.73	113.18
1	A	112	GLY	N-CA-C	-6.93	105.50	115.27
1	B	102	GLU	CA-C-N	6.93	132.29	120.72
1	B	102	GLU	C-N-CA	6.93	132.29	120.72
3	G	60	PRO	N-CA-C	-6.93	105.81	114.68
11	W	14	ILE	CA-C-O	-6.92	113.52	120.85
7	S	2	ALA	CA-C-N	6.90	130.50	120.71
7	S	2	ALA	C-N-CA	6.90	130.50	120.71
1	B	256	TYR	CA-C-O	-6.88	113.53	120.90
1	C	490	SER	N-CA-C	-6.88	98.71	109.72
2	F	218	VAL	N-CA-C	-6.86	98.24	108.12
2	F	422	GLU	N-CA-C	-6.86	104.17	112.54
2	E	461	GLY	N-CA-C	-6.85	98.36	112.34
2	D	137	ILE	N-CA-C	-6.84	97.77	108.23
3	G	204	TYR	N-CA-C	-6.83	96.25	110.80
2	D	52	HIS	N-CA-C	-6.83	96.52	108.20
2	E	210	ASP	N-CA-C	-6.83	96.25	110.80
1	A	150	ILE	N-CA-C	-6.83	97.27	107.37
1	C	374	VAL	N-CA-C	6.81	116.91	110.30
1	B	46	ASN	N-CA-C	-6.81	103.13	113.89
8	T	27	ALA	O-C-N	6.81	129.08	122.07
1	C	112	GLY	N-CA-C	-6.80	97.07	113.18
1	A	99	VAL	N-CA-C	-6.79	97.78	108.86
2	E	207	ASN	N-CA-C	-6.78	98.16	109.07
2	D	334	VAL	N-CA-C	-6.77	97.98	107.80
2	E	159	GLY	N-CA-C	-6.76	97.17	113.18
2	F	30	PRO	N-CA-C	-6.75	102.46	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	114	ALA	N-CA-C	6.75	119.59	108.99
1	C	299	PHE	N-CA-C	-6.74	103.86	111.14
2	D	59	ARG	N-CA-C	-6.74	98.74	109.59
4	H	36	VAL	N-CA-C	-6.73	98.48	108.45
2	F	162	LYS	CA-C-N	6.72	129.28	120.28
2	F	162	LYS	C-N-CA	6.72	129.28	120.28
2	E	112	GLN	N-CA-C	-6.71	98.98	109.72
2	D	419	GLN	N-CA-C	6.70	121.20	112.89
7	S	60	VAL	N-CA-C	-6.70	106.97	113.53
2	F	209	LYS	N-CA-C	-6.69	103.51	112.94
2	E	26	ASP	N-CA-C	-6.68	104.44	112.59
1	A	300	TYR	CA-C-N	6.67	129.54	120.54
1	A	300	TYR	C-N-CA	6.67	129.54	120.54
1	C	405	GLN	N-CA-C	-6.66	104.45	112.58
2	D	27	GLU	N-CA-C	-6.66	99.20	109.52
2	D	396	LEU	CA-C-N	6.65	130.60	120.82
2	D	396	LEU	C-N-CA	6.65	130.60	120.82
4	H	91	GLN	N-CA-C	-6.65	97.22	108.26
2	E	57	THR	N-CA-C	-6.64	98.58	109.40
2	D	207	ASN	N-CA-C	-6.63	99.11	109.72
2	D	463	ILE	CA-C-N	6.63	129.46	120.38
2	D	463	ILE	C-N-CA	6.63	129.46	120.38
2	F	400	ASP	N-CA-C	-6.63	103.98	111.07
2	F	110	THR	N-CA-C	-6.62	99.25	109.52
1	B	299	PHE	N-CA-C	-6.62	103.99	111.14
7	S	41	ARG	CA-C-N	6.60	129.11	120.60
7	S	41	ARG	C-N-CA	6.60	129.11	120.60
7	S	63	SER	N-CA-C	-6.59	104.17	111.36
1	C	347	ASP	N-CA-C	-6.59	104.38	112.88
1	B	35	GLY	N-CA-C	-6.58	97.59	113.18
3	G	80	ALA	N-CA-C	-6.58	103.58	112.26
2	E	392	GLY	N-CA-C	-6.55	97.64	113.18
2	D	249	GLN	N-CA-C	6.55	120.15	110.46
2	E	298	THR	N-CA-C	-6.55	94.53	107.69
1	C	376	SER	N-CA-C	6.53	119.40	111.82
2	E	209	LYS	N-CA-C	-6.53	103.92	112.41
4	H	108	ALA	N-CA-C	6.53	118.98	111.02
11	W	147	ILE	CA-C-O	-6.53	113.81	121.05
1	B	194	ASP	N-CA-C	-6.52	96.51	107.99
3	G	75	ARG	N-CA-C	-6.52	100.88	110.52
2	F	273	GLY	N-CA-C	-6.50	106.96	115.47
3	G	129	LYS	CA-C-N	6.49	131.35	122.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	G	129	LYS	C-N-CA	6.49	131.35	122.34
1	A	455	LYS	N-CA-C	-6.48	103.49	111.40
2	F	151	LYS	N-CA-C	-6.48	97.96	108.52
1	A	170	ASP	CA-C-N	6.47	133.91	121.54
1	A	170	ASP	C-N-CA	6.47	133.91	121.54
1	C	407	GLY	N-CA-C	-6.47	106.99	115.47
2	E	122	GLU	CA-C-N	6.47	128.96	120.28
2	E	122	GLU	C-N-CA	6.47	128.96	120.28
2	D	76	LEU	CA-C-N	6.47	129.95	120.82
2	D	76	LEU	C-N-CA	6.47	129.95	120.82
4	H	55	LEU	CA-C-O	-6.47	113.37	120.36
1	B	333	ASP	CA-C-N	6.46	130.67	120.47
1	B	333	ASP	C-N-CA	6.46	130.67	120.47
1	C	300	TYR	CA-C-N	6.45	129.25	120.54
1	C	300	TYR	C-N-CA	6.45	129.25	120.54
3	G	188	GLU	CA-C-N	6.44	133.85	121.54
3	G	188	GLU	C-N-CA	6.44	133.85	121.54
1	A	225	ALA	N-CA-C	-6.43	105.43	113.28
1	A	15	ARG	CA-C-N	6.43	129.19	120.77
1	A	15	ARG	C-N-CA	6.43	129.19	120.77
2	F	454	GLU	N-CA-C	6.42	118.28	111.28
2	F	274	ARG	N-CA-C	-6.41	99.92	109.86
4	H	98	VAL	CA-C-N	6.41	129.97	120.87
4	H	98	VAL	C-N-CA	6.41	129.97	120.87
1	A	49	ALA	N-CA-C	-6.41	99.47	109.72
2	F	189	ARG	CA-C-N	6.40	129.15	120.38
2	F	189	ARG	C-N-CA	6.40	129.15	120.38
2	E	182	VAL	N-CA-C	-6.40	98.93	108.46
1	C	175	LYS	N-CA-C	-6.40	104.22	111.07
3	G	40	PRO	CA-C-N	6.40	129.18	120.54
3	G	40	PRO	C-N-CA	6.40	129.18	120.54
3	G	110	ASP	N-CA-C	-6.39	103.93	112.94
2	F	366	GLU	O-C-N	6.39	128.67	122.03
2	E	354	THR	N-CA-C	6.38	118.65	109.14
1	A	266	ILE	N-CA-C	-6.38	99.29	108.48
1	B	400	VAL	N-CA-C	-6.37	106.53	112.83
8	T	96	ARG	CA-C-N	6.37	129.13	120.54
8	T	96	ARG	C-N-CA	6.37	129.13	120.54
3	G	216	SER	CA-C-N	6.35	128.79	120.28
3	G	216	SER	C-N-CA	6.35	128.79	120.28
2	D	273	GLY	N-CA-C	-6.35	106.48	115.30
1	A	156	LEU	N-CA-C	-6.34	105.37	113.23

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	335	SER	N-CA-C	-6.33	104.82	112.54
7	S	149	LYS	N-CA-C	-6.32	104.72	112.88
1	A	203	TYR	N-CA-C	-6.32	96.80	107.99
1	C	104	LEU	N-CA-C	-6.32	99.58	109.25
2	E	463	ILE	CA-C-N	6.32	129.04	120.38
2	E	463	ILE	C-N-CA	6.32	129.04	120.38
4	H	89	SER	N-CA-C	-6.32	99.39	109.76
2	E	219	TYR	N-CA-C	-6.32	98.69	109.24
2	F	105	ARG	N-CA-C	-6.32	104.13	112.72
2	F	25	PHE	N-CA-C	-6.31	98.95	109.24
1	A	338	ILE	CA-C-O	-6.31	114.46	118.69
1	A	260	ASN	N-CA-C	-6.31	102.09	111.81
2	D	467	VAL	N-CA-C	-6.31	104.35	110.72
2	E	397	SER	CA-C-N	6.30	130.69	120.60
2	E	397	SER	C-N-CA	6.30	130.69	120.60
2	F	211	ALA	N-CA-C	-6.30	105.17	112.92
2	F	300	LYS	N-CA-C	-6.30	105.59	113.28
1	B	509	GLU	N-CA-C	-6.29	104.33	111.07
1	C	290	GLY	CA-C-N	6.29	131.37	121.56
1	C	290	GLY	C-N-CA	6.29	131.37	121.56
1	A	104	LEU	N-CA-C	-6.29	99.63	109.25
9	U	59	ALA	N-CA-C	-6.29	106.57	114.56
2	F	95	MET	N-CA-C	-6.29	99.92	109.85
2	E	39	GLN	N-CA-C	-6.28	99.41	109.96
1	B	243	GLN	CA-C-N	6.27	128.69	120.28
1	B	243	GLN	C-N-CA	6.27	128.69	120.28
4	H	19	THR	N-CA-C	-6.27	98.19	108.41
1	C	100	GLY	N-CA-C	-6.26	102.27	110.29
2	E	206	ILE	CA-C-N	6.25	131.63	123.00
2	E	206	ILE	C-N-CA	6.25	131.63	123.00
2	D	40	GLY	N-CA-C	-6.24	105.77	116.01
5	I	10	SER	N-CA-C	-6.24	98.66	108.14
10	V	5	LEU	O-C-N	6.24	132.98	123.00
1	B	432	GLN	N-CA-C	-6.23	99.12	109.46
2	F	23	VAL	N-CA-C	-6.23	99.51	108.48
2	F	340	ALA	CA-C-N	6.23	129.25	120.28
2	F	340	ALA	C-N-CA	6.23	129.25	120.28
1	B	231	VAL	N-CA-C	-6.23	97.38	107.28
10	V	5	LEU	CA-C-O	-6.23	110.21	120.80
4	H	55	LEU	CA-C-N	-6.22	112.02	122.29
4	H	55	LEU	C-N-CA	-6.22	112.02	122.29
2	D	367	HIS	N-CA-C	-6.22	103.65	111.11

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	251	VAL	CA-C-N	6.21	131.58	123.00
2	E	251	VAL	C-N-CA	6.21	131.58	123.00
1	C	66	LEU	N-CA-C	-6.21	96.20	107.75
2	E	225	PRO	CA-C-N	6.21	125.43	118.97
2	E	225	PRO	C-N-CA	6.21	125.43	118.97
2	D	105	ARG	N-CA-C	-6.20	102.86	110.61
2	D	360	PRO	CA-C-N	6.20	128.50	120.44
2	D	360	PRO	C-N-CA	6.20	128.50	120.44
1	B	232	VAL	N-CA-C	-6.19	98.95	107.99
2	F	332	THR	N-CA-C	-6.19	98.81	108.90
1	C	360	GLY	N-CA-C	-6.19	106.09	115.00
1	A	310	ALA	CA-C-N	6.18	131.71	123.00
1	A	310	ALA	C-N-CA	6.18	131.71	123.00
2	F	127	SER	N-CA-C	-6.18	99.80	109.25
1	C	493	SER	CA-C-N	6.17	128.88	120.54
1	C	493	SER	C-N-CA	6.17	128.88	120.54
2	F	99	GLY	CA-C-N	6.17	130.04	120.60
2	F	99	GLY	C-N-CA	6.17	130.04	120.60
2	E	96	ASN	N-CA-C	-6.17	100.80	110.36
2	F	317	LEU	CA-C-N	6.17	128.83	120.38
2	F	317	LEU	C-N-CA	6.17	128.83	120.38
2	D	370	VAL	N-CA-C	-6.16	104.50	110.72
2	E	447	GLY	CA-C-N	6.15	128.52	120.28
2	E	447	GLY	C-N-CA	6.15	128.52	120.28
3	G	271	ALA	N-CA-C	-6.15	97.71	110.80
3	G	106	ILE	N-CA-C	-6.13	99.32	108.46
1	C	294	TYR	CA-C-N	6.13	127.50	119.84
1	C	294	TYR	C-N-CA	6.13	127.50	119.84
2	F	359	ASP	N-CA-C	-6.12	96.27	109.81
1	B	224	ASP	N-CA-C	6.12	123.83	110.80
4	H	21	ALA	N-CA-C	-6.11	99.44	108.79
2	D	321	ALA	CA-C-O	-6.10	113.29	119.08
2	F	126	MET	CA-C-N	6.09	130.55	121.72
2	F	126	MET	C-N-CA	6.09	130.55	121.72
1	C	92	GLY	N-CA-C	-6.07	105.55	114.90
1	B	500	ILE	O-C-N	6.07	127.85	121.91
1	A	192	GLY	N-CA-C	-6.06	102.22	112.77
1	C	401	ALA	N-CA-C	-6.06	104.76	111.36
1	C	260	ASN	N-CA-C	-6.06	104.01	112.25
2	E	163	THR	N-CA-C	-6.05	104.68	111.28
1	A	28	THR	N-CA-C	-6.05	100.10	109.24
1	C	190	ASN	N-CA-C	-6.05	105.39	112.89

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	229	ARG	CA-C-N	6.04	128.97	120.28
2	D	229	ARG	C-N-CA	6.04	128.97	120.28
7	S	21	ALA	N-CA-C	-6.04	104.04	111.40
2	E	127	SER	N-CA-C	-6.03	99.32	108.67
3	G	171	TYR	N-CA-C	-6.03	99.97	108.96
2	F	147	ALA	N-CA-C	-6.02	99.89	109.59
2	D	331	ALA	N-CA-C	-6.02	98.79	108.55
2	E	246	GLN	N-CA-C	-6.02	104.28	111.69
9	U	13	PHE	N-CA-C	6.01	123.61	110.80
1	A	322	THR	N-CA-C	-6.01	99.91	109.76
1	B	473	ILE	N-CA-C	-6.00	104.66	110.42
2	F	444	ILE	CA-C-N	6.00	128.32	120.28
2	F	444	ILE	C-N-CA	6.00	128.32	120.28
2	F	103	ASP	N-CA-C	-6.00	104.83	111.36
4	H	32	ASN	CA-C-N	5.99	131.48	122.91
4	H	32	ASN	C-N-CA	5.99	131.48	122.91
4	H	61	GLY	N-CA-C	-5.99	99.00	113.18
1	A	297	ASP	N-CA-C	-5.98	106.23	112.93
1	B	143	ARG	N-CA-C	-5.98	98.06	110.80
1	B	267	ILE	N-CA-C	-5.98	99.02	107.75
2	E	276	PRO	N-CA-C	-5.97	100.17	112.47
2	E	302	GLY	N-CA-C	-5.97	102.37	110.43
1	B	174	GLY	N-CA-C	-5.97	107.42	115.36
1	A	376	SER	N-CA-C	5.97	117.78	111.28
2	E	311	TYR	N-CA-C	-5.97	99.47	108.96
7	S	73	THR	CA-C-N	5.97	128.28	120.28
7	S	73	THR	C-N-CA	5.97	128.28	120.28
1	A	448	GLY	N-CA-C	-5.96	105.14	112.77
1	C	279	ARG	CA-C-N	5.96	128.58	120.54
1	C	279	ARG	C-N-CA	5.96	128.58	120.54
7	S	26	ALA	N-CA-C	-5.96	104.70	111.14
1	B	73	VAL	N-CA-C	-5.95	99.06	107.75
2	E	282	GLN	N-CA-C	-5.95	101.35	108.25
2	F	60	THR	N-CA-C	-5.95	100.37	109.41
2	F	162	LYS	CA-C-O	5.95	127.25	121.00
2	E	410	ILE	N-CA-C	-5.94	104.71	110.42
2	D	96	ASN	N-CA-C	-5.94	100.78	109.63
1	B	30	ARG	N-CA-C	-5.94	99.72	109.40
2	E	105	ARG	N-CA-C	-5.93	104.65	112.72
2	E	304	ILE	N-CA-C	-5.92	97.87	107.28
3	G	81	ILE	N-CA-C	5.91	116.37	110.23
1	A	336	ALA	CA-C-N	5.90	128.11	120.44

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	336	ALA	C-N-CA	5.90	128.11	120.44
2	F	22	ASP	N-CA-C	-5.90	99.57	109.07
2	E	467	VAL	N-CA-C	-5.90	104.98	110.53
11	W	166	ALA	N-CA-C	5.90	118.94	111.69
2	D	303	SER	CA-C-N	-5.89	115.24	123.13
2	D	303	SER	C-N-CA	-5.89	115.24	123.13
2	D	62	ALA	N-CA-C	-5.89	100.90	110.20
2	D	410	ILE	CA-C-N	5.88	128.44	120.38
2	D	410	ILE	C-N-CA	5.88	128.44	120.38
2	F	206	ILE	N-CA-C	-5.88	99.10	107.98
1	B	484	ARG	N-CA-C	-5.88	104.78	111.07
2	F	334	VAL	N-CA-C	-5.88	99.28	107.80
1	A	486	ASP	N-CA-C	5.87	119.71	112.54
2	E	337	ARG	N-CA-C	-5.87	104.88	111.28
2	D	112	GLN	N-CA-C	-5.87	100.27	109.25
1	A	45	ARG	N-CA-C	5.86	123.29	110.80
2	F	353	SER	N-CA-C	-5.86	96.85	107.75
1	B	430	GLN	CA-C-N	5.86	125.54	119.92
1	B	430	GLN	C-N-CA	5.86	125.54	119.92
4	H	21	ALA	CA-C-N	5.86	131.63	122.26
4	H	21	ALA	C-N-CA	5.86	131.63	122.26
1	A	122	GLY	N-CA-C	-5.85	105.57	115.34
3	G	199	ASP	CA-C-O	-5.85	112.14	120.51
1	C	232	VAL	N-CA-C	-5.85	100.00	108.36
1	C	140	ILE	N-CA-C	-5.85	100.06	108.42
2	D	161	GLY	CA-C-N	5.84	128.03	120.44
2	D	161	GLY	C-N-CA	5.84	128.03	120.44
2	F	251	VAL	N-CA-C	-5.84	99.99	108.87
1	B	146	MET	N-CA-C	-5.84	100.28	109.50
2	D	355	SER	N-CA-C	-5.84	97.97	108.48
1	A	17	LEU	N-CA-C	-5.83	106.12	113.18
3	G	132	GLY	N-CA-C	-5.83	99.37	113.18
1	A	14	GLU	CA-C-N	5.82	128.66	120.28
1	A	14	GLU	C-N-CA	5.82	128.66	120.28
2	E	52	HIS	CA-C-O	5.82	126.59	120.54
1	B	135	GLY	N-CA-C	-5.82	104.79	112.82
1	C	495	ALA	N-CA-C	-5.82	105.02	111.36
1	C	298	VAL	N-CA-C	-5.81	103.90	112.04
2	D	43	THR	N-CA-C	-5.81	99.93	109.40
1	B	42	HIS	N-CA-C	-5.81	100.52	109.76
3	G	94	ALA	N-CA-C	5.81	117.28	111.07
7	S	52	ALA	N-CA-C	5.80	117.69	111.36

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	135	GLY	CA-C-N	5.80	128.37	120.77
1	A	135	GLY	C-N-CA	5.80	128.37	120.77
1	C	94	ILE	N-CA-C	-5.80	101.32	109.21
1	B	366	ASN	CA-C-N	5.79	128.40	120.46
1	B	366	ASN	C-N-CA	5.79	128.40	120.46
2	D	122	GLU	N-CA-C	-5.79	101.11	110.32
1	A	109	ASP	N-CA-C	-5.79	103.07	110.53
1	A	373	ARG	CA-C-N	5.79	132.38	121.97
1	A	373	ARG	C-N-CA	5.79	132.38	121.97
2	E	306	SER	CA-C-O	5.79	126.84	120.71
11	W	20	VAL	N-CA-C	5.79	116.56	110.72
1	A	118	LYS	N-CA-C	-5.78	104.39	112.25
2	F	358	MET	CA-C-N	5.78	135.90	121.80
2	F	358	MET	C-N-CA	5.78	135.90	121.80
9	U	109	ILE	CA-C-O	-5.78	115.05	121.17
10	V	30	VAL	CA-C-O	-5.78	113.56	120.78
2	F	12	ARG	N-CA-C	-5.77	99.60	109.24
1	A	493	SER	CA-C-N	5.77	127.94	120.44
1	A	493	SER	C-N-CA	5.77	127.94	120.44
1	C	353	GLU	CA-C-N	5.77	128.01	120.28
1	C	353	GLU	C-N-CA	5.77	128.01	120.28
2	F	26	ASP	N-CA-C	-5.76	104.37	111.40
2	D	316	ASP	N-CA-C	-5.76	100.55	109.14
1	A	257	PHE	CA-C-N	5.76	127.92	120.44
1	A	257	PHE	C-N-CA	5.76	127.92	120.44
1	A	62	MET	N-CA-C	-5.74	99.30	109.06
1	C	197	LYS	N-CA-C	-5.74	104.52	112.03
4	H	18	PHE	CA-C-O	5.74	126.63	120.32
2	F	247	GLU	N-CA-C	-5.73	106.05	113.16
7	S	133	GLU	CA-C-N	5.72	131.14	122.56
7	S	133	GLU	C-N-CA	5.72	131.14	122.56
2	D	307	VAL	N-CA-C	-5.71	98.19	107.28
4	H	43	GLY	N-CA-C	-5.71	102.42	110.88
1	A	204	VAL	N-CA-C	-5.71	99.49	108.23
2	D	183	PHE	N-CA-C	-5.71	99.10	108.41
8	T	67	SER	CA-C-O	5.71	126.80	120.63
2	F	433	PRO	N-CA-C	-5.71	102.84	111.41
2	F	461	GLY	N-CA-C	-5.70	100.71	112.34
9	U	2	LYS	CA-C-N	5.70	132.42	121.54
9	U	2	LYS	C-N-CA	5.70	132.42	121.54
7	S	80	PRO	N-CA-C	-5.70	107.02	114.03
2	D	438	ILE	CA-C-N	5.69	127.84	120.44

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	438	ILE	C-N-CA	5.69	127.84	120.44
2	D	208	LEU	N-CA-C	-5.69	105.08	113.61
1	C	42	HIS	CA-C-N	5.68	132.55	121.41
1	C	42	HIS	C-N-CA	5.68	132.55	121.41
1	C	505	LEU	N-CA-C	-5.68	104.99	111.07
2	E	403	THR	CA-C-N	5.68	127.83	120.56
2	E	403	THR	C-N-CA	5.68	127.83	120.56
1	B	373	ARG	CA-C-N	5.67	129.44	120.47
1	B	373	ARG	C-N-CA	5.67	129.44	120.47
4	H	95	GLU	N-CA-C	-5.67	105.00	111.07
2	D	292	MET	N-CA-C	-5.67	103.88	112.04
2	F	94	ILE	N-CA-C	-5.67	99.58	107.80
3	G	102	GLU	N-CA-C	-5.67	99.81	108.76
1	C	487	GLY	N-CA-C	-5.66	107.43	115.30
2	E	249	GLN	N-CA-C	5.66	122.86	110.80
3	G	268	GLY	N-CA-C	-5.66	99.76	113.18
9	U	58	VAL	CA-C-N	5.66	130.74	122.08
9	U	58	VAL	C-N-CA	5.66	130.74	122.08
1	A	286	ARG	CA-C-N	5.65	128.25	120.39
1	A	286	ARG	C-N-CA	5.65	128.25	120.39
1	A	97	VAL	N-CA-C	-5.64	96.69	108.88
2	F	303	SER	CA-C-N	-5.64	115.57	123.13
2	F	303	SER	C-N-CA	-5.64	115.57	123.13
2	F	450	ASP	N-CA-C	-5.64	98.79	110.80
1	A	151	LYS	CA-C-N	5.63	128.10	120.38
1	A	151	LYS	C-N-CA	5.63	128.10	120.38
1	B	66	LEU	N-CA-C	-5.63	98.58	108.20
1	A	477	GLN	CA-C-N	5.62	128.61	120.79
1	A	477	GLN	C-N-CA	5.62	128.61	120.79
1	C	365	ILE	N-CA-C	5.62	121.03	109.34
1	B	29	GLY	CA-C-N	5.62	131.36	122.94
1	B	29	GLY	C-N-CA	5.62	131.36	122.94
1	A	67	GLU	N-CA-C	-5.61	101.82	110.58
1	A	264	ALA	N-CA-C	-5.61	100.82	109.52
1	B	303	SER	N-CA-C	-5.61	105.25	111.36
1	C	115	ILE	CA-C-N	5.61	127.80	120.28
1	C	115	ILE	C-N-CA	5.61	127.80	120.28
2	D	306	SER	N-CA-C	-5.60	99.78	108.90
4	H	46	GLY	N-CA-C	-5.60	99.92	113.18
1	A	444	VAL	N-CA-C	-5.59	104.91	111.00
11	W	91	SER	CA-C-O	5.59	128.50	120.51
1	C	45	ARG	N-CA-C	-5.59	107.46	114.56

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	92	GLY	N-CA-C	-5.58	108.44	115.08
3	G	8	ARG	N-CA-C	-5.58	105.10	111.07
3	G	32	ALA	CA-C-O	5.57	126.67	120.82
3	G	39	LYS	N-CA-C	5.57	122.13	109.81
1	C	385	GLN	CA-C-N	-5.57	115.78	122.35
1	C	385	GLN	C-N-CA	-5.57	115.78	122.35
2	E	76	LEU	CA-C-N	5.57	128.67	120.82
2	E	76	LEU	C-N-CA	5.57	128.67	120.82
2	E	284	THR	CA-C-N	5.56	127.73	120.28
2	E	284	THR	C-N-CA	5.56	127.73	120.28
2	E	427	HIS	CA-C-N	5.56	132.15	121.54
2	E	427	HIS	C-N-CA	5.56	132.15	121.54
8	T	163	LYS	CA-C-O	-5.56	112.56	120.51
1	C	67	GLU	CA-C-N	5.55	126.78	119.84
1	C	67	GLU	C-N-CA	5.55	126.78	119.84
7	S	28	LYS	CA-C-O	-5.55	115.09	121.19
9	U	1	ARG	CA-C-N	5.55	132.13	121.54
9	U	1	ARG	C-N-CA	5.55	132.13	121.54
2	D	317	LEU	N-CA-C	-5.54	106.21	114.64
3	G	194	ASP	N-CA-C	-5.54	100.99	109.41
2	E	423	VAL	N-CA-C	-5.54	105.13	110.72
7	S	118	CYS	N-CA-C	5.53	122.58	110.80
2	E	361	ASN	N-CA-C	-5.53	103.10	111.56
2	D	25	PHE	N-CA-C	-5.52	100.71	109.59
2	F	27	GLU	N-CA-C	-5.51	103.42	110.53
1	C	461	ILE	N-CA-C	-5.51	105.35	110.53
1	C	25	LEU	O-C-N	5.51	128.43	122.15
2	F	305	THR	N-CA-C	-5.50	99.76	108.73
2	F	41	ARG	CA-C-N	5.50	132.04	121.54
2	F	41	ARG	C-N-CA	5.50	132.04	121.54
2	D	118	ALA	N-CA-C	-5.50	100.96	108.38
7	S	65	LYS	N-CA-C	-5.50	105.37	111.36
2	F	155	PHE	N-CA-C	-5.49	101.52	110.20
1	B	256	TYR	O-C-N	5.49	127.80	122.09
2	F	270	ALA	CA-C-N	5.49	128.66	120.31
2	F	270	ALA	C-N-CA	5.49	128.66	120.31
1	A	158	PRO	N-CA-C	-5.49	101.16	112.47
1	C	338	ILE	CA-C-O	-5.49	115.01	118.69
3	G	175	GLU	N-CA-C	-5.49	100.72	109.23
2	E	321	ALA	N-CA-C	-5.49	105.14	112.55
2	F	392	GLY	N-CA-C	5.49	126.18	113.18
1	B	508	PHE	CA-C-N	5.48	127.57	120.44

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	508	PHE	C-N-CA	5.48	127.57	120.44
1	B	212	THR	N-CA-C	-5.48	105.39	111.36
1	A	38	ILE	N-CA-C	-5.48	99.66	107.77
1	C	216	LEU	CA-C-N	5.48	127.67	120.60
1	C	216	LEU	C-N-CA	5.48	127.67	120.60
3	G	204	TYR	CA-C-N	5.48	127.89	120.38
3	G	204	TYR	C-N-CA	5.48	127.89	120.38
2	E	277	SER	CA-C-N	5.48	128.49	120.71
2	E	277	SER	C-N-CA	5.48	128.49	120.71
2	F	20	VAL	CA-C-N	-5.48	115.96	123.14
2	F	20	VAL	C-N-CA	-5.48	115.96	123.14
2	F	125	GLU	N-CA-C	-5.48	106.55	113.18
3	G	182	ASP	CA-C-N	5.48	129.99	120.68
3	G	182	ASP	C-N-CA	5.48	129.99	120.68
2	E	384	LEU	N-CA-C	5.47	118.17	111.82
4	H	54	THR	N-CA-C	-5.47	100.20	108.52
1	B	190	ASN	N-CA-C	-5.47	106.11	112.89
1	B	461	ILE	N-CA-C	-5.47	105.39	110.53
1	A	167	ILE	N-CA-C	-5.46	100.01	107.99
2	F	196	LEU	CA-C-O	5.46	126.21	120.42
2	D	29	LEU	CA-C-N	5.46	126.00	120.38
2	D	29	LEU	C-N-CA	5.46	126.00	120.38
2	E	277	SER	N-CA-C	-5.46	100.70	108.23
1	C	448	GLY	CA-C-N	5.44	128.20	120.53
1	C	448	GLY	C-N-CA	5.44	128.20	120.53
3	G	112	ILE	N-CA-C	-5.44	105.23	110.72
1	C	170	ASP	CA-C-N	5.44	131.92	121.54
1	C	170	ASP	C-N-CA	5.44	131.92	121.54
1	C	333	ASP	N-CA-C	-5.43	104.86	112.25
1	C	509	GLU	N-CA-C	-5.43	99.24	110.80
1	C	118	LYS	N-CA-C	-5.42	105.97	112.59
1	B	135	GLY	CA-C-N	5.42	127.87	120.77
1	B	135	GLY	C-N-CA	5.42	127.87	120.77
2	F	131	GLU	CA-C-N	5.42	128.60	120.69
2	F	131	GLU	C-N-CA	5.42	128.60	120.69
3	G	79	GLY	N-CA-C	-5.42	100.33	113.18
1	A	44	LEU	CA-C-N	5.42	131.89	121.54
1	A	44	LEU	C-N-CA	5.42	131.89	121.54
2	D	246	GLN	N-CA-C	-5.42	104.79	111.40
2	F	347	ALA	CA-C-N	5.42	131.72	121.97
2	F	347	ALA	C-N-CA	5.42	131.72	121.97
3	G	42	ARG	O-C-N	5.41	127.66	122.03

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	50	ALA	N-CA-C	-5.41	106.61	113.43
1	A	400	VAL	N-CA-C	-5.41	105.44	113.39
2	E	343	GLY	CA-C-N	5.41	131.71	121.97
2	E	343	GLY	C-N-CA	5.41	131.71	121.97
4	H	72	THR	N-CA-C	-5.41	99.62	108.76
2	D	421	ALA	N-CA-C	-5.41	103.84	110.65
2	E	138	LYS	CA-C-N	5.40	127.86	120.46
2	E	138	LYS	C-N-CA	5.40	127.86	120.46
1	A	501	VAL	CA-C-N	5.40	127.52	120.28
1	A	501	VAL	C-N-CA	5.40	127.52	120.28
2	E	471	ASP	CA-C-N	5.40	128.06	120.28
2	E	471	ASP	C-N-CA	5.40	128.06	120.28
3	G	246	LEU	N-CA-C	5.40	117.87	111.33
1	B	148	THR	N-CA-C	-5.40	107.70	114.56
1	C	408	SER	CA-C-N	5.40	131.06	122.10
1	C	408	SER	C-N-CA	5.40	131.06	122.10
2	F	262	THR	CA-C-N	5.38	127.49	120.28
2	F	262	THR	C-N-CA	5.38	127.49	120.28
2	E	174	ALA	CA-C-O	5.38	126.25	120.55
2	E	205	VAL	N-CA-C	-5.38	105.29	110.72
1	A	500	ILE	O-C-N	5.37	127.18	121.91
2	D	311	TYR	N-CA-C	-5.37	101.71	110.20
2	F	281	TYR	CA-C-O	-5.37	115.18	120.98
1	C	34	ILE	CA-C-O	5.37	126.65	120.90
1	C	45	ARG	CA-C-O	5.37	124.67	118.55
2	E	147	ALA	N-CA-C	-5.37	99.36	110.80
2	E	448	GLU	CA-C-N	5.37	127.74	120.38
2	E	448	GLU	C-N-CA	5.37	127.74	120.38
1	B	357	PHE	CA-C-N	5.37	127.91	120.29
1	B	357	PHE	C-N-CA	5.37	127.91	120.29
2	E	386	ASP	CA-C-N	5.37	127.43	120.56
2	E	386	ASP	C-N-CA	5.37	127.43	120.56
2	D	41	ARG	CA-C-N	5.36	131.80	121.18
2	D	41	ARG	C-N-CA	5.36	131.80	121.18
1	B	71	VAL	N-CA-C	-5.35	99.93	107.75
1	A	372	SER	N-CA-C	-5.35	98.49	108.02
1	C	67	GLU	CA-C-O	-5.35	116.32	121.08
2	E	270	ALA	CA-C-N	5.35	128.44	120.31
2	E	270	ALA	C-N-CA	5.35	128.44	120.31
2	E	453	PRO	CA-C-N	5.35	127.45	120.28
2	E	453	PRO	C-N-CA	5.35	127.45	120.28
7	S	147	VAL	N-CA-C	5.34	120.45	109.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	29	LEU	N-CA-C	-5.34	97.08	108.93
2	E	85	PRO	CA-C-O	-5.34	115.25	121.34
2	D	434	LEU	N-CA-C	5.32	116.77	111.07
1	C	175	LYS	CA-C-O	5.31	126.40	120.82
11	W	195	ILE	CA-C-O	-5.31	115.54	121.17
4	H	100	LEU	CA-C-N	5.31	131.68	121.54
4	H	100	LEU	C-N-CA	5.31	131.68	121.54
7	S	17	ARG	N-CA-C	-5.30	106.31	112.89
1	C	400	VAL	N-CA-C	-5.30	106.70	113.22
1	A	401	ALA	CA-C-N	5.30	127.64	120.38
1	A	401	ALA	C-N-CA	5.30	127.64	120.38
2	D	455	GLN	N-CA-C	-5.30	106.77	113.18
1	A	327	ILE	N-CA-C	-5.29	100.44	108.17
2	F	467	VAL	CA-C-N	5.29	127.37	120.28
2	F	467	VAL	C-N-CA	5.29	127.37	120.28
2	D	143	LEU	N-CA-C	-5.28	105.98	112.90
2	D	211	ALA	N-CA-C	-5.28	105.06	112.25
7	S	141	PHE	CA-C-N	5.28	131.63	121.54
7	S	141	PHE	C-N-CA	5.28	131.63	121.54
2	D	324	THR	CA-C-N	5.28	127.35	120.28
2	D	324	THR	C-N-CA	5.28	127.35	120.28
2	D	225	PRO	CA-C-N	5.27	124.72	119.24
2	D	225	PRO	C-N-CA	5.27	124.72	119.24
1	B	477	GLN	CA-C-N	5.27	128.11	120.79
1	B	477	GLN	C-N-CA	5.27	128.11	120.79
2	F	56	SER	N-CA-C	-5.27	104.38	111.54
1	B	373	ARG	N-CA-C	-5.27	105.62	111.36
1	B	378	ALA	N-CA-C	-5.26	102.29	109.71
2	E	336	SER	N-CA-C	-5.26	98.69	107.80
7	S	106	SER	O-C-N	5.26	129.59	122.59
2	E	422	GLU	CA-C-N	5.26	127.89	120.42
2	E	422	GLU	C-N-CA	5.26	127.89	120.42
2	E	43	THR	N-CA-C	-5.26	101.58	109.15
4	H	51	HIS	N-CA-C	5.26	122.00	110.80
2	D	362	ILE	CA-C-N	5.25	131.43	121.97
2	D	362	ILE	C-N-CA	5.25	131.43	121.97
8	T	28	ILE	CA-C-N	5.25	128.05	120.38
8	T	28	ILE	C-N-CA	5.25	128.05	120.38
2	D	352	ASP	N-CA-C	-5.25	107.90	114.56
8	T	165	ILE	CA-C-O	-5.25	114.22	120.78
1	B	318	GLY	N-CA-C	-5.25	108.39	115.36
1	A	318	GLY	CA-C-N	5.24	131.68	121.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	318	GLY	C-N-CA	5.24	131.68	121.41
3	G	155	PHE	CA-C-N	5.24	131.55	121.54
3	G	155	PHE	C-N-CA	5.24	131.55	121.54
1	C	46	ASN	N-CA-C	-5.24	105.69	111.71
7	S	150	LEU	CA-C-N	5.24	131.54	121.54
7	S	150	LEU	C-N-CA	5.24	131.54	121.54
1	C	391	LYS	CA-C-O	5.24	126.10	120.55
2	D	63	MET	N-CA-C	-5.24	106.48	112.92
1	A	35	GLY	N-CA-C	-5.23	100.78	113.18
1	A	73	VAL	N-CA-C	-5.22	100.12	107.75
5	I	32	ALA	CA-C-N	5.22	129.04	120.63
5	I	32	ALA	C-N-CA	5.22	129.04	120.63
2	E	204	GLY	N-CA-C	-5.22	108.12	115.32
2	E	418	PHE	CA-C-N	5.22	127.54	120.44
2	E	418	PHE	C-N-CA	5.22	127.54	120.44
1	B	493	SER	CA-C-N	5.22	127.22	120.44
1	B	493	SER	C-N-CA	5.22	127.22	120.44
2	F	40	GLY	N-CA-C	-5.21	108.43	115.36
2	F	406	ARG	N-CA-C	-5.21	105.68	111.36
2	F	86	VAL	N-CA-C	-5.21	100.74	108.45
1	A	19	ALA	CA-C-N	5.21	131.48	121.54
1	A	19	ALA	C-N-CA	5.21	131.48	121.54
2	D	269	SER	N-CA-C	5.21	119.96	111.37
2	E	450	ASP	CA-C-N	5.21	131.48	121.54
2	E	450	ASP	C-N-CA	5.21	131.48	121.54
2	F	343	GLY	N-CA-C	-5.21	108.14	115.32
1	A	463	LYS	CA-C-N	5.20	127.20	120.44
1	A	463	LYS	C-N-CA	5.20	127.20	120.44
1	A	162	GLY	CA-C-N	5.20	128.10	120.71
1	A	162	GLY	C-N-CA	5.20	128.10	120.71
4	H	127	THR	CA-C-N	5.20	127.20	120.44
4	H	127	THR	C-N-CA	5.20	127.20	120.44
2	E	398	GLU	CA-C-N	5.20	127.51	120.44
2	E	398	GLU	C-N-CA	5.20	127.51	120.44
2	E	47	LEU	N-CA-C	-5.20	101.23	109.59
2	F	449	TYR	N-CA-C	-5.20	100.83	109.46
1	B	126	ARG	N-CA-C	-5.19	101.40	109.24
2	D	71	ARG	N-CA-C	-5.19	102.17	109.96
2	E	201	ILE	CA-C-N	5.19	127.54	120.54
2	E	201	ILE	C-N-CA	5.19	127.54	120.54
1	B	298	VAL	N-CA-C	-5.18	104.79	112.04
2	F	431	LEU	N-CA-C	-5.18	100.59	109.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	212	THR	N-CA-C	-5.18	105.72	111.36
1	B	191	ASP	N-CA-C	-5.17	106.97	113.28
1	B	72	GLY	N-CA-C	-5.17	100.94	113.18
1	C	381	ARG	CA-C-N	5.17	127.97	120.79
1	C	381	ARG	C-N-CA	5.17	127.97	120.79
1	B	419	SER	CA-C-N	5.16	127.51	120.54
1	B	419	SER	C-N-CA	5.16	127.51	120.54
3	G	50	ALA	O-C-N	5.16	129.26	122.97
2	F	463	ILE	N-CA-C	5.16	115.88	110.62
3	G	252	ARG	N-CA-C	-5.16	105.57	111.14
7	S	98	THR	CA-C-O	-5.16	113.58	118.33
2	F	55	GLU	CA-C-N	5.15	129.44	122.07
2	F	55	GLU	C-N-CA	5.15	129.44	122.07
2	E	317	LEU	N-CA-C	-5.15	107.38	113.97
1	B	158	PRO	CA-C-O	-5.15	115.67	121.43
2	D	390	ILE	N-CA-C	-5.14	107.40	113.42
1	B	260	ASN	CA-C-N	5.14	131.49	121.41
1	B	260	ASN	C-N-CA	5.14	131.49	121.41
2	E	336	SER	CA-C-N	5.14	127.17	120.28
2	E	336	SER	C-N-CA	5.14	127.17	120.28
2	F	387	ILE	CA-C-N	5.14	128.59	120.47
2	F	387	ILE	C-N-CA	5.14	128.59	120.47
2	F	152	ILE	N-CA-C	-5.13	100.99	108.17
1	A	491	GLU	CA-C-N	5.13	127.61	120.63
1	A	491	GLU	C-N-CA	5.13	127.61	120.63
2	E	426	GLY	N-CA-C	-5.13	101.02	113.18
1	A	253	MET	N-CA-C	5.13	117.61	111.71
2	D	193	GLY	CA-C-N	5.13	127.10	120.44
2	D	193	GLY	C-N-CA	5.13	127.10	120.44
2	F	380	ASP	N-CA-C	-5.13	105.77	111.36
1	C	316	PHE	N-CA-C	-5.12	106.34	112.59
1	A	348	GLY	N-CA-C	-5.12	106.42	111.85
5	I	36	LYS	N-CA-C	-5.12	105.39	110.97
1	A	197	LYS	N-CA-C	-5.12	105.50	112.26
1	C	40	ARG	N-CA-C	-5.12	100.96	109.46
3	G	198	ALA	CA-C-N	5.12	131.32	121.54
3	G	198	ALA	C-N-CA	5.12	131.32	121.54
11	W	106	ILE	CA-C-N	5.12	125.16	119.32
11	W	106	ILE	C-N-CA	5.12	125.16	119.32
7	S	120	VAL	CA-C-N	5.11	128.47	120.75
7	S	120	VAL	C-N-CA	5.11	128.47	120.75
1	B	127	ARG	N-CA-C	-5.11	100.01	108.75

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	D	427	HIS	N-CA-C	-5.10	101.36	108.96
1	B	141	SER	N-CA-C	5.10	121.66	110.80
2	D	22	ASP	N-CA-C	-5.10	100.86	109.07
1	C	364	ALA	CA-C-N	5.10	131.14	121.97
1	C	364	ALA	C-N-CA	5.10	131.14	121.97
7	S	155	ASP	N-CA-C	5.10	119.43	112.55
11	W	152	GLN	CA-C-O	-5.09	113.18	120.16
3	G	29	ALA	N-CA-C	-5.09	105.19	111.40
2	E	130	GLN	N-CA-C	-5.09	101.00	108.99
2	D	243	PHE	N-CA-C	5.09	118.75	112.54
2	D	373	GLY	N-CA-C	-5.09	106.26	112.77
1	B	131	LEU	N-CA-C	-5.09	100.05	108.75
2	D	166	ILE	CA-C-N	5.09	127.05	120.44
2	D	166	ILE	C-N-CA	5.09	127.05	120.44
4	H	67	ALA	N-CA-C	-5.09	103.33	110.35
2	F	269	SER	N-CA-C	5.08	119.76	111.37
1	B	143	ARG	CA-C-N	5.08	127.56	120.65
1	B	143	ARG	C-N-CA	5.08	127.56	120.65
1	C	334	VAL	N-CA-C	-5.08	105.44	112.50
2	E	285	LEU	N-CA-C	-5.08	105.74	111.28
4	H	73	SER	CA-C-N	-5.08	114.69	122.87
4	H	73	SER	C-N-CA	-5.08	114.69	122.87
5	I	33	ASN	N-CA-C	5.08	118.94	112.34
2	F	64	ASP	CA-C-N	5.08	125.73	120.60
2	F	64	ASP	C-N-CA	5.08	125.73	120.60
2	E	178	GLY	N-CA-C	-5.08	106.44	114.10
2	F	255	ILE	N-CA-C	-5.07	100.26	107.77
3	G	176	LYS	N-CA-C	-5.07	100.03	109.06
1	B	164	ARG	CA-C-N	-5.07	115.62	122.77
1	B	164	ARG	C-N-CA	-5.07	115.62	122.77
1	C	444	VAL	N-CA-C	-5.07	104.65	111.44
7	S	128	GLU	N-CA-C	-5.07	107.77	114.31
1	A	191	ASP	N-CA-C	-5.07	107.10	113.28
1	C	372	SER	N-CA-C	-5.07	99.00	108.02
2	E	13	ILE	CA-C-N	-5.06	116.12	121.84
2	E	13	ILE	C-N-CA	-5.06	116.12	121.84
1	B	88	VAL	N-CA-C	-5.06	101.02	108.11
1	C	39	ALA	N-CA-C	-5.06	100.27	108.52
2	E	158	ALA	CA-C-N	5.06	131.32	121.41
2	E	158	ALA	C-N-CA	5.06	131.32	121.41
8	T	100	ALA	N-CA-C	-5.06	105.21	111.33
1	A	319	GLY	CA-C-N	-5.05	113.01	121.75

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	319	GLY	C-N-CA	-5.05	113.01	121.75
1	C	195	GLU	N-CA-C	-5.05	105.86	112.23
1	B	202	ILE	N-CA-C	-5.05	100.30	107.77
1	A	405	GLN	CA-C-N	5.05	127.30	120.44
1	A	405	GLN	C-N-CA	5.05	127.30	120.44
2	E	71	ARG	N-CA-C	-5.04	101.75	109.76
4	H	51	HIS	CA-C-N	5.04	131.46	122.13
4	H	51	HIS	C-N-CA	5.04	131.46	122.13
1	A	396	GLN	N-CA-C	5.04	116.77	111.28
2	F	57	THR	N-CA-C	-5.04	101.19	109.40
1	B	169	GLY	N-CA-C	-5.04	103.32	110.63
2	E	438	ILE	O-C-N	5.04	126.85	121.91
3	G	175	GLU	CA-C-N	-5.04	116.70	123.96
3	G	175	GLU	C-N-CA	-5.04	116.70	123.96
1	A	338	ILE	N-CA-C	-5.04	106.31	112.35
1	C	387	ALA	N-CA-C	5.03	116.84	111.36
7	S	117	PRO	CA-C-O	-5.03	115.77	121.96
1	C	109	ASP	CA-C-N	5.03	127.27	120.38
1	C	109	ASP	C-N-CA	5.03	127.27	120.38
2	D	226	PRO	CA-C-N	5.03	125.67	119.99
2	D	226	PRO	C-N-CA	5.03	125.67	119.99
2	E	262	THR	N-CA-C	-5.03	105.88	111.36
7	S	40	LEU	CA-C-N	5.03	127.28	120.65
7	S	40	LEU	C-N-CA	5.03	127.28	120.65
7	S	110	SER	O-C-N	5.02	127.25	121.88
1	A	350	ILE	CA-C-N	5.02	129.27	122.19
1	A	350	ILE	C-N-CA	5.02	129.27	122.19
1	B	487	GLY	N-CA-C	-5.02	107.17	114.90
2	E	203	SER	N-CA-C	-5.02	106.00	111.82
2	F	120	ALA	CA-C-N	5.01	126.11	119.84
2	F	120	ALA	C-N-CA	5.01	126.11	119.84
1	B	353	GLU	CA-C-O	5.01	126.02	120.71
7	S	47	LYS	N-CA-C	5.01	121.47	110.80
1	A	169	GLY	N-CA-C	-5.01	103.37	110.63
2	F	238	THR	N-CA-C	5.01	117.39	111.33
7	S	54	SER	N-CA-C	-5.01	105.90	111.36
1	A	61	GLY	N-CA-C	-5.00	101.36	110.97

There are no chirality outliers.

All (79) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	173	THR	Peptide,Mainchain
1	A	287	ARG	Peptide
1	A	336	ALA	Peptide
1	B	371	VAL	Peptide
1	B	379	GLN	Peptide
1	C	194	ASP	Mainchain
2	D	122	GLU	Peptide,Mainchain
2	D	130	GLN	Mainchain
2	D	160	VAL	Mainchain
2	D	319	ASP	Mainchain
2	D	418	PHE	Mainchain
2	E	161	GLY	Mainchain
2	E	397	SER	Mainchain
2	F	26	ASP	Mainchain
2	F	397	SER	Mainchain
3	G	120	HIS	Mainchain
3	G	175	GLU	Mainchain
3	G	251	ASN	Mainchain
3	G	271	ALA	Mainchain
4	H	37	ASP	Peptide
4	H	84	VAL	Peptide
7	S	106	SER	Mainchain
7	S	152	VAL	Peptide
7	S	156	PRO	Peptide
7	S	161	GLY	Mainchain
7	S	49	PRO	Mainchain
8	T	103	LEU	Mainchain
8	T	104	GLU	Mainchain
8	T	137	GLN	Mainchain
8	T	148	VAL	Peptide,Mainchain
8	T	154	ALA	Peptide
8	T	161	ILE	Peptide,Mainchain
8	T	162	ALA	Peptide,Mainchain
8	T	163	LYS	Mainchain
8	T	164	CYS	Peptide,Mainchain
8	T	172	SER	Peptide
8	T	28	ILE	Peptide,Mainchain
8	T	29	SER	Mainchain
8	T	44	SER	Mainchain
8	T	66	ALA	Mainchain
8	T	67	SER	Mainchain
8	T	97	ASN	Mainchain
9	U	10	TRP	Mainchain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
9	U	107	THR	Mainchain
9	U	109	ILE	Mainchain
9	U	112	TYR	Mainchain
9	U	12	ALA	Peptide
9	U	13	PHE	Peptide
9	U	2	LYS	Mainchain
9	U	24	VAL	Mainchain
9	U	29	LYS	Mainchain
9	U	58	VAL	Mainchain
9	U	60	LYS	Mainchain
9	U	80	GLU	Mainchain
9	U	9	ASP	Peptide,Mainchain
10	V	12	PHE	Mainchain
10	V	29	PRO	Peptide
10	V	30	VAL	Mainchain
10	V	6	ASP	Mainchain
10	V	64	PHE	Peptide
10	V	7	PRO	Mainchain
11	W	159	ARG	Mainchain
11	W	175	GLY	Mainchain
11	W	193	PHE	Mainchain
11	W	196	LEU	Mainchain
11	W	197	ILE	Mainchain
11	W	35	ASN	Peptide
11	W	48	TRP	Mainchain
11	W	63	SER	Mainchain
11	W	90	HIS	Peptide,Mainchain

5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	2035	0	589	9	0
1	B	1918	0	553	12	0
1	C	1947	0	563	8	0
2	D	1867	0	533	6	0
2	E	1863	0	532	3	0
2	F	1863	0	532	10	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	G	1053	0	283	9	0
4	H	523	0	140	1	0
5	I	187	0	53	4	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	178	12	0
8	T	697	0	182	10	0
9	U	485	0	121	1	0
10	V	265	0	68	0	0
11	W	869	0	226	5	0
All	All	18545	0	5289	81	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 3.

All (81) 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)
2:F:84:ILE:H	2:F:114:ALA:H	1.24	0.83
1:B:49:ALA:H	2:F:69:LEU:H	1.31	0.79
7:S:163:ILE:O	7:S:167:GLY:O	2.16	0.63
8:T:19:VAL:O	11:W:91:SER:N	2.32	0.62
1:C:149:GLY:HA3	1:C:436:MET:H	1.66	0.60
7:S:72:MET:N	7:S:75:LYS:H	2.00	0.59
2:F:356:ARG:C	2:F:358:MET:H	2.12	0.58
1:A:285:LEU:C	1:A:287:ARG:H	2.12	0.57
1:C:172:GLN:C	1:C:174:GLY:H	2.12	0.55
8:T:160:THR:C	8:T:162:ALA:N	2.59	0.55
1:B:285:LEU:C	1:B:287:ARG:H	2.14	0.55
7:S:50:LYS:C	7:S:52:ALA:H	2.16	0.54
8:T:27:ALA:O	8:T:28:ILE:C	2.51	0.53
8:T:157:GLU:C	8:T:159:GLU:H	2.16	0.53
8:T:20:ILE:CA	11:W:91:SER:H	2.21	0.52
1:B:158:PRO:O	1:B:375:GLY:HA3	2.10	0.52
7:S:30:ASN:C	7:S:32:LEU:H	2.16	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:S:72:MET:CA	7:S:75:LYS:H	2.23	0.51
1:A:475:GLN:C	1:A:477:GLN:H	2.18	0.51
7:S:69:LEU:O	7:S:72:MET:CA	2.59	0.51
2:F:336:SER:H	2:F:348:VAL:C	2.19	0.50
2:D:473:LEU:C	2:D:475:GLU:H	2.20	0.50
4:H:65:VAL:H	4:H:73:SER:H	1.60	0.50
7:S:69:LEU:O	7:S:72:MET:N	2.45	0.50
3:G:118:ARG:H	3:G:120:HIS:H	1.60	0.49
2:E:159:GLY:HA2	2:E:164:VAL:H	1.76	0.49
2:D:213:SER:C	2:D:215:VAL:H	2.22	0.48
8:T:99:ILE:O	8:T:100:ALA:C	2.56	0.48
1:C:316:PHE:C	1:C:318:GLY:H	2.22	0.47
1:B:49:ALA:N	2:F:69:LEU:H	2.04	0.47
2:F:272:LEU:C	2:F:274:ARG:H	2.22	0.47
3:G:139:GLY:H	5:I:38:SER:CA	2.28	0.47
7:S:65:LYS:C	7:S:67:LYS:H	2.23	0.46
1:A:317:GLY:C	1:A:319:GLY:H	2.23	0.46
1:C:353:GLU:H	1:C:365:ILE:N	2.13	0.46
1:B:49:ALA:H	2:F:69:LEU:N	2.09	0.46
3:G:178:ILE:C	3:G:180:SER:H	2.23	0.46
8:T:18:TYR:C	8:T:19:VAL:O	2.52	0.45
1:C:189:PHE:C	1:C:192:GLY:H	2.24	0.45
1:B:259:ASP:C	1:B:261:GLY:H	2.23	0.45
2:D:25:PHE:C	2:D:27:GLU:H	2.25	0.44
1:B:61:GLY:HA2	1:B:74:VAL:O	2.17	0.44
8:T:19:VAL:O	11:W:90:HIS:C	2.61	0.44
1:C:149:GLY:CA	1:C:436:MET:H	2.31	0.44
5:I:6:GLN:C	5:I:8:GLY:H	2.24	0.44
8:T:95:GLN:O	8:T:96:ARG:C	2.61	0.44
2:F:104:GLU:C	2:F:106:GLY:H	2.26	0.44
1:B:43:GLY:C	1:B:45:ARG:H	2.26	0.43
1:B:258:ARG:O	1:B:319:GLY:HA2	2.18	0.43
1:B:67:GLU:C	1:B:69:ASP:H	2.27	0.43
1:C:172:GLN:C	1:C:174:GLY:N	2.75	0.43
1:A:172:GLN:C	1:A:174:GLY:H	2.27	0.43
2:E:67:GLU:C	2:E:69:LEU:H	2.26	0.43
1:A:189:PHE:C	1:A:192:GLY:H	2.26	0.43
1:B:57:SER:C	1:B:59:LEU:H	2.26	0.43
3:G:183:THR:C	3:G:186:SER:H	2.26	0.43
2:E:133:LEU:H	2:E:146:TYR:C	2.27	0.42
7:S:61:LYS:C	7:S:63:SER:H	2.26	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:W:88:LEU:O	11:W:89:PRO:C	2.61	0.42
11:W:156:LEU:O	11:W:160:LEU:N	2.53	0.42
2:D:419:GLN:CA	2:D:429:GLY:H	2.32	0.42
3:G:197:ASP:C	3:G:199:ASP:N	2.78	0.42
1:B:453:LEU:C	1:B:455:LYS:H	2.28	0.41
3:G:263:ILE:O	3:G:266:ILE:O	2.38	0.41
2:F:98:ILE:C	2:F:100:GLU:H	2.29	0.41
5:I:2:ALA:C	5:I:4:TRP:N	2.79	0.41
7:S:86:ILE:C	7:S:88:LEU:H	2.27	0.41
7:S:91:GLU:C	7:S:93:GLY:H	2.28	0.41
1:A:15:ARG:CA	1:A:19:ALA:H	2.33	0.41
1:A:357:PHE:C	1:A:360:GLY:H	2.29	0.41
2:F:271:LEU:C	2:F:273:GLY:H	2.29	0.41
2:D:159:GLY:C	2:D:161:GLY:H	2.25	0.41
3:G:118:ARG:C	3:G:120:HIS:H	2.25	0.41
3:G:139:GLY:HA3	5:I:38:SER:O	2.20	0.41
3:G:268:GLY:H	3:G:270:ALA:H	1.69	0.41
9:U:16:ILE:O	9:U:17:ILE:C	2.65	0.40
1:A:11:ILE:O	1:A:12:LEU:C	2.63	0.40
8:T:157:GLU:C	8:T:159:GLU:N	2.78	0.40
1:C:49:ALA:H	2:D:68:GLY:C	2.30	0.40
7:S:19:ALA:O	7:S:23:TYR:N	2.55	0.40
1:A:283:LEU:C	1:A:286:ARG:H	2.29	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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%)	452 (89%)	30 (6%)	25 (5%)	1	15
1	B	476/510 (93%)	419 (88%)	38 (8%)	19 (4%)	2	18

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	C	485/510 (95%)	443 (91%)	26 (5%)	16 (3%)	3	21
2	D	465/482 (96%)	418 (90%)	33 (7%)	14 (3%)	3	22
2	E	464/482 (96%)	409 (88%)	35 (8%)	20 (4%)	2	17
2	F	464/482 (96%)	417 (90%)	27 (6%)	20 (4%)	2	17
3	G	258/273 (94%)	199 (77%)	34 (13%)	25 (10%)	0	7
4	H	129/146 (88%)	114 (88%)	8 (6%)	7 (5%)	1	14
5	I	45/50 (90%)	38 (84%)	6 (13%)	1 (2%)	5	29
6	J	70/72 (97%)	62 (89%)	6 (9%)	2 (3%)	3	23
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%)	117 (70%)	27 (16%)	22 (13%)	0	4
8	T	172/174 (99%)	157 (91%)	10 (6%)	5 (3%)	3	23
9	U	120/124 (97%)	102 (85%)	11 (9%)	7 (6%)	1	13
10	V	65/77 (84%)	53 (82%)	8 (12%)	4 (6%)	1	12
11	W	215/217 (99%)	191 (89%)	21 (10%)	3 (1%)	9	40
All	All	4591/4803 (96%)	4026 (88%)	368 (8%)	197 (4%)	3	17

All (197) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	13	GLU
1	A	14	GLU
1	A	45	ARG
1	A	48	GLN
1	A	171	ARG
1	A	194	ASP
1	A	224	ASP
1	A	262	LYS
1	A	289	PRO
1	A	319	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	509	GLU
1	B	45	ARG
1	B	143	ARG
1	B	163	GLN
1	B	171	ARG
1	B	224	ASP
1	B	238	ASP
1	B	346	THR
1	B	505	LEU
1	C	57	SER
1	C	121	ILE
1	C	146	MET
1	C	289	PRO
1	C	365	ILE
2	D	277	SER
2	D	364	GLY
2	D	451	HIS
2	E	132	ILE
2	E	276	PRO
2	E	281	TYR
2	E	344	ILE
2	E	352	ASP
2	E	428	LEU
2	F	30	PRO
2	F	282	GLN
2	F	348	VAL
2	F	396	LEU
3	G	51	LEU
3	G	118	ARG
3	G	156	ASP
3	G	199	ASP
3	G	250	PHE
3	G	271	ALA
4	H	49	ALA
4	H	50	ALA
4	H	51	HIS
7	S	47	LYS
7	S	50	LYS
7	S	78	PHE
7	S	81	LEU
7	S	106	SER
7	S	108	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	S	115	GLU
7	S	125	ALA
7	S	146	GLN
7	S	151	GLU
8	T	164	CYS
8	T	165	ILE
9	U	13	PHE
9	U	14	GLY
10	V	7	PRO
10	V	8	VAL
10	V	67	PRO
1	A	21	THR
1	A	238	ASP
1	A	331	ALA
1	A	374	VAL
1	B	319	GLY
1	C	26	GLU
1	C	44	LEU
1	C	47	VAL
1	C	224	ASP
1	C	346	THR
1	C	430	GLN
2	D	223	ASN
2	D	297	THR
2	D	363	VAL
2	E	73	GLN
2	E	157	GLY
2	E	210	ASP
2	E	451	HIS
2	F	82	ILE
2	F	299	THR
2	F	450	ASP
3	G	9	ARG
3	G	76	GLY
3	G	87	LYS
3	G	93	ALA
3	G	155	PHE
3	G	191	SER
3	G	257	VAL
4	H	69	ASP
5	I	2	ALA
7	S	14	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	S	29	GLN
8	T	151	SER
9	U	3	LEU
9	U	12	ALA
9	U	98	CYS
10	V	68	LYS
1	A	11	ILE
1	A	146	MET
1	A	235	THR
1	A	410	LEU
1	B	141	SER
1	C	145	PRO
1	C	171	ARG
2	D	55	GLU
2	D	176	ALA
2	D	214	LYS
2	E	249	GLN
2	E	299	THR
2	F	72	GLY
2	F	102	ILE
2	F	129	GLU
2	F	213	SER
2	F	359	ASP
2	F	453	PRO
3	G	10	LEU
3	G	72	SER
3	G	92	GLU
3	G	117	HIS
3	G	134	ARG
3	G	168	VAL
3	G	200	VAL
3	G	258	ILE
4	H	101	ASP
4	H	124	ASP
6	J	45	GLN
7	S	77	LYS
7	S	153	LYS
9	U	99	ALA
11	W	40	ASN
1	A	23	VAL
1	A	26	GLU
1	A	209	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	235	THR
1	B	289	PRO
1	B	377	ALA
1	B	456	LEU
1	C	27	GLU
2	D	360	PRO
2	E	223	ASN
2	F	160	VAL
2	F	394	ASP
6	P	40	PRO
6	Q	44	GLN
7	S	10	GLN
7	S	61	LYS
7	S	92	ASN
7	S	130	THR
11	W	36	ARG
1	A	8	VAL
1	B	59	LEU
1	B	170	ASP
2	D	101	PRO
2	D	279	VAL
2	E	357	ILE
2	F	157	GLY
2	F	357	ILE
3	G	201	LEU
3	G	268	GLY
4	H	39	PRO
6	O	39	ASN
7	S	68	SER
7	S	93	GLY
11	W	92	PHE
1	C	143	ARG
7	S	9	VAL
7	S	66	VAL
2	D	30	PRO
2	E	279	VAL
2	F	279	VAL
3	G	69	ILE
6	M	40	PRO
8	T	152	ILE
2	E	102	ILE
9	U	79	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	47	VAL
1	B	115	ILE
1	C	68	PRO
2	E	30	PRO
2	E	161	GLY
2	E	417	PRO
2	F	121	PRO
2	F	462	PRO
3	G	115	ILE
6	J	40	PRO
6	M	71	ILE
8	T	28	ILE
1	A	47	VAL
1	A	365	ILE
1	B	134	PRO
2	D	282	GLN
2	E	144	ALA
6	K	40	PRO
6	Q	40	PRO

5.3.2 Protein sidechains [i](#)

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

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-3169. These allow visual inspection of the internal detail of the map and identification of artifacts.

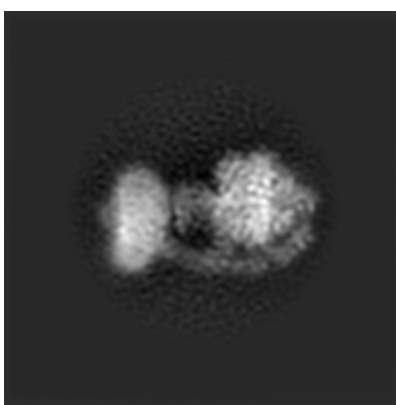
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

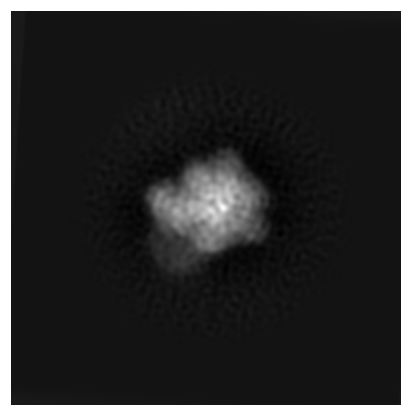
6.1.1 Primary map



X



Y

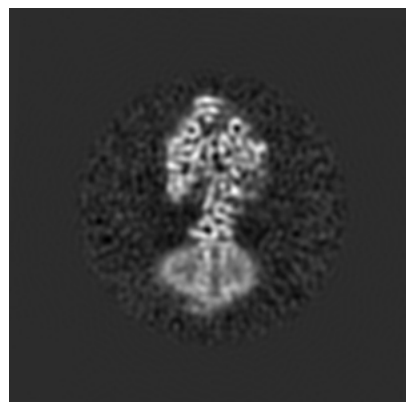


Z

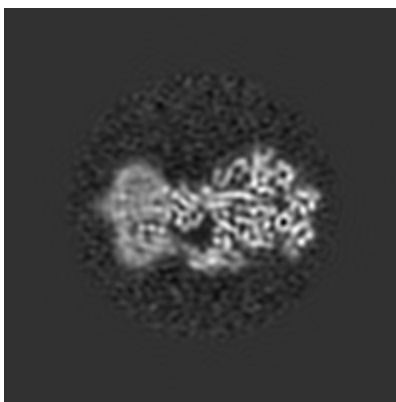
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

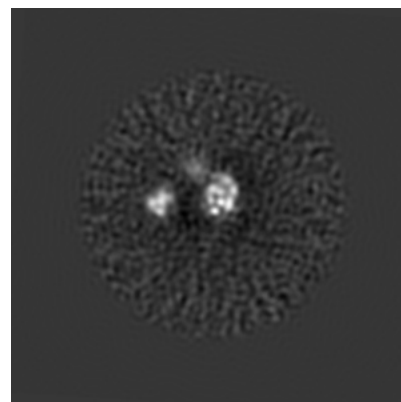
6.2.1 Primary map



X Index: 128



Y Index: 128



Z Index: 128

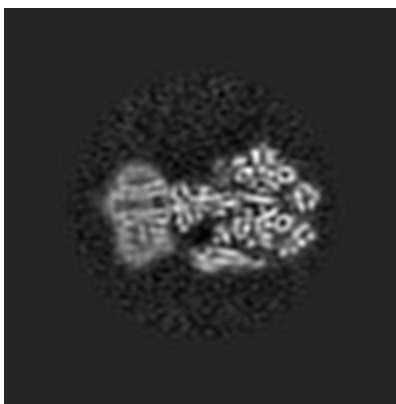
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

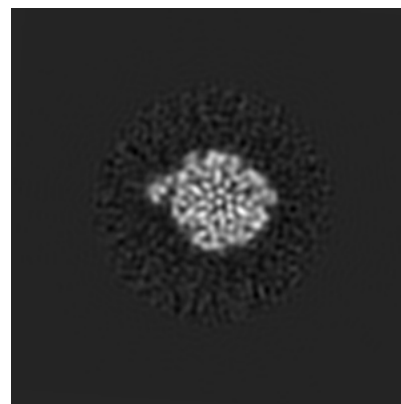
6.3.1 Primary map



X Index: 134



Y Index: 131

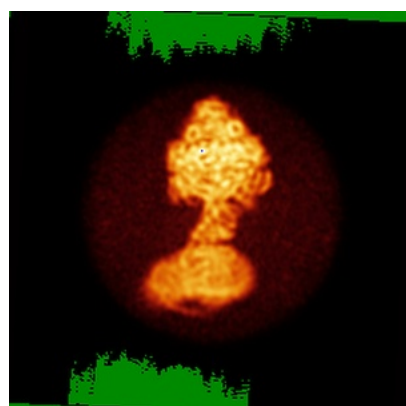


Z Index: 166

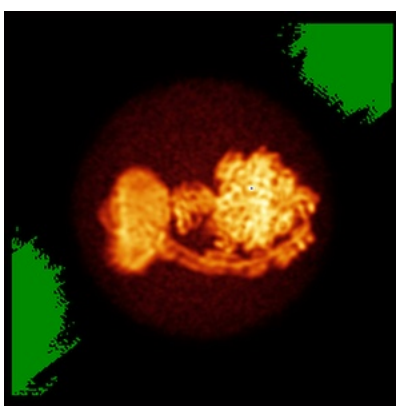
The images above show the largest variance slices of the map in three orthogonal directions.

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

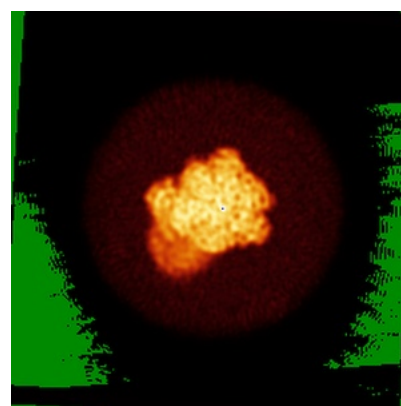
6.4.1 Primary map



X



Y

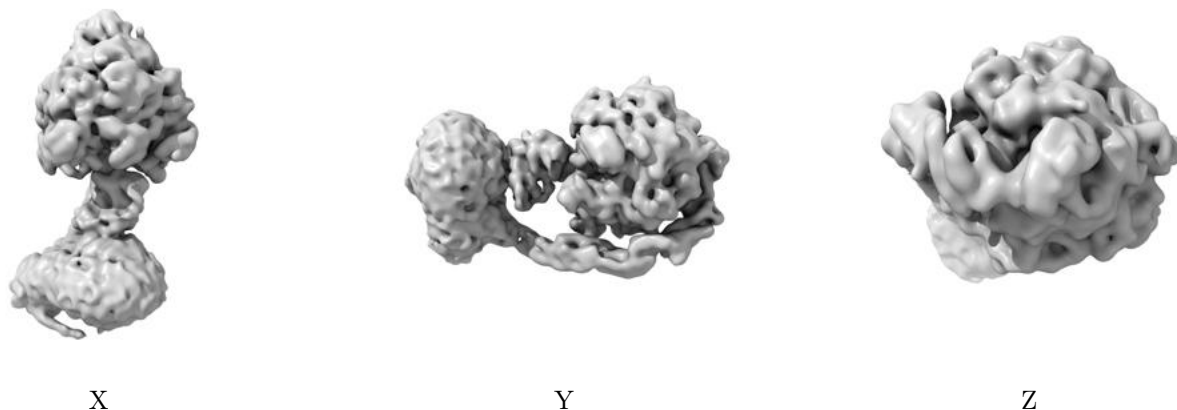


Z

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

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



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

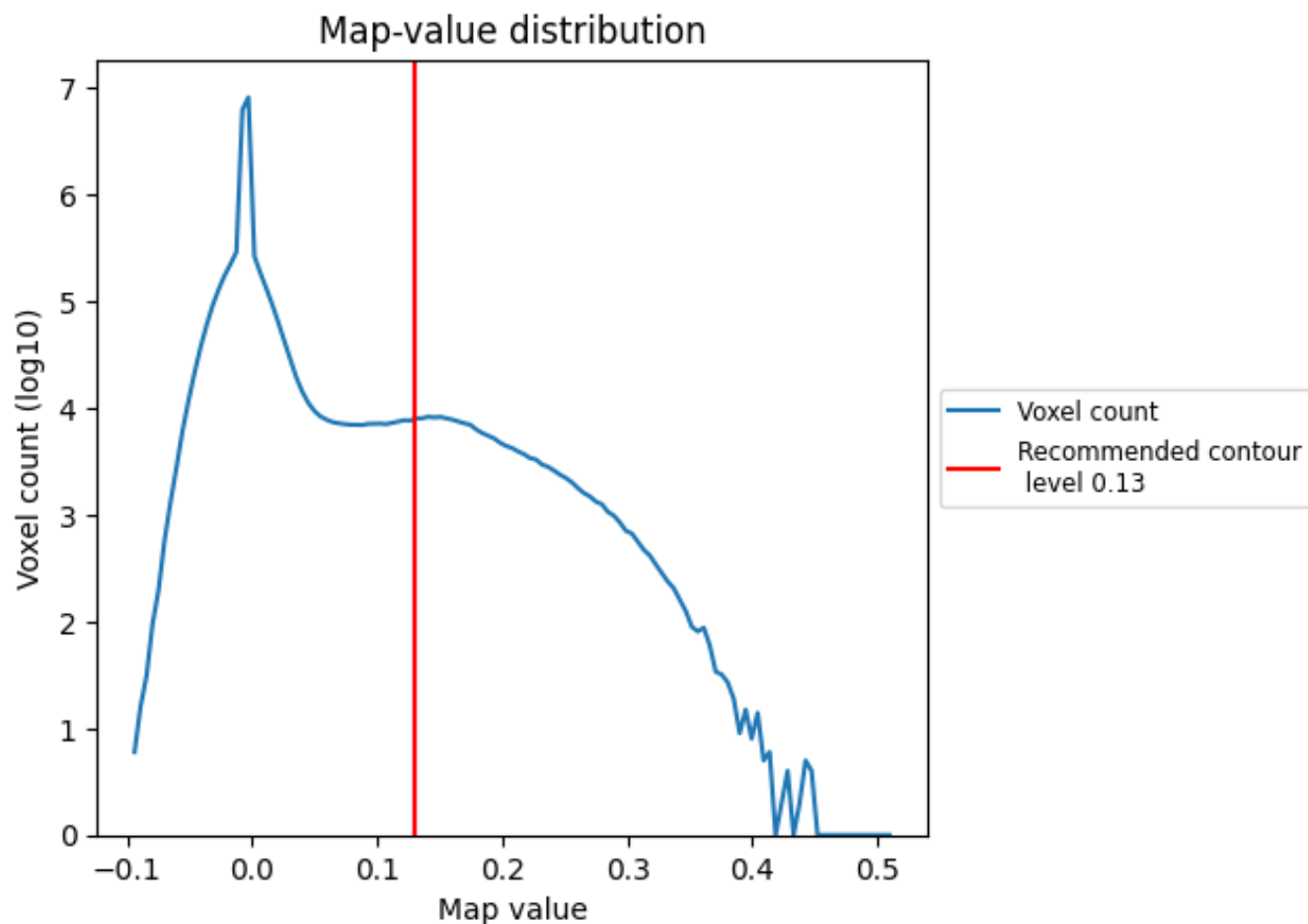
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

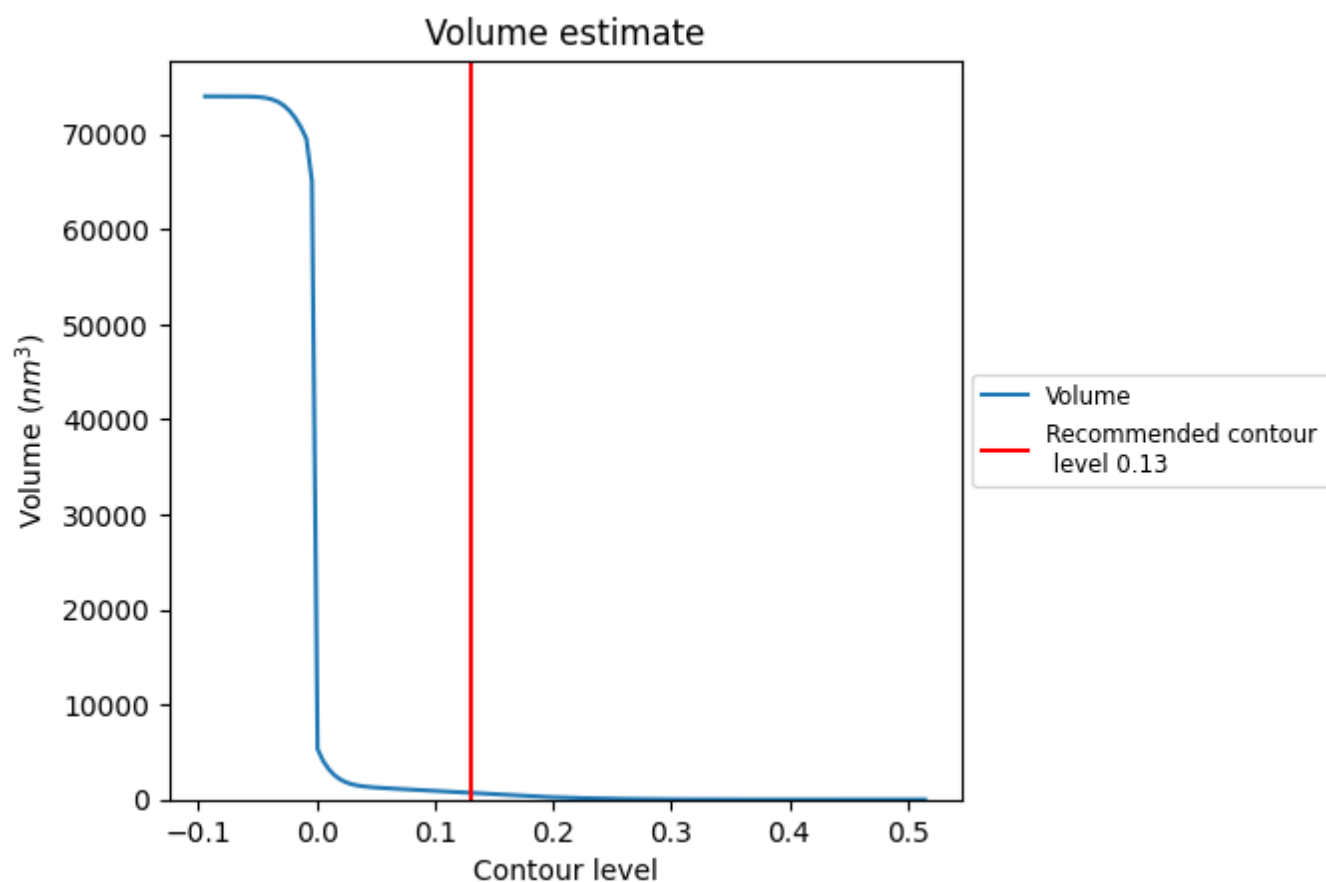
This section contains the results of statistical analysis of the map.

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.

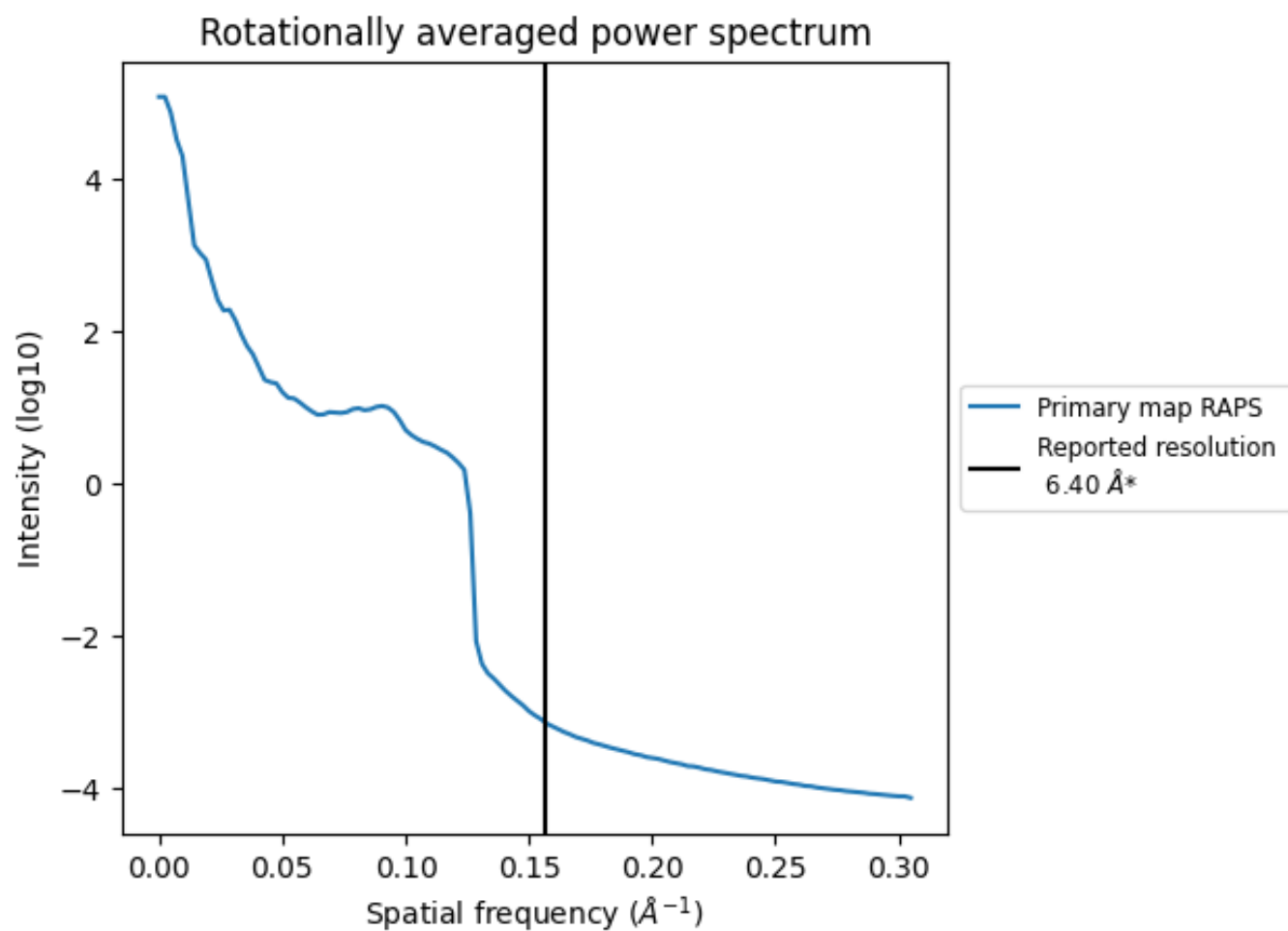
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 713 nm³; this corresponds to an approximate mass of 644 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 0.156 Å⁻¹

8 Fourier-Shell correlation

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

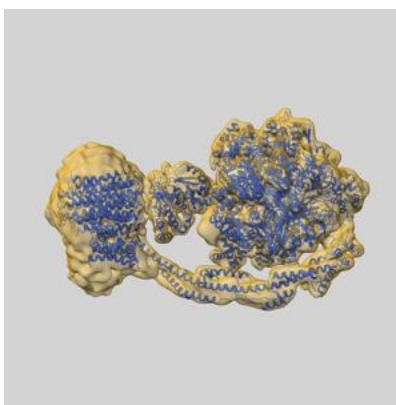
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-3169 and PDB model 5FIK. Per-residue inclusion information can be found in section [3](#) on page [7](#).

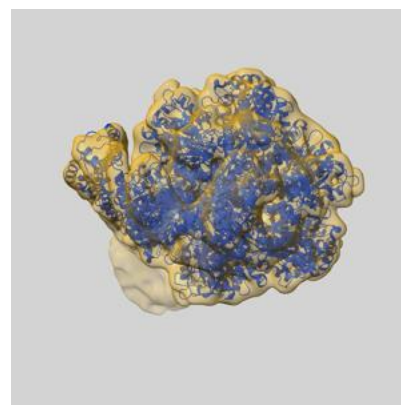
9.1 Map-model overlay [i](#)



X



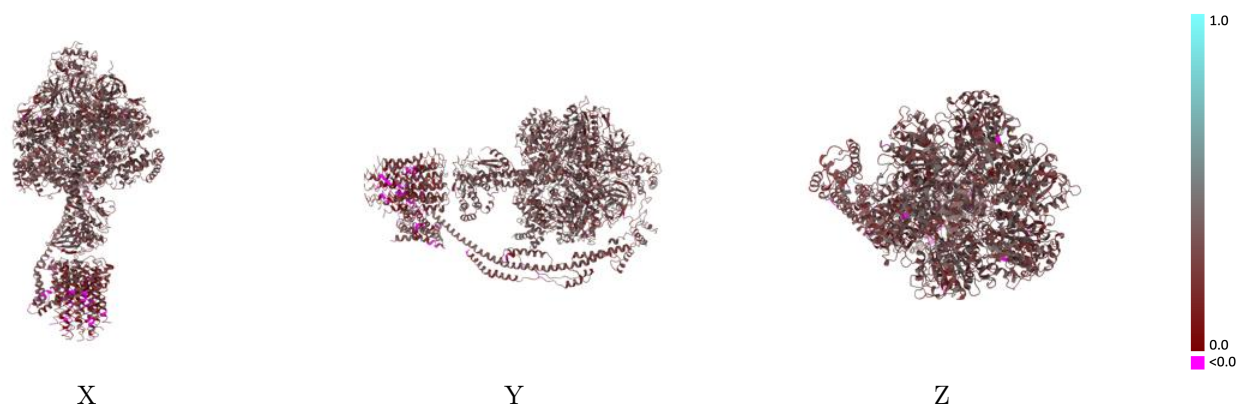
Y



Z

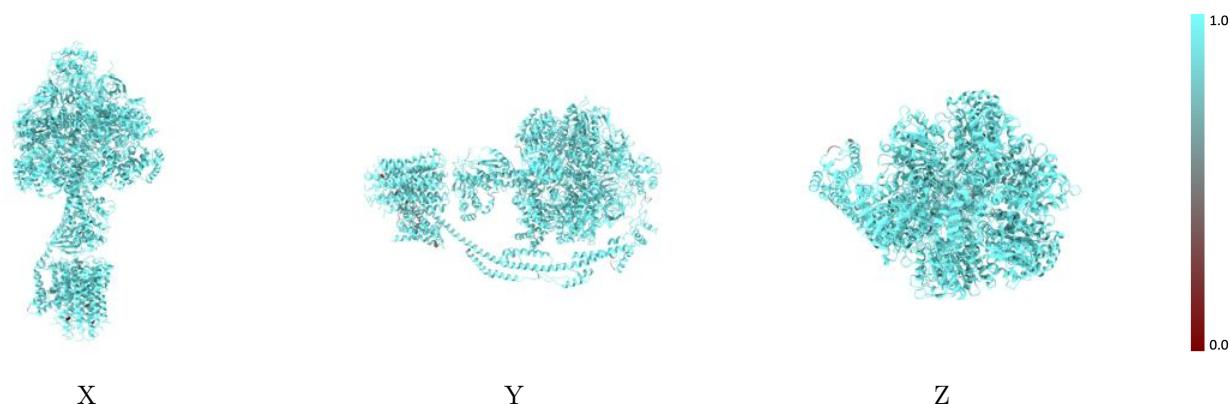
The images above show the 3D surface view of the map at the recommended contour level 0.13 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



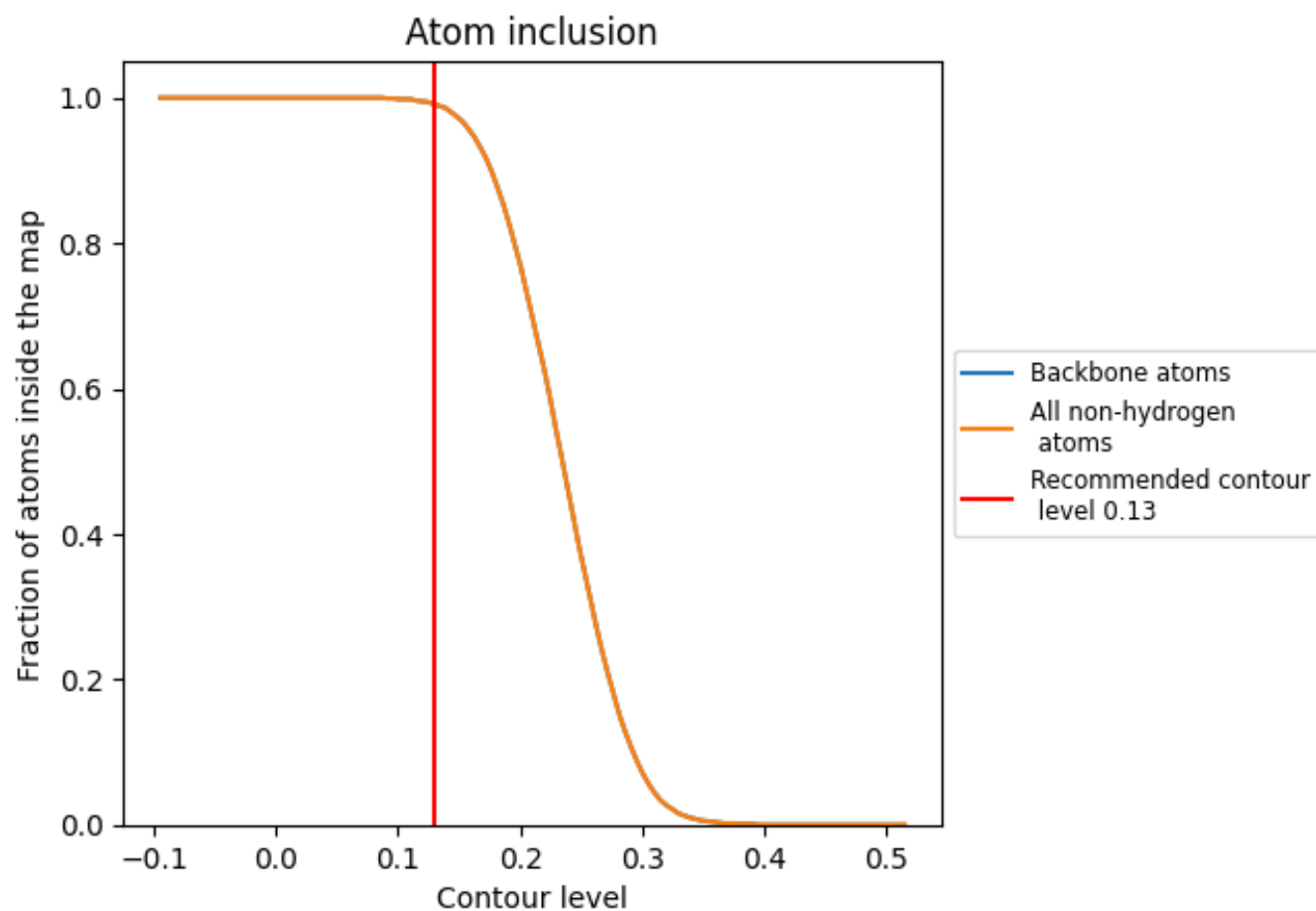
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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	 0.2850
A	 0.9950	 0.3020
B	 1.0000	 0.3090
C	 1.0000	 0.3170
D	 1.0000	 0.3070
E	 1.0000	 0.3100
F	 1.0000	 0.3040
G	 0.9970	 0.3150
H	 1.0000	 0.3090
I	 0.9570	 0.2930
J	 1.0000	 0.1950
K	 0.9900	 0.2250
L	 0.9900	 0.1760
M	 0.9760	 0.1740
N	 0.9830	 0.1930
O	 0.9620	 0.1990
P	 0.9760	 0.1590
Q	 0.9900	 0.1830
S	 0.9910	 0.3120
T	 0.9910	 0.2940
U	 0.9570	 0.2420
V	 0.9740	 0.2690
W	 0.9270	 0.1830

