Full wwPDB EM Validation Report

Feb 11, 2024 – 01:19 PM EST

PDB ID	:	3C91
EMDB ID	:	EMD-1733
Title	:	Thermoplasma acidophilum 20S proteasome with an open gate
Authors	:	Rabl, J.; Smith, D.M.; Yu, Y.; Chang, S.C.; Goldberg, A.L.; Cheng, Y.
Deposited on	:	2008-02-14
Resolution	:	6.80 Å(reported)
Based on initial model	:	1PMA

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 (i) 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 (i)) were used in the production of this report:

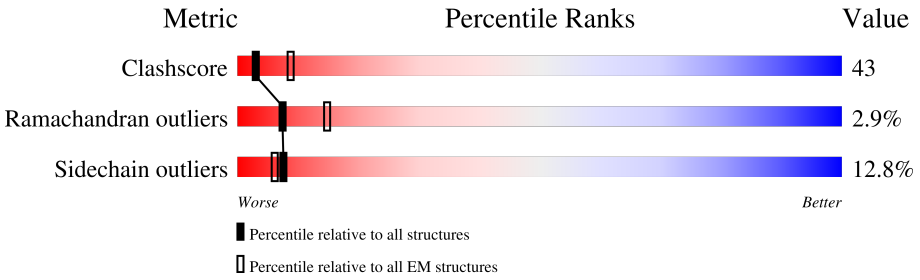
EMDB validation analysis	:	0.0.1.dev70
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 6.80 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

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 <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	233	26% 42% 47% 7% • •
1	B	233	28% 45% 45% 7% • •
1	C	233	27% 43% 45% 8% • •
1	D	233	30% 42% 47% 8% • •
1	E	233	32% 42% 47% 8% • •
1	F	233	35% 42% 47% 7% • •
1	G	233	31% 41% 49% 7% • •
1	O	233	30% 43% 46% 7% • •

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Mol	Chain	Length	Quality of chain
1	P	233	32% 45% 44% 7%
1	Q	233	33% 44% 45% 7%
1	R	233	33% 41% 48% 8%
1	S	233	37% 41% 48% 8%
1	T	233	36% 42% 47% 8%
1	U	233	29% 42% 47% 7%
2	1	203	25% 58% 35% 7%
2	2	203	22% 54% 38% 8%
2	H	203	24% 50% 41% 9%
2	I	203	24% 58% 33% 8%
2	J	203	23% 58% 34% 8%
2	K	203	23% 51% 41% 8%
2	L	203	21% 51% 40% 9%
2	M	203	21% 56% 37% 7%
2	N	203	21% 52% 40% 7%
2	V	203	26% 50% 41% 9%
2	W	203	26% 57% 34% 8%
2	X	203	26% 58% 35% 7%
2	Y	203	25% 49% 43% 8%
2	Z	203	23% 51% 40% 9%

2 Entry composition (i)

There are 2 unique types of molecules in this entry. The entry contains 46578 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called Proteasome subunit alpha.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	227	Total	C	N	O	S	0	0
			1769	1123	299	344	3		
1	B	227	Total	C	N	O	S	0	0
			1769	1123	299	344	3		
1	C	227	Total	C	N	O	S	0	0
			1769	1123	299	344	3		
1	D	227	Total	C	N	O	S	0	0
			1769	1123	299	344	3		
1	E	227	Total	C	N	O	S	0	0
			1769	1123	299	344	3		
1	F	227	Total	C	N	O	S	0	0
			1769	1123	299	344	3		
1	G	227	Total	C	N	O	S	0	0
			1769	1123	299	344	3		
1	O	227	Total	C	N	O	S	0	0
			1769	1123	299	344	3		
1	P	227	Total	C	N	O	S	0	0
			1769	1123	299	344	3		
1	Q	227	Total	C	N	O	S	0	0
			1769	1123	299	344	3		
1	R	227	Total	C	N	O	S	0	0
			1769	1123	299	344	3		
1	S	227	Total	C	N	O	S	0	0
			1769	1123	299	344	3		
1	T	227	Total	C	N	O	S	0	0
			1769	1123	299	344	3		
1	U	227	Total	C	N	O	S	0	0
			1769	1123	299	344	3		

- Molecule 2 is a protein called Proteasome subunit beta.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	H	203	Total	C	N	O	S	0	0
			1558	985	264	298	11		

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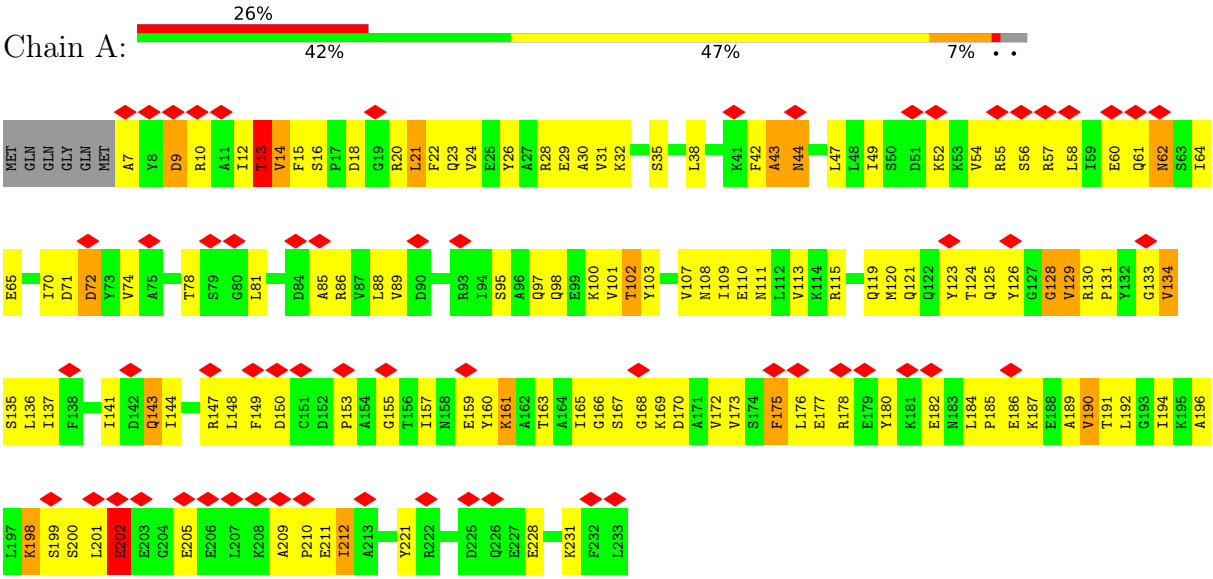
Mol	Chain	Residues	Atoms					AltConf	Trace
2	I	203	Total	C	N	O	S	0	0
			1558	985	264	298	11		
2	J	203	Total	C	N	O	S	0	0
			1558	985	264	298	11		
2	K	203	Total	C	N	O	S	0	0
			1558	985	264	298	11		
2	L	203	Total	C	N	O	S	0	0
			1558	985	264	298	11		
2	M	203	Total	C	N	O	S	0	0
			1558	985	264	298	11		
2	N	203	Total	C	N	O	S	0	0
			1558	985	264	298	11		
2	V	203	Total	C	N	O	S	0	0
			1558	985	264	298	11		
2	W	203	Total	C	N	O	S	0	0
			1558	985	264	298	11		
2	X	203	Total	C	N	O	S	0	0
			1558	985	264	298	11		
2	Y	203	Total	C	N	O	S	0	0
			1558	985	264	298	11		
2	Z	203	Total	C	N	O	S	0	0
			1558	985	264	298	11		
2	1	203	Total	C	N	O	S	0	0
			1558	985	264	298	11		
2	2	203	Total	C	N	O	S	0	0
			1558	985	264	298	11		

3 Residue-property plots (i)

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.

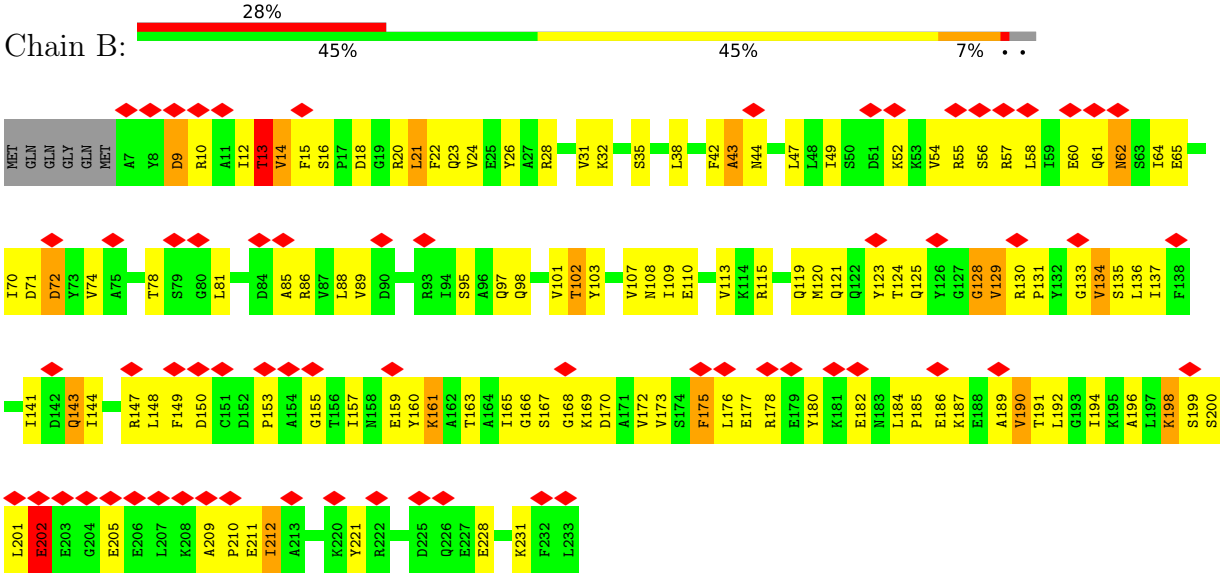
• Molecule 1: Proteasome subunit alpha

Chain A:



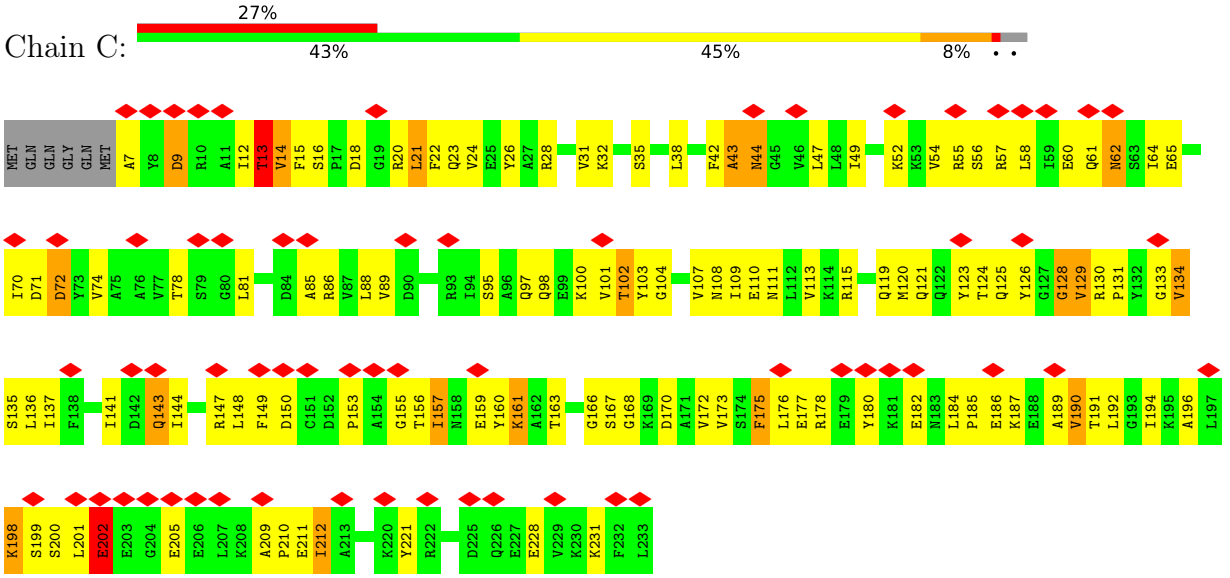
• Molecule 1: Proteasome subunit alpha

Chain B:



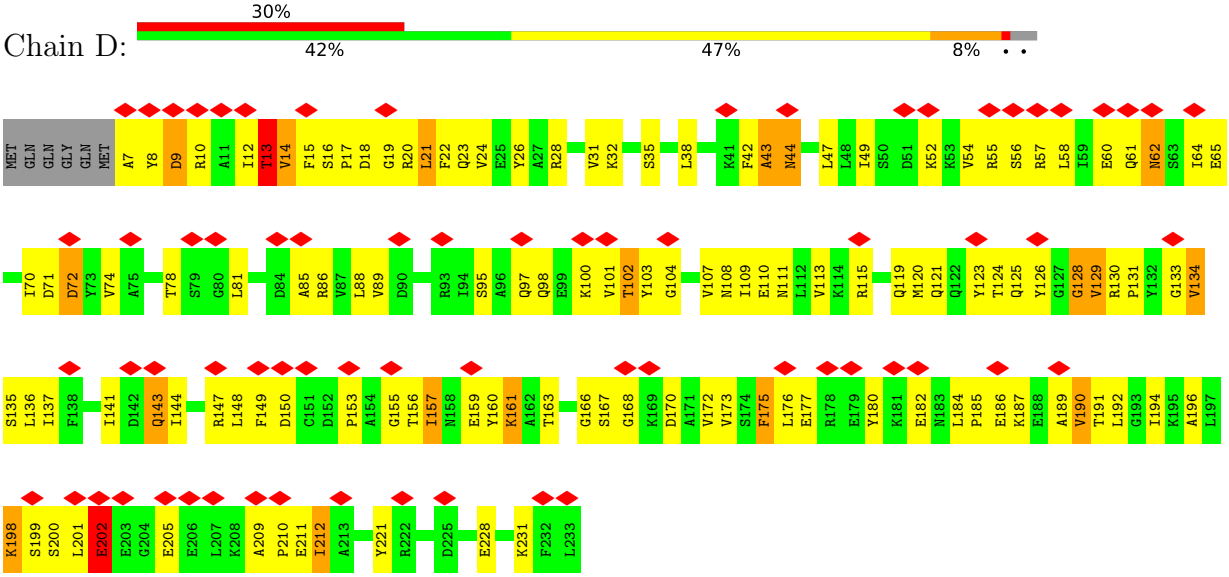
• Molecule 1: Proteasome subunit alpha

Chain C:



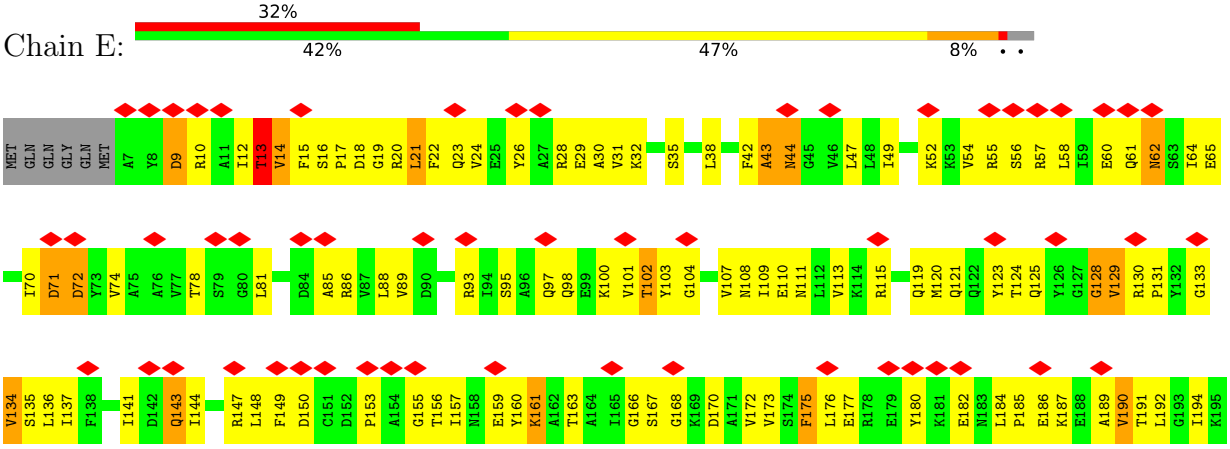
• Molecule 1: Proteasome subunit alpha

Chain D:

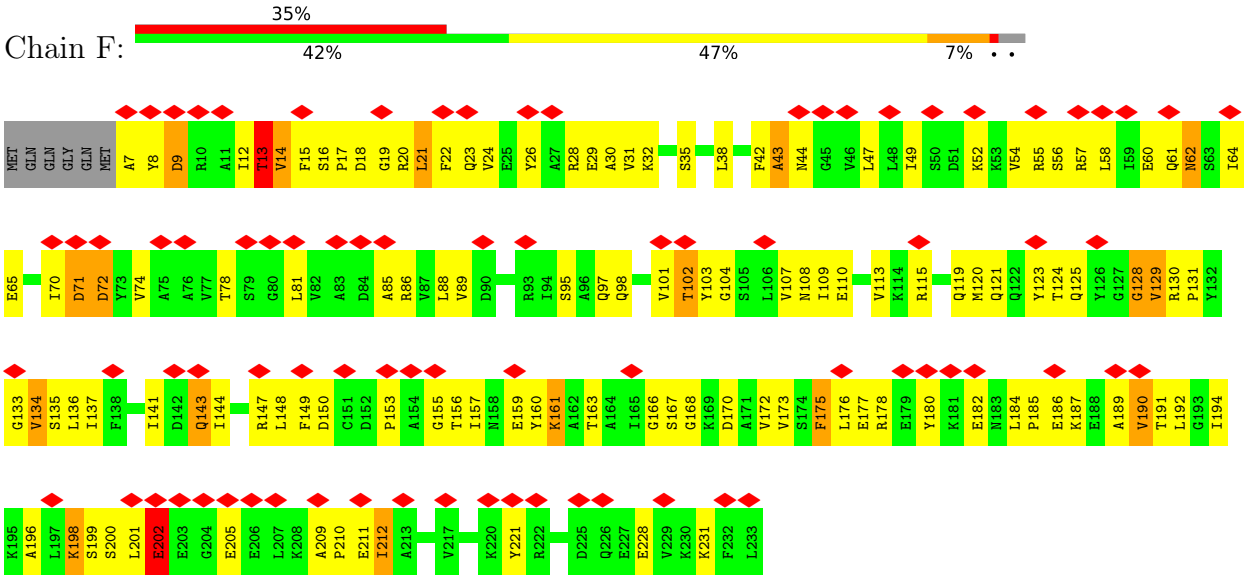


• Molecule 1: Proteasome subunit alpha

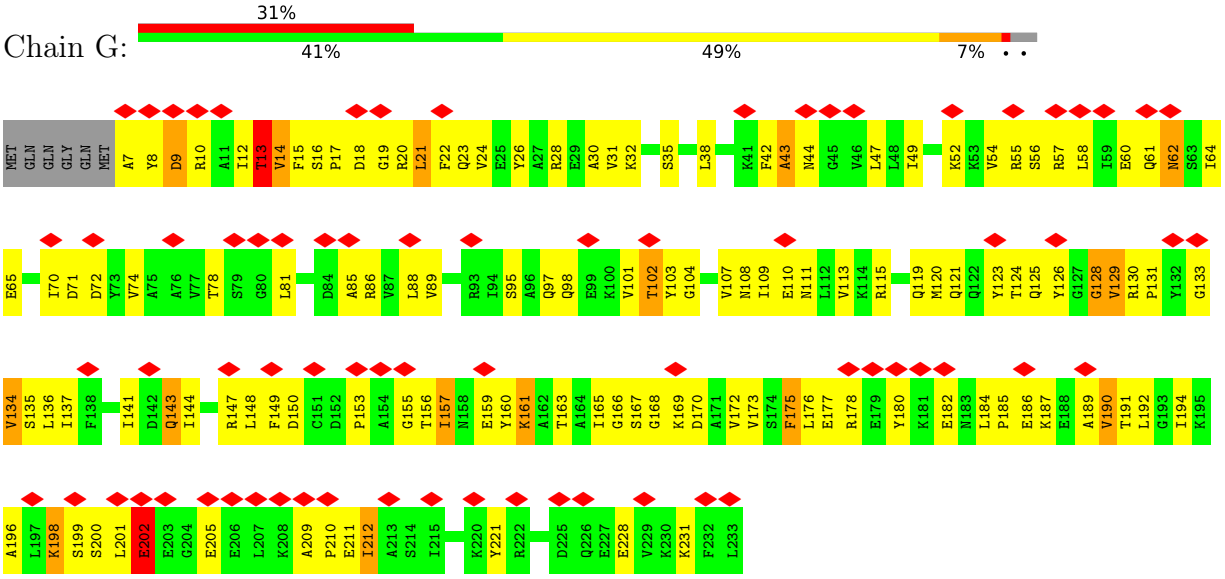
Chain E:



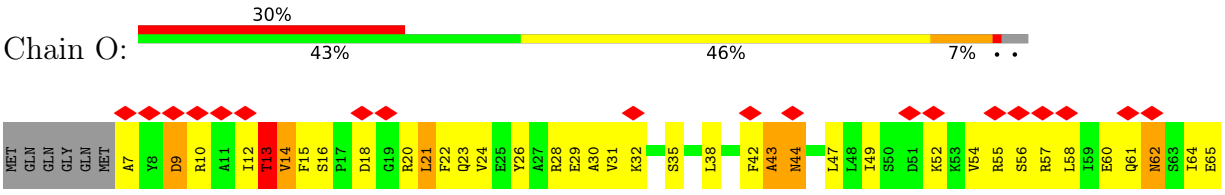
• Molecule 1: Proteasome subunit alpha

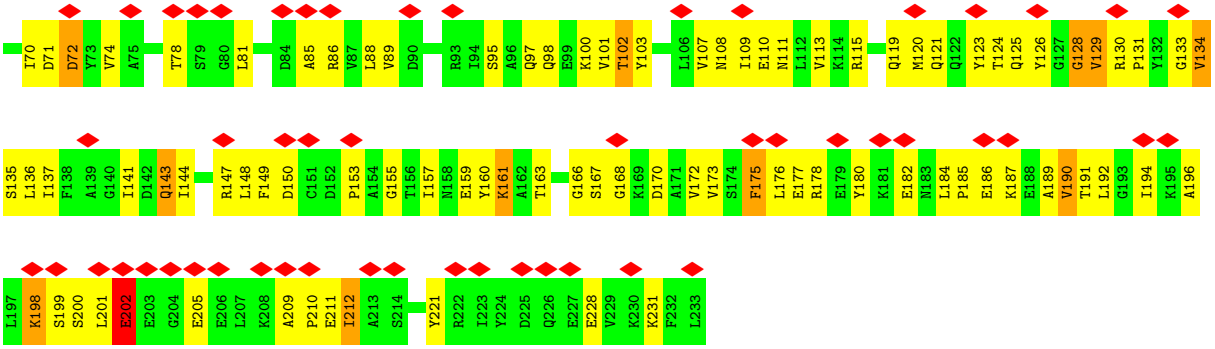


• Molecule 1: Proteasome subunit alpha



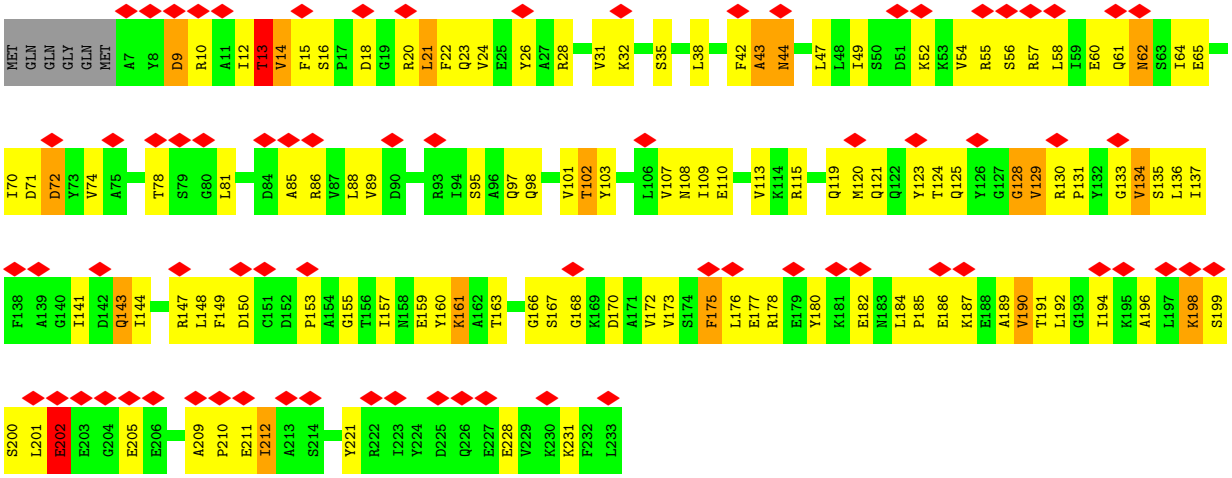
• Molecule 1: Proteasome subunit alpha





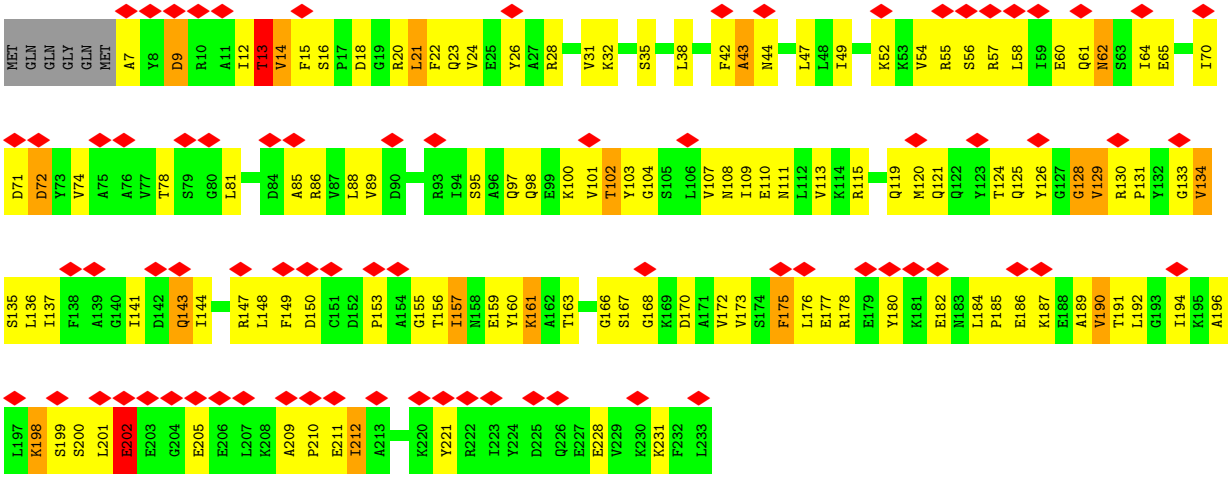
• Molecule 1: Proteasome subunit alpha

Chain P:

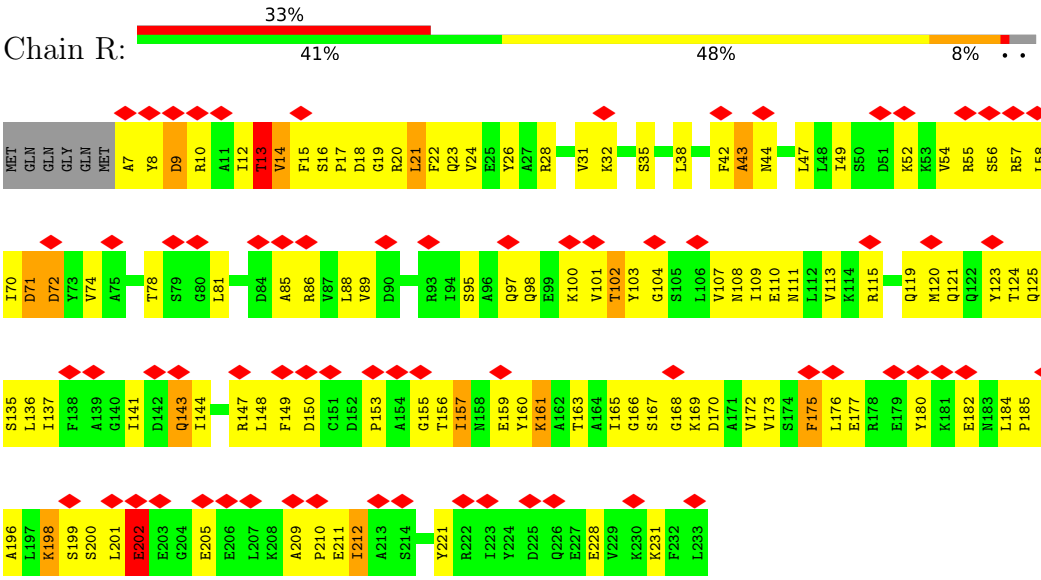


• Molecule 1: Proteasome subunit alpha

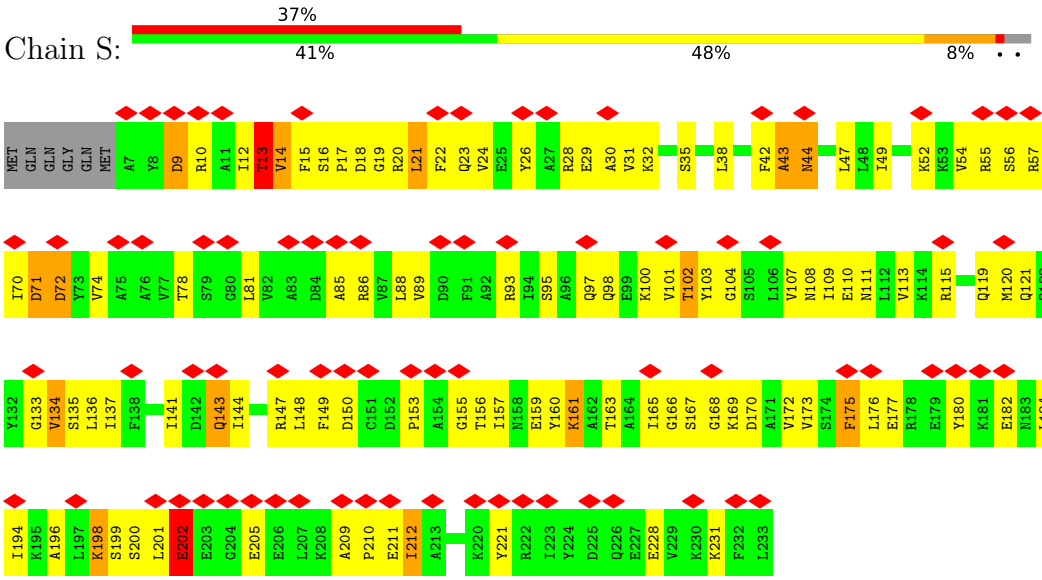
Chain Q:



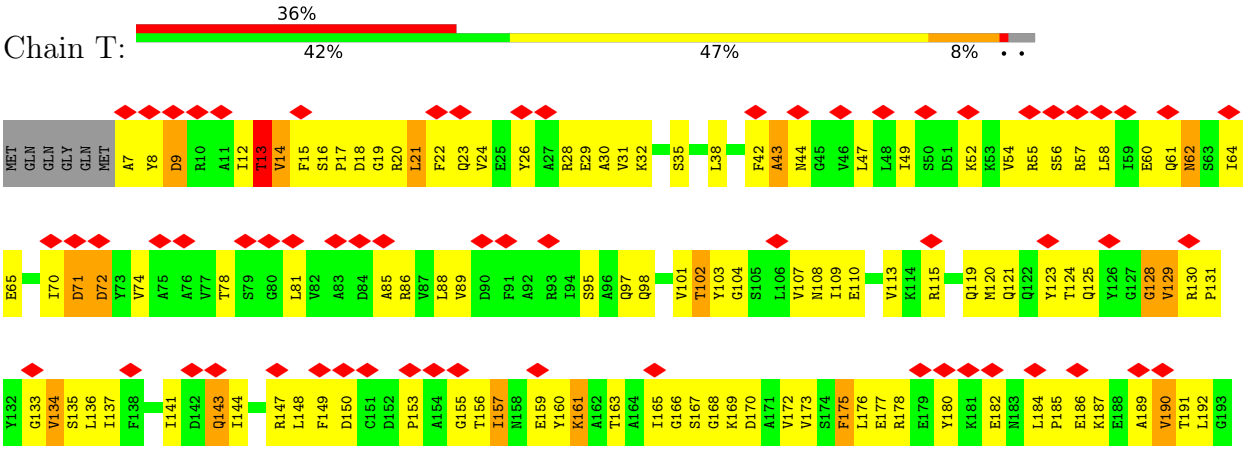
• Molecule 1: Proteasome subunit alpha

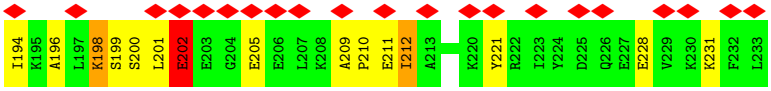


• Molecule 1: Proteasome subunit alpha

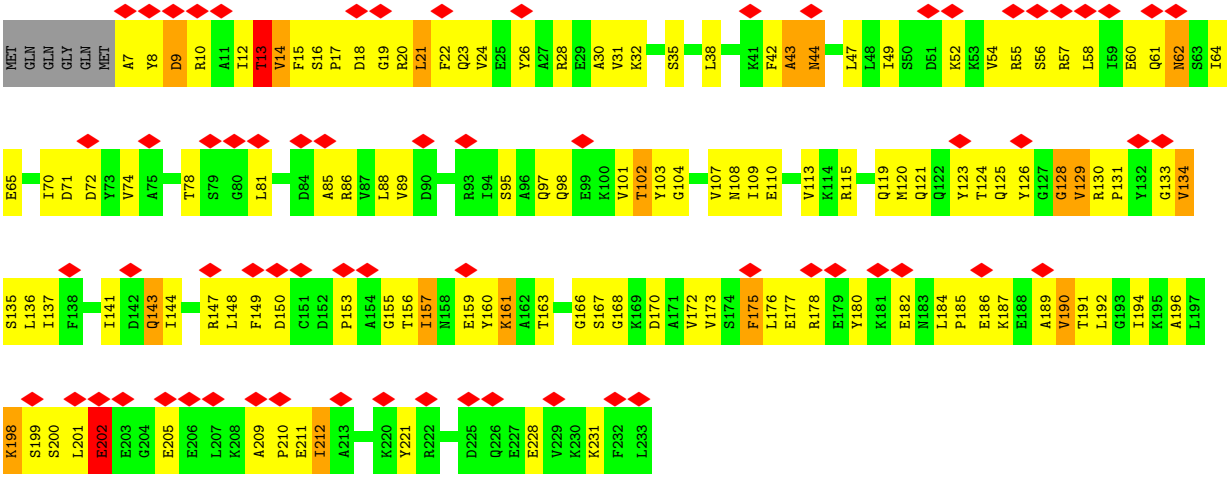


• Molecule 1: Proteasome subunit alpha

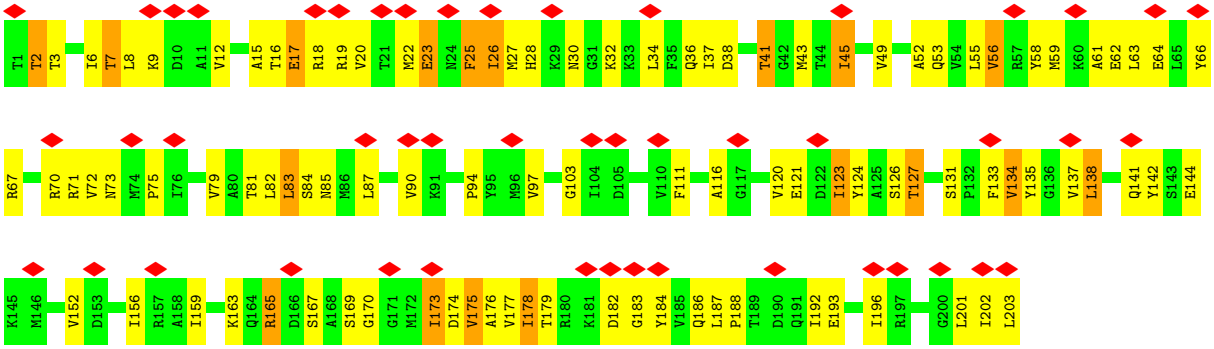




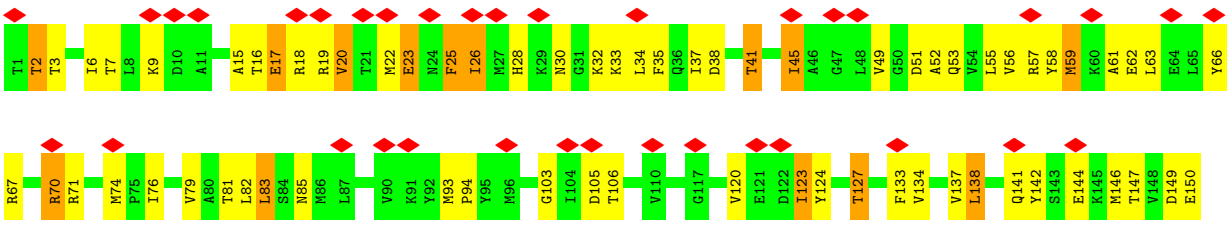
• Molecule 1: Proteasome subunit alpha

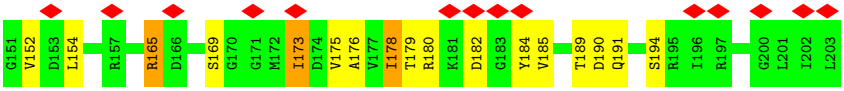


• Molecule 2: Proteasome subunit beta



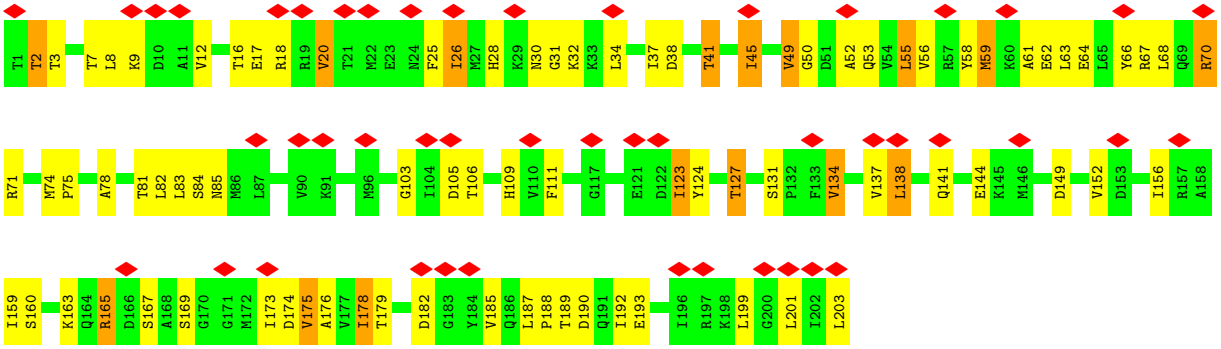
• Molecule 2: Proteasome subunit beta





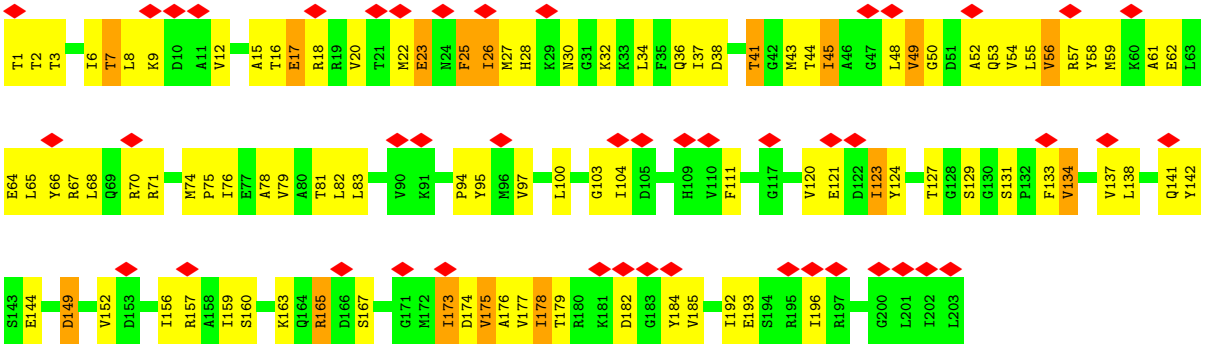
• Molecule 2: Proteasome subunit beta

Chain J:



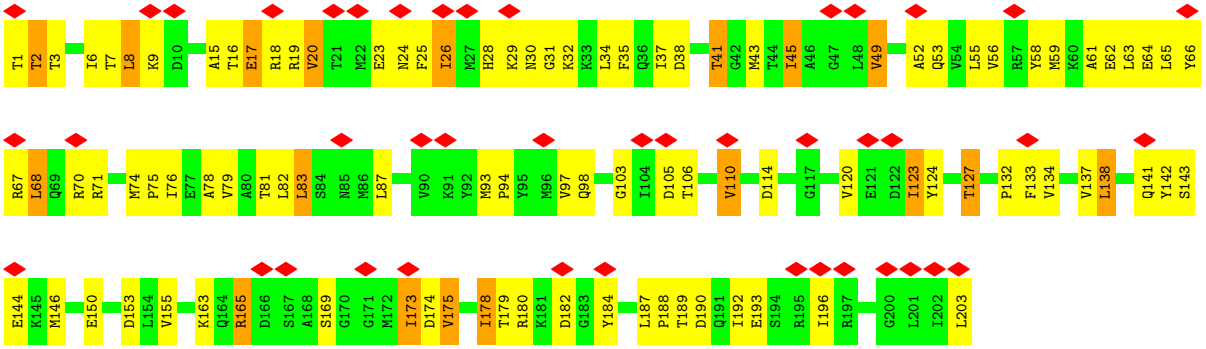
• Molecule 2: Proteasome subunit beta

Chain K:



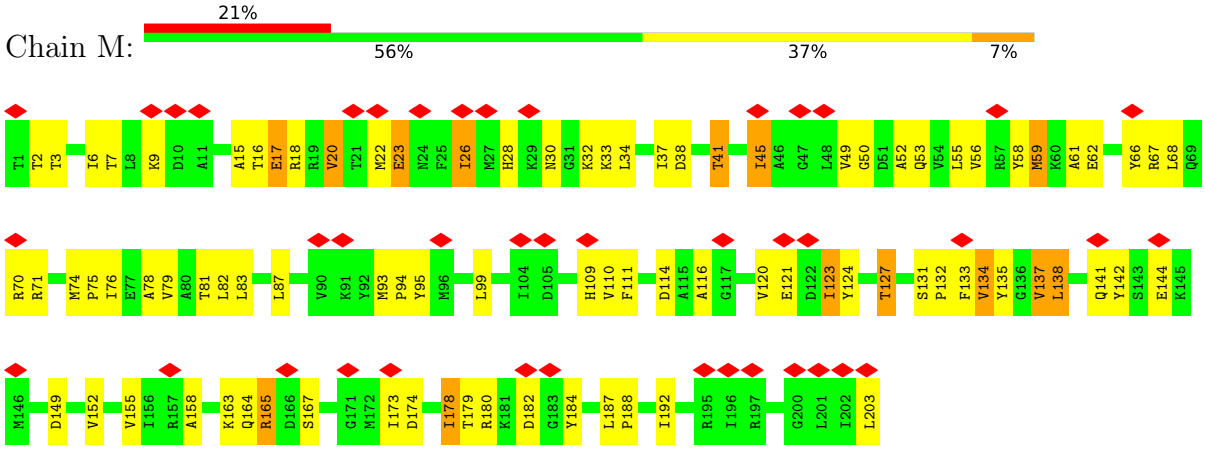
• Molecule 2: Proteasome subunit beta

Chain L:



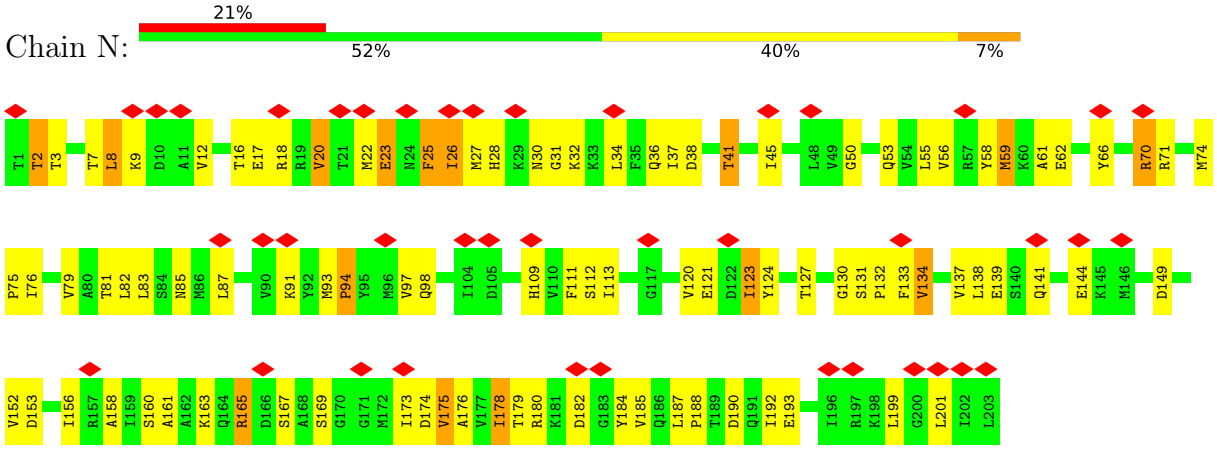
• Molecule 2: Proteasome subunit beta

Chain M:



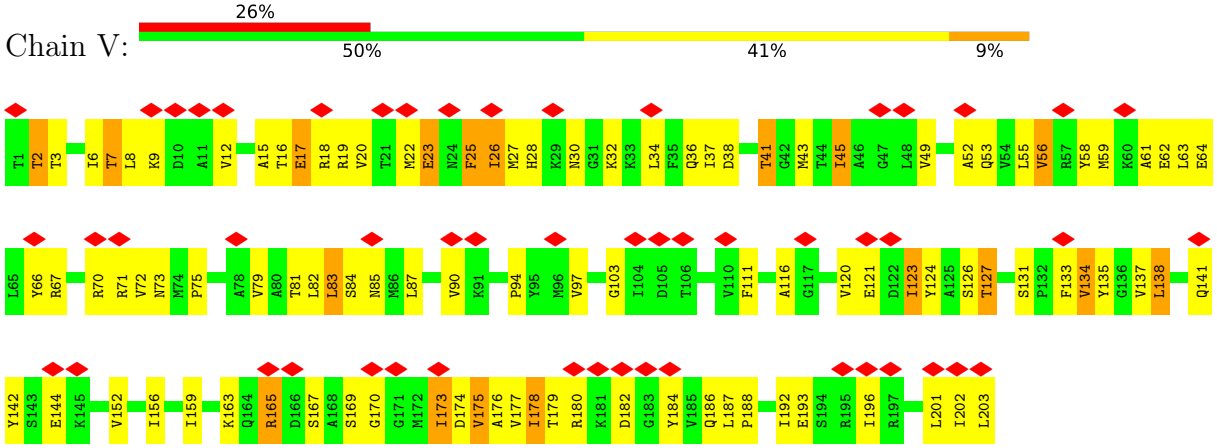
• Molecule 2: Proteasome subunit beta

Chain N:



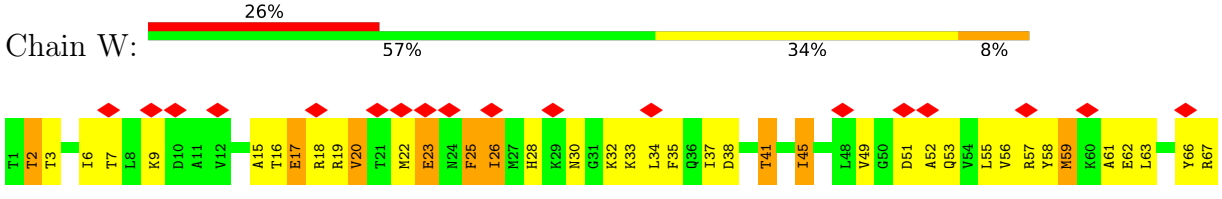
• Molecule 2: Proteasome subunit beta

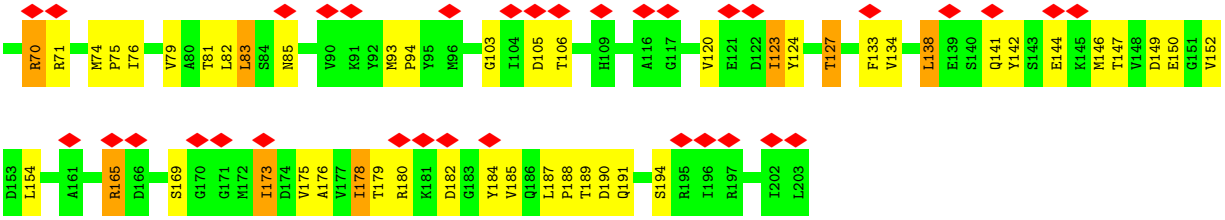
Chain V:



• Molecule 2: Proteasome subunit beta

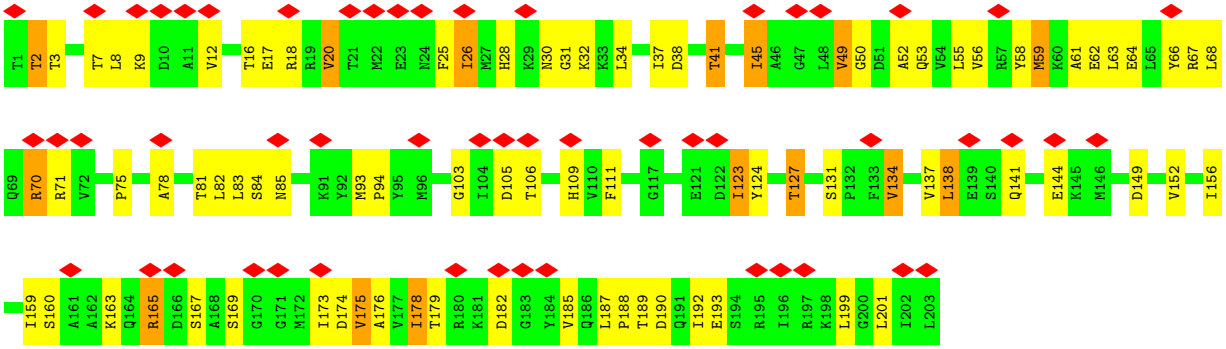
Chain W:





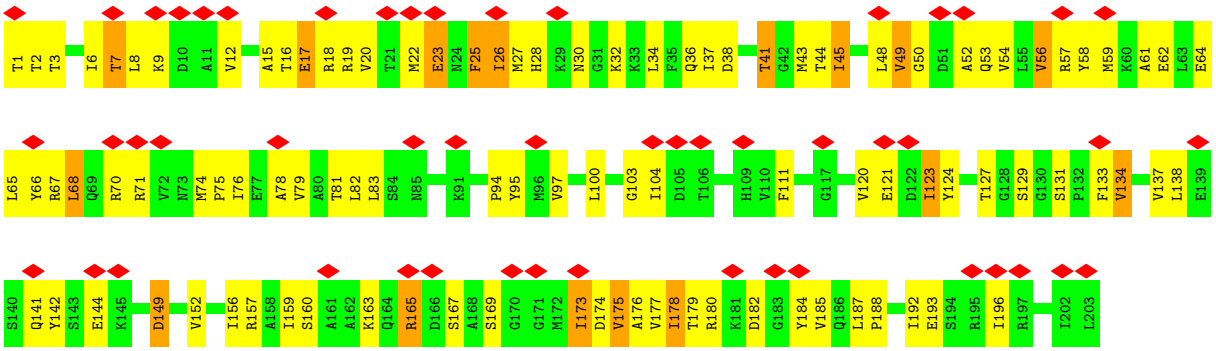
• Molecule 2: Proteasome subunit beta

Chain X:



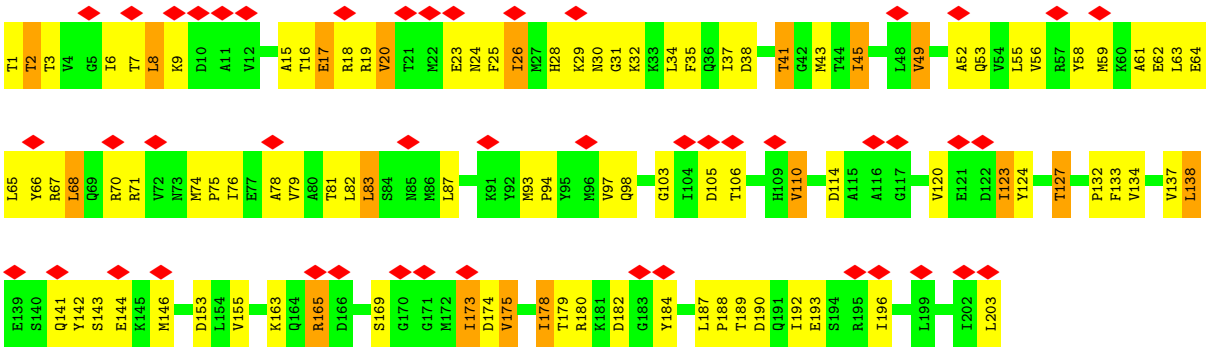
• Molecule 2: Proteasome subunit beta

Chain Y:



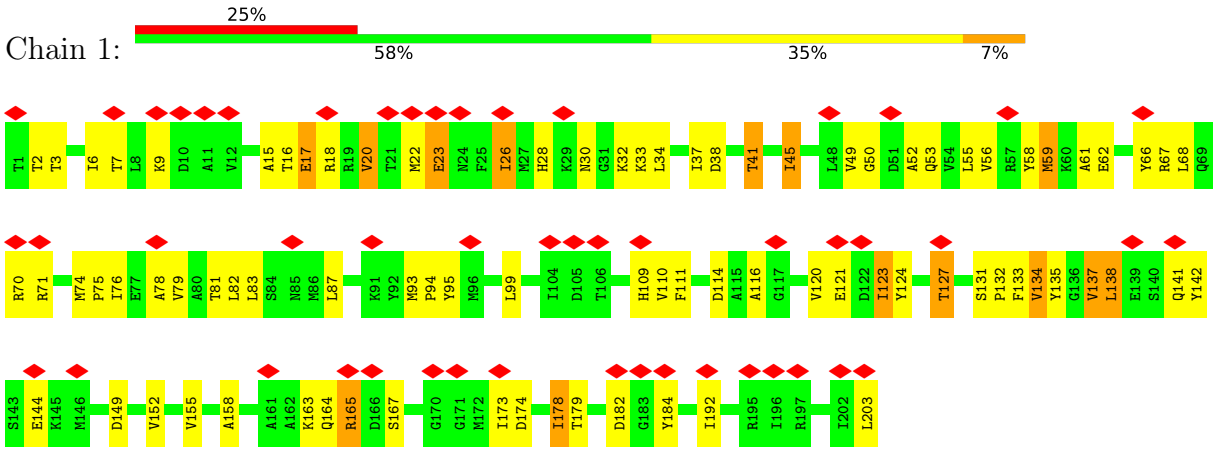
• Molecule 2: Proteasome subunit beta

Chain Z:



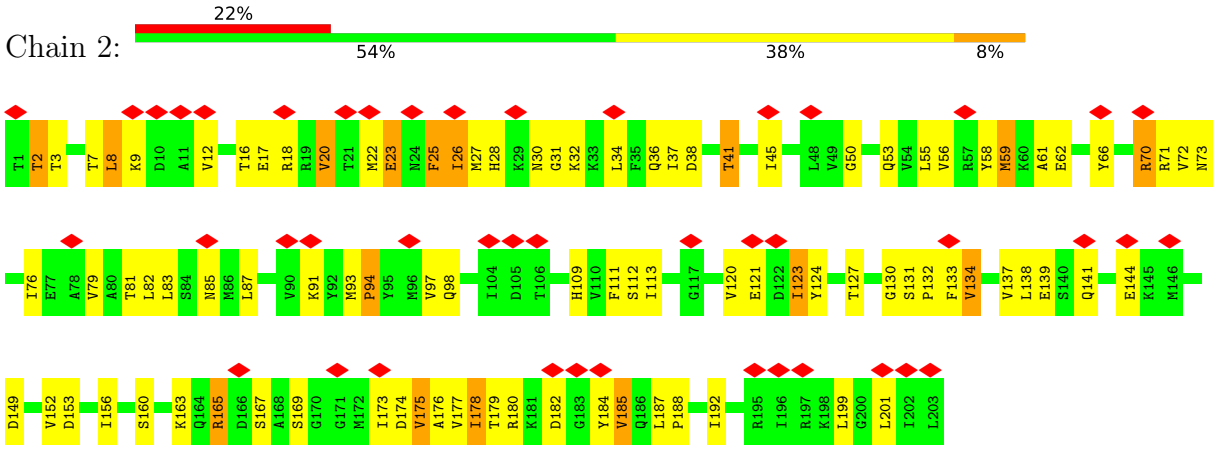
• Molecule 2: Proteasome subunit beta

Chain 1:



• Molecule 2: Proteasome subunit beta

Chain 2:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, D7	Depositor
Number of particles used	44794	Depositor
Resolution determination method	Not provided	
CTF correction method	PHASE AND AMPLITUDE	Depositor
Microscope	FEI TECNAI F20	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/Å^2$)	20.00	Depositor
Minimum defocus (nm)	-1500.00	Depositor
Maximum defocus (nm)	-3500.00	Depositor
Magnification	51159	Depositor
Image detector	KODAK SO-163 FILM	Depositor
Maximum map value	9.018	Depositor
Minimum map value	-4.980	Depositor
Average map value	0.000	Depositor
Map value standard deviation	1.000	Depositor
Recommended contour level	2.5	Depositor
Map size (Å)	197.028, 197.028, 197.028	wwPDB
Map dimensions	144, 144, 144	wwPDB
Map angles (°)	90, 90, 90	wwPDB
Pixel spacing (Å)	1.36825, 1.36825, 1.36825	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
1	A	0.55	0/1793	0.80	3/2416 (0.1%)
1	B	0.55	0/1793	0.80	3/2416 (0.1%)
1	C	0.55	0/1793	0.80	3/2416 (0.1%)
1	D	0.56	0/1793	0.80	3/2416 (0.1%)
1	E	0.55	0/1793	0.80	3/2416 (0.1%)
1	F	0.55	0/1793	0.80	3/2416 (0.1%)
1	G	0.55	0/1793	0.80	3/2416 (0.1%)
1	O	0.55	0/1793	0.80	3/2416 (0.1%)
1	P	0.55	0/1793	0.80	3/2416 (0.1%)
1	Q	0.56	0/1793	0.80	3/2416 (0.1%)
1	R	0.56	0/1793	0.80	3/2416 (0.1%)
1	S	0.55	0/1793	0.80	3/2416 (0.1%)
1	T	0.55	0/1793	0.80	3/2416 (0.1%)
1	U	0.56	0/1793	0.80	3/2416 (0.1%)
2	1	0.55	0/1577	0.75	1/2129 (0.0%)
2	2	0.54	0/1577	0.75	0/2129
2	H	0.57	0/1577	0.76	0/2129
2	I	0.57	0/1577	0.76	0/2129
2	J	0.54	0/1577	0.75	0/2129
2	K	0.55	0/1577	0.77	2/2129 (0.1%)
2	L	0.57	0/1577	0.77	0/2129
2	M	0.55	0/1577	0.75	1/2129 (0.0%)
2	N	0.54	0/1577	0.75	0/2129
2	V	0.57	0/1577	0.76	0/2129
2	W	0.57	0/1577	0.76	0/2129
2	X	0.54	0/1577	0.75	0/2129
2	Y	0.55	0/1577	0.77	2/2129 (0.1%)
2	Z	0.57	0/1577	0.77	0/2129
All	All	0.56	0/47180	0.78	48/63630 (0.1%)

There are no bond length outliers.

All (48) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	E	13	THR	C-N-CA	-11.65	92.58	121.70
1	S	13	THR	C-N-CA	-11.65	92.58	121.70
1	B	13	THR	C-N-CA	-11.63	92.62	121.70
1	P	13	THR	C-N-CA	-11.63	92.62	121.70
1	A	13	THR	C-N-CA	-11.63	92.63	121.70
1	R	13	THR	C-N-CA	-11.63	92.63	121.70
1	G	13	THR	C-N-CA	-11.62	92.65	121.70
1	U	13	THR	C-N-CA	-11.62	92.65	121.70
1	D	13	THR	C-N-CA	-11.62	92.66	121.70
1	C	13	THR	C-N-CA	-11.62	92.66	121.70
1	O	13	THR	C-N-CA	-11.61	92.66	121.70
1	T	13	THR	C-N-CA	-11.61	92.67	121.70
1	Q	13	THR	C-N-CA	-11.61	92.68	121.70
1	F	13	THR	C-N-CA	-11.61	92.69	121.70
1	Q	9	ASP	CB-CG-OD2	7.93	125.44	118.30
1	C	9	ASP	CB-CG-OD2	7.93	125.44	118.30
1	P	9	ASP	CB-CG-OD2	7.90	125.41	118.30
1	O	9	ASP	CB-CG-OD2	7.89	125.40	118.30
1	S	9	ASP	CB-CG-OD2	7.89	125.40	118.30
1	A	9	ASP	CB-CG-OD2	7.88	125.40	118.30
1	F	9	ASP	CB-CG-OD2	7.87	125.38	118.30
1	B	9	ASP	CB-CG-OD2	7.86	125.37	118.30
1	T	9	ASP	CB-CG-OD2	7.86	125.37	118.30
1	E	9	ASP	CB-CG-OD2	7.84	125.36	118.30
1	G	9	ASP	CB-CG-OD2	7.83	125.35	118.30
1	D	9	ASP	CB-CG-OD2	7.83	125.34	118.30
1	U	9	ASP	CB-CG-OD2	7.81	125.33	118.30
1	R	9	ASP	CB-CG-OD2	7.76	125.29	118.30
2	K	95	TYR	N-CA-C	-5.88	95.13	111.00
2	Y	95	TYR	N-CA-C	-5.87	95.14	111.00
1	R	128	GLY	N-CA-C	5.14	125.94	113.10
1	D	128	GLY	N-CA-C	5.12	125.91	113.10
1	B	128	GLY	N-CA-C	5.12	125.91	113.10
1	P	128	GLY	N-CA-C	5.12	125.91	113.10
1	Q	128	GLY	N-CA-C	5.12	125.91	113.10
1	C	128	GLY	N-CA-C	5.12	125.90	113.10
1	O	128	GLY	N-CA-C	5.12	125.89	113.10
1	A	128	GLY	N-CA-C	5.11	125.88	113.10
1	E	128	GLY	N-CA-C	5.11	125.87	113.10
1	G	128	GLY	N-CA-C	5.11	125.86	113.10
1	F	128	GLY	N-CA-C	5.10	125.85	113.10
1	S	128	GLY	N-CA-C	5.10	125.84	113.10
1	T	128	GLY	N-CA-C	5.10	125.84	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	U	128	GLY	N-CA-C	5.09	125.83	113.10
2	1	95	TYR	N-CA-C	-5.06	97.35	111.00
2	M	95	TYR	N-CA-C	-5.04	97.39	111.00
2	K	8	LEU	CA-CB-CG	5.03	126.87	115.30
2	Y	8	LEU	CA-CB-CG	5.02	126.85	115.30

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	1769	0	1799	278	0
1	B	1769	0	1799	263	0
1	C	1769	0	1798	285	0
1	D	1769	0	1799	299	0
1	E	1769	0	1798	308	0
1	F	1769	0	1797	302	0
1	G	1769	0	1799	333	0
1	O	1769	0	1799	281	0
1	P	1769	0	1799	266	0
1	Q	1769	0	1798	280	0
1	R	1769	0	1799	299	0
1	S	1769	0	1798	308	0
1	T	1769	0	1797	306	0
1	U	1769	0	1799	333	0
2	1	1558	0	1609	130	0
2	2	1558	0	1609	123	0
2	H	1558	0	1609	144	0
2	I	1558	0	1609	96	0
2	J	1558	0	1609	109	0
2	K	1558	0	1609	124	0
2	L	1558	0	1609	134	0
2	M	1558	0	1609	131	0
2	N	1558	0	1609	123	0
2	V	1558	0	1609	145	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	W	1558	0	1609	101	0
2	X	1558	0	1609	98	0
2	Y	1558	0	1609	127	0
2	Z	1558	0	1609	130	0
All	All	46578	0	47704	4081	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 43.

All (4081) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:177:GLU:HA	1:D:58:LEU:CG	1.26	1.65
1:T:12:ILE:CD1	1:T:23:GLN:CG	1.74	1.64
1:O:177:GLU:HA	1:P:58:LEU:CD1	1.21	1.64
1:S:12:ILE:CD1	1:S:23:GLN:CG	1.74	1.64
1:R:12:ILE:CD1	1:R:23:GLN:CG	1.74	1.63
1:Q:177:GLU:HB2	1:R:58:LEU:CD2	1.19	1.62
1:A:177:GLU:HA	1:B:58:LEU:CD1	1.21	1.62
1:A:12:ILE:CD1	1:A:23:GLN:CG	1.74	1.62
1:G:12:ILE:CD1	1:G:23:GLN:CG	1.74	1.62
1:D:12:ILE:CG1	1:D:23:GLN:CB	1.78	1.61
1:Q:177:GLU:CB	1:R:58:LEU:CD2	1.76	1.61
1:F:12:ILE:CD1	1:F:23:GLN:CG	1.74	1.61
1:B:12:ILE:CD1	1:B:23:GLN:CG	1.74	1.60
1:C:177:GLU:CB	1:D:58:LEU:CD2	1.76	1.60
1:Q:12:ILE:CD1	1:Q:23:GLN:CG	1.74	1.60
1:Q:177:GLU:HA	1:R:58:LEU:CD1	1.18	1.60
1:E:12:ILE:CG1	1:E:23:GLN:CB	1.78	1.59
1:D:12:ILE:CD1	1:D:23:GLN:CG	1.74	1.59
1:O:12:ILE:CG1	1:O:23:GLN:CB	1.78	1.59
1:G:108:ASN:CB	2:H:70:ARG:HG2	1.28	1.58
1:C:12:ILE:CG1	1:C:23:GLN:CB	1.78	1.57
1:U:12:ILE:CD1	1:U:23:GLN:CG	1.74	1.57
1:R:12:ILE:CD1	1:R:23:GLN:CA	1.83	1.57
1:C:177:GLU:HA	1:D:58:LEU:CD1	1.18	1.57
1:G:12:ILE:CD1	1:G:23:GLN:CA	1.83	1.57
1:F:12:ILE:CB	1:F:23:GLN:HG3	1.11	1.56
1:Q:12:ILE:CG1	1:Q:23:GLN:CB	1.78	1.56
1:Q:177:GLU:HA	1:R:58:LEU:CG	1.26	1.56
1:U:12:ILE:CG1	1:U:23:GLN:CB	1.78	1.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:12:ILE:CB	1:E:23:GLN:HG3	1.11	1.56
1:Q:177:GLU:CA	1:R:58:LEU:HD11	1.32	1.56
1:C:12:ILE:CD1	1:C:23:GLN:CG	1.74	1.56
1:P:12:ILE:CB	1:P:23:GLN:HG3	1.11	1.56
1:P:12:ILE:CD1	1:P:23:GLN:CG	1.74	1.56
1:P:12:ILE:CG1	1:P:23:GLN:CB	1.78	1.56
1:U:12:ILE:CD1	1:U:23:GLN:CA	1.83	1.56
1:B:12:ILE:CD1	1:B:23:GLN:CA	1.83	1.56
1:C:177:GLU:CA	1:D:58:LEU:HD21	1.30	1.56
1:C:177:GLU:HB2	1:D:58:LEU:CD2	1.19	1.56
1:G:12:ILE:CG1	1:G:23:GLN:CB	1.78	1.56
1:G:12:ILE:CB	1:G:23:GLN:HG3	1.11	1.56
1:Q:12:ILE:CB	1:Q:23:GLN:HG3	1.11	1.56
1:T:12:ILE:CB	1:T:23:GLN:HG3	1.11	1.56
1:E:12:ILE:CD1	1:E:23:GLN:CG	1.74	1.55
1:O:12:ILE:CD1	1:O:23:GLN:CG	1.74	1.55
1:C:12:ILE:CD1	1:C:23:GLN:CA	1.83	1.55
1:T:12:ILE:CD1	1:T:23:GLN:CA	1.83	1.55
1:U:108:ASN:CB	2:V:70:ARG:HG2	1.28	1.55
1:F:12:ILE:CG1	1:F:23:GLN:CB	1.78	1.55
1:C:12:ILE:CB	1:C:23:GLN:HG3	1.11	1.54
1:R:12:ILE:CG1	1:R:23:GLN:CB	1.78	1.54
1:R:12:ILE:CB	1:R:23:GLN:HG3	1.11	1.54
1:S:12:ILE:CD1	1:S:23:GLN:CA	1.83	1.54
1:T:12:ILE:CG1	1:T:23:GLN:CB	1.78	1.54
1:U:12:ILE:CB	1:U:23:GLN:HG3	1.11	1.54
1:A:12:ILE:CD1	1:A:23:GLN:CA	1.83	1.54
1:C:177:GLU:CA	1:D:58:LEU:HD11	1.32	1.54
1:B:12:ILE:CB	1:B:23:GLN:HG3	1.11	1.54
1:B:177:GLU:CA	1:C:58:LEU:HD11	1.30	1.54
1:P:177:GLU:CA	1:Q:58:LEU:HD11	1.30	1.54
1:D:12:ILE:HD12	1:D:23:GLN:CA	1.38	1.53
1:O:12:ILE:CB	1:O:23:GLN:HG3	1.11	1.53
1:A:12:ILE:CB	1:A:23:GLN:HG3	1.11	1.53
1:D:12:ILE:CB	1:D:23:GLN:HG3	1.11	1.53
1:O:12:ILE:HD12	1:O:23:GLN:CA	1.38	1.53
1:A:12:ILE:CG1	1:A:23:GLN:CB	1.78	1.52
1:S:12:ILE:CG1	1:S:23:GLN:CB	1.78	1.52
1:B:12:ILE:CG1	1:B:23:GLN:CB	1.78	1.52
1:P:177:GLU:HA	1:Q:58:LEU:CD1	1.06	1.52
1:Q:177:GLU:CA	1:R:58:LEU:HD21	1.30	1.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:12:ILE:HD12	1:F:23:GLN:CA	1.38	1.52
1:S:12:ILE:CB	1:S:23:GLN:HG3	1.11	1.52
1:B:12:ILE:HD12	1:B:23:GLN:CA	1.38	1.51
1:C:12:ILE:CB	1:C:23:GLN:CG	1.88	1.51
1:F:177:GLU:HA	1:G:58:LEU:CD1	1.04	1.51
1:O:12:ILE:CD1	1:O:23:GLN:CA	1.83	1.51
1:R:12:ILE:CB	1:R:23:GLN:CG	1.89	1.51
1:U:12:ILE:CB	1:U:23:GLN:CG	1.89	1.51
1:Q:12:ILE:HD12	1:Q:23:GLN:CA	1.38	1.51
1:B:177:GLU:HA	1:C:58:LEU:CD1	1.06	1.51
1:T:177:GLU:HA	1:U:58:LEU:CD1	1.04	1.50
1:D:12:ILE:CB	1:D:23:GLN:CG	1.88	1.50
1:G:12:ILE:CB	1:G:23:GLN:CG	1.89	1.50
1:E:12:ILE:CD1	1:E:23:GLN:CA	1.83	1.50
1:T:12:ILE:HD12	1:T:23:GLN:CA	1.38	1.50
1:T:12:ILE:CB	1:T:23:GLN:CG	1.89	1.50
1:B:12:ILE:CB	1:B:23:GLN:CG	1.89	1.50
1:P:12:ILE:CD1	1:P:23:GLN:CA	1.83	1.49
1:E:12:ILE:CB	1:E:23:GLN:CG	1.89	1.49
1:P:12:ILE:CB	1:P:23:GLN:CG	1.89	1.49
1:P:12:ILE:HD12	1:P:23:GLN:CA	1.38	1.49
1:B:108:ASN:CB	2:J:70:ARG:HG2	1.38	1.49
1:P:108:ASN:CB	2:X:70:ARG:HG2	1.38	1.48
1:D:12:ILE:CD1	1:D:23:GLN:CA	1.83	1.47
1:R:12:ILE:HD12	1:R:23:GLN:CA	1.38	1.47
1:G:12:ILE:HD12	1:G:23:GLN:CA	1.38	1.47
1:E:12:ILE:HD12	1:E:23:GLN:CA	1.38	1.47
1:O:12:ILE:CB	1:O:23:GLN:CG	1.88	1.47
1:S:12:ILE:CB	1:S:23:GLN:CG	1.89	1.47
1:Q:12:ILE:CD1	1:Q:23:GLN:CA	1.83	1.46
1:A:12:ILE:CB	1:A:23:GLN:CG	1.88	1.46
1:F:12:ILE:CD1	1:F:23:GLN:CA	1.83	1.46
1:F:12:ILE:CB	1:F:23:GLN:CG	1.89	1.46
1:Q:12:ILE:CB	1:Q:23:GLN:CG	1.88	1.45
1:T:177:GLU:N	1:U:58:LEU:HD21	1.26	1.45
1:C:12:ILE:HD12	1:C:23:GLN:CA	1.38	1.45
1:Q:177:GLU:CA	1:R:58:LEU:CD1	1.89	1.45
1:Q:108:ASN:CB	2:Y:70:ARG:HG2	1.46	1.44
1:Q:177:GLU:CA	1:R:58:LEU:CD2	1.88	1.44
1:F:177:GLU:N	1:G:58:LEU:HD21	1.26	1.44
1:U:12:ILE:HD12	1:U:23:GLN:CA	1.38	1.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:177:GLU:CA	1:G:58:LEU:HD11	1.46	1.43
1:A:57:ARG:HH21	1:G:178:ARG:CA	1.30	1.43
1:P:12:ILE:HB	1:P:23:GLN:CG	1.47	1.42
1:U:12:ILE:HB	1:U:23:GLN:CG	1.47	1.42
1:T:177:GLU:CA	1:U:58:LEU:HD11	1.46	1.42
1:C:12:ILE:HB	1:C:23:GLN:CG	1.47	1.42
1:C:108:ASN:CB	2:K:70:ARG:HG2	1.46	1.41
1:E:12:ILE:HB	1:E:23:GLN:CG	1.47	1.41
1:A:12:ILE:HB	1:A:23:GLN:CG	1.47	1.40
1:R:12:ILE:HB	1:R:23:GLN:CG	1.47	1.40
1:G:12:ILE:HB	1:G:23:GLN:CG	1.47	1.40
1:O:57:ARG:HH21	1:U:178:ARG:CA	1.30	1.40
1:S:12:ILE:HB	1:S:23:GLN:CG	1.47	1.40
1:T:12:ILE:HB	1:T:23:GLN:CG	1.47	1.39
1:F:177:GLU:CA	1:G:58:LEU:CD1	1.99	1.39
1:S:12:ILE:HD12	1:S:23:GLN:CA	1.38	1.39
1:T:177:GLU:CA	1:U:58:LEU:CD1	1.98	1.39
1:A:12:ILE:HD12	1:A:23:GLN:CA	1.38	1.38
1:B:12:ILE:HB	1:B:23:GLN:CG	1.47	1.38
1:Q:177:GLU:N	1:R:58:LEU:HD21	1.35	1.38
1:C:177:GLU:N	1:D:58:LEU:HD21	1.35	1.38
1:A:57:ARG:NH2	1:G:178:ARG:CA	1.87	1.38
1:C:177:GLU:CA	1:D:58:LEU:CD2	1.88	1.37
1:A:57:ARG:NE	1:G:177:GLU:O	1.58	1.37
1:F:108:ASN:CB	2:N:70:ARG:HG2	1.55	1.36
1:C:155:GLY:O	1:D:86:ARG:NH2	1.59	1.35
1:A:60:GLU:OE2	1:G:161:LYS:HB2	1.21	1.35
1:C:178:ARG:HA	1:D:57:ARG:NH2	1.42	1.35
1:O:57:ARG:NE	1:U:177:GLU:O	1.58	1.35
1:Q:12:ILE:HB	1:Q:23:GLN:CG	1.47	1.34
1:O:57:ARG:NH2	1:U:178:ARG:CA	1.87	1.34
1:Q:155:GLY:O	1:R:86:ARG:NH2	1.59	1.34
1:O:12:ILE:HB	1:O:23:GLN:CG	1.47	1.34
1:A:177:GLU:CA	1:B:58:LEU:HD11	1.58	1.33
1:O:60:GLU:OE2	1:U:161:LYS:HD2	1.28	1.33
1:T:108:ASN:CB	2:2:70:ARG:HG2	1.55	1.33
1:C:108:ASN:CG	2:K:70:ARG:HG2	1.50	1.32
1:Q:177:GLU:C	1:R:58:LEU:HD11	1.46	1.32
1:O:177:GLU:CA	1:P:58:LEU:HD11	1.58	1.32
1:C:177:GLU:C	1:D:58:LEU:HD11	1.46	1.32
1:F:12:ILE:HB	1:F:23:GLN:CG	1.47	1.32

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:101:VAL:CG2	2:M:58:TYR:CD1	2.14	1.30
1:D:101:VAL:CG2	2:K:58:TYR:HD1	1.45	1.30
1:Q:178:ARG:HA	1:R:57:ARG:NH2	1.42	1.30
1:A:60:GLU:OE2	1:G:161:LYS:HD2	1.28	1.30
1:A:108:ASN:CB	2:I:70:ARG:HG2	1.62	1.29
1:D:12:ILE:HB	1:D:23:GLN:CG	1.47	1.29
1:S:161:LYS:CB	1:T:60:GLU:OE2	1.80	1.29
1:D:101:VAL:CG2	2:K:58:TYR:CD1	2.14	1.29
1:E:161:LYS:CB	1:F:60:GLU:OE2	1.80	1.29
1:O:57:ARG:NH2	1:U:178:ARG:C	1.85	1.29
1:R:101:VAL:CG2	2:Y:58:TYR:CD1	2.14	1.29
1:T:101:VAL:CG2	2:1:58:TYR:CD1	2.14	1.29
1:U:108:ASN:CG	2:V:70:ARG:HG2	1.52	1.29
1:Q:108:ASN:CG	2:Y:70:ARG:HG2	1.50	1.29
1:O:107:VAL:HG11	2:W:66:TYR:OH	1.33	1.29
1:G:108:ASN:CB	2:H:70:ARG:CG	2.09	1.28
1:U:108:ASN:CB	2:V:70:ARG:CG	2.09	1.28
1:C:101:VAL:HG21	2:J:58:TYR:CD1	1.68	1.28
1:R:101:VAL:CG2	2:Y:58:TYR:HD1	1.45	1.28
1:A:57:ARG:NH2	1:G:178:ARG:C	1.85	1.27
1:S:101:VAL:CG2	2:Z:58:TYR:CD1	2.17	1.27
1:A:57:ARG:CZ	1:G:177:GLU:O	1.82	1.27
1:O:108:ASN:CB	2:W:70:ARG:HG2	1.62	1.27
1:O:177:GLU:O	1:P:57:ARG:NH2	1.66	1.27
1:E:101:VAL:CG2	2:L:58:TYR:CD1	2.17	1.27
1:P:107:VAL:HG11	2:X:66:TYR:OH	1.32	1.27
1:G:108:ASN:HB3	2:H:70:ARG:CG	1.65	1.26
1:G:108:ASN:CG	2:H:70:ARG:HG2	1.52	1.26
1:B:9:ASP:HB2	1:B:26:TYR:OH	1.09	1.26
1:Q:101:VAL:HG21	2:X:58:TYR:CD1	1.68	1.26
1:O:60:GLU:OE2	1:U:161:LYS:HB2	1.21	1.26
1:O:86:ARG:NH2	1:U:155:GLY:O	1.68	1.26
1:D:155:GLY:O	1:E:86:ARG:NH2	1.69	1.26
1:U:9:ASP:HB2	1:U:26:TYR:OH	1.09	1.26
1:A:12:ILE:HD13	1:A:23:GLN:CG	1.47	1.25
1:B:107:VAL:HG11	2:J:66:TYR:OH	1.32	1.25
1:C:9:ASP:HB2	1:C:26:TYR:OH	1.09	1.25
1:T:9:ASP:HB2	1:T:26:TYR:OH	1.09	1.25
1:D:177:GLU:OE1	1:E:57:ARG:N	1.68	1.25
1:T:101:VAL:HG21	2:1:58:TYR:CD1	1.72	1.25
1:A:177:GLU:O	1:B:57:ARG:NH2	1.66	1.25

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:12:ILE:HD13	1:C:23:GLN:CG	1.47	1.25
1:D:9:ASP:HB2	1:D:26:TYR:OH	1.09	1.25
1:O:57:ARG:CZ	1:U:177:GLU:O	1.82	1.25
1:S:9:ASP:HB2	1:S:26:TYR:OH	1.09	1.25
1:T:102:THR:O	2:2:85:ASN:OD1	1.53	1.25
1:Q:101:VAL:CG2	2:X:58:TYR:CD1	2.19	1.24
1:A:107:VAL:HG11	2:I:66:TYR:OH	1.33	1.24
1:P:161:LYS:HB2	1:Q:60:GLU:OE2	1.36	1.24
1:A:9:ASP:HB2	1:A:26:TYR:OH	1.09	1.24
1:T:21:LEU:HD11	1:U:130:ARG:CD	1.68	1.24
1:A:102:THR:O	2:I:85:ASN:OD1	1.54	1.24
1:F:102:THR:O	2:N:85:ASN:OD1	1.52	1.24
1:O:9:ASP:HB2	1:O:26:TYR:OH	1.09	1.24
1:S:12:ILE:HD13	1:S:23:GLN:CG	1.48	1.24
1:U:12:ILE:HD13	1:U:23:GLN:CG	1.47	1.24
1:C:101:VAL:CG2	2:J:58:TYR:CD1	2.19	1.23
1:P:177:GLU:OE2	1:Q:56:SER:OG	1.56	1.23
1:Q:9:ASP:HB2	1:Q:26:TYR:OH	1.09	1.23
1:R:177:GLU:OE1	1:S:57:ARG:N	1.68	1.23
1:A:57:ARG:HH21	1:G:178:ARG:N	1.36	1.23
1:E:173:VAL:O	1:F:58:LEU:HD21	1.38	1.23
1:P:9:ASP:HB2	1:P:26:TYR:OH	1.09	1.23
1:P:101:VAL:HG21	2:W:58:TYR:CD1	1.72	1.23
1:B:101:VAL:HG21	2:I:58:TYR:CD1	1.72	1.23
1:A:86:ARG:NH2	1:G:155:GLY:O	1.68	1.23
1:D:161:LYS:CB	1:E:60:GLU:OE2	1.86	1.23
1:F:12:ILE:HD13	1:F:23:GLN:CG	1.47	1.23
1:E:9:ASP:HB2	1:E:26:TYR:OH	1.09	1.23
1:Q:177:GLU:CB	1:R:58:LEU:HD21	1.50	1.23
1:R:12:ILE:HD13	1:R:23:GLN:CG	1.47	1.23
1:R:155:GLY:O	1:S:86:ARG:NH2	1.69	1.23
1:U:107:VAL:HG11	2:V:66:TYR:OH	1.38	1.23
1:O:102:THR:O	2:W:85:ASN:OD1	1.54	1.22
1:C:177:GLU:CA	1:D:58:LEU:CD1	1.89	1.22
1:F:101:VAL:HG21	2:M:58:TYR:CD1	1.72	1.22
1:F:9:ASP:HB2	1:F:26:TYR:OH	1.09	1.22
1:F:21:LEU:HD11	1:G:130:ARG:CD	1.68	1.22
1:G:9:ASP:HB2	1:G:26:TYR:OH	1.09	1.22
1:Q:12:ILE:HD13	1:Q:23:GLN:CG	1.48	1.22
1:R:9:ASP:HB2	1:R:26:TYR:OH	1.09	1.22
1:Q:177:GLU:CB	1:R:58:LEU:HD22	1.47	1.22

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:57:ARG:N	1:G:177:GLU:OE1	1.73	1.22
1:D:161:LYS:HB2	1:E:60:GLU:OE2	1.05	1.22
1:O:57:ARG:HH21	1:U:178:ARG:N	1.36	1.22
1:C:177:GLU:CB	1:D:58:LEU:HD22	1.47	1.21
1:R:161:LYS:CB	1:S:60:GLU:OE2	1.86	1.21
1:C:108:ASN:ND2	2:K:70:ARG:HG2	1.54	1.21
1:F:177:GLU:OE1	1:G:58:LEU:HD13	1.41	1.21
1:O:12:ILE:CG1	1:O:23:GLN:CG	2.11	1.21
1:S:108:ASN:ND2	2:1:70:ARG:HG2	1.55	1.21
1:T:12:ILE:HD13	1:T:23:GLN:CG	1.47	1.21
1:B:161:LYS:HB2	1:C:60:GLU:OE2	1.36	1.20
1:C:177:GLU:CB	1:D:58:LEU:HD21	1.50	1.20
1:T:177:GLU:OE1	1:U:58:LEU:HD13	1.41	1.20
1:U:108:ASN:HB3	2:V:70:ARG:CG	1.65	1.20
1:E:12:ILE:HD13	1:E:23:GLN:CG	1.47	1.20
1:G:102:THR:O	2:H:85:ASN:OD1	1.59	1.20
1:R:101:VAL:HG21	2:Y:58:TYR:CD1	1.73	1.20
1:E:108:ASN:ND2	2:M:70:ARG:HG2	1.55	1.20
1:G:107:VAL:HG11	2:H:66:TYR:OH	1.38	1.20
1:Q:108:ASN:ND2	2:Y:70:ARG:HG2	1.54	1.20
1:D:177:GLU:N	1:E:58:LEU:HD21	1.49	1.20
1:P:12:ILE:CG1	1:P:23:GLN:HG3	1.72	1.20
1:Q:12:ILE:CG1	1:Q:23:GLN:HG3	1.72	1.19
1:R:177:GLU:CD	1:S:57:ARG:H	1.45	1.19
1:F:12:ILE:CG1	1:F:23:GLN:CG	2.10	1.19
1:F:12:ILE:CG1	1:F:23:GLN:HG3	1.72	1.19
1:D:101:VAL:HG21	2:K:58:TYR:CD1	1.73	1.19
1:O:12:ILE:CG1	1:O:23:GLN:HG3	1.72	1.19
1:S:173:VAL:O	1:T:58:LEU:HD21	1.38	1.19
1:P:12:ILE:HD13	1:P:23:GLN:CG	1.48	1.19
1:R:12:ILE:CG1	1:R:23:GLN:HG3	1.72	1.19
1:A:177:GLU:N	1:B:58:LEU:HD21	1.58	1.19
1:F:177:GLU:HA	1:G:58:LEU:CG	1.72	1.19
1:E:101:VAL:HG21	2:L:58:TYR:CD1	1.79	1.18
1:S:12:ILE:CG1	1:S:23:GLN:HG3	1.72	1.18
1:A:58:LEU:HD21	1:G:177:GLU:N	1.35	1.18
1:C:108:ASN:CB	2:K:70:ARG:CG	2.20	1.18
1:Q:12:ILE:CG1	1:Q:23:GLN:CG	2.11	1.18
1:Q:108:ASN:CB	2:Y:70:ARG:CG	2.20	1.18
1:G:12:ILE:CG1	1:G:23:GLN:HG3	1.72	1.18
1:T:177:GLU:HA	1:U:58:LEU:CG	1.72	1.18

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:57:ARG:N	1:U:177:GLU:OE1	1.73	1.18
1:S:173:VAL:O	1:T:58:LEU:CD2	1.92	1.18
1:A:12:ILE:CG1	1:A:23:GLN:HG3	1.72	1.18
1:D:177:GLU:CD	1:E:57:ARG:H	1.45	1.18
1:R:161:LYS:HB2	1:S:60:GLU:OE2	1.05	1.18
1:A:177:GLU:CA	1:B:58:LEU:CD1	2.18	1.17
1:C:12:ILE:CG1	1:C:23:GLN:HG3	1.72	1.17
1:T:12:ILE:CG1	1:T:23:GLN:CG	2.11	1.17
1:B:177:GLU:OE2	1:C:56:SER:OG	1.56	1.17
1:T:155:GLY:O	1:U:86:ARG:NH2	1.76	1.17
1:U:12:ILE:CG1	1:U:23:GLN:HG3	1.72	1.17
1:E:173:VAL:O	1:F:58:LEU:CD2	1.92	1.17
1:O:58:LEU:HD21	1:U:177:GLU:N	1.35	1.17
1:S:101:VAL:HG21	2:Z:58:TYR:CD1	1.79	1.17
1:F:155:GLY:O	1:G:86:ARG:NH2	1.76	1.17
1:C:108:ASN:HB3	2:K:70:ARG:HD3	1.26	1.16
1:U:102:THR:O	2:V:85:ASN:OD1	1.59	1.16
1:A:12:ILE:CG1	1:A:23:GLN:CG	2.11	1.16
1:O:177:GLU:CA	1:P:58:LEU:CD1	2.18	1.16
1:A:60:GLU:OE2	1:G:161:LYS:CB	1.92	1.16
1:A:21:LEU:HD11	1:B:130:ARG:HD2	1.27	1.16
1:O:60:GLU:OE2	1:U:161:LYS:CB	1.92	1.16
1:O:177:GLU:N	1:P:58:LEU:HD21	1.58	1.16
1:F:177:GLU:CA	1:G:58:LEU:CD2	2.24	1.16
1:D:12:ILE:HD13	1:D:23:GLN:CG	1.47	1.15
1:B:12:ILE:CG1	1:B:23:GLN:HG3	1.72	1.15
1:S:12:ILE:CG1	1:S:23:GLN:CG	2.10	1.15
1:T:177:GLU:CA	1:U:58:LEU:CD2	2.24	1.15
1:B:178:ARG:CA	1:C:57:ARG:NH2	2.11	1.14
1:D:124:THR:HG22	1:E:130:ARG:HH21	1.05	1.14
1:B:177:GLU:CA	1:C:58:LEU:CD1	2.01	1.14
1:P:12:ILE:CG1	1:P:23:GLN:HB2	1.59	1.14
1:P:101:VAL:CG2	2:W:58:TYR:CD1	2.31	1.14
1:U:108:ASN:HB3	2:V:70:ARG:HG2	1.17	1.14
1:A:177:GLU:O	1:B:57:ARG:CZ	1.95	1.14
1:G:101:VAL:HG21	2:N:58:TYR:CD1	1.83	1.14
1:T:12:ILE:CG1	1:T:23:GLN:HG3	1.72	1.14
1:O:12:ILE:HD13	1:O:23:GLN:CG	1.47	1.13
1:O:177:GLU:O	1:P:57:ARG:CZ	1.95	1.13
1:P:178:ARG:CA	1:Q:57:ARG:NH2	2.11	1.13
1:T:161:LYS:HD2	1:U:60:GLU:OE2	1.45	1.13

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:12:ILE:HD13	1:B:23:GLN:CG	1.47	1.13
1:F:161:LYS:HD2	1:G:60:GLU:OE2	1.45	1.13
1:Q:101:VAL:CG2	2:X:58:TYR:CE1	2.31	1.13
1:S:177:GLU:OE1	1:T:57:ARG:HB2	1.48	1.13
1:T:177:GLU:CA	1:U:58:LEU:HD21	1.78	1.13
1:A:57:ARG:HH22	1:G:178:ARG:C	1.48	1.13
1:E:177:GLU:OE1	1:F:57:ARG:CB	1.97	1.13
1:E:177:GLU:CD	1:F:57:ARG:H	1.52	1.13
1:G:12:ILE:HD13	1:G:23:GLN:CG	1.47	1.13
1:P:108:ASN:HB3	2:X:70:ARG:HG2	1.24	1.13
1:E:155:GLY:O	1:F:86:ARG:NH2	1.82	1.13
1:E:177:GLU:OE1	1:F:57:ARG:HB2	1.48	1.13
1:P:108:ASN:HB3	2:X:70:ARG:CG	1.79	1.13
1:U:107:VAL:CG1	2:V:66:TYR:OH	1.96	1.13
1:B:101:VAL:CG2	2:I:58:TYR:CD1	2.31	1.13
1:G:107:VAL:CG1	2:H:66:TYR:OH	1.96	1.12
1:P:108:ASN:CB	2:X:70:ARG:CG	2.27	1.12
1:Q:21:LEU:HD11	1:R:130:ARG:HD2	1.14	1.12
1:R:177:GLU:N	1:S:58:LEU:HD21	1.49	1.13
1:T:101:VAL:CG2	2:1:58:TYR:CE1	2.32	1.12
1:T:108:ASN:CB	2:2:70:ARG:CG	2.28	1.12
1:C:101:VAL:CG2	2:J:58:TYR:CE1	2.31	1.12
1:D:12:ILE:CG1	1:D:23:GLN:HB2	1.59	1.12
1:F:101:VAL:CG2	2:M:58:TYR:CE1	2.32	1.12
1:F:177:GLU:HB2	1:G:58:LEU:HD22	1.21	1.12
1:Q:108:ASN:HB3	2:Y:70:ARG:HD3	1.26	1.12
1:S:155:GLY:O	1:T:86:ARG:NH2	1.82	1.12
1:Q:177:GLU:OE1	1:R:58:LEU:N	1.83	1.12
1:R:124:THR:HG22	1:S:130:ARG:HH21	1.05	1.12
1:S:108:ASN:CG	2:1:70:ARG:HG2	1.70	1.12
1:U:101:VAL:HG21	2:2:58:TYR:CD1	1.83	1.12
1:B:108:ASN:HB3	2:J:70:ARG:CG	1.79	1.12
1:P:177:GLU:CA	1:Q:58:LEU:CD1	2.01	1.12
1:S:177:GLU:OE1	1:T:57:ARG:CB	1.97	1.12
1:D:108:ASN:ND2	2:L:70:ARG:HG2	1.65	1.11
1:U:108:ASN:HB3	2:V:70:ARG:CD	1.80	1.11
1:C:161:LYS:HB2	1:D:60:GLU:OE2	1.51	1.11
1:E:12:ILE:CG1	1:E:23:GLN:HB2	1.59	1.11
1:E:12:ILE:CG1	1:E:23:GLN:HG3	1.72	1.11
1:F:177:GLU:CA	1:G:58:LEU:HD21	1.78	1.11
1:S:97:GLN:OE1	2:Z:61:ALA:HB1	1.50	1.11

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:177:GLU:C	1:B:57:ARG:HH21	1.54	1.11
1:B:108:ASN:CB	2:J:70:ARG:CG	2.27	1.11
1:B:108:ASN:HB3	2:J:70:ARG:HG2	1.24	1.11
1:D:12:ILE:CG1	1:D:23:GLN:HG3	1.72	1.11
1:A:177:GLU:OE1	1:B:58:LEU:HD13	1.50	1.10
1:R:161:LYS:HD2	1:S:60:GLU:OE2	1.51	1.10
1:S:177:GLU:CD	1:T:57:ARG:H	1.52	1.10
1:C:177:GLU:OE1	1:D:58:LEU:N	1.83	1.10
1:E:97:GLN:OE1	2:L:61:ALA:HB1	1.51	1.10
1:C:108:ASN:HB3	2:K:70:ARG:CD	1.81	1.10
1:D:161:LYS:HD2	1:E:60:GLU:OE2	1.51	1.10
1:G:108:ASN:HB3	2:H:70:ARG:CD	1.80	1.10
1:Q:161:LYS:HB2	1:R:60:GLU:OE2	1.51	1.10
1:R:103:TYR:C	2:Z:81:THR:HG21	1.70	1.10
1:R:108:ASN:ND2	2:Z:70:ARG:HG2	1.65	1.10
1:C:12:ILE:CG1	1:C:23:GLN:CG	2.11	1.10
1:D:103:TYR:C	2:L:81:THR:HG21	1.70	1.10
1:E:108:ASN:CG	2:M:70:ARG:HG2	1.70	1.10
1:F:108:ASN:CB	2:N:70:ARG:CG	2.28	1.10
1:F:108:ASN:ND2	2:N:70:ARG:HG2	1.66	1.10
1:S:108:ASN:CB	2:1:70:ARG:HG2	1.82	1.10
1:E:108:ASN:CB	2:M:70:ARG:HG2	1.82	1.09
1:O:130:ARG:HD2	1:U:21:LEU:HD11	1.11	1.09
1:O:101:VAL:HG21	2:V:58:TYR:CD1	1.88	1.09
1:S:101:VAL:CG2	2:Z:58:TYR:HD1	1.61	1.09
1:E:103:TYR:C	2:M:81:THR:HG21	1.72	1.09
1:G:108:ASN:HB3	2:H:70:ARG:HG2	1.17	1.09
1:O:177:GLU:C	1:P:57:ARG:HH21	1.54	1.09
1:O:177:GLU:OE1	1:P:58:LEU:HD13	1.50	1.09
1:C:21:LEU:HD11	1:D:130:ARG:HD2	1.14	1.09
1:Q:108:ASN:HB3	2:Y:70:ARG:CD	1.81	1.09
1:U:12:ILE:CG1	1:U:23:GLN:CG	2.10	1.09
1:D:177:GLU:H	1:E:58:LEU:HD21	0.95	1.09
1:S:12:ILE:CG1	1:S:23:GLN:HB2	1.59	1.09
1:T:178:ARG:CA	1:U:57:ARG:HH21	1.66	1.09
1:A:101:VAL:HG21	2:H:58:TYR:CD1	1.88	1.08
1:D:173:VAL:O	1:E:58:LEU:CD2	2.01	1.08
1:O:21:LEU:HD11	1:P:130:ARG:HD2	1.27	1.08
1:R:173:VAL:O	1:S:58:LEU:CD2	2.01	1.08
1:S:103:TYR:C	2:1:81:THR:HG21	1.72	1.08
1:T:108:ASN:ND2	2:2:70:ARG:HG2	1.66	1.08

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:161:LYS:HB2	1:F:60:GLU:OE2	0.90	1.08
1:G:12:ILE:CG1	1:G:23:GLN:HB2	1.59	1.08
1:O:57:ARG:NH2	1:U:178:ARG:HA	1.67	1.08
1:A:130:ARG:HD2	1:G:21:LEU:HD11	1.11	1.08
1:B:177:GLU:HA	1:C:58:LEU:HD13	1.35	1.08
1:S:161:LYS:HB2	1:T:60:GLU:OE2	0.90	1.08
1:S:177:GLU:H	1:T:58:LEU:HD21	1.19	1.08
1:A:12:ILE:CG1	1:A:23:GLN:HB2	1.59	1.08
1:R:12:ILE:CG1	1:R:23:GLN:HB2	1.59	1.08
1:R:177:GLU:H	1:S:58:LEU:HD21	0.95	1.08
1:A:57:ARG:NH2	1:G:178:ARG:HA	1.67	1.08
1:O:57:ARG:HH22	1:U:178:ARG:C	1.48	1.08
1:F:161:LYS:HB2	1:G:60:GLU:OE2	1.55	1.07
1:F:108:ASN:CG	2:N:70:ARG:HG2	1.75	1.07
1:F:178:ARG:CA	1:G:57:ARG:HH21	1.66	1.07
1:P:101:VAL:CG2	2:W:58:TYR:HD1	1.65	1.07
1:Q:12:ILE:CG1	1:Q:23:GLN:HB2	1.59	1.07
1:F:177:GLU:O	1:G:57:ARG:NH2	1.88	1.07
1:T:177:GLU:HB2	1:U:58:LEU:HD22	1.21	1.07
1:O:107:VAL:CG1	2:W:66:TYR:OH	2.03	1.07
1:T:161:LYS:HB2	1:U:60:GLU:OE2	1.54	1.07
1:U:12:ILE:CG1	1:U:23:GLN:HB2	1.59	1.07
1:G:12:ILE:CG1	1:G:23:GLN:CG	2.10	1.07
1:P:12:ILE:CG1	1:P:23:GLN:CG	2.11	1.07
1:T:177:GLU:HA	1:U:58:LEU:HD13	1.30	1.07
1:U:108:ASN:HD22	2:V:70:ARG:CB	1.67	1.07
1:C:177:GLU:O	1:D:58:LEU:HD11	1.54	1.06
1:F:177:GLU:HA	1:G:58:LEU:HD13	1.30	1.06
1:O:161:LYS:HD2	1:P:60:GLU:OE2	1.54	1.06
1:C:101:VAL:HG21	2:J:58:TYR:CE1	1.91	1.06
1:R:21:LEU:HD11	1:S:130:ARG:HD2	1.09	1.06
1:Q:177:GLU:O	1:R:58:LEU:HD11	1.54	1.06
1:T:13:THR:CB	1:T:14:VAL:HG23	1.77	1.06
1:C:12:ILE:CG1	1:C:23:GLN:HB2	1.59	1.06
1:D:13:THR:HB	1:D:14:VAL:HG23	1.36	1.06
1:O:60:GLU:OE2	1:U:161:LYS:CD	2.03	1.06
1:T:177:GLU:O	1:U:57:ARG:NH2	1.88	1.06
1:A:107:VAL:CG1	2:I:66:TYR:OH	2.03	1.06
1:A:177:GLU:O	1:B:57:ARG:NE	1.89	1.06
1:O:58:LEU:CD2	1:U:177:GLU:N	2.16	1.06
1:T:177:GLU:N	1:U:58:LEU:CD2	2.19	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:38:ASP:HB3	2:V:41:THR:HG23	1.38	1.06
1:G:108:ASN:HD22	2:H:70:ARG:CB	1.67	1.05
1:B:101:VAL:CG2	2:I:58:TYR:HD1	1.64	1.05
1:O:13:THR:CB	1:O:14:VAL:HG23	1.77	1.05
1:O:130:ARG:HH21	1:U:124:THR:HG22	0.90	1.05
1:Q:13:THR:CB	1:Q:14:VAL:HG23	1.77	1.05
1:T:108:ASN:CG	2:2:70:ARG:HG2	1.75	1.05
1:U:101:VAL:CG2	2:2:58:TYR:CD1	2.40	1.05
1:U:103:TYR:CE1	2:V:82:LEU:HD13	1.92	1.05
1:A:60:GLU:OE2	1:G:161:LYS:CD	2.03	1.05
1:E:13:THR:HB	1:E:14:VAL:HG23	1.36	1.05
1:F:12:ILE:CG1	1:F:23:GLN:HB2	1.59	1.05
1:A:58:LEU:CD2	1:G:177:GLU:N	2.16	1.05
1:B:13:THR:CB	1:B:14:VAL:HG23	1.77	1.05
1:R:108:ASN:CG	2:Z:70:ARG:HG2	1.77	1.05
1:A:130:ARG:HH21	1:G:124:THR:HG22	0.90	1.04
1:D:21:LEU:HD11	1:E:130:ARG:HD2	1.09	1.04
1:E:177:GLU:H	1:F:58:LEU:HD21	1.18	1.04
1:G:101:VAL:CG2	2:N:58:TYR:CD1	2.40	1.04
1:Q:101:VAL:HG21	2:X:58:TYR:CE1	1.91	1.04
1:R:12:ILE:CG1	1:R:23:GLN:CG	2.11	1.04
1:A:161:LYS:HD2	1:B:60:GLU:OE2	1.54	1.04
1:E:101:VAL:CG2	2:L:58:TYR:HD1	1.60	1.04
1:F:13:THR:HB	1:F:14:VAL:HG23	1.36	1.04
1:G:103:TYR:CE1	2:H:82:LEU:HD13	1.92	1.04
2:H:38:ASP:HB3	2:H:41:THR:HG23	1.38	1.04
1:O:177:GLU:HA	1:P:58:LEU:HD13	1.36	1.04
1:R:13:THR:HB	1:R:14:VAL:HG23	1.36	1.04
1:U:12:ILE:CA	1:U:23:GLN:CG	2.36	1.04
1:E:177:GLU:CD	1:F:58:LEU:HD13	1.77	1.03
1:P:12:ILE:CA	1:P:23:GLN:CG	2.36	1.03
1:Q:9:ASP:CB	1:Q:26:TYR:OH	2.06	1.03
1:T:12:ILE:CG1	1:T:23:GLN:HB2	1.59	1.03
1:T:12:ILE:CA	1:T:23:GLN:CG	2.36	1.03
1:C:12:ILE:CA	1:C:23:GLN:CG	2.36	1.03
1:D:177:GLU:HB2	1:E:58:LEU:HD22	1.40	1.03
1:E:12:ILE:CA	1:E:23:GLN:CG	2.36	1.03
1:F:12:ILE:CA	1:F:23:GLN:CG	2.36	1.03
1:F:177:GLU:N	1:G:58:LEU:CD2	2.19	1.03
1:O:124:THR:HG22	1:P:130:ARG:HH21	1.24	1.03
1:O:177:GLU:O	1:P:57:ARG:NE	1.89	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:12:ILE:CA	1:Q:23:GLN:CG	2.36	1.03
1:A:58:LEU:HD22	1:G:177:GLU:HB2	1.40	1.03
1:B:12:ILE:CG1	1:B:23:GLN:HB2	1.59	1.03
1:D:12:ILE:CA	1:D:23:GLN:CG	2.36	1.03
1:F:9:ASP:CB	1:F:26:TYR:OH	2.06	1.03
1:F:13:THR:CB	1:F:14:VAL:HG23	1.76	1.03
1:O:12:ILE:CA	1:O:23:GLN:CG	2.36	1.03
1:P:9:ASP:CB	1:P:26:TYR:OH	2.06	1.03
1:A:57:ARG:NH2	1:G:177:GLU:O	1.92	1.03
1:D:108:ASN:CG	2:L:70:ARG:HG2	1.76	1.03
1:G:9:ASP:CB	1:G:26:TYR:OH	2.06	1.03
1:G:12:ILE:CA	1:G:23:GLN:CG	2.36	1.03
1:G:13:THR:HB	1:G:14:VAL:HG23	1.36	1.03
1:S:21:LEU:HD11	1:T:130:ARG:HD2	1.40	1.03
1:S:177:GLU:CD	1:T:58:LEU:HD13	1.77	1.03
1:T:108:ASN:HB2	2:2:70:ARG:HG2	1.38	1.03
1:A:108:ASN:HB3	2:I:70:ARG:HG2	1.38	1.03
1:C:21:LEU:HD11	1:D:130:ARG:CD	1.89	1.03
1:C:178:ARG:CA	1:D:57:ARG:NH2	2.22	1.03
1:E:9:ASP:CB	1:E:26:TYR:OH	2.06	1.03
1:O:13:THR:HB	1:O:14:VAL:HG23	1.36	1.03
1:O:57:ARG:HH21	1:U:177:GLU:C	1.62	1.03
1:R:9:ASP:CB	1:R:26:TYR:OH	2.06	1.03
1:S:177:GLU:OE1	1:T:57:ARG:CA	2.07	1.03
1:A:13:THR:HB	1:A:14:VAL:HG23	1.36	1.02
1:A:57:ARG:HH21	1:G:177:GLU:C	1.62	1.02
1:A:130:ARG:HH21	1:G:124:THR:CG2	1.72	1.02
1:C:9:ASP:CB	1:C:26:TYR:OH	2.06	1.02
1:D:13:THR:CB	1:D:14:VAL:HG23	1.76	1.02
1:D:108:ASN:CB	2:L:70:ARG:HG2	1.89	1.02
1:E:177:GLU:OE1	1:F:57:ARG:CA	2.07	1.02
1:P:13:THR:HB	1:P:14:VAL:HG23	1.36	1.02
1:P:102:THR:O	2:X:85:ASN:OD1	1.77	1.02
1:U:9:ASP:CB	1:U:26:TYR:OH	2.06	1.02
1:A:57:ARG:NH2	1:G:178:ARG:O	1.88	1.02
1:B:12:ILE:CA	1:B:23:GLN:CG	2.36	1.02
1:C:13:THR:HB	1:C:14:VAL:HG23	1.36	1.02
1:Q:12:ILE:CA	1:Q:23:GLN:HG2	1.89	1.02
1:Q:13:THR:HB	1:Q:14:VAL:HG23	1.36	1.02
1:Q:21:LEU:HD11	1:R:130:ARG:CD	1.89	1.02
1:Q:108:ASN:ND2	2:Y:70:ARG:CG	2.22	1.02

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:13:THR:HB	1:U:14:VAL:HG23	1.36	1.02
1:C:108:ASN:ND2	2:K:70:ARG:CG	2.22	1.02
1:F:12:ILE:CA	1:F:23:GLN:HG2	1.89	1.02
1:Q:108:ASN:HB3	2:Y:70:ARG:CG	1.89	1.02
1:R:12:ILE:CA	1:R:23:GLN:CG	2.36	1.02
1:R:108:ASN:CB	2:Z:70:ARG:HG2	1.89	1.02
1:S:9:ASP:CB	1:S:26:TYR:OH	2.06	1.02
1:A:9:ASP:CB	1:A:26:TYR:OH	2.06	1.02
1:A:12:ILE:CA	1:A:23:GLN:CG	2.36	1.02
1:B:9:ASP:CB	1:B:26:TYR:OH	2.06	1.02
1:G:12:ILE:CA	1:G:23:GLN:HG2	1.89	1.02
1:O:58:LEU:HD22	1:U:177:GLU:HB2	1.40	1.02
1:P:12:ILE:CA	1:P:23:GLN:HG2	1.89	1.02
1:S:13:THR:HB	1:S:14:VAL:HG23	1.36	1.02
1:C:12:ILE:CA	1:C:23:GLN:HG2	1.89	1.02
1:O:9:ASP:CB	1:O:26:TYR:OH	2.06	1.02
1:R:177:GLU:OE1	1:S:57:ARG:CA	2.08	1.02
1:S:12:ILE:CA	1:S:23:GLN:CG	2.36	1.02
1:T:9:ASP:CB	1:T:26:TYR:OH	2.06	1.02
1:U:12:ILE:CA	1:U:23:GLN:HG2	1.89	1.02
1:A:177:GLU:HA	1:B:58:LEU:HD13	1.36	1.01
1:D:9:ASP:CB	1:D:26:TYR:OH	2.06	1.01
1:E:12:ILE:CA	1:E:23:GLN:HG2	1.89	1.01
1:G:108:ASN:HB3	2:H:70:ARG:HD3	1.41	1.01
1:O:108:ASN:HB3	2:W:70:ARG:HG2	1.38	1.01
1:P:177:GLU:HA	1:Q:58:LEU:HD13	1.35	1.01
1:R:12:ILE:CA	1:R:23:GLN:HG2	1.89	1.01
1:T:13:THR:HB	1:T:14:VAL:HG23	1.36	1.01
1:B:108:ASN:HB2	2:J:70:ARG:HG2	1.39	1.01
1:B:13:THR:HB	1:B:14:VAL:HG23	1.36	1.01
1:E:177:GLU:HB2	1:F:58:LEU:HD22	1.42	1.01
1:O:130:ARG:NH2	1:U:124:THR:HG22	1.75	1.01
1:S:108:ASN:HB3	2:1:70:ARG:HD3	1.38	1.01
1:B:107:VAL:CG1	2:J:66:TYR:OH	2.07	1.01
1:P:107:VAL:CG1	2:X:66:TYR:OH	2.08	1.01
1:A:12:ILE:CA	1:A:23:GLN:HG2	1.89	1.01
1:E:21:LEU:HD11	1:F:130:ARG:HD2	1.40	1.01
1:O:12:ILE:CA	1:O:23:GLN:HG2	1.89	1.01
1:P:108:ASN:HB2	2:X:70:ARG:HG2	1.39	1.01
1:T:12:ILE:CA	1:T:23:GLN:HG2	1.89	1.01
1:O:57:ARG:NH2	1:U:177:GLU:O	1.92	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:57:ARG:H	1:U:177:GLU:CD	1.64	1.00
1:O:130:ARG:HH21	1:U:124:THR:CG2	1.72	1.00
1:P:107:VAL:HG11	2:X:66:TYR:HH	1.24	1.00
1:Q:178:ARG:CA	1:R:57:ARG:NH2	2.22	1.00
1:S:12:ILE:CA	1:S:23:GLN:HG2	1.89	1.00
1:A:130:ARG:NH2	1:G:124:THR:HG22	1.75	1.00
1:B:102:THR:O	2:J:85:ASN:OD1	1.77	1.00
1:B:177:GLU:OE1	1:C:58:LEU:HD13	1.62	1.00
1:C:108:ASN:HD22	2:K:70:ARG:CB	1.75	1.00
1:E:108:ASN:HB3	2:M:70:ARG:HD3	1.38	1.00
1:P:177:GLU:OE1	1:Q:58:LEU:HD13	1.62	1.00
1:R:177:GLU:HB2	1:S:58:LEU:HD22	1.40	1.00
1:A:101:VAL:CG2	2:H:58:TYR:CD1	2.45	1.00
1:Q:178:ARG:CA	1:R:57:ARG:HH21	1.74	1.00
1:T:21:LEU:CD1	1:U:130:ARG:HD2	1.91	1.00
1:C:178:ARG:HA	1:D:57:ARG:HH21	0.95	1.00
2:M:38:ASP:HB3	2:M:41:THR:HG23	1.44	1.00
1:Q:177:GLU:O	1:R:57:ARG:NH2	1.94	1.00
1:B:12:ILE:CA	1:B:23:GLN:HG2	1.89	1.00
1:D:12:ILE:CA	1:D:23:GLN:HG2	1.89	1.00
1:G:101:VAL:HG21	2:N:58:TYR:CE1	1.97	1.00
1:C:101:VAL:CG2	2:J:58:TYR:HD1	1.65	1.00
1:T:101:VAL:HG22	2:1:58:TYR:CE1	1.97	1.00
1:C:177:GLU:O	1:D:57:ARG:NH2	1.94	0.99
1:O:57:ARG:NH2	1:U:178:ARG:O	1.88	0.99
1:S:177:GLU:HB2	1:T:58:LEU:HD22	1.42	0.99
1:Q:108:ASN:HD22	2:Y:70:ARG:CB	1.74	0.99
1:A:57:ARG:H	1:G:177:GLU:CD	1.64	0.99
1:D:177:GLU:OE1	1:E:57:ARG:CA	2.08	0.99
1:Q:124:THR:HG22	1:R:130:ARG:HH21	1.24	0.99
1:U:108:ASN:HB3	2:V:70:ARG:HD3	1.41	0.99
1:F:101:VAL:CG2	2:M:58:TYR:HD1	1.62	0.99
1:O:101:VAL:CG2	2:V:58:TYR:CD1	2.45	0.99
1:Q:177:GLU:CA	1:R:58:LEU:CG	2.08	0.99
1:C:178:ARG:CA	1:D:57:ARG:HH21	1.74	0.99
1:F:108:ASN:HB2	2:N:70:ARG:HG2	1.38	0.99
1:C:124:THR:HG22	1:D:130:ARG:HH21	1.24	0.99
1:A:124:THR:HG22	1:B:130:ARG:HH21	1.24	0.99
1:F:21:LEU:CD1	1:G:130:ARG:HD2	1.91	0.99
2:X:45:ILE:HG12	2:X:52:ALA:HB1	1.44	0.99
1:S:13:THR:CB	1:S:14:VAL:HG23	1.76	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:12:ILE:CG1	1:B:23:GLN:CG	2.11	0.98
2:K:38:ASP:HB3	2:K:41:THR:HG23	1.45	0.98
1:U:101:VAL:HG21	2:2:58:TYR:CE1	1.97	0.98
2:1:38:ASP:HB3	2:1:41:THR:HG23	1.44	0.98
1:C:177:GLU:H	1:D:58:LEU:HD21	1.22	0.98
1:S:177:GLU:OE1	1:T:57:ARG:N	1.97	0.98
1:F:101:VAL:HG22	2:M:58:TYR:CE1	1.97	0.98
1:C:108:ASN:CB	2:K:70:ARG:CD	2.42	0.98
1:G:13:THR:CB	1:G:14:VAL:HG23	1.77	0.97
1:A:13:THR:CB	1:A:14:VAL:HG23	1.77	0.97
1:S:12:ILE:CG1	1:S:23:GLN:HB3	1.67	0.97
1:O:12:ILE:CG1	1:O:23:GLN:HB2	1.59	0.97
1:E:13:THR:CB	1:E:14:VAL:HG23	1.77	0.97
1:P:108:ASN:CG	2:X:70:ARG:HG2	1.85	0.97
1:Q:108:ASN:CB	2:Y:70:ARG:CD	2.42	0.97
1:R:13:THR:CB	1:R:14:VAL:HG23	1.76	0.97
1:T:12:ILE:CG1	1:T:23:GLN:HB3	1.67	0.97
1:A:12:ILE:CG1	1:A:23:GLN:HB3	1.67	0.97
1:E:177:GLU:OE1	1:F:57:ARG:N	1.97	0.97
1:E:177:GLU:HB2	1:F:58:LEU:CD2	1.95	0.97
1:G:101:VAL:CG2	2:N:58:TYR:CE1	2.48	0.97
2:M:45:ILE:HG12	2:M:52:ALA:HB1	1.46	0.97
1:D:21:LEU:HD11	1:E:130:ARG:CD	1.95	0.97
1:U:101:VAL:CG2	2:2:58:TYR:CE1	2.48	0.97
1:T:101:VAL:HG23	2:1:58:TYR:HD1	1.26	0.97
2:1:45:ILE:HG12	2:1:52:ALA:HB1	1.46	0.97
1:B:12:ILE:CG1	1:B:23:GLN:HB3	1.67	0.96
2:J:45:ILE:HG12	2:J:52:ALA:HB1	1.44	0.96
1:O:161:LYS:HB2	1:P:60:GLU:OE2	1.65	0.96
1:P:177:GLU:N	1:Q:58:LEU:HD21	1.80	0.96
1:A:101:VAL:CG2	2:H:58:TYR:HD1	1.78	0.96
1:F:101:VAL:HG23	2:M:58:TYR:HD1	1.26	0.96
1:P:13:THR:CB	1:P:14:VAL:HG23	1.76	0.96
1:C:12:ILE:CG1	1:C:23:GLN:HB3	1.67	0.96
1:F:103:TYR:CE1	2:N:82:LEU:HD13	2.01	0.96
1:Q:101:VAL:CG2	2:X:58:TYR:HD1	1.65	0.96
1:R:21:LEU:HD11	1:S:130:ARG:CD	1.95	0.96
1:F:178:ARG:CA	1:G:57:ARG:NH2	2.29	0.96
1:T:178:ARG:CA	1:U:57:ARG:NH2	2.29	0.96
1:U:13:THR:CB	1:U:14:VAL:HG23	1.77	0.96
2:Y:38:ASP:HB3	2:Y:41:THR:HG23	1.45	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:12:ILE:CG1	1:U:23:GLN:HB3	1.67	0.95
1:B:108:ASN:CG	2:J:70:ARG:HG2	1.85	0.95
1:B:177:GLU:N	1:C:58:LEU:HD21	1.80	0.95
2:J:38:ASP:HB3	2:J:41:THR:HG23	1.46	0.95
1:F:108:ASN:HB3	2:N:70:ARG:HD3	1.49	0.95
1:O:101:VAL:CG2	2:V:58:TYR:HD1	1.78	0.95
1:T:103:TYR:CE1	2:2:82:LEU:HD13	2.01	0.95
1:T:21:LEU:HD11	1:U:130:ARG:HD2	0.96	0.95
2:W:38:ASP:HB3	2:W:41:THR:HG23	1.49	0.95
1:A:161:LYS:HB2	1:B:60:GLU:OE2	1.65	0.94
1:D:12:ILE:CG1	1:D:23:GLN:CG	2.10	0.94
2:X:38:ASP:HB3	2:X:41:THR:HG23	1.46	0.94
1:C:13:THR:CB	1:C:14:VAL:HG23	1.77	0.94
1:C:108:ASN:HB3	2:K:70:ARG:CG	1.89	0.94
1:Q:178:ARG:HA	1:R:57:ARG:HH21	0.95	0.94
2:2:38:ASP:HB3	2:2:41:THR:HG23	1.47	0.94
1:T:177:GLU:O	1:U:57:ARG:CZ	2.15	0.94
1:D:103:TYR:O	2:L:81:THR:HG21	1.68	0.94
1:F:15:PHE:HB2	1:G:23:GLN:HE22	1.32	0.94
1:F:21:LEU:HD11	1:G:130:ARG:HD2	0.96	0.94
2:N:38:ASP:HB3	2:N:41:THR:HG23	1.47	0.94
1:P:161:LYS:CB	1:Q:60:GLU:OE2	2.16	0.94
1:T:101:VAL:CG2	2:1:58:TYR:HD1	1.62	0.94
1:C:177:GLU:HA	1:D:58:LEU:HG	1.50	0.94
1:D:12:ILE:CG1	1:D:23:GLN:HB3	1.67	0.94
1:D:21:LEU:CD1	1:E:130:ARG:HD2	1.97	0.94
1:D:177:GLU:CD	1:E:57:ARG:N	2.14	0.94
1:F:125:GLN:O	1:G:129:VAL:HG23	1.68	0.94
1:R:12:ILE:CG1	1:R:23:GLN:HB3	1.67	0.94
1:R:103:TYR:O	2:Z:81:THR:HG21	1.68	0.94
1:O:155:GLY:O	1:P:86:ARG:NH2	2.00	0.94
1:R:21:LEU:CD1	1:S:130:ARG:HD2	1.97	0.94
1:F:177:GLU:CB	1:G:58:LEU:HD22	1.97	0.94
2:I:38:ASP:HB3	2:I:41:THR:HG23	1.49	0.94
1:O:107:VAL:HG11	2:W:66:TYR:HH	1.24	0.94
1:Q:177:GLU:H	1:R:58:LEU:HD21	1.22	0.94
1:R:173:VAL:O	1:S:58:LEU:HD21	1.67	0.94
1:T:108:ASN:HD22	2:2:70:ARG:HG2	1.32	0.94
1:T:177:GLU:CB	1:U:58:LEU:HD22	1.97	0.94
1:D:173:VAL:O	1:E:58:LEU:HD21	1.67	0.93
1:T:108:ASN:HB3	2:2:70:ARG:CG	1.97	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:107:VAL:HG11	2:V:66:TYR:HH	1.31	0.93
1:B:161:LYS:CB	1:C:60:GLU:OE2	2.16	0.93
1:C:108:ASN:CB	2:K:70:ARG:HD3	1.99	0.93
1:T:125:GLN:O	1:U:129:VAL:HG23	1.68	0.93
1:F:177:GLU:H	1:G:58:LEU:HD21	1.13	0.93
1:S:177:GLU:HB2	1:T:58:LEU:CD2	1.94	0.93
1:U:108:ASN:ND2	2:V:70:ARG:HG2	1.83	0.93
1:A:155:GLY:O	1:B:86:ARG:NH2	2.00	0.93
1:T:177:GLU:H	1:U:58:LEU:HD21	1.13	0.93
1:G:108:ASN:ND2	2:H:70:ARG:HG2	1.83	0.93
1:O:12:ILE:CG1	1:O:23:GLN:HB3	1.67	0.93
1:R:108:ASN:HB3	2:Z:70:ARG:HD3	1.50	0.93
1:E:177:GLU:N	1:F:58:LEU:HD21	1.82	0.93
1:F:101:VAL:HG21	2:M:58:TYR:CE1	2.00	0.93
1:F:124:THR:HG22	1:G:130:ARG:HH21	1.34	0.93
1:Q:177:GLU:HA	1:R:58:LEU:HG	1.50	0.93
1:T:177:GLU:HB2	1:U:58:LEU:CD2	1.99	0.93
1:C:177:GLU:HA	1:D:58:LEU:CD2	1.77	0.93
1:F:177:GLU:O	1:G:57:ARG:CZ	2.15	0.93
1:T:108:ASN:HB3	2:2:70:ARG:HD3	1.49	0.93
1:G:12:ILE:CG1	1:G:23:GLN:HB3	1.67	0.93
1:S:124:THR:HG22	1:T:130:ARG:HH21	1.33	0.93
1:E:177:GLU:CD	1:F:57:ARG:N	2.21	0.92
1:S:177:GLU:CD	1:T:57:ARG:N	2.21	0.92
1:F:101:VAL:HG22	2:M:58:TYR:HE1	1.32	0.92
1:P:178:ARG:HA	1:Q:57:ARG:NH2	1.84	0.92
1:A:130:ARG:CD	1:G:21:LEU:HD11	2.00	0.92
1:Q:108:ASN:CB	2:Y:70:ARG:HD3	1.99	0.92
1:O:108:ASN:HB3	2:W:70:ARG:CG	1.99	0.92
1:Q:101:VAL:HG22	2:X:58:TYR:HE1	1.34	0.92
1:T:15:PHE:HB2	1:U:23:GLN:HE22	1.32	0.92
1:T:177:GLU:C	1:U:58:LEU:HD11	1.90	0.92
1:B:177:GLU:OE2	1:C:56:SER:CB	2.18	0.92
1:O:58:LEU:HD21	1:U:177:GLU:H	0.95	0.92
1:D:108:ASN:HB3	2:L:70:ARG:HD3	1.50	0.92
1:R:177:GLU:CD	1:S:57:ARG:N	2.14	0.92
1:B:161:LYS:HD2	1:C:60:GLU:OE2	1.69	0.91
1:E:101:VAL:HG23	2:L:58:TYR:HD1	1.35	0.91
1:Q:101:VAL:HG22	2:X:58:TYR:CE1	2.04	0.91
1:F:177:GLU:HB2	1:G:58:LEU:CD2	1.99	0.91
1:T:101:VAL:HG22	2:1:58:TYR:HE1	1.32	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:177:GLU:N	1:T:58:LEU:HD21	1.82	0.91
1:T:178:ARG:HA	1:U:57:ARG:HH21	1.32	0.91
1:Q:107:VAL:HG11	2:Y:66:TYR:OH	1.69	0.91
1:T:107:VAL:HG11	2:2:66:TYR:OH	1.71	0.91
1:A:107:VAL:HG11	2:I:66:TYR:HH	1.26	0.91
1:D:177:GLU:N	1:E:58:LEU:CD2	2.25	0.91
1:F:108:ASN:HB3	2:N:70:ARG:CG	1.97	0.91
1:F:178:ARG:O	1:G:57:ARG:NH2	2.03	0.91
1:F:107:VAL:HG11	2:N:66:TYR:OH	1.71	0.91
1:T:108:ASN:ND2	2:2:70:ARG:CG	2.33	0.91
1:F:12:ILE:CG1	1:F:23:GLN:HB3	1.67	0.91
1:P:161:LYS:HD2	1:Q:60:GLU:OE2	1.69	0.91
1:S:101:VAL:HG23	2:Z:58:TYR:HD1	1.35	0.91
1:U:12:ILE:HD13	1:U:23:GLN:CD	1.91	0.91
1:C:12:ILE:HD13	1:C:23:GLN:CD	1.91	0.91
1:A:108:ASN:HB3	2:I:70:ARG:CG	1.99	0.91
1:O:58:LEU:CD2	1:U:173:VAL:O	2.19	0.91
1:T:178:ARG:HA	1:U:57:ARG:NH2	1.85	0.91
1:A:58:LEU:CD2	1:G:173:VAL:O	2.19	0.91
1:E:12:ILE:HD13	1:E:23:GLN:CD	1.91	0.91
1:E:124:THR:HG22	1:F:130:ARG:HH21	1.34	0.91
1:Q:9:ASP:HB2	1:Q:26:TYR:HH	1.32	0.91
1:A:12:ILE:HD13	1:A:23:GLN:CD	1.91	0.90
1:A:57:ARG:NH2	1:G:177:GLU:C	2.25	0.90
1:F:177:GLU:C	1:G:58:LEU:HD11	1.90	0.90
1:T:124:THR:HG22	1:U:130:ARG:HH21	1.34	0.90
1:A:10:ARG:HH11	1:G:7:ALA:HB1	1.36	0.90
1:A:130:ARG:HD2	1:G:21:LEU:CD1	2.00	0.90
1:F:178:ARG:HA	1:G:57:ARG:NH2	1.85	0.90
1:Q:101:VAL:HG23	2:X:58:TYR:HD1	1.35	0.90
1:S:12:ILE:HD13	1:S:23:GLN:CD	1.91	0.90
1:O:10:ARG:HH11	1:U:7:ALA:HB1	1.36	0.90
1:O:12:ILE:HD13	1:O:23:GLN:CD	1.91	0.90
1:O:177:GLU:HB2	1:P:58:LEU:HD22	1.52	0.90
1:P:177:GLU:OE2	1:Q:56:SER:CB	2.18	0.90
1:T:178:ARG:O	1:U:57:ARG:NH2	2.03	0.90
1:C:108:ASN:HD22	2:K:70:ARG:CG	1.82	0.90
1:E:12:ILE:CG1	1:E:23:GLN:HB3	1.67	0.90
1:E:101:VAL:CG2	2:L:58:TYR:CE1	2.54	0.90
1:F:108:ASN:HD22	2:N:70:ARG:HG2	1.32	0.90
1:T:12:ILE:HD13	1:T:23:GLN:CD	1.91	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:12:ILE:HD13	1:F:23:GLN:CD	1.91	0.90
1:R:177:GLU:N	1:S:58:LEU:CD2	2.25	0.90
1:D:12:ILE:HD13	1:D:23:GLN:CD	1.91	0.90
1:O:130:ARG:CD	1:U:21:LEU:HD11	2.00	0.90
1:B:12:ILE:HD13	1:B:23:GLN:CD	1.91	0.90
1:E:108:ASN:ND2	2:M:70:ARG:CG	2.35	0.90
1:O:108:ASN:CB	2:W:70:ARG:CG	2.50	0.90
1:P:12:ILE:HD13	1:P:23:GLN:CD	1.91	0.90
1:S:101:VAL:CG2	2:Z:58:TYR:CE1	2.54	0.90
1:S:177:GLU:OE2	1:T:57:ARG:N	2.05	0.90
1:A:178:ARG:CA	1:B:57:ARG:HH21	1.85	0.90
1:Q:12:ILE:HD13	1:Q:23:GLN:CD	1.91	0.90
1:F:108:ASN:ND2	2:N:70:ARG:CG	2.33	0.90
1:F:178:ARG:HA	1:G:57:ARG:HH21	1.32	0.90
1:U:108:ASN:HB2	2:V:70:ARG:HG2	1.53	0.90
1:A:177:GLU:HB2	1:B:58:LEU:HD22	1.52	0.89
1:R:12:ILE:HD13	1:R:23:GLN:CD	1.91	0.89
1:O:57:ARG:NH2	1:U:177:GLU:C	2.25	0.89
1:C:107:VAL:HG11	2:K:66:TYR:OH	1.69	0.89
1:P:21:LEU:HD11	1:Q:130:ARG:HD2	1.54	0.89
1:Q:12:ILE:CG1	1:Q:23:GLN:HB3	1.67	0.89
1:Q:108:ASN:HB2	2:Y:70:ARG:HG2	1.52	0.89
1:S:101:VAL:HG22	2:Z:58:TYR:CE1	2.07	0.89
1:S:108:ASN:ND2	2:1:70:ARG:CG	2.35	0.89
1:P:12:ILE:CG1	1:P:23:GLN:HB3	1.67	0.89
1:Q:177:GLU:N	1:R:58:LEU:CD2	2.23	0.89
1:T:12:ILE:HA	1:T:23:GLN:HG2	1.55	0.89
1:C:101:VAL:HG22	2:J:58:TYR:CE1	2.04	0.89
1:D:161:LYS:CD	1:E:60:GLU:OE2	2.21	0.89
1:G:12:ILE:HD13	1:G:23:GLN:CD	1.91	0.89
1:C:101:VAL:HG23	2:J:58:TYR:HD1	1.35	0.89
1:B:178:ARG:HA	1:C:57:ARG:NH2	1.84	0.89
1:R:161:LYS:CD	1:S:60:GLU:OE2	2.21	0.89
1:S:12:ILE:HA	1:S:23:GLN:HG2	1.55	0.89
1:T:101:VAL:HG21	2:1:58:TYR:CE1	2.00	0.89
1:T:108:ASN:HB3	2:2:70:ARG:CD	2.03	0.89
1:A:12:ILE:HA	1:A:23:GLN:HG2	1.55	0.89
1:D:101:VAL:HG22	2:K:58:TYR:CD1	2.06	0.89
1:Q:108:ASN:HD22	2:Y:70:ARG:CG	1.82	0.89
1:S:108:ASN:HB3	2:1:70:ARG:CD	2.02	0.89
1:A:108:ASN:CB	2:I:70:ARG:CG	2.50	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:12:ILE:HA	1:B:23:GLN:HG2	1.55	0.89
1:E:108:ASN:HD22	2:M:70:ARG:HG2	1.35	0.89
1:O:130:ARG:HD2	1:U:21:LEU:CD1	2.00	0.89
1:E:177:GLU:OE2	1:F:57:ARG:N	2.05	0.89
1:R:12:ILE:HA	1:R:23:GLN:HG2	1.55	0.88
1:C:101:VAL:HG22	2:J:58:TYR:HE1	1.34	0.88
1:O:178:ARG:CA	1:P:57:ARG:HH21	1.85	0.88
1:R:177:GLU:OE1	1:S:57:ARG:CB	2.21	0.88
1:E:108:ASN:HB3	2:M:70:ARG:CD	2.02	0.88
1:U:12:ILE:HA	1:U:23:GLN:HG2	1.55	0.88
2:1:37:ILE:HD11	2:1:59:MET:HB3	1.56	0.88
1:C:108:ASN:HB2	2:K:70:ARG:HG2	1.52	0.88
1:P:155:GLY:O	1:Q:86:ARG:NH2	2.06	0.88
1:R:161:LYS:HB2	1:S:60:GLU:CD	1.94	0.88
1:F:103:TYR:C	2:N:81:THR:HG21	1.94	0.88
1:G:12:ILE:HA	1:G:23:GLN:HG2	1.55	0.88
1:D:177:GLU:OE1	1:E:57:ARG:CB	2.21	0.88
1:F:12:ILE:HA	1:F:23:GLN:HG2	1.55	0.88
1:G:101:VAL:CG2	2:N:58:TYR:HD1	1.83	0.88
1:T:177:GLU:CB	1:U:58:LEU:CD2	2.52	0.88
1:E:12:ILE:HA	1:E:23:GLN:HG2	1.55	0.88
1:E:101:VAL:HG22	2:L:58:TYR:CE1	2.07	0.88
1:G:108:ASN:HD22	2:H:70:ARG:HB3	1.38	0.88
1:C:12:ILE:HA	1:C:23:GLN:HG2	1.55	0.88
1:G:108:ASN:CB	2:H:70:ARG:CD	2.47	0.88
1:P:177:GLU:H	1:Q:58:LEU:HD21	1.38	0.88
1:B:21:LEU:HD11	1:C:130:ARG:HD2	1.54	0.87
1:D:177:GLU:OE1	1:E:58:LEU:N	2.07	0.87
1:U:108:ASN:HD22	2:V:70:ARG:HB3	1.38	0.87
1:A:58:LEU:HD21	1:G:177:GLU:H	0.95	0.87
1:D:12:ILE:HD13	1:D:23:GLN:NE2	1.89	0.87
1:U:101:VAL:CG2	2:2:58:TYR:HD1	1.83	0.87
1:R:177:GLU:H	1:S:58:LEU:CD2	1.84	0.87
1:P:177:GLU:CD	1:Q:58:LEU:HD13	1.94	0.87
1:S:103:TYR:C	2:1:81:THR:CG2	2.41	0.87
1:P:9:ASP:HB2	1:P:26:TYR:HH	1.37	0.87
1:B:101:VAL:CG2	2:I:58:TYR:CE1	2.57	0.87
1:D:177:GLU:H	1:E:58:LEU:CD2	1.84	0.87
1:O:108:ASN:CG	2:W:70:ARG:HG2	1.94	0.87
1:S:108:ASN:HD22	2:1:70:ARG:HG2	1.35	0.87
1:C:12:ILE:HD13	1:C:23:GLN:NE2	1.89	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:124:THR:HG22	1:E:130:ARG:NH2	1.89	0.87
1:E:103:TYR:C	2:M:81:THR:CG2	2.41	0.87
1:G:12:ILE:HD13	1:G:23:GLN:NE2	1.89	0.87
1:P:101:VAL:CG2	2:W:58:TYR:CE1	2.57	0.87
1:A:108:ASN:CG	2:I:70:ARG:HG2	1.94	0.87
1:B:101:VAL:HG21	2:I:58:TYR:CE1	2.10	0.87
1:D:12:ILE:HA	1:D:23:GLN:HG2	1.55	0.87
1:D:161:LYS:HB2	1:E:60:GLU:CD	1.94	0.87
1:O:12:ILE:HA	1:O:23:GLN:HG2	1.55	0.87
1:Q:12:ILE:HD13	1:Q:23:GLN:NE2	1.89	0.87
1:R:177:GLU:OE1	1:S:58:LEU:N	2.06	0.87
1:A:97:GLN:OE1	2:H:61:ALA:HB1	1.75	0.87
1:F:178:ARG:C	1:G:57:ARG:NH2	2.28	0.87
1:S:103:TYR:HE1	2:1:82:LEU:HD22	1.39	0.87
1:F:12:ILE:HD13	1:F:23:GLN:NE2	1.89	0.86
1:G:108:ASN:HB2	2:H:70:ARG:HG2	1.53	0.86
1:P:12:ILE:HA	1:P:23:GLN:HG2	1.55	0.86
1:P:101:VAL:HG21	2:W:58:TYR:CE1	2.10	0.86
1:Q:12:ILE:HA	1:Q:23:GLN:HG2	1.55	0.86
1:T:103:TYR:C	2:2:81:THR:HG21	1.94	0.86
1:E:12:ILE:CG1	1:E:23:GLN:CG	2.10	0.86
1:O:12:ILE:HD13	1:O:23:GLN:NE2	1.89	0.86
1:T:108:ASN:HD22	2:2:70:ARG:CG	1.87	0.86
1:B:177:GLU:CD	1:C:58:LEU:HD13	1.94	0.86
1:F:108:ASN:HB3	2:N:70:ARG:CD	2.03	0.86
1:R:12:ILE:HD13	1:R:23:GLN:NE2	1.89	0.86
1:A:12:ILE:HD13	1:A:23:GLN:NE2	1.89	0.86
1:B:177:GLU:HB2	1:C:58:LEU:HD22	1.57	0.86
1:D:9:ASP:HB2	1:D:26:TYR:HH	1.40	0.86
1:U:12:ILE:HD13	1:U:23:GLN:NE2	1.89	0.86
1:G:107:VAL:HG11	2:H:66:TYR:HH	1.36	0.86
1:S:12:ILE:HD13	1:S:23:GLN:NE2	1.89	0.86
1:T:177:GLU:O	1:U:57:ARG:NE	2.08	0.86
1:A:9:ASP:HB2	1:A:26:TYR:HH	1.38	0.86
1:B:155:GLY:O	1:C:86:ARG:NH2	2.06	0.86
1:E:12:ILE:HD13	1:E:23:GLN:NE2	1.89	0.86
1:R:9:ASP:HB2	1:R:26:TYR:HH	1.38	0.86
1:T:178:ARG:C	1:U:57:ARG:NH2	2.28	0.86
1:B:12:ILE:HD13	1:B:23:GLN:NE2	1.89	0.86
1:R:124:THR:HG22	1:S:130:ARG:NH2	1.89	0.86
1:T:12:ILE:HD13	1:T:23:GLN:NE2	1.89	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:21:LEU:HD11	1:B:130:ARG:CD	2.05	0.86
1:O:21:LEU:HD11	1:P:130:ARG:CD	2.05	0.85
1:U:108:ASN:CB	2:V:70:ARG:CD	2.47	0.85
1:B:9:ASP:HB2	1:B:26:TYR:HH	1.39	0.85
1:O:60:GLU:CD	1:U:161:LYS:HB2	1.97	0.85
1:P:12:ILE:HD13	1:P:23:GLN:NE2	1.89	0.85
1:S:177:GLU:OE1	1:T:58:LEU:N	2.09	0.85
1:C:177:GLU:CA	1:D:58:LEU:CG	2.08	0.85
1:R:101:VAL:HG22	2:Y:58:TYR:CD1	2.06	0.85
1:E:177:GLU:OE1	1:F:58:LEU:N	2.09	0.85
1:F:108:ASN:HD22	2:N:70:ARG:CG	1.87	0.85
2:M:37:ILE:HD11	2:M:59:MET:HB3	1.56	0.85
1:G:9:ASP:HB2	1:G:26:TYR:HH	1.35	0.85
2:L:38:ASP:HB3	2:L:41:THR:HG23	1.59	0.85
1:T:161:LYS:CD	1:U:60:GLU:OE2	2.25	0.85
1:F:177:GLU:HA	1:G:58:LEU:HD11	0.86	0.85
1:R:124:THR:CG2	1:S:130:ARG:HH21	1.89	0.85
1:E:97:GLN:OE1	2:L:61:ALA:CB	2.25	0.85
1:T:177:GLU:HA	1:U:58:LEU:HD11	0.86	0.85
1:U:9:ASP:HB2	1:U:26:TYR:HH	1.37	0.85
1:B:177:GLU:H	1:C:58:LEU:HD21	1.38	0.85
1:D:7:ALA:HB1	1:E:10:ARG:HH11	1.40	0.85
1:F:21:LEU:CD1	1:G:130:ARG:CD	2.52	0.85
1:R:7:ALA:HB1	1:S:10:ARG:HH11	1.40	0.85
1:E:103:TYR:HE1	2:M:82:LEU:HD22	1.40	0.85
1:F:177:GLU:CB	1:G:58:LEU:CD2	2.52	0.85
1:F:177:GLU:O	1:G:57:ARG:NE	2.08	0.84
1:T:9:ASP:HB2	1:T:26:TYR:HH	1.38	0.84
1:A:177:GLU:HA	1:B:58:LEU:CG	2.07	0.84
1:C:9:ASP:HB2	1:C:26:TYR:HH	1.38	0.84
1:P:177:GLU:HB2	1:Q:58:LEU:HD22	1.57	0.84
1:S:9:ASP:HB2	1:S:26:TYR:HH	1.39	0.84
1:A:60:GLU:CD	1:G:161:LYS:HB2	1.97	0.84
2:Z:38:ASP:HB3	2:Z:41:THR:HG23	1.59	0.84
1:E:9:ASP:HB2	1:E:26:TYR:HH	1.38	0.84
1:G:108:ASN:ND2	2:H:70:ARG:CB	2.41	0.84
1:O:97:GLN:OE1	2:V:61:ALA:HB1	1.75	0.84
1:A:177:GLU:H	1:B:58:LEU:HD21	1.38	0.84
1:C:177:GLU:N	1:D:58:LEU:CD2	2.23	0.84
1:O:178:ARG:CA	1:P:57:ARG:NH2	2.41	0.84
1:S:97:GLN:OE1	2:Z:61:ALA:CB	2.25	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:108:ASN:ND2	2:H:70:ARG:CG	2.41	0.83
1:C:108:ASN:HD22	2:K:70:ARG:HG2	1.38	0.83
1:E:108:ASN:CB	2:M:70:ARG:CG	2.56	0.83
1:F:15:PHE:CZ	1:G:130:ARG:NH1	2.46	0.83
1:F:177:GLU:C	1:G:57:ARG:HH21	1.80	0.83
1:S:108:ASN:CB	2:1:70:ARG:CG	2.56	0.83
1:U:108:ASN:ND2	2:V:70:ARG:CG	2.41	0.83
1:U:103:TYR:C	2:V:81:THR:HG21	1.99	0.83
1:G:103:TYR:C	2:H:81:THR:HG21	1.98	0.83
1:O:129:VAL:HG23	1:U:125:GLN:O	1.79	0.83
1:T:177:GLU:C	1:U:57:ARG:HH21	1.80	0.83
2:2:53:GLN:O	2:2:56:VAL:HG12	1.78	0.83
1:F:161:LYS:CD	1:G:60:GLU:OE2	2.25	0.83
1:C:125:GLN:O	1:D:129:VAL:HG23	1.78	0.83
1:G:107:VAL:CG2	2:H:66:TYR:OH	2.27	0.83
2:N:53:GLN:O	2:N:56:VAL:HG12	1.78	0.83
1:P:124:THR:HG22	1:Q:130:ARG:HH21	1.43	0.83
1:F:97:GLN:OE1	2:M:61:ALA:HB1	1.78	0.83
1:O:60:GLU:HG2	1:U:161:LYS:N	1.93	0.83
1:O:178:ARG:N	1:P:57:ARG:HH21	1.76	0.83
1:T:21:LEU:CD1	1:U:130:ARG:CD	2.52	0.83
1:O:9:ASP:HB2	1:O:26:TYR:HH	1.40	0.83
1:A:60:GLU:HG2	1:G:161:LYS:N	1.93	0.83
1:A:178:ARG:CA	1:B:57:ARG:NH2	2.41	0.83
1:D:124:THR:CG2	1:E:130:ARG:HH21	1.89	0.83
1:O:177:GLU:CA	1:P:58:LEU:HD21	2.09	0.83
2:W:123:ILE:HG12	2:W:124:TYR:HD1	1.44	0.83
1:D:101:VAL:HG23	2:K:58:TYR:HD1	1.43	0.82
1:T:97:GLN:OE1	2:1:61:ALA:HB1	1.78	0.82
1:A:129:VAL:HG23	1:G:125:GLN:O	1.79	0.82
1:F:9:ASP:HB2	1:F:26:TYR:HH	1.39	0.82
1:O:177:GLU:H	1:P:58:LEU:HD21	1.38	0.82
1:A:58:LEU:CD2	1:G:177:GLU:H	1.83	0.82
1:Q:125:GLN:O	1:R:129:VAL:HG23	1.78	0.82
1:T:177:GLU:HA	1:U:58:LEU:CD2	1.98	0.82
1:A:177:GLU:CA	1:B:58:LEU:HD21	2.09	0.82
1:C:107:VAL:HG21	2:K:66:TYR:OH	1.80	0.82
1:O:177:GLU:HA	1:P:58:LEU:CG	2.07	0.82
1:Q:108:ASN:CG	2:Y:70:ARG:CG	2.42	0.82
1:U:108:ASN:ND2	2:V:70:ARG:CB	2.41	0.82
1:D:101:VAL:HG22	2:K:58:TYR:CE1	2.15	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:177:GLU:OE1	1:G:58:LEU:CD1	2.27	0.82
1:T:15:PHE:CZ	1:U:130:ARG:NH1	2.46	0.82
1:A:178:ARG:N	1:B:57:ARG:HH21	1.76	0.81
1:T:177:GLU:CD	1:U:58:LEU:HD13	2.00	0.81
1:B:124:THR:HG22	1:C:130:ARG:HH21	1.43	0.81
1:C:97:GLN:OE1	2:J:61:ALA:HB1	1.80	0.81
1:B:107:VAL:HG11	2:J:66:TYR:HH	1.43	0.81
1:D:108:ASN:ND2	2:L:70:ARG:CG	2.43	0.81
2:J:37:ILE:HD11	2:J:59:MET:HB3	1.61	0.81
1:R:101:VAL:HG23	2:Y:58:TYR:HD1	1.43	0.81
2:1:20:VAL:HG13	2:1:28:HIS:HB2	1.62	0.81
1:O:58:LEU:CD2	1:U:177:GLU:H	1.83	0.81
1:P:178:ARG:C	1:Q:57:ARG:NH2	2.33	0.81
1:Q:103:TYR:C	2:Y:81:THR:HG21	2.00	0.81
1:R:101:VAL:HG22	2:Y:58:TYR:CE1	2.15	0.81
1:B:108:ASN:HB3	2:J:70:ARG:CD	2.11	0.81
2:I:123:ILE:HG12	2:I:124:TYR:HD1	1.44	0.81
1:O:177:GLU:CA	1:P:58:LEU:CD2	2.59	0.81
1:U:107:VAL:CG2	2:V:66:TYR:OH	2.27	0.81
1:A:52:LYS:NZ	1:A:62:ASN:HA	1.96	0.81
1:E:103:TYR:O	2:M:81:THR:HG21	1.80	0.81
1:T:7:ALA:HB1	1:U:10:ARG:HH11	1.46	0.81
1:B:178:ARG:C	1:C:57:ARG:NH2	2.33	0.81
1:F:177:GLU:CD	1:G:58:LEU:HD13	2.00	0.81
1:S:177:GLU:OE1	1:T:58:LEU:HD13	1.80	0.81
2:M:20:VAL:HG13	2:M:28:HIS:HB2	1.62	0.81
1:S:52:LYS:NZ	1:S:62:ASN:HA	1.96	0.81
1:U:52:LYS:NZ	1:U:62:ASN:HA	1.96	0.81
2:X:37:ILE:HD11	2:X:59:MET:HB3	1.61	0.81
1:C:52:LYS:NZ	1:C:62:ASN:HA	1.96	0.80
1:C:103:TYR:C	2:K:81:THR:HG21	2.00	0.80
1:Q:107:VAL:HG21	2:Y:66:TYR:OH	1.80	0.80
1:F:177:GLU:HA	1:G:58:LEU:CD2	1.98	0.80
1:S:103:TYR:O	2:1:81:THR:HG21	1.80	0.80
1:U:107:VAL:HG21	2:V:66:TYR:OH	1.82	0.80
1:G:52:LYS:NZ	1:G:62:ASN:HA	1.96	0.80
1:O:57:ARG:CA	1:U:177:GLU:OE1	2.30	0.80
1:O:177:GLU:HA	1:P:58:LEU:HD11	0.80	0.80
1:Q:97:GLN:OE1	2:X:61:ALA:HB1	1.80	0.80
1:A:177:GLU:HA	1:B:58:LEU:HD11	0.80	0.80
1:D:52:LYS:NZ	1:D:62:ASN:HA	1.96	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:10:ARG:NH1	1:U:7:ALA:HB1	1.96	0.80
1:Q:108:ASN:HD22	2:Y:70:ARG:HG2	1.38	0.80
1:R:108:ASN:ND2	2:Z:70:ARG:CG	2.43	0.80
1:B:52:LYS:NZ	1:B:62:ASN:HA	1.96	0.80
1:D:12:ILE:HD12	1:D:23:GLN:CG	1.76	0.80
1:D:125:GLN:O	1:E:129:VAL:HG23	1.81	0.80
1:O:12:ILE:HD12	1:O:23:GLN:CG	1.76	0.80
1:E:161:LYS:HB2	1:F:60:GLU:CD	2.00	0.80
1:E:177:GLU:OE1	1:F:58:LEU:HD13	1.80	0.80
1:O:52:LYS:NZ	1:O:62:ASN:HA	1.96	0.80
1:R:177:GLU:HB2	1:S:58:LEU:CD2	2.12	0.80
1:T:52:LYS:NZ	1:T:62:ASN:HA	1.96	0.80
1:G:107:VAL:HG21	2:H:66:TYR:OH	1.82	0.80
1:R:52:LYS:NZ	1:R:62:ASN:HA	1.96	0.80
1:E:52:LYS:NZ	1:E:62:ASN:HA	1.96	0.79
1:P:108:ASN:HB3	2:X:70:ARG:CD	2.11	0.79
1:F:108:ASN:CB	2:N:70:ARG:CD	2.59	0.79
1:Q:52:LYS:NZ	1:Q:62:ASN:HA	1.96	0.79
1:Q:177:GLU:O	1:R:58:LEU:CD1	2.29	0.79
1:S:161:LYS:HB2	1:T:60:GLU:CD	2.00	0.79
1:C:177:GLU:O	1:D:58:LEU:CD1	2.29	0.79
1:P:52:LYS:NZ	1:P:62:ASN:HA	1.96	0.79
2:Y:123:ILE:HG12	2:Y:124:TYR:HD1	1.48	0.79
1:A:57:ARG:CA	1:G:177:GLU:OE1	2.30	0.79
1:A:177:GLU:CA	1:B:58:LEU:CD2	2.59	0.79
1:D:177:GLU:HB2	1:E:58:LEU:CD2	2.12	0.79
1:B:12:ILE:CD1	1:B:23:GLN:C	2.52	0.79
1:F:7:ALA:HB1	1:G:10:ARG:HH11	1.46	0.79
1:F:52:LYS:NZ	1:F:62:ASN:HA	1.96	0.79
1:T:12:ILE:CD1	1:T:23:GLN:C	2.52	0.79
1:A:10:ARG:NH1	1:G:7:ALA:HB1	1.96	0.78
1:O:12:ILE:HD12	1:O:23:GLN:N	1.98	0.78
1:P:12:ILE:HD12	1:P:23:GLN:N	1.98	0.78
1:T:177:GLU:OE1	1:U:58:LEU:CD1	2.27	0.78
2:K:123:ILE:HG12	2:K:124:TYR:HD1	1.48	0.78
1:S:12:ILE:HD12	1:S:23:GLN:CG	1.75	0.78
1:Q:107:VAL:CG1	2:Y:66:TYR:OH	2.31	0.78
1:R:125:GLN:O	1:S:129:VAL:HG23	1.81	0.78
1:D:12:ILE:HD12	1:D:23:GLN:N	1.98	0.78
1:O:186:GLU:O	1:O:190:VAL:HG12	1.84	0.78
1:R:7:ALA:HB1	1:S:10:ARG:NH1	1.99	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:108:ASN:HD22	2:1:70:ARG:CG	1.95	0.78
1:T:108:ASN:CB	2:2:70:ARG:CD	2.59	0.78
1:U:12:ILE:HD12	1:U:23:GLN:N	1.98	0.78
1:C:12:ILE:HD12	1:C:23:GLN:N	1.99	0.78
1:C:124:THR:CG2	1:D:130:ARG:HH21	1.97	0.78
1:D:186:GLU:O	1:D:190:VAL:HG12	1.84	0.78
1:E:12:ILE:HD12	1:E:23:GLN:N	1.98	0.78
1:S:12:ILE:CD1	1:S:23:GLN:C	2.52	0.78
1:D:97:GLN:OE1	2:K:61:ALA:HB1	1.84	0.78
1:G:108:ASN:ND2	2:H:70:ARG:CA	2.47	0.78
1:Q:12:ILE:HD12	1:Q:23:GLN:N	1.98	0.78
2:V:123:ILE:HG12	2:V:124:TYR:HD1	1.49	0.78
1:A:12:ILE:CD1	1:A:23:GLN:C	2.52	0.78
1:C:107:VAL:CG1	2:K:66:TYR:OH	2.31	0.78
1:P:12:ILE:CD1	1:P:23:GLN:C	2.52	0.78
1:P:178:ARG:C	1:Q:57:ARG:HH22	1.87	0.78
1:R:12:ILE:CD1	1:R:23:GLN:C	2.52	0.78
1:T:186:GLU:O	1:T:190:VAL:HG12	1.84	0.78
2:W:53:GLN:O	2:W:56:VAL:HG12	1.83	0.78
1:E:12:ILE:CD1	1:E:23:GLN:C	2.52	0.78
1:F:186:GLU:O	1:F:190:VAL:HG12	1.84	0.78
1:G:12:ILE:CD1	1:G:23:GLN:C	2.52	0.78
1:G:108:ASN:HB2	2:H:70:ARG:CG	2.09	0.78
1:B:186:GLU:O	1:B:190:VAL:HG12	1.84	0.78
1:D:12:ILE:HD11	1:D:23:GLN:HB3	0.80	0.78
1:Q:186:GLU:O	1:Q:190:VAL:HG12	1.84	0.78
1:F:12:ILE:HD12	1:F:23:GLN:N	1.98	0.77
1:Q:161:LYS:HD2	1:R:60:GLU:OE2	1.84	0.77
1:A:12:ILE:HD12	1:A:23:GLN:N	1.98	0.77
1:C:12:ILE:CD1	1:C:23:GLN:C	2.52	0.77
1:D:7:ALA:HB1	1:E:10:ARG:NH1	1.99	0.77
1:O:12:ILE:CD1	1:O:23:GLN:C	2.52	0.77
1:O:12:ILE:HD11	1:O:23:GLN:HB3	0.80	0.77
1:R:97:GLN:OE1	2:Y:61:ALA:HB1	1.84	0.77
1:R:108:ASN:HB3	2:Z:70:ARG:CD	2.14	0.77
1:B:12:ILE:HD12	1:B:23:GLN:N	1.98	0.77
1:P:177:GLU:OE1	1:Q:57:ARG:N	2.17	0.77
1:U:186:GLU:O	1:U:190:VAL:HG12	1.84	0.77
1:A:12:ILE:HD12	1:A:23:GLN:CG	1.76	0.77
2:H:43:MET:HE1	2:H:56:VAL:HG23	1.65	0.77
1:S:12:ILE:HD12	1:S:23:GLN:N	1.98	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:12:ILE:HD12	1:T:23:GLN:N	1.98	0.77
1:E:186:GLU:O	1:E:190:VAL:HG12	1.84	0.77
1:G:186:GLU:O	1:G:190:VAL:HG12	1.84	0.77
1:U:12:ILE:CD1	1:U:23:GLN:C	2.52	0.77
1:D:108:ASN:HB3	2:L:70:ARG:CD	2.14	0.77
1:P:12:ILE:HD11	1:P:23:GLN:HB3	0.80	0.77
1:C:186:GLU:O	1:C:190:VAL:HG12	1.84	0.77
1:G:108:ASN:CG	2:H:70:ARG:CG	2.44	0.77
2:N:32:LYS:HE2	2:N:34:LEU:O	1.85	0.77
1:R:108:ASN:HD22	2:Z:70:ARG:HG2	1.49	0.77
1:T:13:THR:CB	1:T:14:VAL:CG2	2.62	0.77
1:U:12:ILE:HD11	1:U:23:GLN:HB3	0.80	0.77
1:E:12:ILE:HD11	1:E:23:GLN:HB3	0.80	0.77
1:F:12:ILE:CD1	1:F:23:GLN:C	2.52	0.77
1:A:186:GLU:O	1:A:190:VAL:HG12	1.84	0.77
1:C:12:ILE:HD11	1:C:23:GLN:CB	1.31	0.77
1:C:12:ILE:HD11	1:C:23:GLN:HB3	0.80	0.77
1:C:161:LYS:HD2	1:D:60:GLU:OE2	1.84	0.77
1:D:12:ILE:CD1	1:D:23:GLN:C	2.52	0.77
2:N:167:SER:HB2	2:Y:167:SER:HB2	1.65	0.77
1:T:107:VAL:CG1	2:2:66:TYR:OH	2.32	0.77
1:B:178:ARG:C	1:C:57:ARG:HH22	1.87	0.77
2:H:123:ILE:HG12	2:H:124:TYR:HD1	1.49	0.77
2:I:53:GLN:O	2:I:56:VAL:HG12	1.83	0.77
1:R:12:ILE:HD12	1:R:23:GLN:CG	1.76	0.77
2:X:123:ILE:H	2:X:123:ILE:HD13	1.49	0.77
1:B:177:GLU:OE1	1:C:57:ARG:N	2.17	0.76
1:E:108:ASN:HD22	2:M:70:ARG:CG	1.96	0.76
1:Q:12:ILE:CD1	1:Q:23:GLN:C	2.52	0.76
1:A:101:VAL:CG2	2:H:58:TYR:CE1	2.68	0.76
1:D:13:THR:CB	1:D:14:VAL:CG2	2.62	0.76
1:O:101:VAL:CG2	2:V:58:TYR:CE1	2.68	0.76
1:Q:103:TYR:O	2:Y:81:THR:HG21	1.86	0.76
1:U:12:ILE:HD11	1:U:23:GLN:CB	1.31	0.76
1:B:12:ILE:HD11	1:B:23:GLN:CB	1.31	0.76
1:F:12:ILE:HD11	1:F:23:GLN:CB	1.31	0.76
1:G:12:ILE:HD11	1:G:23:GLN:CB	1.31	0.76
1:O:12:ILE:HG13	1:O:23:GLN:HB2	1.67	0.76
1:O:101:VAL:HG21	2:V:58:TYR:CE1	2.20	0.76
1:R:161:LYS:N	1:S:60:GLU:HG2	2.01	0.76
1:T:12:ILE:HD12	1:T:23:GLN:CG	1.76	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:108:ASN:CB	2:N:70:ARG:HD3	2.15	0.76
1:G:12:ILE:HG13	1:G:23:GLN:HB2	1.67	0.76
1:G:103:TYR:C	2:H:81:THR:CG2	2.54	0.76
1:P:186:GLU:O	1:P:190:VAL:HG12	1.84	0.76
1:Q:124:THR:CG2	1:R:130:ARG:HH21	1.97	0.76
1:R:186:GLU:O	1:R:190:VAL:HG12	1.84	0.76
1:S:186:GLU:O	1:S:190:VAL:HG12	1.84	0.76
2:2:32:LYS:HE2	2:2:34:LEU:O	1.85	0.76
2:K:167:SER:HB2	2:2:167:SER:HB2	1.68	0.76
1:R:103:TYR:C	2:Z:81:THR:CG2	2.51	0.76
1:S:107:VAL:HG11	2:1:66:TYR:OH	1.86	0.76
1:U:108:ASN:ND2	2:V:70:ARG:CA	2.47	0.76
1:Q:12:ILE:HD11	1:Q:23:GLN:HB3	0.80	0.76
1:R:12:ILE:HD12	1:R:23:GLN:N	1.98	0.76
1:O:13:THR:CB	1:O:14:VAL:CG2	2.62	0.76
1:U:103:TYR:C	2:V:81:THR:CG2	2.54	0.76
1:R:12:ILE:HG13	1:R:23:GLN:HB2	1.67	0.76
1:B:101:VAL:HG21	2:I:58:TYR:HD1	1.24	0.76
1:E:101:VAL:HG22	2:L:58:TYR:CD1	2.19	0.76
2:J:123:ILE:H	2:J:123:ILE:HD13	1.49	0.76
1:P:173:VAL:O	1:Q:58:LEU:HD21	1.86	0.76
1:P:177:GLU:OE1	1:Q:57:ARG:HB2	1.86	0.76
1:A:101:VAL:HG21	2:H:58:TYR:CE1	2.21	0.76
1:C:103:TYR:O	2:K:81:THR:HG21	1.86	0.76
1:D:13:THR:HB	1:D:14:VAL:CG2	2.16	0.76
1:F:12:ILE:HD11	1:F:23:GLN:HB3	0.80	0.76
1:F:107:VAL:CG1	2:N:66:TYR:OH	2.32	0.76
1:E:107:VAL:HG11	2:M:66:TYR:OH	1.86	0.75
1:G:12:ILE:HD12	1:G:23:GLN:N	1.98	0.75
1:P:159:GLU:O	1:Q:60:GLU:HB2	1.87	0.75
1:S:21:LEU:HD11	1:T:130:ARG:CD	2.16	0.75
1:R:13:THR:CB	1:R:14:VAL:CG2	2.62	0.75
1:T:12:ILE:HD11	1:T:23:GLN:HB3	0.80	0.75
1:P:97:GLN:OE1	2:W:61:ALA:HB1	1.86	0.75
1:Q:12:ILE:HD11	1:Q:23:GLN:CB	1.31	0.75
1:B:177:GLU:OE1	1:C:57:ARG:HB2	1.86	0.75
1:D:108:ASN:HD22	2:L:70:ARG:HG2	1.49	0.75
1:D:161:LYS:N	1:E:60:GLU:HG2	2.01	0.75
1:G:13:THR:CB	1:G:14:VAL:CG2	2.62	0.75
1:O:13:THR:HB	1:O:14:VAL:CG2	2.16	0.75
1:R:12:ILE:HD11	1:R:23:GLN:HB3	0.80	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:12:ILE:HD11	1:S:23:GLN:HB3	0.80	0.75
1:B:12:ILE:HD11	1:B:23:GLN:HB3	0.80	0.75
1:B:12:ILE:HG13	1:B:23:GLN:HB2	1.66	0.75
1:D:12:ILE:HG13	1:D:23:GLN:HB2	1.66	0.75
1:P:12:ILE:HD11	1:P:23:GLN:CB	1.31	0.75
1:R:12:ILE:HD11	1:R:23:GLN:CB	1.31	0.75
1:A:57:ARG:NH2	1:G:178:ARG:N	2.20	0.75
1:A:58:LEU:HD13	1:G:177:GLU:OE1	1.86	0.75
1:B:173:VAL:O	1:C:58:LEU:HD21	1.86	0.75
1:E:12:ILE:HD11	1:E:23:GLN:CB	1.31	0.75
1:Q:103:TYR:O	2:Y:81:THR:CG2	2.35	0.75
1:U:108:ASN:CB	2:V:70:ARG:HD3	2.16	0.75
2:Z:53:GLN:O	2:Z:56:VAL:HG12	1.87	0.75
1:A:13:THR:HB	1:A:14:VAL:CG2	2.16	0.75
1:A:86:ARG:CZ	1:G:155:GLY:O	2.35	0.75
1:B:12:ILE:HD11	1:B:23:GLN:C	2.07	0.75
1:C:12:ILE:HD11	1:C:23:GLN:C	2.07	0.75
1:C:52:LYS:HZ3	1:C:62:ASN:HA	1.51	0.75
1:E:103:TYR:O	2:M:81:THR:CG2	2.35	0.75
1:D:12:ILE:HD13	1:D:23:GLN:HE21	1.51	0.74
1:G:12:ILE:HD12	1:G:23:GLN:CG	1.76	0.74
1:Q:13:THR:CB	1:Q:14:VAL:CG2	2.62	0.74
1:R:177:GLU:OE1	1:S:57:ARG:HB2	1.86	0.74
1:S:13:THR:HB	1:S:14:VAL:CG2	2.16	0.74
1:U:12:ILE:HD11	1:U:23:GLN:C	2.07	0.74
1:C:103:TYR:O	2:K:81:THR:CG2	2.35	0.74
1:C:108:ASN:CG	2:K:70:ARG:CG	2.42	0.74
1:E:104:GLY:N	2:M:81:THR:HG21	2.02	0.74
1:Q:161:LYS:CB	1:R:60:GLU:OE2	2.34	0.74
1:T:12:ILE:HD11	1:T:23:GLN:C	2.07	0.74
1:T:108:ASN:HD22	2:2:70:ARG:CB	2.00	0.74
1:A:60:GLU:OE2	1:G:161:LYS:CG	2.35	0.74
1:D:103:TYR:C	2:L:81:THR:CG2	2.51	0.74
1:T:12:ILE:HG13	1:T:23:GLN:HB2	1.66	0.74
1:T:178:ARG:N	1:U:57:ARG:HH21	1.84	0.74
1:A:12:ILE:HD11	1:A:23:GLN:HB3	0.80	0.74
1:B:12:ILE:HD12	1:B:23:GLN:CG	1.75	0.74
1:B:97:GLN:OE1	2:I:61:ALA:HB1	1.86	0.74
1:F:13:THR:HB	1:F:14:VAL:CG2	2.16	0.74
1:G:12:ILE:HD11	1:G:23:GLN:HB3	0.80	0.74
1:B:177:GLU:CD	1:C:57:ARG:H	1.90	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:177:GLU:HB2	1:C:58:LEU:CD2	2.17	0.74
1:C:161:LYS:CB	1:D:60:GLU:OE2	2.34	0.74
1:E:21:LEU:HD11	1:F:130:ARG:CD	2.16	0.74
1:F:13:THR:CB	1:F:14:VAL:CG2	2.62	0.74
1:P:177:GLU:CD	1:Q:57:ARG:H	1.90	0.74
1:Q:12:ILE:HD12	1:Q:23:GLN:CG	1.75	0.74
1:T:12:ILE:HD11	1:T:23:GLN:CB	1.31	0.74
1:T:108:ASN:CB	2:2:70:ARG:HD3	2.15	0.74
2:2:62:GLU:HG2	2:2:82:LEU:HD21	1.70	0.74
1:F:103:TYR:C	2:N:81:THR:CG2	2.56	0.74
1:P:12:ILE:HG13	1:P:23:GLN:HB2	1.66	0.74
1:U:97:GLN:OE1	2:2:61:ALA:HB1	1.88	0.74
2:2:123:ILE:H	2:2:123:ILE:HD13	1.52	0.74
1:A:58:LEU:N	1:G:177:GLU:OE1	2.21	0.74
1:D:177:GLU:OE1	1:E:57:ARG:HB2	1.86	0.74
1:F:178:ARG:N	1:G:57:ARG:HH21	1.84	0.74
1:B:108:ASN:ND2	2:J:70:ARG:HG2	2.03	0.74
1:B:177:GLU:OE1	1:C:57:ARG:CB	2.36	0.74
1:F:108:ASN:HD22	2:N:70:ARG:CB	2.00	0.74
1:G:108:ASN:CB	2:H:70:ARG:HD3	2.16	0.74
2:M:123:ILE:HG12	2:M:124:TYR:HD1	1.53	0.74
1:O:58:LEU:HD13	1:U:177:GLU:OE1	1.86	0.74
1:O:86:ARG:CZ	1:U:155:GLY:O	2.34	0.74
1:B:52:LYS:HZ3	1:B:62:ASN:HA	1.52	0.74
1:O:108:ASN:HB2	2:W:70:ARG:HG2	1.66	0.74
1:S:108:ASN:CB	2:1:70:ARG:CD	2.66	0.74
1:C:103:TYR:C	2:K:81:THR:CG2	2.56	0.74
1:E:12:ILE:HD11	1:E:23:GLN:C	2.07	0.74
1:E:108:ASN:CB	2:M:70:ARG:HD3	2.18	0.74
1:F:177:GLU:OE1	1:G:57:ARG:N	2.21	0.74
1:A:108:ASN:ND2	2:I:70:ARG:HG2	2.02	0.73
1:O:60:GLU:OE2	1:U:161:LYS:CG	2.35	0.73
1:P:12:ILE:HD11	1:P:23:GLN:C	2.07	0.73
1:P:177:GLU:HB2	1:Q:58:LEU:CD2	2.17	0.73
1:T:12:ILE:HD13	1:T:23:GLN:HE21	1.51	0.73
1:A:12:ILE:HD11	1:A:23:GLN:C	2.07	0.73
1:E:12:ILE:HD13	1:E:23:GLN:HE21	1.51	0.73
1:E:78:THR:HG21	1:E:85:ALA:HB1	1.71	0.73
2:L:53:GLN:O	2:L:56:VAL:HG12	1.87	0.73
1:P:78:THR:HG21	1:P:85:ALA:HB1	1.70	0.73
1:Q:12:ILE:HD11	1:Q:23:GLN:C	2.07	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:103:TYR:O	2:1:81:THR:CG2	2.35	0.73
1:S:104:GLY:N	2:1:81:THR:HG21	2.02	0.73
1:A:13:THR:CB	1:A:14:VAL:CG2	2.62	0.73
1:B:159:GLU:O	1:C:60:GLU:HB2	1.87	0.73
1:F:78:THR:HG21	1:F:85:ALA:HB1	1.70	0.73
1:O:58:LEU:N	1:U:177:GLU:OE1	2.21	0.73
1:Q:78:THR:HG21	1:Q:85:ALA:HB1	1.70	0.73
1:S:108:ASN:HB3	2:1:70:ARG:CG	2.18	0.73
1:T:52:LYS:HZ3	1:T:62:ASN:HA	1.53	0.73
1:C:13:THR:HB	1:C:14:VAL:CG2	2.16	0.73
1:E:108:ASN:CB	2:M:70:ARG:CD	2.66	0.73
1:G:97:GLN:OE1	2:N:61:ALA:HB1	1.88	0.73
1:S:12:ILE:HD11	1:S:23:GLN:C	2.07	0.73
1:S:13:THR:CB	1:S:14:VAL:CG2	2.62	0.73
1:T:103:TYR:C	2:2:81:THR:CG2	2.56	0.73
1:A:177:GLU:CD	1:B:58:LEU:HD13	2.08	0.73
1:D:78:THR:HG21	1:D:85:ALA:HB1	1.70	0.73
1:F:161:LYS:CB	1:G:60:GLU:OE2	2.36	0.73
1:O:108:ASN:ND2	2:W:70:ARG:HG2	2.02	0.73
1:Q:13:THR:HB	1:Q:14:VAL:CG2	2.16	0.73
1:U:13:THR:HB	1:U:14:VAL:CG2	2.16	0.73
1:U:108:ASN:HD22	2:V:70:ARG:CA	2.00	0.73
1:G:108:ASN:HD22	2:H:70:ARG:CA	2.00	0.73
1:P:177:GLU:OE1	1:Q:57:ARG:CB	2.36	0.73
1:R:155:GLY:O	1:S:86:ARG:CZ	2.36	0.73
2:Z:2:THR:HG22	2:Z:169:SER:OG	1.89	0.73
1:E:13:THR:CB	1:E:14:VAL:CG2	2.62	0.73
1:O:12:ILE:HD13	1:O:23:GLN:HE21	1.51	0.73
1:O:78:THR:HG21	1:O:85:ALA:HB1	1.70	0.73
1:Q:103:TYR:C	2:Y:81:THR:CG2	2.56	0.73
1:S:52:LYS:HZ1	1:S:62:ASN:HA	1.51	0.73
1:C:12:ILE:HD13	1:C:23:GLN:HE21	1.51	0.73
1:E:155:GLY:O	1:F:86:ARG:CZ	2.36	0.73
1:G:78:THR:HG21	1:G:85:ALA:HB1	1.70	0.73
2:L:2:THR:HG22	2:L:169:SER:OG	1.89	0.73
1:P:13:THR:CB	1:P:14:VAL:CG2	2.62	0.73
1:Q:107:VAL:CG2	2:Y:66:TYR:OH	2.37	0.73
1:Q:108:ASN:HB2	2:Y:70:ARG:CG	2.12	0.73
1:R:177:GLU:OE2	1:S:57:ARG:N	2.22	0.73
1:S:108:ASN:HD22	2:1:70:ARG:CB	2.02	0.73
1:S:155:GLY:O	1:T:86:ARG:CZ	2.36	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:177:GLU:OE1	1:U:57:ARG:N	2.21	0.73
1:C:72:ASP:OD1	2:J:67:ARG:NH2	2.22	0.73
1:G:12:ILE:HD13	1:G:23:GLN:HE21	1.51	0.73
1:P:108:ASN:ND2	2:X:70:ARG:HG2	2.03	0.73
1:R:12:ILE:HD13	1:R:23:GLN:HE21	1.51	0.73
1:R:78:THR:HG21	1:R:85:ALA:HB1	1.70	0.73
1:S:12:ILE:HD13	1:S:23:GLN:HE21	1.51	0.73
1:A:58:LEU:HD21	1:G:173:VAL:O	1.89	0.73
1:E:108:ASN:HB3	2:M:70:ARG:CG	2.18	0.73
1:F:12:ILE:HD11	1:F:23:GLN:C	2.07	0.73
1:O:58:LEU:CD2	1:U:177:GLU:HB2	2.19	0.73
1:P:12:ILE:HD13	1:P:23:GLN:HE21	1.51	0.73
2:W:103:GLY:HA2	2:W:178:ILE:HD11	1.71	0.73
2:Z:20:VAL:HG13	2:Z:28:HIS:HB2	1.71	0.73
1:C:13:THR:CB	1:C:14:VAL:CG2	2.62	0.72
1:C:108:ASN:HD22	2:K:70:ARG:HB3	1.54	0.72
1:D:101:VAL:CG2	2:K:58:TYR:CE1	2.68	0.72
1:D:111:ASN:CB	2:L:70:ARG:NH1	2.52	0.72
1:G:12:ILE:HD11	1:G:23:GLN:C	2.07	0.72
1:O:168:GLY:O	1:O:172:VAL:HG12	1.89	0.72
1:R:177:GLU:CD	1:S:58:LEU:HD13	2.10	0.72
1:S:161:LYS:HD2	1:T:60:GLU:OE2	1.88	0.72
2:V:32:LYS:HE2	2:V:34:LEU:O	1.89	0.72
1:D:168:GLY:O	1:D:172:VAL:HG12	1.89	0.72
1:E:12:ILE:HG13	1:E:23:GLN:HB2	1.66	0.72
1:E:108:ASN:HD22	2:M:70:ARG:CB	2.02	0.72
1:F:12:ILE:HD13	1:F:23:GLN:HE21	1.51	0.72
1:F:168:GLY:O	1:F:172:VAL:HG12	1.89	0.72
1:O:177:GLU:CD	1:P:58:LEU:HD13	2.08	0.72
1:Q:72:ASP:OD1	2:X:67:ARG:NH2	2.22	0.72
1:Q:168:GLY:O	1:Q:172:VAL:HG12	1.89	0.72
1:R:12:ILE:HD11	1:R:23:GLN:C	2.07	0.72
1:T:108:ASN:HB2	2:2:70:ARG:CG	2.11	0.72
2:V:53:GLN:O	2:V:56:VAL:HG12	1.89	0.72
2:1:18:ARG:HE	2:1:30:ASN:HD22	1.37	0.72
1:D:108:ASN:CB	2:L:70:ARG:CG	2.66	0.72
1:D:155:GLY:C	1:E:86:ARG:HH22	1.90	0.72
1:D:177:GLU:OE2	1:E:57:ARG:N	2.22	0.72
1:O:12:ILE:HD11	1:O:23:GLN:C	2.07	0.72
1:P:101:VAL:HG21	2:W:58:TYR:HD1	1.24	0.72
1:S:103:TYR:O	2:1:81:THR:CB	2.38	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:78:THR:HG21	1:C:85:ALA:HB1	1.70	0.72
1:D:155:GLY:O	1:E:86:ARG:CZ	2.36	0.72
2:L:20:VAL:HG13	2:L:28:HIS:HB2	1.71	0.72
2:N:62:GLU:HG2	2:N:82:LEU:HD21	1.69	0.72
1:Q:12:ILE:HD13	1:Q:23:GLN:HE21	1.51	0.72
1:Q:101:VAL:HG23	2:X:58:TYR:CD1	2.15	0.72
1:Q:104:GLY:HA3	2:Y:81:THR:HG21	1.70	0.72
1:Q:108:ASN:HD22	2:Y:70:ARG:HB3	1.54	0.72
2:W:38:ASP:HB3	2:W:41:THR:CG2	2.18	0.72
1:E:168:GLY:O	1:E:172:VAL:HG12	1.89	0.72
1:F:12:ILE:HD12	1:F:23:GLN:CG	1.75	0.72
2:M:18:ARG:HE	2:M:30:ASN:HD22	1.37	0.72
1:Q:108:ASN:ND2	2:Y:70:ARG:CB	2.50	0.72
1:S:168:GLY:O	1:S:172:VAL:HG12	1.89	0.72
1:A:168:GLY:O	1:A:172:VAL:HG12	1.89	0.72
1:C:104:GLY:HA3	2:K:81:THR:HG21	1.70	0.72
1:F:107:VAL:HG11	2:N:66:TYR:HH	1.54	0.72
2:H:53:GLN:O	2:H:56:VAL:HG12	1.89	0.72
1:P:168:GLY:O	1:P:172:VAL:HG12	1.89	0.72
1:R:111:ASN:ND2	2:Z:70:ARG:CZ	2.53	0.72
1:T:72:ASP:OD1	2:1:67:ARG:NH2	2.22	0.72
2:1:123:ILE:HG12	2:1:124:TYR:HD1	1.53	0.72
1:A:12:ILE:HD13	1:A:23:GLN:HE21	1.51	0.72
1:R:111:ASN:CB	2:Z:70:ARG:NH1	2.52	0.72
1:S:108:ASN:CB	2:1:70:ARG:HD3	2.18	0.72
1:T:168:GLY:O	1:T:172:VAL:HG12	1.89	0.72
1:U:12:ILE:HD13	1:U:23:GLN:HE21	1.52	0.72
1:U:13:THR:CB	1:U:14:VAL:CG2	2.62	0.72
1:A:12:ILE:HD11	1:A:23:GLN:CB	1.31	0.72
1:D:16:SER:O	1:E:26:TYR:HB3	1.90	0.72
1:E:19:GLY:CA	1:F:30:ALA:HB2	2.20	0.72
1:G:104:GLY:HA3	2:H:81:THR:HG21	1.71	0.72
2:I:38:ASP:HB3	2:I:41:THR:CG2	2.19	0.72
2:N:123:ILE:HD13	2:N:123:ILE:H	1.52	0.72
1:O:12:ILE:HD11	1:O:23:GLN:CB	1.31	0.72
1:R:108:ASN:CB	2:Z:70:ARG:CG	2.66	0.72
1:U:78:THR:HG21	1:U:85:ALA:HB1	1.71	0.72
1:B:12:ILE:HD13	1:B:23:GLN:HE21	1.51	0.72
1:B:168:GLY:O	1:B:172:VAL:HG12	1.89	0.72
1:G:168:GLY:O	1:G:172:VAL:HG12	1.89	0.72
1:T:78:THR:HG21	1:T:85:ALA:HB1	1.70	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:168:GLY:O	1:C:172:VAL:HG12	1.89	0.72
1:E:103:TYR:O	2:M:81:THR:CB	2.38	0.72
1:E:161:LYS:HD2	1:F:60:GLU:OE2	1.88	0.72
1:S:12:ILE:HG13	1:S:23:GLN:HB2	1.66	0.72
1:U:12:ILE:HD12	1:U:23:GLN:CG	1.75	0.72
1:A:52:LYS:HZ1	1:A:62:ASN:HA	1.52	0.71
1:C:107:VAL:CG2	2:K:66:TYR:OH	2.37	0.71
1:D:12:ILE:HD11	1:D:23:GLN:CB	1.31	0.71
1:T:161:LYS:CB	1:U:60:GLU:OE2	2.36	0.71
1:U:168:GLY:O	1:U:172:VAL:HG12	1.89	0.71
1:A:78:THR:HG21	1:A:85:ALA:HB1	1.70	0.71
1:A:178:ARG:C	1:B:57:ARG:NH2	2.43	0.71
1:D:111:ASN:ND2	2:L:70:ARG:CZ	2.53	0.71
1:E:177:GLU:OE1	1:F:57:ARG:C	2.28	0.71
1:S:78:THR:HG21	1:S:85:ALA:HB1	1.70	0.71
1:D:12:ILE:HD11	1:D:23:GLN:C	2.07	0.71
1:D:103:TYR:O	2:L:81:THR:CG2	2.39	0.71
1:F:108:ASN:HB2	2:N:70:ARG:CG	2.11	0.71
1:O:178:ARG:C	1:P:57:ARG:NH2	2.43	0.71
1:P:101:VAL:HG23	2:W:58:TYR:HD1	1.55	0.71
1:A:12:ILE:HG13	1:A:23:GLN:HB2	1.67	0.71
1:B:78:THR:HG21	1:B:85:ALA:HB1	1.70	0.71
1:R:101:VAL:CG2	2:Y:58:TYR:CE1	2.68	0.71
1:R:111:ASN:CG	2:Z:70:ARG:NH1	2.43	0.71
1:B:13:THR:CB	1:B:14:VAL:CG2	2.62	0.71
1:D:111:ASN:CG	2:L:70:ARG:NH1	2.43	0.71
1:F:72:ASP:OD1	2:M:67:ARG:NH2	2.22	0.71
2:I:103:GLY:HA2	2:I:178:ILE:HD11	1.71	0.71
1:S:103:TYR:CE1	2:1:82:LEU:HD13	2.26	0.71
1:D:17:PRO:O	1:E:29:GLU:HG3	1.90	0.71
1:D:177:GLU:OE1	1:E:58:LEU:HD13	1.91	0.71
2:L:7:THR:HB	2:L:123:ILE:O	1.90	0.71
1:R:17:PRO:O	1:S:29:GLU:HG3	1.90	0.71
1:R:168:GLY:O	1:R:172:VAL:HG12	1.89	0.71
1:G:101:VAL:CG2	2:N:58:TYR:HE1	2.02	0.71
1:S:177:GLU:OE1	1:T:57:ARG:C	2.28	0.71
1:U:108:ASN:HB2	2:V:70:ARG:CG	2.09	0.71
2:H:59:MET:HE2	2:H:79:VAL:HG23	1.72	0.71
1:U:107:VAL:HG11	2:V:66:TYR:CZ	2.26	0.71
2:Z:7:THR:HB	2:Z:123:ILE:O	1.90	0.71
1:C:12:ILE:HD12	1:C:23:GLN:CG	1.75	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:108:ASN:CG	2:V:70:ARG:CG	2.44	0.71
1:S:19:GLY:CA	1:T:30:ALA:HB2	2.20	0.71
1:U:101:VAL:CG2	2:2:58:TYR:HE1	2.02	0.71
1:A:178:ARG:HA	1:B:57:ARG:NH2	2.06	0.70
1:B:13:THR:HB	1:B:14:VAL:CG2	2.16	0.70
2:H:32:LYS:HE2	2:H:34:LEU:O	1.89	0.70
1:O:58:LEU:HD21	1:U:173:VAL:O	1.89	0.70
1:O:86:ARG:NH1	1:U:157:ILE:HG22	2.06	0.70
1:Q:108:ASN:HB2	2:Y:70:ARG:CD	2.20	0.70
1:S:12:ILE:HD11	1:S:23:GLN:CB	1.31	0.70
1:U:104:GLY:HA3	2:V:81:THR:HG21	1.71	0.70
1:A:86:ARG:NH1	1:G:157:ILE:HG22	2.06	0.70
1:G:107:VAL:HG11	2:H:66:TYR:CZ	2.26	0.70
1:R:155:GLY:C	1:S:86:ARG:HH22	1.90	0.70
1:U:104:GLY:CA	2:V:81:THR:HG21	2.21	0.70
1:E:13:THR:HB	1:E:14:VAL:CG2	2.16	0.70
1:E:103:TYR:CE1	2:M:82:LEU:HD22	2.26	0.70
1:E:103:TYR:CE1	2:M:82:LEU:HD13	2.26	0.70
2:N:38:ASP:HB3	2:N:41:THR:CG2	2.21	0.70
2:X:53:GLN:O	2:X:56:VAL:HG12	1.91	0.70
1:D:52:LYS:HZ3	1:D:62:ASN:HA	1.52	0.70
1:D:177:GLU:CD	1:E:58:LEU:HD13	2.10	0.70
1:R:16:SER:O	1:S:26:TYR:HB3	1.90	0.70
1:R:177:GLU:OE1	1:S:58:LEU:HD13	1.91	0.70
1:A:108:ASN:HB2	2:I:70:ARG:HG2	1.66	0.70
1:T:13:THR:HB	1:T:14:VAL:CG2	2.16	0.70
1:C:108:ASN:ND2	2:K:70:ARG:CB	2.50	0.70
1:G:13:THR:HB	1:G:14:VAL:CG2	2.16	0.70
2:V:59:MET:HE2	2:V:79:VAL:HG23	1.72	0.70
1:F:178:ARG:C	1:G:57:ARG:HH22	1.92	0.70
1:Q:12:ILE:HG13	1:Q:23:GLN:HB2	1.67	0.70
1:R:103:TYR:O	2:Z:81:THR:CG2	2.39	0.70
1:S:101:VAL:HG22	2:Z:58:TYR:CD1	2.19	0.70
1:A:58:LEU:CD2	1:G:177:GLU:HB2	2.19	0.70
1:O:57:ARG:HH21	1:U:178:ARG:HA	1.32	0.70
1:T:72:ASP:OD2	2:1:67:ARG:NH2	2.23	0.70
1:U:12:ILE:HG13	1:U:23:GLN:HB2	1.67	0.70
1:C:108:ASN:HB2	2:K:70:ARG:CG	2.12	0.70
2:I:62:GLU:HG2	2:I:82:LEU:HD21	1.74	0.70
1:P:108:ASN:HB3	2:X:70:ARG:HD3	1.72	0.70
1:R:13:THR:HB	1:R:14:VAL:CG2	2.16	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:103:TYR:CZ	2:V:82:LEU:HD13	2.27	0.70
1:B:101:VAL:HG22	2:I:58:TYR:CE1	2.27	0.69
2:V:38:ASP:HB3	2:V:41:THR:CG2	2.20	0.69
2:W:62:GLU:HG2	2:W:82:LEU:HD21	1.74	0.69
1:B:108:ASN:HB3	2:J:70:ARG:HD3	1.72	0.69
1:B:173:VAL:O	1:C:58:LEU:CD2	2.39	0.69
2:H:45:ILE:HG12	2:H:52:ALA:HB1	1.74	0.69
1:P:173:VAL:O	1:Q:58:LEU:CD2	2.39	0.69
2:Y:12:VAL:HG13	2:Y:178:ILE:HG23	1.74	0.69
1:G:103:TYR:CZ	2:H:82:LEU:HD13	2.27	0.69
2:W:103:GLY:HA2	2:W:178:ILE:CD1	2.22	0.69
1:C:12:ILE:HG13	1:C:23:GLN:HB2	1.67	0.69
1:G:104:GLY:CA	2:H:81:THR:HG21	2.21	0.69
2:N:37:ILE:HD11	2:N:59:MET:HB3	1.73	0.69
1:P:13:THR:HB	1:P:14:VAL:CG2	2.16	0.69
1:D:184:LEU:HD23	1:D:189:ALA:HA	1.75	0.69
1:Q:156:THR:HA	1:R:86:ARG:HH12	1.58	0.69
1:G:101:VAL:HG22	2:N:58:TYR:CE1	2.27	0.69
2:J:45:ILE:CG1	2:J:52:ALA:HB1	2.22	0.69
2:K:7:THR:HB	2:K:123:ILE:O	1.93	0.69
1:R:108:ASN:HD22	2:Z:70:ARG:CB	2.05	0.69
1:T:103:TYR:O	2:2:81:THR:HG21	1.93	0.69
1:A:57:ARG:N	1:G:177:GLU:CD	2.33	0.69
2:M:141:GLN:NE2	2:1:141:GLN:NE2	2.41	0.69
1:O:178:ARG:HA	1:P:57:ARG:NH2	2.06	0.69
1:O:184:LEU:HD23	1:O:189:ALA:HA	1.75	0.69
1:P:52:LYS:HZ1	1:P:62:ASN:HA	1.55	0.69
1:Q:161:LYS:CD	1:R:60:GLU:OE2	2.41	0.69
1:S:107:VAL:CG1	2:1:66:TYR:OH	2.41	0.69
2:V:43:MET:HE1	2:V:56:VAL:HG23	1.75	0.69
1:C:156:THR:HA	1:D:86:ARG:HH12	1.58	0.69
1:D:161:LYS:CG	1:E:60:GLU:OE2	2.41	0.69
1:E:101:VAL:HG21	2:L:58:TYR:CE1	2.26	0.69
1:F:72:ASP:OD2	2:M:67:ARG:NH2	2.23	0.69
1:G:104:GLY:N	2:H:81:THR:HG21	2.08	0.69
2:I:103:GLY:HA2	2:I:178:ILE:CD1	2.22	0.69
2:J:53:GLN:O	2:J:56:VAL:HG12	1.91	0.69
2:K:12:VAL:HG13	2:K:178:ILE:HG23	1.74	0.69
1:O:178:ARG:O	1:P:57:ARG:NH2	2.26	0.69
1:B:177:GLU:CD	1:C:56:SER:OG	2.31	0.69
1:C:184:LEU:HD23	1:C:189:ALA:HA	1.75	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:184:LEU:HD23	1:E:189:ALA:HA	1.75	0.69
1:F:12:ILE:HG13	1:F:23:GLN:HB2	1.66	0.69
1:P:12:ILE:HD12	1:P:23:GLN:CG	1.75	0.69
1:P:101:VAL:HG22	2:W:58:TYR:CE1	2.27	0.69
1:R:17:PRO:HA	1:S:26:TYR:CD1	2.28	0.69
1:S:103:TYR:O	2:1:81:THR:HB	1.93	0.69
1:R:161:LYS:CG	1:S:60:GLU:OE2	2.41	0.68
1:U:184:LEU:HD23	1:U:189:ALA:HA	1.75	0.68
2:V:45:ILE:HG12	2:V:52:ALA:HB1	1.74	0.68
1:A:129:VAL:HG23	1:G:126:TYR:HA	1.74	0.68
1:B:101:VAL:HG23	2:I:58:TYR:HD1	1.55	0.68
1:G:101:VAL:HG22	2:N:58:TYR:HE1	1.57	0.68
1:P:184:LEU:HD23	1:P:189:ALA:HA	1.75	0.68
1:S:155:GLY:C	1:T:86:ARG:HH22	1.96	0.68
1:F:103:TYR:HE1	2:N:82:LEU:HD22	1.58	0.68
2:L:193:GLU:HA	2:L:196:ILE:HD12	1.74	0.68
2:1:3:THR:OG1	2:1:127:THR:HG22	1.93	0.68
1:D:19:GLY:CA	1:E:30:ALA:HB2	2.24	0.68
1:E:52:LYS:HZ1	1:E:62:ASN:HA	1.57	0.68
1:S:177:GLU:OE1	1:T:58:LEU:CD1	2.41	0.68
2:X:149:ASP:O	2:X:152:VAL:HG12	1.94	0.68
1:D:108:ASN:HD22	2:L:70:ARG:CB	2.05	0.68
1:E:15:PHE:CZ	1:F:130:ARG:NH1	2.62	0.68
1:S:101:VAL:HG21	2:Z:58:TYR:CE1	2.26	0.68
1:S:161:LYS:N	1:T:60:GLU:HG2	2.08	0.68
2:Y:7:THR:HB	2:Y:123:ILE:O	1.93	0.68
2:1:53:GLN:O	2:1:56:VAL:HG12	1.93	0.68
2:2:37:ILE:HD11	2:2:59:MET:HB3	1.73	0.68
1:A:178:ARG:O	1:B:57:ARG:NH2	2.26	0.68
1:F:177:GLU:OE1	1:G:58:LEU:N	2.26	0.68
2:J:149:ASP:O	2:J:152:VAL:HG12	1.94	0.68
1:S:101:VAL:HG22	2:Z:58:TYR:HE1	1.59	0.68
1:U:104:GLY:N	2:V:81:THR:HG21	2.08	0.68
1:E:177:GLU:OE1	1:F:58:LEU:CD1	2.41	0.68
1:F:103:TYR:O	2:N:81:THR:HG21	1.93	0.68
1:O:57:ARG:N	1:U:177:GLU:CD	2.33	0.68
1:O:125:GLN:O	1:P:129:VAL:HG23	1.94	0.68
1:O:177:GLU:OE1	1:P:57:ARG:N	2.27	0.68
1:Q:125:GLN:O	1:R:129:VAL:HA	1.94	0.68
1:E:155:GLY:C	1:F:86:ARG:HH22	1.96	0.68
1:E:161:LYS:N	1:F:60:GLU:HG2	2.08	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:7:ALA:HB1	1:P:10:ARG:HH11	1.59	0.68
1:S:15:PHE:CZ	1:T:130:ARG:NH1	2.62	0.68
2:X:18:ARG:HE	2:X:30:ASN:HD22	1.41	0.68
2:Z:193:GLU:HA	2:Z:196:ILE:HD12	1.74	0.68
1:D:17:PRO:HA	1:E:26:TYR:CD1	2.28	0.68
1:E:103:TYR:O	2:M:81:THR:HB	1.93	0.68
1:A:86:ARG:HH22	1:G:155:GLY:C	1.92	0.68
1:T:184:LEU:HD23	1:T:189:ALA:HA	1.75	0.68
1:U:101:VAL:HG22	2:2:58:TYR:HE1	1.57	0.68
1:A:7:ALA:HB1	1:B:10:ARG:HH11	1.59	0.67
1:A:184:LEU:HD23	1:A:189:ALA:HA	1.75	0.67
1:C:125:GLN:O	1:D:129:VAL:HA	1.94	0.67
1:D:103:TYR:CE1	2:L:82:LEU:HD13	2.29	0.67
1:E:12:ILE:HD12	1:E:23:GLN:CG	1.75	0.67
1:F:184:LEU:HD23	1:F:189:ALA:HA	1.75	0.67
1:O:129:VAL:HG23	1:U:126:TYR:HA	1.74	0.67
1:P:177:GLU:N	1:Q:58:LEU:HD11	2.06	0.67
1:Q:184:LEU:HD23	1:Q:189:ALA:HA	1.75	0.67
1:C:161:LYS:CD	1:D:60:GLU:OE2	2.41	0.67
2:M:3:THR:OG1	2:M:127:THR:HG22	1.93	0.67
1:S:184:LEU:HD23	1:S:189:ALA:HA	1.75	0.67
1:T:177:GLU:OE1	1:U:58:LEU:N	2.27	0.67
1:A:125:GLN:O	1:B:129:VAL:HG23	1.94	0.67
1:E:107:VAL:CG1	2:M:66:TYR:OH	2.41	0.67
1:G:103:TYR:O	2:H:81:THR:HB	1.94	0.67
1:G:108:ASN:ND2	2:H:70:ARG:HA	2.10	0.67
1:G:184:LEU:HD23	1:G:189:ALA:HA	1.75	0.67
2:H:59:MET:SD	2:H:83:LEU:HD13	2.35	0.67
1:P:177:GLU:OE1	1:Q:58:LEU:CD1	2.40	0.67
1:B:184:LEU:HD23	1:B:189:ALA:HA	1.75	0.67
1:D:8:TYR:OH	1:E:9:ASP:OD2	2.12	0.67
1:G:101:VAL:HG23	2:N:58:TYR:HD1	1.59	0.67
2:M:53:GLN:O	2:M:56:VAL:HG12	1.93	0.67
1:O:177:GLU:HB2	1:P:58:LEU:CD2	2.23	0.67
1:R:184:LEU:HD23	1:R:189:ALA:HA	1.75	0.67
1:S:103:TYR:CE1	2:1:82:LEU:HD22	2.26	0.67
1:R:19:GLY:CA	1:S:30:ALA:HB2	2.24	0.67
1:A:177:GLU:OE1	1:B:57:ARG:N	2.27	0.67
1:C:177:GLU:CB	1:D:58:LEU:CG	2.58	0.67
2:X:45:ILE:CG1	2:X:52:ALA:HB1	2.22	0.67
2:I:133:PHE:CZ	2:I:165:ARG:HB3	2.30	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:101:VAL:HG22	2:2:58:TYR:CE1	2.27	0.67
1:B:177:GLU:N	1:C:58:LEU:HD11	2.06	0.66
1:D:108:ASN:HB3	2:L:70:ARG:CG	2.25	0.66
1:E:159:GLU:O	1:F:60:GLU:HB2	1.95	0.66
1:R:103:TYR:CE1	2:Z:82:LEU:HD13	2.29	0.66
1:R:108:ASN:HB3	2:Z:70:ARG:CG	2.25	0.66
2:2:38:ASP:HB3	2:2:41:THR:CG2	2.21	0.66
2:M:123:ILE:H	2:M:123:ILE:HD13	1.60	0.66
1:T:103:TYR:HE1	2:2:82:LEU:HD22	1.58	0.66
1:U:103:TYR:O	2:V:81:THR:HB	1.94	0.66
1:A:177:GLU:HB2	1:B:58:LEU:CD2	2.23	0.66
1:F:16:SER:O	1:G:26:TYR:HB3	1.95	0.66
2:H:38:ASP:HB3	2:H:41:THR:CG2	2.20	0.66
1:O:52:LYS:HZ1	1:O:62:ASN:HA	1.60	0.66
1:R:8:TYR:OH	1:S:9:ASP:OD2	2.12	0.66
1:T:16:SER:O	1:U:26:TYR:HB3	1.95	0.66
1:T:61:GLN:O	1:T:64:ILE:HG22	1.96	0.66
2:I:7:THR:HB	2:I:123:ILE:O	1.96	0.66
2:L:59:MET:SD	2:L:83:LEU:HD13	2.36	0.66
1:O:61:GLN:O	1:O:64:ILE:HG22	1.95	0.66
1:R:111:ASN:ND2	2:Z:70:ARG:NH2	2.43	0.66
1:S:159:GLU:O	1:T:60:GLU:HB2	1.96	0.66
2:W:7:THR:HB	2:W:123:ILE:O	1.96	0.66
2:W:133:PHE:CZ	2:W:165:ARG:HB3	2.30	0.66
1:A:108:ASN:HB3	2:I:70:ARG:CD	2.24	0.66
1:C:21:LEU:CD1	1:D:130:ARG:CD	2.72	0.66
1:P:177:GLU:CD	1:Q:56:SER:OG	2.31	0.66
2:V:59:MET:SD	2:V:83:LEU:HD13	2.35	0.66
1:C:61:GLN:O	1:C:64:ILE:HG22	1.95	0.66
1:C:198:LYS:O	1:C:202:GLU:HB2	1.96	0.66
1:O:108:ASN:HB3	2:W:70:ARG:CD	2.24	0.66
1:U:198:LYS:O	1:U:202:GLU:HB2	1.96	0.66
1:D:61:GLN:O	1:D:64:ILE:HG22	1.96	0.66
2:J:18:ARG:HE	2:J:30:ASN:HD22	1.41	0.66
1:P:21:LEU:HD11	1:Q:130:ARG:CD	2.26	0.66
1:R:108:ASN:HD22	2:Z:70:ARG:CG	2.06	0.66
1:U:108:ASN:ND2	2:V:70:ARG:HA	2.10	0.66
2:X:2:THR:HG22	2:X:169:SER:OG	1.96	0.66
2:X:75:PRO:O	2:X:78:ALA:HB3	1.96	0.66
1:B:61:GLN:O	1:B:64:ILE:HG22	1.95	0.66
1:C:15:PHE:HB2	1:D:23:GLN:HE22	1.59	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:M:164:GLN:NE2	2:Z:29:LYS:NZ	2.44	0.66
1:O:57:ARG:CB	1:U:177:GLU:OE1	2.44	0.66
1:U:61:GLN:O	1:U:64:ILE:HG22	1.95	0.66
2:Z:59:MET:SD	2:Z:83:LEU:HD13	2.36	0.66
1:A:61:GLN:O	1:A:64:ILE:HG22	1.95	0.66
1:A:177:GLU:OE1	1:B:58:LEU:CD1	2.38	0.66
1:B:177:GLU:OE1	1:C:58:LEU:CD1	2.40	0.66
1:O:198:LYS:O	1:O:202:GLU:HB2	1.96	0.66
1:Q:61:GLN:O	1:Q:64:ILE:HG22	1.95	0.66
1:Q:177:GLU:O	1:R:57:ARG:CZ	2.43	0.66
1:A:198:LYS:O	1:A:202:GLU:HB2	1.96	0.66
1:E:61:GLN:O	1:E:64:ILE:HG22	1.95	0.66
1:G:198:LYS:O	1:G:202:GLU:HB2	1.96	0.66
2:J:2:THR:HG22	2:J:169:SER:OG	1.96	0.66
1:R:61:GLN:O	1:R:64:ILE:HG22	1.96	0.66
1:R:198:LYS:O	1:R:202:GLU:HB2	1.96	0.66
1:U:52:LYS:HZ1	1:U:62:ASN:HA	1.61	0.66
1:C:108:ASN:HB2	2:K:70:ARG:CD	2.20	0.65
1:Q:15:PHE:HB2	1:R:23:GLN:HE22	1.59	0.65
1:S:61:GLN:O	1:S:64:ILE:HG22	1.95	0.65
2:1:123:ILE:HD13	2:1:123:ILE:H	1.60	0.65
1:R:52:LYS:HZ3	1:R:62:ASN:HA	1.59	0.65
1:A:57:ARG:CZ	1:G:178:ARG:HA	2.26	0.65
1:B:198:LYS:O	1:B:202:GLU:HB2	1.96	0.65
1:C:177:GLU:O	1:D:57:ARG:CZ	2.43	0.65
2:L:123:ILE:HG12	2:L:124:TYR:HD1	1.61	0.65
2:M:124:TYR:CD2	2:M:138:LEU:HD23	2.31	0.65
1:O:57:ARG:CZ	1:U:178:ARG:HA	2.27	0.65
1:S:198:LYS:O	1:S:202:GLU:HB2	1.96	0.65
2:Y:28:HIS:CD2	2:Z:120:VAL:HG11	2.31	0.65
1:A:23:GLN:HE22	1:G:15:PHE:HB2	1.62	0.65
1:D:198:LYS:O	1:D:202:GLU:HB2	1.96	0.65
2:L:29:LYS:NZ	2:1:164:GLN:NE2	2.45	0.65
2:M:164:GLN:NE2	2:Z:29:LYS:HZ1	1.93	0.65
1:G:61:GLN:O	1:G:64:ILE:HG22	1.95	0.65
1:Q:177:GLU:CG	1:R:58:LEU:HD22	2.25	0.65
2:W:45:ILE:HG12	2:W:52:ALA:HB1	1.79	0.65
1:O:108:ASN:HB3	2:W:70:ARG:HD3	1.79	0.65
1:P:61:GLN:O	1:P:64:ILE:HG22	1.96	0.65
2:Z:123:ILE:HG12	2:Z:124:TYR:HD1	1.62	0.65
1:A:177:GLU:N	1:B:58:LEU:CD2	2.49	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:111:ASN:ND2	2:L:70:ARG:NH2	2.43	0.65
1:E:198:LYS:O	1:E:202:GLU:HB2	1.96	0.65
1:F:124:THR:CG2	1:G:130:ARG:HH21	2.08	0.65
2:K:28:HIS:CD2	2:L:120:VAL:HG11	2.31	0.65
1:Q:198:LYS:O	1:Q:202:GLU:HB2	1.96	0.65
1:T:198:LYS:O	1:T:202:GLU:HB2	1.96	0.65
1:C:107:VAL:HG11	2:K:66:TYR:HH	1.62	0.65
1:O:26:TYR:HB3	1:U:16:SER:O	1.97	0.65
1:O:101:VAL:HG21	2:V:58:TYR:HD1	1.40	0.65
1:T:103:TYR:O	2:2:81:THR:CG2	2.45	0.65
1:T:107:VAL:HG21	2:2:66:TYR:OH	1.97	0.65
1:T:124:THR:CG2	1:U:130:ARG:HH21	2.08	0.65
2:W:123:ILE:HD13	2:W:123:ILE:H	1.62	0.65
1:A:57:ARG:CB	1:G:177:GLU:OE1	2.44	0.65
1:F:61:GLN:O	1:F:64:ILE:HG22	1.95	0.65
1:O:23:GLN:HE22	1:U:15:PHE:HB2	1.62	0.65
1:B:108:ASN:HD22	2:J:70:ARG:CB	2.10	0.65
1:F:17:PRO:HA	1:G:26:TYR:CD1	2.32	0.65
1:F:103:TYR:O	2:N:81:THR:CG2	2.45	0.65
2:I:124:TYR:CD2	2:I:138:LEU:HD23	2.32	0.65
1:Q:21:LEU:CD1	1:R:130:ARG:CD	2.72	0.65
2:W:20:VAL:HG13	2:W:28:HIS:HB2	1.79	0.65
1:F:198:LYS:O	1:F:202:GLU:HB2	1.96	0.64
1:P:198:LYS:O	1:P:202:GLU:HB2	1.96	0.64
1:F:52:LYS:HZ3	1:F:62:ASN:HA	1.61	0.64
2:I:20:VAL:HG13	2:I:28:HIS:HB2	1.79	0.64
1:R:108:ASN:HB3	2:Z:70:ARG:HG2	1.74	0.64
2:K:59:MET:HE2	2:K:79:VAL:HG23	1.79	0.64
1:T:15:PHE:CE2	1:U:131:PRO:O	2.51	0.64
1:F:15:PHE:CE2	1:G:131:PRO:O	2.51	0.64
1:G:52:LYS:HZ3	1:G:62:ASN:HA	1.60	0.64
2:N:123:ILE:HG12	2:N:124:TYR:HD2	1.61	0.64
2:Y:123:ILE:HG12	2:Y:124:TYR:CD1	2.31	0.64
2:1:49:VAL:HG23	2:1:50:GLY:H	1.63	0.64
2:1:124:TYR:CD2	2:1:138:LEU:HD23	2.31	0.64
2:J:75:PRO:O	2:J:78:ALA:HB3	1.96	0.64
2:L:124:TYR:CD2	2:L:138:LEU:HD23	2.33	0.64
1:U:101:VAL:HG23	2:2:58:TYR:HD1	1.59	0.64
2:W:124:TYR:CD2	2:W:138:LEU:HD23	2.32	0.64
1:B:21:LEU:HD11	1:C:130:ARG:CD	2.26	0.64
1:D:156:THR:HA	1:E:86:ARG:HH12	1.62	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:I:45:ILE:HG12	2:I:52:ALA:HB1	1.79	0.64
1:O:177:GLU:OE1	1:P:58:LEU:CD1	2.38	0.64
2:V:124:TYR:CD2	2:V:138:LEU:HD23	2.33	0.64
2:M:123:ILE:HG12	2:M:124:TYR:CD1	2.33	0.64
2:1:45:ILE:CG1	2:1:52:ALA:HB1	2.26	0.64
1:A:26:TYR:HB3	1:G:16:SER:O	1.97	0.64
1:A:108:ASN:HB3	2:I:70:ARG:HD3	1.79	0.64
2:L:18:ARG:HB2	2:L:31:GLY:O	1.98	0.64
1:R:100:LYS:NZ	2:Y:64:GLU:OE1	2.28	0.64
2:V:55:LEU:HD21	2:V:87:LEU:HD11	1.80	0.64
2:2:123:ILE:HG12	2:2:124:TYR:HD2	1.61	0.64
2:K:3:THR:HB	2:K:16:THR:HG22	1.80	0.64
1:S:19:GLY:HA3	1:T:30:ALA:HB2	1.80	0.64
2:1:123:ILE:HG12	2:1:124:TYR:CD1	2.33	0.64
2:I:123:ILE:HD13	2:I:123:ILE:H	1.62	0.64
1:S:72:ASP:OD1	2:Z:67:ARG:NH2	2.31	0.64
1:T:17:PRO:HA	1:U:26:TYR:CD1	2.32	0.64
1:E:72:ASP:OD1	2:L:67:ARG:NH2	2.31	0.63
1:O:86:ARG:HH22	1:U:155:GLY:C	1.92	0.63
1:Q:177:GLU:HB2	1:R:58:LEU:HD22	0.63	0.63
1:R:156:THR:HA	1:S:86:ARG:HH12	1.62	0.63
1:O:97:GLN:OE1	2:V:61:ALA:CB	2.46	0.63
1:P:15:PHE:CZ	1:Q:130:ARG:NH1	2.66	0.63
2:V:123:ILE:HD13	2:V:123:ILE:H	1.62	0.63
1:A:23:GLN:HE22	1:G:15:PHE:H	1.46	0.63
2:I:123:ILE:HG12	2:I:124:TYR:CD1	2.32	0.63
2:M:141:GLN:NE2	2:1:141:GLN:HE21	1.96	0.63
1:O:23:GLN:HE22	1:U:15:PHE:H	1.46	0.63
1:P:108:ASN:HD22	2:X:70:ARG:CB	2.10	0.63
1:Q:52:LYS:HZ1	1:Q:62:ASN:HA	1.61	0.63
2:Z:37:ILE:HD11	2:Z:59:MET:HB3	1.79	0.63
1:E:19:GLY:HA3	1:F:30:ALA:HB2	1.80	0.63
2:J:103:GLY:HA2	2:J:178:ILE:HD13	1.81	0.63
2:K:193:GLU:HA	2:K:196:ILE:HD12	1.81	0.63
2:M:45:ILE:CG1	2:M:52:ALA:HB1	2.26	0.63
2:M:49:VAL:HG23	2:M:50:GLY:H	1.62	0.63
2:Y:193:GLU:HA	2:Y:196:ILE:HD12	1.81	0.63
2:Z:18:ARG:HB2	2:Z:31:GLY:O	1.98	0.63
2:Z:124:TYR:CD2	2:Z:138:LEU:HD23	2.33	0.63
1:B:15:PHE:CZ	1:C:130:ARG:NH1	2.66	0.63
1:G:103:TYR:O	2:H:81:THR:CG2	2.47	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:167:SER:HB2	2:X:167:SER:HB2	1.79	0.63
2:N:179:THR:HG23	2:N:182:ASP:H	1.63	0.63
2:X:103:GLY:HA2	2:X:178:ILE:HD13	1.81	0.63
1:D:100:LYS:NZ	2:K:64:GLU:OE1	2.28	0.63
1:F:107:VAL:HG21	2:N:66:TYR:OH	1.97	0.63
1:C:104:GLY:CA	2:K:81:THR:HG21	2.28	0.63
1:C:177:GLU:HB2	1:D:58:LEU:HD22	0.63	0.63
1:C:177:GLU:CD	1:D:58:LEU:H	2.01	0.63
2:H:124:TYR:CD2	2:H:138:LEU:HD23	2.33	0.63
1:B:177:GLU:OE2	1:C:56:SER:CA	2.47	0.63
1:C:177:GLU:CG	1:D:58:LEU:HD22	2.25	0.63
1:F:108:ASN:CG	2:N:70:ARG:CG	2.56	0.63
2:H:123:ILE:HD13	2:H:123:ILE:H	1.62	0.63
2:N:133:PHE:CZ	2:N:165:ARG:HB3	2.34	0.63
1:U:103:TYR:O	2:V:81:THR:CG2	2.47	0.63
1:A:26:TYR:CD1	1:G:17:PRO:HA	2.34	0.62
1:G:103:TYR:HE1	2:H:82:LEU:HD22	1.64	0.62
2:J:103:GLY:HA2	2:J:178:ILE:CD1	2.29	0.62
1:O:161:LYS:CB	1:P:60:GLU:OE2	2.45	0.62
1:R:173:VAL:O	1:S:58:LEU:HD22	1.99	0.62
1:U:103:TYR:HE1	2:V:82:LEU:HD22	1.64	0.62
2:2:133:PHE:CZ	2:2:165:ARG:HB3	2.34	0.62
1:B:177:GLU:CA	1:C:58:LEU:HD13	2.08	0.62
1:D:103:TYR:HE1	2:L:82:LEU:HD22	1.64	0.62
2:L:37:ILE:HD11	2:L:59:MET:HB3	1.79	0.62
1:O:177:GLU:HA	1:P:58:LEU:CD2	2.28	0.62
1:T:178:ARG:C	1:U:57:ARG:HH22	1.92	0.62
1:D:177:GLU:OE1	1:E:57:ARG:C	2.37	0.62
1:E:101:VAL:HG22	2:L:58:TYR:HE1	1.59	0.62
1:Q:104:GLY:CA	2:Y:81:THR:HG21	2.28	0.62
1:R:177:GLU:OE1	1:S:57:ARG:C	2.37	0.62
2:Z:15:ALA:HB2	2:Z:175:VAL:HB	1.82	0.62
1:E:177:GLU:CB	1:F:58:LEU:CD2	2.70	0.62
2:K:123:ILE:HD13	2:K:123:ILE:H	1.63	0.62
1:T:14:VAL:H	1:U:130:ARG:HB2	1.64	0.62
1:A:129:VAL:CG2	1:G:125:GLN:O	2.48	0.62
1:C:121:GLN:O	1:C:124:THR:HB	2.00	0.62
1:T:17:PRO:HA	1:U:26:TYR:CG	2.35	0.62
1:C:97:GLN:OE1	2:J:61:ALA:CB	2.48	0.62
1:D:108:ASN:HD22	2:L:70:ARG:CG	2.06	0.62
1:E:107:VAL:HG21	2:M:66:TYR:OH	1.99	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:17:PRO:HA	1:G:26:TYR:CG	2.34	0.62
2:I:76:ILE:O	2:I:79:VAL:HG12	2.00	0.62
1:O:26:TYR:CD1	1:U:17:PRO:HA	2.34	0.62
1:Q:121:GLN:O	1:Q:124:THR:HB	2.00	0.62
1:U:121:GLN:O	1:U:124:THR:HB	2.00	0.62
2:M:141:GLN:HE21	2:1:141:GLN:NE2	1.97	0.62
2:Y:3:THR:HB	2:Y:16:THR:HG22	1.80	0.62
2:H:2:THR:HG22	2:H:169:SER:OG	2.00	0.62
2:H:55:LEU:HD21	2:H:87:LEU:HD11	1.80	0.62
2:J:167:SER:HB2	2:V:167:SER:HB2	1.82	0.62
1:Q:52:LYS:HZ3	1:Q:62:ASN:HA	1.63	0.62
1:T:121:GLN:O	1:T:124:THR:HB	2.00	0.62
2:V:43:MET:CE	2:V:56:VAL:HG23	2.29	0.62
2:X:103:GLY:HA2	2:X:178:ILE:CD1	2.29	0.62
1:B:121:GLN:O	1:B:124:THR:HB	2.00	0.62
1:F:121:GLN:O	1:F:124:THR:HB	2.00	0.62
1:P:177:GLU:OE2	1:Q:56:SER:CA	2.47	0.62
1:P:177:GLU:CB	1:Q:58:LEU:CD1	2.77	0.62
2:1:149:ASP:O	2:1:152:VAL:HG12	1.99	0.62
2:H:123:ILE:HG12	2:H:124:TYR:CD1	2.33	0.62
1:P:121:GLN:O	1:P:124:THR:HB	2.00	0.62
1:Q:97:GLN:OE1	2:X:61:ALA:CB	2.48	0.62
1:R:121:GLN:O	1:R:124:THR:HB	2.00	0.62
2:2:179:THR:HG23	2:2:182:ASP:H	1.63	0.62
1:F:52:LYS:HZ1	1:F:62:ASN:HA	1.63	0.61
2:M:149:ASP:O	2:M:152:VAL:HG12	1.99	0.61
1:U:52:LYS:HZ3	1:U:62:ASN:HA	1.63	0.61
1:D:61:GLN:OE1	1:D:62:ASN:HB3	2.00	0.61
1:G:12:ILE:HA	1:G:23:GLN:CG	2.21	0.61
1:S:121:GLN:O	1:S:124:THR:HB	2.00	0.61
1:G:121:GLN:O	1:G:124:THR:HB	2.00	0.61
2:K:38:ASP:HB3	2:K:41:THR:CG2	2.26	0.61
1:O:58:LEU:HD13	1:U:177:GLU:CD	2.21	0.61
1:P:88:LEU:HD21	1:P:120:MET:SD	2.41	0.61
1:S:107:VAL:HG21	2:1:66:TYR:OH	1.99	0.61
2:V:2:THR:HG22	2:V:169:SER:OG	2.00	0.61
2:W:76:ILE:O	2:W:79:VAL:HG12	1.99	0.61
1:A:88:LEU:HD21	1:A:120:MET:SD	2.41	0.61
1:E:121:GLN:O	1:E:124:THR:HB	2.00	0.61
1:F:14:VAL:H	1:G:130:ARG:HB2	1.64	0.61
1:O:49:ILE:HD12	1:O:211:GLU:O	2.01	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:49:ILE:HD12	1:P:211:GLU:O	2.01	0.61
1:P:177:GLU:CB	1:Q:58:LEU:HD13	2.30	0.61
1:Q:15:PHE:CZ	1:R:130:ARG:NH1	2.68	0.61
1:B:88:LEU:HD21	1:B:120:MET:SD	2.41	0.61
1:C:49:ILE:HD12	1:C:211:GLU:O	2.01	0.61
2:N:76:ILE:O	2:N:79:VAL:HG12	2.00	0.61
1:O:88:LEU:HD21	1:O:120:MET:SD	2.41	0.61
1:Q:49:ILE:HD12	1:Q:211:GLU:O	2.01	0.61
1:Q:88:LEU:HD21	1:Q:120:MET:SD	2.41	0.61
1:Q:177:GLU:CD	1:R:58:LEU:H	2.01	0.61
2:Y:123:ILE:HD13	2:Y:123:ILE:H	1.63	0.61
1:A:121:GLN:O	1:A:124:THR:HB	2.00	0.61
1:C:15:PHE:CZ	1:D:130:ARG:NH1	2.68	0.61
1:C:88:LEU:HD21	1:C:120:MET:SD	2.41	0.61
1:D:121:GLN:O	1:D:124:THR:HB	2.00	0.61
1:E:88:LEU:HD21	1:E:120:MET:SD	2.41	0.61
1:G:108:ASN:ND2	2:H:70:ARG:O	2.33	0.61
2:K:123:ILE:HG12	2:K:124:TYR:CD1	2.31	0.61
1:O:177:GLU:C	1:P:57:ARG:NH2	2.30	0.61
1:A:97:GLN:OE1	2:H:61:ALA:CB	2.46	0.61
1:D:49:ILE:HD12	1:D:211:GLU:O	2.01	0.61
1:F:72:ASP:CG	2:M:67:ARG:NH2	2.54	0.61
1:F:88:LEU:HD21	1:F:120:MET:SD	2.41	0.61
1:O:121:GLN:O	1:O:124:THR:HB	2.00	0.61
1:S:49:ILE:HD12	1:S:211:GLU:O	2.01	0.61
1:T:61:GLN:OE1	1:T:62:ASN:HB3	2.00	0.61
1:T:72:ASP:CG	2:1:67:ARG:NH2	2.54	0.61
1:U:88:LEU:HD21	1:U:120:MET:SD	2.41	0.61
2:W:123:ILE:HG12	2:W:124:TYR:CD1	2.32	0.61
1:A:49:ILE:HD12	1:A:211:GLU:O	2.01	0.61
1:B:61:GLN:OE1	1:B:62:ASN:HB3	2.00	0.61
1:D:88:LEU:HD21	1:D:120:MET:SD	2.41	0.61
1:E:49:ILE:HD12	1:E:211:GLU:O	2.01	0.61
1:F:61:GLN:OE1	1:F:62:ASN:HB3	2.00	0.61
1:O:61:GLN:OE1	1:O:62:ASN:HB3	2.00	0.61
1:S:88:LEU:HD21	1:S:120:MET:SD	2.41	0.61
1:T:88:LEU:HD21	1:T:120:MET:SD	2.41	0.61
1:U:49:ILE:HD12	1:U:211:GLU:O	2.01	0.61
1:E:61:GLN:OE1	1:E:62:ASN:HB3	2.00	0.61
1:G:61:GLN:OE1	1:G:62:ASN:HB3	2.00	0.61
2:L:15:ALA:HB2	2:L:175:VAL:HB	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:3:THR:HB	2:N:16:THR:HG22	1.83	0.61
1:O:129:VAL:CG2	1:U:125:GLN:O	2.48	0.61
1:Q:12:ILE:HA	1:Q:23:GLN:CG	2.21	0.61
1:R:103:TYR:HE1	2:Z:82:LEU:HD22	1.64	0.61
1:U:108:ASN:ND2	2:V:70:ARG:O	2.33	0.61
2:W:37:ILE:HD11	2:W:59:MET:HB3	1.82	0.61
2:I:37:ILE:HD11	2:I:59:MET:HB3	1.83	0.60
1:P:61:GLN:OE1	1:P:62:ASN:HB3	2.00	0.60
1:Q:61:GLN:OE1	1:Q:62:ASN:HB3	2.00	0.60
1:U:61:GLN:OE1	1:U:62:ASN:HB3	2.00	0.60
2:L:3:THR:HB	2:L:16:THR:HG22	1.83	0.60
1:R:49:ILE:HD12	1:R:211:GLU:O	2.01	0.60
1:S:125:GLN:O	1:T:129:VAL:HG23	2.02	0.60
1:C:178:ARG:HA	1:D:57:ARG:HH22	1.59	0.60
1:F:49:ILE:HD12	1:F:211:GLU:O	2.01	0.60
1:R:61:GLN:OE1	1:R:62:ASN:HB3	2.00	0.60
2:Z:32:LYS:HE2	2:Z:34:LEU:O	2.01	0.60
1:D:107:VAL:HG11	2:L:66:TYR:OH	2.01	0.60
1:E:125:GLN:O	1:F:129:VAL:HG23	2.02	0.60
2:L:133:PHE:HE1	2:2:132:PRO:HA	1.65	0.60
1:O:15:PHE:HB2	1:P:23:GLN:HE22	1.66	0.60
1:R:12:ILE:HA	1:R:23:GLN:CG	2.21	0.60
1:B:177:GLU:CB	1:C:58:LEU:CD1	2.77	0.60
1:C:61:GLN:OE1	1:C:62:ASN:HB3	2.00	0.60
1:F:108:ASN:HB2	2:N:70:ARG:CD	2.31	0.60
1:G:49:ILE:HD12	1:G:211:GLU:O	2.01	0.60
1:R:28:ARG:O	1:R:31:VAL:HG22	2.02	0.60
1:R:88:LEU:HD21	1:R:120:MET:SD	2.41	0.60
2:2:76:ILE:O	2:2:79:VAL:HG12	2.00	0.60
1:A:61:GLN:OE1	1:A:62:ASN:HB3	2.00	0.60
1:B:161:LYS:N	1:C:60:GLU:HG2	2.16	0.60
1:F:71:ASP:HA	2:M:68:LEU:HD21	1.82	0.60
1:G:28:ARG:O	1:G:31:VAL:HG22	2.02	0.60
1:G:52:LYS:HZ1	1:G:62:ASN:HA	1.65	0.60
1:G:103:TYR:O	2:H:81:THR:HG21	2.02	0.60
2:K:124:TYR:CD2	2:K:138:LEU:HD23	2.37	0.60
1:O:52:LYS:HZ3	1:O:62:ASN:HA	1.65	0.60
1:R:107:VAL:HG11	2:Z:66:TYR:OH	2.01	0.60
1:B:177:GLU:CB	1:C:58:LEU:HD13	2.30	0.60
1:S:28:ARG:O	1:S:31:VAL:HG22	2.02	0.60
1:T:104:GLY:N	2:2:81:THR:HG21	2.17	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:107:VAL:HG11	2:2:66:TYR:HH	1.66	0.60
2:1:133:PHE:CZ	2:1:165:ARG:HB3	2.37	0.60
1:E:108:ASN:HB3	2:M:70:ARG:HG2	1.76	0.60
1:G:88:LEU:HD21	1:G:120:MET:SD	2.41	0.60
1:R:52:LYS:HZ1	1:R:62:ASN:HA	1.66	0.60
1:S:107:VAL:CG2	2:1:66:TYR:OH	2.50	0.60
1:T:15:PHE:HB2	1:U:23:GLN:NE2	2.11	0.60
1:T:71:ASP:HA	2:1:68:LEU:HD21	1.83	0.60
2:Y:159:ILE:O	2:Y:163:LYS:HG3	2.02	0.60
1:F:8:TYR:CE2	1:G:10:ARG:HD3	2.37	0.60
2:H:43:MET:CE	2:H:56:VAL:HG23	2.30	0.60
1:O:177:GLU:C	1:P:58:LEU:HD11	2.22	0.60
1:S:61:GLN:OE1	1:S:62:ASN:HB3	2.00	0.60
1:U:107:VAL:CB	2:V:66:TYR:OH	2.49	0.60
2:2:3:THR:HB	2:2:16:THR:HG22	1.83	0.60
1:B:49:ILE:HD12	1:B:211:GLU:O	2.01	0.60
1:D:97:GLN:OE1	2:K:61:ALA:CB	2.50	0.60
1:P:161:LYS:N	1:Q:60:GLU:HG2	2.16	0.60
1:T:42:PHE:HD1	1:T:43:ALA:N	2.00	0.60
1:U:12:ILE:HB	1:U:23:GLN:HG3	0.60	0.60
1:A:58:LEU:HD13	1:G:177:GLU:CD	2.21	0.59
1:D:28:ARG:O	1:D:31:VAL:HG22	2.02	0.59
1:Q:28:ARG:O	1:Q:31:VAL:HG22	2.02	0.59
1:Q:177:GLU:CB	1:R:58:LEU:CG	2.59	0.59
1:A:15:PHE:HB2	1:B:23:GLN:HE22	1.66	0.59
1:A:28:ARG:O	1:A:31:VAL:HG22	2.02	0.59
1:A:42:PHE:HD1	1:A:43:ALA:N	2.00	0.59
1:O:28:ARG:O	1:O:31:VAL:HG22	2.02	0.59
1:T:49:ILE:HD12	1:T:211:GLU:O	2.01	0.59
2:V:123:ILE:HG12	2:V:124:TYR:CD1	2.33	0.59
2:X:38:ASP:HB2	2:X:63:LEU:HD23	1.84	0.59
2:Z:3:THR:HB	2:Z:16:THR:HG22	1.83	0.59
1:B:12:ILE:HB	1:B:23:GLN:HG3	0.60	0.59
1:C:12:ILE:HB	1:C:23:GLN:HG3	0.59	0.59
1:F:28:ARG:O	1:F:31:VAL:HG22	2.02	0.59
1:F:42:PHE:HD1	1:F:43:ALA:N	2.00	0.59
1:G:107:VAL:CB	2:H:66:TYR:OH	2.49	0.59
2:K:32:LYS:HE2	2:K:34:LEU:O	2.02	0.59
2:M:133:PHE:CZ	2:M:165:ARG:HB3	2.37	0.59
1:P:12:ILE:HB	1:P:23:GLN:HG3	0.60	0.59
1:T:103:TYR:CZ	2:2:82:LEU:HD13	2.37	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:37:ILE:HD11	2:V:59:MET:HB3	1.82	0.59
1:D:15:PHE:HB2	1:E:23:GLN:HE22	1.67	0.59
1:D:19:GLY:HA3	1:E:30:ALA:HB2	1.84	0.59
1:F:107:VAL:CG2	2:N:66:TYR:OH	2.51	0.59
1:G:42:PHE:HD1	1:G:43:ALA:N	2.00	0.59
1:O:12:ILE:HB	1:O:23:GLN:HG3	0.59	0.59
1:Q:12:ILE:HB	1:Q:23:GLN:HG3	0.59	0.59
1:R:42:PHE:HD1	1:R:43:ALA:N	2.00	0.59
1:S:42:PHE:HD1	1:S:43:ALA:N	2.00	0.59
1:T:12:ILE:HB	1:T:23:GLN:HG3	0.60	0.59
1:T:28:ARG:O	1:T:31:VAL:HG22	2.02	0.59
2:W:149:ASP:O	2:W:152:VAL:HG12	2.03	0.59
2:Y:18:ARG:HE	2:Y:30:ASN:HD22	1.51	0.59
1:A:49:ILE:HD11	1:A:210:PRO:HB3	1.85	0.59
1:A:178:ARG:HA	1:B:57:ARG:HH21	1.62	0.59
1:D:108:ASN:HD22	2:L:70:ARG:HB3	1.68	0.59
1:F:177:GLU:CA	1:G:58:LEU:HD13	2.02	0.59
2:K:152:VAL:O	2:K:156:ILE:HG13	2.03	0.59
1:S:12:ILE:HB	1:S:23:GLN:HG3	0.60	0.59
1:U:42:PHE:HD1	1:U:43:ALA:N	2.00	0.59
1:A:12:ILE:HB	1:A:23:GLN:HG3	0.59	0.59
1:B:49:ILE:HD11	1:B:210:PRO:HB3	1.85	0.59
1:D:12:ILE:HB	1:D:23:GLN:HG3	0.59	0.59
1:D:173:VAL:O	1:E:58:LEU:HD22	1.99	0.59
1:F:12:ILE:HA	1:F:23:GLN:CG	2.21	0.59
1:F:104:GLY:N	2:N:81:THR:HG21	2.17	0.59
1:G:12:ILE:HB	1:G:23:GLN:HG3	0.60	0.59
1:G:49:ILE:HD11	1:G:210:PRO:HB3	1.85	0.59
1:O:15:PHE:CZ	1:P:130:ARG:NH1	2.71	0.59
1:P:108:ASN:ND2	2:X:70:ARG:CG	2.66	0.59
1:R:15:PHE:HB2	1:S:23:GLN:HE22	1.67	0.59
1:T:8:TYR:CE2	1:U:10:ARG:HD3	2.37	0.59
1:A:177:GLU:C	1:B:57:ARG:NH2	2.30	0.59
1:B:42:PHE:HD1	1:B:43:ALA:N	2.00	0.59
1:E:111:ASN:CB	2:M:70:ARG:NH1	2.66	0.59
2:L:32:LYS:HE2	2:L:34:LEU:O	2.01	0.59
1:Q:42:PHE:HD1	1:Q:43:ALA:N	2.00	0.59
1:R:97:GLN:OE1	2:Y:61:ALA:CB	2.50	0.59
2:1:38:ASP:HB3	2:1:41:THR:CG2	2.28	0.59
1:A:15:PHE:CZ	1:B:130:ARG:NH1	2.71	0.59
1:A:161:LYS:CB	1:B:60:GLU:OE2	2.45	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:108:ASN:HB3	2:L:70:ARG:HG2	1.74	0.59
1:E:42:PHE:HD1	1:E:43:ALA:N	2.00	0.59
1:E:107:VAL:CG2	2:M:66:TYR:OH	2.50	0.59
1:R:19:GLY:HA3	1:S:30:ALA:HB2	1.84	0.59
1:R:49:ILE:HD11	1:R:210:PRO:HB3	1.85	0.59
1:S:49:ILE:HD11	1:S:210:PRO:HB3	1.85	0.59
1:C:42:PHE:HD1	1:C:43:ALA:N	2.00	0.59
1:E:28:ARG:O	1:E:31:VAL:HG22	2.02	0.59
1:E:177:GLU:CD	1:F:58:LEU:H	2.06	0.59
1:F:49:ILE:HD11	1:F:210:PRO:HB3	1.85	0.59
2:H:37:ILE:HD11	2:H:59:MET:HB3	1.82	0.59
1:P:28:ARG:O	1:P:31:VAL:HG22	2.02	0.59
1:T:107:VAL:CG2	2:2:66:TYR:OH	2.51	0.59
1:A:101:VAL:HG21	2:H:58:TYR:HD1	1.40	0.59
1:C:28:ARG:O	1:C:31:VAL:HG22	2.02	0.59
1:C:35:SER:O	1:C:166:GLY:HA3	2.03	0.59
2:L:38:ASP:HB3	2:L:41:THR:CG2	2.31	0.59
1:Q:49:ILE:HD11	1:Q:210:PRO:HB3	1.85	0.59
1:R:12:ILE:HB	1:R:23:GLN:HG3	0.59	0.59
1:B:28:ARG:O	1:B:31:VAL:HG22	2.02	0.58
1:D:42:PHE:HD1	1:D:43:ALA:N	2.00	0.58
1:E:12:ILE:HD13	1:E:23:GLN:CA	1.93	0.58
1:F:12:ILE:HB	1:F:23:GLN:HG3	0.59	0.58
2:J:7:THR:HB	2:J:123:ILE:O	2.03	0.58
1:R:108:ASN:CB	2:Z:70:ARG:CD	2.80	0.58
1:S:177:GLU:CD	1:T:58:LEU:H	2.06	0.58
1:T:35:SER:O	1:T:166:GLY:HA3	2.03	0.58
2:Y:124:TYR:CD2	2:Y:138:LEU:HD23	2.37	0.58
2:J:38:ASP:HB2	2:J:63:LEU:HD23	1.84	0.58
2:N:132:PRO:HA	2:Z:133:PHE:HE1	1.67	0.58
1:O:42:PHE:HD1	1:O:43:ALA:N	2.00	0.58
1:T:49:ILE:HD11	1:T:210:PRO:HB3	1.85	0.58
2:Z:123:ILE:H	2:Z:123:ILE:HD13	1.67	0.58
1:A:177:GLU:C	1:B:58:LEU:HD11	2.22	0.58
1:B:35:SER:O	1:B:166:GLY:HA3	2.03	0.58
1:D:35:SER:O	1:D:166:GLY:HA3	2.03	0.58
1:E:12:ILE:HB	1:E:23:GLN:HG3	0.60	0.58
1:T:108:ASN:HB2	2:2:70:ARG:CD	2.31	0.58
1:U:28:ARG:O	1:U:31:VAL:HG22	2.02	0.58
2:Z:38:ASP:HB3	2:Z:41:THR:CG2	2.31	0.58
2:2:178:ILE:HB	2:2:184:TYR:HA	1.84	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:101:VAL:HG22	2:H:58:TYR:CE1	2.38	0.58
2:K:159:ILE:O	2:K:163:LYS:HG3	2.02	0.58
2:L:123:ILE:HD13	2:L:123:ILE:H	1.67	0.58
1:P:42:PHE:HD1	1:P:43:ALA:N	2.00	0.58
1:R:108:ASN:HD22	2:Z:70:ARG:HB3	1.68	0.58
1:S:35:SER:O	1:S:166:GLY:HA3	2.03	0.58
1:U:35:SER:O	1:U:166:GLY:HA3	2.03	0.58
2:X:7:THR:HB	2:X:123:ILE:O	2.03	0.58
2:X:199:LEU:HB3	2:X:201:LEU:HD13	1.85	0.58
2:Y:152:VAL:O	2:Y:156:ILE:HG13	2.03	0.58
1:B:101:VAL:HG22	2:I:58:TYR:HE1	1.67	0.58
1:C:49:ILE:HD11	1:C:210:PRO:HB3	1.85	0.58
1:E:49:ILE:HD11	1:E:210:PRO:HB3	1.85	0.58
1:F:103:TYR:CZ	2:N:82:LEU:HD13	2.37	0.58
1:F:135:SER:OG	1:F:153:PRO:HD3	2.04	0.58
2:L:28:HIS:CD2	2:M:120:VAL:HG11	2.39	0.58
1:R:35:SER:O	1:R:166:GLY:HA3	2.03	0.58
1:S:111:ASN:CB	2:1:70:ARG:NH1	2.66	0.58
1:U:49:ILE:HD11	1:U:210:PRO:HB3	1.85	0.58
2:Y:20:VAL:HG22	2:Y:28:HIS:HB2	1.86	0.58
1:A:35:SER:O	1:A:166:GLY:HA3	2.03	0.58
1:E:135:SER:OG	1:E:153:PRO:HD3	2.04	0.58
1:P:135:SER:OG	1:P:153:PRO:HD3	2.04	0.58
1:S:160:TYR:C	1:T:60:GLU:HG3	2.24	0.58
1:U:144:ILE:HD11	2:V:70:ARG:O	2.03	0.58
2:Y:59:MET:HE3	2:Y:82:LEU:HD23	1.83	0.58
1:C:178:ARG:C	1:D:57:ARG:HH22	2.07	0.58
1:D:97:GLN:HG3	2:K:65:LEU:HB2	1.85	0.58
1:E:15:PHE:CZ	1:F:133:GLY:HA3	2.39	0.58
1:P:49:ILE:HD11	1:P:210:PRO:HB3	1.84	0.58
1:U:103:TYR:O	2:V:81:THR:HG21	2.02	0.58
2:V:152:VAL:O	2:V:156:ILE:HG13	2.04	0.58
2:Y:32:LYS:HE2	2:Y:34:LEU:O	2.02	0.58
1:A:177:GLU:HA	1:B:58:LEU:CD2	2.28	0.58
1:F:35:SER:O	1:F:166:GLY:HA3	2.03	0.58
2:H:8:LEU:HD12	2:H:8:LEU:O	2.03	0.58
1:O:135:SER:OG	1:O:153:PRO:HD3	2.04	0.58
1:Q:135:SER:OG	1:Q:153:PRO:HD3	2.04	0.58
1:C:72:ASP:OD2	2:J:67:ARG:NH2	2.36	0.58
1:D:135:SER:OG	1:D:153:PRO:HD3	2.04	0.58
1:E:35:SER:O	1:E:166:GLY:HA3	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:35:SER:O	1:G:166:GLY:HA3	2.03	0.58
1:G:135:SER:OG	1:G:153:PRO:HD3	2.04	0.58
2:I:149:ASP:O	2:I:152:VAL:HG12	2.03	0.58
2:Y:38:ASP:HB3	2:Y:41:THR:CG2	2.26	0.58
1:B:108:ASN:ND2	2:J:70:ARG:CG	2.66	0.58
1:D:19:GLY:O	1:E:30:ALA:HB2	2.04	0.58
1:G:144:ILE:HD11	2:H:70:ARG:O	2.03	0.58
2:K:18:ARG:HE	2:K:30:ASN:HD22	1.51	0.58
1:O:49:ILE:HD11	1:O:210:PRO:HB3	1.85	0.58
2:X:123:ILE:HG12	2:X:124:TYR:HD1	1.69	0.58
1:O:86:ARG:HH12	1:U:156:THR:HA	1.69	0.57
1:Q:72:ASP:OD2	2:X:67:ARG:NH2	2.36	0.57
1:B:177:GLU:HA	1:C:58:LEU:CG	2.19	0.57
2:J:3:THR:OG1	2:J:127:THR:HG22	2.05	0.57
2:M:28:HIS:CD2	2:N:120:VAL:HG11	2.39	0.57
2:N:178:ILE:HB	2:N:184:TYR:HA	1.84	0.57
1:O:35:SER:O	1:O:166:GLY:HA3	2.03	0.57
1:O:101:VAL:HG22	2:V:58:TYR:CE1	2.38	0.57
1:R:15:PHE:H	1:S:23:GLN:HE22	1.51	0.57
1:S:15:PHE:CZ	1:T:133:GLY:HA3	2.39	0.57
2:X:160:SER:O	2:X:163:LYS:HB2	2.04	0.57
1:D:15:PHE:H	1:E:23:GLN:HE22	1.51	0.57
2:I:51:ASP:O	2:I:55:LEU:HB2	2.04	0.57
1:P:12:ILE:HD13	1:P:23:GLN:CA	1.93	0.57
1:P:12:ILE:HA	1:P:23:GLN:CG	2.21	0.57
1:Q:35:SER:O	1:Q:166:GLY:HA3	2.03	0.57
1:R:135:SER:OG	1:R:153:PRO:HD3	2.04	0.57
2:1:28:HIS:CD2	2:2:120:VAL:HG11	2.39	0.57
1:A:86:ARG:HH12	1:G:156:THR:HA	1.69	0.57
1:C:135:SER:OG	1:C:153:PRO:HD3	2.04	0.57
2:M:75:PRO:O	2:M:78:ALA:HB3	2.05	0.57
1:O:12:ILE:CD1	1:O:23:GLN:HB2	1.06	0.57
1:Q:178:ARG:C	1:R:57:ARG:HH22	2.07	0.57
2:X:3:THR:OG1	2:X:127:THR:HG22	2.05	0.57
2:Z:28:HIS:CD2	2:1:120:VAL:HG11	2.39	0.57
1:E:160:TYR:C	1:F:60:GLU:HG3	2.24	0.57
1:G:108:ASN:HD22	2:H:70:ARG:CG	2.08	0.57
2:K:20:VAL:HG22	2:K:28:HIS:HB2	1.86	0.57
2:N:124:TYR:CD1	2:N:138:LEU:HD23	2.40	0.57
1:R:97:GLN:HG3	2:Y:65:LEU:HB2	1.85	0.57
1:T:103:TYR:O	2:2:81:THR:HB	2.05	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:155:GLY:C	1:U:86:ARG:HH22	2.00	0.57
2:V:8:LEU:HD12	2:V:8:LEU:O	2.03	0.57
2:Y:131:SER:O	2:Y:134:VAL:HG13	2.04	0.57
1:C:125:GLN:C	1:D:129:VAL:HG23	2.25	0.57
1:D:12:ILE:HA	1:D:23:GLN:CG	2.21	0.57
1:D:108:ASN:CB	2:L:70:ARG:CD	2.80	0.57
1:E:12:ILE:HA	1:E:23:GLN:CG	2.21	0.57
2:K:131:SER:O	2:K:134:VAL:HG13	2.04	0.57
1:R:19:GLY:O	1:S:30:ALA:HB2	2.04	0.57
1:T:15:PHE:HE2	1:U:131:PRO:O	1.87	0.57
1:T:177:GLU:CA	1:U:58:LEU:HD13	2.02	0.57
1:B:12:ILE:CD1	1:B:23:GLN:HB2	1.05	0.57
1:E:52:LYS:HZ3	1:E:62:ASN:HA	1.68	0.57
1:F:155:GLY:C	1:G:86:ARG:HH22	2.00	0.57
2:H:152:VAL:O	2:H:156:ILE:HG13	2.04	0.57
1:P:35:SER:O	1:P:166:GLY:HA3	2.03	0.57
1:T:12:ILE:CD1	1:T:23:GLN:HB2	1.06	0.57
1:U:135:SER:OG	1:U:153:PRO:HD3	2.04	0.57
2:W:51:ASP:O	2:W:55:LEU:HB2	2.05	0.57
1:D:49:ILE:HD11	1:D:210:PRO:HB3	1.85	0.57
1:F:15:PHE:HE2	1:G:131:PRO:O	1.87	0.57
1:F:143:GLN:HA	1:F:143:GLN:HE21	1.70	0.57
2:M:178:ILE:HB	2:M:184:TYR:HA	1.87	0.57
1:P:143:GLN:HE21	1:P:143:GLN:HA	1.70	0.57
1:P:177:GLU:CA	1:Q:58:LEU:CD2	2.83	0.57
2:Y:59:MET:HE2	2:Y:79:VAL:HG23	1.85	0.57
1:E:143:GLN:HE21	1:E:143:GLN:HA	1.70	0.57
2:H:37:ILE:HD11	2:H:59:MET:CG	2.35	0.57
1:Q:12:ILE:HD13	1:Q:23:GLN:CA	1.93	0.57
1:R:21:LEU:CD1	1:S:130:ARG:CD	2.71	0.57
1:S:12:ILE:CD1	1:S:23:GLN:HB2	1.06	0.57
1:F:103:TYR:O	2:N:81:THR:HB	2.05	0.57
2:L:43:MET:CE	2:L:56:VAL:HG23	2.35	0.57
2:V:62:GLU:HG2	2:V:82:LEU:HD21	1.87	0.57
2:1:178:ILE:HB	2:1:184:TYR:HA	1.87	0.57
2:2:152:VAL:O	2:2:156:ILE:HG13	2.05	0.57
1:A:9:ASP:OD2	1:G:8:TYR:OH	2.23	0.56
1:A:12:ILE:CD1	1:A:23:GLN:HB2	1.05	0.56
1:B:135:SER:OG	1:B:153:PRO:HD3	2.04	0.56
1:C:125:GLN:O	1:D:129:VAL:CG2	2.51	0.56
2:K:45:ILE:HG12	2:K:52:ALA:HB1	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:101:VAL:HG23	2:V:58:TYR:HD1	1.66	0.56
1:P:107:VAL:HG11	2:X:66:TYR:CZ	2.35	0.56
1:Q:143:GLN:HA	1:Q:143:GLN:HE21	1.70	0.56
1:T:101:VAL:HG23	2:1:58:TYR:CD1	2.09	0.56
1:T:143:GLN:HA	1:T:143:GLN:HE21	1.70	0.56
1:A:177:GLU:CB	1:B:58:LEU:CD2	2.83	0.56
1:C:103:TYR:CE1	2:K:82:LEU:HD13	2.40	0.56
1:E:12:ILE:CD1	1:E:23:GLN:HB2	1.05	0.56
1:G:103:TYR:CD1	2:H:82:LEU:HD13	2.40	0.56
2:L:179:THR:HG23	2:L:182:ASP:H	1.70	0.56
2:M:76:ILE:HG21	2:M:109:HIS:HB2	1.88	0.56
1:R:143:GLN:HA	1:R:143:GLN:HE21	1.70	0.56
1:S:143:GLN:HE21	1:S:143:GLN:HA	1.70	0.56
2:2:124:TYR:CD1	2:2:138:LEU:HD23	2.40	0.56
1:A:135:SER:OG	1:A:153:PRO:HD3	2.04	0.56
1:A:143:GLN:HA	1:A:143:GLN:HE21	1.70	0.56
1:A:177:GLU:CB	1:B:58:LEU:HD22	2.32	0.56
1:A:178:ARG:C	1:B:57:ARG:HH22	2.08	0.56
1:B:143:GLN:HA	1:B:143:GLN:HE21	1.70	0.56
1:G:143:GLN:HA	1:G:143:GLN:HE21	1.70	0.56
2:H:174:ASP:HA	2:H:192:ILE:HD13	1.88	0.56
2:J:160:SER:O	2:J:163:LYS:HB2	2.04	0.56
2:M:38:ASP:HB3	2:M:41:THR:CG2	2.28	0.56
2:N:152:VAL:O	2:N:156:ILE:HG13	2.05	0.56
1:O:12:ILE:HD12	1:O:23:GLN:HB2	0.74	0.56
1:O:124:THR:CG2	1:P:130:ARG:HH21	2.09	0.56
1:Q:103:TYR:CE1	2:Y:82:LEU:HD13	2.41	0.56
1:S:12:ILE:HD13	1:S:23:GLN:CA	1.93	0.56
1:C:12:ILE:CD1	1:C:23:GLN:HB2	1.06	0.56
1:C:101:VAL:HG23	2:J:58:TYR:CD1	2.15	0.56
1:E:100:LYS:NZ	2:L:64:GLU:OE1	2.38	0.56
2:J:199:LEU:HB3	2:J:201:LEU:HD13	1.85	0.56
1:P:101:VAL:HG22	2:W:58:TYR:HE1	1.68	0.56
1:Q:100:LYS:NZ	2:X:64:GLU:OE1	2.38	0.56
1:U:108:ASN:HD22	2:V:70:ARG:CG	2.08	0.56
2:V:37:ILE:HD11	2:V:59:MET:CG	2.35	0.56
2:Z:43:MET:HE1	2:Z:56:VAL:HG23	1.88	0.56
1:D:43:ALA:HB2	1:D:185:PRO:HA	1.88	0.56
1:G:97:GLN:OE1	2:N:61:ALA:CB	2.53	0.56
1:Q:104:GLY:N	2:Y:81:THR:HG21	2.21	0.56
1:U:103:TYR:CD1	2:V:82:LEU:HD13	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:174:ASP:HA	2:V:192:ILE:HD13	1.88	0.56
1:C:178:ARG:CA	1:D:57:ARG:HH22	2.15	0.56
1:O:143:GLN:HA	1:O:143:GLN:HE21	1.70	0.56
1:O:177:GLU:CB	1:P:58:LEU:CD2	2.83	0.56
1:P:12:ILE:CD1	1:P:23:GLN:HB2	1.05	0.56
1:R:12:ILE:CD1	1:R:23:GLN:HB2	1.05	0.56
1:S:177:GLU:CB	1:T:58:LEU:CD2	2.70	0.56
2:Z:179:THR:HG23	2:Z:182:ASP:H	1.70	0.56
2:N:174:ASP:HA	2:N:192:ILE:HD13	1.87	0.56
1:U:103:TYR:O	2:V:81:THR:CB	2.54	0.56
1:A:12:ILE:HD13	1:A:23:GLN:CA	1.93	0.56
1:D:177:GLU:CB	1:E:58:LEU:CD2	2.75	0.56
2:M:32:LYS:HE2	2:M:34:LEU:O	2.06	0.56
1:O:9:ASP:OD2	1:U:8:TYR:OH	2.23	0.56
1:P:177:GLU:CA	1:Q:58:LEU:HD21	2.35	0.56
1:T:135:SER:OG	1:T:153:PRO:HD3	2.04	0.56
1:U:12:ILE:CD1	1:U:23:GLN:HB2	1.05	0.56
1:B:177:GLU:CA	1:C:58:LEU:CD2	2.83	0.56
1:C:104:GLY:N	2:K:81:THR:HG21	2.21	0.56
1:S:135:SER:OG	1:S:153:PRO:HD3	2.04	0.56
1:T:97:GLN:OE1	2:1:61:ALA:CB	2.53	0.56
2:V:120:VAL:HG11	2:2:28:HIS:CD2	2.41	0.56
2:1:75:PRO:O	2:1:78:ALA:HB3	2.04	0.56
1:D:14:VAL:H	1:E:130:ARG:HB2	1.70	0.56
1:S:43:ALA:HB2	1:S:185:PRO:HA	1.88	0.56
1:G:103:TYR:O	2:H:81:THR:CB	2.54	0.55
2:N:26:ILE:HD13	2:N:26:ILE:C	2.27	0.55
2:N:66:TYR:CZ	2:N:70:ARG:HD2	2.41	0.55
1:O:43:ALA:HB2	1:O:185:PRO:HA	1.88	0.55
1:P:52:LYS:HZ3	1:P:62:ASN:HA	1.70	0.55
1:Q:125:GLN:O	1:R:129:VAL:CG2	2.51	0.55
1:Q:178:ARG:CA	1:R:57:ARG:HH22	2.15	0.55
1:R:14:VAL:H	1:S:130:ARG:HB2	1.70	0.55
1:R:14:VAL:HG13	1:S:23:GLN:OE1	2.06	0.55
2:Z:43:MET:CE	2:Z:56:VAL:HG23	2.35	0.55
1:A:43:ALA:HB2	1:A:185:PRO:HA	1.88	0.55
1:B:12:ILE:HD12	1:B:23:GLN:HB2	0.74	0.55
1:E:72:ASP:OD2	2:L:67:ARG:NH2	2.39	0.55
1:F:104:GLY:HA3	2:N:81:THR:HG21	1.89	0.55
1:G:12:ILE:CD1	1:G:23:GLN:HB2	1.05	0.55
1:G:70:ILE:HD12	1:G:74:VAL:HG22	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:62:GLU:HG2	2:H:82:LEU:HD21	1.87	0.55
2:J:123:ILE:HG12	2:J:124:TYR:HD1	1.69	0.55
1:O:60:GLU:CG	1:U:161:LYS:N	2.68	0.55
1:Q:12:ILE:CD1	1:Q:23:GLN:HB2	1.06	0.55
1:R:43:ALA:HB2	1:R:185:PRO:HA	1.88	0.55
1:T:156:THR:HA	1:U:86:ARG:HH12	1.71	0.55
2:V:6:ILE:HD11	2:V:142:TYR:CD1	2.42	0.55
2:2:174:ASP:HA	2:2:192:ILE:HD13	1.87	0.55
1:A:161:LYS:CD	1:B:60:GLU:OE2	2.41	0.55
1:B:177:GLU:CA	1:C:58:LEU:HD21	2.35	0.55
1:C:43:ALA:HB2	1:C:185:PRO:HA	1.88	0.55
1:D:14:VAL:HG13	1:E:23:GLN:OE1	2.06	0.55
1:F:12:ILE:CD1	1:F:23:GLN:HB2	1.05	0.55
1:T:43:ALA:HB2	1:T:185:PRO:HA	1.88	0.55
1:A:70:ILE:HD12	1:A:74:VAL:HG22	1.88	0.55
1:C:143:GLN:HA	1:C:143:GLN:HE21	1.70	0.55
1:E:43:ALA:HB2	1:E:185:PRO:HA	1.88	0.55
1:F:12:ILE:HD12	1:F:23:GLN:HB2	0.74	0.55
1:F:15:PHE:HB2	1:G:23:GLN:NE2	2.11	0.55
1:F:70:ILE:HD12	1:F:74:VAL:HG22	1.88	0.55
1:F:156:THR:HA	1:G:86:ARG:HH12	1.71	0.55
1:G:108:ASN:HB2	2:H:70:ARG:CD	2.31	0.55
2:H:120:VAL:HG11	2:N:28:HIS:CD2	2.41	0.55
2:M:167:SER:OG	2:Z:24:ASN:HA	2.07	0.55
1:P:43:ALA:HB2	1:P:185:PRO:HA	1.88	0.55
1:R:15:PHE:CZ	1:S:130:ARG:NH1	2.74	0.55
1:R:70:ILE:HD12	1:R:74:VAL:HG22	1.88	0.55
2:1:76:ILE:HG21	2:1:109:HIS:HB2	1.88	0.55
1:A:123:TYR:OH	1:G:126:TYR:OH	2.24	0.55
1:B:70:ILE:HD12	1:B:74:VAL:HG22	1.88	0.55
1:D:12:ILE:CD1	1:D:23:GLN:HB2	1.05	0.55
1:D:72:ASP:OD2	2:K:67:ARG:NH2	2.40	0.55
1:E:160:TYR:C	1:F:60:GLU:CG	2.75	0.55
1:E:198:LYS:HG2	1:E:202:GLU:HG2	1.88	0.55
1:P:177:GLU:OE1	1:Q:57:ARG:CA	2.54	0.55
1:S:111:ASN:CG	2:1:70:ARG:NH1	2.60	0.55
1:U:143:GLN:HE21	1:U:143:GLN:HA	1.70	0.55
2:2:66:TYR:CZ	2:2:70:ARG:HD2	2.41	0.55
1:B:95:SER:OG	1:B:115:ARG:HD3	2.07	0.55
1:E:173:VAL:HG22	1:F:58:LEU:HD23	1.89	0.55
1:F:43:ALA:HB2	1:F:185:PRO:HA	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:178:ARG:C	1:P:57:ARG:HH22	2.08	0.55
1:S:95:SER:OG	1:S:115:ARG:HD3	2.07	0.55
1:S:160:TYR:C	1:T:60:GLU:CG	2.75	0.55
1:U:97:GLN:OE1	2:2:61:ALA:CB	2.53	0.55
1:A:95:SER:OG	1:A:115:ARG:HD3	2.07	0.55
1:C:103:TYR:CD1	2:K:82:LEU:HB2	2.42	0.55
1:D:15:PHE:CZ	1:E:130:ARG:NH1	2.74	0.55
1:D:95:SER:OG	1:D:115:ARG:HD3	2.07	0.55
1:D:198:LYS:HG2	1:D:202:GLU:HG2	1.88	0.55
1:E:95:SER:OG	1:E:115:ARG:HD3	2.07	0.55
1:E:111:ASN:CG	2:M:70:ARG:NH1	2.60	0.55
2:H:179:THR:HG23	2:H:182:ASP:H	1.72	0.55
1:P:95:SER:OG	1:P:115:ARG:HD3	2.07	0.55
1:Q:125:GLN:C	1:R:129:VAL:HG23	2.25	0.55
2:Y:45:ILE:HG12	2:Y:52:ALA:HB1	1.87	0.55
1:B:43:ALA:HB2	1:B:185:PRO:HA	1.88	0.55
1:B:177:GLU:OE1	1:C:57:ARG:CA	2.54	0.55
1:C:12:ILE:HD12	1:C:23:GLN:HB2	0.74	0.55
1:D:143:GLN:HA	1:D:143:GLN:HE21	1.70	0.55
1:G:43:ALA:HB2	1:G:185:PRO:HA	1.88	0.55
2:I:17:GLU:O	2:I:33:LYS:HD2	2.07	0.55
1:O:95:SER:OG	1:O:115:ARG:HD3	2.07	0.55
1:R:12:ILE:HD12	1:R:23:GLN:HB2	0.74	0.55
1:R:95:SER:OG	1:R:115:ARG:HD3	2.07	0.55
1:S:70:ILE:HD12	1:S:74:VAL:HG22	1.88	0.55
1:U:43:ALA:HB2	1:U:185:PRO:HA	1.88	0.55
1:U:70:ILE:HD12	1:U:74:VAL:HG22	1.88	0.55
1:C:124:THR:HG22	1:D:130:ARG:NH2	2.08	0.55
1:E:70:ILE:HD12	1:E:74:VAL:HG22	1.88	0.55
1:F:198:LYS:HG2	1:F:202:GLU:HG2	1.88	0.55
1:Q:43:ALA:HB2	1:Q:185:PRO:HA	1.88	0.55
1:Q:72:ASP:CG	2:X:67:ARG:NH2	2.61	0.55
1:Q:95:SER:OG	1:Q:115:ARG:HD3	2.07	0.55
1:Q:103:TYR:O	2:Y:81:THR:HB	2.07	0.55
1:R:111:ASN:HB2	2:Z:70:ARG:NH1	2.21	0.55
1:T:70:ILE:HD12	1:T:74:VAL:HG22	1.88	0.55
1:A:12:ILE:HD12	1:A:23:GLN:HB2	0.74	0.55
1:B:108:ASN:HB2	2:J:70:ARG:CG	2.19	0.55
1:C:95:SER:OG	1:C:115:ARG:HD3	2.07	0.55
1:D:12:ILE:HD12	1:D:23:GLN:HB2	0.74	0.55
1:D:70:ILE:HD12	1:D:74:VAL:HG22	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:12:ILE:HD12	1:P:23:GLN:HB2	0.74	0.55
1:P:198:LYS:HG2	1:P:202:GLU:HG2	1.88	0.55
1:Q:177:GLU:CB	1:R:58:LEU:CD1	2.51	0.55
1:R:49:ILE:HD13	1:R:212:ILE:HB	1.89	0.55
1:T:12:ILE:HD12	1:T:23:GLN:HB2	0.74	0.55
1:T:104:GLY:HA3	2:2:81:THR:HG21	1.89	0.55
1:U:12:ILE:HD12	1:U:23:GLN:HB2	0.74	0.55
1:C:70:ILE:HD12	1:C:74:VAL:HG22	1.88	0.54
1:D:49:ILE:HD13	1:D:212:ILE:HB	1.89	0.54
1:O:70:ILE:HD12	1:O:74:VAL:HG22	1.88	0.54
1:S:12:ILE:HD12	1:S:23:GLN:HB2	0.74	0.54
1:T:95:SER:OG	1:T:115:ARG:HD3	2.07	0.54
1:U:12:ILE:HD13	1:U:23:GLN:CA	1.93	0.54
2:V:179:THR:HG23	2:V:182:ASP:H	1.71	0.54
2:2:26:ILE:C	2:2:26:ILE:HD13	2.27	0.54
1:C:12:ILE:HA	1:C:23:GLN:CG	2.21	0.54
1:F:49:ILE:HD13	1:F:212:ILE:HB	1.89	0.54
1:F:95:SER:OG	1:F:115:ARG:HD3	2.07	0.54
1:G:49:ILE:HD13	1:G:212:ILE:HB	1.89	0.54
1:O:12:ILE:HA	1:O:23:GLN:CG	2.21	0.54
1:O:49:ILE:HD13	1:O:212:ILE:HB	1.89	0.54
1:Q:70:ILE:HD12	1:Q:74:VAL:HG22	1.88	0.54
1:S:155:GLY:O	1:T:86:ARG:NH1	2.41	0.54
1:S:173:VAL:HG22	1:T:58:LEU:HD23	1.89	0.54
1:U:95:SER:OG	1:U:115:ARG:HD3	2.07	0.54
1:U:108:ASN:HB2	2:V:70:ARG:CD	2.31	0.54
1:B:52:LYS:HZ1	1:B:62:ASN:HA	1.73	0.54
1:D:21:LEU:CD1	1:E:130:ARG:CD	2.71	0.54
1:G:12:ILE:HD13	1:G:23:GLN:CA	1.93	0.54
2:H:6:ILE:HD11	2:H:142:TYR:CD1	2.42	0.54
1:Q:49:ILE:HD13	1:Q:212:ILE:HB	1.89	0.54
1:Q:108:ASN:ND2	2:Y:70:ARG:CA	2.71	0.54
1:S:49:ILE:HD13	1:S:212:ILE:HB	1.89	0.54
1:T:52:LYS:HZ1	1:T:62:ASN:HA	1.73	0.54
2:W:17:GLU:O	2:W:33:LYS:HD2	2.07	0.54
1:A:49:ILE:HD13	1:A:212:ILE:HB	1.89	0.54
1:B:161:LYS:CD	1:C:60:GLU:OE2	2.51	0.54
1:E:49:ILE:HD13	1:E:212:ILE:HB	1.89	0.54
1:F:177:GLU:O	1:G:58:LEU:HD11	2.07	0.54
1:G:95:SER:OG	1:G:115:ARG:HD3	2.07	0.54
1:G:198:LYS:HG2	1:G:202:GLU:HG2	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:49:ILE:HD13	1:P:212:ILE:HB	1.89	0.54
1:P:70:ILE:HD12	1:P:74:VAL:HG22	1.88	0.54
1:Q:198:LYS:HG2	1:Q:202:GLU:HG2	1.88	0.54
1:A:198:LYS:HG2	1:A:202:GLU:HG2	1.88	0.54
1:B:108:ASN:ND2	2:J:70:ARG:O	2.41	0.54
1:D:52:LYS:HZ1	1:D:62:ASN:HA	1.73	0.54
1:Q:103:TYR:CD1	2:Y:82:LEU:HB2	2.42	0.54
1:R:177:GLU:CD	1:S:58:LEU:H	2.11	0.54
1:B:107:VAL:HG11	2:J:66:TYR:CZ	2.35	0.54
1:B:198:LYS:HG2	1:B:202:GLU:HG2	1.88	0.54
1:C:72:ASP:CG	2:J:67:ARG:NH2	2.61	0.54
1:C:103:TYR:O	2:K:81:THR:HB	2.07	0.54
1:E:156:THR:HA	1:F:86:ARG:HH12	1.72	0.54
1:F:12:ILE:HD13	1:F:23:GLN:CA	1.92	0.54
2:I:3:THR:HB	2:I:16:THR:HG22	1.90	0.54
2:K:62:GLU:HG2	2:K:82:LEU:HD21	1.90	0.54
2:M:37:ILE:HD11	2:M:59:MET:CB	2.35	0.54
2:M:164:GLN:HE21	2:Z:29:LYS:HZ1	1.54	0.54
1:O:198:LYS:HG2	1:O:202:GLU:HG2	1.88	0.54
2:1:32:LYS:HE2	2:1:34:LEU:O	2.06	0.54
1:C:100:LYS:NZ	2:J:64:GLU:OE1	2.38	0.54
2:H:159:ILE:O	2:H:163:LYS:HG3	2.08	0.54
2:K:37:ILE:HD11	2:K:59:MET:HB3	1.90	0.54
2:K:141:GLN:NE2	2:V:141:GLN:NE2	2.55	0.54
2:L:29:LYS:HZ3	2:1:164:GLN:NE2	2.05	0.54
2:L:43:MET:HE2	2:L:56:VAL:HG23	1.89	0.54
2:N:165:ARG:C	2:Y:26:ILE:HG22	2.28	0.54
1:R:198:LYS:HG2	1:R:202:GLU:HG2	1.88	0.54
1:S:72:ASP:OD2	2:Z:67:ARG:NH2	2.39	0.54
1:S:161:LYS:CD	1:T:60:GLU:OE2	2.56	0.54
1:S:198:LYS:HG2	1:S:202:GLU:HG2	1.88	0.54
1:T:198:LYS:HG2	1:T:202:GLU:HG2	1.88	0.54
2:W:3:THR:HB	2:W:16:THR:HG22	1.90	0.54
2:Y:37:ILE:HD11	2:Y:59:MET:HB3	1.90	0.54
1:C:198:LYS:HG2	1:C:202:GLU:HG2	1.88	0.54
1:D:19:GLY:HA3	1:E:30:ALA:N	2.23	0.54
2:I:63:LEU:HD11	2:I:74:MET:SD	2.48	0.54
2:L:45:ILE:HG12	2:L:52:ALA:HB1	1.90	0.54
1:S:156:THR:HA	1:T:86:ARG:HH12	1.72	0.54
2:V:26:ILE:HD13	2:V:26:ILE:C	2.28	0.54
1:C:108:ASN:ND2	2:K:70:ARG:CA	2.71	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:141:GLN:HE21	2:V:141:GLN:NE2	2.06	0.54
1:S:161:LYS:N	1:T:60:GLU:CG	2.71	0.54
1:U:42:PHE:HB2	1:U:184:LEU:O	2.08	0.54
2:W:63:LEU:HD11	2:W:74:MET:SD	2.48	0.54
2:Z:35:PHE:CE2	2:Z:45:ILE:HD12	2.43	0.54
1:A:52:LYS:HZ3	1:A:62:ASN:HA	1.73	0.54
1:C:42:PHE:HB2	1:C:184:LEU:O	2.09	0.54
2:H:26:ILE:C	2:H:26:ILE:HD13	2.28	0.54
2:J:32:LYS:HE2	2:J:34:LEU:O	2.08	0.54
2:L:141:GLN:NE2	2:2:141:GLN:NE2	2.56	0.54
1:Q:126:TYR:HA	1:R:129:VAL:HG23	1.90	0.54
1:S:108:ASN:HB3	2:1:70:ARG:HG2	1.76	0.54
2:Y:36:GLN:HB2	2:Y:184:TYR:CE1	2.43	0.54
2:1:37:ILE:HD11	2:1:59:MET:CB	2.35	0.54
1:C:144:ILE:HD12	1:C:147:ARG:NH1	2.24	0.53
1:E:107:VAL:HG11	2:M:66:TYR:HH	1.73	0.53
2:H:3:THR:HB	2:H:16:THR:HG22	1.90	0.53
2:J:131:SER:O	2:J:134:VAL:HG13	2.08	0.53
1:O:42:PHE:HB2	1:O:184:LEU:O	2.08	0.53
1:O:129:VAL:HA	1:U:125:GLN:O	2.08	0.53
1:R:161:LYS:N	1:S:60:GLU:CG	2.71	0.53
1:T:177:GLU:CA	1:U:58:LEU:CG	2.53	0.53
1:U:12:ILE:HA	1:U:23:GLN:CG	2.21	0.53
2:V:159:ILE:O	2:V:163:LYS:HG3	2.08	0.53
1:A:129:VAL:HA	1:G:125:GLN:O	2.08	0.53
1:B:49:ILE:HD13	1:B:212:ILE:HB	1.89	0.53
1:B:107:VAL:HG21	2:J:66:TYR:OH	2.08	0.53
1:B:160:TYR:C	1:C:60:GLU:HG2	2.29	0.53
1:D:177:GLU:CD	1:E:58:LEU:H	2.11	0.53
1:E:144:ILE:HD12	1:E:147:ARG:NH1	2.23	0.53
1:E:161:LYS:N	1:F:60:GLU:CG	2.71	0.53
1:G:42:PHE:HB2	1:G:184:LEU:O	2.08	0.53
2:M:55:LEU:HD23	2:M:99:LEU:HD11	1.91	0.53
1:O:23:GLN:OE1	1:U:14:VAL:HG13	2.09	0.53
1:O:57:ARG:NH2	1:U:178:ARG:N	2.20	0.53
1:P:144:ILE:HD12	1:P:147:ARG:NH1	2.24	0.53
1:R:42:PHE:HB2	1:R:184:LEU:O	2.08	0.53
1:T:177:GLU:O	1:U:58:LEU:HD11	2.07	0.53
1:T:177:GLU:C	1:U:57:ARG:NH2	2.50	0.53
1:U:144:ILE:HD12	1:U:147:ARG:NH1	2.24	0.53
2:2:199:LEU:HB3	2:2:201:LEU:HD13	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:101:VAL:HG23	2:H:58:TYR:HD1	1.65	0.53
1:B:12:ILE:HA	1:B:23:GLN:CG	2.21	0.53
1:B:42:PHE:HB2	1:B:184:LEU:O	2.08	0.53
1:B:144:ILE:HD12	1:B:147:ARG:NH1	2.24	0.53
1:C:177:GLU:CB	1:D:58:LEU:CD1	2.51	0.53
1:E:161:LYS:CD	1:F:60:GLU:OE2	2.56	0.53
2:K:36:GLN:HB2	2:K:184:TYR:CE1	2.43	0.53
1:O:86:ARG:NH1	1:U:155:GLY:O	2.41	0.53
1:R:12:ILE:HD13	1:R:23:GLN:CA	1.92	0.53
1:R:72:ASP:OD2	2:Y:67:ARG:NH2	2.40	0.53
1:U:49:ILE:HD13	1:U:212:ILE:HB	1.90	0.53
1:U:198:LYS:HG2	1:U:202:GLU:HG2	1.88	0.53
2:Y:25:PHE:C	2:Y:25:PHE:CD1	2.80	0.53
1:A:42:PHE:HB2	1:A:184:LEU:O	2.08	0.53
1:C:12:ILE:HD13	1:C:23:GLN:CA	1.93	0.53
1:C:49:ILE:HD13	1:C:212:ILE:HB	1.89	0.53
1:C:143:GLN:OE1	2:K:75:PRO:HG2	2.09	0.53
1:D:42:PHE:HB2	1:D:184:LEU:O	2.08	0.53
1:E:12:ILE:HD12	1:E:23:GLN:HB2	0.74	0.53
2:J:3:THR:HB	2:J:16:THR:HG22	1.90	0.53
2:M:135:TYR:HB3	2:1:165:ARG:HG2	1.90	0.53
2:N:149:ASP:O	2:N:152:VAL:HG12	2.08	0.53
1:Q:42:PHE:HB2	1:Q:184:LEU:O	2.08	0.53
1:S:42:PHE:HB2	1:S:184:LEU:O	2.09	0.53
1:D:111:ASN:CG	2:L:70:ARG:CZ	2.76	0.53
1:E:104:GLY:CA	2:M:81:THR:HG21	2.39	0.53
2:H:133:PHE:CZ	2:H:165:ARG:HB3	2.43	0.53
1:O:58:LEU:CD2	1:U:177:GLU:CB	2.76	0.53
1:O:161:LYS:CD	1:P:60:GLU:OE2	2.41	0.53
1:P:42:PHE:HB2	1:P:184:LEU:O	2.08	0.53
1:P:108:ASN:ND2	2:X:70:ARG:O	2.41	0.53
1:P:160:TYR:C	1:Q:60:GLU:HG2	2.29	0.53
2:Z:103:GLY:HA2	2:Z:178:ILE:CD1	2.39	0.53
2:1:55:LEU:HD23	2:1:99:LEU:HD11	1.91	0.53
1:B:178:ARG:O	1:C:57:ARG:NH2	2.40	0.53
1:D:12:ILE:HD13	1:D:23:GLN:CA	1.93	0.53
1:E:155:GLY:O	1:F:86:ARG:NH1	2.41	0.53
1:Q:144:ILE:HD12	1:Q:147:ARG:NH1	2.24	0.53
1:Q:157:ILE:HG22	1:R:86:ARG:CZ	2.39	0.53
1:R:19:GLY:HA3	1:S:30:ALA:N	2.23	0.53
1:R:144:ILE:HD12	1:R:147:ARG:NH1	2.24	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:19:GLY:HA3	1:U:30:ALA:HB2	1.90	0.53
2:X:3:THR:HB	2:X:16:THR:HG22	1.90	0.53
1:C:52:LYS:HZ1	1:C:62:ASN:HA	1.74	0.53
1:C:126:TYR:HA	1:D:129:VAL:HG23	1.90	0.53
1:F:144:ILE:HD12	1:F:147:ARG:NH1	2.24	0.53
2:L:35:PHE:CE2	2:L:45:ILE:HD12	2.43	0.53
1:T:42:PHE:HB2	1:T:184:LEU:O	2.09	0.53
1:T:104:GLY:CA	2:2:81:THR:HG21	2.39	0.53
2:Z:45:ILE:HG12	2:Z:52:ALA:HB1	1.90	0.53
2:2:149:ASP:O	2:2:152:VAL:HG12	2.08	0.53
2:J:26:ILE:C	2:J:26:ILE:HD13	2.30	0.53
2:L:103:GLY:HA2	2:L:178:ILE:CD1	2.39	0.53
1:Q:124:THR:HG22	1:R:130:ARG:NH2	2.08	0.53
1:S:104:GLY:CA	2:1:81:THR:HG21	2.39	0.53
1:S:124:THR:HG22	1:T:130:ARG:NH2	2.15	0.53
2:V:133:PHE:CZ	2:V:165:ARG:HB3	2.43	0.53
2:2:123:ILE:HG12	2:2:124:TYR:CD2	2.44	0.53
1:B:108:ASN:CB	2:J:70:ARG:CD	2.79	0.53
1:G:144:ILE:HD12	1:G:147:ARG:NH1	2.24	0.53
2:K:26:ILE:C	2:K:26:ILE:HD13	2.29	0.53
2:K:26:ILE:HG22	2:2:165:ARG:C	2.30	0.53
1:S:100:LYS:NZ	2:Z:64:GLU:OE1	2.38	0.53
1:T:49:ILE:HD13	1:T:212:ILE:HB	1.89	0.53
1:T:144:ILE:HD12	1:T:147:ARG:NH1	2.24	0.53
1:U:103:TYR:CE1	2:V:82:LEU:HD22	2.44	0.53
2:X:32:LYS:HE2	2:X:34:LEU:O	2.08	0.53
2:Y:15:ALA:HB2	2:Y:175:VAL:HB	1.91	0.53
2:Z:26:ILE:O	2:Z:26:ILE:HD13	2.09	0.53
2:1:6:ILE:HD11	2:1:142:TYR:CD1	2.44	0.53
1:A:102:THR:C	2:I:85:ASN:OD1	2.42	0.53
1:B:12:ILE:HG13	1:B:12:ILE:O	2.09	0.53
1:D:144:ILE:HD12	1:D:147:ARG:NH1	2.24	0.53
1:F:42:PHE:HB2	1:F:184:LEU:O	2.09	0.53
1:O:57:ARG:HB2	1:U:177:GLU:OE1	2.09	0.53
2:V:3:THR:HB	2:V:16:THR:HG22	1.90	0.53
1:D:108:ASN:CB	2:L:70:ARG:HD3	2.30	0.52
1:E:42:PHE:HB2	1:E:184:LEU:O	2.09	0.52
1:G:107:VAL:HG21	2:H:66:TYR:HH	1.74	0.52
1:O:108:ASN:ND2	2:W:70:ARG:O	2.42	0.52
1:O:178:ARG:HA	1:P:57:ARG:HH21	1.62	0.52
1:P:107:VAL:HG21	2:X:66:TYR:OH	2.08	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:108:ASN:HB2	2:X:70:ARG:CG	2.19	0.52
1:S:144:ILE:HD12	1:S:147:ARG:NH1	2.23	0.52
1:A:57:ARG:HB2	1:G:177:GLU:OE1	2.09	0.52
1:B:177:GLU:N	1:C:58:LEU:CD2	2.66	0.52
2:K:103:GLY:HA2	2:K:178:ILE:HD13	1.91	0.52
2:K:173:ILE:HD13	2:K:173:ILE:C	2.30	0.52
2:M:131:SER:O	2:M:134:VAL:HG13	2.10	0.52
2:N:131:SER:O	2:N:134:VAL:HG13	2.09	0.52
2:N:199:LEU:HB3	2:N:201:LEU:HD13	1.90	0.52
1:O:12:ILE:HG13	1:O:12:ILE:O	2.09	0.52
1:O:144:ILE:HD12	1:O:147:ARG:NH1	2.23	0.52
2:X:28:HIS:CD2	2:Y:120:VAL:HG11	2.44	0.52
2:X:131:SER:O	2:X:134:VAL:HG13	2.08	0.52
2:2:131:SER:O	2:2:134:VAL:HG13	2.09	0.52
1:A:124:THR:CG2	1:B:130:ARG:HH21	2.09	0.52
1:C:42:PHE:CD1	1:C:43:ALA:N	2.78	0.52
1:C:157:ILE:HG22	1:D:86:ARG:CZ	2.39	0.52
1:D:12:ILE:HG13	1:D:12:ILE:O	2.09	0.52
2:J:124:TYR:CD2	2:J:138:LEU:HD23	2.45	0.52
2:K:15:ALA:HB2	2:K:175:VAL:HB	1.91	0.52
2:L:26:ILE:O	2:L:26:ILE:HD13	2.09	0.52
1:P:178:ARG:O	1:Q:57:ARG:NH2	2.40	0.52
1:S:12:ILE:HA	1:S:23:GLN:CG	2.21	0.52
1:S:12:ILE:HG13	1:S:12:ILE:O	2.09	0.52
1:S:107:VAL:HG21	2:1:66:TYR:HH	1.73	0.52
1:T:12:ILE:HG13	1:T:12:ILE:O	2.09	0.52
1:U:42:PHE:CD1	1:U:43:ALA:N	2.78	0.52
2:V:45:ILE:CG1	2:V:52:ALA:HB1	2.39	0.52
1:A:86:ARG:NH1	1:G:155:GLY:O	2.41	0.52
1:A:108:ASN:ND2	2:I:70:ARG:O	2.42	0.52
1:D:108:ASN:ND2	2:L:70:ARG:CB	2.72	0.52
1:F:97:GLN:OE1	2:M:61:ALA:CB	2.53	0.52
2:H:141:GLN:NE2	2:Y:141:GLN:NE2	2.58	0.52
2:K:59:MET:HE3	2:K:82:LEU:HD23	1.91	0.52
1:O:42:PHE:CD1	1:O:43:ALA:N	2.78	0.52
1:Q:107:VAL:HG21	2:Y:66:TYR:HH	1.74	0.52
1:Q:143:GLN:OE1	2:Y:75:PRO:HG2	2.09	0.52
2:X:26:ILE:C	2:X:26:ILE:HD13	2.30	0.52
2:Y:26:ILE:HD13	2:Y:26:ILE:C	2.29	0.52
1:D:111:ASN:HB2	2:L:70:ARG:NH1	2.21	0.52
1:F:125:GLN:O	1:G:129:VAL:CG2	2.51	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:102:THR:C	2:H:85:ASN:OD1	2.43	0.52
2:J:28:HIS:CD2	2:K:120:VAL:HG11	2.44	0.52
1:Q:177:GLU:C	1:R:57:ARG:HH21	2.13	0.52
1:U:160:TYR:CD2	1:U:163:THR:HB	2.45	0.52
2:X:124:TYR:CD2	2:X:138:LEU:HD23	2.44	0.52
1:A:12:ILE:HG13	1:A:12:ILE:O	2.09	0.52
1:A:144:ILE:HD12	1:A:147:ARG:NH1	2.24	0.52
1:C:160:TYR:CD2	1:C:163:THR:HB	2.45	0.52
1:D:21:LEU:O	1:D:24:VAL:HG12	2.10	0.52
1:D:160:TYR:CD2	1:D:163:THR:HB	2.45	0.52
2:I:45:ILE:CG1	2:I:52:ALA:HB1	2.39	0.52
2:J:37:ILE:HD11	2:J:59:MET:CB	2.38	0.52
2:M:6:ILE:HD11	2:M:142:TYR:CD1	2.44	0.52
1:O:21:LEU:O	1:O:24:VAL:HG12	2.10	0.52
1:R:108:ASN:CB	2:Z:70:ARG:HD3	2.30	0.52
1:R:111:ASN:CG	2:Z:70:ARG:CZ	2.77	0.52
1:S:19:GLY:HA3	1:T:30:ALA:CA	2.39	0.52
1:S:173:VAL:HG22	1:T:58:LEU:CD2	2.40	0.52
1:T:160:TYR:CD2	1:T:163:THR:HB	2.45	0.52
2:X:189:THR:HG23	2:X:190:ASP:N	2.25	0.52
2:Y:173:ILE:C	2:Y:173:ILE:HD13	2.30	0.52
2:1:20:VAL:CG1	2:1:28:HIS:HB2	2.36	0.52
1:A:130:ARG:CD	1:G:21:LEU:CD1	2.75	0.52
1:C:177:GLU:C	1:D:57:ARG:HH21	2.13	0.52
2:H:45:ILE:CG1	2:H:52:ALA:HB1	2.39	0.52
2:L:24:ASN:HA	2:1:167:SER:OG	2.09	0.52
2:L:62:GLU:HG2	2:L:82:LEU:HD21	1.91	0.52
1:O:108:ASN:HD22	2:W:70:ARG:CB	2.22	0.52
1:O:160:TYR:CD2	1:O:163:THR:HB	2.45	0.52
1:R:21:LEU:O	1:R:24:VAL:HG12	2.10	0.52
1:S:52:LYS:HZ3	1:S:62:ASN:HA	1.74	0.52
2:2:18:ARG:HE	2:2:30:ASN:HD22	1.57	0.52
1:A:23:GLN:OE1	1:G:14:VAL:HG13	2.09	0.52
1:C:70:ILE:HB	1:C:74:VAL:HG13	1.92	0.52
1:F:104:GLY:CA	2:N:81:THR:HG21	2.39	0.52
1:G:21:LEU:O	1:G:24:VAL:HG12	2.10	0.52
2:H:141:GLN:NE2	2:Y:141:GLN:HE21	2.08	0.52
1:Q:103:TYR:O	2:Y:81:THR:CB	2.58	0.52
1:Q:160:TYR:CD2	1:Q:163:THR:HB	2.45	0.52
1:T:12:ILE:HA	1:T:23:GLN:CG	2.21	0.52
2:W:45:ILE:CG1	2:W:52:ALA:HB1	2.39	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:60:GLU:CG	1:G:160:TYR:C	2.78	0.52
1:E:21:LEU:CD1	1:F:130:ARG:HD2	2.27	0.52
1:E:70:ILE:HB	1:E:74:VAL:HG13	1.92	0.52
1:F:21:LEU:O	1:F:24:VAL:HG12	2.10	0.52
1:F:42:PHE:CD1	1:F:43:ALA:N	2.78	0.52
1:F:70:ILE:HB	1:F:74:VAL:HG13	1.92	0.52
1:F:103:TYR:O	2:N:81:THR:CB	2.58	0.52
1:P:12:ILE:HG13	1:P:12:ILE:O	2.09	0.52
1:Q:70:ILE:HB	1:Q:74:VAL:HG13	1.92	0.52
1:R:70:ILE:HB	1:R:74:VAL:HG13	1.92	0.52
1:U:12:ILE:HG13	1:U:12:ILE:O	2.09	0.52
1:U:70:ILE:HB	1:U:74:VAL:HG13	1.92	0.52
2:Y:62:GLU:HG2	2:Y:82:LEU:HD21	1.90	0.52
2:Y:103:GLY:HA2	2:Y:178:ILE:HD13	1.91	0.52
2:Z:55:LEU:HD21	2:Z:87:LEU:HD11	1.92	0.52
1:A:85:ALA:O	1:A:89:VAL:HG23	2.10	0.52
1:B:42:PHE:CD1	1:B:43:ALA:N	2.78	0.52
1:B:72:ASP:OD1	2:I:67:ARG:NH2	2.43	0.52
1:C:161:LYS:HB2	1:D:60:GLU:CD	2.29	0.52
1:D:42:PHE:CD1	1:D:43:ALA:N	2.78	0.52
1:E:12:ILE:HG13	1:E:12:ILE:O	2.09	0.52
1:E:42:PHE:CD1	1:E:43:ALA:N	2.78	0.52
1:E:160:TYR:CD2	1:E:163:THR:HB	2.45	0.52
1:G:85:ALA:O	1:G:89:VAL:HG23	2.10	0.52
1:O:70:ILE:HB	1:O:74:VAL:HG13	1.92	0.52
1:O:85:ALA:O	1:O:89:VAL:HG23	2.10	0.52
1:P:70:ILE:HB	1:P:74:VAL:HG13	1.92	0.52
1:Q:21:LEU:O	1:Q:24:VAL:HG12	2.10	0.52
1:R:85:ALA:O	1:R:89:VAL:HG23	2.10	0.52
1:R:108:ASN:ND2	2:Z:70:ARG:CB	2.72	0.52
1:S:85:ALA:O	1:S:89:VAL:HG23	2.10	0.52
1:T:103:TYR:O	2:2:81:THR:CB	2.58	0.52
2:Z:62:GLU:HG2	2:Z:82:LEU:HD21	1.91	0.52
2:2:2:THR:HG22	2:2:169:SER:OG	2.10	0.52
1:A:60:GLU:CG	1:G:161:LYS:N	2.68	0.51
1:C:12:ILE:HG13	1:C:12:ILE:O	2.09	0.51
1:D:85:ALA:O	1:D:89:VAL:HG23	2.10	0.51
1:F:160:TYR:CD2	1:F:163:THR:HB	2.45	0.51
1:P:72:ASP:OD1	2:W:67:ARG:NH2	2.44	0.51
1:P:160:TYR:CD2	1:P:163:THR:HB	2.45	0.51
1:P:177:GLU:CB	1:Q:58:LEU:CD2	2.88	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:42:PHE:CD1	1:R:43:ALA:N	2.78	0.51
2:V:176:ALA:HA	2:V:186:GLN:HA	1.92	0.51
1:B:85:ALA:O	1:B:89:VAL:HG23	2.10	0.51
1:B:160:TYR:CD2	1:B:163:THR:HB	2.45	0.51
1:D:70:ILE:HB	1:D:74:VAL:HG13	1.92	0.51
2:J:189:THR:HG23	2:J:190:ASP:N	2.25	0.51
2:K:174:ASP:HA	2:K:192:ILE:HD13	1.92	0.51
2:M:165:ARG:HG2	2:1:135:TYR:HB3	1.91	0.51
2:N:141:GLN:NE2	2:Z:141:GLN:NE2	2.58	0.51
2:N:165:ARG:HA	2:Y:26:ILE:HG23	1.92	0.51
1:P:108:ASN:CB	2:X:70:ARG:CD	2.79	0.51
1:Q:12:ILE:HG13	1:Q:12:ILE:O	2.09	0.51
1:Q:42:PHE:CD1	1:Q:43:ALA:N	2.78	0.51
1:S:161:LYS:CA	1:T:60:GLU:OE2	2.56	0.51
1:T:42:PHE:CD1	1:T:43:ALA:N	2.78	0.51
2:Y:174:ASP:HA	2:Y:192:ILE:HD13	1.92	0.51
1:B:21:LEU:O	1:B:24:VAL:HG12	2.10	0.51
1:C:103:TYR:O	2:K:81:THR:CB	2.58	0.51
1:E:173:VAL:HG22	1:F:58:LEU:CD2	2.40	0.51
1:G:70:ILE:HB	1:G:74:VAL:HG13	1.92	0.51
2:K:25:PHE:CD1	2:K:25:PHE:C	2.80	0.51
2:L:29:LYS:NZ	2:1:164:GLN:HE21	2.08	0.51
1:O:60:GLU:CG	1:U:160:TYR:C	2.78	0.51
1:Q:191:THR:O	1:Q:194:ILE:HG22	2.11	0.51
1:T:70:ILE:HB	1:T:74:VAL:HG13	1.92	0.51
2:W:18:ARG:HE	2:W:30:ASN:HD22	1.57	0.51
2:1:124:TYR:HD2	2:1:138:LEU:HD23	1.76	0.51
1:B:70:ILE:HB	1:B:74:VAL:HG13	1.92	0.51
1:E:19:GLY:HA3	1:F:30:ALA:CA	2.39	0.51
1:G:42:PHE:CD1	1:G:43:ALA:N	2.78	0.51
1:G:160:TYR:CD2	1:G:163:THR:HB	2.45	0.51
2:I:179:THR:HG23	2:I:182:ASP:H	1.75	0.51
2:N:2:THR:HG22	2:N:169:SER:OG	2.10	0.51
1:P:21:LEU:O	1:P:24:VAL:HG12	2.10	0.51
1:R:12:ILE:HG13	1:R:12:ILE:O	2.09	0.51
1:R:125:GLN:O	1:S:129:VAL:CG2	2.56	0.51
1:T:85:ALA:O	1:T:89:VAL:HG23	2.10	0.51
1:A:21:LEU:O	1:A:24:VAL:HG12	2.10	0.51
1:A:42:PHE:CD1	1:A:43:ALA:N	2.78	0.51
1:A:103:TYR:O	2:I:81:THR:HB	2.11	0.51
1:B:180:TYR:HA	1:B:192:LEU:HD21	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:85:ALA:O	1:E:89:VAL:HG23	2.10	0.51
1:F:19:GLY:HA3	1:G:30:ALA:HB2	1.91	0.51
1:F:191:THR:O	1:F:194:ILE:HG22	2.11	0.51
1:P:42:PHE:CD1	1:P:43:ALA:N	2.78	0.51
1:R:160:TYR:CD2	1:R:163:THR:HB	2.45	0.51
1:S:42:PHE:CD1	1:S:43:ALA:N	2.78	0.51
2:Z:124:TYR:HD2	2:Z:138:LEU:HD23	1.76	0.51
1:A:7:ALA:HB1	1:B:10:ARG:NH1	2.25	0.51
1:A:108:ASN:HD22	2:I:70:ARG:CB	2.22	0.51
1:B:103:TYR:C	2:J:81:THR:HG21	2.31	0.51
1:C:21:LEU:O	1:C:24:VAL:HG12	2.10	0.51
1:C:180:TYR:HA	1:C:192:LEU:HD21	1.93	0.51
1:E:191:THR:O	1:E:194:ILE:HG22	2.11	0.51
1:G:191:THR:O	1:G:194:ILE:HG22	2.11	0.51
2:L:141:GLN:NE2	2:2:141:GLN:HE21	2.09	0.51
2:M:164:GLN:HE21	2:Z:29:LYS:NZ	2.07	0.51
1:O:180:TYR:HA	1:O:192:LEU:HD21	1.93	0.51
1:O:191:THR:O	1:O:194:ILE:HG22	2.11	0.51
1:Q:85:ALA:O	1:Q:89:VAL:HG23	2.10	0.51
1:Q:107:VAL:HG11	2:Y:66:TYR:HH	1.75	0.51
1:R:191:THR:O	1:R:194:ILE:HG22	2.11	0.51
1:S:191:THR:O	1:S:194:ILE:HG22	2.11	0.51
2:V:116:ALA:O	2:2:50:GLY:HA3	2.11	0.51
2:V:173:ILE:HD13	2:V:173:ILE:C	2.31	0.51
1:A:70:ILE:HB	1:A:74:VAL:HG13	1.92	0.51
1:A:101:VAL:HG22	2:H:58:TYR:HE1	1.76	0.51
1:B:191:THR:O	1:B:194:ILE:HG22	2.11	0.51
1:D:149:PHE:CE1	1:D:159:GLU:HB2	2.46	0.51
2:I:18:ARG:HE	2:I:30:ASN:HD22	1.57	0.51
2:K:53:GLN:O	2:K:56:VAL:HG12	2.10	0.51
2:L:55:LEU:HD21	2:L:87:LEU:HD11	1.92	0.51
1:P:103:TYR:C	2:X:81:THR:HG21	2.31	0.51
1:P:191:THR:O	1:P:194:ILE:HG22	2.11	0.51
1:R:19:GLY:HA3	1:S:30:ALA:CA	2.41	0.51
1:S:21:LEU:CD1	1:T:130:ARG:HD2	2.27	0.51
1:S:70:ILE:HB	1:S:74:VAL:HG13	1.92	0.51
1:S:180:TYR:HA	1:S:192:LEU:HD21	1.93	0.51
1:T:191:THR:O	1:T:194:ILE:HG22	2.11	0.51
1:U:180:TYR:HA	1:U:192:LEU:HD21	1.93	0.51
2:2:36:GLN:HB2	2:2:184:TYR:CE1	2.46	0.51
1:A:191:THR:O	1:A:194:ILE:HG22	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:177:GLU:H	1:D:58:LEU:CD2	2.06	0.51
1:F:7:ALA:HB1	1:G:10:ARG:NH1	2.22	0.51
1:F:12:ILE:HG13	1:F:12:ILE:O	2.09	0.51
2:H:116:ALA:O	2:N:50:GLY:HA3	2.11	0.51
2:N:36:GLN:HB2	2:N:184:TYR:CE1	2.46	0.51
1:O:7:ALA:HB1	1:P:10:ARG:NH1	2.25	0.51
1:O:177:GLU:CA	1:P:58:LEU:HD13	2.17	0.51
1:P:161:LYS:CD	1:Q:60:GLU:OE2	2.51	0.51
1:R:180:TYR:HA	1:R:192:LEU:HD21	1.93	0.51
1:S:160:TYR:CD2	1:S:163:THR:HB	2.45	0.51
1:T:180:TYR:HA	1:T:192:LEU:HD21	1.93	0.51
2:W:59:MET:CE	2:W:82:LEU:HD23	2.41	0.51
2:1:131:SER:O	2:1:134:VAL:HG13	2.10	0.51
1:C:175:PHE:C	1:C:175:PHE:CD1	2.84	0.51
1:D:15:PHE:HZ	1:E:133:GLY:N	2.09	0.51
1:D:107:VAL:CG1	2:L:66:TYR:OH	2.59	0.51
1:D:180:TYR:HA	1:D:192:LEU:HD21	1.93	0.51
1:E:21:LEU:O	1:E:24:VAL:HG12	2.10	0.51
1:E:160:TYR:HA	1:F:60:GLU:CG	2.41	0.51
1:F:85:ALA:O	1:F:89:VAL:HG23	2.11	0.51
1:F:180:TYR:HA	1:F:192:LEU:HD21	1.93	0.51
2:I:59:MET:CE	2:I:82:LEU:HD23	2.41	0.51
2:M:62:GLU:HG2	2:M:82:LEU:HD21	1.93	0.51
2:N:123:ILE:HG12	2:N:124:TYR:CD2	2.44	0.51
1:O:149:PHE:CE1	1:O:159:GLU:HB2	2.46	0.51
1:R:107:VAL:CG1	2:Z:66:TYR:OH	2.59	0.51
1:S:21:LEU:O	1:S:24:VAL:HG12	2.10	0.51
1:S:160:TYR:HA	1:T:60:GLU:CG	2.41	0.51
1:T:175:PHE:CD1	1:T:175:PHE:C	2.85	0.51
1:B:175:PHE:CD1	1:B:175:PHE:C	2.85	0.51
1:C:85:ALA:O	1:C:89:VAL:HG23	2.10	0.51
1:E:180:TYR:HA	1:E:192:LEU:HD21	1.93	0.51
2:H:173:ILE:HD13	2:H:173:ILE:C	2.31	0.51
1:P:85:ALA:O	1:P:89:VAL:HG23	2.11	0.51
1:P:180:TYR:HA	1:P:192:LEU:HD21	1.93	0.51
1:T:21:LEU:O	1:T:24:VAL:HG12	2.10	0.51
1:U:21:LEU:O	1:U:24:VAL:HG12	2.10	0.51
2:W:15:ALA:HB2	2:W:175:VAL:HB	1.93	0.51
2:Y:53:GLN:O	2:Y:56:VAL:HG12	2.10	0.51
2:2:20:VAL:HG13	2:2:28:HIS:HB2	1.93	0.51
1:A:12:ILE:HA	1:A:23:GLN:CG	2.21	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:108:ASN:ND2	2:I:70:ARG:CG	2.73	0.50
1:A:160:TYR:CD2	1:A:163:THR:HB	2.45	0.50
1:D:161:LYS:N	1:E:60:GLU:CG	2.71	0.50
1:G:12:ILE:HG13	1:G:12:ILE:O	2.09	0.50
2:H:176:ALA:HA	2:H:186:GLN:HA	1.92	0.50
2:J:160:SER:HA	2:J:163:LYS:HD3	1.93	0.50
2:L:29:LYS:HZ1	2:1:164:GLN:NE2	2.10	0.50
2:L:173:ILE:C	2:L:173:ILE:HD13	2.32	0.50
1:U:85:ALA:O	1:U:89:VAL:HG23	2.11	0.50
1:A:180:TYR:HA	1:A:192:LEU:HD21	1.93	0.50
1:B:160:TYR:C	1:C:60:GLU:CG	2.80	0.50
1:E:175:PHE:C	1:E:175:PHE:HD1	2.15	0.50
1:G:149:PHE:CE1	1:G:159:GLU:HB2	2.46	0.50
1:G:175:PHE:HD1	1:G:175:PHE:C	2.15	0.50
1:G:180:TYR:HA	1:G:192:LEU:HD21	1.93	0.50
2:N:20:VAL:HG13	2:N:28:HIS:HB2	1.93	0.50
2:N:25:PHE:C	2:N:25:PHE:CD1	2.84	0.50
1:P:175:PHE:CD1	1:P:175:PHE:C	2.85	0.50
1:Q:149:PHE:CE1	1:Q:159:GLU:HB2	2.46	0.50
1:Q:175:PHE:C	1:Q:175:PHE:CD1	2.84	0.50
1:S:108:ASN:HD22	2:1:70:ARG:HB3	1.75	0.50
2:W:3:THR:OG1	2:W:127:THR:HG22	2.12	0.50
2:W:179:THR:HG23	2:W:182:ASP:H	1.75	0.50
1:A:149:PHE:CE1	1:A:159:GLU:HB2	2.46	0.50
1:A:177:GLU:CD	1:B:57:ARG:H	2.14	0.50
1:C:191:THR:O	1:C:194:ILE:HG22	2.11	0.50
1:E:103:TYR:CD1	2:M:82:LEU:HB2	2.46	0.50
2:M:49:VAL:HG23	2:M:50:GLY:N	2.25	0.50
1:P:160:TYR:C	1:Q:60:GLU:CG	2.80	0.50
1:P:175:PHE:C	1:P:175:PHE:HD1	2.15	0.50
1:Q:157:ILE:HG22	1:R:86:ARG:NH1	2.26	0.50
1:Q:161:LYS:HB2	1:R:60:GLU:CD	2.29	0.50
1:Q:175:PHE:C	1:Q:175:PHE:HD1	2.15	0.50
1:U:175:PHE:CD1	1:U:175:PHE:C	2.85	0.50
1:U:191:THR:O	1:U:194:ILE:HG22	2.11	0.50
2:V:124:TYR:HD2	2:V:138:LEU:HD23	1.76	0.50
2:1:62:GLU:HG2	2:1:82:LEU:HD21	1.93	0.50
1:D:175:PHE:CD1	1:D:175:PHE:C	2.84	0.50
1:D:191:THR:O	1:D:194:ILE:HG22	2.11	0.50
1:E:149:PHE:CE1	1:E:159:GLU:HB2	2.46	0.50
1:E:177:GLU:N	1:F:58:LEU:CD2	2.58	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:149:PHE:CE1	1:F:159:GLU:HB2	2.46	0.50
1:G:103:TYR:CE1	2:H:82:LEU:HD22	2.44	0.50
1:R:149:PHE:CE1	1:R:159:GLU:HB2	2.46	0.50
2:2:112:SER:O	2:2:113:ILE:HD13	2.12	0.50
1:D:15:PHE:CE2	1:E:131:PRO:O	2.65	0.50
1:F:175:PHE:HD1	1:F:175:PHE:C	2.15	0.50
2:H:124:TYR:HD2	2:H:138:LEU:HD23	1.76	0.50
2:J:174:ASP:HA	2:J:192:ILE:HD13	1.94	0.50
1:O:12:ILE:HD13	1:O:23:GLN:CA	1.93	0.50
1:O:175:PHE:CD1	1:O:175:PHE:C	2.85	0.50
1:P:149:PHE:CE1	1:P:159:GLU:HB2	2.46	0.50
1:Q:180:TYR:HA	1:Q:192:LEU:HD21	1.93	0.50
1:R:175:PHE:CD1	1:R:175:PHE:C	2.84	0.50
2:1:49:VAL:HG23	2:1:50:GLY:N	2.25	0.50
2:2:25:PHE:CD1	2:2:25:PHE:C	2.84	0.50
1:C:157:ILE:HG22	1:D:86:ARG:NH1	2.26	0.50
1:E:93:ARG:HB3	2:L:65:LEU:HD11	1.94	0.50
1:F:15:PHE:HZ	1:G:130:ARG:NH1	2.07	0.50
1:F:173:VAL:O	1:G:58:LEU:CD2	2.60	0.50
2:M:20:VAL:CG1	2:M:28:HIS:HB2	2.36	0.50
1:R:15:PHE:HZ	1:S:133:GLY:N	2.10	0.50
1:R:175:PHE:C	1:R:175:PHE:HD1	2.15	0.50
1:S:71:ASP:HA	2:Z:68:LEU:HD21	1.94	0.50
1:S:103:TYR:CD1	2:1:82:LEU:HB2	2.46	0.50
1:S:175:PHE:C	1:S:175:PHE:CD1	2.85	0.50
2:X:160:SER:HA	2:X:163:LYS:HD3	1.94	0.50
2:Z:133:PHE:CZ	2:Z:165:ARG:HB3	2.47	0.50
1:D:19:GLY:HA3	1:E:30:ALA:CA	2.41	0.50
1:E:15:PHE:CZ	1:F:133:GLY:CA	2.95	0.50
1:E:175:PHE:C	1:E:175:PHE:CD1	2.84	0.50
1:F:175:PHE:C	1:F:175:PHE:CD1	2.85	0.50
2:I:15:ALA:HB2	2:I:175:VAL:HB	1.93	0.50
2:M:132:PRO:HA	2:1:133:PHE:CE1	2.47	0.50
2:M:133:PHE:CE1	2:1:132:PRO:HA	2.47	0.50
1:R:15:PHE:CE2	1:S:131:PRO:O	2.65	0.50
1:R:126:TYR:HA	1:S:129:VAL:HG23	1.94	0.50
1:S:149:PHE:CE1	1:S:159:GLU:HB2	2.46	0.50
1:T:173:VAL:O	1:U:58:LEU:CD2	2.60	0.50
1:U:102:THR:C	2:V:85:ASN:OD1	2.43	0.50
1:U:103:TYR:CE1	2:V:82:LEU:CD1	2.83	0.50
2:X:123:ILE:H	2:X:123:ILE:CD1	2.23	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:175:PHE:CD1	1:A:175:PHE:C	2.85	0.50
1:B:177:GLU:CB	1:C:58:LEU:CD2	2.88	0.50
1:G:175:PHE:C	1:G:175:PHE:CD1	2.85	0.50
2:N:123:ILE:H	2:N:123:ILE:CD1	2.24	0.50
1:O:100:LYS:NZ	2:V:64:GLU:OE1	2.43	0.50
1:O:177:GLU:CB	1:P:58:LEU:HD22	2.32	0.50
2:W:66:TYR:CZ	2:W:70:ARG:HD2	2.46	0.50
2:Z:173:ILE:C	2:Z:173:ILE:HD13	2.32	0.50
1:A:21:LEU:CD1	1:B:130:ARG:HD2	2.20	0.50
2:M:26:ILE:O	2:M:26:ILE:HD13	2.11	0.50
1:O:103:TYR:O	2:W:81:THR:HB	2.11	0.50
1:B:149:PHE:CE1	1:B:159:GLU:HB2	2.46	0.49
1:C:175:PHE:C	1:C:175:PHE:HD1	2.15	0.49
1:D:125:GLN:O	1:E:129:VAL:CG2	2.56	0.49
1:E:107:VAL:HG21	2:M:66:TYR:HH	1.76	0.49
2:I:66:TYR:CZ	2:I:70:ARG:HD2	2.46	0.49
2:N:18:ARG:HE	2:N:30:ASN:HD22	1.57	0.49
1:R:137:ILE:HG22	1:R:150:ASP:HB2	1.94	0.49
1:S:137:ILE:HG22	1:S:150:ASP:HB2	1.94	0.49
2:1:26:ILE:HD13	2:1:26:ILE:O	2.11	0.49
1:A:23:GLN:NE2	1:G:15:PHE:H	2.10	0.49
1:A:108:ASN:HD22	2:I:70:ARG:HG2	1.77	0.49
1:A:137:ILE:HG22	1:A:150:ASP:HB2	1.95	0.49
1:A:177:GLU:CA	1:B:58:LEU:HD13	2.17	0.49
1:C:110:GLU:O	1:C:113:VAL:HG12	2.13	0.49
1:G:137:ILE:HG22	1:G:150:ASP:HB2	1.94	0.49
2:L:133:PHE:CZ	2:L:165:ARG:HB3	2.47	0.49
1:O:170:ASP:O	1:O:173:VAL:HG12	2.13	0.49
1:P:137:ILE:HG22	1:P:150:ASP:HB2	1.95	0.49
1:U:149:PHE:CE1	1:U:159:GLU:HB2	2.46	0.49
1:U:175:PHE:C	1:U:175:PHE:HD1	2.15	0.49
2:V:178:ILE:HB	2:V:184:TYR:HA	1.93	0.49
1:D:126:TYR:HA	1:E:129:VAL:HG23	1.94	0.49
2:I:3:THR:OG1	2:I:127:THR:HG22	2.12	0.49
2:L:132:PRO:HA	2:2:133:PHE:CE1	2.47	0.49
1:O:137:ILE:HG22	1:O:150:ASP:HB2	1.94	0.49
1:Q:137:ILE:HG22	1:Q:150:ASP:CB	2.43	0.49
1:Q:170:ASP:O	1:Q:173:VAL:HG12	2.13	0.49
1:S:15:PHE:CZ	1:T:133:GLY:CA	2.95	0.49
1:S:93:ARG:HB3	2:Z:65:LEU:HD11	1.94	0.49
1:U:110:GLU:O	1:U:113:VAL:HG12	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:110:GLU:O	1:A:113:VAL:HG12	2.13	0.49
1:A:175:PHE:C	1:A:175:PHE:HD1	2.15	0.49
1:B:137:ILE:HG22	1:B:150:ASP:HB2	1.94	0.49
1:C:149:PHE:CE1	1:C:159:GLU:HB2	2.46	0.49
1:D:170:ASP:O	1:D:173:VAL:HG12	2.13	0.49
1:E:137:ILE:HG22	1:E:150:ASP:HB2	1.95	0.49
1:G:137:ILE:HG22	1:G:150:ASP:CB	2.43	0.49
1:O:101:VAL:HG22	2:V:58:TYR:HE1	1.76	0.49
1:O:175:PHE:C	1:O:175:PHE:HD1	2.15	0.49
1:Q:137:ILE:HG22	1:Q:150:ASP:HB2	1.94	0.49
1:S:110:GLU:O	1:S:113:VAL:HG12	2.13	0.49
2:X:174:ASP:HA	2:X:192:ILE:HD13	1.94	0.49
1:B:62:ASN:O	1:B:65:GLU:HG2	2.13	0.49
1:C:137:ILE:HG22	1:C:150:ASP:HB2	1.94	0.49
1:D:62:ASN:O	1:D:65:GLU:HG2	2.12	0.49
1:D:137:ILE:HG22	1:D:150:ASP:CB	2.43	0.49
1:F:137:ILE:HG22	1:F:150:ASP:HB2	1.94	0.49
1:F:170:ASP:O	1:F:173:VAL:HG12	2.13	0.49
2:K:179:THR:HG23	2:K:182:ASP:H	1.77	0.49
1:P:108:ASN:CG	2:X:70:ARG:CG	2.72	0.49
1:P:155:GLY:O	1:Q:86:ARG:CZ	2.61	0.49
1:R:110:GLU:O	1:R:113:VAL:HG12	2.13	0.49
1:R:137:ILE:HG22	1:R:150:ASP:CB	2.43	0.49
1:T:149:PHE:CE1	1:T:159:GLU:HB2	2.46	0.49
2:Z:189:THR:HG23	2:Z:190:ASP:N	2.28	0.49
1:B:228:GLU:O	1:B:231:LYS:HB3	2.13	0.49
1:C:62:ASN:O	1:C:65:GLU:HG2	2.12	0.49
1:C:228:GLU:O	1:C:231:LYS:HB3	2.13	0.49
1:G:110:GLU:O	1:G:113:VAL:HG12	2.13	0.49
1:G:228:GLU:O	1:G:231:LYS:HB3	2.13	0.49
1:O:110:GLU:O	1:O:113:VAL:HG12	2.13	0.49
1:R:170:ASP:O	1:R:173:VAL:HG12	2.13	0.49
1:R:228:GLU:O	1:R:231:LYS:HB3	2.13	0.49
1:S:175:PHE:C	1:S:175:PHE:HD1	2.15	0.49
1:T:137:ILE:HG22	1:T:150:ASP:HB2	1.95	0.49
1:T:175:PHE:C	1:T:175:PHE:HD1	2.15	0.49
1:U:137:ILE:HG22	1:U:150:ASP:HB2	1.95	0.49
1:A:62:ASN:O	1:A:65:GLU:HG2	2.13	0.49
1:A:228:GLU:O	1:A:231:LYS:HB3	2.13	0.49
1:D:137:ILE:HG22	1:D:150:ASP:HB2	1.94	0.49
1:D:175:PHE:C	1:D:175:PHE:HD1	2.15	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:110:GLU:O	1:E:113:VAL:HG12	2.13	0.49
1:P:177:GLU:HA	1:Q:58:LEU:CG	2.19	0.49
1:S:228:GLU:O	1:S:231:LYS:HB3	2.13	0.49
1:U:62:ASN:O	1:U:65:GLU:HG2	2.13	0.49
1:U:228:GLU:O	1:U:231:LYS:HB3	2.13	0.49
2:X:62:GLU:HG2	2:X:82:LEU:HD21	1.94	0.49
1:A:137:ILE:HG22	1:A:150:ASP:CB	2.43	0.49
1:C:170:ASP:O	1:C:173:VAL:HG12	2.13	0.49
1:D:228:GLU:O	1:D:231:LYS:HB3	2.13	0.49
1:E:228:GLU:O	1:E:231:LYS:HB3	2.13	0.49
1:F:137:ILE:HG22	1:F:150:ASP:CB	2.43	0.49
2:K:26:ILE:HG23	2:2:165:ARG:HA	1.94	0.49
1:O:228:GLU:O	1:O:231:LYS:HB3	2.13	0.49
1:P:228:GLU:O	1:P:231:LYS:HB3	2.13	0.49
1:T:228:GLU:O	1:T:231:LYS:HB3	2.13	0.49
1:U:170:ASP:O	1:U:173:VAL:HG12	2.13	0.49
2:Y:59:MET:CE	2:Y:82:LEU:HD23	2.43	0.49
1:B:110:GLU:O	1:B:113:VAL:HG12	2.13	0.49
1:B:155:GLY:O	1:C:86:ARG:CZ	2.61	0.49
1:F:228:GLU:O	1:F:231:LYS:HB3	2.13	0.49
1:G:170:ASP:O	1:G:173:VAL:HG12	2.13	0.49
2:H:26:ILE:HG23	2:X:165:ARG:HA	1.94	0.49
2:H:178:ILE:HB	2:H:184:TYR:HA	1.93	0.49
1:O:62:ASN:O	1:O:65:GLU:HG2	2.12	0.49
1:P:101:VAL:CG2	2:W:58:TYR:HE1	2.21	0.49
1:Q:12:ILE:HD12	1:Q:23:GLN:HB2	0.74	0.49
1:Q:62:ASN:O	1:Q:65:GLU:HG2	2.13	0.49
1:R:62:ASN:O	1:R:65:GLU:HG2	2.13	0.49
1:T:7:ALA:HB1	1:U:10:ARG:NH1	2.22	0.49
1:T:62:ASN:O	1:T:65:GLU:HG2	2.13	0.49
2:W:124:TYR:HD2	2:W:138:LEU:HD23	1.78	0.49
1:B:170:ASP:O	1:B:173:VAL:HG12	2.13	0.49
1:C:177:GLU:C	1:D:57:ARG:NH2	2.65	0.49
1:D:110:GLU:O	1:D:113:VAL:HG12	2.13	0.49
1:E:15:PHE:HE2	1:F:131:PRO:O	1.96	0.49
1:G:62:ASN:O	1:G:65:GLU:HG2	2.13	0.49
1:S:62:ASN:O	1:S:65:GLU:HG2	2.13	0.49
1:T:170:ASP:O	1:T:173:VAL:HG12	2.13	0.49
1:C:137:ILE:HG22	1:C:150:ASP:CB	2.43	0.48
1:F:62:ASN:O	1:F:65:GLU:HG2	2.13	0.48
2:J:18:ARG:HB2	2:J:31:GLY:O	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:M:76:ILE:O	2:M:79:VAL:HG12	2.13	0.48
2:N:112:SER:O	2:N:113:ILE:HD13	2.12	0.48
2:N:141:GLN:HE21	2:Z:141:GLN:NE2	2.11	0.48
1:O:137:ILE:HG22	1:O:150:ASP:CB	2.43	0.48
1:Q:110:GLU:O	1:Q:113:VAL:HG12	2.13	0.48
1:S:137:ILE:HG22	1:S:150:ASP:CB	2.43	0.48
1:T:110:GLU:O	1:T:113:VAL:HG12	2.13	0.48
1:B:107:VAL:CG2	2:J:66:TYR:OH	2.62	0.48
1:B:177:GLU:CA	1:C:58:LEU:CG	2.88	0.48
1:E:17:PRO:O	1:F:29:GLU:HG3	2.13	0.48
1:E:62:ASN:O	1:E:65:GLU:HG2	2.13	0.48
1:E:71:ASP:HA	2:L:68:LEU:HD21	1.94	0.48
1:E:137:ILE:HG22	1:E:150:ASP:CB	2.43	0.48
1:Q:228:GLU:O	1:Q:231:LYS:HB3	2.13	0.48
1:T:177:GLU:CD	1:U:57:ARG:H	2.16	0.48
2:Y:175:VAL:CG2	2:Y:176:ALA:N	2.75	0.48
2:1:76:ILE:O	2:1:79:VAL:HG12	2.13	0.48
1:B:175:PHE:C	1:B:175:PHE:HD1	2.15	0.48
1:E:170:ASP:O	1:E:173:VAL:HG12	2.13	0.48
1:F:177:GLU:CD	1:G:57:ARG:H	2.16	0.48
1:P:110:GLU:O	1:P:113:VAL:HG12	2.13	0.48
1:S:14:VAL:H	1:T:130:ARG:HB2	1.78	0.48
1:S:17:PRO:O	1:T:29:GLU:HG3	2.13	0.48
1:S:72:ASP:CG	2:Z:67:ARG:NH2	2.67	0.48
2:Y:179:THR:HG23	2:Y:182:ASP:H	1.77	0.48
1:A:30:ALA:HB2	1:G:19:GLY:O	2.13	0.48
1:A:170:ASP:O	1:A:173:VAL:HG12	2.13	0.48
1:D:148:LEU:O	1:D:159:GLU:HG3	2.14	0.48
2:H:12:VAL:HG13	2:H:178:ILE:HG23	1.96	0.48
2:I:189:THR:HG23	2:I:190:ASP:N	2.28	0.48
1:O:177:GLU:CD	1:P:57:ARG:H	2.14	0.48
1:S:170:ASP:O	1:S:173:VAL:HG12	2.13	0.48
1:T:108:ASN:CG	2:2:70:ARG:CG	2.56	0.48
2:V:36:GLN:HB2	2:V:184:TYR:CE1	2.48	0.48
1:E:14:VAL:H	1:F:130:ARG:HB2	1.79	0.48
2:H:36:GLN:HB2	2:H:184:TYR:CE1	2.48	0.48
2:K:175:VAL:CG2	2:K:176:ALA:N	2.75	0.48
1:P:107:VAL:CG2	2:X:66:TYR:OH	2.62	0.48
1:P:137:ILE:HG22	1:P:150:ASP:CB	2.43	0.48
1:U:137:ILE:HG22	1:U:150:ASP:CB	2.43	0.48
2:2:123:ILE:HD13	2:2:123:ILE:N	2.26	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:72:ASP:CG	2:L:67:ARG:NH2	2.67	0.48
1:F:110:GLU:O	1:F:113:VAL:HG12	2.13	0.48
2:H:17:GLU:HB2	2:H:170:GLY:O	2.14	0.48
2:L:18:ARG:HE	2:L:30:ASN:HD22	1.61	0.48
2:L:189:THR:HG23	2:L:190:ASP:N	2.28	0.48
2:N:139:GLU:OE1	2:Z:165:ARG:NE	2.46	0.48
1:O:30:ALA:HB2	1:U:19:GLY:O	2.13	0.48
1:O:129:VAL:HG23	1:U:125:GLN:C	2.33	0.48
1:O:148:LEU:O	1:O:159:GLU:HG3	2.14	0.48
1:P:97:GLN:OE1	2:W:61:ALA:CB	2.60	0.48
1:P:170:ASP:O	1:P:173:VAL:HG12	2.13	0.48
1:A:148:LEU:O	1:A:159:GLU:HG3	2.14	0.48
1:B:137:ILE:HG22	1:B:150:ASP:CB	2.43	0.48
1:E:108:ASN:HD22	2:M:70:ARG:HB3	1.75	0.48
1:G:101:VAL:HG21	2:N:58:TYR:HD1	1.47	0.48
1:G:148:LEU:O	1:G:159:GLU:HG3	2.14	0.48
2:K:59:MET:CE	2:K:82:LEU:HD23	2.43	0.48
2:M:26:ILE:HD13	2:M:26:ILE:C	2.34	0.48
1:P:103:TYR:HE1	2:X:82:LEU:HD22	1.79	0.48
1:P:177:GLU:HA	1:Q:58:LEU:HD11	0.48	0.48
1:S:148:LEU:O	1:S:159:GLU:HG3	2.14	0.48
1:B:177:GLU:HA	1:C:58:LEU:HD11	0.48	0.48
2:H:59:MET:HE2	2:H:79:VAL:CG2	2.42	0.48
1:P:62:ASN:O	1:P:65:GLU:HG2	2.13	0.48
1:R:148:LEU:O	1:R:159:GLU:HG3	2.14	0.48
1:R:157:ILE:HG22	1:S:86:ARG:NH1	2.29	0.48
1:T:137:ILE:HG22	1:T:150:ASP:CB	2.43	0.48
2:V:103:GLY:HA2	2:V:178:ILE:CD1	2.44	0.48
2:Z:174:ASP:HA	2:Z:192:ILE:HD13	1.96	0.48
1:A:21:LEU:CD1	1:B:130:ARG:CD	2.87	0.48
1:F:101:VAL:HG23	2:M:58:TYR:CD1	2.09	0.48
2:J:45:ILE:HD11	2:J:52:ALA:O	2.14	0.48
2:J:165:ARG:HA	2:V:26:ILE:HG23	1.96	0.48
2:K:1:THR:H3	2:K:129:SER:HB3	1.79	0.48
1:P:108:ASN:HD22	2:X:70:ARG:CA	2.27	0.48
1:T:134:VAL:O	1:T:153:PRO:HG3	2.14	0.48
2:X:109:HIS:HB3	2:X:111:PHE:HE1	1.79	0.48
1:B:134:VAL:O	1:B:153:PRO:HG3	2.14	0.48
1:D:155:GLY:O	1:E:86:ARG:NH1	2.46	0.48
2:I:32:LYS:HE2	2:I:34:LEU:O	2.14	0.48
2:K:44:THR:OG1	2:K:100:LEU:HB3	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:148:LEU:O	1:Q:159:GLU:HG3	2.14	0.48
1:U:134:VAL:O	1:U:153:PRO:HG3	2.14	0.48
2:W:22:MET:O	2:W:23:GLU:HB2	2.14	0.48
2:Z:178:ILE:O	2:Z:178:ILE:HG12	2.14	0.48
2:1:179:THR:HG23	2:1:182:ASP:H	1.79	0.48
1:A:134:VAL:O	1:A:153:PRO:HG3	2.14	0.47
1:B:103:TYR:HE1	2:J:82:LEU:HD22	1.79	0.47
1:C:173:VAL:O	1:D:58:LEU:CD2	2.62	0.47
1:D:160:TYR:C	1:E:60:GLU:CG	2.82	0.47
1:E:161:LYS:CA	1:F:60:GLU:OE2	2.56	0.47
2:J:141:GLN:NE2	2:W:141:GLN:HE21	2.11	0.47
2:J:152:VAL:O	2:J:156:ILE:HG13	2.14	0.47
1:O:60:GLU:HG2	1:U:160:TYR:C	2.34	0.47
1:P:108:ASN:HD22	2:X:70:ARG:CG	2.26	0.47
1:Q:134:VAL:O	1:Q:153:PRO:HG3	2.14	0.47
1:R:101:VAL:HA	2:Y:57:ARG:HB3	1.96	0.47
1:R:155:GLY:O	1:S:86:ARG:NH1	2.46	0.47
1:R:160:TYR:C	1:S:60:GLU:CG	2.82	0.47
1:S:108:ASN:ND2	2:1:70:ARG:CB	2.72	0.47
1:S:177:GLU:N	1:T:58:LEU:CD2	2.58	0.47
1:T:107:VAL:HG21	2:2:66:TYR:HH	1.79	0.47
2:1:26:ILE:HD13	2:1:26:ILE:C	2.34	0.47
2:1:74:MET:HG2	2:1:78:ALA:HB3	1.96	0.47
1:A:58:LEU:HD22	1:G:173:VAL:O	2.11	0.47
1:C:134:VAL:O	1:C:153:PRO:HG3	2.14	0.47
1:F:134:VAL:O	1:F:153:PRO:HG3	2.14	0.47
1:F:148:LEU:O	1:F:159:GLU:HG3	2.14	0.47
1:O:108:ASN:ND2	2:W:70:ARG:CG	2.73	0.47
1:R:101:VAL:HG23	2:Y:58:TYR:N	2.29	0.47
1:S:134:VAL:O	1:S:153:PRO:HG3	2.14	0.47
2:V:66:TYR:CZ	2:V:70:ARG:HD2	2.49	0.47
2:V:126:SER:HB3	2:V:135:TYR:CE2	2.49	0.47
2:W:26:ILE:HD13	2:W:26:ILE:C	2.35	0.47
2:W:32:LYS:HE2	2:W:34:LEU:O	2.14	0.47
2:W:189:THR:HG23	2:W:190:ASP:N	2.28	0.47
2:X:45:ILE:HD11	2:X:52:ALA:O	2.14	0.47
2:Y:44:THR:OG1	2:Y:100:LEU:HB3	2.14	0.47
1:B:148:LEU:O	1:B:159:GLU:HG3	2.14	0.47
1:D:15:PHE:CZ	1:E:133:GLY:CA	2.97	0.47
2:J:62:GLU:HG2	2:J:82:LEU:HD21	1.94	0.47
2:J:159:ILE:O	2:J:163:LYS:HG3	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:K:103:GLY:HA2	2:K:178:ILE:CD1	2.44	0.47
1:O:23:GLN:NE2	1:U:15:PHE:H	2.10	0.47
1:P:177:GLU:CA	1:Q:58:LEU:HD13	2.08	0.47
1:Q:178:ARG:C	1:R:57:ARG:NH2	2.67	0.47
2:Y:43:MET:HE2	2:Y:56:VAL:HG23	1.96	0.47
2:Y:124:TYR:HD2	2:Y:138:LEU:HD23	1.80	0.47
2:2:76:ILE:HG21	2:2:109:HIS:HB2	1.96	0.47
1:A:129:VAL:HG23	1:G:125:GLN:C	2.33	0.47
1:B:108:ASN:ND2	2:J:70:ARG:CA	2.77	0.47
1:D:160:TYR:C	1:E:60:GLU:HG3	2.35	0.47
2:K:133:PHE:CZ	2:K:165:ARG:HB3	2.48	0.47
2:M:7:THR:HB	2:M:123:ILE:O	2.14	0.47
2:M:74:MET:HG2	2:M:78:ALA:HB3	1.95	0.47
1:R:111:ASN:CG	2:Z:70:ARG:HH12	2.17	0.47
1:S:15:PHE:HE2	1:T:131:PRO:O	1.96	0.47
1:T:148:LEU:O	1:T:159:GLU:HG3	2.14	0.47
2:V:55:LEU:HD12	2:V:55:LEU:HA	1.50	0.47
1:A:60:GLU:HG2	1:G:160:TYR:C	2.33	0.47
1:D:157:ILE:HG22	1:E:86:ARG:NH1	2.29	0.47
2:H:6:ILE:HD11	2:H:142:TYR:HD1	1.79	0.47
2:H:103:GLY:HA2	2:H:178:ILE:CD1	2.44	0.47
2:I:22:MET:O	2:I:23:GLU:HB2	2.14	0.47
2:I:26:ILE:HD13	2:I:26:ILE:C	2.35	0.47
2:I:124:TYR:HD2	2:I:138:LEU:HD23	1.78	0.47
2:N:133:PHE:CE1	2:Z:132:PRO:HA	2.50	0.47
1:O:60:GLU:HG3	1:U:160:TYR:C	2.35	0.47
2:V:12:VAL:HG13	2:V:178:ILE:HG23	1.96	0.47
2:X:159:ILE:O	2:X:163:LYS:HG3	2.14	0.47
1:A:57:ARG:N	1:G:177:GLU:OE2	2.48	0.47
1:B:12:ILE:HD11	1:B:24:VAL:N	2.30	0.47
1:B:108:ASN:HD22	2:J:70:ARG:CA	2.27	0.47
1:O:134:VAL:O	1:O:153:PRO:HG3	2.14	0.47
1:P:44:ASN:HD22	1:P:44:ASN:HA	1.56	0.47
1:S:19:GLY:HA3	1:T:30:ALA:CB	2.44	0.47
1:U:148:LEU:O	1:U:159:GLU:HG3	2.14	0.47
2:Y:50:GLY:O	2:Y:54:VAL:HG12	2.14	0.47
2:Y:133:PHE:CZ	2:Y:165:ARG:HB3	2.49	0.47
1:A:12:ILE:HD11	1:A:24:VAL:N	2.30	0.47
1:A:60:GLU:HG3	1:G:160:TYR:C	2.35	0.47
1:A:175:PHE:CD2	1:A:196:ALA:HA	2.50	0.47
1:B:175:PHE:CD2	1:B:196:ALA:HA	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:12:ILE:HD11	1:C:24:VAL:N	2.30	0.47
1:C:175:PHE:CD2	1:C:196:ALA:HA	2.50	0.47
1:D:134:VAL:O	1:D:153:PRO:HG3	2.14	0.47
1:E:44:ASN:HD22	1:E:44:ASN:HA	1.56	0.47
1:E:93:ARG:HB3	2:L:65:LEU:CD1	2.45	0.47
1:F:108:ASN:ND2	2:N:70:ARG:CA	2.78	0.47
2:H:20:VAL:HG22	2:H:28:HIS:HB2	1.97	0.47
2:H:66:TYR:CZ	2:H:70:ARG:HD2	2.49	0.47
2:H:126:SER:HB3	2:H:135:TYR:CE2	2.49	0.47
2:I:141:GLN:HE21	2:X:141:GLN:NE2	2.12	0.47
2:J:109:HIS:HB3	2:J:111:PHE:HE1	1.79	0.47
2:L:178:ILE:O	2:L:178:ILE:HG12	2.14	0.47
1:P:148:LEU:O	1:P:159:GLU:HG3	2.14	0.47
1:P:175:PHE:CD2	1:P:196:ALA:HA	2.50	0.47
1:R:12:ILE:HD11	1:R:24:VAL:N	2.30	0.47
1:S:160:TYR:HA	1:T:60:GLU:HG2	1.96	0.47
1:S:175:PHE:CD2	1:S:196:ALA:HA	2.50	0.47
1:T:125:GLN:O	1:U:129:VAL:CG2	2.51	0.47
1:T:175:PHE:CD2	1:T:196:ALA:HA	2.50	0.47
1:U:175:PHE:CD2	1:U:196:ALA:HA	2.50	0.47
2:V:17:GLU:HB2	2:V:170:GLY:O	2.14	0.47
2:W:189:THR:HG23	2:W:190:ASP:H	1.79	0.47
2:X:18:ARG:HB2	2:X:31:GLY:O	2.13	0.47
2:X:37:ILE:HD11	2:X:59:MET:CB	2.37	0.47
2:X:175:VAL:CG2	2:X:176:ALA:N	2.78	0.47
2:Y:74:MET:HG2	2:Y:78:ALA:HB3	1.97	0.47
2:Y:103:GLY:HA2	2:Y:178:ILE:CD1	2.44	0.47
2:Z:18:ARG:HE	2:Z:30:ASN:HD22	1.61	0.47
2:2:59:MET:HE2	2:2:79:VAL:HG23	1.96	0.47
1:G:12:ILE:HD11	1:G:24:VAL:N	2.30	0.47
2:L:174:ASP:HA	2:L:192:ILE:HD13	1.96	0.47
2:N:18:ARG:HB2	2:N:31:GLY:O	2.15	0.47
2:N:76:ILE:HG21	2:N:109:HIS:HB2	1.96	0.47
2:N:91:LYS:O	2:N:94:PRO:HD3	2.15	0.47
1:P:108:ASN:ND2	2:X:70:ARG:CA	2.77	0.47
1:P:134:VAL:O	1:P:153:PRO:HG3	2.14	0.47
1:Q:177:GLU:C	1:R:57:ARG:NH2	2.65	0.47
1:T:12:ILE:HD11	1:T:24:VAL:N	2.30	0.47
1:C:148:LEU:O	1:C:159:GLU:HG3	2.14	0.47
1:E:148:LEU:O	1:E:159:GLU:HG3	2.14	0.47
1:E:160:TYR:HA	1:F:60:GLU:HG2	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:175:PHE:CD2	1:E:196:ALA:HA	2.50	0.47
2:K:141:GLN:NE2	2:V:141:GLN:HE21	2.13	0.47
2:L:124:TYR:HD2	2:L:138:LEU:HD23	1.76	0.47
2:M:179:THR:HG23	2:M:182:ASP:H	1.79	0.47
2:N:175:VAL:CG2	2:N:176:ALA:N	2.78	0.47
1:R:175:PHE:CD2	1:R:196:ALA:HA	2.50	0.47
1:S:12:ILE:HD11	1:S:24:VAL:N	2.30	0.47
1:U:12:ILE:HD11	1:U:24:VAL:N	2.30	0.47
1:U:98:GLN:O	1:U:102:THR:HG23	2.15	0.47
2:V:37:ILE:HD11	2:V:59:MET:CB	2.45	0.47
2:W:175:VAL:CG2	2:W:176:ALA:N	2.78	0.47
2:2:55:LEU:HD21	2:2:87:LEU:HD11	1.97	0.47
2:2:93:MET:N	2:2:94:PRO:CD	2.77	0.47
1:A:130:ARG:NH2	1:G:124:THR:CG2	2.54	0.47
1:D:12:ILE:HD11	1:D:24:VAL:N	2.30	0.47
1:D:15:PHE:CZ	1:E:133:GLY:HA3	2.50	0.47
1:E:103:TYR:CZ	2:M:82:LEU:HD13	2.49	0.47
1:F:12:ILE:HD11	1:F:24:VAL:N	2.30	0.47
2:I:35:PHE:CE2	2:I:45:ILE:HD12	2.50	0.47
2:I:189:THR:HG23	2:I:190:ASP:H	1.79	0.47
2:K:43:MET:CE	2:K:56:VAL:HG23	2.45	0.47
1:R:15:PHE:CZ	1:S:133:GLY:CA	2.97	0.47
1:S:93:ARG:HB3	2:Z:65:LEU:CD1	2.45	0.47
1:S:98:GLN:O	1:S:102:THR:HG23	2.15	0.47
1:T:108:ASN:ND2	2:2:70:ARG:CA	2.78	0.47
2:1:7:THR:HB	2:1:123:ILE:O	2.14	0.47
1:E:19:GLY:HA3	1:F:30:ALA:CB	2.44	0.46
1:E:98:GLN:O	1:E:102:THR:HG23	2.16	0.46
1:F:21:LEU:CD1	1:G:130:ARG:HD3	2.43	0.46
1:G:175:PHE:CD2	1:G:196:ALA:HA	2.50	0.46
2:H:193:GLU:HA	2:H:196:ILE:HD12	1.98	0.46
2:M:22:MET:O	2:M:23:GLU:HB2	2.15	0.46
2:N:55:LEU:HD21	2:N:87:LEU:HD11	1.97	0.46
2:N:123:ILE:HD13	2:N:123:ILE:N	2.26	0.46
1:O:12:ILE:HD11	1:O:24:VAL:N	2.30	0.46
1:O:57:ARG:N	1:U:177:GLU:OE2	2.48	0.46
1:O:103:TYR:CE1	2:W:82:LEU:HD13	2.50	0.46
1:R:7:ALA:CB	1:S:10:ARG:NH1	2.76	0.46
2:X:20:VAL:HG13	2:X:28:HIS:HB2	1.97	0.46
2:X:81:THR:O	2:X:84:SER:HB3	2.15	0.46
2:Y:43:MET:CE	2:Y:56:VAL:HG23	2.45	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1:22:MET:O	2:1:23:GLU:HB2	2.15	0.46
1:A:98:GLN:O	1:A:102:THR:HG23	2.16	0.46
1:A:100:LYS:NZ	2:H:64:GLU:OE1	2.43	0.46
1:D:98:GLN:O	1:D:102:THR:HG23	2.16	0.46
1:D:101:VAL:HA	2:K:57:ARG:HB3	1.96	0.46
1:D:175:PHE:CD2	1:D:196:ALA:HA	2.50	0.46
1:E:12:ILE:HD11	1:E:24:VAL:N	2.30	0.46
2:H:37:ILE:HD11	2:H:59:MET:CB	2.45	0.46
2:J:138:LEU:HD12	2:J:138:LEU:HA	1.68	0.46
2:K:27:MET:HG2	2:K:27:MET:O	2.16	0.46
2:K:50:GLY:O	2:K:54:VAL:HG12	2.14	0.46
2:M:124:TYR:HD2	2:M:138:LEU:HD23	1.76	0.46
1:P:98:GLN:O	1:P:102:THR:HG23	2.16	0.46
1:Q:173:VAL:O	1:R:58:LEU:CD2	2.62	0.46
1:R:15:PHE:CZ	1:S:133:GLY:HA3	2.50	0.46
1:S:15:PHE:CE2	1:T:131:PRO:O	2.68	0.46
2:V:177:VAL:HG12	2:V:187:LEU:CD1	2.46	0.46
1:C:98:GLN:O	1:C:102:THR:HG23	2.16	0.46
1:D:101:VAL:HG23	2:K:58:TYR:N	2.29	0.46
1:E:15:PHE:CE2	1:F:131:PRO:O	2.68	0.46
1:E:134:VAL:O	1:E:153:PRO:HG3	2.14	0.46
2:H:177:VAL:HG12	2:H:187:LEU:CD1	2.46	0.46
2:I:175:VAL:CG2	2:I:176:ALA:N	2.78	0.46
2:K:74:MET:HG2	2:K:78:ALA:HB3	1.97	0.46
2:M:110:VAL:O	2:M:110:VAL:HG13	2.16	0.46
2:N:93:MET:N	2:N:94:PRO:CD	2.77	0.46
1:O:175:PHE:CD2	1:O:196:ALA:HA	2.50	0.46
1:R:160:TYR:C	1:S:60:GLU:HG3	2.35	0.46
2:W:35:PHE:CE2	2:W:45:ILE:HD12	2.50	0.46
2:2:18:ARG:HB2	2:2:31:GLY:O	2.15	0.46
2:2:175:VAL:CG2	2:2:176:ALA:N	2.78	0.46
2:J:175:VAL:CG2	2:J:176:ALA:N	2.78	0.46
2:J:179:THR:HG23	2:J:182:ASP:H	1.80	0.46
2:K:48:LEU:HD12	2:K:49:VAL:N	2.31	0.46
2:N:109:HIS:HB3	2:N:111:PHE:HE1	1.81	0.46
1:P:12:ILE:HD11	1:P:24:VAL:N	2.30	0.46
1:Q:175:PHE:CD2	1:Q:196:ALA:HA	2.50	0.46
1:R:104:GLY:N	2:Z:81:THR:HG21	2.28	0.46
1:R:134:VAL:O	1:R:153:PRO:HG3	2.14	0.46
2:X:138:LEU:HD12	2:X:138:LEU:HA	1.68	0.46
2:2:91:LYS:O	2:2:94:PRO:HD3	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:134:VAL:O	1:G:153:PRO:HG3	2.14	0.46
2:I:20:VAL:CG1	2:I:28:HIS:HB2	2.44	0.46
2:K:43:MET:HE1	2:K:56:VAL:HG23	1.97	0.46
2:L:132:PRO:HA	2:2:133:PHE:HE1	1.81	0.46
2:N:37:ILE:HD11	2:N:59:MET:CG	2.46	0.46
1:O:102:THR:C	2:W:85:ASN:OD1	2.42	0.46
1:O:130:ARG:HB2	1:U:14:VAL:H	1.81	0.46
1:P:103:TYR:CE1	2:X:82:LEU:HD22	2.51	0.46
1:Q:12:ILE:HD11	1:Q:24:VAL:N	2.30	0.46
1:S:103:TYR:CZ	2:1:82:LEU:HD13	2.49	0.46
2:X:152:VAL:O	2:X:156:ILE:HG13	2.14	0.46
2:Y:1:THR:H3	2:Y:129:SER:HB3	1.81	0.46
2:2:109:HIS:HB3	2:2:111:PHE:HE1	1.81	0.46
1:B:108:ASN:HD22	2:J:70:ARG:HG2	1.79	0.46
1:E:108:ASN:HB2	2:M:70:ARG:HG2	1.90	0.46
2:I:138:LEU:HD12	2:I:154:LEU:HD11	1.98	0.46
1:Q:108:ASN:ND2	2:Y:70:ARG:HA	2.31	0.46
1:S:104:GLY:HA3	2:1:81:THR:HG21	1.97	0.46
2:V:7:THR:HB	2:V:123:ILE:O	2.16	0.46
2:V:193:GLU:HA	2:V:196:ILE:HD12	1.97	0.46
2:2:37:ILE:HD11	2:2:59:MET:CG	2.46	0.46
1:F:175:PHE:CD2	1:F:196:ALA:HA	2.50	0.46
1:G:103:TYR:CE1	2:H:82:LEU:CD1	2.83	0.46
2:L:103:GLY:HA2	2:L:178:ILE:HD11	1.98	0.46
2:L:165:ARG:NE	2:2:139:GLU:OE1	2.49	0.46
1:O:98:GLN:O	1:O:102:THR:HG23	2.16	0.46
1:O:177:GLU:N	1:P:58:LEU:CD2	2.49	0.46
1:T:177:GLU:CG	1:U:58:LEU:HD13	2.46	0.46
2:V:72:VAL:HG22	2:V:73:ASN:N	2.31	0.46
2:W:20:VAL:CG1	2:W:28:HIS:HB2	2.44	0.46
2:X:179:THR:HG23	2:X:182:ASP:H	1.80	0.46
1:D:19:GLY:C	1:E:30:ALA:HB2	2.36	0.46
1:G:12:ILE:HD12	1:G:23:GLN:HB2	0.74	0.46
1:G:98:GLN:O	1:G:102:THR:HG23	2.15	0.46
2:N:27:MET:HG2	2:N:27:MET:O	2.15	0.46
1:O:130:ARG:CD	1:U:21:LEU:CD1	2.75	0.46
1:Q:12:ILE:HD13	1:Q:23:GLN:CB	1.03	0.46
1:R:98:GLN:O	1:R:102:THR:HG23	2.16	0.46
1:T:108:ASN:ND2	2:2:70:ARG:HA	2.31	0.46
1:T:177:GLU:H	1:U:58:LEU:CD2	2.03	0.46
2:1:174:ASP:HA	2:1:192:ILE:HD13	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:44:ASN:HD22	1:D:44:ASN:HA	1.56	0.46
2:K:17:GLU:HA	2:K:173:ILE:HA	1.98	0.46
2:K:160:SER:HA	2:K:163:LYS:HD3	1.98	0.46
1:O:44:ASN:HD22	1:O:44:ASN:HA	1.56	0.46
1:S:44:ASN:HD22	1:S:44:ASN:HA	1.56	0.46
2:X:189:THR:HG23	2:X:190:ASP:H	1.81	0.46
2:2:27:MET:O	2:2:27:MET:HG2	2.15	0.46
1:A:29:GLU:HG3	1:G:17:PRO:O	2.16	0.46
1:F:177:GLU:H	1:G:58:LEU:CD2	2.03	0.46
1:F:177:GLU:C	1:G:57:ARG:NH2	2.50	0.46
1:O:21:LEU:CD1	1:P:130:ARG:HD2	2.20	0.46
1:Q:98:GLN:O	1:Q:102:THR:HG23	2.16	0.46
1:R:107:VAL:HG21	2:Z:66:TYR:OH	2.15	0.46
1:T:177:GLU:CB	1:U:58:LEU:HD13	2.45	0.46
2:V:20:VAL:HG22	2:V:28:HIS:HB2	1.96	0.46
2:I:105:ASP:OD1	2:I:106:THR:N	2.49	0.45
2:N:97:VAL:HG22	2:N:98:GLN:H	1.81	0.45
1:A:103:TYR:CE1	2:I:82:LEU:HD13	2.50	0.45
1:D:107:VAL:HG11	2:L:66:TYR:HH	1.81	0.45
1:D:107:VAL:HG21	2:L:66:TYR:OH	2.15	0.45
1:F:98:GLN:O	1:F:102:THR:HG23	2.16	0.45
2:H:111:PHE:CE2	2:H:121:GLU:HB2	2.51	0.45
2:J:81:THR:O	2:J:84:SER:HB3	2.15	0.45
2:K:111:PHE:CE2	2:K:121:GLU:HB2	2.51	0.45
2:M:6:ILE:HG23	2:M:6:ILE:O	2.16	0.45
2:M:15:ALA:HB3	2:M:155:VAL:HG11	1.98	0.45
2:Y:17:GLU:HA	2:Y:173:ILE:HA	1.98	0.45
2:Y:27:MET:HG2	2:Y:27:MET:O	2.16	0.45
2:2:97:VAL:HG22	2:2:98:GLN:N	2.32	0.45
1:B:108:ASN:HD22	2:J:70:ARG:CG	2.26	0.45
1:C:49:ILE:HD11	1:C:210:PRO:CB	2.47	0.45
1:F:177:GLU:CG	1:G:58:LEU:HD13	2.46	0.45
2:J:105:ASP:OD1	2:J:106:THR:N	2.50	0.45
2:L:19:ARG:HE	2:L:26:ILE:HG13	1.81	0.45
2:M:174:ASP:HA	2:M:192:ILE:HD13	1.98	0.45
2:N:124:TYR:HD1	2:N:138:LEU:HD23	1.81	0.45
1:O:21:LEU:CD1	1:P:130:ARG:CD	2.87	0.45
1:T:98:GLN:O	1:T:102:THR:HG23	2.16	0.45
1:U:49:ILE:HD11	1:U:210:PRO:CB	2.47	0.45
2:Y:48:LEU:HD12	2:Y:49:VAL:N	2.31	0.45
2:2:123:ILE:H	2:2:123:ILE:CD1	2.24	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:108:ASN:ND2	2:K:70:ARG:HA	2.31	0.45
1:E:104:GLY:HA3	2:M:81:THR:HG21	1.97	0.45
2:L:19:ARG:NE	2:L:26:ILE:HG13	2.32	0.45
2:L:75:PRO:O	2:L:78:ALA:HB3	2.16	0.45
1:T:52:LYS:HE3	1:T:64:ILE:HG23	1.99	0.45
2:V:111:PHE:CE2	2:V:121:GLU:HB2	2.51	0.45
2:X:105:ASP:OD1	2:X:106:THR:N	2.50	0.45
2:Y:149:ASP:O	2:Y:152:VAL:HG12	2.17	0.45
2:1:110:VAL:O	2:1:110:VAL:HG13	2.16	0.45
2:2:37:ILE:HD11	2:2:59:MET:CB	2.43	0.45
1:B:98:GLN:O	1:B:102:THR:HG23	2.16	0.45
1:B:103:TYR:CE1	2:J:82:LEU:HD22	2.51	0.45
1:D:12:ILE:N	1:D:23:GLN:HG2	2.31	0.45
2:H:22:MET:O	2:H:23:GLU:HB2	2.17	0.45
2:H:141:GLN:HE21	2:Y:141:GLN:NE2	2.15	0.45
2:I:173:ILE:C	2:I:173:ILE:HD13	2.37	0.45
2:J:20:VAL:HG13	2:J:28:HIS:HB2	1.97	0.45
2:M:55:LEU:HD12	2:M:55:LEU:HA	1.76	0.45
2:N:8:LEU:HD12	2:N:8:LEU:O	2.17	0.45
1:O:12:ILE:N	1:O:23:GLN:HG2	2.31	0.45
1:Q:18:ASP:OD2	1:Q:20:ARG:HD3	2.17	0.45
1:S:12:ILE:CD1	1:S:23:GLN:CB	0.48	0.45
2:W:173:ILE:C	2:W:173:ILE:HD13	2.37	0.45
2:Y:75:PRO:O	2:Y:78:ALA:HB3	2.16	0.45
2:2:180:ARG:HD2	2:2:180:ARG:HA	1.80	0.45
1:D:103:TYR:HA	2:L:81:THR:HG22	1.99	0.45
1:F:108:ASN:ND2	2:N:70:ARG:HA	2.31	0.45
2:H:7:THR:HB	2:H:123:ILE:O	2.16	0.45
2:H:72:VAL:HG22	2:H:73:ASN:N	2.31	0.45
2:K:75:PRO:O	2:K:78:ALA:HB3	2.16	0.45
2:L:6:ILE:HD11	2:L:142:TYR:CD1	2.52	0.45
2:L:110:VAL:O	2:L:110:VAL:HG13	2.16	0.45
1:T:18:ASP:OD2	1:T:20:ARG:HD3	2.17	0.45
2:W:105:ASP:OD1	2:W:106:THR:N	2.49	0.45
2:Z:19:ARG:HE	2:Z:26:ILE:HG13	1.82	0.45
2:Z:110:VAL:O	2:Z:110:VAL:HG13	2.16	0.45
2:Z:187:LEU:HA	2:Z:188:PRO:HD3	1.77	0.45
1:B:18:ASP:OD2	1:B:20:ARG:HD3	2.17	0.45
1:D:78:THR:CG2	1:D:85:ALA:HB1	2.45	0.45
1:E:18:ASP:OD2	1:E:20:ARG:HD3	2.17	0.45
1:E:124:THR:HG22	1:F:130:ARG:NH2	2.15	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:18:ASP:OD2	1:F:20:ARG:HD3	2.17	0.45
2:N:97:VAL:HG22	2:N:98:GLN:N	2.32	0.45
2:N:180:ARG:HD2	2:N:180:ARG:HA	1.80	0.45
1:O:29:GLU:HG3	1:U:17:PRO:O	2.16	0.45
1:Q:12:ILE:CD1	1:Q:23:GLN:CB	0.48	0.45
1:Q:78:THR:CG2	1:Q:85:ALA:HB1	2.45	0.45
1:R:103:TYR:HA	2:Z:81:THR:HG22	1.99	0.45
1:R:177:GLU:CB	1:S:58:LEU:CD2	2.75	0.45
2:W:2:THR:HG22	2:W:169:SER:OG	2.17	0.45
2:2:97:VAL:HG22	2:2:98:GLN:H	1.81	0.45
1:B:24:VAL:O	1:B:28:ARG:HG3	2.17	0.45
1:B:177:GLU:CG	1:C:58:LEU:HD13	2.46	0.45
1:C:12:ILE:HD13	1:C:23:GLN:HB3	0.88	0.45
1:D:49:ILE:HD11	1:D:210:PRO:CB	2.47	0.45
1:F:177:GLU:CB	1:G:58:LEU:HD13	2.45	0.45
1:G:143:GLN:OE1	2:H:75:PRO:HG3	2.17	0.45
2:K:55:LEU:HD12	2:K:55:LEU:HA	1.79	0.45
2:K:149:ASP:O	2:K:152:VAL:HG12	2.17	0.45
2:M:180:ARG:HA	2:M:180:ARG:HD2	1.77	0.45
1:P:12:ILE:HD12	1:P:23:GLN:CB	0.59	0.45
1:R:19:GLY:HA3	1:S:30:ALA:CB	2.47	0.45
1:S:52:LYS:HE3	1:S:64:ILE:HG23	1.99	0.45
2:W:146:MET:HA	2:W:150:GLU:OE1	2.17	0.45
2:1:6:ILE:HG23	2:1:6:ILE:O	2.16	0.45
1:B:97:GLN:OE1	2:I:61:ALA:CB	2.60	0.45
1:C:18:ASP:OD2	1:C:20:ARG:HD3	2.17	0.45
1:E:24:VAL:O	1:E:28:ARG:HG3	2.17	0.45
1:E:78:THR:CG2	1:E:85:ALA:HB1	2.45	0.45
1:F:12:ILE:CD1	1:F:23:GLN:CB	0.48	0.45
2:L:141:GLN:HE21	2:2:141:GLN:NE2	2.14	0.45
1:P:177:GLU:CA	1:Q:58:LEU:CG	2.88	0.45
1:S:18:ASP:OD2	1:S:20:ARG:HD3	2.17	0.45
1:S:111:ASN:ND2	2:1:70:ARG:CZ	2.80	0.45
2:X:49:VAL:HG23	2:X:50:GLY:H	1.82	0.45
2:1:15:ALA:HB3	2:1:155:VAL:HG11	1.98	0.45
1:A:52:LYS:HE3	1:A:64:ILE:HG23	1.99	0.45
1:C:78:THR:CG2	1:C:85:ALA:HB1	2.45	0.45
2:I:2:THR:HG22	2:I:169:SER:OG	2.17	0.45
2:L:17:GLU:HA	2:L:173:ILE:HA	1.99	0.45
2:N:37:ILE:HD11	2:N:59:MET:CB	2.43	0.45
1:O:108:ASN:HD22	2:W:70:ARG:HG2	1.77	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:18:ASP:OD2	1:P:20:ARG:HD3	2.17	0.45
1:P:24:VAL:O	1:P:28:ARG:HG3	2.17	0.45
1:Q:143:GLN:OE1	2:Y:75:PRO:CG	2.65	0.45
1:R:19:GLY:C	1:S:30:ALA:HB2	2.36	0.45
1:R:177:GLU:OE1	1:S:58:LEU:CD1	2.63	0.45
1:S:107:VAL:HG11	2:1:66:TYR:HH	1.81	0.45
1:T:24:VAL:O	1:T:28:ARG:HG3	2.17	0.45
1:U:18:ASP:OD2	1:U:20:ARG:HD3	2.17	0.45
1:U:24:VAL:O	1:U:28:ARG:HG3	2.16	0.45
2:V:6:ILE:HD11	2:V:142:TYR:HD1	1.79	0.45
2:V:22:MET:O	2:V:23:GLU:HB2	2.17	0.45
2:V:27:MET:HG2	2:V:27:MET:O	2.17	0.45
2:Y:160:SER:HA	2:Y:163:LYS:HD3	1.98	0.45
2:Z:75:PRO:O	2:Z:78:ALA:HB3	2.16	0.45
1:A:44:ASN:HD22	1:A:44:ASN:HA	1.56	0.44
1:A:159:GLU:O	1:B:60:GLU:HB2	2.17	0.44
1:B:52:LYS:HE3	1:B:64:ILE:HG23	1.99	0.44
1:C:178:ARG:C	1:D:57:ARG:NH2	2.67	0.44
2:J:123:ILE:HG12	2:J:124:TYR:CD1	2.51	0.44
2:J:189:THR:HG23	2:J:190:ASP:H	1.81	0.44
1:T:108:ASN:ND2	2:2:70:ARG:CB	2.75	0.44
1:U:143:GLN:OE1	2:V:75:PRO:HG3	2.17	0.44
2:Y:111:PHE:CE2	2:Y:121:GLU:HB2	2.51	0.44
2:Z:8:LEU:HD12	2:Z:8:LEU:O	2.17	0.44
2:Z:19:ARG:NE	2:Z:26:ILE:HG13	2.32	0.44
1:A:18:ASP:OD2	1:A:20:ARG:HD3	2.17	0.44
1:D:177:GLU:OE1	1:E:58:LEU:CD1	2.63	0.44
2:L:8:LEU:O	2:L:8:LEU:HD12	2.17	0.44
2:N:7:THR:HB	2:N:123:ILE:O	2.18	0.44
1:P:78:THR:CG2	1:P:85:ALA:HB1	2.45	0.44
1:P:177:GLU:CG	1:Q:58:LEU:HD13	2.46	0.44
1:T:21:LEU:CD1	1:U:130:ARG:HD3	2.43	0.44
2:V:15:ALA:HB2	2:V:175:VAL:HB	1.99	0.44
2:Y:187:LEU:HA	2:Y:188:PRO:HD3	1.76	0.44
2:2:8:LEU:HD12	2:2:8:LEU:O	2.17	0.44
1:A:24:VAL:O	1:A:28:ARG:HG3	2.17	0.44
1:A:130:ARG:HB2	1:G:14:VAL:H	1.81	0.44
1:B:177:GLU:OE1	1:C:58:LEU:N	2.50	0.44
1:C:12:ILE:N	1:C:23:GLN:HG2	2.31	0.44
1:C:24:VAL:O	1:C:28:ARG:HG3	2.17	0.44
1:D:12:ILE:HD13	1:D:23:GLN:HB3	0.88	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:52:LYS:HE3	1:E:64:ILE:HG23	1.99	0.44
1:E:111:ASN:ND2	2:M:70:ARG:CZ	2.80	0.44
2:I:59:MET:HE1	2:I:82:LEU:HD23	1.99	0.44
2:L:93:MET:N	2:L:94:PRO:CD	2.81	0.44
1:O:78:THR:CG2	1:O:85:ALA:HB1	2.45	0.44
1:E:173:VAL:CG2	1:F:58:LEU:HD23	2.47	0.44
1:G:18:ASP:OD2	1:G:20:ARG:HD3	2.17	0.44
1:G:49:ILE:HD11	1:G:210:PRO:CB	2.47	0.44
2:H:27:MET:O	2:H:27:MET:HG2	2.17	0.44
2:K:124:TYR:HD2	2:K:138:LEU:HD23	1.80	0.44
1:O:24:VAL:O	1:O:28:ARG:HG3	2.17	0.44
1:Q:177:GLU:H	1:R:58:LEU:CD2	2.06	0.44
1:R:18:ASP:OD2	1:R:20:ARG:HD3	2.17	0.44
2:W:25:PHE:CD1	2:W:25:PHE:C	2.91	0.44
2:W:138:LEU:HD12	2:W:154:LEU:HD11	1.98	0.44
2:Y:76:ILE:O	2:Y:79:VAL:HG12	2.18	0.44
2:Z:103:GLY:HA2	2:Z:178:ILE:HD11	1.98	0.44
2:2:130:GLY:O	2:2:134:VAL:HG12	2.17	0.44
1:F:12:ILE:HD13	1:F:23:GLN:CB	1.02	0.44
1:G:103:TYR:CD1	2:H:82:LEU:HB2	2.53	0.44
2:N:59:MET:HE2	2:N:79:VAL:HG23	1.99	0.44
1:O:49:ILE:HD11	1:O:210:PRO:CB	2.47	0.44
1:R:52:LYS:HE3	1:R:64:ILE:HG23	1.99	0.44
1:S:49:ILE:HD11	1:S:210:PRO:CB	2.47	0.44
1:U:12:ILE:HD13	1:U:23:GLN:HB3	0.88	0.44
1:U:103:TYR:CD1	2:V:82:LEU:HB2	2.53	0.44
1:B:12:ILE:CD1	1:B:23:GLN:CB	0.48	0.44
1:D:19:GLY:HA3	1:E:30:ALA:CB	2.47	0.44
1:D:24:VAL:O	1:D:28:ARG:HG3	2.17	0.44
1:D:52:LYS:HE3	1:D:64:ILE:HG23	1.99	0.44
1:E:111:ASN:HB2	2:M:70:ARG:NH1	2.33	0.44
1:E:173:VAL:O	1:F:58:LEU:HD23	2.06	0.44
1:F:24:VAL:O	1:F:28:ARG:HG3	2.17	0.44
2:H:187:LEU:HA	2:H:188:PRO:HD3	1.77	0.44
2:I:6:ILE:HD11	2:I:142:TYR:CD1	2.52	0.44
2:I:25:PHE:C	2:I:25:PHE:CD1	2.91	0.44
2:J:123:ILE:H	2:J:123:ILE:CD1	2.23	0.44
2:L:74:MET:HG2	2:L:78:ALA:HB3	2.00	0.44
2:N:130:GLY:O	2:N:134:VAL:HG12	2.17	0.44
1:O:58:LEU:HD22	1:U:177:GLU:CB	2.20	0.44
1:P:177:GLU:OE1	1:Q:58:LEU:N	2.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:24:VAL:O	1:Q:28:ARG:HG3	2.17	0.44
1:Q:49:ILE:HD11	1:Q:210:PRO:CB	2.47	0.44
1:S:24:VAL:O	1:S:28:ARG:HG3	2.17	0.44
1:U:12:ILE:N	1:U:23:GLN:HG2	2.31	0.44
1:U:52:LYS:HE3	1:U:64:ILE:HG23	1.99	0.44
1:U:78:THR:CG2	1:U:85:ALA:HB1	2.45	0.44
2:Z:17:GLU:HA	2:Z:173:ILE:HA	1.99	0.44
1:B:125:GLN:O	1:C:129:VAL:HG23	2.18	0.44
1:C:52:LYS:HE3	1:C:64:ILE:HG23	1.99	0.44
1:C:103:TYR:C	2:K:81:THR:HG22	2.37	0.44
1:C:143:GLN:OE1	2:K:75:PRO:CG	2.65	0.44
1:C:178:ARG:N	1:D:57:ARG:HH21	2.15	0.44
1:D:18:ASP:OD2	1:D:20:ARG:HD3	2.17	0.44
1:F:49:ILE:HD11	1:F:210:PRO:CB	2.47	0.44
1:P:52:LYS:HE3	1:P:64:ILE:HG23	1.99	0.44
2:W:6:ILE:HD11	2:W:142:TYR:CD1	2.53	0.44
2:Z:74:MET:HG2	2:Z:78:ALA:HB3	2.00	0.44
1:D:17:PRO:HA	1:E:26:TYR:CG	2.53	0.44
1:D:111:ASN:CG	2:L:70:ARG:HH12	2.17	0.44
1:E:15:PHE:HZ	1:F:133:GLY:N	2.15	0.44
1:S:15:PHE:HZ	1:T:133:GLY:N	2.15	0.44
2:V:59:MET:HE2	2:V:79:VAL:CG2	2.43	0.44
2:V:90:VAL:O	2:V:90:VAL:HG22	2.18	0.44
2:Z:76:ILE:HA	2:Z:79:VAL:HG12	2.00	0.44
1:A:49:ILE:HD11	1:A:210:PRO:CB	2.47	0.44
1:C:108:ASN:HD22	2:K:70:ARG:CA	2.24	0.44
1:F:108:ASN:HD22	2:N:70:ARG:CA	2.31	0.44
2:H:15:ALA:HB2	2:H:175:VAL:HB	1.99	0.44
2:K:76:ILE:O	2:K:79:VAL:HG12	2.18	0.44
1:O:109:ILE:CG2	1:O:147:ARG:HD3	2.48	0.44
1:R:49:ILE:HD11	1:R:210:PRO:CB	2.47	0.44
1:T:108:ASN:HD22	2:2:70:ARG:CA	2.30	0.44
2:Y:34:LEU:HD21	2:Y:176:ALA:HB3	2.00	0.44
2:2:124:TYR:HD1	2:2:138:LEU:HD23	1.81	0.44
2:2:160:SER:HA	2:2:163:LYS:HD3	2.00	0.44
1:D:72:ASP:OD1	2:K:67:ARG:NH2	2.52	0.43
1:E:32:LYS:O	1:E:167:SER:HA	2.18	0.43
1:E:109:ILE:CG2	1:E:147:ARG:HD3	2.48	0.43
1:F:187:LYS:O	1:F:190:VAL:HG13	2.18	0.43
1:G:52:LYS:HE3	1:G:64:ILE:HG23	1.99	0.43
2:M:93:MET:N	2:M:94:PRO:CD	2.81	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:N:83:LEU:HD12	2:N:83:LEU:HA	1.85	0.43
1:P:49:ILE:HD11	1:P:210:PRO:CB	2.47	0.43
1:P:109:ILE:CG2	1:P:147:ARG:HD3	2.48	0.43
1:Q:109:ILE:CG2	1:Q:147:ARG:HD3	2.48	0.43
1:Q:111:ASN:CB	2:Y:70:ARG:NH1	2.80	0.43
1:S:108:ASN:HB2	2:1:70:ARG:CD	2.48	0.43
1:T:12:ILE:CD1	1:T:23:GLN:CB	0.48	0.43
2:W:187:LEU:HA	2:W:188:PRO:HD3	1.83	0.43
1:B:108:ASN:ND2	2:J:70:ARG:HA	2.34	0.43
1:B:130:ARG:NH1	1:B:131:PRO:O	2.51	0.43
1:C:109:ILE:CG2	1:C:147:ARG:HD3	2.48	0.43
1:E:49:ILE:HD11	1:E:210:PRO:CB	2.47	0.43
1:F:16:SER:HB3	1:F:22:PHE:CE2	2.53	0.43
1:G:24:VAL:O	1:G:28:ARG:HG3	2.17	0.43
1:G:143:GLN:OE1	2:H:75:PRO:CG	2.66	0.43
1:G:187:LYS:O	1:G:190:VAL:HG13	2.18	0.43
2:I:146:MET:HA	2:I:150:GLU:OE1	2.17	0.43
2:L:76:ILE:HA	2:L:79:VAL:HG12	2.00	0.43
2:L:178:ILE:HB	2:L:184:TYR:HA	2.00	0.43
2:N:165:ARG:HA	2:Y:26:ILE:CG2	2.48	0.43
1:O:18:ASP:OD2	1:O:20:ARG:HD3	2.17	0.43
1:O:52:LYS:HE3	1:O:64:ILE:HG23	1.99	0.43
1:O:130:ARG:NH1	1:O:131:PRO:O	2.52	0.43
1:O:159:GLU:O	1:P:60:GLU:HB2	2.17	0.43
1:Q:16:SER:HB3	1:Q:22:PHE:CE2	2.53	0.43
1:Q:32:LYS:O	1:Q:167:SER:HA	2.18	0.43
1:Q:52:LYS:HE3	1:Q:64:ILE:HG23	1.99	0.43
1:Q:187:LYS:O	1:Q:190:VAL:HG13	2.19	0.43
1:R:72:ASP:OD1	2:Y:67:ARG:NH2	2.51	0.43
1:S:173:VAL:CG2	1:T:58:LEU:HD23	2.47	0.43
1:T:16:SER:HB3	1:T:22:PHE:CE2	2.53	0.43
1:T:32:LYS:O	1:T:167:SER:HA	2.18	0.43
1:T:49:ILE:HD11	1:T:210:PRO:CB	2.47	0.43
1:T:130:ARG:NH1	1:T:131:PRO:O	2.52	0.43
1:U:109:ILE:CG2	1:U:147:ARG:HD3	2.48	0.43
1:U:130:ARG:NH1	1:U:131:PRO:O	2.51	0.43
2:2:111:PHE:CE2	2:2:121:GLU:HB2	2.53	0.43
1:A:130:ARG:NH1	1:A:131:PRO:O	2.51	0.43
1:D:32:LYS:O	1:D:167:SER:HA	2.18	0.43
1:D:109:ILE:CG2	1:D:147:ARG:HD3	2.48	0.43
1:D:130:ARG:NH1	1:D:131:PRO:O	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:130:ARG:NH1	1:E:131:PRO:O	2.52	0.43
1:F:32:LYS:O	1:F:167:SER:HA	2.18	0.43
1:F:52:LYS:HE3	1:F:64:ILE:HG23	1.99	0.43
1:F:109:ILE:CG2	1:F:147:ARG:HD3	2.48	0.43
2:J:49:VAL:HG23	2:J:50:GLY:H	1.82	0.43
2:M:133:PHE:HE1	2:1:132:PRO:HA	1.81	0.43
2:N:138:LEU:HD12	2:N:138:LEU:HA	1.71	0.43
1:P:32:LYS:O	1:P:167:SER:HA	2.18	0.43
1:R:17:PRO:HA	1:S:26:TYR:CG	2.53	0.43
1:R:187:LYS:O	1:R:190:VAL:HG13	2.19	0.43
1:S:130:ARG:NH1	1:S:131:PRO:O	2.52	0.43
1:U:16:SER:HB3	1:U:22:PHE:CE2	2.53	0.43
2:V:17:GLU:HA	2:V:173:ILE:HA	2.01	0.43
2:V:25:PHE:C	2:V:25:PHE:CD1	2.90	0.43
1:B:12:ILE:N	1:B:23:GLN:HG2	2.31	0.43
1:C:16:SER:HB3	1:C:22:PHE:CE2	2.53	0.43
1:C:107:VAL:HG21	2:K:66:TYR:HH	1.80	0.43
1:D:81:LEU:HD23	1:D:133:GLY:HA3	2.00	0.43
1:E:187:LYS:O	1:E:190:VAL:HG13	2.18	0.43
1:F:19:GLY:CA	1:G:30:ALA:HB2	2.49	0.43
1:G:12:ILE:HD13	1:G:23:GLN:CB	1.02	0.43
2:H:90:VAL:O	2:H:90:VAL:HG22	2.18	0.43
2:L:189:THR:HG23	2:L:190:ASP:H	1.83	0.43
2:N:141:GLN:NE2	2:Z:141:GLN:HE21	2.15	0.43
1:O:10:ARG:NH1	1:U:7:ALA:CB	2.77	0.43
1:R:130:ARG:NH1	1:R:131:PRO:O	2.52	0.43
1:S:111:ASN:HB2	2:1:70:ARG:NH1	2.33	0.43
1:U:143:GLN:OE1	2:V:75:PRO:CG	2.66	0.43
2:V:19:ARG:HE	2:V:26:ILE:HG13	1.84	0.43
2:Z:6:ILE:HD11	2:Z:142:TYR:CD1	2.52	0.43
1:C:130:ARG:NH1	1:C:131:PRO:O	2.52	0.43
1:D:16:SER:HB3	1:D:22:PHE:CE2	2.53	0.43
1:G:130:ARG:NH1	1:G:131:PRO:O	2.51	0.43
2:H:17:GLU:HA	2:H:173:ILE:HA	2.01	0.43
2:M:66:TYR:CZ	2:M:70:ARG:HD2	2.54	0.43
1:O:58:LEU:HD22	1:U:173:VAL:O	2.11	0.43
1:P:16:SER:HB3	1:P:22:PHE:CE2	2.53	0.43
1:P:177:GLU:N	1:Q:58:LEU:CD2	2.66	0.43
1:P:187:LYS:O	1:P:190:VAL:HG13	2.19	0.43
1:Q:108:ASN:HD22	2:Y:70:ARG:CA	2.24	0.43
1:T:19:GLY:CA	1:U:30:ALA:HB2	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:32:LYS:O	1:B:167:SER:HA	2.18	0.43
1:B:109:ILE:CG2	1:B:147:ARG:HD3	2.48	0.43
1:C:111:ASN:CB	2:K:70:ARG:NH1	2.80	0.43
1:E:108:ASN:ND2	2:M:70:ARG:CB	2.72	0.43
1:F:130:ARG:NH1	1:F:131:PRO:O	2.52	0.43
1:F:177:GLU:O	1:G:58:LEU:CD1	2.67	0.43
2:H:19:ARG:HE	2:H:26:ILE:HG13	1.84	0.43
2:L:3:THR:OG1	2:L:127:THR:HG22	2.19	0.43
1:R:24:VAL:O	1:R:28:ARG:HG3	2.17	0.43
1:S:32:LYS:O	1:S:167:SER:HA	2.18	0.43
1:T:52:LYS:HB3	1:T:209:ALA:O	2.19	0.43
2:Y:6:ILE:HD11	2:Y:142:TYR:CD1	2.53	0.43
2:Z:105:ASP:OD1	2:Z:106:THR:N	2.52	0.43
2:Z:189:THR:HG23	2:Z:190:ASP:H	1.84	0.43
2:1:66:TYR:CZ	2:1:70:ARG:HD2	2.53	0.43
2:1:93:MET:N	2:1:94:PRO:CD	2.81	0.43
1:D:187:LYS:O	1:D:190:VAL:HG13	2.19	0.43
1:E:16:SER:HB3	1:E:22:PHE:CE2	2.53	0.43
1:G:16:SER:HB3	1:G:22:PHE:CE2	2.53	0.43
2:H:103:GLY:HA2	2:H:178:ILE:HD13	2.01	0.43
1:O:32:LYS:O	1:O:167:SER:HA	2.18	0.43
1:P:130:ARG:NH1	1:P:131:PRO:O	2.51	0.43
1:Q:12:ILE:HD12	1:Q:23:GLN:CB	0.59	0.43
1:Q:81:LEU:HD23	1:Q:133:GLY:HA3	2.00	0.43
1:S:187:LYS:O	1:S:190:VAL:HG13	2.19	0.43
2:V:83:LEU:HD12	2:V:83:LEU:HA	1.69	0.43
2:V:103:GLY:HA2	2:V:178:ILE:HD13	2.01	0.43
2:Z:55:LEU:HD12	2:Z:55:LEU:HA	1.67	0.43
1:A:16:SER:HB3	1:A:22:PHE:CE2	2.53	0.43
1:A:32:LYS:O	1:A:167:SER:HA	2.18	0.43
1:B:16:SER:HB3	1:B:22:PHE:CE2	2.53	0.43
1:D:103:TYR:O	2:L:81:THR:CB	2.66	0.43
1:E:52:LYS:HB3	1:E:209:ALA:O	2.19	0.43
1:G:12:ILE:N	1:G:23:GLN:HG2	2.31	0.43
2:H:131:SER:O	2:H:134:VAL:HG13	2.19	0.43
2:I:45:ILE:CD1	2:I:52:ALA:HB1	2.49	0.43
2:L:180:ARG:HA	2:L:180:ARG:HD2	1.72	0.43
2:L:187:LEU:HA	2:L:188:PRO:HD3	1.77	0.43
2:M:109:HIS:HB3	2:M:111:PHE:HE1	1.84	0.43
2:M:132:PRO:HA	2:1:133:PHE:HE1	1.81	0.43
2:N:160:SER:HA	2:N:163:LYS:HD3	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:15:PHE:HZ	1:U:130:ARG:NH1	2.07	0.43
2:Y:157:ARG:O	2:Y:160:SER:HB2	2.19	0.43
2:Z:15:ALA:HB3	2:Z:155:VAL:HG11	2.00	0.43
2:Z:178:ILE:HB	2:Z:184:TYR:HA	2.01	0.43
1:A:12:ILE:N	1:A:23:GLN:HG2	2.31	0.43
1:A:60:GLU:CG	1:G:161:LYS:HB2	2.48	0.43
1:B:49:ILE:HD11	1:B:210:PRO:CB	2.47	0.43
1:B:52:LYS:HB3	1:B:209:ALA:O	2.19	0.43
1:B:61:GLN:CD	1:B:62:ASN:H	2.22	0.43
1:C:12:ILE:CD1	1:C:23:GLN:CB	0.48	0.43
1:F:52:LYS:HB3	1:F:209:ALA:O	2.19	0.43
2:H:202:ILE:HG12	2:H:203:LEU:N	2.34	0.43
2:K:34:LEU:HD21	2:K:176:ALA:HB3	2.00	0.43
2:M:87:LEU:HD23	2:M:114:ASP:O	2.19	0.43
1:P:108:ASN:ND2	2:X:70:ARG:HA	2.34	0.43
1:Q:7:ALA:HB1	1:R:10:ARG:HH11	1.84	0.43
1:Q:52:LYS:HB3	1:Q:209:ALA:O	2.19	0.43
1:Q:130:ARG:NH1	1:Q:131:PRO:O	2.52	0.43
1:R:15:PHE:H	1:S:23:GLN:NE2	2.17	0.43
1:R:16:SER:HB3	1:R:22:PHE:CE2	2.53	0.43
1:R:103:TYR:O	2:Z:81:THR:CB	2.66	0.43
1:R:109:ILE:CG2	1:R:147:ARG:HD3	2.48	0.43
1:S:81:LEU:HD23	1:S:133:GLY:HA3	2.00	0.43
1:T:109:ILE:CG2	1:T:147:ARG:HD3	2.48	0.43
1:U:12:ILE:CD1	1:U:23:GLN:CB	0.48	0.43
2:V:3:THR:OG1	2:V:127:THR:HG22	2.19	0.43
2:V:18:ARG:HE	2:V:30:ASN:HD22	1.67	0.43
2:V:28:HIS:CD2	2:W:120:VAL:HG11	2.54	0.43
2:V:59:MET:HE3	2:V:82:LEU:HD23	2.01	0.43
2:W:59:MET:HE1	2:W:82:LEU:HD23	2.00	0.43
2:Y:180:ARG:HD2	2:Y:180:ARG:HA	1.78	0.43
2:2:7:THR:HB	2:2:123:ILE:O	2.18	0.43
1:A:81:LEU:HD23	1:A:133:GLY:HA3	2.00	0.43
1:A:107:VAL:HG13	2:I:66:TYR:OH	2.09	0.43
1:A:109:ILE:CG2	1:A:147:ARG:HD3	2.48	0.43
1:A:187:LYS:O	1:A:190:VAL:HG13	2.19	0.43
1:C:81:LEU:HD23	1:C:133:GLY:HA3	2.00	0.43
2:L:25:PHE:CD1	2:L:25:PHE:C	2.91	0.43
2:L:55:LEU:HD12	2:L:55:LEU:HA	1.68	0.43
1:O:187:LYS:O	1:O:190:VAL:HG13	2.18	0.43
1:P:61:GLN:CD	1:P:62:ASN:H	2.22	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:125:GLN:O	1:Q:129:VAL:HG23	2.18	0.43
1:S:16:SER:HB3	1:S:22:PHE:CE2	2.53	0.43
1:T:61:GLN:CD	1:T:62:ASN:H	2.23	0.43
1:T:187:LYS:O	1:T:190:VAL:HG13	2.19	0.43
1:U:61:GLN:CD	1:U:62:ASN:H	2.22	0.43
2:Z:15:ALA:HB3	2:Z:155:VAL:CG1	2.49	0.43
1:B:187:LYS:O	1:B:190:VAL:HG13	2.19	0.42
1:C:32:LYS:O	1:C:167:SER:HA	2.18	0.42
1:D:15:PHE:CZ	1:E:133:GLY:N	2.87	0.42
1:G:107:VAL:HG13	2:H:66:TYR:OH	2.08	0.42
1:S:12:ILE:N	1:S:23:GLN:HG2	2.31	0.42
2:W:180:ARG:HD2	2:W:180:ARG:HA	1.81	0.42
1:C:54:VAL:HG22	1:C:55:ARG:N	2.35	0.42
1:D:61:GLN:CD	1:D:62:ASN:H	2.23	0.42
1:D:104:GLY:N	2:L:81:THR:HG21	2.28	0.42
1:E:61:GLN:CD	1:E:62:ASN:H	2.23	0.42
1:F:103:TYR:CE1	2:N:82:LEU:HD22	2.46	0.42
1:F:155:GLY:O	1:G:86:ARG:CZ	2.58	0.42
1:G:81:LEU:HD23	1:G:133:GLY:HA3	2.00	0.42
1:G:109:ILE:CG2	1:G:147:ARG:HD3	2.48	0.42
2:H:28:HIS:CD2	2:I:120:VAL:HG11	2.54	0.42
2:K:6:ILE:HD11	2:K:142:TYR:CD1	2.53	0.42
1:O:81:LEU:HD23	1:O:133:GLY:HA3	2.00	0.42
1:O:173:VAL:O	1:P:58:LEU:CD2	2.67	0.42
1:P:52:LYS:HB3	1:P:209:ALA:O	2.19	0.42
1:R:12:ILE:HD13	1:R:23:GLN:CB	1.02	0.42
1:R:12:ILE:N	1:R:23:GLN:HG2	2.31	0.42
1:R:81:LEU:HD23	1:R:133:GLY:HA3	2.00	0.42
1:T:81:LEU:HD23	1:T:133:GLY:HA3	2.00	0.42
1:U:32:LYS:O	1:U:167:SER:HA	2.18	0.42
1:U:54:VAL:HG22	1:U:55:ARG:N	2.35	0.42
1:U:81:LEU:HD23	1:U:133:GLY:HA3	2.00	0.42
2:1:74:MET:HA	2:1:75:PRO:HD3	1.87	0.42
1:B:54:VAL:HG22	1:B:55:ARG:N	2.35	0.42
1:B:108:ASN:CG	2:J:70:ARG:CG	2.72	0.42
1:C:187:LYS:O	1:C:190:VAL:HG13	2.19	0.42
1:D:52:LYS:HB3	1:D:209:ALA:O	2.19	0.42
1:E:81:LEU:HD23	1:E:133:GLY:HA3	2.00	0.42
1:G:32:LYS:O	1:G:167:SER:HA	2.18	0.42
2:H:55:LEU:HA	2:H:55:LEU:HD12	1.50	0.42
2:L:15:ALA:HB3	2:L:155:VAL:HG11	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:29:LYS:HZ1	2:1:164:GLN:HE21	1.67	0.42
2:M:114:ASP:OD1	2:M:116:ALA:HB3	2.20	0.42
2:N:111:PHE:CE2	2:N:121:GLU:HB2	2.53	0.42
1:O:16:SER:HB3	1:O:22:PHE:CE2	2.53	0.42
1:O:60:GLU:CG	1:U:161:LYS:HB2	2.48	0.42
1:Q:61:GLN:CD	1:Q:62:ASN:H	2.22	0.42
1:T:12:ILE:N	1:T:23:GLN:HG2	2.31	0.42
1:U:187:LYS:O	1:U:190:VAL:HG13	2.18	0.42
1:A:111:ASN:CG	2:I:70:ARG:NH1	2.73	0.42
1:C:61:GLN:CD	1:C:62:ASN:H	2.22	0.42
1:E:102:THR:O	2:M:81:THR:HG22	2.19	0.42
1:F:81:LEU:HD23	1:F:133:GLY:HA3	2.00	0.42
1:G:61:GLN:CD	1:G:62:ASN:H	2.22	0.42
2:I:123:ILE:H	2:I:123:ILE:CD1	2.31	0.42
2:K:157:ARG:O	2:K:160:SER:HB2	2.19	0.42
2:L:15:ALA:HB3	2:L:155:VAL:CG1	2.49	0.42
2:M:184:TYR:CD1	2:M:184:TYR:C	2.93	0.42
2:N:22:MET:O	2:N:23:GLU:HB2	2.20	0.42
1:O:61:GLN:CD	1:O:62:ASN:H	2.22	0.42
1:P:177:GLU:C	1:Q:58:LEU:HD11	2.24	0.42
1:Q:54:VAL:HG22	1:Q:55:ARG:N	2.35	0.42
1:R:32:LYS:O	1:R:167:SER:HA	2.18	0.42
1:R:61:GLN:CD	1:R:62:ASN:H	2.23	0.42
1:S:52:LYS:HB3	1:S:209:ALA:O	2.19	0.42
1:S:109:ILE:CG2	1:S:147:ARG:HD3	2.48	0.42
1:T:12:ILE:HD13	1:T:23:GLN:CA	1.93	0.42
1:T:54:VAL:HG22	1:T:55:ARG:N	2.35	0.42
2:V:131:SER:O	2:V:134:VAL:HG13	2.19	0.42
2:V:202:ILE:HG12	2:V:203:LEU:N	2.34	0.42
2:Z:93:MET:N	2:Z:94:PRO:CD	2.81	0.42
1:C:58:LEU:CD1	1:C:58:LEU:N	2.82	0.42
1:C:101:VAL:CG2	2:J:58:TYR:HE1	1.92	0.42
1:D:12:ILE:CD1	1:D:23:GLN:CB	0.48	0.42
1:G:107:VAL:HG11	2:H:66:TYR:CE2	2.55	0.42
2:H:25:PHE:C	2:H:25:PHE:CD1	2.90	0.42
2:H:83:LEU:HD12	2:H:83:LEU:HA	1.69	0.42
2:H:179:THR:O	2:H:183:GLY:N	2.50	0.42
2:J:34:LEU:HD21	2:J:176:ALA:CB	2.50	0.42
2:W:93:MET:N	2:W:94:PRO:CD	2.82	0.42
2:Z:25:PHE:CD1	2:Z:25:PHE:C	2.91	0.42
2:1:109:HIS:HB3	2:1:111:PHE:HE1	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1:138:LEU:HD12	2:1:138:LEU:HA	1.86	0.42
1:A:52:LYS:HB3	1:A:209:ALA:O	2.19	0.42
1:B:56:SER:OG	1:B:58:LEU:HB2	2.20	0.42
1:B:123:TYR:N	1:B:123:TYR:CD1	2.88	0.42
1:G:52:LYS:HB3	1:G:209:ALA:O	2.19	0.42
2:H:3:THR:OG1	2:H:127:THR:HG22	2.19	0.42
2:H:165:ARG:C	2:X:26:ILE:HG22	2.39	0.42
2:J:55:LEU:HD12	2:J:55:LEU:HA	1.85	0.42
2:J:199:LEU:CB	2:J:201:LEU:HD13	2.50	0.42
2:L:105:ASP:OD1	2:L:106:THR:N	2.52	0.42
1:R:54:VAL:HG22	1:R:55:ARG:N	2.34	0.42
1:R:159:GLU:O	1:S:60:GLU:HB2	2.19	0.42
1:T:155:GLY:O	1:U:86:ARG:CZ	2.58	0.42
1:U:107:VAL:HG21	2:V:66:TYR:HH	1.78	0.42
2:X:109:HIS:HB3	2:X:111:PHE:CE1	2.54	0.42
2:Z:3:THR:OG1	2:Z:127:THR:HG22	2.19	0.42
2:2:187:LEU:HA	2:2:188:PRO:HD3	1.81	0.42
1:C:7:ALA:HB1	1:D:10:ARG:HH11	1.84	0.42
1:C:52:LYS:HB3	1:C:209:ALA:O	2.19	0.42
1:F:12:ILE:N	1:F:23:GLN:HG2	2.31	0.42
1:G:54:VAL:HG22	1:G:55:ARG:N	2.34	0.42
2:J:187:LEU:HA	2:J:188:PRO:HD3	1.79	0.42
1:O:52:LYS:HB3	1:O:209:ALA:O	2.19	0.42
1:O:111:ASN:CG	2:W:70:ARG:NH1	2.73	0.42
1:P:81:LEU:HD23	1:P:133:GLY:HA3	2.00	0.42
1:R:52:LYS:HB3	1:R:209:ALA:O	2.19	0.42
1:T:56:SER:OG	1:T:58:LEU:HB2	2.20	0.42
1:U:58:LEU:CD1	1:U:58:LEU:N	2.83	0.42
2:W:191:GLN:O	2:W:194:SER:HB3	2.20	0.42
2:X:187:LEU:HA	2:X:188:PRO:HD3	1.79	0.42
2:Z:143:SER:O	2:Z:146:MET:HG3	2.20	0.42
2:Z:190:ASP:HA	2:Z:193:GLU:HG2	2.02	0.42
1:A:72:ASP:OD1	2:H:67:ARG:NH2	2.53	0.42
1:B:81:LEU:HD23	1:B:133:GLY:HA3	2.00	0.42
1:C:123:TYR:CD1	1:C:123:TYR:N	2.88	0.42
1:E:54:VAL:HG22	1:E:55:ARG:N	2.35	0.42
1:F:54:VAL:HG22	1:F:55:ARG:N	2.35	0.42
1:F:56:SER:OG	1:F:58:LEU:HB2	2.20	0.42
1:F:61:GLN:CD	1:F:62:ASN:H	2.23	0.42
2:L:2:THR:HG23	2:L:17:GLU:HG3	2.02	0.42
1:O:108:ASN:CB	2:W:70:ARG:CD	2.93	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:72:ASP:OD2	2:W:67:ARG:NH2	2.52	0.42
1:P:103:TYR:O	2:X:81:THR:HB	2.19	0.42
1:T:103:TYR:CE1	2:2:82:LEU:HD22	2.46	0.42
1:T:123:TYR:N	1:T:123:TYR:CD1	2.88	0.42
1:U:52:LYS:HB3	1:U:209:ALA:O	2.19	0.42
1:A:108:ASN:HD22	2:I:70:ARG:CG	2.33	0.42
1:A:173:VAL:O	1:B:58:LEU:CD2	2.67	0.42
1:D:56:SER:OG	1:D:58:LEU:HB2	2.20	0.42
1:G:56:SER:OG	1:G:58:LEU:HB2	2.20	0.42
2:I:180:ARG:HD2	2:I:180:ARG:HA	1.81	0.42
2:I:191:GLN:O	2:I:194:SER:HB3	2.20	0.42
1:O:123:TYR:N	1:O:123:TYR:CD1	2.88	0.42
1:O:155:GLY:O	1:P:86:ARG:CZ	2.66	0.42
1:R:56:SER:OG	1:R:58:LEU:HB2	2.20	0.42
1:R:101:VAL:HG22	2:Y:58:TYR:HE1	1.76	0.42
2:2:22:MET:O	2:2:23:GLU:HB2	2.20	0.42
1:A:58:LEU:N	1:A:58:LEU:CD1	2.82	0.42
1:E:58:LEU:N	1:E:58:LEU:CD1	2.82	0.42
1:E:123:TYR:CD1	1:E:123:TYR:N	2.88	0.42
2:J:74:MET:HA	2:J:75:PRO:HD3	1.88	0.42
1:O:58:LEU:N	1:O:58:LEU:CD1	2.82	0.42
1:S:102:THR:O	2:1:81:THR:HG22	2.19	0.42
1:U:123:TYR:N	1:U:123:TYR:CD1	2.88	0.42
2:Z:163:LYS:CE	2:Z:203:LEU:HD23	2.50	0.42
1:A:14:VAL:H	1:B:130:ARG:HB2	1.85	0.41
1:B:58:LEU:CD1	1:B:58:LEU:N	2.83	0.41
1:D:15:PHE:HE2	1:E:131:PRO:O	2.03	0.41
2:M:17:GLU:O	2:M:33:LYS:HD2	2.20	0.41
1:O:54:VAL:HG22	1:O:55:ARG:N	2.34	0.41
1:T:58:LEU:N	1:T:58:LEU:CD1	2.82	0.41
1:T:198:LYS:CG	1:T:202:GLU:HG2	2.50	0.41
2:W:45:ILE:CD1	2:W:52:ALA:HB1	2.49	0.41
2:X:34:LEU:HD21	2:X:176:ALA:CB	2.50	0.41
2:X:123:ILE:HG12	2:X:124:TYR:CD1	2.51	0.41
2:Z:180:ARG:HA	2:Z:180:ARG:HD2	1.71	0.41
1:B:198:LYS:CG	1:B:202:GLU:HG2	2.50	0.41
1:D:54:VAL:HG22	1:D:55:ARG:N	2.34	0.41
1:D:107:VAL:CG2	2:L:66:TYR:OH	2.68	0.41
1:G:58:LEU:CD1	1:G:58:LEU:N	2.82	0.41
2:I:147:THR:OG1	2:I:150:GLU:HG3	2.21	0.41
2:M:111:PHE:CE2	2:M:121:GLU:HB2	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:72:ASP:OD1	2:V:67:ARG:NH2	2.53	0.41
1:O:102:THR:O	2:W:81:THR:HG22	2.20	0.41
1:O:108:ASN:HD22	2:W:70:ARG:CG	2.33	0.41
1:P:54:VAL:HG22	1:P:55:ARG:N	2.35	0.41
1:S:160:TYR:C	1:T:60:GLU:HG2	2.39	0.41
2:1:87:LEU:HD23	2:1:114:ASP:O	2.19	0.41
1:A:57:ARG:CZ	1:G:178:ARG:O	2.63	0.41
1:A:126:TYR:HA	1:B:129:VAL:HG23	2.03	0.41
1:B:12:ILE:HD13	1:B:23:GLN:CA	1.92	0.41
1:D:159:GLU:O	1:E:60:GLU:HB2	2.19	0.41
1:E:56:SER:OG	1:E:58:LEU:HB2	2.20	0.41
1:E:160:TYR:C	1:F:60:GLU:HG2	2.39	0.41
1:F:21:LEU:HD21	1:G:130:ARG:CZ	2.50	0.41
1:G:107:VAL:CG1	2:H:66:TYR:CZ	2.94	0.41
1:G:198:LYS:O	1:G:199:SER:C	2.59	0.41
2:J:190:ASP:HA	2:J:193:GLU:HG2	2.02	0.41
2:M:163:LYS:CE	2:M:203:LEU:HD23	2.50	0.41
1:P:123:TYR:CD1	1:P:123:TYR:N	2.88	0.41
1:U:44:ASN:HD22	1:U:44:ASN:HA	1.56	0.41
1:U:56:SER:OG	1:U:58:LEU:HB2	2.20	0.41
2:W:123:ILE:H	2:W:123:ILE:CD1	2.31	0.41
1:E:15:PHE:CZ	1:F:133:GLY:N	2.88	0.41
2:I:19:ARG:NE	2:I:26:ILE:HG13	2.36	0.41
2:I:93:MET:N	2:I:94:PRO:CD	2.82	0.41
2:I:175:VAL:HG22	2:I:176:ALA:N	2.35	0.41
2:J:26:ILE:HG22	2:V:165:ARG:C	2.40	0.41
2:L:143:SER:O	2:L:146:MET:HG3	2.20	0.41
2:L:163:LYS:CE	2:L:203:LEU:HD23	2.50	0.41
2:M:3:THR:HB	2:M:16:THR:HG22	2.03	0.41
1:R:15:PHE:CZ	1:S:133:GLY:N	2.87	0.41
1:R:107:VAL:CG2	2:Z:66:TYR:OH	2.68	0.41
1:S:61:GLN:CD	1:S:62:ASN:H	2.23	0.41
1:T:21:LEU:HD21	1:U:130:ARG:CZ	2.50	0.41
2:V:180:ARG:HA	2:V:180:ARG:HD2	1.79	0.41
2:Y:59:MET:CE	2:Y:79:VAL:HG23	2.49	0.41
2:1:114:ASP:OD1	2:1:116:ALA:HB3	2.20	0.41
1:A:61:GLN:CD	1:A:62:ASN:H	2.22	0.41
1:A:102:THR:O	2:I:81:THR:HG22	2.20	0.41
1:A:198:LYS:O	1:A:199:SER:C	2.59	0.41
1:C:56:SER:OG	1:C:58:LEU:HB2	2.20	0.41
1:D:123:TYR:N	1:D:123:TYR:CD1	2.88	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:12:ILE:N	1:E:23:GLN:HG2	2.31	0.41
2:K:26:ILE:CG2	2:2:165:ARG:HA	2.50	0.41
2:M:187:LEU:HA	2:M:188:PRO:HD3	1.82	0.41
2:N:59:MET:SD	2:N:83:LEU:HD13	2.60	0.41
2:N:158:ALA:O	2:N:161:ALA:HB3	2.21	0.41
1:Q:56:SER:OG	1:Q:58:LEU:HB2	2.20	0.41
1:R:12:ILE:CD1	1:R:23:GLN:CB	0.48	0.41
1:S:54:VAL:HG22	1:S:55:ARG:N	2.35	0.41
1:S:58:LEU:N	1:S:58:LEU:CD1	2.82	0.41
2:1:137:VAL:HG21	2:1:158:ALA:HA	2.01	0.41
2:1:163:LYS:CE	2:1:203:LEU:HD23	2.50	0.41
2:1:184:TYR:CD1	2:1:184:TYR:C	2.93	0.41
1:A:54:VAL:HG22	1:A:55:ARG:N	2.35	0.41
1:A:198:LYS:CG	1:A:202:GLU:HG2	2.50	0.41
1:D:198:LYS:O	1:D:199:SER:C	2.59	0.41
1:G:123:TYR:N	1:G:123:TYR:CD1	2.88	0.41
2:L:66:TYR:CZ	2:L:70:ARG:HD2	2.56	0.41
1:O:56:SER:OG	1:O:58:LEU:HB2	2.20	0.41
1:Q:12:ILE:N	1:Q:23:GLN:HG2	2.31	0.41
1:Q:58:LEU:CD1	1:Q:58:LEU:N	2.82	0.41
1:R:101:VAL:HG21	2:Y:58:TYR:CE1	2.41	0.41
1:S:15:PHE:CZ	1:T:133:GLY:N	2.88	0.41
1:U:107:VAL:HG11	2:V:66:TYR:CE2	2.55	0.41
2:V:187:LEU:HA	2:V:188:PRO:HD3	1.77	0.41
2:W:175:VAL:HG22	2:W:176:ALA:N	2.35	0.41
2:1:17:GLU:O	2:1:33:LYS:HD2	2.20	0.41
2:1:111:PHE:CE2	2:1:121:GLU:HB2	2.55	0.41
1:B:103:TYR:O	2:J:81:THR:HB	2.19	0.41
1:G:78:THR:CG2	1:G:85:ALA:HB1	2.45	0.41
2:H:18:ARG:HE	2:H:30:ASN:HD22	1.67	0.41
2:K:22:MET:O	2:K:23:GLU:HB2	2.21	0.41
2:K:49:VAL:HG23	2:K:50:GLY:H	1.86	0.41
2:L:20:VAL:CG1	2:L:28:HIS:HB2	2.44	0.41
2:L:43:MET:HE1	2:L:56:VAL:HA	2.02	0.41
2:L:97:VAL:HG22	2:L:98:GLN:N	2.36	0.41
2:M:165:ARG:NH2	2:1:135:TYR:HE1	2.18	0.41
1:P:56:SER:OG	1:P:58:LEU:HB2	2.20	0.41
1:P:58:LEU:CD1	1:P:58:LEU:N	2.83	0.41
1:Q:198:LYS:O	1:Q:199:SER:C	2.59	0.41
1:R:198:LYS:O	1:R:199:SER:C	2.59	0.41
1:S:198:LYS:O	1:S:199:SER:C	2.59	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1:3:THR:HB	2:1:16:THR:HG22	2.03	0.41
2:2:177:VAL:HG13	2:2:185:VAL:HG13	2.03	0.41
1:A:56:SER:OG	1:A:58:LEU:HB2	2.20	0.41
1:A:165:ILE:HD12	1:A:169:LYS:HD2	2.03	0.41
1:D:160:TYR:C	1:E:60:GLU:HG2	2.41	0.41
1:F:125:GLN:C	1:G:129:VAL:HG23	2.38	0.41
1:F:198:LYS:O	1:F:199:SER:C	2.59	0.41
2:I:56:VAL:CG1	2:I:57:ARG:N	2.84	0.41
2:J:203:LEU:HD12	2:J:203:LEU:HA	1.86	0.41
2:N:133:PHE:HE1	2:Z:132:PRO:HA	1.83	0.41
2:N:187:LEU:HA	2:N:188:PRO:HD3	1.81	0.41
1:R:58:LEU:CD1	1:R:58:LEU:N	2.82	0.41
1:S:198:LYS:CG	1:S:202:GLU:HG2	2.50	0.41
2:W:56:VAL:CG1	2:W:57:ARG:N	2.84	0.41
2:Z:20:VAL:CG1	2:Z:28:HIS:HB2	2.44	0.41
2:Z:97:VAL:HG22	2:Z:98:GLN:N	2.36	0.41
2:J:141:GLN:HE21	2:W:141:GLN:HE21	1.69	0.41
2:J:190:ASP:O	2:J:193:GLU:HG2	2.21	0.41
2:L:138:LEU:HD12	2:L:138:LEU:HA	1.90	0.41
2:M:135:TYR:HE1	2:1:165:ARG:NH2	2.19	0.41
2:M:137:VAL:HG21	2:M:158:ALA:HA	2.01	0.41
2:N:74:MET:HA	2:N:75:PRO:HD3	1.95	0.41
1:O:126:TYR:HA	1:P:129:VAL:HG23	2.03	0.41
1:R:123:TYR:CD1	1:R:123:TYR:N	2.88	0.41
1:S:56:SER:OG	1:S:58:LEU:HB2	2.20	0.41
1:S:165:ILE:HD12	1:S:169:LYS:HD2	2.03	0.41
1:T:12:ILE:CD1	1:T:23:GLN:HB3	0.55	0.41
1:T:165:ILE:HD12	1:T:169:LYS:HD2	2.03	0.41
1:U:108:ASN:ND2	2:V:70:ARG:C	2.75	0.41
1:U:198:LYS:O	1:U:199:SER:C	2.59	0.41
2:W:19:ARG:NE	2:W:26:ILE:HG13	2.36	0.41
2:Y:19:ARG:NH1	2:Y:169:SER:O	2.54	0.41
2:Z:66:TYR:CZ	2:Z:70:ARG:HD2	2.56	0.41
2:2:72:VAL:HG22	2:2:73:ASN:N	2.36	0.41
1:A:12:ILE:CD1	1:A:23:GLN:CB	0.48	0.41
1:B:165:ILE:HD12	1:B:169:LYS:HD2	2.03	0.41
1:C:198:LYS:O	1:C:199:SER:C	2.59	0.41
1:D:198:LYS:CG	1:D:202:GLU:HG2	2.50	0.41
1:F:58:LEU:N	1:F:58:LEU:CD1	2.82	0.41
2:H:81:THR:O	2:H:84:SER:HB3	2.21	0.41
2:J:26:ILE:HG23	2:V:165:ARG:HA	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:109:HIS:HB3	2:J:111:PHE:CE1	2.55	0.41
2:K:59:MET:CE	2:K:79:VAL:HG23	2.49	0.41
2:M:165:ARG:CZ	2:1:135:TYR:CD1	3.04	0.41
1:O:14:VAL:H	1:P:130:ARG:HB2	1.85	0.41
1:P:198:LYS:CG	1:P:202:GLU:HG2	2.50	0.41
1:R:19:GLY:O	1:S:30:ALA:CB	2.69	0.41
1:R:71:ASP:HA	2:Y:68:LEU:HD21	2.03	0.41
1:T:177:GLU:O	1:U:58:LEU:CD1	2.67	0.41
1:U:101:VAL:HG23	2:2:58:TYR:CD1	2.39	0.41
2:V:59:MET:CE	2:V:82:LEU:HD23	2.51	0.41
2:Y:34:LEU:HD21	2:Y:176:ALA:CB	2.51	0.41
1:A:86:ARG:CZ	1:G:157:ILE:HG22	2.51	0.40
1:B:198:LYS:O	1:B:199:SER:C	2.59	0.40
1:F:123:TYR:CD1	1:F:123:TYR:N	2.88	0.40
1:F:177:GLU:CA	1:G:58:LEU:CG	2.53	0.40
2:H:59:MET:CE	2:H:82:LEU:HD23	2.51	0.40
2:I:178:ILE:HB	2:I:184:TYR:HA	2.03	0.40
2:J:103:GLY:HA2	2:J:178:ILE:HD11	2.02	0.40
2:K:34:LEU:HD21	2:K:176:ALA:CB	2.51	0.40
2:L:146:MET:HE3	2:L:150:GLU:HB3	2.03	0.40
2:M:76:ILE:HA	2:M:79:VAL:HG12	2.04	0.40
1:P:177:GLU:CD	1:Q:57:ARG:N	2.66	0.40
1:R:78:THR:CG2	1:R:85:ALA:HB1	2.45	0.40
1:R:165:ILE:HD12	1:R:169:LYS:HD2	2.03	0.40
1:T:198:LYS:O	1:T:199:SER:C	2.59	0.40
2:W:178:ILE:HB	2:W:184:TYR:HA	2.03	0.40
2:X:93:MET:N	2:X:94:PRO:CD	2.85	0.40
2:Y:22:MET:O	2:Y:23:GLU:HB2	2.21	0.40
2:Z:2:THR:HG23	2:Z:17:GLU:HG3	2.02	0.40
2:Z:87:LEU:HD23	2:Z:114:ASP:O	2.20	0.40
1:B:72:ASP:OD2	2:I:67:ARG:NH2	2.52	0.40
1:E:198:LYS:O	1:E:199:SER:C	2.59	0.40
1:E:198:LYS:CG	1:E:202:GLU:HG2	2.50	0.40
1:F:124:THR:HG22	1:G:130:ARG:NH2	2.17	0.40
1:G:165:ILE:HD12	1:G:169:LYS:HD2	2.03	0.40
2:H:66:TYR:CD1	2:H:66:TYR:C	2.94	0.40
2:L:190:ASP:HA	2:L:193:GLU:HG2	2.02	0.40
2:M:135:TYR:CD1	2:1:165:ARG:CZ	3.04	0.40
1:P:12:ILE:CD1	1:P:23:GLN:CB	0.48	0.40
1:R:15:PHE:HE2	1:S:131:PRO:O	2.03	0.40
1:S:161:LYS:CG	1:T:60:GLU:OE2	2.60	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:W:26:ILE:HD13	2:W:26:ILE:O	2.22	0.40
2:2:59:MET:SD	2:2:83:LEU:HD13	2.60	0.40
1:B:102:THR:O	2:J:81:THR:HG22	2.22	0.40
1:C:44:ASN:HD22	1:C:44:ASN:HA	1.56	0.40
1:G:111:ASN:CB	2:H:70:ARG:NH1	2.84	0.40
2:I:59:MET:SD	2:I:83:LEU:HD13	2.61	0.40
2:N:190:ASP:HA	2:N:193:GLU:HG2	2.04	0.40
1:O:198:LYS:O	1:O:199:SER:C	2.59	0.40
1:S:123:TYR:CD1	1:S:123:TYR:N	2.88	0.40
1:T:12:ILE:HD13	1:T:23:GLN:HB3	0.88	0.40
1:U:12:ILE:CD1	1:U:23:GLN:HB3	0.55	0.40
2:V:81:THR:O	2:V:84:SER:HB3	2.21	0.40
2:W:59:MET:SD	2:W:83:LEU:HD13	2.61	0.40
2:W:147:THR:OG1	2:W:150:GLU:HG3	2.21	0.40
2:X:190:ASP:HA	2:X:193:GLU:HG2	2.02	0.40
1:D:15:PHE:H	1:E:23:GLN:NE2	2.17	0.40
1:E:12:ILE:CD1	1:E:23:GLN:CB	0.48	0.40
1:G:130:ARG:HA	1:G:131:PRO:HD3	1.96	0.40
2:L:87:LEU:HD23	2:L:114:ASP:O	2.20	0.40
1:O:198:LYS:CG	1:O:202:GLU:HG2	2.50	0.40
1:P:198:LYS:O	1:P:199:SER:C	2.59	0.40
2:V:66:TYR:CD1	2:V:66:TYR:C	2.94	0.40
2:V:202:ILE:CG1	2:V:203:LEU:N	2.85	0.40
1:B:177:GLU:C	1:C:58:LEU:HD11	2.24	0.40
1:E:161:LYS:CG	1:F:60:GLU:OE2	2.60	0.40
2:I:26:ILE:HD13	2:I:26:ILE:O	2.22	0.40
2:J:141:GLN:HE21	2:W:141:GLN:NE2	2.19	0.40
1:O:16:SER:O	1:P:26:TYR:HB3	2.21	0.40
1:O:86:ARG:CZ	1:U:157:ILE:HG22	2.51	0.40
1:T:15:PHE:CB	1:U:23:GLN:HE22	2.18	0.40
1:T:157:ILE:HG22	1:U:86:ARG:NH1	2.37	0.40
2:W:74:MET:HA	2:W:75:PRO:HD3	1.94	0.40
2:Z:43:MET:HE1	2:Z:56:VAL:HA	2.02	0.40
2:2:76:ILE:O	2:2:79:VAL:CG1	2.69	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	225/233 (97%)	189 (84%)	26 (12%)	10 (4%)	2	22
1	B	225/233 (97%)	189 (84%)	26 (12%)	10 (4%)	2	22
1	C	225/233 (97%)	188 (84%)	27 (12%)	10 (4%)	2	22
1	D	225/233 (97%)	189 (84%)	26 (12%)	10 (4%)	2	22
1	E	225/233 (97%)	189 (84%)	26 (12%)	10 (4%)	2	22
1	F	225/233 (97%)	188 (84%)	27 (12%)	10 (4%)	2	22
1	G	225/233 (97%)	189 (84%)	26 (12%)	10 (4%)	2	22
1	O	225/233 (97%)	189 (84%)	26 (12%)	10 (4%)	2	22
1	P	225/233 (97%)	189 (84%)	26 (12%)	10 (4%)	2	22
1	Q	225/233 (97%)	188 (84%)	27 (12%)	10 (4%)	2	22
1	R	225/233 (97%)	189 (84%)	26 (12%)	10 (4%)	2	22
1	S	225/233 (97%)	189 (84%)	26 (12%)	10 (4%)	2	22
1	T	225/233 (97%)	188 (84%)	27 (12%)	10 (4%)	2	22
1	U	225/233 (97%)	189 (84%)	26 (12%)	10 (4%)	2	22
2	1	201/203 (99%)	176 (88%)	23 (11%)	2 (1%)	15	54
2	2	201/203 (99%)	184 (92%)	15 (8%)	2 (1%)	15	54
2	H	201/203 (99%)	184 (92%)	15 (8%)	2 (1%)	15	54
2	I	201/203 (99%)	183 (91%)	16 (8%)	2 (1%)	15	54
2	J	201/203 (99%)	180 (90%)	20 (10%)	1 (0%)	29	69
2	K	201/203 (99%)	184 (92%)	15 (8%)	2 (1%)	15	54
2	L	201/203 (99%)	181 (90%)	16 (8%)	4 (2%)	7	38
2	M	201/203 (99%)	176 (88%)	23 (11%)	2 (1%)	15	54
2	N	201/203 (99%)	184 (92%)	15 (8%)	2 (1%)	15	54
2	V	201/203 (99%)	185 (92%)	14 (7%)	2 (1%)	15	54
2	W	201/203 (99%)	183 (91%)	16 (8%)	2 (1%)	15	54

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
2	X	201/203 (99%)	180 (90%)	20 (10%)	1 (0%)	29 69
2	Y	201/203 (99%)	184 (92%)	15 (8%)	2 (1%)	15 54
2	Z	201/203 (99%)	181 (90%)	16 (8%)	4 (2%)	7 38
All	All	5964/6104 (98%)	5187 (87%)	607 (10%)	170 (3%)	7 29

All (170) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	14	VAL
1	A	128	GLY
1	A	182	GLU
1	A	200	SER
1	B	14	VAL
1	B	128	GLY
1	B	182	GLU
1	B	200	SER
1	C	14	VAL
1	C	128	GLY
1	C	182	GLU
1	C	200	SER
1	D	14	VAL
1	D	128	GLY
1	D	182	GLU
1	D	200	SER
1	E	14	VAL
1	E	128	GLY
1	E	182	GLU
1	E	200	SER
1	F	14	VAL
1	F	128	GLY
1	F	182	GLU
1	F	200	SER
1	G	14	VAL
1	G	128	GLY
1	G	182	GLU
1	G	200	SER
2	I	9	LYS
2	L	9	LYS
2	M	9	LYS
1	O	14	VAL
1	O	128	GLY

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Mol	Chain	Res	Type
1	O	182	GLU
1	O	200	SER
1	P	14	VAL
1	P	128	GLY
1	P	182	GLU
1	P	200	SER
1	Q	14	VAL
1	Q	128	GLY
1	Q	182	GLU
1	Q	200	SER
1	R	14	VAL
1	R	128	GLY
1	R	182	GLU
1	R	200	SER
1	S	14	VAL
1	S	128	GLY
1	S	182	GLU
1	S	200	SER
1	T	14	VAL
1	T	128	GLY
1	T	182	GLU
1	T	200	SER
1	U	14	VAL
1	U	128	GLY
1	U	182	GLU
1	U	200	SER
2	W	9	LYS
2	Z	9	LYS
2	1	9	LYS
1	A	43	ALA
1	A	72	ASP
1	A	205	GLU
1	B	43	ALA
1	B	72	ASP
1	B	205	GLU
1	C	43	ALA
1	C	72	ASP
1	C	205	GLU
1	D	43	ALA
1	D	72	ASP
1	D	205	GLU
1	E	43	ALA

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Mol	Chain	Res	Type
1	E	72	ASP
1	E	205	GLU
1	F	43	ALA
1	F	72	ASP
1	F	205	GLU
1	G	43	ALA
1	G	72	ASP
1	G	205	GLU
2	H	9	LYS
2	J	9	LYS
2	K	9	LYS
2	N	9	LYS
1	O	43	ALA
1	O	72	ASP
1	O	205	GLU
1	P	43	ALA
1	P	72	ASP
1	P	205	GLU
1	Q	43	ALA
1	Q	72	ASP
1	Q	205	GLU
1	R	43	ALA
1	R	72	ASP
1	R	205	GLU
1	S	43	ALA
1	S	72	ASP
1	S	205	GLU
1	T	43	ALA
1	T	72	ASP
1	T	205	GLU
1	U	43	ALA
1	U	72	ASP
1	U	205	GLU
2	V	9	LYS
2	X	9	LYS
2	Y	9	LYS
2	2	9	LYS
2	H	23	GLU
2	K	23	GLU
2	V	23	GLU
2	Y	23	GLU
2	M	23	GLU

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Mol	Chain	Res	Type
2	1	23	GLU
1	A	198	LYS
1	A	202	GLU
1	B	198	LYS
1	B	202	GLU
1	C	198	LYS
1	C	202	GLU
1	D	198	LYS
1	D	202	GLU
1	E	198	LYS
1	E	202	GLU
1	F	198	LYS
1	F	202	GLU
1	G	198	LYS
1	G	202	GLU
2	L	23	GLU
2	N	23	GLU
1	O	198	LYS
1	O	202	GLU
1	P	198	LYS
1	P	202	GLU
1	Q	198	LYS
1	Q	202	GLU
1	R	198	LYS
1	R	202	GLU
1	S	198	LYS
1	S	202	GLU
1	T	198	LYS
1	T	202	GLU
1	U	198	LYS
1	U	202	GLU
2	Z	23	GLU
2	2	23	GLU
2	I	23	GLU
2	L	49	VAL
2	W	23	GLU
2	Z	49	VAL
2	L	110	VAL
2	Z	110	VAL
1	A	129	VAL
1	B	129	VAL
1	C	129	VAL

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Mol	Chain	Res	Type
1	D	129	VAL
1	E	129	VAL
1	F	129	VAL
1	G	129	VAL
1	O	129	VAL
1	P	129	VAL
1	Q	129	VAL
1	R	129	VAL
1	S	129	VAL
1	T	129	VAL
1	U	129	VAL

5.3.2 Protein sidechains (i)

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	A	188/193 (97%)	166 (88%)	22 (12%)	5 20
1	B	188/193 (97%)	166 (88%)	22 (12%)	5 20
1	C	188/193 (97%)	166 (88%)	22 (12%)	5 20
1	D	188/193 (97%)	166 (88%)	22 (12%)	5 20
1	E	188/193 (97%)	166 (88%)	22 (12%)	5 20
1	F	188/193 (97%)	166 (88%)	22 (12%)	5 20
1	G	188/193 (97%)	166 (88%)	22 (12%)	5 20
1	O	188/193 (97%)	166 (88%)	22 (12%)	5 20
1	P	188/193 (97%)	166 (88%)	22 (12%)	5 20
1	Q	188/193 (97%)	166 (88%)	22 (12%)	5 20
1	R	188/193 (97%)	166 (88%)	22 (12%)	5 20
1	S	188/193 (97%)	166 (88%)	22 (12%)	5 20
1	T	188/193 (97%)	166 (88%)	22 (12%)	5 20
1	U	188/193 (97%)	166 (88%)	22 (12%)	5 20
2	1	170/170 (100%)	152 (89%)	18 (11%)	6 23

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	2	170/170 (100%)	146 (86%)	24 (14%)	3	16
2	H	170/170 (100%)	145 (85%)	25 (15%)	3	15
2	I	170/170 (100%)	148 (87%)	22 (13%)	4	18
2	J	170/170 (100%)	143 (84%)	27 (16%)	2	13
2	K	170/170 (100%)	143 (84%)	27 (16%)	2	13
2	L	170/170 (100%)	146 (86%)	24 (14%)	3	16
2	M	170/170 (100%)	152 (89%)	18 (11%)	6	23
2	N	170/170 (100%)	146 (86%)	24 (14%)	3	16
2	V	170/170 (100%)	145 (85%)	25 (15%)	3	15
2	W	170/170 (100%)	149 (88%)	21 (12%)	4	19
2	X	170/170 (100%)	143 (84%)	27 (16%)	2	13
2	Y	170/170 (100%)	143 (84%)	27 (16%)	2	13
2	Z	170/170 (100%)	146 (86%)	24 (14%)	3	16
All	All	5012/5082 (99%)	4371 (87%)	641 (13%)	7	18

All (641) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	13	THR
1	A	21	LEU
1	A	38	LEU
1	A	44	ASN
1	A	47	LEU
1	A	62	ASN
1	A	71	ASP
1	A	102	THR
1	A	119	GLN
1	A	134	VAL
1	A	136	LEU
1	A	141	ILE
1	A	143	GLN
1	A	157	ILE
1	A	161	LYS
1	A	175	PHE
1	A	176	LEU
1	A	190	VAL
1	A	201	LEU

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Mol	Chain	Res	Type
1	A	202	GLU
1	A	212	ILE
1	A	221	TYR
1	B	13	THR
1	B	21	LEU
1	B	38	LEU
1	B	44	ASN
1	B	47	LEU
1	B	62	ASN
1	B	71	ASP
1	B	102	THR
1	B	119	GLN
1	B	134	VAL
1	B	136	LEU
1	B	141	ILE
1	B	143	GLN
1	B	157	ILE
1	B	161	LYS
1	B	175	PHE
1	B	176	LEU
1	B	190	VAL
1	B	201	LEU
1	B	202	GLU
1	B	212	ILE
1	B	221	TYR
1	C	13	THR
1	C	21	LEU
1	C	38	LEU
1	C	44	ASN
1	C	47	LEU
1	C	62	ASN
1	C	71	ASP
1	C	102	THR
1	C	119	GLN
1	C	134	VAL
1	C	136	LEU
1	C	141	ILE
1	C	143	GLN
1	C	157	ILE
1	C	161	LYS
1	C	175	PHE
1	C	176	LEU

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Mol	Chain	Res	Type
1	C	190	VAL
1	C	201	LEU
1	C	202	GLU
1	C	212	ILE
1	C	221	TYR
1	D	13	THR
1	D	21	LEU
1	D	38	LEU
1	D	44	ASN
1	D	47	LEU
1	D	62	ASN
1	D	71	ASP
1	D	102	THR
1	D	119	GLN
1	D	134	VAL
1	D	136	LEU
1	D	141	ILE
1	D	143	GLN
1	D	157	ILE
1	D	161	LYS
1	D	175	PHE
1	D	176	LEU
1	D	190	VAL
1	D	201	LEU
1	D	202	GLU
1	D	212	ILE
1	D	221	TYR
1	E	13	THR
1	E	21	LEU
1	E	38	LEU
1	E	44	ASN
1	E	47	LEU
1	E	62	ASN
1	E	71	ASP
1	E	102	THR
1	E	119	GLN
1	E	134	VAL
1	E	136	LEU
1	E	141	ILE
1	E	143	GLN
1	E	157	ILE
1	E	161	LYS

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Mol	Chain	Res	Type
1	E	175	PHE
1	E	176	LEU
1	E	190	VAL
1	E	201	LEU
1	E	202	GLU
1	E	212	ILE
1	E	221	TYR
1	F	13	THR
1	F	21	LEU
1	F	38	LEU
1	F	44	ASN
1	F	47	LEU
1	F	62	ASN
1	F	71	ASP
1	F	102	THR
1	F	119	GLN
1	F	134	VAL
1	F	136	LEU
1	F	141	ILE
1	F	143	GLN
1	F	157	ILE
1	F	161	LYS
1	F	175	PHE
1	F	176	LEU
1	F	190	VAL
1	F	201	LEU
1	F	202	GLU
1	F	212	ILE
1	F	221	TYR
1	G	13	THR
1	G	21	LEU
1	G	38	LEU
1	G	44	ASN
1	G	47	LEU
1	G	62	ASN
1	G	71	ASP
1	G	102	THR
1	G	119	GLN
1	G	134	VAL
1	G	136	LEU
1	G	141	ILE
1	G	143	GLN

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Mol	Chain	Res	Type
1	G	157	ILE
1	G	161	LYS
1	G	175	PHE
1	G	176	LEU
1	G	190	VAL
1	G	201	LEU
1	G	202	GLU
1	G	212	ILE
1	G	221	TYR
2	H	2	THR
2	H	7	THR
2	H	17	GLU
2	H	25	PHE
2	H	26	ILE
2	H	41	THR
2	H	45	ILE
2	H	49	VAL
2	H	56	VAL
2	H	63	LEU
2	H	71	ARG
2	H	83	LEU
2	H	94	PRO
2	H	97	VAL
2	H	123	ILE
2	H	127	THR
2	H	134	VAL
2	H	137	VAL
2	H	138	LEU
2	H	144	GLU
2	H	165	ARG
2	H	173	ILE
2	H	175	VAL
2	H	178	ILE
2	H	201	LEU
2	I	2	THR
2	I	17	GLU
2	I	20	VAL
2	I	25	PHE
2	I	26	ILE
2	I	41	THR
2	I	45	ILE
2	I	49	VAL

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Mol	Chain	Res	Type
2	I	59	MET
2	I	70	ARG
2	I	71	ARG
2	I	83	LEU
2	I	123	ILE
2	I	127	THR
2	I	134	VAL
2	I	137	VAL
2	I	138	LEU
2	I	144	GLU
2	I	165	ARG
2	I	173	ILE
2	I	178	ILE
2	I	185	VAL
2	J	2	THR
2	J	8	LEU
2	J	12	VAL
2	J	17	GLU
2	J	20	VAL
2	J	25	PHE
2	J	26	ILE
2	J	41	THR
2	J	45	ILE
2	J	49	VAL
2	J	55	LEU
2	J	59	MET
2	J	68	LEU
2	J	70	ARG
2	J	71	ARG
2	J	83	LEU
2	J	123	ILE
2	J	127	THR
2	J	134	VAL
2	J	137	VAL
2	J	138	LEU
2	J	144	GLU
2	J	165	ARG
2	J	173	ILE
2	J	175	VAL
2	J	178	ILE
2	J	185	VAL
2	K	2	THR

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Mol	Chain	Res	Type
2	K	7	THR
2	K	17	GLU
2	K	25	PHE
2	K	26	ILE
2	K	41	THR
2	K	45	ILE
2	K	49	VAL
2	K	56	VAL
2	K	68	LEU
2	K	71	ARG
2	K	83	LEU
2	K	94	PRO
2	K	97	VAL
2	K	104	ILE
2	K	123	ILE
2	K	127	THR
2	K	134	VAL
2	K	137	VAL
2	K	144	GLU
2	K	149	ASP
2	K	165	ARG
2	K	173	ILE
2	K	175	VAL
2	K	177	VAL
2	K	178	ILE
2	K	185	VAL
2	L	1	THR
2	L	2	THR
2	L	8	LEU
2	L	17	GLU
2	L	20	VAL
2	L	26	ILE
2	L	41	THR
2	L	45	ILE
2	L	49	VAL
2	L	63	LEU
2	L	68	LEU
2	L	71	ARG
2	L	83	LEU
2	L	123	ILE
2	L	127	THR
2	L	134	VAL

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Mol	Chain	Res	Type
2	L	137	VAL
2	L	138	LEU
2	L	144	GLU
2	L	153	ASP
2	L	165	ARG
2	L	173	ILE
2	L	175	VAL
2	L	178	ILE
2	M	2	THR
2	M	17	GLU
2	M	20	VAL
2	M	26	ILE
2	M	41	THR
2	M	45	ILE
2	M	59	MET
2	M	71	ARG
2	M	83	LEU
2	M	123	ILE
2	M	127	THR
2	M	134	VAL
2	M	137	VAL
2	M	138	LEU
2	M	144	GLU
2	M	165	ARG
2	M	173	ILE
2	M	178	ILE
2	N	2	THR
2	N	8	LEU
2	N	12	VAL
2	N	17	GLU
2	N	20	VAL
2	N	25	PHE
2	N	26	ILE
2	N	41	THR
2	N	45	ILE
2	N	59	MET
2	N	70	ARG
2	N	71	ARG
2	N	94	PRO
2	N	123	ILE
2	N	127	THR
2	N	134	VAL

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Mol	Chain	Res	Type
2	N	137	VAL
2	N	144	GLU
2	N	153	ASP
2	N	165	ARG
2	N	173	ILE
2	N	175	VAL
2	N	178	ILE
2	N	185	VAL
1	O	13	THR
1	O	21	LEU
1	O	38	LEU
1	O	44	ASN
1	O	47	LEU
1	O	62	ASN
1	O	71	ASP
1	O	102	THR
1	O	119	GLN
1	O	134	VAL
1	O	136	LEU
1	O	141	ILE
1	O	143	GLN
1	O	157	ILE
1	O	161	LYS
1	O	175	PHE
1	O	176	LEU
1	O	190	VAL
1	O	201	LEU
1	O	202	GLU
1	O	212	ILE
1	O	221	TYR
1	P	13	THR
1	P	21	LEU
1	P	38	LEU
1	P	44	ASN
1	P	47	LEU
1	P	62	ASN
1	P	71	ASP
1	P	102	THR
1	P	119	GLN
1	P	134	VAL
1	P	136	LEU
1	P	141	ILE

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Mol	Chain	Res	Type
1	P	143	GLN
1	P	157	ILE
1	P	161	LYS
1	P	175	PHE
1	P	176	LEU
1	P	190	VAL
1	P	201	LEU
1	P	202	GLU
1	P	212	ILE
1	P	221	TYR
1	Q	13	THR
1	Q	21	LEU
1	Q	38	LEU
1	Q	44	ASN
1	Q	47	LEU
1	Q	62	ASN
1	Q	71	ASP
1	Q	102	THR
1	Q	119	GLN
1	Q	134	VAL
1	Q	136	LEU
1	Q	141	ILE
1	Q	143	GLN
1	Q	157	ILE
1	Q	161	LYS
1	Q	175	PHE
1	Q	176	LEU
1	Q	190	VAL
1	Q	201	LEU
1	Q	202	GLU
1	Q	212	ILE
1	Q	221	TYR
1	R	13	THR
1	R	21	LEU
1	R	38	LEU
1	R	44	ASN
1	R	47	LEU
1	R	62	ASN
1	R	71	ASP
1	R	102	THR
1	R	119	GLN
1	R	134	VAL

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Mol	Chain	Res	Type
1	R	136	LEU
1	R	141	ILE
1	R	143	GLN
1	R	157	ILE
1	R	161	LYS
1	R	175	PHE
1	R	176	LEU
1	R	190	VAL
1	R	201	LEU
1	R	202	GLU
1	R	212	ILE
1	R	221	TYR
1	S	13	THR
1	S	21	LEU
1	S	38	LEU
1	S	44	ASN
1	S	47	LEU
1	S	62	ASN
1	S	71	ASP
1	S	102	THR
1	S	119	GLN
1	S	134	VAL
1	S	136	LEU
1	S	141	ILE
1	S	143	GLN
1	S	157	ILE
1	S	161	LYS
1	S	175	PHE
1	S	176	LEU
1	S	190	VAL
1	S	201	LEU
1	S	202	GLU
1	S	212	ILE
1	S	221	TYR
1	T	13	THR
1	T	21	LEU
1	T	38	LEU
1	T	44	ASN
1	T	47	LEU
1	T	62	ASN
1	T	71	ASP
1	T	102	THR

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Mol	Chain	Res	Type
1	T	119	GLN
1	T	134	VAL
1	T	136	LEU
1	T	141	ILE
1	T	143	GLN
1	T	157	ILE
1	T	161	LYS
1	T	175	PHE
1	T	176	LEU
1	T	190	VAL
1	T	201	LEU
1	T	202	GLU
1	T	212	ILE
1	T	221	TYR
1	U	13	THR
1	U	21	LEU
1	U	38	LEU
1	U	44	ASN
1	U	47	LEU
1	U	62	ASN
1	U	71	ASP
1	U	102	THR
1	U	119	GLN
1	U	134	VAL
1	U	136	LEU
1	U	141	ILE
1	U	143	GLN
1	U	157	ILE
1	U	161	LYS
1	U	175	PHE
1	U	176	LEU
1	U	190	VAL
1	U	201	LEU
1	U	202	GLU
1	U	212	ILE
1	U	221	TYR
2	V	2	THR
2	V	7	THR
2	V	17	GLU
2	V	25	PHE
2	V	26	ILE
2	V	41	THR

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Mol	Chain	Res	Type
2	V	45	ILE
2	V	49	VAL
2	V	56	VAL
2	V	63	LEU
2	V	71	ARG
2	V	83	LEU
2	V	94	PRO
2	V	97	VAL
2	V	123	ILE
2	V	127	THR
2	V	134	VAL
2	V	137	VAL
2	V	138	LEU
2	V	144	GLU
2	V	165	ARG
2	V	173	ILE
2	V	175	VAL
2	V	178	ILE
2	V	201	LEU
2	W	2	THR
2	W	17	GLU
2	W	20	VAL
2	W	25	PHE
2	W	26	ILE
2	W	41	THR
2	W	45	ILE
2	W	49	VAL
2	W	59	MET
2	W	70	ARG
2	W	71	ARG
2	W	83	LEU
2	W	123	ILE
2	W	127	THR
2	W	134	VAL
2	W	138	LEU
2	W	144	GLU
2	W	165	ARG
2	W	173	ILE
2	W	178	ILE
2	W	185	VAL
2	X	2	THR
2	X	8	LEU

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Mol	Chain	Res	Type
2	X	12	VAL
2	X	17	GLU
2	X	20	VAL
2	X	25	PHE
2	X	26	ILE
2	X	41	THR
2	X	45	ILE
2	X	49	VAL
2	X	55	LEU
2	X	59	MET
2	X	68	LEU
2	X	70	ARG
2	X	71	ARG
2	X	83	LEU
2	X	123	ILE
2	X	127	THR
2	X	134	VAL
2	X	137	VAL
2	X	138	LEU
2	X	144	GLU
2	X	165	ARG
2	X	173	ILE
2	X	175	VAL
2	X	178	ILE
2	X	185	VAL
2	Y	2	THR
2	Y	7	THR
2	Y	17	GLU
2	Y	25	PHE
2	Y	26	ILE
2	Y	41	THR
2	Y	45	ILE
2	Y	49	VAL
2	Y	56	VAL
2	Y	68	LEU
2	Y	71	ARG
2	Y	83	LEU
2	Y	94	PRO
2	Y	97	VAL
2	Y	104	ILE
2	Y	123	ILE
2	Y	127	THR

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Mol	Chain	Res	Type
2	Y	134	VAL
2	Y	137	VAL
2	Y	144	GLU
2	Y	149	ASP
2	Y	165	ARG
2	Y	173	ILE
2	Y	175	VAL
2	Y	177	VAL
2	Y	178	ILE
2	Y	185	VAL
2	Z	1	THR
2	Z	2	THR
2	Z	8	LEU
2	Z	17	GLU
2	Z	20	VAL
2	Z	26	ILE
2	Z	41	THR
2	Z	45	ILE
2	Z	49	VAL
2	Z	63	LEU
2	Z	68	LEU
2	Z	71	ARG
2	Z	83	LEU
2	Z	123	ILE
2	Z	127	THR
2	Z	134	VAL
2	Z	137	VAL
2	Z	138	LEU
2	Z	144	GLU
2	Z	153	ASP
2	Z	165	ARG
2	Z	173	ILE
2	Z	175	VAL
2	Z	178	ILE
2	1	2	THR
2	1	17	GLU
2	1	20	VAL
2	1	26	ILE
2	1	41	THR
2	1	45	ILE
2	1	59	MET
2	1	71	ARG

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Mol	Chain	Res	Type
2	1	83	LEU
2	1	123	ILE
2	1	127	THR
2	1	134	VAL
2	1	137	VAL
2	1	138	LEU
2	1	144	GLU
2	1	165	ARG
2	1	173	ILE
2	1	178	ILE
2	2	2	THR
2	2	8	LEU
2	2	12	VAL
2	2	17	GLU
2	2	20	VAL
2	2	25	PHE
2	2	26	ILE
2	2	41	THR
2	2	45	ILE
2	2	59	MET
2	2	70	ARG
2	2	71	ARG
2	2	94	PRO
2	2	123	ILE
2	2	127	THR
2	2	134	VAL
2	2	137	VAL
2	2	144	GLU
2	2	153	ASP
2	2	165	ARG
2	2	173	ILE
2	2	175	VAL
2	2	178	ILE
2	2	185	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (134) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	23	GLN
1	A	44	ASN
1	A	98	GLN
1	A	111	ASN

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Mol	Chain	Res	Type
1	A	121	GLN
1	A	125	GLN
1	A	143	GLN
1	B	23	GLN
1	B	44	ASN
1	B	98	GLN
1	B	111	ASN
1	B	121	GLN
1	B	125	GLN
1	B	143	GLN
1	C	23	GLN
1	C	44	ASN
1	C	98	GLN
1	C	111	ASN
1	C	121	GLN
1	C	125	GLN
1	D	23	GLN
1	D	44	ASN
1	D	98	GLN
1	D	111	ASN
1	D	121	GLN
1	D	125	GLN
1	E	23	GLN
1	E	44	ASN
1	E	98	GLN
1	E	111	ASN
1	E	121	GLN
1	E	125	GLN
1	F	23	GLN
1	F	44	ASN
1	F	98	GLN
1	F	111	ASN
1	F	121	GLN
1	F	125	GLN
1	G	23	GLN
1	G	44	ASN
1	G	98	GLN
2	H	30	ASN
2	H	36	GLN
2	H	85	ASN
2	H	164	GLN
2	I	30	ASN

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Mol	Chain	Res	Type
2	I	36	GLN
2	I	73	ASN
2	I	164	GLN
2	J	30	ASN
2	J	36	GLN
2	J	141	GLN
2	J	164	GLN
2	K	30	ASN
2	K	85	ASN
2	K	141	GLN
2	K	164	GLN
2	L	30	ASN
2	L	85	ASN
2	L	141	GLN
2	L	164	GLN
2	M	30	ASN
2	M	85	ASN
2	M	141	GLN
2	M	164	GLN
2	N	30	ASN
2	N	85	ASN
2	N	164	GLN
1	O	23	GLN
1	O	44	ASN
1	O	98	GLN
1	O	111	ASN
1	O	143	GLN
1	P	23	GLN
1	P	44	ASN
1	P	98	GLN
1	P	111	ASN
1	P	121	GLN
1	P	125	GLN
1	P	143	GLN
1	Q	23	GLN
1	Q	44	ASN
1	Q	98	GLN
1	Q	111	ASN
1	Q	121	GLN
1	Q	125	GLN
1	R	23	GLN
1	R	44	ASN

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Mol	Chain	Res	Type
1	R	98	GLN
1	R	111	ASN
1	R	121	GLN
1	R	125	GLN
1	S	23	GLN
1	S	44	ASN
1	S	98	GLN
1	S	111	ASN
1	S	121	GLN
1	S	125	GLN
1	T	23	GLN
1	T	44	ASN
1	T	98	GLN
1	T	111	ASN
1	T	121	GLN
1	T	125	GLN
1	U	23	GLN
1	U	44	ASN
1	U	98	GLN
2	V	30	ASN
2	V	36	GLN
2	V	85	ASN
2	V	164	GLN
2	W	30	ASN
2	W	36	GLN
2	W	73	ASN
2	W	85	ASN
2	W	164	GLN
2	X	30	ASN
2	X	36	GLN
2	X	141	GLN
2	X	164	GLN
2	Y	30	ASN
2	Y	85	ASN
2	Y	141	GLN
2	Y	164	GLN
2	Z	30	ASN
2	Z	85	ASN
2	Z	141	GLN
2	Z	164	GLN
2	1	30	ASN
2	1	85	ASN

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Mol	Chain	Res	Type
2	1	164	GLN
2	2	30	ASN
2	2	85	ASN
2	2	164	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

There are no monosaccharides in this entry.

5.6 Ligand geometry

There are no ligands in this entry.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

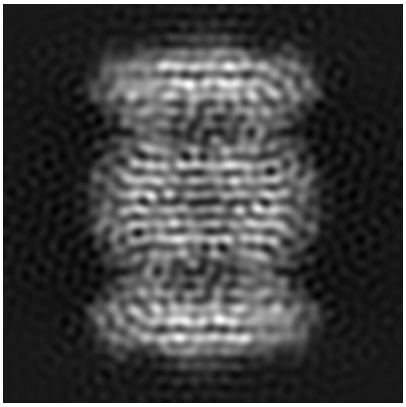
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-1733. These allow visual inspection of the internal detail of the map and identification of artifacts.

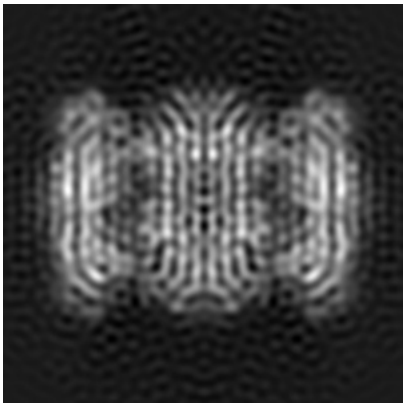
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

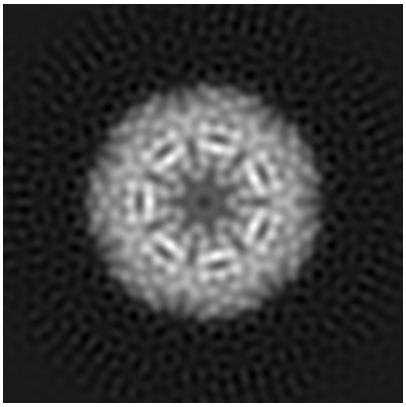
6.1.1 Primary map



X



Y

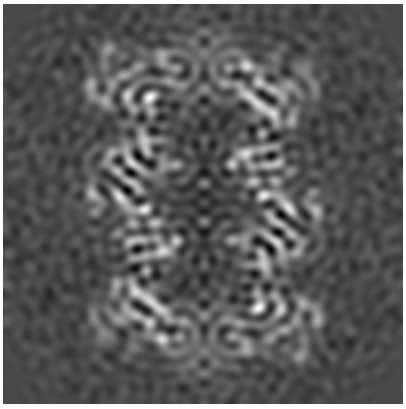


Z

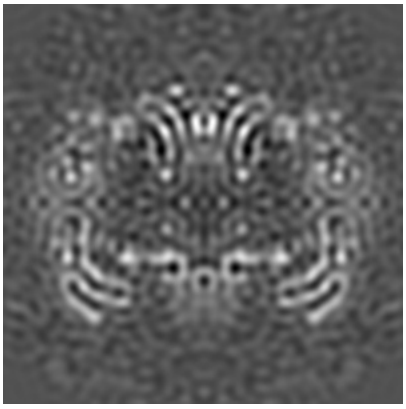
The images above show the map projected in three orthogonal directions.

6.2 Central slices

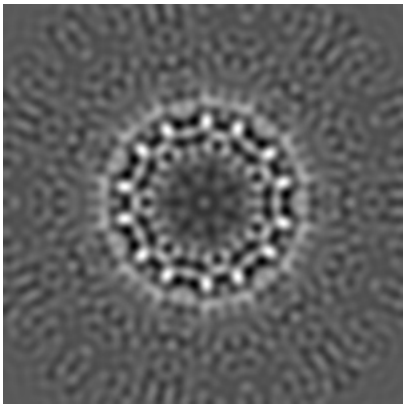
6.2.1 Primary map



X Index: 72



Y Index: 72

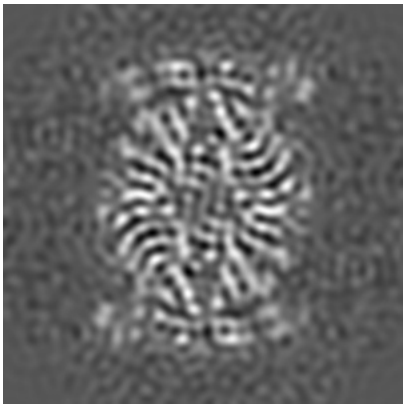


Z Index: 72

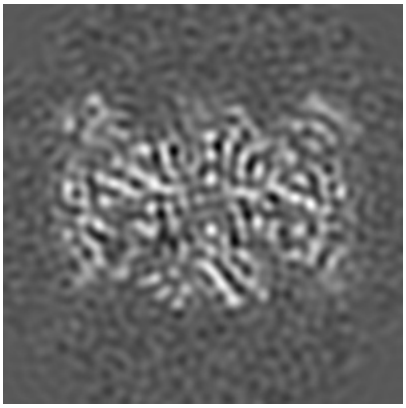
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

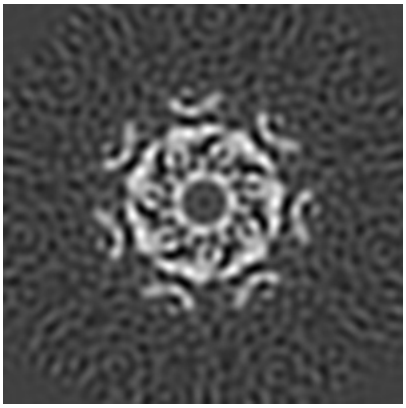
6.3.1 Primary map



X Index: 90



Y Index: 53

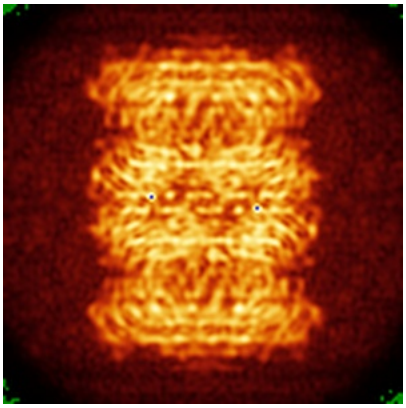


Z Index: 58

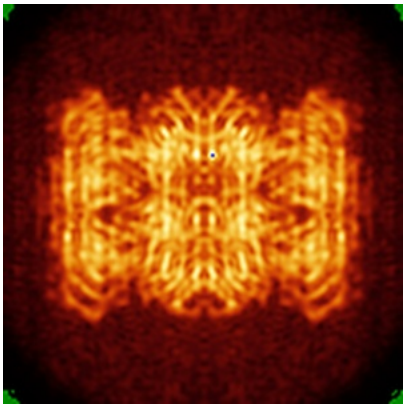
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) (i)

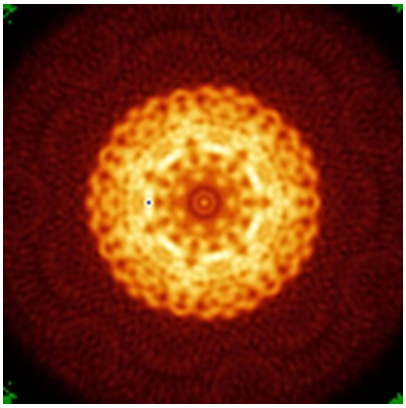
6.4.1 Primary map



X



Y

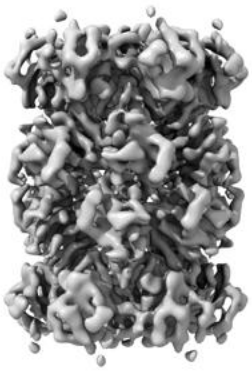


Z

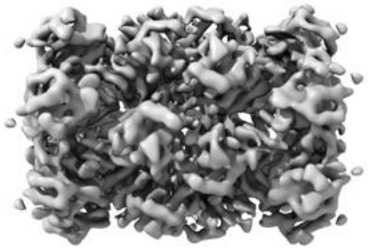
The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views (i)

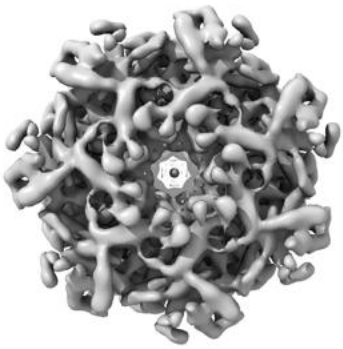
6.5.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 2.5. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

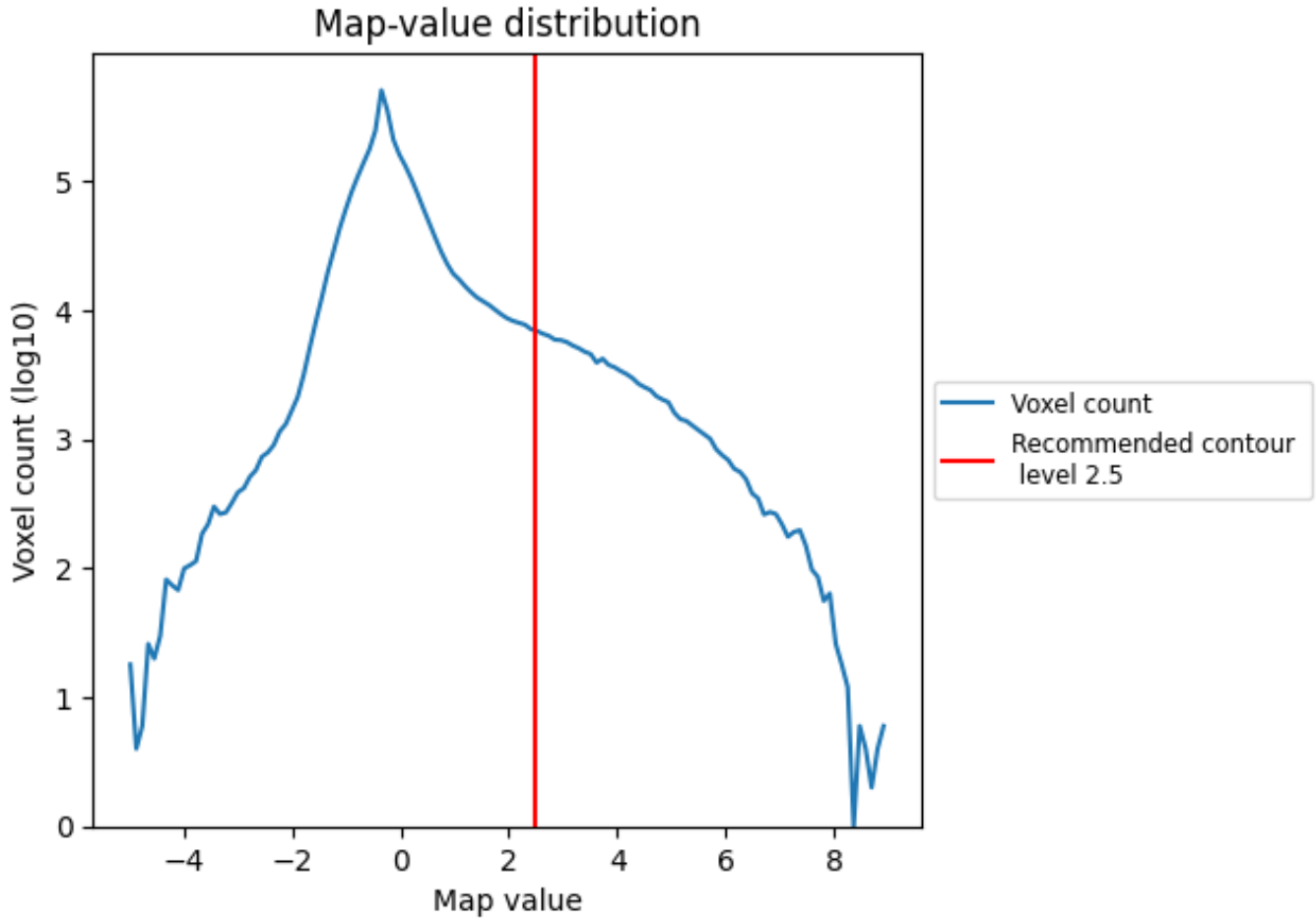
6.6 Mask visualisation (i)

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

7 Map analysis

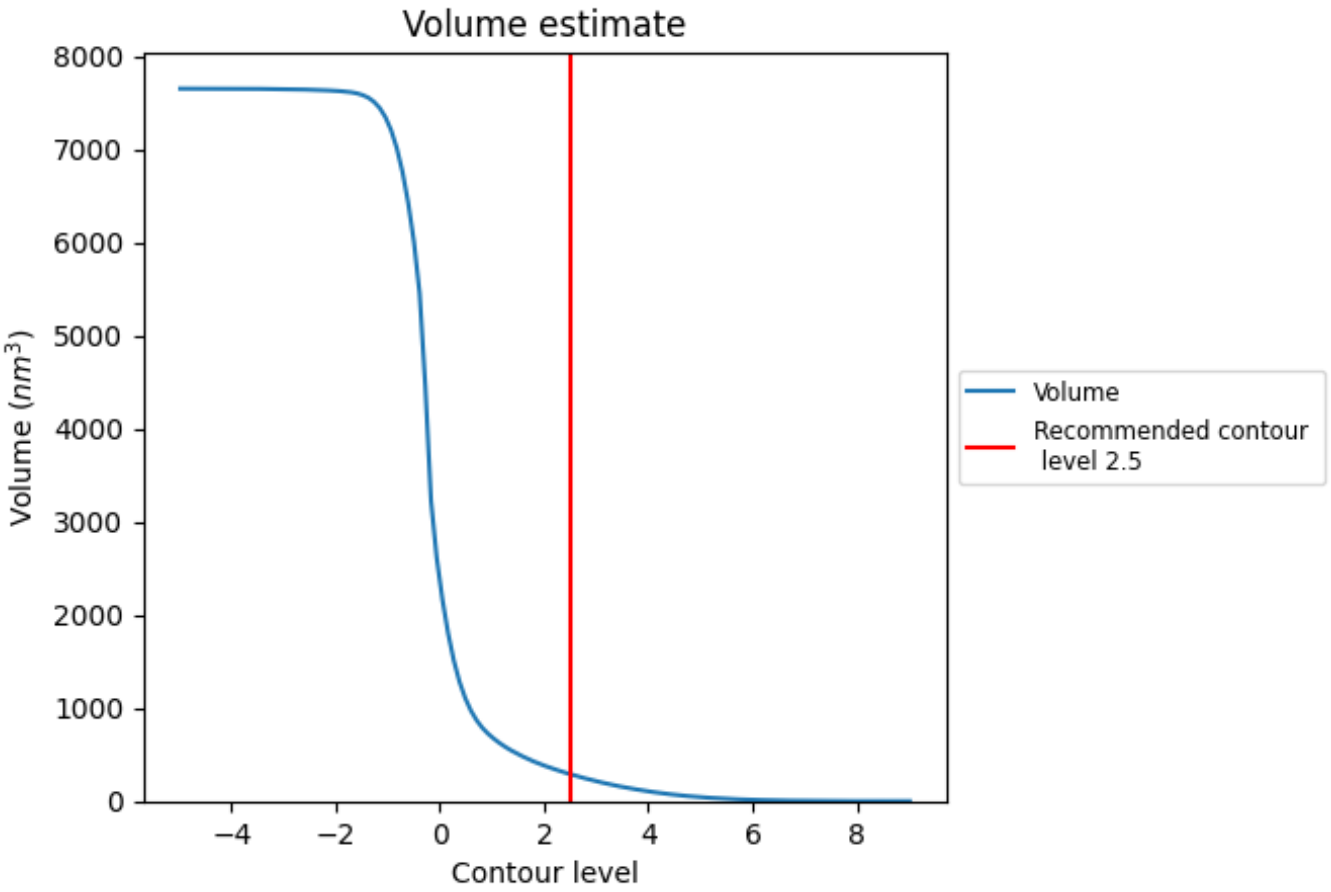
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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.

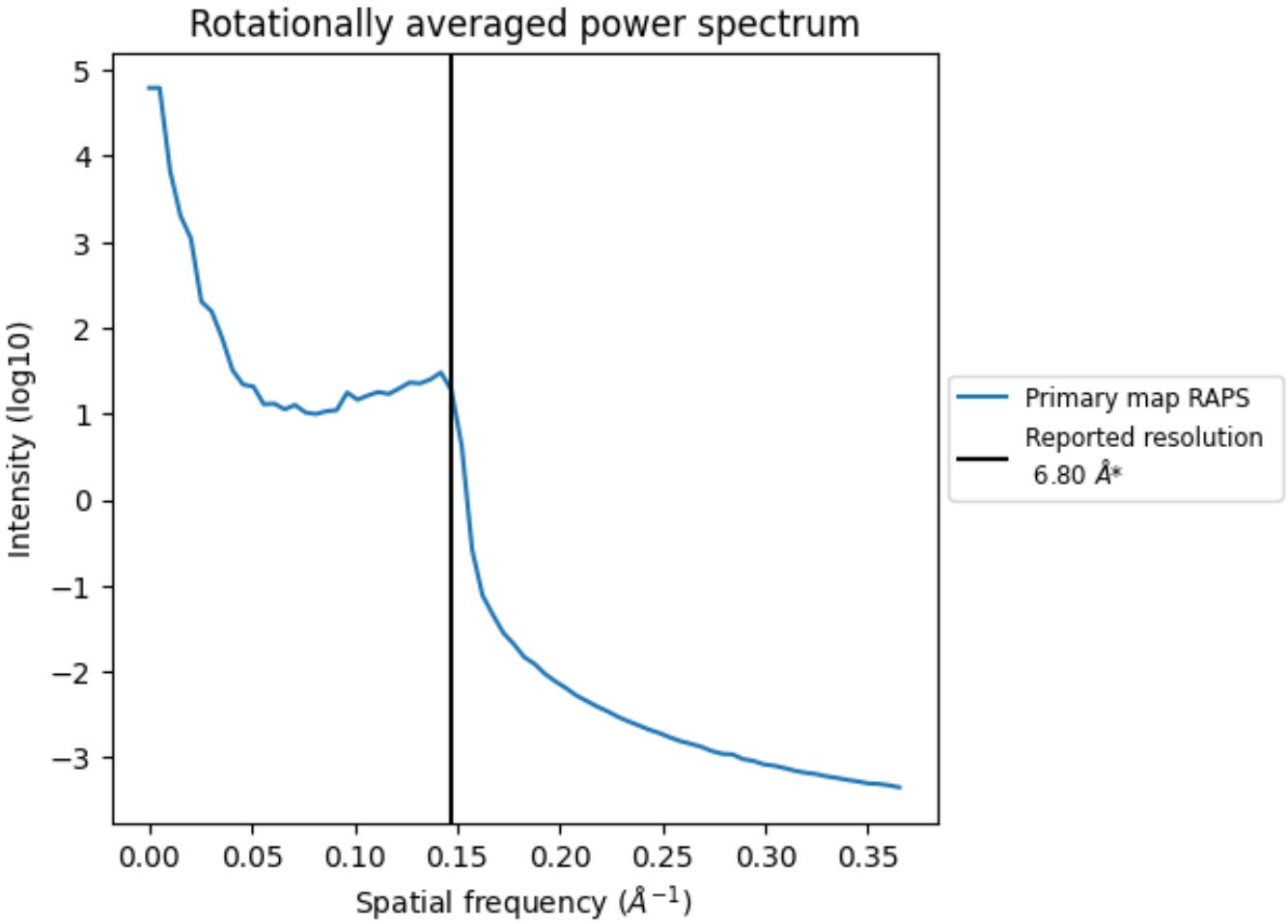
7.2 Volume estimate



The volume at the recommended contour level is 290 nm^3; this corresponds to an approximate mass of 262 kDa.

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

7.3 Rotationally averaged power spectrum (i)



*Reported resolution corresponds to spatial frequency of 0.147 Å^{-1}

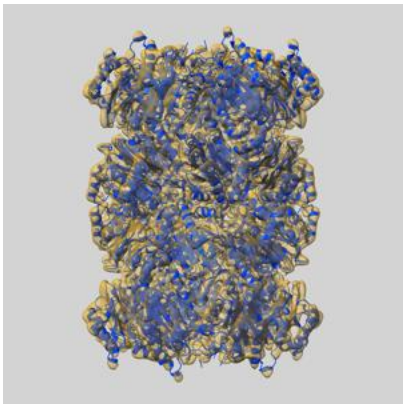
8 Fourier-Shell correlation (i)

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

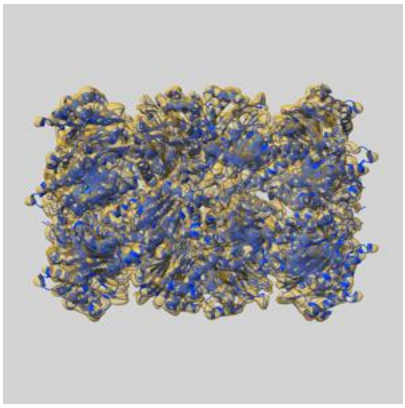
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-1733 and PDB model 3C91. Per-residue inclusion information can be found in section 3 on page 6.

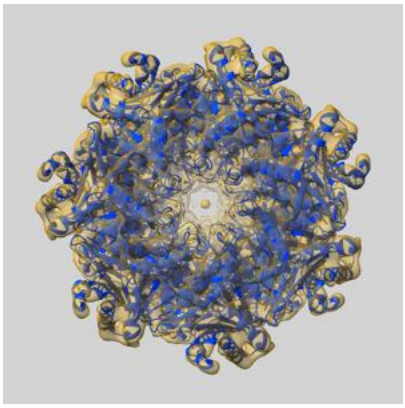
9.1 Map-model overlay



X



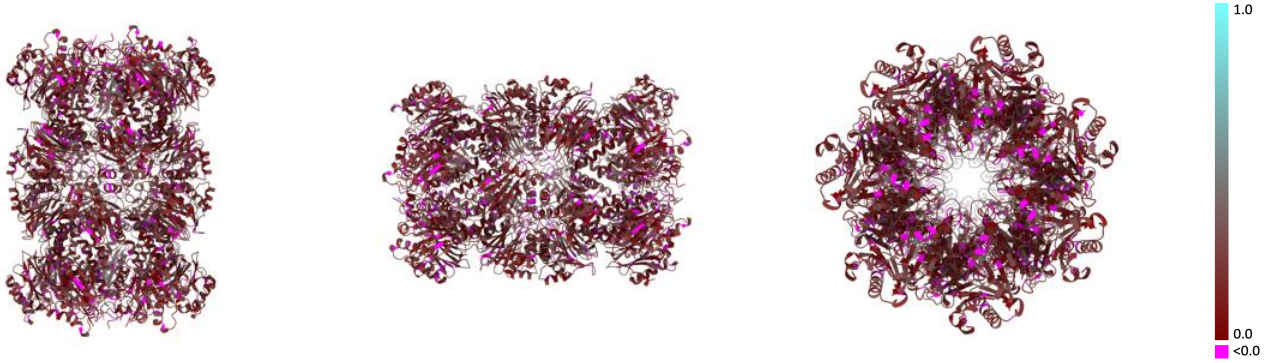
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 2.5 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.

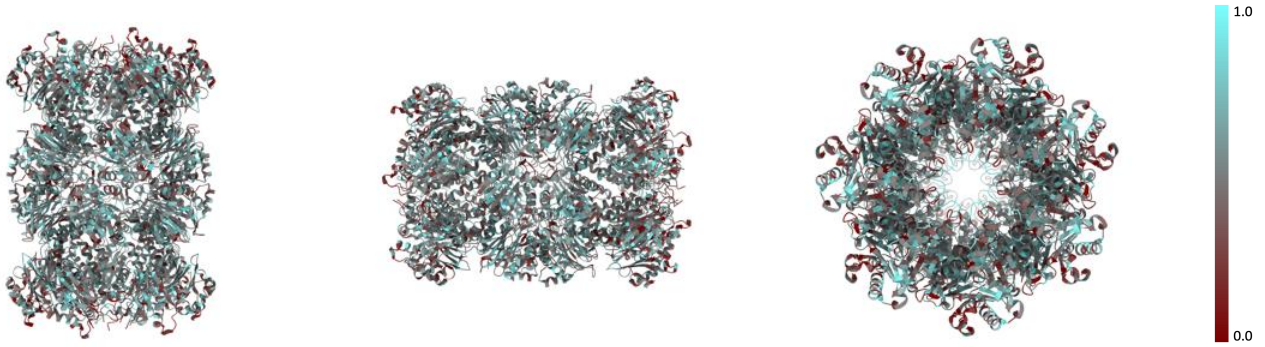
9.2 Q-score mapped to coordinate model (i)



X Y Z

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.

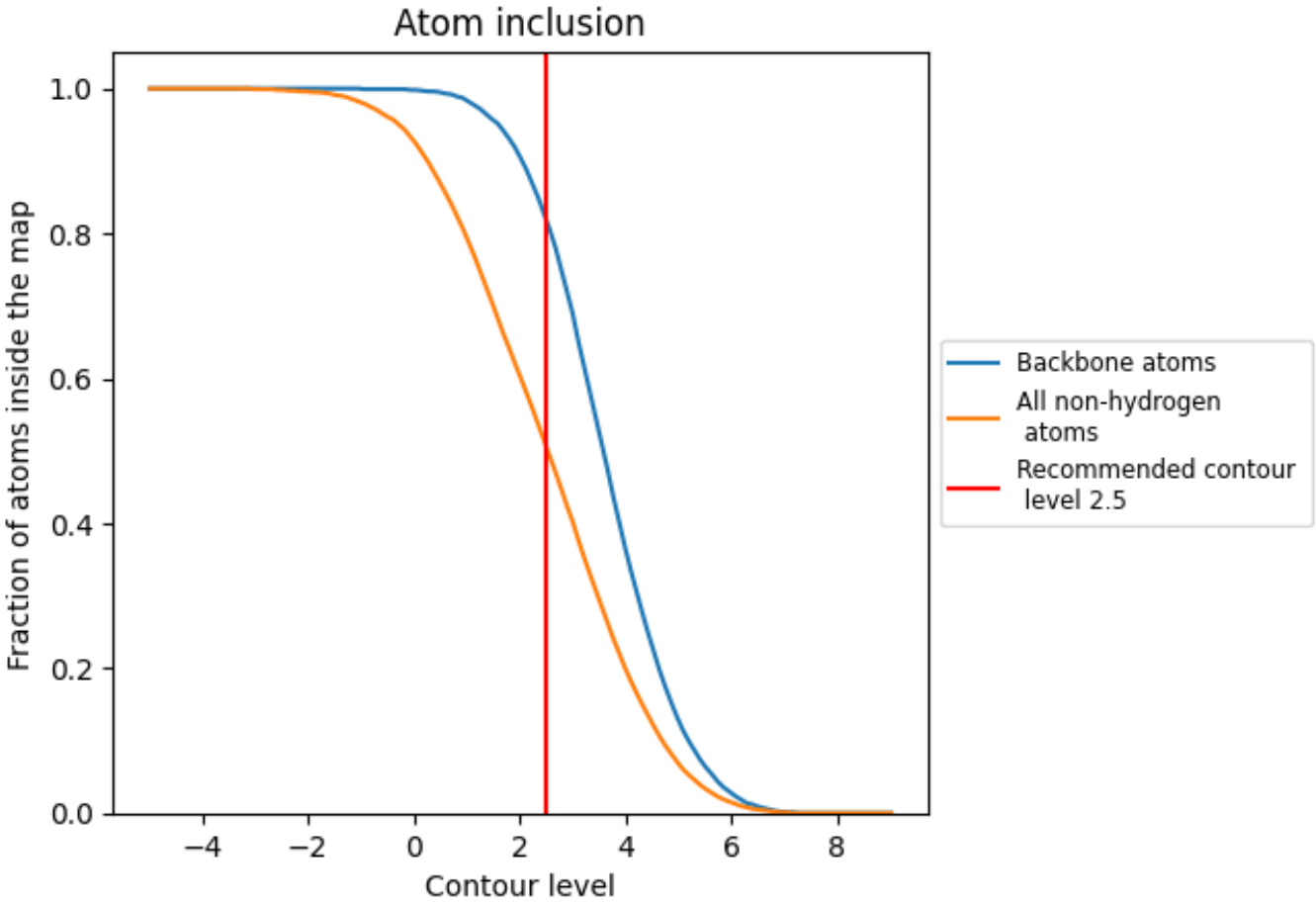
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

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 (2.5).

9.4 Atom inclusion (i)



At the recommended contour level, 82% of all backbone atoms, 51% 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 (2.5) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.5060	0.1730
1	0.5250	0.1790
2	0.5300	0.1810
A	0.4980	0.1720
B	0.4980	0.1710
C	0.4890	0.1700
D	0.4900	0.1680
E	0.4860	0.1710
F	0.4760	0.1620
G	0.4810	0.1680
H	0.5340	0.1820
I	0.5310	0.1810
J	0.5280	0.1840
K	0.5340	0.1810
L	0.5340	0.1810
M	0.5400	0.1840
N	0.5390	0.1830
O	0.4840	0.1640
P	0.4840	0.1660
Q	0.4820	0.1660
R	0.4910	0.1660
S	0.4770	0.1650
T	0.4790	0.1590
U	0.4970	0.1670
V	0.5210	0.1770
W	0.5220	0.1720
X	0.5230	0.1740
Y	0.5190	0.1760
Z	0.5190	0.1770