



Full wwPDB EM Validation Report ⓘ

Mar 25, 2026 – 08:12 AM UTC

PDB ID : 6H7W / pdb_00006h7w
EMDB ID : EMD-0154
Title : Model of retromer-Vps5 complex assembled on membrane.
Authors : Kovtun, O.; Leneva, N.; Ariotti, N.; Rohan, T.S.; Owen, D.J.; Briggs, J.A.G.;
Collins, B.M.
Deposited on : 2018-07-31
Resolution : 11.40 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.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

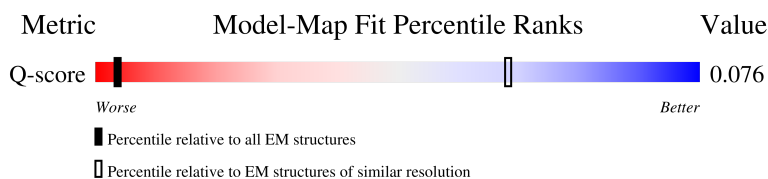
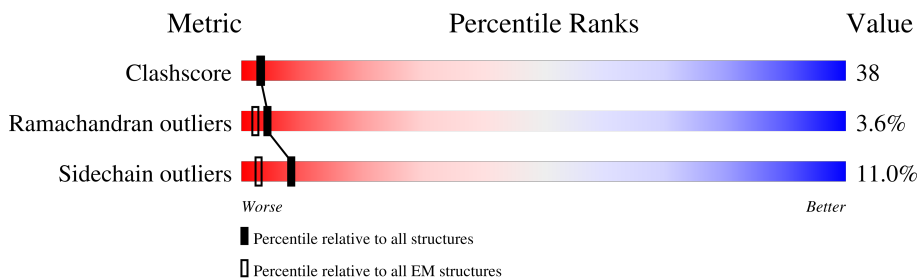
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 11.40 Å.

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



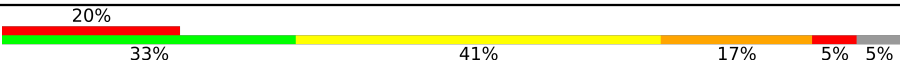
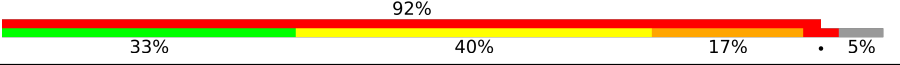
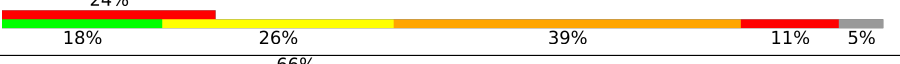
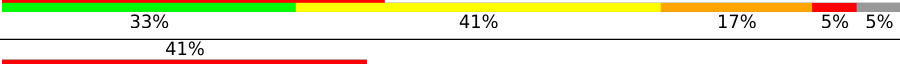
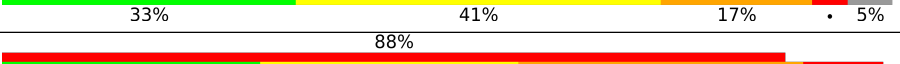
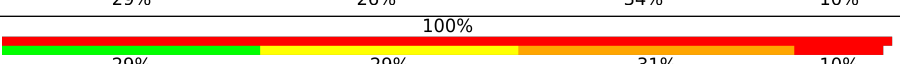
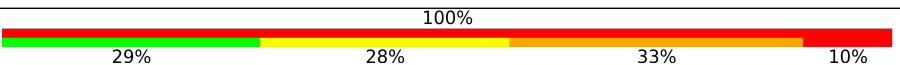
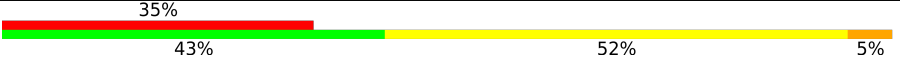
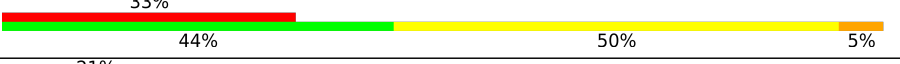
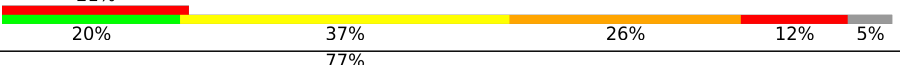
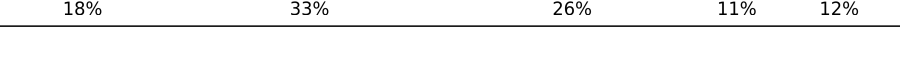
Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	91 (10.90 - 11.90)

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

Mol	Chain	Length	Quality of chain
1	C	292	9% 83% 16% .
1	J	292	9% 82% 18% .
2	A	368	20% 32% 40% 18% . 5%
2	B	368	25% 20% 26% 38% 11% 5%

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Mol	Chain	Length	Quality of chain
2	E	368	
2	F	368	
2	G	368	
2	H	368	
2	N	368	
2	P	368	
3	D	129	
3	K	129	
3	L	129	
3	V	129	
4	M	220	
4	O	220	
5	S	193	
5	T	193	
6	Q	846	
6	R	846	

2 Entry composition [i](#)

There are 6 unique types of molecules in this entry. The entry contains 95648 atoms, of which 45448 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 Vacuolar protein sorting-associated protein 26-like protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	J	292	Total	C	N	O	S	0	0
			2417	1550	416	442	9		
1	C	292	Total	C	N	O	S	0	0
			2417	1550	416	442	9		

- Molecule 2 is a protein called Putative vacuolar protein sorting-associated protein.

Mol	Chain	Residues	Atoms						AltConf	Trace
2	B	349	Total 5688	C 1796	H 2845	N 507	O 533	S 7	0	0
2	A	349	Total 5688	C 1796	H 2845	N 507	O 533	S 7	0	0
2	G	349	Total 5688	C 1796	H 2845	N 507	O 533	S 7	0	0
2	E	349	Total 5688	C 1796	H 2845	N 507	O 533	S 7	0	0
2	P	349	Total 5688	C 1796	H 2845	N 507	O 533	S 7	0	0
2	N	349	Total 5688	C 1796	H 2845	N 507	O 533	S 7	0	0
2	H	349	Total 5688	C 1796	H 2845	N 507	O 533	S 7	0	0
2	F	349	Total 5688	C 1796	H 2845	N 507	O 533	S 7	0	0

- Molecule 3 is a protein called Putative vacuolar protein sorting-associated protein.

Mol	Chain	Residues	Atoms						AltConf	Trace
3	D	129	Total	C	H	N	O	S	0	0
			2112	671	1059	190	191	1		
3	K	129	Total	C	H	N	O	S	0	0
			2112	671	1059	190	191	1		
3	V	129	Total	C	H	N	O	S	0	0
			2112	671	1059	190	191	1		

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Mol	Chain	Residues	Atoms						AltConf	Trace
3	L	129	Total	C	H	N	O	S	0	0
			2112	671	1059	190	191	1		

- Molecule 4 is a protein called Putative vacuolar protein sorting-associated protein.

Mol	Chain	Residues	Atoms						AltConf	Trace
4	O	220	Total	C	H	N	O	S	0	0
			3579	1125	1788	317	343	6		
4	M	220	Total	C	H	N	O	S	0	0
			3579	1125	1788	317	343	6		

- Molecule 5 is a protein called Vacuolar protein sorting-associated protein 29.

Mol	Chain	Residues	Atoms						AltConf	Trace
5	S	184	Total	C	H	N	O	S	0	0
			2893	925	1457	235	268	8		
5	T	184	Total	C	H	N	O	S	0	0
			2893	925	1457	235	268	8		

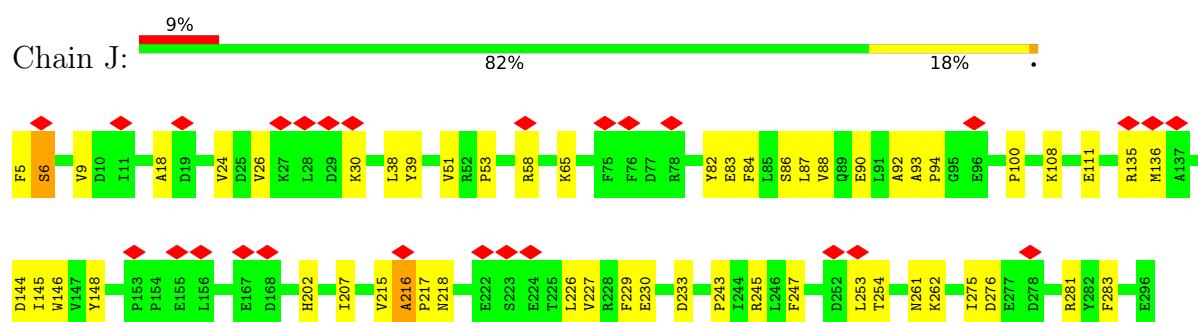
- Molecule 6 is a protein called Vacuolar protein sorting-associated protein 35.

Mol	Chain	Residues	Atoms						AltConf	Trace
6	Q	744	Total	C	H	N	O	S	0	0
			11959	3785	5981	1047	1115	31		
6	R	744	Total	C	H	N	O	S	0	0
			11959	3785	5981	1047	1115	31		

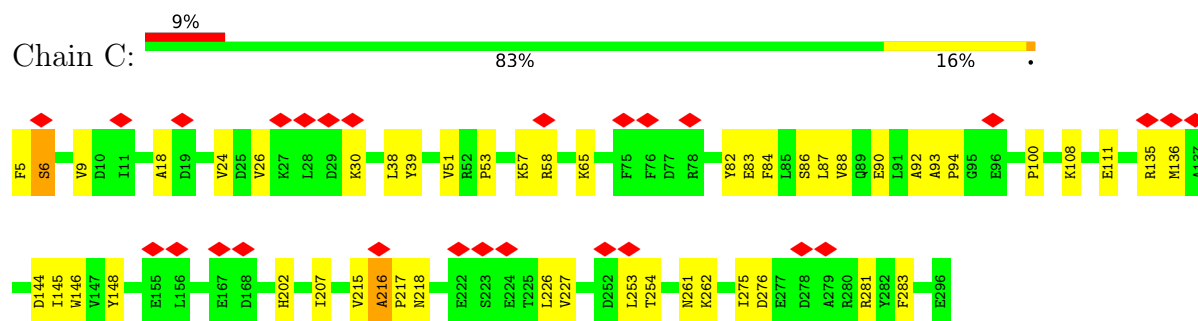
3 Residue-property plots

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

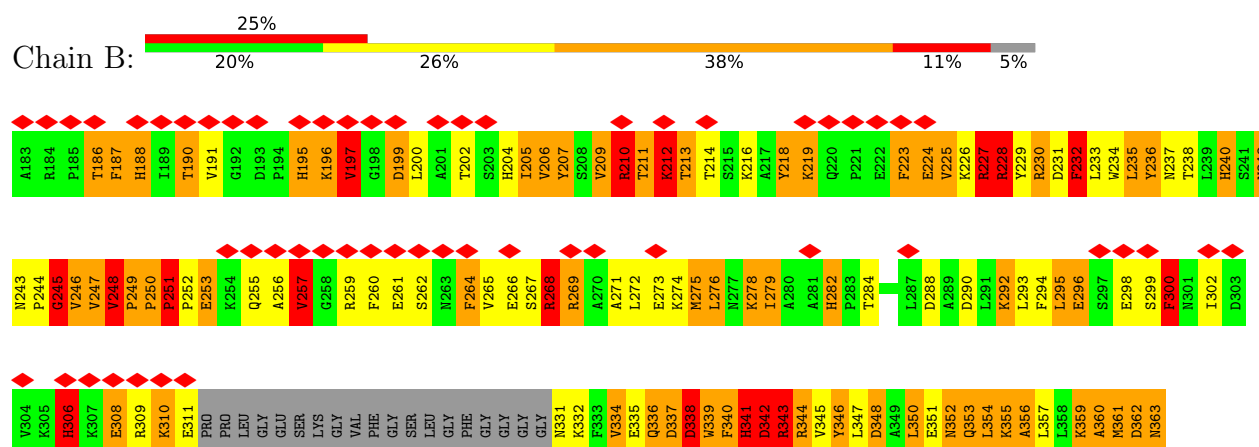
- Molecule 1: Vacuolar protein sorting-associated protein 26-like protein

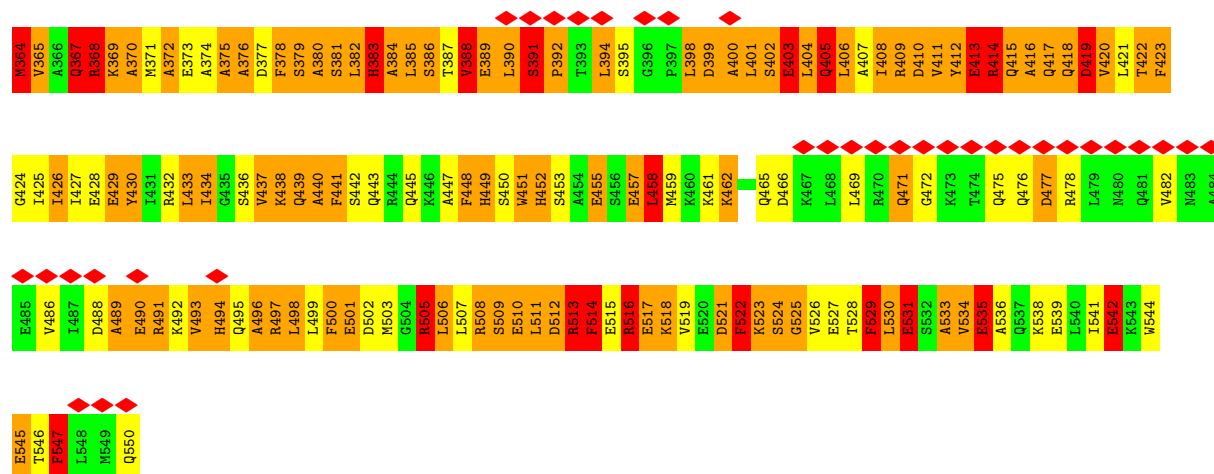


- Molecule 1: Vacuolar protein sorting-associated protein 26-like protein

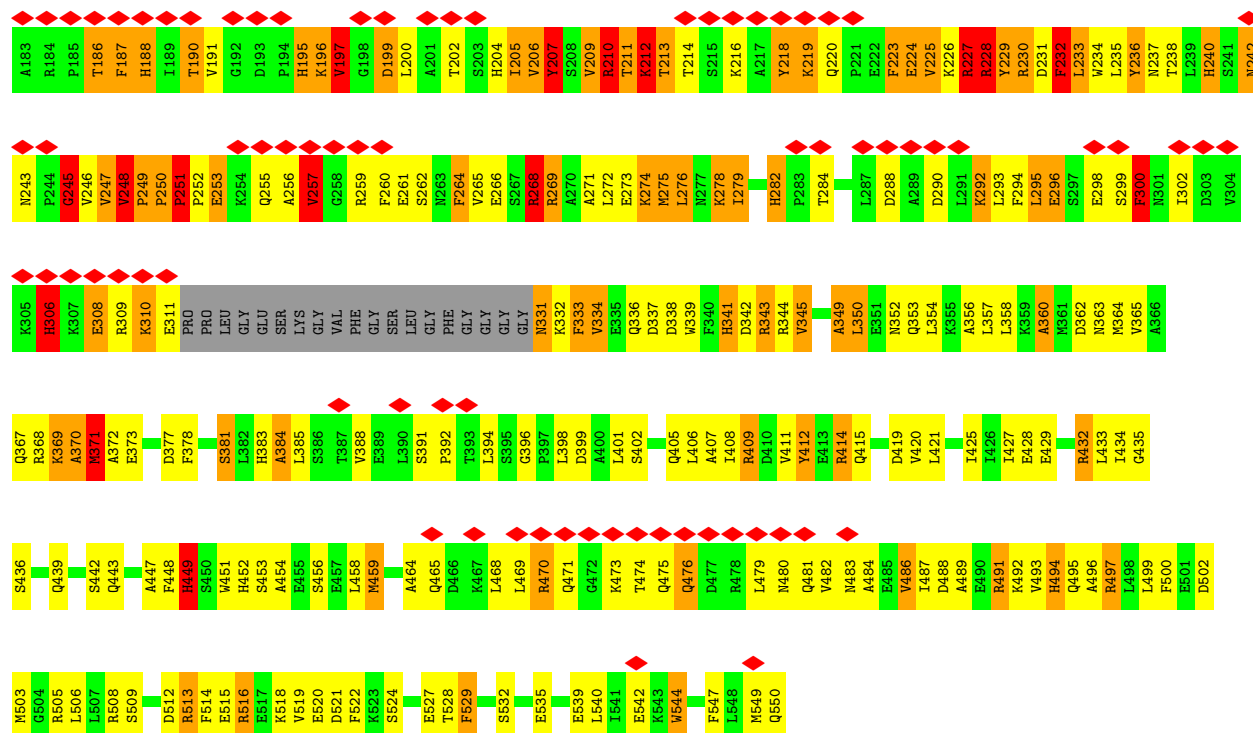


- Molecule 2: Putative vacuolar protein sorting-associated protein



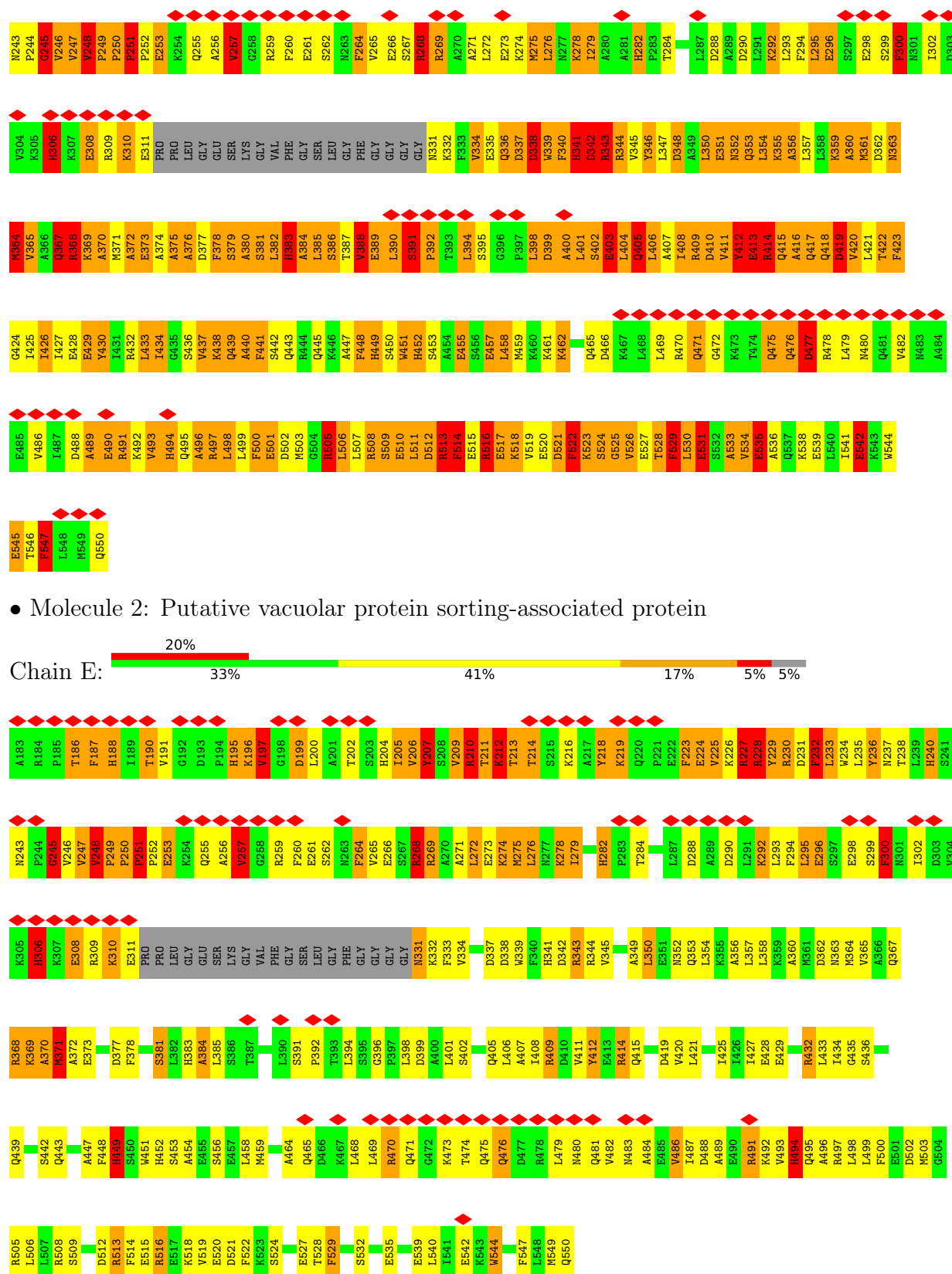


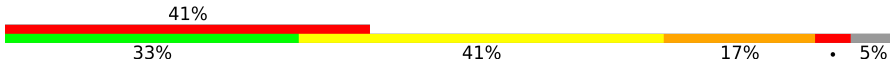
• Molecule 2: Putative vacuolar protein sorting-associated protein

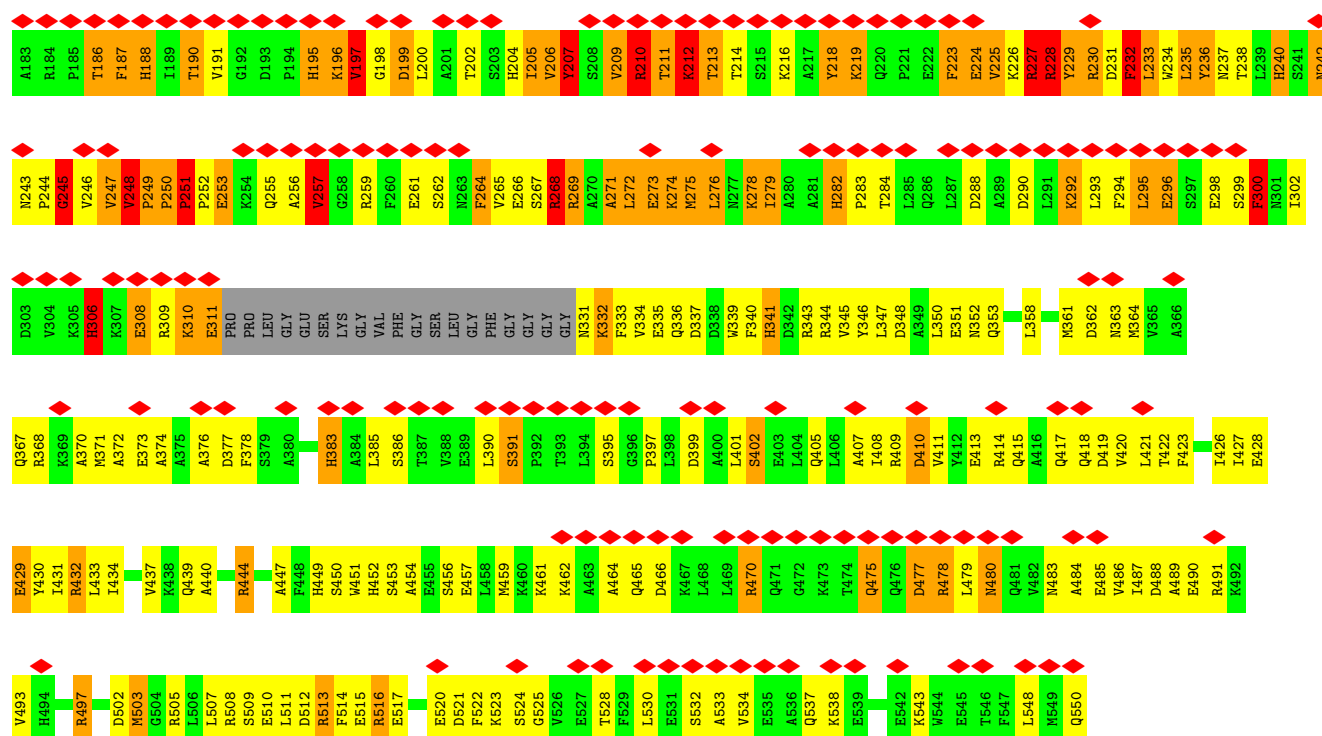


• Molecule 2: Putative vacuolar protein sorting-associated protein

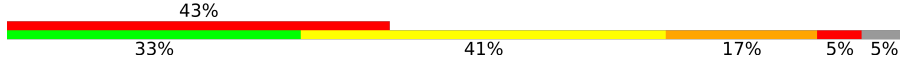


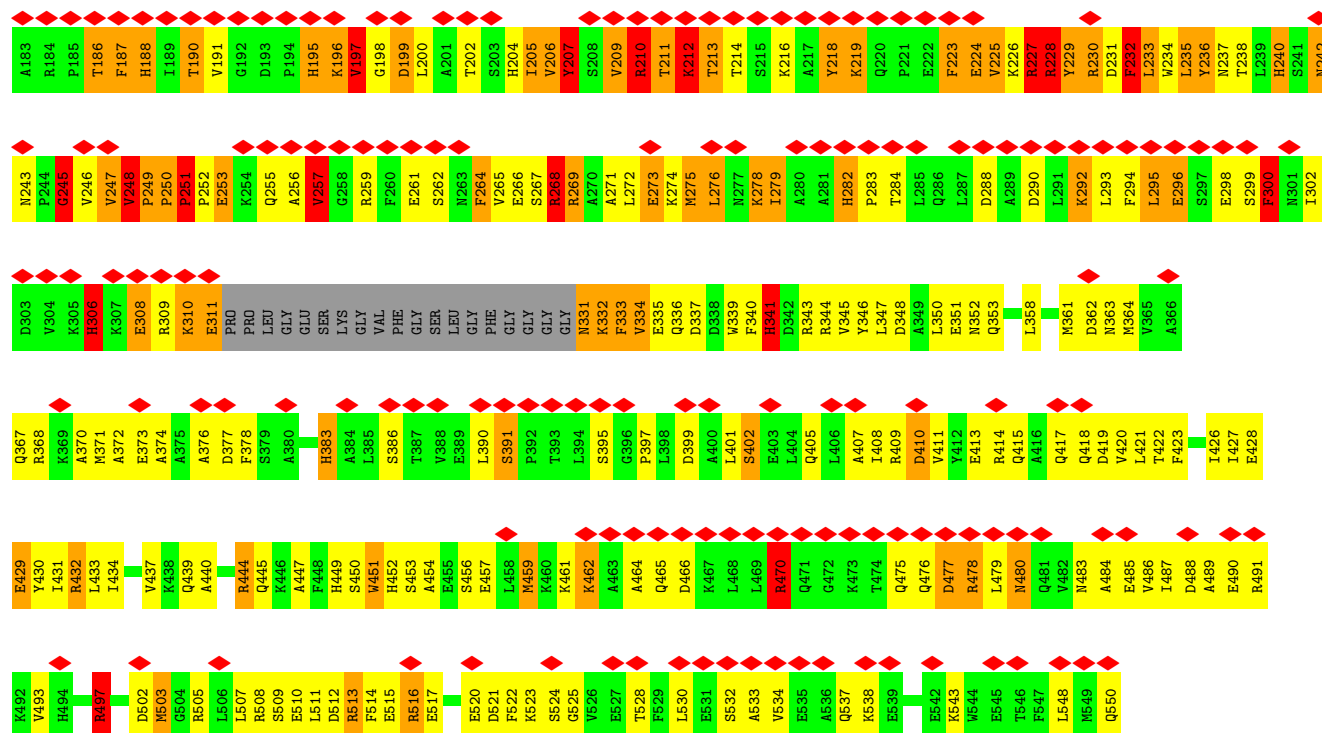


Chain P: 

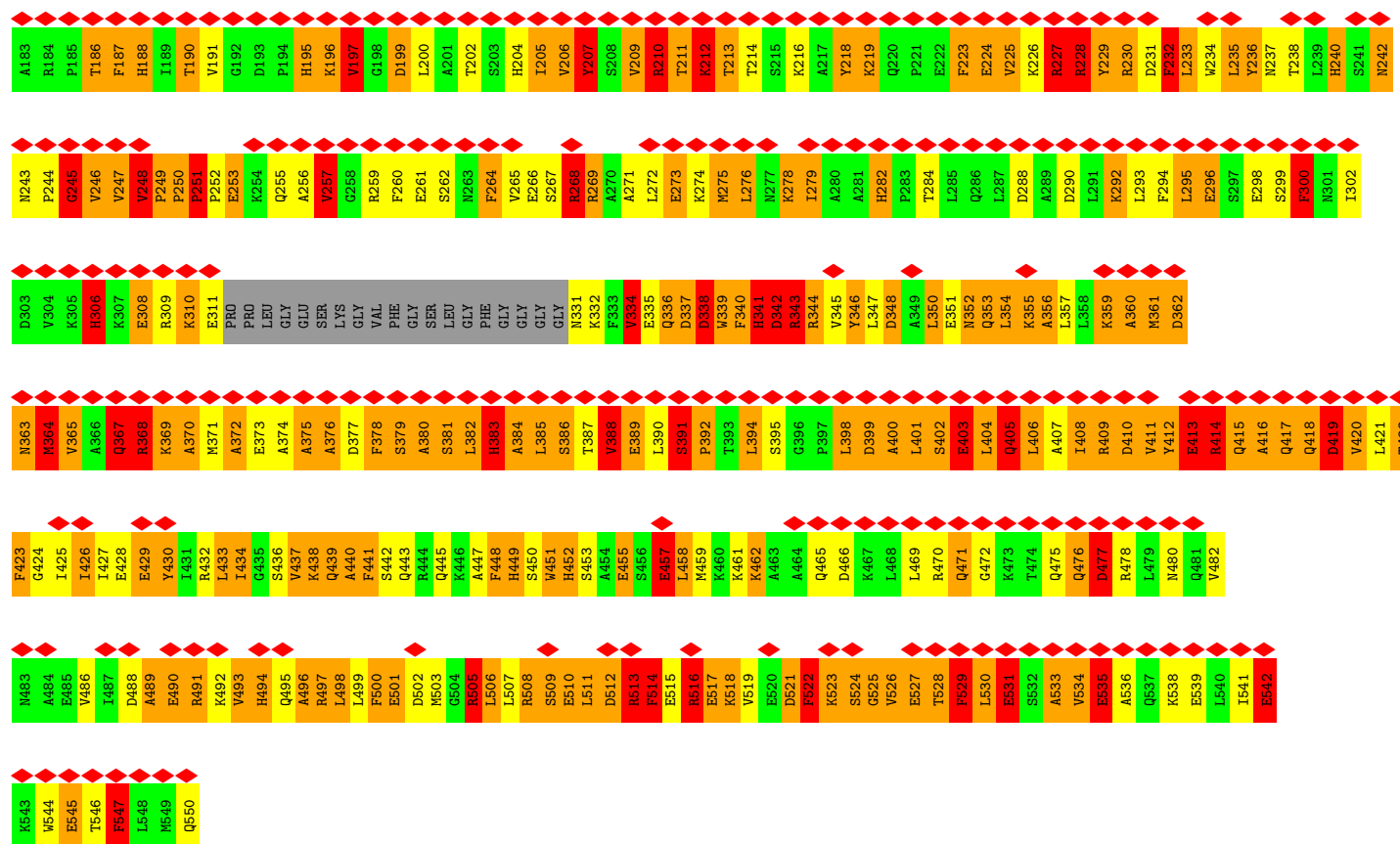
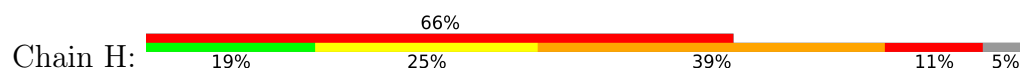


• Molecule 2: Putative vacuolar protein sorting-associated protein

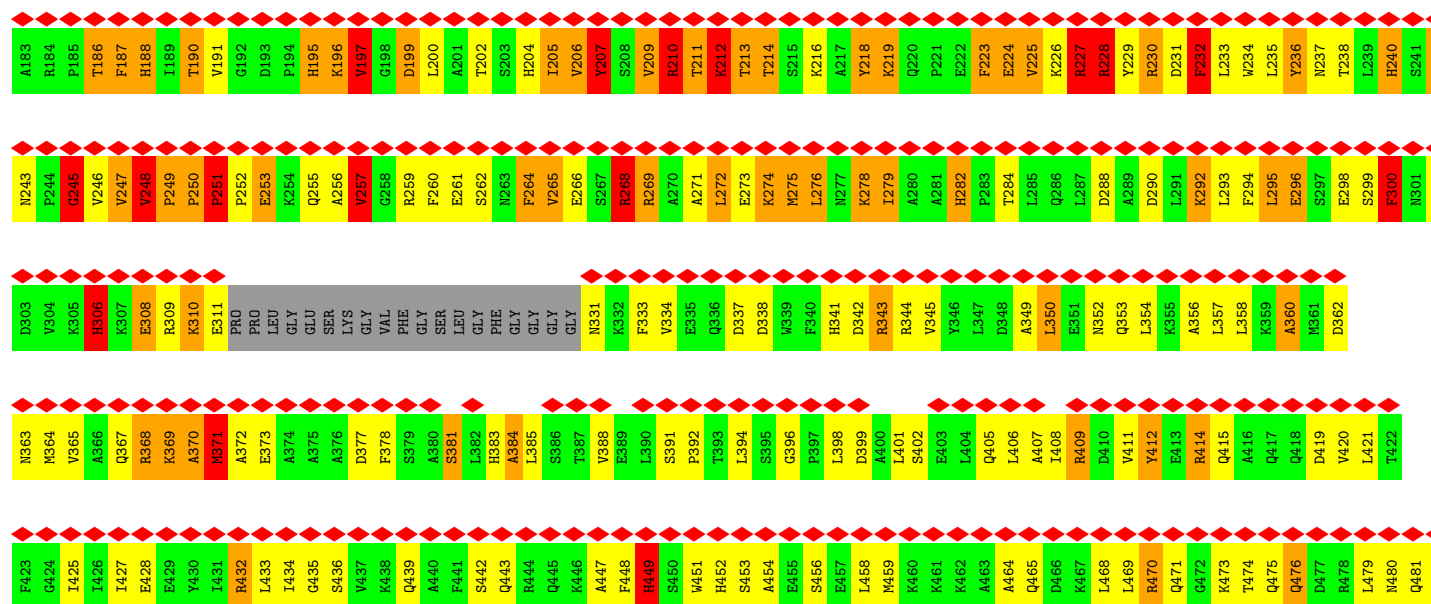
Chain N: 

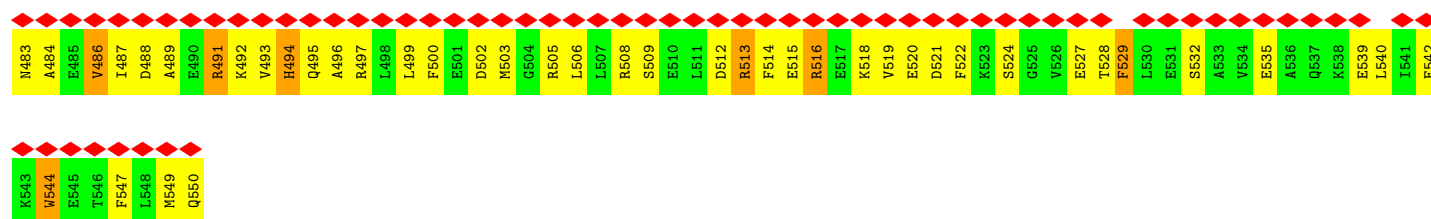


• Molecule 2: Putative vacuolar protein sorting-associated protein

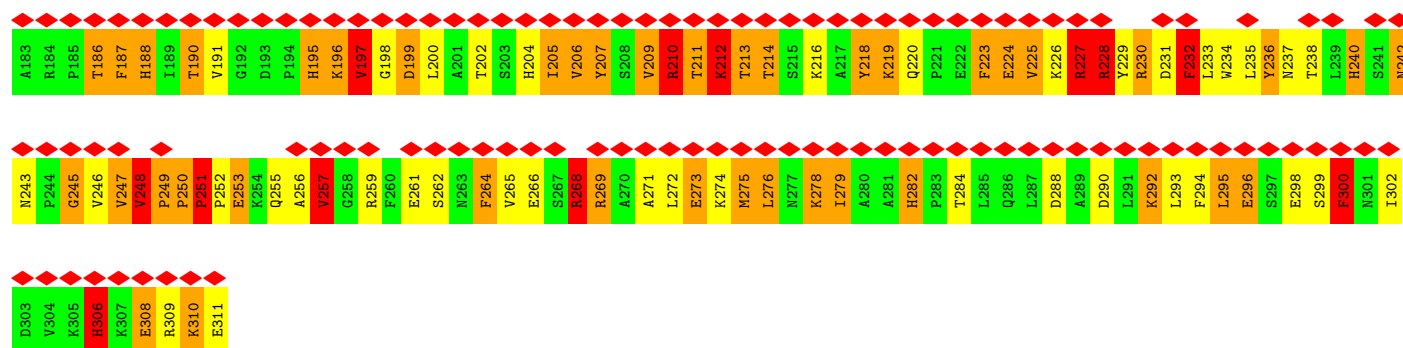
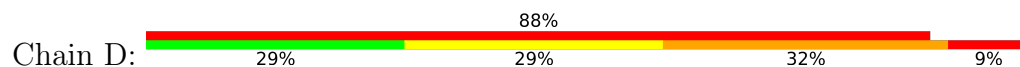


• Molecule 2: Putative vacuolar protein sorting-associated protein

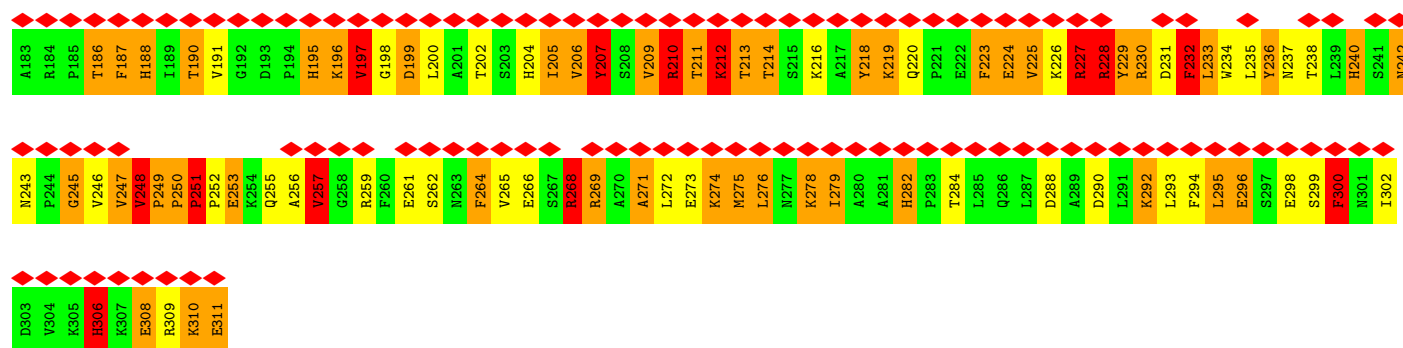
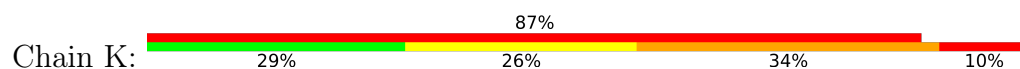




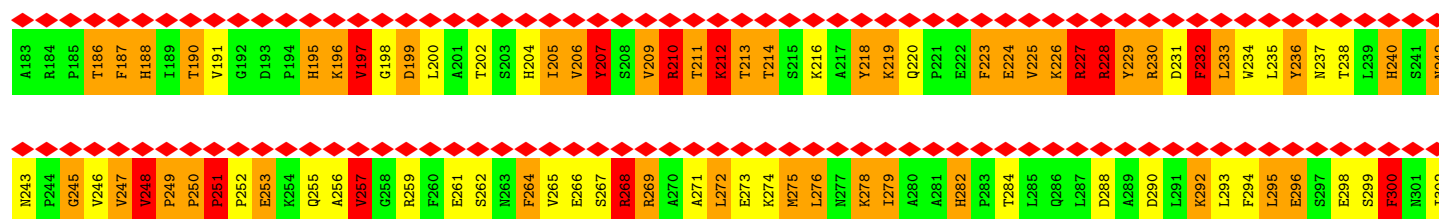
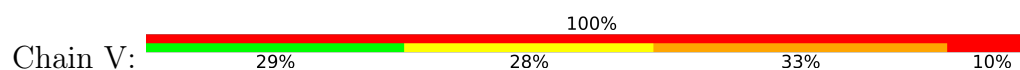
• Molecule 3: Putative vacuolar protein sorting-associated protein



• Molecule 3: Putative vacuolar protein sorting-associated protein

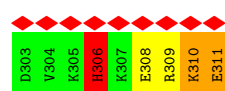
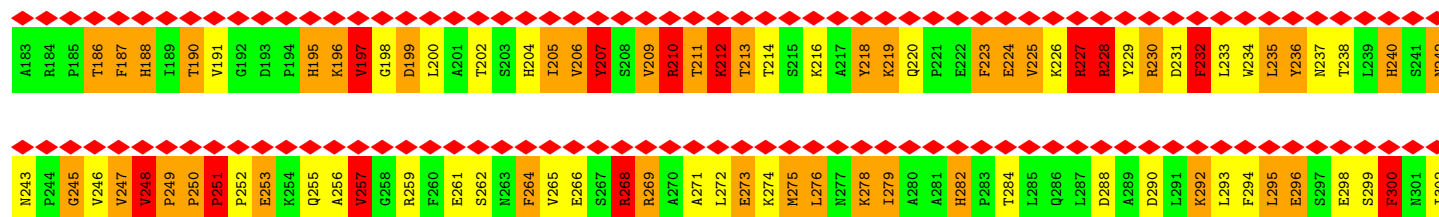
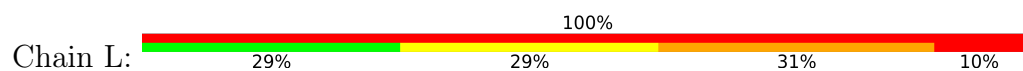


• Molecule 3: Putative vacuolar protein sorting-associated protein

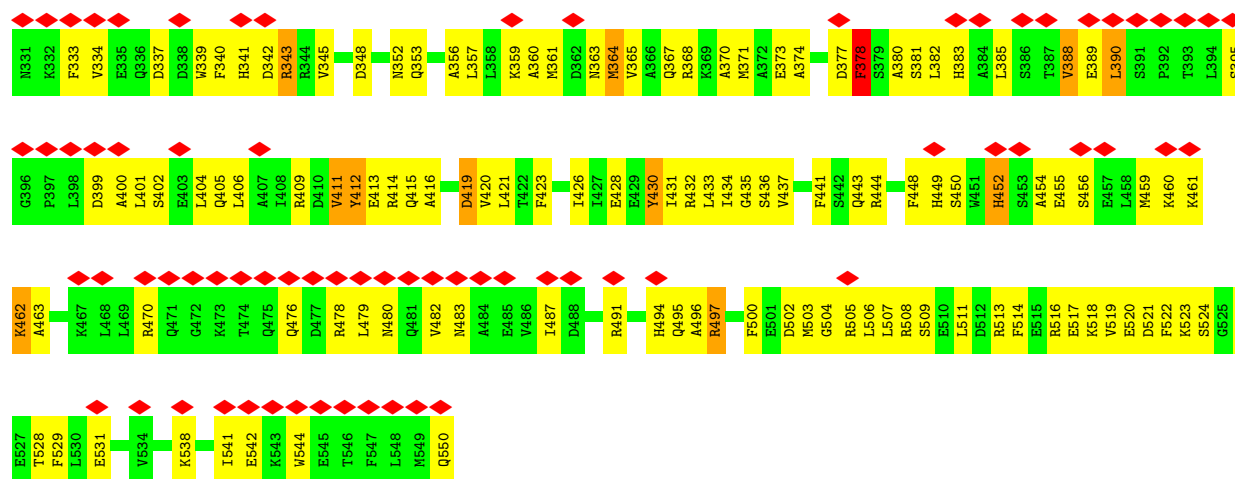




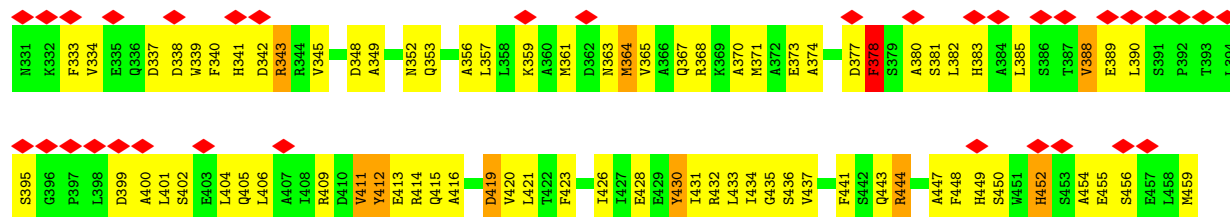
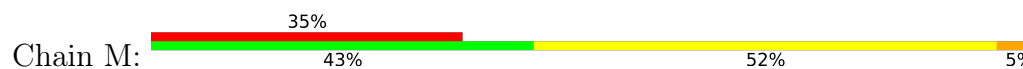
• Molecule 3: Putative vacuolar protein sorting-associated protein

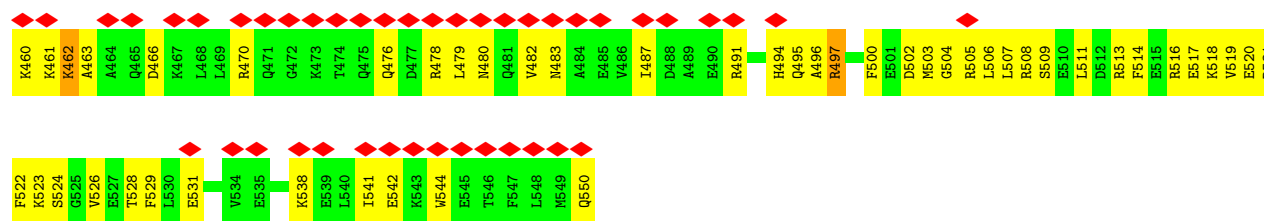


• Molecule 4: Putative vacuolar protein sorting-associated protein

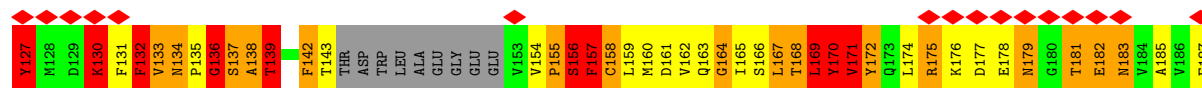
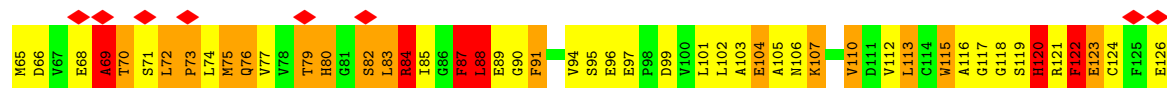
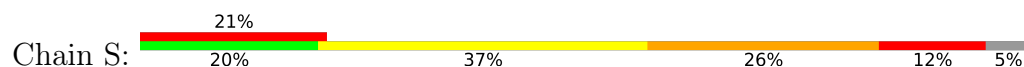


• Molecule 4: Putative vacuolar protein sorting-associated protein

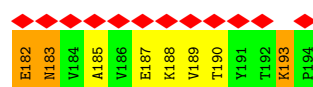
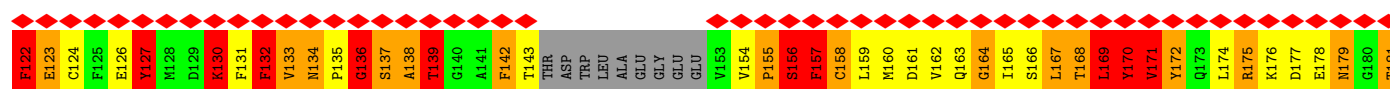
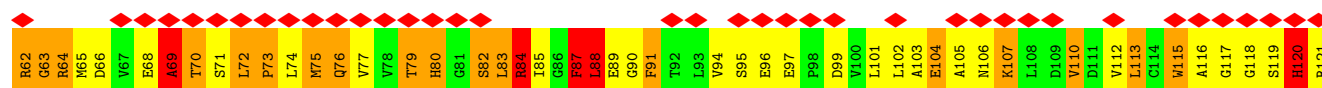
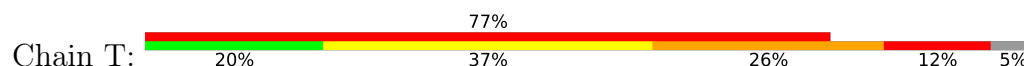




• Molecule 5: Vacuolar protein sorting-associated protein 29



• Molecule 5: Vacuolar protein sorting-associated protein 29



• Molecule 6: Vacuolar protein sorting-associated protein 35







L853	T793
E854	S794
M855	T795
I856	E796
Q857	L797
	F798
	F799
	E800
	I801
	L802
	D803
	R804
	Y805
	Y806
	Y807
	Y808
	F809
	D810
	Q811
	R812
	N813
	E814
	S815
	V816
	T817
	T818
	K819
	Y820
	L821
	N822
	G823
	L824
	I825
	E826
	L827
	I828
	H829
	S830
	N831
	L832
	A833
	G834
	N835
	Q836
	Q837
	D838
	S839
	A840
	S841
	V842
	E843
	A844
	S845
	R846
	K847
	H848
	F849
	I850
	Q851
	T852

4 Experimental information

Property	Value	Source
EM reconstruction method	SUBTOMOGRAM AVERAGING	Depositor
Imposed symmetry	POINT, C2	Depositor
Number of subtomograms used	16037	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION; CTF correction was performed with ctfphaseflip IMOD command using defocus values measured by CTFFIND4 on non-dose-filtered images.	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	3.17	Depositor
Minimum defocus (nm)	2500	Depositor
Maximum defocus (nm)	6500	Depositor
Magnification	105000	Depositor
Image detector	GATAN K2 QUANTUM (4k x 4k)	Depositor
Maximum map value	0.765	Depositor
Minimum map value	-0.535	Depositor
Average map value	0.003	Depositor
Map value standard deviation	0.058	Depositor
Recommended contour level	0.15	Depositor
Map size ($\text{\AA}$)	388.80002, 388.80002, 388.80002	wwPDB
Map dimensions	144, 144, 144	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing ($\text{\AA}$)	2.7, 2.7, 2.7	Depositor

5 Model quality

5.1 Standard geometry

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	C	0.87	0/2469	1.22	5/3327 (0.2%)
1	J	0.87	0/2469	1.22	5/3327 (0.2%)
2	A	2.61	135/2896 (4.7%)	2.51	217/3898 (5.6%)
2	B	2.81	202/2896 (7.0%)	2.43	206/3898 (5.3%)
2	E	2.60	136/2896 (4.7%)	2.51	218/3898 (5.6%)
2	F	2.61	138/2896 (4.8%)	2.51	219/3898 (5.6%)
2	G	2.80	203/2896 (7.0%)	2.43	208/3898 (5.3%)
2	H	2.80	203/2896 (7.0%)	2.43	208/3898 (5.3%)
2	N	2.59	126/2896 (4.4%)	2.60	235/3898 (6.0%)
2	P	2.59	126/2896 (4.4%)	2.60	236/3898 (6.1%)
3	D	2.96	56/1080 (5.2%)	2.43	75/1460 (5.1%)
3	K	2.96	56/1080 (5.2%)	2.43	75/1460 (5.1%)
3	L	2.96	56/1080 (5.2%)	2.43	76/1460 (5.2%)
3	V	2.96	57/1080 (5.3%)	2.43	75/1460 (5.1%)
4	M	2.32	68/1817 (3.7%)	2.59	142/2438 (5.8%)
4	O	2.31	68/1817 (3.7%)	2.59	142/2438 (5.8%)
5	S	2.09	60/1465 (4.1%)	2.30	101/1986 (5.1%)
5	T	2.09	60/1465 (4.1%)	2.30	102/1986 (5.1%)
6	Q	2.41	352/6092 (5.8%)	2.42	417/8255 (5.1%)
6	R	2.41	357/6092 (5.9%)	2.42	410/8255 (5.0%)
All	All	2.46	2459/51174 (4.8%)	2.38	3372/69036 (4.9%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	C	0	1
1	J	0	1
2	A	0	15
2	B	0	27
2	E	0	16

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Mol	Chain	#Chirality outliers	#Planarity outliers
2	F	0	16
2	G	0	27
2	H	0	27
2	N	0	16
2	P	0	16
3	D	0	11
3	K	0	11
3	L	0	11
3	V	0	11
4	M	0	7
4	O	0	7
5	S	0	12
5	T	0	12
6	Q	1	56
6	R	1	57
All	All	2	357

All (2459) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	P	250	PRO	CA-CB	43.35	2.13	1.54
3	K	250	PRO	CA-CB	43.34	2.13	1.54
2	B	250	PRO	CA-CB	43.31	2.13	1.54
2	A	250	PRO	CA-CB	43.31	2.13	1.54
2	N	250	PRO	CA-CB	43.30	2.13	1.54
2	H	250	PRO	CA-CB	43.30	2.13	1.54
2	G	250	PRO	CA-CB	43.30	2.13	1.54
3	V	250	PRO	CA-CB	43.29	2.13	1.54
2	E	250	PRO	CA-CB	43.28	2.13	1.54
3	D	250	PRO	CA-CB	43.25	2.13	1.54
2	F	250	PRO	CA-CB	43.19	2.13	1.54
3	L	250	PRO	CA-CB	43.19	2.13	1.54
2	N	250	PRO	N-CD	32.93	1.93	1.47
2	H	250	PRO	N-CD	32.91	1.93	1.47
2	F	250	PRO	N-CD	32.90	1.93	1.47
3	D	250	PRO	N-CD	32.88	1.93	1.47
2	P	250	PRO	N-CD	32.86	1.93	1.47
2	G	250	PRO	N-CD	32.85	1.93	1.47
3	K	250	PRO	N-CD	32.85	1.93	1.47
2	A	250	PRO	N-CD	32.83	1.93	1.47
3	V	250	PRO	N-CD	32.83	1.93	1.47
3	L	250	PRO	N-CD	32.82	1.93	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	250	PRO	N-CD	32.81	1.93	1.47
2	B	250	PRO	N-CD	32.80	1.93	1.47
3	L	250	PRO	N-CA	22.22	1.92	1.46
2	P	250	PRO	N-CA	22.21	1.92	1.46
2	B	250	PRO	N-CA	22.21	1.92	1.46
2	G	250	PRO	N-CA	22.19	1.92	1.46
2	N	250	PRO	N-CA	22.19	1.92	1.46
3	D	250	PRO	N-CA	22.19	1.92	1.46
3	V	250	PRO	N-CA	22.16	1.92	1.46
2	F	250	PRO	N-CA	22.15	1.92	1.46
2	H	250	PRO	N-CA	22.15	1.92	1.46
3	K	250	PRO	N-CA	22.13	1.91	1.46
2	A	250	PRO	N-CA	22.10	1.91	1.46
2	E	250	PRO	N-CA	22.07	1.91	1.46
3	K	250	PRO	CG-CD	15.43	2.03	1.50
2	A	250	PRO	CG-CD	15.40	2.03	1.50
2	B	250	PRO	CG-CD	15.38	2.03	1.50
2	P	250	PRO	CG-CD	15.37	2.03	1.50
2	H	250	PRO	CG-CD	15.37	2.03	1.50
3	L	250	PRO	CG-CD	15.37	2.03	1.50
3	D	250	PRO	CG-CD	15.37	2.02	1.50
2	F	250	PRO	CG-CD	15.37	2.02	1.50
3	V	250	PRO	CG-CD	15.36	2.02	1.50
2	G	250	PRO	CG-CD	15.36	2.02	1.50
2	E	250	PRO	CG-CD	15.36	2.02	1.50
2	N	250	PRO	CG-CD	15.35	2.02	1.50
2	G	405	GLN	CA-C	-13.55	1.35	1.52
2	B	405	GLN	CA-C	-13.45	1.35	1.52
2	H	405	GLN	CA-C	-13.41	1.35	1.52
3	V	250	PRO	CA-C	13.27	1.64	1.52
2	N	250	PRO	CA-C	13.16	1.64	1.52
2	E	250	PRO	CA-C	13.14	1.64	1.52
2	P	250	PRO	CA-C	13.11	1.64	1.52
2	G	250	PRO	CA-C	13.11	1.64	1.52
2	A	250	PRO	CA-C	13.03	1.64	1.52
2	F	250	PRO	CA-C	12.98	1.64	1.52
2	B	250	PRO	CA-C	12.96	1.64	1.52
3	L	250	PRO	CA-C	12.94	1.64	1.52
3	K	250	PRO	CA-C	12.93	1.64	1.52
2	H	250	PRO	CA-C	12.91	1.64	1.52
3	D	250	PRO	CA-C	12.90	1.64	1.52
2	B	382	LEU	CA-C	-12.43	1.37	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	G	382	LEU	CA-C	-12.43	1.37	1.52
2	H	382	LEU	CA-C	-12.43	1.37	1.52
6	Q	631	SER	CA-C	-12.33	1.37	1.52
6	R	631	SER	CA-C	-12.31	1.37	1.52
2	H	410	ASP	CA-C	-12.12	1.37	1.52
2	G	410	ASP	CA-C	-12.04	1.37	1.52
2	B	410	ASP	CA-C	-12.00	1.37	1.52
2	B	406	LEU	N-CA	-11.96	1.31	1.46
6	R	634	PHE	CA-C	-11.96	1.37	1.52
2	G	406	LEU	N-CA	-11.93	1.31	1.46
2	H	406	LEU	N-CA	-11.93	1.31	1.46
6	Q	634	PHE	CA-C	-11.46	1.37	1.52
2	B	522	PHE	CA-C	-11.26	1.37	1.52
2	G	522	PHE	CA-C	-11.22	1.37	1.52
6	R	629	GLN	CA-C	-11.20	1.38	1.52
2	H	522	PHE	CA-C	-11.18	1.37	1.52
6	Q	633	LEU	CA-C	-11.11	1.38	1.52
6	Q	629	GLN	CA-C	-11.04	1.38	1.52
6	R	633	LEU	CA-C	-11.03	1.38	1.52
3	V	250	PRO	CB-CG	11.02	2.04	1.49
3	L	250	PRO	CB-CG	11.01	2.04	1.49
2	G	250	PRO	CB-CG	11.01	2.04	1.49
2	N	250	PRO	CB-CG	11.01	2.04	1.49
2	B	250	PRO	CB-CG	11.01	2.04	1.49
2	H	250	PRO	CB-CG	11.01	2.04	1.49
3	D	250	PRO	CB-CG	11.00	2.04	1.49
2	P	250	PRO	CB-CG	10.99	2.04	1.49
2	F	250	PRO	CB-CG	10.99	2.04	1.49
2	E	250	PRO	CB-CG	10.99	2.04	1.49
2	A	250	PRO	CB-CG	10.98	2.04	1.49
3	K	250	PRO	CB-CG	10.96	2.04	1.49
6	Q	448	ALA	CA-C	-10.68	1.40	1.52
6	R	448	ALA	CA-C	-10.55	1.40	1.52
2	P	259	ARG	CA-C	-10.49	1.45	1.52
3	V	259	ARG	CA-C	-10.48	1.45	1.52
2	G	282	HIS	CA-C	-10.45	1.44	1.52
2	B	259	ARG	CA-C	-10.42	1.45	1.52
2	B	340	PHE	CA-C	-10.41	1.39	1.52
2	N	259	ARG	CA-C	-10.40	1.45	1.52
2	B	282	HIS	CA-C	-10.39	1.44	1.52
2	P	282	HIS	CA-C	-10.37	1.44	1.52
2	N	282	HIS	CA-C	-10.37	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	H	282	HIS	CA-C	-10.37	1.44	1.52
2	G	340	PHE	CA-C	-10.37	1.39	1.52
2	H	340	PHE	CA-C	-10.37	1.39	1.52
2	E	282	HIS	CA-C	-10.36	1.44	1.52
3	V	282	HIS	CA-C	-10.35	1.44	1.52
2	A	259	ARG	CA-C	-10.34	1.45	1.52
6	R	632	SER	CA-C	-10.34	1.39	1.52
2	A	282	HIS	CA-C	-10.34	1.44	1.52
2	F	282	HIS	CA-C	-10.32	1.44	1.52
3	L	282	HIS	CA-C	-10.31	1.44	1.52
2	F	259	ARG	CA-C	-10.30	1.45	1.52
3	D	282	HIS	CA-C	-10.29	1.44	1.52
2	H	259	ARG	CA-C	-10.29	1.45	1.52
3	D	259	ARG	CA-C	-10.27	1.45	1.52
2	H	339	TRP	CA-C	-10.27	1.39	1.52
6	Q	632	SER	CA-C	-10.26	1.39	1.52
2	G	339	TRP	CA-C	-10.21	1.39	1.52
3	K	282	HIS	CA-C	-10.17	1.44	1.52
2	B	339	TRP	CA-C	-10.16	1.39	1.52
3	L	259	ARG	CA-C	-10.15	1.45	1.52
2	G	259	ARG	CA-C	-10.13	1.45	1.52
3	K	259	ARG	CA-C	-10.07	1.45	1.52
2	E	259	ARG	CA-C	-10.06	1.45	1.52
6	R	580	GLN	CA-C	-10.04	1.39	1.52
6	Q	580	GLN	CA-C	-10.03	1.39	1.52
2	A	343	ARG	CA-C	-9.90	1.40	1.52
2	E	343	ARG	CA-C	-9.87	1.40	1.52
2	F	343	ARG	CA-C	-9.87	1.40	1.52
6	Q	527	ILE	N-CA	-9.85	1.34	1.46
5	S	183	ASN	CA-C	-9.76	1.41	1.52
6	R	630	SER	CA-C	-9.72	1.40	1.52
6	R	527	ILE	N-CA	-9.71	1.34	1.46
5	T	183	ASN	CA-C	-9.71	1.41	1.52
2	H	377	ASP	CA-C	-9.66	1.40	1.52
6	Q	637	LEU	CA-C	-9.66	1.40	1.52
2	H	413	GLU	CA-C	-9.66	1.40	1.52
2	B	377	ASP	CA-C	-9.65	1.40	1.52
2	B	413	GLU	CA-C	-9.63	1.40	1.52
6	R	637	LEU	CA-C	-9.60	1.40	1.52
2	G	413	GLU	CA-C	-9.58	1.40	1.52
6	Q	630	SER	CA-C	-9.58	1.40	1.52
2	G	377	ASP	CA-C	-9.57	1.40	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	R	583	LEU	CA-C	-9.46	1.40	1.52
6	R	502	GLY	CA-C	-9.44	1.41	1.51
6	Q	502	GLY	CA-C	-9.41	1.41	1.51
2	B	344	ARG	CA-C	-9.35	1.41	1.52
2	G	379	SER	N-CA	-9.30	1.35	1.46
2	B	379	SER	N-CA	-9.30	1.35	1.46
2	H	379	SER	N-CA	-9.30	1.35	1.46
2	H	344	ARG	CA-C	-9.30	1.41	1.52
6	R	184	GLU	CA-C	-9.27	1.40	1.52
6	Q	184	GLU	CA-C	-9.25	1.40	1.52
2	G	344	ARG	CA-C	-9.24	1.41	1.52
6	R	579	THR	CA-C	-9.22	1.41	1.52
6	Q	579	THR	CA-C	-9.21	1.41	1.52
6	Q	633	LEU	N-CA	-9.20	1.35	1.46
2	P	484	ALA	N-CA	-9.19	1.35	1.46
6	R	633	LEU	N-CA	-9.17	1.35	1.46
3	K	210	ARG	CA-C	-9.14	1.41	1.52
6	R	525	LEU	N-CA	-9.12	1.35	1.46
6	R	426	TYR	CA-C	-9.11	1.42	1.52
6	Q	583	LEU	CA-C	-9.10	1.41	1.52
2	N	210	ARG	CA-C	-9.07	1.41	1.52
6	R	637	LEU	N-CA	-9.06	1.35	1.46
2	N	484	ALA	N-CA	-9.04	1.35	1.46
3	D	210	ARG	CA-C	-9.03	1.41	1.52
2	N	434	ILE	C-N	9.03	1.45	1.33
6	R	635	LYS	N-CA	-9.02	1.35	1.46
6	Q	525	LEU	N-CA	-9.02	1.35	1.46
3	L	210	ARG	CA-C	-9.01	1.41	1.52
2	B	210	ARG	CA-C	-8.99	1.41	1.52
2	H	210	ARG	CA-C	-8.99	1.41	1.52
3	V	210	ARG	CA-C	-8.99	1.41	1.52
2	G	210	ARG	CA-C	-8.98	1.41	1.52
2	P	210	ARG	CA-C	-8.98	1.41	1.52
2	G	511	LEU	CA-C	-8.97	1.41	1.52
6	Q	426	TYR	CA-C	-8.95	1.42	1.52
2	H	511	LEU	CA-C	-8.93	1.41	1.52
6	Q	635	LYS	N-CA	-8.92	1.35	1.46
2	A	210	ARG	CA-C	-8.90	1.42	1.52
2	E	210	ARG	CA-C	-8.90	1.42	1.52
2	P	538	LYS	CA-C	-8.90	1.41	1.52
2	B	511	LEU	CA-C	-8.90	1.41	1.52
2	P	434	ILE	C-N	8.90	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	210	ARG	CA-C	-8.90	1.42	1.52
6	Q	637	LEU	N-CA	-8.87	1.35	1.46
2	B	381	SER	CA-C	-8.87	1.41	1.52
6	Q	636	PHE	CA-C	-8.86	1.41	1.52
2	N	350	LEU	CA-C	-8.84	1.41	1.52
6	R	636	PHE	CA-C	-8.84	1.41	1.52
2	G	381	SER	CA-C	-8.81	1.41	1.52
5	S	13	ILE	CA-C	-8.78	1.43	1.52
2	A	372	ALA	N-CA	-8.78	1.35	1.46
2	H	381	SER	CA-C	-8.78	1.41	1.52
2	N	538	LYS	CA-C	-8.78	1.41	1.52
2	G	338	ASP	CA-C	-8.77	1.41	1.52
4	O	433	LEU	C-N	8.77	1.45	1.33
2	P	350	LEU	CA-C	-8.76	1.41	1.52
5	T	13	ILE	CA-C	-8.75	1.43	1.52
6	R	585	GLN	N-CA	-8.74	1.35	1.46
2	G	343	ARG	CA-C	-8.74	1.41	1.52
6	Q	585	GLN	N-CA	-8.73	1.35	1.46
2	F	372	ALA	N-CA	-8.73	1.35	1.46
6	Q	181	ASN	CA-C	-8.71	1.41	1.52
2	H	338	ASP	CA-C	-8.70	1.41	1.52
6	Q	398	GLN	CA-C	-8.69	1.41	1.52
4	M	433	LEU	C-N	8.69	1.44	1.33
2	B	343	ARG	CA-C	-8.68	1.41	1.52
6	R	181	ASN	CA-C	-8.68	1.41	1.52
6	Q	587	THR	N-CA	-8.67	1.35	1.46
2	B	338	ASP	CA-C	-8.66	1.41	1.52
2	E	343	ARG	NE-CZ	8.66	1.42	1.33
6	R	587	THR	N-CA	-8.65	1.35	1.46
6	R	400	LEU	CA-C	-8.64	1.41	1.52
6	R	398	GLN	CA-C	-8.64	1.41	1.52
2	E	372	ALA	N-CA	-8.63	1.36	1.46
6	R	719	ASN	CA-C	-8.61	1.41	1.52
5	T	130	LYS	CA-C	-8.61	1.42	1.52
6	Q	720	TYR	CA-C	-8.61	1.41	1.52
6	R	612	LEU	CA-C	-8.60	1.41	1.52
6	Q	719	ASN	CA-C	-8.59	1.41	1.52
2	H	535	GLU	CA-C	-8.58	1.41	1.52
6	R	730	HIS	CA-C	-8.57	1.41	1.52
2	F	484	ALA	CA-C	-8.56	1.42	1.52
6	Q	612	LEU	CA-C	-8.55	1.41	1.52
6	R	720	TYR	CA-C	-8.55	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	535	GLU	CA-C	-8.54	1.41	1.52
5	S	130	LYS	CA-C	-8.54	1.42	1.52
2	G	535	GLU	CA-C	-8.53	1.41	1.52
2	H	343	ARG	CA-C	-8.52	1.42	1.52
6	R	524	VAL	CA-C	-8.52	1.42	1.52
2	A	484	ALA	CA-C	-8.51	1.42	1.52
2	H	227	ARG	CA-C	-8.51	1.41	1.52
5	S	170	TYR	CA-C	-8.50	1.42	1.52
2	F	343	ARG	NE-CZ	8.49	1.42	1.33
6	Q	400	LEU	CA-C	-8.49	1.41	1.52
6	Q	580	GLN	N-CA	-8.48	1.36	1.46
2	A	343	ARG	NE-CZ	8.48	1.42	1.33
6	Q	444	VAL	N-CA	-8.46	1.36	1.46
5	T	170	TYR	CA-C	-8.46	1.42	1.52
6	Q	432	TYR	CA-C	-8.45	1.42	1.52
6	Q	730	HIS	CA-C	-8.45	1.41	1.52
2	G	378	PHE	CA-C	-8.45	1.41	1.52
6	R	432	TYR	CA-C	-8.44	1.42	1.52
2	E	484	ALA	CA-C	-8.44	1.42	1.52
2	N	227	ARG	CA-C	-8.43	1.41	1.52
2	N	249	PRO	C-N	-8.43	1.23	1.33
6	R	580	GLN	N-CA	-8.42	1.36	1.46
3	D	249	PRO	C-N	-8.41	1.23	1.33
6	Q	524	VAL	CA-C	-8.40	1.42	1.52
6	R	182	PHE	CA-C	-8.40	1.42	1.52
2	A	453	SER	N-CA	-8.40	1.36	1.46
2	F	453	SER	N-CA	-8.40	1.36	1.46
4	M	380	ALA	CA-CB	8.40	1.66	1.53
2	H	430	TYR	CA-C	-8.39	1.41	1.52
2	H	249	PRO	C-N	-8.39	1.23	1.33
2	A	249	PRO	C-N	-8.39	1.23	1.33
2	F	249	PRO	C-N	-8.38	1.23	1.33
2	G	227	ARG	CA-C	-8.38	1.41	1.52
4	O	380	ALA	CA-CB	8.38	1.66	1.53
3	K	249	PRO	C-N	-8.37	1.23	1.33
2	H	518	LYS	N-CA	-8.37	1.36	1.46
5	S	80	HIS	CA-C	-8.37	1.42	1.52
3	K	227	ARG	CA-C	-8.37	1.41	1.52
2	E	249	PRO	C-N	-8.36	1.23	1.33
2	B	227	ARG	CA-C	-8.36	1.41	1.52
2	B	430	TYR	CA-C	-8.36	1.42	1.52
2	G	430	TYR	CA-C	-8.35	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	Q	715	PHE	CA-C	-8.35	1.42	1.52
6	R	133	ASP	CA-C	-8.35	1.42	1.52
2	H	378	PHE	CA-C	-8.35	1.42	1.52
2	P	227	ARG	CA-C	-8.34	1.41	1.52
6	R	501	ALA	CA-C	-8.34	1.42	1.52
2	A	227	ARG	CA-C	-8.33	1.41	1.52
3	V	272	LEU	CA-C	-8.33	1.42	1.52
5	T	20	ILE	CA-C	-8.33	1.46	1.53
6	R	715	PHE	CA-C	-8.33	1.42	1.52
2	B	383	HIS	N-CA	-8.33	1.36	1.46
4	O	452	HIS	ND1-CE1	8.33	1.40	1.32
6	Q	133	ASP	CA-C	-8.33	1.42	1.52
3	V	227	ARG	CA-C	-8.32	1.41	1.52
6	Q	182	PHE	CA-C	-8.32	1.42	1.52
6	Q	501	ALA	CA-C	-8.32	1.42	1.52
6	R	444	VAL	N-CA	-8.32	1.36	1.46
2	B	378	PHE	CA-C	-8.32	1.42	1.52
2	E	453	SER	N-CA	-8.32	1.36	1.46
2	G	383	HIS	N-CA	-8.31	1.36	1.46
2	P	249	PRO	C-N	-8.31	1.23	1.33
2	B	433	LEU	CA-C	-8.30	1.42	1.52
2	G	249	PRO	C-N	-8.30	1.23	1.33
2	H	383	HIS	N-CA	-8.30	1.36	1.46
2	B	518	LYS	N-CA	-8.30	1.36	1.46
2	G	409	ARG	CA-C	-8.29	1.41	1.52
5	T	80	HIS	CA-C	-8.30	1.42	1.52
2	F	272	LEU	CA-C	-8.29	1.42	1.52
3	D	272	LEU	CA-C	-8.29	1.42	1.52
2	N	272	LEU	CA-C	-8.29	1.42	1.52
3	V	249	PRO	C-N	-8.29	1.23	1.33
2	H	409	ARG	CA-C	-8.28	1.41	1.52
2	B	249	PRO	C-N	-8.28	1.23	1.33
2	P	522	PHE	C-N	8.28	1.44	1.33
2	P	523	LYS	N-CA	-8.28	1.36	1.46
3	D	227	ARG	CA-C	-8.27	1.41	1.52
3	L	249	PRO	C-N	-8.27	1.23	1.33
2	G	518	LYS	N-CA	-8.27	1.36	1.46
2	E	227	ARG	CA-C	-8.27	1.41	1.52
2	A	272	LEU	CA-C	-8.27	1.42	1.52
2	H	272	LEU	CA-C	-8.27	1.42	1.52
6	R	632	SER	N-CA	-8.27	1.36	1.46
2	G	272	LEU	CA-C	-8.26	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	409	ARG	CA-C	-8.26	1.41	1.52
4	M	452	HIS	ND1-CE1	8.26	1.40	1.32
2	P	272	LEU	CA-C	-8.25	1.42	1.52
6	Q	183	VAL	CA-C	-8.25	1.42	1.52
2	B	272	LEU	CA-C	-8.24	1.42	1.52
2	F	227	ARG	CA-C	-8.23	1.41	1.52
3	K	272	LEU	CA-C	-8.23	1.42	1.52
6	Q	632	SER	N-CA	-8.22	1.36	1.46
2	H	433	LEU	CA-C	-8.22	1.42	1.52
3	L	227	ARG	CA-C	-8.22	1.41	1.52
2	N	195	HIS	CA-C	-8.21	1.43	1.53
2	N	522	PHE	C-N	8.21	1.44	1.33
2	G	529	PHE	N-CA	-8.19	1.36	1.46
6	R	526	GLU	CA-C	-8.19	1.42	1.52
2	E	272	LEU	CA-C	-8.16	1.42	1.52
2	G	339	TRP	N-CA	-8.16	1.36	1.46
2	H	408	ILE	CA-CB	-8.15	1.44	1.54
2	G	433	LEU	CA-C	-8.14	1.42	1.52
3	L	272	LEU	CA-C	-8.13	1.42	1.52
6	Q	526	GLU	CA-C	-8.12	1.42	1.52
2	B	408	ILE	CA-CB	-8.12	1.44	1.54
2	H	529	PHE	N-CA	-8.11	1.36	1.46
6	Q	586	MET	CA-C	-8.11	1.42	1.52
2	B	372	ALA	N-CA	-8.11	1.36	1.46
2	N	523	LYS	N-CA	-8.11	1.36	1.46
2	H	195	HIS	CA-C	-8.11	1.43	1.53
2	G	408	ILE	CA-CB	-8.10	1.44	1.54
6	R	720	TYR	N-CA	-8.10	1.36	1.46
2	F	195	HIS	CA-C	-8.09	1.43	1.53
2	G	195	HIS	CA-C	-8.09	1.43	1.53
2	H	339	TRP	N-CA	-8.08	1.36	1.46
2	B	339	TRP	N-CA	-8.07	1.36	1.46
6	R	586	MET	CA-C	-8.06	1.42	1.52
2	G	372	ALA	N-CA	-8.06	1.36	1.46
6	R	467	GLN	CA-C	-8.06	1.41	1.52
2	B	529	PHE	N-CA	-8.05	1.36	1.46
6	Q	641	ILE	CA-C	-8.05	1.42	1.52
6	R	641	ILE	CA-C	-8.05	1.42	1.52
2	H	372	ALA	N-CA	-8.05	1.36	1.46
5	S	20	ILE	CA-C	-8.05	1.46	1.53
3	K	195	HIS	CA-C	-8.04	1.43	1.53
2	P	195	HIS	CA-C	-8.04	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	R	506	ARG	N-CA	-8.03	1.36	1.46
2	A	195	HIS	CA-C	-8.02	1.43	1.53
2	N	432	ARG	N-CA	-8.02	1.36	1.46
6	R	583	LEU	N-CA	-8.01	1.36	1.46
2	P	513	ARG	CA-C	-8.01	1.42	1.52
6	Q	101	ASN	CA-C	-8.01	1.43	1.52
2	F	196	LYS	CA-C	-8.01	1.42	1.52
6	R	183	VAL	CA-C	-8.00	1.42	1.52
6	Q	151	LEU	N-CA	-8.00	1.36	1.46
2	E	195	HIS	CA-C	-8.00	1.43	1.53
2	B	195	HIS	CA-C	-8.00	1.43	1.53
3	L	196	LYS	CA-C	-8.00	1.42	1.52
3	D	196	LYS	CA-C	-7.99	1.42	1.52
2	B	196	LYS	CA-C	-7.99	1.42	1.52
6	R	584	LEU	CA-C	-7.99	1.42	1.52
3	V	195	HIS	CA-C	-7.98	1.43	1.53
2	G	416	ALA	CA-C	-7.98	1.42	1.52
3	L	195	HIS	CA-C	-7.98	1.43	1.53
6	R	151	LEU	N-CA	-7.98	1.36	1.46
6	Q	720	TYR	N-CA	-7.98	1.36	1.46
6	Q	506	ARG	N-CA	-7.97	1.36	1.46
3	V	196	LYS	CA-C	-7.97	1.42	1.52
3	D	195	HIS	CA-C	-7.96	1.43	1.53
2	H	196	LYS	CA-C	-7.95	1.42	1.52
6	Q	584	LEU	CA-C	-7.95	1.42	1.52
2	H	416	ALA	CA-C	-7.95	1.42	1.52
2	B	416	ALA	CA-C	-7.94	1.42	1.52
2	E	196	LYS	CA-C	-7.93	1.42	1.52
6	Q	459	GLN	CA-C	-7.93	1.42	1.52
2	A	196	LYS	CA-C	-7.92	1.42	1.52
2	N	196	LYS	CA-C	-7.92	1.42	1.52
5	S	166	SER	CA-C	-7.92	1.43	1.52
6	R	101	ASN	CA-C	-7.91	1.43	1.52
6	Q	467	GLN	CA-C	-7.91	1.42	1.52
2	N	513	ARG	CA-C	-7.91	1.42	1.52
2	H	372	ALA	CA-C	-7.90	1.43	1.52
2	P	432	ARG	N-CA	-7.90	1.36	1.46
6	Q	583	LEU	N-CA	-7.90	1.36	1.46
6	Q	256	LEU	CA-C	-7.88	1.42	1.52
5	T	166	SER	CA-C	-7.88	1.43	1.52
2	P	196	LYS	CA-C	-7.88	1.42	1.52
6	R	256	LEU	CA-C	-7.88	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	G	196	LYS	CA-C	-7.88	1.42	1.52
3	K	196	LYS	CA-C	-7.87	1.42	1.52
6	R	433	VAL	CA-C	-7.87	1.43	1.52
2	B	372	ALA	CA-C	-7.86	1.43	1.52
2	H	451	TRP	N-CA	-7.85	1.37	1.46
6	Q	433	VAL	CA-C	-7.85	1.43	1.52
6	Q	642	SER	CA-C	-7.85	1.42	1.52
6	R	630	SER	N-CA	-7.85	1.37	1.46
2	B	451	TRP	N-CA	-7.85	1.37	1.46
6	Q	463	LEU	CA-C	-7.84	1.42	1.52
6	R	505	VAL	CA-C	-7.84	1.42	1.52
6	R	705	ILE	CA-C	-7.84	1.43	1.52
6	Q	630	SER	N-CA	-7.83	1.37	1.46
6	Q	435	GLY	CA-C	-7.82	1.42	1.52
2	E	333	PHE	N-CA	-7.82	1.36	1.46
6	Q	705	ILE	CA-C	-7.81	1.43	1.52
6	R	459	GLN	CA-C	-7.81	1.42	1.52
2	G	372	ALA	CA-C	-7.80	1.43	1.52
6	R	465	LEU	N-CA	-7.79	1.37	1.46
2	H	441	PHE	N-CA	-7.79	1.37	1.46
6	R	435	GLY	CA-C	-7.79	1.42	1.52
2	G	451	TRP	N-CA	-7.78	1.37	1.46
2	N	279	ILE	CA-C	-7.77	1.43	1.52
6	Q	505	VAL	CA-C	-7.76	1.43	1.52
6	Q	716	GLY	CA-C	-7.75	1.41	1.52
2	F	279	ILE	CA-C	-7.74	1.43	1.52
6	Q	465	LEU	N-CA	-7.74	1.37	1.46
2	G	279	ILE	CA-C	-7.74	1.43	1.52
2	E	279	ILE	CA-C	-7.74	1.43	1.52
6	R	463	LEU	CA-C	-7.74	1.43	1.52
2	B	441	PHE	N-CA	-7.73	1.37	1.46
6	R	235	ILE	N-CA	-7.73	1.39	1.46
2	G	441	PHE	N-CA	-7.72	1.37	1.46
2	P	279	ILE	CA-C	-7.72	1.43	1.52
2	H	345	VAL	CA-C	-7.72	1.43	1.52
2	A	333	PHE	N-CA	-7.71	1.37	1.46
6	R	716	GLY	CA-C	-7.71	1.41	1.52
4	M	452	HIS	CD2-NE2	7.70	1.46	1.37
3	V	279	ILE	CA-C	-7.70	1.43	1.52
2	B	279	ILE	CA-C	-7.70	1.43	1.52
2	F	344	ARG	CA-C	-7.70	1.43	1.52
6	R	642	SER	CA-C	-7.70	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	G	345	VAL	CA-C	-7.68	1.43	1.52
3	L	279	ILE	CA-C	-7.67	1.43	1.52
3	D	279	ILE	CA-C	-7.67	1.43	1.52
2	A	344	ARG	CA-C	-7.67	1.43	1.52
3	D	209	VAL	CA-C	-7.67	1.42	1.52
2	H	279	ILE	CA-C	-7.66	1.43	1.52
3	D	271	ALA	CA-C	-7.66	1.43	1.52
2	F	492	LYS	N-CA	-7.66	1.37	1.46
6	Q	716	GLY	N-CA	-7.65	1.35	1.45
4	M	432	ARG	CD-NE	7.65	1.56	1.46
6	Q	441	LEU	CA-C	-7.65	1.43	1.53
2	E	492	LYS	N-CA	-7.65	1.37	1.46
2	A	271	ALA	CA-C	-7.64	1.43	1.52
6	Q	506	ARG	CA-C	-7.64	1.42	1.52
6	R	441	LEU	CA-C	-7.64	1.43	1.53
2	F	333	PHE	N-CA	-7.64	1.37	1.46
6	R	434	ASP	N-CA	-7.64	1.36	1.46
2	A	279	ILE	CA-C	-7.64	1.43	1.52
2	F	271	ALA	CA-C	-7.64	1.43	1.52
6	Q	235	ILE	N-CA	-7.64	1.39	1.46
6	Q	591	TYR	CA-C	-7.64	1.43	1.52
6	R	627	SER	CA-C	-7.64	1.43	1.52
6	R	264	PRO	CA-C	-7.63	1.42	1.52
6	R	694	ASP	CA-C	-7.62	1.43	1.52
2	F	209	VAL	CA-C	-7.62	1.42	1.52
2	P	456	SER	C-N	7.61	1.43	1.33
2	G	408	ILE	N-CA	-7.61	1.37	1.46
2	H	209	VAL	CA-C	-7.61	1.42	1.52
2	B	345	VAL	CA-C	-7.61	1.43	1.52
2	N	271	ALA	CA-C	-7.61	1.43	1.52
2	E	271	ALA	CA-C	-7.61	1.43	1.52
6	R	799	VAL	CA-C	-7.61	1.43	1.52
6	Q	264	PRO	CA-C	-7.60	1.43	1.52
4	O	399	ASP	C-N	7.60	1.43	1.33
2	P	209	VAL	CA-C	-7.60	1.42	1.52
2	B	209	VAL	CA-C	-7.60	1.42	1.52
2	G	271	ALA	CA-C	-7.60	1.43	1.52
3	K	279	ILE	CA-C	-7.60	1.43	1.52
2	N	209	VAL	CA-C	-7.60	1.42	1.52
6	Q	627	SER	CA-C	-7.60	1.43	1.52
2	E	209	VAL	CA-C	-7.59	1.42	1.52
4	M	399	ASP	C-N	7.59	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	R	591	TYR	CA-C	-7.59	1.43	1.52
2	A	209	VAL	CA-C	-7.59	1.42	1.52
5	S	171	VAL	CA-C	-7.58	1.43	1.52
2	P	271	ALA	CA-C	-7.58	1.43	1.52
4	O	452	HIS	CD2-NE2	7.58	1.46	1.37
2	H	414	ARG	CA-C	-7.58	1.43	1.52
3	L	209	VAL	CA-C	-7.58	1.42	1.52
2	B	414	ARG	CA-C	-7.58	1.43	1.52
4	O	432	ARG	CD-NE	7.58	1.56	1.46
2	G	362	ASP	CA-C	-7.58	1.43	1.52
2	H	363	ASN	CA-C	-7.58	1.43	1.52
2	A	492	LYS	N-CA	-7.57	1.37	1.46
2	B	271	ALA	CA-C	-7.57	1.43	1.52
2	H	271	ALA	CA-C	-7.57	1.43	1.52
3	K	209	VAL	CA-C	-7.56	1.42	1.52
2	H	362	ASP	CA-C	-7.56	1.43	1.52
2	F	408	ILE	CA-C	-7.56	1.43	1.52
3	V	209	VAL	CA-C	-7.55	1.42	1.52
6	Q	434	ASP	N-CA	-7.55	1.36	1.46
2	E	408	ILE	CA-C	-7.54	1.43	1.52
3	K	271	ALA	CA-C	-7.54	1.43	1.52
2	G	209	VAL	CA-C	-7.54	1.42	1.52
6	Q	799	VAL	CA-C	-7.53	1.43	1.52
6	Q	694	ASP	CA-C	-7.52	1.43	1.52
2	B	363	ASN	CA-C	-7.52	1.43	1.52
3	L	271	ALA	CA-C	-7.52	1.43	1.52
6	Q	503	GLU	CA-C	-7.52	1.43	1.52
2	E	344	ARG	CA-C	-7.52	1.43	1.52
6	R	506	ARG	CA-C	-7.52	1.43	1.52
5	T	171	VAL	CA-C	-7.52	1.43	1.52
2	H	408	ILE	N-CA	-7.51	1.37	1.46
2	B	362	ASP	CA-C	-7.51	1.43	1.52
2	G	414	ARG	CA-C	-7.50	1.43	1.52
6	R	528	LEU	CA-C	-7.50	1.43	1.52
6	R	469	PRO	CA-C	-7.49	1.42	1.52
2	P	508	ARG	CD-NE	7.49	1.56	1.46
6	Q	469	PRO	CA-C	-7.49	1.42	1.52
6	Q	528	LEU	CA-C	-7.49	1.43	1.52
2	H	410	ASP	N-CA	-7.48	1.37	1.46
2	H	278	LYS	CA-C	-7.48	1.43	1.52
2	B	207	TYR	CA-C	-7.48	1.43	1.52
2	N	456	SER	C-N	7.47	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	410	ASP	N-CA	-7.47	1.37	1.46
2	P	278	LYS	CA-C	-7.46	1.43	1.52
3	V	271	ALA	CA-C	-7.46	1.43	1.52
6	R	503	GLU	CA-C	-7.46	1.43	1.52
6	R	716	GLY	N-CA	-7.45	1.35	1.45
2	B	278	LYS	CA-C	-7.45	1.43	1.52
2	N	508	ARG	CD-NE	7.45	1.56	1.46
2	G	353	GLN	CA-C	-7.44	1.43	1.52
2	H	207	TYR	CA-C	-7.44	1.43	1.52
6	Q	463	LEU	N-CA	-7.43	1.37	1.46
2	G	278	LYS	CA-C	-7.43	1.43	1.52
6	Q	523	ASN	CA-C	-7.43	1.43	1.52
2	A	408	ILE	CA-C	-7.42	1.43	1.52
2	P	207	TYR	CA-C	-7.42	1.43	1.52
2	G	207	TYR	CA-C	-7.41	1.43	1.52
2	A	207	TYR	CA-C	-7.41	1.43	1.52
2	N	207	TYR	CA-C	-7.41	1.43	1.52
2	E	273	GLU	CA-C	-7.41	1.43	1.52
2	G	363	ASN	CA-C	-7.40	1.43	1.52
2	E	278	LYS	CA-C	-7.40	1.43	1.52
6	R	463	LEU	N-CA	-7.40	1.37	1.46
2	N	278	LYS	CA-C	-7.39	1.43	1.52
2	E	306	HIS	CA-C	-7.39	1.43	1.52
2	B	408	ILE	N-CA	-7.39	1.37	1.46
2	B	353	GLN	CA-C	-7.38	1.43	1.52
3	L	207	TYR	CA-C	-7.38	1.43	1.52
6	R	523	ASN	CA-C	-7.38	1.43	1.52
3	D	207	TYR	CA-C	-7.38	1.43	1.52
2	A	421	LEU	N-CA	7.38	1.55	1.46
2	E	421	LEU	N-CA	7.38	1.55	1.46
3	L	278	LYS	CA-C	-7.37	1.43	1.52
2	H	306	HIS	CA-C	-7.37	1.43	1.52
2	F	278	LYS	CA-C	-7.37	1.43	1.52
2	F	207	TYR	CA-C	-7.36	1.43	1.52
2	F	306	HIS	CA-C	-7.35	1.43	1.52
5	S	20	ILE	N-CA	-7.35	1.40	1.46
3	V	207	TYR	CA-C	-7.35	1.43	1.52
2	G	410	ASP	N-CA	-7.34	1.37	1.46
2	H	353	GLN	CA-C	-7.34	1.43	1.52
3	K	306	HIS	CA-C	-7.34	1.43	1.52
2	A	306	HIS	CA-C	-7.33	1.43	1.52
2	A	278	LYS	CA-C	-7.33	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	A	405	GLN	CA-C	-7.33	1.43	1.52
2	E	207	TYR	CA-C	-7.33	1.43	1.52
6	Q	678	TYR	CA-C	-7.32	1.43	1.52
2	F	421	LEU	N-CA	7.32	1.55	1.46
3	L	306	HIS	CA-C	-7.32	1.43	1.52
3	V	278	LYS	CA-C	-7.32	1.43	1.52
2	G	306	HIS	CA-C	-7.32	1.43	1.52
2	P	306	HIS	CA-C	-7.31	1.43	1.52
2	B	306	HIS	CA-C	-7.31	1.43	1.52
5	S	174	LEU	CA-C	-7.30	1.44	1.52
6	R	470	LEU	CA-C	-7.29	1.43	1.52
2	B	403	GLU	CA-C	-7.29	1.43	1.52
6	R	678	TYR	CA-C	-7.29	1.43	1.52
2	E	362	ASP	C-N	7.29	1.43	1.33
2	A	362	ASP	C-N	7.28	1.43	1.33
2	F	362	ASP	C-N	7.28	1.43	1.33
2	H	403	GLU	CA-C	-7.27	1.43	1.52
2	H	273	GLU	CA-C	-7.27	1.43	1.52
2	N	306	HIS	CA-C	-7.27	1.43	1.52
3	V	306	HIS	CA-C	-7.27	1.43	1.52
6	R	181	ASN	N-CA	-7.26	1.37	1.46
4	M	432	ARG	NE-CZ	7.25	1.41	1.33
3	K	207	TYR	CA-C	-7.25	1.43	1.52
4	M	426	ILE	N-CA	7.25	1.55	1.46
6	R	571	LEU	CA-C	-7.25	1.43	1.52
6	R	657	CYS	CA-C	-7.25	1.43	1.52
2	F	273	GLU	CA-C	-7.25	1.43	1.52
2	E	508	ARG	CD-NE	7.24	1.56	1.46
2	E	405	GLN	CA-C	-7.24	1.43	1.52
6	Q	571	LEU	CA-C	-7.24	1.43	1.52
2	G	403	GLU	CA-C	-7.22	1.43	1.52
2	F	405	GLN	CA-C	-7.22	1.43	1.52
2	A	470	ARG	CD-NE	7.22	1.56	1.46
2	H	414	ARG	N-CA	-7.22	1.37	1.46
3	D	278	LYS	CA-C	-7.22	1.43	1.52
2	G	248	VAL	CA-CB	-7.22	1.44	1.54
6	Q	292	VAL	CA-C	-7.21	1.43	1.52
3	K	278	LYS	CA-C	-7.21	1.43	1.52
6	Q	470	LEU	CA-C	-7.20	1.43	1.52
6	R	292	VAL	CA-C	-7.20	1.43	1.52
2	A	508	ARG	CD-NE	7.20	1.56	1.46
2	G	414	ARG	N-CA	-7.19	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	306	HIS	CA-C	-7.19	1.43	1.52
2	G	404	LEU	N-CA	-7.19	1.37	1.46
3	V	273	GLU	CA-C	-7.18	1.43	1.52
2	H	206	VAL	N-CA	-7.18	1.37	1.46
6	Q	181	ASN	N-CA	-7.18	1.37	1.46
4	O	432	ARG	NE-CZ	7.17	1.41	1.33
3	D	273	GLU	CA-C	-7.17	1.43	1.52
2	N	532	SER	CA-CB	7.17	1.64	1.53
2	F	434	ILE	CA-C	-7.17	1.43	1.52
6	Q	657	CYS	CA-C	-7.16	1.43	1.52
2	B	373	GLU	CA-C	-7.16	1.43	1.52
3	K	273	GLU	CA-C	-7.16	1.43	1.52
2	N	343	ARG	N-CA	-7.16	1.37	1.46
2	H	335	GLU	CA-C	-7.16	1.43	1.52
2	N	451	TRP	CA-CB	7.16	1.64	1.53
2	B	273	GLU	CA-C	-7.16	1.43	1.52
2	P	532	SER	CA-CB	7.15	1.64	1.53
6	Q	578	ASP	N-CA	-7.15	1.37	1.46
2	B	206	VAL	N-CA	-7.15	1.37	1.46
3	K	206	VAL	N-CA	-7.15	1.37	1.46
5	T	174	LEU	CA-C	-7.15	1.44	1.52
2	A	434	ILE	CA-C	-7.15	1.43	1.52
5	T	20	ILE	N-CA	-7.15	1.41	1.46
2	G	373	GLU	CA-C	-7.15	1.43	1.52
3	L	206	VAL	N-CA	-7.15	1.37	1.46
2	P	451	TRP	CA-CB	7.14	1.64	1.53
2	B	335	GLU	CA-C	-7.14	1.43	1.52
3	L	273	GLU	CA-C	-7.14	1.43	1.52
2	B	248	VAL	CA-CB	-7.14	1.45	1.54
2	A	273	GLU	CA-C	-7.14	1.43	1.52
6	Q	180	THR	CA-C	-7.13	1.43	1.52
3	D	206	VAL	N-CA	-7.13	1.37	1.46
2	E	434	ILE	CA-C	-7.13	1.43	1.52
2	H	373	GLU	CA-C	-7.13	1.43	1.52
2	G	335	GLU	CA-C	-7.13	1.43	1.52
2	F	508	ARG	CD-NE	7.12	1.56	1.46
2	F	470	ARG	CD-NE	7.12	1.56	1.46
2	G	273	GLU	CA-C	-7.12	1.43	1.52
3	L	248	VAL	CA-CB	-7.12	1.45	1.54
6	Q	70	PHE	CA-C	-7.12	1.43	1.52
6	R	484	THR	CA-C	-7.11	1.43	1.52
6	R	578	ASP	N-CA	-7.11	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	248	VAL	CA-CB	-7.11	1.45	1.54
2	N	273	GLU	CA-C	-7.11	1.43	1.52
3	V	206	VAL	N-CA	-7.11	1.37	1.46
6	R	70	PHE	CA-C	-7.10	1.43	1.52
6	R	680	PHE	CA-C	-7.10	1.43	1.52
2	H	404	LEU	N-CA	-7.09	1.37	1.46
2	B	404	LEU	N-CA	-7.09	1.37	1.46
2	B	378	PHE	N-CA	-7.09	1.37	1.46
2	E	470	ARG	CD-NE	7.09	1.56	1.46
2	P	343	ARG	N-CA	-7.09	1.37	1.46
2	N	453	SER	CA-C	-7.09	1.43	1.52
2	B	414	ARG	N-CA	-7.09	1.37	1.46
4	O	460	LYS	CA-CB	7.08	1.64	1.53
3	K	248	VAL	CA-CB	-7.08	1.45	1.54
2	H	248	VAL	CA-CB	-7.08	1.45	1.54
4	O	426	ILE	N-CA	7.08	1.54	1.46
2	F	248	VAL	CA-CB	-7.08	1.45	1.54
6	Q	484	THR	CA-C	-7.07	1.43	1.52
2	F	369	LYS	CA-C	-7.07	1.44	1.52
2	A	248	VAL	CA-CB	-7.06	1.45	1.54
6	R	658	LEU	CA-C	-7.06	1.43	1.52
6	R	180	THR	CA-C	-7.05	1.43	1.52
2	G	206	VAL	N-CA	-7.05	1.37	1.46
2	P	206	VAL	N-CA	-7.05	1.37	1.46
4	M	460	LYS	CA-CB	7.05	1.64	1.53
3	D	248	VAL	CA-CB	-7.04	1.45	1.54
2	N	206	VAL	N-CA	-7.04	1.37	1.46
6	R	690	GLU	CA-C	-7.04	1.43	1.52
2	P	413	GLU	C-N	7.04	1.43	1.33
2	A	369	LYS	CA-C	-7.03	1.44	1.52
3	K	233	LEU	CA-C	-7.03	1.43	1.52
6	R	426	TYR	N-CA	-7.03	1.39	1.46
2	P	248	VAL	CA-CB	-7.03	1.45	1.54
6	Q	426	TYR	N-CA	-7.03	1.39	1.46
6	Q	680	PHE	CA-C	-7.02	1.43	1.52
2	F	206	VAL	N-CA	-7.02	1.38	1.46
6	R	612	LEU	N-CA	-7.02	1.37	1.46
6	Q	468	SER	CA-C	-7.02	1.43	1.52
6	Q	658	LEU	CA-C	-7.01	1.44	1.52
2	H	378	PHE	N-CA	-7.01	1.37	1.46
2	P	453	SER	CA-C	-7.01	1.44	1.52
6	Q	612	LEU	N-CA	-7.00	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	Q	800	GLU	CA-C	-7.00	1.43	1.52
2	G	364	MET	CA-C	-6.99	1.43	1.52
2	P	273	GLU	CA-C	-6.99	1.43	1.52
2	F	516	ARG	CD-NE	6.99	1.56	1.46
2	G	378	PHE	N-CA	-6.99	1.38	1.46
2	B	364	MET	CA-C	-6.98	1.43	1.52
2	H	364	MET	CA-C	-6.98	1.43	1.52
2	A	206	VAL	N-CA	-6.98	1.38	1.46
5	S	134	ASN	N-CA	-6.97	1.38	1.46
6	R	722	THR	N-CA	-6.97	1.38	1.46
6	R	606	ILE	CA-C	-6.97	1.44	1.52
6	Q	606	ILE	CA-C	-6.97	1.44	1.52
2	B	415	GLN	CA-C	-6.96	1.43	1.52
6	R	681	PHE	CA-C	-6.96	1.43	1.52
2	E	206	VAL	N-CA	-6.96	1.38	1.46
2	E	233	LEU	CA-C	-6.96	1.43	1.52
2	N	413	GLU	C-N	6.96	1.43	1.33
5	S	83	LEU	CA-C	-6.96	1.44	1.52
6	Q	690	GLU	CA-C	-6.95	1.43	1.52
6	R	468	SER	CA-C	-6.95	1.44	1.52
2	E	369	LYS	CA-C	-6.95	1.44	1.52
2	F	233	LEU	CA-C	-6.94	1.43	1.52
3	V	248	VAL	CA-CB	-6.94	1.45	1.54
2	B	233	LEU	CA-C	-6.94	1.43	1.52
5	S	131	PHE	CA-C	-6.94	1.44	1.52
6	R	730	HIS	CB-CG	-6.94	1.40	1.50
2	N	248	VAL	CA-CB	-6.93	1.45	1.54
6	Q	730	HIS	CB-CG	-6.93	1.40	1.50
5	T	134	ASN	N-CA	-6.93	1.38	1.46
6	Q	110	ILE	CA-C	-6.93	1.44	1.52
5	T	83	LEU	CA-C	-6.93	1.44	1.52
5	T	131	PHE	CA-C	-6.93	1.44	1.52
2	A	233	LEU	CA-C	-6.93	1.43	1.52
2	A	452	HIS	ND1-CE1	6.92	1.39	1.32
6	Q	643	THR	CA-C	-6.92	1.43	1.52
6	Q	722	THR	N-CA	-6.92	1.38	1.46
2	G	415	GLN	CA-C	-6.92	1.43	1.52
2	H	415	GLN	CA-C	-6.91	1.43	1.52
2	A	491	ARG	CD-NE	6.91	1.55	1.46
2	H	427	ILE	CA-C	-6.91	1.44	1.52
2	E	452	HIS	ND1-CE1	6.91	1.39	1.32
6	R	473	TYR	CA-C	-6.91	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	L	233	LEU	CA-C	-6.90	1.43	1.52
6	R	800	GLU	CA-C	-6.90	1.43	1.52
2	E	516	ARG	CD-NE	6.90	1.55	1.46
6	Q	41	ALA	CA-C	-6.90	1.43	1.52
6	R	643	THR	CA-C	-6.90	1.43	1.52
2	H	440	ALA	CA-C	-6.89	1.43	1.52
2	A	516	ARG	CD-NE	6.89	1.55	1.46
3	D	233	LEU	CA-C	-6.89	1.44	1.52
6	R	648	VAL	CA-C	-6.89	1.44	1.52
4	M	443	GLN	C-N	6.89	1.43	1.33
2	P	233	LEU	CA-C	-6.89	1.44	1.52
2	B	427	ILE	CA-C	-6.88	1.44	1.52
2	H	233	LEU	CA-C	-6.88	1.44	1.52
6	Q	473	TYR	CA-C	-6.88	1.43	1.52
2	G	427	ILE	CA-C	-6.88	1.44	1.52
6	Q	648	VAL	CA-C	-6.88	1.44	1.52
2	P	465	GLN	N-CA	-6.88	1.38	1.46
6	Q	105	ARG	CA-C	-6.88	1.44	1.52
6	Q	564	TRP	N-CA	-6.87	1.38	1.46
6	R	564	TRP	N-CA	-6.87	1.38	1.46
3	V	233	LEU	CA-C	-6.87	1.44	1.52
6	R	102	ILE	N-CA	-6.87	1.38	1.46
2	B	440	ALA	CA-C	-6.87	1.43	1.52
2	N	465	GLN	N-CA	-6.87	1.38	1.46
6	Q	412	ILE	CA-C	-6.86	1.43	1.52
2	G	233	LEU	CA-C	-6.86	1.44	1.52
2	F	491	ARG	CD-NE	6.86	1.55	1.46
6	R	41	ALA	CA-C	-6.85	1.43	1.52
6	R	110	ILE	CA-C	-6.85	1.44	1.52
2	E	491	ARG	CD-NE	6.85	1.55	1.46
6	R	412	ILE	CA-C	-6.85	1.44	1.52
2	F	452	HIS	ND1-CE1	6.85	1.39	1.32
6	Q	681	PHE	CA-C	-6.84	1.44	1.52
2	N	478	ARG	CD-NE	6.84	1.55	1.46
6	Q	178	ILE	CA-C	-6.84	1.44	1.52
6	R	581	PHE	CA-C	-6.84	1.43	1.52
6	Q	581	PHE	CA-C	-6.84	1.43	1.52
6	Q	393	PHE	CA-C	-6.83	1.44	1.52
2	H	423	PHE	CA-C	-6.83	1.44	1.52
6	Q	437	LEU	CA-C	-6.83	1.43	1.52
5	S	136	GLY	CA-C	-6.82	1.42	1.51
6	R	232	ARG	CA-C	-6.82	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	361	MET	CA-C	-6.82	1.43	1.52
6	Q	565	LEU	CA-C	-6.82	1.44	1.52
2	P	484	ALA	CA-CB	6.82	1.64	1.53
2	H	361	MET	CA-C	-6.82	1.43	1.52
6	R	437	LEU	CA-C	-6.82	1.44	1.52
4	O	443	GLN	C-N	6.82	1.43	1.33
2	B	423	PHE	CA-C	-6.81	1.44	1.52
2	B	429	GLU	CA-C	-6.81	1.44	1.52
2	G	440	ALA	CA-C	-6.80	1.44	1.52
2	H	429	GLU	CA-C	-6.79	1.44	1.52
2	H	386	SER	CA-C	-6.79	1.43	1.52
6	Q	232	ARG	CA-C	-6.79	1.44	1.52
2	P	415	GLN	C-N	6.78	1.42	1.33
6	Q	461	SER	CA-C	-6.78	1.44	1.52
2	P	478	ARG	CD-NE	6.78	1.55	1.46
2	P	437	VAL	CA-CB	-6.78	1.45	1.54
2	B	386	SER	CA-C	-6.78	1.43	1.52
2	N	233	LEU	CA-C	-6.78	1.44	1.52
2	H	274	LYS	N-CA	-6.78	1.38	1.46
6	R	105	ARG	CA-C	-6.78	1.44	1.52
5	T	136	GLY	CA-C	-6.77	1.42	1.51
2	G	361	MET	CA-C	-6.77	1.43	1.52
2	N	274	LYS	N-CA	-6.77	1.38	1.46
6	R	611	LYS	CA-C	-6.77	1.44	1.52
6	R	206	GLN	CA-C	-6.77	1.44	1.52
4	M	480	ASN	CA-C	6.76	1.61	1.52
6	R	443	LYS	CA-C	-6.76	1.44	1.52
6	R	565	LEU	CA-C	-6.76	1.44	1.52
2	G	386	SER	CA-C	-6.76	1.43	1.52
4	O	480	ASN	CA-C	6.76	1.61	1.52
2	N	484	ALA	CA-CB	6.76	1.63	1.53
5	S	126	GLU	CA-C	-6.75	1.44	1.52
5	T	126	GLU	CA-C	-6.75	1.44	1.52
2	E	274	LYS	N-CA	-6.75	1.38	1.46
6	Q	611	LYS	CA-C	-6.75	1.44	1.52
2	H	407	ALA	CA-C	-6.74	1.44	1.52
6	R	461	SER	CA-C	-6.74	1.44	1.52
6	Q	443	LYS	CA-C	-6.74	1.44	1.52
6	Q	102	ILE	N-CA	-6.74	1.38	1.46
2	N	415	GLN	C-N	6.73	1.42	1.33
6	R	178	ILE	CA-C	-6.73	1.44	1.52
2	G	274	LYS	N-CA	-6.72	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	R	393	PHE	CA-C	-6.72	1.44	1.52
2	H	469	LEU	N-CA	-6.71	1.38	1.46
6	Q	685	PHE	CA-C	-6.71	1.44	1.52
5	S	134	ASN	CA-C	-6.71	1.43	1.52
2	B	274	LYS	N-CA	-6.71	1.38	1.46
5	T	138	ALA	CA-C	-6.71	1.43	1.52
6	R	105	ARG	N-CA	-6.71	1.38	1.46
4	O	511	LEU	CA-C	-6.71	1.44	1.52
2	P	274	LYS	N-CA	-6.71	1.38	1.46
2	B	407	ALA	CA-C	-6.71	1.44	1.52
4	O	411	VAL	CA-C	-6.70	1.44	1.52
3	K	274	LYS	N-CA	-6.70	1.38	1.46
3	L	274	LYS	N-CA	-6.69	1.38	1.46
2	B	469	LEU	N-CA	-6.69	1.38	1.46
6	R	486	VAL	CA-C	-6.69	1.44	1.52
2	G	423	PHE	CA-C	-6.69	1.44	1.52
6	R	527	ILE	CA-CB	-6.69	1.46	1.54
2	F	274	LYS	N-CA	-6.69	1.38	1.46
6	Q	486	VAL	CA-C	-6.69	1.44	1.52
2	G	429	GLU	CA-C	-6.69	1.44	1.52
6	Q	635	LYS	CA-C	-6.69	1.44	1.52
2	N	418	GLN	CA-C	-6.68	1.44	1.52
6	Q	105	ARG	N-CA	-6.68	1.38	1.46
6	Q	666	GLN	CA-C	-6.68	1.44	1.52
2	B	513	ARG	N-CA	-6.68	1.38	1.46
6	R	658	LEU	N-CA	-6.67	1.38	1.46
2	B	450	SER	CA-C	-6.66	1.44	1.52
3	V	274	LYS	N-CA	-6.66	1.38	1.46
4	M	411	VAL	CA-C	-6.66	1.44	1.52
4	M	511	LEU	CA-C	-6.66	1.44	1.52
6	Q	662	CYS	CA-C	-6.66	1.44	1.52
2	G	513	ARG	N-CA	-6.65	1.38	1.46
2	E	338	ASP	CA-C	-6.65	1.44	1.52
2	N	437	VAL	CA-CB	-6.65	1.45	1.54
2	A	338	ASP	CA-C	-6.65	1.44	1.52
2	A	518	LYS	C-O	-6.64	1.16	1.24
6	R	727	CYS	CA-C	-6.64	1.44	1.52
2	G	407	ALA	CA-C	-6.64	1.44	1.52
4	O	389	GLU	C-N	6.64	1.43	1.33
6	Q	658	LEU	N-CA	-6.63	1.38	1.46
6	Q	405	HIS	CA-C	-6.63	1.44	1.52
6	R	635	LYS	CA-C	-6.63	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	G	469	LEU	N-CA	-6.63	1.38	1.46
3	L	223	PHE	CA-C	-6.63	1.44	1.52
3	D	274	LYS	N-CA	-6.63	1.38	1.46
6	R	662	CYS	CA-C	-6.63	1.44	1.52
6	Q	103	ILE	CA-CB	-6.62	1.50	1.54
5	S	175	ARG	CA-C	-6.62	1.44	1.52
2	F	223	PHE	CA-C	-6.62	1.44	1.52
2	N	444	ARG	CD-NE	6.61	1.55	1.46
2	G	450	SER	CA-C	-6.61	1.44	1.52
6	R	418	LEU	CA-C	-6.60	1.44	1.52
6	Q	184	GLU	N-CA	-6.60	1.38	1.46
6	Q	675	GLU	CA-C	-6.60	1.44	1.52
2	G	401	LEU	N-CA	-6.59	1.38	1.46
3	L	213	THR	CA-C	-6.59	1.44	1.52
2	A	223	PHE	CA-C	-6.59	1.44	1.52
2	H	513	ARG	N-CA	-6.59	1.38	1.46
6	Q	206	GLN	CA-C	-6.59	1.44	1.52
4	M	404	LEU	CA-C	-6.59	1.44	1.52
2	A	274	LYS	N-CA	-6.58	1.38	1.46
2	H	213	THR	CA-C	-6.58	1.44	1.52
6	R	666	GLN	CA-C	-6.58	1.44	1.52
4	M	389	GLU	C-N	6.58	1.42	1.33
2	H	401	LEU	N-CA	-6.58	1.38	1.46
2	P	418	GLN	CA-C	-6.57	1.44	1.52
3	V	213	THR	CA-C	-6.57	1.44	1.52
6	Q	727	CYS	CA-C	-6.57	1.44	1.52
2	E	213	THR	CA-C	-6.57	1.44	1.52
6	R	626	TRP	CA-C	-6.57	1.44	1.52
3	K	213	THR	CA-C	-6.56	1.44	1.52
2	F	518	LYS	C-O	-6.56	1.16	1.24
3	K	223	PHE	CA-C	-6.56	1.44	1.52
6	R	504	ILE	N-CA	-6.56	1.38	1.46
2	A	213	THR	CA-C	-6.56	1.44	1.52
5	S	23	LYS	CA-C	-6.55	1.43	1.52
6	R	184	GLU	N-CA	-6.55	1.38	1.46
5	T	134	ASN	CA-C	-6.55	1.44	1.52
6	R	685	PHE	CA-C	-6.55	1.44	1.52
5	T	63	GLY	CA-C	-6.55	1.46	1.52
5	T	175	ARG	CA-C	-6.55	1.44	1.52
6	Q	418	LEU	CA-C	-6.55	1.44	1.52
6	Q	638	HIS	CA-C	-6.55	1.44	1.52
6	R	634	PHE	N-CA	-6.55	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	549	MET	C-N	6.54	1.42	1.33
2	N	213	THR	CA-C	-6.54	1.44	1.52
2	N	223	PHE	CA-C	-6.54	1.44	1.52
2	A	549	MET	C-N	6.54	1.42	1.33
2	F	338	ASP	CA-C	-6.54	1.44	1.52
2	G	223	PHE	CA-C	-6.54	1.44	1.52
2	B	401	LEU	N-CA	-6.54	1.38	1.46
6	R	711	ARG	CA-C	-6.54	1.44	1.52
4	M	414	ARG	CD-NE	6.53	1.55	1.46
2	H	223	PHE	CA-C	-6.53	1.44	1.52
6	Q	227	ASP	CA-C	-6.53	1.44	1.52
2	P	343	ARG	C-O	-6.53	1.16	1.24
6	R	405	HIS	CA-C	-6.53	1.44	1.52
2	E	223	PHE	CA-C	-6.53	1.44	1.52
6	Q	465	LEU	CA-C	-6.53	1.44	1.52
2	E	518	LYS	C-O	-6.52	1.16	1.24
5	S	138	ALA	CA-C	-6.52	1.44	1.52
2	E	515	GLU	N-CA	-6.52	1.38	1.46
2	N	343	ARG	C-O	-6.52	1.16	1.24
2	H	450	SER	CA-C	-6.52	1.44	1.52
3	D	213	THR	CA-C	-6.52	1.44	1.52
2	H	526	VAL	CA-C	-6.52	1.44	1.52
2	F	213	THR	CA-C	-6.52	1.44	1.52
5	S	63	GLY	CA-C	-6.52	1.46	1.52
6	Q	639	SER	CA-C	-6.51	1.44	1.52
5	T	23	LYS	CA-C	-6.51	1.44	1.52
6	Q	527	ILE	CA-CB	-6.51	1.46	1.54
2	E	549	MET	C-N	6.50	1.42	1.33
3	D	223	PHE	CA-C	-6.50	1.44	1.52
4	O	339	TRP	C-N	6.50	1.42	1.33
3	K	226	LYS	CA-C	-6.50	1.44	1.53
3	L	211	THR	N-CA	-6.50	1.38	1.46
2	P	213	THR	CA-C	-6.49	1.44	1.52
6	Q	471	ARG	CA-C	-6.49	1.44	1.52
6	Q	567	ARG	CA-C	-6.49	1.44	1.52
6	R	227	ASP	CA-C	-6.49	1.44	1.52
6	R	566	ALA	N-CA	-6.49	1.38	1.46
2	B	223	PHE	CA-C	-6.49	1.44	1.52
6	R	445	LYS	CA-C	-6.49	1.44	1.52
6	Q	400	LEU	N-CA	-6.49	1.38	1.46
4	O	414	ARG	CD-NE	6.49	1.55	1.46
6	Q	626	TRP	CA-C	-6.48	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	R	675	GLU	CA-C	-6.48	1.44	1.52
2	G	344	ARG	N-CA	-6.48	1.38	1.46
2	G	512	ASP	CA-C	-6.48	1.44	1.52
2	F	515	GLU	N-CA	-6.48	1.38	1.46
6	R	465	LEU	CA-C	-6.48	1.44	1.52
2	P	444	ARG	CD-NE	6.48	1.55	1.46
2	G	492	LYS	CA-C	-6.48	1.44	1.52
4	O	404	LEU	CA-C	-6.48	1.44	1.52
2	N	226	LYS	CA-C	-6.47	1.44	1.53
2	H	344	ARG	N-CA	-6.47	1.38	1.46
6	Q	192	LEU	CA-C	-6.47	1.44	1.52
2	A	226	LYS	CA-C	-6.47	1.44	1.53
2	E	505	ARG	NE-CZ	6.47	1.40	1.33
4	O	494	HIS	CE1-NE2	6.47	1.39	1.32
2	N	470	ARG	NE-CZ	6.47	1.40	1.33
2	E	211	THR	N-CA	-6.46	1.38	1.46
6	R	639	SER	N-CA	-6.46	1.38	1.46
2	G	213	THR	CA-C	-6.46	1.44	1.52
6	Q	566	ALA	N-CA	-6.46	1.38	1.46
4	M	339	TRP	C-N	6.46	1.42	1.33
6	R	400	LEU	N-CA	-6.46	1.38	1.46
2	B	492	LYS	CA-C	-6.45	1.44	1.52
2	B	526	VAL	CA-C	-6.45	1.44	1.52
3	K	211	THR	N-CA	-6.45	1.38	1.46
3	D	211	THR	N-CA	-6.45	1.38	1.46
3	D	226	LYS	CA-C	-6.45	1.44	1.53
3	V	223	PHE	CA-C	-6.45	1.44	1.52
6	Q	445	LYS	CA-C	-6.45	1.44	1.52
6	R	567	ARG	CA-C	-6.45	1.44	1.52
2	A	211	THR	N-CA	-6.45	1.38	1.46
6	R	158	TYR	CA-C	-6.45	1.45	1.53
6	R	638	HIS	CA-C	-6.44	1.44	1.52
2	E	226	LYS	CA-C	-6.44	1.44	1.53
2	A	515	GLU	N-CA	-6.43	1.38	1.46
2	G	211	THR	N-CA	-6.43	1.38	1.46
2	B	512	ASP	CA-C	-6.43	1.44	1.52
2	G	343	ARG	N-CA	-6.43	1.38	1.46
2	F	211	THR	N-CA	-6.43	1.38	1.46
3	V	226	LYS	CA-C	-6.43	1.44	1.53
6	R	440	ALA	CA-C	-6.43	1.45	1.52
6	Q	625	ASN	CA-C	-6.43	1.44	1.52
5	S	47	THR	N-CA	-6.43	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	213	THR	CA-C	-6.42	1.44	1.52
3	K	243	ASN	N-CA	-6.42	1.40	1.46
2	H	243	ASN	N-CA	-6.42	1.40	1.46
6	Q	711	ARG	CA-C	-6.42	1.44	1.52
6	R	706	ALA	N-CA	-6.42	1.38	1.46
6	R	625	ASN	CA-C	-6.42	1.44	1.52
4	O	411	VAL	N-CA	6.41	1.54	1.46
2	H	343	ARG	N-CA	-6.41	1.38	1.46
2	B	343	ARG	N-CA	-6.41	1.38	1.46
6	Q	187	LYS	CA-C	-6.41	1.44	1.52
6	Q	440	ALA	CA-C	-6.41	1.46	1.52
6	Q	468	SER	N-CA	-6.41	1.40	1.46
2	H	211	THR	N-CA	-6.40	1.38	1.46
5	S	69	ALA	CA-C	-6.40	1.44	1.52
2	B	344	ARG	N-CA	-6.40	1.38	1.46
2	H	512	ASP	CA-C	-6.40	1.44	1.52
6	Q	639	SER	N-CA	-6.40	1.38	1.46
6	Q	482	LEU	CA-C	-6.40	1.45	1.52
2	G	422	THR	CA-C	-6.39	1.44	1.52
2	B	211	THR	N-CA	-6.39	1.38	1.46
6	R	103	ILE	CA-CB	-6.39	1.50	1.54
6	R	639	SER	CA-C	-6.39	1.44	1.52
6	R	471	ARG	CA-C	-6.39	1.44	1.52
6	R	187	LYS	CA-C	-6.39	1.44	1.52
2	F	383	HIS	CB-CG	6.39	1.59	1.50
2	H	492	LYS	CA-C	-6.38	1.44	1.52
5	T	47	THR	N-CA	-6.38	1.38	1.46
2	A	383	HIS	CB-CG	6.38	1.59	1.50
2	P	226	LYS	CA-C	-6.38	1.44	1.53
2	N	211	THR	N-CA	-6.38	1.38	1.46
2	F	505	ARG	NE-CZ	6.38	1.40	1.33
4	M	494	HIS	CE1-NE2	6.38	1.39	1.32
3	V	211	THR	N-CA	-6.38	1.38	1.46
6	Q	66	TYR	CA-C	-6.38	1.44	1.52
2	N	510	GLU	C-N	6.37	1.42	1.33
2	A	343	ARG	CD-NE	6.37	1.55	1.46
2	P	223	PHE	CA-C	-6.37	1.45	1.52
2	H	205	ILE	CA-C	-6.37	1.45	1.52
2	P	211	THR	N-CA	-6.37	1.38	1.46
2	B	205	ILE	CA-C	-6.37	1.45	1.52
2	A	502	ASP	CA-C	-6.37	1.43	1.52
2	G	526	VAL	CA-C	-6.37	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	383	HIS	CB-CG	6.37	1.59	1.50
6	R	698	GLN	CA-C	-6.37	1.44	1.52
3	D	243	ASN	N-CA	-6.36	1.40	1.46
6	R	192	LEU	CA-C	-6.36	1.44	1.52
2	B	226	LYS	CA-C	-6.36	1.44	1.53
2	B	452	HIS	CA-C	-6.36	1.44	1.52
2	H	226	LYS	CA-C	-6.36	1.44	1.53
2	F	226	LYS	CA-C	-6.36	1.44	1.53
6	Q	681	PHE	N-CA	-6.36	1.38	1.46
6	Q	158	TYR	N-CA	-6.36	1.40	1.46
6	Q	504	ILE	N-CA	-6.36	1.39	1.46
6	Q	698	GLN	CA-C	-6.36	1.44	1.52
6	Q	462	LEU	CA-C	-6.36	1.44	1.52
2	F	344	ARG	CD-NE	6.35	1.55	1.46
2	P	343	ARG	CD-NE	6.35	1.55	1.46
3	L	243	ASN	N-CA	-6.35	1.40	1.46
6	R	234	SER	CA-C	-6.35	1.44	1.52
6	Q	234	SER	CA-C	-6.35	1.44	1.52
6	R	468	SER	N-CA	-6.35	1.40	1.46
5	T	69	ALA	CA-C	-6.34	1.44	1.52
2	G	226	LYS	CA-C	-6.34	1.44	1.53
3	L	226	LYS	CA-C	-6.34	1.44	1.53
6	R	482	LEU	CA-C	-6.34	1.45	1.52
2	G	452	HIS	CA-C	-6.34	1.44	1.52
2	F	343	ARG	CD-NE	6.33	1.55	1.46
6	Q	706	ALA	N-CA	-6.33	1.38	1.46
6	R	852	THR	CA-C	-6.33	1.44	1.52
2	F	502	ASP	CA-C	-6.33	1.43	1.52
2	H	422	THR	CA-C	-6.33	1.44	1.52
2	A	505	ARG	NE-CZ	6.33	1.40	1.33
4	M	381	SER	C-N	6.33	1.42	1.33
4	O	367	GLN	CA-C	-6.32	1.44	1.52
2	N	343	ARG	CD-NE	6.32	1.55	1.46
2	P	510	GLU	C-N	6.32	1.42	1.33
6	Q	522	GLU	CA-C	-6.31	1.44	1.52
4	M	413	GLU	C-N	6.31	1.42	1.33
6	R	681	PHE	N-CA	-6.31	1.38	1.46
2	A	344	ARG	CD-NE	6.31	1.55	1.46
3	V	243	ASN	N-CA	-6.31	1.40	1.46
4	M	411	VAL	N-CA	6.30	1.54	1.46
6	Q	158	TYR	CA-C	-6.30	1.45	1.53
2	E	344	ARG	CD-NE	6.30	1.55	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	O	409	ARG	CZ-NH2	6.30	1.41	1.33
5	S	24	PHE	CA-C	-6.30	1.44	1.52
6	Q	410	ASP	CA-C	-6.30	1.44	1.52
6	R	633	LEU	C-O	-6.30	1.16	1.24
5	T	171	VAL	N-CA	-6.30	1.38	1.46
2	N	423	PHE	CA-C	-6.30	1.44	1.52
2	P	423	PHE	CA-C	-6.30	1.44	1.52
6	Q	624	ASP	N-CA	-6.30	1.40	1.46
2	G	340	PHE	N-CA	-6.29	1.38	1.46
5	T	24	PHE	CA-C	-6.29	1.44	1.52
5	S	171	VAL	N-CA	-6.29	1.38	1.46
6	Q	568	LEU	N-CA	-6.29	1.38	1.46
2	F	205	ILE	CA-C	-6.29	1.45	1.52
2	H	421	LEU	N-CA	-6.29	1.38	1.46
2	P	470	ARG	NE-CZ	6.28	1.40	1.33
6	R	631	SER	N-CA	-6.28	1.39	1.46
4	M	367	GLN	CA-C	-6.28	1.44	1.52
2	H	452	HIS	CA-C	-6.28	1.44	1.52
4	M	470	ARG	C-N	6.28	1.42	1.33
4	O	413	GLU	C-N	6.28	1.42	1.33
4	O	431	ILE	C-N	6.28	1.41	1.33
6	Q	631	SER	N-CA	-6.28	1.39	1.46
3	K	296	GLU	CA-C	-6.27	1.44	1.52
2	B	422	THR	CA-C	-6.27	1.44	1.52
6	R	800	GLU	N-CA	-6.27	1.38	1.46
2	P	491	ARG	C-N	6.27	1.42	1.33
6	R	581	PHE	N-CA	-6.27	1.38	1.46
6	R	522	GLU	CA-C	-6.27	1.44	1.52
3	L	205	ILE	CA-C	-6.26	1.45	1.52
3	V	205	ILE	CA-C	-6.26	1.45	1.52
6	Q	800	GLU	N-CA	-6.26	1.38	1.46
4	M	409	ARG	CZ-NH2	6.25	1.41	1.33
2	H	340	PHE	N-CA	-6.25	1.38	1.46
2	E	502	ASP	CA-C	-6.25	1.44	1.52
4	O	470	ARG	C-N	6.25	1.42	1.33
2	N	335	GLU	N-CA	-6.25	1.38	1.46
6	Q	524	VAL	N-CA	-6.25	1.39	1.46
2	E	343	ARG	CD-NE	6.25	1.54	1.46
6	Q	633	LEU	C-O	-6.24	1.16	1.24
6	Q	852	THR	CA-C	-6.24	1.44	1.52
2	E	296	GLU	CA-C	-6.24	1.44	1.52
6	R	524	VAL	N-CA	-6.24	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	R	66	TYR	CA-C	-6.24	1.44	1.52
6	R	490	GLN	CA-C	-6.24	1.44	1.52
6	Q	183	VAL	CA-CB	-6.23	1.46	1.54
4	O	381	SER	C-N	6.23	1.41	1.33
6	R	129	LYS	N-CA	-6.23	1.38	1.46
6	R	568	LEU	N-CA	-6.23	1.39	1.46
2	B	340	PHE	N-CA	-6.23	1.38	1.46
6	Q	634	PHE	N-CA	-6.23	1.38	1.46
2	A	451	TRP	CA-C	-6.23	1.45	1.52
2	A	471	GLN	C-N	6.23	1.41	1.33
2	E	471	GLN	C-N	6.23	1.41	1.33
6	Q	394	PHE	CA-C	-6.22	1.45	1.52
2	A	205	ILE	CA-C	-6.22	1.45	1.52
2	G	421	LEU	N-CA	-6.22	1.38	1.46
2	F	471	GLN	C-N	6.22	1.41	1.33
2	B	421	LEU	N-CA	-6.22	1.38	1.46
2	P	296	GLU	CA-C	-6.22	1.44	1.52
6	Q	581	PHE	N-CA	-6.21	1.38	1.46
2	B	296	GLU	CA-C	-6.21	1.44	1.52
2	E	451	TRP	CA-C	-6.21	1.45	1.52
6	R	410	ASP	CA-C	-6.21	1.44	1.52
2	G	518	LYS	CA-C	-6.21	1.44	1.52
2	P	335	GLU	N-CA	-6.21	1.38	1.46
6	Q	191	ARG	CA-C	-6.21	1.44	1.52
4	M	431	ILE	C-N	6.21	1.41	1.33
6	R	798	PHE	CA-C	-6.21	1.44	1.52
2	H	350	LEU	CA-C	-6.21	1.44	1.52
3	L	296	GLU	CA-C	-6.21	1.44	1.52
2	G	205	ILE	CA-C	-6.20	1.45	1.52
3	V	296	GLU	CA-C	-6.20	1.44	1.52
6	R	467	GLN	N-CA	-6.20	1.38	1.46
6	Q	585	GLN	CA-C	-6.20	1.44	1.52
6	R	394	PHE	CA-C	-6.20	1.45	1.52
3	D	296	GLU	CA-C	-6.20	1.45	1.52
2	P	205	ILE	CA-C	-6.19	1.45	1.52
2	E	205	ILE	CA-C	-6.19	1.45	1.52
2	G	523	LYS	N-CA	-6.19	1.39	1.46
2	N	491	ARG	C-N	6.19	1.42	1.33
2	G	296	GLU	CA-C	-6.18	1.45	1.52
6	R	218	ASN	CA-C	-6.18	1.44	1.52
6	R	60	LYS	N-CA	-6.18	1.39	1.46
2	B	350	LEU	CA-C	-6.18	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	R	222	LEU	CA-C	-6.18	1.44	1.52
2	H	296	GLU	CA-C	-6.18	1.45	1.52
2	G	391	SER	CA-C	-6.18	1.45	1.52
6	R	664	CYS	N-CA	-6.17	1.39	1.46
3	D	205	ILE	CA-C	-6.17	1.45	1.52
5	S	55	SER	CA-C	-6.17	1.45	1.52
6	R	191	ARG	CA-C	-6.17	1.44	1.52
2	B	518	LYS	CA-C	-6.17	1.44	1.52
6	Q	490	GLN	CA-C	-6.17	1.44	1.52
5	T	159	LEU	CA-C	-6.16	1.45	1.52
2	G	507	LEU	CA-C	-6.16	1.44	1.52
6	R	462	LEU	CA-C	-6.16	1.44	1.52
2	E	384	ALA	C-O	-6.16	1.17	1.24
4	O	421	LEU	N-CA	-6.16	1.38	1.46
6	R	624	ASP	N-CA	-6.16	1.40	1.46
2	N	205	ILE	CA-C	-6.16	1.45	1.52
2	E	493	VAL	N-CA	-6.15	1.39	1.46
2	N	296	GLU	CA-C	-6.15	1.45	1.52
2	F	451	TRP	CA-C	-6.15	1.45	1.52
6	R	183	VAL	CA-CB	-6.15	1.46	1.54
2	G	510	GLU	N-CA	-6.15	1.39	1.46
4	O	542	GLU	N-CA	-6.15	1.39	1.46
6	Q	613	ALA	CA-C	-6.15	1.44	1.52
3	V	228	ARG	CA-C	-6.15	1.45	1.52
6	R	848	HIS	CB-CG	6.14	1.58	1.50
6	Q	798	PHE	CA-C	-6.14	1.44	1.52
2	H	523	LYS	N-CA	-6.14	1.39	1.46
6	R	613	ALA	CA-C	-6.14	1.44	1.52
2	P	290	ASP	CA-C	-6.13	1.45	1.52
2	F	296	GLU	CA-C	-6.13	1.45	1.52
2	H	354	LEU	CA-C	-6.13	1.44	1.52
3	V	272	LEU	N-CA	-6.13	1.39	1.46
2	H	391	SER	CA-C	-6.13	1.45	1.52
6	Q	60	LYS	N-CA	-6.13	1.39	1.46
6	Q	646	THR	N-CA	-6.13	1.38	1.46
6	Q	129	LYS	N-CA	-6.12	1.39	1.46
2	A	243	ASN	N-CA	-6.12	1.40	1.46
6	Q	664	CYS	N-CA	-6.12	1.39	1.46
2	A	411	VAL	CA-C	-6.12	1.45	1.52
2	H	225	VAL	CA-C	-6.12	1.45	1.52
2	G	354	LEU	CA-C	-6.12	1.44	1.52
2	H	518	LYS	CA-C	-6.12	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	S	169	LEU	CA-C	-6.11	1.45	1.52
6	Q	218	ASN	CA-C	-6.11	1.44	1.52
6	Q	848	HIS	CB-CG	6.11	1.58	1.50
5	S	159	LEU	CA-C	-6.11	1.45	1.52
2	H	336	GLN	CA-C	-6.11	1.44	1.52
2	B	354	LEU	CA-C	-6.11	1.44	1.52
2	G	350	LEU	CA-C	-6.11	1.44	1.52
2	G	498	LEU	CA-C	-6.11	1.45	1.52
3	K	205	ILE	CA-C	-6.10	1.45	1.52
2	H	272	LEU	N-CA	-6.10	1.39	1.46
4	M	421	LEU	N-CA	-6.10	1.38	1.46
5	T	17	ALA	CA-C	-6.10	1.45	1.52
2	B	384	ALA	CA-C	-6.10	1.44	1.52
2	B	498	LEU	CA-C	-6.10	1.45	1.52
2	F	411	VAL	CA-C	-6.10	1.45	1.52
6	R	585	GLN	CA-C	-6.10	1.45	1.52
2	B	408	ILE	CA-C	-6.09	1.45	1.52
2	G	417	GLN	CA-C	-6.09	1.44	1.52
6	Q	578	ASP	CA-C	-6.09	1.45	1.52
2	B	346	TYR	CA-C	-6.09	1.44	1.52
6	Q	467	GLN	N-CA	-6.09	1.38	1.46
6	R	183	VAL	N-CA	-6.09	1.39	1.46
2	F	272	LEU	N-CA	-6.09	1.39	1.46
3	L	292	LYS	CA-C	-6.09	1.45	1.52
6	R	158	TYR	N-CA	-6.09	1.40	1.46
2	G	296	GLU	N-CA	-6.09	1.39	1.46
2	F	290	ASP	CA-C	-6.09	1.45	1.52
2	B	417	GLN	CA-C	-6.08	1.44	1.52
2	A	384	ALA	C-O	-6.08	1.17	1.24
5	T	55	SER	CA-C	-6.08	1.45	1.52
2	P	344	ARG	CZ-NH2	6.08	1.41	1.33
3	L	290	ASP	CA-C	-6.08	1.45	1.52
6	R	695	SER	N-CA	-6.08	1.39	1.46
2	A	296	GLU	CA-C	-6.08	1.45	1.52
2	G	225	VAL	CA-C	-6.08	1.45	1.52
2	G	346	TYR	CA-C	-6.08	1.44	1.52
2	B	290	ASP	CA-C	-6.07	1.45	1.52
3	D	290	ASP	CA-C	-6.07	1.45	1.52
2	E	272	LEU	N-CA	-6.07	1.39	1.46
2	E	449	HIS	ND1-CE1	6.07	1.38	1.32
2	H	417	GLN	CA-C	-6.07	1.44	1.52
2	H	498	LEU	CA-C	-6.07	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	R	646	THR	N-CA	-6.07	1.38	1.46
2	E	411	VAL	CA-C	-6.07	1.45	1.52
2	A	493	VAL	N-CA	-6.07	1.39	1.46
2	B	523	LYS	N-CA	-6.07	1.39	1.46
3	D	272	LEU	N-CA	-6.07	1.39	1.46
2	P	228	ARG	CA-C	-6.07	1.45	1.52
2	B	228	ARG	CA-C	-6.07	1.45	1.52
6	Q	148	ARG	CA-C	-6.07	1.44	1.52
6	Q	525	LEU	CA-C	-6.07	1.45	1.52
6	R	128	MET	CA-C	-6.07	1.44	1.52
3	V	290	ASP	CA-C	-6.06	1.45	1.52
2	P	272	LEU	N-CA	-6.06	1.39	1.46
2	G	290	ASP	CA-C	-6.06	1.45	1.52
2	N	344	ARG	CZ-NH2	6.06	1.41	1.33
6	R	638	HIS	N-CA	-6.06	1.39	1.46
3	K	290	ASP	CA-C	-6.06	1.45	1.52
2	H	507	LEU	CA-C	-6.06	1.45	1.52
6	Q	222	LEU	CA-C	-6.06	1.45	1.52
2	F	225	VAL	CA-C	-6.06	1.45	1.52
6	Q	175	ILE	CA-C	-6.05	1.45	1.52
2	B	243	ASN	N-CA	-6.05	1.40	1.46
2	B	507	LEU	N-CA	-6.05	1.39	1.46
6	R	102	ILE	CA-C	-6.05	1.45	1.52
3	K	272	LEU	N-CA	-6.05	1.39	1.46
2	H	401	LEU	CA-C	-6.04	1.44	1.52
2	E	236	TYR	N-CA	-6.04	1.39	1.46
6	R	297	ASN	CA-C	-6.04	1.45	1.52
6	R	175	ILE	CA-C	-6.04	1.45	1.52
2	H	411	VAL	CA-CB	-6.04	1.47	1.54
6	R	851	GLN	CA-C	-6.04	1.45	1.52
6	R	578	ASP	CA-C	-6.04	1.45	1.52
2	F	493	VAL	N-CA	-6.04	1.39	1.46
2	B	507	LEU	CA-C	-6.04	1.45	1.52
2	A	449	HIS	ND1-CE1	6.04	1.38	1.32
2	G	228	ARG	CA-C	-6.04	1.45	1.52
2	E	296	GLU	N-CA	-6.04	1.39	1.46
4	M	382	LEU	CA-C	-6.04	1.45	1.52
2	F	292	LYS	CA-C	-6.04	1.45	1.52
5	S	17	ALA	CA-C	-6.04	1.45	1.52
2	N	228	ARG	CA-C	-6.03	1.45	1.52
2	H	507	LEU	N-CA	-6.03	1.39	1.46
6	R	525	LEU	CA-C	-6.03	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	296	GLU	N-CA	-6.03	1.39	1.46
2	A	228	ARG	CA-C	-6.03	1.45	1.52
2	G	243	ASN	N-CA	-6.03	1.40	1.46
3	V	296	GLU	N-CA	-6.03	1.39	1.46
2	G	384	ALA	CA-C	-6.03	1.45	1.52
2	H	346	TYR	CA-C	-6.03	1.45	1.52
2	H	510	GLU	N-CA	-6.03	1.39	1.46
5	T	169	LEU	CA-C	-6.03	1.45	1.52
4	O	382	LEU	CA-C	-6.02	1.45	1.52
2	G	336	GLN	CA-C	-6.02	1.45	1.52
3	L	296	GLU	N-CA	-6.02	1.39	1.46
6	Q	695	SER	N-CA	-6.02	1.39	1.46
6	R	106	LEU	CA-C	-6.02	1.45	1.52
6	R	226	VAL	CA-C	-6.02	1.45	1.52
2	B	336	GLN	CA-C	-6.02	1.45	1.52
3	D	228	ARG	CA-C	-6.02	1.45	1.52
2	H	408	ILE	CA-C	-6.02	1.45	1.52
3	L	228	ARG	CA-C	-6.02	1.45	1.52
6	Q	226	VAL	CA-C	-6.02	1.45	1.52
6	R	427	PRO	CA-C	-6.02	1.47	1.53
2	B	523	LYS	CA-C	-6.02	1.45	1.52
4	M	542	GLU	N-CA	-6.01	1.39	1.46
2	E	243	ASN	N-CA	-6.01	1.40	1.46
6	Q	627	SER	N-CA	-6.01	1.39	1.46
6	Q	728	ALA	CA-C	-6.01	1.45	1.52
2	B	406	LEU	CA-CB	-6.01	1.43	1.53
2	A	290	ASP	CA-C	-6.01	1.45	1.52
2	E	470	ARG	NE-CZ	6.01	1.39	1.33
6	Q	106	LEU	CA-C	-6.01	1.45	1.52
2	G	401	LEU	CA-C	-6.00	1.44	1.52
2	N	332	LYS	CA-C	-6.00	1.45	1.52
2	H	228	ARG	CA-C	-6.00	1.45	1.52
6	Q	102	ILE	CA-C	-6.00	1.45	1.52
6	R	729	GLN	CA-C	-6.00	1.45	1.52
2	B	225	VAL	CA-C	-6.00	1.45	1.52
2	G	507	LEU	N-CA	-6.00	1.39	1.46
2	H	290	ASP	CA-C	-6.00	1.45	1.52
2	A	296	GLU	N-CA	-6.00	1.39	1.46
2	G	382	LEU	N-CA	-6.00	1.39	1.46
2	G	411	VAL	CA-CB	-6.00	1.47	1.54
3	K	228	ARG	CA-C	-6.00	1.45	1.52
2	P	296	GLU	N-CA	-6.00	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	243	ASN	N-CA	-6.00	1.40	1.46
2	E	292	LYS	CA-C	-5.99	1.45	1.52
2	B	296	GLU	N-CA	-5.99	1.39	1.46
2	G	272	LEU	N-CA	-5.99	1.39	1.46
2	E	290	ASP	CA-C	-5.99	1.45	1.52
6	Q	64	GLU	CA-C	-5.99	1.45	1.52
2	N	290	ASP	CA-C	-5.99	1.45	1.52
2	H	296	GLU	N-CA	-5.99	1.39	1.46
2	H	384	ALA	CA-C	-5.99	1.45	1.52
2	F	470	ARG	NE-CZ	5.99	1.39	1.33
6	Q	613	ALA	N-CA	-5.99	1.39	1.46
2	B	391	SER	CA-C	-5.99	1.45	1.52
2	N	296	GLU	N-CA	-5.99	1.39	1.46
6	Q	717	ARG	N-CA	-5.98	1.38	1.46
2	B	236	TYR	N-CA	-5.98	1.39	1.46
2	E	342	ASP	CA-C	-5.98	1.45	1.52
2	H	406	LEU	CA-CB	-5.98	1.43	1.53
2	A	470	ARG	NE-CZ	5.98	1.39	1.33
2	B	419	ASP	N-CA	-5.98	1.38	1.46
2	F	384	ALA	C-O	-5.98	1.17	1.24
6	Q	729	GLN	CA-C	-5.98	1.45	1.52
6	R	590	ALA	N-CA	-5.98	1.38	1.46
2	F	449	HIS	ND1-CE1	5.98	1.38	1.32
6	Q	297	ASN	CA-C	-5.98	1.45	1.52
6	R	627	SER	N-CA	-5.98	1.39	1.46
2	A	342	ASP	CA-C	-5.98	1.45	1.52
2	E	228	ARG	CA-C	-5.97	1.45	1.52
3	K	225	VAL	CA-C	-5.97	1.45	1.52
2	P	225	VAL	CA-C	-5.97	1.45	1.52
5	S	120	HIS	CA-C	-5.97	1.44	1.52
2	E	474	THR	C-N	5.97	1.41	1.33
2	N	292	LYS	CA-C	-5.97	1.45	1.52
2	F	228	ARG	CA-C	-5.97	1.45	1.52
3	V	292	LYS	CA-C	-5.97	1.45	1.52
2	G	406	LEU	CA-CB	-5.97	1.43	1.53
2	G	408	ILE	CA-C	-5.97	1.45	1.52
2	A	236	TYR	N-CA	-5.96	1.39	1.46
4	M	399	ASP	CA-C	-5.96	1.45	1.52
3	L	225	VAL	CA-C	-5.96	1.45	1.52
6	Q	638	HIS	N-CA	-5.96	1.39	1.46
5	T	131	PHE	N-CA	-5.96	1.38	1.46
2	A	420	VAL	N-CA	5.96	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	P	243	ASN	N-CA	-5.96	1.40	1.46
3	L	272	LEU	N-CA	-5.96	1.39	1.46
3	D	236	TYR	N-CA	-5.96	1.39	1.46
2	B	272	LEU	N-CA	-5.96	1.39	1.46
6	R	148	ARG	CA-C	-5.96	1.44	1.52
2	B	382	LEU	N-CA	-5.96	1.39	1.46
2	B	401	LEU	CA-C	-5.96	1.44	1.52
2	H	434	ILE	N-CA	-5.96	1.39	1.46
6	R	582	ARG	CA-C	-5.96	1.45	1.52
2	B	510	GLU	N-CA	-5.95	1.39	1.46
6	R	592	ALA	N-CA	-5.95	1.38	1.46
2	A	292	LYS	CA-C	-5.95	1.45	1.52
3	K	292	LYS	CA-C	-5.95	1.45	1.52
2	N	236	TYR	N-CA	-5.95	1.39	1.46
6	Q	183	VAL	N-CA	-5.95	1.39	1.46
5	T	120	HIS	CA-C	-5.95	1.44	1.52
3	D	292	LYS	CA-C	-5.95	1.45	1.52
2	E	513	ARG	CZ-NH2	5.95	1.41	1.33
2	N	243	ASN	N-CA	-5.95	1.40	1.46
6	R	296	MET	CA-C	-5.95	1.45	1.52
2	H	382	LEU	N-CA	-5.95	1.39	1.46
2	G	236	TYR	N-CA	-5.94	1.39	1.46
3	K	236	TYR	N-CA	-5.94	1.39	1.46
2	H	523	LYS	CA-C	-5.94	1.45	1.52
2	P	292	LYS	CA-C	-5.94	1.45	1.52
2	N	272	LEU	N-CA	-5.94	1.39	1.46
2	H	406	LEU	CA-C	-5.94	1.45	1.52
2	F	236	TYR	N-CA	-5.94	1.39	1.46
3	L	236	TYR	N-CA	-5.94	1.39	1.46
4	O	478	ARG	CA-CB	5.94	1.63	1.53
2	A	272	LEU	N-CA	-5.93	1.39	1.46
2	B	411	VAL	CA-CB	-5.93	1.47	1.54
6	Q	851	GLN	CA-C	-5.93	1.45	1.52
2	A	225	VAL	CA-C	-5.93	1.45	1.52
2	G	406	LEU	CA-C	-5.93	1.45	1.52
4	O	399	ASP	CA-C	-5.93	1.45	1.52
4	M	380	ALA	CA-C	-5.93	1.45	1.52
2	F	420	VAL	N-CA	5.93	1.53	1.46
3	V	225	VAL	CA-C	-5.93	1.45	1.52
6	R	717	ARG	N-CA	-5.93	1.39	1.46
6	R	613	ALA	N-CA	-5.93	1.39	1.46
2	G	493	VAL	N-CA	-5.92	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	P	236	TYR	N-CA	-5.92	1.39	1.46
6	R	446	GLU	CA-C	-5.92	1.45	1.52
4	O	509	SER	CA-CB	5.92	1.62	1.53
4	M	378	PHE	N-CA	-5.92	1.39	1.46
2	N	449	HIS	CE1-NE2	5.92	1.38	1.32
5	S	131	PHE	N-CA	-5.92	1.39	1.46
2	A	494	HIS	ND1-CE1	5.92	1.38	1.32
2	G	523	LYS	CA-C	-5.92	1.45	1.52
2	F	474	THR	C-N	5.91	1.41	1.33
6	Q	128	MET	CA-C	-5.91	1.45	1.52
2	E	494	HIS	ND1-CE1	5.91	1.38	1.32
2	F	434	ILE	CA-CB	-5.91	1.47	1.54
5	S	181	THR	CA-C	-5.91	1.45	1.52
6	R	64	GLU	CA-C	-5.91	1.45	1.52
2	P	332	LYS	CA-C	-5.91	1.45	1.52
3	D	225	VAL	CA-C	-5.91	1.45	1.52
2	F	296	GLU	N-CA	-5.91	1.39	1.46
6	Q	582	ARG	CA-C	-5.91	1.45	1.52
6	Q	590	ALA	N-CA	-5.91	1.39	1.46
5	T	127	TYR	N-CA	-5.91	1.39	1.46
2	E	434	ILE	CA-CB	-5.90	1.47	1.54
6	Q	261	GLN	CA-C	-5.90	1.45	1.52
2	E	401	LEU	C-N	5.90	1.41	1.33
4	M	509	SER	CA-CB	5.90	1.62	1.53
6	Q	427	PRO	CA-C	-5.90	1.48	1.53
6	R	261	GLN	CA-C	-5.90	1.45	1.52
6	Q	592	ALA	N-CA	-5.90	1.38	1.46
6	Q	242	GLN	CA-C	-5.90	1.45	1.52
2	N	225	VAL	CA-C	-5.90	1.45	1.52
2	A	401	LEU	C-N	5.89	1.41	1.33
2	G	419	ASP	N-CA	-5.89	1.38	1.46
2	H	292	LYS	CA-C	-5.89	1.45	1.52
2	F	238	THR	CA-C	-5.89	1.45	1.52
2	F	342	ASP	CA-C	-5.89	1.45	1.52
2	A	392	PRO	CA-CB	-5.89	1.45	1.53
2	F	401	LEU	C-N	5.89	1.41	1.33
6	R	614	ARG	CA-C	-5.89	1.45	1.52
2	A	505	ARG	CD-NE	5.89	1.54	1.46
2	E	225	VAL	CA-C	-5.89	1.45	1.52
4	M	478	ARG	CA-CB	5.89	1.62	1.53
2	G	434	ILE	N-CA	-5.88	1.39	1.46
6	R	691	SER	CA-C	-5.88	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	G	420	VAL	CA-C	-5.88	1.45	1.52
2	H	419	ASP	N-CA	-5.88	1.38	1.46
6	Q	614	ARG	CA-C	-5.88	1.45	1.52
6	R	728	ALA	CA-C	-5.88	1.45	1.52
4	O	380	ALA	CA-C	-5.88	1.45	1.52
2	N	533	ALA	CA-CB	5.88	1.62	1.53
2	E	420	VAL	N-CA	5.87	1.53	1.46
2	H	236	TYR	N-CA	-5.87	1.39	1.46
2	F	392	PRO	CA-CB	-5.87	1.45	1.53
5	T	156	SER	N-CA	-5.87	1.38	1.45
6	Q	296	MET	CA-C	-5.87	1.45	1.52
2	B	292	LYS	CA-C	-5.87	1.45	1.52
3	L	238	THR	CA-C	-5.87	1.45	1.52
5	S	127	TYR	N-CA	-5.87	1.39	1.46
2	G	419	ASP	CA-C	-5.86	1.46	1.52
2	B	367	GLN	N-CA	-5.86	1.39	1.46
2	A	238	THR	CA-C	-5.86	1.45	1.52
6	R	799	VAL	N-CA	-5.86	1.39	1.46
2	A	338	ASP	C-N	5.86	1.41	1.33
2	A	434	ILE	CA-CB	-5.86	1.47	1.54
3	K	296	GLU	N-CA	-5.86	1.39	1.46
4	M	462	LYS	CA-CB	5.86	1.62	1.53
2	E	238	THR	CA-C	-5.86	1.45	1.52
2	A	513	ARG	CZ-NH2	5.86	1.41	1.33
4	O	462	LYS	CA-CB	5.86	1.62	1.53
6	R	438	ALA	CA-C	-5.86	1.45	1.53
2	B	419	ASP	CA-C	-5.85	1.46	1.52
2	H	420	VAL	CA-C	-5.85	1.45	1.52
2	B	434	ILE	N-CA	-5.85	1.39	1.46
5	T	4	LEU	CA-C	-5.85	1.45	1.53
6	R	508	LEU	CA-C	-5.85	1.44	1.52
2	A	396	GLY	C-N	5.85	1.41	1.33
6	R	92	LEU	N-CA	-5.85	1.39	1.46
6	Q	580	GLN	C-O	-5.84	1.17	1.24
2	F	513	ARG	CZ-NH2	5.84	1.41	1.33
2	A	474	THR	C-N	5.83	1.41	1.33
2	E	396	GLY	C-N	5.83	1.41	1.33
2	B	420	VAL	CA-C	-5.83	1.45	1.52
2	G	399	ASP	N-CA	-5.83	1.39	1.46
2	E	392	PRO	CA-CB	-5.83	1.45	1.53
2	G	390	LEU	CA-C	-5.83	1.44	1.52
5	S	4	LEU	CA-C	-5.83	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	Q	131	MET	CA-C	-5.83	1.45	1.52
2	P	431	ILE	N-CA	-5.83	1.39	1.46
2	N	477	ASP	CA-C	-5.83	1.45	1.52
2	F	396	GLY	C-N	5.83	1.41	1.33
6	Q	92	LEU	N-CA	-5.83	1.39	1.46
5	T	21	PRO	CA-C	-5.83	1.46	1.52
6	R	580	GLN	C-O	-5.83	1.17	1.24
6	R	436	ILE	N-CA	-5.83	1.39	1.46
2	N	376	ALA	C-N	5.82	1.42	1.33
3	V	236	TYR	N-CA	-5.82	1.39	1.46
6	Q	446	GLU	CA-C	-5.82	1.45	1.52
2	E	505	ARG	CD-NE	5.82	1.54	1.46
2	F	432	ARG	CD-NE	5.82	1.54	1.46
6	Q	691	SER	CA-C	-5.82	1.45	1.52
2	F	505	ARG	CD-NE	5.82	1.54	1.46
6	R	188	LEU	CA-C	-5.82	1.45	1.52
6	Q	697	ALA	CA-C	-5.82	1.45	1.52
2	P	533	ALA	CA-CB	5.81	1.62	1.53
3	V	282	HIS	C-N	-5.81	1.26	1.34
2	G	292	LYS	CA-C	-5.81	1.45	1.52
2	H	493	VAL	N-CA	-5.81	1.39	1.46
6	Q	799	VAL	N-CA	-5.81	1.39	1.46
6	R	391	ASP	CA-C	-5.81	1.45	1.52
2	H	367	GLN	N-CA	-5.81	1.39	1.46
2	B	406	LEU	CA-C	-5.80	1.45	1.52
2	H	390	LEU	CA-C	-5.80	1.44	1.52
2	F	515	GLU	CA-C	5.80	1.60	1.52
4	O	368	ARG	NE-CZ	5.80	1.39	1.33
4	O	523	LYS	C-N	5.80	1.41	1.33
6	R	712	THR	N-CA	-5.80	1.38	1.45
4	M	340	PHE	C-N	5.80	1.41	1.33
2	F	494	HIS	ND1-CE1	5.80	1.38	1.32
6	R	131	MET	CA-C	-5.80	1.45	1.52
5	S	21	PRO	CA-C	-5.79	1.46	1.52
6	Q	438	ALA	CA-C	-5.79	1.45	1.53
5	S	156	SER	N-CA	-5.79	1.38	1.45
6	Q	712	THR	N-CA	-5.79	1.38	1.45
6	R	483	PRO	CA-C	-5.79	1.44	1.52
2	H	419	ASP	CA-C	-5.79	1.46	1.52
2	B	390	LEU	CA-C	-5.78	1.44	1.52
2	E	350	LEU	C-O	-5.78	1.17	1.24
2	P	487	ILE	C-N	5.78	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	A	532	SER	C-O	-5.78	1.17	1.24
2	N	456	SER	CA-CB	5.78	1.62	1.53
2	B	238	THR	CA-C	-5.78	1.45	1.52
3	K	282	HIS	C-N	-5.78	1.26	1.34
2	N	487	ILE	C-N	5.78	1.41	1.33
6	Q	508	LEU	CA-C	-5.78	1.44	1.52
2	P	456	SER	CA-CB	5.78	1.62	1.53
6	Q	791	THR	N-CA	-5.78	1.39	1.46
2	N	268	ARG	N-CA	-5.77	1.39	1.46
6	R	242	GLN	CA-C	-5.77	1.45	1.52
2	B	493	VAL	N-CA	-5.77	1.39	1.46
4	M	523	LYS	C-N	5.77	1.41	1.33
2	P	449	HIS	CE1-NE2	5.77	1.38	1.32
2	F	338	ASP	C-N	5.77	1.41	1.33
5	T	181	THR	CA-C	-5.77	1.45	1.52
2	A	350	LEU	C-O	-5.77	1.17	1.24
6	Q	391	ASP	CA-C	-5.77	1.45	1.52
2	P	376	ALA	C-N	5.76	1.42	1.33
2	P	477	ASP	CA-C	-5.76	1.45	1.52
2	E	515	GLU	CA-C	5.76	1.60	1.52
6	R	791	THR	N-CA	-5.76	1.39	1.46
2	F	282	HIS	C-N	-5.76	1.26	1.34
2	P	282	HIS	C-N	-5.76	1.26	1.34
2	B	404	LEU	CA-C	-5.75	1.45	1.52
2	G	367	GLN	N-CA	-5.75	1.39	1.46
6	R	697	ALA	CA-C	-5.75	1.45	1.52
2	G	404	LEU	CA-C	-5.75	1.45	1.52
2	E	432	ARG	CD-NE	5.75	1.54	1.46
5	S	188	LYS	CA-C	-5.75	1.45	1.52
6	Q	436	ILE	N-CA	-5.75	1.39	1.46
2	E	338	ASP	C-N	5.74	1.41	1.33
2	H	275	MET	CA-C	-5.74	1.45	1.52
6	R	640	ALA	N-CA	-5.74	1.39	1.46
4	O	340	PHE	C-N	5.74	1.41	1.33
6	Q	293	ILE	CA-C	-5.74	1.45	1.52
2	B	268	ARG	N-CA	-5.74	1.39	1.46
2	E	421	LEU	C-N	5.74	1.41	1.33
6	R	293	ILE	CA-C	-5.74	1.45	1.52
2	E	483	ASN	CA-CB	5.73	1.62	1.53
2	N	275	MET	CA-C	-5.73	1.45	1.52
2	B	282	HIS	C-N	-5.73	1.26	1.34
5	T	188	LYS	CA-C	-5.73	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	G	282	HIS	C-N	-5.73	1.26	1.34
2	F	421	LEU	C-N	5.73	1.41	1.33
6	Q	483	PRO	CA-C	-5.73	1.44	1.52
2	G	434	ILE	CA-CB	-5.72	1.47	1.54
2	P	238	THR	CA-C	-5.72	1.45	1.52
2	N	282	HIS	C-N	-5.72	1.26	1.34
2	H	404	LEU	CA-C	-5.71	1.45	1.52
2	H	434	ILE	CA-CB	-5.71	1.47	1.54
2	F	532	SER	C-O	-5.71	1.17	1.24
6	R	132	MET	CA-C	-5.71	1.45	1.52
2	B	360	ALA	N-CA	-5.71	1.39	1.46
6	Q	132	MET	CA-C	-5.71	1.45	1.52
2	A	409	ARG	NE-CZ	5.71	1.39	1.33
2	E	409	ARG	NE-CZ	5.71	1.39	1.33
2	F	409	ARG	NE-CZ	5.71	1.39	1.33
3	V	268	ARG	N-CA	-5.70	1.39	1.46
2	G	348	ASP	CA-C	-5.70	1.45	1.52
3	D	282	HIS	C-N	-5.70	1.26	1.34
2	G	392	PRO	CA-C	-5.70	1.43	1.52
2	P	497	ARG	CD-NE	5.70	1.54	1.46
4	M	368	ARG	NE-CZ	5.70	1.39	1.33
2	H	424	GLY	CA-C	-5.70	1.45	1.52
5	S	155	PRO	CA-C	-5.70	1.44	1.52
6	R	258	VAL	CA-CB	-5.70	1.47	1.54
2	B	399	ASP	N-CA	-5.70	1.39	1.46
2	A	515	GLU	CA-C	5.70	1.60	1.52
2	E	407	ALA	C-O	-5.70	1.17	1.24
2	B	424	GLY	CA-C	-5.70	1.45	1.52
2	A	452	HIS	N-CA	-5.70	1.39	1.46
6	Q	53	ARG	CA-C	-5.70	1.44	1.52
2	G	276	LEU	CA-C	-5.70	1.45	1.52
3	L	275	MET	CA-C	-5.70	1.45	1.52
2	N	508	ARG	CZ-NH2	5.69	1.40	1.33
2	N	419	ASP	C-N	5.69	1.41	1.33
2	A	432	ARG	CD-NE	5.69	1.54	1.46
6	Q	665	GLY	CA-C	-5.69	1.45	1.52
2	A	483	ASN	CA-CB	5.69	1.62	1.53
2	H	360	ALA	N-CA	-5.68	1.39	1.46
6	Q	258	VAL	CA-CB	-5.68	1.47	1.54
2	A	282	HIS	C-N	-5.68	1.26	1.34
2	P	268	ARG	N-CA	-5.68	1.39	1.46
5	T	155	PRO	CA-C	-5.68	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	452	HIS	N-CA	-5.68	1.39	1.46
6	Q	179	LEU	N-CA	-5.68	1.39	1.46
2	B	423	PHE	N-CA	-5.68	1.39	1.46
2	P	508	ARG	CZ-NH2	5.68	1.40	1.33
6	R	401	VAL	CA-C	-5.68	1.45	1.52
3	V	275	MET	CA-C	-5.68	1.45	1.52
3	L	282	HIS	C-N	-5.68	1.26	1.34
2	N	428	GLU	C-N	5.67	1.41	1.33
6	R	429	ARG	CA-C	-5.67	1.45	1.52
2	P	275	MET	CA-C	-5.67	1.45	1.52
2	F	268	ARG	N-CA	-5.67	1.39	1.46
2	H	399	ASP	N-CA	-5.67	1.39	1.46
6	Q	149	TYR	N-CA	-5.67	1.39	1.46
3	D	275	MET	CA-C	-5.67	1.45	1.52
2	H	238	THR	CA-C	-5.67	1.45	1.52
6	R	444	VAL	CA-CB	-5.67	1.47	1.54
6	R	523	ASN	N-CA	-5.67	1.39	1.46
2	G	496	ALA	CA-C	-5.67	1.45	1.52
2	G	238	THR	CA-C	-5.67	1.45	1.52
2	E	275	MET	CA-C	-5.67	1.45	1.52
4	O	459	MET	C-N	5.67	1.41	1.33
2	B	392	PRO	CA-C	-5.66	1.43	1.52
2	G	423	PHE	N-CA	-5.66	1.39	1.46
6	Q	392	ILE	CA-C	-5.66	1.46	1.52
6	Q	523	ASN	N-CA	-5.66	1.39	1.46
6	Q	214	LEU	CA-C	-5.66	1.45	1.52
6	R	179	LEU	N-CA	-5.66	1.39	1.46
2	A	275	MET	CA-C	-5.66	1.45	1.52
6	Q	188	LEU	CA-C	-5.66	1.45	1.52
2	G	360	ALA	N-CA	-5.66	1.39	1.46
2	F	483	ASN	CA-CB	5.66	1.62	1.53
6	Q	444	VAL	CA-CB	-5.66	1.47	1.54
2	G	530	LEU	CA-C	-5.66	1.45	1.52
6	R	731	ALA	N-CA	-5.65	1.39	1.46
3	L	268	ARG	N-CA	-5.65	1.39	1.46
3	D	238	THR	CA-C	-5.65	1.45	1.52
3	K	275	MET	CA-C	-5.65	1.45	1.52
2	G	424	GLY	CA-C	-5.64	1.45	1.52
2	F	407	ALA	C-O	-5.64	1.17	1.24
6	Q	511	ASN	CA-C	-5.64	1.45	1.52
5	T	158	CYS	CA-C	-5.64	1.46	1.52
6	R	464	SER	CA-C	-5.64	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	H	282	HIS	C-N	-5.64	1.26	1.34
2	H	423	PHE	N-CA	-5.64	1.39	1.46
6	R	149	TYR	N-CA	-5.64	1.39	1.46
5	S	158	CYS	CA-C	-5.64	1.46	1.52
2	A	421	LEU	C-N	5.64	1.41	1.33
2	N	347	LEU	CA-C	5.64	1.60	1.52
2	N	497	ARG	CD-NE	5.64	1.54	1.46
2	H	514	PHE	CA-C	-5.64	1.45	1.52
2	E	482	VAL	CA-C	-5.63	1.45	1.52
2	P	419	ASP	C-N	5.63	1.41	1.33
2	H	392	PRO	CA-C	-5.63	1.44	1.52
2	B	514	PHE	CA-C	-5.63	1.45	1.52
2	A	407	ALA	C-O	-5.63	1.17	1.24
3	D	268	ARG	N-CA	-5.63	1.39	1.46
2	G	268	ARG	N-CA	-5.63	1.39	1.46
2	H	276	LEU	CA-C	-5.63	1.45	1.52
6	R	511	ASN	CA-C	-5.63	1.45	1.52
2	F	275	MET	CA-C	-5.63	1.45	1.52
2	H	268	ARG	N-CA	-5.63	1.39	1.46
2	N	431	ILE	N-CA	-5.62	1.39	1.46
2	E	206	VAL	CA-C	-5.62	1.45	1.52
2	E	268	ARG	N-CA	-5.62	1.39	1.46
2	N	386	SER	N-CA	-5.62	1.38	1.46
6	Q	97	GLN	CA-C	-5.62	1.44	1.52
3	K	238	THR	CA-C	-5.62	1.45	1.52
4	M	459	MET	C-N	5.62	1.41	1.33
6	Q	401	VAL	CA-C	-5.62	1.45	1.52
2	B	434	ILE	CA-CB	-5.62	1.47	1.54
2	N	368	ARG	CZ-NH1	5.62	1.40	1.32
2	H	348	ASP	CA-C	-5.62	1.45	1.52
6	Q	609	GLY	CA-C	-5.62	1.45	1.52
2	E	282	HIS	C-N	-5.62	1.26	1.34
2	E	532	SER	C-O	-5.62	1.17	1.24
6	R	562	GLN	CA-C	-5.62	1.45	1.52
2	B	206	VAL	CA-C	-5.62	1.45	1.52
2	F	452	HIS	N-CA	-5.62	1.39	1.46
3	V	238	THR	CA-C	-5.62	1.45	1.52
2	B	276	LEU	CA-C	-5.61	1.45	1.52
2	F	350	LEU	C-O	-5.61	1.17	1.24
5	S	59	LYS	CA-C	-5.61	1.45	1.52
4	M	450	SER	CA-CB	5.61	1.62	1.53
6	Q	640	ALA	N-CA	-5.61	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	496	ALA	CA-C	-5.61	1.45	1.52
2	P	428	GLU	C-N	5.61	1.41	1.33
6	R	392	ILE	CA-C	-5.60	1.46	1.52
2	B	275	MET	CA-C	-5.60	1.45	1.52
6	Q	429	ARG	CA-C	-5.60	1.45	1.52
2	P	515	GLU	C-N	5.60	1.41	1.33
6	R	629	GLN	N-CA	-5.60	1.39	1.46
2	P	386	SER	N-CA	-5.60	1.38	1.46
6	R	97	GLN	CA-C	-5.60	1.44	1.52
2	B	530	LEU	CA-C	-5.60	1.45	1.52
6	Q	628	SER	CA-C	-5.60	1.45	1.52
5	T	59	LYS	CA-C	-5.60	1.45	1.52
2	A	268	ARG	N-CA	-5.59	1.39	1.46
4	O	378	PHE	N-CA	-5.59	1.39	1.46
2	B	348	ASP	CA-C	-5.59	1.45	1.52
2	B	466	ASP	CA-C	-5.59	1.45	1.52
2	N	276	LEU	CA-C	-5.59	1.45	1.52
6	R	586	MET	C-N	-5.59	1.26	1.33
2	P	347	LEU	CA-C	5.58	1.60	1.52
6	Q	257	GLU	CA-C	-5.58	1.45	1.52
3	K	268	ARG	N-CA	-5.58	1.39	1.46
2	A	475	GLN	CA-CB	5.58	1.62	1.53
2	H	369	LYS	N-CA	-5.58	1.39	1.46
6	Q	417	SER	CA-C	-5.58	1.45	1.52
2	G	352	ASN	CA-C	-5.58	1.45	1.52
2	P	368	ARG	CZ-NH1	5.58	1.40	1.32
2	F	508	ARG	NE-CZ	5.58	1.39	1.33
2	H	530	LEU	CA-C	-5.58	1.45	1.52
6	Q	586	MET	C-N	-5.58	1.26	1.33
2	B	352	ASN	CA-C	-5.58	1.45	1.52
2	G	206	VAL	CA-C	-5.58	1.45	1.52
2	E	276	LEU	CA-C	-5.58	1.45	1.52
2	B	462	LYS	CA-C	-5.57	1.45	1.52
6	R	408	ILE	N-CA	-5.57	1.39	1.46
6	R	677	ALA	N-CA	-5.57	1.39	1.46
2	P	399	ASP	C-N	5.57	1.41	1.33
6	Q	629	GLN	N-CA	-5.57	1.39	1.46
2	F	492	LYS	CA-C	-5.57	1.45	1.52
6	Q	192	LEU	N-CA	-5.57	1.39	1.46
2	A	508	ARG	NE-CZ	5.57	1.39	1.33
2	N	413	GLU	CA-CB	5.57	1.62	1.53
3	V	224	GLU	CA-C	-5.57	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	R	53	ARG	CA-C	-5.57	1.45	1.52
6	R	214	LEU	CA-C	-5.57	1.45	1.52
4	M	461	LYS	N-CA	-5.57	1.39	1.46
6	Q	579	THR	C-N	-5.57	1.26	1.33
6	R	171	LEU	CA-C	-5.57	1.45	1.52
6	Q	677	ALA	N-CA	-5.56	1.39	1.46
6	R	724	ILE	CA-C	-5.56	1.45	1.52
2	G	376	ALA	CA-C	-5.56	1.45	1.52
2	N	515	GLU	C-N	5.56	1.41	1.33
6	Q	724	ILE	CA-C	-5.56	1.45	1.52
6	Q	788	CYS	CA-C	-5.56	1.45	1.52
6	R	146	PHE	CA-C	-5.56	1.45	1.52
6	R	192	LEU	N-CA	-5.56	1.39	1.46
6	R	698	GLN	N-CA	-5.56	1.39	1.46
2	A	492	LYS	CA-C	-5.56	1.45	1.52
2	G	466	ASP	CA-C	-5.56	1.45	1.52
5	S	160	MET	CA-C	-5.56	1.46	1.52
6	R	579	THR	C-N	-5.56	1.26	1.33
2	G	514	PHE	CA-C	-5.56	1.45	1.52
2	N	238	THR	CA-C	-5.56	1.45	1.52
6	R	393	PHE	N-CA	-5.56	1.39	1.46
2	B	407	ALA	C-N	-5.55	1.26	1.33
2	B	411	VAL	N-CA	-5.55	1.39	1.46
3	L	206	VAL	CA-C	-5.55	1.45	1.52
6	Q	561	GLU	CA-C	-5.55	1.45	1.52
6	Q	731	ALA	N-CA	-5.55	1.39	1.46
6	R	147	LEU	CA-C	-5.55	1.45	1.52
2	H	466	ASP	CA-C	-5.55	1.45	1.52
6	Q	149	TYR	CA-C	-5.55	1.45	1.52
2	N	516	ARG	N-CA	-5.55	1.39	1.46
2	F	206	VAL	CA-C	-5.55	1.45	1.52
2	N	248	VAL	N-CA	-5.55	1.39	1.46
2	A	206	VAL	CA-C	-5.54	1.45	1.52
2	A	276	LEU	CA-C	-5.54	1.45	1.52
3	K	274	LYS	CA-C	-5.54	1.45	1.52
4	O	450	SER	CA-CB	5.54	1.61	1.53
6	Q	91	ASP	CA-C	-5.54	1.45	1.52
6	R	628	SER	CA-C	-5.54	1.45	1.52
2	G	275	MET	CA-C	-5.54	1.45	1.52
2	H	496	ALA	CA-C	-5.54	1.45	1.52
6	Q	661	PHE	CA-C	-5.54	1.45	1.52
6	R	257	GLU	CA-C	-5.54	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	475	GLN	CA-CB	5.54	1.62	1.53
6	R	572	ILE	N-CA	-5.54	1.40	1.46
6	Q	464	SER	CA-C	-5.54	1.45	1.52
2	P	224	GLU	CA-C	-5.54	1.46	1.52
2	F	276	LEU	CA-C	-5.54	1.45	1.52
3	D	274	LYS	CA-C	-5.53	1.45	1.52
2	G	462	LYS	CA-C	-5.53	1.45	1.52
2	P	276	LEU	CA-C	-5.53	1.45	1.52
2	H	268	ARG	CA-C	-5.53	1.45	1.52
6	R	91	ASP	CA-C	-5.53	1.45	1.52
2	H	352	ASN	CA-C	-5.53	1.45	1.52
3	V	206	VAL	CA-C	-5.53	1.45	1.52
6	R	739	ASP	N-CA	-5.53	1.39	1.46
6	Q	686	THR	CA-C	-5.53	1.45	1.52
2	F	482	VAL	CA-C	-5.52	1.45	1.52
2	G	411	VAL	N-CA	-5.52	1.40	1.46
4	O	480	ASN	C-O	-5.52	1.17	1.24
2	F	248	VAL	N-CA	-5.52	1.39	1.46
6	R	609	GLY	CA-C	-5.52	1.45	1.52
2	E	492	LYS	CA-C	-5.52	1.45	1.52
2	H	462	LYS	CA-C	-5.52	1.45	1.52
6	Q	171	LEU	CA-C	-5.52	1.45	1.52
6	R	561	GLU	CA-C	-5.52	1.45	1.52
2	E	508	ARG	NE-CZ	5.52	1.39	1.33
2	H	274	LYS	CA-C	-5.52	1.45	1.52
2	H	407	ALA	C-N	-5.52	1.26	1.33
3	D	276	LEU	CA-C	-5.52	1.45	1.52
2	G	274	LYS	CA-C	-5.51	1.45	1.52
2	G	345	VAL	N-CA	-5.51	1.40	1.46
4	M	480	ASN	C-O	-5.51	1.17	1.24
2	H	411	VAL	N-CA	-5.51	1.40	1.46
2	E	529	PHE	C-N	5.51	1.40	1.33
2	N	206	VAL	CA-C	-5.51	1.45	1.52
6	R	417	SER	CA-C	-5.51	1.45	1.52
2	A	518	LYS	C-N	5.51	1.40	1.33
2	A	529	PHE	C-N	5.51	1.40	1.33
6	Q	698	GLN	N-CA	-5.51	1.39	1.46
5	T	160	MET	CA-C	-5.51	1.46	1.52
2	E	274	LYS	CA-C	-5.50	1.45	1.52
5	S	167	LEU	CA-C	-5.50	1.45	1.52
6	R	508	LEU	N-CA	-5.50	1.38	1.46
2	P	206	VAL	CA-C	-5.50	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	H	206	VAL	CA-C	-5.50	1.45	1.52
2	F	529	PHE	C-N	5.50	1.40	1.33
3	V	276	LEU	CA-C	-5.50	1.45	1.52
2	E	497	ARG	NE-CZ	5.50	1.39	1.33
3	K	276	LEU	CA-C	-5.50	1.45	1.52
5	T	167	LEU	CA-C	-5.50	1.45	1.52
3	L	276	LEU	CA-C	-5.50	1.45	1.52
6	Q	640	ALA	CA-C	-5.50	1.45	1.52
6	Q	393	PHE	N-CA	-5.50	1.39	1.46
6	R	404	GLN	CA-C	-5.49	1.45	1.52
6	R	661	PHE	CA-C	-5.49	1.45	1.52
2	A	274	LYS	CA-C	-5.49	1.45	1.52
4	O	461	LYS	N-CA	-5.49	1.39	1.46
4	M	415	GLN	CA-C	-5.49	1.45	1.52
2	H	224	GLU	CA-C	-5.49	1.46	1.52
2	F	497	ARG	NE-CZ	5.49	1.39	1.33
2	N	399	ASP	C-N	5.49	1.41	1.33
5	T	133	VAL	CA-C	-5.49	1.45	1.52
6	R	149	TYR	CA-C	-5.49	1.45	1.52
6	Q	630	SER	C-O	-5.48	1.17	1.24
2	F	475	GLN	CA-CB	5.48	1.62	1.53
6	Q	146	PHE	CA-C	-5.48	1.45	1.52
2	F	464	ALA	C-N	5.48	1.40	1.33
6	Q	439	TYR	CA-C	-5.48	1.45	1.52
2	B	369	LYS	N-CA	-5.48	1.39	1.46
2	P	274	LYS	CA-C	-5.48	1.45	1.52
2	N	274	LYS	CA-C	-5.48	1.45	1.52
3	V	248	VAL	N-CA	-5.48	1.39	1.46
6	Q	508	LEU	N-CA	-5.48	1.38	1.46
2	P	344	ARG	CZ-NH1	5.48	1.40	1.32
2	B	274	LYS	CA-C	-5.47	1.45	1.52
3	D	206	VAL	CA-C	-5.47	1.45	1.52
3	K	206	VAL	CA-C	-5.47	1.45	1.52
2	P	248	VAL	N-CA	-5.47	1.39	1.46
2	P	413	GLU	CA-CB	5.47	1.61	1.53
2	B	376	ALA	CA-C	-5.47	1.45	1.52
2	G	369	LYS	N-CA	-5.47	1.39	1.46
6	Q	521	LEU	CA-C	-5.47	1.45	1.52
2	B	459	MET	N-CA	-5.47	1.39	1.46
2	H	248	VAL	N-CA	-5.47	1.39	1.46
6	Q	739	ASP	N-CA	-5.47	1.39	1.46
5	T	137	SER	CA-C	-5.47	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	449	HIS	N-CA	-5.47	1.39	1.46
2	A	482	VAL	CA-C	-5.47	1.45	1.52
2	N	344	ARG	CZ-NH1	5.46	1.40	1.32
2	B	516	ARG	N-CA	-5.46	1.39	1.46
6	R	640	ALA	CA-C	-5.46	1.45	1.52
2	H	345	VAL	N-CA	-5.46	1.40	1.46
3	L	274	LYS	CA-C	-5.45	1.45	1.52
5	S	133	VAL	CA-C	-5.45	1.45	1.52
6	Q	408	ILE	N-CA	-5.45	1.40	1.46
2	B	439	GLN	CA-C	-5.45	1.45	1.52
6	R	439	TYR	CA-C	-5.45	1.45	1.52
6	Q	644	LEU	CA-C	-5.45	1.46	1.52
2	B	493	VAL	CA-C	-5.44	1.46	1.52
2	E	268	ARG	CA-C	-5.44	1.45	1.52
6	Q	572	ILE	N-CA	-5.44	1.40	1.46
2	B	345	VAL	N-CA	-5.44	1.40	1.46
6	Q	404	GLN	CA-C	-5.44	1.45	1.52
3	V	274	LYS	CA-C	-5.44	1.46	1.52
6	Q	801	ILE	CA-C	-5.44	1.45	1.52
2	A	497	ARG	NE-CZ	5.43	1.39	1.33
2	E	464	ALA	C-N	5.43	1.40	1.33
2	H	376	ALA	CA-C	-5.43	1.45	1.52
2	F	274	LYS	CA-C	-5.43	1.46	1.52
5	S	137	SER	CA-C	-5.43	1.45	1.52
2	A	464	ALA	C-N	5.43	1.40	1.33
3	L	224	GLU	CA-C	-5.43	1.46	1.52
6	R	788	CYS	CA-C	-5.43	1.45	1.52
2	B	224	GLU	CA-C	-5.43	1.46	1.52
3	D	210	ARG	N-CA	-5.43	1.39	1.46
2	H	459	MET	N-CA	-5.43	1.39	1.46
6	Q	562	GLN	CA-C	-5.43	1.45	1.52
2	G	493	VAL	CA-C	-5.43	1.46	1.52
2	E	248	VAL	N-CA	-5.43	1.39	1.46
2	N	224	GLU	CA-C	-5.43	1.46	1.52
6	R	644	LEU	CA-C	-5.43	1.46	1.52
6	R	686	THR	CA-C	-5.43	1.45	1.52
2	E	224	GLU	CA-C	-5.43	1.46	1.52
6	Q	438	ALA	N-CA	-5.43	1.39	1.46
6	Q	466	LEU	CA-C	-5.43	1.45	1.52
2	G	495	GLN	CA-C	-5.43	1.46	1.52
2	E	518	LYS	C-N	5.43	1.40	1.33
6	Q	147	LEU	CA-C	-5.43	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	R	403	ALA	CA-C	-5.43	1.45	1.52
3	K	248	VAL	N-CA	-5.42	1.39	1.46
6	Q	294	GLY	CA-C	-5.42	1.46	1.52
6	R	466	LEU	CA-C	-5.42	1.45	1.52
2	G	459	MET	N-CA	-5.42	1.39	1.46
4	O	526	VAL	CA-C	-5.42	1.45	1.52
3	L	248	VAL	N-CA	-5.42	1.40	1.46
6	Q	607	THR	CA-C	-5.42	1.45	1.52
3	D	224	GLU	CA-C	-5.42	1.46	1.52
2	F	518	LYS	C-N	5.42	1.40	1.33
2	A	503	MET	CA-C	-5.42	1.45	1.52
2	F	268	ARG	CA-C	-5.42	1.45	1.52
6	R	521	LEU	CA-C	-5.42	1.45	1.52
2	G	407	ALA	C-N	-5.41	1.27	1.33
2	G	439	GLN	CA-C	-5.41	1.45	1.52
6	R	845	SER	CA-C	-5.41	1.45	1.52
6	Q	139	GLN	N-CA	-5.41	1.39	1.46
6	Q	403	ALA	CA-C	-5.41	1.45	1.52
5	T	18	LEU	CA-C	-5.41	1.45	1.52
6	R	717	ARG	CD-NE	5.41	1.53	1.46
2	A	512	ASP	C-N	5.41	1.40	1.33
2	H	531	GLU	N-CA	-5.41	1.39	1.46
2	F	449	HIS	CB-CG	5.41	1.57	1.50
6	R	109	MET	CA-C	-5.41	1.45	1.52
2	A	248	VAL	N-CA	-5.41	1.40	1.46
2	G	437	VAL	CA-CB	-5.41	1.47	1.54
2	F	224	GLU	CA-C	-5.41	1.46	1.52
3	V	210	ARG	N-CA	-5.41	1.39	1.46
2	A	268	ARG	CA-C	-5.40	1.45	1.52
2	A	449	HIS	CB-CG	5.40	1.57	1.50
3	K	210	ARG	N-CA	-5.40	1.39	1.46
6	Q	120	ASP	CA-C	-5.40	1.47	1.53
4	O	460	LYS	C-N	5.40	1.41	1.33
2	N	513	ARG	CZ-NH2	5.40	1.40	1.33
6	R	258	VAL	CA-C	-5.40	1.46	1.52
6	R	294	GLY	CA-C	-5.40	1.46	1.52
6	R	695	SER	CA-C	-5.40	1.45	1.52
2	B	495	GLN	CA-C	-5.40	1.46	1.52
6	Q	695	SER	CA-C	-5.40	1.45	1.52
2	A	224	GLU	CA-C	-5.40	1.46	1.52
3	D	248	VAL	N-CA	-5.40	1.40	1.46
2	G	449	HIS	N-CA	-5.39	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	H	242	ASN	CA-C	-5.39	1.45	1.52
6	Q	717	ARG	CD-NE	5.39	1.53	1.46
6	Q	799	VAL	CA-CB	-5.39	1.48	1.54
2	F	503	MET	CA-C	-5.39	1.45	1.52
2	H	493	VAL	CA-CB	-5.39	1.48	1.54
2	G	224	GLU	CA-C	-5.39	1.46	1.52
2	E	492	LYS	C-N	5.39	1.40	1.33
2	H	439	GLN	CA-C	-5.39	1.45	1.52
6	Q	504	ILE	CA-CB	-5.39	1.47	1.54
3	V	266	GLU	CA-C	-5.39	1.45	1.52
4	M	497	ARG	N-CA	-5.38	1.39	1.46
2	H	437	VAL	CA-CB	-5.38	1.47	1.54
6	R	120	ASP	CA-C	-5.38	1.47	1.53
2	B	248	VAL	N-CA	-5.38	1.40	1.46
2	B	493	VAL	CA-CB	-5.38	1.48	1.54
4	M	460	LYS	C-N	5.38	1.41	1.33
2	H	506	LEU	CA-C	-5.38	1.45	1.52
2	A	492	LYS	C-N	5.38	1.40	1.33
2	P	513	ARG	CZ-NH2	5.38	1.40	1.33
2	G	445	GLN	CA-C	-5.38	1.45	1.52
2	H	516	ARG	N-CA	-5.38	1.39	1.46
2	G	359	LYS	CA-C	-5.37	1.45	1.52
2	G	493	VAL	CA-CB	-5.37	1.48	1.54
3	V	242	ASN	CA-C	-5.37	1.45	1.52
3	L	242	ASN	CA-C	-5.37	1.45	1.52
6	Q	179	LEU	CA-C	-5.37	1.45	1.52
2	P	268	ARG	CA-C	-5.37	1.45	1.52
6	R	448	ALA	N-CA	-5.37	1.39	1.46
3	K	268	ARG	CA-C	-5.37	1.45	1.52
4	O	444	ARG	NE-CZ	5.37	1.39	1.33
4	O	483	ASN	N-CA	-5.37	1.39	1.46
6	R	799	VAL	CA-CB	-5.37	1.48	1.54
4	O	541	ILE	C-N	5.37	1.41	1.33
2	A	459	MET	CA-CB	5.37	1.61	1.53
2	G	516	ARG	CA-C	-5.37	1.45	1.52
2	P	516	ARG	N-CA	-5.37	1.39	1.46
4	M	413	GLU	CA-CB	5.37	1.61	1.53
2	H	418	GLN	CA-C	-5.37	1.46	1.52
6	R	607	THR	CA-C	-5.37	1.45	1.52
2	B	516	ARG	CA-C	-5.36	1.45	1.52
3	K	224	GLU	CA-C	-5.36	1.46	1.52
2	N	266	GLU	CA-C	-5.36	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	S	104	GLU	CA-C	-5.36	1.45	1.52
6	Q	220	VAL	N-CA	-5.36	1.40	1.46
6	Q	399	HIS	CA-C	-5.36	1.45	1.52
2	B	268	ARG	CA-C	-5.36	1.45	1.52
2	F	512	ASP	C-N	5.36	1.40	1.33
4	M	444	ARG	NE-CZ	5.36	1.39	1.33
6	Q	786	ASP	CA-C	-5.36	1.45	1.52
2	E	210	ARG	N-CA	-5.36	1.39	1.46
6	Q	100	GLY	CA-C	-5.36	1.45	1.52
2	B	359	LYS	CA-C	-5.36	1.45	1.52
3	D	268	ARG	CA-C	-5.36	1.45	1.52
4	M	353	GLN	CA-C	-5.36	1.46	1.52
2	N	268	ARG	CA-C	-5.36	1.45	1.52
2	H	516	ARG	CA-C	-5.35	1.45	1.52
5	T	52	ARG	N-CA	-5.35	1.39	1.46
2	B	394	LEU	N-CA	-5.35	1.38	1.46
2	B	445	GLN	CA-C	-5.35	1.45	1.52
4	M	356	ALA	C-N	5.35	1.41	1.34
4	M	541	ILE	C-N	5.35	1.41	1.33
2	H	394	LEU	N-CA	-5.35	1.38	1.46
6	Q	733	LYS	CA-C	-5.35	1.45	1.52
2	F	468	LEU	C-O	-5.35	1.17	1.24
3	L	268	ARG	CA-C	-5.35	1.45	1.52
2	B	531	GLU	N-CA	-5.35	1.39	1.46
2	G	242	ASN	CA-C	-5.35	1.45	1.52
2	G	545	GLU	CA-C	-5.35	1.45	1.52
4	O	415	GLN	CA-C	-5.35	1.45	1.52
2	A	468	LEU	C-O	-5.35	1.17	1.24
6	R	100	GLY	CA-C	-5.35	1.45	1.52
2	N	428	GLU	N-CA	-5.34	1.39	1.46
6	Q	448	ALA	N-CA	-5.34	1.39	1.46
4	M	455	GLU	CA-C	5.34	1.59	1.52
5	S	91	PHE	CA-C	-5.34	1.45	1.52
5	S	52	ARG	N-CA	-5.34	1.39	1.46
6	Q	141	PRO	N-CA	-5.34	1.40	1.47
2	B	437	VAL	CA-CB	-5.34	1.47	1.54
4	O	356	ALA	C-N	5.34	1.41	1.34
2	N	295	LEU	CA-C	-5.34	1.45	1.52
2	G	531	GLU	N-CA	-5.34	1.40	1.46
4	M	430	TYR	C-N	5.34	1.40	1.33
6	Q	233	ASP	N-CA	-5.34	1.39	1.46
4	M	526	VAL	CA-C	-5.34	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	H	445	GLN	CA-C	-5.34	1.45	1.52
2	F	459	MET	CA-CB	5.34	1.61	1.53
3	L	210	ARG	N-CA	-5.34	1.39	1.46
6	Q	258	VAL	CA-C	-5.34	1.46	1.52
6	R	706	ALA	CA-C	-5.34	1.46	1.52
6	R	665	GLY	CA-C	-5.33	1.45	1.51
2	P	210	ARG	N-CA	-5.33	1.39	1.46
2	P	532	SER	C-N	5.33	1.40	1.33
2	G	506	LEU	CA-C	-5.33	1.45	1.52
2	H	417	GLN	N-CA	-5.33	1.39	1.46
5	S	79	THR	CA-C	-5.33	1.46	1.52
2	G	248	VAL	N-CA	-5.33	1.40	1.46
2	H	449	HIS	N-CA	-5.33	1.40	1.46
2	B	266	GLU	CA-C	-5.33	1.45	1.52
2	H	369	LYS	CA-C	-5.33	1.45	1.52
6	R	179	LEU	CA-C	-5.33	1.45	1.52
2	E	242	ASN	CA-C	-5.33	1.45	1.52
2	G	266	GLU	CA-C	-5.33	1.45	1.52
2	G	516	ARG	N-CA	-5.33	1.40	1.46
2	E	503	MET	CA-C	-5.33	1.45	1.52
2	P	242	ASN	CA-C	-5.33	1.45	1.52
4	M	508	ARG	CA-C	-5.33	1.46	1.52
5	T	107	LYS	CA-C	-5.33	1.46	1.52
2	H	493	VAL	CA-C	-5.32	1.46	1.52
2	F	492	LYS	C-N	5.32	1.40	1.33
6	Q	845	SER	CA-C	-5.32	1.45	1.52
6	R	141	PRO	N-CA	-5.32	1.40	1.47
2	N	462	LYS	CA-C	-5.32	1.46	1.52
2	N	532	SER	C-N	5.32	1.40	1.33
2	G	268	ARG	CA-C	-5.32	1.45	1.52
4	O	455	GLU	CA-C	5.32	1.59	1.52
2	N	532	SER	N-CA	-5.32	1.39	1.46
2	H	210	ARG	N-CA	-5.32	1.39	1.46
2	H	545	GLU	CA-C	-5.32	1.45	1.52
5	S	107	LYS	CA-C	-5.32	1.46	1.52
2	A	491	ARG	CZ-NH1	5.32	1.40	1.32
2	E	459	MET	CA-CB	5.32	1.61	1.53
2	B	210	ARG	N-CA	-5.31	1.39	1.46
2	B	418	GLN	CA-C	-5.31	1.46	1.52
2	F	266	GLU	CA-C	-5.31	1.45	1.52
3	L	266	GLU	CA-C	-5.31	1.45	1.52
6	R	221	ARG	CA-C	-5.31	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	O	413	GLU	CA-CB	5.31	1.61	1.53
6	R	504	ILE	CA-CB	-5.31	1.47	1.54
2	B	341	HIS	N-CA	-5.31	1.39	1.46
6	Q	213	LEU	CA-C	-5.31	1.45	1.52
5	T	104	GLU	CA-C	-5.31	1.46	1.52
2	A	210	ARG	N-CA	-5.31	1.39	1.46
2	E	491	ARG	CZ-NH1	5.31	1.40	1.32
6	R	630	SER	C-O	-5.31	1.18	1.24
2	H	495	GLN	CA-C	-5.31	1.46	1.52
3	D	242	ASN	CA-C	-5.30	1.45	1.52
6	Q	109	MET	CA-C	-5.30	1.45	1.52
6	Q	411	THR	N-CA	-5.30	1.40	1.46
6	Q	616	PHE	N-CA	-5.30	1.40	1.46
6	Q	706	ALA	CA-C	-5.30	1.46	1.52
2	G	394	LEU	N-CA	-5.30	1.38	1.46
3	K	242	ASN	CA-C	-5.30	1.45	1.52
2	N	414	ARG	CD-NE	5.30	1.53	1.46
2	F	331	ASN	CG-ND2	5.30	1.44	1.33
3	V	268	ARG	CA-C	-5.30	1.45	1.52
6	R	780	ARG	CD-NE	5.29	1.53	1.46
2	P	532	SER	N-CA	-5.29	1.39	1.46
2	N	242	ASN	CA-C	-5.29	1.45	1.52
4	M	402	SER	CA-CB	5.29	1.61	1.53
5	S	18	LEU	CA-C	-5.29	1.45	1.52
6	R	213	LEU	CA-C	-5.29	1.46	1.52
2	B	369	LYS	CA-C	-5.29	1.45	1.52
4	M	504	GLY	CA-C	5.29	1.58	1.52
2	F	503	MET	N-CA	5.29	1.52	1.46
2	G	295	LEU	CA-C	-5.29	1.45	1.52
2	E	331	ASN	CG-ND2	5.29	1.44	1.33
2	N	417	GLN	CA-C	-5.28	1.45	1.52
6	R	569	VAL	CA-C	-5.28	1.46	1.52
2	B	365	VAL	CA-C	-5.28	1.46	1.52
3	D	266	GLU	CA-C	-5.28	1.46	1.52
2	G	418	GLN	CA-C	-5.28	1.46	1.52
6	Q	172	GLN	N-CA	-5.28	1.40	1.46
6	Q	390	TYR	CA-C	-5.28	1.46	1.52
2	H	359	LYS	CA-C	-5.28	1.45	1.52
2	P	454	ALA	CA-C	-5.28	1.46	1.52
6	Q	255	LEU	CA-C	-5.28	1.46	1.52
6	R	411	THR	N-CA	-5.28	1.40	1.46
6	R	801	ILE	CA-C	-5.28	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	A	266	GLU	CA-C	-5.27	1.46	1.52
6	R	220	VAL	N-CA	-5.27	1.40	1.46
4	O	508	ARG	CA-C	-5.27	1.46	1.52
5	T	123	GLU	CA-C	-5.27	1.45	1.52
4	O	538	LYS	C-N	5.27	1.40	1.33
6	Q	268	HIS	CA-C	-5.27	1.46	1.52
6	Q	434	ASP	CA-C	-5.27	1.45	1.52
6	R	260	THR	CA-C	-5.27	1.46	1.52
4	O	430	TYR	C-N	5.27	1.40	1.33
2	H	365	VAL	CA-C	-5.27	1.46	1.52
2	F	210	ARG	N-CA	-5.27	1.39	1.46
2	B	242	ASN	CA-C	-5.27	1.45	1.52
2	E	449	HIS	CB-CG	5.27	1.57	1.50
2	H	266	GLU	CA-C	-5.27	1.46	1.52
6	R	390	TYR	CA-C	-5.26	1.46	1.52
6	R	444	VAL	CA-C	-5.26	1.46	1.52
6	R	654	ALA	CA-C	-5.26	1.46	1.52
2	G	210	ARG	N-CA	-5.26	1.39	1.46
2	G	417	GLN	N-CA	-5.26	1.39	1.46
6	R	616	PHE	N-CA	-5.26	1.40	1.46
2	P	428	GLU	N-CA	-5.26	1.40	1.46
2	F	420	VAL	CA-CB	5.26	1.60	1.54
6	Q	674	GLU	N-CA	-5.26	1.39	1.46
5	T	166	SER	N-CA	-5.26	1.39	1.45
2	B	365	VAL	N-CA	-5.26	1.40	1.46
2	E	266	GLU	CA-C	-5.26	1.46	1.52
3	K	266	GLU	CA-C	-5.26	1.46	1.52
2	N	210	ARG	N-CA	-5.26	1.39	1.46
2	N	454	ALA	CA-C	-5.26	1.46	1.52
3	K	295	LEU	CA-C	-5.26	1.45	1.52
4	O	497	ARG	N-CA	-5.26	1.40	1.46
4	M	538	LYS	C-N	5.26	1.40	1.33
6	R	462	LEU	N-CA	-5.26	1.40	1.46
6	R	399	HIS	CA-C	-5.25	1.46	1.52
2	H	341	HIS	N-CA	-5.25	1.39	1.46
2	F	491	ARG	CZ-NH1	5.25	1.40	1.32
6	R	164	SER	CA-C	-5.25	1.46	1.52
6	R	172	GLN	N-CA	-5.25	1.40	1.46
6	R	733	LYS	CA-C	-5.25	1.45	1.52
6	Q	221	ARG	CA-C	-5.25	1.46	1.52
2	E	503	MET	N-CA	5.25	1.52	1.46
4	O	402	SER	CA-CB	5.25	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	N	454	ALA	N-CA	-5.25	1.40	1.46
2	E	512	ASP	C-N	5.25	1.40	1.33
4	O	524	SER	CA-C	-5.25	1.46	1.52
6	R	786	ASP	CA-C	-5.25	1.46	1.52
6	Q	479	ALA	N-CA	-5.25	1.39	1.46
2	P	266	GLU	CA-C	-5.24	1.46	1.52
4	M	426	ILE	CA-C	-5.24	1.46	1.52
4	M	483	ASN	N-CA	-5.24	1.40	1.46
5	S	169	LEU	N-CA	-5.24	1.39	1.46
6	Q	433	VAL	CA-CB	-5.24	1.48	1.54
6	Q	654	ALA	CA-C	-5.24	1.46	1.52
6	R	233	ASP	N-CA	-5.24	1.39	1.46
2	A	242	ASN	CA-C	-5.24	1.45	1.52
2	A	503	MET	N-CA	5.24	1.52	1.46
2	H	248	VAL	CA-C	-5.24	1.47	1.52
6	R	220	VAL	CA-CB	-5.24	1.48	1.54
5	T	91	PHE	CA-C	-5.24	1.46	1.52
6	R	261	GLN	N-CA	-5.24	1.40	1.46
4	O	504	GLY	CA-C	5.24	1.58	1.52
3	L	295	LEU	CA-C	-5.24	1.45	1.52
2	F	206	VAL	CA-CB	-5.23	1.47	1.54
3	L	224	GLU	N-CA	-5.23	1.39	1.46
6	R	255	LEU	CA-C	-5.23	1.46	1.52
2	A	295	LEU	CA-C	-5.23	1.45	1.52
6	Q	292	VAL	N-CA	-5.23	1.40	1.46
2	P	206	VAL	CA-CB	-5.23	1.47	1.54
4	M	436	SER	CA-C	-5.23	1.46	1.52
2	B	506	LEU	CA-C	-5.23	1.46	1.52
2	P	414	ARG	CD-NE	5.23	1.53	1.46
2	H	295	LEU	CA-C	-5.23	1.45	1.52
2	P	454	ALA	N-CA	-5.22	1.40	1.46
3	V	248	VAL	CA-C	-5.22	1.47	1.52
6	Q	107	TYR	N-CA	-5.22	1.40	1.46
2	B	387	THR	N-CA	-5.22	1.39	1.46
6	R	268	HIS	CA-C	-5.22	1.46	1.52
2	G	341	HIS	N-CA	-5.22	1.40	1.46
2	A	206	VAL	CA-CB	-5.22	1.48	1.54
2	A	331	ASN	CG-ND2	5.22	1.44	1.33
2	G	387	THR	CA-C	-5.22	1.45	1.52
6	Q	104	PRO	CA-C	-5.22	1.45	1.52
2	G	387	THR	N-CA	-5.21	1.39	1.46
2	P	462	LYS	CA-C	-5.21	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	242	ASN	CA-C	-5.21	1.45	1.52
5	T	88	LEU	CA-C	-5.21	1.46	1.52
3	V	295	LEU	CA-C	-5.21	1.45	1.52
2	G	499	LEU	CA-C	-5.21	1.46	1.52
2	H	387	THR	CA-C	-5.21	1.45	1.52
2	H	499	LEU	CA-C	-5.21	1.46	1.52
6	Q	220	VAL	CA-CB	-5.21	1.48	1.54
3	V	206	VAL	CA-CB	-5.21	1.48	1.54
2	B	387	THR	CA-C	-5.21	1.45	1.52
2	N	206	VAL	CA-CB	-5.21	1.48	1.54
2	H	387	THR	N-CA	-5.21	1.39	1.46
6	Q	260	THR	CA-C	-5.21	1.46	1.52
6	R	434	ASP	CA-C	-5.21	1.45	1.52
6	R	438	ALA	N-CA	-5.21	1.39	1.46
6	R	588	ARG	CA-C	-5.21	1.46	1.52
2	B	545	GLU	CA-C	-5.21	1.46	1.52
2	E	468	LEU	C-O	-5.21	1.18	1.24
2	P	248	VAL	CA-C	-5.21	1.47	1.52
6	R	38	LEU	N-CA	-5.21	1.40	1.46
2	B	417	GLN	N-CA	-5.21	1.39	1.46
5	S	88	LEU	CA-C	-5.21	1.46	1.52
2	B	295	LEU	CA-C	-5.20	1.45	1.52
2	F	354	LEU	CA-CB	5.20	1.61	1.53
2	B	248	VAL	CA-C	-5.20	1.47	1.52
4	M	524	SER	CA-C	-5.20	1.46	1.52
6	R	292	VAL	N-CA	-5.20	1.40	1.46
6	R	802	LEU	CA-C	-5.20	1.46	1.52
6	Q	65	LEU	CA-C	-5.20	1.46	1.52
6	R	107	TYR	N-CA	-5.20	1.40	1.46
6	R	628	SER	N-CA	-5.20	1.40	1.46
6	R	674	GLU	N-CA	-5.20	1.39	1.46
6	R	104	PRO	CA-C	-5.19	1.45	1.52
2	N	528	THR	N-CA	-5.19	1.40	1.46
6	Q	802	LEU	CA-C	-5.19	1.46	1.52
2	P	444	ARG	NE-CZ	5.19	1.38	1.33
4	M	334	VAL	CA-C	-5.19	1.46	1.52
2	F	371	MET	CA-C	-5.19	1.42	1.52
6	Q	207	GLU	N-CA	-5.19	1.40	1.46
2	P	417	GLN	CA-C	-5.19	1.45	1.52
6	Q	38	LEU	N-CA	-5.19	1.40	1.46
5	T	79	THR	CA-C	-5.19	1.46	1.52
3	D	248	VAL	CA-C	-5.18	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	G	365	VAL	N-CA	-5.18	1.40	1.46
2	A	420	VAL	CA-CB	5.18	1.60	1.54
2	H	505	ARG	CA-C	-5.18	1.46	1.52
6	R	433	VAL	CA-CB	-5.18	1.48	1.54
2	A	248	VAL	CA-C	-5.18	1.47	1.52
2	P	295	LEU	CA-C	-5.18	1.45	1.52
2	A	432	ARG	CZ-NH2	5.18	1.40	1.33
2	G	369	LYS	CA-C	-5.18	1.45	1.52
4	M	414	ARG	NE-CZ	5.18	1.38	1.33
6	Q	99	ALA	CA-C	-5.17	1.46	1.52
4	O	399	ASP	N-CA	-5.17	1.40	1.46
6	Q	569	VAL	CA-C	-5.17	1.46	1.52
6	Q	588	ARG	CA-C	-5.17	1.46	1.52
6	R	587	THR	CA-CB	-5.17	1.45	1.53
2	P	341	HIS	CA-CB	5.17	1.61	1.53
2	N	515	GLU	N-CA	-5.17	1.40	1.46
3	K	224	GLU	N-CA	-5.17	1.39	1.46
6	R	696	LYS	CA-C	-5.17	1.46	1.52
2	G	248	VAL	CA-C	-5.17	1.47	1.52
4	O	426	ILE	CA-C	-5.17	1.46	1.52
6	R	809	PHE	CA-CB	5.17	1.61	1.53
6	R	139	GLN	N-CA	-5.16	1.40	1.46
2	E	420	VAL	CA-CB	5.16	1.60	1.54
2	E	206	VAL	CA-CB	-5.16	1.48	1.54
4	O	334	VAL	CA-C	-5.16	1.46	1.52
5	S	166	SER	N-CA	-5.16	1.39	1.45
2	B	378	PHE	CA-CB	-5.16	1.45	1.53
4	M	399	ASP	N-CA	-5.16	1.40	1.46
2	N	248	VAL	CA-C	-5.16	1.47	1.52
6	Q	164	SER	CA-C	-5.16	1.46	1.52
6	R	65	LEU	CA-C	-5.16	1.46	1.52
2	A	354	LEU	CA-CB	5.15	1.61	1.53
4	O	436	SER	CA-C	-5.15	1.46	1.52
2	A	449	HIS	CA-CB	5.15	1.61	1.53
2	E	354	LEU	CA-CB	5.15	1.61	1.53
2	E	371	MET	CA-C	-5.15	1.42	1.52
2	H	378	PHE	CA-CB	-5.15	1.45	1.53
6	Q	587	THR	CA-CB	-5.15	1.45	1.53
6	Q	780	ARG	CD-NE	5.15	1.53	1.46
2	G	206	VAL	CA-CB	-5.15	1.48	1.54
3	L	206	VAL	CA-CB	-5.15	1.48	1.54
6	R	138	VAL	CA-C	-5.15	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	R	471	ARG	N-CA	-5.15	1.40	1.46
2	G	517	GLU	CA-C	-5.15	1.46	1.52
2	H	206	VAL	CA-CB	-5.15	1.48	1.54
5	S	33	ILE	CA-C	-5.15	1.46	1.52
5	S	123	GLU	CA-C	-5.15	1.46	1.52
2	H	517	GLU	CA-C	-5.15	1.46	1.52
2	E	432	ARG	CZ-NH2	5.14	1.40	1.33
6	Q	261	GLN	N-CA	-5.14	1.40	1.46
3	D	206	VAL	CA-CB	-5.14	1.48	1.54
2	N	341	HIS	CA-CB	5.14	1.61	1.53
5	S	13	ILE	N-CA	-5.14	1.40	1.46
6	Q	444	VAL	CA-C	-5.14	1.46	1.52
5	S	76	GLN	CA-C	-5.14	1.46	1.52
2	G	365	VAL	CA-C	-5.14	1.46	1.52
6	R	536	SER	CA-C	-5.14	1.46	1.52
5	S	76	GLN	N-CA	-5.14	1.40	1.46
6	Q	462	LEU	N-CA	-5.14	1.40	1.46
2	B	206	VAL	CA-CB	-5.13	1.48	1.54
4	O	353	GLN	CA-C	-5.13	1.46	1.52
2	P	515	GLU	N-CA	-5.13	1.40	1.46
2	B	224	GLU	N-CA	-5.13	1.39	1.46
2	G	378	PHE	CA-CB	-5.13	1.45	1.53
4	M	364	MET	CA-CB	5.13	1.61	1.53
2	B	499	LEU	CA-C	-5.13	1.46	1.52
4	O	478	ARG	CZ-NH2	5.13	1.40	1.33
2	F	248	VAL	CA-C	-5.13	1.47	1.52
2	F	432	ARG	CZ-NH2	5.13	1.40	1.33
2	N	457	GLU	CA-C	5.12	1.59	1.52
6	Q	607	THR	N-CA	-5.12	1.40	1.46
2	B	505	ARG	CA-C	-5.12	1.46	1.52
6	Q	782	LEU	N-CA	-5.12	1.40	1.46
5	T	33	ILE	CA-C	-5.12	1.46	1.52
2	B	517	GLU	CA-C	-5.12	1.46	1.52
2	H	365	VAL	N-CA	-5.12	1.40	1.46
6	Q	809	PHE	CA-CB	5.12	1.61	1.53
2	P	343	ARG	CZ-NH1	5.12	1.40	1.32
2	G	505	ARG	CA-C	-5.12	1.46	1.52
3	K	206	VAL	CA-CB	-5.12	1.48	1.54
2	P	224	GLU	N-CA	-5.12	1.39	1.46
4	M	343	ARG	NE-CZ	5.12	1.38	1.33
2	F	344	ARG	CA-CB	5.12	1.61	1.53
6	R	479	ALA	N-CA	-5.12	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	L	248	VAL	CA-C	-5.11	1.47	1.52
5	S	8	ILE	CA-C	-5.11	1.46	1.52
6	R	99	ALA	CA-C	-5.11	1.46	1.52
5	T	169	LEU	N-CA	-5.11	1.39	1.46
3	D	224	GLU	N-CA	-5.11	1.40	1.46
6	R	207	GLU	N-CA	-5.11	1.40	1.46
4	O	414	ARG	NE-CZ	5.11	1.38	1.33
2	F	449	HIS	CA-CB	5.11	1.61	1.53
5	T	76	GLN	CA-C	-5.11	1.46	1.52
2	A	371	MET	CA-C	-5.11	1.42	1.52
2	P	351	GLU	CA-C	-5.11	1.46	1.52
2	P	339	TRP	NE1-CE2	5.11	1.43	1.37
6	Q	151	LEU	CA-C	-5.11	1.46	1.52
6	R	642	SER	N-CA	-5.11	1.40	1.46
6	R	782	LEU	N-CA	-5.10	1.40	1.46
2	A	224	GLU	N-CA	-5.10	1.40	1.46
2	H	224	GLU	N-CA	-5.10	1.40	1.46
6	Q	138	VAL	CA-C	-5.10	1.47	1.52
5	T	76	GLN	N-CA	-5.10	1.40	1.46
2	G	224	GLU	N-CA	-5.10	1.40	1.46
6	Q	696	LYS	CA-C	-5.10	1.46	1.52
4	O	364	MET	CA-CB	5.10	1.61	1.53
2	P	528	THR	N-CA	-5.10	1.40	1.46
6	R	765	THR	C-N	5.10	1.40	1.33
2	N	444	ARG	NE-CZ	5.09	1.38	1.33
5	S	16	ARG	CA-C	-5.09	1.46	1.52
6	Q	480	LEU	CA-C	-5.09	1.45	1.52
6	Q	765	THR	C-N	5.09	1.40	1.33
6	R	608	ALA	CA-C	-5.09	1.46	1.52
2	B	425	ILE	N-CA	-5.09	1.40	1.46
2	B	355	LYS	CA-C	-5.09	1.46	1.52
2	E	248	VAL	CA-C	-5.09	1.47	1.52
2	E	295	LEU	CA-C	-5.09	1.45	1.52
6	Q	396	GLN	N-CA	-5.09	1.40	1.46
6	Q	471	ARG	N-CA	-5.09	1.40	1.46
2	G	528	THR	CA-C	-5.09	1.46	1.52
2	E	224	GLU	N-CA	-5.09	1.40	1.46
2	P	457	GLU	CA-C	5.09	1.59	1.52
2	N	339	TRP	NE1-CE2	5.09	1.43	1.37
2	H	342	ASP	CA-C	-5.09	1.46	1.52
6	R	449	ASN	N-CA	-5.09	1.38	1.46
3	D	295	LEU	CA-C	-5.08	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	G	524	SER	N-CA	-5.08	1.40	1.46
5	T	13	ILE	N-CA	-5.08	1.40	1.46
2	E	231	ASP	CA-C	-5.08	1.46	1.52
3	V	224	GLU	N-CA	-5.08	1.40	1.46
2	H	425	ILE	N-CA	-5.07	1.40	1.46
6	R	461	SER	N-CA	-5.07	1.40	1.46
2	P	452	HIS	CD2-NE2	5.07	1.43	1.37
2	N	351	GLU	CA-C	-5.07	1.46	1.52
6	Q	461	SER	N-CA	-5.07	1.40	1.46
6	R	402	GLN	N-CA	-5.07	1.40	1.46
6	R	717	ARG	NE-CZ	5.07	1.38	1.33
2	F	295	LEU	CA-C	-5.06	1.45	1.52
2	H	524	SER	N-CA	-5.06	1.40	1.46
6	Q	203	LEU	CA-C	-5.06	1.46	1.52
2	E	449	HIS	CA-CB	5.06	1.61	1.53
6	Q	101	ASN	N-CA	-5.06	1.40	1.46
2	B	429	GLU	N-CA	-5.05	1.40	1.46
6	R	497	ARG	CA-C	-5.05	1.46	1.52
6	R	728	ALA	N-CA	-5.05	1.40	1.46
3	K	248	VAL	CA-C	-5.05	1.47	1.52
2	H	355	LYS	CA-C	-5.05	1.46	1.52
6	Q	150	TYR	CA-C	-5.05	1.46	1.52
2	E	344	ARG	CA-CB	5.05	1.61	1.53
2	N	343	ARG	CZ-NH1	5.05	1.39	1.32
4	M	478	ARG	CZ-NH2	5.04	1.40	1.33
2	G	355	LYS	CA-C	-5.04	1.46	1.52
6	R	195	GLN	CA-C	-5.04	1.46	1.52
2	F	224	GLU	N-CA	-5.04	1.40	1.46
6	R	101	ASN	N-CA	-5.04	1.40	1.46
3	V	267	SER	CA-C	-5.04	1.46	1.52
6	R	151	LEU	CA-C	-5.04	1.46	1.52
2	A	344	ARG	CA-CB	5.04	1.61	1.53
6	R	529	LYS	N-CA	-5.04	1.40	1.46
2	E	368	ARG	CA-CB	5.03	1.61	1.53
2	N	434	ILE	N-CA	-5.03	1.40	1.46
2	F	368	ARG	CA-CB	5.03	1.61	1.53
2	F	516	ARG	CZ-NH2	5.03	1.40	1.33
5	T	8	ILE	CA-C	-5.03	1.46	1.52
6	R	607	THR	N-CA	-5.03	1.40	1.46
2	B	458	LEU	CA-C	-5.03	1.46	1.52
2	N	224	GLU	N-CA	-5.03	1.40	1.46
2	H	528	THR	CA-C	-5.03	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	Q	430	LEU	CA-C	-5.03	1.45	1.52
5	T	19	ASP	CA-C	-5.03	1.46	1.53
6	R	164	SER	CA-CB	-5.03	1.45	1.53
2	B	524	SER	N-CA	-5.03	1.40	1.46
4	O	360	ALA	CA-C	-5.03	1.46	1.52
4	O	494	HIS	C-N	-5.03	1.27	1.33
2	H	457	GLU	N-CA	-5.03	1.40	1.46
2	B	542	GLU	CA-C	-5.03	1.46	1.52
2	P	267	SER	CA-C	-5.03	1.46	1.52
2	H	245	GLY	CA-C	-5.03	1.44	1.51
2	H	542	GLU	CA-C	-5.03	1.46	1.52
6	Q	219	ILE	CA-C	-5.03	1.46	1.52
6	Q	497	ARG	CA-C	-5.02	1.46	1.52
2	G	362	ASP	N-CA	-5.02	1.40	1.46
4	O	505	ARG	CZ-NH2	5.02	1.40	1.33
2	H	527	GLU	N-CA	-5.02	1.40	1.46
6	R	430	LEU	CA-C	-5.02	1.45	1.52
2	G	425	ILE	N-CA	-5.02	1.40	1.46
2	G	429	GLU	N-CA	-5.02	1.40	1.46
6	R	662	CYS	N-CA	-5.02	1.40	1.46
2	G	542	GLU	CA-C	-5.02	1.46	1.52
2	F	265	VAL	CA-CB	-5.01	1.48	1.54
6	R	480	LEU	CA-C	-5.01	1.45	1.52
2	G	351	GLU	CA-C	-5.01	1.46	1.52
2	N	417	GLN	CA-CB	5.01	1.61	1.53
6	Q	185	MET	N-CA	-5.01	1.40	1.46
2	G	412	TYR	N-CA	-5.01	1.40	1.46
4	M	505	ARG	CD-NE	5.01	1.53	1.46
6	Q	449	ASN	N-CA	-5.01	1.38	1.46
6	Q	529	LYS	N-CA	-5.01	1.40	1.46
6	R	203	LEU	CA-C	-5.01	1.46	1.52
6	R	219	ILE	CA-C	-5.01	1.46	1.52
2	B	413	GLU	N-CA	-5.01	1.40	1.46
2	B	342	ASP	CA-C	-5.01	1.46	1.52
2	A	344	ARG	CZ-NH1	5.01	1.39	1.32
4	M	349	ALA	C-N	5.01	1.40	1.33
2	F	231	ASP	CA-C	-5.01	1.46	1.52
6	Q	717	ARG	NE-CZ	5.01	1.38	1.33
2	P	550	GLN	CA-C	5.00	1.63	1.52
2	N	267	SER	CA-C	-5.00	1.46	1.52
6	Q	195	GLN	CA-C	-5.00	1.46	1.52
5	T	16	ARG	CA-C	-5.00	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	S	19	ASP	CA-C	-5.00	1.46	1.53

All (3372) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	522	PHE	CA-CB-CG	-17.05	96.75	113.80
2	H	522	PHE	CA-CB-CG	-17.04	96.76	113.80
2	G	522	PHE	CA-CB-CG	-17.03	96.77	113.80
6	R	449	ASN	N-CA-C	-15.86	90.79	110.61
6	Q	449	ASN	N-CA-C	-15.85	90.80	110.61
6	Q	848	HIS	CA-CB-CG	13.84	127.64	113.80
2	G	388	VAL	N-CA-C	-13.79	98.63	111.45
2	B	388	VAL	N-CA-C	-13.78	98.64	111.45
2	H	388	VAL	N-CA-C	-13.76	98.66	111.45
6	R	848	HIS	CA-CB-CG	13.73	127.53	113.80
2	H	390	LEU	N-CA-C	-13.69	97.05	113.88
2	G	390	LEU	N-CA-C	-13.68	97.06	113.88
2	B	390	LEU	N-CA-C	-13.67	97.06	113.88
6	Q	517	THR	N-CA-C	-13.29	96.24	108.07
6	R	517	THR	N-CA-C	-13.19	96.33	108.07
6	Q	572	ILE	N-CA-C	12.90	125.33	110.62
6	R	572	ILE	N-CA-C	12.84	125.25	110.62
6	Q	573	HIS	N-CA-C	12.74	126.36	111.71
6	Q	597	ARG	CA-C-N	12.72	140.56	120.47
6	Q	597	ARG	C-N-CA	12.72	140.56	120.47
6	R	597	ARG	CA-C-N	12.71	140.55	120.47
6	R	597	ARG	C-N-CA	12.71	140.55	120.47
6	R	573	HIS	N-CA-C	12.64	126.25	111.71
6	R	432	TYR	CB-CA-C	-12.63	91.06	110.88
6	Q	432	TYR	CB-CA-C	-12.57	91.14	110.88
2	B	423	PHE	CA-CB-CG	-12.54	101.26	113.80
2	G	423	PHE	CA-CB-CG	-12.49	101.31	113.80
2	H	423	PHE	CA-CB-CG	-12.48	101.32	113.80
6	R	484	THR	N-CA-C	-12.41	96.26	111.40
6	Q	484	THR	N-CA-C	-12.37	96.31	111.40
6	Q	598	ILE	N-CA-C	12.29	126.41	111.05
6	R	598	ILE	N-CA-C	12.23	126.34	111.05
2	F	370	ALA	N-CA-C	12.07	127.58	111.28
2	A	370	ALA	N-CA-C	12.07	127.57	111.28
2	E	370	ALA	N-CA-C	12.04	127.53	111.28
5	T	183	ASN	CA-CB-CG	-11.98	100.62	112.60
5	S	183	ASN	CA-CB-CG	-11.97	100.63	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	R	790	GLU	CA-C-N	11.90	135.92	120.44
6	R	790	GLU	C-N-CA	11.90	135.92	120.44
6	R	70	PHE	CA-CB-CG	11.90	125.70	113.80
6	Q	790	GLU	CA-C-N	11.89	135.90	120.44
6	Q	790	GLU	C-N-CA	11.89	135.90	120.44
6	Q	140	HIS	CA-CB-CG	-11.83	101.97	113.80
6	Q	70	PHE	CA-CB-CG	11.82	125.62	113.80
6	R	140	HIS	CA-CB-CG	-11.81	101.99	113.80
6	R	235	ILE	N-CA-C	-11.80	102.30	111.62
6	Q	235	ILE	N-CA-C	-11.77	102.32	111.62
5	T	157	PHE	CA-CB-CG	11.67	125.47	113.80
5	S	157	PHE	CA-CB-CG	11.66	125.46	113.80
2	P	340	PHE	CA-CB-CG	11.64	125.44	113.80
6	R	809	PHE	CA-CB-CG	11.59	125.39	113.80
2	N	340	PHE	CA-CB-CG	11.50	125.30	113.80
5	T	83	LEU	N-CA-C	-11.49	91.09	109.59
6	Q	809	PHE	CA-CB-CG	11.48	125.28	113.80
5	S	83	LEU	N-CA-C	-11.48	91.11	109.59
6	Q	712	THR	N-CA-C	-11.31	92.51	109.81
6	R	712	THR	N-CA-C	-11.28	92.55	109.81
2	P	212	LYS	N-CA-C	-11.21	91.03	109.07
2	A	212	LYS	N-CA-C	-11.18	91.07	109.07
3	V	212	LYS	N-CA-C	-11.17	91.08	109.07
2	H	212	LYS	N-CA-C	-11.17	91.09	109.07
2	G	212	LYS	N-CA-C	-11.16	91.10	109.07
2	N	212	LYS	N-CA-C	-11.16	91.10	109.07
3	K	212	LYS	N-CA-C	-11.14	91.13	109.07
2	B	212	LYS	N-CA-C	-11.14	91.13	109.07
2	E	212	LYS	N-CA-C	-11.14	91.13	109.07
2	F	212	LYS	N-CA-C	-11.14	91.14	109.07
3	L	212	LYS	N-CA-C	-11.13	91.15	109.07
3	D	212	LYS	N-CA-C	-11.13	91.15	109.07
6	R	489	PHE	CA-CB-CG	11.01	124.81	113.80
6	Q	489	PHE	CA-CB-CG	11.00	124.80	113.80
6	Q	505	VAL	CB-CA-C	-11.00	97.29	112.14
6	R	505	VAL	CB-CA-C	-10.99	97.30	112.14
6	R	169	GLY	N-CA-C	-10.93	99.85	111.21
6	Q	169	GLY	N-CA-C	-10.87	99.90	111.21
6	R	227	ASP	CA-CB-CG	-10.87	101.73	112.60
6	Q	227	ASP	CA-CB-CG	-10.82	101.78	112.60
6	Q	681	PHE	CA-CB-CG	-10.56	103.24	113.80
2	G	394	LEU	N-CA-C	-10.52	100.99	114.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	H	394	LEU	N-CA-C	-10.50	101.02	114.04
2	B	394	LEU	N-CA-C	-10.49	101.03	114.04
5	S	170	TYR	N-CA-C	-10.49	91.32	108.41
5	T	170	TYR	N-CA-C	-10.49	91.32	108.41
6	R	681	PHE	CA-CB-CG	-10.48	103.32	113.80
5	S	134	ASN	CA-CB-CG	-10.47	102.13	112.60
5	T	134	ASN	CA-CB-CG	-10.47	102.13	112.60
5	T	80	HIS	CA-CB-CG	-10.46	103.34	113.80
6	Q	194	HIS	CA-CB-CG	-10.45	103.35	113.80
5	S	80	HIS	CA-CB-CG	-10.45	103.35	113.80
6	Q	714	ASN	CA-CB-CG	10.38	122.98	112.60
6	R	714	ASN	CA-CB-CG	10.36	122.96	112.60
2	N	520	GLU	CA-C-N	10.34	134.13	120.28
2	N	520	GLU	C-N-CA	10.34	134.13	120.28
6	R	194	HIS	CA-CB-CG	-10.33	103.47	113.80
2	P	520	GLU	CA-C-N	10.33	134.12	120.28
2	P	520	GLU	C-N-CA	10.33	134.12	120.28
6	R	434	ASP	CA-CB-CG	-10.32	102.28	112.60
5	S	84	ARG	N-CA-C	-10.31	92.43	109.24
2	P	532	SER	N-CA-C	10.31	122.60	111.36
5	T	84	ARG	N-CA-C	-10.29	92.46	109.24
2	N	532	SER	N-CA-C	10.27	122.55	111.36
6	Q	434	ASP	CA-CB-CG	-10.22	102.38	112.60
2	H	342	ASP	CA-CB-CG	10.00	122.60	112.60
6	R	440	ALA	N-CA-C	-10.00	99.93	112.72
2	B	342	ASP	CA-CB-CG	9.99	122.59	112.60
6	Q	440	ALA	N-CA-C	-9.98	99.95	112.72
2	P	211	THR	N-CA-C	-9.94	93.08	109.07
3	V	211	THR	N-CA-C	-9.93	93.08	109.07
2	N	211	THR	N-CA-C	-9.93	93.09	109.07
2	G	342	ASP	CA-CB-CG	9.92	122.52	112.60
3	L	211	THR	N-CA-C	-9.91	93.11	109.07
2	E	211	THR	N-CA-C	-9.91	93.12	109.07
2	B	211	THR	N-CA-C	-9.90	93.13	109.07
3	K	211	THR	N-CA-C	-9.90	93.13	109.07
3	D	211	THR	N-CA-C	-9.89	93.14	109.07
2	G	211	THR	N-CA-C	-9.89	93.15	109.07
2	F	211	THR	N-CA-C	-9.88	93.16	109.07
2	H	211	THR	N-CA-C	-9.87	93.17	109.07
6	R	576	ASP	CA-C-N	9.86	133.49	120.28
6	R	576	ASP	C-N-CA	9.86	133.49	120.28
2	A	211	THR	N-CA-C	-9.82	93.25	109.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	Q	576	ASP	CA-C-N	9.82	133.44	120.28
6	Q	576	ASP	C-N-CA	9.82	133.44	120.28
5	S	119	SER	N-CA-C	-9.80	101.49	112.57
6	Q	91	ASP	CA-CB-CG	-9.79	102.81	112.60
6	R	91	ASP	CA-CB-CG	-9.78	102.82	112.60
2	B	377	ASP	N-CA-C	-9.75	101.49	113.97
2	H	377	ASP	N-CA-C	-9.72	101.52	113.97
5	T	119	SER	N-CA-C	-9.72	101.58	112.57
2	G	377	ASP	N-CA-C	-9.72	101.53	113.97
3	L	223	PHE	CA-CB-CG	-9.62	104.17	113.80
2	B	370	ALA	CA-C-N	9.60	138.97	121.70
2	B	370	ALA	C-N-CA	9.60	138.97	121.70
2	G	370	ALA	CA-C-N	9.60	138.97	121.70
2	G	370	ALA	C-N-CA	9.60	138.97	121.70
2	H	370	ALA	CA-C-N	9.60	138.97	121.70
2	H	370	ALA	C-N-CA	9.60	138.97	121.70
4	M	434	ILE	CA-C-N	9.59	130.78	120.03
4	M	434	ILE	C-N-CA	9.59	130.78	120.03
2	N	223	PHE	CA-CB-CG	-9.57	104.23	113.80
2	G	223	PHE	CA-CB-CG	-9.57	104.23	113.80
2	F	223	PHE	CA-CB-CG	-9.57	104.23	113.80
3	K	223	PHE	CA-CB-CG	-9.56	104.24	113.80
6	R	809	PHE	N-CA-C	-9.56	100.84	111.07
3	V	223	PHE	CA-CB-CG	-9.56	104.24	113.80
2	A	223	PHE	CA-CB-CG	-9.55	104.25	113.80
2	H	525	GLY	CA-C-N	9.55	133.55	120.46
2	H	525	GLY	C-N-CA	9.55	133.55	120.46
2	P	223	PHE	CA-CB-CG	-9.55	104.25	113.80
2	G	525	GLY	CA-C-N	9.54	133.53	120.46
2	G	525	GLY	C-N-CA	9.54	133.53	120.46
2	N	370	ALA	CA-C-N	9.54	138.87	121.70
2	N	370	ALA	C-N-CA	9.54	138.87	121.70
2	B	525	GLY	CA-C-N	9.53	133.52	120.46
2	B	525	GLY	C-N-CA	9.53	133.52	120.46
4	O	434	ILE	CA-C-N	9.53	130.71	120.03
4	O	434	ILE	C-N-CA	9.53	130.71	120.03
2	P	370	ALA	CA-C-N	9.52	138.84	121.70
2	P	370	ALA	C-N-CA	9.52	138.84	121.70
2	E	223	PHE	CA-CB-CG	-9.52	104.28	113.80
2	B	223	PHE	CA-CB-CG	-9.51	104.29	113.80
3	D	223	PHE	CA-CB-CG	-9.51	104.30	113.80
6	Q	809	PHE	N-CA-C	-9.51	100.90	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	R	438	ALA	N-CA-C	-9.48	98.39	112.04
2	H	223	PHE	CA-CB-CG	-9.44	104.36	113.80
6	Q	438	ALA	N-CA-C	-9.42	98.47	112.04
3	K	251	PRO	N-CA-C	9.39	122.16	110.70
2	H	465	GLN	CB-CG-CD	-9.38	96.65	112.60
2	B	465	GLN	CB-CG-CD	-9.38	96.65	112.60
3	L	251	PRO	N-CA-C	9.37	122.13	110.70
6	Q	636	PHE	CA-CB-CG	9.37	123.17	113.80
2	G	251	PRO	N-CA-C	9.35	122.11	110.70
2	B	251	PRO	N-CA-C	9.35	122.10	110.70
3	D	251	PRO	N-CA-C	9.34	122.10	110.70
2	N	251	PRO	N-CA-C	9.33	122.09	110.70
3	V	251	PRO	N-CA-C	9.33	122.08	110.70
2	A	468	LEU	CA-C-N	9.33	132.78	120.28
2	A	468	LEU	C-N-CA	9.33	132.78	120.28
2	G	465	GLN	CB-CG-CD	-9.33	96.75	112.60
2	E	468	LEU	CA-C-N	9.33	132.78	120.28
2	E	468	LEU	C-N-CA	9.33	132.78	120.28
2	P	251	PRO	N-CA-C	9.32	122.07	110.70
2	H	251	PRO	N-CA-C	9.31	122.06	110.70
2	F	468	LEU	CA-C-N	9.31	132.75	120.28
2	F	468	LEU	C-N-CA	9.31	132.75	120.28
2	A	251	PRO	N-CA-C	9.30	122.05	110.70
2	G	334	VAL	N-CA-C	9.30	119.35	110.42
6	R	636	PHE	CA-CB-CG	9.30	123.10	113.80
2	F	251	PRO	N-CA-C	9.30	122.04	110.70
2	E	251	PRO	N-CA-C	9.29	122.04	110.70
6	R	38	LEU	N-CA-CB	-9.28	96.47	110.12
2	B	334	VAL	N-CA-C	9.28	119.33	110.42
2	H	334	VAL	N-CA-C	9.27	119.31	110.42
6	Q	38	LEU	N-CA-CB	-9.26	96.51	110.12
5	S	132	PHE	N-CA-C	-9.23	93.85	108.90
2	H	405	GLN	CB-CA-C	-9.17	95.27	110.85
5	T	132	PHE	N-CA-C	-9.16	93.97	108.90
6	Q	603	PRO	N-CA-C	9.15	121.86	110.70
6	Q	177	PHE	CA-CB-CG	-9.14	104.66	113.80
2	B	405	GLN	CB-CA-C	-9.13	95.32	110.85
6	Q	531	LEU	N-CA-C	9.13	121.32	111.36
3	V	253	GLU	CA-C-N	9.13	133.68	120.71
3	V	253	GLU	C-N-CA	9.13	133.68	120.71
6	Q	716	GLY	CA-C-N	9.13	133.43	120.28
6	Q	716	GLY	C-N-CA	9.13	133.43	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	253	GLU	CA-C-N	9.13	133.67	120.71
2	N	253	GLU	C-N-CA	9.13	133.67	120.71
2	A	253	GLU	CA-C-N	9.11	133.65	120.71
2	A	253	GLU	C-N-CA	9.11	133.65	120.71
3	K	253	GLU	CA-C-N	9.11	133.64	120.71
3	K	253	GLU	C-N-CA	9.11	133.64	120.71
2	P	253	GLU	CA-C-N	9.10	133.64	120.71
2	P	253	GLU	C-N-CA	9.10	133.64	120.71
3	L	253	GLU	CA-C-N	9.10	133.63	120.71
3	L	253	GLU	C-N-CA	9.10	133.63	120.71
2	F	505	ARG	CA-C-N	9.10	132.47	120.28
2	F	505	ARG	C-N-CA	9.10	132.47	120.28
6	R	177	PHE	CA-CB-CG	-9.10	104.70	113.80
6	R	531	LEU	N-CA-C	9.09	121.27	111.36
6	R	603	PRO	N-CA-C	9.08	121.78	110.70
2	H	253	GLU	CA-C-N	9.08	133.60	120.71
2	H	253	GLU	C-N-CA	9.08	133.60	120.71
6	R	716	GLY	CA-C-N	9.08	133.35	120.28
6	R	716	GLY	C-N-CA	9.08	133.35	120.28
2	E	505	ARG	CA-C-N	9.08	132.44	120.28
2	E	505	ARG	C-N-CA	9.08	132.44	120.28
2	B	253	GLU	CA-C-N	9.07	133.59	120.71
2	B	253	GLU	C-N-CA	9.07	133.59	120.71
2	G	253	GLU	CA-C-N	9.07	133.59	120.71
2	G	253	GLU	C-N-CA	9.07	133.59	120.71
2	G	405	GLN	CB-CA-C	-9.06	95.44	110.85
2	A	505	ARG	CA-C-N	9.06	132.42	120.28
2	A	505	ARG	C-N-CA	9.06	132.42	120.28
2	F	253	GLU	CA-C-N	9.06	133.57	120.71
2	F	253	GLU	C-N-CA	9.06	133.57	120.71
3	D	253	GLU	CA-C-N	9.05	133.56	120.71
3	D	253	GLU	C-N-CA	9.05	133.56	120.71
2	E	253	GLU	CA-C-N	9.05	133.56	120.71
2	E	253	GLU	C-N-CA	9.05	133.56	120.71
2	A	206	VAL	N-CA-C	-9.04	95.10	108.12
6	R	485	TYR	N-CA-CB	-9.04	95.22	110.49
6	Q	485	TYR	N-CA-CB	-9.03	95.23	110.49
2	G	206	VAL	N-CA-C	-9.02	95.13	108.12
2	E	206	VAL	N-CA-C	-9.02	95.13	108.12
3	K	206	VAL	N-CA-C	-9.02	95.13	108.12
2	F	206	VAL	N-CA-C	-9.02	95.13	108.12
2	P	206	VAL	N-CA-C	-9.02	95.14	108.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	209	VAL	N-CA-C	-9.01	94.59	107.75
2	E	209	VAL	N-CA-C	-9.01	94.59	107.75
3	L	209	VAL	N-CA-C	-9.01	94.59	107.75
2	H	206	VAL	N-CA-C	-9.01	95.15	108.12
2	A	209	VAL	N-CA-C	-9.01	94.60	107.75
3	D	206	VAL	N-CA-C	-9.01	95.15	108.12
4	O	516	ARG	NE-CZ-NH2	9.00	127.30	119.20
2	G	209	VAL	N-CA-C	-9.00	94.61	107.75
3	V	209	VAL	N-CA-C	-8.99	94.62	107.75
2	B	209	VAL	N-CA-C	-8.98	94.64	107.75
2	H	209	VAL	N-CA-C	-8.98	94.64	107.75
3	V	206	VAL	N-CA-C	-8.98	95.19	108.12
2	N	206	VAL	N-CA-C	-8.98	95.19	108.12
3	K	209	VAL	N-CA-C	-8.97	94.65	107.75
3	D	209	VAL	N-CA-C	-8.97	94.66	107.75
2	F	209	VAL	N-CA-C	-8.97	94.66	107.75
2	B	206	VAL	N-CA-C	-8.96	95.21	108.12
2	P	209	VAL	N-CA-C	-8.96	94.66	107.75
3	L	206	VAL	N-CA-C	-8.96	95.21	108.12
4	O	363	ASN	CA-CB-CG	-8.96	103.64	112.60
4	M	516	ARG	NE-CZ-NH2	8.96	127.26	119.20
6	Q	737	LYS	N-CA-C	8.95	124.92	112.75
6	R	218	ASN	CA-CB-CG	-8.95	103.66	112.60
6	Q	218	ASN	CA-CB-CG	-8.93	103.67	112.60
2	B	518	LYS	N-CA-C	8.93	121.01	111.28
2	G	518	LYS	N-CA-C	8.92	121.01	111.28
2	H	518	LYS	N-CA-C	8.92	121.00	111.28
5	T	44	ASP	CA-C-N	8.92	132.23	120.28
5	T	44	ASP	C-N-CA	8.92	132.23	120.28
5	S	44	ASP	CA-C-N	8.92	132.23	120.28
5	S	44	ASP	C-N-CA	8.92	132.23	120.28
4	M	363	ASN	CA-CB-CG	-8.89	103.71	112.60
6	Q	523	ASN	CA-CB-CG	-8.89	103.71	112.60
6	R	523	ASN	CA-CB-CG	-8.89	103.71	112.60
2	H	433	LEU	CB-CA-C	-8.80	96.19	110.79
2	B	426	ILE	CB-CA-C	8.79	124.35	112.22
2	B	433	LEU	CB-CA-C	-8.79	96.21	110.79
5	T	31	GLY	CA-C-N	8.79	131.86	120.44
5	T	31	GLY	C-N-CA	8.79	131.86	120.44
2	G	433	LEU	CB-CA-C	-8.77	96.23	110.79
2	H	426	ILE	CB-CA-C	8.77	124.32	112.22
5	S	31	GLY	CA-C-N	8.75	131.81	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	S	31	GLY	C-N-CA	8.75	131.81	120.44
6	R	37	LYS	CA-C-N	8.74	131.99	120.28
6	R	37	LYS	C-N-CA	8.74	131.99	120.28
2	G	426	ILE	CB-CA-C	8.73	124.27	112.22
2	F	250	PRO	CA-C-N	8.72	129.36	120.38
2	F	250	PRO	C-N-CA	8.72	129.36	120.38
6	Q	37	LYS	CA-C-N	8.71	131.96	120.28
6	Q	37	LYS	C-N-CA	8.71	131.96	120.28
4	O	412	TYR	N-CA-CB	8.70	122.90	110.12
6	R	509	LEU	N-CA-C	-8.69	102.81	113.41
2	P	524	SER	CA-C-N	8.68	129.80	119.99
2	P	524	SER	C-N-CA	8.68	129.80	119.99
6	Q	509	LEU	N-CA-C	-8.67	102.83	113.41
4	M	412	TYR	N-CA-CB	8.66	122.85	110.12
2	N	524	SER	CA-C-N	8.65	129.77	119.99
2	N	524	SER	C-N-CA	8.65	129.77	119.99
2	H	250	PRO	CA-C-N	8.65	129.29	120.38
2	H	250	PRO	C-N-CA	8.65	129.29	120.38
2	A	250	PRO	CA-C-N	8.64	129.28	120.38
2	A	250	PRO	C-N-CA	8.64	129.28	120.38
6	Q	685	PHE	CA-CB-CG	-8.64	105.16	113.80
6	R	661	PHE	CB-CA-C	-8.64	96.45	110.79
3	D	250	PRO	CA-C-N	8.64	129.28	120.38
3	D	250	PRO	C-N-CA	8.64	129.28	120.38
4	O	370	ALA	O-C-N	-8.63	112.78	121.93
2	P	408	ILE	O-C-N	8.63	130.24	121.87
6	R	685	PHE	CA-CB-CG	-8.63	105.17	113.80
6	Q	661	PHE	CB-CA-C	-8.62	96.47	110.79
6	R	227	ASP	N-CA-C	-8.62	96.29	109.14
2	B	250	PRO	CA-C-N	8.62	129.26	120.38
2	B	250	PRO	C-N-CA	8.62	129.26	120.38
6	Q	91	ASP	CA-C-N	8.62	131.83	120.28
6	Q	91	ASP	C-N-CA	8.62	131.83	120.28
2	E	250	PRO	CA-C-N	8.62	129.26	120.38
2	E	250	PRO	C-N-CA	8.62	129.26	120.38
6	Q	730	HIS	CB-CA-C	-8.62	96.49	110.79
4	M	370	ALA	O-C-N	-8.61	112.80	121.93
6	Q	202	ASP	CA-CB-CG	-8.61	103.99	112.60
3	K	250	PRO	CA-C-N	8.60	129.24	120.38
3	K	250	PRO	C-N-CA	8.60	129.24	120.38
3	L	250	PRO	CA-C-N	8.60	129.24	120.38
3	L	250	PRO	C-N-CA	8.60	129.24	120.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	G	250	PRO	CA-C-N	8.59	129.22	120.38
2	G	250	PRO	C-N-CA	8.59	129.22	120.38
6	R	91	ASP	CA-C-N	8.59	131.78	120.28
6	R	91	ASP	C-N-CA	8.59	131.78	120.28
5	T	102	LEU	N-CA-CB	-8.58	97.50	110.12
2	P	250	PRO	CA-C-N	8.57	129.21	120.38
2	P	250	PRO	C-N-CA	8.57	129.21	120.38
2	N	250	PRO	CA-C-N	8.57	129.21	120.38
2	N	250	PRO	C-N-CA	8.57	129.21	120.38
6	Q	227	ASP	N-CA-C	-8.57	96.37	109.14
6	R	730	HIS	CB-CA-C	-8.56	96.58	110.79
3	V	250	PRO	CA-C-N	8.55	129.19	120.38
3	V	250	PRO	C-N-CA	8.55	129.19	120.38
6	R	202	ASP	CA-CB-CG	-8.55	104.05	112.60
5	S	102	LEU	N-CA-CB	-8.54	97.57	110.12
2	P	447	ALA	CA-C-N	8.53	131.53	120.44
2	P	447	ALA	C-N-CA	8.53	131.53	120.44
2	N	408	ILE	O-C-N	8.53	130.14	121.87
6	R	681	PHE	CB-CA-C	8.52	125.33	110.85
3	D	282	HIS	CA-CB-CG	-8.50	105.30	113.80
2	P	374	ALA	CA-C-O	-8.50	111.89	120.82
6	Q	601	THR	N-CA-C	-8.49	102.85	113.55
4	M	507	LEU	CA-C-N	8.49	131.48	120.44
4	M	507	LEU	C-N-CA	8.49	131.48	120.44
3	L	282	HIS	CA-CB-CG	-8.49	105.31	113.80
6	Q	771	GLY	N-CA-C	8.49	124.36	113.24
2	H	427	ILE	CB-CA-C	-8.49	101.01	111.88
2	B	427	ILE	CB-CA-C	-8.48	101.02	111.88
2	G	427	ILE	CB-CA-C	-8.48	101.02	111.88
2	P	405	GLN	CA-C-N	8.48	131.65	120.28
2	P	405	GLN	C-N-CA	8.48	131.65	120.28
2	F	282	HIS	CA-CB-CG	-8.48	105.32	113.80
2	N	426	ILE	CA-C-O	-8.48	111.86	120.85
2	N	405	GLN	CA-C-N	8.48	131.64	120.28
2	N	405	GLN	C-N-CA	8.48	131.64	120.28
6	R	601	THR	N-CA-C	-8.47	102.87	113.55
2	N	374	ALA	CA-C-O	-8.47	111.93	120.82
3	V	282	HIS	CA-CB-CG	-8.46	105.34	113.80
2	B	361	MET	CB-CA-C	-8.46	97.28	110.81
4	O	507	LEU	CA-C-N	8.45	131.42	120.44
4	O	507	LEU	C-N-CA	8.45	131.42	120.44
2	P	426	ILE	CA-C-O	-8.44	111.91	120.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	447	ALA	CA-C-N	8.43	131.40	120.44
2	N	447	ALA	C-N-CA	8.43	131.40	120.44
2	H	282	HIS	CA-CB-CG	-8.43	105.37	113.80
5	T	85	ILE	N-CA-C	-8.43	95.44	107.75
6	R	771	GLY	N-CA-C	8.43	124.28	113.24
2	G	361	MET	CB-CA-C	-8.42	97.34	110.81
6	Q	681	PHE	CB-CA-C	8.41	125.16	110.85
2	H	361	MET	CB-CA-C	-8.41	97.36	110.81
2	E	282	HIS	CA-CB-CG	-8.40	105.39	113.80
2	P	282	HIS	CA-CB-CG	-8.40	105.40	113.80
2	B	282	HIS	CA-CB-CG	-8.38	105.42	113.80
3	K	282	HIS	CA-CB-CG	-8.38	105.42	113.80
5	S	85	ILE	N-CA-C	-8.37	95.52	107.75
2	N	282	HIS	CA-CB-CG	-8.37	105.43	113.80
6	R	737	LYS	N-CA-C	8.37	125.05	113.16
2	A	282	HIS	CA-CB-CG	-8.36	105.44	113.80
2	P	470	ARG	NE-CZ-NH1	-8.36	113.14	121.50
2	E	284	THR	N-CA-C	8.35	120.00	111.07
6	Q	723	LEU	N-CA-C	8.35	120.46	111.36
3	K	284	THR	N-CA-C	8.33	119.98	111.07
6	R	723	LEU	N-CA-C	8.32	120.43	111.36
6	R	591	TYR	CA-CB-CG	-8.32	98.92	113.90
2	F	284	THR	N-CA-C	8.31	119.97	111.07
2	A	284	THR	N-CA-C	8.31	119.96	111.07
2	B	284	THR	N-CA-C	8.31	119.96	111.07
5	T	135	PRO	N-CA-C	-8.31	103.97	114.35
2	G	284	THR	N-CA-C	8.30	119.95	111.07
2	N	470	ARG	NE-CZ-NH1	-8.30	113.20	121.50
5	S	135	PRO	N-CA-C	-8.30	103.97	114.35
6	Q	591	TYR	CA-CB-CG	-8.30	98.96	113.90
3	D	284	THR	N-CA-C	8.29	119.94	111.07
2	G	282	HIS	CA-CB-CG	-8.29	105.51	113.80
6	R	584	LEU	CB-CA-C	-8.28	97.05	110.79
2	H	284	THR	N-CA-C	8.28	119.93	111.07
3	V	284	THR	N-CA-C	8.27	119.92	111.07
6	Q	584	LEU	CB-CA-C	-8.27	97.06	110.79
3	L	284	THR	N-CA-C	8.26	119.91	111.07
2	E	352	ASN	N-CA-C	-8.26	102.36	111.36
2	F	352	ASN	N-CA-C	-8.26	102.36	111.36
5	S	182	GLU	N-CA-C	-8.26	96.62	109.25
6	Q	157	ASP	N-CA-C	-8.25	102.24	113.30
2	P	284	THR	N-CA-C	8.24	119.89	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	352	ASN	N-CA-C	-8.24	102.38	111.36
2	N	284	THR	N-CA-C	8.23	119.88	111.07
5	T	182	GLU	N-CA-C	-8.23	96.66	109.25
6	R	157	ASP	N-CA-C	-8.20	102.31	113.30
6	Q	638	HIS	CA-CB-CG	-8.20	105.60	113.80
6	R	638	HIS	CA-CB-CG	-8.19	105.61	113.80
2	E	473	LYS	N-CA-C	-8.18	94.21	108.69
5	T	187	GLU	N-CA-C	-8.18	96.58	109.50
2	F	473	LYS	N-CA-C	-8.17	94.23	108.69
2	P	337	ASP	CA-C-N	8.16	131.05	120.44
2	P	337	ASP	C-N-CA	8.16	131.05	120.44
2	B	529	PHE	CA-CB-CG	-8.16	105.64	113.80
2	N	300	PHE	CA-CB-CG	-8.16	105.64	113.80
6	Q	101	ASN	CA-CB-CG	-8.15	104.45	112.60
2	H	300	PHE	CA-CB-CG	-8.14	105.66	113.80
2	N	337	ASP	CA-C-N	8.14	131.02	120.44
2	N	337	ASP	C-N-CA	8.14	131.02	120.44
2	F	300	PHE	CA-CB-CG	-8.14	105.66	113.80
3	K	300	PHE	CA-CB-CG	-8.13	105.67	113.80
6	R	101	ASN	CA-CB-CG	-8.13	104.47	112.60
2	H	529	PHE	CA-CB-CG	-8.11	105.69	113.80
5	S	187	GLU	N-CA-C	-8.11	96.68	109.50
2	P	300	PHE	CA-CB-CG	-8.10	105.70	113.80
2	A	473	LYS	N-CA-C	-8.10	94.35	108.69
2	P	470	ARG	NE-CZ-NH2	8.09	126.48	119.20
2	A	300	PHE	CA-CB-CG	-8.09	105.71	113.80
2	G	300	PHE	CA-CB-CG	-8.09	105.71	113.80
2	E	300	PHE	CA-CB-CG	-8.09	105.71	113.80
2	B	300	PHE	CA-CB-CG	-8.07	105.73	113.80
3	L	300	PHE	CA-CB-CG	-8.05	105.75	113.80
2	B	410	ASP	CA-CB-CG	-8.04	104.56	112.60
3	V	300	PHE	CA-CB-CG	-8.04	105.76	113.80
2	G	529	PHE	CA-CB-CG	-8.04	105.77	113.80
6	R	740	GLN	N-CA-C	8.04	119.67	111.07
2	H	410	ASP	CA-CB-CG	-8.02	104.58	112.60
6	Q	489	PHE	CB-CA-C	-8.02	95.80	110.63
2	E	480	ASN	CA-CB-CG	8.01	120.61	112.60
2	G	406	LEU	N-CA-CB	-8.00	98.32	110.16
2	B	389	GLU	CB-CG-CD	-8.00	99.00	112.60
2	F	480	ASN	CA-CB-CG	8.00	120.60	112.60
2	B	386	SER	CB-CA-C	-8.00	94.04	109.95
3	D	300	PHE	CA-CB-CG	-8.00	105.81	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	G	410	ASP	CA-CB-CG	-8.00	104.61	112.60
2	N	361	MET	CA-C-N	7.99	130.83	120.44
2	N	361	MET	C-N-CA	7.99	130.83	120.44
2	G	389	GLU	CB-CG-CD	-7.98	99.03	112.60
2	A	480	ASN	CA-CB-CG	7.98	120.58	112.60
2	H	406	LEU	N-CA-CB	-7.98	98.35	110.16
2	H	386	SER	CB-CA-C	-7.98	94.07	109.95
2	G	440	ALA	CB-CA-C	-7.97	97.55	110.79
2	B	406	LEU	N-CA-CB	-7.97	98.37	110.16
6	R	574	SER	N-CA-C	7.97	119.97	111.28
2	A	370	ALA	CA-C-N	7.96	136.04	121.70
2	A	370	ALA	C-N-CA	7.96	136.04	121.70
2	H	389	GLU	CB-CG-CD	-7.96	99.06	112.60
6	R	489	PHE	CB-CA-C	-7.96	95.90	110.63
2	A	412	TYR	N-CA-C	7.96	119.96	111.28
2	P	450	SER	O-C-N	7.96	130.27	122.07
2	G	386	SER	CB-CA-C	-7.96	94.11	109.95
6	R	32	LEU	CB-CA-C	-7.95	97.59	110.79
2	N	452	HIS	CA-C-N	7.94	130.77	120.44
2	N	452	HIS	C-N-CA	7.94	130.77	120.44
6	Q	32	LEU	CB-CA-C	-7.94	97.61	110.79
2	F	370	ALA	CA-C-N	7.93	135.98	121.70
2	F	370	ALA	C-N-CA	7.93	135.98	121.70
2	E	412	TYR	N-CA-C	7.93	119.92	111.28
2	P	361	MET	CA-C-N	7.93	130.75	120.44
2	P	361	MET	C-N-CA	7.93	130.75	120.44
6	Q	740	GLN	N-CA-C	7.93	119.56	111.07
2	H	440	ALA	CB-CA-C	-7.93	97.63	110.79
2	P	452	HIS	CA-C-N	7.92	130.74	120.44
2	P	452	HIS	C-N-CA	7.92	130.74	120.44
6	R	568	LEU	N-CA-CB	-7.92	98.52	110.01
2	F	412	TYR	N-CA-C	7.92	119.91	111.28
2	E	370	ALA	CA-C-N	7.92	135.95	121.70
2	E	370	ALA	C-N-CA	7.92	135.95	121.70
2	N	470	ARG	NE-CZ-NH2	7.92	126.32	119.20
2	B	440	ALA	CB-CA-C	-7.91	97.66	110.79
6	R	83	ASN	CA-CB-CG	-7.90	104.70	112.60
6	Q	574	SER	N-CA-C	7.88	119.87	111.28
6	Q	568	LEU	N-CA-CB	-7.87	98.59	110.01
6	Q	48	LEU	N-CA-C	7.85	119.47	111.07
6	Q	83	ASN	CA-CB-CG	-7.85	104.75	112.60
6	Q	285	HIS	CA-CB-CG	-7.83	105.97	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	R	285	HIS	CA-CB-CG	-7.80	106.00	113.80
2	N	450	SER	O-C-N	7.80	130.10	122.07
6	R	800	GLU	CA-CB-CG	-7.79	98.52	114.10
6	R	48	LEU	N-CA-C	7.79	119.41	111.07
6	Q	133	ASP	CA-CB-CG	-7.79	104.81	112.60
4	O	361	MET	CB-CA-C	-7.78	97.87	110.79
3	K	248	VAL	N-CA-CB	7.78	122.10	111.21
6	Q	800	GLU	CA-CB-CG	-7.78	98.54	114.10
6	R	515	ILE	CA-C-N	7.77	136.39	121.54
6	R	515	ILE	C-N-CA	7.77	136.39	121.54
6	R	432	TYR	N-CA-CB	7.77	121.27	110.01
6	Q	515	ILE	CA-C-N	7.77	136.37	121.54
6	Q	515	ILE	C-N-CA	7.77	136.37	121.54
4	M	443	GLN	OE1-CD-NE2	7.76	130.36	122.60
2	P	505	ARG	NE-CZ-NH2	7.75	126.18	119.20
4	M	361	MET	CB-CA-C	-7.75	97.92	110.79
6	R	404	GLN	N-CA-C	-7.75	94.29	110.80
6	R	133	ASP	CA-CB-CG	-7.75	104.86	112.60
2	B	400	ALA	CA-C-O	7.74	128.76	120.55
4	O	443	GLN	OE1-CD-NE2	7.73	130.33	122.60
5	T	179	ASN	N-CA-C	-7.73	103.65	113.23
6	Q	432	TYR	N-CA-CB	7.73	121.21	110.01
3	L	248	VAL	N-CA-CB	7.72	122.02	111.21
6	Q	404	GLN	N-CA-C	-7.72	94.36	110.80
2	N	248	VAL	N-CA-CB	7.71	122.00	111.21
4	M	341	HIS	CA-CB-CG	7.70	121.50	113.80
2	G	400	ALA	CA-C-O	7.70	128.71	120.55
2	N	505	ARG	NE-CZ-NH2	7.69	126.12	119.20
2	H	248	VAL	N-CA-CB	7.69	121.97	111.21
4	O	491	ARG	N-CA-C	7.68	119.65	111.28
2	F	248	VAL	N-CA-CB	7.68	121.97	111.21
2	B	248	VAL	N-CA-CB	7.68	121.96	111.21
3	D	248	VAL	N-CA-CB	7.67	121.95	111.21
2	E	522	PHE	N-CA-C	-7.67	103.72	113.23
2	G	248	VAL	N-CA-CB	7.66	121.93	111.21
2	E	248	VAL	N-CA-CB	7.66	121.93	111.21
5	S	54	ILE	CB-CA-C	-7.66	101.65	112.22
2	H	451	TRP	CB-CG-CD2	-7.65	116.09	126.80
5	S	179	ASN	N-CA-C	-7.65	103.74	113.23
6	R	233	ASP	CA-CB-CG	-7.65	104.95	112.60
4	M	491	ARG	N-CA-C	7.65	119.62	111.28
6	Q	233	ASP	CA-CB-CG	-7.65	104.95	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	H	400	ALA	CA-C-O	7.65	128.66	120.55
2	N	421	LEU	CA-C-O	-7.65	112.31	120.42
6	Q	98	TYR	N-CA-C	-7.65	103.95	113.28
2	P	421	LEU	CA-C-O	-7.64	112.32	120.42
2	G	196	LYS	N-CA-C	-7.64	95.14	108.20
2	A	248	VAL	N-CA-CB	7.63	121.90	111.21
3	V	248	VAL	N-CA-CB	7.63	121.90	111.21
2	P	248	VAL	N-CA-CB	7.63	121.89	111.21
5	T	51	LEU	CB-CA-C	-7.63	98.12	110.79
6	R	98	TYR	N-CA-C	-7.63	103.97	113.28
6	Q	572	ILE	N-CA-CB	-7.63	100.93	110.47
5	T	54	ILE	CB-CA-C	-7.63	101.69	112.22
6	R	572	ILE	N-CA-CB	-7.63	100.94	110.47
2	F	522	PHE	N-CA-C	-7.62	103.78	113.23
4	M	522	PHE	N-CA-C	-7.62	102.32	111.69
2	B	338	ASP	CA-CB-CG	7.62	120.22	112.60
2	A	522	PHE	N-CA-C	-7.61	103.79	113.23
4	O	341	HIS	CA-CB-CG	7.61	121.41	113.80
2	P	537	GLN	CA-C-N	7.61	130.48	120.28
2	P	537	GLN	C-N-CA	7.61	130.48	120.28
3	L	196	LYS	N-CA-C	-7.61	95.19	108.20
3	K	196	LYS	N-CA-C	-7.61	95.19	108.20
5	S	51	LEU	CB-CA-C	-7.61	98.17	110.79
2	P	210	ARG	N-CA-C	-7.60	96.83	109.07
2	H	338	ASP	CA-CB-CG	7.60	120.20	112.60
2	B	451	TRP	CB-CG-CD2	-7.60	116.16	126.80
3	K	210	ARG	N-CA-C	-7.60	96.83	109.07
6	R	517	THR	N-CA-CB	7.60	119.12	111.29
2	H	521	ASP	CB-CA-C	-7.60	98.18	110.79
2	E	196	LYS	N-CA-C	-7.59	95.21	108.20
2	N	537	GLN	CA-C-N	7.59	130.46	120.28
2	N	537	GLN	C-N-CA	7.59	130.46	120.28
3	D	268	ARG	CA-C-N	7.59	130.31	120.44
3	D	268	ARG	C-N-CA	7.59	130.31	120.44
2	G	210	ARG	N-CA-C	-7.59	96.84	109.07
2	A	196	LYS	N-CA-C	-7.59	95.22	108.20
3	D	196	LYS	N-CA-C	-7.59	95.22	108.20
4	O	460	LYS	CA-C-N	7.59	131.07	120.29
4	O	460	LYS	C-N-CA	7.59	131.07	120.29
2	B	196	LYS	N-CA-C	-7.59	95.22	108.20
3	L	210	ARG	N-CA-C	-7.59	96.85	109.07
6	Q	839	SER	CA-C-N	7.59	130.45	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	Q	839	SER	C-N-CA	7.59	130.45	120.28
4	M	460	LYS	CA-C-N	7.59	131.06	120.29
4	M	460	LYS	C-N-CA	7.59	131.06	120.29
5	T	127	TYR	N-CA-C	-7.59	94.82	108.48
2	H	196	LYS	N-CA-C	-7.58	95.23	108.20
2	A	448	PHE	CA-CB-CG	7.58	121.38	113.80
3	D	210	ARG	N-CA-C	-7.58	96.86	109.07
3	K	268	ARG	CA-C-N	7.58	130.29	120.44
3	K	268	ARG	C-N-CA	7.58	130.29	120.44
3	L	268	ARG	CA-C-N	7.58	130.29	120.44
3	L	268	ARG	C-N-CA	7.58	130.29	120.44
2	G	521	ASP	CB-CA-C	-7.58	98.21	110.79
6	Q	137	GLY	N-CA-C	7.58	123.52	113.37
2	E	448	PHE	CA-CB-CG	7.58	121.38	113.80
2	N	374	ALA	O-C-N	7.58	129.87	122.07
2	B	210	ARG	N-CA-C	-7.57	96.88	109.07
2	G	451	TRP	CB-CG-CD2	-7.57	116.20	126.80
4	O	522	PHE	N-CA-C	-7.57	102.37	111.69
2	A	268	ARG	CA-C-N	7.57	130.28	120.44
2	A	268	ARG	C-N-CA	7.57	130.28	120.44
2	P	374	ALA	O-C-N	7.57	129.87	122.07
2	F	448	PHE	CA-CB-CG	7.57	121.37	113.80
2	H	268	ARG	CA-C-N	7.57	130.28	120.44
2	H	268	ARG	C-N-CA	7.57	130.28	120.44
2	F	196	LYS	N-CA-C	-7.57	95.25	108.20
6	R	839	SER	CA-C-N	7.57	130.43	120.28
6	R	839	SER	C-N-CA	7.57	130.43	120.28
2	E	268	ARG	CA-C-N	7.57	130.28	120.44
2	E	268	ARG	C-N-CA	7.57	130.28	120.44
5	S	127	TYR	N-CA-C	-7.57	94.86	108.48
6	R	770	ASP	CA-C-N	7.57	129.60	120.14
6	R	770	ASP	C-N-CA	7.57	129.60	120.14
2	P	196	LYS	N-CA-C	-7.57	95.26	108.20
2	H	210	ARG	N-CA-C	-7.57	96.89	109.07
6	Q	517	THR	N-CA-CB	7.57	119.08	111.29
6	Q	624	ASP	N-CA-C	-7.57	100.81	112.99
2	A	210	ARG	N-CA-C	-7.57	96.89	109.07
6	R	624	ASP	N-CA-C	-7.56	100.81	112.99
2	E	210	ARG	N-CA-C	-7.56	96.90	109.07
2	N	210	ARG	N-CA-C	-7.56	96.90	109.07
3	V	196	LYS	N-CA-C	-7.56	95.27	108.20
2	N	196	LYS	N-CA-C	-7.55	95.28	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	R	137	GLY	N-CA-C	7.55	123.49	113.37
2	B	521	ASP	CB-CA-C	-7.55	98.25	110.79
6	Q	770	ASP	CA-C-N	7.54	129.56	120.14
6	Q	770	ASP	C-N-CA	7.54	129.56	120.14
2	F	210	ARG	N-CA-C	-7.53	96.94	109.07
2	G	338	ASP	CA-CB-CG	7.53	120.13	112.60
2	H	376	ALA	CB-CA-C	-7.53	94.26	109.99
2	F	268	ARG	CA-C-N	7.53	130.22	120.44
2	F	268	ARG	C-N-CA	7.53	130.22	120.44
2	N	268	ARG	CA-C-N	7.52	130.22	120.44
2	N	268	ARG	C-N-CA	7.52	130.22	120.44
3	V	210	ARG	N-CA-C	-7.52	96.96	109.07
2	G	376	ALA	CB-CA-C	-7.52	94.28	109.99
2	P	332	LYS	CA-C-N	7.52	130.35	120.28
2	P	332	LYS	C-N-CA	7.52	130.35	120.28
2	N	532	SER	CA-C-N	7.52	130.21	120.44
2	N	532	SER	C-N-CA	7.52	130.21	120.44
2	B	268	ARG	CA-C-N	7.52	130.21	120.44
2	B	268	ARG	C-N-CA	7.52	130.21	120.44
2	B	376	ALA	CB-CA-C	-7.50	94.31	109.99
2	A	539	GLU	CA-C-N	7.50	130.33	120.28
2	A	539	GLU	C-N-CA	7.50	130.33	120.28
2	P	268	ARG	CA-C-N	7.50	130.19	120.44
2	P	268	ARG	C-N-CA	7.50	130.19	120.44
2	G	268	ARG	CA-C-N	7.50	130.19	120.44
2	G	268	ARG	C-N-CA	7.50	130.19	120.44
2	E	499	LEU	CA-C-N	7.49	130.32	120.28
2	E	499	LEU	C-N-CA	7.49	130.32	120.28
2	E	539	GLU	CA-C-N	7.49	130.32	120.28
2	E	539	GLU	C-N-CA	7.49	130.32	120.28
6	R	235	ILE	CB-CA-C	7.49	117.72	111.05
2	F	539	GLU	CA-C-N	7.49	130.31	120.28
2	F	539	GLU	C-N-CA	7.49	130.31	120.28
3	V	268	ARG	CA-C-N	7.49	130.17	120.44
3	V	268	ARG	C-N-CA	7.49	130.17	120.44
6	Q	235	ILE	CB-CA-C	7.48	117.71	111.05
6	Q	90	ALA	N-CA-C	7.46	119.94	110.24
2	N	332	LYS	CA-C-N	7.46	130.28	120.28
2	N	332	LYS	C-N-CA	7.46	130.28	120.28
4	M	334	VAL	CA-C-N	7.46	130.27	120.28
4	M	334	VAL	C-N-CA	7.46	130.27	120.28
2	P	532	SER	CA-C-N	7.44	130.12	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	P	532	SER	C-N-CA	7.44	130.12	120.44
2	H	455	GLU	N-CA-C	7.44	119.47	111.36
4	O	334	VAL	CA-C-N	7.43	130.24	120.28
4	O	334	VAL	C-N-CA	7.43	130.24	120.28
5	T	159	LEU	N-CA-C	-7.43	97.10	109.07
2	F	499	LEU	CA-C-N	7.43	130.24	120.28
2	F	499	LEU	C-N-CA	7.43	130.24	120.28
5	S	159	LEU	N-CA-C	-7.43	97.11	109.07
6	Q	38	LEU	N-CA-C	-7.43	103.18	111.28
6	Q	71	ASP	CA-CB-CG	-7.43	105.17	112.60
6	R	38	LEU	N-CA-C	-7.42	103.19	111.28
6	R	71	ASP	CA-CB-CG	-7.42	105.18	112.60
6	R	90	ALA	N-CA-C	7.42	119.89	110.24
6	R	149	TYR	CA-CB-CG	-7.40	100.58	113.90
5	T	88	LEU	N-CA-C	-7.39	97.81	108.60
6	R	716	GLY	O-C-N	7.38	129.16	122.81
6	Q	716	GLY	O-C-N	7.38	129.16	122.81
4	M	401	LEU	N-CA-C	7.38	119.32	111.28
2	A	499	LEU	CA-C-N	7.38	130.17	120.28
2	A	499	LEU	C-N-CA	7.38	130.17	120.28
2	F	544	TRP	O-C-N	7.37	129.94	122.12
5	S	88	LEU	N-CA-C	-7.37	97.84	108.60
2	E	544	TRP	O-C-N	7.37	129.93	122.12
4	M	482	VAL	CA-C-O	-7.37	113.29	120.95
6	Q	149	TYR	CA-CB-CG	-7.37	100.64	113.90
4	O	401	LEU	N-CA-C	7.36	119.31	111.28
2	F	333	PHE	CA-C-N	7.36	129.84	120.56
2	F	333	PHE	C-N-CA	7.36	129.84	120.56
2	B	415	GLN	N-CA-C	7.36	121.52	112.54
2	G	455	GLU	N-CA-C	7.36	119.38	111.36
6	Q	12	ARG	CA-C-N	7.35	131.85	120.82
6	Q	12	ARG	C-N-CA	7.35	131.85	120.82
2	H	415	GLN	N-CA-C	7.35	121.50	112.54
6	R	12	ARG	CA-C-N	7.34	131.84	120.82
6	R	12	ARG	C-N-CA	7.34	131.84	120.82
6	Q	752	TRP	CA-C-N	7.34	130.44	120.38
6	Q	752	TRP	C-N-CA	7.34	130.44	120.38
6	R	820	TYR	CA-CB-CG	-7.34	100.69	113.90
6	R	102	ILE	N-CA-C	7.33	117.42	110.53
6	Q	820	TYR	CA-CB-CG	-7.33	100.71	113.90
6	R	526	GLU	CB-CA-C	-7.33	99.37	110.88
6	Q	533	LYS	N-CA-C	-7.33	98.23	109.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	Q	102	ILE	N-CA-C	7.32	117.41	110.53
6	R	752	TRP	CA-C-N	7.31	130.40	120.38
6	R	752	TRP	C-N-CA	7.31	130.40	120.38
2	E	333	PHE	CA-C-N	7.31	129.77	120.56
2	E	333	PHE	C-N-CA	7.31	129.77	120.56
2	A	377	ASP	N-CA-C	-7.30	104.52	113.50
2	F	377	ASP	N-CA-C	-7.30	104.53	113.50
2	B	455	GLU	N-CA-C	7.29	119.31	111.36
4	O	482	VAL	CA-C-O	-7.29	113.37	120.95
2	H	190	THR	N-CA-C	-7.29	97.52	109.40
6	R	772	LYS	N-CA-C	7.29	118.87	111.07
2	G	415	GLN	N-CA-C	7.28	121.42	112.54
6	Q	772	LYS	N-CA-C	7.28	118.86	111.07
2	P	461	LYS	CA-C-N	7.28	129.90	120.44
2	P	461	LYS	C-N-CA	7.28	129.90	120.44
2	A	333	PHE	CA-C-N	7.28	129.73	120.56
2	A	333	PHE	C-N-CA	7.28	129.73	120.56
4	O	341	HIS	N-CA-CB	7.27	120.92	110.16
6	R	623	ASP	N-CA-CB	7.27	120.66	109.97
6	Q	526	GLU	CB-CA-C	-7.27	99.47	110.88
2	A	544	TRP	O-C-N	7.27	129.82	122.12
2	N	461	LYS	CA-C-N	7.26	129.88	120.44
2	N	461	LYS	C-N-CA	7.26	129.88	120.44
4	O	339	TRP	CD2-CE2-CZ2	-7.26	115.14	122.40
6	Q	623	ASP	N-CA-CB	7.26	120.64	109.97
2	E	377	ASP	N-CA-C	-7.26	104.58	113.50
4	M	341	HIS	N-CA-CB	7.25	120.89	110.16
6	R	533	LYS	N-CA-C	-7.25	98.34	109.14
6	R	501	ALA	CA-C-N	7.25	128.18	119.99
6	R	501	ALA	C-N-CA	7.25	128.18	119.99
6	Q	672	GLU	N-CA-CB	7.24	122.73	110.49
6	Q	501	ALA	CA-C-N	7.24	128.17	119.99
6	Q	501	ALA	C-N-CA	7.24	128.17	119.99
4	M	339	TRP	CD2-CE2-CZ2	-7.24	115.16	122.40
2	N	508	ARG	CA-C-O	7.23	128.41	120.82
6	R	672	GLU	N-CA-CB	7.22	122.70	110.49
2	A	337	ASP	N-CA-C	-7.22	103.49	111.36
4	O	370	ALA	CA-C-N	7.22	129.95	120.28
4	O	370	ALA	C-N-CA	7.22	129.95	120.28
6	Q	726	LYS	N-CA-C	7.22	118.79	111.07
6	Q	207	GLU	CB-CA-C	7.21	122.77	110.79
2	H	501	GLU	CB-CA-C	-7.21	99.56	110.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	R	647	ARG	N-CA-C	-7.21	97.09	108.63
4	O	340	PHE	CA-CB-CG	-7.21	106.59	113.80
2	B	501	GLU	CB-CA-C	-7.21	99.56	110.88
2	E	454	ALA	CA-C-O	7.21	128.19	120.55
2	A	454	ALA	CA-C-O	7.21	128.19	120.55
2	H	415	GLN	CA-CB-CG	-7.21	99.69	114.10
2	F	337	ASP	N-CA-C	-7.21	103.50	111.36
2	B	415	GLN	CA-CB-CG	-7.20	99.70	114.10
2	P	402	SER	CA-C-N	7.20	129.93	120.28
2	P	402	SER	C-N-CA	7.20	129.93	120.28
2	A	333	PHE	N-CA-C	-7.20	103.44	111.28
2	G	399	ASP	CA-CB-CG	-7.20	105.40	112.60
2	G	501	GLU	CB-CA-C	-7.20	99.58	110.88
4	M	340	PHE	CA-CB-CG	-7.20	106.61	113.80
2	G	415	GLN	CA-CB-CG	-7.19	99.71	114.10
2	E	333	PHE	N-CA-C	-7.19	103.44	111.28
6	Q	210	GLU	CB-CA-C	-7.19	98.86	110.79
4	M	377	ASP	N-CA-CB	7.18	120.68	110.12
2	E	337	ASP	N-CA-C	-7.18	103.53	111.36
2	P	508	ARG	CA-C-O	7.18	128.36	120.82
6	Q	647	ARG	N-CA-C	-7.18	97.14	108.63
2	A	435	GLY	CA-C-N	7.18	129.90	120.28
2	A	435	GLY	C-N-CA	7.18	129.90	120.28
3	K	308	GLU	N-CA-C	7.17	119.10	111.28
2	F	333	PHE	N-CA-C	-7.17	103.46	111.28
6	R	210	GLU	CB-CA-C	-7.17	98.89	110.79
4	M	370	ALA	CA-C-N	7.17	129.88	120.28
4	M	370	ALA	C-N-CA	7.17	129.88	120.28
2	E	435	GLY	CA-C-N	7.16	129.88	120.28
2	E	435	GLY	C-N-CA	7.16	129.88	120.28
6	R	264	PRO	CB-CA-C	-7.16	102.22	111.46
4	O	377	ASP	N-CA-CB	7.16	120.64	110.12
6	Q	583	LEU	CA-C-N	7.16	129.87	120.28
6	Q	583	LEU	C-N-CA	7.16	129.87	120.28
4	M	521	ASP	CA-C-N	7.16	132.81	120.58
4	M	521	ASP	C-N-CA	7.16	132.81	120.58
2	H	438	LYS	CB-CA-C	7.15	122.67	110.79
6	R	207	GLU	CB-CA-C	7.15	122.66	110.79
2	N	402	SER	CA-C-N	7.15	129.86	120.28
2	N	402	SER	C-N-CA	7.15	129.86	120.28
2	H	513	ARG	N-CA-CB	-7.14	99.65	110.01
6	R	726	LYS	N-CA-C	7.14	118.71	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	399	ASP	CA-CB-CG	-7.14	105.46	112.60
2	F	435	GLY	CA-C-N	7.14	129.84	120.28
2	F	435	GLY	C-N-CA	7.14	129.84	120.28
3	V	308	GLU	N-CA-C	7.14	119.06	111.28
6	Q	264	PRO	CB-CA-C	-7.14	102.25	111.46
2	N	308	GLU	N-CA-C	7.13	119.05	111.28
6	R	623	ASP	N-CA-C	-7.13	99.73	110.28
6	R	429	ARG	CA-C-N	7.12	130.54	120.28
6	R	429	ARG	C-N-CA	7.12	130.54	120.28
5	T	171	VAL	N-CA-C	-7.12	98.17	108.36
2	P	450	SER	CA-C-O	-7.12	113.34	120.82
2	G	438	LYS	CB-CA-C	7.12	122.61	110.79
3	K	190	THR	N-CA-C	-7.12	97.36	109.24
2	H	232	PHE	CB-CA-C	-7.12	98.97	110.79
2	F	454	ALA	CA-C-O	7.12	128.09	120.55
2	A	190	THR	N-CA-C	-7.12	97.36	109.24
2	A	341	HIS	CA-CB-CG	-7.11	106.69	113.80
3	D	190	THR	N-CA-C	-7.11	97.36	109.24
2	F	190	THR	N-CA-C	-7.11	97.37	109.24
2	B	308	GLU	N-CA-C	7.11	119.03	111.28
2	B	513	ARG	N-CA-CB	-7.11	99.70	110.01
3	D	308	GLU	N-CA-C	7.11	119.03	111.28
2	B	438	LYS	CB-CA-C	7.11	122.59	110.79
6	R	583	LEU	CA-C-N	7.11	129.80	120.28
6	R	583	LEU	C-N-CA	7.11	129.80	120.28
2	P	190	THR	N-CA-C	-7.10	97.38	109.24
5	S	170	TYR	N-CA-CB	7.10	121.73	110.65
2	N	386	SER	O-C-N	-7.10	112.06	122.43
2	H	399	ASP	CA-CB-CG	-7.10	105.50	112.60
2	F	308	GLU	N-CA-C	7.10	119.02	111.28
6	R	259	ILE	CB-CA-C	-7.09	102.89	111.97
2	B	232	PHE	CB-CA-C	-7.09	99.02	110.79
2	F	341	HIS	CA-CB-CG	-7.09	106.71	113.80
6	R	840	ALA	CA-C-N	7.09	129.78	120.28
6	R	840	ALA	C-N-CA	7.09	129.78	120.28
6	Q	623	ASP	N-CA-C	-7.08	99.80	110.28
5	T	170	TYR	N-CA-CB	7.08	121.70	110.65
2	P	308	GLU	N-CA-C	7.08	119.00	111.28
3	D	232	PHE	CB-CA-C	-7.08	99.04	110.79
2	G	513	ARG	N-CA-CB	-7.08	99.75	110.01
3	L	190	THR	N-CA-C	-7.08	97.42	109.24
2	N	232	PHE	CB-CA-C	-7.08	99.04	110.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	401	LEU	CA-C-N	7.08	129.64	120.44
2	N	401	LEU	C-N-CA	7.08	129.64	120.44
4	O	521	ASP	CA-C-N	7.07	132.67	120.58
4	O	521	ASP	C-N-CA	7.07	132.67	120.58
2	F	232	PHE	CB-CA-C	-7.07	99.05	110.79
2	P	401	LEU	CA-C-N	7.07	129.63	120.44
2	P	401	LEU	C-N-CA	7.07	129.63	120.44
2	E	341	HIS	CA-CB-CG	-7.07	106.73	113.80
2	G	308	GLU	N-CA-C	7.07	118.98	111.28
3	V	190	THR	N-CA-C	-7.06	97.44	109.24
6	Q	259	ILE	CB-CA-C	-7.06	102.93	111.97
2	N	190	THR	N-CA-C	-7.06	97.45	109.24
2	E	190	THR	N-CA-C	-7.06	97.46	109.24
5	S	171	VAL	N-CA-C	-7.06	98.27	108.36
6	Q	408	ILE	N-CA-CB	-7.05	100.94	110.54
2	A	232	PHE	CB-CA-C	-7.05	99.08	110.79
3	L	308	GLU	N-CA-C	7.05	118.97	111.28
2	B	190	THR	N-CA-C	-7.05	97.47	109.24
4	M	343	ARG	O-C-N	7.05	129.59	122.12
6	R	140	HIS	N-CA-C	-7.05	99.40	109.62
2	H	308	GLU	N-CA-C	7.05	118.96	111.28
2	E	232	PHE	CB-CA-C	-7.05	99.09	110.79
6	R	408	ILE	N-CA-CB	-7.05	100.95	110.54
2	G	232	PHE	CB-CA-C	-7.04	99.10	110.79
5	S	43	THR	CA-C-N	7.04	130.71	120.71
5	S	43	THR	C-N-CA	7.04	130.71	120.71
6	Q	429	ARG	CA-C-N	7.04	130.42	120.28
6	Q	429	ARG	C-N-CA	7.04	130.42	120.28
2	G	190	THR	N-CA-C	-7.04	97.48	109.24
3	V	232	PHE	CB-CA-C	-7.04	99.10	110.79
2	P	386	SER	O-C-N	-7.04	112.15	122.43
4	O	333	PHE	O-C-N	-7.04	114.66	122.12
6	Q	140	HIS	N-CA-C	-7.04	99.42	109.62
4	M	333	PHE	O-C-N	-7.03	114.67	122.12
6	Q	187	LYS	CB-CA-C	-7.03	99.85	110.88
6	R	534	GLU	N-CA-CB	7.03	122.37	110.49
3	K	232	PHE	CB-CA-C	-7.03	99.13	110.79
2	N	466	ASP	N-CA-C	7.02	118.93	111.28
3	L	232	PHE	CB-CA-C	-7.02	99.14	110.79
6	Q	534	GLU	N-CA-CB	7.02	122.35	110.49
6	Q	840	ALA	CA-C-N	7.02	129.68	120.28
6	Q	840	ALA	C-N-CA	7.02	129.68	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	308	GLU	N-CA-C	7.01	118.93	111.28
6	Q	626	TRP	N-CA-C	-7.01	103.64	111.28
2	P	466	ASP	N-CA-C	7.01	118.92	111.28
6	Q	142	VAL	N-CA-C	7.01	117.12	110.53
2	P	232	PHE	CB-CA-C	-7.01	99.15	110.79
2	N	450	SER	CA-C-O	-7.01	113.46	120.82
6	R	669	ASP	N-CA-CB	7.00	120.17	110.01
6	Q	648	VAL	O-C-N	7.00	128.66	121.87
4	O	370	ALA	N-CA-C	-7.00	104.01	114.64
5	T	43	THR	CA-C-N	6.99	130.63	120.71
5	T	43	THR	C-N-CA	6.99	130.63	120.71
6	Q	138	VAL	N-CA-CB	6.99	119.98	111.60
6	R	187	LYS	CB-CA-C	-6.98	99.92	110.88
4	O	343	ARG	O-C-N	6.98	129.52	122.12
2	G	413	GLU	N-CA-C	-6.98	103.67	111.28
2	E	308	GLU	N-CA-C	6.98	118.89	111.28
4	O	476	GLN	CA-C-N	6.98	129.51	120.44
4	O	476	GLN	C-N-CA	6.98	129.51	120.44
2	N	383	HIS	O-C-N	6.97	129.51	122.12
6	R	626	TRP	N-CA-C	-6.97	103.68	111.28
4	M	370	ALA	N-CA-C	-6.97	104.05	114.64
6	R	648	VAL	O-C-N	6.97	128.63	121.87
2	E	509	SER	N-CA-C	-6.97	103.62	111.07
4	M	476	GLN	CA-C-N	6.96	129.49	120.44
4	M	476	GLN	C-N-CA	6.96	129.49	120.44
6	Q	669	ASP	N-CA-CB	6.96	120.11	110.01
5	T	16	ARG	N-CA-CB	6.96	120.36	110.12
6	R	138	VAL	N-CA-CB	6.96	119.96	111.60
5	S	16	ARG	N-CA-CB	6.96	120.34	110.12
4	M	365	VAL	CB-CA-C	-6.95	102.92	112.02
6	Q	590	ALA	N-CA-C	-6.95	103.72	111.71
6	R	503	GLU	N-CA-CB	6.95	120.33	110.12
2	B	413	GLU	N-CA-C	-6.94	103.71	111.28
2	H	413	GLU	N-CA-C	-6.94	103.71	111.28
6	R	428	GLU	CA-C-N	6.94	134.80	121.54
6	R	428	GLU	C-N-CA	6.94	134.80	121.54
6	R	465	LEU	N-CA-CB	-6.94	99.95	110.01
5	S	142	PHE	CA-CB-CG	-6.93	106.87	113.80
2	N	402	SER	CA-C-O	6.93	128.10	120.82
6	Q	465	LEU	N-CA-CB	-6.93	99.96	110.01
4	M	480	ASN	CA-CB-CG	-6.93	105.67	112.60
4	O	365	VAL	CB-CA-C	-6.93	102.95	112.02

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	509	SER	N-CA-C	-6.92	103.66	111.07
6	R	267	TYR	N-CA-C	-6.92	103.81	111.36
4	O	480	ASN	CA-CB-CG	-6.92	105.68	112.60
4	O	496	ALA	CA-C-N	6.91	129.54	120.28
4	O	496	ALA	C-N-CA	6.91	129.54	120.28
6	Q	477	PHE	N-CA-C	6.91	118.81	111.28
6	Q	267	TYR	N-CA-C	-6.91	103.83	111.36
2	A	458	LEU	CA-C-N	6.90	129.53	120.28
2	A	458	LEU	C-N-CA	6.90	129.53	120.28
6	R	464	SER	CA-C-N	6.90	129.41	120.44
6	R	464	SER	C-N-CA	6.90	129.41	120.44
5	T	142	PHE	CA-CB-CG	-6.90	106.90	113.80
2	A	509	SER	N-CA-C	-6.90	103.69	111.07
2	P	383	HIS	O-C-N	6.90	129.43	122.12
2	F	458	LEU	CA-C-N	6.90	129.52	120.28
2	F	458	LEU	C-N-CA	6.90	129.52	120.28
6	Q	428	GLU	CA-C-N	6.90	134.71	121.54
6	Q	428	GLU	C-N-CA	6.90	134.71	121.54
6	Q	730	HIS	CA-CB-CG	-6.89	106.91	113.80
6	Q	673	PHE	CA-C-N	6.88	133.19	121.14
6	Q	673	PHE	C-N-CA	6.88	133.19	121.14
6	R	730	HIS	CA-CB-CG	-6.88	106.92	113.80
6	R	477	PHE	N-CA-C	6.88	118.78	111.28
6	R	673	PHE	CA-C-N	6.88	133.18	121.14
6	R	673	PHE	C-N-CA	6.88	133.18	121.14
6	R	268	HIS	CA-C-N	6.87	130.17	120.28
6	R	268	HIS	C-N-CA	6.87	130.17	120.28
6	Q	673	PHE	N-CA-C	6.87	120.47	108.52
6	R	142	VAL	N-CA-C	6.86	116.98	110.53
2	P	402	SER	CA-C-O	6.86	128.02	120.82
6	Q	503	GLU	N-CA-CB	6.86	120.21	110.12
6	R	590	ALA	N-CA-C	-6.86	103.82	111.71
2	E	458	LEU	CA-C-N	6.86	129.47	120.28
2	E	458	LEU	C-N-CA	6.86	129.47	120.28
3	L	212	LYS	N-CA-CB	6.86	121.33	110.57
5	T	122	PHE	N-CA-C	-6.85	95.06	107.60
6	Q	464	SER	CA-C-N	6.85	129.34	120.44
6	Q	464	SER	C-N-CA	6.85	129.34	120.44
6	Q	268	HIS	CA-C-N	6.85	130.14	120.28
6	Q	268	HIS	C-N-CA	6.85	130.14	120.28
2	G	514	PHE	N-CA-C	6.85	118.39	111.07
5	T	106	ASN	CA-CB-CG	6.85	119.45	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	M	496	ALA	CA-C-N	6.84	129.45	120.28
4	M	496	ALA	C-N-CA	6.84	129.45	120.28
6	Q	102	ILE	N-CA-CB	-6.84	101.81	110.57
2	N	502	ASP	CA-CB-CG	-6.84	105.76	112.60
6	Q	752	TRP	N-CA-C	6.84	120.14	110.23
4	O	518	LYS	N-CA-CB	6.84	120.17	110.12
6	Q	500	ILE	N-CA-C	6.83	116.95	110.53
2	N	212	LYS	N-CA-CB	6.83	121.30	110.57
2	P	345	VAL	O-C-N	-6.83	115.22	121.91
2	A	482	VAL	N-CA-CB	6.83	120.82	110.58
2	P	457	GLU	CA-C-O	-6.83	113.65	120.82
6	R	673	PHE	N-CA-C	6.83	120.40	108.52
2	P	509	SER	CA-C-N	6.83	129.43	120.28
2	P	509	SER	C-N-CA	6.83	129.43	120.28
2	H	514	PHE	N-CA-C	6.82	118.37	111.07
5	S	122	PHE	N-CA-C	-6.82	95.11	107.60
2	F	482	VAL	N-CA-CB	6.82	120.81	110.58
6	Q	692	ILE	N-CA-C	-6.82	98.67	109.17
6	R	692	ILE	N-CA-C	-6.82	98.67	109.17
2	B	212	LYS	N-CA-CB	6.81	121.26	110.57
4	O	333	PHE	CA-CB-CG	6.81	120.61	113.80
3	V	212	LYS	N-CA-CB	6.81	121.26	110.57
3	D	212	LYS	N-CA-CB	6.80	121.25	110.57
2	G	212	LYS	N-CA-CB	6.80	121.25	110.57
2	E	482	VAL	N-CA-CB	6.80	120.78	110.58
2	F	212	LYS	N-CA-CB	6.80	121.25	110.57
2	P	502	ASP	CA-CB-CG	-6.80	105.80	112.60
6	Q	170	ASN	N-CA-CB	6.80	121.98	110.49
2	A	212	LYS	N-CA-CB	6.80	121.24	110.57
2	P	212	LYS	N-CA-CB	6.79	121.24	110.57
3	K	212	LYS	N-CA-CB	6.79	121.24	110.57
2	N	191	VAL	N-CA-C	-6.79	97.83	107.75
2	F	197	VAL	CA-C-N	6.79	127.84	120.44
2	F	197	VAL	C-N-CA	6.79	127.84	120.44
5	S	12	HIS	N-CA-C	-6.79	96.33	110.80
2	B	514	PHE	N-CA-C	6.79	118.34	111.07
2	E	212	LYS	N-CA-CB	6.79	121.23	110.57
5	T	12	HIS	N-CA-C	-6.79	96.34	110.80
4	O	487	ILE	CA-C-O	-6.79	113.89	120.95
4	M	359	LYS	O-C-N	6.79	130.62	122.27
6	R	102	ILE	N-CA-CB	-6.78	101.89	110.57
2	H	212	LYS	N-CA-CB	6.78	121.22	110.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	191	VAL	N-CA-C	-6.78	97.86	107.75
2	G	197	VAL	CA-C-N	6.78	127.83	120.44
2	G	197	VAL	C-N-CA	6.78	127.83	120.44
2	N	509	SER	CA-C-N	6.78	129.36	120.28
2	N	509	SER	C-N-CA	6.78	129.36	120.28
4	M	333	PHE	CA-CB-CG	6.78	120.58	113.80
2	B	339	TRP	CB-CG-CD2	-6.77	117.32	126.80
5	S	106	ASN	CA-CB-CG	6.77	119.37	112.60
6	R	500	ILE	N-CA-C	6.77	116.89	110.53
4	O	373	GLU	CA-C-N	6.77	129.35	120.28
4	O	373	GLU	C-N-CA	6.77	129.35	120.28
4	M	518	LYS	N-CA-CB	6.77	120.07	110.12
2	G	339	TRP	CB-CG-CD2	-6.76	117.33	126.80
2	E	394	LEU	CA-C-O	6.76	127.69	119.64
2	H	197	VAL	CA-C-N	6.76	127.81	120.44
2	H	197	VAL	C-N-CA	6.76	127.81	120.44
3	V	191	VAL	N-CA-C	-6.76	97.88	107.75
3	K	191	VAL	N-CA-C	-6.76	97.88	107.75
6	R	752	TRP	N-CA-C	6.76	120.03	110.23
2	B	197	VAL	CA-C-N	6.75	127.80	120.44
2	B	197	VAL	C-N-CA	6.75	127.80	120.44
4	O	359	LYS	O-C-N	6.75	130.58	122.27
2	N	505	ARG	CA-C-N	6.75	129.32	120.28
2	N	505	ARG	C-N-CA	6.75	129.32	120.28
3	L	187	PHE	N-CA-C	-6.75	97.35	108.76
2	G	191	VAL	N-CA-C	-6.75	97.90	107.75
2	N	345	VAL	O-C-N	-6.75	115.30	121.91
3	K	187	PHE	N-CA-C	-6.74	97.37	108.76
4	M	373	GLU	CA-C-N	6.74	129.31	120.28
4	M	373	GLU	C-N-CA	6.74	129.31	120.28
2	H	187	PHE	N-CA-C	-6.74	97.37	108.76
2	B	191	VAL	N-CA-C	-6.74	97.91	107.75
2	P	187	PHE	N-CA-C	-6.74	97.38	108.76
6	Q	590	ALA	CB-CA-C	6.74	123.09	110.63
6	R	170	ASN	N-CA-CB	6.74	121.87	110.49
2	B	511	LEU	CB-CA-C	-6.73	100.31	110.88
3	D	187	PHE	N-CA-C	-6.73	97.38	108.76
2	F	191	VAL	N-CA-C	-6.73	97.92	107.75
5	S	29	SER	CA-C-N	6.73	126.75	119.89
5	S	29	SER	C-N-CA	6.73	126.75	119.89
3	D	191	VAL	N-CA-C	-6.73	97.93	107.75
2	G	187	PHE	N-CA-C	-6.73	97.39	108.76

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	197	VAL	CA-C-N	6.72	127.77	120.44
2	E	197	VAL	C-N-CA	6.72	127.77	120.44
2	P	191	VAL	N-CA-C	-6.72	97.93	107.75
3	V	187	PHE	N-CA-C	-6.72	97.39	108.76
3	L	191	VAL	N-CA-C	-6.72	97.93	107.75
6	R	590	ALA	CB-CA-C	6.72	123.06	110.63
2	B	187	PHE	N-CA-C	-6.72	97.41	108.76
2	P	505	ARG	CA-C-N	6.72	129.28	120.28
2	P	505	ARG	C-N-CA	6.72	129.28	120.28
6	R	720	TYR	CA-C-O	-6.72	113.77	120.82
2	E	187	PHE	N-CA-C	-6.71	97.41	108.76
2	E	191	VAL	N-CA-C	-6.71	97.95	107.75
2	P	197	VAL	CA-C-N	6.71	127.76	120.44
2	P	197	VAL	C-N-CA	6.71	127.76	120.44
2	H	191	VAL	N-CA-C	-6.71	97.95	107.75
2	F	464	ALA	CA-C-N	6.71	129.17	120.44
2	F	464	ALA	C-N-CA	6.71	129.17	120.44
2	G	519	VAL	CA-C-N	6.71	129.27	120.28
2	G	519	VAL	C-N-CA	6.71	129.27	120.28
5	T	29	SER	CA-C-N	6.71	126.73	119.89
5	T	29	SER	C-N-CA	6.71	126.73	119.89
3	V	249	PRO	N-CA-C	-6.70	102.53	110.70
2	H	339	TRP	CB-CG-CD2	-6.70	117.42	126.80
2	A	187	PHE	N-CA-C	-6.70	97.44	108.76
2	H	249	PRO	N-CA-C	-6.70	102.53	110.70
4	M	487	ILE	CA-C-O	-6.69	113.99	120.95
2	H	511	LEU	CB-CA-C	-6.69	100.37	110.88
2	N	457	GLU	CA-C-O	-6.69	113.79	120.82
6	Q	720	TYR	CA-C-O	-6.69	113.79	120.82
2	H	451	TRP	CB-CG-CD1	-6.69	116.86	126.90
6	Q	584	LEU	N-CA-C	-6.69	103.99	111.28
2	E	464	ALA	CA-C-N	6.69	129.13	120.44
2	E	464	ALA	C-N-CA	6.69	129.13	120.44
2	F	187	PHE	N-CA-C	-6.69	97.46	108.76
2	A	197	VAL	CA-C-N	6.68	127.73	120.44
2	A	197	VAL	C-N-CA	6.68	127.73	120.44
2	G	249	PRO	N-CA-C	-6.68	102.55	110.70
2	N	187	PHE	N-CA-C	-6.68	97.46	108.76
4	O	378	PHE	O-C-N	6.68	129.20	122.12
3	V	197	VAL	CA-C-N	6.68	127.72	120.44
3	V	197	VAL	C-N-CA	6.68	127.72	120.44
2	G	511	LEU	CB-CA-C	-6.68	100.39	110.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	H	519	VAL	CA-C-N	6.68	129.23	120.28
2	H	519	VAL	C-N-CA	6.68	129.23	120.28
2	A	394	LEU	CA-C-O	6.67	127.58	119.64
2	A	464	ALA	CA-C-N	6.67	129.11	120.44
2	A	464	ALA	C-N-CA	6.67	129.11	120.44
2	P	377	ASP	N-CA-C	-6.67	105.43	113.97
2	N	410	ASP	N-CA-CB	6.67	119.74	110.07
6	Q	434	ASP	CB-CA-C	6.67	122.96	110.63
3	K	197	VAL	CA-C-N	6.66	127.70	120.44
3	K	197	VAL	C-N-CA	6.66	127.70	120.44
2	P	367	GLN	CB-CG-CD	-6.66	101.28	112.60
2	P	363	ASN	CA-C-O	6.66	127.48	120.42
2	G	451	TRP	CB-CG-CD1	-6.65	116.92	126.90
2	N	197	VAL	CA-C-N	6.65	127.69	120.44
2	N	197	VAL	C-N-CA	6.65	127.69	120.44
2	B	519	VAL	CA-C-N	6.65	129.19	120.28
2	B	519	VAL	C-N-CA	6.65	129.19	120.28
4	O	402	SER	CA-C-N	6.65	129.19	120.28
4	O	402	SER	C-N-CA	6.65	129.19	120.28
3	L	197	VAL	CA-C-N	6.65	127.69	120.44
3	L	197	VAL	C-N-CA	6.65	127.69	120.44
2	B	249	PRO	N-CA-C	-6.64	102.60	110.70
2	P	249	PRO	N-CA-C	-6.64	102.60	110.70
4	M	402	SER	CA-C-N	6.64	129.18	120.28
4	M	402	SER	C-N-CA	6.64	129.18	120.28
6	Q	463	LEU	N-CA-C	6.64	118.17	111.07
6	Q	723	LEU	CA-C-N	6.64	129.55	120.46
6	Q	723	LEU	C-N-CA	6.64	129.55	120.46
2	N	348	ASP	CA-CB-CG	-6.63	105.97	112.60
6	R	434	ASP	CB-CA-C	6.63	122.90	110.63
2	F	249	PRO	N-CA-C	-6.63	102.61	110.70
3	D	197	VAL	CA-C-N	6.63	127.67	120.44
3	D	197	VAL	C-N-CA	6.63	127.67	120.44
2	N	411	VAL	N-CA-C	6.63	116.78	110.42
5	S	70	THR	N-CA-C	-6.62	104.14	111.36
3	K	249	PRO	N-CA-C	-6.62	102.63	110.70
2	N	363	ASN	CA-C-O	6.61	127.43	120.42
2	F	394	LEU	CA-C-O	6.61	127.51	119.64
5	T	103	ALA	CA-C-N	6.61	129.68	120.29
5	T	103	ALA	C-N-CA	6.61	129.68	120.29
2	B	451	TRP	CB-CG-CD1	-6.61	116.99	126.90
5	S	20	ILE	N-CA-C	-6.61	101.08	107.76

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	249	PRO	N-CA-C	-6.61	102.64	110.70
6	R	584	LEU	N-CA-C	-6.61	104.08	111.28
2	N	367	GLN	CB-CG-CD	-6.61	101.37	112.60
2	P	410	ASP	N-CA-CB	6.60	119.65	110.07
4	O	416	ALA	N-CA-CB	-6.60	100.41	110.12
2	P	348	ASP	CA-CB-CG	-6.60	106.00	112.60
4	M	378	PHE	O-C-N	6.60	129.12	122.12
4	M	416	ALA	N-CA-CB	-6.60	100.41	110.12
2	N	377	ASP	N-CA-C	-6.60	105.52	113.97
2	H	433	LEU	N-CA-CB	6.60	119.83	110.12
3	D	249	PRO	N-CA-C	-6.60	102.65	110.70
5	T	167	LEU	N-CA-C	-6.60	98.22	109.24
4	M	550	GLN	N-CA-CB	6.60	121.72	110.50
2	H	214	THR	N-CA-C	-6.60	104.86	113.17
2	E	454	ALA	N-CA-CB	6.60	119.82	110.12
5	T	70	THR	N-CA-C	-6.60	104.17	111.36
2	A	249	PRO	N-CA-C	-6.59	102.65	110.70
5	S	167	LEU	N-CA-C	-6.59	98.23	109.24
3	D	214	THR	N-CA-C	-6.59	104.87	113.17
6	Q	34	THR	CA-C-N	6.59	126.50	119.85
6	Q	34	THR	C-N-CA	6.59	126.50	119.85
6	Q	526	GLU	N-CA-CB	6.59	119.57	110.01
2	E	249	PRO	N-CA-C	-6.59	102.67	110.70
2	A	454	ALA	N-CA-CB	6.58	119.80	110.12
5	T	20	ILE	N-CA-C	-6.58	101.11	107.76
3	L	249	PRO	N-CA-C	-6.58	102.67	110.70
2	G	433	LEU	N-CA-CB	6.58	119.79	110.12
6	R	723	LEU	CA-C-N	6.58	129.47	120.46
6	R	723	LEU	C-N-CA	6.58	129.47	120.46
2	F	447	ALA	CA-C-N	6.57	129.08	120.28
2	F	447	ALA	C-N-CA	6.57	129.08	120.28
5	S	5	ILE	N-CA-C	-6.57	98.27	107.80
2	G	542	GLU	N-CA-CB	6.57	119.78	110.12
5	S	103	ALA	CA-C-N	6.57	129.62	120.29
5	S	103	ALA	C-N-CA	6.57	129.62	120.29
4	O	550	GLN	N-CA-CB	6.57	121.66	110.50
2	H	542	GLU	N-CA-CB	6.57	119.77	110.12
6	R	34	THR	CA-C-N	6.57	126.48	119.85
6	R	34	THR	C-N-CA	6.57	126.48	119.85
2	B	433	LEU	N-CA-CB	6.56	119.77	110.12
2	B	214	THR	N-CA-C	-6.56	104.90	113.17
2	P	411	VAL	N-CA-C	6.56	116.72	110.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	214	THR	N-CA-C	-6.56	104.91	113.17
2	E	214	THR	N-CA-C	-6.56	104.91	113.17
5	T	44	ASP	N-CA-C	6.56	119.74	110.23
2	B	542	GLU	N-CA-CB	6.55	119.75	110.12
3	L	214	THR	N-CA-C	-6.55	104.91	113.17
5	T	135	PRO	CA-C-N	6.55	134.25	121.41
5	T	135	PRO	C-N-CA	6.55	134.25	121.41
2	F	508	ARG	CD-NE-CZ	-6.55	115.23	124.40
6	Q	263	PHE	CA-C-N	6.55	126.51	119.76
6	Q	263	PHE	C-N-CA	6.55	126.51	119.76
2	F	454	ALA	N-CA-CB	6.54	119.74	110.12
3	K	214	THR	N-CA-C	-6.54	104.93	113.17
2	P	214	THR	N-CA-C	-6.54	104.93	113.17
3	V	214	THR	N-CA-C	-6.54	104.93	113.17
2	A	447	ALA	CA-C-N	6.54	129.04	120.28
2	A	447	ALA	C-N-CA	6.54	129.04	120.28
5	S	44	ASP	N-CA-C	6.54	119.70	110.23
6	Q	808	TYR	CA-CB-CG	-6.54	102.14	113.90
2	A	214	THR	N-CA-C	-6.53	104.94	113.17
2	P	363	ASN	CA-CB-CG	-6.53	106.07	112.60
6	R	463	LEU	N-CA-C	6.53	118.06	111.07
2	N	464	ALA	N-CA-C	-6.53	104.16	111.28
6	R	526	GLU	N-CA-CB	6.52	119.47	110.01
4	O	517	GLU	CA-C-N	6.52	129.02	120.28
4	O	517	GLU	C-N-CA	6.52	129.02	120.28
6	Q	648	VAL	CA-C-N	6.52	133.99	121.54
6	Q	648	VAL	C-N-CA	6.52	133.99	121.54
5	T	5	ILE	N-CA-C	-6.52	98.35	107.80
2	A	508	ARG	CD-NE-CZ	-6.52	115.28	124.40
5	S	135	PRO	CA-C-N	6.52	134.18	121.41
5	S	135	PRO	C-N-CA	6.52	134.18	121.41
2	G	214	THR	N-CA-C	-6.51	104.96	113.17
6	R	263	PHE	CA-C-N	6.51	126.47	119.76
6	R	263	PHE	C-N-CA	6.51	126.47	119.76
2	B	408	ILE	N-CA-CB	-6.51	101.68	110.54
5	S	132	PHE	CA-CB-CG	-6.51	107.29	113.80
6	R	648	VAL	CA-C-N	6.51	133.97	121.54
6	R	648	VAL	C-N-CA	6.51	133.97	121.54
2	N	363	ASN	CA-CB-CG	-6.51	106.09	112.60
2	N	214	THR	N-CA-C	-6.51	104.97	113.17
6	R	770	ASP	CA-CB-CG	-6.51	106.09	112.60
2	A	216	LYS	N-CA-C	-6.51	104.92	112.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	216	LYS	N-CA-C	-6.50	104.92	112.92
2	H	493	VAL	CB-CA-C	-6.50	103.65	111.97
2	G	493	VAL	CB-CA-C	-6.50	103.66	111.97
2	N	480	ASN	CA-CB-CG	-6.50	106.11	112.60
2	G	380	ALA	CA-C-N	6.49	128.88	120.44
2	G	380	ALA	C-N-CA	6.49	128.88	120.44
2	E	447	ALA	CA-C-N	6.49	128.98	120.28
2	E	447	ALA	C-N-CA	6.49	128.98	120.28
2	G	385	LEU	N-CA-CB	6.49	120.65	110.46
3	D	216	LYS	N-CA-C	-6.49	104.94	112.92
2	E	508	ARG	CD-NE-CZ	-6.49	115.32	124.40
2	N	363	ASN	CA-C-N	6.49	129.62	120.28
2	N	363	ASN	C-N-CA	6.49	129.62	120.28
2	P	363	ASN	CA-C-N	6.49	129.62	120.28
2	P	363	ASN	C-N-CA	6.49	129.62	120.28
5	T	132	PHE	CA-CB-CG	-6.48	107.32	113.80
3	V	216	LYS	N-CA-C	-6.48	104.95	112.92
2	P	480	ASN	CA-CB-CG	-6.48	106.12	112.60
6	Q	703	CYS	CB-CA-C	-6.48	100.04	110.79
3	K	216	LYS	N-CA-C	-6.48	104.95	112.92
2	H	216	LYS	N-CA-C	-6.48	104.95	112.92
6	R	703	CYS	CB-CA-C	-6.48	100.04	110.79
3	L	216	LYS	N-CA-C	-6.47	104.96	112.92
2	H	408	ILE	N-CA-CB	-6.47	101.74	110.54
5	T	170	TYR	CA-CB-CG	-6.47	102.26	113.90
6	R	808	TYR	CA-CB-CG	-6.47	102.26	113.90
2	B	493	VAL	CB-CA-C	-6.47	103.69	111.97
2	F	500	PHE	O-C-N	-6.47	115.27	122.12
2	P	334	VAL	N-CA-C	-6.46	104.21	110.42
5	S	170	TYR	CA-CB-CG	-6.46	102.26	113.90
2	G	408	ILE	N-CA-CB	-6.46	101.75	110.54
2	G	509	SER	CA-C-O	6.46	127.40	120.55
2	P	216	LYS	N-CA-C	-6.46	104.97	112.92
6	Q	803	ASP	CA-CB-CG	6.46	119.06	112.60
2	P	464	ALA	N-CA-C	-6.45	104.25	111.28
6	R	803	ASP	CA-CB-CG	6.45	119.05	112.60
6	R	615	ARG	CA-C-N	6.45	128.92	120.28
6	R	615	ARG	C-N-CA	6.45	128.92	120.28
6	R	694	ASP	CA-C-N	6.45	128.92	120.28
6	R	694	ASP	C-N-CA	6.45	128.92	120.28
6	Q	770	ASP	CA-CB-CG	-6.45	106.15	112.60
6	Q	817	THR	CA-C-N	6.44	129.56	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	Q	817	THR	C-N-CA	6.44	129.56	120.28
2	E	216	LYS	N-CA-C	-6.44	105.00	112.92
2	E	494	HIS	O-C-N	6.44	128.95	122.12
2	N	216	LYS	N-CA-C	-6.44	105.00	112.92
2	H	380	ALA	CA-C-N	6.44	128.81	120.44
2	H	380	ALA	C-N-CA	6.44	128.81	120.44
4	M	495	GLN	N-CA-C	6.44	118.38	111.36
2	B	216	LYS	N-CA-C	-6.44	105.00	112.92
6	Q	245	GLN	CB-CG-CD	6.43	123.54	112.60
2	B	509	SER	CA-C-O	6.43	127.37	120.55
4	M	356	ALA	O-C-N	-6.43	115.45	122.07
6	R	245	GLN	CB-CG-CD	6.43	123.53	112.60
2	H	385	LEU	N-CA-CB	6.43	120.55	110.46
4	M	500	PHE	CA-CB-CG	-6.42	107.38	113.80
2	B	380	ALA	CA-C-N	6.42	128.78	120.44
2	B	380	ALA	C-N-CA	6.42	128.78	120.44
4	O	356	ALA	O-C-N	-6.42	115.46	122.07
5	T	131	PHE	N-CA-C	-6.42	98.44	108.90
2	B	219	LYS	CA-C-N	6.42	129.38	120.65
2	B	219	LYS	C-N-CA	6.42	129.38	120.65
2	A	500	PHE	O-C-N	-6.42	115.32	122.12
2	N	390	LEU	N-CA-C	-6.42	97.13	110.80
2	E	489	ALA	CA-C-N	6.42	128.88	120.28
2	E	489	ALA	C-N-CA	6.42	128.88	120.28
4	O	495	GLN	N-CA-C	6.41	118.35	111.36
6	Q	615	ARG	CA-C-N	6.41	128.87	120.28
6	Q	615	ARG	C-N-CA	6.41	128.87	120.28
2	P	390	LEU	N-CA-C	-6.41	97.16	110.80
5	S	58	LEU	N-CA-C	-6.40	98.29	108.73
5	S	131	PHE	N-CA-C	-6.40	98.47	108.90
4	M	517	GLU	CA-C-N	6.40	128.86	120.28
4	M	517	GLU	C-N-CA	6.40	128.86	120.28
2	N	219	LYS	CA-C-N	6.40	129.35	120.65
2	N	219	LYS	C-N-CA	6.40	129.35	120.65
2	E	432	ARG	N-CA-C	6.40	117.91	111.07
6	Q	694	ASP	CA-C-N	6.40	128.85	120.28
6	Q	694	ASP	C-N-CA	6.40	128.85	120.28
2	H	472	GLY	N-CA-C	-6.39	98.03	113.18
2	G	216	LYS	N-CA-C	-6.39	105.06	112.92
3	K	255	GLN	N-CA-C	-6.39	105.52	113.38
2	B	472	GLY	N-CA-C	-6.39	98.04	113.18
2	A	489	ALA	CA-C-N	6.39	128.84	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	489	ALA	C-N-CA	6.39	128.84	120.28
2	B	255	GLN	N-CA-C	-6.39	105.53	113.38
2	G	472	GLY	N-CA-C	-6.38	98.05	113.18
2	F	255	GLN	N-CA-C	-6.38	105.53	113.38
6	Q	399	HIS	CA-C-N	6.38	128.83	120.28
6	Q	399	HIS	C-N-CA	6.38	128.83	120.28
3	V	219	LYS	CA-C-N	6.38	129.33	120.65
3	V	219	LYS	C-N-CA	6.38	129.33	120.65
2	B	385	LEU	N-CA-CB	6.38	120.47	110.46
5	T	58	LEU	N-CA-C	-6.38	98.33	108.73
6	R	482	LEU	CA-C-N	-6.38	111.87	119.84
6	R	482	LEU	C-N-CA	-6.38	111.87	119.84
2	H	219	LYS	CA-C-N	6.37	129.32	120.65
2	H	219	LYS	C-N-CA	6.37	129.32	120.65
2	N	334	VAL	N-CA-C	-6.37	104.30	110.42
3	V	255	GLN	N-CA-C	-6.37	105.54	113.38
2	B	368	ARG	CG-CD-NE	6.37	126.01	112.00
6	R	226	VAL	N-CA-CB	6.37	121.74	111.23
4	O	503	MET	CA-C-N	6.37	127.00	120.00
4	O	503	MET	C-N-CA	6.37	127.00	120.00
2	G	219	LYS	CA-C-N	6.37	129.31	120.65
2	G	219	LYS	C-N-CA	6.37	129.31	120.65
2	A	219	LYS	CA-C-N	6.37	129.31	120.65
2	A	219	LYS	C-N-CA	6.37	129.31	120.65
4	O	383	HIS	CB-CG-CD2	-6.37	122.93	131.20
6	R	399	HIS	CA-C-N	6.37	128.81	120.28
6	R	399	HIS	C-N-CA	6.37	128.81	120.28
2	F	219	LYS	CA-C-N	6.36	129.30	120.65
2	F	219	LYS	C-N-CA	6.36	129.30	120.65
6	R	765	THR	CA-C-N	6.36	133.69	121.54
6	R	765	THR	C-N-CA	6.36	133.69	121.54
3	D	219	LYS	CA-C-N	6.36	129.30	120.65
3	D	219	LYS	C-N-CA	6.36	129.30	120.65
2	N	470	ARG	CA-C-N	6.36	128.80	120.28
2	N	470	ARG	C-N-CA	6.36	128.80	120.28
2	H	255	GLN	N-CA-C	-6.36	105.56	113.38
2	F	489	ALA	CA-C-N	6.36	128.80	120.28
2	F	489	ALA	C-N-CA	6.36	128.80	120.28
2	E	500	PHE	O-C-N	-6.36	115.38	122.12
2	N	497	ARG	NE-CZ-NH1	-6.36	115.14	121.50
3	L	255	GLN	N-CA-C	-6.36	105.56	113.38
5	T	75	MET	N-CA-C	-6.36	99.64	109.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	R	704	VAL	CB-CA-C	-6.36	103.56	112.14
2	E	219	LYS	CA-C-N	6.36	129.29	120.65
2	E	219	LYS	C-N-CA	6.36	129.29	120.65
3	L	219	LYS	CA-C-N	6.36	129.29	120.65
3	L	219	LYS	C-N-CA	6.36	129.29	120.65
3	D	250	PRO	CB-CA-C	6.35	118.67	110.92
3	K	219	LYS	CA-C-N	6.35	129.29	120.65
3	K	219	LYS	C-N-CA	6.35	129.29	120.65
2	P	219	LYS	CA-C-N	6.35	129.29	120.65
2	P	219	LYS	C-N-CA	6.35	129.29	120.65
2	P	334	VAL	CA-C-N	6.35	128.79	120.28
2	P	334	VAL	C-N-CA	6.35	128.79	120.28
6	Q	765	THR	CA-C-N	6.35	133.67	121.54
6	Q	765	THR	C-N-CA	6.35	133.67	121.54
2	H	368	ARG	CG-CD-NE	6.35	125.97	112.00
3	L	250	PRO	CB-CA-C	6.35	118.67	110.92
6	Q	283	ASN	N-CA-C	-6.35	100.41	109.24
2	P	255	GLN	N-CA-C	-6.35	105.57	113.38
2	H	350	LEU	CD1-CG-CD2	6.35	124.76	110.80
2	F	250	PRO	CB-CA-C	6.35	118.66	110.92
6	R	661	PHE	N-CA-CB	6.34	119.45	110.12
2	H	509	SER	CA-C-O	6.34	127.27	120.55
6	Q	482	LEU	CA-C-N	-6.34	111.91	119.84
6	Q	482	LEU	C-N-CA	-6.34	111.91	119.84
2	B	350	LEU	CD1-CG-CD2	6.34	124.75	110.80
2	A	494	HIS	O-C-N	6.34	128.84	122.12
5	S	75	MET	N-CA-C	-6.34	99.66	109.24
2	B	409	ARG	N-CA-C	-6.34	103.66	111.33
6	Q	109	MET	CB-CA-C	-6.34	100.27	110.79
2	E	255	GLN	N-CA-C	-6.34	105.58	113.38
4	O	500	PHE	CA-CB-CG	-6.34	107.46	113.80
2	B	416	ALA	CB-CA-C	-6.34	100.27	110.79
3	D	255	GLN	N-CA-C	-6.34	105.59	113.38
2	G	255	GLN	N-CA-C	-6.34	105.58	113.38
2	G	368	ARG	CG-CD-NE	6.34	125.94	112.00
4	M	448	PHE	N-CA-CB	6.34	119.54	110.16
2	N	334	VAL	CA-C-N	6.34	128.77	120.28
2	N	334	VAL	C-N-CA	6.34	128.77	120.28
5	T	176	LYS	N-CA-C	-6.34	100.19	110.20
6	R	754	THR	N-CA-C	-6.34	97.13	108.47
6	R	109	MET	CB-CA-C	-6.33	100.27	110.79
4	M	503	MET	CA-C-N	6.33	126.97	120.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	M	503	MET	C-N-CA	6.33	126.97	120.00
2	F	494	HIS	O-C-N	6.33	128.83	122.12
2	A	255	GLN	N-CA-C	-6.33	105.59	113.38
2	H	409	ARG	N-CA-C	-6.33	103.67	111.33
6	R	817	THR	CA-C-N	6.33	129.40	120.28
6	R	817	THR	C-N-CA	6.33	129.40	120.28
2	E	349	ALA	O-C-N	6.33	128.93	122.09
4	M	353	GLN	CA-C-N	6.33	129.39	120.28
4	M	353	GLN	C-N-CA	6.33	129.39	120.28
5	T	77	VAL	N-CA-C	-6.33	99.36	108.53
2	G	350	LEU	CD1-CG-CD2	6.33	124.72	110.80
2	E	474	THR	N-CA-C	-6.33	97.76	108.26
2	A	432	ARG	N-CA-C	6.32	117.83	111.07
5	S	77	VAL	N-CA-C	-6.32	99.36	108.53
6	Q	754	THR	N-CA-C	-6.32	97.15	108.47
4	O	353	GLN	CA-C-N	6.32	129.38	120.28
4	O	353	GLN	C-N-CA	6.32	129.38	120.28
6	Q	213	LEU	CA-C-N	6.32	128.75	120.28
6	Q	213	LEU	C-N-CA	6.32	128.75	120.28
2	E	402	SER	N-CA-CB	6.32	119.36	109.94
2	P	470	ARG	CA-C-N	6.32	128.75	120.28
2	P	470	ARG	C-N-CA	6.32	128.75	120.28
3	K	250	PRO	CB-CA-C	6.32	118.63	110.92
2	P	543	LYS	CB-CA-C	-6.32	100.30	110.79
4	M	383	HIS	CB-CG-CD2	-6.32	122.99	131.20
2	H	416	ALA	CB-CA-C	-6.32	100.30	110.79
5	S	176	LYS	N-CA-C	-6.32	100.22	110.20
2	P	250	PRO	CB-CA-C	6.32	118.62	110.92
6	Q	704	VAL	CB-CA-C	-6.32	103.61	112.14
3	D	197	VAL	CB-CA-C	6.31	121.88	111.59
2	N	543	LYS	CB-CA-C	-6.31	100.31	110.79
2	F	432	ARG	N-CA-C	6.31	117.83	111.07
6	Q	226	VAL	N-CA-CB	6.31	121.65	111.23
2	N	197	VAL	CB-CA-C	6.31	121.88	111.59
2	B	375	ALA	CB-CA-C	6.31	123.17	109.99
3	L	197	VAL	CB-CA-C	6.31	121.87	111.59
6	R	680	PHE	CB-CA-C	-6.30	100.32	110.79
2	A	349	ALA	O-C-N	6.30	128.90	122.09
2	G	197	VAL	CB-CA-C	6.30	121.86	111.59
6	R	283	ASN	N-CA-C	-6.30	100.48	109.24
2	F	405	GLN	CB-CG-CD	-6.30	101.89	112.60
4	O	459	MET	CA-C-N	6.30	128.72	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	O	459	MET	C-N-CA	6.30	128.72	120.28
2	F	402	SER	N-CA-CB	6.30	119.32	109.94
2	F	345	VAL	N-CA-C	6.30	117.04	110.62
6	R	213	LEU	CA-C-N	6.30	128.72	120.28
6	R	213	LEU	C-N-CA	6.30	128.72	120.28
2	A	402	SER	N-CA-CB	6.29	119.32	109.94
2	E	197	VAL	CB-CA-C	6.29	121.85	111.59
2	N	250	PRO	CB-CA-C	6.29	118.60	110.92
6	Q	661	PHE	N-CA-CB	6.29	119.37	110.12
2	B	197	VAL	CB-CA-C	6.29	121.84	111.59
3	K	197	VAL	CB-CA-C	6.29	121.84	111.59
2	H	375	ALA	CB-CA-C	6.29	123.14	109.99
2	A	405	GLN	CB-CG-CD	-6.29	101.91	112.60
2	E	405	GLN	CB-CG-CD	-6.29	101.91	112.60
2	P	493	VAL	CA-C-O	-6.29	114.50	121.17
2	F	474	THR	N-CA-C	-6.29	97.82	108.26
6	R	443	LYS	CB-CA-C	-6.29	100.35	110.79
2	G	375	ALA	CB-CA-C	6.29	123.13	109.99
2	F	349	ALA	O-C-N	6.29	128.88	122.09
3	L	272	LEU	CB-CA-C	-6.28	100.98	110.90
5	S	17	ALA	N-CA-C	-6.28	99.46	109.76
2	E	345	VAL	N-CA-C	6.28	117.02	110.62
2	P	272	LEU	CB-CA-C	-6.28	100.98	110.90
2	P	197	VAL	CB-CA-C	6.28	121.82	111.59
6	Q	680	PHE	CB-CA-C	-6.28	100.37	110.79
2	H	197	VAL	CB-CA-C	6.27	121.82	111.59
2	F	197	VAL	CB-CA-C	6.27	121.82	111.59
6	R	66	TYR	CA-C-O	-6.27	114.23	120.82
2	A	474	THR	N-CA-C	-6.27	97.85	108.26
2	F	272	LEU	CB-CA-C	-6.27	100.99	110.90
6	Q	66	TYR	CA-C-O	-6.27	114.23	120.82
6	R	620	GLU	N-CA-C	6.27	118.39	108.67
2	H	250	PRO	CB-CA-C	6.27	118.57	110.92
6	R	622	TYR	N-CA-C	-6.27	97.45	110.80
2	A	197	VAL	CB-CA-C	6.27	121.81	111.59
2	N	348	ASP	N-CA-CB	6.27	119.43	110.16
6	Q	620	GLU	N-CA-C	6.27	118.39	108.67
2	E	250	PRO	CB-CA-C	6.26	118.56	110.92
6	Q	443	LYS	CB-CA-C	-6.26	100.39	110.79
2	N	255	GLN	N-CA-C	-6.26	105.68	113.38
2	G	409	ARG	N-CA-C	-6.26	103.76	111.33
2	P	348	ASP	N-CA-CB	6.26	119.42	110.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	S	46	ALA	CA-C-O	6.26	127.18	120.55
6	Q	815	SER	CA-C-N	6.26	129.12	120.49
6	Q	815	SER	C-N-CA	6.26	129.12	120.49
5	T	17	ALA	N-CA-C	-6.26	99.50	109.76
3	V	250	PRO	CB-CA-C	6.25	118.55	110.92
2	B	250	PRO	CB-CA-C	6.25	118.55	110.92
2	G	416	ALA	CB-CA-C	-6.25	100.41	110.79
2	N	272	LEU	CB-CA-C	-6.25	101.02	110.90
3	K	272	LEU	CB-CA-C	-6.25	101.03	110.90
3	D	272	LEU	CB-CA-C	-6.25	101.03	110.90
3	V	272	LEU	CB-CA-C	-6.25	101.03	110.90
5	T	46	ALA	CA-C-O	6.25	127.17	120.55
2	A	250	PRO	CB-CA-C	6.24	118.54	110.92
4	O	448	PHE	N-CA-CB	6.24	119.40	110.16
2	N	430	TYR	CA-C-O	-6.24	113.80	120.42
2	A	275	MET	CA-C-N	6.24	128.64	120.28
2	A	275	MET	C-N-CA	6.24	128.64	120.28
2	P	430	TYR	CA-C-O	-6.24	113.81	120.42
4	M	459	MET	CA-C-N	6.24	128.64	120.28
4	M	459	MET	C-N-CA	6.24	128.64	120.28
6	Q	622	TYR	N-CA-C	-6.23	97.53	110.80
2	A	484	ALA	CA-C-N	6.23	128.63	120.28
2	A	484	ALA	C-N-CA	6.23	128.63	120.28
2	G	430	TYR	CA-CB-CG	-6.23	102.69	113.90
2	F	275	MET	CA-C-N	6.23	128.63	120.28
2	F	275	MET	C-N-CA	6.23	128.63	120.28
5	T	30	PRO	N-CA-C	6.23	121.02	111.11
6	R	182	PHE	CA-CB-CG	6.23	120.03	113.80
3	D	275	MET	CA-C-N	6.23	128.62	120.28
3	D	275	MET	C-N-CA	6.23	128.62	120.28
2	B	430	TYR	CA-CB-CG	-6.22	102.69	113.90
5	S	30	PRO	N-CA-C	6.22	121.01	111.11
6	Q	443	LYS	CA-C-O	6.22	127.15	120.55
2	A	345	VAL	N-CA-C	6.22	116.97	110.62
2	N	275	MET	CA-C-N	6.22	128.62	120.28
2	N	275	MET	C-N-CA	6.22	128.62	120.28
6	R	525	LEU	CA-C-O	-6.22	113.82	120.42
2	H	251	PRO	CA-C-N	6.22	126.17	119.76
2	H	251	PRO	C-N-CA	6.22	126.17	119.76
6	R	826	GLU	CB-CG-CD	-6.22	102.02	112.60
2	A	272	LEU	CB-CA-C	-6.22	101.07	110.90
2	P	497	ARG	NE-CZ-NH1	-6.22	115.28	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	493	VAL	CA-C-O	-6.22	114.58	121.17
3	V	197	VAL	CB-CA-C	6.22	121.72	111.59
6	R	291	ILE	CA-C-N	6.22	129.25	120.42
6	R	291	ILE	C-N-CA	6.22	129.25	120.42
2	N	487	ILE	CB-CA-C	-6.21	103.64	112.22
6	Q	575	ASP	CA-C-N	6.21	133.41	121.54
6	Q	575	ASP	C-N-CA	6.21	133.41	121.54
2	E	272	LEU	CB-CA-C	-6.21	101.09	110.90
6	Q	291	ILE	CA-C-N	6.21	129.24	120.42
6	Q	291	ILE	C-N-CA	6.21	129.24	120.42
2	B	410	ASP	CB-CA-C	-6.21	101.09	110.90
6	R	733	LYS	N-CA-C	-6.21	104.08	113.89
6	Q	117	MET	CB-CA-C	-6.21	100.48	110.79
2	B	471	GLN	N-CA-C	-6.21	104.51	111.28
2	H	430	TYR	CA-CB-CG	-6.21	102.73	113.90
6	Q	636	PHE	CA-C-O	6.21	127.13	120.55
2	E	275	MET	CA-C-N	6.20	128.59	120.28
2	E	275	MET	C-N-CA	6.20	128.59	120.28
2	P	429	GLU	CB-CG-CD	-6.20	102.05	112.60
3	L	275	MET	CA-C-N	6.20	128.59	120.28
3	L	275	MET	C-N-CA	6.20	128.59	120.28
6	Q	525	LEU	CA-C-O	-6.20	113.84	120.42
2	P	511	LEU	CA-C-N	6.20	128.58	120.28
2	P	511	LEU	C-N-CA	6.20	128.58	120.28
6	Q	826	GLU	CB-CG-CD	-6.20	102.07	112.60
2	H	275	MET	CA-C-N	6.19	128.58	120.28
2	H	275	MET	C-N-CA	6.19	128.58	120.28
2	B	272	LEU	CB-CA-C	-6.19	101.12	110.90
2	B	356	ALA	CA-C-N	6.19	128.57	120.28
2	B	356	ALA	C-N-CA	6.19	128.57	120.28
2	G	250	PRO	CB-CA-C	6.19	118.47	110.92
6	R	117	MET	CB-CA-C	-6.19	100.52	110.79
2	P	275	MET	CA-C-N	6.19	128.57	120.28
2	P	275	MET	C-N-CA	6.19	128.57	120.28
5	S	164	GLY	CA-C-N	6.19	131.12	121.35
5	S	164	GLY	C-N-CA	6.19	131.12	121.35
2	F	500	PHE	CA-C-O	6.18	127.11	120.55
3	D	251	PRO	CA-C-N	6.18	126.13	119.76
3	D	251	PRO	C-N-CA	6.18	126.13	119.76
6	Q	401	VAL	CB-CA-C	-6.18	103.79	112.14
2	A	476	GLN	CA-C-N	6.18	128.47	120.44
2	A	476	GLN	C-N-CA	6.18	128.47	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	K	275	MET	CA-C-N	6.18	128.56	120.28
3	K	275	MET	C-N-CA	6.18	128.56	120.28
2	H	370	ALA	CB-CA-C	-6.18	103.25	112.09
2	G	272	LEU	CB-CA-C	-6.18	101.14	110.90
3	K	251	PRO	CA-C-N	6.18	126.12	119.76
3	K	251	PRO	C-N-CA	6.18	126.12	119.76
2	F	476	GLN	CA-C-N	6.18	128.47	120.44
2	F	476	GLN	C-N-CA	6.18	128.47	120.44
2	E	251	PRO	CA-C-N	6.17	126.12	119.76
2	E	251	PRO	C-N-CA	6.17	126.12	119.76
6	R	575	ASP	CA-C-N	6.17	133.33	121.54
6	R	575	ASP	C-N-CA	6.17	133.33	121.54
2	N	429	GLU	CB-CG-CD	-6.17	102.11	112.60
6	R	401	VAL	CB-CA-C	-6.17	103.81	112.14
2	A	251	PRO	CA-C-N	6.17	126.11	119.76
2	A	251	PRO	C-N-CA	6.17	126.11	119.76
3	V	275	MET	CA-C-N	6.17	128.54	120.28
3	V	275	MET	C-N-CA	6.17	128.54	120.28
6	R	405	HIS	CA-CB-CG	-6.17	107.63	113.80
2	P	251	PRO	CA-C-N	6.17	126.11	119.76
2	P	251	PRO	C-N-CA	6.17	126.11	119.76
2	H	410	ASP	CB-CA-C	-6.17	101.16	110.90
6	Q	28	MET	CG-SD-CE	-6.17	87.33	100.90
6	R	443	LYS	CA-C-O	6.17	127.09	120.55
2	F	484	ALA	CA-C-N	6.16	128.54	120.28
2	F	484	ALA	C-N-CA	6.16	128.54	120.28
6	Q	401	VAL	N-CA-C	-6.16	104.33	110.62
5	T	164	GLY	CA-C-N	6.16	131.09	121.35
5	T	164	GLY	C-N-CA	6.16	131.09	121.35
6	R	28	MET	CG-SD-CE	-6.16	87.34	100.90
2	H	272	LEU	CB-CA-C	-6.16	101.17	110.90
6	R	79	HIS	CA-C-N	6.16	128.53	120.28
6	R	79	HIS	C-N-CA	6.16	128.53	120.28
2	E	542	GLU	N-CA-CB	6.16	119.17	110.12
2	P	487	ILE	CB-CA-C	-6.16	103.72	112.22
2	A	408	ILE	CA-C-O	-6.16	114.55	120.95
2	G	356	ALA	CA-C-N	6.16	128.53	120.28
2	G	356	ALA	C-N-CA	6.16	128.53	120.28
2	N	511	LEU	CA-C-N	6.16	128.53	120.28
2	N	511	LEU	C-N-CA	6.16	128.53	120.28
2	H	471	GLN	N-CA-C	-6.15	104.57	111.28
2	F	251	PRO	CA-C-N	6.15	126.10	119.76

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	251	PRO	C-N-CA	6.15	126.10	119.76
6	Q	79	HIS	CA-C-N	6.15	128.53	120.28
6	Q	79	HIS	C-N-CA	6.15	128.53	120.28
2	H	356	ALA	CA-C-N	6.15	128.52	120.28
2	H	356	ALA	C-N-CA	6.15	128.52	120.28
6	Q	34	THR	CB-CA-C	6.15	116.87	109.31
2	N	335	GLU	CB-CA-C	-6.15	100.58	110.79
6	Q	733	LYS	N-CA-C	-6.15	104.18	113.89
2	B	370	ALA	CB-CA-C	-6.15	103.30	112.09
2	N	251	PRO	CA-C-N	6.14	126.09	119.76
2	N	251	PRO	C-N-CA	6.14	126.09	119.76
3	V	251	PRO	CA-C-N	6.14	126.09	119.76
3	V	251	PRO	C-N-CA	6.14	126.09	119.76
2	G	410	ASP	CB-CA-C	-6.14	101.19	110.90
2	G	471	GLN	N-CA-C	-6.14	104.58	111.28
5	T	23	LYS	CB-CA-C	-6.14	98.88	110.67
6	R	636	PHE	CA-C-O	6.14	127.06	120.55
2	A	542	GLU	N-CA-CB	6.14	119.15	110.12
5	T	65	MET	N-CA-C	-6.14	103.02	110.88
6	R	407	PRO	N-CA-CB	6.14	108.80	103.27
6	R	734	LEU	N-CA-C	-6.14	102.61	110.53
6	R	815	SER	CA-C-N	6.14	128.96	120.49
6	R	815	SER	C-N-CA	6.14	128.96	120.49
2	E	484	ALA	CA-C-N	6.14	128.50	120.28
2	E	484	ALA	C-N-CA	6.14	128.50	120.28
6	Q	182	PHE	CA-CB-CG	6.13	119.94	113.80
6	Q	489	PHE	N-CA-CB	6.13	119.67	110.22
2	N	362	ASP	CA-CB-CG	-6.13	106.47	112.60
3	L	251	PRO	CA-C-N	6.13	126.07	119.76
3	L	251	PRO	C-N-CA	6.13	126.07	119.76
2	B	246	VAL	CA-C-N	6.12	132.99	121.97
2	B	246	VAL	C-N-CA	6.12	132.99	121.97
2	B	251	PRO	CA-C-N	6.12	126.07	119.76
2	B	251	PRO	C-N-CA	6.12	126.07	119.76
2	P	452	HIS	ND1-CE1-NE2	6.12	114.52	108.40
2	B	275	MET	CA-C-N	6.12	128.48	120.28
2	B	275	MET	C-N-CA	6.12	128.48	120.28
5	S	23	LYS	CB-CA-C	-6.12	98.92	110.67
2	G	370	ALA	CB-CA-C	-6.12	103.34	112.09
2	P	335	GLU	CB-CA-C	-6.12	100.64	110.79
6	Q	596	GLU	N-CA-C	6.12	123.59	113.50
2	F	542	GLU	N-CA-CB	6.12	119.11	110.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	S	65	MET	N-CA-C	-6.11	103.06	110.88
6	Q	405	HIS	CA-CB-CG	-6.11	107.69	113.80
2	A	337	ASP	CA-CB-CG	-6.11	106.49	112.60
2	E	243	ASN	CA-CB-CG	-6.11	106.49	112.60
2	E	337	ASP	CA-CB-CG	-6.11	106.49	112.60
4	O	383	HIS	CB-CA-C	-6.11	100.65	110.79
6	Q	734	LEU	N-CA-C	-6.11	102.65	110.53
6	R	489	PHE	N-CA-CB	6.11	119.63	110.22
3	D	246	VAL	CA-C-N	6.11	132.97	121.97
3	D	246	VAL	C-N-CA	6.11	132.97	121.97
2	P	246	VAL	CA-C-N	6.11	132.96	121.97
2	P	246	VAL	C-N-CA	6.11	132.96	121.97
6	Q	446	GLU	N-CA-CB	6.11	119.19	110.16
6	R	596	GLU	N-CA-C	6.11	123.57	113.50
2	N	348	ASP	N-CA-C	-6.10	104.71	111.36
2	F	337	ASP	CA-CB-CG	-6.10	106.50	112.60
2	N	452	HIS	ND1-CE1-NE2	6.09	114.49	108.40
6	R	430	LEU	CA-C-N	6.09	128.44	120.28
6	R	430	LEU	C-N-CA	6.09	128.44	120.28
2	G	275	MET	CA-C-N	6.09	128.44	120.28
2	G	275	MET	C-N-CA	6.09	128.44	120.28
2	A	341	HIS	N-CA-CB	6.09	119.17	110.16
2	A	500	PHE	CA-C-O	6.09	127.00	120.55
2	E	341	HIS	N-CA-CB	6.09	119.17	110.16
2	P	407	ALA	CB-CA-C	-6.09	101.33	110.88
4	M	383	HIS	CB-CA-C	-6.08	100.69	110.79
3	V	246	VAL	CA-C-N	6.08	132.92	121.97
3	V	246	VAL	C-N-CA	6.08	132.92	121.97
6	R	34	THR	CB-CA-C	6.08	116.79	109.31
2	A	414	ARG	NE-CZ-NH2	6.08	124.67	119.20
2	E	476	GLN	CA-C-N	6.08	128.35	120.44
2	E	476	GLN	C-N-CA	6.08	128.35	120.44
4	O	388	VAL	N-CA-C	-6.08	106.80	113.43
2	F	246	VAL	CA-C-N	6.08	132.91	121.97
2	F	246	VAL	C-N-CA	6.08	132.91	121.97
2	G	251	PRO	CA-C-N	6.08	126.02	119.76
2	G	251	PRO	C-N-CA	6.08	126.02	119.76
2	E	508	ARG	CA-C-N	6.08	128.34	120.44
2	E	508	ARG	C-N-CA	6.08	128.34	120.44
2	P	348	ASP	N-CA-C	-6.08	104.74	111.36
6	Q	645	TYR	CA-CB-CG	-6.08	102.96	113.90
3	K	246	VAL	CA-C-N	6.07	132.90	121.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	K	246	VAL	C-N-CA	6.07	132.90	121.97
2	E	408	ILE	CA-C-O	-6.07	114.64	120.95
2	H	477	ASP	N-CA-CB	-6.07	101.21	110.01
2	H	246	VAL	CA-C-N	6.07	132.89	121.97
2	H	246	VAL	C-N-CA	6.07	132.89	121.97
4	O	353	GLN	N-CA-CB	6.07	118.81	110.01
3	L	246	VAL	CA-C-N	6.07	132.89	121.97
3	L	246	VAL	C-N-CA	6.07	132.89	121.97
6	R	669	ASP	CA-CB-CG	6.07	118.67	112.60
5	S	19	ASP	CA-CB-CG	6.06	118.66	112.60
2	G	477	ASP	N-CA-CB	-6.06	101.22	110.01
2	N	246	VAL	CA-C-N	6.06	132.88	121.97
2	N	246	VAL	C-N-CA	6.06	132.88	121.97
6	Q	482	LEU	N-CA-C	-6.06	102.01	109.65
2	B	477	ASP	N-CA-CB	-6.06	101.23	110.01
2	P	336	GLN	OE1-CD-NE2	6.06	128.66	122.60
2	F	408	ILE	CA-C-O	-6.05	114.65	120.95
2	F	341	HIS	N-CA-CB	6.05	119.12	110.16
6	R	32	LEU	N-CA-CB	6.05	119.02	110.12
2	N	407	ALA	CB-CA-C	-6.05	101.38	110.88
3	V	243	ASN	CA-CB-CG	-6.05	106.55	112.60
6	R	645	TYR	CA-CB-CG	-6.05	103.01	113.90
2	G	246	VAL	CA-C-N	6.05	132.86	121.97
2	G	246	VAL	C-N-CA	6.05	132.86	121.97
2	E	500	PHE	CA-C-O	6.05	126.96	120.55
4	M	388	VAL	N-CA-C	-6.05	106.83	113.43
6	Q	407	PRO	N-CA-CB	6.05	108.71	103.27
2	A	246	VAL	CA-C-N	6.05	132.85	121.97
2	A	246	VAL	C-N-CA	6.05	132.85	121.97
2	P	362	ASP	CA-CB-CG	-6.05	106.55	112.60
2	F	414	ARG	NE-CZ-NH2	6.04	124.64	119.20
4	O	337	ASP	N-CA-C	6.04	117.95	111.36
4	M	337	ASP	N-CA-C	6.04	117.94	111.36
6	R	401	VAL	N-CA-C	-6.04	104.46	110.62
6	R	769	ARG	CA-C-N	6.04	133.08	121.54
6	R	769	ARG	C-N-CA	6.04	133.08	121.54
2	A	243	ASN	CA-CB-CG	-6.04	106.56	112.60
2	E	246	VAL	CA-C-N	6.04	132.84	121.97
2	E	246	VAL	C-N-CA	6.04	132.84	121.97
6	Q	769	ARG	CA-C-N	6.04	133.07	121.54
6	Q	769	ARG	C-N-CA	6.04	133.07	121.54
6	R	446	GLU	N-CA-CB	6.04	119.10	110.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	Q	32	LEU	N-CA-CB	6.04	118.99	110.12
4	M	506	LEU	CA-C-O	-6.03	114.16	120.55
2	E	414	ARG	NE-CZ-NH2	6.03	124.63	119.20
6	R	688	TYR	CA-CB-CG	6.03	124.75	113.90
2	B	422	THR	CB-CA-C	-6.03	100.78	110.79
4	O	406	LEU	CA-C-N	6.03	128.28	120.44
4	O	406	LEU	C-N-CA	6.03	128.28	120.44
4	M	406	LEU	CA-C-N	6.03	128.28	120.44
4	M	406	LEU	C-N-CA	6.03	128.28	120.44
2	E	442	SER	CA-C-N	6.03	128.35	120.28
2	E	442	SER	C-N-CA	6.03	128.35	120.28
6	R	482	LEU	N-CA-C	-6.02	102.06	109.65
2	N	243	ASN	CA-CB-CG	-6.02	106.58	112.60
6	R	638	HIS	CB-CG-CD2	-6.02	123.37	131.20
6	Q	635	LYS	CA-C-N	6.02	128.35	120.28
6	Q	635	LYS	C-N-CA	6.02	128.35	120.28
6	Q	638	HIS	CB-CG-CD2	-6.01	123.38	131.20
6	R	25	THR	N-CA-CB	6.01	118.96	110.12
4	M	520	GLU	N-CA-C	-6.01	104.73	111.28
6	Q	25	THR	N-CA-CB	6.01	118.95	110.12
6	Q	180	THR	N-CA-CB	6.01	118.95	110.12
2	A	516	ARG	NE-CZ-NH2	6.01	124.61	119.20
3	K	243	ASN	CA-CB-CG	-6.01	106.59	112.60
6	R	180	THR	N-CA-CB	6.00	118.95	110.12
2	E	434	ILE	N-CA-CB	6.00	118.70	110.54
2	P	243	ASN	CA-CB-CG	-6.00	106.60	112.60
2	N	336	GLN	OE1-CD-NE2	6.00	128.60	122.60
3	L	243	ASN	CA-CB-CG	-6.00	106.60	112.60
4	M	353	GLN	N-CA-CB	6.00	118.71	110.01
4	O	337	ASP	CA-C-N	6.00	128.24	120.44
4	O	337	ASP	C-N-CA	6.00	128.24	120.44
2	H	422	THR	CB-CA-C	-6.00	100.83	110.79
6	Q	430	LEU	CA-C-N	6.00	128.32	120.28
6	Q	430	LEU	C-N-CA	6.00	128.32	120.28
2	G	422	THR	CB-CA-C	-6.00	100.84	110.79
2	A	442	SER	CA-C-N	5.99	128.31	120.28
2	A	442	SER	C-N-CA	5.99	128.31	120.28
2	A	456	SER	CA-C-N	5.99	128.23	120.44
2	A	456	SER	C-N-CA	5.99	128.23	120.44
4	O	506	LEU	CA-C-O	-5.99	114.20	120.55
4	O	520	GLU	N-CA-C	-5.99	104.75	111.28
4	M	337	ASP	CA-C-N	5.99	128.23	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	M	337	ASP	C-N-CA	5.99	128.23	120.44
2	F	442	SER	CA-C-N	5.99	128.31	120.28
2	F	442	SER	C-N-CA	5.99	128.31	120.28
2	H	441	PHE	CA-CB-CG	-5.99	107.81	113.80
6	Q	603	PRO	CA-C-O	-5.99	111.88	120.56
5	T	19	ASP	CA-CB-CG	5.98	118.58	112.60
2	B	441	PHE	CA-CB-CG	-5.98	107.82	113.80
3	D	243	ASN	CA-CB-CG	-5.98	106.62	112.60
2	G	243	ASN	CA-CB-CG	-5.98	106.62	112.60
2	F	550	GLN	OE1-CD-NE2	5.98	128.58	122.60
6	Q	688	TYR	CA-CB-CG	5.98	124.67	113.90
2	B	243	ASN	CA-CB-CG	-5.98	106.62	112.60
2	B	475	GLN	CB-CG-CD	-5.98	102.43	112.60
2	H	243	ASN	CA-CB-CG	-5.98	106.62	112.60
4	O	400	ALA	CA-C-N	5.98	128.29	120.28
4	O	400	ALA	C-N-CA	5.98	128.29	120.28
2	A	508	ARG	CA-C-N	5.97	128.20	120.44
2	A	508	ARG	C-N-CA	5.97	128.20	120.44
2	G	441	PHE	CA-CB-CG	-5.97	107.83	113.80
2	E	456	SER	CA-C-N	5.97	128.20	120.44
2	E	456	SER	C-N-CA	5.97	128.20	120.44
2	G	475	GLN	CB-CG-CD	-5.96	102.46	112.60
2	H	475	GLN	CB-CG-CD	-5.96	102.46	112.60
2	F	516	ARG	NE-CZ-NH2	5.96	124.57	119.20
6	R	635	LYS	CA-C-N	5.96	128.27	120.28
6	R	635	LYS	C-N-CA	5.96	128.27	120.28
4	M	400	ALA	CA-C-N	5.96	128.26	120.28
4	M	400	ALA	C-N-CA	5.96	128.26	120.28
2	F	243	ASN	CA-CB-CG	-5.96	106.64	112.60
5	S	119	SER	CA-C-N	5.96	132.92	121.54
5	S	119	SER	C-N-CA	5.96	132.92	121.54
2	P	521	ASP	CA-CB-CG	5.95	118.55	112.60
4	O	479	LEU	CA-C-O	5.95	126.73	120.42
2	P	514	PHE	CA-CB-CG	-5.95	107.85	113.80
2	F	508	ARG	CA-C-N	5.95	128.18	120.44
2	F	508	ARG	C-N-CA	5.95	128.18	120.44
6	R	581	PHE	CA-CB-CG	-5.95	107.85	113.80
2	G	352	ASN	CA-CB-CG	-5.95	106.65	112.60
2	P	486	VAL	N-CA-C	-5.94	104.72	110.42
4	M	479	LEU	CA-C-O	5.94	126.72	120.42
2	N	417	GLN	N-CA-C	5.94	118.71	111.82
5	T	119	SER	CA-C-N	5.94	132.89	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	T	119	SER	C-N-CA	5.94	132.89	121.54
6	R	813	ASN	CA-CB-CG	-5.94	106.66	112.60
5	S	182	GLU	CA-C-N	-5.94	114.81	123.00
5	S	182	GLU	C-N-CA	-5.94	114.81	123.00
2	A	434	ILE	N-CA-CB	5.93	118.61	110.54
2	A	550	GLN	OE1-CD-NE2	5.93	128.53	122.60
2	N	507	LEU	CA-C-N	5.93	128.16	120.44
2	N	507	LEU	C-N-CA	5.93	128.16	120.44
6	R	394	PHE	CA-CB-CG	-5.93	107.87	113.80
2	N	486	VAL	N-CA-C	-5.93	104.72	110.42
2	B	420	VAL	CB-CA-C	-5.93	104.27	112.04
6	Q	813	ASN	CA-CB-CG	-5.93	106.67	112.60
2	N	514	PHE	CA-CB-CG	-5.93	107.87	113.80
5	T	161	ASP	N-CA-C	-5.93	98.62	108.34
2	N	373	GLU	CA-C-N	5.92	128.14	120.44
2	N	373	GLU	C-N-CA	5.92	128.14	120.44
5	T	27	LEU	N-CA-C	5.92	118.69	111.82
6	R	37	LYS	N-CA-C	-5.92	105.64	112.92
4	M	491	ARG	CA-C-N	5.92	128.13	120.44
4	M	491	ARG	C-N-CA	5.92	128.13	120.44
2	A	528	THR	N-CA-CB	5.91	118.81	110.12
2	N	521	ASP	CA-CB-CG	5.91	118.51	112.60
2	H	352	ASN	CA-CB-CG	-5.91	106.69	112.60
5	T	47	THR	N-CA-CB	-5.91	101.41	110.16
2	B	368	ARG	NE-CZ-NH2	5.91	124.52	119.20
2	E	516	ARG	NE-CZ-NH2	5.91	124.52	119.20
4	O	412	TYR	CB-CA-C	-5.91	100.98	110.79
2	F	434	ILE	N-CA-CB	5.91	118.58	110.54
4	O	365	VAL	N-CA-CB	5.91	118.13	110.57
2	P	364	MET	N-CA-C	5.91	118.50	111.71
6	Q	579	THR	CA-C-N	5.91	128.19	120.28
6	Q	579	THR	C-N-CA	5.91	128.19	120.28
6	R	603	PRO	CA-C-O	-5.90	112.00	120.56
6	R	273	ASP	N-CA-CB	-5.90	101.44	110.12
5	S	161	ASP	N-CA-C	-5.90	98.67	108.34
6	Q	581	PHE	CA-CB-CG	-5.90	107.90	113.80
6	R	764	ASP	N-CA-CB	5.90	120.46	110.49
2	P	439	GLN	CA-C-N	5.90	128.18	120.28
2	P	439	GLN	C-N-CA	5.90	128.18	120.28
2	G	420	VAL	CB-CA-C	-5.89	104.32	112.04
2	H	368	ARG	NE-CZ-NH2	5.89	124.50	119.20
2	G	368	ARG	NE-CZ-NH2	5.89	124.50	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	514	PHE	CA-C-N	5.89	128.10	120.44
2	E	514	PHE	C-N-CA	5.89	128.10	120.44
2	F	456	SER	CA-C-N	5.89	128.10	120.44
2	F	456	SER	C-N-CA	5.89	128.10	120.44
6	R	579	THR	CA-C-N	5.89	128.18	120.28
6	R	579	THR	C-N-CA	5.89	128.18	120.28
2	P	417	GLN	N-CA-C	5.89	118.65	111.82
5	S	47	THR	N-CA-CB	-5.89	101.44	110.16
5	T	182	GLU	CA-C-N	-5.89	114.88	123.00
5	T	182	GLU	C-N-CA	-5.89	114.88	123.00
2	E	528	THR	N-CA-CB	5.88	118.77	110.12
2	P	408	ILE	CA-C-O	-5.88	114.83	120.95
4	M	426	ILE	CA-CB-CG2	-5.88	100.50	110.50
6	Q	37	LYS	N-CA-C	-5.88	105.68	112.92
2	N	439	GLN	CA-C-N	5.88	128.16	120.28
2	N	439	GLN	C-N-CA	5.88	128.16	120.28
2	A	514	PHE	CA-C-N	5.88	128.09	120.44
2	A	514	PHE	C-N-CA	5.88	128.09	120.44
4	M	365	VAL	N-CA-CB	5.88	118.10	110.57
2	B	352	ASN	CA-CB-CG	-5.88	106.72	112.60
2	E	550	GLN	OE1-CD-NE2	5.87	128.47	122.60
4	O	491	ARG	CA-C-N	5.87	128.07	120.44
4	O	491	ARG	C-N-CA	5.87	128.07	120.44
2	H	420	VAL	CB-CA-C	-5.87	104.35	112.04
2	E	262	SER	CA-C-N	5.87	128.07	120.44
2	E	262	SER	C-N-CA	5.87	128.07	120.44
2	A	362	ASP	CA-CB-CG	-5.87	106.73	112.60
2	P	373	GLU	CA-C-N	5.87	128.07	120.44
2	P	373	GLU	C-N-CA	5.87	128.07	120.44
2	F	341	HIS	CA-C-N	5.87	128.07	120.44
2	F	341	HIS	C-N-CA	5.87	128.07	120.44
6	Q	669	ASP	CA-CB-CG	5.87	118.47	112.60
6	R	65	LEU	N-CA-CB	5.87	118.74	110.12
2	N	364	MET	N-CA-C	5.87	118.46	111.71
2	F	528	THR	N-CA-CB	5.87	118.74	110.12
5	S	27	LEU	N-CA-C	5.87	118.62	111.82
6	R	530	VAL	CB-CA-C	-5.87	104.22	112.14
4	M	412	TYR	CB-CA-C	-5.86	101.06	110.79
6	R	454	HIS	N-CA-C	-5.86	98.31	110.80
6	Q	394	PHE	CA-CB-CG	-5.86	107.94	113.80
2	P	507	LEU	CA-C-N	5.86	128.06	120.44
2	P	507	LEU	C-N-CA	5.86	128.06	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	486	VAL	N-CA-CB	5.86	117.40	110.55
6	Q	422	SER	N-CA-CB	5.86	118.73	110.12
6	Q	530	VAL	CB-CA-C	-5.86	104.23	112.14
6	Q	785	ALA	CA-C-N	5.86	128.13	120.28
6	Q	785	ALA	C-N-CA	5.86	128.13	120.28
6	Q	764	ASP	N-CA-CB	5.86	120.39	110.49
2	F	362	ASP	CA-CB-CG	-5.85	106.75	112.60
6	R	410	ASP	CB-CA-C	-5.85	101.07	110.79
2	F	514	PHE	CA-C-N	5.85	128.05	120.44
2	F	514	PHE	C-N-CA	5.85	128.05	120.44
6	R	835	ASN	N-CA-C	-5.85	98.75	108.75
2	A	415	GLN	N-CA-C	5.85	119.68	112.54
2	P	417	GLN	OE1-CD-NE2	-5.85	116.75	122.60
2	F	415	GLN	N-CA-C	5.85	119.68	112.54
2	G	441	PHE	N-CA-CB	-5.85	101.53	110.01
2	H	513	ARG	CB-CA-C	5.84	120.06	110.88
4	O	426	ILE	CA-CB-CG2	-5.84	100.57	110.50
3	K	262	SER	CA-C-N	5.84	128.03	120.44
3	K	262	SER	C-N-CA	5.84	128.03	120.44
4	M	495	GLN	CA-C-N	5.84	128.03	120.44
4	M	495	GLN	C-N-CA	5.84	128.03	120.44
2	B	513	ARG	CB-CA-C	5.84	120.05	110.88
2	P	517	GLU	CB-CA-C	-5.84	101.10	110.79
2	H	491	ARG	CA-C-N	5.84	128.10	120.28
2	H	491	ARG	C-N-CA	5.84	128.10	120.28
6	Q	65	LEU	N-CA-CB	5.84	118.70	110.12
2	N	517	GLU	CB-CA-C	-5.83	101.10	110.79
6	Q	410	ASP	CB-CA-C	-5.83	101.10	110.79
2	B	491	ARG	CA-C-N	5.83	128.10	120.28
2	B	491	ARG	C-N-CA	5.83	128.10	120.28
6	Q	784	VAL	CB-CA-C	-5.83	104.17	112.22
6	Q	448	ALA	O-C-N	5.83	130.03	123.27
6	R	785	ALA	CA-C-N	5.83	128.09	120.28
6	R	785	ALA	C-N-CA	5.83	128.09	120.28
2	E	362	ASP	CA-CB-CG	-5.83	106.77	112.60
2	N	417	GLN	OE1-CD-NE2	-5.83	116.77	122.60
2	F	262	SER	CA-C-N	5.83	128.02	120.44
2	F	262	SER	C-N-CA	5.83	128.02	120.44
2	A	341	HIS	CA-C-N	5.83	128.01	120.44
2	A	341	HIS	C-N-CA	5.83	128.01	120.44
2	G	513	ARG	CB-CA-C	5.83	120.03	110.88
4	O	495	GLN	CA-C-N	5.83	128.01	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	O	495	GLN	C-N-CA	5.83	128.01	120.44
6	Q	239	LEU	CB-CA-C	-5.83	101.73	110.88
3	D	262	SER	CA-C-N	5.82	128.01	120.44
3	D	262	SER	C-N-CA	5.82	128.01	120.44
2	P	262	SER	CA-C-N	5.82	128.01	120.44
2	P	262	SER	C-N-CA	5.82	128.01	120.44
5	S	19	ASP	N-CA-C	-5.82	101.33	110.36
6	Q	803	ASP	CB-CA-C	-5.82	101.12	110.79
5	T	19	ASP	N-CA-C	-5.82	101.34	110.36
6	R	803	ASP	CB-CA-C	-5.82	101.13	110.79
2	A	398	LEU	CA-C-O	5.82	126.72	120.55
2	A	535	GLU	CA-C-N	5.82	128.07	120.28
2	A	535	GLU	C-N-CA	5.82	128.07	120.28
4	O	348	ASP	CA-CB-CG	-5.82	106.78	112.60
2	A	262	SER	CA-C-N	5.82	128.00	120.44
2	A	262	SER	C-N-CA	5.82	128.00	120.44
2	N	264	PHE	CA-CB-CG	-5.82	107.98	113.80
6	R	448	ALA	O-C-N	5.82	130.02	123.27
2	G	245	GLY	N-CA-C	-5.81	99.40	113.18
2	E	415	GLN	N-CA-C	5.81	119.63	112.54
2	B	245	GLY	N-CA-C	-5.81	99.41	113.18
2	G	306	HIS	CA-CB-CG	-5.81	107.99	113.80
3	V	245	GLY	N-CA-C	-5.81	99.40	113.18
6	Q	412	ILE	CB-CA-C	-5.81	104.20	112.22
6	Q	454	HIS	N-CA-C	-5.81	98.42	110.80
6	Q	664	CYS	CA-C-N	5.81	126.39	119.94
6	Q	664	CYS	C-N-CA	5.81	126.39	119.94
2	B	441	PHE	N-CA-CB	-5.81	101.58	110.01
3	L	262	SER	CA-C-N	5.81	127.99	120.44
3	L	262	SER	C-N-CA	5.81	127.99	120.44
2	E	341	HIS	CA-C-N	5.81	127.99	120.44
2	E	341	HIS	C-N-CA	5.81	127.99	120.44
2	P	486	VAL	N-CA-CB	5.81	117.35	110.55
4	M	348	ASP	CA-CB-CG	-5.81	106.79	112.60
6	Q	273	ASP	N-CA-CB	-5.81	101.58	110.12
6	Q	719	ASN	N-CA-C	-5.81	105.03	111.36
6	R	719	ASN	N-CA-C	-5.81	105.03	111.36
2	A	245	GLY	N-CA-C	-5.80	99.42	113.18
2	G	533	ALA	N-CA-C	5.80	117.41	111.14
2	P	352	ASN	CA-CB-CG	-5.80	106.80	112.60
2	H	441	PHE	N-CA-CB	-5.80	101.59	110.01
6	R	526	GLU	CA-C-O	5.80	126.92	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	264	PHE	CA-CB-CG	-5.80	108.00	113.80
2	G	491	ARG	CA-C-N	5.80	128.06	120.28
2	G	491	ARG	C-N-CA	5.80	128.06	120.28
2	N	262	SER	CA-C-N	5.80	127.98	120.44
2	N	262	SER	C-N-CA	5.80	127.98	120.44
2	N	534	VAL	N-CA-CB	5.80	118.43	110.54
2	A	407	ALA	CA-C-O	-5.80	114.40	120.55
2	G	437	VAL	CA-C-O	5.80	126.60	119.58
2	F	245	GLY	N-CA-C	-5.80	99.43	113.18
6	Q	395	ASP	N-CA-C	-5.80	104.96	111.28
6	Q	835	ASN	N-CA-C	-5.80	98.83	108.75
6	R	239	LEU	CB-CA-C	-5.80	101.77	110.88
2	B	262	SER	CA-C-N	5.80	127.98	120.44
2	B	262	SER	C-N-CA	5.80	127.98	120.44
3	L	245	GLY	N-CA-C	-5.80	99.44	113.18
6	R	850	ILE	N-CA-CB	-5.80	103.77	110.55
6	Q	439	TYR	CA-CB-CG	5.79	124.33	113.90
3	K	264	PHE	CA-CB-CG	-5.79	108.01	113.80
6	Q	526	GLU	CA-C-O	5.79	126.90	120.82
2	P	245	GLY	N-CA-C	-5.79	99.46	113.18
2	N	245	GLY	N-CA-C	-5.79	99.46	113.18
2	H	402	SER	CB-CA-C	-5.79	101.79	110.88
2	E	486	VAL	CA-C-O	-5.79	115.25	121.27
3	D	245	GLY	N-CA-C	-5.79	99.47	113.18
2	H	262	SER	CA-C-N	5.79	127.96	120.44
2	H	262	SER	C-N-CA	5.79	127.96	120.44
6	Q	645	TYR	CA-C-O	5.79	126.68	120.55
2	G	402	SER	CB-CA-C	-5.78	101.80	110.88
6	Q	698	GLN	CB-CG-CD	-5.78	102.77	112.60
6	R	439	TYR	CA-CB-CG	5.78	124.31	113.90
6	R	784	VAL	CB-CA-C	-5.78	104.24	112.22
2	B	402	SER	CB-CA-C	-5.78	101.80	110.88
2	E	398	LEU	CA-C-O	5.78	126.68	120.55
2	P	264	PHE	CA-CB-CG	-5.78	108.02	113.80
6	R	395	ASP	N-CA-C	-5.78	104.98	111.28
3	D	264	PHE	CA-CB-CG	-5.78	108.02	113.80
2	N	352	ASN	CA-CB-CG	-5.78	106.82	112.60
3	K	245	GLY	N-CA-C	-5.78	99.49	113.18
2	H	245	GLY	N-CA-C	-5.78	99.49	113.18
6	R	422	SER	N-CA-CB	5.78	118.61	110.12
6	R	667	VAL	CA-C-N	5.77	128.02	120.28
6	R	667	VAL	C-N-CA	5.77	128.02	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	245	GLY	N-CA-C	-5.77	99.50	113.18
2	N	408	ILE	CA-C-O	-5.77	114.95	120.95
6	R	645	TYR	CA-C-O	5.77	126.67	120.55
2	E	535	GLU	CA-C-N	5.77	128.01	120.28
2	E	535	GLU	C-N-CA	5.77	128.01	120.28
4	O	496	ALA	CA-C-O	-5.77	114.76	120.82
4	M	519	VAL	CA-C-N	5.77	128.01	120.28
4	M	519	VAL	C-N-CA	5.77	128.01	120.28
2	G	262	SER	CA-C-N	5.76	127.94	120.44
2	G	262	SER	C-N-CA	5.76	127.94	120.44
4	M	339	TRP	CA-C-O	-5.76	114.44	120.55
2	F	535	GLU	CA-C-N	5.76	128.00	120.28
2	F	535	GLU	C-N-CA	5.76	128.00	120.28
6	R	139	GLN	N-CA-C	-5.76	106.15	112.72
2	A	486	VAL	CA-C-O	-5.76	115.28	121.27
2	A	470	ARG	N-CA-C	-5.76	105.45	112.88
4	O	339	TRP	CA-C-O	-5.76	114.44	120.55
2	N	341	HIS	CB-CA-C	5.76	120.64	110.85
3	V	262	SER	CA-C-N	5.76	127.93	120.44
3	V	262	SER	C-N-CA	5.76	127.93	120.44
6	Q	850	ILE	N-CA-CB	-5.76	103.81	110.55
6	R	698	GLN	CB-CG-CD	-5.76	102.81	112.60
2	H	264	PHE	CA-CB-CG	-5.75	108.05	113.80
2	E	407	ALA	CA-C-O	-5.75	114.45	120.55
2	N	306	HIS	CA-CB-CG	-5.75	108.05	113.80
2	B	264	PHE	CA-CB-CG	-5.75	108.05	113.80
6	R	412	ILE	CB-CA-C	-5.75	104.28	112.22
2	E	470	ARG	N-CA-C	-5.75	105.46	112.88
2	H	437	VAL	CA-C-O	5.75	126.53	119.58
2	F	398	LEU	CA-C-O	5.75	126.64	120.55
3	V	264	PHE	CA-CB-CG	-5.75	108.05	113.80
2	P	427	ILE	CA-C-O	-5.75	115.08	121.17
6	Q	617	LYS	N-CA-C	-5.75	105.02	111.28
6	Q	667	VAL	CA-C-N	5.75	127.98	120.28
6	Q	667	VAL	C-N-CA	5.75	127.98	120.28
4	M	496	ALA	CA-C-O	-5.74	114.79	120.82
2	B	533	ALA	N-CA-C	5.74	117.34	111.14
4	O	519	VAL	CA-C-N	5.74	127.97	120.28
4	O	519	VAL	C-N-CA	5.74	127.97	120.28
2	P	341	HIS	CB-CA-C	5.74	120.61	110.85
5	T	76	GLN	N-CA-C	-5.74	99.25	108.55
2	F	470	ARG	N-CA-C	-5.74	105.48	112.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	L	264	PHE	CA-CB-CG	-5.74	108.06	113.80
6	R	402	GLN	N-CA-C	5.74	117.53	111.28
6	R	617	LYS	N-CA-C	-5.74	105.03	111.28
2	N	427	ILE	CA-C-O	-5.73	115.09	121.17
2	F	486	VAL	CA-C-O	-5.73	115.31	121.27
6	Q	485	TYR	CA-CB-CG	5.73	124.22	113.90
2	E	338	ASP	CA-C-N	5.73	127.96	120.28
2	E	338	ASP	C-N-CA	5.73	127.96	120.28
2	H	452	HIS	N-CA-CB	5.73	119.17	110.28
6	Q	402	GLN	N-CA-C	5.73	117.53	111.28
5	T	162	VAL	N-CA-C	-5.73	100.16	108.36
2	B	437	VAL	CA-C-O	5.73	126.51	119.58
5	S	76	GLN	N-CA-C	-5.73	99.27	108.55
2	B	452	HIS	N-CA-CB	5.72	119.15	110.28
2	P	363	ASN	O-C-N	-5.72	115.62	122.15
6	R	285	HIS	N-CA-C	-5.72	105.80	112.89
6	R	210	GLU	CA-C-N	-5.72	112.03	122.38
6	R	210	GLU	C-N-CA	-5.72	112.03	122.38
2	B	414	ARG	CA-C-N	-5.72	111.17	120.72
2	B	414	ARG	C-N-CA	-5.72	111.17	120.72
6	Q	197	HIS	CA-C-N	5.72	128.52	120.28
6	Q	197	HIS	C-N-CA	5.72	128.52	120.28
2	B	290	ASP	N-CA-C	-5.71	104.95	111.07
2	B	306	HIS	CA-CB-CG	-5.71	108.09	113.80
3	K	290	ASP	N-CA-C	-5.71	104.95	111.07
2	H	533	ALA	N-CA-C	5.71	117.31	111.14
2	F	264	PHE	CA-CB-CG	-5.71	108.08	113.80
6	R	95	LEU	N-CA-CB	-5.71	101.72	110.12
6	Q	727	CYS	N-CA-CB	5.71	118.52	110.12
6	Q	210	GLU	CA-C-N	-5.71	112.04	122.38
6	Q	210	GLU	C-N-CA	-5.71	112.04	122.38
2	H	306	HIS	CA-CB-CG	-5.71	108.09	113.80
6	Q	58	SER	CA-C-N	5.71	125.18	119.24
6	Q	58	SER	C-N-CA	5.71	125.18	119.24
2	B	341	HIS	CB-CA-C	5.71	120.55	110.85
2	G	466	ASP	CA-CB-CG	-5.71	106.89	112.60
6	Q	422	SER	CA-C-N	5.71	127.93	120.28
6	Q	422	SER	C-N-CA	5.71	127.93	120.28
6	R	205	THR	N-CA-C	5.71	117.50	111.28
4	M	463	ALA	CA-C-N	5.71	127.92	120.28
4	M	463	ALA	C-N-CA	5.71	127.92	120.28
2	H	414	ARG	CA-C-N	-5.71	111.19	120.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	H	414	ARG	C-N-CA	-5.71	111.19	120.72
3	V	290	ASP	N-CA-C	-5.71	104.97	111.07
4	O	519	VAL	CA-C-O	-5.70	115.12	121.17
6	Q	755	PRO	CA-C-N	5.70	132.24	121.97
6	Q	755	PRO	C-N-CA	5.70	132.24	121.97
4	O	364	MET	CA-C-O	-5.70	114.38	120.42
2	H	290	ASP	N-CA-C	-5.70	104.97	111.07
2	F	338	ASP	CA-C-N	5.70	127.92	120.28
2	F	338	ASP	C-N-CA	5.70	127.92	120.28
2	G	264	PHE	CA-CB-CG	-5.70	108.10	113.80
6	R	727	CYS	N-CA-CB	5.70	118.49	110.12
2	P	513	ARG	NE-CZ-NH2	-5.70	114.07	119.20
5	S	162	VAL	N-CA-C	-5.70	100.22	108.36
2	A	419	ASP	CA-CB-CG	5.69	118.29	112.60
2	E	391	SER	CA-C-N	5.69	125.37	119.05
2	E	391	SER	C-N-CA	5.69	125.37	119.05
6	Q	139	GLN	N-CA-C	-5.69	106.23	112.72
6	Q	285	HIS	N-CA-C	-5.69	105.83	112.89
6	Q	564	TRP	CB-CG-CD1	-5.69	118.36	126.90
6	R	485	TYR	CA-CB-CG	5.69	124.14	113.90
6	R	624	ASP	CA-C-N	5.69	131.72	122.67
6	R	624	ASP	C-N-CA	5.69	131.72	122.67
2	E	494	HIS	CE1-NE2-CD2	-5.69	103.31	109.00
4	O	345	VAL	N-CA-C	5.69	115.88	110.42
2	F	306	HIS	CA-CB-CG	-5.69	108.11	113.80
2	G	414	ARG	CA-C-N	-5.69	111.22	120.72
2	G	414	ARG	C-N-CA	-5.69	111.22	120.72
4	O	452	HIS	CA-CB-CG	-5.69	108.11	113.80
2	A	338	ASP	CA-C-N	5.69	127.90	120.28
2	A	338	ASP	C-N-CA	5.69	127.90	120.28
2	F	452	HIS	ND1-CE1-NE2	5.69	114.09	108.40
3	V	306	HIS	CA-CB-CG	-5.69	108.11	113.80
5	S	112	VAL	CA-C-N	-5.69	114.98	123.00
5	S	112	VAL	C-N-CA	-5.69	114.98	123.00
2	F	407	ALA	CA-C-O	-5.69	114.52	120.55
6	R	439	TYR	N-CA-CB	5.69	119.96	110.41
6	Q	624	ASP	CA-C-N	5.68	131.71	122.67
6	Q	624	ASP	C-N-CA	5.68	131.71	122.67
6	R	790	GLU	CA-C-O	5.68	126.66	120.58
2	F	494	HIS	CE1-NE2-CD2	-5.68	103.32	109.00
2	H	466	ASP	CA-CB-CG	-5.68	106.92	112.60
2	H	499	LEU	CA-C-N	5.68	128.16	120.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	H	499	LEU	C-N-CA	5.68	128.16	120.38
6	R	755	PRO	CA-C-N	5.68	132.19	121.97
6	R	755	PRO	C-N-CA	5.68	132.19	121.97
2	F	391	SER	CA-C-N	5.68	125.35	119.05
2	F	391	SER	C-N-CA	5.68	125.35	119.05
2	A	290	ASP	N-CA-C	-5.67	105.00	111.07
2	G	290	ASP	N-CA-C	-5.67	105.00	111.07
2	G	499	LEU	CA-C-N	5.67	128.15	120.38
2	G	499	LEU	C-N-CA	5.67	128.15	120.38
4	M	345	VAL	N-CA-C	5.67	115.87	110.42
2	F	480	ASN	CA-C-O	-5.67	114.86	120.70
4	O	463	ALA	CA-C-N	5.67	127.88	120.28
4	O	463	ALA	C-N-CA	5.67	127.88	120.28
2	P	290	ASP	N-CA-C	-5.67	105.00	111.07
2	F	274	LYS	N-CA-CB	-5.67	101.78	110.01
2	N	290	ASP	N-CA-C	-5.67	105.00	111.07
2	H	523	LYS	N-CA-C	-5.67	105.02	111.14
3	D	306	HIS	CA-CB-CG	-5.67	108.13	113.80
4	M	519	VAL	CA-C-O	-5.67	115.16	121.17
5	T	126	GLU	N-CA-C	-5.67	100.44	109.96
6	R	564	TRP	CB-CG-CD1	-5.67	118.40	126.90
2	H	341	HIS	CB-CA-C	5.66	120.48	110.85
6	Q	95	LEU	N-CA-CB	-5.66	101.80	110.12
6	Q	205	THR	N-CA-C	5.66	117.45	111.28
2	A	521	ASP	CA-CB-CG	-5.66	106.94	112.60
2	G	438	LYS	CA-CB-CG	-5.66	102.78	114.10
2	P	306	HIS	CA-CB-CG	-5.66	108.14	113.80
2	E	264	PHE	CA-CB-CG	-5.66	108.14	113.80
2	E	306	HIS	CA-CB-CG	-5.66	108.14	113.80
2	N	353	GLN	CB-CG-CD	5.66	122.22	112.60
2	N	513	ARG	NE-CZ-NH2	-5.66	114.11	119.20
2	A	480	ASN	CA-C-O	-5.66	114.88	120.70
2	G	390	LEU	N-CA-CB	5.66	118.11	110.59
2	F	290	ASP	N-CA-C	-5.66	105.02	111.07
2	N	485	GLU	CA-C-N	5.65	127.68	120.56
2	N	485	GLU	C-N-CA	5.65	127.68	120.56
2	F	419	ASP	CA-CB-CG	5.65	118.25	112.60
6	R	664	CYS	CA-C-N	5.65	126.38	119.99
6	R	664	CYS	C-N-CA	5.65	126.38	119.99
2	G	452	HIS	N-CA-CB	5.65	119.04	110.28
2	G	341	HIS	CB-CA-C	5.65	120.45	110.85
4	M	452	HIS	CA-CB-CG	-5.65	108.15	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	Q	447	HIS	CA-CB-CG	5.65	119.45	113.80
6	R	447	HIS	CA-CB-CG	5.65	119.45	113.80
6	R	38	LEU	CA-C-N	5.65	127.85	120.28
6	R	38	LEU	C-N-CA	5.65	127.85	120.28
2	A	306	HIS	CA-CB-CG	-5.65	108.15	113.80
5	S	126	GLU	N-CA-C	-5.65	100.47	109.96
6	Q	672	GLU	CB-CA-C	-5.65	99.18	110.42
6	R	197	HIS	CA-C-N	5.65	128.41	120.28
6	R	197	HIS	C-N-CA	5.65	128.41	120.28
2	B	438	LYS	CA-CB-CG	-5.64	102.81	114.10
6	R	58	SER	CA-C-N	5.64	125.11	119.24
6	R	58	SER	C-N-CA	5.64	125.11	119.24
2	A	494	HIS	CE1-NE2-CD2	-5.64	103.36	109.00
2	F	439	GLN	CB-CA-C	-5.64	101.42	110.79
3	L	290	ASP	N-CA-C	-5.64	105.03	111.07
2	P	353	GLN	CB-CG-CD	5.64	122.19	112.60
6	Q	439	TYR	N-CA-CB	5.64	119.89	110.41
2	G	476	GLN	CA-C-N	5.64	127.77	120.44
2	G	476	GLN	C-N-CA	5.64	127.77	120.44
3	K	279	ILE	N-CA-CB	5.64	118.21	110.54
2	N	363	ASN	O-C-N	-5.64	115.72	122.15
2	P	485	GLU	CA-C-N	5.64	127.66	120.56
2	P	485	GLU	C-N-CA	5.64	127.66	120.56
2	B	523	LYS	N-CA-C	-5.64	105.05	111.14
2	F	479	LEU	N-CA-CB	5.64	118.18	110.01
3	L	306	HIS	CA-CB-CG	-5.64	108.16	113.80
6	R	422	SER	CA-C-N	5.64	127.83	120.28
6	R	422	SER	C-N-CA	5.64	127.83	120.28
6	Q	42	LEU	N-CA-C	5.63	117.42	111.28
6	R	672	GLU	CB-CA-C	-5.63	99.21	110.42
3	D	290	ASP	N-CA-C	-5.63	105.05	111.07
4	O	395	SER	CB-CA-C	-5.63	101.44	110.79
2	H	438	LYS	CA-CB-CG	-5.63	102.84	114.10
6	Q	297	ASN	CA-CB-CG	-5.63	106.97	112.60
6	R	438	ALA	N-CA-CB	5.63	118.92	110.19
2	A	279	ILE	N-CA-CB	5.63	118.19	110.54
4	M	364	MET	CA-C-O	-5.63	114.45	120.42
6	Q	438	ALA	N-CA-CB	5.63	118.92	110.19
2	B	499	LEU	CA-C-N	5.63	128.09	120.38
2	B	499	LEU	C-N-CA	5.63	128.09	120.38
2	G	523	LYS	N-CA-C	-5.63	105.06	111.14
2	E	290	ASP	N-CA-C	-5.63	105.05	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	522	PHE	N-CA-C	-5.63	105.53	112.90
2	H	274	LYS	N-CA-CB	-5.62	101.85	110.01
2	E	372	ALA	CA-C-O	-5.62	114.91	120.70
2	E	439	GLN	CB-CA-C	-5.62	101.46	110.79
2	N	279	ILE	N-CA-CB	5.62	118.19	110.54
2	A	358	LEU	N-CA-C	5.62	117.41	111.28
2	A	452	HIS	ND1-CE1-NE2	5.62	114.02	108.40
2	A	479	LEU	N-CA-CB	5.62	118.16	110.01
3	V	279	ILE	N-CA-CB	5.62	118.18	110.54
6	R	172	GLN	CA-C-N	5.62	127.81	120.28
6	R	172	GLN	C-N-CA	5.62	127.81	120.28
2	E	488	ASP	CA-C-N	5.62	127.81	120.28
2	E	488	ASP	C-N-CA	5.62	127.81	120.28
2	P	279	ILE	N-CA-CB	5.62	118.18	110.54
5	T	112	VAL	CA-C-N	-5.62	115.08	123.00
5	T	112	VAL	C-N-CA	-5.62	115.08	123.00
6	Q	241	GLU	N-CA-CB	5.62	118.38	110.12
2	E	419	ASP	CA-CB-CG	5.61	118.21	112.60
6	Q	563	GLY	CA-C-O	5.61	126.07	119.45
6	R	420	ASN	CA-CB-CG	-5.61	106.99	112.60
3	D	186	THR	CA-C-N	5.61	131.38	122.74
3	D	186	THR	C-N-CA	5.61	131.38	122.74
2	E	452	HIS	ND1-CE1-NE2	5.61	114.01	108.40
2	B	476	GLN	CA-C-N	5.61	127.73	120.44
2	B	476	GLN	C-N-CA	5.61	127.73	120.44
4	O	423	PHE	N-CA-CB	5.61	118.46	110.16
2	H	346	TYR	N-CA-CB	5.61	118.37	110.12
3	D	274	LYS	N-CA-CB	-5.61	101.88	110.01
2	E	274	LYS	N-CA-CB	-5.61	101.88	110.01
4	M	395	SER	CB-CA-C	-5.61	101.48	110.79
2	A	274	LYS	N-CA-CB	-5.61	101.88	110.01
3	K	306	HIS	CA-CB-CG	-5.61	108.19	113.80
2	B	390	LEU	N-CA-CB	5.61	118.05	110.59
4	O	385	LEU	N-CA-C	-5.61	106.99	113.88
2	P	274	LYS	N-CA-CB	-5.61	101.88	110.01
4	M	385	LEU	N-CA-C	-5.61	106.99	113.88
2	P	522	PHE	N-CA-C	-5.60	105.56	112.90
2	F	521	ASP	CA-CB-CG	-5.60	107.00	112.60
1	C	276	ASP	CA-CB-CG	5.60	118.20	112.60
2	A	488	ASP	CA-C-N	5.60	127.79	120.28
2	A	488	ASP	C-N-CA	5.60	127.79	120.28
6	Q	48	LEU	CB-CA-C	-5.60	102.08	110.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	Q	790	GLU	CA-C-O	5.60	126.58	120.58
2	P	350	LEU	N-CA-C	5.60	117.38	111.28
6	R	297	ASN	CA-CB-CG	-5.60	107.00	112.60
2	A	391	SER	CA-C-N	5.60	125.26	119.05
2	A	391	SER	C-N-CA	5.60	125.26	119.05
2	G	274	LYS	N-CA-CB	-5.60	101.89	110.01
4	M	517	GLU	CA-C-O	-5.60	114.94	120.70
3	L	274	LYS	N-CA-CB	-5.60	101.89	110.01
6	R	241	GLU	N-CA-CB	5.60	118.35	110.12
2	P	358	LEU	N-CA-C	5.60	117.38	111.28
2	A	439	GLN	CB-CA-C	-5.59	101.50	110.79
3	L	279	ILE	N-CA-CB	5.59	118.15	110.54
6	R	42	LEU	N-CA-C	5.59	117.38	111.28
2	E	521	ASP	CA-CB-CG	-5.59	107.01	112.60
4	O	357	LEU	CA-C-N	5.59	127.77	120.28
4	O	357	LEU	C-N-CA	5.59	127.77	120.28
2	F	363	ASN	CA-C-O	-5.59	114.95	120.82
6	R	598	ILE	N-CA-CB	-5.59	101.09	110.65
2	B	186	THR	CA-C-N	5.59	131.35	122.74
2	B	186	THR	C-N-CA	5.59	131.35	122.74
2	B	274	LYS	N-CA-CB	-5.59	101.91	110.01
2	G	186	THR	CA-C-N	5.59	131.35	122.74
2	G	186	THR	C-N-CA	5.59	131.35	122.74
2	N	358	LEU	N-CA-C	5.59	117.37	111.28
2	H	476	GLN	CA-C-N	5.59	127.71	120.44
2	H	476	GLN	C-N-CA	5.59	127.71	120.44
6	Q	98	TYR	CB-CG-CD2	-5.59	112.42	120.80
2	B	515	GLU	CA-C-O	5.59	126.47	120.55
2	E	358	LEU	N-CA-C	5.59	117.37	111.28
2	E	363	ASN	CA-C-O	-5.59	114.95	120.82
2	H	337	ASP	N-CA-C	-5.59	105.27	111.36
2	H	500	PHE	CB-CA-C	5.59	120.18	110.68
2	F	372	ALA	CA-C-O	-5.59	114.95	120.70
2	G	279	ILE	N-CA-CB	5.58	118.14	110.54
2	H	390	LEU	N-CA-CB	5.58	118.02	110.59
3	V	186	THR	CA-C-N	5.58	131.34	122.74
3	V	186	THR	C-N-CA	5.58	131.34	122.74
3	K	186	THR	CA-C-N	5.58	131.34	122.74
3	K	186	THR	C-N-CA	5.58	131.34	122.74
2	F	488	ASP	CA-C-N	5.58	127.76	120.28
2	F	488	ASP	C-N-CA	5.58	127.76	120.28
6	Q	172	GLN	CA-C-N	5.58	127.76	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	Q	172	GLN	C-N-CA	5.58	127.76	120.28
3	V	274	LYS	N-CA-CB	-5.58	101.92	110.01
2	B	346	TYR	N-CA-CB	5.58	118.32	110.12
4	O	437	VAL	CA-C-O	-5.58	112.93	119.85
2	P	186	THR	CA-C-N	5.58	131.33	122.74
2	P	186	THR	C-N-CA	5.58	131.33	122.74
2	P	485	GLU	CB-CA-C	-5.58	101.37	110.85
2	G	346	TYR	N-CA-CB	5.58	118.32	110.12
2	E	452	HIS	CA-CB-CG	-5.58	108.22	113.80
4	M	357	LEU	CA-C-N	5.58	127.75	120.28
4	M	357	LEU	C-N-CA	5.58	127.75	120.28
2	H	279	ILE	N-CA-CB	5.58	118.12	110.54
2	H	501	GLU	CB-CG-CD	-5.58	103.12	112.60
2	B	337	ASP	N-CA-C	-5.58	105.28	111.36
2	E	186	THR	CA-C-N	5.58	131.33	122.74
2	E	186	THR	C-N-CA	5.58	131.33	122.74
2	E	479	LEU	N-CA-CB	5.58	118.09	110.01
2	E	480	ASN	CA-C-O	-5.58	114.96	120.70
2	P	543	LYS	N-CA-C	5.58	117.36	111.28
2	N	350	LEU	N-CA-C	5.58	117.36	111.28
2	F	358	LEU	N-CA-C	5.58	117.36	111.28
6	R	518	PRO	CA-C-N	5.58	128.31	120.28
6	R	518	PRO	C-N-CA	5.58	128.31	120.28
6	R	713	ARG	CA-C-N	5.58	128.02	120.38
6	R	713	ARG	C-N-CA	5.58	128.02	120.38
2	A	372	ALA	CA-C-O	-5.57	114.96	120.70
3	K	274	LYS	N-CA-CB	-5.57	101.93	110.01
2	N	274	LYS	N-CA-CB	-5.57	101.93	110.01
2	F	186	THR	CA-C-N	5.57	131.32	122.74
2	F	186	THR	C-N-CA	5.57	131.32	122.74
3	L	186	THR	CA-C-N	5.57	131.32	122.74
3	L	186	THR	C-N-CA	5.57	131.32	122.74
6	Q	420	ASN	CA-CB-CG	-5.57	107.03	112.60
6	R	675	GLU	CB-CA-C	-5.57	101.54	110.79
2	N	543	LYS	N-CA-C	5.57	117.35	111.28
2	A	186	THR	CA-C-N	5.57	131.31	122.74
2	A	186	THR	C-N-CA	5.57	131.31	122.74
2	F	452	HIS	CA-CB-CG	-5.57	108.23	113.80
6	R	201	ARG	N-CA-C	5.57	117.02	111.07
4	O	517	GLU	CA-C-O	-5.56	114.98	120.82
2	P	487	ILE	CA-C-N	5.56	127.74	120.28
2	P	487	ILE	C-N-CA	5.56	127.74	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	Q	598	ILE	N-CA-CB	-5.56	101.14	110.65
2	B	501	GLU	CB-CG-CD	-5.56	103.14	112.60
6	R	263	PHE	CA-CB-CG	-5.56	108.24	113.80
3	D	279	ILE	N-CA-CB	5.56	118.10	110.54
2	B	279	ILE	N-CA-CB	5.56	118.10	110.54
2	B	466	ASP	CA-CB-CG	-5.56	107.04	112.60
2	N	485	GLU	CB-CA-C	-5.56	101.40	110.85
2	P	452	HIS	CE1-NE2-CD2	-5.55	103.44	109.00
6	Q	518	PRO	CA-C-N	5.55	128.28	120.28
6	Q	518	PRO	C-N-CA	5.55	128.28	120.28
6	Q	675	GLU	CB-CA-C	-5.55	101.57	110.79
4	M	423	PHE	N-CA-CB	5.55	118.38	110.16
2	N	452	HIS	CE1-NE2-CD2	-5.55	103.45	109.00
6	R	98	TYR	CB-CG-CD2	-5.55	112.48	120.80
2	F	279	ILE	N-CA-CB	5.55	118.08	110.54
3	L	257	VAL	CA-C-N	5.55	126.49	120.44
3	L	257	VAL	C-N-CA	5.55	126.49	120.44
2	E	279	ILE	N-CA-CB	5.55	118.08	110.54
2	N	186	THR	CA-C-N	5.55	131.28	122.74
2	N	186	THR	C-N-CA	5.55	131.28	122.74
2	N	487	ILE	CA-C-N	5.55	127.71	120.28
2	N	487	ILE	C-N-CA	5.55	127.71	120.28
2	H	186	THR	CA-C-N	5.55	131.28	122.74
2	H	186	THR	C-N-CA	5.55	131.28	122.74
6	Q	38	LEU	CA-C-N	5.55	127.71	120.28
6	Q	38	LEU	C-N-CA	5.55	127.71	120.28
2	G	515	GLU	CA-C-O	5.54	126.43	120.55
6	Q	625	ASN	CA-C-N	5.54	127.71	120.28
6	Q	625	ASN	C-N-CA	5.54	127.71	120.28
6	Q	201	ARG	N-CA-C	5.54	117.00	111.07
5	T	45	ARG	N-CA-C	5.54	117.32	111.28
2	E	349	ALA	N-CA-CB	5.54	118.10	110.07
6	R	218	ASN	CA-C-N	5.54	128.04	120.46
6	R	218	ASN	C-N-CA	5.54	128.04	120.46
2	A	452	HIS	CA-CB-CG	-5.53	108.27	113.80
6	Q	263	PHE	CA-CB-CG	-5.53	108.27	113.80
6	Q	713	ARG	CA-C-N	5.53	127.96	120.38
6	Q	713	ARG	C-N-CA	5.53	127.96	120.38
2	P	347	LEU	CA-C-N	5.53	128.14	120.29
2	P	347	LEU	C-N-CA	5.53	128.14	120.29
6	R	631	SER	O-C-N	5.53	127.77	122.07
2	G	500	PHE	CB-CA-C	5.53	120.08	110.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	349	ALA	N-CA-CB	5.53	118.08	110.07
2	B	500	PHE	CB-CA-C	5.53	120.08	110.68
2	G	501	GLU	CB-CG-CD	-5.53	103.21	112.60
6	Q	652	GLY	CA-C-N	5.53	128.03	120.46
6	Q	652	GLY	C-N-CA	5.53	128.03	120.46
4	M	404	LEU	CA-C-N	5.52	127.68	120.28
4	M	404	LEU	C-N-CA	5.52	127.68	120.28
2	G	337	ASP	N-CA-C	-5.52	105.34	111.36
5	T	73	PRO	CA-C-N	5.52	132.09	121.54
5	T	73	PRO	C-N-CA	5.52	132.09	121.54
6	R	563	GLY	CA-C-O	5.52	125.97	119.45
2	N	347	LEU	CA-C-N	5.52	128.13	120.29
2	N	347	LEU	C-N-CA	5.52	128.13	120.29
2	H	515	GLU	CA-C-O	5.52	126.40	120.55
1	J	276	ASP	CA-CB-CG	5.52	118.12	112.60
6	Q	448	ALA	CA-C-N	5.52	132.58	122.54
6	Q	448	ALA	C-N-CA	5.52	132.58	122.54
6	R	448	ALA	CA-C-N	5.52	132.58	122.54
6	R	448	ALA	C-N-CA	5.52	132.58	122.54
2	N	343	ARG	NE-CZ-NH1	-5.51	115.98	121.50
2	N	459	MET	N-CA-C	-5.51	105.27	111.28
6	Q	218	ASN	CA-C-N	5.51	128.02	120.46
6	Q	218	ASN	C-N-CA	5.51	128.02	120.46
6	Q	631	SER	O-C-N	5.51	127.75	122.07
6	R	48	LEU	CB-CA-C	-5.51	102.22	110.88
2	P	343	ARG	NE-CZ-NH1	-5.51	115.99	121.50
6	Q	187	LYS	N-CA-C	5.51	116.97	111.07
2	B	514	PHE	N-CA-CB	5.51	118.00	110.01
3	K	257	VAL	CA-C-N	5.51	126.45	120.44
3	K	257	VAL	C-N-CA	5.51	126.45	120.44
4	M	437	VAL	CA-C-O	-5.51	113.02	119.85
2	F	481	GLN	N-CA-C	5.51	116.97	111.07
3	V	257	VAL	CA-C-N	5.51	126.45	120.44
3	V	257	VAL	C-N-CA	5.51	126.45	120.44
2	F	356	ALA	CA-C-N	5.51	127.66	120.28
2	F	356	ALA	C-N-CA	5.51	127.66	120.28
6	Q	408	ILE	CB-CA-C	5.51	119.57	112.14
6	Q	710	HIS	N-CA-C	5.51	122.53	110.80
6	Q	407	PRO	N-CA-C	-5.50	102.55	111.03
6	R	418	LEU	N-CA-C	-5.50	105.28	111.28
2	A	349	ALA	N-CA-CB	5.50	118.05	110.07
2	N	503	MET	O-C-N	5.50	127.95	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	S	45	ARG	N-CA-C	5.50	117.28	111.28
2	E	356	ALA	CA-C-N	5.50	127.65	120.28
2	E	356	ALA	C-N-CA	5.50	127.65	120.28
2	E	432	ARG	O-C-N	5.50	127.74	122.07
2	P	459	MET	N-CA-C	-5.50	105.28	111.28
2	F	465	GLN	OE1-CD-NE2	5.50	128.10	122.60
6	R	625	ASN	CA-C-N	5.50	127.65	120.28
6	R	625	ASN	C-N-CA	5.50	127.65	120.28
2	A	481	GLN	CB-CA-C	-5.50	102.25	110.88
5	S	73	PRO	CA-C-N	5.50	132.04	121.54
5	S	73	PRO	C-N-CA	5.50	132.04	121.54
2	A	495	GLN	CB-CG-CD	-5.50	103.26	112.60
4	O	404	LEU	CA-C-N	5.50	127.64	120.28
4	O	404	LEU	C-N-CA	5.50	127.64	120.28
5	S	9	GLY	CA-C-N	5.50	132.04	121.54
5	S	9	GLY	C-N-CA	5.50	132.04	121.54
6	R	710	HIS	N-CA-C	5.49	122.50	110.80
3	D	257	VAL	CA-C-N	5.49	126.43	120.44
3	D	257	VAL	C-N-CA	5.49	126.43	120.44
6	Q	418	LEU	N-CA-C	-5.49	105.30	111.28
2	B	425	ILE	CB-CA-C	-5.49	104.94	111.97
2	E	494	HIS	CG-CD2-NE2	5.49	112.69	107.20
2	E	481	GLN	N-CA-C	5.49	116.94	111.07
2	H	425	ILE	CB-CA-C	-5.49	104.95	111.97
5	S	87	PHE	CB-CG-CD1	5.49	130.03	120.70
2	A	363	ASN	CA-C-O	-5.48	115.06	120.82
2	A	465	GLN	OE1-CD-NE2	5.48	128.08	122.60
2	H	257	VAL	CA-C-N	5.48	126.42	120.44
2	H	257	VAL	C-N-CA	5.48	126.42	120.44
2	F	495	GLN	CB-CG-CD	-5.48	103.28	112.60
2	G	442	SER	CA-C-N	5.48	127.62	120.28
2	G	442	SER	C-N-CA	5.48	127.62	120.28
2	H	517	GLU	CB-CG-CD	-5.48	103.28	112.60
2	F	257	VAL	CA-C-N	5.48	126.41	120.44
2	F	257	VAL	C-N-CA	5.48	126.41	120.44
3	D	253	GLU	N-CA-C	5.48	118.26	110.10
6	R	652	GLY	CA-C-N	5.48	127.96	120.46
6	R	652	GLY	C-N-CA	5.48	127.96	120.46
2	B	517	GLU	CB-CG-CD	-5.47	103.29	112.60
6	Q	600	THR	N-CA-CB	-5.47	102.38	110.53
6	R	75	TYR	CB-CA-C	-5.47	101.71	110.79
6	R	187	LYS	N-CA-C	5.47	116.93	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	P	331	ASN	CA-C-N	5.47	129.53	120.94
2	P	331	ASN	C-N-CA	5.47	129.53	120.94
6	Q	453	LEU	CA-C-N	5.47	131.99	121.54
6	Q	453	LEU	C-N-CA	5.47	131.99	121.54
4	M	449	HIS	ND1-CE1-NE2	5.47	113.87	108.40
2	A	253	GLU	N-CA-C	5.47	118.24	110.10
2	N	331	ASN	CA-C-N	5.47	129.52	120.94
2	N	331	ASN	C-N-CA	5.47	129.52	120.94
5	S	99	ASP	CA-CB-CG	-5.46	107.14	112.60
5	T	9	GLY	CA-C-N	5.46	131.98	121.54
5	T	9	GLY	C-N-CA	5.46	131.98	121.54
6	R	409	GLN	N-CA-C	5.46	117.24	111.28
2	G	514	PHE	N-CA-CB	5.46	117.93	110.01
2	N	253	GLU	N-CA-C	5.46	118.24	110.10
2	H	514	PHE	N-CA-CB	5.46	117.93	110.01
2	F	481	GLN	CB-CA-C	-5.46	102.31	110.88
5	S	49	ASP	CA-CB-CG	5.46	118.06	112.60
6	Q	94	GLU	CA-C-N	5.46	127.60	120.28
6	Q	94	GLU	C-N-CA	5.46	127.60	120.28
6	R	68	ALA	N-CA-C	5.46	116.91	111.07
6	R	511	ASN	N-CA-CB	5.46	119.72	110.49
2	H	253	GLU	N-CA-C	5.46	118.24	110.10
5	T	87	PHE	CB-CG-CD1	5.46	129.98	120.70
2	G	425	ILE	CB-CA-C	-5.46	104.98	111.97
2	P	253	GLU	N-CA-C	5.46	118.23	110.10
3	L	253	GLU	N-CA-C	5.46	118.23	110.10
6	Q	148	ARG	N-CA-CB	5.46	118.73	110.28
6	Q	644	LEU	N-CA-C	5.46	116.91	111.07
6	R	408	ILE	CB-CA-C	5.46	119.50	112.14
2	E	253	GLU	N-CA-C	5.45	118.23	110.10
3	K	269	ARG	CA-C-N	5.45	127.59	120.28
3	K	269	ARG	C-N-CA	5.45	127.59	120.28
5	T	99	ASP	CA-CB-CG	-5.45	107.15	112.60
2	E	495	GLN	CB-CG-CD	-5.45	103.33	112.60
2	G	517	GLU	CB-CG-CD	-5.45	103.34	112.60
2	E	257	VAL	CA-C-N	5.45	126.38	120.44
2	E	257	VAL	C-N-CA	5.45	126.38	120.44
2	P	257	VAL	CA-C-N	5.45	126.38	120.44
2	P	257	VAL	C-N-CA	5.45	126.38	120.44
2	A	257	VAL	CA-C-N	5.44	126.37	120.44
2	A	257	VAL	C-N-CA	5.44	126.37	120.44
2	B	442	SER	CA-C-N	5.44	127.57	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	442	SER	C-N-CA	5.44	127.57	120.28
6	Q	68	ALA	N-CA-C	5.44	116.89	111.07
2	F	494	HIS	CG-CD2-NE2	5.44	112.64	107.20
5	T	188	LYS	N-CA-C	-5.44	100.83	109.59
6	Q	161	THR	CA-C-N	5.44	132.07	121.41
6	Q	161	THR	C-N-CA	5.44	132.07	121.41
2	B	257	VAL	CA-C-N	5.44	126.36	120.44
2	B	257	VAL	C-N-CA	5.44	126.36	120.44
2	P	503	MET	O-C-N	5.44	127.88	122.12
2	B	253	GLU	N-CA-C	5.43	118.20	110.10
2	A	356	ALA	CA-C-N	5.43	127.56	120.28
2	A	356	ALA	C-N-CA	5.43	127.56	120.28
6	R	453	LEU	CA-C-N	5.43	131.92	121.54
6	R	453	LEU	C-N-CA	5.43	131.92	121.54
6	R	532	ILE	CA-CB-CG2	-5.43	101.26	110.50
2	N	432	ARG	N-CA-C	5.43	116.88	111.07
6	R	161	THR	CA-C-N	5.43	132.06	121.41
6	R	161	THR	C-N-CA	5.43	132.06	121.41
6	R	407	PRO	N-CA-C	-5.43	102.66	111.03
2	F	432	ARG	O-C-N	5.43	127.66	122.07
2	N	293	LEU	CA-C-N	5.43	127.56	120.28
2	N	293	LEU	C-N-CA	5.43	127.56	120.28
2	F	243	ASN	CA-C-N	5.43	125.52	119.87
2	F	243	ASN	C-N-CA	5.43	125.52	119.87
6	Q	409	GLN	N-CA-C	5.43	117.20	111.28
3	D	243	ASN	CA-C-N	5.43	125.52	119.87
3	D	243	ASN	C-N-CA	5.43	125.52	119.87
2	P	293	LEU	CA-C-N	5.43	127.55	120.28
2	P	293	LEU	C-N-CA	5.43	127.55	120.28
5	T	61	VAL	CA-C-N	5.43	131.91	121.54
5	T	61	VAL	C-N-CA	5.43	131.91	121.54
6	R	516	SER	N-CA-C	5.43	122.36	110.80
2	E	419	ASP	O-C-N	5.43	129.41	122.03
6	Q	511	ASN	N-CA-CB	5.43	119.66	110.49
6	Q	765	THR	N-CA-C	5.42	122.35	110.80
2	E	481	GLN	CB-CA-C	-5.42	102.37	110.88
2	A	432	ARG	O-C-N	5.42	127.65	122.07
2	G	311	GLU	CB-CG-CD	-5.42	103.39	112.60
2	E	465	GLN	OE1-CD-NE2	5.42	128.02	122.60
2	N	257	VAL	CA-C-N	5.42	126.35	120.44
2	N	257	VAL	C-N-CA	5.42	126.35	120.44
2	H	269	ARG	CA-C-N	5.42	127.54	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	H	269	ARG	C-N-CA	5.42	127.54	120.28
6	Q	791	THR	N-CA-C	5.42	116.87	111.07
6	R	664	CYS	N-CA-CB	-5.42	102.21	110.07
2	G	243	ASN	CA-C-N	5.42	125.50	119.87
2	G	243	ASN	C-N-CA	5.42	125.50	119.87
2	E	360	ALA	CA-C-N	5.42	127.80	120.38
2	E	360	ALA	C-N-CA	5.42	127.80	120.38
2	H	513	ARG	O-C-N	-5.42	116.49	122.07
3	V	253	GLU	N-CA-C	5.42	118.17	110.10
3	V	269	ARG	CA-C-N	5.42	127.54	120.28
3	V	269	ARG	C-N-CA	5.42	127.54	120.28
6	R	148	ARG	N-CA-CB	5.42	118.67	110.28
2	G	253	GLU	N-CA-C	5.42	118.17	110.10
6	R	765	THR	N-CA-C	5.42	122.33	110.80
3	V	293	LEU	CA-C-N	5.41	127.53	120.28
3	V	293	LEU	C-N-CA	5.41	127.53	120.28
2	A	360	ALA	CA-C-N	5.41	127.80	120.38
2	A	360	ALA	C-N-CA	5.41	127.80	120.38
2	A	481	GLN	N-CA-C	5.41	116.86	111.07
2	G	257	VAL	CA-C-N	5.41	126.34	120.44
2	G	257	VAL	C-N-CA	5.41	126.34	120.44
3	K	253	GLU	N-CA-C	5.41	118.16	110.10
3	L	269	ARG	CA-C-N	5.41	127.53	120.28
3	L	269	ARG	C-N-CA	5.41	127.53	120.28
6	Q	532	ILE	CA-CB-CG2	-5.41	101.30	110.50
6	Q	664	CYS	N-CA-CB	-5.41	102.22	110.07
2	B	465	GLN	N-CA-CB	-5.41	102.17	110.01
3	K	243	ASN	CA-C-N	5.41	125.50	119.87
3	K	243	ASN	C-N-CA	5.41	125.50	119.87
4	O	531	GLU	O-C-N	5.41	127.64	122.07
2	F	360	ALA	CA-C-N	5.41	127.79	120.38
2	F	360	ALA	C-N-CA	5.41	127.79	120.38
3	L	293	LEU	CA-C-N	5.41	127.53	120.28
3	L	293	LEU	C-N-CA	5.41	127.53	120.28
5	T	49	ASP	CA-CB-CG	5.41	118.01	112.60
2	H	442	SER	CA-C-N	5.41	127.52	120.28
2	H	442	SER	C-N-CA	5.41	127.52	120.28
6	Q	847	LYS	CB-CA-C	-5.41	101.82	110.79
2	P	405	GLN	N-CA-C	5.40	117.17	111.28
2	A	419	ASP	O-C-N	5.40	129.38	122.03
3	K	293	LEU	CA-C-N	5.40	127.52	120.28
3	K	293	LEU	C-N-CA	5.40	127.52	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	O	361	MET	N-CA-CB	5.40	118.06	110.12
6	Q	75	TYR	CB-CA-C	-5.40	101.83	110.79
4	M	487	ILE	CA-C-N	5.40	127.78	120.44
4	M	487	ILE	C-N-CA	5.40	127.78	120.44
2	F	253	GLU	N-CA-C	5.40	118.14	110.10
2	F	473	LYS	CA-C-O	5.40	126.92	120.28
2	B	500	PHE	N-CA-CB	-5.40	101.97	110.06
2	A	269	ARG	CA-C-N	5.40	127.51	120.28
2	A	269	ARG	C-N-CA	5.40	127.51	120.28
2	P	352	ASN	OD1-CG-ND2	5.40	128.00	122.60
2	B	269	ARG	CA-C-N	5.39	127.51	120.28
2	B	269	ARG	C-N-CA	5.39	127.51	120.28
2	P	512	ASP	O-C-N	5.39	127.84	122.12
2	H	465	GLN	N-CA-CB	-5.39	102.19	110.12
2	F	269	ARG	CA-C-N	5.39	127.51	120.28
2	F	269	ARG	C-N-CA	5.39	127.51	120.28
6	R	600	THR	N-CA-CB	-5.39	102.49	110.53
2	G	398	LEU	CA-C-O	5.39	126.14	120.42
6	Q	87	ASN	CA-C-N	5.39	131.84	121.54
6	Q	87	ASN	C-N-CA	5.39	131.84	121.54
2	A	494	HIS	CG-CD2-NE2	5.39	112.59	107.20
2	G	269	ARG	CA-C-N	5.39	127.50	120.28
2	G	269	ARG	C-N-CA	5.39	127.50	120.28
2	P	475	GLN	CA-C-O	-5.39	115.84	121.55
2	F	419	ASP	O-C-N	5.39	129.36	122.03
5	S	188	LYS	N-CA-C	-5.39	100.91	109.59
6	Q	564	TRP	N-CA-CB	-5.39	102.18	110.16
6	R	240	LEU	N-CA-C	5.39	117.15	111.28
6	R	644	LEU	N-CA-C	5.39	116.84	111.07
4	O	342	ASP	CA-C-O	-5.39	115.16	120.82
2	P	311	GLU	CB-CG-CD	-5.39	103.44	112.60
6	Q	272	LEU	CA-C-N	5.39	127.50	120.28
6	Q	272	LEU	C-N-CA	5.39	127.50	120.28
2	A	364	MET	CG-SD-CE	-5.38	89.05	100.90
2	E	269	ARG	CA-C-N	5.38	127.49	120.28
2	E	269	ARG	C-N-CA	5.38	127.49	120.28
4	O	402	SER	CA-C-O	-5.38	115.17	120.82
2	H	398	LEU	CA-C-O	5.38	126.13	120.42
6	Q	56	SER	CA-C-N	5.38	131.82	121.54
6	Q	56	SER	C-N-CA	5.38	131.82	121.54
2	G	500	PHE	N-CA-CB	-5.38	101.98	110.06
2	N	311	GLU	CB-CG-CD	-5.38	103.45	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	R	577	ASN	CA-C-O	5.38	126.26	120.55
2	F	311	GLU	CB-CG-CD	-5.38	103.45	112.60
6	Q	516	SER	N-CA-C	5.38	122.26	110.80
6	R	752	TRP	CB-CG-CD2	-5.38	119.27	126.80
2	B	293	LEU	CA-C-N	5.38	127.49	120.28
2	B	293	LEU	C-N-CA	5.38	127.49	120.28
2	A	293	LEU	CA-C-N	5.38	127.49	120.28
2	A	293	LEU	C-N-CA	5.38	127.49	120.28
2	N	475	GLN	CA-C-O	-5.38	115.85	121.55
2	H	477	ASP	CA-CB-CG	5.38	117.98	112.60
6	R	56	SER	CA-C-N	5.38	131.81	121.54
6	R	56	SER	C-N-CA	5.38	131.81	121.54
3	D	311	GLU	CB-CG-CD	-5.38	103.46	112.60
2	P	269	ARG	CA-C-N	5.38	127.48	120.28
2	P	269	ARG	C-N-CA	5.38	127.48	120.28
4	M	361	MET	N-CA-CB	5.38	118.02	110.12
2	F	293	LEU	CA-C-N	5.38	127.48	120.28
2	F	293	LEU	C-N-CA	5.38	127.48	120.28
5	S	61	VAL	CA-C-N	5.38	131.81	121.54
5	S	61	VAL	C-N-CA	5.38	131.81	121.54
6	R	94	GLU	CA-C-N	5.38	127.48	120.28
6	R	94	GLU	C-N-CA	5.38	127.48	120.28
2	H	293	LEU	CA-C-N	5.38	127.48	120.28
2	H	293	LEU	C-N-CA	5.38	127.48	120.28
3	K	311	GLU	CB-CG-CD	-5.37	103.46	112.60
4	O	449	HIS	ND1-CE1-NE2	5.37	113.77	108.40
3	V	311	GLU	CB-CG-CD	-5.37	103.47	112.60
3	L	311	GLU	CB-CG-CD	-5.37	103.47	112.60
4	O	487	ILE	CA-C-N	5.37	127.74	120.44
4	O	487	ILE	C-N-CA	5.37	127.74	120.44
2	N	352	ASN	OD1-CG-ND2	5.37	127.97	122.60
2	G	513	ARG	O-C-N	-5.37	116.54	122.07
6	Q	697	ALA	CA-C-N	5.37	127.47	120.28
6	Q	697	ALA	C-N-CA	5.37	127.47	120.28
5	T	172	TYR	N-CA-C	-5.37	100.43	109.07
6	R	180	THR	CA-CB-OG1	5.37	117.65	109.60
2	B	311	GLU	CB-CG-CD	-5.36	103.48	112.60
2	A	311	GLU	CB-CG-CD	-5.36	103.48	112.60
2	E	311	GLU	CB-CG-CD	-5.36	103.48	112.60
2	H	522	PHE	CB-CA-C	-5.36	98.66	109.55
2	E	519	VAL	O-C-N	5.36	127.07	121.87
2	N	543	LYS	CA-C-N	5.36	127.90	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	543	LYS	C-N-CA	5.36	127.90	120.29
6	R	739	ASP	N-CA-CB	-5.36	102.24	110.01
6	R	847	LYS	CB-CA-C	-5.36	101.89	110.79
3	D	269	ARG	CA-C-N	5.36	127.46	120.28
3	D	269	ARG	C-N-CA	5.36	127.46	120.28
2	N	339	TRP	CA-C-O	-5.36	114.87	120.55
6	R	791	THR	N-CA-C	5.36	116.80	111.07
2	G	477	ASP	CA-CB-CG	5.36	117.96	112.60
6	Q	256	LEU	N-CA-C	-5.36	105.44	111.28
2	B	513	ARG	O-C-N	-5.36	116.56	122.07
3	D	293	LEU	CA-C-N	5.36	127.46	120.28
3	D	293	LEU	C-N-CA	5.36	127.46	120.28
2	E	364	MET	CG-SD-CE	-5.36	89.12	100.90
2	E	527	GLU	N-CA-CB	5.36	117.99	110.12
2	H	243	ASN	CA-C-N	5.36	125.44	119.87
2	H	243	ASN	C-N-CA	5.36	125.44	119.87
5	S	172	TYR	N-CA-C	-5.36	100.45	109.07
2	B	522	PHE	CB-CA-C	-5.35	98.68	109.55
2	P	372	ALA	N-CA-CB	5.35	117.77	110.01
6	R	87	ASN	CA-C-N	5.35	131.76	121.54
6	R	87	ASN	C-N-CA	5.35	131.76	121.54
2	B	477	ASP	CA-CB-CG	5.35	117.95	112.60
2	N	243	ASN	CA-C-N	5.35	125.44	119.87
2	N	243	ASN	C-N-CA	5.35	125.44	119.87
2	F	344	ARG	N-CA-C	5.35	116.80	111.07
2	B	243	ASN	CA-C-N	5.35	125.44	119.87
2	B	243	ASN	C-N-CA	5.35	125.44	119.87
4	O	502	ASP	CA-CB-CG	5.35	117.95	112.60
4	M	544	TRP	CA-CB-CG	5.35	123.77	113.60
2	N	405	GLN	N-CA-C	5.35	117.11	111.28
2	F	338	ASP	N-CA-C	5.35	116.79	111.07
5	S	158	CYS	CA-C-N	-5.35	115.62	123.00
5	S	158	CYS	C-N-CA	-5.35	115.62	123.00
2	A	243	ASN	CA-C-N	5.35	125.43	119.87
2	A	243	ASN	C-N-CA	5.35	125.43	119.87
2	A	344	ARG	N-CA-C	5.35	116.79	111.07
2	G	522	PHE	CB-CA-C	-5.35	98.69	109.55
2	E	356	ALA	CB-CA-C	-5.35	101.91	110.79
2	N	269	ARG	CA-C-N	5.35	127.45	120.28
2	N	269	ARG	C-N-CA	5.35	127.45	120.28
2	N	550	GLN	CG-CD-OE1	5.35	131.50	120.80
6	Q	577	ASN	CA-C-O	5.35	126.22	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	R	579	THR	CA-C-O	5.35	126.43	120.82
2	A	527	GLU	N-CA-CB	5.35	117.98	110.12
2	A	473	LYS	CA-C-O	5.34	126.85	120.28
4	M	531	GLU	O-C-N	5.34	127.57	122.07
3	L	243	ASN	CA-C-N	5.34	125.43	119.87
3	L	243	ASN	C-N-CA	5.34	125.43	119.87
2	G	340	PHE	CA-CB-CG	-5.34	108.46	113.80
2	P	333	PHE	O-C-N	5.34	127.78	122.12
2	F	356	ALA	CB-CA-C	-5.34	101.92	110.79
2	F	364	MET	CG-SD-CE	-5.34	89.14	100.90
5	T	158	CYS	CA-C-N	-5.34	115.63	123.00
5	T	158	CYS	C-N-CA	-5.34	115.63	123.00
6	R	814	GLU	CA-C-N	5.34	127.44	120.28
6	R	814	GLU	C-N-CA	5.34	127.44	120.28
2	A	356	ALA	CB-CA-C	-5.34	101.92	110.79
2	G	293	LEU	CA-C-N	5.34	127.44	120.28
2	G	293	LEU	C-N-CA	5.34	127.44	120.28
2	N	346	TYR	N-CA-C	5.34	116.79	111.07
6	R	564	TRP	N-CA-CB	-5.34	102.25	110.16
2	H	311	GLU	CB-CG-CD	-5.34	103.53	112.60
3	V	243	ASN	CA-C-N	5.34	125.42	119.87
3	V	243	ASN	C-N-CA	5.34	125.42	119.87
6	R	256	LEU	N-CA-C	-5.34	105.46	111.28
6	R	582	ARG	CB-CA-C	-5.34	102.50	110.88
2	E	338	ASP	N-CA-C	5.33	116.78	111.07
2	E	496	ALA	N-CA-CB	5.33	117.96	110.12
4	M	502	ASP	CA-CB-CG	5.33	117.93	112.60
2	H	500	PHE	N-CA-CB	-5.33	102.06	110.06
6	Q	588	ARG	CB-CG-CD	5.33	123.57	111.30
6	R	697	ALA	CA-C-N	5.33	127.43	120.28
6	R	697	ALA	C-N-CA	5.33	127.43	120.28
2	G	354	LEU	CB-CA-C	-5.33	101.94	110.79
2	H	340	PHE	CA-CB-CG	-5.33	108.47	113.80
6	Q	240	LEU	N-CA-C	5.33	117.09	111.28
4	O	544	TRP	CA-CB-CG	5.33	123.73	113.60
2	G	232	PHE	N-CA-C	5.33	117.09	111.28
4	O	361	MET	N-CA-C	5.33	117.09	111.28
4	M	342	ASP	CA-C-O	-5.33	115.23	120.82
6	R	588	ARG	CB-CG-CD	5.33	123.55	111.30
2	P	346	TYR	N-CA-C	5.33	116.77	111.07
2	P	550	GLN	N-CA-CB	5.33	119.56	110.50
4	M	402	SER	CA-C-O	-5.33	115.23	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	550	GLN	N-CA-CB	5.33	119.56	110.50
2	B	398	LEU	CA-C-O	5.32	126.06	120.42
2	E	473	LYS	CA-C-O	5.32	126.83	120.28
6	Q	582	ARG	CB-CA-C	-5.32	102.53	110.88
6	Q	739	ASP	N-CA-CB	-5.32	102.30	110.12
2	B	354	LEU	CB-CA-C	-5.32	101.96	110.79
3	K	231	ASP	CA-CB-CG	-5.32	107.28	112.60
2	N	512	ASP	O-C-N	5.32	127.76	122.12
2	H	354	LEU	CB-CA-C	-5.32	101.96	110.79
2	N	231	ASP	CA-CB-CG	-5.32	107.28	112.60
2	G	465	GLN	N-CA-CB	-5.32	102.30	110.01
6	Q	814	GLU	CA-C-N	5.32	127.35	120.44
6	Q	814	GLU	C-N-CA	5.32	127.35	120.44
2	A	519	VAL	O-C-N	5.31	127.02	121.87
2	G	547	PHE	N-CA-C	-5.31	106.85	113.38
2	E	293	LEU	CA-C-N	5.31	127.39	120.28
2	E	293	LEU	C-N-CA	5.31	127.39	120.28
2	H	335	GLU	CB-CG-CD	5.31	121.63	112.60
2	H	380	ALA	N-CA-C	5.31	117.07	111.28
2	N	423	PHE	N-CA-C	5.31	117.14	111.36
2	F	496	ALA	N-CA-CB	5.31	117.92	110.12
2	P	423	PHE	N-CA-C	5.31	117.14	111.36
2	P	243	ASN	CA-C-N	5.30	125.38	119.87
2	P	243	ASN	C-N-CA	5.30	125.38	119.87
2	G	231	ASP	CA-CB-CG	-5.30	107.30	112.60
2	N	372	ALA	N-CA-CB	5.30	117.69	110.01
2	H	231	ASP	CA-CB-CG	-5.30	107.30	112.60
2	E	344	ARG	N-CA-C	5.30	116.74	111.07
2	P	488	ASP	N-CA-CB	5.29	117.90	110.12
1	J	144	ASP	N-CA-C	5.29	117.97	110.50
3	V	232	PHE	N-CA-C	5.29	117.05	111.28
6	Q	267	TYR	CA-C-N	5.29	127.37	120.28
6	Q	267	TYR	C-N-CA	5.29	127.37	120.28
6	R	272	LEU	CA-C-N	5.29	127.37	120.28
6	R	272	LEU	C-N-CA	5.29	127.37	120.28
2	P	339	TRP	CA-C-O	-5.29	114.94	120.55
6	R	267	TYR	CA-C-N	5.29	127.37	120.28
6	R	267	TYR	C-N-CA	5.29	127.37	120.28
2	A	338	ASP	N-CA-C	5.29	116.73	111.07
2	F	427	ILE	CA-C-N	5.29	127.37	120.28
2	F	427	ILE	C-N-CA	5.29	127.37	120.28
2	A	496	ALA	N-CA-CB	5.29	117.89	110.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	M	361	MET	N-CA-C	5.29	117.04	111.28
4	M	419	ASP	CA-CB-CG	5.29	117.89	112.60
2	A	487	ILE	N-CA-C	-5.29	105.38	110.72
6	Q	752	TRP	CB-CG-CD2	-5.28	119.41	126.80
3	D	231	ASP	CA-CB-CG	-5.28	107.32	112.60
2	E	427	ILE	CA-C-N	5.28	127.36	120.28
2	E	427	ILE	C-N-CA	5.28	127.36	120.28
4	M	500	PHE	O-C-N	-5.28	116.60	122.09
6	R	454	HIS	N-CA-CB	5.28	119.41	110.49
6	Q	180	THR	CA-CB-OG1	5.28	117.52	109.60
2	B	340	PHE	CA-CB-CG	-5.28	108.52	113.80
2	B	369	LYS	CA-CB-CG	-5.28	103.55	114.10
2	G	369	LYS	CA-CB-CG	-5.28	103.54	114.10
2	N	333	PHE	O-C-N	5.28	127.71	122.12
3	V	231	ASP	CA-CB-CG	-5.28	107.32	112.60
1	C	144	ASP	N-CA-C	5.28	117.94	110.50
2	B	547	PHE	N-CA-C	-5.28	106.89	113.38
3	D	197	VAL	N-CA-C	-5.28	102.25	109.37
2	F	519	VAL	O-C-N	5.28	126.99	121.87
2	F	527	GLU	N-CA-CB	5.28	117.88	110.12
6	Q	258	VAL	N-CA-CB	5.28	117.72	110.54
6	R	594	GLY	CA-C-N	5.27	131.61	121.54
6	R	594	GLY	C-N-CA	5.27	131.61	121.54
2	B	231	ASP	CA-CB-CG	-5.27	107.33	112.60
2	A	427	ILE	CA-C-N	5.27	127.35	120.28
2	A	427	ILE	C-N-CA	5.27	127.35	120.28
4	O	419	ASP	CA-CB-CG	5.27	117.87	112.60
3	K	218	TYR	CA-C-N	5.27	131.61	121.54
3	K	218	TYR	C-N-CA	5.27	131.61	121.54
2	F	231	ASP	CA-CB-CG	-5.27	107.33	112.60
3	L	231	ASP	CA-CB-CG	-5.27	107.33	112.60
2	G	347	LEU	CB-CA-C	-5.27	99.47	109.95
2	E	487	ILE	N-CA-C	-5.27	105.40	110.72
2	P	483	ASN	CB-CG-ND2	-5.27	108.50	116.40
2	F	487	ILE	N-CA-C	-5.27	105.40	110.72
1	J	254	THR	N-CA-CB	5.26	115.85	109.74
3	L	232	PHE	N-CA-C	5.26	117.02	111.28
2	A	232	PHE	N-CA-C	5.26	117.02	111.28
4	M	478	ARG	CB-CA-C	-5.26	99.64	110.38
6	Q	437	LEU	N-CA-C	5.26	117.02	111.28
2	A	231	ASP	CA-CB-CG	-5.26	107.34	112.60
2	G	493	VAL	CA-CB-CG2	-5.26	101.45	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	335	GLU	CB-CG-CD	5.26	121.54	112.60
2	E	231	ASP	CA-CB-CG	-5.26	107.34	112.60
2	P	550	GLN	CG-CD-OE1	5.26	131.32	120.80
6	Q	594	GLY	CA-C-N	5.26	131.59	121.54
6	Q	594	GLY	C-N-CA	5.26	131.59	121.54
6	R	421	LEU	N-CA-C	5.26	116.70	111.07
2	B	493	VAL	CA-CB-CG2	-5.26	101.46	110.40
2	A	218	TYR	CA-C-N	5.26	131.58	121.54
2	A	218	TYR	C-N-CA	5.26	131.58	121.54
3	K	248	VAL	N-CA-C	-5.26	97.53	108.88
2	H	493	VAL	CA-CB-CG2	-5.26	101.46	110.40
6	Q	727	CYS	O-C-N	5.26	127.69	122.12
6	R	258	VAL	N-CA-CB	5.26	117.69	110.54
2	P	231	ASP	CA-CB-CG	-5.25	107.34	112.60
6	Q	454	HIS	N-CA-CB	5.25	119.37	110.49
2	N	218	TYR	CA-C-N	5.25	131.58	121.54
2	N	218	TYR	C-N-CA	5.25	131.58	121.54
2	H	347	LEU	CB-CA-C	-5.25	99.50	109.95
6	R	465	LEU	N-CA-C	-5.25	105.45	111.07
2	B	232	PHE	N-CA-C	5.25	117.00	111.28
4	O	478	ARG	CB-CA-C	-5.25	99.67	110.38
2	H	369	LYS	CA-CB-CG	-5.25	103.60	114.10
2	P	489	ALA	N-CA-CB	5.25	117.84	110.12
2	N	488	ASP	N-CA-CB	5.25	117.83	110.12
3	L	296	GLU	CB-CG-CD	-5.25	103.68	112.60
6	Q	579	THR	CA-C-O	5.25	126.33	120.82
3	D	232	PHE	N-CA-C	5.25	117.00	111.28
2	P	543	LYS	CA-C-N	5.25	127.74	120.29
2	P	543	LYS	C-N-CA	5.25	127.74	120.29
4	M	441	PHE	CB-CA-C	-5.25	102.08	110.79
2	B	347	LEU	CB-CA-C	-5.24	99.52	109.95
2	A	248	VAL	N-CA-C	-5.24	97.56	108.88
2	G	380	ALA	N-CA-C	5.24	117.00	111.28
6	Q	421	LEU	N-CA-C	5.24	116.68	111.07
2	A	334	VAL	O-C-N	-5.24	116.77	121.91
2	E	218	TYR	CA-C-N	5.24	131.55	121.54
2	E	218	TYR	C-N-CA	5.24	131.55	121.54
2	B	380	ALA	N-CA-C	5.24	116.99	111.28
2	G	524	SER	N-CA-CB	-5.24	102.42	110.12
2	B	248	VAL	N-CA-C	-5.24	97.57	108.88
2	F	232	PHE	N-CA-C	5.24	116.99	111.28
5	T	42	LEU	N-CA-C	5.24	121.96	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	N	483	ASN	CB-CG-ND2	-5.24	108.55	116.40
5	S	42	LEU	N-CA-C	5.24	121.95	110.80
2	H	296	GLU	CB-CG-CD	-5.23	103.70	112.60
2	G	218	TYR	CA-C-N	5.23	131.53	121.54
2	G	218	TYR	C-N-CA	5.23	131.53	121.54
3	K	197	VAL	N-CA-C	-5.23	102.31	109.37
3	K	296	GLU	CB-CG-CD	-5.23	103.70	112.60
3	V	218	TYR	CA-C-N	5.23	131.53	121.54
3	V	218	TYR	C-N-CA	5.23	131.53	121.54
2	G	335	GLU	CB-CG-CD	5.23	121.49	112.60
2	E	232	PHE	N-CA-C	5.23	116.98	111.28
4	O	529	PHE	CA-C-N	5.23	127.24	120.44
4	O	529	PHE	C-N-CA	5.23	127.24	120.44
2	P	218	TYR	CA-C-N	5.23	131.53	121.54
2	P	218	TYR	C-N-CA	5.23	131.53	121.54
2	F	334	VAL	O-C-N	-5.23	116.78	121.91
2	F	524	SER	CB-CA-C	-5.23	102.11	110.79
3	L	248	VAL	N-CA-C	-5.23	97.58	108.88
6	Q	389	LEU	CB-CA-C	-5.23	101.79	110.68
2	G	408	ILE	N-CA-C	5.23	115.95	110.62
6	R	727	CYS	O-C-N	5.23	127.66	122.12
6	R	738	PRO	CA-C-N	5.23	127.24	120.44
6	R	738	PRO	C-N-CA	5.23	127.24	120.44
2	A	296	GLU	CB-CG-CD	-5.23	103.71	112.60
4	M	450	SER	N-CA-C	5.23	116.98	111.28
2	H	547	PHE	N-CA-C	-5.23	106.95	113.38
6	Q	738	PRO	CA-C-N	5.23	127.29	120.28
6	Q	738	PRO	C-N-CA	5.23	127.29	120.28
2	B	218	TYR	CA-C-N	5.22	131.52	121.54
2	B	218	TYR	C-N-CA	5.22	131.52	121.54
2	B	524	SER	N-CA-CB	-5.22	102.44	110.12
2	G	248	VAL	N-CA-C	-5.22	97.60	108.88
2	E	436	SER	N-CA-C	5.22	116.97	111.28
2	H	545	GLU	CA-C-N	5.22	127.54	120.38
2	H	545	GLU	C-N-CA	5.22	127.54	120.38
6	Q	150	TYR	CA-C-N	5.22	127.23	120.44
6	Q	150	TYR	C-N-CA	5.22	127.23	120.44
2	E	243	ASN	CA-C-N	5.22	125.30	119.87
2	E	243	ASN	C-N-CA	5.22	125.30	119.87
2	P	335	GLU	CA-C-N	5.22	127.70	120.29
2	P	335	GLU	C-N-CA	5.22	127.70	120.29
2	N	232	PHE	N-CA-C	5.22	116.97	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	218	TYR	CA-C-N	5.22	131.51	121.54
2	F	218	TYR	C-N-CA	5.22	131.51	121.54
2	A	524	SER	CB-CA-C	-5.22	102.13	110.79
3	D	218	TYR	CA-C-N	5.22	131.51	121.54
3	D	218	TYR	C-N-CA	5.22	131.51	121.54
4	O	500	PHE	O-C-N	-5.22	116.66	122.09
2	N	197	VAL	N-CA-C	-5.22	102.32	109.37
2	F	248	VAL	N-CA-C	-5.22	97.61	108.88
3	D	248	VAL	N-CA-C	-5.22	97.61	108.88
2	N	489	ALA	N-CA-CB	5.22	117.79	110.12
6	R	150	TYR	CA-C-N	5.22	127.22	120.44
6	R	150	TYR	C-N-CA	5.22	127.22	120.44
2	P	248	VAL	N-CA-C	-5.22	97.61	108.88
2	P	452	HIS	N-CA-CB	5.22	118.37	110.28
2	N	335	GLU	CA-C-N	5.22	127.70	120.29
2	N	335	GLU	C-N-CA	5.22	127.70	120.29
5	S	168	THR	N-CA-C	-5.22	100.40	108.90
2	B	405	GLN	CB-CG-CD	-5.21	103.73	112.60
2	E	425	ILE	CA-C-O	-5.21	115.26	121.05
2	E	520	GLU	O-C-N	5.21	128.09	122.15
6	R	732	SER	CB-CA-C	-5.21	101.09	110.37
2	E	197	VAL	N-CA-C	-5.21	102.33	109.37
2	E	248	VAL	N-CA-C	-5.21	97.62	108.88
2	E	524	SER	CB-CA-C	-5.21	102.14	110.79
4	M	529	PHE	CA-C-N	5.21	127.22	120.44
4	M	529	PHE	C-N-CA	5.21	127.22	120.44
2	N	525	GLY	CA-C-N	5.21	127.82	120.42
2	N	525	GLY	C-N-CA	5.21	127.82	120.42
2	H	248	VAL	N-CA-C	-5.21	97.62	108.88
6	Q	465	LEU	N-CA-C	-5.21	105.49	111.07
2	B	296	GLU	CB-CG-CD	-5.21	103.74	112.60
4	O	441	PHE	CB-CA-C	-5.21	102.14	110.79
3	V	210	ARG	CB-CA-C	-5.21	100.71	109.72
4	O	428	GLU	N-CA-CB	5.21	117.78	110.12
2	P	525	GLY	CA-C-N	5.21	127.81	120.42
2	P	525	GLY	C-N-CA	5.21	127.81	120.42
2	P	534	VAL	N-CA-CB	5.21	118.39	110.58
2	N	335	GLU	N-CA-C	5.21	116.96	111.28
3	L	218	TYR	CA-C-N	5.21	131.49	121.54
3	L	218	TYR	C-N-CA	5.21	131.49	121.54
6	Q	732	SER	CB-CA-C	-5.21	101.10	110.37
5	T	159	LEU	N-CA-CB	5.21	118.75	110.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	R	389	LEU	CB-CA-C	-5.21	101.82	110.68
6	R	563	GLY	N-CA-C	-5.21	108.20	114.66
2	B	545	GLU	CA-C-N	5.21	127.51	120.38
2	B	545	GLU	C-N-CA	5.21	127.51	120.38
2	P	296	GLU	CB-CG-CD	-5.21	103.75	112.60
2	H	405	GLN	CB-CG-CD	-5.21	103.75	112.60
5	T	168	THR	N-CA-C	-5.21	100.42	108.90
2	E	296	GLU	CB-CG-CD	-5.20	103.75	112.60
2	E	334	VAL	O-C-N	-5.20	116.81	121.91
2	N	452	HIS	N-CA-CB	5.20	118.34	110.28
2	F	425	ILE	CA-C-O	-5.20	115.28	121.05
1	C	254	THR	N-CA-CB	5.20	115.77	109.74
3	D	210	ARG	CB-CA-C	-5.20	100.72	109.72
2	E	365	VAL	CA-C-N	5.20	127.25	120.28
2	E	365	VAL	C-N-CA	5.20	127.25	120.28
3	V	296	GLU	CB-CG-CD	-5.20	103.76	112.60
6	Q	563	GLY	N-CA-C	-5.20	108.21	114.66
2	G	405	GLN	CB-CG-CD	-5.20	103.76	112.60
4	O	450	SER	N-CA-C	5.20	116.95	111.28
3	V	197	VAL	N-CA-C	-5.20	102.35	109.37
3	L	197	VAL	N-CA-C	-5.20	102.35	109.37
2	A	197	VAL	N-CA-C	-5.20	102.35	109.37
2	B	210	ARG	CB-CA-C	-5.20	100.73	109.72
2	A	425	ILE	CA-C-O	-5.20	115.28	121.05
2	P	197	VAL	N-CA-C	-5.20	102.36	109.37
2	P	335	GLU	N-CA-C	5.20	116.94	111.28
2	F	296	GLU	CB-CG-CD	-5.19	103.77	112.60
6	R	437	LEU	N-CA-C	5.19	116.94	111.28
3	D	296	GLU	CB-CG-CD	-5.19	103.77	112.60
4	M	478	ARG	NE-CZ-NH1	-5.19	116.31	121.50
2	H	232	PHE	N-CA-C	5.19	116.94	111.28
3	V	248	VAL	N-CA-C	-5.19	97.67	108.88
2	B	353	GLN	CB-CG-CD	-5.19	103.78	112.60
2	N	248	VAL	N-CA-C	-5.19	97.68	108.88
2	N	371	MET	CA-C-N	5.19	127.18	120.44
2	N	371	MET	C-N-CA	5.19	127.18	120.44
2	F	197	VAL	N-CA-C	-5.19	102.37	109.37
2	F	365	VAL	CA-C-N	5.19	127.23	120.28
2	F	365	VAL	C-N-CA	5.19	127.23	120.28
2	A	210	ARG	CB-CA-C	-5.19	100.75	109.72
2	N	296	GLU	CB-CG-CD	-5.19	103.78	112.60
2	N	550	GLN	OE1-CD-NE2	-5.19	117.41	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	Q	98	TYR	CB-CG-CD1	5.19	128.58	120.80
2	B	197	VAL	N-CA-C	-5.18	102.37	109.37
2	H	218	TYR	CA-C-N	5.18	131.44	121.54
2	H	218	TYR	C-N-CA	5.18	131.44	121.54
2	B	408	ILE	N-CA-C	5.18	115.91	110.62
2	G	210	ARG	CB-CA-C	-5.18	100.76	109.72
2	G	296	GLU	CB-CG-CD	-5.18	103.79	112.60
2	G	545	GLU	CA-C-N	5.18	127.48	120.38
2	G	545	GLU	C-N-CA	5.18	127.48	120.38
2	N	421	LEU	CA-C-N	5.18	127.18	120.44
2	N	421	LEU	C-N-CA	5.18	127.18	120.44
2	H	210	ARG	CB-CA-C	-5.18	100.75	109.72
2	H	353	GLN	CB-CG-CD	-5.18	103.79	112.60
2	H	524	SER	N-CA-CB	-5.18	102.50	110.12
6	R	98	TYR	CB-CG-CD1	5.18	128.57	120.80
5	S	185	ALA	N-CA-C	-5.18	100.96	109.40
5	T	90	GLY	CA-C-N	5.18	127.53	120.54
5	T	90	GLY	C-N-CA	5.18	127.53	120.54
2	B	408	ILE	CA-C-N	5.18	127.47	120.38
2	B	408	ILE	C-N-CA	5.18	127.47	120.38
4	O	456	SER	N-CA-C	5.18	117.82	111.82
5	S	159	LEU	N-CA-CB	5.18	118.70	110.57
5	S	166	SER	N-CA-C	-5.18	101.72	109.95
5	T	69	ALA	N-CA-CB	5.18	119.24	110.49
4	O	454	ALA	CA-C-N	5.17	127.17	120.44
4	O	454	ALA	C-N-CA	5.17	127.17	120.44
2	A	520	GLU	O-C-N	5.17	128.05	122.15
4	M	494	HIS	ND1-CE1-NE2	5.17	113.57	108.40
2	G	197	VAL	N-CA-C	-5.17	102.40	109.37
2	P	210	ARG	CB-CA-C	-5.16	100.79	109.72
5	S	69	ALA	N-CA-CB	5.16	119.22	110.49
6	R	88	HIS	CA-CB-CG	5.16	118.96	113.80
2	B	489	ALA	CA-C-N	5.16	127.20	120.28
2	B	489	ALA	C-N-CA	5.16	127.20	120.28
5	T	166	SER	N-CA-C	-5.16	101.74	109.95
5	T	185	ALA	N-CA-C	-5.16	100.99	109.40
6	R	430	LEU	CA-C-O	5.16	125.93	120.10
2	E	210	ARG	CB-CA-C	-5.16	100.79	109.72
3	K	232	PHE	N-CA-C	5.16	116.91	111.28
4	M	377	ASP	CB-CA-C	-5.16	102.22	110.79
2	F	210	ARG	CB-CA-C	-5.16	100.79	109.72
2	F	520	GLU	O-C-N	5.16	128.03	122.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	R	643	THR	CB-CA-C	-5.16	102.22	110.79
2	A	195	HIS	N-CA-C	-5.16	99.54	108.52
2	P	195	HIS	N-CA-C	-5.16	99.55	108.52
5	T	56	PRO	N-CA-C	-5.16	101.84	112.47
2	P	232	PHE	N-CA-C	5.16	116.90	111.28
2	H	197	VAL	N-CA-C	-5.16	102.41	109.37
2	F	373	GLU	N-CA-CB	5.16	118.16	110.22
4	M	454	ALA	CA-C-N	5.15	127.14	120.44
4	M	454	ALA	C-N-CA	5.15	127.14	120.44
6	Q	476	ILE	CA-C-N	5.15	127.18	120.28
6	Q	476	ILE	C-N-CA	5.15	127.18	120.28
4	O	531	GLU	CB-CG-CD	-5.15	103.84	112.60
2	P	530	LEU	N-CA-CB	5.15	117.48	110.01
4	M	456	SER	N-CA-C	5.15	117.79	111.82
2	N	210	ARG	CB-CA-C	-5.15	100.82	109.72
2	A	365	VAL	CA-C-N	5.14	127.17	120.28
2	A	365	VAL	C-N-CA	5.14	127.17	120.28
4	O	494	HIS	ND1-CE1-NE2	5.14	113.54	108.40
2	F	495	GLN	O-C-N	-5.14	116.77	122.07
2	F	544	TRP	CA-C-O	-5.14	115.10	120.55
2	P	421	LEU	CA-C-N	5.14	127.12	120.44
2	P	421	LEU	C-N-CA	5.14	127.12	120.44
6	R	528	LEU	N-CA-CB	5.14	117.68	110.12
2	F	195	HIS	N-CA-C	-5.14	99.58	108.52
2	G	353	GLN	CB-CG-CD	-5.14	103.86	112.60
6	Q	643	THR	CB-CA-C	-5.14	102.26	110.79
4	O	377	ASP	CB-CA-C	-5.14	102.27	110.79
2	N	530	LEU	N-CA-CB	5.14	117.46	110.01
2	H	408	ILE	CA-C-N	5.14	127.42	120.38
2	H	408	ILE	C-N-CA	5.14	127.42	120.38
5	S	23	LYS	N-CA-CB	5.14	118.24	110.28
2	P	371	MET	CA-C-N	5.13	127.11	120.44
2	P	371	MET	C-N-CA	5.13	127.11	120.44
2	H	195	HIS	N-CA-C	-5.13	99.59	108.52
2	F	436	SER	N-CA-C	5.13	116.87	111.28
2	F	491	ARG	N-CA-C	5.13	116.95	111.36
5	S	56	PRO	N-CA-C	-5.13	101.90	112.47
4	M	531	GLU	CB-CG-CD	-5.13	103.88	112.60
2	A	465	GLN	CA-C-N	5.13	127.15	120.28
2	A	465	GLN	C-N-CA	5.13	127.15	120.28
2	E	229	TYR	CA-C-N	5.13	127.15	120.28
2	E	229	TYR	C-N-CA	5.13	127.15	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	P	432	ARG	N-CA-C	5.13	116.87	111.28
4	M	343	ARG	NE-CZ-NH1	-5.13	116.37	121.50
2	H	530	LEU	CA-C-N	5.13	127.15	120.28
2	H	530	LEU	C-N-CA	5.13	127.15	120.28
2	A	352	ASN	N-CA-CB	5.13	117.75	110.16
3	K	195	HIS	N-CA-C	-5.13	99.60	108.52
4	M	428	GLU	N-CA-CB	5.13	117.66	110.12
6	Q	154	GLN	CB-CA-C	-5.13	102.28	110.79
2	F	238	THR	CB-CA-C	-5.12	102.83	110.88
2	A	436	SER	N-CA-C	5.12	116.86	111.28
2	E	465	GLN	CA-C-N	5.12	127.15	120.28
2	E	465	GLN	C-N-CA	5.12	127.15	120.28
2	G	195	HIS	N-CA-C	-5.12	99.61	108.52
2	P	550	GLN	OE1-CD-NE2	-5.12	117.48	122.60
5	S	110	VAL	N-CA-C	-5.12	100.50	108.44
6	R	589	LYS	CA-C-N	5.12	127.66	120.28
6	R	589	LYS	C-N-CA	5.12	127.66	120.28
3	L	195	HIS	N-CA-C	-5.12	99.61	108.52
6	R	166	GLY	CA-C-N	5.12	126.24	119.84
6	R	166	GLY	C-N-CA	5.12	126.24	119.84
3	D	195	HIS	N-CA-C	-5.12	99.61	108.52
4	M	494	HIS	N-CA-C	-5.12	105.59	111.07
3	V	195	HIS	N-CA-C	-5.12	99.61	108.52
6	Q	586	MET	CA-C-O	5.12	125.98	120.55
6	R	154	GLN	CB-CA-C	-5.12	102.29	110.79
6	R	562	GLN	OE1-CD-NE2	5.12	127.72	122.60
2	G	364	MET	N-CA-C	5.12	116.86	111.28
2	G	530	LEU	CA-C-N	5.12	127.14	120.28
2	G	530	LEU	C-N-CA	5.12	127.14	120.28
2	E	195	HIS	N-CA-C	-5.12	99.62	108.52
2	E	495	GLN	O-C-N	-5.12	116.80	122.07
4	M	514	PHE	CB-CG-CD1	5.12	129.40	120.70
3	L	210	ARG	CB-CA-C	-5.12	100.87	109.72
2	G	489	ALA	CA-C-N	5.11	127.13	120.28
2	G	489	ALA	C-N-CA	5.11	127.13	120.28
2	H	502	ASP	N-CA-C	-5.11	106.55	112.89
6	Q	212	GLN	CA-C-N	5.11	127.13	120.28
6	Q	212	GLN	C-N-CA	5.11	127.13	120.28
1	J	18	ALA	N-CA-C	5.11	117.59	111.71
4	O	514	PHE	CB-CG-CD1	5.11	129.39	120.70
2	B	195	HIS	N-CA-C	-5.11	99.63	108.52
4	O	538	LYS	O-C-N	5.11	127.54	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	M	528	THR	CA-C-O	5.11	125.97	120.55
2	N	391	SER	CA-C-N	5.11	124.72	119.05
2	N	391	SER	C-N-CA	5.11	124.72	119.05
2	H	408	ILE	N-CA-C	5.11	115.83	110.62
6	Q	88	HIS	CA-CB-CG	5.11	118.91	113.80
2	B	502	ASP	N-CA-C	-5.11	106.56	112.89
2	E	544	TRP	CA-C-O	-5.11	115.14	120.55
4	O	435	GLY	CA-C-N	5.11	127.54	120.29
4	O	435	GLY	C-N-CA	5.11	127.54	120.29
6	Q	430	LEU	CA-C-O	5.11	125.87	120.10
2	A	373	GLU	N-CA-CB	5.11	118.08	110.22
2	F	494	HIS	ND1-CE1-NE2	5.11	113.50	108.40
6	Q	528	LEU	N-CA-CB	5.11	117.62	110.12
5	T	23	LYS	N-CA-CB	5.11	118.19	110.28
4	O	494	HIS	N-CA-C	-5.10	105.61	111.07
2	F	465	GLN	CA-C-N	5.10	127.12	120.28
2	F	465	GLN	C-N-CA	5.10	127.12	120.28
6	Q	792	ALA	CA-C-O	5.10	125.95	120.70
6	R	476	ILE	CA-C-N	5.10	127.12	120.28
6	R	476	ILE	C-N-CA	5.10	127.12	120.28
2	F	229	TYR	CA-C-N	5.10	127.11	120.28
2	F	229	TYR	C-N-CA	5.10	127.11	120.28
2	G	408	ILE	CA-C-N	5.10	127.36	120.38
2	G	408	ILE	C-N-CA	5.10	127.36	120.38
2	P	331	ASN	CB-CA-C	5.10	119.79	110.10
2	H	489	ALA	CA-C-N	5.10	127.11	120.28
2	H	489	ALA	C-N-CA	5.10	127.11	120.28
2	B	530	LEU	CA-C-N	5.10	127.11	120.28
2	B	530	LEU	C-N-CA	5.10	127.11	120.28
2	E	352	ASN	N-CA-CB	5.10	117.70	110.16
3	K	278	LYS	CB-CA-C	-5.10	102.19	110.85
4	O	478	ARG	NE-CZ-NH1	-5.10	116.40	121.50
2	P	238	THR	CB-CA-C	-5.10	102.88	110.88
3	V	278	LYS	CB-CA-C	-5.10	102.18	110.85
6	Q	166	GLY	CA-C-N	5.10	126.21	119.84
6	Q	166	GLY	C-N-CA	5.10	126.21	119.84
2	A	495	GLN	O-C-N	-5.09	116.82	122.07
2	G	368	ARG	N-CA-C	-5.09	104.47	111.81
2	E	412	TYR	CA-C-O	5.09	125.95	120.55
3	K	210	ARG	CB-CA-C	-5.09	100.91	109.72
2	F	412	TYR	CA-C-O	5.09	125.95	120.55
6	R	397	VAL	CB-CA-C	-5.09	105.26	112.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	S	90	GLY	CA-C-N	5.09	127.42	120.54
5	S	90	GLY	C-N-CA	5.09	127.42	120.54
2	N	278	LYS	CB-CA-C	-5.09	102.19	110.85
6	Q	589	LYS	CA-C-N	5.09	127.61	120.28
6	Q	589	LYS	C-N-CA	5.09	127.61	120.28
2	A	491	ARG	N-CA-C	5.09	116.91	111.36
6	R	586	MET	CA-C-O	5.09	125.94	120.55
3	D	310	LYS	N-CA-CB	5.09	119.69	111.65
2	B	368	ARG	N-CA-C	-5.08	104.49	111.81
6	Q	732	SER	N-CA-C	-5.08	106.92	113.02
2	F	352	ASN	N-CA-CB	5.08	117.68	110.16
2	N	195	HIS	N-CA-C	-5.08	99.68	108.52
6	Q	808	TYR	CA-C-N	5.08	127.05	120.44
6	Q	808	TYR	C-N-CA	5.08	127.05	120.44
5	T	33	ILE	N-CA-C	-5.08	102.30	109.21
3	D	278	LYS	CB-CA-C	-5.08	102.22	110.85
4	O	363	ASN	N-CA-C	5.08	116.90	111.36
2	A	381	SER	N-CA-CB	5.08	117.37	110.01
2	E	238	THR	CB-CA-C	-5.08	102.91	110.88
2	H	368	ARG	N-CA-C	-5.08	104.50	111.81
2	E	310	LYS	N-CA-CB	5.08	119.67	111.65
3	K	310	LYS	N-CA-CB	5.08	119.67	111.65
6	Q	112	VAL	CB-CA-C	-5.08	105.29	112.14
2	G	502	ASP	N-CA-C	-5.07	106.60	112.89
2	N	310	LYS	N-CA-CB	5.07	119.67	111.65
5	S	130	LYS	N-CA-C	-5.07	101.83	109.85
1	C	18	ALA	N-CA-C	5.07	117.54	111.71
4	M	363	ASN	N-CA-C	5.07	116.89	111.36
2	F	310	LYS	N-CA-CB	5.07	119.66	111.65
3	V	229	TYR	CA-C-N	5.07	127.08	120.28
3	V	229	TYR	C-N-CA	5.07	127.08	120.28
3	V	310	LYS	N-CA-CB	5.07	119.66	111.65
3	L	229	TYR	CA-C-N	5.07	127.08	120.28
3	L	229	TYR	C-N-CA	5.07	127.08	120.28
2	B	310	LYS	N-CA-CB	5.07	119.66	111.65
2	G	278	LYS	CB-CA-C	-5.07	102.23	110.85
2	B	278	LYS	CB-CA-C	-5.07	102.24	110.85
2	A	238	THR	CB-CA-C	-5.07	102.92	110.88
2	A	388	VAL	N-CA-C	-5.07	107.49	113.42
4	O	462	LYS	CA-C-N	5.07	127.07	120.28
4	O	462	LYS	C-N-CA	5.07	127.07	120.28
4	M	352	ASN	CA-CB-CG	-5.07	107.53	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	F	362	ASP	CA-C-N	5.07	127.03	120.44
2	F	362	ASP	C-N-CA	5.07	127.03	120.44
2	A	362	ASP	CA-C-N	5.07	127.02	120.44
2	A	362	ASP	C-N-CA	5.07	127.02	120.44
2	A	494	HIS	ND1-CE1-NE2	5.07	113.47	108.40
2	E	373	GLU	N-CA-CB	5.07	118.02	110.22
2	E	381	SER	N-CA-CB	5.07	117.35	110.01
4	O	343	ARG	NE-CZ-NH1	-5.07	116.44	121.50
2	H	310	LYS	N-CA-CB	5.07	119.65	111.65
3	L	238	THR	CB-CA-C	-5.07	102.93	110.88
6	Q	397	VAL	CB-CA-C	-5.07	105.30	112.14
5	T	110	VAL	N-CA-C	-5.07	100.59	108.44
6	R	212	GLN	CA-C-N	5.07	127.07	120.28
6	R	212	GLN	C-N-CA	5.07	127.07	120.28
2	H	278	LYS	CB-CA-C	-5.06	102.24	110.85
6	R	112	VAL	CB-CA-C	-5.06	105.31	112.14
6	R	527	ILE	CB-CA-C	5.06	118.97	112.14
2	A	310	LYS	N-CA-CB	5.06	119.65	111.65
3	L	310	LYS	N-CA-CB	5.06	119.65	111.65
2	A	412	TYR	CA-C-O	5.06	125.91	120.55
2	G	229	TYR	CA-C-N	5.06	127.06	120.28
2	G	229	TYR	C-N-CA	5.06	127.06	120.28
2	F	512	ASP	CA-CB-CG	5.06	117.66	112.60
6	R	792	ALA	CA-C-O	5.06	125.91	120.70
3	K	229	TYR	CA-C-N	5.06	127.06	120.28
3	K	229	TYR	C-N-CA	5.06	127.06	120.28
2	P	310	LYS	N-CA-CB	5.06	119.64	111.65
6	R	808	TYR	CA-C-N	5.06	127.02	120.44
6	R	808	TYR	C-N-CA	5.06	127.02	120.44
2	G	341	HIS	CE1-NE2-CD2	-5.05	103.94	109.00
2	N	229	TYR	CA-C-N	5.05	127.05	120.28
2	N	229	TYR	C-N-CA	5.05	127.05	120.28
2	N	336	GLN	CA-C-O	5.05	125.78	120.42
2	H	489	ALA	N-CA-C	5.05	116.79	111.28
2	F	381	SER	N-CA-CB	5.05	117.34	110.01
5	S	66	ASP	N-CA-C	-5.05	99.74	108.69
2	A	229	TYR	CA-C-N	5.05	127.05	120.28
2	A	229	TYR	C-N-CA	5.05	127.05	120.28
4	O	426	ILE	N-CA-C	5.05	115.77	110.62
2	P	278	LYS	CB-CA-C	-5.05	102.26	110.85
2	G	367	GLN	CB-CG-CD	-5.05	104.01	112.60
2	E	341	HIS	CG-CD2-NE2	5.05	112.25	107.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	H	364	MET	N-CA-C	5.05	116.78	111.28
3	L	278	LYS	CB-CA-C	-5.05	102.26	110.85
4	O	528	THR	CA-C-O	5.05	125.90	120.55
4	M	435	GLY	CA-C-N	5.05	127.46	120.29
4	M	435	GLY	C-N-CA	5.05	127.46	120.29
6	Q	527	ILE	CB-CA-C	5.05	118.96	112.14
5	T	130	LYS	N-CA-C	-5.05	101.87	109.85
6	Q	714	ASN	N-CA-C	5.05	117.44	111.33
2	A	544	TRP	CA-C-O	-5.05	115.20	120.55
2	G	310	LYS	N-CA-CB	5.05	119.62	111.65
2	E	512	ASP	CA-CB-CG	5.05	117.65	112.60
2	P	229	TYR	CA-C-N	5.05	127.04	120.28
2	P	229	TYR	C-N-CA	5.05	127.04	120.28
2	H	367	GLN	CB-CG-CD	-5.05	104.02	112.60
6	Q	217	SER	CA-C-N	5.05	127.04	120.28
6	Q	217	SER	C-N-CA	5.05	127.04	120.28
6	Q	717	ARG	N-CA-C	-5.05	105.91	111.71
5	T	66	ASP	N-CA-C	-5.05	99.76	108.69
2	E	278	LYS	CB-CA-C	-5.04	102.27	110.85
2	B	229	TYR	CA-C-N	5.04	127.04	120.28
2	B	229	TYR	C-N-CA	5.04	127.04	120.28
2	B	364	MET	N-CA-C	5.04	116.78	111.28
4	O	395	SER	N-CA-C	5.04	116.78	111.28
2	F	278	LYS	CB-CA-C	-5.04	102.28	110.85
6	R	732	SER	N-CA-C	-5.04	106.97	113.02
2	B	367	GLN	CB-CG-CD	-5.04	104.03	112.60
2	E	362	ASP	CA-C-N	5.04	127.00	120.44
2	E	362	ASP	C-N-CA	5.04	127.00	120.44
1	C	135	ARG	N-CA-C	5.04	116.77	111.28
2	P	422	THR	CB-CA-C	-5.04	102.97	110.88
2	A	278	LYS	CB-CA-C	-5.04	102.28	110.85
2	H	229	TYR	CA-C-N	5.04	127.03	120.28
2	H	229	TYR	C-N-CA	5.04	127.03	120.28
6	R	423	LEU	CB-CA-C	-5.04	102.42	110.79
4	M	538	LYS	O-C-N	5.04	127.46	122.12
2	P	391	SER	CA-C-N	5.04	124.64	119.05
2	P	391	SER	C-N-CA	5.04	124.64	119.05
2	H	495	GLN	CB-CA-C	-5.04	102.94	110.90
6	Q	71	ASP	CB-CA-C	5.03	119.14	110.79
6	Q	737	LYS	CA-C-O	-5.03	113.80	118.73
6	R	71	ASP	CB-CA-C	5.03	119.14	110.79
3	D	229	TYR	CA-C-N	5.03	127.02	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	229	TYR	C-N-CA	5.03	127.02	120.28
6	Q	410	ASP	CA-C-N	5.03	126.98	120.44
6	Q	410	ASP	C-N-CA	5.03	126.98	120.44
6	Q	562	GLN	OE1-CD-NE2	5.03	127.63	122.60
5	T	21	PRO	CA-C-O	-5.03	113.27	120.56
6	Q	140	HIS	CB-CG-CD2	-5.03	124.66	131.20
6	R	624	ASP	CA-C-O	5.03	124.36	119.08
2	G	495	GLN	CB-CA-C	-5.03	102.96	110.90
4	M	334	VAL	N-CA-CB	5.03	116.43	110.55
5	T	82	SER	N-CA-C	-5.03	102.87	110.06
4	O	454	ALA	CA-C-O	-5.03	115.09	120.42
2	N	331	ASN	CB-CA-C	5.03	119.65	110.10
5	S	21	PRO	CA-C-O	-5.03	113.27	120.56
6	Q	256	LEU	CB-CA-C	-5.03	102.45	110.79
2	B	341	HIS	CE1-NE2-CD2	-5.02	103.98	109.00
6	R	682	ALA	N-CA-C	-5.02	105.80	111.28
4	O	352	ASN	CA-CB-CG	-5.02	107.58	112.60
2	P	336	GLN	CA-C-O	5.02	125.74	120.42
2	F	388	VAL	N-CA-C	-5.02	107.54	113.42
2	A	429	GLU	N-CA-CB	5.02	117.29	110.01
4	O	334	VAL	N-CA-CB	5.02	116.42	110.55
2	N	445	GLN	N-CA-CB	5.02	117.50	110.12
6	Q	423	LEU	CB-CA-C	-5.02	102.46	110.79
2	E	494	HIS	ND1-CE1-NE2	5.02	113.42	108.40
5	S	82	SER	N-CA-C	-5.02	102.89	110.06
6	R	203	LEU	CB-CA-C	-5.02	102.46	110.79
6	R	686	THR	CB-CA-C	-5.02	102.15	110.68
2	N	503	MET	CA-CB-CG	-5.02	104.07	114.10
6	R	717	ARG	N-CA-C	-5.02	105.94	111.71
2	G	489	ALA	N-CA-C	5.01	116.75	111.28
4	M	466	ASP	CA-C-N	5.01	127.00	120.28
4	M	466	ASP	C-N-CA	5.01	127.00	120.28
6	R	678	TYR	N-CA-CB	5.01	117.49	110.12
2	E	429	GLU	N-CA-CB	5.01	117.28	110.01
2	H	341	HIS	CE1-NE2-CD2	-5.01	103.99	109.00
6	Q	265	ASP	CB-CA-C	-5.01	101.05	110.67
4	O	390	LEU	N-CA-CB	5.01	118.96	110.49
4	O	434	ILE	O-C-N	5.01	126.73	121.87
2	N	422	THR	CB-CA-C	-5.01	103.02	110.88
6	Q	678	TYR	N-CA-CB	5.01	117.48	110.12
2	E	341	HIS	CE1-NE2-CD2	-5.01	103.99	109.00
1	J	135	ARG	N-CA-C	5.01	116.74	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	P	385	LEU	N-CA-C	-5.01	107.17	113.28
4	M	462	LYS	CA-C-N	5.01	126.99	120.28
4	M	462	LYS	C-N-CA	5.01	126.99	120.28
2	N	477	ASP	CA-CB-CG	-5.01	107.59	112.60
4	M	338	ASP	CA-C-N	5.00	126.99	120.28
4	M	338	ASP	C-N-CA	5.00	126.99	120.28
6	Q	682	ALA	N-CA-C	-5.00	105.82	111.28
6	R	181	ASN	CA-CB-CG	-5.00	107.59	112.60
6	R	265	ASP	CB-CA-C	-5.00	101.06	110.67
2	P	486	VAL	CA-C-N	5.00	127.52	120.42
2	P	486	VAL	C-N-CA	5.00	127.52	120.42
4	M	454	ALA	CA-C-O	-5.00	115.12	120.42
2	F	453	SER	CA-C-N	5.00	126.98	120.28
2	F	453	SER	C-N-CA	5.00	126.98	120.28
6	Q	489	PHE	CA-C-N	5.00	126.98	120.28
6	Q	489	PHE	C-N-CA	5.00	126.98	120.28
6	Q	686	THR	CB-CA-C	-5.00	102.18	110.68

All (2) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
6	Q	87	ASN	CA
6	R	87	ASN	CA

All (357) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	A	207	TYR	Sidechain
2	A	210	ARG	Sidechain
2	A	227	ARG	Sidechain
2	A	228	ARG	Sidechain
2	A	230	ARG	Sidechain
2	A	232	PHE	Sidechain
2	A	236	TYR	Sidechain
2	A	251	PRO	Peptide
2	A	264	PHE	Sidechain
2	A	268	ARG	Sidechain
2	A	306	HIS	Sidechain
2	A	409	ARG	Sidechain
2	A	470	ARG	Peptide
2	A	491	ARG	Sidechain
2	A	494	HIS	Sidechain

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Mol	Chain	Res	Type	Group
2	B	207	TYR	Sidechain
2	B	210	ARG	Sidechain
2	B	227	ARG	Sidechain
2	B	228	ARG	Sidechain
2	B	230	ARG	Sidechain
2	B	232	PHE	Sidechain
2	B	236	TYR	Sidechain
2	B	251	PRO	Peptide
2	B	264	PHE	Sidechain
2	B	268	ARG	Sidechain
2	B	306	HIS	Sidechain
2	B	341	HIS	Sidechain
2	B	367	GLN	Peptide
2	B	368	ARG	Sidechain
2	B	383	HIS	Sidechain
2	B	391	SER	Peptide
2	B	412	TYR	Sidechain
2	B	448	PHE	Sidechain
2	B	478	ARG	Sidechain
2	B	494	HIS	Sidechain
2	B	497	ARG	Sidechain
2	B	505	ARG	Sidechain
2	B	508	ARG	Sidechain
2	B	513	ARG	Sidechain
2	B	522	PHE	Sidechain
2	B	529	PHE	Sidechain
2	B	547	PHE	Sidechain
1	C	148	TYR	Sidechain
3	D	207	TYR	Sidechain
3	D	210	ARG	Sidechain
3	D	227	ARG	Sidechain
3	D	228	ARG	Sidechain
3	D	230	ARG	Sidechain
3	D	232	PHE	Sidechain
3	D	236	TYR	Sidechain
3	D	251	PRO	Peptide
3	D	264	PHE	Sidechain
3	D	268	ARG	Sidechain
3	D	306	HIS	Sidechain
2	E	207	TYR	Sidechain
2	E	210	ARG	Sidechain
2	E	227	ARG	Sidechain

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Mol	Chain	Res	Type	Group
2	E	228	ARG	Sidechain
2	E	230	ARG	Sidechain
2	E	232	PHE	Sidechain
2	E	236	TYR	Sidechain
2	E	251	PRO	Peptide
2	E	264	PHE	Sidechain
2	E	268	ARG	Sidechain
2	E	306	HIS	Sidechain
2	E	409	ARG	Sidechain
2	E	449	HIS	Sidechain
2	E	470	ARG	Peptide
2	E	491	ARG	Sidechain
2	E	494	HIS	Sidechain
2	F	207	TYR	Sidechain
2	F	210	ARG	Sidechain
2	F	227	ARG	Sidechain
2	F	228	ARG	Sidechain
2	F	230	ARG	Sidechain
2	F	232	PHE	Sidechain
2	F	236	TYR	Sidechain
2	F	251	PRO	Peptide
2	F	264	PHE	Sidechain
2	F	268	ARG	Sidechain
2	F	306	HIS	Sidechain
2	F	409	ARG	Sidechain
2	F	449	HIS	Sidechain
2	F	470	ARG	Peptide
2	F	491	ARG	Sidechain
2	F	494	HIS	Sidechain
2	G	207	TYR	Sidechain
2	G	210	ARG	Sidechain
2	G	227	ARG	Sidechain
2	G	228	ARG	Sidechain
2	G	230	ARG	Sidechain
2	G	232	PHE	Sidechain
2	G	236	TYR	Sidechain
2	G	251	PRO	Peptide
2	G	264	PHE	Sidechain
2	G	268	ARG	Sidechain
2	G	306	HIS	Sidechain
2	G	341	HIS	Sidechain
2	G	367	GLN	Peptide

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Mol	Chain	Res	Type	Group
2	G	368	ARG	Sidechain
2	G	383	HIS	Sidechain
2	G	391	SER	Peptide
2	G	412	TYR	Sidechain
2	G	448	PHE	Sidechain
2	G	478	ARG	Sidechain
2	G	494	HIS	Sidechain
2	G	497	ARG	Sidechain
2	G	505	ARG	Sidechain
2	G	508	ARG	Sidechain
2	G	513	ARG	Sidechain
2	G	522	PHE	Sidechain
2	G	529	PHE	Sidechain
2	G	547	PHE	Sidechain
2	H	207	TYR	Sidechain
2	H	210	ARG	Sidechain
2	H	227	ARG	Sidechain
2	H	228	ARG	Sidechain
2	H	230	ARG	Sidechain
2	H	232	PHE	Sidechain
2	H	236	TYR	Sidechain
2	H	251	PRO	Peptide
2	H	264	PHE	Sidechain
2	H	268	ARG	Sidechain
2	H	306	HIS	Sidechain
2	H	341	HIS	Sidechain
2	H	367	GLN	Peptide
2	H	368	ARG	Sidechain
2	H	383	HIS	Sidechain
2	H	391	SER	Peptide
2	H	412	TYR	Sidechain
2	H	448	PHE	Sidechain
2	H	478	ARG	Sidechain
2	H	494	HIS	Sidechain
2	H	497	ARG	Sidechain
2	H	505	ARG	Sidechain
2	H	508	ARG	Sidechain
2	H	513	ARG	Sidechain
2	H	522	PHE	Sidechain
2	H	529	PHE	Sidechain
2	H	547	PHE	Sidechain
1	J	148	TYR	Sidechain

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Mol	Chain	Res	Type	Group
3	K	207	TYR	Sidechain
3	K	210	ARG	Sidechain
3	K	227	ARG	Sidechain
3	K	228	ARG	Sidechain
3	K	230	ARG	Sidechain
3	K	232	PHE	Sidechain
3	K	236	TYR	Sidechain
3	K	251	PRO	Peptide
3	K	264	PHE	Sidechain
3	K	268	ARG	Sidechain
3	K	306	HIS	Sidechain
3	L	207	TYR	Sidechain
3	L	210	ARG	Sidechain
3	L	227	ARG	Sidechain
3	L	228	ARG	Sidechain
3	L	230	ARG	Sidechain
3	L	232	PHE	Sidechain
3	L	236	TYR	Sidechain
3	L	251	PRO	Peptide
3	L	264	PHE	Sidechain
3	L	268	ARG	Sidechain
3	L	306	HIS	Sidechain
4	M	343	ARG	Sidechain
4	M	378	PHE	Sidechain
4	M	412	TYR	Sidechain
4	M	430	TYR	Sidechain
4	M	452	HIS	Sidechain
4	M	497	ARG	Sidechain
4	M	513	ARG	Sidechain
2	N	207	TYR	Sidechain
2	N	210	ARG	Sidechain
2	N	227	ARG	Sidechain
2	N	228	ARG	Sidechain
2	N	230	ARG	Sidechain
2	N	232	PHE	Sidechain
2	N	236	TYR	Sidechain
2	N	251	PRO	Peptide
2	N	264	PHE	Sidechain
2	N	268	ARG	Sidechain
2	N	306	HIS	Sidechain
2	N	378	PHE	Sidechain
2	N	391	SER	Peptide

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Mol	Chain	Res	Type	Group
2	N	470	ARG	Peptide
2	N	497	ARG	Sidechain
2	N	516	ARG	Sidechain
4	O	343	ARG	Sidechain
4	O	378	PHE	Sidechain
4	O	412	TYR	Sidechain
4	O	430	TYR	Sidechain
4	O	452	HIS	Sidechain
4	O	497	ARG	Sidechain
4	O	513	ARG	Sidechain
2	P	207	TYR	Sidechain
2	P	210	ARG	Sidechain
2	P	227	ARG	Sidechain
2	P	228	ARG	Sidechain
2	P	230	ARG	Sidechain
2	P	232	PHE	Sidechain
2	P	236	TYR	Sidechain
2	P	251	PRO	Peptide
2	P	264	PHE	Sidechain
2	P	268	ARG	Sidechain
2	P	306	HIS	Sidechain
2	P	378	PHE	Sidechain
2	P	391	SER	Peptide
2	P	470	ARG	Peptide
2	P	497	ARG	Sidechain
2	P	516	ARG	Sidechain
6	Q	101	ASN	Mainchain,Peptide
6	Q	105	ARG	Sidechain
6	Q	107	TYR	Sidechain
6	Q	140	HIS	Sidechain
6	Q	149	TYR	Sidechain
6	Q	158	TYR	Sidechain
6	Q	231	TYR	Sidechain
6	Q	233	ASP	Peptide
6	Q	285	HIS	Sidechain
6	Q	302	TYR	Sidechain
6	Q	399	HIS	Sidechain
6	Q	407	PRO	Mainchain
6	Q	426	TYR	Sidechain
6	Q	429	ARG	Sidechain
6	Q	432	TYR	Mainchain,Sidechain
6	Q	438	ALA	Mainchain,Peptide

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Mol	Chain	Res	Type	Group
6	Q	439	TYR	Sidechain
6	Q	471	ARG	Sidechain
6	Q	473	TYR	Sidechain
6	Q	484	THR	Mainchain,Peptide
6	Q	489	PHE	Sidechain
6	Q	494	TYR	Sidechain
6	Q	498	ARG	Sidechain
6	Q	506	ARG	Sidechain
6	Q	53	ARG	Sidechain
6	Q	561	GLU	Mainchain
6	Q	570	HIS	Peptide
6	Q	591	TYR	Sidechain
6	Q	597	ARG	Sidechain
6	Q	599	ARG	Sidechain
6	Q	622	TYR	Sidechain
6	Q	63	TYR	Sidechain
6	Q	634	PHE	Sidechain
6	Q	638	HIS	Sidechain
6	Q	647	ARG	Peptide
6	Q	650	GLY	Peptide
6	Q	678	TYR	Sidechain
6	Q	680	PHE	Sidechain
6	Q	688	TYR	Sidechain
6	Q	690	GLU	Peptide
6	Q	713	ARG	Sidechain
6	Q	715	PHE	Sidechain
6	Q	717	ARG	Sidechain
6	Q	742	ARG	Sidechain
6	Q	745	TYR	Sidechain
6	Q	768	TYR	Sidechain
6	Q	771	GLY	Mainchain
6	Q	773	ARG	Sidechain
6	Q	805	TYR	Sidechain
6	Q	808	TYR	Sidechain
6	Q	820	TYR	Sidechain
6	Q	93	TYR	Sidechain
6	R	101	ASN	Mainchain,Peptide
6	R	105	ARG	Sidechain
6	R	107	TYR	Sidechain
6	R	140	HIS	Sidechain
6	R	149	TYR	Sidechain
6	R	158	TYR	Sidechain

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Mol	Chain	Res	Type	Group
6	R	194	HIS	Sidechain
6	R	231	TYR	Sidechain
6	R	233	ASP	Peptide
6	R	285	HIS	Sidechain
6	R	302	TYR	Sidechain
6	R	399	HIS	Sidechain
6	R	407	PRO	Mainchain
6	R	426	TYR	Sidechain
6	R	429	ARG	Sidechain
6	R	432	TYR	Mainchain,Sidechain
6	R	438	ALA	Mainchain,Peptide
6	R	439	TYR	Sidechain
6	R	471	ARG	Sidechain
6	R	473	TYR	Sidechain
6	R	484	THR	Mainchain,Peptide
6	R	489	PHE	Sidechain
6	R	494	TYR	Sidechain
6	R	498	ARG	Sidechain
6	R	506	ARG	Sidechain
6	R	53	ARG	Sidechain
6	R	561	GLU	Mainchain
6	R	570	HIS	Peptide
6	R	591	TYR	Sidechain
6	R	597	ARG	Sidechain
6	R	599	ARG	Sidechain
6	R	622	TYR	Sidechain
6	R	63	TYR	Sidechain
6	R	634	PHE	Sidechain
6	R	638	HIS	Sidechain
6	R	647	ARG	Peptide
6	R	650	GLY	Peptide
6	R	678	TYR	Sidechain
6	R	680	PHE	Sidechain
6	R	688	TYR	Sidechain
6	R	690	GLU	Peptide
6	R	713	ARG	Sidechain
6	R	715	PHE	Sidechain
6	R	717	ARG	Sidechain
6	R	742	ARG	Sidechain
6	R	745	TYR	Sidechain
6	R	768	TYR	Sidechain
6	R	771	GLY	Mainchain

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Mol	Chain	Res	Type	Group
6	R	773	ARG	Sidechain
6	R	805	TYR	Sidechain
6	R	808	TYR	Sidechain
6	R	820	TYR	Sidechain
6	R	93	TYR	Sidechain
5	S	120	HIS	Sidechain
5	S	122	PHE	Sidechain
5	S	127	TYR	Sidechain
5	S	132	PHE	Sidechain
5	S	157	PHE	Sidechain
5	S	170	TYR	Sidechain
5	S	48	TYR	Sidechain
5	S	50	TYR	Sidechain
5	S	52	ARG	Sidechain
5	S	64	ARG	Sidechain
5	S	80	HIS	Sidechain
5	S	84	ARG	Sidechain
5	T	120	HIS	Sidechain
5	T	122	PHE	Sidechain
5	T	127	TYR	Sidechain
5	T	132	PHE	Sidechain
5	T	157	PHE	Sidechain
5	T	170	TYR	Sidechain
5	T	48	TYR	Sidechain
5	T	50	TYR	Sidechain
5	T	52	ARG	Sidechain
5	T	64	ARG	Sidechain
5	T	80	HIS	Sidechain
5	T	84	ARG	Sidechain
3	V	207	TYR	Sidechain
3	V	210	ARG	Sidechain
3	V	227	ARG	Sidechain
3	V	228	ARG	Sidechain
3	V	230	ARG	Sidechain
3	V	232	PHE	Sidechain
3	V	236	TYR	Sidechain
3	V	251	PRO	Peptide
3	V	264	PHE	Sidechain
3	V	268	ARG	Sidechain
3	V	306	HIS	Sidechain

5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	C	2417	0	2432	219	0
1	J	2417	0	2430	249	0
2	A	2843	2845	2835	324	0
2	B	2843	2845	2836	469	0
2	E	2843	2845	2835	283	0
2	F	2843	2845	2835	235	0
2	G	2843	2845	2834	519	0
2	H	2843	2845	2833	459	0
2	N	2843	2845	2833	302	0
2	P	2843	2845	2834	229	0
3	D	1053	1059	1056	113	0
3	K	1053	1059	1055	131	0
3	L	1053	1059	1054	139	0
3	V	1053	1059	1056	109	0
4	M	1791	1788	1785	3	0
4	O	1791	1788	1785	2	0
5	S	1436	1457	1453	87	0
5	T	1436	1457	1453	84	0
6	Q	5978	5981	5974	471	0
6	R	5978	5981	5976	437	0
All	All	50200	45448	50184	3768	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 38.

All (3768) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:350:LEU:HD22	2:A:385:LEU:CG	1.21	1.65
2:G:350:LEU:HD22	2:E:385:LEU:CG	1.21	1.61
2:H:350:LEU:HD22	2:F:385:LEU:CG	1.21	1.59
1:J:217:PRO:CB	2:G:390:LEU:HD12	1.25	1.59
1:J:217:PRO:CD	2:G:390:LEU:HG	1.16	1.58
2:G:248:VAL:CG2	2:G:443:GLN:HE22	0.97	1.58
2:H:248:VAL:CG2	2:H:443:GLN:HE22	0.98	1.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:248:VAL:CG2	2:B:443:GLN:HE22	0.98	1.55
1:C:217:PRO:CD	2:B:390:LEU:HG	1.37	1.54
2:A:250:PRO:CG	2:A:433:LEU:HG	1.36	1.52
2:P:475:GLN:CD	2:N:311:GLU:HA	1.27	1.52
2:F:250:PRO:CG	2:F:433:LEU:HG	1.37	1.52
2:E:250:PRO:CG	2:E:433:LEU:HG	1.36	1.51
2:H:530:LEU:HD21	2:F:544:TRP:CD1	1.47	1.49
1:J:217:PRO:HD2	2:G:390:LEU:CG	1.41	1.49
2:G:530:LEU:HD21	2:E:544:TRP:CD1	1.47	1.49
2:A:333:PHE:CG	2:N:333:PHE:HD1	1.28	1.48
2:B:246:VAL:HG22	2:B:503:MET:CE	1.41	1.47
1:J:261:ASN:ND2	1:C:90:GLU:CG	1.74	1.47
1:C:217:PRO:CB	2:B:390:LEU:HD12	1.42	1.47
2:B:530:LEU:HD21	2:A:544:TRP:CD1	1.47	1.47
2:A:196:LYS:NZ	3:D:196:LYS:HZ2	1.08	1.47
2:H:350:LEU:CD2	2:F:385:LEU:CG	1.92	1.47
2:G:350:LEU:CD2	2:E:385:LEU:CG	1.92	1.47
1:J:90:GLU:CG	1:C:261:ASN:ND2	1.74	1.46
2:H:246:VAL:HG22	2:H:503:MET:CE	1.41	1.46
1:J:90:GLU:CG	1:C:261:ASN:CG	1.89	1.46
1:J:247:PHE:CB	6:Q:98:TYR:CE1	1.96	1.46
2:B:350:LEU:CD2	2:A:385:LEU:CG	1.92	1.46
2:F:274:LYS:NZ	2:F:432:ARG:NH1	1.62	1.46
1:J:90:GLU:HG3	1:C:261:ASN:CG	1.41	1.45
2:G:246:VAL:HG22	2:G:503:MET:CE	1.41	1.45
2:A:274:LYS:NZ	2:A:432:ARG:NH1	1.62	1.43
2:G:248:VAL:CG2	2:G:443:GLN:NE2	1.82	1.43
2:B:196:LYS:NZ	2:P:196:LYS:NZ	1.66	1.43
2:P:475:GLN:CD	2:N:311:GLU:CA	1.92	1.43
2:B:350:LEU:HD22	2:A:385:LEU:CD2	1.47	1.43
1:J:261:ASN:CG	1:C:90:GLU:CG	1.89	1.42
2:B:246:VAL:CG2	2:B:503:MET:HE1	1.49	1.42
2:H:350:LEU:HD22	2:F:385:LEU:CD2	1.47	1.42
2:G:246:VAL:CG2	2:G:503:MET:HE1	1.49	1.42
6:Q:721:ASP:CG	6:R:721:ASP:OD2	1.63	1.42
2:A:196:LYS:NZ	3:D:196:LYS:NZ	1.66	1.41
2:G:196:LYS:NZ	2:N:196:LYS:NZ	1.66	1.41
2:H:246:VAL:CG2	2:H:503:MET:HE1	1.49	1.41
2:G:350:LEU:HD22	2:E:385:LEU:CD2	1.47	1.41
2:P:477:ASP:C	2:N:310:LYS:CE	1.75	1.41
2:E:274:LYS:NZ	2:E:432:ARG:NH1	1.62	1.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:196:LYS:NZ	3:L:196:LYS:HZ2	1.03	1.41
2:A:332:LYS:HG2	2:N:331:ASN:N	1.36	1.40
2:H:248:VAL:CG2	2:H:443:GLN:NE2	1.82	1.40
2:N:249:PRO:CA	2:N:433:LEU:HD21	1.52	1.40
1:J:88:VAL:CG1	1:C:82:TYR:OH	1.70	1.39
6:Q:721:ASP:OD2	6:R:721:ASP:CG	1.63	1.39
2:H:196:LYS:NZ	3:V:196:LYS:NZ	1.66	1.39
2:H:246:VAL:CG2	2:H:503:MET:CE	1.97	1.39
2:B:248:VAL:CG2	2:B:443:GLN:NE2	1.82	1.39
2:G:246:VAL:CG2	2:G:503:MET:CE	1.97	1.39
1:J:82:TYR:OH	1:C:88:VAL:CG1	1.70	1.38
1:J:261:ASN:CG	1:C:90:GLU:HG3	1.41	1.38
2:N:250:PRO:CA	2:N:429:GLU:OE2	1.66	1.38
2:P:310:LYS:CD	2:N:480:ASN:HB2	1.27	1.38
2:E:196:LYS:NZ	3:K:196:LYS:NZ	1.66	1.37
1:J:217:PRO:HB2	2:G:390:LEU:CD1	1.52	1.37
2:G:250:PRO:CD	2:G:250:PRO:CG	2.03	1.37
2:E:245:GLY:HA2	2:E:443:GLN:NE2	1.05	1.37
2:P:475:GLN:OE1	2:N:311:GLU:CA	1.68	1.37
2:F:196:LYS:NZ	3:L:196:LYS:NZ	1.66	1.37
3:V:250:PRO:CG	3:V:250:PRO:CD	2.03	1.37
1:J:247:PHE:HB2	6:Q:98:TYR:CD1	1.58	1.37
2:H:250:PRO:CG	2:H:250:PRO:CD	2.03	1.37
2:B:246:VAL:CG2	2:B:503:MET:CE	1.97	1.37
3:D:250:PRO:CD	3:D:250:PRO:CG	2.03	1.37
1:C:217:PRO:HD2	2:B:390:LEU:CG	1.54	1.36
2:A:250:PRO:CG	2:A:250:PRO:CD	2.03	1.36
2:B:196:LYS:NZ	2:P:196:LYS:HZ2	1.17	1.36
2:G:350:LEU:HD22	2:E:385:LEU:CD1	1.54	1.36
2:N:250:PRO:CG	2:N:250:PRO:CD	2.02	1.36
2:H:250:PRO:CB	2:H:436:SER:HB3	1.56	1.36
2:H:350:LEU:HD22	2:F:385:LEU:CD1	1.54	1.36
3:L:250:PRO:CD	3:L:250:PRO:CG	2.03	1.36
2:P:250:PRO:CG	2:P:250:PRO:CD	2.03	1.36
1:J:88:VAL:HG11	1:C:82:TYR:OH	1.19	1.36
2:E:250:PRO:CG	2:E:250:PRO:CD	2.03	1.35
3:K:250:PRO:CG	3:K:250:PRO:CB	2.04	1.35
2:B:250:PRO:CB	2:B:250:PRO:CG	2.04	1.35
2:A:250:PRO:CG	2:A:250:PRO:CB	2.04	1.35
3:K:250:PRO:CG	3:K:250:PRO:CD	2.03	1.35
2:B:371:MET:HE2	2:A:371:MET:CE	1.57	1.35

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:250:PRO:CG	2:B:250:PRO:CD	2.03	1.35
2:E:250:PRO:CG	2:E:250:PRO:CB	2.04	1.35
3:K:311:GLU:O	2:H:476:GLN:CB	1.73	1.35
2:G:250:PRO:CB	2:G:436:SER:HB3	1.56	1.35
2:B:248:VAL:HG21	2:B:443:GLN:NE2	1.38	1.34
3:D:250:PRO:CG	3:D:250:PRO:CB	2.04	1.34
2:F:250:PRO:CG	2:F:250:PRO:CD	2.03	1.34
3:V:250:PRO:CG	3:V:250:PRO:CB	2.04	1.34
2:A:333:PHE:CG	2:N:333:PHE:CD1	2.14	1.34
2:P:475:GLN:NE2	2:N:311:GLU:CA	1.87	1.34
2:B:350:LEU:HD22	2:A:385:LEU:CD1	1.54	1.34
2:H:371:MET:HE2	2:F:371:MET:CE	1.57	1.34
2:B:250:PRO:CB	2:B:436:SER:HB3	1.56	1.34
2:A:245:GLY:CA	2:A:443:GLN:HE21	1.41	1.33
2:N:250:PRO:CA	2:N:250:PRO:N	1.92	1.33
2:G:250:PRO:CG	2:G:250:PRO:CB	2.04	1.33
2:E:250:PRO:N	2:E:250:PRO:CA	1.91	1.33
3:K:250:PRO:N	3:K:250:PRO:CA	1.91	1.33
2:N:250:PRO:CD	2:N:429:GLU:OE2	1.76	1.33
2:H:250:PRO:N	2:H:250:PRO:CA	1.91	1.33
3:V:250:PRO:N	3:V:250:PRO:CA	1.91	1.33
2:G:250:PRO:N	2:G:250:PRO:CA	1.92	1.33
2:F:245:GLY:CA	2:F:443:GLN:HE21	1.41	1.33
3:L:250:PRO:N	3:L:250:PRO:CA	1.92	1.33
2:H:250:PRO:CG	2:H:250:PRO:CB	2.04	1.33
2:F:250:PRO:CG	2:F:250:PRO:CB	2.04	1.33
2:A:245:GLY:HA2	2:A:443:GLN:NE2	1.04	1.33
2:P:310:LYS:CE	2:N:477:ASP:O	1.74	1.33
2:H:267:SER:HB3	2:H:432:ARG:NH1	1.01	1.33
2:F:245:GLY:HA2	2:F:443:GLN:NE2	1.05	1.33
2:B:250:PRO:N	2:B:250:PRO:CA	1.92	1.32
2:P:250:PRO:N	2:P:250:PRO:CA	1.92	1.32
2:G:371:MET:HE2	2:E:371:MET:CE	1.57	1.32
3:L:250:PRO:CG	3:L:250:PRO:CB	2.04	1.32
2:B:267:SER:HB3	2:B:432:ARG:NH1	1.01	1.32
2:G:267:SER:HB3	2:G:432:ARG:NH1	1.01	1.32
2:E:245:GLY:CA	2:E:443:GLN:HE21	1.41	1.32
2:F:250:PRO:N	2:F:250:PRO:CA	1.91	1.31
3:V:250:PRO:CD	3:V:250:PRO:N	1.93	1.31
1:J:90:GLU:OE2	1:C:82:TYR:CE2	1.81	1.31
2:A:250:PRO:CD	2:A:250:PRO:N	1.93	1.31

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:K:250:PRO:CD	3:K:250:PRO:N	1.93	1.31
2:P:310:LYS:HE2	2:N:477:ASP:C	1.50	1.31
3:D:250:PRO:CD	3:D:250:PRO:N	1.93	1.31
2:N:250:PRO:CD	2:N:250:PRO:N	1.93	1.31
2:B:250:PRO:CD	2:B:250:PRO:N	1.93	1.30
2:H:248:VAL:HG21	2:H:443:GLN:NE2	1.38	1.30
3:D:250:PRO:N	3:D:250:PRO:CA	1.92	1.30
2:H:250:PRO:CD	2:H:250:PRO:N	1.93	1.30
1:J:82:TYR:CE2	1:C:90:GLU:OE2	1.81	1.30
2:A:250:PRO:N	2:A:250:PRO:CA	1.91	1.30
2:E:250:PRO:CD	2:E:250:PRO:N	1.93	1.30
2:G:250:PRO:CD	2:G:250:PRO:N	1.93	1.30
1:J:217:PRO:CD	2:G:390:LEU:CG	2.00	1.30
1:J:230:GLU:HB3	6:Q:101:ASN:OD1	1.21	1.29
2:F:250:PRO:CD	2:F:250:PRO:N	1.93	1.29
6:Q:725:THR:OG1	6:R:722:THR:CG2	1.79	1.29
2:P:250:PRO:CD	2:P:250:PRO:N	1.93	1.29
3:L:250:PRO:CD	3:L:250:PRO:N	1.93	1.29
1:J:261:ASN:ND2	1:C:90:GLU:HG2	0.96	1.29
2:G:267:SER:CB	2:G:432:ARG:HH12	1.46	1.29
2:H:267:SER:CB	2:H:432:ARG:NH1	1.95	1.29
2:B:267:SER:CB	2:B:432:ARG:HH12	1.46	1.28
6:Q:683:GLN:CG	6:R:733:LYS:NZ	1.96	1.28
1:C:5:PHE:CB	2:E:331:ASN:OD1	1.78	1.28
2:B:267:SER:CB	2:B:432:ARG:NH1	1.95	1.28
2:P:310:LYS:CE	2:N:477:ASP:C	1.99	1.28
2:G:248:VAL:HG21	2:G:443:GLN:NE2	1.38	1.28
6:Q:722:THR:CG2	6:R:725:THR:OG1	1.79	1.28
1:J:6:SER:O	2:A:331:ASN:N	1.66	1.27
1:J:90:GLU:HG2	1:C:261:ASN:ND2	0.96	1.27
6:Q:683:GLN:CG	6:R:733:LYS:HZ1	1.45	1.27
2:E:196:LYS:NZ	3:K:196:LYS:HZ2	1.20	1.27
2:H:250:PRO:CB	2:H:250:PRO:CA	2.13	1.27
2:H:267:SER:CB	2:H:432:ARG:HH12	1.46	1.27
3:L:250:PRO:CA	3:L:250:PRO:CB	2.13	1.27
1:J:217:PRO:CB	2:G:390:LEU:CD1	2.10	1.27
2:B:250:PRO:CB	2:B:250:PRO:CA	2.13	1.27
2:F:250:PRO:CB	2:F:250:PRO:CA	2.13	1.27
3:D:250:PRO:CB	3:D:250:PRO:CA	2.13	1.26
2:G:267:SER:CB	2:G:432:ARG:NH1	1.95	1.26
2:P:250:PRO:CA	2:P:250:PRO:CB	2.13	1.26

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:Q:733:LYS:NZ	6:R:683:GLN:CG	1.96	1.26
2:G:250:PRO:CB	2:G:250:PRO:CA	2.13	1.26
2:B:350:LEU:CD2	2:A:385:LEU:CD1	2.13	1.26
2:E:250:PRO:CB	2:E:250:PRO:CA	2.13	1.26
2:P:310:LYS:HE2	2:N:477:ASP:O	1.19	1.26
2:A:250:PRO:CB	2:A:250:PRO:CA	2.13	1.25
2:N:250:PRO:CA	2:N:250:PRO:CB	2.13	1.25
3:K:250:PRO:CB	3:K:250:PRO:CA	2.13	1.25
3:V:250:PRO:CB	3:V:250:PRO:CA	2.13	1.25
2:A:333:PHE:CD2	2:N:333:PHE:CD1	2.25	1.25
6:Q:733:LYS:HZ1	6:R:683:GLN:CG	1.48	1.25
2:P:475:GLN:OE1	2:N:311:GLU:C	1.78	1.24
2:N:250:PRO:CD	2:N:429:GLU:CD	2.08	1.24
6:Q:722:THR:HG21	6:R:725:THR:CG2	1.67	1.24
6:Q:725:THR:CG2	6:R:722:THR:HG21	1.67	1.24
2:P:249:PRO:HA	2:P:433:LEU:CD2	1.67	1.24
2:F:250:PRO:HB3	2:F:432:ARG:CB	1.68	1.24
2:G:370:ALA:N	2:E:367:GLN:OE1	1.69	1.24
2:P:475:GLN:NE2	2:N:311:GLU:HA	0.92	1.24
2:P:477:ASP:C	2:N:310:LYS:HE2	0.95	1.24
2:G:350:LEU:CD2	2:E:385:LEU:HG	1.58	1.23
1:C:217:PRO:HB2	2:B:390:LEU:CD1	1.67	1.23
2:A:245:GLY:CA	2:A:443:GLN:NE2	1.99	1.23
2:H:370:ALA:N	2:F:367:GLN:OE1	1.70	1.23
2:A:250:PRO:HB3	2:A:432:ARG:CB	1.68	1.23
2:N:250:PRO:CD	2:N:429:GLU:CG	2.14	1.23
1:J:82:TYR:OH	1:C:88:VAL:HG11	1.20	1.23
2:B:370:ALA:N	2:A:367:GLN:OE1	1.70	1.23
2:H:350:LEU:CD2	2:F:385:LEU:CD1	2.13	1.23
2:G:196:LYS:NZ	2:N:196:LYS:HZ2	1.20	1.22
2:E:406:LEU:CD2	3:K:220:GLN:HE22	1.53	1.22
2:E:250:PRO:HB3	2:E:432:ARG:CB	1.68	1.21
1:J:88:VAL:HG11	1:C:82:TYR:CZ	1.75	1.21
1:C:5:PHE:HB3	2:E:331:ASN:OD1	1.30	1.21
2:P:475:GLN:HE22	2:N:311:GLU:CA	1.51	1.21
2:A:336:GLN:HB2	2:N:332:LYS:NZ	1.55	1.21
2:G:350:LEU:CD2	2:E:385:LEU:CD1	2.13	1.21
2:P:478:ARG:N	2:N:310:LYS:HE2	1.55	1.21
1:J:82:TYR:CZ	1:C:88:VAL:HG11	1.75	1.21
1:C:5:PHE:HB3	2:E:331:ASN:CG	1.66	1.21
2:G:250:PRO:CB	2:G:436:SER:CB	2.18	1.21

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:406:LEU:CD2	3:L:220:GLN:HE22	1.53	1.21
2:A:406:LEU:CD2	3:D:220:GLN:HE22	1.53	1.20
2:H:250:PRO:CB	2:H:436:SER:CB	2.18	1.20
6:Q:683:GLN:HA	6:R:733:LYS:NZ	1.55	1.20
2:B:199:ASP:HB2	2:P:198:GLY:O	1.39	1.20
2:B:250:PRO:CB	2:B:436:SER:CB	2.18	1.20
2:A:199:ASP:HB2	3:D:198:GLY:O	1.39	1.20
1:J:247:PHE:CG	6:Q:98:TYR:HE1	1.60	1.20
2:E:245:GLY:CA	2:E:443:GLN:NE2	1.99	1.20
2:P:310:LYS:CD	2:N:480:ASN:CB	2.18	1.20
1:C:217:PRO:N	2:B:392:PRO:HG3	1.57	1.19
2:B:350:LEU:CD2	2:A:385:LEU:HD11	1.71	1.19
2:H:350:LEU:CD2	2:F:385:LEU:HD11	1.72	1.19
1:J:217:PRO:CA	2:G:390:LEU:HD12	1.73	1.19
2:A:333:PHE:CD2	2:N:333:PHE:HD1	1.61	1.19
2:G:199:ASP:HB2	2:N:198:GLY:O	1.39	1.19
1:J:30:LYS:CE	2:N:283:PRO:HG2	1.73	1.19
2:H:199:ASP:HB2	3:V:198:GLY:O	1.39	1.19
2:B:350:LEU:CD2	2:A:385:LEU:HG	1.58	1.18
2:N:248:VAL:O	2:N:433:LEU:HD23	1.35	1.18
2:H:530:LEU:CD2	2:F:544:TRP:CD1	2.25	1.18
2:F:199:ASP:HB2	3:L:198:GLY:O	1.39	1.18
1:C:5:PHE:CG	2:E:331:ASN:OD1	1.97	1.18
2:B:530:LEU:CD2	2:A:544:TRP:CD1	2.25	1.18
2:E:199:ASP:HB2	3:K:198:GLY:O	1.39	1.18
2:H:350:LEU:CD2	2:F:385:LEU:HG	1.57	1.18
6:Q:733:LYS:NZ	6:R:683:GLN:CA	2.07	1.18
2:H:384:ALA:HB1	2:F:353:GLN:NE2	1.59	1.18
2:G:530:LEU:CD2	2:E:544:TRP:CD1	2.25	1.18
2:P:274:LYS:NZ	2:P:429:GLU:OE1	1.77	1.18
2:N:250:PRO:CA	2:N:429:GLU:CD	2.16	1.18
2:F:245:GLY:CA	2:F:443:GLN:NE2	1.99	1.17
1:C:58:ARG:NH2	2:E:339:TRP:CH2	2.11	1.17
2:P:475:GLN:OE1	2:N:311:GLU:O	1.60	1.17
6:Q:733:LYS:NZ	6:R:683:GLN:HA	1.56	1.17
2:B:250:PRO:HG3	2:B:433:LEU:HA	1.27	1.17
2:B:384:ALA:HB1	2:A:353:GLN:NE2	1.59	1.16
2:A:333:PHE:CE2	2:N:333:PHE:CE1	2.33	1.16
2:G:350:LEU:CD2	2:E:385:LEU:HD11	1.72	1.16
2:A:250:PRO:CG	2:A:433:LEU:CG	2.24	1.16
2:G:384:ALA:HB1	2:E:353:GLN:NE2	1.58	1.16

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:Q:683:GLN:CA	6:R:733:LYS:NZ	2.07	1.16
2:G:248:VAL:HG22	2:G:443:GLN:HE22	1.06	1.16
2:P:475:GLN:OE1	2:N:311:GLU:N	1.79	1.16
2:G:350:LEU:HD21	2:E:385:LEU:HG	1.17	1.16
2:A:332:LYS:HA	2:N:331:ASN:C	1.68	1.15
2:E:250:PRO:CG	2:E:433:LEU:CG	2.24	1.15
2:F:250:PRO:HB3	2:F:432:ARG:HB3	1.22	1.15
1:C:58:ARG:NH2	2:E:339:TRP:HH2	1.43	1.15
2:B:246:VAL:HG23	2:B:503:MET:HE3	1.27	1.15
2:N:249:PRO:HA	2:N:433:LEU:CD2	1.74	1.15
2:H:246:VAL:HG23	2:H:503:MET:HE3	1.26	1.15
1:J:230:GLU:HB3	6:Q:101:ASN:CG	1.71	1.15
2:N:250:PRO:CD	2:N:429:GLU:HG3	1.70	1.15
2:B:381:SER:HB3	2:A:357:LEU:HD21	1.19	1.15
2:F:250:PRO:CG	2:F:433:LEU:CG	2.24	1.15
1:J:5:PHE:N	2:N:332:LYS:CB	2.11	1.14
2:B:530:LEU:CD2	2:A:544:TRP:NE1	2.10	1.14
2:H:196:LYS:NZ	3:V:196:LYS:HZ2	1.25	1.14
1:J:247:PHE:HB2	6:Q:98:TYR:CE1	1.68	1.14
1:C:6:SER:O	2:E:331:ASN:N	1.78	1.14
2:H:250:PRO:CA	2:H:436:SER:HB2	1.78	1.14
2:A:250:PRO:HB3	2:A:432:ARG:HB3	1.22	1.14
2:G:250:PRO:HG3	2:G:433:LEU:HA	1.27	1.14
2:H:248:VAL:HG22	2:H:443:GLN:HE22	1.06	1.14
2:H:357:LEU:HD21	2:F:381:SER:CB	1.78	1.14
1:C:216:ALA:C	2:B:392:PRO:HG3	1.73	1.13
2:G:530:LEU:CD2	2:E:544:TRP:NE1	2.10	1.13
2:P:249:PRO:HA	2:P:433:LEU:HD21	1.16	1.13
1:J:5:PHE:CB	2:N:332:LYS:HB2	1.79	1.13
2:B:357:LEU:HD21	2:A:381:SER:CB	1.78	1.13
2:G:246:VAL:HG23	2:G:503:MET:HE3	1.27	1.13
2:G:357:LEU:HD21	2:E:381:SER:CB	1.78	1.13
2:P:250:PRO:HD3	2:P:433:LEU:CG	1.78	1.13
2:H:530:LEU:CD2	2:F:544:TRP:NE1	2.10	1.13
6:Q:683:GLN:HG3	6:R:733:LYS:HZ1	1.04	1.13
6:Q:733:LYS:HZ1	6:R:683:GLN:HG3	1.12	1.12
2:G:250:PRO:CA	2:G:436:SER:HB2	1.78	1.12
2:G:476:GLN:H	3:L:311:GLU:C	1.45	1.12
2:P:310:LYS:HE3	2:N:476:GLN:O	1.47	1.12
2:N:250:PRO:HA	2:N:432:ARG:HD2	1.26	1.12
2:B:250:PRO:CA	2:B:436:SER:HB2	1.78	1.12

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:247:PHE:HB3	6:Q:98:TYR:CE1	1.75	1.12
1:C:5:PHE:CD1	2:E:331:ASN:OD1	2.01	1.12
1:J:217:PRO:CG	2:G:390:LEU:HG	1.54	1.11
2:H:381:SER:HB3	2:F:357:LEU:HD21	1.19	1.11
2:A:250:PRO:HG3	2:A:433:LEU:HG	1.17	1.11
2:G:479:LEU:HD23	3:L:310:LYS:HE3	1.31	1.11
2:E:250:PRO:HG3	2:E:433:LEU:HG	1.17	1.11
2:H:250:PRO:HG3	2:H:433:LEU:HA	1.28	1.11
2:H:371:MET:CE	2:F:371:MET:HE1	1.81	1.11
2:B:248:VAL:HG22	2:B:443:GLN:HE22	1.07	1.10
1:C:217:PRO:CD	2:B:392:PRO:HG3	1.80	1.10
2:H:381:SER:CB	2:F:357:LEU:HD21	1.81	1.10
6:Q:725:THR:HG21	6:R:722:THR:HG21	1.31	1.10
2:G:381:SER:HB3	2:E:357:LEU:HD21	1.19	1.10
2:N:248:VAL:O	2:N:433:LEU:CD2	1.99	1.10
1:C:5:PHE:CG	2:E:331:ASN:CG	2.30	1.10
2:B:381:SER:CB	2:A:357:LEU:HD21	1.81	1.10
2:H:250:PRO:HB3	2:H:436:SER:HB3	1.20	1.10
2:B:371:MET:CE	2:A:371:MET:HE1	1.81	1.09
2:G:350:LEU:HD22	2:E:385:LEU:HD21	1.32	1.09
2:G:476:GLN:N	3:L:311:GLU:C	2.03	1.09
2:G:371:MET:CE	2:E:371:MET:HE1	1.81	1.09
2:G:250:PRO:HB3	2:G:436:SER:HB3	1.20	1.09
2:G:381:SER:CB	2:E:357:LEU:HD21	1.81	1.09
2:H:350:LEU:HD21	2:F:385:LEU:HG	1.17	1.09
6:Q:722:THR:HG21	6:R:725:THR:HG21	1.31	1.09
2:B:250:PRO:HB3	2:B:436:SER:HB3	1.20	1.09
6:Q:722:THR:HG22	6:R:725:THR:OG1	1.46	1.09
2:P:310:LYS:CD	2:N:477:ASP:O	1.85	1.08
1:J:247:PHE:CD1	6:Q:94:GLU:OE2	1.98	1.08
2:B:350:LEU:HD21	2:A:385:LEU:HG	1.17	1.08
2:P:310:LYS:HD2	2:N:480:ASN:HB2	1.17	1.08
1:J:86:SER:HB3	1:C:86:SER:HB3	1.33	1.08
2:G:365:VAL:HG22	2:G:416:ALA:HB1	1.35	1.08
6:Q:725:THR:OG1	6:R:722:THR:HG22	1.45	1.08
2:E:250:PRO:HB3	2:E:432:ARG:HB3	1.22	1.08
2:H:350:LEU:HD22	2:F:385:LEU:HD21	1.32	1.08
2:G:371:MET:HE1	2:E:367:GLN:O	1.54	1.07
1:J:92:ALA:CA	1:C:262:LYS:HD3	1.82	1.07
2:B:350:LEU:HD22	2:A:385:LEU:HD21	1.32	1.07
2:B:371:MET:HE1	2:A:367:GLN:O	1.55	1.07

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:333:PHE:CD1	2:N:333:PHE:CD1	2.40	1.07
2:H:371:MET:HE1	2:F:367:GLN:O	1.54	1.07
1:J:6:SER:N	2:A:331:ASN:N	2.02	1.07
1:J:216:ALA:C	2:G:392:PRO:HG3	1.80	1.07
1:J:262:LYS:HD3	1:C:92:ALA:CA	1.82	1.07
2:P:310:LYS:HD2	2:N:480:ASN:CB	1.82	1.07
1:J:6:SER:O	2:A:331:ASN:CA	2.02	1.07
1:C:217:PRO:CD	2:B:390:LEU:CG	2.20	1.07
2:B:367:GLN:OE1	2:A:370:ALA:O	1.73	1.07
2:H:367:GLN:OE1	2:F:370:ALA:O	1.73	1.07
1:C:30:LYS:CE	2:P:283:PRO:HG2	1.84	1.06
1:J:243:PRO:CG	6:Q:134:MET:HA	1.84	1.06
2:A:253:GLU:OE2	2:A:428:GLU:OE1	1.74	1.06
2:G:367:GLN:OE1	2:E:370:ALA:O	1.73	1.06
2:H:350:LEU:CD2	2:F:385:LEU:CD2	2.28	1.06
1:J:92:ALA:C	1:C:262:LYS:HD3	1.81	1.06
2:H:199:ASP:OD2	3:V:200:LEU:CD2	2.04	1.06
2:F:253:GLU:OE2	2:F:428:GLU:OE1	1.74	1.06
1:C:6:SER:O	2:E:331:ASN:CA	2.04	1.06
2:E:199:ASP:CB	3:K:198:GLY:O	2.04	1.06
2:F:199:ASP:OD2	3:L:200:LEU:CD2	2.04	1.05
2:A:199:ASP:OD2	3:D:200:LEU:CD2	2.04	1.05
2:G:199:ASP:OD2	2:N:200:LEU:CD2	2.04	1.05
2:E:199:ASP:OD2	3:K:200:LEU:CD2	2.04	1.05
2:F:250:PRO:HG2	2:F:433:LEU:HG	1.38	1.05
2:F:250:PRO:HG3	2:F:433:LEU:HG	1.17	1.05
1:C:283:PHE:HE1	2:B:545:GLU:HB3	1.14	1.05
2:P:250:PRO:CD	2:P:429:GLU:OE2	2.02	1.05
6:Q:733:LYS:NZ	6:R:683:GLN:CB	2.20	1.05
1:J:262:LYS:HD3	1:C:92:ALA:C	1.81	1.05
2:E:253:GLU:OE2	2:E:428:GLU:OE1	1.74	1.05
2:B:250:PRO:CA	2:B:436:SER:CB	2.35	1.05
2:G:350:LEU:CD2	2:E:385:LEU:CD2	2.28	1.05
2:H:199:ASP:CB	3:V:198:GLY:O	2.04	1.05
2:H:245:GLY:C	2:H:503:MET:HG3	1.82	1.05
2:H:250:PRO:CA	2:H:436:SER:CB	2.35	1.05
2:H:365:VAL:HG22	2:H:416:ALA:HB1	1.35	1.05
6:Q:733:LYS:CE	6:R:683:GLN:HA	1.86	1.05
2:B:199:ASP:OD2	2:P:200:LEU:CD2	2.04	1.04
2:A:199:ASP:CB	3:D:198:GLY:O	2.04	1.04
2:G:250:PRO:CA	2:G:436:SER:CB	2.35	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:357:LEU:CD2	2:F:381:SER:HB2	1.87	1.04
6:Q:683:GLN:HA	6:R:733:LYS:CE	1.85	1.04
1:J:217:PRO:N	2:G:392:PRO:HG3	1.70	1.04
2:G:199:ASP:CB	2:N:198:GLY:O	2.04	1.04
2:P:310:LYS:HD3	2:N:480:ASN:HB2	1.06	1.04
2:F:199:ASP:CB	3:L:198:GLY:O	2.04	1.04
2:B:199:ASP:CB	2:P:198:GLY:O	2.04	1.04
2:B:245:GLY:C	2:B:503:MET:HG3	1.83	1.04
2:G:530:LEU:HD22	2:E:544:TRP:NE1	1.73	1.04
6:Q:683:GLN:CB	6:R:733:LYS:NZ	2.20	1.04
2:B:365:VAL:HG22	2:B:416:ALA:HB1	1.35	1.04
1:J:5:PHE:N	2:N:332:LYS:HB3	1.73	1.03
2:B:246:VAL:CG2	2:B:503:MET:HE3	1.81	1.03
2:G:350:LEU:CD2	2:E:385:LEU:HD21	1.89	1.03
2:G:357:LEU:CD2	2:E:381:SER:HB2	1.87	1.03
1:J:6:SER:C	2:A:331:ASN:N	2.16	1.03
2:A:333:PHE:CD1	2:N:333:PHE:HB2	1.93	1.03
2:G:246:VAL:CG2	2:G:503:MET:HE3	1.81	1.03
2:B:350:LEU:CD2	2:A:385:LEU:HD21	1.89	1.03
2:B:357:LEU:CD2	2:A:381:SER:HB2	1.87	1.03
1:J:283:PHE:HE1	2:G:545:GLU:HB3	1.18	1.02
2:B:350:LEU:CD2	2:A:385:LEU:CD2	2.28	1.02
2:G:245:GLY:C	2:G:503:MET:HG3	1.82	1.02
2:B:260:PHE:CD2	2:P:198:GLY:HA3	1.95	1.02
2:E:250:PRO:HG2	2:E:433:LEU:HG	1.37	1.02
2:H:371:MET:CE	2:F:367:GLN:O	2.08	1.02
1:J:90:GLU:HG2	1:C:261:ASN:CG	1.64	1.01
2:B:384:ALA:HB1	2:A:353:GLN:HE21	1.25	1.01
2:A:260:PHE:CD2	3:D:198:GLY:HA3	1.95	1.01
2:E:260:PHE:CD2	3:K:198:GLY:HA3	1.95	1.01
2:N:250:PRO:HD3	2:N:433:LEU:HD11	1.41	1.01
2:H:260:PHE:CD2	3:V:198:GLY:HA3	1.95	1.01
6:Q:725:THR:CB	6:R:722:THR:HG21	1.89	1.01
2:G:350:LEU:HD23	2:E:385:LEU:HD11	1.42	1.01
2:P:249:PRO:CA	2:P:433:LEU:HD21	1.88	1.01
2:N:250:PRO:HB3	2:N:429:GLU:HA	1.37	1.01
1:C:283:PHE:CE1	2:B:545:GLU:HB3	1.94	1.01
2:A:250:PRO:HG2	2:A:433:LEU:HG	1.37	1.01
2:A:406:LEU:HD23	3:D:220:GLN:HE22	1.21	1.01
2:B:530:LEU:HD22	2:A:544:TRP:NE1	1.73	1.01
2:P:250:PRO:CD	2:P:433:LEU:HD21	1.91	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:261:ASN:OD1	1:C:90:GLU:HG3	1.59	1.01
6:Q:722:THR:HG21	6:R:725:THR:CB	1.89	1.01
6:Q:733:LYS:HZ1	6:R:683:GLN:CB	1.73	1.01
6:Q:722:THR:HG21	6:R:725:THR:OG1	1.58	1.00
1:J:243:PRO:HG3	6:Q:134:MET:HA	1.38	1.00
1:C:217:PRO:CB	2:B:390:LEU:CD1	2.30	1.00
2:P:475:GLN:CD	2:N:311:GLU:N	2.19	1.00
2:H:246:VAL:CG2	2:H:503:MET:HE3	1.81	1.00
2:F:406:LEU:HD23	3:L:220:GLN:HE22	1.21	1.00
6:Q:725:THR:OG1	6:R:722:THR:HG21	1.58	1.00
2:G:371:MET:CE	2:E:367:GLN:O	2.08	1.00
2:B:371:MET:CE	2:A:367:GLN:O	2.08	1.00
2:F:260:PHE:CD2	3:L:198:GLY:HA3	1.95	1.00
1:J:230:GLU:CB	6:Q:101:ASN:OD1	2.08	0.99
1:J:90:GLU:HG3	1:C:261:ASN:OD1	1.59	0.99
2:E:406:LEU:HD23	3:K:220:GLN:HE22	1.21	0.99
2:N:250:PRO:CA	2:N:429:GLU:OE1	2.09	0.99
2:G:260:PHE:CD2	2:N:198:GLY:HA3	1.95	0.99
1:C:217:PRO:CG	2:B:390:LEU:HG	1.75	0.99
2:P:250:PRO:HD3	2:P:433:LEU:CD1	1.91	0.99
2:H:370:ALA:CA	2:F:367:GLN:OE1	2.11	0.99
2:H:530:LEU:HD22	2:F:544:TRP:NE1	1.73	0.99
2:H:350:LEU:CD2	2:F:385:LEU:HD21	1.89	0.99
1:J:261:ASN:CG	1:C:90:GLU:HG2	1.64	0.99
2:H:372:ALA:HB1	2:H:409:ARG:HH11	1.28	0.99
2:G:196:LYS:NZ	2:N:196:LYS:HZ3	1.52	0.98
6:Q:733:LYS:HZ1	6:R:683:GLN:CA	1.69	0.98
1:J:83:GLU:O	1:C:88:VAL:HG21	1.63	0.98
2:B:196:LYS:NZ	2:P:196:LYS:HZ3	1.55	0.98
2:G:384:ALA:HB1	2:E:353:GLN:HE21	1.25	0.98
2:N:250:PRO:CB	2:N:432:ARG:HH21	1.76	0.98
2:B:370:ALA:CA	2:A:367:GLN:OE1	2.11	0.98
2:A:333:PHE:CE1	2:N:333:PHE:CD1	2.51	0.98
1:J:5:PHE:HB2	2:N:332:LYS:HB2	1.42	0.98
2:H:350:LEU:HD23	2:F:385:LEU:HD11	1.42	0.98
1:J:88:VAL:HG21	1:C:83:GLU:O	1.63	0.97
1:C:6:SER:C	2:E:331:ASN:N	2.22	0.97
1:J:247:PHE:CB	6:Q:98:TYR:HE1	1.56	0.97
1:J:247:PHE:CG	6:Q:98:TYR:CE1	2.44	0.97
2:G:250:PRO:CG	2:G:433:LEU:HA	1.94	0.97
2:G:370:ALA:CA	2:E:367:GLN:OE1	2.11	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:5:PHE:CB	2:E:331:ASN:CG	2.30	0.97
6:Q:683:GLN:HA	6:R:733:LYS:HZ2	1.25	0.97
2:B:250:PRO:CG	2:B:433:LEU:HA	1.94	0.97
2:B:350:LEU:HD23	2:A:385:LEU:HD11	1.42	0.97
2:A:332:LYS:CG	2:N:331:ASN:N	2.28	0.97
2:A:406:LEU:HD21	3:D:220:GLN:NE2	1.80	0.97
2:H:246:VAL:HG23	2:H:503:MET:CE	1.84	0.97
2:A:406:LEU:HD21	3:D:220:GLN:HE22	1.30	0.97
2:P:250:PRO:HD3	2:P:433:LEU:HD11	1.46	0.96
2:P:477:ASP:O	2:N:310:LYS:HE2	1.62	0.96
2:G:372:ALA:HB1	2:G:409:ARG:HH11	1.28	0.96
2:H:196:LYS:HZ3	3:V:196:LYS:NZ	1.43	0.96
2:H:196:LYS:NZ	3:V:196:LYS:HZ3	1.47	0.96
2:F:406:LEU:HD21	3:L:220:GLN:NE2	1.80	0.96
2:E:406:LEU:HD21	3:K:220:GLN:NE2	1.80	0.96
1:J:82:TYR:CZ	1:C:90:GLU:OE2	2.19	0.96
1:J:90:GLU:OE2	1:C:82:TYR:CZ	2.18	0.96
1:C:217:PRO:CA	2:B:390:LEU:HD12	1.94	0.95
2:B:350:LEU:CG	2:A:385:LEU:HD21	1.95	0.95
1:J:217:PRO:CG	2:G:390:LEU:CG	2.11	0.95
1:J:261:ASN:OD1	1:C:90:GLU:CG	2.11	0.95
2:G:350:LEU:CG	2:E:385:LEU:HD21	1.95	0.95
2:P:250:PRO:CB	2:P:432:ARG:HD2	1.96	0.95
2:H:250:PRO:CG	2:H:433:LEU:HA	1.95	0.95
2:H:350:LEU:CG	2:F:385:LEU:HD21	1.95	0.95
2:B:372:ALA:HB1	2:B:409:ARG:HH11	1.28	0.95
2:E:406:LEU:HD21	3:K:220:GLN:HE22	1.30	0.94
1:J:217:PRO:CD	2:G:390:LEU:CD1	2.44	0.94
1:J:30:LYS:HE2	2:N:283:PRO:HG2	1.44	0.94
2:G:248:VAL:HG21	2:G:443:GLN:HE22	0.79	0.94
2:A:336:GLN:HB2	2:N:332:LYS:HZ1	1.31	0.94
2:G:196:LYS:HZ3	2:N:196:LYS:NZ	1.43	0.94
2:G:357:LEU:HD21	2:E:381:SER:HB2	0.95	0.94
2:E:196:LYS:NZ	3:K:196:LYS:HZ3	1.52	0.94
2:B:371:MET:SD	2:A:367:GLN:HB3	2.08	0.94
2:G:371:MET:SD	2:E:367:GLN:HB3	2.08	0.94
2:P:250:PRO:HD3	2:P:433:LEU:CD2	1.98	0.94
2:H:371:MET:SD	2:F:367:GLN:HB3	2.08	0.94
2:F:406:LEU:HD21	3:L:220:GLN:HE22	1.30	0.94
2:A:245:GLY:HA2	2:A:443:GLN:HE22	1.32	0.94
1:J:90:GLU:CG	1:C:261:ASN:OD1	2.11	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:470:ARG:HH11	2:H:352:ASN:HD21	1.14	0.94
2:G:530:LEU:HD22	2:E:544:TRP:CE2	2.03	0.94
2:B:530:LEU:HD22	2:A:544:TRP:CE2	2.03	0.93
6:Q:683:GLN:HG2	6:R:733:LYS:NZ	1.83	0.93
1:J:58:ARG:NH2	2:A:339:TRP:CH2	2.36	0.93
2:H:530:LEU:HD22	2:F:544:TRP:CE2	2.03	0.93
2:F:196:LYS:HZ3	3:L:196:LYS:NZ	1.43	0.93
1:J:247:PHE:HD1	6:Q:94:GLU:OE2	1.39	0.93
2:E:245:GLY:HA2	2:E:443:GLN:HE22	1.32	0.93
2:E:406:LEU:CD2	3:K:220:GLN:NE2	2.32	0.93
2:P:247:VAL:HG11	2:P:513:ARG:HH11	1.33	0.93
2:B:357:LEU:HD21	2:A:381:SER:HB2	0.95	0.93
2:F:406:LEU:CD2	3:L:220:GLN:NE2	2.32	0.93
2:B:248:VAL:HG21	2:B:443:GLN:HE22	0.78	0.93
2:N:247:VAL:HG12	2:N:513:ARG:HH11	1.33	0.93
1:J:5:PHE:CG	2:A:331:ASN:ND2	2.33	0.92
2:A:333:PHE:CD2	2:N:333:PHE:CE1	2.53	0.92
2:A:333:PHE:CZ	2:N:333:PHE:CD1	2.56	0.92
2:A:333:PHE:CZ	2:N:333:PHE:CE1	2.57	0.92
1:J:283:PHE:CE1	2:G:545:GLU:HB3	2.05	0.92
1:C:216:ALA:C	2:B:392:PRO:CG	2.42	0.92
2:A:333:PHE:CE2	2:N:333:PHE:CD1	2.54	0.92
2:P:251:PRO:HD2	2:P:432:ARG:CD	2.00	0.92
1:J:6:SER:O	2:A:331:ASN:HA	1.70	0.92
2:A:406:LEU:CD2	3:D:220:GLN:NE2	2.32	0.92
2:P:250:PRO:HB3	2:P:432:ARG:HD2	1.50	0.92
2:B:246:VAL:HG23	2:B:503:MET:CE	1.84	0.92
2:E:196:LYS:HZ3	3:K:196:LYS:NZ	1.44	0.92
2:N:250:PRO:CA	2:N:432:ARG:HD2	1.99	0.92
2:H:371:MET:CE	2:F:371:MET:CE	2.46	0.92
2:E:199:ASP:CB	3:K:200:LEU:HG	2.00	0.91
2:H:357:LEU:HD21	2:F:381:SER:HB2	0.95	0.91
2:H:199:ASP:CB	3:V:200:LEU:HG	2.00	0.91
2:B:199:ASP:CB	2:P:200:LEU:HG	2.00	0.91
2:G:530:LEU:CD1	2:E:544:TRP:HE1	1.84	0.91
2:H:248:VAL:HG21	2:H:443:GLN:HE22	0.79	0.91
2:F:245:GLY:HA2	2:F:443:GLN:HE22	1.32	0.91
2:N:250:PRO:HA	2:N:432:ARG:CD	2.01	0.91
2:B:196:LYS:HZ2	2:P:196:LYS:NZ	1.69	0.91
6:Q:733:LYS:NZ	6:R:683:GLN:HG2	1.83	0.91
1:J:58:ARG:NH2	2:A:339:TRP:HH2	1.67	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:332:LYS:HD3	2:N:497:ARG:HD3	1.52	0.90
2:G:240:HIS:CG	2:G:248:VAL:HG21	2.07	0.90
2:N:251:PRO:HD3	2:N:432:ARG:HD3	1.50	0.90
2:A:199:ASP:CB	3:D:200:LEU:HG	2.00	0.90
2:E:250:PRO:HB3	2:E:432:ARG:HB2	1.53	0.90
2:H:530:LEU:CD1	2:F:544:TRP:HE1	1.84	0.90
2:H:384:ALA:HB1	2:F:353:GLN:HE21	1.25	0.90
2:G:267:SER:HB3	2:G:432:ARG:HH11	1.08	0.90
3:K:240:HIS:CG	3:K:248:VAL:HG21	2.07	0.90
1:J:88:VAL:HG13	1:C:82:TYR:OH	1.71	0.90
2:A:196:LYS:HZ3	3:D:196:LYS:NZ	1.43	0.90
2:F:199:ASP:CB	3:L:200:LEU:HG	2.00	0.90
2:F:240:HIS:CG	2:F:248:VAL:HG21	2.07	0.90
2:F:250:PRO:HB3	2:F:432:ARG:HB2	1.53	0.90
1:C:217:PRO:HD3	2:B:392:PRO:HG3	1.52	0.90
2:G:199:ASP:CB	2:N:200:LEU:HG	2.00	0.90
1:C:5:PHE:N	2:P:332:LYS:HB2	1.86	0.90
2:B:530:LEU:CD1	2:A:544:TRP:HE1	1.84	0.90
2:A:336:GLN:CB	2:N:332:LYS:NZ	2.35	0.90
2:E:240:HIS:CG	2:E:248:VAL:HG21	2.06	0.90
2:A:331:ASN:HD21	2:N:332:LYS:CE	1.84	0.90
2:E:196:LYS:HZ2	3:K:196:LYS:NZ	1.65	0.90
2:A:334:VAL:HG22	2:N:451:TRP:CZ2	2.06	0.89
2:N:240:HIS:CG	2:N:248:VAL:HG21	2.07	0.89
3:L:240:HIS:CG	3:L:248:VAL:HG21	2.07	0.89
2:G:196:LYS:HZ1	2:N:196:LYS:NZ	1.69	0.89
2:H:240:HIS:CG	2:H:248:VAL:HG21	2.07	0.89
2:B:240:HIS:CG	2:B:248:VAL:HG21	2.07	0.89
3:D:240:HIS:CG	3:D:248:VAL:HG21	2.06	0.89
2:H:196:LYS:HZ2	3:V:196:LYS:NZ	1.68	0.89
6:Q:733:LYS:HZ2	6:R:683:GLN:HA	1.35	0.89
1:J:217:PRO:HD2	2:G:390:LEU:CD2	2.03	0.89
2:A:250:PRO:HB3	2:A:432:ARG:HB2	1.53	0.89
2:B:353:GLN:HE22	2:A:384:ALA:HB3	1.34	0.89
2:A:240:HIS:CG	2:A:248:VAL:HG21	2.07	0.89
2:P:240:HIS:CG	2:P:248:VAL:HG21	2.07	0.89
1:J:92:ALA:CA	1:C:262:LYS:CD	2.47	0.89
2:B:250:PRO:CD	2:B:436:SER:OG	2.21	0.89
3:V:240:HIS:CG	3:V:248:VAL:HG21	2.06	0.89
1:C:58:ARG:NH2	2:E:339:TRP:CZ2	2.40	0.89
1:J:217:PRO:CD	2:G:392:PRO:HG3	2.02	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:196:LYS:HZ1	3:D:196:LYS:NZ	1.69	0.89
2:G:353:GLN:HE22	2:E:384:ALA:HB3	1.34	0.89
2:G:470:ARG:HH11	2:H:352:ASN:ND2	1.70	0.89
1:J:82:TYR:OH	1:C:88:VAL:HG13	1.71	0.88
2:A:334:VAL:HG21	2:N:451:TRP:HE1	1.37	0.88
2:H:250:PRO:CD	2:H:436:SER:OG	2.21	0.88
2:G:371:MET:HE2	2:E:371:MET:HE1	0.88	0.88
2:P:477:ASP:O	2:N:310:LYS:CE	2.17	0.88
2:N:250:PRO:CB	2:N:429:GLU:HA	1.99	0.88
6:Q:733:LYS:HE3	6:R:683:GLN:HA	1.54	0.88
2:B:196:LYS:HZ1	2:P:196:LYS:NZ	1.68	0.88
2:A:196:LYS:NZ	3:D:196:LYS:HZ3	1.64	0.88
2:G:250:PRO:CD	2:G:436:SER:OG	2.21	0.88
2:P:310:LYS:CE	2:N:476:GLN:O	2.21	0.88
2:H:353:GLN:HE22	2:F:384:ALA:HB3	1.34	0.88
2:H:371:MET:HE2	2:F:371:MET:HE1	0.88	0.88
2:G:196:LYS:HZ2	2:N:196:LYS:NZ	1.68	0.88
6:Q:683:GLN:CB	6:R:733:LYS:HZ1	1.81	0.88
2:B:371:MET:CE	2:A:367:GLN:HB3	2.04	0.88
2:G:371:MET:CE	2:E:371:MET:CE	2.46	0.88
2:P:475:GLN:HE22	2:N:311:GLU:CB	1.86	0.88
2:H:199:ASP:HB3	3:V:200:LEU:HG	1.56	0.88
1:J:5:PHE:CG	2:N:332:LYS:HB2	2.09	0.88
1:J:217:PRO:CA	2:G:390:LEU:CD1	2.47	0.88
2:G:199:ASP:HB3	2:N:200:LEU:HG	1.56	0.88
2:F:196:LYS:HZ2	3:L:196:LYS:NZ	1.67	0.88
2:B:267:SER:HB3	2:B:432:ARG:HH11	1.08	0.87
2:N:250:PRO:HB3	2:N:432:ARG:HH21	1.39	0.87
2:F:199:ASP:HB3	3:L:200:LEU:HG	1.56	0.87
6:Q:733:LYS:NZ	6:R:683:GLN:HG3	1.77	0.87
2:G:371:MET:CE	2:E:367:GLN:HB3	2.04	0.87
2:B:250:PRO:HG3	2:B:433:LEU:CA	2.04	0.87
2:A:196:LYS:HZ2	3:D:196:LYS:NZ	1.68	0.87
2:F:196:LYS:NZ	3:L:196:LYS:HZ3	1.69	0.87
1:J:88:VAL:HB	1:C:84:PHE:HA	1.57	0.86
2:B:199:ASP:HB3	2:P:200:LEU:HG	1.56	0.86
2:H:250:PRO:HG3	2:H:433:LEU:CA	2.04	0.86
2:F:196:LYS:HZ1	3:L:196:LYS:NZ	1.69	0.86
6:Q:683:GLN:HA	6:R:733:LYS:HE3	1.54	0.86
1:J:82:TYR:HH	1:C:88:VAL:CG1	1.88	0.86
2:B:260:PHE:HD2	2:P:198:GLY:HA3	1.40	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:251:PRO:HD3	2:N:432:ARG:CD	2.04	0.86
2:H:260:PHE:HD2	3:V:198:GLY:HA3	1.40	0.86
2:H:371:MET:CE	2:F:367:GLN:HB3	2.04	0.86
1:J:30:LYS:NZ	2:N:283:PRO:HG2	1.91	0.86
2:B:371:MET:HE2	2:A:371:MET:HE1	0.88	0.86
2:H:196:LYS:HZ1	3:V:196:LYS:NZ	1.69	0.86
1:J:82:TYR:HE1	1:C:65:LYS:HZ2	0.87	0.86
1:J:262:LYS:CD	1:C:92:ALA:CA	2.47	0.86
6:Q:722:THR:CG2	6:R:721:ASP:O	2.24	0.86
2:B:196:LYS:HZ3	2:P:196:LYS:NZ	1.43	0.85
2:G:479:LEU:CD2	3:L:310:LYS:HE3	2.05	0.85
2:E:196:LYS:HZ1	3:K:196:LYS:NZ	1.72	0.85
2:H:267:SER:HB3	2:H:432:ARG:HH11	1.08	0.85
2:B:250:PRO:N	2:B:436:SER:HB2	1.91	0.85
1:J:65:LYS:HZ2	1:C:82:TYR:HE1	0.87	0.85
2:G:250:PRO:HG3	2:G:433:LEU:CA	2.04	0.85
2:G:530:LEU:HD21	2:E:544:TRP:NE1	1.85	0.85
2:H:250:PRO:N	2:H:436:SER:HB2	1.91	0.85
2:B:371:MET:CE	2:A:371:MET:CE	2.46	0.85
2:P:251:PRO:CD	2:P:432:ARG:HD3	2.06	0.85
1:C:6:SER:N	2:E:331:ASN:N	2.25	0.85
2:A:199:ASP:HB3	3:D:200:LEU:HG	1.56	0.85
2:A:250:PRO:HB2	2:A:432:ARG:NE	1.92	0.85
2:G:250:PRO:N	2:G:436:SER:HB2	1.92	0.85
2:E:250:PRO:HB2	2:E:432:ARG:NE	1.92	0.85
6:Q:683:GLN:CA	6:R:733:LYS:HZ2	1.79	0.85
1:J:5:PHE:CD2	2:N:332:LYS:CB	2.58	0.84
2:E:199:ASP:HB3	3:K:200:LEU:HG	1.56	0.84
6:Q:721:ASP:O	6:R:722:THR:CG2	2.24	0.84
1:J:84:PHE:HA	1:C:88:VAL:HB	1.57	0.84
2:A:260:PHE:HD2	3:D:198:GLY:HA3	1.40	0.84
2:G:260:PHE:HD2	2:N:198:GLY:HA3	1.40	0.84
3:K:311:GLU:O	2:H:476:GLN:HB2	1.77	0.84
2:F:260:PHE:HD2	3:L:198:GLY:HA3	1.40	0.84
2:P:247:VAL:HG11	2:P:513:ARG:NH1	1.92	0.84
2:B:384:ALA:CB	2:A:353:GLN:NE2	2.41	0.84
1:C:6:SER:O	2:E:331:ASN:HA	1.76	0.84
2:P:250:PRO:HD3	2:P:433:LEU:HD21	1.56	0.84
1:J:82:TYR:HE1	1:C:65:LYS:NZ	1.74	0.84
2:H:384:ALA:CB	2:F:353:GLN:NE2	2.41	0.84
1:J:88:VAL:HG11	1:C:82:TYR:CE2	2.13	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:217:PRO:CD	2:B:390:LEU:CD1	2.55	0.83
2:P:249:PRO:CA	2:P:433:LEU:CD2	2.49	0.83
2:F:250:PRO:HB2	2:F:432:ARG:NE	1.92	0.83
1:C:217:PRO:HD2	2:B:390:LEU:HG	0.85	0.83
1:C:217:PRO:HB2	2:B:390:LEU:HD12	0.84	0.83
2:B:350:LEU:HD22	2:A:385:LEU:HD11	1.39	0.83
2:P:250:PRO:CA	2:P:429:GLU:OE2	2.25	0.83
1:J:58:ARG:HH21	2:A:339:TRP:HH2	0.88	0.83
1:C:30:LYS:HE2	2:P:283:PRO:HG2	1.59	0.83
2:N:250:PRO:HD3	2:N:433:LEU:CD1	2.08	0.82
1:J:82:TYR:CE2	1:C:88:VAL:HG11	2.13	0.82
2:A:331:ASN:ND2	2:N:332:LYS:CE	2.43	0.82
2:N:251:PRO:CD	2:N:432:ARG:CD	2.58	0.82
1:J:94:PRO:O	1:C:215:VAL:CG1	2.27	0.82
2:N:247:VAL:CG1	2:N:513:ARG:HH11	1.92	0.82
2:N:249:PRO:CA	2:N:433:LEU:CD2	2.44	0.82
6:Q:722:THR:HA	6:R:722:THR:HA	1.61	0.82
3:K:310:LYS:HG3	2:H:480:ASN:HB2	1.60	0.82
2:H:350:LEU:HD22	2:F:385:LEU:HD11	1.39	0.82
1:J:65:LYS:NZ	1:C:82:TYR:HE1	1.75	0.82
2:A:250:PRO:CB	2:A:432:ARG:NE	2.43	0.82
2:G:246:VAL:H	2:G:503:MET:HE3	1.44	0.82
2:G:384:ALA:CB	2:E:353:GLN:NE2	2.41	0.82
2:P:477:ASP:OD1	2:N:310:LYS:HG2	1.79	0.82
2:B:246:VAL:H	2:B:503:MET:HE3	1.45	0.82
2:G:455:GLU:OE1	2:H:334:VAL:HG11	1.80	0.82
2:H:384:ALA:CB	2:F:353:GLN:HE21	1.93	0.82
2:H:530:LEU:HD21	2:F:544:TRP:NE1	1.85	0.82
2:F:250:PRO:CB	2:F:432:ARG:NE	2.43	0.81
2:E:260:PHE:HD2	3:K:198:GLY:HA3	1.40	0.81
2:P:310:LYS:HD3	2:N:480:ASN:CB	1.98	0.81
2:B:530:LEU:HD21	2:A:544:TRP:NE1	1.85	0.81
2:A:333:PHE:CD1	2:N:333:PHE:CG	2.68	0.81
6:Q:683:GLN:CB	6:R:733:LYS:HZ2	1.88	0.81
2:E:250:PRO:CB	2:E:432:ARG:NE	2.43	0.81
3:K:311:GLU:C	2:H:476:GLN:N	2.32	0.81
2:A:199:ASP:CG	3:D:200:LEU:HG	2.06	0.81
2:A:250:PRO:CB	2:A:432:ARG:HB3	2.09	0.81
2:E:196:LYS:HZ1	3:K:196:LYS:HZ3	1.25	0.81
2:H:246:VAL:H	2:H:503:MET:HE3	1.45	0.81
2:G:248:VAL:HG22	2:G:443:GLN:NE2	1.74	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:199:ASP:CG	3:K:200:LEU:HG	2.06	0.81
1:J:230:GLU:CB	6:Q:101:ASN:CG	2.54	0.80
2:A:334:VAL:CG2	2:N:451:TRP:HE1	1.94	0.80
2:G:338:ASP:HA	2:G:341:HIS:CE1	2.17	0.80
6:R:107:TYR:CE1	6:R:147:LEU:HD13	2.17	0.80
2:B:199:ASP:CG	2:P:200:LEU:HG	2.06	0.80
2:B:384:ALA:CB	2:A:353:GLN:HE21	1.93	0.80
2:G:352:ASN:HD21	2:H:470:ARG:NH1	1.77	0.80
2:N:250:PRO:HB3	2:N:432:ARG:NH2	1.96	0.80
1:C:30:LYS:NZ	2:P:283:PRO:HG2	1.95	0.80
1:J:5:PHE:N	2:N:332:LYS:HB2	1.96	0.80
1:J:82:TYR:OH	1:C:65:LYS:HD2	1.81	0.80
1:J:215:VAL:CG1	1:C:94:PRO:O	2.27	0.80
6:Q:107:TYR:CE1	6:Q:147:LEU:HD13	2.16	0.80
2:G:384:ALA:CB	2:E:353:GLN:HE21	1.93	0.80
2:B:338:ASP:HA	2:B:341:HIS:CE1	2.17	0.80
1:J:216:ALA:C	2:G:392:PRO:CG	2.55	0.80
1:C:217:PRO:CG	2:B:390:LEU:CG	2.33	0.80
3:K:311:GLU:O	2:H:476:GLN:HB3	1.13	0.80
1:J:217:PRO:HD2	2:G:390:LEU:HG	0.81	0.80
2:H:244:PRO:O	2:H:447:ALA:HB2	1.82	0.80
2:A:331:ASN:HD21	2:N:332:LYS:NZ	1.79	0.79
2:G:244:PRO:O	2:G:447:ALA:HB2	1.82	0.79
6:Q:733:LYS:HZ2	6:R:683:GLN:CA	1.91	0.79
2:H:199:ASP:CG	3:V:200:LEU:HG	2.06	0.79
6:Q:683:GLN:CA	6:R:733:LYS:HZ1	1.80	0.79
6:Q:733:LYS:HZ3	6:R:683:GLN:CG	1.94	0.79
1:J:65:LYS:HD2	1:C:82:TYR:OH	1.81	0.79
2:G:476:GLN:N	3:L:311:GLU:O	2.09	0.79
1:J:86:SER:O	1:C:86:SER:O	1.99	0.79
1:J:229:PHE:CE1	6:Q:105:ARG:NH1	2.50	0.79
2:P:480:ASN:HB2	2:N:310:LYS:HD3	1.65	0.79
2:N:251:PRO:HD2	2:N:432:ARG:NH2	1.97	0.79
2:F:199:ASP:CG	3:L:200:LEU:HG	2.06	0.79
6:R:447:HIS:CE1	6:R:448:ALA:HB2	2.17	0.79
1:J:217:PRO:N	2:G:390:LEU:CD1	2.46	0.79
2:B:244:PRO:O	2:B:447:ALA:HB2	1.82	0.79
2:B:371:MET:HE1	2:A:367:GLN:HB3	1.64	0.79
2:E:250:PRO:CB	2:E:432:ARG:HB3	2.09	0.79
2:E:250:PRO:CB	2:E:432:ARG:HE	1.95	0.79
2:A:331:ASN:O	2:N:331:ASN:HA	1.83	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:253:GLU:H	2:G:268:ARG:HA	1.48	0.79
2:A:199:ASP:OD2	3:D:200:LEU:HG	1.83	0.79
2:G:199:ASP:CG	2:N:200:LEU:HG	2.06	0.79
2:G:352:ASN:HD21	2:H:470:ARG:HH11	1.29	0.79
2:N:245:GLY:HA2	2:N:440:ALA:HB2	1.64	0.79
2:H:338:ASP:HA	2:H:341:HIS:CE1	2.16	0.79
3:D:253:GLU:H	3:D:268:ARG:HA	1.48	0.79
2:H:371:MET:HE1	2:F:367:GLN:HB3	1.64	0.79
2:B:199:ASP:OD2	2:P:200:LEU:HG	1.83	0.79
2:A:199:ASP:OD2	3:D:200:LEU:HD21	1.83	0.79
2:A:250:PRO:HG3	2:A:433:LEU:CG	2.02	0.79
2:N:250:PRO:HB3	2:N:429:GLU:CA	2.12	0.79
2:P:253:GLU:H	2:P:268:ARG:HA	1.48	0.79
1:J:217:PRO:HB2	2:G:390:LEU:HD12	0.79	0.78
1:C:5:PHE:HB3	2:E:331:ASN:CA	2.12	0.78
2:A:250:PRO:CB	2:A:432:ARG:HE	1.95	0.78
2:N:249:PRO:HA	2:N:433:LEU:HD21	0.80	0.78
2:F:199:ASP:OD2	3:L:200:LEU:HG	1.83	0.78
2:E:199:ASP:CA	3:K:198:GLY:O	2.30	0.78
2:B:253:GLU:H	2:B:268:ARG:HA	1.48	0.78
2:G:199:ASP:OD2	2:N:200:LEU:HD21	1.83	0.78
2:A:199:ASP:CA	3:D:198:GLY:O	2.30	0.78
2:G:199:ASP:OD2	2:N:200:LEU:HG	1.83	0.78
1:J:5:PHE:CD2	2:A:331:ASN:ND2	2.51	0.78
1:C:5:PHE:CG	2:E:331:ASN:ND2	2.50	0.78
2:E:253:GLU:H	2:E:268:ARG:HA	1.48	0.78
2:P:247:VAL:CG1	2:P:513:ARG:HH11	1.96	0.78
2:F:250:PRO:CB	2:F:432:ARG:HB3	2.09	0.78
3:L:253:GLU:H	3:L:268:ARG:HA	1.48	0.78
2:A:253:GLU:H	2:A:268:ARG:HA	1.48	0.78
2:G:371:MET:HE1	2:E:367:GLN:HB3	1.64	0.78
2:G:530:LEU:HD13	2:E:544:TRP:HE1	1.46	0.78
2:E:199:ASP:OD2	3:K:200:LEU:HG	1.83	0.78
2:H:199:ASP:OD2	3:V:200:LEU:HD21	1.83	0.78
2:B:530:LEU:HD13	2:A:544:TRP:HE1	1.46	0.78
1:J:88:VAL:CG1	1:C:82:TYR:HH	1.96	0.78
2:G:455:GLU:OE1	2:H:334:VAL:CG1	2.32	0.78
2:E:199:ASP:OD2	3:K:200:LEU:HD21	1.83	0.78
2:A:333:PHE:CE2	2:N:333:PHE:HE1	1.99	0.78
2:H:199:ASP:CA	3:V:198:GLY:O	2.30	0.78
1:J:217:PRO:CB	2:G:390:LEU:CG	2.56	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:247:VAL:HG12	2:N:513:ARG:NH1	1.99	0.77
2:H:253:GLU:H	2:H:268:ARG:HA	1.48	0.77
2:F:253:GLU:H	2:F:268:ARG:HA	1.48	0.77
6:Q:447:HIS:CE1	6:Q:448:ALA:HB2	2.17	0.77
2:E:250:PRO:HB2	2:E:432:ARG:HE	1.48	0.77
2:H:530:LEU:HD13	2:F:544:TRP:HE1	1.47	0.77
2:F:250:PRO:HG3	2:F:433:LEU:CG	2.02	0.77
6:Q:438:ALA:HB2	6:Q:484:THR:HG21	1.67	0.77
3:K:253:GLU:H	3:K:268:ARG:HA	1.48	0.77
6:R:438:ALA:HB2	6:R:484:THR:HG21	1.67	0.77
2:B:199:ASP:OD2	2:P:200:LEU:HD21	1.83	0.77
2:B:199:ASP:CA	2:P:198:GLY:O	2.30	0.77
2:P:310:LYS:HD2	2:N:480:ASN:CG	2.08	0.77
2:H:350:LEU:CB	2:F:385:LEU:HD21	2.14	0.77
2:F:250:PRO:CB	2:F:432:ARG:HE	1.95	0.77
3:V:253:GLU:H	3:V:268:ARG:HA	1.48	0.77
2:F:199:ASP:CA	3:L:198:GLY:O	2.30	0.77
2:G:350:LEU:CB	2:E:385:LEU:HD21	2.14	0.77
2:G:480:ASN:HB2	3:L:310:LYS:CG	2.14	0.77
2:N:250:PRO:CB	2:N:432:ARG:NH2	2.48	0.77
2:A:333:PHE:CD1	2:N:333:PHE:CB	2.67	0.77
2:G:480:ASN:HB2	3:L:310:LYS:HG3	1.67	0.77
1:J:30:LYS:HE2	2:N:283:PRO:CG	2.15	0.77
1:C:217:PRO:HD3	2:B:392:PRO:CG	2.15	0.77
2:B:248:VAL:HG22	2:B:443:GLN:NE2	1.74	0.77
2:G:250:PRO:CA	2:G:436:SER:HB3	2.14	0.77
2:H:246:VAL:HG22	2:H:503:MET:HE1	0.77	0.77
1:J:243:PRO:HG2	6:Q:134:MET:HA	1.67	0.76
2:B:350:LEU:CB	2:A:385:LEU:HD21	2.14	0.76
2:G:199:ASP:CA	2:N:198:GLY:O	2.30	0.76
2:N:253:GLU:H	2:N:268:ARG:HA	1.48	0.76
2:B:250:PRO:CA	2:B:436:SER:HB3	2.14	0.76
2:G:245:GLY:CA	2:G:503:MET:HG3	2.15	0.76
3:K:311:GLU:C	2:H:476:GLN:H	1.92	0.76
2:F:199:ASP:OD2	3:L:200:LEU:HD21	1.83	0.76
2:B:246:VAL:HG22	2:B:503:MET:HE1	0.77	0.76
2:B:384:ALA:HB1	2:A:353:GLN:HE22	1.50	0.76
2:B:382:LEU:HD13	2:B:401:LEU:C	2.11	0.76
2:G:246:VAL:HG23	2:G:503:MET:CE	1.84	0.76
2:H:250:PRO:CA	2:H:436:SER:HB3	2.14	0.76
2:H:382:LEU:HD13	2:H:401:LEU:C	2.11	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:Q:435:GLY:HA2	6:Q:439:TYR:CD2	2.21	0.76
2:G:382:LEU:HD13	2:G:401:LEU:C	2.11	0.76
2:G:470:ARG:HH12	2:H:348:ASP:CB	1.99	0.76
2:P:250:PRO:HB3	2:P:429:GLU:HA	1.66	0.76
2:P:251:PRO:HD3	2:P:432:ARG:HD3	1.66	0.76
2:H:199:ASP:OD2	3:V:200:LEU:HG	1.83	0.76
1:J:217:PRO:C	2:G:390:LEU:HD12	2.10	0.76
6:Q:733:LYS:HZ3	6:R:683:GLN:HG2	1.46	0.76
1:J:217:PRO:HD2	2:G:390:LEU:CD1	2.15	0.76
1:J:247:PHE:HB2	6:Q:98:TYR:HD1	1.48	0.76
2:B:199:ASP:OD2	2:P:200:LEU:CG	2.34	0.75
2:A:199:ASP:OD2	3:D:200:LEU:CG	2.33	0.75
2:H:245:GLY:CA	2:H:503:MET:HG3	2.15	0.75
2:G:246:VAL:HG22	2:G:503:MET:HE1	0.77	0.75
2:P:310:LYS:HE3	2:N:476:GLN:C	2.09	0.75
6:R:435:GLY:HA2	6:R:439:TYR:CD2	2.21	0.75
2:A:250:PRO:HB2	2:A:432:ARG:HE	1.49	0.75
6:Q:683:GLN:HG2	6:R:733:LYS:HZ3	1.48	0.75
2:B:245:GLY:CA	2:B:503:MET:HG3	2.15	0.75
2:P:250:PRO:CB	2:P:432:ARG:HH21	1.98	0.75
2:H:250:PRO:CB	2:H:436:SER:OG	2.34	0.75
2:F:199:ASP:OD2	3:L:200:LEU:CG	2.33	0.75
6:Q:733:LYS:HZ2	6:R:683:GLN:CB	1.97	0.75
2:B:250:PRO:CB	2:B:436:SER:OG	2.34	0.75
2:G:199:ASP:OD2	2:N:200:LEU:CG	2.34	0.75
2:P:477:ASP:OD1	2:N:310:LYS:CG	2.24	0.75
2:H:199:ASP:OD2	3:V:200:LEU:CG	2.34	0.75
2:F:250:PRO:HB2	2:F:432:ARG:HE	1.48	0.75
1:J:5:PHE:HB3	2:A:331:ASN:N	2.02	0.75
2:B:267:SER:CA	2:B:432:ARG:HH12	2.00	0.75
2:E:199:ASP:OD2	3:K:200:LEU:CG	2.33	0.75
2:H:248:VAL:HG22	2:H:443:GLN:NE2	1.74	0.74
2:H:260:PHE:CE2	3:V:198:GLY:HA3	2.22	0.74
1:J:230:GLU:HB3	6:Q:101:ASN:ND2	2.01	0.74
2:P:251:PRO:HD2	2:P:432:ARG:HD3	1.68	0.74
2:P:250:PRO:CD	2:P:433:LEU:CD2	2.61	0.74
2:H:267:SER:CA	2:H:432:ARG:HH12	2.00	0.74
2:H:384:ALA:HB1	2:F:353:GLN:HE22	1.50	0.74
1:J:230:GLU:CB	6:Q:101:ASN:ND2	2.51	0.74
2:G:384:ALA:HB1	2:E:353:GLN:HE22	1.50	0.74
3:K:311:GLU:HB2	2:H:477:ASP:HB2	1.67	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:333:PHE:CE1	2:N:333:PHE:CG	2.75	0.74
1:C:5:PHE:HB3	2:E:331:ASN:CB	2.17	0.74
2:B:371:MET:HE2	2:A:371:MET:HE2	1.69	0.74
2:G:250:PRO:CB	2:G:436:SER:OG	2.34	0.74
2:E:260:PHE:CE2	3:K:198:GLY:HA3	2.22	0.74
2:P:475:GLN:CD	2:N:310:LYS:C	2.55	0.74
6:Q:725:THR:HG1	6:R:722:THR:HG22	1.50	0.74
2:F:260:PHE:CE2	3:L:198:GLY:HA3	2.23	0.73
1:J:218:ASN:H	2:G:390:LEU:HD11	1.52	0.73
2:B:260:PHE:CE2	2:P:198:GLY:HA3	2.22	0.73
2:E:250:PRO:HG3	2:E:433:LEU:CG	2.02	0.73
6:Q:683:GLN:CG	6:R:733:LYS:HZ3	1.99	0.73
2:H:370:ALA:CB	2:F:367:GLN:OE1	2.36	0.73
2:A:260:PHE:CE2	3:D:198:GLY:HA3	2.23	0.73
2:G:267:SER:CA	2:G:432:ARG:HH12	2.00	0.73
2:P:310:LYS:HE2	2:N:478:ARG:N	2.01	0.73
2:H:357:LEU:CD2	2:F:381:SER:CB	2.58	0.73
6:R:84:HIS:CD2	6:R:115:ALA:HB1	2.23	0.73
2:G:260:PHE:CE2	2:N:198:GLY:HA3	2.22	0.73
2:P:310:LYS:HE3	2:N:477:ASP:C	2.12	0.73
2:A:334:VAL:CG2	2:N:451:TRP:CZ2	2.71	0.73
2:A:345:VAL:HG21	2:N:462:LYS:CE	2.18	0.73
3:K:310:LYS:N	2:H:476:GLN:CD	2.39	0.73
6:Q:686:THR:OG1	6:R:733:LYS:HE3	1.89	0.73
2:P:250:PRO:HD3	2:P:433:LEU:HG	1.69	0.73
1:J:5:PHE:N	2:N:332:LYS:CG	2.52	0.73
2:H:250:PRO:HA	2:H:436:SER:HB2	1.71	0.73
6:Q:84:HIS:CD2	6:Q:115:ALA:HB1	2.23	0.73
2:B:370:ALA:CB	2:A:367:GLN:OE1	2.36	0.72
2:G:357:LEU:HD11	2:E:381:SER:HB3	1.71	0.72
2:G:370:ALA:CB	2:E:367:GLN:OE1	2.36	0.72
2:B:357:LEU:HD11	2:A:381:SER:HB3	1.71	0.72
2:G:371:MET:HE2	2:E:371:MET:HE2	1.69	0.72
2:N:251:PRO:HD2	2:N:432:ARG:CZ	2.19	0.72
2:H:199:ASP:HB3	3:V:200:LEU:CG	2.19	0.72
1:C:217:PRO:HG3	2:B:392:PRO:N	2.04	0.72
2:P:250:PRO:CD	2:P:433:LEU:HD11	2.18	0.72
2:H:371:MET:HE2	2:F:371:MET:HE2	1.69	0.72
2:B:367:GLN:CD	2:A:370:ALA:O	2.33	0.72
2:H:196:LYS:HZ1	3:V:196:LYS:HZ3	1.27	0.72
1:J:262:LYS:HB3	1:C:93:ALA:CA	2.20	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:199:ASP:HB3	2:P:200:LEU:CG	2.19	0.72
2:B:372:ALA:HB1	2:B:409:ARG:NH1	2.05	0.72
2:A:199:ASP:HB3	3:D:200:LEU:CG	2.19	0.72
2:G:250:PRO:HB3	2:G:436:SER:CB	2.04	0.72
2:F:199:ASP:HB3	3:L:200:LEU:CG	2.19	0.72
2:H:357:LEU:HD11	2:F:381:SER:HB3	1.71	0.72
2:B:370:ALA:HB3	2:A:367:GLN:CD	2.15	0.71
2:G:199:ASP:HB3	2:N:200:LEU:CG	2.19	0.71
2:E:199:ASP:HB3	3:K:200:LEU:CG	2.19	0.71
2:H:367:GLN:CD	2:F:370:ALA:O	2.33	0.71
1:J:5:PHE:C	2:A:331:ASN:N	2.47	0.71
1:J:90:GLU:CB	1:C:261:ASN:ND2	2.53	0.71
2:P:245:GLY:HA2	2:P:440:ALA:HB2	1.72	0.71
1:J:247:PHE:CB	6:Q:98:TYR:CD1	2.42	0.71
2:B:458:LEU:HB2	2:B:489:ALA:HB1	1.73	0.71
2:G:458:LEU:HB2	2:G:489:ALA:HB1	1.73	0.71
6:Q:733:LYS:HE3	6:R:686:THR:OG1	1.89	0.71
6:R:141:PRO:HD3	6:R:191:ARG:HE	1.55	0.71
1:J:261:ASN:ND2	1:C:90:GLU:CB	2.53	0.71
2:G:367:GLN:CD	2:E:370:ALA:O	2.33	0.71
2:H:370:ALA:HB3	2:F:367:GLN:CD	2.15	0.71
6:Q:683:GLN:HG3	6:R:733:LYS:NZ	1.77	0.71
2:G:370:ALA:HB3	2:E:367:GLN:CD	2.15	0.71
2:N:247:VAL:CG1	2:N:513:ARG:NH1	2.53	0.71
2:N:249:PRO:C	2:N:433:LEU:HD21	2.16	0.71
6:Q:666:GLN:HE22	6:Q:711:ARG:HB2	1.55	0.71
2:A:334:VAL:CG2	2:N:451:TRP:NE1	2.54	0.71
1:C:217:PRO:CD	2:B:392:PRO:CG	2.65	0.71
2:G:470:ARG:NH1	2:H:352:ASN:HD21	1.86	0.71
1:J:281:ARG:O	2:G:545:GLU:OE1	2.08	0.70
1:J:93:ALA:CA	1:C:262:LYS:HB3	2.20	0.70
1:C:217:PRO:HD2	2:B:390:LEU:CD1	2.17	0.70
6:R:559:MET:HE2	6:R:597:ARG:HE	1.55	0.70
6:Q:141:PRO:HD3	6:Q:191:ARG:HE	1.55	0.70
6:R:58:SER:H	6:R:61:GLN:HE21	1.38	0.70
2:G:248:VAL:CG2	2:G:443:GLN:CD	2.64	0.70
2:F:199:ASP:OD2	3:L:200:LEU:HD23	1.91	0.70
6:R:397:VAL:O	6:R:401:VAL:HG23	1.91	0.70
2:G:477:ASP:HB2	3:L:311:GLU:CD	2.16	0.70
1:J:5:PHE:N	2:N:332:LYS:HG2	2.07	0.70
2:B:248:VAL:CG2	2:B:443:GLN:CD	2.64	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:371:MET:HE3	2:A:367:GLN:O	1.91	0.70
2:A:334:VAL:HG22	2:N:451:TRP:HZ2	1.54	0.70
2:G:370:ALA:HB3	2:E:367:GLN:OE1	1.92	0.70
2:H:371:MET:HE3	2:F:367:GLN:O	1.91	0.70
6:Q:397:VAL:O	6:Q:401:VAL:HG23	1.91	0.70
2:P:245:GLY:HA2	2:P:440:ALA:CB	2.21	0.70
1:C:58:ARG:CZ	2:E:339:TRP:CH2	2.75	0.70
2:E:199:ASP:OD2	3:K:200:LEU:HD23	1.91	0.70
2:P:250:PRO:HB3	2:P:432:ARG:HH21	1.55	0.70
6:Q:559:MET:HE2	6:Q:597:ARG:HE	1.55	0.70
2:H:458:LEU:HB2	2:H:489:ALA:HB1	1.73	0.69
2:P:310:LYS:CG	2:N:477:ASP:OD1	2.38	0.69
2:H:248:VAL:CG2	2:H:443:GLN:CD	2.64	0.69
1:C:5:PHE:CD1	2:E:331:ASN:CG	2.61	0.69
3:D:306:HIS:HA	3:D:309:ARG:HH21	1.58	0.69
2:G:367:GLN:HE22	2:E:370:ALA:C	2.01	0.69
2:P:310:LYS:HG2	2:N:477:ASP:OD1	1.92	0.69
2:F:250:PRO:CB	2:F:432:ARG:CB	2.61	0.69
6:Q:58:SER:H	6:Q:61:GLN:HE21	1.38	0.69
2:H:370:ALA:HB3	2:F:367:GLN:OE1	1.92	0.69
6:Q:726:LYS:HE3	6:R:722:THR:O	1.92	0.69
2:N:306:HIS:HA	2:N:309:ARG:HH21	1.58	0.69
2:H:306:HIS:HA	2:H:309:ARG:HH21	1.58	0.69
2:F:250:PRO:HG3	2:F:433:LEU:N	2.08	0.69
1:J:94:PRO:O	1:C:215:VAL:HG12	1.92	0.69
6:Q:437:LEU:HD11	6:Q:485:TYR:HB2	1.73	0.69
2:B:199:ASP:OD2	2:P:200:LEU:HD23	1.91	0.69
2:B:381:SER:CB	2:A:357:LEU:CD2	2.68	0.69
2:A:250:PRO:HG3	2:A:433:LEU:N	2.08	0.69
2:H:367:GLN:HE22	2:F:370:ALA:C	2.01	0.69
3:V:306:HIS:HA	3:V:309:ARG:HH21	1.58	0.69
6:R:666:GLN:HE22	6:R:711:ARG:HB2	1.55	0.69
2:A:306:HIS:HA	2:A:309:ARG:HH21	1.58	0.69
6:Q:722:THR:O	6:R:726:LYS:HE3	1.92	0.69
2:G:372:ALA:HB1	2:G:409:ARG:NH1	2.05	0.69
2:F:306:HIS:HA	2:F:309:ARG:HH21	1.58	0.69
1:J:5:PHE:HB3	2:A:331:ASN:CA	2.13	0.68
1:J:6:SER:CA	2:A:331:ASN:N	2.56	0.68
2:B:361:MET:HA	2:B:364:MET:SD	2.33	0.68
2:G:253:GLU:OE2	2:G:432:ARG:NH1	2.26	0.68
3:K:306:HIS:HA	3:K:309:ARG:HH21	1.58	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:136:MET:HE2	2:P:490:GLU:HB2	1.74	0.68
2:G:470:ARG:HH22	2:H:348:ASP:HB2	1.58	0.68
1:J:243:PRO:HG3	6:Q:134:MET:CA	2.20	0.68
2:G:361:MET:HA	2:G:364:MET:SD	2.33	0.68
6:R:437:LEU:HD11	6:R:485:TYR:HB2	1.74	0.68
2:A:333:PHE:HD2	2:N:451:TRP:HH2	1.39	0.68
2:E:250:PRO:CG	2:E:433:LEU:CD2	2.71	0.68
2:H:361:MET:HA	2:H:364:MET:SD	2.33	0.68
2:A:199:ASP:HB3	3:D:200:LEU:CB	2.24	0.68
2:H:199:ASP:OD2	3:V:200:LEU:HD23	1.91	0.68
2:B:306:HIS:HA	2:B:309:ARG:HH21	1.58	0.68
2:B:367:GLN:HE22	2:A:370:ALA:C	2.00	0.68
2:B:370:ALA:HB3	2:A:367:GLN:OE1	1.92	0.68
2:A:199:ASP:OD2	3:D:200:LEU:HD23	1.91	0.68
2:A:334:VAL:HG21	2:N:451:TRP:NE1	2.08	0.68
2:G:200:LEU:HG	2:N:199:ASP:OD2	1.94	0.68
2:G:470:ARG:HH12	2:H:348:ASP:HB3	1.59	0.68
1:J:5:PHE:HB2	2:A:331:ASN:C	2.19	0.68
2:B:253:GLU:OE2	2:B:432:ARG:NH1	2.26	0.68
2:G:371:MET:HE3	2:E:367:GLN:O	1.91	0.68
2:G:357:LEU:O	2:G:360:ALA:HB3	1.93	0.68
2:H:372:ALA:HB1	2:H:409:ARG:NH1	2.05	0.68
2:F:250:PRO:CG	2:F:433:LEU:CD2	2.71	0.68
1:J:5:PHE:CG	2:N:332:LYS:CB	2.73	0.68
2:B:200:LEU:HG	2:P:199:ASP:OD2	1.94	0.68
2:G:250:PRO:HA	2:G:436:SER:HB2	1.71	0.68
2:H:199:ASP:HB3	3:V:200:LEU:CB	2.24	0.68
2:H:200:LEU:HG	3:V:199:ASP:OD2	1.94	0.68
2:H:253:GLU:OE2	2:H:432:ARG:NH1	2.26	0.68
2:B:357:LEU:O	2:B:360:ALA:HB3	1.93	0.68
2:B:433:LEU:HD13	2:B:514:PHE:CZ	2.29	0.68
2:G:246:VAL:HG22	2:G:503:MET:SD	2.34	0.68
2:E:250:PRO:HG3	2:E:433:LEU:N	2.08	0.68
2:H:357:LEU:O	2:H:360:ALA:HB3	1.93	0.68
6:Q:483:PRO:HA	6:Q:486:VAL:H	1.59	0.68
6:R:483:PRO:HA	6:R:486:VAL:H	1.59	0.68
1:J:217:PRO:HD3	2:G:392:PRO:HG3	1.74	0.67
2:B:350:LEU:HB3	2:A:385:LEU:HD21	1.75	0.67
2:H:250:PRO:HB3	2:H:436:SER:CB	2.03	0.67
5:S:52:ARG:HE	5:S:58:LEU:H	1.40	0.67
1:J:84:PHE:HA	1:C:88:VAL:CB	2.25	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:357:LEU:CD2	2:E:381:SER:CB	2.58	0.67
2:E:200:LEU:HG	3:K:199:ASP:OD2	1.94	0.67
2:P:475:GLN:HE22	2:N:311:GLU:HA	0.85	0.67
2:H:370:ALA:C	2:F:367:GLN:OE1	2.36	0.67
2:F:200:LEU:HG	3:L:199:ASP:OD2	1.94	0.67
1:C:5:PHE:HB3	2:E:331:ASN:N	2.08	0.67
2:A:200:LEU:HG	3:D:199:ASP:OD2	1.94	0.67
2:A:250:PRO:CG	2:A:433:LEU:CD2	2.71	0.67
2:P:306:HIS:HA	2:P:309:ARG:HH21	1.58	0.67
2:H:350:LEU:HB3	2:F:385:LEU:HD21	1.75	0.67
2:F:199:ASP:HB3	3:L:200:LEU:CB	2.24	0.67
2:B:246:VAL:HG22	2:B:503:MET:SD	2.34	0.67
2:A:334:VAL:HG22	2:N:451:TRP:CE2	2.29	0.67
2:G:433:LEU:HD13	2:G:514:PHE:CZ	2.29	0.67
2:G:449:HIS:CD2	2:G:452:HIS:CE1	2.83	0.67
2:P:480:ASN:HB2	2:N:310:LYS:CD	2.23	0.67
2:H:379:SER:HA	2:H:402:SER:HA	1.76	0.67
1:J:247:PHE:CZ	6:Q:94:GLU:HA	2.30	0.67
1:C:30:LYS:HZ1	2:P:283:PRO:HG2	1.58	0.67
2:B:253:GLU:OE2	2:B:432:ARG:NE	2.28	0.67
2:G:199:ASP:HB3	2:N:200:LEU:CB	2.24	0.67
2:G:306:HIS:HA	2:G:309:ARG:HH21	1.57	0.67
2:G:379:SER:HA	2:G:402:SER:HA	1.76	0.67
2:E:250:PRO:CB	2:E:432:ARG:CB	2.61	0.67
2:E:306:HIS:HA	2:E:309:ARG:HH21	1.58	0.67
2:P:250:PRO:HG3	2:P:429:GLU:C	2.18	0.67
2:H:253:GLU:OE2	2:H:432:ARG:NE	2.28	0.67
6:Q:389:LEU:HA	6:Q:392:ILE:HD12	1.77	0.67
5:T:52:ARG:HE	5:T:58:LEU:H	1.40	0.67
2:H:433:LEU:HD13	2:H:514:PHE:CZ	2.29	0.67
3:L:306:HIS:HA	3:L:309:ARG:HH21	1.58	0.67
2:B:250:PRO:HA	2:B:436:SER:HB2	1.71	0.67
2:G:350:LEU:HB3	2:E:385:LEU:HD21	1.75	0.67
1:J:215:VAL:HG12	1:C:94:PRO:O	1.92	0.67
6:Q:32:LEU:HD13	6:Q:76:LEU:HB2	1.76	0.67
1:J:58:ARG:NH2	2:A:339:TRP:CZ2	2.62	0.67
1:J:261:ASN:HD21	1:C:90:GLU:CG	1.71	0.67
2:B:199:ASP:HB3	2:P:200:LEU:CB	2.24	0.67
2:H:449:HIS:CD2	2:H:452:HIS:CE1	2.83	0.67
1:C:5:PHE:HB2	2:E:331:ASN:C	2.20	0.67
2:B:449:HIS:CD2	2:B:452:HIS:CE1	2.83	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:334:VAL:CG2	2:N:451:TRP:HZ2	2.08	0.67
2:E:250:PRO:HB2	2:E:432:ARG:CZ	2.25	0.67
5:S:16:ARG:CZ	5:S:120:HIS:CE1	2.78	0.67
6:R:389:LEU:HA	6:R:392:ILE:HD12	1.77	0.67
2:B:379:SER:HA	2:B:402:SER:HA	1.76	0.66
2:H:381:SER:CB	2:F:357:LEU:CD2	2.68	0.66
2:H:530:LEU:CD1	2:F:544:TRP:NE1	2.58	0.66
1:J:5:PHE:CD1	2:A:331:ASN:ND2	2.63	0.66
2:H:246:VAL:HG22	2:H:503:MET:SD	2.34	0.66
6:R:435:GLY:HA2	6:R:439:TYR:CG	2.30	0.66
2:E:199:ASP:HB3	3:K:200:LEU:CB	2.24	0.66
2:B:370:ALA:C	2:A:367:GLN:OE1	2.36	0.66
2:H:199:ASP:O	3:V:199:ASP:CG	2.39	0.66
2:F:199:ASP:O	3:L:199:ASP:CG	2.39	0.66
6:Q:509:LEU:HD13	6:Q:567:ARG:HH11	1.61	0.66
6:Q:722:THR:CG2	6:R:725:THR:CG2	2.61	0.66
2:A:199:ASP:O	3:D:199:ASP:CG	2.39	0.66
2:G:196:LYS:HZ1	2:N:196:LYS:HZ3	1.32	0.66
2:G:199:ASP:OD2	2:N:200:LEU:HD23	1.91	0.66
6:Q:435:GLY:HA2	6:Q:439:TYR:CG	2.30	0.66
5:T:123:GLU:H	5:T:134:ASN:HB3	1.61	0.66
6:R:32:LEU:HD13	6:R:76:LEU:HB2	1.76	0.66
6:R:562:GLN:H	6:R:562:GLN:CD	2.04	0.66
2:G:253:GLU:OE2	2:G:432:ARG:NE	2.28	0.66
2:G:260:PHE:CE2	2:N:198:GLY:CA	2.79	0.66
2:G:370:ALA:C	2:E:367:GLN:OE1	2.36	0.66
5:S:123:GLU:H	5:S:134:ASN:HB3	1.61	0.66
1:J:247:PHE:CZ	6:Q:94:GLU:CA	2.78	0.66
2:A:250:PRO:HB2	2:A:432:ARG:CZ	2.25	0.66
2:N:251:PRO:HD2	2:N:432:ARG:CD	2.25	0.66
1:J:5:PHE:CD2	2:N:332:LYS:HB2	2.27	0.66
1:C:58:ARG:NE	2:E:339:TRP:CH2	2.64	0.66
2:A:332:LYS:HA	2:N:332:LYS:N	2.10	0.66
2:A:260:PHE:CE2	3:D:198:GLY:CA	2.79	0.65
6:R:509:LEU:HD13	6:R:567:ARG:HH11	1.61	0.65
2:B:385:LEU:HD21	2:A:350:LEU:HD13	1.79	0.65
2:H:488:ASP:HA	2:H:491:ARG:HE	1.61	0.65
2:F:260:PHE:CE2	3:L:198:GLY:CA	2.79	0.65
1:J:5:PHE:CA	2:N:332:LYS:HB2	2.25	0.65
1:C:5:PHE:N	2:P:332:LYS:CB	2.57	0.65
5:T:16:ARG:CZ	5:T:120:HIS:CE1	2.78	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:488:ASP:HA	2:B:491:ARG:HE	1.61	0.65
2:A:345:VAL:HG21	2:N:462:LYS:NZ	2.11	0.65
2:G:199:ASP:O	2:N:199:ASP:CG	2.39	0.65
2:G:488:ASP:HA	2:G:491:ARG:HE	1.62	0.65
2:E:260:PHE:CE2	3:K:198:GLY:CA	2.79	0.65
6:Q:562:GLN:CD	6:Q:562:GLN:H	2.04	0.65
2:B:199:ASP:O	2:P:199:ASP:CG	2.39	0.65
2:B:406:LEU:CD1	2:B:409:ARG:HH21	2.10	0.65
2:G:530:LEU:CD1	2:E:544:TRP:NE1	2.58	0.65
1:J:88:VAL:CB	1:C:84:PHE:HA	2.25	0.65
2:B:250:PRO:HA	2:B:436:SER:CB	2.26	0.65
2:E:199:ASP:O	3:K:199:ASP:CG	2.39	0.65
2:F:250:PRO:HD3	2:F:433:LEU:HA	1.79	0.65
2:G:406:LEU:CD1	2:G:409:ARG:HH21	2.10	0.65
2:P:250:PRO:HB3	2:P:432:ARG:CD	2.24	0.65
2:H:385:LEU:HD21	2:F:350:LEU:HD13	1.79	0.65
2:F:211:THR:HG21	2:F:295:LEU:HB3	1.79	0.65
6:Q:722:THR:HG22	6:R:721:ASP:O	1.96	0.65
2:B:211:THR:HG21	2:B:295:LEU:HB3	1.79	0.65
2:B:245:GLY:HA3	2:B:503:MET:HG3	1.79	0.65
1:J:30:LYS:HZ1	2:N:283:PRO:HG2	1.62	0.65
1:J:230:GLU:O	6:Q:105:ARG:NH2	2.29	0.65
2:G:368:ARG:HD2	2:G:416:ALA:H	1.62	0.65
2:H:260:PHE:CE2	3:V:198:GLY:CA	2.79	0.65
2:H:267:SER:HB3	2:H:432:ARG:HH12	0.82	0.65
2:E:209:VAL:HB	2:E:225:VAL:HG22	1.80	0.64
2:N:251:PRO:CD	2:N:432:ARG:HD2	2.26	0.64
2:H:211:THR:HG21	2:H:295:LEU:HB3	1.79	0.64
6:R:264:PRO:HB2	6:R:267:TYR:H	1.62	0.64
2:B:260:PHE:CE2	2:P:198:GLY:CA	2.79	0.64
2:H:209:VAL:HB	2:H:225:VAL:HG22	1.80	0.64
2:F:250:PRO:HB2	2:F:432:ARG:CZ	2.25	0.64
6:Q:103:ILE:HG23	6:Q:107:TYR:CE1	2.33	0.64
1:C:217:PRO:CA	2:B:390:LEU:CD1	2.70	0.64
2:B:267:SER:HB3	2:B:432:ARG:HH12	0.82	0.64
2:B:380:ALA:O	2:B:383:HIS:CD2	2.51	0.64
2:G:380:ALA:O	2:G:383:HIS:CD2	2.51	0.64
2:P:211:THR:HG21	2:P:295:LEU:HB3	1.79	0.64
6:R:96:VAL:HG23	6:R:97:GLN:OE1	1.98	0.64
1:J:217:PRO:CG	2:G:390:LEU:CD1	2.59	0.64
2:B:368:ARG:HD2	2:B:416:ALA:H	1.62	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:370:ALA:HB3	2:A:367:GLN:NE2	2.13	0.64
2:H:375:ALA:CB	2:H:409:ARG:HB2	2.28	0.64
2:H:380:ALA:O	2:H:383:HIS:CD2	2.51	0.64
3:L:209:VAL:HB	3:L:225:VAL:HG22	1.80	0.64
6:R:103:ILE:HG23	6:R:107:TYR:CE1	2.33	0.64
2:A:209:VAL:HB	2:A:225:VAL:HG22	1.80	0.64
2:A:250:PRO:HD3	2:A:433:LEU:HA	1.79	0.64
2:G:479:LEU:C	3:L:310:LYS:HE2	2.23	0.64
2:E:211:THR:HG21	2:E:295:LEU:HB3	1.79	0.64
2:E:250:PRO:HB2	2:E:432:ARG:NH1	2.13	0.64
3:K:211:THR:HG21	3:K:295:LEU:HB3	1.79	0.64
2:H:350:LEU:CG	2:F:385:LEU:CD2	2.69	0.64
6:Q:721:ASP:O	6:R:722:THR:HG22	1.96	0.64
2:A:211:THR:HG21	2:A:295:LEU:HB3	1.79	0.64
3:D:234:TRP:CZ3	3:D:237:ASN:HB2	2.33	0.64
2:G:375:ALA:CB	2:G:409:ARG:HB2	2.28	0.64
2:G:385:LEU:HD21	2:E:350:LEU:HD13	1.79	0.64
2:P:251:PRO:HD2	2:P:432:ARG:HD2	1.80	0.64
2:H:245:GLY:HA3	2:H:503:MET:HG3	1.79	0.64
2:F:250:PRO:HB2	2:F:432:ARG:NH1	2.13	0.64
2:G:245:GLY:HA3	2:G:503:MET:HG3	1.79	0.64
2:P:234:TRP:CZ3	2:P:237:ASN:HB2	2.33	0.64
6:Q:264:PRO:HB2	6:Q:267:TYR:H	1.63	0.64
2:G:267:SER:HB3	2:G:432:ARG:HH12	0.82	0.64
2:N:234:TRP:CZ3	2:N:237:ASN:HB2	2.33	0.64
3:V:211:THR:HG21	3:V:295:LEU:HB3	1.79	0.64
3:L:211:THR:HG21	3:L:295:LEU:HB3	1.79	0.64
6:Q:96:VAL:HG23	6:Q:97:GLN:OE1	1.98	0.64
2:B:227:ARG:HB2	2:B:232:PHE:CZ	2.33	0.64
2:G:211:THR:HG21	2:G:295:LEU:HB3	1.79	0.64
2:P:227:ARG:HB2	2:P:232:PHE:CZ	2.33	0.64
2:N:209:VAL:HB	2:N:225:VAL:HG22	1.80	0.64
2:H:406:LEU:CD1	2:H:409:ARG:HH21	2.10	0.64
3:V:209:VAL:HB	3:V:225:VAL:HG22	1.79	0.64
3:L:234:TRP:CZ3	3:L:237:ASN:HB2	2.33	0.64
6:Q:438:ALA:HB3	6:Q:439:TYR:HD1	1.63	0.64
1:J:82:TYR:HE2	1:C:90:GLU:OE2	1.75	0.64
2:B:234:TRP:CZ3	2:B:237:ASN:HB2	2.33	0.64
2:A:234:TRP:CZ3	2:A:237:ASN:HB2	2.33	0.64
3:D:227:ARG:HB2	3:D:232:PHE:CZ	2.33	0.64
2:E:234:TRP:CZ3	2:E:237:ASN:HB2	2.33	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:250:PRO:HD3	2:E:433:LEU:HA	1.79	0.64
1:C:217:PRO:HG3	2:B:391:SER:C	2.16	0.63
2:G:209:VAL:HB	2:G:225:VAL:HG22	1.79	0.63
3:K:209:VAL:HB	3:K:225:VAL:HG22	1.80	0.63
3:K:309:ARG:N	2:H:476:GLN:OE1	2.31	0.63
2:F:209:VAL:HB	2:F:225:VAL:HG22	1.80	0.63
6:Q:80:LEU:HD21	6:Q:111:THR:O	1.98	0.63
6:Q:725:THR:CG2	6:R:722:THR:CG2	2.61	0.63
1:C:5:PHE:CD1	2:E:331:ASN:ND2	2.67	0.63
2:B:209:VAL:HB	2:B:225:VAL:HG22	1.79	0.63
3:K:234:TRP:CZ3	3:K:237:ASN:HB2	2.33	0.63
1:J:217:PRO:N	2:G:390:LEU:HD11	2.12	0.63
2:B:196:LYS:HZ1	2:P:196:LYS:HZ3	1.35	0.63
2:B:350:LEU:CG	2:A:385:LEU:CD2	2.70	0.63
2:G:350:LEU:HD22	2:E:385:LEU:HD11	1.39	0.63
2:H:246:VAL:HA	2:H:503:MET:SD	2.39	0.63
6:Q:471:ARG:HH21	6:Q:472:ARG:HH22	1.47	0.63
2:B:530:LEU:CD1	2:A:544:TRP:NE1	2.58	0.63
2:A:250:PRO:HB2	2:A:432:ARG:NH1	2.13	0.63
2:G:430:TYR:CE2	2:G:522:PHE:CZ	2.87	0.63
3:K:310:LYS:H	2:H:476:GLN:CD	2.07	0.63
2:H:357:LEU:HD22	2:F:378:PHE:CD1	2.34	0.63
2:H:368:ARG:HD2	2:H:416:ALA:H	1.62	0.63
2:F:234:TRP:CZ3	2:F:237:ASN:HB2	2.33	0.63
3:V:227:ARG:HB2	3:V:232:PHE:CZ	2.33	0.63
6:Q:752:TRP:CZ2	6:Q:811:GLN:HB3	2.33	0.63
6:R:438:ALA:HB3	6:R:439:TYR:HD1	1.63	0.63
6:R:631:SER:HA	6:R:634:PHE:CE2	2.34	0.63
6:R:752:TRP:CZ2	6:R:811:GLN:HB3	2.33	0.63
2:B:357:LEU:HD22	2:A:378:PHE:CD1	2.34	0.63
2:B:430:TYR:CE2	2:B:522:PHE:CZ	2.87	0.63
3:D:211:THR:HG21	3:D:295:LEU:HB3	1.79	0.63
2:G:234:TRP:CZ3	2:G:237:ASN:HB2	2.33	0.63
2:G:449:HIS:HA	2:G:452:HIS:CE1	2.34	0.63
2:E:227:ARG:HB2	2:E:232:PHE:CZ	2.33	0.63
2:N:250:PRO:CB	2:N:429:GLU:CA	2.61	0.63
2:A:227:ARG:HB2	2:A:232:PHE:CZ	2.33	0.63
2:G:370:ALA:HB3	2:E:367:GLN:NE2	2.13	0.63
2:N:227:ARG:HB2	2:N:232:PHE:CZ	2.33	0.63
2:H:234:TRP:CZ3	2:H:237:ASN:HB2	2.33	0.63
6:R:471:ARG:HH21	6:R:472:ARG:HH22	1.47	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:K:311:GLU:HB2	2:H:477:ASP:CB	1.80	0.63
2:P:209:VAL:HB	2:P:225:VAL:HG22	1.79	0.63
2:P:250:PRO:CD	2:P:433:LEU:CG	2.68	0.63
2:H:196:LYS:HZ2	3:V:196:LYS:HZ3	1.33	0.63
2:H:250:PRO:HA	2:H:436:SER:CB	2.26	0.63
6:Q:683:GLN:CA	6:R:733:LYS:CE	2.66	0.63
6:R:80:LEU:HD21	6:R:111:THR:O	1.99	0.63
2:B:375:ALA:CB	2:B:409:ARG:HB2	2.28	0.63
3:L:227:ARG:HB2	3:L:232:PHE:CZ	2.34	0.63
1:J:92:ALA:C	1:C:262:LYS:CD	2.67	0.63
1:C:30:LYS:HE2	2:P:283:PRO:CG	2.27	0.63
2:B:449:HIS:HA	2:B:452:HIS:CE1	2.34	0.63
2:G:227:ARG:HB2	2:G:232:PHE:CZ	2.33	0.63
2:G:246:VAL:HA	2:G:503:MET:SD	2.39	0.63
6:Q:108:LEU:O	6:Q:112:VAL:HG23	1.99	0.63
6:Q:435:GLY:HA2	6:Q:439:TYR:CE2	2.34	0.63
6:R:435:GLY:HA2	6:R:439:TYR:CE2	2.34	0.63
1:C:5:PHE:C	2:E:331:ASN:N	2.56	0.62
2:A:332:LYS:HA	2:N:331:ASN:O	1.97	0.62
3:K:227:ARG:HB2	3:K:232:PHE:CZ	2.33	0.62
2:H:227:ARG:HB2	2:H:232:PHE:CZ	2.33	0.62
2:F:227:ARG:HB2	2:F:232:PHE:CZ	2.33	0.62
2:A:206:VAL:HG21	2:A:228:ARG:CZ	2.30	0.62
2:N:206:VAL:HG21	2:N:228:ARG:CZ	2.30	0.62
2:P:204:HIS:CE1	2:P:230:ARG:HE	2.17	0.62
2:H:370:ALA:HB3	2:F:367:GLN:NE2	2.13	0.62
3:V:234:TRP:CZ3	3:V:237:ASN:HB2	2.33	0.62
3:L:206:VAL:HG21	3:L:228:ARG:CZ	2.30	0.62
6:Q:631:SER:HA	6:Q:634:PHE:CE2	2.34	0.62
5:T:107:LYS:HZ2	6:R:800:GLU:HB3	1.64	0.62
1:J:218:ASN:N	2:G:390:LEU:CD1	2.63	0.62
2:A:250:PRO:CB	2:A:432:ARG:CB	2.62	0.62
2:G:371:MET:HE1	2:E:367:GLN:C	2.24	0.62
2:G:382:LEU:HD12	2:G:405:GLN:HG3	1.82	0.62
3:K:206:VAL:HG21	3:K:228:ARG:CZ	2.30	0.62
3:V:204:HIS:CE1	3:V:230:ARG:HE	2.17	0.62
1:C:217:PRO:HD2	2:B:390:LEU:CD2	2.27	0.62
3:D:206:VAL:HG21	3:D:228:ARG:CZ	2.30	0.62
2:F:204:HIS:CE1	2:F:230:ARG:HE	2.18	0.62
5:S:138:ALA:HB1	5:S:157:PHE:CD2	2.35	0.62
6:R:564:TRP:CH2	6:R:568:LEU:HD22	2.34	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:246:VAL:HA	2:B:503:MET:SD	2.39	0.62
3:D:209:VAL:HB	3:D:225:VAL:HG22	1.80	0.62
2:G:204:HIS:CE1	2:G:230:ARG:HE	2.18	0.62
2:E:204:HIS:CE1	2:E:230:ARG:HE	2.17	0.62
2:P:206:VAL:HG21	2:P:228:ARG:CZ	2.30	0.62
2:N:211:THR:HG21	2:N:295:LEU:HB3	1.79	0.62
2:H:196:LYS:HZ3	3:V:196:LYS:HZ2	0.63	0.62
2:H:371:MET:HE1	2:F:367:GLN:C	2.24	0.62
3:V:206:VAL:HG21	3:V:228:ARG:CZ	2.30	0.62
2:B:250:PRO:HB3	2:B:436:SER:CB	2.04	0.62
2:G:415:GLN:HG3	2:G:418:GLN:NE2	2.15	0.62
3:K:204:HIS:CE1	3:K:230:ARG:HE	2.18	0.62
2:P:310:LYS:HD3	2:N:477:ASP:O	1.93	0.62
3:L:204:HIS:CE1	3:L:230:ARG:HE	2.18	0.62
1:C:218:ASN:H	2:B:390:LEU:HD11	1.65	0.62
2:B:494:HIS:CE1	2:B:498:LEU:HB2	2.35	0.62
2:A:331:ASN:ND2	2:N:332:LYS:NZ	2.47	0.62
2:A:497:ARG:HD3	2:N:334:VAL:HG21	1.80	0.62
3:D:204:HIS:CE1	3:D:230:ARG:HE	2.18	0.62
2:G:206:VAL:HG21	2:G:228:ARG:CZ	2.30	0.62
2:H:449:HIS:HA	2:H:452:HIS:CE1	2.34	0.62
2:F:250:PRO:CB	2:F:432:ARG:HB2	2.30	0.62
1:J:88:VAL:HB	1:C:84:PHE:CA	2.30	0.62
2:E:206:VAL:HG21	2:E:228:ARG:CZ	2.30	0.62
6:Q:429:ARG:HB2	6:Q:432:TYR:CZ	2.35	0.62
5:T:138:ALA:HB1	5:T:157:PHE:CD2	2.35	0.62
6:R:429:ARG:HB2	6:R:432:TYR:CZ	2.35	0.62
6:R:508:LEU:HD22	6:R:513:THR:H	1.65	0.62
1:J:218:ASN:N	2:G:390:LEU:HD11	2.15	0.62
2:P:250:PRO:CA	2:P:432:ARG:HD2	2.30	0.62
2:H:206:VAL:HG21	2:H:228:ARG:CZ	2.30	0.62
2:B:371:MET:HE1	2:A:367:GLN:C	2.24	0.61
2:G:357:LEU:HD22	2:E:378:PHE:CD1	2.34	0.61
2:H:415:GLN:HG3	2:H:418:GLN:NE2	2.15	0.61
2:H:430:TYR:CE2	2:H:522:PHE:CZ	2.87	0.61
2:F:206:VAL:HG21	2:F:228:ARG:CZ	2.30	0.61
6:Q:516:SER:HA	6:Q:520:HIS:CD2	2.35	0.61
6:Q:564:TRP:CH2	6:Q:568:LEU:HD22	2.34	0.61
2:B:206:VAL:HG21	2:B:228:ARG:CZ	2.30	0.61
2:B:357:LEU:CD2	2:A:381:SER:CB	2.58	0.61
2:A:204:HIS:CE1	2:A:230:ARG:HE	2.18	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:332:LYS:CA	2:N:331:ASN:C	2.61	0.61
2:G:253:GLU:CD	2:G:432:ARG:HH11	2.08	0.61
2:H:204:HIS:CE1	2:H:230:ARG:HE	2.18	0.61
2:H:494:HIS:CE1	2:H:498:LEU:HB2	2.35	0.61
6:R:516:SER:HA	6:R:520:HIS:CD2	2.35	0.61
2:B:415:GLN:HG3	2:B:418:GLN:NE2	2.15	0.61
2:F:250:PRO:HB3	2:F:432:ARG:NE	2.15	0.61
6:Q:733:LYS:HZ1	6:R:683:GLN:N	1.97	0.61
6:R:564:TRP:CZ2	6:R:568:LEU:HD22	2.35	0.61
1:J:90:GLU:CG	1:C:261:ASN:HD21	1.71	0.61
2:B:538:LYS:HZ3	2:B:541:ILE:HB	1.65	0.61
2:G:250:PRO:HA	2:G:436:SER:CB	2.26	0.61
2:G:476:GLN:HB3	3:L:306:HIS:O	1.99	0.61
2:G:479:LEU:HG	3:L:310:LYS:HE2	1.81	0.61
6:Q:564:TRP:CZ2	6:Q:568:LEU:HD22	2.35	0.61
1:C:217:PRO:HD3	2:B:392:PRO:CD	2.31	0.61
2:G:246:VAL:N	2:G:503:MET:HE3	2.14	0.61
2:G:494:HIS:CE1	2:G:498:LEU:HB2	2.35	0.61
2:H:382:LEU:HD12	2:H:405:GLN:HG3	1.82	0.61
6:R:108:LEU:O	6:R:112:VAL:HG23	1.99	0.61
1:J:136:MET:HE2	2:N:490:GLU:HB3	1.83	0.61
1:C:216:ALA:HA	2:B:392:PRO:HG2	1.83	0.61
2:N:204:HIS:CE1	2:N:230:ARG:HE	2.18	0.61
6:Q:494:TYR:HA	6:Q:497:ARG:HE	1.65	0.61
6:Q:508:LEU:HD22	6:Q:513:THR:H	1.65	0.61
2:B:204:HIS:CE1	2:B:230:ARG:HE	2.18	0.61
2:A:349:ALA:HB2	2:N:470:ARG:HH21	1.66	0.61
2:P:249:PRO:C	2:P:433:LEU:HD21	2.25	0.61
6:R:473:TYR:CE2	6:R:476:ILE:HA	2.36	0.61
1:J:217:PRO:C	2:G:390:LEU:CD1	2.72	0.61
2:B:410:ASP:HB3	2:B:414:ARG:HH11	1.66	0.61
2:B:534:VAL:HG13	2:B:535:GLU:OE2	2.01	0.61
2:G:381:SER:CB	2:E:357:LEU:CD2	2.69	0.61
2:E:250:PRO:HB3	2:E:432:ARG:NE	2.15	0.61
2:N:251:PRO:HD2	2:N:432:ARG:HD2	1.81	0.61
2:H:253:GLU:CD	2:H:432:ARG:HH11	2.09	0.61
2:B:253:GLU:CD	2:B:432:ARG:HH11	2.08	0.60
2:G:337:ASP:O	2:G:341:HIS:CD2	2.54	0.60
2:H:337:ASP:O	2:H:341:HIS:CD2	2.54	0.60
1:J:136:MET:HE2	2:N:490:GLU:CB	2.31	0.60
2:A:334:VAL:CG2	2:N:451:TRP:CE2	2.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:534:VAL:HG13	2:H:535:GLU:OE2	2.01	0.60
2:P:250:PRO:CB	2:P:429:GLU:HA	2.30	0.60
2:H:385:LEU:HD12	2:H:388:VAL:HG21	1.84	0.60
2:B:382:LEU:HD12	2:B:405:GLN:HG3	1.82	0.60
2:H:408:ILE:HD13	2:F:529:PHE:CZ	2.36	0.60
2:G:410:ASP:HB3	2:G:414:ARG:HH11	1.66	0.60
2:H:538:LYS:HZ3	2:H:541:ILE:HB	1.65	0.60
1:J:5:PHE:CB	2:A:331:ASN:N	2.64	0.60
2:B:408:ILE:HD13	2:A:529:PHE:CZ	2.36	0.60
2:B:337:ASP:O	2:B:341:HIS:CD2	2.54	0.60
2:G:538:LYS:HZ3	2:G:541:ILE:HB	1.67	0.60
2:H:382:LEU:HD13	2:H:401:LEU:O	2.01	0.60
6:Q:579:THR:HA	6:Q:582:ARG:CZ	2.32	0.60
1:J:5:PHE:CB	2:A:331:ASN:CA	2.79	0.60
1:C:217:PRO:N	2:B:390:LEU:CD1	2.64	0.60
1:C:283:PHE:HE1	2:B:545:GLU:CB	2.04	0.60
2:G:225:VAL:HG23	2:G:227:ARG:HG2	1.84	0.60
2:G:385:LEU:HD12	2:G:388:VAL:HG21	1.84	0.60
2:G:480:ASN:HA	3:L:310:LYS:HD3	1.82	0.60
2:E:250:PRO:CB	2:E:432:ARG:HB2	2.30	0.60
3:K:311:GLU:O	2:H:476:GLN:N	2.32	0.60
6:R:795:ILE:HA	6:R:798:PHE:CD2	2.37	0.60
6:R:494:TYR:HA	6:R:497:ARG:HE	1.65	0.60
2:B:225:VAL:HG23	2:B:227:ARG:HG2	1.84	0.59
2:G:352:ASN:ND2	2:H:470:ARG:HH11	1.97	0.59
2:G:408:ILE:HD13	2:E:529:PHE:CZ	2.36	0.59
6:R:579:THR:HA	6:R:582:ARG:CZ	2.32	0.59
2:B:382:LEU:HD13	2:B:401:LEU:O	2.01	0.59
2:A:250:PRO:HB3	2:A:432:ARG:NE	2.15	0.59
2:G:382:LEU:HD13	2:G:401:LEU:O	2.01	0.59
2:P:250:PRO:HA	2:P:432:ARG:CD	2.32	0.59
2:H:246:VAL:N	2:H:503:MET:HE3	2.15	0.59
1:C:58:ARG:HH21	2:E:339:TRP:HH2	0.70	0.59
2:E:196:LYS:HZ3	3:K:196:LYS:HZ2	0.60	0.59
2:P:310:LYS:CE	2:N:479:LEU:N	2.65	0.59
6:Q:528:LEU:HG	6:Q:586:MET:HE1	1.84	0.59
6:Q:579:THR:HG22	6:Q:583:LEU:HD12	1.84	0.59
2:B:372:ALA:HB2	2:B:413:GLU:CD	2.28	0.59
2:A:406:LEU:HD21	3:D:220:GLN:CD	2.27	0.59
2:G:451:TRP:CD1	2:G:493:VAL:O	2.56	0.59
2:G:480:ASN:HB2	3:L:310:LYS:HG2	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:534:VAL:HG13	2:G:535:GLU:OE2	2.01	0.59
2:H:372:ALA:HB2	2:H:413:GLU:CD	2.28	0.59
2:H:451:TRP:CD1	2:H:493:VAL:O	2.56	0.59
1:J:111:GLU:HG2	1:C:108:LYS:HB3	1.85	0.59
1:C:217:PRO:N	2:B:392:PRO:CG	2.49	0.59
2:A:225:VAL:HG23	2:A:227:ARG:HG2	1.84	0.59
2:G:477:ASP:HB2	3:L:311:GLU:OE1	2.02	0.59
2:E:225:VAL:HG23	2:E:227:ARG:HG2	1.84	0.59
6:R:528:LEU:HG	6:R:586:MET:HE1	1.84	0.59
2:B:204:HIS:HE1	2:B:230:ARG:HE	1.51	0.59
2:B:382:LEU:HD22	2:B:401:LEU:HB2	1.84	0.59
2:G:343:ARG:HA	2:G:346:TYR:CZ	2.38	0.59
3:K:204:HIS:HE1	3:K:230:ARG:HE	1.51	0.59
2:H:410:ASP:HB3	2:H:414:ARG:HH11	1.66	0.59
2:B:343:ARG:HA	2:B:346:TYR:CZ	2.38	0.59
2:H:204:HIS:HE1	2:H:230:ARG:HE	1.51	0.59
2:H:343:ARG:HA	2:H:346:TYR:CZ	2.38	0.59
2:F:406:LEU:HD21	3:L:220:GLN:CD	2.27	0.59
3:V:204:HIS:HE1	3:V:230:ARG:HE	1.51	0.59
6:Q:721:ASP:O	6:R:722:THR:HG23	2.03	0.59
6:R:715:PHE:HB2	6:R:720:TYR:CE1	2.38	0.59
2:B:240:HIS:N	2:B:248:VAL:HG11	2.18	0.59
3:K:204:HIS:CE1	3:K:228:ARG:HD3	2.38	0.59
2:N:225:VAL:HG23	2:N:227:ARG:HG2	1.84	0.59
6:Q:189:TRP:CZ3	6:Q:251:ALA:HA	2.38	0.59
6:Q:473:TYR:CE2	6:Q:476:ILE:HA	2.36	0.59
6:R:579:THR:HG22	6:R:583:LEU:HD12	1.84	0.59
6:R:587:THR:O	6:R:591:TYR:CE2	2.56	0.59
6:R:715:PHE:HB2	6:R:720:TYR:CZ	2.38	0.59
1:J:245:ARG:NH1	6:Q:130:ASP:OD2	2.36	0.59
3:D:204:HIS:CE1	3:D:228:ARG:HD3	2.38	0.59
2:G:240:HIS:N	2:G:248:VAL:HG11	2.18	0.59
2:G:480:ASN:CB	3:L:310:LYS:HG3	2.33	0.59
2:N:240:HIS:N	2:N:248:VAL:HG11	2.18	0.59
2:H:382:LEU:HD22	2:H:401:LEU:HB2	1.84	0.59
2:F:225:VAL:HG23	2:F:227:ARG:HG2	1.84	0.59
6:Q:587:THR:O	6:Q:591:TYR:CE2	2.56	0.59
5:T:12:HIS:HB2	5:T:16:ARG:H	1.68	0.59
2:B:451:TRP:CD1	2:B:493:VAL:O	2.55	0.59
2:A:250:PRO:CB	2:A:432:ARG:HB2	2.30	0.59
2:G:204:HIS:HE1	2:G:230:ARG:HE	1.51	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:406:LEU:HD21	3:K:220:GLN:CD	2.28	0.59
2:B:385:LEU:HD12	2:B:388:VAL:HG21	1.84	0.58
2:G:382:LEU:HD22	2:G:401:LEU:HB2	1.84	0.58
2:E:240:HIS:N	2:E:248:VAL:HG11	2.18	0.58
2:P:204:HIS:CE1	2:P:228:ARG:HD3	2.38	0.58
2:N:248:VAL:C	2:N:433:LEU:CD2	2.76	0.58
2:H:386:SER:HA	2:H:398:LEU:HD23	1.84	0.58
3:V:204:HIS:CE1	3:V:228:ARG:HD3	2.38	0.58
6:Q:795:ILE:HA	6:Q:798:PHE:CD2	2.37	0.58
2:A:204:HIS:CE1	2:A:228:ARG:HD3	2.38	0.58
2:G:386:SER:HA	2:G:398:LEU:HD23	1.85	0.58
2:N:204:HIS:HE1	2:N:230:ARG:HE	1.51	0.58
3:L:240:HIS:N	3:L:248:VAL:HG11	2.18	0.58
6:Q:528:LEU:HD23	6:Q:586:MET:SD	2.43	0.58
2:B:449:HIS:CD2	2:B:452:HIS:HE1	2.21	0.58
2:H:225:VAL:HG23	2:H:227:ARG:HG2	1.84	0.58
6:Q:715:PHE:HB2	6:Q:720:TYR:CZ	2.38	0.58
1:J:108:LYS:HB3	1:C:111:GLU:HG2	1.85	0.58
1:C:58:ARG:CZ	2:E:339:TRP:CZ2	2.86	0.58
1:C:217:PRO:C	2:B:390:LEU:HD12	2.27	0.58
2:E:204:HIS:CE1	2:E:228:ARG:HD3	2.38	0.58
2:H:246:VAL:CA	2:H:503:MET:SD	2.92	0.58
2:H:367:GLN:NE2	2:F:369:LYS:O	2.36	0.58
2:F:240:HIS:N	2:F:248:VAL:HG11	2.18	0.58
5:S:12:HIS:HB2	5:S:16:ARG:H	1.68	0.58
6:R:480:LEU:HD23	6:R:485:TYR:HE1	1.68	0.58
3:D:240:HIS:N	3:D:248:VAL:HG11	2.18	0.58
2:G:246:VAL:CA	2:G:503:MET:SD	2.92	0.58
2:P:240:HIS:N	2:P:248:VAL:HG11	2.18	0.58
2:H:204:HIS:CE1	2:H:228:ARG:HD3	2.38	0.58
3:L:204:HIS:CE1	3:L:228:ARG:HD3	2.38	0.58
6:Q:722:THR:HG22	6:R:725:THR:HG1	1.64	0.58
6:R:264:PRO:HD2	6:R:267:TYR:CD2	2.39	0.58
6:R:528:LEU:HD23	6:R:586:MET:SD	2.44	0.58
2:B:246:VAL:N	2:B:503:MET:HE3	2.14	0.58
2:A:240:HIS:N	2:A:248:VAL:HG11	2.18	0.58
2:G:479:LEU:HD23	3:L:310:LYS:CE	2.19	0.58
2:P:310:LYS:HE2	2:N:478:ARG:C	2.28	0.58
2:N:204:HIS:CE1	2:N:228:ARG:HD3	2.38	0.58
2:F:199:ASP:O	3:L:199:ASP:OD2	2.22	0.58
6:Q:733:LYS:CE	6:R:683:GLN:CA	2.66	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:5:PHE:CB	2:E:331:ASN:C	2.76	0.58
2:B:196:LYS:HZ3	2:P:196:LYS:HZ2	0.59	0.58
2:A:199:ASP:O	3:D:199:ASP:OD2	2.22	0.58
3:D:225:VAL:HG23	3:D:227:ARG:HG2	1.84	0.58
2:G:204:HIS:CE1	2:G:228:ARG:HD3	2.38	0.58
2:G:246:VAL:N	2:G:503:MET:SD	2.77	0.58
2:G:470:ARG:NH1	2:H:352:ASN:ND2	2.48	0.58
3:K:240:HIS:N	3:K:248:VAL:HG11	2.18	0.58
2:F:204:HIS:CE1	2:F:228:ARG:HD3	2.38	0.58
3:V:225:VAL:HG23	3:V:227:ARG:HG2	1.84	0.58
5:S:52:ARG:HE	5:S:58:LEU:N	2.02	0.58
6:Q:264:PRO:HD2	6:Q:267:TYR:CD2	2.39	0.58
6:Q:722:THR:O	6:R:726:LYS:CE	2.51	0.58
2:A:406:LEU:HD23	3:D:220:GLN:NE2	2.06	0.58
2:H:240:HIS:N	2:H:248:VAL:HG11	2.18	0.58
6:Q:715:PHE:HB2	6:Q:720:TYR:CE1	2.38	0.58
6:Q:722:THR:HG23	6:R:721:ASP:O	2.03	0.58
2:B:246:VAL:N	2:B:503:MET:SD	2.77	0.58
2:G:367:GLN:NE2	2:E:369:LYS:O	2.36	0.58
2:G:449:HIS:CD2	2:G:452:HIS:HE1	2.21	0.58
6:Q:725:THR:HG21	6:R:722:THR:CG2	2.20	0.58
6:Q:752:TRP:CD1	6:Q:754:THR:H	2.22	0.58
5:T:52:ARG:HE	5:T:58:LEU:N	2.02	0.58
1:J:93:ALA:HB2	1:C:262:LYS:HB3	1.85	0.58
2:B:367:GLN:NE2	2:A:369:LYS:O	2.36	0.58
2:E:199:ASP:O	3:K:199:ASP:OD2	2.22	0.58
3:K:225:VAL:HG23	3:K:227:ARG:HG2	1.84	0.58
2:P:250:PRO:N	2:P:433:LEU:HD21	2.18	0.58
2:H:199:ASP:O	3:V:199:ASP:OD2	2.22	0.58
6:Q:480:LEU:HD23	6:Q:485:TYR:HE1	1.68	0.58
6:R:189:TRP:CZ3	6:R:251:ALA:HA	2.38	0.58
1:C:5:PHE:HD1	2:E:331:ASN:OD1	1.78	0.57
1:C:202:HIS:CE1	1:C:275:ILE:HD12	2.39	0.57
2:B:199:ASP:O	2:P:199:ASP:OD2	2.22	0.57
3:L:225:VAL:HG23	3:L:227:ARG:HG2	1.84	0.57
1:J:262:LYS:HB3	1:C:93:ALA:HB2	1.85	0.57
2:B:204:HIS:CE1	2:B:228:ARG:HD3	2.38	0.57
6:R:184:GLU:O	6:R:188:LEU:HD12	2.04	0.57
6:R:247:ARG:HH22	6:R:282:LEU:HA	1.69	0.57
1:J:261:ASN:HD21	1:C:90:GLU:HG2	0.75	0.57
2:B:246:VAL:CA	2:B:503:MET:SD	2.92	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:249:PRO:C	2:G:250:PRO:CA	2.73	0.57
2:P:225:VAL:HG23	2:P:227:ARG:HG2	1.84	0.57
3:L:204:HIS:HE1	3:L:230:ARG:HE	1.51	0.57
5:S:61:VAL:HG22	5:S:87:PHE:CD2	2.40	0.57
6:R:193:GLN:HB2	6:R:208:ARG:HH11	1.69	0.57
2:G:372:ALA:HB2	2:G:413:GLU:CD	2.28	0.57
6:R:752:TRP:CD1	6:R:754:THR:H	2.22	0.57
2:H:449:HIS:CD2	2:H:452:HIS:HE1	2.21	0.57
6:Q:247:ARG:HH22	6:Q:282:LEU:HA	1.70	0.57
2:H:343:ARG:HE	2:H:344:ARG:HA	1.69	0.57
1:J:90:GLU:HG2	1:C:261:ASN:HD21	0.75	0.57
1:J:202:HIS:CE1	1:J:275:ILE:HD12	2.40	0.57
2:B:386:SER:HA	2:B:398:LEU:HD23	1.85	0.57
2:A:253:GLU:OE2	2:A:428:GLU:CD	2.48	0.57
2:E:253:GLU:OE2	2:E:428:GLU:CD	2.48	0.57
2:H:246:VAL:N	2:H:503:MET:SD	2.77	0.57
3:V:240:HIS:N	3:V:248:VAL:HG11	2.18	0.57
5:T:61:VAL:HG22	5:T:87:PHE:CD2	2.39	0.57
1:C:136:MET:SD	2:P:490:GLU:OE2	2.63	0.57
2:E:204:HIS:HE1	2:E:230:ARG:HE	1.51	0.57
2:P:204:HIS:HE1	2:P:230:ARG:HE	1.51	0.57
2:H:249:PRO:C	2:H:250:PRO:CA	2.73	0.57
6:Q:193:GLN:HB2	6:Q:208:ARG:HH11	1.69	0.57
6:Q:722:THR:CG2	6:R:725:THR:HG21	2.20	0.57
1:C:136:MET:HE2	2:P:490:GLU:CB	2.35	0.57
2:B:408:ILE:HD13	2:A:529:PHE:CE2	2.40	0.57
2:B:430:TYR:CD1	2:B:518:LYS:HE2	2.40	0.57
2:A:497:ARG:HD3	2:N:334:VAL:CG2	2.35	0.57
3:D:249:PRO:C	3:D:250:PRO:CA	2.73	0.57
2:P:247:VAL:CG1	2:P:513:ARG:NH1	2.63	0.57
1:J:262:LYS:CD	1:C:92:ALA:C	2.67	0.57
2:B:253:GLU:OE2	2:B:432:ARG:CZ	2.53	0.57
2:G:343:ARG:HE	2:G:344:ARG:HA	1.69	0.57
2:G:430:TYR:CD1	2:G:518:LYS:HE2	2.40	0.57
5:S:130:LYS:HB2	5:S:132:PHE:CE2	2.40	0.57
6:Q:638:HIS:C	6:Q:638:HIS:CD2	2.82	0.57
2:B:379:SER:HB3	2:B:406:LEU:HB2	1.87	0.56
2:A:204:HIS:HE1	2:A:230:ARG:HE	1.51	0.56
2:G:199:ASP:O	2:N:199:ASP:OD2	2.22	0.56
2:H:408:ILE:HD13	2:F:529:PHE:CE2	2.40	0.56
6:Q:148:ARG:HH11	6:Q:181:ASN:HA	1.70	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:Q:726:LYS:CE	6:R:722:THR:O	2.52	0.56
6:R:148:ARG:HH11	6:R:181:ASN:HA	1.70	0.56
2:G:416:ALA:HB3	2:G:417:GLN:OE1	2.05	0.56
2:H:379:SER:HB3	2:H:406:LEU:HB2	1.87	0.56
2:F:204:HIS:HE1	2:F:230:ARG:HE	1.51	0.56
6:Q:184:GLU:O	6:Q:188:LEU:HD12	2.04	0.56
6:Q:401:VAL:HG22	6:Q:406:LEU:HD12	1.87	0.56
1:J:39:TYR:CD1	1:J:145:ILE:HG23	2.40	0.56
2:A:345:VAL:HG21	2:N:462:LYS:HE2	1.87	0.56
2:G:350:LEU:CG	2:E:385:LEU:CD2	2.70	0.56
2:G:379:SER:HB3	2:G:402:SER:O	2.06	0.56
2:G:408:ILE:HD13	2:E:529:PHE:CE2	2.40	0.56
2:H:416:ALA:HB3	2:H:417:GLN:OE1	2.05	0.56
2:H:430:TYR:CD1	2:H:518:LYS:HE2	2.40	0.56
6:Q:578:ASP:O	6:Q:582:ARG:HG3	2.05	0.56
5:T:130:LYS:HB2	5:T:132:PHE:CE2	2.40	0.56
6:R:570:HIS:CE1	6:R:571:LEU:HA	2.40	0.56
6:R:578:ASP:O	6:R:582:ARG:HG3	2.05	0.56
1:J:86:SER:N	1:C:86:SER:O	2.35	0.56
1:J:84:PHE:CA	1:C:88:VAL:HB	2.30	0.56
2:B:343:ARG:HE	2:B:344:ARG:HA	1.69	0.56
3:D:204:HIS:HE1	3:D:230:ARG:HE	1.51	0.56
6:Q:570:HIS:CE1	6:Q:571:LEU:HA	2.40	0.56
6:R:632:SER:O	6:R:636:PHE:HB3	2.06	0.56
2:G:253:GLU:OE2	2:G:432:ARG:CZ	2.54	0.56
2:G:479:LEU:HG	3:L:310:LYS:CE	2.35	0.56
6:R:740:GLN:O	6:R:744:VAL:HG23	2.06	0.56
2:P:240:HIS:CD2	2:P:248:VAL:HG21	2.41	0.56
3:V:240:HIS:CD2	3:V:248:VAL:HG21	2.41	0.56
3:V:249:PRO:C	3:V:250:PRO:CA	2.73	0.56
6:Q:683:GLN:N	6:R:733:LYS:HZ1	2.04	0.56
1:C:217:PRO:CG	2:B:390:LEU:CD1	2.72	0.56
5:S:105:ALA:HA	5:S:110:VAL:HG23	1.88	0.56
6:Q:579:THR:HA	6:Q:582:ARG:NE	2.21	0.56
6:R:638:HIS:C	6:R:638:HIS:CD2	2.82	0.56
1:J:247:PHE:CE2	6:Q:94:GLU:O	2.58	0.56
1:C:217:PRO:HD3	2:B:392:PRO:HD3	1.86	0.56
6:Q:429:ARG:HA	6:Q:429:ARG:CZ	2.36	0.56
6:R:401:VAL:HG22	6:R:406:LEU:HD12	1.87	0.56
2:N:245:GLY:HA2	2:N:440:ALA:CB	2.36	0.56
2:H:367:GLN:NE2	2:F:370:ALA:O	2.39	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L:249:PRO:C	3:L:250:PRO:CA	2.73	0.56
5:S:61:VAL:HG22	5:S:87:PHE:CE2	2.41	0.56
5:T:105:ALA:HA	5:T:110:VAL:HG23	1.88	0.56
2:B:367:GLN:NE2	2:A:370:ALA:O	2.39	0.55
2:B:426:ILE:O	2:B:430:TYR:CE2	2.59	0.55
2:A:249:PRO:C	2:A:250:PRO:CA	2.73	0.55
3:K:240:HIS:CD2	3:K:248:VAL:HG21	2.41	0.55
2:P:249:PRO:C	2:P:433:LEU:CD2	2.77	0.55
2:H:253:GLU:OE2	2:H:432:ARG:CZ	2.53	0.55
2:F:196:LYS:HZ1	3:L:196:LYS:HZ3	1.42	0.55
6:Q:632:SER:O	6:Q:636:PHE:HB3	2.06	0.55
5:T:52:ARG:CZ	5:T:52:ARG:HA	2.36	0.55
6:R:438:ALA:CB	6:R:484:THR:HG21	2.36	0.55
6:R:590:ALA:HA	6:R:593:GLU:OE2	2.06	0.55
2:G:379:SER:HB3	2:G:406:LEU:HB2	1.87	0.55
2:G:422:THR:HG21	2:G:528:THR:HG21	1.88	0.55
2:G:426:ILE:O	2:G:430:TYR:CE2	2.59	0.55
6:R:579:THR:HA	6:R:582:ARG:NE	2.21	0.55
1:J:262:LYS:HB3	1:C:93:ALA:N	2.21	0.55
1:C:39:TYR:CD1	1:C:145:ILE:HG23	2.40	0.55
2:P:310:LYS:HE2	2:N:478:ARG:CA	2.36	0.55
2:H:426:ILE:O	2:H:430:TYR:CE2	2.59	0.55
2:F:240:HIS:CD2	2:F:248:VAL:HG21	2.41	0.55
6:Q:438:ALA:CB	6:Q:484:THR:HG21	2.35	0.55
5:T:61:VAL:HG22	5:T:87:PHE:CE2	2.41	0.55
6:R:476:ILE:O	6:R:479:ALA:HB3	2.06	0.55
6:R:526:GLU:HA	6:R:529:LYS:HD2	1.88	0.55
6:R:429:ARG:CZ	6:R:429:ARG:HA	2.36	0.55
1:J:217:PRO:HB2	2:G:390:LEU:CG	2.23	0.55
1:C:58:ARG:NE	2:E:339:TRP:CZ2	2.75	0.55
2:B:249:PRO:C	2:B:250:PRO:CA	2.73	0.55
6:Q:99:ALA:HB3	6:Q:105:ARG:HA	1.89	0.55
6:R:603:PRO:HA	6:R:606:ILE:HG12	1.89	0.55
2:B:379:SER:HB3	2:B:402:SER:O	2.06	0.55
2:B:406:LEU:O	2:B:409:ARG:HB3	2.06	0.55
2:H:437:VAL:HA	2:H:440:ALA:HB2	1.88	0.55
2:B:422:THR:HG21	2:B:528:THR:HG21	1.88	0.55
6:Q:32:LEU:O	6:Q:79:HIS:CD2	2.60	0.55
6:Q:428:GLU:CG	6:Q:429:ARG:H	2.18	0.55
6:Q:603:PRO:HA	6:Q:606:ILE:HG12	1.89	0.55
6:R:428:GLU:CG	6:R:429:ARG:H	2.18	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:R:532:ILE:HG21	6:R:590:ALA:HB1	1.89	0.55
3:D:240:HIS:CD2	3:D:248:VAL:HG21	2.41	0.55
2:G:367:GLN:NE2	2:E:370:ALA:O	2.39	0.55
2:E:196:LYS:HZ2	3:K:196:LYS:CE	2.19	0.55
2:H:406:LEU:O	2:H:409:ARG:HB3	2.07	0.55
2:H:516:ARG:HH11	2:H:517:GLU:HB2	1.72	0.55
5:S:52:ARG:HA	5:S:52:ARG:CZ	2.36	0.55
6:Q:476:ILE:O	6:Q:479:ALA:HB3	2.06	0.55
6:R:32:LEU:O	6:R:79:HIS:CD2	2.60	0.55
1:J:261:ASN:O	1:C:90:GLU:HG3	2.07	0.55
2:A:196:LYS:HZ3	3:D:196:LYS:HZ2	0.55	0.55
2:E:240:HIS:CD2	2:E:248:VAL:HG21	2.41	0.55
6:R:99:ALA:HB3	6:R:105:ARG:HA	1.89	0.55
2:B:195:HIS:CD2	2:B:197:VAL:HG22	2.42	0.55
2:B:416:ALA:HB3	2:B:417:GLN:OE1	2.05	0.55
3:L:240:HIS:CD2	3:L:248:VAL:HG21	2.41	0.55
5:S:107:LYS:HZ2	6:Q:800:GLU:HB3	1.72	0.55
6:Q:590:ALA:HA	6:Q:593:GLU:OE2	2.06	0.55
2:G:437:VAL:HA	2:G:440:ALA:HB2	1.89	0.54
2:P:249:PRO:C	2:P:250:PRO:CA	2.73	0.54
2:P:477:ASP:O	2:N:310:LYS:CD	2.41	0.54
2:H:379:SER:HB3	2:H:402:SER:O	2.06	0.54
1:J:93:ALA:N	1:C:262:LYS:HB3	2.21	0.54
2:N:195:HIS:CD2	2:N:197:VAL:HG22	2.42	0.54
6:R:587:THR:HA	6:R:590:ALA:HB3	1.90	0.54
2:B:409:ARG:C	2:B:409:ARG:HD3	2.33	0.54
2:B:437:VAL:HA	2:B:440:ALA:HB2	1.89	0.54
2:B:451:TRP:HE1	2:B:493:VAL:HG13	1.72	0.54
2:A:406:LEU:HD11	3:D:223:PHE:HE1	1.73	0.54
2:G:196:LYS:HZ3	2:N:196:LYS:HZ2	0.59	0.54
2:H:195:HIS:CD2	2:H:197:VAL:HG22	2.42	0.54
6:Q:740:GLN:O	6:Q:744:VAL:HG23	2.06	0.54
2:B:516:ARG:HH11	2:B:517:GLU:HB2	1.72	0.54
2:A:240:HIS:CD2	2:A:248:VAL:HG21	2.41	0.54
2:A:250:PRO:HG3	2:A:433:LEU:H	1.73	0.54
2:A:331:ASN:HD21	2:N:332:LYS:HE3	1.70	0.54
2:G:195:HIS:CD2	2:G:197:VAL:HG22	2.42	0.54
2:P:195:HIS:CD2	2:P:197:VAL:HG22	2.42	0.54
2:P:310:LYS:CD	2:N:476:GLN:O	2.54	0.54
2:H:422:THR:HG21	2:H:528:THR:HG21	1.88	0.54
2:F:253:GLU:OE2	2:F:428:GLU:CD	2.48	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:V:195:HIS:CD2	3:V:197:VAL:HG22	2.42	0.54
6:Q:526:GLU:HA	6:Q:529:LYS:HD2	1.89	0.54
6:R:32:LEU:HD23	6:R:41:ALA:HB1	1.89	0.54
3:D:195:HIS:CD2	3:D:197:VAL:HG22	2.42	0.54
2:E:406:LEU:HD11	3:K:223:PHE:HE1	1.73	0.54
2:F:195:HIS:CD2	2:F:197:VAL:HG22	2.42	0.54
6:Q:32:LEU:HD23	6:Q:41:ALA:HB1	1.89	0.54
5:T:69:ALA:HA	5:T:72:LEU:HD12	1.90	0.54
1:J:90:GLU:HG3	1:C:261:ASN:O	2.07	0.54
2:N:240:HIS:CD2	2:N:248:VAL:HG21	2.41	0.54
6:Q:584:LEU:HD12	6:Q:585:GLN:HE22	1.72	0.54
2:B:357:LEU:CG	2:A:381:SER:CB	2.86	0.54
2:G:470:ARG:HH12	2:H:348:ASP:HB2	1.73	0.54
6:R:584:LEU:HD12	6:R:585:GLN:HE22	1.72	0.54
6:R:707:SER:HA	6:R:710:HIS:CD2	2.43	0.54
2:G:361:MET:O	2:G:365:VAL:HG23	2.08	0.54
2:G:516:ARG:HH11	2:G:517:GLU:HB2	1.72	0.54
5:S:58:LEU:HD11	5:S:60:ILE:HG23	1.89	0.54
2:G:406:LEU:O	2:G:409:ARG:HB3	2.07	0.54
2:G:409:ARG:C	2:G:409:ARG:HD3	2.33	0.54
2:E:195:HIS:CD2	2:E:197:VAL:HG22	2.42	0.54
2:H:409:ARG:C	2:H:409:ARG:HD3	2.33	0.54
2:H:451:TRP:HE1	2:H:493:VAL:HG13	1.72	0.54
5:T:169:LEU:HD23	5:T:169:LEU:O	2.08	0.54
1:J:217:PRO:HG3	2:G:392:PRO:N	2.23	0.54
2:A:195:HIS:CD2	2:A:197:VAL:HG22	2.42	0.54
2:N:249:PRO:C	2:N:250:PRO:CA	2.73	0.54
2:F:196:LYS:HZ3	3:L:196:LYS:HZ2	0.54	0.54
3:L:195:HIS:CD2	3:L:197:VAL:HG22	2.42	0.54
2:B:375:ALA:HB3	2:B:409:ARG:HB2	1.90	0.53
2:B:400:ALA:CB	2:B:550:GLN:HE22	2.21	0.53
2:G:357:LEU:CG	2:E:381:SER:CB	2.86	0.53
2:G:375:ALA:HB3	2:G:409:ARG:HB2	1.90	0.53
2:E:250:PRO:HG3	2:E:433:LEU:H	1.73	0.53
2:P:250:PRO:CD	2:P:433:LEU:HG	2.37	0.53
2:H:361:MET:O	2:H:365:VAL:HG23	2.08	0.53
1:J:5:PHE:HD2	2:N:332:LYS:HA	1.73	0.53
1:J:108:LYS:O	1:C:111:GLU:OE2	2.26	0.53
2:G:451:TRP:HE1	2:G:493:VAL:HG13	1.72	0.53
2:G:470:ARG:NH2	2:H:348:ASP:HB2	2.21	0.53
2:G:480:ASN:N	3:L:310:LYS:HG3	2.23	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:K:195:HIS:CD2	3:K:197:VAL:HG22	2.42	0.53
2:H:357:LEU:CG	2:F:381:SER:CB	2.86	0.53
6:R:457:PRO:HA	6:R:460:GLN:CD	2.34	0.53
1:J:243:PRO:HG3	6:Q:133:ASP:O	2.08	0.53
2:H:368:ARG:HD2	2:H:413:GLU:O	2.09	0.53
6:Q:193:GLN:HB3	6:Q:194:HIS:CE1	2.43	0.53
6:Q:707:SER:HA	6:Q:710:HIS:CD2	2.43	0.53
6:R:193:GLN:HB3	6:R:194:HIS:CE1	2.43	0.53
1:J:93:ALA:CB	1:C:262:LYS:HB3	2.39	0.53
1:C:217:PRO:HA	2:B:392:PRO:HA	1.90	0.53
3:K:310:LYS:HG3	2:H:480:ASN:CB	2.33	0.53
2:P:250:PRO:HB2	2:P:432:ARG:HH21	1.70	0.53
2:P:477:ASP:O	2:N:310:LYS:HD3	2.07	0.53
6:Q:587:THR:HA	6:Q:590:ALA:HB3	1.90	0.53
6:Q:641:ILE:HA	6:Q:644:LEU:HG	1.91	0.53
2:A:341:HIS:CE1	2:N:459:MET:HE3	2.43	0.53
1:J:243:PRO:HB2	6:Q:134:MET:CE	2.38	0.53
2:G:368:ARG:HD2	2:G:413:GLU:O	2.09	0.53
2:P:251:PRO:CD	2:P:432:ARG:CD	2.70	0.53
2:P:475:GLN:NE2	2:N:310:LYS:O	2.40	0.53
3:L:228:ARG:HG3	3:L:300:PHE:CE1	2.44	0.53
6:Q:779:GLN:HB2	6:Q:783:ARG:HH21	1.74	0.53
5:T:58:LEU:HD11	5:T:60:ILE:HG23	1.89	0.53
1:C:226:LEU:HD13	1:C:253:LEU:HD22	1.89	0.53
2:B:361:MET:O	2:B:365:VAL:HG23	2.08	0.53
2:F:274:LYS:CE	2:F:432:ARG:NH1	2.66	0.53
5:S:69:ALA:HA	5:S:72:LEU:HD12	1.90	0.53
5:S:169:LEU:O	5:S:169:LEU:HD23	2.08	0.53
6:Q:532:ILE:HG21	6:Q:590:ALA:HB1	1.89	0.53
6:Q:586:MET:HA	6:Q:589:LYS:HD2	1.91	0.53
5:T:120:HIS:HB2	5:T:143:THR:HA	1.90	0.53
2:B:228:ARG:HG3	2:B:300:PHE:CE1	2.44	0.53
2:B:240:HIS:ND1	2:B:248:VAL:HG21	2.24	0.53
2:B:368:ARG:HD2	2:B:413:GLU:O	2.09	0.53
2:G:228:ARG:HG3	2:G:300:PHE:CE1	2.44	0.53
2:G:400:ALA:CB	2:G:550:GLN:HE22	2.21	0.53
2:G:479:LEU:CD2	3:L:310:LYS:CE	2.82	0.53
2:E:274:LYS:CE	2:E:432:ARG:NH1	2.66	0.53
2:H:400:ALA:CB	2:H:550:GLN:HE22	2.21	0.53
2:F:228:ARG:HG3	2:F:300:PHE:CE1	2.44	0.53
2:F:250:PRO:HG3	2:F:433:LEU:H	1.73	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:406:LEU:HD11	3:L:223:PHE:HE1	1.73	0.53
3:V:228:ARG:HG3	3:V:300:PHE:CE1	2.44	0.53
2:B:370:ALA:CB	2:A:367:GLN:NE2	2.71	0.53
5:S:115:TRP:CH2	5:S:134:ASN:HB2	2.44	0.53
6:Q:751:TRP:CZ3	6:Q:774:VAL:HA	2.44	0.53
1:J:226:LEU:HD13	1:J:253:LEU:HD22	1.89	0.53
2:B:536:ALA:HA	2:B:539:GLU:CD	2.34	0.53
2:G:232:PHE:HB2	2:G:252:PRO:HG3	1.92	0.53
5:T:96:GLU:HB3	5:T:121:ARG:HH22	1.74	0.53
6:R:480:LEU:HA	6:R:485:TYR:CE1	2.44	0.53
1:J:86:SER:O	1:C:86:SER:N	2.34	0.52
2:B:232:PHE:HB2	2:B:252:PRO:HG3	1.92	0.52
2:B:244:PRO:O	2:B:447:ALA:CB	2.56	0.52
2:B:457:GLU:HB3	2:B:461:LYS:HZ1	1.74	0.52
2:G:479:LEU:CG	3:L:310:LYS:HE2	2.39	0.52
2:N:240:HIS:ND1	2:N:248:VAL:HG21	2.24	0.52
6:Q:480:LEU:HA	6:Q:485:TYR:CE1	2.44	0.52
1:J:217:PRO:HD3	2:G:392:PRO:CG	2.39	0.52
2:G:406:LEU:HA	2:G:409:ARG:HB3	1.90	0.52
2:G:497:ARG:HH22	2:G:501:GLU:HB2	1.75	0.52
6:Q:457:PRO:HA	6:Q:460:GLN:CD	2.34	0.52
6:R:429:ARG:HB2	6:R:432:TYR:CE1	2.44	0.52
6:R:749:HIS:CE1	6:R:754:THR:O	2.63	0.52
2:A:274:LYS:CE	2:A:432:ARG:NH1	2.66	0.52
3:D:228:ARG:HG3	3:D:300:PHE:CE1	2.44	0.52
2:G:437:VAL:O	2:G:440:ALA:HB3	2.09	0.52
2:E:240:HIS:ND1	2:E:248:VAL:HG21	2.24	0.52
2:P:240:HIS:ND1	2:P:248:VAL:HG21	2.24	0.52
2:N:232:PHE:HB2	2:N:252:PRO:HG3	1.91	0.52
6:Q:429:ARG:HB2	6:Q:432:TYR:CE1	2.44	0.52
5:T:62:ARG:HH12	6:R:697:ALA:HA	1.73	0.52
6:R:525:LEU:C	6:R:529:LYS:HZ2	2.18	0.52
1:C:6:SER:CA	2:E:331:ASN:N	2.71	0.52
2:E:228:ARG:HG3	2:E:300:PHE:CE1	2.44	0.52
2:H:375:ALA:HB3	2:H:409:ARG:HB2	1.90	0.52
2:H:536:ALA:HA	2:H:539:GLU:CD	2.34	0.52
3:V:232:PHE:HB2	3:V:252:PRO:HG3	1.92	0.52
6:Q:633:LEU:HA	6:Q:636:PHE:HB3	1.92	0.52
1:J:262:LYS:HB3	1:C:93:ALA:CB	2.39	0.52
3:D:240:HIS:ND1	3:D:248:VAL:HG21	2.24	0.52
2:G:419:ASP:O	2:G:423:PHE:CD2	2.63	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:232:PHE:HB2	2:P:252:PRO:HG3	1.92	0.52
3:L:204:HIS:CD2	3:L:204:HIS:O	2.63	0.52
5:S:96:GLU:HB3	5:S:121:ARG:HH22	1.74	0.52
6:Q:58:SER:HB2	6:Q:61:GLN:H	1.74	0.52
5:T:115:TRP:CH2	5:T:134:ASN:HB2	2.44	0.52
6:R:641:ILE:HA	6:R:644:LEU:HG	1.91	0.52
2:B:406:LEU:HA	2:B:409:ARG:HB3	1.91	0.52
2:B:497:ARG:HH22	2:B:501:GLU:HB2	1.75	0.52
2:G:370:ALA:CB	2:E:367:GLN:NE2	2.71	0.52
2:P:228:ARG:HG3	2:P:300:PHE:CE1	2.44	0.52
2:N:228:ARG:HG3	2:N:300:PHE:CE1	2.44	0.52
2:H:415:GLN:HG3	2:H:418:GLN:HE21	1.75	0.52
3:L:232:PHE:HB2	3:L:252:PRO:HG3	1.92	0.52
5:S:120:HIS:HB2	5:S:143:THR:HA	1.90	0.52
6:R:606:ILE:HG21	6:R:660:LEU:HD22	1.91	0.52
6:R:779:GLN:HB2	6:R:783:ARG:HH21	1.74	0.52
1:J:84:PHE:HA	1:C:88:VAL:CG2	2.40	0.52
1:J:88:VAL:CG2	1:C:84:PHE:HA	2.40	0.52
2:B:356:ALA:HA	2:B:359:LYS:HZ2	1.75	0.52
2:A:228:ARG:HG3	2:A:300:PHE:CE1	2.44	0.52
2:E:260:PHE:CD2	3:K:198:GLY:CA	2.84	0.52
2:H:228:ARG:HG3	2:H:300:PHE:CE1	2.44	0.52
2:H:356:ALA:HA	2:H:359:LYS:HZ2	1.75	0.52
2:H:406:LEU:HA	2:H:409:ARG:HB3	1.90	0.52
3:V:240:HIS:ND1	3:V:248:VAL:HG21	2.24	0.52
6:R:188:LEU:HD23	6:R:191:ARG:NH2	2.24	0.52
6:R:586:MET:HA	6:R:589:LYS:HD2	1.91	0.52
2:A:196:LYS:NZ	3:D:196:LYS:CE	2.68	0.52
2:G:356:ALA:HA	2:G:359:LYS:HZ2	1.75	0.52
3:K:204:HIS:CD2	3:K:204:HIS:O	2.63	0.52
3:K:228:ARG:HG3	3:K:300:PHE:CE1	2.44	0.52
2:H:419:ASP:O	2:H:423:PHE:CD2	2.63	0.52
3:V:218:TYR:CE1	3:V:295:LEU:HD12	2.45	0.52
6:Q:468:SER:HA	6:Q:471:ARG:HE	1.75	0.52
6:Q:480:LEU:HD23	6:Q:485:TYR:CE1	2.44	0.52
2:B:218:TYR:CE1	2:B:295:LEU:HD12	2.45	0.52
2:B:458:LEU:HD22	2:B:490:GLU:HA	1.92	0.52
2:A:204:HIS:O	2:A:204:HIS:CD2	2.63	0.52
2:A:240:HIS:ND1	2:A:248:VAL:HG21	2.24	0.52
3:D:204:HIS:CD2	3:D:204:HIS:O	2.63	0.52
2:G:536:ALA:HA	2:G:539:GLU:CD	2.34	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:199:ASP:O	3:V:199:ASP:CB	2.53	0.52
2:F:218:TYR:CE1	2:F:295:LEU:HD12	2.45	0.52
5:S:62:ARG:HH12	6:Q:697:ALA:HA	1.74	0.52
6:Q:722:THR:HA	6:R:722:THR:HG22	1.91	0.52
5:T:118:GLY:C	5:T:120:HIS:H	2.18	0.52
6:R:415:CYS:HA	6:R:418:LEU:HB2	1.91	0.52
6:R:640:ALA:O	6:R:644:LEU:HG	2.10	0.52
6:R:751:TRP:CZ3	6:R:774:VAL:HA	2.44	0.52
2:B:357:LEU:HD11	2:A:381:SER:CB	2.40	0.52
2:B:385:LEU:HD12	2:B:388:VAL:CG2	2.40	0.52
2:A:196:LYS:HZ1	3:D:196:LYS:HZ3	1.39	0.52
2:G:371:MET:HE1	2:E:367:GLN:CB	2.39	0.52
2:G:513:ARG:HG2	2:G:513:ARG:HH21	1.75	0.52
2:P:218:TYR:CE1	2:P:295:LEU:HD12	2.45	0.52
2:F:249:PRO:C	2:F:250:PRO:CA	2.73	0.52
3:V:204:HIS:CD2	3:V:204:HIS:O	2.63	0.52
5:S:138:ALA:O	5:S:139:THR:HG23	2.10	0.52
6:Q:394:PHE:CE1	6:Q:436:ILE:HD13	2.45	0.52
6:R:208:ARG:HH22	6:R:251:ALA:HB2	1.74	0.52
6:Q:97:GLN:HE22	6:Q:106:LEU:HA	1.75	0.51
6:Q:188:LEU:HD23	6:Q:191:ARG:NH2	2.24	0.51
2:G:480:ASN:CA	3:L:310:LYS:HG3	2.41	0.51
2:H:232:PHE:HB2	2:H:252:PRO:HG3	1.91	0.51
2:H:240:HIS:ND1	2:H:248:VAL:HG21	2.24	0.51
2:H:244:PRO:O	2:H:447:ALA:CB	2.56	0.51
2:H:513:ARG:HH21	2:H:513:ARG:HG2	1.75	0.51
5:S:79:THR:HG23	5:S:84:ARG:HH12	1.75	0.51
6:Q:172:GLN:CD	6:Q:172:GLN:H	2.18	0.51
6:R:97:GLN:HE22	6:R:106:LEU:HA	1.75	0.51
6:R:468:SER:HA	6:R:471:ARG:HE	1.75	0.51
1:C:24:VAL:HG21	1:C:38:LEU:HD13	1.92	0.51
2:P:250:PRO:N	2:P:429:GLU:OE2	2.43	0.51
2:N:204:HIS:O	2:N:204:HIS:CD2	2.63	0.51
2:H:437:VAL:O	2:H:440:ALA:HB3	2.09	0.51
2:F:240:HIS:ND1	2:F:248:VAL:HG21	2.24	0.51
3:L:240:HIS:ND1	3:L:248:VAL:HG21	2.24	0.51
6:Q:396:GLN:O	6:Q:399:HIS:CD2	2.63	0.51
6:Q:665:GLY:O	6:Q:668:ALA:HB3	2.10	0.51
6:R:58:SER:HB2	6:R:61:GLN:H	1.74	0.51
6:R:80:LEU:HD11	6:R:115:ALA:HB2	1.92	0.51
6:R:749:HIS:HA	6:R:752:TRP:HB2	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:207:ILE:HB	1:C:227:VAL:HG12	1.92	0.51
2:B:204:HIS:CD2	2:B:204:HIS:O	2.63	0.51
2:B:437:VAL:O	2:B:440:ALA:HB3	2.09	0.51
2:A:218:TYR:CE1	2:A:295:LEU:HD12	2.45	0.51
2:G:218:TYR:CE1	2:G:295:LEU:HD12	2.45	0.51
2:E:204:HIS:CD2	2:E:204:HIS:O	2.63	0.51
2:H:204:HIS:CD2	2:H:204:HIS:O	2.63	0.51
2:H:497:ARG:HH22	2:H:501:GLU:HB2	1.75	0.51
6:Q:749:HIS:HA	6:Q:752:TRP:HB2	1.92	0.51
5:T:79:THR:HG23	5:T:84:ARG:HH12	1.75	0.51
6:R:396:GLN:O	6:R:399:HIS:CD2	2.63	0.51
1:J:111:GLU:OE2	1:C:108:LYS:O	2.26	0.51
1:J:207:ILE:HB	1:J:227:VAL:HG12	1.92	0.51
2:G:352:ASN:ND2	2:H:470:ARG:NH1	2.53	0.51
2:P:204:HIS:CD2	2:P:204:HIS:O	2.63	0.51
2:F:204:HIS:O	2:F:204:HIS:CD2	2.63	0.51
5:S:138:ALA:HA	5:S:156:SER:H	1.76	0.51
6:Q:570:HIS:CE1	6:Q:571:LEU:HD23	2.46	0.51
6:Q:640:ALA:O	6:Q:644:LEU:HG	2.10	0.51
5:T:138:ALA:O	5:T:139:THR:HG23	2.10	0.51
6:R:401:VAL:HG22	6:R:406:LEU:CD1	2.41	0.51
6:R:597:ARG:H	6:R:598:ILE:HG23	1.76	0.51
6:R:749:HIS:CE1	6:R:754:THR:HB	2.45	0.51
2:G:240:HIS:ND1	2:G:248:VAL:HG21	2.24	0.51
2:G:458:LEU:HB2	2:G:489:ALA:CB	2.40	0.51
2:G:518:LYS:HA	2:G:521:ASP:OD1	2.11	0.51
2:E:218:TYR:CE1	2:E:295:LEU:HD12	2.45	0.51
2:H:196:LYS:NZ	3:V:196:LYS:CE	2.68	0.51
2:H:518:LYS:HA	2:H:521:ASP:OD1	2.11	0.51
6:Q:208:ARG:HH22	6:Q:251:ALA:HB2	1.74	0.51
6:Q:401:VAL:HG22	6:Q:406:LEU:CD1	2.41	0.51
6:Q:722:THR:HG22	6:R:722:THR:HA	1.91	0.51
6:R:570:HIS:CE1	6:R:571:LEU:HD23	2.46	0.51
2:B:415:GLN:HG3	2:B:418:GLN:HE21	1.75	0.51
2:B:419:ASP:O	2:B:423:PHE:CD2	2.63	0.51
2:G:357:LEU:HD11	2:E:381:SER:CB	2.40	0.51
3:K:218:TYR:CE1	3:K:295:LEU:HD12	2.45	0.51
3:K:249:PRO:C	3:K:250:PRO:CA	2.73	0.51
5:S:118:GLY:C	5:S:120:HIS:H	2.19	0.51
6:Q:749:HIS:CE1	6:Q:754:THR:O	2.63	0.51
2:B:513:ARG:HG2	2:B:513:ARG:HH21	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:518:LYS:HA	2:B:521:ASP:OD1	2.11	0.51
2:B:544:TRP:CZ3	2:B:545:GLU:HG2	2.46	0.51
2:G:204:HIS:CD2	2:G:204:HIS:O	2.63	0.51
2:G:530:LEU:HD11	2:E:544:TRP:HE1	1.73	0.51
2:N:218:TYR:CE1	2:N:295:LEU:HD12	2.45	0.51
2:H:458:LEU:HB2	2:H:489:ALA:CB	2.40	0.51
6:Q:415:CYS:HA	6:Q:418:LEU:HB2	1.92	0.51
6:R:509:LEU:HD13	6:R:567:ARG:NH1	2.26	0.51
1:J:30:LYS:NZ	2:N:283:PRO:CG	2.70	0.51
1:C:216:ALA:HB1	1:C:217:PRO:CD	2.41	0.51
2:B:196:LYS:NZ	2:P:196:LYS:CE	2.68	0.51
2:A:232:PHE:HB2	2:A:252:PRO:HG3	1.92	0.51
2:H:385:LEU:HD12	2:H:388:VAL:CG2	2.40	0.51
3:V:228:ARG:HG3	3:V:230:ARG:HH21	1.76	0.51
3:L:218:TYR:CE1	3:L:295:LEU:HD12	2.45	0.51
1:J:247:PHE:HB3	6:Q:98:TYR:CZ	2.41	0.51
3:D:232:PHE:HB2	3:D:252:PRO:HG3	1.92	0.51
2:G:244:PRO:O	2:G:447:ALA:CB	2.56	0.51
2:G:476:GLN:CB	3:L:311:GLU:O	2.57	0.51
2:E:249:PRO:C	2:E:250:PRO:CA	2.73	0.51
5:S:23:LYS:HD3	5:S:26:LYS:HZ2	1.76	0.51
5:T:23:LYS:HD3	5:T:26:LYS:HZ2	1.75	0.51
6:R:633:LEU:HA	6:R:636:PHE:HB3	1.91	0.51
1:J:247:PHE:CD2	6:Q:94:GLU:O	2.64	0.50
3:D:218:TYR:CE1	3:D:295:LEU:HD12	2.45	0.50
2:E:190:THR:HB	2:E:210:ARG:HE	1.76	0.50
2:E:232:PHE:HB2	2:E:252:PRO:HG3	1.92	0.50
2:H:218:TYR:CE1	2:H:295:LEU:HD12	2.45	0.50
2:F:232:PHE:HB2	2:F:252:PRO:HG3	1.91	0.50
3:L:228:ARG:HG3	3:L:230:ARG:HH21	1.77	0.50
5:S:30:PRO:C	5:S:32:LYS:H	2.19	0.50
6:Q:749:HIS:CE1	6:Q:754:THR:HB	2.45	0.50
5:T:61:VAL:O	5:T:61:VAL:HG23	2.12	0.50
6:R:394:PHE:CE1	6:R:436:ILE:HD13	2.45	0.50
6:R:625:ASN:HD22	6:R:629:GLN:NE2	2.10	0.50
2:B:433:LEU:HD13	2:B:514:PHE:HZ	1.75	0.50
2:H:433:LEU:HD13	2:H:514:PHE:HZ	1.75	0.50
2:H:457:GLU:HB3	2:H:461:LYS:HZ1	1.76	0.50
2:P:311:GLU:HB3	2:N:477:ASP:OD2	2.10	0.50
2:H:370:ALA:CB	2:F:367:GLN:NE2	2.71	0.50
5:T:30:PRO:C	5:T:32:LYS:H	2.19	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:R:665:GLY:O	6:R:668:ALA:HB3	2.10	0.50
1:J:30:LYS:CE	2:N:283:PRO:CG	2.66	0.50
1:C:281:ARG:O	2:B:545:GLU:OE1	2.28	0.50
2:B:228:ARG:HG3	2:B:230:ARG:HH21	1.77	0.50
2:B:385:LEU:HD21	2:A:350:LEU:CD1	2.41	0.50
2:G:458:LEU:HD22	2:G:490:GLU:HA	1.92	0.50
3:K:232:PHE:HB2	3:K:252:PRO:HG3	1.92	0.50
2:P:249:PRO:HA	2:P:433:LEU:HD22	1.82	0.50
2:H:385:LEU:HD21	2:F:350:LEU:CD1	2.41	0.50
2:H:544:TRP:CZ3	2:H:545:GLU:HG2	2.46	0.50
6:Q:264:PRO:O	6:Q:268:HIS:CG	2.64	0.50
6:Q:533:LYS:CE	6:Q:537:GLN:HA	2.42	0.50
6:Q:597:ARG:H	6:Q:598:ILE:HG23	1.76	0.50
6:R:212:GLN:HB2	6:R:254:TYR:CD2	2.46	0.50
1:J:216:ALA:HB1	1:J:217:PRO:CD	2.41	0.50
1:C:226:LEU:HD13	1:C:253:LEU:CD2	2.42	0.50
2:P:190:THR:HB	2:P:210:ARG:HE	1.77	0.50
2:H:458:LEU:HD22	2:H:490:GLU:HA	1.93	0.50
2:H:518:LYS:O	2:H:522:PHE:CD2	2.65	0.50
5:S:55:SER:HB2	5:S:56:PRO:HD2	1.93	0.50
6:Q:80:LEU:HD11	6:Q:115:ALA:HB2	1.92	0.50
6:Q:189:TRP:CZ2	6:Q:212:GLN:HB3	2.46	0.50
6:Q:525:LEU:C	6:Q:529:LYS:HZ2	2.18	0.50
6:Q:606:ILE:HG21	6:Q:660:LEU:HD22	1.92	0.50
5:T:175:ARG:HH21	5:T:183:ASN:C	2.20	0.50
6:R:172:GLN:CD	6:R:172:GLN:H	2.18	0.50
6:R:189:TRP:CZ2	6:R:212:GLN:HB3	2.46	0.50
6:R:264:PRO:O	6:R:268:HIS:CG	2.65	0.50
1:J:24:VAL:HG21	1:J:38:LEU:HD13	1.92	0.50
1:C:5:PHE:CA	2:E:331:ASN:OD1	2.55	0.50
3:D:190:THR:HB	3:D:210:ARG:HE	1.77	0.50
2:G:514:PHE:O	2:G:517:GLU:HB3	2.11	0.50
2:G:538:LYS:HZ2	2:G:542:GLU:HG3	1.76	0.50
2:G:544:TRP:CZ3	2:G:545:GLU:HG2	2.46	0.50
3:K:310:LYS:N	2:H:476:GLN:OE1	2.43	0.50
2:P:228:ARG:HG3	2:P:230:ARG:HH21	1.76	0.50
2:P:265:VAL:HG23	2:P:269:ARG:NH2	2.27	0.50
2:N:190:THR:HB	2:N:210:ARG:HE	1.76	0.50
2:N:247:VAL:HG11	2:N:513:ARG:NH1	2.27	0.50
2:N:250:PRO:CD	2:N:433:LEU:HD11	2.28	0.50
2:F:265:VAL:HG23	2:F:269:ARG:NH2	2.27	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:Q:399:HIS:CG	6:Q:400:LEU:N	2.79	0.50
6:R:533:LYS:CE	6:R:537:GLN:HA	2.42	0.50
1:C:5:PHE:CB	2:E:331:ASN:CA	2.88	0.50
2:B:518:LYS:O	2:B:522:PHE:CD2	2.65	0.50
2:G:246:VAL:N	2:G:503:MET:HG3	2.26	0.50
2:G:518:LYS:O	2:G:522:PHE:CD2	2.65	0.50
3:K:228:ARG:HG3	3:K:230:ARG:HH21	1.77	0.50
3:K:240:HIS:ND1	3:K:248:VAL:HG21	2.24	0.50
2:P:205:ILE:CD1	2:P:269:ARG:HH21	2.25	0.50
2:H:365:VAL:CG2	2:H:416:ALA:HB1	2.26	0.50
2:F:190:THR:HB	2:F:210:ARG:HE	1.77	0.50
2:F:196:LYS:NZ	3:L:196:LYS:CE	2.68	0.50
6:Q:447:HIS:CG	6:Q:448:ALA:N	2.80	0.50
2:B:430:TYR:HE2	2:B:522:PHE:CZ	2.29	0.50
2:A:345:VAL:CG2	2:N:462:LYS:NZ	2.74	0.50
2:G:199:ASP:O	2:N:200:LEU:CA	2.55	0.50
2:G:370:ALA:CB	2:E:367:GLN:CD	2.85	0.50
2:G:385:LEU:HD21	2:E:350:LEU:CD1	2.41	0.50
3:V:190:THR:HB	3:V:210:ARG:HE	1.77	0.50
6:Q:188:LEU:HD23	6:Q:191:ARG:HH22	1.77	0.50
6:R:447:HIS:CG	6:R:448:ALA:N	2.80	0.50
6:R:480:LEU:HD23	6:R:485:TYR:CE1	2.44	0.50
6:R:483:PRO:CA	6:R:486:VAL:H	2.25	0.50
2:B:190:THR:HB	2:B:210:ARG:HE	1.77	0.50
2:A:199:ASP:O	3:D:199:ASP:CB	2.52	0.50
3:D:228:ARG:HG3	3:D:230:ARG:HH21	1.77	0.50
2:G:479:LEU:CG	3:L:310:LYS:CE	2.90	0.50
2:N:228:ARG:HG3	2:N:230:ARG:HH21	1.76	0.50
2:N:265:VAL:HG23	2:N:269:ARG:NH2	2.27	0.50
6:Q:508:LEU:HB2	6:Q:567:ARG:NH2	2.27	0.50
5:T:138:ALA:HA	5:T:156:SER:H	1.76	0.50
6:R:706:ALA:O	6:R:710:HIS:CG	2.65	0.50
2:A:349:ALA:HA	2:N:470:ARG:NH2	2.27	0.49
3:D:265:VAL:HG23	3:D:269:ARG:NH2	2.27	0.49
2:G:190:THR:HB	2:G:210:ARG:HE	1.77	0.49
2:G:196:LYS:HZ2	2:N:196:LYS:HZ3	1.37	0.49
2:G:205:ILE:CD1	2:G:269:ARG:HH21	2.25	0.49
2:G:415:GLN:HG3	2:G:418:GLN:HE21	1.75	0.49
3:K:265:VAL:HG23	3:K:269:ARG:NH2	2.27	0.49
2:F:228:ARG:HG3	2:F:230:ARG:HH21	1.77	0.49
3:V:205:ILE:CD1	3:V:269:ARG:HH21	2.25	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:V:265:VAL:HG23	3:V:269:ARG:NH2	2.27	0.49
5:S:61:VAL:HG23	5:S:61:VAL:O	2.11	0.49
5:T:117:GLY:HA3	5:T:121:ARG:H	1.77	0.49
6:R:508:LEU:HB2	6:R:567:ARG:NH2	2.27	0.49
2:B:365:VAL:CG2	2:B:416:ALA:HB1	2.25	0.49
2:A:205:ILE:CD1	2:A:269:ARG:HH21	2.25	0.49
2:G:265:VAL:HG23	2:G:269:ARG:NH2	2.27	0.49
2:G:385:LEU:HD12	2:G:388:VAL:CG2	2.40	0.49
3:L:205:ILE:CD1	3:L:269:ARG:HH21	2.25	0.49
3:L:265:VAL:HG23	3:L:269:ARG:NH2	2.27	0.49
5:S:60:ILE:O	5:S:61:VAL:HG13	2.12	0.49
1:C:5:PHE:CD2	2:E:331:ASN:ND2	2.79	0.49
2:B:353:GLN:HE22	2:A:384:ALA:CB	2.17	0.49
2:B:514:PHE:O	2:B:517:GLU:HB3	2.11	0.49
2:A:334:VAL:HG22	2:N:451:TRP:NE1	2.24	0.49
2:G:245:GLY:C	2:G:503:MET:CG	2.72	0.49
2:G:430:TYR:HE2	2:G:522:PHE:CZ	2.29	0.49
2:G:458:LEU:HA	2:G:461:LYS:HD2	1.94	0.49
2:H:228:ARG:HG3	2:H:230:ARG:HH21	1.77	0.49
2:H:365:VAL:HG23	2:H:420:VAL:HG11	1.94	0.49
2:F:406:LEU:HD23	3:L:220:GLN:NE2	2.06	0.49
6:Q:212:GLN:HB2	6:Q:254:TYR:CD2	2.46	0.49
6:Q:508:LEU:HD21	6:Q:513:THR:HG22	1.95	0.49
6:Q:533:LYS:HE2	6:Q:537:GLN:HA	1.94	0.49
6:Q:803:ASP:HB2	6:Q:804:ARG:NH1	2.28	0.49
6:R:188:LEU:HD23	6:R:191:ARG:HH22	1.77	0.49
6:R:192:LEU:HA	6:R:195:GLN:HB2	1.95	0.49
6:R:565:LEU:HD11	6:R:605:LEU:CD1	2.42	0.49
1:J:5:PHE:CD2	2:N:332:LYS:HA	2.47	0.49
1:J:90:GLU:HB2	1:C:261:ASN:HA	1.94	0.49
1:J:261:ASN:HA	1:C:90:GLU:HB2	1.94	0.49
2:B:458:LEU:HB2	2:B:489:ALA:CB	2.40	0.49
2:A:228:ARG:HG3	2:A:230:ARG:HH21	1.77	0.49
3:D:205:ILE:CD1	3:D:269:ARG:HH21	2.25	0.49
2:G:475:GLN:C	3:L:311:GLU:HA	1.97	0.49
3:L:190:THR:HB	3:L:210:ARG:HE	1.77	0.49
5:S:175:ARG:HH21	5:S:183:ASN:C	2.20	0.49
6:Q:499:ALA:O	6:Q:503:GLU:HB2	2.12	0.49
6:Q:509:LEU:HD13	6:Q:567:ARG:NH1	2.26	0.49
5:T:60:ILE:O	5:T:61:VAL:HG13	2.12	0.49
2:B:205:ILE:CD1	2:B:269:ARG:HH21	2.25	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:371:MET:HE1	2:A:367:GLN:CB	2.39	0.49
2:H:430:TYR:HE2	2:H:522:PHE:CZ	2.29	0.49
6:Q:624:ASP:HA	6:Q:626:TRP:CD1	2.48	0.49
1:J:226:LEU:HD13	1:J:253:LEU:CD2	2.42	0.49
2:A:253:GLU:CD	2:A:428:GLU:OE1	2.54	0.49
2:A:332:LYS:CA	2:N:331:ASN:O	2.60	0.49
2:G:250:PRO:N	2:G:436:SER:CB	2.73	0.49
2:G:365:VAL:HG23	2:G:420:VAL:HG11	1.94	0.49
2:H:190:THR:HB	2:H:210:ARG:HE	1.77	0.49
2:H:371:MET:HE1	2:F:367:GLN:CB	2.39	0.49
2:H:376:ALA:HA	2:H:406:LEU:HD13	1.94	0.49
2:F:205:ILE:CD1	2:F:269:ARG:HH21	2.25	0.49
6:Q:625:ASN:HD22	6:Q:629:GLN:NE2	2.09	0.49
6:R:51:GLU:O	6:R:54:THR:HG22	2.12	0.49
6:R:87:ASN:CG	6:R:88:HIS:H	2.21	0.49
6:R:285:HIS:CD2	6:R:285:HIS:H	2.31	0.49
6:R:469:PRO:HB2	6:R:473:TYR:CD2	2.47	0.49
6:R:533:LYS:HE2	6:R:537:GLN:HA	1.94	0.49
2:B:451:TRP:HA	2:B:496:ALA:HB3	1.95	0.49
2:E:228:ARG:HG3	2:E:230:ARG:HH21	1.77	0.49
3:K:190:THR:HB	3:K:210:ARG:HE	1.77	0.49
3:K:205:ILE:CD1	3:K:269:ARG:HH21	2.25	0.49
5:S:11:LEU:O	5:S:16:ARG:HB2	2.12	0.49
5:S:59:LYS:HZ2	5:S:76:GLN:HB3	1.77	0.49
6:Q:53:ARG:HH12	6:Q:103:ILE:HG12	1.77	0.49
6:Q:295:MET:HA	6:Q:298:ARG:HH11	1.77	0.49
6:Q:469:PRO:HB2	6:Q:473:TYR:CE2	2.48	0.49
6:R:295:MET:HA	6:R:298:ARG:HH11	1.77	0.49
6:R:469:PRO:HB2	6:R:473:TYR:CE2	2.48	0.49
6:R:803:ASP:HB2	6:R:804:ARG:NH1	2.28	0.49
2:B:371:MET:HB3	2:B:412:TYR:CE2	2.48	0.49
2:A:190:THR:HB	2:A:210:ARG:HE	1.77	0.49
2:A:333:PHE:HD1	2:N:333:PHE:HB2	1.66	0.49
2:A:459:MET:HE1	2:N:341:HIS:HB3	1.95	0.49
2:G:510:GLU:C	2:G:510:GLU:CD	2.80	0.49
2:H:406:LEU:O	2:H:410:ASP:CG	2.56	0.49
2:H:510:GLU:C	2:H:510:GLU:CD	2.80	0.49
2:F:196:LYS:HZ2	3:L:196:LYS:CE	2.26	0.49
6:Q:141:PRO:HD2	6:Q:195:GLN:HG2	1.94	0.49
5:T:11:LEU:O	5:T:16:ARG:HB2	2.12	0.49
5:T:55:SER:HB2	5:T:56:PRO:HD2	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:T:59:LYS:HZ2	5:T:76:GLN:HB3	1.77	0.49
6:R:573:HIS:CE1	6:R:612:LEU:HA	2.48	0.49
2:B:265:VAL:HG23	2:B:269:ARG:NH2	2.27	0.49
2:B:365:VAL:HG23	2:B:420:VAL:HG11	1.94	0.49
2:A:265:VAL:HG23	2:A:269:ARG:NH2	2.27	0.49
2:E:209:VAL:O	2:E:224:GLU:HA	2.13	0.49
2:E:265:VAL:HG23	2:E:269:ARG:NH2	2.27	0.49
2:H:514:PHE:O	2:H:517:GLU:HB3	2.12	0.49
6:Q:483:PRO:CA	6:Q:486:VAL:H	2.25	0.49
6:Q:565:LEU:HD11	6:Q:605:LEU:CD1	2.42	0.49
6:R:428:GLU:HG3	6:R:429:ARG:H	1.78	0.49
6:R:675:GLU:CD	6:R:675:GLU:H	2.21	0.49
2:B:406:LEU:O	2:B:410:ASP:CG	2.56	0.49
3:D:209:VAL:O	3:D:224:GLU:HA	2.13	0.49
2:G:228:ARG:HG3	2:G:230:ARG:HH21	1.76	0.49
2:H:458:LEU:HA	2:H:461:LYS:HD2	1.94	0.49
3:V:209:VAL:O	3:V:224:GLU:HA	2.13	0.49
5:S:117:GLY:HA3	5:S:121:ARG:H	1.77	0.49
6:Q:87:ASN:CG	6:Q:88:HIS:H	2.21	0.49
6:Q:497:ARG:HD2	6:Q:530:VAL:HG13	1.95	0.49
6:R:95:LEU:HD12	6:R:98:TYR:CE2	2.48	0.49
6:R:141:PRO:HD2	6:R:195:GLN:HG2	1.94	0.49
2:B:242:ASN:HD22	2:B:288:ASP:CG	2.21	0.48
2:B:510:GLU:C	2:B:510:GLU:CD	2.80	0.48
2:B:530:LEU:HD11	2:A:544:TRP:HE1	1.73	0.48
2:A:242:ASN:HD22	2:A:288:ASP:CG	2.21	0.48
3:D:242:ASN:HD22	3:D:288:ASP:CG	2.21	0.48
2:N:205:ILE:CD1	2:N:269:ARG:HH21	2.25	0.48
2:H:336:GLN:HG3	2:H:340:PHE:CZ	2.48	0.48
2:H:371:MET:HB3	2:H:412:TYR:CE2	2.48	0.48
2:H:426:ILE:HB	2:H:430:TYR:OH	2.13	0.48
3:V:242:ASN:HD22	3:V:288:ASP:CG	2.21	0.48
6:Q:469:PRO:HB2	6:Q:473:TYR:CD2	2.47	0.48
5:T:83:LEU:HB2	5:T:164:GLY:O	2.13	0.48
5:T:154:VAL:HG22	5:T:175:ARG:HG3	1.95	0.48
6:R:53:ARG:HH12	6:R:103:ILE:HG12	1.77	0.48
6:R:624:ASP:HA	6:R:626:TRP:CD1	2.48	0.48
2:G:267:SER:CA	2:G:432:ARG:NH1	2.69	0.48
2:G:451:TRP:HA	2:G:496:ALA:HB3	1.95	0.48
2:E:205:ILE:CD1	2:E:269:ARG:HH21	2.25	0.48
3:K:209:VAL:O	3:K:224:GLU:HA	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:477:ASP:OD1	2:N:309:ARG:O	2.30	0.48
2:F:242:ASN:HD22	2:F:288:ASP:CG	2.21	0.48
6:Q:51:GLU:O	6:Q:54:THR:HG22	2.12	0.48
6:Q:266:GLU:O	6:Q:270:HIS:CD2	2.66	0.48
6:Q:581:PHE:CZ	6:Q:633:LEU:HD21	2.48	0.48
6:Q:675:GLU:H	6:Q:675:GLU:CD	2.21	0.48
6:Q:706:ALA:O	6:Q:710:HIS:CG	2.65	0.48
5:T:104:GLU:OE2	5:T:113:LEU:HD23	2.13	0.48
6:R:266:GLU:O	6:R:270:HIS:CD2	2.66	0.48
6:R:399:HIS:CG	6:R:400:LEU:N	2.79	0.48
6:R:499:ALA:O	6:R:503:GLU:HB2	2.12	0.48
6:R:617:LYS:CE	6:R:671:THR:HG22	2.42	0.48
6:R:680:PHE:HA	6:R:683:GLN:CD	2.38	0.48
1:C:57:LYS:HZ3	2:E:331:ASN:ND2	2.11	0.48
1:C:218:ASN:N	2:B:390:LEU:CD1	2.76	0.48
2:B:199:ASP:O	2:P:199:ASP:CB	2.52	0.48
2:G:209:VAL:O	2:G:224:GLU:HA	2.13	0.48
2:G:430:TYR:CD1	2:G:430:TYR:N	2.79	0.48
2:N:209:VAL:O	2:N:224:GLU:HA	2.13	0.48
2:H:419:ASP:HB3	2:H:529:PHE:HA	1.95	0.48
2:H:451:TRP:CZ2	2:H:452:HIS:HA	2.49	0.48
2:H:451:TRP:HA	2:H:496:ALA:HB3	1.95	0.48
6:Q:95:LEU:HD12	6:Q:98:TYR:CE2	2.48	0.48
6:Q:617:LYS:CE	6:Q:671:THR:HG22	2.43	0.48
6:R:508:LEU:HD21	6:R:513:THR:HG22	1.95	0.48
2:B:376:ALA:HA	2:B:406:LEU:HD13	1.94	0.48
2:B:538:LYS:HZ2	2:B:542:GLU:HG3	1.78	0.48
2:G:371:MET:HB3	2:G:412:TYR:CE2	2.47	0.48
6:R:95:LEU:HA	6:R:98:TYR:CZ	2.49	0.48
6:R:782:LEU:O	6:R:785:ALA:HB3	2.13	0.48
2:B:433:LEU:HD22	2:B:514:PHE:CE2	2.49	0.48
2:B:451:TRP:CZ2	2:B:452:HIS:HA	2.49	0.48
2:A:449:HIS:C	2:A:449:HIS:CD2	2.92	0.48
2:G:451:TRP:CZ2	2:G:452:HIS:HA	2.49	0.48
2:P:242:ASN:HD22	2:P:288:ASP:CG	2.21	0.48
2:F:253:GLU:CD	2:F:428:GLU:OE1	2.54	0.48
3:L:242:ASN:HD22	3:L:288:ASP:CG	2.21	0.48
6:Q:32:LEU:HD22	6:Q:76:LEU:HD22	1.95	0.48
6:Q:192:LEU:HA	6:Q:195:GLN:HB2	1.95	0.48
2:G:242:ASN:HD22	2:G:288:ASP:CG	2.21	0.48
2:G:426:ILE:HB	2:G:430:TYR:OH	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:433:LEU:HD22	2:G:514:PHE:CE2	2.49	0.48
2:E:199:ASP:O	3:K:200:LEU:CA	2.55	0.48
3:K:242:ASN:HD22	3:K:288:ASP:CG	2.21	0.48
2:P:245:GLY:HA2	2:P:440:ALA:HB1	1.95	0.48
2:H:265:VAL:HG23	2:H:269:ARG:NH2	2.27	0.48
6:R:497:ARG:HD2	6:R:530:VAL:HG13	1.95	0.48
2:B:458:LEU:HA	2:B:461:LYS:HD2	1.94	0.48
2:G:406:LEU:O	2:G:410:ASP:CG	2.56	0.48
2:H:433:LEU:HD22	2:H:514:PHE:CE2	2.49	0.48
5:S:104:GLU:OE2	5:S:113:LEU:HD23	2.13	0.48
6:Q:605:LEU:H	6:Q:605:LEU:HD12	1.79	0.48
6:R:130:ASP:HA	6:R:133:ASP:OD2	2.14	0.48
2:B:336:GLN:HG3	2:B:340:PHE:CZ	2.49	0.48
2:A:209:VAL:O	2:A:224:GLU:HA	2.13	0.48
2:G:302:ILE:O	2:G:306:HIS:CE1	2.67	0.48
2:E:227:ARG:HH21	2:E:294:PHE:HA	1.79	0.48
2:E:406:LEU:HD23	3:K:220:GLN:NE2	2.06	0.48
3:K:302:ILE:O	3:K:306:HIS:CE1	2.67	0.48
3:L:227:ARG:HH21	3:L:294:PHE:HA	1.79	0.48
5:S:168:THR:HG23	5:S:190:THR:HG22	1.96	0.48
6:Q:428:GLU:HG3	6:Q:429:ARG:H	1.78	0.48
6:Q:525:LEU:HD22	6:Q:586:MET:HG3	1.96	0.48
6:Q:561:GLU:O	6:Q:564:TRP:HE3	1.97	0.48
6:Q:725:THR:OG1	6:R:722:THR:CB	2.56	0.48
6:R:32:LEU:HD22	6:R:76:LEU:HD22	1.95	0.48
6:R:523:ASN:HA	6:R:526:GLU:HG3	1.96	0.48
6:R:605:LEU:H	6:R:605:LEU:HD12	1.79	0.48
1:J:58:ARG:NE	2:A:339:TRP:CH2	2.81	0.48
2:B:352:ASN:HA	2:B:355:LYS:HZ2	1.78	0.48
2:B:426:ILE:HB	2:B:430:TYR:OH	2.13	0.48
2:B:462:LYS:HA	2:B:486:VAL:HG21	1.96	0.48
2:G:376:ALA:HA	2:G:406:LEU:HD13	1.95	0.48
2:G:423:PHE:CZ	2:G:525:GLY:O	2.67	0.48
2:G:426:ILE:O	2:G:430:TYR:CZ	2.67	0.48
2:G:533:ALA:HB1	2:E:540:LEU:CD2	2.43	0.48
3:K:227:ARG:HH21	3:K:294:PHE:HA	1.79	0.48
2:H:227:ARG:HH21	2:H:294:PHE:HA	1.79	0.48
2:H:426:ILE:O	2:H:430:TYR:CZ	2.67	0.48
2:H:430:TYR:CG	2:H:518:LYS:HD2	2.49	0.48
2:F:209:VAL:O	2:F:224:GLU:HA	2.13	0.48
5:S:45:ARG:HA	5:S:48:TYR:HB2	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:Q:49:VAL:HG11	6:Q:103:ILE:HG22	1.95	0.48
6:Q:95:LEU:HA	6:Q:98:TYR:CZ	2.49	0.48
6:Q:289:LYS:HG3	6:Q:414:LEU:HD11	1.95	0.48
6:Q:500:ILE:HG23	6:Q:501:ALA:N	2.29	0.48
6:Q:573:HIS:CE1	6:Q:612:LEU:HA	2.48	0.48
6:Q:688:TYR:CD2	6:Q:705:ILE:HD13	2.49	0.48
6:Q:782:LEU:O	6:Q:785:ALA:HB3	2.13	0.48
6:R:521:LEU:O	6:R:524:VAL:HB	2.14	0.48
2:G:260:PHE:CD2	2:N:198:GLY:CA	2.84	0.48
2:G:336:GLN:HG3	2:G:340:PHE:CZ	2.48	0.48
2:G:430:TYR:CG	2:G:518:LYS:HD2	2.49	0.48
2:G:433:LEU:HD13	2:G:514:PHE:HZ	1.75	0.48
2:H:205:ILE:CD1	2:H:269:ARG:HH21	2.25	0.48
2:H:209:VAL:O	2:H:224:GLU:HA	2.13	0.48
2:H:368:ARG:NH2	2:H:416:ALA:HB2	2.29	0.48
2:F:302:ILE:O	2:F:306:HIS:CE1	2.67	0.48
2:F:449:HIS:C	2:F:449:HIS:CD2	2.92	0.48
5:S:83:LEU:HB2	5:S:164:GLY:O	2.13	0.48
5:S:137:SER:C	5:S:155:PRO:HA	2.39	0.48
6:Q:201:ARG:HA	6:Q:204:ARG:HE	1.79	0.48
6:Q:680:PHE:HA	6:Q:683:GLN:CD	2.38	0.48
6:R:49:VAL:HG11	6:R:103:ILE:HG22	1.95	0.48
6:R:434:ASP:HA	6:R:437:LEU:HB2	1.96	0.48
6:R:581:PHE:CZ	6:R:633:LEU:HD21	2.48	0.48
6:R:803:ASP:HB2	6:R:804:ARG:HH12	1.79	0.48
2:B:426:ILE:O	2:B:430:TYR:CZ	2.67	0.47
2:B:451:TRP:CD2	2:B:451:TRP:C	2.92	0.47
2:B:533:ALA:HB1	2:A:540:LEU:CD2	2.43	0.47
2:A:227:ARG:HH21	2:A:294:PHE:HA	1.79	0.47
2:P:209:VAL:O	2:P:224:GLU:HA	2.13	0.47
2:H:462:LYS:HA	2:H:486:VAL:HG21	1.96	0.47
2:H:533:ALA:HB1	2:F:540:LEU:CD2	2.43	0.47
6:Q:467:GLN:HE22	6:Q:500:ILE:HG13	1.79	0.47
6:Q:505:VAL:O	6:Q:509:LEU:HB2	2.14	0.47
6:Q:521:LEU:O	6:Q:524:VAL:HB	2.14	0.47
5:T:137:SER:C	5:T:155:PRO:HA	2.39	0.47
2:B:196:LYS:HZ2	2:P:196:LYS:HZ3	1.38	0.47
2:B:368:ARG:NH2	2:B:416:ALA:HB2	2.29	0.47
2:B:430:TYR:CG	2:B:518:LYS:HD2	2.49	0.47
3:D:247:VAL:HG22	3:D:248:VAL:N	2.29	0.47
2:G:368:ARG:NH2	2:G:416:ALA:HB2	2.29	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:409:ARG:HE	2:G:413:GLU:HG2	1.80	0.47
2:E:242:ASN:HD22	2:E:288:ASP:CG	2.21	0.47
2:E:302:ILE:O	2:E:306:HIS:CE1	2.67	0.47
2:H:423:PHE:CZ	2:H:525:GLY:O	2.67	0.47
3:V:227:ARG:HH21	3:V:294:PHE:HA	1.79	0.47
3:V:302:ILE:O	3:V:306:HIS:CE1	2.67	0.47
5:T:64:ARG:CZ	5:T:91:PHE:HA	2.45	0.47
5:T:168:THR:HG23	5:T:190:THR:HG22	1.96	0.47
6:R:561:GLU:O	6:R:564:TRP:HE3	1.97	0.47
6:R:688:TYR:CD2	6:R:705:ILE:HD13	2.49	0.47
1:C:57:LYS:NZ	2:E:331:ASN:CG	2.73	0.47
3:D:225:VAL:HA	3:D:298:GLU:HB2	1.96	0.47
2:H:247:VAL:HG22	2:H:248:VAL:N	2.29	0.47
2:H:451:TRP:C	2:H:451:TRP:CD2	2.92	0.47
2:H:538:LYS:HZ2	2:H:542:GLU:HG3	1.80	0.47
5:S:64:ARG:CZ	5:S:91:PHE:HA	2.45	0.47
6:Q:453:LEU:HD22	6:Q:459:GLN:HA	1.96	0.47
6:Q:523:ASN:HA	6:Q:526:GLU:HG3	1.96	0.47
6:Q:564:TRP:CZ3	6:Q:565:LEU:HD22	2.49	0.47
6:R:289:LYS:HG3	6:R:414:LEU:HD11	1.95	0.47
2:N:227:ARG:HH21	2:N:294:PHE:HA	1.79	0.47
2:H:246:VAL:N	2:H:503:MET:HG3	2.27	0.47
2:H:302:ILE:O	2:H:306:HIS:CE1	2.67	0.47
2:H:423:PHE:CE1	2:H:525:GLY:C	2.93	0.47
3:L:209:VAL:O	3:L:224:GLU:HA	2.13	0.47
5:S:170:TYR:HB2	5:S:172:TYR:CE1	2.50	0.47
5:S:178:GLU:CD	5:S:178:GLU:H	2.22	0.47
6:Q:434:ASP:HA	6:Q:437:LEU:HB2	1.96	0.47
6:Q:528:LEU:CD2	6:Q:586:MET:SD	3.03	0.47
5:T:177:ASP:C	5:T:179:ASN:H	2.22	0.47
5:T:178:GLU:H	5:T:178:GLU:CD	2.22	0.47
6:R:505:VAL:O	6:R:509:LEU:HB2	2.15	0.47
6:R:661:PHE:CE2	6:R:684:ALA:HA	2.50	0.47
1:J:5:PHE:CB	2:A:331:ASN:C	2.86	0.47
1:J:82:TYR:CE1	1:C:65:LYS:CD	2.98	0.47
1:J:215:VAL:HG13	1:C:94:PRO:O	2.13	0.47
1:J:262:LYS:CD	1:C:92:ALA:HA	2.29	0.47
2:B:225:VAL:HA	2:B:298:GLU:HB2	1.96	0.47
2:B:227:ARG:HH21	2:B:294:PHE:HA	1.79	0.47
2:G:389:GLU:OE2	2:G:395:SER:HA	2.14	0.47
2:G:419:ASP:HB3	2:G:529:PHE:HA	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:302:ILE:O	2:P:306:HIS:CE1	2.67	0.47
2:N:242:ASN:HD22	2:N:288:ASP:CG	2.21	0.47
3:L:306:HIS:HA	3:L:309:ARG:NH2	2.29	0.47
5:S:154:VAL:HG22	5:S:175:ARG:HG3	1.95	0.47
6:Q:570:HIS:CD2	6:Q:570:HIS:O	2.67	0.47
5:T:45:ARG:HA	5:T:48:TYR:HB2	1.95	0.47
5:T:61:VAL:HG12	5:T:75:MET:HA	1.96	0.47
5:T:170:TYR:HB2	5:T:172:TYR:CE1	2.49	0.47
6:R:201:ARG:HA	6:R:204:ARG:HE	1.79	0.47
6:R:802:LEU:HB2	6:R:828:ILE:HD11	1.97	0.47
2:B:209:VAL:O	2:B:224:GLU:HA	2.13	0.47
2:B:409:ARG:HE	2:B:413:GLU:HG2	1.79	0.47
3:D:227:ARG:HH21	3:D:294:PHE:HA	1.79	0.47
2:G:247:VAL:HG22	2:G:248:VAL:N	2.29	0.47
2:H:242:ASN:HD22	2:H:288:ASP:CG	2.21	0.47
2:H:357:LEU:HD11	2:F:381:SER:CB	2.40	0.47
3:L:302:ILE:O	3:L:306:HIS:CE1	2.67	0.47
6:Q:182:PHE:CD1	6:Q:182:PHE:C	2.93	0.47
6:Q:223:SER:C	6:Q:225:LEU:H	2.22	0.47
6:Q:280:SER:HB3	6:Q:399:HIS:CE1	2.50	0.47
6:Q:479:ALA:HB1	6:Q:485:TYR:HE2	1.79	0.47
6:Q:661:PHE:CE2	6:Q:684:ALA:HA	2.50	0.47
6:Q:802:LEU:HB2	6:Q:828:ILE:HD11	1.97	0.47
6:R:570:HIS:CD2	6:R:570:HIS:O	2.68	0.47
1:J:26:VAL:HG22	1:J:146:TRP:CE3	2.50	0.47
1:J:65:LYS:CD	1:C:82:TYR:CE1	2.98	0.47
1:J:87:LEU:HD21	1:C:87:LEU:HD21	1.96	0.47
1:J:247:PHE:CE2	6:Q:97:GLN:HB2	2.49	0.47
2:B:247:VAL:HG22	2:B:248:VAL:N	2.29	0.47
2:B:423:PHE:CZ	2:B:525:GLY:O	2.67	0.47
2:B:423:PHE:CE1	2:B:525:GLY:C	2.93	0.47
2:G:344:ARG:HH22	2:G:441:PHE:HB3	1.80	0.47
2:G:368:ARG:CD	2:G:413:GLU:O	2.63	0.47
2:G:383:HIS:HA	2:G:399:ASP:OD1	2.14	0.47
2:G:451:TRP:C	2:G:451:TRP:CD2	2.92	0.47
3:K:247:VAL:HG22	3:K:248:VAL:N	2.29	0.47
4:M:371:MET:O	4:M:374:ALA:HB3	2.15	0.47
2:N:306:HIS:HA	2:N:309:ARG:NH2	2.29	0.47
2:H:225:VAL:HA	2:H:298:GLU:HB2	1.96	0.47
2:H:375:ALA:HB1	2:H:409:ARG:HB2	1.95	0.47
3:L:225:VAL:HA	3:L:298:GLU:HB2	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:Q:285:HIS:CD2	6:Q:285:HIS:H	2.31	0.47
6:Q:462:LEU:HD21	6:Q:492:GLN:HE21	1.79	0.47
6:Q:570:HIS:CD2	6:Q:570:HIS:C	2.92	0.47
6:Q:773:ARG:H	6:Q:773:ARG:CD	2.26	0.47
6:R:462:LEU:HD21	6:R:492:GLN:HE21	1.79	0.47
6:R:500:ILE:HG23	6:R:501:ALA:N	2.29	0.47
6:R:525:LEU:HD22	6:R:586:MET:HG3	1.96	0.47
6:R:564:TRP:CZ3	6:R:565:LEU:HD22	2.49	0.47
6:R:759:ARG:HE	6:R:767:LEU:CD2	2.28	0.47
6:R:773:ARG:CD	6:R:773:ARG:H	2.26	0.47
2:B:302:ILE:O	2:B:306:HIS:CE1	2.67	0.47
2:B:367:GLN:NE2	2:A:370:ALA:C	2.72	0.47
2:B:368:ARG:CD	2:B:413:GLU:O	2.63	0.47
2:B:389:GLU:OE2	2:B:395:SER:HA	2.14	0.47
2:A:332:LYS:HB3	2:N:331:ASN:O	2.15	0.47
2:G:227:ARG:HH21	2:G:294:PHE:HA	1.79	0.47
2:G:339:TRP:HA	2:G:339:TRP:CE3	2.50	0.47
2:G:357:LEU:CD1	2:E:381:SER:HB3	2.44	0.47
2:G:429:GLU:C	2:G:429:GLU:CD	2.83	0.47
2:E:199:ASP:O	3:K:199:ASP:CB	2.53	0.47
2:E:225:VAL:HA	2:E:298:GLU:HB2	1.96	0.47
2:P:225:VAL:HA	2:P:298:GLU:HB2	1.96	0.47
2:P:227:ARG:HH21	2:P:294:PHE:HA	1.79	0.47
2:H:267:SER:CB	2:H:432:ARG:HH11	1.95	0.47
2:H:409:ARG:HE	2:H:413:GLU:HG2	1.79	0.47
2:H:448:PHE:HB2	2:H:500:PHE:CZ	2.50	0.47
2:H:451:TRP:HE1	2:H:493:VAL:CA	2.28	0.47
5:S:177:ASP:C	5:S:179:ASN:H	2.22	0.47
6:Q:273:ASP:HA	6:Q:276:LEU:HD12	1.97	0.47
5:T:130:LYS:NZ	5:T:132:PHE:CE1	2.82	0.47
6:R:463:LEU:HA	6:R:466:LEU:HD12	1.97	0.47
6:R:493:THR:HG23	6:R:496:THR:H	1.80	0.47
1:J:111:GLU:CD	1:C:108:LYS:HB3	2.40	0.47
1:J:111:GLU:CG	1:C:108:LYS:HB3	2.45	0.47
1:C:26:VAL:HG22	1:C:146:TRP:CE3	2.50	0.47
2:B:494:HIS:CD2	2:B:494:HIS:C	2.93	0.47
2:A:247:VAL:O	2:A:248:VAL:HG13	2.15	0.47
2:A:497:ARG:CD	2:N:334:VAL:CG2	2.92	0.47
2:G:267:SER:CB	2:G:432:ARG:HH11	1.95	0.47
2:G:423:PHE:CE1	2:G:525:GLY:C	2.93	0.47
2:E:449:HIS:C	2:E:449:HIS:CD2	2.92	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:K:225:VAL:HA	3:K:298:GLU:HB2	1.97	0.47
3:K:311:GLU:O	2:H:476:GLN:CA	2.49	0.47
2:P:247:VAL:O	2:P:248:VAL:HG13	2.15	0.47
2:N:247:VAL:HG22	2:N:248:VAL:N	2.30	0.47
2:H:389:GLU:OE2	2:H:395:SER:HA	2.14	0.47
2:F:225:VAL:HA	2:F:298:GLU:HB2	1.96	0.47
2:F:227:ARG:HH21	2:F:294:PHE:HA	1.79	0.47
3:V:247:VAL:HG22	3:V:248:VAL:N	2.30	0.47
6:Q:161:THR:HB	6:Q:171:LEU:HA	1.96	0.47
6:Q:468:SER:N	6:Q:469:PRO:HD2	2.30	0.47
5:T:158:CYS:SG	5:T:171:VAL:HA	2.55	0.47
6:R:161:THR:HB	6:R:171:LEU:HA	1.96	0.47
6:R:263:PHE:HB2	6:R:268:HIS:CE1	2.50	0.47
6:R:273:ASP:HA	6:R:276:LEU:HD12	1.97	0.47
6:R:467:GLN:HE22	6:R:500:ILE:HG13	1.79	0.47
6:R:468:SER:N	6:R:469:PRO:HD2	2.30	0.47
6:R:528:LEU:CD2	6:R:586:MET:SD	3.03	0.47
1:J:9:VAL:CG2	1:J:51:VAL:HG13	2.45	0.47
2:B:246:VAL:N	2:B:503:MET:HG3	2.27	0.47
2:B:344:ARG:HH22	2:B:441:PHE:HB3	1.80	0.47
2:B:375:ALA:HB1	2:B:409:ARG:HB2	1.95	0.47
2:G:250:PRO:HG2	2:G:433:LEU:HA	1.90	0.47
2:G:371:MET:CE	2:E:371:MET:HE2	2.38	0.47
2:G:448:PHE:HB2	2:G:500:PHE:CZ	2.50	0.47
2:G:462:LYS:HA	2:G:486:VAL:HG21	1.96	0.47
2:E:247:VAL:HG22	2:E:248:VAL:N	2.30	0.47
2:H:383:HIS:HA	2:H:399:ASP:OD1	2.15	0.47
5:S:63:GLY:HA2	5:S:89:GLU:HB3	1.97	0.47
5:S:107:LYS:HZ1	6:Q:804:ARG:NH1	2.12	0.47
6:Q:583:LEU:O	6:Q:587:THR:HG23	2.15	0.47
6:R:66:TYR:O	6:R:70:PHE:CB	2.63	0.47
6:R:280:SER:HB3	6:R:399:HIS:CE1	2.50	0.47
6:R:583:LEU:O	6:R:587:THR:HG23	2.15	0.47
1:J:30:LYS:HZ1	2:N:283:PRO:CG	2.27	0.46
1:C:9:VAL:CG2	1:C:51:VAL:HG13	2.45	0.46
2:B:339:TRP:CE3	2:B:339:TRP:HA	2.50	0.46
2:B:448:PHE:HB2	2:B:500:PHE:CZ	2.50	0.46
2:A:196:LYS:HZ2	3:D:196:LYS:CE	2.27	0.46
3:D:302:ILE:O	3:D:306:HIS:CE1	2.67	0.46
2:G:375:ALA:HB1	2:G:409:ARG:HB2	1.95	0.46
2:P:306:HIS:HA	2:P:309:ARG:NH2	2.29	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:247:VAL:O	2:N:248:VAL:HG13	2.15	0.46
2:N:302:ILE:O	2:N:306:HIS:CE1	2.67	0.46
2:H:339:TRP:HA	2:H:339:TRP:CE3	2.50	0.46
6:Q:194:HIS:CD2	6:Q:201:ARG:HH12	2.33	0.46
6:Q:444:VAL:HA	6:Q:447:HIS:HD2	1.80	0.46
6:Q:722:THR:CB	6:R:725:THR:OG1	2.56	0.46
6:R:182:PHE:CD1	6:R:182:PHE:C	2.93	0.46
1:J:5:PHE:CB	2:N:332:LYS:CB	2.72	0.46
1:J:108:LYS:HB3	1:C:111:GLU:CG	2.45	0.46
2:B:247:VAL:O	2:B:248:VAL:HG13	2.16	0.46
2:B:383:HIS:HA	2:B:399:ASP:OD1	2.14	0.46
2:B:419:ASP:HB3	2:B:529:PHE:HA	1.96	0.46
2:B:498:LEU:O	2:B:501:GLU:HB3	2.16	0.46
2:A:302:ILE:O	2:A:306:HIS:CE1	2.67	0.46
3:K:247:VAL:O	3:K:248:VAL:HG13	2.15	0.46
2:H:247:VAL:O	2:H:248:VAL:HG13	2.15	0.46
2:H:372:ALA:HA	2:H:409:ARG:NE	2.31	0.46
3:L:223:PHE:CB	3:L:296:GLU:HA	2.46	0.46
3:L:247:VAL:O	3:L:248:VAL:HG13	2.15	0.46
5:S:61:VAL:HG12	5:S:75:MET:HA	1.97	0.46
6:Q:66:TYR:O	6:Q:70:PHE:CB	2.63	0.46
6:Q:148:ARG:NH1	6:Q:181:ASN:HA	2.29	0.46
6:Q:479:ALA:HB1	6:Q:485:TYR:CE2	2.50	0.46
5:T:24:PHE:CE1	5:T:157:PHE:CE1	3.04	0.46
6:R:148:ARG:NH1	6:R:181:ASN:HA	2.29	0.46
6:R:194:HIS:CD2	6:R:201:ARG:HH12	2.33	0.46
1:C:218:ASN:N	2:B:390:LEU:HD11	2.30	0.46
2:B:367:GLN:C	2:B:369:LYS:H	2.24	0.46
2:A:225:VAL:HA	2:A:298:GLU:HB2	1.97	0.46
2:A:260:PHE:HE2	3:D:198:GLY:CA	2.29	0.46
2:G:223:PHE:CB	2:G:296:GLU:HA	2.46	0.46
2:G:227:ARG:HD2	2:G:294:PHE:CE1	2.50	0.46
2:E:227:ARG:HD2	2:E:294:PHE:CE1	2.50	0.46
2:H:368:ARG:CD	2:H:413:GLU:O	2.63	0.46
2:H:498:LEU:O	2:H:501:GLU:HB3	2.16	0.46
2:F:247:VAL:O	2:F:248:VAL:HG13	2.16	0.46
6:Q:130:ASP:HA	6:Q:133:ASP:OD2	2.14	0.46
6:Q:443:LYS:N	6:Q:443:LYS:HE2	2.30	0.46
6:Q:468:SER:HA	6:Q:471:ARG:NE	2.30	0.46
6:Q:483:PRO:HA	6:Q:486:VAL:HG23	1.97	0.46
6:Q:483:PRO:C	6:Q:486:VAL:H	2.24	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:Q:625:ASN:HD22	6:Q:629:GLN:HE22	1.62	0.46
6:R:88:HIS:CE1	6:R:90:ALA:HA	2.50	0.46
6:R:401:VAL:O	6:R:405:HIS:HA	2.15	0.46
6:R:483:PRO:HA	6:R:486:VAL:HG23	1.97	0.46
2:B:391:SER:CB	2:B:394:LEU:HD12	2.46	0.46
2:B:400:ALA:HB1	2:B:550:GLN:HE22	1.81	0.46
2:G:457:GLU:HB3	2:G:461:LYS:HZ1	1.80	0.46
2:E:223:PHE:CG	2:E:296:GLU:HA	2.51	0.46
2:E:247:VAL:O	2:E:248:VAL:HG13	2.15	0.46
2:P:223:PHE:CB	2:P:296:GLU:HA	2.46	0.46
2:H:223:PHE:CG	2:H:296:GLU:HA	2.51	0.46
5:S:110:VAL:HG23	5:S:113:LEU:HD11	1.98	0.46
6:Q:528:LEU:HD12	6:Q:531:LEU:HB3	1.98	0.46
5:T:63:GLY:HA2	5:T:89:GLU:HB3	1.97	0.46
6:R:28:MET:CE	6:R:32:LEU:HD11	2.46	0.46
6:R:28:MET:HE3	6:R:32:LEU:HD11	1.98	0.46
6:R:132:MET:HG2	6:R:177:PHE:CZ	2.50	0.46
6:R:528:LEU:HD12	6:R:531:LEU:HB3	1.98	0.46
6:R:573:HIS:NE2	6:R:612:LEU:HA	2.30	0.46
1:C:5:PHE:HD2	2:E:332:LYS:C	2.24	0.46
2:B:246:VAL:N	2:B:503:MET:CE	2.79	0.46
2:B:375:ALA:HA	2:B:378:PHE:CB	2.46	0.46
2:B:455:GLU:HG3	2:B:493:VAL:HG21	1.97	0.46
2:A:227:ARG:HD2	2:A:294:PHE:CE1	2.50	0.46
3:D:247:VAL:O	3:D:248:VAL:HG13	2.15	0.46
2:G:225:VAL:HA	2:G:298:GLU:HB2	1.96	0.46
2:G:247:VAL:O	2:G:248:VAL:HG13	2.15	0.46
2:G:498:LEU:O	2:G:501:GLU:HB3	2.16	0.46
2:H:367:GLN:NE2	2:F:370:ALA:C	2.73	0.46
2:H:455:GLU:HG3	2:H:493:VAL:HG21	1.97	0.46
2:F:223:PHE:CB	2:F:296:GLU:HA	2.46	0.46
3:V:227:ARG:HD2	3:V:294:PHE:CE1	2.50	0.46
3:L:227:ARG:HD2	3:L:294:PHE:CE1	2.51	0.46
5:S:24:PHE:CE1	5:S:157:PHE:CE1	3.04	0.46
6:Q:28:MET:CE	6:Q:32:LEU:HD11	2.46	0.46
6:Q:759:ARG:HE	6:Q:767:LEU:CD2	2.28	0.46
5:T:88:LEU:HB2	5:T:91:PHE:CE1	2.51	0.46
5:T:110:VAL:HG23	5:T:113:LEU:HD11	1.98	0.46
6:R:468:SER:HA	6:R:471:ARG:NE	2.30	0.46
6:R:617:LYS:HE3	6:R:671:THR:HG22	1.98	0.46
2:B:451:TRP:HE1	2:B:493:VAL:CA	2.28	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:223:PHE:CB	2:A:296:GLU:HA	2.46	0.46
2:G:353:GLN:HE22	2:E:384:ALA:CB	2.17	0.46
2:G:455:GLU:HG3	2:G:493:VAL:HG21	1.97	0.46
2:F:247:VAL:HG22	2:F:248:VAL:N	2.30	0.46
3:V:223:PHE:CB	3:V:296:GLU:HA	2.46	0.46
3:V:225:VAL:HA	3:V:298:GLU:HB2	1.97	0.46
3:L:247:VAL:HG22	3:L:248:VAL:N	2.29	0.46
5:S:158:CYS:SG	5:S:171:VAL:HA	2.55	0.46
6:Q:565:LEU:O	6:Q:569:VAL:HG23	2.15	0.46
1:J:262:LYS:HE3	1:C:92:ALA:HA	1.36	0.46
3:D:227:ARG:HD2	3:D:294:PHE:CE1	2.51	0.46
3:K:227:ARG:HD2	3:K:294:PHE:CE1	2.51	0.46
2:P:187:PHE:CD1	2:P:218:TYR:CD2	3.04	0.46
2:P:247:VAL:HG22	2:P:248:VAL:N	2.29	0.46
2:N:223:PHE:CG	2:N:296:GLU:HA	2.51	0.46
2:N:223:PHE:CB	2:N:296:GLU:HA	2.46	0.46
2:N:227:ARG:HD2	2:N:294:PHE:CE1	2.51	0.46
2:H:348:ASP:HA	2:H:438:LYS:HZ3	1.81	0.46
2:F:223:PHE:CG	2:F:296:GLU:HA	2.51	0.46
5:S:46:ALA:O	5:S:50:TYR:CD2	2.69	0.46
6:Q:263:PHE:HB2	6:Q:268:HIS:CE1	2.50	0.46
6:Q:265:ASP:HA	6:Q:268:HIS:CD2	2.51	0.46
6:Q:667:VAL:O	6:Q:671:THR:HG23	2.16	0.46
6:R:479:ALA:HB1	6:R:485:TYR:CE2	2.51	0.46
2:B:227:ARG:HD2	2:B:294:PHE:CE1	2.51	0.46
2:B:250:PRO:HG2	2:B:433:LEU:HA	1.90	0.46
2:A:223:PHE:CG	2:A:296:GLU:HA	2.51	0.46
2:A:247:VAL:HG22	2:A:248:VAL:N	2.30	0.46
2:A:306:HIS:HA	2:A:309:ARG:NH2	2.29	0.46
2:G:246:VAL:N	2:G:503:MET:CE	2.79	0.46
2:G:494:HIS:CD2	2:G:494:HIS:C	2.93	0.46
2:N:204:HIS:CE1	2:N:228:ARG:CD	2.99	0.46
2:H:223:PHE:CB	2:H:296:GLU:HA	2.46	0.46
2:H:250:PRO:HG2	2:H:433:LEU:HA	1.90	0.46
2:H:367:GLN:C	2:H:369:LYS:H	2.24	0.46
6:Q:88:HIS:CE1	6:Q:90:ALA:HA	2.50	0.46
6:Q:399:HIS:CE1	6:Q:403:ALA:CB	2.99	0.46
6:Q:401:VAL:O	6:Q:405:HIS:HA	2.15	0.46
6:R:223:SER:C	6:R:225:LEU:H	2.22	0.46
6:R:399:HIS:CE1	6:R:403:ALA:CB	2.99	0.46
6:R:453:LEU:HD22	6:R:459:GLN:HA	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:6:SER:O	2:E:331:ASN:C	2.58	0.46
2:B:204:HIS:CE1	2:B:228:ARG:CD	2.99	0.46
2:B:223:PHE:CG	2:B:296:GLU:HA	2.51	0.46
2:B:348:ASP:HA	2:B:438:LYS:HZ3	1.81	0.46
2:B:357:LEU:CD1	2:A:381:SER:HB3	2.44	0.46
2:B:372:ALA:HA	2:B:409:ARG:NE	2.31	0.46
2:B:382:LEU:HD22	2:B:401:LEU:CB	2.46	0.46
3:D:187:PHE:CD1	3:D:218:TYR:CD2	3.04	0.46
3:D:223:PHE:CB	3:D:296:GLU:HA	2.46	0.46
3:D:306:HIS:HA	3:D:309:ARG:NH2	2.29	0.46
2:G:391:SER:CB	2:G:394:LEU:HD12	2.46	0.46
2:E:306:HIS:HA	2:E:309:ARG:NH2	2.29	0.46
3:K:223:PHE:CB	3:K:296:GLU:HA	2.46	0.46
2:P:227:ARG:HH12	2:P:299:SER:N	2.14	0.46
2:H:196:LYS:HZ2	3:V:196:LYS:CE	2.27	0.46
2:H:375:ALA:HA	2:H:378:PHE:CB	2.46	0.46
3:V:223:PHE:CG	3:V:296:GLU:HA	2.51	0.46
6:Q:132:MET:HG2	6:Q:177:PHE:CZ	2.50	0.46
6:Q:463:LEU:HA	6:Q:466:LEU:HD12	1.97	0.46
6:Q:532:ILE:HB	6:Q:593:GLU:OE2	2.16	0.46
5:T:12:HIS:CE1	5:T:16:ARG:HE	2.34	0.46
6:R:565:LEU:O	6:R:569:VAL:HG23	2.15	0.46
6:R:800:GLU:HA	6:R:803:ASP:CG	2.41	0.46
1:J:261:ASN:OD1	1:C:90:GLU:CD	2.59	0.46
2:B:227:ARG:HH12	2:B:299:SER:N	2.14	0.46
2:B:245:GLY:C	2:B:503:MET:CG	2.72	0.46
2:G:367:GLN:C	2:G:369:LYS:H	2.24	0.46
2:G:451:TRP:HE1	2:G:493:VAL:CA	2.28	0.46
2:E:227:ARG:HH12	2:E:299:SER:N	2.14	0.46
3:K:204:HIS:CE1	3:K:228:ARG:CD	2.99	0.46
2:P:227:ARG:HD2	2:P:294:PHE:CE1	2.50	0.46
2:P:250:PRO:N	2:P:433:LEU:CD2	2.78	0.46
2:N:225:VAL:HA	2:N:298:GLU:HB2	1.96	0.46
2:H:430:TYR:CD1	2:H:430:TYR:N	2.79	0.46
3:L:204:HIS:CE1	3:L:228:ARG:CD	2.99	0.46
6:Q:573:HIS:NE2	6:Q:612:LEU:HA	2.30	0.46
6:Q:800:GLU:HA	6:Q:803:ASP:CG	2.41	0.46
5:T:107:LYS:HZ2	6:R:800:GLU:CB	2.29	0.46
6:R:444:VAL:HA	6:R:447:HIS:HD2	1.80	0.46
6:R:483:PRO:C	6:R:486:VAL:H	2.24	0.46
1:J:5:PHE:HZ	2:A:336:GLN:HG2	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:429:GLU:C	2:B:429:GLU:CD	2.83	0.45
2:G:187:PHE:CD1	2:G:218:TYR:CD2	3.04	0.45
2:E:187:PHE:CD1	2:E:218:TYR:CD2	3.04	0.45
3:K:223:PHE:CG	3:K:296:GLU:HA	2.51	0.45
3:K:227:ARG:HH12	3:K:299:SER:N	2.14	0.45
2:P:204:HIS:CE1	2:P:228:ARG:CD	2.99	0.45
2:H:187:PHE:CD1	2:H:218:TYR:CD2	3.04	0.45
2:H:227:ARG:HD2	2:H:294:PHE:CE1	2.51	0.45
2:H:382:LEU:HD22	2:H:401:LEU:CB	2.46	0.45
3:L:227:ARG:HH12	3:L:299:SER:N	2.14	0.45
6:Q:28:MET:HE3	6:Q:32:LEU:HD11	1.98	0.45
6:Q:66:TYR:O	6:Q:70:PHE:HB3	2.16	0.45
6:Q:404:GLN:O	6:Q:405:HIS:CG	2.69	0.45
6:Q:493:THR:HG23	6:Q:496:THR:H	1.80	0.45
6:R:265:ASP:HA	6:R:268:HIS:CD2	2.51	0.45
6:R:404:GLN:O	6:R:405:HIS:CG	2.69	0.45
1:J:58:ARG:CZ	2:A:339:TRP:CH2	2.98	0.45
1:J:233:ASP:OD2	6:Q:143:ARG:NE	2.49	0.45
3:D:227:ARG:HH12	3:D:299:SER:N	2.14	0.45
2:G:400:ALA:HB1	2:G:550:GLN:HE22	1.81	0.45
4:O:371:MET:O	4:O:374:ALA:HB3	2.15	0.45
2:P:223:PHE:CG	2:P:296:GLU:HA	2.51	0.45
2:H:227:ARG:HH12	2:H:299:SER:N	2.14	0.45
2:F:227:ARG:HD2	2:F:294:PHE:CE1	2.50	0.45
2:F:227:ARG:HH12	2:F:299:SER:N	2.14	0.45
3:V:247:VAL:O	3:V:248:VAL:HG13	2.15	0.45
5:S:12:HIS:CE1	5:S:16:ARG:HE	2.34	0.45
6:Q:461:SER:O	6:Q:465:LEU:HB2	2.16	0.45
6:Q:525:LEU:HD21	6:Q:583:LEU:HD23	1.98	0.45
2:B:370:ALA:CB	2:A:367:GLN:CD	2.85	0.45
2:G:412:TYR:CD2	2:G:412:TYR:C	2.94	0.45
2:E:223:PHE:CB	2:E:296:GLU:HA	2.46	0.45
2:H:429:GLU:CD	2:H:429:GLU:C	2.83	0.45
6:Q:565:LEU:O	6:Q:568:LEU:HD23	2.17	0.45
5:T:46:ALA:O	5:T:50:TYR:CD2	2.69	0.45
6:R:399:HIS:CE1	6:R:403:ALA:HB2	2.51	0.45
6:R:479:ALA:HB1	6:R:485:TYR:HE2	1.80	0.45
6:R:565:LEU:O	6:R:568:LEU:HD23	2.17	0.45
6:R:625:ASN:HD22	6:R:629:GLN:HE22	1.62	0.45
2:G:227:ARG:HH12	2:G:299:SER:N	2.14	0.45
2:G:369:LYS:O	2:G:372:ALA:HB3	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:372:ALA:HA	2:G:409:ARG:NE	2.31	0.45
3:K:187:PHE:CD1	3:K:218:TYR:CD2	3.04	0.45
2:H:372:ALA:HB2	2:H:413:GLU:OE1	2.17	0.45
2:H:391:SER:CB	2:H:394:LEU:HD12	2.46	0.45
2:F:260:PHE:CD2	3:L:198:GLY:CA	2.84	0.45
5:S:88:LEU:HB2	5:S:91:PHE:CE1	2.51	0.45
6:R:156:ARG:HH22	6:R:217:SER:C	2.24	0.45
1:J:94:PRO:O	1:C:215:VAL:HG13	2.13	0.45
1:C:5:PHE:CD2	2:E:332:LYS:C	2.94	0.45
2:B:278:LYS:HB3	2:B:282:HIS:CE1	2.52	0.45
2:B:352:ASN:HA	2:B:355:LYS:HE3	1.98	0.45
3:D:204:HIS:CE1	3:D:228:ARG:CD	2.99	0.45
3:D:251:PRO:HA	3:D:275:MET:SD	2.57	0.45
2:G:204:HIS:CE1	2:G:228:ARG:CD	2.99	0.45
2:G:375:ALA:HA	2:G:378:PHE:CB	2.46	0.45
2:G:382:LEU:HD22	2:G:401:LEU:CB	2.46	0.45
2:E:250:PRO:HG2	2:E:433:LEU:CG	2.22	0.45
2:P:274:LYS:NZ	2:P:429:GLU:CD	2.66	0.45
2:P:278:LYS:HB3	2:P:282:HIS:CE1	2.52	0.45
2:H:204:HIS:CE1	2:H:228:ARG:CD	2.99	0.45
2:H:278:LYS:HB3	2:H:282:HIS:CE1	2.52	0.45
2:H:352:ASN:HA	2:H:355:LYS:HE3	1.99	0.45
3:V:187:PHE:CD1	3:V:218:TYR:CD2	3.04	0.45
5:S:168:THR:CG2	5:S:190:THR:HG22	2.46	0.45
6:Q:621:HIS:HB2	6:Q:622:TYR:CZ	2.51	0.45
6:R:443:LYS:HE2	6:R:443:LYS:N	2.30	0.45
6:R:667:VAL:O	6:R:671:THR:HG23	2.16	0.45
1:J:90:GLU:OE2	1:C:82:TYR:HE2	1.75	0.45
1:J:92:ALA:HA	1:C:262:LYS:HE3	1.36	0.45
1:J:229:PHE:CE1	6:Q:105:ARG:HD3	2.52	0.45
2:B:187:PHE:CD1	2:B:218:TYR:CD2	3.04	0.45
2:B:251:PRO:HA	2:B:275:MET:SD	2.57	0.45
2:A:349:ALA:CB	2:N:470:ARG:HH21	2.27	0.45
2:G:251:PRO:HA	2:G:275:MET:SD	2.57	0.45
2:G:352:ASN:HA	2:G:355:LYS:HE3	1.99	0.45
2:G:376:ALA:HB2	2:G:409:ARG:NH2	2.32	0.45
2:G:380:ALA:O	2:G:383:HIS:HD2	1.99	0.45
3:K:278:LYS:HB3	3:K:282:HIS:CE1	2.52	0.45
2:P:206:VAL:HA	2:P:227:ARG:O	2.17	0.45
2:P:310:LYS:CE	2:N:478:ARG:N	2.68	0.45
2:N:187:PHE:CD1	2:N:218:TYR:CD2	3.04	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:227:ARG:HH12	2:N:299:SER:N	2.14	0.45
2:H:251:PRO:HA	2:H:275:MET:SD	2.57	0.45
3:V:278:LYS:HB3	3:V:282:HIS:CE1	2.52	0.45
3:L:187:PHE:CD1	3:L:218:TYR:CD2	3.04	0.45
6:Q:565:LEU:HA	6:Q:568:LEU:HD23	1.99	0.45
5:T:12:HIS:HA	5:T:41:ASN:O	2.16	0.45
6:R:561:GLU:CD	6:R:561:GLU:N	2.75	0.45
6:R:621:HIS:HB2	6:R:622:TYR:CZ	2.52	0.45
1:C:30:LYS:NZ	2:P:283:PRO:CG	2.75	0.45
2:A:227:ARG:HH12	2:A:299:SER:N	2.14	0.45
3:D:223:PHE:CG	3:D:296:GLU:HA	2.51	0.45
2:G:206:VAL:HA	2:G:227:ARG:O	2.17	0.45
2:E:278:LYS:HB3	2:E:282:HIS:CE1	2.52	0.45
2:P:310:LYS:HD2	2:N:480:ASN:ND2	2.31	0.45
2:H:406:LEU:HD12	2:H:409:ARG:HH21	1.81	0.45
2:F:187:PHE:CD1	2:F:218:TYR:CD2	3.04	0.45
2:F:204:HIS:CE1	2:F:228:ARG:CD	2.99	0.45
3:V:204:HIS:CE1	3:V:228:ARG:CD	2.99	0.45
6:Q:428:GLU:OE1	6:Q:433:VAL:HG21	2.17	0.45
5:T:168:THR:CG2	5:T:190:THR:HG22	2.46	0.45
6:R:428:GLU:OE1	6:R:433:VAL:HG21	2.17	0.45
6:R:525:LEU:HD21	6:R:583:LEU:HD23	1.98	0.45
1:J:5:PHE:CD2	2:N:332:LYS:CA	3.00	0.45
1:J:243:PRO:HB2	6:Q:134:MET:HE3	1.98	0.45
1:C:216:ALA:CA	2:B:392:PRO:CG	2.94	0.45
2:A:204:HIS:CE1	2:A:228:ARG:CD	2.99	0.45
2:A:206:VAL:HA	2:A:227:ARG:O	2.17	0.45
2:A:278:LYS:HB3	2:A:282:HIS:CE1	2.52	0.45
2:E:204:HIS:CE1	2:E:228:ARG:CD	2.99	0.45
2:E:251:PRO:HA	2:E:275:MET:SD	2.57	0.45
2:H:344:ARG:HH22	2:H:441:PHE:HB3	1.80	0.45
2:H:412:TYR:CD2	2:H:412:TYR:C	2.94	0.45
2:F:206:VAL:HA	2:F:227:ARG:O	2.17	0.45
5:T:51:LEU:HD13	5:T:58:LEU:CD1	2.47	0.45
6:R:532:ILE:HB	6:R:593:GLU:OE2	2.16	0.45
1:J:92:ALA:HA	1:C:262:LYS:CD	2.28	0.45
1:J:108:LYS:HB3	1:C:111:GLU:CD	2.40	0.45
2:B:372:ALA:HB2	2:B:413:GLU:OE1	2.17	0.45
2:B:414:ARG:HB3	2:B:418:GLN:HE21	1.82	0.45
2:B:535:GLU:OE1	2:B:535:GLU:HA	2.17	0.45
2:A:187:PHE:CD1	2:A:218:TYR:CD2	3.04	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:A:260:PHE:CD2	3:D:198:GLY:CA	2.84	0.45
2:G:367:GLN:NE2	2:E:370:ALA:C	2.73	0.45
2:G:461:LYS:HZ3	2:G:489:ALA:HB2	1.82	0.45
3:K:251:PRO:HA	3:K:275:MET:SD	2.57	0.45
2:P:383:HIS:CD2	2:P:402:SER:HB3	2.52	0.45
2:H:376:ALA:HB2	2:H:409:ARG:NH2	2.32	0.45
3:V:306:HIS:HA	3:V:309:ARG:NH2	2.29	0.45
3:L:251:PRO:HA	3:L:275:MET:SD	2.57	0.45
5:S:127:TYR:CE2	5:S:132:PHE:CE2	3.04	0.45
6:Q:156:ARG:HH22	6:Q:217:SER:C	2.25	0.45
6:Q:399:HIS:CE1	6:Q:403:ALA:HB2	2.51	0.45
6:Q:498:ARG:HH11	6:Q:506:ARG:HH11	1.65	0.45
6:Q:719:ASN:O	6:Q:723:LEU:HG	2.17	0.45
5:T:113:LEU:HD22	5:T:130:LYS:HZ1	1.81	0.45
6:R:486:VAL:HA	6:R:489:PHE:CE1	2.52	0.45
6:R:631:SER:HA	6:R:634:PHE:CZ	2.52	0.45
2:A:250:PRO:HG2	2:A:433:LEU:CG	2.22	0.45
2:G:223:PHE:CG	2:G:296:GLU:HA	2.51	0.45
2:G:348:ASP:HA	2:G:438:LYS:HZ3	1.81	0.45
2:G:434:ILE:O	2:G:438:LYS:HG3	2.17	0.45
2:G:514:PHE:CZ	2:G:518:LYS:NZ	2.81	0.45
3:K:209:VAL:HB	3:K:225:VAL:CG2	2.47	0.45
2:H:400:ALA:HB1	2:H:550:GLN:HE22	1.81	0.45
2:H:414:ARG:HB3	2:H:418:GLN:HE21	1.82	0.45
3:V:251:PRO:HA	3:V:275:MET:SD	2.57	0.45
3:L:278:LYS:HB3	3:L:282:HIS:CE1	2.52	0.45
6:Q:617:LYS:HE3	6:Q:671:THR:HG22	1.98	0.45
6:Q:803:ASP:HB2	6:Q:804:ARG:HH12	1.79	0.45
5:T:124:CYS:SG	5:T:133:VAL:HG13	2.57	0.45
5:T:127:TYR:CE2	5:T:132:PHE:CE2	3.04	0.45
6:R:66:TYR:O	6:R:70:PHE:HB3	2.16	0.45
6:R:416:CYS:O	6:R:419:ALA:HB3	2.16	0.45
6:R:461:SER:O	6:R:465:LEU:HB2	2.16	0.45
6:R:588:ARG:HH21	6:R:591:TYR:HB2	1.82	0.45
6:R:612:LEU:HD11	6:R:616:PHE:CE1	2.52	0.45
6:R:676:VAL:HB	6:R:680:PHE:CZ	2.52	0.45
2:B:223:PHE:CB	2:B:296:GLU:HA	2.46	0.44
2:B:367:GLN:HA	2:B:369:LYS:HB2	1.99	0.44
2:B:400:ALA:O	2:B:403:GLU:CD	2.60	0.44
3:D:278:LYS:HB3	3:D:282:HIS:CE1	2.52	0.44
2:G:253:GLU:CD	2:G:432:ARG:HE	2.25	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:206:VAL:HA	2:E:227:ARG:O	2.17	0.44
2:N:278:LYS:HB3	2:N:282:HIS:CE1	2.52	0.44
3:L:206:VAL:HA	3:L:227:ARG:O	2.17	0.44
5:S:124:CYS:SG	5:S:133:VAL:HG13	2.57	0.44
6:Q:276:LEU:HD21	6:Q:393:PHE:CD1	2.52	0.44
6:Q:416:CYS:SG	6:Q:465:LEU:HB2	2.58	0.44
6:R:97:GLN:HA	6:R:105:ARG:HG3	1.99	0.44
6:R:473:TYR:CD2	6:R:476:ILE:HG22	2.52	0.44
6:R:626:TRP:CD2	6:R:627:SER:N	2.85	0.44
6:R:677:ALA:O	6:R:681:PHE:CD2	2.70	0.44
1:J:90:GLU:CD	1:C:261:ASN:OD1	2.59	0.44
2:G:365:VAL:CG2	2:G:416:ALA:HB1	2.26	0.44
2:G:372:ALA:HB2	2:G:413:GLU:OE1	2.17	0.44
2:P:479:LEU:N	2:N:310:LYS:NZ	2.65	0.44
2:H:308:GLU:C	2:H:310:LYS:H	2.26	0.44
3:V:308:GLU:C	3:V:310:LYS:H	2.26	0.44
6:Q:34:THR:HB	6:Q:37:LYS:HB2	1.99	0.44
6:Q:59:PRO:O	6:Q:63:TYR:HB2	2.17	0.44
6:Q:206:GLN:HA	6:Q:209:ARG:CZ	2.47	0.44
6:Q:416:CYS:O	6:Q:419:ALA:HB3	2.16	0.44
6:Q:486:VAL:HA	6:Q:489:PHE:CE1	2.52	0.44
2:B:369:LYS:O	2:B:372:ALA:HB3	2.16	0.44
2:B:376:ALA:HB2	2:B:409:ARG:NH2	2.32	0.44
2:B:433:LEU:HD22	2:B:514:PHE:CZ	2.53	0.44
2:A:251:PRO:HA	2:A:275:MET:SD	2.57	0.44
2:G:368:ARG:HG3	2:G:416:ALA:HB2	1.99	0.44
3:K:206:VAL:HA	3:K:227:ARG:O	2.17	0.44
2:H:434:ILE:O	2:H:438:LYS:HG3	2.17	0.44
2:H:494:HIS:CD2	2:H:494:HIS:C	2.93	0.44
2:F:278:LYS:HB3	2:F:282:HIS:CE1	2.52	0.44
2:F:306:HIS:HA	2:F:309:ARG:NH2	2.29	0.44
3:V:227:ARG:HH12	3:V:299:SER:N	2.14	0.44
3:L:223:PHE:CG	3:L:296:GLU:HA	2.51	0.44
5:S:122:PHE:C	5:S:122:PHE:CD1	2.94	0.44
6:Q:494:TYR:CD2	6:Q:535:GLY:HA3	2.53	0.44
6:Q:561:GLU:H	6:Q:561:GLU:CD	2.26	0.44
6:Q:612:LEU:HD11	6:Q:616:PHE:CE1	2.52	0.44
6:Q:715:PHE:HB3	6:Q:719:ASN:HB2	2.00	0.44
6:R:434:ASP:C	6:R:439:TYR:CE1	2.95	0.44
6:R:561:GLU:CD	6:R:561:GLU:H	2.25	0.44
1:C:5:PHE:CB	2:E:331:ASN:N	2.78	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:308:GLU:C	2:B:310:LYS:H	2.25	0.44
2:B:385:LEU:CD2	2:A:350:LEU:HD13	2.46	0.44
3:D:206:VAL:HA	3:D:227:ARG:O	2.17	0.44
2:G:250:PRO:CD	2:G:436:SER:CB	2.96	0.44
2:G:470:ARG:NH1	2:H:348:ASP:HB2	2.32	0.44
2:P:308:GLU:C	2:P:310:LYS:H	2.25	0.44
2:H:206:VAL:HA	2:H:227:ARG:O	2.17	0.44
2:H:357:LEU:CD2	2:F:378:PHE:CD1	3.01	0.44
2:H:370:ALA:CB	2:F:367:GLN:CD	2.85	0.44
2:F:197:VAL:HG23	2:F:204:HIS:O	2.18	0.44
3:V:206:VAL:HA	3:V:227:ARG:O	2.17	0.44
5:S:12:HIS:HA	5:S:41:ASN:O	2.17	0.44
6:Q:263:PHE:HB2	6:Q:268:HIS:HE1	1.83	0.44
6:Q:409:GLN:HG2	6:Q:458:ALA:HA	1.99	0.44
6:Q:471:ARG:HB2	6:Q:472:ARG:HH12	1.83	0.44
6:Q:626:TRP:CD2	6:Q:627:SER:N	2.86	0.44
5:T:117:GLY:N	5:T:134:ASN:HD21	2.15	0.44
6:R:59:PRO:O	6:R:63:TYR:HB2	2.17	0.44
6:R:276:LEU:HD21	6:R:393:PHE:CD1	2.52	0.44
6:R:494:TYR:CD2	6:R:535:GLY:HA3	2.53	0.44
6:R:565:LEU:HA	6:R:568:LEU:HD23	1.99	0.44
1:J:24:VAL:CG2	1:J:38:LEU:HD13	2.48	0.44
2:A:260:PHE:CE2	3:D:198:GLY:HA2	2.53	0.44
2:G:278:LYS:HB3	2:G:282:HIS:CE1	2.52	0.44
2:P:251:PRO:HA	2:P:275:MET:SD	2.57	0.44
2:H:246:VAL:N	2:H:503:MET:CE	2.79	0.44
2:H:369:LYS:O	2:H:372:ALA:HB3	2.16	0.44
2:F:251:PRO:HA	2:F:275:MET:SD	2.57	0.44
6:Q:434:ASP:C	6:Q:439:TYR:CE1	2.95	0.44
6:Q:479:ALA:O	6:Q:485:TYR:CE2	2.71	0.44
6:Q:677:ALA:O	6:Q:681:PHE:CD2	2.70	0.44
6:R:570:HIS:CD2	6:R:570:HIS:C	2.92	0.44
1:J:261:ASN:CB	1:C:90:GLU:HG3	2.36	0.44
1:C:216:ALA:HB1	1:C:217:PRO:HD3	2.00	0.44
1:C:217:PRO:N	2:B:390:LEU:HD11	2.33	0.44
2:B:260:PHE:HE2	2:P:198:GLY:CA	2.29	0.44
2:B:434:ILE:O	2:B:438:LYS:HG3	2.17	0.44
2:A:349:ALA:CA	2:N:470:ARG:NH2	2.81	0.44
3:D:308:GLU:C	3:D:310:LYS:H	2.26	0.44
2:P:244:PRO:O	2:P:444:ARG:NH2	2.39	0.44
2:N:197:VAL:HG23	2:N:204:HIS:O	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:302:ILE:HD12	2:N:302:ILE:H	1.83	0.44
2:H:391:SER:HA	2:H:392:PRO:HD3	1.82	0.44
6:Q:15:GLU:CD	6:Q:15:GLU:H	2.26	0.44
6:Q:432:TYR:C	6:Q:435:GLY:H	2.25	0.44
6:Q:560:GLU:HA	6:Q:562:GLN:HE22	1.83	0.44
6:Q:561:GLU:CD	6:Q:561:GLU:N	2.75	0.44
6:Q:588:ARG:HH21	6:Q:591:TYR:HB2	1.82	0.44
6:Q:631:SER:HA	6:Q:634:PHE:CZ	2.52	0.44
6:R:432:TYR:C	6:R:435:GLY:H	2.26	0.44
6:R:440:ALA:O	6:R:444:VAL:HG23	2.18	0.44
6:R:498:ARG:HH11	6:R:506:ARG:HH11	1.65	0.44
6:R:582:ARG:HG3	6:R:582:ARG:H	1.54	0.44
2:B:337:ASP:O	2:B:341:HIS:CG	2.71	0.44
2:B:523:LYS:HA	2:B:523:LYS:HE2	2.00	0.44
2:G:400:ALA:O	2:G:403:GLU:CD	2.60	0.44
2:P:240:HIS:CA	2:P:248:VAL:HG11	2.48	0.44
2:N:383:HIS:CD2	2:N:402:SER:HB3	2.52	0.44
5:S:8:ILE:HD12	5:S:157:PHE:CE2	2.53	0.44
6:Q:31:PHE:HB2	6:Q:41:ALA:HA	2.00	0.44
6:Q:676:VAL:HB	6:Q:680:PHE:CZ	2.52	0.44
6:Q:717:ARG:HA	6:Q:720:TYR:HB2	1.99	0.44
6:R:31:PHE:HB2	6:R:41:ALA:HA	2.00	0.44
6:R:114:THR:HA	6:R:117:MET:SD	2.58	0.44
6:R:206:GLN:HA	6:R:209:ARG:CZ	2.47	0.44
6:R:479:ALA:O	6:R:485:TYR:CE2	2.71	0.44
1:C:30:LYS:HZ1	2:P:283:PRO:CG	2.27	0.44
2:B:206:VAL:HA	2:B:227:ARG:O	2.17	0.44
2:B:380:ALA:O	2:B:383:HIS:HD2	1.99	0.44
2:B:451:TRP:CH2	2:B:452:HIS:HA	2.53	0.44
3:D:197:VAL:HG23	3:D:204:HIS:O	2.18	0.44
2:G:209:VAL:HB	2:G:225:VAL:CG2	2.47	0.44
2:G:406:LEU:CD1	2:G:409:ARG:NH2	2.81	0.44
2:G:414:ARG:HB3	2:G:418:GLN:HE21	1.82	0.44
2:G:451:TRP:HE1	2:G:493:VAL:HA	1.83	0.44
2:G:531:GLU:CD	2:G:531:GLU:N	2.76	0.44
2:E:240:HIS:CA	2:E:248:VAL:HG11	2.48	0.44
2:N:251:PRO:HA	2:N:275:MET:SD	2.57	0.44
2:N:308:GLU:C	2:N:310:LYS:H	2.26	0.44
2:H:253:GLU:CD	2:H:432:ARG:HE	2.25	0.44
2:H:337:ASP:O	2:H:341:HIS:CG	2.71	0.44
2:H:400:ALA:O	2:H:403:GLU:CD	2.60	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:240:HIS:CA	2:F:248:VAL:HG11	2.48	0.44
5:S:51:LEU:HD13	5:S:58:LEU:CD1	2.47	0.44
5:S:116:ALA:C	5:S:134:ASN:HD21	2.26	0.44
6:Q:648:VAL:HG23	6:Q:649:ASN:H	1.82	0.44
6:R:140:HIS:C	6:R:191:ARG:HH21	2.26	0.44
6:R:141:PRO:CD	6:R:191:ARG:HE	2.27	0.44
6:R:409:GLN:HG2	6:R:458:ALA:HA	1.99	0.44
6:R:416:CYS:SG	6:R:465:LEU:HB2	2.58	0.44
1:J:5:PHE:CD1	2:A:331:ASN:CG	2.55	0.44
1:C:24:VAL:CG2	1:C:38:LEU:HD13	2.48	0.44
2:B:240:HIS:CA	2:B:248:VAL:HG11	2.48	0.44
2:B:260:PHE:CE2	2:P:198:GLY:HA2	2.53	0.44
2:B:379:SER:CB	2:B:402:SER:O	2.66	0.44
2:B:530:LEU:CD2	2:A:544:TRP:CG	2.95	0.44
2:A:308:GLU:C	2:A:310:LYS:H	2.25	0.44
2:G:196:LYS:HZ2	2:N:196:LYS:CE	2.28	0.44
3:K:240:HIS:CA	3:K:248:VAL:HG11	2.48	0.44
2:H:433:LEU:HD22	2:H:514:PHE:CZ	2.53	0.44
3:V:197:VAL:HG23	3:V:204:HIS:O	2.18	0.44
5:S:79:THR:HG23	5:S:82:SER:HA	2.00	0.44
5:S:88:LEU:HD12	5:S:91:PHE:CD1	2.53	0.44
6:Q:97:GLN:HA	6:Q:105:ARG:HG3	1.99	0.44
6:Q:440:ALA:O	6:Q:444:VAL:HG23	2.17	0.44
6:Q:471:ARG:HB2	6:Q:472:ARG:NH1	2.33	0.44
6:Q:580:GLN:O	6:Q:584:LEU:HG	2.17	0.44
5:T:88:LEU:HD12	5:T:91:PHE:CD1	2.53	0.44
6:R:471:ARG:HB2	6:R:472:ARG:NH1	2.33	0.44
1:J:217:PRO:HA	2:G:392:PRO:HA	2.00	0.43
2:B:250:PRO:CD	2:B:436:SER:CB	2.96	0.43
2:B:368:ARG:HG3	2:B:416:ALA:HB2	1.99	0.43
3:D:240:HIS:CA	3:D:248:VAL:HG11	2.48	0.43
2:G:302:ILE:H	2:G:302:ILE:HD12	1.83	0.43
2:G:433:LEU:HD22	2:G:514:PHE:CZ	2.53	0.43
2:E:206:VAL:HG13	2:E:228:ARG:HG2	2.00	0.43
3:K:308:GLU:C	3:K:310:LYS:H	2.25	0.43
2:H:260:PHE:HE2	3:V:198:GLY:CA	2.29	0.43
2:H:353:GLN:HE22	2:F:384:ALA:CB	2.17	0.43
5:S:117:GLY:N	5:S:134:ASN:HD21	2.15	0.43
6:Q:114:THR:HA	6:Q:117:MET:SD	2.58	0.43
6:Q:266:GLU:O	6:Q:269:LEU:HB3	2.18	0.43
6:R:565:LEU:HD11	6:R:605:LEU:HG	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:R:611:LYS:HG3	6:R:612:LEU:N	2.33	0.43
6:R:648:VAL:HG23	6:R:649:ASN:H	1.82	0.43
6:R:717:ARG:HA	6:R:720:TYR:HB2	1.99	0.43
2:B:535:GLU:N	2:B:535:GLU:CD	2.76	0.43
2:G:357:LEU:CD2	2:E:378:PHE:CD1	3.01	0.43
2:G:379:SER:CB	2:G:402:SER:O	2.66	0.43
2:G:538:LYS:HD2	2:G:538:LYS:HA	1.86	0.43
2:E:209:VAL:HB	2:E:225:VAL:CG2	2.47	0.43
2:P:302:ILE:H	2:P:302:ILE:HD12	1.83	0.43
2:N:206:VAL:HA	2:N:227:ARG:O	2.17	0.43
2:H:276:LEU:HA	2:H:279:ILE:HG12	2.00	0.43
2:H:302:ILE:H	2:H:302:ILE:HD12	1.83	0.43
2:H:530:LEU:CD2	2:F:544:TRP:CG	2.95	0.43
2:H:535:GLU:OE1	2:H:535:GLU:HA	2.17	0.43
3:V:240:HIS:CA	3:V:248:VAL:HG11	2.48	0.43
3:L:206:VAL:HG13	3:L:228:ARG:HG2	2.00	0.43
3:L:276:LEU:HA	3:L:279:ILE:HG12	2.00	0.43
6:Q:84:HIS:HB3	6:Q:85:PRO:HD3	2.00	0.43
6:Q:140:HIS:C	6:Q:191:ARG:HH21	2.26	0.43
6:Q:520:HIS:HA	6:Q:523:ASN:HD22	1.83	0.43
6:Q:569:VAL:HG13	6:Q:608:ALA:HB2	1.99	0.43
6:Q:611:LYS:HG3	6:Q:612:LEU:N	2.33	0.43
5:T:23:LYS:H	5:T:182:GLU:CD	2.26	0.43
5:T:60:ILE:H	5:T:60:ILE:HD12	1.82	0.43
6:R:468:SER:HA	6:R:471:ARG:CZ	2.48	0.43
6:R:560:GLU:HA	6:R:562:GLN:HE22	1.83	0.43
6:R:569:VAL:HG13	6:R:608:ALA:HB2	1.99	0.43
2:B:451:TRP:HE1	2:B:493:VAL:HA	1.82	0.43
2:A:333:PHE:CD2	2:N:451:TRP:HH2	2.28	0.43
2:G:260:PHE:CE2	2:N:198:GLY:HA2	2.53	0.43
2:H:197:VAL:HG23	2:H:204:HIS:O	2.18	0.43
2:H:206:VAL:HG13	2:H:228:ARG:HG2	2.00	0.43
2:H:368:ARG:HG3	2:H:416:ALA:HB2	1.99	0.43
2:F:308:GLU:C	2:F:310:LYS:H	2.26	0.43
3:V:209:VAL:HB	3:V:225:VAL:CG2	2.47	0.43
5:S:23:LYS:H	5:S:182:GLU:CD	2.26	0.43
5:S:60:ILE:HD12	5:S:60:ILE:H	1.82	0.43
6:Q:473:TYR:CD2	6:Q:476:ILE:HG22	2.52	0.43
5:T:79:THR:HG23	5:T:82:SER:HA	2.00	0.43
5:T:116:ALA:C	5:T:134:ASN:HD21	2.26	0.43
6:R:785:ALA:HA	6:R:788:CYS:SG	2.59	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:199:ASP:O	2:P:200:LEU:CA	2.55	0.43
2:B:227:ARG:HA	2:B:300:PHE:HE1	1.83	0.43
2:B:412:TYR:CD2	2:B:412:TYR:C	2.94	0.43
2:G:197:VAL:HG23	2:G:204:HIS:O	2.18	0.43
2:G:206:VAL:HG13	2:G:228:ARG:HG2	2.00	0.43
2:G:423:PHE:HA	2:G:426:ILE:HG12	2.01	0.43
2:E:197:VAL:HG23	2:E:204:HIS:O	2.18	0.43
2:E:253:GLU:CD	2:E:428:GLU:OE1	2.54	0.43
2:P:197:VAL:HG23	2:P:204:HIS:O	2.18	0.43
2:N:240:HIS:CA	2:N:248:VAL:HG11	2.48	0.43
2:H:250:PRO:CD	2:H:436:SER:CB	2.96	0.43
2:H:250:PRO:N	2:H:436:SER:CB	2.72	0.43
2:H:451:TRP:CH2	2:H:452:HIS:HA	2.53	0.43
2:H:531:GLU:CD	2:H:531:GLU:N	2.76	0.43
5:S:113:LEU:HD22	5:S:130:LYS:HZ1	1.82	0.43
6:Q:51:GLU:CD	6:Q:51:GLU:N	2.76	0.43
6:R:398:GLN:CD	6:R:398:GLN:H	2.26	0.43
6:R:580:GLN:O	6:R:584:LEU:HG	2.18	0.43
6:R:719:ASN:O	6:R:723:LEU:HG	2.17	0.43
1:J:93:ALA:HA	1:C:262:LYS:HB3	1.97	0.43
1:J:216:ALA:HB1	1:J:217:PRO:HD3	2.00	0.43
1:C:216:ALA:HA	2:B:392:PRO:CG	2.48	0.43
1:C:217:PRO:HA	2:B:392:PRO:HB3	1.99	0.43
2:B:197:VAL:HG23	2:B:204:HIS:O	2.18	0.43
2:B:531:GLU:CD	2:B:531:GLU:N	2.76	0.43
2:A:332:LYS:CB	2:N:331:ASN:O	2.67	0.43
3:D:302:ILE:H	3:D:302:ILE:HD12	1.83	0.43
2:G:260:PHE:HE2	2:N:198:GLY:CA	2.29	0.43
2:G:306:HIS:HA	2:G:309:ARG:NH2	2.28	0.43
2:G:505:ARG:NE	2:G:505:ARG:HA	2.34	0.43
2:G:523:LYS:HA	2:G:523:LYS:HE2	2.00	0.43
2:G:535:GLU:N	2:G:535:GLU:CD	2.76	0.43
3:K:197:VAL:HG23	3:K:204:HIS:O	2.18	0.43
4:O:364:MET:HE2	4:O:420:VAL:HG22	2.01	0.43
2:N:209:VAL:HB	2:N:225:VAL:CG2	2.47	0.43
2:F:227:ARG:HA	2:F:300:PHE:HE1	1.84	0.43
3:L:302:ILE:H	3:L:302:ILE:HD12	1.83	0.43
6:Q:443:LYS:HA	6:Q:446:GLU:OE2	2.18	0.43
6:Q:473:TYR:CD2	6:Q:476:ILE:HA	2.54	0.43
6:Q:564:TRP:HZ3	6:Q:565:LEU:HD22	1.83	0.43
6:Q:573:HIS:CD2	6:Q:615:ARG:HG2	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:Q:753:ALA:HA	6:Q:767:LEU:HD13	2.00	0.43
6:R:517:THR:HB	6:R:518:PRO:HD2	2.01	0.43
2:B:391:SER:HB2	2:B:394:LEU:HD12	2.01	0.43
2:B:423:PHE:HA	2:B:426:ILE:HG12	2.01	0.43
3:D:206:VAL:HG13	3:D:228:ARG:HG2	2.00	0.43
3:D:276:LEU:HA	3:D:279:ILE:HG12	2.00	0.43
2:G:227:ARG:HA	2:G:300:PHE:HE1	1.84	0.43
2:G:352:ASN:HA	2:G:355:LYS:HZ2	1.83	0.43
2:G:451:TRP:CD1	2:G:451:TRP:C	2.92	0.43
2:E:227:ARG:HA	2:E:300:PHE:HE1	1.84	0.43
2:E:260:PHE:CE2	3:K:198:GLY:HA2	2.53	0.43
3:K:306:HIS:HA	3:K:309:ARG:NH2	2.29	0.43
2:H:451:TRP:HE1	2:H:493:VAL:HA	1.83	0.43
2:H:518:LYS:HA	2:H:518:LYS:HE3	2.01	0.43
2:F:199:ASP:O	3:L:200:LEU:CA	2.55	0.43
6:Q:53:ARG:NH1	6:Q:103:ILE:H	2.17	0.43
6:Q:242:GLN:HA	6:Q:245:GLN:NE2	2.33	0.43
6:Q:293:ILE:HA	6:Q:296:MET:SD	2.59	0.43
6:Q:580:GLN:O	6:Q:584:LEU:N	2.48	0.43
6:Q:747:ALA:O	6:Q:751:TRP:CZ3	2.71	0.43
5:T:122:PHE:C	5:T:122:PHE:CD1	2.94	0.43
6:R:53:ARG:NH1	6:R:103:ILE:H	2.17	0.43
6:R:443:LYS:HA	6:R:446:GLU:OE2	2.17	0.43
6:R:743:ALA:HA	6:R:746:LEU:HB2	2.00	0.43
2:B:302:ILE:H	2:B:302:ILE:HD12	1.83	0.43
2:B:505:ARG:NE	2:B:505:ARG:HA	2.34	0.43
2:G:337:ASP:O	2:G:341:HIS:CG	2.71	0.43
2:E:276:LEU:HA	2:E:279:ILE:HG12	2.00	0.43
2:P:276:LEU:HA	2:P:279:ILE:HG12	2.01	0.43
2:N:227:ARG:HA	2:N:300:PHE:HE1	1.83	0.43
2:H:199:ASP:O	3:V:200:LEU:CA	2.55	0.43
2:H:379:SER:CB	2:H:402:SER:O	2.65	0.43
2:H:530:LEU:HD11	2:F:544:TRP:HE1	1.73	0.43
3:V:227:ARG:HA	3:V:300:PHE:HE1	1.84	0.43
3:V:302:ILE:HD12	3:V:302:ILE:H	1.83	0.43
5:S:134:ASN:C	5:S:136:GLY:H	2.24	0.43
6:Q:565:LEU:HD11	6:Q:605:LEU:HG	2.00	0.43
6:Q:638:HIS:CE1	6:Q:638:HIS:O	2.72	0.43
6:Q:662:CYS:SG	6:Q:704:VAL:HG11	2.59	0.43
5:T:23:LYS:HG2	5:T:182:GLU:CD	2.44	0.43
5:T:51:LEU:HB2	5:T:58:LEU:HD22	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:R:34:THR:HB	6:R:37:LYS:HB2	1.99	0.43
6:R:51:GLU:N	6:R:51:GLU:CD	2.76	0.43
6:R:236:LEU:HA	6:R:239:LEU:HG	2.01	0.43
6:R:662:CYS:SG	6:R:704:VAL:HG11	2.59	0.43
2:B:371:MET:CE	2:A:371:MET:HE2	2.38	0.43
2:A:227:ARG:HA	2:A:300:PHE:HE1	1.84	0.43
2:G:367:GLN:HA	2:G:369:LYS:HB2	1.99	0.43
2:G:385:LEU:HD11	2:E:350:LEU:HD11	1.53	0.43
2:E:308:GLU:C	2:E:310:LYS:H	2.26	0.43
2:N:276:LEU:HA	2:N:279:ILE:HG12	2.01	0.43
2:H:391:SER:HB2	2:H:394:LEU:HD12	2.01	0.43
3:L:197:VAL:HG23	3:L:204:HIS:O	2.18	0.43
6:Q:212:GLN:HG3	6:Q:254:TYR:CE1	2.53	0.43
5:T:8:ILE:HD12	5:T:157:PHE:CE2	2.53	0.43
5:T:52:ARG:HA	5:T:52:ARG:NE	2.34	0.43
6:R:15:GLU:H	6:R:15:GLU:CD	2.26	0.43
6:R:84:HIS:HB3	6:R:85:PRO:HD3	2.00	0.43
6:R:293:ILE:HA	6:R:296:MET:SD	2.59	0.43
6:R:484:THR:O	6:R:488:LEU:HG	2.18	0.43
6:R:520:HIS:HA	6:R:523:ASN:HD22	1.84	0.43
6:R:573:HIS:CD2	6:R:615:ARG:HG2	2.53	0.43
6:R:615:ARG:HG3	6:R:619:ARG:HH21	1.84	0.43
6:R:747:ALA:O	6:R:751:TRP:CZ3	2.71	0.43
1:J:217:PRO:CD	2:G:392:PRO:CG	2.87	0.43
2:A:197:VAL:HG23	2:A:204:HIS:O	2.18	0.43
2:A:302:ILE:H	2:A:302:ILE:HD12	1.83	0.43
2:G:276:LEU:HA	2:G:279:ILE:HG12	2.00	0.43
2:G:368:ARG:HH21	2:G:416:ALA:HB2	1.84	0.43
2:E:302:ILE:H	2:E:302:ILE:HD12	1.83	0.43
2:H:188:HIS:HB2	2:H:212:LYS:HG2	2.01	0.43
2:H:367:GLN:HA	2:H:369:LYS:HB2	1.99	0.43
2:H:401:LEU:O	2:H:405:GLN:CD	2.62	0.43
2:F:260:PHE:CE2	3:L:198:GLY:HA2	2.53	0.43
3:L:240:HIS:CA	3:L:248:VAL:HG11	2.48	0.43
6:Q:79:HIS:CE1	6:Q:83:ASN:HD22	2.37	0.43
6:Q:236:LEU:HA	6:Q:239:LEU:HG	2.01	0.43
6:Q:398:GLN:H	6:Q:398:GLN:CD	2.26	0.43
6:Q:462:LEU:O	6:Q:466:LEU:HG	2.19	0.43
6:Q:468:SER:HA	6:Q:471:ARG:CZ	2.48	0.43
6:Q:484:THR:O	6:Q:488:LEU:HG	2.18	0.43
5:T:94:VAL:HG22	6:R:746:LEU:HD22	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:R:263:PHE:HB2	6:R:268:HIS:HE1	1.83	0.43
2:G:404:LEU:HD13	2:G:547:PHE:HE2	1.84	0.43
2:G:451:TRP:CH2	2:G:452:HIS:HA	2.53	0.43
2:G:476:GLN:HB3	3:L:311:GLU:O	2.15	0.43
2:G:535:GLU:OE1	2:G:535:GLU:HA	2.17	0.43
2:E:196:LYS:NZ	3:K:196:LYS:CE	2.68	0.43
3:K:188:HIS:HB2	3:K:212:LYS:HG2	2.01	0.43
3:K:302:ILE:HD12	3:K:302:ILE:H	1.83	0.43
2:H:227:ARG:HA	2:H:300:PHE:HE1	1.83	0.43
2:H:240:HIS:CA	2:H:248:VAL:HG11	2.48	0.43
2:H:368:ARG:HH21	2:H:416:ALA:HB2	1.84	0.43
2:H:413:GLU:HB3	2:H:414:ARG:NH2	2.34	0.43
6:Q:107:TYR:CD2	6:Q:150:TYR:CE2	3.07	0.43
6:Q:160:PRO:HA	6:Q:167:PRO:HG2	2.00	0.43
6:Q:517:THR:HB	6:Q:518:PRO:HD2	2.01	0.43
6:R:160:PRO:HA	6:R:167:PRO:HG2	2.00	0.43
6:R:266:GLU:O	6:R:269:LEU:HB3	2.18	0.43
6:R:564:TRP:HZ3	6:R:565:LEU:HD22	1.83	0.43
1:C:217:PRO:HA	2:B:392:PRO:CB	2.49	0.42
2:B:188:HIS:HB2	2:B:212:LYS:HG2	2.01	0.42
2:B:253:GLU:CD	2:B:432:ARG:HE	2.25	0.42
2:B:267:SER:CA	2:B:432:ARG:NH1	2.69	0.42
2:B:276:LEU:HA	2:B:279:ILE:HG12	2.00	0.42
2:A:349:ALA:CA	2:N:470:ARG:HH21	2.32	0.42
2:A:368:ARG:HD3	2:A:412:TYR:CE2	2.54	0.42
2:G:391:SER:HA	2:G:392:PRO:HD3	1.82	0.42
2:G:401:LEU:O	2:G:405:GLN:CD	2.62	0.42
2:G:529:PHE:CD2	2:G:529:PHE:C	2.97	0.42
2:H:260:PHE:CE2	3:V:198:GLY:HA2	2.53	0.42
2:H:423:PHE:HA	2:H:426:ILE:HG12	2.01	0.42
3:L:227:ARG:HA	3:L:300:PHE:HE1	1.84	0.42
6:Q:140:HIS:CE1	6:Q:142:VAL:H	2.37	0.42
6:Q:615:ARG:HG3	6:Q:619:ARG:HH21	1.84	0.42
6:Q:688:TYR:CD2	6:Q:705:ILE:CD1	3.02	0.42
6:R:276:LEU:HB3	6:R:396:GLN:CD	2.44	0.42
6:R:471:ARG:HB2	6:R:472:ARG:HH12	1.83	0.42
6:R:638:HIS:O	6:R:638:HIS:CE1	2.72	0.42
6:R:715:PHE:HB3	6:R:719:ASN:HB2	2.00	0.42
6:R:753:ALA:HA	6:R:767:LEU:HD13	2.00	0.42
2:B:368:ARG:HH21	2:B:416:ALA:HB2	1.84	0.42
2:B:391:SER:HA	2:B:392:PRO:HD3	1.82	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:379:SER:CB	2:G:406:LEU:HB2	2.48	0.42
2:G:391:SER:HB2	2:G:394:LEU:HD12	2.01	0.42
2:G:413:GLU:HB3	2:G:414:ARG:NH2	2.34	0.42
2:E:253:GLU:N	2:E:268:ARG:HA	2.27	0.42
3:K:206:VAL:HG13	3:K:228:ARG:HG2	2.01	0.42
3:K:227:ARG:HA	3:K:300:PHE:HE1	1.84	0.42
2:H:267:SER:CA	2:H:432:ARG:NH1	2.69	0.42
2:H:338:ASP:O	2:H:342:ASP:HB3	2.19	0.42
2:H:380:ALA:O	2:H:383:HIS:HD2	1.99	0.42
2:H:508:ARG:O	2:H:511:LEU:HB2	2.19	0.42
3:L:209:VAL:HB	3:L:225:VAL:CG2	2.47	0.42
3:L:247:VAL:HG22	3:L:248:VAL:H	1.84	0.42
5:S:51:LEU:HB2	5:S:58:LEU:HD22	2.01	0.42
6:Q:280:SER:CB	6:Q:399:HIS:CE1	3.02	0.42
6:R:242:GLN:HA	6:R:245:GLN:NE2	2.33	0.42
6:R:577:ASN:O	6:R:581:PHE:CD1	2.72	0.42
1:J:38:LEU:CD1	1:J:146:TRP:HD1	2.33	0.42
1:J:65:LYS:HD2	1:C:82:TYR:CZ	2.54	0.42
2:B:306:HIS:HA	2:B:309:ARG:NH2	2.29	0.42
2:B:353:GLN:O	2:B:357:LEU:HG	2.19	0.42
2:B:372:ALA:HB2	2:B:413:GLU:CG	2.50	0.42
2:B:379:SER:CB	2:B:406:LEU:HB2	2.48	0.42
2:A:206:VAL:HG13	2:A:228:ARG:HG2	2.00	0.42
3:D:188:HIS:HB2	3:D:212:LYS:HG2	2.01	0.42
2:G:308:GLU:C	2:G:310:LYS:H	2.25	0.42
2:G:338:ASP:O	2:G:342:ASP:HB3	2.19	0.42
2:E:188:HIS:HB2	2:E:212:LYS:HG2	2.01	0.42
2:P:250:PRO:HG3	2:P:429:GLU:O	2.20	0.42
2:N:250:PRO:HD3	2:N:433:LEU:CG	2.49	0.42
3:V:220:GLN:H	3:V:220:GLN:HG2	1.60	0.42
5:S:23:LYS:HG2	5:S:182:GLU:CD	2.43	0.42
5:S:52:ARG:HA	5:S:52:ARG:NE	2.34	0.42
6:Q:189:TRP:CZ2	6:Q:250:LEU:HD22	2.54	0.42
6:Q:577:ASN:HA	6:Q:580:GLN:CD	2.45	0.42
6:Q:743:ALA:HA	6:Q:746:LEU:HB2	2.00	0.42
6:Q:753:ALA:HA	6:Q:767:LEU:HD22	2.01	0.42
6:R:577:ASN:HA	6:R:580:GLN:CD	2.45	0.42
1:C:26:VAL:HG22	1:C:146:TRP:CZ3	2.55	0.42
2:B:406:LEU:HD12	2:B:409:ARG:HH21	1.81	0.42
2:G:205:ILE:HG22	2:G:268:ARG:HH11	1.85	0.42
2:G:385:LEU:CD2	2:E:350:LEU:HD13	2.46	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:518:LYS:HA	2:G:518:LYS:HE3	2.01	0.42
2:H:245:GLY:C	2:H:503:MET:CG	2.72	0.42
2:H:352:ASN:HA	2:H:355:LYS:HZ2	1.84	0.42
2:H:385:LEU:CD2	2:F:350:LEU:HD13	2.46	0.42
2:H:451:TRP:CD1	2:H:451:TRP:C	2.92	0.42
2:H:523:LYS:HE2	2:H:523:LYS:HA	2.00	0.42
2:F:276:LEU:HA	2:F:279:ILE:HG12	2.00	0.42
5:S:61:VAL:CG2	5:S:87:PHE:CD2	3.02	0.42
6:Q:19:ILE:HG13	6:Q:22:ARG:HH21	1.85	0.42
6:Q:480:LEU:HD22	6:Q:526:GLU:OE2	2.19	0.42
6:Q:484:THR:C	6:Q:488:LEU:HD12	2.45	0.42
6:Q:532:ILE:H	6:Q:532:ILE:HG13	1.63	0.42
6:Q:577:ASN:O	6:Q:581:PHE:CD1	2.72	0.42
5:T:45:ARG:HA	5:T:48:TYR:CB	2.50	0.42
5:T:120:HIS:HB2	5:T:143:THR:CA	2.50	0.42
6:R:212:GLN:HG3	6:R:254:TYR:CE1	2.53	0.42
6:R:280:SER:CB	6:R:399:HIS:CE1	3.02	0.42
6:R:528:LEU:HD12	6:R:528:LEU:O	2.20	0.42
2:B:205:ILE:HG22	2:B:268:ARG:HH11	1.85	0.42
2:B:430:TYR:CD1	2:B:430:TYR:N	2.79	0.42
2:B:518:LYS:HA	2:B:518:LYS:HE3	2.01	0.42
2:A:205:ILE:HG22	2:A:268:ARG:HH11	1.85	0.42
2:G:196:LYS:NZ	2:N:196:LYS:CE	2.68	0.42
2:G:353:GLN:NE2	2:E:384:ALA:HB3	2.17	0.42
2:G:404:LEU:HG	2:G:408:ILE:HD12	2.02	0.42
2:G:489:ALA:O	2:G:493:VAL:HG23	2.19	0.42
2:P:227:ARG:HA	2:P:300:PHE:HE1	1.84	0.42
2:P:253:GLU:N	2:P:268:ARG:HA	2.27	0.42
2:N:247:VAL:HG22	2:N:248:VAL:H	1.85	0.42
2:H:404:LEU:HD13	2:H:547:PHE:HE2	1.84	0.42
2:H:489:ALA:O	2:H:493:VAL:HG23	2.19	0.42
5:S:16:ARG:HA	5:S:142:PHE:CZ	2.54	0.42
5:S:94:VAL:HG22	6:Q:746:LEU:HD22	1.99	0.42
5:S:120:HIS:HB2	5:S:143:THR:CA	2.50	0.42
6:Q:264:PRO:O	6:Q:268:HIS:CD2	2.72	0.42
6:Q:479:ALA:O	6:Q:482:LEU:HB2	2.20	0.42
6:R:140:HIS:CD2	6:R:195:GLN:HE21	2.37	0.42
6:R:257:GLU:CD	6:R:257:GLU:C	2.88	0.42
1:J:262:LYS:HB3	1:C:93:ALA:HA	1.97	0.42
2:B:209:VAL:HB	2:B:225:VAL:CG2	2.47	0.42
2:B:413:GLU:HB3	2:B:414:ARG:NH2	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:489:ALA:O	2:B:493:VAL:HG23	2.19	0.42
2:A:220:GLN:H	2:A:220:GLN:HG2	1.60	0.42
2:G:204:HIS:NE2	2:G:228:ARG:HD3	2.35	0.42
2:G:292:LYS:O	2:G:296:GLU:HB2	2.20	0.42
2:G:372:ALA:HB2	2:G:413:GLU:CG	2.50	0.42
3:K:204:HIS:NE2	3:K:228:ARG:HD3	2.35	0.42
2:P:206:VAL:HG13	2:P:228:ARG:HG2	2.00	0.42
4:M:364:MET:HE2	4:M:420:VAL:HG22	2.01	0.42
2:N:302:ILE:HG22	2:N:306:HIS:HE1	1.85	0.42
2:H:379:SER:CB	2:H:406:LEU:HB2	2.48	0.42
2:H:546:THR:HB	2:H:547:PHE:CE1	2.55	0.42
2:F:302:ILE:HD12	2:F:302:ILE:H	1.83	0.42
3:V:205:ILE:HG22	3:V:268:ARG:HH11	1.85	0.42
6:Q:84:HIS:HD2	6:Q:115:ALA:HB1	1.80	0.42
6:Q:785:ALA:HA	6:Q:788:CYS:SG	2.59	0.42
5:T:16:ARG:HA	5:T:142:PHE:CZ	2.54	0.42
6:R:389:LEU:HB3	6:R:393:PHE:CE2	2.55	0.42
6:R:580:GLN:O	6:R:584:LEU:N	2.48	0.42
6:R:673:PHE:CD1	6:R:675:GLU:OE1	2.73	0.42
1:C:5:PHE:HB2	2:E:331:ASN:O	2.18	0.42
2:B:339:TRP:O	2:B:343:ARG:HB3	2.20	0.42
2:B:346:TYR:O	2:B:350:LEU:HG	2.20	0.42
2:B:368:ARG:CZ	2:B:416:ALA:N	2.83	0.42
2:B:508:ARG:O	2:B:511:LEU:HB2	2.19	0.42
2:A:276:LEU:HA	2:A:279:ILE:HG12	2.00	0.42
2:G:188:HIS:HB2	2:G:212:LYS:HG2	2.01	0.42
2:G:240:HIS:CA	2:G:248:VAL:HG11	2.48	0.42
2:G:247:VAL:HG22	2:G:248:VAL:H	1.84	0.42
2:G:368:ARG:CZ	2:G:416:ALA:N	2.83	0.42
2:E:247:VAL:HG22	2:E:248:VAL:H	1.85	0.42
3:K:276:LEU:HA	3:K:279:ILE:HG12	2.00	0.42
2:N:251:PRO:HD2	2:N:432:ARG:HH21	1.83	0.42
2:H:353:GLN:O	2:H:357:LEU:HG	2.19	0.42
2:H:372:ALA:HB2	2:H:413:GLU:CG	2.50	0.42
2:H:505:ARG:NE	2:H:505:ARG:HA	2.34	0.42
2:H:535:GLU:N	2:H:535:GLU:CD	2.76	0.42
2:F:206:VAL:HG13	2:F:228:ARG:HG2	2.00	0.42
6:Q:683:GLN:N	6:R:733:LYS:CE	2.83	0.42
6:R:107:TYR:CD2	6:R:150:TYR:CE2	3.07	0.42
6:R:140:HIS:CE1	6:R:142:VAL:H	2.37	0.42
6:R:473:TYR:CD2	6:R:476:ILE:HA	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:R:562:GLN:CD	6:R:562:GLN:N	2.73	0.42
6:R:753:ALA:HA	6:R:767:LEU:HD22	2.00	0.42
1:J:217:PRO:HD3	2:G:392:PRO:HD3	2.02	0.42
2:B:206:VAL:HG13	2:B:228:ARG:HG2	2.00	0.42
2:B:451:TRP:NE1	2:B:493:VAL:HA	2.35	0.42
2:A:240:HIS:CA	2:A:248:VAL:HG11	2.48	0.42
3:D:302:ILE:HG22	3:D:306:HIS:HE1	1.85	0.42
2:G:248:VAL:HG23	2:G:443:GLN:OE1	2.20	0.42
2:E:368:ARG:HD3	2:E:412:TYR:CE2	2.54	0.42
3:K:220:GLN:H	3:K:220:GLN:HG2	1.60	0.42
2:N:206:VAL:HG13	2:N:228:ARG:HG2	2.01	0.42
2:H:406:LEU:CD1	2:H:409:ARG:NH2	2.81	0.42
2:F:205:ILE:HG22	2:F:268:ARG:HH11	1.85	0.42
2:F:292:LYS:O	2:F:296:GLU:HB2	2.20	0.42
3:L:205:ILE:HG22	3:L:268:ARG:HH11	1.85	0.42
3:L:234:TRP:CZ3	3:L:237:ASN:CB	3.03	0.42
5:S:101:LEU:HB3	5:S:132:PHE:CD1	2.55	0.42
6:Q:673:PHE:CD1	6:Q:675:GLU:OE1	2.73	0.42
5:T:61:VAL:CG2	5:T:87:PHE:CD2	3.02	0.42
5:T:134:ASN:C	5:T:136:GLY:H	2.24	0.42
6:R:189:TRP:CZ2	6:R:250:LEU:HD22	2.54	0.42
6:R:480:LEU:HD22	6:R:526:GLU:OE2	2.19	0.42
6:R:688:TYR:CD2	6:R:705:ILE:CD1	3.02	0.42
1:J:26:VAL:HG22	1:J:146:TRP:CZ3	2.55	0.42
2:B:338:ASP:O	2:B:342:ASP:HB3	2.19	0.42
2:B:404:LEU:HD13	2:B:547:PHE:HE2	1.84	0.42
2:B:539:GLU:HA	2:B:542:GLU:OE1	2.20	0.42
2:A:302:ILE:HG22	2:A:306:HIS:HE1	1.85	0.42
3:D:227:ARG:HA	3:D:300:PHE:HE1	1.84	0.42
2:G:353:GLN:O	2:G:357:LEU:HG	2.19	0.42
2:G:369:LYS:C	2:G:371:MET:HB2	2.45	0.42
2:E:302:ILE:HG22	2:E:306:HIS:HE1	1.85	0.42
2:P:188:HIS:HB2	2:P:212:LYS:HG2	2.01	0.42
2:H:253:GLU:N	2:H:268:ARG:HA	2.27	0.42
2:H:265:VAL:HG23	2:H:269:ARG:HH22	1.85	0.42
2:H:339:TRP:O	2:H:343:ARG:HB3	2.20	0.42
2:H:368:ARG:CZ	2:H:416:ALA:N	2.83	0.42
2:F:204:HIS:NE2	2:F:228:ARG:HD3	2.35	0.42
2:F:265:VAL:HG23	2:F:269:ARG:HH22	1.85	0.42
2:F:513:ARG:HG2	2:F:516:ARG:HH22	1.85	0.42
3:V:276:LEU:HA	3:V:279:ILE:HG12	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L:302:ILE:HG22	3:L:306:HIS:HE1	1.85	0.42
6:Q:140:HIS:CD2	6:Q:195:GLN:HE21	2.37	0.42
6:Q:759:ARG:HH21	6:Q:767:LEU:HD21	1.85	0.42
6:R:264:PRO:O	6:R:268:HIS:CD2	2.72	0.42
6:R:561:GLU:O	6:R:564:TRP:HB3	2.20	0.42
1:J:90:GLU:CB	1:C:261:ASN:O	2.68	0.42
1:C:38:LEU:CD1	1:C:146:TRP:HD1	2.32	0.42
2:B:204:HIS:NE2	2:B:228:ARG:HD3	2.35	0.42
2:B:265:VAL:HG23	2:B:269:ARG:HH22	1.85	0.42
2:B:302:ILE:HG22	2:B:306:HIS:HE1	1.85	0.42
2:A:292:LYS:O	2:A:296:GLU:HB2	2.20	0.42
3:D:204:HIS:NE2	3:D:228:ARG:HD3	2.35	0.42
2:G:346:TYR:O	2:G:350:LEU:HG	2.20	0.42
2:G:452:HIS:CD2	2:G:453:SER:N	2.88	0.42
2:P:249:PRO:C	2:P:433:LEU:HD23	2.45	0.42
2:H:247:VAL:HG22	2:H:248:VAL:H	1.85	0.42
2:H:404:LEU:HG	2:H:408:ILE:HD12	2.01	0.42
2:H:452:HIS:CD2	2:H:453:SER:N	2.88	0.42
2:F:302:ILE:HG22	2:F:306:HIS:HE1	1.85	0.42
3:V:187:PHE:CE1	3:V:218:TYR:CD2	3.08	0.42
3:V:292:LYS:O	3:V:296:GLU:HB2	2.20	0.42
3:L:188:HIS:HB2	3:L:212:LYS:HG2	2.01	0.42
6:Q:389:LEU:HB3	6:Q:393:PHE:CE2	2.55	0.42
6:Q:528:LEU:HD12	6:Q:528:LEU:O	2.19	0.42
6:R:19:ILE:HG13	6:R:22:ARG:HH21	1.85	0.42
6:R:462:LEU:O	6:R:466:LEU:HG	2.19	0.42
2:B:375:ALA:HA	2:B:378:PHE:HB2	2.02	0.41
2:B:406:LEU:CD1	2:B:409:ARG:NH2	2.81	0.41
2:B:406:LEU:HD11	2:B:409:ARG:HH21	1.84	0.41
2:A:265:VAL:HG23	2:A:269:ARG:HH22	1.85	0.41
2:A:513:ARG:HG2	2:A:516:ARG:HH22	1.85	0.41
3:D:265:VAL:HG23	3:D:269:ARG:HH22	1.85	0.41
2:G:411:VAL:HG22	2:G:539:GLU:OE2	2.20	0.41
2:G:458:LEU:CB	2:G:489:ALA:HB1	2.48	0.41
2:G:508:ARG:O	2:G:511:LEU:HB2	2.19	0.41
2:E:279:ILE:O	2:E:282:HIS:O	2.38	0.41
3:K:187:PHE:CE1	3:K:218:TYR:CD2	3.08	0.41
3:K:234:TRP:CZ3	3:K:237:ASN:CB	3.03	0.41
2:P:187:PHE:CE1	2:P:218:TYR:CD2	3.08	0.41
2:N:188:HIS:HB2	2:N:212:LYS:HG2	2.01	0.41
2:H:361:MET:HE1	2:F:378:PHE:CE2	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:247:VAL:HG22	2:F:248:VAL:H	1.85	0.41
2:F:368:ARG:HD3	2:F:412:TYR:CE2	2.54	0.41
3:V:227:ARG:NH1	3:V:298:GLU:HA	2.35	0.41
3:V:302:ILE:HG22	3:V:306:HIS:HE1	1.85	0.41
3:L:265:VAL:HG23	3:L:269:ARG:HH22	1.85	0.41
5:S:97:GLU:OE2	6:Q:749:HIS:CE1	2.73	0.41
5:S:165:ILE:HD12	5:S:193:LYS:O	2.20	0.41
6:Q:302:TYR:CE1	6:Q:305:ARG:HB3	2.55	0.41
6:R:530:VAL:HA	6:R:534:GLU:OE1	2.20	0.41
6:R:585:GLN:C	6:R:589:LYS:HZ2	2.27	0.41
2:A:199:ASP:O	3:D:200:LEU:CA	2.55	0.41
2:A:204:HIS:NE2	2:A:228:ARG:HD3	2.35	0.41
2:G:279:ILE:O	2:G:282:HIS:O	2.38	0.41
2:G:339:TRP:O	2:G:343:ARG:HB3	2.20	0.41
2:G:476:GLN:OE1	3:L:306:HIS:O	2.37	0.41
2:E:205:ILE:HG22	2:E:268:ARG:HH11	1.85	0.41
2:P:247:VAL:HG22	2:P:248:VAL:H	1.85	0.41
2:P:292:LYS:O	2:P:296:GLU:HB2	2.20	0.41
2:N:204:HIS:NE2	2:N:228:ARG:HD3	2.35	0.41
2:H:302:ILE:HG22	2:H:306:HIS:HE1	1.85	0.41
2:F:260:PHE:HE2	3:L:198:GLY:CA	2.29	0.41
3:V:188:HIS:HB2	3:V:212:LYS:HG2	2.01	0.41
3:V:206:VAL:HG13	3:V:228:ARG:HG2	2.00	0.41
3:V:234:TRP:CZ3	3:V:237:ASN:CB	3.03	0.41
6:Q:257:GLU:C	6:Q:257:GLU:CD	2.88	0.41
6:Q:276:LEU:HB3	6:Q:396:GLN:CD	2.44	0.41
6:Q:519:ALA:O	6:Q:522:GLU:HB2	2.20	0.41
6:Q:569:VAL:HG22	6:Q:608:ALA:HB2	2.02	0.41
5:T:116:ALA:CA	5:T:134:ASN:HD21	2.33	0.41
5:T:165:ILE:HD12	5:T:193:LYS:O	2.20	0.41
6:R:479:ALA:O	6:R:482:LEU:HB2	2.20	0.41
2:B:374:ALA:O	2:B:378:PHE:HB2	2.21	0.41
2:B:401:LEU:O	2:B:405:GLN:CD	2.62	0.41
2:B:451:TRP:HE1	2:B:493:VAL:CG1	2.34	0.41
2:A:209:VAL:HB	2:A:225:VAL:CG2	2.47	0.41
3:D:227:ARG:NH1	3:D:298:GLU:HA	2.35	0.41
3:D:292:LYS:O	3:D:296:GLU:HB2	2.20	0.41
2:G:350:LEU:CD1	2:E:385:LEU:CD2	2.98	0.41
2:G:406:LEU:HD12	2:G:409:ARG:HH21	1.81	0.41
2:G:546:THR:HB	2:G:547:PHE:CE1	2.55	0.41
3:K:279:ILE:O	3:K:282:HIS:O	2.39	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:K:292:LYS:O	3:K:296:GLU:HB2	2.20	0.41
2:P:279:ILE:O	2:P:282:HIS:O	2.38	0.41
2:P:302:ILE:HG22	2:P:306:HIS:HE1	1.85	0.41
2:H:209:VAL:HB	2:H:225:VAL:CG2	2.47	0.41
3:V:265:VAL:HG23	3:V:269:ARG:HH22	1.85	0.41
3:L:279:ILE:O	3:L:282:HIS:O	2.39	0.41
6:Q:63:TYR:O	6:Q:66:TYR:HB3	2.20	0.41
6:Q:412:ILE:HB	6:Q:461:SER:CB	2.50	0.41
6:Q:726:LYS:HE3	6:R:726:LYS:HE3	1.16	0.41
5:T:101:LEU:HB3	5:T:132:PHE:CD1	2.55	0.41
6:R:63:TYR:O	6:R:66:TYR:HB3	2.20	0.41
6:R:79:HIS:CE1	6:R:83:ASN:HD22	2.37	0.41
6:R:519:ALA:O	6:R:522:GLU:HB2	2.20	0.41
6:R:712:THR:HG22	6:R:713:ARG:N	2.36	0.41
2:B:292:LYS:O	2:B:296:GLU:HB2	2.20	0.41
2:A:187:PHE:CE1	2:A:218:TYR:CD2	3.08	0.41
2:G:350:LEU:CD1	2:E:385:LEU:HD21	2.50	0.41
2:G:361:MET:HE1	2:E:378:PHE:CE2	2.55	0.41
2:G:451:TRP:NE1	2:G:493:VAL:HA	2.35	0.41
2:E:265:VAL:HG23	2:E:269:ARG:HH22	1.85	0.41
2:E:513:ARG:HG2	2:E:516:ARG:HH22	1.85	0.41
3:K:253:GLU:N	3:K:268:ARG:HA	2.27	0.41
2:P:234:TRP:CZ3	2:P:237:ASN:CB	3.03	0.41
2:P:480:ASN:CG	2:N:310:LYS:NZ	2.76	0.41
2:H:529:PHE:CD2	2:H:529:PHE:C	2.97	0.41
6:Q:490:GLN:N	6:Q:490:GLN:CD	2.79	0.41
6:Q:561:GLU:O	6:Q:564:TRP:HB3	2.20	0.41
6:Q:575:ASP:CG	6:Q:576:ASP:H	2.28	0.41
6:Q:599:ARG:NE	6:Q:599:ARG:H	2.19	0.41
5:T:97:GLU:OE2	6:R:749:HIS:CE1	2.73	0.41
6:R:490:GLN:N	6:R:490:GLN:CD	2.79	0.41
6:R:759:ARG:HH21	6:R:767:LEU:HD21	1.85	0.41
1:J:86:SER:HB3	1:C:86:SER:CB	2.25	0.41
2:B:546:THR:HB	2:B:547:PHE:CE1	2.55	0.41
2:G:365:VAL:HA	2:G:416:ALA:HB2	2.02	0.41
2:G:539:GLU:HA	2:G:542:GLU:OE1	2.20	0.41
2:P:227:ARG:NH1	2:P:298:GLU:HA	2.36	0.41
2:N:444:ARG:HE	2:N:503:MET:HB3	1.85	0.41
2:H:227:ARG:HA	2:H:227:ARG:HD3	1.87	0.41
2:H:248:VAL:HG23	2:H:443:GLN:OE1	2.20	0.41
2:H:346:TYR:O	2:H:350:LEU:HG	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L:187:PHE:CE1	3:L:218:TYR:CD2	3.08	0.41
5:S:105:ALA:HA	5:S:110:VAL:CG2	2.51	0.41
6:Q:29:ARG:HA	6:Q:32:LEU:HG	2.03	0.41
6:Q:63:TYR:CD1	6:Q:67:MET:HE1	2.56	0.41
6:Q:182:PHE:CG	6:Q:183:VAL:N	2.89	0.41
6:Q:408:ILE:HG12	6:Q:447:HIS:CE1	2.56	0.41
6:Q:473:TYR:CE1	6:Q:475:SER:O	2.73	0.41
6:Q:482:LEU:HA	6:Q:483:PRO:HD3	1.90	0.41
6:Q:487:SER:HA	6:Q:490:GLN:HE21	1.86	0.41
6:Q:759:ARG:HD3	6:Q:766:GLU:HA	2.02	0.41
5:T:8:ILE:HD12	5:T:157:PHE:CD2	2.55	0.41
6:R:302:TYR:CE1	6:R:305:ARG:HB3	2.55	0.41
6:R:473:TYR:CE1	6:R:475:SER:O	2.73	0.41
6:R:525:LEU:HD11	6:R:583:LEU:HD23	2.03	0.41
6:R:575:ASP:CG	6:R:576:ASP:H	2.28	0.41
1:J:53:PRO:HD3	1:J:100:PRO:HA	2.02	0.41
1:J:216:ALA:HA	2:G:392:PRO:HG2	2.01	0.41
1:J:261:ASN:O	1:C:90:GLU:CB	2.68	0.41
1:C:53:PRO:HD3	1:C:100:PRO:HA	2.02	0.41
2:B:187:PHE:CE1	2:B:218:TYR:CD2	3.08	0.41
2:B:248:VAL:HG23	2:B:443:GLN:OE1	2.20	0.41
2:B:279:ILE:O	2:B:282:HIS:O	2.38	0.41
2:B:363:ASN:HB3	2:B:367:GLN:OE1	2.21	0.41
2:B:365:VAL:HA	2:B:416:ALA:HB2	2.02	0.41
2:A:188:HIS:HB2	2:A:212:LYS:HG2	2.01	0.41
2:G:227:ARG:NH1	2:G:298:GLU:HA	2.36	0.41
2:G:302:ILE:HG22	2:G:306:HIS:HE1	1.85	0.41
2:P:444:ARG:HE	2:P:503:MET:HB3	1.86	0.41
2:N:187:PHE:CE1	2:N:218:TYR:CD2	3.08	0.41
2:H:187:PHE:CE1	2:H:218:TYR:CD2	3.08	0.41
2:H:357:LEU:CD1	2:F:381:SER:HB3	2.44	0.41
2:H:400:ALA:HA	2:H:403:GLU:HG3	2.03	0.41
3:L:227:ARG:NH1	3:L:298:GLU:HA	2.35	0.41
5:S:8:ILE:HD12	5:S:157:PHE:CD2	2.55	0.41
6:Q:733:LYS:HD3	6:Q:733:LYS:HA	1.98	0.41
6:R:63:TYR:CD1	6:R:67:MET:HE1	2.56	0.41
6:R:569:VAL:HG22	6:R:608:ALA:HB2	2.02	0.41
6:R:745:TYR:CE2	6:R:801:ILE:HG12	2.56	0.41
2:B:227:ARG:NH1	2:B:298:GLU:HA	2.36	0.41
2:B:350:LEU:CD1	2:A:385:LEU:CD2	2.98	0.41
2:B:369:LYS:C	2:B:371:MET:HB2	2.45	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:452:HIS:CD2	2:B:453:SER:N	2.88	0.41
3:D:187:PHE:CE1	3:D:218:TYR:CD2	3.08	0.41
2:G:375:ALA:HA	2:G:378:PHE:HB2	2.02	0.41
2:G:400:ALA:HA	2:G:403:GLU:HG3	2.03	0.41
2:G:530:LEU:CD2	2:E:544:TRP:CG	2.95	0.41
2:E:205:ILE:HD13	2:E:207:TYR:CE1	2.56	0.41
2:E:292:LYS:O	2:E:296:GLU:HB2	2.20	0.41
3:K:205:ILE:HD13	3:K:207:TYR:CE1	2.56	0.41
2:N:205:ILE:HG22	2:N:268:ARG:HH11	1.85	0.41
2:N:227:ARG:NH1	2:N:298:GLU:HA	2.35	0.41
2:H:205:ILE:HD13	2:H:207:TYR:CE1	2.56	0.41
2:H:451:TRP:NE1	2:H:493:VAL:HA	2.36	0.41
2:F:250:PRO:HG2	2:F:433:LEU:CG	2.22	0.41
3:L:204:HIS:NE2	3:L:228:ARG:HD3	2.35	0.41
5:S:116:ALA:CA	5:S:134:ASN:HD21	2.33	0.41
6:Q:772:LYS:HG2	6:Q:773:ARG:HE	1.86	0.41
6:R:462:LEU:HD23	6:R:463:LEU:N	2.36	0.41
6:R:716:GLY:HA3	6:R:763:GLU:OE2	2.21	0.41
1:J:229:PHE:CD1	6:Q:105:ARG:NH1	2.89	0.41
2:B:367:GLN:C	2:B:369:LYS:N	2.79	0.41
2:B:404:LEU:HG	2:B:408:ILE:HD12	2.02	0.41
2:B:451:TRP:CZ3	2:B:452:HIS:HB3	2.56	0.41
2:B:455:GLU:N	2:B:493:VAL:HG22	2.36	0.41
2:A:279:ILE:O	2:A:282:HIS:O	2.38	0.41
2:G:374:ALA:O	2:G:378:PHE:HB2	2.21	0.41
3:K:227:ARG:NH1	3:K:298:GLU:HA	2.36	0.41
4:M:444:ARG:O	4:M:447:ALA:HB3	2.21	0.41
2:N:249:PRO:C	2:N:433:LEU:CD2	2.88	0.41
2:H:234:TRP:CZ3	2:H:237:ASN:CB	3.03	0.41
2:F:188:HIS:HB2	2:F:212:LYS:HG2	2.01	0.41
2:F:279:ILE:O	2:F:282:HIS:O	2.38	0.41
3:V:204:HIS:NE2	3:V:228:ARG:HD3	2.35	0.41
3:V:227:ARG:HA	3:V:227:ARG:HD3	1.87	0.41
5:S:45:ARG:HA	5:S:48:TYR:CB	2.50	0.41
5:S:83:LEU:HD13	5:S:193:LYS:HB3	2.02	0.41
6:Q:112:VAL:O	6:Q:115:ALA:HB3	2.21	0.41
6:Q:498:ARG:O	6:Q:502:GLY:HA3	2.21	0.41
6:Q:503:GLU:HA	6:Q:506:ARG:NE	2.36	0.41
5:T:16:ARG:NE	5:T:120:HIS:CE1	2.89	0.41
5:T:83:LEU:HD13	5:T:193:LYS:HB3	2.02	0.41
6:R:182:PHE:CE2	6:R:183:VAL:HG13	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:R:498:ARG:O	6:R:502:GLY:HA3	2.21	0.41
6:R:808:TYR:CE1	6:R:811:GLN:HG3	2.56	0.41
1:J:30:LYS:NZ	2:N:283:PRO:HD2	2.35	0.41
2:B:250:PRO:N	2:B:436:SER:CB	2.72	0.41
2:B:357:LEU:CD2	2:A:378:PHE:CD1	3.01	0.41
2:B:400:ALA:HA	2:B:403:GLU:HG3	2.03	0.41
2:A:205:ILE:HD13	2:A:207:TYR:CE1	2.56	0.41
2:A:227:ARG:HA	2:A:227:ARG:HD3	1.87	0.41
2:A:227:ARG:NH1	2:A:298:GLU:HA	2.36	0.41
2:A:247:VAL:HG22	2:A:248:VAL:H	1.85	0.41
2:A:357:LEU:O	2:A:360:ALA:HB3	2.21	0.41
3:D:205:ILE:HG22	3:D:268:ARG:HH11	1.85	0.41
3:D:227:ARG:HA	3:D:227:ARG:HD3	1.87	0.41
3:D:247:VAL:HG22	3:D:248:VAL:H	1.84	0.41
2:G:205:ILE:HD13	2:G:207:TYR:CE1	2.56	0.41
2:G:449:HIS:HA	2:G:452:HIS:ND1	2.36	0.41
2:E:188:HIS:CE1	2:E:214:THR:H	2.39	0.41
2:E:252:PRO:HB3	2:E:272:LEU:HG	2.03	0.41
3:K:265:VAL:HG23	3:K:269:ARG:HH22	1.85	0.41
2:P:204:HIS:NE2	2:P:228:ARG:HD3	2.35	0.41
2:P:209:VAL:HB	2:P:225:VAL:CG2	2.47	0.41
2:N:223:PHE:HB3	2:N:296:GLU:HA	2.03	0.41
2:N:292:LYS:O	2:N:296:GLU:HB2	2.20	0.41
2:H:204:HIS:NE2	2:H:228:ARG:HD3	2.35	0.41
2:H:292:LYS:O	2:H:296:GLU:HB2	2.20	0.41
2:H:350:LEU:CD1	2:F:385:LEU:CD2	2.98	0.41
2:H:361:MET:HE2	2:H:364:MET:HE1	2.03	0.41
2:H:369:LYS:C	2:H:371:MET:HB2	2.45	0.41
2:H:374:ALA:O	2:H:378:PHE:HB2	2.21	0.41
2:H:434:ILE:HA	2:H:437:VAL:HG22	2.03	0.41
2:H:539:GLU:HA	2:H:542:GLU:OE1	2.20	0.41
2:F:205:ILE:HD13	2:F:207:TYR:CE1	2.56	0.41
2:F:227:ARG:NH1	2:F:298:GLU:HA	2.35	0.41
3:L:292:LYS:O	3:L:296:GLU:HB2	2.20	0.41
6:Q:182:PHE:CE2	6:Q:183:VAL:HG13	2.56	0.41
6:Q:269:LEU:HA	6:Q:272:LEU:HG	2.03	0.41
6:Q:412:ILE:O	6:Q:416:CYS:SG	2.79	0.41
6:Q:530:VAL:HA	6:Q:534:GLU:OE1	2.20	0.41
6:Q:599:ARG:H	6:Q:599:ARG:HE	1.67	0.41
5:T:105:ALA:HA	5:T:110:VAL:CG2	2.50	0.41
5:T:107:LYS:HZ1	6:R:804:ARG:NH1	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:R:231:TYR:CZ	6:R:267:TYR:HB3	2.56	0.41
6:R:269:LEU:HA	6:R:272:LEU:HG	2.03	0.41
6:R:412:ILE:O	6:R:416:CYS:SG	2.79	0.41
6:R:412:ILE:HB	6:R:461:SER:CB	2.50	0.41
6:R:470:LEU:HD13	6:R:504:ILE:HD11	2.02	0.41
6:R:484:THR:C	6:R:488:LEU:HD12	2.45	0.41
6:R:498:ARG:HG3	6:R:506:ARG:HH12	1.86	0.41
6:R:503:GLU:HA	6:R:506:ARG:NE	2.36	0.41
6:R:568:LEU:HG	6:R:569:VAL:N	2.36	0.41
6:R:570:HIS:CE1	6:R:571:LEU:HG	2.56	0.41
6:R:599:ARG:HE	6:R:599:ARG:H	1.67	0.41
6:R:633:LEU:O	6:R:637:LEU:HG	2.21	0.41
6:R:719:ASN:H	6:R:719:ASN:ND2	2.19	0.41
2:B:411:VAL:HG22	2:B:539:GLU:OE2	2.20	0.41
2:B:452:HIS:CD2	2:B:452:HIS:C	2.99	0.41
3:D:209:VAL:HB	3:D:225:VAL:CG2	2.47	0.41
3:D:223:PHE:HB3	3:D:296:GLU:HA	2.03	0.41
2:G:187:PHE:CE1	2:G:218:TYR:CD2	3.08	0.41
2:G:451:TRP:CZ3	2:G:452:HIS:HB3	2.56	0.41
2:E:187:PHE:CE1	2:E:218:TYR:CD2	3.08	0.41
3:K:188:HIS:CE1	3:K:214:THR:H	2.39	0.41
3:K:247:VAL:HG22	3:K:248:VAL:H	1.84	0.41
2:P:475:GLN:CD	2:N:310:LYS:O	2.64	0.41
2:H:235:LEU:HD22	2:H:235:LEU:O	2.21	0.41
2:H:273:GLU:CD	2:H:273:GLU:C	2.90	0.41
2:H:279:ILE:O	2:H:282:HIS:O	2.39	0.41
2:H:365:VAL:HA	2:H:416:ALA:HB2	2.02	0.41
2:H:451:TRP:CZ3	2:H:452:HIS:HB3	2.56	0.41
2:F:187:PHE:CE1	2:F:218:TYR:CD2	3.09	0.41
2:F:250:PRO:HD3	2:F:433:LEU:CA	2.50	0.41
5:S:130:LYS:NZ	5:S:132:PHE:CE1	2.82	0.41
6:Q:733:LYS:CE	6:R:683:GLN:N	2.83	0.41
6:R:35:PRO:CB	6:R:83:ASN:HD21	2.33	0.41
6:R:759:ARG:HD3	6:R:766:GLU:HA	2.02	0.41
2:B:440:ALA:HA	2:B:443:GLN:OE1	2.22	0.40
2:B:513:ARG:NH2	2:B:514:PHE:HA	2.37	0.40
2:G:361:MET:HE2	2:G:364:MET:HE1	2.03	0.40
2:G:368:ARG:CD	2:G:416:ALA:H	2.32	0.40
2:G:385:LEU:O	2:G:385:LEU:HG	2.21	0.40
2:G:513:ARG:NH2	2:G:514:PHE:HA	2.37	0.40
2:G:517:GLU:HA	2:G:520:GLU:CD	2.46	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:533:ALA:CB	2:E:540:LEU:HD21	2.51	0.40
3:K:205:ILE:HG22	3:K:268:ARG:HH11	1.85	0.40
2:N:229:TYR:CZ	2:N:233:LEU:HD11	2.56	0.40
2:N:235:LEU:HD22	2:N:235:LEU:O	2.22	0.40
2:H:205:ILE:HG22	2:H:268:ARG:HH11	1.85	0.40
2:H:364:MET:HE1	2:F:378:PHE:CE2	2.57	0.40
2:H:411:VAL:HG22	2:H:539:GLU:OE2	2.20	0.40
2:H:440:ALA:HA	2:H:443:GLN:OE1	2.21	0.40
3:V:279:ILE:O	3:V:282:HIS:O	2.39	0.40
3:L:223:PHE:HB3	3:L:296:GLU:HA	2.04	0.40
5:S:16:ARG:NE	5:S:120:HIS:CE1	2.89	0.40
5:S:165:ILE:O	5:S:193:LYS:HB3	2.21	0.40
6:Q:480:LEU:HD13	6:Q:523:ASN:HB3	2.03	0.40
6:Q:498:ARG:HG3	6:Q:506:ARG:HH12	1.86	0.40
6:Q:525:LEU:HD11	6:Q:583:LEU:HD23	2.03	0.40
6:Q:570:HIS:CG	6:Q:571:LEU:N	2.86	0.40
6:Q:603:PRO:HA	6:Q:606:ILE:CG1	2.50	0.40
6:Q:716:GLY:HA3	6:Q:763:GLU:OE2	2.21	0.40
6:R:52:LEU:HD13	6:R:69:VAL:HG21	2.02	0.40
6:R:83:ASN:HA	6:R:86:VAL:HG22	2.03	0.40
6:R:599:ARG:H	6:R:599:ARG:NE	2.19	0.40
6:R:599:ARG:CG	6:R:600:THR:HG23	2.51	0.40
2:B:227:ARG:HA	2:B:227:ARG:HD3	1.87	0.40
2:B:247:VAL:HG22	2:B:248:VAL:H	1.85	0.40
2:B:359:LYS:HA	2:B:362:ASP:OD2	2.22	0.40
2:B:414:ARG:HB3	2:B:418:GLN:NE2	2.37	0.40
3:D:225:VAL:HG21	3:D:294:PHE:O	2.21	0.40
3:D:234:TRP:CZ3	3:D:237:ASN:CB	3.03	0.40
2:G:188:HIS:CE1	2:G:214:THR:H	2.39	0.40
2:G:225:VAL:HG21	2:G:294:PHE:O	2.22	0.40
2:G:351:GLU:HA	2:G:354:LEU:HD12	2.04	0.40
2:G:452:HIS:CD2	2:G:452:HIS:C	2.99	0.40
2:E:196:LYS:HZ2	3:K:196:LYS:HD2	1.86	0.40
2:E:196:LYS:HZ2	3:K:196:LYS:CD	2.34	0.40
2:E:227:ARG:NH1	2:E:298:GLU:HA	2.36	0.40
3:K:302:ILE:HG22	3:K:306:HIS:HE1	1.85	0.40
2:P:265:VAL:HG23	2:P:269:ARG:HH22	1.85	0.40
2:N:225:VAL:HG21	2:N:294:PHE:O	2.21	0.40
2:N:273:GLU:CD	2:N:273:GLU:C	2.89	0.40
2:N:279:ILE:O	2:N:282:HIS:O	2.39	0.40
2:H:227:ARG:NH1	2:H:298:GLU:HA	2.36	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:229:TYR:CZ	2:H:233:LEU:HD11	2.56	0.40
2:H:306:HIS:HA	2:H:309:ARG:NH2	2.29	0.40
2:H:351:GLU:HA	2:H:354:LEU:HD12	2.04	0.40
2:H:400:ALA:HB2	2:H:550:GLN:HE22	1.86	0.40
2:H:523:LYS:HA	2:H:523:LYS:CE	2.51	0.40
2:H:533:ALA:CB	2:F:540:LEU:HD21	2.51	0.40
2:F:234:TRP:CZ3	2:F:237:ASN:CB	3.03	0.40
3:V:188:HIS:CE1	3:V:214:THR:H	2.40	0.40
3:V:252:PRO:HB3	3:V:272:LEU:HG	2.04	0.40
3:L:205:ILE:HD13	3:L:207:TYR:CE1	2.56	0.40
3:L:235:LEU:O	3:L:235:LEU:HD22	2.22	0.40
5:S:138:ALA:HA	5:S:156:SER:N	2.35	0.40
6:Q:35:PRO:CB	6:Q:83:ASN:HD21	2.33	0.40
6:Q:52:LEU:HD13	6:Q:69:VAL:HG21	2.02	0.40
6:Q:83:ASN:HA	6:Q:86:VAL:HG22	2.03	0.40
6:Q:470:LEU:HD13	6:Q:504:ILE:HD11	2.02	0.40
6:Q:633:LEU:O	6:Q:637:LEU:HG	2.21	0.40
6:Q:712:THR:HG22	6:Q:713:ARG:N	2.36	0.40
6:R:182:PHE:CG	6:R:183:VAL:N	2.89	0.40
6:R:220:VAL:CG1	6:R:224:GLN:HE21	2.35	0.40
6:R:503:GLU:HA	6:R:506:ARG:HE	1.86	0.40
2:B:235:LEU:O	2:B:235:LEU:HD22	2.21	0.40
2:B:267:SER:CB	2:B:432:ARG:HH11	1.95	0.40
2:A:229:TYR:CZ	2:A:233:LEU:HD11	2.57	0.40
2:A:332:LYS:CD	2:N:497:ARG:HD3	2.37	0.40
3:D:273:GLU:C	3:D:273:GLU:CD	2.89	0.40
2:G:223:PHE:HB3	2:G:296:GLU:HA	2.03	0.40
2:G:363:ASN:HB3	2:G:367:GLN:OE1	2.21	0.40
2:G:480:ASN:HA	3:L:310:LYS:CD	2.48	0.40
2:E:234:TRP:CZ3	2:E:237:ASN:CB	3.03	0.40
3:K:271:ALA:HA	3:K:274:LYS:HE2	2.04	0.40
2:P:205:ILE:HG22	2:P:268:ARG:HH11	1.85	0.40
2:P:229:TYR:CZ	2:P:233:LEU:HD11	2.56	0.40
2:H:359:LYS:HA	2:H:362:ASP:OD2	2.22	0.40
2:F:188:HIS:CE1	2:F:214:THR:H	2.39	0.40
2:F:209:VAL:HB	2:F:225:VAL:CG2	2.48	0.40
2:F:357:LEU:O	2:F:360:ALA:HB3	2.21	0.40
6:Q:220:VAL:HG13	6:Q:224:GLN:HE21	1.86	0.40
6:Q:231:TYR:CZ	6:Q:267:TYR:HB3	2.56	0.40
6:Q:674:GLU:H	6:Q:674:GLU:CD	2.30	0.40
6:Q:685:PHE:O	6:Q:688:TYR:HB3	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:Q:719:ASN:H	6:Q:719:ASN:ND2	2.19	0.40
6:R:631:SER:HA	6:R:634:PHE:CD2	2.57	0.40
1:J:30:LYS:HE3	2:N:283:PRO:HG2	1.88	0.40
2:B:351:GLU:HA	2:B:354:LEU:HD12	2.04	0.40
2:B:361:MET:HE1	2:A:378:PHE:CE2	2.55	0.40
2:B:364:MET:HE1	2:A:378:PHE:CE2	2.57	0.40
2:B:451:TRP:CD1	2:B:451:TRP:C	2.92	0.40
2:B:457:GLU:CB	2:B:461:LYS:HZ1	2.35	0.40
2:G:350:LEU:HD13	2:E:385:LEU:CD2	2.52	0.40
2:G:372:ALA:HB3	2:G:373:GLU:OE2	2.22	0.40
2:G:455:GLU:N	2:G:493:VAL:HG22	2.36	0.40
2:E:204:HIS:NE2	2:E:228:ARG:HD3	2.35	0.40
2:E:229:TYR:CZ	2:E:233:LEU:HD11	2.56	0.40
3:K:229:TYR:CZ	3:K:233:LEU:HD11	2.57	0.40
2:P:205:ILE:HD13	2:P:207:TYR:CE1	2.56	0.40
2:P:235:LEU:HD22	2:P:235:LEU:O	2.22	0.40
2:P:252:PRO:HB3	2:P:272:LEU:HG	2.04	0.40
2:H:363:ASN:HB3	2:H:367:GLN:OE1	2.21	0.40
2:H:449:HIS:HA	2:H:452:HIS:ND1	2.36	0.40
2:H:458:LEU:HA	2:H:461:LYS:HZ2	1.87	0.40
2:F:252:PRO:HB3	2:F:272:LEU:HG	2.03	0.40
2:F:253:GLU:N	2:F:268:ARG:HA	2.27	0.40
3:V:229:TYR:CZ	3:V:233:LEU:HD11	2.57	0.40
3:V:247:VAL:HG22	3:V:248:VAL:H	1.85	0.40
3:L:220:GLN:H	3:L:220:GLN:HG2	1.60	0.40
5:S:23:LYS:HA	5:S:26:LYS:HD2	2.04	0.40
5:S:105:ALA:HB2	5:S:113:LEU:HD21	2.03	0.40
6:Q:213:LEU:H	6:Q:213:LEU:HG	1.59	0.40
6:Q:462:LEU:HD23	6:Q:463:LEU:N	2.36	0.40
6:Q:570:HIS:CE1	6:Q:571:LEU:HG	2.56	0.40
6:Q:582:ARG:HG3	6:Q:582:ARG:H	1.54	0.40
6:R:49:VAL:CG1	6:R:103:ILE:HG22	2.51	0.40
6:R:117:MET:SD	6:R:158:TYR:CD2	3.14	0.40
6:R:467:GLN:NE2	6:R:470:LEU:HD12	2.37	0.40
6:R:480:LEU:HD13	6:R:523:ASN:HB3	2.03	0.40
6:R:570:HIS:CE1	6:R:571:LEU:CD2	3.05	0.40
6:R:584:LEU:HB3	6:R:585:GLN:OE1	2.21	0.40
6:R:798:PHE:CB	6:R:828:ILE:HG12	2.52	0.40
2:B:196:LYS:HZ2	2:P:196:LYS:CE	2.31	0.40
2:B:361:MET:HE2	2:B:364:MET:HE1	2.03	0.40
2:B:368:ARG:HA	2:B:412:TYR:OH	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:400:ALA:HB2	2:B:550:GLN:HE22	1.86	0.40
2:A:225:VAL:HG21	2:A:294:PHE:O	2.21	0.40
2:A:250:PRO:HG3	2:A:433:LEU:CB	2.52	0.40
3:D:188:HIS:CE1	3:D:214:THR:H	2.40	0.40
2:G:192:GLY:H	2:G:208:SER:HG	1.70	0.40
2:G:227:ARG:HA	2:G:227:ARG:HD3	1.87	0.40
2:G:364:MET:HE1	2:E:378:PHE:CE2	2.56	0.40
2:G:368:ARG:HA	2:G:412:TYR:OH	2.22	0.40
2:G:409:ARG:HD3	2:G:410:ASP:HA	2.04	0.40
2:G:434:ILE:HA	2:G:437:VAL:HG22	2.03	0.40
2:E:494:HIS:CE1	2:E:498:LEU:HD22	2.57	0.40
2:P:271:ALA:HA	2:P:274:LYS:HE2	2.04	0.40
2:P:273:GLU:C	2:P:273:GLU:CD	2.89	0.40
2:N:205:ILE:HD13	2:N:207:TYR:CE1	2.56	0.40
2:N:227:ARG:NH2	2:N:300:PHE:H	2.20	0.40
2:H:367:GLN:C	2:H:369:LYS:N	2.79	0.40
2:H:447:ALA:HB3	2:H:500:PHE:CD1	2.57	0.40
2:H:514:PHE:CZ	2:H:518:LYS:NZ	2.81	0.40
3:V:207:TYR:O	3:V:226:LYS:HA	2.22	0.40
3:V:223:PHE:HB3	3:V:296:GLU:HA	2.03	0.40
3:V:225:VAL:HG21	3:V:294:PHE:O	2.22	0.40
3:L:273:GLU:CD	3:L:273:GLU:C	2.89	0.40
6:Q:117:MET:SD	6:Q:158:TYR:CD2	3.14	0.40
6:Q:125:LYS:O	6:Q:129:LYS:HG2	2.21	0.40
6:Q:633:LEU:HA	6:Q:633:LEU:HD12	1.96	0.40
6:Q:745:TYR:CE2	6:Q:801:ILE:HG12	2.56	0.40
6:R:29:ARG:HA	6:R:32:LEU:HG	2.03	0.40
6:R:603:PRO:HA	6:R:606:ILE:CG1	2.50	0.40
6:R:749:HIS:HE1	6:R:754:THR:HB	1.86	0.40
6:R:772:LYS:HG2	6:R:773:ARG:HE	1.86	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	C	290/292 (99%)	280 (97%)	8 (3%)	2 (1%)	18	56
1	J	290/292 (99%)	280 (97%)	8 (3%)	2 (1%)	18	56
2	A	345/368 (94%)	321 (93%)	15 (4%)	9 (3%)	4	25
2	B	345/368 (94%)	314 (91%)	21 (6%)	10 (3%)	3	23
2	E	345/368 (94%)	321 (93%)	15 (4%)	9 (3%)	4	25
2	F	345/368 (94%)	321 (93%)	15 (4%)	9 (3%)	4	25
2	G	345/368 (94%)	313 (91%)	22 (6%)	10 (3%)	3	23
2	H	345/368 (94%)	313 (91%)	22 (6%)	10 (3%)	3	23
2	N	345/368 (94%)	318 (92%)	19 (6%)	8 (2%)	5	28
2	P	345/368 (94%)	318 (92%)	19 (6%)	8 (2%)	5	28
3	D	127/129 (98%)	105 (83%)	14 (11%)	8 (6%)	1	13
3	K	127/129 (98%)	105 (83%)	14 (11%)	8 (6%)	1	13
3	L	127/129 (98%)	105 (83%)	14 (11%)	8 (6%)	1	13
3	V	127/129 (98%)	105 (83%)	14 (11%)	8 (6%)	1	13
4	M	218/220 (99%)	215 (99%)	2 (1%)	1 (0%)	24	63
4	O	218/220 (99%)	215 (99%)	2 (1%)	1 (0%)	24	63
5	S	180/193 (93%)	145 (81%)	19 (11%)	16 (9%)	0	8
5	T	180/193 (93%)	145 (81%)	19 (11%)	16 (9%)	0	8
6	Q	738/846 (87%)	666 (90%)	32 (4%)	40 (5%)	1	15
6	R	738/846 (87%)	666 (90%)	32 (4%)	40 (5%)	1	15
All	All	6120/6562 (93%)	5571 (91%)	326 (5%)	223 (4%)	4	20

All (223) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	J	6	SER
1	J	216	ALA
1	C	6	SER
1	C	216	ALA
2	B	247	VAL
2	B	332	LYS
2	A	247	VAL
3	D	247	VAL

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Mol	Chain	Res	Type
2	G	247	VAL
2	G	332	LYS
2	E	247	VAL
3	K	247	VAL
2	P	247	VAL
2	N	247	VAL
2	H	247	VAL
2	H	332	LYS
2	F	247	VAL
3	V	247	VAL
3	L	247	VAL
5	S	10	ASN
5	S	62	ARG
6	Q	56	SER
6	Q	57	LEU
6	Q	87	ASN
6	Q	170	ASN
6	Q	428	GLU
6	Q	429	ARG
6	Q	452	ASP
6	Q	454	HIS
6	Q	483	PRO
6	Q	516	SER
6	Q	534	GLU
6	Q	595	ASN
6	Q	649	ASN
6	Q	672	GLU
6	Q	755	PRO
6	Q	764	ASP
6	Q	770	ASP
5	T	10	ASN
5	T	62	ARG
6	R	56	SER
6	R	57	LEU
6	R	87	ASN
6	R	170	ASN
6	R	428	GLU
6	R	429	ARG
6	R	452	ASP
6	R	454	HIS
6	R	483	PRO
6	R	516	SER

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Mol	Chain	Res	Type
6	R	534	GLU
6	R	595	ASN
6	R	649	ASN
6	R	672	GLU
6	R	755	PRO
6	R	764	ASP
6	R	770	ASP
2	B	199	ASP
2	B	256	ALA
2	A	199	ASP
2	A	256	ALA
3	D	199	ASP
3	D	256	ALA
2	G	199	ASP
2	G	256	ALA
2	E	199	ASP
2	E	256	ALA
3	K	199	ASP
3	K	256	ALA
2	P	199	ASP
2	P	256	ALA
2	N	199	ASP
2	N	256	ALA
2	H	199	ASP
2	H	256	ALA
2	F	199	ASP
2	F	256	ALA
3	V	199	ASP
3	V	256	ALA
3	L	199	ASP
3	L	256	ALA
5	S	40	GLY
5	S	41	ASN
5	S	69	ALA
5	S	71	SER
5	S	74	LEU
5	S	136	GLY
6	Q	167	PRO
6	Q	226	VAL
6	Q	455	SER
6	Q	713	ARG
6	Q	767	LEU

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Mol	Chain	Res	Type
5	T	40	GLY
5	T	41	ASN
5	T	69	ALA
5	T	71	SER
5	T	74	LEU
5	T	136	GLY
6	R	167	PRO
6	R	226	VAL
6	R	455	SER
6	R	713	ARG
6	R	767	LEU
2	B	202	THR
2	A	202	THR
2	A	371	MET
3	D	202	THR
2	G	202	THR
2	E	202	THR
2	E	371	MET
3	K	202	THR
4	O	390	LEU
2	P	202	THR
4	M	390	LEU
2	N	202	THR
2	H	202	THR
2	F	202	THR
2	F	371	MET
3	V	202	THR
3	L	202	THR
6	Q	165	ASP
6	Q	388	PRO
6	Q	473	TYR
6	Q	485	TYR
6	Q	511	ASN
6	Q	618	ALA
6	Q	710	HIS
6	Q	765	THR
6	Q	769	ARG
6	Q	788	CYS
6	R	165	ASP
6	R	388	PRO
6	R	473	TYR
6	R	485	TYR

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Mol	Chain	Res	Type
6	R	511	ASN
6	R	618	ALA
6	R	710	HIS
6	R	765	THR
6	R	769	ARG
6	R	788	CYS
2	B	300	PHE
2	A	300	PHE
3	D	300	PHE
2	G	300	PHE
2	E	300	PHE
3	K	300	PHE
2	P	300	PHE
2	N	300	PHE
2	H	300	PHE
2	F	300	PHE
3	V	300	PHE
3	L	300	PHE
5	S	61	VAL
5	S	73	PRO
5	S	139	THR
6	Q	168	GLU
6	Q	474	VAL
6	Q	592	ALA
6	Q	766	GLU
5	T	61	VAL
5	T	73	PRO
5	T	139	THR
6	R	168	GLU
6	R	474	VAL
6	R	592	ALA
6	R	766	GLU
2	B	219	LYS
2	B	245	GLY
2	B	391	SER
2	A	219	LYS
2	A	245	GLY
3	D	219	LYS
3	D	245	GLY
2	G	245	GLY
2	G	391	SER
2	E	219	LYS

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Mol	Chain	Res	Type
2	E	245	GLY
3	K	245	GLY
2	P	245	GLY
2	N	245	GLY
2	H	245	GLY
2	H	391	SER
2	F	219	LYS
2	F	245	GLY
3	V	219	LYS
3	V	245	GLY
3	L	245	GLY
5	S	42	LEU
5	S	55	SER
6	Q	121	GLY
6	Q	576	ASP
6	Q	693	SER
6	Q	838	ASP
5	T	42	LEU
5	T	55	SER
6	R	121	GLY
6	R	576	ASP
6	R	693	SER
6	R	838	ASP
2	G	219	LYS
3	K	219	LYS
2	P	219	LYS
2	N	219	LYS
2	H	219	LYS
3	L	219	LYS
5	S	12	HIS
5	S	68	GLU
5	S	72	LEU
5	T	12	HIS
5	T	68	GLU
5	T	72	LEU
2	B	257	VAL
2	A	257	VAL
3	D	257	VAL
2	G	257	VAL
2	E	257	VAL
3	K	257	VAL
2	P	257	VAL

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Mol	Chain	Res	Type
2	N	257	VAL
2	H	257	VAL
2	F	257	VAL
3	V	257	VAL
3	L	257	VAL

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	C	269/269 (100%)	269 (100%)	0	100	100
1	J	269/269 (100%)	269 (100%)	0	100	100
2	A	306/317 (96%)	286 (94%)	20 (6%)	15	37
2	B	306/317 (96%)	260 (85%)	46 (15%)	3	12
2	E	306/317 (96%)	286 (94%)	20 (6%)	15	37
2	F	306/317 (96%)	286 (94%)	20 (6%)	15	37
2	G	306/317 (96%)	259 (85%)	47 (15%)	2	12
2	H	306/317 (96%)	259 (85%)	47 (15%)	2	12
2	N	306/317 (96%)	288 (94%)	18 (6%)	18	39
2	P	306/317 (96%)	288 (94%)	18 (6%)	18	39
3	D	116/116 (100%)	105 (90%)	11 (10%)	8	25
3	K	116/116 (100%)	105 (90%)	11 (10%)	8	25
3	L	116/116 (100%)	105 (90%)	11 (10%)	8	25
3	V	116/116 (100%)	105 (90%)	11 (10%)	8	25
4	M	190/190 (100%)	184 (97%)	6 (3%)	34	56
4	O	190/190 (100%)	184 (97%)	6 (3%)	34	56
5	S	161/168 (96%)	132 (82%)	29 (18%)	2	9
5	T	161/168 (96%)	132 (82%)	29 (18%)	2	9
6	Q	656/743 (88%)	530 (81%)	126 (19%)	1	8
6	R	656/743 (88%)	529 (81%)	127 (19%)	1	7

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
All	All	5464/5740 (95%)	4861 (89%)	603 (11%)	8 20

All (603) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	B	186	THR
2	B	188	HIS
2	B	197	VAL
2	B	212	LYS
2	B	213	THR
2	B	228	ARG
2	B	235	LEU
2	B	240	HIS
2	B	248	VAL
2	B	257	VAL
2	B	261	GLU
2	B	331	ASN
2	B	334	VAL
2	B	338	ASP
2	B	342	ASP
2	B	343	ARG
2	B	364	MET
2	B	368	ARG
2	B	383	HIS
2	B	388	VAL
2	B	403	GLU
2	B	405	GLN
2	B	413	GLU
2	B	414	ARG
2	B	419	ASP
2	B	428	GLU
2	B	439	GLN
2	B	457	GLU
2	B	458	LEU
2	B	471	GLN
2	B	477	ASP
2	B	482	VAL
2	B	490	GLU
2	B	505	ARG
2	B	506	LEU
2	B	509	SER
2	B	512	ASP

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Mol	Chain	Res	Type
2	B	513	ARG
2	B	514	PHE
2	B	516	ARG
2	B	524	SER
2	B	527	GLU
2	B	531	GLU
2	B	534	VAL
2	B	535	GLU
2	B	542	GLU
2	A	186	THR
2	A	188	HIS
2	A	197	VAL
2	A	212	LYS
2	A	213	THR
2	A	228	ARG
2	A	235	LEU
2	A	240	HIS
2	A	248	VAL
2	A	257	VAL
2	A	261	GLU
2	A	343	ARG
2	A	399	ASP
2	A	414	ARG
2	A	449	HIS
2	A	469	LEU
2	A	476	GLN
2	A	486	VAL
2	A	506	LEU
2	A	547	PHE
3	D	186	THR
3	D	188	HIS
3	D	197	VAL
3	D	212	LYS
3	D	213	THR
3	D	228	ARG
3	D	235	LEU
3	D	240	HIS
3	D	248	VAL
3	D	257	VAL
3	D	261	GLU
2	G	186	THR
2	G	188	HIS

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Mol	Chain	Res	Type
2	G	197	VAL
2	G	212	LYS
2	G	213	THR
2	G	228	ARG
2	G	235	LEU
2	G	240	HIS
2	G	248	VAL
2	G	257	VAL
2	G	261	GLU
2	G	331	ASN
2	G	334	VAL
2	G	338	ASP
2	G	342	ASP
2	G	343	ARG
2	G	364	MET
2	G	368	ARG
2	G	383	HIS
2	G	388	VAL
2	G	403	GLU
2	G	405	GLN
2	G	413	GLU
2	G	414	ARG
2	G	419	ASP
2	G	428	GLU
2	G	439	GLN
2	G	457	GLU
2	G	458	LEU
2	G	471	GLN
2	G	477	ASP
2	G	482	VAL
2	G	490	GLU
2	G	505	ARG
2	G	506	LEU
2	G	509	SER
2	G	512	ASP
2	G	513	ARG
2	G	514	PHE
2	G	516	ARG
2	G	524	SER
2	G	526	VAL
2	G	527	GLU
2	G	531	GLU

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Mol	Chain	Res	Type
2	G	534	VAL
2	G	535	GLU
2	G	542	GLU
2	E	186	THR
2	E	188	HIS
2	E	197	VAL
2	E	212	LYS
2	E	213	THR
2	E	228	ARG
2	E	235	LEU
2	E	240	HIS
2	E	248	VAL
2	E	257	VAL
2	E	261	GLU
2	E	343	ARG
2	E	399	ASP
2	E	414	ARG
2	E	449	HIS
2	E	469	LEU
2	E	476	GLN
2	E	486	VAL
2	E	506	LEU
2	E	547	PHE
3	K	186	THR
3	K	188	HIS
3	K	197	VAL
3	K	212	LYS
3	K	213	THR
3	K	228	ARG
3	K	235	LEU
3	K	240	HIS
3	K	248	VAL
3	K	257	VAL
3	K	261	GLU
4	O	378	PHE
4	O	388	VAL
4	O	405	GLN
4	O	411	VAL
4	O	419	ASP
4	O	462	LYS
2	P	186	THR
2	P	188	HIS

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Mol	Chain	Res	Type
2	P	197	VAL
2	P	212	LYS
2	P	213	THR
2	P	228	ARG
2	P	235	LEU
2	P	240	HIS
2	P	248	VAL
2	P	257	VAL
2	P	261	GLU
2	P	341	HIS
2	P	395	SER
2	P	397	PRO
2	P	409	ARG
2	P	410	ASP
2	P	420	VAL
2	P	548	LEU
4	M	378	PHE
4	M	388	VAL
4	M	405	GLN
4	M	411	VAL
4	M	419	ASP
4	M	462	LYS
2	N	186	THR
2	N	188	HIS
2	N	197	VAL
2	N	212	LYS
2	N	213	THR
2	N	228	ARG
2	N	235	LEU
2	N	240	HIS
2	N	248	VAL
2	N	257	VAL
2	N	261	GLU
2	N	341	HIS
2	N	395	SER
2	N	397	PRO
2	N	409	ARG
2	N	410	ASP
2	N	420	VAL
2	N	548	LEU
2	H	186	THR
2	H	188	HIS

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Mol	Chain	Res	Type
2	H	197	VAL
2	H	212	LYS
2	H	213	THR
2	H	228	ARG
2	H	235	LEU
2	H	240	HIS
2	H	248	VAL
2	H	257	VAL
2	H	261	GLU
2	H	331	ASN
2	H	334	VAL
2	H	338	ASP
2	H	342	ASP
2	H	343	ARG
2	H	364	MET
2	H	368	ARG
2	H	383	HIS
2	H	388	VAL
2	H	403	GLU
2	H	405	GLN
2	H	413	GLU
2	H	414	ARG
2	H	419	ASP
2	H	428	GLU
2	H	439	GLN
2	H	457	GLU
2	H	458	LEU
2	H	471	GLN
2	H	477	ASP
2	H	482	VAL
2	H	490	GLU
2	H	505	ARG
2	H	506	LEU
2	H	509	SER
2	H	512	ASP
2	H	513	ARG
2	H	514	PHE
2	H	516	ARG
2	H	524	SER
2	H	526	VAL
2	H	527	GLU
2	H	531	GLU

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Mol	Chain	Res	Type
2	H	534	VAL
2	H	535	GLU
2	H	542	GLU
2	F	186	THR
2	F	188	HIS
2	F	197	VAL
2	F	212	LYS
2	F	213	THR
2	F	228	ARG
2	F	235	LEU
2	F	240	HIS
2	F	248	VAL
2	F	257	VAL
2	F	261	GLU
2	F	343	ARG
2	F	399	ASP
2	F	414	ARG
2	F	449	HIS
2	F	469	LEU
2	F	476	GLN
2	F	486	VAL
2	F	506	LEU
2	F	547	PHE
3	V	186	THR
3	V	188	HIS
3	V	197	VAL
3	V	212	LYS
3	V	213	THR
3	V	228	ARG
3	V	235	LEU
3	V	240	HIS
3	V	248	VAL
3	V	257	VAL
3	V	261	GLU
3	L	186	THR
3	L	188	HIS
3	L	197	VAL
3	L	212	LYS
3	L	213	THR
3	L	228	ARG
3	L	235	LEU
3	L	240	HIS

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Mol	Chain	Res	Type
3	L	248	VAL
3	L	257	VAL
3	L	261	GLU
5	S	8	ILE
5	S	15	ASP
5	S	21	PRO
5	S	36	THR
5	S	39	LEU
5	S	45	ARG
5	S	52	ARG
5	S	58	LEU
5	S	60	ILE
5	S	70	THR
5	S	84	ARG
5	S	87	PHE
5	S	88	LEU
5	S	95	SER
5	S	113	LEU
5	S	115	TRP
5	S	127	TYR
5	S	130	LYS
5	S	139	THR
5	S	156	SER
5	S	157	PHE
5	S	163	GLN
5	S	167	LEU
5	S	169	LEU
5	S	170	TYR
5	S	171	VAL
5	S	181	THR
5	S	189	VAL
5	S	193	LYS
6	Q	13	LEU
6	Q	23	GLN
6	Q	28	MET
6	Q	40	ASP
6	Q	43	LYS
6	Q	51	GLU
6	Q	64	GLU
6	Q	82	GLU
6	Q	83	ASN
6	Q	87	ASN

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Mol	Chain	Res	Type
6	Q	95	LEU
6	Q	125	LYS
6	Q	128	MET
6	Q	131	MET
6	Q	141	PRO
6	Q	143	ARG
6	Q	150	TYR
6	Q	157	ASP
6	Q	163	ASP
6	Q	165	ASP
6	Q	173	ASP
6	Q	174	SER
6	Q	182	PHE
6	Q	186	ASN
6	Q	192	LEU
6	Q	206	GLN
6	Q	220	VAL
6	Q	221	ARG
6	Q	230	THR
6	Q	234	SER
6	Q	242	GLN
6	Q	245	GLN
6	Q	257	GLU
6	Q	258	VAL
6	Q	275	PHE
6	Q	276	LEU
6	Q	283	ASN
6	Q	288	VAL
6	Q	301	ASP
6	Q	305	ARG
6	Q	387	VAL
6	Q	391	ASP
6	Q	399	HIS
6	Q	411	THR
6	Q	418	LEU
6	Q	425	ILE
6	Q	428	GLU
6	Q	431	ASP
6	Q	436	ILE
6	Q	437	LEU
6	Q	439	TYR
6	Q	443	LYS

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Mol	Chain	Res	Type
6	Q	445	LYS
6	Q	446	GLU
6	Q	447	HIS
6	Q	462	LEU
6	Q	467	GLN
6	Q	472	ARG
6	Q	483	PRO
6	Q	484	THR
6	Q	485	TYR
6	Q	490	GLN
6	Q	494	TYR
6	Q	518	PRO
6	Q	520	HIS
6	Q	522	GLU
6	Q	524	VAL
6	Q	526	GLU
6	Q	532	ILE
6	Q	562	GLN
6	Q	565	LEU
6	Q	567	ARG
6	Q	568	LEU
6	Q	570	HIS
6	Q	578	ASP
6	Q	580	GLN
6	Q	585	GLN
6	Q	588	ARG
6	Q	593	GLU
6	Q	596	GLU
6	Q	599	ARG
6	Q	600	THR
6	Q	614	ARG
6	Q	620	GLU
6	Q	623	ASP
6	Q	625	ASN
6	Q	628	SER
6	Q	633	LEU
6	Q	636	PHE
6	Q	642	SER
6	Q	643	THR
6	Q	648	VAL
6	Q	658	LEU
6	Q	667	VAL

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Mol	Chain	Res	Type
6	Q	669	ASP
6	Q	674	GLU
6	Q	675	GLU
6	Q	679	GLU
6	Q	686	THR
6	Q	688	TYR
6	Q	694	ASP
6	Q	705	ILE
6	Q	709	LEU
6	Q	713	ARG
6	Q	714	ASN
6	Q	718	GLU
6	Q	722	THR
6	Q	724	ILE
6	Q	754	THR
6	Q	770	ASP
6	Q	772	LYS
6	Q	773	ARG
6	Q	777	CYS
6	Q	794	SER
6	Q	797	LEU
6	Q	804	ARG
6	Q	810	ASP
6	Q	816	VAL
6	Q	817	THR
6	Q	818	THR
6	Q	821	LEU
6	Q	832	LEU
6	Q	836	GLN
6	Q	843	GLU
6	Q	853	LEU
6	Q	854	GLU
5	T	8	ILE
5	T	15	ASP
5	T	21	PRO
5	T	36	THR
5	T	39	LEU
5	T	45	ARG
5	T	52	ARG
5	T	58	LEU
5	T	60	ILE
5	T	70	THR

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Mol	Chain	Res	Type
5	T	84	ARG
5	T	87	PHE
5	T	88	LEU
5	T	95	SER
5	T	113	LEU
5	T	115	TRP
5	T	127	TYR
5	T	130	LYS
5	T	139	THR
5	T	156	SER
5	T	157	PHE
5	T	163	GLN
5	T	167	LEU
5	T	169	LEU
5	T	170	TYR
5	T	171	VAL
5	T	181	THR
5	T	189	VAL
5	T	193	LYS
6	R	13	LEU
6	R	23	GLN
6	R	28	MET
6	R	40	ASP
6	R	43	LYS
6	R	51	GLU
6	R	64	GLU
6	R	82	GLU
6	R	83	ASN
6	R	87	ASN
6	R	95	LEU
6	R	125	LYS
6	R	128	MET
6	R	131	MET
6	R	141	PRO
6	R	143	ARG
6	R	150	TYR
6	R	157	ASP
6	R	163	ASP
6	R	165	ASP
6	R	173	ASP
6	R	174	SER
6	R	182	PHE

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Mol	Chain	Res	Type
6	R	186	ASN
6	R	192	LEU
6	R	206	GLN
6	R	220	VAL
6	R	221	ARG
6	R	230	THR
6	R	234	SER
6	R	242	GLN
6	R	245	GLN
6	R	257	GLU
6	R	258	VAL
6	R	275	PHE
6	R	276	LEU
6	R	283	ASN
6	R	288	VAL
6	R	301	ASP
6	R	305	ARG
6	R	387	VAL
6	R	391	ASP
6	R	399	HIS
6	R	411	THR
6	R	418	LEU
6	R	425	ILE
6	R	428	GLU
6	R	431	ASP
6	R	436	ILE
6	R	437	LEU
6	R	439	TYR
6	R	443	LYS
6	R	445	LYS
6	R	446	GLU
6	R	447	HIS
6	R	462	LEU
6	R	467	GLN
6	R	472	ARG
6	R	483	PRO
6	R	484	THR
6	R	485	TYR
6	R	490	GLN
6	R	494	TYR
6	R	518	PRO
6	R	520	HIS

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Mol	Chain	Res	Type
6	R	522	GLU
6	R	524	VAL
6	R	526	GLU
6	R	532	ILE
6	R	562	GLN
6	R	565	LEU
6	R	567	ARG
6	R	568	LEU
6	R	570	HIS
6	R	578	ASP
6	R	580	GLN
6	R	585	GLN
6	R	588	ARG
6	R	593	GLU
6	R	596	GLU
6	R	599	ARG
6	R	600	THR
6	R	614	ARG
6	R	620	GLU
6	R	623	ASP
6	R	625	ASN
6	R	628	SER
6	R	633	LEU
6	R	636	PHE
6	R	642	SER
6	R	643	THR
6	R	648	VAL
6	R	658	LEU
6	R	667	VAL
6	R	669	ASP
6	R	674	GLU
6	R	675	GLU
6	R	679	GLU
6	R	686	THR
6	R	688	TYR
6	R	694	ASP
6	R	705	ILE
6	R	709	LEU
6	R	713	ARG
6	R	714	ASN
6	R	718	GLU
6	R	722	THR

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Mol	Chain	Res	Type
6	R	724	ILE
6	R	754	THR
6	R	770	ASP
6	R	772	LYS
6	R	773	ARG
6	R	777	CYS
6	R	794	SER
6	R	797	LEU
6	R	804	ARG
6	R	810	ASP
6	R	814	GLU
6	R	816	VAL
6	R	817	THR
6	R	818	THR
6	R	821	LEU
6	R	832	LEU
6	R	836	GLN
6	R	843	GLU
6	R	853	LEU
6	R	854	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (177) such sidechains are listed below:

Mol	Chain	Res	Type
1	J	285	GLN
1	C	285	GLN
2	B	204	HIS
2	B	220	GLN
2	B	282	HIS
2	B	306	HIS
2	B	341	HIS
2	B	353	GLN
2	B	367	GLN
2	B	383	HIS
2	B	445	GLN
2	B	449	HIS
2	B	481	GLN
2	B	494	HIS
2	B	550	GLN
2	A	204	HIS
2	A	220	GLN
2	A	282	HIS

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Mol	Chain	Res	Type
2	A	306	HIS
2	A	331	ASN
2	A	336	GLN
2	A	353	GLN
2	A	405	GLN
2	A	439	GLN
2	A	443	GLN
2	A	449	HIS
2	A	476	GLN
2	A	494	HIS
2	A	495	GLN
3	D	204	HIS
3	D	220	GLN
3	D	282	HIS
3	D	306	HIS
2	G	204	HIS
2	G	220	GLN
2	G	282	HIS
2	G	306	HIS
2	G	341	HIS
2	G	352	ASN
2	G	353	GLN
2	G	367	GLN
2	G	383	HIS
2	G	445	GLN
2	G	449	HIS
2	G	481	GLN
2	G	494	HIS
2	G	550	GLN
2	E	204	HIS
2	E	220	GLN
2	E	240	HIS
2	E	282	HIS
2	E	306	HIS
2	E	336	GLN
2	E	353	GLN
2	E	405	GLN
2	E	439	GLN
2	E	443	GLN
2	E	449	HIS
2	E	476	GLN
2	E	494	HIS

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Mol	Chain	Res	Type
2	E	495	GLN
3	K	204	HIS
3	K	220	GLN
3	K	282	HIS
3	K	306	HIS
4	O	341	HIS
4	O	495	GLN
2	P	204	HIS
2	P	220	GLN
2	P	240	HIS
2	P	282	HIS
2	P	306	HIS
2	P	383	HIS
2	P	445	GLN
2	P	452	HIS
2	P	465	GLN
2	P	476	GLN
2	P	550	GLN
4	M	341	HIS
4	M	495	GLN
2	N	204	HIS
2	N	220	GLN
2	N	240	HIS
2	N	282	HIS
2	N	306	HIS
2	N	445	GLN
2	N	452	HIS
2	N	465	GLN
2	N	476	GLN
2	N	537	GLN
2	N	550	GLN
2	H	204	HIS
2	H	220	GLN
2	H	282	HIS
2	H	306	HIS
2	H	341	HIS
2	H	352	ASN
2	H	353	GLN
2	H	367	GLN
2	H	383	HIS
2	H	418	GLN
2	H	445	GLN

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Mol	Chain	Res	Type
2	H	449	HIS
2	H	452	HIS
2	H	480	ASN
2	H	481	GLN
2	H	494	HIS
2	H	550	GLN
2	F	204	HIS
2	F	220	GLN
2	F	282	HIS
2	F	306	HIS
2	F	353	GLN
2	F	405	GLN
2	F	439	GLN
2	F	443	GLN
2	F	449	HIS
2	F	476	GLN
2	F	494	HIS
2	F	495	GLN
3	V	204	HIS
3	V	220	GLN
3	V	282	HIS
3	V	306	HIS
3	L	204	HIS
3	L	220	GLN
3	L	282	HIS
3	L	306	HIS
5	S	10	ASN
6	Q	61	GLN
6	Q	79	HIS
6	Q	83	ASN
6	Q	88	HIS
6	Q	268	HIS
6	Q	283	ASN
6	Q	398	GLN
6	Q	399	HIS
6	Q	404	GLN
6	Q	447	HIS
6	Q	492	GLN
6	Q	511	ASN
6	Q	523	ASN
6	Q	570	HIS
6	Q	625	ASN

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Mol	Chain	Res	Type
6	Q	666	GLN
6	Q	719	ASN
6	Q	749	HIS
6	Q	779	GLN
6	Q	822	ASN
6	Q	829	HIS
6	Q	835	ASN
6	Q	836	GLN
5	T	10	ASN
5	T	120	HIS
6	R	61	GLN
6	R	79	HIS
6	R	83	ASN
6	R	88	HIS
6	R	139	GLN
6	R	186	ASN
6	R	268	HIS
6	R	398	GLN
6	R	399	HIS
6	R	447	HIS
6	R	492	GLN
6	R	511	ASN
6	R	523	ASN
6	R	570	HIS
6	R	629	GLN
6	R	666	GLN
6	R	719	ASN
6	R	749	HIS
6	R	779	GLN
6	R	822	ASN
6	R	829	HIS
6	R	836	GLN
6	R	857	GLN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-0154. These allow visual inspection of the internal detail of the map and identification of artifacts.

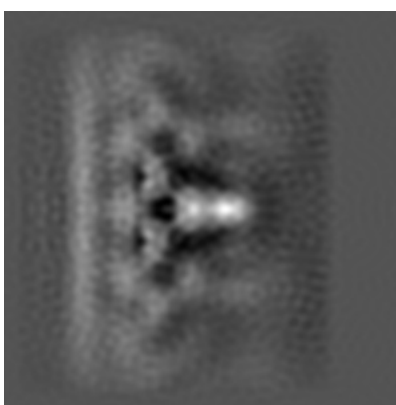
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

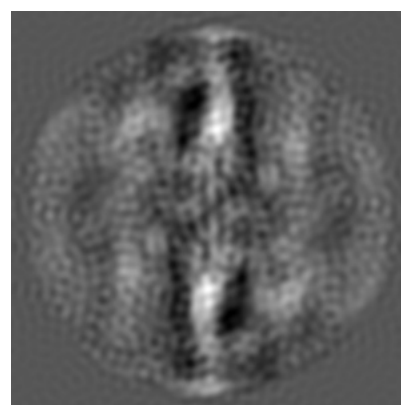
6.1.1 Primary map



X



Y

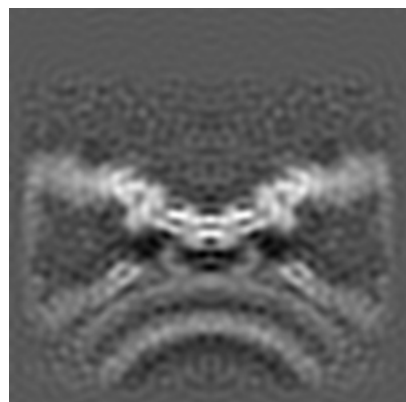


Z

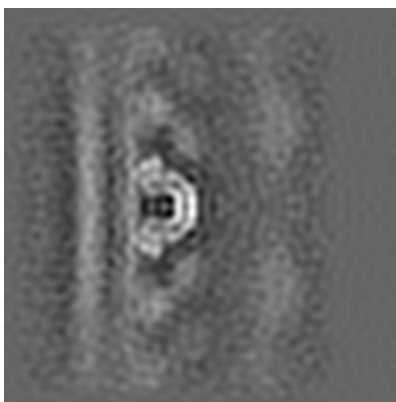
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

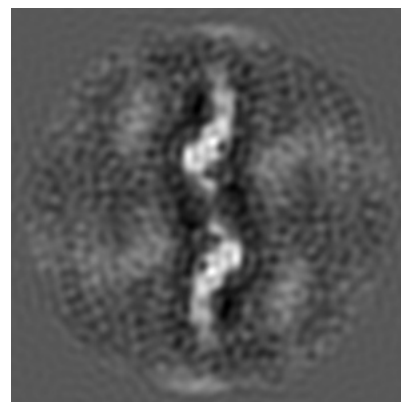
6.2.1 Primary map



X Index: 72



Y Index: 72

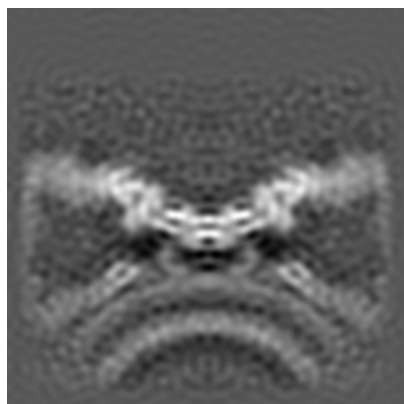


Z Index: 72

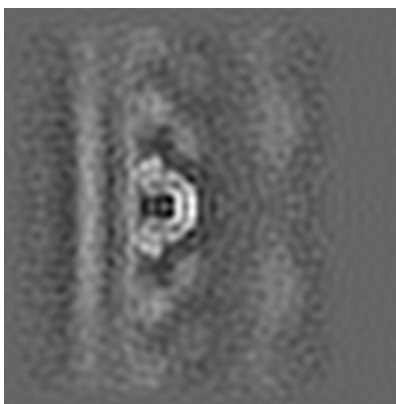
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

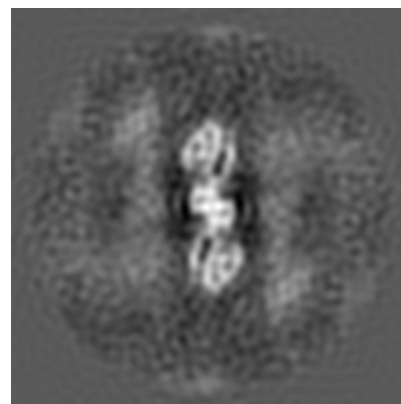
6.3.1 Primary map



X Index: 72



Y Index: 72

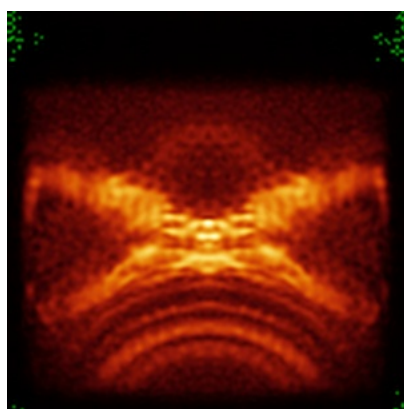


Z Index: 67

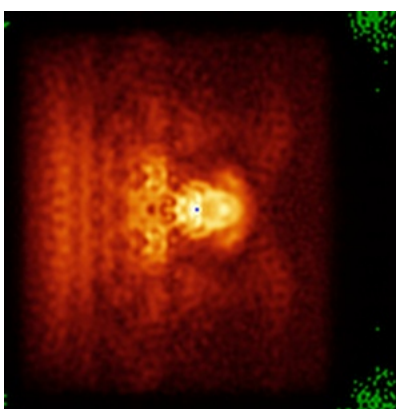
The images above show the largest variance slices of the map in three orthogonal directions.

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

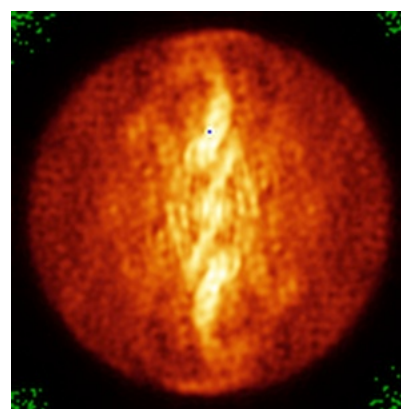
6.4.1 Primary map



X



Y

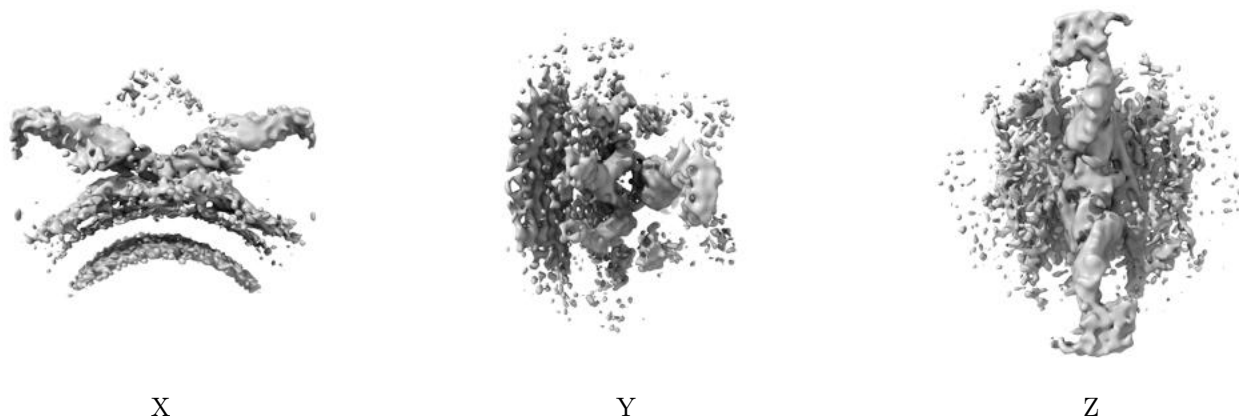


Z

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

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.15. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

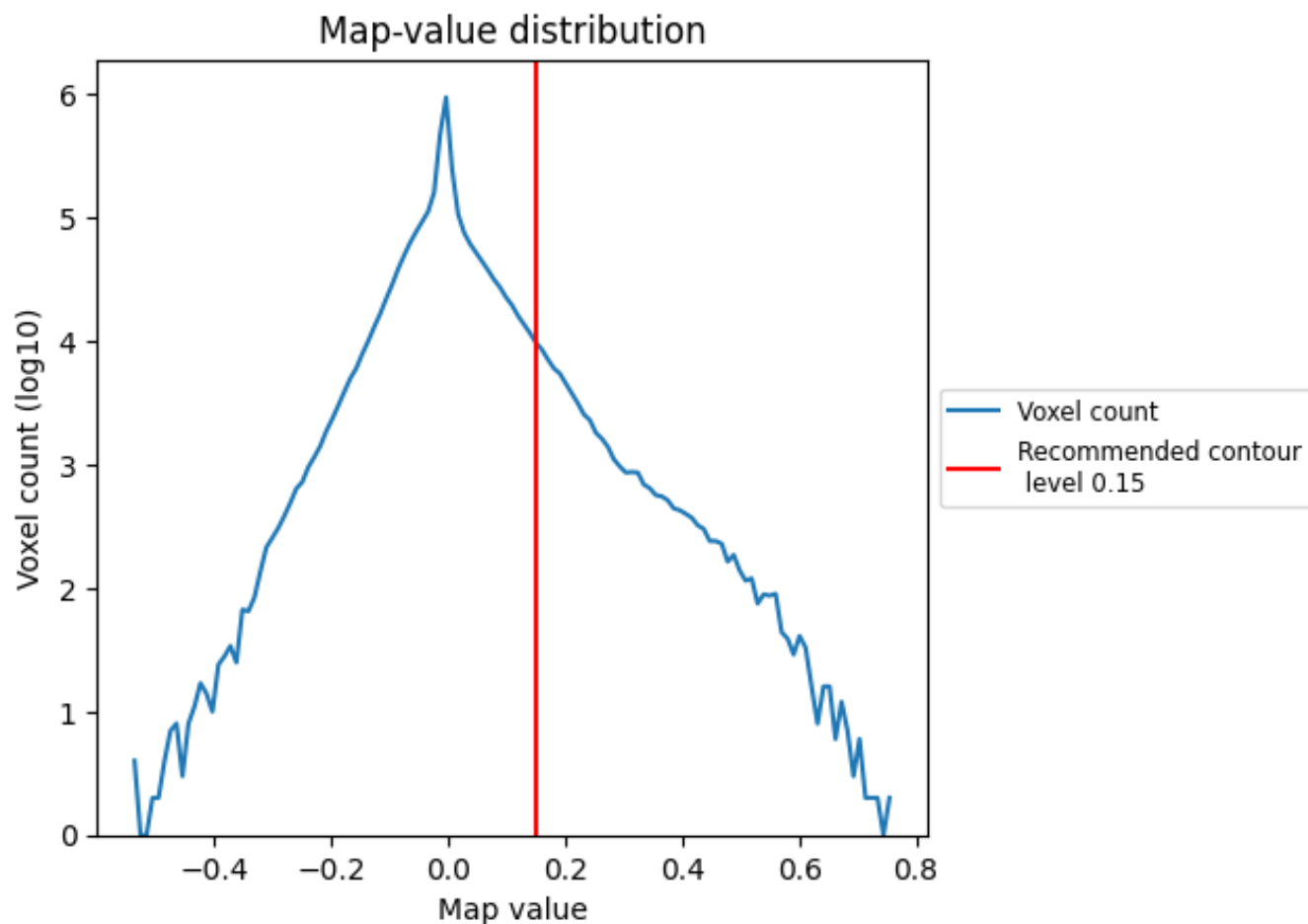
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

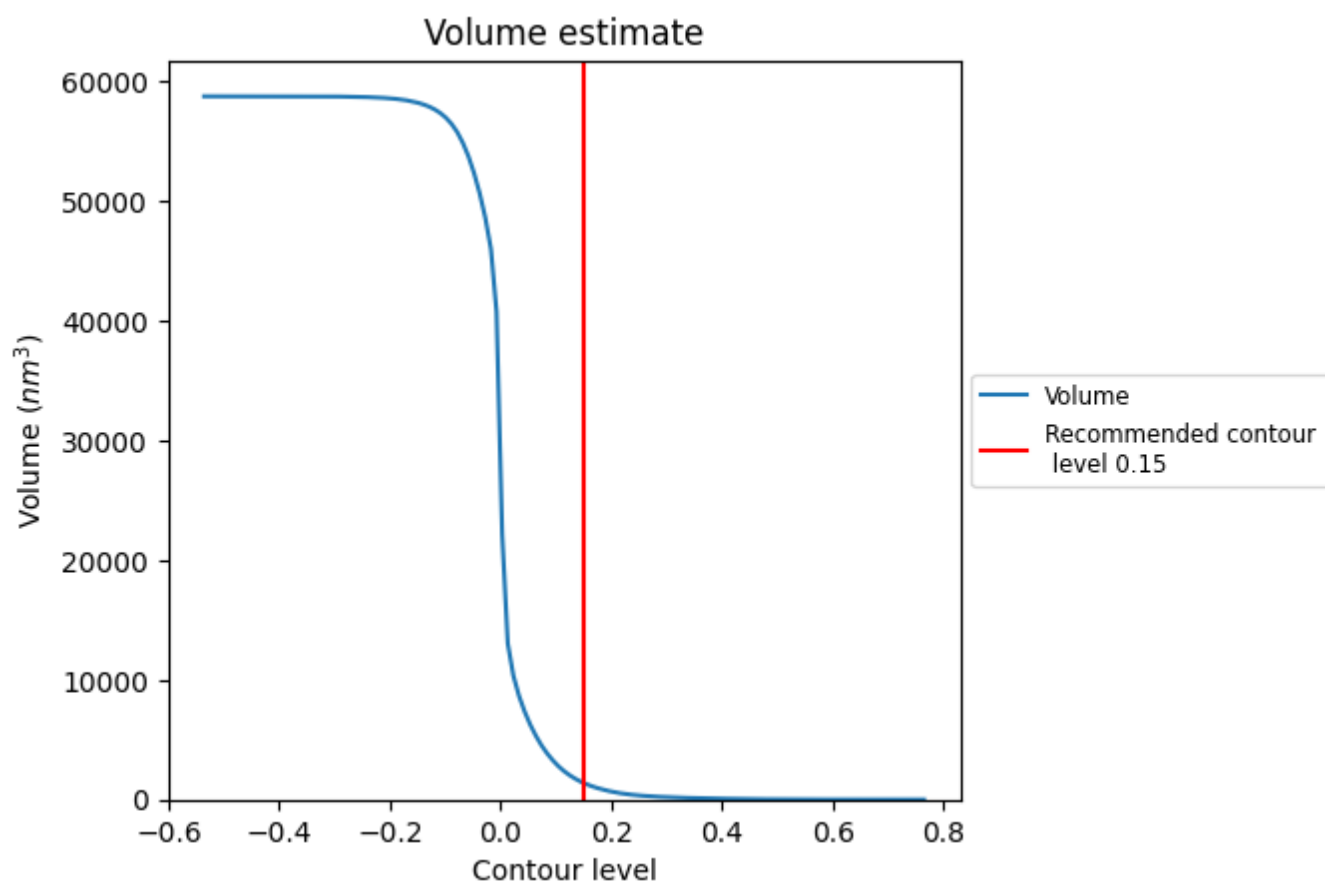
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

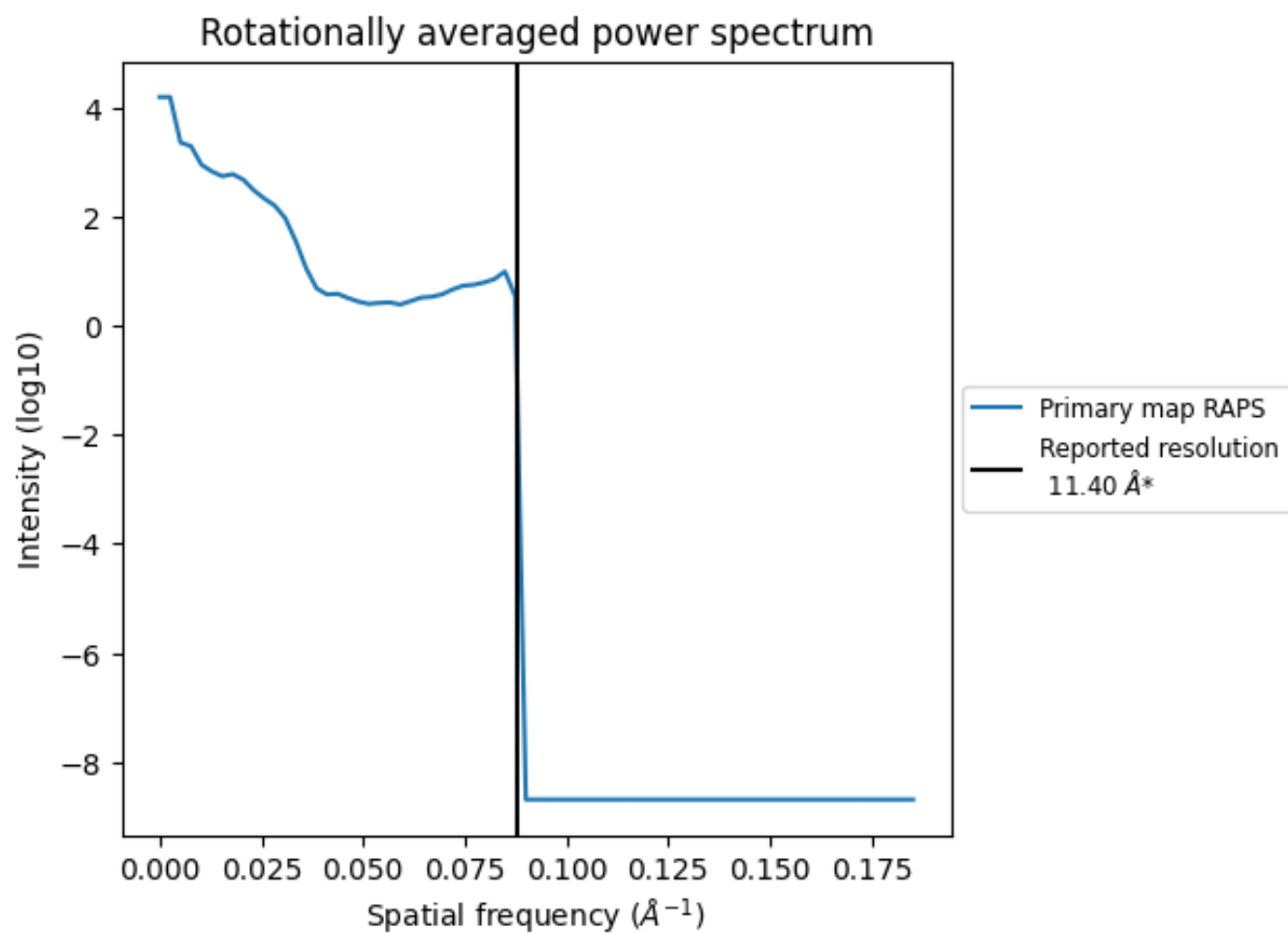
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1393 nm³; this corresponds to an approximate mass of 1259 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum ⓘ



*Reported resolution corresponds to spatial frequency of 0.088 Å⁻¹

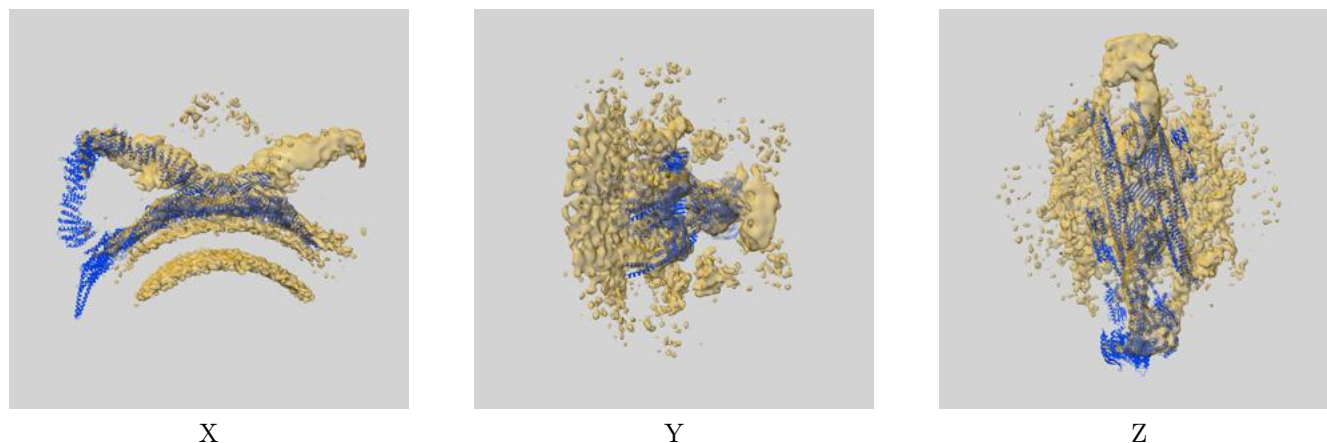
8 Fourier-Shell correlation

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

9 Map-model fit [i](#)

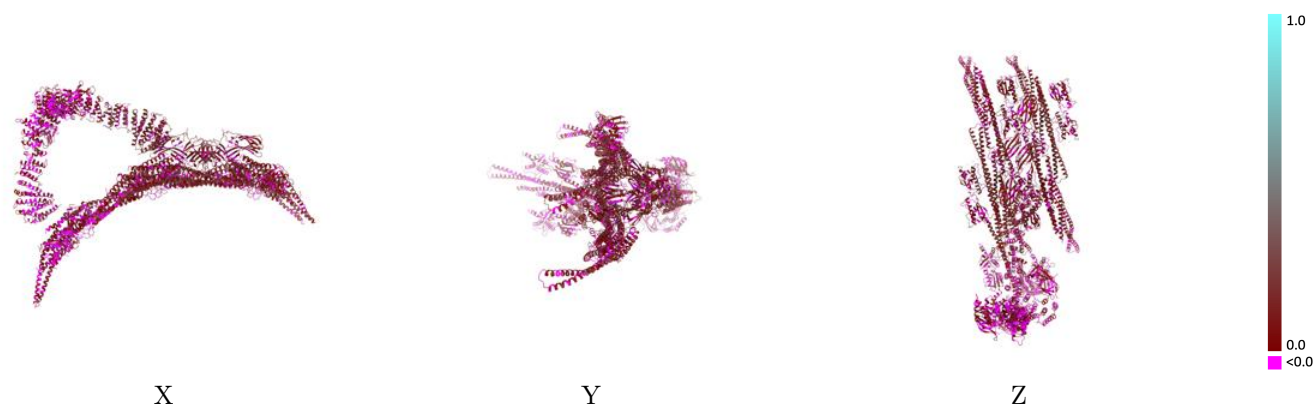
This section contains information regarding the fit between EMDB map EMD-0154 and PDB model 6H7W. Per-residue inclusion information can be found in [section 3](#) on [page 6](#).

9.1 Map-model overlay [i](#)



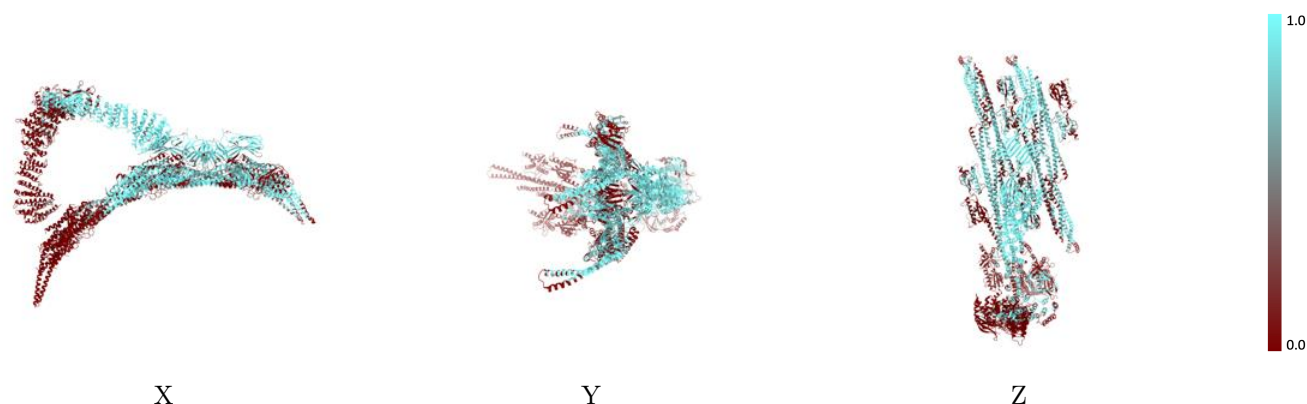
The images above show the 3D surface view of the map at the recommended contour level 0.15 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



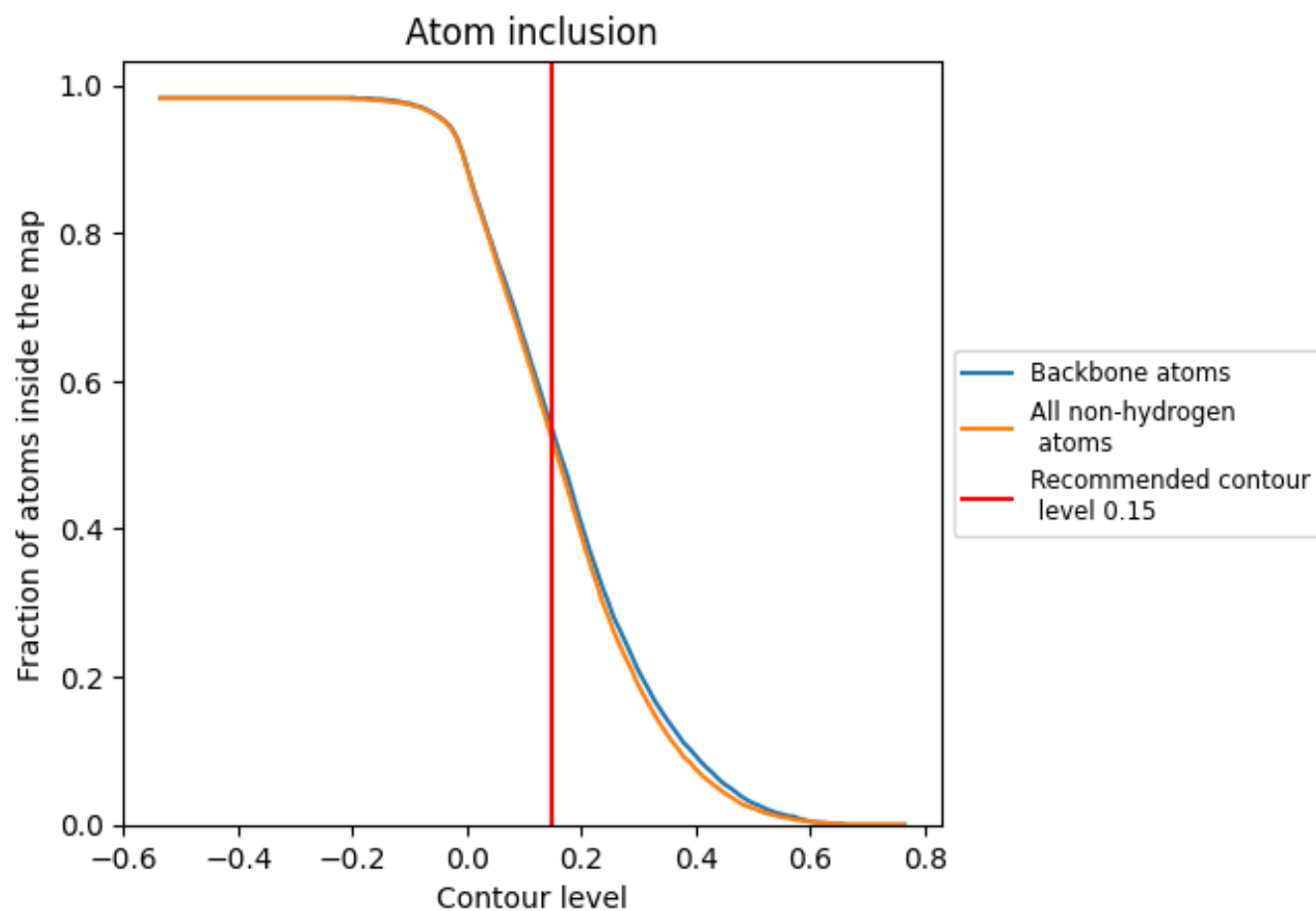
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

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



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.15).

9.4 Atom inclusion [i](#)



At the recommended contour level, 53% of all backbone atoms, 52% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.15) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.5180	 0.0760
A	 0.6860	 0.1290
B	 0.7060	 0.1310
C	 0.8180	 0.0990
D	 0.1320	 0.0330
E	 0.6880	 0.1310
F	 0.0270	 0.0280
G	 0.7050	 0.1280
H	 0.2870	 0.0720
J	 0.8180	 0.1000
K	 0.1320	 0.0320
L	 0.0020	 0.0320
M	 0.6110	 0.0750
N	 0.5210	 0.0980
O	 0.6180	 0.0740
P	 0.5330	 0.0910
Q	 0.8020	 0.0880
R	 0.0560	 0.0120
S	 0.7280	 0.0490
T	 0.1640	 0.0120
V	 0.0000	 -0.0110

