



Full wwPDB X-ray Structure Validation Report ⓘ

May 25, 2020 – 10:36 am BST

PDB ID : 1XFV
Title : Crystal structure of anthrax edema factor (EF) in complex with calmodulin and 3' deoxy-ATP
Authors : Shen, Q.; Zhukovskaya, N.L.; Guo, Q.; Florian, J.; Tang, W.J.
Deposited on : 2004-09-15
Resolution : 3.35 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
Mogul : 1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix) : 1.13
EDS : 2.11
buster-report : 1.1.7 (2018)
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

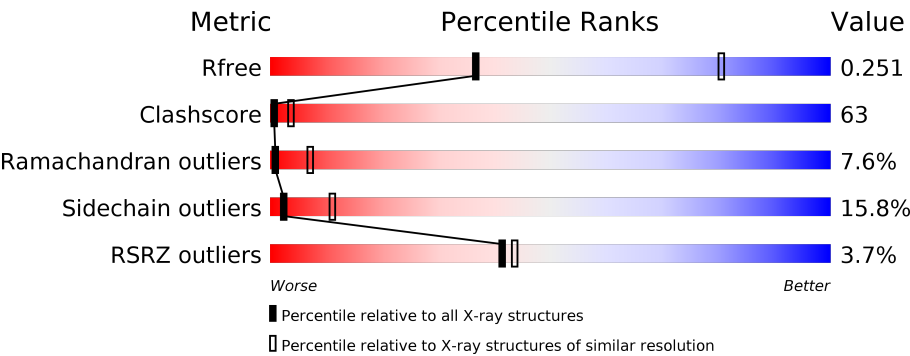
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.35 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))
R_{free}	130704	1558 (3.42-3.30)
Clashscore	141614	1627 (3.42-3.30)
Ramachandran outliers	138981	1599 (3.42-3.30)
Sidechain outliers	138945	1598 (3.42-3.30)
RSRZ outliers	127900	1507 (3.42-3.30)

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>5%</div><div><div></div><div></div><div></div><div></div></div><div>23%55%15%• 5%</div></div>
1	B	777	<div><div>3%</div><div><div></div><div></div><div></div><div></div></div><div>23%55%15%• 5%</div></div>
1	C	777	<div><div>3%</div><div><div></div><div></div><div></div><div></div></div><div>23%56%15%• 5%</div></div>
1	D	777	<div><div>3%</div><div><div></div><div></div><div></div><div></div></div><div>23%56%15%• 5%</div></div>
1	E	777	<div><div>4%</div><div><div></div><div></div><div></div><div></div></div><div>23%55%15%• 5%</div></div>
1	F	777	<div><div>5%</div><div><div></div><div></div><div></div><div></div></div><div>24%55%15%• 5%</div></div>

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Mol	Chain	Length	Quality of chain
2	O	149	<div><div><div>%</div><div><div></div><div>24%</div><div>61%</div><div>13%</div></div><div></div></div></div>
2	P	149	<div><div><div>%</div><div><div></div><div>22%</div><div>64%</div><div>12%</div></div><div></div></div></div>
2	Q	149	<div><div><div>%</div><div><div></div><div>23%</div><div>62%</div><div>13%</div></div><div></div></div></div>
2	R	149	<div><div><div>%</div><div><div></div><div>21%</div><div>63%</div><div>13%</div></div><div></div></div></div>
2	S	149	<div><div><div>3%</div><div><div></div><div>22%</div><div>63%</div><div>13%</div></div><div></div></div></div>
2	T	149	<div><div><div>%</div><div><div></div><div>23%</div><div>62%</div><div>13%</div></div><div></div></div></div>

2 Entry composition [i](#)

There are 6 unique types of molecules in this entry. The entry contains 43044 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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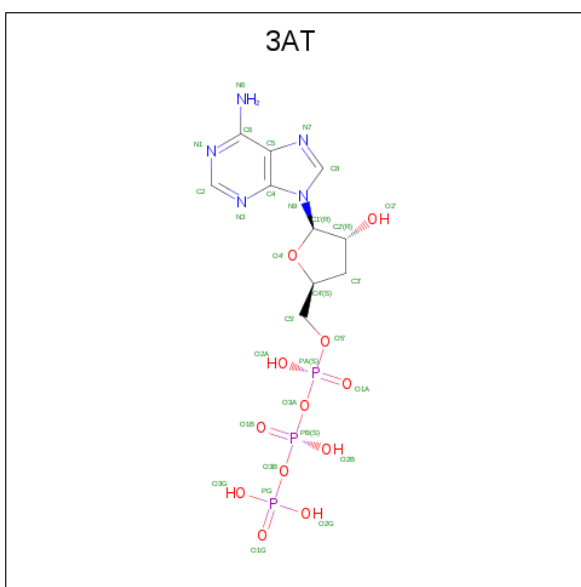
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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	P	146	Total	C	N	O	S	0	0	0
			1146	702	186	249	9			
2	Q	146	Total	C	N	O	S	0	0	0
			1146	702	186	249	9			
2	R	146	Total	C	N	O	S	0	0	0
			1146	702	186	249	9			
2	S	146	Total	C	N	O	S	0	0	0
			1146	702	186	249	9			
2	T	146	Total	C	N	O	S	0	0	0
			1146	702	186	249	9			

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	D	2	Total	Mg	0	0
			2	2		
3	E	2	Total	Mg	0	0
			2	2		
3	B	2	Total	Mg	0	0
			2	2		
3	C	2	Total	Mg	0	0
			2	2		
3	A	2	Total	Mg	0	0
			2	2		
3	F	2	Total	Mg	0	0
			2	2		

- Molecule 4 is 3'-DEOXYADENOSINE-5'-TRIPHOSPHATE (three-letter code: 3AT) (formula: C₁₀H₁₆N₅O₁₂P₃).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
4	A	1	Total 30	C 10	N 5	O 12	P 3	0	0
4	B	1	Total 30	C 10	N 5	O 12	P 3	0	0
4	C	1	Total 30	C 10	N 5	O 12	P 3	0	0
4	D	1	Total 30	C 10	N 5	O 12	P 3	0	0
4	E	1	Total 30	C 10	N 5	O 12	P 3	0	0
4	F	1	Total 30	C 10	N 5	O 12	P 3	0	0

- Molecule 5 is CALCIUM ION (three-letter code: CA) (formula: Ca).

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

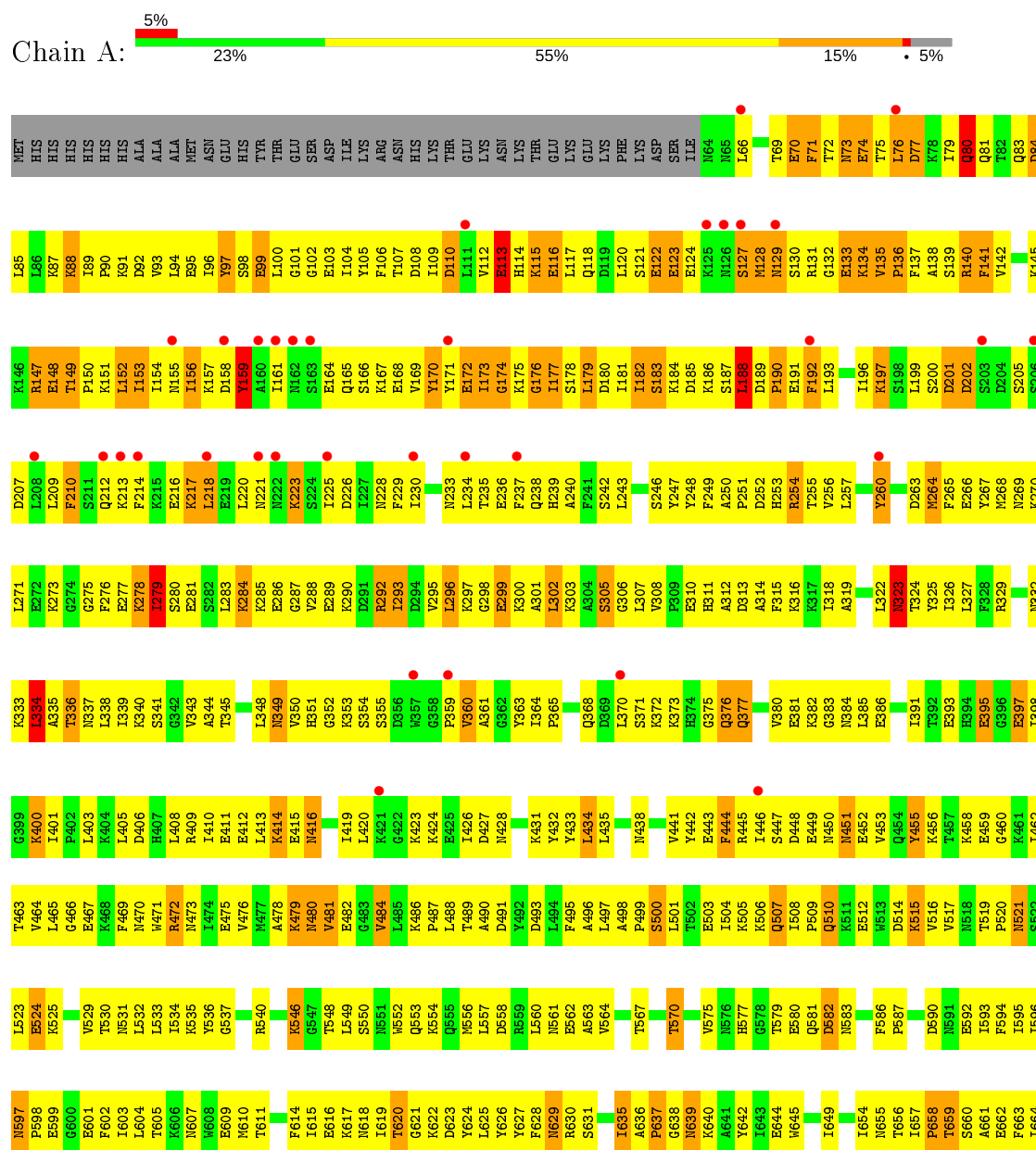
- Molecule 6 is water.

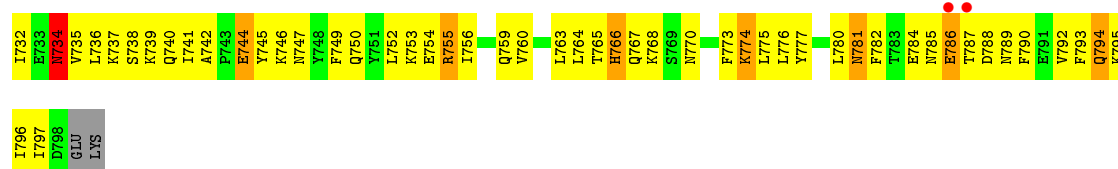
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
6	A	1	Total	O	0	0
			1	1		
6	B	1	Total	O	0	0
			1	1		
6	C	1	Total	O	0	0
			1	1		
6	D	1	Total	O	0	0
			1	1		
6	E	1	Total	O	0	0
			1	1		
6	F	1	Total	O	0	0
			1	1		

3 Residue-property plots

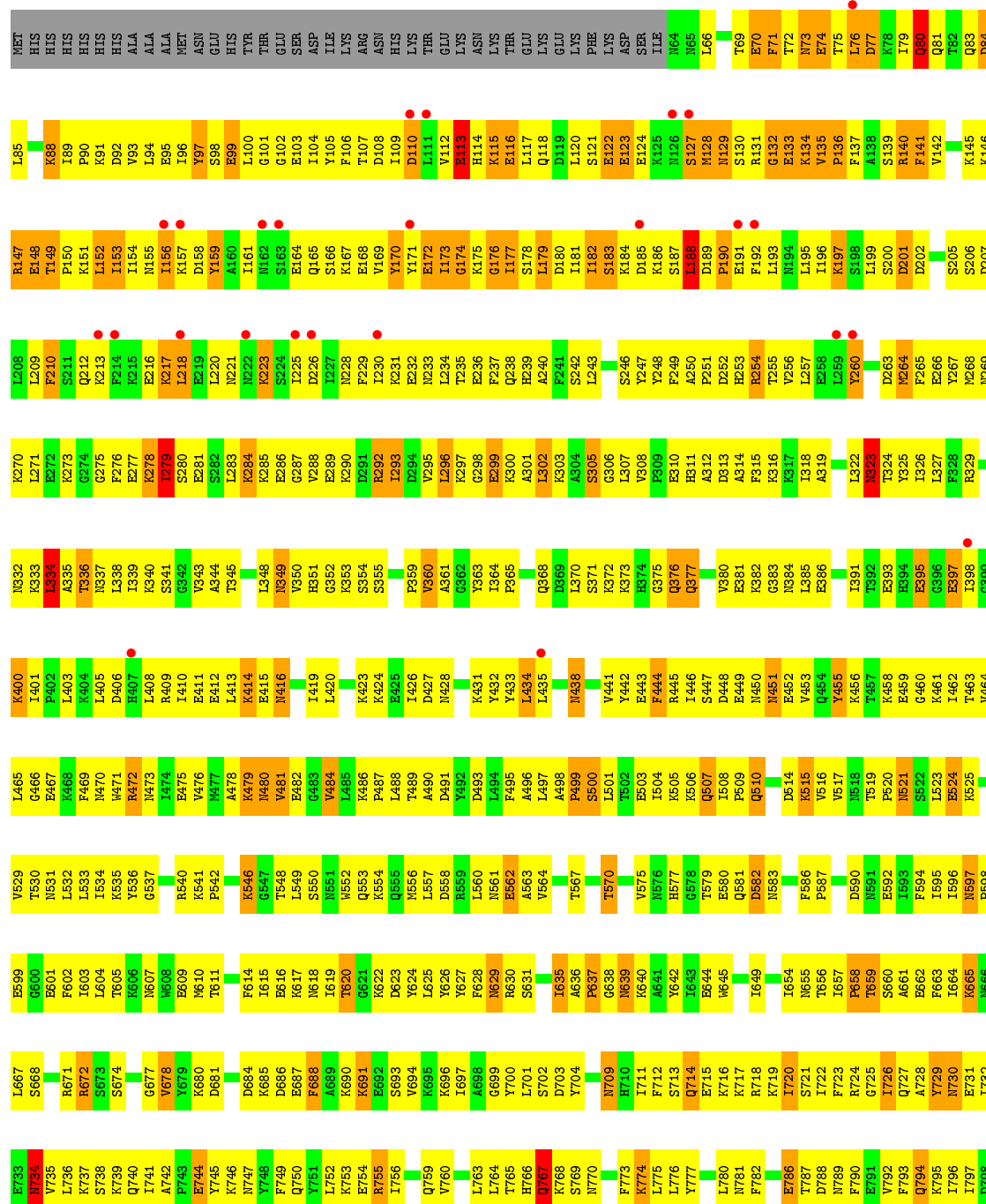
These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are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



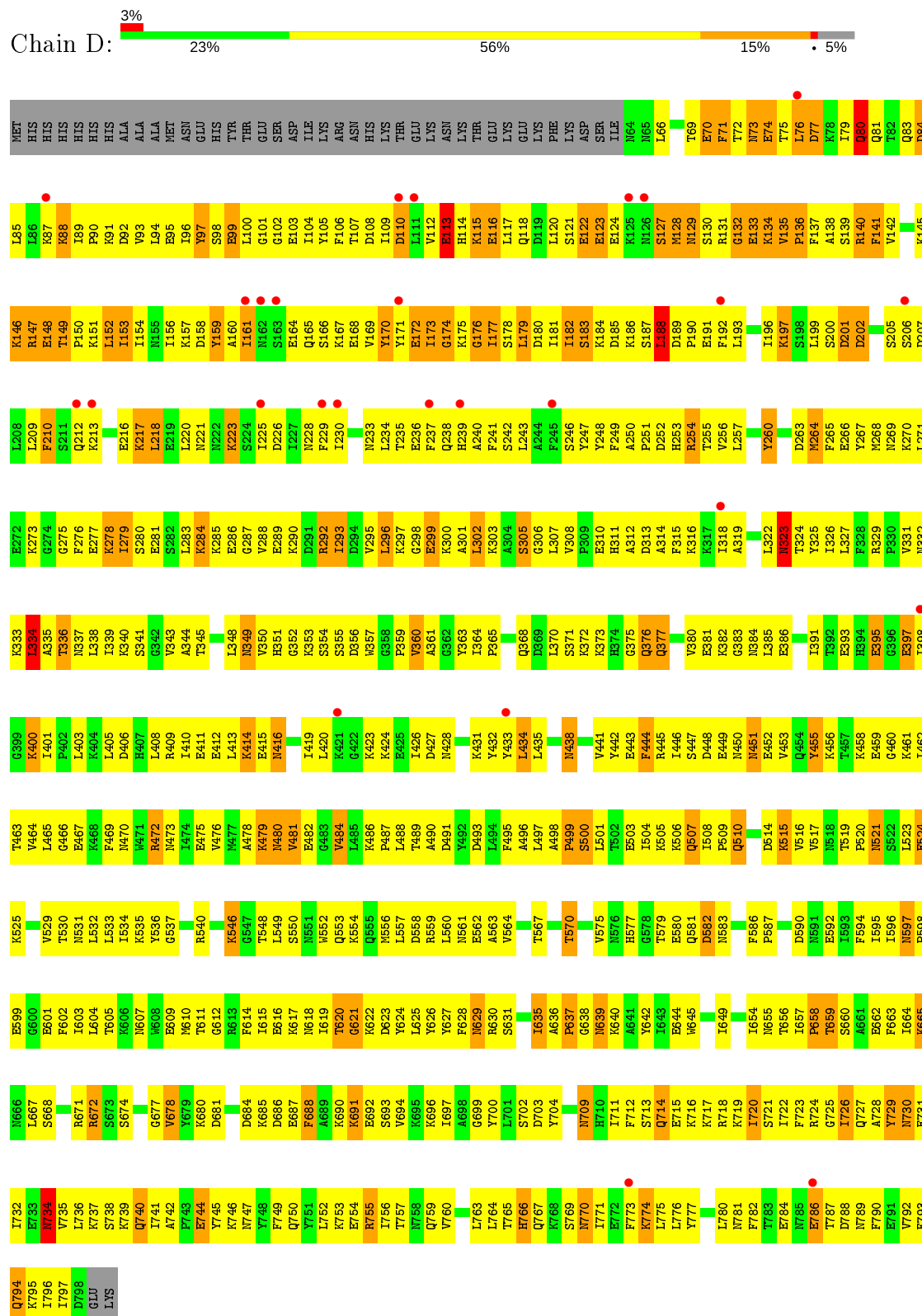


• Molecule 1: Calmodulin-sensitive adenylate cyclase

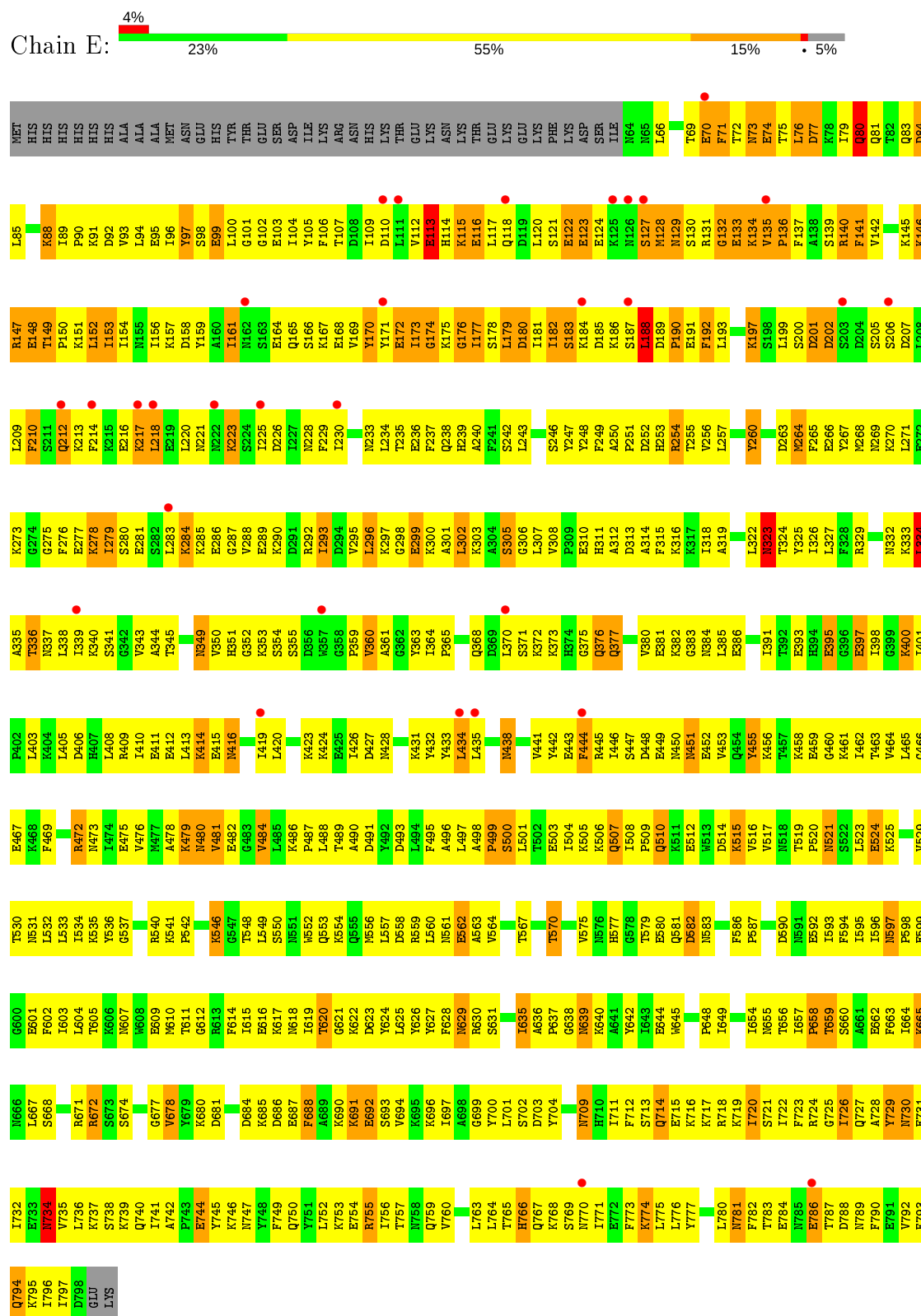


GLU
LYS

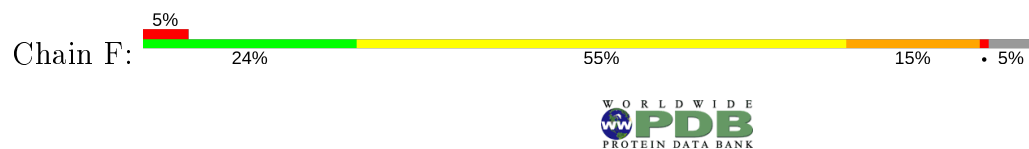
- Molecule 1: Calmodulin-sensitive adenylate cyclase

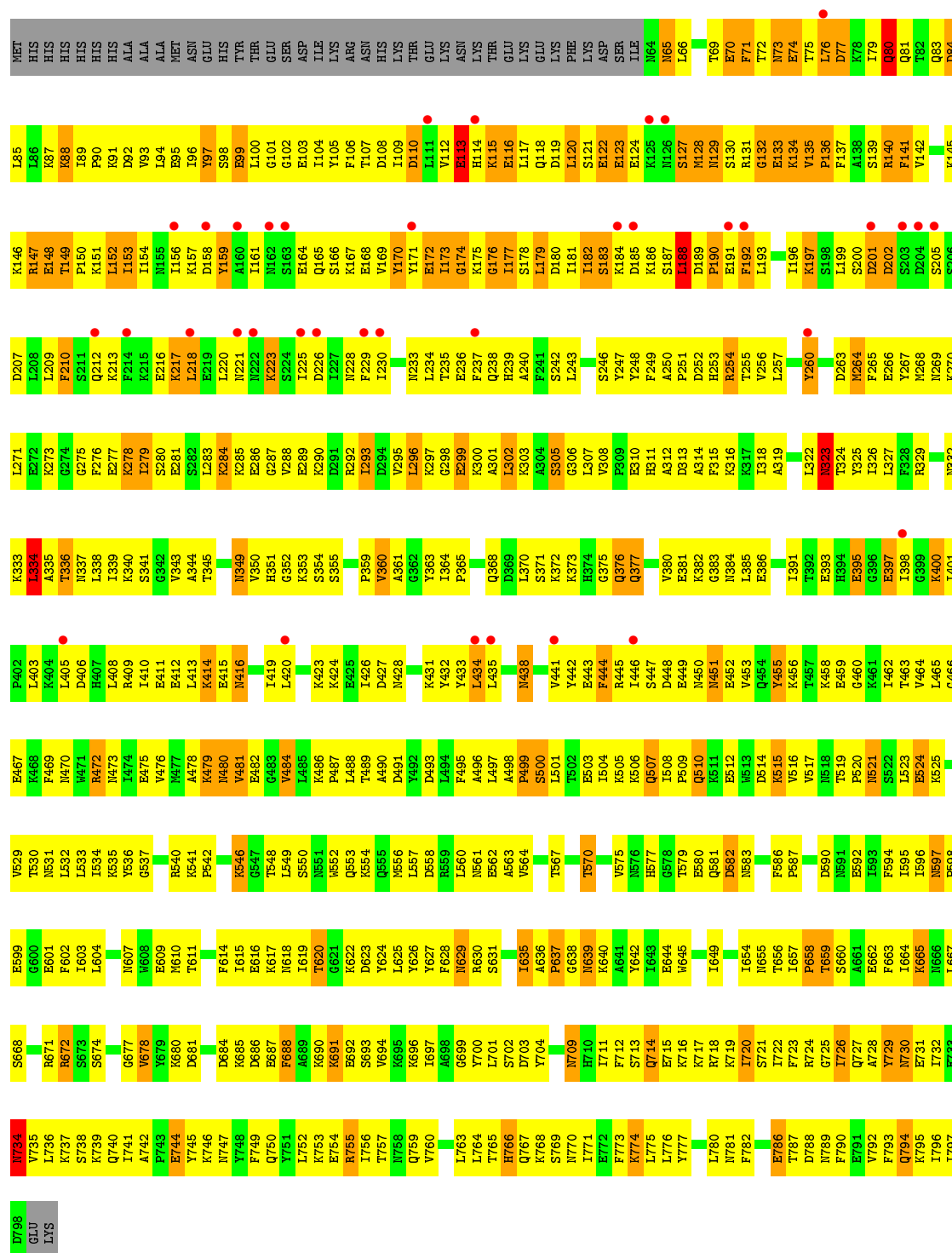


- Molecule 1: Calmodulin-sensitive adenylate cyclase



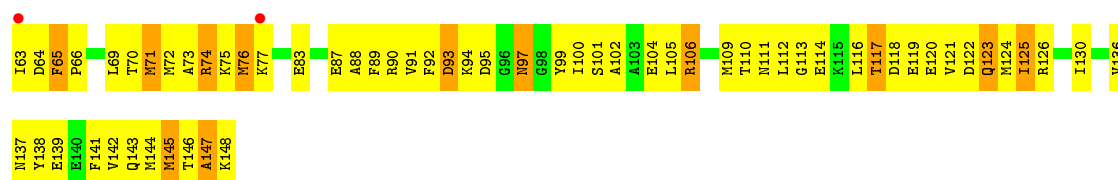
- Molecule 1: Calmodulin-sensitive adenylate cyclase



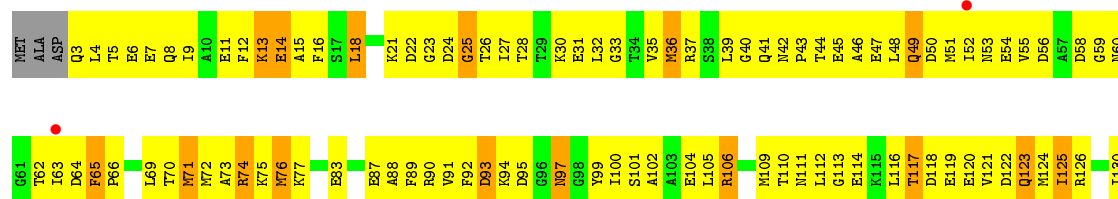


- Molecule 2: Calmodulin 2

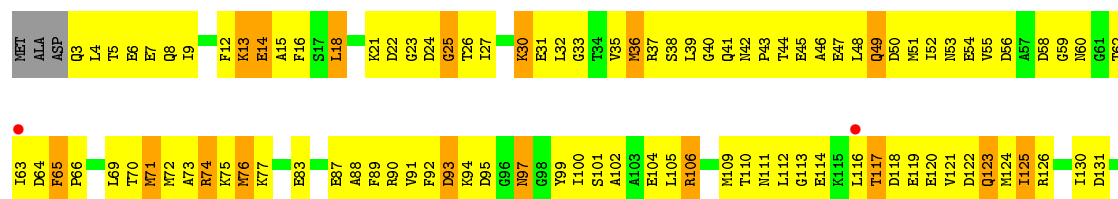




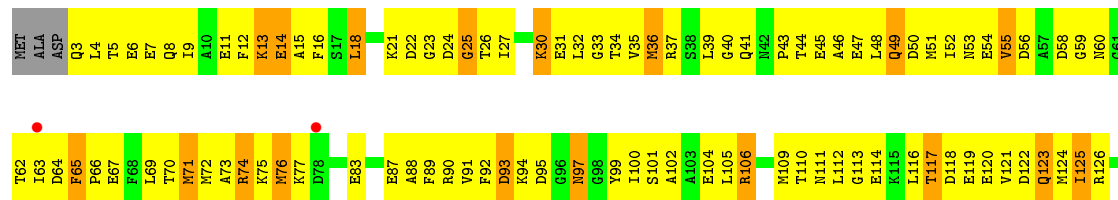
• Molecule 2: Calmodulin 2



• Molecule 2: Calmodulin 2

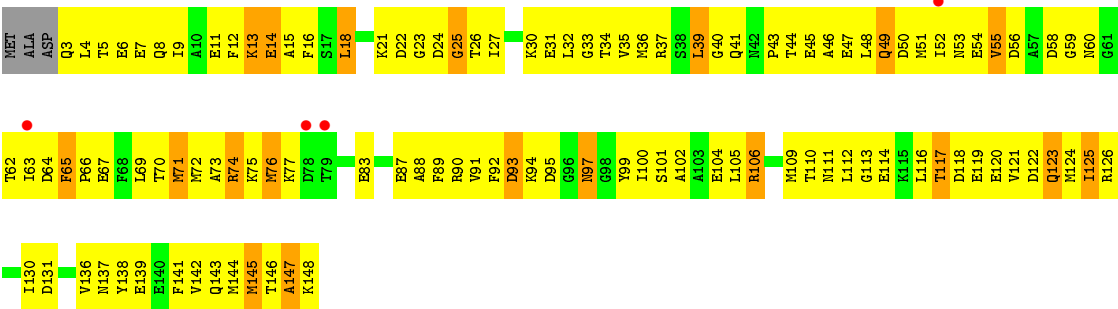


• Molecule 2: Calmodulin 2

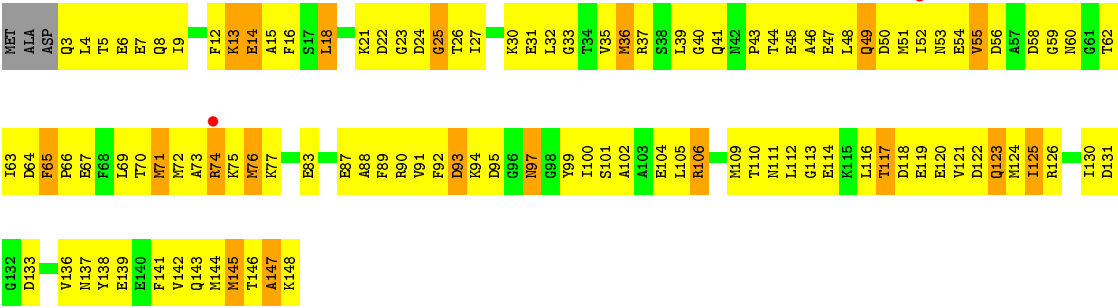


• Molecule 2: Calmodulin 2





• 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	184.60Å 319.29Å 142.05Å 90.00° 90.22° 90.00°	Depositor
Resolution (Å)	29.57 – 3.35 35.51 – 3.35	Depositor EDS
% Data completeness (in resolution range)	92.6 (29.57-3.35) 91.6 (35.51-3.35)	Depositor EDS
R_{merge}	0.08	Depositor
R_{sym}	0.06	Depositor
$\langle I/\sigma(I) \rangle$ ¹	2.04 (at 3.32Å)	Xtriage
Refinement program	CNS 1.1	Depositor
R, R_{free}	0.263 , 0.282 0.234 , 0.251	Depositor DCC
R_{free} test set	5790 reflections (5.04%)	wwPDB-VP
Wilson B-factor (Å ²)	97.5	Xtriage
Anisotropy	0.117	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.30 , 56.3	EDS
L-test for twinning ²	$\langle L \rangle = 0.48$, $\langle L^2 \rangle = 0.32$	Xtriage
Estimated twinning fraction	0.458 for -1/2*h+1/2*k,3/2*h+1/2*k,-l 0.458 for -1/2*h-1/2*k,-3/2*h+1/2*k,-l 0.440 for 1/2*h+1/2*k,3/2*h-1/2*k,-l 0.447 for 1/2*h-1/2*k,-3/2*h-1/2*k,-l 0.439 for -h,-k,l	Xtriage
F_o, F_c correlation	0.90	EDS
Total number of atoms	43044	wwPDB-VP
Average B, all atoms (Å ²)	81.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.41% 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 [i](#)

5.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: CA, MG, 3AT

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	0.53	0/6104	0.82	13/8208 (0.2%)
1	B	0.54	0/6104	0.83	13/8208 (0.2%)
1	C	0.56	1/6104 (0.0%)	0.89	22/8208 (0.3%)
1	D	0.56	3/6104 (0.0%)	0.85	15/8208 (0.2%)
1	E	0.56	2/6104 (0.0%)	0.85	16/8208 (0.2%)
1	F	0.54	0/6104	0.84	12/8208 (0.1%)
2	O	0.53	0/1158	0.76	0/1553
2	P	0.54	0/1158	0.76	0/1553
2	Q	0.55	0/1158	0.75	0/1553
2	R	0.55	0/1158	0.76	0/1553
2	S	0.56	0/1158	0.76	0/1553
2	T	0.56	0/1158	0.76	0/1553
All	All	0.55	6/43572 (0.0%)	0.83	91/58566 (0.2%)

All (6) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	D	740	GLN	C-N	-5.88	1.20	1.34
1	C	766	HIS	C-N	-5.74	1.20	1.34
1	D	784	GLU	C-N	5.50	1.46	1.34
1	D	621	GLY	C-N	5.27	1.46	1.34
1	E	784	GLU	C-N	5.14	1.45	1.34
1	E	212	GLN	C-N	-5.03	1.22	1.34

All (91) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	766	HIS	O-C-N	-15.18	98.42	122.70
1	C	767	GLN	CA-C-N	12.73	145.20	117.20
1	C	766	HIS	CG-ND1-CE1	9.42	121.39	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	766	HIS	ND1-CG-CD2	-8.71	93.81	106.00
1	C	767	GLN	O-C-N	-7.95	109.99	122.70
1	E	188	LEU	N-CA-C	-7.71	90.19	111.00
1	B	188	LEU	N-CA-C	-7.61	90.44	111.00
1	E	129	ASN	N-CA-C	7.54	131.35	111.00
1	A	188	LEU	N-CA-C	-7.47	90.83	111.00
1	B	674	SER	N-CA-C	-7.44	90.92	111.00
1	A	674	SER	N-CA-C	-7.43	90.94	111.00
1	D	674	SER	N-CA-C	-7.43	90.94	111.00
1	C	674	SER	N-CA-C	-7.43	90.94	111.00
1	E	674	SER	N-CA-C	-7.42	90.96	111.00
1	F	674	SER	N-CA-C	-7.42	90.97	111.00
1	C	188	LEU	N-CA-C	-7.29	91.31	111.00
1	C	767	GLN	CA-C-O	-7.28	104.81	120.10
1	F	134	LYS	C-N-CA	-7.25	103.58	121.70
1	B	134	LYS	C-N-CA	-7.24	103.59	121.70
1	E	134	LYS	C-N-CA	-7.24	103.60	121.70
1	A	134	LYS	C-N-CA	-7.24	103.61	121.70
1	D	134	LYS	C-N-CA	-7.24	103.61	121.70
1	C	134	LYS	C-N-CA	-7.23	103.63	121.70
1	D	147	ARG	C-N-CA	-7.12	103.89	121.70
1	F	147	ARG	C-N-CA	-7.11	103.93	121.70
1	A	147	ARG	C-N-CA	-7.10	103.94	121.70
1	C	147	ARG	C-N-CA	-7.10	103.96	121.70
1	B	147	ARG	C-N-CA	-7.09	103.97	121.70
1	E	147	ARG	C-N-CA	-7.09	103.97	121.70
1	F	188	LEU	N-CA-C	-7.08	91.89	111.00
1	C	129	ASN	N-CA-C	7.08	130.11	111.00
1	F	129	ASN	N-CA-C	7.05	130.04	111.00
1	E	159	TYR	CA-C-N	6.88	132.34	117.20
1	D	188	LEU	N-CA-C	-6.72	92.85	111.00
1	D	159	TYR	CA-C-N	6.67	131.88	117.20
1	B	129	ASN	N-CA-C	6.67	129.01	111.00
1	C	766	HIS	CA-C-N	6.53	131.57	117.20
1	A	132	GLY	N-CA-C	-6.52	96.79	113.10
1	E	132	GLY	N-CA-C	-6.52	96.80	113.10
1	D	132	GLY	N-CA-C	-6.52	96.80	113.10
1	C	132	GLY	N-CA-C	-6.51	96.82	113.10
1	F	132	GLY	N-CA-C	-6.42	97.05	113.10
1	B	147	ARG	CA-C-N	6.41	131.30	117.20
1	A	129	ASN	N-CA-C	6.40	128.28	111.00
1	F	147	ARG	CA-C-N	6.40	131.28	117.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	147	ARG	CA-C-N	6.40	131.27	117.20
1	A	147	ARG	CA-C-N	6.39	131.26	117.20
1	E	147	ARG	CA-C-N	6.39	131.26	117.20
1	D	147	ARG	CA-C-N	6.38	131.24	117.20
1	F	159	TYR	CA-C-N	6.23	130.91	117.20
1	D	129	ASN	N-CA-C	5.99	127.18	111.00
1	C	768	LYS	N-CA-C	-5.99	94.83	111.00
1	B	132	GLY	N-CA-C	-5.95	98.23	113.10
1	D	188	LEU	C-N-CA	-5.93	106.88	121.70
1	E	147	ARG	N-CA-C	5.79	126.63	111.00
1	C	147	ARG	N-CA-C	5.79	126.62	111.00
1	B	147	ARG	N-CA-C	5.78	126.61	111.00
1	A	147	ARG	N-CA-C	5.78	126.60	111.00
1	D	147	ARG	N-CA-C	5.76	126.56	111.00
1	F	147	ARG	N-CA-C	5.76	126.55	111.00
1	D	146	LYS	C-N-CA	-5.75	107.33	121.70
1	B	159	TYR	CA-C-N	5.56	129.44	117.20
1	B	188	LEU	C-N-CA	-5.56	107.80	121.70
1	C	159	TYR	CA-C-N	5.56	129.42	117.20
1	A	159	TYR	CA-C-N	5.55	129.42	117.20
1	E	146	LYS	C-N-CA	-5.43	108.13	121.70
1	B	127	SER	N-CA-C	5.42	125.65	111.00
1	A	188	LEU	C-N-CA	-5.40	108.21	121.70
1	C	188	LEU	CA-C-N	5.39	129.07	117.20
1	E	188	LEU	CA-C-N	5.36	128.99	117.20
1	F	190	PRO	CB-CA-C	5.35	125.37	112.00
1	A	190	PRO	CB-CA-C	5.31	125.28	112.00
1	E	190	PRO	CB-CA-C	5.28	125.21	112.00
1	C	188	LEU	C-N-CA	-5.26	108.54	121.70
1	E	159	TYR	O-C-N	-5.24	114.32	122.70
1	E	147	ARG	O-C-N	-5.20	114.38	122.70
1	C	147	ARG	O-C-N	-5.20	114.38	122.70
1	C	765	THR	CB-CA-C	5.20	125.64	111.60
1	E	188	LEU	C-N-CA	-5.19	108.72	121.70
1	A	147	ARG	O-C-N	-5.18	114.42	122.70
1	B	147	ARG	O-C-N	-5.17	114.42	122.70
1	F	147	ARG	O-C-N	-5.16	114.44	122.70
1	D	147	ARG	O-C-N	-5.16	114.45	122.70
1	B	190	PRO	CB-CA-C	5.15	124.86	112.00
1	C	127	SER	N-CA-C	5.11	124.81	111.00
1	A	127	SER	N-CA-C	5.11	124.79	111.00
1	D	127	SER	N-CA-C	5.10	124.78	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	127	SER	N-CA-C	5.10	124.77	111.00
1	F	127	SER	N-CA-C	5.10	124.77	111.00
1	D	188	LEU	CA-C-N	5.05	128.31	117.20
1	D	331	VAL	N-CA-C	-5.03	97.42	111.00

There are no chirality outliers.

There are no planarity outliers.

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	771	2
1	B	5992	0	6010	765	2
1	C	5992	0	6010	770	2
1	D	5992	0	6009	771	3
1	E	5992	0	6009	772	3
1	F	5992	0	6010	755	1
2	O	1146	0	1071	150	0
2	P	1146	0	1071	157	0
2	Q	1146	0	1071	155	0
2	R	1146	0	1071	157	0
2	S	1146	0	1071	162	0
2	T	1146	0	1071	157	0
3	A	2	0	0	0	0
3	B	2	0	0	0	0
3	C	2	0	0	0	0
3	D	2	0	0	0	0
3	E	2	0	0	0	0
3	F	2	0	0	0	0
4	A	30	0	12	1	0
4	B	30	0	12	1	0
4	C	30	0	12	1	0
4	D	30	0	12	1	0
4	E	30	0	12	1	0
4	F	30	0	12	1	0
5	O	3	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
5	P	3	0	0	0	0
5	Q	3	0	0	0	0
5	R	3	0	0	0	0
5	S	3	0	0	0	0
5	T	3	0	0	0	0
6	A	1	0	0	0	0
6	B	1	0	0	0	0
6	C	1	0	0	0	0
6	D	1	0	0	0	0
6	E	1	0	0	0	0
6	F	1	0	0	0	0
All	All	43044	0	42556	5389	8

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 63.

All (5389) 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:E:179:LEU:O	1:E:183:SER:CB	1.74	1.36
1:D:179:LEU:O	1:D:183:SER:CB	1.77	1.30
1:F:179:LEU:O	1:F:183:SER:CB	1.80	1.30
1:C:179:LEU:O	1:C:183:SER:CB	1.77	1.30
1:F:188:LEU:H	1:F:188:LEU:CD2	1.46	1.27
1:B:179:LEU:O	1:B:183:SER:HB2	1.18	1.27
1:E:188:LEU:H	1:E:188:LEU:CD2	1.46	1.26
1:A:179:LEU:O	1:A:183:SER:CB	1.85	1.24
1:A:188:LEU:HD23	1:A:188:LEU:N	1.45	1.24
1:A:188:LEU:CD2	1:A:188:LEU:H	1.46	1.23
1:A:296:LEU:N	1:A:296:LEU:HD23	1.44	1.22
1:E:296:LEU:HD23	1:E:296:LEU:N	1.44	1.22
1:B:296:LEU:HD23	1:B:296:LEU:N	1.44	1.20
1:C:188:LEU:CD2	1:C:188:LEU:H	1.53	1.17
1:C:186:LYS:HA	1:C:190:PRO:HD3	1.25	1.16
1:A:186:LYS:HA	1:A:190:PRO:HD3	1.25	1.15
1:A:179:LEU:O	1:A:183:SER:HB2	0.98	1.15
1:D:188:LEU:H	1:D:188:LEU:CD2	1.54	1.15
1:B:697:ILE:HD13	1:B:732:ILE:HD13	1.26	1.15
1:B:179:LEU:O	1:B:183:SER:CB	1.94	1.14
1:B:188:LEU:CD2	1:B:188:LEU:H	1.61	1.14
1:D:179:LEU:O	1:D:183:SER:HB2	0.96	1.14

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:182:ILE:O	1:F:187:SER:HB2	1.47	1.14
1:A:697:ILE:HD13	1:A:732:ILE:HD13	1.26	1.14
1:C:296:LEU:N	1:C:296:LEU:HD23	1.44	1.14
1:F:296:LEU:N	1:F:296:LEU:HD23	1.44	1.13
1:E:182:ILE:O	1:E:187:SER:HB2	1.49	1.13
1:F:179:LEU:O	1:F:183:SER:HB2	0.97	1.13
1:E:179:LEU:O	1:E:183:SER:HB2	0.95	1.12
1:C:179:LEU:O	1:C:183:SER:HB2	0.95	1.11
1:A:89:ILE:HG22	1:A:93:VAL:HG11	1.13	1.11
1:D:296:LEU:N	1:D:296:LEU:HD23	1.44	1.10
1:E:697:ILE:HD13	1:E:732:ILE:HD13	1.28	1.10
1:D:186:LYS:HA	1:D:190:PRO:HD3	1.27	1.10
1:B:89:ILE:HG22	1:B:93:VAL:HG11	1.13	1.10
1:E:89:ILE:HG22	1:E:93:VAL:HG11	1.15	1.10
1:F:186:LYS:HA	1:F:190:PRO:HD3	1.34	1.10
1:D:188:LEU:H	1:D:188:LEU:HD23	0.95	1.10
1:D:697:ILE:HD13	1:D:732:ILE:HD13	1.25	1.10
1:C:697:ILE:HD13	1:C:732:ILE:HD13	1.27	1.09
1:F:697:ILE:HD13	1:F:732:ILE:HD13	1.25	1.09
2:R:106:ARG:HG3	2:R:121:VAL:HG21	1.12	1.09
1:A:183:SER:O	1:A:187:SER:CB	2.00	1.09
1:D:89:ILE:HG22	1:D:93:VAL:HG11	1.14	1.08
1:F:188:LEU:HD23	1:F:188:LEU:N	1.66	1.08
1:F:89:ILE:HG22	1:F:93:VAL:HG11	1.13	1.08
2:Q:106:ARG:HG3	2:Q:121:VAL:HG21	1.10	1.08
2:P:106:ARG:HG3	2:P:121:VAL:HG21	1.10	1.08
1:C:414:LYS:HA	1:C:414:LYS:HZ3	1.19	1.08
2:S:106:ARG:HG3	2:S:121:VAL:HG21	1.10	1.08
1:E:186:LYS:HA	1:E:190:PRO:HD3	1.36	1.07
1:E:188:LEU:N	1:E:188:LEU:HD23	1.67	1.06
2:O:106:ARG:HG3	2:O:121:VAL:HG21	1.12	1.06
1:C:89:ILE:HG22	1:C:93:VAL:HG11	1.15	1.05
1:D:188:LEU:N	1:D:188:LEU:HD23	1.70	1.05
2:T:106:ARG:HG3	2:T:121:VAL:HG21	1.10	1.05
1:B:188:LEU:HD23	1:B:188:LEU:H	0.90	1.05
1:C:188:LEU:HD23	1:C:188:LEU:H	0.89	1.04
1:C:188:LEU:HD23	1:C:188:LEU:N	1.68	1.04
2:T:3:GLN:N	2:T:77:LYS:HE3	1.72	1.04
1:A:414:LYS:HA	1:A:414:LYS:HZ3	1.22	1.03
1:C:182:ILE:O	1:C:187:SER:HB2	1.59	1.03
1:B:186:LYS:HA	1:B:190:PRO:HD3	1.41	1.02

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:296:LEU:N	1:F:296:LEU:CD2	2.19	1.02
1:D:182:ILE:O	1:D:187:SER:HB2	1.60	1.02
1:F:188:LEU:HD23	1:F:188:LEU:H	0.88	1.02
1:D:414:LYS:NZ	1:D:414:LYS:HA	1.75	1.02
1:D:521:ASN:HB3	1:D:524:GLU:HB2	1.41	1.02
1:A:296:LEU:N	1:A:296:LEU:CD2	2.19	1.01
1:C:479:LYS:HG2	1:C:488:LEU:HD21	1.42	1.01
1:C:521:ASN:HB3	1:C:524:GLU:HB2	1.41	1.01
1:A:70:GLU:HB2	1:A:107:THR:HG22	1.41	1.01
1:E:296:LEU:N	1:E:296:LEU:CD2	2.19	1.01
1:E:414:LYS:NZ	1:E:414:LYS:HA	1.75	1.01
1:F:597:ASN:HB2	1:F:598:PRO:HD2	1.43	1.01
1:A:597:ASN:HB2	1:A:598:PRO:HD2	1.43	1.01
1:D:296:LEU:CD2	1:D:296:LEU:N	2.19	1.01
1:F:715:GLU:HA	1:F:718:ARG:NH1	1.76	1.01
1:B:296:LEU:CD2	1:B:296:LEU:N	2.19	1.00
1:C:414:LYS:HA	1:C:414:LYS:NZ	1.76	1.00
1:C:296:LEU:CD2	1:C:296:LEU:N	2.19	1.00
1:B:635:ILE:HD12	1:B:635:ILE:H	1.27	1.00
1:A:414:LYS:HA	1:A:414:LYS:NZ	1.76	1.00
1:C:597:ASN:HB2	1:C:598:PRO:HD2	1.43	1.00
1:A:521:ASN:HB3	1:A:524:GLU:HB2	1.41	1.00
1:B:550:SER:H	1:B:553:GLN:NE2	1.59	1.00
1:C:715:GLU:HA	1:C:718:ARG:NH1	1.77	1.00
2:T:100:ILE:HB	2:T:136:VAL:HG23	1.43	1.00
1:D:597:ASN:HB2	1:D:598:PRO:HD2	1.44	1.00
1:B:480:ASN:HD22	1:B:481:VAL:N	1.59	1.00
1:D:142:VAL:HG22	1:D:154:ILE:HD12	1.44	1.00
1:E:521:ASN:HB3	1:E:524:GLU:HB2	1.41	1.00
2:O:100:ILE:HB	2:O:136:VAL:HG23	1.42	1.00
1:B:597:ASN:HB2	1:B:598:PRO:HD2	1.44	0.99
2:Q:3:GLN:N	2:Q:77:LYS:HE3	1.76	0.99
1:A:550:SER:H	1:A:553:GLN:NE2	1.60	0.99
1:B:414:LYS:NZ	1:B:414:LYS:HA	1.76	0.99
1:F:521:ASN:HB3	1:F:524:GLU:HB2	1.41	0.99
1:B:479:LYS:HG2	1:B:488:LEU:HD21	1.44	0.99
1:D:479:LYS:HG2	1:D:488:LEU:HD21	1.44	0.99
1:B:715:GLU:HA	1:B:718:ARG:NH1	1.77	0.99
1:D:480:ASN:HD22	1:D:481:VAL:N	1.60	0.99
1:F:70:GLU:HB2	1:F:107:THR:HG22	1.44	0.99
1:A:188:LEU:CD2	1:A:188:LEU:N	2.08	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:635:ILE:HD12	1:A:635:ILE:H	1.28	0.99
1:E:142:VAL:HG22	1:E:154:ILE:HD12	1.45	0.99
1:E:629:ASN:ND2	1:E:631:SER:H	1.60	0.99
1:C:629:ASN:ND2	1:C:631:SER:H	1.61	0.99
1:A:715:GLU:HA	1:A:718:ARG:NH1	1.77	0.99
1:B:629:ASN:ND2	1:B:631:SER:H	1.61	0.99
1:E:414:LYS:HA	1:E:414:LYS:HZ3	1.27	0.99
1:F:414:LYS:HA	1:F:414:LYS:NZ	1.76	0.99
2:R:3:GLN:N	2:R:77:LYS:HE3	1.77	0.99
2:S:3:GLN:N	2:S:77:LYS:HE3	1.77	0.99
1:E:715:GLU:HA	1:E:718:ARG:NH1	1.78	0.99
1:E:188:LEU:H	1:E:188:LEU:HD23	0.87	0.98
1:E:597:ASN:HB2	1:E:598:PRO:HD2	1.43	0.98
1:C:142:VAL:HG22	1:C:154:ILE:HD12	1.45	0.98
2:S:100:ILE:HB	2:S:136:VAL:HG23	1.43	0.98
1:C:480:ASN:HD22	1:C:481:VAL:N	1.60	0.98
1:E:479:LYS:HG2	1:E:488:LEU:HD21	1.42	0.98
1:E:480:ASN:HD22	1:E:481:VAL:N	1.60	0.98
1:F:479:LYS:HG2	1:F:488:LEU:HD21	1.43	0.98
1:A:629:ASN:ND2	1:A:631:SER:H	1.60	0.98
2:P:100:ILE:HB	2:P:136:VAL:HG23	1.43	0.98
1:A:479:LYS:HG2	1:A:488:LEU:HD21	1.45	0.98
1:A:480:ASN:HD22	1:A:481:VAL:N	1.59	0.98
1:D:550:SER:H	1:D:553:GLN:NE2	1.59	0.98
1:E:635:ILE:H	1:E:635:ILE:HD12	1.27	0.98
1:F:183:SER:O	1:F:187:SER:HB3	1.63	0.98
1:B:521:ASN:HB3	1:B:524:GLU:HB2	1.41	0.98
1:B:70:GLU:HB2	1:B:107:THR:HG22	1.43	0.98
2:Q:100:ILE:HB	2:Q:136:VAL:HG23	1.43	0.98
1:C:635:ILE:HD12	1:C:635:ILE:H	1.28	0.98
1:D:635:ILE:H	1:D:635:ILE:HD12	1.27	0.98
1:D:715:GLU:HA	1:D:718:ARG:NH1	1.77	0.97
1:F:629:ASN:ND2	1:F:631:SER:H	1.61	0.97
1:F:480:ASN:HD22	1:F:481:VAL:N	1.60	0.97
1:F:550:SER:H	1:F:553:GLN:NE2	1.60	0.97
1:D:629:ASN:ND2	1:D:631:SER:H	1.62	0.97
1:A:142:VAL:HG22	1:A:154:ILE:HD12	1.46	0.97
1:B:142:VAL:HG22	1:B:154:ILE:HD12	1.46	0.97
1:F:635:ILE:H	1:F:635:ILE:HD12	1.28	0.97
1:C:70:GLU:HB2	1:C:107:THR:HG22	1.47	0.97
2:O:3:GLN:N	2:O:77:LYS:HE3	1.78	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:550:SER:H	1:C:553:GLN:NE2	1.61	0.97
1:F:142:VAL:HG22	1:F:154:ILE:HD12	1.46	0.97
1:F:184:LYS:NZ	1:F:191:GLU:HB2	1.80	0.96
1:B:188:LEU:HD23	1:B:188:LEU:N	1.72	0.96
1:C:550:SER:H	1:C:553:GLN:HE21	1.04	0.96
1:E:550:SER:H	1:E:553:GLN:NE2	1.61	0.96
2:R:100:ILE:HB	2:R:136:VAL:HG23	1.43	0.96
1:D:414:LYS:HZ3	1:D:414:LYS:HA	1.29	0.96
1:F:188:LEU:N	1:F:188:LEU:CD2	2.19	0.96
1:E:188:LEU:N	1:E:188:LEU:CD2	2.18	0.96
2:P:3:GLN:N	2:P:77:LYS:HE3	1.80	0.95
1:E:550:SER:H	1:E:553:GLN:HE21	1.05	0.95
1:E:183:SER:O	1:E:187:SER:HB3	1.64	0.95
1:A:115:LYS:HZ1	1:A:116:GLU:HG2	1.31	0.95
1:A:668:SER:HA	2:O:14:GLU:HG3	1.48	0.95
1:E:788:ASP:O	1:E:792:VAL:HG23	1.67	0.95
1:D:184:LYS:NZ	1:D:191:GLU:HB2	1.82	0.94
1:F:550:SER:H	1:F:553:GLN:HE21	1.03	0.94
1:F:414:LYS:HA	1:F:414:LYS:HZ3	1.31	0.94
1:F:788:ASP:O	1:F:792:VAL:HG23	1.67	0.94
1:B:180:ASP:N	1:B:180:ASP:OD1	1.95	0.94
1:E:70:GLU:HB2	1:E:107:THR:HG22	1.47	0.94
1:A:354:SER:O	1:A:371:SER:HB2	1.68	0.94
1:D:550:SER:H	1:D:553:GLN:HE21	1.03	0.94
1:D:70:GLU:HB2	1:D:107:THR:HG22	1.47	0.94
1:D:788:ASP:O	1:D:792:VAL:HG23	1.68	0.94
1:E:354:SER:O	1:E:371:SER:HB2	1.67	0.94
1:F:218:LEU:HD11	1:F:225:ILE:HD11	1.50	0.94
1:C:188:LEU:CD2	1:C:188:LEU:N	2.27	0.94
1:E:218:LEU:HD11	1:E:225:ILE:HD11	1.50	0.93
1:A:296:LEU:HD23	1:A:296:LEU:H	1.11	0.93
1:B:414:LYS:HZ3	1:B:414:LYS:HA	1.30	0.93
1:F:354:SER:O	1:F:371:SER:HB2	1.67	0.93
1:B:354:SER:O	1:B:371:SER:HB2	1.67	0.93
1:B:550:SER:H	1:B:553:GLN:HE21	1.03	0.93
1:D:354:SER:O	1:D:371:SER:HB2	1.67	0.93
1:A:183:SER:O	1:A:187:SER:HB3	1.66	0.93
1:B:296:LEU:HD23	1:B:296:LEU:H	1.11	0.93
1:C:354:SER:O	1:C:371:SER:HB2	1.67	0.93
1:C:668:SER:HA	2:Q:14:GLU:HG3	1.47	0.93
1:B:182:ILE:O	1:B:187:SER:HB2	1.69	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:218:LEU:HD11	1:B:225:ILE:HD11	1.50	0.92
1:F:182:ILE:C	1:F:187:SER:HB2	1.90	0.92
1:A:629:ASN:HD22	1:A:631:SER:H	1.16	0.91
1:B:715:GLU:HA	1:B:718:ARG:HH12	1.35	0.91
1:C:218:LEU:HD11	1:C:225:ILE:HD11	1.50	0.91
1:F:173:ILE:HG13	1:F:242:SER:HB3	1.52	0.91
1:D:718:ARG:NH1	1:D:767:GLN:HE21	1.69	0.91
1:A:463:THR:HG22	1:A:465:LEU:H	1.36	0.91
1:A:175:LYS:HB2	1:A:175:LYS:NZ	1.86	0.91
1:B:115:LYS:HZ1	1:B:116:GLU:HG2	1.34	0.91
1:B:668:SER:HA	2:P:14:GLU:HG3	1.49	0.91
1:A:218:LEU:HD11	1:A:225:ILE:HD11	1.50	0.91
1:B:89:ILE:CG2	1:B:93:VAL:HG11	2.01	0.91
1:C:296:LEU:HD23	1:C:296:LEU:H	1.11	0.90
1:A:550:SER:H	1:A:553:GLN:HE21	1.03	0.90
2:S:32:LEU:HD22	2:S:63:ILE:HD11	1.53	0.90
1:F:296:LEU:H	1:F:296:LEU:HD23	1.11	0.90
1:D:173:ILE:HG13	1:D:242:SER:HB3	1.53	0.90
1:E:183:SER:O	1:E:187:SER:CB	2.19	0.90
1:A:89:ILE:CG2	1:A:93:VAL:HG11	2.01	0.90
1:C:115:LYS:HZ3	1:C:116:GLU:HG2	1.36	0.90
2:T:117:THR:HG23	2:T:120:GLU:HB2	1.54	0.90
1:D:218:LEU:HD11	1:D:225:ILE:HD11	1.50	0.90
1:E:184:LYS:NZ	1:E:191:GLU:HB2	1.86	0.90
1:F:463:THR:HG22	1:F:465:LEU:H	1.36	0.90
2:T:32:LEU:HD22	2:T:63:ILE:HD11	1.53	0.90
1:A:173:ILE:HG13	1:A:242:SER:HB3	1.54	0.90
1:F:629:ASN:HD22	1:F:631:SER:H	1.17	0.90
1:F:668:SER:HA	2:T:14:GLU:HG3	1.52	0.90
1:C:788:ASP:O	1:C:792:VAL:HG23	1.72	0.89
1:E:191:GLU:O	1:E:193:LEU:N	2.05	0.89
1:E:463:THR:HG22	1:E:465:LEU:H	1.37	0.89
1:A:405:LEU:HD13	1:A:453:VAL:HG21	1.54	0.89
1:E:179:LEU:O	1:E:183:SER:CA	2.20	0.89
1:D:463:THR:HG22	1:D:465:LEU:H	1.36	0.89
2:R:117:THR:HG23	2:R:120:GLU:HB2	1.55	0.89
1:E:629:ASN:HD22	1:E:631:SER:H	1.15	0.89
1:A:134:LYS:HG2	1:A:136:PRO:HD3	1.55	0.89
1:D:188:LEU:N	1:D:188:LEU:CD2	2.28	0.89
1:B:629:ASN:HD22	1:B:631:SER:H	1.16	0.89
1:C:173:ILE:HG13	1:C:242:SER:HB3	1.53	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:115:LYS:HZ1	1:D:116:GLU:HG2	1.37	0.89
2:P:117:THR:HG23	2:P:120:GLU:HB2	1.54	0.89
1:F:89:ILE:CG2	1:F:93:VAL:HG11	2.01	0.89
1:B:134:LYS:HG2	1:B:136:PRO:HD3	1.55	0.89
2:P:58:ASP:C	2:P:60:ASN:H	1.75	0.89
2:Q:117:THR:HG23	2:Q:120:GLU:HB2	1.54	0.89
1:B:173:ILE:HG13	1:B:242:SER:HB3	1.54	0.89
1:C:463:THR:HG22	1:C:465:LEU:H	1.36	0.88
1:B:463:THR:HG22	1:B:465:LEU:H	1.37	0.88
1:D:435:LEU:HG	1:D:446:ILE:HG22	1.55	0.88
1:E:296:LEU:HD23	1:E:296:LEU:H	1.11	0.88
2:O:58:ASP:C	2:O:60:ASN:H	1.75	0.88
2:Q:32:LEU:HD22	2:Q:63:ILE:HD11	1.55	0.88
1:A:180:ASP:N	1:A:180:ASP:OD1	1.99	0.88
1:A:788:ASP:O	1:A:792:VAL:HG23	1.72	0.88
1:D:296:LEU:HD23	1:D:296:LEU:H	1.11	0.88
1:D:668:SER:HA	2:R:14:GLU:HG3	1.52	0.88
1:E:173:ILE:HG13	1:E:242:SER:HB3	1.53	0.88
1:E:715:GLU:HA	1:E:718:ARG:HH12	1.36	0.88
1:E:182:ILE:C	1:E:187:SER:HB2	1.93	0.88
1:F:405:LEU:HD13	1:F:453:VAL:HG21	1.55	0.88
2:O:117:THR:HG23	2:O:120:GLU:HB2	1.55	0.88
1:F:175:LYS:HB2	1:F:175:LYS:NZ	1.88	0.88
1:B:435:LEU:HG	1:B:446:ILE:HG22	1.56	0.88
1:D:629:ASN:HD22	1:D:631:SER:H	1.18	0.88
1:F:715:GLU:HA	1:F:718:ARG:HH12	1.33	0.88
1:C:435:LEU:HG	1:C:446:ILE:HG22	1.56	0.88
1:F:678:VAL:HG22	1:F:745:TYR:HE2	1.37	0.88
1:A:435:LEU:HG	1:A:446:ILE:HG22	1.56	0.88
1:A:678:VAL:HG22	1:A:745:TYR:HE2	1.38	0.88
1:B:175:LYS:HB2	1:B:175:LYS:NZ	1.89	0.88
2:S:58:ASP:C	2:S:60:ASN:H	1.76	0.88
1:B:405:LEU:HD13	1:B:453:VAL:HG21	1.54	0.88
1:C:678:VAL:HG22	1:C:745:TYR:HE2	1.38	0.88
2:S:117:THR:HG23	2:S:120:GLU:HB2	1.55	0.88
1:D:405:LEU:HD13	1:D:453:VAL:HG21	1.54	0.87
1:E:718:ARG:NH1	1:E:767:GLN:HE21	1.72	0.87
1:E:435:LEU:HG	1:E:446:ILE:HG22	1.56	0.87
1:C:134:LYS:HG2	1:C:136:PRO:HD3	1.55	0.87
1:C:175:LYS:NZ	1:C:175:LYS:HB2	1.87	0.87
1:F:115:LYS:HZ1	1:F:116:GLU:HG2	1.39	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:175:LYS:NZ	1:E:175:LYS:HB2	1.87	0.87
1:F:182:ILE:O	1:F:187:SER:CB	2.22	0.87
1:D:183:SER:O	1:D:187:SER:HB3	1.75	0.87
2:O:32:LEU:HD22	2:O:63:ILE:HD11	1.53	0.87
1:C:405:LEU:HD13	1:C:453:VAL:HG21	1.54	0.87
1:E:668:SER:HA	2:S:14:GLU:HG3	1.55	0.87
1:F:122:GLU:OE1	1:F:147:ARG:HB2	1.75	0.87
1:D:678:VAL:HG22	1:D:745:TYR:HE2	1.38	0.87
2:R:32:LEU:HD22	2:R:63:ILE:HD11	1.54	0.87
1:B:678:VAL:HG22	1:B:745:TYR:HE2	1.39	0.87
1:F:724:ARG:HG3	1:F:724:ARG:HH11	1.40	0.86
1:A:715:GLU:HA	1:A:718:ARG:HH12	1.35	0.86
1:C:629:ASN:HD22	1:C:631:SER:H	1.16	0.86
1:F:435:LEU:HG	1:F:446:ILE:HG22	1.56	0.86
1:E:501:LEU:HD22	2:S:112:LEU:HD21	1.57	0.86
1:D:89:ILE:CG2	1:D:93:VAL:HG11	2.02	0.86
1:E:179:LEU:C	1:E:183:SER:HB2	1.94	0.86
1:F:697:ILE:CD1	1:F:732:ILE:HD13	2.06	0.86
1:E:678:VAL:HG22	1:E:745:TYR:HE2	1.38	0.86
2:O:30:LYS:HD3	2:O:30:LYS:H	1.40	0.86
2:P:32:LEU:HD22	2:P:63:ILE:HD11	1.55	0.86
1:E:405:LEU:HD13	1:E:453:VAL:HG21	1.56	0.86
2:R:58:ASP:C	2:R:60:ASN:H	1.75	0.86
1:A:724:ARG:HH11	1:A:724:ARG:HG3	1.41	0.86
1:B:296:LEU:CD2	1:B:296:LEU:H	1.83	0.86
1:D:175:LYS:HB2	1:D:175:LYS:NZ	1.87	0.86
1:D:715:GLU:HA	1:D:718:ARG:HH12	1.35	0.86
1:D:724:ARG:HH11	1:D:724:ARG:HG3	1.41	0.86
1:D:275:GLY:HA2	1:D:278:LYS:HE3	1.58	0.86
1:F:718:ARG:NH1	1:F:767:GLN:HE21	1.73	0.86
2:Q:58:ASP:C	2:Q:60:ASN:H	1.75	0.86
1:C:715:GLU:HA	1:C:718:ARG:HH12	1.35	0.85
1:E:724:ARG:HG3	1:E:724:ARG:HH11	1.42	0.85
2:Q:30:LYS:H	2:Q:30:LYS:HD3	1.40	0.85
1:E:89:ILE:CG2	1:E:93:VAL:HG11	2.02	0.85
1:D:501:LEU:HD22	2:R:112:LEU:HD21	1.58	0.85
1:B:788:ASP:O	1:B:792:VAL:HG23	1.76	0.85
1:C:89:ILE:CG2	1:C:93:VAL:HG11	2.02	0.85
2:P:30:LYS:HD3	2:P:30:LYS:H	1.41	0.85
1:C:724:ARG:HG3	1:C:724:ARG:HH11	1.41	0.85
1:D:447:SER:OG	1:D:450:ASN:O	1.94	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S:30:LYS:HD3	2:S:30:LYS:H	1.41	0.85
1:C:142:VAL:HG22	1:C:154:ILE:HG23	1.59	0.85
1:A:275:GLY:HA2	1:A:278:LYS:HE3	1.58	0.85
1:C:597:ASN:HD21	1:C:601:GLU:H	1.24	0.85
1:B:564:VAL:O	1:B:567:THR:HG22	1.77	0.85
1:D:183:SER:O	1:D:187:SER:CB	2.25	0.85
1:D:179:LEU:O	1:D:183:SER:CA	2.25	0.84
2:T:30:LYS:H	2:T:30:LYS:HD3	1.41	0.84
1:A:183:SER:O	1:A:187:SER:HB2	1.76	0.84
1:B:597:ASN:HD21	1:B:601:GLU:H	1.24	0.84
1:D:697:ILE:CD1	1:D:732:ILE:HD13	2.06	0.84
2:T:37:ARG:HA	2:T:41:GLN:O	1.77	0.84
1:E:122:GLU:OE1	1:E:147:ARG:HB2	1.77	0.84
2:R:30:LYS:H	2:R:30:LYS:HD3	1.40	0.84
2:R:37:ARG:HA	2:R:41:GLN:O	1.77	0.84
2:O:37:ARG:HA	2:O:41:GLN:O	1.77	0.84
1:D:180:ASP:OD1	1:D:180:ASP:N	2.08	0.84
2:Q:37:ARG:HA	2:Q:41:GLN:O	1.77	0.84
1:A:564:VAL:O	1:A:567:THR:HG22	1.78	0.84
1:C:275:GLY:HA2	1:C:278:LYS:HE3	1.60	0.84
1:C:564:VAL:O	1:C:567:THR:HG22	1.77	0.84
1:F:493:ASP:OD2	1:F:577:HIS:CE1	2.30	0.84
1:A:308:VAL:HB	1:A:311:HIS:ND1	1.93	0.84
1:A:697:ILE:CD1	1:A:732:ILE:HD13	2.07	0.84
1:D:115:LYS:NZ	1:D:116:GLU:HG2	1.91	0.84
1:E:447:SER:OG	1:E:450:ASN:O	1.95	0.84
1:F:308:VAL:HB	1:F:311:HIS:ND1	1.93	0.84
1:B:275:GLY:HA2	1:B:278:LYS:HE3	1.60	0.83
1:C:697:ILE:CD1	1:C:732:ILE:HD13	2.07	0.83
2:P:37:ARG:HA	2:P:41:GLN:O	1.77	0.83
2:P:40:GLY:O	2:P:41:GLN:HG3	1.78	0.83
1:A:408:LEU:H	1:A:408:LEU:HD12	1.43	0.83
2:T:58:ASP:C	2:T:60:ASN:H	1.75	0.83
1:B:115:LYS:NZ	1:B:116:GLU:HG2	1.93	0.83
1:C:497:LEU:HD13	1:C:556:MET:HG2	1.60	0.83
1:E:275:GLY:HA2	1:E:278:LYS:HE3	1.59	0.83
1:E:597:ASN:HD21	1:E:601:GLU:H	1.25	0.83
1:B:308:VAL:HB	1:B:311:HIS:ND1	1.93	0.83
1:B:718:ARG:NH1	1:B:767:GLN:HE21	1.74	0.83
1:C:296:LEU:CD2	1:C:296:LEU:H	1.84	0.83
1:B:697:ILE:CD1	1:B:732:ILE:HD13	2.07	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:564:VAL:O	1:D:567:THR:HG22	1.77	0.83
1:E:115:LYS:NZ	1:E:116:GLU:HG2	1.93	0.83
1:F:142:VAL:HG22	1:F:154:ILE:HG23	1.59	0.83
1:C:184:LYS:NZ	1:C:191:GLU:HB2	1.94	0.83
1:C:308:VAL:HB	1:C:311:HIS:ND1	1.93	0.83
1:C:297:LYS:HZ1	1:C:601:GLU:HB3	1.44	0.83
1:E:334:LEU:H	1:E:334:LEU:HD12	1.43	0.83
1:C:408:LEU:HD12	1:C:408:LEU:H	1.43	0.83
1:F:597:ASN:HD21	1:F:601:GLU:H	1.24	0.83
1:A:217:LYS:HB3	1:A:217:LYS:HZ3	1.42	0.83
1:A:501:LEU:HD22	2:O:112:LEU:HD21	1.59	0.83
1:B:724:ARG:HG3	1:B:724:ARG:HH11	1.43	0.83
1:C:493:ASP:OD2	1:C:577:HIS:CE1	2.31	0.83
1:D:334:LEU:HD12	1:D:334:LEU:H	1.43	0.83
1:E:308:VAL:HB	1:E:311:HIS:ND1	1.93	0.83
1:F:275:GLY:HA2	1:F:278:LYS:HE3	1.59	0.83
1:D:308:VAL:HB	1:D:311:HIS:ND1	1.93	0.83
1:E:142:VAL:HG22	1:E:154:ILE:HG23	1.59	0.83
1:E:697:ILE:CD1	1:E:732:ILE:HD13	2.09	0.83
1:A:115:LYS:NZ	1:A:116:GLU:HG2	1.94	0.83
1:D:597:ASN:HD21	1:D:601:GLU:H	1.26	0.83
1:F:173:ILE:HD12	1:F:243:LEU:HD23	1.61	0.83
1:D:122:GLU:OE1	1:D:147:ARG:HB2	1.79	0.82
1:A:122:GLU:OE1	1:A:147:ARG:HB2	1.77	0.82
1:A:597:ASN:HD21	1:A:601:GLU:H	1.25	0.82
1:B:175:LYS:HZ1	1:B:175:LYS:HB2	1.44	0.82
1:F:183:SER:O	1:F:187:SER:CB	2.26	0.82
2:S:37:ARG:HA	2:S:41:GLN:O	1.79	0.82
1:A:493:ASP:OD2	1:A:577:HIS:CE1	2.31	0.82
1:F:564:VAL:O	1:F:567:THR:HG22	1.78	0.82
1:C:501:LEU:HD22	2:Q:112:LEU:HD21	1.61	0.82
1:C:122:GLU:OE1	1:C:147:ARG:HB2	1.80	0.82
1:D:142:VAL:HG22	1:D:154:ILE:HG23	1.61	0.82
1:D:408:LEU:HD12	1:D:408:LEU:H	1.43	0.82
1:F:597:ASN:HD21	1:F:601:GLU:N	1.78	0.82
2:Q:40:GLY:O	2:Q:41:GLN:HG3	1.79	0.82
1:A:334:LEU:H	1:A:334:LEU:HD12	1.45	0.82
2:O:40:GLY:O	2:O:41:GLN:HG3	1.78	0.82
1:B:142:VAL:HG22	1:B:154:ILE:HG23	1.61	0.82
1:B:334:LEU:H	1:B:334:LEU:HD12	1.44	0.82
1:C:115:LYS:NZ	1:C:116:GLU:HG2	1.93	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:493:ASP:OD2	1:D:577:HIS:CE1	2.33	0.82
1:E:597:ASN:HD21	1:E:601:GLU:N	1.78	0.82
1:B:182:ILE:O	1:B:187:SER:CB	2.27	0.82
1:B:408:LEU:H	1:B:408:LEU:HD12	1.44	0.82
1:B:493:ASP:OD2	1:B:577:HIS:CE1	2.32	0.82
1:B:597:ASN:HD21	1:B:601:GLU:N	1.78	0.82
1:E:325:TYR:HB2	1:E:498:ALA:HB3	1.61	0.82
1:B:182:ILE:C	1:B:187:SER:HB2	2.00	0.82
1:B:217:LYS:HZ3	1:B:217:LYS:HB3	1.44	0.82
1:E:173:ILE:HD12	1:E:243:LEU:HD23	1.62	0.82
1:E:564:VAL:O	1:E:567:THR:HG22	1.78	0.82
1:F:697:ILE:HD13	1:F:732:ILE:CD1	2.09	0.82
1:A:718:ARG:NH1	1:A:767:GLN:HE21	1.77	0.82
1:E:493:ASP:OD2	1:E:577:HIS:CE1	2.33	0.81
1:B:122:GLU:OE1	1:B:147:ARG:HB2	1.80	0.81
1:C:597:ASN:HD21	1:C:601:GLU:N	1.78	0.81
1:F:115:LYS:NZ	1:F:116:GLU:HG2	1.94	0.81
1:A:184:LYS:NZ	1:A:191:GLU:HB2	1.94	0.81
1:D:173:ILE:HD12	1:D:243:LEU:HD23	1.62	0.81
1:A:173:ILE:HD12	1:A:243:LEU:HD23	1.63	0.81
1:C:334:LEU:H	1:C:334:LEU:HD12	1.45	0.81
1:F:180:ASP:OD1	1:F:180:ASP:N	2.06	0.81
1:F:408:LEU:H	1:F:408:LEU:HD12	1.43	0.81
1:E:408:LEU:H	1:E:408:LEU:HD12	1.43	0.81
1:A:597:ASN:HD21	1:A:601:GLU:N	1.79	0.81
1:F:334:LEU:HD12	1:F:334:LEU:H	1.46	0.81
1:A:546:LYS:HD2	1:A:554:LYS:HE3	1.62	0.81
1:B:135:VAL:O	1:B:135:VAL:HG22	1.81	0.81
1:D:546:LYS:HD2	1:D:554:LYS:HE3	1.62	0.81
1:F:447:SER:OG	1:F:450:ASN:O	1.97	0.81
1:A:497:LEU:HD13	1:A:556:MET:HG2	1.62	0.81
1:B:173:ILE:HD12	1:B:243:LEU:HD23	1.62	0.81
1:F:629:ASN:C	1:F:629:ASN:HD22	1.84	0.81
1:B:497:LEU:HD13	1:B:556:MET:HG2	1.63	0.81
1:A:135:VAL:O	1:A:135:VAL:HG22	1.81	0.80
2:S:106:ARG:HG3	2:S:121:VAL:CG2	2.05	0.80
1:A:697:ILE:HD13	1:A:732:ILE:CD1	2.11	0.80
1:D:597:ASN:HD21	1:D:601:GLU:N	1.80	0.80
1:F:134:LYS:HG2	1:F:136:PRO:HD3	1.62	0.80
1:F:736:LEU:HD21	1:F:750:GLN:NE2	1.96	0.80
1:B:501:LEU:HD22	2:P:112:LEU:HD21	1.61	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:40:GLY:O	2:R:41:GLN:HG3	1.81	0.80
2:T:40:GLY:O	2:T:41:GLN:HG3	1.80	0.80
1:A:142:VAL:HG22	1:A:154:ILE:HG23	1.60	0.80
1:D:497:LEU:HD13	1:D:556:MET:HG2	1.62	0.80
1:E:736:LEU:HD21	1:E:750:GLN:NE2	1.96	0.80
1:C:173:ILE:HD12	1:C:243:LEU:HD23	1.63	0.80
1:D:325:TYR:HB2	1:D:498:ALA:HB3	1.64	0.80
2:S:40:GLY:O	2:S:41:GLN:HG3	1.80	0.80
1:C:182:ILE:C	1:C:187:SER:HB2	2.01	0.80
1:E:191:GLU:O	1:E:192:PHE:C	2.16	0.80
1:B:184:LYS:NZ	1:B:191:GLU:HB2	1.97	0.80
1:E:629:ASN:C	1:E:629:ASN:HD22	1.85	0.80
1:F:161:ILE:HA	1:F:167:LYS:HD2	1.64	0.80
1:B:297:LYS:HZ1	1:B:601:GLU:HB3	1.47	0.80
1:E:180:ASP:N	1:E:180:ASP:OD1	2.15	0.80
1:B:179:LEU:O	1:B:183:SER:CA	2.30	0.80
1:E:546:LYS:HD2	1:E:554:LYS:HE3	1.62	0.80
2:O:9:ILE:HD12	2:O:69:LEU:HD11	1.64	0.80
1:B:325:TYR:HB2	1:B:498:ALA:HB3	1.64	0.80
1:C:135:VAL:HG22	1:C:135:VAL:O	1.81	0.80
1:D:296:LEU:CD2	1:D:296:LEU:H	1.83	0.80
1:D:90:PRO:O	1:D:93:VAL:HG12	1.82	0.80
1:F:325:TYR:HB2	1:F:498:ALA:HB3	1.63	0.80
1:B:107:THR:HG21	1:B:115:LYS:HE3	1.62	0.80
1:D:697:ILE:HD13	1:D:732:ILE:CD1	2.09	0.80
2:Q:106:ARG:HG3	2:Q:121:VAL:CG2	2.05	0.80
1:A:182:ILE:O	1:A:187:SER:HB2	1.82	0.79
2:S:9:ILE:HD12	2:S:69:LEU:HD11	1.62	0.79
2:T:51:MET:HB3	2:T:71:MET:HG3	1.65	0.79
1:C:183:SER:O	1:C:187:SER:HB3	1.82	0.79
1:B:736:LEU:HD21	1:B:750:GLN:NE2	1.96	0.79
1:C:447:SER:OG	1:C:450:ASN:O	2.00	0.79
1:C:629:ASN:C	1:C:629:ASN:HD22	1.86	0.79
1:F:373:LYS:HD3	1:F:376:GLN:NE2	1.97	0.79
1:B:183:SER:O	1:B:187:SER:HB3	1.83	0.79
1:D:629:ASN:C	1:D:629:ASN:HD22	1.86	0.79
1:E:135:VAL:HG22	1:E:135:VAL:O	1.81	0.79
1:F:497:LEU:HD13	1:F:556:MET:HG2	1.62	0.79
1:B:697:ILE:HD13	1:B:732:ILE:CD1	2.10	0.79
1:C:736:LEU:HD21	1:C:750:GLN:NE2	1.97	0.79
1:D:736:LEU:HD21	1:D:750:GLN:NE2	1.97	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:629:ASN:HD22	1:A:629:ASN:C	1.85	0.79
1:B:184:LYS:NZ	1:B:193:LEU:HD12	1.96	0.79
1:C:325:TYR:HB2	1:C:498:ALA:HB3	1.64	0.79
1:D:135:VAL:HG22	1:D:135:VAL:O	1.81	0.79
1:F:135:VAL:O	1:F:135:VAL:HG22	1.81	0.79
1:A:736:LEU:HD21	1:A:750:GLN:NE2	1.96	0.79
1:B:373:LYS:HD3	1:B:376:GLN:NE2	1.98	0.79
1:B:546:LYS:HD2	1:B:554:LYS:HE3	1.65	0.79
1:F:179:LEU:O	1:F:183:SER:CA	2.30	0.79
1:F:90:PRO:O	1:F:93:VAL:HG12	1.82	0.79
1:F:501:LEU:HD22	2:T:112:LEU:HD21	1.63	0.79
1:A:90:PRO:O	1:A:93:VAL:HG12	1.82	0.79
1:B:90:PRO:O	1:B:93:VAL:HG12	1.83	0.79
1:E:497:LEU:HD13	1:E:556:MET:HG2	1.62	0.79
1:C:179:LEU:O	1:C:183:SER:CA	2.30	0.79
1:C:546:LYS:HD2	1:C:554:LYS:HE3	1.64	0.79
1:E:90:PRO:O	1:E:93:VAL:HG12	1.83	0.79
2:O:51:MET:HB3	2:O:71:MET:HG3	1.65	0.79
2:R:94:LYS:NZ	2:R:94:LYS:HB3	1.97	0.79
1:E:115:LYS:HZ1	1:E:116:GLU:N	1.80	0.79
2:S:94:LYS:HB3	2:S:94:LYS:NZ	1.97	0.79
1:C:373:LYS:HD3	1:C:376:GLN:NE2	1.98	0.78
1:E:318:ILE:H	1:E:318:ILE:HD12	1.49	0.78
2:P:51:MET:HB3	2:P:71:MET:HG3	1.65	0.78
1:C:152:LEU:HD22	1:C:154:ILE:HD11	1.65	0.78
2:P:9:ILE:HD12	2:P:69:LEU:HD11	1.64	0.78
1:B:629:ASN:HD22	1:B:629:ASN:C	1.87	0.78
1:C:180:ASP:CG	1:C:181:ILE:H	1.86	0.78
2:P:94:LYS:HB3	2:P:94:LYS:NZ	1.98	0.78
2:T:94:LYS:NZ	2:T:94:LYS:HB3	1.98	0.78
1:A:373:LYS:HD3	1:A:376:GLN:NE2	1.98	0.78
1:E:373:LYS:HD3	1:E:376:GLN:NE2	1.98	0.78
2:O:94:LYS:NZ	2:O:94:LYS:HB3	1.98	0.78
1:A:325:TYR:HB2	1:A:498:ALA:HB3	1.64	0.78
1:F:546:LYS:HD2	1:F:554:LYS:HE3	1.63	0.78
2:Q:51:MET:HB3	2:Q:71:MET:HG3	1.66	0.78
2:R:51:MET:HB3	2:R:71:MET:HG3	1.66	0.78
1:C:180:ASP:OD1	1:C:180:ASP:N	2.16	0.78
1:E:697:ILE:HD13	1:E:732:ILE:CD1	2.12	0.78
1:B:179:LEU:O	1:B:183:SER:N	2.17	0.78
1:D:581:GLN:NE2	1:D:629:ASN:H	1.82	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:728:ALA:O	1:D:732:ILE:HG12	1.84	0.78
1:E:443:GLU:HG2	1:E:458:LYS:NZ	1.99	0.78
1:E:728:ALA:O	1:E:732:ILE:HG12	1.84	0.78
1:B:581:GLN:NE2	1:B:629:ASN:H	1.82	0.78
1:C:184:LYS:NZ	1:C:193:LEU:HD12	1.98	0.78
1:F:443:GLU:HG2	1:F:458:LYS:NZ	1.99	0.78
2:Q:94:LYS:HB3	2:Q:94:LYS:NZ	1.98	0.78
2:T:9:ILE:HD12	2:T:69:LEU:HD11	1.65	0.78
1:D:179:LEU:C	1:D:183:SER:HB2	2.01	0.77
2:R:106:ARG:HG3	2:R:121:VAL:CG2	2.06	0.77
2:R:9:ILE:HD12	2:R:69:LEU:HD11	1.65	0.77
1:F:184:LYS:NZ	1:F:193:LEU:HD12	1.99	0.77
1:A:152:LEU:HD22	1:A:154:ILE:HD11	1.64	0.77
1:C:581:GLN:NE2	1:C:629:ASN:H	1.83	0.77
1:C:90:PRO:O	1:C:93:VAL:HG12	1.84	0.77
1:D:180:ASP:CG	1:D:181:ILE:H	1.88	0.77
1:D:182:ILE:C	1:D:187:SER:HB2	2.04	0.77
1:A:540:ARG:NH2	2:O:87:GLU:OE1	2.17	0.77
2:P:106:ARG:HG3	2:P:121:VAL:CG2	2.05	0.77
2:S:51:MET:HB3	2:S:71:MET:HG3	1.66	0.77
1:D:161:ILE:HA	1:D:167:LYS:HD2	1.66	0.77
1:D:373:LYS:HD3	1:D:376:GLN:NE2	1.99	0.77
1:E:625:LEU:HD12	1:E:626:TYR:N	2.00	0.77
1:A:318:ILE:H	1:A:318:ILE:HD12	1.48	0.77
1:B:152:LEU:HD22	1:B:154:ILE:HD11	1.65	0.77
1:C:443:GLU:HG2	1:C:458:LYS:NZ	2.00	0.77
1:E:115:LYS:HZ1	1:E:116:GLU:HG2	1.49	0.77
1:F:318:ILE:HD12	1:F:318:ILE:H	1.50	0.77
1:A:184:LYS:NZ	1:A:193:LEU:HD12	1.99	0.77
1:B:90:PRO:HD3	1:B:249:PHE:CE2	2.19	0.77
1:B:443:GLU:HG2	1:B:458:LYS:HZ1	1.47	0.77
1:B:480:ASN:HD22	1:B:481:VAL:H	1.30	0.77
1:C:161:ILE:HA	1:C:167:LYS:HD2	1.64	0.77
1:C:697:ILE:HD13	1:C:732:ILE:CD1	2.11	0.77
1:E:152:LEU:HD22	1:E:154:ILE:HD11	1.65	0.77
2:S:33:GLY:O	2:S:37:ARG:HG3	1.85	0.77
1:F:254:ARG:HG2	1:F:255:THR:H	1.50	0.77
1:B:254:ARG:HG2	1:B:255:THR:H	1.50	0.76
1:D:625:LEU:HD12	1:D:626:TYR:N	2.00	0.76
1:E:182:ILE:O	1:E:187:SER:CB	2.30	0.76
1:E:581:GLN:NE2	1:E:629:ASN:H	1.83	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:66:LEU:HD11	1:A:104:ILE:HG13	1.67	0.76
1:B:443:GLU:HG2	1:B:458:LYS:NZ	2.00	0.76
1:D:318:ILE:HD12	1:D:318:ILE:H	1.50	0.76
1:E:540:ARG:NH2	2:S:87:GLU:OE1	2.18	0.76
1:F:581:GLN:NE2	1:F:629:ASN:H	1.83	0.76
2:O:93:ASP:OD1	2:O:97:ASN:ND2	2.19	0.76
1:B:728:ALA:O	1:B:732:ILE:HG12	1.84	0.76
1:D:152:LEU:HD22	1:D:154:ILE:HD11	1.66	0.76
1:A:480:ASN:HD22	1:A:481:VAL:H	1.30	0.76
1:C:540:ARG:NH2	2:Q:87:GLU:OE1	2.18	0.76
1:D:540:ARG:NH2	2:R:87:GLU:OE1	2.19	0.76
1:F:540:ARG:NH2	2:T:87:GLU:OE1	2.19	0.76
1:E:480:ASN:HD22	1:E:481:VAL:H	1.31	0.76
1:F:152:LEU:HD22	1:F:154:ILE:HD11	1.66	0.76
1:F:480:ASN:ND2	1:F:481:VAL:N	2.34	0.76
2:Q:9:ILE:HD12	2:Q:69:LEU:HD11	1.65	0.76
1:B:169:VAL:O	1:B:173:ILE:HG22	1.86	0.76
1:C:728:ALA:O	1:C:732:ILE:HG12	1.85	0.76
2:O:97:ASN:ND2	2:O:97:ASN:H	1.84	0.76
1:B:318:ILE:H	1:B:318:ILE:HD12	1.50	0.76
1:F:297:LYS:HZ1	1:F:601:GLU:HB3	1.51	0.76
1:F:625:LEU:HD12	1:F:626:TYR:N	2.01	0.76
2:O:33:GLY:O	2:O:37:ARG:HG3	1.86	0.76
1:A:728:ALA:O	1:A:732:ILE:HG12	1.84	0.76
1:C:169:VAL:O	1:C:173:ILE:HG22	1.86	0.76
1:D:184:LYS:NZ	1:D:193:LEU:HD12	1.99	0.76
2:P:33:GLY:O	2:P:37:ARG:HG3	1.86	0.76
1:A:161:ILE:HA	1:A:167:LYS:HD2	1.66	0.75
1:A:480:ASN:ND2	1:A:481:VAL:N	2.34	0.75
1:C:472:ARG:HH11	1:C:472:ARG:HB3	1.52	0.75
1:F:169:VAL:O	1:F:173:ILE:HG22	1.86	0.75
1:A:443:GLU:HG2	1:A:458:LYS:NZ	2.01	0.75
1:B:625:LEU:HD12	1:B:626:TYR:N	2.01	0.75
1:A:128:MET:HB2	1:A:239:HIS:CE1	2.22	0.75
1:C:711:ILE:HG13	1:C:712:PHE:CD2	2.22	0.75
1:E:297:LYS:HZ1	1:E:601:GLU:HB3	1.51	0.75
1:E:711:ILE:HG13	1:E:712:PHE:CD2	2.21	0.75
1:F:472:ARG:HH11	1:F:472:ARG:HB3	1.52	0.75
1:A:581:GLN:NE2	1:A:629:ASN:H	1.82	0.75
1:D:443:GLU:HG2	1:D:458:LYS:NZ	2.00	0.75
1:E:254:ARG:HG2	1:E:255:THR:H	1.50	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:164:GLU:O	1:F:167:LYS:HG2	1.87	0.75
1:F:728:ALA:O	1:F:732:ILE:HG12	1.86	0.75
2:Q:97:ASN:H	2:Q:97:ASN:ND2	1.84	0.75
2:T:33:GLY:O	2:T:37:ARG:HG3	1.87	0.75
1:D:254:ARG:HG2	1:D:255:THR:H	1.51	0.75
1:D:711:ILE:HG13	1:D:712:PHE:CD2	2.22	0.75
1:E:184:LYS:NZ	1:E:193:LEU:HD12	2.01	0.75
1:E:305:SER:HB2	1:E:594:PHE:CD1	2.22	0.75
1:F:794:GLN:O	1:F:797:ILE:HG12	1.87	0.75
1:A:169:VAL:O	1:A:173:ILE:HG22	1.86	0.75
1:A:188:LEU:HD23	1:A:188:LEU:H	0.62	0.75
1:C:625:LEU:HD12	1:C:626:TYR:N	2.02	0.75
1:D:472:ARG:HB3	1:D:472:ARG:HH11	1.52	0.75
1:E:169:VAL:O	1:E:173:ILE:HG22	1.86	0.75
1:E:480:ASN:ND2	1:E:481:VAL:N	2.34	0.75
1:A:164:GLU:O	1:A:167:LYS:HG2	1.86	0.75
1:A:254:ARG:HG2	1:A:255:THR:H	1.50	0.75
1:B:711:ILE:HG13	1:B:712:PHE:CD2	2.22	0.75
1:C:301:ALA:O	1:C:303:LYS:N	2.20	0.75
1:B:66:LEU:HD11	1:B:104:ILE:HG13	1.68	0.75
1:C:179:LEU:C	1:C:183:SER:HB2	2.01	0.75
1:C:254:ARG:HG2	1:C:255:THR:H	1.50	0.75
1:D:164:GLU:O	1:D:167:LYS:HG2	1.86	0.75
1:D:301:ALA:O	1:D:303:LYS:N	2.20	0.75
1:D:443:GLU:CG	1:D:458:LYS:HG2	2.17	0.75
1:F:66:LEU:HD11	1:F:104:ILE:HG13	1.69	0.75
2:R:100:ILE:HB	2:R:136:VAL:CG2	2.17	0.75
1:A:297:LYS:HZ1	1:A:601:GLU:HB3	1.52	0.75
1:B:161:ILE:HA	1:B:167:LYS:HD2	1.67	0.75
1:B:480:ASN:ND2	1:B:481:VAL:N	2.34	0.75
1:B:792:VAL:O	1:B:796:ILE:HG12	1.87	0.75
1:D:123:GLU:HG2	1:D:124:GLU:N	2.02	0.75
2:O:100:ILE:HB	2:O:136:VAL:CG2	2.16	0.75
2:R:94:LYS:HB3	2:R:94:LYS:HZ2	1.51	0.75
2:T:106:ARG:HG3	2:T:121:VAL:CG2	2.05	0.75
1:A:184:LYS:HZ3	1:A:193:LEU:HD12	1.52	0.74
1:A:625:LEU:HD12	1:A:626:TYR:N	2.02	0.74
1:E:164:GLU:O	1:E:167:LYS:HG2	1.87	0.74
1:F:443:GLU:CG	1:F:458:LYS:HG2	2.17	0.74
2:Q:100:ILE:HB	2:Q:136:VAL:CG2	2.17	0.74
1:A:472:ARG:HB3	1:A:472:ARG:HH11	1.52	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:318:ILE:HD12	1:C:318:ILE:H	1.51	0.74
1:D:134:LYS:C	1:D:136:PRO:HD3	2.07	0.74
1:D:480:ASN:HD22	1:D:481:VAL:H	1.32	0.74
1:E:180:ASP:CG	1:E:181:ILE:H	1.88	0.74
1:A:443:GLU:HG2	1:A:458:LYS:HZ1	1.51	0.74
1:A:305:SER:HB2	1:A:594:PHE:CD1	2.23	0.74
1:B:443:GLU:CG	1:B:458:LYS:HG2	2.16	0.74
1:C:217:LYS:HZ3	1:C:217:LYS:HB3	1.51	0.74
1:D:275:GLY:HA2	1:D:278:LYS:CE	2.18	0.74
1:E:161:ILE:HA	1:E:167:LYS:HD2	1.68	0.74
1:B:305:SER:HB2	1:B:594:PHE:CD1	2.22	0.74
1:F:123:GLU:HG2	1:F:124:GLU:N	2.02	0.74
1:F:173:ILE:HD12	1:F:243:LEU:CD2	2.18	0.74
1:A:107:THR:HG21	1:A:115:LYS:HE3	1.67	0.74
1:A:711:ILE:HG13	1:A:712:PHE:CD2	2.23	0.74
1:B:301:ALA:O	1:B:303:LYS:N	2.20	0.74
1:C:794:GLN:O	1:C:797:ILE:HG12	1.87	0.74
1:D:199:LEU:C	1:D:201:ASP:H	1.91	0.74
1:A:794:GLN:O	1:A:797:ILE:HG12	1.88	0.74
1:B:447:SER:OG	1:B:450:ASN:O	2.03	0.74
1:E:308:VAL:O	1:E:311:HIS:HB2	1.88	0.74
1:E:443:GLU:CG	1:E:458:LYS:HG2	2.17	0.74
2:Q:33:GLY:O	2:Q:37:ARG:HG3	1.87	0.74
1:B:188:LEU:CD2	1:B:188:LEU:N	2.32	0.74
1:C:443:GLU:CG	1:C:458:LYS:HG2	2.17	0.74
1:E:794:GLN:O	1:E:797:ILE:HG12	1.87	0.74
1:A:134:LYS:HG2	1:A:136:PRO:CD	2.17	0.74
1:A:792:VAL:O	1:A:796:ILE:HG12	1.88	0.74
1:D:308:VAL:O	1:D:311:HIS:HB2	1.87	0.74
1:D:792:VAL:O	1:D:796:ILE:HG12	1.87	0.74
1:D:794:GLN:O	1:D:797:ILE:HG12	1.87	0.74
1:F:301:ALA:O	1:F:303:LYS:N	2.20	0.74
2:P:100:ILE:HB	2:P:136:VAL:CG2	2.16	0.74
1:B:472:ARG:HB3	1:B:472:ARG:HH11	1.52	0.74
1:C:199:LEU:C	1:C:201:ASP:H	1.91	0.74
1:C:480:ASN:ND2	1:C:481:VAL:N	2.35	0.74
1:F:480:ASN:HD22	1:F:481:VAL:H	1.30	0.74
1:F:711:ILE:HG13	1:F:712:PHE:CD2	2.22	0.74
1:C:164:GLU:O	1:C:167:LYS:HG2	1.87	0.74
1:D:480:ASN:ND2	1:D:481:VAL:N	2.35	0.74
1:B:794:GLN:O	1:B:797:ILE:HG12	1.87	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:175:LYS:HZ2	1:D:175:LYS:HB2	1.50	0.73
1:E:66:LEU:HD11	1:E:104:ILE:HG13	1.69	0.73
1:A:301:ALA:O	1:A:303:LYS:N	2.20	0.73
1:C:123:GLU:HG2	1:C:124:GLU:N	2.03	0.73
1:C:480:ASN:HD22	1:C:481:VAL:H	1.31	0.73
1:D:678:VAL:HG22	1:D:745:TYR:CE2	2.23	0.73
1:E:275:GLY:HA2	1:E:278:LYS:CE	2.18	0.73
1:F:305:SER:HB2	1:F:594:PHE:CD1	2.23	0.73
1:A:123:GLU:HG2	1:A:124:GLU:N	2.03	0.73
1:A:180:ASP:CG	1:A:181:ILE:H	1.92	0.73
1:C:107:THR:HG21	1:C:115:LYS:HE3	1.69	0.73
1:C:275:GLY:HA2	1:C:278:LYS:CE	2.18	0.73
1:C:718:ARG:NH1	1:C:767:GLN:HE21	1.85	0.73
1:D:66:LEU:HD11	1:D:104:ILE:HG13	1.69	0.73
1:F:180:ASP:CG	1:F:181:ILE:H	1.91	0.73
2:T:100:ILE:HB	2:T:136:VAL:CG2	2.17	0.73
1:A:354:SER:HA	1:A:364:ILE:HD13	1.70	0.73
1:A:443:GLU:CG	1:A:458:LYS:HG2	2.17	0.73
1:B:164:GLU:O	1:B:167:LYS:HG2	1.87	0.73
1:C:90:PRO:HD3	1:C:249:PHE:CE2	2.22	0.73
1:D:169:VAL:O	1:D:173:ILE:HG22	1.87	0.73
1:E:134:LYS:HG2	1:E:136:PRO:HD3	1.69	0.73
1:F:354:SER:HA	1:F:364:ILE:HD13	1.68	0.73
1:B:107:THR:HG21	1:B:115:LYS:CE	2.18	0.73
1:B:134:LYS:HG2	1:B:136:PRO:CD	2.17	0.73
1:E:329:ARG:HD2	1:E:590:ASP:OD2	1.88	0.73
1:F:792:VAL:O	1:F:796:ILE:HG12	1.87	0.73
1:F:90:PRO:HD3	1:F:249:PHE:CE2	2.23	0.73
1:C:134:LYS:HG2	1:C:136:PRO:CD	2.17	0.73
1:C:329:ARG:HD2	1:C:590:ASP:OD2	1.89	0.73
1:F:657:ILE:HG13	1:F:756:ILE:CD1	2.18	0.73
2:R:33:GLY:O	2:R:37:ARG:HG3	1.88	0.73
1:A:173:ILE:HD12	1:A:243:LEU:CD2	2.19	0.73
1:B:154:ILE:HG13	1:B:171:TYR:CE1	2.23	0.73
1:B:275:GLY:HA2	1:B:278:LYS:CE	2.18	0.73
1:E:354:SER:HA	1:E:364:ILE:HD13	1.70	0.73
2:S:100:ILE:HB	2:S:136:VAL:CG2	2.17	0.73
1:B:123:GLU:HG2	1:B:124:GLU:N	2.03	0.73
1:C:792:VAL:O	1:C:796:ILE:HG12	1.87	0.73
1:D:354:SER:HA	1:D:364:ILE:HD13	1.69	0.73
1:E:472:ARG:HB3	1:E:472:ARG:HH11	1.52	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:678:VAL:HG22	1:E:745:TYR:CE2	2.23	0.73
2:T:97:ASN:ND2	2:T:97:ASN:H	1.86	0.73
1:D:305:SER:HB2	1:D:594:PHE:CD1	2.23	0.73
1:A:329:ARG:HD2	1:A:590:ASP:OD2	1.89	0.72
1:C:175:LYS:HZ2	1:C:175:LYS:HB2	1.53	0.72
1:C:66:LEU:HD11	1:C:104:ILE:HG13	1.69	0.72
1:A:199:LEU:C	1:A:201:ASP:H	1.91	0.72
1:B:354:SER:HA	1:B:364:ILE:HD13	1.70	0.72
1:B:329:ARG:HD2	1:B:590:ASP:OD2	1.88	0.72
1:C:154:ILE:HG13	1:C:171:TYR:CE1	2.24	0.72
1:C:354:SER:HA	1:C:364:ILE:HD13	1.70	0.72
1:D:657:ILE:HG13	1:D:756:ILE:CD1	2.19	0.72
1:C:735:VAL:HG12	1:C:741:ILE:CD1	2.19	0.72
1:E:123:GLU:HG2	1:E:124:GLU:N	2.02	0.72
1:E:217:LYS:HB3	1:E:217:LYS:NZ	2.04	0.72
1:E:301:ALA:O	1:E:303:LYS:N	2.21	0.72
1:B:370:LEU:HD11	1:B:455:TYR:CE1	2.24	0.72
1:C:657:ILE:HG13	1:C:756:ILE:CD1	2.19	0.72
1:D:173:ILE:HD12	1:D:243:LEU:CD2	2.19	0.72
1:D:329:ARG:HD2	1:D:590:ASP:OD2	1.90	0.72
1:E:173:ILE:HD12	1:E:243:LEU:CD2	2.19	0.72
1:F:217:LYS:HB3	1:F:217:LYS:HZ3	1.52	0.72
2:P:97:ASN:ND2	2:P:97:ASN:H	1.85	0.72
2:R:97:ASN:ND2	2:R:97:ASN:H	1.86	0.72
1:A:447:SER:OG	1:A:450:ASN:O	2.01	0.72
1:A:90:PRO:HD3	1:A:249:PHE:CE2	2.23	0.72
1:D:297:LYS:HZ1	1:D:601:GLU:HB3	1.54	0.72
1:F:199:LEU:C	1:F:201:ASP:H	1.91	0.72
2:Q:93:ASP:OD1	2:Q:97:ASN:ND2	2.22	0.72
1:A:275:GLY:HA2	1:A:278:LYS:CE	2.17	0.72
1:B:295:VAL:C	1:B:296:LEU:HD23	2.10	0.72
1:C:173:ILE:HD12	1:C:243:LEU:CD2	2.20	0.72
1:C:305:SER:HB2	1:C:594:PHE:CD1	2.23	0.72
1:E:792:VAL:O	1:E:796:ILE:HG12	1.89	0.72
1:F:130:SER:HB2	1:F:170:TYR:CZ	2.24	0.72
1:F:185:ASP:O	1:F:190:PRO:HG3	1.90	0.72
1:F:293:ILE:HD11	1:F:617:LYS:HD3	1.72	0.72
1:A:308:VAL:O	1:A:311:HIS:HB2	1.90	0.72
1:A:462:ILE:HG12	1:A:463:THR:N	2.05	0.72
1:A:735:VAL:HG12	1:A:741:ILE:CD1	2.20	0.72
1:B:391:ILE:HG23	1:B:398:ILE:O	1.89	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:185:ASP:O	1:C:190:PRO:HG3	1.89	0.72
2:O:13:LYS:NZ	2:O:65:PHE:HB3	2.05	0.72
1:A:154:ILE:HG13	1:A:171:TYR:CE1	2.25	0.72
1:A:657:ILE:HG13	1:A:756:ILE:CD1	2.19	0.72
1:B:173:ILE:HD12	1:B:243:LEU:CD2	2.19	0.72
1:D:217:LYS:HB3	1:D:217:LYS:NZ	2.04	0.72
1:F:275:GLY:HA2	1:F:278:LYS:CE	2.18	0.72
1:F:370:LEU:HD11	1:F:455:TYR:CE1	2.25	0.72
1:A:370:LEU:HD11	1:A:455:TYR:CE1	2.25	0.72
1:B:735:VAL:HG12	1:B:741:ILE:CD1	2.19	0.72
1:C:107:THR:HG21	1:C:115:LYS:CE	2.20	0.72
1:C:308:VAL:O	1:C:311:HIS:HB2	1.89	0.72
1:E:217:LYS:HZ2	1:E:236:GLU:HG3	1.55	0.72
1:E:90:PRO:HD3	1:E:249:PHE:CE2	2.25	0.72
1:F:154:ILE:HG13	1:F:171:TYR:CE1	2.25	0.72
2:O:92:PHE:O	2:O:94:LYS:N	2.23	0.72
2:S:97:ASN:ND2	2:S:97:ASN:H	1.86	0.72
1:F:142:VAL:HG13	1:F:154:ILE:CD1	2.20	0.72
1:F:678:VAL:HG22	1:F:745:TYR:CE2	2.23	0.72
2:T:93:ASP:OD1	2:T:97:ASN:ND2	2.23	0.72
1:C:182:ILE:O	1:C:187:SER:CB	2.35	0.71
1:D:182:ILE:O	1:D:187:SER:CB	2.35	0.71
1:D:90:PRO:HD3	1:D:249:PHE:CE2	2.25	0.71
2:P:92:PHE:O	2:P:94:LYS:N	2.23	0.71
1:A:295:VAL:C	1:A:296:LEU:HD23	2.10	0.71
1:A:678:VAL:HG22	1:A:745:TYR:CE2	2.23	0.71
1:B:183:SER:O	1:B:187:SER:CB	2.37	0.71
1:C:411:GLU:HA	1:C:414:LYS:HG3	1.72	0.71
1:E:134:LYS:C	1:E:136:PRO:HD3	2.09	0.71
1:E:199:LEU:C	1:E:201:ASP:H	1.91	0.71
2:O:32:LEU:HD22	2:O:63:ILE:CD1	2.20	0.71
2:P:13:LYS:NZ	2:P:65:PHE:HB3	2.05	0.71
2:Q:46:ALA:HA	2:Q:49:GLN:HE22	1.55	0.71
1:A:660:SER:HB2	1:A:702:SER:HB3	1.72	0.71
1:C:462:ILE:HG12	1:C:463:THR:N	2.05	0.71
2:O:46:ALA:HA	2:O:49:GLN:HE22	1.55	0.71
1:B:540:ARG:NH2	2:P:87:GLU:OE1	2.23	0.71
2:T:92:PHE:O	2:T:94:LYS:N	2.23	0.71
1:B:462:ILE:HG12	1:B:463:THR:N	2.05	0.71
1:E:115:LYS:HZ1	1:E:116:GLU:H	1.38	0.71
1:E:130:SER:HB2	1:E:170:TYR:CZ	2.25	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:391:ILE:HG23	1:E:398:ILE:O	1.90	0.71
1:F:696:LYS:HE2	1:F:731:GLU:HG3	1.73	0.71
2:O:6:GLU:HG3	2:O:7:GLU:N	2.06	0.71
1:B:180:ASP:CG	1:B:181:ILE:H	1.90	0.71
1:C:217:LYS:NZ	1:C:217:LYS:HB3	2.04	0.71
1:D:462:ILE:HG12	1:D:463:THR:N	2.05	0.71
1:E:187:SER:C	1:E:188:LEU:O	2.25	0.71
1:F:308:VAL:O	1:F:311:HIS:HB2	1.90	0.71
2:R:46:ALA:HA	2:R:49:GLN:HE22	1.54	0.71
2:T:46:ALA:HA	2:T:49:GLN:HE22	1.55	0.71
1:A:391:ILE:HG23	1:A:398:ILE:O	1.91	0.71
1:C:186:LYS:HE3	1:C:234:LEU:HD12	1.72	0.71
1:D:142:VAL:HG13	1:D:154:ILE:CD1	2.20	0.71
1:E:184:LYS:HZ2	1:E:191:GLU:HB2	1.55	0.71
1:E:370:LEU:HD11	1:E:455:TYR:CE1	2.26	0.71
1:E:735:VAL:HG12	1:E:741:ILE:CD1	2.20	0.71
2:T:13:LYS:NZ	2:T:65:PHE:HB3	2.06	0.71
1:B:308:VAL:O	1:B:311:HIS:HB2	1.90	0.71
1:B:411:GLU:HA	1:B:414:LYS:HG3	1.73	0.71
1:C:370:LEU:HD11	1:C:455:TYR:CE1	2.26	0.71
1:C:776:LEU:HD23	1:C:776:LEU:O	1.91	0.71
1:E:142:VAL:HG13	1:E:154:ILE:CD1	2.20	0.71
1:F:329:ARG:HD2	1:F:590:ASP:OD2	1.89	0.71
1:B:443:GLU:HG2	1:B:458:LYS:CE	2.21	0.71
1:C:324:THR:HB	1:C:499:PRO:HA	1.73	0.71
1:D:115:LYS:HZ1	1:D:116:GLU:N	1.89	0.71
1:D:391:ILE:HG23	1:D:398:ILE:O	1.90	0.71
1:D:694:VAL:CG2	2:R:18:LEU:HD21	2.20	0.71
1:F:199:LEU:O	1:F:201:ASP:N	2.22	0.71
1:A:165:GLN:NE2	1:A:252:ASP:HB3	2.06	0.71
1:D:411:GLU:HA	1:D:414:LYS:HG3	1.73	0.71
1:D:735:VAL:HG12	1:D:741:ILE:CD1	2.21	0.71
1:F:217:LYS:NZ	1:F:217:LYS:HB3	2.04	0.71
2:Q:92:PHE:O	2:Q:94:LYS:N	2.23	0.71
1:A:142:VAL:HG13	1:A:154:ILE:CD1	2.20	0.71
1:B:142:VAL:HG13	1:B:154:ILE:CD1	2.20	0.71
1:C:293:ILE:HD11	1:C:617:LYS:HD3	1.73	0.71
1:E:184:LYS:CE	1:E:191:GLU:HB2	2.20	0.71
1:E:411:GLU:HA	1:E:414:LYS:HG3	1.72	0.71
2:O:106:ARG:HG3	2:O:121:VAL:CG2	2.07	0.71
2:S:32:LEU:HD22	2:S:63:ILE:CD1	2.21	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:411:GLU:HA	1:A:414:LYS:HG3	1.73	0.70
1:B:293:ILE:HD11	1:B:617:LYS:HD3	1.73	0.70
1:D:776:LEU:O	1:D:776:LEU:HD23	1.91	0.70
1:F:134:LYS:C	1:F:136:PRO:HD3	2.10	0.70
1:F:295:VAL:C	1:F:296:LEU:HD23	2.10	0.70
1:F:324:THR:HB	1:F:499:PRO:HA	1.73	0.70
2:P:6:GLU:HG3	2:P:7:GLU:N	2.06	0.70
2:R:13:LYS:NZ	2:R:65:PHE:HB3	2.05	0.70
2:S:6:GLU:HG3	2:S:7:GLU:N	2.05	0.70
1:A:107:THR:HG21	1:A:115:LYS:CE	2.21	0.70
1:C:187:SER:C	1:C:188:LEU:O	2.26	0.70
1:D:293:ILE:HD11	1:D:617:LYS:HD3	1.72	0.70
1:E:629:ASN:HD22	1:E:630:ARG:N	1.89	0.70
1:E:776:LEU:O	1:E:776:LEU:HD23	1.91	0.70
1:C:391:ILE:HG23	1:C:398:ILE:O	1.91	0.70
1:F:443:GLU:HG2	1:F:458:LYS:HZ1	1.56	0.70
2:O:94:LYS:HB3	2:O:94:LYS:HZ2	1.54	0.70
1:A:175:LYS:HZ2	1:A:175:LYS:HB2	1.55	0.70
1:B:217:LYS:HB3	1:B:217:LYS:NZ	2.04	0.70
1:B:660:SER:HB2	1:B:702:SER:HB3	1.72	0.70
1:B:657:ILE:HG13	1:B:756:ILE:CD1	2.21	0.70
1:F:115:LYS:HZ1	1:F:116:GLU:N	1.90	0.70
1:F:411:GLU:HA	1:F:414:LYS:HG3	1.73	0.70
1:F:493:ASP:OD2	1:F:577:HIS:HE1	1.74	0.70
2:R:32:LEU:HD22	2:R:63:ILE:CD1	2.21	0.70
2:R:6:GLU:HG3	2:R:7:GLU:N	2.05	0.70
2:S:92:PHE:O	2:S:94:LYS:N	2.23	0.70
2:T:32:LEU:HD22	2:T:63:ILE:CD1	2.21	0.70
2:T:6:GLU:HG3	2:T:7:GLU:N	2.05	0.70
1:A:191:GLU:O	1:A:193:LEU:N	2.24	0.70
1:A:443:GLU:HG2	1:A:458:LYS:CE	2.21	0.70
1:D:550:SER:N	1:D:553:GLN:HE21	1.85	0.70
1:F:462:ILE:HG12	1:F:463:THR:N	2.05	0.70
2:O:49:GLN:HA	2:O:52:ILE:HG22	1.73	0.70
2:O:97:ASN:H	2:O:97:ASN:HD22	1.39	0.70
2:P:73:ALA:O	2:P:76:MET:N	2.23	0.70
1:A:217:LYS:HB3	1:A:217:LYS:NZ	2.04	0.70
1:A:324:THR:HB	1:A:499:PRO:HA	1.73	0.70
1:C:142:VAL:HG13	1:C:154:ILE:CD1	2.20	0.70
1:E:293:ILE:HD11	1:E:617:LYS:HD3	1.73	0.70
2:R:93:ASP:OD1	2:R:97:ASN:ND2	2.24	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:776:LEU:O	1:A:776:LEU:HD23	1.92	0.70
1:B:199:LEU:O	1:B:201:ASP:N	2.22	0.70
1:B:128:MET:HB2	1:B:239:HIS:CE1	2.26	0.70
1:C:184:LYS:HE2	1:C:193:LEU:HB2	1.74	0.70
1:D:443:GLU:HG2	1:D:458:LYS:CE	2.22	0.70
1:D:660:SER:HB2	1:D:702:SER:HB3	1.73	0.70
1:E:186:LYS:HE3	1:E:234:LEU:HD12	1.71	0.70
1:E:696:LYS:HE2	1:E:731:GLU:HG3	1.74	0.70
1:F:735:VAL:HG12	1:F:741:ILE:CD1	2.21	0.70
1:F:797:ILE:O	1:F:797:ILE:HG13	1.91	0.70
1:B:550:SER:N	1:B:553:GLN:HE21	1.86	0.70
1:C:797:ILE:HG13	1:C:797:ILE:O	1.92	0.70
1:D:187:SER:C	1:D:188:LEU:O	2.26	0.70
1:F:776:LEU:HD23	1:F:776:LEU:O	1.91	0.70
2:R:49:GLN:HA	2:R:52:ILE:HG22	1.73	0.70
1:A:368:GLN:HG3	1:A:383:GLY:HA3	1.74	0.70
1:B:408:LEU:N	1:B:408:LEU:HD12	2.07	0.70
1:C:493:ASP:OD2	1:C:577:HIS:HE1	1.75	0.70
1:D:370:LEU:HD11	1:D:455:TYR:CE1	2.27	0.70
1:F:443:GLU:HG2	1:F:458:LYS:CE	2.21	0.70
2:P:46:ALA:HA	2:P:49:GLN:HE22	1.55	0.70
2:P:93:ASP:OD1	2:P:97:ASN:ND2	2.24	0.70
1:E:694:VAL:CG2	2:S:18:LEU:HD21	2.21	0.70
1:E:462:ILE:HG12	1:E:463:THR:N	2.05	0.70
1:E:660:SER:HB2	1:E:702:SER:HB3	1.73	0.70
2:R:92:PHE:O	2:R:94:LYS:N	2.23	0.70
1:C:678:VAL:HG22	1:C:745:TYR:CE2	2.24	0.69
1:D:324:THR:HB	1:D:499:PRO:HA	1.74	0.69
1:D:797:ILE:HG13	1:D:797:ILE:O	1.92	0.69
1:E:295:VAL:C	1:E:296:LEU:HD23	2.10	0.69
1:E:408:LEU:N	1:E:408:LEU:HD12	2.07	0.69
1:F:165:GLN:NE2	1:F:252:ASP:HB3	2.07	0.69
1:F:629:ASN:HD22	1:F:630:ARG:N	1.90	0.69
2:P:49:GLN:HA	2:P:52:ILE:HG22	1.73	0.69
2:Q:6:GLU:HG3	2:Q:7:GLU:N	2.06	0.69
2:R:58:ASP:C	2:R:60:ASN:N	2.46	0.69
2:S:13:LYS:NZ	2:S:65:PHE:HB3	2.06	0.69
1:A:296:LEU:CD2	1:A:296:LEU:H	1.83	0.69
1:C:408:LEU:HD12	1:C:408:LEU:N	2.06	0.69
1:C:443:GLU:HG2	1:C:458:LYS:CE	2.22	0.69
1:E:443:GLU:HG2	1:E:458:LYS:CE	2.21	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:657:ILE:HG13	1:E:756:ILE:CD1	2.22	0.69
2:Q:32:LEU:HD22	2:Q:63:ILE:CD1	2.21	0.69
2:Q:97:ASN:HD22	2:Q:97:ASN:H	1.39	0.69
1:C:694:VAL:CG2	2:Q:18:LEU:HD21	2.22	0.69
1:D:154:ILE:HG13	1:D:171:TYR:CE1	2.28	0.69
1:F:368:GLN:HG3	1:F:383:GLY:HA3	1.74	0.69
1:D:165:GLN:NE2	1:D:252:ASP:HB3	2.07	0.69
1:D:199:LEU:O	1:D:201:ASP:N	2.22	0.69
1:D:368:GLN:HG3	1:D:383:GLY:HA3	1.73	0.69
1:D:311:HIS:CD2	1:D:564:VAL:HB	2.28	0.69
1:F:660:SER:HB2	1:F:702:SER:HB3	1.73	0.69
2:S:46:ALA:HA	2:S:49:GLN:HE22	1.55	0.69
2:S:93:ASP:OD1	2:S:97:ASN:ND2	2.25	0.69
2:T:49:GLN:HA	2:T:52:ILE:HG22	1.73	0.69
1:A:715:GLU:HA	1:A:718:ARG:CZ	2.22	0.69
1:D:408:LEU:N	1:D:408:LEU:HD12	2.07	0.69
1:D:629:ASN:HD22	1:D:630:ARG:N	1.90	0.69
1:D:722:ILE:HD11	1:D:763:LEU:O	1.91	0.69
1:F:478:ALA:HB1	1:F:486:LYS:O	1.93	0.69
2:Q:49:GLN:HA	2:Q:52:ILE:HG22	1.73	0.69
1:A:493:ASP:OD2	1:A:577:HIS:HE1	1.75	0.69
1:B:478:ALA:HB1	1:B:486:LYS:O	1.93	0.69
1:B:776:LEU:HD23	1:B:776:LEU:O	1.91	0.69
1:C:660:SER:HB2	1:C:702:SER:HB3	1.73	0.69
1:F:391:ILE:HG23	1:F:398:ILE:O	1.93	0.69
2:S:58:ASP:C	2:S:60:ASN:N	2.46	0.69
1:A:89:ILE:HG22	1:A:93:VAL:CG1	2.08	0.69
1:B:199:LEU:C	1:B:201:ASP:H	1.95	0.69
1:E:797:ILE:HG13	1:E:797:ILE:O	1.92	0.69
1:B:165:GLN:NE2	1:B:252:ASP:HB3	2.08	0.69
1:B:368:GLN:HG3	1:B:383:GLY:HA3	1.73	0.69
1:B:696:LYS:HE2	1:B:731:GLU:HG3	1.75	0.69
1:D:134:LYS:HG2	1:D:136:PRO:HD3	1.73	0.69
1:D:295:VAL:C	1:D:296:LEU:HD23	2.10	0.69
1:D:334:LEU:HD12	1:D:334:LEU:N	2.08	0.69
2:O:58:ASP:C	2:O:60:ASN:N	2.45	0.69
2:P:32:LEU:HD22	2:P:63:ILE:CD1	2.22	0.69
2:P:97:ASN:H	2:P:97:ASN:HD22	1.41	0.69
2:Q:13:LYS:NZ	2:Q:65:PHE:HB3	2.07	0.69
2:S:49:GLN:HA	2:S:52:ILE:HG22	1.73	0.69
1:A:293:ILE:O	1:A:295:VAL:HG22	1.92	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:408:LEU:HD12	1:A:408:LEU:N	2.06	0.69
1:C:718:ARG:O	1:C:722:ILE:HG13	1.93	0.69
1:E:334:LEU:HD12	1:E:334:LEU:N	2.08	0.69
1:F:548:THR:O	4:F:908:3AT:N6	2.26	0.69
1:C:165:GLN:NE2	1:C:252:ASP:HB3	2.08	0.69
1:D:715:GLU:HA	1:D:718:ARG:CZ	2.23	0.69
1:E:165:GLN:NE2	1:E:252:ASP:HB3	2.07	0.69
1:F:715:GLU:HA	1:F:718:ARG:CZ	2.22	0.69
2:P:58:ASP:C	2:P:60:ASN:N	2.45	0.69
1:B:715:GLU:HA	1:B:718:ARG:CZ	2.23	0.69
1:C:311:HIS:CD2	1:C:564:VAL:HB	2.27	0.69
1:A:550:SER:N	1:A:553:GLN:HE21	1.86	0.68
1:A:311:HIS:CD2	1:A:564:VAL:HB	2.28	0.68
1:E:324:THR:HB	1:E:499:PRO:HA	1.74	0.68
1:E:311:HIS:CD2	1:E:564:VAL:HB	2.28	0.68
1:A:797:ILE:HG13	1:A:797:ILE:O	1.92	0.68
1:B:197:LYS:HD2	1:B:197:LYS:O	1.93	0.68
1:B:324:THR:HB	1:B:499:PRO:HA	1.73	0.68
1:C:368:GLN:HG3	1:C:383:GLY:HA3	1.73	0.68
1:D:735:VAL:O	1:D:738:SER:HB2	1.94	0.68
1:E:123:GLU:HG2	1:E:124:GLU:H	1.57	0.68
1:E:188:LEU:HD22	1:E:188:LEU:N	2.07	0.68
1:F:408:LEU:N	1:F:408:LEU:HD12	2.07	0.68
1:C:722:ILE:HG23	1:C:760:VAL:HG13	1.74	0.68
1:D:184:LYS:HE2	1:D:193:LEU:HB2	1.74	0.68
1:D:334:LEU:CD1	1:D:334:LEU:H	2.06	0.68
1:B:694:VAL:CG2	2:P:18:LEU:HD21	2.24	0.68
1:A:597:ASN:ND2	1:A:601:GLU:H	1.92	0.68
1:B:123:GLU:HG2	1:B:124:GLU:H	1.58	0.68
1:D:197:LYS:O	1:D:197:LYS:HD2	1.93	0.68
1:D:759:GLN:HE21	1:D:763:LEU:HD11	1.57	0.68
1:E:186:LYS:CE	1:E:234:LEU:HD12	2.24	0.68
1:E:334:LEU:H	1:E:334:LEU:CD1	2.06	0.68
2:T:97:ASN:HD22	2:T:97:ASN:H	1.42	0.68
1:B:134:LYS:C	1:B:136:PRO:HD3	2.14	0.68
1:B:184:LYS:HE2	1:B:193:LEU:HB2	1.76	0.68
1:C:183:SER:O	1:C:187:SER:CB	2.41	0.68
1:C:295:VAL:C	1:C:296:LEU:HD23	2.10	0.68
1:C:715:GLU:HA	1:C:718:ARG:CZ	2.22	0.68
1:D:186:LYS:HE3	1:D:234:LEU:HD12	1.74	0.68
1:E:128:MET:HB2	1:E:239:HIS:CE1	2.28	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:184:LYS:HE2	1:F:193:LEU:HB2	1.74	0.68
1:C:134:LYS:C	1:C:136:PRO:HD3	2.14	0.68
1:C:597:ASN:ND2	1:C:601:GLU:H	1.92	0.68
1:E:478:ALA:HB1	1:E:486:LYS:O	1.93	0.68
1:F:134:LYS:HG2	1:F:136:PRO:CD	2.24	0.68
1:F:175:LYS:HB2	1:F:175:LYS:HZ2	1.59	0.68
1:F:128:MET:HB2	1:F:239:HIS:CE1	2.29	0.68
1:A:134:LYS:C	1:A:136:PRO:HD3	2.14	0.68
1:A:478:ALA:HB1	1:A:486:LYS:O	1.94	0.68
1:C:629:ASN:HD22	1:C:630:ARG:N	1.90	0.68
1:D:718:ARG:O	1:D:722:ILE:HG13	1.94	0.68
1:E:286:GLU:O	1:E:290:LYS:HE3	1.94	0.68
1:E:597:ASN:HB2	1:E:598:PRO:CD	2.23	0.68
1:F:123:GLU:HG2	1:F:124:GLU:H	1.58	0.68
1:F:197:LYS:HD2	1:F:197:LYS:O	1.93	0.68
1:F:286:GLU:O	1:F:290:LYS:HE3	1.94	0.68
1:F:550:SER:N	1:F:553:GLN:HE21	1.86	0.68
2:O:97:ASN:N	2:O:97:ASN:HD22	1.92	0.68
1:D:478:ALA:HB1	1:D:486:LYS:O	1.94	0.68
2:S:73:ALA:O	2:S:76:MET:N	2.27	0.68
2:T:58:ASP:C	2:T:60:ASN:N	2.46	0.68
1:A:184:LYS:HE2	1:A:193:LEU:HB2	1.74	0.68
1:A:696:LYS:HE2	1:A:731:GLU:HG3	1.74	0.68
1:B:179:LEU:C	1:B:183:SER:HB2	2.10	0.68
1:B:286:GLU:O	1:B:290:LYS:HE3	1.94	0.68
1:B:797:ILE:HG13	1:B:797:ILE:O	1.92	0.68
1:C:334:LEU:N	1:C:334:LEU:HD12	2.09	0.68
1:E:310:GLU:OE2	1:E:340:LYS:HD2	1.94	0.68
1:E:368:GLN:HG3	1:E:383:GLY:HA3	1.75	0.68
1:F:718:ARG:O	1:F:722:ILE:HG13	1.94	0.68
2:Q:18:LEU:HD22	2:Q:18:LEU:O	1.94	0.68
1:C:77:ASP:O	1:C:81:GLN:HB2	1.94	0.68
1:E:77:ASP:O	1:E:81:GLN:HB2	1.94	0.68
1:F:107:THR:HG21	1:F:115:LYS:HE3	1.74	0.68
1:F:694:VAL:CG2	2:T:18:LEU:HD21	2.23	0.68
1:A:334:LEU:N	1:A:334:LEU:HD12	2.09	0.67
1:A:629:ASN:HD22	1:A:630:ARG:N	1.91	0.67
1:B:77:ASP:O	1:B:81:GLN:HB2	1.94	0.67
1:C:286:GLU:O	1:C:290:LYS:HE3	1.94	0.67
1:D:414:LYS:HZ2	1:D:414:LYS:HA	1.59	0.67
1:D:718:ARG:HH12	1:D:767:GLN:HE21	1.42	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:493:ASP:OD2	1:E:577:HIS:HE1	1.77	0.67
1:E:715:GLU:HA	1:E:718:ARG:CZ	2.24	0.67
1:F:597:ASN:ND2	1:F:601:GLU:H	1.91	0.67
1:A:123:GLU:HG2	1:A:124:GLU:H	1.59	0.67
1:A:197:LYS:O	1:A:197:LYS:HD2	1.94	0.67
1:A:254:ARG:H	1:A:254:ARG:HD2	1.60	0.67
1:A:77:ASP:O	1:A:81:GLN:HB2	1.94	0.67
1:D:217:LYS:HZ2	1:D:236:GLU:HG3	1.59	0.67
1:D:722:ILE:HG23	1:D:760:VAL:HG13	1.76	0.67
1:E:184:LYS:HE2	1:E:193:LEU:HB2	1.76	0.67
1:E:597:ASN:ND2	1:E:601:GLU:H	1.92	0.67
1:A:278:LYS:O	1:A:281:GLU:N	2.27	0.67
1:A:334:LEU:H	1:A:334:LEU:CD1	2.07	0.67
1:B:311:HIS:CD2	1:B:564:VAL:HB	2.29	0.67
1:C:130:SER:HB2	1:C:170:TYR:CZ	2.29	0.67
1:C:696:LYS:HE2	1:C:731:GLU:HG3	1.75	0.67
1:D:115:LYS:HZ1	1:D:116:GLU:H	1.43	0.67
1:D:123:GLU:HG2	1:D:124:GLU:H	1.58	0.67
1:D:696:LYS:HE2	1:D:731:GLU:HG3	1.76	0.67
1:D:77:ASP:O	1:D:81:GLN:HB2	1.94	0.67
1:D:548:THR:O	4:D:906:3AT:N6	2.28	0.67
1:E:735:VAL:O	1:E:738:SER:HB2	1.95	0.67
2:P:18:LEU:HD22	2:P:18:LEU:O	1.94	0.67
1:B:293:ILE:O	1:B:295:VAL:HG22	1.94	0.67
1:B:334:LEU:N	1:B:334:LEU:HD12	2.09	0.67
1:B:414:LYS:HA	1:B:414:LYS:HZ2	1.59	0.67
1:D:105:TYR:N	1:D:152:LEU:O	2.26	0.67
1:E:718:ARG:O	1:E:722:ILE:HG13	1.94	0.67
1:F:189:ASP:O	1:F:190:PRO:C	2.31	0.67
1:B:630:ARG:CZ	2:P:83:GLU:HG2	2.24	0.67
1:A:286:GLU:O	1:A:290:LYS:HE3	1.95	0.67
1:A:694:VAL:CG2	2:O:18:LEU:HD21	2.24	0.67
1:B:629:ASN:HD22	1:B:630:ARG:N	1.91	0.67
1:B:678:VAL:HG22	1:B:745:TYR:CE2	2.25	0.67
1:C:478:ALA:HB1	1:C:486:LYS:O	1.94	0.67
1:F:184:LYS:HZ2	1:F:191:GLU:HB2	1.58	0.67
1:F:311:HIS:CD2	1:F:564:VAL:HB	2.29	0.67
1:A:630:ARG:CZ	2:O:83:GLU:HG2	2.25	0.67
2:Q:73:ALA:O	2:Q:76:MET:N	2.26	0.67
2:S:94:LYS:HB3	2:S:94:LYS:HZ2	1.56	0.67
1:B:278:LYS:O	1:B:281:GLU:N	2.28	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:213:LYS:HD2	1:C:240:ALA:HB1	1.76	0.67
1:C:278:LYS:O	1:C:281:GLU:N	2.28	0.67
1:C:334:LEU:CD1	1:C:334:LEU:H	2.07	0.67
2:O:9:ILE:CD1	2:O:69:LEU:HD11	2.25	0.67
2:P:94:LYS:HB3	2:P:94:LYS:HZ2	1.59	0.67
2:Q:94:LYS:HB3	2:Q:94:LYS:HZ2	1.59	0.67
2:S:137:ASN:OD1	2:S:139:GLU:HB2	1.95	0.67
1:A:199:LEU:O	1:A:201:ASP:N	2.22	0.67
1:B:718:ARG:O	1:B:722:ILE:HG13	1.94	0.67
1:C:310:GLU:OE2	1:C:340:LYS:HD2	1.95	0.67
1:D:128:MET:HB2	1:D:239:HIS:CE1	2.30	0.67
1:F:334:LEU:HD12	1:F:334:LEU:N	2.09	0.67
1:F:310:GLU:OE2	1:F:340:LYS:HD2	1.95	0.67
2:P:137:ASN:OD1	2:P:139:GLU:HB2	1.95	0.67
2:Q:58:ASP:C	2:Q:60:ASN:N	2.46	0.67
2:S:9:ILE:CD1	2:S:69:LEU:HD11	2.25	0.67
1:A:175:LYS:O	1:A:177:ILE:N	2.28	0.67
1:B:254:ARG:HD2	1:B:254:ARG:H	1.60	0.67
1:B:310:GLU:OE2	1:B:340:LYS:HD2	1.94	0.67
1:D:184:LYS:HZ3	1:D:193:LEU:HD12	1.58	0.67
1:E:154:ILE:HG13	1:E:171:TYR:CE1	2.29	0.67
2:P:97:ASN:N	2:P:97:ASN:HD22	1.92	0.67
2:T:73:ALA:O	2:T:76:MET:N	2.27	0.67
1:B:186:LYS:HE3	1:B:234:LEU:HD12	1.77	0.67
1:B:334:LEU:H	1:B:334:LEU:CD1	2.07	0.67
1:C:115:LYS:HZ3	1:C:116:GLU:N	1.92	0.67
1:C:254:ARG:H	1:C:254:ARG:HD2	1.60	0.67
1:D:107:THR:HG21	1:D:115:LYS:HE3	1.74	0.67
1:D:286:GLU:O	1:D:290:LYS:HE3	1.94	0.67
1:E:550:SER:N	1:E:553:GLN:HE21	1.88	0.67
1:F:254:ARG:HD2	1:F:254:ARG:H	1.60	0.67
2:O:73:ALA:O	2:O:76:MET:N	2.27	0.67
2:S:97:ASN:HD22	2:S:97:ASN:H	1.42	0.67
2:T:94:LYS:HB3	2:T:94:LYS:HZ2	1.56	0.67
1:A:183:SER:C	1:A:187:SER:HB2	2.14	0.67
1:A:718:ARG:O	1:A:722:ILE:HG13	1.95	0.67
1:B:175:LYS:O	1:B:177:ILE:N	2.28	0.67
1:B:213:LYS:HD2	1:B:240:ALA:HB1	1.77	0.67
1:C:123:GLU:HG2	1:C:124:GLU:H	1.58	0.67
1:D:107:THR:HG21	1:D:115:LYS:CE	2.25	0.67
1:E:185:ASP:O	1:E:190:PRO:HG3	1.95	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:187:SER:C	1:B:188:LEU:O	2.31	0.66
1:B:597:ASN:ND2	1:B:601:GLU:H	1.91	0.66
1:C:463:THR:HG22	1:C:465:LEU:N	2.10	0.66
1:E:105:TYR:N	1:E:152:LEU:O	2.25	0.66
1:E:179:LEU:O	1:E:183:SER:N	2.27	0.66
1:E:443:GLU:HG3	1:E:458:LYS:HG2	1.76	0.66
1:F:334:LEU:CD1	1:F:334:LEU:H	2.08	0.66
2:R:137:ASN:OD1	2:R:139:GLU:HB2	1.95	0.66
1:D:443:GLU:HG3	1:D:458:LYS:HG2	1.76	0.66
1:E:197:LYS:O	1:E:197:LYS:HD2	1.95	0.66
2:Q:137:ASN:OD1	2:Q:139:GLU:HB2	1.95	0.66
1:A:186:LYS:HE3	1:A:234:LEU:HD12	1.77	0.66
1:A:191:GLU:O	1:A:192:PHE:C	2.31	0.66
1:C:186:LYS:CE	1:C:234:LEU:HD12	2.25	0.66
1:E:254:ARG:HD2	1:E:254:ARG:H	1.60	0.66
1:F:175:LYS:O	1:F:177:ILE:N	2.28	0.66
1:A:293:ILE:HD11	1:A:617:LYS:HD3	1.78	0.66
1:B:225:ILE:HG12	1:B:229:PHE:HE2	1.60	0.66
1:D:540:ARG:NH1	1:D:627:TYR:CE1	2.62	0.66
1:D:597:ASN:HB2	1:D:598:PRO:CD	2.23	0.66
1:E:107:THR:HG21	1:E:115:LYS:HE3	1.76	0.66
2:P:117:THR:O	2:P:119:GLU:N	2.29	0.66
1:B:115:LYS:HZ1	1:B:116:GLU:N	1.92	0.66
1:B:548:THR:O	4:B:904:3AT:N6	2.28	0.66
1:C:105:TYR:N	1:C:152:LEU:O	2.26	0.66
1:E:225:ILE:HG12	1:E:229:PHE:CE2	2.31	0.66
2:P:9:ILE:CD1	2:P:69:LEU:HD11	2.26	0.66
1:A:225:ILE:HG12	1:A:229:PHE:HE2	1.60	0.66
1:A:310:GLU:OE2	1:A:340:LYS:HD2	1.94	0.66
1:B:89:ILE:HG22	1:B:93:VAL:CG1	2.08	0.66
1:C:225:ILE:HG12	1:C:229:PHE:HE2	1.60	0.66
1:C:225:ILE:HG12	1:C:229:PHE:CE2	2.31	0.66
1:D:225:ILE:HG12	1:D:229:PHE:CE2	2.31	0.66
1:D:278:LYS:O	1:D:281:GLU:N	2.28	0.66
1:D:310:GLU:OE2	1:D:340:LYS:HD2	1.95	0.66
1:F:225:ILE:HG12	1:F:229:PHE:CE2	2.31	0.66
1:A:630:ARG:NH1	2:O:83:GLU:HG2	2.11	0.66
1:A:628:PHE:HE2	2:O:90:ARG:HD2	1.61	0.66
1:D:225:ILE:HG12	1:D:229:PHE:HE2	1.60	0.66
1:D:359:PRO:HG2	1:D:360:VAL:H	1.61	0.66
2:R:73:ALA:O	2:R:76:MET:N	2.28	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:443:GLU:HG3	1:A:458:LYS:HG2	1.77	0.66
1:D:597:ASN:ND2	1:D:601:GLU:H	1.94	0.66
1:F:186:LYS:HE3	1:F:234:LEU:HD12	1.76	0.66
1:F:278:LYS:O	1:F:281:GLU:N	2.28	0.66
1:E:225:ILE:HG12	1:E:229:PHE:HE2	1.60	0.66
1:F:296:LEU:H	1:F:296:LEU:CD2	1.83	0.66
1:F:414:LYS:HA	1:F:414:LYS:HZ2	1.59	0.66
1:A:179:LEU:O	1:A:183:SER:CA	2.42	0.66
1:A:182:ILE:O	1:A:187:SER:CB	2.43	0.66
1:A:540:ARG:NH1	1:A:627:TYR:CE1	2.64	0.66
1:C:197:LYS:O	1:C:197:LYS:HD2	1.94	0.66
1:F:187:SER:C	1:F:188:LEU:O	2.28	0.66
2:R:97:ASN:HD22	2:R:97:ASN:H	1.43	0.66
1:A:597:ASN:HB2	1:A:598:PRO:CD	2.22	0.65
1:C:540:ARG:NH1	1:C:627:TYR:CE1	2.63	0.65
1:D:175:LYS:O	1:D:177:ILE:N	2.29	0.65
1:E:540:ARG:NH1	1:E:627:TYR:CE1	2.64	0.65
2:T:18:LEU:HD22	2:T:18:LEU:O	1.96	0.65
1:C:515:LYS:HE2	1:C:515:LYS:O	1.96	0.65
1:C:548:THR:O	4:C:905:3AT:N6	2.28	0.65
1:F:107:THR:HG21	1:F:115:LYS:CE	2.26	0.65
2:R:18:LEU:O	2:R:18:LEU:HD22	1.96	0.65
2:S:18:LEU:O	2:S:18:LEU:HD22	1.97	0.65
1:F:630:ARG:CZ	2:T:83:GLU:HG2	2.27	0.65
1:A:635:ILE:CD1	1:A:635:ILE:H	2.00	0.65
1:B:443:GLU:HG3	1:B:458:LYS:HG2	1.77	0.65
1:B:597:ASN:HB2	1:B:598:PRO:CD	2.24	0.65
1:C:550:SER:HB3	1:C:553:GLN:HB2	1.78	0.65
1:C:630:ARG:CZ	2:Q:83:GLU:HG2	2.25	0.65
1:D:254:ARG:HD2	1:D:254:ARG:H	1.61	0.65
1:E:107:THR:HG21	1:E:115:LYS:CE	2.26	0.65
1:E:175:LYS:O	1:E:177:ILE:N	2.29	0.65
1:E:199:LEU:O	1:E:201:ASP:N	2.22	0.65
1:F:77:ASP:O	1:F:81:GLN:HB2	1.94	0.65
1:A:412:GLU:O	1:A:416:ASN:HB2	1.96	0.65
1:B:225:ILE:HG12	1:B:229:PHE:CE2	2.31	0.65
1:B:686:ASP:HB3	1:B:739:LYS:HD2	1.79	0.65
1:D:213:LYS:HD2	1:D:240:ALA:HB1	1.77	0.65
1:F:625:LEU:HD12	1:F:625:LEU:C	2.17	0.65
2:O:117:THR:O	2:O:119:GLU:N	2.30	0.65
2:Q:117:THR:O	2:Q:119:GLU:N	2.29	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:65:PHE:HB2	2:T:66:PRO:HD3	1.78	0.65
2:T:9:ILE:CD1	2:T:69:LEU:HD11	2.27	0.65
1:A:128:MET:HB2	1:A:239:HIS:NE2	2.11	0.65
1:C:199:LEU:O	1:C:201:ASP:N	2.22	0.65
1:C:443:GLU:HG3	1:C:458:LYS:HG2	1.77	0.65
1:D:628:PHE:HE2	2:R:90:ARG:HD2	1.60	0.65
1:E:548:THR:O	4:E:907:3AT:N6	2.30	0.65
1:F:709:ASN:HB2	2:T:130:ILE:HG23	1.78	0.65
2:P:13:LYS:HZ3	2:P:65:PHE:HB3	1.59	0.65
2:T:137:ASN:OD1	2:T:139:GLU:HB2	1.95	0.65
1:A:225:ILE:HG12	1:A:229:PHE:CE2	2.31	0.65
1:A:550:SER:HB3	1:A:553:GLN:HB2	1.78	0.65
1:B:630:ARG:NH1	2:P:83:GLU:HG2	2.12	0.65
1:C:175:LYS:O	1:C:177:ILE:N	2.29	0.65
1:C:630:ARG:NH1	2:Q:83:GLU:HG2	2.11	0.65
1:C:724:ARG:HG3	1:C:724:ARG:NH1	2.11	0.65
1:D:493:ASP:OD2	1:D:577:HIS:HE1	1.77	0.65
1:D:718:ARG:NH1	1:D:767:GLN:NE2	2.44	0.65
2:Q:9:ILE:CD1	2:Q:69:LEU:HD11	2.26	0.65
1:A:515:LYS:O	1:A:515:LYS:HE2	1.97	0.65
1:B:105:TYR:N	1:B:152:LEU:O	2.25	0.65
1:D:141:PHE:CD1	1:D:141:PHE:N	2.65	0.65
1:D:625:LEU:C	1:D:625:LEU:HD12	2.16	0.65
1:F:115:LYS:HZ1	1:F:116:GLU:H	1.45	0.65
1:F:412:GLU:O	1:F:416:ASN:HB2	1.96	0.65
2:O:137:ASN:OD1	2:O:139:GLU:HB2	1.96	0.65
1:B:130:SER:HB2	1:B:170:TYR:CZ	2.32	0.65
1:B:463:THR:HG22	1:B:465:LEU:N	2.11	0.65
1:E:427:ASP:O	1:E:428:ASN:HB2	1.96	0.65
1:E:722:ILE:HG23	1:E:760:VAL:HG13	1.79	0.65
2:Q:88:ALA:O	2:Q:91:VAL:HB	1.97	0.65
2:S:65:PHE:HB2	2:S:66:PRO:HD3	1.78	0.65
1:C:359:PRO:HG2	1:C:360:VAL:H	1.62	0.65
1:D:186:LYS:CE	1:D:234:LEU:HD12	2.26	0.65
1:D:427:ASP:O	1:D:428:ASN:HB2	1.96	0.65
1:F:427:ASP:O	1:F:428:ASN:HB2	1.96	0.65
1:B:724:ARG:NH1	1:B:724:ARG:HG3	2.12	0.65
1:D:345:THR:HB	1:D:491:ASP:HB3	1.79	0.65
1:E:184:LYS:HE3	1:E:191:GLU:HB2	1.79	0.65
1:E:412:GLU:O	1:E:416:ASN:HB2	1.97	0.65
2:O:18:LEU:O	2:O:18:LEU:HD22	1.96	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:176:GLY:C	1:A:178:SER:H	2.00	0.64
1:A:463:THR:HG22	1:A:465:LEU:N	2.10	0.64
1:A:686:ASP:HB3	1:A:739:LYS:HD2	1.79	0.64
1:B:345:THR:HG22	1:B:490:ALA:O	1.98	0.64
1:B:515:LYS:O	1:B:515:LYS:HE2	1.97	0.64
1:B:550:SER:HB3	1:B:553:GLN:HB2	1.78	0.64
1:C:345:THR:HB	1:C:491:ASP:HB3	1.79	0.64
1:C:628:PHE:HE2	2:Q:90:ARG:HD2	1.62	0.64
1:E:278:LYS:O	1:E:281:GLU:N	2.29	0.64
1:E:408:LEU:H	1:E:408:LEU:CD1	2.09	0.64
1:E:515:LYS:O	1:E:515:LYS:HE2	1.97	0.64
1:F:188:LEU:HD22	1:F:188:LEU:H	1.55	0.64
1:F:550:SER:HB3	1:F:553:GLN:HB2	1.79	0.64
2:R:117:THR:O	2:R:119:GLU:N	2.30	0.64
2:S:117:THR:O	2:S:119:GLU:N	2.30	0.64
1:A:153:ILE:O	1:A:154:ILE:HD13	1.97	0.64
1:B:412:GLU:O	1:B:416:ASN:HB2	1.97	0.64
1:E:760:VAL:O	1:E:764:LEU:HG	1.98	0.64
1:F:722:ILE:HG23	1:F:760:VAL:HG13	1.78	0.64
2:R:9:ILE:CD1	2:R:69:LEU:HD11	2.27	0.64
2:S:48:LEU:HA	2:S:51:MET:HE1	1.79	0.64
1:A:345:THR:HB	1:A:491:ASP:HB3	1.78	0.64
1:C:427:ASP:O	1:C:428:ASN:HB2	1.96	0.64
1:C:472:ARG:NH1	1:C:472:ARG:HB3	2.13	0.64
1:D:550:SER:HB3	1:D:553:GLN:HB2	1.78	0.64
1:F:443:GLU:HG3	1:F:458:LYS:HG2	1.77	0.64
1:F:540:ARG:NH1	1:F:627:TYR:CE1	2.66	0.64
1:F:724:ARG:NH1	1:F:724:ARG:HG3	2.10	0.64
1:B:628:PHE:HE2	2:P:90:ARG:HD2	1.62	0.64
1:A:427:ASP:O	1:A:428:ASN:HB2	1.96	0.64
1:C:223:LYS:NZ	1:C:228:ASN:HB3	2.13	0.64
1:D:408:LEU:CD1	1:D:408:LEU:H	2.10	0.64
1:D:472:ARG:HB3	1:D:472:ARG:NH1	2.13	0.64
1:E:609:GLU:N	1:E:609:GLU:OE2	2.30	0.64
1:E:625:LEU:C	1:E:625:LEU:HD12	2.17	0.64
1:F:345:THR:HG22	1:F:490:ALA:O	1.97	0.64
1:D:630:ARG:NH1	2:R:83:GLU:HG2	2.12	0.64
1:A:268:MET:O	1:A:271:LEU:HB2	1.97	0.64
1:B:722:ILE:HG23	1:B:760:VAL:HG13	1.78	0.64
1:D:184:LYS:HZ1	1:D:191:GLU:HB2	1.59	0.64
1:E:142:VAL:CG2	1:E:154:ILE:HD12	2.26	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:472:ARG:HB3	1:E:472:ARG:NH1	2.13	0.64
1:E:550:SER:HB3	1:E:553:GLN:HB2	1.78	0.64
1:F:105:TYR:N	1:F:152:LEU:O	2.25	0.64
1:F:628:PHE:HE2	2:T:90:ARG:HD2	1.63	0.64
2:O:48:LEU:HA	2:O:51:MET:HE1	1.80	0.64
1:E:628:PHE:HE2	2:S:90:ARG:HD2	1.60	0.64
1:C:408:LEU:H	1:C:408:LEU:CD1	2.10	0.64
1:C:625:LEU:C	1:C:625:LEU:HD12	2.17	0.64
1:D:609:GLU:OE2	1:D:609:GLU:N	2.30	0.64
2:R:13:LYS:HZ3	2:R:65:PHE:HB3	1.61	0.64
2:T:117:THR:O	2:T:119:GLU:N	2.30	0.64
1:B:625:LEU:HD12	1:B:625:LEU:C	2.17	0.64
1:B:90:PRO:O	1:B:92:ASP:N	2.31	0.64
1:D:223:LYS:NZ	1:D:228:ASN:HB3	2.13	0.64
1:D:412:GLU:O	1:D:416:ASN:HB2	1.97	0.64
1:E:359:PRO:HG2	1:E:360:VAL:H	1.62	0.64
1:F:225:ILE:HG12	1:F:229:PHE:HE2	1.60	0.64
1:F:630:ARG:NH1	2:T:83:GLU:HG2	2.13	0.64
2:P:117:THR:C	2:P:119:GLU:H	2.00	0.64
2:S:32:LEU:HD21	2:S:71:MET:CE	2.28	0.64
1:A:722:ILE:HG23	1:A:760:VAL:HG13	1.77	0.64
1:B:400:LYS:HE2	1:B:475:GLU:OE2	1.98	0.64
1:B:472:ARG:HB3	1:B:472:ARG:NH1	2.13	0.64
1:C:412:GLU:O	1:C:416:ASN:HB2	1.97	0.64
1:F:153:ILE:O	1:F:154:ILE:HD13	1.97	0.64
1:F:345:THR:HB	1:F:491:ASP:HB3	1.79	0.64
2:O:117:THR:C	2:O:119:GLU:H	2.01	0.64
2:P:65:PHE:HB2	2:P:66:PRO:HD3	1.78	0.64
2:T:88:ALA:O	2:T:91:VAL:HB	1.98	0.64
1:A:400:LYS:HE2	1:A:475:GLU:OE2	1.98	0.64
1:B:223:LYS:NZ	1:B:228:ASN:HB3	2.13	0.64
1:C:141:PHE:CD1	1:C:141:PHE:N	2.65	0.64
1:C:268:MET:O	1:C:271:LEU:HB2	1.98	0.64
1:D:515:LYS:O	1:D:515:LYS:HE2	1.97	0.64
1:D:709:ASN:HB2	2:R:130:ILE:HG23	1.80	0.64
1:E:718:ARG:HH12	1:E:767:GLN:HE21	1.45	0.64
1:E:724:ARG:HG3	1:E:724:ARG:NH1	2.11	0.64
1:F:141:PHE:CD1	1:F:141:PHE:N	2.66	0.64
1:F:184:LYS:HZ1	1:F:191:GLU:HB2	1.59	0.64
1:F:268:MET:O	1:F:271:LEU:HB2	1.98	0.64
1:F:515:LYS:O	1:F:515:LYS:HE2	1.98	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:48:LEU:HA	2:P:51:MET:HE1	1.80	0.64
2:R:70:THR:O	2:R:72:MET:N	2.31	0.64
1:D:630:ARG:CZ	2:R:83:GLU:HG2	2.28	0.64
1:B:191:GLU:O	1:B:192:PHE:C	2.33	0.64
1:D:400:LYS:HE2	1:D:475:GLU:OE2	1.98	0.64
1:E:153:ILE:O	1:E:154:ILE:HD13	1.98	0.64
1:E:268:MET:O	1:E:271:LEU:HB2	1.97	0.64
1:F:760:VAL:O	1:F:764:LEU:HG	1.98	0.64
2:Q:44:THR:C	2:Q:46:ALA:H	2.01	0.64
1:A:548:THR:O	4:A:903:3AT:N6	2.30	0.63
1:A:625:LEU:HD12	1:A:625:LEU:C	2.18	0.63
1:B:359:PRO:HG2	1:B:360:VAL:H	1.63	0.63
1:B:540:ARG:HD3	1:B:627:TYR:CZ	2.34	0.63
1:C:173:ILE:O	1:C:175:LYS:N	2.30	0.63
1:C:375:GLY:HA2	1:C:464:VAL:HG11	1.80	0.63
1:E:141:PHE:N	1:E:141:PHE:CD1	2.66	0.63
2:Q:97:ASN:HD22	2:Q:97:ASN:N	1.92	0.63
2:T:70:THR:O	2:T:72:MET:N	2.31	0.63
1:B:540:ARG:NH1	1:B:627:TYR:CE1	2.65	0.63
1:B:709:ASN:HB2	2:P:130:ILE:HG23	1.80	0.63
1:C:597:ASN:HB2	1:C:598:PRO:CD	2.23	0.63
1:D:142:VAL:CG2	1:D:154:ILE:HD12	2.25	0.63
1:E:296:LEU:CD2	1:E:296:LEU:H	1.83	0.63
1:F:408:LEU:H	1:F:408:LEU:CD1	2.10	0.63
1:F:759:GLN:HE21	1:F:763:LEU:HD11	1.64	0.63
2:O:88:ALA:O	2:O:91:VAL:HB	1.97	0.63
2:Q:65:PHE:HB2	2:Q:66:PRO:HD3	1.79	0.63
1:A:70:GLU:CB	1:A:107:THR:HG22	2.24	0.63
1:C:136:PRO:HG2	1:C:139:SER:OG	1.99	0.63
1:D:96:ILE:HG22	1:D:100:LEU:HD11	1.80	0.63
1:D:189:ASP:O	1:D:190:PRO:C	2.33	0.63
1:E:223:LYS:NZ	1:E:228:ASN:HB3	2.13	0.63
1:F:400:LYS:HE2	1:F:475:GLU:OE2	1.98	0.63
1:F:325:TYR:CE1	1:F:598:PRO:HD3	2.34	0.63
2:R:48:LEU:HA	2:R:51:MET:HE1	1.80	0.63
2:T:117:THR:C	2:T:119:GLU:H	2.02	0.63
2:T:32:LEU:HD21	2:T:71:MET:CE	2.28	0.63
1:A:325:TYR:CE1	1:A:598:PRO:HD3	2.34	0.63
1:A:408:LEU:H	1:A:408:LEU:CD1	2.09	0.63
1:A:724:ARG:HG3	1:A:724:ARG:NH1	2.11	0.63
1:B:301:ALA:C	1:B:303:LYS:H	2.02	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:175:LYS:HB2	1:E:175:LYS:HZ2	1.60	0.63
1:E:230:ILE:HG13	1:E:237:PHE:CE2	2.34	0.63
1:E:345:THR:HG22	1:E:490:ALA:O	1.98	0.63
1:F:463:THR:HG22	1:F:465:LEU:N	2.10	0.63
1:F:472:ARG:NH1	1:F:472:ARG:HB3	2.13	0.63
2:R:117:THR:C	2:R:119:GLU:H	2.02	0.63
2:R:65:PHE:HB2	2:R:66:PRO:HD3	1.78	0.63
1:B:184:LYS:HZ3	1:B:193:LEU:HD12	1.63	0.63
1:B:712:PHE:CD1	1:B:716:LYS:HG2	2.34	0.63
1:C:115:LYS:HZ3	1:C:116:GLU:H	1.46	0.63
1:D:560:LEU:O	1:D:563:ALA:HB3	1.99	0.63
1:E:409:ARG:NE	1:E:413:LEU:HD21	2.14	0.63
1:F:96:ILE:HG22	1:F:100:LEU:HD11	1.80	0.63
2:O:32:LEU:HD21	2:O:71:MET:CE	2.29	0.63
2:R:97:ASN:HD22	2:R:97:ASN:N	1.94	0.63
2:S:70:THR:O	2:S:72:MET:N	2.31	0.63
1:A:517:VAL:HB	1:A:525:LYS:NZ	2.13	0.63
1:B:493:ASP:OD2	1:B:577:HIS:HE1	1.77	0.63
1:C:128:MET:HB2	1:C:239:HIS:CE1	2.33	0.63
1:C:400:LYS:HE2	1:C:475:GLU:OE2	1.98	0.63
1:D:409:ARG:NE	1:D:413:LEU:HD21	2.14	0.63
2:Q:48:LEU:HA	2:Q:51:MET:HE1	1.81	0.63
1:B:499:PRO:CG	1:B:504:ILE:HD11	2.29	0.63
1:B:517:VAL:HB	1:B:525:LYS:NZ	2.14	0.63
1:D:184:LYS:CE	1:D:191:GLU:HB2	2.28	0.63
1:E:301:ALA:C	1:E:303:LYS:H	2.02	0.63
1:F:735:VAL:O	1:F:738:SER:HB2	1.99	0.63
2:Q:117:THR:C	2:Q:119:GLU:H	2.01	0.63
1:C:709:ASN:HB2	2:Q:130:ILE:HG23	1.81	0.63
2:R:32:LEU:HD21	2:R:71:MET:CE	2.29	0.63
1:A:185:ASP:O	1:A:190:PRO:HG3	1.99	0.63
1:A:760:VAL:O	1:A:764:LEU:HG	1.98	0.63
1:B:427:ASP:O	1:B:428:ASN:HB2	1.96	0.63
1:F:191:GLU:O	1:F:192:PHE:C	2.36	0.63
1:F:375:GLY:HA2	1:F:464:VAL:HG11	1.81	0.63
1:F:712:PHE:CD1	1:F:716:LYS:HG2	2.34	0.63
2:O:65:PHE:HB2	2:O:66:PRO:HD3	1.79	0.63
2:R:88:ALA:O	2:R:91:VAL:HB	1.99	0.63
1:B:760:VAL:O	1:B:764:LEU:HG	1.98	0.63
1:E:718:ARG:NH1	1:E:767:GLN:NE2	2.47	0.63
1:E:96:ILE:HG22	1:E:100:LEU:HD11	1.81	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:32:LEU:HD21	2:P:71:MET:CE	2.29	0.63
2:P:88:ALA:O	2:P:91:VAL:HB	1.99	0.63
1:A:115:LYS:HZ1	1:A:116:GLU:N	1.97	0.62
1:B:153:ILE:O	1:B:154:ILE:HD13	1.99	0.62
1:B:173:ILE:O	1:B:175:LYS:N	2.32	0.62
1:B:409:ARG:NE	1:B:413:LEU:HD21	2.14	0.62
1:C:301:ALA:C	1:C:303:LYS:H	2.02	0.62
1:C:517:VAL:HB	1:C:525:LYS:NZ	2.14	0.62
1:C:76:LEU:O	1:C:80:GLN:HB2	1.99	0.62
1:E:173:ILE:O	1:E:175:LYS:N	2.32	0.62
1:E:709:ASN:HB2	2:S:130:ILE:HG23	1.81	0.62
1:E:712:PHE:CD1	1:E:716:LYS:HG2	2.34	0.62
1:E:76:LEU:O	1:E:80:GLN:HB2	1.98	0.62
1:F:70:GLU:CB	1:F:107:THR:HG22	2.26	0.62
1:F:191:GLU:O	1:F:193:LEU:N	2.32	0.62
1:F:217:LYS:HZ2	1:F:236:GLU:HG3	1.62	0.62
2:S:117:THR:C	2:S:119:GLU:H	2.02	0.62
2:T:13:LYS:HZ3	2:T:65:PHE:HB3	1.63	0.62
1:A:173:ILE:O	1:A:175:LYS:N	2.32	0.62
1:A:345:THR:HG22	1:A:490:ALA:O	1.99	0.62
1:A:359:PRO:HG2	1:A:360:VAL:H	1.63	0.62
1:A:560:LEU:O	1:A:563:ALA:HB3	1.98	0.62
1:A:635:ILE:HD12	1:A:635:ILE:N	2.09	0.62
1:C:153:ILE:O	1:C:154:ILE:HD13	1.99	0.62
1:D:325:TYR:CE1	1:D:598:PRO:HD3	2.34	0.62
1:E:630:ARG:NH1	2:S:83:GLU:HG2	2.14	0.62
1:F:173:ILE:O	1:F:175:LYS:N	2.32	0.62
1:F:213:LYS:HD2	1:F:240:ALA:HB1	1.80	0.62
1:F:635:ILE:N	1:F:635:ILE:HD12	2.09	0.62
1:F:89:ILE:HG22	1:F:93:VAL:CG1	2.08	0.62
2:Q:32:LEU:HD21	2:Q:71:MET:CE	2.29	0.62
1:A:375:GLY:HA2	1:A:464:VAL:HG11	1.81	0.62
1:A:443:GLU:HG2	1:A:458:LYS:HE3	1.81	0.62
1:B:345:THR:HB	1:B:491:ASP:HB3	1.79	0.62
1:B:408:LEU:CD1	1:B:408:LEU:H	2.10	0.62
1:B:375:GLY:HA2	1:B:464:VAL:HG11	1.80	0.62
1:B:742:ALA:HB1	1:B:744:GLU:OE1	2.00	0.62
1:D:268:MET:O	1:D:271:LEU:HB2	1.98	0.62
1:D:76:LEU:O	1:D:80:GLN:HB2	1.99	0.62
2:P:70:THR:O	2:P:72:MET:N	2.32	0.62
1:A:105:TYR:N	1:A:152:LEU:O	2.25	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:223:LYS:NZ	1:A:228:ASN:HB3	2.13	0.62
1:B:722:ILE:HD11	1:B:763:LEU:O	1.99	0.62
1:D:463:THR:HG22	1:D:465:LEU:N	2.10	0.62
1:D:375:GLY:HA2	1:D:464:VAL:HG11	1.81	0.62
1:E:189:ASP:O	1:E:190:PRO:C	2.36	0.62
1:E:499:PRO:CG	1:E:504:ILE:HD11	2.29	0.62
1:E:560:LEU:O	1:E:563:ALA:HB3	1.99	0.62
1:E:325:TYR:CE1	1:E:598:PRO:HD3	2.34	0.62
1:E:630:ARG:CZ	2:S:83:GLU:HG2	2.30	0.62
1:F:76:LEU:O	1:F:80:GLN:HB2	1.98	0.62
2:O:70:THR:O	2:O:72:MET:N	2.32	0.62
1:A:88:LYS:NZ	1:A:172:GLU:OE1	2.32	0.62
1:A:540:ARG:HD3	1:A:627:TYR:CZ	2.35	0.62
1:A:76:LEU:O	1:A:80:GLN:HB2	1.98	0.62
1:B:560:LEU:O	1:B:563:ALA:HB3	1.99	0.62
1:B:69:THR:HA	1:B:106:PHE:O	1.99	0.62
1:C:345:THR:HG22	1:C:490:ALA:O	1.99	0.62
1:D:153:ILE:O	1:D:154:ILE:HD13	1.99	0.62
1:D:332:ASN:HD21	1:D:334:LEU:HD13	1.65	0.62
1:E:375:GLY:HA2	1:E:464:VAL:HG11	1.81	0.62
1:F:223:LYS:NZ	1:F:228:ASN:HB3	2.13	0.62
1:F:301:ALA:C	1:F:303:LYS:H	2.03	0.62
1:A:472:ARG:NH1	1:A:472:ARG:HB3	2.13	0.62
1:A:712:PHE:CD1	1:A:716:LYS:HG2	2.35	0.62
1:A:742:ALA:HB1	1:A:744:GLU:OE1	2.00	0.62
1:B:268:MET:O	1:B:271:LEU:HB2	1.99	0.62
1:C:712:PHE:CD1	1:C:716:LYS:HG2	2.35	0.62
1:D:301:ALA:C	1:D:303:LYS:N	2.53	0.62
1:E:463:THR:HG22	1:E:465:LEU:N	2.11	0.62
1:E:400:LYS:HE2	1:E:475:GLU:OE2	1.98	0.62
1:F:359:PRO:HG2	1:F:360:VAL:H	1.63	0.62
2:T:48:LEU:HA	2:T:51:MET:HE1	1.81	0.62
1:A:213:LYS:HD2	1:A:240:ALA:HB1	1.80	0.62
1:B:239:HIS:O	1:B:243:LEU:HG	2.00	0.62
1:B:325:TYR:CE1	1:B:598:PRO:HD3	2.34	0.62
1:D:173:ILE:O	1:D:175:LYS:N	2.32	0.62
1:D:540:ARG:HD3	1:D:627:TYR:CZ	2.35	0.62
1:D:760:VAL:O	1:D:764:LEU:HG	1.99	0.62
1:E:345:THR:HB	1:E:491:ASP:HB3	1.80	0.62
1:F:90:PRO:O	1:F:92:ASP:N	2.33	0.62
1:A:102:GLY:HA2	1:A:150:PRO:O	2.00	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:182:ILE:C	1:A:187:SER:HB2	2.19	0.62
1:A:409:ARG:NE	1:A:413:LEU:HD21	2.15	0.62
1:B:182:ILE:O	1:B:187:SER:OG	2.17	0.62
1:C:657:ILE:HG23	1:C:657:ILE:O	1.98	0.62
1:F:301:ALA:C	1:F:303:LYS:N	2.53	0.62
1:F:409:ARG:NE	1:F:413:LEU:HD21	2.14	0.62
2:S:44:THR:C	2:S:46:ALA:H	2.01	0.62
2:S:88:ALA:O	2:S:91:VAL:HB	1.99	0.62
1:B:115:LYS:HZ1	1:B:116:GLU:H	1.47	0.62
1:B:141:PHE:N	1:B:141:PHE:CD1	2.66	0.62
1:B:672:ARG:O	1:B:672:ARG:HD2	2.00	0.62
1:C:293:ILE:O	1:C:295:VAL:HG22	1.99	0.62
1:C:409:ARG:NE	1:C:413:LEU:HD21	2.14	0.62
1:C:540:ARG:HD3	1:C:627:TYR:CZ	2.35	0.62
1:D:102:GLY:HA2	1:D:150:PRO:O	2.00	0.62
2:Q:70:THR:O	2:Q:72:MET:N	2.33	0.62
2:R:44:THR:C	2:R:46:ALA:H	2.02	0.62
2:T:44:THR:C	2:T:46:ALA:H	2.02	0.62
1:A:722:ILE:HD11	1:A:763:LEU:O	2.00	0.62
1:C:560:LEU:O	1:C:563:ALA:HB3	2.00	0.62
1:C:325:TYR:CE1	1:C:598:PRO:HD3	2.34	0.62
1:C:672:ARG:O	1:C:672:ARG:HD2	2.00	0.62
1:D:712:PHE:CD1	1:D:716:LYS:HG2	2.35	0.62
1:F:179:LEU:C	1:F:183:SER:HB2	2.06	0.62
1:F:672:ARG:O	1:F:672:ARG:HD2	2.00	0.62
2:P:44:THR:C	2:P:46:ALA:H	2.02	0.62
1:A:141:PHE:N	1:A:141:PHE:CD1	2.66	0.61
1:A:189:ASP:O	1:A:190:PRO:C	2.36	0.61
1:C:96:ILE:HG22	1:C:100:LEU:HD11	1.81	0.61
1:C:118:GLN:HA	1:C:118:GLN:OE1	2.00	0.61
1:C:239:HIS:O	1:C:243:LEU:HG	1.99	0.61
1:C:90:PRO:O	1:C:92:ASP:N	2.33	0.61
1:F:186:LYS:CE	1:F:234:LEU:HD12	2.30	0.61
1:F:742:ALA:HB1	1:F:744:GLU:OE1	2.00	0.61
1:A:672:ARG:HD2	1:A:672:ARG:O	2.00	0.61
1:C:301:ALA:C	1:C:303:LYS:N	2.53	0.61
1:D:345:THR:HG22	1:D:490:ALA:O	2.00	0.61
1:E:90:PRO:O	1:E:92:ASP:N	2.33	0.61
1:F:297:LYS:NZ	1:F:297:LYS:HB3	2.15	0.61
2:O:44:THR:C	2:O:46:ALA:H	2.01	0.61
1:A:297:LYS:NZ	1:A:297:LYS:HB3	2.15	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:499:PRO:CG	1:A:504:ILE:HD11	2.29	0.61
1:B:76:LEU:O	1:B:80:GLN:HB2	2.00	0.61
1:C:499:PRO:CG	1:C:504:ILE:HD11	2.29	0.61
1:C:722:ILE:HD11	1:C:763:LEU:O	2.00	0.61
1:D:239:HIS:O	1:D:243:LEU:HG	1.99	0.61
1:E:742:ALA:HB1	1:E:744:GLU:OE1	1.99	0.61
2:S:97:ASN:N	2:S:97:ASN:HD22	1.94	0.61
1:A:96:ILE:HG22	1:A:100:LEU:HD11	1.80	0.61
1:B:102:GLY:CA	1:B:150:PRO:HG2	2.30	0.61
1:B:297:LYS:HB3	1:B:297:LYS:NZ	2.15	0.61
1:C:189:ASP:O	1:C:191:GLU:N	2.33	0.61
1:C:324:THR:CB	1:C:499:PRO:HA	2.31	0.61
1:D:185:ASP:O	1:D:190:PRO:HG3	1.99	0.61
1:E:213:LYS:HD2	1:E:240:ALA:HB1	1.81	0.61
1:E:517:VAL:HB	1:E:525:LYS:NZ	2.14	0.61
1:E:672:ARG:HD2	1:E:672:ARG:O	2.00	0.61
1:F:293:ILE:O	1:F:295:VAL:HG22	2.01	0.61
1:F:377:GLN:O	1:F:381:GLU:HB2	2.01	0.61
1:F:607:ASN:HB3	1:F:609:GLU:OE2	2.00	0.61
1:F:540:ARG:HD3	1:F:627:TYR:CZ	2.36	0.61
1:A:90:PRO:O	1:A:92:ASP:N	2.33	0.61
1:B:443:GLU:HG2	1:B:458:LYS:HE3	1.83	0.61
1:B:718:ARG:HH12	1:B:767:GLN:HE21	1.46	0.61
1:D:724:ARG:HG3	1:D:724:ARG:NH1	2.11	0.61
1:E:184:LYS:NZ	1:E:191:GLU:CB	2.60	0.61
1:E:69:THR:HA	1:E:106:PHE:O	2.00	0.61
1:F:722:ILE:HD11	1:F:763:LEU:O	2.00	0.61
2:T:106:ARG:CG	2:T:121:VAL:HG21	2.06	0.61
1:A:609:GLU:OE2	1:A:609:GLU:N	2.31	0.61
1:A:607:ASN:HB3	1:A:609:GLU:OE2	2.00	0.61
1:C:88:LYS:NZ	1:C:172:GLU:OE1	2.33	0.61
1:C:735:VAL:O	1:C:738:SER:HB2	2.01	0.61
1:D:672:ARG:O	1:D:672:ARG:HD2	2.00	0.61
1:E:607:ASN:HB3	1:E:609:GLU:OE2	2.00	0.61
1:F:560:LEU:O	1:F:563:ALA:HB3	2.00	0.61
2:O:13:LYS:HZ1	2:O:65:PHE:CB	2.14	0.61
1:B:102:GLY:HA2	1:B:150:PRO:O	1.99	0.61
1:C:297:LYS:NZ	1:C:297:LYS:HB3	2.15	0.61
1:D:179:LEU:O	1:D:183:SER:N	2.33	0.61
1:D:377:GLN:O	1:D:381:GLU:HB2	2.01	0.61
1:D:90:PRO:O	1:D:92:ASP:N	2.34	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:377:GLN:O	1:E:381:GLU:HB2	2.01	0.61
1:E:759:GLN:HE21	1:E:763:LEU:HD11	1.65	0.61
1:F:116:GLU:HG3	1:F:117:LEU:CD2	2.31	0.61
1:A:142:VAL:CG2	1:A:154:ILE:HD12	2.27	0.61
1:A:175:LYS:CB	1:A:175:LYS:NZ	2.62	0.61
1:B:191:GLU:O	1:B:193:LEU:N	2.34	0.61
1:C:142:VAL:CG2	1:C:154:ILE:HD12	2.26	0.61
1:C:609:GLU:N	1:C:609:GLU:OE2	2.32	0.61
1:E:102:GLY:HA2	1:E:150:PRO:O	2.01	0.61
1:E:122:GLU:OE1	1:E:147:ARG:CB	2.48	0.61
1:E:722:ILE:HD11	1:E:763:LEU:O	2.00	0.61
1:F:102:GLY:HA2	1:F:150:PRO:O	2.00	0.61
1:F:83:GLN:O	1:F:85:LEU:N	2.34	0.61
2:S:21:LYS:C	2:S:21:LYS:HD3	2.21	0.61
1:B:118:GLN:HA	1:B:118:GLN:OE1	2.00	0.61
1:B:128:MET:HB2	1:B:239:HIS:NE2	2.15	0.61
1:B:301:ALA:C	1:B:303:LYS:N	2.52	0.61
1:B:657:ILE:O	1:B:657:ILE:HG23	2.01	0.61
1:C:607:ASN:HB3	1:C:609:GLU:OE2	2.01	0.61
1:C:69:THR:HA	1:C:106:PHE:O	2.00	0.61
1:C:759:GLN:HE21	1:C:763:LEU:HD11	1.66	0.61
1:D:176:GLY:C	1:D:178:SER:H	2.03	0.61
1:E:175:LYS:NZ	1:E:175:LYS:CB	2.63	0.61
1:F:188:LEU:HD22	1:F:188:LEU:N	2.12	0.61
1:F:499:PRO:CG	1:F:504:ILE:HD11	2.30	0.61
1:F:657:ILE:HG23	1:F:657:ILE:O	2.01	0.61
2:O:13:LYS:NZ	2:O:65:PHE:CB	2.64	0.61
2:O:32:LEU:HD21	2:O:71:MET:HE1	1.82	0.61
2:S:13:LYS:HZ3	2:S:65:PHE:HB3	1.65	0.61
1:A:377:GLN:O	1:A:381:GLU:HB2	2.01	0.61
1:B:332:ASN:HD21	1:B:334:LEU:HD13	1.65	0.61
1:C:412:GLU:C	1:C:414:LYS:H	2.04	0.61
1:D:301:ALA:C	1:D:303:LYS:H	2.02	0.61
1:D:499:PRO:CG	1:D:504:ILE:HD11	2.30	0.61
1:E:118:GLN:HA	1:E:118:GLN:OE1	2.01	0.61
1:A:69:THR:HA	1:A:106:PHE:O	2.00	0.60
1:B:442:TYR:O	1:B:458:LYS:NZ	2.34	0.60
1:B:609:GLU:N	1:B:609:GLU:OE2	2.31	0.60
1:C:116:GLU:HG3	1:C:117:LEU:CD2	2.31	0.60
1:C:597:ASN:HD21	1:C:601:GLU:CB	2.14	0.60
1:C:760:VAL:O	1:C:764:LEU:HG	2.00	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:88:LYS:NZ	1:D:172:GLU:OE1	2.33	0.60
1:D:395:GLU:O	1:D:395:GLU:OE1	2.19	0.60
1:D:517:VAL:HB	1:D:525:LYS:NZ	2.15	0.60
1:E:279:ILE:O	1:E:283:LEU:HD13	2.01	0.60
1:E:635:ILE:N	1:E:635:ILE:HD12	2.08	0.60
1:E:83:GLN:O	1:E:85:LEU:N	2.35	0.60
1:F:102:GLY:CA	1:F:150:PRO:HG2	2.31	0.60
1:A:301:ALA:C	1:A:303:LYS:H	2.02	0.60
1:B:349:ASN:HD22	1:B:350:VAL:HG23	1.66	0.60
1:B:96:ILE:HG22	1:B:100:LEU:HD11	1.82	0.60
1:D:116:GLU:HG3	1:D:117:LEU:CD2	2.31	0.60
1:D:230:ILE:HG13	1:D:237:PHE:CE2	2.36	0.60
1:E:102:GLY:CA	1:E:150:PRO:HG2	2.32	0.60
1:F:349:ASN:HD22	1:F:350:VAL:HG23	1.66	0.60
1:B:668:SER:CA	2:P:14:GLU:HG3	2.30	0.60
2:P:89:PHE:HD1	2:P:141:PHE:CD2	2.18	0.60
1:A:442:TYR:O	1:A:458:LYS:NZ	2.34	0.60
1:A:629:ASN:HD22	1:A:631:SER:N	1.95	0.60
1:B:186:LYS:CE	1:B:234:LEU:HD12	2.31	0.60
1:B:377:GLN:O	1:B:381:GLU:HB2	2.02	0.60
1:B:324:THR:CB	1:B:499:PRO:HA	2.31	0.60
1:C:176:GLY:C	1:C:178:SER:H	2.03	0.60
1:C:443:GLU:HG2	1:C:458:LYS:HE3	1.83	0.60
1:D:118:GLN:HA	1:D:118:GLN:OE1	1.99	0.60
1:E:134:LYS:HG2	1:E:136:PRO:CD	2.31	0.60
1:E:332:ASN:HD21	1:E:334:LEU:HD13	1.66	0.60
1:E:324:THR:CB	1:E:499:PRO:HA	2.31	0.60
1:F:69:THR:HA	1:F:106:PHE:O	2.00	0.60
1:F:142:VAL:CG2	1:F:154:ILE:HD12	2.26	0.60
1:F:176:GLY:C	1:F:178:SER:H	2.04	0.60
2:R:102:ALA:CB	2:R:125:ILE:HG13	2.31	0.60
2:R:89:PHE:HD1	2:R:141:PHE:CD2	2.20	0.60
1:A:116:GLU:HG3	1:A:117:LEU:CD2	2.32	0.60
1:B:102:GLY:HA3	1:B:150:PRO:HG2	1.84	0.60
1:B:759:GLN:HE21	1:B:763:LEU:HD11	1.67	0.60
1:D:324:THR:CB	1:D:499:PRO:HA	2.32	0.60
1:F:517:VAL:HB	1:F:525:LYS:NZ	2.15	0.60
1:F:597:ASN:HB2	1:F:598:PRO:CD	2.23	0.60
1:A:102:GLY:CA	1:A:150:PRO:HG2	2.31	0.60
1:A:759:GLN:HE21	1:A:763:LEU:HD11	1.67	0.60
1:B:189:ASP:O	1:B:190:PRO:C	2.35	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:102:GLY:HA2	1:C:150:PRO:O	2.01	0.60
1:D:69:THR:HA	1:D:106:PHE:O	2.00	0.60
1:D:141:PHE:HD1	1:D:141:PHE:N	2.00	0.60
1:E:239:HIS:O	1:E:243:LEU:HG	2.00	0.60
1:E:540:ARG:HD3	1:E:627:TYR:CZ	2.36	0.60
2:R:13:LYS:NZ	2:R:65:PHE:CB	2.65	0.60
1:A:102:GLY:HA3	1:A:150:PRO:HG2	1.84	0.60
1:A:239:HIS:O	1:A:243:LEU:HG	2.01	0.60
1:A:412:GLU:C	1:A:414:LYS:H	2.05	0.60
1:B:176:GLY:C	1:B:178:SER:H	2.05	0.60
1:B:472:ARG:HH11	1:B:472:ARG:CB	2.15	0.60
1:B:635:ILE:HD12	1:B:635:ILE:N	2.08	0.60
1:C:550:SER:N	1:C:553:GLN:HE21	1.87	0.60
1:D:297:LYS:NZ	1:D:297:LYS:HB3	2.15	0.60
1:F:332:ASN:HD21	1:F:334:LEU:HD13	1.65	0.60
1:F:73:ASN:HD22	1:F:74:GLU:CD	2.05	0.60
1:A:668:SER:CA	2:O:14:GLU:HG3	2.29	0.60
2:T:97:ASN:N	2:T:97:ASN:HD22	1.93	0.60
1:A:520:PRO:HG2	1:A:521:ASN:H	1.67	0.60
1:A:628:PHE:CE2	2:O:90:ARG:CZ	2.85	0.60
1:C:279:ILE:H	1:C:279:ILE:HD13	1.67	0.60
1:D:122:GLU:OE1	1:D:147:ARG:CB	2.49	0.60
1:D:102:GLY:CA	1:D:150:PRO:HG2	2.32	0.60
1:D:279:ILE:O	1:D:283:LEU:HD13	2.02	0.60
1:E:297:LYS:HB3	1:E:297:LYS:NZ	2.16	0.60
1:F:472:ARG:CB	1:F:472:ARG:HH11	2.15	0.60
1:F:597:ASN:HD21	1:F:601:GLU:CA	2.14	0.60
1:A:118:GLN:HA	1:A:118:GLN:OE1	2.00	0.60
1:B:116:GLU:HG3	1:B:117:LEU:CD2	2.31	0.60
1:E:395:GLU:O	1:E:395:GLU:OE1	2.19	0.60
1:F:279:ILE:O	1:F:283:LEU:HD13	2.02	0.60
1:F:395:GLU:O	1:F:395:GLU:OE1	2.19	0.60
1:F:412:GLU:C	1:F:414:LYS:H	2.04	0.60
1:A:597:ASN:HD21	1:A:601:GLU:CA	2.15	0.60
1:A:709:ASN:HB2	2:O:130:ILE:HG23	1.83	0.60
1:B:395:GLU:OE1	1:B:395:GLU:O	2.19	0.60
1:C:102:GLY:CA	1:C:150:PRO:HG2	2.32	0.60
1:C:332:ASN:HD21	1:C:334:LEU:HD13	1.66	0.60
1:C:395:GLU:OE1	1:C:395:GLU:O	2.20	0.60
1:C:629:ASN:HD22	1:C:631:SER:N	1.96	0.60
1:D:520:PRO:HG2	1:D:521:ASN:H	1.66	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:607:ASN:HB3	1:D:609:GLU:OE2	2.02	0.60
1:E:66:LEU:HD12	1:E:103:GLU:HA	1.84	0.60
1:F:118:GLN:OE1	1:F:118:GLN:HA	2.00	0.60
1:F:239:HIS:O	1:F:243:LEU:HG	2.00	0.60
1:F:443:GLU:HG2	1:F:458:LYS:HE3	1.83	0.60
1:F:324:THR:CB	1:F:499:PRO:HA	2.30	0.60
2:O:89:PHE:HD1	2:O:141:PHE:CD2	2.19	0.60
2:R:21:LYS:HD3	2:R:21:LYS:C	2.22	0.60
2:S:89:PHE:HD1	2:S:141:PHE:CD2	2.19	0.60
1:B:73:ASN:HD22	1:B:74:GLU:CD	2.05	0.60
1:C:377:GLN:O	1:C:381:GLU:HB2	2.01	0.60
1:D:739:LYS:HG2	1:D:740:GLN:H	1.67	0.60
1:E:597:ASN:HD21	1:E:601:GLU:CA	2.15	0.60
1:F:597:ASN:HD21	1:F:601:GLU:CB	2.15	0.60
2:S:102:ALA:CB	2:S:125:ILE:HG13	2.32	0.60
1:A:597:ASN:HD21	1:A:601:GLU:CB	2.15	0.59
1:B:520:PRO:HG2	1:B:521:ASN:H	1.67	0.59
1:C:279:ILE:O	1:C:283:LEU:HD13	2.01	0.59
1:D:297:LYS:HZ2	1:D:297:LYS:HB3	1.66	0.59
1:D:89:ILE:HG22	1:D:90:PRO:HD2	1.84	0.59
1:E:739:LYS:HG2	1:E:740:GLN:H	1.67	0.59
1:F:122:GLU:OE1	1:F:147:ARG:CB	2.48	0.59
1:F:442:TYR:O	1:F:458:LYS:NZ	2.35	0.59
2:Q:106:ARG:CG	2:Q:121:VAL:HG21	2.06	0.59
2:Q:89:PHE:HD1	2:Q:141:PHE:CD2	2.19	0.59
1:A:186:LYS:CE	1:A:234:LEU:HD12	2.32	0.59
1:A:332:ASN:HD21	1:A:334:LEU:HD13	1.66	0.59
1:A:324:THR:CB	1:A:499:PRO:HA	2.31	0.59
1:B:88:LYS:NZ	1:B:172:GLU:OE1	2.35	0.59
1:D:83:GLN:O	1:D:85:LEU:N	2.35	0.59
1:E:116:GLU:HG3	1:E:117:LEU:CD2	2.32	0.59
1:F:66:LEU:HD12	1:F:103:GLU:HA	1.84	0.59
2:P:102:ALA:CB	2:P:125:ILE:HG13	2.32	0.59
1:A:173:ILE:C	1:A:175:LYS:N	2.55	0.59
1:A:184:LYS:CE	1:A:191:GLU:HB2	2.31	0.59
1:B:412:GLU:C	1:B:414:LYS:H	2.04	0.59
1:B:597:ASN:HD21	1:B:601:GLU:CA	2.15	0.59
1:C:141:PHE:N	1:C:141:PHE:HD1	2.00	0.59
1:C:520:PRO:HG2	1:C:521:ASN:H	1.67	0.59
1:C:597:ASN:HD21	1:C:601:GLU:CA	2.15	0.59
1:C:739:LYS:HG2	1:C:740:GLN:H	1.67	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:742:ALA:HB1	1:D:744:GLU:OE1	2.01	0.59
1:E:443:GLU:HG2	1:E:458:LYS:HE3	1.83	0.59
1:E:520:PRO:HG2	1:E:521:ASN:H	1.67	0.59
2:O:21:LYS:HD3	2:O:21:LYS:C	2.22	0.59
2:T:44:THR:OG1	2:T:47:GLU:N	2.34	0.59
1:C:122:GLU:OE1	1:C:147:ARG:CB	2.50	0.59
1:C:742:ALA:HB1	1:C:744:GLU:OE1	2.01	0.59
1:D:306:GLY:O	1:D:336:THR:HG23	2.02	0.59
1:D:431:LYS:O	1:D:432:TYR:HD2	1.85	0.59
1:D:451:ASN:N	1:D:451:ASN:OD1	2.29	0.59
1:D:443:GLU:HG2	1:D:458:LYS:HE3	1.83	0.59
1:E:414:LYS:HA	1:E:414:LYS:HZ2	1.61	0.59
1:F:134:LYS:HG2	1:F:136:PRO:HG3	1.85	0.59
2:T:13:LYS:NZ	2:T:65:PHE:CB	2.65	0.59
1:A:279:ILE:O	1:A:283:LEU:HD13	2.02	0.59
1:A:517:VAL:HB	1:A:525:LYS:HZ1	1.68	0.59
1:D:597:ASN:HD21	1:D:601:GLU:CB	2.15	0.59
1:E:88:LYS:NZ	1:E:172:GLU:OE1	2.35	0.59
1:E:235:THR:O	1:E:238:GLN:HB2	2.03	0.59
2:Q:21:LYS:C	2:Q:21:LYS:HD3	2.22	0.59
2:T:21:LYS:C	2:T:21:LYS:HD3	2.22	0.59
1:A:349:ASN:HD22	1:A:350:VAL:HG23	1.67	0.59
1:A:414:LYS:HA	1:A:414:LYS:HZ2	1.67	0.59
1:B:306:GLY:O	1:B:336:THR:HG23	2.02	0.59
1:B:349:ASN:ND2	1:B:350:VAL:HG23	2.17	0.59
1:B:597:ASN:HD21	1:B:601:GLU:CB	2.15	0.59
1:C:349:ASN:HD22	1:C:350:VAL:HG23	1.68	0.59
1:C:686:ASP:HB3	1:C:739:LYS:HD2	1.83	0.59
1:C:83:GLN:O	1:C:85:LEU:N	2.36	0.59
1:D:349:ASN:HD22	1:D:350:VAL:HG23	1.68	0.59
1:D:635:ILE:H	1:D:635:ILE:CD1	1.99	0.59
1:E:412:GLU:C	1:E:414:LYS:H	2.04	0.59
1:E:73:ASN:HD22	1:E:74:GLU:CD	2.05	0.59
1:F:102:GLY:HA3	1:F:150:PRO:HG2	1.84	0.59
1:F:88:LYS:NZ	1:F:172:GLU:OE1	2.35	0.59
1:F:349:ASN:ND2	1:F:350:VAL:HG23	2.17	0.59
2:O:102:ALA:CB	2:O:125:ILE:HG13	2.32	0.59
1:A:657:ILE:O	1:A:657:ILE:HG23	2.02	0.59
1:B:739:LYS:HG2	1:B:740:GLN:H	1.67	0.59
1:C:368:GLN:HB2	1:C:380:VAL:HG13	1.85	0.59
1:D:412:GLU:C	1:D:414:LYS:H	2.04	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:472:ARG:HH11	1:D:472:ARG:CB	2.15	0.59
1:E:472:ARG:HH11	1:E:472:ARG:CB	2.15	0.59
1:F:218:LEU:HD11	1:F:225:ILE:CD1	2.29	0.59
1:F:686:ASP:HB3	1:F:739:LYS:HD2	1.83	0.59
1:A:349:ASN:ND2	1:A:350:VAL:HG23	2.18	0.59
1:B:142:VAL:CG2	1:B:154:ILE:HD12	2.27	0.59
1:B:279:ILE:O	1:B:283:LEU:HD13	2.02	0.59
1:C:306:GLY:O	1:C:336:THR:HG23	2.03	0.59
1:C:73:ASN:HD22	1:C:74:GLU:CD	2.05	0.59
1:D:295:VAL:HB	1:D:603:ILE:HG23	1.84	0.59
1:E:136:PRO:HG2	1:E:139:SER:OG	2.01	0.59
1:E:529:VAL:O	1:E:532:LEU:HB2	2.03	0.59
1:F:130:SER:HB2	1:F:170:TYR:CE2	2.37	0.59
1:F:235:THR:O	1:F:238:GLN:HB2	2.03	0.59
1:F:739:LYS:HG2	1:F:740:GLN:H	1.67	0.59
2:P:21:LYS:C	2:P:21:LYS:HD3	2.22	0.59
1:A:235:THR:O	1:A:238:GLN:HB2	2.02	0.59
1:A:529:VAL:O	1:A:532:LEU:HB2	2.02	0.59
1:B:141:PHE:HD1	1:B:141:PHE:N	2.00	0.59
1:B:529:VAL:O	1:B:532:LEU:HB2	2.02	0.59
1:C:218:LEU:HD11	1:C:225:ILE:CD1	2.29	0.59
1:C:529:VAL:O	1:C:532:LEU:HB2	2.01	0.59
1:D:136:PRO:HG2	1:D:139:SER:OG	2.03	0.59
1:D:173:ILE:C	1:D:175:LYS:N	2.55	0.59
1:F:529:VAL:O	1:F:532:LEU:HB2	2.03	0.59
1:F:609:GLU:N	1:F:609:GLU:OE2	2.32	0.59
2:P:58:ASP:O	2:P:60:ASN:N	2.36	0.59
2:Q:106:ARG:O	2:Q:110:THR:HG23	2.03	0.59
1:A:134:LYS:HG2	1:A:136:PRO:HG3	1.85	0.59
1:A:395:GLU:O	1:A:395:GLU:OE1	2.20	0.59
1:B:607:ASN:HB3	1:B:609:GLU:OE2	2.02	0.59
1:C:746:LYS:O	1:C:750:GLN:HG2	2.03	0.59
1:D:188:LEU:HD22	1:D:188:LEU:H	1.61	0.59
1:E:70:GLU:CB	1:E:107:THR:HG22	2.28	0.59
1:E:188:LEU:HD22	1:E:188:LEU:H	1.55	0.59
1:E:629:ASN:HD22	1:E:631:SER:N	1.95	0.59
1:F:175:LYS:CB	1:F:175:LYS:NZ	2.64	0.59
1:F:75:THR:C	1:F:77:ASP:H	2.07	0.59
1:A:739:LYS:HG2	1:A:740:GLN:H	1.67	0.58
1:A:73:ASN:HD22	1:A:74:GLU:CD	2.05	0.58
1:C:530:THR:HG21	2:Q:145:MET:HE3	1.84	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:718:ARG:NH1	1:C:767:GLN:NE2	2.51	0.58
1:E:431:LYS:O	1:E:432:TYR:HD2	1.86	0.58
1:E:442:TYR:O	1:E:458:LYS:NZ	2.35	0.58
2:O:138:TYR:O	2:O:142:VAL:HG23	2.03	0.58
2:O:49:GLN:HA	2:O:52:ILE:CG2	2.33	0.58
1:A:115:LYS:HB3	1:A:115:LYS:HZ3	1.68	0.58
1:A:75:THR:C	1:A:77:ASP:H	2.06	0.58
1:B:431:LYS:O	1:B:432:TYR:HD2	1.86	0.58
1:B:570:THR:O	1:B:570:THR:OG1	2.21	0.58
1:B:776:LEU:O	1:B:780:LEU:HD22	2.03	0.58
1:C:442:TYR:O	1:C:458:LYS:NZ	2.36	0.58
1:E:301:ALA:C	1:E:303:LYS:N	2.53	0.58
2:P:13:LYS:NZ	2:P:65:PHE:CB	2.65	0.58
2:Q:138:TYR:O	2:Q:142:VAL:HG23	2.03	0.58
2:T:32:LEU:HD21	2:T:71:MET:HE2	1.85	0.58
1:A:326:ILE:C	1:A:327:LEU:HD12	2.24	0.58
1:A:472:ARG:CB	1:A:472:ARG:HH11	2.15	0.58
1:D:288:VAL:HG23	1:D:289:GLU:H	1.68	0.58
1:D:343:VAL:HG13	1:D:487:PRO:O	2.03	0.58
1:F:136:PRO:HG2	1:F:139:SER:OG	2.03	0.58
1:F:288:VAL:HG23	1:F:289:GLU:H	1.67	0.58
1:F:326:ILE:C	1:F:327:LEU:HD12	2.24	0.58
1:A:136:PRO:HG2	1:A:139:SER:OG	2.02	0.58
1:A:318:ILE:HG23	1:A:322:LEU:HD12	1.86	0.58
1:A:368:GLN:HB2	1:A:380:VAL:HG13	1.86	0.58
1:B:134:LYS:HG2	1:B:136:PRO:HG3	1.85	0.58
1:B:173:ILE:C	1:B:175:LYS:N	2.55	0.58
1:B:368:GLN:HB2	1:B:380:VAL:HG13	1.85	0.58
1:B:517:VAL:HB	1:B:525:LYS:HZ1	1.68	0.58
1:D:109:ILE:HD13	1:D:157:LYS:NZ	2.19	0.58
1:D:432:TYR:HD1	1:D:445:ARG:HD2	1.68	0.58
1:D:73:ASN:HD22	1:D:74:GLU:CD	2.05	0.58
1:E:199:LEU:C	1:E:201:ASP:N	2.57	0.58
1:E:326:ILE:C	1:E:327:LEU:HD12	2.23	0.58
1:E:517:VAL:HB	1:E:525:LYS:HZ1	1.69	0.58
1:E:75:THR:C	1:E:77:ASP:H	2.07	0.58
1:F:318:ILE:HG23	1:F:322:LEU:HD12	1.86	0.58
1:F:597:ASN:ND2	1:F:601:GLU:N	2.51	0.58
2:P:106:ARG:CG	2:P:121:VAL:HG21	2.06	0.58
1:C:235:THR:O	1:C:238:GLN:HB2	2.03	0.58
1:C:472:ARG:HH11	1:C:472:ARG:CB	2.15	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:199:LEU:C	1:D:201:ASP:N	2.57	0.58
1:D:442:TYR:O	1:D:458:LYS:NZ	2.36	0.58
1:E:288:VAL:HG23	1:E:289:GLU:H	1.69	0.58
1:E:349:ASN:HD22	1:E:350:VAL:HG23	1.69	0.58
2:T:89:PHE:HD1	2:T:141:PHE:CD2	2.20	0.58
1:B:218:LEU:HD11	1:B:225:ILE:CD1	2.29	0.58
1:C:66:LEU:HD12	1:C:103:GLU:HA	1.85	0.58
1:C:107:THR:HG21	1:C:115:LYS:HD2	1.86	0.58
1:C:184:LYS:HZ2	1:C:191:GLU:HB2	1.68	0.58
1:D:349:ASN:ND2	1:D:350:VAL:HG23	2.18	0.58
1:D:735:VAL:O	1:D:738:SER:CB	2.52	0.58
1:E:173:ILE:C	1:E:175:LYS:N	2.55	0.58
1:E:420:LEU:O	1:E:420:LEU:HD13	2.04	0.58
1:E:495:PHE:O	1:E:496:ALA:HB2	2.03	0.58
1:E:746:LYS:O	1:E:750:GLN:HG2	2.04	0.58
1:F:141:PHE:N	1:F:141:PHE:HD1	2.01	0.58
1:F:306:GLY:O	1:F:336:THR:HG23	2.02	0.58
1:F:343:VAL:HG13	1:F:487:PRO:O	2.03	0.58
2:O:117:THR:C	2:O:119:GLU:N	2.57	0.58
2:O:58:ASP:O	2:O:60:ASN:N	2.37	0.58
2:Q:13:LYS:NZ	2:Q:65:PHE:CB	2.67	0.58
2:T:106:ARG:O	2:T:110:THR:HG23	2.04	0.58
1:A:431:LYS:O	1:A:432:TYR:HD2	1.85	0.58
1:A:776:LEU:O	1:A:780:LEU:HD22	2.04	0.58
1:B:343:VAL:HG13	1:B:487:PRO:O	2.02	0.58
1:C:109:ILE:HD13	1:C:157:LYS:NZ	2.19	0.58
1:C:343:VAL:HG13	1:C:487:PRO:O	2.03	0.58
1:D:351:HIS:HB2	1:D:386:GLU:HG2	1.86	0.58
1:D:517:VAL:HB	1:D:525:LYS:HZ1	1.69	0.58
1:D:657:ILE:O	1:D:657:ILE:HG23	2.02	0.58
2:O:22:ASP:O	2:O:24:ASP:N	2.37	0.58
2:Q:102:ALA:CB	2:Q:125:ILE:HG13	2.34	0.58
1:A:218:LEU:HD11	1:A:225:ILE:CD1	2.29	0.58
1:D:107:THR:HG21	1:D:115:LYS:HD2	1.86	0.58
1:D:530:THR:HG21	2:R:145:MET:HE3	1.84	0.58
1:E:109:ILE:HD13	1:E:157:LYS:NZ	2.19	0.58
1:F:230:ILE:HG13	1:F:237:PHE:CE2	2.39	0.58
1:F:414:LYS:NZ	1:F:419:ILE:O	2.37	0.58
2:P:138:TYR:O	2:P:142:VAL:HG23	2.03	0.58
2:Q:117:THR:C	2:Q:119:GLU:N	2.57	0.58
2:R:58:ASP:O	2:R:60:ASN:N	2.37	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S:13:LYS:NZ	2:S:65:PHE:CB	2.66	0.58
2:T:22:ASP:O	2:T:24:ASP:N	2.37	0.58
1:A:199:LEU:C	1:A:201:ASP:N	2.57	0.58
1:A:420:LEU:O	1:A:420:LEU:HD13	2.04	0.58
1:B:318:ILE:HG23	1:B:322:LEU:HD12	1.86	0.58
1:B:83:GLN:O	1:B:85:LEU:N	2.37	0.58
1:C:495:PHE:O	1:C:496:ALA:HB2	2.04	0.58
1:D:597:ASN:HD21	1:D:601:GLU:CA	2.15	0.58
1:D:635:ILE:N	1:D:635:ILE:HD12	2.08	0.58
1:E:102:GLY:HA3	1:E:150:PRO:HG2	1.84	0.58
1:E:414:LYS:NZ	1:E:419:ILE:O	2.36	0.58
1:E:686:ASP:HB3	1:E:739:LYS:HD2	1.85	0.58
1:F:351:HIS:HB2	1:F:386:GLU:HG2	1.86	0.58
1:F:520:PRO:HG2	1:F:521:ASN:H	1.67	0.58
1:F:746:LYS:O	1:F:750:GLN:HG2	2.04	0.58
2:O:106:ARG:O	2:O:110:THR:HG23	2.03	0.58
2:T:102:ALA:CB	2:T:125:ILE:HG13	2.34	0.58
2:T:58:ASP:O	2:T:60:ASN:N	2.37	0.58
1:A:279:ILE:HD13	1:A:279:ILE:H	1.69	0.58
1:B:288:VAL:HG23	1:B:289:GLU:H	1.68	0.58
1:C:134:LYS:HG2	1:C:136:PRO:HG3	1.85	0.58
1:C:288:VAL:HG23	1:C:289:GLU:H	1.68	0.58
1:C:318:ILE:HG23	1:C:322:LEU:HD12	1.85	0.58
1:C:66:LEU:HD12	1:C:66:LEU:O	2.04	0.58
1:D:66:LEU:HD12	1:D:103:GLU:HA	1.84	0.58
1:D:235:THR:O	1:D:238:GLN:HB2	2.04	0.58
1:E:176:GLY:C	1:E:178:SER:H	2.05	0.58
1:F:65:ASN:N	1:F:65:ASN:HD22	2.02	0.58
2:P:22:ASP:O	2:P:24:ASP:N	2.37	0.58
2:Q:58:ASP:O	2:Q:60:ASN:N	2.37	0.58
1:A:301:ALA:C	1:A:303:LYS:N	2.53	0.57
1:A:83:GLN:O	1:A:85:LEU:N	2.36	0.57
1:B:66:LEU:HD12	1:B:103:GLU:HA	1.85	0.57
1:B:175:LYS:O	1:B:178:SER:N	2.37	0.57
1:B:326:ILE:C	1:B:327:LEU:HD12	2.24	0.57
1:B:746:LYS:O	1:B:750:GLN:HG2	2.04	0.57
1:C:115:LYS:HZ2	1:C:115:LYS:HB3	1.68	0.57
1:C:175:LYS:NZ	1:C:175:LYS:CB	2.63	0.57
1:C:175:LYS:O	1:C:178:SER:N	2.37	0.57
1:E:115:LYS:C	1:E:117:LEU:H	2.07	0.57
1:E:107:THR:HG21	1:E:115:LYS:HD2	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:776:LEU:O	1:F:780:LEU:HD22	2.03	0.57
2:P:117:THR:C	2:P:119:GLU:N	2.56	0.57
2:R:46:ALA:CA	2:R:49:GLN:HE22	2.17	0.57
1:A:628:PHE:CZ	2:O:90:ARG:CZ	2.87	0.57
1:B:70:GLU:CB	1:B:107:THR:HG22	2.26	0.57
1:B:307:LEU:H	1:B:307:LEU:HD12	1.70	0.57
1:B:351:HIS:HB2	1:B:386:GLU:HG2	1.86	0.57
1:C:135:VAL:O	1:C:135:VAL:CG2	2.53	0.57
1:C:184:LYS:HZ3	1:C:193:LEU:HD12	1.68	0.57
1:C:628:PHE:CE2	2:Q:90:ARG:CZ	2.87	0.57
1:C:704:TYR:OH	1:C:759:GLN:NE2	2.37	0.57
1:D:495:PHE:O	1:D:496:ALA:HB2	2.04	0.57
1:D:615:ILE:HG23	1:D:619:ILE:HB	1.86	0.57
1:E:597:ASN:HD21	1:E:601:GLU:CB	2.16	0.57
1:F:324:THR:CG2	1:F:499:PRO:HA	2.34	0.57
1:F:628:PHE:CE2	2:T:90:ARG:CZ	2.88	0.57
2:S:138:TYR:O	2:S:142:VAL:HG23	2.04	0.57
2:S:44:THR:OG1	2:S:47:GLU:N	2.34	0.57
1:A:141:PHE:N	1:A:141:PHE:HD1	2.01	0.57
1:A:615:ILE:HG23	1:A:619:ILE:HB	1.86	0.57
1:B:109:ILE:HD13	1:B:157:LYS:NZ	2.19	0.57
1:B:115:LYS:NZ	1:B:116:GLU:N	2.53	0.57
1:B:175:LYS:NZ	1:B:175:LYS:CB	2.65	0.57
1:D:75:THR:C	1:D:77:ASP:H	2.07	0.57
1:D:776:LEU:O	1:D:780:LEU:HD22	2.03	0.57
1:E:293:ILE:O	1:E:295:VAL:HG22	2.04	0.57
1:E:343:VAL:HG13	1:E:487:PRO:O	2.03	0.57
1:E:324:THR:CG2	1:E:499:PRO:HA	2.34	0.57
1:E:667:LEU:HD13	1:E:678:VAL:HG21	1.86	0.57
1:E:89:ILE:HG22	1:E:90:PRO:HD2	1.86	0.57
1:F:79:ILE:C	1:F:81:GLN:H	2.08	0.57
1:F:89:ILE:HG22	1:F:90:PRO:HD2	1.86	0.57
2:S:22:ASP:O	2:S:24:ASP:N	2.37	0.57
1:B:628:PHE:CE2	2:P:90:ARG:CZ	2.87	0.57
1:C:349:ASN:ND2	1:C:350:VAL:HG23	2.18	0.57
1:D:134:LYS:HG2	1:D:136:PRO:CD	2.34	0.57
1:D:579:THR:O	1:D:581:GLN:N	2.38	0.57
1:D:657:ILE:HG21	1:D:704:TYR:CD1	2.40	0.57
1:E:279:ILE:HD13	1:E:279:ILE:H	1.70	0.57
1:E:368:GLN:HB2	1:E:380:VAL:HG13	1.85	0.57
1:E:776:LEU:O	1:E:780:LEU:HD22	2.03	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:117:THR:C	2:T:119:GLU:N	2.57	0.57
2:T:46:ALA:CA	2:T:49:GLN:HE22	2.18	0.57
1:A:495:PHE:O	1:A:496:ALA:HB2	2.03	0.57
1:B:75:THR:C	1:B:77:ASP:H	2.07	0.57
1:C:230:ILE:HG13	1:C:237:PHE:CE2	2.39	0.57
1:C:351:HIS:HB2	1:C:386:GLU:HG2	1.87	0.57
1:C:324:THR:CG2	1:C:499:PRO:HA	2.35	0.57
1:C:579:THR:O	1:C:581:GLN:N	2.38	0.57
1:C:735:VAL:HG12	1:C:741:ILE:HD11	1.87	0.57
1:C:776:LEU:O	1:C:780:LEU:HD22	2.04	0.57
1:C:89:ILE:HG22	1:C:90:PRO:HD2	1.86	0.57
1:D:134:LYS:HG2	1:D:136:PRO:HG3	1.86	0.57
1:D:368:GLN:HB2	1:D:380:VAL:HG13	1.86	0.57
1:D:420:LEU:O	1:D:420:LEU:HD13	2.05	0.57
1:D:667:LEU:HD13	1:D:678:VAL:HG21	1.86	0.57
1:E:218:LEU:HD11	1:E:225:ILE:CD1	2.29	0.57
1:E:597:ASN:H	1:E:597:ASN:HD22	1.50	0.57
1:E:657:ILE:O	1:E:657:ILE:HG23	2.02	0.57
1:F:109:ILE:HD13	1:F:157:LYS:HZ3	1.69	0.57
1:F:128:MET:HB2	1:F:239:HIS:NE2	2.20	0.57
2:T:138:TYR:O	2:T:142:VAL:HG23	2.04	0.57
1:A:343:VAL:HG13	1:A:487:PRO:O	2.04	0.57
1:A:89:ILE:HG22	1:A:90:PRO:HD2	1.87	0.57
1:B:432:TYR:HD1	1:B:445:ARG:HD2	1.70	0.57
1:B:324:THR:CG2	1:B:499:PRO:HA	2.35	0.57
1:C:70:GLU:CB	1:C:107:THR:HG22	2.27	0.57
1:C:173:ILE:C	1:C:175:LYS:N	2.54	0.57
1:C:517:VAL:HB	1:C:525:LYS:HZ1	1.68	0.57
1:D:529:VAL:O	1:D:532:LEU:HB2	2.03	0.57
1:E:141:PHE:N	1:E:141:PHE:HD1	2.01	0.57
1:E:295:VAL:HB	1:E:603:ILE:HG23	1.86	0.57
1:E:618:ASN:O	1:E:622:LYS:HB3	2.04	0.57
1:F:368:GLN:HB2	1:F:380:VAL:HG13	1.86	0.57
1:F:597:ASN:HD22	1:F:597:ASN:H	1.52	0.57
2:O:95:ASP:OD2	2:O:97:ASN:CG	2.43	0.57
2:T:8:GLN:NE2	2:T:76:MET:SD	2.77	0.57
1:A:188:LEU:HD22	1:A:188:LEU:N	2.13	0.57
1:B:718:ARG:NH1	1:B:767:GLN:NE2	2.48	0.57
1:C:597:ASN:OD1	1:C:599:GLU:HB2	2.05	0.57
1:D:181:ILE:HB	1:D:238:GLN:OE1	2.05	0.57
1:E:735:VAL:O	1:E:738:SER:CB	2.53	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:46:ALA:CA	2:P:49:GLN:HE22	2.18	0.57
2:Q:46:ALA:CA	2:Q:49:GLN:HE22	2.18	0.57
2:T:46:ALA:HA	2:T:49:GLN:NE2	2.20	0.57
1:A:629:ASN:ND2	1:A:631:SER:N	2.44	0.57
1:B:115:LYS:HB3	1:B:115:LYS:HZ3	1.68	0.57
1:B:530:THR:HG21	2:P:145:MET:HE3	1.87	0.57
1:C:102:GLY:HA3	1:C:150:PRO:HG2	1.86	0.57
1:D:505:LYS:HD2	1:D:505:LYS:O	2.04	0.57
1:D:628:PHE:CZ	2:R:90:ARG:CZ	2.88	0.57
1:D:686:ASP:HB3	1:D:739:LYS:HD2	1.86	0.57
1:C:628:PHE:CZ	2:Q:90:ARG:CZ	2.88	0.57
2:R:46:ALA:HA	2:R:49:GLN:NE2	2.19	0.57
1:A:109:ILE:HD13	1:A:157:LYS:NZ	2.19	0.57
1:A:597:ASN:H	1:A:597:ASN:HD22	1.53	0.57
1:A:746:LYS:O	1:A:750:GLN:HG2	2.05	0.57
1:A:718:ARG:HH12	1:A:767:GLN:HE21	1.50	0.57
1:A:79:ILE:C	1:A:81:GLN:H	2.08	0.57
1:B:275:GLY:HA2	1:B:278:LYS:CD	2.35	0.57
1:B:279:ILE:HD13	1:B:279:ILE:H	1.69	0.57
1:D:746:LYS:O	1:D:750:GLN:HG2	2.04	0.57
1:F:109:ILE:HD13	1:F:157:LYS:NZ	2.19	0.57
1:F:505:LYS:HD2	1:F:505:LYS:O	2.04	0.57
1:F:718:ARG:HH12	1:F:767:GLN:HE21	1.48	0.57
2:S:46:ALA:CA	2:S:49:GLN:HE22	2.17	0.57
2:T:49:GLN:HA	2:T:52:ILE:CG2	2.35	0.57
1:A:66:LEU:HD12	1:A:103:GLU:HA	1.85	0.57
1:A:288:VAL:HG23	1:A:289:GLU:H	1.68	0.57
1:A:630:ARG:HH11	1:A:630:ARG:HG3	1.70	0.57
1:A:66:LEU:HD12	1:A:66:LEU:O	2.05	0.57
1:C:115:LYS:NZ	1:C:116:GLU:N	2.53	0.57
1:C:432:TYR:HD1	1:C:445:ARG:HD2	1.70	0.57
1:C:615:ILE:HG23	1:C:619:ILE:HB	1.86	0.57
1:D:115:LYS:C	1:D:117:LEU:H	2.08	0.57
1:D:326:ILE:C	1:D:327:LEU:HD12	2.25	0.57
1:D:66:LEU:O	1:D:66:LEU:HD12	2.05	0.57
1:E:349:ASN:ND2	1:E:350:VAL:HG23	2.19	0.57
1:E:79:ILE:C	1:E:81:GLN:H	2.08	0.57
1:F:432:TYR:HD1	1:F:445:ARG:HD2	1.68	0.57
2:S:46:ALA:HA	2:S:49:GLN:NE2	2.20	0.57
2:T:120:GLU:HA	2:T:123:GLN:HB2	1.87	0.57
1:A:217:LYS:HZ2	1:A:236:GLU:HG3	1.70	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:351:HIS:HB2	1:A:386:GLU:HG2	1.87	0.56
1:B:112:VAL:O	1:B:114:HIS:N	2.35	0.56
1:B:115:LYS:C	1:B:117:LEU:H	2.08	0.56
1:B:235:THR:O	1:B:238:GLN:HB2	2.05	0.56
1:D:102:GLY:HA3	1:D:150:PRO:HG2	1.85	0.56
1:F:420:LEU:HD13	1:F:420:LEU:O	2.05	0.56
2:R:106:ARG:O	2:R:110:THR:HG23	2.05	0.56
2:S:117:THR:C	2:S:119:GLU:N	2.57	0.56
2:S:58:ASP:O	2:S:60:ASN:N	2.37	0.56
1:A:657:ILE:HG21	1:A:704:TYR:CD1	2.40	0.56
1:C:431:LYS:O	1:C:432:TYR:HD2	1.87	0.56
1:D:764:LEU:C	1:D:766:HIS:H	2.09	0.56
1:E:318:ILE:HG23	1:E:322:LEU:HD12	1.86	0.56
1:F:175:LYS:O	1:F:178:SER:N	2.38	0.56
1:F:431:LYS:O	1:F:432:TYR:HD2	1.87	0.56
1:B:628:PHE:CZ	2:P:90:ARG:CZ	2.88	0.56
2:Q:49:GLN:HA	2:Q:52:ILE:CG2	2.35	0.56
1:A:535:LYS:HD2	1:A:536:TYR:CD2	2.41	0.56
1:C:217:LYS:HZ2	1:C:236:GLU:HG3	1.69	0.56
1:C:420:LEU:HD13	1:C:420:LEU:O	2.04	0.56
1:D:79:ILE:C	1:D:81:GLN:H	2.08	0.56
1:E:306:GLY:O	1:E:336:THR:HG23	2.04	0.56
1:E:351:HIS:HB2	1:E:386:GLU:HG2	1.87	0.56
1:F:116:GLU:HG3	1:F:117:LEU:HD22	1.87	0.56
1:F:535:LYS:HD2	1:F:536:TYR:CD2	2.40	0.56
1:F:615:ILE:HG23	1:F:619:ILE:HB	1.87	0.56
1:F:66:LEU:HD12	1:F:66:LEU:O	2.06	0.56
2:O:120:GLU:HA	2:O:123:GLN:HB2	1.88	0.56
1:B:335:ALA:O	1:B:339:ILE:HG13	2.06	0.56
1:B:414:LYS:NZ	1:B:419:ILE:O	2.37	0.56
1:B:615:ILE:HG23	1:B:619:ILE:HB	1.87	0.56
1:B:79:ILE:C	1:B:81:GLN:H	2.08	0.56
1:C:115:LYS:C	1:C:117:LEU:H	2.09	0.56
1:C:326:ILE:C	1:C:327:LEU:HD12	2.25	0.56
1:C:337:ASN:O	1:C:341:SER:N	2.29	0.56
1:C:75:THR:C	1:C:77:ASP:H	2.07	0.56
1:D:175:LYS:CB	1:D:175:LYS:NZ	2.64	0.56
1:E:531:ASN:O	1:E:535:LYS:HB2	2.06	0.56
1:F:199:LEU:C	1:F:201:ASP:N	2.57	0.56
1:F:618:ASN:O	1:F:622:LYS:HB3	2.04	0.56
2:O:97:ASN:ND2	2:O:97:ASN:N	2.48	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Q:44:THR:OG1	2:Q:47:GLU:N	2.34	0.56
2:S:65:PHE:CB	2:S:66:PRO:HD3	2.36	0.56
1:F:530:THR:HG21	2:T:145:MET:HE3	1.87	0.56
2:T:65:PHE:CB	2:T:66:PRO:HD3	2.36	0.56
1:A:570:THR:O	1:A:570:THR:OG1	2.23	0.56
1:B:435:LEU:H	1:B:445:ARG:HA	1.70	0.56
1:B:92:ASP:C	1:B:94:LEU:N	2.57	0.56
1:C:134:LYS:HG2	1:C:136:PRO:CG	2.36	0.56
1:D:302:LEU:HD22	1:D:602:PHE:HE1	1.71	0.56
1:D:324:THR:CG2	1:D:499:PRO:HA	2.35	0.56
1:E:615:ILE:HG23	1:E:619:ILE:HB	1.88	0.56
1:E:635:ILE:CD1	1:E:635:ILE:H	1.99	0.56
1:F:179:LEU:O	1:F:183:SER:N	2.38	0.56
1:F:531:ASN:O	1:F:535:LYS:HB2	2.05	0.56
2:P:65:PHE:CB	2:P:66:PRO:HD3	2.36	0.56
1:D:628:PHE:CE2	2:R:90:ARG:CZ	2.88	0.56
2:S:120:GLU:HA	2:S:123:GLN:HB2	1.88	0.56
1:A:116:GLU:HG3	1:A:117:LEU:HD22	1.88	0.56
1:A:306:GLY:O	1:A:336:THR:HG23	2.04	0.56
1:A:505:LYS:HD2	1:A:505:LYS:O	2.05	0.56
1:B:711:ILE:HG13	1:B:712:PHE:CE2	2.41	0.56
1:C:295:VAL:HB	1:C:603:ILE:HG23	1.87	0.56
1:C:635:ILE:HD12	1:C:635:ILE:N	2.09	0.56
1:C:711:ILE:HG13	1:C:712:PHE:CE2	2.41	0.56
1:D:115:LYS:NZ	1:D:116:GLU:N	2.53	0.56
1:D:293:ILE:O	1:D:295:VAL:HG22	2.05	0.56
1:E:451:ASN:OD1	1:E:451:ASN:N	2.29	0.56
1:F:592:GLU:HB3	1:F:604:LEU:HD11	1.87	0.56
2:Q:22:ASP:O	2:Q:24:ASP:N	2.38	0.56
2:R:49:GLN:HA	2:R:52:ILE:CG2	2.35	0.56
2:S:106:ARG:O	2:S:110:THR:HG23	2.05	0.56
1:A:115:LYS:HZ1	1:A:116:GLU:H	1.52	0.56
1:A:187:SER:C	1:A:188:LEU:O	2.36	0.56
1:A:432:TYR:HD1	1:A:445:ARG:HD2	1.69	0.56
1:B:134:LYS:HG2	1:B:136:PRO:CG	2.36	0.56
1:E:175:LYS:HB2	1:E:175:LYS:HZ3	1.71	0.56
1:E:175:LYS:O	1:E:178:SER:N	2.38	0.56
1:E:735:VAL:HG12	1:E:741:ILE:HD11	1.87	0.56
1:F:667:LEU:HD13	1:F:678:VAL:HG21	1.88	0.56
1:F:747:ASN:O	1:F:750:GLN:HB2	2.06	0.56
1:F:628:PHE:CZ	2:T:90:ARG:CZ	2.89	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:431:LYS:C	1:A:432:TYR:HD2	2.09	0.56
1:A:735:VAL:O	1:A:738:SER:HB2	2.06	0.56
1:B:727:GLN:O	1:B:730:ASN:HB3	2.05	0.56
1:B:735:VAL:HG12	1:B:741:ILE:HD11	1.87	0.56
1:E:592:GLU:HB3	1:E:604:LEU:HD11	1.88	0.56
1:E:657:ILE:HG21	1:E:704:TYR:CD1	2.41	0.56
1:F:115:LYS:HB3	1:F:115:LYS:HZ3	1.69	0.56
2:P:106:ARG:O	2:P:110:THR:HG23	2.04	0.56
1:A:704:TYR:OH	1:A:759:GLN:NE2	2.39	0.56
1:B:96:ILE:HG22	1:B:100:LEU:CD1	2.36	0.56
1:B:181:ILE:HB	1:B:238:GLN:OE1	2.06	0.56
1:C:451:ASN:N	1:C:451:ASN:OD1	2.29	0.56
1:C:718:ARG:HH12	1:C:767:GLN:HE21	1.50	0.56
1:D:531:ASN:O	1:D:535:LYS:HB2	2.05	0.56
1:E:134:LYS:HG2	1:E:136:PRO:HG3	1.87	0.56
1:F:184:LYS:HZ3	1:F:193:LEU:HD12	1.68	0.56
1:F:92:ASP:C	1:F:94:LEU:N	2.57	0.56
2:P:49:GLN:HA	2:P:52:ILE:CG2	2.35	0.56
2:R:120:GLU:HA	2:R:123:GLN:HB2	1.88	0.56
1:A:324:THR:CG2	1:A:499:PRO:HA	2.35	0.56
1:A:629:ASN:C	1:A:629:ASN:ND2	2.58	0.56
1:A:688:PHE:C	1:A:688:PHE:CD2	2.80	0.56
1:B:136:PRO:HG2	1:B:139:SER:OG	2.04	0.56
1:B:420:LEU:HD13	1:B:420:LEU:O	2.06	0.56
1:C:181:ILE:HB	1:C:238:GLN:OE1	2.06	0.56
1:C:186:LYS:HA	1:C:190:PRO:CD	2.16	0.56
1:C:335:ALA:O	1:C:339:ILE:HG13	2.06	0.56
1:E:432:TYR:HD1	1:E:445:ARG:HD2	1.70	0.56
1:E:66:LEU:O	1:E:66:LEU:HD12	2.06	0.56
1:F:360:VAL:HG21	1:F:365:PRO:HB3	1.88	0.56
2:P:32:LEU:HD21	2:P:71:MET:HE1	1.87	0.56
1:A:115:LYS:C	1:A:117:LEU:H	2.09	0.56
1:A:181:ILE:HB	1:A:238:GLN:OE1	2.06	0.56
1:A:335:ALA:O	1:A:339:ILE:HG13	2.06	0.56
1:B:495:PHE:O	1:B:496:ALA:HB2	2.05	0.56
1:B:597:ASN:H	1:B:597:ASN:HD22	1.54	0.56
1:C:505:LYS:HD2	1:C:505:LYS:O	2.05	0.56
1:C:601:GLU:C	1:C:602:PHE:HD2	2.09	0.56
1:C:79:ILE:C	1:C:81:GLN:H	2.08	0.56
1:D:96:ILE:HG22	1:D:100:LEU:CD1	2.36	0.56
1:D:601:GLU:C	1:D:602:PHE:HD2	2.10	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:435:LEU:CG	1:E:446:ILE:HG22	2.34	0.56
1:F:517:VAL:HB	1:F:525:LYS:HZ1	1.69	0.56
2:P:64:ASP:OD1	2:P:66:PRO:HD2	2.06	0.56
2:R:117:THR:C	2:R:119:GLU:N	2.57	0.56
2:R:138:TYR:O	2:R:142:VAL:HG23	2.05	0.56
1:A:115:LYS:NZ	1:A:116:GLU:N	2.54	0.55
1:A:122:GLU:OE1	1:A:147:ARG:CB	2.52	0.55
1:A:184:LYS:HE3	1:A:191:GLU:HB2	1.88	0.55
1:B:431:LYS:C	1:B:432:TYR:HD2	2.09	0.55
1:B:531:ASN:O	1:B:535:LYS:HB2	2.06	0.55
1:C:307:LEU:HD12	1:C:307:LEU:H	1.71	0.55
1:C:338:LEU:O	1:C:341:SER:HB3	2.06	0.55
1:C:414:LYS:NZ	1:C:419:ILE:O	2.37	0.55
1:C:92:ASP:C	1:C:94:LEU:N	2.57	0.55
1:D:184:LYS:HZ2	1:D:191:GLU:HB2	1.68	0.55
1:D:337:ASN:O	1:D:341:SER:N	2.29	0.55
1:D:335:ALA:O	1:D:339:ILE:HG13	2.06	0.55
2:Q:46:ALA:HA	2:Q:49:GLN:NE2	2.20	0.55
1:E:628:PHE:CZ	2:S:90:ARG:CZ	2.89	0.55
1:A:112:VAL:O	1:A:114:HIS:N	2.37	0.55
1:A:531:ASN:O	1:A:535:LYS:HB2	2.06	0.55
1:A:96:ILE:HG22	1:A:100:LEU:CD1	2.35	0.55
1:B:535:LYS:HD2	1:B:536:TYR:CD2	2.41	0.55
1:B:66:LEU:HD12	1:B:66:LEU:O	2.06	0.55
1:B:688:PHE:C	1:B:688:PHE:CD2	2.79	0.55
1:D:318:ILE:HG23	1:D:322:LEU:HD12	1.87	0.55
1:E:462:ILE:HD11	1:E:466:GLY:HA2	1.88	0.55
1:E:579:THR:O	1:E:581:GLN:N	2.39	0.55
1:F:495:PHE:O	1:F:496:ALA:HB2	2.05	0.55
1:F:597:ASN:OD1	1:F:599:GLU:HB2	2.06	0.55
1:F:718:ARG:NH1	1:F:767:GLN:NE2	2.49	0.55
2:O:65:PHE:CB	2:O:66:PRO:HD3	2.37	0.55
2:Q:120:GLU:HA	2:Q:123:GLN:HB2	1.88	0.55
1:A:414:LYS:NZ	1:A:419:ILE:O	2.36	0.55
1:B:89:ILE:HG22	1:B:90:PRO:HD2	1.86	0.55
1:C:130:SER:HB2	1:C:170:TYR:CE2	2.42	0.55
1:C:592:GLU:HB3	1:C:604:LEU:HD11	1.88	0.55
1:D:70:GLU:CB	1:D:107:THR:HG22	2.27	0.55
1:E:181:ILE:HB	1:E:238:GLN:OE1	2.06	0.55
1:F:181:ILE:HB	1:F:238:GLN:OE1	2.06	0.55
1:F:279:ILE:HD13	1:F:279:ILE:H	1.70	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:629:ASN:ND2	1:F:631:SER:N	2.45	0.55
2:P:120:GLU:HA	2:P:123:GLN:HB2	1.88	0.55
1:A:134:LYS:HG2	1:A:136:PRO:CG	2.36	0.55
1:A:297:LYS:HB3	1:A:297:LYS:HZ2	1.70	0.55
1:A:307:LEU:HD12	1:A:307:LEU:H	1.71	0.55
1:B:199:LEU:C	1:B:201:ASP:N	2.58	0.55
1:B:307:LEU:N	1:B:307:LEU:HD12	2.20	0.55
1:D:275:GLY:HA2	1:D:278:LYS:CD	2.36	0.55
1:D:597:ASN:OD1	1:D:599:GLU:HB2	2.07	0.55
1:E:184:LYS:HZ2	1:E:191:GLU:CB	2.19	0.55
1:E:505:LYS:O	1:E:505:LYS:HD2	2.05	0.55
1:F:173:ILE:C	1:F:175:LYS:N	2.55	0.55
1:F:451:ASN:N	1:F:451:ASN:OD1	2.29	0.55
2:O:46:ALA:CA	2:O:49:GLN:HE22	2.18	0.55
1:C:668:SER:CA	2:Q:14:GLU:HG3	2.28	0.55
2:R:106:ARG:CG	2:R:121:VAL:HG21	2.08	0.55
1:A:601:GLU:C	1:A:602:PHE:HD2	2.09	0.55
1:B:180:ASP:O	1:B:183:SER:N	2.36	0.55
1:B:597:ASN:OD1	1:B:599:GLU:HB2	2.07	0.55
1:C:535:LYS:HD2	1:C:536:TYR:CD2	2.41	0.55
1:D:279:ILE:H	1:D:279:ILE:HD13	1.70	0.55
1:D:462:ILE:HD11	1:D:466:GLY:HA2	1.89	0.55
1:D:592:GLU:HB3	1:D:604:LEU:HD11	1.88	0.55
1:E:96:ILE:HG22	1:E:100:LEU:CD1	2.36	0.55
1:E:128:MET:HB2	1:E:239:HIS:NE2	2.22	0.55
1:E:335:ALA:O	1:E:339:ILE:HG13	2.06	0.55
1:E:629:ASN:ND2	1:E:631:SER:N	2.44	0.55
1:F:184:LYS:CE	1:F:191:GLU:HB2	2.36	0.55
1:F:96:ILE:HG22	1:F:100:LEU:CD1	2.35	0.55
2:R:44:THR:OG1	2:R:47:GLU:N	2.34	0.55
2:R:65:PHE:CB	2:R:66:PRO:HD3	2.36	0.55
1:B:116:GLU:HG3	1:B:117:LEU:HD22	1.87	0.55
1:B:186:LYS:HG2	1:B:186:LYS:O	2.06	0.55
1:B:302:LEU:HD22	1:B:602:PHE:HE1	1.70	0.55
1:B:446:ILE:HG13	1:B:452:GLU:O	2.06	0.55
1:C:186:LYS:HG2	1:C:186:LYS:O	2.06	0.55
1:C:297:LYS:HZ2	1:C:297:LYS:HB3	1.70	0.55
1:C:414:LYS:HA	1:C:414:LYS:HZ2	1.71	0.55
1:D:92:ASP:C	1:D:94:LEU:N	2.59	0.55
1:F:73:ASN:HB3	1:F:74:GLU:OE1	2.07	0.55
2:Q:64:ASP:OD1	2:Q:66:PRO:HD2	2.07	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S:76:MET:HG3	2:S:76:MET:O	2.04	0.55
1:B:510:GLN:O	1:B:514:ASP:HB2	2.06	0.55
1:C:199:LEU:HD21	1:C:226:ASP:OD2	2.07	0.55
1:C:667:LEU:HD13	1:C:678:VAL:HG21	1.89	0.55
1:D:629:ASN:C	1:D:629:ASN:ND2	2.59	0.55
1:D:704:TYR:OH	1:D:759:GLN:NE2	2.39	0.55
1:D:711:ILE:HG13	1:D:712:PHE:CE2	2.41	0.55
1:E:115:LYS:HZ2	1:E:116:GLU:HG2	1.69	0.55
1:E:431:LYS:C	1:E:432:TYR:HD2	2.10	0.55
1:E:711:ILE:HG13	1:E:712:PHE:CE2	2.41	0.55
1:E:747:ASN:O	1:E:750:GLN:HB2	2.07	0.55
1:F:115:LYS:NZ	1:F:116:GLU:N	2.53	0.55
1:F:307:LEU:N	1:F:307:LEU:HD12	2.21	0.55
2:R:22:ASP:O	2:R:24:ASP:N	2.39	0.55
2:R:64:ASP:OD1	2:R:66:PRO:HD2	2.06	0.55
1:A:504:ILE:O	1:A:507:GLN:HB3	2.07	0.55
1:A:639:ASN:HD22	1:A:639:ASN:H	1.55	0.55
1:A:711:ILE:HG13	1:A:712:PHE:CE2	2.42	0.55
1:B:601:GLU:C	1:B:602:PHE:HD2	2.10	0.55
1:B:629:ASN:HD22	1:B:631:SER:N	1.95	0.55
1:C:302:LEU:HD22	1:C:602:PHE:HE1	1.72	0.55
1:C:737:LYS:HE2	1:C:737:LYS:HA	1.89	0.55
1:C:96:ILE:HG22	1:C:100:LEU:CD1	2.36	0.55
1:D:735:VAL:HG12	1:D:741:ILE:HD11	1.89	0.55
1:D:97:TYR:HA	1:D:100:LEU:HD12	1.89	0.55
1:F:335:ALA:O	1:F:339:ILE:HG13	2.07	0.55
2:S:49:GLN:HA	2:S:52:ILE:CG2	2.35	0.55
2:T:76:MET:HG3	2:T:76:MET:O	2.04	0.55
1:A:184:LYS:HZ1	1:A:191:GLU:HB2	1.69	0.55
1:A:307:LEU:HD12	1:A:307:LEU:N	2.21	0.55
1:A:510:GLN:O	1:A:514:ASP:HB2	2.07	0.55
1:B:411:GLU:O	1:B:414:LYS:HB2	2.07	0.55
1:C:116:GLU:HG3	1:C:117:LEU:HD22	1.87	0.55
1:C:275:GLY:HA2	1:C:278:LYS:CD	2.37	0.55
1:D:116:GLU:HG3	1:D:117:LEU:HD22	1.88	0.55
1:D:218:LEU:HD11	1:D:225:ILE:CD1	2.29	0.55
1:D:412:GLU:C	1:D:414:LYS:N	2.61	0.55
1:D:570:THR:O	1:D:570:THR:OG1	2.22	0.55
1:D:597:ASN:HD22	1:D:597:ASN:H	1.53	0.55
1:D:89:ILE:HG22	1:D:93:VAL:CG1	2.10	0.55
1:E:180:ASP:CG	1:E:181:ILE:N	2.59	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:302:LEU:HD22	1:E:602:PHE:HE1	1.72	0.55
1:E:318:ILE:HD12	1:E:318:ILE:N	2.21	0.55
1:E:597:ASN:OD1	1:E:599:GLU:HB2	2.06	0.55
1:E:727:GLN:O	1:E:730:ASN:HB3	2.07	0.55
1:E:97:TYR:HA	1:E:100:LEU:HD12	1.88	0.55
1:F:115:LYS:C	1:F:117:LEU:H	2.08	0.55
1:F:275:GLY:HA2	1:F:278:LYS:CD	2.36	0.55
1:F:570:THR:OG1	1:F:570:THR:O	2.24	0.55
1:F:579:THR:O	1:F:581:GLN:N	2.39	0.55
1:F:711:ILE:HG13	1:F:712:PHE:CE2	2.41	0.55
1:F:735:VAL:HG12	1:F:741:ILE:HD11	1.89	0.55
1:A:275:GLY:HA2	1:A:278:LYS:CD	2.37	0.55
1:B:337:ASN:O	1:B:341:SER:N	2.29	0.55
1:B:85:LEU:O	1:B:88:LYS:HE3	2.07	0.55
1:D:223:LYS:NZ	1:D:228:ASN:CB	2.70	0.55
1:D:307:LEU:HD12	1:D:307:LEU:H	1.72	0.55
1:E:115:LYS:NZ	1:E:116:GLU:N	2.53	0.55
1:F:223:LYS:NZ	1:F:228:ASN:CB	2.70	0.55
1:F:435:LEU:H	1:F:445:ARG:HA	1.72	0.55
1:F:688:PHE:CD2	1:F:688:PHE:C	2.80	0.55
1:E:525:LYS:HE3	2:S:114:GLU:HG2	1.89	0.55
1:B:107:THR:HG21	1:B:115:LYS:HD2	1.90	0.54
1:B:325:TYR:CD1	1:B:598:PRO:HD3	2.42	0.54
1:B:667:LEU:HD13	1:B:678:VAL:HG21	1.88	0.54
1:B:704:TYR:OH	1:B:759:GLN:NE2	2.40	0.54
1:C:504:ILE:O	1:C:507:GLN:HB3	2.07	0.54
1:D:349:ASN:HD22	1:D:350:VAL:N	2.05	0.54
1:E:131:ARG:HG2	1:E:131:ARG:HH11	1.72	0.54
1:A:175:LYS:O	1:A:178:SER:N	2.40	0.54
1:A:360:VAL:HG21	1:A:365:PRO:HB3	1.89	0.54
1:A:462:ILE:HD11	1:A:466:GLY:HA2	1.88	0.54
1:A:592:GLU:HB3	1:A:604:LEU:HD11	1.89	0.54
1:A:597:ASN:OD1	1:A:599:GLU:HB2	2.07	0.54
1:A:73:ASN:HB3	1:A:74:GLU:OE1	2.08	0.54
1:B:223:LYS:NZ	1:B:228:ASN:CB	2.70	0.54
1:B:592:GLU:HB3	1:B:604:LEU:HD11	1.89	0.54
1:C:210:PHE:N	1:C:210:PHE:CD2	2.74	0.54
1:C:307:LEU:N	1:C:307:LEU:HD12	2.21	0.54
1:C:531:ASN:O	1:C:535:LYS:HB2	2.06	0.54
1:D:199:LEU:HD21	1:D:226:ASP:OD2	2.07	0.54
1:D:307:LEU:HD12	1:D:307:LEU:N	2.21	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:688:PHE:C	1:D:688:PHE:CD2	2.80	0.54
1:E:199:LEU:HD21	1:E:226:ASP:OD2	2.07	0.54
1:E:275:GLY:HA2	1:E:278:LYS:CD	2.36	0.54
1:E:312:ALA:O	1:E:315:PHE:HB2	2.08	0.54
1:E:535:LYS:HD2	1:E:536:TYR:CD2	2.42	0.54
1:E:601:GLU:C	1:E:602:PHE:HD2	2.10	0.54
1:E:704:TYR:OH	1:E:759:GLN:NE2	2.40	0.54
1:E:73:ASN:HB3	1:E:74:GLU:OE1	2.07	0.54
1:F:307:LEU:H	1:F:307:LEU:HD12	1.72	0.54
2:Q:65:PHE:CB	2:Q:66:PRO:HD3	2.36	0.54
1:A:199:LEU:HD21	1:A:226:ASP:OD2	2.07	0.54
1:A:223:LYS:NZ	1:A:228:ASN:CB	2.70	0.54
1:A:618:ASN:O	1:A:622:LYS:HB3	2.07	0.54
1:C:165:GLN:C	1:C:167:LYS:H	2.11	0.54
1:C:199:LEU:C	1:C:201:ASP:N	2.57	0.54
1:C:223:LYS:NZ	1:C:228:ASN:CB	2.70	0.54
1:C:510:GLN:O	1:C:514:ASP:HB2	2.07	0.54
1:C:570:THR:O	1:C:570:THR:OG1	2.22	0.54
1:E:130:SER:HB2	1:E:170:TYR:OH	2.08	0.54
1:E:639:ASN:HD22	1:E:639:ASN:H	1.55	0.54
1:F:325:TYR:CD1	1:F:598:PRO:HD3	2.43	0.54
1:F:657:ILE:HG21	1:F:704:TYR:CD1	2.42	0.54
1:F:727:GLN:O	1:F:730:ASN:HB3	2.07	0.54
2:O:109:MET:HG3	2:O:116:LEU:HD11	1.90	0.54
1:A:135:VAL:CG2	1:A:135:VAL:O	2.53	0.54
1:A:247:TYR:HE2	1:A:256:VAL:HG11	1.72	0.54
1:A:360:VAL:O	1:A:363:TYR:HB2	2.07	0.54
1:A:435:LEU:H	1:A:445:ARG:HA	1.72	0.54
1:A:654:ILE:C	1:A:655:ASN:HD22	2.11	0.54
1:A:727:GLN:O	1:A:730:ASN:HB3	2.07	0.54
1:B:504:ILE:O	1:B:507:GLN:HB3	2.07	0.54
1:B:90:PRO:C	1:B:92:ASP:H	2.10	0.54
1:C:349:ASN:HD22	1:C:350:VAL:N	2.06	0.54
1:E:116:GLU:HG3	1:E:117:LEU:HD22	1.88	0.54
1:E:223:LYS:NZ	1:E:228:ASN:CB	2.70	0.54
1:E:628:PHE:CE2	2:S:90:ARG:CZ	2.90	0.54
1:E:654:ILE:C	1:E:655:ASN:HD22	2.10	0.54
1:E:688:PHE:C	1:E:688:PHE:CD2	2.79	0.54
1:F:199:LEU:HD21	1:F:226:ASP:OD2	2.07	0.54
1:F:412:GLU:C	1:F:414:LYS:N	2.60	0.54
1:F:431:LYS:C	1:F:432:TYR:HD2	2.10	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:95:ASP:OD2	2:P:97:ASN:CG	2.46	0.54
1:A:145:LYS:HD3	1:A:151:LYS:HD2	1.90	0.54
1:A:165:GLN:C	1:A:167:LYS:H	2.11	0.54
1:C:462:ILE:HD11	1:C:466:GLY:HA2	1.89	0.54
1:C:659:THR:OG1	1:C:662:GLU:HB2	2.08	0.54
1:D:414:LYS:NZ	1:D:419:ILE:O	2.36	0.54
1:D:431:LYS:C	1:D:432:TYR:HD2	2.09	0.54
1:D:510:GLN:O	1:D:514:ASP:HB2	2.07	0.54
1:E:307:LEU:H	1:E:307:LEU:HD12	1.73	0.54
1:E:504:ILE:O	1:E:507:GLN:HB3	2.08	0.54
1:E:570:THR:O	1:E:570:THR:OG1	2.23	0.54
1:E:90:PRO:C	1:E:92:ASP:H	2.11	0.54
1:F:97:TYR:HA	1:F:100:LEU:HD12	1.88	0.54
1:A:530:THR:HG21	2:O:145:MET:CE	2.37	0.54
2:P:109:MET:HG3	2:P:116:LEU:HD11	1.90	0.54
2:Q:95:ASP:OD2	2:Q:97:ASN:CG	2.46	0.54
2:R:8:GLN:NE2	2:R:76:MET:SD	2.81	0.54
1:F:525:LYS:HE3	2:T:114:GLU:HG2	1.90	0.54
1:B:368:GLN:CB	1:B:380:VAL:HG13	2.38	0.54
1:B:505:LYS:HD2	1:B:505:LYS:O	2.06	0.54
1:B:579:THR:O	1:B:581:GLN:N	2.41	0.54
1:C:360:VAL:O	1:C:363:TYR:HB2	2.07	0.54
1:C:435:LEU:H	1:C:445:ARG:HA	1.71	0.54
1:C:515:LYS:NZ	1:C:515:LYS:HB3	2.23	0.54
1:D:184:LYS:NZ	1:D:191:GLU:CB	2.66	0.54
1:D:535:LYS:HD2	1:D:536:TYR:CD2	2.42	0.54
1:D:302:LEU:HB2	1:D:602:PHE:HD1	1.73	0.54
1:D:323:ASN:ND2	1:D:624:TYR:OH	2.31	0.54
1:D:747:ASN:O	1:D:750:GLN:HB2	2.07	0.54
1:E:360:VAL:HG21	1:E:365:PRO:HB3	1.90	0.54
1:E:412:GLU:C	1:E:414:LYS:N	2.60	0.54
1:F:247:TYR:HE2	1:F:256:VAL:HG11	1.73	0.54
1:F:462:ILE:HD11	1:F:466:GLY:HA2	1.88	0.54
1:F:85:LEU:O	1:F:88:LYS:HE3	2.07	0.54
2:O:64:ASP:OD1	2:O:66:PRO:HD2	2.07	0.54
2:S:64:ASP:OD1	2:S:66:PRO:HD2	2.07	0.54
1:A:630:ARG:HG3	1:A:630:ARG:NH1	2.22	0.54
1:A:90:PRO:HG2	1:A:93:VAL:HB	1.90	0.54
1:B:135:VAL:O	1:B:135:VAL:CG2	2.53	0.54
1:B:657:ILE:HG21	1:B:704:TYR:CD1	2.43	0.54
1:B:735:VAL:O	1:B:738:SER:HB2	2.08	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:747:ASN:O	1:B:750:GLN:HB2	2.07	0.54
1:D:210:PHE:N	1:D:210:PHE:CD2	2.75	0.54
1:D:443:GLU:HG2	1:D:458:LYS:HZ1	1.73	0.54
1:D:629:ASN:ND2	1:D:631:SER:N	2.45	0.54
1:D:792:VAL:HG12	1:D:796:ILE:HD11	1.90	0.54
1:E:123:GLU:CG	1:E:124:GLU:H	2.19	0.54
1:E:210:PHE:CD2	1:E:210:PHE:N	2.75	0.54
1:E:360:VAL:O	1:E:363:TYR:HB2	2.08	0.54
1:E:435:LEU:H	1:E:445:ARG:HA	1.72	0.54
1:E:510:GLN:O	1:E:514:ASP:HB2	2.07	0.54
2:S:8:GLN:NE2	2:S:76:MET:SD	2.80	0.54
1:A:302:LEU:HD22	1:A:602:PHE:HE1	1.71	0.54
1:A:312:ALA:O	1:A:315:PHE:HB2	2.07	0.54
1:A:735:VAL:HG12	1:A:741:ILE:HD11	1.88	0.54
1:B:217:LYS:CB	1:B:236:GLU:HG3	2.38	0.54
1:C:312:ALA:O	1:C:315:PHE:HB2	2.08	0.54
1:C:515:LYS:O	1:C:515:LYS:HG2	2.08	0.54
1:C:597:ASN:H	1:C:597:ASN:HD22	1.55	0.54
1:D:217:LYS:HB3	1:D:217:LYS:HZ3	1.72	0.54
1:D:618:ASN:O	1:D:622:LYS:HB3	2.07	0.54
1:D:654:ILE:C	1:D:655:ASN:HD22	2.11	0.54
1:D:737:LYS:HA	1:D:737:LYS:HE2	1.89	0.54
1:E:515:LYS:HB3	1:E:515:LYS:NZ	2.23	0.54
1:E:92:ASP:C	1:E:94:LEU:N	2.57	0.54
1:F:131:ARG:HH11	1:F:131:ARG:HG2	1.72	0.54
1:F:601:GLU:C	1:F:602:PHE:HD2	2.10	0.54
1:B:525:LYS:HE3	2:P:114:GLU:HG2	1.89	0.54
2:Q:76:MET:HG3	2:Q:76:MET:O	2.04	0.54
1:A:579:THR:O	1:A:581:GLN:N	2.41	0.54
1:B:170:TYR:C	1:B:172:GLU:N	2.61	0.54
1:B:435:LEU:CG	1:B:446:ILE:HG22	2.35	0.54
1:B:73:ASN:HB3	1:B:74:GLU:OE1	2.08	0.54
1:C:97:TYR:HA	1:C:100:LEU:HD12	1.89	0.54
1:C:254:ARG:HG2	1:C:255:THR:N	2.22	0.54
1:C:431:LYS:C	1:C:432:TYR:HD2	2.10	0.54
1:C:747:ASN:O	1:C:750:GLN:HB2	2.07	0.54
1:D:131:ARG:HH11	1:D:131:ARG:HG2	1.72	0.54
1:D:90:PRO:C	1:D:92:ASP:H	2.12	0.54
1:E:191:GLU:C	1:E:193:LEU:N	2.61	0.54
1:E:515:LYS:O	1:E:515:LYS:HG2	2.08	0.54
1:F:704:TYR:OH	1:F:759:GLN:NE2	2.40	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S:32:LEU:HD21	2:S:71:MET:HE2	1.89	0.54
2:T:64:ASP:OD1	2:T:66:PRO:HD2	2.07	0.54
1:A:109:ILE:HD13	1:A:157:LYS:HZ3	1.71	0.54
1:A:534:ILE:HG22	1:A:535:LYS:N	2.23	0.54
1:A:636:ALA:O	1:A:640:LYS:N	2.41	0.54
1:B:217:LYS:HZ2	1:B:236:GLU:HG3	1.73	0.54
1:B:312:ALA:O	1:B:315:PHE:HB2	2.07	0.54
1:B:360:VAL:HG21	1:B:365:PRO:HB3	1.89	0.54
1:B:456:LYS:HB3	1:B:470:ASN:C	2.27	0.54
1:B:295:VAL:HB	1:B:603:ILE:HG23	1.90	0.54
1:B:737:LYS:HE2	1:B:737:LYS:HA	1.90	0.54
1:C:145:LYS:HD3	1:C:151:LYS:HD2	1.90	0.54
1:C:325:TYR:CD1	1:C:598:PRO:HD3	2.43	0.54
1:C:368:GLN:CB	1:C:380:VAL:HG13	2.37	0.54
1:D:115:LYS:HB3	1:D:115:LYS:HZ3	1.73	0.54
1:D:175:LYS:O	1:D:178:SER:N	2.40	0.54
1:D:325:TYR:CD1	1:D:598:PRO:HD3	2.43	0.54
1:D:727:GLN:O	1:D:730:ASN:HB3	2.06	0.54
1:E:184:LYS:HZ3	1:E:193:LEU:HD12	1.71	0.54
1:E:297:LYS:HB3	1:E:297:LYS:HZ2	1.72	0.54
1:E:349:ASN:HD22	1:E:350:VAL:N	2.06	0.54
1:E:411:GLU:O	1:E:414:LYS:HB2	2.07	0.54
1:E:792:VAL:HG12	1:E:796:ILE:HD11	1.90	0.54
1:F:107:THR:HG21	1:F:115:LYS:HD2	1.89	0.54
1:F:510:GLN:O	1:F:514:ASP:HB2	2.07	0.54
1:F:630:ARG:HG3	1:F:630:ARG:HH11	1.73	0.54
1:F:737:LYS:HA	1:F:737:LYS:HE2	1.89	0.54
2:S:109:MET:HG3	2:S:116:LEU:HD11	1.90	0.54
2:S:121:VAL:C	2:S:123:GLN:N	2.60	0.54
1:A:325:TYR:CD1	1:A:598:PRO:HD3	2.43	0.53
1:A:412:GLU:C	1:A:414:LYS:N	2.61	0.53
1:B:145:LYS:HD3	1:B:151:LYS:HD2	1.90	0.53
1:B:360:VAL:O	1:B:363:TYR:HB2	2.08	0.53
1:B:597:ASN:ND2	1:B:601:GLU:N	2.51	0.53
1:C:412:GLU:C	1:C:414:LYS:N	2.60	0.53
1:C:73:ASN:HB3	1:C:74:GLU:OE1	2.07	0.53
1:C:85:LEU:O	1:C:88:LYS:HE3	2.09	0.53
1:D:128:MET:HB2	1:D:239:HIS:NE2	2.22	0.53
1:D:338:LEU:O	1:D:341:SER:HB3	2.08	0.53
1:D:360:VAL:O	1:D:363:TYR:HB2	2.08	0.53
1:E:657:ILE:O	1:E:658:PRO:O	2.26	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:659:THR:OG1	1:E:662:GLU:HB2	2.08	0.53
1:F:302:LEU:HD22	1:F:602:PHE:HE1	1.72	0.53
1:F:327:LEU:N	1:F:327:LEU:HD12	2.23	0.53
1:F:302:LEU:HB2	1:F:602:PHE:HD1	1.73	0.53
1:F:639:ASN:H	1:F:639:ASN:HD22	1.57	0.53
2:P:44:THR:OG1	2:P:47:GLU:N	2.35	0.53
2:Q:13:LYS:HZ3	2:Q:65:PHE:HB3	1.71	0.53
2:S:105:LEU:HD23	2:S:121:VAL:HG13	1.89	0.53
1:A:411:GLU:O	1:A:414:LYS:HB2	2.08	0.53
1:A:85:LEU:O	1:A:88:LYS:HE3	2.08	0.53
1:A:97:TYR:HA	1:A:100:LEU:HD12	1.89	0.53
1:B:636:ALA:O	1:B:640:LYS:N	2.42	0.53
1:C:279:ILE:H	1:C:279:ILE:CD1	2.21	0.53
1:C:525:LYS:HE3	2:Q:114:GLU:HG2	1.89	0.53
1:C:657:ILE:HG21	1:C:704:TYR:CD1	2.44	0.53
1:D:145:LYS:HD3	1:D:151:LYS:HD2	1.90	0.53
1:D:247:TYR:HE2	1:D:256:VAL:HG11	1.73	0.53
1:D:411:GLU:O	1:D:414:LYS:HB2	2.07	0.53
1:D:73:ASN:HB3	1:D:74:GLU:OE1	2.07	0.53
1:E:307:LEU:N	1:E:307:LEU:HD12	2.22	0.53
1:E:327:LEU:HD12	1:E:327:LEU:N	2.23	0.53
1:F:105:TYR:HB2	1:F:153:ILE:HG12	1.90	0.53
1:F:504:ILE:O	1:F:507:GLN:HB3	2.08	0.53
1:F:90:PRO:C	1:F:92:ASP:H	2.12	0.53
2:S:106:ARG:CG	2:S:121:VAL:HG21	2.06	0.53
1:A:747:ASN:O	1:A:750:GLN:HB2	2.08	0.53
1:B:792:VAL:HG12	1:B:796:ILE:HD11	1.90	0.53
1:C:792:VAL:HG12	1:C:796:ILE:HD11	1.90	0.53
1:C:88:LYS:HG2	1:C:88:LYS:O	2.07	0.53
1:D:90:PRO:HG2	1:D:93:VAL:HB	1.91	0.53
1:E:324:THR:HG22	1:E:499:PRO:HA	1.90	0.53
1:E:368:GLN:CB	1:E:380:VAL:HG13	2.38	0.53
1:E:639:ASN:ND2	1:E:639:ASN:H	2.06	0.53
1:F:210:PHE:CD2	1:F:210:PHE:N	2.75	0.53
2:P:46:ALA:HA	2:P:49:GLN:NE2	2.20	0.53
2:S:95:ASP:OD2	2:S:97:ASN:CG	2.46	0.53
1:A:368:GLN:CB	1:A:380:VAL:HG13	2.39	0.53
1:A:657:ILE:O	1:A:658:PRO:O	2.26	0.53
1:A:659:THR:OG1	1:A:662:GLU:HB2	2.08	0.53
1:B:446:ILE:HD11	1:B:451:ASN:CB	2.38	0.53
1:B:515:LYS:O	1:B:515:LYS:HG2	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:630:ARG:HG3	1:B:630:ARG:HH11	1.74	0.53
1:B:659:THR:OG1	1:B:662:GLU:HB2	2.08	0.53
1:C:105:TYR:HB2	1:C:153:ILE:HG12	1.90	0.53
1:C:530:THR:HG21	2:Q:145:MET:CE	2.39	0.53
1:C:630:ARG:HG3	1:C:630:ARG:HH11	1.74	0.53
1:D:165:GLN:C	1:D:167:LYS:H	2.11	0.53
1:D:312:ALA:O	1:D:315:PHE:HB2	2.09	0.53
1:D:639:ASN:H	1:D:639:ASN:HD22	1.55	0.53
1:D:639:ASN:ND2	1:D:639:ASN:H	2.07	0.53
1:E:115:LYS:O	1:E:117:LEU:N	2.42	0.53
2:P:97:ASN:ND2	2:P:97:ASN:N	2.49	0.53
1:A:210:PHE:N	1:A:210:PHE:CD2	2.75	0.53
1:B:462:ILE:HD11	1:B:466:GLY:HA2	1.89	0.53
1:B:97:TYR:HA	1:B:100:LEU:HD12	1.89	0.53
1:C:247:TYR:HE2	1:C:256:VAL:HG11	1.73	0.53
1:C:410:ILE:HG22	1:C:411:GLU:N	2.23	0.53
1:C:90:PRO:HG2	1:C:93:VAL:HB	1.91	0.53
1:D:435:LEU:H	1:D:445:ARG:HA	1.72	0.53
1:E:145:LYS:HD3	1:E:151:LYS:HD2	1.90	0.53
1:E:105:TYR:HB2	1:E:153:ILE:HG12	1.90	0.53
1:F:184:LYS:HZ1	1:F:193:LEU:HD12	1.74	0.53
2:O:46:ALA:HA	2:O:49:GLN:NE2	2.20	0.53
2:R:95:ASP:OD2	2:R:97:ASN:CG	2.46	0.53
2:T:109:MET:HG3	2:T:116:LEU:HD11	1.91	0.53
1:A:327:LEU:HD12	1:A:327:LEU:N	2.24	0.53
1:B:165:GLN:C	1:B:167:LYS:H	2.12	0.53
1:B:349:ASN:HD22	1:B:350:VAL:N	2.07	0.53
1:B:410:ILE:HG22	1:B:411:GLU:N	2.24	0.53
1:C:128:MET:HB2	1:C:239:HIS:NE2	2.22	0.53
1:C:360:VAL:HG21	1:C:365:PRO:HB3	1.89	0.53
1:C:411:GLU:O	1:C:414:LYS:HB2	2.08	0.53
1:C:499:PRO:HD3	1:C:552:TRP:CH2	2.43	0.53
1:D:515:LYS:NZ	1:D:515:LYS:HB3	2.24	0.53
1:E:325:TYR:CD1	1:E:598:PRO:HD3	2.43	0.53
1:E:410:ILE:HG22	1:E:411:GLU:N	2.24	0.53
1:F:635:ILE:CD1	1:F:635:ILE:H	2.01	0.53
1:A:410:ILE:HG22	1:A:411:GLU:N	2.24	0.53
1:A:792:VAL:HG12	1:A:796:ILE:HD11	1.90	0.53
1:A:88:LYS:HG2	1:A:88:LYS:O	2.07	0.53
1:B:313:ASP:O	1:B:316:LYS:HB2	2.09	0.53
1:B:639:ASN:HD22	1:B:639:ASN:H	1.56	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:639:ASN:H	1:B:639:ASN:ND2	2.06	0.53
1:B:71:PHE:CD1	1:B:108:ASP:OD1	2.62	0.53
1:C:131:ARG:HH11	1:C:131:ARG:HG2	1.73	0.53
1:C:170:TYR:C	1:C:172:GLU:N	2.62	0.53
1:C:639:ASN:H	1:C:639:ASN:ND2	2.06	0.53
1:D:180:ASP:CG	1:D:181:ILE:N	2.59	0.53
1:E:165:GLN:C	1:E:167:LYS:H	2.11	0.53
1:E:209:LEU:HD23	1:E:260:TYR:CG	2.43	0.53
1:E:247:TYR:HE2	1:E:256:VAL:HG11	1.74	0.53
1:E:534:ILE:HG22	1:E:535:LYS:N	2.24	0.53
1:E:499:PRO:HD3	1:E:552:TRP:CH2	2.44	0.53
1:E:737:LYS:HA	1:E:737:LYS:HE2	1.89	0.53
1:E:90:PRO:HG2	1:E:93:VAL:HB	1.91	0.53
1:F:515:LYS:O	1:F:515:LYS:HG2	2.08	0.53
1:F:534:ILE:HG22	1:F:535:LYS:N	2.24	0.53
1:F:657:ILE:HG13	1:F:756:ILE:HD12	1.90	0.53
1:F:792:VAL:HG12	1:F:796:ILE:HD11	1.91	0.53
2:P:5:THR:HG23	2:P:8:GLN:HB2	1.91	0.53
1:D:525:LYS:HE3	2:R:114:GLU:HG2	1.90	0.53
1:A:397:GLU:O	1:A:479:LYS:HA	2.09	0.53
1:A:515:LYS:O	1:A:515:LYS:HG2	2.09	0.53
1:A:92:ASP:C	1:A:94:LEU:N	2.58	0.53
1:B:172:GLU:O	1:B:175:LYS:HB3	2.09	0.53
1:B:247:TYR:HE2	1:B:256:VAL:HG11	1.74	0.53
1:C:302:LEU:HB2	1:C:602:PHE:HD1	1.74	0.53
1:D:546:LYS:CD	1:D:554:LYS:HE3	2.36	0.53
1:D:795:LYS:C	1:D:797:ILE:N	2.62	0.53
1:E:199:LEU:HD23	1:E:225:ILE:O	2.09	0.53
1:E:302:LEU:HB2	1:E:602:PHE:HD1	1.74	0.53
1:F:410:ILE:HG22	1:F:411:GLU:N	2.24	0.53
1:F:411:GLU:O	1:F:414:LYS:HB2	2.08	0.53
1:A:107:THR:HG21	1:A:115:LYS:HD2	1.91	0.53
1:A:131:ARG:HH11	1:A:131:ARG:HG2	1.73	0.53
1:A:199:LEU:HD23	1:A:225:ILE:O	2.09	0.53
1:A:338:LEU:O	1:A:341:SER:HB3	2.09	0.53
1:B:131:ARG:HH11	1:B:131:ARG:HG2	1.73	0.53
1:B:210:PHE:CD2	1:B:210:PHE:N	2.75	0.53
1:B:199:LEU:HD21	1:B:226:ASP:OD2	2.09	0.53
1:B:338:LEU:O	1:B:341:SER:HB3	2.09	0.53
1:C:279:ILE:HD13	1:C:279:ILE:N	2.24	0.53
1:C:639:ASN:HD22	1:C:639:ASN:H	1.55	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:199:LEU:HD23	1:D:225:ILE:O	2.09	0.53
1:D:515:LYS:O	1:D:515:LYS:HG2	2.08	0.53
1:E:217:LYS:HB3	1:E:217:LYS:HZ3	1.73	0.53
1:E:337:ASN:ND2	1:E:412:GLU:OE1	2.42	0.53
1:F:177:ILE:HA	1:F:180:ASP:CG	2.29	0.53
2:P:121:VAL:C	2:P:123:GLN:N	2.61	0.53
2:T:5:THR:HG23	2:T:8:GLN:HB2	1.91	0.53
1:B:248:TYR:O	1:B:248:TYR:CD2	2.62	0.53
1:B:412:GLU:C	1:B:414:LYS:N	2.60	0.53
1:B:397:GLU:O	1:B:479:LYS:HA	2.09	0.53
1:C:199:LEU:HD23	1:C:225:ILE:O	2.09	0.53
1:C:90:PRO:C	1:C:92:ASP:H	2.12	0.53
1:D:148:GLU:HG3	1:D:149:THR:N	2.23	0.53
1:D:405:LEU:N	1:D:405:LEU:HD12	2.24	0.53
1:E:148:GLU:HG3	1:E:149:THR:N	2.23	0.53
1:E:184:LYS:CE	1:E:193:LEU:HB2	2.39	0.53
1:E:355:SER:CB	1:E:371:SER:HA	2.39	0.53
1:F:145:LYS:HD3	1:F:151:LYS:HD2	1.91	0.53
1:F:349:ASN:HD22	1:F:350:VAL:N	2.07	0.53
1:F:636:ALA:O	1:F:640:LYS:N	2.41	0.53
1:F:776:LEU:O	1:F:780:LEU:CD2	2.57	0.53
2:O:5:THR:CG2	2:O:8:GLN:HB2	2.39	0.53
2:R:32:LEU:HD21	2:R:71:MET:HE2	1.90	0.53
1:E:664:ILE:HG21	2:S:15:ALA:HB2	1.92	0.53
1:A:170:TYR:C	1:A:172:GLU:N	2.61	0.52
1:B:327:LEU:HD12	1:B:327:LEU:N	2.24	0.52
1:C:189:ASP:O	1:C:190:PRO:C	2.46	0.52
1:C:654:ILE:C	1:C:655:ASN:HD22	2.13	0.52
1:C:731:GLU:O	1:C:735:VAL:HG23	2.09	0.52
1:E:186:LYS:HZ1	1:E:234:LEU:CD1	2.23	0.52
1:F:134:LYS:HG2	1:F:136:PRO:CG	2.38	0.52
1:F:199:LEU:HD23	1:F:225:ILE:O	2.09	0.52
1:F:312:ALA:O	1:F:315:PHE:HB2	2.09	0.52
1:F:318:ILE:HD12	1:F:318:ILE:N	2.22	0.52
2:O:97:ASN:O	2:O:99:TYR:HD1	1.92	0.52
2:R:102:ALA:HB2	2:R:125:ILE:HG13	1.90	0.52
2:T:5:THR:CG2	2:T:8:GLN:HB2	2.39	0.52
1:A:209:LEU:HD23	1:A:260:TYR:CG	2.45	0.52
1:A:499:PRO:HD3	1:A:552:TRP:CH2	2.45	0.52
1:B:776:LEU:O	1:B:780:LEU:CD2	2.57	0.52
1:B:90:PRO:HG2	1:B:93:VAL:HB	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:172:GLU:O	1:C:175:LYS:HB3	2.09	0.52
1:C:688:PHE:C	1:C:688:PHE:CD2	2.81	0.52
1:D:360:VAL:HG21	1:D:365:PRO:HB3	1.90	0.52
1:D:597:ASN:ND2	1:D:601:GLU:N	2.53	0.52
1:D:630:ARG:HH11	1:D:630:ARG:HG3	1.74	0.52
1:D:642:TYR:HE2	1:D:644:GLU:OE2	1.93	0.52
1:E:776:LEU:O	1:E:780:LEU:CD2	2.57	0.52
1:F:135:VAL:O	1:F:135:VAL:CG2	2.52	0.52
1:F:209:LEU:HD23	1:F:260:TYR:CG	2.44	0.52
1:F:324:THR:HG22	1:F:499:PRO:HA	1.91	0.52
1:F:642:TYR:HE2	1:F:644:GLU:OE2	1.92	0.52
1:F:90:PRO:HG2	1:F:93:VAL:HB	1.91	0.52
2:O:5:THR:HG23	2:O:8:GLN:HB2	1.91	0.52
1:A:148:GLU:HG3	1:A:149:THR:N	2.23	0.52
1:A:349:ASN:HD22	1:A:350:VAL:N	2.07	0.52
1:A:718:ARG:NH1	1:A:767:GLN:NE2	2.53	0.52
1:B:148:GLU:HG3	1:B:149:THR:N	2.23	0.52
1:B:209:LEU:HD23	1:B:260:TYR:CG	2.44	0.52
1:C:795:LYS:C	1:C:797:ILE:N	2.63	0.52
1:D:318:ILE:N	1:D:318:ILE:HD12	2.22	0.52
1:D:435:LEU:CG	1:D:446:ILE:HG22	2.34	0.52
1:D:534:ILE:HG22	1:D:535:LYS:N	2.25	0.52
1:F:535:LYS:HD2	1:F:536:TYR:CE2	2.44	0.52
1:F:630:ARG:NH1	1:F:630:ARG:HG3	2.25	0.52
1:F:735:VAL:O	1:F:738:SER:CB	2.58	0.52
2:Q:121:VAL:C	2:Q:123:GLN:N	2.60	0.52
1:D:664:ILE:HG21	2:R:15:ALA:HB2	1.91	0.52
2:S:102:ALA:HB2	2:S:125:ILE:HG13	1.91	0.52
2:S:5:THR:CG2	2:S:8:GLN:HB2	2.39	0.52
1:A:405:LEU:N	1:A:405:LEU:HD12	2.25	0.52
1:A:535:LYS:HD2	1:A:536:TYR:CE2	2.45	0.52
1:B:213:LYS:HB2	1:B:240:ALA:CB	2.40	0.52
1:B:297:LYS:HZ2	1:B:297:LYS:HB3	1.74	0.52
1:B:499:PRO:HD3	1:B:552:TRP:CH2	2.44	0.52
1:B:731:GLU:O	1:B:735:VAL:HG23	2.09	0.52
1:C:186:LYS:CA	1:C:190:PRO:HD3	2.18	0.52
1:C:497:LEU:CD1	1:C:556:MET:HG2	2.36	0.52
1:D:254:ARG:HG2	1:D:255:THR:N	2.23	0.52
1:D:209:LEU:HD23	1:D:260:TYR:CG	2.44	0.52
1:D:504:ILE:O	1:D:507:GLN:HB3	2.08	0.52
1:D:659:THR:OG1	1:D:662:GLU:HB2	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:148:GLU:HG3	1:F:149:THR:N	2.23	0.52
1:F:360:VAL:O	1:F:363:TYR:HB2	2.09	0.52
1:F:523:LEU:HD11	2:T:144:MET:HG2	1.91	0.52
2:R:76:MET:HG3	2:R:76:MET:O	2.04	0.52
1:A:73:ASN:ND2	1:A:74:GLU:OE2	2.42	0.52
1:A:776:LEU:O	1:A:780:LEU:CD2	2.58	0.52
1:B:105:TYR:HB2	1:B:153:ILE:HG12	1.91	0.52
1:B:246:SER:O	1:B:250:ALA:HB2	2.09	0.52
1:B:255:THR:O	1:B:256:VAL:C	2.48	0.52
1:B:302:LEU:HB2	1:B:602:PHE:HD1	1.73	0.52
1:C:148:GLU:HG3	1:C:149:THR:N	2.23	0.52
1:C:549:LEU:HD12	1:C:553:GLN:HB3	1.92	0.52
1:C:597:ASN:ND2	1:C:601:GLU:N	2.52	0.52
1:C:727:GLN:O	1:C:730:ASN:HB3	2.08	0.52
1:D:657:ILE:O	1:D:658:PRO:O	2.27	0.52
1:E:338:LEU:O	1:E:341:SER:HB3	2.08	0.52
1:F:313:ASP:O	1:F:316:LYS:HB2	2.09	0.52
1:F:337:ASN:O	1:F:341:SER:N	2.28	0.52
1:F:499:PRO:HD3	1:F:552:TRP:CH2	2.44	0.52
1:F:546:LYS:CD	1:F:554:LYS:HE3	2.37	0.52
1:F:795:LYS:C	1:F:797:ILE:N	2.63	0.52
2:O:106:ARG:CG	2:O:121:VAL:HG21	2.08	0.52
2:O:76:MET:O	2:O:76:MET:HG3	2.04	0.52
2:Q:5:THR:CG2	2:Q:8:GLN:HB2	2.40	0.52
2:R:109:MET:HG3	2:R:116:LEU:HD11	1.91	0.52
2:T:95:ASP:OD2	2:T:97:ASN:CG	2.47	0.52
1:A:217:LYS:CB	1:A:236:GLU:HG3	2.39	0.52
1:A:246:SER:O	1:A:250:ALA:HB2	2.10	0.52
1:A:313:ASP:O	1:A:316:LYS:HB2	2.10	0.52
1:A:302:LEU:HB2	1:A:602:PHE:HD1	1.73	0.52
1:A:667:LEU:HD13	1:A:678:VAL:HG21	1.90	0.52
1:B:189:ASP:O	1:B:191:GLU:HG2	2.09	0.52
1:B:254:ARG:HG2	1:B:255:THR:N	2.23	0.52
1:B:535:LYS:HD2	1:B:536:TYR:CE2	2.45	0.52
1:B:73:ASN:ND2	1:B:74:GLU:OE2	2.42	0.52
1:B:795:LYS:C	1:B:797:ILE:N	2.63	0.52
1:C:355:SER:CB	1:C:371:SER:HA	2.40	0.52
1:C:639:ASN:HD22	1:C:639:ASN:N	2.07	0.52
1:D:776:LEU:O	1:D:780:LEU:CD2	2.57	0.52
1:E:98:SER:O	1:E:101:GLY:N	2.43	0.52
1:E:254:ARG:HG2	1:E:255:THR:N	2.23	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:405:LEU:HD12	1:E:405:LEU:N	2.25	0.52
1:F:165:GLN:C	1:F:167:LYS:H	2.12	0.52
1:F:279:ILE:CD1	1:F:279:ILE:H	2.23	0.52
1:F:654:ILE:C	1:F:655:ASN:HD22	2.13	0.52
1:F:657:ILE:O	1:F:658:PRO:O	2.26	0.52
1:F:731:GLU:O	1:F:735:VAL:HG23	2.10	0.52
2:Q:109:MET:HG3	2:Q:116:LEU:HD11	1.92	0.52
2:S:5:THR:HG23	2:S:8:GLN:HB2	1.92	0.52
1:A:105:TYR:HB2	1:A:153:ILE:HG12	1.90	0.52
1:A:515:LYS:NZ	1:A:515:LYS:HB3	2.24	0.52
1:A:639:ASN:HD22	1:A:639:ASN:N	2.07	0.52
1:B:275:GLY:O	1:B:278:LYS:HB2	2.10	0.52
1:B:444:PHE:CD1	1:B:444:PHE:N	2.78	0.52
1:C:630:ARG:HG3	1:C:630:ARG:NH1	2.25	0.52
1:D:173:ILE:O	1:D:174:GLY:C	2.48	0.52
1:D:368:GLN:CB	1:D:380:VAL:HG13	2.39	0.52
1:E:530:THR:HG21	2:S:145:MET:HE3	1.92	0.52
1:E:636:ALA:O	1:E:640:LYS:N	2.42	0.52
1:E:73:ASN:ND2	1:E:74:GLU:OE2	2.42	0.52
1:F:246:SER:O	1:F:250:ALA:HB2	2.09	0.52
1:F:337:ASN:ND2	1:F:412:GLU:OE1	2.43	0.52
1:A:530:THR:HG21	2:O:145:MET:HE3	1.91	0.52
2:O:44:THR:OG1	2:O:47:GLU:N	2.34	0.52
2:P:26:THR:HA	2:P:64:ASP:HA	1.92	0.52
2:Q:26:THR:HA	2:Q:64:ASP:HA	1.92	0.52
2:Q:32:LEU:HD21	2:Q:71:MET:HE1	1.90	0.52
2:S:26:THR:HA	2:S:64:ASP:HA	1.92	0.52
2:T:26:THR:HA	2:T:64:ASP:HA	1.92	0.52
1:A:636:ALA:HB3	1:A:639:ASN:HD21	1.75	0.52
1:B:318:ILE:N	1:B:318:ILE:HD12	2.23	0.52
1:B:480:ASN:C	1:B:480:ASN:HD22	2.08	0.52
1:B:630:ARG:HG3	1:B:630:ARG:NH1	2.25	0.52
1:C:180:ASP:CG	1:C:181:ILE:N	2.57	0.52
1:C:246:SER:O	1:C:250:ALA:HB2	2.10	0.52
1:C:209:LEU:HD23	1:C:260:TYR:CG	2.45	0.52
1:D:410:ILE:HG22	1:D:411:GLU:N	2.24	0.52
1:D:601:GLU:O	1:D:602:PHE:HD2	1.93	0.52
1:F:397:GLU:O	1:F:479:LYS:HA	2.10	0.52
1:F:659:THR:OG1	1:F:662:GLU:HB2	2.10	0.52
1:F:764:LEU:C	1:F:766:HIS:H	2.13	0.52
1:A:628:PHE:CE2	2:O:90:ARG:NH1	2.78	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:5:THR:CG2	2:P:8:GLN:HB2	2.39	0.52
2:Q:44:THR:C	2:Q:46:ALA:N	2.63	0.52
2:R:5:THR:HG23	2:R:8:GLN:HB2	1.92	0.52
2:S:5:THR:HG23	2:S:8:GLN:H	1.75	0.52
1:A:90:PRO:C	1:A:92:ASP:H	2.12	0.52
1:C:179:LEU:O	1:C:183:SER:N	2.43	0.52
1:C:288:VAL:HG23	1:C:289:GLU:N	2.25	0.52
1:C:308:VAL:CB	1:C:311:HIS:ND1	2.71	0.52
1:C:327:LEU:HD12	1:C:327:LEU:N	2.24	0.52
1:C:534:ILE:HG22	1:C:535:LYS:N	2.23	0.52
1:D:337:ASN:ND2	1:D:412:GLU:OE1	2.43	0.52
1:D:85:LEU:O	1:D:88:LYS:HE3	2.10	0.52
1:E:764:LEU:C	1:E:766:HIS:H	2.14	0.52
1:F:217:LYS:CB	1:F:236:GLU:HG3	2.40	0.52
1:F:355:SER:CB	1:F:371:SER:HA	2.40	0.52
1:F:368:GLN:CB	1:F:380:VAL:HG13	2.39	0.52
1:F:790:PHE:O	1:F:793:PHE:HB3	2.10	0.52
2:O:5:THR:HG23	2:O:8:GLN:H	1.75	0.52
2:Q:5:THR:HG23	2:Q:8:GLN:HB2	1.92	0.52
1:A:435:LEU:CG	1:A:446:ILE:HG22	2.35	0.52
1:B:515:LYS:NZ	1:B:515:LYS:HB3	2.25	0.52
1:C:636:ALA:HB3	1:C:639:ASN:HD21	1.74	0.52
1:D:180:ASP:O	1:D:183:SER:N	2.41	0.52
1:D:313:ASP:O	1:D:316:LYS:HB2	2.09	0.52
1:D:355:SER:CB	1:D:371:SER:HA	2.40	0.52
1:E:115:LYS:HB3	1:E:115:LYS:HZ3	1.75	0.52
1:E:180:ASP:O	1:E:183:SER:N	2.38	0.52
1:E:275:GLY:O	1:E:278:LYS:HB2	2.10	0.52
1:F:123:GLU:CG	1:F:124:GLU:H	2.19	0.52
1:F:288:VAL:HG23	1:F:289:GLU:N	2.24	0.52
1:F:503:GLU:HA	1:F:506:LYS:HD3	1.92	0.52
1:F:515:LYS:HB3	1:F:515:LYS:NZ	2.25	0.52
2:O:105:LEU:HD23	2:O:121:VAL:HG13	1.92	0.52
1:A:98:SER:O	1:A:101:GLY:N	2.43	0.51
1:A:230:ILE:HG13	1:A:237:PHE:CE2	2.45	0.51
1:A:337:ASN:ND2	1:A:412:GLU:OE1	2.43	0.51
1:A:639:ASN:ND2	1:A:639:ASN:H	2.06	0.51
1:A:731:GLU:O	1:A:735:VAL:HG23	2.10	0.51
1:B:405:LEU:HD12	1:B:405:LEU:N	2.25	0.51
1:B:764:LEU:C	1:B:766:HIS:H	2.13	0.51
1:C:313:ASP:O	1:C:316:LYS:HB2	2.09	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:642:TYR:HE2	1:C:644:GLU:OE2	1.93	0.51
1:D:170:TYR:C	1:D:172:GLU:N	2.61	0.51
1:D:337:ASN:ND2	1:D:412:GLU:OE2	2.43	0.51
1:D:535:LYS:HD2	1:D:536:TYR:CE2	2.45	0.51
1:D:88:LYS:HG2	1:D:88:LYS:O	2.09	0.51
1:E:630:ARG:HH11	1:E:630:ARG:HG3	1.75	0.51
1:E:790:PHE:O	1:E:793:PHE:HB3	2.10	0.51
1:F:530:THR:HG21	2:T:145:MET:CE	2.40	0.51
2:Q:97:ASN:O	2:Q:99:TYR:HD1	1.93	0.51
2:R:5:THR:HG23	2:R:8:GLN:H	1.75	0.51
1:A:172:GLU:O	1:A:175:LYS:HB3	2.09	0.51
1:A:218:LEU:C	1:A:220:LEU:H	2.14	0.51
1:A:444:PHE:N	1:A:444:PHE:CD1	2.78	0.51
1:A:499:PRO:HD2	1:A:625:LEU:O	2.10	0.51
1:B:122:GLU:OE1	1:B:147:ARG:CB	2.55	0.51
1:B:725:GLY:O	1:B:728:ALA:HB3	2.11	0.51
1:C:98:SER:O	1:C:101:GLY:N	2.44	0.51
1:C:173:ILE:O	1:C:174:GLY:C	2.48	0.51
1:D:327:LEU:HD12	1:D:327:LEU:N	2.24	0.51
1:E:731:GLU:O	1:E:735:VAL:HG23	2.11	0.51
1:E:85:LEU:O	1:E:88:LYS:HE3	2.10	0.51
1:B:628:PHE:CE2	2:P:90:ARG:NH1	2.78	0.51
2:Q:13:LYS:HZ1	2:Q:65:PHE:CB	2.24	0.51
2:Q:8:GLN:NE2	2:Q:76:MET:SD	2.82	0.51
2:R:5:THR:CG2	2:R:8:GLN:HB2	2.39	0.51
1:A:186:LYS:HG2	1:A:186:LYS:O	2.09	0.51
1:B:165:GLN:C	1:B:167:LYS:N	2.64	0.51
1:C:105:TYR:HB2	1:C:153:ILE:CG1	2.41	0.51
1:C:636:ALA:O	1:C:640:LYS:N	2.42	0.51
1:D:105:TYR:HB2	1:D:153:ILE:HG12	1.91	0.51
1:E:535:LYS:HD2	1:E:536:TYR:CE2	2.45	0.51
1:F:180:ASP:CG	1:F:181:ILE:N	2.62	0.51
1:F:628:PHE:CE2	2:T:90:ARG:NH1	2.79	0.51
1:F:73:ASN:ND2	1:F:74:GLU:OE2	2.42	0.51
2:O:102:ALA:HB2	2:O:125:ILE:HG13	1.92	0.51
2:P:102:ALA:HB2	2:P:125:ILE:HG13	1.91	0.51
2:R:105:LEU:HD23	2:R:121:VAL:HG13	1.92	0.51
2:R:121:VAL:C	2:R:123:GLN:N	2.62	0.51
1:D:668:SER:CA	2:R:14:GLU:HG3	2.32	0.51
1:B:218:LEU:C	1:B:220:LEU:H	2.14	0.51
1:B:657:ILE:O	1:B:658:PRO:O	2.29	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:503:GLU:HA	1:C:506:LYS:HD3	1.93	0.51
1:C:595:ILE:HG22	1:C:596:ILE:N	2.26	0.51
1:C:586:PHE:CD2	1:C:638:GLY:HA3	2.46	0.51
1:C:776:LEU:O	1:C:780:LEU:CD2	2.58	0.51
1:D:581:GLN:HE21	1:D:629:ASN:H	1.58	0.51
1:D:731:GLU:O	1:D:735:VAL:HG23	2.10	0.51
1:E:205:SER:C	1:E:207:ASP:H	2.14	0.51
1:E:636:ALA:HB3	1:E:639:ASN:HD21	1.74	0.51
1:E:720:ILE:O	1:E:724:ARG:HG2	2.11	0.51
1:F:275:GLY:O	1:F:278:LYS:HB2	2.11	0.51
1:F:308:VAL:CB	1:F:311:HIS:ND1	2.71	0.51
1:F:295:VAL:HB	1:F:603:ILE:HG23	1.90	0.51
2:O:26:THR:HA	2:O:64:ASP:HA	1.92	0.51
2:R:44:THR:C	2:R:46:ALA:N	2.64	0.51
1:A:248:TYR:O	1:A:248:TYR:CD2	2.63	0.51
1:A:255:THR:O	1:A:256:VAL:C	2.48	0.51
1:B:534:ILE:HG22	1:B:535:LYS:N	2.24	0.51
1:B:595:ILE:HG22	1:B:596:ILE:N	2.26	0.51
1:C:165:GLN:C	1:C:167:LYS:N	2.64	0.51
1:C:263:ASP:O	1:C:264:MET:C	2.49	0.51
1:D:168:GLU:C	1:D:170:TYR:N	2.64	0.51
1:D:275:GLY:O	1:D:278:LYS:HB2	2.11	0.51
1:D:288:VAL:HG23	1:D:289:GLU:N	2.25	0.51
1:D:530:THR:HG21	2:R:145:MET:CE	2.40	0.51
1:E:595:ILE:HG22	1:E:596:ILE:N	2.25	0.51
1:E:795:LYS:C	1:E:797:ILE:N	2.63	0.51
1:F:168:GLU:C	1:F:170:TYR:N	2.64	0.51
1:F:205:SER:C	1:F:207:ASP:H	2.14	0.51
2:O:121:VAL:C	2:O:123:GLN:N	2.61	0.51
2:R:26:THR:HA	2:R:64:ASP:HA	1.92	0.51
1:E:694:VAL:HG23	2:S:18:LEU:HD11	1.93	0.51
2:T:105:LEU:HD23	2:T:121:VAL:HG13	1.92	0.51
2:T:5:THR:HG23	2:T:8:GLN:H	1.76	0.51
2:T:97:ASN:O	2:T:99:TYR:HD1	1.94	0.51
1:A:279:ILE:HD13	1:A:279:ILE:N	2.25	0.51
1:A:288:VAL:HG23	1:A:289:GLU:N	2.25	0.51
1:A:324:THR:HG22	1:A:499:PRO:HA	1.91	0.51
1:A:355:SER:CB	1:A:371:SER:HA	2.40	0.51
1:C:337:ASN:ND2	1:C:412:GLU:OE1	2.44	0.51
1:C:535:LYS:HD2	1:C:536:TYR:CE2	2.45	0.51
1:C:546:LYS:CD	1:C:554:LYS:HE3	2.38	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:172:GLU:O	1:D:175:LYS:HB3	2.10	0.51
1:D:189:ASP:O	1:D:191:GLU:N	2.44	0.51
1:D:503:GLU:HA	1:D:506:LYS:HD3	1.93	0.51
1:D:694:VAL:HG23	2:R:18:LEU:HD21	1.92	0.51
1:E:546:LYS:CD	1:E:554:LYS:HE3	2.37	0.51
2:P:105:LEU:HD23	2:P:121:VAL:HG13	1.92	0.51
1:A:165:GLN:C	1:A:167:LYS:N	2.64	0.51
1:A:657:ILE:HG13	1:A:756:ILE:HD12	1.93	0.51
1:B:173:ILE:O	1:B:174:GLY:C	2.49	0.51
1:B:288:VAL:HG23	1:B:289:GLU:N	2.25	0.51
1:B:337:ASN:ND2	1:B:412:GLU:OE1	2.44	0.51
1:B:503:GLU:HA	1:B:506:LYS:HD3	1.92	0.51
1:B:497:LEU:CD1	1:B:556:MET:HG2	2.38	0.51
1:B:499:PRO:HD2	1:B:625:LEU:O	2.11	0.51
1:B:722:ILE:HD13	1:B:764:LEU:HD23	1.92	0.51
1:C:92:ASP:O	1:C:93:VAL:C	2.49	0.51
1:D:141:PHE:H	1:D:141:PHE:HD1	1.57	0.51
1:D:397:GLU:O	1:D:479:LYS:HA	2.10	0.51
1:D:636:ALA:O	1:D:640:LYS:N	2.43	0.51
1:D:795:LYS:C	1:D:797:ILE:H	2.14	0.51
1:E:279:ILE:HD13	1:E:279:ILE:N	2.26	0.51
1:E:313:ASP:O	1:E:316:LYS:HB2	2.10	0.51
1:F:279:ILE:N	1:F:279:ILE:HD13	2.26	0.51
1:F:338:LEU:O	1:F:341:SER:HB3	2.11	0.51
1:F:636:ALA:HB3	1:F:639:ASN:HD21	1.75	0.51
1:F:639:ASN:H	1:F:639:ASN:ND2	2.08	0.51
2:Q:36:MET:HE3	2:Q:43:PRO:HG3	1.93	0.51
2:T:73:ALA:O	2:T:75:LYS:N	2.43	0.51
1:B:115:LYS:O	1:B:117:LEU:N	2.43	0.51
1:B:618:ASN:O	1:B:622:LYS:HB3	2.11	0.51
1:C:107:THR:HG21	1:C:115:LYS:CD	2.40	0.51
1:C:324:THR:HG22	1:C:499:PRO:HA	1.91	0.51
1:C:405:LEU:HD12	1:C:405:LEU:N	2.26	0.51
1:C:456:LYS:HB3	1:C:470:ASN:C	2.31	0.51
1:C:523:LEU:HD11	2:Q:144:MET:HG2	1.92	0.51
1:C:649:ILE:HD13	2:Q:138:TYR:HB2	1.92	0.51
1:D:98:SER:O	1:D:101:GLY:N	2.42	0.51
1:F:216:GLU:HG3	1:F:217:LYS:HG2	1.93	0.51
2:Q:5:THR:HG23	2:Q:8:GLN:H	1.75	0.51
1:A:115:LYS:O	1:A:117:LEU:N	2.44	0.51
1:A:451:ASN:N	1:A:451:ASN:OD1	2.29	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:601:GLU:O	1:A:602:PHE:HD2	1.94	0.51
1:B:216:GLU:HG3	1:B:217:LYS:HG2	1.93	0.51
1:B:355:SER:CB	1:B:371:SER:HA	2.41	0.51
1:C:275:GLY:O	1:C:278:LYS:HB2	2.10	0.51
1:C:447:SER:OG	1:C:448:ASP:N	2.44	0.51
1:C:557:LEU:HD11	1:C:575:VAL:CG1	2.41	0.51
1:C:90:PRO:C	1:C:92:ASP:N	2.64	0.51
1:D:170:TYR:O	1:D:174:GLY:N	2.43	0.51
1:D:248:TYR:O	1:D:248:TYR:CD2	2.64	0.51
1:D:324:THR:HG22	1:D:499:PRO:HA	1.91	0.51
1:D:432:TYR:CE1	1:D:445:ARG:CZ	2.94	0.51
1:D:523:LEU:HD11	2:R:144:MET:HG2	1.93	0.51
1:D:629:ASN:HD22	1:D:631:SER:N	1.97	0.51
1:E:105:TYR:HB2	1:E:153:ILE:CG1	2.41	0.51
1:E:170:TYR:C	1:E:172:GLU:N	2.62	0.51
1:F:263:ASP:O	1:F:264:MET:C	2.48	0.51
1:F:629:ASN:HD22	1:F:631:SER:N	1.97	0.51
1:A:525:LYS:HE3	2:O:114:GLU:HG2	1.93	0.51
2:P:44:THR:C	2:P:46:ALA:N	2.64	0.51
2:Q:12:PHE:CD1	2:Q:72:MET:HG3	2.46	0.51
1:A:205:SER:C	1:A:207:ASP:H	2.14	0.51
1:A:247:TYR:HE2	1:A:256:VAL:CG1	2.24	0.51
1:A:318:ILE:N	1:A:318:ILE:HD12	2.21	0.51
1:A:595:ILE:HG22	1:A:596:ILE:N	2.26	0.51
1:A:581:GLN:HE21	1:A:629:ASN:H	1.58	0.51
1:B:324:THR:HG22	1:B:499:PRO:HA	1.92	0.51
1:B:447:SER:OG	1:B:448:ASP:N	2.44	0.51
1:B:657:ILE:HG13	1:B:756:ILE:HD12	1.93	0.51
1:B:88:LYS:HG2	1:B:88:LYS:O	2.10	0.51
1:C:446:ILE:HD11	1:C:451:ASN:CB	2.41	0.51
1:C:480:ASN:C	1:C:480:ASN:ND2	2.64	0.51
1:C:92:ASP:O	1:C:94:LEU:N	2.44	0.51
1:D:105:TYR:HB2	1:D:153:ILE:CG1	2.41	0.51
1:D:499:PRO:HD3	1:D:552:TRP:CH2	2.45	0.51
1:D:557:LEU:HD11	1:D:575:VAL:CG1	2.41	0.51
1:D:586:PHE:CD2	1:D:638:GLY:HA3	2.46	0.51
1:D:636:ALA:HB3	1:D:639:ASN:HD21	1.75	0.51
1:D:90:PRO:C	1:D:92:ASP:N	2.64	0.51
1:F:105:TYR:HB2	1:F:153:ILE:CG1	2.41	0.51
1:F:115:LYS:O	1:F:117:LEU:N	2.44	0.51
1:F:177:ILE:HA	1:F:180:ASP:OD1	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:218:LEU:C	1:F:220:LEU:H	2.14	0.51
1:F:337:ASN:ND2	1:F:412:GLU:OE2	2.44	0.51
1:F:497:LEU:CD1	1:F:556:MET:HG2	2.38	0.51
1:F:581:GLN:HE21	1:F:629:ASN:H	1.59	0.51
2:P:8:GLN:NE2	2:P:76:MET:SD	2.84	0.51
2:R:13:LYS:HZ3	2:R:65:PHE:CB	2.23	0.51
2:T:44:THR:C	2:T:46:ALA:N	2.64	0.51
1:A:173:ILE:O	1:A:174:GLY:C	2.48	0.50
1:A:446:ILE:HD11	1:A:451:ASN:CB	2.40	0.50
1:A:503:GLU:HA	1:A:506:LYS:HD3	1.93	0.50
1:B:130:SER:HB2	1:B:170:TYR:CE2	2.46	0.50
1:B:639:ASN:HD22	1:B:639:ASN:N	2.07	0.50
1:B:654:ILE:C	1:B:655:ASN:HD22	2.14	0.50
1:C:397:GLU:O	1:C:479:LYS:HA	2.10	0.50
1:C:432:TYR:CE1	1:C:445:ARG:CZ	2.94	0.50
1:C:618:ASN:O	1:C:622:LYS:HB3	2.11	0.50
1:D:447:SER:OG	1:D:448:ASP:N	2.44	0.50
1:D:716:LYS:O	1:D:717:LYS:C	2.49	0.50
1:D:790:PHE:O	1:D:793:PHE:HB3	2.11	0.50
1:E:639:ASN:HD22	1:E:639:ASN:N	2.08	0.50
1:F:170:TYR:C	1:F:172:GLU:N	2.61	0.50
1:F:90:PRO:C	1:F:92:ASP:N	2.64	0.50
1:F:92:ASP:O	1:F:94:LEU:N	2.44	0.50
2:P:76:MET:HG3	2:P:76:MET:O	2.04	0.50
2:P:5:THR:HG23	2:P:8:GLN:H	1.76	0.50
2:T:12:PHE:CD1	2:T:72:MET:HG3	2.46	0.50
1:A:275:GLY:O	1:A:278:LYS:HB2	2.12	0.50
1:A:795:LYS:C	1:A:797:ILE:N	2.63	0.50
1:B:581:GLN:HE21	1:B:629:ASN:H	1.58	0.50
1:C:657:ILE:O	1:C:658:PRO:O	2.28	0.50
1:C:94:LEU:C	1:C:96:ILE:H	2.15	0.50
1:D:165:GLN:C	1:D:167:LYS:N	2.64	0.50
1:D:397:GLU:HG3	1:D:480:ASN:HB3	1.94	0.50
1:D:499:PRO:HD2	1:D:625:LEU:O	2.11	0.50
1:E:279:ILE:C	1:E:281:GLU:H	2.15	0.50
1:E:337:ASN:ND2	1:E:412:GLU:OE2	2.44	0.50
1:E:581:GLN:HE21	1:E:629:ASN:H	1.59	0.50
1:E:642:TYR:HE2	1:E:644:GLU:OE2	1.94	0.50
1:E:711:ILE:C	1:E:712:PHE:HD2	2.14	0.50
1:E:88:LYS:HG2	1:E:88:LYS:O	2.11	0.50
1:F:725:GLY:O	1:F:728:ALA:HB3	2.10	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:664:ILE:HG21	2:O:15:ALA:HB2	1.93	0.50
2:P:36:MET:CE	2:P:43:PRO:HG3	2.41	0.50
2:S:124:MET:O	2:S:126:ARG:N	2.44	0.50
1:A:216:GLU:HG3	1:A:217:LYS:HG2	1.93	0.50
1:A:279:ILE:C	1:A:281:GLU:H	2.15	0.50
1:B:337:ASN:ND2	1:B:412:GLU:OE2	2.43	0.50
1:B:92:ASP:O	1:B:94:LEU:N	2.45	0.50
1:C:205:SER:C	1:C:207:ASP:H	2.14	0.50
1:C:223:LYS:HZ3	1:C:228:ASN:HB3	1.75	0.50
1:C:601:GLU:O	1:C:602:PHE:HD2	1.93	0.50
1:C:735:VAL:O	1:C:738:SER:CB	2.59	0.50
1:C:73:ASN:ND2	1:C:74:GLU:OE2	2.43	0.50
1:D:255:THR:O	1:D:256:VAL:C	2.49	0.50
1:D:657:ILE:HG13	1:D:756:ILE:HD12	1.92	0.50
1:D:94:LEU:C	1:D:96:ILE:H	2.13	0.50
1:E:141:PHE:H	1:E:141:PHE:HD1	1.59	0.50
1:E:246:SER:O	1:E:250:ALA:HB2	2.11	0.50
1:E:288:VAL:HG23	1:E:289:GLU:N	2.25	0.50
1:E:92:ASP:O	1:E:93:VAL:C	2.49	0.50
1:E:92:ASP:O	1:E:94:LEU:N	2.44	0.50
1:F:112:VAL:O	1:F:114:HIS:N	2.43	0.50
1:F:254:ARG:HG2	1:F:255:THR:N	2.23	0.50
1:F:255:THR:O	1:F:256:VAL:C	2.49	0.50
1:F:595:ILE:HG22	1:F:596:ILE:N	2.25	0.50
1:F:639:ASN:HD22	1:F:639:ASN:N	2.08	0.50
2:O:8:GLN:NE2	2:O:76:MET:SD	2.84	0.50
1:A:432:TYR:CE1	1:A:445:ARG:CZ	2.95	0.50
1:A:642:TYR:HE2	1:A:644:GLU:OE2	1.93	0.50
1:A:795:LYS:C	1:A:797:ILE:H	2.15	0.50
1:B:105:TYR:HB2	1:B:153:ILE:CG1	2.41	0.50
1:B:279:ILE:N	1:B:279:ILE:HD13	2.26	0.50
1:C:122:GLU:HG3	1:C:147:ARG:H	1.75	0.50
1:C:105:TYR:CB	1:C:153:ILE:HG12	2.42	0.50
1:C:279:ILE:C	1:C:281:GLU:H	2.15	0.50
1:C:410:ILE:HD13	1:C:419:ILE:HD11	1.93	0.50
1:C:446:ILE:HG13	1:C:452:GLU:O	2.11	0.50
1:C:664:ILE:HG21	2:Q:15:ALA:HB2	1.92	0.50
1:E:165:GLN:C	1:E:167:LYS:N	2.64	0.50
1:E:216:GLU:HG3	1:E:217:LYS:HG2	1.93	0.50
1:E:90:PRO:C	1:E:92:ASP:N	2.64	0.50
1:F:711:ILE:C	1:F:712:PHE:HD2	2.15	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:716:LYS:O	1:F:717:LYS:C	2.50	0.50
2:R:97:ASN:O	2:R:99:TYR:HD1	1.93	0.50
2:T:102:ALA:HB2	2:T:125:ILE:HG13	1.93	0.50
1:A:66:LEU:HD12	1:A:104:ILE:H	1.77	0.50
1:A:337:ASN:ND2	1:A:412:GLU:OE2	2.43	0.50
1:A:501:LEU:HD22	2:O:112:LEU:CD2	2.37	0.50
1:A:546:LYS:CD	1:A:554:LYS:HE3	2.37	0.50
1:A:649:ILE:HD13	2:O:138:TYR:HB2	1.93	0.50
1:A:90:PRO:C	1:A:92:ASP:N	2.64	0.50
1:B:199:LEU:HD23	1:B:225:ILE:O	2.11	0.50
1:B:263:ASP:O	1:B:264:MET:C	2.50	0.50
1:B:480:ASN:C	1:B:480:ASN:ND2	2.63	0.50
1:B:549:LEU:HD12	1:B:553:GLN:HB3	1.93	0.50
1:B:94:LEU:C	1:B:96:ILE:H	2.14	0.50
1:C:255:THR:O	1:C:256:VAL:C	2.49	0.50
1:C:720:ILE:O	1:C:724:ARG:HG2	2.12	0.50
1:D:88:LYS:NZ	1:D:172:GLU:OE2	2.45	0.50
1:E:286:GLU:HG2	1:E:286:GLU:O	2.12	0.50
1:F:88:LYS:NZ	1:F:172:GLU:OE2	2.45	0.50
1:F:297:LYS:HZ2	1:F:297:LYS:HB3	1.75	0.50
1:F:432:TYR:CE1	1:F:445:ARG:CZ	2.94	0.50
1:F:444:PHE:CD1	1:F:444:PHE:N	2.79	0.50
1:F:88:LYS:HG2	1:F:88:LYS:O	2.10	0.50
2:O:44:THR:C	2:O:46:ALA:N	2.64	0.50
2:Q:138:TYR:CE1	2:Q:142:VAL:HG22	2.47	0.50
2:S:138:TYR:CE1	2:S:142:VAL:HG22	2.46	0.50
2:T:124:MET:O	2:T:126:ARG:N	2.45	0.50
1:A:176:GLY:C	1:A:178:SER:N	2.65	0.50
1:A:725:GLY:O	1:A:728:ALA:HB3	2.11	0.50
1:B:409:ARG:CZ	1:B:413:LEU:HD21	2.42	0.50
1:B:432:TYR:CE1	1:B:445:ARG:CZ	2.95	0.50
1:B:636:ALA:HB3	1:B:639:ASN:HD21	1.76	0.50
1:B:642:TYR:HE2	1:B:644:GLU:OE2	1.93	0.50
1:B:722:ILE:HD13	1:B:764:LEU:CD2	2.41	0.50
1:B:90:PRO:C	1:B:92:ASP:N	2.63	0.50
1:C:184:LYS:HZ1	1:C:193:LEU:HD12	1.74	0.50
1:C:216:GLU:HG3	1:C:217:LYS:HG2	1.93	0.50
1:C:480:ASN:C	1:C:480:ASN:HD22	2.09	0.50
1:C:628:PHE:CE2	2:Q:90:ARG:NH1	2.80	0.50
1:C:629:ASN:C	1:C:629:ASN:ND2	2.58	0.50
1:C:581:GLN:HE22	1:C:629:ASN:H	1.60	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:246:SER:O	1:D:250:ALA:HB2	2.12	0.50
1:D:286:GLU:HG2	1:D:286:GLU:O	2.12	0.50
1:D:73:ASN:ND2	1:D:74:GLU:OE2	2.43	0.50
1:E:105:TYR:CB	1:E:153:ILE:HG12	2.42	0.50
1:E:122:GLU:HG3	1:E:147:ARG:H	1.77	0.50
1:E:252:ASP:O	1:E:254:ARG:HD2	2.11	0.50
1:E:337:ASN:O	1:E:341:SER:N	2.29	0.50
1:F:165:GLN:C	1:F:167:LYS:N	2.64	0.50
1:F:172:GLU:O	1:F:175:LYS:HB3	2.11	0.50
1:F:279:ILE:C	1:F:281:GLU:H	2.15	0.50
1:F:601:GLU:O	1:F:602:PHE:HD2	1.94	0.50
2:P:124:MET:O	2:P:126:ARG:N	2.44	0.50
1:D:694:VAL:HG23	2:R:18:LEU:HD11	1.94	0.50
2:R:12:PHE:CD1	2:R:72:MET:HG3	2.47	0.50
1:A:105:TYR:HB2	1:A:153:ILE:CG1	2.42	0.50
1:A:177:ILE:HA	1:A:180:ASP:CG	2.32	0.50
1:A:263:ASP:O	1:A:264:MET:C	2.49	0.50
1:A:482:GLU:HA	1:A:482:GLU:OE2	2.12	0.50
1:B:205:SER:C	1:B:207:ASP:H	2.14	0.50
1:B:410:ILE:HD13	1:B:419:ILE:HD11	1.94	0.50
1:B:88:LYS:NZ	1:B:172:GLU:OE2	2.44	0.50
1:C:141:PHE:H	1:C:141:PHE:HD1	1.57	0.50
1:C:252:ASP:O	1:C:254:ARG:HD2	2.11	0.50
1:C:444:PHE:N	1:C:444:PHE:CD1	2.78	0.50
1:C:725:GLY:O	1:C:728:ALA:HB3	2.12	0.50
1:D:279:ILE:N	1:D:279:ILE:HD13	2.26	0.50
1:E:170:TYR:O	1:E:174:GLY:N	2.45	0.50
1:E:172:GLU:O	1:E:175:LYS:HB3	2.11	0.50
1:E:255:THR:O	1:E:256:VAL:C	2.48	0.50
1:E:444:PHE:CD1	1:E:444:PHE:N	2.78	0.50
1:E:397:GLU:O	1:E:479:LYS:HA	2.10	0.50
1:E:557:LEU:HD11	1:E:575:VAL:CG1	2.42	0.50
1:F:105:TYR:CB	1:F:153:ILE:HG12	2.42	0.50
1:F:405:LEU:HD12	1:F:405:LEU:N	2.26	0.50
1:F:776:LEU:HD23	1:F:776:LEU:C	2.32	0.50
2:P:36:MET:HE2	2:P:43:PRO:HG3	1.93	0.50
2:R:12:PHE:O	2:R:16:PHE:HB2	2.12	0.50
2:T:36:MET:CE	2:T:43:PRO:HG3	2.42	0.50
1:A:753:LYS:O	1:A:754:GLU:C	2.50	0.50
1:B:170:TYR:O	1:B:174:GLY:N	2.45	0.50
1:B:302:LEU:HD22	1:B:602:PHE:CE1	2.47	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:501:LEU:HD22	2:Q:112:LEU:CD2	2.39	0.50
1:C:657:ILE:HG13	1:C:756:ILE:HD12	1.91	0.50
1:D:183:SER:O	1:D:187:SER:HB2	2.07	0.50
1:D:205:SER:C	1:D:207:ASP:H	2.14	0.50
1:D:92:ASP:O	1:D:93:VAL:C	2.50	0.50
1:E:586:PHE:CD2	1:E:638:GLY:HA3	2.47	0.50
1:E:94:LEU:C	1:E:96:ILE:H	2.15	0.50
1:F:286:GLU:HG2	1:F:286:GLU:O	2.12	0.50
2:Q:36:MET:CE	2:Q:43:PRO:HG3	2.42	0.50
1:F:664:ILE:HG21	2:T:15:ALA:HB2	1.94	0.50
1:A:183:SER:C	1:A:187:SER:CB	2.75	0.50
1:A:286:GLU:HG2	1:A:286:GLU:O	2.11	0.50
1:A:549:LEU:HD12	1:A:553:GLN:HB3	1.93	0.50
1:A:94:LEU:C	1:A:96:ILE:H	2.14	0.50
1:B:581:GLN:HE22	1:B:629:ASN:H	1.60	0.50
1:C:776:LEU:HD23	1:C:776:LEU:C	2.32	0.50
1:D:105:TYR:CB	1:D:153:ILE:HG12	2.42	0.50
1:E:248:TYR:O	1:E:248:TYR:CD2	2.65	0.50
1:E:447:SER:OG	1:E:448:ASP:N	2.44	0.50
1:E:776:LEU:HD23	1:E:776:LEU:C	2.32	0.50
1:F:173:ILE:O	1:F:174:GLY:C	2.49	0.50
1:F:549:LEU:HD12	1:F:553:GLN:HB3	1.93	0.50
1:F:499:PRO:HD2	1:F:625:LEU:O	2.12	0.50
1:F:795:LYS:C	1:F:797:ILE:H	2.14	0.50
1:B:694:VAL:HG23	2:P:18:LEU:HD11	1.93	0.50
2:Q:12:PHE:O	2:Q:16:PHE:HB2	2.12	0.50
2:S:12:PHE:CD1	2:S:72:MET:HG3	2.47	0.50
2:S:24:ASP:CG	2:S:25:GLY:H	2.15	0.50
2:S:73:ALA:O	2:S:75:LYS:N	2.45	0.50
1:A:88:LYS:NZ	1:A:172:GLU:OE2	2.45	0.49
1:A:184:LYS:CE	1:A:193:LEU:HB2	2.42	0.49
1:A:409:ARG:CZ	1:A:413:LEU:HD21	2.42	0.49
1:A:410:ILE:HD13	1:A:419:ILE:HD11	1.93	0.49
1:A:446:ILE:HG13	1:A:452:GLU:O	2.11	0.49
1:B:107:THR:HG21	1:B:115:LYS:CD	2.42	0.49
1:B:184:LYS:HZ1	1:B:193:LEU:HD12	1.74	0.49
1:B:247:TYR:HE2	1:B:256:VAL:CG1	2.25	0.49
1:B:482:GLU:OE2	1:B:482:GLU:HA	2.12	0.49
1:C:170:TYR:O	1:C:174:GLY:N	2.44	0.49
1:C:218:LEU:C	1:C:220:LEU:H	2.14	0.49
1:D:66:LEU:HD12	1:D:104:ILE:H	1.77	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:263:ASP:O	1:D:264:MET:C	2.50	0.49
1:E:480:ASN:ND2	1:E:480:ASN:C	2.64	0.49
1:E:499:PRO:HD2	1:E:625:LEU:O	2.12	0.49
1:F:252:ASP:O	1:F:254:ARG:HD2	2.12	0.49
1:F:586:PHE:CD2	1:F:638:GLY:HA3	2.47	0.49
2:P:13:LYS:HZ3	2:P:65:PHE:CB	2.23	0.49
1:A:271:LEU:HA	1:A:275:GLY:HA3	1.93	0.49
1:A:597:ASN:ND2	1:A:601:GLU:N	2.52	0.49
1:A:295:VAL:HB	1:A:603:ILE:HG23	1.93	0.49
1:A:711:ILE:C	1:A:712:PHE:HD2	2.15	0.49
1:B:456:LYS:HB2	1:B:470:ASN:HA	1.93	0.49
1:B:716:LYS:O	1:B:717:LYS:C	2.50	0.49
1:C:99:GLU:C	1:C:101:GLY:H	2.15	0.49
1:C:184:LYS:CE	1:C:191:GLU:HB2	2.41	0.49
1:C:443:GLU:HG2	1:C:458:LYS:HZ1	1.71	0.49
1:D:123:GLU:CG	1:D:124:GLU:H	2.19	0.49
1:D:216:GLU:HG3	1:D:217:LYS:HG2	1.93	0.49
1:D:410:ILE:HD13	1:D:419:ILE:HD11	1.93	0.49
1:D:595:ILE:HG22	1:D:596:ILE:N	2.28	0.49
1:D:630:ARG:HG3	1:D:630:ARG:NH1	2.26	0.49
1:E:186:LYS:NZ	1:E:234:LEU:HD12	2.27	0.49
1:F:288:VAL:C	1:F:290:LYS:H	2.16	0.49
1:F:94:LEU:C	1:F:96:ILE:N	2.65	0.49
2:O:13:LYS:HZ3	2:O:65:PHE:HB3	1.77	0.49
1:A:180:ASP:CG	1:A:181:ILE:N	2.61	0.49
1:B:168:GLU:C	1:B:170:TYR:N	2.64	0.49
1:B:530:THR:HG21	2:P:145:MET:CE	2.41	0.49
1:B:66:LEU:HD12	1:B:104:ILE:H	1.77	0.49
1:B:776:LEU:HD23	1:B:776:LEU:C	2.32	0.49
1:C:711:ILE:C	1:C:712:PHE:HD2	2.15	0.49
1:C:716:LYS:O	1:C:717:LYS:C	2.50	0.49
1:C:94:LEU:C	1:C:96:ILE:N	2.66	0.49
1:D:165:GLN:O	1:D:167:LYS:N	2.46	0.49
1:D:177:ILE:HA	1:D:180:ASP:CG	2.33	0.49
1:D:271:LEU:HD13	1:D:276:PHE:CE2	2.47	0.49
1:D:444:PHE:N	1:D:444:PHE:CD1	2.79	0.49
1:D:94:LEU:C	1:D:96:ILE:N	2.65	0.49
1:D:94:LEU:O	1:D:97:TYR:N	2.45	0.49
1:E:218:LEU:C	1:E:220:LEU:H	2.14	0.49
1:E:311:HIS:HD2	1:E:564:VAL:HB	1.77	0.49
1:E:549:LEU:HD12	1:E:553:GLN:HB3	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:597:ASN:ND2	1:E:601:GLU:N	2.52	0.49
1:E:601:GLU:O	1:E:602:PHE:HD2	1.94	0.49
1:F:447:SER:OG	1:F:448:ASP:N	2.44	0.49
2:P:138:TYR:CE1	2:P:142:VAL:HG22	2.46	0.49
1:B:664:ILE:HG21	2:P:15:ALA:HB2	1.93	0.49
2:P:97:ASN:O	2:P:99:TYR:HD1	1.95	0.49
1:A:716:LYS:O	1:A:717:LYS:C	2.50	0.49
1:B:720:ILE:O	1:B:724:ARG:HG2	2.12	0.49
1:B:795:LYS:C	1:B:797:ILE:H	2.14	0.49
1:B:94:LEU:C	1:B:96:ILE:N	2.65	0.49
1:C:217:LYS:CB	1:C:236:GLU:HG3	2.43	0.49
1:C:409:ARG:CZ	1:C:413:LEU:HD21	2.42	0.49
1:C:66:LEU:HD12	1:C:104:ILE:H	1.78	0.49
1:C:88:LYS:NZ	1:C:172:GLU:OE2	2.46	0.49
1:D:122:GLU:HG3	1:D:147:ARG:H	1.77	0.49
1:D:127:SER:O	1:D:133:GLU:HG3	2.13	0.49
1:D:217:LYS:CB	1:D:236:GLU:HG3	2.42	0.49
1:D:308:VAL:CB	1:D:311:HIS:ND1	2.71	0.49
1:E:432:TYR:CE1	1:E:445:ARG:CZ	2.94	0.49
1:E:397:GLU:HG3	1:E:480:ASN:HB3	1.94	0.49
1:F:247:TYR:HE2	1:F:256:VAL:CG1	2.25	0.49
1:F:410:ILE:HD13	1:F:419:ILE:HD11	1.93	0.49
2:O:12:PHE:CD1	2:O:72:MET:HG3	2.47	0.49
2:Q:105:LEU:HD23	2:Q:121:VAL:HG13	1.93	0.49
2:S:36:MET:CE	2:S:43:PRO:HG3	2.43	0.49
2:S:97:ASN:O	2:S:99:TYR:HD1	1.95	0.49
1:B:180:ASP:CG	1:B:181:ILE:N	2.62	0.49
1:B:184:LYS:CE	1:B:191:GLU:HB2	2.41	0.49
1:B:426:ILE:HD13	1:B:431:LYS:HA	1.95	0.49
1:B:711:ILE:C	1:B:712:PHE:HD2	2.15	0.49
1:D:115:LYS:O	1:D:117:LEU:N	2.45	0.49
1:D:776:LEU:HD23	1:D:776:LEU:C	2.32	0.49
1:E:134:LYS:HG2	1:E:136:PRO:CG	2.42	0.49
1:E:285:LYS:C	1:E:287:GLY:H	2.16	0.49
1:E:409:ARG:CZ	1:E:413:LEU:HD21	2.41	0.49
1:E:716:LYS:O	1:E:717:LYS:C	2.50	0.49
1:E:99:GLU:C	1:E:101:GLY:H	2.15	0.49
1:F:127:SER:O	1:F:133:GLU:HG3	2.13	0.49
1:F:397:GLU:HG3	1:F:480:ASN:HB3	1.93	0.49
1:F:557:LEU:HD11	1:F:575:VAL:CG1	2.43	0.49
1:F:649:ILE:HD13	2:T:138:TYR:HB2	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:O:5:THR:O	2:O:8:GLN:HB3	2.12	0.49
1:D:628:PHE:CE2	2:R:90:ARG:NH1	2.80	0.49
1:A:447:SER:OG	1:A:448:ASP:N	2.45	0.49
1:B:501:LEU:HD22	2:P:112:LEU:CD2	2.39	0.49
1:B:601:GLU:O	1:B:602:PHE:HD2	1.95	0.49
1:C:127:SER:O	1:C:133:GLU:HG3	2.13	0.49
1:C:248:TYR:O	1:C:248:TYR:CD2	2.65	0.49
1:C:271:LEU:HA	1:C:275:GLY:HA3	1.95	0.49
1:C:581:GLN:HE21	1:C:629:ASN:H	1.59	0.49
1:D:218:LEU:C	1:D:220:LEU:H	2.14	0.49
1:D:497:LEU:CD1	1:D:556:MET:HG2	2.38	0.49
1:D:581:GLN:HE22	1:D:629:ASN:H	1.60	0.49
1:D:725:GLY:O	1:D:728:ALA:HB3	2.13	0.49
1:D:92:ASP:O	1:D:94:LEU:N	2.46	0.49
1:E:628:PHE:CE2	2:S:90:ARG:NH1	2.81	0.49
1:F:720:ILE:O	1:F:724:ARG:HG2	2.12	0.49
1:F:92:ASP:O	1:F:93:VAL:C	2.49	0.49
1:F:94:LEU:C	1:F:96:ILE:H	2.14	0.49
2:O:36:MET:CE	2:O:43:PRO:HG3	2.42	0.49
1:F:694:VAL:HG23	2:T:18:LEU:HD11	1.95	0.49
1:A:105:TYR:CB	1:A:153:ILE:HG12	2.42	0.49
1:A:168:GLU:C	1:A:170:TYR:N	2.64	0.49
1:A:426:ILE:HD13	1:A:431:LYS:HA	1.95	0.49
1:A:720:ILE:O	1:A:724:ARG:HG2	2.12	0.49
1:B:141:PHE:HD1	1:B:141:PHE:H	1.57	0.49
1:B:586:PHE:CD2	1:B:638:GLY:HA3	2.47	0.49
1:B:92:ASP:O	1:B:93:VAL:C	2.50	0.49
1:C:337:ASN:ND2	1:C:412:GLU:OE2	2.45	0.49
1:C:94:LEU:O	1:C:97:TYR:N	2.45	0.49
1:D:480:ASN:ND2	1:D:480:ASN:C	2.64	0.49
1:D:720:ILE:O	1:D:724:ARG:HG2	2.12	0.49
1:E:135:VAL:CG2	1:E:135:VAL:O	2.53	0.49
1:E:168:GLU:C	1:E:170:TYR:N	2.64	0.49
1:E:173:ILE:O	1:E:174:GLY:C	2.50	0.49
1:E:177:ILE:HA	1:E:180:ASP:CG	2.33	0.49
1:E:263:ASP:O	1:E:264:MET:C	2.50	0.49
1:E:410:ILE:HD13	1:E:419:ILE:HD11	1.93	0.49
1:E:725:GLY:O	1:E:728:ALA:HB3	2.13	0.49
1:E:753:LYS:O	1:E:754:GLU:C	2.51	0.49
2:P:143:GLN:O	2:P:147:ALA:HB3	2.13	0.49
2:Q:124:MET:O	2:Q:126:ARG:N	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S:12:PHE:O	2:S:16:PHE:HB2	2.13	0.49
1:E:694:VAL:HG23	2:S:18:LEU:HD21	1.94	0.49
2:T:138:TYR:CE1	2:T:142:VAL:HG22	2.47	0.49
1:A:71:PHE:CD1	1:A:108:ASP:OD1	2.66	0.49
1:A:252:ASP:O	1:A:254:ARG:HD2	2.11	0.49
1:A:285:LYS:C	1:A:287:GLY:H	2.16	0.49
1:A:586:PHE:CD2	1:A:638:GLY:HA3	2.47	0.49
1:A:94:LEU:O	1:A:97:TYR:N	2.46	0.49
1:B:279:ILE:C	1:B:281:GLU:H	2.15	0.49
1:C:99:GLU:OE2	1:C:284:LYS:HD2	2.13	0.49
1:D:134:LYS:HG2	1:D:136:PRO:CG	2.43	0.49
1:D:184:LYS:HE3	1:D:191:GLU:HB2	1.93	0.49
1:D:409:ARG:CZ	1:D:413:LEU:HD21	2.42	0.49
1:D:764:LEU:O	1:D:766:HIS:N	2.46	0.49
1:E:247:TYR:HE2	1:E:256:VAL:CG1	2.25	0.49
1:E:277:GLU:HA	1:E:280:SER:OG	2.13	0.49
1:E:795:LYS:C	1:E:797:ILE:H	2.15	0.49
1:E:94:LEU:C	1:E:96:ILE:N	2.66	0.49
1:F:184:LYS:NZ	1:F:191:GLU:CB	2.67	0.49
1:F:94:LEU:O	1:F:97:TYR:N	2.45	0.49
2:O:124:MET:O	2:O:126:ARG:N	2.46	0.49
2:O:138:TYR:CE1	2:O:142:VAL:HG22	2.47	0.49
2:P:12:PHE:CD1	2:P:72:MET:HG3	2.48	0.49
2:Q:102:ALA:HB2	2:Q:125:ILE:HG13	1.93	0.49
2:R:36:MET:CE	2:R:43:PRO:HG3	2.43	0.49
1:F:668:SER:CA	2:T:14:GLU:HG3	2.32	0.49
1:A:127:SER:O	1:A:133:GLU:HG3	2.13	0.49
1:B:201:ASP:HB3	1:B:202:ASP:OD2	2.12	0.49
1:B:286:GLU:HG2	1:B:286:GLU:O	2.12	0.49
1:B:546:LYS:CD	1:B:554:LYS:HE3	2.39	0.49
1:C:176:GLY:C	1:C:178:SER:N	2.66	0.49
1:E:127:SER:O	1:E:133:GLU:HG3	2.13	0.49
1:E:217:LYS:HB3	1:E:217:LYS:HZ2	1.75	0.49
1:F:426:ILE:HD13	1:F:431:LYS:HA	1.95	0.49
2:O:36:MET:HE3	2:O:43:PRO:HG3	1.94	0.49
1:A:628:PHE:HE2	2:O:90:ARG:CD	2.25	0.49
2:R:111:ASN:C	2:R:113:GLY:H	2.17	0.49
2:S:32:LEU:HD21	2:S:71:MET:HE1	1.95	0.49
2:T:5:THR:O	2:T:8:GLN:HB3	2.12	0.49
1:A:99:GLU:C	1:A:101:GLY:H	2.15	0.49
1:A:213:LYS:HB2	1:A:240:ALA:CB	2.43	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:397:GLU:HG3	1:A:480:ASN:HB3	1.94	0.49
1:A:92:ASP:O	1:A:93:VAL:C	2.51	0.49
1:B:288:VAL:C	1:B:290:LYS:H	2.17	0.49
1:B:451:ASN:OD1	1:B:451:ASN:N	2.29	0.49
1:B:94:LEU:O	1:B:97:TYR:N	2.45	0.49
1:C:115:LYS:O	1:C:117:LEU:N	2.45	0.49
1:C:165:GLN:O	1:C:167:LYS:N	2.46	0.49
1:E:302:LEU:HD22	1:E:602:PHE:CE1	2.48	0.49
1:E:482:GLU:OE2	1:E:482:GLU:HA	2.12	0.49
1:E:501:LEU:HD22	2:S:112:LEU:CD2	2.35	0.49
1:E:523:LEU:HD11	2:S:144:MET:HG2	1.94	0.49
1:F:66:LEU:HD12	1:F:104:ILE:H	1.78	0.49
2:Q:4:LEU:HA	2:Q:8:GLN:OE1	2.13	0.49
2:S:4:LEU:HA	2:S:8:GLN:OE1	2.13	0.49
1:A:165:GLN:O	1:A:167:LYS:N	2.46	0.48
1:A:557:LEU:HD11	1:A:575:VAL:CG1	2.43	0.48
1:B:753:LYS:O	1:B:754:GLU:C	2.52	0.48
1:D:271:LEU:HA	1:D:275:GLY:HA3	1.94	0.48
1:D:549:LEU:HD12	1:D:553:GLN:HB3	1.94	0.48
1:D:311:HIS:HD2	1:D:564:VAL:HB	1.76	0.48
1:E:66:LEU:HD12	1:E:104:ILE:H	1.79	0.48
1:F:248:TYR:O	1:F:248:TYR:CD2	2.66	0.48
1:F:409:ARG:CZ	1:F:413:LEU:HD21	2.43	0.48
2:O:48:LEU:HA	2:O:51:MET:CE	2.43	0.48
2:S:5:THR:O	2:S:8:GLN:HB3	2.13	0.48
2:T:12:PHE:O	2:T:16:PHE:HB2	2.13	0.48
1:A:142:VAL:HG13	1:A:154:ILE:HD12	1.94	0.48
1:A:175:LYS:HZ3	1:A:175:LYS:HB2	1.74	0.48
1:A:456:LYS:HB3	1:A:470:ASN:C	2.34	0.48
1:A:523:LEU:HD11	2:O:144:MET:HG2	1.94	0.48
1:B:230:ILE:HG13	1:B:237:PHE:CE2	2.47	0.48
1:B:252:ASP:O	1:B:254:ARG:HD2	2.12	0.48
1:B:729:TYR:C	1:B:729:TYR:CD2	2.87	0.48
1:C:177:ILE:HA	1:C:180:ASP:OD1	2.13	0.48
1:D:597:ASN:ND2	1:D:601:GLU:HB2	2.28	0.48
1:E:530:THR:HG21	2:S:145:MET:CE	2.43	0.48
1:F:170:TYR:O	1:F:174:GLY:N	2.45	0.48
1:F:285:LYS:C	1:F:287:GLY:H	2.17	0.48
2:P:12:PHE:O	2:P:16:PHE:HB2	2.13	0.48
2:P:4:LEU:HA	2:P:8:GLN:OE1	2.13	0.48
2:Q:143:GLN:O	2:Q:147:ALA:HB3	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:32:LEU:HD21	2:R:71:MET:HE1	1.95	0.48
2:T:131:ASP:N	2:T:131:ASP:OD1	2.46	0.48
1:A:123:GLU:CG	1:A:124:GLU:H	2.20	0.48
1:A:344:ALA:O	1:A:489:THR:HG22	2.13	0.48
1:A:495:PHE:CD1	1:A:495:PHE:O	2.67	0.48
1:A:94:LEU:C	1:A:96:ILE:N	2.66	0.48
1:B:263:ASP:O	1:B:265:PHE:N	2.47	0.48
1:B:456:LYS:HB3	1:B:471:TRP:N	2.28	0.48
1:B:515:LYS:NZ	1:B:516:VAL:HG23	2.29	0.48
1:C:152:LEU:CD2	1:C:154:ILE:HD11	2.40	0.48
1:C:597:ASN:ND2	1:C:601:GLU:HB2	2.28	0.48
1:C:795:LYS:C	1:C:797:ILE:H	2.15	0.48
1:D:168:GLU:O	1:D:170:TYR:N	2.47	0.48
1:D:186:LYS:NZ	1:D:234:LEU:HD12	2.28	0.48
1:D:711:ILE:C	1:D:712:PHE:HD2	2.15	0.48
1:E:175:LYS:HZ3	1:E:175:LYS:CB	2.26	0.48
1:E:426:ILE:HD13	1:E:431:LYS:HA	1.95	0.48
1:E:657:ILE:HG13	1:E:756:ILE:HD12	1.94	0.48
1:F:99:GLU:C	1:F:101:GLY:H	2.15	0.48
1:F:597:ASN:ND2	1:F:601:GLU:HB2	2.29	0.48
2:T:116:LEU:HD13	2:T:121:VAL:HG22	1.95	0.48
1:B:123:GLU:CG	1:B:124:GLU:H	2.20	0.48
1:B:184:LYS:HZ2	1:B:191:GLU:HB2	1.75	0.48
1:B:686:ASP:CB	1:B:739:LYS:HD2	2.42	0.48
1:C:247:TYR:HE2	1:C:256:VAL:CG1	2.26	0.48
1:C:302:LEU:HD22	1:C:602:PHE:CE1	2.48	0.48
1:C:482:GLU:OE2	1:C:482:GLU:HA	2.13	0.48
1:C:629:ASN:ND2	1:C:631:SER:N	2.44	0.48
1:D:225:ILE:HG23	1:D:229:PHE:CE2	2.49	0.48
1:D:279:ILE:C	1:D:281:GLU:H	2.15	0.48
1:D:500:SER:O	1:D:504:ILE:HD13	2.13	0.48
1:E:107:THR:HG21	1:E:115:LYS:CD	2.43	0.48
1:E:353:LYS:HB2	1:E:368:GLN:HE22	1.78	0.48
1:E:515:LYS:HZ3	1:E:516:VAL:HG23	1.78	0.48
1:E:629:ASN:ND2	1:E:629:ASN:C	2.57	0.48
1:F:500:SER:O	1:F:504:ILE:HD13	2.14	0.48
2:P:116:LEU:HD13	2:P:121:VAL:HG22	1.95	0.48
2:R:124:MET:O	2:R:126:ARG:N	2.46	0.48
2:T:121:VAL:C	2:T:123:GLN:N	2.61	0.48
2:T:24:ASP:CG	2:T:25:GLY:H	2.16	0.48
1:B:105:TYR:CB	1:B:153:ILE:HG12	2.42	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:165:GLN:O	1:B:167:LYS:N	2.46	0.48
1:B:177:ILE:HA	1:B:180:ASP:CG	2.34	0.48
1:B:523:LEU:HD11	2:P:144:MET:HG2	1.94	0.48
1:B:597:ASN:ND2	1:B:601:GLU:HB2	2.29	0.48
1:C:142:VAL:CG2	1:C:154:ILE:HG23	2.40	0.48
1:C:168:GLU:C	1:C:170:TYR:H	2.17	0.48
1:C:210:PHE:HD2	1:C:210:PHE:N	2.11	0.48
1:C:426:ILE:HD13	1:C:431:LYS:HA	1.95	0.48
1:D:130:SER:C	1:D:132:GLY:H	2.17	0.48
1:D:279:ILE:HG22	1:D:283:LEU:CD1	2.44	0.48
1:D:426:ILE:HD13	1:D:431:LYS:HA	1.95	0.48
1:D:764:LEU:C	1:D:766:HIS:N	2.65	0.48
1:E:165:GLN:O	1:E:167:LYS:N	2.46	0.48
1:F:168:GLU:C	1:F:170:TYR:H	2.17	0.48
1:F:263:ASP:O	1:F:265:PHE:N	2.46	0.48
1:F:279:ILE:HG22	1:F:283:LEU:CD1	2.44	0.48
1:F:482:GLU:HA	1:F:482:GLU:OE2	2.14	0.48
1:F:83:GLN:O	1:F:84:ASP:C	2.51	0.48
2:O:30:LYS:H	2:O:30:LYS:CD	2.20	0.48
2:P:5:THR:O	2:P:8:GLN:HB3	2.13	0.48
2:T:4:LEU:HA	2:T:8:GLN:OE1	2.14	0.48
1:A:581:GLN:HE22	1:A:629:ASN:H	1.61	0.48
1:A:776:LEU:C	1:A:776:LEU:HD23	2.33	0.48
1:A:97:TYR:CE1	1:A:178:SER:HB2	2.48	0.48
1:B:184:LYS:HZ1	1:B:191:GLU:HB2	1.75	0.48
1:C:263:ASP:O	1:C:265:PHE:N	2.46	0.48
1:C:397:GLU:HG3	1:C:480:ASN:HB3	1.95	0.48
1:E:83:GLN:O	1:E:84:ASP:C	2.51	0.48
1:F:97:TYR:CD2	1:F:102:GLY:HA3	2.48	0.48
1:F:165:GLN:O	1:F:167:LYS:N	2.47	0.48
1:F:176:GLY:C	1:F:178:SER:N	2.67	0.48
1:F:234:LEU:HD23	1:F:235:THR:H	1.78	0.48
1:F:302:LEU:HD22	1:F:602:PHE:CE1	2.49	0.48
1:F:311:HIS:HD2	1:F:564:VAL:HB	1.78	0.48
2:Q:5:THR:O	2:Q:8:GLN:HB3	2.13	0.48
1:D:649:ILE:HD13	2:R:138:TYR:HB2	1.94	0.48
2:S:5:THR:HG23	2:S:8:GLN:CB	2.43	0.48
1:A:337:ASN:O	1:A:341:SER:N	2.29	0.48
1:B:181:ILE:HD12	1:B:238:GLN:OE1	2.14	0.48
1:B:308:VAL:CB	1:B:311:HIS:ND1	2.71	0.48
1:B:98:SER:O	1:B:101:GLY:N	2.45	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:180:ASP:O	1:C:183:SER:N	2.41	0.48
1:C:184:LYS:CE	1:C:193:LEU:HB2	2.42	0.48
1:C:286:GLU:HG2	1:C:286:GLU:O	2.13	0.48
1:C:499:PRO:HD2	1:C:625:LEU:O	2.14	0.48
1:C:694:VAL:HG23	2:Q:18:LEU:HD21	1.95	0.48
1:C:729:TYR:CD2	1:C:729:TYR:C	2.87	0.48
1:D:482:GLU:OE2	1:D:482:GLU:HA	2.13	0.48
1:D:660:SER:O	1:D:663:PHE:HB3	2.13	0.48
1:E:183:SER:C	1:E:187:SER:HB3	2.34	0.48
1:F:480:ASN:ND2	1:F:480:ASN:C	2.64	0.48
2:R:5:THR:HG23	2:R:8:GLN:CB	2.44	0.48
2:R:91:VAL:HG12	2:R:92:PHE:N	2.29	0.48
1:E:668:SER:CA	2:S:14:GLU:HG3	2.36	0.48
1:A:184:LYS:NZ	1:A:191:GLU:CB	2.73	0.48
1:A:288:VAL:C	1:A:290:LYS:H	2.17	0.48
1:A:302:LEU:HD22	1:A:602:PHE:CE1	2.48	0.48
1:B:234:LEU:HD23	1:B:235:THR:H	1.79	0.48
1:B:443:GLU:CD	1:B:458:LYS:HG2	2.33	0.48
1:B:495:PHE:O	1:B:495:PHE:CD1	2.67	0.48
1:B:635:ILE:CD1	1:B:635:ILE:H	1.99	0.48
1:C:177:ILE:HA	1:C:180:ASP:CG	2.33	0.48
1:C:192:PHE:HA	1:C:195:LEU:HB3	1.95	0.48
1:D:99:GLU:C	1:D:101:GLY:H	2.16	0.48
1:D:109:ILE:HD13	1:D:157:LYS:HZ3	1.77	0.48
1:D:277:GLU:HA	1:D:280:SER:OG	2.14	0.48
1:D:639:ASN:N	1:D:639:ASN:HD22	2.08	0.48
1:E:94:LEU:O	1:E:97:TYR:N	2.46	0.48
1:F:184:LYS:CE	1:F:193:LEU:HB2	2.42	0.48
1:F:277:GLU:HA	1:F:280:SER:OG	2.13	0.48
1:F:435:LEU:CG	1:F:446:ILE:HG22	2.35	0.48
1:F:656:THR:O	1:F:755:ARG:HD2	2.13	0.48
2:O:111:ASN:C	2:O:113:GLY:H	2.16	0.48
2:Q:24:ASP:CG	2:Q:25:GLY:H	2.17	0.48
2:R:24:ASP:CG	2:R:25:GLY:H	2.17	0.48
2:S:111:ASN:C	2:S:113:GLY:H	2.17	0.48
2:S:116:LEU:HD13	2:S:121:VAL:HG22	1.95	0.48
1:A:790:PHE:O	1:A:793:PHE:HB3	2.14	0.48
1:B:127:SER:O	1:B:133:GLU:HG3	2.13	0.48
1:B:184:LYS:CE	1:B:193:LEU:HB2	2.42	0.48
1:B:99:GLU:C	1:B:101:GLY:H	2.16	0.48
1:C:123:GLU:CG	1:C:124:GLU:H	2.19	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:234:LEU:HD23	1:C:235:THR:H	1.79	0.48
1:C:318:ILE:HD12	1:C:318:ILE:N	2.24	0.48
1:C:660:SER:O	1:C:663:PHE:HB3	2.13	0.48
1:D:107:THR:HG21	1:D:115:LYS:CD	2.43	0.48
1:D:135:VAL:N	1:D:136:PRO:HD3	2.27	0.48
1:D:252:ASP:O	1:D:254:ARG:HD2	2.13	0.48
1:E:186:LYS:HG2	1:E:186:LYS:O	2.14	0.48
1:E:210:PHE:HD2	1:E:210:PHE:N	2.12	0.48
1:E:263:ASP:O	1:E:265:PHE:N	2.47	0.48
1:E:308:VAL:CB	1:E:311:HIS:ND1	2.71	0.48
1:E:660:SER:O	1:E:663:PHE:HB3	2.14	0.48
1:F:168:GLU:O	1:F:170:TYR:N	2.47	0.48
1:F:609:GLU:O	1:F:610:MET:C	2.53	0.48
2:P:24:ASP:CG	2:P:25:GLY:H	2.17	0.48
2:P:31:GLU:O	2:P:35:VAL:HG23	2.14	0.48
2:R:73:ALA:O	2:R:75:LYS:N	2.47	0.48
1:A:210:PHE:N	1:A:210:PHE:HD2	2.12	0.48
1:B:285:LYS:C	1:B:287:GLY:H	2.16	0.48
1:B:713:SER:O	1:B:714:GLN:C	2.52	0.48
1:C:311:HIS:HD2	1:C:564:VAL:HB	1.75	0.48
1:D:210:PHE:N	1:D:210:PHE:HD2	2.12	0.48
1:D:234:LEU:HD23	1:D:235:THR:H	1.79	0.48
1:D:279:ILE:H	1:D:279:ILE:CD1	2.23	0.48
1:D:302:LEU:HD22	1:D:602:PHE:CE1	2.48	0.48
1:D:353:LYS:HB2	1:D:368:GLN:HE22	1.79	0.48
1:D:729:TYR:CD2	1:D:729:TYR:C	2.87	0.48
1:D:715:GLU:OE1	1:D:767:GLN:NE2	2.47	0.48
1:E:503:GLU:HA	1:E:506:LYS:HD3	1.95	0.48
1:E:597:ASN:ND2	1:E:601:GLU:HB2	2.29	0.48
1:F:98:SER:O	1:F:101:GLY:N	2.44	0.48
1:F:344:ALA:O	1:F:489:THR:HG22	2.13	0.48
1:F:353:LYS:HB2	1:F:368:GLN:HE22	1.79	0.48
1:F:515:LYS:NZ	1:F:516:VAL:HG23	2.28	0.48
1:F:629:ASN:C	1:F:629:ASN:ND2	2.57	0.48
2:O:44:THR:O	2:O:46:ALA:N	2.47	0.48
1:C:694:VAL:HG23	2:Q:18:LEU:HD11	1.96	0.48
2:R:138:TYR:CE1	2:R:142:VAL:HG22	2.49	0.48
1:A:234:LEU:HD23	1:A:235:THR:H	1.78	0.47
1:A:715:GLU:HA	1:A:718:ARG:NH2	2.29	0.47
1:A:686:ASP:CB	1:A:739:LYS:HD2	2.42	0.47
1:B:353:LYS:HB2	1:B:368:GLN:HE22	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:557:LEU:HD11	1:B:575:VAL:CG1	2.44	0.47
1:C:288:VAL:C	1:C:290:LYS:H	2.16	0.47
1:C:500:SER:O	1:C:504:ILE:HD13	2.13	0.47
1:C:753:LYS:O	1:C:754:GLU:C	2.52	0.47
1:D:247:TYR:HE2	1:D:256:VAL:CG1	2.25	0.47
1:D:83:GLN:O	1:D:84:ASP:C	2.52	0.47
1:E:225:ILE:HG23	1:E:229:PHE:CE2	2.49	0.47
1:E:279:ILE:HG22	1:E:283:LEU:CD1	2.44	0.47
1:E:88:LYS:NZ	1:E:172:GLU:OE2	2.47	0.47
1:F:271:LEU:HA	1:F:275:GLY:HA3	1.95	0.47
1:F:446:ILE:HD11	1:F:451:ASN:CB	2.44	0.47
1:F:581:GLN:HE22	1:F:629:ASN:H	1.61	0.47
2:O:143:GLN:O	2:O:147:ALA:HB3	2.14	0.47
2:O:24:ASP:CG	2:O:25:GLY:H	2.17	0.47
2:Q:121:VAL:O	2:Q:122:ASP:C	2.52	0.47
2:T:143:GLN:O	2:T:147:ALA:HB3	2.15	0.47
1:A:279:ILE:CD1	1:A:279:ILE:H	2.22	0.47
1:B:397:GLU:HG3	1:B:480:ASN:HB3	1.94	0.47
1:B:83:GLN:O	1:B:84:ASP:C	2.52	0.47
1:C:112:VAL:O	1:C:114:HIS:N	2.44	0.47
1:C:168:GLU:C	1:C:170:TYR:N	2.64	0.47
1:C:277:GLU:HA	1:C:280:SER:OG	2.13	0.47
1:C:515:LYS:NZ	1:C:516:VAL:HG23	2.30	0.47
1:C:500:SER:HA	1:C:624:TYR:CD2	2.49	0.47
1:D:97:TYR:CD2	1:D:102:GLY:HA3	2.49	0.47
1:D:116:GLU:C	1:D:117:LEU:HD22	2.35	0.47
1:D:217:LYS:HB3	1:D:217:LYS:HZ2	1.77	0.47
1:D:515:LYS:NZ	1:D:516:VAL:HG23	2.29	0.47
1:D:609:GLU:O	1:D:610:MET:C	2.52	0.47
1:E:168:GLU:O	1:E:170:TYR:N	2.47	0.47
1:E:515:LYS:NZ	1:E:516:VAL:HG23	2.29	0.47
1:E:741:ILE:O	1:E:742:ALA:C	2.52	0.47
1:F:153:ILE:C	1:F:154:ILE:HD13	2.34	0.47
1:F:515:LYS:HZ3	1:F:516:VAL:HG23	1.79	0.47
2:O:116:LEU:HD13	2:O:121:VAL:HG22	1.95	0.47
2:O:12:PHE:O	2:O:16:PHE:HB2	2.13	0.47
2:P:44:THR:O	2:P:46:ALA:N	2.48	0.47
2:P:5:THR:HG23	2:P:8:GLN:CB	2.44	0.47
2:S:44:THR:C	2:S:46:ALA:N	2.64	0.47
2:T:5:THR:HG23	2:T:8:GLN:CB	2.44	0.47
1:A:263:ASP:O	1:A:265:PHE:N	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:729:TYR:C	1:A:729:TYR:CD2	2.87	0.47
1:A:92:ASP:O	1:A:94:LEU:N	2.47	0.47
1:B:142:VAL:HG13	1:B:154:ILE:HD12	1.94	0.47
1:B:277:GLU:HA	1:B:280:SER:OG	2.14	0.47
1:B:456:LYS:CB	1:B:470:ASN:C	2.83	0.47
1:B:712:PHE:HD1	1:B:716:LYS:HG2	1.77	0.47
1:C:97:TYR:CD2	1:C:102:GLY:HA3	2.48	0.47
1:C:443:GLU:CD	1:C:458:LYS:HG2	2.35	0.47
1:C:712:PHE:HD1	1:C:716:LYS:HG2	1.78	0.47
1:D:176:GLY:C	1:D:178:SER:N	2.67	0.47
1:D:628:PHE:HE2	2:R:90:ARG:CD	2.26	0.47
1:D:753:LYS:O	1:D:754:GLU:C	2.52	0.47
1:E:279:ILE:H	1:E:279:ILE:CD1	2.23	0.47
1:F:225:ILE:HG23	1:F:229:PHE:CE2	2.49	0.47
2:R:101:SER:O	2:R:104:GLU:HG2	2.15	0.47
2:R:4:LEU:HA	2:R:8:GLN:OE1	2.15	0.47
1:A:97:TYR:CD2	1:A:102:GLY:HA3	2.49	0.47
1:A:254:ARG:HG2	1:A:255:THR:N	2.22	0.47
1:A:311:HIS:HD2	1:A:564:VAL:HB	1.77	0.47
1:A:83:GLN:O	1:A:84:ASP:C	2.52	0.47
1:B:323:ASN:O	1:B:324:THR:HG22	2.15	0.47
1:B:629:ASN:ND2	1:B:631:SER:N	2.44	0.47
1:D:446:ILE:HD11	1:D:451:ASN:CB	2.45	0.47
1:D:597:ASN:HD21	1:D:601:GLU:HB2	1.79	0.47
1:E:271:LEU:HA	1:E:275:GLY:HA3	1.96	0.47
1:E:713:SER:O	1:E:714:GLN:C	2.52	0.47
1:E:729:TYR:CD2	1:E:729:TYR:C	2.87	0.47
1:F:753:LYS:O	1:F:754:GLU:C	2.52	0.47
2:P:48:LEU:HA	2:P:51:MET:CE	2.44	0.47
2:Q:44:THR:O	2:Q:46:ALA:N	2.47	0.47
2:T:111:ASN:C	2:T:113:GLY:H	2.17	0.47
2:T:13:LYS:HZ3	2:T:65:PHE:CB	2.25	0.47
1:A:107:THR:HG21	1:A:115:LYS:CD	2.45	0.47
1:A:497:LEU:CD1	1:A:556:MET:HG2	2.38	0.47
1:A:94:LEU:O	1:A:96:ILE:N	2.48	0.47
1:B:210:PHE:HD2	1:B:210:PHE:N	2.12	0.47
1:B:446:ILE:HD11	1:B:451:ASN:HB2	1.97	0.47
1:B:500:SER:HA	1:B:624:TYR:CD2	2.49	0.47
1:C:153:ILE:C	1:C:154:ILE:HD13	2.35	0.47
1:C:168:GLU:O	1:C:170:TYR:N	2.47	0.47
1:D:263:ASP:O	1:D:265:PHE:N	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:741:ILE:O	1:D:742:ALA:C	2.53	0.47
1:E:649:ILE:HD13	2:S:138:TYR:HB2	1.96	0.47
1:E:712:PHE:HD1	1:E:716:LYS:HG2	1.78	0.47
1:E:715:GLU:OE1	1:E:767:GLN:NE2	2.47	0.47
1:E:94:LEU:O	1:E:96:ILE:N	2.48	0.47
2:P:111:ASN:C	2:P:113:GLY:H	2.17	0.47
2:P:121:VAL:O	2:P:122:ASP:C	2.53	0.47
2:S:121:VAL:O	2:S:122:ASP:C	2.53	0.47
2:S:44:THR:O	2:S:46:ALA:N	2.48	0.47
2:T:48:LEU:HA	2:T:51:MET:CE	2.44	0.47
1:A:152:LEU:CD2	1:A:154:ILE:HD11	2.39	0.47
1:A:225:ILE:HG23	1:A:229:PHE:CE2	2.49	0.47
1:A:424:LYS:HG2	1:A:433:TYR:CD2	2.50	0.47
1:A:516:VAL:O	1:A:519:THR:HG22	2.15	0.47
1:A:597:ASN:ND2	1:A:601:GLU:HB2	2.29	0.47
1:A:656:THR:O	1:A:755:ARG:HD2	2.14	0.47
1:B:168:GLU:C	1:B:170:TYR:H	2.18	0.47
1:B:225:ILE:HG23	1:B:229:PHE:CE2	2.49	0.47
1:B:343:VAL:HG12	1:B:344:ALA:O	2.15	0.47
1:B:649:ILE:HD13	2:P:138:TYR:HB2	1.96	0.47
1:B:660:SER:O	1:B:663:PHE:HB3	2.15	0.47
1:C:97:TYR:CE1	1:C:178:SER:HB2	2.49	0.47
1:C:279:ILE:HG22	1:C:283:LEU:CD1	2.45	0.47
1:C:713:SER:O	1:C:714:GLN:C	2.53	0.47
1:D:489:THR:OG1	1:D:490:ALA:N	2.48	0.47
1:E:142:VAL:HG13	1:E:154:ILE:HD12	1.94	0.47
1:E:217:LYS:CB	1:E:236:GLU:HG3	2.45	0.47
1:E:628:PHE:HE2	2:S:90:ARG:CD	2.28	0.47
1:F:715:GLU:HA	1:F:718:ARG:NH2	2.30	0.47
1:F:94:LEU:O	1:F:96:ILE:N	2.48	0.47
2:O:5:THR:HG23	2:O:8:GLN:CB	2.44	0.47
2:Q:111:ASN:C	2:Q:113:GLY:H	2.16	0.47
2:Q:5:THR:HG23	2:Q:8:GLN:CB	2.44	0.47
2:R:116:LEU:HD13	2:R:121:VAL:HG22	1.96	0.47
1:F:694:VAL:HG23	2:T:18:LEU:HD21	1.95	0.47
2:T:31:GLU:O	2:T:35:VAL:HG23	2.15	0.47
2:T:44:THR:O	2:T:46:ALA:N	2.48	0.47
1:A:168:GLU:O	1:A:170:TYR:N	2.47	0.47
1:A:672:ARG:HD3	1:A:672:ARG:HA	1.68	0.47
1:B:97:TYR:CD2	1:B:102:GLY:HA3	2.49	0.47
1:B:152:LEU:CD2	1:B:154:ILE:HD11	2.39	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:176:GLY:C	1:B:178:SER:N	2.68	0.47
1:B:279:ILE:HG22	1:B:283:LEU:CD1	2.45	0.47
1:C:109:ILE:HD13	1:C:157:LYS:HZ3	1.80	0.47
1:C:225:ILE:HG23	1:C:229:PHE:CE2	2.49	0.47
1:C:616:GLU:HA	1:C:620:THR:HB	1.97	0.47
1:C:741:ILE:O	1:C:742:ALA:C	2.52	0.47
1:D:713:SER:O	1:D:714:GLN:C	2.53	0.47
1:D:94:LEU:O	1:D:96:ILE:N	2.47	0.47
1:E:170:TYR:C	1:E:172:GLU:H	2.18	0.47
1:E:288:VAL:C	1:E:290:LYS:H	2.16	0.47
1:E:344:ALA:O	1:E:489:THR:HG22	2.14	0.47
1:E:700:TYR:O	1:E:703:ASP:N	2.48	0.47
1:F:142:VAL:HG13	1:F:154:ILE:HD12	1.94	0.47
1:F:672:ARG:HD3	1:F:672:ARG:HA	1.68	0.47
2:P:102:ALA:HA	2:P:125:ILE:HG13	1.97	0.47
2:P:30:LYS:CD	2:P:30:LYS:H	2.20	0.47
2:Q:73:ALA:O	2:Q:75:LYS:N	2.48	0.47
1:A:116:GLU:C	1:A:117:LEU:HD22	2.35	0.47
1:A:170:TYR:O	1:A:174:GLY:N	2.44	0.47
1:A:712:PHE:HB3	1:A:716:LYS:HG2	1.96	0.47
1:A:764:LEU:C	1:A:766:HIS:H	2.18	0.47
1:B:271:LEU:HA	1:B:275:GLY:HA3	1.95	0.47
1:B:344:ALA:O	1:B:489:THR:HG22	2.15	0.47
1:B:424:LYS:HG2	1:B:433:TYR:CD2	2.50	0.47
1:B:500:SER:O	1:B:504:ILE:HD13	2.14	0.47
1:C:136:PRO:O	1:C:139:SER:N	2.37	0.47
1:C:285:LYS:C	1:C:287:GLY:H	2.17	0.47
1:C:344:ALA:O	1:C:489:THR:HG22	2.15	0.47
1:D:152:LEU:CD2	1:D:154:ILE:HD11	2.41	0.47
1:E:97:TYR:CD2	1:E:102:GLY:HA3	2.50	0.47
1:E:318:ILE:CG2	1:E:322:LEU:HD12	2.45	0.47
1:F:424:LYS:HG2	1:F:433:TYR:CD2	2.50	0.47
1:F:516:VAL:O	1:F:519:THR:HG22	2.15	0.47
1:F:660:SER:O	1:F:663:PHE:HB3	2.15	0.47
1:F:712:PHE:HB3	1:F:716:LYS:HG2	1.97	0.47
1:F:741:ILE:O	1:F:742:ALA:C	2.52	0.47
1:A:277:GLU:HA	1:A:280:SER:OG	2.14	0.47
1:A:279:ILE:HG22	1:A:283:LEU:CD1	2.45	0.47
1:C:353:LYS:H	1:C:368:GLN:HE22	1.63	0.47
1:D:116:GLU:O	1:D:117:LEU:HD22	2.15	0.47
1:D:285:LYS:C	1:D:287:GLY:H	2.17	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:616:GLU:HA	1:D:620:THR:HB	1.97	0.47
1:F:764:LEU:C	1:F:766:HIS:N	2.68	0.47
2:R:143:GLN:O	2:R:147:ALA:HB3	2.14	0.47
2:R:44:THR:O	2:R:46:ALA:N	2.48	0.47
2:R:5:THR:O	2:R:8:GLN:HB3	2.14	0.47
2:S:13:LYS:HZ1	2:S:65:PHE:CB	2.27	0.47
1:B:279:ILE:CD1	1:B:279:ILE:H	2.22	0.47
1:B:540:ARG:HD3	1:B:627:TYR:OH	2.15	0.47
1:B:656:THR:O	1:B:755:ARG:HD2	2.15	0.47
1:B:94:LEU:O	1:B:96:ILE:N	2.48	0.47
1:C:107:THR:CG2	1:C:115:LYS:HD2	2.45	0.47
1:C:456:LYS:HB2	1:C:470:ASN:HA	1.96	0.47
1:C:656:THR:O	1:C:755:ARG:HD2	2.15	0.47
1:C:790:PHE:O	1:C:793:PHE:HB3	2.15	0.47
1:D:186:LYS:HG2	1:D:186:LYS:O	2.15	0.47
1:D:184:LYS:CE	1:D:193:LEU:HB2	2.42	0.47
1:D:700:TYR:O	1:D:703:ASP:N	2.47	0.47
1:E:116:GLU:C	1:E:117:LEU:HD22	2.36	0.47
1:E:142:VAL:CG2	1:E:154:ILE:HG23	2.39	0.47
1:F:116:GLU:C	1:F:117:LEU:HD22	2.35	0.47
1:F:134:LYS:C	1:F:136:PRO:CD	2.83	0.47
2:O:70:THR:O	2:O:71:MET:C	2.54	0.47
2:O:4:LEU:HA	2:O:8:GLN:OE1	2.15	0.47
2:Q:32:LEU:HD21	2:Q:71:MET:HE2	1.94	0.47
2:R:31:GLU:O	2:R:35:VAL:HG23	2.14	0.47
2:T:102:ALA:HA	2:T:125:ILE:HG13	1.97	0.47
1:A:270:LYS:HA	1:A:273:LYS:HB2	1.97	0.47
1:A:515:LYS:NZ	1:A:516:VAL:HG23	2.30	0.47
1:B:115:LYS:HB2	1:B:118:GLN:HG2	1.97	0.47
1:C:184:LYS:HZ1	1:C:191:GLU:HB2	1.76	0.47
1:E:234:LEU:HD23	1:E:235:THR:H	1.80	0.47
1:E:628:PHE:CD1	1:E:645:TRP:CD1	3.03	0.47
1:E:581:GLN:HE22	1:E:629:ASN:H	1.62	0.47
1:F:443:GLU:CD	1:F:458:LYS:HG2	2.35	0.47
1:F:597:ASN:HD21	1:F:601:GLU:HB2	1.80	0.47
2:S:21:LYS:HD3	2:S:22:ASP:N	2.30	0.47
1:A:500:SER:O	1:A:504:ILE:HD13	2.15	0.46
1:A:609:GLU:O	1:A:610:MET:C	2.53	0.46
1:B:71:PHE:CB	1:B:108:ASP:HB2	2.45	0.46
1:B:153:ILE:C	1:B:154:ILE:HD13	2.35	0.46
1:B:168:GLU:O	1:B:170:TYR:N	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:435:LEU:CG	1:C:446:ILE:HG22	2.35	0.46
1:D:168:GLU:C	1:D:170:TYR:H	2.16	0.46
1:D:288:VAL:C	1:D:290:LYS:H	2.17	0.46
1:D:443:GLU:CD	1:D:458:LYS:HG2	2.35	0.46
1:D:658:PRO:HG3	1:D:752:LEU:HD22	1.97	0.46
1:E:153:ILE:C	1:E:154:ILE:HD13	2.35	0.46
1:E:178:SER:OG	1:E:179:LEU:CD2	2.63	0.46
1:E:712:PHE:HB3	1:E:716:LYS:HG2	1.97	0.46
1:F:107:THR:HG21	1:F:115:LYS:CD	2.45	0.46
1:F:318:ILE:CG2	1:F:322:LEU:HD12	2.44	0.46
1:F:343:VAL:HG12	1:F:344:ALA:O	2.15	0.46
1:F:489:THR:OG1	1:F:490:ALA:N	2.49	0.46
1:F:713:SER:O	1:F:714:GLN:C	2.53	0.46
2:S:70:THR:O	2:S:71:MET:C	2.53	0.46
2:T:30:LYS:H	2:T:30:LYS:CD	2.20	0.46
2:T:65:PHE:CD1	2:T:66:PRO:HD3	2.50	0.46
1:A:170:TYR:C	1:A:172:GLU:H	2.18	0.46
1:A:168:GLU:C	1:A:170:TYR:H	2.17	0.46
1:A:550:SER:N	1:A:553:GLN:NE2	2.45	0.46
1:A:713:SER:O	1:A:714:GLN:C	2.53	0.46
1:B:741:ILE:O	1:B:742:ALA:C	2.53	0.46
1:C:424:LYS:HG2	1:C:433:TYR:CD2	2.50	0.46
1:C:489:THR:OG1	1:C:490:ALA:N	2.48	0.46
1:C:495:PHE:O	1:C:581:GLN:HG2	2.15	0.46
1:C:508:ILE:CG2	1:C:509:PRO:HD2	2.45	0.46
1:D:170:TYR:C	1:D:172:GLU:H	2.18	0.46
1:D:188:LEU:HD22	1:D:188:LEU:N	2.26	0.46
1:D:712:PHE:HB3	1:D:716:LYS:HG2	1.97	0.46
1:E:343:VAL:HG12	1:E:344:ALA:O	2.15	0.46
1:E:495:PHE:O	1:E:495:PHE:CD1	2.68	0.46
1:E:630:ARG:NH1	1:E:630:ARG:HG3	2.27	0.46
1:F:616:GLU:HA	1:F:620:THR:HB	1.97	0.46
1:F:729:TYR:CD2	1:F:729:TYR:C	2.87	0.46
1:A:694:VAL:HG23	2:O:18:LEU:HD11	1.97	0.46
2:R:13:LYS:HZ1	2:R:65:PHE:CB	2.28	0.46
2:S:13:LYS:HZ3	2:S:65:PHE:CB	2.27	0.46
1:A:153:ILE:C	1:A:154:ILE:HD13	2.35	0.46
1:A:723:PHE:O	1:A:726:ILE:N	2.48	0.46
1:B:609:GLU:O	1:B:610:MET:C	2.53	0.46
1:C:213:LYS:HB2	1:C:240:ALA:CB	2.45	0.46
1:C:271:LEU:HD13	1:C:276:PHE:CE2	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:373:LYS:CD	1:C:376:GLN:NE2	2.75	0.46
1:C:735:VAL:HG12	1:C:741:ILE:HD13	1.96	0.46
1:D:142:VAL:CG2	1:D:154:ILE:HG23	2.41	0.46
1:D:792:VAL:C	1:D:796:ILE:HG12	2.36	0.46
1:E:446:ILE:HD11	1:E:451:ASN:CB	2.46	0.46
1:E:597:ASN:HD21	1:E:601:GLU:HB2	1.81	0.46
1:E:616:GLU:HA	1:E:620:THR:HB	1.97	0.46
1:E:697:ILE:C	1:E:699:GLY:N	2.69	0.46
1:E:658:PRO:HG3	1:E:752:LEU:HD22	1.98	0.46
1:F:192:PHE:HB3	1:F:196:ILE:CD1	2.45	0.46
1:F:210:PHE:N	1:F:210:PHE:HD2	2.12	0.46
1:F:712:PHE:HD1	1:F:716:LYS:HG2	1.78	0.46
1:A:323:ASN:O	1:A:324:THR:HG22	2.16	0.46
1:A:353:LYS:H	1:A:368:GLN:HE22	1.63	0.46
1:A:741:ILE:O	1:A:742:ALA:C	2.52	0.46
1:C:116:GLU:C	1:C:117:LEU:HD22	2.35	0.46
1:C:134:LYS:CG	1:C:136:PRO:HD3	2.38	0.46
1:C:724:ARG:NH1	1:C:724:ARG:CG	2.78	0.46
1:F:170:TYR:C	1:F:172:GLU:H	2.18	0.46
1:F:271:LEU:HD13	1:F:276:PHE:CE2	2.50	0.46
1:F:456:LYS:HB2	1:F:469:PHE:O	2.16	0.46
2:O:121:VAL:O	2:O:122:ASP:C	2.53	0.46
2:Q:116:LEU:HD13	2:Q:121:VAL:HG22	1.96	0.46
2:S:143:GLN:O	2:S:147:ALA:HB3	2.15	0.46
2:T:70:THR:O	2:T:71:MET:C	2.53	0.46
1:A:359:PRO:O	1:A:361:ALA:N	2.48	0.46
1:B:185:ASP:O	1:B:190:PRO:HG3	2.16	0.46
1:C:315:PHE:CD2	1:C:560:LEU:HD22	2.51	0.46
1:E:130:SER:HB2	1:E:170:TYR:CE2	2.51	0.46
1:E:189:ASP:O	1:E:191:GLU:HG2	2.16	0.46
1:E:97:TYR:CE1	1:E:178:SER:HB2	2.50	0.46
1:F:463:THR:HB	1:F:467:GLU:H	1.80	0.46
1:F:508:ILE:CG2	1:F:509:PRO:HD2	2.46	0.46
1:F:525:LYS:O	1:F:529:VAL:HG23	2.15	0.46
1:F:628:PHE:HE2	2:T:90:ARG:CD	2.28	0.46
2:P:143:GLN:O	2:P:147:ALA:CB	2.64	0.46
2:Q:70:THR:O	2:Q:71:MET:C	2.54	0.46
1:C:630:ARG:CZ	2:Q:83:GLU:CG	2.94	0.46
2:R:48:LEU:HA	2:R:51:MET:CE	2.44	0.46
1:A:413:LEU:N	1:A:413:LEU:HD23	2.31	0.46
1:A:88:LYS:NZ	1:A:172:GLU:CD	2.68	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:96:ILE:O	1:A:100:LEU:HG	2.15	0.46
1:C:123:GLU:O	1:C:146:LYS:NZ	2.49	0.46
1:C:723:PHE:O	1:C:726:ILE:N	2.49	0.46
1:C:722:ILE:HD13	1:C:764:LEU:CD2	2.46	0.46
1:D:424:LYS:HG2	1:D:433:TYR:CD2	2.50	0.46
1:D:359:PRO:HD2	1:D:444:PHE:CE2	2.51	0.46
1:D:540:ARG:HD3	1:D:627:TYR:OH	2.15	0.46
1:D:79:ILE:C	1:D:81:GLN:N	2.69	0.46
1:D:88:LYS:NZ	1:D:172:GLU:CD	2.69	0.46
1:E:152:LEU:CD2	1:E:154:ILE:HD11	2.39	0.46
1:E:609:GLU:O	1:E:610:MET:C	2.53	0.46
1:F:323:ASN:O	1:F:324:THR:HG22	2.15	0.46
1:F:792:VAL:C	1:F:796:ILE:HG12	2.36	0.46
1:F:96:ILE:O	1:F:100:LEU:HG	2.15	0.46
2:Q:37:ARG:HH11	2:Q:37:ARG:HG2	1.80	0.46
2:R:37:ARG:HH11	2:R:37:ARG:HG2	1.81	0.46
2:S:91:VAL:HG12	2:S:92:PHE:N	2.30	0.46
1:A:353:LYS:HB2	1:A:368:GLN:HE22	1.81	0.46
1:A:480:ASN:C	1:A:480:ASN:ND2	2.64	0.46
1:A:515:LYS:HZ3	1:A:516:VAL:HG23	1.80	0.46
1:A:525:LYS:O	1:A:529:VAL:HG23	2.15	0.46
1:A:616:GLU:HA	1:A:620:THR:HB	1.97	0.46
1:A:75:THR:C	1:A:77:ASP:N	2.69	0.46
1:B:659:THR:O	1:B:660:SER:C	2.54	0.46
1:D:135:VAL:CG2	1:D:135:VAL:O	2.52	0.46
1:E:168:GLU:C	1:E:170:TYR:H	2.17	0.46
1:E:443:GLU:CD	1:E:458:LYS:HG2	2.35	0.46
1:F:359:PRO:HD2	1:F:444:PHE:CE2	2.51	0.46
1:F:550:SER:N	1:F:553:GLN:NE2	2.45	0.46
2:Q:143:GLN:O	2:Q:147:ALA:CB	2.64	0.46
2:S:146:THR:O	2:S:147:ALA:C	2.54	0.46
2:S:31:GLU:O	2:S:35:VAL:HG23	2.16	0.46
2:T:36:MET:HE3	2:T:43:PRO:HG3	1.98	0.46
1:A:177:ILE:HA	1:A:180:ASP:OD1	2.16	0.46
1:A:792:VAL:C	1:A:796:ILE:HG12	2.36	0.46
1:B:540:ARG:HD2	1:B:582:ASP:OD2	2.16	0.46
1:B:97:TYR:CE1	1:B:178:SER:HB2	2.50	0.46
1:D:142:VAL:HG13	1:D:154:ILE:HD11	1.96	0.46
1:D:353:LYS:H	1:D:368:GLN:HE22	1.63	0.46
1:D:525:LYS:O	1:D:529:VAL:HG23	2.16	0.46
1:D:712:PHE:HD1	1:D:716:LYS:HG2	1.79	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:495:PHE:O	1:E:581:GLN:HG2	2.15	0.46
2:R:65:PHE:CD1	2:R:66:PRO:HD3	2.51	0.46
2:S:16:PHE:CZ	2:S:27:ILE:HG23	2.51	0.46
1:A:359:PRO:HD2	1:A:444:PHE:CE2	2.51	0.46
1:B:140:ARG:HA	1:B:140:ARG:NE	2.31	0.46
1:B:270:LYS:HA	1:B:273:LYS:HB2	1.98	0.46
1:B:353:LYS:H	1:B:368:GLN:HE22	1.64	0.46
1:C:170:TYR:C	1:C:172:GLU:H	2.18	0.46
1:C:188:LEU:HD22	1:C:188:LEU:N	2.26	0.46
1:C:88:LYS:NZ	1:C:172:GLU:CD	2.70	0.46
1:D:142:VAL:HG13	1:D:154:ILE:HD12	1.94	0.46
1:D:191:GLU:O	1:D:192:PHE:C	2.52	0.46
1:D:318:ILE:CG2	1:D:322:LEU:HD12	2.46	0.46
1:D:456:LYS:HB2	1:D:469:PHE:O	2.16	0.46
1:D:559:ARG:HA	1:D:559:ARG:HD2	1.78	0.46
1:D:687:GLU:O	1:D:690:LYS:N	2.49	0.46
1:E:140:ARG:HA	1:E:140:ARG:NE	2.31	0.46
1:E:424:LYS:HG2	1:E:433:TYR:CD2	2.50	0.46
1:E:656:THR:O	1:E:755:ARG:HD2	2.15	0.46
1:E:792:VAL:C	1:E:796:ILE:HG12	2.36	0.46
1:F:115:LYS:HB2	1:F:118:GLN:HG2	1.98	0.46
1:F:495:PHE:O	1:F:495:PHE:CD1	2.69	0.46
2:O:101:SER:O	2:O:104:GLU:HG2	2.16	0.46
2:O:65:PHE:CD1	2:O:66:PRO:HD3	2.51	0.46
2:R:121:VAL:O	2:R:122:ASP:C	2.54	0.46
2:S:102:ALA:HA	2:S:125:ILE:HG13	1.97	0.46
2:S:48:LEU:HA	2:S:51:MET:CE	2.44	0.46
1:A:175:LYS:O	1:A:176:GLY:C	2.55	0.46
1:A:271:LEU:HD13	1:A:276:PHE:CE2	2.51	0.46
1:A:318:ILE:CG2	1:A:322:LEU:HD12	2.45	0.46
1:A:343:VAL:HG12	1:A:344:ALA:O	2.16	0.46
1:A:446:ILE:HD11	1:A:451:ASN:HB2	1.98	0.46
1:A:777:TYR:CE1	1:A:782:PHE:CE1	3.04	0.46
1:B:170:TYR:C	1:B:172:GLU:H	2.18	0.46
1:B:359:PRO:HD2	1:B:444:PHE:CE2	2.51	0.46
1:B:359:PRO:O	1:B:361:ALA:N	2.49	0.46
1:B:311:HIS:HD2	1:B:564:VAL:HB	1.77	0.46
1:B:671:ARG:NH1	1:B:677:GLY:HA3	2.31	0.46
1:B:715:GLU:HA	1:B:718:ARG:NH2	2.30	0.46
1:C:140:ARG:HA	1:C:140:ARG:NE	2.30	0.46
1:C:186:LYS:HZ1	1:C:234:LEU:CD1	2.28	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:343:VAL:HG12	1:C:344:ALA:O	2.16	0.46
1:C:525:LYS:O	1:C:529:VAL:HG23	2.16	0.46
1:D:115:LYS:HZ2	1:D:116:GLU:HG2	1.78	0.46
1:D:500:SER:HA	1:D:624:TYR:CD2	2.51	0.46
1:D:735:VAL:HG12	1:D:741:ILE:HD13	1.97	0.46
1:E:109:ILE:HD13	1:E:157:LYS:HZ3	1.79	0.46
1:E:462:ILE:HG12	1:E:463:THR:H	1.81	0.46
1:E:479:LYS:HG2	1:E:488:LEU:CD2	2.30	0.46
1:E:500:SER:O	1:E:504:ILE:HD13	2.16	0.46
1:E:79:ILE:C	1:E:81:GLN:N	2.69	0.46
2:Q:48:LEU:HA	2:Q:51:MET:CE	2.44	0.46
2:S:65:PHE:CD1	2:S:66:PRO:HD3	2.51	0.46
2:T:16:PHE:CZ	2:T:27:ILE:HG23	2.51	0.46
1:A:334:LEU:N	1:A:334:LEU:CD1	2.75	0.45
1:B:443:GLU:OE2	1:B:458:LYS:HG2	2.15	0.45
1:B:525:LYS:O	1:B:529:VAL:HG23	2.15	0.45
1:B:723:PHE:O	1:B:726:ILE:N	2.49	0.45
1:B:764:LEU:O	1:B:766:HIS:N	2.49	0.45
1:B:764:LEU:C	1:B:766:HIS:N	2.69	0.45
1:D:153:ILE:C	1:D:154:ILE:HD13	2.36	0.45
1:D:715:GLU:HA	1:D:718:ARG:NH2	2.30	0.45
1:D:718:ARG:HH11	1:D:767:GLN:NE2	2.13	0.45
1:D:96:ILE:O	1:D:100:LEU:HG	2.16	0.45
1:E:271:LEU:HD13	1:E:276:PHE:CE2	2.50	0.45
1:E:497:LEU:CD1	1:E:556:MET:HG2	2.38	0.45
1:F:495:PHE:O	1:F:581:GLN:HG2	2.16	0.45
1:F:558:ASP:O	1:F:561:ASN:N	2.49	0.45
1:F:628:PHE:CD1	1:F:645:TRP:CD1	3.04	0.45
1:F:777:TYR:CE1	1:F:782:PHE:CE1	3.04	0.45
2:P:21:LYS:HD3	2:P:22:ASP:N	2.31	0.45
2:P:70:THR:O	2:P:71:MET:C	2.54	0.45
2:Q:21:LYS:HD3	2:Q:22:ASP:N	2.31	0.45
1:A:794:GLN:HB3	1:A:794:GLN:HE21	1.63	0.45
1:B:116:GLU:C	1:B:117:LEU:HD22	2.36	0.45
1:B:482:GLU:O	1:B:484:VAL:HG22	2.17	0.45
1:B:75:THR:C	1:B:77:ASP:N	2.69	0.45
1:C:353:LYS:HB2	1:C:368:GLN:HE22	1.81	0.45
1:C:715:GLU:HA	1:C:718:ARG:NH2	2.30	0.45
1:C:792:VAL:C	1:C:796:ILE:HG12	2.36	0.45
1:D:515:LYS:HZ3	1:D:516:VAL:HG23	1.80	0.45
1:D:540:ARG:HD2	1:D:582:ASP:OD2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:97:TYR:CE1	1:D:178:SER:HB2	2.51	0.45
1:E:359:PRO:O	1:E:361:ALA:N	2.49	0.45
1:E:75:THR:C	1:E:77:ASP:N	2.70	0.45
1:F:175:LYS:O	1:F:176:GLY:C	2.55	0.45
2:O:37:ARG:HG2	2:O:37:ARG:HH11	1.81	0.45
2:R:12:PHE:HE1	2:R:72:MET:HB3	1.81	0.45
2:T:12:PHE:HE1	2:T:72:MET:HB3	1.81	0.45
1:A:397:GLU:O	1:A:398:ILE:HD13	2.16	0.45
1:A:489:THR:OG1	1:A:490:ALA:N	2.49	0.45
1:A:777:TYR:HA	1:A:780:LEU:HD23	1.98	0.45
1:B:397:GLU:O	1:B:398:ILE:HD13	2.16	0.45
1:B:489:THR:OG1	1:B:490:ALA:N	2.49	0.45
1:B:516:VAL:O	1:B:519:THR:HG22	2.15	0.45
1:B:495:PHE:O	1:B:581:GLN:HG2	2.16	0.45
1:B:700:TYR:O	1:B:703:ASP:N	2.48	0.45
1:B:724:ARG:NH1	1:B:724:ARG:CG	2.79	0.45
1:B:777:TYR:HA	1:B:780:LEU:CD2	2.46	0.45
1:C:456:LYS:HB3	1:C:471:TRP:N	2.31	0.45
1:C:540:ARG:HD3	1:C:627:TYR:OH	2.16	0.45
1:C:628:PHE:HE2	2:Q:90:ARG:CD	2.27	0.45
1:C:712:PHE:HB3	1:C:716:LYS:HG2	1.97	0.45
1:D:359:PRO:O	1:D:361:ALA:N	2.49	0.45
1:D:501:LEU:HD22	2:R:112:LEU:CD2	2.36	0.45
1:E:359:PRO:HD2	1:E:444:PHE:CE2	2.51	0.45
1:E:456:LYS:HB2	1:E:469:PHE:O	2.17	0.45
1:E:508:ILE:CG2	1:E:509:PRO:HD2	2.45	0.45
1:E:655:ASN:ND2	1:E:655:ASN:N	2.63	0.45
1:F:97:TYR:CE1	1:F:178:SER:HB2	2.51	0.45
1:F:413:LEU:HD23	1:F:413:LEU:N	2.31	0.45
1:F:686:ASP:CB	1:F:739:LYS:HD2	2.46	0.45
2:O:126:ARG:HG3	2:O:126:ARG:HH21	1.81	0.45
2:P:65:PHE:CD1	2:P:66:PRO:HD3	2.51	0.45
1:A:722:ILE:HD13	1:A:764:LEU:HD23	1.99	0.45
1:B:456:LYS:HB2	1:B:469:PHE:O	2.16	0.45
1:B:508:ILE:CG2	1:B:509:PRO:HD2	2.46	0.45
1:B:559:ARG:HD2	1:B:559:ARG:HA	1.79	0.45
1:C:115:LYS:HB2	1:C:118:GLN:HG2	1.98	0.45
1:C:142:VAL:HG13	1:C:154:ILE:HD12	1.95	0.45
1:C:186:LYS:NZ	1:C:234:LEU:HD12	2.32	0.45
1:D:107:THR:CG2	1:D:115:LYS:HD2	2.46	0.45
1:D:99:GLU:OE2	1:D:284:LYS:HD2	2.15	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:348:LEU:HA	1:D:348:LEU:HD23	1.82	0.45
1:D:462:ILE:HG12	1:D:463:THR:H	1.81	0.45
1:D:516:VAL:O	1:D:519:THR:HG22	2.15	0.45
1:D:655:ASN:ND2	1:D:655:ASN:N	2.64	0.45
1:D:697:ILE:C	1:D:699:GLY:N	2.70	0.45
1:E:397:GLU:O	1:E:398:ILE:HD13	2.17	0.45
1:E:413:LEU:N	1:E:413:LEU:HD23	2.32	0.45
1:F:462:ILE:HG12	1:F:463:THR:H	1.82	0.45
2:Q:102:ALA:HA	2:Q:125:ILE:HG13	1.98	0.45
1:A:540:ARG:HD3	1:A:627:TYR:OH	2.16	0.45
1:B:196:ILE:HA	1:B:199:LEU:HG	1.99	0.45
1:B:767:GLN:HB3	1:B:768:LYS:H	1.53	0.45
1:B:777:TYR:CE1	1:B:782:PHE:CE1	3.05	0.45
1:B:792:VAL:C	1:B:796:ILE:HG12	2.36	0.45
1:C:516:VAL:O	1:C:519:THR:HG22	2.16	0.45
1:C:94:LEU:O	1:C:96:ILE:N	2.49	0.45
1:D:479:LYS:HG2	1:D:488:LEU:CD2	2.32	0.45
1:D:777:TYR:HA	1:D:780:LEU:CD2	2.47	0.45
1:E:99:GLU:OE2	1:E:284:LYS:HD2	2.17	0.45
1:F:540:ARG:HD3	1:F:627:TYR:OH	2.17	0.45
2:Q:126:ARG:HG3	2:Q:126:ARG:HH21	1.81	0.45
2:Q:65:PHE:CD1	2:Q:66:PRO:HD3	2.51	0.45
2:T:126:ARG:HG3	2:T:126:ARG:HH21	1.81	0.45
2:T:21:LYS:HD3	2:T:22:ASP:N	2.32	0.45
1:A:373:LYS:CD	1:A:376:GLN:NE2	2.76	0.45
1:A:495:PHE:O	1:A:581:GLN:HG2	2.17	0.45
1:A:660:SER:O	1:A:663:PHE:HB3	2.15	0.45
1:A:691:LYS:O	1:A:693:SER:N	2.50	0.45
1:B:115:LYS:C	1:B:117:LEU:N	2.69	0.45
1:C:359:PRO:O	1:C:361:ALA:N	2.49	0.45
1:C:463:THR:HB	1:C:467:GLU:H	1.81	0.45
1:C:777:TYR:HA	1:C:780:LEU:CD2	2.46	0.45
1:D:315:PHE:CD2	1:D:560:LEU:HD22	2.52	0.45
1:D:719:LYS:O	1:D:721:SER:N	2.50	0.45
1:D:75:THR:C	1:D:77:ASP:N	2.70	0.45
1:D:777:TYR:CE1	1:D:782:PHE:CE1	3.04	0.45
1:E:687:GLU:O	1:E:690:LYS:N	2.50	0.45
1:F:135:VAL:N	1:F:136:PRO:HD3	2.32	0.45
1:F:318:ILE:O	1:F:319:ALA:C	2.55	0.45
1:F:324:THR:HB	1:F:499:PRO:CA	2.45	0.45
2:O:102:ALA:HA	2:O:125:ILE:HG13	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:O:31:GLU:O	2:O:35:VAL:HG23	2.17	0.45
2:P:32:LEU:HD12	2:P:32:LEU:O	2.17	0.45
2:T:13:LYS:HZ1	2:T:65:PHE:CB	2.28	0.45
1:B:373:LYS:CD	1:B:376:GLN:NE2	2.75	0.45
1:B:413:LEU:HD23	1:B:413:LEU:N	2.32	0.45
1:B:628:PHE:CD1	1:B:645:TRP:CD1	3.04	0.45
1:C:333:LYS:C	1:C:335:ALA:H	2.20	0.45
1:C:359:PRO:CB	1:C:405:LEU:HD21	2.47	0.45
1:C:413:LEU:HD23	1:C:413:LEU:N	2.32	0.45
1:C:79:ILE:C	1:C:81:GLN:N	2.70	0.45
1:D:115:LYS:HB2	1:D:118:GLN:HG2	1.98	0.45
1:D:495:PHE:O	1:D:581:GLN:HG2	2.16	0.45
1:D:777:TYR:HA	1:D:780:LEU:HD23	1.98	0.45
1:E:323:ASN:O	1:E:324:THR:HG22	2.16	0.45
1:F:140:ARG:HA	1:F:140:ARG:NE	2.31	0.45
1:F:141:PHE:H	1:F:141:PHE:HD1	1.59	0.45
1:F:175:LYS:CB	1:F:175:LYS:HZ3	2.29	0.45
1:F:723:PHE:O	1:F:726:ILE:N	2.50	0.45
2:O:32:LEU:O	2:O:32:LEU:HD12	2.17	0.45
1:A:140:ARG:NE	1:A:140:ARG:HA	2.32	0.45
1:A:318:ILE:O	1:A:319:ALA:C	2.55	0.45
1:A:443:GLU:CD	1:A:458:LYS:HG2	2.35	0.45
1:B:271:LEU:HD13	1:B:276:PHE:CE2	2.51	0.45
1:B:318:ILE:CG2	1:B:322:LEU:HD12	2.45	0.45
1:C:456:LYS:HB2	1:C:469:PHE:O	2.16	0.45
1:C:96:ILE:O	1:C:100:LEU:HG	2.16	0.45
1:D:344:ALA:O	1:D:489:THR:HG22	2.16	0.45
1:D:721:SER:C	1:D:723:PHE:N	2.70	0.45
1:D:795:LYS:O	1:D:797:ILE:N	2.50	0.45
1:E:254:ARG:N	1:E:254:ARG:HD2	2.30	0.45
1:E:764:LEU:C	1:E:766:HIS:N	2.68	0.45
1:F:368:GLN:C	1:F:370:LEU:H	2.21	0.45
1:F:719:LYS:O	1:F:721:SER:N	2.50	0.45
1:F:735:VAL:HG12	1:F:741:ILE:HD13	1.97	0.45
1:F:794:GLN:HB3	1:F:794:GLN:HE21	1.63	0.45
2:O:143:GLN:O	2:O:147:ALA:CB	2.64	0.45
1:A:175:LYS:HZ3	1:A:175:LYS:CB	2.29	0.45
1:A:777:TYR:HA	1:A:780:LEU:CD2	2.47	0.45
1:B:175:LYS:O	1:B:176:GLY:C	2.55	0.45
1:B:333:LYS:C	1:B:335:ALA:H	2.21	0.45
1:B:616:GLU:HA	1:B:620:THR:HB	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:79:ILE:C	1:B:81:GLN:N	2.70	0.45
1:C:142:VAL:HG13	1:C:154:ILE:HD11	1.97	0.45
1:C:266:GLU:HA	1:C:269:ASN:HB3	1.99	0.45
1:C:609:GLU:O	1:C:610:MET:C	2.53	0.45
1:C:659:THR:O	1:C:660:SER:C	2.55	0.45
1:D:254:ARG:N	1:D:254:ARG:HD2	2.31	0.45
1:E:123:GLU:O	1:E:146:LYS:NZ	2.50	0.45
1:E:153:ILE:HG22	1:E:153:ILE:O	2.17	0.45
1:E:175:LYS:O	1:E:176:GLY:C	2.56	0.45
1:E:719:LYS:O	1:E:721:SER:N	2.50	0.45
1:E:723:PHE:O	1:E:726:ILE:N	2.50	0.45
1:F:213:LYS:HB2	1:F:240:ALA:CB	2.47	0.45
1:F:691:LYS:O	1:F:693:SER:N	2.50	0.45
1:F:79:ILE:C	1:F:81:GLN:N	2.69	0.45
2:P:146:THR:O	2:P:147:ALA:C	2.55	0.45
2:P:12:PHE:HE1	2:P:72:MET:HB3	1.82	0.45
2:R:143:GLN:O	2:R:147:ALA:CB	2.65	0.45
2:S:37:ARG:HH11	2:S:37:ARG:HG2	1.81	0.45
1:A:324:THR:HB	1:A:499:PRO:CA	2.46	0.45
1:A:333:LYS:C	1:A:335:ALA:H	2.21	0.45
1:A:712:PHE:HD1	1:A:716:LYS:HG2	1.79	0.45
1:B:315:PHE:CD2	1:B:560:LEU:HD22	2.52	0.45
1:B:463:THR:HB	1:B:467:GLU:H	1.82	0.45
1:C:173:ILE:HG13	1:C:242:SER:CB	2.36	0.45
1:C:461:LYS:HD2	1:C:461:LYS:HA	1.82	0.45
1:D:153:ILE:O	1:D:153:ILE:HG22	2.16	0.45
1:D:175:LYS:O	1:D:176:GLY:C	2.55	0.45
1:D:413:LEU:HD23	1:D:413:LEU:N	2.32	0.45
1:D:680:LYS:HG2	1:D:681:ASP:N	2.32	0.45
1:E:199:LEU:CD2	1:E:225:ILE:O	2.65	0.45
1:E:403:LEU:HD13	1:E:476:VAL:HG11	1.99	0.45
1:E:550:SER:N	1:E:553:GLN:NE2	2.46	0.45
1:F:116:GLU:O	1:F:117:LEU:HD22	2.17	0.45
1:F:270:LYS:HA	1:F:273:LYS:HB2	1.99	0.45
1:F:687:GLU:O	1:F:690:LYS:N	2.50	0.45
2:Q:31:GLU:O	2:Q:35:VAL:HG23	2.16	0.45
2:R:16:PHE:CZ	2:R:27:ILE:HG23	2.52	0.45
2:S:126:ARG:HH21	2:S:126:ARG:HG3	1.81	0.45
2:S:32:LEU:O	2:S:32:LEU:HD12	2.17	0.45
2:T:16:PHE:CE1	2:T:27:ILE:HD13	2.52	0.45
1:A:115:LYS:HB2	1:A:118:GLN:HG2	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:308:VAL:CB	1:A:311:HIS:ND1	2.71	0.44
1:A:456:LYS:HB2	1:A:470:ASN:HA	1.98	0.44
1:A:722:ILE:HD13	1:A:764:LEU:CD2	2.47	0.44
1:B:130:SER:C	1:B:132:GLY:H	2.20	0.44
1:B:153:ILE:HG22	1:B:153:ILE:O	2.16	0.44
1:B:630:ARG:CZ	2:P:83:GLU:CG	2.94	0.44
1:B:712:PHE:HB3	1:B:716:LYS:HG2	1.98	0.44
1:B:777:TYR:HA	1:B:780:LEU:HD23	1.98	0.44
1:B:795:LYS:O	1:B:797:ILE:N	2.51	0.44
1:C:116:GLU:O	1:C:117:LEU:HD22	2.17	0.44
1:C:443:GLU:OE2	1:C:458:LYS:HG2	2.17	0.44
1:C:597:ASN:HD21	1:C:601:GLU:HB2	1.79	0.44
1:D:123:GLU:O	1:D:146:LYS:NZ	2.50	0.44
1:E:116:GLU:O	1:E:117:LEU:HD22	2.17	0.44
1:E:135:VAL:N	1:E:136:PRO:HD3	2.31	0.44
1:E:209:LEU:HD23	1:E:260:TYR:CD2	2.52	0.44
1:E:296:LEU:O	1:E:301:ALA:HB2	2.17	0.44
1:E:516:VAL:O	1:E:519:THR:HG22	2.16	0.44
1:E:777:TYR:HA	1:E:780:LEU:CD2	2.47	0.44
1:E:89:ILE:HG22	1:E:93:VAL:CG1	2.10	0.44
1:F:199:LEU:CD2	1:F:225:ILE:O	2.65	0.44
1:F:353:LYS:H	1:F:368:GLN:HE22	1.65	0.44
1:F:359:PRO:O	1:F:361:ALA:N	2.50	0.44
1:F:478:ALA:HA	1:F:488:LEU:HG	1.98	0.44
1:F:700:TYR:O	1:F:703:ASP:N	2.51	0.44
1:A:694:VAL:HG23	2:O:18:LEU:HD21	1.97	0.44
2:P:101:SER:O	2:P:104:GLU:HG2	2.17	0.44
2:R:131:ASP:OD1	2:R:131:ASP:N	2.46	0.44
2:R:21:LYS:HD3	2:R:22:ASP:N	2.32	0.44
2:S:5:THR:O	2:S:8:GLN:N	2.50	0.44
2:T:32:LEU:HD12	2:T:32:LEU:O	2.16	0.44
1:A:359:PRO:CB	1:A:405:LEU:HD21	2.47	0.44
1:A:441:VAL:O	1:A:442:TYR:CD2	2.70	0.44
1:A:462:ILE:HG12	1:A:463:THR:H	1.81	0.44
1:A:508:ILE:CG2	1:A:509:PRO:HD2	2.46	0.44
1:A:583:ASN:ND2	1:A:587:PRO:HA	2.32	0.44
1:A:655:ASN:ND2	1:A:655:ASN:N	2.64	0.44
1:A:71:PHE:CB	1:A:108:ASP:HB2	2.46	0.44
1:B:134:LYS:CG	1:B:136:PRO:HD3	2.37	0.44
1:B:142:VAL:CG2	1:B:154:ILE:HG23	2.41	0.44
1:C:482:GLU:O	1:C:484:VAL:HG22	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:495:PHE:O	1:C:495:PHE:CD1	2.70	0.44
1:C:540:ARG:HD2	1:C:582:ASP:OD2	2.17	0.44
1:C:777:TYR:HA	1:C:780:LEU:HD23	1.98	0.44
1:D:403:LEU:HD13	1:D:476:VAL:HG11	1.99	0.44
1:D:478:ALA:HA	1:D:488:LEU:HG	2.00	0.44
1:D:508:ILE:CG2	1:D:509:PRO:HD2	2.46	0.44
1:D:789:ASN:O	1:D:792:VAL:HB	2.18	0.44
1:E:115:LYS:HB2	1:E:118:GLN:HG2	1.99	0.44
1:E:489:THR:OG1	1:E:490:ALA:N	2.49	0.44
1:E:720:ILE:HA	1:E:720:ILE:HD12	1.87	0.44
1:E:735:VAL:HG12	1:E:741:ILE:HD13	1.97	0.44
1:E:745:TYR:O	1:E:746:LYS:C	2.56	0.44
1:F:123:GLU:O	1:F:146:LYS:NZ	2.50	0.44
1:F:315:PHE:CD2	1:F:560:LEU:HD22	2.52	0.44
1:F:441:VAL:O	1:F:442:TYR:CD2	2.70	0.44
1:B:709:ASN:OD1	2:P:130:ILE:O	2.35	0.44
2:S:146:THR:O	2:S:148:LYS:N	2.51	0.44
1:A:116:GLU:O	1:A:117:LEU:HD22	2.17	0.44
1:A:191:GLU:C	1:A:193:LEU:N	2.70	0.44
1:A:795:LYS:O	1:A:797:ILE:N	2.50	0.44
1:A:79:ILE:C	1:A:81:GLN:N	2.69	0.44
1:B:687:GLU:O	1:B:690:LYS:N	2.51	0.44
1:C:508:ILE:HG22	1:C:509:PRO:HD2	1.99	0.44
1:C:579:THR:C	1:C:581:GLN:H	2.21	0.44
1:C:716:LYS:O	1:C:719:LYS:N	2.50	0.44
1:C:83:GLN:O	1:C:84:ASP:C	2.52	0.44
1:D:359:PRO:CB	1:D:405:LEU:HD21	2.47	0.44
1:D:463:THR:HB	1:D:467:GLU:H	1.81	0.44
1:E:96:ILE:O	1:E:100:LEU:HG	2.17	0.44
1:E:115:LYS:C	1:E:117:LEU:N	2.69	0.44
1:E:270:LYS:HA	1:E:273:LYS:HB2	1.98	0.44
1:E:315:PHE:CD2	1:E:560:LEU:HD22	2.52	0.44
1:E:324:THR:HB	1:E:499:PRO:CA	2.46	0.44
1:E:353:LYS:H	1:E:368:GLN:HE22	1.64	0.44
1:E:500:SER:HA	1:E:624:TYR:CD2	2.53	0.44
1:E:525:LYS:O	1:E:529:VAL:HG23	2.17	0.44
1:E:540:ARG:HD3	1:E:627:TYR:OH	2.18	0.44
1:E:611:THR:O	1:E:615:ILE:HG13	2.18	0.44
1:E:323:ASN:ND2	1:E:624:TYR:OH	2.32	0.44
1:E:716:LYS:O	1:E:719:LYS:N	2.51	0.44
1:E:693:SER:OG	1:E:731:GLU:OE1	2.34	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:732:ILE:HG23	1:E:749:PHE:HD1	1.82	0.44
1:E:789:ASN:O	1:E:792:VAL:HB	2.18	0.44
1:F:122:GLU:HG3	1:F:147:ARG:H	1.82	0.44
1:F:716:LYS:O	1:F:719:LYS:N	2.51	0.44
2:O:21:LYS:HD3	2:O:22:ASP:N	2.32	0.44
2:Q:16:PHE:CE1	2:Q:27:ILE:HD13	2.53	0.44
2:Q:5:THR:O	2:Q:8:GLN:N	2.50	0.44
2:R:146:THR:O	2:R:147:ALA:C	2.55	0.44
2:R:94:LYS:NZ	2:R:94:LYS:CB	2.76	0.44
2:S:12:PHE:HE1	2:S:72:MET:HB3	1.81	0.44
2:S:16:PHE:CE1	2:S:27:ILE:HD13	2.53	0.44
2:T:121:VAL:O	2:T:122:ASP:C	2.55	0.44
1:A:173:ILE:HG13	1:A:242:SER:CB	2.37	0.44
1:B:96:ILE:O	1:B:100:LEU:HG	2.17	0.44
1:B:88:LYS:NZ	1:B:172:GLU:CD	2.70	0.44
1:B:97:TYR:CE2	1:B:102:GLY:HA3	2.53	0.44
1:C:178:SER:OG	1:C:179:LEU:CD2	2.65	0.44
1:C:270:LYS:HA	1:C:273:LYS:HB2	1.99	0.44
1:C:298:GLY:C	1:C:300:LYS:H	2.21	0.44
1:C:318:ILE:CG2	1:C:322:LEU:HD12	2.45	0.44
1:C:323:ASN:ND2	1:C:624:TYR:OH	2.35	0.44
1:C:75:THR:C	1:C:77:ASP:N	2.70	0.44
1:C:777:TYR:CE1	1:C:782:PHE:CE1	3.05	0.44
1:D:112:VAL:O	1:D:114:HIS:N	2.49	0.44
1:D:495:PHE:CD1	1:D:495:PHE:O	2.70	0.44
1:D:656:THR:O	1:D:755:ARG:HD2	2.16	0.44
1:E:112:VAL:O	1:E:114:HIS:N	2.49	0.44
1:E:715:GLU:HA	1:E:718:ARG:NH2	2.32	0.44
1:F:333:LYS:C	1:F:335:ALA:H	2.21	0.44
1:F:432:TYR:HE1	1:F:445:ARG:CZ	2.31	0.44
1:F:764:LEU:O	1:F:766:HIS:N	2.50	0.44
2:P:73:ALA:O	2:P:75:LYS:N	2.50	0.44
2:Q:16:PHE:CZ	2:Q:27:ILE:HG23	2.52	0.44
2:Q:9:ILE:HD12	2:Q:69:LEU:HD21	2.00	0.44
2:R:70:THR:O	2:R:71:MET:C	2.53	0.44
2:S:5:THR:O	2:S:6:GLU:C	2.56	0.44
2:T:12:PHE:CE1	2:T:72:MET:HG3	2.52	0.44
1:A:238:GLN:C	1:A:240:ALA:N	2.71	0.44
1:A:432:TYR:HE1	1:A:445:ARG:CZ	2.31	0.44
1:A:315:PHE:CD2	1:A:560:LEU:HD22	2.53	0.44
1:A:628:PHE:CD1	1:A:645:TRP:CD1	3.04	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:697:ILE:C	1:A:699:GLY:N	2.70	0.44
1:A:716:LYS:O	1:A:719:LYS:N	2.50	0.44
1:A:735:VAL:O	1:A:738:SER:CB	2.65	0.44
1:C:191:GLU:O	1:C:192:PHE:C	2.56	0.44
1:C:199:LEU:CD2	1:C:225:ILE:O	2.65	0.44
1:C:345:THR:HB	1:C:491:ASP:CB	2.47	0.44
1:C:359:PRO:HD2	1:C:444:PHE:CE2	2.52	0.44
1:C:441:VAL:O	1:C:442:TYR:CD2	2.70	0.44
1:C:456:LYS:CB	1:C:470:ASN:C	2.86	0.44
1:C:628:PHE:CD1	1:C:645:TRP:CD1	3.05	0.44
1:C:658:PRO:HG3	1:C:752:LEU:HD22	1.99	0.44
1:D:266:GLU:HA	1:D:269:ASN:HB3	2.00	0.44
1:D:557:LEU:HD11	1:D:575:VAL:HG11	2.00	0.44
1:E:508:ILE:HG22	1:E:509:PRO:HD2	1.99	0.44
1:F:115:LYS:C	1:F:117:LEU:N	2.70	0.44
1:F:99:GLU:OE2	1:F:284:LYS:HD2	2.18	0.44
1:F:715:GLU:OE1	1:F:767:GLN:NE2	2.50	0.44
1:F:732:ILE:HG23	1:F:749:PHE:HD1	1.83	0.44
1:F:75:THR:C	1:F:77:ASP:N	2.70	0.44
1:F:777:TYR:HA	1:F:780:LEU:CD2	2.47	0.44
2:O:146:THR:O	2:O:147:ALA:C	2.55	0.44
2:O:12:PHE:HE1	2:O:72:MET:HB3	1.82	0.44
2:P:32:LEU:HD21	2:P:71:MET:HE2	1.99	0.44
2:S:101:SER:O	2:S:104:GLU:HG2	2.17	0.44
2:S:70:THR:C	2:S:72:MET:N	2.71	0.44
1:A:134:LYS:CG	1:A:136:PRO:HD3	2.37	0.44
1:A:735:VAL:HG12	1:A:741:ILE:HD13	1.97	0.44
1:A:764:LEU:O	1:A:766:HIS:N	2.50	0.44
1:B:109:ILE:HD13	1:B:157:LYS:HZ2	1.82	0.44
1:B:266:GLU:HA	1:B:269:ASN:HB3	1.99	0.44
1:B:515:LYS:HZ3	1:B:516:VAL:HG23	1.83	0.44
1:B:597:ASN:HD21	1:B:601:GLU:HB2	1.80	0.44
1:B:697:ILE:C	1:B:699:GLY:N	2.69	0.44
1:B:716:LYS:O	1:B:719:LYS:N	2.51	0.44
1:B:794:GLN:HB3	1:B:794:GLN:HE21	1.62	0.44
1:C:153:ILE:HG22	1:C:153:ILE:O	2.16	0.44
1:C:210:PHE:HD2	1:C:210:PHE:H	1.66	0.44
1:C:311:HIS:O	1:C:314:ALA:HB3	2.16	0.44
1:C:323:ASN:O	1:C:324:THR:HG22	2.18	0.44
1:C:403:LEU:HD13	1:C:476:VAL:HG11	2.00	0.44
1:C:719:LYS:O	1:C:721:SER:N	2.51	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:686:ASP:CB	1:C:739:LYS:HD2	2.46	0.44
1:C:773:PHE:O	1:C:775:LEU:N	2.50	0.44
1:D:296:LEU:O	1:D:301:ALA:HB2	2.18	0.44
1:D:318:ILE:O	1:D:319:ALA:C	2.55	0.44
1:D:693:SER:OG	1:D:731:GLU:OE1	2.36	0.44
1:E:333:LYS:C	1:E:335:ALA:H	2.21	0.44
1:E:540:ARG:HD2	1:E:582:ASP:OD2	2.18	0.44
1:E:777:TYR:CE1	1:E:782:PHE:CE1	3.05	0.44
1:E:777:TYR:HA	1:E:780:LEU:HD23	1.99	0.44
1:F:186:LYS:O	1:F:186:LYS:HG2	2.16	0.44
1:F:397:GLU:O	1:F:398:ILE:HD13	2.18	0.44
1:F:88:LYS:NZ	1:F:172:GLU:CD	2.70	0.44
2:P:16:PHE:CZ	2:P:27:ILE:HG23	2.52	0.44
2:R:5:THR:O	2:R:6:GLU:C	2.56	0.44
2:R:5:THR:O	2:R:8:GLN:N	2.50	0.44
1:D:630:ARG:CZ	2:R:83:GLU:CG	2.96	0.44
2:T:101:SER:O	2:T:104:GLU:HG2	2.17	0.44
2:T:37:ARG:HH11	2:T:37:ARG:HG2	1.82	0.44
1:A:180:ASP:O	1:A:183:SER:N	2.46	0.44
1:A:199:LEU:CD2	1:A:225:ILE:O	2.65	0.44
1:A:298:GLY:C	1:A:300:LYS:H	2.21	0.44
1:A:456:LYS:HB2	1:A:469:PHE:O	2.18	0.44
1:B:107:THR:CG2	1:B:115:LYS:HD2	2.48	0.44
1:B:441:VAL:O	1:B:442:TYR:CD2	2.71	0.44
1:B:495:PHE:CD1	1:B:495:PHE:C	2.91	0.44
1:B:672:ARG:HA	1:B:672:ARG:HD3	1.69	0.44
1:B:718:ARG:HH11	1:B:767:GLN:NE2	2.15	0.44
1:D:134:LYS:C	1:D:136:PRO:CD	2.83	0.44
1:D:579:THR:C	1:D:581:GLN:H	2.21	0.44
1:E:405:LEU:CD1	1:E:405:LEU:N	2.81	0.44
1:E:478:ALA:HA	1:E:488:LEU:HG	2.00	0.44
1:E:697:ILE:C	1:E:699:GLY:H	2.21	0.44
1:F:658:PRO:HG3	1:F:752:LEU:HD22	2.00	0.44
1:F:659:THR:O	1:F:660:SER:C	2.55	0.44
1:F:693:SER:OG	1:F:731:GLU:OE1	2.36	0.44
1:F:697:ILE:C	1:F:699:GLY:N	2.71	0.44
2:O:92:PHE:C	2:O:94:LYS:N	2.71	0.44
1:B:694:VAL:HG23	2:P:18:LEU:HD21	1.98	0.44
1:C:709:ASN:OD1	2:Q:130:ILE:O	2.36	0.44
1:A:192:PHE:HB3	1:A:196:ILE:CD1	2.48	0.44
1:A:463:THR:HB	1:A:467:GLU:H	1.82	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:134:LYS:C	1:B:136:PRO:CD	2.85	0.44
1:B:123:GLU:O	1:B:146:LYS:NZ	2.50	0.44
1:B:223:LYS:HZ3	1:B:228:ASN:HB3	1.82	0.44
1:B:305:SER:OG	1:B:306:GLY:N	2.50	0.44
1:B:629:ASN:ND2	1:B:629:ASN:C	2.59	0.44
1:C:295:VAL:HB	1:C:603:ILE:CG2	2.48	0.44
1:C:697:ILE:C	1:C:699:GLY:N	2.70	0.44
1:C:71:PHE:CG	1:C:73:ASN:HB2	2.53	0.44
1:C:795:LYS:O	1:C:797:ILE:N	2.51	0.44
1:D:199:LEU:CD2	1:D:225:ILE:O	2.65	0.44
1:D:397:GLU:O	1:D:398:ILE:HD13	2.18	0.44
1:D:441:VAL:O	1:D:442:TYR:CD2	2.71	0.44
1:D:732:ILE:HG23	1:D:749:PHE:HD1	1.83	0.44
1:D:752:LEU:O	1:D:756:ILE:HG12	2.18	0.44
1:E:639:ASN:ND2	1:E:639:ASN:N	2.66	0.44
1:E:795:LYS:O	1:E:797:ILE:N	2.51	0.44
1:F:97:TYR:CE2	1:F:102:GLY:HA3	2.52	0.44
1:F:142:VAL:CG2	1:F:154:ILE:HG23	2.40	0.44
1:F:175:LYS:HB2	1:F:175:LYS:HZ3	1.74	0.44
1:F:501:LEU:HD22	2:T:112:LEU:CD2	2.41	0.44
1:F:532:LEU:HD23	1:F:532:LEU:HA	1.84	0.44
1:F:745:TYR:O	1:F:746:LYS:C	2.56	0.44
2:P:37:ARG:HG2	2:P:37:ARG:HH11	1.82	0.44
2:Q:12:PHE:HE1	2:Q:72:MET:HB3	1.82	0.44
2:R:102:ALA:HA	2:R:125:ILE:HG13	1.99	0.44
2:R:126:ARG:HH21	2:R:126:ARG:HG3	1.82	0.44
2:R:36:MET:HE3	2:R:43:PRO:HG3	2.00	0.44
2:S:131:ASP:N	2:S:131:ASP:OD1	2.45	0.44
1:A:405:LEU:N	1:A:405:LEU:CD1	2.81	0.44
1:A:630:ARG:CZ	2:O:83:GLU:CG	2.94	0.44
1:A:658:PRO:HG3	1:A:752:LEU:HD22	1.98	0.44
1:A:659:THR:O	1:A:660:SER:C	2.56	0.44
1:A:66:LEU:CD1	1:A:103:GLU:HA	2.48	0.44
1:A:693:SER:OG	1:A:731:GLU:OE1	2.36	0.44
1:B:209:LEU:HD23	1:B:260:TYR:CD2	2.53	0.44
1:B:368:GLN:C	1:B:370:LEU:H	2.21	0.44
1:D:140:ARG:NE	1:D:140:ARG:HA	2.31	0.44
1:D:173:ILE:HG13	1:D:242:SER:CB	2.36	0.44
1:D:405:LEU:N	1:D:405:LEU:CD1	2.80	0.44
1:D:720:ILE:HD12	1:D:720:ILE:HA	1.87	0.44
1:E:115:LYS:HB2	1:E:118:GLN:CG	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:345:THR:HB	1:E:491:ASP:CB	2.47	0.44
1:E:443:GLU:HG2	1:E:458:LYS:HZ1	1.78	0.44
1:E:691:LYS:O	1:E:693:SER:N	2.51	0.44
1:F:238:GLN:C	1:F:240:ALA:N	2.71	0.44
1:F:298:GLY:C	1:F:300:LYS:H	2.21	0.44
2:P:124:MET:O	2:P:125:ILE:C	2.56	0.44
2:P:13:LYS:HZ1	2:P:65:PHE:CB	2.30	0.44
2:P:5:THR:O	2:P:8:GLN:N	2.51	0.44
2:P:92:PHE:C	2:P:94:LYS:N	2.71	0.44
1:A:115:LYS:C	1:A:117:LEU:N	2.71	0.43
1:A:136:PRO:HG2	1:A:139:SER:HG	1.83	0.43
1:A:368:GLN:C	1:A:370:LEU:H	2.21	0.43
1:A:405:LEU:HD13	1:A:453:VAL:CG2	2.38	0.43
1:A:478:ALA:HA	1:A:488:LEU:HG	2.00	0.43
1:A:532:LEU:HA	1:A:532:LEU:HD23	1.86	0.43
1:A:732:ILE:HG23	1:A:749:PHE:HD1	1.82	0.43
1:B:109:ILE:HG13	1:B:109:ILE:H	1.64	0.43
1:B:109:ILE:HD13	1:B:157:LYS:HZ3	1.83	0.43
1:B:403:LEU:HD13	1:B:476:VAL:HG11	2.00	0.43
1:B:721:SER:C	1:B:723:PHE:N	2.71	0.43
1:C:610:MET:O	1:C:614:PHE:N	2.38	0.43
1:C:687:GLU:O	1:C:690:LYS:N	2.50	0.43
1:C:700:TYR:O	1:C:703:ASP:N	2.51	0.43
1:C:722:ILE:HD13	1:C:764:LEU:HD23	1.99	0.43
1:D:186:LYS:HZ1	1:D:234:LEU:CD1	2.31	0.43
1:D:443:GLU:OE2	1:D:458:LYS:HG2	2.18	0.43
1:E:443:GLU:OE2	1:E:458:LYS:HG2	2.17	0.43
1:E:71:PHE:CG	1:E:73:ASN:HB2	2.53	0.43
1:E:764:LEU:O	1:E:766:HIS:N	2.51	0.43
1:F:446:ILE:HG13	1:F:452:GLU:O	2.17	0.43
1:F:482:GLU:O	1:F:484:VAL:HG22	2.18	0.43
1:F:771:ILE:HG12	1:F:771:ILE:H	1.57	0.43
1:F:777:TYR:HA	1:F:780:LEU:HD23	1.98	0.43
2:Q:12:PHE:CE1	2:Q:72:MET:HG3	2.53	0.43
2:R:97:ASN:O	2:R:99:TYR:CD1	2.71	0.43
2:S:30:LYS:H	2:S:30:LYS:CD	2.20	0.43
1:A:153:ILE:O	1:A:153:ILE:HG22	2.17	0.43
1:A:234:LEU:HG	1:A:235:THR:N	2.33	0.43
1:A:403:LEU:HD13	1:A:476:VAL:HG11	2.00	0.43
1:A:456:LYS:HB3	1:A:471:TRP:N	2.33	0.43
1:A:540:ARG:HD2	1:A:582:ASP:OD2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:432:TYR:HE1	1:C:445:ARG:CZ	2.31	0.43
1:C:446:ILE:HD11	1:C:451:ASN:HB2	1.99	0.43
1:C:462:ILE:HG12	1:C:463:THR:H	1.82	0.43
1:D:438:ASN:HA	1:D:438:ASN:HD22	1.53	0.43
1:D:639:ASN:ND2	1:D:639:ASN:N	2.66	0.43
1:D:667:LEU:O	1:D:668:SER:C	2.56	0.43
1:E:142:VAL:HG13	1:E:154:ILE:HD11	1.96	0.43
1:E:176:GLY:C	1:E:178:SER:N	2.67	0.43
1:E:210:PHE:H	1:E:210:PHE:HD2	1.66	0.43
1:E:432:TYR:HE1	1:E:445:ARG:CZ	2.31	0.43
1:F:66:LEU:CD1	1:F:103:GLU:HA	2.48	0.43
1:F:234:LEU:HG	1:F:235:THR:N	2.33	0.43
1:F:403:LEU:HD13	1:F:476:VAL:HG11	2.00	0.43
2:O:16:PHE:CE1	2:O:27:ILE:HD13	2.52	0.43
2:Q:5:THR:O	2:Q:6:GLU:C	2.56	0.43
1:D:694:VAL:HG22	2:R:18:LEU:HD21	2.00	0.43
2:R:9:ILE:HD12	2:R:69:LEU:HD21	2.00	0.43
1:A:266:GLU:HA	1:A:269:ASN:HB3	1.99	0.43
1:A:558:ASP:O	1:A:561:ASN:N	2.52	0.43
1:A:700:TYR:O	1:A:703:ASP:N	2.51	0.43
1:A:719:LYS:O	1:A:721:SER:N	2.50	0.43
1:B:298:GLY:C	1:B:300:LYS:H	2.22	0.43
1:B:359:PRO:CB	1:B:405:LEU:HD21	2.49	0.43
1:B:432:TYR:HE1	1:B:445:ARG:CZ	2.31	0.43
1:B:478:ALA:HA	1:B:488:LEU:HG	2.00	0.43
1:B:735:VAL:O	1:B:738:SER:CB	2.66	0.43
1:C:115:LYS:C	1:C:117:LEU:N	2.71	0.43
1:C:175:LYS:O	1:C:176:GLY:C	2.55	0.43
1:C:359:PRO:HB2	1:C:405:LEU:HD21	2.00	0.43
1:C:558:ASP:O	1:C:561:ASN:N	2.52	0.43
1:C:83:GLN:C	1:C:85:LEU:N	2.72	0.43
1:D:270:LYS:HA	1:D:273:LYS:HB2	1.99	0.43
1:D:298:GLY:C	1:D:300:LYS:H	2.21	0.43
1:D:323:ASN:O	1:D:324:THR:HG22	2.18	0.43
1:D:432:TYR:HE1	1:D:445:ARG:CZ	2.31	0.43
1:D:657:ILE:HG21	1:D:704:TYR:CE1	2.54	0.43
1:D:697:ILE:C	1:D:699:GLY:H	2.22	0.43
1:D:71:PHE:CG	1:D:73:ASN:HB2	2.53	0.43
1:E:255:THR:O	1:E:257:LEU:N	2.52	0.43
1:E:559:ARG:HA	1:E:559:ARG:HD2	1.79	0.43
1:F:109:ILE:HG13	1:F:109:ILE:H	1.64	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:152:LEU:CD2	1:F:154:ILE:HD11	2.40	0.43
1:F:595:ILE:HD12	1:F:614:PHE:CE2	2.54	0.43
1:F:639:ASN:ND2	1:F:639:ASN:N	2.66	0.43
1:F:795:LYS:O	1:F:797:ILE:N	2.50	0.43
1:F:88:LYS:HZ2	1:F:172:GLU:CD	2.21	0.43
2:O:5:THR:O	2:O:8:GLN:N	2.50	0.43
2:Q:146:THR:O	2:Q:147:ALA:C	2.56	0.43
2:Q:91:VAL:HG12	2:Q:92:PHE:N	2.33	0.43
2:Q:94:LYS:CB	2:Q:94:LYS:NZ	2.76	0.43
2:R:70:THR:C	2:R:72:MET:N	2.71	0.43
2:T:105:LEU:HB2	2:T:125:ILE:HD11	2.01	0.43
2:T:143:GLN:O	2:T:147:ALA:CB	2.66	0.43
1:A:134:LYS:C	1:A:136:PRO:CD	2.85	0.43
1:A:482:GLU:O	1:A:484:VAL:HG22	2.19	0.43
1:A:671:ARG:NH1	1:A:677:GLY:HA3	2.33	0.43
1:A:745:TYR:O	1:A:746:LYS:C	2.55	0.43
1:B:142:VAL:HG13	1:B:154:ILE:HD11	1.97	0.43
1:B:691:LYS:O	1:B:693:SER:N	2.51	0.43
1:B:71:PHE:CG	1:B:73:ASN:HB2	2.53	0.43
1:C:97:TYR:CE2	1:C:102:GLY:HA3	2.53	0.43
1:C:130:SER:C	1:C:132:GLY:H	2.22	0.43
1:C:197:LYS:NZ	1:C:267:TYR:CD2	2.87	0.43
1:C:397:GLU:O	1:C:398:ILE:HD13	2.18	0.43
1:C:443:GLU:O	1:C:455:TYR:HA	2.17	0.43
1:C:715:GLU:OE1	1:C:767:GLN:NE2	2.49	0.43
1:D:123:GLU:CG	1:D:124:GLU:N	2.71	0.43
1:D:581:GLN:NE2	1:D:629:ASN:N	2.60	0.43
1:D:723:PHE:O	1:D:726:ILE:N	2.50	0.43
1:E:463:THR:HB	1:E:467:GLU:H	1.83	0.43
1:F:210:PHE:H	1:F:210:PHE:HD2	1.66	0.43
1:F:186:LYS:NZ	1:F:234:LEU:HD12	2.33	0.43
1:F:405:LEU:CD1	1:F:405:LEU:N	2.82	0.43
1:F:540:ARG:HD2	1:F:582:ASP:OD2	2.19	0.43
2:Q:101:SER:O	2:Q:104:GLU:HG2	2.17	0.43
2:Q:32:LEU:HD12	2:Q:32:LEU:O	2.17	0.43
2:S:92:PHE:C	2:S:94:LYS:N	2.71	0.43
2:T:101:SER:OG	2:T:104:GLU:HG2	2.18	0.43
1:A:209:LEU:HD23	1:A:260:TYR:CD2	2.54	0.43
1:A:687:GLU:O	1:A:690:LYS:N	2.52	0.43
1:B:255:THR:O	1:B:257:LEU:N	2.52	0.43
1:B:318:ILE:O	1:B:319:ALA:C	2.56	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:405:LEU:HD13	1:B:453:VAL:CG2	2.39	0.43
1:B:405:LEU:N	1:B:405:LEU:CD1	2.81	0.43
1:B:773:PHE:O	1:B:775:LEU:N	2.52	0.43
1:B:790:PHE:O	1:B:793:PHE:HB3	2.18	0.43
1:C:173:ILE:HG23	1:C:174:GLY:H	1.83	0.43
1:C:581:GLN:NE2	1:C:629:ASN:N	2.61	0.43
1:D:115:LYS:HB2	1:D:118:GLN:CG	2.48	0.43
1:D:311:HIS:O	1:D:314:ALA:HB3	2.17	0.43
1:D:443:GLU:O	1:D:455:TYR:HA	2.18	0.43
1:D:482:GLU:O	1:D:484:VAL:HG22	2.19	0.43
1:D:716:LYS:O	1:D:719:LYS:N	2.50	0.43
1:D:773:PHE:O	1:D:775:LEU:N	2.51	0.43
1:E:234:LEU:HG	1:E:235:THR:N	2.34	0.43
1:E:238:GLN:C	1:E:240:ALA:N	2.71	0.43
1:E:311:HIS:O	1:E:314:ALA:HB3	2.19	0.43
1:E:318:ILE:O	1:E:319:ALA:C	2.57	0.43
1:E:595:ILE:HD12	1:E:614:PHE:CE2	2.53	0.43
1:F:443:GLU:O	1:F:455:TYR:HA	2.19	0.43
2:O:16:PHE:CZ	2:O:27:ILE:HG23	2.53	0.43
2:R:32:LEU:HD12	2:R:32:LEU:O	2.18	0.43
2:S:143:GLN:O	2:S:147:ALA:CB	2.66	0.43
2:T:55:VAL:HB	2:T:67:GLU:OE1	2.18	0.43
1:A:141:PHE:H	1:A:141:PHE:HD1	1.59	0.43
1:A:142:VAL:CG2	1:A:154:ILE:HG23	2.41	0.43
1:A:443:GLU:O	1:A:455:TYR:HA	2.18	0.43
1:B:611:THR:O	1:B:615:ILE:HG13	2.18	0.43
1:B:655:ASN:ND2	1:B:655:ASN:N	2.66	0.43
1:B:693:SER:OG	1:B:731:GLU:OE1	2.36	0.43
1:C:557:LEU:HD11	1:C:575:VAL:HG11	2.01	0.43
1:D:628:PHE:CD1	1:D:645:TRP:CD1	3.07	0.43
1:D:773:PHE:O	1:D:774:LYS:C	2.57	0.43
1:E:266:GLU:HA	1:E:269:ASN:HB3	2.00	0.43
1:E:443:GLU:O	1:E:455:TYR:HA	2.18	0.43
1:F:180:ASP:O	1:F:183:SER:N	2.45	0.43
1:F:721:SER:C	1:F:723:PHE:N	2.70	0.43
2:P:126:ARG:HH21	2:P:126:ARG:HG3	1.84	0.43
2:P:70:THR:C	2:P:72:MET:N	2.72	0.43
2:P:91:VAL:HG12	2:P:92:PHE:N	2.33	0.43
1:D:709:ASN:OD1	2:R:130:ILE:O	2.37	0.43
2:R:146:THR:O	2:R:148:LYS:N	2.52	0.43
1:A:97:TYR:CE2	1:A:102:GLY:HA3	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:130:SER:HB2	1:A:170:TYR:CZ	2.53	0.43
1:B:461:LYS:HA	1:B:461:LYS:HD2	1.82	0.43
1:B:520:PRO:HG2	1:B:521:ASN:N	2.33	0.43
1:B:714:GLN:O	1:B:715:GLU:C	2.57	0.43
1:B:735:VAL:HG12	1:B:741:ILE:HD13	1.96	0.43
1:C:115:LYS:HB2	1:C:118:GLN:CG	2.49	0.43
1:C:97:TYR:CE1	1:C:178:SER:CB	3.02	0.43
1:C:209:LEU:HD23	1:C:260:TYR:CD2	2.54	0.43
1:C:234:LEU:HG	1:C:235:THR:N	2.33	0.43
1:D:234:LEU:HG	1:D:235:THR:N	2.33	0.43
1:D:209:LEU:HD23	1:D:260:TYR:CD2	2.54	0.43
1:D:333:LYS:C	1:D:335:ALA:H	2.21	0.43
1:E:255:THR:C	1:E:257:LEU:N	2.72	0.43
1:E:771:ILE:HG12	1:E:771:ILE:H	1.57	0.43
1:F:508:ILE:HG22	1:F:509:PRO:HD2	2.00	0.43
1:F:680:LYS:HG2	1:F:681:ASP:N	2.34	0.43
2:P:145:MET:HB3	2:P:146:THR:H	1.63	0.43
2:P:16:PHE:CE1	2:P:27:ILE:HD13	2.54	0.43
2:Q:92:PHE:C	2:Q:94:LYS:N	2.71	0.43
1:D:665:LYS:HG3	2:R:11:GLU:CD	2.39	0.43
1:A:170:TYR:O	1:A:172:GLU:N	2.52	0.43
1:A:196:ILE:HA	1:A:199:LEU:HG	1.99	0.43
1:A:680:LYS:HG2	1:A:681:ASP:N	2.34	0.43
1:B:170:TYR:O	1:B:172:GLU:N	2.52	0.43
1:B:443:GLU:HG3	1:B:458:LYS:CG	2.48	0.43
1:B:443:GLU:O	1:B:455:TYR:HA	2.18	0.43
1:B:508:ILE:HG22	1:B:509:PRO:HD2	2.00	0.43
1:B:550:SER:N	1:B:553:GLN:NE2	2.44	0.43
1:B:773:PHE:O	1:B:774:LYS:C	2.57	0.43
1:B:83:GLN:C	1:B:85:LEU:N	2.72	0.43
1:C:305:SER:OG	1:C:306:GLY:N	2.50	0.43
1:C:478:ALA:HA	1:C:488:LEU:HG	2.00	0.43
1:D:210:PHE:H	1:D:210:PHE:HD2	1.67	0.43
1:D:238:GLN:C	1:D:240:ALA:N	2.71	0.43
1:D:255:THR:O	1:D:257:LEU:N	2.51	0.43
1:D:305:SER:OG	1:D:306:GLY:N	2.49	0.43
1:D:373:LYS:CD	1:D:376:GLN:NE2	2.76	0.43
1:E:170:TYR:O	1:E:172:GLU:N	2.52	0.43
1:E:368:GLN:C	1:E:370:LEU:H	2.21	0.43
1:E:532:LEU:HA	1:E:532:LEU:HD23	1.85	0.43
1:E:773:PHE:O	1:E:774:LYS:C	2.57	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:88:LYS:NZ	1:E:172:GLU:CD	2.72	0.43
1:F:701:LEU:HD23	1:F:701:LEU:HA	1.80	0.43
1:F:773:PHE:O	1:F:775:LEU:N	2.51	0.43
1:F:789:ASN:O	1:F:792:VAL:HB	2.19	0.43
2:O:9:ILE:HD12	2:O:69:LEU:HD21	2.01	0.43
2:P:101:SER:OG	2:P:104:GLU:HG2	2.19	0.43
2:Q:70:THR:C	2:Q:72:MET:N	2.72	0.43
2:R:44:THR:OG1	2:R:47:GLU:HB2	2.18	0.43
1:A:610:MET:O	1:A:614:PHE:N	2.37	0.43
1:A:657:ILE:HA	1:A:658:PRO:HD2	1.87	0.43
1:A:75:THR:O	1:A:77:ASP:N	2.51	0.43
1:C:350:VAL:HG12	1:C:352:GLY:H	1.84	0.43
1:C:720:ILE:HA	1:C:720:ILE:HD12	1.87	0.43
1:C:755:ARG:O	1:C:756:ILE:C	2.57	0.43
1:D:97:TYR:CE2	1:D:102:GLY:HA3	2.53	0.43
1:D:343:VAL:HG12	1:D:344:ALA:O	2.17	0.43
1:D:508:ILE:HG22	1:D:509:PRO:HD2	2.01	0.43
1:D:550:SER:N	1:D:553:GLN:NE2	2.44	0.43
1:E:659:THR:O	1:E:660:SER:C	2.57	0.43
1:F:359:PRO:CB	1:F:405:LEU:HD21	2.48	0.43
1:F:628:PHE:CD2	1:F:628:PHE:N	2.87	0.43
1:F:655:ASN:ND2	1:F:655:ASN:N	2.65	0.43
2:O:12:PHE:CE1	2:O:72:MET:HG3	2.54	0.43
2:O:146:THR:O	2:O:148:LYS:N	2.51	0.43
2:S:105:LEU:HB2	2:S:125:ILE:HD11	2.01	0.43
2:S:12:PHE:CE1	2:S:72:MET:HG3	2.53	0.43
2:T:146:THR:O	2:T:148:LYS:N	2.52	0.43
2:T:32:LEU:HD21	2:T:71:MET:HE1	2.00	0.43
2:T:5:THR:O	2:T:8:GLN:N	2.51	0.43
2:T:70:THR:C	2:T:72:MET:N	2.72	0.43
1:A:182:ILE:O	1:A:187:SER:OG	2.36	0.43
1:A:348:LEU:HD23	1:A:348:LEU:HA	1.82	0.43
1:A:581:GLN:HE21	1:A:629:ASN:N	2.17	0.43
1:A:500:SER:HA	1:A:624:TYR:CD2	2.54	0.43
1:A:71:PHE:CG	1:A:73:ASN:HB2	2.53	0.43
1:A:764:LEU:C	1:A:766:HIS:N	2.72	0.43
1:A:773:PHE:O	1:A:774:LYS:C	2.57	0.43
1:B:238:GLN:C	1:B:240:ALA:N	2.72	0.43
1:B:558:ASP:O	1:B:561:ASN:N	2.52	0.43
1:C:405:LEU:CD1	1:C:405:LEU:N	2.82	0.43
1:C:493:ASP:OD2	1:C:577:HIS:NE2	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:752:LEU:O	1:C:756:ILE:HG12	2.18	0.43
1:D:170:TYR:O	1:D:172:GLU:N	2.52	0.43
1:D:295:VAL:HB	1:D:603:ILE:CG2	2.46	0.43
1:D:625:LEU:C	1:D:625:LEU:CD1	2.84	0.43
1:D:745:TYR:O	1:D:746:LYS:C	2.56	0.43
1:E:107:THR:CG2	1:E:115:LYS:HD2	2.47	0.43
1:E:279:ILE:HG22	1:E:283:LEU:HD11	2.01	0.43
1:E:558:ASP:O	1:E:561:ASN:N	2.52	0.43
1:E:685:LYS:HA	1:E:685:LYS:HD3	1.86	0.43
1:E:731:GLU:HA	1:E:734:ASN:HB2	2.01	0.43
1:F:209:LEU:HD23	1:F:260:TYR:CD2	2.54	0.43
1:F:223:LYS:HZ1	1:F:228:ASN:HB3	1.81	0.43
1:F:755:ARG:O	1:F:756:ILE:C	2.57	0.43
2:O:5:THR:O	2:O:6:GLU:C	2.57	0.43
2:P:146:THR:O	2:P:148:LYS:N	2.52	0.43
2:T:92:PHE:C	2:T:94:LYS:N	2.71	0.43
1:A:173:ILE:HG23	1:A:174:GLY:H	1.84	0.42
1:A:508:ILE:HG22	1:A:509:PRO:HD2	2.00	0.42
1:B:210:PHE:HD2	1:B:210:PHE:H	1.67	0.42
1:B:234:LEU:HG	1:B:235:THR:N	2.34	0.42
1:B:719:LYS:O	1:B:721:SER:N	2.52	0.42
1:C:155:ASN:C	1:C:156:ILE:HG13	2.39	0.42
1:C:318:ILE:O	1:C:319:ALA:C	2.56	0.42
1:C:380:VAL:C	1:C:382:LYS:H	2.22	0.42
1:C:495:PHE:C	1:C:495:PHE:CD1	2.93	0.42
1:C:515:LYS:HZ3	1:C:516:VAL:HG23	1.84	0.42
1:D:115:LYS:C	1:D:117:LEU:N	2.71	0.42
1:D:184:LYS:HZ1	1:D:191:GLU:CB	2.29	0.42
1:D:558:ASP:O	1:D:561:ASN:N	2.52	0.42
1:D:771:ILE:HG12	1:D:771:ILE:H	1.57	0.42
1:E:66:LEU:CD1	1:E:103:GLU:HA	2.48	0.42
1:E:667:LEU:O	1:E:668:SER:C	2.56	0.42
1:E:680:LYS:HG2	1:E:681:ASP:N	2.34	0.42
1:E:701:LEU:HD23	1:E:701:LEU:HA	1.80	0.42
1:E:781:ASN:ND2	1:E:783:THR:OG1	2.50	0.42
1:F:153:ILE:HG22	1:F:153:ILE:O	2.18	0.42
1:F:184:LYS:HZ2	1:F:191:GLU:CB	2.27	0.42
2:O:145:MET:HB3	2:O:146:THR:H	1.63	0.42
2:P:105:LEU:HB2	2:P:125:ILE:HD11	2.01	0.42
2:P:89:PHE:CD1	2:P:141:PHE:CD2	3.05	0.42
2:P:5:THR:O	2:P:6:GLU:C	2.57	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S:124:MET:O	2:S:125:ILE:C	2.57	0.42
2:S:65:PHE:CD1	2:S:65:PHE:N	2.85	0.42
1:A:597:ASN:HD21	1:A:601:GLU:HB2	1.80	0.42
1:A:628:PHE:N	1:A:628:PHE:CD2	2.87	0.42
1:A:75:THR:HB	1:A:76:LEU:H	1.65	0.42
1:B:136:PRO:HG2	1:B:139:SER:HG	1.84	0.42
1:B:197:LYS:CD	1:B:197:LYS:O	2.66	0.42
1:B:579:THR:C	1:B:581:GLN:H	2.22	0.42
1:B:581:GLN:HE21	1:B:629:ASN:N	2.16	0.42
1:B:79:ILE:O	1:B:81:GLN:N	2.52	0.42
1:D:345:THR:HB	1:D:491:ASP:CB	2.47	0.42
1:D:595:ILE:HD12	1:D:614:PHE:CE2	2.54	0.42
1:E:541:LYS:HB3	1:E:542:PRO:HD2	2.01	0.42
1:E:718:ARG:HH11	1:E:767:GLN:NE2	2.16	0.42
1:E:773:PHE:O	1:E:775:LEU:N	2.52	0.42
1:E:794:GLN:HE21	1:E:794:GLN:HB3	1.62	0.42
1:F:170:TYR:O	1:F:172:GLU:N	2.52	0.42
1:F:191:GLU:C	1:F:193:LEU:N	2.71	0.42
1:F:373:LYS:CD	1:F:376:GLN:NE2	2.75	0.42
1:F:438:ASN:HA	1:F:438:ASN:HD22	1.53	0.42
1:F:463:THR:HB	1:F:467:GLU:N	2.34	0.42
1:F:630:ARG:CZ	2:T:83:GLU:CG	2.96	0.42
2:O:109:MET:HG3	2:O:116:LEU:CD1	2.49	0.42
2:O:124:MET:O	2:O:125:ILE:C	2.57	0.42
2:O:70:THR:C	2:O:72:MET:N	2.72	0.42
2:O:73:ALA:O	2:O:75:LYS:N	2.51	0.42
2:Q:97:ASN:O	2:Q:99:TYR:CD1	2.72	0.42
2:S:137:ASN:OD1	2:S:139:GLU:N	2.52	0.42
2:S:94:LYS:CB	2:S:94:LYS:NZ	2.76	0.42
2:T:117:THR:HG23	2:T:120:GLU:CB	2.39	0.42
1:A:359:PRO:HB2	1:A:405:LEU:HD21	2.01	0.42
1:A:495:PHE:CD1	1:A:495:PHE:C	2.92	0.42
1:A:611:THR:O	1:A:615:ILE:HG13	2.18	0.42
1:B:197:LYS:NZ	1:B:264:MET:SD	2.88	0.42
1:B:327:LEU:O	1:B:495:PHE:N	2.49	0.42
1:C:405:LEU:HD13	1:C:453:VAL:CG2	2.38	0.42
1:C:680:LYS:HG2	1:C:681:ASP:N	2.33	0.42
1:C:763:LEU:HA	1:C:763:LEU:HD23	1.89	0.42
1:C:767:GLN:O	1:C:767:GLN:HG2	2.19	0.42
1:C:773:PHE:O	1:C:774:LYS:C	2.57	0.42
1:D:520:PRO:HG2	1:D:521:ASN:N	2.33	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:177:ILE:HA	1:E:180:ASP:OD1	2.19	0.42
1:E:305:SER:OG	1:E:306:GLY:N	2.51	0.42
1:E:665:LYS:O	1:E:668:SER:HB3	2.19	0.42
1:F:130:SER:C	1:F:132:GLY:H	2.23	0.42
1:F:142:VAL:HG13	1:F:154:ILE:HD11	1.96	0.42
1:F:266:GLU:HA	1:F:269:ASN:HB3	2.00	0.42
1:F:359:PRO:HG2	1:F:360:VAL:N	2.32	0.42
1:F:473:ASN:OD1	1:F:473:ASN:N	2.53	0.42
1:F:665:LYS:O	1:F:668:SER:HB3	2.20	0.42
2:O:105:LEU:HB2	2:O:125:ILE:HD11	2.01	0.42
1:A:709:ASN:OD1	2:O:130:ILE:O	2.37	0.42
2:O:97:ASN:O	2:O:99:TYR:CD1	2.71	0.42
2:R:92:PHE:C	2:R:94:LYS:N	2.71	0.42
1:E:694:VAL:HG22	2:S:18:LEU:HD21	1.99	0.42
1:A:255:THR:O	1:A:257:LEU:N	2.52	0.42
1:A:311:HIS:O	1:A:314:ALA:HB3	2.19	0.42
1:A:380:VAL:C	1:A:382:LYS:H	2.23	0.42
1:A:714:GLN:O	1:A:715:GLU:C	2.58	0.42
1:A:755:ARG:O	1:A:756:ILE:C	2.57	0.42
1:B:66:LEU:CD1	1:B:103:GLU:HA	2.49	0.42
1:B:191:GLU:C	1:B:193:LEU:N	2.72	0.42
1:B:311:HIS:O	1:B:314:ALA:HB3	2.18	0.42
1:B:384:ASN:O	1:B:385:LEU:C	2.58	0.42
1:C:462:ILE:CG1	1:C:463:THR:N	2.80	0.42
1:C:455:TYR:O	1:C:471:TRP:HA	2.19	0.42
1:C:697:ILE:C	1:C:699:GLY:H	2.22	0.42
1:C:745:TYR:O	1:C:746:LYS:C	2.56	0.42
1:C:732:ILE:HG23	1:C:749:PHE:HD1	1.84	0.42
1:C:776:LEU:CD2	1:C:776:LEU:C	2.88	0.42
1:D:413:LEU:HB2	1:D:419:ILE:HG12	2.01	0.42
1:D:493:ASP:OD2	1:D:577:HIS:NE2	2.52	0.42
1:D:691:LYS:O	1:D:693:SER:N	2.52	0.42
1:D:714:GLN:O	1:D:715:GLU:C	2.58	0.42
1:E:186:LYS:O	1:E:188:LEU:O	2.38	0.42
1:E:359:PRO:CB	1:E:405:LEU:HD21	2.49	0.42
1:E:482:GLU:O	1:E:484:VAL:HG22	2.20	0.42
1:E:686:ASP:CB	1:E:739:LYS:HD2	2.50	0.42
1:E:97:TYR:CE2	1:E:102:GLY:HA3	2.54	0.42
1:F:311:HIS:O	1:F:314:ALA:HB3	2.19	0.42
2:Q:44:THR:OG1	2:Q:47:GLU:HB2	2.19	0.42
2:R:16:PHE:CE1	2:R:27:ILE:HD13	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S:36:MET:HE2	2:S:43:PRO:HG3	2.01	0.42
2:T:9:ILE:HD12	2:T:69:LEU:HD21	2.01	0.42
1:A:579:THR:C	1:A:581:GLN:H	2.22	0.42
1:A:595:ILE:HD12	1:A:614:PHE:CE2	2.54	0.42
1:B:332:ASN:ND2	1:B:334:LEU:HD13	2.34	0.42
1:B:350:VAL:HG12	1:B:352:GLY:H	1.85	0.42
1:B:658:PRO:HG3	1:B:752:LEU:HD22	2.00	0.42
1:B:715:GLU:OE1	1:B:767:GLN:NE2	2.52	0.42
1:C:136:PRO:HG2	1:C:139:SER:HG	1.85	0.42
1:C:192:PHE:HB3	1:C:196:ILE:CD1	2.49	0.42
1:C:794:GLN:O	1:C:797:ILE:CG1	2.64	0.42
1:D:456:LYS:HB3	1:D:470:ASN:C	2.39	0.42
1:D:731:GLU:HA	1:D:734:ASN:HB2	2.02	0.42
1:E:557:LEU:HD11	1:E:575:VAL:HG11	2.02	0.42
1:E:579:THR:C	1:E:581:GLN:H	2.22	0.42
1:E:628:PHE:N	1:E:628:PHE:CD2	2.87	0.42
1:F:671:ARG:NH1	1:F:677:GLY:HA3	2.34	0.42
1:F:685:LYS:HD3	1:F:685:LYS:HA	1.86	0.42
1:F:75:THR:O	1:F:77:ASP:N	2.52	0.42
2:P:12:PHE:CE1	2:P:72:MET:HG3	2.55	0.42
2:Q:13:LYS:N	2:Q:13:LYS:HD2	2.35	0.42
2:T:137:ASN:OD1	2:T:139:GLU:N	2.53	0.42
2:T:146:THR:O	2:T:147:ALA:C	2.56	0.42
1:A:223:LYS:HZ1	1:A:228:ASN:HB3	1.82	0.42
1:A:281:GLU:O	1:A:285:LYS:HG2	2.20	0.42
1:A:384:ASN:O	1:A:385:LEU:C	2.58	0.42
1:A:731:GLU:HA	1:A:734:ASN:HB2	2.02	0.42
1:A:746:LYS:NZ	1:A:747:ASN:HD21	2.17	0.42
1:A:79:ILE:O	1:A:81:GLN:N	2.53	0.42
1:B:115:LYS:HB2	1:B:118:GLN:CG	2.49	0.42
1:B:581:GLN:NE2	1:B:629:ASN:N	2.60	0.42
1:B:620:THR:HG22	1:B:621:GLY:N	2.34	0.42
1:B:680:LYS:HG2	1:B:681:ASP:N	2.34	0.42
1:B:697:ILE:C	1:B:699:GLY:H	2.22	0.42
1:B:745:TYR:O	1:B:746:LYS:C	2.57	0.42
1:B:99:GLU:OE2	1:B:284:LYS:HD2	2.18	0.42
1:C:307:LEU:H	1:C:307:LEU:CD1	2.33	0.42
1:C:595:ILE:HD12	1:C:614:PHE:CE2	2.55	0.42
1:C:665:LYS:O	1:C:668:SER:HB3	2.19	0.42
1:C:721:SER:C	1:C:723:PHE:N	2.70	0.42
1:D:359:PRO:HB2	1:D:405:LEU:HD21	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:776:LEU:CD2	1:D:776:LEU:C	2.88	0.42
1:D:83:GLN:C	1:D:85:LEU:N	2.72	0.42
1:E:752:LEU:O	1:E:756:ILE:HG12	2.20	0.42
1:F:255:THR:C	1:F:257:LEU:N	2.72	0.42
1:F:296:LEU:O	1:F:301:ALA:HB2	2.19	0.42
1:F:500:SER:HA	1:F:624:TYR:CD2	2.54	0.42
1:F:767:GLN:HB3	1:F:768:LYS:H	1.61	0.42
1:F:776:LEU:C	1:F:776:LEU:CD2	2.88	0.42
2:P:52:ILE:HG23	2:P:53:ASN:N	2.35	0.42
2:Q:105:LEU:HB2	2:Q:125:ILE:HD11	2.01	0.42
2:Q:146:THR:O	2:Q:148:LYS:N	2.52	0.42
1:D:525:LYS:NZ	2:R:114:GLU:OE1	2.51	0.42
2:S:65:PHE:HB2	2:S:66:PRO:CD	2.49	0.42
1:F:709:ASN:OD1	2:T:130:ILE:O	2.37	0.42
1:A:307:LEU:CD1	1:A:307:LEU:H	2.33	0.42
1:A:636:ALA:O	1:A:637:PRO:C	2.58	0.42
1:A:657:ILE:HG21	1:A:704:TYR:CE1	2.54	0.42
1:A:773:PHE:O	1:A:775:LEU:N	2.52	0.42
1:A:83:GLN:C	1:A:85:LEU:N	2.72	0.42
1:B:116:GLU:O	1:B:117:LEU:HD22	2.20	0.42
1:B:462:ILE:HG12	1:B:463:THR:H	1.81	0.42
1:B:532:LEU:HD23	1:B:532:LEU:HA	1.86	0.42
1:B:628:PHE:HE2	2:P:90:ARG:CD	2.28	0.42
1:B:731:GLU:HA	1:B:734:ASN:HB2	2.01	0.42
1:B:776:LEU:CD2	1:B:776:LEU:C	2.88	0.42
1:C:238:GLN:C	1:C:240:ALA:N	2.71	0.42
1:C:693:SER:OG	1:C:731:GLU:OE1	2.36	0.42
1:D:181:ILE:O	1:D:186:LYS:HB3	2.20	0.42
1:D:324:THR:HB	1:D:499:PRO:CA	2.47	0.42
1:D:350:VAL:HG12	1:D:352:GLY:H	1.85	0.42
1:D:75:THR:O	1:D:77:ASP:N	2.53	0.42
1:E:714:GLN:O	1:E:715:GLU:C	2.58	0.42
1:E:776:LEU:CD2	1:E:776:LEU:C	2.88	0.42
1:E:788:ASP:C	1:E:792:VAL:HG23	2.37	0.42
1:F:443:GLU:OE2	1:F:458:LYS:HG2	2.18	0.42
1:F:773:PHE:O	1:F:774:LYS:C	2.57	0.42
2:P:42:ASN:HA	2:P:43:PRO:HD2	1.87	0.42
2:Q:121:VAL:O	2:Q:123:GLN:N	2.53	0.42
2:Q:131:ASP:N	2:Q:131:ASP:OD1	2.46	0.42
2:R:12:PHE:CE1	2:R:72:MET:HG3	2.54	0.42
2:S:101:SER:OG	2:S:104:GLU:HG2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:179:LEU:O	1:A:183:SER:N	2.53	0.42
1:A:210:PHE:H	1:A:210:PHE:HD2	1.67	0.42
1:A:197:LYS:NZ	1:A:264:MET:SD	2.92	0.42
1:A:443:GLU:OE2	1:A:458:LYS:HG2	2.19	0.42
1:B:732:ILE:HG23	1:B:749:PHE:HD1	1.83	0.42
1:C:636:ALA:O	1:C:637:PRO:C	2.58	0.42
1:C:714:GLN:O	1:C:715:GLU:C	2.57	0.42
1:D:332:ASN:ND2	1:D:334:LEU:HD13	2.33	0.42
1:D:447:SER:CB	1:D:450:ASN:O	2.66	0.42
1:D:671:ARG:NH1	1:D:677:GLY:HA3	2.34	0.42
1:D:88:LYS:HZ2	1:D:172:GLU:CD	2.23	0.42
1:E:405:LEU:HD13	1:E:453:VAL:CG2	2.40	0.42
1:E:441:VAL:O	1:E:442:TYR:CD2	2.72	0.42
1:E:520:PRO:HG2	1:E:521:ASN:N	2.33	0.42
1:E:709:ASN:OD1	2:S:130:ILE:O	2.38	0.42
1:F:305:SER:OG	1:F:306:GLY:N	2.50	0.42
1:F:456:LYS:HB3	1:F:470:ASN:C	2.40	0.42
2:O:104:GLU:O	2:O:105:LEU:C	2.58	0.42
2:P:104:GLU:O	2:P:105:LEU:C	2.58	0.42
2:R:124:MET:O	2:R:125:ILE:C	2.57	0.42
2:S:109:MET:HG3	2:S:116:LEU:CD1	2.49	0.42
2:S:121:VAL:O	2:S:123:GLN:N	2.53	0.42
2:S:97:ASN:O	2:S:99:TYR:CD1	2.73	0.42
2:T:65:PHE:HB2	2:T:66:PRO:CD	2.49	0.42
1:A:184:LYS:HZ1	1:A:191:GLU:CB	2.32	0.42
1:A:250:ALA:O	1:A:252:ASP:N	2.53	0.42
1:A:413:LEU:HB2	1:A:419:ILE:HG12	2.02	0.42
1:A:776:LEU:C	1:A:776:LEU:CD2	2.88	0.42
1:B:177:ILE:HA	1:B:180:ASP:OD2	2.20	0.42
1:B:192:PHE:HB3	1:B:196:ILE:CD1	2.50	0.42
1:B:197:LYS:NZ	1:B:267:TYR:CD2	2.88	0.42
1:B:217:LYS:HB2	1:B:236:GLU:HG3	2.02	0.42
1:B:380:VAL:C	1:B:382:LYS:H	2.23	0.42
1:B:583:ASN:ND2	1:B:587:PRO:HA	2.35	0.42
1:B:628:PHE:CD2	1:B:628:PHE:N	2.86	0.42
1:C:71:PHE:CD1	1:C:108:ASP:OD1	2.73	0.42
1:C:192:PHE:O	1:C:193:LEU:C	2.58	0.42
1:C:278:LYS:O	1:C:279:ILE:C	2.58	0.42
1:C:279:ILE:HG22	1:C:283:LEU:HD11	2.01	0.42
1:C:667:LEU:O	1:C:668:SER:C	2.58	0.42
1:C:701:LEU:HD23	1:C:701:LEU:HA	1.81	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:731:GLU:HA	1:C:734:ASN:HB2	2.02	0.42
1:D:173:ILE:HG23	1:D:174:GLY:H	1.84	0.42
1:D:255:THR:C	1:D:257:LEU:N	2.72	0.42
1:D:279:ILE:HG22	1:D:283:LEU:HD11	2.02	0.42
1:D:446:ILE:HG13	1:D:452:GLU:O	2.19	0.42
1:D:495:PHE:CD1	1:D:495:PHE:C	2.93	0.42
1:E:295:VAL:HB	1:E:603:ILE:CG2	2.49	0.42
1:E:447:SER:CB	1:E:450:ASN:O	2.67	0.42
1:E:495:PHE:C	1:E:495:PHE:CD1	2.92	0.42
1:E:581:GLN:NE2	1:E:629:ASN:N	2.62	0.42
1:E:583:ASN:ND2	1:E:587:PRO:HA	2.35	0.42
1:E:691:LYS:O	1:E:692:GLU:C	2.58	0.42
1:F:384:ASN:O	1:F:385:LEU:C	2.58	0.42
1:F:579:THR:C	1:F:581:GLN:H	2.22	0.42
2:P:9:ILE:HD12	2:P:69:LEU:HD21	2.02	0.42
2:Q:124:MET:O	2:Q:125:ILE:C	2.57	0.42
2:R:52:ILE:HG23	2:R:53:ASN:N	2.35	0.42
2:S:9:ILE:HD12	2:S:69:LEU:HD21	2.02	0.42
1:A:142:VAL:HG13	1:A:154:ILE:HD11	1.97	0.42
1:A:443:GLU:HG3	1:A:458:LYS:CG	2.49	0.42
1:B:281:GLU:O	1:B:285:LYS:HG2	2.20	0.42
1:B:307:LEU:CD1	1:B:307:LEU:H	2.32	0.42
1:B:359:PRO:HB2	1:B:405:LEU:HD21	2.02	0.42
1:B:691:LYS:O	1:B:692:GLU:C	2.58	0.42
1:B:755:ARG:O	1:B:756:ILE:C	2.57	0.42
1:B:784:GLU:HG3	1:B:785:ASN:N	2.35	0.42
1:C:188:LEU:H	1:C:188:LEU:HD22	1.65	0.42
1:C:255:THR:O	1:C:257:LEU:N	2.52	0.42
1:C:655:ASN:N	1:C:655:ASN:ND2	2.66	0.42
1:D:136:PRO:O	1:D:138:ALA:N	2.53	0.42
1:D:197:LYS:NZ	1:D:267:TYR:CD2	2.88	0.42
1:D:504:ILE:HD12	1:D:504:ILE:N	2.35	0.42
1:D:581:GLN:HE21	1:D:629:ASN:N	2.16	0.42
1:D:583:ASN:ND2	1:D:587:PRO:HA	2.35	0.42
1:E:113:GLU:HA	1:E:118:GLN:HB3	2.02	0.42
1:E:298:GLY:C	1:E:300:LYS:H	2.22	0.42
1:E:380:VAL:C	1:E:382:LYS:H	2.23	0.42
1:E:443:GLU:CG	1:E:458:LYS:CG	2.95	0.42
1:E:79:ILE:O	1:E:81:GLN:N	2.53	0.42
1:E:83:GLN:C	1:E:85:LEU:N	2.71	0.42
1:F:197:LYS:NZ	1:F:267:TYR:CD2	2.88	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:71:PHE:CG	1:F:73:ASN:HB2	2.54	0.42
2:R:137:ASN:OD1	2:R:139:GLU:N	2.53	0.42
2:T:97:ASN:O	2:T:99:TYR:CD1	2.72	0.42
1:A:109:ILE:HG13	1:A:109:ILE:H	1.64	0.41
1:A:254:ARG:HD2	1:A:254:ARG:N	2.31	0.41
1:A:715:GLU:OE1	1:A:767:GLN:NE2	2.53	0.41
1:A:781:ASN:O	1:A:789:ASN:ND2	2.53	0.41
1:B:186:LYS:O	1:B:188:LEU:O	2.38	0.41
1:B:752:LEU:O	1:B:756:ILE:HG12	2.20	0.41
1:C:327:LEU:O	1:C:495:PHE:N	2.48	0.41
1:C:672:ARG:HA	1:C:672:ARG:HD3	1.69	0.41
1:C:691:LYS:O	1:C:693:SER:N	2.53	0.41
1:C:718:ARG:O	1:C:722:ILE:CG1	2.66	0.41
1:D:192:PHE:HB3	1:D:196:ILE:CD1	2.50	0.41
1:D:192:PHE:O	1:D:193:LEU:C	2.59	0.41
1:E:192:PHE:O	1:E:193:LEU:C	2.57	0.41
1:E:233:ASN:HB3	1:E:236:GLU:HB2	2.02	0.41
1:E:281:GLU:O	1:E:285:LYS:HG2	2.19	0.41
1:E:512:GLU:O	1:E:516:VAL:HG23	2.20	0.41
1:E:630:ARG:CZ	2:S:83:GLU:CG	2.98	0.41
1:E:657:ILE:HG21	1:E:704:TYR:CE1	2.55	0.41
1:F:583:ASN:ND2	1:F:587:PRO:HA	2.34	0.41
1:F:79:ILE:O	1:F:81:GLN:N	2.52	0.41
2:O:65:PHE:HB2	2:O:66:PRO:CD	2.50	0.41
2:R:109:MET:HG3	2:R:116:LEU:CD1	2.50	0.41
2:S:89:PHE:CD1	2:S:141:PHE:CD2	3.06	0.41
2:S:44:THR:OG1	2:S:47:GLU:HB2	2.21	0.41
1:A:665:LYS:O	1:A:668:SER:HB3	2.21	0.41
1:A:701:LEU:HD23	1:A:701:LEU:HA	1.79	0.41
1:A:721:SER:C	1:A:723:PHE:N	2.70	0.41
1:B:155:ASN:C	1:B:156:ILE:HG13	2.40	0.41
1:B:413:LEU:HB2	1:B:419:ILE:HG12	2.02	0.41
1:C:109:ILE:HD13	1:C:157:LYS:HZ2	1.85	0.41
1:C:410:ILE:C	1:C:412:GLU:H	2.24	0.41
1:D:186:LYS:O	1:D:188:LEU:O	2.38	0.41
1:D:473:ASN:N	1:D:473:ASN:OD1	2.53	0.41
1:E:186:LYS:HZ1	1:E:234:LEU:HD13	1.84	0.41
1:E:197:LYS:NZ	1:E:267:TYR:CD2	2.89	0.41
1:E:359:PRO:HG2	1:E:360:VAL:N	2.32	0.41
1:E:438:ASN:HA	1:E:438:ASN:HD22	1.53	0.41
1:E:450:ASN:ND2	1:E:452:GLU:CD	2.74	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:581:GLN:HE21	1:E:629:ASN:N	2.18	0.41
1:F:136:PRO:HG2	1:F:139:SER:HG	1.86	0.41
1:F:178:SER:OG	1:F:179:LEU:CD2	2.68	0.41
1:F:186:LYS:HA	1:F:190:PRO:CD	2.26	0.41
1:F:189:ASP:O	1:F:191:GLU:N	2.52	0.41
1:F:279:ILE:HG22	1:F:283:LEU:HD11	2.01	0.41
1:F:444:PHE:N	1:F:444:PHE:HD1	2.18	0.41
1:F:450:ASN:ND2	1:F:452:GLU:CD	2.74	0.41
1:F:581:GLN:HE21	1:F:629:ASN:N	2.18	0.41
1:F:731:GLU:HA	1:F:734:ASN:HB2	2.02	0.41
1:F:746:LYS:NZ	1:F:747:ASN:HD21	2.17	0.41
1:F:83:GLN:C	1:F:85:LEU:N	2.72	0.41
2:P:109:MET:HG3	2:P:116:LEU:CD1	2.49	0.41
1:B:665:LYS:HG3	2:P:11:GLU:CD	2.41	0.41
2:Q:27:ILE:HA	2:Q:31:GLU:OE2	2.20	0.41
2:R:101:SER:OG	2:R:104:GLU:HG2	2.20	0.41
2:R:27:ILE:HA	2:R:31:GLU:OE2	2.20	0.41
2:R:55:VAL:HB	2:R:67:GLU:OE1	2.20	0.41
2:S:69:LEU:HD12	2:S:69:LEU:HA	1.84	0.41
1:A:107:THR:CG2	1:A:115:LYS:HD2	2.50	0.41
1:A:300:LYS:HE2	1:A:300:LYS:HB3	1.94	0.41
1:A:684:ASP:C	1:A:686:ASP:H	2.24	0.41
1:B:108:ASP:O	1:B:110:ASP:OD1	2.39	0.41
1:B:278:LYS:O	1:B:279:ILE:C	2.59	0.41
1:B:375:GLY:O	1:B:377:GLN:N	2.53	0.41
1:B:450:ASN:ND2	1:B:452:GLU:CD	2.74	0.41
1:B:746:LYS:NZ	1:B:747:ASN:HD21	2.17	0.41
1:B:75:THR:O	1:B:77:ASP:N	2.52	0.41
1:C:384:ASN:O	1:C:385:LEU:C	2.58	0.41
1:C:541:LYS:HB3	1:C:542:PRO:HD2	2.02	0.41
1:C:684:ASP:C	1:C:686:ASP:H	2.23	0.41
1:C:794:GLN:HB3	1:C:794:GLN:HE21	1.62	0.41
1:D:463:THR:HB	1:D:467:GLU:N	2.35	0.41
1:D:628:PHE:CD2	1:D:628:PHE:N	2.86	0.41
1:E:134:LYS:C	1:E:136:PRO:CD	2.85	0.41
1:E:665:LYS:HG3	2:S:11:GLU:CD	2.40	0.41
1:E:672:ARG:HA	1:E:672:ARG:HD3	1.68	0.41
1:E:75:THR:O	1:E:77:ASP:N	2.52	0.41
1:F:255:THR:O	1:F:257:LEU:N	2.52	0.41
1:F:197:LYS:NZ	1:F:264:MET:SD	2.90	0.41
1:F:380:VAL:C	1:F:382:LYS:H	2.23	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:495:PHE:C	1:F:495:PHE:CD1	2.93	0.41
1:F:610:MET:O	1:F:614:PHE:N	2.38	0.41
1:F:657:ILE:HA	1:F:658:PRO:HD2	1.87	0.41
2:P:44:THR:OG1	2:P:47:GLU:HB2	2.21	0.41
2:Q:137:ASN:OD1	2:Q:139:GLU:N	2.53	0.41
2:R:105:LEU:HB2	2:R:125:ILE:HD11	2.02	0.41
2:R:49:GLN:CA	2:R:52:ILE:HG22	2.48	0.41
1:A:155:ASN:C	1:A:156:ILE:HG13	2.41	0.41
1:A:97:TYR:CE1	1:A:178:SER:CB	3.03	0.41
1:A:444:PHE:HD1	1:A:444:PHE:N	2.18	0.41
1:A:456:LYS:CB	1:A:470:ASN:C	2.89	0.41
1:B:279:ILE:C	1:B:281:GLU:N	2.74	0.41
1:B:318:ILE:H	1:B:318:ILE:CD1	2.28	0.41
1:C:233:ASN:HB3	1:C:236:GLU:HB2	2.02	0.41
1:C:213:LYS:CD	1:C:240:ALA:HB1	2.48	0.41
1:C:611:THR:HG22	1:C:615:ILE:CD1	2.50	0.41
1:D:109:ILE:H	1:D:109:ILE:HG13	1.64	0.41
1:D:105:TYR:HB2	1:D:153:ILE:HA	2.02	0.41
1:D:177:ILE:HA	1:D:180:ASP:OD1	2.20	0.41
1:D:233:ASN:HB3	1:D:236:GLU:HB2	2.02	0.41
1:D:213:LYS:HB2	1:D:240:ALA:CB	2.49	0.41
1:D:403:LEU:HG	1:D:405:LEU:CD1	2.51	0.41
1:D:446:ILE:HD11	1:D:451:ASN:HB2	2.01	0.41
1:D:611:THR:O	1:D:615:ILE:HG13	2.21	0.41
1:D:755:ARG:O	1:D:756:ILE:C	2.58	0.41
1:E:201:ASP:HB3	1:E:202:ASP:OD2	2.21	0.41
1:E:223:LYS:HZ1	1:E:228:ASN:HB3	1.83	0.41
1:F:113:GLU:HA	1:F:118:GLN:HB3	2.03	0.41
1:F:201:ASP:HB3	1:F:202:ASP:OD2	2.21	0.41
1:F:520:PRO:HG2	1:F:521:ASN:N	2.33	0.41
1:F:684:ASP:C	1:F:686:ASP:H	2.24	0.41
1:F:718:ARG:HH11	1:F:767:GLN:NE2	2.17	0.41
2:P:94:LYS:CB	2:P:94:LYS:NZ	2.76	0.41
2:T:104:GLU:O	2:T:105:LEU:C	2.58	0.41
1:A:108:ASP:O	1:A:110:ASP:OD1	2.39	0.41
1:A:318:ILE:H	1:A:318:ILE:CD1	2.26	0.41
1:A:350:VAL:HG12	1:A:352:GLY:H	1.85	0.41
1:B:154:ILE:HG13	1:B:171:TYR:CD1	2.55	0.41
1:B:173:ILE:C	1:B:175:LYS:H	2.23	0.41
1:B:473:ASN:N	1:B:473:ASN:OD1	2.53	0.41
1:C:413:LEU:HB2	1:C:419:ILE:HG12	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:380:VAL:C	1:D:382:LYS:H	2.23	0.41
1:D:746:LYS:NZ	1:D:747:ASN:HD21	2.17	0.41
1:E:350:VAL:HG12	1:E:352:GLY:H	1.85	0.41
1:F:350:VAL:HG12	1:F:352:GLY:H	1.84	0.41
2:O:16:PHE:HA	2:O:35:VAL:HG11	2.02	0.41
2:O:44:THR:OG1	2:O:47:GLU:HB2	2.20	0.41
2:P:13:LYS:N	2:P:13:LYS:HD2	2.36	0.41
2:P:28:THR:N	2:P:31:GLU:OE2	2.49	0.41
2:S:6:GLU:CG	2:S:7:GLU:N	2.80	0.41
1:A:115:LYS:HB2	1:A:118:GLN:CG	2.50	0.41
1:A:113:GLU:HA	1:A:118:GLN:HB3	2.02	0.41
1:A:667:LEU:O	1:A:668:SER:C	2.58	0.41
1:B:173:ILE:HG23	1:B:174:GLY:H	1.85	0.41
1:B:295:VAL:HB	1:B:603:ILE:CG2	2.51	0.41
1:B:493:ASP:OD2	1:B:577:HIS:NE2	2.51	0.41
1:C:173:ILE:C	1:C:175:LYS:H	2.23	0.41
1:C:450:ASN:ND2	1:C:452:GLU:CD	2.74	0.41
1:C:611:THR:O	1:C:615:ILE:HG13	2.20	0.41
1:D:113:GLU:HA	1:D:118:GLN:HB3	2.02	0.41
1:D:173:ILE:HG23	1:D:174:GLY:N	2.35	0.41
1:D:384:ASN:O	1:D:385:LEU:C	2.58	0.41
1:D:659:THR:O	1:D:660:SER:C	2.57	0.41
1:D:721:SER:O	1:D:722:ILE:C	2.59	0.41
1:E:130:SER:C	1:E:132:GLY:H	2.24	0.41
1:E:359:PRO:HB2	1:E:405:LEU:HD21	2.02	0.41
1:E:424:LYS:HE3	1:E:424:LYS:HB3	1.94	0.41
1:E:746:LYS:NZ	1:E:747:ASN:HD21	2.17	0.41
1:F:307:LEU:CD1	1:F:307:LEU:H	2.33	0.41
1:F:657:ILE:HG21	1:F:704:TYR:CE1	2.56	0.41
1:F:752:LEU:O	1:F:756:ILE:HG12	2.21	0.41
2:P:97:ASN:O	2:P:99:TYR:CD1	2.73	0.41
2:T:5:THR:O	2:T:6:GLU:C	2.57	0.41
2:T:6:GLU:CG	2:T:7:GLU:N	2.80	0.41
1:A:197:LYS:NZ	1:A:267:TYR:CD2	2.88	0.41
1:A:279:ILE:HG22	1:A:283:LEU:HD11	2.02	0.41
1:A:450:ASN:ND2	1:A:452:GLU:CD	2.74	0.41
1:A:455:TYR:O	1:A:471:TRP:HA	2.21	0.41
1:A:327:LEU:HG	1:A:595:ILE:HG23	2.03	0.41
1:A:691:LYS:O	1:A:692:GLU:C	2.58	0.41
1:A:784:GLU:HG3	1:A:785:ASN:N	2.36	0.41
1:B:595:ILE:HD12	1:B:614:PHE:CE2	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:657:ILE:HA	1:B:658:PRO:HD2	1.88	0.41
1:B:97:TYR:CE1	1:B:178:SER:CB	3.03	0.41
1:C:173:ILE:HG23	1:C:174:GLY:N	2.35	0.41
1:C:255:THR:C	1:C:257:LEU:N	2.72	0.41
1:C:501:LEU:HA	1:C:501:LEU:HD23	1.89	0.41
1:C:520:PRO:HG2	1:C:521:ASN:N	2.33	0.41
1:D:636:ALA:O	1:D:637:PRO:C	2.59	0.41
1:E:384:ASN:O	1:E:385:LEU:C	2.59	0.41
1:E:413:LEU:HB2	1:E:419:ILE:HG12	2.02	0.41
1:E:461:LYS:HA	1:E:461:LYS:HD2	1.82	0.41
1:E:97:TYR:CE1	1:E:178:SER:CB	3.03	0.41
1:F:107:THR:CG2	1:F:115:LYS:HD2	2.50	0.41
1:F:115:LYS:HB2	1:F:118:GLN:CG	2.49	0.41
1:F:97:TYR:CE1	1:F:178:SER:CB	3.03	0.41
1:F:493:ASP:OD2	1:F:577:HIS:NE2	2.51	0.41
2:Q:52:ILE:HG23	2:Q:53:ASN:N	2.35	0.41
2:R:117:THR:HG23	2:R:120:GLU:CB	2.39	0.41
2:S:52:ILE:HG23	2:S:53:ASN:N	2.35	0.41
1:A:186:LYS:HZ1	1:A:234:LEU:CD1	2.34	0.41
1:A:305:SER:OG	1:A:306:GLY:N	2.52	0.41
1:A:685:LYS:HA	1:A:685:LYS:HD3	1.85	0.41
1:B:512:GLU:O	1:B:516:VAL:HG23	2.20	0.41
1:B:667:LEU:O	1:B:668:SER:C	2.58	0.41
1:C:368:GLN:C	1:C:370:LEU:H	2.22	0.41
1:C:403:LEU:HG	1:C:405:LEU:CD1	2.51	0.41
1:D:410:ILE:C	1:D:412:GLU:H	2.24	0.41
1:D:561:ASN:C	1:D:563:ALA:N	2.73	0.41
1:D:620:THR:HG22	1:D:621:GLY:N	2.36	0.41
1:D:90:PRO:HD2	1:D:93:VAL:HG11	2.03	0.41
1:E:109:ILE:HG13	1:E:109:ILE:H	1.64	0.41
1:E:444:PHE:N	1:E:444:PHE:HD1	2.18	0.41
1:E:446:ILE:HD11	1:E:451:ASN:HB2	2.02	0.41
1:E:473:ASN:OD1	1:E:473:ASN:N	2.54	0.41
1:E:611:THR:HG22	1:E:615:ILE:CD1	2.50	0.41
1:E:620:THR:HG22	1:E:621:GLY:N	2.36	0.41
1:E:671:ARG:NH1	1:E:677:GLY:HA3	2.35	0.41
1:F:108:ASP:O	1:F:110:ASP:OD1	2.39	0.41
2:Q:109:MET:HG3	2:Q:116:LEU:CD1	2.51	0.41
2:T:124:MET:O	2:T:125:ILE:C	2.57	0.41
2:T:44:THR:OG1	2:T:47:GLU:HB2	2.20	0.41
1:A:292:ARG:NE	1:A:617:LYS:HE3	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:199:LEU:CD2	1:B:225:ILE:O	2.68	0.41
1:B:684:ASP:C	1:B:686:ASP:H	2.23	0.41
1:C:108:ASP:O	1:C:110:ASP:OD1	2.39	0.41
1:C:170:TYR:O	1:C:172:GLU:N	2.53	0.41
1:D:368:GLN:C	1:D:370:LEU:H	2.22	0.41
1:D:450:ASN:ND2	1:D:452:GLU:CD	2.74	0.41
1:D:611:THR:HG22	1:D:615:ILE:CD1	2.51	0.41
1:D:612:GLY:O	1:D:616:GLU:HG3	2.20	0.41
1:D:691:LYS:O	1:D:692:GLU:C	2.59	0.41
1:D:794:GLN:O	1:D:797:ILE:CG1	2.64	0.41
1:E:173:ILE:HG13	1:E:242:SER:CB	2.35	0.41
1:E:184:LYS:HZ1	1:E:193:LEU:HD12	1.79	0.41
1:E:463:THR:HB	1:E:467:GLU:N	2.36	0.41
1:E:593:ILE:C	1:E:604:LEU:HD12	2.41	0.41
1:E:755:ARG:O	1:E:756:ILE:C	2.59	0.41
1:F:288:VAL:C	1:F:290:LYS:N	2.74	0.41
1:F:375:GLY:O	1:F:377:GLN:N	2.54	0.41
1:F:323:ASN:ND2	1:F:624:TYR:OH	2.37	0.41
2:O:137:ASN:OD1	2:O:139:GLU:N	2.54	0.41
2:T:89:PHE:HB2	2:T:141:PHE:CD2	2.56	0.41
2:T:52:ILE:HG23	2:T:53:ASN:N	2.35	0.41
1:A:345:THR:HB	1:A:491:ASP:CB	2.46	0.41
1:A:443:GLU:CG	1:A:458:LYS:CG	2.95	0.41
1:A:724:ARG:NH1	1:A:724:ARG:CG	2.78	0.41
1:B:71:PHE:HD1	1:B:108:ASP:OD1	2.01	0.41
1:B:192:PHE:O	1:B:193:LEU:C	2.59	0.41
1:B:541:LYS:HB3	1:B:542:PRO:HD2	2.02	0.41
1:B:665:LYS:O	1:B:668:SER:HB3	2.21	0.41
1:B:768:LYS:HD3	1:B:768:LYS:HA	1.86	0.41
1:C:66:LEU:CD1	1:C:103:GLU:HA	2.49	0.41
1:C:186:LYS:HZ1	1:C:234:LEU:HD13	1.86	0.41
1:C:229:PHE:CD1	1:C:229:PHE:O	2.74	0.41
1:C:313:ASP:O	1:C:316:LYS:CB	2.69	0.41
1:C:438:ASN:HD22	1:C:438:ASN:HA	1.53	0.41
1:C:473:ASN:OD1	1:C:473:ASN:N	2.53	0.41
1:C:481:VAL:O	1:C:484:VAL:HG23	2.21	0.41
1:C:561:ASN:O	1:C:562:GLU:C	2.59	0.41
1:C:661:ALA:HB2	2:Q:38:SER:O	2.21	0.41
1:C:79:ILE:O	1:C:81:GLN:N	2.54	0.41
1:D:250:ALA:C	1:D:252:ASP:H	2.24	0.41
1:D:279:ILE:C	1:D:281:GLU:N	2.74	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:461:LYS:HA	1:D:461:LYS:HD2	1.82	0.41
1:D:770:ASN:HA	1:D:770:ASN:HD22	1.70	0.41
1:D:794:GLN:HB3	1:D:794:GLN:HE21	1.62	0.41
1:E:481:VAL:O	1:E:484:VAL:HG23	2.21	0.41
1:E:561:ASN:O	1:E:562:GLU:C	2.59	0.41
1:E:657:ILE:HA	1:E:658:PRO:HD2	1.88	0.41
1:E:724:ARG:CG	1:E:724:ARG:NH1	2.78	0.41
1:F:370:LEU:HA	1:F:370:LEU:HD23	1.92	0.41
1:F:410:ILE:C	1:F:412:GLU:H	2.24	0.41
1:F:481:VAL:O	1:F:484:VAL:HG23	2.21	0.41
1:F:636:ALA:O	1:F:637:PRO:C	2.59	0.41
1:B:694:VAL:HG22	2:P:18:LEU:HD21	2.02	0.41
2:Q:101:SER:OG	2:Q:104:GLU:HG2	2.20	0.41
2:Q:89:PHE:HB2	2:Q:141:PHE:CD2	2.56	0.41
2:S:104:GLU:O	2:S:105:LEU:C	2.58	0.41
1:A:136:PRO:O	1:A:138:ALA:N	2.54	0.41
1:A:189:ASP:O	1:A:191:GLU:HG2	2.21	0.41
1:A:255:THR:C	1:A:257:LEU:N	2.72	0.41
1:A:279:ILE:C	1:A:281:GLU:N	2.74	0.41
1:A:403:LEU:HG	1:A:405:LEU:CD1	2.51	0.41
1:A:512:GLU:O	1:A:516:VAL:HG23	2.21	0.41
1:A:520:PRO:HG2	1:A:521:ASN:N	2.33	0.41
1:A:66:LEU:HD12	1:A:104:ILE:N	2.36	0.41
1:A:752:LEU:O	1:A:756:ILE:HG12	2.20	0.41
1:B:173:ILE:HG13	1:B:242:SER:CB	2.37	0.41
1:B:254:ARG:HD2	1:B:254:ARG:N	2.31	0.41
1:B:292:ARG:NE	1:B:617:LYS:HE3	2.36	0.41
1:C:66:LEU:HD12	1:C:104:ILE:N	2.36	0.41
1:C:231:LYS:O	1:C:232:GLU:C	2.57	0.41
1:C:281:GLU:O	1:C:285:LYS:HG2	2.21	0.41
1:C:324:THR:HB	1:C:499:PRO:CA	2.45	0.41
1:C:447:SER:CB	1:C:450:ASN:O	2.69	0.41
1:C:463:THR:HB	1:C:467:GLU:N	2.35	0.41
1:C:671:ARG:NH1	1:C:677:GLY:HA3	2.36	0.41
1:C:746:LYS:NZ	1:C:747:ASN:HD21	2.18	0.41
1:D:97:TYR:CE1	1:D:178:SER:CB	3.04	0.41
1:D:250:ALA:O	1:D:252:ASP:N	2.53	0.41
1:D:359:PRO:HG2	1:D:360:VAL:N	2.30	0.41
1:D:444:PHE:N	1:D:444:PHE:HD1	2.19	0.41
1:D:684:ASP:C	1:D:686:ASP:H	2.23	0.41
1:E:375:GLY:O	1:E:377:GLN:N	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:684:ASP:C	1:E:686:ASP:H	2.24	0.41
1:E:721:SER:C	1:E:723:PHE:N	2.71	0.41
1:F:119:ASP:HB3	1:F:120:LEU:H	1.75	0.41
1:F:278:LYS:O	1:F:279:ILE:C	2.59	0.41
1:F:359:PRO:HB2	1:F:405:LEU:HD21	2.02	0.41
1:F:667:LEU:O	1:F:668:SER:C	2.58	0.41
1:F:724:ARG:CG	1:F:724:ARG:NH1	2.78	0.41
2:Q:6:GLU:CG	2:Q:7:GLU:N	2.81	0.41
2:S:13:LYS:HD2	2:S:13:LYS:N	2.36	0.41
2:S:36:MET:O	2:S:39:LEU:N	2.53	0.41
2:T:3:GLN:N	2:T:77:LYS:CE	2.63	0.41
1:A:233:ASN:HB3	1:A:236:GLU:HB2	2.02	0.40
1:A:238:GLN:C	1:A:240:ALA:H	2.24	0.40
1:A:375:GLY:O	1:A:377:GLN:N	2.54	0.40
1:A:462:ILE:CG1	1:A:463:THR:N	2.80	0.40
1:A:611:THR:HG22	1:A:615:ILE:CD1	2.52	0.40
1:A:697:ILE:C	1:A:699:GLY:H	2.23	0.40
1:B:279:ILE:HG22	1:B:283:LEU:HD11	2.03	0.40
1:C:444:PHE:HD1	1:C:444:PHE:N	2.18	0.40
1:C:581:GLN:HE21	1:C:629:ASN:N	2.17	0.40
1:C:628:PHE:N	1:C:628:PHE:CD2	2.88	0.40
1:C:75:THR:O	1:C:77:ASP:N	2.53	0.40
1:C:89:ILE:HG22	1:C:93:VAL:CG1	2.10	0.40
1:D:159:TYR:O	1:D:160:ALA:HB2	2.21	0.40
1:D:201:ASP:HB3	1:D:202:ASP:OD2	2.21	0.40
1:D:307:LEU:CD1	1:D:307:LEU:H	2.33	0.40
1:D:356:ASP:O	1:D:357:TRP:HB3	2.21	0.40
1:D:718:ARG:O	1:D:722:ILE:CG1	2.67	0.40
1:D:79:ILE:O	1:D:81:GLN:N	2.53	0.40
1:E:105:TYR:HB2	1:E:153:ILE:HA	2.02	0.40
1:E:279:ILE:C	1:E:281:GLU:N	2.74	0.40
1:E:403:LEU:HG	1:E:405:LEU:CD1	2.51	0.40
1:E:427:ASP:O	1:E:428:ASN:CB	2.68	0.40
1:E:504:ILE:HD12	1:E:504:ILE:N	2.36	0.40
1:F:173:ILE:HG23	1:F:174:GLY:H	1.85	0.40
1:F:233:ASN:HB3	1:F:236:GLU:HB2	2.02	0.40
1:F:403:LEU:HG	1:F:405:LEU:CD1	2.51	0.40
1:F:446:ILE:HD11	1:F:451:ASN:HB2	2.01	0.40
1:F:456:LYS:HB2	1:F:470:ASN:HA	2.03	0.40
1:F:611:THR:O	1:F:615:ILE:HG13	2.21	0.40
1:F:697:ILE:C	1:F:699:GLY:H	2.23	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:O:101:SER:OG	2:O:104:GLU:HG2	2.21	0.40
1:A:661:ALA:HB2	2:O:38:SER:O	2.21	0.40
2:Q:42:ASN:HA	2:Q:43:PRO:HD2	1.87	0.40
2:R:30:LYS:CD	2:R:30:LYS:H	2.19	0.40
2:T:13:LYS:C	2:T:15:ALA:N	2.74	0.40
2:T:16:PHE:HA	2:T:35:VAL:HG11	2.03	0.40
1:A:100:LEU:HD22	1:A:182:ILE:HG21	2.04	0.40
1:A:136:PRO:O	1:A:139:SER:N	2.37	0.40
1:A:201:ASP:HB3	1:A:202:ASP:OD2	2.21	0.40
1:A:278:LYS:O	1:A:279:ILE:C	2.58	0.40
1:A:481:VAL:O	1:A:484:VAL:HG23	2.22	0.40
1:B:159:TYR:N	1:B:159:TYR:CD1	2.89	0.40
1:B:443:GLU:CG	1:B:458:LYS:CG	2.94	0.40
1:B:561:ASN:O	1:B:562:GLU:C	2.60	0.40
1:C:288:VAL:C	1:C:290:LYS:N	2.75	0.40
1:C:579:THR:C	1:C:581:GLN:N	2.75	0.40
1:C:292:ARG:NE	1:C:617:LYS:HE3	2.36	0.40
1:D:197:LYS:CD	1:D:197:LYS:O	2.66	0.40
1:D:281:GLU:O	1:D:285:LYS:HG2	2.20	0.40
1:E:307:LEU:H	1:E:307:LEU:CD1	2.34	0.40
1:E:75:THR:HB	1:E:76:LEU:H	1.66	0.40
1:F:182:ILE:O	1:F:187:SER:OG	2.39	0.40
1:F:254:ARG:CD	1:F:254:ARG:H	2.30	0.40
1:F:281:GLU:O	1:F:285:LYS:HG2	2.21	0.40
1:F:313:ASP:O	1:F:316:LYS:CB	2.70	0.40
2:O:27:ILE:HA	2:O:31:GLU:OE2	2.21	0.40
2:P:140:GLU:O	2:P:143:GLN:HB2	2.21	0.40
2:P:16:PHE:HA	2:P:35:VAL:HG11	2.01	0.40
2:Q:104:GLU:O	2:Q:105:LEU:C	2.59	0.40
1:A:105:TYR:HB2	1:A:153:ILE:HA	2.03	0.40
1:A:173:ILE:C	1:A:175:LYS:H	2.25	0.40
1:A:184:LYS:HZ2	1:A:191:GLU:HB2	1.82	0.40
1:B:105:TYR:HB2	1:B:153:ILE:HA	2.03	0.40
1:B:184:LYS:HE3	1:B:191:GLU:HB2	2.02	0.40
1:B:229:PHE:CD1	1:B:229:PHE:O	2.74	0.40
1:B:304:ALA:O	1:B:305:SER:C	2.60	0.40
1:B:781:ASN:O	1:B:789:ASN:ND2	2.54	0.40
1:C:175:LYS:HB2	1:C:175:LYS:HZ3	1.79	0.40
1:C:250:ALA:C	1:C:252:ASP:H	2.25	0.40
1:C:279:ILE:C	1:C:281:GLU:N	2.74	0.40
1:C:375:GLY:O	1:C:377:GLN:N	2.55	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:443:GLU:CG	1:C:458:LYS:CG	2.95	0.40
1:C:557:LEU:HD11	1:C:575:VAL:HG12	2.03	0.40
1:C:297:LYS:NZ	1:C:601:GLU:HB3	2.24	0.40
1:C:721:SER:O	1:C:722:ILE:C	2.60	0.40
1:C:789:ASN:O	1:C:792:VAL:HB	2.21	0.40
1:D:104:ILE:HG23	1:D:152:LEU:HB3	2.04	0.40
1:D:238:GLN:C	1:D:240:ALA:H	2.25	0.40
1:D:241:PHE:HA	1:D:264:MET:HE1	2.03	0.40
1:D:375:GLY:O	1:D:377:GLN:N	2.54	0.40
1:E:210:PHE:CD1	1:E:214:PHE:HD1	2.39	0.40
1:E:332:ASN:ND2	1:E:334:LEU:HD13	2.34	0.40
1:E:612:GLY:O	1:E:616:GLU:HG3	2.21	0.40
1:E:657:ILE:O	1:E:658:PRO:C	2.59	0.40
1:F:541:LYS:HB3	1:F:542:PRO:HD2	2.03	0.40
1:F:66:LEU:HD12	1:F:104:ILE:N	2.37	0.40
2:Q:13:LYS:HZ3	2:Q:65:PHE:CB	2.33	0.40
2:R:13:LYS:HD2	2:R:13:LYS:N	2.36	0.40
2:R:16:PHE:HA	2:R:35:VAL:HG11	2.04	0.40
1:A:135:VAL:N	1:A:136:PRO:HD3	2.36	0.40
1:A:159:TYR:CD1	1:A:159:TYR:N	2.89	0.40
1:A:410:ILE:C	1:A:412:GLU:H	2.24	0.40
1:A:473:ASN:OD1	1:A:473:ASN:N	2.54	0.40
1:A:593:ILE:C	1:A:604:LEU:HD12	2.41	0.40
1:A:620:THR:HG22	1:A:621:GLY:N	2.36	0.40
1:A:639:ASN:HD22	1:A:639:ASN:C	2.25	0.40
1:A:770:ASN:HA	1:A:770:ASN:HD22	1.70	0.40
1:B:313:ASP:O	1:B:316:LYS:CB	2.68	0.40
1:B:611:THR:HG22	1:B:615:ILE:CD1	2.52	0.40
1:C:113:GLU:HA	1:C:118:GLN:HB3	2.03	0.40
1:C:348:LEU:HA	1:C:348:LEU:HD23	1.82	0.40
1:C:583:ASN:ND2	1:C:587:PRO:HA	2.37	0.40
1:C:718:ARG:HH11	1:C:767:GLN:NE2	2.19	0.40
1:D:108:ASP:O	1:D:110:ASP:OD1	2.39	0.40
1:D:229:PHE:O	1:D:229:PHE:CD1	2.74	0.40
1:D:313:ASP:O	1:D:316:LYS:CB	2.69	0.40
1:D:611:THR:HG22	1:D:615:ILE:HD12	2.04	0.40
1:D:292:ARG:NE	1:D:617:LYS:HE3	2.37	0.40
1:E:238:GLN:C	1:E:240:ALA:H	2.24	0.40
1:E:373:LYS:CD	1:E:376:GLN:NE2	2.76	0.40
1:E:561:ASN:C	1:E:563:ALA:N	2.73	0.40
1:E:66:LEU:HD12	1:E:104:ILE:N	2.37	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:173:ILE:C	1:F:175:LYS:H	2.24	0.40
1:F:250:ALA:C	1:F:252:ASP:H	2.24	0.40
1:F:318:ILE:H	1:F:318:ILE:CD1	2.28	0.40
1:F:714:GLN:O	1:F:715:GLU:C	2.58	0.40
2:O:71:MET:HG2	2:O:71:MET:O	2.22	0.40
2:S:55:VAL:HB	2:S:67:GLU:OE1	2.21	0.40
2:T:109:MET:HG3	2:T:116:LEU:CD1	2.50	0.40
2:T:145:MET:HB3	2:T:146:THR:H	1.63	0.40
1:A:154:ILE:HG13	1:A:171:TYR:CD1	2.56	0.40
1:A:210:PHE:CD1	1:A:214:PHE:HD1	2.40	0.40
1:A:327:LEU:O	1:A:495:PHE:N	2.49	0.40
1:A:359:PRO:HG2	1:A:360:VAL:N	2.33	0.40
1:A:99:GLU:OE2	1:A:284:LYS:HD2	2.22	0.40
1:B:136:PRO:O	1:B:138:ALA:N	2.55	0.40
1:B:183:SER:O	1:B:187:SER:HB2	2.20	0.40
1:B:250:ALA:O	1:B:252:ASP:N	2.54	0.40
1:B:345:THR:C	1:B:488:LEU:HD22	2.42	0.40
1:B:455:TYR:O	1:B:471:TRP:HA	2.19	0.40
1:B:639:ASN:HD22	1:B:639:ASN:C	2.24	0.40
1:B:688:PHE:C	1:B:688:PHE:HD2	2.25	0.40
1:C:131:ARG:HG2	1:C:131:ARG:NH1	2.37	0.40
1:C:134:LYS:C	1:C:136:PRO:CD	2.85	0.40
1:D:278:LYS:O	1:D:279:ILE:C	2.58	0.40
1:D:579:THR:C	1:D:581:GLN:N	2.75	0.40
1:D:722:ILE:HD13	1:D:764:LEU:CD2	2.52	0.40
1:D:73:ASN:O	1:D:74:GLU:O	2.40	0.40
1:E:410:ILE:C	1:E:412:GLU:H	2.24	0.40
1:E:446:ILE:HG13	1:E:452:GLU:O	2.21	0.40
1:E:611:THR:HG22	1:E:615:ILE:HD12	2.04	0.40
1:E:767:GLN:HB3	1:E:768:LYS:H	1.53	0.40
1:F:192:PHE:O	1:F:193:LEU:C	2.59	0.40
1:F:413:LEU:HB2	1:F:419:ILE:HG12	2.02	0.40
1:F:447:SER:CB	1:F:450:ASN:O	2.68	0.40
1:F:512:GLU:O	1:F:516:VAL:HG23	2.22	0.40
2:S:27:ILE:HA	2:S:31:GLU:OE2	2.21	0.40
2:S:9:ILE:HD12	2:S:69:LEU:CD1	2.44	0.40
2:T:91:VAL:HG12	2:T:92:PHE:N	2.34	0.40

All (8) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:685:LYS:NZ	1:D:685:LYS:NZ[2_657]	2.03	0.17
1:A:75:THR:CG2	1:E:786:GLU:O[4_556]	2.09	0.11
1:B:786:GLU:O	1:D:75:THR:CG2[4_656]	2.12	0.08
1:F:75:THR:CG2	1:F:786:GLU:O[2_557]	2.13	0.07
1:B:75:THR:CG2	1:D:786:GLU:O[4_656]	2.14	0.06
1:A:786:GLU:O	1:E:75:THR:CG2[4_556]	2.15	0.05
1:C:75:THR:CG2	1:C:786:GLU:O[2_756]	2.15	0.05
1:C:685:LYS:NZ	1:E:685:LYS:NZ[2_657]	2.16	0.04

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%)	497 (68%)	179 (24%)	57 (8%)	1	6
1	B	733/777 (94%)	494 (67%)	183 (25%)	56 (8%)	1	7
1	C	733/777 (94%)	491 (67%)	187 (26%)	55 (8%)	1	7
1	D	733/777 (94%)	492 (67%)	187 (26%)	54 (7%)	1	7
1	E	733/777 (94%)	490 (67%)	186 (25%)	57 (8%)	1	6
1	F	733/777 (94%)	492 (67%)	186 (25%)	55 (8%)	1	7
2	O	144/149 (97%)	103 (72%)	30 (21%)	11 (8%)	1	7
2	P	144/149 (97%)	103 (72%)	30 (21%)	11 (8%)	1	7
2	Q	144/149 (97%)	103 (72%)	30 (21%)	11 (8%)	1	7
2	R	144/149 (97%)	103 (72%)	29 (20%)	12 (8%)	1	6
2	S	144/149 (97%)	103 (72%)	30 (21%)	11 (8%)	1	7
2	T	144/149 (97%)	103 (72%)	30 (21%)	11 (8%)	1	7
All	All	5262/5556 (95%)	3574 (68%)	1287 (24%)	401 (8%)	1	7

All (401) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	176	GLY
1	A	183	SER
1	A	302	LEU
1	A	787	THR
1	B	137	PHE
1	B	176	GLY
1	B	183	SER
1	B	302	LEU
1	B	787	THR
1	C	113	GLU
1	C	176	GLY
1	C	183	SER
1	C	302	LEU
1	C	787	THR
1	D	113	GLU
1	D	136	PRO
1	D	137	PHE
1	D	176	GLY
1	D	183	SER
1	D	302	LEU
1	D	787	THR
1	E	113	GLU
1	E	136	PRO
1	E	176	GLY
1	E	183	SER
1	E	302	LEU
1	E	787	THR
1	F	113	GLU
1	F	137	PHE
1	F	176	GLY
1	F	183	SER
1	F	302	LEU
1	F	787	THR
2	O	23	GLY
2	O	71	MET
2	O	145	MET
2	P	23	GLY
2	P	71	MET
2	P	145	MET
2	Q	23	GLY
2	R	23	GLY
2	R	71	MET
2	R	145	MET

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Mol	Chain	Res	Type
2	S	23	GLY
2	S	71	MET
2	S	145	MET
2	T	23	GLY
2	T	71	MET
2	T	145	MET
1	A	73	ASN
1	A	74	GLU
1	A	84	ASP
1	A	91	LYS
1	A	113	GLU
1	A	116	GLU
1	A	136	PRO
1	A	137	PHE
1	A	174	GLY
1	A	192	PHE
1	A	200	SER
1	A	278	LYS
1	A	334	LEU
1	A	376	GLN
1	A	434	LEU
1	A	449	GLU
1	A	510	GLN
1	A	580	GLU
1	A	620	THR
1	A	658	PRO
1	A	730	ASN
1	B	73	ASN
1	B	74	GLU
1	B	84	ASP
1	B	91	LYS
1	B	113	GLU
1	B	116	GLU
1	B	136	PRO
1	B	174	GLY
1	B	278	LYS
1	B	334	LEU
1	B	376	GLN
1	B	434	LEU
1	B	510	GLN
1	B	580	GLU
1	B	620	THR

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Mol	Chain	Res	Type
1	B	658	PRO
1	B	730	ASN
1	C	73	ASN
1	C	74	GLU
1	C	84	ASP
1	C	91	LYS
1	C	116	GLU
1	C	136	PRO
1	C	137	PHE
1	C	174	GLY
1	C	200	SER
1	C	278	LYS
1	C	334	LEU
1	C	372	LYS
1	C	376	GLN
1	C	434	LEU
1	C	580	GLU
1	C	620	THR
1	C	658	PRO
1	C	730	ASN
1	D	73	ASN
1	D	74	GLU
1	D	84	ASP
1	D	91	LYS
1	D	116	GLU
1	D	174	GLY
1	D	200	SER
1	D	278	LYS
1	D	334	LEU
1	D	372	LYS
1	D	376	GLN
1	D	434	LEU
1	D	449	GLU
1	D	580	GLU
1	D	620	THR
1	D	658	PRO
1	D	730	ASN
1	E	73	ASN
1	E	74	GLU
1	E	84	ASP
1	E	91	LYS
1	E	116	GLU

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Mol	Chain	Res	Type
1	E	137	PHE
1	E	174	GLY
1	E	192	PHE
1	E	200	SER
1	E	278	LYS
1	E	334	LEU
1	E	372	LYS
1	E	376	GLN
1	E	434	LEU
1	E	449	GLU
1	E	510	GLN
1	E	580	GLU
1	E	620	THR
1	E	658	PRO
1	E	730	ASN
1	F	73	ASN
1	F	74	GLU
1	F	84	ASP
1	F	91	LYS
1	F	116	GLU
1	F	136	PRO
1	F	174	GLY
1	F	200	SER
1	F	278	LYS
1	F	334	LEU
1	F	372	LYS
1	F	376	GLN
1	F	434	LEU
1	F	449	GLU
1	F	510	GLN
1	F	580	GLU
1	F	620	THR
1	F	658	PRO
1	F	730	ASN
2	O	45	GLU
2	O	93	ASP
2	O	118	ASP
2	O	125	ILE
2	P	45	GLU
2	P	93	ASP
2	P	118	ASP
2	P	125	ILE

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Mol	Chain	Res	Type
2	Q	45	GLU
2	Q	71	MET
2	Q	93	ASP
2	Q	118	ASP
2	Q	125	ILE
2	Q	145	MET
2	R	45	GLU
2	R	74	ARG
2	R	93	ASP
2	R	118	ASP
2	R	125	ILE
2	S	45	GLU
2	S	74	ARG
2	S	93	ASP
2	S	118	ASP
2	S	125	ILE
2	T	45	GLU
2	T	74	ARG
2	T	93	ASP
2	T	118	ASP
2	T	125	ILE
1	A	76	LEU
1	A	251	PRO
1	A	260	TYR
1	A	299	GLU
1	A	372	LYS
1	A	406	ASP
1	A	734	ASN
1	A	765	THR
1	A	774	LYS
1	B	76	LEU
1	B	180	ASP
1	B	200	SER
1	B	251	PRO
1	B	260	TYR
1	B	299	GLU
1	B	372	LYS
1	B	406	ASP
1	B	449	GLU
1	B	734	ASN
1	B	765	THR
1	B	774	LYS

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Mol	Chain	Res	Type
1	C	76	LEU
1	C	251	PRO
1	C	260	TYR
1	C	299	GLU
1	C	406	ASP
1	C	449	GLU
1	C	510	GLN
1	C	734	ASN
1	C	774	LYS
1	D	76	LEU
1	D	251	PRO
1	D	260	TYR
1	D	299	GLU
1	D	406	ASP
1	D	510	GLN
1	D	720	ILE
1	D	734	ASN
1	D	765	THR
1	D	774	LYS
1	E	76	LEU
1	E	251	PRO
1	E	260	TYR
1	E	299	GLU
1	E	406	ASP
1	E	734	ASN
1	E	774	LYS
1	F	76	LEU
1	F	192	PHE
1	F	251	PRO
1	F	260	TYR
1	F	299	GLU
1	F	406	ASP
1	F	734	ASN
1	F	774	LYS
2	O	25	GLY
2	O	74	ARG
2	P	25	GLY
2	P	74	ARG
2	Q	74	ARG
2	R	25	GLY
2	S	25	GLY
2	T	25	GLY

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Mol	Chain	Res	Type
1	A	95	GLU
1	A	121	SER
1	A	166	SER
1	A	360	VAL
1	A	393	GLU
1	A	459	GLU
1	A	691	LYS
1	A	720	ILE
1	B	95	GLU
1	B	121	SER
1	B	166	SER
1	B	192	PHE
1	B	393	GLU
1	B	691	LYS
1	B	720	ILE
1	C	121	SER
1	C	166	SER
1	C	393	GLU
1	C	691	LYS
1	C	720	ILE
1	D	95	GLU
1	D	121	SER
1	D	166	SER
1	D	393	GLU
1	D	691	LYS
1	E	95	GLU
1	E	121	SER
1	E	166	SER
1	E	180	ASP
1	E	393	GLU
1	E	691	LYS
1	E	720	ILE
1	F	95	GLU
1	F	121	SER
1	F	166	SER
1	F	393	GLU
1	F	459	GLU
1	F	691	LYS
1	F	720	ILE
1	F	765	THR
2	Q	25	GLY
1	A	80	GLN

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Mol	Chain	Res	Type
1	A	123	GLU
1	A	159	TYR
1	A	323	ASN
1	A	423	LYS
1	A	546	LYS
1	A	637	PRO
1	B	80	GLN
1	B	123	GLU
1	B	159	TYR
1	B	264	MET
1	B	323	ASN
1	B	360	VAL
1	B	423	LYS
1	B	459	GLU
1	B	546	LYS
1	B	637	PRO
1	C	80	GLN
1	C	95	GLU
1	C	123	GLU
1	C	159	TYR
1	C	190	PRO
1	C	323	ASN
1	C	360	VAL
1	C	423	LYS
1	C	459	GLU
1	C	546	LYS
1	C	637	PRO
1	D	80	GLN
1	D	123	GLU
1	D	323	ASN
1	D	360	VAL
1	D	423	LYS
1	D	459	GLU
1	D	546	LYS
1	D	605	THR
1	D	637	PRO
1	E	80	GLN
1	E	123	GLU
1	E	323	ASN
1	E	360	VAL
1	E	423	LYS
1	E	459	GLU

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Mol	Chain	Res	Type
1	E	637	PRO
1	E	757	THR
1	E	765	THR
1	F	80	GLN
1	F	123	GLU
1	F	159	TYR
1	F	323	ASN
1	F	360	VAL
1	F	423	LYS
1	F	546	LYS
1	F	637	PRO
2	O	147	ALA
2	P	147	ALA
2	Q	147	ALA
2	R	147	ALA
2	S	147	ALA
2	T	147	ALA
1	A	264	MET
1	A	460	GLY
1	A	605	THR
1	A	692	GLU
1	A	757	THR
1	B	460	GLY
1	B	605	THR
1	B	692	GLU
1	C	206	SER
1	C	264	MET
1	C	605	THR
1	D	206	SER
1	D	264	MET
1	D	460	GLY
1	D	757	THR
1	E	206	SER
1	E	264	MET
1	E	460	GLY
1	E	546	LYS
1	E	605	THR
1	E	692	GLU
1	F	264	MET
1	F	460	GLY
1	F	692	GLU
1	F	757	THR

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Mol	Chain	Res	Type
2	R	133	ASP
1	C	460	GLY
1	A	177	ILE
1	A	537	GLY
1	C	537	GLY
1	D	537	GLY
2	O	59	GLY
2	P	59	GLY
2	Q	59	GLY
2	T	59	GLY
1	B	537	GLY
1	D	177	ILE
1	E	537	GLY
1	F	537	GLY
2	R	59	GLY
2	S	59	GLY
1	B	177	ILE
1	C	177	ILE
1	F	177	ILE
1	A	279	ILE
1	C	279	ILE
1	E	177	ILE

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%)	562 (85%)	102 (15%)	2	12
1	B	664/705 (94%)	558 (84%)	106 (16%)	2	10
1	C	664/705 (94%)	560 (84%)	104 (16%)	2	11
1	D	664/705 (94%)	558 (84%)	106 (16%)	2	10
1	E	664/705 (94%)	558 (84%)	106 (16%)	2	10
1	F	664/705 (94%)	558 (84%)	106 (16%)	2	10
2	O	123/127 (97%)	103 (84%)	20 (16%)	2	10

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	P	123/127 (97%)	105 (85%)	18 (15%)	3	13
2	Q	123/127 (97%)	104 (85%)	19 (15%)	2	12
2	R	123/127 (97%)	103 (84%)	20 (16%)	2	10
2	S	123/127 (97%)	105 (85%)	18 (15%)	3	13
2	T	123/127 (97%)	104 (85%)	19 (15%)	2	12
All	All	4722/4992 (95%)	3978 (84%)	744 (16%)	2	11

All (744) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	70	GLU
1	A	71	PHE
1	A	72	THR
1	A	77	ASP
1	A	80	GLN
1	A	87	LYS
1	A	88	LYS
1	A	97	TYR
1	A	99	GLU
1	A	110	ASP
1	A	113	GLU
1	A	115	LYS
1	A	120	LEU
1	A	122	GLU
1	A	128	MET
1	A	129	ASN
1	A	133	GLU
1	A	135	VAL
1	A	140	ARG
1	A	141	PHE
1	A	148	GLU
1	A	149	THR
1	A	152	LEU
1	A	153	ILE
1	A	156	ILE
1	A	158	ASP
1	A	170	TYR
1	A	172	GLU
1	A	173	ILE
1	A	179	LEU

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Mol	Chain	Res	Type
1	A	182	ILE
1	A	188	LEU
1	A	197	LYS
1	A	201	ASP
1	A	202	ASP
1	A	210	PHE
1	A	212	GLN
1	A	217	LYS
1	A	218	LEU
1	A	221	ASN
1	A	223	LYS
1	A	253	HIS
1	A	254	ARG
1	A	279	ILE
1	A	284	LYS
1	A	292	ARG
1	A	293	ILE
1	A	296	LEU
1	A	299	GLU
1	A	305	SER
1	A	323	ASN
1	A	334	LEU
1	A	336	THR
1	A	349	ASN
1	A	377	GLN
1	A	395	GLU
1	A	397	GLU
1	A	400	LYS
1	A	401	ILE
1	A	414	LYS
1	A	415	GLU
1	A	416	ASN
1	A	434	LEU
1	A	438	ASN
1	A	444	PHE
1	A	451	ASN
1	A	455	TYR
1	A	472	ARG
1	A	479	LYS
1	A	480	ASN
1	A	481	VAL
1	A	484	VAL

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Mol	Chain	Res	Type
1	A	500	SER
1	A	507	GLN
1	A	515	LYS
1	A	521	ASN
1	A	524	GLU
1	A	533	LEU
1	A	562	GLU
1	A	570	THR
1	A	582	ASP
1	A	597	ASN
1	A	623	ASP
1	A	629	ASN
1	A	635	ILE
1	A	639	ASN
1	A	659	THR
1	A	665	LYS
1	A	672	ARG
1	A	678	VAL
1	A	688	PHE
1	A	709	ASN
1	A	714	GLN
1	A	726	ILE
1	A	729	TYR
1	A	734	ASN
1	A	744	GLU
1	A	755	ARG
1	A	770	ASN
1	A	781	ASN
1	A	786	GLU
1	A	794	GLN
1	B	70	GLU
1	B	71	PHE
1	B	72	THR
1	B	77	ASP
1	B	80	GLN
1	B	87	LYS
1	B	88	LYS
1	B	97	TYR
1	B	99	GLU
1	B	110	ASP
1	B	113	GLU
1	B	115	LYS

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Mol	Chain	Res	Type
1	B	120	LEU
1	B	122	GLU
1	B	128	MET
1	B	129	ASN
1	B	133	GLU
1	B	135	VAL
1	B	140	ARG
1	B	141	PHE
1	B	148	GLU
1	B	149	THR
1	B	152	LEU
1	B	153	ILE
1	B	156	ILE
1	B	158	ASP
1	B	170	TYR
1	B	172	GLU
1	B	173	ILE
1	B	179	LEU
1	B	180	ASP
1	B	182	ILE
1	B	188	LEU
1	B	197	LYS
1	B	201	ASP
1	B	202	ASP
1	B	210	PHE
1	B	212	GLN
1	B	217	LYS
1	B	218	LEU
1	B	221	ASN
1	B	223	LYS
1	B	253	HIS
1	B	254	ARG
1	B	279	ILE
1	B	284	LYS
1	B	292	ARG
1	B	293	ILE
1	B	296	LEU
1	B	299	GLU
1	B	305	SER
1	B	309	PRO
1	B	323	ASN
1	B	334	LEU

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Mol	Chain	Res	Type
1	B	336	THR
1	B	349	ASN
1	B	377	GLN
1	B	395	GLU
1	B	397	GLU
1	B	400	LYS
1	B	401	ILE
1	B	414	LYS
1	B	415	GLU
1	B	416	ASN
1	B	434	LEU
1	B	438	ASN
1	B	444	PHE
1	B	451	ASN
1	B	455	TYR
1	B	472	ARG
1	B	479	LYS
1	B	480	ASN
1	B	481	VAL
1	B	484	VAL
1	B	499	PRO
1	B	500	SER
1	B	507	GLN
1	B	515	LYS
1	B	521	ASN
1	B	524	GLU
1	B	533	LEU
1	B	562	GLU
1	B	570	THR
1	B	582	ASP
1	B	597	ASN
1	B	623	ASP
1	B	629	ASN
1	B	635	ILE
1	B	639	ASN
1	B	659	THR
1	B	665	LYS
1	B	672	ARG
1	B	678	VAL
1	B	688	PHE
1	B	709	ASN
1	B	714	GLN

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Mol	Chain	Res	Type
1	B	726	ILE
1	B	729	TYR
1	B	734	ASN
1	B	744	GLU
1	B	755	ARG
1	B	766	HIS
1	B	770	ASN
1	B	781	ASN
1	B	786	GLU
1	B	794	GLN
1	C	70	GLU
1	C	71	PHE
1	C	72	THR
1	C	77	ASP
1	C	80	GLN
1	C	88	LYS
1	C	97	TYR
1	C	99	GLU
1	C	110	ASP
1	C	113	GLU
1	C	115	LYS
1	C	120	LEU
1	C	122	GLU
1	C	128	MET
1	C	129	ASN
1	C	133	GLU
1	C	135	VAL
1	C	140	ARG
1	C	141	PHE
1	C	148	GLU
1	C	149	THR
1	C	152	LEU
1	C	153	ILE
1	C	156	ILE
1	C	158	ASP
1	C	170	TYR
1	C	172	GLU
1	C	173	ILE
1	C	179	LEU
1	C	182	ILE
1	C	188	LEU
1	C	197	LYS

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Mol	Chain	Res	Type
1	C	201	ASP
1	C	202	ASP
1	C	210	PHE
1	C	212	GLN
1	C	217	LYS
1	C	218	LEU
1	C	221	ASN
1	C	223	LYS
1	C	253	HIS
1	C	254	ARG
1	C	279	ILE
1	C	284	LYS
1	C	292	ARG
1	C	293	ILE
1	C	296	LEU
1	C	299	GLU
1	C	305	SER
1	C	323	ASN
1	C	334	LEU
1	C	336	THR
1	C	349	ASN
1	C	377	GLN
1	C	395	GLU
1	C	397	GLU
1	C	400	LYS
1	C	401	ILE
1	C	414	LYS
1	C	415	GLU
1	C	416	ASN
1	C	434	LEU
1	C	438	ASN
1	C	444	PHE
1	C	451	ASN
1	C	455	TYR
1	C	472	ARG
1	C	479	LYS
1	C	480	ASN
1	C	481	VAL
1	C	484	VAL
1	C	499	PRO
1	C	500	SER
1	C	507	GLN

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Mol	Chain	Res	Type
1	C	515	LYS
1	C	521	ASN
1	C	524	GLU
1	C	533	LEU
1	C	562	GLU
1	C	570	THR
1	C	582	ASP
1	C	597	ASN
1	C	623	ASP
1	C	629	ASN
1	C	635	ILE
1	C	639	ASN
1	C	659	THR
1	C	665	LYS
1	C	672	ARG
1	C	678	VAL
1	C	688	PHE
1	C	709	ASN
1	C	714	GLN
1	C	726	ILE
1	C	729	TYR
1	C	734	ASN
1	C	744	GLU
1	C	755	ARG
1	C	767	GLN
1	C	769	SER
1	C	770	ASN
1	C	781	ASN
1	C	786	GLU
1	C	794	GLN
1	D	70	GLU
1	D	71	PHE
1	D	72	THR
1	D	77	ASP
1	D	80	GLN
1	D	87	LYS
1	D	88	LYS
1	D	97	TYR
1	D	99	GLU
1	D	110	ASP
1	D	113	GLU
1	D	115	LYS

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Mol	Chain	Res	Type
1	D	120	LEU
1	D	122	GLU
1	D	128	MET
1	D	129	ASN
1	D	133	GLU
1	D	135	VAL
1	D	140	ARG
1	D	141	PHE
1	D	148	GLU
1	D	149	THR
1	D	152	LEU
1	D	153	ILE
1	D	156	ILE
1	D	158	ASP
1	D	161	ILE
1	D	170	TYR
1	D	172	GLU
1	D	173	ILE
1	D	179	LEU
1	D	182	ILE
1	D	188	LEU
1	D	197	LYS
1	D	201	ASP
1	D	202	ASP
1	D	210	PHE
1	D	212	GLN
1	D	217	LYS
1	D	218	LEU
1	D	221	ASN
1	D	223	LYS
1	D	253	HIS
1	D	254	ARG
1	D	279	ILE
1	D	284	LYS
1	D	292	ARG
1	D	293	ILE
1	D	296	LEU
1	D	299	GLU
1	D	305	SER
1	D	323	ASN
1	D	334	LEU
1	D	336	THR

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Mol	Chain	Res	Type
1	D	349	ASN
1	D	377	GLN
1	D	395	GLU
1	D	397	GLU
1	D	400	LYS
1	D	401	ILE
1	D	414	LYS
1	D	415	GLU
1	D	416	ASN
1	D	434	LEU
1	D	438	ASN
1	D	444	PHE
1	D	451	ASN
1	D	455	TYR
1	D	472	ARG
1	D	479	LYS
1	D	480	ASN
1	D	481	VAL
1	D	484	VAL
1	D	499	PRO
1	D	500	SER
1	D	507	GLN
1	D	515	LYS
1	D	521	ASN
1	D	524	GLU
1	D	533	LEU
1	D	562	GLU
1	D	570	THR
1	D	582	ASP
1	D	597	ASN
1	D	623	ASP
1	D	629	ASN
1	D	635	ILE
1	D	639	ASN
1	D	659	THR
1	D	665	LYS
1	D	672	ARG
1	D	678	VAL
1	D	688	PHE
1	D	709	ASN
1	D	714	GLN
1	D	726	ILE

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Mol	Chain	Res	Type
1	D	729	TYR
1	D	734	ASN
1	D	744	GLU
1	D	755	ARG
1	D	766	HIS
1	D	769	SER
1	D	770	ASN
1	D	781	ASN
1	D	786	GLU
1	D	794	GLN
1	E	70	GLU
1	E	71	PHE
1	E	72	THR
1	E	77	ASP
1	E	80	GLN
1	E	88	LYS
1	E	97	TYR
1	E	99	GLU
1	E	110	ASP
1	E	113	GLU
1	E	115	LYS
1	E	120	LEU
1	E	122	GLU
1	E	128	MET
1	E	129	ASN
1	E	133	GLU
1	E	135	VAL
1	E	140	ARG
1	E	141	PHE
1	E	148	GLU
1	E	149	THR
1	E	152	LEU
1	E	153	ILE
1	E	156	ILE
1	E	158	ASP
1	E	161	ILE
1	E	170	TYR
1	E	172	GLU
1	E	173	ILE
1	E	179	LEU
1	E	182	ILE
1	E	188	LEU

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Mol	Chain	Res	Type
1	E	197	LYS
1	E	201	ASP
1	E	202	ASP
1	E	210	PHE
1	E	212	GLN
1	E	217	LYS
1	E	218	LEU
1	E	221	ASN
1	E	223	LYS
1	E	253	HIS
1	E	254	ARG
1	E	279	ILE
1	E	284	LYS
1	E	292	ARG
1	E	293	ILE
1	E	296	LEU
1	E	299	GLU
1	E	305	SER
1	E	323	ASN
1	E	334	LEU
1	E	336	THR
1	E	349	ASN
1	E	377	GLN
1	E	395	GLU
1	E	397	GLU
1	E	400	LYS
1	E	401	ILE
1	E	414	LYS
1	E	415	GLU
1	E	416	ASN
1	E	434	LEU
1	E	438	ASN
1	E	444	PHE
1	E	451	ASN
1	E	455	TYR
1	E	472	ARG
1	E	479	LYS
1	E	480	ASN
1	E	481	VAL
1	E	484	VAL
1	E	499	PRO
1	E	500	SER

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Mol	Chain	Res	Type
1	E	507	GLN
1	E	515	LYS
1	E	521	ASN
1	E	524	GLU
1	E	533	LEU
1	E	562	GLU
1	E	570	THR
1	E	582	ASP
1	E	597	ASN
1	E	623	ASP
1	E	629	ASN
1	E	635	ILE
1	E	639	ASN
1	E	648	PRO
1	E	659	THR
1	E	665	LYS
1	E	672	ARG
1	E	678	VAL
1	E	688	PHE
1	E	709	ASN
1	E	714	GLN
1	E	726	ILE
1	E	729	TYR
1	E	734	ASN
1	E	744	GLU
1	E	755	ARG
1	E	766	HIS
1	E	769	SER
1	E	770	ASN
1	E	781	ASN
1	E	786	GLU
1	E	794	GLN
1	F	65	ASN
1	F	70	GLU
1	F	71	PHE
1	F	72	THR
1	F	77	ASP
1	F	80	GLN
1	F	87	LYS
1	F	88	LYS
1	F	97	TYR
1	F	99	GLU

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Mol	Chain	Res	Type
1	F	110	ASP
1	F	113	GLU
1	F	115	LYS
1	F	120	LEU
1	F	122	GLU
1	F	128	MET
1	F	129	ASN
1	F	133	GLU
1	F	135	VAL
1	F	140	ARG
1	F	141	PHE
1	F	148	GLU
1	F	149	THR
1	F	152	LEU
1	F	153	ILE
1	F	156	ILE
1	F	158	ASP
1	F	170	TYR
1	F	172	GLU
1	F	173	ILE
1	F	179	LEU
1	F	182	ILE
1	F	188	LEU
1	F	197	LYS
1	F	201	ASP
1	F	202	ASP
1	F	210	PHE
1	F	212	GLN
1	F	217	LYS
1	F	218	LEU
1	F	221	ASN
1	F	223	LYS
1	F	253	HIS
1	F	254	ARG
1	F	279	ILE
1	F	284	LYS
1	F	292	ARG
1	F	293	ILE
1	F	296	LEU
1	F	299	GLU
1	F	305	SER
1	F	323	ASN

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Mol	Chain	Res	Type
1	F	334	LEU
1	F	336	THR
1	F	349	ASN
1	F	377	GLN
1	F	395	GLU
1	F	397	GLU
1	F	400	LYS
1	F	401	ILE
1	F	414	LYS
1	F	415	GLU
1	F	416	ASN
1	F	434	LEU
1	F	438	ASN
1	F	444	PHE
1	F	451	ASN
1	F	455	TYR
1	F	472	ARG
1	F	479	LYS
1	F	480	ASN
1	F	481	VAL
1	F	484	VAL
1	F	499	PRO
1	F	500	SER
1	F	507	GLN
1	F	515	LYS
1	F	521	ASN
1	F	524	GLU
1	F	533	LEU
1	F	562	GLU
1	F	570	THR
1	F	582	ASP
1	F	597	ASN
1	F	623	ASP
1	F	629	ASN
1	F	635	ILE
1	F	639	ASN
1	F	659	THR
1	F	665	LYS
1	F	672	ARG
1	F	678	VAL
1	F	688	PHE
1	F	709	ASN

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Mol	Chain	Res	Type
1	F	714	GLN
1	F	726	ILE
1	F	729	TYR
1	F	734	ASN
1	F	744	GLU
1	F	755	ARG
1	F	766	HIS
1	F	769	SER
1	F	770	ASN
1	F	781	ASN
1	F	786	GLU
1	F	794	GLN
2	O	13	LYS
2	O	14	GLU
2	O	18	LEU
2	O	30	LYS
2	O	34	THR
2	O	36	MET
2	O	39	LEU
2	O	49	GLN
2	O	50	ASP
2	O	54	GLU
2	O	55	VAL
2	O	56	ASP
2	O	62	THR
2	O	65	PHE
2	O	74	ARG
2	O	76	MET
2	O	97	ASN
2	O	106	ARG
2	O	117	THR
2	O	123	GLN
2	P	13	LYS
2	P	14	GLU
2	P	18	LEU
2	P	36	MET
2	P	39	LEU
2	P	49	GLN
2	P	50	ASP
2	P	54	GLU
2	P	55	VAL
2	P	56	ASP

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Mol	Chain	Res	Type
2	P	62	THR
2	P	65	PHE
2	P	74	ARG
2	P	76	MET
2	P	97	ASN
2	P	106	ARG
2	P	117	THR
2	P	123	GLN
2	Q	13	LYS
2	Q	14	GLU
2	Q	18	LEU
2	Q	30	LYS
2	Q	36	MET
2	Q	39	LEU
2	Q	49	GLN
2	Q	50	ASP
2	Q	54	GLU
2	Q	55	VAL
2	Q	56	ASP
2	Q	62	THR
2	Q	65	PHE
2	Q	74	ARG
2	Q	76	MET
2	Q	97	ASN
2	Q	106	ARG
2	Q	117	THR
2	Q	123	GLN
2	R	13	LYS
2	R	14	GLU
2	R	18	LEU
2	R	30	LYS
2	R	34	THR
2	R	36	MET
2	R	39	LEU
2	R	49	GLN
2	R	50	ASP
2	R	54	GLU
2	R	55	VAL
2	R	56	ASP
2	R	62	THR
2	R	65	PHE
2	R	74	ARG

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Mol	Chain	Res	Type
2	R	76	MET
2	R	97	ASN
2	R	106	ARG
2	R	117	THR
2	R	123	GLN
2	S	13	LYS
2	S	14	GLU
2	S	18	LEU
2	S	34	THR
2	S	39	LEU
2	S	49	GLN
2	S	50	ASP
2	S	54	GLU
2	S	55	VAL
2	S	56	ASP
2	S	62	THR
2	S	65	PHE
2	S	74	ARG
2	S	76	MET
2	S	97	ASN
2	S	106	ARG
2	S	117	THR
2	S	123	GLN
2	T	13	LYS
2	T	14	GLU
2	T	18	LEU
2	T	36	MET
2	T	39	LEU
2	T	49	GLN
2	T	50	ASP
2	T	54	GLU
2	T	55	VAL
2	T	56	ASP
2	T	62	THR
2	T	65	PHE
2	T	74	ARG
2	T	76	MET
2	T	97	ASN
2	T	106	ARG
2	T	117	THR
2	T	123	GLN
2	T	133	ASP

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (225) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	64	ASN
1	A	73	ASN
1	A	81	GLN
1	A	83	GLN
1	A	129	ASN
1	A	212	GLN
1	A	323	ASN
1	A	337	ASN
1	A	349	ASN
1	A	368	GLN
1	A	376	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	577	HIS
1	A	581	GLN
1	A	597	ASN
1	A	629	ASN
1	A	639	ASN
1	A	655	ASN
1	A	709	ASN
1	A	747	ASN
1	A	750	GLN
1	A	759	GLN
1	A	767	GLN
1	A	770	ASN
1	A	781	ASN
1	A	794	GLN
1	B	64	ASN
1	B	73	ASN
1	B	81	GLN
1	B	83	GLN
1	B	129	ASN
1	B	212	GLN
1	B	323	ASN

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Mol	Chain	Res	Type
1	B	337	ASN
1	B	349	ASN
1	B	368	GLN
1	B	376	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
1	B	551	ASN
1	B	553	GLN
1	B	576	ASN
1	B	577	HIS
1	B	581	GLN
1	B	597	ASN
1	B	629	ASN
1	B	639	ASN
1	B	655	ASN
1	B	709	ASN
1	B	727	GLN
1	B	747	ASN
1	B	750	GLN
1	B	759	GLN
1	B	767	GLN
1	B	770	ASN
1	B	781	ASN
1	B	794	GLN
1	C	73	ASN
1	C	81	GLN
1	C	83	GLN
1	C	129	ASN
1	C	212	GLN
1	C	323	ASN
1	C	337	ASN
1	C	349	ASN
1	C	368	GLN
1	C	376	GLN
1	C	387	ASN
1	C	438	ASN
1	C	480	ASN
1	C	507	GLN

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Mol	Chain	Res	Type
1	C	510	GLN
1	C	518	ASN
1	C	551	ASN
1	C	553	GLN
1	C	576	ASN
1	C	577	HIS
1	C	581	GLN
1	C	597	ASN
1	C	629	ASN
1	C	639	ASN
1	C	655	ASN
1	C	709	ASN
1	C	727	GLN
1	C	740	GLN
1	C	747	ASN
1	C	750	GLN
1	C	759	GLN
1	C	767	GLN
1	C	770	ASN
1	C	781	ASN
1	C	794	GLN
1	D	64	ASN
1	D	73	ASN
1	D	81	GLN
1	D	83	GLN
1	D	129	ASN
1	D	212	GLN
1	D	323	ASN
1	D	337	ASN
1	D	349	ASN
1	D	368	GLN
1	D	376	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	577	HIS

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Mol	Chain	Res	Type
1	D	581	GLN
1	D	597	ASN
1	D	629	ASN
1	D	639	ASN
1	D	655	ASN
1	D	709	ASN
1	D	727	GLN
1	D	747	ASN
1	D	750	GLN
1	D	759	GLN
1	D	767	GLN
1	D	770	ASN
1	D	781	ASN
1	D	794	GLN
1	E	73	ASN
1	E	81	GLN
1	E	83	GLN
1	E	129	ASN
1	E	212	GLN
1	E	323	ASN
1	E	337	ASN
1	E	349	ASN
1	E	368	GLN
1	E	376	GLN
1	E	387	ASN
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	577	HIS
1	E	581	GLN
1	E	597	ASN
1	E	629	ASN
1	E	639	ASN
1	E	655	ASN
1	E	709	ASN
1	E	727	GLN
1	E	747	ASN

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Mol	Chain	Res	Type
1	E	750	GLN
1	E	759	GLN
1	E	767	GLN
1	E	770	ASN
1	E	781	ASN
1	E	794	GLN
1	F	65	ASN
1	F	73	ASN
1	F	81	GLN
1	F	83	GLN
1	F	129	ASN
1	F	212	GLN
1	F	323	ASN
1	F	337	ASN
1	F	349	ASN
1	F	368	GLN
1	F	376	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	577	HIS
1	F	581	GLN
1	F	597	ASN
1	F	629	ASN
1	F	639	ASN
1	F	655	ASN
1	F	709	ASN
1	F	747	ASN
1	F	750	GLN
1	F	759	GLN
1	F	767	GLN
1	F	770	ASN
1	F	781	ASN
1	F	794	GLN
2	O	49	GLN
2	O	111	ASN

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Mol	Chain	Res	Type
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 [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

5.6 Ligand geometry [i](#)

Of 36 ligands modelled in this entry, 30 are monoatomic - leaving 6 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. 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 $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
4	3AT	E	907	3	25,32,32	1.37	4 (16%)	28,50,50	1.29	3 (10%)
4	3AT	A	903	3	25,32,32	1.42	4 (16%)	28,50,50	1.32	3 (10%)
4	3AT	D	906	3	25,32,32	1.44	4 (16%)	28,50,50	1.30	3 (10%)
4	3AT	C	905	3	25,32,32	1.46	4 (16%)	28,50,50	1.33	3 (10%)
4	3AT	B	904	3	25,32,32	1.40	4 (16%)	28,50,50	1.34	3 (10%)
4	3AT	F	908	3	25,32,32	1.37	4 (16%)	28,50,50	1.33	3 (10%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
4	3AT	E	907	3	-	7/18/34/34	0/3/3/3
4	3AT	A	903	3	-	7/18/34/34	0/3/3/3
4	3AT	D	906	3	-	7/18/34/34	0/3/3/3
4	3AT	C	905	3	-	7/18/34/34	0/3/3/3
4	3AT	B	904	3	-	7/18/34/34	0/3/3/3
4	3AT	F	908	3	-	7/18/34/34	0/3/3/3

All (24) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	906	3AT	C4-N3	3.60	1.40	1.35
4	A	903	3AT	C4-N3	3.40	1.40	1.35
4	C	905	3AT	C4-N3	3.33	1.40	1.35
4	B	904	3AT	C4-N3	3.07	1.39	1.35
4	C	905	3AT	PG-O2G	-2.99	1.43	1.54
4	B	904	3AT	C8-N7	-2.98	1.29	1.34
4	E	907	3AT	PG-O2G	-2.96	1.43	1.54
4	F	908	3AT	C4-N3	2.88	1.39	1.35
4	E	907	3AT	C8-N7	-2.87	1.29	1.34
4	A	903	3AT	PG-O2G	-2.87	1.43	1.54
4	D	906	3AT	C8-N7	-2.86	1.29	1.34
4	F	908	3AT	C8-N7	-2.85	1.29	1.34
4	B	904	3AT	PG-O2G	-2.84	1.43	1.54
4	C	905	3AT	C8-N7	-2.83	1.29	1.34
4	A	903	3AT	C8-N7	-2.74	1.29	1.34
4	D	906	3AT	PG-O2G	-2.73	1.44	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	F	908	3AT	PG-O2G	-2.70	1.44	1.54
4	E	907	3AT	C4-N3	2.69	1.39	1.35
4	C	905	3AT	C2-N3	2.69	1.36	1.32
4	A	903	3AT	C2-N3	2.68	1.36	1.32
4	D	906	3AT	C2-N3	2.68	1.36	1.32
4	F	908	3AT	C2-N3	2.66	1.36	1.32
4	B	904	3AT	C2-N3	2.64	1.36	1.32
4	E	907	3AT	C2-N3	2.52	1.36	1.32

All (18) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	F	908	3AT	O4'-C1'-C2'	-4.13	100.89	106.93
4	B	904	3AT	O4'-C1'-C2'	-4.05	101.01	106.93
4	C	905	3AT	O4'-C1'-C2'	-3.96	101.14	106.93
4	A	903	3AT	O4'-C1'-C2'	-3.87	101.27	106.93
4	E	907	3AT	O4'-C1'-C2'	-3.80	101.38	106.93
4	D	906	3AT	O4'-C1'-C2'	-3.76	101.43	106.93
4	B	904	3AT	PB-O3B-PG	3.33	144.25	132.83
4	C	905	3AT	PB-O3B-PG	3.27	144.06	132.83
4	A	903	3AT	PB-O3B-PG	3.26	144.01	132.83
4	F	908	3AT	PB-O3B-PG	3.25	143.97	132.83
4	E	907	3AT	PB-O3B-PG	3.23	143.91	132.83
4	D	906	3AT	PB-O3B-PG	3.19	143.78	132.83
4	A	903	3AT	C4-C5-N7	2.81	112.32	109.40
4	B	904	3AT	C4-C5-N7	2.69	112.20	109.40
4	F	908	3AT	C4-C5-N7	2.67	112.18	109.40
4	C	905	3AT	C4-C5-N7	2.63	112.14	109.40
4	E	907	3AT	C4-C5-N7	2.61	112.12	109.40
4	D	906	3AT	C4-C5-N7	2.60	112.11	109.40

There are no chirality outliers.

All (42) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	E	907	3AT	PB-O3B-PG-O2G
4	E	907	3AT	O4'-C4'-C5'-O5'
4	E	907	3AT	C3'-C4'-C5'-O5'
4	A	903	3AT	PB-O3B-PG-O2G
4	A	903	3AT	O4'-C4'-C5'-O5'
4	A	903	3AT	C3'-C4'-C5'-O5'
4	B	904	3AT	PB-O3B-PG-O2G

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Mol	Chain	Res	Type	Atoms
4	B	904	3AT	O4'-C4'-C5'-O5'
4	B	904	3AT	C3'-C4'-C5'-O5'
4	C	905	3AT	PB-O3B-PG-O2G
4	C	905	3AT	O4'-C4'-C5'-O5'
4	C	905	3AT	C3'-C4'-C5'-O5'
4	F	908	3AT	PB-O3B-PG-O2G
4	F	908	3AT	O4'-C4'-C5'-O5'
4	F	908	3AT	C3'-C4'-C5'-O5'
4	D	906	3AT	PB-O3B-PG-O2G
4	D	906	3AT	O4'-C4'-C5'-O5'
4	D	906	3AT	C3'-C4'-C5'-O5'
4	E	907	3AT	C4'-C5'-O5'-PA
4	A	903	3AT	C4'-C5'-O5'-PA
4	B	904	3AT	C4'-C5'-O5'-PA
4	C	905	3AT	C4'-C5'-O5'-PA
4	F	908	3AT	C4'-C5'-O5'-PA
4	D	906	3AT	C4'-C5'-O5'-PA
4	E	907	3AT	PA-O3A-PB-O1B
4	A	903	3AT	PA-O3A-PB-O1B
4	B	904	3AT	PA-O3A-PB-O1B
4	C	905	3AT	PA-O3A-PB-O1B
4	F	908	3AT	PA-O3A-PB-O1B
4	D	906	3AT	PA-O3A-PB-O1B
4	E	907	3AT	PB-O3B-PG-O3G
4	A	903	3AT	PB-O3B-PG-O3G
4	B	904	3AT	PB-O3B-PG-O3G
4	C	905	3AT	PB-O3B-PG-O3G
4	F	908	3AT	PB-O3B-PG-O3G
4	D	906	3AT	PB-O3B-PG-O3G
4	E	907	3AT	PB-O3B-PG-O1G
4	A	903	3AT	PB-O3B-PG-O1G
4	B	904	3AT	PB-O3B-PG-O1G
4	C	905	3AT	PB-O3B-PG-O1G
4	F	908	3AT	PB-O3B-PG-O1G
4	D	906	3AT	PB-O3B-PG-O1G

There are no ring outliers.

6 monomers are involved in 6 short contacts:

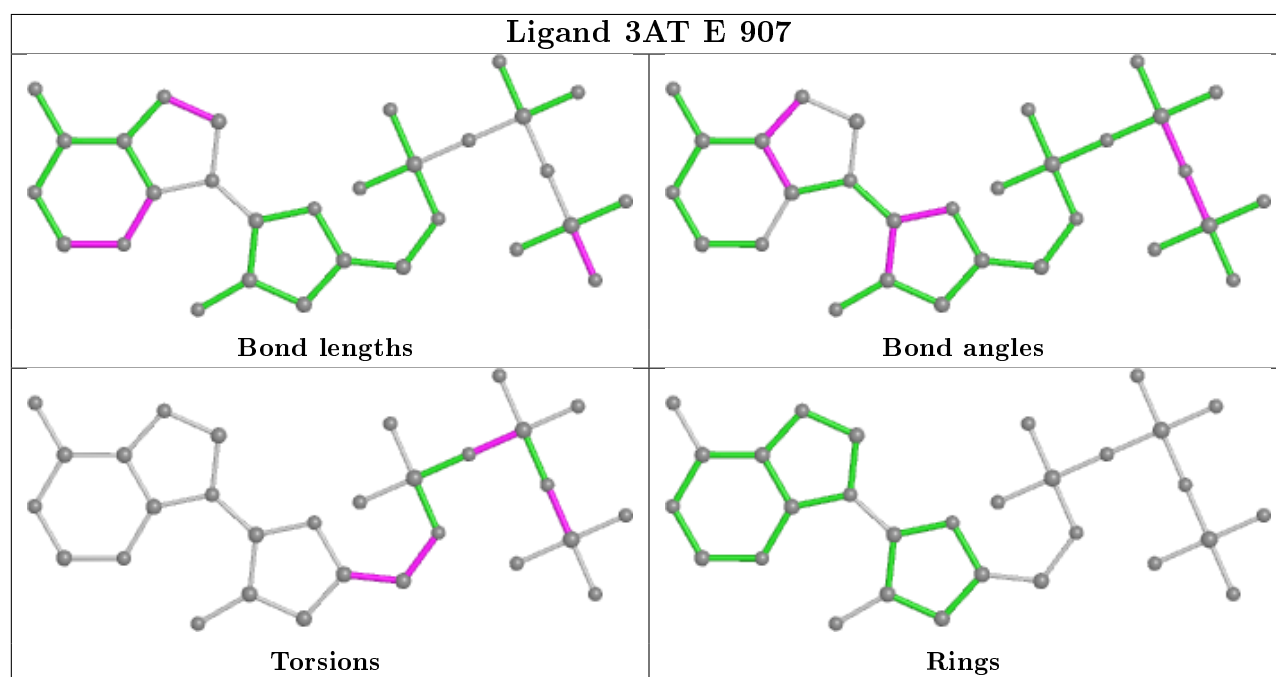
Mol	Chain	Res	Type	Clashes	Symm-Clashes
4	E	907	3AT	1	0
4	A	903	3AT	1	0

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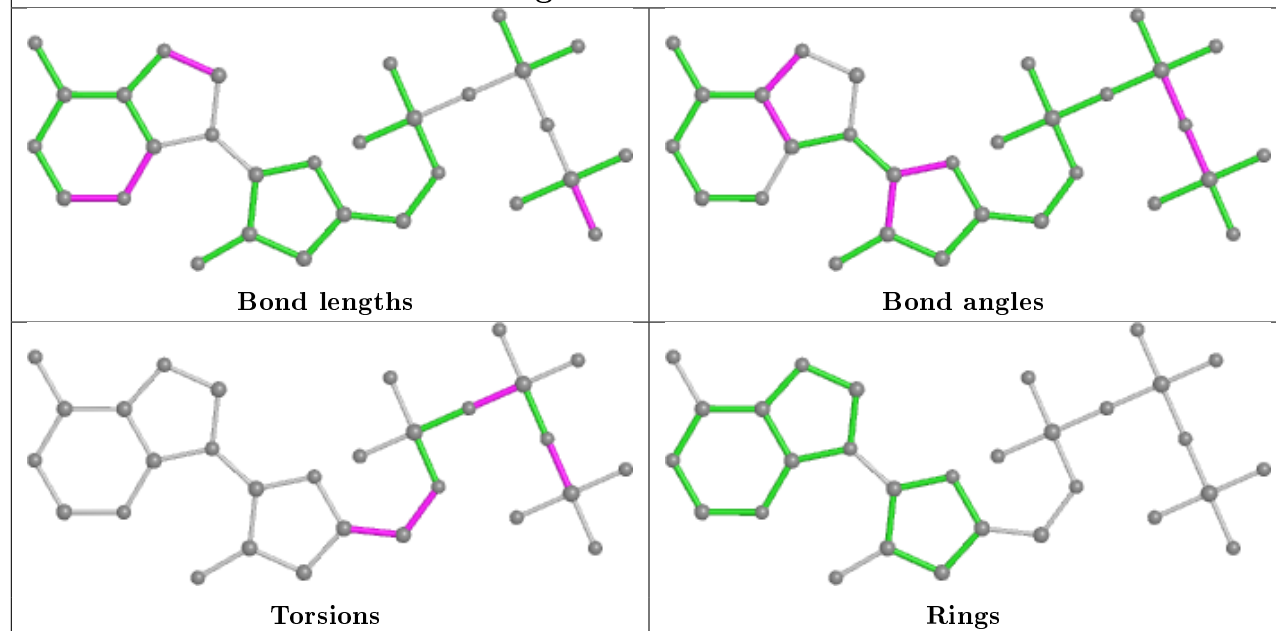
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Mol	Chain	Res	Type	Clashes	Symm-Clashes
4	D	906	3AT	1	0
4	C	905	3AT	1	0
4	B	904	3AT	1	0
4	F	908	3AT	1	0

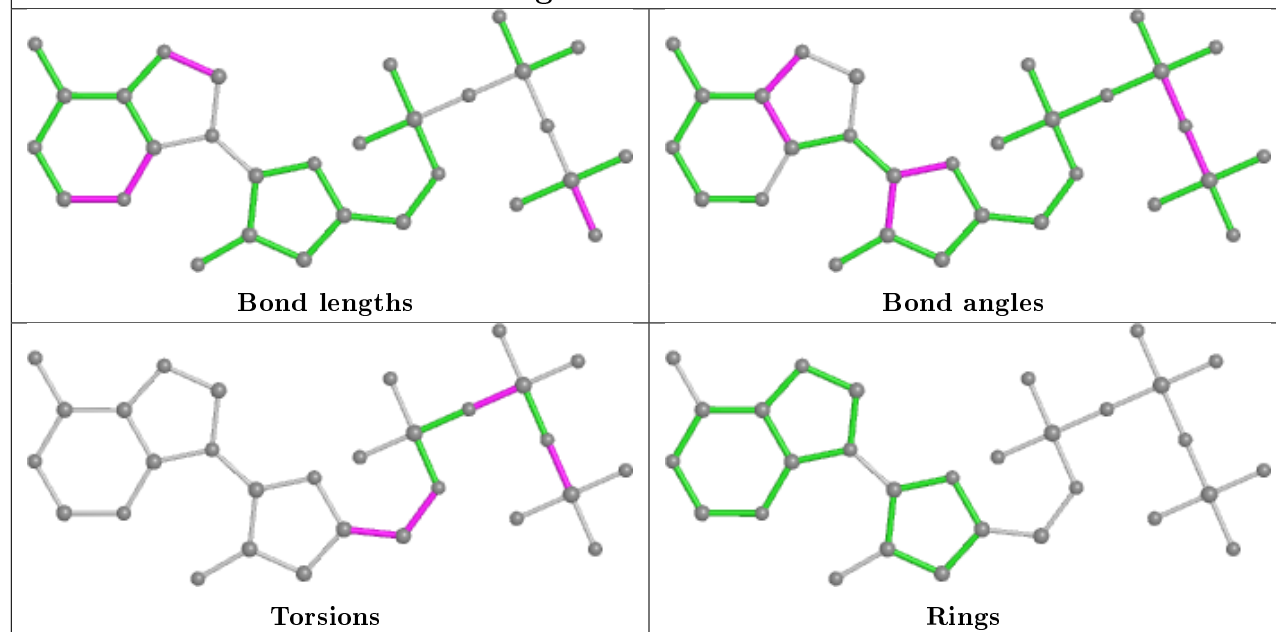
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.



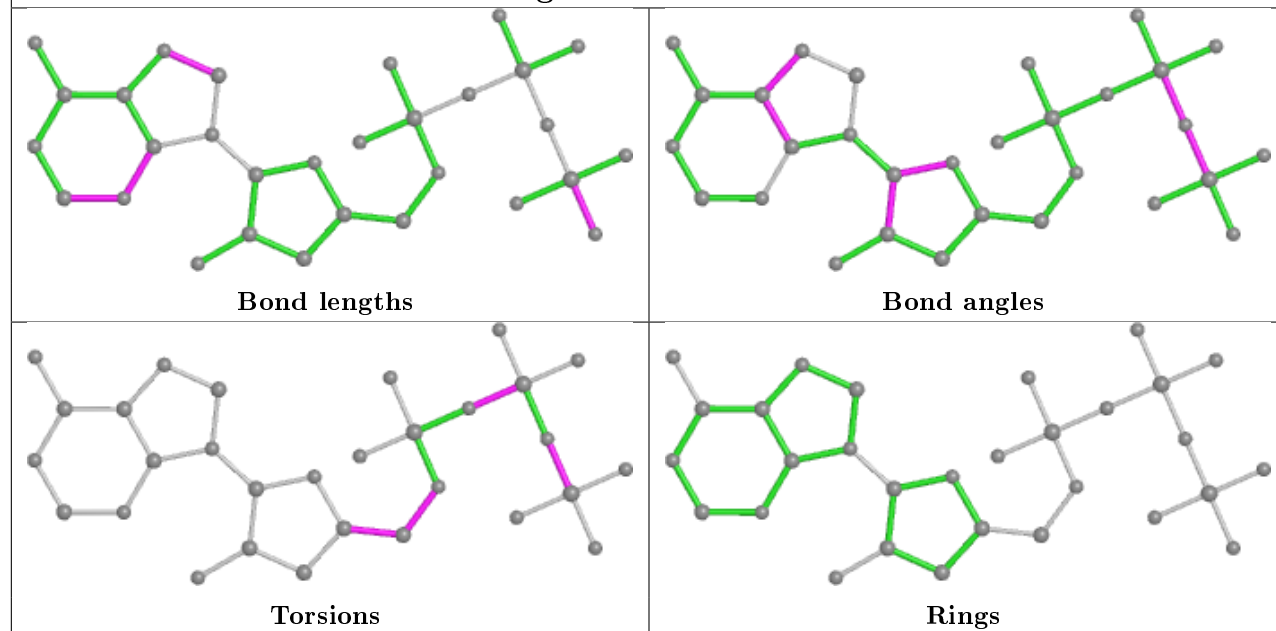
Ligand 3AT A 903



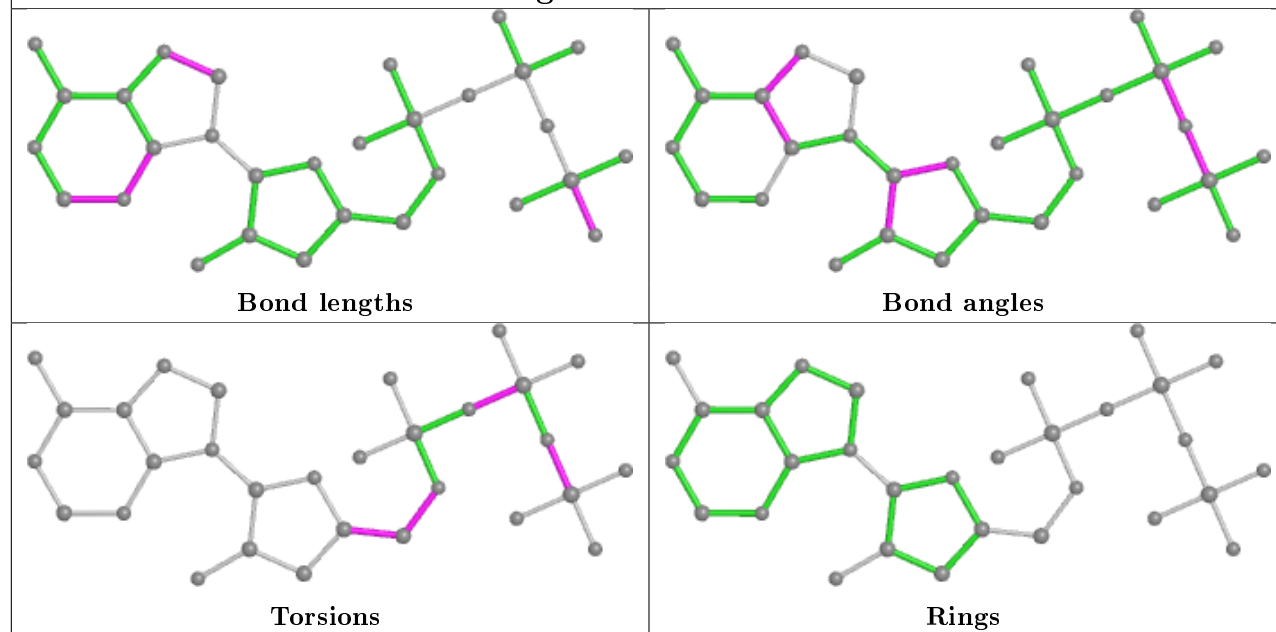
Ligand 3AT D 906

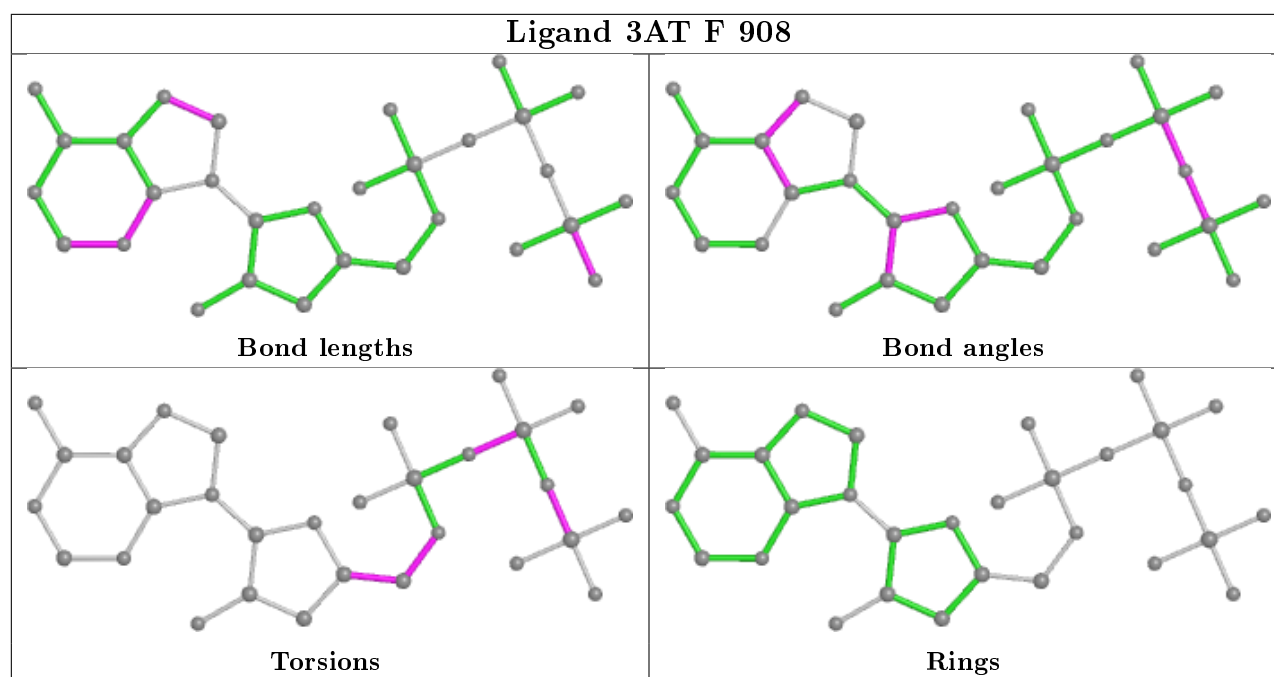


Ligand 3AT C 905



Ligand 3AT B 904





5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 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(Å ²)	Q<0.9
1	A	735/777 (94%)	0.32	35 (4%) 30 33	26, 80, 136, 148	0
1	B	735/777 (94%)	0.25	26 (3%) 44 46	27, 80, 136, 148	0
1	C	735/777 (94%)	0.27	25 (3%) 45 47	27, 80, 136, 148	0
1	D	735/777 (94%)	0.28	26 (3%) 44 46	27, 80, 136, 150	0
1	E	735/777 (94%)	0.29	31 (4%) 36 38	26, 80, 136, 148	0
1	F	735/777 (94%)	0.31	37 (5%) 28 31	27, 80, 136, 148	0
2	O	146/149 (97%)	0.09	2 (1%) 75 78	33, 63, 124, 131	0
2	P	146/149 (97%)	0.09	2 (1%) 75 78	33, 63, 124, 131	0
2	Q	146/149 (97%)	0.08	2 (1%) 75 78	33, 62, 124, 131	0
2	R	146/149 (97%)	0.12	2 (1%) 75 78	33, 63, 124, 131	0
2	S	146/149 (97%)	0.11	4 (2%) 54 57	32, 62, 124, 131	0
2	T	146/149 (97%)	0.09	2 (1%) 75 78	33, 62, 124, 131	0
All	All	5286/5556 (95%)	0.26	194 (3%) 41 43	26, 76, 134, 150	0

All (194) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	E	126	ASN	8.6
1	D	162	ASN	7.5
1	D	171	TYR	7.3
1	A	222	ASN	7.2
1	B	126	ASN	7.1
1	B	171	TYR	6.6
1	E	171	TYR	6.5
1	C	171	TYR	6.5
1	F	162	ASN	6.5
1	A	171	TYR	6.5
1	B	225	ILE	6.3

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Mol	Chain	Res	Type	RSRZ
1	D	225	ILE	6.2
1	C	162	ASN	6.1
1	C	225	ILE	5.9
1	A	786	GLU	5.7
1	E	225	ILE	5.6
1	B	212	GLN	5.5
1	B	218	LEU	5.5
1	F	225	ILE	5.4
1	F	163	SER	5.4
1	C	126	ASN	5.4
1	F	171	TYR	5.3
1	A	162	ASN	5.3
1	E	125	LYS	5.2
1	B	786	GLU	5.2
1	C	222	ASN	5.2
1	A	111	LEU	5.1
1	D	126	ASN	5.1
1	B	162	ASN	5.1
1	F	212	GLN	5.1
1	A	221	ASN	4.9
1	F	126	ASN	4.9
1	E	127	SER	4.9
1	E	218	LEU	4.9
1	E	111	LEU	4.8
1	D	163	SER	4.6
1	A	214	PHE	4.6
1	F	204	ASP	4.5
1	D	125	LYS	4.5
1	C	226	ASP	4.5
1	C	163	SER	4.5
1	A	160	ALA	4.4
1	B	237	PHE	4.3
1	F	222	ASN	4.3
1	D	206	SER	4.3
1	A	126	ASN	4.3
1	F	260	TYR	4.3
1	D	786	GLU	4.2
1	F	237	PHE	4.2
1	E	162	ASN	4.1
1	B	125	LYS	4.0
1	E	212	GLN	4.0
1	A	212	GLN	3.9

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Mol	Chain	Res	Type	RSRZ
1	C	260	TYR	3.9
1	A	218	LEU	3.8
1	C	214	PHE	3.8
1	A	163	SER	3.7
1	A	260	TYR	3.7
1	A	127	SER	3.6
1	D	76	LEU	3.6
1	A	230	ILE	3.6
1	D	229	PHE	3.5
1	C	156	ILE	3.5
1	F	230	ILE	3.5
1	A	225	ILE	3.4
1	D	111	LEU	3.4
1	E	230	ILE	3.4
1	D	230	ILE	3.4
1	E	214	PHE	3.4
2	Q	63	ILE	3.3
2	R	63	ILE	3.3
1	F	221	ASN	3.2
1	A	161	ILE	3.2
1	F	156	ILE	3.2
1	F	185	ASP	3.2
2	S	78	ASP	3.2
1	F	192	PHE	3.1
1	D	318	ILE	3.1
1	A	129	ASN	3.0
1	D	110	ASP	3.0
1	B	127	SER	3.0
1	B	191	GLU	3.0
1	D	421	LYS	3.0
1	C	157	LYS	3.0
1	B	204	ASP	3.0
1	F	111	LEU	3.0
1	B	214	PHE	2.9
1	F	226	ASP	2.9
1	E	770	ASN	2.9
1	B	156	ILE	2.9
1	D	161	ILE	2.9
1	F	434	LEU	2.8
1	C	218	LEU	2.8
1	E	370	LEU	2.8
1	D	237	PHE	2.8

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Mol	Chain	Res	Type	RSRZ
2	S	52	ILE	2.8
1	F	184	LYS	2.8
1	C	259	LEU	2.8
1	B	206	SER	2.8
1	F	201	ASP	2.8
1	E	444	PHE	2.7
1	F	441	VAL	2.7
1	A	206	SER	2.7
1	A	237	PHE	2.7
1	C	76	LEU	2.7
1	E	357	TRP	2.7
1	B	222	ASN	2.7
1	B	70	GLU	2.7
1	F	218	LEU	2.6
1	B	118	GLN	2.6
1	B	160	ALA	2.6
1	E	135	VAL	2.6
1	A	203	SER	2.6
1	B	114	HIS	2.6
1	B	787	THR	2.6
1	E	786	GLU	2.5
1	F	398	ILE	2.5
1	F	160	ALA	2.5
1	C	127	SER	2.5
1	F	203	SER	2.5
1	E	187	SER	2.5
1	C	230	ILE	2.5
1	D	398	ILE	2.5
2	S	63	ILE	2.5
1	E	217	LYS	2.5
1	E	206	SER	2.5
1	A	359	PRO	2.5
1	E	339	ILE	2.5
1	F	420	LEU	2.4
1	C	407	HIS	2.4
2	P	52	ILE	2.4
1	F	229	PHE	2.4
1	A	370	LEU	2.4
1	C	213	LYS	2.4
1	C	111	LEU	2.4
1	B	357	TRP	2.4
1	F	114	HIS	2.4

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Mol	Chain	Res	Type	RSRZ
1	C	191	GLU	2.4
1	E	419	ILE	2.4
1	F	435	LEU	2.4
1	F	205	SER	2.3
1	F	214	PHE	2.3
1	D	433	TYR	2.3
1	A	192	PHE	2.3
1	E	435	LEU	2.3
1	D	212	GLN	2.3
1	A	208	LEU	2.3
2	Q	116	LEU	2.3
1	A	234	LEU	2.3
1	A	158	ASP	2.3
1	E	118	GLN	2.3
1	E	434	LEU	2.3
1	E	203	SER	2.3
1	A	213	LYS	2.3
1	F	405	LEU	2.3
1	A	357	TRP	2.3
1	D	245	PHE	2.3
1	F	191	GLU	2.3
1	C	185	ASP	2.3
1	A	76	LEU	2.3
1	B	185	ASP	2.2
1	A	66	LEU	2.2
2	O	77	LYS	2.2
1	A	125	LYS	2.2
1	A	421	LYS	2.2
1	D	213	LYS	2.2
1	C	110	ASP	2.2
1	C	435	LEU	2.2
1	E	70	GLU	2.2
1	E	222	ASN	2.2
1	E	283	LEU	2.1
1	F	158	ASP	2.1
1	D	192	PHE	2.1
2	O	63	ILE	2.1
1	A	446	ILE	2.1
2	T	52	ILE	2.1
2	R	78	ASP	2.1
1	C	398	ILE	2.1
1	F	125	LYS	2.1

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Mol	Chain	Res	Type	RSRZ
1	C	192	PHE	2.1
1	D	87	LYS	2.1
1	B	444	PHE	2.1
2	T	74	ARG	2.1
1	A	155	ASN	2.1
2	P	63	ILE	2.1
1	B	76	LEU	2.1
1	D	773	PHE	2.1
2	S	79	THR	2.1
1	F	446	ILE	2.1
1	E	184	LYS	2.1
1	B	72	THR	2.0
1	E	110	ASP	2.0
1	F	76	LEU	2.0
1	D	239	HIS	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(Å ²)	Q<0.9
4	3AT	A	903	30/30	0.92	0.24	60,74,93,94	0
4	3AT	C	905	30/30	0.92	0.22	62,73,94,95	0
4	3AT	F	908	30/30	0.92	0.21	61,75,94,95	0
4	3AT	E	907	30/30	0.93	0.22	60,74,96,97	0
4	3AT	B	904	30/30	0.93	0.23	58,73,93,94	0
3	MG	C	903	1/1	0.93	0.15	9,9,9,9	0
4	3AT	D	906	30/30	0.93	0.21	58,74,94,95	0
5	CA	Q	705	1/1	0.93	0.11	55,55,55,55	0

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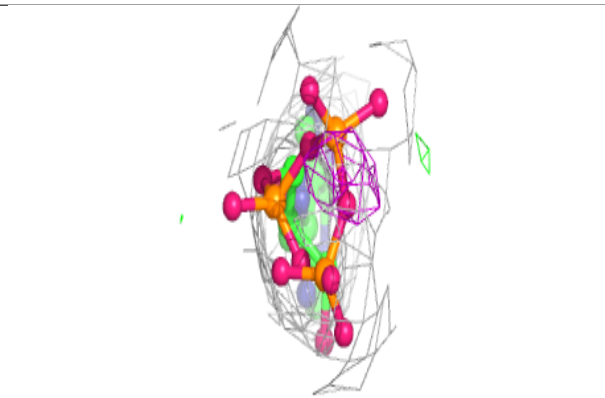
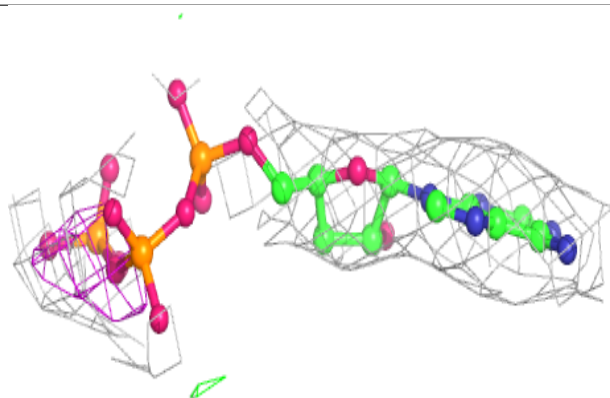
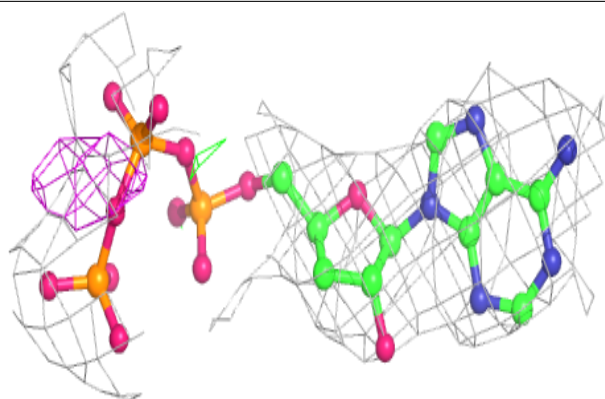
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
5	CA	O	701	1/1	0.94	0.07	51,51,51,51	0
3	MG	B	902	1/1	0.94	0.21	17,17,17,17	0
5	CA	T	811	1/1	0.95	0.16	33,33,33,33	0
3	MG	D	904	1/1	0.95	0.17	8,8,8,8	0
5	CA	Q	805	1/1	0.95	0.17	27,27,27,27	0
5	CA	S	809	1/1	0.95	0.16	26,26,26,26	0
5	CA	S	709	1/1	0.96	0.11	57,57,57,57	0
5	CA	R	707	1/1	0.96	0.10	62,62,62,62	0
5	CA	T	711	1/1	0.96	0.10	55,55,55,55	0
3	MG	A	901	1/1	0.97	0.19	5,5,5,5	0
3	MG	D	905	1/1	0.97	0.10	43,43,43,43	0
5	CA	P	703	1/1	0.97	0.15	62,62,62,62	0
3	MG	A	902	1/1	0.97	0.16	28,28,28,28	0
3	MG	E	906	1/1	0.97	0.14	26,26,26,26	0
3	MG	F	906	1/1	0.97	0.15	11,11,11,11	0
5	CA	R	807	1/1	0.97	0.14	33,33,33,33	0
5	CA	Q	806	1/1	0.97	0.16	57,57,57,57	0
5	CA	R	808	1/1	0.98	0.11	54,54,54,54	0
3	MG	F	907	1/1	0.98	0.11	34,34,34,34	0
5	CA	O	802	1/1	0.98	0.14	52,52,52,52	0
3	MG	E	905	1/1	0.98	0.14	20,20,20,20	0
5	CA	O	801	1/1	0.98	0.16	30,30,30,30	0
5	CA	P	804	1/1	0.98	0.10	52,52,52,52	0
3	MG	B	903	1/1	0.98	0.13	25,25,25,25	0
3	MG	C	904	1/1	0.98	0.15	26,26,26,26	0
5	CA	T	812	1/1	0.98	0.16	49,49,49,49	0
5	CA	P	803	1/1	0.98	0.14	31,31,31,31	0
5	CA	S	810	1/1	0.99	0.12	56,56,56,56	0

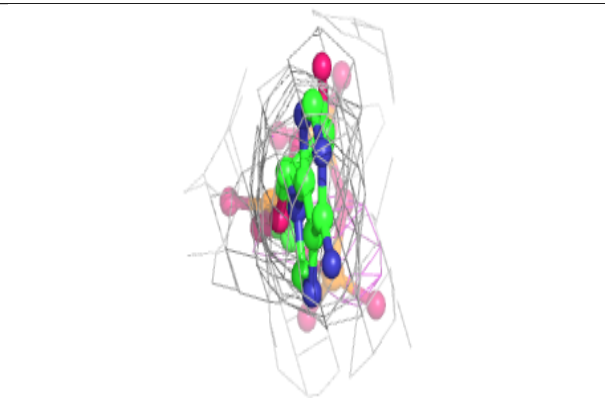
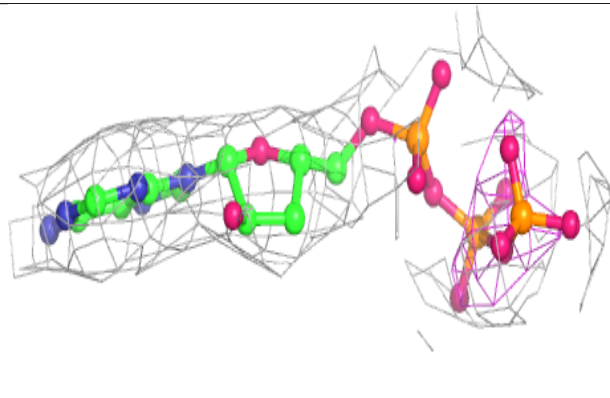
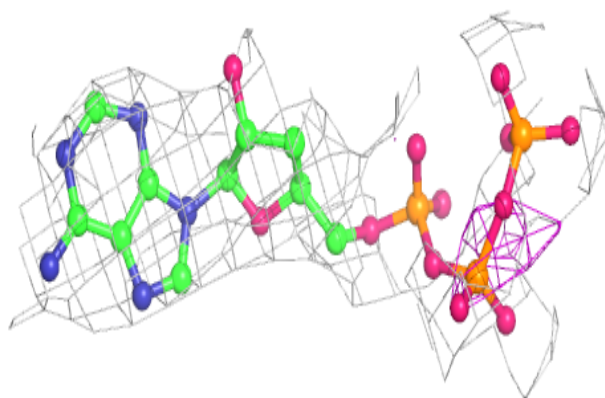
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

Electron density around 3AT A 903:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

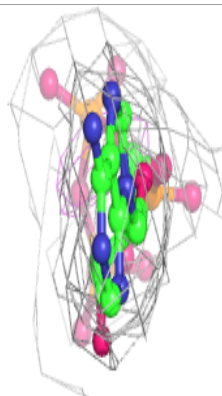
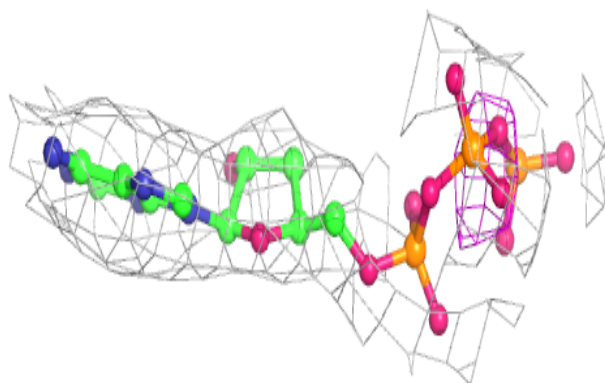
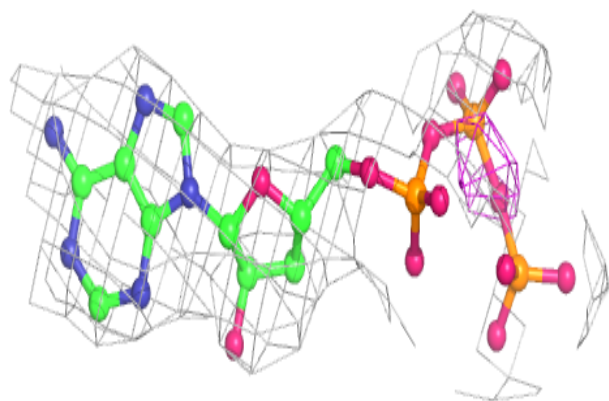
**Electron density around 3AT C 905:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

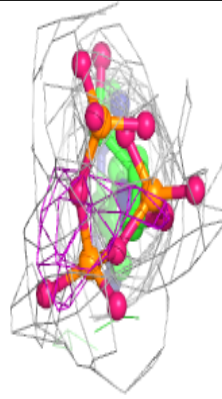
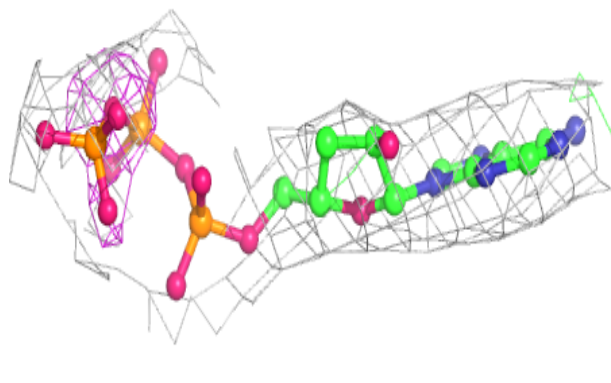
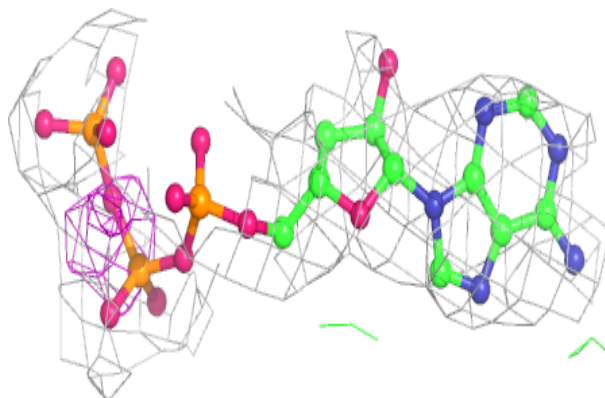


Electron density around 3AT F 908:

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)

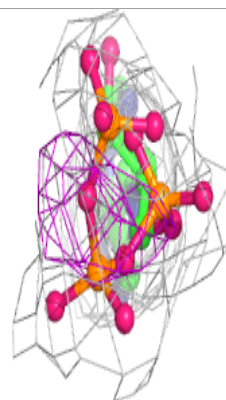
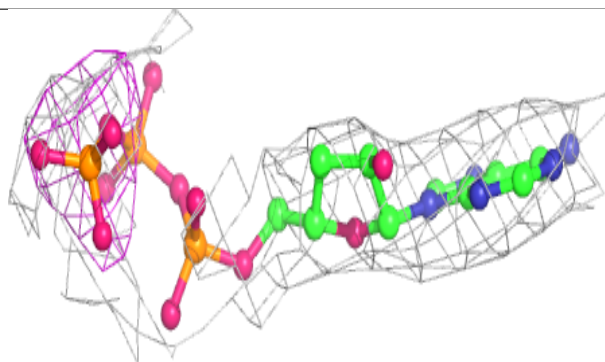
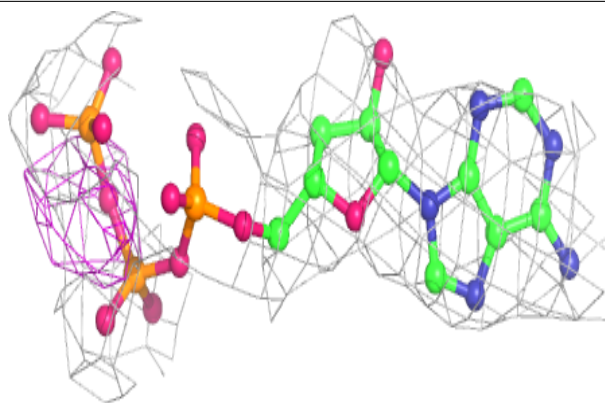
**Electron density around 3AT E 907:**

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)

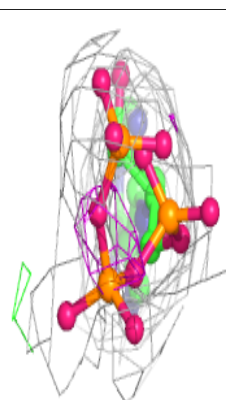
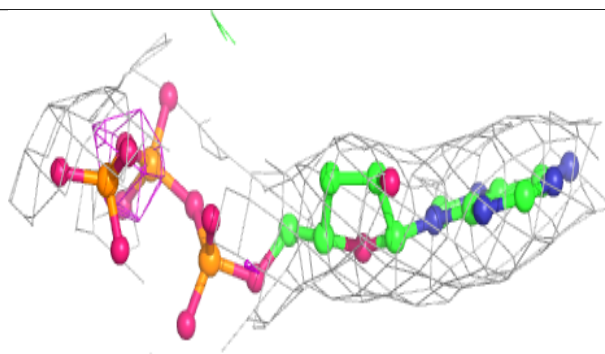
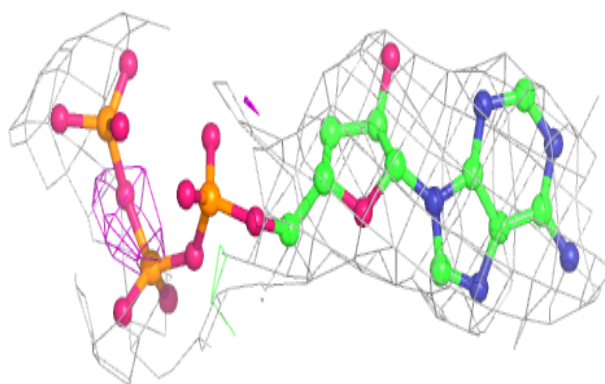


Electron density around 3AT B 904:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

**Electron density around 3AT D 906:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



6.5 Other polymers [i](#)

There are no such residues in this entry.