



wwPDB EM Map/Model Validation Report ⓘ

Apr 10, 2016 – 01:45 PM BST

PDB ID : 2Y9K
EMDB ID: : EMD-1871
Title : Three-dimensional model of Salmonella's needle complex at subnanometer resolution
Authors : Schraidt, O.; Marlovits, T.C.
Deposited on : 2011-02-15
Resolution : 8.30 Å(reported)
Based on PDB ID : 3GR5

This is a wwPDB EM Map/Model Validation Report for a publicly released PDB/EMDB entry.
For rigid body fitted models, validation errors reported here could stem from errors in the original structure(s) used in the fitting.
We welcome your comments at validation@mail.wwpdb.org
A user guide is available at
<http://wwpdb.org/validation/2016/EMValidationReportHelp>

MolProbity : 4.02b-467
Mogul : unknown
Percentile statistics : 20151230.v01 (using entries in the PDB archive December 30th 2015)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : trunk27241

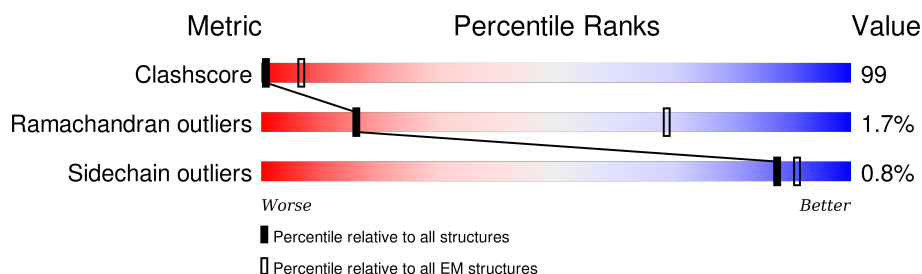
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 8.30 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	114402	924
Ramachandran outliers	111179	726
Sidechain outliers	111093	686

The table below summarises the geometric issues observed across the polymeric chains. The red, orange, yellow and green segments on the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$.

Mol	Chain	Length	Quality of chain
1	A	137	36% 54% 9% .
1	B	137	36% 54% 9% .
1	C	137	37% 53% 9% .
1	D	137	36% 54% 9% .
1	E	137	36% 54% 9% .
1	F	137	35% 55% 9% .
1	G	137	36% 53% 9% .
1	H	137	36% 54% 9% .
1	I	137	36% 54% 9% .

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Mol	Chain	Length	Quality of chain
1	J	137	<div><div></div><div>36%54%9%</div></div>
1	K	137	<div><div></div><div>36%54%9%</div></div>
1	L	137	<div><div></div><div>36%54%9%</div></div>
1	M	137	<div><div></div><div>36%54%9%</div></div>
1	N	137	<div><div></div><div>35%55%9%</div></div>
1	O	137	<div><div></div><div>36%53%9%</div></div>

2 Entry composition

There is only 1 type of molecule in this entry. The entry contains 16485 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.

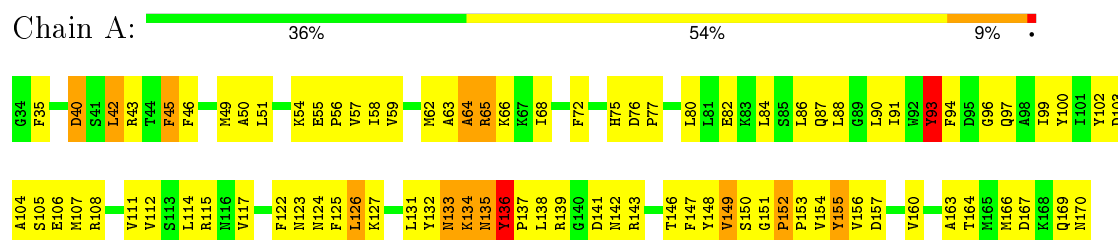
- Molecule 1 is a protein called PROTEIN INVG.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	137	Total	C	N	O	S	0	0
			1099	705	187	201	6		
1	B	137	Total	C	N	O	S	0	0
			1099	705	187	201	6		
1	C	137	Total	C	N	O	S	0	0
			1099	705	187	201	6		
1	D	137	Total	C	N	O	S	0	0
			1099	705	187	201	6		
1	E	137	Total	C	N	O	S	0	0
			1099	705	187	201	6		
1	F	137	Total	C	N	O	S	0	0
			1099	705	187	201	6		
1	G	137	Total	C	N	O	S	0	0
			1099	705	187	201	6		
1	H	137	Total	C	N	O	S	0	0
			1099	705	187	201	6		
1	I	137	Total	C	N	O	S	0	0
			1099	705	187	201	6		
1	J	137	Total	C	N	O	S	0	0
			1099	705	187	201	6		
1	K	137	Total	C	N	O	S	0	0
			1099	705	187	201	6		
1	L	137	Total	C	N	O	S	0	0
			1099	705	187	201	6		
1	M	137	Total	C	N	O	S	0	0
			1099	705	187	201	6		
1	N	137	Total	C	N	O	S	0	0
			1099	705	187	201	6		
1	O	137	Total	C	N	O	S	0	0
			1099	705	187	201	6		

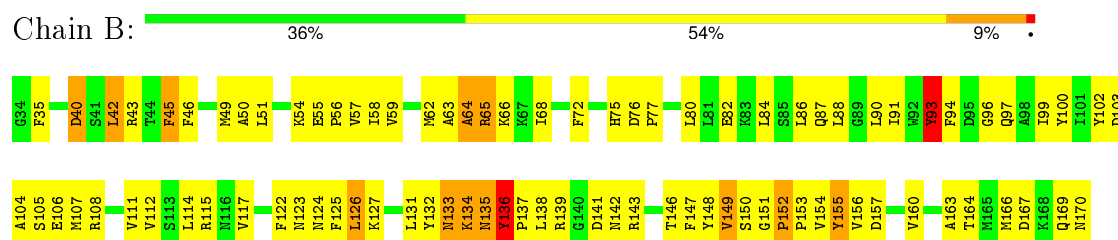
3 Residue-property plots [i](#)

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

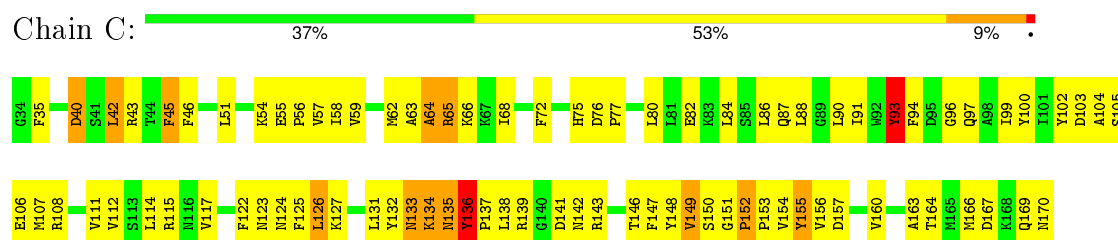
• Molecule 1: PROTEIN INVG



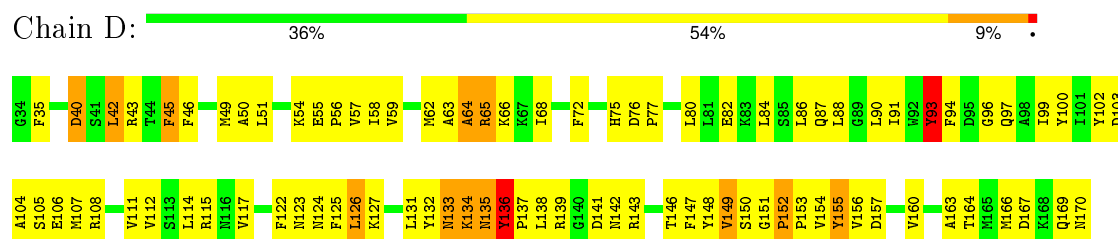
• Molecule 1: PROTEIN INVG



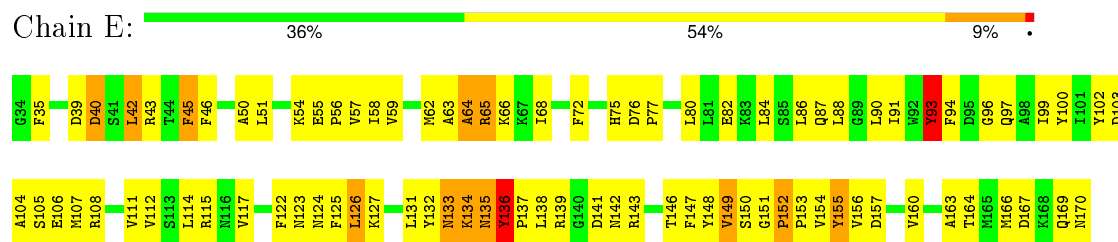
• Molecule 1: PROTEIN INVG



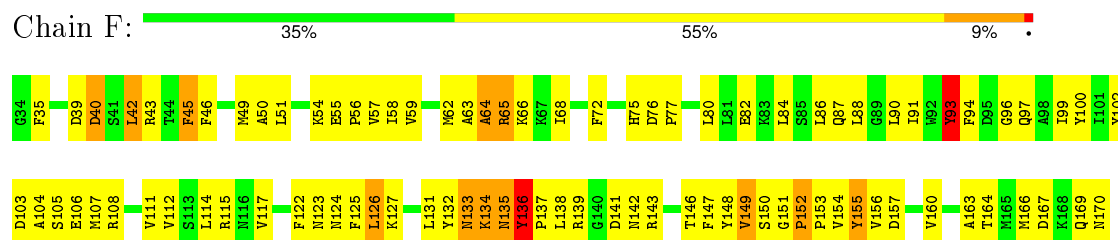
• Molecule 1: PROTEIN INVG



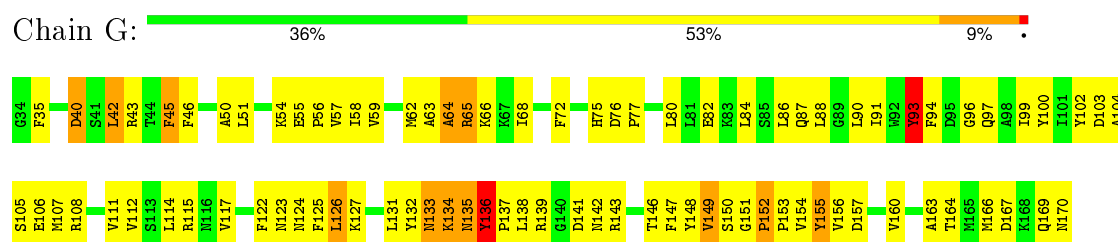
• Molecule 1: PROTEIN INVG



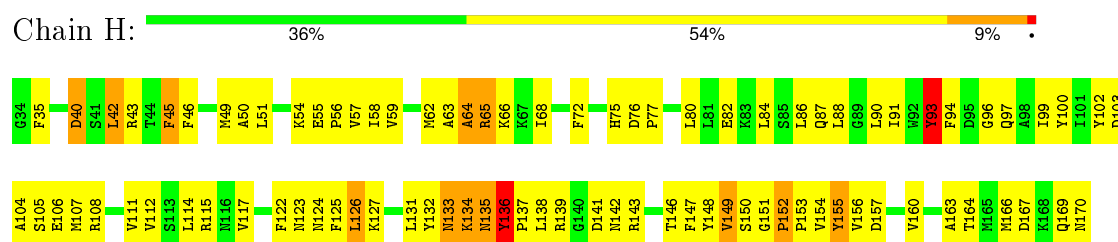
• Molecule 1: PROTEIN INVG



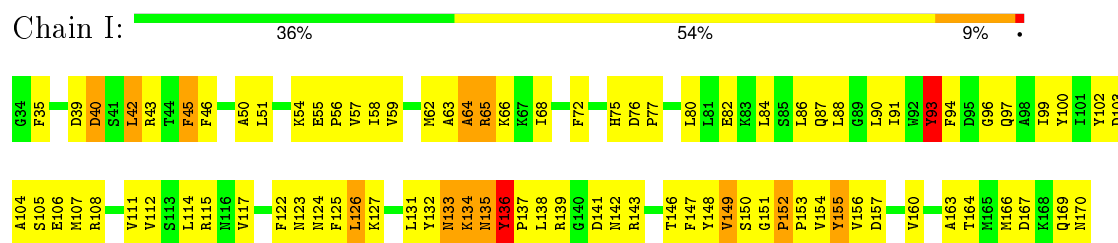
• Molecule 1: PROTEIN INVG



• Molecule 1: PROTEIN INVG

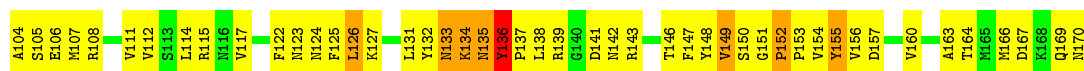


• Molecule 1: PROTEIN INVG



• Molecule 1: PROTEIN INVG





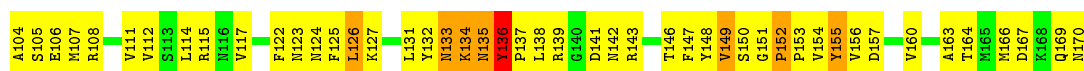
• Molecule 1: PROTEIN INVG

Chain K: 36% 54% 9%



• Molecule 1: PROTEIN INVG

Chain L: 36% 54% 9%



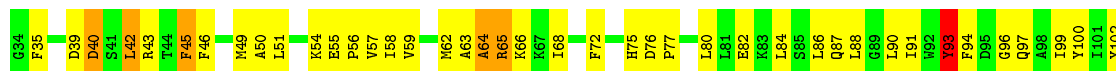
• Molecule 1: PROTEIN INVG

Chain M: 36% 54% 9%



• Molecule 1: PROTEIN INVG

Chain N: 35% 55% 9%



• Molecule 1: PROTEIN INVG

Chain O: 36% 53% 9%



S105	E106	M107	R108		V111	V112	S113	L114	R115	M116	V117		F122	M123	M124	F125	L126	K127		L131	Y132	M133	K134	M135	Y136	P137	L138	R139		G140	D141	M142	R143		T146	F147	Y148	Y149	S150	G151	P152	P153	V154	Y155	V156	D157		V160		A163	T164	M165	M166	D167	K168	Q169	N170
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4 Experimental information

Property	Value	Source
Reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	Depositor
Number of images	Not provided	Depositor
Resolution determination method	Not provided	Depositor
CTF correction method	EACH CCD FRAME	Depositor
Microscope	OTHER	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	Not provided	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	2500	Depositor
Magnification	93000	Depositor
Image detector	CCD GATAN 4KX4K	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 2$	RMSZ	$\# Z > 2$
1	A	1.06	8/1122 (0.7%)	1.94	19/1512 (1.3%)
1	B	1.06	8/1122 (0.7%)	1.94	19/1512 (1.3%)
1	C	1.06	8/1122 (0.7%)	1.94	19/1512 (1.3%)
1	D	1.06	7/1122 (0.6%)	1.94	19/1512 (1.3%)
1	E	1.06	8/1122 (0.7%)	1.94	19/1512 (1.3%)
1	F	1.06	8/1122 (0.7%)	1.94	19/1512 (1.3%)
1	G	1.06	8/1122 (0.7%)	1.94	19/1512 (1.3%)
1	H	1.06	8/1122 (0.7%)	1.94	19/1512 (1.3%)
1	I	1.06	8/1122 (0.7%)	1.94	19/1512 (1.3%)
1	J	1.06	7/1122 (0.6%)	1.94	19/1512 (1.3%)
1	K	1.05	8/1122 (0.7%)	1.94	19/1512 (1.3%)
1	L	1.06	8/1122 (0.7%)	1.94	19/1512 (1.3%)
1	M	1.06	8/1122 (0.7%)	1.93	19/1512 (1.3%)
1	N	1.06	7/1122 (0.6%)	1.94	19/1512 (1.3%)
1	O	1.06	7/1122 (0.6%)	1.94	19/1512 (1.3%)
All	All	1.06	116/16830 (0.7%)	1.94	285/22680 (1.3%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	4
1	B	0	4
1	C	0	4
1	D	0	4
1	E	0	4
1	F	0	4
1	G	0	4
1	H	0	4
1	I	0	4
1	J	0	4

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Mol	Chain	#Chirality outliers	#Planarity outliers
1	K	0	4
1	L	0	4
1	M	0	4
1	N	0	4
1	O	0	4
All	All	0	60

All (116) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	O	136	TYR	CD2-CE2	-14.13	1.18	1.39
1	E	136	TYR	CD2-CE2	-14.11	1.18	1.39
1	L	136	TYR	CD2-CE2	-14.08	1.18	1.39
1	C	136	TYR	CD2-CE2	-14.07	1.18	1.39
1	N	136	TYR	CD2-CE2	-14.07	1.18	1.39
1	F	136	TYR	CD2-CE2	-14.06	1.18	1.39
1	J	136	TYR	CD2-CE2	-14.04	1.18	1.39
1	K	136	TYR	CD2-CE2	-14.04	1.18	1.39
1	D	136	TYR	CD2-CE2	-14.03	1.18	1.39
1	B	136	TYR	CD2-CE2	-14.02	1.18	1.39
1	I	136	TYR	CD2-CE2	-14.01	1.18	1.39
1	M	136	TYR	CD2-CE2	-14.01	1.18	1.39
1	A	136	TYR	CD2-CE2	-14.00	1.18	1.39
1	G	136	TYR	CD2-CE2	-14.00	1.18	1.39
1	H	136	TYR	CD2-CE2	-14.00	1.18	1.39
1	G	93	TYR	CE1-CZ	10.77	1.52	1.38
1	B	93	TYR	CE1-CZ	10.73	1.52	1.38
1	O	93	TYR	CE1-CZ	10.73	1.52	1.38
1	D	93	TYR	CE1-CZ	10.71	1.52	1.38
1	J	93	TYR	CE1-CZ	10.69	1.52	1.38
1	L	93	TYR	CE1-CZ	10.68	1.52	1.38
1	C	93	TYR	CE1-CZ	10.66	1.52	1.38
1	A	93	TYR	CE1-CZ	10.66	1.52	1.38
1	F	93	TYR	CE1-CZ	10.64	1.52	1.38
1	K	93	TYR	CE1-CZ	10.64	1.52	1.38
1	N	93	TYR	CE1-CZ	10.63	1.52	1.38
1	I	93	TYR	CE1-CZ	10.63	1.52	1.38
1	E	93	TYR	CE1-CZ	10.61	1.52	1.38
1	M	93	TYR	CE1-CZ	10.61	1.52	1.38
1	H	93	TYR	CE1-CZ	10.59	1.52	1.38
1	A	65	ARG	C-O	-9.59	1.05	1.23
1	N	65	ARG	C-O	-9.56	1.05	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	65	ARG	C-O	-9.56	1.05	1.23
1	L	65	ARG	C-O	-9.55	1.05	1.23
1	K	65	ARG	C-O	-9.55	1.05	1.23
1	F	65	ARG	C-O	-9.55	1.05	1.23
1	J	65	ARG	C-O	-9.55	1.05	1.23
1	M	65	ARG	C-O	-9.54	1.05	1.23
1	O	65	ARG	C-O	-9.54	1.05	1.23
1	C	65	ARG	C-O	-9.53	1.05	1.23
1	D	65	ARG	C-O	-9.52	1.05	1.23
1	H	65	ARG	C-O	-9.52	1.05	1.23
1	B	65	ARG	C-O	-9.49	1.05	1.23
1	G	65	ARG	C-O	-9.48	1.05	1.23
1	I	65	ARG	C-O	-9.48	1.05	1.23
1	B	93	TYR	CD1-CE1	-9.36	1.25	1.39
1	N	93	TYR	CD1-CE1	-9.35	1.25	1.39
1	D	93	TYR	CD1-CE1	-9.34	1.25	1.39
1	C	93	TYR	CD1-CE1	-9.31	1.25	1.39
1	O	93	TYR	CD1-CE1	-9.31	1.25	1.39
1	L	93	TYR	CD1-CE1	-9.29	1.25	1.39
1	A	93	TYR	CD1-CE1	-9.29	1.25	1.39
1	I	93	TYR	CD1-CE1	-9.29	1.25	1.39
1	K	93	TYR	CD1-CE1	-9.28	1.25	1.39
1	J	93	TYR	CD1-CE1	-9.28	1.25	1.39
1	M	93	TYR	CD1-CE1	-9.28	1.25	1.39
1	F	93	TYR	CD1-CE1	-9.28	1.25	1.39
1	E	93	TYR	CD1-CE1	-9.27	1.25	1.39
1	H	93	TYR	CD1-CE1	-9.26	1.25	1.39
1	G	93	TYR	CD1-CE1	-9.26	1.25	1.39
1	O	136	TYR	CG-CD2	8.18	1.49	1.39
1	H	136	TYR	CG-CD2	8.14	1.49	1.39
1	J	136	TYR	CG-CD2	8.14	1.49	1.39
1	C	136	TYR	CG-CD2	8.10	1.49	1.39
1	N	136	TYR	CG-CD2	8.09	1.49	1.39
1	F	136	TYR	CG-CD2	8.09	1.49	1.39
1	M	136	TYR	CG-CD2	8.09	1.49	1.39
1	E	136	TYR	CG-CD2	8.08	1.49	1.39
1	G	136	TYR	CG-CD2	8.08	1.49	1.39
1	L	136	TYR	CG-CD2	8.04	1.49	1.39
1	D	136	TYR	CG-CD2	8.03	1.49	1.39
1	K	136	TYR	CG-CD2	8.03	1.49	1.39
1	B	136	TYR	CG-CD2	8.02	1.49	1.39
1	I	136	TYR	CG-CD2	7.99	1.49	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	136	TYR	CG-CD2	7.96	1.49	1.39
1	L	136	TYR	CZ-OH	-7.31	1.25	1.37
1	F	136	TYR	CZ-OH	-7.31	1.25	1.37
1	O	136	TYR	CZ-OH	-7.28	1.25	1.37
1	H	136	TYR	CZ-OH	-7.27	1.25	1.37
1	I	136	TYR	CZ-OH	-7.25	1.25	1.37
1	J	136	TYR	CZ-OH	-7.25	1.25	1.37
1	A	136	TYR	CZ-OH	-7.25	1.25	1.37
1	C	136	TYR	CZ-OH	-7.25	1.25	1.37
1	E	136	TYR	CZ-OH	-7.25	1.25	1.37
1	G	136	TYR	CZ-OH	-7.24	1.25	1.37
1	D	136	TYR	CZ-OH	-7.24	1.25	1.37
1	N	136	TYR	CZ-OH	-7.24	1.25	1.37
1	B	136	TYR	CZ-OH	-7.20	1.25	1.37
1	K	136	TYR	CZ-OH	-7.17	1.25	1.37
1	M	136	TYR	CZ-OH	-7.17	1.25	1.37
1	N	93	TYR	CG-CD1	6.67	1.47	1.39
1	O	93	TYR	CG-CD1	6.63	1.47	1.39
1	F	93	TYR	CG-CD1	6.62	1.47	1.39
1	I	93	TYR	CG-CD1	6.60	1.47	1.39
1	K	93	TYR	CG-CD1	6.60	1.47	1.39
1	D	93	TYR	CG-CD1	6.59	1.47	1.39
1	G	93	TYR	CG-CD1	6.57	1.47	1.39
1	C	93	TYR	CG-CD1	6.56	1.47	1.39
1	A	93	TYR	CG-CD1	6.56	1.47	1.39
1	M	93	TYR	CG-CD1	6.55	1.47	1.39
1	B	93	TYR	CG-CD1	6.54	1.47	1.39
1	E	93	TYR	CG-CD1	6.51	1.47	1.39
1	J	93	TYR	CG-CD1	6.50	1.47	1.39
1	L	93	TYR	CG-CD1	6.48	1.47	1.39
1	H	93	TYR	CG-CD1	6.40	1.47	1.39
1	A	136	TYR	CD1-CE1	-5.08	1.31	1.39
1	E	136	TYR	CD1-CE1	-5.08	1.31	1.39
1	M	136	TYR	CD1-CE1	-5.07	1.31	1.39
1	L	136	TYR	CD1-CE1	-5.07	1.31	1.39
1	H	136	TYR	CD1-CE1	-5.05	1.31	1.39
1	F	136	TYR	CD1-CE1	-5.04	1.31	1.39
1	B	136	TYR	CD1-CE1	-5.04	1.31	1.39
1	K	136	TYR	CD1-CE1	-5.04	1.31	1.39
1	C	136	TYR	CD1-CE1	-5.03	1.31	1.39
1	G	136	TYR	CD1-CE1	-5.03	1.31	1.39
1	I	136	TYR	CD1-CE1	-5.03	1.31	1.39

All (285) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	136	TYR	CB-CG-CD2	28.96	138.38	121.00
1	A	136	TYR	CB-CG-CD2	28.88	138.33	121.00
1	G	136	TYR	CB-CG-CD2	28.88	138.33	121.00
1	I	136	TYR	CB-CG-CD2	28.84	138.31	121.00
1	D	136	TYR	CB-CG-CD2	28.83	138.30	121.00
1	F	136	TYR	CB-CG-CD2	28.81	138.28	121.00
1	C	136	TYR	CB-CG-CD2	28.80	138.28	121.00
1	K	136	TYR	CB-CG-CD2	28.79	138.27	121.00
1	M	136	TYR	CB-CG-CD2	28.79	138.27	121.00
1	O	136	TYR	CB-CG-CD2	28.78	138.27	121.00
1	L	136	TYR	CB-CG-CD2	28.77	138.26	121.00
1	H	136	TYR	CB-CG-CD2	28.77	138.26	121.00
1	B	136	TYR	CB-CG-CD2	28.75	138.25	121.00
1	N	136	TYR	CB-CG-CD2	28.74	138.25	121.00
1	J	136	TYR	CB-CG-CD2	28.72	138.23	121.00
1	F	155	TYR	CB-CG-CD1	28.49	138.09	121.00
1	D	155	TYR	CB-CG-CD1	28.40	138.04	121.00
1	I	155	TYR	CB-CG-CD1	28.39	138.04	121.00
1	G	155	TYR	CB-CG-CD1	28.38	138.03	121.00
1	A	155	TYR	CB-CG-CD1	28.36	138.01	121.00
1	N	155	TYR	CB-CG-CD1	28.34	138.01	121.00
1	E	155	TYR	CB-CG-CD1	28.32	137.99	121.00
1	O	155	TYR	CB-CG-CD1	28.31	137.99	121.00
1	L	155	TYR	CB-CG-CD1	28.30	137.98	121.00
1	K	155	TYR	CB-CG-CD1	28.28	137.97	121.00
1	C	155	TYR	CB-CG-CD1	28.26	137.96	121.00
1	J	155	TYR	CB-CG-CD1	28.26	137.96	121.00
1	H	155	TYR	CB-CG-CD1	28.23	137.94	121.00
1	B	155	TYR	CB-CG-CD1	28.23	137.94	121.00
1	M	155	TYR	CB-CG-CD1	28.19	137.91	121.00
1	G	155	TYR	CG-CD1-CE1	18.27	135.91	121.30
1	I	155	TYR	CG-CD1-CE1	18.22	135.88	121.30
1	D	155	TYR	CG-CD1-CE1	18.21	135.87	121.30
1	O	155	TYR	CG-CD1-CE1	18.19	135.85	121.30
1	C	155	TYR	CG-CD1-CE1	18.19	135.85	121.30
1	F	155	TYR	CG-CD1-CE1	18.18	135.85	121.30
1	E	155	TYR	CG-CD1-CE1	18.18	135.84	121.30
1	A	155	TYR	CG-CD1-CE1	18.15	135.82	121.30
1	H	155	TYR	CG-CD1-CE1	18.15	135.82	121.30
1	L	155	TYR	CG-CD1-CE1	18.13	135.81	121.30
1	K	155	TYR	CG-CD1-CE1	18.13	135.81	121.30
1	M	155	TYR	CG-CD1-CE1	18.10	135.78	121.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	155	TYR	CG-CD1-CE1	18.09	135.77	121.30
1	J	155	TYR	CG-CD1-CE1	18.08	135.77	121.30
1	B	155	TYR	CG-CD1-CE1	18.08	135.76	121.30
1	D	155	TYR	CB-CG-CD2	-17.51	110.50	121.00
1	N	155	TYR	CB-CG-CD2	-17.48	110.51	121.00
1	G	155	TYR	CB-CG-CD2	-17.46	110.52	121.00
1	J	155	TYR	CB-CG-CD2	-17.45	110.53	121.00
1	F	155	TYR	CB-CG-CD2	-17.43	110.54	121.00
1	A	155	TYR	CB-CG-CD2	-17.42	110.55	121.00
1	B	155	TYR	CB-CG-CD2	-17.41	110.55	121.00
1	L	155	TYR	CB-CG-CD2	-17.36	110.58	121.00
1	O	155	TYR	CB-CG-CD2	-17.34	110.60	121.00
1	I	155	TYR	CB-CG-CD2	-17.32	110.61	121.00
1	K	155	TYR	CB-CG-CD2	-17.30	110.62	121.00
1	E	155	TYR	CB-CG-CD2	-17.29	110.62	121.00
1	C	155	TYR	CB-CG-CD2	-17.29	110.63	121.00
1	M	155	TYR	CB-CG-CD2	-17.27	110.64	121.00
1	H	155	TYR	CB-CG-CD2	-17.20	110.68	121.00
1	B	93	TYR	CB-CG-CD1	14.75	129.85	121.00
1	H	93	TYR	CB-CG-CD1	14.74	129.85	121.00
1	K	93	TYR	CB-CG-CD1	14.74	129.85	121.00
1	N	93	TYR	CB-CG-CD1	14.65	129.79	121.00
1	L	93	TYR	CB-CG-CD1	14.64	129.79	121.00
1	J	93	TYR	CB-CG-CD1	14.64	129.78	121.00
1	O	93	TYR	CB-CG-CD1	14.63	129.78	121.00
1	D	93	TYR	CB-CG-CD1	14.63	129.78	121.00
1	F	93	TYR	CB-CG-CD1	14.62	129.77	121.00
1	M	93	TYR	CB-CG-CD1	14.62	129.77	121.00
1	G	93	TYR	CB-CG-CD1	14.60	129.76	121.00
1	E	93	TYR	CB-CG-CD1	14.57	129.75	121.00
1	I	93	TYR	CB-CG-CD1	14.57	129.74	121.00
1	C	93	TYR	CB-CG-CD1	14.57	129.74	121.00
1	A	93	TYR	CB-CG-CD1	14.56	129.74	121.00
1	K	136	TYR	CD1-CG-CD2	-14.00	102.50	117.90
1	C	136	TYR	CD1-CG-CD2	-13.99	102.51	117.90
1	H	136	TYR	CD1-CG-CD2	-13.98	102.52	117.90
1	E	136	TYR	CD1-CG-CD2	-13.98	102.53	117.90
1	M	136	TYR	CD1-CG-CD2	-13.98	102.53	117.90
1	O	136	TYR	CD1-CG-CD2	-13.97	102.54	117.90
1	G	136	TYR	CD1-CG-CD2	-13.94	102.57	117.90
1	N	136	TYR	CD1-CG-CD2	-13.94	102.57	117.90
1	D	136	TYR	CD1-CG-CD2	-13.93	102.58	117.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	136	TYR	CD1-CG-CD2	-13.93	102.58	117.90
1	J	136	TYR	CD1-CG-CD2	-13.92	102.59	117.90
1	A	136	TYR	CD1-CG-CD2	-13.91	102.60	117.90
1	I	136	TYR	CD1-CG-CD2	-13.89	102.62	117.90
1	B	136	TYR	CD1-CG-CD2	-13.88	102.63	117.90
1	F	136	TYR	CD1-CG-CD2	-13.87	102.64	117.90
1	H	93	TYR	CB-CG-CD2	-12.99	113.21	121.00
1	E	93	TYR	CB-CG-CD2	-12.92	113.25	121.00
1	J	93	TYR	CB-CG-CD2	-12.91	113.25	121.00
1	B	93	TYR	CB-CG-CD2	-12.91	113.25	121.00
1	K	93	TYR	CB-CG-CD2	-12.88	113.27	121.00
1	A	93	TYR	CB-CG-CD2	-12.87	113.28	121.00
1	D	93	TYR	CB-CG-CD2	-12.86	113.28	121.00
1	C	93	TYR	CB-CG-CD2	-12.85	113.29	121.00
1	G	93	TYR	CB-CG-CD2	-12.85	113.29	121.00
1	F	93	TYR	CB-CG-CD2	-12.84	113.29	121.00
1	L	93	TYR	CB-CG-CD2	-12.82	113.31	121.00
1	N	93	TYR	CB-CG-CD2	-12.82	113.31	121.00
1	M	93	TYR	CB-CG-CD2	-12.79	113.33	121.00
1	I	93	TYR	CB-CG-CD2	-12.78	113.33	121.00
1	O	93	TYR	CB-CG-CD2	-12.78	113.33	121.00
1	E	136	TYR	CG-CD2-CE2	12.56	131.35	121.30
1	I	136	TYR	CG-CD2-CE2	12.54	131.33	121.30
1	K	136	TYR	CG-CD2-CE2	12.54	131.33	121.30
1	N	136	TYR	CG-CD2-CE2	12.50	131.30	121.30
1	L	136	TYR	CG-CD2-CE2	12.50	131.30	121.30
1	H	136	TYR	CG-CD2-CE2	12.49	131.29	121.30
1	M	136	TYR	CG-CD2-CE2	12.49	131.29	121.30
1	D	136	TYR	CG-CD2-CE2	12.48	131.29	121.30
1	C	136	TYR	CG-CD2-CE2	12.48	131.28	121.30
1	A	136	TYR	CG-CD2-CE2	12.48	131.28	121.30
1	O	136	TYR	CG-CD2-CE2	12.46	131.27	121.30
1	J	136	TYR	CG-CD2-CE2	12.43	131.24	121.30
1	G	136	TYR	CG-CD2-CE2	12.43	131.24	121.30
1	B	136	TYR	CG-CD2-CE2	12.38	131.20	121.30
1	F	136	TYR	CG-CD2-CE2	12.32	131.16	121.30
1	C	126	LEU	CB-CG-CD1	-11.18	92.00	111.00
1	D	126	LEU	CB-CG-CD1	-11.16	92.03	111.00
1	G	126	LEU	CB-CG-CD1	-11.16	92.02	111.00
1	E	126	LEU	CB-CG-CD1	-11.16	92.03	111.00
1	H	126	LEU	CB-CG-CD1	-11.14	92.06	111.00
1	F	126	LEU	CB-CG-CD1	-11.14	92.06	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	126	LEU	CB-CG-CD1	-11.14	92.06	111.00
1	B	126	LEU	CB-CG-CD1	-11.13	92.08	111.00
1	J	126	LEU	CB-CG-CD1	-11.13	92.09	111.00
1	L	126	LEU	CB-CG-CD1	-11.12	92.10	111.00
1	O	126	LEU	CB-CG-CD1	-11.12	92.10	111.00
1	A	126	LEU	CB-CG-CD1	-11.12	92.10	111.00
1	I	126	LEU	CB-CG-CD1	-11.12	92.10	111.00
1	N	126	LEU	CB-CG-CD1	-11.11	92.11	111.00
1	K	126	LEU	CB-CG-CD1	-11.09	92.15	111.00
1	C	136	TYR	CG-CD1-CE1	11.03	130.12	121.30
1	K	136	TYR	CG-CD1-CE1	11.03	130.12	121.30
1	O	136	TYR	CG-CD1-CE1	11.00	130.10	121.30
1	M	136	TYR	CG-CD1-CE1	10.99	130.09	121.30
1	G	136	TYR	CG-CD1-CE1	10.99	130.09	121.30
1	J	136	TYR	CG-CD1-CE1	10.98	130.09	121.30
1	B	136	TYR	CG-CD1-CE1	10.98	130.09	121.30
1	H	136	TYR	CG-CD1-CE1	10.98	130.08	121.30
1	L	136	TYR	CG-CD1-CE1	10.97	130.07	121.30
1	N	136	TYR	CG-CD1-CE1	10.96	130.06	121.30
1	F	136	TYR	CG-CD1-CE1	10.92	130.04	121.30
1	E	155	TYR	CD1-CE1-CZ	-10.91	109.98	119.80
1	D	136	TYR	CG-CD1-CE1	10.90	130.02	121.30
1	E	136	TYR	CG-CD1-CE1	10.89	130.01	121.30
1	A	136	TYR	CG-CD1-CE1	10.88	130.01	121.30
1	O	155	TYR	CD1-CE1-CZ	-10.87	110.02	119.80
1	A	155	TYR	CD1-CE1-CZ	-10.86	110.02	119.80
1	I	136	TYR	CG-CD1-CE1	10.86	129.99	121.30
1	L	155	TYR	CD1-CE1-CZ	-10.85	110.04	119.80
1	D	155	TYR	CD1-CE1-CZ	-10.84	110.05	119.80
1	G	155	TYR	CD1-CE1-CZ	-10.83	110.05	119.80
1	K	155	TYR	CD1-CE1-CZ	-10.83	110.05	119.80
1	C	155	TYR	CD1-CE1-CZ	-10.82	110.06	119.80
1	H	155	TYR	CD1-CE1-CZ	-10.80	110.08	119.80
1	B	155	TYR	CD1-CE1-CZ	-10.80	110.08	119.80
1	F	155	TYR	CD1-CE1-CZ	-10.79	110.09	119.80
1	N	155	TYR	CD1-CE1-CZ	-10.77	110.10	119.80
1	M	155	TYR	CD1-CE1-CZ	-10.76	110.11	119.80
1	I	155	TYR	CD1-CE1-CZ	-10.76	110.11	119.80
1	J	155	TYR	CD1-CE1-CZ	-10.73	110.14	119.80
1	B	155	TYR	CZ-CE2-CD2	9.21	128.09	119.80
1	C	155	TYR	CZ-CE2-CD2	9.17	128.05	119.80
1	I	155	TYR	CZ-CE2-CD2	9.16	128.05	119.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	155	TYR	CZ-CE2-CD2	9.15	128.03	119.80
1	G	155	TYR	CZ-CE2-CD2	9.14	128.03	119.80
1	K	155	TYR	CZ-CE2-CD2	9.13	128.01	119.80
1	F	155	TYR	CZ-CE2-CD2	9.12	128.01	119.80
1	D	155	TYR	CZ-CE2-CD2	9.12	128.01	119.80
1	H	155	TYR	CZ-CE2-CD2	9.12	128.01	119.80
1	N	155	TYR	CZ-CE2-CD2	9.12	128.01	119.80
1	E	155	TYR	CZ-CE2-CD2	9.11	128.00	119.80
1	A	155	TYR	CZ-CE2-CD2	9.11	128.00	119.80
1	J	155	TYR	CZ-CE2-CD2	9.11	128.00	119.80
1	L	155	TYR	CZ-CE2-CD2	9.11	128.00	119.80
1	O	155	TYR	CZ-CE2-CD2	9.11	128.00	119.80
1	G	40	ASP	CB-CG-OD1	-7.60	111.46	118.30
1	O	40	ASP	CB-CG-OD1	-7.58	111.48	118.30
1	E	40	ASP	CB-CG-OD1	-7.56	111.50	118.30
1	D	40	ASP	CB-CG-OD1	-7.55	111.50	118.30
1	I	40	ASP	CB-CG-OD1	-7.55	111.50	118.30
1	K	40	ASP	CB-CG-OD1	-7.53	111.52	118.30
1	N	40	ASP	CB-CG-OD1	-7.50	111.55	118.30
1	L	40	ASP	CB-CG-OD1	-7.49	111.56	118.30
1	F	40	ASP	CB-CG-OD1	-7.47	111.57	118.30
1	A	40	ASP	CB-CG-OD1	-7.47	111.58	118.30
1	C	40	ASP	CB-CG-OD1	-7.46	111.58	118.30
1	B	40	ASP	CB-CG-OD1	-7.45	111.59	118.30
1	H	40	ASP	CB-CG-OD1	-7.44	111.60	118.30
1	J	40	ASP	CB-CG-OD1	-7.42	111.62	118.30
1	M	40	ASP	CB-CG-OD1	-7.41	111.63	118.30
1	F	155	TYR	CD1-CG-CD2	-6.47	110.78	117.90
1	I	155	TYR	CD1-CG-CD2	-6.46	110.79	117.90
1	H	155	TYR	CD1-CG-CD2	-6.45	110.80	117.90
1	E	155	TYR	CD1-CG-CD2	-6.45	110.81	117.90
1	C	155	TYR	CD1-CG-CD2	-6.44	110.82	117.90
1	K	155	TYR	CD1-CG-CD2	-6.42	110.83	117.90
1	O	155	TYR	CD1-CG-CD2	-6.42	110.83	117.90
1	G	155	TYR	CD1-CG-CD2	-6.41	110.85	117.90
1	M	155	TYR	CD1-CG-CD2	-6.40	110.86	117.90
1	A	155	TYR	CD1-CG-CD2	-6.40	110.86	117.90
1	L	155	TYR	CD1-CG-CD2	-6.39	110.87	117.90
1	D	155	TYR	CD1-CG-CD2	-6.39	110.87	117.90
1	B	155	TYR	CD1-CG-CD2	-6.35	110.92	117.90
1	N	155	TYR	CD1-CG-CD2	-6.34	110.92	117.90
1	J	155	TYR	CD1-CG-CD2	-6.32	110.94	117.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	155	TYR	CG-CD2-CE2	-6.02	116.48	121.30
1	N	155	TYR	CG-CD2-CE2	-6.00	116.50	121.30
1	D	155	TYR	CG-CD2-CE2	-6.00	116.50	121.30
1	J	155	TYR	CG-CD2-CE2	-6.00	116.50	121.30
1	B	155	TYR	CG-CD2-CE2	-5.99	116.51	121.30
1	I	155	TYR	CG-CD2-CE2	-5.96	116.53	121.30
1	A	155	TYR	CG-CD2-CE2	-5.94	116.55	121.30
1	C	155	TYR	CG-CD2-CE2	-5.94	116.55	121.30
1	F	155	TYR	CG-CD2-CE2	-5.93	116.56	121.30
1	H	155	TYR	CG-CD2-CE2	-5.93	116.56	121.30
1	L	155	TYR	CG-CD2-CE2	-5.93	116.56	121.30
1	M	155	TYR	CG-CD2-CE2	-5.92	116.56	121.30
1	K	155	TYR	CG-CD2-CE2	-5.92	116.56	121.30
1	O	155	TYR	CG-CD2-CE2	-5.89	116.58	121.30
1	E	155	TYR	CG-CD2-CE2	-5.86	116.61	121.30
1	D	149	VAL	CG1-CB-CG2	-5.79	101.64	110.90
1	B	149	VAL	CG1-CB-CG2	-5.76	101.68	110.90
1	J	149	VAL	CG1-CB-CG2	-5.75	101.71	110.90
1	M	149	VAL	CG1-CB-CG2	-5.74	101.71	110.90
1	C	149	VAL	CG1-CB-CG2	-5.74	101.72	110.90
1	H	149	VAL	CG1-CB-CG2	-5.74	101.72	110.90
1	K	149	VAL	CG1-CB-CG2	-5.72	101.75	110.90
1	I	149	VAL	CG1-CB-CG2	-5.72	101.75	110.90
1	O	149	VAL	CG1-CB-CG2	-5.71	101.77	110.90
1	G	149	VAL	CG1-CB-CG2	-5.70	101.78	110.90
1	E	149	VAL	CG1-CB-CG2	-5.69	101.80	110.90
1	L	149	VAL	CG1-CB-CG2	-5.69	101.80	110.90
1	N	149	VAL	CG1-CB-CG2	-5.68	101.81	110.90
1	F	149	VAL	CG1-CB-CG2	-5.66	101.84	110.90
1	A	149	VAL	CG1-CB-CG2	-5.63	101.89	110.90
1	F	45	PHE	CD1-CE1-CZ	5.63	126.85	120.10
1	L	45	PHE	CD1-CE1-CZ	5.61	126.83	120.10
1	G	45	PHE	CD1-CE1-CZ	5.60	126.82	120.10
1	A	45	PHE	CD1-CE1-CZ	5.57	126.78	120.10
1	C	45	PHE	CD1-CE1-CZ	5.57	126.78	120.10
1	O	45	PHE	CD1-CE1-CZ	5.56	126.78	120.10
1	K	45	PHE	CD1-CE1-CZ	5.55	126.77	120.10
1	M	45	PHE	CD1-CE1-CZ	5.55	126.76	120.10
1	D	45	PHE	CD1-CE1-CZ	5.54	126.74	120.10
1	J	45	PHE	CD1-CE1-CZ	5.53	126.74	120.10
1	I	45	PHE	CD1-CE1-CZ	5.51	126.71	120.10
1	N	45	PHE	CD1-CE1-CZ	5.51	126.71	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	45	PHE	CD1-CE1-CZ	5.50	126.70	120.10
1	B	45	PHE	CD1-CE1-CZ	5.48	126.67	120.10
1	H	45	PHE	CD1-CE1-CZ	5.47	126.67	120.10
1	J	135	ASN	CB-CA-C	5.46	121.31	110.40
1	K	135	ASN	CB-CA-C	5.44	121.28	110.40
1	N	135	ASN	CB-CA-C	5.44	121.28	110.40
1	F	135	ASN	CB-CA-C	5.43	121.27	110.40
1	H	135	ASN	CB-CA-C	5.43	121.26	110.40
1	L	135	ASN	CB-CA-C	5.43	121.26	110.40
1	M	135	ASN	CB-CA-C	5.41	121.23	110.40
1	D	135	ASN	CB-CA-C	5.41	121.22	110.40
1	C	135	ASN	CB-CA-C	5.41	121.21	110.40
1	A	135	ASN	CB-CA-C	5.40	121.20	110.40
1	B	135	ASN	CB-CA-C	5.39	121.19	110.40
1	G	135	ASN	CB-CA-C	5.38	121.17	110.40
1	I	135	ASN	CB-CA-C	5.38	121.16	110.40
1	O	135	ASN	CB-CA-C	5.37	121.14	110.40
1	E	135	ASN	CB-CA-C	5.37	121.13	110.40
1	N	42	LEU	CD1-CG-CD2	5.09	125.76	110.50
1	J	42	LEU	CD1-CG-CD2	5.08	125.74	110.50
1	M	42	LEU	CD1-CG-CD2	5.08	125.73	110.50
1	F	42	LEU	CD1-CG-CD2	5.07	125.71	110.50
1	C	42	LEU	CD1-CG-CD2	5.07	125.71	110.50
1	E	42	LEU	CD1-CG-CD2	5.07	125.69	110.50
1	A	42	LEU	CD1-CG-CD2	5.06	125.68	110.50
1	L	42	LEU	CD1-CG-CD2	5.06	125.67	110.50
1	G	42	LEU	CD1-CG-CD2	5.05	125.65	110.50
1	O	42	LEU	CD1-CG-CD2	5.05	125.65	110.50
1	D	42	LEU	CD1-CG-CD2	5.05	125.64	110.50
1	K	42	LEU	CD1-CG-CD2	5.05	125.64	110.50
1	H	42	LEU	CD1-CG-CD2	5.04	125.63	110.50
1	I	42	LEU	CD1-CG-CD2	5.04	125.63	110.50
1	B	42	LEU	CD1-CG-CD2	5.04	125.62	110.50

There are no chirality outliers.

All (60) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	133	ASN	Peptide
1	A	136	TYR	Sidechain
1	A	64	ALA	Peptide
1	A	93	TYR	Sidechain

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Mol	Chain	Res	Type	Group
1	B	133	ASN	Peptide
1	B	136	TYR	Sidechain
1	B	64	ALA	Peptide
1	B	93	TYR	Sidechain
1	C	133	ASN	Peptide
1	C	136	TYR	Sidechain
1	C	64	ALA	Peptide
1	C	93	TYR	Sidechain
1	D	133	ASN	Peptide
1	D	136	TYR	Sidechain
1	D	64	ALA	Peptide
1	D	93	TYR	Sidechain
1	E	133	ASN	Peptide
1	E	136	TYR	Sidechain
1	E	64	ALA	Peptide
1	E	93	TYR	Sidechain
1	F	133	ASN	Peptide
1	F	136	TYR	Sidechain
1	F	64	ALA	Peptide
1	F	93	TYR	Sidechain
1	G	133	ASN	Peptide
1	G	136	TYR	Sidechain
1	G	64	ALA	Peptide
1	G	93	TYR	Sidechain
1	H	133	ASN	Peptide
1	H	136	TYR	Sidechain
1	H	64	ALA	Peptide
1	H	93	TYR	Sidechain
1	I	133	ASN	Peptide
1	I	136	TYR	Sidechain
1	I	64	ALA	Peptide
1	I	93	TYR	Sidechain
1	J	133	ASN	Peptide
1	J	136	TYR	Sidechain
1	J	64	ALA	Peptide
1	J	93	TYR	Sidechain
1	K	133	ASN	Peptide
1	K	136	TYR	Sidechain
1	K	64	ALA	Peptide
1	K	93	TYR	Sidechain
1	L	133	ASN	Peptide
1	L	136	TYR	Sidechain

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Mol	Chain	Res	Type	Group
1	L	64	ALA	Peptide
1	L	93	TYR	Sidechain
1	M	133	ASN	Peptide
1	M	136	TYR	Sidechain
1	M	64	ALA	Peptide
1	M	93	TYR	Sidechain
1	N	133	ASN	Peptide
1	N	136	TYR	Sidechain
1	N	64	ALA	Peptide
1	N	93	TYR	Sidechain
1	O	133	ASN	Peptide
1	O	136	TYR	Sidechain
1	O	64	ALA	Peptide
1	O	93	TYR	Sidechain

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	1099	0	1094	278	0
1	B	1099	0	1094	285	0
1	C	1099	0	1094	277	0
1	D	1099	0	1094	280	0
1	E	1099	0	1094	284	0
1	F	1099	0	1094	277	0
1	G	1099	0	1094	278	0
1	H	1099	0	1094	277	0
1	I	1099	0	1094	278	0
1	J	1099	0	1094	283	0
1	K	1099	0	1094	274	0
1	L	1099	0	1094	278	0
1	M	1099	0	1094	284	0
1	N	1099	0	1094	279	0
1	O	1099	0	1094	280	0
All	All	16485	0	16410	3269	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 99.

All (3269) 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:F:97:GLN:HG3	1:H:105:SER:CB	1.23	1.66
1:M:143:ARG:HH22	1:N:166:MET:CG	1.06	1.65
1:I:166:MET:CG	1:O:143:ARG:HH22	1.08	1.63
1:B:166:MET:CG	1:I:143:ARG:HH22	1.06	1.63
1:A:97:GLN:HG3	1:D:105:SER:CB	1.24	1.63
1:L:166:MET:CG	1:N:143:ARG:HH22	1.05	1.62
1:G:105:SER:CA	1:K:97:GLN:HG3	1.24	1.62
1:I:97:GLN:HG3	1:O:105:SER:CA	1.24	1.61
1:C:105:SER:CB	1:E:97:GLN:HG3	1.26	1.61
1:I:97:GLN:CG	1:O:105:SER:HB2	1.14	1.61
1:A:105:SER:CB	1:J:97:GLN:HG3	1.24	1.60
1:F:166:MET:CG	1:H:143:ARG:HH22	1.08	1.60
1:G:97:GLN:CG	1:J:105:SER:HB2	1.16	1.60
1:H:166:MET:CG	1:L:143:ARG:HH22	1.09	1.60
1:G:143:ARG:HH22	1:K:166:MET:CG	1.10	1.60
1:B:97:GLN:HG3	1:I:105:SER:CA	1.24	1.60
1:K:143:ARG:HH22	1:O:166:MET:CG	1.07	1.59
1:B:143:ARG:HH22	1:M:166:MET:CG	1.09	1.59
1:I:97:GLN:HG3	1:O:105:SER:CB	1.25	1.59
1:D:97:GLN:HG3	1:E:105:SER:CB	1.22	1.59
1:C:143:ARG:HH22	1:E:166:MET:CG	1.07	1.59
1:C:166:MET:CG	1:F:143:ARG:HH22	1.05	1.59
1:B:97:GLN:CG	1:I:105:SER:HB2	1.17	1.59
1:A:166:MET:CG	1:D:143:ARG:HH22	1.05	1.59
1:C:97:GLN:HG3	1:F:105:SER:CB	1.26	1.59
1:A:143:ARG:HH22	1:J:166:MET:CG	1.08	1.59
1:G:97:GLN:HG3	1:J:105:SER:CB	1.26	1.58
1:H:97:GLN:HG3	1:L:105:SER:CB	1.25	1.58
1:C:97:GLN:CG	1:F:105:SER:HB2	1.15	1.58
1:L:97:GLN:HG3	1:N:105:SER:CB	1.24	1.58
1:L:97:GLN:CG	1:N:105:SER:HB2	1.14	1.58
1:K:105:SER:HB2	1:O:97:GLN:CG	1.14	1.58
1:G:105:SER:CB	1:K:97:GLN:HG3	1.23	1.57
1:G:166:MET:CG	1:J:143:ARG:HH22	1.06	1.57
1:B:97:GLN:HG3	1:I:105:SER:CB	1.27	1.57
1:F:97:GLN:CG	1:H:105:SER:HB2	1.13	1.57
1:L:97:GLN:HG3	1:N:105:SER:CA	1.23	1.57
1:M:105:SER:CB	1:N:97:GLN:HG3	1.26	1.56
1:C:105:SER:HB2	1:E:97:GLN:CG	1.16	1.56
1:A:105:SER:HB2	1:J:97:GLN:CG	1.14	1.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:97:GLN:CG	1:L:105:SER:HB2	1.14	1.55
1:A:97:GLN:CG	1:D:105:SER:HB2	1.13	1.55
1:B:105:SER:CB	1:M:97:GLN:HG3	1.20	1.55
1:D:97:GLN:CG	1:E:105:SER:HB2	1.11	1.54
1:M:105:SER:HB2	1:N:97:GLN:CG	1.15	1.54
1:D:166:MET:CG	1:E:143:ARG:HH22	1.09	1.54
1:B:105:SER:CA	1:M:97:GLN:HG3	1.23	1.54
1:K:105:SER:CB	1:O:97:GLN:HG3	1.25	1.54
1:B:105:SER:HB2	1:M:97:GLN:CG	1.10	1.53
1:G:105:SER:HB2	1:K:97:GLN:CG	1.12	1.53
1:M:105:SER:CA	1:N:97:GLN:HG3	1.22	1.53
1:F:97:GLN:HG3	1:H:105:SER:CA	1.23	1.49
1:H:97:GLN:HG3	1:L:105:SER:CA	1.24	1.49
1:C:105:SER:CA	1:E:97:GLN:HG3	1.25	1.49
1:B:143:ARG:NH2	1:M:166:MET:HG2	1.20	1.49
1:C:97:GLN:HG3	1:F:105:SER:CA	1.23	1.48
1:A:97:GLN:HG3	1:D:105:SER:CA	1.20	1.48
1:L:166:MET:HG2	1:N:143:ARG:NH2	1.18	1.47
1:G:166:MET:HG2	1:J:143:ARG:NH2	1.16	1.47
1:D:97:GLN:HG3	1:E:105:SER:CA	1.24	1.46
1:A:143:ARG:NH2	1:J:166:MET:HG2	1.17	1.46
1:M:143:ARG:NH2	1:N:166:MET:HG2	1.13	1.46
1:A:105:SER:CA	1:J:97:GLN:HG3	1.24	1.45
1:G:97:GLN:HG3	1:J:105:SER:CA	1.25	1.45
1:K:143:ARG:NH2	1:O:166:MET:HG2	1.16	1.44
1:G:143:ARG:NH2	1:K:166:MET:HG2	1.18	1.43
1:B:166:MET:HG2	1:I:143:ARG:NH2	1.15	1.43
1:C:166:MET:HG2	1:F:143:ARG:NH2	1.14	1.42
1:D:166:MET:HG2	1:E:143:ARG:NH2	1.19	1.42
1:I:166:MET:HG2	1:O:143:ARG:NH2	1.17	1.42
1:C:143:ARG:NH2	1:E:166:MET:HG2	1.16	1.42
1:A:166:MET:HG2	1:D:143:ARG:NH2	1.15	1.42
1:F:166:MET:HG2	1:H:143:ARG:NH2	1.17	1.41
1:B:97:GLN:CG	1:I:105:SER:CB	1.89	1.40
1:H:166:MET:HG2	1:L:143:ARG:NH2	1.14	1.40
1:K:105:SER:CA	1:O:97:GLN:HG3	1.23	1.38
1:G:105:SER:CB	1:K:97:GLN:CG	1.86	1.37
1:M:88:LEU:HD23	1:N:54:LYS:NZ	1.38	1.37
1:L:97:GLN:CG	1:N:105:SER:CB	1.87	1.36
1:F:54:LYS:NZ	1:H:88:LEU:HD23	1.39	1.36
1:A:97:GLN:CG	1:D:105:SER:CB	1.85	1.35

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:54:LYS:NZ	1:F:88:LEU:HD23	1.40	1.35
1:I:97:GLN:CG	1:O:105:SER:CB	1.88	1.35
1:A:54:LYS:NZ	1:D:88:LEU:HD23	1.37	1.35
1:G:88:LEU:HD23	1:K:54:LYS:NZ	1.39	1.35
1:H:54:LYS:NZ	1:L:88:LEU:HD23	1.41	1.34
1:A:54:LYS:NZ	1:D:88:LEU:CD2	1.89	1.34
1:B:105:SER:CB	1:M:97:GLN:CG	1.84	1.33
1:F:54:LYS:NZ	1:H:88:LEU:CD2	1.92	1.33
1:B:88:LEU:HD23	1:M:54:LYS:NZ	1.40	1.33
1:B:88:LEU:HD23	1:M:54:LYS:CE	1.59	1.32
1:K:88:LEU:HD23	1:O:54:LYS:NZ	1.41	1.32
1:A:88:LEU:HD23	1:J:54:LYS:NZ	1.41	1.32
1:A:54:LYS:CE	1:D:88:LEU:HD23	1.59	1.32
1:M:88:LEU:CD2	1:N:54:LYS:NZ	1.91	1.32
1:A:88:LEU:CD2	1:J:54:LYS:NZ	1.93	1.32
1:L:54:LYS:NZ	1:N:88:LEU:HD23	1.43	1.32
1:G:88:LEU:CD2	1:K:54:LYS:NZ	1.93	1.32
1:K:88:LEU:HD23	1:O:54:LYS:CE	1.60	1.32
1:D:54:LYS:NZ	1:E:88:LEU:HD23	1.42	1.32
1:B:54:LYS:NZ	1:I:88:LEU:HD23	1.42	1.32
1:C:97:GLN:CG	1:F:105:SER:CB	1.88	1.32
1:G:54:LYS:CE	1:J:88:LEU:HD23	1.60	1.32
1:I:54:LYS:CE	1:O:88:LEU:HD23	1.60	1.32
1:D:54:LYS:CE	1:E:88:LEU:HD23	1.59	1.31
1:D:54:LYS:NZ	1:E:88:LEU:CD2	1.93	1.31
1:C:88:LEU:HD23	1:E:54:LYS:NZ	1.44	1.31
1:C:88:LEU:HD23	1:E:54:LYS:CE	1.61	1.31
1:C:54:LYS:NZ	1:F:88:LEU:CD2	1.92	1.31
1:A:88:LEU:HD23	1:J:54:LYS:CE	1.61	1.31
1:K:88:LEU:CD2	1:O:54:LYS:NZ	1.92	1.31
1:C:54:LYS:CE	1:F:88:LEU:HD23	1.61	1.31
1:B:88:LEU:CD2	1:M:54:LYS:NZ	1.92	1.31
1:G:54:LYS:NZ	1:J:66:LYS:HG3	1.45	1.31
1:L:54:LYS:NZ	1:N:88:LEU:CD2	1.93	1.30
1:C:88:LEU:CD2	1:E:54:LYS:NZ	1.95	1.30
1:D:97:GLN:CG	1:E:105:SER:CB	1.85	1.30
1:L:54:LYS:CE	1:N:88:LEU:HD23	1.59	1.30
1:I:54:LYS:NZ	1:O:88:LEU:HD23	1.43	1.30
1:H:54:LYS:CE	1:L:88:LEU:HD23	1.62	1.30
1:B:54:LYS:NZ	1:I:88:LEU:CD2	1.94	1.30
1:I:54:LYS:NZ	1:O:88:LEU:CD2	1.94	1.30

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:105:SER:CB	1:J:97:GLN:CG	1.87	1.29
1:G:97:GLN:CG	1:J:105:SER:CB	1.89	1.29
1:C:66:LYS:HG3	1:E:54:LYS:NZ	1.47	1.29
1:M:88:LEU:HD23	1:N:54:LYS:CE	1.61	1.29
1:G:88:LEU:HD23	1:K:54:LYS:CE	1.61	1.29
1:G:54:LYS:NZ	1:J:88:LEU:CD2	1.95	1.29
1:F:54:LYS:CE	1:H:88:LEU:HD23	1.60	1.29
1:H:54:LYS:NZ	1:L:88:LEU:CD2	1.94	1.29
1:F:97:GLN:CG	1:H:105:SER:CB	1.86	1.29
1:C:105:SER:CB	1:E:97:GLN:CG	1.89	1.28
1:B:54:LYS:CE	1:I:88:LEU:HD23	1.62	1.28
1:G:54:LYS:NZ	1:J:88:LEU:HD23	1.45	1.28
1:D:54:LYS:NZ	1:E:66:LYS:HG3	1.49	1.27
1:K:105:SER:CB	1:O:97:GLN:CG	1.87	1.27
1:L:54:LYS:NZ	1:N:66:LYS:HG3	1.47	1.27
1:I:54:LYS:NZ	1:O:66:LYS:HG3	1.47	1.27
1:G:54:LYS:HZ1	1:J:88:LEU:CD2	1.46	1.26
1:A:66:LYS:HG3	1:J:54:LYS:NZ	1.51	1.26
1:B:54:LYS:NZ	1:I:66:LYS:HG3	1.49	1.25
1:C:54:LYS:NZ	1:F:66:LYS:HG3	1.51	1.25
1:K:66:LYS:HG3	1:O:54:LYS:NZ	1.50	1.24
1:B:66:LYS:HG3	1:M:54:LYS:NZ	1.50	1.24
1:H:97:GLN:CG	1:L:105:SER:CB	1.88	1.23
1:A:54:LYS:NZ	1:D:66:LYS:HG3	1.54	1.23
1:F:54:LYS:NZ	1:H:66:LYS:HG3	1.53	1.23
1:G:66:LYS:HG3	1:K:54:LYS:NZ	1.53	1.23
1:H:54:LYS:NZ	1:L:66:LYS:HG3	1.52	1.23
1:M:105:SER:CB	1:N:97:GLN:CG	1.88	1.22
1:M:66:LYS:HG3	1:N:54:LYS:NZ	1.53	1.20
1:L:166:MET:CG	1:N:143:ARG:NH2	1.84	1.19
1:B:143:ARG:NH2	1:M:166:MET:CG	1.87	1.17
1:K:143:ARG:NH2	1:O:166:MET:CG	1.84	1.15
1:G:166:MET:CG	1:J:143:ARG:NH2	1.84	1.14
1:A:97:GLN:CG	1:D:105:SER:CA	2.16	1.14
1:F:166:MET:CG	1:H:143:ARG:NH2	1.85	1.12
1:C:166:MET:CG	1:F:143:ARG:NH2	1.82	1.12
1:I:166:MET:CG	1:O:143:ARG:NH2	1.85	1.11
1:L:54:LYS:HE2	1:N:88:LEU:HD23	1.32	1.11
1:D:54:LYS:HE2	1:E:88:LEU:HD23	1.33	1.11
1:B:88:LEU:HD23	1:M:54:LYS:HE2	1.33	1.11
1:A:105:SER:CA	1:J:97:GLN:CG	2.20	1.10

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:97:GLN:CG	1:E:105:SER:CA	2.19	1.10
1:M:88:LEU:CD2	1:N:54:LYS:HZ1	1.59	1.10
1:C:105:SER:CA	1:E:97:GLN:CG	2.21	1.09
1:C:88:LEU:CD2	1:E:54:LYS:HZ1	1.56	1.09
1:I:54:LYS:HE2	1:O:88:LEU:HD23	1.33	1.08
1:C:97:GLN:CG	1:F:105:SER:CA	2.19	1.08
1:A:143:ARG:NH2	1:J:166:MET:CG	1.85	1.08
1:D:166:MET:CG	1:E:143:ARG:NH2	1.87	1.08
1:F:97:GLN:CG	1:H:105:SER:CA	2.19	1.08
1:G:97:GLN:CG	1:J:105:SER:CA	2.21	1.08
1:F:54:LYS:HZ2	1:H:66:LYS:HG3	1.07	1.08
1:A:166:MET:CG	1:D:143:ARG:NH2	1.82	1.08
1:G:54:LYS:HZ1	1:J:88:LEU:HD22	1.10	1.08
1:C:54:LYS:HE2	1:F:88:LEU:HD23	1.37	1.07
1:A:88:LEU:HD23	1:J:54:LYS:HE2	1.36	1.07
1:G:54:LYS:HZ2	1:J:66:LYS:HG3	0.95	1.07
1:G:105:SER:CA	1:K:97:GLN:CG	2.20	1.06
1:C:143:ARG:NH2	1:E:166:MET:CG	1.84	1.06
1:D:54:LYS:HZ2	1:E:66:LYS:HG3	1.07	1.06
1:C:88:LEU:HD23	1:E:54:LYS:HE2	1.34	1.06
1:K:105:SER:CA	1:O:97:GLN:CG	2.19	1.06
1:G:88:LEU:HD23	1:K:54:LYS:HE2	1.37	1.06
1:H:54:LYS:HE2	1:L:88:LEU:HD23	1.37	1.05
1:M:143:ARG:NH2	1:N:166:MET:CG	1.82	1.05
1:B:166:MET:CG	1:I:143:ARG:NH2	1.83	1.05
1:A:54:LYS:HE2	1:D:88:LEU:HD23	1.36	1.05
1:G:143:ARG:NH2	1:K:166:MET:CG	1.87	1.05
1:A:88:LEU:HA	1:J:54:LYS:HE2	1.39	1.05
1:A:54:LYS:HE2	1:D:88:LEU:HA	1.37	1.04
1:G:54:LYS:HE2	1:J:88:LEU:HA	1.37	1.04
1:H:97:GLN:CG	1:L:105:SER:CA	2.20	1.04
1:B:54:LYS:HE2	1:I:88:LEU:HA	1.36	1.04
1:M:105:SER:CA	1:N:97:GLN:CG	2.19	1.04
1:K:88:LEU:HA	1:O:54:LYS:HE2	1.38	1.04
1:M:88:LEU:HD23	1:N:54:LYS:HE2	1.38	1.04
1:K:66:LYS:HG3	1:O:54:LYS:HZ2	1.04	1.04
1:G:54:LYS:HE2	1:J:88:LEU:HD23	1.32	1.04
1:C:88:LEU:HD22	1:E:54:LYS:HZ1	1.20	1.04
1:F:54:LYS:HE2	1:H:88:LEU:HD23	1.36	1.04
1:C:54:LYS:HE2	1:F:88:LEU:HA	1.37	1.03
1:G:88:LEU:HA	1:K:54:LYS:HE2	1.40	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:88:LEU:HA	1:E:54:LYS:HE2	1.37	1.03
1:H:166:MET:CG	1:L:143:ARG:NH2	1.84	1.03
1:L:54:LYS:HE2	1:N:88:LEU:HA	1.38	1.03
1:B:54:LYS:HE2	1:I:88:LEU:HD23	1.36	1.03
1:L:97:GLN:CG	1:N:105:SER:CA	2.19	1.03
1:M:66:LYS:HG3	1:N:54:LYS:HZ2	1.06	1.03
1:I:54:LYS:HE2	1:O:88:LEU:HA	1.38	1.03
1:M:88:LEU:HA	1:N:54:LYS:HE2	1.36	1.02
1:B:97:GLN:CG	1:I:105:SER:CA	2.21	1.02
1:K:88:LEU:HD23	1:O:54:LYS:HE2	1.35	1.02
1:D:54:LYS:HE2	1:E:88:LEU:HA	1.40	1.01
1:M:88:LEU:HA	1:N:54:LYS:CE	1.90	1.01
1:I:54:LYS:HZ1	1:O:88:LEU:CD2	1.64	1.01
1:C:54:LYS:HZ3	1:F:88:LEU:CD2	1.57	1.01
1:B:88:LEU:CD2	1:M:54:LYS:HZ1	1.63	1.01
1:L:54:LYS:NZ	1:N:88:LEU:HD22	1.75	1.01
1:F:54:LYS:HE2	1:H:88:LEU:HA	1.38	1.00
1:F:54:LYS:NZ	1:H:88:LEU:HD22	1.76	1.00
1:A:54:LYS:CE	1:D:88:LEU:HA	1.91	1.00
1:H:54:LYS:HE2	1:L:88:LEU:HA	1.38	1.00
1:I:97:GLN:CG	1:O:105:SER:CA	2.20	1.00
1:C:54:LYS:CE	1:F:88:LEU:HA	1.92	1.00
1:I:54:LYS:HZ2	1:O:66:LYS:HG3	1.02	1.00
1:D:54:LYS:NZ	1:E:88:LEU:HD22	1.75	1.00
1:I:54:LYS:NZ	1:O:88:LEU:HD22	1.76	1.00
1:B:54:LYS:NZ	1:I:88:LEU:HD22	1.77	1.00
1:H:54:LYS:HZ1	1:L:88:LEU:CD2	1.69	0.99
1:M:105:SER:HA	1:N:97:GLN:HG3	1.41	0.99
1:M:88:LEU:HD22	1:N:54:LYS:NZ	1.76	0.99
1:B:88:LEU:HA	1:M:54:LYS:HE2	1.41	0.99
1:K:88:LEU:HA	1:O:54:LYS:CE	1.93	0.99
1:G:88:LEU:CD2	1:K:54:LYS:HZ1	1.68	0.99
1:B:66:LYS:HG3	1:M:54:LYS:HZ2	1.05	0.99
1:B:54:LYS:CE	1:I:88:LEU:HA	1.93	0.99
1:G:88:LEU:CD2	1:K:54:LYS:HZ3	1.64	0.99
1:B:88:LEU:HD22	1:M:54:LYS:NZ	1.75	0.99
1:A:97:GLN:HG3	1:D:105:SER:HA	1.42	0.98
1:C:54:LYS:NZ	1:F:88:LEU:HD22	1.76	0.98
1:L:54:LYS:HZ1	1:N:88:LEU:HD22	1.25	0.98
1:A:54:LYS:HZ3	1:D:88:LEU:CD2	1.62	0.98
1:H:54:LYS:CE	1:L:88:LEU:HA	1.94	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:88:LEU:CD2	1:O:54:LYS:HZ3	1.69	0.98
1:A:54:LYS:NZ	1:D:88:LEU:HD22	1.74	0.98
1:L:54:LYS:HZ2	1:N:66:LYS:HG3	1.01	0.98
1:A:88:LEU:HD22	1:J:54:LYS:NZ	1.76	0.97
1:C:66:LYS:HG3	1:E:54:LYS:HZ2	0.99	0.97
1:F:54:LYS:CE	1:H:88:LEU:HA	1.93	0.97
1:A:54:LYS:HZ1	1:D:88:LEU:CD2	1.65	0.97
1:A:88:LEU:HA	1:J:54:LYS:CE	1.94	0.97
1:D:54:LYS:HZ3	1:E:88:LEU:CD2	1.62	0.97
1:A:66:LYS:HG3	1:J:54:LYS:HZ2	1.07	0.97
1:B:97:GLN:HG3	1:I:105:SER:HA	1.45	0.97
1:H:54:LYS:HZ2	1:L:66:LYS:HG3	1.08	0.97
1:H:54:LYS:HZ3	1:L:88:LEU:CD2	1.66	0.97
1:A:88:LEU:CD2	1:J:54:LYS:HZ3	1.64	0.97
1:G:105:SER:HA	1:K:97:GLN:HG3	1.45	0.97
1:B:105:SER:CA	1:M:97:GLN:CG	2.19	0.97
1:G:88:LEU:HD22	1:K:54:LYS:NZ	1.78	0.97
1:B:88:LEU:HD22	1:M:54:LYS:HZ1	1.26	0.97
1:G:54:LYS:CE	1:J:88:LEU:HA	1.95	0.97
1:L:54:LYS:CE	1:N:88:LEU:HA	1.94	0.97
1:C:88:LEU:HA	1:E:54:LYS:CE	1.94	0.96
1:I:54:LYS:CE	1:O:88:LEU:HA	1.95	0.96
1:F:54:LYS:HZ1	1:H:88:LEU:CD2	1.63	0.96
1:L:54:LYS:HZ1	1:N:88:LEU:CD2	1.63	0.96
1:D:54:LYS:CE	1:E:88:LEU:HA	1.96	0.96
1:G:88:LEU:HA	1:K:54:LYS:CE	1.95	0.96
1:H:54:LYS:NZ	1:L:88:LEU:HD22	1.77	0.96
1:B:54:LYS:HZ2	1:I:66:LYS:HG3	1.05	0.95
1:I:54:LYS:HZ1	1:O:88:LEU:HD22	1.26	0.95
1:B:58:ILE:HG21	1:B:100:TYR:CD2	2.02	0.95
1:L:58:ILE:HG21	1:L:100:TYR:CD2	2.02	0.95
1:I:97:GLN:HG3	1:O:105:SER:HA	1.47	0.95
1:C:58:ILE:HG21	1:C:100:TYR:CD2	2.02	0.95
1:K:58:ILE:HG21	1:K:100:TYR:CD2	2.02	0.95
1:M:88:LEU:HD22	1:N:54:LYS:HZ1	1.25	0.95
1:B:105:SER:HA	1:M:97:GLN:HG3	1.47	0.95
1:K:88:LEU:CD2	1:O:54:LYS:HZ1	1.64	0.95
1:B:54:LYS:HZ3	1:I:88:LEU:CD2	1.67	0.95
1:M:143:ARG:HD3	1:N:169:GLN:OE1	1.67	0.95
1:C:97:GLN:HG3	1:F:105:SER:HA	1.43	0.95
1:N:58:ILE:HG21	1:N:100:TYR:CD2	2.02	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:169:GLN:OE1	1:L:143:ARG:HD3	1.67	0.94
1:K:105:SER:HA	1:O:97:GLN:HG3	1.45	0.94
1:D:58:ILE:HG21	1:D:100:TYR:CD2	2.02	0.94
1:I:58:ILE:HG21	1:I:100:TYR:CD2	2.02	0.94
1:L:54:LYS:HZ2	1:N:66:LYS:CG	1.80	0.94
1:D:54:LYS:HZ1	1:E:88:LEU:CD2	1.72	0.94
1:J:58:ILE:HG21	1:J:100:TYR:CD2	2.02	0.94
1:F:97:GLN:HG3	1:H:105:SER:HA	1.44	0.94
1:L:97:GLN:HG3	1:N:105:SER:HA	1.48	0.94
1:F:58:ILE:HG21	1:F:100:TYR:CD2	2.02	0.94
1:B:88:LEU:HA	1:M:54:LYS:CE	1.96	0.94
1:G:54:LYS:HZ2	1:J:66:LYS:CG	1.80	0.94
1:H:58:ILE:HG21	1:H:100:TYR:CD2	2.02	0.94
1:H:97:GLN:HG3	1:L:105:SER:HA	1.44	0.94
1:M:58:ILE:HG21	1:M:100:TYR:CD2	2.02	0.94
1:A:105:SER:HA	1:J:97:GLN:HG3	1.45	0.94
1:L:93:TYR:CE1	1:L:136:TYR:CD2	2.56	0.94
1:O:93:TYR:CE1	1:O:136:TYR:CD2	2.56	0.94
1:O:58:ILE:HG21	1:O:100:TYR:CD2	2.02	0.94
1:B:93:TYR:CE1	1:B:136:TYR:CD2	2.56	0.94
1:C:88:LEU:CD2	1:E:54:LYS:HZ3	1.81	0.94
1:K:93:TYR:CE1	1:K:136:TYR:CD2	2.56	0.93
1:M:93:TYR:CE1	1:M:136:TYR:CD2	2.56	0.93
1:G:58:ILE:HG21	1:G:100:TYR:CD2	2.02	0.93
1:F:54:LYS:HZ1	1:H:88:LEU:HD22	1.28	0.93
1:E:58:ILE:HG21	1:E:100:TYR:CD2	2.02	0.93
1:A:58:ILE:HG21	1:A:100:TYR:CD2	2.02	0.93
1:A:54:LYS:HZ2	1:D:66:LYS:HG3	1.07	0.93
1:C:93:TYR:CE1	1:C:136:TYR:CD2	2.56	0.93
1:N:93:TYR:CE1	1:N:136:TYR:CD2	2.56	0.93
1:J:93:TYR:CE1	1:J:136:TYR:CD2	2.56	0.93
1:H:93:TYR:CE1	1:H:136:TYR:CD2	2.56	0.93
1:K:88:LEU:HD22	1:O:54:LYS:HZ1	1.27	0.93
1:D:54:LYS:HZ2	1:E:66:LYS:CG	1.82	0.93
1:F:93:TYR:CE1	1:F:136:TYR:CD2	2.56	0.93
1:C:54:LYS:HZ1	1:F:88:LEU:CD2	1.76	0.93
1:A:93:TYR:CE1	1:A:136:TYR:CD2	2.56	0.92
1:B:66:LYS:CG	1:M:54:LYS:HZ2	1.82	0.92
1:I:54:LYS:HZ2	1:O:66:LYS:CG	1.81	0.92
1:C:88:LEU:HD22	1:E:54:LYS:NZ	1.76	0.92
1:I:93:TYR:CE1	1:I:136:TYR:CD2	2.56	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:93:TYR:CE1	1:G:136:TYR:CD2	2.56	0.92
1:M:143:ARG:HD3	1:N:169:GLN:CD	1.89	0.92
1:C:54:LYS:HZ2	1:F:66:LYS:HG3	1.09	0.92
1:K:88:LEU:HD22	1:O:54:LYS:NZ	1.75	0.92
1:D:93:TYR:CE1	1:D:136:TYR:CD2	2.56	0.92
1:E:93:TYR:CE1	1:E:136:TYR:CD2	2.56	0.92
1:G:97:GLN:HG3	1:J:105:SER:HA	1.48	0.92
1:H:169:GLN:CD	1:L:143:ARG:HD3	1.89	0.92
1:C:66:LYS:CG	1:E:54:LYS:HZ2	1.81	0.92
1:A:88:LEU:CD2	1:J:54:LYS:HZ1	1.69	0.92
1:N:122:PHE:CE2	1:N:126:LEU:HD11	2.05	0.92
1:B:54:LYS:HZ1	1:I:88:LEU:CD2	1.69	0.92
1:D:97:GLN:HG3	1:E:105:SER:HA	1.47	0.92
1:M:122:PHE:CE2	1:M:126:LEU:HD11	2.05	0.92
1:F:54:LYS:HZ3	1:H:88:LEU:CD2	1.67	0.91
1:B:54:LYS:HZ1	1:I:88:LEU:HD22	1.32	0.91
1:B:88:LEU:CD2	1:M:54:LYS:HZ3	1.69	0.91
1:I:122:PHE:CE2	1:I:126:LEU:HD11	2.05	0.91
1:K:122:PHE:CE2	1:K:126:LEU:HD11	2.05	0.91
1:L:122:PHE:CE2	1:L:126:LEU:HD11	2.05	0.91
1:A:122:PHE:CE2	1:A:126:LEU:HD11	2.05	0.91
1:J:122:PHE:CE2	1:J:126:LEU:HD11	2.05	0.91
1:B:122:PHE:CE2	1:B:126:LEU:HD11	2.05	0.91
1:G:143:ARG:HD3	1:K:169:GLN:CD	1.91	0.91
1:A:166:MET:CB	1:D:143:ARG:NH2	2.33	0.91
1:I:54:LYS:HZ3	1:O:88:LEU:CD2	1.72	0.91
1:D:122:PHE:CE2	1:D:126:LEU:HD11	2.05	0.91
1:C:169:GLN:OE1	1:F:143:ARG:HD3	1.71	0.91
1:H:122:PHE:CE2	1:H:126:LEU:HD11	2.05	0.91
1:E:122:PHE:CE2	1:E:126:LEU:HD11	2.05	0.91
1:A:169:GLN:OE1	1:D:143:ARG:HD3	1.71	0.90
1:G:66:LYS:HG3	1:K:54:LYS:HZ2	1.09	0.90
1:L:54:LYS:HZ3	1:N:88:LEU:CD2	1.72	0.90
1:F:122:PHE:CE2	1:F:126:LEU:HD11	2.05	0.90
1:G:122:PHE:CE2	1:G:126:LEU:HD11	2.05	0.90
1:C:166:MET:CB	1:F:143:ARG:NH2	2.35	0.90
1:M:143:ARG:NH2	1:N:166:MET:CB	2.35	0.90
1:K:66:LYS:CG	1:O:54:LYS:HZ2	1.83	0.90
1:B:54:LYS:HZ2	1:I:66:LYS:CG	1.83	0.90
1:M:88:LEU:CD2	1:N:54:LYS:HZ3	1.72	0.90
1:O:122:PHE:CE2	1:O:126:LEU:HD11	2.05	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:66:LYS:CG	1:J:54:LYS:HZ2	1.84	0.90
1:C:122:PHE:CE2	1:C:126:LEU:HD11	2.05	0.90
1:B:169:GLN:OE1	1:I:143:ARG:HD3	1.71	0.90
1:C:54:LYS:HZ2	1:F:66:LYS:CG	1.86	0.89
1:G:143:ARG:HD3	1:K:169:GLN:OE1	1.71	0.89
1:A:143:ARG:HD3	1:J:169:GLN:OE1	1.72	0.89
1:H:54:LYS:HZ2	1:L:66:LYS:CG	1.86	0.89
1:M:114:LEU:HD22	1:M:167:ASP:HB2	1.55	0.89
1:C:114:LEU:HD22	1:C:167:ASP:HB2	1.55	0.89
1:M:105:SER:CB	1:N:97:GLN:HG2	1.78	0.89
1:I:114:LEU:HD22	1:I:167:ASP:HB2	1.55	0.89
1:E:114:LEU:HD22	1:E:167:ASP:HB2	1.55	0.89
1:C:105:SER:HA	1:E:97:GLN:HG3	1.47	0.89
1:F:54:LYS:HZ2	1:H:66:LYS:CG	1.85	0.89
1:B:114:LEU:HD22	1:B:167:ASP:HB2	1.55	0.89
1:D:114:LEU:HD22	1:D:167:ASP:HB2	1.55	0.89
1:F:114:LEU:HD22	1:F:167:ASP:HB2	1.55	0.89
1:K:143:ARG:HD3	1:O:169:GLN:OE1	1.72	0.89
1:H:166:MET:CB	1:L:143:ARG:NH2	2.36	0.89
1:C:143:ARG:HD3	1:E:169:GLN:OE1	1.72	0.89
1:K:105:SER:CB	1:O:97:GLN:HG2	1.79	0.89
1:H:114:LEU:HD22	1:H:167:ASP:HB2	1.55	0.89
1:O:114:LEU:HD22	1:O:167:ASP:HB2	1.55	0.89
1:A:143:ARG:HD3	1:J:169:GLN:CD	1.93	0.89
1:N:114:LEU:HD22	1:N:167:ASP:HB2	1.55	0.89
1:L:166:MET:CB	1:N:143:ARG:NH2	2.36	0.88
1:K:143:ARG:NH2	1:O:166:MET:CB	2.36	0.88
1:H:54:LYS:HZ1	1:L:88:LEU:HD22	1.33	0.88
1:G:54:LYS:NZ	1:J:66:LYS:CG	2.35	0.88
1:L:114:LEU:HD22	1:L:167:ASP:HB2	1.55	0.88
1:G:88:LEU:HD22	1:K:54:LYS:HZ1	1.33	0.88
1:A:114:LEU:HD22	1:A:167:ASP:HB2	1.55	0.88
1:A:169:GLN:CD	1:D:143:ARG:HD3	1.93	0.88
1:K:114:LEU:HD22	1:K:167:ASP:HB2	1.55	0.88
1:I:169:GLN:OE1	1:O:143:ARG:HD3	1.73	0.88
1:B:166:MET:CB	1:I:143:ARG:NH2	2.37	0.88
1:F:169:GLN:OE1	1:H:143:ARG:HD3	1.72	0.88
1:L:97:GLN:HG2	1:N:105:SER:CB	1.80	0.88
1:D:166:MET:CB	1:E:143:ARG:NH2	2.37	0.88
1:A:143:ARG:NH2	1:J:166:MET:CB	2.37	0.88
1:G:166:MET:CB	1:J:143:ARG:NH2	2.36	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:114:LEU:HD22	1:G:167:ASP:HB2	1.55	0.88
1:G:169:GLN:OE1	1:J:143:ARG:HD3	1.74	0.88
1:J:114:LEU:HD22	1:J:167:ASP:HB2	1.55	0.87
1:F:166:MET:CB	1:H:143:ARG:NH2	2.36	0.87
1:B:143:ARG:NH2	1:M:166:MET:CB	2.36	0.87
1:D:54:LYS:HZ1	1:E:88:LEU:HD22	1.33	0.87
1:B:169:GLN:CD	1:I:143:ARG:HD3	1.95	0.87
1:K:143:ARG:HD3	1:O:169:GLN:CD	1.95	0.87
1:I:54:LYS:NZ	1:O:66:LYS:CG	2.37	0.87
1:A:97:GLN:HG2	1:D:105:SER:CB	1.76	0.87
1:F:169:GLN:CD	1:H:143:ARG:HD3	1.94	0.87
1:A:88:LEU:HD22	1:J:54:LYS:HZ1	1.32	0.87
1:I:166:MET:CB	1:O:143:ARG:NH2	2.38	0.87
1:I:40:ASP:HB2	1:I:45:PHE:HE1	1.40	0.87
1:I:169:GLN:CD	1:O:143:ARG:HD3	1.96	0.86
1:G:143:ARG:NH2	1:K:166:MET:CB	2.38	0.86
1:B:143:ARG:HD3	1:M:169:GLN:CD	1.96	0.86
1:H:97:GLN:HG2	1:L:105:SER:CB	1.80	0.86
1:D:169:GLN:OE1	1:E:143:ARG:HD3	1.75	0.86
1:G:40:ASP:HB2	1:G:45:PHE:HE1	1.40	0.86
1:N:40:ASP:HB2	1:N:45:PHE:HE1	1.40	0.86
1:I:97:GLN:HG2	1:O:105:SER:CB	1.80	0.86
1:B:143:ARG:HD3	1:M:169:GLN:OE1	1.75	0.86
1:G:66:LYS:CG	1:K:54:LYS:HZ2	1.86	0.86
1:C:143:ARG:NH2	1:E:166:MET:CB	2.37	0.86
1:A:54:LYS:HZ2	1:D:66:LYS:CG	1.86	0.86
1:D:40:ASP:HB2	1:D:45:PHE:HE1	1.40	0.86
1:J:40:ASP:HB2	1:J:45:PHE:HE1	1.40	0.86
1:B:105:SER:CB	1:M:97:GLN:HG2	1.78	0.86
1:A:54:LYS:HZ1	1:D:88:LEU:HD22	1.29	0.86
1:F:135:ASN:ND2	1:F:152:PRO:HG2	1.91	0.86
1:C:135:ASN:ND2	1:C:152:PRO:HG2	1.91	0.86
1:J:135:ASN:ND2	1:J:152:PRO:HG2	1.91	0.86
1:C:169:GLN:CD	1:F:143:ARG:HD3	1.95	0.86
1:N:135:ASN:ND2	1:N:152:PRO:HG2	1.91	0.86
1:H:135:ASN:ND2	1:H:152:PRO:HG2	1.91	0.86
1:E:135:ASN:ND2	1:E:152:PRO:HG2	1.91	0.86
1:A:135:ASN:ND2	1:A:152:PRO:HG2	1.91	0.86
1:D:169:GLN:CD	1:E:143:ARG:HD3	1.96	0.85
1:M:66:LYS:CG	1:N:54:LYS:HZ2	1.87	0.85
1:K:135:ASN:ND2	1:K:152:PRO:HG2	1.91	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:97:GLN:HG2	1:J:105:SER:HB2	0.85	0.85
1:C:143:ARG:HD3	1:E:169:GLN:CD	1.95	0.85
1:L:135:ASN:ND2	1:L:152:PRO:HG2	1.91	0.85
1:B:97:GLN:HG2	1:I:105:SER:CB	1.81	0.85
1:B:40:ASP:HB2	1:B:45:PHE:HE1	1.40	0.85
1:L:54:LYS:NZ	1:N:66:LYS:CG	2.37	0.85
1:O:40:ASP:HB2	1:O:45:PHE:HE1	1.40	0.85
1:D:135:ASN:ND2	1:D:152:PRO:HG2	1.91	0.85
1:G:105:SER:CB	1:K:97:GLN:HG2	1.79	0.85
1:M:40:ASP:HB2	1:M:45:PHE:HE1	1.40	0.85
1:F:40:ASP:HB2	1:F:45:PHE:HE1	1.40	0.85
1:K:40:ASP:HB2	1:K:45:PHE:HE1	1.40	0.85
1:B:135:ASN:ND2	1:B:152:PRO:HG2	1.91	0.85
1:A:40:ASP:HB2	1:A:45:PHE:HE1	1.40	0.85
1:G:169:GLN:CD	1:J:143:ARG:HD3	1.97	0.85
1:C:166:MET:HG2	1:F:143:ARG:CZ	2.07	0.85
1:H:40:ASP:HB2	1:H:45:PHE:HE1	1.40	0.85
1:G:135:ASN:ND2	1:G:152:PRO:HG2	1.91	0.85
1:E:40:ASP:HB2	1:E:45:PHE:HE1	1.40	0.84
1:B:97:GLN:HG2	1:I:105:SER:HB2	0.85	0.84
1:A:166:MET:HG2	1:D:143:ARG:CZ	2.08	0.84
1:I:135:ASN:ND2	1:I:152:PRO:HG2	1.91	0.84
1:L:169:GLN:OE1	1:N:143:ARG:HD3	1.77	0.84
1:G:166:MET:HG2	1:J:143:ARG:CZ	2.08	0.84
1:O:135:ASN:ND2	1:O:152:PRO:HG2	1.91	0.84
1:C:105:SER:HB2	1:E:97:GLN:HG2	0.85	0.84
1:L:97:GLN:HG2	1:N:105:SER:HB2	0.84	0.84
1:C:40:ASP:HB2	1:C:45:PHE:HE1	1.40	0.84
1:C:66:LYS:CG	1:E:54:LYS:NZ	2.37	0.84
1:L:40:ASP:HB2	1:L:45:PHE:HE1	1.40	0.84
1:G:54:LYS:NZ	1:J:88:LEU:HD22	1.75	0.84
1:B:166:MET:HG2	1:I:143:ARG:CZ	2.08	0.84
1:B:66:LYS:CG	1:M:54:LYS:NZ	2.39	0.84
1:M:135:ASN:ND2	1:M:152:PRO:HG2	1.91	0.84
1:K:42:LEU:HD11	1:K:46:PHE:CE1	2.14	0.83
1:O:42:LEU:HD11	1:O:46:PHE:CE1	2.14	0.83
1:B:42:LEU:HD11	1:B:46:PHE:CE1	2.14	0.83
1:C:42:LEU:HD11	1:C:46:PHE:CE1	2.14	0.83
1:A:105:SER:HB2	1:J:97:GLN:HG2	0.83	0.83
1:L:42:LEU:HD11	1:L:46:PHE:CE1	2.14	0.83
1:A:42:LEU:HD11	1:A:46:PHE:CE1	2.14	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:143:ARG:CZ	1:E:166:MET:HG2	2.09	0.83
1:I:97:GLN:HG2	1:O:105:SER:HB2	0.84	0.83
1:H:42:LEU:HD11	1:H:46:PHE:CE1	2.14	0.83
1:E:42:LEU:HD11	1:E:46:PHE:CE1	2.14	0.83
1:K:136:TYR:OH	1:K:154:VAL:HG13	1.79	0.83
1:K:143:ARG:CZ	1:O:166:MET:HG2	2.09	0.83
1:D:97:GLN:HG2	1:E:105:SER:HB2	0.83	0.83
1:A:66:LYS:CG	1:J:54:LYS:NZ	2.40	0.83
1:I:42:LEU:HD11	1:I:46:PHE:CE1	2.14	0.83
1:B:136:TYR:OH	1:B:154:VAL:HG13	1.79	0.83
1:M:143:ARG:CZ	1:N:166:MET:HG2	2.09	0.82
1:G:42:LEU:HD11	1:G:46:PHE:CE1	2.14	0.82
1:F:97:GLN:HG2	1:H:105:SER:CB	1.78	0.82
1:M:42:LEU:HD11	1:M:46:PHE:CE1	2.14	0.82
1:A:133:ASN:HA	1:A:136:TYR:H	1.45	0.82
1:A:136:TYR:OH	1:A:154:VAL:HG13	1.79	0.82
1:L:166:MET:HG2	1:N:143:ARG:CZ	2.07	0.82
1:D:42:LEU:HD11	1:D:46:PHE:CE1	2.14	0.82
1:H:133:ASN:HA	1:H:136:TYR:H	1.45	0.82
1:H:97:GLN:HG2	1:L:105:SER:HB2	0.83	0.82
1:C:54:LYS:HZ1	1:F:88:LEU:HD22	1.38	0.82
1:M:133:ASN:HA	1:M:136:TYR:H	1.45	0.82
1:E:133:ASN:HA	1:E:136:TYR:H	1.45	0.82
1:G:122:PHE:HE1	1:G:163:ALA:HA	1.45	0.82
1:F:42:LEU:HD11	1:F:46:PHE:CE1	2.14	0.82
1:J:42:LEU:HD11	1:J:46:PHE:CE1	2.14	0.82
1:D:136:TYR:OH	1:D:154:VAL:HG13	1.79	0.82
1:K:105:SER:HB2	1:O:97:GLN:HG2	0.83	0.82
1:J:122:PHE:HE1	1:J:163:ALA:HA	1.45	0.82
1:N:42:LEU:HD11	1:N:46:PHE:CE1	2.14	0.82
1:C:136:TYR:OH	1:C:154:VAL:HG13	1.79	0.82
1:J:133:ASN:HA	1:J:136:TYR:H	1.45	0.82
1:M:136:TYR:OH	1:M:154:VAL:HG13	1.79	0.82
1:G:136:TYR:OH	1:G:154:VAL:HG13	1.79	0.82
1:B:122:PHE:HE1	1:B:163:ALA:HA	1.45	0.82
1:D:133:ASN:HA	1:D:136:TYR:H	1.45	0.82
1:O:136:TYR:OH	1:O:154:VAL:HG13	1.79	0.82
1:O:122:PHE:HE1	1:O:163:ALA:HA	1.45	0.82
1:N:133:ASN:HA	1:N:136:TYR:H	1.45	0.82
1:L:136:TYR:OH	1:L:154:VAL:HG13	1.79	0.82
1:K:122:PHE:HE1	1:K:163:ALA:HA	1.45	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:133:ASN:HA	1:B:136:TYR:H	1.45	0.81
1:C:97:GLN:HG2	1:F:105:SER:HB2	0.83	0.81
1:M:105:SER:HB2	1:N:97:GLN:HG2	0.82	0.81
1:B:105:SER:HB2	1:M:97:GLN:HG2	0.82	0.81
1:D:54:LYS:NZ	1:E:66:LYS:CG	2.38	0.81
1:C:133:ASN:HA	1:C:136:TYR:H	1.45	0.81
1:I:136:TYR:OH	1:I:154:VAL:HG13	1.79	0.81
1:I:166:MET:HG2	1:O:143:ARG:CZ	2.10	0.81
1:L:169:GLN:CD	1:N:143:ARG:HD3	2.01	0.81
1:G:105:SER:HB2	1:K:97:GLN:HG2	0.83	0.81
1:H:112:VAL:HB	1:H:147:PHE:CZ	2.16	0.81
1:J:136:TYR:OH	1:J:154:VAL:HG13	1.79	0.81
1:E:136:TYR:OH	1:E:154:VAL:HG13	1.79	0.81
1:L:122:PHE:HE1	1:L:163:ALA:HA	1.45	0.81
1:L:112:VAL:HB	1:L:147:PHE:CZ	2.16	0.81
1:H:122:PHE:HE1	1:H:163:ALA:HA	1.45	0.81
1:F:133:ASN:HA	1:F:136:TYR:H	1.45	0.81
1:I:112:VAL:HB	1:I:147:PHE:CZ	2.16	0.81
1:A:122:PHE:HE1	1:A:163:ALA:HA	1.45	0.81
1:F:112:VAL:HB	1:F:147:PHE:CZ	2.16	0.81
1:F:97:GLN:HG2	1:H:105:SER:HB2	0.82	0.81
1:K:133:ASN:HA	1:K:136:TYR:H	1.45	0.81
1:F:136:TYR:OH	1:F:154:VAL:HG13	1.79	0.81
1:B:112:VAL:HB	1:B:147:PHE:CZ	2.16	0.81
1:C:112:VAL:HB	1:C:147:PHE:CZ	2.16	0.81
1:F:166:MET:HG2	1:H:143:ARG:CZ	2.10	0.81
1:N:136:TYR:OH	1:N:154:VAL:HG13	1.79	0.81
1:N:112:VAL:HB	1:N:147:PHE:CZ	2.16	0.81
1:G:97:GLN:HG2	1:J:105:SER:CB	1.81	0.81
1:G:133:ASN:HA	1:G:136:TYR:H	1.45	0.81
1:L:133:ASN:HA	1:L:136:TYR:H	1.45	0.81
1:I:133:ASN:HA	1:I:136:TYR:H	1.45	0.81
1:E:112:VAL:HB	1:E:147:PHE:CZ	2.16	0.81
1:H:136:TYR:OH	1:H:154:VAL:HG13	1.79	0.80
1:N:122:PHE:HE1	1:N:163:ALA:HA	1.45	0.80
1:M:112:VAL:HB	1:M:147:PHE:CZ	2.16	0.80
1:M:122:PHE:HE1	1:M:163:ALA:HA	1.45	0.80
1:F:122:PHE:HE1	1:F:163:ALA:HA	1.45	0.80
1:A:112:VAL:HB	1:A:147:PHE:CZ	2.16	0.80
1:D:112:VAL:HB	1:D:147:PHE:CZ	2.16	0.80
1:G:112:VAL:HB	1:G:147:PHE:CZ	2.16	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:135:ASN:O	1:I:152:PRO:HD2	1.82	0.80
1:B:135:ASN:O	1:B:152:PRO:HD2	1.82	0.80
1:O:135:ASN:O	1:O:152:PRO:HD2	1.82	0.80
1:I:122:PHE:HE1	1:I:163:ALA:HA	1.45	0.80
1:J:112:VAL:HB	1:J:147:PHE:CZ	2.16	0.80
1:A:143:ARG:CZ	1:J:166:MET:HG2	2.11	0.80
1:C:54:LYS:NZ	1:F:66:LYS:CG	2.41	0.80
1:M:135:ASN:O	1:M:152:PRO:HD2	1.82	0.80
1:G:54:LYS:HZ3	1:J:88:LEU:CD2	1.93	0.80
1:K:112:VAL:HB	1:K:147:PHE:CZ	2.16	0.80
1:D:122:PHE:HE1	1:D:163:ALA:HA	1.45	0.80
1:A:135:ASN:O	1:A:152:PRO:HD2	1.82	0.80
1:D:135:ASN:O	1:D:152:PRO:HD2	1.82	0.80
1:F:135:ASN:O	1:F:152:PRO:HD2	1.82	0.80
1:H:135:ASN:O	1:H:152:PRO:HD2	1.82	0.80
1:O:112:VAL:HB	1:O:147:PHE:CZ	2.16	0.80
1:H:54:LYS:NZ	1:L:66:LYS:CG	2.41	0.79
1:E:122:PHE:HE1	1:E:163:ALA:HA	1.45	0.79
1:K:135:ASN:O	1:K:152:PRO:HD2	1.82	0.79
1:E:135:ASN:O	1:E:152:PRO:HD2	1.82	0.79
1:J:135:ASN:O	1:J:152:PRO:HD2	1.82	0.79
1:A:97:GLN:HG2	1:D:105:SER:HB2	0.80	0.79
1:C:122:PHE:HE1	1:C:163:ALA:HA	1.45	0.79
1:N:135:ASN:O	1:N:152:PRO:HD2	1.82	0.79
1:O:133:ASN:HA	1:O:136:TYR:H	1.45	0.79
1:A:136:TYR:CE2	1:A:155:TYR:HA	2.18	0.79
1:N:136:TYR:CE2	1:N:155:TYR:HA	2.18	0.79
1:F:54:LYS:NZ	1:H:66:LYS:CG	2.42	0.79
1:C:135:ASN:O	1:C:152:PRO:HD2	1.82	0.79
1:J:136:TYR:CE2	1:J:155:TYR:HA	2.18	0.79
1:F:136:TYR:CE2	1:F:155:TYR:HA	2.18	0.79
1:L:135:ASN:O	1:L:152:PRO:HD2	1.82	0.79
1:D:136:TYR:CE2	1:D:155:TYR:HA	2.18	0.78
1:B:143:ARG:CZ	1:M:166:MET:HG2	2.12	0.78
1:C:136:TYR:CE2	1:C:155:TYR:HA	2.18	0.78
1:C:93:TYR:HB2	1:C:135:ASN:OD1	1.84	0.78
1:A:54:LYS:NZ	1:D:66:LYS:CG	2.43	0.78
1:H:93:TYR:HB2	1:H:135:ASN:OD1	1.84	0.78
1:H:136:TYR:CE2	1:H:155:TYR:HA	2.18	0.78
1:M:93:TYR:HB2	1:M:135:ASN:OD1	1.84	0.78
1:M:136:TYR:CE2	1:M:155:TYR:HA	2.18	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:136:TYR:CE2	1:E:155:TYR:HA	2.18	0.78
1:G:135:ASN:O	1:G:152:PRO:HD2	1.82	0.78
1:L:93:TYR:HB2	1:L:135:ASN:OD1	1.84	0.78
1:L:136:TYR:CE2	1:L:155:TYR:HA	2.18	0.78
1:O:136:TYR:CE2	1:O:155:TYR:HA	2.18	0.78
1:O:93:TYR:HB2	1:O:135:ASN:OD1	1.84	0.78
1:D:166:MET:HG2	1:E:143:ARG:CZ	2.11	0.78
1:I:136:TYR:CE2	1:I:155:TYR:HA	2.18	0.78
1:G:136:TYR:CE2	1:G:155:TYR:HA	2.18	0.78
1:E:93:TYR:HB2	1:E:135:ASN:OD1	1.84	0.78
1:M:143:ARG:CD	1:N:169:GLN:OE1	2.31	0.77
1:H:54:LYS:HZ3	1:L:88:LEU:HD23	1.33	0.77
1:I:93:TYR:HB2	1:I:135:ASN:OD1	1.84	0.77
1:H:166:MET:HG2	1:L:143:ARG:CZ	2.11	0.77
1:B:136:TYR:CE2	1:B:155:TYR:HA	2.18	0.77
1:A:93:TYR:HB2	1:A:135:ASN:OD1	1.84	0.77
1:N:133:ASN:HB2	1:N:137:PRO:HD3	1.67	0.77
1:D:93:TYR:HB2	1:D:135:ASN:OD1	1.84	0.77
1:B:93:TYR:HB2	1:B:135:ASN:OD1	1.84	0.77
1:M:133:ASN:HB2	1:M:137:PRO:HD3	1.67	0.77
1:B:133:ASN:HB2	1:B:137:PRO:HD3	1.67	0.77
1:K:93:TYR:HB2	1:K:135:ASN:OD1	1.84	0.77
1:I:133:ASN:HB2	1:I:137:PRO:HD3	1.67	0.77
1:N:93:TYR:HB2	1:N:135:ASN:OD1	1.84	0.77
1:K:136:TYR:CE2	1:K:155:TYR:HA	2.18	0.77
1:O:133:ASN:HB2	1:O:137:PRO:HD3	1.67	0.77
1:H:169:GLN:OE1	1:L:143:ARG:CD	2.31	0.77
1:D:54:LYS:HZ1	1:E:66:LYS:HG3	1.48	0.77
1:K:133:ASN:HB2	1:K:137:PRO:HD3	1.67	0.77
1:J:93:TYR:HB2	1:J:135:ASN:OD1	1.84	0.77
1:F:93:TYR:HB2	1:F:135:ASN:OD1	1.84	0.77
1:G:133:ASN:HB2	1:G:137:PRO:HD3	1.67	0.77
1:L:133:ASN:HB2	1:L:137:PRO:HD3	1.67	0.76
1:J:133:ASN:HB2	1:J:137:PRO:HD3	1.67	0.76
1:G:93:TYR:HB2	1:G:135:ASN:OD1	1.84	0.76
1:H:133:ASN:HB2	1:H:137:PRO:HD3	1.67	0.76
1:A:133:ASN:HB2	1:A:137:PRO:HD3	1.67	0.76
1:D:133:ASN:HB2	1:D:137:PRO:HD3	1.67	0.75
1:E:133:ASN:HB2	1:E:137:PRO:HD3	1.67	0.75
1:F:133:ASN:HB2	1:F:137:PRO:HD3	1.67	0.75
1:B:54:LYS:NZ	1:I:66:LYS:CG	2.39	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:133:ASN:HB2	1:C:137:PRO:HD3	1.67	0.75
1:G:88:LEU:HD23	1:K:54:LYS:HZ3	1.31	0.75
1:C:97:GLN:HG2	1:F:105:SER:CB	1.79	0.75
1:H:63:ALA:HA	1:H:103:ASP:OD1	1.87	0.75
1:K:66:LYS:CG	1:O:54:LYS:NZ	2.40	0.75
1:O:132:TYR:O	1:O:136:TYR:HB2	1.87	0.74
1:G:63:ALA:HA	1:G:103:ASP:OD1	1.87	0.74
1:K:132:TYR:O	1:K:136:TYR:HB2	1.87	0.74
1:I:132:TYR:O	1:I:136:TYR:HB2	1.88	0.74
1:J:63:ALA:HA	1:J:103:ASP:OD1	1.87	0.74
1:G:132:TYR:O	1:G:136:TYR:HB2	1.87	0.74
1:B:132:TYR:O	1:B:136:TYR:HB2	1.87	0.74
1:F:63:ALA:HA	1:F:103:ASP:OD1	1.87	0.74
1:M:63:ALA:HA	1:M:103:ASP:OD1	1.87	0.74
1:G:143:ARG:CD	1:K:169:GLN:OE1	2.35	0.74
1:K:63:ALA:HA	1:K:103:ASP:OD1	1.87	0.74
1:A:54:LYS:HZ3	1:D:88:LEU:HD23	1.30	0.74
1:I:93:TYR:CD1	1:I:136:TYR:CD2	2.76	0.74
1:M:132:TYR:O	1:M:136:TYR:HB2	1.87	0.74
1:B:143:ARG:HH22	1:M:166:MET:CB	1.93	0.74
1:B:93:TYR:CD1	1:B:136:TYR:CD2	2.76	0.74
1:M:93:TYR:CD1	1:M:136:TYR:CD2	2.76	0.74
1:D:97:GLN:HG2	1:E:105:SER:CB	1.79	0.74
1:A:169:GLN:OE1	1:D:143:ARG:CD	2.34	0.74
1:K:93:TYR:CD1	1:K:136:TYR:CD2	2.75	0.74
1:N:63:ALA:HA	1:N:103:ASP:OD1	1.87	0.74
1:J:132:TYR:O	1:J:136:TYR:HB2	1.87	0.74
1:A:63:ALA:HA	1:A:103:ASP:OD1	1.87	0.74
1:O:63:ALA:HA	1:O:103:ASP:OD1	1.87	0.74
1:O:93:TYR:CD1	1:O:136:TYR:CD2	2.76	0.74
1:C:63:ALA:HA	1:C:103:ASP:OD1	1.87	0.74
1:L:132:TYR:O	1:L:136:TYR:HB2	1.87	0.74
1:N:93:TYR:CD1	1:N:136:TYR:CD2	2.76	0.73
1:K:122:PHE:CE2	1:K:147:PHE:CZ	2.76	0.73
1:N:132:TYR:O	1:N:136:TYR:HB2	1.88	0.73
1:E:63:ALA:HA	1:E:103:ASP:OD1	1.87	0.73
1:E:122:PHE:CE2	1:E:147:PHE:CZ	2.76	0.73
1:G:122:PHE:CE2	1:G:147:PHE:CZ	2.77	0.73
1:O:122:PHE:CE2	1:O:147:PHE:CZ	2.76	0.73
1:C:122:PHE:CE2	1:C:147:PHE:CZ	2.76	0.73
1:C:169:GLN:OE1	1:F:143:ARG:CD	2.36	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:54:LYS:HZ1	1:I:66:LYS:HG3	1.53	0.73
1:L:93:TYR:CD1	1:L:136:TYR:CD2	2.76	0.73
1:C:93:TYR:CD1	1:C:136:TYR:CD2	2.76	0.73
1:D:63:ALA:HA	1:D:103:ASP:OD1	1.87	0.73
1:D:93:TYR:CD1	1:D:136:TYR:CD2	2.75	0.73
1:E:93:TYR:CD1	1:E:136:TYR:CD2	2.76	0.73
1:A:122:PHE:CE2	1:A:147:PHE:CZ	2.76	0.73
1:B:63:ALA:HA	1:B:103:ASP:OD1	1.87	0.73
1:G:93:TYR:CD1	1:G:136:TYR:CD2	2.76	0.73
1:D:122:PHE:CE2	1:D:147:PHE:CZ	2.76	0.73
1:H:122:PHE:CE2	1:H:147:PHE:CZ	2.77	0.73
1:L:63:ALA:HA	1:L:103:ASP:OD1	1.87	0.73
1:A:132:TYR:O	1:A:136:TYR:HB2	1.88	0.73
1:F:122:PHE:CE2	1:F:147:PHE:CZ	2.77	0.73
1:B:169:GLN:OE1	1:I:143:ARG:CD	2.36	0.73
1:J:122:PHE:CE2	1:J:147:PHE:CZ	2.77	0.73
1:C:54:LYS:HZ1	1:F:66:LYS:HG3	1.51	0.73
1:F:93:TYR:CD1	1:F:136:TYR:CD2	2.76	0.73
1:A:93:TYR:CD1	1:A:136:TYR:CD2	2.76	0.73
1:I:122:PHE:CE2	1:I:147:PHE:CZ	2.77	0.73
1:I:63:ALA:HA	1:I:103:ASP:OD1	1.87	0.73
1:N:122:PHE:CE2	1:N:147:PHE:CZ	2.77	0.73
1:L:122:PHE:CE2	1:L:147:PHE:CZ	2.77	0.73
1:B:122:PHE:CE2	1:B:147:PHE:CZ	2.77	0.73
1:K:143:ARG:CD	1:O:169:GLN:OE1	2.37	0.73
1:A:143:ARG:CD	1:J:169:GLN:OE1	2.36	0.73
1:J:93:TYR:CD1	1:J:136:TYR:CD2	2.76	0.73
1:E:132:TYR:O	1:E:136:TYR:HB2	1.88	0.73
1:D:132:TYR:O	1:D:136:TYR:HB2	1.87	0.72
1:H:93:TYR:CD1	1:H:136:TYR:CD2	2.76	0.72
1:M:122:PHE:CE2	1:M:147:PHE:CZ	2.77	0.72
1:F:169:GLN:OE1	1:H:143:ARG:CD	2.36	0.72
1:A:105:SER:CB	1:J:97:GLN:HG2	1.79	0.72
1:H:132:TYR:O	1:H:136:TYR:HB2	1.88	0.72
1:F:122:PHE:CE1	1:F:163:ALA:HA	2.25	0.72
1:G:143:ARG:CZ	1:K:166:MET:HG2	2.13	0.72
1:C:143:ARG:CD	1:E:169:GLN:OE1	2.37	0.72
1:F:55:GLU:OE2	1:F:99:ILE:HD13	1.90	0.72
1:J:55:GLU:OE2	1:J:99:ILE:HD13	1.90	0.72
1:C:132:TYR:O	1:C:136:TYR:HB2	1.87	0.72
1:A:55:GLU:OE2	1:A:99:ILE:HD13	1.90	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:108:ARG:NH2	1:D:156:VAL:HG21	2.05	0.72
1:L:108:ARG:NH2	1:L:156:VAL:HG21	2.05	0.72
1:H:122:PHE:CE1	1:H:163:ALA:HA	2.25	0.72
1:A:51:LEU:CD2	1:D:66:LYS:NZ	2.53	0.72
1:C:55:GLU:OE2	1:C:99:ILE:HD13	1.90	0.72
1:G:108:ARG:NH2	1:G:156:VAL:HG21	2.05	0.72
1:H:55:GLU:OE2	1:H:99:ILE:HD13	1.90	0.72
1:I:169:GLN:OE1	1:O:143:ARG:CD	2.38	0.72
1:C:108:ARG:NH2	1:C:156:VAL:HG21	2.05	0.72
1:C:122:PHE:CE1	1:C:163:ALA:HA	2.25	0.72
1:E:108:ARG:NH2	1:E:156:VAL:HG21	2.05	0.72
1:L:55:GLU:OE2	1:L:99:ILE:HD13	1.90	0.72
1:J:108:ARG:NH2	1:J:156:VAL:HG21	2.05	0.71
1:A:108:ARG:NH2	1:A:156:VAL:HG21	2.05	0.71
1:H:108:ARG:NH2	1:H:156:VAL:HG21	2.05	0.71
1:N:108:ARG:NH2	1:N:156:VAL:HG21	2.05	0.71
1:G:55:GLU:OE2	1:G:99:ILE:HD13	1.90	0.71
1:M:108:ARG:NH2	1:M:156:VAL:HG21	2.05	0.71
1:I:58:ILE:HG23	1:I:100:TYR:HA	1.73	0.71
1:F:132:TYR:O	1:F:136:TYR:HB2	1.87	0.71
1:O:58:ILE:HG23	1:O:100:TYR:HA	1.72	0.71
1:G:58:ILE:HG23	1:G:100:TYR:HA	1.72	0.71
1:I:122:PHE:CE1	1:I:163:ALA:HA	2.25	0.71
1:B:122:PHE:CE1	1:B:163:ALA:HA	2.25	0.71
1:E:122:PHE:CE1	1:E:163:ALA:HA	2.25	0.71
1:O:122:PHE:CE1	1:O:163:ALA:HA	2.25	0.71
1:K:108:ARG:NH2	1:K:156:VAL:HG21	2.05	0.71
1:F:108:ARG:NH2	1:F:156:VAL:HG21	2.05	0.71
1:M:55:GLU:OE2	1:M:99:ILE:HD13	1.90	0.71
1:B:55:GLU:OE2	1:B:99:ILE:HD13	1.90	0.71
1:C:105:SER:CB	1:E:97:GLN:HG2	1.81	0.71
1:M:66:LYS:NZ	1:N:51:LEU:CD2	2.53	0.71
1:G:66:LYS:HG3	1:K:54:LYS:HZ1	1.53	0.71
1:K:55:GLU:OE2	1:K:99:ILE:HD13	1.90	0.71
1:I:108:ARG:NH2	1:I:156:VAL:HG21	2.05	0.71
1:G:66:LYS:CG	1:K:54:LYS:NZ	2.42	0.71
1:J:122:PHE:CE1	1:J:163:ALA:HA	2.25	0.71
1:N:55:GLU:OE2	1:N:99:ILE:HD13	1.90	0.71
1:B:143:ARG:CD	1:M:169:GLN:OE1	2.39	0.71
1:O:108:ARG:NH2	1:O:156:VAL:HG21	2.05	0.71
1:M:122:PHE:CE1	1:M:163:ALA:HA	2.25	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:55:GLU:OE2	1:I:99:ILE:HD13	1.90	0.71
1:B:136:TYR:CD2	1:B:155:TYR:CD1	2.79	0.71
1:G:122:PHE:CE1	1:G:163:ALA:HA	2.25	0.71
1:K:58:ILE:HG23	1:K:100:TYR:HA	1.73	0.71
1:M:58:ILE:HG23	1:M:100:TYR:HA	1.73	0.71
1:K:122:PHE:CE1	1:K:163:ALA:HA	2.25	0.71
1:B:58:ILE:HG23	1:B:100:TYR:HA	1.72	0.71
1:L:136:TYR:CD2	1:L:155:TYR:CD1	2.79	0.71
1:I:136:TYR:CD2	1:I:155:TYR:CD1	2.79	0.71
1:J:58:ILE:HG23	1:J:100:TYR:HA	1.72	0.71
1:D:122:PHE:CE1	1:D:163:ALA:HA	2.25	0.71
1:D:55:GLU:OE2	1:D:99:ILE:HD13	1.90	0.71
1:E:55:GLU:OE2	1:E:99:ILE:HD13	1.90	0.71
1:B:108:ARG:NH2	1:B:156:VAL:HG21	2.05	0.71
1:M:66:LYS:NZ	1:N:51:LEU:HD21	2.06	0.70
1:N:136:TYR:CD2	1:N:155:TYR:CD1	2.79	0.70
1:N:58:ILE:HG23	1:N:100:TYR:HA	1.72	0.70
1:N:122:PHE:CE1	1:N:163:ALA:HA	2.25	0.70
1:G:169:GLN:OE1	1:J:143:ARG:CD	2.38	0.70
1:C:51:LEU:CD2	1:F:66:LYS:NZ	2.54	0.70
1:B:66:LYS:HG3	1:M:54:LYS:HZ1	1.54	0.70
1:K:136:TYR:CD2	1:K:155:TYR:CD1	2.79	0.70
1:G:136:TYR:CD2	1:G:155:TYR:CD1	2.79	0.70
1:A:58:ILE:HG23	1:A:100:TYR:HA	1.72	0.70
1:O:55:GLU:OE2	1:O:99:ILE:HD13	1.90	0.70
1:H:136:TYR:CD2	1:H:155:TYR:CD1	2.79	0.70
1:K:66:LYS:NZ	1:O:51:LEU:CD2	2.54	0.70
1:L:93:TYR:CZ	1:L:136:TYR:CE2	2.80	0.70
1:K:136:TYR:CE1	1:K:155:TYR:HB2	2.27	0.70
1:I:93:TYR:CZ	1:I:136:TYR:CE2	2.80	0.70
1:O:93:TYR:CZ	1:O:136:TYR:CE2	2.80	0.70
1:B:51:LEU:CD2	1:I:66:LYS:NZ	2.55	0.70
1:G:136:TYR:CE1	1:G:155:TYR:HB2	2.27	0.70
1:F:51:LEU:CD2	1:H:66:LYS:NZ	2.55	0.70
1:J:136:TYR:CD2	1:J:155:TYR:CD1	2.79	0.70
1:J:136:TYR:CE1	1:J:155:TYR:HB2	2.27	0.70
1:H:93:TYR:CZ	1:H:136:TYR:CE2	2.80	0.70
1:O:136:TYR:CE1	1:O:155:TYR:HB2	2.27	0.70
1:A:136:TYR:CE1	1:A:155:TYR:HB2	2.27	0.70
1:L:136:TYR:CE1	1:L:155:TYR:HB2	2.27	0.70
1:N:93:TYR:CZ	1:N:136:TYR:CE2	2.80	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:136:TYR:CE1	1:I:155:TYR:HB2	2.27	0.70
1:A:122:PHE:CE1	1:A:163:ALA:HA	2.25	0.70
1:D:169:GLN:OE1	1:E:143:ARG:CD	2.39	0.70
1:L:51:LEU:CD2	1:N:66:LYS:NZ	2.55	0.70
1:K:93:TYR:CZ	1:K:136:TYR:CE2	2.80	0.70
1:D:58:ILE:HG23	1:D:100:TYR:HA	1.73	0.70
1:M:136:TYR:CD2	1:M:155:TYR:CD1	2.79	0.70
1:O:136:TYR:CD2	1:O:155:TYR:CD1	2.79	0.70
1:M:136:TYR:CE1	1:M:155:TYR:HB2	2.27	0.70
1:I:54:LYS:HZ1	1:O:66:LYS:HG3	1.53	0.69
1:C:88:LEU:CD2	1:E:54:LYS:CE	2.54	0.69
1:B:136:TYR:CE1	1:B:155:TYR:HB2	2.27	0.69
1:L:58:ILE:HG23	1:L:100:TYR:HA	1.72	0.69
1:C:58:ILE:HG23	1:C:100:TYR:HA	1.72	0.69
1:H:136:TYR:CE1	1:H:155:TYR:HB2	2.27	0.69
1:E:136:TYR:CD2	1:E:155:TYR:CD1	2.79	0.69
1:A:136:TYR:CD2	1:A:155:TYR:CD1	2.79	0.69
1:L:122:PHE:CE1	1:L:163:ALA:HA	2.25	0.69
1:B:93:TYR:CZ	1:B:136:TYR:CE2	2.80	0.69
1:N:136:TYR:CE1	1:N:155:TYR:HB2	2.27	0.69
1:E:93:TYR:CZ	1:E:136:TYR:CE2	2.80	0.69
1:H:54:LYS:HZ1	1:L:66:LYS:HG3	1.54	0.69
1:D:93:TYR:CZ	1:D:136:TYR:CE2	2.80	0.69
1:H:58:ILE:HG23	1:H:100:TYR:HA	1.73	0.69
1:M:93:TYR:CZ	1:M:136:TYR:CE2	2.80	0.69
1:C:66:LYS:NZ	1:E:51:LEU:CD2	2.55	0.69
1:C:135:ASN:O	1:C:151:GLY:HA3	1.93	0.69
1:C:136:TYR:CE1	1:C:155:TYR:HB2	2.27	0.69
1:I:135:ASN:O	1:I:151:GLY:HA3	1.93	0.69
1:J:136:TYR:CE2	1:J:155:TYR:CA	2.76	0.69
1:F:58:ILE:HG23	1:F:100:TYR:HA	1.72	0.69
1:F:136:TYR:CD2	1:F:155:TYR:CD1	2.79	0.69
1:F:136:TYR:CE1	1:F:155:TYR:HB2	2.27	0.69
1:H:136:TYR:CE2	1:H:155:TYR:CA	2.76	0.69
1:O:135:ASN:O	1:O:151:GLY:HA3	1.93	0.69
1:E:58:ILE:HG23	1:E:100:TYR:HA	1.73	0.69
1:A:93:TYR:CZ	1:A:136:TYR:CE2	2.80	0.69
1:L:135:ASN:O	1:L:151:GLY:HA3	1.93	0.69
1:N:136:TYR:CE2	1:N:155:TYR:CA	2.76	0.69
1:F:93:TYR:CZ	1:F:136:TYR:CE2	2.80	0.69
1:M:135:ASN:O	1:M:151:GLY:HA3	1.93	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:46:PHE:CE1	1:H:84:LEU:HD13	2.28	0.69
1:A:51:LEU:HD21	1:D:66:LYS:NZ	2.07	0.69
1:L:46:PHE:CE1	1:L:84:LEU:HD13	2.28	0.69
1:B:135:ASN:O	1:B:151:GLY:HA3	1.93	0.69
1:C:136:TYR:CD2	1:C:155:TYR:CD1	2.79	0.69
1:C:93:TYR:CZ	1:C:136:TYR:CE2	2.80	0.69
1:K:135:ASN:O	1:K:151:GLY:HA3	1.93	0.69
1:K:136:TYR:CE2	1:K:155:TYR:CA	2.76	0.69
1:N:135:ASN:O	1:N:151:GLY:HA3	1.93	0.69
1:J:93:TYR:CZ	1:J:136:TYR:CE2	2.80	0.69
1:A:135:ASN:O	1:A:151:GLY:HA3	1.93	0.69
1:F:46:PHE:CE1	1:F:84:LEU:HD13	2.28	0.69
1:D:46:PHE:CE1	1:D:84:LEU:HD13	2.28	0.69
1:A:66:LYS:NZ	1:J:51:LEU:CD2	2.56	0.69
1:N:46:PHE:CE1	1:N:84:LEU:HD13	2.28	0.69
1:L:54:LYS:HZ1	1:N:66:LYS:HG3	1.53	0.69
1:E:46:PHE:CE1	1:E:84:LEU:HD13	2.28	0.69
1:I:51:LEU:CD2	1:O:66:LYS:NZ	2.56	0.69
1:C:46:PHE:CE1	1:C:84:LEU:HD13	2.28	0.69
1:B:136:TYR:CE2	1:B:155:TYR:CA	2.76	0.69
1:C:136:TYR:CE2	1:C:155:TYR:CA	2.76	0.69
1:D:136:TYR:CD2	1:D:155:TYR:CD1	2.79	0.69
1:D:136:TYR:CE2	1:D:155:TYR:CA	2.76	0.69
1:D:136:TYR:CE1	1:D:155:TYR:HB2	2.27	0.69
1:J:135:ASN:O	1:J:151:GLY:HA3	1.93	0.69
1:I:136:TYR:CE2	1:I:155:TYR:CA	2.76	0.69
1:F:135:ASN:O	1:F:151:GLY:HA3	1.93	0.69
1:G:135:ASN:O	1:G:151:GLY:HA3	1.93	0.69
1:G:93:TYR:CZ	1:G:136:TYR:CE2	2.80	0.69
1:E:136:TYR:CE2	1:E:155:TYR:CA	2.76	0.69
1:A:136:TYR:CE2	1:A:155:TYR:CA	2.76	0.69
1:M:66:LYS:CG	1:N:54:LYS:NZ	2.43	0.69
1:G:51:LEU:CD2	1:J:66:LYS:NZ	2.55	0.69
1:G:136:TYR:CE2	1:G:155:TYR:CA	2.76	0.69
1:A:46:PHE:CE1	1:A:84:LEU:HD13	2.28	0.68
1:C:66:LYS:HG3	1:E:54:LYS:HZ1	1.57	0.68
1:D:149:VAL:HG13	1:D:155:TYR:CE2	2.29	0.68
1:J:135:ASN:C	1:J:136:TYR:HD1	1.97	0.68
1:E:135:ASN:O	1:E:151:GLY:HA3	1.93	0.68
1:E:136:TYR:CE1	1:E:155:TYR:HB2	2.27	0.68
1:L:136:TYR:CE2	1:L:155:TYR:CA	2.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:136:TYR:CE2	1:M:155:TYR:CA	2.76	0.68
1:G:46:PHE:CE1	1:G:84:LEU:HD13	2.28	0.68
1:K:46:PHE:CE1	1:K:84:LEU:HD13	2.28	0.68
1:F:136:TYR:CE2	1:F:155:TYR:CA	2.76	0.68
1:H:149:VAL:HG13	1:H:155:TYR:CE2	2.29	0.68
1:E:149:VAL:HG13	1:E:155:TYR:CE2	2.28	0.68
1:M:46:PHE:CE1	1:M:84:LEU:HD13	2.28	0.68
1:H:51:LEU:CD2	1:L:66:LYS:NZ	2.56	0.68
1:B:66:LYS:NZ	1:M:51:LEU:CD2	2.57	0.68
1:B:135:ASN:C	1:B:136:TYR:HD1	1.97	0.68
1:I:135:ASN:C	1:I:136:TYR:HD1	1.97	0.68
1:H:135:ASN:O	1:H:151:GLY:HA3	1.93	0.68
1:O:135:ASN:C	1:O:136:TYR:HD1	1.97	0.68
1:B:51:LEU:HD21	1:I:66:LYS:NZ	2.09	0.68
1:J:46:PHE:CE1	1:J:84:LEU:HD13	2.28	0.68
1:E:135:ASN:C	1:E:136:TYR:HD1	1.97	0.68
1:F:149:VAL:HG13	1:F:155:TYR:CE2	2.29	0.68
1:M:135:ASN:C	1:M:136:TYR:HD1	1.97	0.68
1:O:149:VAL:HG13	1:O:155:TYR:CE2	2.29	0.68
1:B:46:PHE:CE1	1:B:84:LEU:HD13	2.28	0.68
1:D:135:ASN:C	1:D:136:TYR:HD1	1.97	0.68
1:F:135:ASN:C	1:F:136:TYR:HD1	1.97	0.68
1:M:149:VAL:HG13	1:M:155:TYR:CE2	2.28	0.68
1:A:149:VAL:HG13	1:A:155:TYR:CE2	2.28	0.68
1:C:51:LEU:HD21	1:F:66:LYS:NZ	2.08	0.68
1:C:54:LYS:HZ3	1:F:88:LEU:HD23	1.26	0.68
1:O:46:PHE:CE1	1:O:84:LEU:HD13	2.28	0.68
1:K:135:ASN:C	1:K:136:TYR:HD1	1.97	0.68
1:D:135:ASN:O	1:D:151:GLY:HA3	1.93	0.68
1:I:100:TYR:CD2	1:I:154:VAL:HG11	2.29	0.68
1:L:149:VAL:HG13	1:L:155:TYR:CE2	2.28	0.68
1:I:149:VAL:HG13	1:I:155:TYR:CE2	2.28	0.68
1:F:100:TYR:CD2	1:F:154:VAL:HG11	2.29	0.68
1:O:136:TYR:CE2	1:O:155:TYR:CA	2.76	0.68
1:B:149:VAL:HG13	1:B:155:TYR:CE2	2.28	0.68
1:L:135:ASN:C	1:L:136:TYR:HD1	1.97	0.68
1:L:100:TYR:CD2	1:L:154:VAL:HG11	2.29	0.68
1:O:100:TYR:CD2	1:O:154:VAL:HG11	2.29	0.68
1:D:51:LEU:CD2	1:E:66:LYS:NZ	2.57	0.67
1:B:100:TYR:CD2	1:B:154:VAL:HG11	2.29	0.67
1:C:149:VAL:HG13	1:C:155:TYR:CE2	2.28	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:100:TYR:CD2	1:M:154:VAL:HG11	2.29	0.67
1:A:135:ASN:C	1:A:136:TYR:HD1	1.97	0.67
1:G:135:ASN:C	1:G:136:TYR:HD1	1.97	0.67
1:G:149:VAL:HG13	1:G:155:TYR:CE2	2.28	0.67
1:L:166:MET:SD	1:N:143:ARG:NH2	2.66	0.67
1:K:136:TYR:HB3	1:K:155:TYR:CE1	2.30	0.67
1:I:46:PHE:CE1	1:I:84:LEU:HD13	2.28	0.67
1:C:100:TYR:CD2	1:C:154:VAL:HG11	2.29	0.67
1:C:135:ASN:C	1:C:136:TYR:HD1	1.97	0.67
1:N:135:ASN:C	1:N:136:TYR:HD1	1.97	0.67
1:D:100:TYR:CD2	1:D:154:VAL:HG11	2.29	0.67
1:J:149:VAL:HG13	1:J:155:TYR:CE2	2.28	0.67
1:E:100:TYR:CD2	1:E:154:VAL:HG11	2.29	0.67
1:K:100:TYR:CD2	1:K:154:VAL:HG11	2.29	0.67
1:A:114:LEU:HD13	1:A:117:VAL:HG13	1.77	0.67
1:O:114:LEU:HD13	1:O:117:VAL:HG13	1.77	0.67
1:G:66:LYS:NZ	1:K:51:LEU:CD2	2.57	0.67
1:N:100:TYR:CD2	1:N:154:VAL:HG11	2.29	0.67
1:J:136:TYR:HB3	1:J:155:TYR:CE1	2.30	0.67
1:G:100:TYR:CD2	1:G:154:VAL:HG11	2.29	0.67
1:K:114:LEU:HD13	1:K:117:VAL:HG13	1.77	0.67
1:G:54:LYS:CE	1:J:88:LEU:CD2	2.53	0.67
1:I:136:TYR:HB3	1:I:155:TYR:CE1	2.30	0.67
1:H:135:ASN:C	1:H:136:TYR:HD1	1.97	0.67
1:F:51:LEU:HD21	1:H:66:LYS:NZ	2.09	0.67
1:K:66:LYS:NZ	1:O:51:LEU:HD21	2.09	0.67
1:B:136:TYR:HB3	1:B:155:TYR:CE1	2.30	0.67
1:K:149:VAL:HG13	1:K:155:TYR:CE2	2.28	0.67
1:O:136:TYR:HB3	1:O:155:TYR:CE1	2.29	0.67
1:A:100:TYR:CD2	1:A:154:VAL:HG11	2.29	0.67
1:J:114:LEU:HD13	1:J:117:VAL:HG13	1.77	0.67
1:L:51:LEU:HD21	1:N:66:LYS:NZ	2.10	0.67
1:N:149:VAL:HG13	1:N:155:TYR:CE2	2.28	0.67
1:F:136:TYR:HB3	1:F:155:TYR:CE1	2.30	0.67
1:L:169:GLN:OE1	1:N:143:ARG:CD	2.42	0.66
1:H:51:LEU:HD21	1:L:66:LYS:NZ	2.09	0.66
1:C:136:TYR:HB3	1:C:155:TYR:CE1	2.30	0.66
1:N:136:TYR:HB3	1:N:155:TYR:CE1	2.29	0.66
1:H:100:TYR:CD2	1:H:154:VAL:HG11	2.29	0.66
1:I:114:LEU:HD13	1:I:117:VAL:HG13	1.76	0.66
1:D:114:LEU:HD13	1:D:117:VAL:HG13	1.77	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:166:MET:SD	1:J:143:ARG:NH2	2.68	0.66
1:K:66:LYS:HG3	1:O:54:LYS:HZ1	1.55	0.66
1:A:136:TYR:HB3	1:A:155:TYR:CE1	2.30	0.66
1:M:114:LEU:HD13	1:M:117:VAL:HG13	1.77	0.66
1:B:58:ILE:CG2	1:B:100:TYR:HA	2.26	0.66
1:C:93:TYR:CE1	1:C:136:TYR:CE2	2.84	0.66
1:I:58:ILE:CG2	1:I:100:TYR:HA	2.26	0.66
1:J:100:TYR:CD2	1:J:154:VAL:HG11	2.29	0.66
1:C:58:ILE:CG2	1:C:100:TYR:HA	2.26	0.66
1:H:136:TYR:HB3	1:H:155:TYR:CE1	2.30	0.66
1:M:136:TYR:HB3	1:M:155:TYR:CE1	2.30	0.66
1:G:136:TYR:HB3	1:G:155:TYR:CE1	2.30	0.66
1:G:51:LEU:HD21	1:J:66:LYS:NZ	2.10	0.66
1:D:136:TYR:HB3	1:D:155:TYR:CE1	2.30	0.66
1:O:58:ILE:CG2	1:O:100:TYR:HA	2.26	0.66
1:E:93:TYR:CE1	1:E:136:TYR:CE2	2.84	0.66
1:G:114:LEU:HD13	1:G:117:VAL:HG13	1.76	0.66
1:B:166:MET:SD	1:I:143:ARG:NH2	2.69	0.66
1:A:88:LEU:CD2	1:J:54:LYS:CE	2.54	0.66
1:F:58:ILE:CG2	1:F:100:TYR:HA	2.26	0.66
1:G:93:TYR:CE1	1:G:136:TYR:CE2	2.84	0.66
1:L:122:PHE:CE2	1:L:147:PHE:CE2	2.84	0.66
1:C:166:MET:SD	1:F:143:ARG:NH2	2.69	0.66
1:K:93:TYR:CE1	1:K:136:TYR:CE2	2.84	0.66
1:K:58:ILE:CG2	1:K:100:TYR:HA	2.26	0.66
1:G:58:ILE:CG2	1:G:100:TYR:HA	2.26	0.66
1:E:136:TYR:HB3	1:E:155:TYR:CE1	2.30	0.66
1:N:114:LEU:HD13	1:N:117:VAL:HG13	1.77	0.66
1:M:122:PHE:CE2	1:M:147:PHE:CE2	2.84	0.66
1:I:122:PHE:CE2	1:I:147:PHE:CE2	2.84	0.66
1:O:122:PHE:CE2	1:O:147:PHE:CE2	2.84	0.66
1:J:93:TYR:CE1	1:J:136:TYR:CE2	2.84	0.66
1:F:93:TYR:CE1	1:F:136:TYR:CE2	2.84	0.66
1:E:58:ILE:CG2	1:E:100:TYR:HA	2.26	0.66
1:B:114:LEU:HD13	1:B:117:VAL:HG13	1.77	0.66
1:B:122:PHE:CE2	1:B:147:PHE:CE2	2.84	0.66
1:C:66:LYS:NZ	1:E:51:LEU:HD21	2.10	0.66
1:L:136:TYR:HB3	1:L:155:TYR:CE1	2.30	0.66
1:J:58:ILE:CG2	1:J:100:TYR:HA	2.26	0.66
1:N:122:PHE:CE2	1:N:147:PHE:CE2	2.84	0.66
1:H:122:PHE:CE2	1:H:147:PHE:CE2	2.84	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:43:ARG:HH11	1:N:59:VAL:HG23	1.61	0.65
1:D:93:TYR:CE1	1:D:136:TYR:CE2	2.84	0.65
1:M:58:ILE:CG2	1:M:100:TYR:HA	2.26	0.65
1:L:114:LEU:HD13	1:L:117:VAL:HG13	1.76	0.65
1:C:143:ARG:NH2	1:E:166:MET:SD	2.70	0.65
1:B:43:ARG:HH11	1:B:59:VAL:HG23	1.61	0.65
1:N:93:TYR:CE1	1:N:136:TYR:CE2	2.84	0.65
1:D:58:ILE:CG2	1:D:100:TYR:HA	2.26	0.65
1:H:58:ILE:CG2	1:H:100:TYR:HA	2.26	0.65
1:M:93:TYR:CE1	1:M:136:TYR:CE2	2.84	0.65
1:J:43:ARG:HH11	1:J:59:VAL:HG23	1.61	0.65
1:O:43:ARG:HH11	1:O:59:VAL:HG23	1.61	0.65
1:L:93:TYR:CE1	1:L:136:TYR:CE2	2.84	0.65
1:K:122:PHE:CE2	1:K:147:PHE:CE2	2.84	0.65
1:F:114:LEU:HD13	1:F:117:VAL:HG13	1.76	0.65
1:F:122:PHE:CE2	1:F:147:PHE:CE2	2.84	0.65
1:F:43:ARG:HH11	1:F:59:VAL:HG23	1.61	0.65
1:D:43:ARG:HH11	1:D:59:VAL:HG23	1.61	0.65
1:E:43:ARG:HH11	1:E:59:VAL:HG23	1.61	0.65
1:I:43:ARG:HH11	1:I:59:VAL:HG23	1.61	0.65
1:J:135:ASN:O	1:J:136:TYR:CD1	2.50	0.65
1:A:66:LYS:NZ	1:J:51:LEU:HD21	2.10	0.65
1:O:93:TYR:CE1	1:O:136:TYR:CE2	2.84	0.65
1:G:135:ASN:O	1:G:136:TYR:CD1	2.50	0.65
1:C:122:PHE:CE2	1:C:147:PHE:CE2	2.84	0.65
1:K:43:ARG:HH11	1:K:59:VAL:HG23	1.61	0.65
1:O:43:ARG:NH1	1:O:59:VAL:HG23	2.12	0.65
1:L:58:ILE:CG2	1:L:100:TYR:HA	2.26	0.65
1:N:58:ILE:CG2	1:N:100:TYR:HA	2.26	0.65
1:F:135:ASN:O	1:F:136:TYR:CD1	2.50	0.65
1:H:93:TYR:CE1	1:H:136:TYR:CE2	2.84	0.65
1:E:135:ASN:O	1:E:136:TYR:CD1	2.50	0.65
1:A:93:TYR:CE1	1:A:136:TYR:CE2	2.84	0.65
1:H:114:LEU:HD13	1:H:117:VAL:HG13	1.76	0.65
1:E:114:LEU:HD13	1:E:117:VAL:HG13	1.77	0.65
1:G:122:PHE:CE2	1:G:147:PHE:CE2	2.84	0.65
1:D:76:ASP:OD1	1:D:77:PRO:HD2	1.97	0.65
1:K:75:HIS:HB3	1:K:80:LEU:HD11	1.79	0.65
1:E:76:ASP:OD1	1:E:77:PRO:HD2	1.97	0.65
1:F:76:ASP:OD1	1:F:77:PRO:HD2	1.97	0.65
1:C:76:ASP:OD1	1:C:77:PRO:HD2	1.97	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:75:HIS:HB3	1:O:80:LEU:HD11	1.79	0.65
1:M:43:ARG:HH11	1:M:59:VAL:HG23	1.61	0.65
1:G:66:LYS:NZ	1:K:51:LEU:HD21	2.10	0.65
1:N:43:ARG:NH1	1:N:59:VAL:HG23	2.12	0.65
1:B:93:TYR:CE1	1:B:136:TYR:CE2	2.84	0.65
1:D:135:ASN:O	1:D:136:TYR:CD1	2.50	0.65
1:H:135:ASN:O	1:H:136:TYR:CD1	2.50	0.65
1:O:135:ASN:O	1:O:136:TYR:CD1	2.50	0.65
1:A:58:ILE:CG2	1:A:100:TYR:HA	2.26	0.65
1:H:114:LEU:HD11	1:H:122:PHE:CD1	2.32	0.65
1:E:114:LEU:HD11	1:E:122:PHE:CD1	2.32	0.65
1:G:43:ARG:HH11	1:G:59:VAL:HG23	1.61	0.65
1:L:43:ARG:HH11	1:L:59:VAL:HG23	1.61	0.65
1:I:43:ARG:NH1	1:I:59:VAL:HG23	2.12	0.65
1:B:135:ASN:O	1:B:136:TYR:CD1	2.50	0.65
1:K:135:ASN:O	1:K:136:TYR:CD1	2.50	0.65
1:M:135:ASN:O	1:M:136:TYR:CD1	2.50	0.65
1:J:114:LEU:HD11	1:J:122:PHE:CD1	2.32	0.65
1:C:114:LEU:HD11	1:C:122:PHE:CD1	2.32	0.65
1:H:43:ARG:HH11	1:H:59:VAL:HG23	1.61	0.65
1:F:43:ARG:NH1	1:F:59:VAL:HG23	2.12	0.65
1:D:43:ARG:NH1	1:D:59:VAL:HG23	2.12	0.65
1:B:66:LYS:NZ	1:M:51:LEU:HD21	2.12	0.65
1:A:43:ARG:NH1	1:A:59:VAL:HG23	2.12	0.65
1:J:43:ARG:NH1	1:J:59:VAL:HG23	2.12	0.65
1:C:135:ASN:O	1:C:136:TYR:CD1	2.50	0.65
1:A:122:PHE:CE2	1:A:147:PHE:CE2	2.84	0.65
1:D:114:LEU:HD11	1:D:122:PHE:CD1	2.32	0.65
1:E:122:PHE:CE2	1:E:147:PHE:CE2	2.84	0.65
1:G:114:LEU:HD11	1:G:122:PHE:CD1	2.32	0.65
1:M:76:ASP:OD1	1:M:77:PRO:HD2	1.97	0.65
1:N:76:ASP:OD1	1:N:77:PRO:HD2	1.97	0.65
1:K:143:ARG:NH2	1:O:166:MET:SD	2.70	0.65
1:M:43:ARG:NH1	1:M:59:VAL:HG23	2.12	0.65
1:I:51:LEU:HD21	1:O:66:LYS:NZ	2.10	0.65
1:O:114:LEU:HD11	1:O:122:PHE:CD1	2.32	0.65
1:C:114:LEU:HD13	1:C:117:VAL:HG13	1.76	0.65
1:O:111:VAL:HG12	1:O:148:TYR:CD1	2.32	0.65
1:H:76:ASP:OD1	1:H:77:PRO:HD2	1.97	0.65
1:A:43:ARG:HH11	1:A:59:VAL:HG23	1.61	0.64
1:A:66:LYS:HG3	1:J:54:LYS:HZ1	1.52	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:135:ASN:O	1:A:136:TYR:CD1	2.50	0.64
1:J:122:PHE:CE2	1:J:147:PHE:CE2	2.84	0.64
1:E:75:HIS:HB3	1:E:80:LEU:HD11	1.79	0.64
1:A:76:ASP:OD1	1:A:77:PRO:HD2	1.97	0.64
1:B:111:VAL:HG12	1:B:148:TYR:CD1	2.32	0.64
1:B:76:ASP:OD1	1:B:77:PRO:HD2	1.97	0.64
1:I:111:VAL:HG12	1:I:148:TYR:CD1	2.32	0.64
1:I:75:HIS:HB3	1:I:80:LEU:HD11	1.79	0.64
1:F:54:LYS:HZ1	1:H:66:LYS:HG3	1.56	0.64
1:E:43:ARG:NH1	1:E:59:VAL:HG23	2.12	0.64
1:C:43:ARG:NH1	1:C:59:VAL:HG23	2.12	0.64
1:M:114:LEU:HD11	1:M:122:PHE:CD1	2.32	0.64
1:K:114:LEU:HD11	1:K:122:PHE:CD1	2.32	0.64
1:D:75:HIS:HB3	1:D:80:LEU:HD11	1.79	0.64
1:G:75:HIS:HB3	1:G:80:LEU:HD11	1.79	0.64
1:N:111:VAL:HG12	1:N:148:TYR:CD1	2.32	0.64
1:I:166:MET:SD	1:O:143:ARG:NH2	2.71	0.64
1:I:135:ASN:O	1:I:136:TYR:CD1	2.50	0.64
1:N:114:LEU:HD11	1:N:122:PHE:CD1	2.32	0.64
1:L:114:LEU:HD11	1:L:122:PHE:CD1	2.32	0.64
1:D:122:PHE:CE2	1:D:147:PHE:CE2	2.84	0.64
1:J:111:VAL:HG12	1:J:148:TYR:CD1	2.32	0.64
1:A:166:MET:SD	1:D:143:ARG:NH2	2.71	0.64
1:A:54:LYS:HZ1	1:D:66:LYS:HG3	1.57	0.64
1:L:43:ARG:NH1	1:L:59:VAL:HG23	2.12	0.64
1:F:114:LEU:HD11	1:F:122:PHE:CD1	2.32	0.64
1:I:76:ASP:OD1	1:I:77:PRO:HD2	1.97	0.64
1:L:76:ASP:OD1	1:L:77:PRO:HD2	1.97	0.64
1:M:111:VAL:HG12	1:M:148:TYR:CD1	2.32	0.64
1:G:111:VAL:HG12	1:G:148:TYR:CD1	2.32	0.64
1:I:114:LEU:HD11	1:I:122:PHE:CD1	2.32	0.64
1:C:75:HIS:HB3	1:C:80:LEU:HD11	1.79	0.64
1:C:43:ARG:HH11	1:C:59:VAL:HG23	1.61	0.64
1:C:63:ALA:HA	1:C:103:ASP:CG	2.18	0.64
1:N:135:ASN:O	1:N:136:TYR:CD1	2.50	0.64
1:O:63:ALA:HA	1:O:103:ASP:CG	2.18	0.64
1:A:75:HIS:HB3	1:A:80:LEU:HD11	1.79	0.64
1:D:63:ALA:HA	1:D:103:ASP:CG	2.18	0.64
1:I:137:PRO:HG2	1:I:150:SER:OG	1.98	0.64
1:I:93:TYR:CE1	1:I:136:TYR:CE2	2.84	0.64
1:G:63:ALA:HA	1:G:103:ASP:CG	2.18	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:63:ALA:HA	1:E:103:ASP:CG	2.18	0.64
1:K:76:ASP:OD1	1:K:77:PRO:HD2	1.97	0.64
1:O:76:ASP:OD1	1:O:77:PRO:HD2	1.97	0.64
1:H:43:ARG:NH1	1:H:59:VAL:HG23	2.12	0.64
1:G:43:ARG:NH1	1:G:59:VAL:HG23	2.12	0.64
1:B:137:PRO:HG2	1:B:150:SER:OG	1.98	0.64
1:L:135:ASN:O	1:L:136:TYR:CD1	2.50	0.64
1:B:75:HIS:HB3	1:B:80:LEU:HD11	1.79	0.64
1:F:111:VAL:HG12	1:F:148:TYR:CD1	2.32	0.64
1:D:51:LEU:HD21	1:E:66:LYS:NZ	2.12	0.64
1:B:63:ALA:HA	1:B:103:ASP:CG	2.18	0.64
1:A:114:LEU:HD11	1:A:122:PHE:CD1	2.32	0.64
1:B:114:LEU:HD11	1:B:122:PHE:CD1	2.32	0.64
1:F:75:HIS:HB3	1:F:80:LEU:HD11	1.79	0.64
1:D:111:VAL:HG12	1:D:148:TYR:CD1	2.32	0.64
1:J:75:HIS:HB3	1:J:80:LEU:HD11	1.79	0.64
1:K:43:ARG:NH1	1:K:59:VAL:HG23	2.12	0.64
1:I:63:ALA:HA	1:I:103:ASP:CG	2.18	0.64
1:H:111:VAL:HG12	1:H:148:TYR:CD1	2.32	0.64
1:M:63:ALA:HA	1:M:103:ASP:CG	2.18	0.63
1:E:133:ASN:C	1:E:135:ASN:H	2.02	0.63
1:A:63:ALA:HA	1:A:103:ASP:CG	2.19	0.63
1:J:76:ASP:OD1	1:J:77:PRO:HD2	1.97	0.63
1:C:111:VAL:HG12	1:C:148:TYR:CD1	2.32	0.63
1:K:111:VAL:HG12	1:K:148:TYR:CD1	2.33	0.63
1:O:137:PRO:HG2	1:O:150:SER:OG	1.98	0.63
1:E:111:VAL:HG12	1:E:148:TYR:CD1	2.32	0.63
1:K:133:ASN:C	1:K:135:ASN:H	2.02	0.63
1:J:63:ALA:HA	1:J:103:ASP:CG	2.18	0.63
1:F:63:ALA:HA	1:F:103:ASP:CG	2.18	0.63
1:M:137:PRO:HG2	1:M:150:SER:OG	1.98	0.63
1:H:75:HIS:HB3	1:H:80:LEU:HD11	1.79	0.63
1:L:111:VAL:HG12	1:L:148:TYR:CD1	2.32	0.63
1:M:88:LEU:HD23	1:N:54:LYS:HZ3	1.37	0.63
1:B:43:ARG:NH1	1:B:59:VAL:HG23	2.12	0.63
1:H:133:ASN:C	1:H:135:ASN:H	2.02	0.63
1:G:76:ASP:OD1	1:G:77:PRO:HD2	1.97	0.63
1:B:133:ASN:C	1:B:135:ASN:H	2.02	0.63
1:N:63:ALA:HA	1:N:103:ASP:CG	2.18	0.63
1:H:63:ALA:HA	1:H:103:ASP:CG	2.18	0.63
1:D:166:MET:SD	1:E:143:ARG:NH2	2.72	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:133:ASN:C	1:N:135:ASN:H	2.02	0.63
1:N:137:PRO:HG2	1:N:150:SER:OG	1.98	0.63
1:I:133:ASN:C	1:I:135:ASN:H	2.02	0.63
1:J:133:ASN:C	1:J:135:ASN:H	2.02	0.63
1:L:133:ASN:C	1:L:135:ASN:H	2.02	0.63
1:C:133:ASN:C	1:C:135:ASN:H	2.02	0.63
1:C:137:PRO:HG2	1:C:150:SER:OG	1.98	0.63
1:H:137:PRO:HG2	1:H:150:SER:OG	1.98	0.63
1:L:75:HIS:HB3	1:L:80:LEU:HD11	1.79	0.63
1:K:137:PRO:HG2	1:K:150:SER:OG	1.98	0.63
1:F:137:PRO:HG2	1:F:150:SER:OG	1.98	0.63
1:O:133:ASN:C	1:O:135:ASN:H	2.02	0.63
1:A:137:PRO:HG2	1:A:150:SER:OG	1.98	0.63
1:F:166:MET:SD	1:H:143:ARG:NH2	2.72	0.63
1:K:63:ALA:HA	1:K:103:ASP:CG	2.18	0.63
1:D:117:VAL:HB	1:D:170:ASN:CG	2.20	0.63
1:A:111:VAL:HG12	1:A:148:TYR:CD1	2.33	0.63
1:D:137:PRO:HG2	1:D:150:SER:OG	1.98	0.62
1:M:75:HIS:HB3	1:M:80:LEU:HD11	1.79	0.62
1:L:63:ALA:HA	1:L:103:ASP:CG	2.18	0.62
1:D:133:ASN:C	1:D:135:ASN:H	2.02	0.62
1:E:137:PRO:HG2	1:E:150:SER:OG	1.98	0.62
1:N:117:VAL:HB	1:N:170:ASN:CG	2.20	0.62
1:L:137:PRO:HG2	1:L:150:SER:OG	1.98	0.62
1:J:137:PRO:HG2	1:J:150:SER:OG	1.98	0.62
1:I:117:VAL:HB	1:I:170:ASN:CG	2.20	0.62
1:G:117:VAL:HB	1:G:170:ASN:CG	2.20	0.62
1:N:75:HIS:HB3	1:N:80:LEU:HD11	1.79	0.62
1:B:143:ARG:NH2	1:M:166:MET:SD	2.72	0.62
1:H:117:VAL:HB	1:H:170:ASN:CG	2.20	0.62
1:F:117:VAL:HB	1:F:170:ASN:CG	2.20	0.62
1:A:169:GLN:HE22	1:D:146:THR:HG21	1.64	0.62
1:A:143:ARG:NH2	1:J:166:MET:SD	2.72	0.62
1:M:117:VAL:HB	1:M:170:ASN:CG	2.20	0.62
1:L:117:VAL:HB	1:L:170:ASN:CG	2.20	0.62
1:M:143:ARG:NH2	1:N:166:MET:SD	2.73	0.62
1:M:133:ASN:C	1:M:135:ASN:H	2.02	0.62
1:G:133:ASN:C	1:G:135:ASN:H	2.02	0.62
1:G:137:PRO:HG2	1:G:150:SER:OG	1.98	0.62
1:B:117:VAL:HB	1:B:170:ASN:CG	2.20	0.62
1:H:169:GLN:OE1	1:L:143:ARG:NH1	2.32	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:133:ASN:C	1:F:135:ASN:H	2.02	0.62
1:A:133:ASN:C	1:A:135:ASN:H	2.02	0.62
1:K:117:VAL:HB	1:K:170:ASN:CG	2.20	0.62
1:A:117:VAL:HB	1:A:170:ASN:CG	2.20	0.62
1:J:117:VAL:HB	1:J:170:ASN:CG	2.20	0.62
1:E:117:VAL:HB	1:E:170:ASN:CG	2.20	0.62
1:O:117:VAL:HB	1:O:170:ASN:CG	2.20	0.62
1:C:117:VAL:HB	1:C:170:ASN:CG	2.20	0.62
1:B:146:THR:HG21	1:M:169:GLN:HE22	1.64	0.61
1:L:169:GLN:HE22	1:N:146:THR:HG21	1.65	0.61
1:A:51:LEU:HG	1:D:66:LYS:NZ	2.15	0.61
1:K:88:LEU:HD23	1:O:54:LYS:HZ3	1.37	0.61
1:A:93:TYR:CD1	1:A:136:TYR:CE2	2.89	0.61
1:F:169:GLN:HE22	1:H:146:THR:HG21	1.66	0.61
1:A:54:LYS:HG3	1:D:87:GLN:O	2.01	0.61
1:N:93:TYR:CD1	1:N:136:TYR:CE2	2.89	0.61
1:D:93:TYR:CD1	1:D:136:TYR:CE2	2.89	0.61
1:F:93:TYR:CD1	1:F:136:TYR:CE2	2.89	0.61
1:G:143:ARG:NH1	1:K:169:GLN:OE1	2.31	0.61
1:L:93:TYR:CD1	1:L:136:TYR:CE2	2.89	0.61
1:M:87:GLN:O	1:N:54:LYS:HG3	2.01	0.61
1:A:54:LYS:HE3	1:D:88:LEU:HA	1.82	0.61
1:K:93:TYR:CD1	1:K:136:TYR:CE2	2.89	0.61
1:G:93:TYR:CD1	1:G:136:TYR:CE2	2.89	0.61
1:C:54:LYS:HG3	1:F:87:GLN:O	2.01	0.61
1:C:93:TYR:CD1	1:C:136:TYR:CE2	2.89	0.61
1:B:54:LYS:HZ3	1:I:88:LEU:HD23	1.35	0.60
1:I:93:TYR:CD1	1:I:136:TYR:CE2	2.89	0.60
1:J:93:TYR:CD1	1:J:136:TYR:CE2	2.89	0.60
1:H:93:TYR:CD1	1:H:136:TYR:CE2	2.89	0.60
1:M:66:LYS:HG3	1:N:54:LYS:HZ1	1.61	0.60
1:L:54:LYS:CE	1:N:88:LEU:CD2	2.52	0.60
1:G:54:LYS:HZ1	1:J:66:LYS:HG3	1.61	0.60
1:M:136:TYR:CD1	1:M:155:TYR:HB2	2.37	0.60
1:G:136:TYR:CD1	1:G:155:TYR:HB2	2.37	0.60
1:B:124:ASN:HA	1:B:127:LYS:HE3	1.84	0.60
1:F:169:GLN:OE1	1:H:143:ARG:NH1	2.34	0.60
1:D:169:GLN:HE22	1:E:146:THR:HG21	1.65	0.60
1:B:93:TYR:CD1	1:B:136:TYR:CE2	2.89	0.60
1:M:93:TYR:CD1	1:M:136:TYR:CE2	2.89	0.60
1:O:136:TYR:CD1	1:O:155:TYR:HB2	2.37	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:146:THR:HG21	1:O:169:GLN:HE22	1.67	0.60
1:G:169:GLN:HE22	1:J:146:THR:HG21	1.67	0.60
1:I:124:ASN:HA	1:I:127:LYS:HE3	1.84	0.60
1:I:136:TYR:CD1	1:I:155:TYR:HB2	2.37	0.60
1:E:93:TYR:CD1	1:E:136:TYR:CE2	2.89	0.60
1:A:137:PRO:HD2	1:A:150:SER:O	2.02	0.60
1:O:124:ASN:HA	1:O:127:LYS:HE3	1.84	0.60
1:B:137:PRO:HD2	1:B:150:SER:O	2.02	0.60
1:B:136:TYR:CD1	1:B:155:TYR:HB2	2.37	0.60
1:D:137:PRO:HD2	1:D:150:SER:O	2.02	0.60
1:I:137:PRO:HD2	1:I:150:SER:O	2.02	0.60
1:M:137:PRO:HD2	1:M:150:SER:O	2.02	0.60
1:M:124:ASN:HA	1:M:127:LYS:HE3	1.84	0.60
1:F:51:LEU:HG	1:H:66:LYS:NZ	2.17	0.60
1:J:137:PRO:HD2	1:J:150:SER:O	2.02	0.60
1:O:137:PRO:HD2	1:O:150:SER:O	2.02	0.60
1:M:143:ARG:HB3	1:N:169:GLN:NE2	2.16	0.60
1:H:166:MET:SD	1:L:143:ARG:NH2	2.74	0.60
1:B:143:ARG:NH1	1:M:169:GLN:OE1	2.33	0.60
1:A:166:MET:HB3	1:D:143:ARG:NH2	2.16	0.60
1:B:136:TYR:CG	1:B:155:TYR:CD1	2.90	0.60
1:O:136:TYR:CG	1:O:155:TYR:CD1	2.90	0.60
1:G:136:TYR:CG	1:G:155:TYR:CD1	2.90	0.60
1:L:137:PRO:HD2	1:L:150:SER:O	2.02	0.60
1:N:137:PRO:HD2	1:N:150:SER:O	2.02	0.60
1:I:135:ASN:O	1:I:136:TYR:HD1	1.85	0.60
1:H:136:TYR:CD1	1:H:155:TYR:HB2	2.37	0.60
1:A:135:ASN:O	1:A:136:TYR:HD1	1.85	0.60
1:A:136:TYR:CG	1:A:155:TYR:CD1	2.90	0.60
1:G:143:ARG:NH2	1:K:166:MET:SD	2.75	0.59
1:H:137:PRO:HD2	1:H:150:SER:O	2.02	0.59
1:E:137:PRO:HD2	1:E:150:SER:O	2.02	0.59
1:K:124:ASN:HA	1:K:127:LYS:HE3	1.84	0.59
1:C:137:PRO:HD2	1:C:150:SER:O	2.02	0.59
1:D:136:TYR:CD1	1:D:155:TYR:HB2	2.37	0.59
1:F:136:TYR:CD1	1:F:155:TYR:HB2	2.37	0.59
1:O:93:TYR:CD1	1:O:136:TYR:CE2	2.89	0.59
1:N:124:ASN:HA	1:N:127:LYS:HE3	1.84	0.59
1:H:169:GLN:NE2	1:L:143:ARG:HB3	2.17	0.59
1:L:43:ARG:HG3	1:L:59:VAL:HG21	1.85	0.59
1:K:137:PRO:HD2	1:K:150:SER:O	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:136:TYR:CD1	1:J:155:TYR:HB2	2.37	0.59
1:E:136:TYR:CD1	1:E:155:TYR:HB2	2.37	0.59
1:L:124:ASN:HA	1:L:127:LYS:HE3	1.84	0.59
1:M:143:ARG:NH1	1:N:169:GLN:OE1	2.34	0.59
1:C:169:GLN:HE22	1:F:146:THR:HG21	1.67	0.59
1:M:66:LYS:NZ	1:N:51:LEU:HG	2.17	0.59
1:L:135:ASN:O	1:L:136:TYR:HD1	1.85	0.59
1:C:135:ASN:O	1:C:136:TYR:HD1	1.86	0.59
1:G:137:PRO:HD2	1:G:150:SER:O	2.02	0.59
1:M:43:ARG:HG3	1:M:59:VAL:HG21	1.85	0.59
1:C:35:PHE:CZ	1:C:72:PHE:CG	2.91	0.59
1:G:66:LYS:NZ	1:K:51:LEU:HG	2.18	0.59
1:B:66:LYS:NZ	1:M:51:LEU:HG	2.17	0.59
1:K:87:GLN:O	1:O:54:LYS:HG3	2.02	0.59
1:K:136:TYR:CD1	1:K:155:TYR:HB2	2.37	0.59
1:N:136:TYR:CG	1:N:155:TYR:CD1	2.90	0.59
1:F:137:PRO:HD2	1:F:150:SER:O	2.02	0.59
1:M:136:TYR:CG	1:M:155:TYR:CD1	2.90	0.59
1:G:135:ASN:O	1:G:136:TYR:HD1	1.85	0.59
1:M:35:PHE:CZ	1:M:72:PHE:CG	2.91	0.59
1:N:35:PHE:CZ	1:N:72:PHE:CG	2.91	0.59
1:F:35:PHE:CZ	1:F:72:PHE:CG	2.91	0.59
1:H:124:ASN:HA	1:H:127:LYS:HE3	1.84	0.59
1:B:43:ARG:HG3	1:B:59:VAL:HG21	1.85	0.59
1:B:88:LEU:CD2	1:M:54:LYS:CE	2.52	0.59
1:N:43:ARG:HG3	1:N:59:VAL:HG21	1.85	0.59
1:M:135:ASN:O	1:M:136:TYR:HD1	1.85	0.59
1:C:94:PHE:CD1	1:C:99:ILE:HG22	2.38	0.59
1:L:136:TYR:CG	1:L:155:TYR:CD1	2.90	0.59
1:C:136:TYR:CG	1:C:155:TYR:CD1	2.90	0.59
1:D:136:TYR:CG	1:D:155:TYR:CD1	2.90	0.59
1:I:136:TYR:CG	1:I:155:TYR:CD1	2.90	0.59
1:E:136:TYR:CG	1:E:155:TYR:CD1	2.90	0.59
1:A:136:TYR:CD1	1:A:155:TYR:HB2	2.37	0.59
1:E:35:PHE:CZ	1:E:72:PHE:CG	2.91	0.59
1:G:124:ASN:HA	1:G:127:LYS:HE3	1.84	0.59
1:H:43:ARG:HG3	1:H:59:VAL:HG21	1.85	0.59
1:F:43:ARG:HG3	1:F:59:VAL:HG21	1.85	0.59
1:K:66:LYS:NZ	1:O:51:LEU:HG	2.18	0.59
1:B:54:LYS:HG3	1:I:87:GLN:O	2.03	0.59
1:C:136:TYR:CD1	1:C:155:TYR:HB2	2.36	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:136:TYR:CG	1:K:155:TYR:CD1	2.90	0.59
1:N:136:TYR:CD1	1:N:155:TYR:HB2	2.37	0.59
1:G:42:LEU:HD22	1:G:88:LEU:HD13	1.85	0.59
1:I:43:ARG:HG3	1:I:59:VAL:HG21	1.85	0.59
1:O:43:ARG:HG3	1:O:59:VAL:HG21	1.85	0.59
1:J:136:TYR:CG	1:J:155:TYR:CD1	2.90	0.59
1:L:108:ARG:CZ	1:L:156:VAL:HG21	2.33	0.59
1:M:108:ARG:CZ	1:M:156:VAL:HG21	2.33	0.59
1:B:94:PHE:CD1	1:B:99:ILE:HG22	2.38	0.59
1:I:108:ARG:CZ	1:I:156:VAL:HG21	2.33	0.59
1:E:94:PHE:CD1	1:E:99:ILE:HG22	2.38	0.59
1:J:124:ASN:HA	1:J:127:LYS:HE3	1.84	0.59
1:J:35:PHE:CZ	1:J:72:PHE:CG	2.91	0.59
1:B:35:PHE:CZ	1:B:72:PHE:CG	2.91	0.59
1:I:169:GLN:HE22	1:O:146:THR:HG21	1.67	0.58
1:L:166:MET:HB3	1:N:143:ARG:NH2	2.18	0.58
1:C:146:THR:HG21	1:E:169:GLN:HE22	1.68	0.58
1:L:54:LYS:HG3	1:N:87:GLN:O	2.03	0.58
1:H:135:ASN:O	1:H:136:TYR:HD1	1.86	0.58
1:F:124:ASN:HA	1:F:127:LYS:HE3	1.84	0.58
1:G:35:PHE:CZ	1:G:72:PHE:CG	2.91	0.58
1:L:35:PHE:CZ	1:L:72:PHE:CG	2.91	0.58
1:K:42:LEU:HD22	1:K:88:LEU:HD13	1.86	0.58
1:O:42:LEU:HD22	1:O:88:LEU:HD13	1.85	0.58
1:C:43:ARG:HG3	1:C:59:VAL:HG21	1.85	0.58
1:K:94:PHE:CD1	1:K:99:ILE:HG22	2.38	0.58
1:D:94:PHE:CD1	1:D:99:ILE:HG22	2.38	0.58
1:O:94:PHE:CD1	1:O:99:ILE:HG22	2.38	0.58
1:C:124:ASN:HA	1:C:127:LYS:HE3	1.84	0.58
1:G:146:THR:HG21	1:K:169:GLN:HE22	1.67	0.58
1:B:143:ARG:NH2	1:M:166:MET:HB3	2.18	0.58
1:D:169:GLN:OE1	1:E:143:ARG:NH1	2.34	0.58
1:C:51:LEU:HG	1:F:66:LYS:NZ	2.18	0.58
1:A:87:GLN:O	1:J:54:LYS:HG3	2.04	0.58
1:I:42:LEU:HD22	1:I:88:LEU:HD13	1.85	0.58
1:D:135:ASN:O	1:D:136:TYR:HD1	1.86	0.58
1:O:108:ARG:CZ	1:O:156:VAL:HG21	2.33	0.58
1:F:94:PHE:CD1	1:F:99:ILE:HG22	2.38	0.58
1:J:94:PHE:CD1	1:J:99:ILE:HG22	2.38	0.58
1:K:108:ARG:CZ	1:K:156:VAL:HG21	2.33	0.58
1:I:94:PHE:CD1	1:I:99:ILE:HG22	2.38	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:35:PHE:CZ	1:H:72:PHE:CG	2.91	0.58
1:A:124:ASN:HA	1:A:127:LYS:HE3	1.84	0.58
1:D:35:PHE:CZ	1:D:72:PHE:CG	2.91	0.58
1:L:42:LEU:CD1	1:L:46:PHE:CE1	2.87	0.58
1:E:43:ARG:HG3	1:E:59:VAL:HG21	1.85	0.58
1:I:42:LEU:CD1	1:I:46:PHE:CE1	2.87	0.58
1:O:135:ASN:O	1:O:136:TYR:HD1	1.85	0.58
1:A:94:PHE:CD1	1:A:99:ILE:HG22	2.38	0.58
1:F:108:ARG:CZ	1:F:156:VAL:HG21	2.33	0.58
1:M:94:PHE:CD1	1:M:99:ILE:HG22	2.38	0.58
1:A:35:PHE:CZ	1:A:72:PHE:CG	2.91	0.58
1:F:54:LYS:HG3	1:H:87:GLN:O	2.03	0.58
1:K:43:ARG:HG3	1:K:59:VAL:HG21	1.85	0.58
1:C:87:GLN:O	1:E:54:LYS:HG3	2.04	0.58
1:H:136:TYR:CG	1:H:155:TYR:CD1	2.90	0.58
1:H:136:TYR:HH	1:H:154:VAL:HG13	1.68	0.58
1:G:108:ARG:CZ	1:G:156:VAL:HG21	2.33	0.58
1:L:136:TYR:CD1	1:L:155:TYR:HB2	2.37	0.58
1:J:135:ASN:O	1:J:136:TYR:HD1	1.85	0.58
1:F:136:TYR:CG	1:F:155:TYR:CD1	2.90	0.58
1:L:94:PHE:CD1	1:L:99:ILE:HG22	2.38	0.58
1:K:35:PHE:CZ	1:K:72:PHE:CG	2.91	0.58
1:H:51:LEU:HG	1:L:66:LYS:NZ	2.19	0.58
1:B:42:LEU:HD22	1:B:88:LEU:HD13	1.85	0.58
1:A:42:LEU:HD22	1:A:88:LEU:HD13	1.85	0.58
1:G:54:LYS:HG3	1:J:87:GLN:O	2.04	0.58
1:J:42:LEU:HD22	1:J:88:LEU:HD13	1.86	0.58
1:H:94:PHE:CD1	1:H:99:ILE:HG22	2.38	0.58
1:G:94:PHE:CD1	1:G:99:ILE:HG22	2.38	0.58
1:E:124:ASN:HA	1:E:127:LYS:HE3	1.84	0.58
1:H:169:GLN:HE22	1:L:146:THR:HG21	1.68	0.58
1:C:54:LYS:HE3	1:F:88:LEU:HA	1.84	0.58
1:J:108:ARG:CZ	1:J:156:VAL:HG21	2.33	0.58
1:D:124:ASN:HA	1:D:127:LYS:HE3	1.84	0.58
1:B:169:GLN:HE22	1:I:146:THR:HG21	1.68	0.58
1:D:42:LEU:HD22	1:D:88:LEU:HD13	1.85	0.58
1:D:51:LEU:HG	1:E:66:LYS:NZ	2.18	0.58
1:I:43:ARG:NH2	1:I:64:ALA:HB3	2.19	0.58
1:I:54:LYS:HG3	1:O:87:GLN:O	2.04	0.58
1:N:108:ARG:CZ	1:N:156:VAL:HG21	2.33	0.58
1:N:94:PHE:CD1	1:N:99:ILE:HG22	2.38	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:108:ARG:CZ	1:B:156:VAL:HG21	2.33	0.58
1:G:43:ARG:HG3	1:G:59:VAL:HG21	1.85	0.58
1:N:42:LEU:CD1	1:N:46:PHE:CE1	2.87	0.58
1:J:43:ARG:NH2	1:J:64:ALA:HB3	2.19	0.58
1:I:112:VAL:CB	1:I:147:PHE:CZ	2.87	0.58
1:D:112:VAL:CB	1:D:147:PHE:CZ	2.87	0.58
1:I:35:PHE:CZ	1:I:72:PHE:CG	2.91	0.58
1:O:35:PHE:CZ	1:O:72:PHE:CG	2.91	0.58
1:A:146:THR:HG21	1:J:169:GLN:HE22	1.67	0.57
1:D:43:ARG:NH2	1:D:64:ALA:HB3	2.19	0.57
1:H:54:LYS:HG3	1:L:87:GLN:O	2.04	0.57
1:A:66:LYS:NZ	1:J:51:LEU:HG	2.19	0.57
1:L:51:LEU:HG	1:N:66:LYS:NZ	2.19	0.57
1:O:42:LEU:CD1	1:O:46:PHE:CE1	2.86	0.57
1:I:112:VAL:HB	1:I:147:PHE:CE2	2.39	0.57
1:O:112:VAL:CB	1:O:147:PHE:CZ	2.87	0.57
1:H:108:ARG:CZ	1:H:156:VAL:HG21	2.33	0.57
1:D:42:LEU:HD13	1:D:68:ILE:HD11	1.87	0.57
1:B:42:LEU:HD13	1:B:68:ILE:HD11	1.87	0.57
1:K:43:ARG:NH2	1:K:64:ALA:HB3	2.20	0.57
1:E:43:ARG:NH2	1:E:64:ALA:HB3	2.19	0.57
1:J:43:ARG:HG3	1:J:59:VAL:HG21	1.85	0.57
1:N:112:VAL:HB	1:N:147:PHE:CE2	2.40	0.57
1:E:108:ARG:CZ	1:E:156:VAL:HG21	2.33	0.57
1:C:169:GLN:OE1	1:F:143:ARG:NH1	2.37	0.57
1:M:43:ARG:NH2	1:M:64:ALA:HB3	2.19	0.57
1:H:43:ARG:NH2	1:H:64:ALA:HB3	2.19	0.57
1:F:43:ARG:NH2	1:F:64:ALA:HB3	2.19	0.57
1:D:43:ARG:HG3	1:D:59:VAL:HG21	1.85	0.57
1:L:43:ARG:NH2	1:L:64:ALA:HB3	2.19	0.57
1:K:42:LEU:HD13	1:K:68:ILE:HD11	1.87	0.57
1:E:42:LEU:HD13	1:E:68:ILE:HD11	1.86	0.57
1:I:51:LEU:HG	1:O:66:LYS:NZ	2.19	0.57
1:C:43:ARG:NH2	1:C:64:ALA:HB3	2.19	0.57
1:O:112:VAL:HB	1:O:147:PHE:CE2	2.40	0.57
1:D:108:ARG:CZ	1:D:156:VAL:HG21	2.34	0.57
1:C:108:ARG:CZ	1:C:156:VAL:HG21	2.33	0.57
1:M:42:LEU:HD22	1:M:88:LEU:HD13	1.85	0.57
1:G:42:LEU:HD13	1:G:68:ILE:HD11	1.87	0.57
1:A:42:LEU:HD13	1:A:68:ILE:HD11	1.87	0.57
1:A:43:ARG:NH2	1:A:64:ALA:HB3	2.19	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:43:ARG:NH2	1:N:64:ALA:HB3	2.19	0.57
1:E:42:LEU:HD22	1:E:88:LEU:HD13	1.85	0.57
1:C:42:LEU:HD13	1:C:68:ILE:HD11	1.87	0.57
1:F:135:ASN:O	1:F:136:TYR:HD1	1.85	0.57
1:N:112:VAL:CB	1:N:147:PHE:CZ	2.87	0.57
1:A:112:VAL:CB	1:A:147:PHE:CZ	2.87	0.57
1:G:112:VAL:HB	1:G:147:PHE:CE2	2.39	0.57
1:A:169:GLN:NE2	1:D:143:ARG:HB3	2.19	0.57
1:F:42:LEU:HD13	1:F:68:ILE:HD11	1.87	0.57
1:B:88:LEU:CD2	1:M:54:LYS:HE2	2.23	0.57
1:I:42:LEU:HD13	1:I:68:ILE:HD11	1.87	0.57
1:O:42:LEU:HD13	1:O:68:ILE:HD11	1.87	0.57
1:K:122:PHE:HE2	1:K:147:PHE:CZ	2.23	0.57
1:F:112:VAL:HB	1:F:147:PHE:CE2	2.40	0.57
1:C:166:MET:HB3	1:F:143:ARG:NH2	2.18	0.57
1:L:42:LEU:HD13	1:L:68:ILE:HD11	1.86	0.57
1:B:43:ARG:NH2	1:B:64:ALA:HB3	2.19	0.57
1:A:43:ARG:HG3	1:A:59:VAL:HG21	1.85	0.57
1:J:42:LEU:CD1	1:J:46:PHE:CE1	2.87	0.57
1:C:42:LEU:HD22	1:C:88:LEU:HD13	1.85	0.57
1:B:93:TYR:CG	1:B:136:TYR:CZ	2.93	0.57
1:M:112:VAL:HB	1:M:147:PHE:CE2	2.40	0.57
1:K:112:VAL:CB	1:K:147:PHE:CZ	2.87	0.57
1:L:112:VAL:CB	1:L:147:PHE:CZ	2.87	0.57
1:L:75:HIS:CB	1:L:80:LEU:HD11	2.35	0.57
1:H:136:TYR:CZ	1:H:155:TYR:HB2	2.40	0.57
1:M:93:TYR:CG	1:M:136:TYR:CZ	2.93	0.57
1:O:93:TYR:CG	1:O:136:TYR:CZ	2.93	0.57
1:A:108:ARG:CZ	1:A:156:VAL:HG21	2.33	0.57
1:K:80:LEU:HD12	1:K:80:LEU:H	1.70	0.57
1:F:80:LEU:H	1:F:80:LEU:HD12	1.70	0.57
1:M:80:LEU:N	1:M:80:LEU:HD12	2.20	0.57
1:M:80:LEU:H	1:M:80:LEU:HD12	1.70	0.57
1:C:143:ARG:NH1	1:E:169:GLN:OE1	2.37	0.57
1:M:42:LEU:HD13	1:M:68:ILE:HD11	1.87	0.57
1:D:42:LEU:CD1	1:D:46:PHE:CE1	2.87	0.57
1:A:42:LEU:CD1	1:A:46:PHE:CE1	2.86	0.57
1:A:88:LEU:HA	1:J:54:LYS:HE3	1.86	0.57
1:N:42:LEU:HD13	1:N:68:ILE:HD11	1.87	0.57
1:J:42:LEU:HD13	1:J:68:ILE:HD11	1.87	0.57
1:D:93:TYR:CG	1:D:136:TYR:CZ	2.93	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:112:VAL:HB	1:L:147:PHE:CE2	2.40	0.57
1:B:112:VAL:CB	1:B:147:PHE:CZ	2.87	0.57
1:H:112:VAL:CB	1:H:147:PHE:CZ	2.87	0.57
1:F:75:HIS:CB	1:F:80:LEU:HD11	2.35	0.57
1:C:80:LEU:HD12	1:C:80:LEU:H	1.70	0.57
1:B:169:GLN:OE1	1:I:143:ARG:NH1	2.37	0.57
1:F:42:LEU:HD22	1:F:88:LEU:HD13	1.85	0.57
1:L:42:LEU:HD22	1:L:88:LEU:HD13	1.85	0.57
1:N:42:LEU:HD22	1:N:88:LEU:HD13	1.86	0.57
1:C:42:LEU:CD1	1:C:46:PHE:CE1	2.87	0.57
1:K:135:ASN:O	1:K:136:TYR:HD1	1.86	0.57
1:I:136:TYR:CZ	1:I:155:TYR:HB2	2.40	0.57
1:M:136:TYR:CZ	1:M:155:TYR:HB2	2.40	0.57
1:E:93:TYR:CG	1:E:136:TYR:CZ	2.93	0.57
1:A:63:ALA:HB2	1:A:102:TYR:HA	1.87	0.57
1:M:75:HIS:CB	1:M:80:LEU:HD11	2.35	0.57
1:G:80:LEU:HD12	1:G:80:LEU:H	1.70	0.57
1:L:80:LEU:HD12	1:L:80:LEU:N	2.20	0.57
1:H:42:LEU:HD22	1:H:88:LEU:HD13	1.85	0.57
1:H:42:LEU:HD13	1:H:68:ILE:HD11	1.87	0.57
1:B:135:ASN:O	1:B:136:TYR:HD1	1.85	0.57
1:L:136:TYR:CZ	1:L:155:TYR:HB2	2.40	0.57
1:L:93:TYR:CG	1:L:136:TYR:CZ	2.93	0.57
1:C:136:TYR:CZ	1:C:155:TYR:HB2	2.40	0.57
1:C:93:TYR:CE2	1:C:136:TYR:CE2	2.93	0.57
1:F:136:TYR:CZ	1:F:155:TYR:HB2	2.40	0.57
1:J:112:VAL:HB	1:J:147:PHE:CE2	2.40	0.57
1:H:112:VAL:HB	1:H:147:PHE:CE2	2.40	0.57
1:F:112:VAL:CB	1:F:147:PHE:CZ	2.87	0.57
1:D:75:HIS:CB	1:D:80:LEU:HD11	2.35	0.57
1:D:111:VAL:HG12	1:D:148:TYR:CE1	2.40	0.57
1:M:146:THR:HG21	1:N:169:GLN:HE22	1.68	0.56
1:M:42:LEU:CD1	1:M:46:PHE:CE1	2.86	0.56
1:C:93:TYR:CG	1:C:136:TYR:CZ	2.93	0.56
1:I:93:TYR:CG	1:I:136:TYR:CZ	2.93	0.56
1:O:93:TYR:CE2	1:O:136:TYR:CE2	2.93	0.56
1:E:93:TYR:CE2	1:E:136:TYR:CE2	2.93	0.56
1:A:93:TYR:CG	1:A:136:TYR:CZ	2.93	0.56
1:N:122:PHE:HE2	1:N:147:PHE:CZ	2.23	0.56
1:G:122:PHE:HE2	1:G:147:PHE:CZ	2.23	0.56
1:E:75:HIS:CB	1:E:80:LEU:HD11	2.35	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:80:LEU:HD12	1:O:80:LEU:N	2.20	0.56
1:A:75:HIS:CB	1:A:80:LEU:HD11	2.35	0.56
1:B:80:LEU:HD12	1:B:80:LEU:N	2.20	0.56
1:I:80:LEU:N	1:I:80:LEU:HD12	2.20	0.56
1:G:87:GLN:O	1:K:54:LYS:HG3	2.05	0.56
1:B:51:LEU:HG	1:I:66:LYS:NZ	2.20	0.56
1:K:93:TYR:CE2	1:K:136:TYR:CE2	2.93	0.56
1:K:136:TYR:CZ	1:K:155:TYR:HB2	2.40	0.56
1:I:93:TYR:CE2	1:I:136:TYR:CE2	2.93	0.56
1:F:93:TYR:CG	1:F:136:TYR:CZ	2.93	0.56
1:D:112:VAL:HB	1:D:147:PHE:CE2	2.40	0.56
1:E:112:VAL:HB	1:E:147:PHE:CE2	2.39	0.56
1:E:80:LEU:H	1:E:80:LEU:HD12	1.70	0.56
1:B:80:LEU:HD12	1:B:80:LEU:H	1.70	0.56
1:J:111:VAL:HG12	1:J:148:TYR:CE1	2.40	0.56
1:D:166:MET:HB3	1:E:143:ARG:NH2	2.19	0.56
1:G:43:ARG:NH2	1:G:64:ALA:HB3	2.20	0.56
1:B:87:GLN:O	1:M:54:LYS:HG3	2.05	0.56
1:E:42:LEU:CD1	1:E:46:PHE:CE1	2.87	0.56
1:O:43:ARG:NH2	1:O:64:ALA:HB3	2.19	0.56
1:B:93:TYR:CE2	1:B:136:TYR:CE2	2.93	0.56
1:C:63:ALA:HB2	1:C:102:TYR:HA	1.87	0.56
1:D:93:TYR:CE2	1:D:136:TYR:CE2	2.93	0.56
1:J:93:TYR:CE2	1:J:136:TYR:CE2	2.93	0.56
1:J:63:ALA:HB2	1:J:102:TYR:HA	1.87	0.56
1:J:93:TYR:CG	1:J:136:TYR:CZ	2.93	0.56
1:F:93:TYR:CE2	1:F:136:TYR:CE2	2.94	0.56
1:H:93:TYR:CE2	1:H:136:TYR:CE2	2.93	0.56
1:O:136:TYR:CZ	1:O:155:TYR:HB2	2.40	0.56
1:G:93:TYR:CE2	1:G:136:TYR:CE2	2.94	0.56
1:G:136:TYR:CZ	1:G:155:TYR:HB2	2.40	0.56
1:A:93:TYR:CE2	1:A:136:TYR:CE2	2.93	0.56
1:M:122:PHE:HE2	1:M:147:PHE:CZ	2.23	0.56
1:L:122:PHE:HE2	1:L:147:PHE:CZ	2.23	0.56
1:B:112:VAL:HB	1:B:147:PHE:CE2	2.40	0.56
1:C:112:VAL:HB	1:C:147:PHE:CE2	2.39	0.56
1:K:80:LEU:HD12	1:K:80:LEU:N	2.20	0.56
1:H:80:LEU:HD12	1:H:80:LEU:H	1.70	0.56
1:F:111:VAL:HG12	1:F:148:TYR:CE1	2.40	0.56
1:C:111:VAL:HG12	1:C:148:TYR:CE1	2.41	0.56
1:E:111:VAL:HG12	1:E:148:TYR:CE1	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:143:ARG:HB3	1:K:169:GLN:NE2	2.20	0.56
1:M:88:LEU:HA	1:N:54:LYS:HE3	1.82	0.56
1:F:54:LYS:HE3	1:H:88:LEU:HA	1.84	0.56
1:C:66:LYS:NZ	1:E:51:LEU:HG	2.20	0.56
1:L:93:TYR:CE2	1:L:136:TYR:CE2	2.93	0.56
1:N:100:TYR:CG	1:N:154:VAL:HG11	2.41	0.56
1:N:136:TYR:CZ	1:N:155:TYR:HB2	2.40	0.56
1:I:100:TYR:CG	1:I:154:VAL:HG11	2.41	0.56
1:M:93:TYR:CE2	1:M:136:TYR:CE2	2.93	0.56
1:J:112:VAL:CB	1:J:147:PHE:CZ	2.87	0.56
1:O:122:PHE:HE2	1:O:147:PHE:CZ	2.23	0.56
1:O:80:LEU:HD12	1:O:80:LEU:H	1.70	0.56
1:H:75:HIS:CB	1:H:80:LEU:HD11	2.35	0.56
1:G:80:LEU:HD12	1:G:80:LEU:N	2.20	0.56
1:D:141:ASP:CG	1:D:148:TYR:CE2	2.79	0.56
1:H:111:VAL:HG12	1:H:148:TYR:CE1	2.40	0.56
1:A:111:VAL:HG12	1:A:148:TYR:CE1	2.41	0.56
1:B:169:GLN:NE2	1:I:143:ARG:HB3	2.21	0.56
1:K:42:LEU:CD1	1:K:46:PHE:CE1	2.86	0.56
1:K:93:TYR:CG	1:K:136:TYR:CZ	2.93	0.56
1:D:63:ALA:HB2	1:D:102:TYR:HA	1.87	0.56
1:E:122:PHE:HE2	1:E:147:PHE:CZ	2.23	0.56
1:F:80:LEU:N	1:F:80:LEU:HD12	2.20	0.56
1:C:75:HIS:CB	1:C:80:LEU:HD11	2.35	0.56
1:N:80:LEU:N	1:N:80:LEU:HD12	2.20	0.56
1:H:80:LEU:HD12	1:H:80:LEU:N	2.20	0.56
1:I:75:HIS:CB	1:I:80:LEU:HD11	2.35	0.56
1:H:51:LEU:HG	1:L:66:LYS:HZ3	1.69	0.56
1:I:54:LYS:HE2	1:O:88:LEU:CD2	2.23	0.56
1:K:100:TYR:CG	1:K:154:VAL:HG11	2.41	0.56
1:N:93:TYR:CE2	1:N:136:TYR:CE2	2.93	0.56
1:H:93:TYR:CG	1:H:136:TYR:CZ	2.93	0.56
1:E:136:TYR:CZ	1:E:155:TYR:HB2	2.40	0.56
1:M:112:VAL:CB	1:M:147:PHE:CZ	2.87	0.56
1:N:80:LEU:H	1:N:80:LEU:HD12	1.70	0.56
1:N:111:VAL:HG12	1:N:148:TYR:CE1	2.41	0.56
1:M:111:VAL:HG12	1:M:148:TYR:CE1	2.41	0.56
1:G:111:VAL:HG12	1:G:148:TYR:CE1	2.41	0.56
1:E:141:ASP:CG	1:E:148:TYR:CE2	2.79	0.56
1:N:93:TYR:CG	1:N:136:TYR:CZ	2.93	0.56
1:J:136:TYR:CZ	1:J:155:TYR:HB2	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:63:ALA:HB2	1:F:102:TYR:HA	1.87	0.56
1:G:93:TYR:CG	1:G:136:TYR:CZ	2.93	0.56
1:K:112:VAL:HB	1:K:147:PHE:CE2	2.40	0.56
1:C:114:LEU:HD13	1:C:117:VAL:CG1	2.36	0.56
1:I:111:VAL:HG12	1:I:148:TYR:CE1	2.41	0.56
1:L:111:VAL:HG12	1:L:148:TYR:CE1	2.41	0.56
1:M:123:ASN:HD21	1:M:138:LEU:HD21	1.71	0.56
1:B:123:ASN:HD21	1:B:138:LEU:HD21	1.71	0.56
1:A:143:ARG:NH1	1:J:169:GLN:OE1	2.34	0.56
1:B:136:TYR:CZ	1:B:155:TYR:HB2	2.40	0.56
1:K:63:ALA:HB2	1:K:102:TYR:HA	1.87	0.56
1:H:100:TYR:CG	1:H:154:VAL:HG11	2.41	0.56
1:O:63:ALA:HB2	1:O:102:TYR:HA	1.87	0.56
1:M:114:LEU:HD13	1:M:117:VAL:CG1	2.36	0.56
1:C:112:VAL:CB	1:C:147:PHE:CZ	2.87	0.56
1:N:75:HIS:CB	1:N:80:LEU:HD11	2.35	0.56
1:O:111:VAL:HG12	1:O:148:TYR:CE1	2.41	0.56
1:B:111:VAL:HG12	1:B:148:TYR:CE1	2.41	0.56
1:B:75:HIS:CB	1:B:80:LEU:HD11	2.35	0.56
1:G:75:HIS:CB	1:G:80:LEU:HD11	2.35	0.56
1:A:141:ASP:CG	1:A:148:TYR:CE2	2.79	0.56
1:C:88:LEU:HA	1:E:54:LYS:HE3	1.87	0.56
1:B:100:TYR:CG	1:B:154:VAL:HG11	2.41	0.56
1:D:136:TYR:HB3	1:D:155:TYR:CD1	2.41	0.56
1:I:136:TYR:HB3	1:I:155:TYR:CD1	2.41	0.56
1:M:100:TYR:CG	1:M:154:VAL:HG11	2.41	0.56
1:E:135:ASN:O	1:E:136:TYR:HD1	1.85	0.56
1:E:63:ALA:HB2	1:E:102:TYR:HA	1.87	0.56
1:N:114:LEU:HD13	1:N:117:VAL:CG1	2.36	0.56
1:F:114:LEU:HD13	1:F:117:VAL:CG1	2.36	0.56
1:D:80:LEU:HD12	1:D:80:LEU:H	1.70	0.56
1:C:141:ASP:CG	1:C:148:TYR:CE2	2.79	0.56
1:F:42:LEU:CD1	1:F:46:PHE:CE1	2.87	0.56
1:A:51:LEU:HD21	1:D:66:LYS:HZ1	1.70	0.56
1:K:88:LEU:HA	1:O:54:LYS:HE3	1.84	0.56
1:L:54:LYS:HE2	1:N:88:LEU:CD2	2.22	0.56
1:D:54:LYS:HE3	1:E:88:LEU:HA	1.87	0.56
1:G:51:LEU:HG	1:J:66:LYS:NZ	2.21	0.56
1:G:54:LYS:HE3	1:J:88:LEU:HA	1.87	0.56
1:M:136:TYR:HB3	1:M:155:TYR:CD1	2.41	0.56
1:A:136:TYR:HB3	1:A:155:TYR:CD1	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:112:VAL:HB	1:A:147:PHE:CE2	2.40	0.56
1:D:108:ARG:HH12	1:D:153:PRO:HG3	1.71	0.56
1:E:80:LEU:HD12	1:E:80:LEU:N	2.20	0.56
1:O:75:HIS:CB	1:O:80:LEU:HD11	2.35	0.56
1:N:141:ASP:CG	1:N:148:TYR:CE2	2.79	0.56
1:B:51:LEU:HD21	1:I:66:LYS:HZ1	1.71	0.55
1:G:54:LYS:HE2	1:J:88:LEU:CD2	2.22	0.55
1:N:136:TYR:HB3	1:N:155:TYR:CD1	2.41	0.55
1:G:136:TYR:HB3	1:G:155:TYR:CD1	2.41	0.55
1:E:136:TYR:HB3	1:E:155:TYR:CD1	2.41	0.55
1:E:108:ARG:HH12	1:E:153:PRO:HG3	1.71	0.55
1:K:75:HIS:CB	1:K:80:LEU:HD11	2.35	0.55
1:A:80:LEU:N	1:A:80:LEU:HD12	2.20	0.55
1:J:80:LEU:H	1:J:80:LEU:HD12	1.70	0.55
1:G:123:ASN:HD21	1:G:138:LEU:HD21	1.71	0.55
1:I:123:ASN:HD21	1:I:138:LEU:HD21	1.71	0.55
1:A:169:GLN:OE1	1:D:143:ARG:NH1	2.36	0.55
1:G:166:MET:HB3	1:J:143:ARG:NH2	2.19	0.55
1:C:136:TYR:HB3	1:C:155:TYR:CD1	2.41	0.55
1:J:100:TYR:CG	1:J:154:VAL:HG11	2.41	0.55
1:O:136:TYR:HB3	1:O:155:TYR:CD1	2.41	0.55
1:M:115:ARG:HG2	1:M:167:ASP:OD2	2.07	0.55
1:B:114:LEU:HD13	1:B:117:VAL:CG1	2.36	0.55
1:D:122:PHE:HE2	1:D:147:PHE:CZ	2.23	0.55
1:E:114:LEU:HD13	1:E:117:VAL:CG1	2.36	0.55
1:O:115:ARG:HG2	1:O:167:ASP:OD2	2.07	0.55
1:C:80:LEU:HD12	1:C:80:LEU:N	2.20	0.55
1:M:141:ASP:CG	1:M:148:TYR:CE2	2.79	0.55
1:K:111:VAL:HG12	1:K:148:TYR:CE1	2.41	0.55
1:C:169:GLN:NE2	1:F:143:ARG:HB3	2.21	0.55
1:D:54:LYS:HG3	1:E:87:GLN:O	2.05	0.55
1:C:100:TYR:CG	1:C:154:VAL:HG11	2.41	0.55
1:D:136:TYR:CZ	1:D:155:TYR:HB2	2.40	0.55
1:G:115:ARG:HG2	1:G:167:ASP:OD2	2.07	0.55
1:A:80:LEU:HD12	1:A:80:LEU:H	1.70	0.55
1:I:80:LEU:H	1:I:80:LEU:HD12	1.70	0.55
1:F:141:ASP:CG	1:F:148:TYR:CE2	2.79	0.55
1:K:141:ASP:CG	1:K:148:TYR:CE2	2.79	0.55
1:C:123:ASN:HD21	1:C:138:LEU:HD21	1.71	0.55
1:K:123:ASN:HD21	1:K:138:LEU:HD21	1.71	0.55
1:H:123:ASN:HD21	1:H:138:LEU:HD21	1.71	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:143:ARG:HB3	1:J:169:GLN:NE2	2.21	0.55
1:E:40:ASP:HB2	1:E:45:PHE:CE1	2.32	0.55
1:L:136:TYR:HB3	1:L:155:TYR:CD1	2.41	0.55
1:N:135:ASN:O	1:N:136:TYR:HD1	1.86	0.55
1:J:136:TYR:HB3	1:J:155:TYR:CD1	2.41	0.55
1:G:63:ALA:HB2	1:G:102:TYR:HA	1.87	0.55
1:A:136:TYR:CZ	1:A:155:TYR:HB2	2.40	0.55
1:A:115:ARG:HG2	1:A:167:ASP:OD2	2.07	0.55
1:N:108:ARG:HH12	1:N:153:PRO:HG3	1.71	0.55
1:J:141:ASP:CG	1:J:148:TYR:CE2	2.79	0.55
1:L:80:LEU:HD12	1:L:80:LEU:H	1.70	0.55
1:G:141:ASP:CG	1:G:148:TYR:CE2	2.79	0.55
1:L:141:ASP:CG	1:L:148:TYR:CE2	2.79	0.55
1:F:123:ASN:HD21	1:F:138:LEU:HD21	1.71	0.55
1:N:123:ASN:HD21	1:N:138:LEU:HD21	1.71	0.55
1:A:54:LYS:HE2	1:D:88:LEU:CA	2.25	0.55
1:B:136:TYR:HB3	1:B:155:TYR:CD1	2.41	0.55
1:D:100:TYR:CG	1:D:154:VAL:HG11	2.41	0.55
1:M:135:ASN:OD1	1:M:136:TYR:CD1	2.60	0.55
1:A:135:ASN:OD1	1:A:136:TYR:CD1	2.60	0.55
1:L:114:LEU:HD13	1:L:117:VAL:CG1	2.36	0.55
1:L:115:ARG:HG2	1:L:167:ASP:OD2	2.07	0.55
1:D:114:LEU:HD13	1:D:117:VAL:CG1	2.36	0.55
1:H:122:PHE:HE2	1:H:147:PHE:CZ	2.23	0.55
1:H:117:VAL:HB	1:H:170:ASN:OD1	2.07	0.55
1:C:115:ARG:HG2	1:C:167:ASP:OD2	2.07	0.55
1:C:108:ARG:HH12	1:C:153:PRO:HG3	1.72	0.55
1:M:108:ARG:HH12	1:M:153:PRO:HG3	1.71	0.55
1:O:141:ASP:CG	1:O:148:TYR:CE2	2.79	0.55
1:J:123:ASN:HD21	1:J:138:LEU:HD21	1.71	0.55
1:E:123:ASN:HD21	1:E:138:LEU:HD21	1.71	0.55
1:H:54:LYS:CE	1:L:88:LEU:CD2	2.56	0.55
1:N:63:ALA:HB2	1:N:102:TYR:HA	1.87	0.55
1:N:135:ASN:OD1	1:N:136:TYR:CD1	2.60	0.55
1:I:63:ALA:HB2	1:I:102:TYR:HA	1.87	0.55
1:J:135:ASN:OD1	1:J:136:TYR:CD1	2.60	0.55
1:O:135:ASN:OD1	1:O:136:TYR:CD1	2.60	0.55
1:G:100:TYR:CG	1:G:154:VAL:HG11	2.41	0.55
1:N:117:VAL:HB	1:N:170:ASN:OD1	2.07	0.55
1:I:114:LEU:HD13	1:I:117:VAL:CG1	2.36	0.55
1:I:117:VAL:HB	1:I:170:ASN:OD1	2.07	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:114:LEU:HD13	1:H:117:VAL:CG1	2.36	0.55
1:G:112:VAL:CB	1:G:147:PHE:CZ	2.87	0.55
1:H:141:ASP:CG	1:H:148:TYR:CE2	2.79	0.55
1:O:123:ASN:HD21	1:O:138:LEU:HD21	1.71	0.55
1:L:123:ASN:HD21	1:L:138:LEU:HD21	1.71	0.55
1:F:166:MET:HB3	1:H:143:ARG:NH2	2.19	0.55
1:K:143:ARG:HB3	1:O:169:GLN:NE2	2.22	0.55
1:C:88:LEU:CD2	1:E:54:LYS:HE2	2.23	0.55
1:B:135:ASN:OD1	1:B:136:TYR:CD1	2.60	0.55
1:L:135:ASN:OD1	1:L:136:TYR:CE1	2.60	0.55
1:L:100:TYR:CG	1:L:154:VAL:HG11	2.41	0.55
1:H:63:ALA:HB2	1:H:102:TYR:HA	1.87	0.55
1:G:135:ASN:OD1	1:G:136:TYR:CD1	2.60	0.55
1:I:115:ARG:HG2	1:I:167:ASP:OD2	2.07	0.55
1:H:115:ARG:HG2	1:H:167:ASP:OD2	2.07	0.55
1:E:117:VAL:HB	1:E:170:ASN:OD1	2.07	0.55
1:J:75:HIS:CB	1:J:80:LEU:HD11	2.35	0.55
1:M:143:ARG:NH2	1:N:166:MET:HB3	2.19	0.55
1:B:143:ARG:HH22	1:M:166:MET:HG2	0.39	0.55
1:C:143:ARG:HB3	1:E:169:GLN:NE2	2.21	0.55
1:A:143:ARG:NH2	1:J:166:MET:HB3	2.20	0.55
1:G:88:LEU:HA	1:K:54:LYS:HE3	1.86	0.55
1:K:88:LEU:CA	1:O:54:LYS:HE2	2.26	0.55
1:I:51:LEU:HD21	1:O:66:LYS:HZ2	1.72	0.55
1:B:63:ALA:HB2	1:B:102:TYR:HA	1.87	0.55
1:F:136:TYR:HB3	1:F:155:TYR:CD1	2.41	0.55
1:O:100:TYR:CG	1:O:154:VAL:HG11	2.41	0.55
1:M:117:VAL:HB	1:M:170:ASN:OD1	2.07	0.55
1:I:122:PHE:HE2	1:I:147:PHE:CZ	2.23	0.55
1:B:115:ARG:HG2	1:B:167:ASP:OD2	2.07	0.55
1:E:115:ARG:HG2	1:E:167:ASP:OD2	2.07	0.55
1:A:108:ARG:HH12	1:A:153:PRO:HG3	1.72	0.55
1:B:141:ASP:CG	1:B:148:TYR:CE2	2.79	0.55
1:J:80:LEU:N	1:J:80:LEU:HD12	2.20	0.55
1:D:123:ASN:HD21	1:D:138:LEU:HD21	1.71	0.55
1:A:123:ASN:HD21	1:A:138:LEU:HD21	1.71	0.55
1:F:169:GLN:NE2	1:H:143:ARG:HB3	2.22	0.55
1:D:54:LYS:HZ2	1:E:66:LYS:CD	2.19	0.55
1:L:63:ALA:HB2	1:L:102:TYR:HA	1.87	0.55
1:D:135:ASN:OD1	1:D:136:TYR:CD1	2.60	0.55
1:F:135:ASN:OD1	1:F:136:TYR:CD1	2.60	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:136:TYR:HB3	1:H:155:TYR:CD1	2.41	0.55
1:M:135:ASN:OD1	1:M:136:TYR:CE1	2.60	0.55
1:M:63:ALA:HB2	1:M:102:TYR:HA	1.87	0.55
1:O:108:ARG:HH12	1:O:153:PRO:HG3	1.72	0.55
1:A:135:ASN:OD1	1:A:136:TYR:CE1	2.60	0.55
1:J:117:VAL:HB	1:J:170:ASN:OD1	2.07	0.55
1:E:112:VAL:CB	1:E:147:PHE:CZ	2.87	0.55
1:F:115:ARG:HG2	1:F:167:ASP:OD2	2.07	0.55
1:O:117:VAL:HB	1:O:170:ASN:OD1	2.07	0.55
1:D:80:LEU:HD12	1:D:80:LEU:N	2.20	0.55
1:I:141:ASP:CG	1:I:148:TYR:CE2	2.79	0.55
1:G:66:LYS:HZ3	1:K:51:LEU:HG	1.70	0.55
1:K:136:TYR:HB3	1:K:155:TYR:CD1	2.41	0.55
1:E:135:ASN:OD1	1:E:136:TYR:CE1	2.60	0.55
1:E:100:TYR:CG	1:E:154:VAL:HG11	2.41	0.55
1:L:117:VAL:HB	1:L:170:ASN:OD1	2.07	0.55
1:A:114:LEU:HD13	1:A:117:VAL:CG1	2.36	0.55
1:J:122:PHE:CE2	1:J:126:LEU:CD1	2.88	0.55
1:B:117:VAL:HB	1:B:170:ASN:OD1	2.07	0.55
1:G:117:VAL:HB	1:G:170:ASN:OD1	2.07	0.55
1:K:108:ARG:HH12	1:K:153:PRO:HG3	1.72	0.55
1:B:42:LEU:CD1	1:B:46:PHE:CE1	2.87	0.54
1:B:135:ASN:OD1	1:B:136:TYR:CE1	2.60	0.54
1:C:135:ASN:OD1	1:C:136:TYR:CD1	2.60	0.54
1:I:135:ASN:OD1	1:I:136:TYR:CD1	2.60	0.54
1:I:135:ASN:OD1	1:I:136:TYR:CE1	2.60	0.54
1:F:135:ASN:OD1	1:F:136:TYR:CE1	2.60	0.54
1:G:135:ASN:OD1	1:G:136:TYR:CE1	2.60	0.54
1:F:117:VAL:HB	1:F:170:ASN:OD1	2.07	0.54
1:L:108:ARG:HH12	1:L:153:PRO:HG3	1.72	0.54
1:K:143:ARG:NH1	1:O:169:GLN:OE1	2.36	0.54
1:C:51:LEU:HD21	1:F:66:LYS:HZ1	1.72	0.54
1:G:42:LEU:CD1	1:G:46:PHE:CE1	2.87	0.54
1:A:66:LYS:HZ3	1:J:51:LEU:HG	1.71	0.54
1:O:46:PHE:HE2	1:O:90:LEU:HD13	1.73	0.54
1:O:135:ASN:OD1	1:O:136:TYR:CE1	2.60	0.54
1:A:100:TYR:CG	1:A:154:VAL:HG11	2.41	0.54
1:H:156:VAL:O	1:H:160:VAL:HG13	2.08	0.54
1:F:108:ARG:HH12	1:F:153:PRO:HG3	1.72	0.54
1:I:108:ARG:HH12	1:I:153:PRO:HG3	1.72	0.54
1:D:166:MET:HG2	1:E:143:ARG:HH22	0.37	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:42:LEU:CD1	1:H:46:PHE:CE1	2.87	0.54
1:C:54:LYS:HE2	1:F:88:LEU:CD2	2.25	0.54
1:A:54:LYS:HE2	1:D:88:LEU:CD2	2.25	0.54
1:H:54:LYS:HE3	1:L:88:LEU:HA	1.86	0.54
1:I:54:LYS:CE	1:O:88:LEU:CD2	2.53	0.54
1:L:135:ASN:OD1	1:L:136:TYR:CD1	2.60	0.54
1:K:135:ASN:OD1	1:K:136:TYR:CE1	2.60	0.54
1:F:100:TYR:CG	1:F:154:VAL:HG11	2.41	0.54
1:A:122:PHE:HE2	1:A:147:PHE:CZ	2.23	0.54
1:D:117:VAL:HB	1:D:170:ASN:OD1	2.07	0.54
1:D:115:ARG:HG2	1:D:167:ASP:OD2	2.07	0.54
1:G:108:ARG:HH12	1:G:153:PRO:HG3	1.71	0.54
1:C:143:ARG:NH2	1:E:166:MET:HB3	2.20	0.54
1:F:51:LEU:HD21	1:H:66:LYS:HZ1	1.71	0.54
1:E:46:PHE:HE2	1:E:90:LEU:HD13	1.72	0.54
1:C:46:PHE:HE2	1:C:90:LEU:HD13	1.73	0.54
1:K:135:ASN:OD1	1:K:136:TYR:CD1	2.60	0.54
1:H:135:ASN:OD1	1:H:136:TYR:CD1	2.60	0.54
1:H:93:TYR:CZ	1:H:136:TYR:CD2	2.96	0.54
1:A:122:PHE:CE2	1:A:126:LEU:CD1	2.87	0.54
1:G:114:LEU:HD13	1:G:117:VAL:CG1	2.36	0.54
1:C:117:VAL:HB	1:C:170:ASN:OD1	2.07	0.54
1:L:156:VAL:O	1:L:160:VAL:HG13	2.08	0.54
1:B:108:ARG:HH12	1:B:153:PRO:HG3	1.72	0.54
1:J:46:PHE:HE2	1:J:90:LEU:HD13	1.73	0.54
1:N:135:ASN:OD1	1:N:136:TYR:CE1	2.60	0.54
1:K:114:LEU:HD13	1:K:117:VAL:CG1	2.36	0.54
1:K:115:ARG:HG2	1:K:167:ASP:OD2	2.07	0.54
1:D:156:VAL:O	1:D:160:VAL:HG13	2.08	0.54
1:G:156:VAL:O	1:G:160:VAL:HG13	2.08	0.54
1:A:156:VAL:O	1:A:160:VAL:HG13	2.08	0.54
1:F:156:VAL:O	1:F:160:VAL:HG13	2.08	0.54
1:C:104:ALA:O	1:C:107:MET:HE3	2.08	0.54
1:I:166:MET:HB3	1:O:143:ARG:NH2	2.20	0.54
1:K:143:ARG:NH2	1:O:166:MET:HB3	2.19	0.54
1:A:51:LEU:CG	1:D:66:LYS:NZ	2.71	0.54
1:D:54:LYS:HE2	1:E:88:LEU:CD2	2.22	0.54
1:B:54:LYS:HE2	1:I:88:LEU:CD2	2.25	0.54
1:I:93:TYR:CZ	1:I:136:TYR:CD2	2.96	0.54
1:J:135:ASN:OD1	1:J:136:TYR:CE1	2.60	0.54
1:J:156:VAL:O	1:J:160:VAL:HG13	2.08	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:115:ARG:HG2	1:N:167:ASP:OD2	2.07	0.54
1:O:114:LEU:HD13	1:O:117:VAL:CG1	2.36	0.54
1:C:122:PHE:HE2	1:C:147:PHE:CZ	2.23	0.54
1:L:107:MET:SD	1:L:134:LYS:HE3	2.48	0.54
1:G:107:MET:SD	1:G:134:LYS:HE3	2.48	0.54
1:L:166:MET:HG2	1:N:143:ARG:HH22	0.37	0.54
1:K:88:LEU:CD2	1:O:54:LYS:HE2	2.24	0.54
1:B:54:LYS:CE	1:I:88:LEU:CD2	2.55	0.54
1:E:93:TYR:CZ	1:E:136:TYR:CD2	2.96	0.54
1:A:107:MET:SD	1:A:134:LYS:HE3	2.48	0.54
1:H:122:PHE:CE2	1:H:126:LEU:CD1	2.88	0.54
1:K:156:VAL:O	1:K:160:VAL:HG13	2.08	0.54
1:D:99:ILE:O	1:D:99:ILE:HG13	2.08	0.54
1:M:46:PHE:HE2	1:M:90:LEU:HD13	1.73	0.54
1:H:46:PHE:HE2	1:H:90:LEU:HD13	1.73	0.54
1:K:40:ASP:HB2	1:K:45:PHE:CE1	2.32	0.54
1:K:46:PHE:HE2	1:K:90:LEU:HD13	1.73	0.54
1:N:93:TYR:CZ	1:N:136:TYR:CD2	2.96	0.54
1:A:75:HIS:HB3	1:A:80:LEU:CD1	2.38	0.54
1:K:107:MET:SD	1:K:134:LYS:HE3	2.48	0.54
1:D:104:ALA:O	1:D:107:MET:HE3	2.08	0.54
1:O:107:MET:SD	1:O:134:LYS:HE3	2.48	0.54
1:G:169:GLN:NE2	1:J:143:ARG:HB3	2.23	0.54
1:J:114:LEU:HD13	1:J:117:VAL:CG1	2.36	0.54
1:J:115:ARG:HG2	1:J:167:ASP:OD2	2.07	0.54
1:A:99:ILE:O	1:A:99:ILE:HG13	2.08	0.54
1:C:156:VAL:O	1:C:160:VAL:HG13	2.08	0.54
1:L:99:ILE:HG13	1:L:99:ILE:O	2.08	0.54
1:N:156:VAL:O	1:N:160:VAL:HG13	2.08	0.54
1:N:99:ILE:HG13	1:N:99:ILE:O	2.08	0.54
1:E:99:ILE:O	1:E:99:ILE:HG13	2.08	0.54
1:I:75:HIS:HB3	1:I:80:LEU:CD1	2.38	0.54
1:H:42:LEU:HD21	1:H:46:PHE:CZ	2.43	0.54
1:L:46:PHE:HE2	1:L:90:LEU:HD13	1.73	0.54
1:J:93:TYR:CZ	1:J:136:TYR:CD2	2.96	0.54
1:G:93:TYR:CZ	1:G:136:TYR:CD2	2.96	0.54
1:E:135:ASN:OD1	1:E:136:TYR:CD1	2.60	0.54
1:K:117:VAL:HB	1:K:170:ASN:OD1	2.07	0.54
1:E:156:VAL:O	1:E:160:VAL:HG13	2.08	0.54
1:H:108:ARG:HH12	1:H:153:PRO:HG3	1.72	0.54
1:K:75:HIS:HB3	1:K:80:LEU:CD1	2.38	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:75:HIS:HB3	1:G:80:LEU:CD1	2.38	0.54
1:C:107:MET:SD	1:C:134:LYS:HE3	2.48	0.54
1:C:54:LYS:HE2	1:F:88:LEU:CA	2.25	0.53
1:A:46:PHE:HE2	1:A:90:LEU:HD13	1.73	0.53
1:F:93:TYR:CZ	1:F:136:TYR:CD2	2.96	0.53
1:H:135:ASN:OD1	1:H:136:TYR:CE1	2.60	0.53
1:O:156:VAL:O	1:O:160:VAL:HG13	2.08	0.53
1:M:156:VAL:O	1:M:160:VAL:HG13	2.07	0.53
1:K:104:ALA:O	1:K:107:MET:HE3	2.08	0.53
1:I:107:MET:SD	1:I:134:LYS:HE3	2.48	0.53
1:B:107:MET:SD	1:B:134:LYS:HE3	2.48	0.53
1:M:107:MET:SD	1:M:134:LYS:HE3	2.48	0.53
1:H:107:MET:SD	1:H:134:LYS:HE3	2.48	0.53
1:M:88:LEU:CA	1:N:54:LYS:HE2	2.24	0.53
1:G:42:LEU:HD21	1:G:46:PHE:CZ	2.44	0.53
1:L:42:LEU:HD21	1:L:46:PHE:CZ	2.44	0.53
1:I:40:ASP:HB2	1:I:45:PHE:CE1	2.32	0.53
1:J:42:LEU:HD21	1:J:46:PHE:CZ	2.44	0.53
1:I:51:LEU:HG	1:O:66:LYS:HZ3	1.71	0.53
1:A:117:VAL:HB	1:A:170:ASN:OD1	2.07	0.53
1:D:107:MET:SD	1:D:134:LYS:HE3	2.48	0.53
1:N:107:MET:SD	1:N:134:LYS:HE3	2.48	0.53
1:F:42:LEU:HD21	1:F:46:PHE:CZ	2.43	0.53
1:F:46:PHE:HE2	1:F:90:LEU:HD13	1.73	0.53
1:D:46:PHE:HE2	1:D:90:LEU:HD13	1.73	0.53
1:N:42:LEU:HD21	1:N:46:PHE:CZ	2.44	0.53
1:C:135:ASN:OD1	1:C:136:TYR:CE1	2.60	0.53
1:J:108:ARG:HH12	1:J:153:PRO:HG3	1.72	0.53
1:C:99:ILE:O	1:C:99:ILE:HG13	2.08	0.53
1:O:99:ILE:HG13	1:O:99:ILE:O	2.08	0.53
1:I:169:GLN:NE2	1:O:143:ARG:HB3	2.23	0.53
1:B:42:LEU:HD21	1:B:46:PHE:CZ	2.43	0.53
1:C:42:LEU:HD21	1:C:46:PHE:CZ	2.44	0.53
1:D:135:ASN:OD1	1:D:136:TYR:CE1	2.61	0.53
1:D:93:TYR:CZ	1:D:136:TYR:CD2	2.96	0.53
1:J:99:ILE:O	1:J:99:ILE:HG13	2.08	0.53
1:I:99:ILE:HG13	1:I:99:ILE:O	2.08	0.53
1:D:75:HIS:HB3	1:D:80:LEU:CD1	2.38	0.53
1:N:75:HIS:HB3	1:N:80:LEU:CD1	2.38	0.53
1:E:104:ALA:O	1:E:107:MET:HE3	2.09	0.53
1:M:42:LEU:HD21	1:M:46:PHE:CZ	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:42:LEU:HD21	1:I:46:PHE:CZ	2.43	0.53
1:I:46:PHE:HE2	1:I:90:LEU:HD13	1.73	0.53
1:G:122:PHE:CE2	1:G:126:LEU:CD1	2.88	0.53
1:M:99:ILE:HG13	1:M:99:ILE:O	2.08	0.53
1:K:99:ILE:O	1:K:99:ILE:HG13	2.08	0.53
1:B:75:HIS:HB3	1:B:80:LEU:CD1	2.38	0.53
1:L:125:PHE:HE2	1:N:143:ARG:HG3	1.74	0.53
1:F:40:ASP:HB2	1:F:45:PHE:CE1	2.32	0.53
1:K:42:LEU:HD21	1:K:46:PHE:CZ	2.43	0.53
1:B:54:LYS:HE3	1:I:88:LEU:HA	1.86	0.53
1:A:93:TYR:CZ	1:A:136:TYR:CD2	2.96	0.53
1:D:122:PHE:CE2	1:D:126:LEU:CD1	2.88	0.53
1:F:122:PHE:CE2	1:F:126:LEU:CD1	2.87	0.53
1:F:122:PHE:HE2	1:F:147:PHE:CZ	2.24	0.53
1:H:99:ILE:O	1:H:99:ILE:HG13	2.08	0.53
1:B:156:VAL:O	1:B:160:VAL:HG13	2.08	0.53
1:F:107:MET:SD	1:F:134:LYS:HE3	2.48	0.53
1:G:46:PHE:HE2	1:G:90:LEU:HD13	1.73	0.53
1:B:46:PHE:HE2	1:B:90:LEU:HD13	1.73	0.53
1:E:42:LEU:HD21	1:E:46:PHE:CZ	2.44	0.53
1:O:42:LEU:HD21	1:O:46:PHE:CZ	2.43	0.53
1:I:54:LYS:HE3	1:O:88:LEU:HA	1.86	0.53
1:K:93:TYR:CZ	1:K:136:TYR:CD2	2.96	0.53
1:I:156:VAL:O	1:I:160:VAL:HG13	2.08	0.53
1:C:75:HIS:HB3	1:C:80:LEU:CD1	2.38	0.53
1:O:104:ALA:O	1:O:107:MET:HE3	2.09	0.53
1:J:107:MET:SD	1:J:134:LYS:HE3	2.48	0.53
1:J:40:ASP:HB2	1:J:45:PHE:CE1	2.32	0.53
1:B:93:TYR:CZ	1:B:136:TYR:CD2	2.96	0.53
1:L:122:PHE:CE2	1:L:126:LEU:CD1	2.88	0.53
1:E:122:PHE:CE2	1:E:126:LEU:CD1	2.87	0.53
1:O:75:HIS:HB3	1:O:80:LEU:CD1	2.38	0.53
1:L:75:HIS:HB3	1:L:80:LEU:CD1	2.38	0.53
1:M:104:ALA:O	1:M:107:MET:HE3	2.09	0.53
1:I:169:GLN:OE1	1:O:143:ARG:NH1	2.36	0.53
1:F:54:LYS:CE	1:H:88:LEU:CD2	2.54	0.53
1:C:54:LYS:CE	1:F:88:LEU:CD2	2.55	0.53
1:J:122:PHE:HE2	1:J:147:PHE:CZ	2.23	0.53
1:B:122:PHE:HE2	1:B:147:PHE:CZ	2.23	0.53
1:M:75:HIS:HB3	1:M:80:LEU:CD1	2.38	0.53
1:J:35:PHE:CE2	1:J:72:PHE:HB2	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:107:MET:SD	1:E:134:LYS:HE3	2.48	0.53
1:C:122:PHE:CE2	1:C:126:LEU:CD1	2.88	0.53
1:F:75:HIS:HB3	1:F:80:LEU:CD1	2.38	0.53
1:J:75:HIS:HB3	1:J:80:LEU:CD1	2.38	0.53
1:B:35:PHE:CE2	1:B:72:PHE:HB2	2.44	0.53
1:L:125:PHE:CE2	1:N:143:ARG:NE	2.77	0.52
1:G:143:ARG:NH2	1:K:166:MET:HB3	2.21	0.52
1:G:169:GLN:OE1	1:J:143:ARG:NH1	2.38	0.52
1:M:40:ASP:HB2	1:M:45:PHE:CE1	2.32	0.52
1:D:42:LEU:HD21	1:D:46:PHE:CZ	2.44	0.52
1:H:51:LEU:HD21	1:L:66:LYS:HZ2	1.73	0.52
1:C:88:LEU:CA	1:E:54:LYS:HE2	2.26	0.52
1:F:136:TYR:CD2	1:F:155:TYR:CG	2.98	0.52
1:G:136:TYR:CD2	1:G:155:TYR:CG	2.98	0.52
1:G:99:ILE:HG13	1:G:99:ILE:O	2.08	0.52
1:E:75:HIS:HB3	1:E:80:LEU:CD1	2.38	0.52
1:K:35:PHE:CE2	1:K:72:PHE:HB2	2.44	0.52
1:M:66:LYS:NZ	1:N:51:LEU:CG	2.72	0.52
1:A:42:LEU:HD21	1:A:46:PHE:CZ	2.44	0.52
1:J:136:TYR:CD2	1:J:155:TYR:CG	2.98	0.52
1:H:136:TYR:CD2	1:H:155:TYR:CG	2.98	0.52
1:F:99:ILE:HG13	1:F:99:ILE:O	2.08	0.52
1:O:35:PHE:CE2	1:O:72:PHE:HB2	2.44	0.52
1:N:46:PHE:HE2	1:N:90:LEU:HD13	1.73	0.52
1:C:136:TYR:CD2	1:C:155:TYR:CG	2.98	0.52
1:K:136:TYR:CD2	1:K:155:TYR:CG	2.98	0.52
1:E:136:TYR:CD2	1:E:155:TYR:CG	2.98	0.52
1:A:136:TYR:CD2	1:A:155:TYR:CG	2.98	0.52
1:G:35:PHE:CE2	1:G:72:PHE:HB2	2.44	0.52
1:L:40:ASP:HB2	1:L:45:PHE:CE1	2.32	0.52
1:D:54:LYS:NZ	1:E:66:LYS:HE2	2.25	0.52
1:O:40:ASP:HB2	1:O:45:PHE:CE1	2.32	0.52
1:B:136:TYR:CD2	1:B:155:TYR:CB	2.93	0.52
1:L:93:TYR:CZ	1:L:136:TYR:CD2	2.96	0.52
1:D:136:TYR:CD2	1:D:155:TYR:CB	2.93	0.52
1:D:136:TYR:CD2	1:D:155:TYR:CG	2.98	0.52
1:C:35:PHE:CE2	1:C:72:PHE:HB2	2.44	0.52
1:C:54:LYS:HZ2	1:F:66:LYS:CD	2.23	0.52
1:C:136:TYR:CD2	1:C:155:TYR:CB	2.93	0.52
1:M:136:TYR:CD2	1:M:155:TYR:CB	2.93	0.52
1:O:136:TYR:CD2	1:O:155:TYR:CG	2.98	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:153:PRO:O	1:L:156:VAL:HG22	2.10	0.52
1:M:35:PHE:CE2	1:M:72:PHE:HB2	2.44	0.52
1:H:104:ALA:O	1:H:107:MET:HE3	2.10	0.52
1:A:51:LEU:CG	1:D:66:LYS:HZ2	2.23	0.52
1:B:66:LYS:HE2	1:M:54:LYS:NZ	2.24	0.52
1:L:136:TYR:CD2	1:L:155:TYR:CG	2.98	0.52
1:J:153:PRO:O	1:J:156:VAL:HG22	2.10	0.52
1:A:136:TYR:CD2	1:A:155:TYR:CB	2.93	0.52
1:D:153:PRO:O	1:D:156:VAL:HG22	2.10	0.52
1:K:153:PRO:O	1:K:156:VAL:HG22	2.10	0.52
1:B:99:ILE:O	1:B:99:ILE:HG13	2.08	0.52
1:H:75:HIS:HB3	1:H:80:LEU:CD1	2.38	0.52
1:A:35:PHE:CE2	1:A:72:PHE:HB2	2.44	0.52
1:I:54:LYS:HE2	1:O:88:LEU:CA	2.27	0.52
1:I:136:TYR:CD2	1:I:155:TYR:CG	2.97	0.52
1:I:153:PRO:O	1:I:156:VAL:HG22	2.10	0.52
1:E:77:PRO:HA	1:E:80:LEU:HD13	1.92	0.52
1:E:104:ALA:O	1:E:107:MET:HG2	2.10	0.52
1:B:66:LYS:CD	1:M:54:LYS:HZ2	2.23	0.52
1:E:42:LEU:HD11	1:E:46:PHE:HE1	1.73	0.52
1:G:54:LYS:HZ3	1:J:66:LYS:HE2	1.74	0.52
1:B:136:TYR:CD2	1:B:155:TYR:CG	2.98	0.52
1:I:136:TYR:CD2	1:I:155:TYR:CB	2.92	0.52
1:O:136:TYR:CD2	1:O:155:TYR:CB	2.93	0.52
1:A:104:ALA:O	1:A:107:MET:HG2	2.10	0.52
1:N:153:PRO:O	1:N:156:VAL:HG22	2.10	0.52
1:F:108:ARG:NH2	1:F:156:VAL:CG2	2.72	0.52
1:B:153:PRO:O	1:B:156:VAL:HG22	2.10	0.52
1:M:77:PRO:HA	1:M:80:LEU:HD13	1.92	0.52
1:E:35:PHE:CE2	1:E:72:PHE:HB2	2.44	0.52
1:G:66:LYS:HE2	1:K:54:LYS:NZ	2.25	0.52
1:L:54:LYS:HE3	1:N:88:LEU:HA	1.86	0.52
1:C:93:TYR:CZ	1:C:136:TYR:CD2	2.96	0.52
1:N:136:TYR:CD2	1:N:155:TYR:CG	2.98	0.52
1:F:136:TYR:CD2	1:F:155:TYR:CB	2.93	0.52
1:M:136:TYR:CD2	1:M:155:TYR:CG	2.98	0.52
1:D:108:ARG:NH2	1:D:156:VAL:CG2	2.73	0.52
1:G:153:PRO:O	1:G:156:VAL:HG22	2.10	0.52
1:A:153:PRO:O	1:A:156:VAL:HG22	2.10	0.52
1:L:77:PRO:HA	1:L:80:LEU:HD13	1.92	0.52
1:L:35:PHE:CE2	1:L:72:PHE:HB2	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:35:PHE:CE2	1:I:72:PHE:HB2	2.44	0.52
1:J:104:ALA:O	1:J:107:MET:HE3	2.10	0.52
1:D:42:LEU:HD11	1:D:46:PHE:HE1	1.73	0.52
1:B:136:TYR:CD2	1:B:155:TYR:HD1	2.28	0.52
1:K:136:TYR:CD2	1:K:155:TYR:CB	2.93	0.52
1:G:136:TYR:CD2	1:G:155:TYR:CB	2.93	0.52
1:E:136:TYR:CD2	1:E:155:TYR:CB	2.93	0.52
1:C:153:PRO:O	1:C:156:VAL:HG22	2.10	0.52
1:E:108:ARG:NH2	1:E:156:VAL:CG2	2.73	0.52
1:E:153:PRO:O	1:E:156:VAL:HG22	2.10	0.52
1:A:108:ARG:NH2	1:A:156:VAL:CG2	2.72	0.52
1:H:108:ARG:NH2	1:H:156:VAL:CG2	2.73	0.52
1:F:77:PRO:HA	1:F:80:LEU:HD13	1.92	0.52
1:I:77:PRO:HA	1:I:80:LEU:HD13	1.92	0.52
1:I:166:MET:HG2	1:O:143:ARG:HH22	0.35	0.51
1:A:88:LEU:CA	1:J:54:LYS:HE2	2.27	0.51
1:C:42:LEU:HD11	1:C:46:PHE:HE1	1.73	0.51
1:L:136:TYR:CD2	1:L:155:TYR:CB	2.93	0.51
1:N:136:TYR:CD2	1:N:155:TYR:CB	2.93	0.51
1:O:153:PRO:O	1:O:156:VAL:HG22	2.10	0.51
1:L:108:ARG:NH2	1:L:156:VAL:CG2	2.73	0.51
1:C:108:ARG:NH2	1:C:156:VAL:CG2	2.73	0.51
1:H:153:PRO:O	1:H:156:VAL:HG22	2.10	0.51
1:N:35:PHE:CE2	1:N:72:PHE:HB2	2.44	0.51
1:H:35:PHE:CE2	1:H:72:PHE:HB2	2.44	0.51
1:G:143:ARG:HH22	1:K:166:MET:HG2	0.35	0.51
1:A:42:LEU:HD11	1:A:46:PHE:HE1	1.73	0.51
1:J:136:TYR:CD2	1:J:155:TYR:CB	2.93	0.51
1:G:104:ALA:O	1:G:107:MET:HG2	2.10	0.51
1:B:104:ALA:O	1:B:107:MET:HE3	2.10	0.51
1:N:104:ALA:O	1:N:107:MET:HE3	2.10	0.51
1:F:104:ALA:O	1:F:107:MET:HG2	2.10	0.51
1:H:166:MET:HB3	1:L:143:ARG:NH2	2.21	0.51
1:B:143:ARG:HB3	1:M:169:GLN:NE2	2.24	0.51
1:A:66:LYS:HZ2	1:J:51:LEU:HD21	1.74	0.51
1:A:66:LYS:CD	1:J:54:LYS:HZ2	2.23	0.51
1:J:108:ARG:NH2	1:J:156:VAL:CG2	2.72	0.51
1:O:108:ARG:NH2	1:O:156:VAL:CG2	2.72	0.51
1:K:77:PRO:HA	1:K:80:LEU:HD13	1.92	0.51
1:L:169:GLN:OE1	1:N:143:ARG:NH1	2.39	0.51
1:C:125:PHE:HE2	1:F:143:ARG:HG3	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:54:LYS:HE2	1:H:88:LEU:CA	2.27	0.51
1:B:54:LYS:HE2	1:I:88:LEU:CA	2.25	0.51
1:N:108:ARG:NH2	1:N:156:VAL:CG2	2.73	0.51
1:D:35:PHE:CE2	1:D:72:PHE:HB2	2.44	0.51
1:B:166:MET:HB3	1:I:143:ARG:NH2	2.20	0.51
1:A:166:MET:HG2	1:D:143:ARG:HH22	0.34	0.51
1:A:143:ARG:HH22	1:J:166:MET:HG2	0.35	0.51
1:M:88:LEU:CD2	1:N:54:LYS:HE2	2.26	0.51
1:F:51:LEU:CG	1:H:66:LYS:NZ	2.73	0.51
1:B:136:TYR:CG	1:B:155:TYR:CG	2.99	0.51
1:K:136:TYR:CG	1:K:155:TYR:CG	2.99	0.51
1:D:136:TYR:CD2	1:D:155:TYR:HD1	2.29	0.51
1:H:136:TYR:CD2	1:H:155:TYR:CB	2.93	0.51
1:M:93:TYR:CZ	1:M:136:TYR:CD2	2.96	0.51
1:G:136:TYR:CG	1:G:155:TYR:CG	2.99	0.51
1:E:136:TYR:HH	1:E:154:VAL:HG13	1.73	0.51
1:M:108:ARG:NH2	1:M:156:VAL:CG2	2.73	0.51
1:F:35:PHE:CE2	1:F:72:PHE:HB2	2.44	0.51
1:L:125:PHE:HE2	1:N:143:ARG:NE	2.09	0.51
1:A:51:LEU:HG	1:D:66:LYS:HZ2	1.76	0.51
1:G:66:LYS:CD	1:K:54:LYS:HZ2	2.24	0.51
1:G:88:LEU:CA	1:K:54:LYS:HE2	2.28	0.51
1:K:66:LYS:HZ1	1:O:51:LEU:HD21	1.75	0.51
1:L:136:TYR:CG	1:L:155:TYR:CG	2.99	0.51
1:K:136:TYR:CD2	1:K:155:TYR:HD1	2.29	0.51
1:N:136:TYR:CG	1:N:155:TYR:CG	2.99	0.51
1:I:136:TYR:CG	1:I:155:TYR:CG	2.99	0.51
1:M:136:TYR:CG	1:M:155:TYR:CG	2.99	0.51
1:A:77:PRO:HA	1:A:80:LEU:HD13	1.92	0.51
1:I:104:ALA:O	1:I:107:MET:HE3	2.09	0.51
1:I:104:ALA:O	1:I:107:MET:HG2	2.10	0.51
1:G:125:PHE:HE2	1:J:143:ARG:HG3	1.76	0.51
1:G:66:LYS:HZ2	1:K:51:LEU:HD21	1.76	0.51
1:O:93:TYR:CZ	1:O:136:TYR:CD2	2.96	0.51
1:A:136:TYR:CG	1:A:155:TYR:CG	2.99	0.51
1:K:108:ARG:NH2	1:K:156:VAL:CG2	2.72	0.51
1:I:108:ARG:NH2	1:I:156:VAL:CG2	2.73	0.51
1:D:169:GLN:NE2	1:E:143:ARG:HB3	2.24	0.51
1:H:54:LYS:HE2	1:L:88:LEU:CA	2.27	0.51
1:K:88:LEU:CD2	1:O:54:LYS:CE	2.54	0.51
1:A:66:LYS:HE2	1:J:54:LYS:NZ	2.26	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:136:TYR:CG	1:J:155:TYR:CG	2.99	0.51
1:O:136:TYR:CG	1:O:155:TYR:CG	2.99	0.51
1:G:108:ARG:NH2	1:G:156:VAL:CG2	2.72	0.51
1:B:108:ARG:NH2	1:B:156:VAL:CG2	2.73	0.51
1:H:77:PRO:HA	1:H:80:LEU:HD13	1.92	0.51
1:G:104:ALA:O	1:G:107:MET:HE3	2.11	0.51
1:N:104:ALA:O	1:N:107:MET:HG2	2.10	0.51
1:F:104:ALA:O	1:F:107:MET:HE3	2.11	0.51
1:F:166:MET:HG2	1:H:143:ARG:HH22	0.35	0.51
1:B:66:LYS:NZ	1:M:51:LEU:CG	2.74	0.51
1:G:54:LYS:CD	1:J:66:LYS:HE2	2.41	0.51
1:M:153:PRO:O	1:M:156:VAL:HG22	2.10	0.51
1:F:153:PRO:O	1:F:156:VAL:HG22	2.10	0.51
1:G:77:PRO:HA	1:G:80:LEU:HD13	1.92	0.51
1:H:104:ALA:O	1:H:107:MET:HG2	2.10	0.51
1:I:54:LYS:NZ	1:O:66:LYS:HE2	2.26	0.51
1:H:136:TYR:CG	1:H:155:TYR:CG	2.99	0.51
1:M:136:TYR:CD2	1:M:155:TYR:HD1	2.29	0.51
1:E:136:TYR:CD2	1:E:155:TYR:HD1	2.29	0.51
1:A:136:TYR:CD2	1:A:155:TYR:HD1	2.29	0.51
1:C:77:PRO:HA	1:C:80:LEU:HD13	1.92	0.51
1:N:77:PRO:HA	1:N:80:LEU:HD13	1.92	0.51
1:B:77:PRO:HA	1:B:80:LEU:HD13	1.92	0.51
1:B:104:ALA:O	1:B:107:MET:HG2	2.10	0.51
1:F:42:LEU:HD11	1:F:46:PHE:HE1	1.73	0.50
1:B:88:LEU:HA	1:M:54:LYS:HE3	1.86	0.50
1:K:66:LYS:NZ	1:O:51:LEU:CG	2.74	0.50
1:I:54:LYS:HZ2	1:O:66:LYS:CD	2.24	0.50
1:F:136:TYR:CG	1:F:155:TYR:CG	2.99	0.50
1:E:136:TYR:CG	1:E:155:TYR:CG	2.99	0.50
1:O:77:PRO:HA	1:O:80:LEU:HD13	1.92	0.50
1:K:104:ALA:O	1:K:107:MET:HG2	2.10	0.50
1:B:125:PHE:HE2	1:I:143:ARG:HG3	1.76	0.50
1:K:143:ARG:HH22	1:O:166:MET:HG2	0.34	0.50
1:F:51:LEU:CG	1:H:66:LYS:HZ2	2.24	0.50
1:H:54:LYS:HZ2	1:L:66:LYS:CD	2.25	0.50
1:J:42:LEU:HD11	1:J:46:PHE:HE1	1.73	0.50
1:D:136:TYR:CG	1:D:155:TYR:CG	2.99	0.50
1:J:77:PRO:HA	1:J:80:LEU:HD13	1.92	0.50
1:C:104:ALA:O	1:C:107:MET:HG2	2.10	0.50
1:D:157:ASP:HA	1:D:160:VAL:HG22	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:157:ASP:HA	1:G:160:VAL:HG22	1.94	0.50
1:D:104:ALA:O	1:D:107:MET:HG2	2.10	0.50
1:G:125:PHE:CE2	1:J:143:ARG:NE	2.80	0.50
1:F:54:LYS:HZ3	1:H:88:LEU:HD23	1.34	0.50
1:N:42:LEU:HD11	1:N:46:PHE:HE1	1.73	0.50
1:C:64:ALA:O	1:C:66:LYS:N	2.43	0.50
1:C:136:TYR:CG	1:C:155:TYR:CG	2.99	0.50
1:L:104:ALA:O	1:L:107:MET:HG2	2.10	0.50
1:M:104:ALA:O	1:M:107:MET:HG2	2.10	0.50
1:G:166:MET:HG2	1:J:143:ARG:HH22	0.34	0.50
1:F:54:LYS:NZ	1:H:66:LYS:HE2	2.27	0.50
1:C:51:LEU:CG	1:F:66:LYS:NZ	2.73	0.50
1:D:40:ASP:HB2	1:D:45:PHE:CE1	2.32	0.50
1:B:40:ASP:HB2	1:B:45:PHE:CE1	2.32	0.50
1:L:104:ALA:O	1:L:107:MET:HE3	2.12	0.50
1:O:104:ALA:O	1:O:107:MET:HG2	2.10	0.50
1:G:40:ASP:HB2	1:G:45:PHE:CE1	2.32	0.50
1:D:54:LYS:CE	1:E:88:LEU:CD2	2.53	0.50
1:L:136:TYR:HH	1:L:154:VAL:HG13	1.76	0.50
1:C:136:TYR:CD2	1:C:155:TYR:HD1	2.28	0.50
1:K:136:TYR:HH	1:K:154:VAL:HG13	1.76	0.50
1:G:135:ASN:C	1:G:136:TYR:CD1	2.84	0.50
1:K:122:PHE:CE2	1:K:126:LEU:CD1	2.88	0.50
1:J:104:ALA:O	1:J:107:MET:HG2	2.10	0.50
1:C:51:LEU:CG	1:F:66:LYS:HZ2	2.24	0.50
1:L:54:LYS:NZ	1:N:66:LYS:HE2	2.26	0.50
1:B:51:LEU:HG	1:I:66:LYS:HZ2	1.75	0.50
1:L:54:LYS:CD	1:N:66:LYS:HE2	2.42	0.50
1:B:51:LEU:CG	1:I:66:LYS:HZ2	2.24	0.50
1:G:54:LYS:NZ	1:J:66:LYS:HE2	2.26	0.50
1:C:66:LYS:HE2	1:E:54:LYS:NZ	2.27	0.50
1:L:102:TYR:OH	1:L:154:VAL:HG12	2.12	0.50
1:G:102:TYR:OH	1:G:154:VAL:HG12	2.12	0.50
1:A:157:ASP:HA	1:A:160:VAL:HG22	1.94	0.50
1:K:157:ASP:HA	1:K:160:VAL:HG22	1.94	0.50
1:K:143:ARG:HG3	1:O:125:PHE:HE2	1.77	0.50
1:C:143:ARG:HG3	1:E:125:PHE:HE2	1.77	0.50
1:B:54:LYS:HZ2	1:I:66:LYS:CD	2.24	0.50
1:K:102:TYR:OH	1:K:154:VAL:HG12	2.12	0.50
1:M:66:LYS:HZ1	1:N:51:LEU:HD21	1.76	0.49
1:F:51:LEU:HG	1:H:66:LYS:HZ2	1.76	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:102:TYR:OH	1:N:154:VAL:HG12	2.12	0.49
1:J:102:TYR:OH	1:J:154:VAL:HG12	2.12	0.49
1:D:77:PRO:HA	1:D:80:LEU:HD13	1.92	0.49
1:C:143:ARG:HH22	1:E:166:MET:HG2	0.33	0.49
1:H:42:LEU:HD11	1:H:46:PHE:HE1	1.73	0.49
1:D:64:ALA:O	1:D:66:LYS:N	2.42	0.49
1:K:66:LYS:HE2	1:O:54:LYS:NZ	2.27	0.49
1:A:66:LYS:NZ	1:J:51:LEU:CG	2.74	0.49
1:L:51:LEU:CG	1:N:66:LYS:NZ	2.75	0.49
1:J:64:ALA:O	1:J:66:LYS:N	2.42	0.49
1:H:136:TYR:CE2	1:H:155:TYR:HB2	2.48	0.49
1:C:157:ASP:HA	1:C:160:VAL:HG22	1.94	0.49
1:I:157:ASP:HA	1:I:160:VAL:HG22	1.94	0.49
1:H:51:LEU:CG	1:L:66:LYS:NZ	2.75	0.49
1:D:51:LEU:CG	1:E:66:LYS:NZ	2.75	0.49
1:J:136:TYR:CE2	1:J:155:TYR:CB	2.96	0.49
1:O:136:TYR:CD2	1:O:155:TYR:HD1	2.29	0.49
1:E:136:TYR:CE2	1:E:155:TYR:CB	2.96	0.49
1:E:102:TYR:OH	1:E:154:VAL:HG12	2.12	0.49
1:F:157:ASP:HA	1:F:160:VAL:HG22	1.94	0.49
1:L:169:GLN:NE2	1:N:143:ARG:HB3	2.27	0.49
1:K:68:ILE:HD11	1:K:88:LEU:HD11	1.95	0.49
1:B:51:LEU:CG	1:I:66:LYS:NZ	2.75	0.49
1:O:68:ILE:HD11	1:O:88:LEU:HD11	1.95	0.49
1:C:136:TYR:CE2	1:C:155:TYR:CB	2.95	0.49
1:M:102:TYR:OH	1:M:154:VAL:HG12	2.12	0.49
1:G:136:TYR:CE2	1:G:155:TYR:CB	2.95	0.49
1:A:136:TYR:CE2	1:A:155:TYR:CB	2.96	0.49
1:N:122:PHE:CE2	1:N:126:LEU:CD1	2.87	0.49
1:E:157:ASP:HA	1:E:160:VAL:HG22	1.94	0.49
1:G:42:LEU:HD11	1:G:46:PHE:HE1	1.73	0.49
1:B:88:LEU:HD23	1:M:54:LYS:HZ3	1.37	0.49
1:G:54:LYS:HE2	1:J:88:LEU:CA	2.26	0.49
1:I:102:TYR:OH	1:I:154:VAL:HG12	2.13	0.49
1:I:136:TYR:CE2	1:I:155:TYR:HB2	2.48	0.49
1:J:157:ASP:HA	1:J:160:VAL:HG22	1.94	0.49
1:F:136:TYR:CD2	1:F:155:TYR:HD1	2.29	0.49
1:A:125:PHE:HE2	1:D:143:ARG:HG3	1.77	0.49
1:G:66:LYS:NZ	1:K:51:LEU:CG	2.74	0.49
1:I:68:ILE:HD11	1:I:88:LEU:HD11	1.95	0.49
1:C:102:TYR:OH	1:C:154:VAL:HG12	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:136:TYR:CD2	1:N:155:TYR:HD1	2.29	0.49
1:F:136:TYR:CE2	1:F:155:TYR:CB	2.96	0.49
1:H:102:TYR:OH	1:H:154:VAL:HG12	2.12	0.49
1:B:68:ILE:HD11	1:B:88:LEU:HD11	1.95	0.49
1:C:166:MET:HG2	1:F:143:ARG:HH22	0.33	0.49
1:D:125:PHE:CE2	1:E:143:ARG:NE	2.81	0.49
1:M:42:LEU:HD13	1:M:88:LEU:HD11	1.95	0.49
1:C:51:LEU:HG	1:F:66:LYS:HZ2	1.78	0.49
1:G:68:ILE:HD11	1:G:88:LEU:HD11	1.95	0.49
1:L:54:LYS:HZ2	1:N:66:LYS:CD	2.24	0.49
1:C:136:TYR:CD2	1:C:155:TYR:HB2	2.48	0.49
1:D:136:TYR:CE2	1:D:155:TYR:CB	2.96	0.49
1:H:136:TYR:CE2	1:H:155:TYR:CB	2.95	0.49
1:M:136:TYR:CE2	1:M:155:TYR:CB	2.96	0.49
1:M:136:TYR:CE2	1:M:155:TYR:HB2	2.48	0.49
1:O:157:ASP:HA	1:O:160:VAL:HG22	1.94	0.49
1:H:54:LYS:HE2	1:L:88:LEU:CD2	2.26	0.49
1:B:42:LEU:HD13	1:B:88:LEU:HD11	1.95	0.49
1:I:136:TYR:CE2	1:I:155:TYR:CB	2.96	0.49
1:G:136:TYR:CD2	1:G:155:TYR:HB2	2.48	0.49
1:L:157:ASP:HA	1:L:160:VAL:HG22	1.94	0.49
1:M:157:ASP:HA	1:M:160:VAL:HG22	1.94	0.49
1:I:125:PHE:CE2	1:O:143:ARG:NE	2.80	0.49
1:I:125:PHE:HE2	1:O:143:ARG:HG3	1.78	0.49
1:H:166:MET:HG2	1:L:143:ARG:HH22	0.32	0.49
1:G:125:PHE:HE2	1:J:143:ARG:NE	2.11	0.49
1:M:68:ILE:HD11	1:M:88:LEU:HD11	1.95	0.49
1:H:42:LEU:HD13	1:H:88:LEU:HD11	1.95	0.49
1:H:54:LYS:NZ	1:L:66:LYS:HE2	2.27	0.49
1:A:88:LEU:CD2	1:J:54:LYS:HE2	2.25	0.49
1:N:136:TYR:CE2	1:N:155:TYR:CB	2.96	0.49
1:J:136:TYR:CD2	1:J:155:TYR:HD1	2.29	0.49
1:C:54:LYS:NZ	1:F:66:LYS:HE2	2.28	0.48
1:F:42:LEU:HD13	1:F:88:LEU:HD11	1.95	0.48
1:D:42:LEU:HD13	1:D:88:LEU:HD11	1.95	0.48
1:L:42:LEU:HD11	1:L:46:PHE:HE1	1.73	0.48
1:E:42:LEU:HD13	1:E:88:LEU:HD11	1.95	0.48
1:L:136:TYR:CE2	1:L:155:TYR:HB2	2.48	0.48
1:N:136:TYR:CE2	1:N:155:TYR:HB2	2.48	0.48
1:D:102:TYR:OH	1:D:154:VAL:HG12	2.12	0.48
1:J:136:TYR:CD2	1:J:155:TYR:HB2	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:136:TYR:CD2	1:F:155:TYR:HB2	2.49	0.48
1:H:136:TYR:CD2	1:H:155:TYR:HB2	2.48	0.48
1:O:102:TYR:OH	1:O:154:VAL:HG12	2.12	0.48
1:I:42:LEU:HD13	1:I:88:LEU:HD11	1.95	0.48
1:J:68:ILE:HD11	1:J:88:LEU:HD11	1.95	0.48
1:O:42:LEU:HD13	1:O:88:LEU:HD11	1.95	0.48
1:B:102:TYR:OH	1:B:154:VAL:HG12	2.12	0.48
1:D:136:TYR:CD2	1:D:155:TYR:HB2	2.48	0.48
1:A:136:TYR:CD2	1:A:155:TYR:HB2	2.48	0.48
1:N:157:ASP:HA	1:N:160:VAL:HG22	1.94	0.48
1:L:42:LEU:HD13	1:L:88:LEU:HD11	1.95	0.48
1:L:54:LYS:HE2	1:N:88:LEU:CA	2.27	0.48
1:I:54:LYS:CD	1:O:66:LYS:HE2	2.43	0.48
1:I:51:LEU:CG	1:O:66:LYS:NZ	2.75	0.48
1:C:42:LEU:HD13	1:C:88:LEU:HD11	1.95	0.48
1:B:136:TYR:CE2	1:B:155:TYR:CB	2.96	0.48
1:L:136:TYR:CE2	1:L:155:TYR:CB	2.96	0.48
1:K:136:TYR:CD2	1:K:155:TYR:HB2	2.48	0.48
1:O:136:TYR:CE2	1:O:155:TYR:HB2	2.48	0.48
1:E:136:TYR:CD2	1:E:155:TYR:HB2	2.48	0.48
1:A:102:TYR:OH	1:A:154:VAL:HG12	2.12	0.48
1:A:136:TYR:HH	1:A:154:VAL:HG13	1.77	0.48
1:B:157:ASP:HA	1:B:160:VAL:HG22	1.94	0.48
1:B:166:MET:HG2	1:I:143:ARG:HH22	0.32	0.48
1:B:125:PHE:CE2	1:I:143:ARG:NE	2.82	0.48
1:K:42:LEU:HD13	1:K:88:LEU:HD11	1.95	0.48
1:N:42:LEU:HD13	1:N:88:LEU:HD11	1.95	0.48
1:B:54:LYS:NZ	1:I:66:LYS:HE2	2.28	0.48
1:C:66:LYS:HE2	1:E:54:LYS:CD	2.43	0.48
1:C:66:LYS:NZ	1:E:51:LEU:CG	2.76	0.48
1:K:136:TYR:CE2	1:K:155:TYR:CB	2.96	0.48
1:D:136:TYR:CE2	1:D:155:TYR:HB2	2.48	0.48
1:F:102:TYR:OH	1:F:154:VAL:HG12	2.12	0.48
1:G:136:TYR:CE2	1:G:155:TYR:HB2	2.48	0.48
1:F:125:PHE:HE2	1:H:143:ARG:HG3	1.79	0.48
1:B:143:ARG:NE	1:M:125:PHE:HE2	2.12	0.48
1:A:42:LEU:HD13	1:A:88:LEU:HD11	1.95	0.48
1:N:68:ILE:HD11	1:N:88:LEU:HD11	1.95	0.48
1:F:136:TYR:CE2	1:F:155:TYR:HB2	2.48	0.48
1:O:136:TYR:CE2	1:O:155:TYR:CB	2.96	0.48
1:B:143:ARG:NE	1:M:125:PHE:CE2	2.81	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:66:LYS:HZ2	1:N:51:LEU:HD21	1.78	0.48
1:G:42:LEU:HD13	1:G:88:LEU:HD11	1.95	0.48
1:A:68:ILE:HD11	1:A:88:LEU:HD11	1.95	0.48
1:D:54:LYS:CD	1:E:66:LYS:HE2	2.43	0.48
1:E:68:ILE:HD11	1:E:88:LEU:HD11	1.94	0.48
1:G:51:LEU:CG	1:J:66:LYS:NZ	2.76	0.48
1:J:42:LEU:HD13	1:J:88:LEU:HD11	1.95	0.48
1:M:93:TYR:CG	1:M:136:TYR:CE2	3.02	0.48
1:E:136:TYR:CE2	1:E:155:TYR:HB2	2.48	0.48
1:B:122:PHE:CE2	1:B:126:LEU:CD1	2.88	0.48
1:N:57:VAL:HG23	1:N:99:ILE:HG13	1.96	0.48
1:D:125:PHE:HE2	1:E:143:ARG:HG3	1.79	0.48
1:K:66:LYS:HZ2	1:O:51:LEU:CG	2.26	0.48
1:B:136:TYR:CE2	1:B:155:TYR:HB2	2.48	0.48
1:B:93:TYR:CG	1:B:136:TYR:CE2	3.02	0.48
1:I:93:TYR:CG	1:I:136:TYR:CE2	3.02	0.48
1:J:136:TYR:CE2	1:J:155:TYR:HB2	2.48	0.48
1:O:93:TYR:CG	1:O:136:TYR:CE2	3.02	0.48
1:O:136:TYR:CD2	1:O:155:TYR:HB2	2.48	0.48
1:A:104:ALA:O	1:A:107:MET:HE3	2.14	0.48
1:H:157:ASP:HA	1:H:160:VAL:HG22	1.94	0.48
1:B:57:VAL:HG23	1:B:99:ILE:HG13	1.96	0.48
1:D:125:PHE:HE2	1:E:143:ARG:NE	2.11	0.48
1:H:68:ILE:HD11	1:H:88:LEU:HD11	1.95	0.48
1:A:54:LYS:CE	1:D:88:LEU:CD2	2.53	0.48
1:L:93:TYR:CG	1:L:136:TYR:CE2	3.02	0.48
1:C:135:ASN:HA	1:C:152:PRO:HD2	1.96	0.48
1:N:93:TYR:CG	1:N:136:TYR:CE2	3.02	0.48
1:I:136:TYR:CD2	1:I:155:TYR:HB2	2.48	0.48
1:M:93:TYR:CB	1:M:135:ASN:OD1	2.60	0.48
1:N:117:VAL:HG12	1:N:167:ASP:OD1	2.14	0.48
1:M:117:VAL:HG12	1:M:167:ASP:OD1	2.14	0.48
1:M:57:VAL:HG23	1:M:99:ILE:HG13	1.96	0.48
1:K:57:VAL:HG23	1:K:99:ILE:HG13	1.96	0.48
1:I:57:VAL:HG23	1:I:99:ILE:HG13	1.96	0.48
1:I:125:PHE:HE2	1:O:143:ARG:NE	2.12	0.48
1:A:54:LYS:HZ2	1:D:66:LYS:CD	2.27	0.48
1:D:68:ILE:HD11	1:D:88:LEU:HD11	1.95	0.48
1:L:68:ILE:HD11	1:L:88:LEU:HD11	1.95	0.48
1:K:42:LEU:HD11	1:K:46:PHE:HE1	1.73	0.48
1:L:136:TYR:CD2	1:L:155:TYR:HD1	2.29	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:136:TYR:CE2	1:C:155:TYR:HB2	2.48	0.48
1:K:136:TYR:CE2	1:K:155:TYR:HB2	2.48	0.48
1:K:93:TYR:CG	1:K:136:TYR:CE2	3.02	0.48
1:D:135:ASN:HA	1:D:152:PRO:HD2	1.96	0.48
1:G:93:TYR:CG	1:G:136:TYR:CE2	3.02	0.48
1:E:135:ASN:HA	1:E:152:PRO:HD2	1.96	0.48
1:A:135:ASN:HA	1:A:152:PRO:HD2	1.96	0.48
1:I:117:VAL:HG12	1:I:167:ASP:OD1	2.14	0.48
1:I:122:PHE:CE2	1:I:126:LEU:CD1	2.88	0.48
1:A:117:VAL:HG12	1:A:167:ASP:OD1	2.14	0.48
1:B:117:VAL:HG12	1:B:167:ASP:OD1	2.14	0.48
1:L:57:VAL:HG23	1:L:99:ILE:HG13	1.96	0.48
1:A:143:ARG:HG3	1:J:125:PHE:HE2	1.79	0.48
1:F:68:ILE:HD11	1:F:88:LEU:HD11	1.95	0.48
1:A:54:LYS:NZ	1:D:66:LYS:HE2	2.29	0.48
1:B:66:LYS:HE2	1:M:54:LYS:CD	2.44	0.48
1:K:66:LYS:CD	1:O:54:LYS:HZ2	2.26	0.48
1:B:136:TYR:HH	1:B:154:VAL:HG13	1.75	0.48
1:B:136:TYR:CD2	1:B:155:TYR:HB2	2.48	0.48
1:J:135:ASN:HA	1:J:152:PRO:HD2	1.96	0.48
1:J:93:TYR:CG	1:J:136:TYR:CE2	3.02	0.48
1:F:135:ASN:HA	1:F:152:PRO:HD2	1.96	0.48
1:O:117:VAL:HG12	1:O:167:ASP:OD1	2.14	0.48
1:H:57:VAL:HG23	1:H:99:ILE:HG13	1.96	0.48
1:G:143:ARG:HD3	1:K:169:GLN:NE2	2.29	0.47
1:H:135:ASN:HA	1:H:152:PRO:HD2	1.96	0.47
1:L:117:VAL:HG12	1:L:167:ASP:OD1	2.14	0.47
1:O:122:PHE:CE2	1:O:126:LEU:CD1	2.87	0.47
1:O:57:VAL:HG23	1:O:99:ILE:HG13	1.96	0.47
1:K:143:ARG:NE	1:O:125:PHE:CE2	2.82	0.47
1:B:88:LEU:CA	1:M:54:LYS:HE2	2.29	0.47
1:A:40:ASP:HB2	1:A:45:PHE:CE1	2.32	0.47
1:B:93:TYR:CB	1:B:135:ASN:OD1	2.60	0.47
1:L:135:ASN:HA	1:L:152:PRO:HD2	1.96	0.47
1:N:135:ASN:HA	1:N:152:PRO:HD2	1.96	0.47
1:M:136:TYR:CD2	1:M:155:TYR:HB2	2.48	0.47
1:A:131:LEU:HD23	1:A:132:TYR:N	2.30	0.47
1:K:117:VAL:HG12	1:K:167:ASP:OD1	2.14	0.47
1:B:112:VAL:HB	1:B:147:PHE:CE1	2.49	0.47
1:B:143:ARG:HG3	1:M:125:PHE:HE2	1.79	0.47
1:G:51:LEU:HD21	1:J:66:LYS:HZ2	1.78	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:68:ILE:HD11	1:C:88:LEU:HD11	1.95	0.47
1:H:93:TYR:CG	1:H:136:TYR:CE2	3.02	0.47
1:M:135:ASN:HA	1:M:152:PRO:HD2	1.96	0.47
1:A:93:TYR:CG	1:A:136:TYR:CE2	3.02	0.47
1:H:117:VAL:HG12	1:H:167:ASP:OD1	2.14	0.47
1:F:117:VAL:HG12	1:F:167:ASP:OD1	2.14	0.47
1:F:57:VAL:HG23	1:F:99:ILE:HG13	1.96	0.47
1:G:57:VAL:HG23	1:G:99:ILE:HG13	1.96	0.47
1:G:125:PHE:HE2	1:J:143:ARG:HE	1.62	0.47
1:J:117:VAL:HG12	1:J:167:ASP:OD1	2.14	0.47
1:D:112:VAL:HB	1:D:147:PHE:CE1	2.49	0.47
1:E:112:VAL:HB	1:E:147:PHE:CE1	2.49	0.47
1:G:117:VAL:HG12	1:G:167:ASP:OD1	2.14	0.47
1:F:54:LYS:HZ2	1:H:66:LYS:CD	2.26	0.47
1:D:54:LYS:HE2	1:E:88:LEU:CA	2.29	0.47
1:B:135:ASN:HA	1:B:152:PRO:HD2	1.96	0.47
1:H:135:ASN:C	1:H:136:TYR:CD1	2.84	0.47
1:A:136:TYR:CE2	1:A:155:TYR:HB2	2.48	0.47
1:C:138:LEU:HD23	1:C:139:ARG:N	2.30	0.47
1:N:131:LEU:HD23	1:N:132:TYR:N	2.30	0.47
1:D:93:TYR:CG	1:D:136:TYR:CE2	3.02	0.47
1:F:93:TYR:CG	1:F:136:TYR:CE2	3.02	0.47
1:M:112:VAL:HB	1:M:147:PHE:CE1	2.49	0.47
1:I:125:PHE:HE2	1:O:143:ARG:HE	1.62	0.47
1:O:64:ALA:O	1:O:66:LYS:N	2.43	0.47
1:C:66:LYS:HZ2	1:E:51:LEU:HD21	1.78	0.47
1:C:40:ASP:HB2	1:C:45:PHE:CE1	2.32	0.47
1:L:131:LEU:HD23	1:L:132:TYR:N	2.30	0.47
1:L:135:ASN:C	1:L:136:TYR:CD1	2.84	0.47
1:B:102:TYR:CE2	1:B:154:VAL:HG12	2.50	0.47
1:L:136:TYR:CD2	1:L:155:TYR:HB2	2.48	0.47
1:C:93:TYR:CG	1:C:136:TYR:CE2	3.02	0.47
1:K:135:ASN:HA	1:K:152:PRO:HD2	1.96	0.47
1:K:131:LEU:HD23	1:K:132:TYR:N	2.30	0.47
1:I:93:TYR:CB	1:I:135:ASN:OD1	2.61	0.47
1:I:135:ASN:HA	1:I:152:PRO:HD2	1.96	0.47
1:J:131:LEU:HD23	1:J:132:TYR:N	2.30	0.47
1:H:131:LEU:HD23	1:H:132:TYR:N	2.30	0.47
1:E:93:TYR:CG	1:E:136:TYR:CE2	3.02	0.47
1:D:117:VAL:HG12	1:D:167:ASP:OD1	2.14	0.47
1:H:112:VAL:HB	1:H:147:PHE:CE1	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:112:VAL:HB	1:F:147:PHE:CE1	2.49	0.47
1:C:117:VAL:HG12	1:C:167:ASP:OD1	2.14	0.47
1:J:57:VAL:HG23	1:J:99:ILE:HG13	1.96	0.47
1:C:57:VAL:HG23	1:C:99:ILE:HG13	1.96	0.47
1:K:138:LEU:HD23	1:K:139:ARG:N	2.30	0.47
1:F:138:LEU:HD23	1:F:139:ARG:N	2.30	0.47
1:A:138:LEU:HD23	1:A:139:ARG:N	2.30	0.47
1:F:64:ALA:O	1:F:66:LYS:N	2.42	0.47
1:D:51:LEU:HG	1:E:66:LYS:HZ3	1.79	0.47
1:B:54:LYS:CD	1:I:66:LYS:HE2	2.45	0.47
1:I:54:LYS:HZ3	1:O:88:LEU:HD23	1.40	0.47
1:K:102:TYR:CE2	1:K:154:VAL:HG12	2.50	0.47
1:D:102:TYR:CE2	1:D:154:VAL:HG12	2.50	0.47
1:D:131:LEU:HD23	1:D:132:TYR:N	2.30	0.47
1:H:136:TYR:CD2	1:H:155:TYR:HD1	2.29	0.47
1:M:131:LEU:HD23	1:M:132:TYR:N	2.30	0.47
1:O:131:LEU:HD23	1:O:132:TYR:N	2.30	0.47
1:O:135:ASN:HA	1:O:152:PRO:HD2	1.96	0.47
1:E:138:LEU:HD23	1:E:139:ARG:N	2.30	0.47
1:O:138:LEU:HD23	1:O:139:ARG:N	2.30	0.47
1:M:143:ARG:HG3	1:N:125:PHE:HE2	1.79	0.47
1:C:106:GLU:HA	1:E:97:GLN:HE22	1.54	0.47
1:C:143:ARG:NE	1:E:125:PHE:CE2	2.81	0.47
1:C:131:LEU:HD23	1:C:132:TYR:N	2.30	0.47
1:C:102:TYR:CE2	1:C:154:VAL:HG12	2.50	0.47
1:E:102:TYR:CE2	1:E:154:VAL:HG12	2.50	0.47
1:E:57:VAL:HG23	1:E:99:ILE:HG13	1.96	0.47
1:G:88:LEU:CD2	1:K:54:LYS:CE	2.56	0.47
1:L:64:ALA:O	1:L:66:LYS:N	2.42	0.47
1:N:40:ASP:HB2	1:N:45:PHE:CE1	2.32	0.47
1:N:136:TYR:CD2	1:N:155:TYR:HB2	2.49	0.47
1:J:102:TYR:CE2	1:J:154:VAL:HG12	2.50	0.47
1:F:131:LEU:HD23	1:F:132:TYR:N	2.30	0.47
1:H:133:ASN:C	1:H:135:ASN:N	2.69	0.47
1:N:112:VAL:HB	1:N:147:PHE:CE1	2.49	0.47
1:I:138:LEU:HD23	1:I:139:ARG:N	2.30	0.47
1:K:143:ARG:NE	1:O:125:PHE:HE2	2.13	0.46
1:F:54:LYS:HE2	1:H:88:LEU:CD2	2.25	0.46
1:L:51:LEU:HD21	1:N:66:LYS:HZ2	1.78	0.46
1:N:102:TYR:CE2	1:N:154:VAL:HG12	2.50	0.46
1:I:102:TYR:CE2	1:I:154:VAL:HG12	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:102:TYR:CE2	1:H:154:VAL:HG12	2.50	0.46
1:O:102:TYR:CE2	1:O:154:VAL:HG12	2.50	0.46
1:G:135:ASN:HA	1:G:152:PRO:HD2	1.96	0.46
1:D:97:GLN:CG	1:E:105:SER:HA	2.24	0.46
1:M:66:LYS:HZ3	1:N:51:LEU:HG	1.77	0.46
1:C:66:LYS:CD	1:E:54:LYS:HZ2	2.29	0.46
1:B:131:LEU:HD23	1:B:132:TYR:N	2.30	0.46
1:L:102:TYR:CE2	1:L:154:VAL:HG12	2.50	0.46
1:I:136:TYR:CD2	1:I:155:TYR:HD1	2.29	0.46
1:F:102:TYR:CE2	1:F:154:VAL:HG12	2.50	0.46
1:J:112:VAL:HB	1:J:147:PHE:CE1	2.49	0.46
1:A:57:VAL:HG23	1:A:99:ILE:HG13	1.96	0.46
1:D:57:VAL:HG23	1:D:99:ILE:HG13	1.96	0.46
1:G:138:LEU:HD23	1:G:139:ARG:N	2.30	0.46
1:A:97:GLN:HE22	1:D:106:GLU:HA	1.53	0.46
1:B:66:LYS:HZ1	1:M:51:LEU:HD21	1.80	0.46
1:K:66:LYS:HE2	1:O:54:LYS:CD	2.46	0.46
1:M:102:TYR:CE2	1:M:154:VAL:HG12	2.50	0.46
1:E:117:VAL:HG12	1:E:167:ASP:OD1	2.14	0.46
1:G:112:VAL:HB	1:G:147:PHE:CE1	2.49	0.46
1:H:124:ASN:OD1	1:H:127:LYS:HE3	2.16	0.46
1:H:138:LEU:HD23	1:H:139:ARG:N	2.30	0.46
1:M:66:LYS:HZ2	1:N:51:LEU:CG	2.29	0.46
1:O:42:LEU:HD11	1:O:46:PHE:HE1	1.73	0.46
1:M:135:ASN:C	1:M:136:TYR:CD1	2.84	0.46
1:E:133:ASN:C	1:E:135:ASN:N	2.69	0.46
1:A:112:VAL:HB	1:A:147:PHE:CE1	2.49	0.46
1:F:124:ASN:OD1	1:F:127:LYS:HE3	2.16	0.46
1:A:124:ASN:OD1	1:A:127:LYS:HE3	2.16	0.46
1:B:138:LEU:HD23	1:B:139:ARG:N	2.30	0.46
1:B:125:PHE:HE2	1:I:143:ARG:NE	2.13	0.46
1:F:125:PHE:CE2	1:H:143:ARG:NE	2.83	0.46
1:G:143:ARG:HE	1:K:125:PHE:HE2	1.64	0.46
1:K:66:LYS:HZ2	1:O:51:LEU:HG	1.80	0.46
1:N:135:ASN:C	1:N:136:TYR:CD1	2.84	0.46
1:J:133:ASN:C	1:J:135:ASN:N	2.69	0.46
1:F:133:ASN:C	1:F:135:ASN:N	2.69	0.46
1:O:93:TYR:CB	1:O:135:ASN:OD1	2.60	0.46
1:A:102:TYR:CE2	1:A:154:VAL:HG12	2.50	0.46
1:L:124:ASN:OD1	1:L:127:LYS:HE3	2.16	0.46
1:J:124:ASN:OD1	1:J:127:LYS:HE3	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:124:ASN:OD1	1:D:127:LYS:HE3	2.16	0.46
1:L:138:LEU:HD23	1:L:139:ARG:N	2.30	0.46
1:D:138:LEU:HD23	1:D:139:ARG:N	2.30	0.46
1:B:66:LYS:HZ3	1:M:51:LEU:HG	1.79	0.46
1:C:136:TYR:CB	1:C:155:TYR:CD1	2.99	0.46
1:G:131:LEU:HD23	1:G:132:TYR:N	2.30	0.46
1:A:133:ASN:C	1:A:135:ASN:N	2.69	0.46
1:E:64:ALA:O	1:E:66:LYS:N	2.42	0.46
1:N:133:ASN:C	1:N:135:ASN:N	2.69	0.46
1:N:136:TYR:CB	1:N:155:TYR:CD1	2.99	0.46
1:I:131:LEU:HD23	1:I:132:TYR:N	2.30	0.46
1:H:136:TYR:CB	1:H:155:TYR:CD1	2.99	0.46
1:E:131:LEU:HD23	1:E:132:TYR:N	2.30	0.46
1:L:112:VAL:HB	1:L:147:PHE:CE1	2.49	0.46
1:N:124:ASN:OD1	1:N:127:LYS:HE3	2.16	0.46
1:J:138:LEU:HD23	1:J:139:ARG:N	2.30	0.46
1:A:143:ARG:NE	1:J:125:PHE:CE2	2.83	0.46
1:M:106:GLU:HA	1:N:97:GLN:HE22	1.57	0.46
1:L:133:ASN:C	1:L:135:ASN:N	2.69	0.46
1:G:102:TYR:CE2	1:G:154:VAL:HG12	2.50	0.46
1:C:112:VAL:HB	1:C:147:PHE:CE1	2.49	0.46
1:G:124:ASN:OD1	1:G:127:LYS:HE3	2.16	0.46
1:N:138:LEU:HD23	1:N:139:ARG:N	2.30	0.46
1:D:49:MET:HE2	1:D:49:MET:HB2	1.89	0.46
1:M:143:ARG:HH22	1:N:166:MET:HG2	0.31	0.46
1:M:66:LYS:HE2	1:N:54:LYS:NZ	2.29	0.46
1:F:135:ASN:C	1:F:136:TYR:CD1	2.84	0.46
1:M:122:PHE:CE2	1:M:126:LEU:CD1	2.88	0.46
1:K:122:PHE:CZ	1:K:163:ALA:HB2	2.51	0.46
1:B:122:PHE:CZ	1:B:163:ALA:HB2	2.51	0.46
1:G:143:ARG:NE	1:K:125:PHE:CE2	2.84	0.46
1:A:143:ARG:NE	1:J:125:PHE:HE2	2.14	0.46
1:C:135:ASN:C	1:C:136:TYR:CD1	2.84	0.46
1:I:133:ASN:C	1:I:135:ASN:N	2.69	0.46
1:E:136:TYR:CB	1:E:155:TYR:CD1	2.99	0.46
1:K:112:VAL:HB	1:K:147:PHE:CE1	2.49	0.46
1:I:124:ASN:OD1	1:I:127:LYS:HE3	2.16	0.46
1:E:124:ASN:OD1	1:E:127:LYS:HE3	2.16	0.46
1:M:138:LEU:HD23	1:M:139:ARG:N	2.30	0.46
1:F:125:PHE:HE2	1:H:143:ARG:NE	2.14	0.45
1:C:125:PHE:HE2	1:F:143:ARG:NE	2.14	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:97:GLN:CG	1:F:105:SER:HA	2.21	0.45
1:L:97:GLN:CA	1:N:105:SER:CB	2.94	0.45
1:G:51:LEU:CG	1:J:66:LYS:HZ2	2.29	0.45
1:D:136:TYR:CB	1:D:155:TYR:CD1	2.99	0.45
1:O:94:PHE:HD1	1:O:99:ILE:HG22	1.82	0.45
1:G:123:ASN:HD21	1:G:138:LEU:CD2	2.30	0.45
1:E:123:ASN:HD21	1:E:138:LEU:CD2	2.30	0.45
1:C:143:ARG:NE	1:E:125:PHE:HE2	2.12	0.45
1:A:143:ARG:HD3	1:J:169:GLN:NE2	2.32	0.45
1:H:40:ASP:HB2	1:H:45:PHE:CE1	2.32	0.45
1:G:64:ALA:O	1:G:66:LYS:N	2.43	0.45
1:L:136:TYR:CB	1:L:155:TYR:CD1	2.99	0.45
1:F:136:TYR:CB	1:F:155:TYR:CD1	2.99	0.45
1:A:136:TYR:CB	1:A:155:TYR:CD1	2.99	0.45
1:D:122:PHE:HE2	1:D:126:LEU:HD11	1.76	0.45
1:H:122:PHE:HE2	1:H:126:LEU:HD11	1.76	0.45
1:O:124:ASN:OD1	1:O:127:LYS:HE3	2.16	0.45
1:C:124:ASN:OD1	1:C:127:LYS:HE3	2.16	0.45
1:M:143:ARG:HD3	1:N:169:GLN:NE2	2.30	0.45
1:G:106:GLU:HA	1:K:97:GLN:HE22	1.57	0.45
1:H:169:GLN:NE2	1:L:143:ARG:HD3	2.28	0.45
1:B:66:LYS:HZ2	1:M:51:LEU:CG	2.29	0.45
1:K:133:ASN:C	1:K:135:ASN:N	2.69	0.45
1:M:136:TYR:CB	1:M:155:TYR:CD1	2.99	0.45
1:G:136:TYR:CD2	1:G:155:TYR:HD1	2.28	0.45
1:I:122:PHE:CZ	1:I:163:ALA:HB2	2.51	0.45
1:F:122:PHE:CZ	1:F:163:ALA:HB2	2.51	0.45
1:I:94:PHE:HD1	1:I:99:ILE:HG22	1.82	0.45
1:J:123:ASN:HD21	1:J:138:LEU:CD2	2.30	0.45
1:L:169:GLN:NE2	1:N:146:THR:OG1	2.49	0.45
1:A:66:LYS:HE2	1:J:54:LYS:CD	2.46	0.45
1:I:112:VAL:HB	1:I:147:PHE:CE1	2.49	0.45
1:E:122:PHE:CZ	1:E:163:ALA:HB2	2.51	0.45
1:O:112:VAL:HB	1:O:147:PHE:CE1	2.49	0.45
1:B:94:PHE:HD1	1:B:99:ILE:HG22	1.82	0.45
1:K:124:ASN:OD1	1:K:127:LYS:HE3	2.16	0.45
1:H:125:PHE:HE2	1:L:143:ARG:HG3	1.81	0.45
1:A:64:ALA:O	1:A:66:LYS:N	2.42	0.45
1:B:136:TYR:CB	1:B:155:TYR:CD1	2.99	0.45
1:J:136:TYR:CB	1:J:155:TYR:CD1	2.99	0.45
1:M:133:ASN:C	1:M:135:ASN:N	2.69	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:133:ASN:C	1:G:135:ASN:N	2.69	0.45
1:D:122:PHE:CZ	1:D:163:ALA:HB2	2.51	0.45
1:C:138:LEU:C	1:C:138:LEU:HD23	2.37	0.45
1:D:125:PHE:HE2	1:E:143:ARG:HE	1.62	0.45
1:B:135:ASN:C	1:B:136:TYR:CD1	2.83	0.45
1:K:93:TYR:CB	1:K:135:ASN:OD1	2.61	0.45
1:N:136:TYR:CZ	1:N:155:TYR:N	2.85	0.45
1:A:136:TYR:CZ	1:A:155:TYR:N	2.85	0.45
1:L:122:PHE:CZ	1:L:163:ALA:HB2	2.51	0.45
1:M:124:ASN:OD1	1:M:127:LYS:HE3	2.16	0.45
1:I:138:LEU:C	1:I:138:LEU:HD23	2.37	0.45
1:C:123:ASN:HD21	1:C:138:LEU:CD2	2.30	0.45
1:K:138:LEU:C	1:K:138:LEU:HD23	2.37	0.45
1:F:138:LEU:C	1:F:138:LEU:HD23	2.37	0.45
1:A:97:GLN:CG	1:D:105:SER:HA	2.19	0.45
1:F:136:TYR:CZ	1:F:155:TYR:N	2.85	0.45
1:M:122:PHE:CZ	1:M:163:ALA:HB2	2.51	0.45
1:G:122:PHE:CZ	1:G:163:ALA:HB2	2.51	0.45
1:O:122:PHE:CZ	1:O:163:ALA:HB2	2.51	0.45
1:C:122:PHE:CZ	1:C:163:ALA:HB2	2.51	0.45
1:C:94:PHE:CE2	1:C:96:GLY:HA2	2.52	0.45
1:B:124:ASN:OD1	1:B:127:LYS:HE3	2.16	0.45
1:I:123:ASN:HD21	1:I:138:LEU:CD2	2.30	0.45
1:A:138:LEU:HD23	1:A:138:LEU:C	2.37	0.45
1:B:49:MET:HE2	1:B:49:MET:HB2	1.89	0.45
1:H:54:LYS:CD	1:L:66:LYS:HE2	2.47	0.45
1:B:64:ALA:O	1:B:66:LYS:N	2.42	0.45
1:N:64:ALA:O	1:N:66:LYS:N	2.43	0.45
1:G:51:LEU:CD2	1:J:66:LYS:HZ2	2.30	0.45
1:K:136:TYR:CB	1:K:155:TYR:CD1	2.99	0.45
1:D:136:TYR:CZ	1:D:155:TYR:N	2.85	0.45
1:I:136:TYR:CB	1:I:155:TYR:CD1	2.99	0.45
1:M:94:PHE:CE2	1:M:96:GLY:HA2	2.52	0.45
1:B:123:ASN:HD21	1:B:138:LEU:CD2	2.30	0.45
1:E:138:LEU:C	1:E:138:LEU:HD23	2.38	0.45
1:D:123:ASN:HD21	1:D:138:LEU:CD2	2.30	0.45
1:M:64:ALA:O	1:M:66:LYS:N	2.42	0.45
1:B:133:ASN:C	1:B:135:ASN:N	2.69	0.45
1:A:122:PHE:CZ	1:A:163:ALA:HB2	2.51	0.45
1:M:138:LEU:HD23	1:M:138:LEU:C	2.37	0.45
1:D:82:GLU:O	1:D:86:LEU:HG	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:105:SER:CB	1:M:97:GLN:CA	2.95	0.45
1:L:54:LYS:HZ3	1:N:88:LEU:HD23	1.40	0.45
1:D:51:LEU:CG	1:E:66:LYS:HZ2	2.30	0.45
1:I:42:LEU:HD11	1:I:46:PHE:HE1	1.73	0.45
1:I:64:ALA:O	1:I:66:LYS:N	2.42	0.45
1:L:136:TYR:CZ	1:L:155:TYR:N	2.85	0.45
1:C:136:TYR:CZ	1:C:155:TYR:N	2.85	0.45
1:E:135:ASN:C	1:E:136:TYR:CD1	2.84	0.45
1:C:94:PHE:HD1	1:C:99:ILE:HG22	1.81	0.45
1:M:123:ASN:HD21	1:M:138:LEU:CD2	2.30	0.45
1:K:123:ASN:HD21	1:K:138:LEU:CD2	2.30	0.45
1:H:123:ASN:HD21	1:H:138:LEU:CD2	2.30	0.45
1:H:138:LEU:C	1:H:138:LEU:HD23	2.37	0.45
1:A:82:GLU:O	1:A:86:LEU:HG	2.18	0.45
1:L:51:LEU:CG	1:N:66:LYS:HZ2	2.30	0.44
1:B:136:TYR:CZ	1:B:155:TYR:N	2.85	0.44
1:K:136:TYR:CZ	1:K:155:TYR:N	2.85	0.44
1:I:136:TYR:CZ	1:I:155:TYR:N	2.85	0.44
1:O:136:TYR:CB	1:O:155:TYR:CD1	2.99	0.44
1:H:122:PHE:CZ	1:H:163:ALA:HB2	2.51	0.44
1:M:94:PHE:HD1	1:M:99:ILE:HG22	1.82	0.44
1:N:94:PHE:CE2	1:N:96:GLY:HA2	2.52	0.44
1:J:138:LEU:C	1:J:138:LEU:HD23	2.37	0.44
1:L:138:LEU:HD23	1:L:138:LEU:C	2.38	0.44
1:J:82:GLU:O	1:J:86:LEU:HG	2.17	0.44
1:G:97:GLN:CA	1:J:105:SER:CB	2.95	0.44
1:G:143:ARG:NE	1:K:125:PHE:HE2	2.14	0.44
1:G:66:LYS:HE2	1:K:54:LYS:CD	2.48	0.44
1:C:133:ASN:HA	1:C:135:ASN:N	2.33	0.44
1:K:133:ASN:HA	1:K:135:ASN:N	2.33	0.44
1:D:133:ASN:HA	1:D:135:ASN:N	2.33	0.44
1:J:160:VAL:O	1:J:164:THR:HG23	2.18	0.44
1:M:136:TYR:CZ	1:M:155:TYR:N	2.85	0.44
1:G:136:TYR:CZ	1:G:155:TYR:N	2.85	0.44
1:F:94:PHE:HD1	1:F:99:ILE:HG22	1.82	0.44
1:H:94:PHE:HD1	1:H:99:ILE:HG22	1.82	0.44
1:L:94:PHE:CE2	1:L:96:GLY:HA2	2.52	0.44
1:H:160:VAL:O	1:H:164:THR:HG23	2.17	0.44
1:M:160:VAL:O	1:M:164:THR:HG23	2.18	0.44
1:K:94:PHE:CE2	1:K:96:GLY:HA2	2.52	0.44
1:E:94:PHE:CE2	1:E:96:GLY:HA2	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:94:PHE:CE2	1:O:96:GLY:HA2	2.52	0.44
1:N:123:ASN:HD21	1:N:138:LEU:CD2	2.30	0.44
1:L:82:GLU:O	1:L:86:LEU:HG	2.17	0.44
1:G:105:SER:HA	1:K:97:GLN:CG	2.22	0.44
1:A:133:ASN:HA	1:A:135:ASN:N	2.33	0.44
1:F:94:PHE:CE2	1:F:96:GLY:HA2	2.52	0.44
1:H:94:PHE:CE2	1:H:96:GLY:HA2	2.52	0.44
1:A:76:ASP:O	1:A:80:LEU:HD12	2.18	0.44
1:N:138:LEU:C	1:N:138:LEU:HD23	2.37	0.44
1:C:125:PHE:CE2	1:F:143:ARG:NE	2.83	0.44
1:F:54:LYS:CD	1:H:66:LYS:HE2	2.47	0.44
1:C:88:LEU:HD23	1:E:54:LYS:HZ3	1.47	0.44
1:N:93:TYR:CB	1:N:135:ASN:OD1	2.60	0.44
1:J:136:TYR:CZ	1:J:155:TYR:N	2.85	0.44
1:H:136:TYR:CZ	1:H:155:TYR:N	2.85	0.44
1:O:160:VAL:O	1:O:164:THR:HG23	2.18	0.44
1:G:133:ASN:HA	1:G:135:ASN:N	2.33	0.44
1:E:133:ASN:HA	1:E:135:ASN:N	2.33	0.44
1:J:122:PHE:CZ	1:J:163:ALA:HB2	2.51	0.44
1:E:160:VAL:O	1:E:164:THR:HG23	2.18	0.44
1:I:94:PHE:CE2	1:I:96:GLY:HA2	2.52	0.44
1:B:160:VAL:O	1:B:164:THR:HG23	2.18	0.44
1:G:138:LEU:C	1:G:138:LEU:HD23	2.37	0.44
1:F:123:ASN:HD21	1:F:138:LEU:CD2	2.30	0.44
1:O:123:ASN:HD21	1:O:138:LEU:CD2	2.30	0.44
1:B:66:LYS:HZ2	1:M:51:LEU:HD21	1.82	0.44
1:A:88:LEU:HD23	1:J:54:LYS:HZ3	1.32	0.44
1:L:51:LEU:HG	1:N:66:LYS:HZ3	1.80	0.44
1:D:133:ASN:HA	1:D:135:ASN:H	1.83	0.44
1:J:133:ASN:HA	1:J:135:ASN:N	2.33	0.44
1:F:133:ASN:HA	1:F:135:ASN:N	2.33	0.44
1:G:93:TYR:CB	1:G:135:ASN:OD1	2.60	0.44
1:L:160:VAL:O	1:L:164:THR:HG23	2.18	0.44
1:K:76:ASP:O	1:K:80:LEU:HD12	2.18	0.44
1:M:76:ASP:O	1:M:80:LEU:HD12	2.18	0.44
1:I:76:ASP:O	1:I:80:LEU:HD12	2.18	0.44
1:B:82:GLU:O	1:B:86:LEU:HG	2.17	0.44
1:B:106:GLU:HA	1:M:97:GLN:HE22	1.53	0.44
1:G:51:LEU:HD21	1:J:66:LYS:HZ1	1.81	0.44
1:C:66:LYS:HZ3	1:E:51:LEU:HG	1.82	0.44
1:N:133:ASN:HA	1:N:135:ASN:H	1.83	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:136:TYR:CZ	1:O:155:TYR:N	2.85	0.44
1:G:136:TYR:CB	1:G:155:TYR:CD1	2.99	0.44
1:E:136:TYR:CZ	1:E:155:TYR:N	2.85	0.44
1:N:122:PHE:CZ	1:N:163:ALA:HB2	2.51	0.44
1:I:160:VAL:O	1:I:164:THR:HG23	2.18	0.44
1:F:76:ASP:O	1:F:80:LEU:HD12	2.18	0.44
1:B:138:LEU:C	1:B:138:LEU:HD23	2.37	0.44
1:A:123:ASN:HD21	1:A:138:LEU:CD2	2.30	0.44
1:I:82:GLU:O	1:I:86:LEU:HG	2.18	0.44
1:C:54:LYS:CD	1:F:66:LYS:HE2	2.47	0.44
1:B:133:ASN:HA	1:B:135:ASN:H	1.83	0.44
1:M:133:ASN:HA	1:M:135:ASN:H	1.83	0.44
1:O:133:ASN:C	1:O:135:ASN:N	2.69	0.44
1:E:133:ASN:HA	1:E:135:ASN:H	1.83	0.44
1:A:93:TYR:CB	1:A:135:ASN:OD1	2.60	0.44
1:G:94:PHE:CE2	1:G:96:GLY:HA2	2.52	0.44
1:K:160:VAL:O	1:K:164:THR:HG23	2.18	0.44
1:B:94:PHE:CE2	1:B:96:GLY:HA2	2.52	0.44
1:C:76:ASP:O	1:C:80:LEU:HD12	2.18	0.44
1:D:138:LEU:HD23	1:D:138:LEU:C	2.37	0.44
1:G:82:GLU:O	1:G:86:LEU:HG	2.18	0.44
1:G:143:ARG:HG3	1:K:125:PHE:HE2	1.82	0.44
1:G:88:LEU:CD2	1:K:54:LYS:HE2	2.26	0.44
1:C:133:ASN:HA	1:C:135:ASN:H	1.83	0.44
1:H:133:ASN:HA	1:H:135:ASN:N	2.33	0.44
1:O:133:ASN:HA	1:O:135:ASN:N	2.33	0.44
1:A:133:ASN:HA	1:A:135:ASN:H	1.83	0.44
1:A:93:TYR:CD2	1:A:136:TYR:CE2	3.06	0.44
1:D:160:VAL:O	1:D:164:THR:HG23	2.18	0.44
1:L:76:ASP:O	1:L:80:LEU:HD12	2.18	0.44
1:J:76:ASP:O	1:J:80:LEU:HD12	2.18	0.44
1:E:82:GLU:O	1:E:86:LEU:HG	2.18	0.44
1:M:49:MET:HB2	1:M:49:MET:HE2	1.89	0.44
1:F:125:PHE:HE2	1:H:143:ARG:HE	1.64	0.44
1:C:169:GLN:NE2	1:F:146:THR:OG1	2.51	0.44
1:D:169:GLN:NE2	1:E:143:ARG:HD3	2.33	0.44
1:C:93:TYR:CD2	1:C:136:TYR:CE2	3.06	0.44
1:I:133:ASN:HA	1:I:135:ASN:N	2.32	0.44
1:G:160:VAL:O	1:G:164:THR:HG23	2.18	0.44
1:N:76:ASP:O	1:N:80:LEU:HD12	2.18	0.44
1:M:82:GLU:O	1:M:86:LEU:HG	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:82:GLU:O	1:H:86:LEU:HG	2.18	0.44
1:A:169:GLN:NE2	1:D:146:THR:OG1	2.50	0.43
1:B:42:LEU:HD11	1:B:46:PHE:HE1	1.73	0.43
1:G:133:ASN:HA	1:G:135:ASN:H	1.83	0.43
1:J:94:PHE:CE2	1:J:96:GLY:HA2	2.52	0.43
1:A:94:PHE:CE2	1:A:96:GLY:HA2	2.52	0.43
1:C:160:VAL:O	1:C:164:THR:HG23	2.18	0.43
1:N:160:VAL:O	1:N:164:THR:HG23	2.18	0.43
1:D:94:PHE:CE2	1:D:96:GLY:HA2	2.52	0.43
1:E:94:PHE:HD1	1:E:99:ILE:HG22	1.82	0.43
1:E:76:ASP:O	1:E:80:LEU:HD12	2.18	0.43
1:B:76:ASP:O	1:B:80:LEU:HD12	2.18	0.43
1:O:82:GLU:O	1:O:86:LEU:HG	2.18	0.43
1:D:51:LEU:HD21	1:E:66:LYS:HZ1	1.82	0.43
1:K:133:ASN:HA	1:K:135:ASN:H	1.83	0.43
1:K:93:TYR:CD2	1:K:136:TYR:CE2	3.06	0.43
1:J:133:ASN:HA	1:J:135:ASN:H	1.83	0.43
1:J:93:TYR:CD2	1:J:136:TYR:CE2	3.06	0.43
1:E:93:TYR:CD2	1:E:136:TYR:CE2	3.06	0.43
1:D:76:ASP:O	1:D:80:LEU:HD12	2.18	0.43
1:O:76:ASP:O	1:O:80:LEU:HD12	2.18	0.43
1:H:76:ASP:O	1:H:80:LEU:HD12	2.18	0.43
1:O:138:LEU:HD23	1:O:138:LEU:C	2.38	0.43
1:F:82:GLU:O	1:F:86:LEU:HG	2.18	0.43
1:A:125:PHE:CE2	1:D:143:ARG:NE	2.85	0.43
1:A:125:PHE:HE2	1:D:143:ARG:NE	2.16	0.43
1:A:66:LYS:HZ2	1:J:51:LEU:CD2	2.31	0.43
1:C:66:LYS:HZ2	1:E:51:LEU:CG	2.30	0.43
1:L:133:ASN:HA	1:L:135:ASN:H	1.83	0.43
1:C:133:ASN:C	1:C:135:ASN:N	2.69	0.43
1:D:133:ASN:C	1:D:135:ASN:N	2.69	0.43
1:D:93:TYR:CD2	1:D:136:TYR:CE2	3.06	0.43
1:O:122:PHE:HE2	1:O:126:LEU:HD11	1.76	0.43
1:A:160:VAL:O	1:A:164:THR:HG23	2.18	0.43
1:G:76:ASP:O	1:G:80:LEU:HD12	2.18	0.43
1:N:82:GLU:O	1:N:86:LEU:HG	2.17	0.43
1:B:97:GLN:CG	1:I:105:SER:HA	2.23	0.43
1:M:66:LYS:HZ2	1:N:51:LEU:CD2	2.30	0.43
1:B:133:ASN:HA	1:B:135:ASN:N	2.33	0.43
1:L:133:ASN:HA	1:L:135:ASN:N	2.33	0.43
1:N:133:ASN:HA	1:N:135:ASN:N	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:133:ASN:HA	1:I:135:ASN:H	1.83	0.43
1:I:135:ASN:C	1:I:136:TYR:CD1	2.83	0.43
1:F:56:PRO:O	1:F:99:ILE:HG12	2.19	0.43
1:N:94:PHE:HD1	1:N:99:ILE:HG22	1.82	0.43
1:C:82:GLU:O	1:C:86:LEU:HG	2.18	0.43
1:K:82:GLU:O	1:K:86:LEU:HG	2.18	0.43
1:B:169:GLN:NE2	1:I:146:THR:OG1	2.52	0.43
1:K:105:SER:HA	1:O:97:GLN:CG	2.22	0.43
1:M:42:LEU:HD11	1:M:46:PHE:HE1	1.73	0.43
1:D:45:PHE:CE2	1:D:68:ILE:HB	2.54	0.43
1:K:46:PHE:N	1:K:46:PHE:CD1	2.86	0.43
1:D:51:LEU:HD21	1:E:66:LYS:HZ2	1.81	0.43
1:E:45:PHE:CE2	1:E:68:ILE:HB	2.54	0.43
1:I:46:PHE:CD1	1:I:46:PHE:N	2.86	0.43
1:O:46:PHE:CD1	1:O:46:PHE:N	2.86	0.43
1:F:133:ASN:HA	1:F:135:ASN:H	1.83	0.43
1:M:56:PRO:O	1:M:99:ILE:HG12	2.19	0.43
1:B:56:PRO:O	1:B:99:ILE:HG12	2.19	0.43
1:D:97:GLN:CA	1:E:105:SER:CB	2.95	0.43
1:G:169:GLN:NE2	1:J:146:THR:OG1	2.51	0.43
1:G:46:PHE:CD1	1:G:46:PHE:N	2.86	0.43
1:B:46:PHE:CD1	1:B:46:PHE:N	2.86	0.43
1:C:45:PHE:CE2	1:C:68:ILE:HB	2.54	0.43
1:M:93:TYR:CD2	1:M:136:TYR:CE2	3.06	0.43
1:C:56:PRO:O	1:C:99:ILE:HG12	2.19	0.43
1:L:56:PRO:O	1:L:99:ILE:HG12	2.19	0.43
1:F:160:VAL:O	1:F:164:THR:HG23	2.18	0.43
1:N:56:PRO:O	1:N:99:ILE:HG12	2.19	0.43
1:I:56:PRO:O	1:I:99:ILE:HG12	2.19	0.43
1:L:123:ASN:HD21	1:L:138:LEU:CD2	2.30	0.43
1:H:64:ALA:O	1:H:66:LYS:N	2.42	0.43
1:D:46:PHE:N	1:D:46:PHE:CD1	2.86	0.43
1:A:46:PHE:N	1:A:46:PHE:CD1	2.86	0.43
1:J:46:PHE:N	1:J:46:PHE:CD1	2.86	0.43
1:G:93:TYR:CD2	1:G:136:TYR:CE2	3.06	0.43
1:A:49:MET:HB2	1:A:49:MET:HE2	1.89	0.43
1:I:97:GLN:CA	1:O:105:SER:CB	2.96	0.43
1:C:143:ARG:HE	1:E:125:PHE:HE2	1.62	0.43
1:B:105:SER:HA	1:M:97:GLN:CG	2.23	0.43
1:F:45:PHE:CE2	1:F:68:ILE:HB	2.54	0.43
1:N:46:PHE:N	1:N:46:PHE:CD1	2.86	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:45:PHE:CE2	1:N:68:ILE:HB	2.54	0.43
1:B:93:TYR:CD2	1:B:136:TYR:CE2	3.06	0.43
1:F:93:TYR:CD2	1:F:136:TYR:CE2	3.06	0.43
1:H:133:ASN:HA	1:H:135:ASN:H	1.83	0.43
1:H:93:TYR:CD2	1:H:136:TYR:CE2	3.06	0.43
1:O:56:PRO:O	1:O:99:ILE:HG12	2.19	0.43
1:M:66:LYS:CD	1:N:54:LYS:HZ2	2.32	0.43
1:A:54:LYS:CD	1:D:66:LYS:HE2	2.48	0.43
1:L:46:PHE:N	1:L:46:PHE:CD1	2.86	0.43
1:A:45:PHE:CE2	1:A:68:ILE:HB	2.54	0.43
1:E:46:PHE:CD1	1:E:46:PHE:N	2.86	0.43
1:C:46:PHE:N	1:C:46:PHE:CD1	2.86	0.43
1:J:93:TYR:CB	1:J:135:ASN:OD1	2.60	0.43
1:M:133:ASN:HA	1:M:135:ASN:N	2.33	0.43
1:A:56:PRO:O	1:A:99:ILE:HG12	2.19	0.43
1:M:46:PHE:N	1:M:46:PHE:CD1	2.86	0.43
1:H:46:PHE:N	1:H:46:PHE:CD1	2.86	0.43
1:F:46:PHE:CD1	1:F:46:PHE:N	2.86	0.43
1:B:45:PHE:CE2	1:B:68:ILE:HB	2.54	0.43
1:I:45:PHE:CE2	1:I:68:ILE:HB	2.54	0.43
1:J:45:PHE:CE2	1:J:68:ILE:HB	2.54	0.43
1:O:135:ASN:C	1:O:136:TYR:CD1	2.84	0.43
1:E:122:PHE:HE2	1:E:126:LEU:HD11	1.76	0.43
1:H:56:PRO:O	1:H:99:ILE:HG12	2.19	0.43
1:C:105:SER:CB	1:E:97:GLN:CA	2.97	0.42
1:K:146:THR:OG1	1:O:169:GLN:NE2	2.52	0.42
1:H:45:PHE:CE2	1:H:68:ILE:HB	2.54	0.42
1:F:42:LEU:HD12	1:F:68:ILE:HG13	2.01	0.42
1:L:45:PHE:CE2	1:L:68:ILE:HB	2.54	0.42
1:N:93:TYR:CD2	1:N:136:TYR:CE2	3.06	0.42
1:O:133:ASN:HA	1:O:135:ASN:H	1.83	0.42
1:D:56:PRO:O	1:D:99:ILE:HG12	2.19	0.42
1:D:94:PHE:HD1	1:D:99:ILE:HG22	1.82	0.42
1:L:51:LEU:HD21	1:N:66:LYS:HZ1	1.81	0.42
1:O:45:PHE:CE2	1:O:68:ILE:HB	2.54	0.42
1:L:93:TYR:CD2	1:L:136:TYR:CE2	3.06	0.42
1:I:93:TYR:CD2	1:I:136:TYR:CE2	3.06	0.42
1:K:105:SER:CB	1:O:97:GLN:CA	2.97	0.42
1:M:45:PHE:CE2	1:M:68:ILE:HB	2.54	0.42
1:H:42:LEU:HD12	1:H:68:ILE:HG13	2.02	0.42
1:L:42:LEU:HD12	1:L:68:ILE:HG13	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:46:PHE:HD1	1:C:46:PHE:N	2.18	0.42
1:O:93:TYR:CD2	1:O:136:TYR:CE2	3.06	0.42
1:A:105:SER:HA	1:J:97:GLN:CG	2.23	0.42
1:H:125:PHE:CE2	1:L:143:ARG:NE	2.87	0.42
1:K:143:ARG:HD3	1:O:169:GLN:NE2	2.34	0.42
1:I:46:PHE:HD1	1:I:46:PHE:N	2.18	0.42
1:D:135:ASN:C	1:D:136:TYR:CD1	2.83	0.42
1:K:56:PRO:O	1:K:99:ILE:HG12	2.19	0.42
1:C:146:THR:OG1	1:E:169:GLN:NE2	2.53	0.42
1:G:46:PHE:HD1	1:G:46:PHE:N	2.18	0.42
1:K:45:PHE:CE2	1:K:68:ILE:HB	2.54	0.42
1:G:56:PRO:O	1:G:99:ILE:HG12	2.19	0.42
1:M:46:PHE:N	1:M:46:PHE:HD1	2.18	0.42
1:M:66:LYS:HE2	1:N:54:LYS:CD	2.50	0.42
1:H:46:PHE:N	1:H:46:PHE:HD1	2.18	0.42
1:D:46:PHE:N	1:D:46:PHE:HD1	2.18	0.42
1:G:45:PHE:CE2	1:G:68:ILE:HB	2.54	0.42
1:A:46:PHE:HD1	1:A:46:PHE:N	2.18	0.42
1:L:54:LYS:HD2	1:N:66:LYS:HE2	2.02	0.42
1:N:42:LEU:HD12	1:N:68:ILE:HG13	2.02	0.42
1:G:58:ILE:CG2	1:G:100:TYR:CD2	2.90	0.42
1:A:135:ASN:C	1:A:136:TYR:CD1	2.84	0.42
1:J:56:PRO:O	1:J:99:ILE:HG12	2.19	0.42
1:L:125:PHE:CE2	1:N:143:ARG:HG3	2.52	0.42
1:H:42:LEU:HD12	1:H:42:LEU:HA	1.84	0.42
1:H:42:LEU:HD13	1:H:88:LEU:CD1	2.50	0.42
1:B:42:LEU:CD2	1:B:88:LEU:HD13	2.50	0.42
1:G:51:LEU:HG	1:J:66:LYS:HZ3	1.84	0.42
1:D:111:VAL:CG1	1:D:148:TYR:CE1	3.03	0.42
1:F:97:GLN:CA	1:H:105:SER:CB	2.98	0.42
1:I:169:GLN:NE2	1:O:143:ARG:HD3	2.34	0.42
1:K:46:PHE:CZ	1:K:84:LEU:HB3	2.55	0.42
1:I:42:LEU:CD2	1:I:88:LEU:HD13	2.50	0.42
1:J:46:PHE:N	1:J:46:PHE:HD1	2.18	0.42
1:C:42:LEU:HD12	1:C:68:ILE:HG13	2.02	0.42
1:E:56:PRO:O	1:E:99:ILE:HG12	2.19	0.42
1:F:141:ASP:CG	1:F:142:ASN:H	2.23	0.42
1:D:141:ASP:CG	1:D:142:ASN:H	2.23	0.42
1:F:169:GLN:NE2	1:H:146:THR:OG1	2.53	0.42
1:M:42:LEU:HA	1:M:42:LEU:HD12	1.84	0.42
1:D:42:LEU:HD12	1:D:68:ILE:HG13	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:66:LYS:HZ2	1:K:51:LEU:CD2	2.32	0.42
1:L:46:PHE:N	1:L:46:PHE:HD1	2.18	0.42
1:B:46:PHE:CZ	1:B:84:LEU:HB3	2.55	0.42
1:E:42:LEU:HD12	1:E:68:ILE:HG13	2.02	0.42
1:O:46:PHE:N	1:O:46:PHE:HD1	2.18	0.42
1:B:137:PRO:CD	1:B:150:SER:O	2.68	0.42
1:A:91:ILE:HD13	1:A:107:MET:HE3	2.02	0.42
1:A:97:GLN:CA	1:D:105:SER:CB	2.97	0.42
1:M:42:LEU:HD12	1:M:68:ILE:HG13	2.02	0.42
1:M:46:PHE:CZ	1:M:84:LEU:HB3	2.55	0.42
1:M:42:LEU:CD2	1:M:88:LEU:HD13	2.50	0.42
1:F:42:LEU:HD13	1:F:88:LEU:CD1	2.50	0.42
1:D:42:LEU:HD13	1:D:88:LEU:CD1	2.50	0.42
1:B:42:LEU:HD13	1:B:88:LEU:CD1	2.50	0.42
1:K:46:PHE:HD1	1:K:46:PHE:N	2.18	0.42
1:I:46:PHE:CZ	1:I:84:LEU:HB3	2.55	0.42
1:M:136:TYR:HH	1:M:154:VAL:HG13	1.82	0.42
1:G:91:ILE:CD1	1:G:152:PRO:HG3	2.50	0.42
1:J:122:PHE:HE2	1:J:126:LEU:HD11	1.76	0.42
1:A:94:PHE:HD1	1:A:99:ILE:HG22	1.82	0.42
1:G:94:PHE:HD1	1:G:99:ILE:HG22	1.81	0.42
1:N:111:VAL:CG1	1:N:148:TYR:CE1	3.03	0.42
1:H:141:ASP:CG	1:H:142:ASN:H	2.23	0.42
1:G:46:PHE:CZ	1:G:84:LEU:HB3	2.55	0.41
1:L:42:LEU:HD13	1:L:88:LEU:CD1	2.50	0.41
1:B:66:LYS:HZ2	1:M:51:LEU:HG	1.84	0.41
1:A:42:LEU:HD13	1:A:88:LEU:CD1	2.50	0.41
1:N:46:PHE:N	1:N:46:PHE:HD1	2.18	0.41
1:E:46:PHE:HD1	1:E:46:PHE:N	2.18	0.41
1:I:42:LEU:HD13	1:I:88:LEU:CD1	2.50	0.41
1:O:46:PHE:CZ	1:O:84:LEU:HB3	2.55	0.41
1:H:50:ALA:O	1:H:55:GLU:HG2	2.20	0.41
1:A:75:HIS:C	1:A:80:LEU:HD11	2.41	0.41
1:M:111:VAL:CG1	1:M:148:TYR:CE1	3.03	0.41
1:J:75:HIS:C	1:J:80:LEU:HD11	2.41	0.41
1:E:111:VAL:CG1	1:E:148:TYR:CE1	3.03	0.41
1:A:111:VAL:CG1	1:A:148:TYR:CE1	3.03	0.41
1:I:169:GLN:NE2	1:O:146:THR:OG1	2.53	0.41
1:B:146:THR:OG1	1:M:169:GLN:NE2	2.53	0.41
1:B:42:LEU:HD12	1:B:68:ILE:HG13	2.02	0.41
1:K:42:LEU:HD13	1:K:88:LEU:CD1	2.50	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:42:LEU:HD12	1:I:68:ILE:HG13	2.01	0.41
1:O:42:LEU:HD13	1:O:88:LEU:CD1	2.50	0.41
1:D:136:TYR:HH	1:D:154:VAL:HG13	1.82	0.41
1:D:91:ILE:CD1	1:D:152:PRO:HG3	2.50	0.41
1:J:135:ASN:C	1:J:136:TYR:CD1	2.83	0.41
1:F:91:ILE:CD1	1:F:152:PRO:HG3	2.50	0.41
1:H:91:ILE:CD1	1:H:152:PRO:HG3	2.50	0.41
1:A:91:ILE:CD1	1:A:152:PRO:HG3	2.50	0.41
1:B:50:ALA:O	1:B:55:GLU:HG2	2.21	0.41
1:D:75:HIS:C	1:D:80:LEU:HD11	2.41	0.41
1:F:75:HIS:C	1:F:80:LEU:HD11	2.41	0.41
1:G:75:HIS:C	1:G:80:LEU:HD11	2.41	0.41
1:E:141:ASP:CG	1:E:142:ASN:H	2.23	0.41
1:L:141:ASP:CG	1:L:142:ASN:H	2.23	0.41
1:F:62:MET:SD	1:F:106:GLU:CG	3.09	0.41
1:N:49:MET:HE2	1:N:49:MET:HB2	1.89	0.41
1:M:146:THR:OG1	1:N:169:GLN:NE2	2.54	0.41
1:M:42:LEU:HD13	1:M:88:LEU:CD1	2.50	0.41
1:N:46:PHE:CZ	1:N:84:LEU:HB3	2.55	0.41
1:N:42:LEU:CD2	1:N:88:LEU:HD13	2.50	0.41
1:K:135:ASN:C	1:K:136:TYR:CD1	2.84	0.41
1:I:137:PRO:CD	1:I:150:SER:O	2.68	0.41
1:E:91:ILE:CD1	1:E:152:PRO:HG3	2.50	0.41
1:C:75:HIS:C	1:C:80:LEU:HD11	2.41	0.41
1:I:141:ASP:CG	1:I:142:ASN:H	2.23	0.41
1:L:75:HIS:C	1:L:80:LEU:HD11	2.41	0.41
1:L:111:VAL:CG1	1:L:148:TYR:CE1	3.03	0.41
1:A:141:ASP:CG	1:A:142:ASN:H	2.23	0.41
1:I:97:GLN:CG	1:O:105:SER:HA	2.24	0.41
1:B:143:ARG:HD3	1:M:169:GLN:NE2	2.34	0.41
1:L:42:LEU:CD2	1:L:88:LEU:HD13	2.50	0.41
1:E:42:LEU:HD13	1:E:88:LEU:CD1	2.50	0.41
1:K:137:PRO:CD	1:K:150:SER:O	2.68	0.41
1:M:93:TYR:CD1	1:M:136:TYR:CG	3.08	0.41
1:I:50:ALA:O	1:I:55:GLU:HG2	2.21	0.41
1:D:50:ALA:O	1:D:55:GLU:HG2	2.21	0.41
1:K:75:HIS:C	1:K:80:LEU:HD11	2.41	0.41
1:O:141:ASP:CG	1:O:142:ASN:H	2.23	0.41
1:J:111:VAL:CG1	1:J:148:TYR:CE1	3.03	0.41
1:A:62:MET:SD	1:A:106:GLU:CG	3.09	0.41
1:J:62:MET:SD	1:J:106:GLU:CG	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:46:PHE:HD1	1:F:46:PHE:N	2.18	0.41
1:D:54:LYS:HD2	1:E:66:LYS:HE2	2.03	0.41
1:B:51:LEU:CD2	1:I:66:LYS:HZ2	2.33	0.41
1:G:54:LYS:HD2	1:J:66:LYS:HE2	2.01	0.41
1:C:66:LYS:HZ1	1:E:51:LEU:HD21	1.81	0.41
1:C:66:LYS:HE2	1:E:54:LYS:HZ3	1.85	0.41
1:B:93:TYR:CD1	1:B:136:TYR:CG	3.08	0.41
1:C:93:TYR:CB	1:C:135:ASN:OD1	2.60	0.41
1:C:91:ILE:CD1	1:C:152:PRO:HG3	2.50	0.41
1:N:91:ILE:CD1	1:N:152:PRO:HG3	2.50	0.41
1:J:91:ILE:CD1	1:J:152:PRO:HG3	2.50	0.41
1:M:137:PRO:CD	1:M:150:SER:O	2.68	0.41
1:G:137:PRO:CD	1:G:150:SER:O	2.68	0.41
1:A:135:ASN:O	1:A:151:GLY:CA	2.67	0.41
1:F:50:ALA:O	1:F:55:GLU:HG2	2.21	0.41
1:A:50:ALA:O	1:A:55:GLU:HG2	2.21	0.41
1:L:94:PHE:HD1	1:L:99:ILE:HG22	1.82	0.41
1:M:50:ALA:O	1:M:55:GLU:HG2	2.21	0.41
1:E:75:HIS:C	1:E:80:LEU:HD11	2.41	0.41
1:O:75:HIS:C	1:O:80:LEU:HD11	2.41	0.41
1:M:141:ASP:CG	1:M:142:ASN:H	2.23	0.41
1:C:141:ASP:CG	1:C:142:ASN:H	2.23	0.41
1:C:111:VAL:CG1	1:C:148:TYR:CE1	3.03	0.41
1:L:49:MET:HB2	1:L:49:MET:HE2	1.90	0.41
1:H:62:MET:SD	1:H:106:GLU:CG	3.09	0.41
1:M:143:ARG:NE	1:N:125:PHE:CE2	2.87	0.41
1:G:62:MET:SD	1:G:106:GLU:CG	3.09	0.41
1:I:97:GLN:HE22	1:O:106:GLU:HA	1.54	0.41
1:C:62:MET:SD	1:C:106:GLU:CG	3.09	0.41
1:G:125:PHE:CE2	1:J:143:ARG:HG3	2.54	0.41
1:D:169:GLN:NE2	1:E:146:THR:OG1	2.54	0.41
1:H:42:LEU:CD2	1:H:88:LEU:HD13	2.50	0.41
1:D:46:PHE:CZ	1:D:84:LEU:HB3	2.55	0.41
1:B:46:PHE:N	1:B:46:PHE:HD1	2.18	0.41
1:A:42:LEU:HD12	1:A:68:ILE:HG13	2.02	0.41
1:E:46:PHE:CZ	1:E:84:LEU:HB3	2.55	0.41
1:O:42:LEU:HD12	1:O:68:ILE:HG13	2.02	0.41
1:N:93:TYR:CD1	1:N:136:TYR:CG	3.08	0.41
1:I:93:TYR:CD1	1:I:136:TYR:CG	3.08	0.41
1:A:93:TYR:CD1	1:A:136:TYR:CG	3.08	0.41
1:E:50:ALA:O	1:E:55:GLU:HG2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:141:ASP:CG	1:N:142:ASN:H	2.23	0.41
1:K:62:MET:SD	1:K:106:GLU:CG	3.09	0.41
1:H:49:MET:HB2	1:H:49:MET:HE2	1.89	0.41
1:K:66:LYS:HZ2	1:O:51:LEU:HD21	1.83	0.41
1:A:46:PHE:CZ	1:A:84:LEU:HB3	2.55	0.41
1:J:46:PHE:CZ	1:J:84:LEU:HB3	2.55	0.41
1:B:91:ILE:CD1	1:B:152:PRO:HG3	2.50	0.41
1:K:91:ILE:CD1	1:K:152:PRO:HG3	2.50	0.41
1:F:93:TYR:CB	1:F:135:ASN:OD1	2.61	0.41
1:F:135:ASN:O	1:F:151:GLY:CA	2.66	0.41
1:M:91:ILE:CD1	1:M:152:PRO:HG3	2.50	0.41
1:O:152:PRO:HA	1:O:153:PRO:HD3	1.96	0.41
1:G:136:TYR:CG	1:G:155:TYR:HB2	2.56	0.41
1:L:122:PHE:HE2	1:L:126:LEU:HD11	1.76	0.41
1:L:50:ALA:O	1:L:55:GLU:HG2	2.21	0.41
1:H:75:HIS:C	1:H:80:LEU:HD11	2.41	0.41
1:B:141:ASP:CG	1:B:142:ASN:H	2.23	0.41
1:B:111:VAL:CG1	1:B:148:TYR:CE1	3.03	0.41
1:F:111:VAL:CG1	1:F:148:TYR:CE1	3.03	0.41
1:K:111:VAL:CG1	1:K:148:TYR:CE1	3.03	0.41
1:F:49:MET:HE2	1:F:49:MET:HB2	1.89	0.41
1:M:143:ARG:NE	1:N:125:PHE:HE2	2.18	0.41
1:D:62:MET:SD	1:D:106:GLU:CG	3.09	0.41
1:H:125:PHE:HE2	1:L:143:ARG:NE	2.17	0.41
1:G:169:GLN:NE2	1:J:143:ARG:HD3	2.36	0.41
1:F:42:LEU:CD2	1:F:88:LEU:HD13	2.50	0.41
1:L:46:PHE:CZ	1:L:84:LEU:HB3	2.55	0.41
1:B:66:LYS:HE2	1:M:54:LYS:HD2	2.03	0.41
1:K:42:LEU:HD12	1:K:68:ILE:HG13	2.01	0.41
1:K:64:ALA:O	1:K:66:LYS:N	2.42	0.41
1:J:42:LEU:HD13	1:J:88:LEU:CD1	2.50	0.41
1:C:42:LEU:HD13	1:C:88:LEU:CD1	2.50	0.41
1:D:93:TYR:CD1	1:D:136:TYR:CG	3.08	0.41
1:I:91:ILE:CD1	1:I:152:PRO:HG3	2.50	0.41
1:J:93:TYR:CD1	1:J:136:TYR:CG	3.08	0.41
1:H:93:TYR:CB	1:H:135:ASN:OD1	2.60	0.41
1:E:93:TYR:CB	1:E:135:ASN:OD1	2.60	0.41
1:J:94:PHE:HD1	1:J:99:ILE:HG22	1.81	0.41
1:O:50:ALA:O	1:O:55:GLU:HG2	2.20	0.41
1:O:111:VAL:CG1	1:O:148:TYR:CE1	3.03	0.41
1:M:143:ARG:HE	1:N:125:PHE:HE2	1.68	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:62:MET:SD	1:O:106:GLU:CG	3.09	0.41
1:H:97:GLN:HE22	1:L:106:GLU:HA	1.58	0.41
1:L:62:MET:SD	1:L:106:GLU:CG	3.09	0.41
1:L:97:GLN:O	1:N:105:SER:HB3	2.20	0.41
1:M:62:MET:SD	1:M:106:GLU:CG	3.09	0.41
1:G:42:LEU:HD12	1:G:68:ILE:HG13	2.02	0.41
1:B:45:PHE:CE2	1:B:68:ILE:CG2	3.04	0.41
1:C:42:LEU:CD2	1:C:88:LEU:HD13	2.50	0.41
1:L:93:TYR:CD1	1:L:136:TYR:CG	3.08	0.41
1:L:91:ILE:CD1	1:L:152:PRO:HG3	2.50	0.41
1:K:136:TYR:CG	1:K:155:TYR:HB2	2.56	0.41
1:D:93:TYR:CB	1:D:135:ASN:OD1	2.60	0.41
1:O:91:ILE:CD1	1:O:152:PRO:HG3	2.50	0.41
1:G:93:TYR:CD1	1:G:136:TYR:CG	3.08	0.41
1:E:93:TYR:CD1	1:E:136:TYR:CG	3.08	0.41
1:J:50:ALA:O	1:J:55:GLU:HG2	2.21	0.41
1:I:75:HIS:C	1:I:80:LEU:HD11	2.41	0.41
1:N:141:ASP:CG	1:N:142:ASN:N	2.75	0.41
1:J:141:ASP:CG	1:J:142:ASN:N	2.75	0.41
1:H:111:VAL:CG1	1:H:148:TYR:CE1	3.03	0.41
1:K:141:ASP:CG	1:K:142:ASN:H	2.23	0.41
1:L:141:ASP:CG	1:L:142:ASN:N	2.75	0.41
1:I:62:MET:SD	1:I:106:GLU:CG	3.09	0.41
1:E:62:MET:SD	1:E:106:GLU:CG	3.09	0.41
1:N:62:MET:SD	1:N:106:GLU:CG	3.09	0.41
1:B:169:GLN:NE2	1:I:143:ARG:HD3	2.34	0.41
1:A:105:SER:CB	1:J:97:GLN:CA	2.98	0.41
1:H:97:GLN:CG	1:L:105:SER:HA	2.22	0.41
1:H:45:PHE:CE2	1:H:68:ILE:CG2	3.04	0.41
1:I:45:PHE:CE2	1:I:68:ILE:CG2	3.04	0.41
1:L:137:PRO:CD	1:L:150:SER:O	2.68	0.41
1:J:136:TYR:CG	1:J:155:TYR:HB2	2.56	0.41
1:O:137:PRO:CD	1:O:150:SER:O	2.68	0.41
1:M:75:HIS:C	1:M:80:LEU:HD11	2.41	0.41
1:N:75:HIS:C	1:N:80:LEU:HD11	2.41	0.41
1:B:75:HIS:C	1:B:80:LEU:HD11	2.41	0.41
1:J:141:ASP:CG	1:J:142:ASN:H	2.23	0.41
1:G:141:ASP:CG	1:G:142:ASN:N	2.75	0.41
1:E:141:ASP:CG	1:E:142:ASN:N	2.75	0.41
1:F:169:GLN:NE2	1:H:143:ARG:HD3	2.32	0.40
1:G:97:GLN:O	1:J:105:SER:HB3	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:97:GLN:CA	1:F:105:SER:CB	2.98	0.40
1:A:146:THR:OG1	1:J:169:GLN:NE2	2.54	0.40
1:B:62:MET:SD	1:B:106:GLU:CG	3.09	0.40
1:D:43:ARG:HB2	1:D:64:ALA:HB1	2.04	0.40
1:G:42:LEU:HD13	1:G:88:LEU:CD1	2.50	0.40
1:N:45:PHE:CE2	1:N:68:ILE:CG2	3.04	0.40
1:E:43:ARG:HB2	1:E:64:ALA:HB1	2.03	0.40
1:E:42:LEU:CD2	1:E:88:LEU:HD13	2.50	0.40
1:J:42:LEU:HD12	1:J:68:ILE:HG13	2.02	0.40
1:J:43:ARG:HB2	1:J:64:ALA:HB1	2.04	0.40
1:C:136:TYR:CG	1:C:155:TYR:HB2	2.55	0.40
1:H:136:TYR:CG	1:H:155:TYR:HB2	2.56	0.40
1:O:136:TYR:HH	1:O:154:VAL:HG13	1.79	0.40
1:O:136:TYR:CG	1:O:155:TYR:HB2	2.56	0.40
1:N:50:ALA:O	1:N:55:GLU:HG2	2.20	0.40
1:G:111:VAL:CG1	1:G:148:TYR:CE1	3.03	0.40
1:J:49:MET:HE2	1:J:49:MET:HB2	1.89	0.40
1:B:97:GLN:CA	1:I:105:SER:CB	2.98	0.40
1:H:46:PHE:CZ	1:H:84:LEU:HB3	2.55	0.40
1:N:42:LEU:HD13	1:N:88:LEU:CD1	2.50	0.40
1:E:45:PHE:CE2	1:E:68:ILE:CG2	3.04	0.40
1:C:42:LEU:HD12	1:C:42:LEU:HA	1.84	0.40
1:C:93:TYR:CD1	1:C:136:TYR:CG	3.09	0.40
1:D:136:TYR:CG	1:D:155:TYR:HB2	2.56	0.40
1:I:136:TYR:CG	1:I:155:TYR:HB2	2.56	0.40
1:A:136:TYR:CG	1:A:155:TYR:HB2	2.56	0.40
1:C:141:ASP:CG	1:C:142:ASN:N	2.75	0.40
1:B:125:PHE:CE2	1:I:143:ARG:HG3	2.55	0.40
1:C:125:PHE:CE2	1:F:143:ARG:HG3	2.55	0.40
1:M:45:PHE:CE2	1:M:68:ILE:CG2	3.04	0.40
1:F:45:PHE:CE2	1:F:68:ILE:CG2	3.05	0.40
1:L:45:PHE:CE2	1:L:68:ILE:CG2	3.04	0.40
1:K:43:ARG:HB2	1:K:64:ALA:HB1	2.04	0.40
1:O:43:ARG:HB2	1:O:64:ALA:HB1	2.04	0.40
1:O:45:PHE:CE2	1:O:68:ILE:CG2	3.04	0.40
1:L:136:TYR:CG	1:L:155:TYR:HB2	2.56	0.40
1:N:136:TYR:CG	1:N:155:TYR:HB2	2.56	0.40
1:J:58:ILE:CG2	1:J:100:TYR:CD2	2.90	0.40
1:J:137:PRO:CD	1:J:150:SER:O	2.68	0.40
1:F:93:TYR:CD1	1:F:136:TYR:CG	3.08	0.40
1:H:137:PRO:CD	1:H:150:SER:O	2.68	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:50:ALA:O	1:K:55:GLU:HG2	2.20	0.40
1:I:111:VAL:CG1	1:I:148:TYR:CE1	3.03	0.40
1:M:141:ASP:CG	1:M:142:ASN:N	2.75	0.40
1:H:141:ASP:CG	1:H:142:ASN:N	2.75	0.40
1:F:35:PHE:CZ	1:F:72:PHE:CD1	3.10	0.40
1:A:97:GLN:O	1:D:105:SER:HB3	2.21	0.40
1:A:43:ARG:HB2	1:A:64:ALA:HB1	2.04	0.40
1:J:42:LEU:HA	1:J:42:LEU:HD12	1.84	0.40
1:I:54:LYS:HD2	1:O:66:LYS:HE2	2.03	0.40
1:C:46:PHE:CZ	1:C:84:LEU:HB3	2.55	0.40
1:B:135:ASN:O	1:B:151:GLY:CA	2.67	0.40
1:B:136:TYR:CG	1:B:155:TYR:HB2	2.56	0.40
1:N:137:PRO:CD	1:N:150:SER:O	2.68	0.40
1:J:152:PRO:HA	1:J:153:PRO:HD3	1.95	0.40
1:M:136:TYR:CG	1:M:155:TYR:HB2	2.56	0.40
1:A:141:ASP:CG	1:A:142:ASN:N	2.75	0.40
1:L:35:PHE:CZ	1:L:72:PHE:CD1	3.10	0.40
1:C:143:ARG:HG3	1:E:125:PHE:CE2	2.55	0.40
1:F:43:ARG:HB2	1:F:64:ALA:HB1	2.04	0.40
1:F:46:PHE:CZ	1:F:84:LEU:HB3	2.55	0.40
1:D:42:LEU:CD2	1:D:88:LEU:HD13	2.50	0.40
1:G:43:ARG:HB2	1:G:64:ALA:HB1	2.04	0.40
1:B:46:PHE:CE2	1:B:90:LEU:HD13	2.55	0.40
1:D:51:LEU:HG	1:E:66:LYS:HZ2	1.86	0.40
1:C:66:LYS:HE2	1:E:54:LYS:HD2	2.04	0.40
1:K:93:TYR:CD1	1:K:136:TYR:CG	3.08	0.40
1:F:136:TYR:CG	1:F:155:TYR:HB2	2.56	0.40
1:O:93:TYR:CD1	1:O:136:TYR:CG	3.08	0.40
1:E:136:TYR:CG	1:E:155:TYR:HB2	2.56	0.40
1:G:50:ALA:O	1:G:55:GLU:HG2	2.20	0.40
1:H:35:PHE:CZ	1:H:72:PHE:CD1	3.10	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	135/137 (98%)	129 (96%)	4 (3%)	2 (2%)	13	57
1	B	135/137 (98%)	129 (96%)	4 (3%)	2 (2%)	13	57
1	C	135/137 (98%)	129 (96%)	4 (3%)	2 (2%)	13	57
1	D	135/137 (98%)	129 (96%)	4 (3%)	2 (2%)	13	57
1	E	135/137 (98%)	129 (96%)	3 (2%)	3 (2%)	8	49
1	F	135/137 (98%)	129 (96%)	3 (2%)	3 (2%)	8	49
1	G	135/137 (98%)	129 (96%)	4 (3%)	2 (2%)	13	57
1	H	135/137 (98%)	129 (96%)	4 (3%)	2 (2%)	13	57
1	I	135/137 (98%)	129 (96%)	3 (2%)	3 (2%)	8	49
1	J	135/137 (98%)	129 (96%)	4 (3%)	2 (2%)	13	57
1	K	135/137 (98%)	129 (96%)	3 (2%)	3 (2%)	8	49
1	L	135/137 (98%)	129 (96%)	4 (3%)	2 (2%)	13	57
1	M	135/137 (98%)	129 (96%)	4 (3%)	2 (2%)	13	57
1	N	135/137 (98%)	129 (96%)	3 (2%)	3 (2%)	8	49
1	O	135/137 (98%)	129 (96%)	4 (3%)	2 (2%)	13	57
All	All	2025/2055 (98%)	1935 (96%)	55 (3%)	35 (2%)	16	55

All (35) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	65	ARG
1	A	134	LYS
1	B	65	ARG
1	B	134	LYS
1	C	65	ARG
1	C	134	LYS
1	D	65	ARG
1	D	134	LYS
1	E	65	ARG
1	E	134	LYS
1	F	65	ARG
1	F	134	LYS
1	G	65	ARG
1	G	134	LYS
1	H	65	ARG

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Mol	Chain	Res	Type
1	H	134	LYS
1	I	65	ARG
1	I	134	LYS
1	J	65	ARG
1	J	134	LYS
1	K	65	ARG
1	K	134	LYS
1	L	65	ARG
1	L	134	LYS
1	M	65	ARG
1	M	134	LYS
1	N	65	ARG
1	N	134	LYS
1	O	65	ARG
1	O	134	LYS
1	E	39	ASP
1	F	39	ASP
1	I	39	ASP
1	K	39	ASP
1	N	39	ASP

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	118/118 (100%)	117 (99%)	1 (1%)	86	94
1	B	118/118 (100%)	117 (99%)	1 (1%)	86	94
1	C	118/118 (100%)	117 (99%)	1 (1%)	86	94
1	D	118/118 (100%)	117 (99%)	1 (1%)	86	94
1	E	118/118 (100%)	117 (99%)	1 (1%)	86	94
1	F	118/118 (100%)	117 (99%)	1 (1%)	86	94
1	G	118/118 (100%)	117 (99%)	1 (1%)	86	94
1	H	118/118 (100%)	117 (99%)	1 (1%)	86	94

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	I	118/118 (100%)	117 (99%)	1 (1%)	86	94
1	J	118/118 (100%)	117 (99%)	1 (1%)	86	94
1	K	118/118 (100%)	117 (99%)	1 (1%)	86	94
1	L	118/118 (100%)	117 (99%)	1 (1%)	86	94
1	M	118/118 (100%)	117 (99%)	1 (1%)	86	94
1	N	118/118 (100%)	117 (99%)	1 (1%)	86	94
1	O	118/118 (100%)	117 (99%)	1 (1%)	86	94
All	All	1770/1770 (100%)	1755 (99%)	15 (1%)	87	94

All (15) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	152	PRO
1	B	152	PRO
1	C	152	PRO
1	D	152	PRO
1	E	152	PRO
1	F	152	PRO
1	G	152	PRO
1	H	152	PRO
1	I	152	PRO
1	J	152	PRO
1	K	152	PRO
1	L	152	PRO
1	M	152	PRO
1	N	152	PRO
1	O	152	PRO

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. There are no such sidechains identified.

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.