



Full wwPDB EM Validation Report ⓘ

Nov 19, 2022 – 04:51 pm GMT

PDB ID : 5NZT
EMDB ID : EMD-3722
Title : The structure of the COPI coat linkage I
Authors : Dodonova, S.O.; Aderhold, P.; Kopp, J.; Ganeva, I.; Roehling, S.; Hagen, W.J.H.; Sinning, I.; Wieland, F.; Briggs, J.A.G.
Deposited on : 2017-05-15
Resolution : 17.00 Å(reported)

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

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

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

EMDB validation analysis : 0.0.1.dev43
MolProbity : 4.02b-467
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.9
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.31.2

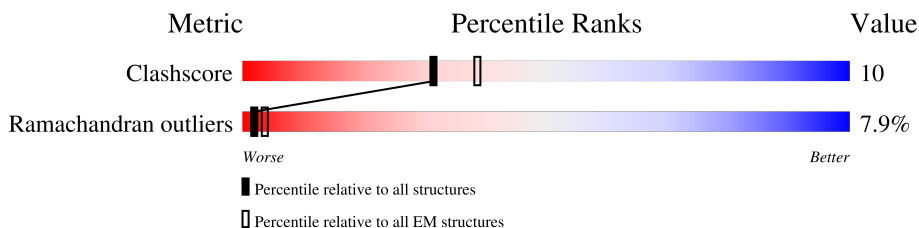
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 17.00 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)
Clashscore	158937	4297
Ramachandran outliers	154571	4023

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	1-A	1262	9% 73% 14% • 11%
1	2-A	1262	73% 14% • 11%
1	3-A	1262	73% 15% • 11%
2	1-E	308	19% 93% • 5%
2	2-E	308	93% • 5%
2	3-E	308	94% • 5%
3	1-B	968	17% 67% 13% • 17%
3	1-N	968	24% 50% 8% • 41%
3	2-B	968	66% 13% • 17%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	2-N	968	
3	3-B	968	
3	3-N	968	
4	1-C	905	
4	1-H	905	
4	2-C	905	
4	2-H	905	
4	3-C	905	
4	3-H	905	
5	1-D	511	
5	1-I	511	
5	2-D	511	
5	2-I	511	
5	3-D	511	
5	3-I	511	
6	1-F	181	
6	1-J	181	
6	1-M	181	
6	1-R	181	
6	2-F	181	
6	2-J	181	
6	2-M	181	
6	2-R	181	
6	3-F	181	
6	3-J	181	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
6	3-M	181	65% 19% 12% 6%
6	3-R	181	54% 27% 12% 7%
7	1-G	874	75% 14% 9% 6%
7	1-K	874	52% 9% 36% 28%
7	2-G	874	75% 13% 9%
7	2-K	874	52% 9% 36%
7	3-G	874	75% 14% 9%
7	3-K	874	52% 9% 36%
8	1-L	177	66% 12% 21% 36%
8	1-Z	177	66% 12% 21% 12%
8	2-L	177	66% 12% 21%
8	2-Z	177	66% 12% 21%
8	3-L	177	66% 12% 21%
8	3-Z	177	66% 12% 21%

2 Entry composition i

There are 8 unique types of molecules in this entry. The entry contains 83685 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 Coatomer subunit alpha.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
1	1-A	1126	4503	2252	1126	1125	0	0
1	2-A	1126	4503	2252	1126	1125	0	0
1	3-A	1126	4503	2252	1126	1125	0	0

There are 38 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	1225	LEU	-	expression tag	UNP Q8CIE6
A	1226	GLU	-	expression tag	UNP Q8CIE6
A	1227	VAL	-	expression tag	UNP Q8CIE6
A	1228	LEU	-	expression tag	UNP Q8CIE6
A	1229	PHE	-	expression tag	UNP Q8CIE6
A	1230	GLN	-	expression tag	UNP Q8CIE6
A	1231	GLY	-	expression tag	UNP Q8CIE6
A	1232	PRO	-	expression tag	UNP Q8CIE6
A	1233	SER	-	expression tag	UNP Q8CIE6
A	1234	ALA	-	expression tag	UNP Q8CIE6
A	1235	TRP	-	expression tag	UNP Q8CIE6
A	1236	SER	-	expression tag	UNP Q8CIE6
A	1237	HIS	-	expression tag	UNP Q8CIE6
A	1238	PRO	-	expression tag	UNP Q8CIE6
A	1239	GLN	-	expression tag	UNP Q8CIE6
A	1240	PHE	-	expression tag	UNP Q8CIE6
A	1241	GLU	-	expression tag	UNP Q8CIE6
A	1242	LYS	-	expression tag	UNP Q8CIE6
A	1243	GLY	-	expression tag	UNP Q8CIE6
A	1244	GLY	-	expression tag	UNP Q8CIE6
A	1245	GLY	-	expression tag	UNP Q8CIE6
A	1246	SER	-	expression tag	UNP Q8CIE6
A	1247	GLY	-	expression tag	UNP Q8CIE6
A	1248	GLY	-	expression tag	UNP Q8CIE6

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
A	1249	GLY	-	expression tag	UNP Q8CIE6
A	1250	SER	-	expression tag	UNP Q8CIE6
A	1251	GLY	-	expression tag	UNP Q8CIE6
A	1252	GLY	-	expression tag	UNP Q8CIE6
A	1253	SER	-	expression tag	UNP Q8CIE6
A	1254	ALA	-	expression tag	UNP Q8CIE6
A	1255	TRP	-	expression tag	UNP Q8CIE6
A	1256	SER	-	expression tag	UNP Q8CIE6
A	1257	HIS	-	expression tag	UNP Q8CIE6
A	1258	PRO	-	expression tag	UNP Q8CIE6
A	1259	GLN	-	expression tag	UNP Q8CIE6
A	1260	PHE	-	expression tag	UNP Q8CIE6
A	1261	GLU	-	expression tag	UNP Q8CIE6
A	1262	LYS	-	expression tag	UNP Q8CIE6

- Molecule 2 is a protein called Coatomer subunit epsilon.

Mol	Chain	Residues	Atoms				AltConf	Trace
2	1-E	292	Total	C	N	O	0	0
			1169	584	292	293		
2	2-E	292	Total	C	N	O	0	0
			1169	584	292	293		
2	3-E	292	Total	C	N	O	0	0
			1169	584	292	293		

- Molecule 3 is a protein called Coatomer subunit beta.

Mol	Chain	Residues	Atoms				AltConf	Trace
3	1-B	800	Total	C	N	O	0	0
			3198	1600	800	798		
3	2-B	800	Total	C	N	O	0	0
			3198	1600	800	798		
3	3-B	800	Total	C	N	O	0	0
			3198	1600	800	798		
3	1-N	570	Total	C	N	O	0	0
			2279	1140	570	569		
3	2-N	570	Total	C	N	O	0	0
			2279	1140	570	569		
3	3-N	570	Total	C	N	O	0	0
			2279	1140	570	569		

There are 30 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
B	1	MET	-	initiating methionine	UNP Q9JIF7
B	2	HIS	-	expression tag	UNP Q9JIF7
B	3	HIS	-	expression tag	UNP Q9JIF7
B	4	HIS	-	expression tag	UNP Q9JIF7
B	5	HIS	-	expression tag	UNP Q9JIF7
B	6	HIS	-	expression tag	UNP Q9JIF7
B	7	HIS	-	expression tag	UNP Q9JIF7
B	8	GLU	-	expression tag	UNP Q9JIF7
B	9	ASN	-	expression tag	UNP Q9JIF7
B	10	LEU	-	expression tag	UNP Q9JIF7
B	11	TYR	-	expression tag	UNP Q9JIF7
B	12	PHE	-	expression tag	UNP Q9JIF7
B	13	GLN	-	expression tag	UNP Q9JIF7
B	14	GLY	-	expression tag	UNP Q9JIF7
B	15	HIS	-	expression tag	UNP Q9JIF7
N	1	MET	-	initiating methionine	UNP Q9JIF7
N	2	HIS	-	expression tag	UNP Q9JIF7
N	3	HIS	-	expression tag	UNP Q9JIF7
N	4	HIS	-	expression tag	UNP Q9JIF7
N	5	HIS	-	expression tag	UNP Q9JIF7
N	6	HIS	-	expression tag	UNP Q9JIF7
N	7	HIS	-	expression tag	UNP Q9JIF7
N	8	GLU	-	expression tag	UNP Q9JIF7
N	9	ASN	-	expression tag	UNP Q9JIF7
N	10	LEU	-	expression tag	UNP Q9JIF7
N	11	TYR	-	expression tag	UNP Q9JIF7
N	12	PHE	-	expression tag	UNP Q9JIF7
N	13	GLN	-	expression tag	UNP Q9JIF7
N	14	GLY	-	expression tag	UNP Q9JIF7
N	15	HIS	-	expression tag	UNP Q9JIF7

- Molecule 4 is a protein called Coatomer subunit beta'.

Mol	Chain	Residues	Atoms				AltConf	Trace
4	1-C	843	Total	C	N	O	0	0
			3371	1686	843	842		
4	2-C	843	Total	C	N	O	0	0
			3371	1686	843	842		
4	3-C	843	Total	C	N	O	0	0
			3371	1686	843	842		
4	1-H	721	Total	C	N	O	0	0
			2884	1442	721	721		
4	2-H	721	Total	C	N	O	0	0
			2884	1442	721	721		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
4	3-H	721	2884	1442	721	721	0	0

- Molecule 5 is a protein called Coatomer subunit delta.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
5	1-D	177	706	354	177	175	0	0
5	2-D	177	706	354	177	175	0	0
5	3-D	177	706	354	177	175	0	0
5	1-I	177	706	354	177	175	0	0
5	2-I	177	706	354	177	175	0	0
5	3-I	177	706	354	177	175	0	0

- Molecule 6 is a protein called ADP-ribosylation factor 1.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
6	1-F	159	635	318	159	158	0	0
6	2-F	159	635	318	159	158	0	0
6	3-F	159	635	318	159	158	0	0
6	1-R	159	635	318	159	158	0	0
6	2-R	159	635	318	159	158	0	0
6	3-R	159	635	318	159	158	0	0
6	1-M	159	635	318	159	158	0	0
6	2-M	159	635	318	159	158	0	0
6	3-M	159	635	318	159	158	0	0
6	1-J	159	635	318	159	158	0	0

Continued on next page...

Continued from previous page...

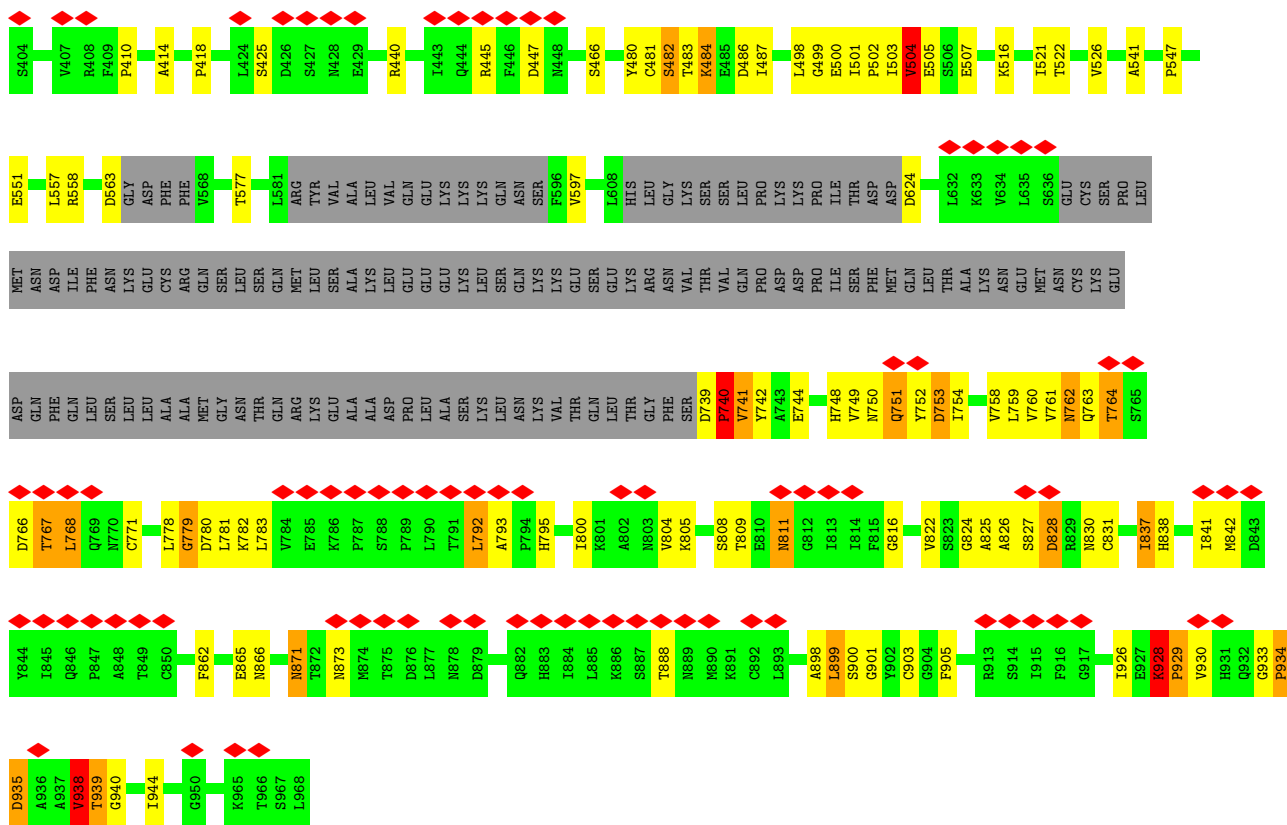
Mol	Chain	Residues	Atoms				AltConf	Trace
6	2-J	159	Total	C	N	O	0	0
			635	318	159	158		
6	3-J	159	Total	C	N	O	0	0
			635	318	159	158		

- Molecule 7 is a protein called Coatomer subunit gamma-1.

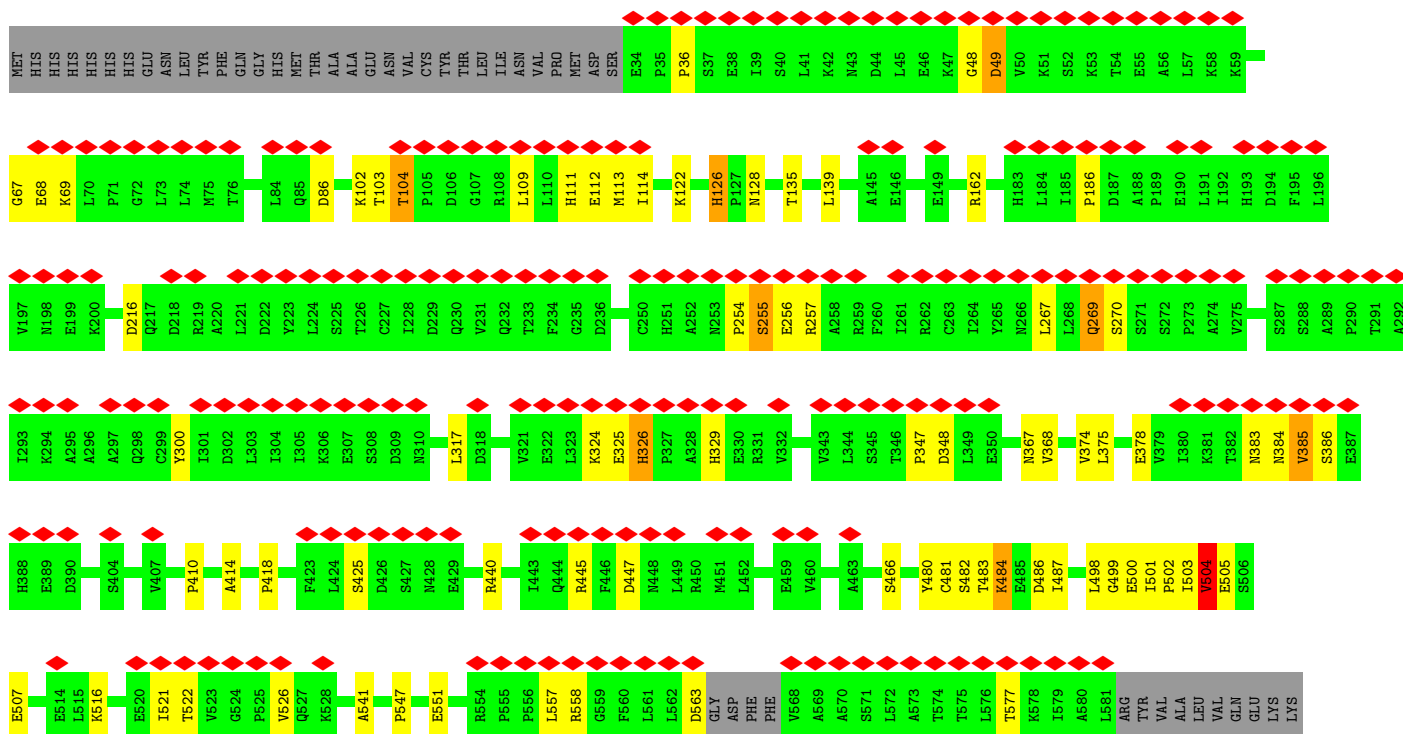
Mol	Chain	Residues	Atoms				AltConf	Trace
7	1-G	798	Total	C	N	O	0	0
			3190	1596	798	796		
7	2-G	798	Total	C	N	O	0	0
			3190	1596	798	796		
7	3-G	798	Total	C	N	O	0	0
			3190	1596	798	796		
7	1-K	560	Total	C	N	O	0	0
			2239	1120	560	559		
7	2-K	560	Total	C	N	O	0	0
			2239	1120	560	559		
7	3-K	560	Total	C	N	O	0	0
			2239	1120	560	559		

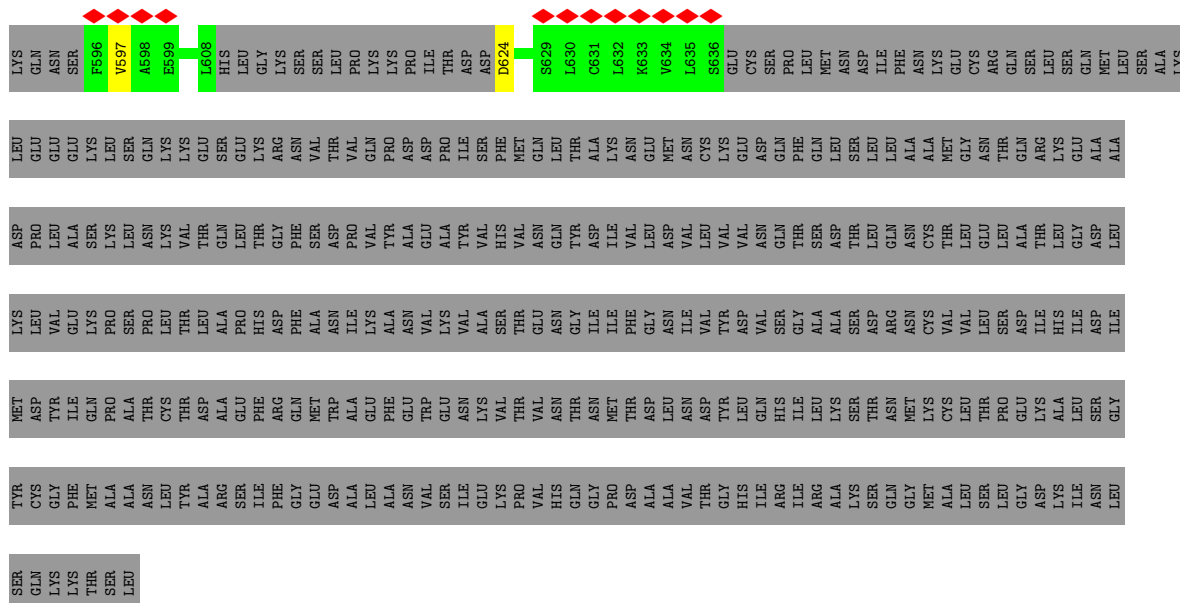
- Molecule 8 is a protein called Coatomer subunit zeta-1.

Mol	Chain	Residues	Atoms				AltConf	Trace
8	1-Z	139	Total	C	N	O	0	0
			555	278	139	138		
8	2-Z	139	Total	C	N	O	0	0
			555	278	139	138		
8	3-Z	139	Total	C	N	O	0	0
			555	278	139	138		
8	1-L	139	Total	C	N	O	0	0
			555	278	139	138		
8	2-L	139	Total	C	N	O	0	0
			555	278	139	138		
8	3-L	139	Total	C	N	O	0	0
			555	278	139	138		



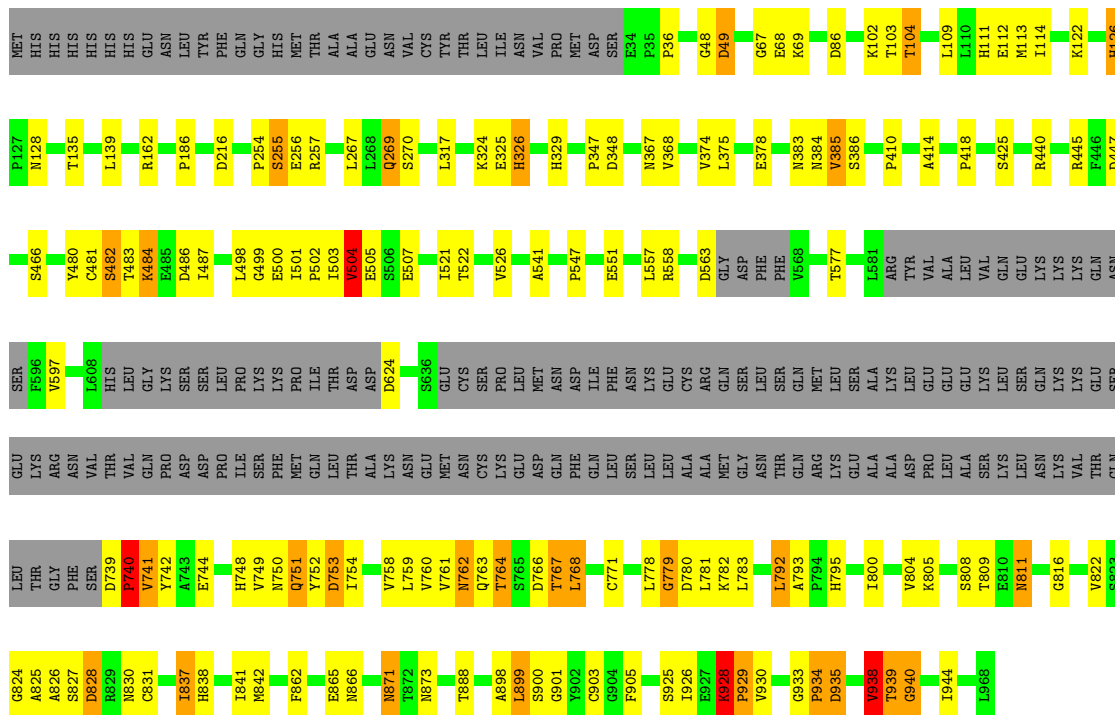
• Molecule 3: Coatomer subunit beta





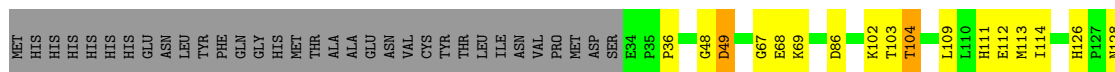
● Molecule 3: Coatomer subunit beta

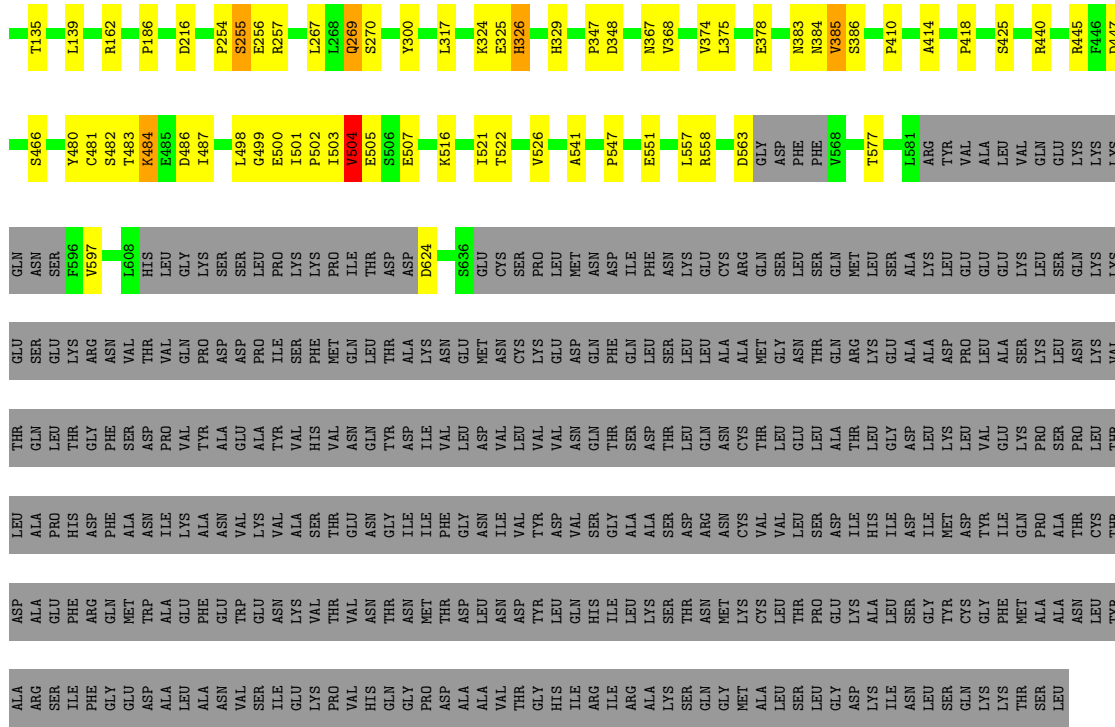
Chain 2-B: 66% 13% 17%



● Molecule 3: Coatomer subunit beta

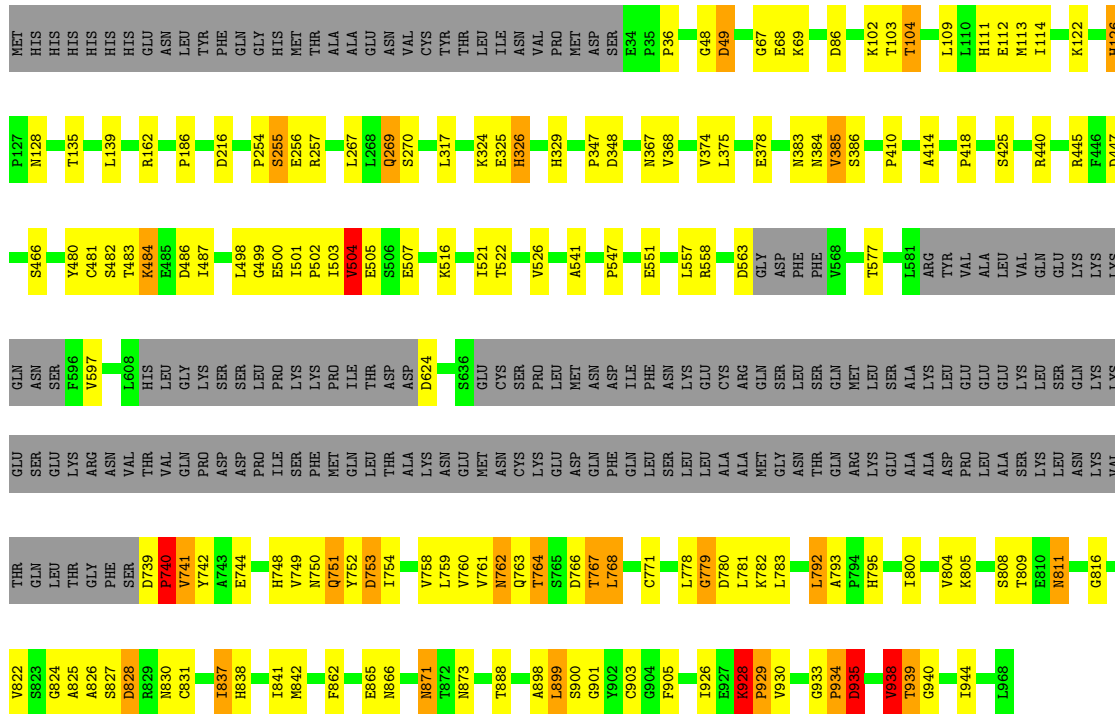
Chain 2-N: 50% 8% 41%





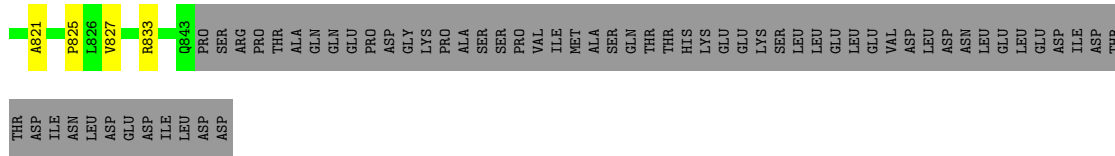
• Molecule 3: Coatomer subunit beta

Chain 3-B: 66% 13% 17%

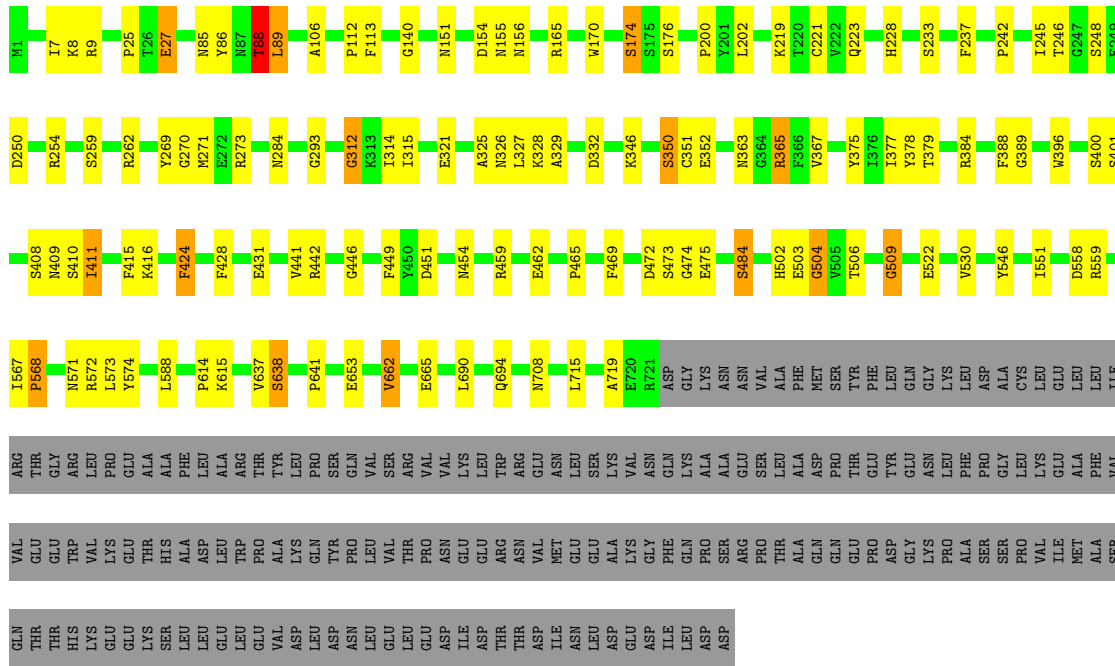


• Molecule 3: Coatomer subunit beta

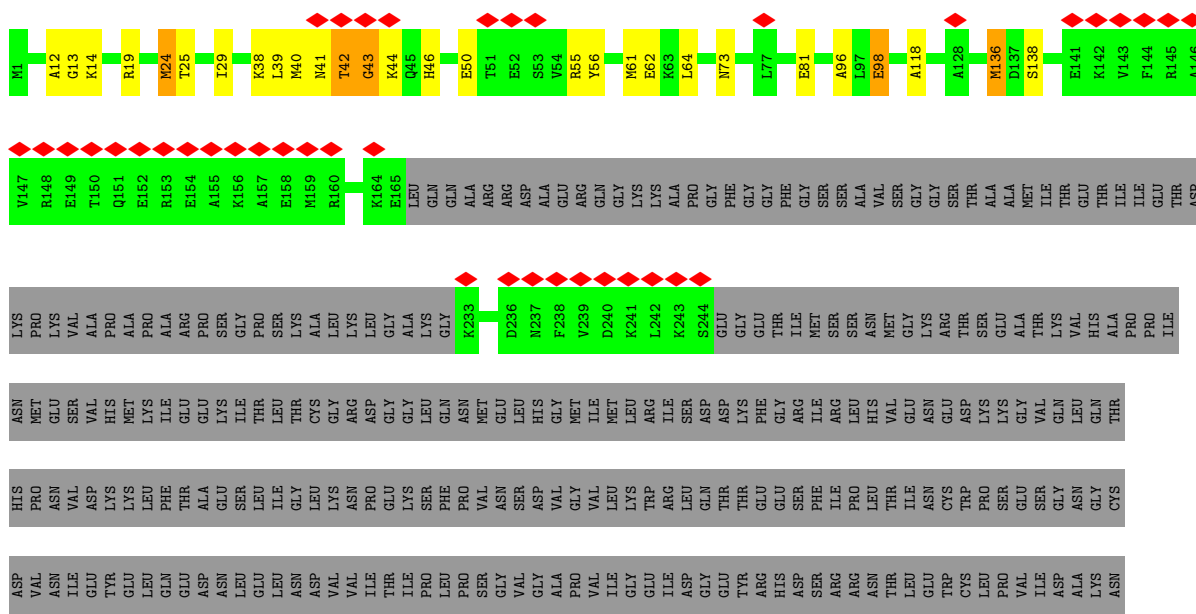
Chain 3-N: 51% 7% 41%

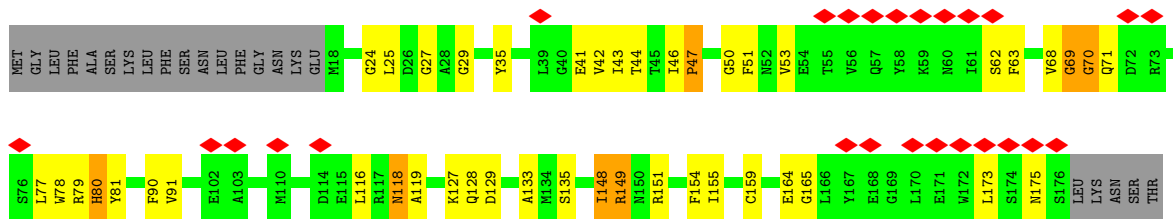


• Molecule 4: Coatomer subunit beta'

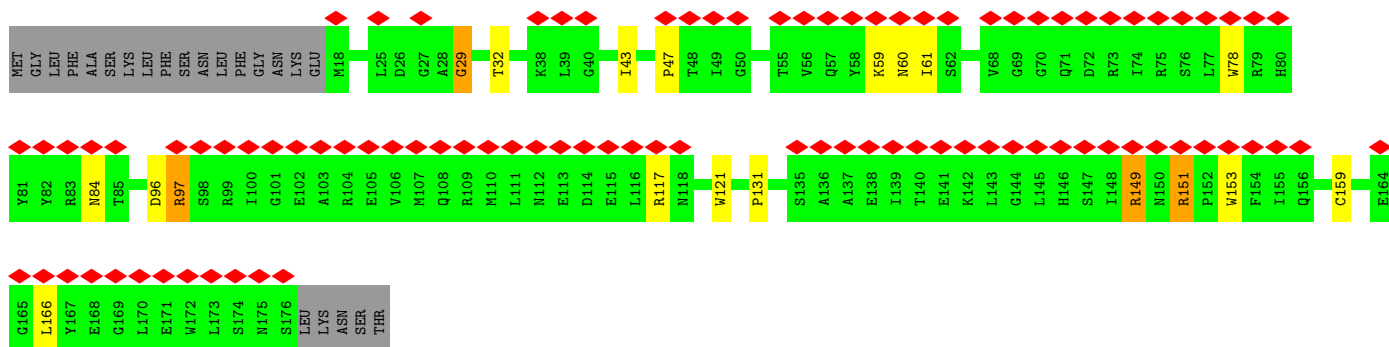
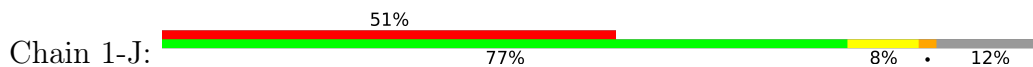


• Molecule 5: Coatomer subunit delta

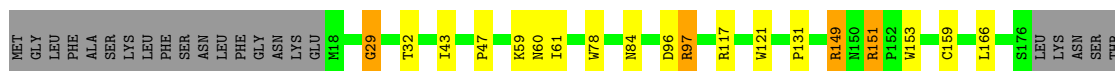
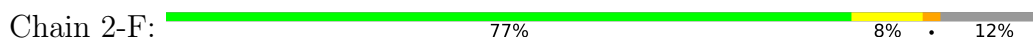




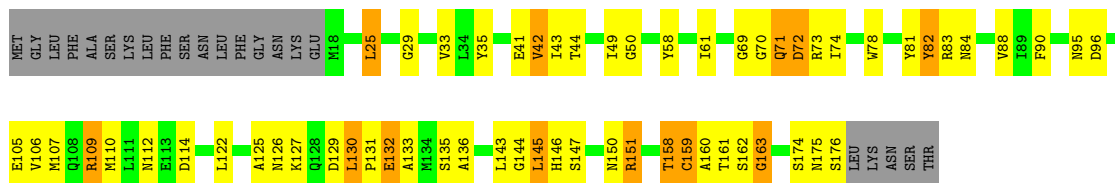
• Molecule 6: ADP-ribosylation factor 1



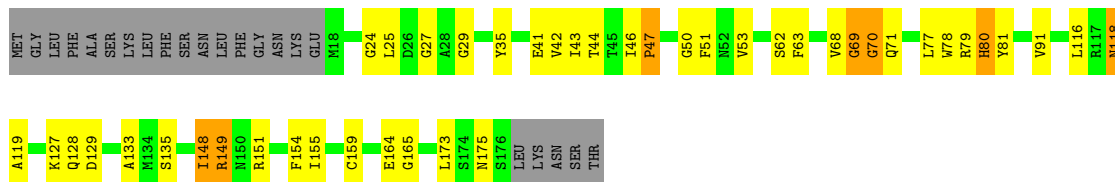
• Molecule 6: ADP-ribosylation factor 1



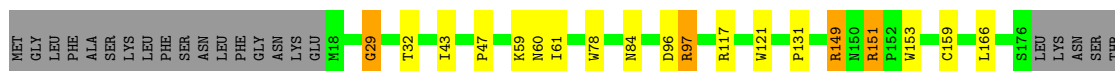
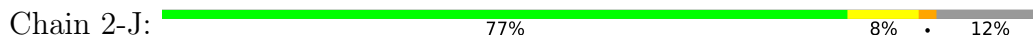
• Molecule 6: ADP-ribosylation factor 1



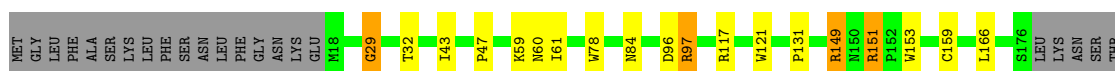
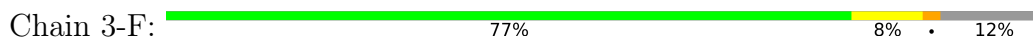
• Molecule 6: ADP-ribosylation factor 1



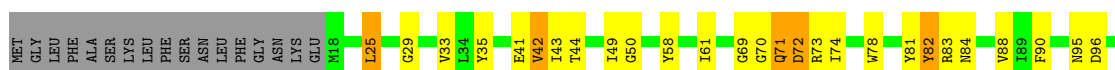
• Molecule 6: ADP-ribosylation factor 1



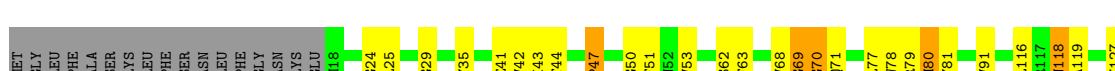
• Molecule 6: ADP-ribosylation factor 1



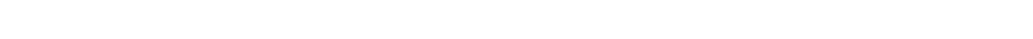
• Molecule 6: ADP-ribosylation factor 1



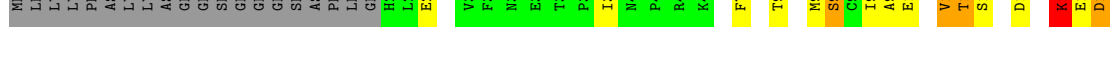
• Molecule 6: ADP-ribosylation factor 1

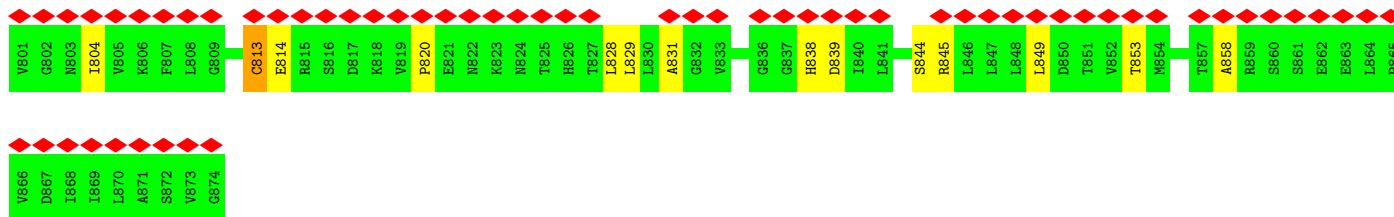


• Molecule 6: ADP-ribosylation factor 1

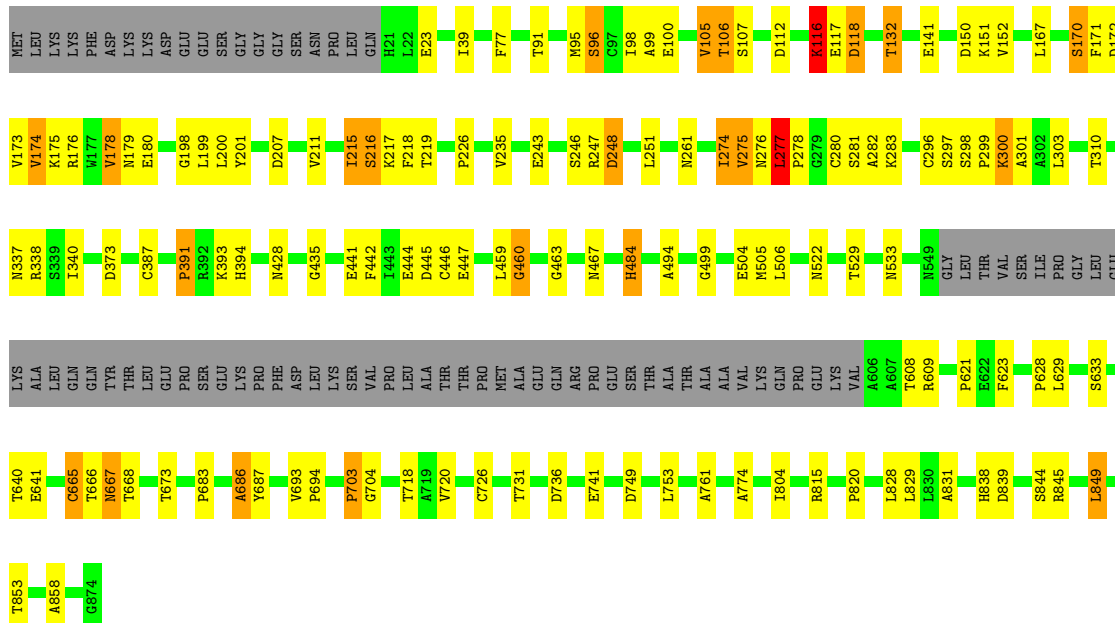
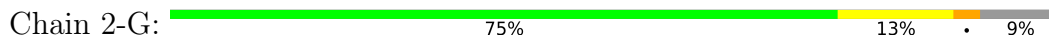


• Molecule 7: Coatomer subunit gamma-1

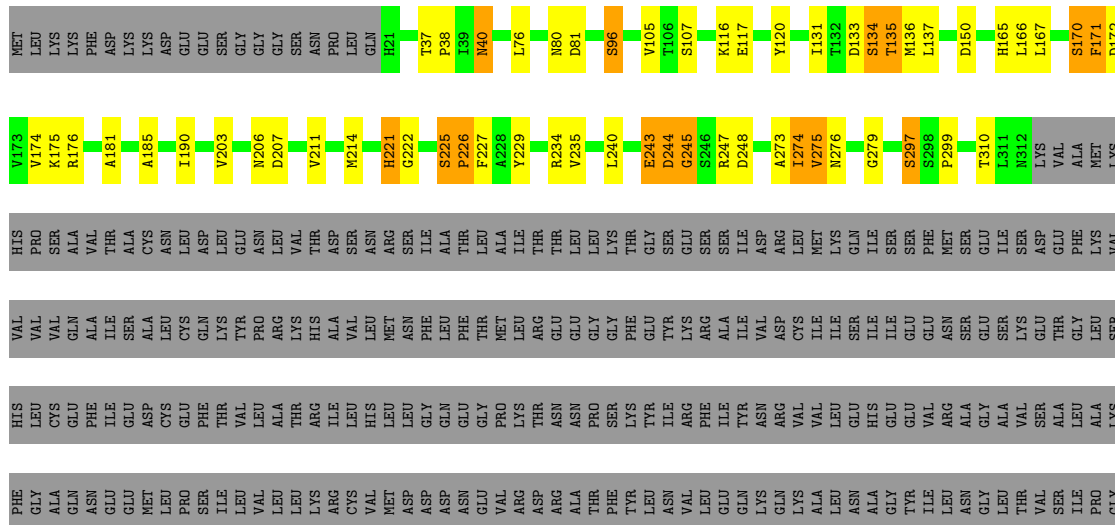


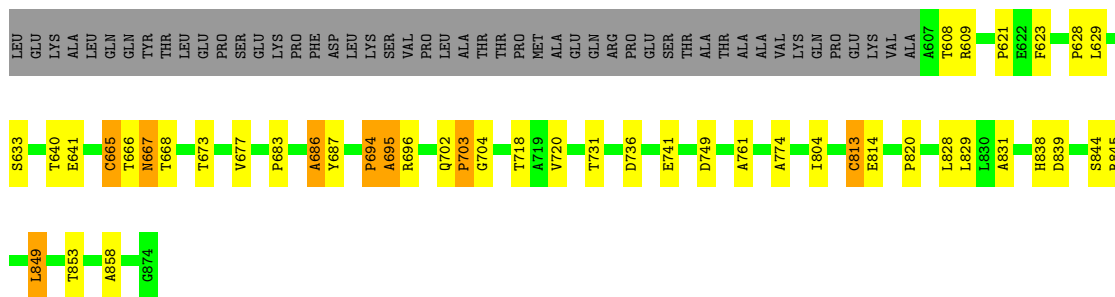


• Molecule 7: Coatomer subunit gamma-1

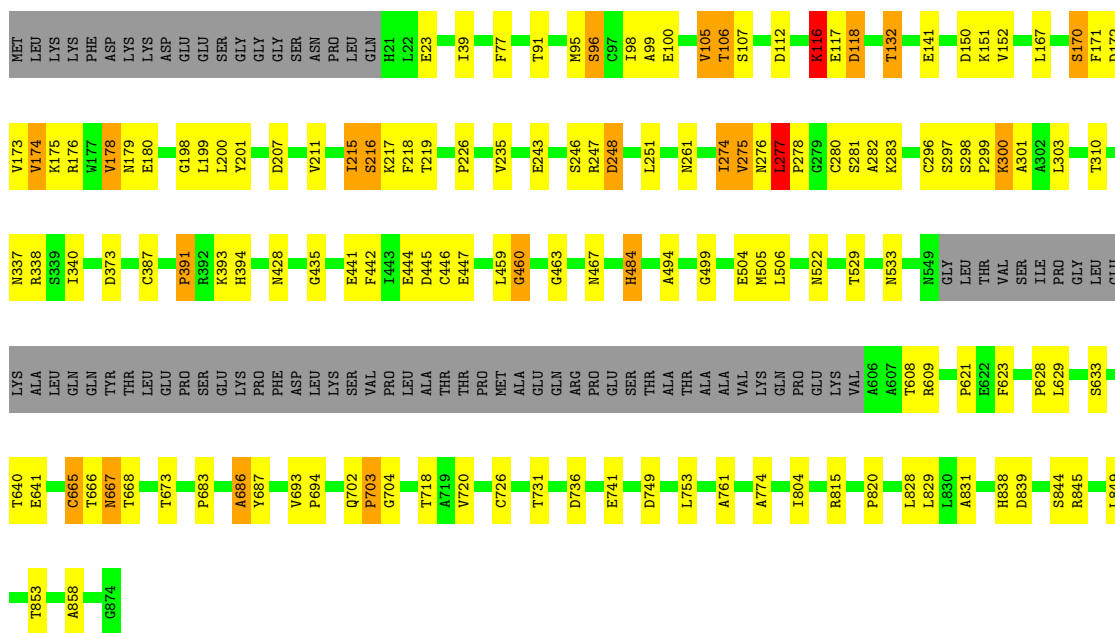
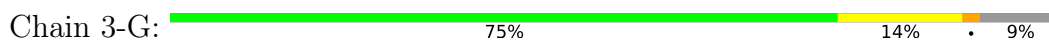


• Molecule 7: Coatomer subunit gamma-1

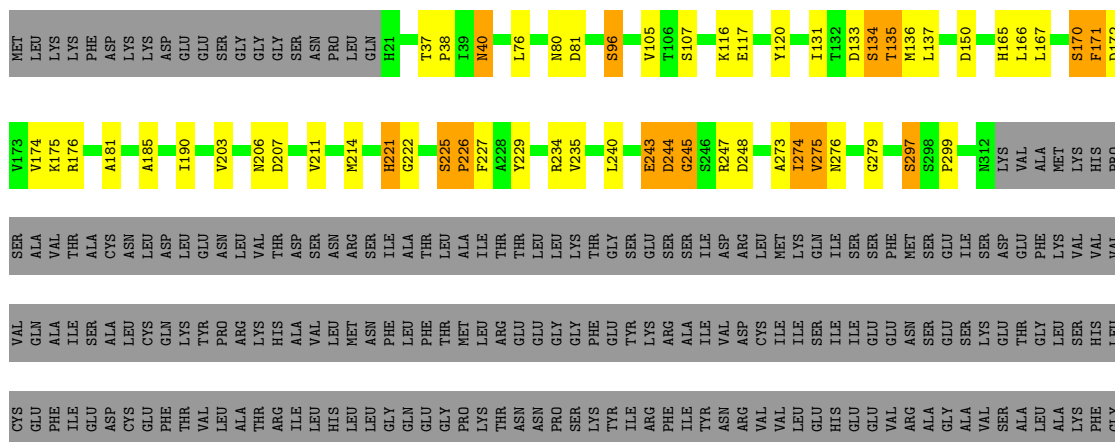


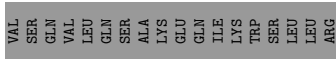
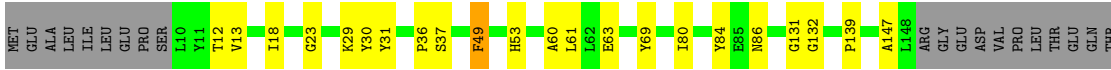


• Molecule 7: Coatomer subunit gamma-1

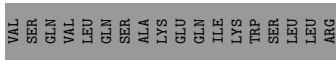


• Molecule 7: Coatomer subunit gamma-1

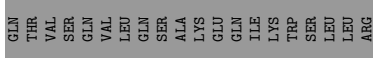




• Molecule 8: Coatomer subunit zeta-1



• Molecule 8: Coatomer subunit zeta-1



4 Experimental information

Property	Value	Source
EM reconstruction method	SUBTOMOGRAM AVERAGING	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of subtomograms used	2547	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING ONLY; CTF-determination for each individual tilt image was performed using CTFFIND4. Strip-based CTF-correction and tomogram reconstruction was performed in Imod.	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	2	Depositor
Minimum defocus (nm)	2500	Depositor
Maximum defocus (nm)	5000	Depositor
Magnification	Not provided	
Image detector	GATAN K2 QUANTUM (4k x 4k)	Depositor
Maximum map value	0.153	Depositor
Minimum map value	-0.136	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.025	Depositor
Recommended contour level	0.03	Depositor
Map size (\AA)	377.36, 377.36, 377.36	wwPDB
Map dimensions	212, 212, 212	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	1.78, 1.78, 1.78	Depositor

5 Model quality i

5.1 Standard geometry i

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	1-A	1.41	15/4501 (0.3%)	1.59	75/5623 (1.3%)
1	2-A	1.41	15/4501 (0.3%)	1.59	74/5623 (1.3%)
1	3-A	1.41	15/4501 (0.3%)	1.59	76/5623 (1.4%)
2	1-E	0.91	0/1168	0.63	0/1457
2	2-E	0.91	0/1168	0.63	0/1457
2	3-E	0.91	0/1168	0.63	0/1457
3	1-B	1.72	18/3193 (0.6%)	1.55	45/3983 (1.1%)
3	1-N	1.68	9/2275 (0.4%)	1.34	16/2837 (0.6%)
3	2-B	1.72	18/3193 (0.6%)	1.55	45/3983 (1.1%)
3	2-N	1.68	9/2275 (0.4%)	1.34	16/2837 (0.6%)
3	3-B	1.72	18/3193 (0.6%)	1.55	46/3983 (1.2%)
3	3-N	1.68	8/2275 (0.4%)	1.34	16/2837 (0.6%)
4	1-C	1.76	23/3370 (0.7%)	1.70	60/4211 (1.4%)
4	1-H	1.81	22/2883 (0.8%)	1.72	54/3602 (1.5%)
4	2-C	1.76	23/3370 (0.7%)	1.70	59/4211 (1.4%)
4	2-H	1.81	21/2883 (0.7%)	1.72	53/3602 (1.5%)
4	3-C	1.76	22/3370 (0.7%)	1.70	60/4211 (1.4%)
4	3-H	1.81	21/2883 (0.7%)	1.72	53/3602 (1.5%)
5	1-D	1.67	3/704 (0.4%)	1.65	10/877 (1.1%)
5	1-I	1.67	3/704 (0.4%)	1.65	10/877 (1.1%)
5	2-D	1.67	3/704 (0.4%)	1.65	10/877 (1.1%)
5	2-I	1.67	3/704 (0.4%)	1.65	10/877 (1.1%)
5	3-D	1.67	3/704 (0.4%)	1.65	10/877 (1.1%)
5	3-I	1.67	3/704 (0.4%)	1.65	10/877 (1.1%)
6	1-F	1.57	1/634 (0.2%)	1.71	9/791 (1.1%)
6	1-J	1.56	1/634 (0.2%)	1.71	9/791 (1.1%)
6	1-M	1.60	5/634 (0.8%)	1.65	10/791 (1.3%)
6	1-R	1.88	10/634 (1.6%)	1.81	15/791 (1.9%)
6	2-F	1.56	1/634 (0.2%)	1.71	9/791 (1.1%)
6	2-J	1.57	1/634 (0.2%)	1.71	9/791 (1.1%)
6	2-M	1.60	4/634 (0.6%)	1.65	10/791 (1.3%)
6	2-R	1.88	10/634 (1.6%)	1.81	15/791 (1.9%)
6	3-F	1.57	1/634 (0.2%)	1.71	9/791 (1.1%)
6	3-J	1.56	1/634 (0.2%)	1.71	9/791 (1.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
6	3-M	1.60	4/634 (0.6%)	1.65	10/791 (1.3%)
6	3-R	1.88	10/634 (1.6%)	1.81	15/791 (1.9%)
7	1-G	1.62	11/3188 (0.3%)	1.59	45/3982 (1.1%)
7	1-K	1.72	9/2237 (0.4%)	1.69	44/2793 (1.6%)
7	2-G	1.62	11/3188 (0.3%)	1.59	45/3982 (1.1%)
7	2-K	1.72	9/2237 (0.4%)	1.69	45/2793 (1.6%)
7	3-G	1.62	11/3188 (0.3%)	1.59	45/3982 (1.1%)
7	3-K	1.72	9/2237 (0.4%)	1.69	45/2793 (1.6%)
8	1-L	2.05	3/554 (0.5%)	1.72	7/691 (1.0%)
8	1-Z	1.87	3/554 (0.5%)	1.69	10/691 (1.4%)
8	2-L	2.05	3/554 (0.5%)	1.72	7/691 (1.0%)
8	2-Z	1.87	3/554 (0.5%)	1.69	10/691 (1.4%)
8	3-L	2.05	3/554 (0.5%)	1.72	8/691 (1.2%)
8	3-Z	1.87	3/554 (0.5%)	1.69	10/691 (1.4%)
All	All	1.65	402/83601 (0.5%)	1.60	1258/104364 (1.2%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
3	1-B	0	3
3	2-B	0	3
3	3-B	0	3
7	2-G	0	1
7	2-K	0	1
All	All	0	11

All (402) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	3-B	940	GLY	N-CA	-7.80	1.34	1.46
3	1-B	940	GLY	N-CA	-7.79	1.34	1.46
3	2-B	940	GLY	N-CA	-7.78	1.34	1.46
6	3-R	29	GLY	CA-C	-7.59	1.39	1.51
6	1-R	29	GLY	CA-C	-7.59	1.39	1.51
6	2-R	29	GLY	CA-C	-7.57	1.39	1.51
6	2-R	35	TYR	CA-C	-7.37	1.33	1.52
6	1-R	35	TYR	CA-C	-7.33	1.33	1.52
6	3-R	35	TYR	CA-C	-7.32	1.33	1.52
1	2-A	191	GLY	CA-C	-7.08	1.40	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	3-A	191	GLY	CA-C	-7.03	1.40	1.51
1	1-A	191	GLY	CA-C	-7.03	1.40	1.51
3	3-B	418	PRO	CA-C	-6.63	1.39	1.52
3	2-B	418	PRO	CA-C	-6.62	1.39	1.52
3	1-B	418	PRO	CA-C	-6.61	1.39	1.52
4	1-C	572	ARG	CA-C	-6.59	1.35	1.52
4	2-C	572	ARG	CA-C	-6.59	1.35	1.52
4	3-H	572	ARG	CA-C	-6.58	1.35	1.52
4	1-H	572	ARG	CA-C	-6.58	1.35	1.52
4	2-H	572	ARG	CA-C	-6.58	1.35	1.52
7	1-G	215	ILE	CA-C	-6.57	1.35	1.52
4	3-C	572	ARG	CA-C	-6.57	1.35	1.52
7	2-G	215	ILE	CA-C	-6.57	1.35	1.52
7	3-G	215	ILE	CA-C	-6.56	1.35	1.52
7	2-K	235	VAL	N-CA	-6.55	1.33	1.46
3	1-N	418	PRO	CA-C	-6.55	1.39	1.52
3	2-N	418	PRO	CA-C	-6.55	1.39	1.52
1	2-A	594	PRO	CA-C	-6.54	1.39	1.52
7	1-K	235	VAL	N-CA	-6.53	1.33	1.46
1	1-A	594	PRO	CA-C	-6.53	1.39	1.52
3	3-N	418	PRO	CA-C	-6.52	1.39	1.52
7	3-K	235	VAL	N-CA	-6.51	1.33	1.46
1	3-A	594	PRO	CA-C	-6.49	1.39	1.52
5	3-D	55	ARG	CA-C	-6.46	1.36	1.52
5	1-D	55	ARG	CA-C	-6.45	1.36	1.52
1	1-A	612	LEU	N-CA	-6.44	1.33	1.46
1	3-A	612	LEU	N-CA	-6.43	1.33	1.46
5	3-I	55	ARG	CA-C	-6.43	1.36	1.52
1	2-A	612	LEU	N-CA	-6.43	1.33	1.46
5	1-I	55	ARG	CA-C	-6.42	1.36	1.52
5	2-D	55	ARG	CA-C	-6.41	1.36	1.52
5	2-I	55	ARG	CA-C	-6.39	1.36	1.52
7	3-G	839	ASP	CA-C	-6.37	1.36	1.52
7	2-K	211	VAL	CA-C	-6.35	1.36	1.52
7	1-G	839	ASP	CA-C	-6.34	1.36	1.52
1	1-A	766	GLY	CA-C	-6.34	1.41	1.51
1	3-A	766	GLY	CA-C	-6.34	1.41	1.51
6	1-R	109	ARG	CA-C	-6.33	1.36	1.52
7	2-G	839	ASP	CA-C	-6.33	1.36	1.52
7	1-K	211	VAL	CA-C	-6.33	1.36	1.52
1	2-A	766	GLY	CA-C	-6.32	1.41	1.51
7	3-K	211	VAL	CA-C	-6.32	1.36	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	3-R	109	ARG	CA-C	-6.31	1.36	1.52
7	1-K	839	ASP	CA-C	-6.30	1.36	1.52
6	2-R	109	ARG	CA-C	-6.30	1.36	1.52
7	2-K	839	ASP	CA-C	-6.29	1.36	1.52
7	3-K	839	ASP	CA-C	-6.28	1.36	1.52
7	2-K	214	MET	CA-C	-6.24	1.36	1.52
7	1-K	214	MET	CA-C	-6.22	1.36	1.52
8	3-Z	19	LEU	N-CA	-6.22	1.33	1.46
4	2-H	293	GLY	CA-C	-6.21	1.42	1.51
4	1-H	293	GLY	CA-C	-6.20	1.42	1.51
7	3-K	214	MET	CA-C	-6.20	1.36	1.52
8	1-Z	19	LEU	N-CA	-6.19	1.33	1.46
4	1-C	293	GLY	CA-C	-6.18	1.42	1.51
4	2-C	293	GLY	CA-C	-6.18	1.42	1.51
8	2-Z	19	LEU	N-CA	-6.18	1.33	1.46
4	3-C	293	GLY	CA-C	-6.17	1.42	1.51
4	3-H	293	GLY	CA-C	-6.17	1.42	1.51
4	2-H	416	LYS	CA-C	-6.15	1.36	1.52
4	3-H	416	LYS	CA-C	-6.13	1.37	1.52
4	1-H	416	LYS	CA-C	-6.12	1.37	1.52
4	2-H	378	TYR	CA-C	-6.12	1.37	1.52
4	3-C	416	LYS	CA-C	-6.12	1.37	1.52
4	1-C	416	LYS	CA-C	-6.12	1.37	1.52
4	2-C	416	LYS	CA-C	-6.11	1.37	1.52
4	1-H	378	TYR	CA-C	-6.11	1.37	1.52
4	3-C	378	TYR	CA-C	-6.11	1.37	1.52
4	1-C	378	TYR	CA-C	-6.10	1.37	1.52
4	3-H	378	TYR	CA-C	-6.09	1.37	1.52
6	3-M	70	GLY	CA-C	-6.09	1.42	1.51
4	2-C	378	TYR	CA-C	-6.09	1.37	1.52
6	3-M	29	GLY	CA-C	-6.07	1.42	1.51
6	2-M	29	GLY	CA-C	-6.07	1.42	1.51
1	1-A	596	GLU	N-CA	-6.06	1.34	1.46
8	2-L	23	GLY	CA-C	-6.05	1.42	1.51
1	3-A	596	GLU	N-CA	-6.05	1.34	1.46
6	1-M	29	GLY	CA-C	-6.05	1.42	1.51
6	2-M	70	GLY	CA-C	-6.04	1.42	1.51
6	3-M	47	PRO	CA-C	-6.04	1.40	1.52
1	2-A	596	GLU	N-CA	-6.04	1.34	1.46
7	1-G	774	ALA	N-CA	-6.03	1.34	1.46
6	1-M	70	GLY	CA-C	-6.03	1.42	1.51
7	3-G	774	ALA	N-CA	-6.03	1.34	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	2-G	774	ALA	N-CA	-6.03	1.34	1.46
6	2-M	47	PRO	CA-C	-6.02	1.40	1.52
6	1-M	47	PRO	CA-C	-6.02	1.40	1.52
8	1-L	23	GLY	CA-C	-6.00	1.42	1.51
7	1-K	774	ALA	N-CA	-5.99	1.34	1.46
7	2-K	774	ALA	N-CA	-5.97	1.34	1.46
7	3-K	774	ALA	N-CA	-5.96	1.34	1.46
8	3-L	23	GLY	CA-C	-5.96	1.42	1.51
4	1-C	641	PRO	CA-C	-5.94	1.41	1.52
4	2-C	641	PRO	CA-C	-5.94	1.41	1.52
4	3-H	641	PRO	CA-C	-5.93	1.41	1.52
3	3-B	762	ASN	CA-C	-5.93	1.37	1.52
3	1-B	762	ASN	CA-C	-5.93	1.37	1.52
4	3-C	641	PRO	CA-C	-5.92	1.41	1.52
4	1-H	641	PRO	CA-C	-5.92	1.41	1.52
4	2-H	641	PRO	CA-C	-5.91	1.41	1.52
3	2-B	762	ASN	CA-C	-5.90	1.37	1.52
4	2-C	384	ARG	CA-C	-5.90	1.37	1.52
4	2-H	384	ARG	CA-C	-5.88	1.37	1.52
4	3-H	384	ARG	CA-C	-5.88	1.37	1.52
4	1-H	384	ARG	CA-C	-5.88	1.37	1.52
4	3-C	384	ARG	CA-C	-5.88	1.37	1.52
4	1-C	384	ARG	CA-C	-5.88	1.37	1.52
3	2-B	126	HIS	CA-C	-5.77	1.38	1.52
7	1-K	105	VAL	N-CA	-5.77	1.34	1.46
7	3-K	105	VAL	N-CA	-5.76	1.34	1.46
3	1-B	126	HIS	CA-C	-5.75	1.38	1.52
3	1-N	126	HIS	CA-C	-5.75	1.38	1.52
3	3-N	126	HIS	CA-C	-5.75	1.38	1.52
7	2-K	105	VAL	N-CA	-5.75	1.34	1.46
3	3-B	126	HIS	CA-C	-5.75	1.38	1.52
3	2-N	126	HIS	CA-C	-5.75	1.38	1.52
3	1-B	940	GLY	CA-C	-5.72	1.42	1.51
3	3-B	940	GLY	CA-C	-5.71	1.42	1.51
4	1-H	377	ILE	CA-C	-5.70	1.38	1.52
3	2-B	940	GLY	CA-C	-5.70	1.42	1.51
4	1-C	377	ILE	CA-C	-5.69	1.38	1.52
4	2-H	377	ILE	CA-C	-5.69	1.38	1.52
4	3-C	377	ILE	CA-C	-5.69	1.38	1.52
4	3-H	377	ILE	CA-C	-5.69	1.38	1.52
4	2-C	377	ILE	CA-C	-5.67	1.38	1.52
6	1-F	29	GLY	N-CA	-5.66	1.37	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	2-J	29	GLY	N-CA	-5.65	1.37	1.46
6	2-F	29	GLY	N-CA	-5.64	1.37	1.46
6	1-J	29	GLY	N-CA	-5.64	1.37	1.46
4	1-H	245	ILE	N-CA	-5.64	1.35	1.46
6	3-F	29	GLY	N-CA	-5.63	1.37	1.46
4	1-C	245	ILE	N-CA	-5.62	1.35	1.46
4	3-C	245	ILE	N-CA	-5.62	1.35	1.46
4	2-H	245	ILE	N-CA	-5.61	1.35	1.46
4	3-H	245	ILE	N-CA	-5.61	1.35	1.46
4	2-C	245	ILE	N-CA	-5.61	1.35	1.46
6	3-J	29	GLY	N-CA	-5.60	1.37	1.46
4	3-C	568	PRO	CA-C	-5.60	1.41	1.52
7	3-G	235	VAL	N-CA	-5.59	1.35	1.46
1	1-A	660	ILE	CA-C	-5.57	1.38	1.52
3	2-B	378	GLU	CA-C	-5.57	1.38	1.52
1	3-A	660	ILE	CA-C	-5.57	1.38	1.52
1	2-A	660	ILE	CA-C	-5.56	1.38	1.52
4	1-C	568	PRO	CA-C	-5.56	1.41	1.52
7	1-G	235	VAL	N-CA	-5.56	1.35	1.46
3	1-B	378	GLU	CA-C	-5.55	1.38	1.52
1	2-A	679	GLU	CA-C	-5.55	1.38	1.52
3	1-N	378	GLU	CA-C	-5.54	1.38	1.52
4	2-C	568	PRO	CA-C	-5.54	1.41	1.52
4	2-H	568	PRO	CA-C	-5.54	1.41	1.52
1	1-A	679	GLU	CA-C	-5.54	1.38	1.52
3	2-N	378	GLU	CA-C	-5.53	1.38	1.52
1	3-A	679	GLU	CA-C	-5.53	1.38	1.52
7	1-G	442	PHE	CA-C	-5.53	1.38	1.52
7	2-G	235	VAL	N-CA	-5.53	1.35	1.46
3	3-B	378	GLU	CA-C	-5.53	1.38	1.52
3	3-N	378	GLU	CA-C	-5.53	1.38	1.52
4	3-H	568	PRO	CA-C	-5.53	1.41	1.52
7	2-G	442	PHE	CA-C	-5.52	1.38	1.52
4	1-H	568	PRO	CA-C	-5.52	1.41	1.52
7	3-G	442	PHE	CA-C	-5.51	1.38	1.52
1	3-A	360	GLY	CA-C	-5.51	1.43	1.51
8	3-Z	65	LEU	N-CA	-5.50	1.35	1.46
8	1-Z	65	LEU	N-CA	-5.49	1.35	1.46
7	1-K	203	VAL	N-CA	-5.49	1.35	1.46
7	2-K	165	HIS	CA-C	-5.49	1.38	1.52
1	2-A	599	PHE	N-CA	-5.48	1.35	1.46
8	2-Z	65	LEU	N-CA	-5.48	1.35	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	3-B	753	ASP	N-CA	-5.48	1.35	1.46
7	1-K	165	HIS	CA-C	-5.48	1.38	1.52
7	3-K	203	VAL	N-CA	-5.47	1.35	1.46
7	2-K	203	VAL	N-CA	-5.47	1.35	1.46
1	3-A	600	LYS	CA-C	-5.47	1.38	1.52
4	2-H	449	PHE	CA-C	-5.47	1.38	1.52
7	3-K	165	HIS	CA-C	-5.47	1.38	1.52
1	1-A	599	PHE	N-CA	-5.46	1.35	1.46
1	3-A	599	PHE	N-CA	-5.45	1.35	1.46
4	1-H	449	PHE	CA-C	-5.45	1.38	1.52
1	1-A	600	LYS	CA-C	-5.45	1.38	1.52
1	1-A	595	THR	N-CA	-5.44	1.35	1.46
3	1-B	753	ASP	N-CA	-5.44	1.35	1.46
1	2-A	595	THR	N-CA	-5.44	1.35	1.46
1	1-A	360	GLY	CA-C	-5.43	1.43	1.51
4	3-H	449	PHE	CA-C	-5.43	1.38	1.52
1	2-A	600	LYS	CA-C	-5.42	1.38	1.52
4	1-C	449	PHE	CA-C	-5.42	1.38	1.52
3	2-B	753	ASP	N-CA	-5.42	1.35	1.46
4	3-C	449	PHE	CA-C	-5.42	1.38	1.52
1	3-A	595	THR	N-CA	-5.42	1.35	1.46
7	2-G	112	ASP	CA-C	-5.40	1.39	1.52
4	2-C	449	PHE	CA-C	-5.40	1.39	1.52
7	2-G	180	GLU	N-CA	-5.40	1.35	1.46
7	1-G	112	ASP	CA-C	-5.40	1.39	1.52
1	2-A	360	GLY	CA-C	-5.40	1.43	1.51
3	2-B	938	VAL	CA-C	-5.39	1.39	1.52
5	2-D	56	TYR	CA-C	-5.39	1.39	1.52
5	1-D	56	TYR	CA-C	-5.39	1.39	1.52
7	3-G	112	ASP	CA-C	-5.38	1.39	1.52
5	2-I	56	TYR	CA-C	-5.38	1.39	1.52
3	3-B	938	VAL	CA-C	-5.37	1.39	1.52
7	1-G	180	GLU	N-CA	-5.37	1.35	1.46
5	1-I	56	TYR	CA-C	-5.37	1.39	1.52
5	3-D	56	TYR	CA-C	-5.37	1.39	1.52
1	1-A	612	LEU	CA-C	-5.36	1.39	1.52
7	3-G	180	GLU	N-CA	-5.36	1.35	1.46
3	1-B	938	VAL	CA-C	-5.36	1.39	1.52
1	3-A	612	LEU	CA-C	-5.36	1.39	1.52
6	1-R	90	PHE	N-CA	-5.36	1.35	1.46
1	2-A	612	LEU	CA-C	-5.36	1.39	1.52
3	3-B	754	ILE	N-CA	-5.36	1.35	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	3-I	56	TYR	CA-C	-5.35	1.39	1.52
6	1-R	107	MET	CA-C	-5.35	1.39	1.52
3	1-B	749	VAL	CA-C	-5.35	1.39	1.52
6	2-R	90	PHE	N-CA	-5.35	1.35	1.46
6	3-R	107	MET	CA-C	-5.35	1.39	1.52
3	2-B	749	VAL	CA-C	-5.35	1.39	1.52
3	2-B	754	ILE	N-CA	-5.34	1.35	1.46
5	2-I	81	GLU	CA-C	-5.34	1.39	1.52
3	1-B	754	ILE	N-CA	-5.34	1.35	1.46
5	1-I	81	GLU	CA-C	-5.34	1.39	1.52
4	2-C	315	ILE	N-CA	-5.33	1.35	1.46
5	1-D	81	GLU	CA-C	-5.33	1.39	1.52
4	2-C	312	GLY	CA-C	-5.33	1.43	1.51
5	3-D	81	GLU	CA-C	-5.33	1.39	1.52
6	3-R	90	PHE	N-CA	-5.33	1.35	1.46
3	2-B	783	LEU	CA-C	-5.32	1.39	1.52
3	3-B	749	VAL	CA-C	-5.32	1.39	1.52
4	3-H	315	ILE	N-CA	-5.32	1.35	1.46
4	2-C	8	LYS	CA-C	-5.32	1.39	1.52
5	3-I	81	GLU	CA-C	-5.32	1.39	1.52
6	2-R	107	MET	CA-C	-5.32	1.39	1.52
3	3-B	783	LEU	CA-C	-5.32	1.39	1.52
5	2-D	81	GLU	CA-C	-5.32	1.39	1.52
4	2-H	315	ILE	N-CA	-5.32	1.35	1.46
1	1-A	283	GLY	CA-C	-5.31	1.43	1.51
4	1-C	8	LYS	CA-C	-5.31	1.39	1.52
3	1-B	783	LEU	CA-C	-5.31	1.39	1.52
4	1-H	315	ILE	N-CA	-5.30	1.35	1.46
4	1-C	312	GLY	CA-C	-5.30	1.43	1.51
4	1-C	315	ILE	N-CA	-5.30	1.35	1.46
4	3-H	223	GLN	CA-C	-5.30	1.39	1.52
1	2-A	283	GLY	CA-C	-5.30	1.43	1.51
4	2-C	223	GLN	CA-C	-5.30	1.39	1.52
4	1-H	8	LYS	CA-C	-5.30	1.39	1.52
4	2-H	223	GLN	CA-C	-5.30	1.39	1.52
4	3-H	8	LYS	CA-C	-5.30	1.39	1.52
4	3-C	415	PHE	CA-C	-5.29	1.39	1.52
4	1-C	223	GLN	CA-C	-5.29	1.39	1.52
4	3-C	8	LYS	CA-C	-5.29	1.39	1.52
4	2-H	8	LYS	CA-C	-5.29	1.39	1.52
4	1-H	223	GLN	CA-C	-5.29	1.39	1.52
4	3-C	312	GLY	CA-C	-5.29	1.43	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	2-C	415	PHE	CA-C	-5.29	1.39	1.52
1	3-A	283	GLY	CA-C	-5.28	1.43	1.51
4	2-H	312	GLY	CA-C	-5.28	1.43	1.51
4	3-C	315	ILE	N-CA	-5.28	1.35	1.46
8	2-Z	19	LEU	CA-C	-5.27	1.39	1.52
3	2-N	368	VAL	N-CA	-5.27	1.35	1.46
3	3-B	368	VAL	N-CA	-5.27	1.35	1.46
8	1-L	49	PHE	CA-C	-5.27	1.39	1.52
8	1-Z	19	LEU	CA-C	-5.27	1.39	1.52
3	1-B	368	VAL	N-CA	-5.27	1.35	1.46
4	3-C	223	GLN	CA-C	-5.27	1.39	1.52
4	1-H	312	GLY	CA-C	-5.26	1.43	1.51
4	1-C	85	ASN	N-CA	-5.26	1.35	1.46
4	3-C	85	ASN	N-CA	-5.26	1.35	1.46
8	3-L	49	PHE	CA-C	-5.26	1.39	1.52
8	2-L	49	PHE	CA-C	-5.26	1.39	1.52
6	3-R	105	GLU	CA-C	-5.26	1.39	1.52
4	1-C	415	PHE	CA-C	-5.25	1.39	1.52
8	3-Z	19	LEU	CA-C	-5.25	1.39	1.52
4	2-C	85	ASN	N-CA	-5.25	1.35	1.46
3	1-N	368	VAL	N-CA	-5.25	1.35	1.46
4	1-H	379	THR	N-CA	-5.24	1.35	1.46
3	3-N	368	VAL	N-CA	-5.24	1.35	1.46
4	3-H	312	GLY	CA-C	-5.23	1.43	1.51
6	1-R	105	GLU	CA-C	-5.23	1.39	1.52
3	3-B	440	ARG	CA-C	-5.23	1.39	1.52
3	1-B	440	ARG	CA-C	-5.23	1.39	1.52
4	2-H	379	THR	N-CA	-5.23	1.35	1.46
4	1-H	85	ASN	N-CA	-5.23	1.35	1.46
3	2-B	368	VAL	N-CA	-5.22	1.35	1.46
3	2-B	440	ARG	CA-C	-5.22	1.39	1.52
3	2-B	759	LEU	N-CA	-5.22	1.35	1.46
6	2-R	105	GLU	CA-C	-5.22	1.39	1.52
3	1-B	759	LEU	N-CA	-5.22	1.35	1.46
3	2-N	440	ARG	CA-C	-5.22	1.39	1.52
3	3-B	759	LEU	N-CA	-5.22	1.35	1.46
1	1-A	610	GLU	N-CA	-5.21	1.35	1.46
3	1-N	440	ARG	CA-C	-5.21	1.39	1.52
1	3-A	610	GLU	N-CA	-5.21	1.35	1.46
4	1-H	415	PHE	CA-C	-5.21	1.39	1.52
3	3-N	440	ARG	CA-C	-5.20	1.39	1.52
4	2-H	85	ASN	N-CA	-5.20	1.35	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	2-H	415	PHE	CA-C	-5.20	1.39	1.52
1	2-A	610	GLU	N-CA	-5.20	1.35	1.46
4	3-H	379	THR	N-CA	-5.20	1.35	1.46
3	3-B	750	ASN	N-CA	-5.20	1.35	1.46
4	2-C	379	THR	N-CA	-5.20	1.35	1.46
4	3-C	736	GLY	CA-C	-5.19	1.43	1.51
4	3-H	85	ASN	N-CA	-5.19	1.35	1.46
4	3-H	415	PHE	CA-C	-5.19	1.39	1.52
4	1-C	736	GLY	CA-C	-5.18	1.43	1.51
4	2-C	736	GLY	CA-C	-5.18	1.43	1.51
7	2-G	499	GLY	CA-C	-5.18	1.43	1.51
4	1-C	379	THR	N-CA	-5.17	1.36	1.46
3	1-B	750	ASN	N-CA	-5.17	1.36	1.46
3	2-B	750	ASN	N-CA	-5.16	1.36	1.46
4	3-C	379	THR	N-CA	-5.16	1.36	1.46
6	3-R	110	MET	CA-C	-5.15	1.39	1.52
7	1-G	499	GLY	CA-C	-5.15	1.43	1.51
7	1-G	174	VAL	CA-C	-5.14	1.39	1.52
7	3-G	174	VAL	CA-C	-5.14	1.39	1.52
6	2-R	110	MET	CA-C	-5.14	1.39	1.52
7	2-G	174	VAL	CA-C	-5.14	1.39	1.52
1	3-A	631	LYS	N-CA	-5.14	1.36	1.46
6	3-M	35	TYR	CA-C	-5.14	1.39	1.52
6	2-M	35	TYR	CA-C	-5.13	1.39	1.52
4	2-H	573	LEU	CA-C	-5.13	1.39	1.52
7	3-G	499	GLY	CA-C	-5.13	1.43	1.51
4	3-H	367	VAL	CA-C	-5.13	1.39	1.52
1	1-A	631	LYS	N-CA	-5.13	1.36	1.46
6	1-M	35	TYR	CA-C	-5.13	1.39	1.52
6	1-R	110	MET	CA-C	-5.12	1.39	1.52
3	1-N	317	LEU	CA-C	-5.12	1.39	1.52
4	3-H	573	LEU	CA-C	-5.12	1.39	1.52
3	3-N	317	LEU	CA-C	-5.12	1.39	1.52
4	1-H	573	LEU	CA-C	-5.11	1.39	1.52
1	2-A	631	LYS	N-CA	-5.11	1.36	1.46
4	1-C	367	VAL	CA-C	-5.11	1.39	1.52
4	1-H	367	VAL	CA-C	-5.11	1.39	1.52
3	3-N	375	LEU	CA-C	-5.11	1.39	1.52
8	2-L	139	PRO	CA-C	-5.10	1.42	1.52
8	1-L	139	PRO	CA-C	-5.10	1.42	1.52
4	2-H	367	VAL	CA-C	-5.10	1.39	1.52
8	3-L	139	PRO	CA-C	-5.10	1.42	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	1-C	573	LEU	CA-C	-5.10	1.39	1.52
3	2-N	317	LEU	CA-C	-5.10	1.39	1.52
4	2-C	367	VAL	CA-C	-5.10	1.39	1.52
3	1-B	317	LEU	CA-C	-5.10	1.39	1.52
3	1-N	375	LEU	CA-C	-5.09	1.39	1.52
4	3-C	367	VAL	CA-C	-5.09	1.39	1.52
3	2-B	317	LEU	CA-C	-5.09	1.39	1.52
3	2-N	375	LEU	CA-C	-5.09	1.39	1.52
3	3-B	375	LEU	CA-C	-5.09	1.39	1.52
3	1-B	375	LEU	CA-C	-5.09	1.39	1.52
4	2-C	573	LEU	CA-C	-5.09	1.39	1.52
3	2-B	375	LEU	CA-C	-5.09	1.39	1.52
4	2-H	314	ILE	CA-C	-5.08	1.39	1.52
4	3-C	573	LEU	CA-C	-5.08	1.39	1.52
3	3-B	317	LEU	CA-C	-5.08	1.39	1.52
7	2-G	460	GLY	CA-C	-5.07	1.43	1.51
4	1-H	314	ILE	CA-C	-5.06	1.39	1.52
7	1-G	460	GLY	CA-C	-5.06	1.43	1.51
6	1-R	33	VAL	N-CA	-5.06	1.36	1.46
4	2-C	588	LEU	N-CA	-5.06	1.36	1.46
6	1-R	96	ASP	CA-C	-5.05	1.39	1.52
4	3-C	588	LEU	N-CA	-5.05	1.36	1.46
6	2-R	96	ASP	CA-C	-5.05	1.39	1.52
3	3-B	374	VAL	N-CA	-5.05	1.36	1.46
6	3-R	33	VAL	N-CA	-5.05	1.36	1.46
7	3-G	460	GLY	CA-C	-5.05	1.43	1.51
7	2-K	234	ARG	CA-C	-5.05	1.39	1.52
4	3-H	314	ILE	CA-C	-5.05	1.39	1.52
3	1-B	374	VAL	N-CA	-5.04	1.36	1.46
3	2-B	374	VAL	N-CA	-5.04	1.36	1.46
4	1-C	314	ILE	CA-C	-5.04	1.39	1.52
4	2-C	314	ILE	CA-C	-5.04	1.39	1.52
6	3-R	96	ASP	CA-C	-5.04	1.39	1.52
7	3-K	234	ARG	CA-C	-5.04	1.39	1.52
6	2-R	33	VAL	N-CA	-5.03	1.36	1.46
7	2-G	91	THR	N-CA	-5.03	1.36	1.46
4	3-C	314	ILE	CA-C	-5.03	1.39	1.52
7	1-G	91	THR	N-CA	-5.03	1.36	1.46
7	1-K	234	ARG	CA-C	-5.03	1.39	1.52
6	3-R	106	VAL	N-CA	-5.03	1.36	1.46
4	1-C	588	LEU	N-CA	-5.03	1.36	1.46
4	2-H	588	LEU	N-CA	-5.03	1.36	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	1-H	588	LEU	N-CA	-5.02	1.36	1.46
7	3-G	91	THR	N-CA	-5.02	1.36	1.46
6	1-R	106	VAL	N-CA	-5.02	1.36	1.46
3	1-N	374	VAL	N-CA	-5.02	1.36	1.46
4	2-C	535	ILE	N-CA	-5.02	1.36	1.46
3	1-N	300	TYR	CA-C	-5.02	1.40	1.52
6	2-R	106	VAL	N-CA	-5.02	1.36	1.46
4	3-H	588	LEU	N-CA	-5.02	1.36	1.46
3	2-N	374	VAL	N-CA	-5.01	1.36	1.46
3	3-N	300	TYR	CA-C	-5.01	1.40	1.52
4	1-C	535	ILE	N-CA	-5.01	1.36	1.46
3	2-N	300	TYR	CA-C	-5.00	1.40	1.52
6	1-M	90	PHE	N-CA	-5.00	1.36	1.46
4	1-H	535	ILE	N-CA	-5.00	1.36	1.46

All (1258) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1-A	343	GLN	N-CA-C	-9.86	84.38	111.00
1	2-A	343	GLN	N-CA-C	-9.85	84.40	111.00
1	3-A	343	GLN	N-CA-C	-9.85	84.41	111.00
7	1-K	117	GLU	C-N-CA	9.76	146.09	121.70
7	3-K	117	GLU	C-N-CA	9.74	146.06	121.70
7	2-K	117	GLU	C-N-CA	9.74	146.05	121.70
3	3-B	326	HIS	N-CA-C	-9.60	85.09	111.00
3	2-N	326	HIS	N-CA-C	-9.59	85.12	111.00
3	1-B	326	HIS	N-CA-C	-9.58	85.13	111.00
3	1-N	326	HIS	N-CA-C	-9.58	85.13	111.00
3	2-B	326	HIS	N-CA-C	-9.58	85.13	111.00
3	3-N	326	HIS	N-CA-C	-9.58	85.14	111.00
7	1-G	96	SER	N-CA-C	9.10	135.56	111.00
7	3-G	96	SER	N-CA-C	9.10	135.56	111.00
7	2-G	96	SER	N-CA-C	9.09	135.55	111.00
3	2-B	940	GLY	N-CA-C	-9.04	90.49	113.10
3	3-B	940	GLY	N-CA-C	-9.04	90.49	113.10
3	1-B	940	GLY	N-CA-C	-9.04	90.50	113.10
4	3-H	416	LYS	N-CA-C	-8.90	86.98	111.00
4	2-C	416	LYS	N-CA-C	-8.89	86.99	111.00
4	1-C	416	LYS	N-CA-C	-8.89	87.00	111.00
4	1-H	416	LYS	N-CA-C	-8.89	87.00	111.00
4	2-H	416	LYS	N-CA-C	-8.89	87.00	111.00
4	3-C	416	LYS	N-CA-C	-8.88	87.01	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2-A	229	VAL	N-CA-C	-8.57	87.85	111.00
1	3-A	229	VAL	N-CA-C	-8.57	87.85	111.00
1	1-A	229	VAL	N-CA-C	-8.57	87.86	111.00
3	3-B	760	VAL	N-CA-C	-8.57	87.86	111.00
3	1-B	760	VAL	N-CA-C	-8.56	87.89	111.00
3	2-B	760	VAL	N-CA-C	-8.55	87.91	111.00
5	3-D	61	MET	N-CA-C	-8.54	87.93	111.00
5	3-I	61	MET	N-CA-C	-8.54	87.93	111.00
5	2-D	61	MET	N-CA-C	-8.54	87.94	111.00
5	1-D	61	MET	N-CA-C	-8.54	87.95	111.00
5	1-I	61	MET	N-CA-C	-8.54	87.95	111.00
3	3-B	67	GLY	N-CA-C	-8.53	91.77	113.10
5	2-I	61	MET	N-CA-C	-8.53	87.97	111.00
3	1-B	67	GLY	N-CA-C	-8.52	91.79	113.10
3	2-B	67	GLY	N-CA-C	-8.52	91.80	113.10
3	3-N	67	GLY	N-CA-C	-8.51	91.83	113.10
3	1-N	67	GLY	N-CA-C	-8.51	91.83	113.10
3	2-N	67	GLY	N-CA-C	-8.50	91.85	113.10
6	1-R	150	ASN	C-N-CA	8.39	142.68	121.70
6	2-R	150	ASN	C-N-CA	8.39	142.67	121.70
6	3-R	150	ASN	C-N-CA	8.38	142.64	121.70
1	3-A	740	GLY	N-CA-C	-8.38	92.16	113.10
1	2-A	740	GLY	N-CA-C	-8.37	92.18	113.10
1	1-A	740	GLY	N-CA-C	-8.37	92.19	113.10
6	2-F	59	LYS	C-N-CA	8.32	142.51	121.70
6	3-F	59	LYS	C-N-CA	8.31	142.47	121.70
6	1-F	59	LYS	C-N-CA	8.30	142.44	121.70
6	3-J	59	LYS	C-N-CA	8.28	142.39	121.70
6	1-J	59	LYS	C-N-CA	8.28	142.39	121.70
6	2-J	59	LYS	C-N-CA	8.26	142.35	121.70
1	2-A	631	LYS	N-CA-C	-8.22	88.81	111.00
1	1-A	631	LYS	N-CA-C	-8.21	88.84	111.00
1	3-A	631	LYS	N-CA-C	-8.20	88.86	111.00
6	3-R	122	LEU	N-CA-C	-8.19	88.89	111.00
1	2-A	491	VAL	C-N-CA	8.18	142.15	121.70
6	1-R	122	LEU	N-CA-C	-8.18	88.92	111.00
6	2-R	122	LEU	N-CA-C	-8.17	88.93	111.00
1	3-A	491	VAL	C-N-CA	8.17	142.13	121.70
1	1-A	491	VAL	C-N-CA	8.15	142.09	121.70
3	1-B	759	LEU	N-CA-C	-8.09	89.17	111.00
3	2-B	759	LEU	N-CA-C	-8.09	89.17	111.00
3	3-B	759	LEU	N-CA-C	-8.07	89.20	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	3-A	504	ALA	N-CA-C	-8.00	89.39	111.00
1	2-A	504	ALA	N-CA-C	-8.00	89.40	111.00
1	1-A	504	ALA	N-CA-C	-8.00	89.40	111.00
5	2-D	56	TYR	N-CA-C	-7.92	89.61	111.00
5	3-D	56	TYR	N-CA-C	-7.92	89.62	111.00
1	3-A	789	ASP	N-CA-C	-7.91	89.63	111.00
5	1-D	56	TYR	N-CA-C	-7.91	89.64	111.00
1	1-A	789	ASP	N-CA-C	-7.91	89.65	111.00
1	2-A	789	ASP	N-CA-C	-7.90	89.68	111.00
5	2-I	56	TYR	N-CA-C	-7.90	89.68	111.00
5	1-I	56	TYR	N-CA-C	-7.89	89.69	111.00
5	3-I	56	TYR	N-CA-C	-7.89	89.69	111.00
7	2-G	829	LEU	N-CA-C	-7.82	89.90	111.00
7	3-G	829	LEU	N-CA-C	-7.82	89.90	111.00
7	1-G	829	LEU	N-CA-C	-7.81	89.91	111.00
7	1-K	829	LEU	N-CA-C	-7.81	89.92	111.00
7	2-K	829	LEU	N-CA-C	-7.80	89.93	111.00
7	3-K	829	LEU	N-CA-C	-7.80	89.93	111.00
1	3-A	371	ASN	N-CA-C	-7.80	89.95	111.00
1	1-A	371	ASN	N-CA-C	-7.79	89.97	111.00
1	2-A	371	ASN	N-CA-C	-7.77	90.01	111.00
1	3-A	779	ASP	N-CA-C	-7.77	90.01	111.00
1	1-A	779	ASP	N-CA-C	-7.76	90.04	111.00
1	2-A	779	ASP	N-CA-C	-7.76	90.06	111.00
6	1-R	144	GLY	N-CA-C	-7.72	93.79	113.10
6	3-R	144	GLY	N-CA-C	-7.72	93.79	113.10
6	2-R	144	GLY	N-CA-C	-7.72	93.80	113.10
1	2-A	803	PRO	N-CA-C	7.68	132.06	112.10
4	3-H	441	VAL	N-CA-C	-7.68	90.27	111.00
4	1-H	441	VAL	N-CA-C	-7.67	90.29	111.00
4	2-H	441	VAL	N-CA-C	-7.67	90.30	111.00
4	1-C	441	VAL	N-CA-C	-7.66	90.33	111.00
1	1-A	803	PRO	N-CA-C	7.66	132.00	112.10
1	3-A	803	PRO	N-CA-C	7.66	132.00	112.10
4	3-C	441	VAL	N-CA-C	-7.65	90.35	111.00
4	2-C	441	VAL	N-CA-C	-7.65	90.35	111.00
3	2-N	255	SER	C-N-CA	7.63	140.77	121.70
3	2-B	750	ASN	N-CA-C	-7.62	90.41	111.00
3	1-B	750	ASN	N-CA-C	-7.62	90.42	111.00
3	3-N	255	SER	C-N-CA	7.61	140.73	121.70
3	3-B	750	ASN	N-CA-C	-7.61	90.45	111.00
3	1-N	255	SER	C-N-CA	7.61	140.72	121.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1-A	321	ARG	N-CA-C	-7.60	90.47	111.00
3	1-B	255	SER	C-N-CA	7.60	140.70	121.70
1	3-A	321	ARG	N-CA-C	-7.60	90.48	111.00
3	2-B	255	SER	C-N-CA	7.60	140.69	121.70
1	2-A	321	ARG	N-CA-C	-7.59	90.50	111.00
3	3-B	255	SER	C-N-CA	7.59	140.68	121.70
6	1-M	41	GLU	C-N-CA	7.57	140.64	121.70
6	2-M	41	GLU	C-N-CA	7.57	140.63	121.70
6	3-M	41	GLU	C-N-CA	7.57	140.63	121.70
6	1-R	159	CYS	N-CA-C	-7.55	90.61	111.00
6	3-R	159	CYS	N-CA-C	-7.55	90.62	111.00
6	2-R	159	CYS	N-CA-C	-7.54	90.64	111.00
6	3-J	97	ARG	N-CA-C	-7.54	90.64	111.00
6	2-J	97	ARG	N-CA-C	-7.53	90.66	111.00
6	1-J	97	ARG	N-CA-C	-7.53	90.68	111.00
1	3-A	622	GLY	N-CA-C	-7.53	94.28	113.10
1	1-A	622	GLY	N-CA-C	-7.52	94.29	113.10
1	2-A	622	GLY	N-CA-C	-7.52	94.30	113.10
6	1-F	97	ARG	N-CA-C	-7.52	90.70	111.00
6	2-F	97	ARG	N-CA-C	-7.52	90.70	111.00
6	3-F	97	ARG	N-CA-C	-7.51	90.72	111.00
6	2-F	61	ILE	N-CA-C	-7.49	90.79	111.00
6	3-J	61	ILE	N-CA-C	-7.48	90.81	111.00
6	1-F	61	ILE	N-CA-C	-7.47	90.83	111.00
6	1-J	61	ILE	N-CA-C	-7.47	90.82	111.00
6	3-F	61	ILE	N-CA-C	-7.47	90.83	111.00
7	2-G	117	GLU	N-CA-C	-7.47	90.83	111.00
5	2-D	118	ALA	N-CA-C	-7.46	90.85	111.00
6	2-J	61	ILE	N-CA-C	-7.46	90.84	111.00
5	1-D	118	ALA	N-CA-C	-7.46	90.85	111.00
5	3-D	118	ALA	N-CA-C	-7.46	90.86	111.00
7	1-G	117	GLU	N-CA-C	-7.46	90.86	111.00
5	1-I	118	ALA	N-CA-C	-7.45	90.89	111.00
5	3-I	118	ALA	N-CA-C	-7.44	90.90	111.00
7	3-G	117	GLU	N-CA-C	-7.44	90.90	111.00
1	2-A	198	LYS	N-CA-C	-7.44	90.91	111.00
5	2-I	118	ALA	N-CA-C	-7.44	90.92	111.00
1	3-A	198	LYS	N-CA-C	-7.43	90.93	111.00
1	1-A	198	LYS	N-CA-C	-7.43	90.94	111.00
4	2-C	221	CYS	N-CA-C	-7.33	91.20	111.00
4	2-H	559	ARG	N-CA-C	-7.33	91.22	111.00
4	1-H	559	ARG	N-CA-C	-7.32	91.22	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	2-C	559	ARG	N-CA-C	-7.32	91.23	111.00
4	3-H	559	ARG	N-CA-C	-7.32	91.23	111.00
4	1-C	559	ARG	N-CA-C	-7.32	91.23	111.00
4	3-C	559	ARG	N-CA-C	-7.32	91.24	111.00
4	1-C	221	CYS	N-CA-C	-7.31	91.26	111.00
5	2-D	136	MET	N-CA-C	-7.31	91.26	111.00
4	3-C	221	CYS	N-CA-C	-7.31	91.26	111.00
4	3-H	221	CYS	N-CA-C	-7.31	91.26	111.00
5	1-D	136	MET	N-CA-C	-7.31	91.27	111.00
5	3-D	136	MET	N-CA-C	-7.30	91.29	111.00
4	1-H	221	CYS	N-CA-C	-7.30	91.30	111.00
5	2-I	136	MET	N-CA-C	-7.29	91.30	111.00
5	1-I	136	MET	N-CA-C	-7.29	91.31	111.00
5	3-I	136	MET	N-CA-C	-7.29	91.32	111.00
4	2-H	221	CYS	N-CA-C	-7.28	91.34	111.00
3	2-B	749	VAL	N-CA-C	-7.27	91.36	111.00
3	3-B	749	VAL	N-CA-C	-7.27	91.36	111.00
3	1-B	749	VAL	N-CA-C	-7.27	91.38	111.00
7	1-G	693	VAL	C-N-CA	-7.26	91.51	122.00
7	3-G	693	VAL	C-N-CA	-7.25	91.53	122.00
7	2-G	693	VAL	C-N-CA	-7.25	91.53	122.00
1	1-A	338	ASP	N-CA-C	-7.24	91.45	111.00
1	2-A	338	ASP	N-CA-C	-7.23	91.47	111.00
1	3-A	338	ASP	N-CA-C	-7.23	91.48	111.00
3	1-B	761	VAL	N-CA-C	-7.18	91.60	111.00
3	2-B	761	VAL	N-CA-C	-7.18	91.62	111.00
3	3-B	761	VAL	N-CA-C	-7.18	91.62	111.00
3	3-B	837	ILE	N-CA-C	-7.18	91.62	111.00
1	1-A	519	ASP	N-CA-C	-7.18	91.62	111.00
1	2-A	519	ASP	N-CA-C	-7.17	91.63	111.00
1	3-A	519	ASP	N-CA-C	-7.17	91.64	111.00
3	1-B	837	ILE	N-CA-C	-7.17	91.64	111.00
3	2-B	837	ILE	N-CA-C	-7.16	91.68	111.00
6	3-M	69	GLY	N-CA-C	-7.13	95.28	113.10
6	1-M	69	GLY	N-CA-C	-7.12	95.29	113.10
6	2-M	69	GLY	N-CA-C	-7.12	95.30	113.10
3	3-N	269	GLN	N-CA-C	-7.12	91.79	111.00
3	1-N	269	GLN	N-CA-C	-7.11	91.80	111.00
3	3-B	269	GLN	N-CA-C	-7.11	91.81	111.00
3	2-N	269	GLN	N-CA-C	-7.10	91.82	111.00
3	1-B	269	GLN	N-CA-C	-7.10	91.83	111.00
3	2-B	269	GLN	N-CA-C	-7.10	91.84	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	2-J	121	TRP	N-CA-C	7.08	130.11	111.00
3	2-B	48	GLY	N-CA-C	-7.08	95.41	113.10
3	2-N	48	GLY	N-CA-C	-7.07	95.43	113.10
3	3-B	48	GLY	N-CA-C	-7.07	95.43	113.10
3	1-B	48	GLY	N-CA-C	-7.07	95.43	113.10
3	1-N	48	GLY	N-CA-C	-7.07	95.44	113.10
6	2-F	121	TRP	N-CA-C	7.07	130.08	111.00
7	2-K	244	ASP	N-CA-C	-7.07	91.92	111.00
6	1-F	121	TRP	N-CA-C	7.06	130.07	111.00
6	1-J	121	TRP	N-CA-C	7.06	130.07	111.00
6	3-J	121	TRP	N-CA-C	7.06	130.07	111.00
6	3-F	121	TRP	N-CA-C	7.06	130.06	111.00
7	3-K	244	ASP	N-CA-C	-7.06	91.95	111.00
7	1-K	244	ASP	N-CA-C	-7.05	91.96	111.00
3	2-N	49	ASP	N-CA-C	-7.05	91.97	111.00
3	1-N	49	ASP	N-CA-C	-7.05	91.98	111.00
3	3-N	48	GLY	N-CA-C	-7.05	95.48	113.10
3	1-B	49	ASP	N-CA-C	-7.04	92.00	111.00
3	3-N	49	ASP	N-CA-C	-7.04	92.00	111.00
3	3-B	49	ASP	N-CA-C	-7.03	92.01	111.00
3	2-B	49	ASP	N-CA-C	-7.03	92.01	111.00
7	2-G	609	ARG	C-N-CA	7.03	139.27	121.70
7	1-G	609	ARG	C-N-CA	7.02	139.24	121.70
3	3-B	811	ASN	N-CA-C	-7.02	92.06	111.00
1	1-A	339	ARG	N-CA-C	-7.00	92.09	111.00
3	2-B	811	ASN	N-CA-C	-7.00	92.09	111.00
1	3-A	339	ARG	N-CA-C	-7.00	92.09	111.00
1	2-A	339	ARG	N-CA-C	-7.00	92.10	111.00
7	3-G	609	ARG	C-N-CA	7.00	139.20	121.70
3	1-B	811	ASN	N-CA-C	-7.00	92.10	111.00
7	1-K	609	ARG	C-N-CA	7.00	139.19	121.70
7	2-K	609	ARG	C-N-CA	7.00	139.19	121.70
7	3-K	609	ARG	C-N-CA	6.99	139.17	121.70
3	2-B	871	ASN	N-CA-C	-6.96	92.21	111.00
3	3-B	871	ASN	N-CA-C	-6.95	92.22	111.00
3	1-B	871	ASN	N-CA-C	-6.94	92.25	111.00
1	3-A	36	TRP	N-CA-C	-6.91	92.35	111.00
1	1-A	36	TRP	N-CA-C	-6.90	92.38	111.00
1	2-A	36	TRP	N-CA-C	-6.89	92.38	111.00
1	2-A	240	TRP	C-N-CA	6.88	138.91	121.70
1	2-A	243	ASP	N-CA-C	-6.88	92.43	111.00
1	1-A	240	TRP	C-N-CA	6.87	138.88	121.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1-A	243	ASP	N-CA-C	-6.87	92.46	111.00
1	3-A	240	TRP	C-N-CA	6.87	138.86	121.70
1	3-A	243	ASP	N-CA-C	-6.86	92.48	111.00
1	2-A	236	GLU	N-CA-C	-6.80	92.64	111.00
1	1-A	236	GLU	N-CA-C	-6.79	92.67	111.00
4	2-H	653	GLU	N-CA-C	-6.79	92.67	111.00
4	1-C	653	GLU	N-CA-C	-6.79	92.68	111.00
1	3-A	236	GLU	N-CA-C	-6.79	92.68	111.00
4	3-H	653	GLU	N-CA-C	-6.79	92.68	111.00
4	1-H	653	GLU	N-CA-C	-6.78	92.68	111.00
1	2-A	528	ILE	N-CA-C	-6.78	92.68	111.00
1	1-A	528	ILE	N-CA-C	-6.78	92.69	111.00
4	3-C	653	GLU	N-CA-C	-6.78	92.70	111.00
4	2-C	653	GLU	N-CA-C	-6.78	92.71	111.00
1	3-A	528	ILE	N-CA-C	-6.77	92.71	111.00
1	1-A	430	ASP	N-CA-C	-6.75	92.77	111.00
1	2-A	430	ASP	N-CA-C	-6.75	92.78	111.00
1	3-A	430	ASP	N-CA-C	-6.74	92.80	111.00
4	3-H	27	GLU	N-CA-C	-6.73	92.83	111.00
4	2-C	27	GLU	N-CA-C	-6.72	92.85	111.00
4	2-H	27	GLU	N-CA-C	-6.72	92.85	111.00
4	1-C	27	GLU	N-CA-C	-6.72	92.86	111.00
4	1-H	27	GLU	N-CA-C	-6.72	92.86	111.00
4	3-C	27	GLU	N-CA-C	-6.71	92.87	111.00
1	2-A	766	GLY	N-CA-C	-6.69	96.38	113.10
1	1-A	766	GLY	N-CA-C	-6.68	96.39	113.10
1	3-A	766	GLY	N-CA-C	-6.68	96.39	113.10
7	1-G	828	LEU	N-CA-C	-6.67	93.00	111.00
7	1-K	828	LEU	N-CA-C	-6.67	93.00	111.00
7	2-G	828	LEU	N-CA-C	-6.67	93.00	111.00
7	3-G	828	LEU	N-CA-C	-6.67	93.00	111.00
7	2-K	828	LEU	N-CA-C	-6.66	93.01	111.00
7	3-K	828	LEU	N-CA-C	-6.65	93.04	111.00
6	2-F	159	CYS	N-CA-C	-6.64	93.07	111.00
6	2-J	159	CYS	N-CA-C	-6.63	93.08	111.00
6	3-J	159	CYS	N-CA-C	-6.63	93.09	111.00
6	1-J	159	CYS	N-CA-C	-6.63	93.09	111.00
6	1-F	159	CYS	N-CA-C	-6.63	93.11	111.00
7	1-K	629	LEU	C-N-CA	6.63	138.27	121.70
7	2-K	629	LEU	C-N-CA	6.62	138.26	121.70
6	3-F	159	CYS	N-CA-C	-6.62	93.12	111.00
7	3-G	629	LEU	C-N-CA	6.62	138.25	121.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	1-G	629	LEU	C-N-CA	6.62	138.25	121.70
7	3-K	629	LEU	C-N-CA	6.61	138.24	121.70
7	2-G	629	LEU	C-N-CA	6.61	138.23	121.70
8	1-Z	11	TYR	N-CA-C	-6.61	93.16	111.00
8	2-Z	11	TYR	N-CA-C	-6.60	93.17	111.00
4	1-C	379	THR	N-CA-C	-6.60	93.19	111.00
8	3-Z	11	TYR	N-CA-C	-6.60	93.19	111.00
4	2-C	379	THR	N-CA-C	-6.59	93.20	111.00
4	3-C	379	THR	N-CA-C	-6.59	93.20	111.00
4	1-H	379	THR	N-CA-C	-6.59	93.22	111.00
4	3-H	379	THR	N-CA-C	-6.59	93.22	111.00
5	1-D	14	LYS	C-N-CA	6.58	138.16	121.70
4	2-H	379	THR	N-CA-C	-6.58	93.23	111.00
5	3-D	14	LYS	C-N-CA	6.58	138.15	121.70
8	3-Z	62	LEU	N-CA-C	-6.58	93.25	111.00
5	2-D	14	LYS	C-N-CA	6.57	138.14	121.70
5	2-I	14	LYS	C-N-CA	6.57	138.13	121.70
5	3-I	14	LYS	C-N-CA	6.57	138.13	121.70
5	1-I	14	LYS	C-N-CA	6.57	138.13	121.70
1	2-A	457	PHE	N-CA-C	-6.57	93.27	111.00
1	1-A	457	PHE	N-CA-C	-6.57	93.27	111.00
1	2-A	242	VAL	N-CA-C	-6.57	93.27	111.00
3	3-B	740	PRO	N-CA-C	-6.57	95.03	112.10
8	1-Z	62	LEU	N-CA-C	-6.56	93.29	111.00
3	1-B	740	PRO	N-CA-C	-6.56	95.05	112.10
1	3-A	242	VAL	N-CA-C	-6.55	93.31	111.00
1	1-A	242	VAL	N-CA-C	-6.55	93.31	111.00
1	3-A	457	PHE	N-CA-C	-6.55	93.31	111.00
7	2-G	667	ASN	N-CA-C	-6.55	93.32	111.00
7	2-K	667	ASN	N-CA-C	-6.55	93.32	111.00
7	1-K	667	ASN	N-CA-C	-6.54	93.33	111.00
7	3-K	667	ASN	N-CA-C	-6.54	93.33	111.00
7	1-G	667	ASN	N-CA-C	-6.54	93.33	111.00
3	2-B	740	PRO	N-CA-C	-6.54	95.09	112.10
8	2-Z	62	LEU	N-CA-C	-6.54	93.33	111.00
7	3-G	667	ASN	N-CA-C	-6.53	93.36	111.00
1	3-A	105	TYR	N-CA-C	-6.51	93.43	111.00
1	2-A	105	TYR	N-CA-C	-6.50	93.44	111.00
1	1-A	105	TYR	N-CA-C	-6.50	93.45	111.00
6	1-M	155	ILE	N-CA-C	-6.48	93.50	111.00
3	2-B	792	LEU	N-CA-C	-6.48	93.50	111.00
3	3-B	792	LEU	N-CA-C	-6.48	93.51	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	3-M	155	ILE	N-CA-C	-6.48	93.51	111.00
3	1-B	792	LEU	N-CA-C	-6.48	93.52	111.00
6	2-M	155	ILE	N-CA-C	-6.47	93.52	111.00
5	1-D	19	ARG	C-N-CA	6.45	137.83	121.70
7	3-K	849	LEU	N-CA-C	-6.45	93.59	111.00
5	3-D	19	ARG	C-N-CA	6.44	137.81	121.70
7	1-K	849	LEU	N-CA-C	-6.44	93.62	111.00
5	2-D	19	ARG	C-N-CA	6.44	137.79	121.70
7	2-K	849	LEU	N-CA-C	-6.43	93.63	111.00
5	1-I	19	ARG	C-N-CA	6.43	137.78	121.70
7	3-G	849	LEU	N-CA-C	-6.43	93.64	111.00
5	3-I	19	ARG	C-N-CA	6.43	137.77	121.70
5	2-I	19	ARG	C-N-CA	6.43	137.77	121.70
7	1-G	849	LEU	N-CA-C	-6.42	93.66	111.00
1	2-A	589	VAL	N-CA-C	-6.42	93.66	111.00
7	2-G	849	LEU	N-CA-C	-6.42	93.67	111.00
1	1-A	317	PHE	C-N-CA	6.42	137.74	121.70
1	1-A	589	VAL	N-CA-C	-6.41	93.69	111.00
1	3-A	589	VAL	N-CA-C	-6.41	93.69	111.00
3	3-B	754	ILE	N-CA-C	-6.41	93.69	111.00
3	1-B	754	ILE	N-CA-C	-6.41	93.70	111.00
3	2-B	754	ILE	N-CA-C	-6.41	93.70	111.00
1	2-A	317	PHE	C-N-CA	6.41	137.71	121.70
1	3-A	317	PHE	C-N-CA	6.40	137.71	121.70
4	3-C	154	ASP	N-CA-C	-6.39	93.75	111.00
4	3-H	546	TYR	N-CA-C	-6.39	93.75	111.00
7	2-G	484	HIS	N-CA-C	-6.38	93.76	111.00
7	1-G	484	HIS	N-CA-C	-6.38	93.77	111.00
4	1-H	546	TYR	N-CA-C	-6.38	93.78	111.00
4	2-C	154	ASP	N-CA-C	-6.38	93.78	111.00
5	2-D	29	ILE	N-CA-C	-6.38	93.78	111.00
4	2-H	546	TYR	N-CA-C	-6.38	93.78	111.00
5	2-I	29	ILE	N-CA-C	-6.38	93.79	111.00
7	3-G	484	HIS	N-CA-C	-6.37	93.79	111.00
4	1-C	154	ASP	N-CA-C	-6.37	93.80	111.00
4	2-H	154	ASP	N-CA-C	-6.37	93.80	111.00
5	1-D	29	ILE	N-CA-C	-6.37	93.81	111.00
5	1-I	29	ILE	N-CA-C	-6.37	93.81	111.00
4	2-C	546	TYR	N-CA-C	-6.37	93.81	111.00
5	3-D	29	ILE	N-CA-C	-6.37	93.81	111.00
4	1-H	154	ASP	N-CA-C	-6.36	93.82	111.00
3	3-B	414	ALA	C-N-CA	6.36	137.60	121.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	3-H	154	ASP	N-CA-C	-6.36	93.83	111.00
7	2-K	117	GLU	CA-C-N	-6.36	103.22	117.20
4	1-C	546	TYR	N-CA-C	-6.35	93.84	111.00
4	3-C	546	TYR	N-CA-C	-6.35	93.85	111.00
5	3-I	29	ILE	N-CA-C	-6.35	93.85	111.00
7	3-K	117	GLU	CA-C-N	-6.35	103.24	117.20
3	2-B	414	ALA	C-N-CA	6.34	137.56	121.70
7	1-G	150	ASP	C-N-CA	6.34	137.56	121.70
6	3-M	149	ARG	N-CA-C	-6.34	93.88	111.00
7	2-K	838	HIS	C-N-CA	6.34	137.55	121.70
3	1-B	414	ALA	C-N-CA	6.34	137.54	121.70
3	1-N	414	ALA	C-N-CA	6.33	137.53	121.70
8	2-Z	29	LYS	N-CA-C	-6.33	93.90	111.00
3	3-N	414	ALA	C-N-CA	6.33	137.53	121.70
7	1-K	117	GLU	CA-C-N	-6.33	103.28	117.20
7	3-G	150	ASP	C-N-CA	6.33	137.52	121.70
7	3-K	838	HIS	C-N-CA	6.33	137.52	121.70
6	1-M	149	ARG	N-CA-C	-6.33	93.92	111.00
3	2-N	414	ALA	C-N-CA	6.33	137.52	121.70
7	2-G	150	ASP	C-N-CA	6.33	137.51	121.70
7	3-G	838	HIS	C-N-CA	6.33	137.51	121.70
8	1-Z	29	LYS	N-CA-C	-6.32	93.93	111.00
7	1-K	838	HIS	C-N-CA	6.32	137.50	121.70
6	2-M	149	ARG	N-CA-C	-6.32	93.94	111.00
7	1-G	838	HIS	C-N-CA	6.32	137.50	121.70
7	3-K	206	ASN	N-CA-C	-6.32	93.95	111.00
7	2-G	838	HIS	C-N-CA	6.31	137.48	121.70
7	1-K	206	ASN	N-CA-C	-6.31	93.96	111.00
7	1-K	704	GLY	N-CA-C	-6.31	97.32	113.10
7	2-K	206	ASN	N-CA-C	-6.30	93.98	111.00
7	2-K	704	GLY	N-CA-C	-6.30	97.34	113.10
7	3-K	96	SER	N-CA-C	6.30	128.02	111.00
7	1-K	96	SER	N-CA-C	6.30	128.01	111.00
8	3-Z	29	LYS	N-CA-C	-6.30	93.99	111.00
7	3-K	704	GLY	N-CA-C	-6.30	97.35	113.10
7	3-G	704	GLY	N-CA-C	-6.30	97.35	113.10
1	2-A	768	ASP	C-N-CA	6.29	137.44	121.70
7	1-G	704	GLY	N-CA-C	-6.29	97.37	113.10
7	2-K	96	SER	N-CA-C	6.29	127.98	111.00
1	3-A	768	ASP	C-N-CA	6.29	137.42	121.70
1	2-A	73	TYR	N-CA-C	-6.29	94.03	111.00
1	1-A	768	ASP	C-N-CA	6.28	137.39	121.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	2-G	704	GLY	N-CA-C	-6.28	97.41	113.10
1	3-A	73	TYR	N-CA-C	-6.28	94.05	111.00
4	3-H	155	ASN	C-N-CA	6.27	137.37	121.70
4	1-C	155	ASN	C-N-CA	6.27	137.37	121.70
4	2-C	155	ASN	C-N-CA	6.27	137.37	121.70
6	2-M	62	SER	C-N-CA	6.27	137.37	121.70
1	1-A	73	TYR	N-CA-C	-6.26	94.08	111.00
6	3-M	62	SER	C-N-CA	6.26	137.36	121.70
4	3-C	155	ASN	C-N-CA	6.26	137.34	121.70
6	1-M	62	SER	C-N-CA	6.25	137.33	121.70
4	1-H	155	ASN	C-N-CA	6.25	137.33	121.70
3	2-B	816	GLY	N-CA-C	-6.24	97.49	113.10
4	2-H	155	ASN	C-N-CA	6.24	137.30	121.70
3	1-B	816	GLY	N-CA-C	-6.24	97.51	113.10
4	1-H	113	PHE	N-CA-C	6.24	127.84	111.00
3	3-B	816	GLY	N-CA-C	-6.23	97.52	113.10
4	2-C	113	PHE	N-CA-C	6.23	127.83	111.00
4	1-C	113	PHE	N-CA-C	6.23	127.82	111.00
7	1-G	665	CYS	N-CA-C	6.23	127.81	111.00
4	3-H	113	PHE	N-CA-C	6.23	127.81	111.00
7	2-G	665	CYS	N-CA-C	6.22	127.80	111.00
4	3-C	113	PHE	N-CA-C	6.22	127.80	111.00
4	2-H	113	PHE	N-CA-C	6.22	127.78	111.00
7	3-G	665	CYS	N-CA-C	6.21	127.77	111.00
4	3-C	736	GLY	N-CA-C	-6.21	97.58	113.10
4	3-H	546	TYR	O-C-N	6.21	132.63	122.70
4	2-C	736	GLY	N-CA-C	-6.20	97.60	113.10
4	1-H	546	TYR	O-C-N	6.20	132.62	122.70
7	2-G	277	LEU	C-N-CA	-6.20	95.98	122.00
7	3-G	277	LEU	C-N-CA	-6.20	95.98	122.00
4	1-C	736	GLY	N-CA-C	-6.19	97.61	113.10
4	1-C	546	TYR	O-C-N	6.19	132.61	122.70
7	1-G	277	LEU	C-N-CA	-6.19	96.01	122.00
4	3-C	546	TYR	O-C-N	6.19	132.60	122.70
8	2-L	30	TYR	N-CA-C	-6.18	94.32	111.00
4	2-H	546	TYR	O-C-N	6.18	132.58	122.70
8	1-L	30	TYR	N-CA-C	-6.17	94.34	111.00
3	3-B	933	GLY	C-N-CA	-6.17	96.08	122.00
3	2-B	933	GLY	C-N-CA	-6.17	96.09	122.00
4	2-C	546	TYR	O-C-N	6.17	132.57	122.70
3	1-B	933	GLY	C-N-CA	-6.17	96.09	122.00
4	2-C	85	ASN	N-CA-C	-6.17	94.35	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	3-L	30	TYR	N-CA-C	-6.16	94.37	111.00
4	1-C	85	ASN	N-CA-C	-6.16	94.38	111.00
4	3-H	85	ASN	N-CA-C	-6.16	94.38	111.00
7	3-K	665	CYS	N-CA-C	6.15	127.61	111.00
6	3-R	42	VAL	C-N-CA	6.15	137.07	121.70
6	1-R	42	VAL	C-N-CA	6.15	137.06	121.70
7	1-K	665	CYS	N-CA-C	6.15	127.59	111.00
4	2-H	85	ASN	N-CA-C	-6.14	94.42	111.00
4	1-H	85	ASN	N-CA-C	-6.14	94.42	111.00
7	2-K	665	CYS	N-CA-C	6.14	127.58	111.00
4	3-C	85	ASN	N-CA-C	-6.14	94.42	111.00
6	2-R	42	VAL	C-N-CA	6.13	137.03	121.70
8	3-Z	25	ARG	N-CA-C	-6.13	94.44	111.00
8	1-Z	25	ARG	N-CA-C	-6.12	94.46	111.00
8	2-Z	25	ARG	N-CA-C	-6.12	94.46	111.00
1	2-A	511	ILE	N-CA-C	-6.11	94.50	111.00
3	2-B	905	PHE	C-N-CA	6.11	136.97	121.70
4	2-C	396	TRP	N-CA-C	-6.11	94.51	111.00
3	1-B	905	PHE	C-N-CA	6.10	136.96	121.70
3	3-B	905	PHE	C-N-CA	6.10	136.96	121.70
4	1-C	396	TRP	N-CA-C	-6.10	94.53	111.00
1	3-A	511	ILE	N-CA-C	-6.10	94.53	111.00
4	2-H	170	TRP	C-N-CA	6.10	136.94	121.70
4	1-C	315	ILE	N-CA-C	-6.10	94.54	111.00
1	1-A	511	ILE	N-CA-C	-6.09	94.54	111.00
4	1-H	396	TRP	N-CA-C	-6.09	94.54	111.00
4	2-C	315	ILE	N-CA-C	-6.09	94.55	111.00
4	2-H	396	TRP	N-CA-C	-6.09	94.56	111.00
4	3-C	315	ILE	N-CA-C	-6.09	94.55	111.00
4	3-C	396	TRP	N-CA-C	-6.09	94.55	111.00
4	1-H	546	TYR	CA-C-N	-6.09	103.80	117.20
4	2-H	546	TYR	CA-C-N	-6.09	103.80	117.20
4	3-H	396	TRP	N-CA-C	-6.09	94.56	111.00
4	1-H	170	TRP	C-N-CA	6.09	136.91	121.70
4	3-H	546	TYR	CA-C-N	-6.08	103.81	117.20
4	2-C	170	TRP	C-N-CA	6.08	136.91	121.70
4	3-H	315	ILE	N-CA-C	-6.08	94.58	111.00
4	1-H	315	ILE	N-CA-C	-6.08	94.59	111.00
6	3-R	58	TYR	N-CA-C	-6.08	94.59	111.00
4	2-H	315	ILE	N-CA-C	-6.08	94.60	111.00
4	2-C	546	TYR	CA-C-N	-6.07	103.84	117.20
4	3-H	170	TRP	C-N-CA	6.07	136.88	121.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	1-R	58	TYR	N-CA-C	-6.07	94.62	111.00
6	2-R	58	TYR	N-CA-C	-6.07	94.62	111.00
4	1-C	546	TYR	CA-C-N	-6.06	103.86	117.20
4	1-C	170	TRP	C-N-CA	6.06	136.85	121.70
7	1-G	207	ASP	N-CA-C	6.05	127.35	111.00
7	2-G	207	ASP	N-CA-C	6.05	127.35	111.00
7	3-G	207	ASP	N-CA-C	6.05	127.34	111.00
8	3-Z	30	TYR	N-CA-C	-6.05	94.65	111.00
4	3-C	170	TRP	C-N-CA	6.05	136.83	121.70
3	3-N	385	VAL	C-N-CA	6.05	136.83	121.70
8	1-Z	30	TYR	N-CA-C	-6.05	94.66	111.00
8	2-Z	30	TYR	N-CA-C	-6.05	94.66	111.00
4	1-C	551	ILE	N-CA-C	-6.05	94.67	111.00
3	2-N	385	VAL	C-N-CA	6.05	136.82	121.70
4	3-C	551	ILE	N-CA-C	-6.05	94.67	111.00
8	3-Z	129	VAL	N-CA-C	-6.05	94.67	111.00
8	1-Z	129	VAL	N-CA-C	-6.04	94.68	111.00
4	3-C	546	TYR	CA-C-N	-6.04	103.91	117.20
4	2-C	551	ILE	N-CA-C	-6.04	94.69	111.00
8	2-Z	129	VAL	N-CA-C	-6.04	94.69	111.00
3	1-N	385	VAL	C-N-CA	6.04	136.80	121.70
8	2-L	80	ILE	C-N-CA	6.04	134.98	122.30
5	3-D	50	GLU	N-CA-C	-6.03	94.71	111.00
4	3-H	551	ILE	N-CA-C	-6.03	94.71	111.00
4	1-H	551	ILE	N-CA-C	-6.03	94.71	111.00
5	1-D	50	GLU	N-CA-C	-6.03	94.72	111.00
5	2-D	50	GLU	N-CA-C	-6.03	94.72	111.00
5	2-I	50	GLU	N-CA-C	-6.03	94.72	111.00
8	1-L	80	ILE	C-N-CA	6.03	134.96	122.30
5	1-I	50	GLU	N-CA-C	-6.03	94.73	111.00
5	3-I	50	GLU	N-CA-C	-6.02	94.74	111.00
4	3-H	504	GLY	N-CA-C	6.02	128.16	113.10
4	2-H	551	ILE	N-CA-C	-6.02	94.75	111.00
8	3-L	80	ILE	C-N-CA	6.02	134.94	122.30
3	2-B	385	VAL	C-N-CA	6.01	136.74	121.70
4	2-C	424	PHE	N-CA-C	-6.01	94.76	111.00
6	2-M	53	VAL	N-CA-C	-6.01	94.76	111.00
4	2-H	504	GLY	N-CA-C	6.01	128.13	113.10
4	3-H	424	PHE	N-CA-C	-6.01	94.76	111.00
4	1-H	424	PHE	N-CA-C	-6.01	94.77	111.00
4	2-H	424	PHE	N-CA-C	-6.01	94.77	111.00
6	3-M	53	VAL	N-CA-C	-6.01	94.77	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	1-B	385	VAL	C-N-CA	6.01	136.72	121.70
4	3-C	424	PHE	N-CA-C	-6.01	94.78	111.00
4	1-H	504	GLY	N-CA-C	6.01	128.12	113.10
6	2-R	71	GLN	N-CA-C	-6.01	94.78	111.00
3	3-B	385	VAL	C-N-CA	6.01	136.72	121.70
7	3-G	731	THR	N-CA-C	-6.01	94.78	111.00
7	2-G	731	THR	N-CA-C	-6.00	94.79	111.00
4	1-C	424	PHE	N-CA-C	-6.00	94.79	111.00
7	1-K	731	THR	N-CA-C	-6.00	94.79	111.00
6	1-R	71	GLN	N-CA-C	-6.00	94.80	111.00
6	1-M	53	VAL	N-CA-C	-6.00	94.81	111.00
7	1-G	731	THR	N-CA-C	-6.00	94.81	111.00
7	2-K	731	THR	N-CA-C	-6.00	94.81	111.00
6	3-R	71	GLN	N-CA-C	-5.99	94.82	111.00
7	3-K	731	THR	N-CA-C	-5.99	94.82	111.00
7	2-K	80	ASN	N-CA-C	-5.98	94.84	111.00
4	2-C	245	ILE	N-CA-C	-5.98	94.85	111.00
4	2-C	151	ASN	N-CA-C	-5.98	94.86	111.00
4	2-H	174	SER	N-CA-C	-5.98	94.86	111.00
4	3-C	174	SER	N-CA-C	-5.97	94.87	111.00
7	1-K	80	ASN	N-CA-C	-5.97	94.88	111.00
7	3-G	640	THR	N-CA-C	-5.97	94.88	111.00
1	2-A	554	THR	N-CA-C	5.97	127.12	111.00
4	2-H	245	ILE	N-CA-C	-5.97	94.88	111.00
4	3-C	504	GLY	N-CA-C	5.97	128.02	113.10
4	1-C	504	GLY	N-CA-C	5.97	128.02	113.10
4	1-C	174	SER	N-CA-C	-5.97	94.89	111.00
4	1-C	245	ILE	N-CA-C	-5.96	94.89	111.00
4	2-C	504	GLY	N-CA-C	5.96	128.01	113.10
7	2-K	640	THR	N-CA-C	-5.96	94.89	111.00
4	3-C	245	ILE	N-CA-C	-5.96	94.89	111.00
4	3-H	174	SER	N-CA-C	-5.96	94.89	111.00
7	2-G	640	THR	N-CA-C	-5.96	94.90	111.00
7	3-K	80	ASN	N-CA-C	-5.96	94.90	111.00
7	1-G	640	THR	N-CA-C	-5.96	94.90	111.00
7	1-K	640	THR	N-CA-C	-5.96	94.91	111.00
4	2-C	174	SER	N-CA-C	-5.96	94.91	111.00
7	1-K	736	ASP	N-CA-C	-5.96	94.91	111.00
1	1-A	554	THR	N-CA-C	5.96	127.09	111.00
4	1-H	174	SER	N-CA-C	-5.96	94.91	111.00
4	3-C	151	ASN	N-CA-C	-5.96	94.91	111.00
7	3-G	736	ASP	N-CA-C	-5.96	94.91	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	1-C	151	ASN	N-CA-C	-5.96	94.92	111.00
4	1-H	245	ILE	N-CA-C	-5.96	94.92	111.00
7	2-G	736	ASP	N-CA-C	-5.96	94.92	111.00
7	3-K	640	THR	N-CA-C	-5.96	94.92	111.00
6	3-R	96	ASP	N-CA-C	-5.96	94.92	111.00
1	1-A	599	PHE	CA-C-N	5.95	130.30	117.20
7	2-K	222	GLY	N-CA-C	-5.95	98.22	113.10
7	1-G	736	ASP	N-CA-C	-5.95	94.93	111.00
7	2-K	736	ASP	N-CA-C	-5.95	94.93	111.00
7	3-K	736	ASP	N-CA-C	-5.95	94.93	111.00
4	3-H	245	ILE	N-CA-C	-5.95	94.93	111.00
7	1-K	222	GLY	N-CA-C	-5.95	98.22	113.10
7	2-G	506	LEU	N-CA-C	5.95	127.07	111.00
1	3-A	554	THR	N-CA-C	5.95	127.06	111.00
1	2-A	392	ASP	N-CA-C	-5.95	94.94	111.00
7	1-G	506	LEU	N-CA-C	5.95	127.05	111.00
6	2-R	96	ASP	N-CA-C	-5.95	94.95	111.00
7	3-G	506	LEU	N-CA-C	5.95	127.05	111.00
6	1-R	96	ASP	N-CA-C	-5.94	94.95	111.00
1	1-A	392	ASP	N-CA-C	-5.94	94.96	111.00
8	2-L	61	LEU	C-N-CA	-5.94	106.86	121.70
7	3-K	222	GLY	N-CA-C	-5.94	98.26	113.10
7	2-K	240	LEU	C-N-CA	5.94	136.54	121.70
1	3-A	599	PHE	CA-C-N	5.93	130.25	117.20
4	2-H	151	ASN	N-CA-C	-5.93	94.98	111.00
1	3-A	392	ASP	N-CA-C	-5.93	94.99	111.00
4	1-H	151	ASN	N-CA-C	-5.93	94.99	111.00
4	1-C	88	THR	N-CA-C	-5.93	95.00	111.00
4	3-H	151	ASN	N-CA-C	-5.93	95.00	111.00
4	1-H	88	THR	N-CA-C	-5.92	95.01	111.00
4	2-H	88	THR	N-CA-C	-5.92	95.02	111.00
7	1-K	240	LEU	C-N-CA	5.92	136.49	121.70
8	1-L	61	LEU	C-N-CA	-5.92	106.91	121.70
1	2-A	599	PHE	CA-C-N	5.92	130.22	117.20
4	2-C	88	THR	N-CA-C	-5.91	95.04	111.00
4	3-C	88	THR	N-CA-C	-5.91	95.04	111.00
3	1-B	795	HIS	C-N-CA	5.90	136.46	121.70
3	1-B	928	LYS	N-CA-C	5.90	126.93	111.00
3	3-B	928	LYS	N-CA-C	5.90	126.93	111.00
4	3-H	88	THR	N-CA-C	-5.90	95.07	111.00
8	3-L	61	LEU	C-N-CA	-5.90	106.95	121.70
3	3-B	795	HIS	C-N-CA	5.90	136.44	121.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	3-K	858	ALA	N-CA-C	-5.90	95.08	111.00
3	2-B	795	HIS	C-N-CA	5.90	136.44	121.70
7	3-K	240	LEU	C-N-CA	5.89	136.44	121.70
7	2-G	858	ALA	N-CA-C	-5.89	95.09	111.00
7	1-K	858	ALA	N-CA-C	-5.89	95.09	111.00
3	2-B	928	LYS	N-CA-C	5.89	126.90	111.00
7	2-K	858	ALA	N-CA-C	-5.89	95.10	111.00
7	3-G	858	ALA	N-CA-C	-5.88	95.12	111.00
7	1-G	858	ALA	N-CA-C	-5.88	95.12	111.00
1	2-A	429	LEU	N-CA-C	-5.85	95.20	111.00
7	2-G	300	LYS	N-CA-C	-5.85	95.20	111.00
7	1-G	300	LYS	N-CA-C	-5.84	95.22	111.00
1	1-A	429	LEU	N-CA-C	-5.84	95.24	111.00
4	2-C	446	GLY	N-CA-C	-5.84	98.50	113.10
7	3-K	695	ALA	N-CA-C	-5.84	95.23	111.00
7	3-G	300	LYS	N-CA-C	-5.83	95.25	111.00
1	3-A	429	LEU	N-CA-C	-5.83	95.25	111.00
4	1-H	446	GLY	N-CA-C	-5.83	98.53	113.10
7	1-K	695	ALA	N-CA-C	-5.83	95.27	111.00
1	2-A	325	ALA	N-CA-C	5.83	126.74	111.00
4	2-H	446	GLY	N-CA-C	-5.83	98.53	113.10
4	3-H	446	GLY	N-CA-C	-5.83	98.53	113.10
1	1-A	496	TRP	N-CA-C	-5.82	95.28	111.00
1	3-A	325	ALA	N-CA-C	5.82	126.72	111.00
7	2-K	695	ALA	N-CA-C	-5.82	95.29	111.00
1	1-A	325	ALA	N-CA-C	5.82	126.71	111.00
1	3-A	496	TRP	N-CA-C	-5.82	95.29	111.00
4	1-C	446	GLY	N-CA-C	-5.81	98.56	113.10
4	3-C	446	GLY	N-CA-C	-5.81	98.57	113.10
7	1-G	845	ARG	N-CA-C	-5.80	95.34	111.00
1	2-A	496	TRP	N-CA-C	-5.80	95.33	111.00
7	2-K	845	ARG	N-CA-C	-5.80	95.34	111.00
7	3-G	845	ARG	N-CA-C	-5.80	95.34	111.00
7	1-K	845	ARG	N-CA-C	-5.79	95.35	111.00
7	2-G	845	ARG	N-CA-C	-5.79	95.38	111.00
7	3-K	845	ARG	N-CA-C	-5.78	95.39	111.00
7	1-K	749	ASP	N-CA-C	-5.78	95.39	111.00
5	2-I	98	GLU	N-CA-C	-5.78	95.40	111.00
7	2-K	749	ASP	N-CA-C	-5.77	95.41	111.00
5	3-I	98	GLU	N-CA-C	-5.77	95.41	111.00
7	3-K	749	ASP	N-CA-C	-5.77	95.41	111.00
3	3-B	410	PRO	N-CA-C	-5.77	97.10	112.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	2-B	325	GLU	C-N-CA	5.77	136.12	121.70
3	1-B	325	GLU	C-N-CA	5.77	136.11	121.70
3	1-N	410	PRO	N-CA-C	-5.76	97.11	112.10
5	1-I	98	GLU	N-CA-C	-5.76	95.44	111.00
5	1-D	98	GLU	N-CA-C	-5.76	95.44	111.00
3	1-B	748	HIS	N-CA-C	-5.76	95.44	111.00
1	3-A	509	HIS	N-CA-C	-5.76	95.44	111.00
7	2-G	749	ASP	N-CA-C	-5.76	95.45	111.00
3	3-N	410	PRO	N-CA-C	-5.76	97.12	112.10
3	1-B	410	PRO	N-CA-C	-5.76	97.13	112.10
7	3-G	749	ASP	N-CA-C	-5.76	95.45	111.00
7	1-G	749	ASP	N-CA-C	-5.76	95.46	111.00
3	2-B	748	HIS	N-CA-C	-5.75	95.46	111.00
5	3-D	98	GLU	N-CA-C	-5.75	95.46	111.00
3	2-N	325	GLU	C-N-CA	5.75	136.08	121.70
3	3-B	748	HIS	N-CA-C	-5.75	95.47	111.00
3	1-N	325	GLU	C-N-CA	5.75	136.07	121.70
5	2-D	98	GLU	N-CA-C	-5.75	95.48	111.00
3	2-N	410	PRO	N-CA-C	-5.75	97.15	112.10
3	3-B	325	GLU	C-N-CA	5.75	136.07	121.70
4	3-C	530	VAL	N-CA-C	-5.75	95.48	111.00
3	2-B	410	PRO	N-CA-C	-5.75	97.16	112.10
3	3-N	325	GLU	C-N-CA	5.74	136.06	121.70
1	1-A	509	HIS	N-CA-C	-5.74	95.50	111.00
4	1-C	530	VAL	N-CA-C	-5.74	95.50	111.00
4	2-C	530	VAL	N-CA-C	-5.74	95.51	111.00
6	2-R	61	ILE	N-CA-C	-5.74	95.51	111.00
7	3-K	40	ASN	N-CA-C	-5.74	95.52	111.00
1	2-A	507	ALA	N-CA-C	-5.73	95.52	111.00
4	1-H	530	VAL	N-CA-C	-5.73	95.52	111.00
7	2-K	40	ASN	N-CA-C	-5.73	95.52	111.00
7	1-K	40	ASN	N-CA-C	-5.73	95.53	111.00
3	3-B	804	VAL	N-CA-C	-5.73	95.53	111.00
4	3-H	530	VAL	N-CA-C	-5.73	95.53	111.00
6	3-R	61	ILE	N-CA-C	-5.73	95.53	111.00
1	1-A	507	ALA	N-CA-C	-5.73	95.54	111.00
4	2-H	530	VAL	N-CA-C	-5.73	95.54	111.00
7	1-G	95	MET	N-CA-C	5.73	126.46	111.00
6	1-R	61	ILE	N-CA-C	-5.73	95.54	111.00
3	1-B	804	VAL	N-CA-C	-5.72	95.54	111.00
1	2-A	509	HIS	N-CA-C	-5.72	95.54	111.00
7	2-G	95	MET	N-CA-C	5.72	126.45	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	3-G	95	MET	N-CA-C	5.72	126.44	111.00
3	2-B	804	VAL	N-CA-C	-5.72	95.56	111.00
1	3-A	507	ALA	N-CA-C	-5.72	95.57	111.00
1	3-A	67	VAL	N-CA-C	-5.70	95.61	111.00
1	2-A	67	VAL	N-CA-C	-5.70	95.61	111.00
1	1-A	67	VAL	N-CA-C	-5.70	95.62	111.00
6	2-F	151	ARG	N-CA-C	-5.69	95.63	111.00
3	3-N	414	ALA	O-C-N	5.69	131.81	122.70
1	3-A	77	VAL	N-CA-C	-5.68	95.66	111.00
3	3-B	841	ILE	N-CA-C	5.68	126.34	111.00
1	2-A	77	VAL	N-CA-C	-5.68	95.67	111.00
3	1-B	414	ALA	O-C-N	5.68	131.78	122.70
3	1-B	841	ILE	N-CA-C	5.68	126.33	111.00
5	3-I	24	MET	C-N-CA	5.68	135.89	121.70
5	1-I	24	MET	C-N-CA	5.67	135.89	121.70
5	2-I	24	MET	C-N-CA	5.67	135.89	121.70
6	3-F	151	ARG	N-CA-C	-5.67	95.68	111.00
7	1-G	178	VAL	N-CA-C	5.67	126.32	111.00
1	1-A	77	VAL	N-CA-C	-5.67	95.69	111.00
6	1-F	151	ARG	N-CA-C	-5.67	95.69	111.00
3	2-B	841	ILE	N-CA-C	5.67	126.31	111.00
7	2-G	178	VAL	N-CA-C	5.67	126.31	111.00
4	3-C	411	ILE	N-CA-C	-5.67	95.69	111.00
4	2-C	411	ILE	N-CA-C	-5.67	95.69	111.00
7	3-G	178	VAL	N-CA-C	5.67	126.30	111.00
5	1-D	24	MET	C-N-CA	5.67	135.87	121.70
3	1-N	414	ALA	O-C-N	5.66	131.76	122.70
3	2-B	414	ALA	O-C-N	5.66	131.76	122.70
5	3-D	24	MET	C-N-CA	5.66	135.85	121.70
6	1-J	151	ARG	N-CA-C	-5.66	95.72	111.00
3	2-N	414	ALA	O-C-N	5.66	131.76	122.70
6	2-J	151	ARG	N-CA-C	-5.66	95.72	111.00
4	1-C	411	ILE	N-CA-C	-5.66	95.72	111.00
7	1-K	853	THR	N-CA-C	-5.66	95.73	111.00
5	2-D	24	MET	C-N-CA	5.66	135.84	121.70
7	2-G	853	THR	N-CA-C	-5.66	95.73	111.00
1	2-A	87	PHE	N-CA-C	-5.65	95.73	111.00
7	2-K	853	THR	N-CA-C	-5.65	95.73	111.00
6	3-J	151	ARG	N-CA-C	-5.65	95.74	111.00
1	1-A	522	CYS	N-CA-C	-5.65	95.74	111.00
7	1-G	853	THR	N-CA-C	-5.65	95.74	111.00
1	2-A	522	CYS	N-CA-C	-5.65	95.74	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	3-B	414	ALA	O-C-N	5.65	131.74	122.70
1	3-A	522	CYS	N-CA-C	-5.65	95.75	111.00
1	2-A	611	VAL	CA-C-N	-5.65	104.77	117.20
7	3-K	853	THR	N-CA-C	-5.65	95.75	111.00
1	1-A	87	PHE	N-CA-C	-5.64	95.76	111.00
4	3-H	442	ARG	N-CA-C	-5.64	95.76	111.00
3	1-B	926	ILE	N-CA-C	5.64	126.24	111.00
3	3-B	926	ILE	N-CA-C	5.64	126.23	111.00
7	3-G	853	THR	N-CA-C	-5.64	95.78	111.00
4	1-H	442	ARG	N-CA-C	-5.64	95.78	111.00
4	2-H	411	ILE	N-CA-C	-5.64	95.78	111.00
1	3-A	87	PHE	N-CA-C	-5.64	95.78	111.00
4	1-H	411	ILE	N-CA-C	-5.64	95.78	111.00
1	2-A	324	PRO	C-N-CA	5.64	135.79	121.70
1	1-A	324	PRO	C-N-CA	5.63	135.78	121.70
6	2-R	41	GLU	C-N-CA	5.63	135.78	121.70
1	1-A	611	VAL	CA-C-N	-5.63	104.81	117.20
6	1-R	41	GLU	C-N-CA	5.63	135.78	121.70
3	2-B	926	ILE	N-CA-C	5.63	126.20	111.00
1	1-A	227	ARG	N-CA-C	-5.63	95.80	111.00
6	3-R	151	ARG	N-CA-C	5.63	126.19	111.00
1	3-A	611	VAL	CA-C-N	-5.63	104.82	117.20
4	2-H	442	ARG	N-CA-C	-5.62	95.82	111.00
4	3-H	411	ILE	N-CA-C	-5.62	95.81	111.00
1	2-A	227	ARG	N-CA-C	-5.62	95.82	111.00
6	2-R	151	ARG	N-CA-C	5.62	126.17	111.00
6	3-R	41	GLU	C-N-CA	5.62	135.75	121.70
4	2-C	442	ARG	N-CA-C	-5.62	95.84	111.00
8	2-Z	58	GLU	N-CA-C	-5.62	95.84	111.00
1	3-A	227	ARG	N-CA-C	-5.62	95.84	111.00
6	3-R	88	VAL	N-CA-C	5.62	126.16	111.00
6	1-R	151	ARG	N-CA-C	5.61	126.16	111.00
1	3-A	324	PRO	C-N-CA	5.61	135.73	121.70
4	1-C	442	ARG	N-CA-C	-5.61	95.85	111.00
1	3-A	621	VAL	C-N-CA	5.61	134.08	122.30
4	3-C	442	ARG	N-CA-C	-5.61	95.86	111.00
8	1-Z	58	GLU	N-CA-C	-5.60	95.88	111.00
8	3-Z	58	GLU	N-CA-C	-5.59	95.90	111.00
6	1-R	88	VAL	N-CA-C	5.59	126.10	111.00
1	1-A	621	VAL	C-N-CA	5.59	134.04	122.30
6	2-R	88	VAL	N-CA-C	5.59	126.09	111.00
1	2-A	621	VAL	C-N-CA	5.58	134.02	122.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	3-H	9	ARG	N-CA-C	-5.58	95.93	111.00
4	1-H	9	ARG	N-CA-C	-5.57	95.95	111.00
4	2-C	9	ARG	N-CA-C	-5.57	95.95	111.00
4	3-C	202	LEU	O-C-N	5.57	131.62	122.70
4	1-C	9	ARG	N-CA-C	-5.57	95.96	111.00
1	2-A	423	ARG	C-N-CA	5.57	135.63	121.70
4	3-C	9	ARG	N-CA-C	-5.57	95.96	111.00
4	2-C	202	LEU	O-C-N	5.57	131.61	122.70
1	1-A	423	ARG	C-N-CA	5.57	135.61	121.70
1	3-A	487	LYS	C-N-CA	5.57	135.62	121.70
1	3-A	423	ARG	C-N-CA	5.56	135.61	121.70
3	3-B	800	ILE	N-CA-C	-5.56	95.98	111.00
3	2-B	800	ILE	N-CA-C	-5.56	95.99	111.00
4	2-H	9	ARG	N-CA-C	-5.56	95.98	111.00
4	2-C	662	VAL	N-CA-C	-5.56	95.99	111.00
4	1-C	202	LEU	O-C-N	5.56	131.59	122.70
6	2-M	148	ILE	C-N-CA	5.56	135.59	121.70
4	3-C	662	VAL	N-CA-C	-5.56	96.00	111.00
4	3-H	202	LEU	O-C-N	5.56	131.59	122.70
3	1-B	800	ILE	N-CA-C	-5.55	96.00	111.00
4	1-C	662	VAL	N-CA-C	-5.55	96.00	111.00
4	3-H	662	VAL	N-CA-C	-5.55	96.00	111.00
4	1-H	662	VAL	N-CA-C	-5.55	96.01	111.00
1	2-A	78	TRP	N-CA-C	-5.55	96.01	111.00
1	1-A	78	TRP	N-CA-C	-5.55	96.01	111.00
1	1-A	487	LYS	C-N-CA	5.55	135.57	121.70
4	1-C	246	THR	C-N-CA	5.55	133.95	122.30
6	2-M	63	PHE	N-CA-C	5.55	125.98	111.00
6	3-M	63	PHE	N-CA-C	5.54	125.97	111.00
6	1-M	63	PHE	N-CA-C	5.54	125.97	111.00
4	2-C	246	THR	C-N-CA	5.54	133.94	122.30
1	2-A	487	LYS	C-N-CA	5.54	135.55	121.70
6	1-M	148	ILE	C-N-CA	5.54	135.55	121.70
4	2-H	662	VAL	N-CA-C	-5.54	96.05	111.00
1	1-A	574	LYS	C-N-CA	5.54	133.93	122.30
6	2-M	154	PHE	N-CA-C	-5.54	96.06	111.00
1	3-A	78	TRP	N-CA-C	-5.54	96.06	111.00
6	3-M	154	PHE	N-CA-C	-5.54	96.06	111.00
6	1-M	154	PHE	N-CA-C	-5.53	96.06	111.00
1	3-A	574	LYS	C-N-CA	5.53	133.92	122.30
7	3-K	279	GLY	N-CA-C	-5.53	99.27	113.10
4	1-H	202	LEU	O-C-N	5.53	131.55	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	3-C	246	THR	C-N-CA	5.53	133.92	122.30
1	2-A	574	LYS	C-N-CA	5.53	133.91	122.30
7	2-K	279	GLY	N-CA-C	-5.53	99.28	113.10
4	2-H	202	LEU	N-CA-C	-5.53	96.06	111.00
4	3-H	365	ARG	N-CA-C	5.53	125.93	111.00
4	1-H	202	LEU	N-CA-C	-5.53	96.08	111.00
4	3-H	202	LEU	N-CA-C	-5.53	96.07	111.00
4	1-C	202	LEU	N-CA-C	-5.53	96.08	111.00
4	1-H	246	THR	C-N-CA	5.53	133.90	122.30
4	2-H	246	THR	C-N-CA	5.53	133.91	122.30
7	1-K	279	GLY	N-CA-C	-5.52	99.29	113.10
3	2-B	828	ASP	N-CA-C	-5.52	96.09	111.00
4	3-H	246	THR	C-N-CA	5.52	133.90	122.30
6	3-M	148	ILE	C-N-CA	5.52	135.49	121.70
4	3-C	202	LEU	N-CA-C	-5.52	96.11	111.00
4	1-H	365	ARG	N-CA-C	5.51	125.89	111.00
4	2-C	202	LEU	N-CA-C	-5.51	96.11	111.00
8	3-Z	16	ILE	N-CA-C	-5.51	96.11	111.00
4	3-H	89	LEU	N-CA-C	-5.51	96.11	111.00
3	1-B	828	ASP	N-CA-C	-5.51	96.11	111.00
7	1-G	132	THR	N-CA-C	5.51	125.88	111.00
4	3-C	89	LEU	N-CA-C	-5.51	96.12	111.00
8	2-Z	16	ILE	N-CA-C	-5.51	96.13	111.00
7	2-K	831	ALA	C-N-CA	5.51	133.87	122.30
4	2-H	365	ARG	N-CA-C	5.51	125.88	111.00
4	3-C	472	ASP	N-CA-C	-5.51	96.12	111.00
7	3-G	132	THR	N-CA-C	5.51	125.87	111.00
8	1-Z	16	ILE	N-CA-C	-5.50	96.14	111.00
7	1-K	831	ALA	C-N-CA	5.50	133.86	122.30
7	2-G	132	THR	N-CA-C	5.50	125.86	111.00
4	1-C	89	LEU	N-CA-C	-5.50	96.15	111.00
4	2-H	89	LEU	N-CA-C	-5.50	96.14	111.00
3	3-B	828	ASP	N-CA-C	-5.50	96.15	111.00
4	2-C	365	ARG	N-CA-C	5.50	125.85	111.00
4	1-C	472	ASP	N-CA-C	-5.50	96.15	111.00
4	1-H	89	LEU	N-CA-C	-5.50	96.16	111.00
4	3-C	327	LEU	N-CA-C	-5.50	96.16	111.00
4	1-C	327	LEU	N-CA-C	-5.50	96.17	111.00
4	1-C	365	ARG	N-CA-C	5.50	125.84	111.00
4	2-H	202	LEU	O-C-N	5.50	131.49	122.70
4	3-H	472	ASP	N-CA-C	-5.50	96.16	111.00
4	1-H	472	ASP	N-CA-C	-5.49	96.17	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2-A	736	ALA	N-CA-C	5.49	125.83	111.00
4	2-C	327	LEU	N-CA-C	-5.49	96.17	111.00
7	3-K	673	THR	N-CA-C	-5.49	96.17	111.00
4	2-H	327	LEU	N-CA-C	-5.49	96.18	111.00
7	3-G	116	LYS	N-CA-C	5.49	125.83	111.00
7	3-G	673	THR	N-CA-C	-5.49	96.18	111.00
4	2-C	472	ASP	N-CA-C	-5.49	96.18	111.00
7	2-K	673	THR	N-CA-C	-5.49	96.18	111.00
4	3-C	365	ARG	N-CA-C	5.49	125.82	111.00
3	3-B	256	GLU	N-CA-C	5.49	125.82	111.00
7	3-K	831	ALA	C-N-CA	5.49	133.82	122.30
1	1-A	132	THR	N-CA-C	-5.49	96.19	111.00
3	1-N	256	GLU	N-CA-C	5.49	125.81	111.00
7	2-G	831	ALA	C-N-CA	5.49	133.82	122.30
1	3-A	736	ALA	N-CA-C	5.49	125.81	111.00
4	3-H	327	LEU	N-CA-C	-5.49	96.19	111.00
1	1-A	736	ALA	N-CA-C	5.48	125.80	111.00
7	1-K	673	THR	N-CA-C	-5.48	96.20	111.00
4	2-C	89	LEU	N-CA-C	-5.48	96.19	111.00
3	3-N	256	GLU	N-CA-C	5.48	125.81	111.00
7	1-G	831	ALA	C-N-CA	5.48	133.81	122.30
7	1-G	116	LYS	N-CA-C	5.48	125.79	111.00
4	1-H	327	LEU	N-CA-C	-5.48	96.21	111.00
4	2-H	472	ASP	N-CA-C	-5.48	96.21	111.00
3	1-B	256	GLU	N-CA-C	5.48	125.79	111.00
7	1-G	673	THR	N-CA-C	-5.48	96.21	111.00
1	2-A	132	THR	N-CA-C	-5.48	96.22	111.00
1	2-A	516	ARG	C-N-CA	5.48	135.39	121.70
3	2-B	256	GLU	N-CA-C	5.48	125.78	111.00
1	3-A	132	THR	N-CA-C	-5.47	96.22	111.00
3	2-N	256	GLU	N-CA-C	5.47	125.77	111.00
7	2-G	116	LYS	N-CA-C	5.47	125.77	111.00
7	2-G	673	THR	N-CA-C	-5.47	96.24	111.00
8	1-L	29	LYS	N-CA-C	-5.46	96.25	111.00
1	1-A	516	ARG	C-N-CA	5.46	135.35	121.70
8	3-L	29	LYS	N-CA-C	-5.46	96.25	111.00
7	3-G	831	ALA	C-N-CA	5.46	133.77	122.30
3	2-B	103	THR	C-N-CA	5.46	135.35	121.70
4	3-H	202	LEU	CA-C-N	-5.46	105.19	117.20
4	1-H	202	LEU	CA-C-N	-5.46	105.20	117.20
1	3-A	516	ARG	C-N-CA	5.45	135.32	121.70
4	3-C	202	LEU	CA-C-N	-5.45	105.21	117.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1-A	587	PRO	N-CA-C	5.45	126.26	112.10
3	2-B	758	VAL	N-CA-C	-5.45	96.30	111.00
8	2-L	29	LYS	N-CA-C	-5.45	96.30	111.00
4	1-C	202	LEU	CA-C-N	-5.44	105.22	117.20
3	1-B	103	THR	C-N-CA	5.44	135.31	121.70
3	3-B	103	THR	C-N-CA	5.44	135.31	121.70
4	2-H	202	LEU	CA-C-N	-5.44	105.23	117.20
4	2-C	202	LEU	CA-C-N	-5.44	105.24	117.20
3	3-N	103	THR	C-N-CA	5.44	135.29	121.70
1	2-A	587	PRO	N-CA-C	5.44	126.23	112.10
3	1-B	758	VAL	N-CA-C	-5.43	96.33	111.00
3	3-B	257	ARG	N-CA-C	5.43	125.67	111.00
3	2-N	482	SER	N-CA-C	5.43	125.67	111.00
1	3-A	587	PRO	N-CA-C	5.43	126.22	112.10
3	1-N	103	THR	C-N-CA	5.43	135.28	121.70
3	2-N	103	THR	C-N-CA	5.43	135.28	121.70
3	3-B	758	VAL	N-CA-C	-5.42	96.36	111.00
7	3-G	459	LEU	C-N-CA	5.42	133.69	122.30
3	1-B	939	THR	N-CA-C	-5.42	96.36	111.00
3	2-B	939	THR	N-CA-C	-5.42	96.37	111.00
3	2-N	257	ARG	N-CA-C	5.42	125.63	111.00
3	1-N	257	ARG	N-CA-C	5.42	125.63	111.00
3	3-B	939	THR	N-CA-C	-5.42	96.37	111.00
3	1-B	257	ARG	N-CA-C	5.42	125.62	111.00
3	1-N	482	SER	N-CA-C	5.42	125.62	111.00
7	1-G	459	LEU	C-N-CA	5.42	133.67	122.30
3	3-N	482	SER	N-CA-C	5.42	125.62	111.00
1	1-A	533	GLY	N-CA-C	-5.41	99.57	113.10
3	3-B	482	SER	N-CA-C	5.41	125.62	111.00
3	3-N	257	ARG	N-CA-C	5.41	125.61	111.00
3	1-B	482	SER	N-CA-C	5.41	125.61	111.00
7	2-G	274	ILE	N-CA-C	5.41	125.61	111.00
7	3-G	844	SER	N-CA-C	-5.41	96.39	111.00
1	3-A	533	GLY	N-CA-C	-5.41	99.58	113.10
3	2-B	482	SER	N-CA-C	5.41	125.60	111.00
3	2-B	257	ARG	N-CA-C	5.41	125.60	111.00
1	2-A	533	GLY	N-CA-C	-5.40	99.59	113.10
7	1-G	844	SER	N-CA-C	-5.39	96.44	111.00
8	1-L	60	ALA	C-N-CA	5.39	135.19	121.70
7	2-G	459	LEU	C-N-CA	5.39	133.63	122.30
7	2-G	844	SER	N-CA-C	-5.39	96.43	111.00
7	1-G	274	ILE	N-CA-C	5.39	125.56	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	3-K	814	GLU	N-CA-C	-5.39	96.44	111.00
8	3-L	60	ALA	C-N-CA	5.39	135.17	121.70
1	3-A	656	GLY	N-CA-C	-5.38	99.64	113.10
7	1-K	814	GLU	N-CA-C	-5.38	96.47	111.00
1	1-A	444	ILE	N-CA-C	-5.38	96.47	111.00
8	2-L	60	ALA	C-N-CA	5.38	135.15	121.70
1	2-A	444	ILE	N-CA-C	-5.38	96.48	111.00
1	2-A	656	GLY	N-CA-C	-5.38	99.65	113.10
7	2-K	814	GLU	N-CA-C	-5.38	96.48	111.00
7	3-G	274	ILE	N-CA-C	5.38	125.52	111.00
1	1-A	656	GLY	N-CA-C	-5.38	99.66	113.10
3	2-B	744	GLU	N-CA-C	-5.37	96.50	111.00
1	3-A	444	ILE	N-CA-C	-5.37	96.50	111.00
7	2-K	844	SER	N-CA-C	-5.37	96.51	111.00
6	3-M	91	VAL	C-N-CA	5.37	135.12	121.70
7	1-K	844	SER	N-CA-C	-5.36	96.52	111.00
6	2-M	91	VAL	C-N-CA	5.36	135.11	121.70
7	3-K	844	SER	N-CA-C	-5.36	96.52	111.00
3	1-B	744	GLU	N-CA-C	-5.36	96.52	111.00
6	1-M	91	VAL	C-N-CA	5.36	135.10	121.70
4	2-C	262	ARG	N-CA-C	-5.36	96.53	111.00
3	3-B	744	GLU	N-CA-C	-5.36	96.53	111.00
4	2-H	262	ARG	N-CA-C	-5.36	96.54	111.00
4	1-H	262	ARG	N-CA-C	-5.35	96.55	111.00
4	3-H	262	ARG	N-CA-C	-5.35	96.56	111.00
4	1-C	262	ARG	N-CA-C	-5.34	96.58	111.00
4	3-C	262	ARG	N-CA-C	-5.33	96.60	111.00
4	2-C	378	TYR	O-C-N	5.33	131.23	122.70
1	1-A	272	SER	N-CA-C	5.32	125.37	111.00
1	2-A	272	SER	N-CA-C	5.32	125.36	111.00
4	3-C	378	TYR	O-C-N	5.32	131.21	122.70
4	2-H	509	GLY	N-CA-C	-5.31	99.82	113.10
3	3-B	763	GLN	C-N-CA	5.31	134.98	121.70
1	2-A	329	HIS	N-CA-C	-5.31	96.66	111.00
4	2-H	106	ALA	N-CA-C	-5.31	96.66	111.00
4	3-C	378	TYR	CA-C-N	-5.31	105.52	117.20
4	3-H	106	ALA	N-CA-C	-5.31	96.66	111.00
4	1-H	106	ALA	N-CA-C	-5.31	96.67	111.00
4	3-H	509	GLY	N-CA-C	-5.31	99.83	113.10
1	1-A	329	HIS	N-CA-C	-5.31	96.67	111.00
8	3-L	13	VAL	N-CA-C	-5.31	96.67	111.00
3	1-B	763	GLN	C-N-CA	5.30	134.96	121.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	1-C	378	TYR	O-C-N	5.30	131.19	122.70
4	1-C	509	GLY	N-CA-C	-5.30	99.84	113.10
8	2-L	13	VAL	N-CA-C	-5.30	96.68	111.00
1	3-A	272	SER	N-CA-C	5.30	125.32	111.00
4	1-C	378	TYR	CA-C-N	-5.30	105.54	117.20
8	1-L	13	VAL	N-CA-C	-5.30	96.69	111.00
4	2-C	378	TYR	CA-C-N	-5.30	105.54	117.20
1	1-A	630	GLN	N-CA-C	-5.30	96.69	111.00
4	1-H	509	GLY	N-CA-C	-5.30	99.85	113.10
1	2-A	630	GLN	N-CA-C	-5.30	96.69	111.00
1	3-A	630	GLN	N-CA-C	-5.30	96.69	111.00
4	3-C	106	ALA	N-CA-C	-5.30	96.69	111.00
4	3-C	509	GLY	N-CA-C	-5.30	99.86	113.10
4	3-H	378	TYR	O-C-N	5.30	131.18	122.70
3	2-B	763	GLN	C-N-CA	5.29	134.94	121.70
7	1-G	686	ALA	N-CA-C	5.29	125.28	111.00
4	2-C	509	GLY	N-CA-C	-5.29	99.87	113.10
4	1-C	106	ALA	N-CA-C	-5.29	96.72	111.00
1	3-A	329	HIS	N-CA-C	-5.29	96.72	111.00
7	3-G	686	ALA	N-CA-C	5.29	125.28	111.00
4	1-H	378	TYR	CA-C-N	-5.29	105.56	117.20
4	2-H	378	TYR	O-C-N	5.29	131.16	122.70
4	1-H	378	TYR	O-C-N	5.29	131.16	122.70
4	2-H	378	TYR	CA-C-N	-5.29	105.57	117.20
4	2-C	106	ALA	N-CA-C	-5.28	96.73	111.00
6	3-F	166	LEU	C-N-CA	5.28	134.91	121.70
4	3-H	378	TYR	CA-C-N	-5.28	105.57	117.20
1	2-A	340	PHE	C-N-CA	5.28	134.91	121.70
7	1-K	686	ALA	N-CA-C	5.28	125.25	111.00
7	2-G	686	ALA	N-CA-C	5.28	125.25	111.00
1	1-A	340	PHE	C-N-CA	5.28	134.89	121.70
6	3-J	166	LEU	C-N-CA	5.28	134.89	121.70
6	2-F	166	LEU	C-N-CA	5.27	134.88	121.70
6	1-F	166	LEU	C-N-CA	5.27	134.88	121.70
1	3-A	340	PHE	C-N-CA	5.27	134.88	121.70
6	1-J	166	LEU	C-N-CA	5.27	134.87	121.70
1	3-A	383	ALA	C-N-CA	5.27	134.87	121.70
7	3-K	686	ALA	N-CA-C	5.27	125.22	111.00
7	2-K	120	TYR	CA-C-N	-5.27	105.62	117.20
1	1-A	383	ALA	C-N-CA	5.26	134.85	121.70
7	2-K	686	ALA	N-CA-C	5.26	125.20	111.00
7	3-K	131	ILE	N-CA-C	5.26	125.20	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2-A	402	SER	N-CA-C	-5.25	96.82	111.00
7	1-K	120	TYR	CA-C-N	-5.25	105.64	117.20
6	2-J	166	LEU	C-N-CA	5.25	134.83	121.70
7	2-G	838	HIS	CA-C-N	-5.25	105.65	117.20
7	1-K	131	ILE	N-CA-C	5.25	125.17	111.00
1	2-A	383	ALA	C-N-CA	5.25	134.81	121.70
6	3-F	60	ASN	CA-C-N	-5.25	105.66	117.20
1	1-A	402	SER	N-CA-C	-5.25	96.84	111.00
7	2-K	131	ILE	N-CA-C	5.24	125.16	111.00
6	1-F	60	ASN	CA-C-N	-5.24	105.68	117.20
6	1-J	60	ASN	CA-C-N	-5.24	105.68	117.20
6	2-F	60	ASN	CA-C-N	-5.24	105.68	117.20
7	1-G	838	HIS	CA-C-N	-5.24	105.68	117.20
4	2-H	237	PHE	N-CA-C	-5.24	96.86	111.00
6	2-J	60	ASN	CA-C-N	-5.24	105.68	117.20
1	3-A	402	SER	N-CA-C	-5.23	96.87	111.00
6	3-J	60	ASN	CA-C-N	-5.23	105.69	117.20
4	3-C	574	TYR	N-CA-C	-5.23	96.88	111.00
4	1-H	237	PHE	N-CA-C	-5.23	96.89	111.00
7	3-K	120	TYR	CA-C-N	-5.23	105.70	117.20
4	3-C	237	PHE	N-CA-C	-5.23	96.89	111.00
4	1-C	237	PHE	N-CA-C	-5.22	96.90	111.00
4	2-C	574	TYR	N-CA-C	-5.22	96.89	111.00
4	3-H	237	PHE	N-CA-C	-5.22	96.90	111.00
7	1-K	838	HIS	CA-C-N	-5.22	105.72	117.20
4	3-H	574	TYR	N-CA-C	-5.22	96.91	111.00
4	1-C	574	TYR	N-CA-C	-5.22	96.91	111.00
7	3-G	838	HIS	CA-C-N	-5.22	105.72	117.20
7	1-K	297	SER	N-CA-C	5.22	125.08	111.00
4	2-H	574	TYR	N-CA-C	-5.22	96.92	111.00
4	2-C	237	PHE	N-CA-C	-5.21	96.92	111.00
7	3-K	247	ARG	N-CA-C	-5.21	96.92	111.00
7	2-K	297	SER	N-CA-C	5.21	125.08	111.00
7	3-K	297	SER	N-CA-C	5.21	125.07	111.00
4	1-H	574	TYR	N-CA-C	-5.21	96.94	111.00
3	2-B	822	VAL	N-CA-C	-5.21	96.94	111.00
4	2-C	254	ARG	N-CA-C	-5.21	96.94	111.00
7	2-G	683	PRO	N-CA-C	5.21	125.64	112.10
7	1-G	683	PRO	N-CA-C	5.21	125.63	112.10
7	1-K	247	ARG	N-CA-C	-5.21	96.95	111.00
7	3-K	838	HIS	CA-C-N	-5.21	105.75	117.20
6	2-R	25	LEU	CA-C-N	-5.20	105.75	117.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	2-K	247	ARG	N-CA-C	-5.20	96.95	111.00
3	1-B	822	VAL	N-CA-C	-5.20	96.96	111.00
4	1-C	254	ARG	N-CA-C	-5.20	96.96	111.00
6	1-R	25	LEU	CA-C-N	-5.20	105.76	117.20
7	2-K	838	HIS	CA-C-N	-5.20	105.76	117.20
7	3-G	683	PRO	N-CA-C	5.20	125.61	112.10
1	3-A	436	LEU	N-CA-C	-5.20	96.97	111.00
6	3-R	25	LEU	CA-C-N	-5.20	105.77	117.20
1	1-A	570	VAL	CA-C-N	5.19	128.62	117.20
4	3-C	254	ARG	N-CA-C	-5.19	96.98	111.00
3	3-B	822	VAL	N-CA-C	-5.19	96.99	111.00
1	2-A	245	CYS	N-CA-C	-5.18	97.00	111.00
7	1-K	683	PRO	N-CA-C	5.18	125.58	112.10
1	1-A	436	LEU	N-CA-C	-5.18	97.01	111.00
1	2-A	570	VAL	CA-C-N	5.18	128.59	117.20
7	2-K	683	PRO	N-CA-C	5.18	125.56	112.10
1	2-A	436	LEU	N-CA-C	-5.18	97.02	111.00
4	2-H	474	GLY	C-N-CA	5.17	134.64	121.70
4	2-H	588	LEU	N-CA-C	-5.17	97.03	111.00
6	3-R	146	HIS	C-N-CA	5.17	134.64	121.70
7	3-K	683	PRO	N-CA-C	5.17	125.55	112.10
4	3-H	588	LEU	N-CA-C	-5.17	97.03	111.00
1	1-A	245	CYS	N-CA-C	-5.17	97.04	111.00
6	2-R	146	HIS	C-N-CA	5.17	134.63	121.70
1	3-A	570	VAL	CA-C-N	5.17	128.57	117.20
4	3-C	474	GLY	C-N-CA	5.17	134.62	121.70
4	2-C	474	GLY	C-N-CA	5.17	134.61	121.70
4	1-H	254	ARG	N-CA-C	-5.16	97.06	111.00
4	1-H	588	LEU	N-CA-C	-5.16	97.06	111.00
4	1-C	474	GLY	C-N-CA	5.16	134.60	121.70
7	2-K	176	ARG	C-N-CA	5.16	134.60	121.70
6	1-R	146	HIS	C-N-CA	5.16	134.60	121.70
4	1-H	474	GLY	C-N-CA	5.16	134.60	121.70
4	3-H	254	ARG	N-CA-C	-5.16	97.06	111.00
6	2-F	96	ASP	N-CA-C	-5.16	97.07	111.00
4	3-H	469	PHE	N-CA-C	-5.16	97.07	111.00
7	1-K	176	ARG	C-N-CA	5.16	134.59	121.70
1	3-A	245	CYS	N-CA-C	-5.16	97.08	111.00
4	3-H	474	GLY	C-N-CA	5.16	134.59	121.70
4	2-H	254	ARG	N-CA-C	-5.15	97.08	111.00
4	1-C	588	LEU	N-CA-C	-5.15	97.09	111.00
7	1-G	39	ILE	N-CA-C	-5.15	97.09	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	1-H	469	PHE	N-CA-C	-5.15	97.09	111.00
6	3-F	96	ASP	N-CA-C	-5.15	97.09	111.00
6	1-F	96	ASP	N-CA-C	-5.15	97.10	111.00
4	2-H	469	PHE	N-CA-C	-5.15	97.11	111.00
3	1-B	504	VAL	N-CA-C	5.14	124.89	111.00
3	2-B	504	VAL	N-CA-C	5.14	124.89	111.00
6	2-J	96	ASP	N-CA-C	-5.14	97.11	111.00
7	3-G	39	ILE	N-CA-C	-5.14	97.11	111.00
4	2-C	155	ASN	CA-C-N	-5.14	105.89	117.20
4	2-C	588	LEU	N-CA-C	-5.14	97.11	111.00
7	3-K	176	ARG	C-N-CA	5.14	134.56	121.70
6	1-J	96	ASP	N-CA-C	-5.14	97.13	111.00
4	3-C	588	LEU	N-CA-C	-5.14	97.12	111.00
4	1-C	469	PHE	N-CA-C	-5.14	97.13	111.00
1	2-A	221	VAL	N-CA-C	-5.14	97.13	111.00
7	2-G	39	ILE	N-CA-C	-5.14	97.13	111.00
3	3-B	504	VAL	N-CA-C	5.14	124.87	111.00
6	3-J	96	ASP	N-CA-C	-5.14	97.13	111.00
3	1-N	504	VAL	N-CA-C	5.14	124.87	111.00
4	2-H	155	ASN	CA-C-N	-5.14	105.90	117.20
4	1-H	155	ASN	CA-C-N	-5.13	105.91	117.20
7	2-G	703	PRO	C-N-CA	5.13	133.08	122.30
4	3-C	469	PHE	N-CA-C	-5.13	97.14	111.00
1	1-A	221	VAL	N-CA-C	-5.13	97.14	111.00
1	3-A	221	VAL	N-CA-C	-5.13	97.14	111.00
4	3-C	155	ASN	CA-C-N	-5.13	105.92	117.20
4	1-C	155	ASN	CA-C-N	-5.13	105.92	117.20
3	2-B	782	LYS	N-CA-C	-5.13	97.16	111.00
3	2-N	504	VAL	N-CA-C	5.12	124.84	111.00
7	1-G	703	PRO	C-N-CA	5.12	133.06	122.30
4	2-C	469	PHE	N-CA-C	-5.12	97.17	111.00
7	3-G	703	PRO	C-N-CA	5.12	133.06	122.30
4	3-H	155	ASN	CA-C-N	-5.12	105.94	117.20
3	1-B	782	LYS	N-CA-C	-5.12	97.18	111.00
4	2-C	827	VAL	C-N-CA	5.12	134.49	121.70
3	3-B	782	LYS	N-CA-C	-5.11	97.19	111.00
1	3-A	515	ASN	N-CA-C	-5.11	97.20	111.00
4	3-C	802	LYS	N-CA-C	5.11	124.80	111.00
3	3-N	504	VAL	N-CA-C	5.11	124.80	111.00
7	1-G	296	CYS	C-N-CA	5.11	134.47	121.70
4	2-C	802	LYS	CA-C-N	5.11	128.44	117.20
7	3-G	296	CYS	C-N-CA	5.11	134.46	121.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	2-L	18	ILE	O-C-N	5.10	130.87	122.70
4	3-C	802	LYS	CA-C-N	5.10	128.42	117.20
4	1-C	802	LYS	CA-C-N	5.10	128.42	117.20
4	1-C	802	LYS	N-CA-C	5.10	124.77	111.00
7	1-G	804	ILE	N-CA-C	5.10	124.77	111.00
7	2-G	296	CYS	C-N-CA	5.10	134.45	121.70
7	2-K	703	PRO	C-N-CA	5.10	133.01	122.30
4	3-C	314	ILE	N-CA-C	-5.10	97.24	111.00
1	1-A	515	ASN	N-CA-C	-5.10	97.24	111.00
7	3-G	804	ILE	N-CA-C	5.10	124.76	111.00
4	1-C	803	GLU	N-CA-C	5.09	124.75	111.00
7	2-G	804	ILE	N-CA-C	5.09	124.76	111.00
4	2-C	802	LYS	N-CA-C	5.09	124.75	111.00
4	1-C	827	VAL	C-N-CA	5.09	134.42	121.70
4	3-H	314	ILE	N-CA-C	-5.09	97.26	111.00
7	3-G	118	ASP	CA-C-N	-5.09	106.01	117.20
7	3-K	703	PRO	C-N-CA	5.09	132.99	122.30
1	2-A	515	ASN	N-CA-C	-5.09	97.26	111.00
4	2-C	567	ILE	N-CA-C	-5.09	97.27	111.00
7	1-K	703	PRO	C-N-CA	5.08	132.98	122.30
4	3-H	7	ILE	N-CA-C	-5.08	97.27	111.00
8	1-L	18	ILE	O-C-N	5.08	130.83	122.70
8	2-Z	18	ILE	CA-C-N	-5.08	106.02	117.20
4	3-C	567	ILE	N-CA-C	-5.08	97.27	111.00
1	1-A	37	ASP	N-CA-C	-5.08	97.28	111.00
1	2-A	37	ASP	N-CA-C	-5.08	97.28	111.00
6	2-R	29	GLY	N-CA-C	-5.08	100.39	113.10
4	1-C	314	ILE	N-CA-C	-5.08	97.29	111.00
4	1-C	567	ILE	N-CA-C	-5.08	97.29	111.00
6	1-R	29	GLY	N-CA-C	-5.08	100.40	113.10
4	1-H	7	ILE	N-CA-C	-5.08	97.29	111.00
4	1-H	314	ILE	N-CA-C	-5.08	97.29	111.00
4	2-C	314	ILE	N-CA-C	-5.08	97.29	111.00
4	2-C	803	GLU	N-CA-C	5.08	124.71	111.00
7	2-G	435	GLY	C-N-CA	5.08	134.39	121.70
4	3-C	803	GLU	N-CA-C	5.08	124.71	111.00
4	2-H	567	ILE	N-CA-C	-5.07	97.30	111.00
4	3-C	827	VAL	C-N-CA	5.07	134.38	121.70
8	3-L	18	ILE	O-C-N	5.07	130.82	122.70
7	1-G	118	ASP	CA-C-N	-5.07	106.04	117.20
4	2-H	314	ILE	N-CA-C	-5.07	97.31	111.00
1	3-A	37	ASP	N-CA-C	-5.07	97.31	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	3-Z	18	ILE	CA-C-N	-5.07	106.05	117.20
7	3-K	120	TYR	C-N-CA	5.07	134.37	121.70
8	1-Z	18	ILE	CA-C-N	-5.07	106.05	117.20
4	2-H	7	ILE	N-CA-C	-5.07	97.32	111.00
6	3-R	29	GLY	N-CA-C	-5.07	100.43	113.10
4	2-C	7	ILE	N-CA-C	-5.07	97.33	111.00
4	1-C	7	ILE	N-CA-C	-5.06	97.33	111.00
7	1-G	435	GLY	C-N-CA	5.06	134.36	121.70
4	1-H	567	ILE	N-CA-C	-5.06	97.33	111.00
4	3-H	567	ILE	N-CA-C	-5.06	97.33	111.00
7	2-G	118	ASP	CA-C-N	-5.06	106.06	117.20
1	2-A	543	TYR	N-CA-C	-5.06	97.35	111.00
4	3-C	790	ASP	CA-C-N	5.06	131.26	117.10
7	1-K	804	ILE	N-CA-C	5.05	124.65	111.00
1	3-A	543	TYR	N-CA-C	-5.05	97.35	111.00
7	3-G	435	GLY	C-N-CA	5.05	134.34	121.70
4	1-C	790	ASP	CA-C-N	5.05	131.25	117.10
7	1-G	141	GLU	N-CA-C	5.05	124.64	111.00
8	2-Z	56	ASP	N-CA-C	-5.05	97.36	111.00
4	2-C	790	ASP	CA-C-N	5.05	131.24	117.10
7	2-K	804	ILE	N-CA-C	5.05	124.63	111.00
4	3-C	7	ILE	N-CA-C	-5.05	97.36	111.00
8	1-Z	56	ASP	N-CA-C	-5.05	97.38	111.00
7	2-G	141	GLU	N-CA-C	5.05	124.63	111.00
8	3-Z	56	ASP	N-CA-C	-5.05	97.38	111.00
1	1-A	543	TYR	N-CA-C	-5.04	97.39	111.00
7	1-K	813	CYS	N-CA-C	5.04	124.61	111.00
7	3-G	141	GLU	N-CA-C	5.04	124.61	111.00
7	3-K	804	ILE	N-CA-C	5.04	124.61	111.00
7	1-K	120	TYR	C-N-CA	5.04	134.30	121.70
1	2-A	562	ARG	N-CA-C	-5.04	97.39	111.00
7	2-K	120	TYR	C-N-CA	5.04	134.29	121.70
7	2-K	813	CYS	N-CA-C	5.04	124.60	111.00
1	1-A	562	ARG	N-CA-C	-5.03	97.41	111.00
7	1-G	815	ARG	N-CA-C	-5.03	97.41	111.00
7	3-K	221	HIS	C-N-CA	5.03	132.87	122.30
7	3-K	813	CYS	N-CA-C	5.03	124.59	111.00
7	2-G	815	ARG	N-CA-C	-5.03	97.42	111.00
7	3-G	815	ARG	N-CA-C	-5.03	97.42	111.00
1	3-A	562	ARG	N-CA-C	-5.03	97.43	111.00
1	2-A	249	TYR	N-CA-C	-5.02	97.44	111.00
7	2-K	221	HIS	C-N-CA	5.02	132.85	122.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	3-A	249	TYR	N-CA-C	-5.02	97.44	111.00
1	1-A	249	TYR	N-CA-C	-5.02	97.45	111.00
1	3-A	428	VAL	N-CA-C	-5.02	97.45	111.00
7	1-K	221	HIS	C-N-CA	5.02	132.83	122.30
1	1-A	428	VAL	N-CA-C	-5.01	97.47	111.00
7	3-K	150	ASP	C-N-CA	5.01	134.23	121.70
1	2-A	428	VAL	N-CA-C	-5.01	97.47	111.00
1	3-A	391	TYR	N-CA-C	-5.01	97.48	111.00
4	1-H	397	ALA	N-CA-C	-5.01	97.48	111.00
4	3-C	397	ALA	N-CA-C	-5.01	97.48	111.00
4	1-C	397	ALA	N-CA-C	-5.00	97.49	111.00
7	2-K	150	ASP	C-N-CA	5.00	134.21	121.70
1	3-A	200	VAL	N-CA-C	-5.00	97.49	111.00
1	1-A	568	ILE	N-CA-C	-5.00	97.50	111.00
3	3-B	935	ASP	N-CA-C	5.00	124.50	111.00
8	3-L	58	GLU	N-CA-C	-5.00	97.50	111.00

There are no chirality outliers.

All (11) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
3	1-B	898	ALA	Peptide
3	1-B	903	CYS	Peptide
3	1-B	938	VAL	Mainchain
3	2-B	898	ALA	Peptide
3	2-B	903	CYS	Peptide
3	2-B	938	VAL	Mainchain
7	2-G	849	LEU	Mainchain
7	2-K	849	LEU	Mainchain
3	3-B	898	ALA	Peptide
3	3-B	903	CYS	Peptide
3	3-B	938	VAL	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	1-A	4503	0	1194	38	0
1	2-A	4503	0	1194	36	0
1	3-A	4503	0	1194	39	0
2	1-E	1169	0	303	0	0
2	2-E	1169	0	303	0	0
2	3-E	1169	0	303	0	0
3	1-B	3198	0	810	56	0
3	1-N	2279	0	568	20	0
3	2-B	3198	0	810	58	0
3	2-N	2279	0	568	20	0
3	3-B	3198	0	810	56	0
3	3-N	2279	0	568	21	0
4	1-C	3371	0	919	22	0
4	1-H	2884	0	794	26	0
4	2-C	3371	0	919	22	0
4	2-H	2884	0	794	26	0
4	3-C	3371	0	919	23	0
4	3-H	2884	0	794	25	0
5	1-D	706	0	182	9	0
5	1-I	706	0	182	9	0
5	2-D	706	0	182	9	0
5	2-I	706	0	182	9	0
5	3-D	706	0	182	9	0
5	3-I	706	0	182	9	0
6	1-F	635	0	181	3	0
6	1-J	635	0	181	3	0
6	1-M	635	0	181	19	0
6	1-R	635	0	181	40	0
6	2-F	635	0	181	3	0
6	2-J	635	0	181	3	0
6	2-M	635	0	181	19	0
6	2-R	635	0	181	37	0
6	3-F	635	0	181	3	0
6	3-J	635	0	181	3	0
6	3-M	635	0	181	18	0
6	3-R	635	0	181	38	0
7	1-G	3190	0	822	69	0
7	1-K	2239	0	572	39	0
7	2-G	3190	0	822	66	0
7	2-K	2239	0	572	38	0
7	3-G	3190	0	822	68	0
7	3-K	2239	0	572	38	0
8	1-L	555	0	148	2	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
8	1-Z	555	0	147	14	0
8	2-L	555	0	148	2	0
8	2-Z	555	0	147	15	0
8	3-L	555	0	148	2	0
8	3-Z	555	0	147	14	0
All	All	83685	0	22095	1015	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 10.

All (1015) 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)
7:G:107:SER:H	6:R:50:GLY:CA	1.31	1.43
7:K:107:SER:N	6:M:50:GLY:HA3	1.28	1.42
7:G:107:SER:N	6:R:50:GLY:HA3	1.16	1.42
7:G:107:SER:H	6:R:50:GLY:CA	1.31	1.42
7:G:107:SER:N	6:R:50:GLY:HA3	1.16	1.42
7:G:107:SER:H	6:R:50:GLY:CA	1.31	1.41
7:K:107:SER:N	6:M:50:GLY:HA3	1.28	1.39
7:G:107:SER:N	6:R:50:GLY:HA3	1.16	1.39
7:K:107:SER:N	6:M:50:GLY:HA3	1.28	1.37
7:K:167:LEU:CA	7:K:170:SER:O	1.73	1.36
7:K:167:LEU:CA	7:K:170:SER:O	1.73	1.35
7:K:167:LEU:CA	7:K:170:SER:O	1.73	1.34
1:A:145:PRO:CA	1:A:215:PRO:O	1.80	1.28
1:A:145:PRO:CA	1:A:215:PRO:O	1.80	1.27
1:A:145:PRO:CA	1:A:215:PRO:O	1.80	1.27
1:A:503:VAL:O	1:A:514:CYS:O	1.53	1.26
4:H:269:TYR:O	4:H:271:MET:N	1.69	1.25
4:C:269:TYR:O	4:C:271:MET:N	1.69	1.25
4:C:269:TYR:O	4:C:271:MET:N	1.69	1.24
4:H:269:TYR:O	4:H:271:MET:N	1.69	1.24
1:A:503:VAL:O	1:A:514:CYS:O	1.53	1.24
4:C:269:TYR:O	4:C:271:MET:N	1.68	1.24
6:R:143:LEU:C	6:R:145:LEU:H	1.23	1.24
4:H:269:TYR:O	4:H:271:MET:N	1.68	1.23
1:A:503:VAL:O	1:A:514:CYS:O	1.53	1.23
7:K:107:SER:H	6:M:50:GLY:CA	1.53	1.21
7:K:107:SER:H	6:M:50:GLY:CA	1.53	1.21
6:R:143:LEU:C	6:R:145:LEU:H	1.23	1.21

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:K:107:SER:H	6:M:50:GLY:CA	1.53	1.21
3:B:778:LEU:O	3:B:809:THR:O	1.58	1.21
3:B:778:LEU:O	3:B:809:THR:O	1.58	1.20
6:R:71:GLN:O	6:R:74:ILE:N	1.73	1.19
6:R:71:GLN:O	6:R:74:ILE:N	1.74	1.19
6:R:71:GLN:O	6:R:74:ILE:N	1.74	1.19
3:B:778:LEU:O	3:B:809:THR:O	1.58	1.19
5:D:13:GLY:HA2	5:D:38:LYS:CA	1.74	1.17
5:D:13:GLY:HA2	5:D:38:LYS:CA	1.74	1.17
5:D:13:GLY:HA2	5:D:38:LYS:CA	1.75	1.15
5:I:13:GLY:HA2	5:I:38:LYS:CA	1.74	1.15
5:I:13:GLY:HA2	5:I:38:LYS:CA	1.74	1.15
5:I:13:GLY:HA2	5:I:38:LYS:CA	1.74	1.15
6:R:143:LEU:C	6:R:145:LEU:H	1.23	1.15
7:K:190:ILE:CA	7:K:225:SER:CA	2.26	1.14
7:K:190:ILE:CA	7:K:225:SER:CA	2.26	1.14
7:G:167:LEU:CA	7:G:170:SER:O	1.95	1.13
7:G:167:LEU:CA	7:G:170:SER:O	1.95	1.13
7:K:190:ILE:CA	7:K:225:SER:CA	2.26	1.13
7:G:167:LEU:CA	7:G:170:SER:O	1.95	1.12
3:B:781:LEU:O	3:B:808:SER:O	1.63	1.11
6:R:143:LEU:C	6:R:145:LEU:N	1.99	1.11
3:B:778:LEU:O	3:B:809:THR:C	1.91	1.08
7:G:179:ASN:N	4:H:350:SER:O	1.86	1.08
7:G:179:ASN:N	4:H:350:SER:O	1.86	1.08
3:B:778:LEU:O	3:B:809:THR:C	1.91	1.07
8:Z:11:TYR:CA	8:Z:132:GLY:HA3	1.84	1.07
3:B:778:LEU:O	3:B:809:THR:C	1.91	1.07
3:B:781:LEU:O	3:B:808:SER:O	1.63	1.07
7:G:179:ASN:N	4:H:350:SER:O	1.86	1.07
8:L:31:TYR:CA	8:L:131:GLY:O	2.03	1.07
8:L:31:TYR:CA	8:L:131:GLY:O	2.03	1.07
8:L:31:TYR:CA	8:L:131:GLY:O	2.03	1.07
6:R:159:CYS:O	6:R:162:SER:N	1.88	1.07
6:R:143:LEU:C	6:R:145:LEU:N	1.99	1.07
8:Z:11:TYR:CA	8:Z:132:GLY:HA3	1.84	1.07
8:Z:11:TYR:CA	8:Z:132:GLY:HA3	1.84	1.06
6:R:159:CYS:O	6:R:162:SER:N	1.88	1.06
3:N:526:VAL:CA	3:N:597:VAL:CA	2.35	1.05
6:R:143:LEU:C	6:R:145:LEU:N	1.99	1.04
6:R:159:CYS:O	6:R:162:SER:N	1.88	1.04

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:276:ASN:O	7:G:281:SER:O	1.75	1.04
3:B:526:VAL:CA	3:B:597:VAL:CA	2.35	1.04
3:B:781:LEU:O	3:B:808:SER:O	1.63	1.04
3:B:526:VAL:CA	3:B:597:VAL:CA	2.35	1.04
3:N:526:VAL:CA	3:N:597:VAL:CA	2.35	1.04
3:B:526:VAL:CA	3:B:597:VAL:CA	2.35	1.04
7:G:276:ASN:O	7:G:281:SER:O	1.75	1.03
3:N:526:VAL:CA	3:N:597:VAL:CA	2.35	1.03
7:G:276:ASN:O	7:G:281:SER:O	1.75	1.02
8:Z:12:THR:H	8:Z:132:GLY:CA	1.72	1.02
8:Z:12:THR:H	8:Z:132:GLY:CA	1.72	1.01
8:Z:12:THR:H	8:Z:132:GLY:CA	1.72	1.01
6:R:130:LEU:O	6:R:132:GLU:N	1.92	1.01
6:R:130:LEU:O	6:R:132:GLU:N	1.92	1.00
6:R:130:LEU:O	6:R:132:GLU:N	1.92	1.00
7:K:677:VAL:O	7:K:694:PRO:CA	2.11	0.99
6:R:126:ASN:CA	6:R:158:THR:O	2.10	0.99
6:R:126:ASN:CA	6:R:158:THR:O	2.10	0.99
8:Z:11:TYR:CA	8:Z:132:GLY:CA	2.41	0.99
7:K:677:VAL:O	7:K:694:PRO:CA	2.11	0.99
8:Z:11:TYR:CA	8:Z:132:GLY:CA	2.41	0.99
7:K:677:VAL:O	7:K:694:PRO:CA	2.11	0.98
6:R:126:ASN:CA	6:R:158:THR:O	2.10	0.98
8:Z:11:TYR:CA	8:Z:132:GLY:CA	2.41	0.97
7:K:167:LEU:C	7:K:170:SER:O	2.03	0.97
7:K:167:LEU:C	7:K:170:SER:O	2.03	0.97
7:G:107:SER:N	6:R:50:GLY:CA	2.05	0.96
7:G:107:SER:N	6:R:50:GLY:CA	2.05	0.96
3:B:541:ALA:CA	3:B:624:ASP:N	2.29	0.96
3:B:778:LEU:C	3:B:809:THR:O	2.04	0.96
3:B:541:ALA:CA	3:B:624:ASP:N	2.29	0.96
3:N:541:ALA:CA	3:N:624:ASP:N	2.29	0.96
7:K:167:LEU:C	7:K:170:SER:O	2.03	0.96
3:B:541:ALA:CA	3:B:624:ASP:N	2.29	0.95
7:K:190:ILE:C	7:K:225:SER:CA	2.34	0.95
7:K:190:ILE:C	7:K:225:SER:CA	2.34	0.95
3:B:778:LEU:C	3:B:809:THR:O	2.04	0.95
3:N:541:ALA:CA	3:N:624:ASP:N	2.29	0.95
7:K:190:ILE:C	7:K:225:SER:CA	2.34	0.95
3:B:778:LEU:C	3:B:809:THR:O	2.04	0.95
8:Z:12:THR:N	8:Z:132:GLY:CA	2.30	0.95

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:N:541:ALA:CA	3:N:624:ASP:N	2.29	0.95
3:B:766:ASP:O	3:B:768:LEU:N	1.99	0.94
8:Z:12:THR:N	8:Z:132:GLY:CA	2.30	0.94
8:Z:12:THR:N	8:Z:132:GLY:O	2.02	0.93
8:Z:12:THR:N	8:Z:132:GLY:O	2.02	0.93
3:B:766:ASP:O	3:B:768:LEU:N	1.99	0.93
3:B:766:ASP:O	3:B:768:LEU:N	1.99	0.93
3:B:824:GLY:CA	3:B:830:ASN:O	2.16	0.93
3:B:824:GLY:CA	3:B:830:ASN:O	2.16	0.93
8:Z:12:THR:N	8:Z:132:GLY:CA	2.30	0.93
3:B:824:GLY:CA	3:B:830:ASN:O	2.16	0.93
8:Z:12:THR:N	8:Z:132:GLY:O	2.02	0.92
1:A:495:ILE:O	1:A:502:HIS:O	1.87	0.91
7:K:107:SER:CA	6:M:50:GLY:HA3	2.00	0.91
1:A:495:ILE:O	1:A:502:HIS:O	1.87	0.91
1:A:105:TYR:O	1:A:106:PRO:C	2.08	0.90
6:R:125:ALA:O	6:R:158:THR:O	1.89	0.90
1:A:495:ILE:O	1:A:502:HIS:O	1.87	0.90
7:K:107:SER:CA	6:M:50:GLY:HA3	2.00	0.90
7:K:107:SER:CA	6:M:50:GLY:HA3	2.00	0.90
7:G:107:SER:N	6:R:50:GLY:CA	2.05	0.90
3:B:767:THR:CA	3:B:792:LEU:H	1.85	0.89
3:B:767:THR:CA	3:B:792:LEU:H	1.85	0.89
6:R:125:ALA:O	6:R:158:THR:O	1.89	0.89
1:A:105:TYR:O	1:A:106:PRO:C	2.08	0.89
1:A:105:TYR:O	1:A:106:PRO:C	2.08	0.89
1:A:105:TYR:O	1:A:107:TRP:N	2.06	0.89
1:A:105:TYR:O	1:A:107:TRP:N	2.06	0.89
3:B:767:THR:CA	3:B:792:LEU:H	1.85	0.88
6:R:125:ALA:O	6:R:158:THR:O	1.89	0.88
3:B:781:LEU:CA	3:B:805:LYS:O	2.22	0.88
7:K:167:LEU:O	7:K:170:SER:O	1.92	0.88
3:B:781:LEU:CA	3:B:805:LYS:O	2.22	0.88
1:A:105:TYR:O	1:A:107:TRP:N	2.06	0.87
7:G:198:GLY:O	7:G:201:TYR:N	2.07	0.87
1:A:671:LYS:O	1:A:674:TRP:N	2.08	0.87
7:K:167:LEU:O	7:K:170:SER:O	1.92	0.87
3:B:781:LEU:CA	3:B:805:LYS:O	2.22	0.87
1:A:671:LYS:O	1:A:674:TRP:N	2.08	0.86
7:G:198:GLY:O	7:G:201:TYR:N	2.07	0.86
7:K:190:ILE:O	7:K:225:SER:CA	2.23	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:K:190:ILE:O	7:K:225:SER:CA	2.23	0.86
7:K:167:LEU:O	7:K:170:SER:O	1.92	0.86
7:G:198:GLY:O	7:G:201:TYR:N	2.07	0.86
3:N:483:THR:O	3:N:487:ILE:N	2.09	0.86
7:G:301:ALA:C	7:G:303:LEU:H	1.79	0.86
7:K:190:ILE:O	7:K:225:SER:CA	2.23	0.85
6:R:78:TRP:O	6:R:81:TYR:O	1.95	0.85
7:K:107:SER:N	6:M:50:GLY:CA	2.24	0.85
1:A:671:LYS:O	1:A:674:TRP:N	2.08	0.85
6:R:78:TRP:O	6:R:81:TYR:O	1.95	0.85
3:N:483:THR:O	3:N:487:ILE:N	2.09	0.85
7:G:301:ALA:C	7:G:303:LEU:H	1.79	0.85
7:K:190:ILE:CA	7:K:225:SER:N	2.40	0.85
7:G:107:SER:H	6:R:50:GLY:C	1.79	0.85
7:G:179:ASN:C	4:H:352:GLU:CA	2.45	0.85
7:G:107:SER:H	6:R:50:GLY:C	1.79	0.85
1:A:503:VAL:O	1:A:514:CYS:C	2.15	0.85
6:R:78:TRP:O	6:R:81:TYR:O	1.95	0.85
3:N:483:THR:O	3:N:487:ILE:N	2.09	0.85
7:K:190:ILE:CA	7:K:225:SER:N	2.40	0.85
7:K:190:ILE:CA	7:K:225:SER:N	2.40	0.84
7:K:107:SER:N	6:M:50:GLY:CA	2.24	0.84
7:G:179:ASN:C	4:H:352:GLU:CA	2.45	0.84
7:G:301:ALA:C	7:G:303:LEU:H	1.79	0.84
1:A:503:VAL:O	1:A:514:CYS:C	2.15	0.84
1:A:503:VAL:O	1:A:514:CYS:C	2.15	0.84
3:B:483:THR:O	3:B:487:ILE:N	2.09	0.84
7:G:179:ASN:C	4:H:352:GLU:CA	2.45	0.84
7:G:106:THR:C	6:R:50:GLY:HA3	1.98	0.84
3:B:483:THR:O	3:B:487:ILE:N	2.09	0.84
7:G:106:THR:C	6:R:50:GLY:HA3	1.98	0.84
7:G:107:SER:H	6:R:50:GLY:C	1.79	0.84
3:B:483:THR:O	3:B:487:ILE:N	2.09	0.83
3:B:739:ASP:O	3:B:740:PRO:O	1.96	0.83
3:B:824:GLY:HA2	3:B:830:ASN:O	1.78	0.83
1:A:214:HIS:O	1:A:217:MET:N	2.10	0.83
1:A:671:LYS:O	1:A:673:CYS:N	2.11	0.83
1:A:671:LYS:O	1:A:673:CYS:N	2.11	0.83
1:A:214:HIS:O	1:A:217:MET:N	2.10	0.83
7:G:179:ASN:O	4:H:352:GLU:CA	2.26	0.83
7:K:107:SER:N	6:M:50:GLY:CA	2.24	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:R:130:LEU:C	6:R:132:GLU:H	1.82	0.83
5:I:41:ASN:O	5:I:43:GLY:N	2.12	0.83
6:R:130:LEU:C	6:R:132:GLU:H	1.82	0.83
7:G:106:THR:C	6:R:50:GLY:HA3	1.98	0.83
5:I:41:ASN:O	5:I:43:GLY:N	2.12	0.83
1:A:214:HIS:O	1:A:217:MET:N	2.10	0.82
1:A:671:LYS:O	1:A:673:CYS:N	2.11	0.82
7:G:179:ASN:O	4:H:352:GLU:CA	2.26	0.82
5:I:41:ASN:O	5:I:43:GLY:N	2.12	0.82
3:B:824:GLY:HA2	3:B:830:ASN:O	1.78	0.82
6:R:130:LEU:C	6:R:132:GLU:H	1.82	0.82
3:B:483:THR:O	3:B:484:LYS:C	2.18	0.82
3:B:739:ASP:O	3:B:740:PRO:O	1.96	0.82
5:D:41:ASN:O	5:D:43:GLY:N	2.12	0.82
7:G:179:ASN:O	4:H:352:GLU:CA	2.26	0.82
3:B:824:GLY:HA2	3:B:830:ASN:O	1.78	0.82
5:D:41:ASN:O	5:D:43:GLY:N	2.12	0.82
3:B:483:THR:O	3:B:484:LYS:C	2.18	0.81
3:B:739:ASP:O	3:B:740:PRO:O	1.96	0.81
5:D:41:ASN:O	5:D:43:GLY:N	2.12	0.81
6:M:79:ARG:O	6:M:81:TYR:N	2.13	0.81
8:Z:13:VAL:H	8:Z:132:GLY:HA2	1.46	0.81
6:M:79:ARG:O	6:M:81:TYR:N	2.13	0.81
3:B:767:THR:C	3:B:792:LEU:H	1.84	0.81
8:Z:13:VAL:H	8:Z:132:GLY:HA2	1.46	0.81
3:N:483:THR:O	3:N:484:LYS:C	2.18	0.81
6:M:79:ARG:O	6:M:81:TYR:N	2.13	0.81
3:B:483:THR:O	3:B:484:LYS:C	2.18	0.81
3:N:483:THR:O	3:N:484:LYS:C	2.18	0.81
1:A:496:TRP:CA	1:A:502:HIS:CA	2.59	0.81
8:Z:13:VAL:H	8:Z:132:GLY:HA2	1.46	0.81
3:N:483:THR:O	3:N:484:LYS:C	2.18	0.81
1:A:496:TRP:CA	1:A:502:HIS:CA	2.59	0.81
3:B:767:THR:C	3:B:792:LEU:H	1.84	0.80
3:B:767:THR:C	3:B:792:LEU:H	1.84	0.80
8:Z:11:TYR:C	8:Z:132:GLY:HA3	2.02	0.80
1:A:496:TRP:CA	1:A:502:HIS:CA	2.59	0.80
8:Z:11:TYR:C	8:Z:132:GLY:HA3	2.02	0.80
8:Z:12:THR:H	8:Z:132:GLY:C	1.86	0.79
8:Z:11:TYR:C	8:Z:132:GLY:HA3	2.02	0.79
8:Z:12:THR:H	8:Z:132:GLY:C	1.86	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:Z:12:THR:H	8:Z:132:GLY:C	1.86	0.79
1:A:749:LEU:O	1:A:753:GLY:N	2.15	0.79
5:I:13:GLY:CA	5:I:38:LYS:CA	2.60	0.79
1:A:749:LEU:O	1:A:753:GLY:N	2.15	0.79
5:D:13:GLY:CA	5:D:38:LYS:CA	2.60	0.79
3:B:740:PRO:O	3:B:741:VAL:C	2.18	0.79
5:I:13:GLY:CA	5:I:38:LYS:CA	2.60	0.78
3:B:483:THR:O	3:B:486:ASP:N	2.17	0.78
3:B:483:THR:O	3:B:486:ASP:N	2.17	0.78
5:I:13:GLY:CA	5:I:38:LYS:CA	2.60	0.78
1:A:749:LEU:O	1:A:753:GLY:N	2.15	0.78
3:N:483:THR:O	3:N:486:ASP:N	2.17	0.78
5:D:13:GLY:CA	5:D:38:LYS:CA	2.60	0.77
3:N:483:THR:O	3:N:486:ASP:N	2.17	0.77
3:N:483:THR:O	3:N:486:ASP:N	2.17	0.77
7:G:277:LEU:O	7:G:280:CYS:N	2.16	0.77
7:G:105:VAL:O	7:G:107:SER:N	2.17	0.77
3:B:483:THR:O	3:B:486:ASP:N	2.17	0.77
7:G:277:LEU:O	7:G:280:CYS:N	2.16	0.77
3:B:766:ASP:C	3:B:768:LEU:H	1.89	0.77
7:G:277:LEU:O	7:G:280:CYS:N	2.16	0.77
4:H:637:VAL:O	4:H:638:SER:O	2.03	0.76
3:B:766:ASP:C	3:B:768:LEU:H	1.89	0.76
4:H:637:VAL:O	4:H:638:SER:O	2.03	0.76
4:H:637:VAL:O	4:H:638:SER:O	2.03	0.76
3:B:740:PRO:O	3:B:741:VAL:C	2.18	0.76
3:B:766:ASP:C	3:B:768:LEU:H	1.89	0.76
4:C:637:VAL:O	4:C:638:SER:O	2.03	0.76
5:D:13:GLY:CA	5:D:38:LYS:CA	2.60	0.76
8:Z:12:THR:N	8:Z:132:GLY:HA3	2.00	0.76
4:C:637:VAL:O	4:C:638:SER:O	2.03	0.76
7:G:105:VAL:O	7:G:107:SER:N	2.17	0.76
4:C:637:VAL:O	4:C:638:SER:O	2.03	0.75
8:Z:12:THR:N	8:Z:132:GLY:HA3	2.00	0.75
8:Z:12:THR:H	8:Z:132:GLY:HA2	1.51	0.75
1:A:800:PRO:O	4:C:805:PHE:O	2.05	0.75
3:B:740:PRO:O	3:B:741:VAL:C	2.18	0.75
1:A:800:PRO:O	4:C:805:PHE:O	2.05	0.75
1:A:800:PRO:O	4:C:805:PHE:O	2.05	0.75
8:Z:12:THR:N	8:Z:132:GLY:HA3	2.00	0.74
8:Z:12:THR:H	8:Z:132:GLY:HA2	1.51	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:Z:12:THR:H	8:Z:132:GLY:HA2	1.51	0.74
7:G:301:ALA:C	7:G:303:LEU:N	2.41	0.74
7:G:179:ASN:N	4:H:350:SER:C	2.41	0.74
7:G:247:ARG:O	7:G:248:ASP:C	2.24	0.74
6:M:77:LEU:O	6:M:80:HIS:N	2.20	0.74
6:M:77:LEU:O	6:M:80:HIS:N	2.20	0.74
6:M:77:LEU:O	6:M:80:HIS:N	2.21	0.74
7:G:301:ALA:C	7:G:303:LEU:N	2.41	0.74
6:R:174:SER:O	6:R:176:SER:N	2.21	0.73
7:G:105:VAL:O	7:G:107:SER:N	2.17	0.73
7:G:179:ASN:N	4:H:350:SER:C	2.41	0.73
7:G:215:ILE:O	7:G:219:THR:N	2.22	0.73
7:G:215:ILE:O	7:G:219:THR:N	2.22	0.73
1:A:671:LYS:O	1:A:672:ASN:C	2.26	0.73
6:R:143:LEU:O	6:R:145:LEU:N	2.22	0.73
6:R:143:LEU:O	6:R:145:LEU:N	2.22	0.72
6:R:174:SER:O	6:R:176:SER:N	2.21	0.72
7:G:179:ASN:N	4:H:350:SER:C	2.41	0.72
6:R:143:LEU:O	6:R:145:LEU:N	2.22	0.72
6:R:174:SER:O	6:R:176:SER:N	2.21	0.72
1:A:671:LYS:C	1:A:673:CYS:N	2.39	0.72
4:C:269:TYR:C	4:C:271:MET:N	2.44	0.71
4:H:269:TYR:C	4:H:271:MET:N	2.44	0.71
8:Z:12:THR:N	8:Z:132:GLY:C	2.44	0.71
3:B:928:LYS:O	3:B:934:PRO:O	2.08	0.71
6:J:29:GLY:HA2	6:J:32:THR:H	1.56	0.71
6:J:29:GLY:HA2	6:J:32:THR:H	1.56	0.71
6:J:29:GLY:HA2	6:J:32:THR:H	1.56	0.71
7:G:247:ARG:O	7:G:248:ASP:C	2.24	0.71
8:Z:12:THR:N	8:Z:132:GLY:C	2.44	0.71
6:F:29:GLY:HA2	6:F:32:THR:H	1.56	0.71
7:G:215:ILE:O	7:G:219:THR:N	2.22	0.71
8:Z:12:THR:N	8:Z:132:GLY:C	2.44	0.71
3:B:928:LYS:O	3:B:934:PRO:O	2.08	0.71
3:B:928:LYS:O	3:B:934:PRO:O	2.08	0.70
6:F:29:GLY:HA2	6:F:32:THR:H	1.56	0.70
1:A:801:ILE:O	4:C:805:PHE:N	2.24	0.70
1:A:496:TRP:CA	1:A:502:HIS:N	2.54	0.70
6:F:29:GLY:HA2	6:F:32:THR:H	1.56	0.70
1:A:496:TRP:CA	1:A:502:HIS:N	2.54	0.70
1:A:671:LYS:O	1:A:672:ASN:C	2.26	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:496:TRP:CA	1:A:502:HIS:N	2.54	0.70
1:A:671:LYS:C	1:A:673:CYS:N	2.39	0.70
7:G:215:ILE:O	7:G:217:LYS:N	2.24	0.70
7:G:167:LEU:C	7:G:170:SER:O	2.30	0.70
7:G:301:ALA:C	7:G:303:LEU:N	2.41	0.70
1:A:671:LYS:O	1:A:672:ASN:C	2.26	0.70
1:A:801:ILE:O	4:C:805:PHE:N	2.24	0.70
1:A:801:ILE:O	4:C:805:PHE:N	2.24	0.70
7:G:215:ILE:O	7:G:217:LYS:N	2.25	0.70
5:I:41:ASN:C	5:I:43:GLY:H	1.95	0.70
7:K:133:ASP:O	7:K:134:SER:O	2.10	0.70
5:D:41:ASN:C	5:D:43:GLY:H	1.95	0.70
7:G:167:LEU:C	7:G:170:SER:O	2.30	0.70
7:K:133:ASP:O	7:K:134:SER:O	2.10	0.70
7:G:337:ASN:O	7:G:340:ILE:N	2.25	0.69
1:A:214:HIS:O	1:A:217:MET:CA	2.40	0.69
7:G:337:ASN:O	7:G:340:ILE:N	2.25	0.69
7:G:178:VAL:C	4:H:350:SER:O	2.30	0.69
5:D:41:ASN:C	5:D:43:GLY:H	1.95	0.69
7:K:133:ASP:O	7:K:134:SER:O	2.10	0.69
5:I:41:ASN:C	5:I:43:GLY:H	1.95	0.69
7:G:215:ILE:O	7:G:217:LYS:N	2.25	0.69
7:G:178:VAL:C	4:H:350:SER:O	2.30	0.69
7:G:178:VAL:C	4:H:350:SER:O	2.30	0.69
7:G:247:ARG:O	7:G:248:ASP:C	2.24	0.69
7:G:167:LEU:C	7:G:170:SER:O	2.30	0.69
7:G:337:ASN:O	7:G:340:ILE:N	2.25	0.69
5:I:41:ASN:C	5:I:43:GLY:H	1.95	0.69
1:A:214:HIS:O	1:A:217:MET:CA	2.40	0.69
7:G:172:ASP:O	7:G:175:LYS:N	2.26	0.69
4:H:269:TYR:C	4:H:271:MET:N	2.44	0.69
5:D:41:ASN:C	5:D:43:GLY:H	1.95	0.68
1:A:214:HIS:O	1:A:217:MET:CA	2.40	0.68
8:Z:10:LEU:O	8:Z:11:TYR:C	2.32	0.68
7:G:172:ASP:O	7:G:175:LYS:N	2.26	0.68
7:G:172:ASP:O	7:G:175:LYS:N	2.26	0.68
7:G:247:ARG:O	7:G:248:ASP:O	2.12	0.68
4:C:269:TYR:C	4:C:271:MET:N	2.44	0.68
7:K:107:SER:CA	6:M:50:GLY:O	2.43	0.67
7:K:107:SER:CA	6:M:50:GLY:O	2.43	0.67
4:H:269:TYR:C	4:H:271:MET:N	2.44	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:Z:10:LEU:O	8:Z:11:TYR:O	2.13	0.67
1:A:671:LYS:C	1:A:673:CYS:N	2.39	0.67
8:Z:10:LEU:O	8:Z:11:TYR:C	2.32	0.67
8:Z:10:LEU:O	8:Z:11:TYR:C	2.32	0.67
8:Z:10:LEU:O	8:Z:11:TYR:O	2.13	0.67
7:G:247:ARG:O	7:G:248:ASP:O	2.12	0.67
8:Z:10:LEU:O	8:Z:11:TYR:O	2.13	0.67
7:G:247:ARG:O	7:G:248:ASP:O	2.12	0.67
7:K:107:SER:CA	6:M:50:GLY:O	2.43	0.67
7:G:277:LEU:CA	7:G:280:CYS:CA	2.73	0.67
3:B:779:GLY:O	3:B:808:SER:O	2.14	0.66
3:B:779:GLY:O	3:B:808:SER:O	2.14	0.66
3:B:779:GLY:O	3:B:808:SER:O	2.14	0.66
3:B:929:PRO:CA	3:B:935:ASP:O	2.44	0.66
7:G:277:LEU:CA	7:G:280:CYS:CA	2.74	0.66
7:G:277:LEU:CA	7:G:280:CYS:CA	2.73	0.66
1:A:749:LEU:O	1:A:753:GLY:CA	2.44	0.66
3:B:766:ASP:C	3:B:768:LEU:N	2.45	0.66
1:A:749:LEU:O	1:A:753:GLY:CA	2.44	0.66
1:A:214:HIS:O	1:A:217:MET:O	2.14	0.66
1:A:749:LEU:O	1:A:753:GLY:CA	2.44	0.66
6:R:71:GLN:O	6:R:74:ILE:CA	2.44	0.66
6:R:71:GLN:C	6:R:74:ILE:H	2.00	0.66
7:K:135:THR:C	7:K:137:LEU:H	2.00	0.66
5:I:39:LEU:C	5:I:41:ASN:H	2.00	0.66
3:B:824:GLY:HA3	3:B:830:ASN:O	1.96	0.66
3:B:929:PRO:CA	3:B:935:ASP:O	2.44	0.66
6:R:71:GLN:O	6:R:74:ILE:CA	2.44	0.66
3:B:929:PRO:CA	3:B:935:ASP:O	2.44	0.66
5:D:39:LEU:C	5:D:41:ASN:H	2.00	0.65
6:R:71:GLN:O	6:R:74:ILE:CA	2.44	0.65
7:G:167:LEU:O	7:G:170:SER:O	2.15	0.65
6:R:71:GLN:C	6:R:74:ILE:H	2.00	0.65
7:G:167:LEU:O	7:G:170:SER:O	2.15	0.65
5:I:39:LEU:C	5:I:41:ASN:H	2.00	0.65
7:G:167:LEU:O	7:G:170:SER:O	2.15	0.65
3:B:824:GLY:HA3	3:B:830:ASN:O	1.96	0.65
6:R:71:GLN:C	6:R:74:ILE:H	2.00	0.65
1:A:214:HIS:O	1:A:217:MET:O	2.14	0.65
7:K:135:THR:C	7:K:137:LEU:H	2.00	0.65
3:B:824:GLY:HA3	3:B:830:ASN:O	1.96	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:N:563:ASP:C	3:N:577:THR:C	2.55	0.65
3:B:563:ASP:C	3:B:577:THR:C	2.55	0.65
3:N:563:ASP:C	3:N:577:THR:C	2.55	0.65
7:K:135:THR:C	7:K:137:LEU:H	2.00	0.64
3:N:563:ASP:C	3:N:577:THR:C	2.55	0.64
5:D:39:LEU:C	5:D:41:ASN:H	2.00	0.64
3:B:563:ASP:C	3:B:577:THR:C	2.55	0.64
3:B:563:ASP:C	3:B:577:THR:C	2.55	0.64
3:B:112:GLU:O	3:B:114:ILE:N	2.30	0.64
7:K:243:GLU:O	7:K:245:GLY:N	2.31	0.64
3:B:112:GLU:O	3:B:114:ILE:N	2.30	0.64
3:N:112:GLU:O	3:N:114:ILE:N	2.30	0.64
5:I:39:LEU:C	5:I:41:ASN:H	2.00	0.64
5:D:39:LEU:C	5:D:41:ASN:H	2.00	0.64
3:N:112:GLU:O	3:N:114:ILE:N	2.30	0.64
1:A:214:HIS:O	1:A:217:MET:O	2.14	0.64
3:B:112:GLU:O	3:B:114:ILE:N	2.30	0.64
3:B:766:ASP:C	3:B:768:LEU:N	2.45	0.64
3:B:766:ASP:O	3:B:792:LEU:O	2.16	0.64
3:N:112:GLU:O	3:N:114:ILE:N	2.30	0.64
6:M:116:LEU:O	6:M:118:ASN:N	2.32	0.63
3:B:766:ASP:O	3:B:792:LEU:O	2.16	0.63
6:M:116:LEU:O	6:M:118:ASN:N	2.32	0.63
1:A:754:GLN:C	1:A:756:SER:H	2.02	0.63
7:K:243:GLU:O	7:K:245:GLY:N	2.31	0.63
6:M:116:LEU:O	6:M:118:ASN:N	2.32	0.63
7:K:243:GLU:O	7:K:245:GLY:N	2.31	0.63
4:H:269:TYR:C	4:H:271:MET:H	2.02	0.63
3:B:739:ASP:O	3:B:740:PRO:C	2.38	0.63
3:B:766:ASP:O	3:B:792:LEU:O	2.16	0.63
1:A:754:GLN:C	1:A:756:SER:H	2.02	0.63
6:M:24:GLY:O	6:M:68:VAL:O	2.17	0.63
6:M:24:GLY:O	6:M:68:VAL:O	2.17	0.62
3:B:766:ASP:C	3:B:768:LEU:N	2.45	0.62
1:A:227:ARG:O	1:A:245:CYS:O	2.17	0.62
1:A:754:GLN:C	1:A:756:SER:H	2.02	0.62
1:A:227:ARG:O	1:A:245:CYS:O	2.18	0.62
1:A:227:ARG:O	1:A:245:CYS:O	2.17	0.62
4:C:269:TYR:C	4:C:271:MET:N	2.43	0.62
6:M:24:GLY:O	6:M:68:VAL:O	2.17	0.61
1:A:803:PRO:N	4:C:803:GLU:H	1.97	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:803:PRO:N	4:C:803:GLU:H	1.97	0.61
1:A:803:PRO:N	4:C:803:GLU:H	1.97	0.61
6:R:71:GLN:O	6:R:72:ASP:C	2.39	0.61
4:C:269:TYR:O	4:C:271:MET:CA	2.49	0.61
1:A:205:ASP:H	1:A:207:GLY:H	1.49	0.61
6:R:69:GLY:C	6:R:71:GLN:H	2.04	0.61
1:A:214:HIS:O	1:A:217:MET:C	2.40	0.61
6:R:69:GLY:C	6:R:71:GLN:H	2.04	0.60
7:K:135:THR:O	7:K:137:LEU:N	2.35	0.60
1:A:205:ASP:H	1:A:207:GLY:H	1.49	0.60
6:R:71:GLN:O	6:R:72:ASP:C	2.39	0.60
1:A:214:HIS:O	1:A:217:MET:C	2.40	0.60
1:A:205:ASP:H	1:A:207:GLY:H	1.49	0.60
7:K:135:THR:O	7:K:137:LEU:N	2.34	0.60
4:C:269:TYR:C	4:C:271:MET:H	2.02	0.60
6:R:69:GLY:C	6:R:71:GLN:H	2.04	0.60
4:C:269:TYR:O	4:C:271:MET:CA	2.49	0.60
7:G:215:ILE:C	7:G:217:LYS:H	2.05	0.60
7:G:215:ILE:C	7:G:217:LYS:H	2.05	0.60
6:R:71:GLN:O	6:R:72:ASP:C	2.39	0.60
3:B:779:GLY:N	3:B:809:THR:O	2.22	0.60
7:K:135:THR:O	7:K:137:LEU:N	2.35	0.60
3:B:557:LEU:O	3:B:558:ARG:C	2.41	0.60
7:G:172:ASP:O	7:G:173:VAL:C	2.36	0.60
3:B:740:PRO:O	3:B:742:TYR:N	2.35	0.60
3:N:563:ASP:C	3:N:577:THR:CA	2.71	0.60
1:A:214:HIS:O	1:A:217:MET:C	2.40	0.59
3:N:563:ASP:C	3:N:577:THR:CA	2.71	0.59
3:B:557:LEU:O	3:B:558:ARG:C	2.41	0.59
7:G:215:ILE:O	7:G:218:PHE:N	2.36	0.59
7:G:215:ILE:O	7:G:218:PHE:N	2.36	0.59
7:G:215:ILE:C	7:G:217:LYS:H	2.05	0.59
7:K:107:SER:CA	6:M:50:GLY:CA	2.75	0.59
3:N:563:ASP:C	3:N:577:THR:CA	2.71	0.59
3:B:563:ASP:C	3:B:577:THR:CA	2.71	0.59
4:C:269:TYR:O	4:C:271:MET:CA	2.49	0.59
3:B:563:ASP:C	3:B:577:THR:CA	2.71	0.59
3:B:740:PRO:O	3:B:742:TYR:N	2.35	0.59
6:M:128:GLN:H	6:M:159:CYS:CA	2.16	0.59
4:C:269:TYR:C	4:C:271:MET:H	2.02	0.59
7:G:215:ILE:C	7:G:217:LYS:N	2.55	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:740:PRO:O	3:B:742:TYR:N	2.35	0.59
7:G:215:ILE:C	7:G:217:LYS:N	2.55	0.59
7:G:215:ILE:C	7:G:217:LYS:N	2.55	0.59
6:M:128:GLN:H	6:M:159:CYS:CA	2.16	0.59
3:B:563:ASP:C	3:B:577:THR:CA	2.71	0.59
7:G:215:ILE:O	7:G:218:PHE:N	2.36	0.59
1:A:671:LYS:C	1:A:673:CYS:H	2.06	0.59
6:R:82:TYR:O	6:R:83:ARG:C	2.39	0.59
7:G:172:ASP:O	7:G:173:VAL:C	2.36	0.59
7:G:337:ASN:O	7:G:338:ARG:C	2.39	0.59
3:B:739:ASP:O	3:B:740:PRO:C	2.38	0.59
6:R:82:TYR:O	6:R:83:ARG:C	2.39	0.59
4:H:269:TYR:O	4:H:271:MET:CA	2.49	0.59
7:G:172:ASP:O	7:G:173:VAL:C	2.36	0.58
7:K:107:SER:CA	6:M:50:GLY:CA	2.75	0.58
6:R:159:CYS:O	6:R:162:SER:CA	2.50	0.58
6:R:159:CYS:O	6:R:162:SER:CA	2.50	0.58
6:M:128:GLN:H	6:M:159:CYS:CA	2.16	0.58
3:B:504:VAL:O	3:B:507:GLU:N	2.37	0.58
6:R:159:CYS:O	6:R:162:SER:CA	2.50	0.58
3:N:504:VAL:O	3:N:507:GLU:N	2.37	0.58
4:H:269:TYR:O	4:H:271:MET:CA	2.49	0.58
1:A:671:LYS:C	1:A:673:CYS:H	2.06	0.58
3:N:526:VAL:CA	3:N:597:VAL:N	2.67	0.58
1:A:671:LYS:C	1:A:673:CYS:H	2.06	0.58
3:B:526:VAL:CA	3:B:597:VAL:N	2.67	0.58
3:N:526:VAL:CA	3:N:597:VAL:N	2.67	0.58
3:B:504:VAL:O	3:B:507:GLU:N	2.37	0.58
6:R:82:TYR:O	6:R:83:ARG:C	2.39	0.58
3:B:739:ASP:O	3:B:740:PRO:C	2.38	0.58
3:N:557:LEU:O	3:N:558:ARG:C	2.41	0.58
3:N:557:LEU:O	3:N:558:ARG:C	2.41	0.57
7:G:277:LEU:CA	7:G:280:CYS:C	2.72	0.57
3:B:504:VAL:O	3:B:507:GLU:N	2.37	0.57
7:G:277:LEU:CA	7:G:280:CYS:C	2.72	0.57
7:G:387:CYS:O	7:G:391:PRO:CA	2.53	0.57
3:N:563:ASP:C	3:N:577:THR:O	2.43	0.57
3:B:526:VAL:CA	3:B:597:VAL:N	2.67	0.57
1:A:754:GLN:O	1:A:756:SER:N	2.38	0.57
4:H:269:TYR:O	4:H:271:MET:CA	2.49	0.57
3:B:526:VAL:CA	3:B:597:VAL:N	2.67	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:C:269:TYR:C	4:C:271:MET:H	2.02	0.57
7:G:277:LEU:CA	7:G:280:CYS:C	2.72	0.57
7:G:337:ASN:O	7:G:338:ARG:C	2.39	0.57
7:K:107:SER:CA	6:M:50:GLY:CA	2.75	0.57
8:Z:11:TYR:C	8:Z:132:GLY:CA	2.69	0.57
7:G:387:CYS:O	7:G:391:PRO:CA	2.53	0.57
3:N:526:VAL:CA	3:N:597:VAL:N	2.67	0.57
3:N:563:ASP:C	3:N:577:THR:O	2.43	0.57
3:B:563:ASP:C	3:B:577:THR:O	2.43	0.57
6:R:69:GLY:O	6:R:71:GLN:N	2.34	0.57
3:N:563:ASP:C	3:N:577:THR:O	2.43	0.57
1:A:754:GLN:O	1:A:756:SER:N	2.38	0.57
3:B:563:ASP:C	3:B:577:THR:O	2.43	0.57
7:G:337:ASN:O	7:G:338:ARG:C	2.39	0.57
3:B:899:LEU:O	3:B:900:SER:C	2.43	0.56
7:G:387:CYS:O	7:G:391:PRO:CA	2.53	0.56
3:N:541:ALA:N	3:N:624:ASP:N	2.53	0.56
3:N:504:VAL:O	3:N:507:GLU:N	2.37	0.56
3:N:541:ALA:N	3:N:624:ASP:N	2.53	0.56
3:B:767:THR:CA	3:B:792:LEU:N	2.65	0.56
3:B:563:ASP:C	3:B:577:THR:O	2.43	0.56
3:B:779:GLY:HA2	3:B:811:ASN:H	1.70	0.56
3:B:899:LEU:O	3:B:900:SER:C	2.44	0.56
3:B:541:ALA:N	3:B:624:ASP:N	2.53	0.56
3:N:557:LEU:O	3:N:558:ARG:C	2.41	0.56
1:A:754:GLN:O	1:A:756:SER:N	2.38	0.56
7:G:277:LEU:CA	7:G:280:CYS:N	2.69	0.56
7:K:274:ILE:O	7:K:276:ASN:N	2.39	0.56
3:B:899:LEU:O	3:B:900:SER:C	2.44	0.56
3:N:102:LYS:C	3:N:104:THR:H	2.09	0.56
7:G:179:ASN:CA	4:H:350:SER:O	2.53	0.56
7:G:179:ASN:CA	4:H:350:SER:O	2.54	0.56
7:G:277:LEU:CA	7:G:280:CYS:N	2.69	0.56
3:N:504:VAL:O	3:N:507:GLU:N	2.37	0.56
7:G:179:ASN:CA	4:H:350:SER:O	2.53	0.55
3:N:541:ALA:N	3:N:624:ASP:N	2.53	0.55
3:B:779:GLY:HA2	3:B:811:ASN:H	1.70	0.55
3:B:102:LYS:C	3:B:104:THR:H	2.09	0.55
7:G:198:GLY:C	7:G:200:LEU:N	2.58	0.55
3:B:767:THR:CA	3:B:792:LEU:N	2.65	0.55
4:H:506:THR:C	4:H:509:GLY:H	2.10	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:106:THR:CA	6:R:50:GLY:HA3	2.37	0.55
3:B:557:LEU:O	3:B:558:ARG:C	2.41	0.55
3:B:541:ALA:N	3:B:624:ASP:N	2.53	0.55
7:K:135:THR:C	7:K:137:LEU:N	2.58	0.55
7:G:277:LEU:CA	7:G:280:CYS:N	2.69	0.55
4:H:506:THR:C	4:H:509:GLY:H	2.10	0.55
4:C:506:THR:C	4:C:509:GLY:H	2.10	0.55
7:G:198:GLY:C	7:G:200:LEU:N	2.58	0.55
7:K:274:ILE:O	7:K:276:ASN:N	2.39	0.55
4:C:506:THR:C	4:C:509:GLY:H	2.10	0.55
4:H:269:TYR:C	4:H:271:MET:H	2.02	0.55
3:B:541:ALA:N	3:B:624:ASP:N	2.53	0.55
3:B:767:THR:CA	3:B:792:LEU:N	2.65	0.55
3:B:779:GLY:HA2	3:B:811:ASN:H	1.70	0.55
4:C:375:TYR:O	4:C:388:PHE:CA	2.55	0.55
4:C:375:TYR:O	4:C:388:PHE:CA	2.55	0.54
7:G:106:THR:CA	6:R:50:GLY:HA3	2.36	0.54
4:H:375:TYR:O	4:H:388:PHE:CA	2.56	0.54
7:G:726:CYS:O	7:G:753:LEU:O	2.25	0.54
4:C:375:TYR:O	4:C:388:PHE:CA	2.55	0.54
4:C:506:THR:C	4:C:509:GLY:H	2.10	0.54
1:A:496:TRP:CA	1:A:502:HIS:H	2.21	0.54
4:H:375:TYR:O	4:H:388:PHE:CA	2.56	0.54
7:G:106:THR:CA	6:R:50:GLY:HA3	2.36	0.54
6:R:69:GLY:O	6:R:71:GLN:N	2.34	0.54
7:K:274:ILE:O	7:K:276:ASN:N	2.39	0.54
7:K:665:CYS:O	7:K:703:PRO:CA	2.55	0.54
7:G:179:ASN:H	4:H:350:SER:C	2.11	0.54
7:G:726:CYS:O	7:G:753:LEU:O	2.25	0.54
4:H:506:THR:C	4:H:509:GLY:H	2.10	0.54
1:A:343:GLN:CA	1:A:354:VAL:H	2.21	0.54
7:K:665:CYS:O	7:K:703:PRO:CA	2.56	0.54
4:H:375:TYR:O	4:H:388:PHE:CA	2.56	0.54
4:C:174:SER:C	4:C:176:SER:H	2.12	0.54
7:G:726:CYS:O	7:G:753:LEU:O	2.25	0.54
1:A:343:GLN:CA	1:A:354:VAL:H	2.21	0.54
1:A:496:TRP:CA	1:A:502:HIS:H	2.21	0.53
3:N:112:GLU:C	3:N:114:ILE:H	2.12	0.53
7:K:665:CYS:O	7:K:703:PRO:CA	2.55	0.53
1:A:343:GLN:N	1:A:354:VAL:H	2.07	0.53
1:A:321:ARG:H	1:A:338:ASP:CA	2.22	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:179:ASN:H	4:H:350:SER:C	2.11	0.53
6:R:71:GLN:C	6:R:73:ARG:N	2.60	0.53
1:A:343:GLN:CA	1:A:354:VAL:H	2.21	0.53
6:R:71:GLN:C	6:R:73:ARG:N	2.60	0.53
6:M:47:PRO:C	6:M:69:GLY:HA3	2.29	0.53
6:M:47:PRO:C	6:M:69:GLY:HA3	2.29	0.53
4:H:174:SER:C	4:H:176:SER:H	2.12	0.53
4:H:269:TYR:C	4:H:271:MET:H	2.03	0.53
1:A:321:ARG:H	1:A:338:ASP:CA	2.22	0.53
1:A:321:ARG:H	1:A:338:ASP:CA	2.22	0.53
6:M:25:LEU:C	6:M:69:GLY:HA2	2.29	0.53
3:B:102:LYS:C	3:B:104:THR:H	2.09	0.53
3:B:112:GLU:C	3:B:114:ILE:H	2.12	0.53
6:R:69:GLY:O	6:R:71:GLN:N	2.34	0.53
4:H:174:SER:C	4:H:176:SER:H	2.12	0.53
1:A:754:GLN:C	1:A:756:SER:N	2.62	0.53
1:A:754:GLN:C	1:A:756:SER:N	2.62	0.53
1:A:496:TRP:CA	1:A:502:HIS:H	2.21	0.53
6:R:71:GLN:C	6:R:73:ARG:N	2.60	0.53
3:N:102:LYS:C	3:N:104:THR:H	2.09	0.53
3:N:102:LYS:C	3:N:104:THR:H	2.09	0.53
1:A:343:GLN:N	1:A:354:VAL:H	2.07	0.53
3:B:102:LYS:C	3:B:104:THR:H	2.09	0.53
3:B:112:GLU:C	3:B:114:ILE:H	2.12	0.52
7:K:135:THR:C	7:K:137:LEU:N	2.58	0.52
6:M:47:PRO:C	6:M:69:GLY:HA3	2.29	0.52
7:G:247:ARG:O	7:G:251:LEU:N	2.37	0.52
6:M:25:LEU:C	6:M:69:GLY:HA2	2.29	0.52
1:A:754:GLN:C	1:A:756:SER:N	2.62	0.52
7:G:274:ILE:O	7:G:275:VAL:C	2.48	0.52
3:N:112:GLU:C	3:N:114:ILE:H	2.12	0.52
1:A:343:GLN:N	1:A:354:VAL:H	2.07	0.52
7:G:274:ILE:O	7:G:275:VAL:C	2.48	0.52
7:G:665:CYS:O	7:G:703:PRO:CA	2.57	0.52
4:C:174:SER:C	4:C:176:SER:H	2.12	0.52
7:G:666:THR:O	7:G:668:THR:N	2.43	0.52
6:M:25:LEU:C	6:M:69:GLY:HA2	2.29	0.52
7:G:247:ARG:O	7:G:251:LEU:N	2.37	0.52
7:G:274:ILE:O	7:G:275:VAL:C	2.48	0.52
1:A:802:MET:O	4:C:804:ALA:CA	2.58	0.52
3:B:767:THR:CA	3:B:793:ALA:N	2.73	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:198:GLY:C	7:G:200:LEU:N	2.58	0.52
3:B:112:GLU:C	3:B:114:ILE:H	2.12	0.52
7:G:665:CYS:O	7:G:703:PRO:CA	2.57	0.52
6:R:130:LEU:C	6:R:132:GLU:N	2.51	0.52
4:H:375:TYR:N	4:H:389:GLY:O	2.41	0.52
7:G:179:ASN:H	4:H:350:SER:C	2.11	0.52
7:G:665:CYS:O	7:G:703:PRO:CA	2.57	0.52
7:G:666:THR:O	7:G:668:THR:N	2.43	0.52
3:N:112:GLU:C	3:N:114:ILE:H	2.12	0.52
7:G:247:ARG:O	7:G:251:LEU:N	2.37	0.52
3:N:483:THR:O	3:N:484:LYS:O	2.28	0.52
7:G:666:THR:O	7:G:668:THR:N	2.43	0.52
3:B:767:THR:CA	3:B:793:ALA:N	2.73	0.52
3:B:767:THR:CA	3:B:793:ALA:N	2.73	0.51
6:R:71:GLN:O	6:R:73:ARG:N	2.43	0.51
7:G:198:GLY:O	7:G:199:LEU:C	2.49	0.51
7:G:198:GLY:O	7:G:199:LEU:C	2.49	0.51
1:A:495:ILE:O	1:A:502:HIS:C	2.49	0.51
4:C:174:SER:C	4:C:176:SER:H	2.12	0.51
7:G:172:ASP:C	7:G:175:LYS:H	2.14	0.51
7:G:198:GLY:O	7:G:199:LEU:C	2.49	0.51
1:A:802:MET:O	4:C:804:ALA:CA	2.58	0.51
6:M:77:LEU:O	6:M:80:HIS:CA	2.59	0.51
3:B:483:THR:O	3:B:484:LYS:O	2.28	0.51
6:R:71:GLN:O	6:R:73:ARG:N	2.43	0.51
4:H:174:SER:C	4:H:176:SER:H	2.12	0.51
3:B:767:THR:O	3:B:768:LEU:C	2.49	0.51
7:G:172:ASP:C	7:G:175:LYS:H	2.14	0.51
3:B:767:THR:O	3:B:768:LEU:C	2.49	0.51
1:A:802:MET:O	4:C:804:ALA:CA	2.58	0.51
3:B:483:THR:O	3:B:484:LYS:O	2.28	0.51
7:G:666:THR:O	7:G:667:ASN:C	2.49	0.51
7:G:198:GLY:C	7:G:201:TYR:H	2.07	0.51
6:R:127:LYS:H	6:R:159:CYS:CA	2.24	0.51
6:R:71:GLN:O	6:R:73:ARG:N	2.43	0.51
3:N:324:LYS:C	3:N:326:HIS:H	2.15	0.51
5:I:41:ASN:C	5:I:43:GLY:N	2.60	0.51
1:A:495:ILE:O	1:A:502:HIS:C	2.49	0.51
6:M:78:TRP:O	6:M:79:ARG:C	2.46	0.51
6:R:135:SER:O	6:R:136:ALA:C	2.48	0.51
3:N:483:THR:O	3:N:484:LYS:O	2.28	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:N:324:LYS:C	3:N:326:HIS:H	2.15	0.50
3:B:324:LYS:C	3:B:326:HIS:H	2.15	0.50
3:B:767:THR:O	3:B:768:LEU:C	2.49	0.50
7:G:666:THR:O	7:G:667:ASN:C	2.49	0.50
6:R:69:GLY:C	6:R:71:GLN:N	2.65	0.50
7:K:135:THR:C	7:K:137:LEU:N	2.58	0.50
6:R:69:GLY:C	6:R:71:GLN:N	2.65	0.50
6:R:135:SER:O	6:R:136:ALA:C	2.48	0.50
3:B:324:LYS:C	3:B:326:HIS:H	2.15	0.50
7:G:211:VAL:O	7:G:215:ILE:N	2.45	0.50
1:A:495:ILE:O	1:A:502:HIS:C	2.49	0.50
3:B:483:THR:O	3:B:484:LYS:O	2.28	0.50
6:R:127:LYS:H	6:R:159:CYS:CA	2.24	0.50
6:R:127:LYS:H	6:R:159:CYS:CA	2.24	0.50
6:M:78:TRP:O	6:M:79:ARG:C	2.46	0.50
3:N:324:LYS:C	3:N:326:HIS:H	2.15	0.50
4:H:459:ARG:CA	4:H:509:GLY:HA3	2.42	0.50
3:B:324:LYS:C	3:B:326:HIS:H	2.15	0.50
4:C:375:TYR:N	4:C:389:GLY:O	2.41	0.50
4:C:459:ARG:CA	4:C:509:GLY:HA3	2.42	0.50
4:H:375:TYR:N	4:H:389:GLY:O	2.41	0.50
6:M:77:LEU:O	6:M:80:HIS:CA	2.59	0.50
4:C:459:ARG:CA	4:C:509:GLY:HA3	2.42	0.50
7:G:666:THR:O	7:G:667:ASN:C	2.49	0.50
7:G:211:VAL:O	7:G:215:ILE:N	2.45	0.50
5:D:42:THR:O	5:D:43:GLY:C	2.50	0.49
6:R:135:SER:O	6:R:136:ALA:C	2.48	0.49
4:H:459:ARG:CA	4:H:509:GLY:HA3	2.42	0.49
6:F:149:ARG:C	6:F:151:ARG:H	2.16	0.49
8:Z:11:TYR:C	8:Z:132:GLY:CA	2.69	0.49
6:M:77:LEU:O	6:M:80:HIS:CA	2.59	0.49
3:N:483:THR:O	3:N:484:LYS:O	2.28	0.49
6:R:69:GLY:C	6:R:71:GLN:N	2.65	0.49
5:D:42:THR:O	5:D:43:GLY:C	2.50	0.49
6:M:173:LEU:C	6:M:175:ASN:H	2.15	0.49
5:I:41:ASN:C	5:I:43:GLY:N	2.60	0.49
5:I:42:THR:O	5:I:43:GLY:C	2.50	0.49
4:C:459:ARG:CA	4:C:509:GLY:HA3	2.42	0.49
7:G:211:VAL:O	7:G:215:ILE:N	2.45	0.49
7:G:277:LEU:CA	7:G:280:CYS:H	2.26	0.49
4:H:459:ARG:CA	4:H:509:GLY:HA3	2.42	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:928:LYS:C	3:B:934:PRO:O	2.51	0.49
6:M:173:LEU:C	6:M:175:ASN:H	2.15	0.49
4:H:568:PRO:C	4:H:571:ASN:H	2.16	0.49
4:H:568:PRO:C	4:H:571:ASN:H	2.16	0.49
3:B:928:LYS:C	3:B:934:PRO:O	2.51	0.49
4:C:568:PRO:C	4:C:571:ASN:H	2.16	0.49
4:C:568:PRO:C	4:C:571:ASN:H	2.16	0.49
7:G:277:LEU:C	7:G:280:CYS:N	2.66	0.49
4:H:568:PRO:C	4:H:571:ASN:H	2.16	0.49
5:D:39:LEU:C	5:D:41:ASN:N	2.66	0.49
5:D:42:THR:O	5:D:43:GLY:C	2.50	0.49
4:C:375:TYR:N	4:C:389:GLY:O	2.41	0.49
7:G:198:GLY:C	7:G:201:TYR:H	2.07	0.49
3:B:928:LYS:C	3:B:934:PRO:O	2.51	0.49
7:K:172:ASP:O	7:K:175:LYS:N	2.46	0.49
6:M:173:LEU:C	6:M:175:ASN:H	2.15	0.49
4:C:568:PRO:C	4:C:571:ASN:H	2.16	0.48
7:G:172:ASP:C	7:G:175:LYS:H	2.14	0.48
6:J:149:ARG:C	6:J:151:ARG:H	2.16	0.48
6:F:149:ARG:C	6:F:151:ARG:H	2.16	0.48
7:G:107:SER:CA	6:R:50:GLY:HA3	2.24	0.48
5:I:42:THR:O	5:I:43:GLY:C	2.50	0.48
5:D:39:LEU:C	5:D:41:ASN:N	2.66	0.48
6:M:78:TRP:O	6:M:79:ARG:C	2.46	0.48
5:D:39:LEU:C	5:D:41:ASN:N	2.66	0.48
7:G:246:SER:C	7:G:248:ASP:N	2.66	0.48
6:R:130:LEU:C	6:R:132:GLU:N	2.51	0.48
7:G:198:GLY:C	7:G:201:TYR:H	2.07	0.48
5:I:39:LEU:C	5:I:41:ASN:N	2.66	0.48
7:K:274:ILE:O	7:K:275:VAL:C	2.52	0.48
7:G:246:SER:C	7:G:248:ASP:N	2.66	0.48
7:G:277:LEU:CA	7:G:280:CYS:H	2.26	0.48
7:G:277:LEU:CA	7:G:280:CYS:H	2.26	0.48
7:K:274:ILE:O	7:K:275:VAL:C	2.52	0.48
7:G:246:SER:C	7:G:248:ASP:N	2.66	0.48
7:K:172:ASP:O	7:K:175:LYS:N	2.46	0.48
4:C:375:TYR:N	4:C:389:GLY:O	2.41	0.47
7:K:666:THR:O	7:K:668:THR:N	2.47	0.47
6:J:29:GLY:CA	6:J:32:THR:H	2.26	0.47
7:G:277:LEU:C	7:G:280:CYS:N	2.66	0.47
8:Z:11:TYR:C	8:Z:132:GLY:CA	2.69	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:277:LEU:C	7:G:280:CYS:N	2.66	0.47
7:G:301:ALA:O	7:G:303:LEU:N	2.48	0.47
3:B:767:THR:CA	3:B:792:LEU:C	2.83	0.47
6:M:173:LEU:C	6:M:175:ASN:N	2.68	0.47
7:G:441:GLU:O	7:G:444:GLU:O	2.32	0.47
7:G:460:GLY:HA2	7:G:494:ALA:CA	2.44	0.47
4:H:637:VAL:O	4:H:638:SER:C	2.52	0.47
5:I:42:THR:O	5:I:43:GLY:C	2.50	0.47
7:K:666:THR:O	7:K:668:THR:N	2.47	0.47
5:D:41:ASN:C	5:D:43:GLY:N	2.60	0.47
5:D:41:ASN:C	5:D:43:GLY:N	2.60	0.47
7:G:665:CYS:O	7:G:703:PRO:N	2.48	0.47
7:K:172:ASP:O	7:K:175:LYS:N	2.46	0.47
6:J:149:ARG:C	6:J:151:ARG:H	2.16	0.47
6:R:159:CYS:C	6:R:161:THR:N	2.68	0.47
4:C:637:VAL:O	4:C:638:SER:C	2.53	0.47
4:H:637:VAL:O	4:H:638:SER:C	2.52	0.47
3:B:767:THR:CA	3:B:792:LEU:C	2.83	0.47
7:K:666:THR:O	7:K:667:ASN:C	2.54	0.47
6:M:173:LEU:C	6:M:175:ASN:N	2.68	0.47
6:F:29:GLY:CA	6:F:32:THR:H	2.26	0.47
7:G:116:LYS:O	7:G:118:ASP:N	2.48	0.47
7:G:460:GLY:HA2	7:G:494:ALA:CA	2.44	0.47
7:G:460:GLY:HA2	7:G:494:ALA:CA	2.44	0.47
7:K:666:THR:O	7:K:668:THR:N	2.47	0.47
7:G:116:LYS:O	7:G:118:ASP:N	2.48	0.47
7:G:665:CYS:O	7:G:703:PRO:N	2.48	0.47
4:H:637:VAL:O	4:H:638:SER:C	2.52	0.47
6:J:29:GLY:CA	6:J:32:THR:H	2.26	0.47
7:G:116:LYS:O	7:G:118:ASP:N	2.48	0.47
7:G:441:GLU:O	7:G:444:GLU:O	2.32	0.47
7:G:301:ALA:O	7:G:303:LEU:N	2.48	0.47
7:G:665:CYS:O	7:G:703:PRO:N	2.48	0.47
4:H:233:SER:H	4:H:248:SER:CA	2.28	0.47
3:B:767:THR:CA	3:B:792:LEU:C	2.83	0.47
4:C:637:VAL:O	4:C:638:SER:C	2.52	0.47
6:M:173:LEU:C	6:M:175:ASN:N	2.68	0.46
7:G:726:CYS:O	7:G:753:LEU:N	2.44	0.46
7:G:726:CYS:O	7:G:753:LEU:N	2.44	0.46
6:R:130:LEU:C	6:R:132:GLU:N	2.51	0.46
6:J:29:GLY:CA	6:J:32:THR:H	2.26	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:C:86:TYR:C	4:C:88:THR:H	2.19	0.46
6:F:149:ARG:C	6:F:151:ARG:H	2.16	0.46
4:H:233:SER:H	4:H:248:SER:CA	2.28	0.46
4:C:637:VAL:O	4:C:638:SER:C	2.52	0.46
7:K:274:ILE:O	7:K:275:VAL:C	2.52	0.46
3:B:842:MET:O	3:B:888:THR:O	2.34	0.46
7:G:441:GLU:O	7:G:444:GLU:O	2.32	0.46
7:K:665:CYS:O	7:K:702:GLN:O	2.34	0.46
3:B:842:MET:O	3:B:888:THR:O	2.34	0.46
7:G:726:CYS:O	7:G:753:LEU:N	2.44	0.46
7:K:244:ASP:O	7:K:245:GLY:C	2.54	0.46
7:K:665:CYS:O	7:K:702:GLN:O	2.34	0.46
6:F:29:GLY:CA	6:F:32:THR:H	2.26	0.46
6:R:159:CYS:C	6:R:161:THR:N	2.68	0.46
4:H:86:TYR:C	4:H:88:THR:H	2.19	0.46
4:H:86:TYR:C	4:H:88:THR:H	2.19	0.46
6:F:29:GLY:CA	6:F:32:THR:H	2.26	0.46
7:K:665:CYS:O	7:K:702:GLN:C	2.54	0.46
6:J:149:ARG:C	6:J:151:ARG:H	2.16	0.46
7:K:244:ASP:O	7:K:245:GLY:C	2.54	0.46
4:H:233:SER:H	4:H:248:SER:CA	2.28	0.46
3:B:842:MET:O	3:B:888:THR:O	2.34	0.46
4:H:86:TYR:C	4:H:88:THR:H	2.19	0.46
7:G:301:ALA:O	7:G:303:LEU:N	2.48	0.46
7:K:243:GLU:C	7:K:245:GLY:N	2.69	0.46
4:C:86:TYR:C	4:C:88:THR:H	2.19	0.46
7:K:665:CYS:O	7:K:702:GLN:C	2.54	0.46
4:C:233:SER:H	4:C:248:SER:CA	2.28	0.45
7:K:665:CYS:O	7:K:702:GLN:O	2.34	0.45
4:C:233:SER:H	4:C:248:SER:CA	2.29	0.45
7:K:244:ASP:O	7:K:245:GLY:C	2.54	0.45
7:K:133:ASP:O	7:K:134:SER:C	2.53	0.45
7:G:298:SER:O	7:G:300:LYS:N	2.50	0.45
7:K:243:GLU:C	7:K:245:GLY:N	2.69	0.45
3:B:751:GLN:C	3:B:753:ASP:H	2.19	0.45
6:R:143:LEU:CA	6:R:145:LEU:H	2.20	0.45
7:G:298:SER:O	7:G:300:LYS:N	2.50	0.45
7:K:665:CYS:O	7:K:702:GLN:C	2.54	0.45
7:K:695:ALA:O	7:K:696:ARG:C	2.55	0.45
7:G:298:SER:O	7:G:300:LYS:N	2.50	0.45
7:K:133:ASP:O	7:K:134:SER:C	2.53	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:K:133:ASP:O	7:K:134:SER:C	2.53	0.45
7:K:107:SER:H	6:M:50:GLY:HA3	0.67	0.45
4:H:375:TYR:N	4:H:389:GLY:O	2.41	0.45
5:I:39:LEU:C	5:I:41:ASN:N	2.66	0.45
7:G:172:ASP:C	7:G:174:VAL:N	2.66	0.45
1:A:321:ARG:N	1:A:338:ASP:O	2.50	0.45
4:C:86:TYR:C	4:C:88:THR:H	2.19	0.45
7:K:243:GLU:C	7:K:245:GLY:N	2.69	0.45
5:D:41:ASN:C	5:D:43:GLY:N	2.60	0.44
7:G:172:ASP:C	7:G:174:VAL:N	2.66	0.44
7:K:273:ALA:C	7:K:275:VAL:H	2.21	0.44
7:K:273:ALA:C	7:K:275:VAL:H	2.21	0.44
6:R:159:CYS:C	6:R:161:THR:N	2.68	0.44
7:G:107:SER:N	6:R:50:GLY:C	2.59	0.44
4:C:233:SER:H	4:C:248:SER:CA	2.29	0.44
5:I:41:ASN:C	5:I:43:GLY:N	2.61	0.44
5:I:39:LEU:C	5:I:41:ASN:N	2.66	0.44
3:B:751:GLN:C	3:B:753:ASP:H	2.20	0.44
7:K:666:THR:O	7:K:667:ASN:C	2.53	0.44
4:H:715:LEU:O	4:H:719:ALA:N	2.51	0.44
4:H:715:LEU:O	4:H:719:ALA:N	2.51	0.44
3:B:751:GLN:C	3:B:753:ASP:H	2.20	0.44
7:K:181:ALA:O	7:K:185:ALA:N	2.51	0.44
4:H:715:LEU:O	4:H:719:ALA:N	2.51	0.44
8:Z:12:THR:N	8:Z:132:GLY:HA2	2.20	0.44
7:K:181:ALA:O	7:K:185:ALA:N	2.51	0.44
7:K:107:SER:H	6:M:50:GLY:HA3	0.67	0.44
7:K:666:THR:O	7:K:667:ASN:C	2.54	0.44
6:R:143:LEU:CA	6:R:145:LEU:H	2.20	0.43
4:C:715:LEU:O	4:C:719:ALA:N	2.51	0.43
4:C:715:LEU:O	4:C:719:ALA:N	2.51	0.43
8:L:49:PHE:O	8:L:53:HIS:N	2.52	0.43
3:B:762:ASN:C	3:B:764:THR:H	2.18	0.43
7:K:695:ALA:O	7:K:696:ARG:C	2.55	0.43
1:A:321:ARG:N	1:A:338:ASP:O	2.50	0.43
4:H:484:SER:CA	4:H:522:GLU:H	2.32	0.43
7:K:135:THR:O	7:K:136:MET:C	2.54	0.43
4:C:715:LEU:O	4:C:719:ALA:N	2.51	0.43
7:G:529:THR:O	7:G:533:ASN:N	2.52	0.43
1:A:321:ARG:N	1:A:338:ASP:O	2.50	0.43
4:H:484:SER:CA	4:H:522:GLU:H	2.32	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:C:484:SER:CA	4:C:522:GLU:H	2.32	0.43
7:G:176:ARG:C	7:G:178:VAL:H	2.21	0.43
7:G:107:SER:CA	6:R:50:GLY:HA3	2.24	0.43
7:K:181:ALA:O	7:K:185:ALA:N	2.51	0.43
7:G:107:SER:CA	6:R:50:GLY:CA	2.92	0.43
7:K:171:PHE:O	7:K:174:VAL:N	2.52	0.43
3:B:762:ASN:C	3:B:764:THR:H	2.18	0.43
6:R:70:GLY:O	6:R:72:ASP:N	2.52	0.43
7:G:529:THR:O	7:G:533:ASN:N	2.52	0.43
6:R:70:GLY:O	6:R:72:ASP:N	2.52	0.43
7:G:529:THR:O	7:G:533:ASN:N	2.52	0.43
8:L:49:PHE:O	8:L:53:HIS:N	2.52	0.43
4:H:484:SER:CA	4:H:522:GLU:H	2.32	0.43
7:K:273:ALA:C	7:K:275:VAL:H	2.21	0.42
7:G:274:ILE:O	7:G:275:VAL:O	2.37	0.42
7:K:166:LEU:O	7:K:170:SER:N	2.42	0.42
7:K:226:PRO:O	7:K:229:TYR:N	2.51	0.42
7:K:695:ALA:O	7:K:696:ARG:C	2.55	0.42
3:N:112:GLU:C	3:N:114:ILE:N	2.72	0.42
1:A:749:LEU:O	1:A:753:GLY:HA2	2.18	0.42
3:B:778:LEU:O	3:B:809:THR:CA	2.65	0.42
7:G:176:ARG:C	7:G:178:VAL:H	2.21	0.42
1:A:749:LEU:O	1:A:753:GLY:HA2	2.18	0.42
7:K:135:THR:O	7:K:136:MET:C	2.54	0.42
4:C:484:SER:CA	4:C:522:GLU:H	2.32	0.42
7:G:274:ILE:O	7:G:275:VAL:O	2.37	0.42
7:K:226:PRO:O	7:K:229:TYR:N	2.51	0.42
1:A:749:LEU:O	1:A:753:GLY:HA2	2.18	0.42
3:B:779:GLY:O	3:B:808:SER:C	2.58	0.42
7:G:274:ILE:O	7:G:275:VAL:O	2.37	0.42
4:C:690:LEU:O	4:C:694:GLN:N	2.53	0.42
6:R:70:GLY:O	6:R:72:ASP:N	2.52	0.42
8:L:49:PHE:O	8:L:53:HIS:N	2.51	0.42
7:K:171:PHE:O	7:K:174:VAL:N	2.51	0.42
7:K:171:PHE:O	7:K:174:VAL:N	2.52	0.42
6:R:109:ARG:C	6:R:112:ASN:H	2.23	0.42
4:C:690:LEU:O	4:C:694:GLN:N	2.53	0.42
7:G:107:SER:CA	6:R:50:GLY:CA	2.93	0.42
3:B:779:GLY:O	3:B:808:SER:C	2.58	0.42
7:K:226:PRO:O	7:K:229:TYR:N	2.51	0.42
3:N:267:LEU:C	3:N:269:GLN:H	2.24	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:B:112:GLU:C	3:B:114:ILE:N	2.73	0.42
4:C:484:SER:CA	4:C:522:GLU:H	2.32	0.42
7:G:172:ASP:C	7:G:174:VAL:N	2.66	0.42
7:K:166:LEU:O	7:K:170:SER:N	2.42	0.42
5:I:62:GLU:C	5:I:64:LEU:H	2.23	0.42
7:G:107:SER:CA	6:R:50:GLY:CA	2.92	0.42
6:R:109:ARG:C	6:R:112:ASN:H	2.23	0.42
3:N:267:LEU:C	3:N:269:GLN:H	2.24	0.42
5:I:62:GLU:C	5:I:64:LEU:H	2.23	0.42
3:B:267:LEU:C	3:B:269:GLN:H	2.24	0.41
7:K:107:SER:H	6:M:50:GLY:HA3	0.67	0.41
3:B:778:LEU:O	3:B:809:THR:CA	2.65	0.41
3:B:866:ASN:O	3:B:944:ILE:O	2.39	0.41
3:B:135:THR:O	3:B:139:LEU:N	2.52	0.41
3:B:779:GLY:O	3:B:808:SER:C	2.58	0.41
4:C:690:LEU:O	4:C:694:GLN:N	2.53	0.41
4:H:690:LEU:O	4:H:694:GLN:N	2.53	0.41
3:B:482:SER:C	3:B:484:LYS:N	2.71	0.41
3:B:866:ASN:O	3:B:944:ILE:O	2.39	0.41
3:N:135:THR:O	3:N:139:LEU:N	2.52	0.41
3:B:112:GLU:C	3:B:114:ILE:N	2.73	0.41
3:N:267:LEU:C	3:N:269:GLN:H	2.24	0.41
7:G:107:SER:N	6:R:50:GLY:O	2.52	0.41
5:I:62:GLU:C	5:I:64:LEU:H	2.23	0.41
3:B:866:ASN:O	3:B:944:ILE:O	2.39	0.41
4:H:690:LEU:O	4:H:694:GLN:N	2.53	0.41
3:B:267:LEU:C	3:B:269:GLN:H	2.24	0.41
5:D:62:GLU:C	5:D:64:LEU:H	2.24	0.41
3:N:112:GLU:C	3:N:114:ILE:N	2.73	0.41
3:B:767:THR:CA	3:B:793:ALA:CA	2.99	0.41
4:H:690:LEU:O	4:H:694:GLN:N	2.53	0.41
3:B:767:THR:CA	3:B:793:ALA:CA	2.99	0.41
7:G:179:ASN:CA	4:H:350:SER:C	2.89	0.41
7:K:232:MET:O	7:K:236:ALA:N	2.53	0.41
6:M:27:GLY:H	6:M:46:ILE:CA	2.34	0.41
3:B:135:THR:O	3:B:139:LEU:N	2.52	0.41
3:B:482:SER:C	3:B:484:LYS:N	2.71	0.41
5:D:62:GLU:C	5:D:64:LEU:H	2.23	0.41
6:R:109:ARG:C	6:R:112:ASN:H	2.23	0.41
3:B:778:LEU:O	3:B:809:THR:CA	2.65	0.41
7:G:179:ASN:CA	4:H:350:SER:C	2.88	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:215:ILE:O	7:G:216:SER:C	2.60	0.41
6:R:160:ALA:C	6:R:163:GLY:H	2.25	0.41
7:K:135:THR:O	7:K:136:MET:C	2.54	0.41
1:A:9:SER:N	1:A:313:GLY:HA3	2.36	0.41
1:A:9:SER:N	1:A:313:GLY:HA3	2.36	0.41
3:N:122:LYS:O	3:N:126:HIS:N	2.54	0.41
3:B:122:LYS:O	3:B:126:HIS:N	2.54	0.41
7:G:215:ILE:O	7:G:216:SER:C	2.60	0.41
3:B:762:ASN:C	3:B:764:THR:H	2.18	0.41
7:G:176:ARG:C	7:G:178:VAL:H	2.21	0.41
6:R:160:ALA:C	6:R:163:GLY:H	2.25	0.41
3:N:122:LYS:O	3:N:126:HIS:N	2.54	0.41
1:A:576:ASN:O	1:A:578:VAL:N	2.55	0.40
7:G:107:SER:N	6:R:50:GLY:O	2.52	0.40
6:R:25:LEU:C	6:R:70:GLY:H	2.24	0.40
6:M:27:GLY:H	6:M:46:ILE:CA	2.34	0.40
3:B:112:GLU:C	3:B:114:ILE:N	2.73	0.40
7:G:179:ASN:CA	4:H:350:SER:C	2.88	0.40
1:A:576:ASN:O	1:A:578:VAL:N	2.55	0.40
3:B:267:LEU:C	3:B:269:GLN:H	2.24	0.40
6:R:25:LEU:C	6:R:70:GLY:H	2.24	0.40
3:N:482:SER:C	3:N:484:LYS:N	2.71	0.40
3:B:767:THR:CA	3:B:793:ALA:CA	2.99	0.40
7:G:702:GLN:O	7:G:703:PRO:C	2.60	0.40
1:A:9:SER:N	1:A:313:GLY:HA3	2.36	0.40
1:A:373:ALA:C	1:A:375:ASN:N	2.75	0.40
1:A:373:ALA:C	1:A:375:ASN:N	2.75	0.40
3:N:135:THR:O	3:N:139:LEU:N	2.52	0.40
6:R:25:LEU:C	6:R:70:GLY:H	2.24	0.40
1:A:598:LYS:O	1:A:602:ALA:N	2.54	0.40
4:C:566:TYR:CA	4:C:572:ARG:O	2.69	0.40
7:G:215:ILE:O	7:G:216:SER:C	2.60	0.40
4:H:213:ILE:O	4:H:222:VAL:N	2.54	0.40
4:H:566:TYR:CA	4:H:572:ARG:O	2.69	0.40
3:B:122:LYS:O	3:B:126:HIS:N	2.54	0.40
5:D:62:GLU:C	5:D:64:LEU:H	2.23	0.40
7:G:276:ASN:O	7:G:281:SER:C	2.56	0.40
4:C:566:TYR:CA	4:C:572:ARG:O	2.69	0.40
3:B:925:SER:O	3:B:940:GLY:CA	2.70	0.40
4:C:566:TYR:CA	4:C:572:ARG:O	2.69	0.40
6:R:160:ALA:C	6:R:163:GLY:H	2.24	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:C:15:SER:H	4:C:293:GLY:HA2	1.86	0.40
7:G:702:GLN:O	7:G:703:PRO:C	2.60	0.40
7:K:166:LEU:O	7:K:170:SER:N	2.42	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	1-A	1122/1262 (89%)	891 (79%)	119 (11%)	112 (10%)	0	9
1	2-A	1122/1262 (89%)	891 (79%)	120 (11%)	111 (10%)	0	9
1	3-A	1122/1262 (89%)	891 (79%)	119 (11%)	112 (10%)	0	9
2	1-E	290/308 (94%)	276 (95%)	9 (3%)	5 (2%)	9	42
2	2-E	290/308 (94%)	276 (95%)	9 (3%)	5 (2%)	9	42
2	3-E	290/308 (94%)	276 (95%)	10 (3%)	4 (1%)	11	46
3	1-B	790/968 (82%)	648 (82%)	68 (9%)	74 (9%)	0	10
3	1-N	562/968 (58%)	478 (85%)	40 (7%)	44 (8%)	1	13
3	2-B	790/968 (82%)	648 (82%)	69 (9%)	73 (9%)	1	11
3	2-N	562/968 (58%)	478 (85%)	40 (7%)	44 (8%)	1	13
3	3-B	790/968 (82%)	648 (82%)	68 (9%)	74 (9%)	0	10
3	3-N	562/968 (58%)	478 (85%)	40 (7%)	44 (8%)	1	13
4	1-C	841/905 (93%)	681 (81%)	91 (11%)	69 (8%)	1	12
4	1-H	719/905 (79%)	587 (82%)	77 (11%)	55 (8%)	1	13
4	2-C	841/905 (93%)	682 (81%)	90 (11%)	69 (8%)	1	12
4	2-H	719/905 (79%)	588 (82%)	76 (11%)	55 (8%)	1	13
4	3-C	841/905 (93%)	680 (81%)	92 (11%)	69 (8%)	1	12

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	3-H	719/905 (79%)	587 (82%)	77 (11%)	55 (8%)	1	13
5	1-D	173/511 (34%)	144 (83%)	16 (9%)	13 (8%)	1	13
5	1-I	173/511 (34%)	144 (83%)	16 (9%)	13 (8%)	1	13
5	2-D	173/511 (34%)	144 (83%)	16 (9%)	13 (8%)	1	13
5	2-I	173/511 (34%)	144 (83%)	16 (9%)	13 (8%)	1	13
5	3-D	173/511 (34%)	144 (83%)	16 (9%)	13 (8%)	1	13
5	3-I	173/511 (34%)	144 (83%)	16 (9%)	13 (8%)	1	13
6	1-F	157/181 (87%)	134 (85%)	14 (9%)	9 (6%)	1	18
6	1-J	157/181 (87%)	134 (85%)	14 (9%)	9 (6%)	1	18
6	1-M	157/181 (87%)	126 (80%)	13 (8%)	18 (12%)	0	6
6	1-R	157/181 (87%)	120 (76%)	17 (11%)	20 (13%)	0	5
6	2-F	157/181 (87%)	134 (85%)	14 (9%)	9 (6%)	1	18
6	2-J	157/181 (87%)	134 (85%)	14 (9%)	9 (6%)	1	18
6	2-M	157/181 (87%)	126 (80%)	13 (8%)	18 (12%)	0	6
6	2-R	157/181 (87%)	120 (76%)	17 (11%)	20 (13%)	0	5
6	3-F	157/181 (87%)	134 (85%)	14 (9%)	9 (6%)	1	18
6	3-J	157/181 (87%)	134 (85%)	14 (9%)	9 (6%)	1	18
6	3-M	157/181 (87%)	126 (80%)	13 (8%)	18 (12%)	0	6
6	3-R	157/181 (87%)	120 (76%)	17 (11%)	20 (13%)	0	5
7	1-G	794/874 (91%)	678 (85%)	61 (8%)	55 (7%)	1	15
7	1-K	556/874 (64%)	475 (85%)	42 (8%)	39 (7%)	1	14
7	2-G	794/874 (91%)	678 (85%)	61 (8%)	55 (7%)	1	15
7	2-K	556/874 (64%)	475 (85%)	42 (8%)	39 (7%)	1	14
7	3-G	794/874 (91%)	678 (85%)	61 (8%)	55 (7%)	1	15
7	3-K	556/874 (64%)	475 (85%)	43 (8%)	38 (7%)	1	15
8	1-L	137/177 (77%)	117 (85%)	11 (8%)	9 (7%)	1	16
8	1-Z	137/177 (77%)	119 (87%)	11 (8%)	7 (5%)	2	19
8	2-L	137/177 (77%)	117 (85%)	11 (8%)	9 (7%)	1	16
8	2-Z	137/177 (77%)	119 (87%)	11 (8%)	7 (5%)	2	19
8	3-L	137/177 (77%)	117 (85%)	11 (8%)	9 (7%)	1	16
8	3-Z	137/177 (77%)	119 (87%)	11 (8%)	7 (5%)	2	19

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
All	All	20766/27492 (76%)	17257 (83%)	1860 (9%)	1649 (8%)	2 13

All (1649) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	1-A	63	GLN
1	1-A	64	PRO
1	1-A	92	HIS
1	1-A	106	PRO
1	1-A	125	ARG
1	1-A	169	LYS
1	1-A	174	PRO
1	1-A	187	VAL
1	1-A	215	PRO
1	1-A	237	SER
1	1-A	250	ASN
1	1-A	252	VAL
1	1-A	271	LYS
1	1-A	278	MET
1	1-A	281	ARG
1	1-A	324	PRO
1	1-A	325	ALA
1	1-A	341	LEU
1	1-A	343	GLN
1	1-A	384	SER
1	1-A	454	ASP
1	1-A	457	PHE
1	1-A	466	LEU
1	1-A	479	GLN
1	1-A	492	LYS
1	1-A	566	LEU
1	1-A	583	ARG
1	1-A	584	GLU
1	1-A	592	ILE
1	1-A	593	ASP
1	1-A	619	LYS
1	1-A	642	VAL
1	1-A	671	LYS
1	1-A	728	ASP
1	1-A	779	ASP
1	1-A	788	ILE
1	1-A	796	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1-A	797	PRO
1	1-A	798	PRO
1	1-A	803	PRO
1	1-A	805	ASP
1	1-A	811	LEU
1	1-A	949	VAL
1	1-A	999	VAL
2	1-E	111	SER
2	1-E	231	ARG
3	1-B	36	PRO
3	1-B	68	GLU
3	1-B	109	LEU
3	1-B	111	HIS
3	1-B	113	MET
3	1-B	254	PRO
3	1-B	255	SER
3	1-B	329	HIS
3	1-B	348	ASP
3	1-B	367	ASN
3	1-B	385	VAL
3	1-B	386	SER
3	1-B	466	SER
3	1-B	480	TYR
3	1-B	484	LYS
3	1-B	500	GLU
3	1-B	501	ILE
3	1-B	502	PRO
3	1-B	503	ILE
3	1-B	505	GLU
3	1-B	521	ILE
3	1-B	522	THR
3	1-B	547	PRO
3	1-B	767	THR
3	1-B	771	CYS
3	1-B	826	ALA
3	1-B	831	CYS
3	1-B	865	GLU
3	1-B	899	LEU
3	1-B	929	PRO
3	1-B	930	VAL
3	1-B	934	PRO
3	1-B	935	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	1-B	938	VAL
4	1-C	27	GLU
4	1-C	89	LEU
4	1-C	200	PRO
4	1-C	228	HIS
4	1-C	270	GLY
4	1-C	273	ARG
4	1-C	325	ALA
4	1-C	326	ASN
4	1-C	328	LYS
4	1-C	329	ALA
4	1-C	332	ASP
4	1-C	350	SER
4	1-C	363	ASN
4	1-C	365	ARG
4	1-C	400	SER
4	1-C	410	SER
4	1-C	411	ILE
4	1-C	424	PHE
4	1-C	451	ASP
4	1-C	462	GLU
4	1-C	475	GLU
4	1-C	484	SER
4	1-C	502	HIS
4	1-C	614	PRO
4	1-C	615	LYS
4	1-C	638	SER
4	1-C	762	LEU
4	1-C	781	ASN
4	1-C	782	GLN
4	1-C	789	ALA
4	1-C	790	ASP
4	1-C	806	VAL
4	1-C	825	PRO
4	1-C	833	ARG
5	1-D	12	ALA
5	1-D	44	LYS
5	1-D	73	ASN
5	1-D	96	ALA
6	1-F	97	ARG
6	1-F	117	ARG
6	1-F	131	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	1-G	77	PHE
7	1-G	100	GLU
7	1-G	106	THR
7	1-G	132	THR
7	1-G	151	LYS
7	1-G	171	PHE
7	1-G	243	GLU
7	1-G	261	ASN
7	1-G	275	VAL
7	1-G	277	LEU
7	1-G	283	LYS
7	1-G	299	PRO
7	1-G	373	ASP
7	1-G	394	HIS
7	1-G	446	CYS
7	1-G	484	HIS
7	1-G	608	THR
7	1-G	621	PRO
7	1-G	686	ALA
7	1-G	741	GLU
6	1-R	42	VAL
6	1-R	43	ILE
6	1-R	130	LEU
6	1-R	131	PRO
6	1-R	145	LEU
6	1-R	147	SER
6	1-R	151	ARG
6	1-R	175	ASN
8	1-Z	36	PRO
8	1-Z	37	SER
8	1-Z	84	TYR
7	1-K	134	SER
7	1-K	135	THR
7	1-K	170	SER
7	1-K	171	PHE
7	1-K	207	ASP
7	1-K	221	HIS
7	1-K	225	SER
7	1-K	226	PRO
7	1-K	227	PHE
7	1-K	243	GLU
7	1-K	275	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	1-K	299	PRO
7	1-K	608	THR
7	1-K	621	PRO
7	1-K	686	ALA
7	1-K	741	GLU
7	1-K	813	CYS
8	1-L	37	SER
8	1-L	84	TYR
8	1-L	147	ALA
6	1-M	42	VAL
6	1-M	43	ILE
6	1-M	44	THR
6	1-M	51	PHE
6	1-M	71	GLN
6	1-M	80	HIS
6	1-M	118	ASN
6	1-M	149	ARG
3	1-N	36	PRO
3	1-N	68	GLU
3	1-N	109	LEU
3	1-N	111	HIS
3	1-N	113	MET
3	1-N	254	PRO
3	1-N	255	SER
3	1-N	329	HIS
3	1-N	348	ASP
3	1-N	367	ASN
3	1-N	385	VAL
3	1-N	386	SER
3	1-N	466	SER
3	1-N	480	TYR
3	1-N	484	LYS
3	1-N	500	GLU
3	1-N	501	ILE
3	1-N	502	PRO
3	1-N	503	ILE
3	1-N	505	GLU
3	1-N	521	ILE
3	1-N	522	THR
3	1-N	547	PRO
4	1-H	27	GLU
4	1-H	89	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	1-H	200	PRO
4	1-H	228	HIS
4	1-H	270	GLY
4	1-H	273	ARG
4	1-H	325	ALA
4	1-H	326	ASN
4	1-H	328	LYS
4	1-H	329	ALA
4	1-H	332	ASP
4	1-H	350	SER
4	1-H	363	ASN
4	1-H	365	ARG
4	1-H	400	SER
4	1-H	410	SER
4	1-H	411	ILE
4	1-H	424	PHE
4	1-H	451	ASP
4	1-H	462	GLU
4	1-H	475	GLU
4	1-H	484	SER
4	1-H	502	HIS
4	1-H	614	PRO
4	1-H	615	LYS
4	1-H	638	SER
5	1-I	12	ALA
5	1-I	44	LYS
5	1-I	73	ASN
5	1-I	96	ALA
6	1-J	97	ARG
6	1-J	117	ARG
6	1-J	131	PRO
1	2-A	63	GLN
1	2-A	64	PRO
1	2-A	92	HIS
1	2-A	106	PRO
1	2-A	169	LYS
1	2-A	174	PRO
1	2-A	187	VAL
1	2-A	215	PRO
1	2-A	237	SER
1	2-A	250	ASN
1	2-A	252	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	2-A	271	LYS
1	2-A	278	MET
1	2-A	281	ARG
1	2-A	324	PRO
1	2-A	325	ALA
1	2-A	341	LEU
1	2-A	343	GLN
1	2-A	384	SER
1	2-A	454	ASP
1	2-A	457	PHE
1	2-A	466	LEU
1	2-A	479	GLN
1	2-A	492	LYS
1	2-A	566	LEU
1	2-A	583	ARG
1	2-A	584	GLU
1	2-A	592	ILE
1	2-A	593	ASP
1	2-A	619	LYS
1	2-A	642	VAL
1	2-A	671	LYS
1	2-A	728	ASP
1	2-A	779	ASP
1	2-A	788	ILE
1	2-A	796	GLN
1	2-A	797	PRO
1	2-A	798	PRO
1	2-A	803	PRO
1	2-A	805	ASP
1	2-A	811	LEU
1	2-A	949	VAL
1	2-A	999	VAL
2	2-E	111	SER
2	2-E	231	ARG
3	2-B	36	PRO
3	2-B	68	GLU
3	2-B	109	LEU
3	2-B	111	HIS
3	2-B	113	MET
3	2-B	254	PRO
3	2-B	255	SER
3	2-B	329	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	2-B	348	ASP
3	2-B	367	ASN
3	2-B	385	VAL
3	2-B	386	SER
3	2-B	466	SER
3	2-B	480	TYR
3	2-B	484	LYS
3	2-B	500	GLU
3	2-B	501	ILE
3	2-B	502	PRO
3	2-B	503	ILE
3	2-B	505	GLU
3	2-B	521	ILE
3	2-B	522	THR
3	2-B	547	PRO
3	2-B	767	THR
3	2-B	771	CYS
3	2-B	826	ALA
3	2-B	831	CYS
3	2-B	865	GLU
3	2-B	899	LEU
3	2-B	929	PRO
3	2-B	930	VAL
3	2-B	934	PRO
3	2-B	935	ASP
3	2-B	938	VAL
4	2-C	27	GLU
4	2-C	89	LEU
4	2-C	200	PRO
4	2-C	228	HIS
4	2-C	270	GLY
4	2-C	273	ARG
4	2-C	325	ALA
4	2-C	326	ASN
4	2-C	328	LYS
4	2-C	329	ALA
4	2-C	332	ASP
4	2-C	350	SER
4	2-C	363	ASN
4	2-C	365	ARG
4	2-C	400	SER
4	2-C	410	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	2-C	411	ILE
4	2-C	424	PHE
4	2-C	451	ASP
4	2-C	462	GLU
4	2-C	475	GLU
4	2-C	484	SER
4	2-C	502	HIS
4	2-C	614	PRO
4	2-C	615	LYS
4	2-C	638	SER
4	2-C	762	LEU
4	2-C	781	ASN
4	2-C	782	GLN
4	2-C	789	ALA
4	2-C	790	ASP
4	2-C	806	VAL
4	2-C	825	PRO
4	2-C	833	ARG
5	2-D	12	ALA
5	2-D	44	LYS
5	2-D	73	ASN
5	2-D	96	ALA
6	2-F	97	ARG
6	2-F	117	ARG
6	2-F	131	PRO
7	2-G	77	PHE
7	2-G	100	GLU
7	2-G	106	THR
7	2-G	132	THR
7	2-G	151	LYS
7	2-G	171	PHE
7	2-G	243	GLU
7	2-G	261	ASN
7	2-G	275	VAL
7	2-G	277	LEU
7	2-G	283	LYS
7	2-G	299	PRO
7	2-G	373	ASP
7	2-G	394	HIS
7	2-G	446	CYS
7	2-G	484	HIS
7	2-G	608	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	2-G	621	PRO
7	2-G	686	ALA
7	2-G	741	GLU
6	2-R	42	VAL
6	2-R	43	ILE
6	2-R	130	LEU
6	2-R	131	PRO
6	2-R	145	LEU
6	2-R	147	SER
6	2-R	151	ARG
6	2-R	175	ASN
8	2-Z	36	PRO
8	2-Z	37	SER
8	2-Z	84	TYR
7	2-K	134	SER
7	2-K	135	THR
7	2-K	170	SER
7	2-K	171	PHE
7	2-K	207	ASP
7	2-K	221	HIS
7	2-K	225	SER
7	2-K	226	PRO
7	2-K	227	PHE
7	2-K	243	GLU
7	2-K	275	VAL
7	2-K	299	PRO
7	2-K	608	THR
7	2-K	621	PRO
7	2-K	741	GLU
7	2-K	813	CYS
8	2-L	37	SER
8	2-L	84	TYR
8	2-L	147	ALA
6	2-M	42	VAL
6	2-M	43	ILE
6	2-M	44	THR
6	2-M	51	PHE
6	2-M	71	GLN
6	2-M	80	HIS
6	2-M	118	ASN
6	2-M	149	ARG
3	2-N	36	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	2-N	68	GLU
3	2-N	109	LEU
3	2-N	111	HIS
3	2-N	113	MET
3	2-N	254	PRO
3	2-N	255	SER
3	2-N	329	HIS
3	2-N	348	ASP
3	2-N	367	ASN
3	2-N	385	VAL
3	2-N	386	SER
3	2-N	466	SER
3	2-N	480	TYR
3	2-N	484	LYS
3	2-N	500	GLU
3	2-N	501	ILE
3	2-N	502	PRO
3	2-N	503	ILE
3	2-N	505	GLU
3	2-N	521	ILE
3	2-N	522	THR
3	2-N	547	PRO
4	2-H	27	GLU
4	2-H	89	LEU
4	2-H	200	PRO
4	2-H	228	HIS
4	2-H	270	GLY
4	2-H	273	ARG
4	2-H	325	ALA
4	2-H	326	ASN
4	2-H	328	LYS
4	2-H	329	ALA
4	2-H	332	ASP
4	2-H	350	SER
4	2-H	363	ASN
4	2-H	365	ARG
4	2-H	400	SER
4	2-H	410	SER
4	2-H	411	ILE
4	2-H	424	PHE
4	2-H	451	ASP
4	2-H	462	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	2-H	475	GLU
4	2-H	484	SER
4	2-H	502	HIS
4	2-H	614	PRO
4	2-H	615	LYS
4	2-H	638	SER
5	2-I	12	ALA
5	2-I	44	LYS
5	2-I	73	ASN
5	2-I	96	ALA
6	2-J	97	ARG
6	2-J	117	ARG
6	2-J	131	PRO
1	3-A	63	GLN
1	3-A	64	PRO
1	3-A	92	HIS
1	3-A	106	PRO
1	3-A	125	ARG
1	3-A	169	LYS
1	3-A	174	PRO
1	3-A	187	VAL
1	3-A	215	PRO
1	3-A	237	SER
1	3-A	250	ASN
1	3-A	252	VAL
1	3-A	271	LYS
1	3-A	278	MET
1	3-A	281	ARG
1	3-A	324	PRO
1	3-A	325	ALA
1	3-A	341	LEU
1	3-A	343	GLN
1	3-A	384	SER
1	3-A	454	ASP
1	3-A	457	PHE
1	3-A	466	LEU
1	3-A	479	GLN
1	3-A	492	LYS
1	3-A	566	LEU
1	3-A	583	ARG
1	3-A	584	GLU
1	3-A	592	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	3-A	593	ASP
1	3-A	619	LYS
1	3-A	642	VAL
1	3-A	671	LYS
1	3-A	728	ASP
1	3-A	779	ASP
1	3-A	788	ILE
1	3-A	796	GLN
1	3-A	797	PRO
1	3-A	798	PRO
1	3-A	803	PRO
1	3-A	805	ASP
1	3-A	811	LEU
1	3-A	949	VAL
1	3-A	999	VAL
2	3-E	111	SER
2	3-E	231	ARG
3	3-B	36	PRO
3	3-B	68	GLU
3	3-B	109	LEU
3	3-B	111	HIS
3	3-B	113	MET
3	3-B	254	PRO
3	3-B	255	SER
3	3-B	329	HIS
3	3-B	348	ASP
3	3-B	367	ASN
3	3-B	385	VAL
3	3-B	386	SER
3	3-B	466	SER
3	3-B	480	TYR
3	3-B	484	LYS
3	3-B	500	GLU
3	3-B	501	ILE
3	3-B	502	PRO
3	3-B	503	ILE
3	3-B	505	GLU
3	3-B	521	ILE
3	3-B	522	THR
3	3-B	547	PRO
3	3-B	767	THR
3	3-B	771	CYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	3-B	826	ALA
3	3-B	831	CYS
3	3-B	865	GLU
3	3-B	899	LEU
3	3-B	929	PRO
3	3-B	930	VAL
3	3-B	934	PRO
3	3-B	935	ASP
3	3-B	938	VAL
4	3-C	27	GLU
4	3-C	89	LEU
4	3-C	200	PRO
4	3-C	228	HIS
4	3-C	270	GLY
4	3-C	273	ARG
4	3-C	325	ALA
4	3-C	326	ASN
4	3-C	328	LYS
4	3-C	329	ALA
4	3-C	332	ASP
4	3-C	350	SER
4	3-C	363	ASN
4	3-C	365	ARG
4	3-C	400	SER
4	3-C	410	SER
4	3-C	411	ILE
4	3-C	424	PHE
4	3-C	451	ASP
4	3-C	462	GLU
4	3-C	475	GLU
4	3-C	484	SER
4	3-C	502	HIS
4	3-C	614	PRO
4	3-C	615	LYS
4	3-C	638	SER
4	3-C	762	LEU
4	3-C	781	ASN
4	3-C	782	GLN
4	3-C	789	ALA
4	3-C	790	ASP
4	3-C	806	VAL
4	3-C	825	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	3-C	833	ARG
5	3-D	12	ALA
5	3-D	44	LYS
5	3-D	73	ASN
5	3-D	96	ALA
6	3-F	97	ARG
6	3-F	117	ARG
6	3-F	131	PRO
7	3-G	77	PHE
7	3-G	100	GLU
7	3-G	106	THR
7	3-G	132	THR
7	3-G	151	LYS
7	3-G	171	PHE
7	3-G	243	GLU
7	3-G	261	ASN
7	3-G	275	VAL
7	3-G	277	LEU
7	3-G	283	LYS
7	3-G	299	PRO
7	3-G	373	ASP
7	3-G	394	HIS
7	3-G	446	CYS
7	3-G	484	HIS
7	3-G	608	THR
7	3-G	621	PRO
7	3-G	686	ALA
7	3-G	741	GLU
6	3-R	42	VAL
6	3-R	43	ILE
6	3-R	130	LEU
6	3-R	131	PRO
6	3-R	145	LEU
6	3-R	147	SER
6	3-R	151	ARG
6	3-R	175	ASN
8	3-Z	36	PRO
8	3-Z	37	SER
8	3-Z	84	TYR
7	3-K	134	SER
7	3-K	135	THR
7	3-K	170	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	3-K	171	PHE
7	3-K	207	ASP
7	3-K	221	HIS
7	3-K	225	SER
7	3-K	226	PRO
7	3-K	227	PHE
7	3-K	243	GLU
7	3-K	275	VAL
7	3-K	299	PRO
7	3-K	608	THR
7	3-K	621	PRO
7	3-K	686	ALA
7	3-K	741	GLU
7	3-K	813	CYS
8	3-L	37	SER
8	3-L	84	TYR
8	3-L	147	ALA
6	3-M	42	VAL
6	3-M	43	ILE
6	3-M	44	THR
6	3-M	51	PHE
6	3-M	71	GLN
6	3-M	80	HIS
6	3-M	118	ASN
6	3-M	149	ARG
3	3-N	36	PRO
3	3-N	68	GLU
3	3-N	109	LEU
3	3-N	111	HIS
3	3-N	113	MET
3	3-N	254	PRO
3	3-N	255	SER
3	3-N	329	HIS
3	3-N	348	ASP
3	3-N	367	ASN
3	3-N	385	VAL
3	3-N	386	SER
3	3-N	466	SER
3	3-N	480	TYR
3	3-N	484	LYS
3	3-N	500	GLU
3	3-N	501	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	3-N	502	PRO
3	3-N	503	ILE
3	3-N	505	GLU
3	3-N	521	ILE
3	3-N	522	THR
3	3-N	547	PRO
4	3-H	27	GLU
4	3-H	89	LEU
4	3-H	200	PRO
4	3-H	228	HIS
4	3-H	270	GLY
4	3-H	273	ARG
4	3-H	325	ALA
4	3-H	326	ASN
4	3-H	328	LYS
4	3-H	329	ALA
4	3-H	332	ASP
4	3-H	350	SER
4	3-H	363	ASN
4	3-H	365	ARG
4	3-H	400	SER
4	3-H	410	SER
4	3-H	411	ILE
4	3-H	424	PHE
4	3-H	451	ASP
4	3-H	462	GLU
4	3-H	475	GLU
4	3-H	484	SER
4	3-H	502	HIS
4	3-H	614	PRO
4	3-H	615	LYS
4	3-H	638	SER
5	3-I	12	ALA
5	3-I	44	LYS
5	3-I	73	ASN
5	3-I	96	ALA
6	3-J	97	ARG
6	3-J	117	ARG
6	3-J	131	PRO
1	1-A	10	ALA
1	1-A	185	THR
1	1-A	282	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1-A	290	ASP
1	1-A	345	ASP
1	1-A	373	ALA
1	1-A	425	ARG
1	1-A	498	ALA
1	1-A	546	SER
1	1-A	564	LEU
1	1-A	572	ARG
1	1-A	622	GLY
1	1-A	624	SER
1	1-A	632	LYS
1	1-A	672	ASN
1	1-A	787	ASP
1	1-A	800	PRO
1	1-A	1178	ARG
3	1-B	49	ASP
3	1-B	69	LYS
3	1-B	162	ARG
3	1-B	186	PRO
3	1-B	383	ASN
3	1-B	445	ARG
3	1-B	498	LEU
3	1-B	499	GLY
3	1-B	551	GLU
3	1-B	740	PRO
3	1-B	741	VAL
3	1-B	751	GLN
3	1-B	764	THR
3	1-B	828	ASP
3	1-B	838	HIS
3	1-B	862	PHE
3	1-B	873	ASN
3	1-B	939	THR
4	1-C	88	THR
4	1-C	219	LYS
4	1-C	428	PHE
4	1-C	465	PRO
4	1-C	503	GLU
4	1-C	504	GLY
4	1-C	558	ASP
4	1-C	665	GLU
4	1-C	787	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	1-C	793	GLU
4	1-C	797	LEU
5	1-D	24	MET
5	1-D	25	THR
5	1-D	42	THR
5	1-D	98	GLU
5	1-D	136	MET
7	1-G	96	SER
7	1-G	98	ILE
7	1-G	105	VAL
7	1-G	116	LYS
7	1-G	216	SER
7	1-G	278	PRO
7	1-G	310	THR
7	1-G	463	GLY
7	1-G	467	ASN
7	1-G	522	ASN
7	1-G	633	SER
7	1-G	718	THR
6	1-R	72	ASP
6	1-R	82	TYR
6	1-R	84	ASN
6	1-R	95	ASN
6	1-R	132	GLU
6	1-R	133	ALA
8	1-Z	73	ILE
7	1-K	38	PRO
7	1-K	116	LYS
7	1-K	245	GLY
7	1-K	297	SER
7	1-K	633	SER
7	1-K	718	THR
8	1-L	12	THR
8	1-L	69	TYR
8	1-L	132	GLY
6	1-M	70	GLY
6	1-M	129	ASP
6	1-M	164	GLU
3	1-N	49	ASP
3	1-N	69	LYS
3	1-N	162	ARG
3	1-N	186	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	1-N	383	ASN
3	1-N	445	ARG
3	1-N	498	LEU
3	1-N	499	GLY
3	1-N	551	GLU
4	1-H	88	THR
4	1-H	219	LYS
4	1-H	428	PHE
4	1-H	465	PRO
4	1-H	503	GLU
4	1-H	504	GLY
4	1-H	558	ASP
4	1-H	665	GLU
5	1-I	24	MET
5	1-I	25	THR
5	1-I	42	THR
5	1-I	98	GLU
5	1-I	136	MET
1	2-A	10	ALA
1	2-A	125	ARG
1	2-A	185	THR
1	2-A	282	THR
1	2-A	290	ASP
1	2-A	345	ASP
1	2-A	373	ALA
1	2-A	425	ARG
1	2-A	498	ALA
1	2-A	546	SER
1	2-A	564	LEU
1	2-A	572	ARG
1	2-A	622	GLY
1	2-A	624	SER
1	2-A	632	LYS
1	2-A	672	ASN
1	2-A	787	ASP
1	2-A	800	PRO
1	2-A	1178	ARG
3	2-B	49	ASP
3	2-B	69	LYS
3	2-B	162	ARG
3	2-B	186	PRO
3	2-B	383	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	2-B	445	ARG
3	2-B	498	LEU
3	2-B	499	GLY
3	2-B	551	GLU
3	2-B	740	PRO
3	2-B	741	VAL
3	2-B	764	THR
3	2-B	828	ASP
3	2-B	838	HIS
3	2-B	862	PHE
3	2-B	873	ASN
3	2-B	939	THR
4	2-C	88	THR
4	2-C	219	LYS
4	2-C	428	PHE
4	2-C	465	PRO
4	2-C	503	GLU
4	2-C	504	GLY
4	2-C	558	ASP
4	2-C	665	GLU
4	2-C	787	SER
4	2-C	793	GLU
4	2-C	797	LEU
5	2-D	24	MET
5	2-D	25	THR
5	2-D	42	THR
5	2-D	98	GLU
5	2-D	136	MET
7	2-G	96	SER
7	2-G	98	ILE
7	2-G	105	VAL
7	2-G	116	LYS
7	2-G	216	SER
7	2-G	278	PRO
7	2-G	310	THR
7	2-G	463	GLY
7	2-G	467	ASN
7	2-G	522	ASN
7	2-G	633	SER
7	2-G	718	THR
6	2-R	72	ASP
6	2-R	82	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	2-R	84	ASN
6	2-R	95	ASN
6	2-R	132	GLU
6	2-R	133	ALA
8	2-Z	73	ILE
7	2-K	38	PRO
7	2-K	116	LYS
7	2-K	245	GLY
7	2-K	297	SER
7	2-K	633	SER
7	2-K	686	ALA
7	2-K	718	THR
8	2-L	12	THR
8	2-L	69	TYR
8	2-L	132	GLY
6	2-M	70	GLY
6	2-M	129	ASP
6	2-M	164	GLU
3	2-N	49	ASP
3	2-N	69	LYS
3	2-N	162	ARG
3	2-N	186	PRO
3	2-N	383	ASN
3	2-N	445	ARG
3	2-N	498	LEU
3	2-N	499	GLY
3	2-N	551	GLU
4	2-H	88	THR
4	2-H	219	LYS
4	2-H	428	PHE
4	2-H	465	PRO
4	2-H	503	GLU
4	2-H	504	GLY
4	2-H	558	ASP
4	2-H	665	GLU
5	2-I	24	MET
5	2-I	25	THR
5	2-I	42	THR
5	2-I	98	GLU
5	2-I	136	MET
1	3-A	10	ALA
1	3-A	185	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	3-A	282	THR
1	3-A	290	ASP
1	3-A	345	ASP
1	3-A	373	ALA
1	3-A	425	ARG
1	3-A	498	ALA
1	3-A	546	SER
1	3-A	564	LEU
1	3-A	572	ARG
1	3-A	622	GLY
1	3-A	624	SER
1	3-A	632	LYS
1	3-A	672	ASN
1	3-A	787	ASP
1	3-A	800	PRO
1	3-A	1178	ARG
3	3-B	49	ASP
3	3-B	69	LYS
3	3-B	162	ARG
3	3-B	186	PRO
3	3-B	383	ASN
3	3-B	445	ARG
3	3-B	498	LEU
3	3-B	499	GLY
3	3-B	551	GLU
3	3-B	740	PRO
3	3-B	741	VAL
3	3-B	751	GLN
3	3-B	764	THR
3	3-B	828	ASP
3	3-B	838	HIS
3	3-B	862	PHE
3	3-B	873	ASN
3	3-B	939	THR
4	3-C	88	THR
4	3-C	219	LYS
4	3-C	428	PHE
4	3-C	465	PRO
4	3-C	503	GLU
4	3-C	504	GLY
4	3-C	558	ASP
4	3-C	665	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	3-C	787	SER
4	3-C	793	GLU
4	3-C	797	LEU
5	3-D	24	MET
5	3-D	25	THR
5	3-D	42	THR
5	3-D	98	GLU
5	3-D	136	MET
7	3-G	96	SER
7	3-G	98	ILE
7	3-G	105	VAL
7	3-G	116	LYS
7	3-G	216	SER
7	3-G	278	PRO
7	3-G	310	THR
7	3-G	463	GLY
7	3-G	467	ASN
7	3-G	522	ASN
7	3-G	633	SER
7	3-G	718	THR
6	3-R	72	ASP
6	3-R	82	TYR
6	3-R	84	ASN
6	3-R	95	ASN
6	3-R	132	GLU
6	3-R	133	ALA
8	3-Z	73	ILE
7	3-K	38	PRO
7	3-K	116	LYS
7	3-K	245	GLY
7	3-K	297	SER
7	3-K	633	SER
7	3-K	718	THR
8	3-L	12	THR
8	3-L	69	TYR
8	3-L	132	GLY
6	3-M	70	GLY
6	3-M	129	ASP
6	3-M	164	GLU
3	3-N	49	ASP
3	3-N	69	LYS
3	3-N	162	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	3-N	186	PRO
3	3-N	383	ASN
3	3-N	445	ARG
3	3-N	498	LEU
3	3-N	499	GLY
3	3-N	551	GLU
4	3-H	88	THR
4	3-H	219	LYS
4	3-H	428	PHE
4	3-H	465	PRO
4	3-H	503	GLU
4	3-H	504	GLY
4	3-H	558	ASP
4	3-H	665	GLU
5	3-I	24	MET
5	3-I	25	THR
5	3-I	42	THR
5	3-I	98	GLU
5	3-I	136	MET
1	1-A	61	LYS
1	1-A	62	GLN
1	1-A	168	ARG
1	1-A	176	ALA
1	1-A	183	GLY
1	1-A	218	PRO
1	1-A	251	ASN
1	1-A	323	ARG
1	1-A	340	PHE
1	1-A	349	SER
1	1-A	362	LYS
1	1-A	411	LYS
1	1-A	433	HIS
1	1-A	481	ARG
1	1-A	527	ASN
1	1-A	555	THR
1	1-A	585	CYS
1	1-A	686	ASN
1	1-A	731	GLY
1	1-A	755	LYS
3	1-B	216	ASP
3	1-B	779	GLY
3	1-B	871	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	1-C	140	GLY
4	1-C	156	ASN
4	1-C	250	ASP
4	1-C	259	SER
4	1-C	351	CYS
4	1-C	408	SER
4	1-C	454	ASN
4	1-C	708	ASN
4	1-C	763	PRO
5	1-D	46	HIS
5	1-D	138	SER
6	1-F	47	PRO
6	1-F	84	ASN
6	1-F	149	ARG
7	1-G	170	SER
7	1-G	282	ALA
7	1-G	297	SER
7	1-G	391	PRO
7	1-G	393	LYS
7	1-G	445	ASP
7	1-G	447	GLU
7	1-G	504	GLU
7	1-G	505	MET
7	1-G	628	PRO
7	1-G	641	GLU
7	1-G	687	TYR
7	1-G	720	VAL
7	1-G	761	ALA
6	1-R	114	ASP
8	1-Z	147	ALA
7	1-K	96	SER
7	1-K	248	ASP
7	1-K	628	PRO
7	1-K	641	GLU
7	1-K	687	TYR
7	1-K	720	VAL
7	1-K	761	ALA
8	1-L	36	PRO
6	1-M	127	LYS
6	1-M	135	SER
6	1-M	165	GLY
3	1-N	216	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	1-H	140	GLY
4	1-H	156	ASN
4	1-H	250	ASP
4	1-H	259	SER
4	1-H	351	CYS
4	1-H	408	SER
4	1-H	454	ASN
4	1-H	708	ASN
5	1-I	46	HIS
5	1-I	138	SER
6	1-J	47	PRO
6	1-J	84	ASN
6	1-J	149	ARG
1	2-A	61	LYS
1	2-A	62	GLN
1	2-A	168	ARG
1	2-A	176	ALA
1	2-A	183	GLY
1	2-A	218	PRO
1	2-A	251	ASN
1	2-A	323	ARG
1	2-A	340	PHE
1	2-A	349	SER
1	2-A	362	LYS
1	2-A	411	LYS
1	2-A	433	HIS
1	2-A	481	ARG
1	2-A	527	ASN
1	2-A	555	THR
1	2-A	585	CYS
1	2-A	686	ASN
1	2-A	731	GLY
1	2-A	755	LYS
3	2-B	216	ASP
3	2-B	751	GLN
3	2-B	779	GLY
3	2-B	871	ASN
4	2-C	140	GLY
4	2-C	156	ASN
4	2-C	250	ASP
4	2-C	259	SER
4	2-C	351	CYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	2-C	408	SER
4	2-C	454	ASN
4	2-C	708	ASN
4	2-C	763	PRO
5	2-D	46	HIS
5	2-D	138	SER
6	2-F	47	PRO
6	2-F	84	ASN
6	2-F	149	ARG
7	2-G	170	SER
7	2-G	282	ALA
7	2-G	297	SER
7	2-G	391	PRO
7	2-G	393	LYS
7	2-G	445	ASP
7	2-G	447	GLU
7	2-G	504	GLU
7	2-G	505	MET
7	2-G	628	PRO
7	2-G	641	GLU
7	2-G	687	TYR
7	2-G	720	VAL
7	2-G	761	ALA
6	2-R	114	ASP
8	2-Z	147	ALA
7	2-K	96	SER
7	2-K	248	ASP
7	2-K	628	PRO
7	2-K	641	GLU
7	2-K	687	TYR
7	2-K	720	VAL
7	2-K	761	ALA
8	2-L	36	PRO
6	2-M	127	LYS
6	2-M	135	SER
6	2-M	165	GLY
3	2-N	216	ASP
4	2-H	140	GLY
4	2-H	156	ASN
4	2-H	250	ASP
4	2-H	259	SER
4	2-H	351	CYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	2-H	408	SER
4	2-H	454	ASN
4	2-H	708	ASN
5	2-I	46	HIS
5	2-I	138	SER
6	2-J	47	PRO
6	2-J	84	ASN
6	2-J	149	ARG
1	3-A	61	LYS
1	3-A	62	GLN
1	3-A	168	ARG
1	3-A	176	ALA
1	3-A	183	GLY
1	3-A	218	PRO
1	3-A	251	ASN
1	3-A	323	ARG
1	3-A	340	PHE
1	3-A	349	SER
1	3-A	362	LYS
1	3-A	411	LYS
1	3-A	433	HIS
1	3-A	481	ARG
1	3-A	527	ASN
1	3-A	555	THR
1	3-A	585	CYS
1	3-A	686	ASN
1	3-A	731	GLY
1	3-A	755	LYS
3	3-B	216	ASP
3	3-B	779	GLY
3	3-B	871	ASN
4	3-C	140	GLY
4	3-C	156	ASN
4	3-C	250	ASP
4	3-C	259	SER
4	3-C	351	CYS
4	3-C	408	SER
4	3-C	454	ASN
4	3-C	708	ASN
4	3-C	763	PRO
5	3-D	46	HIS
5	3-D	138	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	3-F	47	PRO
6	3-F	84	ASN
6	3-F	149	ARG
7	3-G	170	SER
7	3-G	282	ALA
7	3-G	297	SER
7	3-G	391	PRO
7	3-G	393	LYS
7	3-G	445	ASP
7	3-G	447	GLU
7	3-G	504	GLU
7	3-G	505	MET
7	3-G	628	PRO
7	3-G	641	GLU
7	3-G	687	TYR
7	3-G	720	VAL
7	3-G	761	ALA
6	3-R	114	ASP
8	3-Z	147	ALA
7	3-K	96	SER
7	3-K	248	ASP
7	3-K	628	PRO
7	3-K	641	GLU
7	3-K	687	TYR
7	3-K	720	VAL
7	3-K	761	ALA
8	3-L	36	PRO
6	3-M	127	LYS
6	3-M	135	SER
6	3-M	165	GLY
3	3-N	216	ASP
4	3-H	140	GLY
4	3-H	156	ASN
4	3-H	250	ASP
4	3-H	259	SER
4	3-H	351	CYS
4	3-H	408	SER
4	3-H	454	ASN
4	3-H	708	ASN
5	3-I	46	HIS
5	3-I	138	SER
6	3-J	47	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	3-J	84	ASN
6	3-J	149	ARG
1	1-A	73	TYR
1	1-A	103	HIS
1	1-A	170	LYS
1	1-A	205	ASP
1	1-A	236	GLU
1	1-A	330	GLY
1	1-A	398	LYS
1	1-A	424	ASN
1	1-A	488	ILE
1	1-A	556	GLY
1	1-A	783	GLU
1	1-A	786	PRO
1	1-A	801	ILE
2	1-E	113	ASP
3	1-B	128	ASN
3	1-B	384	ASN
3	1-B	425	SER
3	1-B	447	ASP
3	1-B	481	CYS
3	1-B	504	VAL
3	1-B	752	TYR
3	1-B	768	LEU
3	1-B	780	ASP
3	1-B	827	SER
3	1-B	837	ILE
3	1-B	901	GLY
3	1-B	928	LYS
4	1-C	165	ARG
4	1-C	321	GLU
4	1-C	346	LYS
4	1-C	401	SER
4	1-C	409	ASN
4	1-C	431	GLU
4	1-C	662	VAL
4	1-C	821	ALA
6	1-F	153	TRP
7	1-G	23	GLU
7	1-G	428	ASN
7	1-G	623	PHE
6	1-R	44	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	1-R	129	ASP
6	1-R	158	THR
8	1-Z	34	THR
7	1-K	76	LEU
7	1-K	623	PHE
8	1-L	86	ASN
6	1-M	119	ALA
6	1-M	133	ALA
3	1-N	128	ASN
3	1-N	384	ASN
3	1-N	425	SER
3	1-N	447	ASP
3	1-N	481	CYS
3	1-N	504	VAL
4	1-H	165	ARG
4	1-H	321	GLU
4	1-H	346	LYS
4	1-H	401	SER
4	1-H	409	ASN
4	1-H	431	GLU
4	1-H	662	VAL
6	1-J	153	TRP
1	2-A	73	TYR
1	2-A	103	HIS
1	2-A	170	LYS
1	2-A	205	ASP
1	2-A	236	GLU
1	2-A	330	GLY
1	2-A	398	LYS
1	2-A	424	ASN
1	2-A	488	ILE
1	2-A	556	GLY
1	2-A	783	GLU
1	2-A	786	PRO
1	2-A	801	ILE
2	2-E	113	ASP
3	2-B	128	ASN
3	2-B	384	ASN
3	2-B	425	SER
3	2-B	447	ASP
3	2-B	481	CYS
3	2-B	504	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	2-B	752	TYR
3	2-B	768	LEU
3	2-B	780	ASP
3	2-B	827	SER
3	2-B	837	ILE
3	2-B	901	GLY
3	2-B	928	LYS
4	2-C	165	ARG
4	2-C	321	GLU
4	2-C	346	LYS
4	2-C	401	SER
4	2-C	409	ASN
4	2-C	431	GLU
4	2-C	662	VAL
4	2-C	821	ALA
6	2-F	153	TRP
7	2-G	23	GLU
7	2-G	226	PRO
7	2-G	428	ASN
7	2-G	623	PHE
6	2-R	44	THR
6	2-R	129	ASP
8	2-Z	34	THR
7	2-K	76	LEU
7	2-K	623	PHE
8	2-L	86	ASN
6	2-M	119	ALA
6	2-M	133	ALA
3	2-N	128	ASN
3	2-N	384	ASN
3	2-N	425	SER
3	2-N	447	ASP
3	2-N	481	CYS
3	2-N	504	VAL
4	2-H	165	ARG
4	2-H	321	GLU
4	2-H	346	LYS
4	2-H	401	SER
4	2-H	409	ASN
4	2-H	431	GLU
4	2-H	662	VAL
6	2-J	153	TRP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	3-A	73	TYR
1	3-A	103	HIS
1	3-A	170	LYS
1	3-A	205	ASP
1	3-A	236	GLU
1	3-A	330	GLY
1	3-A	398	LYS
1	3-A	424	ASN
1	3-A	488	ILE
1	3-A	556	GLY
1	3-A	783	GLU
1	3-A	786	PRO
1	3-A	801	ILE
2	3-E	113	ASP
3	3-B	128	ASN
3	3-B	384	ASN
3	3-B	425	SER
3	3-B	447	ASP
3	3-B	481	CYS
3	3-B	504	VAL
3	3-B	752	TYR
3	3-B	768	LEU
3	3-B	780	ASP
3	3-B	837	ILE
3	3-B	901	GLY
3	3-B	928	LYS
4	3-C	165	ARG
4	3-C	321	GLU
4	3-C	346	LYS
4	3-C	401	SER
4	3-C	409	ASN
4	3-C	431	GLU
4	3-C	662	VAL
4	3-C	821	ALA
6	3-F	153	TRP
7	3-G	23	GLU
7	3-G	226	PRO
7	3-G	428	ASN
7	3-G	623	PHE
6	3-R	44	THR
6	3-R	129	ASP
6	3-R	158	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	3-Z	34	THR
7	3-K	76	LEU
7	3-K	623	PHE
8	3-L	86	ASN
6	3-M	119	ALA
6	3-M	133	ALA
3	3-N	128	ASN
3	3-N	384	ASN
3	3-N	425	SER
3	3-N	447	ASP
3	3-N	481	CYS
3	3-N	504	VAL
4	3-H	165	ARG
4	3-H	321	GLU
4	3-H	346	LYS
4	3-H	401	SER
4	3-H	409	ASN
4	3-H	431	GLU
4	3-H	662	VAL
6	3-J	153	TRP
1	1-A	182	ARG
1	1-A	195	ALA
1	1-A	364	PRO
1	1-A	452	ASN
1	1-A	517	LYS
1	1-A	531	LYS
1	1-A	621	VAL
1	1-A	644	ASP
1	1-A	810	LEU
3	1-B	270	SER
3	1-B	347	PRO
3	1-B	825	ALA
4	1-C	242	PRO
4	1-C	284	ASN
4	1-C	473	SER
4	1-C	737	LYS
5	1-D	40	MET
5	1-D	43	GLY
6	1-F	78	TRP
7	1-G	99	ALA
7	1-G	226	PRO
7	1-G	248	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	1-K	40	ASN
7	1-K	81	ASP
8	1-L	63	GLU
6	1-M	151	ARG
3	1-N	270	SER
3	1-N	347	PRO
4	1-H	242	PRO
4	1-H	284	ASN
4	1-H	473	SER
5	1-I	40	MET
5	1-I	43	GLY
6	1-J	78	TRP
1	2-A	182	ARG
1	2-A	195	ALA
1	2-A	364	PRO
1	2-A	452	ASN
1	2-A	517	LYS
1	2-A	531	LYS
1	2-A	621	VAL
1	2-A	644	ASP
1	2-A	810	LEU
3	2-B	270	SER
3	2-B	347	PRO
3	2-B	825	ALA
4	2-C	242	PRO
4	2-C	284	ASN
4	2-C	473	SER
4	2-C	737	LYS
5	2-D	40	MET
5	2-D	43	GLY
6	2-F	78	TRP
7	2-G	99	ALA
7	2-G	248	ASP
6	2-R	158	THR
7	2-K	40	ASN
7	2-K	81	ASP
8	2-L	63	GLU
6	2-M	151	ARG
3	2-N	270	SER
3	2-N	347	PRO
4	2-H	242	PRO
4	2-H	284	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	2-H	473	SER
5	2-I	40	MET
5	2-I	43	GLY
6	2-J	78	TRP
1	3-A	182	ARG
1	3-A	195	ALA
1	3-A	364	PRO
1	3-A	452	ASN
1	3-A	517	LYS
1	3-A	531	LYS
1	3-A	621	VAL
1	3-A	644	ASP
1	3-A	810	LEU
3	3-B	270	SER
3	3-B	347	PRO
3	3-B	825	ALA
3	3-B	827	SER
4	3-C	242	PRO
4	3-C	284	ASN
4	3-C	473	SER
4	3-C	737	LYS
5	3-D	40	MET
5	3-D	43	GLY
6	3-F	78	TRP
7	3-G	99	ALA
7	3-G	248	ASP
7	3-K	40	ASN
7	3-K	81	ASP
8	3-L	63	GLU
6	3-M	151	ARG
3	3-N	270	SER
3	3-N	347	PRO
4	3-H	242	PRO
4	3-H	284	ASN
4	3-H	473	SER
5	3-I	40	MET
5	3-I	43	GLY
6	3-J	78	TRP
1	1-A	643	LYS
1	1-A	802	MET
3	1-B	86	ASP
3	1-B	104	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	1-C	25	PRO
7	1-G	152	VAL
6	1-R	49	ILE
8	1-Z	54	ARG
7	1-K	37	THR
7	1-K	310	THR
7	1-K	694	PRO
3	1-N	86	ASP
3	1-N	104	THR
4	1-H	25	PRO
1	2-A	643	LYS
1	2-A	802	MET
3	2-B	86	ASP
3	2-B	104	THR
4	2-C	25	PRO
7	2-G	152	VAL
6	2-R	49	ILE
8	2-Z	54	ARG
7	2-K	37	THR
7	2-K	310	THR
7	2-K	694	PRO
3	2-N	86	ASP
3	2-N	104	THR
4	2-H	25	PRO
1	3-A	643	LYS
1	3-A	802	MET
3	3-B	86	ASP
3	3-B	104	THR
4	3-C	25	PRO
7	3-G	152	VAL
6	3-R	49	ILE
8	3-Z	54	ARG
7	3-K	37	THR
7	3-K	694	PRO
3	3-N	86	ASP
3	3-N	104	THR
4	3-H	25	PRO
4	1-C	312	GLY
7	1-K	274	ILE
4	1-H	312	GLY
4	2-C	312	GLY
7	2-K	274	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	2-H	312	GLY
4	3-C	312	GLY
7	3-K	274	ILE
4	3-H	312	GLY
1	1-A	22	PRO
1	1-A	503	VAL
1	1-A	615	VAL
2	1-E	213	SER
4	1-C	112	PRO
6	1-R	163	GLY
6	1-M	148	ILE
4	1-H	112	PRO
1	2-A	22	PRO
1	2-A	503	VAL
1	2-A	615	VAL
2	2-E	213	SER
4	2-C	112	PRO
6	2-R	163	GLY
6	2-M	148	ILE
4	2-H	112	PRO
1	3-A	22	PRO
1	3-A	503	VAL
1	3-A	615	VAL
2	3-E	213	SER
4	3-C	112	PRO
6	3-R	163	GLY
6	3-M	148	ILE
4	3-H	112	PRO
1	1-A	133	GLY
1	1-A	259	PRO
6	1-F	43	ILE
7	1-G	820	PRO
7	1-K	820	PRO
6	1-J	43	ILE
1	2-A	133	GLY
1	2-A	259	PRO
6	2-F	43	ILE
7	2-G	820	PRO
7	2-K	820	PRO
6	2-J	43	ILE
1	3-A	133	GLY
1	3-A	259	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	3-F	43	ILE
7	3-G	820	PRO
7	3-K	820	PRO
6	3-J	43	ILE
7	1-G	694	PRO
7	2-G	694	PRO
7	3-G	694	PRO
1	1-A	575	GLY
2	1-E	45	SER
3	1-B	516	LYS
3	1-N	516	LYS
2	2-E	45	SER
3	2-N	516	LYS
1	3-A	575	GLY
3	3-B	516	LYS
3	3-N	516	LYS

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 monosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-3722. These allow visual inspection of the internal detail of the map and identification of artifacts.

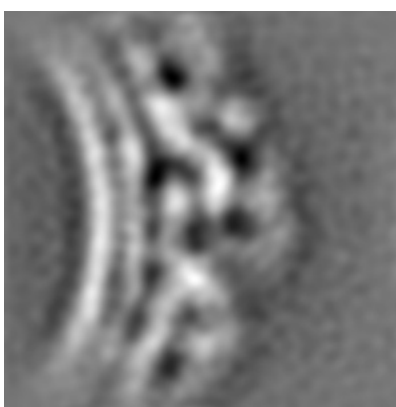
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

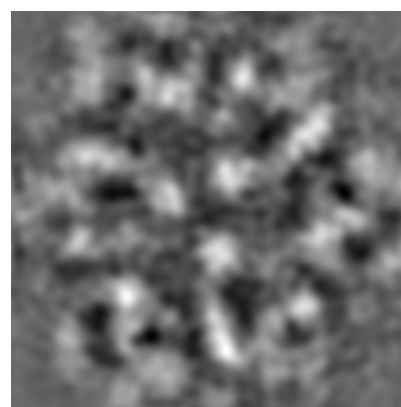
6.1.1 Primary map



X



Y



Z

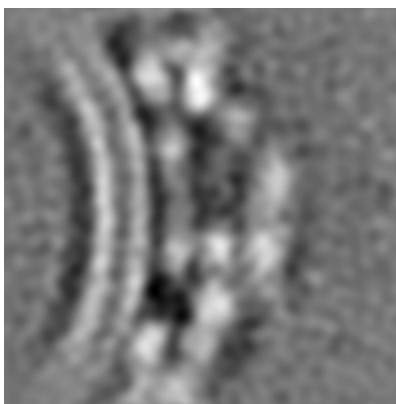
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

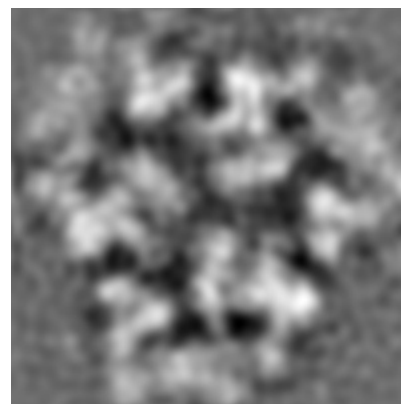
6.2.1 Primary map



X Index: 106



Y Index: 106



Z Index: 106

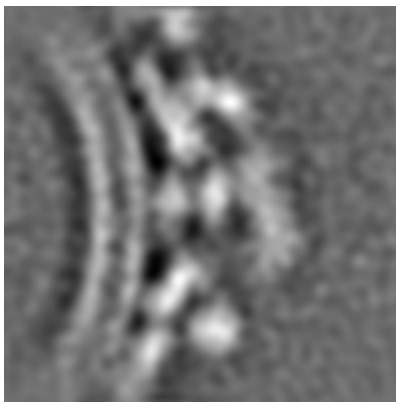
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

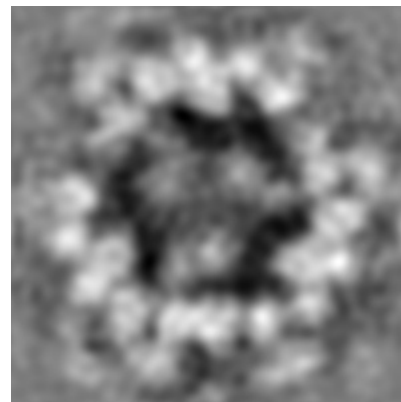
6.3.1 Primary map



X Index: 109



Y Index: 87



Z Index: 79

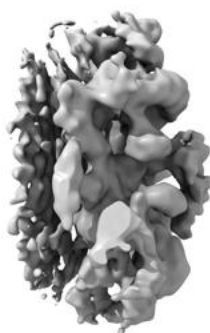
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views [i](#)

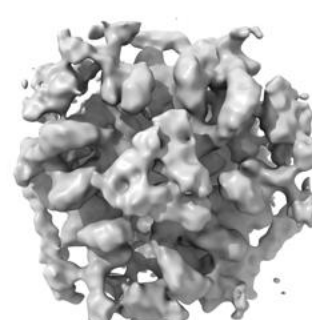
6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.03. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

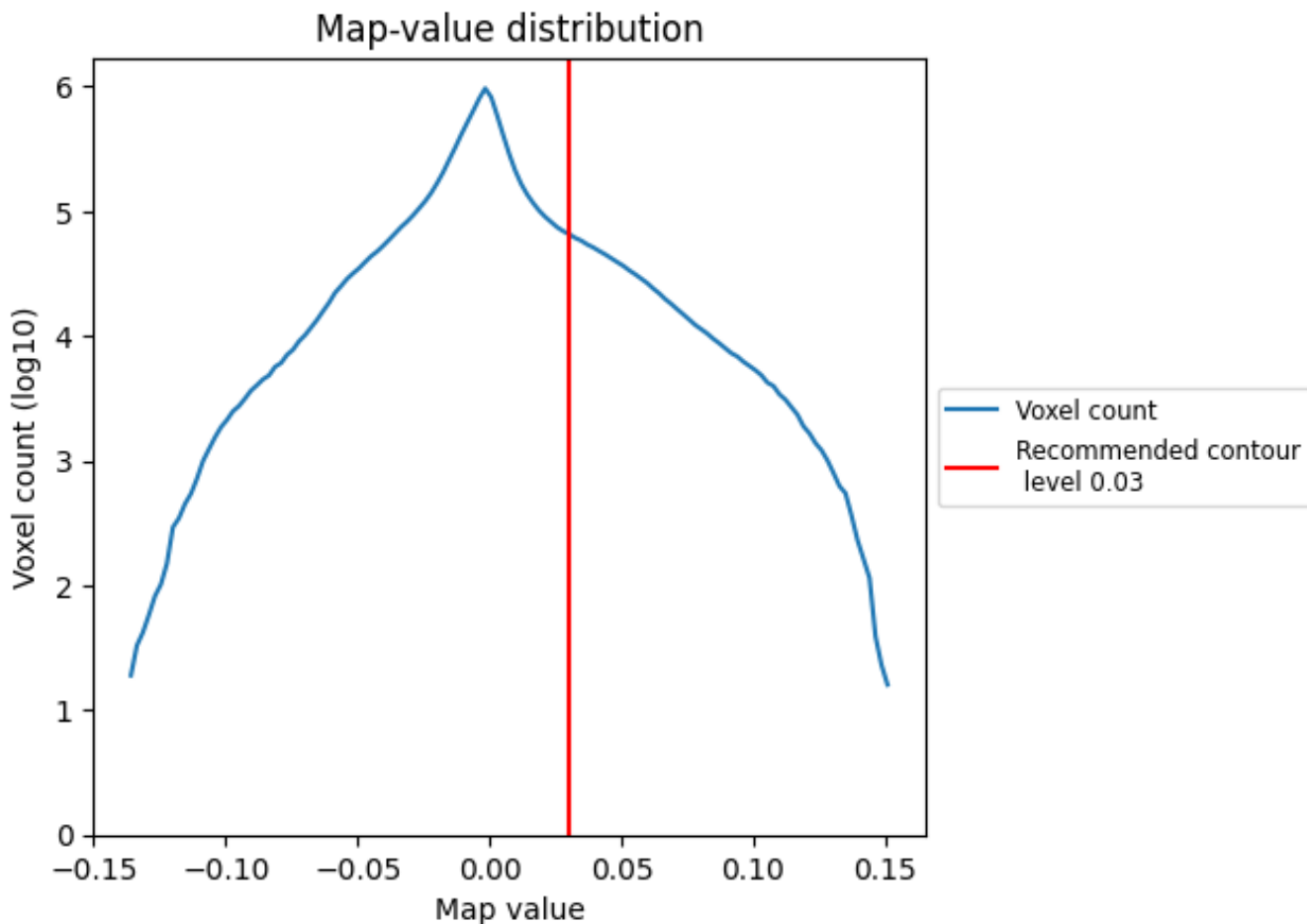
6.5 Mask visualisation

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

7 Map analysis [i](#)

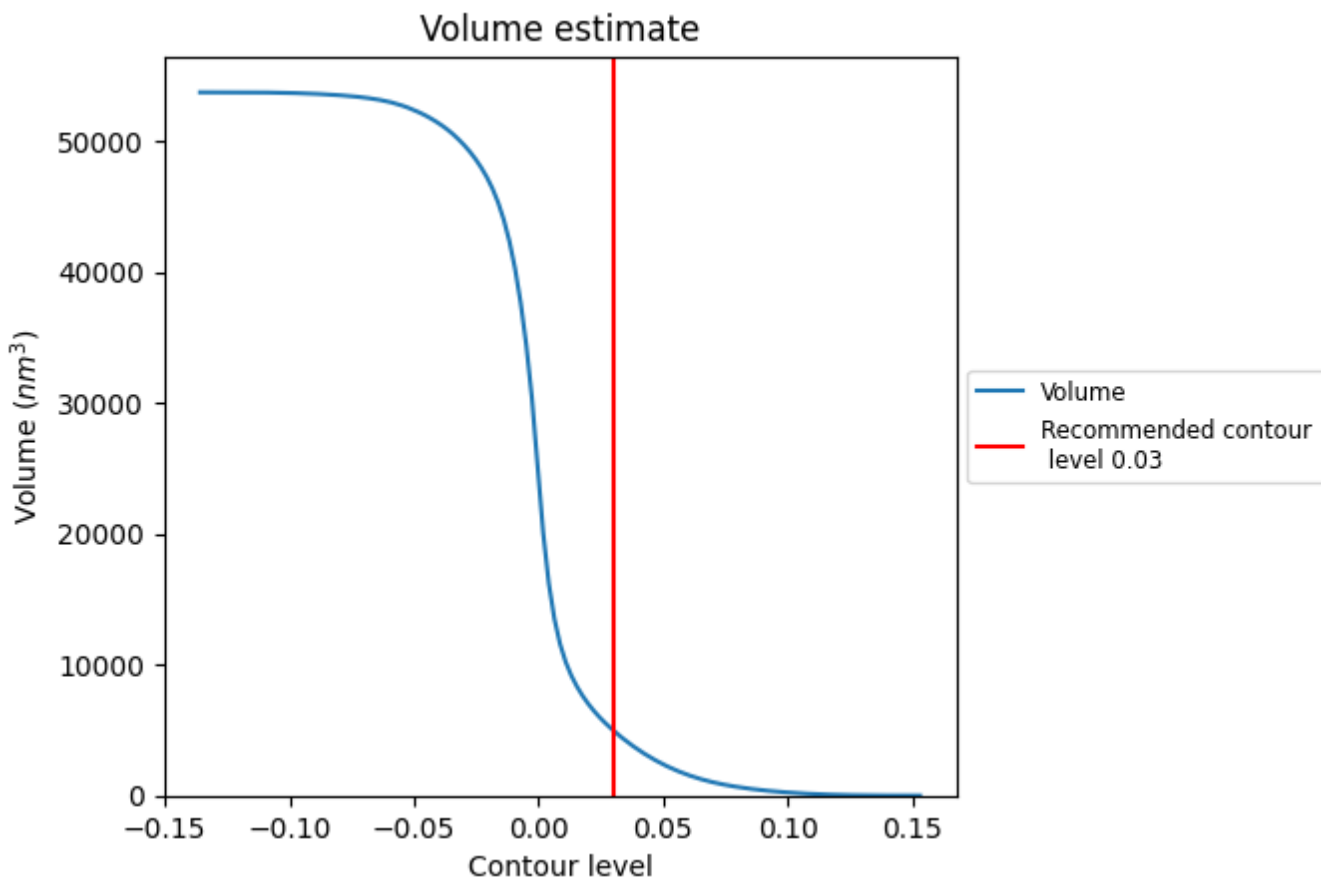
This section contains the results of statistical analysis of the map.

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.

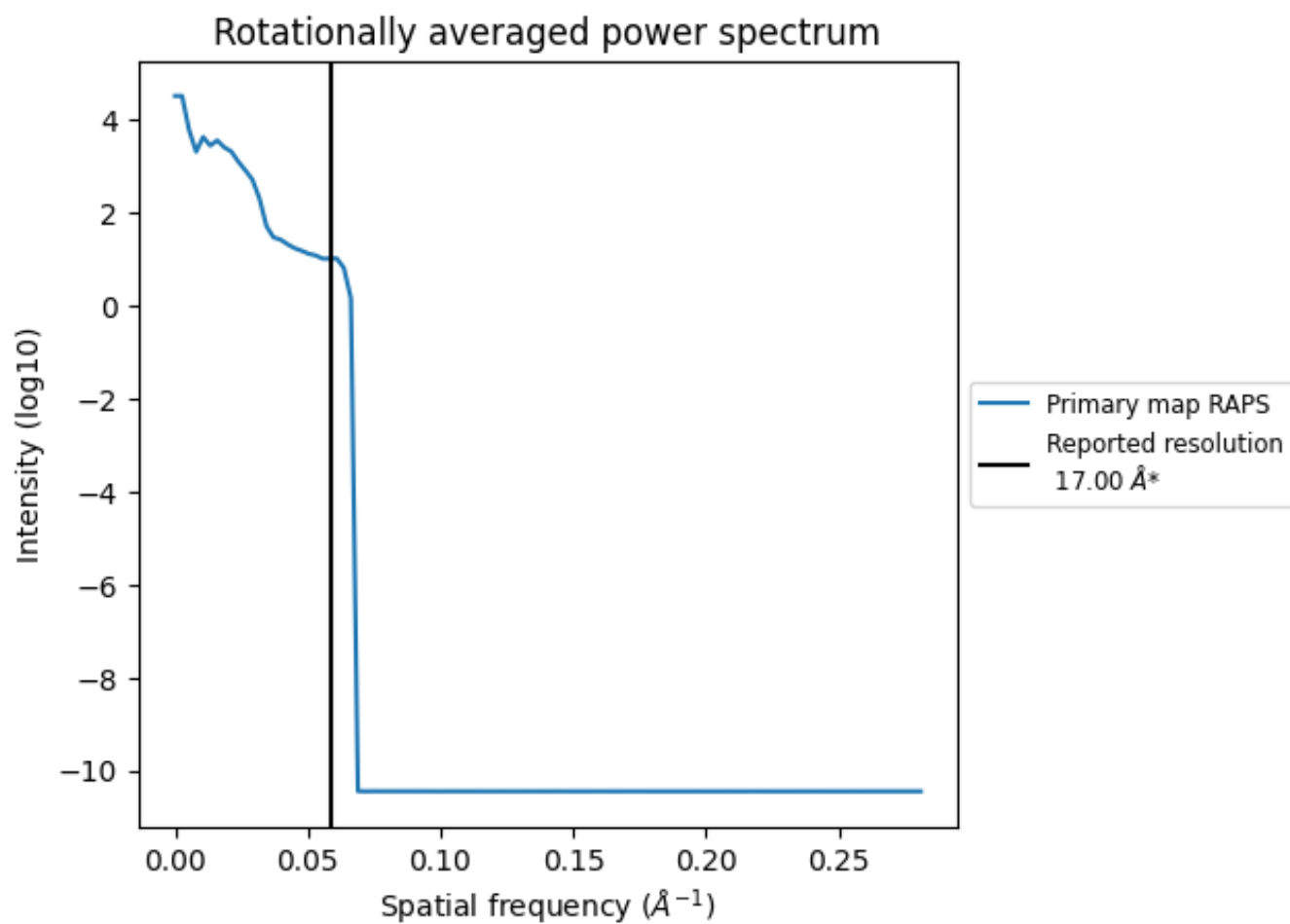
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 4989 nm^3 ; this corresponds to an approximate mass of 4507 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 [\(i\)](#)

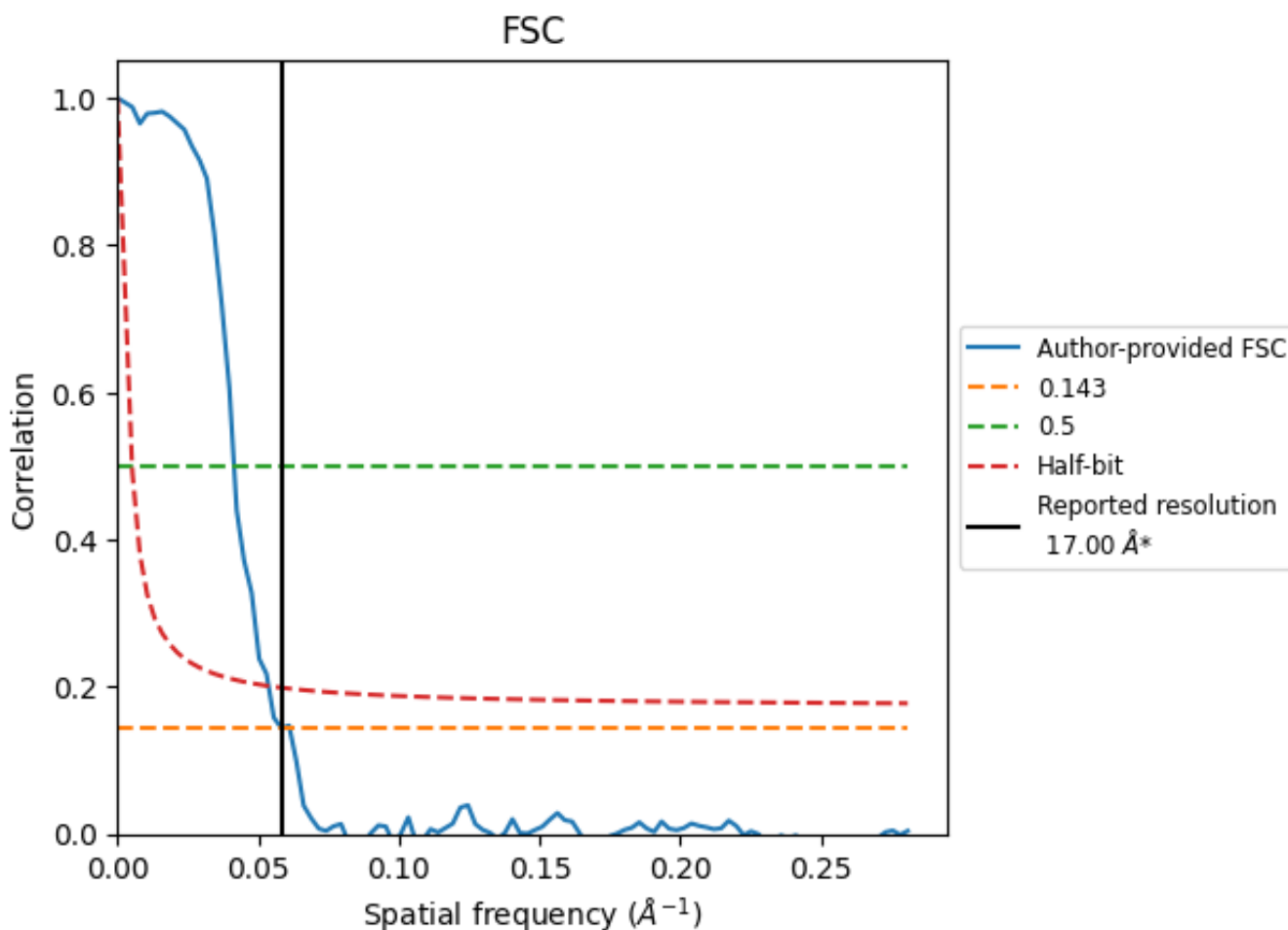


*Reported resolution corresponds to spatial frequency of 0.059 Å⁻¹

8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.059 Å⁻¹

8.2 Resolution estimates [i](#)

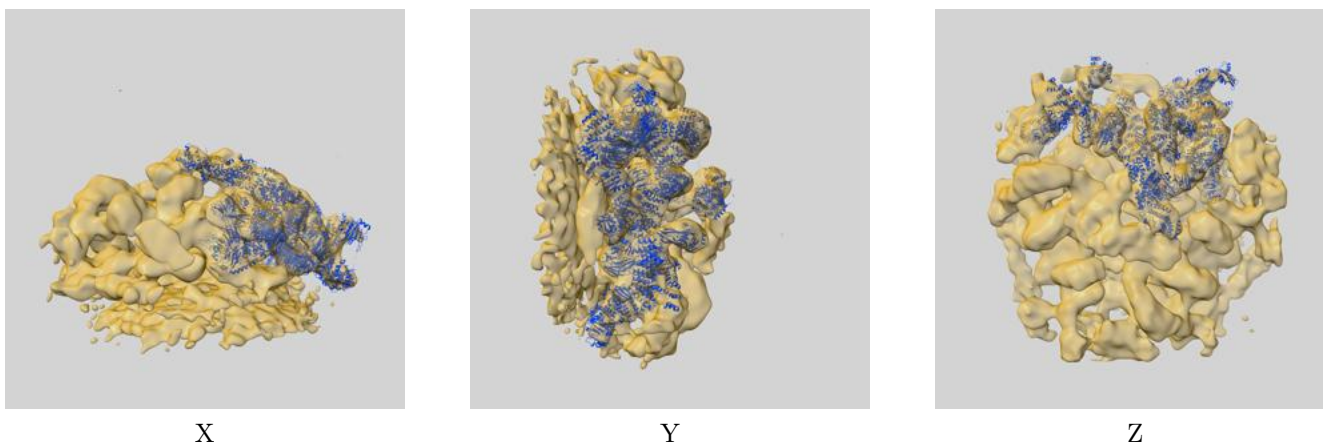
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	17.00	-	-
Author-provided FSC curve	16.34	24.15	18.62
Unmasked-calculated*	-	-	-

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-3722 and PDB model 5NZZ. Per-residue inclusion information can be found in section 3 on page 10.

9.1 Map-model overlay [i](#)

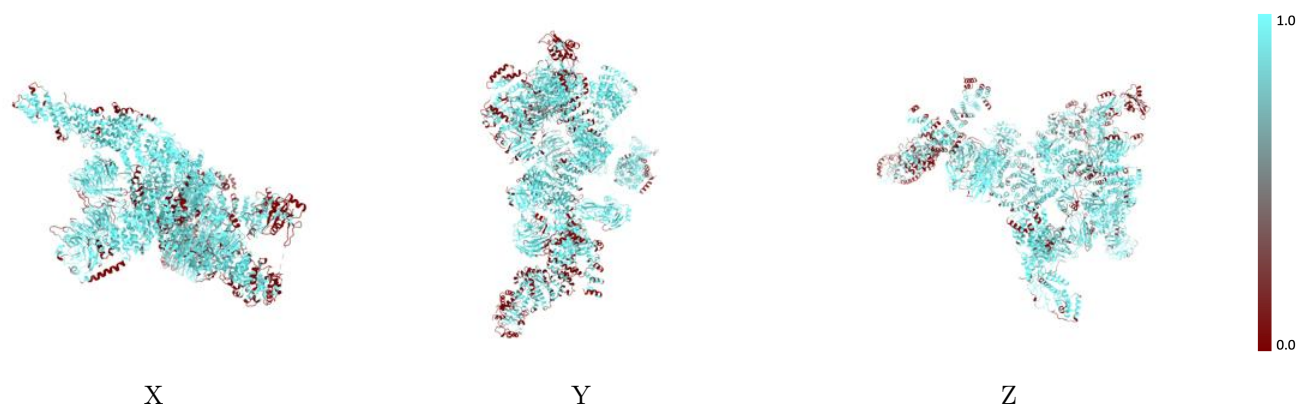


The images above show the 3D surface view of the map at the recommended contour level 0.03 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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

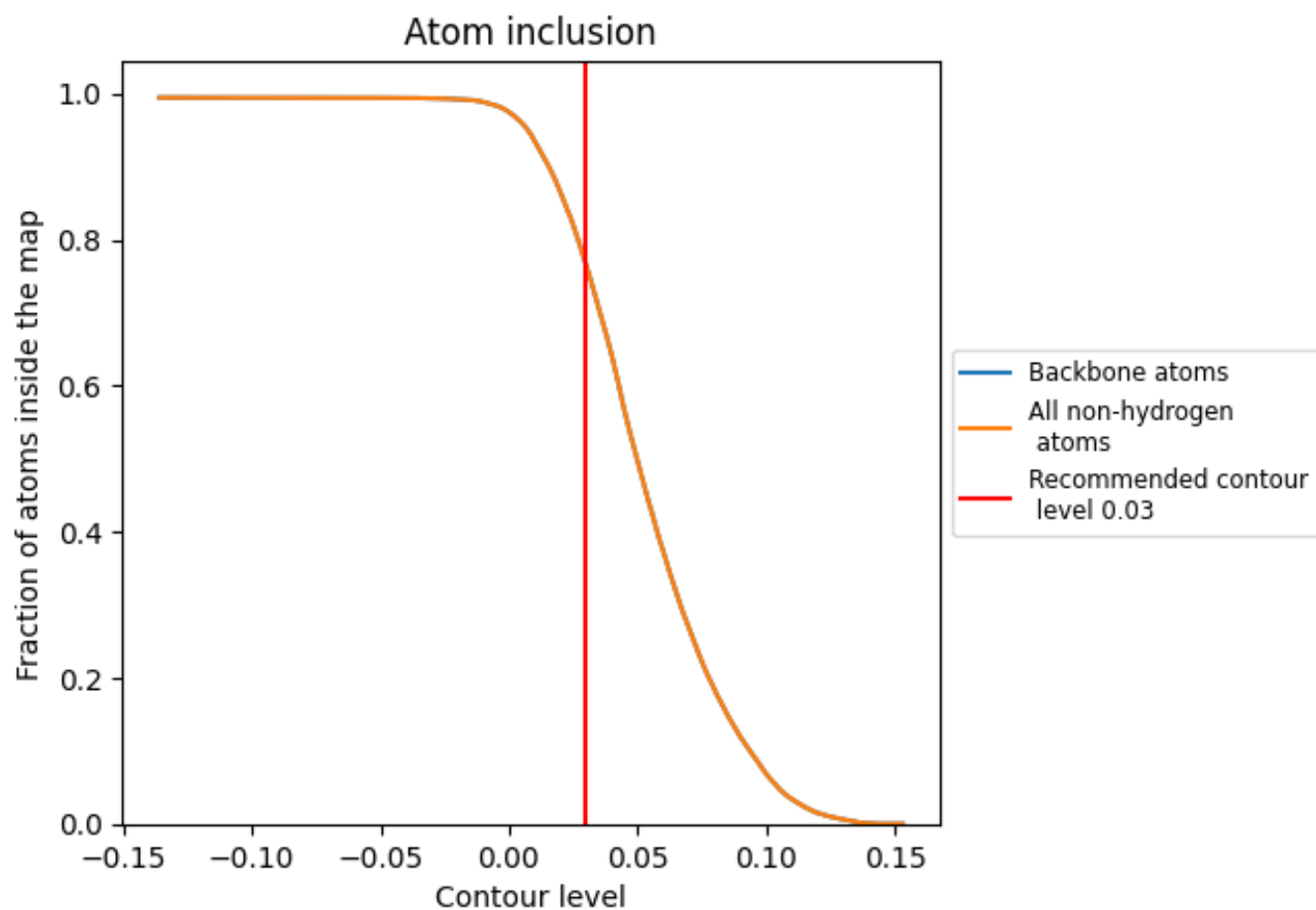
This section was not generated.

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 (0.03).


















9.4 Atom inclusion [i](#)



At the recommended contour level, 77% of all backbone atoms, 77% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary [i](#)

The table lists the average atom inclusion at the recommended contour level (0.03) and Q-score for the entire model and for each chain.

Chain	Atom inclusion
All	 0.7661
A	 0.8843
B	 0.7714
C	 0.8567
D	 0.7521
E	 0.7733
F	 0.8913
G	 0.9191
H	 0.7829
I	 0.3654
J	 0.3921
K	 0.5284
L	 0.5171
M	 0.8283
N	 0.5717
R	 0.8898
Z	 0.8468

