



Full wwPDB X-ray Structure Validation Report ⓘ

May 28, 2020 – 09:16 pm BST

PDB ID : 1XFZ
Title : Crystal structure of anthrax edema factor (EF) in complex with calmodulin
in the presence of 1 millimolar exogenously added calcium chloride
Authors : Shen, Y.; Zhukovskaya, N.L.; Guo, Q.; Florian, J.; Tang, W.J.
Deposited on : 2004-09-15
Resolution : 3.25 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

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

MolProbity	:	4.02b-467
Xtriage (Phenix)	:	1.13
EDS	:	2.11
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.11

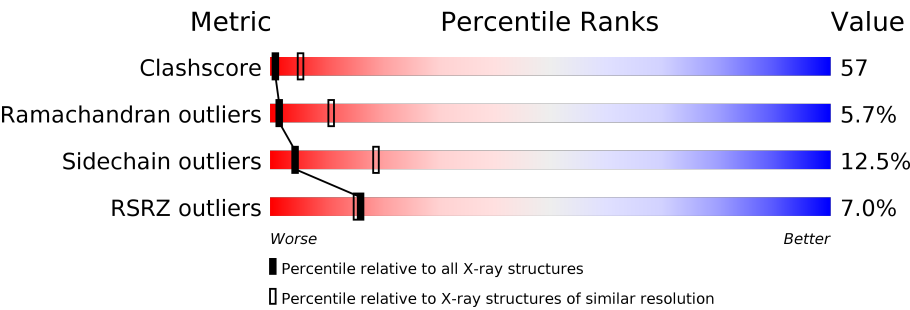
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.25 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)	Similar resolution (#Entries, resolution range(Å))
Clashscore	141614	1251 (3.30-3.22)
Ramachandran outliers	138981	1229 (3.30-3.22)
Sidechain outliers	138945	1228 (3.30-3.22)
RSRZ outliers	127900	1154 (3.30-3.22)

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

Mol	Chain	Length	Quality of chain
1	A	777	<div><div>7%</div><div>28%54%11%5%</div></div>
1	B	777	<div><div>7%</div><div>27%54%12%5%</div></div>
1	C	777	<div><div>8%</div><div>28%54%11%5%</div></div>
1	D	777	<div><div>8%</div><div>28%54%11%5%</div></div>
1	E	777	<div><div>8%</div><div>28%54%11%5%</div></div>
1	F	777	<div><div>7%</div><div>28%54%11%5%</div></div>
2	O	149	<div><div>3%</div><div>30%54%12%5%</div></div>

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Mol	Chain	Length	Quality of chain
2	P	149	<div><div><div></div><div></div><div></div></div><div><div>3%</div><div>30%</div><div>54%</div><div>13%</div><div>..</div></div></div>
2	Q	149	<div><div><div></div><div></div><div></div></div><div><div>3%</div><div>30%</div><div>54%</div><div>13%</div><div>..</div></div></div>
2	R	149	<div><div><div></div><div></div><div></div></div><div><div>%</div><div>32%</div><div>53%</div><div>12%</div><div>..</div></div></div>
2	S	149	<div><div><div></div><div></div><div></div></div><div><div>3%</div><div>30%</div><div>54%</div><div>12%</div><div>..</div></div></div>
2	T	149	<div><div><div></div><div></div><div></div></div><div><div></div><div>30%</div><div>55%</div><div>12%</div><div>..</div></div></div>

2 Entry composition [i](#)

There are 4 unique types of molecules in this entry. The entry contains 42852 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, 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 Calmodulin-sensitive adenylate cyclase.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	735	Total	C	N	O	S	0	0	0
			5992	3828	995	1163	6			
1	B	735	Total	C	N	O	S	0	0	0
			5992	3828	995	1163	6			
1	C	735	Total	C	N	O	S	0	0	0
			5992	3828	995	1163	6			
1	D	735	Total	C	N	O	S	0	0	0
			5992	3828	995	1163	6			
1	E	735	Total	C	N	O	S	0	0	0
			5992	3828	995	1163	6			
1	F	735	Total	C	N	O	S	0	0	0
			5992	3828	995	1163	6			

There are 54 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	24	MET	-	INITIATING METHIONINE	UNP P40136
A	25	HIS	-	EXPRESSION TAG	UNP P40136
A	26	HIS	-	EXPRESSION TAG	UNP P40136
A	27	HIS	-	EXPRESSION TAG	UNP P40136
A	28	HIS	-	EXPRESSION TAG	UNP P40136
A	29	HIS	-	EXPRESSION TAG	UNP P40136
A	30	HIS	-	EXPRESSION TAG	UNP P40136
A	31	ALA	-	CLONING ARTIFACT	UNP P40136
A	32	ALA	-	CLONING ARTIFACT	UNP P40136
B	24	MET	-	INITIATING METHIONINE	UNP P40136
B	25	HIS	-	EXPRESSION TAG	UNP P40136
B	26	HIS	-	EXPRESSION TAG	UNP P40136
B	27	HIS	-	EXPRESSION TAG	UNP P40136
B	28	HIS	-	EXPRESSION TAG	UNP P40136
B	29	HIS	-	EXPRESSION TAG	UNP P40136
B	30	HIS	-	EXPRESSION TAG	UNP P40136
B	31	ALA	-	CLONING ARTIFACT	UNP P40136

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Chain	Residue	Modelled	Actual	Comment	Reference
B	32	ALA	-	CLONING ARTIFACT	UNP P40136
C	24	MET	-	INITIATING METHIONINE	UNP P40136
C	25	HIS	-	EXPRESSION TAG	UNP P40136
C	26	HIS	-	EXPRESSION TAG	UNP P40136
C	27	HIS	-	EXPRESSION TAG	UNP P40136
C	28	HIS	-	EXPRESSION TAG	UNP P40136
C	29	HIS	-	EXPRESSION TAG	UNP P40136
C	30	HIS	-	EXPRESSION TAG	UNP P40136
C	31	ALA	-	CLONING ARTIFACT	UNP P40136
C	32	ALA	-	CLONING ARTIFACT	UNP P40136
D	24	MET	-	INITIATING METHIONINE	UNP P40136
D	25	HIS	-	EXPRESSION TAG	UNP P40136
D	26	HIS	-	EXPRESSION TAG	UNP P40136
D	27	HIS	-	EXPRESSION TAG	UNP P40136
D	28	HIS	-	EXPRESSION TAG	UNP P40136
D	29	HIS	-	EXPRESSION TAG	UNP P40136
D	30	HIS	-	EXPRESSION TAG	UNP P40136
D	31	ALA	-	CLONING ARTIFACT	UNP P40136
D	32	ALA	-	CLONING ARTIFACT	UNP P40136
E	24	MET	-	INITIATING METHIONINE	UNP P40136
E	25	HIS	-	EXPRESSION TAG	UNP P40136
E	26	HIS	-	EXPRESSION TAG	UNP P40136
E	27	HIS	-	EXPRESSION TAG	UNP P40136
E	28	HIS	-	EXPRESSION TAG	UNP P40136
E	29	HIS	-	EXPRESSION TAG	UNP P40136
E	30	HIS	-	EXPRESSION TAG	UNP P40136
E	31	ALA	-	CLONING ARTIFACT	UNP P40136
E	32	ALA	-	CLONING ARTIFACT	UNP P40136
F	24	MET	-	INITIATING METHIONINE	UNP P40136
F	25	HIS	-	EXPRESSION TAG	UNP P40136
F	26	HIS	-	EXPRESSION TAG	UNP P40136
F	27	HIS	-	EXPRESSION TAG	UNP P40136
F	28	HIS	-	EXPRESSION TAG	UNP P40136
F	29	HIS	-	EXPRESSION TAG	UNP P40136
F	30	HIS	-	EXPRESSION TAG	UNP P40136
F	31	ALA	-	CLONING ARTIFACT	UNP P40136
F	32	ALA	-	CLONING ARTIFACT	UNP P40136

- Molecule 2 is a protein called Calmodulin 2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	O	146	Total	C	N	O	S	0	0	0
			1146	702	186	249	9			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	P	146	Total 1146	C 702	N 186	O 249	S 9	0	0	0
2	Q	146	Total 1146	C 702	N 186	O 249	S 9	0	0	0
2	R	146	Total 1146	C 702	N 186	O 249	S 9	0	0	0
2	S	146	Total 1146	C 702	N 186	O 249	S 9	0	0	0
2	T	146	Total 1146	C 702	N 186	O 249	S 9	0	0	0

- Molecule 3 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	D	1	Total 1	Mg 1	0	0
3	E	1	Total 1	Mg 1	0	0
3	B	1	Total 1	Mg 1	0	0
3	C	1	Total 1	Mg 1	0	0
3	A	1	Total 1	Mg 1	0	0
3	F	1	Total 1	Mg 1	0	0

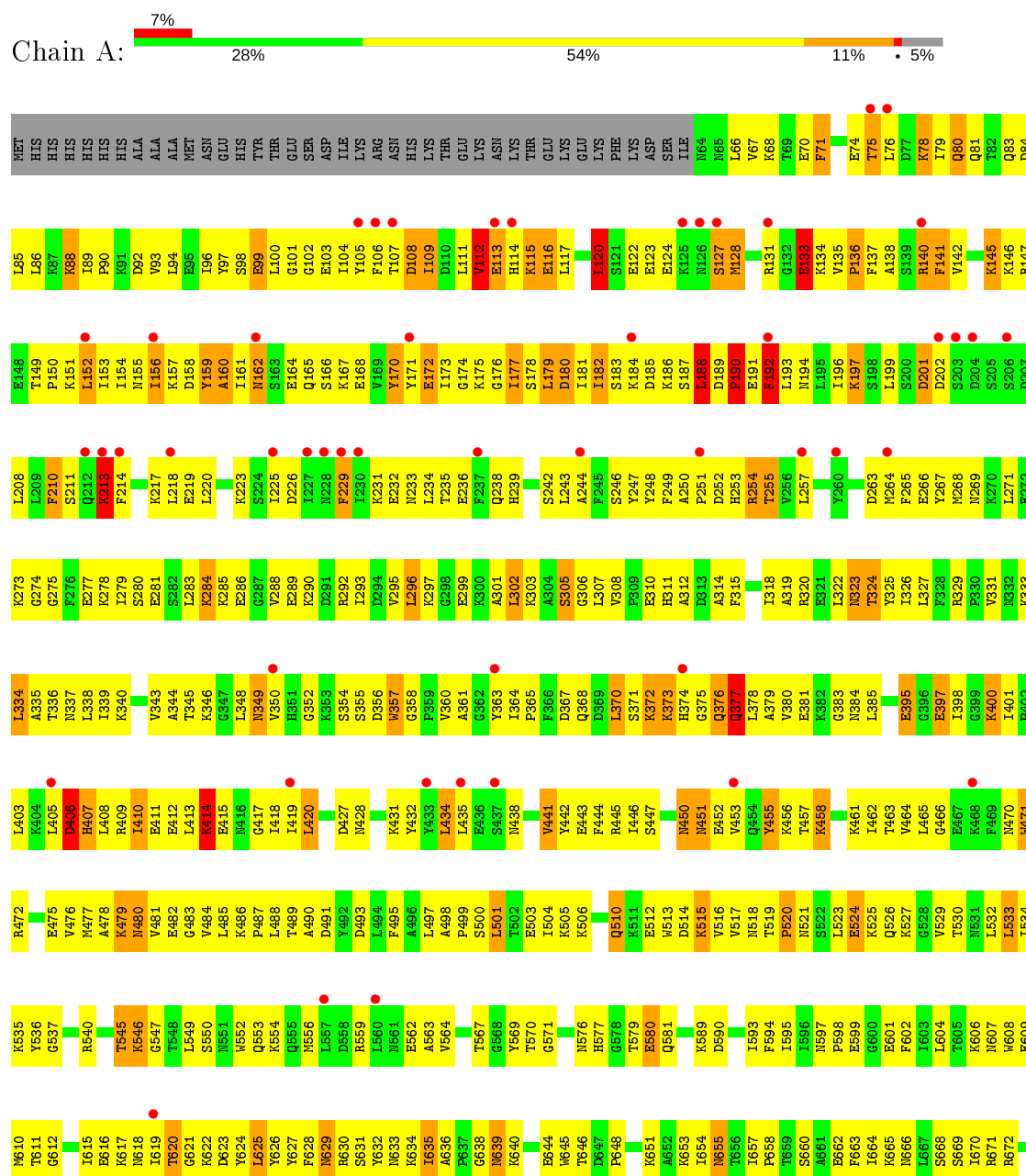
- Molecule 4 is CALCIUM ION (three-letter code: CA) (formula: Ca).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
4	P	3	Total 3	Ca 3	0	0
4	Q	3	Total 3	Ca 3	0	0
4	T	3	Total 3	Ca 3	0	0
4	O	3	Total 3	Ca 3	0	0
4	R	3	Total 3	Ca 3	0	0
4	S	3	Total 3	Ca 3	0	0

3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). 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.

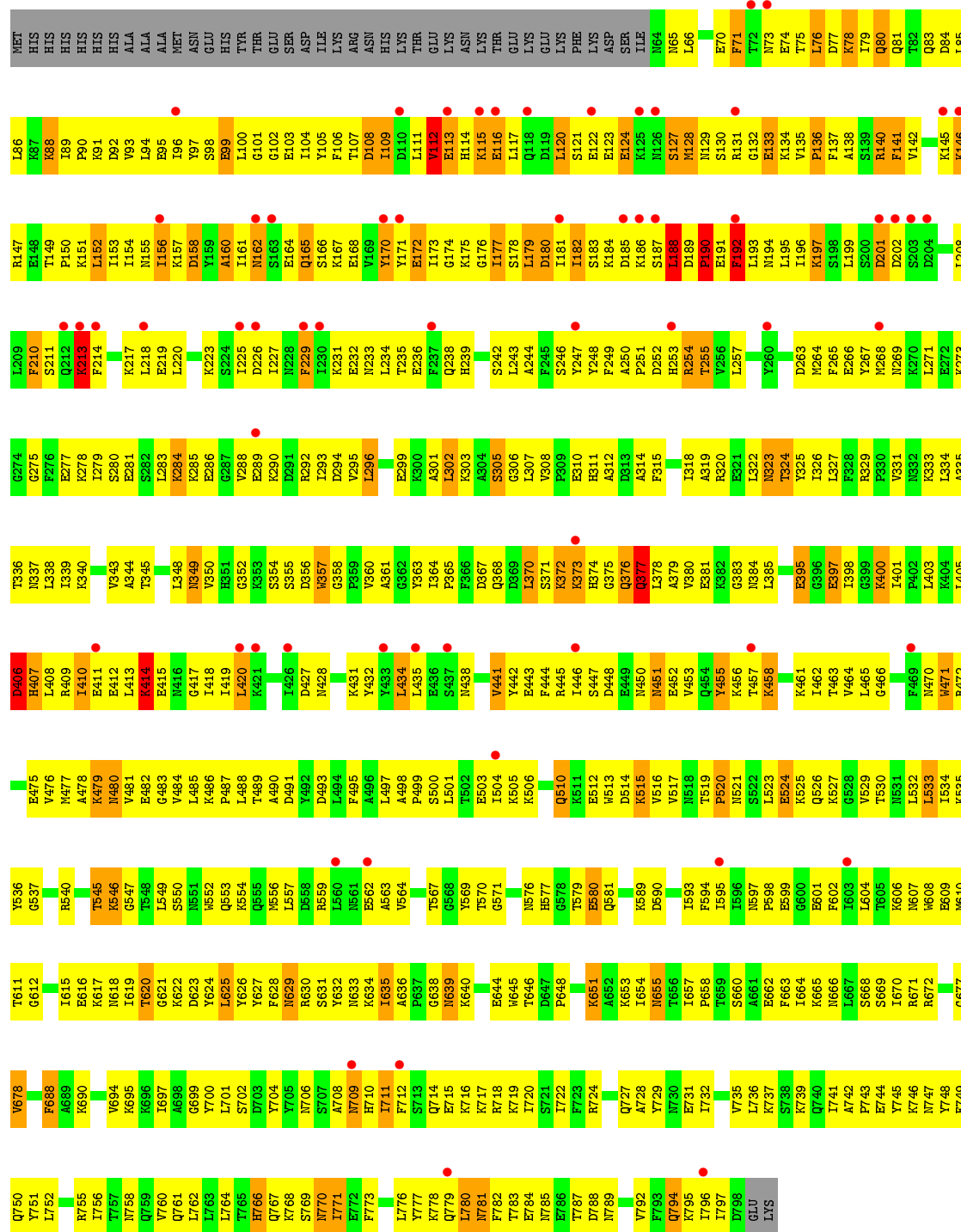
- Molecule 1: Calmodulin-sensitive adenylate cyclase



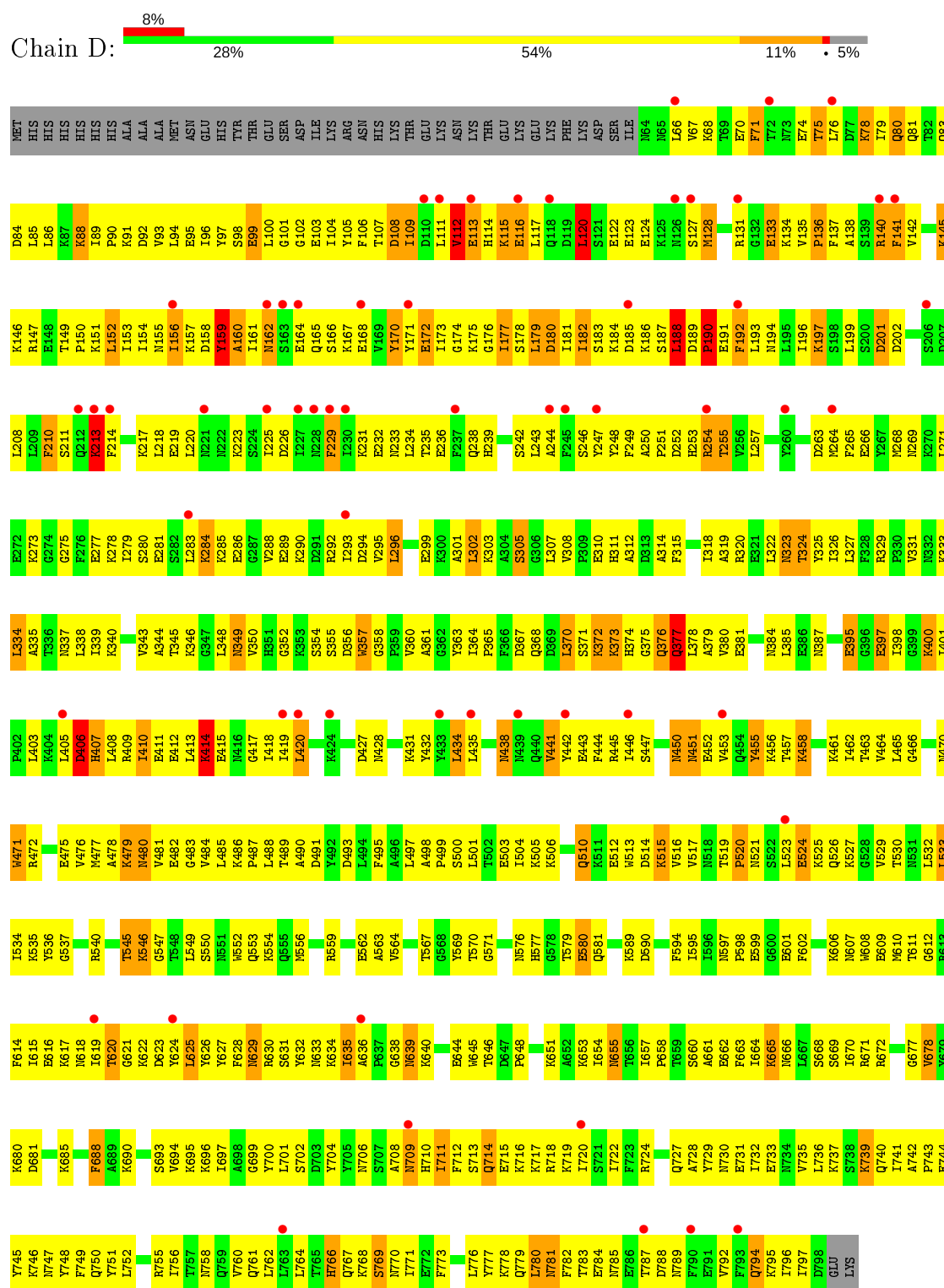




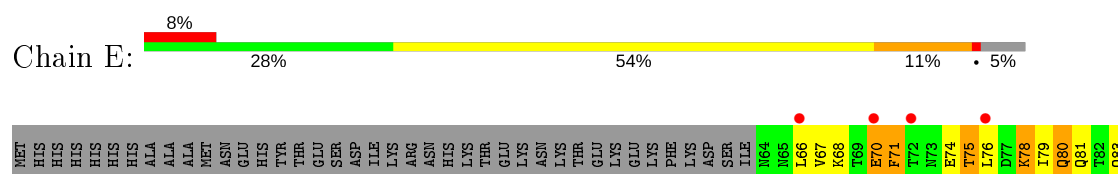
• Molecule 1: Calmodulin-sensitive adenylate cyclase

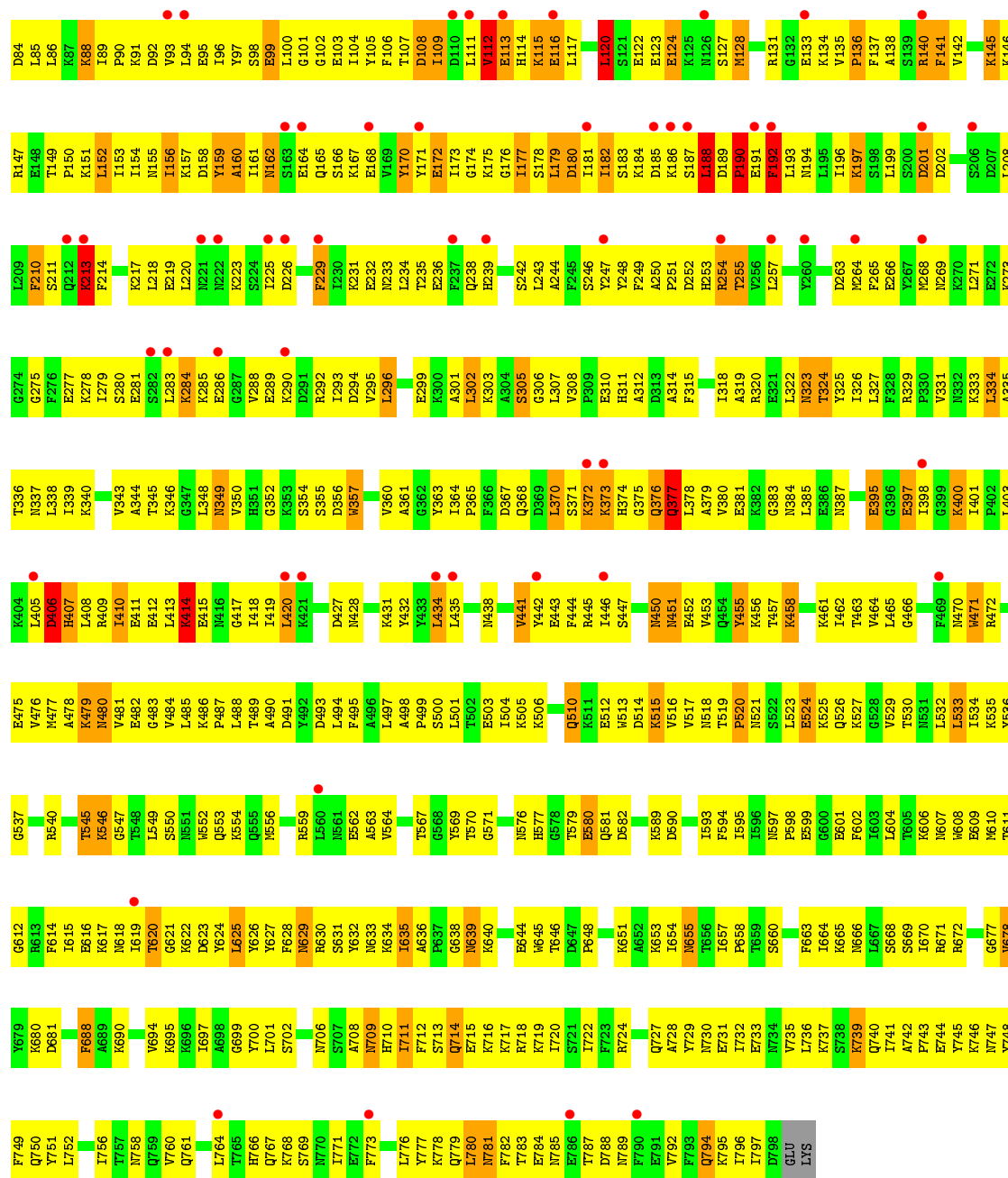


• Molecule 1: Calmodulin-sensitive adenylate cyclase

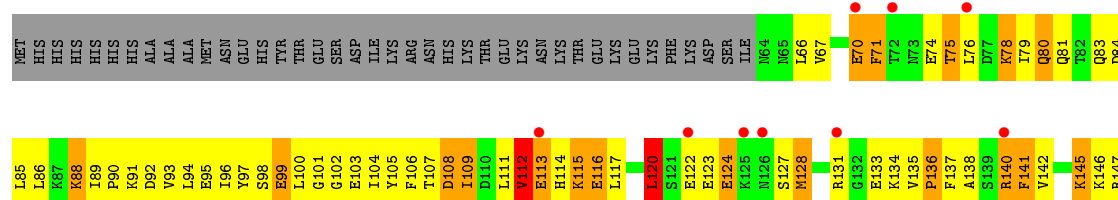


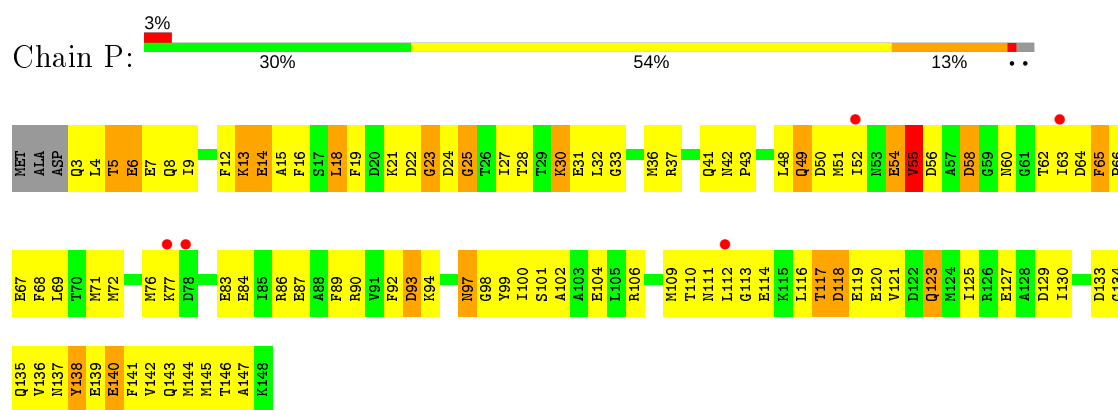
- Molecule 1: Calmodulin-sensitive adenylate cyclase



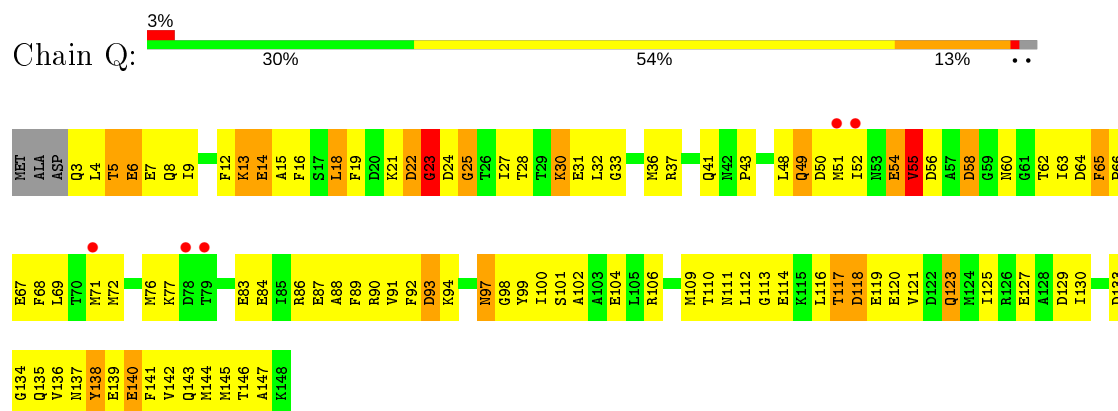


- Molecule 1: Calmodulin-sensitive adenylate cyclase

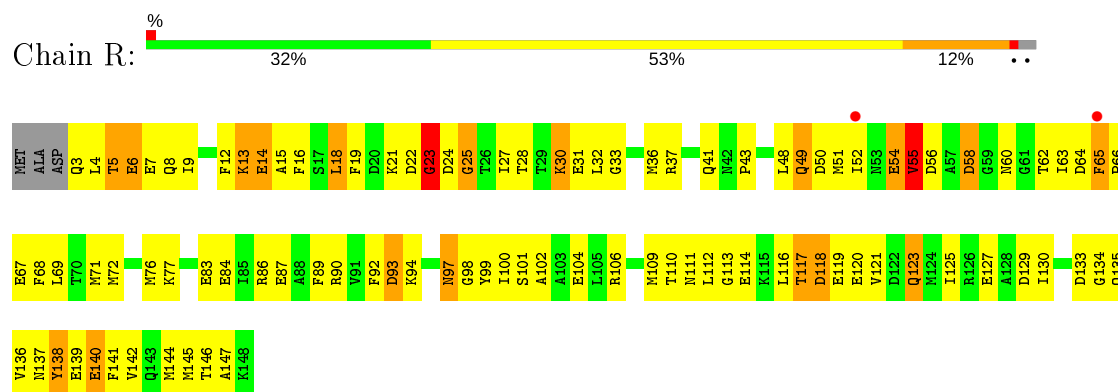




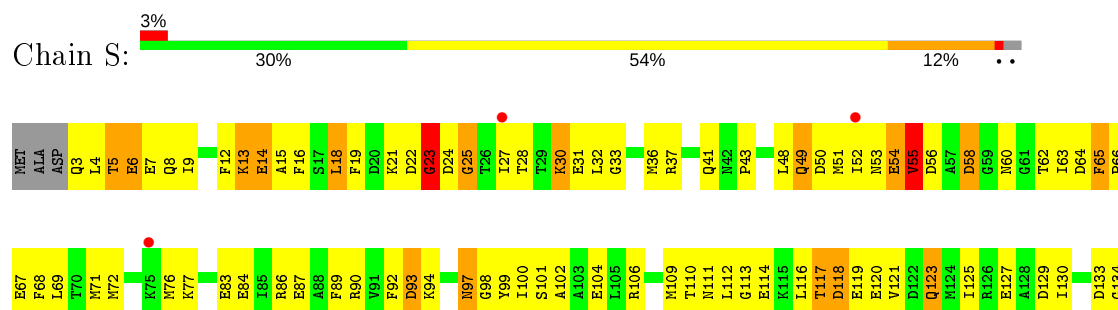
• Molecule 2: Calmodulin 2

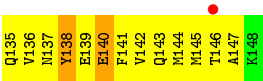


• Molecule 2: Calmodulin 2

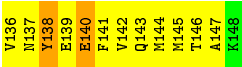
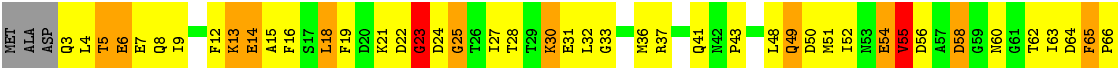


• Molecule 2: Calmodulin 2





● Molecule 2: Calmodulin 2



4 Data and refinement statistics

Property	Value	Source
Space group	C 1 2 1	Depositor
Cell constants a, b, c, α , β , γ	183.26Å 316.48Å 140.80Å 90.00° 89.91° 90.00°	Depositor
Resolution (Å)	29.99 – 3.25 39.65 – 3.20	Depositor EDS
% Data completeness (in resolution range)	95.0 (29.99-3.25) 93.3 (39.65-3.20)	Depositor EDS
R_{merge}	0.08	Depositor
R_{sym}	0.06	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.92 (at 3.18Å)	Xtriage
Refinement program	CNS 1.1	Depositor
R, R_{free}	0.258 , 0.270 0.277 , (Not available)	Depositor DCC
R_{free} test set	No test flags present.	wwPDB-VP
Wilson B-factor (Å ²)	95.5	Xtriage
Anisotropy	0.028	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.33 , 68.6	EDS
L-test for twinning ²	$\langle L \rangle = 0.50$, $\langle L^2 \rangle = 0.33$	Xtriage
Estimated twinning fraction	0.467 for -1/2*h+1/2*k,3/2*h+1/2*k,-l 0.467 for -1/2*h-1/2*k,-3/2*h+1/2*k,-l 0.460 for 1/2*h+1/2*k,3/2*h-1/2*k,-l 0.460 for 1/2*h-1/2*k,-3/2*h-1/2*k,-l 0.469 for -h,-k,l	Xtriage
F_o, F_c correlation	0.92	EDS
Total number of atoms	42852	wwPDB-VP
Average B, all atoms (Å ²)	87.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.30% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: CA, MG

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# $ Z > 5$	RMSZ	# $ Z > 5$
1	A	0.52	1/6104 (0.0%)	0.77	13/8208 (0.2%)
1	B	0.52	2/6104 (0.0%)	0.77	13/8208 (0.2%)
1	C	0.53	2/6104 (0.0%)	0.78	12/8208 (0.1%)
1	D	0.52	0/6104	0.77	12/8208 (0.1%)
1	E	0.52	0/6104	0.78	13/8208 (0.2%)
1	F	0.51	0/6104	0.77	13/8208 (0.2%)
2	O	0.54	0/1158	0.73	1/1553 (0.1%)
2	P	0.53	0/1158	0.72	0/1553
2	Q	0.54	0/1158	0.72	1/1553 (0.1%)
2	R	0.54	0/1158	0.72	1/1553 (0.1%)
2	S	0.54	0/1158	0.72	1/1553 (0.1%)
2	T	0.53	0/1158	0.73	1/1553 (0.1%)
All	All	0.52	5/43572 (0.0%)	0.77	81/58566 (0.1%)

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	1
1	B	0	1
1	C	0	1
1	D	0	1
1	E	0	1
1	F	0	1
2	O	0	1
2	P	0	1
2	Q	0	1
2	R	0	1
2	S	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
2	T	0	1
All	All	0	12

All (5) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	133	GLU	CG-CD	-7.09	1.41	1.51
1	A	133	GLU	CD-OE1	-6.43	1.18	1.25
1	B	133	GLU	CG-CD	-6.42	1.42	1.51
1	B	133	GLU	CD-OE1	-5.36	1.19	1.25
1	C	133	GLU	CD-OE1	-5.11	1.20	1.25

All (81) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	188	LEU	N-CA-C	-9.08	86.49	111.00
1	E	188	LEU	N-CA-C	-8.91	86.95	111.00
1	D	188	LEU	N-CA-C	-8.32	88.53	111.00
1	F	188	LEU	N-CA-C	-8.22	88.81	111.00
1	E	160	ALA	N-CA-C	8.01	132.62	111.00
1	A	188	LEU	N-CA-C	-7.96	89.52	111.00
1	B	160	ALA	N-CA-C	7.90	132.32	111.00
1	C	160	ALA	N-CA-C	7.13	130.25	111.00
1	D	127	SER	N-CA-C	7.12	130.23	111.00
1	F	127	SER	N-CA-C	7.12	130.22	111.00
1	E	127	SER	N-CA-C	7.09	130.15	111.00
1	A	769	SER	N-CA-C	7.09	130.14	111.00
1	A	127	SER	N-CA-C	7.08	130.13	111.00
1	E	190	PRO	N-CA-C	-7.04	93.79	112.10
1	B	188	LEU	N-CA-C	-6.96	92.21	111.00
1	D	160	ALA	N-CA-C	6.90	129.62	111.00
1	C	146	LYS	N-CA-C	6.79	129.32	111.00
1	F	160	ALA	N-CA-C	6.73	129.17	111.00
1	E	769	SER	N-CA-C	6.55	128.69	111.00
1	F	769	SER	N-CA-C	6.46	128.44	111.00
1	C	769	SER	N-CA-C	6.30	128.01	111.00
1	C	129	ASN	N-CA-C	6.22	127.80	111.00
1	A	160	ALA	N-CA-C	6.20	127.74	111.00
1	D	769	SER	N-CA-C	6.01	127.23	111.00
1	B	129	ASN	N-CA-C	5.85	126.79	111.00
1	B	769	SER	N-CA-C	5.84	126.76	111.00
1	F	159	TYR	N-CA-C	5.81	126.68	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	147	ARG	N-CA-C	5.79	126.65	111.00
1	B	145	LYS	N-CA-C	-5.76	95.45	111.00
1	A	145	LYS	N-CA-C	-5.73	95.53	111.00
1	E	145	LYS	N-CA-C	-5.71	95.57	111.00
1	F	145	LYS	N-CA-C	-5.71	95.57	111.00
1	D	145	LYS	N-CA-C	-5.71	95.58	111.00
1	E	159	TYR	N-CA-C	5.70	126.39	111.00
1	D	190	PRO	C-N-CA	-5.68	107.50	121.70
1	B	159	TYR	N-CA-C	5.62	126.19	111.00
1	C	147	ARG	N-CA-C	5.54	125.97	111.00
1	B	127	SER	N-CA-C	5.51	125.87	111.00
1	C	158	ASP	CA-C-N	5.46	129.20	117.20
1	D	159	TYR	N-CA-C	5.45	125.71	111.00
1	B	190	PRO	N-CA-C	-5.45	97.94	112.10
1	E	162	ASN	N-CA-C	5.43	125.67	111.00
1	C	190	PRO	N-CA-C	-5.42	98.00	112.10
1	B	224	SER	N-CA-C	-5.42	96.36	111.00
1	F	162	ASN	N-CA-C	5.40	125.58	111.00
1	A	190	PRO	N-CA-C	-5.37	98.15	112.10
1	D	147	ARG	N-CA-C	5.36	125.48	111.00
1	E	147	ARG	N-CA-C	5.35	125.45	111.00
1	C	162	ASN	N-CA-C	5.34	125.43	111.00
1	B	162	ASN	N-CA-C	5.33	125.40	111.00
1	A	147	ARG	N-CA-C	5.33	125.39	111.00
1	F	147	ARG	N-CA-C	5.33	125.39	111.00
1	C	127	SER	N-CA-C	5.31	125.34	111.00
1	F	450	ASN	N-CA-C	-5.27	96.78	111.00
1	E	450	ASN	N-CA-C	-5.27	96.78	111.00
1	A	450	ASN	N-CA-C	-5.26	96.80	111.00
1	B	739	LYS	N-CA-C	-5.26	96.79	111.00
1	A	162	ASN	N-CA-C	5.25	125.18	111.00
1	D	162	ASN	N-CA-C	5.25	125.18	111.00
1	D	450	ASN	N-CA-C	-5.25	96.83	111.00
1	F	146	LYS	N-CA-C	5.24	125.16	111.00
1	D	146	LYS	N-CA-C	5.24	125.14	111.00
1	A	190	PRO	CA-N-CD	-5.23	104.17	111.50
1	E	146	LYS	N-CA-C	5.21	125.08	111.00
1	A	146	LYS	N-CA-C	5.21	125.06	111.00
1	A	739	LYS	N-CA-C	-5.20	96.97	111.00
1	D	739	LYS	N-CA-C	-5.19	97.00	111.00
1	E	739	LYS	N-CA-C	-5.19	97.00	111.00
1	F	739	LYS	N-CA-C	-5.18	97.00	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	159	TYR	N-CA-C	5.15	124.90	111.00
1	C	188	LEU	C-N-CA	-5.14	108.86	121.70
2	R	23	GLY	N-CA-C	5.13	125.94	113.10
2	Q	23	GLY	N-CA-C	5.12	125.90	113.10
1	F	70	GLU	N-CA-C	5.12	124.81	111.00
1	F	190	PRO	CA-N-CD	-5.12	104.34	111.50
2	T	23	GLY	N-CA-C	5.09	125.81	113.10
1	B	70	GLU	N-CA-C	5.06	124.67	111.00
2	O	23	GLY	N-CA-C	5.04	125.69	113.10
1	E	70	GLU	N-CA-C	5.03	124.57	111.00
2	S	23	GLY	N-CA-C	5.02	125.64	113.10
1	C	739	LYS	N-CA-C	-5.01	97.46	111.00

There are no chirality outliers.

All (12) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	170	TYR	Sidechain
1	B	170	TYR	Sidechain
1	C	170	TYR	Sidechain
1	D	170	TYR	Sidechain
1	E	170	TYR	Sidechain
1	F	170	TYR	Sidechain
2	O	138	TYR	Sidechain
2	P	138	TYR	Sidechain
2	Q	138	TYR	Sidechain
2	R	138	TYR	Sidechain
2	S	138	TYR	Sidechain
2	T	138	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	5992	0	6010	669	1
1	B	5992	0	6010	688	0
1	C	5992	0	6010	684	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	D	5992	0	6010	678	1
1	E	5992	0	6010	672	0
1	F	5992	0	6010	674	0
2	O	1146	0	1071	157	0
2	P	1146	0	1071	156	0
2	Q	1146	0	1071	155	0
2	R	1146	0	1071	156	0
2	S	1146	0	1071	151	0
2	T	1146	0	1071	152	0
3	A	1	0	0	0	0
3	B	1	0	0	0	0
3	C	1	0	0	0	0
3	D	1	0	0	0	0
3	E	1	0	0	0	0
3	F	1	0	0	0	0
4	O	3	0	0	0	0
4	P	3	0	0	0	0
4	Q	3	0	0	0	0
4	R	3	0	0	0	0
4	S	3	0	0	0	0
4	T	3	0	0	0	0
All	All	42852	0	42486	4849	2

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 57.

All (4849) 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:414:LYS:HA	1:F:414:LYS:HZ2	1.13	1.13
1:B:655:ASN:HB3	1:B:758:ASN:HB3	1.31	1.12
1:A:127:SER:O	1:A:133:GLU:HG3	1.50	1.12
1:E:655:ASN:HB3	1:E:758:ASN:HB3	1.32	1.12
1:A:655:ASN:HB3	1:A:758:ASN:HB3	1.30	1.11
1:B:107:THR:HG21	1:B:115:LYS:HD2	1.32	1.10
1:F:722:ILE:HG23	1:F:760:VAL:HG13	1.34	1.09
1:C:655:ASN:HB3	1:C:758:ASN:HB3	1.30	1.09
1:D:655:ASN:HB3	1:D:758:ASN:HB3	1.31	1.08
1:F:655:ASN:HB3	1:F:758:ASN:HB3	1.31	1.07
1:D:722:ILE:HG23	1:D:760:VAL:HG13	1.34	1.07
1:A:722:ILE:HG23	1:A:760:VAL:HG13	1.37	1.07

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:722:ILE:HG23	1:C:760:VAL:HG13	1.37	1.07
1:A:107:THR:HG21	1:A:115:LYS:HD2	1.37	1.06
1:B:722:ILE:HG23	1:B:760:VAL:HG13	1.36	1.06
1:D:89:ILE:HG22	1:D:93:VAL:HG11	1.38	1.05
1:F:107:THR:HG21	1:F:115:LYS:HD2	1.38	1.05
1:E:722:ILE:HG23	1:E:760:VAL:HG13	1.36	1.05
1:B:414:LYS:HZ2	1:B:414:LYS:HA	1.21	1.05
1:C:107:THR:HG21	1:C:115:LYS:HD2	1.35	1.04
1:E:89:ILE:HG22	1:E:93:VAL:HG11	1.37	1.04
1:B:479:LYS:HG2	1:B:488:LEU:HD21	1.38	1.04
1:D:597:ASN:HD21	1:D:601:GLU:HB2	1.19	1.04
1:E:107:THR:HG21	1:E:115:LYS:HD2	1.36	1.04
1:C:597:ASN:HD21	1:C:601:GLU:HB2	1.22	1.03
1:E:597:ASN:HD21	1:E:601:GLU:HB2	1.21	1.03
1:B:89:ILE:HG22	1:B:93:VAL:HG11	1.38	1.02
1:C:479:LYS:HG2	1:C:488:LEU:HD21	1.38	1.02
1:C:89:ILE:HG22	1:C:93:VAL:HG11	1.38	1.02
1:F:479:LYS:HG2	1:F:488:LEU:HD21	1.39	1.02
2:R:30:LYS:H	2:R:30:LYS:HD3	1.24	1.02
2:P:30:LYS:HD3	2:P:30:LYS:H	1.24	1.02
1:D:107:THR:HG21	1:D:115:LYS:HD2	1.37	1.01
1:F:89:ILE:HG22	1:F:93:VAL:HG11	1.37	1.01
1:E:479:LYS:HG2	1:E:488:LEU:HD21	1.38	1.01
1:C:414:LYS:HA	1:C:414:LYS:HZ2	1.24	1.01
1:A:597:ASN:HD21	1:A:601:GLU:HB2	1.23	1.01
2:Q:30:LYS:H	2:Q:30:LYS:HD3	1.26	1.01
1:A:479:LYS:HG2	1:A:488:LEU:HD21	1.39	1.00
1:A:89:ILE:HG22	1:A:93:VAL:HG11	1.38	1.00
2:T:30:LYS:H	2:T:30:LYS:HD3	1.26	1.00
2:S:30:LYS:HD3	2:S:30:LYS:H	1.24	1.00
1:E:217:LYS:HZ1	1:E:233:ASN:HB3	1.27	1.00
1:F:597:ASN:HD21	1:F:601:GLU:HB2	1.22	0.99
1:B:188:LEU:HD23	1:B:188:LEU:H	1.25	0.99
1:A:217:LYS:HZ1	1:A:233:ASN:HB3	1.28	0.99
1:B:597:ASN:HD21	1:B:601:GLU:HB2	1.23	0.98
1:D:546:LYS:HD2	1:D:554:LYS:HE2	1.43	0.98
2:O:30:LYS:HD3	2:O:30:LYS:H	1.25	0.98
1:D:324:THR:HB	1:D:499:PRO:HA	1.44	0.98
1:A:324:THR:HB	1:A:499:PRO:HA	1.45	0.98
1:A:546:LYS:HD2	1:A:554:LYS:HE2	1.43	0.98
1:C:173:ILE:HG13	1:C:242:SER:HB3	1.45	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:479:LYS:HG2	1:D:488:LEU:HD21	1.40	0.98
2:O:9:ILE:HD12	2:O:69:LEU:HD11	1.44	0.97
2:P:9:ILE:HD12	2:P:69:LEU:HD11	1.44	0.97
1:C:217:LYS:HZ1	1:C:233:ASN:HB3	1.29	0.97
1:C:324:THR:HB	1:C:499:PRO:HA	1.45	0.97
1:E:90:PRO:HG2	1:E:93:VAL:HB	1.46	0.97
2:R:9:ILE:HD12	2:R:69:LEU:HD11	1.45	0.97
1:F:546:LYS:HD2	1:F:554:LYS:HE2	1.43	0.97
1:B:546:LYS:HD2	1:B:554:LYS:HE2	1.45	0.96
1:D:173:ILE:HG13	1:D:242:SER:HB3	1.45	0.96
2:S:9:ILE:HD12	2:S:69:LEU:HD11	1.45	0.96
1:F:217:LYS:HZ1	1:F:233:ASN:HB3	1.26	0.96
1:A:173:ILE:HG13	1:A:242:SER:HB3	1.44	0.96
2:Q:9:ILE:HD12	2:Q:69:LEU:HD11	1.44	0.96
1:F:629:ASN:HD22	1:F:631:SER:H	1.12	0.96
1:F:173:ILE:HG13	1:F:242:SER:HB3	1.46	0.96
1:B:217:LYS:HZ1	1:B:233:ASN:HB3	1.28	0.96
1:E:546:LYS:HD2	1:E:554:LYS:HE2	1.46	0.96
1:B:173:ILE:HG13	1:B:242:SER:HB3	1.45	0.96
1:C:550:SER:HB3	1:C:553:GLN:HG3	1.48	0.96
1:B:324:THR:HB	1:B:499:PRO:HA	1.46	0.95
1:C:546:LYS:HD2	1:C:554:LYS:HE2	1.44	0.95
1:D:217:LYS:HZ1	1:D:233:ASN:HB3	1.29	0.95
1:D:550:SER:HB3	1:D:553:GLN:HG3	1.48	0.95
1:F:324:THR:HB	1:F:499:PRO:HA	1.46	0.95
2:T:9:ILE:HD12	2:T:69:LEU:HD11	1.45	0.95
1:D:90:PRO:HG2	1:D:93:VAL:HB	1.48	0.94
1:A:629:ASN:HD22	1:A:631:SER:H	1.15	0.94
1:E:324:THR:HB	1:E:499:PRO:HA	1.46	0.94
1:A:414:LYS:HA	1:A:414:LYS:HZ2	1.32	0.94
1:A:550:SER:HB3	1:A:553:GLN:HG3	1.50	0.94
1:B:191:GLU:O	1:B:193:LEU:N	2.00	0.94
1:F:90:PRO:HG2	1:F:93:VAL:HB	1.47	0.94
1:E:629:ASN:HD22	1:E:631:SER:H	1.14	0.93
1:E:550:SER:HB3	1:E:553:GLN:HG3	1.49	0.93
1:C:90:PRO:HG2	1:C:93:VAL:HB	1.48	0.93
1:B:550:SER:HB3	1:B:553:GLN:HG3	1.48	0.93
1:B:736:LEU:HD21	1:B:750:GLN:NE2	1.84	0.93
1:F:414:LYS:NZ	1:F:414:LYS:HA	1.84	0.93
1:A:90:PRO:HG2	1:A:93:VAL:HB	1.48	0.92
1:B:189:ASP:O	1:B:191:GLU:N	2.03	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:736:LEU:HD21	1:C:750:GLN:NE2	1.83	0.92
1:F:736:LEU:HD21	1:F:750:GLN:NE2	1.85	0.92
1:E:173:ILE:HG13	1:E:242:SER:HB3	1.47	0.92
1:A:414:LYS:HA	1:A:414:LYS:NZ	1.85	0.92
1:B:629:ASN:HD22	1:B:631:SER:H	1.15	0.92
1:B:90:PRO:HG2	1:B:93:VAL:HB	1.49	0.92
1:E:414:LYS:HZ2	1:E:414:LYS:HA	1.35	0.92
1:B:185:ASP:O	1:B:190:PRO:HG3	1.69	0.92
1:F:635:ILE:H	1:F:635:ILE:HD12	1.34	0.92
1:D:736:LEU:HD21	1:D:750:GLN:NE2	1.85	0.91
1:E:480:ASN:HD22	1:E:480:ASN:C	1.73	0.91
1:B:480:ASN:C	1:B:480:ASN:HD22	1.73	0.91
1:A:736:LEU:HD21	1:A:750:GLN:NE2	1.84	0.91
1:D:480:ASN:C	1:D:480:ASN:HD22	1.74	0.91
1:F:597:ASN:HB2	1:F:598:PRO:HD2	1.52	0.91
1:B:414:LYS:NZ	1:B:414:LYS:HA	1.84	0.91
1:C:597:ASN:HB2	1:C:598:PRO:HD2	1.53	0.91
1:E:414:LYS:NZ	1:E:414:LYS:HA	1.84	0.91
1:E:736:LEU:HD21	1:E:750:GLN:NE2	1.86	0.91
1:D:635:ILE:HD12	1:D:635:ILE:H	1.35	0.91
1:F:89:ILE:HD13	1:F:175:LYS:HE2	1.53	0.91
1:A:597:ASN:HB2	1:A:598:PRO:HD2	1.53	0.90
1:C:414:LYS:HA	1:C:414:LYS:NZ	1.85	0.90
1:C:480:ASN:HD22	1:C:480:ASN:C	1.74	0.90
1:D:414:LYS:NZ	1:D:414:LYS:HA	1.84	0.90
1:F:550:SER:HB3	1:F:553:GLN:HG3	1.51	0.90
1:A:89:ILE:HD13	1:A:175:LYS:HE2	1.53	0.90
1:A:480:ASN:HD22	1:A:480:ASN:C	1.75	0.90
1:C:182:ILE:C	1:C:187:SER:HB2	1.92	0.90
1:A:635:ILE:H	1:A:635:ILE:HD12	1.34	0.89
1:C:186:LYS:HA	1:C:190:PRO:HD3	1.53	0.89
1:C:635:ILE:H	1:C:635:ILE:HD12	1.37	0.89
1:D:186:LYS:HE3	1:D:234:LEU:HD12	1.55	0.89
1:D:597:ASN:HB2	1:D:598:PRO:HD2	1.54	0.89
1:B:409:ARG:NE	1:B:413:LEU:HD21	1.88	0.89
1:B:635:ILE:H	1:B:635:ILE:HD12	1.36	0.89
1:D:629:ASN:HD22	1:D:631:SER:H	1.15	0.89
1:A:409:ARG:NE	1:A:413:LEU:HD21	1.88	0.89
1:C:189:ASP:O	1:C:191:GLU:N	2.05	0.89
1:F:480:ASN:HD22	1:F:480:ASN:C	1.75	0.89
1:B:597:ASN:HB2	1:B:598:PRO:HD2	1.52	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:89:ILE:HD13	1:C:175:LYS:HE2	1.55	0.89
1:E:715:GLU:HA	1:E:718:ARG:HH12	1.38	0.89
1:F:629:ASN:ND2	1:F:631:SER:H	1.71	0.89
1:F:409:ARG:NE	1:F:413:LEU:HD21	1.88	0.89
1:C:629:ASN:HD22	1:C:631:SER:H	1.15	0.88
1:B:625:LEU:HD12	1:B:626:TYR:N	1.88	0.88
1:F:191:GLU:O	1:F:193:LEU:N	2.05	0.88
1:E:161:ILE:HG23	1:E:168:GLU:HB2	1.53	0.88
1:E:409:ARG:NE	1:E:413:LEU:HD21	1.88	0.88
1:F:715:GLU:HA	1:F:718:ARG:HH12	1.38	0.88
1:D:89:ILE:HD13	1:D:175:LYS:HE2	1.53	0.88
1:F:161:ILE:HG23	1:F:168:GLU:HB2	1.55	0.88
1:D:409:ARG:NE	1:D:413:LEU:HD21	1.89	0.88
1:D:414:LYS:HZ2	1:D:414:LYS:HA	1.38	0.88
1:C:625:LEU:HD12	1:C:626:TYR:N	1.89	0.88
1:D:191:GLU:O	1:D:193:LEU:N	2.07	0.88
1:D:715:GLU:HA	1:D:718:ARG:HH12	1.38	0.88
1:E:405:LEU:HD13	1:E:453:VAL:HG21	1.56	0.88
1:A:186:LYS:HE3	1:A:234:LEU:HD12	1.56	0.87
1:B:107:THR:CG2	1:B:115:LYS:HD2	2.05	0.87
1:E:597:ASN:HB2	1:E:598:PRO:HD2	1.54	0.87
1:F:189:ASP:O	1:F:191:GLU:N	2.07	0.87
1:E:186:LYS:HE3	1:E:234:LEU:HD12	1.57	0.87
1:C:405:LEU:HD13	1:C:453:VAL:HG21	1.56	0.87
1:B:89:ILE:HD13	1:B:175:LYS:HE2	1.55	0.87
1:B:715:GLU:HA	1:B:718:ARG:HH12	1.39	0.87
1:E:408:LEU:HD12	1:E:408:LEU:H	1.39	0.87
1:F:625:LEU:HD12	1:F:626:TYR:N	1.90	0.87
1:A:715:GLU:HA	1:A:718:ARG:HH12	1.39	0.87
1:A:161:ILE:HG23	1:A:168:GLU:HB2	1.57	0.86
1:C:715:GLU:HA	1:C:718:ARG:HH12	1.38	0.86
1:E:89:ILE:HD13	1:E:175:LYS:HE2	1.54	0.86
1:E:629:ASN:ND2	1:E:631:SER:H	1.73	0.86
1:E:635:ILE:HD12	1:E:635:ILE:H	1.37	0.86
1:E:327:LEU:HG	1:E:595:ILE:HG12	1.57	0.86
1:A:360:VAL:HG11	1:A:370:LEU:HD22	1.57	0.86
1:B:408:LEU:H	1:B:408:LEU:HD12	1.38	0.86
1:C:409:ARG:NE	1:C:413:LEU:HD21	1.89	0.86
1:D:408:LEU:H	1:D:408:LEU:HD12	1.39	0.86
1:F:186:LYS:HE3	1:F:234:LEU:HD12	1.56	0.86
1:D:625:LEU:HD12	1:D:626:TYR:N	1.91	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:405:LEU:HD13	1:F:453:VAL:HG21	1.57	0.86
1:A:408:LEU:H	1:A:408:LEU:HD12	1.40	0.86
1:A:736:LEU:HD21	1:A:750:GLN:HE22	1.41	0.86
1:B:182:ILE:C	1:B:187:SER:HB2	1.96	0.86
1:F:360:VAL:HG11	1:F:370:LEU:HD22	1.56	0.86
1:A:629:ASN:ND2	1:A:631:SER:H	1.74	0.85
1:A:625:LEU:HD12	1:A:626:TYR:N	1.91	0.85
1:B:405:LEU:HD13	1:B:453:VAL:HG21	1.56	0.85
1:D:161:ILE:HG23	1:D:168:GLU:HB2	1.57	0.85
1:D:327:LEU:HG	1:D:595:ILE:HG12	1.57	0.85
1:E:107:THR:CG2	1:E:115:LYS:HD2	2.06	0.85
1:B:360:VAL:HG11	1:B:370:LEU:HD22	1.57	0.85
1:F:408:LEU:H	1:F:408:LEU:HD12	1.40	0.85
1:E:360:VAL:HG11	1:E:370:LEU:HD22	1.56	0.85
1:D:405:LEU:HD13	1:D:453:VAL:HG21	1.56	0.85
1:B:629:ASN:ND2	1:B:631:SER:H	1.74	0.85
1:A:107:THR:CG2	1:A:115:LYS:HD2	2.07	0.85
1:B:736:LEU:HD21	1:B:750:GLN:HE22	1.40	0.85
1:D:597:ASN:ND2	1:D:601:GLU:HB2	1.90	0.85
1:F:107:THR:CG2	1:F:115:LYS:HD2	2.07	0.85
1:F:307:LEU:HD12	1:F:331:VAL:HG21	1.59	0.85
1:A:182:ILE:C	1:A:187:SER:HB2	1.98	0.85
1:C:629:ASN:ND2	1:C:631:SER:H	1.73	0.85
1:D:629:ASN:ND2	1:D:631:SER:H	1.74	0.85
1:D:107:THR:CG2	1:D:115:LYS:HD2	2.07	0.84
1:E:597:ASN:ND2	1:E:601:GLU:HB2	1.92	0.84
1:C:360:VAL:HG11	1:C:370:LEU:HD22	1.58	0.84
2:O:106:ARG:O	2:O:110:THR:HG23	1.77	0.84
1:C:107:THR:CG2	1:C:115:LYS:HD2	2.06	0.84
1:C:354:SER:O	1:C:371:SER:HB2	1.76	0.84
2:R:106:ARG:O	2:R:110:THR:HG23	1.77	0.84
1:C:408:LEU:H	1:C:408:LEU:HD12	1.39	0.84
1:C:736:LEU:HD21	1:C:750:GLN:HE22	1.39	0.84
1:A:327:LEU:HG	1:A:595:ILE:HG12	1.59	0.84
1:C:307:LEU:HD12	1:C:331:VAL:HG21	1.60	0.84
1:E:354:SER:O	1:E:371:SER:HB2	1.78	0.84
1:A:307:LEU:HD12	1:A:331:VAL:HG21	1.59	0.84
1:E:625:LEU:HD12	1:E:626:TYR:N	1.93	0.84
2:O:102:ALA:HB2	2:O:125:ILE:HG13	1.60	0.84
1:E:76:LEU:O	1:E:80:GLN:HB2	1.77	0.84
2:P:102:ALA:HB2	2:P:125:ILE:HG13	1.59	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:106:ARG:O	2:T:110:THR:HG23	1.77	0.84
1:D:360:VAL:HG11	1:D:370:LEU:HD22	1.58	0.84
1:E:307:LEU:HD12	1:E:331:VAL:HG21	1.60	0.84
1:B:161:ILE:HG23	1:B:168:GLU:HB2	1.59	0.84
1:D:530:THR:HG21	2:R:145:MET:HE3	1.60	0.84
2:Q:102:ALA:HB2	2:Q:125:ILE:HG13	1.59	0.84
1:A:191:GLU:O	1:A:193:LEU:N	2.10	0.83
1:C:327:LEU:HG	1:C:595:ILE:HG12	1.58	0.83
1:A:597:ASN:ND2	1:A:601:GLU:HB2	1.93	0.83
1:D:307:LEU:HD12	1:D:331:VAL:HG21	1.59	0.83
1:B:318:ILE:H	1:B:318:ILE:HD12	1.43	0.83
1:F:217:LYS:HG3	1:F:236:GLU:HG3	1.60	0.83
1:B:354:SER:O	1:B:371:SER:HB2	1.77	0.83
1:C:296:LEU:HD23	1:C:296:LEU:N	1.93	0.83
1:C:161:ILE:HG23	1:C:168:GLU:HB2	1.58	0.83
1:D:182:ILE:C	1:D:187:SER:HB2	1.99	0.83
1:E:296:LEU:N	1:E:296:LEU:HD23	1.94	0.83
1:F:354:SER:O	1:F:371:SER:HB2	1.76	0.83
1:F:718:ARG:O	1:F:722:ILE:HG13	1.79	0.83
2:P:65:PHE:HB2	2:P:66:PRO:HD3	1.61	0.83
2:Q:106:ARG:O	2:Q:110:THR:HG23	1.78	0.83
1:A:186:LYS:HA	1:A:190:PRO:HD3	1.60	0.83
1:C:185:ASP:O	1:C:190:PRO:HG3	1.78	0.83
1:E:718:ARG:O	1:E:722:ILE:HG13	1.78	0.83
2:S:102:ALA:HB2	2:S:125:ILE:HG13	1.61	0.83
2:T:102:ALA:HB2	2:T:125:ILE:HG13	1.61	0.83
1:B:718:ARG:O	1:B:722:ILE:HG13	1.79	0.83
1:A:217:LYS:HG3	1:A:236:GLU:HG3	1.61	0.83
1:B:307:LEU:HD12	1:B:331:VAL:HG21	1.61	0.83
1:F:327:LEU:HG	1:F:595:ILE:HG12	1.59	0.83
1:F:597:ASN:ND2	1:F:601:GLU:HB2	1.93	0.83
1:B:327:LEU:HG	1:B:595:ILE:HG12	1.58	0.82
2:P:106:ARG:O	2:P:110:THR:HG23	1.79	0.82
1:B:597:ASN:ND2	1:B:601:GLU:HB2	1.94	0.82
1:C:127:SER:O	1:C:133:GLU:OE1	1.97	0.82
2:P:100:ILE:HB	2:P:136:VAL:CG2	2.08	0.82
2:S:106:ARG:O	2:S:110:THR:HG23	1.78	0.82
2:T:100:ILE:HB	2:T:136:VAL:CG2	2.08	0.82
1:C:718:ARG:O	1:C:722:ILE:HG13	1.79	0.82
1:A:296:LEU:HD23	1:A:296:LEU:N	1.94	0.82
1:A:318:ILE:H	1:A:318:ILE:HD12	1.44	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:405:LEU:HD13	1:A:453:VAL:HG21	1.58	0.82
1:D:90:PRO:O	1:D:93:VAL:HG12	1.79	0.82
1:F:296:LEU:N	1:F:296:LEU:HD23	1.94	0.82
1:B:186:LYS:HA	1:B:190:PRO:HD3	1.61	0.82
1:E:185:ASP:O	1:E:190:PRO:HG3	1.79	0.82
2:O:100:ILE:HB	2:O:136:VAL:CG2	2.09	0.82
1:D:217:LYS:HG3	1:D:236:GLU:HG3	1.61	0.82
1:E:90:PRO:O	1:E:93:VAL:HG12	1.80	0.82
1:F:76:LEU:O	1:F:80:GLN:HB2	1.78	0.82
2:Q:65:PHE:HB2	2:Q:66:PRO:HD3	1.61	0.82
2:R:65:PHE:HB2	2:R:66:PRO:HD3	1.62	0.82
1:C:597:ASN:ND2	1:C:601:GLU:HB2	1.93	0.82
1:D:296:LEU:N	1:D:296:LEU:HD23	1.94	0.82
1:E:115:LYS:HZ1	1:E:117:LEU:HB2	1.42	0.82
1:A:96:ILE:HG22	1:A:100:LEU:HD11	1.62	0.82
1:A:177:ILE:HA	1:A:180:ASP:OD2	1.80	0.82
1:A:354:SER:O	1:A:371:SER:HB2	1.78	0.82
1:A:718:ARG:O	1:A:722:ILE:HG13	1.80	0.82
1:C:186:LYS:HE3	1:C:234:LEU:HD12	1.62	0.82
1:F:668:SER:HA	2:T:14:GLU:HG3	1.62	0.82
1:A:90:PRO:O	1:A:93:VAL:HG12	1.79	0.82
1:B:296:LEU:HD23	1:B:296:LEU:N	1.94	0.82
1:D:668:SER:HA	2:R:14:GLU:HG3	1.62	0.82
1:E:728:ALA:O	1:E:732:ILE:HG12	1.80	0.81
1:F:182:ILE:C	1:F:187:SER:HB2	2.01	0.81
1:B:177:ILE:HA	1:B:180:ASP:OD2	1.81	0.81
1:C:170:TYR:HA	1:C:173:ILE:HG22	1.62	0.81
1:D:170:TYR:HA	1:D:173:ILE:HG22	1.62	0.81
1:D:76:LEU:O	1:D:80:GLN:HB2	1.79	0.81
2:R:102:ALA:HB2	2:R:125:ILE:HG13	1.62	0.81
1:D:177:ILE:HA	1:D:180:ASP:OD2	1.79	0.81
1:E:217:LYS:HG3	1:E:236:GLU:HG3	1.60	0.81
1:F:177:ILE:HA	1:F:180:ASP:OD2	1.80	0.81
1:F:736:LEU:HD21	1:F:750:GLN:HE22	1.41	0.81
2:Q:100:ILE:HB	2:Q:136:VAL:CG2	2.10	0.81
1:A:76:LEU:O	1:A:80:GLN:HB2	1.79	0.81
1:C:217:LYS:HG3	1:C:236:GLU:HG3	1.61	0.81
1:A:447:SER:O	1:A:451:ASN:HA	1.81	0.81
1:B:115:LYS:HZ1	1:B:117:LEU:HB2	1.45	0.81
1:B:728:ALA:O	1:B:732:ILE:HG12	1.79	0.81
2:O:65:PHE:HB2	2:O:66:PRO:HD3	1.61	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S:65:PHE:HB2	2:S:66:PRO:HD3	1.61	0.81
1:C:145:LYS:HB3	1:C:151:LYS:HB2	1.61	0.81
1:C:728:ALA:O	1:C:732:ILE:HG12	1.81	0.81
1:D:447:SER:O	1:D:451:ASN:HA	1.81	0.81
1:D:70:GLU:HB2	1:D:107:THR:HG22	1.62	0.81
1:F:318:ILE:H	1:F:318:ILE:HD12	1.44	0.81
1:C:96:ILE:HG22	1:C:100:LEU:HD11	1.63	0.81
1:D:354:SER:O	1:D:371:SER:HB2	1.80	0.81
1:D:728:ALA:O	1:D:732:ILE:HG12	1.81	0.81
1:E:447:SER:O	1:E:451:ASN:HA	1.81	0.81
2:R:100:ILE:HB	2:R:136:VAL:CG2	2.10	0.81
2:S:100:ILE:HB	2:S:136:VAL:CG2	2.10	0.81
1:F:530:THR:HG21	2:T:145:MET:HE3	1.62	0.81
1:B:90:PRO:O	1:B:93:VAL:HG12	1.79	0.81
1:F:96:ILE:HG22	1:F:100:LEU:HD11	1.63	0.81
1:D:718:ARG:O	1:D:722:ILE:HG13	1.80	0.81
1:C:318:ILE:HD12	1:C:318:ILE:H	1.44	0.81
1:F:90:PRO:O	1:F:93:VAL:HG12	1.81	0.81
1:A:70:GLU:HB2	1:A:107:THR:HG22	1.61	0.80
1:D:736:LEU:HD21	1:D:750:GLN:HE22	1.43	0.80
1:F:447:SER:O	1:F:451:ASN:HA	1.81	0.80
1:D:189:ASP:O	1:D:191:GLU:N	2.14	0.80
2:T:58:ASP:C	2:T:60:ASN:H	1.85	0.80
1:A:668:SER:HA	2:O:14:GLU:HG3	1.63	0.80
1:C:668:SER:HA	2:Q:14:GLU:HG3	1.64	0.80
1:D:96:ILE:HG22	1:D:100:LEU:HD11	1.64	0.80
1:E:182:ILE:C	1:E:187:SER:HB2	2.02	0.80
2:T:65:PHE:HB2	2:T:66:PRO:HD3	1.62	0.80
1:B:217:LYS:HG3	1:B:236:GLU:HG3	1.61	0.80
1:B:615:ILE:HD12	1:B:645:TRP:HH2	1.46	0.80
1:C:462:ILE:HG12	1:C:463:THR:N	1.96	0.80
1:C:90:PRO:O	1:C:93:VAL:HG12	1.80	0.80
1:D:318:ILE:HD12	1:D:318:ILE:H	1.45	0.80
2:R:58:ASP:C	2:R:60:ASN:H	1.85	0.80
1:E:668:SER:HA	2:S:14:GLU:HG3	1.64	0.80
1:B:186:LYS:HE3	1:B:234:LEU:HD12	1.64	0.80
1:B:462:ILE:HG12	1:B:463:THR:N	1.96	0.80
1:A:372:LYS:HG3	1:A:373:LYS:N	1.97	0.80
1:D:615:ILE:HD12	1:D:645:TRP:HH2	1.46	0.80
1:E:177:ILE:HA	1:E:180:ASP:OD2	1.82	0.80
1:A:728:ALA:O	1:A:732:ILE:HG12	1.80	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:170:TYR:HA	1:B:173:ILE:HG22	1.63	0.80
1:E:318:ILE:H	1:E:318:ILE:HD12	1.44	0.80
1:B:182:ILE:O	1:B:187:SER:HB2	1.81	0.79
1:E:170:TYR:HA	1:E:173:ILE:HG22	1.63	0.79
1:A:462:ILE:HG12	1:A:463:THR:N	1.97	0.79
1:E:480:ASN:HD21	1:E:483:GLY:H	1.31	0.79
1:E:96:ILE:HG22	1:E:100:LEU:HD11	1.64	0.79
1:A:372:LYS:HG3	1:A:373:LYS:H	1.47	0.79
1:C:530:THR:HG21	2:Q:145:MET:HE3	1.64	0.79
1:C:177:ILE:HA	1:C:180:ASP:OD2	1.81	0.79
1:F:630:ARG:CZ	2:T:83:GLU:HG2	2.12	0.79
1:C:372:LYS:HG3	1:C:373:LYS:H	1.47	0.79
1:E:530:THR:HG21	2:S:145:MET:HE3	1.64	0.79
1:A:530:THR:HG21	2:O:145:MET:HE3	1.65	0.79
1:A:630:ARG:CZ	2:O:83:GLU:HG2	2.13	0.79
1:F:275:GLY:HA2	1:F:278:LYS:CD	2.12	0.79
1:E:736:LEU:HD21	1:E:750:GLN:HE22	1.44	0.79
1:B:372:LYS:HG3	1:B:373:LYS:N	1.98	0.79
1:D:372:LYS:HG3	1:D:373:LYS:N	1.98	0.79
1:D:462:ILE:HG12	1:D:463:THR:N	1.96	0.79
1:E:372:LYS:HG3	1:E:373:LYS:N	1.98	0.79
1:E:615:ILE:HD12	1:E:645:TRP:HH2	1.48	0.79
1:F:462:ILE:HG12	1:F:463:THR:N	1.97	0.79
1:F:728:ALA:O	1:F:732:ILE:HG12	1.82	0.79
1:C:115:LYS:HZ1	1:C:117:LEU:HB2	1.48	0.79
1:F:115:LYS:HZ1	1:F:117:LEU:HB2	1.46	0.79
1:A:480:ASN:HD21	1:A:483:GLY:H	1.31	0.78
1:B:776:LEU:HD23	1:B:776:LEU:O	1.83	0.78
1:D:186:LYS:HA	1:D:190:PRO:HD3	1.65	0.78
1:E:275:GLY:HA2	1:E:278:LYS:HD2	1.65	0.78
1:B:183:SER:O	1:B:187:SER:HB3	1.84	0.78
1:E:275:GLY:HA2	1:E:278:LYS:CD	2.13	0.78
1:F:615:ILE:HD12	1:F:645:TRP:HH2	1.48	0.78
1:B:96:ILE:HG22	1:B:100:LEU:HD11	1.64	0.78
1:C:127:SER:O	1:C:133:GLU:CD	2.21	0.78
1:C:275:GLY:HA2	1:C:278:LYS:HD2	1.66	0.78
1:D:372:LYS:HG3	1:D:373:LYS:H	1.48	0.78
1:D:530:THR:O	1:D:534:ILE:HG13	1.82	0.78
1:F:170:TYR:HA	1:F:173:ILE:HG22	1.63	0.78
1:F:480:ASN:HD21	1:F:483:GLY:H	1.32	0.78
1:F:747:ASN:O	1:F:750:GLN:HB2	1.84	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:480:ASN:HD22	1:A:481:VAL:N	1.81	0.78
1:C:630:ARG:CZ	2:Q:83:GLU:HG2	2.14	0.78
1:E:191:GLU:O	1:E:193:LEU:N	2.17	0.78
2:O:58:ASP:C	2:O:60:ASN:H	1.85	0.78
1:A:170:TYR:HA	1:A:173:ILE:HG22	1.64	0.78
1:D:214:PHE:HB3	1:D:218:LEU:HB3	1.65	0.78
1:D:214:PHE:CD1	1:D:218:LEU:HD23	2.19	0.78
1:A:275:GLY:HA2	1:A:278:LYS:CD	2.14	0.78
1:B:615:ILE:HG23	1:B:619:ILE:HD12	1.66	0.78
1:C:615:ILE:HD12	1:C:645:TRP:HH2	1.49	0.78
1:D:296:LEU:HD23	1:D:296:LEU:H	1.49	0.78
2:P:49:GLN:HA	2:P:52:ILE:HG22	1.66	0.78
1:A:497:LEU:HD13	1:A:556:MET:HG2	1.65	0.78
1:C:175:LYS:NZ	1:C:175:LYS:HB2	1.99	0.78
1:F:275:GLY:HA2	1:F:278:LYS:HD2	1.65	0.78
2:P:58:ASP:C	2:P:60:ASN:H	1.85	0.78
2:Q:9:ILE:CD1	2:Q:69:LEU:HD11	2.14	0.78
1:B:70:GLU:HB2	1:B:107:THR:HG22	1.65	0.78
1:E:462:ILE:HG12	1:E:463:THR:N	1.97	0.78
1:B:275:GLY:HA2	1:B:278:LYS:CD	2.14	0.78
1:C:275:GLY:HA2	1:C:278:LYS:CD	2.14	0.78
1:E:189:ASP:O	1:E:191:GLU:N	2.17	0.78
1:E:372:LYS:HG3	1:E:373:LYS:H	1.48	0.78
1:F:372:LYS:HG3	1:F:373:LYS:H	1.48	0.78
1:A:214:PHE:CD1	1:A:218:LEU:HD23	2.19	0.78
1:A:776:LEU:O	1:A:776:LEU:HD23	1.84	0.78
1:B:372:LYS:HG3	1:B:373:LYS:H	1.47	0.78
1:E:747:ASN:O	1:E:750:GLN:HB2	1.84	0.78
1:C:214:PHE:HB3	1:C:218:LEU:HB3	1.65	0.77
1:C:372:LYS:HG3	1:C:373:LYS:N	1.98	0.77
1:F:214:PHE:HB3	1:F:218:LEU:HB3	1.64	0.77
2:O:9:ILE:CD1	2:O:69:LEU:HD11	2.15	0.77
1:D:630:ARG:CZ	2:R:83:GLU:HG2	2.14	0.77
2:R:9:ILE:CD1	2:R:69:LEU:HD11	2.14	0.77
2:T:49:GLN:HA	2:T:52:ILE:HG22	1.66	0.77
1:A:188:LEU:HD23	1:A:188:LEU:H	1.50	0.77
1:C:214:PHE:CD1	1:C:218:LEU:HD23	2.19	0.77
1:C:497:LEU:HD13	1:C:556:MET:HG2	1.67	0.77
1:D:776:LEU:O	1:D:776:LEU:HD23	1.84	0.77
1:F:70:GLU:HB2	1:F:107:THR:HG22	1.64	0.77
2:O:49:GLN:HA	2:O:52:ILE:HG22	1.66	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:214:PHE:HB3	1:A:218:LEU:HB3	1.66	0.77
1:C:776:LEU:HD23	1:C:776:LEU:O	1.83	0.77
1:E:175:LYS:NZ	1:E:175:LYS:HB2	2.00	0.77
1:E:480:ASN:HD22	1:E:481:VAL:N	1.81	0.77
1:F:372:LYS:HG3	1:F:373:LYS:N	1.98	0.77
1:F:776:LEU:HD23	1:F:776:LEU:O	1.84	0.77
2:P:9:ILE:CD1	2:P:69:LEU:HD11	2.14	0.77
2:T:9:ILE:CD1	2:T:69:LEU:HD11	2.14	0.77
1:B:175:LYS:HB2	1:B:175:LYS:NZ	1.99	0.77
1:B:480:ASN:HD21	1:B:483:GLY:H	1.31	0.77
1:F:175:LYS:HB2	1:F:175:LYS:NZ	2.00	0.77
1:C:186:LYS:O	1:C:188:LEU:O	2.02	0.77
1:D:246:SER:O	1:D:250:ALA:HB2	1.85	0.77
1:D:480:ASN:HD21	1:D:483:GLY:H	1.32	0.77
1:C:188:LEU:HD23	1:C:188:LEU:H	1.48	0.77
1:F:480:ASN:HD22	1:F:481:VAL:N	1.82	0.77
2:Q:37:ARG:HA	2:Q:41:GLN:O	1.84	0.77
1:B:530:THR:O	1:B:534:ILE:HG13	1.85	0.77
1:B:668:SER:HA	2:P:14:GLU:HG3	1.67	0.77
1:D:275:GLY:HA2	1:D:278:LYS:CD	2.15	0.77
1:E:142:VAL:HG22	1:E:154:ILE:HG23	1.67	0.77
1:E:776:LEU:HD23	1:E:776:LEU:O	1.84	0.77
1:B:480:ASN:HD22	1:B:481:VAL:N	1.81	0.77
1:D:175:LYS:HB2	1:D:175:LYS:NZ	1.99	0.77
1:E:246:SER:O	1:E:250:ALA:HB2	1.85	0.77
1:B:275:GLY:HA2	1:B:278:LYS:HD2	1.66	0.77
1:A:788:ASP:O	1:A:792:VAL:HG23	1.85	0.77
1:B:127:SER:O	1:B:133:GLU:CD	2.24	0.77
1:E:788:ASP:O	1:E:792:VAL:HG23	1.85	0.77
1:A:275:GLY:HA2	1:A:278:LYS:HD2	1.66	0.76
1:B:530:THR:HG21	2:P:145:MET:HE3	1.67	0.76
1:D:183:SER:O	1:D:187:SER:HB3	1.85	0.76
1:F:788:ASP:O	1:F:792:VAL:HG23	1.85	0.76
2:Q:49:GLN:HA	2:Q:52:ILE:HG22	1.67	0.76
2:Q:58:ASP:C	2:Q:60:ASN:H	1.85	0.76
2:R:100:ILE:HB	2:R:136:VAL:HG23	1.67	0.76
1:A:530:THR:O	1:A:534:ILE:HG13	1.85	0.76
1:D:497:LEU:HD13	1:D:556:MET:HG2	1.67	0.76
1:D:615:ILE:HG23	1:D:619:ILE:HD12	1.67	0.76
2:R:49:GLN:HA	2:R:52:ILE:HG22	1.66	0.76
1:A:747:ASN:O	1:A:750:GLN:HB2	1.85	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:214:PHE:HB3	1:B:218:LEU:HB3	1.66	0.76
1:C:747:ASN:O	1:C:750:GLN:HB2	1.84	0.76
1:D:480:ASN:HD22	1:D:481:VAL:N	1.82	0.76
2:R:37:ARG:HA	2:R:41:GLN:O	1.85	0.76
2:S:49:GLN:HA	2:S:52:ILE:HG22	1.66	0.76
1:A:345:THR:HB	1:A:491:ASP:HB3	1.68	0.76
1:D:275:GLY:HA2	1:D:278:LYS:HD2	1.68	0.76
1:E:296:LEU:HD23	1:E:296:LEU:H	1.49	0.76
1:C:480:ASN:HD22	1:C:481:VAL:N	1.82	0.76
1:C:788:ASP:O	1:C:792:VAL:HG23	1.86	0.76
2:S:58:ASP:C	2:S:60:ASN:H	1.86	0.76
2:T:138:TYR:O	2:T:142:VAL:HG23	1.86	0.76
1:A:615:ILE:HG23	1:A:619:ILE:HD12	1.67	0.76
1:B:127:SER:O	1:B:133:GLU:OE1	2.04	0.76
1:B:497:LEU:HD13	1:B:556:MET:HG2	1.66	0.76
1:E:186:LYS:HA	1:E:190:PRO:HD3	1.66	0.76
1:F:214:PHE:CD1	1:F:218:LEU:HD23	2.20	0.76
2:P:100:ILE:HB	2:P:136:VAL:HG23	1.66	0.76
1:A:142:VAL:HG22	1:A:154:ILE:HG23	1.67	0.76
1:E:345:THR:HB	1:E:491:ASP:HB3	1.68	0.76
2:S:9:ILE:CD1	2:S:69:LEU:HD11	2.15	0.76
1:A:615:ILE:HD12	1:A:645:TRP:HH2	1.51	0.76
1:B:142:VAL:HG22	1:B:154:ILE:HG23	1.67	0.76
2:O:100:ILE:HB	2:O:136:VAL:HG23	1.66	0.76
2:Q:100:ILE:HB	2:Q:136:VAL:HG23	1.67	0.76
2:S:100:ILE:HB	2:S:136:VAL:HG23	1.66	0.76
1:C:615:ILE:HG23	1:C:619:ILE:HD12	1.68	0.76
1:E:105:TYR:HB2	1:E:153:ILE:HG12	1.68	0.76
1:E:214:PHE:HB3	1:E:218:LEU:HB3	1.67	0.76
1:A:296:LEU:HD23	1:A:296:LEU:H	1.49	0.76
1:B:76:LEU:O	1:B:80:GLN:HB2	1.86	0.76
2:S:37:ARG:HA	2:S:41:GLN:O	1.85	0.76
2:T:100:ILE:HB	2:T:136:VAL:HG23	1.67	0.76
1:B:329:ARG:HD2	1:B:590:ASP:OD2	1.86	0.75
1:C:188:LEU:HD23	1:C:188:LEU:N	2.01	0.75
1:D:142:VAL:HG22	1:D:154:ILE:HG23	1.69	0.75
1:E:192:PHE:HD1	1:E:192:PHE:H	1.33	0.75
1:F:188:LEU:HD23	1:F:188:LEU:H	1.50	0.75
1:F:345:THR:HB	1:F:491:ASP:HB3	1.68	0.75
1:B:788:ASP:O	1:B:792:VAL:HG23	1.85	0.75
1:C:329:ARG:HD2	1:C:590:ASP:OD2	1.86	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:530:THR:O	1:C:534:ILE:HG13	1.86	0.75
1:D:747:ASN:O	1:D:750:GLN:HB2	1.85	0.75
1:D:788:ASP:O	1:D:792:VAL:HG23	1.85	0.75
1:E:70:GLU:HB2	1:E:107:THR:HG22	1.68	0.75
1:F:329:ARG:HD2	1:F:590:ASP:OD2	1.87	0.75
1:F:497:LEU:HD13	1:F:556:MET:HG2	1.66	0.75
1:D:154:ILE:HG13	1:D:171:TYR:CE1	2.22	0.75
1:B:784:GLU:HG3	1:B:785:ASN:H	1.52	0.75
1:C:154:ILE:HG13	1:C:171:TYR:CE1	2.22	0.75
1:C:480:ASN:HD21	1:C:483:GLY:H	1.33	0.75
1:D:185:ASP:O	1:D:190:PRO:HG3	1.86	0.75
1:E:630:ARG:CZ	2:S:83:GLU:HG2	2.16	0.75
1:F:154:ILE:HG13	1:F:171:TYR:CE1	2.21	0.75
1:B:214:PHE:CD1	1:B:218:LEU:HD23	2.20	0.75
1:B:345:THR:HB	1:B:491:ASP:HB3	1.68	0.75
1:E:89:ILE:HG22	1:E:93:VAL:CG1	2.16	0.75
2:O:37:ARG:HA	2:O:41:GLN:O	1.85	0.75
2:T:37:ARG:HA	2:T:41:GLN:O	1.84	0.75
1:A:175:LYS:HB2	1:A:175:LYS:NZ	2.02	0.75
1:B:246:SER:O	1:B:250:ALA:HB2	1.86	0.75
1:B:747:ASN:O	1:B:750:GLN:HB2	1.85	0.75
1:F:530:THR:O	1:F:534:ILE:HG13	1.86	0.75
2:P:37:ARG:HA	2:P:41:GLN:O	1.85	0.75
1:B:630:ARG:CZ	2:P:83:GLU:HG2	2.17	0.75
1:A:115:LYS:HB3	1:A:115:LYS:HZ2	1.52	0.75
2:S:138:TYR:O	2:S:142:VAL:HG23	1.87	0.75
1:C:784:GLU:HG3	1:C:785:ASN:H	1.52	0.75
1:E:161:ILE:CG2	1:E:168:GLU:HB2	2.16	0.75
1:F:746:LYS:O	1:F:750:GLN:HG2	1.87	0.75
1:C:345:THR:HB	1:C:491:ASP:HB3	1.68	0.75
1:D:182:ILE:O	1:D:187:SER:HB2	1.87	0.75
1:F:246:SER:O	1:F:250:ALA:HB2	1.87	0.75
2:O:138:TYR:O	2:O:142:VAL:HG23	1.86	0.75
2:R:117:THR:HG23	2:R:120:GLU:HB2	1.69	0.75
1:D:345:THR:HB	1:D:491:ASP:HB3	1.69	0.74
1:E:615:ILE:HG23	1:E:619:ILE:HD12	1.68	0.74
1:F:142:VAL:HG22	1:F:154:ILE:HG23	1.69	0.74
1:F:186:LYS:HE3	1:F:234:LEU:CD1	2.17	0.74
1:B:743:PRO:HA	1:B:746:LYS:HB3	1.70	0.74
1:D:462:ILE:HD11	1:D:466:GLY:HA2	1.69	0.74
1:E:462:ILE:HD11	1:E:466:GLY:HA2	1.69	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:530:THR:O	1:E:534:ILE:HG13	1.86	0.74
1:E:718:ARG:NH1	1:E:767:GLN:HE21	1.85	0.74
2:Q:117:THR:HG23	2:Q:120:GLU:HB2	1.69	0.74
1:A:185:ASP:O	1:A:190:PRO:HG3	1.86	0.74
1:A:246:SER:O	1:A:250:ALA:HB2	1.87	0.74
1:C:183:SER:O	1:C:187:SER:HB3	1.87	0.74
1:C:192:PHE:H	1:C:192:PHE:HD1	1.34	0.74
1:D:89:ILE:HG22	1:D:93:VAL:CG1	2.17	0.74
1:A:115:LYS:HZ1	1:A:117:LEU:HB2	1.51	0.74
1:A:183:SER:O	1:A:187:SER:HB3	1.87	0.74
1:B:618:ASN:O	1:B:622:LYS:HB3	1.88	0.74
1:C:296:LEU:HD23	1:C:296:LEU:H	1.48	0.74
1:E:497:LEU:HD13	1:E:556:MET:HG2	1.67	0.74
2:P:33:GLY:O	2:P:37:ARG:HG3	1.86	0.74
2:T:117:THR:HG23	2:T:120:GLU:HB2	1.69	0.74
1:A:189:ASP:O	1:A:191:GLU:N	2.21	0.74
1:E:214:PHE:CD1	1:E:218:LEU:HD23	2.21	0.74
1:E:186:LYS:HE3	1:E:234:LEU:CD1	2.17	0.74
1:F:635:ILE:N	1:F:635:ILE:HD12	2.03	0.74
1:F:715:GLU:HA	1:F:718:ARG:NH1	2.02	0.74
1:F:89:ILE:HG22	1:F:93:VAL:CG1	2.16	0.74
1:A:664:ILE:HG21	2:O:15:ALA:HB2	1.70	0.74
2:S:117:THR:HG23	2:S:120:GLU:HB2	1.70	0.74
1:C:246:SER:O	1:C:250:ALA:HB2	1.86	0.74
1:F:105:TYR:HB2	1:F:153:ILE:HG12	1.68	0.74
2:O:33:GLY:O	2:O:37:ARG:HG3	1.87	0.74
1:B:664:ILE:HG21	2:P:15:ALA:HB2	1.70	0.74
2:Q:138:TYR:O	2:Q:142:VAL:HG23	1.87	0.74
1:A:142:VAL:HG13	1:A:154:ILE:CD1	2.18	0.74
1:B:142:VAL:HG13	1:B:154:ILE:CD1	2.18	0.74
1:B:296:LEU:HD23	1:B:296:LEU:H	1.50	0.74
1:E:154:ILE:HG13	1:E:171:TYR:CE1	2.21	0.74
1:E:183:SER:O	1:E:187:SER:HB3	1.88	0.74
1:F:142:VAL:HG13	1:F:154:ILE:CD1	2.18	0.74
1:A:743:PRO:HA	1:A:746:LYS:HB3	1.70	0.74
1:C:715:GLU:HA	1:C:718:ARG:NH1	2.02	0.74
1:D:186:LYS:HE3	1:D:234:LEU:CD1	2.17	0.74
1:D:715:GLU:HA	1:D:718:ARG:NH1	2.02	0.74
2:O:117:THR:HG23	2:O:120:GLU:HB2	1.70	0.74
2:R:138:TYR:O	2:R:142:VAL:HG23	1.88	0.74
1:B:154:ILE:HG13	1:B:171:TYR:CE1	2.23	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:142:VAL:HG22	1:C:154:ILE:HG23	1.70	0.74
1:D:784:GLU:HG3	1:D:785:ASN:H	1.51	0.74
1:F:296:LEU:H	1:F:296:LEU:HD23	1.49	0.74
1:D:664:ILE:HG21	2:R:15:ALA:HB2	1.70	0.74
1:E:664:ILE:HG21	2:S:15:ALA:HB2	1.69	0.74
1:C:664:ILE:HG21	2:Q:15:ALA:HB2	1.70	0.74
1:A:678:VAL:HG22	1:A:745:TYR:CE2	2.23	0.73
1:C:678:VAL:HG22	1:C:745:TYR:CE2	2.23	0.73
1:D:105:TYR:HB2	1:D:153:ILE:HG12	1.69	0.73
1:D:329:ARG:HD2	1:D:590:ASP:OD2	1.88	0.73
1:E:746:LYS:O	1:E:750:GLN:HG2	1.89	0.73
1:D:115:LYS:HZ2	1:D:115:LYS:HB3	1.52	0.73
1:E:188:LEU:H	1:E:188:LEU:HD23	1.52	0.73
1:E:715:GLU:HA	1:E:718:ARG:NH1	2.02	0.73
2:P:117:THR:HG23	2:P:120:GLU:HB2	1.70	0.73
2:T:33:GLY:O	2:T:37:ARG:HG3	1.87	0.73
1:A:154:ILE:HG13	1:A:171:TYR:CE1	2.23	0.73
1:A:635:ILE:N	1:A:635:ILE:HD12	2.03	0.73
1:A:784:GLU:HG3	1:A:785:ASN:H	1.52	0.73
1:D:115:LYS:HZ1	1:D:117:LEU:HB2	1.51	0.73
1:E:142:VAL:HG13	1:E:154:ILE:CD1	2.17	0.73
1:E:329:ARG:HD2	1:E:590:ASP:OD2	1.87	0.73
1:F:615:ILE:HG23	1:F:619:ILE:HD12	1.68	0.73
1:B:462:ILE:HD11	1:B:466:GLY:HA2	1.69	0.73
1:B:746:LYS:O	1:B:750:GLN:HG2	1.88	0.73
1:C:182:ILE:O	1:C:187:SER:HB2	1.88	0.73
1:C:746:LYS:O	1:C:750:GLN:HG2	1.88	0.73
1:F:196:ILE:HA	1:F:199:LEU:HG	1.70	0.73
1:C:462:ILE:HD11	1:C:466:GLY:HA2	1.69	0.73
1:D:746:LYS:O	1:D:750:GLN:HG2	1.89	0.73
1:F:161:ILE:CG2	1:F:168:GLU:HB2	2.17	0.73
1:A:182:ILE:O	1:A:187:SER:HB2	1.87	0.73
1:A:192:PHE:HD1	1:A:192:PHE:H	1.34	0.73
1:B:715:GLU:HA	1:B:718:ARG:NH1	2.02	0.73
1:C:618:ASN:O	1:C:622:LYS:HB3	1.88	0.73
1:D:678:VAL:HG22	1:D:745:TYR:CE2	2.24	0.73
1:A:746:LYS:O	1:A:750:GLN:HG2	1.88	0.73
1:B:105:TYR:HB2	1:B:153:ILE:HG12	1.70	0.73
2:P:138:TYR:O	2:P:142:VAL:HG23	1.87	0.73
2:P:97:ASN:H	2:P:97:ASN:HD22	1.37	0.73
1:A:715:GLU:HA	1:A:718:ARG:NH1	2.03	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:196:ILE:HA	1:B:199:LEU:HG	1.70	0.73
1:F:462:ILE:HD11	1:F:466:GLY:HA2	1.69	0.73
1:F:784:GLU:HG3	1:F:785:ASN:H	1.52	0.73
1:F:664:ILE:HG21	2:T:15:ALA:HB2	1.70	0.73
1:B:288:VAL:HG23	1:B:289:GLU:H	1.54	0.73
2:O:97:ASN:H	2:O:97:ASN:ND2	1.87	0.73
2:S:33:GLY:O	2:S:37:ARG:HG3	1.89	0.73
1:A:288:VAL:HG23	1:A:289:GLU:H	1.54	0.73
2:R:33:GLY:O	2:R:37:ARG:HG3	1.88	0.73
1:A:329:ARG:HD2	1:A:590:ASP:OD2	1.89	0.72
1:B:71:PHE:HB3	1:B:108:ASP:HB2	1.71	0.72
1:D:142:VAL:HG13	1:D:154:ILE:CD1	2.17	0.72
1:D:377:GLN:O	1:D:381:GLU:HB2	1.89	0.72
1:A:377:GLN:O	1:A:381:GLU:HB2	1.89	0.72
1:A:462:ILE:HD11	1:A:466:GLY:HA2	1.70	0.72
1:A:618:ASN:O	1:A:622:LYS:HB3	1.88	0.72
1:D:618:ASN:O	1:D:622:LYS:HB3	1.88	0.72
1:E:784:GLU:HG3	1:E:785:ASN:H	1.51	0.72
1:F:657:ILE:HG13	1:F:756:ILE:CD1	2.19	0.72
2:T:97:ASN:N	2:T:97:ASN:HD22	1.87	0.72
1:A:186:LYS:HE3	1:A:234:LEU:CD1	2.17	0.72
1:C:196:ILE:HA	1:C:199:LEU:HG	1.72	0.72
1:E:196:ILE:HA	1:E:199:LEU:HG	1.70	0.72
1:E:412:GLU:C	1:E:414:LYS:H	1.92	0.72
1:E:503:GLU:OE1	1:E:506:LYS:HD3	1.89	0.72
1:E:743:PRO:HA	1:E:746:LYS:HB3	1.70	0.72
1:A:131:ARG:HB2	1:A:170:TYR:HE2	1.55	0.72
1:B:412:GLU:C	1:B:414:LYS:H	1.92	0.72
1:C:377:GLN:O	1:C:381:GLU:HB2	1.89	0.72
1:D:503:GLU:OE1	1:D:506:LYS:HD3	1.89	0.72
1:F:186:LYS:HA	1:F:190:PRO:HD3	1.71	0.72
1:C:142:VAL:HG13	1:C:154:ILE:CD1	2.19	0.72
1:C:70:GLU:HB2	1:C:107:THR:HG22	1.70	0.72
1:F:112:VAL:O	1:F:114:HIS:N	2.23	0.72
2:O:97:ASN:H	2:O:97:ASN:HD22	1.37	0.72
2:S:97:ASN:N	2:S:97:ASN:HD22	1.86	0.72
1:C:412:GLU:C	1:C:414:LYS:H	1.91	0.72
2:P:97:ASN:ND2	2:P:97:ASN:H	1.87	0.72
1:A:145:LYS:HB3	1:A:151:LYS:HB2	1.72	0.72
1:B:377:GLN:O	1:B:381:GLU:HB2	1.90	0.72
1:B:718:ARG:NH1	1:B:767:GLN:HE21	1.87	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:145:LYS:HB3	1:D:151:LYS:HB2	1.72	0.72
1:F:618:ASN:O	1:F:622:LYS:HB3	1.88	0.72
1:F:71:PHE:HB3	1:F:108:ASP:HB2	1.70	0.72
2:S:97:ASN:ND2	2:S:97:ASN:H	1.87	0.72
2:T:97:ASN:HD22	2:T:97:ASN:H	1.38	0.72
1:C:288:VAL:HG23	1:C:289:GLU:H	1.54	0.72
1:C:743:PRO:HA	1:C:746:LYS:HB3	1.71	0.72
1:F:743:PRO:HA	1:F:746:LYS:HB3	1.70	0.72
2:O:97:ASN:N	2:O:97:ASN:HD22	1.86	0.72
2:P:97:ASN:N	2:P:97:ASN:HD22	1.86	0.72
1:A:196:ILE:HA	1:A:199:LEU:HG	1.72	0.72
1:D:71:PHE:HB3	1:D:108:ASP:HB2	1.71	0.72
1:D:635:ILE:N	1:D:635:ILE:HD12	2.04	0.72
1:A:503:GLU:OE1	1:A:506:LYS:HD3	1.90	0.71
1:B:635:ILE:N	1:B:635:ILE:HD12	2.04	0.71
1:C:112:VAL:O	1:C:114:HIS:N	2.22	0.71
1:C:105:TYR:HB2	1:C:153:ILE:HG12	1.69	0.71
1:C:635:ILE:HD12	1:C:635:ILE:N	2.04	0.71
1:D:743:PRO:HA	1:D:746:LYS:HB3	1.71	0.71
1:E:288:VAL:HG23	1:E:289:GLU:H	1.55	0.71
1:A:105:TYR:HB2	1:A:153:ILE:HG12	1.71	0.71
1:D:191:GLU:O	1:D:192:PHE:C	2.28	0.71
1:D:412:GLU:C	1:D:414:LYS:H	1.92	0.71
1:E:635:ILE:N	1:E:635:ILE:HD12	2.05	0.71
1:F:192:PHE:HD1	1:F:192:PHE:H	1.36	0.71
2:R:63:ILE:HB	2:R:67:GLU:HB3	1.72	0.71
1:B:188:LEU:HD23	1:B:188:LEU:N	2.04	0.71
1:E:618:ASN:O	1:E:622:LYS:HB3	1.89	0.71
1:F:288:VAL:HG23	1:F:289:GLU:H	1.55	0.71
1:F:377:GLN:O	1:F:381:GLU:HB2	1.91	0.71
1:F:503:GLU:OE1	1:F:506:LYS:HD3	1.90	0.71
1:F:715:GLU:OE1	1:F:767:GLN:NE2	2.24	0.71
1:C:161:ILE:CG2	1:C:168:GLU:HB2	2.20	0.71
2:R:97:ASN:HD22	2:R:97:ASN:N	1.87	0.71
1:A:89:ILE:CG2	1:A:93:VAL:HG11	2.20	0.71
1:B:678:VAL:HG22	1:B:745:TYR:CE2	2.26	0.71
1:C:152:LEU:HD22	1:C:154:ILE:HD11	1.71	0.71
1:C:472:ARG:HH11	1:C:472:ARG:HB3	1.56	0.71
1:F:131:ARG:HB2	1:F:170:TYR:HE2	1.56	0.71
2:R:97:ASN:ND2	2:R:97:ASN:H	1.87	0.71
1:A:71:PHE:HB3	1:A:108:ASP:HB2	1.71	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:472:ARG:HB3	1:A:472:ARG:HH11	1.56	0.71
1:C:657:ILE:HG13	1:C:756:ILE:CD1	2.20	0.71
1:F:182:ILE:O	1:F:187:SER:HB2	1.90	0.71
2:P:102:ALA:CB	2:P:125:ILE:HG13	2.20	0.71
1:B:503:GLU:OE1	1:B:506:LYS:HD3	1.90	0.71
1:C:186:LYS:HE3	1:C:234:LEU:CD1	2.19	0.71
1:D:324:THR:HB	1:D:499:PRO:CA	2.21	0.71
1:E:112:VAL:O	1:E:114:HIS:N	2.24	0.71
1:E:152:LEU:HD22	1:E:154:ILE:HD11	1.72	0.71
1:E:97:TYR:HA	1:E:100:LEU:HD12	1.72	0.71
1:A:234:LEU:O	1:A:238:GLN:HG3	1.91	0.71
1:B:472:ARG:HB3	1:B:472:ARG:HH11	1.56	0.71
1:D:288:VAL:HG23	1:D:289:GLU:H	1.54	0.71
1:E:71:PHE:HB3	1:E:108:ASP:HB2	1.70	0.71
1:F:678:VAL:HG22	1:F:745:TYR:CE2	2.26	0.71
1:E:141:PHE:H	1:E:141:PHE:HD1	1.39	0.71
1:E:377:GLN:O	1:E:381:GLU:HB2	1.90	0.71
1:E:678:VAL:HG22	1:E:745:TYR:CE2	2.26	0.71
1:F:152:LEU:HD22	1:F:154:ILE:HD11	1.73	0.71
2:S:102:ALA:CB	2:S:125:ILE:HG13	2.21	0.71
1:C:71:PHE:HB3	1:C:108:ASP:HB2	1.70	0.70
1:D:175:LYS:HZ2	1:D:175:LYS:HB2	1.55	0.70
2:Q:33:GLY:O	2:Q:37:ARG:HG3	1.90	0.70
1:D:188:LEU:H	1:D:188:LEU:HD23	1.55	0.70
1:D:89:ILE:CG2	1:D:93:VAL:HG11	2.19	0.70
2:P:63:ILE:HB	2:P:67:GLU:HB3	1.73	0.70
2:Q:102:ALA:CB	2:Q:125:ILE:HG13	2.20	0.70
2:S:63:ILE:HB	2:S:67:GLU:HB3	1.73	0.70
1:A:412:GLU:C	1:A:414:LYS:H	1.92	0.70
1:C:234:LEU:O	1:C:238:GLN:HG3	1.92	0.70
1:C:497:LEU:CD1	1:C:556:MET:HG2	2.21	0.70
1:F:497:LEU:CD1	1:F:556:MET:HG2	2.22	0.70
2:O:102:ALA:CB	2:O:125:ILE:HG13	2.21	0.70
2:O:63:ILE:HB	2:O:67:GLU:HB3	1.73	0.70
1:C:191:GLU:O	1:C:193:LEU:N	2.23	0.70
1:D:112:VAL:O	1:D:114:HIS:N	2.24	0.70
1:A:112:VAL:O	1:A:114:HIS:N	2.24	0.70
1:A:497:LEU:CD1	1:A:556:MET:HG2	2.21	0.70
1:A:305:SER:HB2	1:A:594:PHE:CD1	2.27	0.70
1:B:112:VAL:O	1:B:114:HIS:N	2.23	0.70
1:B:78:LYS:HD2	1:B:156:ILE:HD13	1.73	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:76:LEU:O	1:C:80:GLN:HB2	1.92	0.70
1:F:183:SER:O	1:F:187:SER:HB3	1.90	0.70
1:F:185:ASP:O	1:F:190:PRO:HG3	1.91	0.70
1:F:412:GLU:C	1:F:414:LYS:H	1.92	0.70
1:B:161:ILE:CG2	1:B:168:GLU:HB2	2.20	0.70
1:B:191:GLU:O	1:B:192:PHE:C	2.30	0.70
1:C:165:GLN:NE2	1:C:252:ASP:HB3	2.07	0.70
1:D:165:GLN:NE2	1:D:252:ASP:HB3	2.07	0.70
1:D:337:ASN:ND2	1:D:412:GLU:OE2	2.24	0.70
1:E:145:LYS:HB3	1:E:151:LYS:HB2	1.74	0.70
1:E:182:ILE:O	1:E:187:SER:HB2	1.92	0.70
2:T:97:ASN:ND2	2:T:97:ASN:H	1.87	0.70
1:C:181:ILE:HB	1:C:238:GLN:OE1	1.92	0.70
1:D:181:ILE:HB	1:D:238:GLN:OE1	1.91	0.70
1:F:472:ARG:HH11	1:F:472:ARG:HB3	1.57	0.70
1:A:152:LEU:HD22	1:A:154:ILE:HD11	1.74	0.70
1:B:217:LYS:CG	1:B:236:GLU:HG3	2.22	0.70
1:F:141:PHE:H	1:F:141:PHE:HD1	1.39	0.70
1:A:89:ILE:HG22	1:A:93:VAL:CG1	2.17	0.70
1:B:192:PHE:HD1	1:B:192:PHE:H	1.39	0.70
1:D:141:PHE:H	1:D:141:PHE:HD1	1.39	0.70
1:D:761:GLN:HE22	1:D:773:PHE:H	1.40	0.70
1:D:78:LYS:HD2	1:D:156:ILE:HD13	1.74	0.70
1:E:196:ILE:HG23	1:E:199:LEU:HD12	1.74	0.70
2:R:102:ALA:CB	2:R:125:ILE:HG13	2.22	0.70
1:A:217:LYS:NZ	1:A:233:ASN:HB3	2.07	0.70
1:A:540:ARG:HD3	1:A:627:TYR:CZ	2.27	0.70
1:C:503:GLU:OE1	1:C:506:LYS:HD3	1.91	0.70
1:C:78:LYS:HD2	1:C:156:ILE:HD13	1.74	0.70
1:D:472:ARG:HB3	1:D:472:ARG:HH11	1.56	0.70
1:D:540:ARG:HD3	1:D:627:TYR:CZ	2.27	0.70
1:E:165:GLN:NE2	1:E:252:ASP:HB3	2.07	0.70
1:F:462:ILE:HG12	1:F:463:THR:H	1.57	0.70
1:B:89:ILE:CG2	1:B:93:VAL:HG11	2.19	0.69
1:D:196:ILE:HA	1:D:199:LEU:HG	1.72	0.69
1:F:145:LYS:HB3	1:F:151:LYS:HB2	1.74	0.69
1:F:305:SER:HB2	1:F:594:PHE:CD1	2.26	0.69
1:F:697:ILE:HD13	1:F:732:ILE:HD13	1.74	0.69
2:Q:97:ASN:H	2:Q:97:ASN:ND2	1.89	0.69
1:A:217:LYS:CG	1:A:236:GLU:HG3	2.22	0.69
1:A:324:THR:HB	1:A:499:PRO:CA	2.21	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:462:ILE:HG12	1:A:463:THR:H	1.57	0.69
1:B:165:GLN:NE2	1:B:252:ASP:HB3	2.07	0.69
1:B:179:LEU:O	1:B:183:SER:HB2	1.93	0.69
1:E:324:THR:HB	1:E:499:PRO:CA	2.22	0.69
1:E:337:ASN:ND2	1:E:412:GLU:OE2	2.25	0.69
1:E:497:LEU:CD1	1:E:556:MET:HG2	2.22	0.69
1:E:761:GLN:HE22	1:E:773:PHE:H	1.40	0.69
2:S:97:ASN:HD22	2:S:97:ASN:H	1.38	0.69
1:B:305:SER:HB2	1:B:594:PHE:CD1	2.27	0.69
1:B:761:GLN:HE22	1:B:773:PHE:H	1.40	0.69
1:C:179:LEU:O	1:C:183:SER:HB2	1.93	0.69
1:E:78:LYS:HD2	1:E:156:ILE:HD13	1.74	0.69
1:E:472:ARG:HB3	1:E:472:ARG:HH11	1.57	0.69
1:F:181:ILE:HB	1:F:238:GLN:OE1	1.92	0.69
2:Q:92:PHE:O	2:Q:94:LYS:N	2.24	0.69
1:B:152:LEU:HD22	1:B:154:ILE:HD11	1.75	0.69
1:B:540:ARG:HD3	1:B:627:TYR:CZ	2.28	0.69
1:B:657:ILE:HG13	1:B:756:ILE:CD1	2.22	0.69
1:B:97:TYR:HA	1:B:100:LEU:HD12	1.73	0.69
1:C:97:TYR:HA	1:C:100:LEU:HD12	1.74	0.69
1:E:217:LYS:NZ	1:E:233:ASN:HB3	2.07	0.69
1:A:181:ILE:HB	1:A:238:GLN:OE1	1.93	0.69
1:B:615:ILE:HD12	1:B:645:TRP:CH2	2.28	0.69
1:D:234:LEU:O	1:D:238:GLN:HG3	1.93	0.69
1:D:657:ILE:HG13	1:D:756:ILE:CD1	2.22	0.69
1:B:337:ASN:ND2	1:B:412:GLU:OE2	2.26	0.69
1:C:761:GLN:HE22	1:C:773:PHE:H	1.40	0.69
1:D:462:ILE:HG12	1:D:463:THR:H	1.57	0.69
1:E:414:LYS:NZ	1:E:419:ILE:O	2.25	0.69
1:E:697:ILE:HD13	1:E:732:ILE:HD13	1.75	0.69
2:R:97:ASN:HD22	2:R:97:ASN:H	1.38	0.69
1:D:131:ARG:HB2	1:D:170:TYR:HE2	1.57	0.69
1:D:217:LYS:CG	1:D:236:GLU:HG3	2.22	0.69
1:E:234:LEU:O	1:E:238:GLN:HG3	1.92	0.69
1:B:196:ILE:HG23	1:B:199:LEU:HD12	1.74	0.69
1:B:234:LEU:O	1:B:238:GLN:HG3	1.92	0.69
1:C:337:ASN:ND2	1:C:412:GLU:OE2	2.26	0.69
1:D:697:ILE:HD13	1:D:732:ILE:HD13	1.74	0.69
1:F:217:LYS:CG	1:F:236:GLU:HG3	2.22	0.69
1:B:186:LYS:HE3	1:B:234:LEU:CD1	2.22	0.69
1:C:115:LYS:HZ2	1:C:115:LYS:HB3	1.56	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:217:LYS:CG	1:C:236:GLU:HG3	2.22	0.69
1:C:715:GLU:OE1	1:C:767:GLN:NE2	2.26	0.69
1:D:400:LYS:HE3	1:D:475:GLU:HG2	1.75	0.69
1:D:74:GLU:HB2	1:D:78:LYS:HB3	1.75	0.69
1:A:337:ASN:ND2	1:A:412:GLU:OE2	2.25	0.69
1:A:761:GLN:HE22	1:A:773:PHE:H	1.41	0.69
1:C:462:ILE:HG12	1:C:463:THR:H	1.57	0.69
1:D:305:SER:HB2	1:D:594:PHE:CD1	2.26	0.69
1:D:97:TYR:HA	1:D:100:LEU:HD12	1.73	0.69
1:E:131:ARG:HB2	1:E:170:TYR:HE2	1.57	0.69
1:E:181:ILE:HB	1:E:238:GLN:OE1	1.92	0.69
1:E:89:ILE:CG2	1:E:93:VAL:HG11	2.19	0.69
1:F:165:GLN:NE2	1:F:252:ASP:HB3	2.07	0.69
2:Q:63:ILE:HB	2:Q:67:GLU:HB3	1.73	0.69
2:Q:97:ASN:N	2:Q:97:ASN:HD22	1.88	0.69
1:D:192:PHE:HB3	1:D:196:ILE:HD11	1.74	0.69
1:E:462:ILE:HG12	1:E:463:THR:H	1.58	0.69
1:A:161:ILE:HA	1:A:167:LYS:HD2	1.74	0.68
1:D:497:LEU:CD1	1:D:556:MET:HG2	2.23	0.68
1:E:74:GLU:HB2	1:E:78:LYS:HB3	1.75	0.68
1:E:657:ILE:HG13	1:E:756:ILE:CD1	2.23	0.68
1:F:234:LEU:O	1:F:238:GLN:HG3	1.93	0.68
1:F:324:THR:HB	1:F:499:PRO:CA	2.23	0.68
1:F:337:ASN:ND2	1:F:412:GLU:OE2	2.26	0.68
1:F:540:ARG:HD3	1:F:627:TYR:CZ	2.28	0.68
2:O:92:PHE:O	2:O:94:LYS:N	2.25	0.68
2:P:92:PHE:O	2:P:94:LYS:N	2.26	0.68
2:T:63:ILE:HB	2:T:67:GLU:HB3	1.74	0.68
1:A:697:ILE:HD13	1:A:732:ILE:HD13	1.75	0.68
1:B:181:ILE:HB	1:B:238:GLN:OE1	1.94	0.68
1:C:697:ILE:HD13	1:C:732:ILE:HD13	1.74	0.68
1:B:131:ARG:HB2	1:B:170:TYR:HE2	1.57	0.68
1:B:462:ILE:HG12	1:B:463:THR:H	1.57	0.68
1:C:615:ILE:HD12	1:C:645:TRP:CH2	2.28	0.68
1:D:609:GLU:OE2	1:D:609:GLU:N	2.26	0.68
1:E:128:MET:HB2	1:E:239:HIS:NE2	2.09	0.68
1:E:480:ASN:ND2	1:E:480:ASN:C	2.47	0.68
1:F:192:PHE:HB3	1:F:196:ILE:HD11	1.76	0.68
2:T:102:ALA:CB	2:T:125:ILE:HG13	2.22	0.68
1:B:497:LEU:CD1	1:B:556:MET:HG2	2.22	0.68
1:B:515:LYS:O	1:B:515:LYS:HG2	1.94	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:515:LYS:HG2	1:E:515:LYS:O	1.94	0.68
1:F:97:TYR:HA	1:F:100:LEU:HD12	1.74	0.68
2:Q:97:ASN:H	2:Q:97:ASN:HD22	1.40	0.68
2:S:92:PHE:O	2:S:94:LYS:N	2.26	0.68
1:A:213:LYS:HE3	1:A:264:MET:HG3	1.75	0.68
1:A:609:GLU:OE2	1:A:609:GLU:N	2.27	0.68
1:B:141:PHE:HD1	1:B:141:PHE:H	1.39	0.68
1:B:217:LYS:NZ	1:B:233:ASN:HB3	2.07	0.68
1:C:305:SER:HB2	1:C:594:PHE:CD1	2.28	0.68
1:E:217:LYS:CG	1:E:236:GLU:HG3	2.22	0.68
1:A:165:GLN:NE2	1:A:252:ASP:HB3	2.08	0.68
1:C:540:ARG:HD3	1:C:627:TYR:CZ	2.28	0.68
1:D:414:LYS:NZ	1:D:419:ILE:O	2.26	0.68
1:F:196:ILE:HG23	1:F:199:LEU:HD12	1.76	0.68
1:A:78:LYS:HD2	1:A:156:ILE:HD13	1.74	0.68
1:C:324:THR:HB	1:C:499:PRO:CA	2.23	0.68
1:E:305:SER:HB2	1:E:594:PHE:CD1	2.26	0.68
1:A:141:PHE:H	1:A:141:PHE:HD1	1.39	0.68
1:D:213:LYS:HE3	1:D:264:MET:HG3	1.76	0.68
1:F:179:LEU:O	1:F:183:SER:HB2	1.93	0.68
1:F:89:ILE:CG2	1:F:93:VAL:HG11	2.18	0.68
1:C:141:PHE:HD1	1:C:141:PHE:H	1.39	0.68
1:F:761:GLN:HE22	1:F:773:PHE:H	1.42	0.68
2:Q:6:GLU:HG3	2:Q:7:GLU:N	2.09	0.68
2:R:5:THR:HG23	2:R:8:GLN:CB	2.24	0.68
2:T:83:GLU:O	2:T:87:GLU:HG3	1.94	0.68
1:A:97:TYR:HA	1:A:100:LEU:HD12	1.74	0.68
1:B:161:ILE:HA	1:B:167:LYS:HD2	1.76	0.68
1:C:517:VAL:HB	1:C:525:LYS:HZ2	1.58	0.68
1:D:523:LEU:HD22	2:R:127:GLU:HG2	1.75	0.68
1:E:179:LEU:O	1:E:183:SER:HB2	1.93	0.68
2:P:5:THR:HG23	2:P:8:GLN:CB	2.24	0.68
2:T:92:PHE:O	2:T:94:LYS:N	2.25	0.68
1:B:162:ASN:HA	1:B:165:GLN:HG3	1.76	0.67
1:B:213:LYS:HE3	1:B:264:MET:HG3	1.77	0.67
1:C:414:LYS:NZ	1:C:419:ILE:O	2.25	0.67
1:D:217:LYS:NZ	1:D:233:ASN:HB3	2.07	0.67
2:Q:5:THR:HG23	2:Q:8:GLN:CB	2.25	0.67
1:A:179:LEU:O	1:A:183:SER:HB2	1.94	0.67
1:B:697:ILE:HD13	1:B:732:ILE:HD13	1.76	0.67
1:B:89:ILE:HG22	1:B:93:VAL:CG1	2.17	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:196:ILE:HG23	1:C:199:LEU:HD12	1.75	0.67
1:D:128:MET:HB2	1:D:239:HIS:NE2	2.10	0.67
1:D:179:LEU:O	1:D:183:SER:HB2	1.93	0.67
1:A:657:ILE:HG13	1:A:756:ILE:CD1	2.24	0.67
1:C:213:LYS:HE3	1:C:264:MET:HG3	1.77	0.67
1:C:764:LEU:O	1:C:768:LYS:O	2.13	0.67
1:D:152:LEU:HD22	1:D:154:ILE:HD11	1.75	0.67
1:E:213:LYS:HE3	1:E:264:MET:HG3	1.76	0.67
1:F:162:ASN:HA	1:F:165:GLN:HG3	1.76	0.67
1:F:515:LYS:O	1:F:515:LYS:HG2	1.94	0.67
1:A:540:ARG:NH2	2:O:87:GLU:OE1	2.27	0.67
2:R:30:LYS:CD	2:R:30:LYS:H	2.02	0.67
1:A:210:PHE:O	1:A:214:PHE:HB2	1.95	0.67
1:B:145:LYS:HB2	1:B:151:LYS:HB2	1.75	0.67
1:C:89:ILE:HG22	1:C:93:VAL:CG1	2.19	0.67
1:E:615:ILE:HD12	1:E:645:TRP:CH2	2.29	0.67
2:S:5:THR:HG23	2:S:8:GLN:CB	2.24	0.67
1:F:540:ARG:NH2	2:T:87:GLU:OE1	2.28	0.67
1:C:192:PHE:HB3	1:C:196:ILE:HD11	1.75	0.67
1:E:112:VAL:HG12	1:E:113:GLU:H	1.59	0.67
1:F:74:GLU:HB2	1:F:78:LYS:HB3	1.75	0.67
2:P:6:GLU:HG3	2:P:7:GLU:N	2.10	0.67
1:A:414:LYS:NZ	1:A:419:ILE:O	2.26	0.67
1:A:615:ILE:HD12	1:A:645:TRP:CH2	2.29	0.67
1:A:718:ARG:NH1	1:A:767:GLN:HE21	1.92	0.67
1:C:630:ARG:HG3	1:C:630:ARG:HH11	1.58	0.67
1:F:629:ASN:C	1:F:629:ASN:HD22	1.98	0.67
1:A:400:LYS:HE3	1:A:475:GLU:HG2	1.76	0.67
1:A:792:VAL:O	1:A:796:ILE:HG12	1.95	0.67
1:D:615:ILE:HD12	1:D:645:TRP:CH2	2.27	0.67
1:A:411:GLU:O	1:A:414:LYS:HB2	1.95	0.67
1:A:480:ASN:C	1:A:480:ASN:ND2	2.48	0.67
1:B:210:PHE:O	1:B:214:PHE:HB2	1.95	0.67
1:C:162:ASN:HA	1:C:165:GLN:HG3	1.77	0.67
1:C:131:ARG:HB2	1:C:170:TYR:HE2	1.59	0.67
1:C:792:VAL:O	1:C:796:ILE:HG12	1.95	0.67
1:D:196:ILE:HG23	1:D:199:LEU:HD12	1.76	0.67
1:E:162:ASN:HA	1:E:165:GLN:HG3	1.77	0.67
1:F:133:GLU:O	1:F:133:GLU:HG2	1.93	0.67
1:F:657:ILE:HG13	1:F:756:ILE:HD13	1.77	0.67
2:O:6:GLU:HG3	2:O:7:GLU:N	2.09	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:540:ARG:NH2	2:R:87:GLU:OE1	2.27	0.67
1:B:189:ASP:O	1:B:190:PRO:C	2.27	0.67
1:F:142:VAL:HG13	1:F:154:ILE:HD12	1.77	0.67
1:F:411:GLU:O	1:F:414:LYS:HB2	1.95	0.67
1:F:615:ILE:HD12	1:F:645:TRP:CH2	2.28	0.67
1:A:74:GLU:HB2	1:A:78:LYS:HB3	1.74	0.67
1:B:184:LYS:NZ	1:B:191:GLU:HB2	2.10	0.67
1:B:446:ILE:HG13	1:B:452:GLU:O	1.95	0.67
1:B:609:GLU:N	1:B:609:GLU:OE2	2.28	0.67
1:B:629:ASN:HD22	1:B:629:ASN:C	1.98	0.67
1:C:161:ILE:HA	1:C:167:LYS:HD2	1.76	0.67
1:D:480:ASN:C	1:D:480:ASN:ND2	2.48	0.67
1:E:540:ARG:HD3	1:E:627:TYR:CZ	2.29	0.67
1:F:112:VAL:HG12	1:F:113:GLU:H	1.60	0.67
1:D:165:GLN:C	1:D:167:LYS:H	1.98	0.66
1:D:515:LYS:O	1:D:515:LYS:HG2	1.94	0.66
1:D:630:ARG:HG3	1:D:630:ARG:HH11	1.60	0.66
1:F:78:LYS:HD2	1:F:156:ILE:HD13	1.76	0.66
2:S:117:THR:O	2:S:119:GLU:N	2.29	0.66
2:T:5:THR:HG23	2:T:8:GLN:CB	2.25	0.66
1:A:165:GLN:C	1:A:167:LYS:H	1.98	0.66
1:B:324:THR:HB	1:B:499:PRO:CA	2.22	0.66
1:B:414:LYS:NZ	1:B:419:ILE:O	2.27	0.66
1:C:217:LYS:NZ	1:C:233:ASN:HB3	2.06	0.66
1:C:570:THR:O	1:C:570:THR:OG1	2.11	0.66
1:D:128:MET:HB2	1:D:239:HIS:CE1	2.30	0.66
1:E:609:GLU:N	1:E:609:GLU:OE2	2.27	0.66
2:P:30:LYS:H	2:P:30:LYS:CD	2.01	0.66
1:C:446:ILE:HG13	1:C:452:GLU:O	1.95	0.66
1:F:213:LYS:HE3	1:F:264:MET:HG3	1.77	0.66
1:F:792:VAL:O	1:F:796:ILE:HG12	1.95	0.66
2:O:83:GLU:O	2:O:87:GLU:HG3	1.95	0.66
1:A:515:LYS:O	1:A:515:LYS:HG2	1.96	0.66
1:E:140:ARG:HA	1:E:140:ARG:HE	1.61	0.66
1:F:697:ILE:CD1	1:F:732:ILE:HD13	2.26	0.66
2:O:5:THR:HG23	2:O:8:GLN:CB	2.25	0.66
2:Q:117:THR:O	2:Q:119:GLU:N	2.28	0.66
1:A:162:ASN:HA	1:A:165:GLN:HG3	1.78	0.66
1:B:792:VAL:O	1:B:796:ILE:HG12	1.95	0.66
1:C:400:LYS:HE3	1:C:475:GLU:HG2	1.77	0.66
1:D:161:ILE:HA	1:D:167:LYS:HD2	1.77	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:184:LYS:NZ	1:D:191:GLU:HB2	2.10	0.66
1:D:192:PHE:HD1	1:D:192:PHE:H	1.43	0.66
1:E:792:VAL:O	1:E:796:ILE:HG12	1.95	0.66
2:O:94:LYS:NZ	2:O:94:LYS:HB3	2.10	0.66
1:C:540:ARG:NH2	2:Q:87:GLU:OE1	2.28	0.66
1:A:112:VAL:HG12	1:A:113:GLU:H	1.60	0.66
1:A:196:ILE:HG23	1:A:199:LEU:HD12	1.76	0.66
1:A:597:ASN:HD21	1:A:601:GLU:CB	2.06	0.66
1:C:74:GLU:HB2	1:C:78:LYS:HB3	1.78	0.66
1:E:210:PHE:O	1:E:214:PHE:HB2	1.95	0.66
1:E:349:ASN:HD22	1:E:350:VAL:HG23	1.61	0.66
2:O:117:THR:O	2:O:119:GLU:N	2.29	0.66
2:Q:83:GLU:O	2:Q:87:GLU:HG3	1.95	0.66
2:R:83:GLU:O	2:R:87:GLU:HG3	1.96	0.66
1:F:523:LEU:HD22	2:T:127:GLU:HG2	1.77	0.66
1:B:611:THR:O	1:B:615:ILE:HG13	1.95	0.66
1:D:411:GLU:O	1:D:414:LYS:HB2	1.96	0.66
1:D:611:THR:O	1:D:615:ILE:HG13	1.96	0.66
2:T:6:GLU:HG3	2:T:7:GLU:N	2.10	0.66
1:B:116:GLU:HG3	1:B:117:LEU:HD22	1.77	0.66
1:C:142:VAL:HG13	1:C:154:ILE:HD12	1.78	0.66
1:E:446:ILE:HG13	1:E:452:GLU:O	1.96	0.66
1:E:400:LYS:HE3	1:E:475:GLU:HG2	1.77	0.66
2:T:94:LYS:NZ	2:T:94:LYS:HB3	2.11	0.66
1:B:142:VAL:HG13	1:B:154:ILE:HD12	1.78	0.66
1:B:165:GLN:C	1:B:167:LYS:H	1.99	0.66
1:B:729:TYR:HB2	1:B:756:ILE:HG21	1.77	0.66
1:C:165:GLN:C	1:C:167:LYS:H	1.98	0.66
1:D:570:THR:O	1:D:570:THR:OG1	2.11	0.66
1:E:597:ASN:HD21	1:E:601:GLU:CB	2.04	0.66
1:F:128:MET:HB2	1:F:239:HIS:NE2	2.11	0.66
1:F:446:ILE:HG13	1:F:452:GLU:O	1.95	0.66
2:S:94:LYS:HB3	2:S:94:LYS:NZ	2.09	0.66
1:A:523:LEU:HD22	2:O:127:GLU:HG2	1.77	0.66
1:D:162:ASN:HA	1:D:165:GLN:HG3	1.77	0.66
1:D:234:LEU:HD23	1:D:235:THR:H	1.60	0.66
1:E:411:GLU:O	1:E:414:LYS:HB2	1.95	0.66
1:F:630:ARG:HG3	1:F:630:ARG:HH11	1.61	0.66
2:R:117:THR:O	2:R:119:GLU:N	2.29	0.66
2:R:6:GLU:HG3	2:R:7:GLU:N	2.10	0.66
1:B:657:ILE:HG13	1:B:756:ILE:HD13	1.76	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:350:VAL:HG12	1:D:352:GLY:H	1.61	0.65
2:Q:94:LYS:NZ	2:Q:94:LYS:HB3	2.11	0.65
2:R:92:PHE:O	2:R:94:LYS:N	2.25	0.65
1:A:629:ASN:HD22	1:A:629:ASN:C	1.99	0.65
1:F:210:PHE:O	1:F:214:PHE:HB2	1.96	0.65
2:R:94:LYS:NZ	2:R:94:LYS:HB3	2.10	0.65
2:S:28:THR:HB	2:S:30:LYS:HZ3	1.59	0.65
1:A:142:VAL:HG13	1:A:154:ILE:HD12	1.78	0.65
1:A:472:ARG:NH1	1:A:472:ARG:HB3	2.11	0.65
1:B:700:TYR:CD1	1:B:727:GLN:HB3	2.32	0.65
1:C:349:ASN:HD22	1:C:350:VAL:HG23	1.62	0.65
1:C:609:GLU:N	1:C:609:GLU:OE2	2.27	0.65
1:C:629:ASN:C	1:C:629:ASN:HD22	1.99	0.65
1:C:657:ILE:HG13	1:C:756:ILE:HD13	1.76	0.65
1:D:112:VAL:HG12	1:D:113:GLU:H	1.61	0.65
1:D:629:ASN:C	1:D:629:ASN:HD22	1.98	0.65
1:E:192:PHE:HB3	1:E:196:ILE:HD11	1.78	0.65
1:F:480:ASN:C	1:F:480:ASN:ND2	2.49	0.65
1:B:400:LYS:HE3	1:B:475:GLU:HG2	1.77	0.65
1:E:128:MET:HB2	1:E:239:HIS:CE1	2.31	0.65
1:E:76:LEU:O	1:E:80:GLN:CB	2.44	0.65
1:F:165:GLN:C	1:F:167:LYS:H	1.99	0.65
2:P:28:THR:HB	2:P:30:LYS:HZ3	1.60	0.65
1:B:197:LYS:HG2	1:B:263:ASP:OD1	1.97	0.65
1:B:305:SER:OG	1:B:307:LEU:HD13	1.97	0.65
1:B:697:ILE:CD1	1:B:732:ILE:HD13	2.27	0.65
1:D:142:VAL:HG13	1:D:154:ILE:HD12	1.77	0.65
1:D:446:ILE:HG13	1:D:452:GLU:O	1.95	0.65
1:E:142:VAL:HG13	1:E:154:ILE:HD12	1.77	0.65
1:E:350:VAL:HG12	1:E:352:GLY:H	1.62	0.65
1:E:697:ILE:CD1	1:E:732:ILE:HD13	2.27	0.65
1:F:350:VAL:HG12	1:F:352:GLY:H	1.62	0.65
1:F:76:LEU:O	1:F:80:GLN:CB	2.44	0.65
2:P:117:THR:O	2:P:119:GLU:N	2.30	0.65
1:B:411:GLU:O	1:B:414:LYS:HB2	1.97	0.65
1:B:570:THR:O	1:B:570:THR:OG1	2.11	0.65
1:C:140:ARG:HA	1:C:140:ARG:HE	1.61	0.65
1:C:192:PHE:HB3	1:C:196:ILE:CD1	2.26	0.65
1:D:697:ILE:CD1	1:D:732:ILE:HD13	2.26	0.65
1:E:570:THR:O	1:E:570:THR:OG1	2.10	0.65
1:E:657:ILE:HG13	1:E:756:ILE:HD13	1.78	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:94:LYS:HB3	2:P:94:LYS:NZ	2.11	0.65
2:Q:30:LYS:H	2:Q:30:LYS:CD	2.03	0.65
2:T:117:THR:O	2:T:119:GLU:N	2.29	0.65
1:C:515:LYS:O	1:C:515:LYS:HG2	1.95	0.65
1:A:192:PHE:HB3	1:A:196:ILE:HD11	1.78	0.65
1:C:697:ILE:CD1	1:C:732:ILE:HD13	2.25	0.65
1:E:165:GLN:C	1:E:167:LYS:H	1.98	0.65
1:E:729:TYR:HB2	1:E:756:ILE:HG21	1.78	0.65
1:B:540:ARG:NH2	2:P:87:GLU:OE1	2.30	0.65
1:A:128:MET:HB2	1:A:239:HIS:NE2	2.11	0.65
1:A:446:ILE:HG13	1:A:452:GLU:O	1.95	0.65
1:B:185:ASP:O	1:B:190:PRO:CG	2.44	0.65
1:B:472:ARG:HB3	1:B:472:ARG:NH1	2.12	0.65
1:D:128:MET:SD	1:D:128:MET:N	2.67	0.65
1:D:657:ILE:HG13	1:D:756:ILE:HD13	1.77	0.65
1:E:96:ILE:O	1:E:100:LEU:HG	1.97	0.65
1:E:234:LEU:HD23	1:E:235:THR:H	1.62	0.65
1:F:175:LYS:HB2	1:F:175:LYS:HZ2	1.61	0.65
2:S:6:GLU:HG3	2:S:7:GLU:N	2.11	0.65
1:A:349:ASN:HD22	1:A:350:VAL:HG23	1.61	0.65
1:B:218:LEU:C	1:B:220:LEU:H	1.98	0.65
1:C:210:PHE:O	1:C:214:PHE:HB2	1.96	0.65
1:D:145:LYS:CB	1:D:151:LYS:HB2	2.27	0.65
1:D:408:LEU:N	1:D:408:LEU:HD12	2.12	0.65
1:D:792:VAL:O	1:D:796:ILE:HG12	1.96	0.65
1:F:349:ASN:HD22	1:F:350:VAL:HG23	1.62	0.65
1:A:611:THR:O	1:A:615:ILE:HG13	1.97	0.64
1:A:630:ARG:HH11	1:A:630:ARG:HG3	1.62	0.64
1:C:218:LEU:C	1:C:220:LEU:H	1.98	0.64
1:C:411:GLU:O	1:C:414:LYS:HB2	1.96	0.64
1:C:729:TYR:HB2	1:C:756:ILE:HG21	1.78	0.64
1:E:630:ARG:HH11	1:E:630:ARG:HG3	1.61	0.64
1:F:414:LYS:NZ	1:F:419:ILE:O	2.25	0.64
1:B:140:ARG:HA	1:B:140:ARG:HE	1.62	0.64
1:B:408:LEU:CD1	1:B:408:LEU:H	2.10	0.64
1:C:472:ARG:NH1	1:C:472:ARG:HB3	2.11	0.64
1:D:192:PHE:HB3	1:D:196:ILE:CD1	2.26	0.64
1:F:609:GLU:N	1:F:609:GLU:OE2	2.28	0.64
2:P:111:ASN:HD22	2:P:111:ASN:N	1.94	0.64
2:S:83:GLU:O	2:S:87:GLU:HG3	1.97	0.64
1:C:234:LEU:HD23	1:C:235:THR:H	1.63	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:140:ARG:HE	1:D:140:ARG:HA	1.62	0.64
1:D:597:ASN:HD21	1:D:601:GLU:CB	2.02	0.64
1:D:710:HIS:C	1:D:712:PHE:H	1.99	0.64
1:D:96:ILE:O	1:D:100:LEU:HG	1.98	0.64
1:E:629:ASN:C	1:E:629:ASN:HD22	2.00	0.64
1:F:161:ILE:HA	1:F:167:LYS:HD2	1.77	0.64
1:A:197:LYS:HG2	1:A:263:ASP:OD1	1.98	0.64
1:B:109:ILE:HG12	1:B:157:LYS:HZ2	1.60	0.64
1:B:112:VAL:HG12	1:B:113:GLU:H	1.61	0.64
1:B:234:LEU:HD23	1:B:235:THR:H	1.62	0.64
1:B:710:HIS:C	1:B:712:PHE:H	2.00	0.64
1:C:521:ASN:HB3	1:C:524:GLU:HB2	1.80	0.64
1:C:96:ILE:O	1:C:100:LEU:HG	1.98	0.64
1:F:185:ASP:O	1:F:190:PRO:HD3	1.96	0.64
1:F:400:LYS:HE3	1:F:475:GLU:HG2	1.78	0.64
1:A:128:MET:HB2	1:A:239:HIS:CE1	2.32	0.64
1:B:90:PRO:HD3	1:B:249:PHE:CE2	2.33	0.64
1:C:305:SER:OG	1:C:307:LEU:HD13	1.98	0.64
1:C:700:TYR:CD1	1:C:727:GLN:HB3	2.33	0.64
1:D:161:ILE:CG2	1:D:168:GLU:HB2	2.27	0.64
1:D:210:PHE:O	1:D:214:PHE:HB2	1.96	0.64
1:E:145:LYS:CB	1:E:151:LYS:HB2	2.28	0.64
1:E:90:PRO:HD3	1:E:249:PHE:CE2	2.32	0.64
1:A:305:SER:OG	1:A:307:LEU:HD13	1.96	0.64
1:A:96:ILE:O	1:A:100:LEU:HG	1.97	0.64
1:C:350:VAL:HG12	1:C:352:GLY:H	1.62	0.64
1:C:408:LEU:H	1:C:408:LEU:CD1	2.11	0.64
1:D:408:LEU:H	1:D:408:LEU:CD1	2.11	0.64
1:D:472:ARG:HB3	1:D:472:ARG:NH1	2.12	0.64
1:D:90:PRO:HG2	1:D:93:VAL:CB	2.27	0.64
1:F:464:VAL:HG23	1:F:465:LEU:HD12	1.80	0.64
1:A:140:ARG:HA	1:A:140:ARG:HE	1.62	0.64
1:C:140:ARG:HA	1:C:140:ARG:NE	2.13	0.64
1:E:408:LEU:N	1:E:408:LEU:HD12	2.13	0.64
1:F:234:LEU:HD23	1:F:235:THR:H	1.62	0.64
1:F:700:TYR:CD1	1:F:727:GLN:HB3	2.33	0.64
2:R:111:ASN:HD22	2:R:111:ASN:N	1.96	0.64
1:B:350:VAL:HG12	1:B:352:GLY:H	1.61	0.64
1:C:89:ILE:CG2	1:C:93:VAL:HG11	2.21	0.64
1:D:218:LEU:C	1:D:220:LEU:H	1.99	0.64
1:D:305:SER:OG	1:D:307:LEU:HD13	1.98	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:349:ASN:HD22	1:D:350:VAL:HG23	1.63	0.64
1:E:197:LYS:HG2	1:E:263:ASP:OD1	1.97	0.64
1:E:218:LEU:C	1:E:220:LEU:H	1.98	0.64
1:F:128:MET:HB2	1:F:239:HIS:CE1	2.32	0.64
1:C:523:LEU:HD22	2:Q:127:GLU:HG2	1.80	0.64
1:A:66:LEU:HD12	1:A:103:GLU:HA	1.80	0.64
1:A:234:LEU:HD23	1:A:235:THR:H	1.62	0.64
1:A:697:ILE:CD1	1:A:732:ILE:HD13	2.27	0.64
1:C:710:HIS:C	1:C:712:PHE:H	2.01	0.64
2:O:94:LYS:HB3	2:O:94:LYS:HZ2	1.62	0.64
1:A:710:HIS:C	1:A:712:PHE:H	2.00	0.64
1:A:657:ILE:HG13	1:A:756:ILE:HD13	1.79	0.64
1:B:480:ASN:C	1:B:480:ASN:ND2	2.47	0.64
1:C:480:ASN:ND2	1:C:480:ASN:C	2.48	0.64
1:F:472:ARG:NH1	1:F:472:ARG:HB3	2.13	0.64
1:F:719:LYS:HG2	1:F:797:ILE:CD1	2.28	0.64
2:Q:111:ASN:HD22	2:Q:111:ASN:N	1.96	0.64
2:Q:28:THR:HB	2:Q:30:LYS:HZ3	1.62	0.64
1:A:218:LEU:C	1:A:220:LEU:H	1.99	0.63
1:C:611:THR:O	1:C:615:ILE:HG13	1.97	0.63
1:D:76:LEU:O	1:D:80:GLN:CB	2.47	0.63
1:E:472:ARG:HB3	1:E:472:ARG:NH1	2.12	0.63
1:E:710:HIS:C	1:E:712:PHE:H	2.00	0.63
1:F:192:PHE:HB3	1:F:196:ILE:CD1	2.27	0.63
1:F:611:THR:O	1:F:615:ILE:HG13	1.98	0.63
2:S:111:ASN:N	2:S:111:ASN:HD22	1.95	0.63
2:T:111:ASN:N	2:T:111:ASN:HD22	1.94	0.63
1:B:349:ASN:HD22	1:B:350:VAL:HG23	1.63	0.63
1:D:184:LYS:HZ1	1:D:191:GLU:HB2	1.64	0.63
1:D:729:TYR:HB2	1:D:756:ILE:HG21	1.80	0.63
1:E:408:LEU:H	1:E:408:LEU:CD1	2.11	0.63
1:E:540:ARG:NH2	2:S:87:GLU:OE1	2.31	0.63
1:F:217:LYS:NZ	1:F:233:ASN:HB3	2.07	0.63
2:S:12:PHE:CE1	2:S:72:MET:HG3	2.32	0.63
1:A:350:VAL:HG12	1:A:352:GLY:H	1.63	0.63
1:B:109:ILE:CD1	1:B:157:LYS:HZ3	2.12	0.63
1:B:188:LEU:CD2	1:B:188:LEU:H	2.06	0.63
1:B:201:ASP:CG	1:B:225:ILE:HD12	2.19	0.63
1:B:719:LYS:HG2	1:B:797:ILE:CD1	2.29	0.63
1:C:189:ASP:O	1:C:190:PRO:C	2.35	0.63
1:D:520:PRO:HG2	1:D:521:ASN:H	1.64	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:729:TYR:HB2	1:A:756:ILE:HG21	1.80	0.63
1:B:517:VAL:HB	1:B:525:LYS:HZ2	1.62	0.63
1:D:700:TYR:CD1	1:D:727:GLN:HB3	2.33	0.63
1:E:700:TYR:CD1	1:E:727:GLN:HB3	2.34	0.63
1:F:191:GLU:O	1:F:192:PHE:C	2.37	0.63
1:A:408:LEU:H	1:A:408:LEU:CD1	2.11	0.63
1:A:464:VAL:HG23	1:A:465:LEU:HD12	1.81	0.63
1:A:700:TYR:CD1	1:A:727:GLN:HB3	2.33	0.63
1:F:184:LYS:NZ	1:F:191:GLU:HB2	2.13	0.63
2:Q:12:PHE:CE1	2:Q:72:MET:HG3	2.34	0.63
2:S:28:THR:HA	2:S:62:THR:HG22	1.81	0.63
1:B:464:VAL:HG23	1:B:465:LEU:HD12	1.81	0.63
1:C:408:LEU:HD12	1:C:408:LEU:N	2.12	0.63
1:C:517:VAL:HB	1:C:525:LYS:NZ	2.13	0.63
1:C:90:PRO:HD3	1:C:249:PHE:CE2	2.34	0.63
1:D:90:PRO:HD3	1:D:249:PHE:CE2	2.34	0.63
1:E:140:ARG:HA	1:E:140:ARG:NE	2.13	0.63
1:E:412:GLU:C	1:E:414:LYS:N	2.52	0.63
1:F:140:ARG:HA	1:F:140:ARG:HE	1.63	0.63
1:F:710:HIS:C	1:F:712:PHE:H	2.01	0.63
2:T:64:ASP:OD1	2:T:66:PRO:HD2	1.99	0.63
1:A:145:LYS:CB	1:A:151:LYS:HB2	2.28	0.63
1:A:192:PHE:HB3	1:A:196:ILE:CD1	2.29	0.63
1:B:115:LYS:HZ2	1:B:115:LYS:HB3	1.63	0.63
1:C:66:LEU:HD12	1:C:103:GLU:HA	1.80	0.63
1:D:197:LYS:HG2	1:D:263:ASP:OD1	1.98	0.63
1:F:305:SER:OG	1:F:307:LEU:HD13	1.98	0.63
1:F:408:LEU:N	1:F:408:LEU:HD12	2.13	0.63
1:F:90:PRO:HG2	1:F:93:VAL:CB	2.26	0.63
2:R:28:THR:HB	2:R:30:LYS:HZ3	1.63	0.63
1:A:719:LYS:HG2	1:A:797:ILE:CD1	2.29	0.63
1:A:76:LEU:O	1:A:80:GLN:CB	2.47	0.63
1:B:109:ILE:CD1	1:B:157:LYS:NZ	2.62	0.63
1:B:520:PRO:HG2	1:B:521:ASN:H	1.63	0.63
1:C:197:LYS:HG2	1:C:263:ASP:OD1	1.99	0.63
1:C:630:ARG:HG3	1:C:630:ARG:NH1	2.13	0.63
1:E:305:SER:OG	1:E:307:LEU:HD13	1.98	0.63
1:A:185:ASP:O	1:A:190:PRO:HD3	1.99	0.63
1:B:90:PRO:HG2	1:B:93:VAL:CB	2.28	0.63
1:C:112:VAL:HG12	1:C:113:GLU:H	1.64	0.63
1:C:307:LEU:HD12	1:C:331:VAL:CG2	2.29	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:161:ILE:HA	1:E:167:LYS:HD2	1.79	0.63
2:R:28:THR:HA	2:R:62:THR:HG22	1.81	0.63
1:B:140:ARG:HA	1:B:140:ARG:NE	2.14	0.62
1:B:408:LEU:N	1:B:408:LEU:HD12	2.12	0.62
1:C:160:ALA:O	1:C:167:LYS:HD2	1.99	0.62
1:C:719:LYS:HG2	1:C:797:ILE:CD1	2.29	0.62
1:E:307:LEU:HD12	1:E:331:VAL:CG2	2.29	0.62
1:A:184:LYS:HZ1	1:A:191:GLU:HB2	1.63	0.62
1:B:175:LYS:HB2	1:B:175:LYS:HZ2	1.64	0.62
1:B:192:PHE:HB3	1:B:196:ILE:HD11	1.79	0.62
1:C:412:GLU:C	1:C:414:LYS:N	2.52	0.62
1:E:719:LYS:HG2	1:E:797:ILE:CD1	2.29	0.62
1:F:408:LEU:H	1:F:408:LEU:CD1	2.12	0.62
2:P:12:PHE:CE1	2:P:72:MET:HG3	2.35	0.62
2:T:12:PHE:CE1	2:T:72:MET:HG3	2.34	0.62
1:D:201:ASP:CG	1:D:225:ILE:HD12	2.19	0.62
1:D:719:LYS:HG2	1:D:797:ILE:CD1	2.29	0.62
1:E:499:PRO:HG2	1:E:504:ILE:HD11	1.81	0.62
1:F:299:GLU:HA	1:F:302:LEU:HB3	1.80	0.62
1:F:521:ASN:HB3	1:F:524:GLU:HB2	1.81	0.62
1:F:597:ASN:HD21	1:F:601:GLU:CB	2.05	0.62
1:F:616:GLU:HA	1:F:620:THR:HB	1.81	0.62
1:F:729:TYR:HB2	1:F:756:ILE:HG21	1.80	0.62
2:O:111:ASN:HD22	2:O:111:ASN:N	1.95	0.62
2:P:5:THR:HG23	2:P:8:GLN:HB2	1.81	0.62
2:P:83:GLU:O	2:P:87:GLU:HG3	1.98	0.62
1:A:570:THR:O	1:A:570:THR:OG1	2.11	0.62
1:B:218:LEU:CD1	1:B:225:ILE:HD11	2.29	0.62
1:B:616:GLU:HA	1:B:620:THR:HB	1.81	0.62
1:C:210:PHE:HD1	1:C:214:PHE:HD1	1.47	0.62
1:C:218:LEU:CD1	1:C:225:ILE:HD11	2.29	0.62
1:D:464:VAL:HG23	1:D:465:LEU:HD12	1.82	0.62
1:D:521:ASN:HB3	1:D:524:GLU:HB2	1.81	0.62
1:E:464:VAL:HG23	1:E:465:LEU:HD12	1.81	0.62
1:E:520:PRO:HG2	1:E:521:ASN:H	1.64	0.62
1:A:201:ASP:CG	1:A:225:ILE:HD12	2.19	0.62
1:B:210:PHE:HD1	1:B:214:PHE:HD1	1.47	0.62
1:D:630:ARG:HG3	1:D:630:ARG:NH1	2.14	0.62
1:E:521:ASN:HB3	1:E:524:GLU:HB2	1.82	0.62
1:F:517:VAL:HB	1:F:525:LYS:NZ	2.14	0.62
2:O:12:PHE:CE1	2:O:72:MET:HG3	2.34	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:21:LYS:C	2:P:21:LYS:HD3	2.20	0.62
1:A:210:PHE:HD1	1:A:214:PHE:HD1	1.47	0.62
1:A:408:LEU:HD12	1:A:408:LEU:N	2.12	0.62
1:A:737:LYS:HA	1:A:737:LYS:HE2	1.81	0.62
1:E:523:LEU:HD22	2:S:127:GLU:HG2	1.80	0.62
1:E:611:THR:O	1:E:615:ILE:HG13	2.00	0.62
1:F:197:LYS:HG2	1:F:263:ASP:OD1	1.99	0.62
1:F:279:ILE:O	1:F:283:LEU:HD13	1.99	0.62
1:A:520:PRO:HG2	1:A:521:ASN:H	1.64	0.62
1:A:655:ASN:CB	1:A:758:ASN:HB3	2.20	0.62
1:B:96:ILE:O	1:B:100:LEU:HG	1.97	0.62
1:C:499:PRO:HG2	1:C:504:ILE:HD11	1.80	0.62
2:Q:64:ASP:OD1	2:Q:66:PRO:HD2	2.00	0.62
1:A:140:ARG:NE	1:A:140:ARG:HA	2.14	0.62
1:A:307:LEU:HD12	1:A:331:VAL:CG2	2.29	0.62
1:B:66:LEU:HD12	1:B:103:GLU:HA	1.80	0.62
1:B:499:PRO:HG2	1:B:504:ILE:HD11	1.81	0.62
1:B:521:ASN:HB3	1:B:524:GLU:HB2	1.82	0.62
1:C:792:VAL:HG12	1:C:796:ILE:HD11	1.82	0.62
1:E:279:ILE:O	1:E:283:LEU:HD13	1.98	0.62
1:E:413:LEU:HB2	1:E:419:ILE:HG12	1.82	0.62
1:A:218:LEU:CD1	1:A:225:ILE:HD11	2.29	0.62
1:C:90:PRO:HG2	1:C:93:VAL:CB	2.27	0.62
1:D:307:LEU:HD12	1:D:331:VAL:CG2	2.29	0.62
1:E:210:PHE:HD1	1:E:214:PHE:HD1	1.48	0.62
1:F:210:PHE:HD1	1:F:214:PHE:HD1	1.48	0.62
1:F:90:PRO:HD3	1:F:249:PHE:CE2	2.35	0.62
1:A:191:GLU:O	1:A:192:PHE:C	2.39	0.62
1:A:299:GLU:HA	1:A:302:LEU:HB3	1.81	0.62
1:B:299:GLU:HA	1:B:302:LEU:HB3	1.81	0.62
1:B:517:VAL:HB	1:B:525:LYS:NZ	2.14	0.62
1:C:109:ILE:HG12	1:C:157:LYS:HZ2	1.63	0.62
1:D:66:LEU:HD12	1:D:103:GLU:HA	1.81	0.62
1:D:413:LEU:HB2	1:D:419:ILE:HG12	1.82	0.62
2:O:21:LYS:HD3	2:O:21:LYS:C	2.20	0.62
2:Q:58:ASP:C	2:Q:60:ASN:N	2.53	0.62
2:R:25:GLY:HA3	2:R:65:PHE:CZ	2.35	0.62
2:R:5:THR:HG23	2:R:8:GLN:HB2	1.82	0.62
1:A:131:ARG:HB2	1:A:170:TYR:CE2	2.35	0.61
1:A:616:GLU:HA	1:A:620:THR:HB	1.81	0.61
1:B:192:PHE:HB3	1:B:196:ILE:CD1	2.30	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:464:VAL:HG23	1:C:465:LEU:HD12	1.82	0.61
1:E:737:LYS:HA	1:E:737:LYS:HE2	1.81	0.61
1:F:66:LEU:HD12	1:F:103:GLU:HA	1.80	0.61
1:F:307:LEU:HD12	1:F:331:VAL:CG2	2.29	0.61
1:F:96:ILE:O	1:F:100:LEU:HG	1.99	0.61
2:O:25:GLY:HA3	2:O:65:PHE:CZ	2.34	0.61
2:Q:28:THR:HA	2:Q:62:THR:HG22	1.81	0.61
2:R:12:PHE:CE1	2:R:72:MET:HG3	2.35	0.61
2:T:121:VAL:C	2:T:123:GLN:N	2.53	0.61
2:T:21:LYS:C	2:T:21:LYS:HD3	2.20	0.61
1:A:128:MET:N	1:A:128:MET:SD	2.66	0.61
1:A:175:LYS:HZ2	1:A:175:LYS:HB2	1.64	0.61
1:A:521:ASN:HB3	1:A:524:GLU:HB2	1.82	0.61
1:B:85:LEU:HD12	1:B:168:GLU:OE1	1.99	0.61
1:C:478:ALA:HB1	1:C:486:LYS:O	2.00	0.61
1:C:678:VAL:HG22	1:C:745:TYR:HE2	1.65	0.61
1:E:85:LEU:HD12	1:E:168:GLU:OE1	1.99	0.61
1:F:201:ASP:CG	1:F:225:ILE:HD12	2.19	0.61
1:F:413:LEU:HB2	1:F:419:ILE:HG12	1.82	0.61
1:F:630:ARG:NH1	1:F:630:ARG:HG3	2.15	0.61
2:S:21:LYS:C	2:S:21:LYS:HD3	2.21	0.61
2:T:28:THR:HA	2:T:62:THR:HG22	1.81	0.61
1:A:279:ILE:O	1:A:283:LEU:HD13	2.01	0.61
1:A:413:LEU:HB2	1:A:419:ILE:HG12	1.81	0.61
1:A:792:VAL:HG12	1:A:796:ILE:HD11	1.83	0.61
1:C:279:ILE:O	1:C:283:LEU:HD13	1.99	0.61
1:C:413:LEU:HB2	1:C:419:ILE:HG12	1.82	0.61
1:C:616:GLU:HA	1:C:620:THR:HB	1.82	0.61
1:E:66:LEU:HD12	1:E:103:GLU:HA	1.81	0.61
2:O:6:GLU:HG3	2:O:7:GLU:H	1.65	0.61
2:S:5:THR:HG23	2:S:8:GLN:HB2	1.82	0.61
2:T:58:ASP:C	2:T:60:ASN:N	2.53	0.61
1:A:517:VAL:HB	1:A:525:LYS:NZ	2.15	0.61
1:B:201:ASP:OD1	1:B:225:ILE:HD12	2.00	0.61
1:B:630:ARG:HG3	1:B:630:ARG:HH11	1.65	0.61
1:C:220:LEU:HG	1:C:223:LYS:HB2	1.82	0.61
1:D:792:VAL:HG12	1:D:796:ILE:HD11	1.82	0.61
1:E:201:ASP:CG	1:E:225:ILE:HD12	2.20	0.61
1:F:478:ALA:HB1	1:F:486:LYS:O	2.01	0.61
2:O:121:VAL:C	2:O:123:GLN:N	2.54	0.61
2:O:5:THR:HG23	2:O:8:GLN:HB2	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:412:GLU:C	1:A:414:LYS:N	2.53	0.61
1:D:412:GLU:C	1:D:414:LYS:N	2.53	0.61
1:D:85:LEU:HD12	1:D:168:GLU:OE1	1.99	0.61
1:E:115:LYS:HZ3	1:E:117:LEU:H	1.48	0.61
1:E:478:ALA:HB1	1:E:486:LYS:O	2.01	0.61
1:F:570:THR:OG1	1:F:570:THR:O	2.09	0.61
2:O:28:THR:HA	2:O:62:THR:HG22	1.81	0.61
2:O:64:ASP:OD1	2:O:66:PRO:HD2	2.01	0.61
2:Q:6:GLU:HG3	2:Q:7:GLU:H	1.66	0.61
2:R:21:LYS:C	2:R:21:LYS:HD3	2.21	0.61
2:T:94:LYS:HB3	2:T:94:LYS:HZ2	1.64	0.61
1:A:161:ILE:CG2	1:A:168:GLU:HB2	2.28	0.61
1:C:697:ILE:HD13	1:C:732:ILE:CD1	2.29	0.61
1:D:218:LEU:CD1	1:D:225:ILE:HD11	2.30	0.61
1:D:718:ARG:NH1	1:D:767:GLN:HE21	1.98	0.61
1:E:299:GLU:HA	1:E:302:LEU:HB3	1.81	0.61
1:F:412:GLU:C	1:F:414:LYS:N	2.53	0.61
2:Q:5:THR:HG23	2:Q:8:GLN:HB2	1.83	0.61
2:S:121:VAL:C	2:S:123:GLN:N	2.53	0.61
1:B:307:LEU:HD12	1:B:331:VAL:CG2	2.30	0.61
1:D:140:ARG:NE	1:D:140:ARG:HA	2.14	0.61
1:D:499:PRO:HG2	1:D:504:ILE:HD11	1.82	0.61
1:D:493:ASP:OD2	1:D:577:HIS:CE1	2.54	0.61
1:F:145:LYS:CB	1:F:151:LYS:HB2	2.31	0.61
1:F:275:GLY:O	1:F:278:LYS:HB2	2.00	0.61
2:P:58:ASP:C	2:P:60:ASN:N	2.54	0.61
2:Q:25:GLY:HA3	2:Q:65:PHE:CZ	2.36	0.61
2:S:25:GLY:HA3	2:S:65:PHE:CZ	2.36	0.61
1:A:478:ALA:HB1	1:A:486:LYS:O	2.01	0.61
1:B:413:LEU:HB2	1:B:419:ILE:HG12	1.81	0.61
1:C:195:LEU:HD11	1:C:226:ASP:O	2.00	0.61
1:F:218:LEU:C	1:F:220:LEU:H	1.99	0.61
1:F:737:LYS:HA	1:F:737:LYS:HE2	1.81	0.61
1:F:85:LEU:HD12	1:F:168:GLU:OE1	2.01	0.61
1:C:299:GLU:HA	1:C:302:LEU:HB3	1.81	0.61
1:D:737:LYS:HA	1:D:737:LYS:HE2	1.81	0.61
1:E:792:VAL:HG12	1:E:796:ILE:HD11	1.82	0.61
1:F:581:GLN:HE22	1:F:632:TYR:HE1	1.48	0.61
2:O:137:ASN:OD1	2:O:139:GLU:HB2	2.00	0.61
2:P:64:ASP:OD1	2:P:66:PRO:HD2	2.01	0.61
2:Q:21:LYS:C	2:Q:21:LYS:HD3	2.21	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:25:GLY:HA3	2:T:65:PHE:CZ	2.36	0.61
1:D:456:LYS:HZ3	1:D:471:TRP:HE1	1.48	0.61
1:E:90:PRO:HG2	1:E:93:VAL:CB	2.25	0.61
1:F:499:PRO:HG2	1:F:504:ILE:HD11	1.81	0.61
1:F:697:ILE:HD13	1:F:732:ILE:CD1	2.30	0.61
2:P:32:LEU:O	2:P:36:MET:HG3	2.01	0.61
2:T:5:THR:HG23	2:T:8:GLN:HB2	1.83	0.61
1:A:711:ILE:HG13	1:A:712:PHE:CD2	2.36	0.60
1:D:115:LYS:HB3	1:D:115:LYS:NZ	2.16	0.60
1:D:220:LEU:HG	1:D:223:LYS:HB2	1.82	0.60
1:D:666:ASN:O	1:D:670:ILE:HG13	2.01	0.60
1:F:792:VAL:HG12	1:F:796:ILE:HD11	1.83	0.60
2:P:28:THR:HA	2:P:62:THR:HG22	1.81	0.60
2:P:6:GLU:HG3	2:P:7:GLU:H	1.66	0.60
2:P:94:LYS:HB3	2:P:94:LYS:HZ2	1.66	0.60
2:R:64:ASP:OD1	2:R:66:PRO:HD2	2.01	0.60
1:C:517:VAL:CB	1:C:525:LYS:HZ2	2.14	0.60
1:D:517:VAL:HB	1:D:525:LYS:HZ2	1.65	0.60
1:E:218:LEU:CD1	1:E:225:ILE:HD11	2.31	0.60
1:E:616:GLU:HA	1:E:620:THR:HB	1.82	0.60
1:B:666:ASN:O	1:B:670:ILE:HG13	2.01	0.60
1:B:742:ALA:HB1	1:B:744:GLU:OE1	2.01	0.60
1:C:109:ILE:HG23	1:C:157:LYS:HD3	1.83	0.60
1:D:279:ILE:O	1:D:283:LEU:HD13	1.99	0.60
1:D:517:VAL:HB	1:D:525:LYS:NZ	2.15	0.60
1:D:678:VAL:HG22	1:D:745:TYR:HE2	1.66	0.60
1:F:140:ARG:HA	1:F:140:ARG:NE	2.15	0.60
1:F:218:LEU:CD1	1:F:225:ILE:HD11	2.32	0.60
1:A:499:PRO:HG2	1:A:504:ILE:HD11	1.82	0.60
1:C:115:LYS:HB3	1:C:115:LYS:NZ	2.16	0.60
1:C:520:PRO:HG2	1:C:521:ASN:H	1.66	0.60
1:C:85:LEU:HD12	1:C:168:GLU:OE1	2.00	0.60
1:B:115:LYS:HZ3	1:B:117:LEU:H	1.50	0.60
1:B:697:ILE:HD13	1:B:732:ILE:CD1	2.31	0.60
1:D:697:ILE:HD13	1:D:732:ILE:CD1	2.30	0.60
1:E:192:PHE:HB3	1:E:196:ILE:CD1	2.30	0.60
1:B:279:ILE:O	1:B:283:LEU:HD13	2.02	0.60
1:D:210:PHE:HD1	1:D:214:PHE:HD1	1.49	0.60
1:D:275:GLY:O	1:D:278:LYS:HB2	2.01	0.60
1:E:517:VAL:HB	1:E:525:LYS:NZ	2.15	0.60
1:F:201:ASP:OD1	1:F:225:ILE:HD12	2.01	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S:94:LYS:HB3	2:S:94:LYS:HZ2	1.65	0.60
1:A:493:ASP:OD2	1:A:577:HIS:CE1	2.54	0.60
1:D:324:THR:CB	1:D:499:PRO:HA	2.28	0.60
1:E:493:ASP:OD2	1:E:577:HIS:CE1	2.55	0.60
1:E:559:ARG:HG3	1:E:559:ARG:HH11	1.67	0.60
1:F:128:MET:N	1:F:128:MET:SD	2.66	0.60
1:F:666:ASN:O	1:F:670:ILE:HG13	2.02	0.60
2:R:97:ASN:ND2	2:R:97:ASN:N	2.49	0.60
1:A:666:ASN:O	1:A:670:ILE:HG13	2.02	0.60
1:A:678:VAL:HG22	1:A:745:TYR:HE2	1.65	0.60
1:B:131:ARG:HB2	1:B:170:TYR:CE2	2.36	0.60
2:R:32:LEU:O	2:R:36:MET:HG3	2.01	0.60
2:S:64:ASP:OD1	2:S:66:PRO:HD2	2.00	0.60
2:T:6:GLU:HG3	2:T:7:GLU:H	1.67	0.60
1:B:412:GLU:C	1:B:414:LYS:N	2.53	0.60
1:B:581:GLN:HE22	1:B:632:TYR:HE1	1.49	0.60
1:D:299:GLU:HA	1:D:302:LEU:HB3	1.82	0.60
1:D:616:GLU:HA	1:D:620:THR:HB	1.82	0.60
1:F:275:GLY:HA2	1:F:278:LYS:CE	2.31	0.60
1:F:517:VAL:HB	1:F:525:LYS:HZ2	1.66	0.60
1:F:520:PRO:HG2	1:F:521:ASN:H	1.65	0.60
2:O:32:LEU:O	2:O:36:MET:HG3	2.02	0.60
2:P:48:LEU:HA	2:P:51:MET:CE	2.31	0.60
2:S:58:ASP:C	2:S:60:ASN:N	2.55	0.60
1:A:697:ILE:HD13	1:A:732:ILE:CD1	2.32	0.60
1:A:85:LEU:HD12	1:A:168:GLU:OE1	2.02	0.60
1:B:360:VAL:CG1	1:B:370:LEU:HD22	2.30	0.60
1:B:792:VAL:HG12	1:B:796:ILE:HD11	1.84	0.60
1:D:581:GLN:HE21	1:D:628:PHE:HA	1.67	0.60
1:F:310:GLU:OE2	1:F:340:LYS:HD2	2.02	0.60
1:F:602:PHE:CD2	1:F:602:PHE:N	2.70	0.60
2:Q:121:VAL:C	2:Q:123:GLN:N	2.53	0.60
2:R:121:VAL:C	2:R:123:GLN:N	2.53	0.60
1:F:711:ILE:HG13	1:F:712:PHE:CD2	2.37	0.59
2:Q:48:LEU:HA	2:Q:51:MET:CE	2.32	0.59
1:B:115:LYS:NZ	1:B:115:LYS:HB3	2.18	0.59
1:C:742:ALA:HB1	1:C:744:GLU:OE1	2.01	0.59
1:D:540:ARG:HD3	1:D:627:TYR:OH	2.02	0.59
1:E:517:VAL:HB	1:E:525:LYS:HZ2	1.67	0.59
1:E:630:ARG:NH1	1:E:630:ARG:HG3	2.15	0.59
1:F:493:ASP:OD2	1:F:577:HIS:CE1	2.54	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:25:GLY:HA3	2:P:65:PHE:CZ	2.36	0.59
2:R:48:LEU:HA	2:R:51:MET:CE	2.32	0.59
1:A:325:TYR:HB2	1:A:498:ALA:HB3	1.85	0.59
1:A:581:GLN:HE21	1:A:628:PHE:HA	1.66	0.59
1:B:145:LYS:CB	1:B:151:LYS:HB2	2.32	0.59
1:D:131:ARG:HB2	1:D:170:TYR:CE2	2.37	0.59
1:D:173:ILE:HG23	1:D:174:GLY:N	2.17	0.59
1:D:742:ALA:HB1	1:D:744:GLU:OE1	2.02	0.59
1:E:310:GLU:OE2	1:E:340:LYS:HD2	2.02	0.59
1:E:581:GLN:HE22	1:E:632:TYR:HE1	1.50	0.59
1:A:201:ASP:OD1	1:A:225:ILE:HD12	2.03	0.59
1:A:360:VAL:CG1	1:A:370:LEU:HD22	2.30	0.59
1:A:79:ILE:C	1:A:81:GLN:H	2.06	0.59
1:B:523:LEU:HD22	2:P:127:GLU:HG2	1.83	0.59
1:C:134:LYS:C	1:C:136:PRO:HD3	2.23	0.59
1:E:79:ILE:C	1:E:81:GLN:H	2.05	0.59
2:O:48:LEU:HA	2:O:51:MET:CE	2.32	0.59
2:S:48:LEU:HA	2:S:51:MET:CE	2.32	0.59
2:T:32:LEU:O	2:T:36:MET:HG3	2.01	0.59
2:T:48:LEU:HA	2:T:51:MET:CE	2.32	0.59
1:A:220:LEU:HG	1:A:223:LYS:HB2	1.83	0.59
1:A:602:PHE:N	1:A:602:PHE:CD2	2.70	0.59
1:B:220:LEU:HG	1:B:223:LYS:HB2	1.84	0.59
1:D:310:GLU:OE2	1:D:340:LYS:HD2	2.03	0.59
2:R:137:ASN:OD1	2:R:139:GLU:HB2	2.02	0.59
2:S:137:ASN:OD1	2:S:139:GLU:HB2	2.02	0.59
2:S:6:GLU:HG3	2:S:7:GLU:H	1.68	0.59
2:T:121:VAL:C	2:T:123:GLN:H	2.04	0.59
1:A:517:VAL:HB	1:A:525:LYS:HZ2	1.66	0.59
1:A:90:PRO:HD3	1:A:249:PHE:CE2	2.36	0.59
1:B:711:ILE:HG13	1:B:712:PHE:CD2	2.37	0.59
1:B:74:GLU:HB2	1:B:78:LYS:HB3	1.85	0.59
1:B:92:ASP:O	1:B:96:ILE:HG13	2.03	0.59
1:F:115:LYS:HZ2	1:F:115:LYS:HB3	1.68	0.59
1:F:277:GLU:HA	1:F:280:SER:OG	2.03	0.59
1:F:742:ALA:HB1	1:F:744:GLU:OE1	2.01	0.59
1:A:115:LYS:HB3	1:A:115:LYS:NZ	2.16	0.59
1:C:115:LYS:HZ3	1:C:117:LEU:H	1.50	0.59
1:E:134:LYS:C	1:E:136:PRO:HD3	2.22	0.59
1:A:173:ILE:HG23	1:A:174:GLY:N	2.17	0.59
1:A:742:ALA:HB1	1:A:744:GLU:OE1	2.01	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:478:ALA:HB1	1:B:486:LYS:O	2.03	0.59
1:B:597:ASN:HD21	1:B:601:GLU:CB	2.06	0.59
1:B:79:ILE:C	1:B:81:GLN:H	2.06	0.59
1:C:173:ILE:HG23	1:C:174:GLY:N	2.18	0.59
1:C:499:PRO:HD3	1:C:552:TRP:CH2	2.38	0.59
1:D:478:ALA:HB1	1:D:486:LYS:O	2.01	0.59
1:E:115:LYS:HB3	1:E:115:LYS:NZ	2.17	0.59
1:F:724:ARG:HG3	1:F:724:ARG:HH11	1.68	0.59
2:P:121:VAL:C	2:P:123:GLN:N	2.53	0.59
1:A:715:GLU:OE1	1:A:767:GLN:NE2	2.35	0.59
1:B:493:ASP:OD2	1:B:577:HIS:CE1	2.55	0.59
1:D:201:ASP:OD1	1:D:225:ILE:HD12	2.01	0.59
1:D:711:ILE:HG13	1:D:712:PHE:CD2	2.37	0.59
1:E:173:ILE:HG23	1:E:174:GLY:N	2.17	0.59
1:E:275:GLY:HA2	1:E:278:LYS:CE	2.32	0.59
1:E:697:ILE:HD13	1:E:732:ILE:CD1	2.31	0.59
2:P:121:VAL:C	2:P:123:GLN:H	2.05	0.59
1:A:657:ILE:HD11	1:A:701:LEU:HD23	1.84	0.59
1:B:275:GLY:HA2	1:B:278:LYS:CE	2.33	0.59
1:D:134:LYS:C	1:D:136:PRO:HD3	2.23	0.59
1:F:115:LYS:NZ	1:F:115:LYS:HB3	2.17	0.59
2:O:30:LYS:H	2:O:30:LYS:CD	2.02	0.59
2:R:121:VAL:C	2:R:123:GLN:H	2.05	0.59
1:A:134:LYS:C	1:A:136:PRO:HD3	2.23	0.58
1:A:310:GLU:OE2	1:A:340:LYS:HD2	2.02	0.58
1:C:268:MET:O	1:C:271:LEU:HB2	2.03	0.58
1:C:602:PHE:N	1:C:602:PHE:CD2	2.71	0.58
1:C:666:ASN:O	1:C:670:ILE:HG13	2.03	0.58
1:D:581:GLN:HE22	1:D:632:TYR:HE1	1.50	0.58
2:S:28:THR:HB	2:S:30:LYS:NZ	2.18	0.58
1:A:268:MET:O	1:A:271:LEU:HB2	2.03	0.58
1:A:630:ARG:HG3	1:A:630:ARG:NH1	2.17	0.58
1:B:135:VAL:O	1:B:135:VAL:HG22	2.03	0.58
1:B:275:GLY:O	1:B:278:LYS:HB2	2.02	0.58
1:C:131:ARG:HB2	1:C:170:TYR:CE2	2.37	0.58
1:C:310:GLU:OE2	1:C:340:LYS:HD2	2.03	0.58
1:C:711:ILE:HG13	1:C:712:PHE:CD2	2.37	0.58
1:D:79:ILE:C	1:D:81:GLN:H	2.06	0.58
2:Q:137:ASN:OD1	2:Q:139:GLU:HB2	2.03	0.58
2:S:32:LEU:O	2:S:36:MET:HG3	2.03	0.58
1:A:700:TYR:CE1	1:A:727:GLN:HB3	2.38	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:134:LYS:C	1:B:136:PRO:HD3	2.23	0.58
1:B:517:VAL:CB	1:B:525:LYS:HZ2	2.16	0.58
1:C:275:GLY:HA2	1:C:278:LYS:CE	2.33	0.58
1:C:79:ILE:C	1:C:81:GLN:H	2.06	0.58
2:P:56:ASP:HB3	2:P:60:ASN:OD1	2.03	0.58
1:D:277:GLU:HA	1:D:280:SER:OG	2.04	0.58
1:D:499:PRO:HD3	1:D:552:TRP:CH2	2.38	0.58
1:E:191:GLU:O	1:E:192:PHE:C	2.41	0.58
1:E:277:GLU:HA	1:E:280:SER:OG	2.04	0.58
1:E:742:ALA:HB1	1:E:744:GLU:OE1	2.03	0.58
1:F:360:VAL:CG1	1:F:370:LEU:HD22	2.29	0.58
2:S:12:PHE:CD1	2:S:72:MET:HG3	2.38	0.58
1:A:269:ASN:O	1:A:273:LYS:HG3	2.03	0.58
1:C:275:GLY:O	1:C:278:LYS:HB2	2.03	0.58
1:E:639:ASN:ND2	1:E:639:ASN:H	2.02	0.58
1:F:639:ASN:H	1:F:639:ASN:ND2	2.01	0.58
1:A:275:GLY:O	1:A:278:LYS:HB2	2.03	0.58
1:C:185:ASP:O	1:C:190:PRO:CG	2.51	0.58
1:C:277:GLU:HA	1:C:280:SER:OG	2.04	0.58
1:C:597:ASN:HB2	1:C:598:PRO:CD	2.32	0.58
1:E:268:MET:O	1:E:271:LEU:HB2	2.04	0.58
1:F:499:PRO:HD3	1:F:552:TRP:CH2	2.39	0.58
2:P:137:ASN:OD1	2:P:139:GLU:HB2	2.03	0.58
1:A:277:GLU:HA	1:A:280:SER:OG	2.03	0.58
1:A:315:PHE:HA	1:A:318:ILE:HD13	1.86	0.58
1:B:731:GLU:O	1:B:735:VAL:HG23	2.04	0.58
1:C:172:GLU:HB3	1:C:246:SER:HA	1.86	0.58
1:C:201:ASP:OD1	1:C:225:ILE:HD12	2.03	0.58
1:D:657:ILE:HD11	1:D:701:LEU:HD23	1.85	0.58
1:E:581:GLN:HE21	1:E:628:PHE:HA	1.68	0.58
1:E:678:VAL:HG22	1:E:745:TYR:HE2	1.68	0.58
1:F:135:VAL:O	1:F:135:VAL:HG22	2.03	0.58
1:F:184:LYS:HZ1	1:F:191:GLU:HB2	1.69	0.58
2:S:55:VAL:HG21	2:S:67:GLU:OE1	2.04	0.58
1:A:639:ASN:ND2	1:A:639:ASN:H	2.02	0.58
1:B:277:GLU:HA	1:B:280:SER:OG	2.03	0.58
1:B:499:PRO:HD3	1:B:552:TRP:CH2	2.39	0.58
1:B:581:GLN:HE21	1:B:628:PHE:HA	1.67	0.58
1:B:700:TYR:CE1	1:B:727:GLN:HB3	2.39	0.58
1:C:201:ASP:CG	1:C:225:ILE:HD12	2.24	0.58
1:C:581:GLN:HE22	1:C:632:TYR:HE1	1.50	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:220:LEU:HG	1:E:223:LYS:HB2	1.85	0.58
1:E:666:ASN:O	1:E:670:ILE:HG13	2.03	0.58
2:Q:28:THR:HB	2:Q:30:LYS:NZ	2.18	0.58
1:A:184:LYS:NZ	1:A:191:GLU:HB2	2.17	0.58
1:B:172:GLU:HB3	1:B:246:SER:HA	1.86	0.58
1:B:447:SER:OG	1:B:448:ASP:N	2.37	0.58
1:B:655:ASN:CB	1:B:758:ASN:HB3	2.21	0.58
1:C:559:ARG:HH11	1:C:559:ARG:HG3	1.68	0.58
1:C:581:GLN:HE21	1:C:628:PHE:HA	1.69	0.58
1:D:217:LYS:CB	1:D:236:GLU:HG3	2.34	0.58
1:E:711:ILE:HG13	1:E:712:PHE:CD2	2.38	0.58
1:F:134:LYS:C	1:F:136:PRO:HD3	2.23	0.58
2:O:121:VAL:C	2:O:123:GLN:H	2.05	0.58
2:O:58:ASP:C	2:O:60:ASN:N	2.53	0.58
2:R:94:LYS:HB3	2:R:94:LYS:HZ2	1.67	0.58
2:T:28:THR:HB	2:T:30:LYS:NZ	2.18	0.58
1:A:540:ARG:HD3	1:A:627:TYR:OH	2.04	0.58
1:A:90:PRO:HG2	1:A:93:VAL:CB	2.27	0.58
1:D:602:PHE:N	1:D:602:PHE:CD2	2.71	0.58
1:D:724:ARG:HH11	1:D:724:ARG:HG3	1.68	0.58
1:F:173:ILE:HG23	1:F:174:GLY:N	2.18	0.58
2:O:55:VAL:HG21	2:O:67:GLU:OE1	2.03	0.58
2:R:6:GLU:HG3	2:R:7:GLU:H	1.67	0.58
1:D:160:ALA:O	1:D:167:LYS:HD2	2.04	0.57
1:D:325:TYR:HB2	1:D:498:ALA:HB3	1.85	0.57
1:D:639:ASN:ND2	1:D:639:ASN:H	2.02	0.57
1:F:731:GLU:O	1:F:735:VAL:HG23	2.04	0.57
2:Q:121:VAL:C	2:Q:123:GLN:H	2.06	0.57
2:T:12:PHE:CD1	2:T:72:MET:HG3	2.39	0.57
1:A:135:VAL:O	1:A:135:VAL:HG22	2.04	0.57
1:A:724:ARG:HH11	1:A:724:ARG:HG3	1.68	0.57
1:B:470:ASN:O	1:B:472:ARG:HG3	2.04	0.57
1:B:657:ILE:HD11	1:B:701:LEU:HD23	1.85	0.57
1:C:217:LYS:HB3	1:C:217:LYS:HZ2	1.69	0.57
1:C:625:LEU:HD12	1:C:626:TYR:H	1.67	0.57
1:D:165:GLN:C	1:D:167:LYS:N	2.58	0.57
1:D:550:SER:CB	1:D:553:GLN:HG3	2.31	0.57
1:D:625:LEU:HD12	1:D:626:TYR:H	1.69	0.57
2:P:28:THR:HB	2:P:30:LYS:NZ	2.18	0.57
2:R:28:THR:HB	2:R:30:LYS:NZ	2.19	0.57
2:R:55:VAL:HG21	2:R:67:GLU:OE1	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:106:PHE:HZ	1:A:171:TYR:HH	1.51	0.57
1:A:499:PRO:HD3	1:A:552:TRP:CH2	2.40	0.57
1:C:345:THR:HG22	1:C:490:ALA:O	2.05	0.57
1:C:360:VAL:CG1	1:C:370:LEU:HD22	2.31	0.57
1:C:724:ARG:HG3	1:C:724:ARG:HH11	1.69	0.57
1:D:516:VAL:O	1:D:519:THR:HG22	2.05	0.57
1:D:722:ILE:HG23	1:D:760:VAL:CG1	2.23	0.57
1:E:470:ASN:O	1:E:472:ARG:HG3	2.04	0.57
2:O:28:THR:HB	2:O:30:LYS:NZ	2.19	0.57
2:Q:32:LEU:O	2:Q:36:MET:HG3	2.04	0.57
2:Q:71:MET:O	2:Q:71:MET:HG2	2.04	0.57
2:S:121:VAL:C	2:S:123:GLN:H	2.05	0.57
1:A:581:GLN:HE22	1:A:632:TYR:HE1	1.51	0.57
1:A:735:VAL:HG12	1:A:741:ILE:CD1	2.35	0.57
1:B:315:PHE:HA	1:B:318:ILE:HD13	1.87	0.57
1:C:170:TYR:HA	1:C:173:ILE:CG2	2.35	0.57
1:D:517:VAL:CB	1:D:525:LYS:HZ2	2.18	0.57
1:E:165:GLN:C	1:E:167:LYS:N	2.58	0.57
1:E:201:ASP:OD2	1:E:218:LEU:HD11	2.05	0.57
1:E:76:LEU:O	1:E:80:GLN:N	2.32	0.57
1:F:269:ASN:O	1:F:273:LYS:HG3	2.04	0.57
1:A:239:HIS:O	1:A:243:LEU:HG	2.04	0.57
1:B:173:ILE:HG23	1:B:174:GLY:N	2.19	0.57
1:B:310:GLU:OE2	1:B:340:LYS:HD2	2.04	0.57
1:B:559:ARG:HG3	1:B:559:ARG:HH11	1.69	0.57
1:C:175:LYS:HZ2	1:C:175:LYS:HB2	1.66	0.57
1:C:636:ALA:O	1:C:640:LYS:HA	2.04	0.57
1:D:225:ILE:HG12	1:D:229:PHE:HE2	1.70	0.57
1:D:268:MET:O	1:D:271:LEU:HB2	2.05	0.57
1:D:700:TYR:CE1	1:D:727:GLN:HB3	2.39	0.57
1:F:239:HIS:O	1:F:243:LEU:HG	2.05	0.57
1:F:581:GLN:HE21	1:F:628:PHE:HA	1.69	0.57
1:A:630:ARG:NH1	2:O:83:GLU:HG2	2.18	0.57
1:B:288:VAL:HG23	1:B:289:GLU:N	2.20	0.57
1:F:268:MET:O	1:F:271:LEU:HB2	2.05	0.57
2:Q:12:PHE:CD1	2:Q:72:MET:HG3	2.39	0.57
2:T:56:ASP:HB3	2:T:60:ASN:OD1	2.05	0.57
1:A:636:ALA:O	1:A:640:LYS:HA	2.04	0.57
1:B:225:ILE:HG12	1:B:229:PHE:HE2	1.70	0.57
1:B:602:PHE:N	1:B:602:PHE:CD2	2.71	0.57
1:C:239:HIS:O	1:C:243:LEU:HG	2.05	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:559:ARG:HG3	1:D:559:ARG:HH11	1.69	0.57
1:D:735:VAL:HG12	1:D:741:ILE:CD1	2.35	0.57
2:R:111:ASN:C	2:R:113:GLY:H	2.08	0.57
2:R:71:MET:HG2	2:R:71:MET:O	2.05	0.57
2:T:137:ASN:OD1	2:T:139:GLU:HB2	2.05	0.57
1:A:217:LYS:CB	1:A:236:GLU:HG3	2.34	0.57
1:A:559:ARG:HH11	1:A:559:ARG:HG3	1.70	0.57
1:A:92:ASP:O	1:A:96:ILE:HG13	2.04	0.57
1:B:636:ALA:O	1:B:640:LYS:HA	2.05	0.57
1:B:724:ARG:HG3	1:B:724:ARG:HH11	1.69	0.57
1:C:182:ILE:O	1:C:187:SER:CB	2.53	0.57
1:C:296:LEU:CD2	1:C:296:LEU:H	2.18	0.57
1:C:657:ILE:HD11	1:C:701:LEU:HD23	1.87	0.57
1:C:700:TYR:CE1	1:C:727:GLN:HB3	2.39	0.57
1:C:655:ASN:CB	1:C:758:ASN:HB3	2.20	0.57
1:D:239:HIS:O	1:D:243:LEU:HG	2.05	0.57
1:D:470:ASN:O	1:D:472:ARG:HG3	2.05	0.57
1:D:519:THR:HG21	1:D:525:LYS:HA	1.87	0.57
1:E:115:LYS:HZ2	1:E:115:LYS:HB3	1.68	0.57
1:E:239:HIS:O	1:E:243:LEU:HG	2.05	0.57
1:E:275:GLY:O	1:E:278:LYS:HB2	2.04	0.57
1:E:519:THR:HG21	1:E:525:LYS:HA	1.87	0.57
1:E:516:VAL:O	1:E:519:THR:HG22	2.05	0.57
1:F:225:ILE:HG12	1:F:229:PHE:HE2	1.70	0.57
1:F:517:VAL:CB	1:F:525:LYS:HZ2	2.18	0.57
1:F:630:ARG:NH1	2:T:83:GLU:HG2	2.18	0.57
2:Q:56:ASP:HB3	2:Q:60:ASN:OD1	2.05	0.57
2:S:65:PHE:CB	2:S:66:PRO:HD3	2.34	0.57
1:B:107:THR:HG21	1:B:115:LYS:CD	2.22	0.57
1:B:630:ARG:HG3	1:B:630:ARG:NH1	2.18	0.57
1:B:639:ASN:H	1:B:639:ASN:ND2	2.03	0.57
1:B:678:VAL:HG22	1:B:745:TYR:HE2	1.68	0.57
1:E:360:VAL:CG1	1:E:370:LEU:HD22	2.30	0.57
1:F:217:LYS:CB	1:F:236:GLU:HG3	2.35	0.57
1:F:735:VAL:HG12	1:F:741:ILE:CD1	2.35	0.57
2:T:65:PHE:CB	2:T:66:PRO:HD3	2.35	0.57
1:A:115:LYS:HZ3	1:A:117:LEU:H	1.53	0.57
1:A:519:THR:HG21	1:A:525:LYS:HA	1.87	0.57
1:C:269:ASN:O	1:C:273:LYS:HG3	2.04	0.57
1:C:516:VAL:O	1:C:519:THR:HG22	2.05	0.57
1:C:630:ARG:NH1	2:Q:83:GLU:HG2	2.20	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:296:LEU:CD2	1:E:296:LEU:H	2.18	0.57
1:E:373:LYS:HD3	1:E:376:GLN:NE2	2.20	0.57
1:E:517:VAL:CB	1:E:525:LYS:HZ2	2.18	0.57
1:E:735:VAL:HG12	1:E:741:ILE:CD1	2.34	0.57
1:F:165:GLN:C	1:F:167:LYS:N	2.58	0.57
1:F:172:GLU:HB3	1:F:246:SER:HA	1.86	0.57
1:F:470:ASN:O	1:F:472:ARG:HG3	2.05	0.57
1:F:559:ARG:HG3	1:F:559:ARG:HH11	1.69	0.57
2:T:30:LYS:H	2:T:30:LYS:CD	2.03	0.57
1:F:534:ILE:CG2	2:T:84:GLU:HB3	2.35	0.57
1:A:202:ASP:CB	1:A:208:LEU:HG	2.35	0.56
1:A:470:ASN:O	1:A:472:ARG:HG3	2.05	0.56
1:B:199:LEU:HD21	1:B:226:ASP:OD2	2.05	0.56
1:B:345:THR:HG22	1:B:490:ALA:O	2.05	0.56
1:B:472:ARG:HH11	1:B:472:ARG:CB	2.18	0.56
1:B:540:ARG:HD3	1:B:627:TYR:OH	2.05	0.56
1:C:165:GLN:C	1:C:167:LYS:N	2.58	0.56
1:C:184:LYS:NZ	1:C:191:GLU:HB2	2.20	0.56
1:C:92:ASP:O	1:C:96:ILE:HG13	2.05	0.56
1:D:145:LYS:HD3	1:D:151:LYS:HD2	1.87	0.56
1:D:360:VAL:CG1	1:D:370:LEU:HD22	2.31	0.56
1:E:217:LYS:CB	1:E:236:GLU:HG3	2.35	0.56
1:E:625:LEU:HD12	1:E:626:TYR:H	1.71	0.56
1:E:92:ASP:O	1:E:96:ILE:HG13	2.05	0.56
1:F:700:TYR:CE1	1:F:727:GLN:HB3	2.40	0.56
2:O:71:MET:HG2	2:O:71:MET:O	2.04	0.56
1:B:239:HIS:O	1:B:243:LEU:HG	2.04	0.56
1:C:470:ASN:O	1:C:472:ARG:HG3	2.04	0.56
1:C:639:ASN:H	1:C:639:ASN:ND2	2.04	0.56
1:D:236:GLU:HA	1:D:239:HIS:CD2	2.40	0.56
1:D:472:ARG:HH11	1:D:472:ARG:CB	2.18	0.56
1:E:160:ALA:O	1:E:167:LYS:HD2	2.05	0.56
1:F:236:GLU:HA	1:F:239:HIS:CD2	2.39	0.56
1:F:752:LEU:O	1:F:756:ILE:HG12	2.05	0.56
1:F:85:LEU:HG	1:F:171:TYR:CE2	2.40	0.56
1:F:92:ASP:O	1:F:96:ILE:HG13	2.05	0.56
2:P:55:VAL:HG21	2:P:67:GLU:OE1	2.04	0.56
1:B:269:ASN:O	1:B:273:LYS:HG3	2.05	0.56
1:B:629:ASN:HB3	1:B:632:TYR:CE1	2.40	0.56
1:C:472:ARG:HH11	1:C:472:ARG:CB	2.18	0.56
1:C:597:ASN:HD21	1:C:601:GLU:CB	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:275:GLY:HA2	1:D:278:LYS:CE	2.34	0.56
1:E:135:VAL:HG22	1:E:135:VAL:O	2.05	0.56
1:E:175:LYS:HB2	1:E:175:LYS:HZ2	1.68	0.56
1:E:185:ASP:O	1:E:190:PRO:CG	2.53	0.56
1:E:201:ASP:OD1	1:E:225:ILE:HD12	2.04	0.56
1:E:296:LEU:N	1:E:296:LEU:CD2	2.67	0.56
1:F:79:ILE:C	1:F:81:GLN:H	2.08	0.56
1:D:630:ARG:NH1	2:R:83:GLU:HG2	2.20	0.56
2:S:71:MET:O	2:S:71:MET:HG2	2.05	0.56
1:A:165:GLN:C	1:A:167:LYS:N	2.58	0.56
1:A:288:VAL:HG23	1:A:289:GLU:N	2.20	0.56
1:A:731:GLU:O	1:A:735:VAL:HG23	2.06	0.56
1:B:286:GLU:O	1:B:290:LYS:HB2	2.05	0.56
1:C:135:VAL:HG22	1:C:135:VAL:O	2.05	0.56
1:C:173:ILE:HG13	1:C:242:SER:CB	2.29	0.56
1:C:199:LEU:C	1:C:201:ASP:H	2.09	0.56
1:C:629:ASN:HB3	1:C:632:TYR:CE1	2.41	0.56
1:C:731:GLU:O	1:C:735:VAL:HG23	2.05	0.56
1:F:220:LEU:HG	1:F:223:LYS:HB2	1.86	0.56
1:F:345:THR:HG22	1:F:490:ALA:O	2.06	0.56
1:F:597:ASN:HB2	1:F:598:PRO:CD	2.31	0.56
2:P:12:PHE:CD1	2:P:72:MET:HG3	2.39	0.56
2:Q:55:VAL:HG21	2:Q:67:GLU:OE1	2.04	0.56
2:R:56:ASP:HB3	2:R:60:ASN:OD1	2.05	0.56
2:T:111:ASN:C	2:T:113:GLY:H	2.09	0.56
1:A:275:GLY:HA2	1:A:278:LYS:CE	2.35	0.56
1:A:516:VAL:O	1:A:519:THR:HG22	2.03	0.56
1:A:559:ARG:O	1:A:563:ALA:HB2	2.05	0.56
1:A:579:THR:O	1:A:581:GLN:N	2.38	0.56
1:C:288:VAL:HG23	1:C:289:GLU:N	2.20	0.56
1:C:559:ARG:O	1:C:563:ALA:HB2	2.06	0.56
1:D:515:LYS:NZ	1:D:515:LYS:HB3	2.21	0.56
1:D:92:ASP:O	1:D:96:ILE:HG13	2.05	0.56
1:E:700:TYR:HD1	1:E:728:ALA:N	2.04	0.56
2:Q:111:ASN:C	2:Q:113:GLY:H	2.08	0.56
2:S:111:ASN:C	2:S:113:GLY:H	2.08	0.56
2:T:55:VAL:HG21	2:T:67:GLU:OE1	2.06	0.56
1:B:217:LYS:CB	1:B:236:GLU:HG3	2.34	0.56
1:B:482:GLU:OE2	1:B:482:GLU:HA	2.06	0.56
1:B:519:THR:HG21	1:B:525:LYS:HA	1.87	0.56
1:C:185:ASP:O	1:C:190:PRO:HD3	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:217:LYS:CB	1:C:236:GLU:HG3	2.35	0.56
1:D:345:THR:HG22	1:D:490:ALA:O	2.06	0.56
1:E:201:ASP:OD2	1:E:218:LEU:HD21	2.06	0.56
1:E:700:TYR:CE1	1:E:727:GLN:HB3	2.40	0.56
1:F:315:PHE:HA	1:F:318:ILE:HD13	1.87	0.56
1:F:678:VAL:HG22	1:F:745:TYR:HE2	1.67	0.56
2:O:64:ASP:OD2	2:O:67:GLU:HG2	2.06	0.56
2:P:71:MET:O	2:P:71:MET:HG2	2.04	0.56
1:A:199:LEU:C	1:A:201:ASP:H	2.09	0.56
1:A:225:ILE:HG12	1:A:229:PHE:HE2	1.70	0.56
1:A:517:VAL:CB	1:A:525:LYS:HZ2	2.18	0.56
1:B:201:ASP:OD2	1:B:218:LEU:HD21	2.05	0.56
1:B:781:ASN:H	1:B:789:ASN:ND2	2.03	0.56
1:C:236:GLU:HA	1:C:239:HIS:CD2	2.41	0.56
1:C:781:ASN:H	1:C:789:ASN:ND2	2.04	0.56
1:D:135:VAL:HG22	1:D:135:VAL:O	2.05	0.56
1:D:559:ARG:O	1:D:563:ALA:HB2	2.06	0.56
1:E:131:ARG:HB2	1:E:170:TYR:CE2	2.39	0.56
1:E:657:ILE:HD11	1:E:701:LEU:HD23	1.87	0.56
1:E:79:ILE:O	1:E:81:GLN:N	2.39	0.56
1:F:472:ARG:CB	1:F:472:ARG:HH11	2.19	0.56
1:F:540:ARG:HD3	1:F:627:TYR:OH	2.05	0.56
1:F:629:ASN:HB3	1:F:632:TYR:CE1	2.40	0.56
1:F:700:TYR:HD1	1:F:728:ALA:N	2.03	0.56
1:F:781:ASN:H	1:F:789:ASN:ND2	2.03	0.56
2:Q:64:ASP:OD2	2:Q:67:GLU:HG2	2.06	0.56
2:S:56:ASP:HB3	2:S:60:ASN:OD1	2.05	0.56
1:A:172:GLU:HB3	1:A:246:SER:HA	1.86	0.56
1:B:451:ASN:OD1	1:B:451:ASN:N	2.39	0.56
1:C:218:LEU:HD13	1:C:225:ILE:HD11	1.87	0.56
1:C:315:PHE:HA	1:C:318:ILE:HD13	1.87	0.56
1:D:731:GLU:O	1:D:735:VAL:HG23	2.06	0.56
1:E:172:GLU:HB3	1:E:246:SER:HA	1.86	0.56
1:E:636:ALA:O	1:E:640:LYS:HA	2.04	0.56
1:F:115:LYS:HZ3	1:F:117:LEU:H	1.54	0.56
1:F:202:ASP:CB	1:F:208:LEU:HG	2.36	0.56
1:F:657:ILE:HD11	1:F:701:LEU:HD23	1.86	0.56
2:O:12:PHE:CD1	2:O:72:MET:HG3	2.39	0.56
2:O:56:ASP:HB3	2:O:60:ASN:OD1	2.06	0.56
2:P:65:PHE:CB	2:P:66:PRO:HD3	2.34	0.56
2:S:32:LEU:HD22	2:S:63:ILE:HD13	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:700:TYR:HD1	1:B:728:ALA:N	2.04	0.56
1:C:550:SER:CB	1:C:553:GLN:HG3	2.31	0.56
1:C:700:TYR:HD1	1:C:728:ALA:N	2.04	0.56
1:D:636:ALA:O	1:D:640:LYS:HA	2.05	0.56
1:D:671:ARG:NH1	1:D:677:GLY:HA3	2.21	0.56
1:E:225:ILE:HG12	1:E:229:PHE:HE2	1.70	0.56
2:P:97:ASN:ND2	2:P:97:ASN:N	2.49	0.56
2:R:12:PHE:CD1	2:R:72:MET:HG3	2.40	0.56
1:A:629:ASN:HB3	1:A:632:TYR:CE1	2.40	0.56
1:B:199:LEU:C	1:B:201:ASP:H	2.09	0.56
1:B:218:LEU:HD13	1:B:225:ILE:HD11	1.87	0.56
1:B:752:LEU:O	1:B:756:ILE:HG12	2.06	0.56
1:C:202:ASP:CB	1:C:208:LEU:HG	2.36	0.56
1:C:324:THR:CB	1:C:499:PRO:HA	2.30	0.56
1:D:296:LEU:N	1:D:296:LEU:CD2	2.67	0.56
1:D:629:ASN:HB3	1:D:632:TYR:CE1	2.41	0.56
1:D:715:GLU:OE1	1:D:767:GLN:NE2	2.39	0.56
1:E:182:ILE:O	1:E:182:ILE:HG23	2.05	0.56
1:E:301:ALA:O	1:E:303:LYS:N	2.39	0.56
1:E:325:TYR:HB2	1:E:498:ALA:HB3	1.88	0.56
1:E:629:ASN:HB3	1:E:632:TYR:CE1	2.41	0.56
1:F:88:LYS:HE2	1:F:168:GLU:OE1	2.06	0.56
1:F:365:PRO:HB2	1:F:367:ASP:O	2.06	0.56
1:F:325:TYR:HB2	1:F:498:ALA:HB3	1.87	0.56
1:F:581:GLN:NE2	1:F:629:ASN:H	2.04	0.56
2:T:24:ASP:OD1	2:T:25:GLY:N	2.39	0.56
1:A:296:LEU:CD2	1:A:296:LEU:H	2.19	0.56
1:A:752:LEU:O	1:A:756:ILE:HG12	2.06	0.56
1:B:165:GLN:C	1:B:167:LYS:N	2.58	0.56
1:B:182:ILE:O	1:B:182:ILE:HG23	2.05	0.56
1:B:236:GLU:HA	1:B:239:HIS:CD2	2.41	0.56
1:B:268:MET:O	1:B:271:LEU:HB2	2.05	0.56
1:C:519:THR:HG21	1:C:525:LYS:HA	1.87	0.56
1:D:199:LEU:C	1:D:201:ASP:H	2.10	0.56
1:D:598:PRO:HG3	1:D:624:TYR:OH	2.06	0.56
1:D:752:LEU:O	1:D:756:ILE:HG12	2.06	0.56
1:E:269:ASN:O	1:E:273:LYS:HG3	2.05	0.56
1:E:540:ARG:HD3	1:E:627:TYR:OH	2.06	0.56
1:F:519:THR:HG21	1:F:525:LYS:HA	1.87	0.56
2:P:64:ASP:OD2	2:P:67:GLU:HG2	2.06	0.56
2:T:71:MET:O	2:T:71:MET:HG2	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:630:ARG:NH1	2:P:83:GLU:HG2	2.20	0.55
1:C:515:LYS:NZ	1:C:515:LYS:HB3	2.21	0.55
1:C:579:THR:O	1:C:581:GLN:N	2.39	0.55
1:D:172:GLU:HB3	1:D:246:SER:HA	1.86	0.55
1:E:156:ILE:N	1:E:156:ILE:HD12	2.21	0.55
1:E:420:LEU:HD13	1:E:420:LEU:O	2.06	0.55
1:F:373:LYS:HD3	1:F:376:GLN:NE2	2.21	0.55
1:D:534:ILE:CG2	2:R:84:GLU:HB3	2.37	0.55
2:S:64:ASP:OD2	2:S:67:GLU:HG2	2.07	0.55
1:A:156:ILE:N	1:A:156:ILE:HD12	2.21	0.55
1:A:286:GLU:O	1:A:290:LYS:HB2	2.06	0.55
1:A:472:ARG:CB	1:A:472:ARG:HH11	2.18	0.55
1:A:784:GLU:HG3	1:A:785:ASN:N	2.20	0.55
1:B:106:PHE:HZ	1:B:171:TYR:HH	1.53	0.55
1:B:325:TYR:HB2	1:B:498:ALA:HB3	1.88	0.55
1:D:201:ASP:OD2	1:D:218:LEU:HD11	2.06	0.55
1:E:236:GLU:HA	1:E:239:HIS:CD2	2.41	0.55
1:F:296:LEU:H	1:F:296:LEU:CD2	2.18	0.55
1:B:625:LEU:HD12	1:B:626:TYR:H	1.67	0.55
1:C:338:LEU:O	1:C:343:VAL:HB	2.06	0.55
1:D:202:ASP:CB	1:D:208:LEU:HG	2.36	0.55
1:E:128:MET:N	1:E:128:MET:SD	2.66	0.55
1:E:784:GLU:HG3	1:E:785:ASN:N	2.20	0.55
1:F:201:ASP:OD2	1:F:218:LEU:HD11	2.06	0.55
2:Q:117:THR:C	2:Q:119:GLU:N	2.59	0.55
2:Q:37:ARG:HH11	2:Q:37:ARG:HG2	1.70	0.55
2:T:64:ASP:OD2	2:T:67:GLU:HG2	2.06	0.55
2:T:97:ASN:ND2	2:T:97:ASN:N	2.49	0.55
1:A:201:ASP:OD2	1:A:218:LEU:HD21	2.07	0.55
1:A:345:THR:HG22	1:A:490:ALA:O	2.06	0.55
1:A:625:LEU:HD12	1:A:626:TYR:H	1.68	0.55
1:A:85:LEU:HG	1:A:171:TYR:CE2	2.41	0.55
1:A:85:LEU:O	1:A:88:LYS:HE3	2.07	0.55
1:B:185:ASP:O	1:B:190:PRO:HD3	2.06	0.55
1:B:373:LYS:HD3	1:B:376:GLN:NE2	2.21	0.55
1:C:182:ILE:O	1:C:182:ILE:HG23	2.05	0.55
1:D:115:LYS:HZ3	1:D:117:LEU:H	1.52	0.55
1:D:655:ASN:CB	1:D:758:ASN:HB3	2.21	0.55
1:D:85:LEU:O	1:D:88:LYS:HE3	2.07	0.55
1:E:286:GLU:O	1:E:290:LYS:HB2	2.06	0.55
1:E:315:PHE:HA	1:E:318:ILE:HD13	1.87	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:182:ILE:HG23	1:F:182:ILE:O	2.05	0.55
1:F:288:VAL:HG23	1:F:289:GLU:N	2.20	0.55
1:F:76:LEU:O	1:F:80:GLN:N	2.36	0.55
2:P:24:ASP:OD1	2:P:25:GLY:N	2.40	0.55
2:Q:137:ASN:H	2:Q:140:GLU:HG3	1.71	0.55
1:A:671:ARG:NH1	1:A:677:GLY:HA3	2.21	0.55
1:B:115:LYS:NZ	1:B:117:LEU:HB2	2.20	0.55
1:B:217:LYS:HZ2	1:B:217:LYS:HB3	1.72	0.55
1:B:76:LEU:O	1:B:80:GLN:CB	2.53	0.55
1:B:88:LYS:HE2	1:B:168:GLU:OE1	2.07	0.55
1:C:325:TYR:HB2	1:C:498:ALA:HB3	1.87	0.55
1:C:732:ILE:HG23	1:C:749:PHE:HD1	1.72	0.55
1:D:156:ILE:HD12	1:D:156:ILE:N	2.21	0.55
1:D:288:VAL:HG23	1:D:289:GLU:N	2.20	0.55
1:E:202:ASP:CB	1:E:208:LEU:HG	2.37	0.55
1:E:364:ILE:O	1:E:477:MET:HG2	2.06	0.55
1:E:655:ASN:CB	1:E:758:ASN:HB3	2.21	0.55
1:F:456:LYS:HZ3	1:F:471:TRP:HE1	1.53	0.55
1:F:636:ALA:O	1:F:640:LYS:HA	2.05	0.55
2:P:111:ASN:N	2:P:111:ASN:ND2	2.55	0.55
2:P:54:GLU:O	2:P:55:VAL:HG13	2.07	0.55
1:C:534:ILE:CG2	2:Q:84:GLU:HB3	2.36	0.55
2:R:137:ASN:H	2:R:140:GLU:HG3	1.72	0.55
1:A:217:LYS:HB3	1:A:217:LYS:HZ2	1.72	0.55
1:A:700:TYR:HD1	1:A:728:ALA:N	2.04	0.55
1:B:210:PHE:HD1	1:B:214:PHE:CD1	2.25	0.55
1:B:516:VAL:O	1:B:519:THR:HG22	2.06	0.55
1:D:159:TYR:H	1:D:159:TYR:HD1	1.55	0.55
1:D:269:ASN:O	1:D:273:LYS:HG3	2.05	0.55
1:D:315:PHE:HA	1:D:318:ILE:HD13	1.87	0.55
1:E:152:LEU:CD2	1:E:154:ILE:HD11	2.36	0.55
1:E:724:ARG:HG3	1:E:724:ARG:HH11	1.71	0.55
1:E:731:GLU:O	1:E:735:VAL:HG23	2.07	0.55
1:F:201:ASP:OD2	1:F:218:LEU:HD21	2.07	0.55
1:F:559:ARG:O	1:F:563:ALA:HB2	2.07	0.55
2:R:64:ASP:OD2	2:R:67:GLU:HG2	2.06	0.55
1:A:182:ILE:O	1:A:182:ILE:HG23	2.05	0.55
1:B:170:TYR:HA	1:B:173:ILE:CG2	2.36	0.55
1:B:202:ASP:CB	1:B:208:LEU:HG	2.37	0.55
1:B:732:ILE:HG23	1:B:749:PHE:HD1	1.72	0.55
1:C:116:GLU:HG3	1:C:117:LEU:CD2	2.37	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:217:LYS:HB3	1:D:217:LYS:HZ2	1.71	0.55
1:D:373:LYS:HD3	1:D:376:GLN:NE2	2.22	0.55
1:D:579:THR:O	1:D:581:GLN:N	2.40	0.55
1:D:700:TYR:HD1	1:D:728:ALA:N	2.05	0.55
1:D:781:ASN:H	1:D:789:ASN:ND2	2.04	0.55
1:D:784:GLU:HG3	1:D:785:ASN:N	2.20	0.55
1:E:602:PHE:N	1:E:602:PHE:CD2	2.71	0.55
1:E:752:LEU:O	1:E:756:ILE:HG12	2.07	0.55
1:F:131:ARG:HB2	1:F:170:TYR:CE2	2.40	0.55
2:S:24:ASP:OD1	2:S:25:GLY:N	2.39	0.55
2:T:117:THR:C	2:T:119:GLU:N	2.60	0.55
1:A:441:VAL:O	1:A:442:TYR:HD2	1.90	0.55
1:A:545:THR:O	1:A:547:GLY:N	2.40	0.55
1:B:127:SER:O	1:B:133:GLU:CG	2.54	0.55
1:B:173:ILE:HG13	1:B:242:SER:CB	2.29	0.55
1:B:735:VAL:HG12	1:B:741:ILE:CD1	2.36	0.55
1:C:88:LYS:HE2	1:C:168:GLU:OE1	2.07	0.55
1:C:210:PHE:HD1	1:C:214:PHE:CD1	2.25	0.55
1:D:365:PRO:HB2	1:D:367:ASP:O	2.07	0.55
1:E:671:ARG:NH1	1:E:677:GLY:HA3	2.21	0.55
1:E:781:ASN:H	1:E:789:ASN:ND2	2.04	0.55
1:F:671:ARG:NH1	1:F:677:GLY:HA3	2.21	0.55
1:A:88:LYS:HE2	1:A:168:GLU:OE1	2.07	0.55
1:A:218:LEU:HD13	1:A:225:ILE:HD11	1.88	0.55
1:B:201:ASP:OD2	1:B:218:LEU:HD11	2.05	0.55
1:B:559:ARG:O	1:B:563:ALA:HB2	2.07	0.55
1:B:581:GLN:NE2	1:B:629:ASN:H	2.05	0.55
1:B:784:GLU:HG3	1:B:785:ASN:N	2.20	0.55
1:C:153:ILE:C	1:C:154:ILE:HD13	2.28	0.55
1:C:220:LEU:HD21	1:C:223:LYS:HG3	1.89	0.55
1:C:373:LYS:HD3	1:C:376:GLN:NE2	2.21	0.55
1:C:364:ILE:O	1:C:477:MET:HG2	2.06	0.55
1:F:199:LEU:C	1:F:201:ASP:H	2.09	0.55
1:F:516:VAL:O	1:F:519:THR:HG22	2.06	0.55
2:O:55:VAL:HB	2:O:67:GLU:OE2	2.06	0.55
2:P:37:ARG:HG2	2:P:37:ARG:HH11	1.71	0.55
1:A:210:PHE:HD1	1:A:214:PHE:CD1	2.25	0.55
1:B:109:ILE:HG23	1:B:157:LYS:HD3	1.89	0.55
1:B:85:LEU:O	1:B:88:LYS:HE3	2.07	0.55
1:C:127:SER:O	1:C:133:GLU:CG	2.54	0.55
1:C:191:GLU:O	1:C:192:PHE:C	2.46	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:598:PRO:HG3	1:C:624:TYR:OH	2.07	0.55
1:C:581:GLN:NE2	1:C:629:ASN:H	2.05	0.55
1:C:737:LYS:HE2	1:C:737:LYS:HA	1.88	0.55
1:D:201:ASP:OD2	1:D:218:LEU:HD21	2.07	0.55
1:D:301:ALA:O	1:D:303:LYS:N	2.40	0.55
1:D:441:VAL:O	1:D:442:TYR:HD2	1.90	0.55
1:E:550:SER:H	1:E:553:GLN:HE21	1.55	0.55
1:F:160:ALA:O	1:F:167:LYS:HD2	2.07	0.55
1:F:218:LEU:C	1:F:220:LEU:N	2.60	0.55
1:F:441:VAL:O	1:F:442:TYR:HD2	1.90	0.55
1:F:732:ILE:HG23	1:F:749:PHE:HD1	1.72	0.55
1:F:784:GLU:HG3	1:F:785:ASN:N	2.21	0.55
2:Q:24:ASP:OD1	2:Q:25:GLY:N	2.39	0.55
1:A:201:ASP:OD2	1:A:218:LEU:HD11	2.07	0.54
1:A:373:LYS:HD3	1:A:376:GLN:NE2	2.21	0.54
1:A:581:GLN:NE2	1:A:629:ASN:H	2.05	0.54
1:A:79:ILE:O	1:A:81:GLN:N	2.40	0.54
1:B:296:LEU:CD2	1:B:296:LEU:H	2.19	0.54
1:B:597:ASN:HB2	1:B:598:PRO:CD	2.31	0.54
1:C:201:ASP:OD2	1:C:218:LEU:HD11	2.06	0.54
1:C:292:ARG:NE	1:C:617:LYS:HE3	2.22	0.54
1:C:540:ARG:HD3	1:C:627:TYR:OH	2.06	0.54
1:C:85:LEU:O	1:C:88:LYS:HE3	2.08	0.54
1:E:85:LEU:HG	1:E:171:TYR:CE2	2.41	0.54
1:E:579:THR:O	1:E:581:GLN:N	2.40	0.54
1:E:581:GLN:NE2	1:E:629:ASN:H	2.04	0.54
2:P:111:ASN:C	2:P:113:GLY:H	2.09	0.54
2:R:37:ARG:HH11	2:R:37:ARG:HG2	1.72	0.54
1:A:598:PRO:HG3	1:A:624:TYR:OH	2.07	0.54
1:C:301:ALA:O	1:C:303:LYS:N	2.40	0.54
1:C:327:LEU:HD12	1:C:327:LEU:N	2.22	0.54
1:C:441:VAL:O	1:C:442:TYR:HD2	1.90	0.54
1:D:182:ILE:HG23	1:D:182:ILE:O	2.06	0.54
1:E:463:THR:O	1:E:466:GLY:N	2.35	0.54
1:E:559:ARG:O	1:E:563:ALA:HB2	2.07	0.54
1:F:153:ILE:C	1:F:154:ILE:HD13	2.27	0.54
2:O:111:ASN:C	2:O:113:GLY:H	2.09	0.54
2:O:117:THR:C	2:O:119:GLU:N	2.60	0.54
2:O:49:GLN:NE2	2:O:49:GLN:N	2.56	0.54
2:R:65:PHE:CB	2:R:66:PRO:HD3	2.35	0.54
2:S:30:LYS:H	2:S:30:LYS:CD	2.01	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:55:VAL:HB	2:T:67:GLU:OE2	2.07	0.54
2:T:32:LEU:HD22	2:T:63:ILE:HD13	1.89	0.54
1:A:99:GLU:C	1:A:101:GLY:H	2.11	0.54
1:A:338:LEU:O	1:A:343:VAL:HB	2.08	0.54
1:B:598:PRO:HG3	1:B:624:TYR:OH	2.07	0.54
1:C:201:ASP:OD2	1:C:218:LEU:HD21	2.07	0.54
1:C:735:VAL:HG12	1:C:741:ILE:CD1	2.37	0.54
1:C:88:LYS:HZ3	1:C:172:GLU:CD	2.10	0.54
1:E:145:LYS:HD3	1:E:151:LYS:HD2	1.89	0.54
1:F:248:TYR:HD2	1:F:249:PHE:CE1	2.26	0.54
1:F:364:ILE:O	1:F:477:MET:HG2	2.07	0.54
1:F:292:ARG:NE	1:F:617:LYS:HE3	2.22	0.54
2:Q:5:THR:HG23	2:Q:8:GLN:HB3	1.90	0.54
1:A:248:TYR:HD2	1:A:249:PHE:CE1	2.26	0.54
1:A:781:ASN:H	1:A:789:ASN:ND2	2.04	0.54
1:D:164:GLU:C	1:D:166:SER:H	2.11	0.54
1:D:248:TYR:HD2	1:D:249:PHE:CE1	2.26	0.54
1:D:85:LEU:HG	1:D:171:TYR:CE2	2.42	0.54
1:E:115:LYS:NZ	1:E:117:LEU:HB2	2.20	0.54
1:E:199:LEU:C	1:E:201:ASP:H	2.10	0.54
1:E:296:LEU:HD22	1:E:606:LYS:HE2	1.89	0.54
2:O:24:ASP:OD1	2:O:25:GLY:N	2.40	0.54
2:R:32:LEU:HD22	2:R:63:ILE:HD13	1.90	0.54
2:S:117:THR:C	2:S:119:GLU:N	2.60	0.54
2:T:137:ASN:H	2:T:140:GLU:HG3	1.72	0.54
1:A:365:PRO:HB2	1:A:367:ASP:O	2.08	0.54
1:A:360:VAL:HG21	1:A:365:PRO:HB3	1.88	0.54
1:B:515:LYS:NZ	1:B:515:LYS:HB3	2.22	0.54
1:B:671:ARG:NH1	1:B:677:GLY:HA3	2.22	0.54
1:D:173:ILE:HG13	1:D:242:SER:CB	2.30	0.54
1:E:116:GLU:HG3	1:E:117:LEU:CD2	2.37	0.54
1:E:88:LYS:HE2	1:E:168:GLU:OE1	2.08	0.54
1:E:481:VAL:HB	1:E:486:LYS:HD2	1.90	0.54
1:E:499:PRO:HD3	1:E:552:TRP:CH2	2.42	0.54
1:F:116:GLU:HG3	1:F:117:LEU:CD2	2.38	0.54
1:F:106:PHE:HZ	1:F:171:TYR:HH	1.52	0.54
1:F:579:THR:O	1:F:581:GLN:N	2.41	0.54
2:O:137:ASN:H	2:O:140:GLU:HG3	1.72	0.54
1:A:533:LEU:HD22	1:A:533:LEU:O	2.08	0.54
1:A:635:ILE:CD1	1:A:635:ILE:H	2.16	0.54
1:B:534:ILE:CG2	2:P:84:GLU:HB3	2.38	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:111:LEU:CD2	1:C:155:ASN:HD21	2.20	0.54
1:D:153:ILE:C	1:D:154:ILE:HD13	2.28	0.54
1:D:338:LEU:O	1:D:343:VAL:HB	2.07	0.54
1:F:210:PHE:HD1	1:F:214:PHE:CD1	2.26	0.54
1:F:515:LYS:HB3	1:F:515:LYS:NZ	2.23	0.54
2:P:117:THR:C	2:P:119:GLU:N	2.60	0.54
2:R:54:GLU:O	2:R:55:VAL:HG13	2.07	0.54
2:T:48:LEU:HA	2:T:51:MET:HE1	1.90	0.54
1:A:292:ARG:NE	1:A:617:LYS:HE3	2.23	0.54
1:B:409:ARG:CZ	1:B:413:LEU:HD21	2.38	0.54
1:B:292:ARG:NE	1:B:617:LYS:HE3	2.23	0.54
1:B:86:LEU:HA	1:B:89:ILE:HD12	1.89	0.54
1:C:671:ARG:NH1	1:C:677:GLY:HA3	2.23	0.54
1:F:296:LEU:N	1:F:296:LEU:CD2	2.67	0.54
1:F:722:ILE:HG23	1:F:760:VAL:CG1	2.23	0.54
2:R:24:ASP:OD1	2:R:25:GLY:N	2.40	0.54
2:S:137:ASN:H	2:S:140:GLU:HG3	1.73	0.54
2:S:55:VAL:HB	2:S:67:GLU:OE2	2.07	0.54
2:S:5:THR:HG23	2:S:8:GLN:HB3	1.90	0.54
2:T:5:THR:HG23	2:T:8:GLN:HB3	1.90	0.54
1:A:236:GLU:HA	1:A:239:HIS:CD2	2.42	0.54
1:B:109:ILE:HD11	1:B:157:LYS:NZ	2.22	0.54
1:B:252:ASP:O	1:B:254:ARG:HD2	2.08	0.54
1:B:441:VAL:O	1:B:442:TYR:HD2	1.90	0.54
1:B:79:ILE:O	1:B:81:GLN:N	2.40	0.54
1:C:252:ASP:O	1:C:254:ARG:HD2	2.08	0.54
1:D:106:PHE:HZ	1:D:171:TYR:HH	1.51	0.54
1:D:364:ILE:O	1:D:477:MET:HG2	2.07	0.54
1:D:709:ASN:O	1:D:717:LYS:HE3	2.08	0.54
1:E:360:VAL:HG21	1:E:365:PRO:HB3	1.90	0.54
1:E:515:LYS:HB3	1:E:515:LYS:NZ	2.23	0.54
1:A:108:ASP:OD2	1:A:108:ASP:C	2.46	0.54
1:A:115:LYS:NZ	1:A:117:LEU:HB2	2.23	0.54
1:B:579:THR:O	1:B:581:GLN:N	2.41	0.54
1:C:248:TYR:HD2	1:C:249:PHE:CE1	2.26	0.54
1:C:360:VAL:HG21	1:C:365:PRO:HB3	1.89	0.54
1:C:76:LEU:O	1:C:80:GLN:CB	2.56	0.54
1:C:784:GLU:HG3	1:C:785:ASN:N	2.21	0.54
1:C:79:ILE:O	1:C:81:GLN:N	2.40	0.54
1:E:365:PRO:HB2	1:E:367:ASP:O	2.08	0.54
1:E:472:ARG:HH11	1:E:472:ARG:CB	2.19	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:776:LEU:O	1:E:780:LEU:HD13	2.08	0.54
2:O:58:ASP:O	2:O:60:ASN:N	2.39	0.54
2:Q:49:GLN:NE2	2:Q:49:GLN:N	2.56	0.54
2:Q:55:VAL:HB	2:Q:67:GLU:OE2	2.07	0.54
2:R:86:ARG:NH2	2:R:138:TYR:CE2	2.76	0.54
2:S:93:ASP:OD1	2:S:97:ASN:ND2	2.41	0.54
1:A:243:LEU:HA	1:A:246:SER:OG	2.07	0.54
1:A:409:ARG:CZ	1:A:413:LEU:HD21	2.38	0.54
1:A:420:LEU:O	1:A:420:LEU:HD13	2.08	0.54
1:B:88:LYS:NZ	1:B:172:GLU:OE2	2.39	0.54
1:B:360:VAL:HG21	1:B:365:PRO:HB3	1.89	0.54
1:C:152:LEU:CD2	1:C:154:ILE:HD11	2.37	0.54
1:D:481:VAL:HB	1:D:486:LYS:HD2	1.90	0.54
1:D:292:ARG:NE	1:D:617:LYS:HE3	2.22	0.54
1:D:732:ILE:HG23	1:D:749:PHE:HD1	1.74	0.54
1:E:128:MET:O	1:E:128:MET:HG2	2.08	0.54
1:E:218:LEU:HD13	1:E:225:ILE:HD11	1.90	0.54
1:F:360:VAL:HG21	1:F:365:PRO:HB3	1.90	0.54
1:F:493:ASP:OD2	1:F:577:HIS:HE1	1.91	0.54
2:R:49:GLN:NE2	2:R:49:GLN:N	2.55	0.54
1:A:301:ALA:O	1:A:303:LYS:N	2.41	0.53
1:A:456:LYS:HD3	1:A:471:TRP:CD1	2.43	0.53
1:A:364:ILE:O	1:A:477:MET:HG2	2.08	0.53
1:A:515:LYS:NZ	1:A:515:LYS:HB3	2.22	0.53
1:A:621:GLY:HA2	2:O:94:LYS:HZ3	1.72	0.53
1:A:86:LEU:HA	1:A:89:ILE:HD12	1.90	0.53
1:C:286:GLU:O	1:C:290:LYS:HB2	2.08	0.53
1:D:286:GLU:O	1:D:290:LYS:HB2	2.08	0.53
1:E:243:LEU:HA	1:E:246:SER:OG	2.08	0.53
1:E:288:VAL:HG23	1:E:289:GLU:N	2.21	0.53
1:E:441:VAL:O	1:E:442:TYR:HD2	1.91	0.53
1:E:534:ILE:CG2	2:S:84:GLU:HB3	2.37	0.53
1:F:338:LEU:O	1:F:343:VAL:HB	2.08	0.53
2:R:5:THR:HG23	2:R:8:GLN:HB3	1.90	0.53
2:S:111:ASN:ND2	2:S:111:ASN:N	2.56	0.53
2:T:37:ARG:HH11	2:T:37:ARG:HG2	1.72	0.53
1:A:252:ASP:O	1:A:254:ARG:HD2	2.08	0.53
1:A:564:VAL:O	1:A:567:THR:HG22	2.08	0.53
1:B:545:THR:O	1:B:547:GLY:N	2.40	0.53
1:B:550:SER:CB	1:B:553:GLN:HG3	2.31	0.53
1:C:153:ILE:O	1:C:154:ILE:HD13	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:409:ARG:CZ	1:C:413:LEU:HD21	2.39	0.53
1:C:499:PRO:CG	1:C:504:ILE:HD11	2.38	0.53
1:D:220:LEU:HD21	1:D:223:LYS:HG3	1.89	0.53
1:D:360:VAL:HG21	1:D:365:PRO:HB3	1.90	0.53
1:D:581:GLN:NE2	1:D:629:ASN:H	2.05	0.53
1:E:210:PHE:HD1	1:E:214:PHE:CD1	2.26	0.53
1:E:732:ILE:HG23	1:E:749:PHE:HD1	1.73	0.53
1:F:107:THR:HG21	1:F:115:LYS:CD	2.27	0.53
1:F:335:ALA:O	1:F:339:ILE:HG13	2.09	0.53
1:F:409:ARG:CZ	1:F:413:LEU:HD21	2.38	0.53
1:F:655:ASN:CB	1:F:758:ASN:HB3	2.20	0.53
2:Q:54:GLU:O	2:Q:55:VAL:HG13	2.09	0.53
1:A:116:GLU:HG3	1:A:117:LEU:CD2	2.38	0.53
1:A:88:LYS:NZ	1:A:172:GLU:OE2	2.42	0.53
1:A:170:TYR:HA	1:A:173:ILE:CG2	2.36	0.53
1:A:797:ILE:HG13	1:A:797:ILE:O	2.08	0.53
1:B:327:LEU:HD12	1:B:327:LEU:N	2.23	0.53
1:C:545:THR:O	1:C:547:GLY:N	2.39	0.53
1:C:752:LEU:O	1:C:756:ILE:HG12	2.08	0.53
1:D:88:LYS:HE2	1:D:168:GLU:OE1	2.08	0.53
1:E:409:ARG:CZ	1:E:413:LEU:HD21	2.38	0.53
1:E:456:LYS:HD3	1:E:471:TRP:CD1	2.44	0.53
1:E:545:THR:O	1:E:547:GLY:N	2.41	0.53
1:F:327:LEU:N	1:F:327:LEU:HD12	2.23	0.53
1:F:355:SER:HB2	1:F:371:SER:HA	1.91	0.53
1:F:85:LEU:O	1:F:88:LYS:HE3	2.08	0.53
1:A:534:ILE:CG2	2:O:84:GLU:HB3	2.38	0.53
2:P:55:VAL:HB	2:P:67:GLU:OE2	2.08	0.53
2:Q:111:ASN:N	2:Q:111:ASN:ND2	2.56	0.53
2:T:93:ASP:OD1	2:T:97:ASN:ND2	2.41	0.53
1:C:456:LYS:HD3	1:C:471:TRP:CD1	2.43	0.53
1:D:128:MET:O	1:D:128:MET:HG2	2.09	0.53
1:D:79:ILE:O	1:D:81:GLN:N	2.41	0.53
1:E:797:ILE:HG13	1:E:797:ILE:O	2.09	0.53
1:F:156:ILE:HD12	1:F:156:ILE:N	2.23	0.53
1:F:456:LYS:HD3	1:F:471:TRP:CD1	2.44	0.53
2:O:54:GLU:O	2:O:55:VAL:HG13	2.08	0.53
2:O:93:ASP:OD1	2:O:97:ASN:ND2	2.41	0.53
2:Q:32:LEU:HD22	2:Q:63:ILE:HD13	1.90	0.53
2:S:110:THR:O	2:S:113:GLY:N	2.41	0.53
2:T:110:THR:O	2:T:113:GLY:N	2.41	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:175:LYS:NZ	1:B:175:LYS:CB	2.71	0.53
1:D:564:VAL:O	1:D:567:THR:HG22	2.08	0.53
1:E:164:GLU:C	1:E:166:SER:H	2.11	0.53
1:E:218:LEU:C	1:E:220:LEU:N	2.59	0.53
1:E:597:ASN:HB2	1:E:598:PRO:CD	2.33	0.53
1:E:630:ARG:NH1	2:S:83:GLU:HG2	2.23	0.53
1:F:170:TYR:HA	1:F:173:ILE:CG2	2.35	0.53
2:P:137:ASN:H	2:P:140:GLU:HG3	1.73	0.53
1:B:621:GLY:HA2	2:P:94:LYS:HZ3	1.74	0.53
2:R:55:VAL:HB	2:R:67:GLU:OE2	2.08	0.53
2:S:86:ARG:NH2	2:S:138:TYR:CE2	2.76	0.53
1:A:185:ASP:O	1:A:190:PRO:CG	2.56	0.53
1:A:324:THR:CB	1:A:499:PRO:HA	2.29	0.53
1:B:184:LYS:HZ1	1:B:191:GLU:HB2	1.71	0.53
1:B:248:TYR:HD2	1:B:249:PHE:CE1	2.27	0.53
1:B:301:ALA:O	1:B:303:LYS:N	2.41	0.53
1:B:481:VAL:HB	1:B:486:LYS:HD2	1.91	0.53
1:C:109:ILE:CD1	1:C:157:LYS:NZ	2.72	0.53
1:C:175:LYS:NZ	1:C:175:LYS:CB	2.71	0.53
1:C:75:THR:C	1:C:77:ASP:H	2.11	0.53
1:D:116:GLU:HG3	1:D:117:LEU:CD2	2.38	0.53
1:D:210:PHE:HD1	1:D:214:PHE:CD1	2.27	0.53
1:D:797:ILE:O	1:D:797:ILE:HG13	2.09	0.53
1:E:175:LYS:NZ	1:E:175:LYS:CB	2.71	0.53
1:E:85:LEU:O	1:E:88:LYS:HE3	2.09	0.53
1:F:99:GLU:C	1:F:101:GLY:H	2.12	0.53
1:F:175:LYS:CB	1:F:175:LYS:NZ	2.71	0.53
1:F:179:LEU:O	1:F:183:SER:N	2.42	0.53
1:F:420:LEU:HD13	1:F:420:LEU:O	2.09	0.53
1:F:545:THR:O	1:F:547:GLY:N	2.41	0.53
1:F:86:LEU:HA	1:F:89:ILE:HD12	1.90	0.53
1:A:530:THR:HG21	2:O:145:MET:CE	2.36	0.53
2:O:37:ARG:HG2	2:O:37:ARG:HH11	1.72	0.53
2:S:54:GLU:O	2:S:55:VAL:HG13	2.07	0.53
2:T:49:GLN:NE2	2:T:49:GLN:N	2.57	0.53
1:B:797:ILE:HG13	1:B:797:ILE:O	2.09	0.53
1:C:156:ILE:HD12	1:C:156:ILE:N	2.23	0.53
1:C:296:LEU:HD22	1:C:606:LYS:HE2	1.91	0.53
1:C:355:SER:HB2	1:C:371:SER:HA	1.90	0.53
1:C:420:LEU:HD13	1:C:420:LEU:O	2.09	0.53
1:D:710:HIS:O	1:D:712:PHE:N	2.42	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:345:THR:HG22	1:E:490:ALA:O	2.09	0.53
1:E:716:LYS:O	1:E:720:ILE:HG22	2.09	0.53
2:Q:93:ASP:OD1	2:Q:97:ASN:ND2	2.41	0.53
1:A:199:LEU:HD21	1:A:226:ASP:OD2	2.08	0.53
1:A:456:LYS:HB3	1:A:471:TRP:N	2.24	0.53
1:A:688:PHE:C	1:A:688:PHE:CD2	2.82	0.53
1:B:420:LEU:O	1:B:420:LEU:HD13	2.08	0.53
1:B:688:PHE:CD2	1:B:688:PHE:C	2.82	0.53
1:B:85:LEU:HG	1:B:171:TYR:CE2	2.43	0.53
1:C:218:LEU:C	1:C:220:LEU:N	2.60	0.53
1:C:318:ILE:CG2	1:C:322:LEU:HD12	2.39	0.53
1:C:482:GLU:HA	1:C:482:GLU:OE2	2.08	0.53
1:D:355:SER:HB2	1:D:371:SER:HA	1.91	0.53
1:D:482:GLU:OE2	1:D:482:GLU:HA	2.08	0.53
1:D:688:PHE:C	1:D:688:PHE:CD2	2.82	0.53
1:E:327:LEU:HD12	1:E:327:LEU:N	2.24	0.53
1:E:292:ARG:NE	1:E:617:LYS:HE3	2.23	0.53
1:F:550:SER:H	1:F:553:GLN:HE21	1.57	0.53
1:F:564:VAL:O	1:F:567:THR:HG22	2.08	0.53
2:O:111:ASN:ND2	2:O:111:ASN:N	2.56	0.53
2:Q:65:PHE:CB	2:Q:66:PRO:HD3	2.34	0.53
2:S:37:ARG:HH11	2:S:37:ARG:HG2	1.73	0.53
1:C:164:GLU:C	1:C:166:SER:H	2.11	0.53
1:C:797:ILE:HG13	1:C:797:ILE:O	2.09	0.53
1:C:86:LEU:HA	1:C:89:ILE:HD12	1.90	0.53
1:E:371:SER:O	1:E:372:LYS:C	2.47	0.53
1:E:482:GLU:OE2	1:E:482:GLU:HA	2.09	0.53
1:F:286:GLU:O	1:F:290:LYS:HB2	2.09	0.53
1:F:481:VAL:HB	1:F:486:LYS:HD2	1.91	0.53
1:F:545:THR:C	1:F:547:GLY:H	2.13	0.53
1:A:327:LEU:HD12	1:A:327:LEU:N	2.24	0.53
1:A:482:GLU:HA	1:A:482:GLU:OE2	2.09	0.53
1:A:493:ASP:OD2	1:A:577:HIS:HE1	1.91	0.53
1:B:186:LYS:C	1:B:188:LEU:O	2.47	0.53
1:C:564:VAL:O	1:C:567:THR:HG22	2.07	0.53
1:C:625:LEU:C	1:C:625:LEU:HD12	2.28	0.53
1:C:85:LEU:HG	1:C:171:TYR:CE2	2.44	0.53
1:D:99:GLU:C	1:D:101:GLY:H	2.12	0.53
1:D:175:LYS:CB	1:D:175:LYS:NZ	2.71	0.53
1:D:218:LEU:HD13	1:D:225:ILE:HD11	1.89	0.53
1:D:252:ASP:O	1:D:254:ARG:HD2	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:409:ARG:CZ	1:D:413:LEU:HD21	2.38	0.53
1:D:711:ILE:O	1:D:712:PHE:HD2	1.91	0.53
1:E:185:ASP:O	1:E:190:PRO:HD3	2.08	0.53
1:E:248:TYR:HD2	1:E:249:PHE:CE1	2.27	0.53
1:E:338:LEU:O	1:E:343:VAL:HB	2.09	0.53
1:E:456:LYS:HZ3	1:E:471:TRP:HE1	1.56	0.53
1:E:564:VAL:O	1:E:567:THR:HG22	2.08	0.53
1:E:688:PHE:C	1:E:688:PHE:CD2	2.82	0.53
1:F:451:ASN:N	1:F:451:ASN:OD1	2.40	0.53
1:F:797:ILE:O	1:F:797:ILE:HG13	2.09	0.53
2:P:49:GLN:N	2:P:49:GLN:NE2	2.57	0.53
2:P:32:LEU:HD22	2:P:63:ILE:HD13	1.90	0.53
2:R:58:ASP:O	2:R:60:ASN:N	2.39	0.53
2:S:49:GLN:NE2	2:S:49:GLN:N	2.57	0.53
1:F:706:ASN:O	2:T:130:ILE:HG23	2.08	0.53
1:A:602:PHE:N	1:A:602:PHE:HD2	2.07	0.52
1:B:296:LEU:CD2	1:B:296:LEU:N	2.67	0.52
1:B:365:PRO:HB2	1:B:367:ASP:O	2.09	0.52
1:B:447:SER:OG	1:B:450:ASN:O	2.20	0.52
1:B:625:LEU:HD12	1:B:625:LEU:C	2.28	0.52
1:C:478:ALA:CB	1:C:486:LYS:O	2.58	0.52
1:D:545:THR:O	1:D:547:GLY:N	2.39	0.52
1:E:141:PHE:N	1:E:141:PHE:CD1	2.78	0.52
1:E:252:ASP:O	1:E:254:ARG:HD2	2.09	0.52
1:F:108:ASP:C	1:F:108:ASP:OD2	2.46	0.52
1:F:152:LEU:CD2	1:F:154:ILE:HD11	2.38	0.52
2:O:36:MET:CE	2:O:43:PRO:HG3	2.39	0.52
2:Q:86:ARG:NH2	2:Q:138:TYR:CE2	2.76	0.52
2:R:111:ASN:ND2	2:R:111:ASN:N	2.56	0.52
2:R:117:THR:C	2:R:119:GLU:N	2.60	0.52
1:A:145:LYS:HD3	1:A:151:LYS:HD2	1.91	0.52
1:A:296:LEU:CD2	1:A:296:LEU:N	2.67	0.52
1:B:356:ASP:O	1:B:357:TRP:HB3	2.10	0.52
1:B:564:VAL:O	1:B:567:THR:HG22	2.09	0.52
1:C:71:PHE:CE2	1:C:73:ASN:HB2	2.45	0.52
1:C:776:LEU:O	1:C:780:LEU:HD13	2.09	0.52
1:D:243:LEU:HA	1:D:246:SER:OG	2.08	0.52
1:D:456:LYS:HD3	1:D:471:TRP:CD1	2.44	0.52
1:D:463:THR:O	1:D:466:GLY:N	2.36	0.52
1:D:743:PRO:HA	1:D:746:LYS:CB	2.40	0.52
1:F:128:MET:O	1:F:128:MET:HG2	2.08	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:218:LEU:HG	1:F:218:LEU:O	2.10	0.52
1:F:301:ALA:O	1:F:303:LYS:N	2.41	0.52
1:F:463:THR:O	1:F:466:GLY:N	2.36	0.52
2:O:48:LEU:HA	2:O:51:MET:HE1	1.91	0.52
1:A:356:ASP:O	1:A:357:TRP:HB3	2.09	0.52
1:B:499:PRO:CG	1:B:504:ILE:HD11	2.40	0.52
1:D:512:GLU:O	1:D:515:LYS:NZ	2.42	0.52
1:E:86:LEU:HA	1:E:89:ILE:HD12	1.89	0.52
1:E:99:GLU:C	1:E:101:GLY:H	2.13	0.52
1:F:106:PHE:HZ	1:F:171:TYR:OH	1.93	0.52
1:F:218:LEU:HD13	1:F:225:ILE:HD11	1.90	0.52
1:F:688:PHE:CD2	1:F:688:PHE:C	2.83	0.52
2:P:93:ASP:OD1	2:P:97:ASN:ND2	2.42	0.52
2:T:133:ASP:OD2	2:T:135:GLN:HG3	2.09	0.52
1:A:545:THR:C	1:A:547:GLY:H	2.12	0.52
1:A:732:ILE:HG23	1:A:749:PHE:HD1	1.74	0.52
1:A:776:LEU:O	1:A:780:LEU:HD13	2.10	0.52
1:B:153:ILE:C	1:B:154:ILE:HD13	2.30	0.52
1:B:364:ILE:O	1:B:477:MET:HG2	2.08	0.52
1:B:510:GLN:O	1:B:514:ASP:HB2	2.09	0.52
1:B:776:LEU:O	1:B:780:LEU:HD13	2.09	0.52
1:C:218:LEU:O	1:C:218:LEU:HG	2.10	0.52
1:D:414:LYS:HZ3	1:D:414:LYS:HA	1.71	0.52
1:D:545:THR:C	1:D:547:GLY:H	2.12	0.52
1:E:128:MET:CB	1:E:239:HIS:NE2	2.73	0.52
1:E:153:ILE:C	1:E:154:ILE:HD13	2.30	0.52
1:E:335:ALA:O	1:E:339:ILE:HG13	2.09	0.52
1:F:281:GLU:O	1:F:285:LYS:HG2	2.09	0.52
1:F:356:ASP:O	1:F:357:TRP:HB3	2.10	0.52
1:F:371:SER:O	1:F:372:LYS:C	2.48	0.52
1:F:722:ILE:HD13	1:F:764:LEU:HD23	1.91	0.52
2:O:28:THR:HB	2:O:30:LYS:HZ3	1.73	0.52
2:O:32:LEU:HD22	2:O:63:ILE:HD13	1.90	0.52
2:P:5:THR:HG23	2:P:8:GLN:HB3	1.91	0.52
1:B:621:GLY:HA2	2:P:94:LYS:NZ	2.25	0.52
2:T:54:GLU:O	2:T:55:VAL:HG13	2.08	0.52
1:A:179:LEU:O	1:A:183:SER:N	2.43	0.52
1:A:499:PRO:CG	1:A:504:ILE:HD11	2.40	0.52
1:B:145:LYS:HD3	1:B:151:LYS:HD2	1.90	0.52
1:B:156:ILE:HD12	1:B:156:ILE:N	2.23	0.52
1:B:335:ALA:O	1:B:339:ILE:HG13	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:456:LYS:HB3	1:B:471:TRP:N	2.25	0.52
1:B:324:THR:CB	1:B:499:PRO:HA	2.29	0.52
1:C:405:LEU:HD13	1:C:453:VAL:CG2	2.37	0.52
1:D:152:LEU:CD2	1:D:154:ILE:HD11	2.39	0.52
1:D:170:TYR:HA	1:D:173:ILE:CG2	2.35	0.52
1:D:191:GLU:C	1:D:193:LEU:N	2.62	0.52
1:D:597:ASN:HB2	1:D:598:PRO:CD	2.33	0.52
1:D:776:LEU:O	1:D:780:LEU:HD13	2.10	0.52
2:Q:117:THR:C	2:Q:119:GLU:H	2.13	0.52
2:R:117:THR:C	2:R:119:GLU:H	2.13	0.52
1:A:153:ILE:C	1:A:154:ILE:HD13	2.30	0.52
1:A:281:GLU:O	1:A:285:LYS:HG2	2.10	0.52
1:A:335:ALA:O	1:A:339:ILE:HG13	2.10	0.52
1:A:355:SER:HB2	1:A:371:SER:HA	1.92	0.52
1:A:371:SER:O	1:A:372:LYS:C	2.48	0.52
1:A:481:VAL:HB	1:A:486:LYS:HD2	1.91	0.52
1:B:164:GLU:C	1:B:166:SER:H	2.12	0.52
1:B:338:LEU:O	1:B:343:VAL:HB	2.10	0.52
1:B:493:ASP:OD2	1:B:577:HIS:HE1	1.93	0.52
1:C:512:GLU:O	1:C:515:LYS:NZ	2.42	0.52
1:D:108:ASP:OD2	1:D:108:ASP:C	2.46	0.52
1:E:170:TYR:HA	1:E:173:ILE:CG2	2.35	0.52
1:E:722:ILE:HD13	1:E:764:LEU:CD2	2.40	0.52
1:F:141:PHE:CD1	1:F:141:PHE:N	2.78	0.52
1:F:243:LEU:HA	1:F:246:SER:OG	2.08	0.52
1:F:478:ALA:CB	1:F:486:LYS:O	2.58	0.52
1:F:776:LEU:O	1:F:780:LEU:HD13	2.10	0.52
2:P:36:MET:CE	2:P:43:PRO:HG3	2.39	0.52
2:Q:133:ASP:OD2	2:Q:135:GLN:HG3	2.10	0.52
1:A:173:ILE:HG13	1:A:242:SER:CB	2.29	0.52
1:A:218:LEU:HG	1:A:218:LEU:O	2.10	0.52
1:A:710:HIS:O	1:A:712:PHE:N	2.42	0.52
1:B:318:ILE:CG2	1:B:322:LEU:HD12	2.39	0.52
1:B:371:SER:O	1:B:372:LYS:C	2.48	0.52
1:C:179:LEU:O	1:C:183:SER:N	2.42	0.52
1:C:243:LEU:HA	1:C:246:SER:OG	2.10	0.52
1:C:365:PRO:HB2	1:C:367:ASP:O	2.09	0.52
1:C:447:SER:OG	1:C:448:ASP:N	2.43	0.52
1:D:327:LEU:HD12	1:D:327:LEU:N	2.24	0.52
1:D:420:LEU:O	1:D:420:LEU:HD13	2.09	0.52
1:E:173:ILE:HG13	1:E:242:SER:CB	2.30	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:217:LYS:HB3	1:E:217:LYS:HZ2	1.75	0.52
1:E:545:THR:C	1:E:547:GLY:H	2.13	0.52
1:F:456:LYS:HB3	1:F:471:TRP:N	2.24	0.52
1:F:499:PRO:CG	1:F:504:ILE:HD11	2.39	0.52
1:C:706:ASN:O	2:Q:130:ILE:HG23	2.10	0.52
1:A:164:GLU:C	1:A:166:SER:H	2.12	0.52
1:A:243:LEU:O	1:A:247:TYR:HB2	2.10	0.52
1:A:550:SER:CB	1:A:553:GLN:HG3	2.33	0.52
1:B:218:LEU:O	1:B:218:LEU:HG	2.09	0.52
1:B:296:LEU:HD22	1:B:606:LYS:HE2	1.92	0.52
1:B:71:PHE:CE2	1:B:73:ASN:HB2	2.45	0.52
1:C:184:LYS:HZ1	1:C:191:GLU:HB2	1.75	0.52
1:C:545:THR:C	1:C:547:GLY:H	2.12	0.52
1:D:128:MET:CB	1:D:239:HIS:NE2	2.73	0.52
1:D:199:LEU:HD21	1:D:226:ASP:OD2	2.09	0.52
1:D:550:SER:H	1:D:553:GLN:HE21	1.58	0.52
1:E:201:ASP:CG	1:E:218:LEU:HD21	2.30	0.52
1:E:478:ALA:CB	1:E:486:LYS:O	2.58	0.52
1:E:493:ASP:OD2	1:E:577:HIS:HE1	1.91	0.52
1:E:533:LEU:O	1:E:533:LEU:HD22	2.09	0.52
1:F:598:PRO:HG3	1:F:624:TYR:OH	2.09	0.52
2:Q:4:LEU:HA	2:Q:8:GLN:OE1	2.10	0.52
2:S:146:THR:O	2:S:147:ALA:C	2.47	0.52
1:A:152:LEU:CD2	1:A:154:ILE:HD11	2.38	0.52
1:A:451:ASN:OD1	1:A:451:ASN:N	2.39	0.52
1:A:478:ALA:CB	1:A:486:LYS:O	2.58	0.52
1:C:120:LEU:HD22	1:C:123:GLU:CD	2.30	0.52
1:C:533:LEU:HD22	1:C:533:LEU:O	2.09	0.52
1:D:493:ASP:OD2	1:D:577:HIS:HE1	1.91	0.52
1:E:106:PHE:HZ	1:E:171:TYR:OH	1.93	0.52
1:E:218:LEU:O	1:E:218:LEU:HG	2.10	0.52
1:E:318:ILE:CG2	1:E:322:LEU:HD12	2.40	0.52
1:E:356:ASP:O	1:E:357:TRP:HB3	2.09	0.52
1:F:716:LYS:O	1:F:720:ILE:HG22	2.10	0.52
2:T:111:ASN:N	2:T:111:ASN:ND2	2.55	0.52
1:A:716:LYS:O	1:A:720:ILE:HG22	2.10	0.52
1:B:218:LEU:C	1:B:220:LEU:N	2.59	0.52
1:B:602:PHE:N	1:B:602:PHE:HD2	2.08	0.52
1:B:710:HIS:O	1:B:712:PHE:N	2.42	0.52
1:C:456:LYS:HZ3	1:C:471:TRP:HE1	1.57	0.52
1:C:456:LYS:HB3	1:C:471:TRP:N	2.25	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:481:VAL:HB	1:C:486:LYS:HD2	1.92	0.52
1:C:401:ILE:HD11	1:C:487:PRO:HD3	1.92	0.52
1:D:375:GLY:O	1:D:377:GLN:N	2.43	0.52
1:E:434:LEU:HD22	1:E:445:ARG:HB3	1.91	0.52
1:E:510:GLN:O	1:E:514:ASP:HB2	2.10	0.52
1:E:598:PRO:HG3	1:E:624:TYR:OH	2.09	0.52
1:F:153:ILE:O	1:F:154:ILE:HD13	2.09	0.52
1:F:295:VAL:HG23	1:F:295:VAL:O	2.10	0.52
2:P:86:ARG:NH2	2:P:138:TYR:CE2	2.76	0.52
1:A:109:ILE:HG23	1:A:157:LYS:HD3	1.93	0.51
1:A:550:SER:H	1:A:553:GLN:HE21	1.58	0.51
1:B:127:SER:C	1:B:133:GLU:OE1	2.48	0.51
1:B:515:LYS:NZ	1:B:516:VAL:HG23	2.25	0.51
1:B:533:LEU:O	1:B:533:LEU:HD22	2.10	0.51
1:B:737:LYS:HA	1:B:737:LYS:HE2	1.91	0.51
1:C:356:ASP:O	1:C:357:TRP:HB3	2.09	0.51
1:C:688:PHE:C	1:C:688:PHE:CD2	2.83	0.51
1:C:709:ASN:O	1:C:717:LYS:HE3	2.10	0.51
1:D:141:PHE:HD1	1:D:141:PHE:N	2.08	0.51
1:D:179:LEU:O	1:D:183:SER:N	2.43	0.51
1:D:499:PRO:CG	1:D:504:ILE:HD11	2.40	0.51
1:E:106:PHE:HZ	1:E:171:TYR:HH	1.53	0.51
1:E:456:LYS:HB3	1:E:471:TRP:N	2.24	0.51
1:F:199:LEU:HD21	1:F:226:ASP:OD2	2.10	0.51
1:F:443:GLU:OE2	1:F:458:LYS:HG2	2.10	0.51
2:Q:94:LYS:HB3	2:Q:94:LYS:HZ2	1.73	0.51
2:R:49:GLN:NE2	2:R:49:GLN:H	2.09	0.51
1:E:706:ASN:O	2:S:130:ILE:HG23	2.09	0.51
1:B:109:ILE:CG1	1:B:157:LYS:HZ2	2.24	0.51
1:B:191:GLU:C	1:B:193:LEU:N	2.64	0.51
1:B:201:ASP:CG	1:B:218:LEU:HD21	2.31	0.51
1:B:197:LYS:NZ	1:B:264:MET:SD	2.81	0.51
1:B:456:LYS:HD3	1:B:471:TRP:CD1	2.45	0.51
1:B:550:SER:H	1:B:553:GLN:HE21	1.58	0.51
1:C:243:LEU:O	1:C:247:TYR:HB2	2.10	0.51
1:C:76:LEU:H	1:C:76:LEU:CD2	2.23	0.51
1:D:540:ARG:NH1	1:D:627:TYR:CE1	2.78	0.51
1:E:179:LEU:O	1:E:183:SER:N	2.42	0.51
1:E:355:SER:HB2	1:E:371:SER:HA	1.92	0.51
1:E:375:GLY:O	1:E:377:GLN:N	2.43	0.51
1:E:499:PRO:CG	1:E:504:ILE:HD11	2.39	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:530:THR:HG21	2:S:145:MET:CE	2.39	0.51
1:E:550:SER:CB	1:E:553:GLN:HG3	2.31	0.51
1:E:88:LYS:HZ3	1:E:172:GLU:CD	2.12	0.51
1:F:335:ALA:HB1	1:F:489:THR:OG1	2.10	0.51
1:F:510:GLN:O	1:F:514:ASP:HB2	2.10	0.51
1:F:709:ASN:O	1:F:717:LYS:HE3	2.11	0.51
1:F:79:ILE:O	1:F:81:GLN:N	2.44	0.51
2:O:146:THR:O	2:O:147:ALA:C	2.48	0.51
2:R:93:ASP:OD1	2:R:97:ASN:ND2	2.42	0.51
1:A:128:MET:HG2	1:A:128:MET:O	2.09	0.51
1:A:175:LYS:CB	1:A:175:LYS:NZ	2.73	0.51
1:B:152:LEU:CD2	1:B:154:ILE:HD11	2.39	0.51
1:B:281:GLU:O	1:B:285:LYS:HG2	2.10	0.51
1:B:372:LYS:O	1:B:374:HIS:N	2.36	0.51
1:B:716:LYS:O	1:B:720:ILE:HG22	2.10	0.51
1:D:141:PHE:CD1	1:D:141:PHE:N	2.78	0.51
1:D:199:LEU:HD23	1:D:225:ILE:O	2.10	0.51
1:D:197:LYS:NZ	1:D:264:MET:SD	2.82	0.51
1:D:318:ILE:CG2	1:D:322:LEU:HD12	2.40	0.51
1:D:371:SER:O	1:D:372:LYS:C	2.48	0.51
1:D:602:PHE:N	1:D:602:PHE:HD2	2.08	0.51
1:F:164:GLU:C	1:F:166:SER:H	2.11	0.51
1:F:217:LYS:NZ	1:F:217:LYS:HB3	2.26	0.51
1:F:199:LEU:HD23	1:F:225:ILE:O	2.10	0.51
1:F:252:ASP:O	1:F:254:ARG:HD2	2.10	0.51
1:F:722:ILE:HD13	1:F:764:LEU:CD2	2.40	0.51
1:B:706:ASN:O	2:P:130:ILE:HG23	2.10	0.51
2:P:58:ASP:O	2:P:60:ASN:N	2.40	0.51
2:T:36:MET:CE	2:T:43:PRO:HG3	2.40	0.51
1:B:123:GLU:HG2	1:B:124:GLU:N	2.25	0.51
1:C:99:GLU:C	1:C:101:GLY:H	2.13	0.51
1:C:550:SER:H	1:C:553:GLN:HE21	1.58	0.51
1:D:218:LEU:O	1:D:218:LEU:HG	2.10	0.51
1:D:462:ILE:CG1	1:D:463:THR:N	2.72	0.51
1:D:510:GLN:O	1:D:514:ASP:HB2	2.11	0.51
1:D:533:LEU:HD22	1:D:533:LEU:O	2.09	0.51
1:E:335:ALA:HB1	1:E:489:THR:OG1	2.11	0.51
1:E:512:GLU:O	1:E:515:LYS:NZ	2.42	0.51
1:E:710:HIS:O	1:E:712:PHE:N	2.43	0.51
1:F:482:GLU:HA	1:F:482:GLU:OE2	2.10	0.51
2:O:117:THR:C	2:O:119:GLU:H	2.14	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:706:ASN:O	2:O:130:ILE:HG23	2.09	0.51
2:O:133:ASP:OD2	2:O:135:GLN:HG3	2.10	0.51
2:P:52:ILE:HG13	2:P:63:ILE:HG23	1.93	0.51
2:Q:49:GLN:NE2	2:Q:49:GLN:H	2.08	0.51
1:D:706:ASN:O	2:R:130:ILE:HG23	2.09	0.51
2:T:117:THR:C	2:T:119:GLU:H	2.14	0.51
1:A:141:PHE:N	1:A:141:PHE:CD1	2.78	0.51
1:A:199:LEU:HD23	1:A:225:ILE:O	2.10	0.51
1:B:179:LEU:O	1:B:183:SER:N	2.43	0.51
1:B:545:THR:C	1:B:547:GLY:H	2.13	0.51
1:C:128:MET:HB2	1:C:239:HIS:NE2	2.25	0.51
1:C:371:SER:O	1:C:372:LYS:C	2.47	0.51
1:C:372:LYS:O	1:C:374:HIS:N	2.36	0.51
1:C:510:GLN:O	1:C:514:ASP:HB2	2.11	0.51
1:D:456:LYS:HB3	1:D:471:TRP:N	2.25	0.51
1:D:478:ALA:CB	1:D:486:LYS:O	2.58	0.51
1:E:462:ILE:CG1	1:E:463:THR:N	2.72	0.51
1:E:515:LYS:NZ	1:E:516:VAL:HG23	2.25	0.51
1:E:743:PRO:HA	1:E:746:LYS:CB	2.40	0.51
1:F:375:GLY:O	1:F:377:GLN:N	2.43	0.51
2:O:110:THR:O	2:O:113:GLY:N	2.43	0.51
2:Q:146:THR:O	2:Q:147:ALA:C	2.48	0.51
2:Q:36:MET:CE	2:Q:43:PRO:HG3	2.40	0.51
2:R:30:LYS:N	2:R:30:LYS:HD3	2.08	0.51
2:S:117:THR:C	2:S:119:GLU:H	2.13	0.51
2:S:36:MET:CE	2:S:43:PRO:HG3	2.40	0.51
1:A:296:LEU:HD22	1:A:606:LYS:HE2	1.92	0.51
1:B:243:LEU:HA	1:B:246:SER:OG	2.10	0.51
1:B:355:SER:HB2	1:B:371:SER:HA	1.93	0.51
1:B:512:GLU:O	1:B:515:LYS:NZ	2.42	0.51
1:C:443:GLU:OE2	1:C:458:LYS:HG2	2.10	0.51
1:D:625:LEU:C	1:D:625:LEU:HD12	2.29	0.51
1:F:217:LYS:HZ2	1:F:217:LYS:HB3	1.76	0.51
1:F:602:PHE:HD2	1:F:602:PHE:N	2.07	0.51
1:F:710:HIS:O	1:F:712:PHE:N	2.44	0.51
1:F:743:PRO:HA	1:F:746:LYS:CB	2.40	0.51
1:F:769:SER:O	1:F:769:SER:OG	2.28	0.51
2:P:117:THR:C	2:P:119:GLU:H	2.13	0.51
2:T:28:THR:HB	2:T:30:LYS:HZ3	1.74	0.51
1:A:318:ILE:CG2	1:A:322:LEU:HD12	2.40	0.51
1:A:76:LEU:O	1:A:80:GLN:N	2.39	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:409:ARG:CD	1:B:413:LEU:HD21	2.39	0.51
1:B:743:PRO:HA	1:B:746:LYS:CB	2.40	0.51
1:B:99:GLU:C	1:B:101:GLY:H	2.13	0.51
1:C:106:PHE:HZ	1:C:171:TYR:HH	1.56	0.51
1:C:281:GLU:O	1:C:285:LYS:HG2	2.10	0.51
1:C:602:PHE:N	1:C:602:PHE:HD2	2.08	0.51
1:E:550:SER:O	1:E:553:GLN:HB2	2.11	0.51
1:E:709:ASN:O	1:E:717:LYS:HE3	2.11	0.51
1:A:743:PRO:HA	1:A:746:LYS:CB	2.40	0.51
1:B:217:LYS:HB3	1:B:217:LYS:NZ	2.26	0.51
1:B:343:VAL:HG13	1:B:487:PRO:HG2	1.93	0.51
1:C:186:LYS:C	1:C:188:LEU:O	2.49	0.51
1:C:227:ILE:O	1:C:227:ILE:HG22	2.11	0.51
1:E:108:ASP:OD2	1:E:108:ASP:C	2.46	0.51
1:E:711:ILE:O	1:E:712:PHE:HD2	1.93	0.51
1:F:109:ILE:HG23	1:F:157:LYS:HD3	1.93	0.51
1:F:515:LYS:NZ	1:F:516:VAL:HG23	2.26	0.51
2:O:102:ALA:HB1	2:O:121:VAL:HG12	1.92	0.51
2:R:146:THR:O	2:R:147:ALA:C	2.48	0.51
1:A:621:GLY:HA2	2:O:94:LYS:NZ	2.26	0.51
1:A:711:ILE:O	1:A:712:PHE:HD2	1.94	0.51
1:C:115:LYS:NZ	1:C:117:LEU:HB2	2.21	0.51
1:C:201:ASP:CG	1:C:218:LEU:HD21	2.32	0.51
1:C:335:ALA:HB1	1:C:489:THR:OG1	2.11	0.51
1:C:722:ILE:HD13	1:C:764:LEU:HD23	1.93	0.51
1:D:86:LEU:HA	1:D:89:ILE:HD12	1.92	0.51
1:F:434:LEU:HD22	1:F:445:ARG:HB3	1.93	0.51
2:T:58:ASP:O	2:T:60:ASN:N	2.38	0.51
1:A:510:GLN:O	1:A:514:ASP:HB2	2.10	0.51
1:B:109:ILE:HD11	1:B:157:LYS:HZ3	1.76	0.51
1:B:109:ILE:O	1:B:110:ASP:OD1	2.29	0.51
1:B:116:GLU:HG3	1:B:117:LEU:CD2	2.40	0.51
1:B:301:ALA:C	1:B:303:LYS:N	2.65	0.51
1:B:443:GLU:OE2	1:B:458:LYS:HG2	2.10	0.51
1:B:71:PHE:CD2	1:B:73:ASN:HB2	2.46	0.51
1:C:141:PHE:CD1	1:C:141:PHE:N	2.78	0.51
1:C:335:ALA:O	1:C:339:ILE:HG13	2.11	0.51
1:C:711:ILE:O	1:C:712:PHE:HD2	1.94	0.51
1:D:120:LEU:HD22	1:D:123:GLU:CD	2.31	0.51
1:D:281:GLU:O	1:D:285:LYS:HG2	2.10	0.51
1:D:81:GLN:O	1:D:85:LEU:HB2	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:197:LYS:NZ	1:E:264:MET:SD	2.82	0.51
1:E:281:GLU:O	1:E:285:LYS:HG2	2.11	0.51
1:F:318:ILE:CG2	1:F:322:LEU:HD12	2.40	0.51
1:F:296:LEU:HD22	1:F:606:LYS:HE2	1.92	0.51
1:F:776:LEU:HD23	1:F:776:LEU:C	2.32	0.51
2:R:58:ASP:C	2:R:60:ASN:N	2.54	0.51
2:S:4:LEU:HA	2:S:8:GLN:OE1	2.10	0.51
1:A:461:LYS:HG3	1:A:462:ILE:H	1.77	0.50
1:A:512:GLU:O	1:A:515:LYS:NZ	2.41	0.50
1:B:141:PHE:CD1	1:B:141:PHE:N	2.78	0.50
1:C:776:LEU:HD23	1:C:776:LEU:C	2.32	0.50
1:D:153:ILE:O	1:D:154:ILE:HD13	2.10	0.50
1:D:356:ASP:O	1:D:357:TRP:HB3	2.10	0.50
1:E:109:ILE:HG23	1:E:157:LYS:HD3	1.93	0.50
1:E:173:ILE:HG23	1:E:174:GLY:H	1.76	0.50
1:E:217:LYS:HB3	1:E:217:LYS:NZ	2.26	0.50
1:E:602:PHE:HD2	1:E:602:PHE:N	2.09	0.50
1:F:173:ILE:HG13	1:F:242:SER:CB	2.30	0.50
1:F:185:ASP:O	1:F:190:PRO:CG	2.59	0.50
1:F:517:VAL:CA	1:F:525:LYS:HZ2	2.24	0.50
1:F:81:GLN:O	1:F:85:LEU:HB2	2.11	0.50
2:O:129:ASP:OD1	2:O:134:GLY:N	2.44	0.50
2:P:110:THR:O	2:P:113:GLY:N	2.43	0.50
2:P:146:THR:O	2:P:147:ALA:C	2.49	0.50
2:P:4:LEU:HA	2:P:8:GLN:OE1	2.11	0.50
2:R:4:LEU:HA	2:R:8:GLN:OE1	2.11	0.50
1:A:293:ILE:O	1:A:295:VAL:HG22	2.11	0.50
1:B:160:ALA:O	1:B:167:LYS:HD2	2.11	0.50
1:B:711:ILE:O	1:B:712:PHE:HD2	1.94	0.50
1:C:743:PRO:HA	1:C:746:LYS:CB	2.41	0.50
1:D:217:LYS:HB3	1:D:217:LYS:NZ	2.27	0.50
1:D:296:LEU:CD2	1:D:296:LEU:H	2.19	0.50
1:D:348:LEU:HD12	1:D:545:THR:O	2.11	0.50
1:E:192:PHE:N	1:E:192:PHE:CD1	2.79	0.50
1:E:81:GLN:O	1:E:85:LEU:HB2	2.10	0.50
1:F:462:ILE:CG1	1:F:463:THR:N	2.72	0.50
2:O:52:ILE:HG13	2:O:63:ILE:HG23	1.93	0.50
2:P:102:ALA:HB1	2:P:121:VAL:HG12	1.92	0.50
2:P:133:ASP:OD2	2:P:135:GLN:HG3	2.10	0.50
2:S:49:GLN:H	2:S:49:GLN:NE2	2.10	0.50
1:A:301:ALA:C	1:A:303:LYS:N	2.65	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:722:ILE:HD13	1:A:764:LEU:CD2	2.41	0.50
1:A:777:TYR:HA	1:A:780:LEU:HD22	1.94	0.50
1:C:165:GLN:HG2	1:C:251:PRO:HG2	1.93	0.50
1:C:375:GLY:O	1:C:377:GLN:N	2.44	0.50
1:C:515:LYS:NZ	1:C:516:VAL:HG23	2.26	0.50
1:D:106:PHE:HZ	1:D:171:TYR:OH	1.94	0.50
1:D:88:LYS:NZ	1:D:172:GLU:OE2	2.42	0.50
1:D:202:ASP:HB2	1:D:208:LEU:HG	1.94	0.50
1:D:218:LEU:HD11	1:D:225:ILE:HD11	1.94	0.50
1:D:295:VAL:O	1:D:295:VAL:HG23	2.11	0.50
1:D:301:ALA:C	1:D:303:LYS:N	2.64	0.50
1:E:480:ASN:HD21	1:E:483:GLY:N	2.06	0.50
1:E:344:ALA:O	1:E:489:THR:HG22	2.12	0.50
1:F:196:ILE:HA	1:F:199:LEU:CG	2.40	0.50
1:F:128:MET:CB	1:F:239:HIS:NE2	2.74	0.50
1:F:405:LEU:HD13	1:F:453:VAL:CG2	2.37	0.50
2:O:49:GLN:NE2	2:O:49:GLN:H	2.08	0.50
2:O:5:THR:HG23	2:O:8:GLN:HB3	1.92	0.50
2:R:110:THR:O	2:R:113:GLY:N	2.42	0.50
2:R:102:ALA:HB1	2:R:121:VAL:HG12	1.93	0.50
2:R:36:MET:CE	2:R:43:PRO:HG3	2.42	0.50
2:T:117:THR:HG23	2:T:120:GLU:CB	2.41	0.50
1:A:120:LEU:HD22	1:A:123:GLU:CD	2.31	0.50
1:A:217:LYS:HB3	1:A:217:LYS:NZ	2.27	0.50
1:A:372:LYS:O	1:A:374:HIS:N	2.36	0.50
1:A:443:GLU:OE2	1:A:458:LYS:HG2	2.11	0.50
1:A:335:ALA:HB1	1:A:489:THR:OG1	2.12	0.50
1:A:515:LYS:NZ	1:A:516:VAL:HG23	2.26	0.50
1:B:165:GLN:HG2	1:B:251:PRO:HG2	1.92	0.50
1:B:375:GLY:O	1:B:377:GLN:N	2.44	0.50
1:C:463:THR:O	1:C:466:GLY:N	2.36	0.50
1:C:530:THR:HG21	2:Q:145:MET:CE	2.37	0.50
1:C:550:SER:O	1:C:553:GLN:HB2	2.11	0.50
1:C:716:LYS:O	1:C:720:ILE:HG22	2.11	0.50
1:D:335:ALA:O	1:D:339:ILE:HG13	2.11	0.50
1:D:716:LYS:O	1:D:720:ILE:HG22	2.11	0.50
1:E:401:ILE:HD11	1:E:487:PRO:HD3	1.94	0.50
1:E:443:GLU:OE2	1:E:458:LYS:HG2	2.11	0.50
1:F:243:LEU:O	1:F:247:TYR:HB2	2.11	0.50
1:F:461:LYS:HG3	1:F:462:ILE:H	1.76	0.50
1:F:401:ILE:HD11	1:F:487:PRO:HD3	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:632:TYR:O	1:F:633:ASN:HB2	2.11	0.50
2:O:30:LYS:HD3	2:O:30:LYS:N	2.09	0.50
2:O:97:ASN:ND2	2:O:97:ASN:N	2.48	0.50
2:P:30:LYS:HD3	2:P:30:LYS:N	2.09	0.50
1:A:409:ARG:CD	1:A:413:LEU:HD21	2.40	0.50
1:A:462:ILE:CG1	1:A:463:THR:N	2.72	0.50
1:C:116:GLU:HG3	1:C:117:LEU:HD22	1.93	0.50
1:C:217:LYS:NZ	1:C:217:LYS:HB3	2.27	0.50
1:C:218:LEU:HD11	1:C:225:ILE:HD11	1.93	0.50
1:C:197:LYS:NZ	1:C:264:MET:SD	2.84	0.50
1:C:710:HIS:O	1:C:712:PHE:N	2.45	0.50
1:D:145:LYS:HD3	1:D:151:LYS:CD	2.41	0.50
1:F:293:ILE:O	1:F:295:VAL:HG22	2.12	0.50
1:F:480:ASN:HD21	1:F:483:GLY:N	2.07	0.50
2:T:102:ALA:HB1	2:T:121:VAL:HG12	1.94	0.50
2:T:86:ARG:NH2	2:T:138:TYR:CE2	2.78	0.50
1:A:153:ILE:O	1:A:154:ILE:HD13	2.12	0.50
1:A:201:ASP:CG	1:A:218:LEU:HD21	2.32	0.50
1:A:463:THR:O	1:A:466:GLY:N	2.36	0.50
1:A:709:ASN:O	1:A:717:LYS:HE3	2.11	0.50
1:B:186:LYS:O	1:B:188:LEU:O	2.30	0.50
1:B:461:LYS:HG3	1:B:462:ILE:H	1.77	0.50
1:C:295:VAL:O	1:C:295:VAL:HG23	2.11	0.50
1:C:493:ASP:OD2	1:C:577:HIS:HE1	1.92	0.50
1:D:461:LYS:HG3	1:D:462:ILE:H	1.77	0.50
1:D:296:LEU:HD22	1:D:606:LYS:HE2	1.94	0.50
1:D:697:ILE:CG2	1:D:732:ILE:HD11	2.42	0.50
1:E:120:LEU:HD22	1:E:123:GLU:CD	2.32	0.50
1:E:295:VAL:HG23	1:E:295:VAL:O	2.11	0.50
2:Q:117:THR:HG23	2:Q:120:GLU:CB	2.41	0.50
2:R:121:VAL:O	2:R:123:GLN:N	2.45	0.50
1:A:116:GLU:HG3	1:A:117:LEU:HD22	1.93	0.50
1:A:375:GLY:O	1:A:377:GLN:N	2.45	0.50
1:B:478:ALA:CB	1:B:486:LYS:O	2.59	0.50
1:D:116:GLU:HG3	1:D:117:LEU:HD22	1.93	0.50
1:D:201:ASP:CG	1:D:218:LEU:HD21	2.32	0.50
1:D:776:LEU:C	1:D:776:LEU:HD23	2.32	0.50
1:E:88:LYS:NZ	1:E:172:GLU:OE2	2.40	0.50
1:E:409:ARG:CD	1:E:413:LEU:HD21	2.41	0.50
1:F:285:LYS:O	1:F:288:VAL:HG22	2.12	0.50
1:F:550:SER:O	1:F:553:GLN:HB2	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:777:TYR:HA	1:F:780:LEU:HD22	1.94	0.50
2:Q:110:THR:O	2:Q:113:GLY:N	2.44	0.50
2:Q:121:VAL:O	2:Q:123:GLN:N	2.45	0.50
2:S:121:VAL:O	2:S:123:GLN:N	2.45	0.50
2:T:121:VAL:O	2:T:123:GLN:N	2.45	0.50
2:T:49:GLN:NE2	2:T:49:GLN:H	2.10	0.50
1:A:173:ILE:HG23	1:A:174:GLY:H	1.77	0.50
1:A:295:VAL:HG23	1:A:295:VAL:O	2.12	0.50
1:A:517:VAL:CA	1:A:525:LYS:HZ2	2.25	0.50
1:A:348:LEU:HD12	1:A:545:THR:O	2.12	0.50
1:B:368:GLN:HB2	1:B:384:ASN:OD1	2.12	0.50
1:B:764:LEU:O	1:B:768:LYS:O	2.30	0.50
1:C:722:ILE:HD13	1:C:764:LEU:CD2	2.41	0.50
1:C:777:TYR:HA	1:C:780:LEU:HD22	1.94	0.50
1:D:109:ILE:HG23	1:D:157:LYS:HD3	1.93	0.50
1:D:710:HIS:C	1:D:712:PHE:N	2.65	0.50
1:E:513:TRP:HD1	1:E:532:LEU:HD13	1.77	0.50
1:E:777:TYR:HA	1:E:780:LEU:HD22	1.94	0.50
2:P:129:ASP:OD1	2:P:134:GLY:N	2.45	0.50
2:Q:58:ASP:O	2:Q:60:ASN:N	2.37	0.50
2:R:129:ASP:OD1	2:R:134:GLY:N	2.45	0.50
1:A:218:LEU:HD11	1:A:225:ILE:HD11	1.93	0.50
1:A:776:LEU:C	1:A:776:LEU:HD23	2.32	0.50
1:B:401:ILE:HD11	1:B:487:PRO:HD3	1.94	0.50
1:B:540:ARG:NH1	1:B:627:TYR:CE1	2.80	0.50
1:B:777:TYR:HA	1:B:780:LEU:HD22	1.94	0.50
1:B:90:PRO:HD3	1:B:249:PHE:CD2	2.46	0.50
1:C:318:ILE:HG23	1:C:322:LEU:HD12	1.93	0.50
1:D:368:GLN:HB2	1:D:384:ASN:OD1	2.11	0.50
1:E:184:LYS:NZ	1:E:191:GLU:HB2	2.27	0.50
1:E:252:ASP:OD2	1:E:253:HIS:CD2	2.65	0.50
1:E:301:ALA:C	1:E:303:LYS:H	2.15	0.50
1:E:414:LYS:HA	1:E:414:LYS:HZ3	1.75	0.50
1:F:165:GLN:HG2	1:F:251:PRO:HG2	1.93	0.50
1:F:185:ASP:O	1:F:190:PRO:CD	2.60	0.50
1:F:512:GLU:O	1:F:515:LYS:NZ	2.43	0.50
1:F:533:LEU:O	1:F:533:LEU:HD22	2.12	0.50
2:Q:52:ILE:HG13	2:Q:63:ILE:HG23	1.93	0.50
2:R:48:LEU:HA	2:R:51:MET:HE1	1.92	0.50
2:S:52:ILE:HG13	2:S:63:ILE:HG23	1.93	0.50
2:T:6:GLU:O	2:T:9:ILE:HB	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:4:LEU:HA	2:T:8:GLN:OE1	2.12	0.50
1:A:780:LEU:HD23	1:A:782:PHE:CE1	2.47	0.49
1:B:243:LEU:O	1:B:247:TYR:HB2	2.12	0.49
1:B:335:ALA:HB1	1:B:489:THR:OG1	2.12	0.49
1:B:83:GLN:O	1:B:84:ASP:C	2.50	0.49
1:D:189:ASP:O	1:D:190:PRO:C	2.45	0.49
1:D:401:ILE:HD11	1:D:487:PRO:HD3	1.94	0.49
1:D:513:TRP:HD1	1:D:532:LEU:HD13	1.77	0.49
1:D:777:TYR:HA	1:D:780:LEU:HD22	1.94	0.49
1:E:196:ILE:HA	1:E:199:LEU:CG	2.40	0.49
1:E:285:LYS:O	1:E:288:VAL:HG22	2.12	0.49
1:E:301:ALA:C	1:E:303:LYS:N	2.63	0.49
1:E:363:TYR:CD2	1:E:476:VAL:HG11	2.47	0.49
1:E:625:LEU:HD12	1:E:625:LEU:C	2.32	0.49
1:F:409:ARG:CD	1:F:413:LEU:HD21	2.41	0.49
1:F:513:TRP:HD1	1:F:532:LEU:HD13	1.77	0.49
1:F:83:GLN:O	1:F:84:ASP:C	2.50	0.49
2:O:117:THR:OG1	2:O:119:GLU:HG2	2.12	0.49
2:Q:102:ALA:HB1	2:Q:121:VAL:HG12	1.93	0.49
1:B:127:SER:O	1:B:133:GLU:HG2	2.11	0.49
1:C:434:LEU:HD22	1:C:445:ARG:HB3	1.94	0.49
1:D:409:ARG:CD	1:D:413:LEU:HD21	2.41	0.49
1:D:443:GLU:OE2	1:D:458:LYS:HG2	2.11	0.49
1:E:165:GLN:HG2	1:E:251:PRO:HG2	1.93	0.49
1:E:199:LEU:HD21	1:E:226:ASP:OD2	2.12	0.49
1:E:517:VAL:CA	1:E:525:LYS:HZ2	2.25	0.49
2:Q:86:ARG:HH21	2:Q:138:TYR:HE2	1.58	0.49
2:S:117:THR:OG1	2:S:119:GLU:HG2	2.12	0.49
2:S:6:GLU:O	2:S:9:ILE:HB	2.11	0.49
1:A:434:LEU:HD22	1:A:445:ARG:HB3	1.95	0.49
1:B:632:TYR:O	1:B:633:ASN:HB2	2.12	0.49
1:C:180:ASP:OD1	1:C:181:ILE:N	2.40	0.49
1:D:171:TYR:O	1:D:175:LYS:NZ	2.45	0.49
1:E:107:THR:HG21	1:E:115:LYS:CD	2.25	0.49
1:E:368:GLN:HB2	1:E:384:ASN:OD1	2.12	0.49
1:E:447:SER:OG	1:E:450:ASN:O	2.30	0.49
1:E:697:ILE:CG2	1:E:732:ILE:HD11	2.43	0.49
1:E:776:LEU:HD23	1:E:776:LEU:C	2.32	0.49
1:F:217:LYS:HZ1	1:F:233:ASN:CB	2.13	0.49
1:F:625:LEU:HD12	1:F:626:TYR:H	1.70	0.49
2:P:114:GLU:OE2	2:P:114:GLU:HA	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:129:ASP:OD1	2:T:134:GLY:N	2.44	0.49
2:T:28:THR:CB	2:T:30:LYS:HZ1	2.24	0.49
1:A:236:GLU:C	1:A:238:GLN:H	2.16	0.49
1:A:550:SER:O	1:A:553:GLN:HB2	2.12	0.49
1:B:218:LEU:HD11	1:B:225:ILE:HD11	1.94	0.49
1:B:318:ILE:HG23	1:B:322:LEU:HD12	1.94	0.49
1:B:480:ASN:HD21	1:B:483:GLY:N	2.07	0.49
1:B:81:GLN:O	1:B:85:LEU:HB2	2.11	0.49
1:C:461:LYS:HG3	1:C:462:ILE:H	1.78	0.49
1:C:462:ILE:CG1	1:C:463:THR:N	2.72	0.49
1:C:478:ALA:HA	1:C:488:LEU:HG	1.95	0.49
1:C:79:ILE:C	1:C:81:GLN:N	2.66	0.49
1:D:79:ILE:C	1:D:81:GLN:N	2.66	0.49
1:E:243:LEU:O	1:E:247:TYR:HB2	2.12	0.49
1:E:293:ILE:O	1:E:295:VAL:HG22	2.12	0.49
1:F:116:GLU:HG3	1:F:117:LEU:HD22	1.93	0.49
1:F:301:ALA:C	1:F:303:LYS:N	2.65	0.49
1:F:630:ARG:O	1:F:634:LYS:HE2	2.13	0.49
2:R:16:PHE:CE1	2:R:27:ILE:HG12	2.47	0.49
2:T:117:THR:OG1	2:T:119:GLU:HG2	2.13	0.49
1:A:160:ALA:O	1:A:167:LYS:HD2	2.12	0.49
1:A:165:GLN:HG2	1:A:251:PRO:HG2	1.93	0.49
1:B:658:PRO:HG3	1:B:752:LEU:HD22	1.95	0.49
1:B:776:LEU:HD23	1:B:776:LEU:C	2.32	0.49
1:C:199:LEU:HD21	1:C:226:ASP:OD2	2.12	0.49
1:C:345:THR:CG2	1:C:491:ASP:HA	2.43	0.49
1:C:397:GLU:O	1:C:398:ILE:HD13	2.13	0.49
1:C:76:LEU:HD22	1:C:76:LEU:N	2.28	0.49
1:E:480:ASN:ND2	1:E:483:GLY:H	2.04	0.49
1:E:540:ARG:NH1	1:E:627:TYR:CE1	2.81	0.49
1:F:180:ASP:OD1	1:F:181:ILE:N	2.41	0.49
1:F:348:LEU:HD12	1:F:545:THR:O	2.12	0.49
2:P:117:THR:OG1	2:P:119:GLU:HG2	2.12	0.49
2:P:86:ARG:HH21	2:P:138:TYR:HE2	1.57	0.49
2:S:129:ASP:OD1	2:S:134:GLY:N	2.45	0.49
2:S:133:ASP:OD2	2:S:135:GLN:HG3	2.12	0.49
1:A:252:ASP:OD2	1:A:253:HIS:CD2	2.66	0.49
1:B:171:TYR:O	1:B:175:LYS:NZ	2.46	0.49
1:B:550:SER:O	1:B:553:GLN:HB2	2.12	0.49
1:C:301:ALA:C	1:C:303:LYS:N	2.64	0.49
1:C:81:GLN:O	1:C:85:LEU:HB2	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:301:ALA:C	1:D:303:LYS:H	2.16	0.49
1:D:515:LYS:NZ	1:D:516:VAL:HG23	2.27	0.49
1:D:546:LYS:CD	1:D:554:LYS:HE2	2.30	0.49
1:E:236:GLU:C	1:E:238:GLN:H	2.15	0.49
1:E:632:TYR:O	1:E:633:ASN:HB2	2.12	0.49
1:E:98:SER:O	1:E:101:GLY:N	2.46	0.49
1:F:88:LYS:NZ	1:F:172:GLU:OE2	2.41	0.49
1:F:201:ASP:CG	1:F:218:LEU:HD21	2.32	0.49
1:F:90:PRO:HD3	1:F:249:PHE:CD2	2.48	0.49
1:A:668:SER:CA	2:O:14:GLU:HG3	2.40	0.49
2:T:52:ILE:HG13	2:T:63:ILE:HG23	1.93	0.49
1:A:218:LEU:C	1:A:220:LEU:N	2.60	0.49
1:A:513:TRP:HD1	1:A:532:LEU:HD13	1.76	0.49
1:A:658:PRO:HG3	1:A:752:LEU:HD22	1.95	0.49
1:B:397:GLU:O	1:B:398:ILE:HD13	2.12	0.49
1:B:513:TRP:HD1	1:B:532:LEU:HD13	1.76	0.49
1:B:348:LEU:HD12	1:B:545:THR:O	2.12	0.49
1:C:171:TYR:O	1:C:175:LYS:NZ	2.45	0.49
1:C:202:ASP:HB2	1:C:208:LEU:HG	1.94	0.49
1:C:348:LEU:HD12	1:C:545:THR:O	2.13	0.49
1:C:697:ILE:CG2	1:C:732:ILE:HD11	2.43	0.49
1:D:478:ALA:HA	1:D:488:LEU:HG	1.95	0.49
1:D:762:LEU:O	1:D:766:HIS:HB2	2.12	0.49
1:E:318:ILE:HG23	1:E:322:LEU:HD12	1.95	0.49
1:E:343:VAL:HG13	1:E:487:PRO:HG2	1.95	0.49
1:E:461:LYS:HG3	1:E:462:ILE:H	1.78	0.49
1:F:171:TYR:O	1:F:175:LYS:NZ	2.46	0.49
1:F:189:ASP:O	1:F:191:GLU:HG2	2.13	0.49
1:F:762:LEU:O	1:F:766:HIS:HB2	2.11	0.49
2:O:109:MET:HG3	2:O:116:LEU:CD1	2.42	0.49
2:O:86:ARG:NH2	2:O:138:TYR:CE2	2.78	0.49
2:O:6:GLU:O	2:O:9:ILE:HB	2.13	0.49
2:Q:117:THR:OG1	2:Q:119:GLU:HG2	2.12	0.49
2:R:133:ASP:OD2	2:R:135:GLN:HG3	2.11	0.49
2:R:86:ARG:HH21	2:R:138:TYR:HE2	1.57	0.49
1:A:202:ASP:HB2	1:A:208:LEU:HG	1.93	0.49
1:A:632:TYR:O	1:A:633:ASN:HB2	2.12	0.49
1:B:153:ILE:O	1:B:154:ILE:HD13	2.13	0.49
1:B:293:ILE:O	1:B:295:VAL:HG22	2.12	0.49
1:B:715:GLU:OE1	1:B:767:GLN:NE2	2.45	0.49
1:C:252:ASP:OD2	1:C:253:HIS:CD2	2.66	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:293:ILE:O	1:C:295:VAL:HG22	2.13	0.49
1:C:75:THR:C	1:C:77:ASP:N	2.66	0.49
1:D:285:LYS:O	1:D:288:VAL:HG22	2.12	0.49
1:D:630:ARG:O	1:D:634:LYS:HE2	2.12	0.49
1:D:639:ASN:HD22	1:D:639:ASN:N	2.10	0.49
1:E:199:LEU:HD23	1:E:225:ILE:O	2.12	0.49
1:E:90:PRO:HD3	1:E:249:PHE:CD2	2.48	0.49
1:F:115:LYS:NZ	1:F:117:LEU:HB2	2.22	0.49
1:F:236:GLU:C	1:F:238:GLN:H	2.16	0.49
1:A:540:ARG:NH1	1:A:627:TYR:CE1	2.80	0.49
1:B:295:VAL:O	1:B:295:VAL:HG23	2.11	0.49
1:B:434:LEU:HD22	1:B:445:ARG:HB3	1.95	0.49
1:C:301:ALA:C	1:C:303:LYS:H	2.16	0.49
1:C:409:ARG:CD	1:C:413:LEU:HD21	2.42	0.49
1:C:90:PRO:HD3	1:C:249:PHE:CD2	2.47	0.49
1:D:109:ILE:HG12	1:D:157:LYS:HZ2	1.77	0.49
1:D:293:ILE:O	1:D:295:VAL:HG22	2.13	0.49
1:E:202:ASP:HB2	1:E:208:LEU:HG	1.95	0.49
1:E:79:ILE:C	1:E:81:GLN:N	2.66	0.49
1:F:527:LYS:HD2	2:T:145:MET:O	2.13	0.49
1:F:530:THR:HG21	2:T:145:MET:CE	2.39	0.49
1:F:621:GLY:HA2	2:T:94:LYS:HZ3	1.78	0.49
2:R:117:THR:OG1	2:R:119:GLU:HG2	2.12	0.49
2:T:114:GLU:OE2	2:T:114:GLU:HA	2.13	0.49
1:A:128:MET:CB	1:A:239:HIS:NE2	2.74	0.49
1:A:630:ARG:O	1:A:634:LYS:HE2	2.12	0.49
1:A:660:SER:O	1:A:663:PHE:HB3	2.12	0.49
1:B:165:GLN:HB2	1:B:252:ASP:OD1	2.13	0.49
1:B:660:SER:O	1:B:663:PHE:HB3	2.13	0.49
1:C:710:HIS:C	1:C:712:PHE:N	2.66	0.49
1:E:153:ILE:O	1:E:154:ILE:HD13	2.12	0.49
1:E:722:ILE:HD13	1:E:764:LEU:HD23	1.95	0.49
1:F:123:GLU:HG2	1:F:124:GLU:N	2.28	0.49
1:F:252:ASP:OD2	1:F:253:HIS:CD2	2.66	0.49
1:F:318:ILE:HG23	1:F:322:LEU:HD12	1.94	0.49
1:F:710:HIS:C	1:F:712:PHE:N	2.66	0.49
1:F:780:LEU:HD23	1:F:782:PHE:CE1	2.48	0.49
2:P:16:PHE:CE1	2:P:27:ILE:HG12	2.48	0.49
1:D:668:SER:CA	2:R:14:GLU:HG3	2.39	0.49
2:S:117:THR:HG23	2:S:120:GLU:CB	2.41	0.49
2:S:12:PHE:HB3	2:S:68:PHE:HE2	1.77	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:395:GLU:OE2	1:A:395:GLU:O	2.30	0.48
1:A:397:GLU:O	1:A:479:LYS:HA	2.13	0.48
1:B:236:GLU:C	1:B:238:GLN:H	2.16	0.48
1:B:530:THR:HG21	2:P:145:MET:CE	2.40	0.48
1:B:709:ASN:O	1:B:717:LYS:HE3	2.12	0.48
1:C:285:LYS:O	1:C:288:VAL:HG22	2.12	0.48
1:C:620:THR:HG22	1:C:621:GLY:N	2.28	0.48
1:C:660:SER:O	1:C:663:PHE:HB3	2.12	0.48
1:C:762:LEU:O	1:C:766:HIS:HB2	2.13	0.48
1:D:236:GLU:C	1:D:238:GLN:H	2.15	0.48
1:D:243:LEU:O	1:D:247:TYR:HB2	2.12	0.48
1:D:434:LEU:HD22	1:D:445:ARG:HB3	1.94	0.48
1:D:527:LYS:HD2	2:R:145:MET:O	2.13	0.48
1:E:145:LYS:HD3	1:E:151:LYS:CD	2.43	0.48
1:E:180:ASP:OD1	1:E:181:ILE:N	2.38	0.48
1:F:202:ASP:HB2	1:F:208:LEU:HG	1.94	0.48
1:F:372:LYS:O	1:F:374:HIS:N	2.36	0.48
1:F:660:SER:O	1:F:663:PHE:HB3	2.13	0.48
2:R:43:PRO:HG3	2:R:48:LEU:HD13	1.95	0.48
2:R:52:ILE:HG13	2:R:63:ILE:HG23	1.94	0.48
2:S:58:ASP:O	2:S:60:ASN:N	2.40	0.48
2:T:18:LEU:HB3	2:T:19:PHE:CD1	2.48	0.48
1:A:196:ILE:HA	1:A:199:LEU:CG	2.41	0.48
1:B:188:LEU:CD2	1:B:188:LEU:N	2.73	0.48
1:D:517:VAL:CA	1:D:525:LYS:HZ2	2.25	0.48
1:D:780:LEU:HD23	1:D:782:PHE:CE1	2.49	0.48
1:E:697:ILE:HG21	1:E:732:ILE:HD11	1.95	0.48
1:F:697:ILE:CG2	1:F:732:ILE:HD11	2.43	0.48
2:O:49:GLN:HE21	2:O:49:GLN:H	1.61	0.48
2:P:49:GLN:H	2:P:49:GLN:NE2	2.10	0.48
2:P:6:GLU:O	2:P:9:ILE:HB	2.12	0.48
2:Q:97:ASN:ND2	2:Q:99:TYR:H	2.10	0.48
2:S:109:MET:HG3	2:S:116:LEU:CD1	2.43	0.48
1:A:123:GLU:HG2	1:A:124:GLU:N	2.28	0.48
1:B:639:ASN:N	1:B:639:ASN:ND2	2.61	0.48
1:C:722:ILE:HG23	1:C:760:VAL:CG1	2.26	0.48
1:D:176:GLY:C	1:D:178:SER:H	2.17	0.48
1:D:397:GLU:O	1:D:398:ILE:HD13	2.13	0.48
1:D:405:LEU:HD13	1:D:453:VAL:CG2	2.37	0.48
1:E:660:SER:O	1:E:663:PHE:HB3	2.13	0.48
1:F:141:PHE:N	1:F:141:PHE:HD1	2.07	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:43:PRO:HG3	2:P:48:LEU:HD13	1.94	0.48
2:R:18:LEU:HB3	2:R:19:PHE:CD1	2.48	0.48
1:A:171:TYR:O	1:A:175:LYS:NZ	2.47	0.48
1:A:405:LEU:HD13	1:A:453:VAL:CG2	2.38	0.48
1:A:639:ASN:ND2	1:A:639:ASN:N	2.60	0.48
1:B:630:ARG:O	1:B:634:LYS:HE2	2.13	0.48
1:B:722:ILE:HD13	1:B:764:LEU:CD2	2.43	0.48
1:B:79:ILE:C	1:B:81:GLN:N	2.66	0.48
1:C:107:THR:HG21	1:C:115:LYS:CD	2.25	0.48
1:C:111:LEU:HD23	1:C:155:ASN:HD21	1.79	0.48
1:C:345:THR:HG21	1:C:491:ASP:HA	1.96	0.48
1:C:451:ASN:N	1:C:451:ASN:OD1	2.45	0.48
1:D:133:GLU:HG2	1:D:133:GLU:O	2.12	0.48
1:D:397:GLU:O	1:D:479:LYS:HA	2.14	0.48
1:E:435:LEU:HG	1:E:446:ILE:HG22	1.95	0.48
1:F:173:ILE:HG23	1:F:174:GLY:H	1.78	0.48
1:F:540:ARG:NH1	1:F:627:TYR:CE1	2.81	0.48
1:A:513:TRP:HH2	2:O:113:GLY:O	1.97	0.48
2:O:4:LEU:HA	2:O:8:GLN:OE1	2.12	0.48
2:P:121:VAL:O	2:P:123:GLN:N	2.46	0.48
2:P:28:THR:CB	2:P:30:LYS:NZ	2.76	0.48
2:R:117:THR:HG23	2:R:120:GLU:CB	2.41	0.48
2:R:97:ASN:ND2	2:R:99:TYR:H	2.11	0.48
2:S:114:GLU:HA	2:S:114:GLU:OE2	2.14	0.48
1:A:318:ILE:HG23	1:A:322:LEU:HD12	1.94	0.48
1:B:176:GLY:C	1:B:178:SER:H	2.16	0.48
1:B:463:THR:O	1:B:466:GLY:N	2.36	0.48
1:C:236:GLU:C	1:C:238:GLN:H	2.16	0.48
1:D:165:GLN:HG2	1:D:251:PRO:HG2	1.95	0.48
1:D:318:ILE:HG23	1:D:322:LEU:HD12	1.95	0.48
1:D:372:LYS:HG3	1:D:373:LYS:HG2	1.96	0.48
1:E:116:GLU:HG3	1:E:117:LEU:HD22	1.93	0.48
1:E:123:GLU:HG2	1:E:124:GLU:N	2.29	0.48
1:E:175:LYS:HB2	1:E:175:LYS:HZ3	1.78	0.48
1:F:191:GLU:C	1:F:193:LEU:N	2.66	0.48
1:F:711:ILE:O	1:F:712:PHE:HD2	1.96	0.48
2:O:18:LEU:HB3	2:O:19:PHE:CD1	2.49	0.48
1:C:668:SER:CA	2:Q:14:GLU:HG3	2.40	0.48
2:Q:43:PRO:HG3	2:Q:48:LEU:HD13	1.95	0.48
2:R:109:MET:HG3	2:R:116:LEU:CD1	2.43	0.48
2:S:28:THR:CB	2:S:30:LYS:NZ	2.77	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:639:ASN:HD22	1:A:639:ASN:N	2.10	0.48
1:A:697:ILE:CG2	1:A:732:ILE:HD11	2.43	0.48
1:A:722:ILE:HD13	1:A:764:LEU:HD23	1.96	0.48
1:B:620:THR:HG22	1:B:621:GLY:N	2.28	0.48
1:C:145:LYS:HD3	1:C:151:LYS:HD2	1.95	0.48
1:C:109:ILE:CG1	1:C:157:LYS:HZ2	2.27	0.48
1:C:395:GLU:O	1:C:395:GLU:OE2	2.31	0.48
1:C:607:ASN:HB3	1:C:609:GLU:OE2	2.14	0.48
1:C:780:LEU:HD23	1:C:782:PHE:CE1	2.48	0.48
1:D:123:GLU:HG2	1:D:124:GLU:N	2.28	0.48
1:E:780:LEU:HD23	1:E:782:PHE:CE1	2.49	0.48
1:F:176:GLY:C	1:F:178:SER:H	2.17	0.48
1:F:639:ASN:HD22	1:F:639:ASN:N	2.10	0.48
1:F:697:ILE:HG21	1:F:732:ILE:HD11	1.96	0.48
1:A:505:LYS:HD3	2:O:112:LEU:O	2.13	0.48
2:O:121:VAL:O	2:O:123:GLN:N	2.46	0.48
2:Q:100:ILE:HB	2:Q:136:VAL:HG22	1.95	0.48
2:Q:6:GLU:O	2:Q:9:ILE:HB	2.13	0.48
2:S:102:ALA:HB1	2:S:121:VAL:HG12	1.96	0.48
2:T:28:THR:CB	2:T:30:LYS:NZ	2.76	0.48
1:A:527:LYS:HD2	2:O:145:MET:O	2.14	0.48
1:A:83:GLN:O	1:A:84:ASP:C	2.51	0.48
1:B:173:ILE:HG23	1:B:174:GLY:H	1.78	0.48
1:C:225:ILE:HG12	1:C:229:PHE:HE2	1.77	0.48
1:C:344:ALA:O	1:C:489:THR:HG22	2.14	0.48
1:C:540:ARG:NH1	1:C:627:TYR:CE1	2.81	0.48
1:D:252:ASP:OD2	1:D:253:HIS:CD2	2.66	0.48
1:D:639:ASN:ND2	1:D:639:ASN:N	2.60	0.48
1:D:764:LEU:O	1:D:768:LYS:O	2.31	0.48
1:E:171:TYR:O	1:E:175:LYS:NZ	2.47	0.48
1:E:218:LEU:HD11	1:E:225:ILE:HD11	1.95	0.48
1:E:395:GLU:O	1:E:395:GLU:OE2	2.30	0.48
1:E:722:ILE:HG23	1:E:760:VAL:CG1	2.26	0.48
1:E:83:GLN:O	1:E:84:ASP:C	2.50	0.48
1:F:120:LEU:HD22	1:F:123:GLU:CD	2.34	0.48
1:F:301:ALA:C	1:F:303:LYS:H	2.16	0.48
1:F:480:ASN:ND2	1:F:483:GLY:H	2.05	0.48
1:F:700:TYR:HD1	1:F:728:ALA:CA	2.27	0.48
1:C:709:ASN:HB2	2:Q:130:ILE:HG23	1.95	0.48
2:Q:28:THR:CB	2:Q:30:LYS:NZ	2.77	0.48
2:S:18:LEU:HB3	2:S:19:PHE:CD1	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S:16:PHE:CE1	2:S:27:ILE:HG12	2.49	0.48
2:S:86:ARG:HH21	2:S:138:TYR:HE2	1.58	0.48
2:T:146:THR:O	2:T:147:ALA:C	2.49	0.48
1:A:368:GLN:HB2	1:A:384:ASN:OD1	2.13	0.48
1:B:301:ALA:C	1:B:303:LYS:H	2.17	0.48
1:B:710:HIS:C	1:B:712:PHE:N	2.66	0.48
1:B:780:LEU:HD23	1:B:782:PHE:CE1	2.49	0.48
1:D:480:ASN:HD21	1:D:483:GLY:N	2.08	0.48
1:D:550:SER:O	1:D:553:GLN:HB2	2.14	0.48
1:E:141:PHE:N	1:E:141:PHE:HD1	2.07	0.48
1:F:368:GLN:HB2	1:F:384:ASN:OD1	2.13	0.48
1:F:397:GLU:O	1:F:479:LYS:HA	2.14	0.48
2:O:97:ASN:ND2	2:O:99:TYR:H	2.11	0.48
2:S:13:LYS:HE2	2:S:65:PHE:HB3	1.96	0.48
2:S:97:ASN:ND2	2:S:99:TYR:H	2.11	0.48
2:S:5:THR:O	2:S:9:ILE:HG12	2.13	0.48
1:A:185:ASP:O	1:A:190:PRO:CD	2.61	0.48
1:A:285:LYS:O	1:A:288:VAL:HG22	2.14	0.48
1:A:81:GLN:O	1:A:85:LEU:HB2	2.13	0.48
1:B:185:ASP:O	1:B:190:PRO:CD	2.62	0.48
1:B:189:ASP:O	1:B:191:GLU:HG2	2.14	0.48
1:B:308:VAL:HB	1:B:311:HIS:ND1	2.29	0.48
1:B:395:GLU:OE2	1:B:395:GLU:O	2.30	0.48
1:B:742:ALA:HB1	1:B:744:GLU:CD	2.34	0.48
1:B:75:THR:C	1:B:77:ASP:H	2.16	0.48
1:C:630:ARG:O	1:C:634:LYS:HE2	2.13	0.48
1:E:176:GLY:C	1:E:178:SER:H	2.17	0.48
1:E:324:THR:CB	1:E:499:PRO:HA	2.30	0.48
1:F:218:LEU:HD11	1:F:225:ILE:HD11	1.95	0.48
1:F:308:VAL:HB	1:F:311:HIS:ND1	2.28	0.48
1:F:345:THR:CG2	1:F:491:ASP:HA	2.43	0.48
1:F:781:ASN:H	1:F:789:ASN:HD21	1.61	0.48
2:O:16:PHE:CE1	2:O:27:ILE:HG12	2.49	0.48
2:P:49:GLN:HA	2:P:52:ILE:CG2	2.41	0.48
2:S:30:LYS:HD3	2:S:30:LYS:N	2.09	0.48
2:T:109:MET:HG3	2:T:116:LEU:CD1	2.44	0.48
1:A:354:SER:OG	1:A:355:SER:N	2.47	0.48
1:A:480:ASN:ND2	1:A:483:GLY:H	2.05	0.48
1:A:79:ILE:C	1:A:81:GLN:N	2.66	0.48
1:B:397:GLU:O	1:B:479:LYS:HA	2.14	0.48
1:C:71:PHE:CD2	1:C:73:ASN:HB2	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:165:GLN:HB2	1:D:252:ASP:OD1	2.14	0.48
1:D:218:LEU:C	1:D:220:LEU:N	2.60	0.48
1:D:629:ASN:C	1:D:629:ASN:ND2	2.67	0.48
1:D:739:LYS:HG2	1:D:740:GLN:H	1.79	0.48
1:E:639:ASN:HD22	1:E:639:ASN:N	2.09	0.48
1:E:781:ASN:H	1:E:789:ASN:HD21	1.61	0.48
1:F:739:LYS:HG2	1:F:740:GLN:H	1.79	0.48
2:O:65:PHE:CB	2:O:66:PRO:HD3	2.34	0.48
2:R:114:GLU:HA	2:R:114:GLU:OE2	2.14	0.48
2:R:49:GLN:HE21	2:R:49:GLN:H	1.61	0.48
2:S:25:GLY:O	2:S:64:ASP:HA	2.14	0.48
2:T:16:PHE:CE1	2:T:27:ILE:HG12	2.49	0.48
1:A:343:VAL:HG13	1:A:487:PRO:HG2	1.96	0.47
1:A:620:THR:HG22	1:A:621:GLY:N	2.29	0.47
1:B:462:ILE:CG1	1:B:463:THR:N	2.72	0.47
1:B:345:THR:CG2	1:B:491:ASP:HA	2.44	0.47
1:B:697:ILE:CG2	1:B:732:ILE:HD11	2.43	0.47
1:B:789:ASN:O	1:B:792:VAL:HB	2.15	0.47
1:C:516:VAL:HG21	1:C:532:LEU:HD11	1.96	0.47
1:C:742:ALA:HB1	1:C:744:GLU:CD	2.35	0.47
1:C:777:TYR:O	1:C:778:LYS:C	2.53	0.47
1:C:83:GLN:O	1:C:84:ASP:C	2.51	0.47
1:D:115:LYS:NZ	1:D:117:LEU:HB2	2.23	0.47
1:D:363:TYR:CD2	1:D:476:VAL:HG11	2.49	0.47
1:D:345:THR:CG2	1:D:491:ASP:HA	2.44	0.47
1:E:764:LEU:O	1:E:768:LYS:O	2.32	0.47
1:F:324:THR:CB	1:F:499:PRO:HA	2.30	0.47
1:F:658:PRO:HG3	1:F:752:LEU:HD22	1.95	0.47
1:F:700:TYR:HD1	1:F:728:ALA:HA	1.79	0.47
1:F:742:ALA:HB1	1:F:744:GLU:CD	2.35	0.47
2:O:114:GLU:OE2	2:O:114:GLU:HA	2.13	0.47
2:P:13:LYS:HE2	2:P:65:PHE:HB3	1.95	0.47
2:P:25:GLY:O	2:P:64:ASP:HA	2.13	0.47
2:Q:18:LEU:HB3	2:Q:19:PHE:CD1	2.49	0.47
2:Q:48:LEU:HA	2:Q:51:MET:HE1	1.96	0.47
2:T:25:GLY:O	2:T:64:ASP:HA	2.14	0.47
2:T:43:PRO:HG3	2:T:48:LEU:HD13	1.94	0.47
2:T:97:ASN:ND2	2:T:99:TYR:H	2.12	0.47
1:A:145:LYS:HD3	1:A:151:LYS:CD	2.44	0.47
1:A:742:ALA:HB1	1:A:744:GLU:CD	2.35	0.47
1:C:165:GLN:HB2	1:C:252:ASP:OD1	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:513:TRP:HD1	1:C:532:LEU:HD13	1.78	0.47
1:D:185:ASP:O	1:D:190:PRO:HD3	2.14	0.47
1:D:354:SER:OG	1:D:355:SER:N	2.47	0.47
1:D:431:LYS:O	1:D:432:TYR:CD2	2.67	0.47
1:D:694:VAL:CG2	2:R:18:LEU:HD21	2.44	0.47
1:E:478:ALA:HA	1:E:488:LEU:HG	1.95	0.47
1:E:348:LEU:HD12	1:E:545:THR:O	2.13	0.47
1:F:197:LYS:NZ	1:F:264:MET:SD	2.84	0.47
1:F:478:ALA:HA	1:F:488:LEU:HG	1.95	0.47
2:Q:114:GLU:HA	2:Q:114:GLU:OE2	2.15	0.47
1:A:372:LYS:HG3	1:A:373:LYS:HG2	1.96	0.47
1:A:401:ILE:HD11	1:A:487:PRO:HD3	1.96	0.47
1:A:478:ALA:HA	1:A:488:LEU:HG	1.95	0.47
1:A:516:VAL:HG21	1:A:532:LEU:HD11	1.96	0.47
1:A:777:TYR:O	1:A:778:LYS:C	2.53	0.47
1:B:252:ASP:OD2	1:B:253:HIS:CD2	2.67	0.47
1:C:145:LYS:HD3	1:C:151:LYS:CD	2.44	0.47
1:D:395:GLU:OE2	1:D:395:GLU:O	2.31	0.47
1:D:335:ALA:HB1	1:D:489:THR:OG1	2.14	0.47
1:F:397:GLU:O	1:F:398:ILE:HD13	2.14	0.47
1:B:694:VAL:CG2	2:P:18:LEU:HD21	2.44	0.47
2:Q:129:ASP:OD1	2:Q:134:GLY:N	2.46	0.47
1:D:621:GLY:HA2	2:R:94:LYS:NZ	2.28	0.47
2:R:6:GLU:O	2:R:9:ILE:HB	2.13	0.47
1:A:93:VAL:CG2	1:A:179:LEU:HD11	2.44	0.47
1:A:188:LEU:HD23	1:A:188:LEU:N	2.26	0.47
1:A:301:ALA:C	1:A:303:LYS:H	2.17	0.47
1:B:478:ALA:HA	1:B:488:LEU:HG	1.95	0.47
1:C:123:GLU:HG2	1:C:124:GLU:N	2.29	0.47
1:C:363:TYR:CD2	1:C:476:VAL:HG11	2.49	0.47
1:C:632:TYR:O	1:C:633:ASN:HB2	2.14	0.47
1:C:639:ASN:N	1:C:639:ASN:ND2	2.61	0.47
1:C:658:PRO:HG3	1:C:752:LEU:HD22	1.96	0.47
1:D:173:ILE:HG23	1:D:174:GLY:H	1.77	0.47
1:D:372:LYS:O	1:D:374:HIS:N	2.37	0.47
1:E:159:TYR:H	1:E:159:TYR:HD1	1.60	0.47
1:E:621:GLY:HA2	2:S:94:LYS:HZ3	1.80	0.47
1:F:431:LYS:O	1:F:432:TYR:CD2	2.68	0.47
2:Q:137:ASN:OD1	2:Q:140:GLU:HG2	2.14	0.47
2:Q:5:THR:O	2:Q:9:ILE:HG12	2.15	0.47
1:E:527:LYS:HD2	2:S:145:MET:O	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:345:THR:CG2	1:A:491:ASP:HA	2.44	0.47
1:B:323:ASN:O	1:B:324:THR:HG22	2.15	0.47
1:C:368:GLN:HB2	1:C:384:ASN:OD1	2.14	0.47
1:C:628:PHE:CD1	1:C:645:TRP:CD1	3.03	0.47
1:C:639:ASN:HD22	1:C:639:ASN:N	2.12	0.47
1:D:196:ILE:HA	1:D:199:LEU:CG	2.42	0.47
1:E:559:ARG:HG3	1:E:559:ARG:NH1	2.29	0.47
1:E:630:ARG:O	1:E:634:LYS:HE2	2.14	0.47
1:E:777:TYR:O	1:E:778:LYS:C	2.52	0.47
1:F:145:LYS:HD3	1:F:151:LYS:HD2	1.96	0.47
1:F:395:GLU:O	1:F:395:GLU:OE2	2.32	0.47
1:F:625:LEU:HD12	1:F:625:LEU:C	2.28	0.47
1:F:88:LYS:HZ3	1:F:172:GLU:CD	2.17	0.47
2:O:13:LYS:NZ	2:O:65:PHE:HB3	2.29	0.47
2:O:12:PHE:HB3	2:O:68:PHE:HE2	1.78	0.47
2:P:52:ILE:HG13	2:P:63:ILE:CG2	2.44	0.47
2:P:64:ASP:OD2	2:P:67:GLU:CG	2.63	0.47
2:Q:109:MET:HG3	2:Q:116:LEU:CD1	2.44	0.47
2:Q:52:ILE:HG13	2:Q:63:ILE:CG2	2.44	0.47
2:S:13:LYS:NZ	2:S:65:PHE:HB3	2.29	0.47
2:T:13:LYS:HE2	2:T:65:PHE:HB3	1.97	0.47
1:A:447:SER:OG	1:A:450:ASN:O	2.30	0.47
1:C:397:GLU:O	1:C:479:LYS:HA	2.15	0.47
1:C:527:LYS:HD2	2:Q:145:MET:O	2.13	0.47
1:C:618:ASN:O	1:C:622:LYS:CB	2.62	0.47
1:D:435:LEU:HG	1:D:446:ILE:HG22	1.97	0.47
1:D:530:THR:HG21	2:R:145:MET:CE	2.36	0.47
1:D:620:THR:HG22	1:D:621:GLY:N	2.28	0.47
1:D:697:ILE:HG21	1:D:732:ILE:HD11	1.95	0.47
1:D:742:ALA:HB1	1:D:744:GLU:CD	2.35	0.47
1:D:777:TYR:O	1:D:778:LYS:C	2.53	0.47
1:D:781:ASN:H	1:D:789:ASN:HD21	1.61	0.47
1:E:231:LYS:O	1:E:233:ASN:N	2.48	0.47
1:E:635:ILE:N	1:E:635:ILE:CD1	2.71	0.47
1:E:739:LYS:HG2	1:E:740:GLN:H	1.79	0.47
1:E:658:PRO:HG3	1:E:752:LEU:HD22	1.96	0.47
1:F:165:GLN:HB2	1:F:252:ASP:OD1	2.13	0.47
1:F:363:TYR:CD2	1:F:476:VAL:HG11	2.49	0.47
2:O:5:THR:O	2:O:9:ILE:HG12	2.14	0.47
2:R:5:THR:O	2:R:9:ILE:HG12	2.15	0.47
2:S:43:PRO:HG3	2:S:48:LEU:HD13	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:88:LYS:HZ3	1:B:172:GLU:CD	2.16	0.47
1:B:202:ASP:HB2	1:B:208:LEU:HG	1.95	0.47
1:B:225:ILE:HG12	1:B:229:PHE:CE2	2.50	0.47
1:B:781:ASN:H	1:B:789:ASN:HD21	1.61	0.47
1:C:700:TYR:HD1	1:C:728:ALA:CA	2.28	0.47
1:D:308:VAL:HB	1:D:311:HIS:ND1	2.29	0.47
1:D:443:GLU:O	1:D:455:TYR:HA	2.15	0.47
1:D:632:TYR:O	1:D:633:ASN:HB2	2.13	0.47
1:D:658:PRO:HG3	1:D:752:LEU:HD22	1.95	0.47
1:E:700:TYR:HD1	1:E:728:ALA:CA	2.28	0.47
1:F:344:ALA:O	1:F:489:THR:HG22	2.15	0.47
1:F:354:SER:OG	1:F:355:SER:N	2.48	0.47
2:O:28:THR:CB	2:O:30:LYS:NZ	2.77	0.47
2:O:52:ILE:HG13	2:O:63:ILE:CG2	2.44	0.47
2:P:133:ASP:OD2	2:P:135:GLN:CG	2.63	0.47
2:Q:117:THR:HG21	2:Q:120:GLU:OE2	2.15	0.47
2:R:28:THR:CB	2:R:30:LYS:NZ	2.78	0.47
1:A:225:ILE:HG12	1:A:229:PHE:CE2	2.50	0.47
1:A:308:VAL:HB	1:A:311:HIS:ND1	2.30	0.47
1:A:431:LYS:O	1:A:432:TYR:CD2	2.67	0.47
1:A:576:ASN:ND2	1:A:576:ASN:N	2.61	0.47
1:A:739:LYS:HG2	1:A:740:GLN:H	1.79	0.47
1:B:285:LYS:O	1:B:288:VAL:HG22	2.14	0.47
1:B:363:TYR:CD2	1:B:476:VAL:HG11	2.50	0.47
1:B:709:ASN:HB2	2:P:130:ILE:HG23	1.96	0.47
1:B:700:TYR:HD1	1:B:728:ALA:CA	2.28	0.47
1:C:480:ASN:HD21	1:C:483:GLY:N	2.08	0.47
1:D:343:VAL:HG13	1:D:487:PRO:HG2	1.97	0.47
1:D:485:LEU:HD12	1:D:485:LEU:N	2.30	0.47
1:D:660:SER:O	1:D:663:PHE:HB3	2.14	0.47
1:E:413:LEU:HD23	1:E:413:LEU:N	2.30	0.47
1:E:397:GLU:O	1:E:479:LYS:HA	2.15	0.47
1:E:620:THR:HG22	1:E:621:GLY:N	2.29	0.47
1:F:323:ASN:O	1:F:324:THR:HG22	2.14	0.47
1:F:485:LEU:HD12	1:F:485:LEU:N	2.30	0.47
1:F:635:ILE:CD1	1:F:635:ILE:N	2.68	0.47
2:O:64:ASP:OD2	2:O:67:GLU:CG	2.62	0.47
2:O:97:ASN:HD22	2:O:98:GLY:N	2.13	0.47
2:P:18:LEU:HB3	2:P:19:PHE:CD1	2.50	0.47
2:Q:65:PHE:HB2	2:Q:66:PRO:CD	2.40	0.47
2:R:13:LYS:NZ	2:R:65:PHE:HB3	2.30	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:141:PHE:N	1:A:141:PHE:HD1	2.08	0.47
1:A:718:ARG:NH1	1:A:767:GLN:NE2	2.62	0.47
1:A:697:ILE:HG21	1:A:732:ILE:HD11	1.96	0.47
1:A:781:ASN:H	1:A:789:ASN:HD21	1.62	0.47
1:B:413:LEU:HD23	1:B:413:LEU:N	2.30	0.47
1:B:456:LYS:HZ3	1:B:471:TRP:HE1	1.63	0.47
1:B:660:SER:HB2	1:B:702:SER:HB2	1.97	0.47
1:C:176:GLY:C	1:C:178:SER:H	2.17	0.47
1:C:308:VAL:HB	1:C:311:HIS:ND1	2.29	0.47
1:C:76:LEU:N	1:C:76:LEU:CD2	2.78	0.47
1:F:413:LEU:HD23	1:F:413:LEU:N	2.30	0.47
1:F:708:ALA:O	1:F:711:ILE:HG12	2.15	0.47
2:O:13:LYS:HE2	2:O:65:PHE:HB3	1.97	0.47
2:O:86:ARG:HH21	2:O:138:TYR:HE2	1.59	0.47
2:P:65:PHE:HB2	2:P:66:PRO:CD	2.40	0.47
2:R:49:GLN:HA	2:R:52:ILE:CG2	2.41	0.47
2:R:13:LYS:HE2	2:R:65:PHE:HB3	1.96	0.47
2:S:52:ILE:HG13	2:S:63:ILE:CG2	2.44	0.47
1:A:176:GLY:C	1:A:178:SER:H	2.18	0.47
1:A:607:ASN:HB3	1:A:609:GLU:OE2	2.15	0.47
1:A:700:TYR:HD1	1:A:728:ALA:HA	1.80	0.47
1:B:345:THR:HG21	1:B:491:ASP:HA	1.97	0.47
1:B:777:TYR:O	1:B:778:LYS:C	2.53	0.47
1:C:134:LYS:O	1:C:135:VAL:HG12	2.14	0.47
1:C:188:LEU:CD2	1:C:188:LEU:N	2.73	0.47
1:C:431:LYS:O	1:C:432:TYR:CD2	2.68	0.47
1:C:621:GLY:HA2	2:Q:94:LYS:NZ	2.30	0.47
1:C:662:GLU:OE2	1:C:755:ARG:NH2	2.38	0.47
1:D:709:ASN:HB2	2:R:130:ILE:HG23	1.97	0.47
1:D:794:GLN:O	1:D:797:ILE:HG12	2.15	0.47
1:E:165:GLN:HB2	1:E:252:ASP:OD1	2.14	0.47
1:E:443:GLU:O	1:E:455:TYR:HA	2.15	0.47
1:F:225:ILE:CG1	1:F:229:PHE:HE2	2.28	0.47
1:F:225:ILE:HG12	1:F:229:PHE:CE2	2.50	0.47
1:F:343:VAL:HG13	1:F:487:PRO:HG2	1.95	0.47
2:P:48:LEU:HA	2:P:51:MET:HE1	1.96	0.47
1:D:505:LYS:HD3	2:R:112:LEU:O	2.15	0.47
2:S:143:GLN:HE21	2:S:143:GLN:HB3	1.52	0.47
2:T:3:GLN:N	2:T:77:LYS:HE3	2.29	0.47
1:A:225:ILE:CG1	1:A:229:PHE:HE2	2.28	0.47
1:A:363:TYR:CD2	1:A:476:VAL:HG11	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:709:ASN:HB2	2:O:130:ILE:HG23	1.97	0.47
1:A:710:HIS:C	1:A:712:PHE:N	2.66	0.47
1:A:90:PRO:HD3	1:A:249:PHE:CD2	2.50	0.47
1:B:700:TYR:HD1	1:B:728:ALA:HA	1.80	0.47
1:C:106:PHE:HZ	1:C:171:TYR:OH	1.97	0.47
1:C:88:LYS:NZ	1:C:172:GLU:OE2	2.39	0.47
1:C:173:ILE:HG23	1:C:174:GLY:H	1.78	0.47
1:C:413:LEU:HD23	1:C:413:LEU:N	2.30	0.47
1:D:413:LEU:HD23	1:D:413:LEU:N	2.29	0.47
1:D:480:ASN:ND2	1:D:483:GLY:H	2.05	0.47
1:E:225:ILE:HG12	1:E:229:PHE:CE2	2.50	0.47
1:E:345:THR:CG2	1:E:491:ASP:HA	2.44	0.47
1:E:677:GLY:HA2	1:E:745:TYR:OH	2.15	0.47
1:F:550:SER:CB	1:F:553:GLN:HG3	2.34	0.47
1:F:79:ILE:C	1:F:81:GLN:N	2.68	0.47
2:O:25:GLY:O	2:O:64:ASP:HA	2.15	0.47
2:P:13:LYS:HZ3	2:P:65:PHE:HB3	1.79	0.47
2:R:52:ILE:HG13	2:R:63:ILE:CG2	2.45	0.47
2:T:101:SER:OG	2:T:104:GLU:HG2	2.15	0.47
2:T:133:ASP:OD2	2:T:135:GLN:CG	2.63	0.47
2:T:52:ILE:HG13	2:T:63:ILE:CG2	2.44	0.47
1:B:344:ALA:HA	1:B:569:TYR:OH	2.15	0.46
1:B:517:VAL:CA	1:B:525:LYS:HZ2	2.29	0.46
1:B:607:ASN:HB3	1:B:609:GLU:OE2	2.16	0.46
1:C:694:VAL:CG2	2:Q:18:LEU:HD21	2.45	0.46
1:D:621:GLY:HA2	2:R:94:LYS:HZ3	1.80	0.46
1:D:700:TYR:HD1	1:D:728:ALA:CA	2.28	0.46
1:F:157:LYS:HD2	1:F:157:LYS:HA	1.52	0.46
2:O:43:PRO:HG3	2:O:48:LEU:HD13	1.95	0.46
1:B:694:VAL:HG23	2:P:18:LEU:HD11	1.97	0.46
2:P:12:PHE:HB3	2:P:68:PHE:HE2	1.79	0.46
2:Q:49:GLN:HE21	2:Q:49:GLN:H	1.61	0.46
2:Q:13:LYS:HE2	2:Q:65:PHE:HB3	1.96	0.46
2:S:100:ILE:HB	2:S:136:VAL:HG22	1.96	0.46
1:A:107:THR:HG21	1:A:115:LYS:CD	2.26	0.46
1:A:180:ASP:OD1	1:A:181:ILE:N	2.40	0.46
1:A:397:GLU:O	1:A:398:ILE:HD13	2.14	0.46
1:A:677:GLY:HA2	1:A:745:TYR:OH	2.14	0.46
1:B:196:ILE:HA	1:B:199:LEU:CG	2.40	0.46
1:C:127:SER:C	1:C:133:GLU:OE1	2.53	0.46
1:C:196:ILE:HA	1:C:199:LEU:CG	2.41	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:152:LEU:HD22	1:E:154:ILE:CD1	2.44	0.46
1:E:225:ILE:CG1	1:E:229:PHE:HE2	2.28	0.46
1:E:618:ASN:O	1:E:622:LYS:CB	2.62	0.46
1:E:700:TYR:HD1	1:E:728:ALA:HA	1.79	0.46
1:E:708:ALA:O	1:E:711:ILE:HG12	2.15	0.46
1:F:217:LYS:HZ2	1:F:236:GLU:CG	2.28	0.46
1:F:620:THR:HG22	1:F:621:GLY:N	2.29	0.46
1:F:629:ASN:C	1:F:629:ASN:ND2	2.67	0.46
2:O:101:SER:OG	2:O:104:GLU:HG2	2.15	0.46
2:Q:13:LYS:NZ	2:Q:65:PHE:HB3	2.30	0.46
2:S:97:ASN:HD22	2:S:98:GLY:N	2.13	0.46
1:A:109:ILE:CD1	1:A:157:LYS:HZ3	2.28	0.46
1:A:111:LEU:CD2	1:A:155:ASN:HD21	2.28	0.46
1:A:724:ARG:HG3	1:A:724:ARG:NH1	2.31	0.46
1:B:629:ASN:ND2	1:B:629:ASN:C	2.67	0.46
1:B:639:ASN:HD22	1:B:639:ASN:N	2.11	0.46
1:C:781:ASN:H	1:C:789:ASN:HD21	1.61	0.46
1:D:225:ILE:CG1	1:D:229:PHE:HE2	2.28	0.46
1:D:225:ILE:HG12	1:D:229:PHE:CE2	2.50	0.46
1:D:700:TYR:HD1	1:D:728:ALA:HA	1.80	0.46
1:E:252:ASP:CG	1:E:253:HIS:H	2.19	0.46
1:E:308:VAL:HB	1:E:311:HIS:ND1	2.29	0.46
1:E:629:ASN:ND2	1:E:629:ASN:C	2.69	0.46
1:E:794:GLN:O	1:E:797:ILE:HG12	2.15	0.46
1:F:192:PHE:O	1:F:196:ILE:HG13	2.15	0.46
1:F:372:LYS:HG3	1:F:373:LYS:HG2	1.97	0.46
1:F:639:ASN:ND2	1:F:639:ASN:N	2.60	0.46
1:F:777:TYR:O	1:F:778:LYS:C	2.52	0.46
2:P:109:MET:HG3	2:P:116:LEU:CD1	2.45	0.46
2:Q:97:ASN:HD22	2:Q:98:GLY:N	2.13	0.46
1:A:106:PHE:HZ	1:A:171:TYR:OH	1.97	0.46
1:A:628:PHE:HE2	2:O:90:ARG:HD2	1.81	0.46
1:A:694:VAL:CG2	2:O:18:LEU:HD21	2.45	0.46
1:B:112:VAL:C	1:B:114:HIS:N	2.69	0.46
1:B:372:LYS:HG3	1:B:373:LYS:HG2	1.98	0.46
1:B:443:GLU:O	1:B:455:TYR:HA	2.15	0.46
1:C:794:GLN:O	1:C:797:ILE:HG12	2.15	0.46
1:D:344:ALA:HA	1:D:569:TYR:OH	2.15	0.46
1:E:109:ILE:CD1	1:E:157:LYS:HZ3	2.29	0.46
1:E:354:SER:OG	1:E:355:SER:N	2.47	0.46
1:E:368:GLN:C	1:E:370:LEU:H	2.19	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:345:THR:HG21	1:F:491:ASP:HA	1.97	0.46
1:F:677:GLY:HA2	1:F:745:TYR:OH	2.14	0.46
2:Q:13:LYS:HZ3	2:Q:65:PHE:HB3	1.80	0.46
2:Q:16:PHE:CE1	2:Q:27:ILE:HG12	2.49	0.46
2:Q:12:PHE:HB3	2:Q:68:PHE:HE2	1.79	0.46
2:T:49:GLN:HA	2:T:52:ILE:CG2	2.41	0.46
2:T:5:THR:O	2:T:9:ILE:HG12	2.15	0.46
2:T:64:ASP:OD2	2:T:67:GLU:CG	2.63	0.46
1:A:708:ALA:O	1:A:711:ILE:HG12	2.16	0.46
1:B:225:ILE:CG1	1:B:229:PHE:HE2	2.28	0.46
1:B:368:GLN:C	1:B:370:LEU:H	2.19	0.46
1:B:431:LYS:O	1:B:432:TYR:CD2	2.68	0.46
1:C:252:ASP:CG	1:C:253:HIS:H	2.19	0.46
1:C:443:GLU:O	1:C:455:TYR:HA	2.15	0.46
1:C:708:ALA:O	1:C:711:ILE:HG12	2.16	0.46
1:D:345:THR:HG21	1:D:491:ASP:HA	1.98	0.46
1:D:607:ASN:HB3	1:D:609:GLU:OE2	2.16	0.46
1:D:88:LYS:HZ3	1:D:172:GLU:CD	2.19	0.46
1:E:639:ASN:ND2	1:E:639:ASN:N	2.59	0.46
1:F:252:ASP:CG	1:F:253:HIS:H	2.19	0.46
1:F:534:ILE:HG21	2:T:84:GLU:HB3	1.97	0.46
1:F:535:LYS:HD2	1:F:536:TYR:CE2	2.50	0.46
2:R:97:ASN:HD22	2:R:98:GLY:N	2.14	0.46
1:E:621:GLY:HA2	2:S:94:LYS:NZ	2.30	0.46
2:T:13:LYS:NZ	2:T:65:PHE:HB3	2.30	0.46
2:T:21:LYS:C	2:T:23:GLY:H	2.19	0.46
1:A:252:ASP:CG	1:A:253:HIS:H	2.19	0.46
1:A:345:THR:HG21	1:A:491:ASP:HA	1.97	0.46
1:A:443:GLU:O	1:A:455:TYR:HA	2.15	0.46
1:C:621:GLY:O	1:C:622:LYS:HE2	2.16	0.46
1:C:700:TYR:HD1	1:C:728:ALA:HA	1.80	0.46
1:D:111:LEU:CD2	1:D:155:ASN:HD21	2.29	0.46
1:D:159:TYR:CD1	1:D:159:TYR:N	2.81	0.46
1:D:520:PRO:HG2	1:D:521:ASN:N	2.31	0.46
1:D:724:ARG:HG3	1:D:724:ARG:NH1	2.31	0.46
1:D:89:ILE:HG22	1:D:90:PRO:HD2	1.98	0.46
1:D:90:PRO:HD3	1:D:249:PHE:CD2	2.50	0.46
1:F:218:LEU:O	1:F:218:LEU:CG	2.64	0.46
1:F:516:VAL:HG21	1:F:532:LEU:HD11	1.98	0.46
2:P:49:GLN:H	2:P:49:GLN:HE21	1.63	0.46
2:R:12:PHE:HB3	2:R:68:PHE:HE2	1.79	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:25:GLY:O	2:R:64:ASP:HA	2.16	0.46
2:R:64:ASP:OD2	2:R:67:GLU:CG	2.63	0.46
2:S:64:ASP:OD2	2:S:67:GLU:CG	2.64	0.46
2:T:49:GLN:H	2:T:49:GLN:HE21	1.63	0.46
1:A:159:TYR:CD1	1:A:159:TYR:N	2.82	0.46
1:A:697:ILE:C	1:A:699:GLY:H	2.18	0.46
1:A:780:LEU:HD23	1:A:782:PHE:CZ	2.51	0.46
1:A:789:ASN:O	1:A:792:VAL:HB	2.16	0.46
1:B:344:ALA:O	1:B:489:THR:HG22	2.16	0.46
1:C:127:SER:O	1:C:133:GLU:HG2	2.14	0.46
1:C:185:ASP:O	1:C:190:PRO:CD	2.64	0.46
1:C:323:ASN:O	1:C:324:THR:HG22	2.16	0.46
1:C:636:ALA:O	1:C:640:LYS:CA	2.64	0.46
1:E:709:ASN:HB2	2:S:130:ILE:HG23	1.97	0.46
1:E:710:HIS:C	1:E:712:PHE:N	2.66	0.46
1:F:529:VAL:O	1:F:532:LEU:HB2	2.16	0.46
2:O:28:THR:CB	2:O:30:LYS:HZ1	2.28	0.46
2:O:3:GLN:N	2:O:77:LYS:HE3	2.30	0.46
2:T:137:ASN:OD1	2:T:140:GLU:HG2	2.15	0.46
1:F:668:SER:CA	2:T:14:GLU:HG3	2.39	0.46
2:T:12:PHE:HB3	2:T:68:PHE:HE2	1.79	0.46
1:A:165:GLN:HB2	1:A:252:ASP:OD1	2.15	0.46
1:A:323:ASN:O	1:A:324:THR:HG22	2.16	0.46
1:A:344:ALA:HA	1:A:569:TYR:OH	2.15	0.46
1:A:697:ILE:C	1:A:699:GLY:N	2.68	0.46
1:A:794:GLN:O	1:A:797:ILE:HG12	2.15	0.46
1:B:576:ASN:N	1:B:576:ASN:ND2	2.63	0.46
1:B:89:ILE:HG22	1:B:90:PRO:HD2	1.98	0.46
1:C:109:ILE:CD1	1:C:157:LYS:HZ3	2.29	0.46
1:C:152:LEU:HD22	1:C:154:ILE:CD1	2.44	0.46
1:E:485:LEU:HD12	1:E:485:LEU:N	2.31	0.46
1:E:607:ASN:HB3	1:E:609:GLU:OE2	2.15	0.46
1:E:742:ALA:HB1	1:E:744:GLU:CD	2.36	0.46
1:F:326:ILE:C	1:F:327:LEU:HD12	2.37	0.46
1:F:447:SER:OG	1:F:450:ASN:O	2.30	0.46
1:F:607:ASN:HB3	1:F:609:GLU:OE2	2.15	0.46
1:F:780:LEU:HD23	1:F:782:PHE:CZ	2.51	0.46
2:P:97:ASN:ND2	2:P:99:TYR:H	2.13	0.46
2:Q:133:ASP:OD2	2:Q:135:GLN:CG	2.64	0.46
2:Q:25:GLY:O	2:Q:64:ASP:HA	2.15	0.46
1:E:668:SER:CA	2:S:14:GLU:HG3	2.41	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:700:TYR:HD1	1:A:728:ALA:CA	2.28	0.46
1:B:111:LEU:CD2	1:B:155:ASN:HD21	2.29	0.46
1:B:708:ALA:O	1:B:711:ILE:HG12	2.15	0.46
1:B:722:ILE:HD13	1:B:764:LEU:HD23	1.98	0.46
1:C:372:LYS:HG3	1:C:373:LYS:HG2	1.98	0.46
1:C:559:ARG:NH1	1:C:559:ARG:HG3	2.30	0.46
1:C:677:GLY:HA2	1:C:745:TYR:OH	2.15	0.46
1:D:252:ASP:CG	1:D:253:HIS:H	2.19	0.46
1:D:323:ASN:O	1:D:324:THR:HG22	2.15	0.46
1:E:431:LYS:O	1:E:432:TYR:CD2	2.68	0.46
1:F:111:LEU:CD2	1:F:155:ASN:HD21	2.29	0.46
1:F:789:ASN:O	1:F:792:VAL:HB	2.16	0.46
1:A:265:PHE:CD2	1:A:266:GLU:N	2.83	0.46
1:A:520:PRO:HG2	1:A:521:ASN:N	2.31	0.46
1:B:535:LYS:HD2	1:B:536:TYR:CE2	2.51	0.46
1:B:780:LEU:HD23	1:B:782:PHE:CZ	2.51	0.46
1:C:181:ILE:O	1:C:181:ILE:HG12	2.16	0.46
1:C:354:SER:OG	1:C:355:SER:N	2.48	0.46
1:C:412:GLU:O	1:C:414:LYS:N	2.49	0.46
1:C:697:ILE:HG21	1:C:732:ILE:HD11	1.97	0.46
1:D:516:VAL:HG21	1:D:532:LEU:HD11	1.98	0.46
1:D:708:ALA:O	1:D:711:ILE:HG12	2.16	0.46
1:D:83:GLN:O	1:D:84:ASP:C	2.51	0.46
1:E:201:ASP:OD1	1:E:218:LEU:HD21	2.15	0.46
1:E:372:LYS:HG3	1:E:373:LYS:HG2	1.98	0.46
2:O:21:LYS:C	2:O:23:GLY:H	2.20	0.46
2:Q:64:ASP:OD2	2:Q:67:GLU:CG	2.64	0.46
2:S:117:THR:HG21	2:S:120:GLU:OE2	2.16	0.46
1:A:295:VAL:O	1:A:296:LEU:C	2.54	0.45
1:A:344:ALA:O	1:A:489:THR:HG22	2.16	0.45
1:A:373:LYS:HD3	1:A:376:GLN:HE21	1.81	0.45
1:A:403:LEU:HD11	1:A:405:LEU:CD1	2.46	0.45
1:A:446:ILE:HD11	1:A:451:ASN:HB2	1.98	0.45
1:B:120:LEU:HD22	1:B:123:GLU:CD	2.37	0.45
1:B:462:ILE:CG1	1:B:463:THR:H	2.27	0.45
1:B:480:ASN:ND2	1:B:483:GLY:H	2.05	0.45
1:B:618:ASN:O	1:B:622:LYS:CB	2.62	0.45
1:B:635:ILE:CD1	1:B:635:ILE:N	2.70	0.45
1:C:157:LYS:HD2	1:C:157:LYS:HA	1.67	0.45
1:C:109:ILE:HD11	1:C:157:LYS:NZ	2.31	0.45
1:C:660:SER:HB2	1:C:702:SER:HB2	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:780:LEU:HD23	1:C:782:PHE:CZ	2.51	0.45
1:D:100:LEU:O	1:D:150:PRO:HD2	2.16	0.45
1:D:180:ASP:OD1	1:D:181:ILE:N	2.40	0.45
1:D:344:ALA:O	1:D:489:THR:HG22	2.16	0.45
1:E:345:THR:HG21	1:E:491:ASP:HA	1.97	0.45
1:E:373:LYS:HD3	1:E:376:GLN:HE21	1.81	0.45
1:E:412:GLU:O	1:E:414:LYS:N	2.49	0.45
1:E:660:SER:HB2	1:E:702:SER:HB2	1.98	0.45
1:F:112:VAL:C	1:F:114:HIS:N	2.68	0.45
1:F:435:LEU:HG	1:F:446:ILE:HG22	1.97	0.45
1:F:443:GLU:O	1:F:455:TYR:HA	2.16	0.45
1:F:96:ILE:HG22	1:F:100:LEU:CD1	2.42	0.45
2:Q:49:GLN:HA	2:Q:52:ILE:CG2	2.42	0.45
1:D:513:TRP:HH2	2:R:113:GLY:O	1.98	0.45
1:A:485:LEU:HD12	1:A:485:LEU:N	2.31	0.45
1:B:109:ILE:HG13	1:B:109:ILE:H	1.41	0.45
1:B:210:PHE:CD2	1:B:210:PHE:N	2.84	0.45
1:C:326:ILE:C	1:C:327:LEU:HD12	2.35	0.45
1:D:376:GLN:OE1	1:D:376:GLN:N	2.49	0.45
1:D:447:SER:OG	1:D:450:ASN:O	2.30	0.45
1:D:597:ASN:OD1	1:D:599:GLU:N	2.50	0.45
1:D:621:GLY:O	1:D:622:LYS:HE2	2.16	0.45
1:D:677:GLY:HA2	1:D:745:TYR:OH	2.16	0.45
1:E:628:PHE:CD1	1:E:645:TRP:CD1	3.03	0.45
1:F:98:SER:O	1:F:101:GLY:N	2.46	0.45
1:F:231:LYS:O	1:F:233:ASN:N	2.50	0.45
1:F:406:ASP:CG	1:F:407:HIS:N	2.70	0.45
1:F:559:ARG:HD2	1:F:562:GLU:OE2	2.17	0.45
1:F:576:ASN:N	1:F:576:ASN:ND2	2.63	0.45
2:O:133:ASP:OD2	2:O:135:GLN:CG	2.64	0.45
2:P:5:THR:O	2:P:9:ILE:HG12	2.16	0.45
2:Q:21:LYS:C	2:Q:23:GLY:H	2.19	0.45
2:S:49:GLN:H	2:S:49:GLN:HE21	1.62	0.45
1:A:98:SER:O	1:A:101:GLY:N	2.49	0.45
1:A:413:LEU:N	1:A:413:LEU:HD23	2.31	0.45
1:A:410:ILE:HD13	1:A:419:ILE:CD1	2.47	0.45
1:B:217:LYS:HB2	1:B:236:GLU:CD	2.37	0.45
1:B:677:GLY:HA2	1:B:745:TYR:OH	2.16	0.45
1:B:794:GLN:O	1:B:797:ILE:HG12	2.16	0.45
1:C:210:PHE:N	1:C:210:PHE:CD2	2.84	0.45
1:C:343:VAL:HG13	1:C:487:PRO:HG2	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:534:ILE:HG21	2:Q:84:GLU:HB3	1.98	0.45
1:C:629:ASN:C	1:C:629:ASN:ND2	2.68	0.45
1:C:770:ASN:HA	1:C:770:ASN:HD22	1.61	0.45
1:D:192:PHE:O	1:D:196:ILE:HG13	2.16	0.45
1:D:201:ASP:OD2	1:D:225:ILE:HD12	2.16	0.45
1:D:368:GLN:C	1:D:370:LEU:H	2.19	0.45
1:D:372:LYS:CG	1:D:373:LYS:N	2.76	0.45
1:E:157:LYS:HA	1:E:157:LYS:HD2	1.52	0.45
1:E:164:GLU:C	1:E:166:SER:N	2.70	0.45
1:E:265:PHE:CD2	1:E:266:GLU:N	2.84	0.45
1:E:435:LEU:O	1:E:444:PHE:O	2.35	0.45
1:E:789:ASN:O	1:E:792:VAL:HB	2.16	0.45
1:F:159:TYR:H	1:F:159:TYR:HD1	1.62	0.45
1:F:210:PHE:CD2	1:F:210:PHE:N	2.85	0.45
1:F:549:LEU:HB2	1:F:553:GLN:HE21	1.82	0.45
2:S:32:LEU:HD22	2:S:63:ILE:CD1	2.47	0.45
1:A:112:VAL:C	1:A:114:HIS:N	2.69	0.45
1:A:529:VAL:O	1:A:532:LEU:HB2	2.17	0.45
1:B:141:PHE:HD1	1:B:141:PHE:N	2.08	0.45
1:D:112:VAL:C	1:D:114:HIS:N	2.69	0.45
1:D:211:SER:C	1:D:213:LYS:H	2.19	0.45
1:D:412:GLU:O	1:D:414:LYS:N	2.49	0.45
1:E:218:LEU:O	1:E:218:LEU:CG	2.65	0.45
1:E:326:ILE:C	1:E:327:LEU:HD12	2.36	0.45
1:E:344:ALA:HA	1:E:569:TYR:OH	2.17	0.45
1:E:372:LYS:O	1:E:374:HIS:N	2.37	0.45
1:E:397:GLU:O	1:E:398:ILE:HD13	2.15	0.45
1:F:410:ILE:HD13	1:F:419:ILE:CD1	2.46	0.45
1:F:513:TRP:HH2	2:T:113:GLY:O	1.98	0.45
2:P:117:THR:HG23	2:P:120:GLU:CB	2.41	0.45
2:P:3:GLN:N	2:P:77:LYS:HE3	2.31	0.45
2:R:117:THR:HG21	2:R:120:GLU:OE2	2.17	0.45
2:R:138:TYR:O	2:R:141:PHE:HB3	2.17	0.45
2:R:36:MET:HE3	2:R:43:PRO:HG3	1.98	0.45
1:A:208:LEU:HD12	1:A:208:LEU:N	2.32	0.45
1:B:220:LEU:HD21	1:B:223:LYS:HG3	1.99	0.45
1:B:410:ILE:HD13	1:B:419:ILE:CD1	2.47	0.45
1:B:597:ASN:OD1	1:B:599:GLU:N	2.49	0.45
1:B:636:ALA:O	1:B:640:LYS:CA	2.65	0.45
1:C:789:ASN:O	1:C:792:VAL:HB	2.16	0.45
1:C:89:ILE:HG22	1:C:90:PRO:HD2	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:295:VAL:O	1:D:296:LEU:C	2.55	0.45
1:D:410:ILE:HD13	1:D:419:ILE:CD1	2.47	0.45
1:D:697:ILE:C	1:D:699:GLY:N	2.69	0.45
1:D:76:LEU:O	1:D:80:GLN:N	2.39	0.45
1:E:210:PHE:CD2	1:E:210:PHE:N	2.85	0.45
1:E:93:VAL:CG2	1:E:179:LEU:HD11	2.47	0.45
1:F:446:ILE:HD11	1:F:451:ASN:HB2	1.98	0.45
1:F:794:GLN:O	1:F:797:ILE:HG12	2.16	0.45
1:F:93:VAL:CG2	1:F:179:LEU:HD11	2.47	0.45
2:P:13:LYS:NZ	2:P:65:PHE:HB3	2.31	0.45
2:Q:143:GLN:HB3	2:Q:143:GLN:HE21	1.51	0.45
2:R:133:ASP:OD2	2:R:135:GLN:CG	2.65	0.45
2:R:21:LYS:C	2:R:23:GLY:H	2.19	0.45
1:A:157:LYS:HD2	1:A:157:LYS:HA	1.52	0.45
1:A:435:LEU:HG	1:A:446:ILE:HG22	1.98	0.45
1:A:625:LEU:HD12	1:A:625:LEU:C	2.30	0.45
1:B:295:VAL:O	1:B:296:LEU:C	2.54	0.45
1:B:432:TYR:CD2	1:B:447:SER:HA	2.52	0.45
1:B:559:ARG:HG3	1:B:559:ARG:NH1	2.31	0.45
1:B:697:ILE:HG21	1:B:732:ILE:HD11	1.98	0.45
1:C:135:VAL:O	1:C:135:VAL:HG13	2.17	0.45
1:C:376:GLN:OE1	1:C:376:GLN:N	2.50	0.45
1:C:697:ILE:C	1:C:699:GLY:N	2.70	0.45
1:C:724:ARG:NH1	1:C:724:ARG:HG3	2.31	0.45
1:D:164:GLU:C	1:D:166:SER:N	2.70	0.45
1:D:214:PHE:CG	1:D:218:LEU:HD23	2.51	0.45
1:D:265:PHE:CD2	1:D:266:GLU:N	2.85	0.45
1:D:789:ASN:O	1:D:792:VAL:HB	2.17	0.45
1:E:576:ASN:ND2	1:E:576:ASN:N	2.61	0.45
1:F:621:GLY:HA2	2:T:94:LYS:NZ	2.32	0.45
2:O:117:THR:HG23	2:O:120:GLU:CB	2.42	0.45
1:B:668:SER:CA	2:P:14:GLU:HG3	2.43	0.45
2:R:137:ASN:OD1	2:R:140:GLU:HG2	2.17	0.45
2:R:65:PHE:HB2	2:R:66:PRO:CD	2.41	0.45
2:T:117:THR:HG21	2:T:120:GLU:OE2	2.16	0.45
1:A:201:ASP:OD2	1:A:225:ILE:HD12	2.16	0.45
1:A:621:GLY:O	1:A:622:LYS:HE2	2.17	0.45
1:A:96:ILE:HG22	1:A:100:LEU:CD1	2.41	0.45
1:B:231:LYS:O	1:B:233:ASN:N	2.50	0.45
1:B:403:LEU:HD11	1:B:405:LEU:CD1	2.46	0.45
1:B:485:LEU:N	1:B:485:LEU:HD12	2.31	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:580:GLU:HG3	1:B:580:GLU:O	2.16	0.45
1:B:612:GLY:O	1:B:616:GLU:HG3	2.17	0.45
1:C:141:PHE:N	1:C:141:PHE:HD1	2.07	0.45
1:C:192:PHE:O	1:C:196:ILE:HG13	2.16	0.45
1:D:322:LEU:HA	1:D:503:GLU:OE2	2.17	0.45
1:E:201:ASP:OD2	1:E:225:ILE:HD12	2.17	0.45
1:F:520:PRO:HG2	1:F:521:ASN:N	2.32	0.45
1:F:694:VAL:CG2	2:T:18:LEU:HD21	2.46	0.45
2:P:36:MET:HE3	2:P:43:PRO:HG3	1.98	0.45
2:R:3:GLN:N	2:R:77:LYS:HE3	2.31	0.45
1:E:694:VAL:CG2	2:S:18:LEU:HD21	2.46	0.45
1:F:505:LYS:HD3	2:T:112:LEU:O	2.16	0.45
1:A:109:ILE:HG12	1:A:157:LYS:HZ2	1.82	0.45
1:A:201:ASP:OD1	1:A:218:LEU:HD21	2.17	0.45
1:A:211:SER:C	1:A:213:LYS:H	2.19	0.45
1:A:628:PHE:CD1	1:A:645:TRP:CD1	3.05	0.45
1:B:201:ASP:OD1	1:B:218:LEU:HD21	2.17	0.45
1:B:628:PHE:CD1	1:B:645:TRP:CD1	3.04	0.45
1:C:112:VAL:C	1:C:114:HIS:N	2.69	0.45
1:C:320:ARG:HG3	1:C:598:PRO:O	2.17	0.45
1:D:446:ILE:HD11	1:D:451:ASN:HB2	1.98	0.45
1:D:529:VAL:O	1:D:532:LEU:HB2	2.16	0.45
1:D:580:GLU:O	1:D:580:GLU:HG3	2.17	0.45
1:D:697:ILE:C	1:D:699:GLY:H	2.18	0.45
1:E:112:VAL:C	1:E:114:HIS:N	2.69	0.45
1:E:323:ASN:O	1:E:324:THR:HG22	2.17	0.45
1:E:529:VAL:O	1:E:532:LEU:HB2	2.17	0.45
1:F:145:LYS:HD3	1:F:151:LYS:CD	2.47	0.45
1:F:636:ALA:O	1:F:640:LYS:CA	2.65	0.45
2:P:49:GLN:O	2:P:52:ILE:HG22	2.17	0.45
2:Q:3:GLN:N	2:Q:77:LYS:HE3	2.31	0.45
2:S:48:LEU:HA	2:S:51:MET:HE1	1.97	0.45
2:S:49:GLN:O	2:S:52:ILE:HG22	2.17	0.45
2:T:86:ARG:HH21	2:T:138:TYR:HE2	1.61	0.45
2:T:97:ASN:HD22	2:T:98:GLY:N	2.14	0.45
1:A:368:GLN:C	1:A:370:LEU:H	2.20	0.45
1:A:549:LEU:HB2	1:A:553:GLN:HE21	1.82	0.45
1:B:164:GLU:C	1:B:166:SER:N	2.71	0.45
1:B:323:ASN:C	1:B:324:THR:CG2	2.86	0.45
1:C:344:ALA:HA	1:C:569:TYR:OH	2.16	0.45
1:D:373:LYS:HD3	1:D:376:GLN:HE21	1.82	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:403:LEU:HD11	1:D:405:LEU:CD1	2.47	0.45
1:E:192:PHE:O	1:E:196:ILE:HG13	2.17	0.45
1:F:376:GLN:N	1:F:376:GLN:OE1	2.50	0.45
1:F:629:ASN:HD22	1:F:631:SER:N	1.95	0.45
2:R:100:ILE:HB	2:R:136:VAL:HG22	1.97	0.45
2:S:3:GLN:N	2:S:77:LYS:HE3	2.31	0.45
1:A:327:LEU:CG	1:A:595:ILE:HG12	2.40	0.45
1:B:208:LEU:N	1:B:208:LEU:HD12	2.32	0.45
1:B:218:LEU:O	1:B:218:LEU:CG	2.64	0.45
1:B:265:PHE:CD2	1:B:266:GLU:N	2.85	0.45
1:B:697:ILE:C	1:B:699:GLY:N	2.70	0.45
1:B:762:LEU:O	1:B:766:HIS:HB2	2.17	0.45
1:C:102:GLY:HA3	1:C:150:PRO:HG2	1.99	0.45
1:C:199:LEU:HD23	1:C:225:ILE:O	2.17	0.45
1:C:231:LYS:O	1:C:233:ASN:N	2.50	0.45
1:C:485:LEU:N	1:C:485:LEU:HD12	2.32	0.45
1:C:96:ILE:HG12	1:C:280:SER:HB3	1.99	0.45
1:D:462:ILE:CG1	1:D:463:THR:H	2.27	0.45
1:D:320:ARG:HG3	1:D:598:PRO:O	2.17	0.45
1:D:780:LEU:HD23	1:D:782:PHE:CZ	2.51	0.45
1:E:715:GLU:OE1	1:E:767:GLN:NE2	2.50	0.45
1:F:181:ILE:O	1:F:181:ILE:HG12	2.17	0.45
1:F:265:PHE:CD2	1:F:266:GLU:N	2.84	0.45
1:F:597:ASN:OD1	1:F:599:GLU:N	2.50	0.45
2:O:49:GLN:O	2:O:52:ILE:HG22	2.17	0.45
2:Q:138:TYR:CE1	2:Q:142:VAL:HG22	2.52	0.45
2:R:138:TYR:CE1	2:R:142:VAL:HG22	2.52	0.45
1:A:210:PHE:N	1:A:210:PHE:CD2	2.85	0.44
1:A:376:GLN:CB	1:A:379:ALA:HB3	2.47	0.44
1:A:406:ASP:CG	1:A:407:HIS:N	2.70	0.44
1:A:629:ASN:C	1:A:629:ASN:ND2	2.68	0.44
1:B:211:SER:C	1:B:213:LYS:H	2.19	0.44
1:B:412:GLU:O	1:B:414:LYS:N	2.49	0.44
1:B:527:LYS:HD2	2:P:145:MET:O	2.16	0.44
1:B:93:VAL:CG2	1:B:179:LEU:HD11	2.47	0.44
1:C:265:PHE:CD2	1:C:266:GLU:N	2.85	0.44
1:D:107:THR:HG21	1:D:115:LYS:CD	2.26	0.44
1:D:326:ILE:C	1:D:327:LEU:HD12	2.37	0.44
1:E:102:GLY:HA3	1:E:150:PRO:HG2	1.99	0.44
1:F:295:VAL:O	1:F:296:LEU:C	2.56	0.44
1:F:323:ASN:C	1:F:324:THR:CG2	2.85	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:376:GLN:CB	1:F:379:ALA:HB3	2.48	0.44
1:F:546:LYS:CD	1:F:554:LYS:HE2	2.30	0.44
1:F:618:ASN:O	1:F:622:LYS:CB	2.62	0.44
1:B:513:TRP:HH2	2:P:113:GLY:O	2.00	0.44
2:P:117:THR:HG21	2:P:120:GLU:OE2	2.17	0.44
2:P:21:LYS:C	2:P:23:GLY:H	2.20	0.44
1:A:192:PHE:O	1:A:196:ILE:HG13	2.18	0.44
1:A:413:LEU:CB	1:A:419:ILE:HG12	2.47	0.44
1:B:152:LEU:HD22	1:B:154:ILE:CD1	2.46	0.44
1:B:192:PHE:O	1:B:196:ILE:HG13	2.17	0.44
1:B:373:LYS:HD3	1:B:376:GLN:HE21	1.82	0.44
1:B:415:GLU:C	1:B:417:GLY:N	2.71	0.44
1:B:96:ILE:HG12	1:B:280:SER:HB3	1.98	0.44
1:C:128:MET:HG3	1:C:239:HIS:CE1	2.53	0.44
1:C:217:LYS:HB2	1:C:236:GLU:CD	2.37	0.44
1:C:214:PHE:CG	1:C:218:LEU:HD23	2.53	0.44
1:C:218:LEU:O	1:C:218:LEU:CG	2.64	0.44
1:C:295:VAL:O	1:C:296:LEU:C	2.54	0.44
1:C:462:ILE:CG1	1:C:463:THR:H	2.27	0.44
1:D:210:PHE:N	1:D:210:PHE:CD2	2.85	0.44
1:E:181:ILE:O	1:E:181:ILE:HG12	2.16	0.44
1:E:515:LYS:HZ3	1:E:516:VAL:HG23	1.82	0.44
1:E:636:ALA:O	1:E:640:LYS:CA	2.64	0.44
1:E:697:ILE:C	1:E:699:GLY:N	2.71	0.44
1:E:780:LEU:HD23	1:E:782:PHE:CZ	2.52	0.44
1:F:201:ASP:OD2	1:F:225:ILE:HD12	2.17	0.44
1:F:344:ALA:HA	1:F:569:TYR:OH	2.17	0.44
1:F:709:ASN:HB2	2:T:130:ILE:HG23	1.98	0.44
2:P:137:ASN:OD1	2:P:140:GLU:HG2	2.17	0.44
2:R:97:ASN:HD22	2:R:98:GLY:H	1.66	0.44
2:S:97:ASN:HD22	2:S:98:GLY:H	1.65	0.44
1:B:109:ILE:HG12	1:B:157:LYS:NZ	2.31	0.44
1:B:217:LYS:HZ2	1:B:236:GLU:CG	2.30	0.44
1:B:252:ASP:CG	1:B:253:HIS:H	2.20	0.44
1:C:164:GLU:C	1:C:166:SER:N	2.70	0.44
1:C:192:PHE:CD1	1:C:192:PHE:N	2.79	0.44
1:C:410:ILE:HD13	1:C:419:ILE:CD1	2.47	0.44
1:C:415:GLU:C	1:C:417:GLY:N	2.71	0.44
1:C:76:LEU:O	1:C:80:GLN:N	2.39	0.44
1:D:217:LYS:HZ2	1:D:236:GLU:CG	2.30	0.44
1:E:376:GLN:N	1:E:376:GLN:OE1	2.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:376:GLN:CB	1:E:379:ALA:HB3	2.47	0.44
1:F:201:ASP:OD1	1:F:218:LEU:HD21	2.17	0.44
1:F:214:PHE:CG	1:F:218:LEU:HD23	2.52	0.44
1:F:697:ILE:C	1:F:699:GLY:H	2.19	0.44
1:A:231:LYS:O	1:A:233:ASN:N	2.50	0.44
1:A:345:THR:HB	1:A:491:ASP:CB	2.45	0.44
1:B:286:GLU:HG2	1:B:286:GLU:O	2.18	0.44
1:B:311:HIS:O	1:B:312:ALA:C	2.56	0.44
1:B:354:SER:OG	1:B:355:SER:N	2.46	0.44
1:B:405:LEU:HD13	1:B:453:VAL:CG2	2.37	0.44
1:B:549:LEU:HB2	1:B:553:GLN:HE21	1.83	0.44
1:B:589:LYS:HE3	1:B:608:TRP:CG	2.52	0.44
1:C:535:LYS:HD2	1:C:536:TYR:CE2	2.51	0.44
1:D:93:VAL:CG2	1:D:179:LEU:HD11	2.48	0.44
1:D:181:ILE:HG12	1:D:181:ILE:O	2.17	0.44
1:D:218:LEU:O	1:D:218:LEU:CG	2.65	0.44
1:D:231:LYS:O	1:D:233:ASN:N	2.51	0.44
1:D:628:PHE:CD1	1:D:645:TRP:CD1	3.06	0.44
1:E:170:TYR:HD2	1:E:173:ILE:HG21	1.82	0.44
1:E:211:SER:C	1:E:213:LYS:H	2.19	0.44
1:E:286:GLU:HG2	1:E:286:GLU:O	2.18	0.44
1:E:414:LYS:HB3	1:E:415:GLU:H	1.68	0.44
1:F:85:LEU:HG	1:F:171:TYR:CD2	2.52	0.44
1:F:373:LYS:HD3	1:F:376:GLN:HE21	1.82	0.44
1:F:372:LYS:CG	1:F:373:LYS:N	2.76	0.44
2:P:97:ASN:HD22	2:P:98:GLY:N	2.16	0.44
2:Q:97:ASN:HD22	2:Q:98:GLY:H	1.66	0.44
2:T:138:TYR:CE1	2:T:142:VAL:HG22	2.52	0.44
1:A:109:ILE:HG12	1:A:157:LYS:HD3	1.99	0.44
1:A:217:LYS:HB2	1:A:236:GLU:CD	2.38	0.44
1:A:589:LYS:HE3	1:A:608:TRP:CG	2.53	0.44
1:B:181:ILE:O	1:B:181:ILE:HG12	2.17	0.44
1:B:326:ILE:C	1:B:327:LEU:HD12	2.38	0.44
1:B:376:GLN:CB	1:B:379:ALA:HB3	2.47	0.44
1:B:717:LYS:O	1:B:720:ILE:HG22	2.18	0.44
1:C:130:SER:C	1:C:132:GLY:N	2.70	0.44
1:C:517:VAL:CA	1:C:525:LYS:HZ2	2.31	0.44
1:C:697:ILE:C	1:C:699:GLY:H	2.20	0.44
1:C:98:SER:O	1:C:101:GLY:N	2.51	0.44
1:D:628:PHE:HE2	2:R:90:ARG:HD2	1.82	0.44
1:D:88:LYS:HB3	1:D:88:LYS:HE3	1.88	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:115:LYS:HZ2	1:E:153:ILE:HD13	1.82	0.44
1:E:320:ARG:HG3	1:E:598:PRO:O	2.17	0.44
2:O:138:TYR:CE1	2:O:142:VAL:HG22	2.53	0.44
2:S:21:LYS:C	2:S:23:GLY:H	2.20	0.44
2:T:140:GLU:HG2	2:T:140:GLU:H	1.55	0.44
2:T:49:GLN:O	2:T:52:ILE:HG22	2.17	0.44
2:T:64:ASP:OD1	2:T:66:PRO:CD	2.65	0.44
1:A:217:LYS:HZ2	1:A:236:GLU:CG	2.30	0.44
1:A:197:LYS:NZ	1:A:264:MET:SD	2.85	0.44
1:A:660:SER:HB2	1:A:702:SER:HB2	1.98	0.44
1:B:109:ILE:HG12	1:B:157:LYS:HD3	1.99	0.44
1:C:186:LYS:HA	1:C:190:PRO:CD	2.36	0.44
1:C:323:ASN:C	1:C:324:THR:CG2	2.86	0.44
1:C:357:TRP:HA	1:C:418:ILE:HG23	2.00	0.44
1:C:376:GLN:CB	1:C:379:ALA:HB3	2.48	0.44
1:C:406:ASP:CG	1:C:407:HIS:N	2.71	0.44
1:C:480:ASN:ND2	1:C:483:GLY:H	2.06	0.44
1:C:513:TRP:HH2	2:Q:113:GLY:O	2.00	0.44
1:C:549:LEU:HB2	1:C:553:GLN:HE21	1.83	0.44
1:C:75:THR:O	1:C:77:ASP:N	2.50	0.44
1:D:549:LEU:HB2	1:D:553:GLN:HE21	1.83	0.44
1:E:217:LYS:HZ2	1:E:236:GLU:CG	2.31	0.44
1:E:295:VAL:O	1:E:296:LEU:C	2.55	0.44
1:E:323:ASN:C	1:E:324:THR:HG22	2.38	0.44
1:E:376:GLN:O	1:E:378:LEU:N	2.51	0.44
1:E:462:ILE:CG1	1:E:463:THR:H	2.27	0.44
1:F:115:LYS:HZ2	1:F:153:ILE:HD13	1.83	0.44
1:F:164:GLU:C	1:F:166:SER:N	2.70	0.44
1:F:208:LEU:N	1:F:208:LEU:HD12	2.33	0.44
1:F:412:GLU:O	1:F:414:LYS:N	2.51	0.44
2:Q:24:ASP:CG	2:Q:25:GLY:H	2.21	0.44
1:E:505:LYS:HD3	2:S:112:LEU:O	2.18	0.44
2:T:30:LYS:N	2:T:30:LYS:HD3	2.10	0.44
1:A:323:ASN:C	1:A:324:THR:CG2	2.86	0.44
1:A:376:GLN:OE1	1:A:376:GLN:N	2.50	0.44
1:A:445:ARG:HG2	1:A:471:TRP:CZ3	2.53	0.44
1:A:559:ARG:HD2	1:A:562:GLU:OE2	2.18	0.44
1:A:636:ALA:O	1:A:640:LYS:CA	2.65	0.44
1:A:89:ILE:HG22	1:A:90:PRO:HD2	1.99	0.44
1:B:201:ASP:OD2	1:B:225:ILE:HD12	2.17	0.44
1:B:357:TRP:HA	1:B:418:ILE:HG23	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:368:GLN:CB	1:B:380:VAL:HG13	2.48	0.44
1:B:724:ARG:NH1	1:B:724:ARG:HG3	2.32	0.44
1:C:211:SER:C	1:C:213:LYS:H	2.19	0.44
1:D:653:LYS:O	1:D:655:ASN:N	2.51	0.44
1:E:516:VAL:HG21	1:E:532:LEU:HD11	1.99	0.44
1:F:320:ARG:HG3	1:F:598:PRO:O	2.17	0.44
1:F:697:ILE:C	1:F:699:GLY:N	2.70	0.44
2:P:102:ALA:CA	2:P:125:ILE:HG13	2.47	0.44
2:R:49:GLN:O	2:R:52:ILE:HG22	2.17	0.44
2:T:143:GLN:HE21	2:T:143:GLN:HB3	1.50	0.44
1:A:66:LEU:HD11	1:A:104:ILE:HG13	2.00	0.44
1:A:357:TRP:HA	1:A:418:ILE:HG23	1.99	0.44
1:B:322:LEU:HA	1:B:503:GLU:OE2	2.17	0.44
1:C:145:LYS:CB	1:C:151:LYS:HB2	2.39	0.44
1:C:175:LYS:HB2	1:C:175:LYS:HZ3	1.78	0.44
1:C:368:GLN:C	1:C:370:LEU:H	2.20	0.44
1:D:323:ASN:C	1:D:324:THR:CG2	2.85	0.44
1:D:445:ARG:HG2	1:D:471:TRP:CZ3	2.53	0.44
1:D:636:ALA:O	1:D:640:LYS:CA	2.65	0.44
1:E:435:LEU:H	1:E:445:ARG:HA	1.82	0.44
1:E:535:LYS:HD2	1:E:536:TYR:CE2	2.53	0.44
1:E:580:GLU:HG3	1:E:580:GLU:O	2.18	0.44
1:F:211:SER:C	1:F:213:LYS:H	2.20	0.44
1:F:323:ASN:C	1:F:324:THR:HG22	2.38	0.44
1:F:559:ARG:HG3	1:F:559:ARG:NH1	2.31	0.44
1:F:621:GLY:O	1:F:622:LYS:HE2	2.18	0.44
2:O:137:ASN:OD1	2:O:140:GLU:HG2	2.17	0.44
2:O:97:ASN:HD22	2:O:98:GLY:H	1.66	0.44
1:B:628:PHE:HE2	2:P:90:ARG:HD2	1.83	0.44
1:D:534:ILE:HG21	2:R:84:GLU:HB3	1.99	0.44
1:A:164:GLU:C	1:A:166:SER:N	2.71	0.44
1:A:535:LYS:HD2	1:A:536:TYR:CE2	2.53	0.44
1:B:102:GLY:HA3	1:B:150:PRO:HG2	1.99	0.44
1:B:88:LYS:NZ	1:B:172:GLU:OE1	2.51	0.44
1:B:534:ILE:HG21	2:P:84:GLU:HB3	1.99	0.44
1:B:653:LYS:O	1:B:655:ASN:N	2.50	0.44
1:B:736:LEU:HD11	1:B:750:GLN:HE21	1.82	0.44
1:C:376:GLN:O	1:C:378:LEU:N	2.51	0.44
1:C:447:SER:CB	1:C:450:ASN:O	2.65	0.44
1:C:523:LEU:HD11	2:Q:144:MET:HG3	2.00	0.44
1:D:323:ASN:C	1:D:324:THR:HG22	2.39	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:376:GLN:O	1:D:378:LEU:N	2.51	0.44
1:D:357:TRP:HA	1:D:418:ILE:HG23	2.00	0.44
1:E:184:LYS:HG3	1:E:194:ASN:HB2	1.99	0.44
1:E:446:ILE:HD11	1:E:451:ASN:HB2	1.98	0.44
1:E:96:ILE:HG12	1:E:280:SER:HB3	1.99	0.44
1:F:217:LYS:HB2	1:F:236:GLU:CD	2.38	0.44
1:F:368:GLN:C	1:F:370:LEU:H	2.20	0.44
1:F:322:LEU:HA	1:F:503:GLU:OE2	2.17	0.44
1:F:580:GLU:HG3	1:F:580:GLU:O	2.18	0.44
1:F:66:LEU:HD11	1:F:104:ILE:HG13	2.00	0.44
2:P:101:SER:OG	2:P:104:GLU:HG2	2.17	0.44
2:Q:102:ALA:CA	2:Q:125:ILE:HG13	2.47	0.44
1:A:181:ILE:HG12	1:A:181:ILE:O	2.18	0.43
1:A:182:ILE:O	1:A:187:SER:CB	2.63	0.43
1:A:244:ALA:HA	1:A:257:LEU:HD13	2.00	0.43
1:A:376:GLN:O	1:A:378:LEU:N	2.51	0.43
1:A:412:GLU:O	1:A:414:LYS:N	2.50	0.43
1:A:414:LYS:HB3	1:A:415:GLU:H	1.68	0.43
1:B:106:PHE:HZ	1:B:171:TYR:OH	1.99	0.43
1:B:735:VAL:HG12	1:B:741:ILE:HD13	1.99	0.43
1:B:776:LEU:CD2	1:B:776:LEU:C	2.87	0.43
1:C:208:LEU:HD12	1:C:208:LEU:N	2.33	0.43
1:C:435:LEU:HG	1:C:446:ILE:HG22	2.00	0.43
1:C:559:ARG:HD2	1:C:562:GLU:OE2	2.17	0.43
1:D:165:GLN:O	1:D:167:LYS:N	2.51	0.43
1:E:244:ALA:HA	1:E:257:LEU:HD13	2.00	0.43
1:E:322:LEU:HA	1:E:503:GLU:OE2	2.18	0.43
1:E:559:ARG:HD2	1:E:562:GLU:OE2	2.18	0.43
1:F:403:LEU:HD11	1:F:405:LEU:CD1	2.48	0.43
1:F:628:PHE:CD1	1:F:645:TRP:CD1	3.05	0.43
1:F:724:ARG:NH1	1:F:724:ARG:HG3	2.31	0.43
2:O:65:PHE:HB2	2:O:66:PRO:CD	2.40	0.43
2:Q:36:MET:HE3	2:Q:43:PRO:HG3	1.99	0.43
2:S:102:ALA:CA	2:S:125:ILE:HG13	2.47	0.43
2:S:137:ASN:OD1	2:S:140:GLU:HG2	2.17	0.43
2:S:49:GLN:HA	2:S:52:ILE:CG2	2.41	0.43
2:S:65:PHE:HB2	2:S:66:PRO:CD	2.40	0.43
1:A:135:VAL:O	1:A:135:VAL:HG13	2.19	0.43
1:A:247:TYR:O	1:A:254:ARG:HA	2.17	0.43
1:A:357:TRP:H	1:A:361:ALA:HB2	1.83	0.43
1:A:88:LYS:HE3	1:A:88:LYS:HB3	1.90	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:100:LEU:O	1:B:150:PRO:HD2	2.18	0.43
1:B:323:ASN:C	1:B:324:THR:HG22	2.39	0.43
1:B:526:GLN:O	1:B:527:LYS:C	2.56	0.43
1:B:697:ILE:C	1:B:699:GLY:H	2.20	0.43
1:C:201:ASP:OD1	1:C:218:LEU:HD21	2.18	0.43
1:C:403:LEU:HG	1:C:405:LEU:CD1	2.49	0.43
1:C:735:VAL:HG12	1:C:741:ILE:HD13	2.00	0.43
1:D:102:GLY:HA3	1:D:150:PRO:HG2	2.00	0.43
1:D:161:ILE:O	1:D:161:ILE:CG2	2.65	0.43
1:D:201:ASP:OD1	1:D:218:LEU:HD21	2.18	0.43
1:E:217:LYS:HB2	1:E:236:GLU:CD	2.38	0.43
1:E:406:ASP:CG	1:E:407:HIS:N	2.71	0.43
1:F:415:GLU:C	1:F:417:GLY:N	2.71	0.43
1:F:462:ILE:CG1	1:F:463:THR:H	2.27	0.43
1:F:628:PHE:HE2	2:T:90:ARG:HD2	1.83	0.43
2:O:102:ALA:CA	2:O:125:ILE:HG13	2.48	0.43
2:Q:49:GLN:O	2:Q:52:ILE:HG22	2.18	0.43
2:R:101:SER:OG	2:R:104:GLU:HG2	2.17	0.43
2:R:140:GLU:H	2:R:140:GLU:HG2	1.55	0.43
2:S:138:TYR:O	2:S:141:PHE:HB3	2.18	0.43
1:A:170:TYR:HD2	1:A:173:ILE:HG21	1.83	0.43
1:A:184:LYS:HG3	1:A:194:ASN:HB2	2.00	0.43
1:A:96:ILE:HG12	1:A:280:SER:HB3	2.00	0.43
1:B:179:LEU:O	1:B:183:SER:CB	2.65	0.43
1:B:182:ILE:O	1:B:187:SER:CB	2.60	0.43
1:B:184:LYS:HE3	1:B:191:GLU:H	1.84	0.43
1:C:100:LEU:O	1:C:150:PRO:HD2	2.18	0.43
1:C:529:VAL:O	1:C:532:LEU:HB2	2.17	0.43
1:D:109:ILE:HG12	1:D:157:LYS:HD3	1.99	0.43
1:D:247:TYR:O	1:D:254:ARG:HA	2.18	0.43
1:D:286:GLU:HG2	1:D:286:GLU:O	2.19	0.43
1:D:415:GLU:C	1:D:417:GLY:N	2.71	0.43
1:D:618:ASN:O	1:D:622:LYS:CB	2.62	0.43
1:D:622:LYS:O	1:D:623:ASP:HB2	2.18	0.43
1:D:660:SER:HB2	1:D:702:SER:HB2	1.99	0.43
1:D:794:GLN:HB3	1:D:794:GLN:HE21	1.60	0.43
1:E:111:LEU:CD2	1:E:155:ASN:HD21	2.30	0.43
1:E:409:ARG:O	1:E:412:GLU:HB3	2.18	0.43
1:F:165:GLN:O	1:F:167:LYS:N	2.52	0.43
1:F:622:LYS:O	1:F:622:LYS:HG3	2.18	0.43
2:O:117:THR:HG21	2:O:120:GLU:OE2	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:534:ILE:HG21	2:S:84:GLU:HB3	2.00	0.43
2:T:97:ASN:HD22	2:T:98:GLY:H	1.66	0.43
1:A:85:LEU:HG	1:A:171:TYR:CD2	2.53	0.43
1:A:286:GLU:HG2	1:A:286:GLU:O	2.18	0.43
1:A:323:ASN:C	1:A:324:THR:HG22	2.39	0.43
1:A:461:LYS:HA	1:A:461:LYS:HD2	1.84	0.43
1:A:559:ARG:HG3	1:A:559:ARG:NH1	2.32	0.43
1:B:523:LEU:HD11	2:P:144:MET:HG3	2.00	0.43
1:C:520:PRO:HG2	1:C:521:ASN:N	2.32	0.43
1:C:546:LYS:CD	1:C:554:LYS:HE2	2.31	0.43
1:D:170:TYR:HD2	1:D:173:ILE:HG21	1.82	0.43
1:D:234:LEU:CD2	1:D:235:THR:HG23	2.48	0.43
1:D:217:LYS:HB2	1:D:236:GLU:CD	2.38	0.43
1:D:406:ASP:CG	1:D:407:HIS:N	2.71	0.43
1:F:109:ILE:HG12	1:F:157:LYS:HD3	1.99	0.43
1:F:357:TRP:HA	1:F:418:ILE:HG23	1.99	0.43
1:F:413:LEU:CB	1:F:419:ILE:HG12	2.48	0.43
1:F:88:LYS:NZ	1:F:172:GLU:CD	2.72	0.43
1:E:513:TRP:HH2	2:S:113:GLY:O	2.01	0.43
2:S:24:ASP:CG	2:S:25:GLY:H	2.21	0.43
1:A:762:LEU:O	1:A:766:HIS:HB2	2.18	0.43
1:B:226:ASP:O	1:B:228:ASN:N	2.51	0.43
1:B:376:GLN:OE1	1:B:376:GLN:N	2.51	0.43
1:C:612:GLY:O	1:C:616:GLU:HG3	2.18	0.43
1:D:184:LYS:HG3	1:D:194:ASN:HB2	2.00	0.43
1:D:191:GLU:O	1:D:194:ASN:N	2.49	0.43
1:D:503:GLU:OE1	1:D:506:LYS:CD	2.64	0.43
1:D:559:ARG:HG3	1:D:559:ARG:NH1	2.31	0.43
1:D:576:ASN:ND2	1:D:576:ASN:N	2.63	0.43
1:D:776:LEU:CD2	1:D:776:LEU:C	2.87	0.43
1:E:159:TYR:N	1:E:159:TYR:CD1	2.84	0.43
1:E:208:LEU:HD12	1:E:208:LEU:N	2.33	0.43
1:E:234:LEU:CD2	1:E:235:THR:HG23	2.49	0.43
1:E:323:ASN:C	1:E:324:THR:CG2	2.86	0.43
1:E:481:VAL:O	1:E:482:GLU:HB2	2.19	0.43
1:E:776:LEU:CD2	1:E:776:LEU:C	2.87	0.43
1:F:88:LYS:NZ	1:F:172:GLU:OE1	2.51	0.43
1:F:184:LYS:HG3	1:F:194:ASN:HB2	2.00	0.43
1:F:345:THR:HB	1:F:491:ASP:CB	2.45	0.43
1:F:376:GLN:O	1:F:378:LEU:N	2.51	0.43
1:F:589:LYS:HE3	1:F:608:TRP:CG	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:O:12:PHE:HE1	2:O:72:MET:HG3	1.83	0.43
2:Q:138:TYR:O	2:Q:141:PHE:HB3	2.19	0.43
2:R:102:ALA:CA	2:R:125:ILE:HG13	2.48	0.43
2:T:32:LEU:HD22	2:T:63:ILE:CD1	2.48	0.43
1:A:218:LEU:O	1:A:218:LEU:CG	2.64	0.43
1:A:322:LEU:HA	1:A:503:GLU:OE2	2.17	0.43
1:A:717:LYS:O	1:A:720:ILE:HG22	2.19	0.43
1:A:794:GLN:HB3	1:A:794:GLN:HE21	1.61	0.43
1:B:693:SER:O	1:B:696:LYS:HB2	2.19	0.43
1:B:98:SER:O	1:B:101:GLY:N	2.48	0.43
1:C:748:TYR:O	1:C:751:TYR:N	2.52	0.43
1:C:93:VAL:CG2	1:C:179:LEU:HD11	2.49	0.43
1:D:457:THR:O	1:D:458:LYS:O	2.37	0.43
1:D:748:TYR:O	1:D:751:TYR:N	2.52	0.43
1:E:589:LYS:HE3	1:E:608:TRP:CG	2.54	0.43
1:E:88:LYS:NZ	1:E:172:GLU:CD	2.72	0.43
1:E:96:ILE:HG22	1:E:100:LEU:CD1	2.43	0.43
1:F:263:ASP:O	1:F:264:MET:C	2.57	0.43
1:F:403:LEU:HG	1:F:405:LEU:CD1	2.49	0.43
1:F:89:ILE:HG22	1:F:90:PRO:HD2	2.01	0.43
2:O:36:MET:HE1	2:O:43:PRO:HG3	2.00	0.43
2:P:111:ASN:H	2:P:111:ASN:ND2	2.17	0.43
2:P:138:TYR:CE1	2:P:142:VAL:HG22	2.53	0.43
2:S:133:ASP:OD2	2:S:135:GLN:CG	2.66	0.43
2:T:111:ASN:ND2	2:T:111:ASN:H	2.17	0.43
2:T:32:LEU:HD21	2:T:71:MET:HE1	2.01	0.43
1:A:325:TYR:CD1	1:A:598:PRO:HD3	2.53	0.43
1:A:415:GLU:C	1:A:417:GLY:N	2.71	0.43
1:B:376:GLN:O	1:B:378:LEU:N	2.51	0.43
1:B:606:LYS:HB2	1:B:610:MET:CE	2.49	0.43
1:C:170:TYR:HD2	1:C:173:ILE:HG21	1.82	0.43
1:C:234:LEU:CD2	1:C:235:THR:HG23	2.49	0.43
1:C:66:LEU:HD11	1:C:104:ILE:HG13	1.99	0.43
1:C:736:LEU:HD11	1:C:750:GLN:HE21	1.83	0.43
1:C:91:LYS:O	1:C:95:GLU:HG2	2.19	0.43
1:D:208:LEU:HD12	1:D:208:LEU:N	2.33	0.43
1:D:325:TYR:CD1	1:D:598:PRO:HD3	2.54	0.43
1:D:333:LYS:C	1:D:335:ALA:H	2.22	0.43
1:D:376:GLN:CB	1:D:379:ALA:HB3	2.48	0.43
1:D:559:ARG:HD2	1:D:562:GLU:OE2	2.18	0.43
1:D:589:LYS:HE3	1:D:608:TRP:CG	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:680:LYS:HG2	1:D:681:ASP:N	2.34	0.43
1:E:165:GLN:O	1:E:167:LYS:N	2.51	0.43
1:E:405:LEU:HD13	1:E:453:VAL:CG2	2.36	0.43
1:E:621:GLY:O	1:E:622:LYS:HE2	2.18	0.43
1:E:724:ARG:HG3	1:E:724:ARG:NH1	2.33	0.43
1:F:776:LEU:C	1:F:776:LEU:CD2	2.87	0.43
1:F:96:ILE:HG12	1:F:280:SER:HB3	2.01	0.43
1:E:694:VAL:HG23	2:S:18:LEU:HD11	1.99	0.43
1:A:214:PHE:CG	1:A:218:LEU:HD23	2.53	0.43
1:A:403:LEU:HG	1:A:405:LEU:CD1	2.49	0.43
1:A:457:THR:O	1:A:458:LYS:O	2.37	0.43
1:A:597:ASN:OD1	1:A:599:GLU:N	2.50	0.43
1:A:612:GLY:O	1:A:616:GLU:HG3	2.19	0.43
1:B:165:GLN:O	1:B:167:LYS:N	2.51	0.43
1:B:254:ARG:HG2	1:B:255:THR:N	2.34	0.43
1:B:406:ASP:CG	1:B:407:HIS:N	2.71	0.43
1:B:88:LYS:NZ	1:B:172:GLU:CD	2.71	0.43
1:B:98:SER:HG	1:B:99:GLU:H	1.67	0.43
1:C:225:ILE:CG1	1:C:229:PHE:HE2	2.31	0.43
1:C:286:GLU:HG2	1:C:286:GLU:O	2.19	0.43
1:C:373:LYS:HD3	1:C:376:GLN:HE21	1.82	0.43
1:C:322:LEU:HA	1:C:503:GLU:OE2	2.18	0.43
1:C:653:LYS:O	1:C:655:ASN:N	2.52	0.43
1:C:741:ILE:O	1:C:742:ALA:C	2.57	0.43
1:D:97:TYR:CE1	1:D:178:SER:CB	3.02	0.43
1:E:549:LEU:HB2	1:E:553:GLN:HE21	1.84	0.43
1:E:85:LEU:HG	1:E:171:TYR:CD2	2.53	0.43
1:F:170:TYR:HD2	1:F:173:ILE:HG21	1.83	0.43
1:F:188:LEU:HD23	1:F:188:LEU:N	2.26	0.43
1:F:286:GLU:HG2	1:F:286:GLU:O	2.19	0.43
1:F:653:LYS:O	1:F:655:ASN:N	2.51	0.43
2:R:19:PHE:CD1	2:R:19:PHE:N	2.87	0.43
1:A:88:LYS:NZ	1:A:172:GLU:OE1	2.52	0.43
1:A:254:ARG:HG2	1:A:255:THR:N	2.34	0.43
1:A:263:ASP:O	1:A:264:MET:C	2.57	0.43
1:A:326:ILE:C	1:A:327:LEU:HD12	2.38	0.43
1:B:741:ILE:O	1:B:742:ALA:C	2.57	0.43
1:C:403:LEU:HD11	1:C:405:LEU:CD1	2.49	0.43
1:C:447:SER:HB3	1:C:450:ASN:O	2.19	0.43
1:D:244:ALA:HA	1:D:257:LEU:HD13	2.01	0.43
1:D:311:HIS:O	1:D:312:ALA:C	2.57	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:357:TRP:H	1:D:361:ALA:HB2	1.84	0.43
1:D:375:GLY:HA2	1:D:464:VAL:HG11	2.01	0.43
1:D:526:GLN:O	1:D:527:LYS:C	2.57	0.43
1:D:535:LYS:HD2	1:D:536:TYR:CE2	2.53	0.43
1:D:612:GLY:O	1:D:616:GLU:HG3	2.18	0.43
1:E:311:HIS:O	1:E:312:ALA:C	2.57	0.43
1:E:415:GLU:C	1:E:417:GLY:N	2.71	0.43
1:F:109:ILE:HG12	1:F:157:LYS:HZ2	1.82	0.43
1:F:306:GLY:O	1:F:336:THR:HG23	2.19	0.43
1:F:435:LEU:O	1:F:444:PHE:O	2.36	0.43
2:P:89:PHE:HB2	2:P:141:PHE:CE2	2.54	0.43
2:Q:19:PHE:CD1	2:Q:19:PHE:N	2.87	0.43
2:S:28:THR:O	2:S:31:GLU:HB2	2.19	0.43
2:T:24:ASP:CG	2:T:25:GLY:H	2.21	0.43
1:A:161:ILE:O	1:A:161:ILE:CG2	2.66	0.43
1:A:191:GLU:C	1:A:193:LEU:N	2.70	0.43
1:A:729:TYR:C	1:A:729:TYR:CD2	2.92	0.43
1:B:175:LYS:HZ3	1:B:175:LYS:HB2	1.82	0.43
1:B:180:ASP:OD1	1:B:181:ILE:N	2.39	0.43
1:B:128:MET:HB2	1:B:239:HIS:NE2	2.34	0.43
1:B:284:LYS:HE3	1:B:284:LYS:HA	2.01	0.43
1:B:724:ARG:O	1:B:727:GLN:HB2	2.18	0.43
1:C:323:ASN:C	1:C:324:THR:HG22	2.40	0.43
1:C:615:ILE:CD1	1:C:645:TRP:HH2	2.26	0.43
1:D:716:LYS:O	1:D:717:LYS:C	2.57	0.43
1:D:729:TYR:CD2	1:D:729:TYR:C	2.91	0.43
1:D:98:SER:O	1:D:101:GLY:N	2.50	0.43
1:E:100:LEU:O	1:E:150:PRO:HD2	2.19	0.43
1:E:88:LYS:NZ	1:E:172:GLU:OE1	2.52	0.43
1:E:318:ILE:H	1:E:318:ILE:CD1	2.22	0.43
1:E:357:TRP:HA	1:E:418:ILE:HG23	2.00	0.43
1:E:622:LYS:O	1:E:623:ASP:HB2	2.19	0.43
1:E:697:ILE:C	1:E:699:GLY:H	2.21	0.43
1:F:771:ILE:HG12	1:F:771:ILE:H	1.62	0.43
2:S:101:SER:OG	2:S:104:GLU:HG2	2.19	0.43
2:S:138:TYR:CE1	2:S:142:VAL:HG22	2.53	0.43
2:T:138:TYR:O	2:T:141:PHE:HB3	2.19	0.43
1:A:217:LYS:NZ	1:A:236:GLU:CB	2.82	0.42
1:A:234:LEU:CD2	1:A:235:THR:HG23	2.48	0.42
1:A:414:LYS:O	1:A:417:GLY:N	2.40	0.42
1:B:159:TYR:N	1:B:159:TYR:CD1	2.86	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:217:LYS:NZ	1:B:236:GLU:CB	2.82	0.42
1:B:247:TYR:O	1:B:254:ARG:HA	2.19	0.42
1:B:311:HIS:O	1:B:314:ALA:HB3	2.19	0.42
1:B:327:LEU:CG	1:B:595:ILE:HG12	2.40	0.42
1:B:648:PRO:O	1:B:651:LYS:HB2	2.19	0.42
1:B:729:TYR:C	1:B:729:TYR:CD2	2.92	0.42
1:C:165:GLN:O	1:C:167:LYS:N	2.51	0.42
1:C:247:TYR:O	1:C:254:ARG:HA	2.19	0.42
1:C:580:GLU:O	1:C:580:GLU:HG3	2.19	0.42
1:D:161:ILE:O	1:D:161:ILE:HG22	2.19	0.42
1:D:403:LEU:HG	1:D:405:LEU:CD1	2.49	0.42
1:E:179:LEU:O	1:E:183:SER:CB	2.65	0.42
1:E:254:ARG:HG2	1:E:255:THR:N	2.33	0.42
1:E:311:HIS:O	1:E:314:ALA:HB3	2.19	0.42
1:E:748:TYR:O	1:E:751:TYR:N	2.52	0.42
1:F:152:LEU:HD22	1:F:154:ILE:CD1	2.46	0.42
1:F:244:ALA:HA	1:F:257:LEU:HD13	2.01	0.42
1:A:523:LEU:HD11	2:O:144:MET:HG3	2.01	0.42
1:B:505:LYS:HD3	2:P:112:LEU:O	2.19	0.42
2:P:19:PHE:N	2:P:19:PHE:CD1	2.87	0.42
2:P:28:THR:O	2:P:31:GLU:HB2	2.19	0.42
1:A:100:LEU:O	1:A:150:PRO:HD2	2.18	0.42
1:A:165:GLN:O	1:A:167:LYS:N	2.52	0.42
1:A:318:ILE:O	1:A:319:ALA:C	2.57	0.42
1:A:320:ARG:HG3	1:A:598:PRO:O	2.18	0.42
1:A:622:LYS:O	1:A:622:LYS:HG3	2.19	0.42
1:A:635:ILE:CD1	1:A:635:ILE:N	2.69	0.42
1:B:234:LEU:CD2	1:B:235:THR:HG23	2.49	0.42
1:B:244:ALA:HA	1:B:257:LEU:HD13	2.01	0.42
1:B:520:PRO:HG2	1:B:521:ASN:N	2.31	0.42
1:B:559:ARG:HD2	1:B:562:GLU:OE2	2.18	0.42
1:B:672:ARG:HD3	1:B:672:ARG:HA	1.87	0.42
1:B:794:GLN:HE22	1:B:795:LYS:HG3	1.84	0.42
1:C:244:ALA:HA	1:C:257:LEU:HD13	2.01	0.42
1:C:372:LYS:CG	1:C:373:LYS:N	2.75	0.42
1:D:66:LEU:HD11	1:D:104:ILE:HG13	2.00	0.42
1:D:622:LYS:HG3	1:D:622:LYS:O	2.19	0.42
1:E:109:ILE:HG12	1:E:157:LYS:HZ2	1.82	0.42
1:E:346:LYS:HD2	1:E:350:VAL:O	2.19	0.42
1:F:247:TYR:O	1:F:254:ARG:HA	2.20	0.42
1:F:311:HIS:O	1:F:312:ALA:C	2.57	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:414:LYS:HB3	1:F:415:GLU:H	1.68	0.42
1:F:612:GLY:O	1:F:616:GLU:HG3	2.19	0.42
1:F:680:LYS:HG2	1:F:681:ASP:N	2.34	0.42
2:O:111:ASN:C	2:O:113:GLY:N	2.73	0.42
2:O:117:THR:O	2:O:118:ASP:C	2.58	0.42
2:O:19:PHE:CD1	2:O:19:PHE:N	2.87	0.42
1:C:694:VAL:HG23	2:Q:18:LEU:HD11	2.01	0.42
2:R:32:LEU:HD22	2:R:63:ILE:CD1	2.49	0.42
2:R:64:ASP:OD1	2:R:66:PRO:CD	2.67	0.42
2:R:8:GLN:O	2:R:12:PHE:CD2	2.72	0.42
1:A:311:HIS:O	1:A:312:ALA:C	2.57	0.42
1:A:333:LYS:C	1:A:335:ALA:H	2.23	0.42
1:A:358:GLY:N	1:A:418:ILE:HG22	2.35	0.42
1:B:184:LYS:HG3	1:B:194:ASN:HB2	2.00	0.42
1:C:648:PRO:O	1:C:651:LYS:HB2	2.20	0.42
1:C:776:LEU:CD2	1:C:776:LEU:C	2.87	0.42
1:C:794:GLN:HE22	1:C:795:LYS:HG3	1.84	0.42
1:D:409:ARG:O	1:D:412:GLU:HB3	2.19	0.42
1:D:662:GLU:OE2	1:D:755:ARG:NH2	2.38	0.42
1:D:96:ILE:HG22	1:D:100:LEU:CD1	2.43	0.42
1:E:145:LYS:HB2	1:E:151:LYS:HB2	2.01	0.42
1:E:217:LYS:HZ1	1:E:233:ASN:CB	2.13	0.42
1:E:333:LYS:C	1:E:335:ALA:H	2.22	0.42
1:E:403:LEU:HG	1:E:405:LEU:CD1	2.49	0.42
1:E:622:LYS:O	1:E:622:LYS:HG3	2.20	0.42
1:E:716:LYS:O	1:E:717:LYS:C	2.57	0.42
1:E:729:TYR:CD2	1:E:729:TYR:C	2.91	0.42
1:F:648:PRO:O	1:F:651:LYS:HB2	2.19	0.42
2:Q:12:PHE:HE1	2:Q:72:MET:HG3	1.83	0.42
2:S:117:THR:O	2:S:118:ASP:C	2.58	0.42
2:S:64:ASP:OD1	2:S:66:PRO:CD	2.67	0.42
1:A:197:LYS:NZ	1:A:267:TYR:CD2	2.80	0.42
1:A:311:HIS:O	1:A:314:ALA:HB3	2.19	0.42
1:A:462:ILE:CG1	1:A:463:THR:H	2.27	0.42
1:A:776:LEU:CD2	1:A:776:LEU:C	2.88	0.42
1:B:263:ASP:O	1:B:264:MET:C	2.57	0.42
1:B:413:LEU:CB	1:B:419:ILE:HG12	2.49	0.42
1:B:481:VAL:O	1:B:482:GLU:HB2	2.19	0.42
1:B:75:THR:HB	1:B:76:LEU:H	1.68	0.42
1:C:217:LYS:NZ	1:C:236:GLU:CB	2.83	0.42
1:C:267:TYR:O	1:C:271:LEU:HG	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:375:GLY:HA2	1:C:464:VAL:HG11	2.01	0.42
1:C:327:LEU:CG	1:C:595:ILE:HG12	2.40	0.42
1:D:145:LYS:HB2	1:D:151:LYS:HB2	2.01	0.42
1:E:185:ASP:O	1:E:190:PRO:CD	2.67	0.42
1:E:526:GLN:O	1:E:527:LYS:C	2.57	0.42
1:F:100:LEU:O	1:F:150:PRO:HD2	2.20	0.42
1:F:517:VAL:HA	1:F:525:LYS:HZ2	1.84	0.42
1:E:695:LYS:HE3	2:S:19:PHE:CD2	2.54	0.42
2:T:102:ALA:CA	2:T:125:ILE:HG13	2.49	0.42
1:A:480:ASN:HD21	1:A:483:GLY:N	2.07	0.42
1:A:512:GLU:O	1:A:516:VAL:HG23	2.20	0.42
1:A:580:GLU:O	1:A:580:GLU:HG3	2.19	0.42
1:A:593:ILE:O	1:A:604:LEU:HA	2.20	0.42
1:B:85:LEU:HG	1:B:171:TYR:CD2	2.55	0.42
1:B:457:THR:O	1:B:458:LYS:O	2.37	0.42
1:B:494:LEU:HB3	1:B:579:THR:HG22	2.02	0.42
1:C:306:GLY:O	1:C:336:THR:HG23	2.19	0.42
1:C:311:HIS:O	1:C:314:ALA:HB3	2.19	0.42
1:D:699:GLY:O	1:D:700:TYR:C	2.58	0.42
1:D:85:LEU:HG	1:D:171:TYR:CD2	2.55	0.42
1:E:325:TYR:CD1	1:E:598:PRO:HD3	2.54	0.42
1:E:368:GLN:CB	1:E:380:VAL:HG13	2.50	0.42
1:E:403:LEU:HD11	1:E:405:LEU:CD1	2.49	0.42
1:E:294:ASP:O	1:E:610:MET:SD	2.77	0.42
1:E:612:GLY:O	1:E:616:GLU:HG3	2.20	0.42
1:E:717:LYS:O	1:E:720:ILE:HG22	2.20	0.42
1:F:234:LEU:CD2	1:F:235:THR:HG23	2.49	0.42
1:F:368:GLN:CB	1:F:380:VAL:HG13	2.50	0.42
1:F:523:LEU:HD11	2:T:144:MET:HG3	2.00	0.42
1:F:526:GLN:O	1:F:527:LYS:C	2.57	0.42
1:F:593:ILE:O	1:F:604:LEU:HA	2.19	0.42
1:F:628:PHE:CE2	2:T:90:ARG:CZ	3.03	0.42
2:O:89:PHE:HB2	2:O:141:PHE:CE2	2.54	0.42
1:C:505:LYS:HD3	2:Q:112:LEU:O	2.20	0.42
2:T:28:THR:O	2:T:31:GLU:HB2	2.18	0.42
1:A:662:GLU:OE2	1:A:755:ARG:NH2	2.38	0.42
1:B:170:TYR:HD2	1:B:173:ILE:HG21	1.83	0.42
1:B:621:GLY:O	1:B:622:LYS:HE2	2.19	0.42
1:B:622:LYS:O	1:B:623:ASP:HB2	2.19	0.42
1:C:294:ASP:O	1:C:610:MET:SD	2.78	0.42
1:C:589:LYS:HE3	1:C:608:TRP:CG	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:85:LEU:HD12	1:C:85:LEU:HA	1.91	0.42
1:D:217:LYS:NZ	1:D:236:GLU:CB	2.82	0.42
1:E:109:ILE:HG12	1:E:157:LYS:HD3	1.99	0.42
1:E:175:LYS:HZ3	1:E:175:LYS:CB	2.32	0.42
1:E:410:ILE:HD13	1:E:419:ILE:CD1	2.49	0.42
1:E:375:GLY:HA2	1:E:464:VAL:HG11	2.01	0.42
1:E:523:LEU:HD11	2:S:144:MET:HG3	2.02	0.42
1:E:597:ASN:OD1	1:E:599:GLU:N	2.51	0.42
1:F:97:TYR:CE1	1:F:178:SER:CB	3.03	0.42
1:F:294:ASP:O	1:F:610:MET:SD	2.77	0.42
1:F:318:ILE:O	1:F:319:ALA:C	2.57	0.42
1:F:736:LEU:HD11	1:F:750:GLN:HE21	1.84	0.42
1:A:534:ILE:HG21	2:O:84:GLU:HB3	2.01	0.42
1:B:695:LYS:HE3	2:P:19:PHE:CD2	2.54	0.42
2:Q:101:SER:OG	2:Q:104:GLU:HG2	2.19	0.42
2:Q:32:LEU:HD22	2:Q:63:ILE:CD1	2.50	0.42
2:S:19:PHE:N	2:S:19:PHE:CD1	2.87	0.42
1:A:346:LYS:HD2	1:A:350:VAL:O	2.19	0.42
1:B:345:THR:HB	1:B:491:ASP:CB	2.46	0.42
1:B:358:GLY:N	1:B:418:ILE:HG22	2.35	0.42
1:B:520:PRO:CG	1:B:521:ASN:H	2.32	0.42
1:B:622:LYS:HG3	1:B:622:LYS:O	2.20	0.42
1:C:184:LYS:HG3	1:C:194:ASN:HB2	2.00	0.42
1:C:457:THR:O	1:C:458:LYS:O	2.38	0.42
1:C:519:THR:HG21	1:C:525:LYS:CA	2.49	0.42
1:C:622:LYS:O	1:C:623:ASP:HB2	2.19	0.42
1:D:182:ILE:O	1:D:187:SER:CB	2.63	0.42
1:D:184:LYS:HE3	1:D:191:GLU:H	1.84	0.42
1:E:189:ASP:HB2	1:E:191:GLU:OE2	2.20	0.42
1:E:306:GLY:O	1:E:336:THR:HG23	2.20	0.42
1:E:680:LYS:HG2	1:E:681:ASP:N	2.35	0.42
1:F:115:LYS:O	1:F:117:LEU:N	2.53	0.42
1:F:162:ASN:O	1:F:165:GLN:CD	2.58	0.42
1:F:182:ILE:O	1:F:187:SER:CB	2.66	0.42
1:F:375:GLY:HA2	1:F:464:VAL:HG11	2.01	0.42
1:F:495:PHE:C	1:F:495:PHE:CD1	2.93	0.42
2:O:138:TYR:O	2:O:141:PHE:HB3	2.20	0.42
1:A:694:VAL:HG23	2:O:18:LEU:HD11	2.01	0.42
2:Q:64:ASP:OD1	2:Q:66:PRO:CD	2.66	0.42
2:Q:89:PHE:HB2	2:Q:141:PHE:CE2	2.54	0.42
1:A:736:LEU:HD11	1:A:750:GLN:HE21	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:794:GLN:HE22	1:A:795:LYS:HG3	1.85	0.42
1:A:86:LEU:HA	1:A:89:ILE:CD1	2.50	0.42
1:B:357:TRP:H	1:B:361:ALA:HB2	1.85	0.42
1:B:504:ILE:HD12	1:B:504:ILE:N	2.35	0.42
1:B:529:VAL:O	1:B:532:LEU:HB2	2.18	0.42
1:B:699:GLY:O	1:B:700:TYR:C	2.58	0.42
1:C:88:LYS:NZ	1:C:172:GLU:CD	2.72	0.42
1:C:296:LEU:CD2	1:C:296:LEU:N	2.66	0.42
1:C:409:ARG:O	1:C:412:GLU:HB3	2.19	0.42
1:C:699:GLY:O	1:C:700:TYR:C	2.58	0.42
1:D:318:ILE:O	1:D:319:ALA:C	2.58	0.42
1:D:520:PRO:CG	1:D:521:ASN:H	2.32	0.42
1:E:115:LYS:NZ	1:E:117:LEU:H	2.17	0.42
1:E:247:TYR:O	1:E:254:ARG:HA	2.19	0.42
1:E:629:ASN:HB3	1:E:632:TYR:CD1	2.55	0.42
1:E:690:LYS:CD	1:E:741:ILE:HG12	2.50	0.42
1:F:217:LYS:NZ	1:F:236:GLU:CB	2.83	0.42
1:F:660:SER:HB2	1:F:702:SER:HB2	2.02	0.42
1:F:719:LYS:HG2	1:F:797:ILE:HD11	2.01	0.42
2:Q:28:THR:O	2:Q:31:GLU:HB2	2.20	0.42
2:R:64:ASP:N	2:R:67:GLU:HB2	2.35	0.42
2:S:36:MET:HE3	2:S:43:PRO:HG3	2.00	0.42
1:A:606:LYS:HB2	1:A:610:MET:CE	2.50	0.42
1:B:135:VAL:HG13	1:B:135:VAL:O	2.19	0.42
1:B:403:LEU:HG	1:B:405:LEU:CD1	2.50	0.42
1:C:88:LYS:NZ	1:C:172:GLU:OE1	2.53	0.42
1:C:217:LYS:HZ2	1:C:236:GLU:CG	2.33	0.42
1:C:263:ASP:O	1:C:264:MET:C	2.58	0.42
1:C:446:ILE:HD11	1:C:451:ASN:HB2	2.02	0.42
1:C:622:LYS:HG3	1:C:622:LYS:O	2.19	0.42
1:C:690:LYS:CD	1:C:741:ILE:HG12	2.50	0.42
1:D:135:VAL:HG13	1:D:135:VAL:O	2.19	0.42
1:D:254:ARG:HG2	1:D:255:THR:N	2.34	0.42
1:E:173:ILE:CG2	1:E:174:GLY:N	2.83	0.42
1:E:334:LEU:HD23	1:E:356:ASP:HA	2.01	0.42
1:E:653:LYS:O	1:E:655:ASN:N	2.52	0.42
1:E:794:GLN:HE22	1:E:795:LYS:HG3	1.85	0.42
1:E:88:LYS:C	1:E:88:LYS:HD2	2.41	0.42
1:F:337:ASN:C	1:F:339:ILE:N	2.73	0.42
2:P:32:LEU:HD22	2:P:63:ILE:CD1	2.49	0.42
2:R:28:THR:O	2:R:31:GLU:HB2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:337:ASN:C	1:A:339:ILE:N	2.74	0.42
1:A:629:ASN:HD22	1:A:631:SER:N	1.98	0.42
1:B:127:SER:HB3	1:B:133:GLU:OE2	2.20	0.42
1:B:325:TYR:CD1	1:B:598:PRO:HD3	2.55	0.42
1:B:334:LEU:HD23	1:B:356:ASP:HA	2.02	0.42
1:B:395:GLU:OE2	1:B:395:GLU:C	2.59	0.42
1:B:516:VAL:HG21	1:B:532:LEU:HD11	2.01	0.42
1:B:75:THR:C	1:B:77:ASP:N	2.72	0.42
1:C:318:ILE:O	1:C:319:ALA:C	2.59	0.42
1:D:311:HIS:O	1:D:314:ALA:HB3	2.20	0.42
1:D:368:GLN:CB	1:D:380:VAL:HG13	2.49	0.42
1:D:435:LEU:O	1:D:444:PHE:O	2.38	0.42
1:E:135:VAL:O	1:E:135:VAL:HG13	2.19	0.42
1:E:189:ASP:O	1:E:191:GLU:HG2	2.20	0.42
1:E:284:LYS:HA	1:E:284:LYS:HE3	2.02	0.42
1:E:461:LYS:HD2	1:E:461:LYS:HA	1.85	0.42
1:F:284:LYS:HE3	1:F:284:LYS:HA	2.02	0.42
1:F:494:LEU:HB3	1:F:579:THR:HG22	2.02	0.42
2:O:143:GLN:HE21	2:O:143:GLN:HB3	1.50	0.42
2:Q:117:THR:O	2:Q:118:ASP:C	2.58	0.42
2:T:19:PHE:N	2:T:19:PHE:CD1	2.87	0.42
1:A:267:TYR:O	1:A:271:LEU:HG	2.20	0.41
1:A:456:LYS:HZ3	1:A:471:TRP:HE1	1.67	0.41
1:A:517:VAL:HA	1:A:525:LYS:HZ2	1.85	0.41
1:A:88:LYS:NZ	1:A:172:GLU:CD	2.73	0.41
1:B:318:ILE:O	1:B:319:ALA:C	2.57	0.41
1:B:320:ARG:HG3	1:B:598:PRO:O	2.19	0.41
1:B:716:LYS:O	1:B:717:LYS:C	2.58	0.41
1:B:73:ASN:CB	1:B:108:ASP:OD1	2.68	0.41
1:C:311:HIS:HE1	1:C:339:ILE:HG22	1.85	0.41
1:C:411:GLU:C	1:C:414:LYS:HB2	2.40	0.41
1:C:413:LEU:CB	1:C:419:ILE:HG12	2.48	0.41
1:C:93:VAL:CG1	1:C:94:LEU:N	2.83	0.41
1:D:217:LYS:HZ2	1:D:236:GLU:HG3	1.85	0.41
1:D:411:GLU:C	1:D:414:LYS:HB2	2.40	0.41
1:D:68:LYS:HG2	1:D:105:TYR:CE2	2.54	0.41
1:D:690:LYS:CD	1:D:741:ILE:HG12	2.50	0.41
1:D:717:LYS:O	1:D:720:ILE:HG22	2.20	0.41
1:E:401:ILE:HG21	1:E:485:LEU:HB3	2.02	0.41
1:E:540:ARG:HD2	1:E:582:ASP:OD1	2.20	0.41
1:E:629:ASN:HD22	1:E:631:SER:N	1.97	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:724:ARG:O	1:E:727:GLN:HB2	2.19	0.41
1:E:89:ILE:HG22	1:E:90:PRO:HD2	2.01	0.41
1:F:189:ASP:O	1:F:190:PRO:C	2.48	0.41
1:F:443:GLU:HG2	1:F:458:LYS:NZ	2.35	0.41
2:O:28:THR:O	2:O:31:GLU:HB2	2.19	0.41
2:O:49:GLN:HA	2:O:52:ILE:CG2	2.41	0.41
2:Q:64:ASP:N	2:Q:67:GLU:HB2	2.35	0.41
1:A:173:ILE:CG2	1:A:174:GLY:N	2.83	0.41
1:A:284:LYS:HE3	1:A:284:LYS:HA	2.02	0.41
1:A:495:PHE:CD1	1:A:495:PHE:C	2.93	0.41
1:B:409:ARG:O	1:B:412:GLU:HB3	2.20	0.41
1:B:748:TYR:O	1:B:751:TYR:N	2.53	0.41
1:C:325:TYR:CD1	1:C:598:PRO:HD3	2.55	0.41
1:C:333:LYS:C	1:C:335:ALA:H	2.23	0.41
1:C:368:GLN:CB	1:C:380:VAL:HG13	2.50	0.41
1:C:597:ASN:OD1	1:C:599:GLU:N	2.51	0.41
1:C:606:LYS:HB2	1:C:610:MET:CE	2.50	0.41
1:D:693:SER:O	1:D:696:LYS:HB2	2.19	0.41
1:E:413:LEU:CB	1:E:419:ILE:HG12	2.49	0.41
1:E:778:LYS:HE3	1:E:778:LYS:HB3	1.87	0.41
1:F:457:THR:O	1:F:458:LYS:O	2.38	0.41
1:F:540:ARG:HD2	1:F:582:ASP:OD1	2.20	0.41
1:F:716:LYS:O	1:F:717:LYS:C	2.58	0.41
1:F:729:TYR:CD2	1:F:729:TYR:C	2.93	0.41
1:F:748:TYR:O	1:F:751:TYR:N	2.52	0.41
1:F:770:ASN:HD22	1:F:770:ASN:HA	1.64	0.41
1:F:99:GLU:C	1:F:101:GLY:N	2.73	0.41
2:O:109:MET:HG3	2:O:116:LEU:HD11	2.01	0.41
2:O:5:THR:O	2:O:8:GLN:HB3	2.21	0.41
2:P:5:THR:O	2:P:8:GLN:HB3	2.20	0.41
2:T:36:MET:HE3	2:T:43:PRO:HG3	2.02	0.41
2:T:36:MET:HE1	2:T:43:PRO:HG3	2.02	0.41
1:A:97:TYR:CE1	1:A:178:SER:CB	3.03	0.41
1:A:411:GLU:C	1:A:414:LYS:HB2	2.40	0.41
1:A:470:ASN:O	1:A:471:TRP:C	2.58	0.41
1:A:526:GLN:O	1:A:527:LYS:C	2.58	0.41
1:B:66:LEU:HD11	1:B:104:ILE:HG13	2.01	0.41
1:B:375:GLY:HA2	1:B:464:VAL:HG11	2.01	0.41
1:B:735:VAL:HA	1:B:738:SER:HB2	2.02	0.41
1:C:175:LYS:HZ3	1:C:175:LYS:CB	2.32	0.41
1:C:621:GLY:HA2	2:Q:94:LYS:HZ3	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:162:ASN:O	1:D:165:GLN:CD	2.59	0.41
1:D:167:LYS:HG3	1:D:168:GLU:N	2.35	0.41
1:D:352:GLY:HA3	1:D:387:ASN:HD21	1.86	0.41
1:D:504:ILE:HD12	1:D:504:ILE:N	2.35	0.41
1:D:778:LYS:HE3	1:D:778:LYS:HB3	1.86	0.41
1:D:96:ILE:HG12	1:D:280:SER:HB3	2.02	0.41
1:E:517:VAL:HA	1:E:525:LYS:HZ2	1.85	0.41
1:E:718:ARG:HH11	1:E:767:GLN:HE21	1.63	0.41
1:F:326:ILE:O	1:F:595:ILE:HA	2.20	0.41
1:F:445:ARG:HG2	1:F:471:TRP:CZ3	2.56	0.41
2:O:32:LEU:HD22	2:O:63:ILE:CD1	2.50	0.41
2:P:12:PHE:HE1	2:P:72:MET:HG3	1.84	0.41
2:Q:111:ASN:C	2:Q:113:GLY:N	2.73	0.41
1:D:523:LEU:HD11	2:R:144:MET:HG3	2.02	0.41
1:D:628:PHE:CE2	2:R:90:ARG:CZ	3.03	0.41
2:S:109:MET:HE3	2:S:114:GLU:HB3	2.01	0.41
2:S:89:PHE:HB2	2:S:141:PHE:CE2	2.55	0.41
1:A:102:GLY:HA3	1:A:150:PRO:HG2	2.01	0.41
1:A:220:LEU:HD21	1:A:223:LYS:HG3	2.02	0.41
1:A:274:GLY:O	1:A:278:LYS:HG3	2.20	0.41
1:A:648:PRO:O	1:A:651:LYS:HB2	2.21	0.41
1:A:680:LYS:HG2	1:A:681:ASP:N	2.35	0.41
1:A:695:LYS:HE3	2:O:19:PHE:CD2	2.55	0.41
1:A:657:ILE:HG21	1:A:704:TYR:CD1	2.55	0.41
1:B:722:ILE:HG23	1:B:760:VAL:CG1	2.25	0.41
1:B:739:LYS:HG2	1:B:740:GLN:H	1.85	0.41
1:B:93:VAL:CG1	1:B:94:LEU:N	2.84	0.41
1:C:201:ASP:OD2	1:C:225:ILE:HD12	2.20	0.41
1:C:337:ASN:C	1:C:339:ILE:N	2.74	0.41
1:C:526:GLN:O	1:C:527:LYS:C	2.59	0.41
1:C:557:LEU:HD12	1:C:557:LEU:HA	1.87	0.41
1:C:593:ILE:O	1:C:604:LEU:HA	2.20	0.41
1:C:729:TYR:CD2	1:C:729:TYR:C	2.93	0.41
1:D:284:LYS:HE3	1:D:284:LYS:HA	2.01	0.41
1:D:657:ILE:HG21	1:D:704:TYR:CD1	2.55	0.41
1:D:768:LYS:HA	1:D:768:LYS:HD3	1.82	0.41
1:E:357:TRP:H	1:E:361:ALA:HB2	1.85	0.41
1:E:520:PRO:CG	1:E:521:ASN:H	2.32	0.41
1:F:102:GLY:HA3	1:F:150:PRO:HG2	2.02	0.41
1:F:267:TYR:O	1:F:271:LEU:HG	2.21	0.41
1:F:622:LYS:O	1:F:623:ASP:HB2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:700:TYR:CD1	1:F:728:ALA:N	2.88	0.41
1:F:794:GLN:HE22	1:F:795:LYS:HG3	1.86	0.41
2:O:24:ASP:CG	2:O:25:GLY:H	2.22	0.41
2:P:109:MET:HE3	2:P:114:GLU:HB3	2.03	0.41
2:R:117:THR:O	2:R:118:ASP:C	2.58	0.41
2:R:89:PHE:HB2	2:R:141:PHE:CE2	2.55	0.41
2:T:100:ILE:HB	2:T:136:VAL:HG22	1.93	0.41
2:T:65:PHE:HB2	2:T:66:PRO:CD	2.41	0.41
1:A:306:GLY:O	1:A:336:THR:HG23	2.21	0.41
1:A:622:LYS:O	1:A:623:ASP:HB2	2.20	0.41
1:B:227:ILE:HG22	1:B:227:ILE:O	2.21	0.41
1:B:320:ARG:O	1:B:321:GLU:C	2.59	0.41
1:B:411:GLU:C	1:B:414:LYS:HB2	2.40	0.41
1:B:77:ASP:O	1:B:81:GLN:HB2	2.21	0.41
1:C:284:LYS:HA	1:C:284:LYS:HE3	2.02	0.41
1:C:628:PHE:HE2	2:Q:90:ARG:HD2	1.85	0.41
1:C:96:ILE:HG22	1:C:100:LEU:CD1	2.42	0.41
1:D:157:LYS:HA	1:D:157:LYS:HD2	1.53	0.41
1:D:199:LEU:CD2	1:D:225:ILE:O	2.68	0.41
1:E:337:ASN:C	1:E:339:ILE:N	2.73	0.41
1:E:352:GLY:HA3	1:E:387:ASN:HD21	1.85	0.41
1:E:593:ILE:O	1:E:604:LEU:HA	2.20	0.41
1:E:606:LYS:HB2	1:E:610:MET:CE	2.51	0.41
1:E:764:LEU:HD23	1:E:764:LEU:HA	1.89	0.41
1:E:794:GLN:HE21	1:E:794:GLN:HB3	1.61	0.41
1:F:334:LEU:HD23	1:F:356:ASP:HA	2.02	0.41
2:P:111:ASN:C	2:P:113:GLY:N	2.73	0.41
2:P:138:TYR:O	2:P:141:PHE:HB3	2.20	0.41
2:Q:88:ALA:O	2:Q:91:VAL:HB	2.20	0.41
2:R:109:MET:HG3	2:R:116:LEU:HD11	2.02	0.41
2:R:111:ASN:C	2:R:113:GLY:N	2.72	0.41
2:R:111:ASN:ND2	2:R:111:ASN:H	2.18	0.41
2:S:13:LYS:CE	2:S:65:PHE:HB3	2.50	0.41
1:F:695:LYS:HE3	2:T:19:PHE:CD2	2.56	0.41
1:A:368:GLN:CB	1:A:380:VAL:HG13	2.50	0.41
1:A:504:ILE:N	1:A:504:ILE:HD12	2.35	0.41
1:B:97:TYR:CE1	1:B:178:SER:CB	3.04	0.41
1:C:724:ARG:O	1:C:727:GLN:HB2	2.21	0.41
1:C:77:ASP:O	1:C:81:GLN:HB2	2.20	0.41
1:D:185:ASP:O	1:D:190:PRO:CG	2.61	0.41
1:D:606:LYS:HB2	1:D:610:MET:CE	2.50	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:730:ASN:O	1:D:732:ILE:N	2.54	0.41
1:E:457:THR:O	1:E:458:LYS:O	2.38	0.41
1:E:68:LYS:HG2	1:E:105:TYR:CE2	2.55	0.41
1:E:99:GLU:C	1:E:101:GLY:N	2.74	0.41
1:F:235:THR:O	1:F:239:HIS:NE2	2.53	0.41
1:F:409:ARG:O	1:F:412:GLU:HB3	2.20	0.41
1:F:610:MET:O	1:F:614:PHE:N	2.50	0.41
1:F:615:ILE:CD1	1:F:645:TRP:HH2	2.27	0.41
2:O:111:ASN:ND2	2:O:111:ASN:H	2.18	0.41
2:P:12:PHE:HE1	2:P:72:MET:CE	2.34	0.41
2:P:8:GLN:O	2:P:12:PHE:CD2	2.74	0.41
2:Q:13:LYS:CE	2:Q:65:PHE:HB3	2.50	0.41
2:R:5:THR:O	2:R:8:GLN:HB3	2.20	0.41
2:S:111:ASN:C	2:S:113:GLY:N	2.72	0.41
2:S:111:ASN:ND2	2:S:111:ASN:H	2.18	0.41
2:T:89:PHE:HB2	2:T:141:PHE:CE2	2.55	0.41
1:A:368:GLN:HG3	1:A:383:GLY:C	2.41	0.41
1:A:501:LEU:HD11	2:O:108:VAL:HG13	2.02	0.41
1:A:520:PRO:CG	1:A:521:ASN:H	2.32	0.41
1:A:653:LYS:O	1:A:655:ASN:N	2.53	0.41
1:B:142:VAL:HG22	1:B:154:ILE:HD12	2.02	0.41
1:B:311:HIS:HE1	1:B:339:ILE:HG22	1.86	0.41
1:B:495:PHE:CD1	1:B:495:PHE:C	2.94	0.41
1:B:503:GLU:OE1	1:B:506:LYS:CD	2.65	0.41
1:B:546:LYS:CD	1:B:554:LYS:HE2	2.33	0.41
1:B:593:ILE:O	1:B:604:LEU:HA	2.21	0.41
1:B:629:ASN:HB3	1:B:632:TYR:CD1	2.56	0.41
1:B:657:ILE:HG21	1:B:704:TYR:CD1	2.56	0.41
1:C:520:PRO:CG	1:C:521:ASN:H	2.33	0.41
1:C:576:ASN:N	1:C:576:ASN:ND2	2.64	0.41
1:D:395:GLU:C	1:D:395:GLU:OE2	2.59	0.41
1:D:495:PHE:CD1	1:D:495:PHE:C	2.94	0.41
1:D:648:PRO:O	1:D:651:LYS:HB2	2.20	0.41
1:D:88:LYS:HD2	1:D:88:LYS:C	2.41	0.41
1:E:109:ILE:HD11	1:E:157:LYS:HZ3	1.86	0.41
1:E:411:GLU:C	1:E:414:LYS:HB2	2.40	0.41
1:E:97:TYR:CE1	1:E:178:SER:CB	3.03	0.41
1:F:173:ILE:CG2	1:F:174:GLY:N	2.84	0.41
1:F:435:LEU:H	1:F:445:ARG:HA	1.84	0.41
1:F:470:ASN:O	1:F:471:TRP:C	2.59	0.41
1:F:503:GLU:OE1	1:F:506:LYS:CD	2.65	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:661:ALA:O	1:F:665:LYS:HB2	2.21	0.41
1:F:718:ARG:NH1	1:F:767:GLN:HE21	2.18	0.41
2:R:13:LYS:CE	2:R:65:PHE:HB3	2.50	0.41
1:A:375:GLY:HA2	1:A:464:VAL:HG11	2.02	0.41
1:A:409:ARG:O	1:A:412:GLU:HB3	2.21	0.41
1:A:771:ILE:H	1:A:771:ILE:HG12	1.64	0.41
1:A:99:GLU:C	1:A:101:GLY:N	2.73	0.41
1:B:519:THR:HG21	1:B:525:LYS:CA	2.50	0.41
1:B:513:TRP:CD1	1:B:532:LEU:HD13	2.55	0.41
1:B:662:GLU:OE2	1:B:755:ARG:NH2	2.38	0.41
1:B:86:LEU:HA	1:B:89:ILE:CD1	2.51	0.41
1:C:210:PHE:HE1	1:C:218:LEU:HG	1.86	0.41
1:C:357:TRP:H	1:C:361:ALA:HB2	1.86	0.41
1:C:88:LYS:HE3	1:C:88:LYS:HB3	1.86	0.41
1:D:263:ASP:O	1:D:264:MET:C	2.57	0.41
1:D:337:ASN:C	1:D:339:ILE:N	2.74	0.41
1:D:345:THR:HB	1:D:491:ASP:CB	2.45	0.41
1:D:438:ASN:HD22	1:D:438:ASN:HA	1.68	0.41
1:D:513:TRP:CD1	1:D:532:LEU:HD13	2.56	0.41
1:E:494:LEU:HB3	1:E:579:THR:HG22	2.03	0.41
1:E:748:TYR:O	1:E:751:TYR:HB3	2.21	0.41
1:F:115:LYS:NZ	1:F:153:ILE:HD13	2.36	0.41
1:F:368:GLN:HG3	1:F:383:GLY:C	2.40	0.41
1:F:504:ILE:HD12	1:F:504:ILE:N	2.34	0.41
1:F:717:LYS:O	1:F:720:ILE:HG22	2.20	0.41
2:O:36:MET:HE3	2:O:43:PRO:HG3	2.02	0.41
1:E:628:PHE:HE2	2:S:90:ARG:HD2	1.84	0.41
2:T:117:THR:O	2:T:118:ASP:C	2.58	0.41
1:A:457:THR:O	1:A:458:LYS:C	2.59	0.41
1:A:497:LEU:HD11	1:A:556:MET:HG2	2.02	0.41
1:A:618:ASN:O	1:A:622:LYS:CB	2.63	0.41
1:A:632:TYR:O	1:A:633:ASN:CB	2.69	0.41
1:B:217:LYS:HZ2	1:B:236:GLU:HG3	1.86	0.41
1:B:333:LYS:C	1:B:335:ALA:H	2.24	0.41
1:B:370:LEU:HD12	1:B:455:TYR:CE1	2.56	0.41
1:B:435:LEU:O	1:B:444:PHE:O	2.39	0.41
1:B:294:ASP:O	1:B:610:MET:SD	2.78	0.41
1:C:135:VAL:N	1:C:136:PRO:HD3	2.36	0.41
1:C:188:LEU:HD21	1:C:279:ILE:HD12	2.03	0.41
1:C:435:LEU:O	1:C:444:PHE:O	2.39	0.41
1:C:470:ASN:O	1:C:471:TRP:C	2.59	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:690:LYS:O	1:C:694:VAL:HG13	2.21	0.41
1:C:794:GLN:O	1:C:797:ILE:CG1	2.69	0.41
1:D:111:LEU:HD23	1:D:155:ASN:HD21	1.86	0.41
1:D:192:PHE:CD1	1:D:192:PHE:N	2.85	0.41
1:D:517:VAL:HA	1:D:525:LYS:HZ2	1.86	0.41
1:E:263:ASP:O	1:E:264:MET:C	2.57	0.41
1:E:495:PHE:CD1	1:E:495:PHE:C	2.94	0.41
1:E:512:GLU:O	1:E:516:VAL:HG23	2.21	0.41
1:E:519:THR:HG21	1:E:525:LYS:CA	2.51	0.41
1:E:632:TYR:O	1:E:633:ASN:CB	2.69	0.41
1:E:648:PRO:O	1:E:651:LYS:HB2	2.20	0.41
1:E:794:GLN:O	1:E:797:ILE:CG1	2.69	0.41
1:E:93:VAL:CG1	1:E:94:LEU:N	2.84	0.41
1:F:358:GLY:N	1:F:418:ILE:HG22	2.36	0.41
1:F:370:LEU:HD12	1:F:455:TYR:CE1	2.56	0.41
1:F:352:GLY:HA3	1:F:387:ASN:HD21	1.86	0.41
1:F:485:LEU:N	1:F:485:LEU:CD1	2.84	0.41
1:F:606:LYS:HB2	1:F:610:MET:CE	2.50	0.41
1:F:690:LYS:CD	1:F:741:ILE:HG12	2.51	0.41
2:O:100:ILE:HB	2:O:136:VAL:HG22	1.95	0.41
2:O:49:GLN:CA	2:O:52:ILE:HG22	2.45	0.41
2:P:143:GLN:HB3	2:P:143:GLN:HE21	1.51	0.41
2:P:64:ASP:OD1	2:P:66:PRO:CD	2.67	0.41
2:P:97:ASN:HD22	2:P:98:GLY:H	1.69	0.41
2:Q:111:ASN:H	2:Q:111:ASN:ND2	2.19	0.41
2:R:49:GLN:CA	2:R:52:ILE:HG22	2.45	0.41
2:S:12:PHE:HE1	2:S:72:MET:HG3	1.81	0.41
2:T:88:ALA:O	2:T:91:VAL:HB	2.21	0.41
1:A:179:LEU:O	1:A:183:SER:CB	2.65	0.41
1:A:372:LYS:CG	1:A:373:LYS:H	2.26	0.41
1:A:376:GLN:HB2	1:A:379:ALA:HB3	2.03	0.41
1:A:96:ILE:O	1:A:100:LEU:CG	2.67	0.41
1:B:197:LYS:HD3	1:B:197:LYS:O	2.21	0.41
1:B:557:LEU:HD12	1:B:557:LEU:HA	1.84	0.41
1:B:629:ASN:HD22	1:B:631:SER:N	1.98	0.41
1:B:99:GLU:C	1:B:101:GLY:N	2.74	0.41
1:C:162:ASN:O	1:C:165:GLN:CD	2.59	0.41
1:C:97:TYR:CE1	1:C:178:SER:CB	3.03	0.41
1:C:311:HIS:O	1:C:312:ALA:C	2.57	0.41
1:C:657:ILE:HG21	1:C:704:TYR:CD1	2.56	0.41
1:C:85:LEU:HG	1:C:171:TYR:CD2	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:311:HIS:HE1	1:D:339:ILE:HG22	1.85	0.41
1:D:435:LEU:H	1:D:445:ARG:HA	1.86	0.41
1:D:794:GLN:HE22	1:D:795:LYS:HG3	1.86	0.41
1:E:66:LEU:HD11	1:E:104:ILE:HG13	2.02	0.41
1:E:88:LYS:HE3	1:E:88:LYS:HB3	1.87	0.41
1:F:197:LYS:NZ	1:F:267:TYR:CD2	2.82	0.41
1:F:311:HIS:HE1	1:F:339:ILE:HG22	1.85	0.41
1:F:312:ALA:O	1:F:315:PHE:HB2	2.20	0.41
1:F:724:ARG:O	1:F:727:GLN:HB2	2.21	0.41
2:O:8:GLN:O	2:O:12:PHE:CD2	2.74	0.41
2:P:100:ILE:HB	2:P:136:VAL:HG22	1.95	0.41
2:Q:22:ASP:OD1	2:Q:22:ASP:N	2.53	0.41
2:S:109:MET:HG3	2:S:116:LEU:HD11	2.02	0.41
2:S:64:ASP:N	2:S:67:GLU:HB2	2.36	0.41
2:T:109:MET:HE3	2:T:114:GLU:HB3	2.02	0.41
1:A:167:LYS:HG3	1:A:168:GLU:N	2.36	0.41
1:A:597:ASN:HB2	1:A:598:PRO:CD	2.32	0.41
1:A:716:LYS:O	1:A:717:LYS:C	2.57	0.41
1:A:748:TYR:O	1:A:751:TYR:N	2.53	0.41
1:B:162:ASN:O	1:B:165:GLN:CD	2.59	0.41
1:B:337:ASN:C	1:B:339:ILE:N	2.74	0.41
1:B:372:LYS:CG	1:B:373:LYS:H	2.27	0.41
1:B:368:GLN:HG3	1:B:383:GLY:C	2.42	0.41
1:B:352:GLY:HA3	1:B:387:ASN:HD21	1.86	0.41
1:B:435:LEU:HG	1:B:446:ILE:HG22	2.03	0.41
1:B:91:LYS:O	1:B:95:GLU:HG2	2.20	0.41
1:C:179:LEU:O	1:C:183:SER:CB	2.65	0.41
1:C:187:SER:C	1:C:188:LEU:O	2.51	0.41
1:C:254:ARG:HG2	1:C:255:THR:N	2.35	0.41
1:C:370:LEU:HD12	1:C:455:TYR:CE1	2.56	0.41
1:C:372:LYS:CG	1:C:373:LYS:H	2.27	0.41
1:C:395:GLU:C	1:C:395:GLU:OE2	2.60	0.41
1:C:717:LYS:O	1:C:720:ILE:HG22	2.21	0.41
1:D:485:LEU:CD1	1:D:485:LEU:N	2.84	0.41
1:D:661:ALA:O	1:D:665:LYS:HB2	2.21	0.41
1:D:694:VAL:HG23	2:R:18:LEU:HD11	2.03	0.41
1:D:748:TYR:O	1:D:751:TYR:HB3	2.20	0.41
1:E:217:LYS:NZ	1:E:236:GLU:CB	2.84	0.41
1:E:312:ALA:O	1:E:315:PHE:HB2	2.21	0.41
1:E:368:GLN:HG3	1:E:383:GLY:C	2.41	0.41
1:E:395:GLU:OE2	1:E:395:GLU:C	2.60	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:326:ILE:O	1:E:595:ILE:HA	2.21	0.41
1:E:91:LYS:O	1:E:95:GLU:HG2	2.20	0.41
1:F:109:ILE:CD1	1:F:157:LYS:HZ3	2.34	0.41
1:F:274:GLY:O	1:F:278:LYS:HG3	2.19	0.41
1:F:414:LYS:O	1:F:417:GLY:N	2.40	0.41
1:F:629:ASN:HB3	1:F:632:TYR:CZ	2.55	0.41
2:O:13:LYS:HA	2:O:13:LYS:HD2	1.87	0.41
2:P:117:THR:O	2:P:118:ASP:C	2.59	0.41
2:P:24:ASP:CG	2:P:25:GLY:H	2.21	0.41
2:Q:140:GLU:HG2	2:Q:140:GLU:H	1.55	0.41
1:A:109:ILE:HD11	1:A:157:LYS:HZ3	1.86	0.40
1:A:189:ASP:O	1:A:190:PRO:C	2.52	0.40
1:A:199:LEU:C	1:A:201:ASP:N	2.75	0.40
1:A:724:ARG:O	1:A:727:GLN:HB2	2.21	0.40
1:A:93:VAL:CG1	1:A:94:LEU:N	2.85	0.40
1:B:68:LYS:HG2	1:B:105:TYR:CE2	2.56	0.40
1:C:478:ALA:HB1	1:C:486:LYS:C	2.41	0.40
1:C:711:ILE:C	1:C:712:PHE:HD2	2.25	0.40
1:C:716:LYS:O	1:C:717:LYS:C	2.59	0.40
1:C:719:LYS:HG2	1:C:797:ILE:HD11	2.02	0.40
1:D:173:ILE:CG2	1:D:174:GLY:N	2.83	0.40
1:D:294:ASP:O	1:D:610:MET:SD	2.79	0.40
1:D:370:LEU:HD12	1:D:455:TYR:CE1	2.55	0.40
1:D:470:ASN:O	1:D:471:TRP:C	2.60	0.40
1:D:481:VAL:O	1:D:482:GLU:HB2	2.20	0.40
1:D:515:LYS:HZ3	1:D:516:VAL:HG23	1.86	0.40
1:D:564:VAL:O	1:D:569:TYR:HB3	2.21	0.40
1:E:318:ILE:O	1:E:319:ALA:C	2.58	0.40
1:E:504:ILE:HD12	1:E:504:ILE:N	2.35	0.40
1:E:564:VAL:O	1:E:569:TYR:HB3	2.22	0.40
1:E:741:ILE:O	1:E:742:ALA:C	2.60	0.40
1:F:325:TYR:CD1	1:F:598:PRO:HD3	2.56	0.40
1:F:732:ILE:HG23	1:F:749:PHE:CD1	2.54	0.40
2:Q:109:MET:HE3	2:Q:114:GLU:HB3	2.03	0.40
2:R:24:ASP:CG	2:R:25:GLY:H	2.21	0.40
1:A:220:LEU:HG	1:A:220:LEU:O	2.21	0.40
1:A:334:LEU:HD23	1:A:356:ASP:HA	2.02	0.40
1:A:607:ASN:HB3	1:A:609:GLU:H	1.86	0.40
1:A:794:GLN:O	1:A:797:ILE:CG1	2.69	0.40
1:B:121:SER:HB2	1:B:145:LYS:HE3	2.03	0.40
1:B:173:ILE:O	1:B:176:GLY:N	2.54	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:414:LYS:HB3	1:B:415:GLU:H	1.68	0.40
1:B:632:TYR:O	1:B:633:ASN:CB	2.69	0.40
1:C:495:PHE:C	1:C:495:PHE:CD1	2.93	0.40
1:D:88:LYS:NZ	1:D:172:GLU:CD	2.74	0.40
1:D:235:THR:O	1:D:239:HIS:NE2	2.54	0.40
1:D:334:LEU:HD23	1:D:356:ASP:HA	2.02	0.40
1:D:346:LYS:HD2	1:D:350:VAL:O	2.22	0.40
1:D:457:THR:O	1:D:458:LYS:C	2.59	0.40
1:D:512:GLU:O	1:D:516:VAL:HG23	2.22	0.40
1:D:629:ASN:HB3	1:D:632:TYR:CD1	2.56	0.40
1:D:99:GLU:C	1:D:101:GLY:N	2.74	0.40
1:E:730:ASN:O	1:E:732:ILE:N	2.55	0.40
1:F:254:ARG:HG2	1:F:255:THR:N	2.36	0.40
1:F:564:VAL:O	1:F:569:TYR:HB3	2.22	0.40
1:F:693:SER:O	1:F:696:LYS:HB2	2.21	0.40
2:O:64:ASP:OD1	2:O:66:PRO:CD	2.67	0.40
2:P:21:LYS:C	2:P:21:LYS:CD	2.89	0.40
2:P:42:ASN:HA	2:P:43:PRO:HD2	1.99	0.40
2:Q:12:PHE:HE1	2:Q:72:MET:CE	2.35	0.40
2:R:109:MET:HE3	2:R:114:GLU:HB3	2.04	0.40
2:R:13:LYS:HA	2:R:13:LYS:HD2	1.86	0.40
2:R:89:PHE:HB2	2:R:141:PHE:CD2	2.56	0.40
2:T:109:MET:HG3	2:T:116:LEU:HD11	2.02	0.40
1:A:326:ILE:O	1:A:595:ILE:HA	2.21	0.40
1:A:395:GLU:OE2	1:A:395:GLU:C	2.60	0.40
1:A:435:LEU:O	1:A:444:PHE:O	2.39	0.40
1:A:481:VAL:O	1:A:482:GLU:HB2	2.21	0.40
1:A:628:PHE:CE2	2:O:90:ARG:CZ	3.04	0.40
1:A:699:GLY:O	1:A:700:TYR:C	2.58	0.40
1:B:111:LEU:HD23	1:B:155:ASN:HD21	1.86	0.40
1:B:326:ILE:O	1:B:595:ILE:HA	2.22	0.40
1:B:461:LYS:HA	1:B:461:LYS:HD2	1.84	0.40
1:B:629:ASN:HB3	1:B:632:TYR:CZ	2.56	0.40
1:B:653:LYS:O	1:B:654:ILE:C	2.60	0.40
1:C:443:GLU:HG2	1:C:458:LYS:NZ	2.36	0.40
1:C:695:LYS:HE3	2:Q:19:PHE:CD2	2.56	0.40
1:D:358:GLY:N	1:D:418:ILE:HG22	2.35	0.40
1:D:519:THR:HG21	1:D:525:LYS:CA	2.50	0.40
1:D:628:PHE:CZ	2:R:90:ARG:CZ	3.05	0.40
1:D:615:ILE:CD1	1:D:645:TRP:HH2	2.25	0.40
1:D:694:VAL:CG2	1:D:695:LYS:N	2.84	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:794:GLN:O	1:D:797:ILE:CG1	2.70	0.40
1:D:89:ILE:CG2	1:D:90:PRO:HD2	2.51	0.40
1:E:111:LEU:HD23	1:E:155:ASN:HD21	1.86	0.40
1:E:214:PHE:CG	1:E:218:LEU:HD23	2.54	0.40
1:E:370:LEU:HD12	1:E:455:TYR:CE1	2.56	0.40
1:E:518:ASN:O	1:E:519:THR:C	2.60	0.40
1:E:615:ILE:CD1	1:E:645:TRP:HH2	2.27	0.40
1:F:214:PHE:CE1	1:F:218:LEU:HD23	2.57	0.40
1:F:559:ARG:HD2	1:F:559:ARG:HA	1.96	0.40
2:P:16:PHE:CE1	2:P:27:ILE:CD1	3.05	0.40
1:C:534:ILE:HG23	2:Q:84:GLU:HB3	2.03	0.40
2:T:8:GLN:O	2:T:12:PHE:CD2	2.74	0.40
1:A:297:LYS:NZ	1:A:297:LYS:HB3	2.36	0.40
1:A:518:ASN:O	1:A:519:THR:C	2.60	0.40
1:A:629:ASN:HB3	1:A:632:TYR:CD1	2.56	0.40
1:B:214:PHE:CG	1:B:218:LEU:HD23	2.53	0.40
1:B:470:ASN:O	1:B:471:TRP:C	2.60	0.40
1:C:372:LYS:HD3	1:C:373:LYS:NZ	2.36	0.40
1:C:368:GLN:HG3	1:C:383:GLY:C	2.42	0.40
1:C:405:LEU:HD12	1:C:405:LEU:N	2.37	0.40
1:C:457:THR:O	1:C:458:LYS:C	2.60	0.40
1:C:503:GLU:OE1	1:C:506:LYS:CD	2.66	0.40
1:C:513:TRP:CD1	1:C:532:LEU:HD13	2.56	0.40
1:C:748:TYR:O	1:C:751:TYR:HB3	2.20	0.40
1:D:372:LYS:HD3	1:D:373:LYS:NZ	2.37	0.40
1:D:610:MET:O	1:D:614:PHE:N	2.50	0.40
1:D:730:ASN:O	1:D:733:GLU:N	2.55	0.40
1:D:735:VAL:HG12	1:D:741:ILE:HD13	2.04	0.40
1:D:764:LEU:HA	1:D:764:LEU:HD23	1.78	0.40
1:D:93:VAL:CG1	1:D:94:LEU:N	2.84	0.40
1:E:414:LYS:O	1:E:417:GLY:N	2.40	0.40
1:E:485:LEU:N	1:E:485:LEU:CD1	2.85	0.40
1:E:520:PRO:HG2	1:E:521:ASN:N	2.31	0.40
1:E:610:MET:O	1:E:614:PHE:N	2.50	0.40
1:E:730:ASN:O	1:E:733:GLU:N	2.54	0.40
1:F:357:TRP:H	1:F:361:ALA:HB2	1.86	0.40
1:F:401:ILE:HG21	1:F:485:LEU:HB3	2.03	0.40
1:F:567:THR:HG23	1:F:568:GLY:N	2.37	0.40
1:F:629:ASN:HB3	1:F:632:TYR:CD1	2.57	0.40
1:F:632:TYR:O	1:F:633:ASN:CB	2.69	0.40
1:F:699:GLY:O	1:F:700:TYR:C	2.58	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:91:LYS:O	1:F:95:GLU:HG2	2.21	0.40
1:F:93:VAL:CG1	1:F:94:LEU:N	2.85	0.40
2:O:32:LEU:HD21	2:O:71:MET:HE1	2.03	0.40
2:Q:5:THR:O	2:Q:8:GLN:HB3	2.21	0.40
2:R:16:PHE:CE1	2:R:27:ILE:CD1	3.04	0.40
2:S:8:GLN:O	2:S:12:PHE:CD2	2.74	0.40
1:A:111:LEU:HD23	1:A:155:ASN:HD21	1.86	0.40
1:A:192:PHE:N	1:A:192:PHE:CD1	2.80	0.40
1:A:68:LYS:HG2	1:A:105:TYR:CE2	2.56	0.40
1:A:693:SER:O	1:A:696:LYS:HB2	2.22	0.40
1:B:159:TYR:HD1	1:B:159:TYR:H	1.70	0.40
1:B:166:SER:O	1:B:169:VAL:HG12	2.21	0.40
1:B:661:ALA:O	1:B:665:LYS:HB2	2.21	0.40
1:B:76:LEU:HD22	1:B:76:LEU:N	2.37	0.40
1:C:167:LYS:HG3	1:C:168:GLU:N	2.36	0.40
1:C:214:PHE:CE1	1:C:218:LEU:HD23	2.57	0.40
1:C:401:ILE:HG21	1:C:485:LEU:HB3	2.03	0.40
1:C:358:GLY:N	1:C:418:ILE:HG22	2.36	0.40
1:C:461:LYS:HD2	1:C:461:LYS:HA	1.84	0.40
1:C:628:PHE:CE2	2:Q:90:ARG:CZ	3.05	0.40
1:C:771:ILE:H	1:C:771:ILE:HG12	1.62	0.40
1:D:102:GLY:CA	1:D:150:PRO:HG2	2.51	0.40
1:D:188:LEU:N	1:D:188:LEU:HD23	2.31	0.40
1:D:370:LEU:CD1	1:D:455:TYR:CE1	3.04	0.40
1:D:451:ASN:N	1:D:451:ASN:OD1	2.39	0.40
1:D:711:ILE:C	1:D:712:PHE:HD2	2.25	0.40
1:D:713:SER:O	1:D:714:GLN:C	2.60	0.40
1:D:91:LYS:O	1:D:95:GLU:HG2	2.22	0.40
1:E:191:GLU:C	1:E:193:LEU:N	2.75	0.40
1:E:713:SER:O	1:E:714:GLN:C	2.60	0.40
1:E:736:LEU:HD11	1:E:750:GLN:HE21	1.85	0.40
1:F:102:GLY:CA	1:F:150:PRO:HG2	2.52	0.40
1:F:333:LYS:C	1:F:335:ALA:H	2.25	0.40
1:F:411:GLU:C	1:F:414:LYS:HB2	2.40	0.40
1:F:657:ILE:HG21	1:F:704:TYR:CD1	2.56	0.40
1:F:86:LEU:HA	1:F:89:ILE:CD1	2.52	0.40
2:O:64:ASP:N	2:O:67:GLU:HB2	2.37	0.40
2:P:13:LYS:CE	2:P:65:PHE:HB3	2.51	0.40
2:P:89:PHE:HB2	2:P:141:PHE:CD2	2.56	0.40
2:S:49:GLN:O	2:S:53:ASN:N	2.44	0.40

All (2) symmetry-related close contacts are listed below. The label for Atom-2 includes the sym-

metry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:685:LYS:NZ	1:A:685:LYS:NZ[2_656]	2.09	0.11
1:D:685:LYS:NZ	1:D:685:LYS:NZ[2_657]	2.18	0.02

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 X-ray entries followed by that with respect to entries of similar resolution.

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	733/777 (94%)	542 (74%)	150 (20%)	41 (6%)	2	11
1	B	733/777 (94%)	546 (74%)	144 (20%)	43 (6%)	1	10
1	C	733/777 (94%)	537 (73%)	151 (21%)	45 (6%)	1	10
1	D	733/777 (94%)	541 (74%)	148 (20%)	44 (6%)	1	10
1	E	733/777 (94%)	537 (73%)	153 (21%)	43 (6%)	1	10
1	F	733/777 (94%)	547 (75%)	142 (19%)	44 (6%)	1	10
2	O	144/149 (97%)	111 (77%)	26 (18%)	7 (5%)	2	14
2	P	144/149 (97%)	111 (77%)	26 (18%)	7 (5%)	2	14
2	Q	144/149 (97%)	112 (78%)	25 (17%)	7 (5%)	2	14
2	R	144/149 (97%)	113 (78%)	24 (17%)	7 (5%)	2	14
2	S	144/149 (97%)	111 (77%)	26 (18%)	7 (5%)	2	14
2	T	144/149 (97%)	113 (78%)	24 (17%)	7 (5%)	2	14
All	All	5262/5556 (95%)	3921 (74%)	1039 (20%)	302 (6%)	1	11

All (302) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	75	THR
1	A	180	ASP
1	A	192	PHE
1	A	458	LYS

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Mol	Chain	Res	Type
1	A	510	GLN
1	A	580	GLU
1	A	787	THR
1	B	180	ASP
1	B	192	PHE
1	B	458	LYS
1	B	510	GLN
1	B	787	THR
1	C	108	ASP
1	C	180	ASP
1	C	192	PHE
1	C	458	LYS
1	C	510	GLN
1	C	580	GLU
1	C	787	THR
1	D	75	THR
1	D	159	TYR
1	D	180	ASP
1	D	192	PHE
1	D	458	LYS
1	D	510	GLN
1	D	580	GLU
1	D	787	THR
1	E	75	THR
1	E	180	ASP
1	E	192	PHE
1	E	458	LYS
1	E	510	GLN
1	E	580	GLU
1	E	787	THR
1	F	75	THR
1	F	180	ASP
1	F	192	PHE
1	F	458	LYS
1	F	510	GLN
1	F	787	THR
1	A	80	GLN
1	A	113	GLU
1	A	120	LEU
1	A	232	GLU
1	A	302	LEU
1	A	334	LEU

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Mol	Chain	Res	Type
1	A	357	TRP
1	A	372	LYS
1	A	376	GLN
1	A	414	LYS
1	A	546	LYS
1	A	620	THR
1	A	654	ILE
1	A	711	ILE
1	A	779	GLN
1	A	783	THR
1	B	80	GLN
1	B	113	GLU
1	B	232	GLU
1	B	302	LEU
1	B	357	TRP
1	B	372	LYS
1	B	376	GLN
1	B	414	LYS
1	B	546	LYS
1	B	580	GLU
1	B	620	THR
1	B	654	ILE
1	B	711	ILE
1	B	771	ILE
1	B	779	GLN
1	B	783	THR
1	C	80	GLN
1	C	113	GLU
1	C	146	LYS
1	C	232	GLU
1	C	302	LEU
1	C	334	LEU
1	C	357	TRP
1	C	372	LYS
1	C	376	GLN
1	C	414	LYS
1	C	546	LYS
1	C	620	THR
1	C	654	ILE
1	C	711	ILE
1	C	771	ILE
1	C	779	GLN

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Mol	Chain	Res	Type
1	C	783	THR
1	D	80	GLN
1	D	113	GLU
1	D	120	LEU
1	D	232	GLU
1	D	302	LEU
1	D	334	LEU
1	D	357	TRP
1	D	372	LYS
1	D	376	GLN
1	D	414	LYS
1	D	546	LYS
1	D	620	THR
1	D	654	ILE
1	D	711	ILE
1	D	771	ILE
1	D	779	GLN
1	D	783	THR
1	E	80	GLN
1	E	113	GLU
1	E	120	LEU
1	E	232	GLU
1	E	302	LEU
1	E	334	LEU
1	E	357	TRP
1	E	372	LYS
1	E	376	GLN
1	E	414	LYS
1	E	546	LYS
1	E	620	THR
1	E	654	ILE
1	E	711	ILE
1	E	771	ILE
1	E	779	GLN
1	E	783	THR
1	F	80	GLN
1	F	113	GLU
1	F	120	LEU
1	F	159	TYR
1	F	232	GLU
1	F	302	LEU
1	F	334	LEU

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Mol	Chain	Res	Type
1	F	357	TRP
1	F	372	LYS
1	F	376	GLN
1	F	414	LYS
1	F	546	LYS
1	F	580	GLU
1	F	620	THR
1	F	654	ILE
1	F	711	ILE
1	F	779	GLN
1	F	783	THR
2	O	23	GLY
2	O	55	VAL
2	O	76	MET
2	O	93	ASP
2	O	118	ASP
2	P	23	GLY
2	P	55	VAL
2	P	76	MET
2	P	93	ASP
2	P	118	ASP
2	Q	23	GLY
2	Q	55	VAL
2	Q	76	MET
2	Q	93	ASP
2	Q	118	ASP
2	R	23	GLY
2	R	55	VAL
2	R	76	MET
2	R	93	ASP
2	R	118	ASP
2	S	23	GLY
2	S	55	VAL
2	S	76	MET
2	S	93	ASP
2	S	118	ASP
2	T	23	GLY
2	T	55	VAL
2	T	76	MET
2	T	93	ASP
2	T	118	ASP
1	A	305	SER

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Mol	Chain	Res	Type
1	A	373	LYS
1	A	377	GLN
1	A	406	ASP
1	A	471	TRP
1	B	116	GLU
1	B	305	SER
1	B	334	LEU
1	B	373	LYS
1	B	377	GLN
1	B	406	ASP
1	B	471	TRP
1	C	65	ASN
1	C	305	SER
1	C	373	LYS
1	C	377	GLN
1	C	406	ASP
1	C	428	ASN
1	C	471	TRP
1	D	305	SER
1	D	373	LYS
1	D	377	GLN
1	D	406	ASP
1	D	428	ASN
1	D	471	TRP
1	E	305	SER
1	E	373	LYS
1	E	377	GLN
1	E	406	ASP
1	E	471	TRP
1	F	116	GLU
1	F	305	SER
1	F	373	LYS
1	F	377	GLN
1	F	406	ASP
1	F	471	TRP
2	O	22	ASP
2	P	22	ASP
2	Q	22	ASP
2	R	22	ASP
2	S	22	ASP
2	T	22	ASP
1	A	108	ASP

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Mol	Chain	Res	Type
1	A	116	GLU
1	A	136	PRO
1	A	138	ALA
1	A	428	ASN
1	B	111	LEU
1	B	136	PRO
1	B	428	ASN
1	C	116	GLU
1	C	136	PRO
1	C	138	ALA
1	D	108	ASP
1	D	116	GLU
1	E	108	ASP
1	E	428	ASN
1	E	537	GLY
1	F	108	ASP
1	F	136	PRO
1	F	428	ASN
1	A	213	LYS
1	A	537	GLY
1	B	65	ASN
1	B	138	ALA
1	B	213	LYS
1	B	537	GLY
1	C	124	GLU
1	C	213	LYS
1	C	537	GLY
1	D	136	PRO
1	D	138	ALA
1	D	213	LYS
1	D	537	GLY
1	E	116	GLU
1	E	124	GLU
1	E	136	PRO
1	E	213	LYS
1	F	138	ALA
1	F	213	LYS
1	F	537	GLY
1	A	520	PRO
1	B	124	GLU
1	B	520	PRO
1	C	121	SER

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Mol	Chain	Res	Type
1	C	165	GLN
1	D	638	GLY
1	E	138	ALA
1	E	520	PRO
1	F	124	GLU
1	F	520	PRO
1	A	571	GLY
1	B	112	VAL
1	B	571	GLY
1	B	638	GLY
1	C	520	PRO
1	C	571	GLY
1	C	638	GLY
1	D	112	VAL
1	D	520	PRO
1	D	571	GLY
1	E	112	VAL
1	E	571	GLY
1	E	638	GLY
1	F	112	VAL
2	O	25	GLY
2	S	25	GLY
2	T	25	GLY
1	A	112	VAL
1	A	638	GLY
1	B	177	ILE
1	C	112	VAL
1	E	177	ILE
1	F	190	PRO
1	F	571	GLY
1	F	638	GLY
2	P	25	GLY
2	Q	25	GLY
2	R	25	GLY
1	A	441	VAL
1	B	441	VAL
1	C	177	ILE
1	C	441	VAL
1	D	177	ILE
1	D	441	VAL
1	E	441	VAL
1	F	177	ILE

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Mol	Chain	Res	Type
1	F	441	VAL
1	A	177	ILE
1	B	227	ILE
1	D	190	PRO

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 X-ray entries followed by that with respect to entries of similar resolution.

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	664/705 (94%)	581 (88%)	83 (12%)	4	19
1	B	664/705 (94%)	582 (88%)	82 (12%)	4	20
1	C	664/705 (94%)	582 (88%)	82 (12%)	4	20
1	D	664/705 (94%)	581 (88%)	83 (12%)	4	19
1	E	664/705 (94%)	582 (88%)	82 (12%)	4	20
1	F	664/705 (94%)	582 (88%)	82 (12%)	4	20
2	O	123/127 (97%)	107 (87%)	16 (13%)	4	17
2	P	123/127 (97%)	107 (87%)	16 (13%)	4	17
2	Q	123/127 (97%)	107 (87%)	16 (13%)	4	17
2	R	123/127 (97%)	107 (87%)	16 (13%)	4	17
2	S	123/127 (97%)	107 (87%)	16 (13%)	4	17
2	T	123/127 (97%)	107 (87%)	16 (13%)	4	17
All	All	4722/4992 (95%)	4132 (88%)	590 (12%)	4	19

All (590) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	67	VAL
1	A	71	PHE
1	A	75	THR
1	A	78	LYS
1	A	88	LYS
1	A	99	GLU

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Mol	Chain	Res	Type
1	A	109	ILE
1	A	112	VAL
1	A	115	LYS
1	A	120	LEU
1	A	122	GLU
1	A	128	MET
1	A	133	GLU
1	A	137	PHE
1	A	140	ARG
1	A	141	PHE
1	A	149	THR
1	A	152	LEU
1	A	156	ILE
1	A	158	ASP
1	A	172	GLU
1	A	179	LEU
1	A	182	ILE
1	A	188	LEU
1	A	190	PRO
1	A	192	PHE
1	A	197	LYS
1	A	201	ASP
1	A	210	PHE
1	A	213	LYS
1	A	219	GLU
1	A	229	PHE
1	A	254	ARG
1	A	255	THR
1	A	284	LYS
1	A	296	LEU
1	A	323	ASN
1	A	324	THR
1	A	349	ASN
1	A	370	LEU
1	A	377	GLN
1	A	385	LEU
1	A	395	GLU
1	A	397	GLU
1	A	400	LYS
1	A	406	ASP
1	A	407	HIS
1	A	410	ILE

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Mol	Chain	Res	Type
1	A	414	LYS
1	A	420	LEU
1	A	427	ASP
1	A	434	LEU
1	A	438	ASN
1	A	451	ASN
1	A	455	TYR
1	A	479	LYS
1	A	480	ASN
1	A	484	VAL
1	A	500	SER
1	A	501	LEU
1	A	515	LYS
1	A	524	GLU
1	A	533	LEU
1	A	545	THR
1	A	625	LEU
1	A	629	ASN
1	A	635	ILE
1	A	639	ASN
1	A	644	GLU
1	A	646	THR
1	A	655	ASN
1	A	665	LYS
1	A	669	SER
1	A	672	ARG
1	A	678	VAL
1	A	688	PHE
1	A	709	ASN
1	A	714	GLN
1	A	766	HIS
1	A	770	ASN
1	A	780	LEU
1	A	781	ASN
1	A	794	GLN
1	B	67	VAL
1	B	71	PHE
1	B	78	LYS
1	B	88	LYS
1	B	99	GLU
1	B	109	ILE
1	B	110	ASP

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Mol	Chain	Res	Type
1	B	112	VAL
1	B	115	LYS
1	B	120	LEU
1	B	122	GLU
1	B	128	MET
1	B	137	PHE
1	B	140	ARG
1	B	141	PHE
1	B	149	THR
1	B	152	LEU
1	B	156	ILE
1	B	158	ASP
1	B	172	GLU
1	B	179	LEU
1	B	182	ILE
1	B	188	LEU
1	B	190	PRO
1	B	197	LYS
1	B	201	ASP
1	B	210	PHE
1	B	213	LYS
1	B	219	GLU
1	B	229	PHE
1	B	254	ARG
1	B	255	THR
1	B	284	LYS
1	B	296	LEU
1	B	323	ASN
1	B	324	THR
1	B	349	ASN
1	B	370	LEU
1	B	377	GLN
1	B	385	LEU
1	B	395	GLU
1	B	397	GLU
1	B	400	LYS
1	B	406	ASP
1	B	407	HIS
1	B	410	ILE
1	B	414	LYS
1	B	420	LEU
1	B	427	ASP

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Mol	Chain	Res	Type
1	B	434	LEU
1	B	438	ASN
1	B	447	SER
1	B	451	ASN
1	B	455	TYR
1	B	479	LYS
1	B	480	ASN
1	B	484	VAL
1	B	500	SER
1	B	501	LEU
1	B	515	LYS
1	B	524	GLU
1	B	533	LEU
1	B	545	THR
1	B	625	LEU
1	B	629	ASN
1	B	635	ILE
1	B	639	ASN
1	B	644	GLU
1	B	646	THR
1	B	651	LYS
1	B	655	ASN
1	B	665	LYS
1	B	669	SER
1	B	672	ARG
1	B	678	VAL
1	B	688	PHE
1	B	709	ASN
1	B	714	GLN
1	B	766	HIS
1	B	780	LEU
1	B	781	ASN
1	B	794	GLN
1	C	71	PHE
1	C	76	LEU
1	C	78	LYS
1	C	88	LYS
1	C	99	GLU
1	C	109	ILE
1	C	112	VAL
1	C	115	LYS
1	C	120	LEU

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Mol	Chain	Res	Type
1	C	122	GLU
1	C	128	MET
1	C	137	PHE
1	C	140	ARG
1	C	141	PHE
1	C	149	THR
1	C	152	LEU
1	C	156	ILE
1	C	158	ASP
1	C	172	GLU
1	C	179	LEU
1	C	182	ILE
1	C	188	LEU
1	C	190	PRO
1	C	192	PHE
1	C	197	LYS
1	C	201	ASP
1	C	210	PHE
1	C	213	LYS
1	C	219	GLU
1	C	229	PHE
1	C	254	ARG
1	C	255	THR
1	C	284	LYS
1	C	296	LEU
1	C	323	ASN
1	C	324	THR
1	C	349	ASN
1	C	370	LEU
1	C	377	GLN
1	C	385	LEU
1	C	395	GLU
1	C	397	GLU
1	C	400	LYS
1	C	406	ASP
1	C	407	HIS
1	C	410	ILE
1	C	414	LYS
1	C	420	LEU
1	C	427	ASP
1	C	434	LEU
1	C	438	ASN

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Mol	Chain	Res	Type
1	C	451	ASN
1	C	455	TYR
1	C	479	LYS
1	C	480	ASN
1	C	484	VAL
1	C	500	SER
1	C	501	LEU
1	C	515	LYS
1	C	524	GLU
1	C	533	LEU
1	C	545	THR
1	C	625	LEU
1	C	629	ASN
1	C	635	ILE
1	C	639	ASN
1	C	644	GLU
1	C	646	THR
1	C	651	LYS
1	C	655	ASN
1	C	665	LYS
1	C	669	SER
1	C	672	ARG
1	C	678	VAL
1	C	688	PHE
1	C	709	ASN
1	C	714	GLN
1	C	766	HIS
1	C	770	ASN
1	C	780	LEU
1	C	781	ASN
1	C	794	GLN
1	D	67	VAL
1	D	71	PHE
1	D	75	THR
1	D	78	LYS
1	D	88	LYS
1	D	99	GLU
1	D	109	ILE
1	D	112	VAL
1	D	115	LYS
1	D	120	LEU
1	D	122	GLU

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Mol	Chain	Res	Type
1	D	128	MET
1	D	133	GLU
1	D	137	PHE
1	D	140	ARG
1	D	141	PHE
1	D	149	THR
1	D	152	LEU
1	D	156	ILE
1	D	158	ASP
1	D	172	GLU
1	D	179	LEU
1	D	182	ILE
1	D	188	LEU
1	D	190	PRO
1	D	197	LYS
1	D	201	ASP
1	D	210	PHE
1	D	213	LYS
1	D	219	GLU
1	D	229	PHE
1	D	254	ARG
1	D	255	THR
1	D	284	LYS
1	D	296	LEU
1	D	323	ASN
1	D	324	THR
1	D	349	ASN
1	D	370	LEU
1	D	377	GLN
1	D	385	LEU
1	D	395	GLU
1	D	397	GLU
1	D	400	LYS
1	D	406	ASP
1	D	407	HIS
1	D	410	ILE
1	D	414	LYS
1	D	420	LEU
1	D	427	ASP
1	D	434	LEU
1	D	438	ASN
1	D	451	ASN

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Mol	Chain	Res	Type
1	D	455	TYR
1	D	479	LYS
1	D	480	ASN
1	D	484	VAL
1	D	500	SER
1	D	501	LEU
1	D	515	LYS
1	D	524	GLU
1	D	533	LEU
1	D	545	THR
1	D	625	LEU
1	D	629	ASN
1	D	635	ILE
1	D	639	ASN
1	D	644	GLU
1	D	646	THR
1	D	655	ASN
1	D	665	LYS
1	D	669	SER
1	D	672	ARG
1	D	678	VAL
1	D	688	PHE
1	D	709	ASN
1	D	714	GLN
1	D	766	HIS
1	D	769	SER
1	D	770	ASN
1	D	780	LEU
1	D	781	ASN
1	D	794	GLN
1	E	67	VAL
1	E	71	PHE
1	E	75	THR
1	E	78	LYS
1	E	88	LYS
1	E	99	GLU
1	E	109	ILE
1	E	112	VAL
1	E	115	LYS
1	E	120	LEU
1	E	122	GLU
1	E	128	MET

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Mol	Chain	Res	Type
1	E	133	GLU
1	E	137	PHE
1	E	140	ARG
1	E	141	PHE
1	E	149	THR
1	E	152	LEU
1	E	156	ILE
1	E	158	ASP
1	E	172	GLU
1	E	179	LEU
1	E	182	ILE
1	E	188	LEU
1	E	190	PRO
1	E	192	PHE
1	E	197	LYS
1	E	201	ASP
1	E	210	PHE
1	E	213	LYS
1	E	219	GLU
1	E	229	PHE
1	E	254	ARG
1	E	255	THR
1	E	284	LYS
1	E	296	LEU
1	E	323	ASN
1	E	324	THR
1	E	349	ASN
1	E	370	LEU
1	E	377	GLN
1	E	385	LEU
1	E	395	GLU
1	E	397	GLU
1	E	400	LYS
1	E	406	ASP
1	E	407	HIS
1	E	410	ILE
1	E	414	LYS
1	E	420	LEU
1	E	427	ASP
1	E	434	LEU
1	E	438	ASN
1	E	451	ASN

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Mol	Chain	Res	Type
1	E	455	TYR
1	E	479	LYS
1	E	480	ASN
1	E	484	VAL
1	E	500	SER
1	E	501	LEU
1	E	515	LYS
1	E	524	GLU
1	E	533	LEU
1	E	545	THR
1	E	625	LEU
1	E	629	ASN
1	E	635	ILE
1	E	639	ASN
1	E	644	GLU
1	E	646	THR
1	E	655	ASN
1	E	665	LYS
1	E	669	SER
1	E	672	ARG
1	E	678	VAL
1	E	688	PHE
1	E	709	ASN
1	E	714	GLN
1	E	766	HIS
1	E	780	LEU
1	E	781	ASN
1	E	794	GLN
1	F	67	VAL
1	F	71	PHE
1	F	75	THR
1	F	78	LYS
1	F	88	LYS
1	F	99	GLU
1	F	109	ILE
1	F	112	VAL
1	F	115	LYS
1	F	120	LEU
1	F	122	GLU
1	F	128	MET
1	F	137	PHE
1	F	140	ARG

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Mol	Chain	Res	Type
1	F	141	PHE
1	F	149	THR
1	F	152	LEU
1	F	156	ILE
1	F	158	ASP
1	F	172	GLU
1	F	179	LEU
1	F	182	ILE
1	F	188	LEU
1	F	190	PRO
1	F	192	PHE
1	F	197	LYS
1	F	201	ASP
1	F	210	PHE
1	F	213	LYS
1	F	219	GLU
1	F	229	PHE
1	F	254	ARG
1	F	255	THR
1	F	284	LYS
1	F	296	LEU
1	F	323	ASN
1	F	324	THR
1	F	349	ASN
1	F	370	LEU
1	F	377	GLN
1	F	385	LEU
1	F	395	GLU
1	F	397	GLU
1	F	400	LYS
1	F	406	ASP
1	F	407	HIS
1	F	410	ILE
1	F	414	LYS
1	F	420	LEU
1	F	427	ASP
1	F	434	LEU
1	F	438	ASN
1	F	451	ASN
1	F	455	TYR
1	F	479	LYS
1	F	480	ASN

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Mol	Chain	Res	Type
1	F	484	VAL
1	F	500	SER
1	F	501	LEU
1	F	515	LYS
1	F	524	GLU
1	F	533	LEU
1	F	545	THR
1	F	625	LEU
1	F	629	ASN
1	F	635	ILE
1	F	639	ASN
1	F	644	GLU
1	F	646	THR
1	F	655	ASN
1	F	665	LYS
1	F	669	SER
1	F	672	ARG
1	F	678	VAL
1	F	688	PHE
1	F	709	ASN
1	F	714	GLN
1	F	766	HIS
1	F	770	ASN
1	F	780	LEU
1	F	781	ASN
1	F	794	GLN
2	O	5	THR
2	O	6	GLU
2	O	13	LYS
2	O	14	GLU
2	O	18	LEU
2	O	30	LYS
2	O	49	GLN
2	O	50	ASP
2	O	54	GLU
2	O	55	VAL
2	O	58	ASP
2	O	65	PHE
2	O	97	ASN
2	O	117	THR
2	O	123	GLN
2	O	140	GLU

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Mol	Chain	Res	Type
2	P	5	THR
2	P	6	GLU
2	P	13	LYS
2	P	14	GLU
2	P	18	LEU
2	P	30	LYS
2	P	49	GLN
2	P	50	ASP
2	P	54	GLU
2	P	55	VAL
2	P	58	ASP
2	P	65	PHE
2	P	97	ASN
2	P	117	THR
2	P	123	GLN
2	P	140	GLU
2	Q	5	THR
2	Q	6	GLU
2	Q	13	LYS
2	Q	14	GLU
2	Q	18	LEU
2	Q	30	LYS
2	Q	49	GLN
2	Q	50	ASP
2	Q	54	GLU
2	Q	55	VAL
2	Q	58	ASP
2	Q	65	PHE
2	Q	97	ASN
2	Q	117	THR
2	Q	123	GLN
2	Q	140	GLU
2	R	5	THR
2	R	6	GLU
2	R	13	LYS
2	R	14	GLU
2	R	18	LEU
2	R	30	LYS
2	R	49	GLN
2	R	50	ASP
2	R	54	GLU
2	R	55	VAL

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Mol	Chain	Res	Type
2	R	58	ASP
2	R	65	PHE
2	R	97	ASN
2	R	117	THR
2	R	123	GLN
2	R	140	GLU
2	S	5	THR
2	S	6	GLU
2	S	13	LYS
2	S	14	GLU
2	S	18	LEU
2	S	30	LYS
2	S	49	GLN
2	S	50	ASP
2	S	54	GLU
2	S	55	VAL
2	S	58	ASP
2	S	65	PHE
2	S	97	ASN
2	S	117	THR
2	S	123	GLN
2	S	140	GLU
2	T	5	THR
2	T	6	GLU
2	T	13	LYS
2	T	14	GLU
2	T	18	LEU
2	T	30	LYS
2	T	49	GLN
2	T	50	ASP
2	T	54	GLU
2	T	55	VAL
2	T	58	ASP
2	T	65	PHE
2	T	97	ASN
2	T	117	THR
2	T	123	GLN
2	T	140	GLU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (198) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	81	GLN
1	A	212	GLN
1	A	323	ASN
1	A	349	ASN
1	A	368	GLN
1	A	377	GLN
1	A	387	ASN
1	A	438	ASN
1	A	480	ASN
1	A	507	GLN
1	A	510	GLN
1	A	518	ASN
1	A	551	ASN
1	A	553	GLN
1	A	576	ASN
1	A	581	GLN
1	A	618	ASN
1	A	629	ASN
1	A	639	ASN
1	A	666	ASN
1	A	709	ASN
1	A	730	ASN
1	A	747	ASN
1	A	750	GLN
1	A	761	GLN
1	A	767	GLN
1	A	770	ASN
1	A	781	ASN
1	A	789	ASN
1	A	794	GLN
1	B	64	ASN
1	B	81	GLN
1	B	212	GLN
1	B	323	ASN
1	B	349	ASN
1	B	368	GLN
1	B	377	GLN
1	B	387	ASN
1	B	438	ASN
1	B	480	ASN
1	B	507	GLN
1	B	510	GLN
1	B	518	ASN

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Mol	Chain	Res	Type
1	B	551	ASN
1	B	553	GLN
1	B	576	ASN
1	B	581	GLN
1	B	618	ASN
1	B	629	ASN
1	B	639	ASN
1	B	666	ASN
1	B	709	ASN
1	B	730	ASN
1	B	747	ASN
1	B	750	GLN
1	B	761	GLN
1	B	767	GLN
1	B	770	ASN
1	B	781	ASN
1	B	789	ASN
1	B	794	GLN
1	C	81	GLN
1	C	212	GLN
1	C	323	ASN
1	C	349	ASN
1	C	368	GLN
1	C	377	GLN
1	C	387	ASN
1	C	438	ASN
1	C	480	ASN
1	C	507	GLN
1	C	510	GLN
1	C	518	ASN
1	C	551	ASN
1	C	553	GLN
1	C	576	ASN
1	C	581	GLN
1	C	618	ASN
1	C	629	ASN
1	C	639	ASN
1	C	666	ASN
1	C	709	ASN
1	C	730	ASN
1	C	747	ASN
1	C	750	GLN

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Mol	Chain	Res	Type
1	C	761	GLN
1	C	770	ASN
1	C	781	ASN
1	C	789	ASN
1	C	794	GLN
1	D	81	GLN
1	D	212	GLN
1	D	323	ASN
1	D	349	ASN
1	D	368	GLN
1	D	377	GLN
1	D	387	ASN
1	D	438	ASN
1	D	480	ASN
1	D	507	GLN
1	D	510	GLN
1	D	518	ASN
1	D	551	ASN
1	D	553	GLN
1	D	576	ASN
1	D	581	GLN
1	D	618	ASN
1	D	629	ASN
1	D	639	ASN
1	D	666	ASN
1	D	709	ASN
1	D	730	ASN
1	D	747	ASN
1	D	750	GLN
1	D	761	GLN
1	D	767	GLN
1	D	770	ASN
1	D	781	ASN
1	D	789	ASN
1	D	794	GLN
1	E	81	GLN
1	E	212	GLN
1	E	323	ASN
1	E	349	ASN
1	E	368	GLN
1	E	377	GLN
1	E	387	ASN

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Mol	Chain	Res	Type
1	E	438	ASN
1	E	480	ASN
1	E	507	GLN
1	E	510	GLN
1	E	518	ASN
1	E	551	ASN
1	E	553	GLN
1	E	576	ASN
1	E	581	GLN
1	E	618	ASN
1	E	629	ASN
1	E	639	ASN
1	E	666	ASN
1	E	709	ASN
1	E	730	ASN
1	E	747	ASN
1	E	750	GLN
1	E	761	GLN
1	E	767	GLN
1	E	770	ASN
1	E	781	ASN
1	E	789	ASN
1	E	794	GLN
1	F	81	GLN
1	F	212	GLN
1	F	323	ASN
1	F	349	ASN
1	F	368	GLN
1	F	377	GLN
1	F	387	ASN
1	F	438	ASN
1	F	480	ASN
1	F	507	GLN
1	F	510	GLN
1	F	518	ASN
1	F	551	ASN
1	F	553	GLN
1	F	576	ASN
1	F	581	GLN
1	F	618	ASN
1	F	629	ASN
1	F	639	ASN

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Mol	Chain	Res	Type
1	F	666	ASN
1	F	709	ASN
1	F	730	ASN
1	F	747	ASN
1	F	750	GLN
1	F	761	GLN
1	F	767	GLN
1	F	770	ASN
1	F	781	ASN
1	F	789	ASN
1	F	794	GLN
2	O	49	GLN
2	O	111	ASN
2	O	143	GLN
2	P	49	GLN
2	P	111	ASN
2	P	143	GLN
2	Q	49	GLN
2	Q	111	ASN
2	Q	143	GLN
2	R	49	GLN
2	R	111	ASN
2	R	143	GLN
2	S	49	GLN
2	S	111	ASN
2	S	143	GLN
2	T	49	GLN
2	T	111	ASN
2	T	143	GLN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

5.6 Ligand geometry

Of 24 ligands modelled in this entry, 24 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q< 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2		OWAB(Å²)	Q<0.9	
1	A	735/777 (94%)	0.56	58 (7%)	12	12	33, 86, 135, 148	0
1	B	735/777 (94%)	0.57	54 (7%)	15	14	33, 87, 135, 148	0
1	C	735/777 (94%)	0.53	62 (8%)	11	11	34, 87, 136, 148	0
1	D	735/777 (94%)	0.55	60 (8%)	11	11	32, 87, 135, 148	0
1	E	735/777 (94%)	0.57	61 (8%)	11	11	34, 87, 136, 148	0
1	F	735/777 (94%)	0.51	56 (7%)	13	12	34, 87, 135, 148	0
2	O	146/149 (97%)	0.25	4 (2%)	54	51	37, 72, 130, 141	0
2	P	146/149 (97%)	0.29	5 (3%)	45	42	36, 72, 130, 141	0
2	Q	146/149 (97%)	0.31	5 (3%)	45	42	36, 72, 130, 141	0
2	R	146/149 (97%)	0.29	2 (1%)	75	74	36, 72, 130, 141	0
2	S	146/149 (97%)	0.30	4 (2%)	54	51	36, 72, 130, 141	0
2	T	146/149 (97%)	0.24	0	100	100	36, 72, 130, 140	0
All	All	5286/5556 (95%)	0.50	371 (7%)	16	15	32, 84, 135, 148	0

All (371) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	212	GLN	8.4
1	B	212	GLN	7.6
1	B	229	PHE	7.3
1	C	225	ILE	7.3
1	C	229	PHE	7.2
1	F	237	PHE	7.0
1	A	225	ILE	6.9
1	E	171	TYR	6.7
1	D	171	TYR	6.6
1	A	171	TYR	6.4
1	D	433	TYR	6.4

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Mol	Chain	Res	Type	RSRZ
1	F	171	TYR	6.2
1	C	237	PHE	6.2
1	B	225	ILE	6.1
1	D	227	ILE	6.0
1	D	225	ILE	5.8
1	B	230	ILE	5.7
1	B	162	ASN	5.6
1	A	213	LYS	5.6
1	D	131	ARG	5.4
1	C	163	SER	5.4
1	D	212	GLN	5.3
1	C	171	TYR	5.3
1	D	237	PHE	5.3
1	D	206	SER	5.2
1	A	227	ILE	5.1
2	P	78	ASP	5.0
1	E	222	ASN	4.9
1	F	229	PHE	4.9
1	B	171	TYR	4.9
1	E	226	ASP	4.9
1	B	204	ASP	4.8
1	C	162	ASN	4.8
1	A	206	SER	4.8
1	B	237	PHE	4.8
1	A	125	LYS	4.7
1	B	202	ASP	4.7
1	E	229	PHE	4.7
1	E	212	GLN	4.6
1	C	131	ARG	4.6
2	Q	78	ASP	4.6
1	F	212	GLN	4.6
1	E	185	ASP	4.6
1	E	72	THR	4.6
1	B	218	LEU	4.5
1	B	163	SER	4.5
1	A	214	PHE	4.5
1	D	213	LYS	4.5
1	A	192	PHE	4.5
1	E	93	VAL	4.5
1	C	72	THR	4.4
1	E	225	ILE	4.4
1	A	156	ILE	4.4

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Mol	Chain	Res	Type	RSRZ
1	C	421	LYS	4.4
1	E	140	ARG	4.3
1	D	140	ARG	4.3
1	C	203	SER	4.3
1	A	162	ASN	4.3
1	F	192	PHE	4.3
1	C	214	PHE	4.2
1	B	213	LYS	4.2
1	B	201	ASP	4.2
1	F	421	LYS	4.2
1	F	125	LYS	4.1
1	D	72	THR	4.1
1	A	228	ASN	4.1
1	C	125	LYS	4.0
2	O	45	GLU	4.0
1	E	237	PHE	3.9
1	E	257	LEU	3.9
1	B	468	LYS	3.9
1	A	237	PHE	3.9
1	A	264	MET	3.9
1	F	435	LEU	3.9
1	A	230	ILE	3.9
1	F	257	LEU	3.8
1	C	709	ASN	3.8
1	E	286	GLU	3.8
1	B	192	PHE	3.8
1	A	229	PHE	3.8
1	C	118	GLN	3.8
1	E	435	LEU	3.8
1	F	126	ASN	3.7
1	B	72	THR	3.7
1	F	113	GLU	3.7
1	B	161	ILE	3.7
1	E	786	GLU	3.6
2	R	52	ILE	3.6
1	B	187	SER	3.6
1	D	126	ASN	3.6
1	B	185	ASP	3.6
1	F	372	LYS	3.5
1	E	446	ILE	3.5
1	B	786	GLU	3.5
2	Q	52	ILE	3.5

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Mol	Chain	Res	Type	RSRZ
1	D	230	ILE	3.5
1	B	214	PHE	3.5
1	E	260	TYR	3.5
1	D	113	GLU	3.5
1	B	165	GLN	3.5
1	A	260	TYR	3.4
1	C	201	ASP	3.4
1	F	160	ALA	3.4
1	D	110	ASP	3.4
1	E	187	SER	3.4
1	E	420	LEU	3.4
1	F	140	ARG	3.4
1	F	786	GLU	3.3
1	E	247	TYR	3.3
1	F	260	TYR	3.3
1	C	202	ASP	3.3
1	C	126	ASN	3.3
1	F	437	SER	3.3
1	A	257	LEU	3.3
1	A	76	LEU	3.3
1	A	131	ARG	3.2
1	C	187	SER	3.2
1	C	446	ILE	3.2
1	D	264	MET	3.2
1	D	111	LEU	3.2
1	E	110	ASP	3.2
2	P	52	ILE	3.2
1	A	433	TYR	3.2
1	D	424	LYS	3.2
1	A	437	SER	3.2
1	F	247	TYR	3.2
1	E	268	MET	3.1
1	A	419	ILE	3.1
1	C	204	ASP	3.1
1	E	191	GLU	3.1
1	D	192	PHE	3.1
1	C	192	PHE	3.1
1	A	106	PHE	3.1
1	F	262	PRO	3.0
1	E	201	ASP	3.0
1	C	230	ILE	3.0
1	B	244	ALA	3.0

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Mol	Chain	Res	Type	RSRZ
1	D	229	PHE	3.0
1	F	70	GLU	3.0
2	Q	79	THR	3.0
1	C	260	TYR	3.0
1	F	446	ILE	3.0
1	A	435	LEU	3.0
1	D	405	LEU	3.0
1	F	264	MET	3.0
1	F	131	ARG	3.0
1	D	214	PHE	3.0
1	C	268	MET	3.0
1	D	419	ILE	3.0
1	A	244	ALA	2.9
1	D	619	ILE	2.9
1	E	264	MET	2.9
1	E	192	PHE	2.9
1	C	218	LEU	2.9
1	F	214	PHE	2.9
1	F	162	ASN	2.9
1	A	763	LEU	2.9
2	P	63	ILE	2.9
1	E	133	GLU	2.9
1	A	768	LYS	2.9
2	P	77	LYS	2.9
1	E	434	LEU	2.9
1	B	738	SER	2.8
1	B	398	ILE	2.8
1	D	254	ARG	2.8
1	A	350	VAL	2.8
1	A	126	ASN	2.8
1	A	453	VAL	2.8
1	E	221	ASN	2.8
1	C	122	GLU	2.8
1	D	228	ASN	2.8
1	A	204	ASP	2.8
1	B	180	ASP	2.8
1	F	218	LEU	2.8
1	D	185	ASP	2.8
1	B	191	GLU	2.8
1	E	282	SER	2.8
1	D	442	TYR	2.8
1	F	156	ILE	2.7

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Mol	Chain	Res	Type	RSRZ
1	C	73	ASN	2.7
1	C	181	ILE	2.7
1	C	253	HIS	2.7
1	F	251	PRO	2.7
1	C	213	LYS	2.7
1	A	202	ASP	2.7
1	D	787	THR	2.7
1	C	186	LYS	2.7
1	E	372	LYS	2.7
1	B	260	TYR	2.7
1	F	373	LYS	2.7
1	A	251	PRO	2.7
1	E	619	ILE	2.7
1	B	435	LEU	2.7
1	B	181	ILE	2.7
1	A	468	LYS	2.6
1	B	109	ILE	2.6
1	E	254	ARG	2.6
1	E	163	SER	2.6
1	E	206	SER	2.6
1	E	283	LEU	2.6
1	D	162	ASN	2.6
1	E	239	HIS	2.6
1	B	118	GLN	2.6
1	B	257	LEU	2.6
1	D	156	ILE	2.6
1	E	126	ASN	2.6
1	F	225	ILE	2.6
1	F	465	LEU	2.6
1	A	719	LYS	2.6
1	E	773	PHE	2.6
1	D	763	LEU	2.6
1	D	116	GLU	2.6
1	B	560	LEU	2.6
1	E	398	ILE	2.6
1	B	510	GLN	2.6
1	C	212	GLN	2.6
1	E	168	GLU	2.6
1	F	202	ASP	2.6
1	A	218	LEU	2.6
1	B	434	LEU	2.6
1	E	113	GLU	2.6

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Mol	Chain	Res	Type	RSRZ
1	F	619	ILE	2.6
1	B	793	PHE	2.5
1	B	226	ASP	2.5
1	A	619	ILE	2.5
1	C	145	LYS	2.5
1	F	285	LYS	2.5
1	C	435	LEU	2.5
1	F	773	PHE	2.5
1	A	786	GLU	2.5
1	A	363	TYR	2.5
1	A	184	LYS	2.5
1	B	405	LEU	2.5
1	D	245	PHE	2.5
1	D	163	SER	2.5
1	D	260	TYR	2.5
1	F	163	SER	2.5
1	A	113	GLU	2.5
1	F	481	VAL	2.5
1	C	146	LYS	2.5
1	D	523	LEU	2.5
1	A	127	SER	2.5
1	C	170	TYR	2.5
1	D	446	ILE	2.5
1	D	435	LEU	2.5
2	P	112	LEU	2.5
1	C	289	GLU	2.5
1	E	181	ILE	2.5
1	E	186	LYS	2.4
2	Q	71	MET	2.4
1	D	420	LEU	2.4
1	F	782	PHE	2.4
1	C	595	ILE	2.4
1	C	796	ILE	2.4
1	C	110	ASP	2.4
1	C	504	ILE	2.4
1	C	113	GLU	2.4
1	B	602	PHE	2.4
1	F	227	ILE	2.4
1	C	185	ASP	2.4
1	D	439	ASN	2.4
1	F	254	ARG	2.4
1	A	105	TYR	2.4

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Mol	Chain	Res	Type	RSRZ
1	A	720	ILE	2.4
1	C	156	ILE	2.4
1	C	226	ASP	2.3
1	E	70	GLU	2.3
1	F	226	ASP	2.3
1	B	771	ILE	2.3
1	C	247	TYR	2.3
1	E	560	LEU	2.3
1	D	221	ASN	2.3
1	B	701	LEU	2.3
1	A	114	HIS	2.3
1	F	289	GLU	2.3
1	D	66	LEU	2.3
2	R	65	PHE	2.3
1	C	96	ILE	2.3
1	F	122	GLU	2.3
2	O	108	VAL	2.3
1	D	164	GLU	2.3
1	F	175	LYS	2.3
1	F	268	MET	2.3
1	D	244	ALA	2.3
1	D	168	GLU	2.3
1	D	127	SER	2.3
1	C	433	TYR	2.3
1	B	148	GLU	2.2
1	E	116	GLU	2.2
1	D	720	ILE	2.2
2	O	52	ILE	2.2
2	S	52	ILE	2.2
1	E	111	LEU	2.2
1	F	777	TYR	2.2
1	A	107	THR	2.2
1	C	712	PHE	2.2
1	F	72	THR	2.2
1	F	779	GLN	2.2
1	A	152	LEU	2.2
1	E	405	LEU	2.2
1	B	222	ASN	2.2
1	D	76	LEU	2.2
1	C	603	ILE	2.2
1	A	776	LEU	2.2
1	B	111	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
1	D	283	LEU	2.2
1	E	421	LYS	2.2
1	B	373	LYS	2.2
1	E	290	LYS	2.2
1	E	442	TYR	2.2
1	A	405	LEU	2.2
1	D	141	PHE	2.2
1	E	790	PHE	2.2
1	E	764	LEU	2.2
2	S	75	LYS	2.2
1	B	206	SER	2.2
1	D	624	TYR	2.2
1	F	276	PHE	2.2
1	A	787	THR	2.2
1	F	230	ILE	2.2
1	A	560	LEU	2.2
1	D	247	TYR	2.1
1	A	557	LEU	2.1
1	E	94	LEU	2.1
1	C	457	THR	2.1
2	Q	51	MET	2.1
1	C	469	PHE	2.1
1	B	93	VAL	2.1
1	C	562	GLU	2.1
1	B	203	SER	2.1
1	F	444	PHE	2.1
1	A	374	HIS	2.1
1	C	779	GLN	2.1
1	D	709	ASN	2.1
1	B	268	MET	2.1
1	C	373	LYS	2.1
1	E	76	LEU	2.1
1	B	170	TYR	2.1
1	E	469	PHE	2.1
1	D	293	ILE	2.1
1	D	453	VAL	2.1
1	F	489	THR	2.1
1	E	164	GLU	2.1
1	C	437	SER	2.1
1	F	184	LYS	2.1
2	S	27	ILE	2.1
1	C	116	GLU	2.1

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Mol	Chain	Res	Type	RSRZ
1	E	213	LYS	2.1
1	F	76	LEU	2.1
1	F	405	LEU	2.1
1	A	75	THR	2.1
1	C	411	GLU	2.1
1	B	756	ILE	2.1
1	A	140	ARG	2.0
1	A	203	SER	2.0
1	C	115	LYS	2.0
1	F	331	VAL	2.0
1	A	739	LYS	2.0
1	C	426	ILE	2.0
1	E	66	LEU	2.0
1	E	373	LYS	2.0
1	B	210	PHE	2.0
1	D	790	PHE	2.0
2	O	89	PHE	2.0
2	S	146	THR	2.0
1	B	282	SER	2.0
1	C	420	LEU	2.0
1	D	118	GLN	2.0
1	D	636	ALA	2.0
1	D	793	PHE	2.0
1	C	560	LEU	2.0

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

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

6.3 Carbohydrates [i](#)

There are no carbohydrates in this entry.

6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
4	CA	P	804	1/1	0.86	0.24	52,52,52,52	0
3	MG	B	902	1/1	0.89	0.20	28,28,28,28	0
4	CA	Q	705	1/1	0.94	0.11	66,66,66,66	0
4	CA	Q	806	1/1	0.94	0.21	50,50,50,50	0
4	CA	P	703	1/1	0.95	0.11	66,66,66,66	0
4	CA	R	808	1/1	0.95	0.20	51,51,51,51	0
4	CA	S	709	1/1	0.95	0.08	65,65,65,65	0
4	CA	T	711	1/1	0.96	0.13	65,65,65,65	0
4	CA	S	809	1/1	0.96	0.17	37,37,37,37	0
4	CA	R	707	1/1	0.97	0.11	64,64,64,64	0
4	CA	O	701	1/1	0.97	0.14	66,66,66,66	0
4	CA	O	802	1/1	0.97	0.19	47,47,47,47	0
4	CA	S	810	1/1	0.97	0.24	52,52,52,52	0
4	CA	Q	805	1/1	0.97	0.13	42,42,42,42	0
4	CA	T	812	1/1	0.97	0.18	51,51,51,51	0
3	MG	D	904	1/1	0.97	0.29	29,29,29,29	0
3	MG	F	906	1/1	0.98	0.25	25,25,25,25	0
3	MG	E	905	1/1	0.98	0.19	23,23,23,23	0
3	MG	C	903	1/1	0.98	0.21	27,27,27,27	0
4	CA	T	811	1/1	0.98	0.11	40,40,40,40	0
3	MG	A	901	1/1	0.99	0.23	26,26,26,26	0
4	CA	R	807	1/1	0.99	0.17	40,40,40,40	0
4	CA	P	803	1/1	0.99	0.19	39,39,39,39	0
4	CA	O	801	1/1	0.99	0.16	39,39,39,39	0

6.5 Other polymers

There are no such residues in this entry.