Full wwPDB X-ray Structure Validation Report (i)

Feb 1, 2016 – 11:56 AM GMT

PDB ID	:	3QA8
Title	:	Crystal Structure of inhibitor of kappa B kinase beta
Authors	:	Xu, G.; Lo, Y.C.; Li, Q.; Napolitano, G.; Wu, X.; Jiang, X.; Dreano, M.; Karin, M.; Wu, H.
Deposited on	:	2011-01-10
Resolution	:	3.60 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
http://wwpdb.org/validation/2016/XrayValidationReportHelp
with specific help available everywhere you see the (i) symbol.

The following versions of software and data (see references (1)) were used in the production of this report:

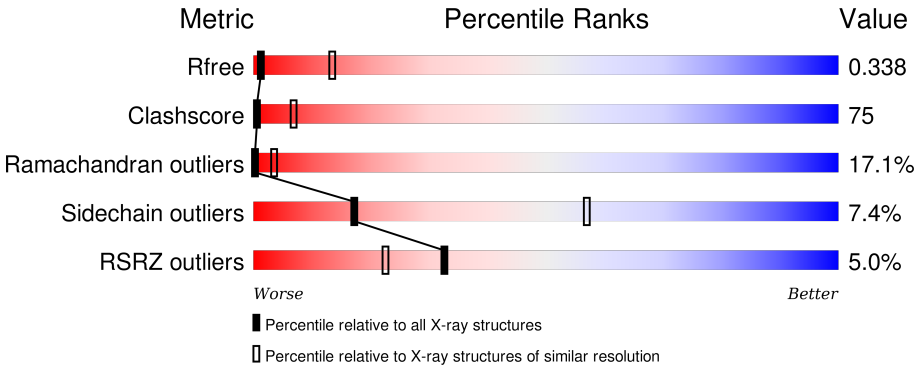
MolProbity	:	4.02b-467
Mogul	:	1.7 (RC4), CSD as536be (2015)
Xtriage (Phenix)	:	1.9-1692
EDS	:	rb-20026688
Percentile statistics	:	20151230.v01 (using entries in the PDB archive December 30th 2015)
Refmac	:	5.8.0135
CCP4	:	6.5.0
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	trunk26865

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 3.60 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}	91344	1408 (3.80-3.40)
Clashscore	102246	1010 (3.74-3.46)
Ramachandran outliers	100387	1007 (3.76-3.44)
Sidechain outliers	100360	1007 (3.76-3.44)
RSRZ outliers	91569	1003 (3.78-3.42)

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. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	676	4% 26% 46% 18% • 8%
1	B	676	4% 26% 45% 19% • 8%
1	C	676	3% 26% 46% 18% • 8%
1	D	676	5% 26% 46% 18% • 8%
1	E	676	3% 27% 46% 18% • 8%

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Mol	Chain	Length	Quality of chain
1	F	676	6% 26% 47% 18% 8%
1	G	676	6% 25% 38% 15% 20%
1	H	676	4% 24% 39% 16% 20%

2 Entry composition

There is only 1 type of molecule in this entry. The entry contains 39026 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 MGC80376 protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	622	Total	C	N	O	S	0	0	0
			5048	3189	899	929	31			
1	B	622	Total	C	N	O	S	0	0	0
			5048	3189	899	929	31			
1	C	622	Total	C	N	O	S	0	0	0
			5048	3189	899	929	31			
1	D	622	Total	C	N	O	S	0	0	0
			5048	3189	899	929	31			
1	E	622	Total	C	N	O	S	0	0	0
			5048	3189	899	929	31			
1	F	622	Total	C	N	O	S	0	0	0
			5048	3189	899	929	31			
1	G	541	Total	C	N	O	S	0	0	0
			4369	2764	779	800	26			
1	H	541	Total	C	N	O	S	0	0	0
			4369	2764	779	800	26			

There are 152 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	0	GLY	-	EXPRESSION TAG	UNP Q6INT1
A	1	GLY	-	EXPRESSION TAG	UNP Q6INT1
A	2	GLY	-	EXPRESSION TAG	UNP Q6INT1
A	3	ARG	-	EXPRESSION TAG	UNP Q6INT1
A	4	SER	-	EXPRESSION TAG	UNP Q6INT1
A	5	PRO	-	EXPRESSION TAG	UNP Q6INT1
A	6	SER	-	EXPRESSION TAG	UNP Q6INT1
A	7	LEU	-	EXPRESSION TAG	UNP Q6INT1
A	8	PRO	-	EXPRESSION TAG	UNP Q6INT1
A	9	THR	-	EXPRESSION TAG	UNP Q6INT1
A	10	GLN	-	EXPRESSION TAG	UNP Q6INT1
A	11	THR	-	EXPRESSION TAG	UNP Q6INT1
A	12	CYS	-	EXPRESSION TAG	UNP Q6INT1

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Chain	Residue	Modelled	Actual	Comment	Reference
A	13	GLY	-	EXPRESSION TAG	UNP Q6INT1
A	14	PRO	-	EXPRESSION TAG	UNP Q6INT1
A	15	TRP	-	EXPRESSION TAG	UNP Q6INT1
A	16	GLU	-	EXPRESSION TAG	UNP Q6INT1
A	177	GLU	SER	ENGINEERED MUTATION	UNP Q6INT1
A	181	GLU	SER	ENGINEERED MUTATION	UNP Q6INT1
B	0	GLY	-	EXPRESSION TAG	UNP Q6INT1
B	1	GLY	-	EXPRESSION TAG	UNP Q6INT1
B	2	GLY	-	EXPRESSION TAG	UNP Q6INT1
B	3	ARG	-	EXPRESSION TAG	UNP Q6INT1
B	4	SER	-	EXPRESSION TAG	UNP Q6INT1
B	5	PRO	-	EXPRESSION TAG	UNP Q6INT1
B	6	SER	-	EXPRESSION TAG	UNP Q6INT1
B	7	LEU	-	EXPRESSION TAG	UNP Q6INT1
B	8	PRO	-	EXPRESSION TAG	UNP Q6INT1
B	9	THR	-	EXPRESSION TAG	UNP Q6INT1
B	10	GLN	-	EXPRESSION TAG	UNP Q6INT1
B	11	THR	-	EXPRESSION TAG	UNP Q6INT1
B	12	CYS	-	EXPRESSION TAG	UNP Q6INT1
B	13	GLY	-	EXPRESSION TAG	UNP Q6INT1
B	14	PRO	-	EXPRESSION TAG	UNP Q6INT1
B	15	TRP	-	EXPRESSION TAG	UNP Q6INT1
B	16	GLU	-	EXPRESSION TAG	UNP Q6INT1
B	177	GLU	SER	ENGINEERED MUTATION	UNP Q6INT1
B	181	GLU	SER	ENGINEERED MUTATION	UNP Q6INT1
C	0	GLY	-	EXPRESSION TAG	UNP Q6INT1
C	1	GLY	-	EXPRESSION TAG	UNP Q6INT1
C	2	GLY	-	EXPRESSION TAG	UNP Q6INT1
C	3	ARG	-	EXPRESSION TAG	UNP Q6INT1
C	4	SER	-	EXPRESSION TAG	UNP Q6INT1
C	5	PRO	-	EXPRESSION TAG	UNP Q6INT1
C	6	SER	-	EXPRESSION TAG	UNP Q6INT1
C	7	LEU	-	EXPRESSION TAG	UNP Q6INT1
C	8	PRO	-	EXPRESSION TAG	UNP Q6INT1
C	9	THR	-	EXPRESSION TAG	UNP Q6INT1
C	10	GLN	-	EXPRESSION TAG	UNP Q6INT1
C	11	THR	-	EXPRESSION TAG	UNP Q6INT1
C	12	CYS	-	EXPRESSION TAG	UNP Q6INT1
C	13	GLY	-	EXPRESSION TAG	UNP Q6INT1
C	14	PRO	-	EXPRESSION TAG	UNP Q6INT1
C	15	TRP	-	EXPRESSION TAG	UNP Q6INT1
C	16	GLU	-	EXPRESSION TAG	UNP Q6INT1

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Chain	Residue	Modelled	Actual	Comment	Reference
C	177	GLU	SER	ENGINEERED MUTATION	UNP Q6INT1
C	181	GLU	SER	ENGINEERED MUTATION	UNP Q6INT1
D	0	GLY	-	EXPRESSION TAG	UNP Q6INT1
D	1	GLY	-	EXPRESSION TAG	UNP Q6INT1
D	2	GLY	-	EXPRESSION TAG	UNP Q6INT1
D	3	ARG	-	EXPRESSION TAG	UNP Q6INT1
D	4	SER	-	EXPRESSION TAG	UNP Q6INT1
D	5	PRO	-	EXPRESSION TAG	UNP Q6INT1
D	6	SER	-	EXPRESSION TAG	UNP Q6INT1
D	7	LEU	-	EXPRESSION TAG	UNP Q6INT1
D	8	PRO	-	EXPRESSION TAG	UNP Q6INT1
D	9	THR	-	EXPRESSION TAG	UNP Q6INT1
D	10	GLN	-	EXPRESSION TAG	UNP Q6INT1
D	11	THR	-	EXPRESSION TAG	UNP Q6INT1
D	12	CYS	-	EXPRESSION TAG	UNP Q6INT1
D	13	GLY	-	EXPRESSION TAG	UNP Q6INT1
D	14	PRO	-	EXPRESSION TAG	UNP Q6INT1
D	15	TRP	-	EXPRESSION TAG	UNP Q6INT1
D	16	GLU	-	EXPRESSION TAG	UNP Q6INT1
D	177	GLU	SER	ENGINEERED MUTATION	UNP Q6INT1
D	181	GLU	SER	ENGINEERED MUTATION	UNP Q6INT1
E	0	GLY	-	EXPRESSION TAG	UNP Q6INT1
E	1	GLY	-	EXPRESSION TAG	UNP Q6INT1
E	2	GLY	-	EXPRESSION TAG	UNP Q6INT1
E	3	ARG	-	EXPRESSION TAG	UNP Q6INT1
E	4	SER	-	EXPRESSION TAG	UNP Q6INT1
E	5	PRO	-	EXPRESSION TAG	UNP Q6INT1
E	6	SER	-	EXPRESSION TAG	UNP Q6INT1
E	7	LEU	-	EXPRESSION TAG	UNP Q6INT1
E	8	PRO	-	EXPRESSION TAG	UNP Q6INT1
E	9	THR	-	EXPRESSION TAG	UNP Q6INT1
E	10	GLN	-	EXPRESSION TAG	UNP Q6INT1
E	11	THR	-	EXPRESSION TAG	UNP Q6INT1
E	12	CYS	-	EXPRESSION TAG	UNP Q6INT1
E	13	GLY	-	EXPRESSION TAG	UNP Q6INT1
E	14	PRO	-	EXPRESSION TAG	UNP Q6INT1
E	15	TRP	-	EXPRESSION TAG	UNP Q6INT1
E	16	GLU	-	EXPRESSION TAG	UNP Q6INT1
E	177	GLU	SER	ENGINEERED MUTATION	UNP Q6INT1
E	181	GLU	SER	ENGINEERED MUTATION	UNP Q6INT1
F	0	GLY	-	EXPRESSION TAG	UNP Q6INT1
F	1	GLY	-	EXPRESSION TAG	UNP Q6INT1

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Chain	Residue	Modelled	Actual	Comment	Reference
F	2	GLY	-	EXPRESSION TAG	UNP Q6INT1
F	3	ARG	-	EXPRESSION TAG	UNP Q6INT1
F	4	SER	-	EXPRESSION TAG	UNP Q6INT1
F	5	PRO	-	EXPRESSION TAG	UNP Q6INT1
F	6	SER	-	EXPRESSION TAG	UNP Q6INT1
F	7	LEU	-	EXPRESSION TAG	UNP Q6INT1
F	8	PRO	-	EXPRESSION TAG	UNP Q6INT1
F	9	THR	-	EXPRESSION TAG	UNP Q6INT1
F	10	GLN	-	EXPRESSION TAG	UNP Q6INT1
F	11	THR	-	EXPRESSION TAG	UNP Q6INT1
F	12	CYS	-	EXPRESSION TAG	UNP Q6INT1
F	13	GLY	-	EXPRESSION TAG	UNP Q6INT1
F	14	PRO	-	EXPRESSION TAG	UNP Q6INT1
F	15	TRP	-	EXPRESSION TAG	UNP Q6INT1
F	16	GLU	-	EXPRESSION TAG	UNP Q6INT1
F	177	GLU	SER	ENGINEERED MUTATION	UNP Q6INT1
F	181	GLU	SER	ENGINEERED MUTATION	UNP Q6INT1
G	0	GLY	-	EXPRESSION TAG	UNP Q6INT1
G	1	GLY	-	EXPRESSION TAG	UNP Q6INT1
G	2	GLY	-	EXPRESSION TAG	UNP Q6INT1
G	3	ARG	-	EXPRESSION TAG	UNP Q6INT1
G	4	SER	-	EXPRESSION TAG	UNP Q6INT1
G	5	PRO	-	EXPRESSION TAG	UNP Q6INT1
G	6	SER	-	EXPRESSION TAG	UNP Q6INT1
G	7	LEU	-	EXPRESSION TAG	UNP Q6INT1
G	8	PRO	-	EXPRESSION TAG	UNP Q6INT1
G	9	THR	-	EXPRESSION TAG	UNP Q6INT1
G	10	GLN	-	EXPRESSION TAG	UNP Q6INT1
G	11	THR	-	EXPRESSION TAG	UNP Q6INT1
G	12	CYS	-	EXPRESSION TAG	UNP Q6INT1
G	13	GLY	-	EXPRESSION TAG	UNP Q6INT1
G	14	PRO	-	EXPRESSION TAG	UNP Q6INT1
G	15	TRP	-	EXPRESSION TAG	UNP Q6INT1
G	16	GLU	-	EXPRESSION TAG	UNP Q6INT1
G	177	GLU	SER	ENGINEERED MUTATION	UNP Q6INT1
G	181	GLU	SER	ENGINEERED MUTATION	UNP Q6INT1
H	0	GLY	-	EXPRESSION TAG	UNP Q6INT1
H	1	GLY	-	EXPRESSION TAG	UNP Q6INT1
H	2	GLY	-	EXPRESSION TAG	UNP Q6INT1
H	3	ARG	-	EXPRESSION TAG	UNP Q6INT1
H	4	SER	-	EXPRESSION TAG	UNP Q6INT1
H	5	PRO	-	EXPRESSION TAG	UNP Q6INT1

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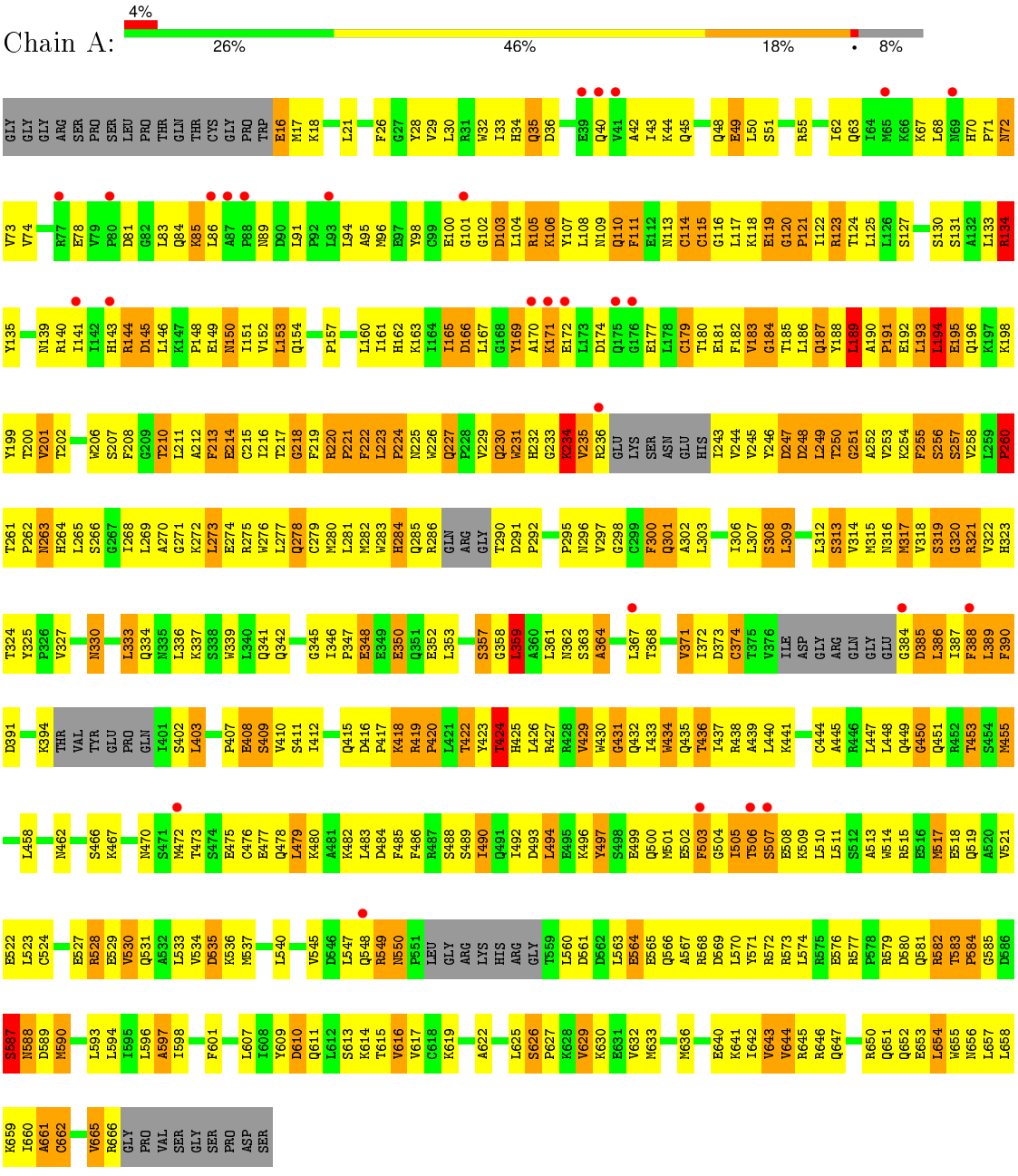
Chain	Residue	Modelled	Actual	Comment	Reference
H	6	SER	-	EXPRESSION TAG	UNP Q6INT1
H	7	LEU	-	EXPRESSION TAG	UNP Q6INT1
H	8	PRO	-	EXPRESSION TAG	UNP Q6INT1
H	9	THR	-	EXPRESSION TAG	UNP Q6INT1
H	10	GLN	-	EXPRESSION TAG	UNP Q6INT1
H	11	THR	-	EXPRESSION TAG	UNP Q6INT1
H	12	CYS	-	EXPRESSION TAG	UNP Q6INT1
H	13	GLY	-	EXPRESSION TAG	UNP Q6INT1
H	14	PRO	-	EXPRESSION TAG	UNP Q6INT1
H	15	TRP	-	EXPRESSION TAG	UNP Q6INT1
H	16	GLU	-	EXPRESSION TAG	UNP Q6INT1
H	177	GLU	SER	ENGINEERED MUTATION	UNP Q6INT1
H	181	GLU	SER	ENGINEERED MUTATION	UNP Q6INT1

3 Residue-property plots (i)

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

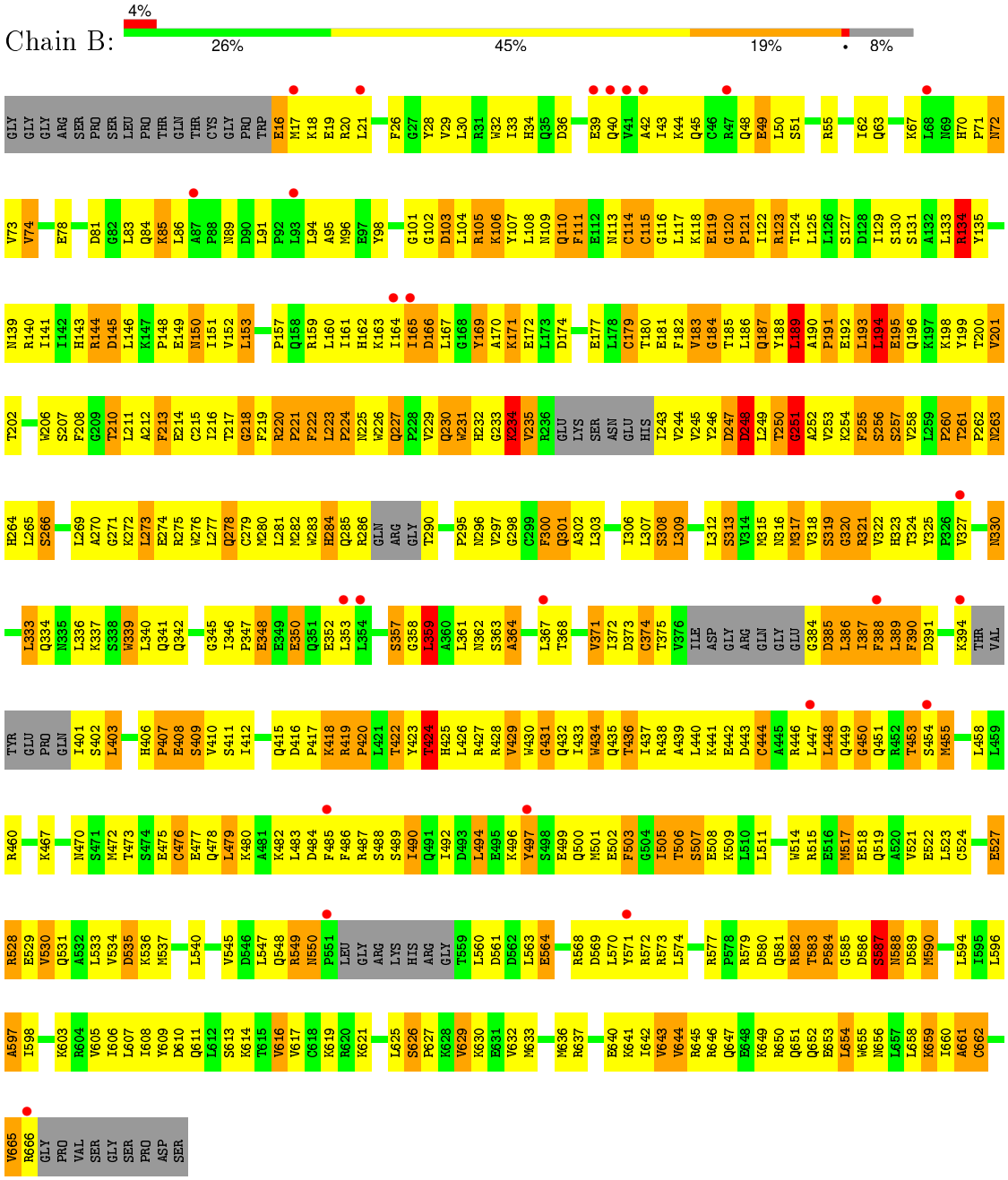
- Molecule 1: MGC80376 protein

Chain A:



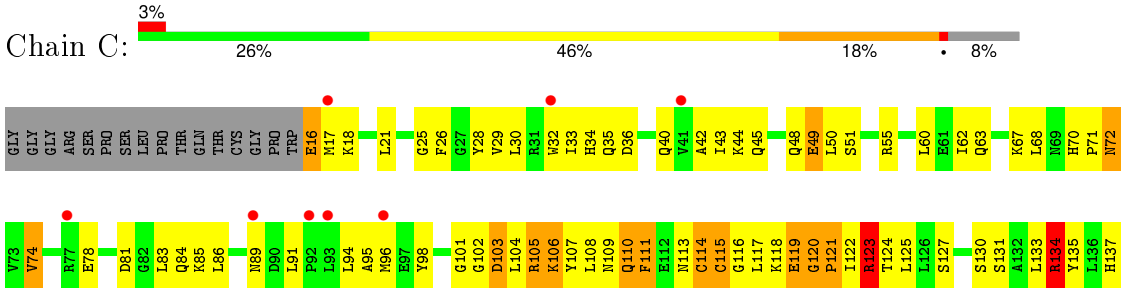
• Molecule 1: MGC80376 protein

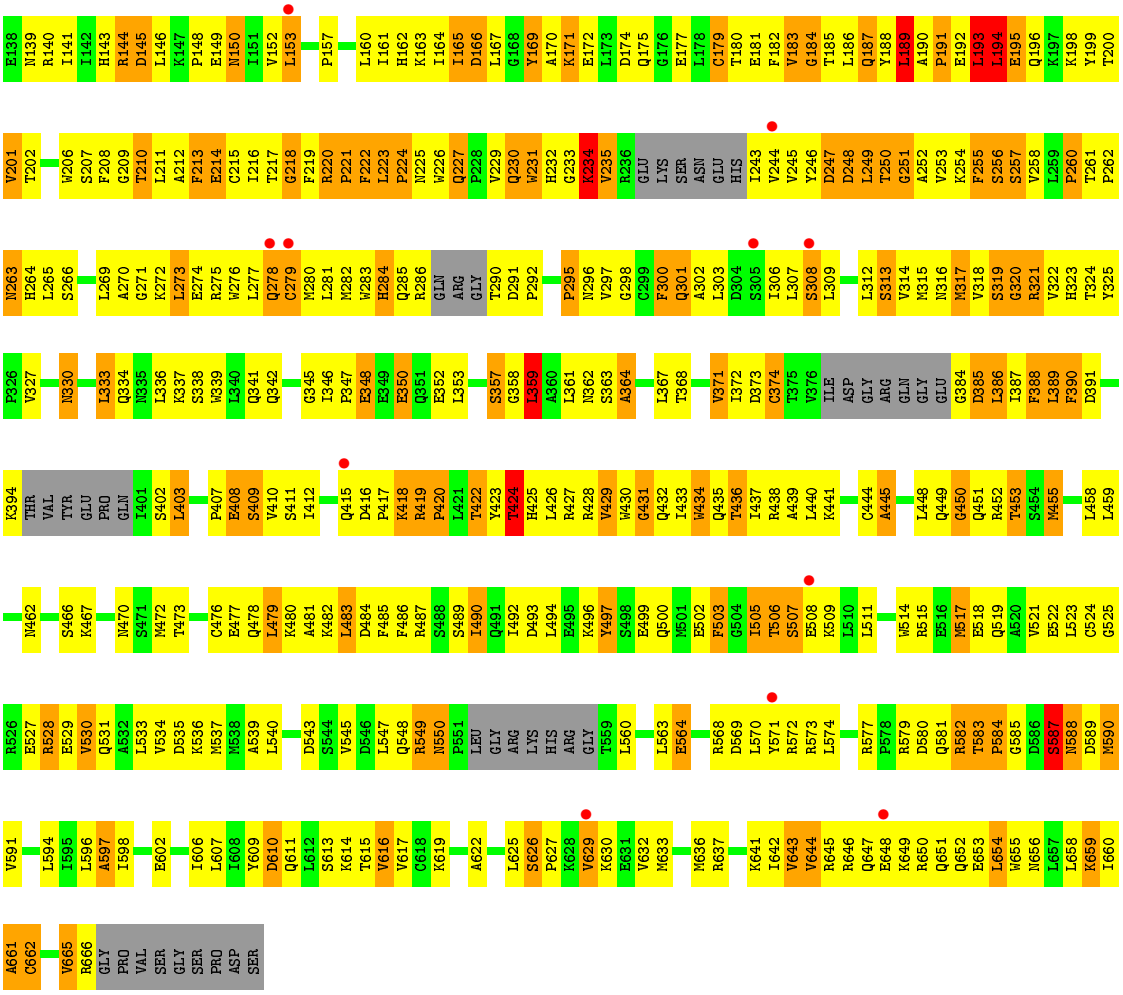
Chain B:



• Molecule 1: MGC80376 protein

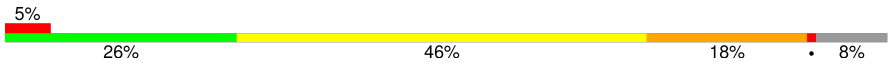
Chain C:

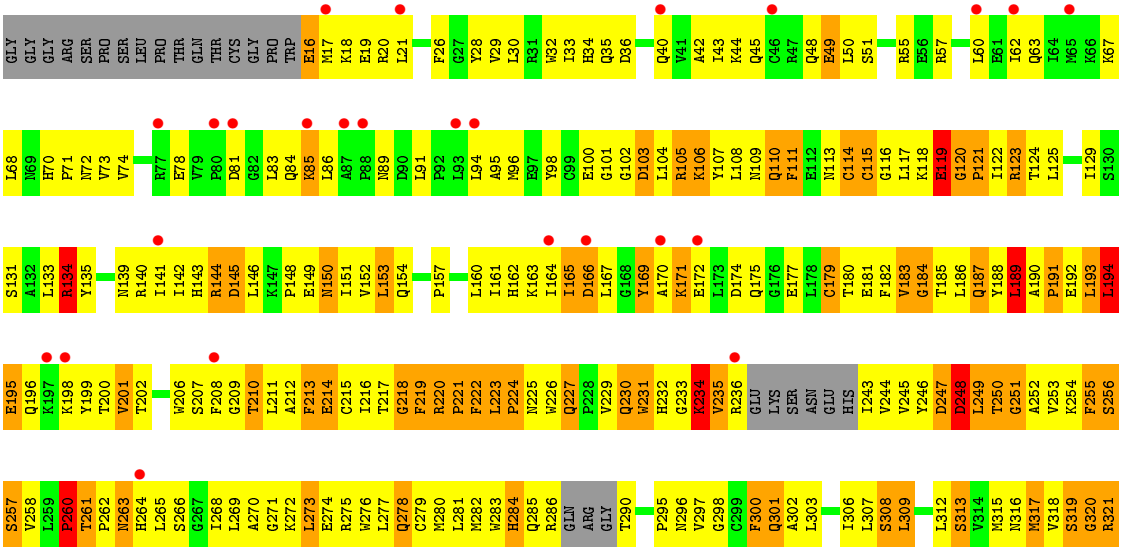


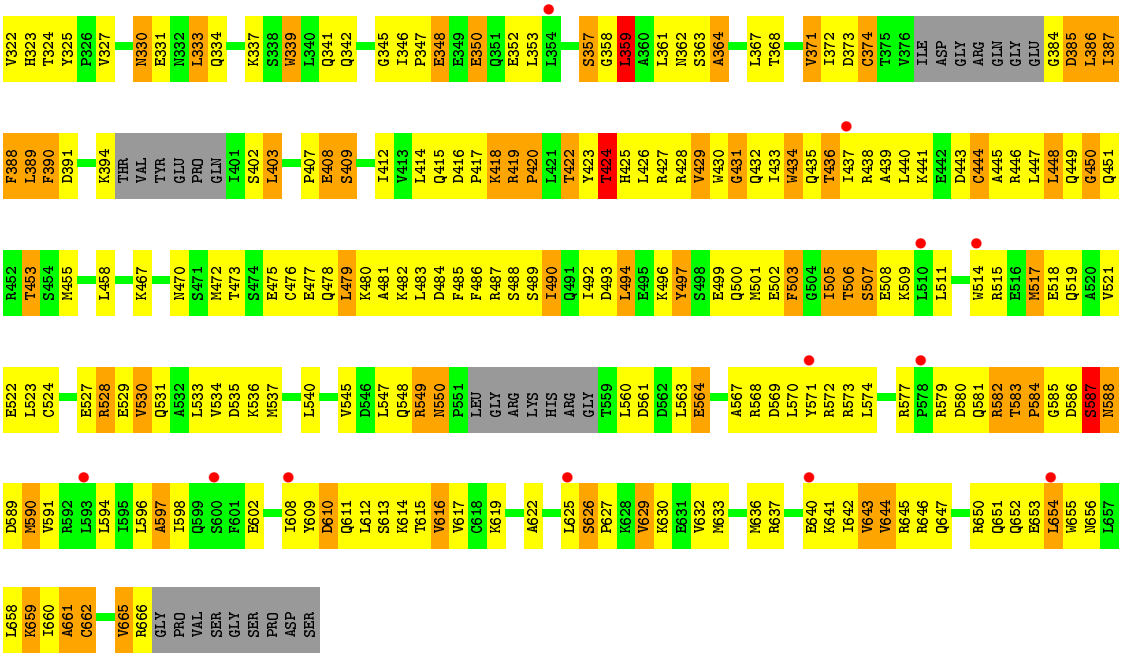


• Molecule 1: MGC80376 protein

Chain D:

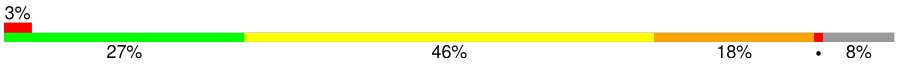


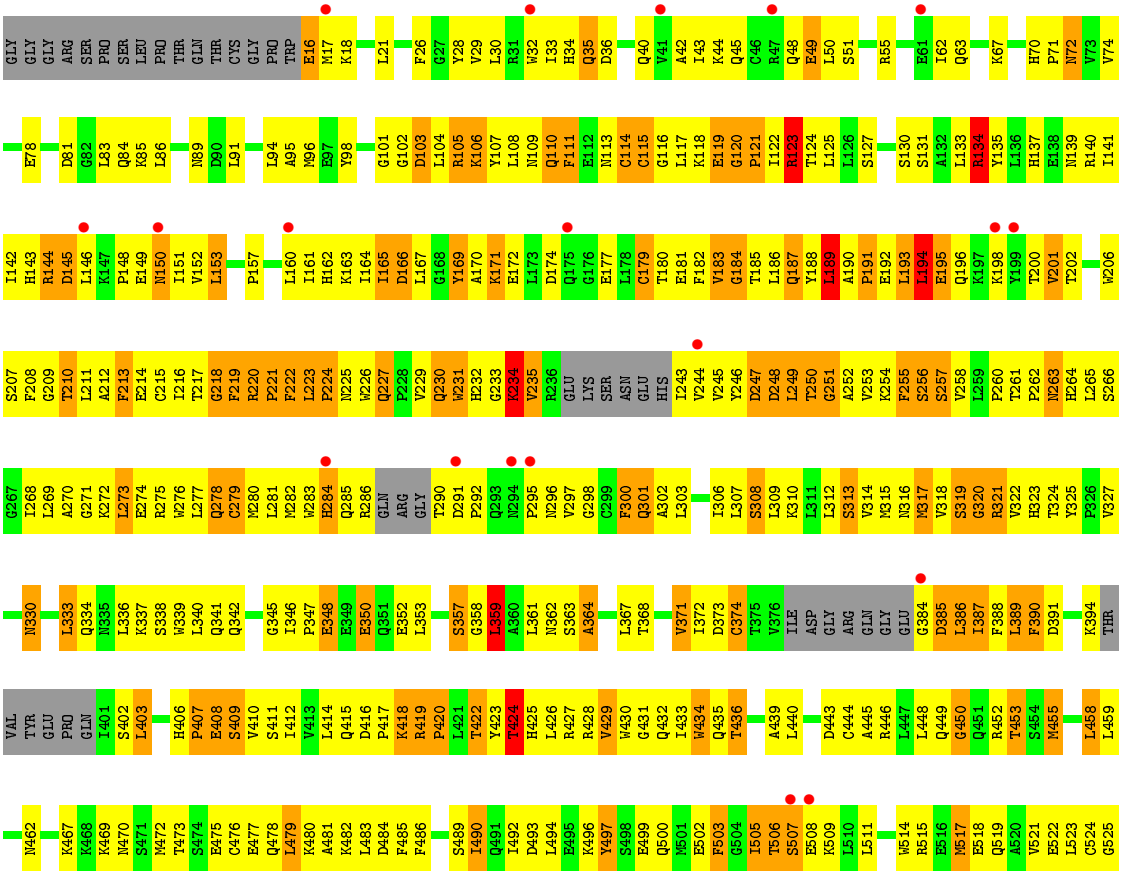


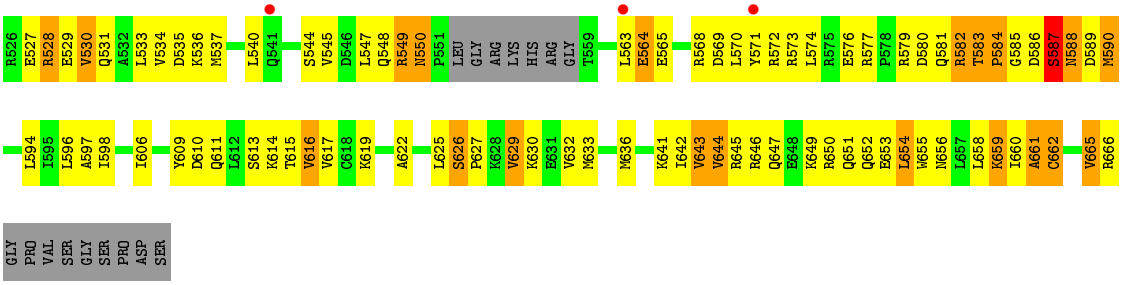


• Molecule 1: MGC80376 protein

Chain E:

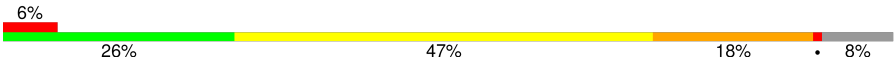


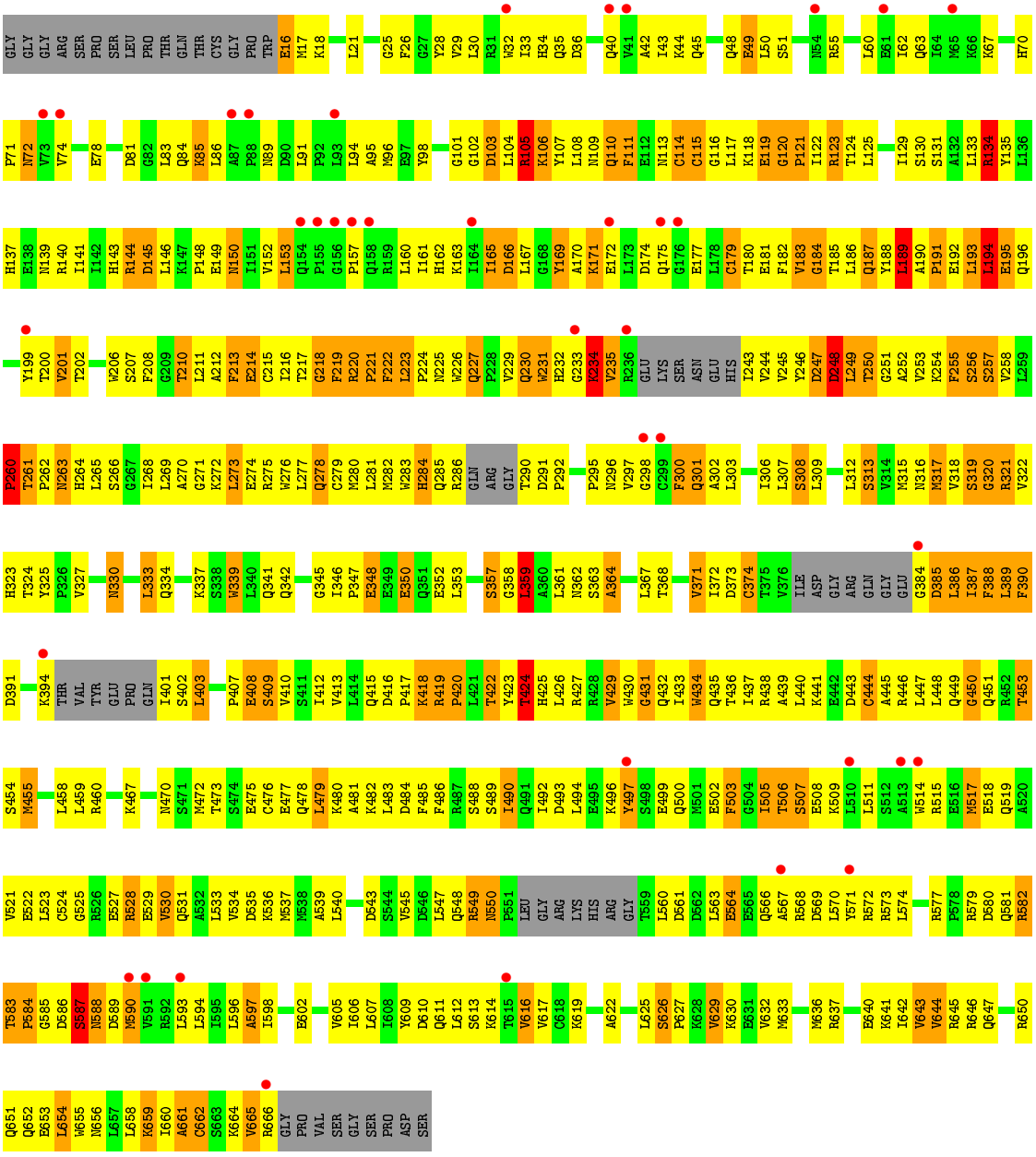




• Molecule 1: MGC80376 protein

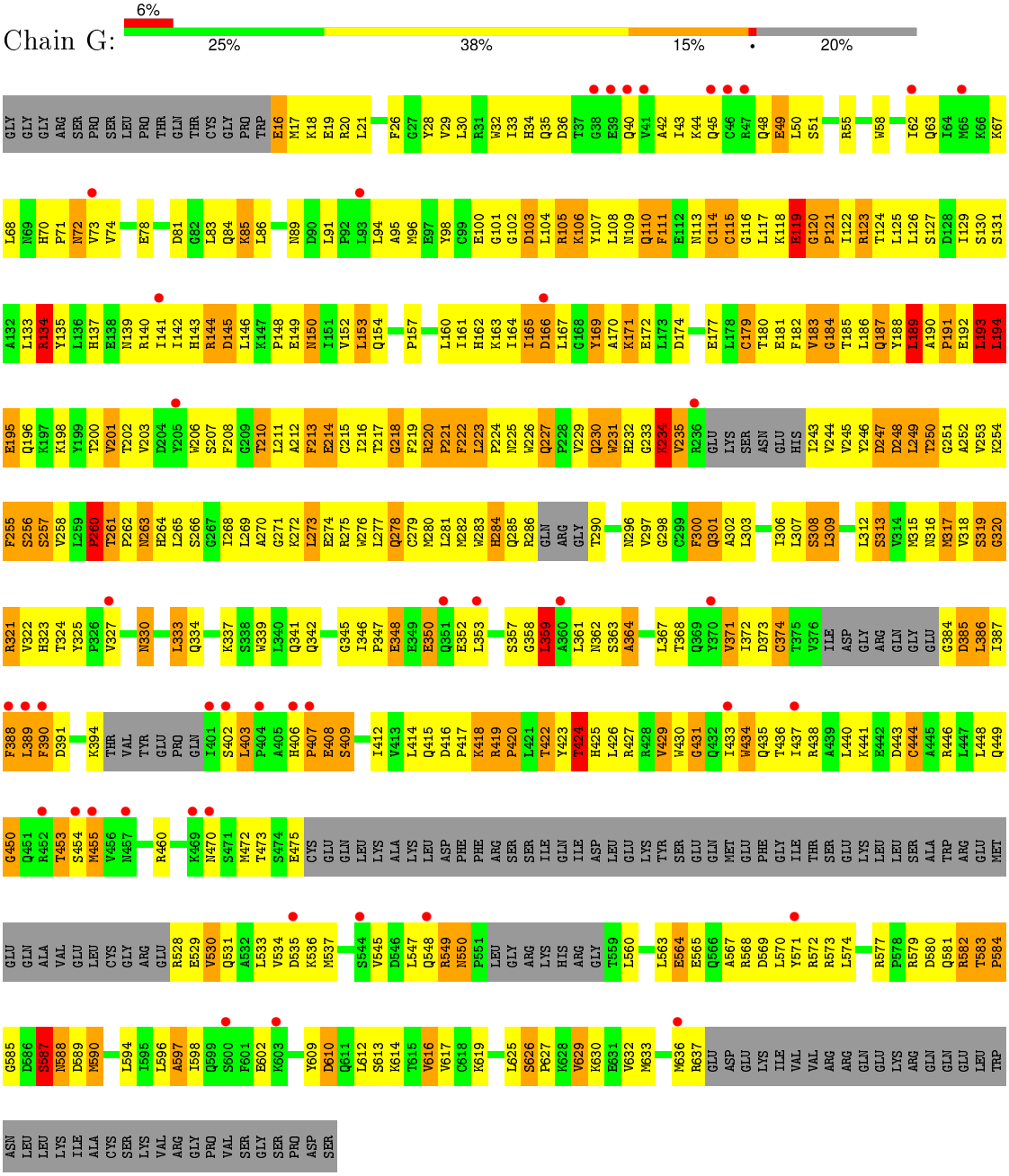
Chain F:





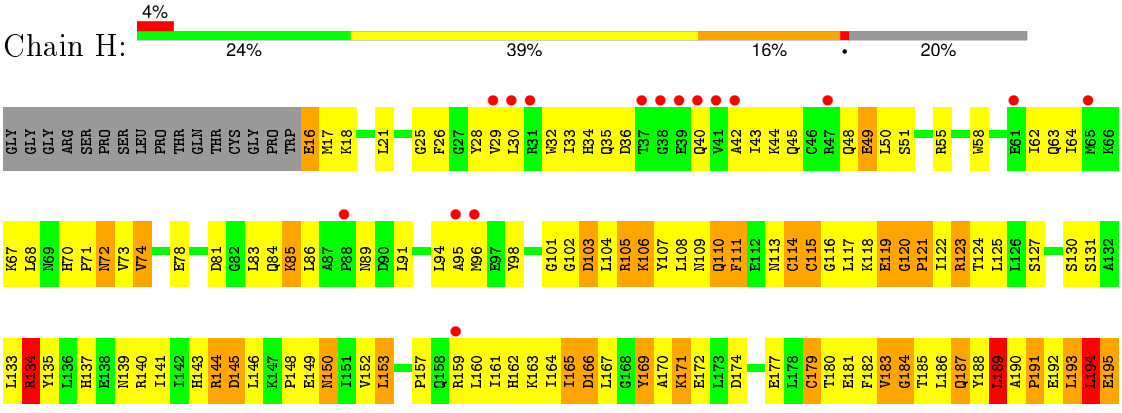
• Molecule 1: MGC80376 protein

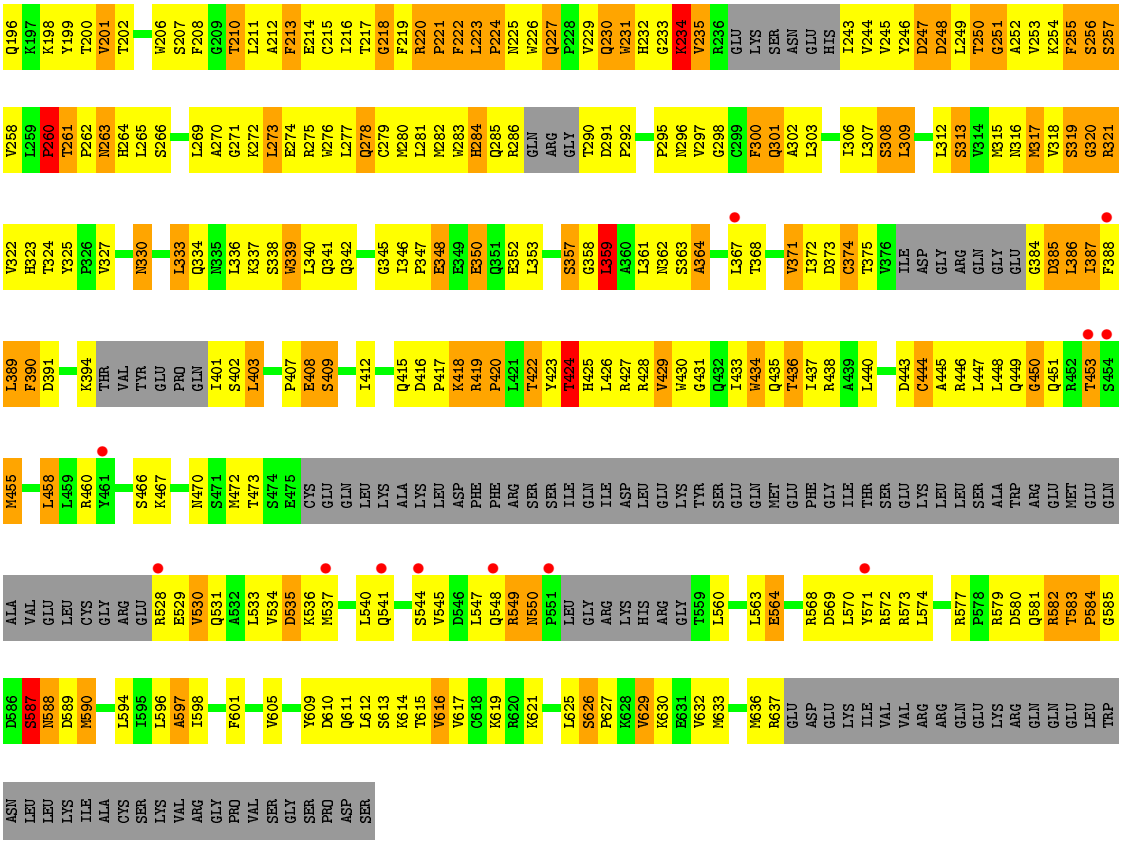
Chain G:



• Molecule 1: MGC80376 protein

Chain H:




Q196 K197 K198 Y199 T200 V201 T202 W206 S207 F208 G209 T210 L211 A212 F213 E214 C215 I216 T217 G218 F219 R220 P221 F222 L223 P224 N225 W226 Q227 P228 V229 Q230 W231 H232 G233 K234 V235 R236 GLU LYS SER ASN GLU HIS I243 Y244 V245 Y246 D247 D248 L249 T250 G251 A252 V253 K254 F255 S256 S257
V258 L259 P260 T261 P262 N263 H264 L265 S266 L269 A270 G271 K272 L273 E274 R275 W276 L277 Q278 C279 M280 L281 M282 W283 H284 Q285 R286 GLN ARG GLY T290 D291 P292 P295 N296 V297 G298 C299 F300 Q301 A302 L303 I306 L307 S308 L309 L312 S313 V314 M315 N316 M317 V318 S319 G320 R321
V322 H323 T324 Y325 P326 V327 N330 L333 Q334 N335 L336 K337 S338 W339 L340 Q341 Q342 G345 I346 P347 E348 E349 E350 Q351 E352 L353 S357 G358 I359 A360 L361 N362 S363 A364 L367 T368 V371 I372 D373 C374 T375 V376 ILE ASP GLY ARG GLN GLY GLU G384 D385 L386 I387 F388
L389 F390 D391 K394 THR VAL TYR GLU PRO GLN I401 S402 L403 P407 E408 S409 I412 Q415 D416 P417 K418 R419 P420 L421 T422 Y423 T424 H425 L426 R427 R428 V429 W430 G431 Q432 I433 W434 Q435 T436 I437 R438 A439 L440 D443 C444 A445 R446 L447 L448 Q449 G450 Q451 R452 T453 S454
M455 L458 L459 R460 Y461 S466 K467 N470 S471 M472 T473 S474 E475 CYS GLU GLN LEU LYS ALA LYS LEU ASP PHE PHE ARG SER SER ILE GLN ILE ASP LEU GLU LYS TYR SER GLU GLN MET GLU PHE GLY ILE THR SER GLU LYS LEU LEU SER ALA TRP ARG GLU MET GLU GLN
ALA VAL GLU LEU CYS GLY ARG GLU R528 E529 V530 Q531 A532 L533 V534 D535 K536 M537 L540 Q541 S544 V545 D546 L547 Q548 R549 N550 P551 LEU GLY ARG LYS HIS ARG GLY T559 L560 L563 E564 R568 D569 L570 Y571 R572 R573 L574 R577 P578 R579 D580 Q581 R582 T583 P584 G585
D586 S587 N588 D589 N590 L594 I595 L596 A597 I598 F601 V605 Y609 D610 Q611 L612 S613 K614 T615 V616 V617 Q618 K619 R620 K621 L625 S626 P627 K628 V629 K630 E631 V632 M633 M636 R637 GLU ASP GLU LYS ILE VAL VAL ARG ARG GLN GLU LYS ARG GLN GLN GLU LEU TRP
ASN LEU LEU LYS ILE ALA CYS SER LYS VAL ARG GLY PRO VAL SER GLY SER PRO ASP SER

4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 1	Depositor
Cell constants a, b, c, α, β, γ	103.17Å 140.34Å 161.17Å 71.28° 79.56° 86.04°	Depositor
Resolution (Å)	15.00 – 3.60 48.67 – 3.50	Depositor EDS
% Data completeness (in resolution range)	78.7 (15.00-3.60) 70.2 (48.67-3.50)	Depositor EDS
R_{merge}	0.07	Depositor
R_{sym}	0.04	Depositor
$< I/\sigma(I) >$ [1]	1.18 (at 3.48Å)	Xtriage
Refinement program	PHENIX (phenix.refine: 1.6.4_486)	Depositor
R, R_{free}	0.308 , 0.344 0.301 , 0.338	Depositor DCC
R_{free} test set	3890 reflections (5.07%)	DCC
Wilson B-factor (Å^2)	84.5	Xtriage
Anisotropy	0.749	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.24 , 122.0	EDS
Estimated twinning fraction	No twinning to report.	Xtriage
L-test for twinning[2]	$< \|L\| > = 0.47$, $< L^2 > = 0.30$	Xtriage
Outliers	0 of 96343 reflections	Xtriage
F_o,F_c correlation	0.88	EDS
Total number of atoms	39026	wwPDB-VP
Average B, all atoms (Å^2)	199.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 4.42% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.375 respectively for untwinned datasets, and 0.333, 0.2 for perfectly twinned datasets.

5 Model quality

5.1 Standard geometry

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|>5$	RMSZ	#$\|Z\|>5$
1	A	0.74	0/5136	0.97	9/6931 (0.1%)
1	B	0.76	0/5136	0.97	10/6931 (0.1%)
1	C	0.78	1/5136 (0.0%)	0.98	11/6931 (0.2%)
1	D	0.74	2/5136 (0.0%)	0.96	10/6931 (0.1%)
1	E	0.77	1/5136 (0.0%)	0.98	10/6931 (0.1%)
1	F	0.75	0/5136	0.96	10/6931 (0.1%)
1	G	0.74	1/4448 (0.0%)	0.96	7/6012 (0.1%)
1	H	0.75	0/4448	0.97	8/6012 (0.1%)
All	All	0.75	5/39712 (0.0%)	0.97	75/53610 (0.1%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	11
1	B	0	11
1	C	0	10
1	D	0	11
1	E	0	10
1	F	0	11
1	G	0	11
1	H	0	11
All	All	0	86

All (5) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	279	CYS	CB-SG	-6.95	1.70	1.82
1	C	279	CYS	CB-SG	-5.47	1.73	1.81
1	G	119	GLU	CG-CD	5.22	1.59	1.51
1	D	119	GLU	CG-CD	5.14	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	D	331	GLU	CG-CD	5.14	1.59	1.51

All (75) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	E	123	ARG	NE-CZ-NH1	6.50	123.55	120.30
1	E	153	LEU	CA-CB-CG	6.42	130.08	115.30
1	A	153	LEU	CA-CB-CG	6.28	129.73	115.30
1	C	153	LEU	CA-CB-CG	6.27	129.72	115.30
1	D	153	LEU	CA-CB-CG	6.27	129.71	115.30
1	B	153	LEU	CA-CB-CG	6.23	129.62	115.30
1	F	153	LEU	CA-CB-CG	6.15	129.44	115.30
1	G	153	LEU	CA-CB-CG	6.15	129.44	115.30
1	D	189	LEU	CA-CB-CG	-6.14	101.17	115.30
1	H	193	LEU	N-CA-C	-6.13	94.44	111.00
1	C	189	LEU	CA-CB-CG	-6.06	101.36	115.30
1	A	193	LEU	N-CA-C	-6.00	94.81	111.00
1	G	193	LEU	N-CA-C	-6.00	94.81	111.00
1	H	153	LEU	CA-CB-CG	5.99	129.07	115.30
1	D	193	LEU	N-CA-C	-5.97	94.88	111.00
1	E	193	LEU	N-CA-C	-5.94	94.96	111.00
1	C	256	SER	N-CA-C	5.94	127.03	111.00
1	C	193	LEU	N-CA-C	-5.94	94.97	111.00
1	B	193	LEU	N-CA-C	-5.93	94.98	111.00
1	A	189	LEU	CA-CB-CG	-5.88	101.77	115.30
1	F	193	LEU	N-CA-C	-5.86	95.17	111.00
1	E	256	SER	N-CA-C	5.86	126.82	111.00
1	G	194	LEU	CA-CB-CG	5.84	128.74	115.30
1	H	256	SER	N-CA-C	5.81	126.68	111.00
1	A	194	LEU	CA-CB-CG	5.78	128.60	115.30
1	D	256	SER	N-CA-C	5.75	126.54	111.00
1	C	249	LEU	CA-CB-CG	5.75	128.52	115.30
1	E	189	LEU	CA-CB-CG	-5.75	102.08	115.30
1	F	194	LEU	CA-CB-CG	5.70	128.40	115.30
1	H	194	LEU	CA-CB-CG	5.70	128.40	115.30
1	D	194	LEU	CA-CB-CG	5.69	128.39	115.30
1	C	194	LEU	CA-CB-CG	5.67	128.34	115.30
1	G	189	LEU	CA-CB-CG	-5.67	102.26	115.30
1	E	194	LEU	CA-CB-CG	5.66	128.32	115.30
1	B	189	LEU	CA-CB-CG	-5.64	102.32	115.30
1	C	123	ARG	NE-CZ-NH1	5.64	123.12	120.30
1	B	256	SER	N-CA-C	5.64	126.23	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	194	LEU	CA-CB-CG	5.61	128.20	115.30
1	C	359	LEU	CA-CB-CG	5.61	128.20	115.30
1	G	256	SER	N-CA-C	5.60	126.12	111.00
1	B	359	LEU	CA-CB-CG	5.60	128.18	115.30
1	G	359	LEU	CA-CB-CG	5.58	128.14	115.30
1	A	256	SER	N-CA-C	5.57	126.05	111.00
1	F	256	SER	N-CA-C	5.56	126.02	111.00
1	H	359	LEU	CA-CB-CG	5.55	128.06	115.30
1	E	359	LEU	CA-CB-CG	5.52	128.00	115.30
1	A	458	LEU	CA-CB-CG	5.52	127.99	115.30
1	F	458	LEU	CA-CB-CG	5.46	127.87	115.30
1	H	189	LEU	CA-CB-CG	-5.46	102.74	115.30
1	F	189	LEU	CA-CB-CG	-5.42	102.83	115.30
1	C	445	ALA	O-C-N	-5.42	114.04	122.70
1	C	458	LEU	CA-CB-CG	5.40	127.71	115.30
1	D	458	LEU	CA-CB-CG	5.39	127.69	115.30
1	E	458	LEU	CA-CB-CG	5.38	127.68	115.30
1	F	359	LEU	CA-CB-CG	5.36	127.64	115.30
1	D	248	ASP	CB-CG-OD1	5.35	123.11	118.30
1	B	458	LEU	CA-CB-CG	5.34	127.59	115.30
1	H	458	LEU	CA-CB-CG	5.28	127.45	115.30
1	E	224	PRO	N-CA-C	-5.28	98.39	112.10
1	F	249	LEU	CA-CB-CG	5.28	127.44	115.30
1	B	248	ASP	CB-CG-OD1	5.26	123.03	118.30
1	F	105	ARG	NE-CZ-NH1	5.26	122.93	120.30
1	E	249	LEU	CA-CB-CG	5.24	127.35	115.30
1	A	359	LEU	CA-CB-CG	5.23	127.32	115.30
1	D	359	LEU	CA-CB-CG	5.21	127.29	115.30
1	B	224	PRO	N-CA-C	-5.21	98.55	112.10
1	A	249	LEU	CA-CB-CG	5.20	127.26	115.30
1	A	224	PRO	N-CA-C	-5.19	98.61	112.10
1	C	224	PRO	N-CA-C	-5.16	98.68	112.10
1	G	249	LEU	CA-CB-CG	5.16	127.16	115.30
1	D	249	LEU	CA-CB-CG	5.13	127.10	115.30
1	H	224	PRO	N-CA-C	-5.10	98.85	112.10
1	B	251	GLY	N-CA-C	-5.07	100.42	113.10
1	F	248	ASP	CB-CG-OD1	5.07	122.86	118.30
1	D	224	PRO	N-CA-C	-5.05	98.98	112.10

There are no chirality outliers.

All (86) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	119	GLU	Peptide
1	A	120	GLY	Peptide
1	A	169	TYR	Peptide
1	A	221	PRO	Peptide
1	A	223	LEU	Peptide
1	A	247	ASP	Peptide
1	A	255	PHE	Peptide
1	A	257	SER	Peptide
1	A	260	PRO	Peptide
1	A	389	LEU	Peptide
1	A	587	SER	Peptide
1	B	119	GLU	Peptide
1	B	120	GLY	Peptide
1	B	169	TYR	Peptide
1	B	221	PRO	Peptide
1	B	223	LEU	Peptide
1	B	247	ASP	Peptide
1	B	255	PHE	Peptide
1	B	257	SER	Peptide
1	B	389	LEU	Peptide
1	B	527	GLU	Mainchain
1	B	587	SER	Peptide
1	C	119	GLU	Peptide
1	C	120	GLY	Peptide
1	C	169	TYR	Peptide
1	C	221	PRO	Peptide
1	C	223	LEU	Peptide
1	C	247	ASP	Peptide
1	C	255	PHE	Peptide
1	C	257	SER	Peptide
1	C	389	LEU	Peptide
1	C	587	SER	Peptide
1	D	119	GLU	Peptide
1	D	120	GLY	Peptide
1	D	169	TYR	Peptide
1	D	221	PRO	Peptide
1	D	223	LEU	Peptide
1	D	247	ASP	Peptide
1	D	255	PHE	Peptide
1	D	257	SER	Peptide
1	D	260	PRO	Peptide
1	D	389	LEU	Peptide
1	D	587	SER	Peptide

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Mol	Chain	Res	Type	Group
1	E	119	GLU	Peptide
1	E	120	GLY	Peptide
1	E	169	TYR	Peptide
1	E	221	PRO	Peptide
1	E	223	LEU	Peptide
1	E	247	ASP	Peptide
1	E	255	PHE	Peptide
1	E	257	SER	Peptide
1	E	389	LEU	Peptide
1	E	587	SER	Peptide
1	F	119	GLU	Peptide
1	F	120	GLY	Peptide
1	F	169	TYR	Peptide
1	F	221	PRO	Peptide
1	F	223	LEU	Peptide
1	F	247	ASP	Peptide
1	F	255	PHE	Peptide
1	F	257	SER	Peptide
1	F	260	PRO	Peptide
1	F	389	LEU	Peptide
1	F	587	SER	Peptide
1	G	119	GLU	Peptide
1	G	120	GLY	Peptide
1	G	169	TYR	Peptide
1	G	221	PRO	Peptide
1	G	223	LEU	Peptide
1	G	247	ASP	Peptide
1	G	255	PHE	Peptide
1	G	257	SER	Peptide
1	G	260	PRO	Peptide
1	G	389	LEU	Peptide
1	G	587	SER	Peptide
1	H	119	GLU	Peptide
1	H	120	GLY	Peptide
1	H	169	TYR	Peptide
1	H	221	PRO	Peptide
1	H	223	LEU	Peptide
1	H	247	ASP	Peptide
1	H	255	PHE	Peptide
1	H	257	SER	Peptide
1	H	260	PRO	Peptide
1	H	389	LEU	Peptide

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Mol	Chain	Res	Type	Group
1	H	587	SER	Peptide

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	5048	0	5120	770	3
1	B	5048	0	5120	807	2
1	C	5048	0	5120	837	4
1	D	5048	0	5120	861	0
1	E	5048	0	5120	820	2
1	F	5048	0	5120	801	0
1	G	4369	0	4430	607	0
1	H	4369	0	4430	616	1
All	All	39026	0	39580	5868	6

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 75.

All (5868) 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:547:LEU:CD1	1:E:615:THR:HG22	1.18	1.61
1:E:547:LEU:HD13	1:E:615:THR:CG2	1.16	1.54
1:C:496:LYS:CB	1:D:655:TRP:HE1	1.25	1.48
1:A:524:CYS:SG	1:A:643:VAL:HG11	1.55	1.46
1:C:496:LYS:HB2	1:D:655:TRP:NE1	1.23	1.43
1:C:573:ARG:HH12	1:D:573:ARG:NH2	1.26	1.33
1:C:573:ARG:NH1	1:D:573:ARG:HH22	1.25	1.33
1:D:434:TRP:CZ3	1:D:568:ARG:HA	1.63	1.32
1:E:655:TRP:NE1	1:F:496:LYS:HB2	1.48	1.29
1:B:434:TRP:CZ3	1:B:568:ARG:HA	1.67	1.29
1:A:230:GLN:O	1:A:232:HIS:N	1.66	1.28
1:H:434:TRP:CE3	1:H:568:ARG:HA	1.66	1.28
1:D:230:GLN:O	1:D:232:HIS:N	1.67	1.27
1:C:654:LEU:CD2	1:D:654:LEU:HD21	1.63	1.26

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:230:GLN:O	1:G:232:HIS:N	1.68	1.26
1:B:230:GLN:O	1:B:232:HIS:N	1.67	1.26
1:G:475:GLU:HG2	1:G:636:MET:CE	1.67	1.25
1:C:230:GLN:O	1:C:232:HIS:N	1.68	1.25
1:E:496:LYS:HB2	1:F:655:TRP:NE1	1.52	1.24
1:D:187:GLN:HB3	1:D:223:LEU:CD2	1.66	1.24
1:F:230:GLN:O	1:F:232:HIS:N	1.69	1.23
1:E:230:GLN:O	1:E:232:HIS:N	1.70	1.23
1:B:434:TRP:CE3	1:B:568:ARG:HA	1.73	1.22
1:D:434:TRP:CE3	1:D:568:ARG:HA	1.74	1.22
1:E:547:LEU:CD1	1:E:615:THR:CG2	1.86	1.22
1:A:654:LEU:HD21	1:B:654:LEU:CD2	1.68	1.21
1:A:655:TRP:CE3	1:B:654:LEU:HD11	1.74	1.21
1:H:230:GLN:O	1:H:232:HIS:N	1.69	1.21
1:E:246:TYR:HD1	1:E:258:VAL:HB	1.05	1.20
1:E:654:LEU:HD11	1:F:655:TRP:CE3	1.77	1.20
1:A:486:PHE:HZ	1:A:517:MET:HE2	1.03	1.20
1:A:517:MET:SD	1:A:650:ARG:HG3	1.82	1.19
1:G:434:TRP:CE3	1:G:568:ARG:HA	1.78	1.19
1:A:434:TRP:CE3	1:A:568:ARG:HA	1.76	1.19
1:C:654:LEU:HD21	1:D:654:LEU:CD2	1.73	1.18
1:B:187:GLN:HB3	1:B:223:LEU:HD21	1.24	1.18
1:H:246:TYR:CD1	1:H:258:VAL:HB	1.79	1.18
1:B:246:TYR:CD1	1:B:258:VAL:HB	1.79	1.17
1:F:570:LEU:HB3	1:F:590:MET:HE3	1.25	1.17
1:H:185:THR:HG23	1:H:187:GLN:HG3	1.18	1.17
1:E:496:LYS:CB	1:F:655:TRP:HE1	1.56	1.17
1:C:655:TRP:NE1	1:D:496:LYS:HB2	1.56	1.17
1:A:187:GLN:HB3	1:A:223:LEU:HD21	1.25	1.17
1:G:475:GLU:HG2	1:G:636:MET:HE1	1.21	1.17
1:A:496:LYS:HB2	1:B:655:TRP:NE1	1.60	1.17
1:D:246:TYR:CD1	1:D:258:VAL:HB	1.79	1.17
1:C:536:LYS:HB3	1:C:625:LEU:HD13	1.21	1.17
1:B:219:PHE:O	1:B:220:ARG:HG2	1.44	1.17
1:F:219:PHE:O	1:F:220:ARG:HG2	1.45	1.17
1:A:246:TYR:CD1	1:A:258:VAL:HB	1.79	1.17
1:A:655:TRP:HE1	1:B:496:LYS:HB2	1.10	1.16
1:A:185:THR:HG23	1:A:187:GLN:HG3	1.20	1.16
1:E:655:TRP:HE1	1:F:496:LYS:CB	1.57	1.16
1:C:246:TYR:CD1	1:C:258:VAL:HB	1.80	1.16
1:G:246:TYR:CD1	1:G:258:VAL:HB	1.80	1.16

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:111:PHE:HZ	1:G:572:ARG:HG3	1.00	1.16
1:F:246:TYR:CD1	1:F:258:VAL:HB	1.80	1.16
1:G:246:TYR:HD1	1:G:258:VAL:HB	1.03	1.16
1:C:246:TYR:HD1	1:C:258:VAL:HB	1.03	1.15
1:E:246:TYR:CD1	1:E:258:VAL:HB	1.80	1.15
1:F:185:THR:HG23	1:F:187:GLN:HG3	1.15	1.15
1:E:118:LYS:HG2	1:E:264:HIS:O	1.46	1.15
1:E:540:LEU:CD1	1:E:622:ALA:HB2	1.77	1.15
1:C:422:THR:HB	1:C:585:GLY:CA	1.77	1.14
1:C:118:LYS:HG2	1:C:264:HIS:O	1.47	1.14
1:C:219:PHE:O	1:C:220:ARG:HG2	1.42	1.14
1:E:187:GLN:HB3	1:E:223:LEU:HD21	1.15	1.14
1:H:563:LEU:HD21	1:H:596:LEU:HB2	1.21	1.14
1:B:479:LEU:HB3	1:B:640:GLU:OE2	1.48	1.14
1:D:219:PHE:O	1:D:220:ARG:HG2	1.47	1.14
1:E:219:PHE:O	1:E:220:ARG:HG2	1.45	1.14
1:B:547:LEU:CD1	1:B:614:LYS:HB3	1.75	1.14
1:G:111:PHE:CZ	1:G:572:ARG:HG3	1.81	1.14
1:C:547:LEU:CD1	1:C:615:THR:HG22	1.78	1.14
1:H:187:GLN:HB3	1:H:223:LEU:HD21	1.26	1.13
1:F:189:LEU:HG	1:F:190:ALA:H	1.10	1.13
1:A:547:LEU:CD1	1:A:615:THR:HG22	1.78	1.13
1:B:527:GLU:O	1:B:529:GLU:N	1.82	1.13
1:C:187:GLN:HB3	1:C:223:LEU:HD21	1.25	1.13
1:C:179:CYS:CB	1:C:181:GLU:HG2	1.77	1.13
1:B:434:TRP:HB3	1:B:571:TYR:CD1	1.84	1.13
1:D:185:THR:HG23	1:D:187:GLN:HG3	1.13	1.12
1:E:187:GLN:HB3	1:E:223:LEU:CD2	1.78	1.12
1:D:246:TYR:HD1	1:D:258:VAL:HB	1.03	1.12
1:C:646:ARG:HG3	1:C:647:GLN:NE2	1.64	1.12
1:H:179:CYS:CB	1:H:181:GLU:HG2	1.78	1.12
1:D:476:CYS:SG	1:D:477:GLU:OE2	2.06	1.12
1:A:476:CYS:SG	1:A:477:GLU:OE2	2.06	1.12
1:B:185:THR:HG23	1:B:187:GLN:HG3	1.16	1.12
1:G:185:THR:HG23	1:G:187:GLN:HG3	1.16	1.12
1:B:189:LEU:HG	1:B:190:ALA:H	1.09	1.12
1:A:179:CYS:CB	1:A:181:GLU:HG2	1.78	1.11
1:D:179:CYS:CB	1:D:181:GLU:HG2	1.79	1.11
1:B:646:ARG:HG3	1:B:647:GLN:HE22	0.95	1.11
1:A:434:TRP:CZ3	1:A:568:ARG:HA	1.86	1.11
1:A:263:ASN:HD21	1:A:265:LEU:HB2	1.16	1.11

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:110:GLN:O	1:H:111:PHE:HB2	1.49	1.11
1:E:473:THR:HG21	1:E:533:LEU:CD2	1.81	1.11
1:A:547:LEU:HD13	1:A:615:THR:CG2	1.81	1.11
1:H:387:ILE:HD11	1:H:449:GLN:HG3	1.13	1.11
1:F:179:CYS:CB	1:F:181:GLU:HG2	1.79	1.11
1:A:646:ARG:HG3	1:A:647:GLN:HE22	0.94	1.10
1:H:246:TYR:HD1	1:H:258:VAL:HB	1.03	1.10
1:F:263:ASN:HD21	1:F:265:LEU:HB2	1.14	1.10
1:H:189:LEU:HG	1:H:190:ALA:H	1.14	1.10
1:H:134:ARG:HA	1:H:300:PHE:HZ	1.12	1.10
1:C:476:CYS:SG	1:C:477:GLU:OE2	2.09	1.10
1:D:262:PRO:HB3	1:D:409:SER:OG	1.52	1.10
1:F:434:TRP:CE3	1:F:568:ARG:HA	1.86	1.10
1:G:179:CYS:CB	1:G:181:GLU:HG2	1.80	1.10
1:B:179:CYS:CB	1:B:181:GLU:HG2	1.81	1.10
1:A:646:ARG:HG3	1:A:647:GLN:NE2	1.65	1.10
1:G:219:PHE:O	1:G:220:ARG:HG2	1.52	1.10
1:B:246:TYR:HD1	1:B:258:VAL:HB	1.02	1.10
1:F:187:GLN:HB3	1:F:223:LEU:HD21	1.17	1.10
1:F:246:TYR:HD1	1:F:258:VAL:HB	1.04	1.10
1:F:646:ARG:HG3	1:F:647:GLN:HE22	0.95	1.10
1:C:219:PHE:O	1:C:220:ARG:CG	2.00	1.09
1:E:185:THR:HG23	1:E:187:GLN:HG3	1.15	1.09
1:C:189:LEU:HG	1:C:190:ALA:H	1.08	1.09
1:C:646:ARG:HG3	1:C:647:GLN:HE22	0.93	1.09
1:C:654:LEU:CD2	1:D:654:LEU:CD2	2.28	1.09
1:A:219:PHE:O	1:A:220:ARG:HG2	1.50	1.09
1:C:185:THR:HG23	1:C:187:GLN:HG3	1.15	1.09
1:H:434:TRP:HB3	1:H:571:TYR:CD1	1.87	1.09
1:A:496:LYS:CB	1:B:655:TRP:HE1	1.64	1.09
1:A:111:PHE:HZ	1:A:572:ARG:HG3	1.15	1.09
1:A:246:TYR:HD1	1:A:258:VAL:HB	1.03	1.09
1:B:547:LEU:HD13	1:B:614:LYS:CB	1.82	1.09
1:F:646:ARG:HG3	1:F:647:GLN:NE2	1.66	1.09
1:E:536:LYS:HB3	1:E:625:LEU:HD13	1.21	1.09
1:C:110:GLN:O	1:C:111:PHE:HB2	1.48	1.09
1:G:189:LEU:HG	1:G:190:ALA:H	1.13	1.09
1:D:219:PHE:O	1:D:220:ARG:CG	2.01	1.09
1:F:219:PHE:O	1:F:220:ARG:CG	2.01	1.09
1:E:179:CYS:CB	1:E:181:GLU:HG2	1.80	1.09
1:B:263:ASN:HD21	1:B:265:LEU:HB2	1.18	1.08

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:282:MET:HB2	1:E:286:ARG:HG3	1.36	1.08
1:D:434:TRP:HB3	1:D:571:TYR:CD1	1.88	1.08
1:H:219:PHE:O	1:H:220:ARG:HG2	1.51	1.08
1:B:219:PHE:O	1:B:220:ARG:CG	2.01	1.08
1:G:110:GLN:O	1:G:111:PHE:HB2	1.52	1.08
1:D:646:ARG:HG3	1:D:647:GLN:NE2	1.66	1.08
1:A:666:ARG:HH12	1:B:502:GLU:HG3	1.15	1.08
1:E:547:LEU:HD13	1:E:615:THR:HG21	1.31	1.07
1:B:646:ARG:HG3	1:B:647:GLN:NE2	1.66	1.07
1:F:473:THR:HG21	1:F:533:LEU:HD22	1.09	1.07
1:E:646:ARG:HG3	1:E:647:GLN:NE2	1.65	1.07
1:A:665:VAL:HG13	1:B:665:VAL:HG13	1.35	1.07
1:D:110:GLN:O	1:D:111:PHE:HB2	1.53	1.07
1:G:434:TRP:CZ3	1:G:568:ARG:HA	1.89	1.07
1:E:189:LEU:HG	1:E:190:ALA:H	1.08	1.07
1:F:110:GLN:O	1:F:111:PHE:HB2	1.50	1.07
1:C:492:ILE:HG23	1:D:651:GLN:HE22	0.97	1.07
1:A:521:VAL:HA	1:A:524:CYS:SG	1.95	1.07
1:B:494:LEU:HD12	1:B:514:TRP:HE3	1.16	1.07
1:A:434:TRP:HB3	1:A:571:TYR:CD1	1.88	1.07
1:H:187:GLN:HB3	1:H:223:LEU:CD2	1.85	1.07
1:A:189:LEU:HG	1:A:190:ALA:H	1.09	1.07
1:B:110:GLN:O	1:B:111:PHE:HB2	1.52	1.07
1:E:387:ILE:HD11	1:E:449:GLN:HG3	1.33	1.06
1:C:655:TRP:HE1	1:D:496:LYS:HB2	0.93	1.06
1:C:263:ASN:HD21	1:C:265:LEU:HB2	1.17	1.06
1:B:187:GLN:HB3	1:B:223:LEU:CD2	1.85	1.06
1:F:118:LYS:HG2	1:F:264:HIS:O	1.54	1.06
1:E:547:LEU:HD12	1:E:615:THR:HG22	1.29	1.06
1:H:434:TRP:CZ3	1:H:568:ARG:HA	1.88	1.06
1:D:473:THR:HG21	1:D:533:LEU:HD22	1.22	1.06
1:E:646:ARG:HG3	1:E:647:GLN:HE22	0.94	1.06
1:G:187:GLN:HB3	1:G:223:LEU:HD21	1.34	1.06
1:A:282:MET:HB2	1:A:286:ARG:HG3	1.37	1.06
1:A:524:CYS:SG	1:A:643:VAL:CG1	2.43	1.06
1:B:476:CYS:SG	1:B:477:GLU:OE2	2.13	1.06
1:A:187:GLN:HB3	1:A:223:LEU:CD2	1.85	1.06
1:G:187:GLN:HB3	1:G:223:LEU:CD2	1.86	1.06
1:F:419:ARG:H	1:F:420:PRO:HD3	1.20	1.06
1:C:547:LEU:HD13	1:C:615:THR:CG2	1.84	1.06
1:F:497:TYR:CE2	1:F:511:LEU:HD22	1.91	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:187:GLN:HB3	1:F:223:LEU:CD2	1.84	1.05
1:D:189:LEU:HG	1:D:190:ALA:H	1.09	1.05
1:A:479:LEU:HD12	1:A:640:GLU:HB3	1.38	1.05
1:G:419:ARG:H	1:G:420:PRO:HD3	1.20	1.05
1:E:422:THR:HB	1:E:585:GLY:CA	1.86	1.05
1:C:492:ILE:HG23	1:D:651:GLN:NE2	1.70	1.05
1:H:473:THR:HG21	1:H:533:LEU:HD22	1.38	1.05
1:A:486:PHE:HZ	1:A:517:MET:CE	1.70	1.05
1:C:434:TRP:CE3	1:C:568:ARG:HA	1.91	1.05
1:H:419:ARG:H	1:H:420:PRO:HD3	1.20	1.05
1:H:219:PHE:O	1:H:220:ARG:CG	2.05	1.05
1:D:646:ARG:HG3	1:D:647:GLN:HE22	0.95	1.05
1:C:187:GLN:HB3	1:C:223:LEU:CD2	1.87	1.05
1:C:419:ARG:H	1:C:420:PRO:HD3	1.20	1.05
1:A:570:LEU:HB3	1:A:590:MET:HE3	1.39	1.05
1:E:110:GLN:O	1:E:111:PHE:HB2	1.51	1.05
1:A:219:PHE:O	1:A:220:ARG:CG	2.04	1.04
1:G:263:ASN:HD21	1:G:265:LEU:HB2	1.16	1.04
1:E:219:PHE:O	1:E:220:ARG:CG	2.03	1.04
1:H:263:ASN:HD21	1:H:265:LEU:HB2	1.16	1.04
1:B:419:ARG:H	1:B:420:PRO:HD3	1.20	1.04
1:H:134:ARG:HA	1:H:300:PHE:CZ	1.92	1.04
1:E:134:ARG:HA	1:E:300:PHE:HZ	1.18	1.04
1:F:134:ARG:HA	1:F:300:PHE:HZ	1.18	1.04
1:C:434:TRP:HB3	1:C:571:TYR:CD1	1.92	1.04
1:G:282:MET:HB2	1:G:286:ARG:HG3	1.37	1.04
1:A:533:LEU:HD23	1:A:629:VAL:CG1	1.86	1.04
1:B:517:MET:HG3	1:B:646:ARG:HH11	1.22	1.04
1:D:263:ASN:HD21	1:D:265:LEU:HB2	1.17	1.04
1:E:263:ASN:HD21	1:E:265:LEU:HB2	1.20	1.04
1:H:26:PHE:CZ	1:H:179:CYS:HB3	1.91	1.04
1:F:476:CYS:SG	1:F:477:GLU:OE2	2.15	1.04
1:E:547:LEU:HD13	1:E:615:THR:HG23	1.35	1.04
1:E:655:TRP:CE3	1:F:654:LEU:HD11	1.93	1.04
1:H:434:TRP:HZ3	1:H:568:ARG:HG3	1.23	1.04
1:B:179:CYS:HB2	1:B:181:GLU:HG2	1.05	1.04
1:C:533:LEU:HD23	1:C:629:VAL:HG11	1.39	1.04
1:C:533:LEU:HD23	1:C:629:VAL:CG1	1.86	1.03
1:B:282:MET:HB2	1:B:286:ARG:HG3	1.40	1.03
1:D:185:THR:CG2	1:D:187:GLN:HG3	1.89	1.03
1:G:179:CYS:HB2	1:G:181:GLU:HG2	1.04	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:502:GLU:HG3	1:F:666:ARG:NH1	1.73	1.03
1:C:651:GLN:HE22	1:D:492:ILE:HG23	1.18	1.03
1:C:249:LEU:HD23	1:C:252:ALA:HA	1.40	1.03
1:A:110:GLN:O	1:A:111:PHE:HB2	1.51	1.03
1:F:229:VAL:HG13	1:G:229:VAL:HG13	1.40	1.03
1:E:419:ARG:H	1:E:420:PRO:HD3	1.21	1.03
1:A:179:CYS:HB2	1:A:181:GLU:HG2	1.04	1.03
1:D:179:CYS:HB2	1:D:181:GLU:HG2	1.04	1.03
1:F:387:ILE:HD12	1:F:450:GLY:HA2	1.41	1.03
1:A:486:PHE:CZ	1:A:517:MET:HE2	1.95	1.02
1:A:655:TRP:CE3	1:B:654:LEU:CD1	2.41	1.02
1:G:249:LEU:HD23	1:G:252:ALA:HA	1.40	1.02
1:F:282:MET:HB2	1:F:286:ARG:HG3	1.37	1.02
1:E:179:CYS:HB2	1:E:181:GLU:HG2	1.04	1.02
1:C:111:PHE:HZ	1:C:572:ARG:HG3	1.24	1.02
1:E:249:LEU:HD23	1:E:252:ALA:HA	1.40	1.02
1:A:249:LEU:HD23	1:A:252:ALA:HA	1.41	1.02
1:B:547:LEU:HD13	1:B:614:LYS:HB3	1.06	1.02
1:H:282:MET:HB2	1:H:286:ARG:HG3	1.40	1.02
1:D:419:ARG:H	1:D:420:PRO:HD3	1.21	1.02
1:D:249:LEU:HD23	1:D:252:ALA:HA	1.37	1.02
1:A:654:LEU:CD2	1:B:654:LEU:HD21	1.87	1.02
1:H:26:PHE:CE2	1:H:181:GLU:CD	2.33	1.02
1:C:492:ILE:CG2	1:D:651:GLN:HE22	1.72	1.02
1:E:134:ARG:HA	1:E:300:PHE:CZ	1.95	1.02
1:D:282:MET:HB2	1:D:286:ARG:HG3	1.37	1.02
1:F:249:LEU:HD23	1:F:252:ALA:HA	1.38	1.02
1:D:187:GLN:HB3	1:D:223:LEU:HD21	1.05	1.01
1:A:419:ARG:H	1:A:420:PRO:HD3	1.20	1.01
1:A:422:THR:HB	1:A:585:GLY:CA	1.89	1.01
1:C:651:GLN:NE2	1:D:492:ILE:HG23	1.73	1.01
1:A:654:LEU:CD2	1:B:654:LEU:CD2	2.38	1.01
1:E:185:THR:CG2	1:E:187:GLN:HG3	1.89	1.01
1:H:118:LYS:HG2	1:H:264:HIS:O	1.58	1.01
1:C:492:ILE:HD13	1:D:651:GLN:HE21	1.24	1.01
1:A:229:VAL:HG13	1:D:229:VAL:HG13	1.39	1.01
1:D:118:LYS:HG2	1:D:264:HIS:O	1.60	1.01
1:B:118:LYS:HG2	1:B:264:HIS:O	1.60	1.01
1:E:476:CYS:SG	1:E:477:GLU:OE2	2.19	1.01
1:C:262:PRO:HB3	1:C:409:SER:OG	1.61	1.01
1:B:249:LEU:HD23	1:B:252:ALA:HA	1.42	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:219:PHE:O	1:G:220:ARG:CG	2.07	1.01
1:C:646:ARG:CG	1:C:647:GLN:HE22	1.73	1.01
1:B:476:CYS:HB2	1:B:636:MET:SD	2.01	1.01
1:C:185:THR:CG2	1:C:187:GLN:HG3	1.89	1.01
1:F:226:TRP:CD1	1:F:227:GLN:N	2.28	1.01
1:F:434:TRP:CZ3	1:F:568:ARG:HA	1.94	1.01
1:C:179:CYS:HB2	1:C:181:GLU:HG2	1.03	1.01
1:E:530:VAL:HA	1:E:533:LEU:HD12	1.43	1.01
1:F:179:CYS:HB2	1:F:181:GLU:HG2	1.03	1.01
1:C:521:VAL:HA	1:C:524:CYS:SG	2.01	1.01
1:H:179:CYS:HB2	1:H:181:GLU:HG2	1.03	1.00
1:E:646:ARG:CG	1:E:647:GLN:HE22	1.74	1.00
1:B:185:THR:CG2	1:B:187:GLN:HG3	1.91	1.00
1:H:226:TRP:CD1	1:H:227:GLN:N	2.28	1.00
1:C:530:VAL:HA	1:C:533:LEU:HD12	1.43	1.00
1:C:226:TRP:CD1	1:C:227:GLN:N	2.29	1.00
1:F:646:ARG:CG	1:F:647:GLN:HE22	1.75	1.00
1:F:521:VAL:HA	1:F:524:CYS:SG	2.01	1.00
1:F:262:PRO:HB3	1:F:409:SER:OG	1.61	1.00
1:D:530:VAL:HA	1:D:533:LEU:HD12	1.43	1.00
1:A:118:LYS:HG2	1:A:264:HIS:O	1.61	1.00
1:F:524:CYS:SG	1:F:643:VAL:HG11	2.01	1.00
1:H:249:LEU:HD23	1:H:252:ALA:HA	1.40	1.00
1:F:536:LYS:HB3	1:F:625:LEU:HD13	1.43	1.00
1:C:655:TRP:HE1	1:D:496:LYS:CB	1.75	0.99
1:D:226:TRP:CD1	1:D:227:GLN:N	2.30	0.99
1:A:479:LEU:HB3	1:A:640:GLU:OE2	1.61	0.99
1:E:533:LEU:HD23	1:E:629:VAL:HG11	1.44	0.99
1:C:134:ARG:HA	1:C:300:PHE:HZ	1.21	0.99
1:C:282:MET:HB2	1:C:286:ARG:HG3	1.38	0.99
1:D:536:LYS:O	1:D:625:LEU:HD13	1.60	0.99
1:D:422:THR:HB	1:D:585:GLY:CA	1.91	0.99
1:B:262:PRO:HB3	1:B:409:SER:OG	1.59	0.99
1:G:434:TRP:HB3	1:G:571:TYR:CD1	1.96	0.99
1:F:185:THR:CG2	1:F:187:GLN:HG3	1.90	0.99
1:G:185:THR:CG2	1:G:187:GLN:HG3	1.90	0.99
1:G:530:VAL:HA	1:G:533:LEU:HD12	1.44	0.99
1:A:536:LYS:HB3	1:A:625:LEU:HD13	1.02	0.99
1:E:497:TYR:CE2	1:E:511:LEU:HD22	1.98	0.99
1:B:521:VAL:HA	1:B:524:CYS:SG	2.03	0.99
1:B:646:ARG:CG	1:B:647:GLN:HE22	1.75	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:434:TRP:CZ3	1:C:568:ARG:HA	1.97	0.99
1:A:111:PHE:CZ	1:A:572:ARG:HG3	1.97	0.99
1:B:226:TRP:CD1	1:B:227:GLN:N	2.31	0.99
1:C:479:LEU:HD11	1:C:641:LYS:HG3	1.44	0.99
1:H:111:PHE:HZ	1:H:572:ARG:HG3	1.27	0.99
1:G:359:LEU:HA	1:G:460:ARG:HH12	1.28	0.99
1:E:547:LEU:HD11	1:E:615:THR:HG22	1.41	0.99
1:B:224:PRO:HG3	1:B:428:ARG:HH22	1.28	0.99
1:C:654:LEU:HD11	1:D:655:TRP:CE3	1.97	0.98
1:F:530:VAL:HA	1:F:533:LEU:HD12	1.42	0.98
1:A:646:ARG:CG	1:A:647:GLN:HE22	1.75	0.98
1:B:387:ILE:HD12	1:B:450:GLY:HA2	1.45	0.98
1:B:494:LEU:HD21	1:B:518:GLU:OE2	1.64	0.98
1:B:134:ARG:HA	1:B:300:PHE:HZ	1.27	0.98
1:G:473:THR:HG21	1:G:533:LEU:HD22	1.42	0.98
1:F:570:LEU:HD23	1:F:590:MET:HG2	1.42	0.98
1:C:473:THR:HG21	1:C:533:LEU:CD2	1.93	0.98
1:G:387:ILE:HG21	1:G:450:GLY:HA2	1.45	0.98
1:E:226:TRP:CD1	1:E:227:GLN:N	2.30	0.98
1:B:530:VAL:HA	1:B:533:LEU:HD12	1.44	0.98
1:H:185:THR:CG2	1:H:187:GLN:HG3	1.93	0.98
1:D:26:PHE:CZ	1:D:179:CYS:HB3	1.99	0.98
1:A:185:THR:CG2	1:A:187:GLN:HG3	1.94	0.97
1:F:434:TRP:HB3	1:F:571:TYR:CD1	1.99	0.97
1:H:434:TRP:HE3	1:H:568:ARG:HA	1.20	0.97
1:A:533:LEU:HD23	1:A:629:VAL:HG11	1.46	0.97
1:D:646:ARG:CG	1:D:647:GLN:HE22	1.76	0.97
1:H:530:VAL:HA	1:H:533:LEU:HD12	1.43	0.97
1:D:521:VAL:HA	1:D:524:CYS:SG	2.04	0.97
1:E:654:LEU:CD1	1:F:655:TRP:CE3	2.47	0.97
1:F:473:THR:HG21	1:F:533:LEU:CD2	1.94	0.97
1:A:473:THR:HG21	1:A:533:LEU:HD22	1.46	0.97
1:A:530:VAL:HA	1:A:533:LEU:HD12	1.45	0.97
1:H:434:TRP:HD1	1:H:435:GLN:N	1.62	0.97
1:H:387:ILE:HG21	1:H:450:GLY:HA2	1.41	0.97
1:E:654:LEU:CD2	1:F:654:LEU:HD21	1.94	0.97
1:G:226:TRP:CD1	1:G:227:GLN:N	2.33	0.97
1:C:492:ILE:CG2	1:D:651:GLN:NE2	2.26	0.97
1:A:536:LYS:CB	1:A:625:LEU:HD13	1.95	0.96
1:F:443:ASP:O	1:F:446:ARG:HB2	1.64	0.96
1:G:475:GLU:CG	1:G:636:MET:HE1	1.95	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:550:ASN:HD21	1:B:611:GLN:CD	1.67	0.96
1:A:547:LEU:HD13	1:A:615:THR:HG22	1.36	0.96
1:C:134:ARG:HA	1:C:300:PHE:CZ	2.00	0.96
1:A:226:TRP:CD1	1:A:227:GLN:N	2.33	0.96
1:C:26:PHE:CZ	1:C:179:CYS:HB3	2.00	0.96
1:B:473:THR:HG21	1:B:533:LEU:HD22	1.45	0.96
1:B:521:VAL:HG13	1:B:643:VAL:CG1	1.95	0.96
1:F:134:ARG:HA	1:F:300:PHE:CZ	2.00	0.96
1:B:434:TRP:HZ3	1:B:568:ARG:HA	1.30	0.96
1:A:666:ARG:NH1	1:B:502:GLU:HG3	1.80	0.96
1:A:134:ARG:HA	1:A:300:PHE:HZ	1.31	0.96
1:A:570:LEU:HB3	1:A:590:MET:CE	1.96	0.96
1:E:434:TRP:HD1	1:E:435:GLN:N	1.64	0.95
1:E:473:THR:HG21	1:E:533:LEU:HD22	1.47	0.95
1:D:441:LYS:HB2	1:D:560:LEU:CD2	1.96	0.95
1:A:563:LEU:HD21	1:A:596:LEU:HB2	1.48	0.95
1:D:434:TRP:CZ3	1:D:568:ARG:CA	2.49	0.95
1:E:262:PRO:HB3	1:E:409:SER:OG	1.66	0.95
1:E:521:VAL:HA	1:E:524:CYS:SG	2.06	0.95
1:E:222:PHE:CE2	1:E:225:ASN:HB2	2.02	0.95
1:H:111:PHE:CZ	1:H:572:ARG:HG3	2.00	0.95
1:D:494:LEU:HD12	1:D:514:TRP:HE3	1.31	0.95
1:F:111:PHE:HZ	1:F:572:ARG:HG3	1.31	0.95
1:A:262:PRO:HB3	1:A:409:SER:OG	1.66	0.95
1:B:222:PHE:CE2	1:B:225:ASN:HB2	2.02	0.94
1:A:655:TRP:HE3	1:B:654:LEU:HD11	1.31	0.94
1:B:494:LEU:HD12	1:B:514:TRP:CE3	2.02	0.94
1:H:193:LEU:HD22	1:H:231:TRP:CD1	2.02	0.94
1:A:641:LYS:HB3	1:A:645:ARG:HH21	1.33	0.94
1:E:658:LEU:HD12	1:F:658:LEU:HD12	1.49	0.94
1:A:17:MET:HB3	1:A:32:TRP:HB3	1.50	0.94
1:C:654:LEU:HD21	1:D:654:LEU:HD21	1.38	0.94
1:D:434:TRP:HD1	1:D:435:GLN:N	1.66	0.94
1:F:570:LEU:HB3	1:F:590:MET:CE	1.98	0.94
1:A:222:PHE:CE2	1:A:225:ASN:HB2	2.02	0.94
1:D:222:PHE:CE2	1:D:225:ASN:HB2	2.02	0.94
1:G:434:TRP:HD1	1:G:435:GLN:N	1.66	0.94
1:B:229:VAL:HG13	1:C:229:VAL:HG13	1.50	0.93
1:E:189:LEU:HG	1:E:190:ALA:N	1.82	0.93
1:G:222:PHE:CE2	1:G:225:ASN:HB2	2.03	0.93
1:H:222:PHE:CE2	1:H:225:ASN:HB2	2.03	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:479:LEU:HD11	1:D:641:LYS:HG3	1.49	0.93
1:E:654:LEU:HD21	1:F:654:LEU:CD2	1.98	0.93
1:F:517:MET:HG3	1:F:646:ARG:HH11	1.32	0.93
1:B:134:ARG:HA	1:B:300:PHE:CZ	2.04	0.93
1:F:641:LYS:HB3	1:F:645:ARG:HH21	1.34	0.93
1:H:327:VAL:HG11	1:H:367:LEU:HB2	1.50	0.93
1:C:473:THR:HG21	1:C:533:LEU:HD22	1.48	0.93
1:C:394:LYS:HG3	1:C:613:SER:HB2	1.49	0.92
1:H:434:TRP:HB3	1:H:571:TYR:HD1	1.33	0.92
1:C:497:TYR:CE2	1:C:511:LEU:HD22	2.04	0.92
1:B:434:TRP:CZ3	1:B:568:ARG:CA	2.52	0.92
1:A:658:LEU:HD12	1:B:658:LEU:HD12	1.51	0.92
1:D:430:TRP:HB3	1:D:571:TYR:HD2	1.30	0.92
1:D:570:LEU:HB3	1:D:590:MET:HE3	1.48	0.92
1:B:434:TRP:HD1	1:B:435:GLN:N	1.67	0.92
1:E:229:VAL:HG13	1:H:229:VAL:HG13	1.49	0.92
1:B:641:LYS:HB3	1:B:645:ARG:HH21	1.33	0.92
1:F:327:VAL:HG11	1:F:367:LEU:HB2	1.50	0.92
1:E:563:LEU:HD21	1:E:596:LEU:HB2	1.51	0.92
1:E:434:TRP:HB3	1:E:571:TYR:CD1	2.05	0.92
1:D:434:TRP:HZ3	1:D:568:ARG:HA	1.26	0.91
1:B:17:MET:HB3	1:B:32:TRP:HB3	1.52	0.91
1:E:540:LEU:HD11	1:E:622:ALA:HB2	1.50	0.91
1:D:641:LYS:HB3	1:D:645:ARG:HH21	1.33	0.91
1:B:387:ILE:HG21	1:B:450:GLY:HA2	1.52	0.91
1:A:540:LEU:CD1	1:A:622:ALA:HB2	2.00	0.91
1:G:327:VAL:HG11	1:G:367:LEU:HB2	1.49	0.91
1:D:17:MET:HB3	1:D:32:TRP:HB3	1.50	0.91
1:A:486:PHE:CZ	1:A:517:MET:CE	2.52	0.91
1:C:222:PHE:CE2	1:C:225:ASN:HB2	2.05	0.91
1:A:153:LEU:HA	1:A:162:HIS:HB3	1.53	0.91
1:F:17:MET:HB3	1:F:32:TRP:HB3	1.53	0.91
1:E:153:LEU:HD23	1:E:162:HIS:ND1	1.85	0.91
1:H:26:PHE:HE2	1:H:181:GLU:OE1	1.54	0.91
1:A:179:CYS:HB2	1:A:181:GLU:CG	1.99	0.91
1:F:387:ILE:CD1	1:F:450:GLY:HA2	1.99	0.91
1:B:327:VAL:HG11	1:B:367:LEU:HB2	1.52	0.91
1:E:17:MET:HB3	1:E:32:TRP:HB3	1.51	0.91
1:D:387:ILE:HD11	1:D:449:GLN:HG3	1.52	0.91
1:B:550:ASN:ND2	1:B:611:GLN:CD	2.25	0.90
1:C:179:CYS:HB2	1:C:181:GLU:CG	1.98	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:387:ILE:HD11	1:E:449:GLN:CG	2.00	0.90
1:G:17:MET:HB3	1:G:32:TRP:HB3	1.51	0.90
1:A:327:VAL:HG11	1:A:367:LEU:HB2	1.50	0.90
1:E:519:GLN:HA	1:E:522:GLU:HB2	1.52	0.90
1:C:153:LEU:HD23	1:C:162:HIS:ND1	1.86	0.90
1:B:550:ASN:ND2	1:B:611:GLN:OE1	2.05	0.90
1:H:26:PHE:HE2	1:H:181:GLU:CD	1.69	0.90
1:B:153:LEU:HA	1:B:162:HIS:HB3	1.53	0.90
1:F:144:ARG:HD3	1:F:169:TYR:O	1.71	0.90
1:C:327:VAL:HG11	1:C:367:LEU:HB2	1.53	0.90
1:H:153:LEU:HA	1:H:162:HIS:HB3	1.53	0.90
1:D:134:ARG:HA	1:D:300:PHE:HZ	1.37	0.90
1:F:519:GLN:HA	1:F:522:GLU:HB2	1.53	0.90
1:G:339:TRP:HA	1:G:342:GLN:HB2	1.52	0.90
1:F:387:ILE:HG21	1:F:450:GLY:HA2	1.51	0.90
1:C:153:LEU:HA	1:C:162:HIS:HB3	1.54	0.90
1:D:219:PHE:C	1:D:220:ARG:HG3	1.91	0.90
1:F:222:PHE:CE2	1:F:225:ASN:HB2	2.06	0.90
1:A:150:ASN:HD22	1:A:167:LEU:HD12	1.37	0.90
1:E:654:LEU:CD2	1:F:654:LEU:CD2	2.50	0.90
1:G:125:LEU:HA	1:G:162:HIS:NE2	1.87	0.90
1:C:17:MET:HB3	1:C:32:TRP:HB3	1.51	0.90
1:D:327:VAL:HG11	1:D:367:LEU:HB2	1.51	0.90
1:C:563:LEU:HD21	1:C:596:LEU:HB2	1.54	0.90
1:D:153:LEU:HA	1:D:162:HIS:HB3	1.54	0.90
1:A:527:GLU:O	1:A:529:GLU:N	2.05	0.90
1:C:419:ARG:HA	1:C:587:SER:OG	1.72	0.89
1:A:434:TRP:HB3	1:A:571:TYR:HD1	1.37	0.89
1:B:26:PHE:CZ	1:B:179:CYS:HB3	2.06	0.89
1:E:641:LYS:HB3	1:E:645:ARG:HH21	1.33	0.89
1:H:17:MET:HB3	1:H:32:TRP:HB3	1.52	0.89
1:E:651:GLN:HE22	1:F:492:ILE:HG23	1.33	0.89
1:C:272:LYS:HG2	1:C:273:LEU:N	1.87	0.89
1:F:153:LEU:HA	1:F:162:HIS:HB3	1.52	0.89
1:F:434:TRP:HD1	1:F:435:GLN:N	1.70	0.89
1:E:339:TRP:HA	1:E:342:GLN:HB2	1.54	0.89
1:F:339:TRP:HA	1:F:342:GLN:HB2	1.52	0.89
1:F:153:LEU:HD23	1:F:162:HIS:ND1	1.86	0.89
1:A:536:LYS:HB3	1:A:625:LEU:CD1	1.97	0.89
1:D:153:LEU:HD23	1:D:162:HIS:ND1	1.88	0.89
1:H:434:TRP:CZ3	1:H:568:ARG:HG3	2.07	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:339:TRP:HA	1:C:342:GLN:HB2	1.55	0.89
1:E:153:LEU:HA	1:E:162:HIS:HB3	1.52	0.89
1:E:272:LYS:HG2	1:E:273:LEU:N	1.87	0.89
1:E:144:ARG:HD3	1:E:169:TYR:O	1.73	0.89
1:C:434:TRP:HD1	1:C:435:GLN:N	1.70	0.89
1:E:118:LYS:CG	1:E:264:HIS:O	2.18	0.89
1:H:125:LEU:HA	1:H:162:HIS:NE2	1.87	0.89
1:E:179:CYS:HB2	1:E:181:GLU:CG	2.00	0.89
1:B:111:PHE:HZ	1:B:572:ARG:HG3	1.34	0.89
1:H:339:TRP:HA	1:H:342:GLN:HB2	1.53	0.89
1:G:153:LEU:HA	1:G:162:HIS:HB3	1.54	0.89
1:G:153:LEU:HD23	1:G:162:HIS:ND1	1.86	0.89
1:A:434:TRP:HE3	1:A:568:ARG:HA	1.36	0.89
1:A:189:LEU:HG	1:A:190:ALA:N	1.82	0.89
1:D:179:CYS:HB2	1:D:181:GLU:CG	1.99	0.89
1:B:153:LEU:HD23	1:B:162:HIS:ND1	1.87	0.89
1:C:219:PHE:C	1:C:220:ARG:HG3	1.94	0.89
1:G:475:GLU:HG2	1:G:636:MET:HE3	1.52	0.89
1:C:459:LEU:HD11	1:C:548:GLN:OE1	1.73	0.89
1:B:519:GLN:HA	1:B:522:GLU:HB2	1.53	0.88
1:H:153:LEU:HD23	1:H:162:HIS:ND1	1.87	0.88
1:A:576:GLU:OE2	1:B:573:ARG:NH2	2.06	0.88
1:C:519:GLN:HA	1:C:522:GLU:HB2	1.53	0.88
1:F:125:LEU:HA	1:F:162:HIS:NE2	1.87	0.88
1:C:651:GLN:NE2	1:D:492:ILE:CG2	2.35	0.88
1:B:144:ARG:HD3	1:B:169:TYR:O	1.73	0.88
1:D:144:ARG:HD3	1:D:169:TYR:O	1.74	0.88
1:D:339:TRP:HA	1:D:342:GLN:HB2	1.55	0.88
1:A:502:GLU:HG3	1:B:666:ARG:NH1	1.89	0.88
1:A:579:ARG:NH2	1:D:580:ASP:HB3	1.88	0.88
1:E:319:SER:OG	1:E:403:LEU:HB2	1.73	0.88
1:C:480:LYS:CE	1:C:527:GLU:HB2	2.03	0.88
1:G:144:ARG:HD3	1:G:169:TYR:O	1.73	0.88
1:A:144:ARG:HD3	1:A:169:TYR:O	1.73	0.88
1:C:658:LEU:HD12	1:D:658:LEU:HD12	1.56	0.88
1:B:219:PHE:C	1:B:220:ARG:HG3	1.91	0.88
1:C:641:LYS:HB3	1:C:645:ARG:HH21	1.36	0.88
1:B:125:LEU:HA	1:B:162:HIS:NE2	1.87	0.88
1:B:339:TRP:HA	1:B:342:GLN:HB2	1.54	0.88
1:F:533:LEU:CD2	1:F:629:VAL:HG13	2.04	0.88
1:H:144:ARG:HD3	1:H:169:TYR:O	1.74	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:519:GLN:HA	1:D:522:GLU:HB2	1.53	0.88
1:A:219:PHE:C	1:A:220:ARG:HG3	1.94	0.88
1:C:118:LYS:CG	1:C:264:HIS:O	2.21	0.88
1:C:111:PHE:CZ	1:C:572:ARG:HG3	2.09	0.88
1:E:125:LEU:HA	1:E:162:HIS:NE2	1.88	0.88
1:G:189:LEU:HG	1:G:190:ALA:N	1.86	0.88
1:D:125:LEU:HA	1:D:162:HIS:NE2	1.88	0.87
1:A:434:TRP:HD1	1:A:435:GLN:N	1.69	0.87
1:C:235:VAL:HG11	1:C:243:ILE:N	1.88	0.87
1:F:235:VAL:HG11	1:F:243:ILE:N	1.88	0.87
1:D:235:VAL:HG11	1:D:243:ILE:N	1.88	0.87
1:E:26:PHE:CZ	1:E:179:CYS:HB3	2.09	0.87
1:C:648:GLU:HB3	1:D:492:ILE:HD12	1.55	0.87
1:C:144:ARG:HD3	1:C:169:TYR:O	1.72	0.87
1:E:327:VAL:HG11	1:E:367:LEU:HB2	1.54	0.87
1:F:219:PHE:C	1:F:220:ARG:HG3	1.91	0.87
1:H:179:CYS:HB2	1:H:181:GLU:CG	1.99	0.87
1:A:519:GLN:HA	1:A:522:GLU:HB2	1.54	0.87
1:C:368:THR:HA	1:C:371:VAL:HG23	1.57	0.87
1:F:189:LEU:HG	1:F:190:ALA:N	1.85	0.87
1:F:179:CYS:HB2	1:F:181:GLU:CG	1.99	0.87
1:D:189:LEU:HG	1:D:190:ALA:N	1.83	0.87
1:A:339:TRP:HA	1:A:342:GLN:HB2	1.54	0.87
1:E:434:TRP:CE3	1:E:568:ARG:HA	2.09	0.87
1:E:394:LYS:HG3	1:E:613:SER:HB2	1.56	0.87
1:H:570:LEU:HB3	1:H:590:MET:CE	2.04	0.87
1:B:494:LEU:CD2	1:B:518:GLU:OE2	2.23	0.87
1:A:153:LEU:HD23	1:A:162:HIS:ND1	1.88	0.87
1:B:246:TYR:HD1	1:B:258:VAL:CB	1.88	0.87
1:G:150:ASN:HD22	1:G:167:LEU:HD12	1.39	0.87
1:H:536:LYS:O	1:H:625:LEU:HD13	1.75	0.87
1:C:655:TRP:CE3	1:D:654:LEU:HD11	2.10	0.87
1:E:536:LYS:CB	1:E:625:LEU:HD13	2.04	0.87
1:B:517:MET:HG3	1:B:646:ARG:NH1	1.89	0.86
1:H:235:VAL:HG11	1:H:243:ILE:N	1.89	0.86
1:B:500:GLN:HB3	1:B:505:ILE:HG12	1.57	0.86
1:C:644:VAL:HA	1:C:647:GLN:HE21	1.40	0.86
1:E:368:THR:HA	1:E:371:VAL:HG23	1.57	0.86
1:D:563:LEU:HD23	1:D:597:ALA:HB2	1.58	0.86
1:H:571:TYR:CZ	1:H:590:MET:SD	2.69	0.86
1:H:134:ARG:HB2	1:H:300:PHE:CE1	2.10	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:134:ARG:HB2	1:H:300:PHE:HE1	1.37	0.86
1:D:644:VAL:HA	1:D:647:GLN:HE21	1.39	0.86
1:A:134:ARG:HA	1:A:300:PHE:CZ	2.09	0.86
1:E:462:ASN:HD21	1:E:540:LEU:HB2	1.40	0.86
1:F:368:THR:HA	1:F:371:VAL:HG23	1.55	0.86
1:G:434:TRP:HZ3	1:G:568:ARG:HG3	1.40	0.86
1:H:150:ASN:HD22	1:H:167:LEU:HD12	1.41	0.86
1:B:189:LEU:HG	1:B:190:ALA:N	1.83	0.86
1:H:134:ARG:CA	1:H:300:PHE:HZ	1.87	0.86
1:D:497:TYR:CE2	1:D:511:LEU:HD22	2.10	0.86
1:B:235:VAL:HG11	1:B:243:ILE:N	1.90	0.86
1:F:272:LYS:HG2	1:F:273:LEU:N	1.88	0.86
1:E:473:THR:HG21	1:E:533:LEU:HD21	1.57	0.86
1:F:644:VAL:HA	1:F:647:GLN:HE21	1.41	0.86
1:E:662:CYS:SG	1:F:661:ALA:HB1	2.16	0.86
1:A:368:THR:HA	1:A:371:VAL:HG23	1.57	0.86
1:B:644:VAL:HA	1:B:647:GLN:HE21	1.40	0.86
1:C:219:PHE:C	1:C:220:ARG:CG	2.43	0.86
1:G:434:TRP:HE3	1:G:568:ARG:HA	1.37	0.86
1:E:219:PHE:C	1:E:220:ARG:HG3	1.94	0.86
1:G:368:THR:HA	1:G:371:VAL:HG23	1.57	0.86
1:E:644:VAL:HA	1:E:647:GLN:HE21	1.41	0.86
1:C:497:TYR:O	1:C:497:TYR:CD2	2.28	0.85
1:E:497:TYR:CD2	1:E:497:TYR:O	2.29	0.85
1:C:422:THR:HB	1:C:585:GLY:HA2	1.57	0.85
1:A:235:VAL:HG11	1:A:243:ILE:N	1.90	0.85
1:F:150:ASN:HD22	1:F:167:LEU:HD12	1.41	0.85
1:B:368:THR:HA	1:B:371:VAL:HG23	1.57	0.85
1:E:235:VAL:HG11	1:E:243:ILE:N	1.90	0.85
1:G:570:LEU:HB3	1:G:590:MET:HE3	1.58	0.85
1:H:563:LEU:HD21	1:H:596:LEU:CB	2.07	0.85
1:E:658:LEU:CD1	1:F:658:LEU:HA	2.06	0.85
1:C:125:LEU:HA	1:C:162:HIS:NE2	1.91	0.85
1:E:111:PHE:HZ	1:E:572:ARG:HG3	1.41	0.85
1:D:246:TYR:HD1	1:D:258:VAL:CB	1.89	0.85
1:B:394:LYS:HG2	1:B:401:ILE:N	1.91	0.85
1:A:497:TYR:CD2	1:A:497:TYR:O	2.30	0.85
1:D:187:GLN:CB	1:D:223:LEU:HD21	2.01	0.85
1:B:434:TRP:HZ3	1:B:568:ARG:CA	1.88	0.85
1:C:148:PRO:HD3	1:C:188:TYR:CE2	2.10	0.85
1:B:434:TRP:HB3	1:B:571:TYR:HD1	1.40	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:497:TYR:O	1:B:497:TYR:CD2	2.30	0.85
1:B:500:GLN:CB	1:B:505:ILE:HG12	2.06	0.85
1:H:563:LEU:CD2	1:H:596:LEU:HB2	2.07	0.85
1:H:387:ILE:HD11	1:H:449:GLN:CG	2.03	0.85
1:A:125:LEU:HA	1:A:162:HIS:NE2	1.90	0.85
1:D:368:THR:HA	1:D:371:VAL:HG23	1.57	0.85
1:B:230:GLN:C	1:B:232:HIS:H	1.80	0.85
1:C:480:LYS:HE3	1:C:527:GLU:HB2	1.57	0.85
1:A:644:VAL:HA	1:A:647:GLN:HE21	1.41	0.85
1:D:434:TRP:HZ3	1:D:568:ARG:CA	1.85	0.85
1:D:150:ASN:HD22	1:D:167:LEU:HD12	1.42	0.85
1:A:510:LEU:HD13	1:A:653:GLU:O	1.77	0.85
1:D:497:TYR:CD2	1:D:497:TYR:O	2.30	0.84
1:D:272:LYS:HG2	1:D:273:LEU:N	1.91	0.84
1:C:189:LEU:HG	1:C:190:ALA:N	1.81	0.84
1:H:153:LEU:HD23	1:H:162:HIS:CG	2.12	0.84
1:B:387:ILE:CD1	1:B:450:GLY:HA2	2.05	0.84
1:A:502:GLU:HG3	1:B:666:ARG:HH11	1.42	0.84
1:H:368:THR:HA	1:H:371:VAL:HG23	1.56	0.84
1:E:153:LEU:HD23	1:E:162:HIS:CG	2.12	0.84
1:C:533:LEU:CD2	1:C:629:VAL:CG1	2.54	0.84
1:F:503:PHE:O	1:F:505:ILE:HG13	1.77	0.84
1:C:150:ASN:HD22	1:C:167:LEU:HD12	1.40	0.84
1:B:111:PHE:CZ	1:B:572:ARG:HG3	2.12	0.84
1:F:357:SER:HA	1:F:453:THR:HB	1.58	0.84
1:H:219:PHE:C	1:H:220:ARG:HG3	1.95	0.84
1:C:153:LEU:HD23	1:C:162:HIS:CG	2.12	0.84
1:E:655:TRP:CE3	1:F:654:LEU:CD1	2.59	0.84
1:G:430:TRP:CE3	1:G:574:LEU:HD22	2.12	0.84
1:H:434:TRP:CD1	1:H:435:GLN:N	2.45	0.84
1:F:230:GLN:C	1:F:232:HIS:H	1.81	0.84
1:B:153:LEU:HD23	1:B:162:HIS:CG	2.13	0.84
1:E:170:ALA:O	1:E:172:GLU:N	2.11	0.84
1:E:219:PHE:C	1:E:220:ARG:CG	2.45	0.84
1:H:402:SER:HA	1:H:609:TYR:CG	2.11	0.84
1:D:119:GLU:CB	1:D:121:PRO:HD2	2.08	0.84
1:H:246:TYR:HD1	1:H:258:VAL:CB	1.89	0.84
1:G:235:VAL:HG11	1:G:243:ILE:N	1.91	0.84
1:E:134:ARG:HB2	1:E:300:PHE:HE1	1.43	0.84
1:E:492:ILE:HD13	1:F:651:GLN:HE21	1.42	0.84
1:F:480:LYS:NZ	1:F:527:GLU:HB2	1.92	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:533:LEU:HD23	1:A:629:VAL:HG13	1.59	0.84
1:D:536:LYS:HB3	1:D:625:LEU:HD13	1.60	0.84
1:A:654:LEU:HD21	1:B:654:LEU:HD21	1.46	0.83
1:A:654:LEU:HD21	1:B:654:LEU:HD22	1.59	0.83
1:G:219:PHE:C	1:G:220:ARG:HG3	1.97	0.83
1:E:230:GLN:C	1:E:232:HIS:H	1.81	0.83
1:A:153:LEU:HD23	1:A:162:HIS:CG	2.13	0.83
1:E:249:LEU:HG	1:E:253:VAL:O	1.78	0.83
1:F:153:LEU:HD23	1:F:162:HIS:CG	2.13	0.83
1:G:153:LEU:HD23	1:G:162:HIS:CG	2.13	0.83
1:G:246:TYR:HD1	1:G:258:VAL:CB	1.89	0.83
1:B:394:LYS:HE2	1:B:401:ILE:HA	1.59	0.83
1:C:230:GLN:C	1:C:232:HIS:H	1.81	0.83
1:B:150:ASN:HD22	1:B:167:LEU:HD12	1.41	0.83
1:A:148:PRO:HD3	1:A:188:TYR:CE2	2.14	0.83
1:E:148:PRO:HD3	1:E:188:TYR:CE2	2.13	0.83
1:F:118:LYS:CG	1:F:264:HIS:O	2.26	0.83
1:C:153:LEU:CD2	1:C:162:HIS:ND1	2.42	0.83
1:E:150:ASN:HD22	1:E:167:LEU:HD12	1.41	0.83
1:G:272:LYS:HG2	1:G:273:LEU:N	1.93	0.83
1:F:220:ARG:HH12	1:F:223:LEU:HD22	1.43	0.83
1:D:547:LEU:HD13	1:D:615:THR:HG22	1.60	0.83
1:B:217:THR:OG1	1:B:218:GLY:N	2.04	0.83
1:C:502:GLU:HG3	1:D:666:ARG:NH1	1.92	0.83
1:C:462:ASN:HD21	1:C:540:LEU:HB2	1.43	0.83
1:A:496:LYS:HB2	1:B:655:TRP:HE1	0.75	0.83
1:A:433:ILE:HB	1:A:571:TYR:CZ	2.14	0.83
1:H:189:LEU:HG	1:H:190:ALA:N	1.89	0.83
1:F:148:PRO:HD3	1:F:188:TYR:CE2	2.12	0.83
1:C:26:PHE:HE2	1:C:181:GLU:OE1	1.62	0.83
1:H:272:LYS:HG2	1:H:273:LEU:N	1.92	0.83
1:D:153:LEU:HD23	1:D:162:HIS:CG	2.13	0.83
1:H:422:THR:HB	1:H:585:GLY:CA	2.08	0.83
1:A:42:ALA:O	1:A:95:ALA:HA	1.79	0.83
1:C:655:TRP:CE3	1:D:654:LEU:CD1	2.61	0.83
1:H:230:GLN:C	1:H:232:HIS:H	1.81	0.83
1:E:153:LEU:CD2	1:E:162:HIS:ND1	2.41	0.83
1:F:263:ASN:ND2	1:F:265:LEU:HB2	1.93	0.83
1:F:422:THR:HB	1:F:585:GLY:CA	2.09	0.83
1:E:26:PHE:HE2	1:E:181:GLU:OE1	1.61	0.83
1:F:444:CYS:C	1:F:446:ARG:H	1.80	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:441:LYS:HB2	1:D:560:LEU:HD22	1.60	0.83
1:C:540:LEU:CD1	1:C:622:ALA:HB2	2.09	0.83
1:C:263:ASN:ND2	1:C:265:LEU:HB2	1.94	0.82
1:G:230:GLN:C	1:G:232:HIS:H	1.81	0.82
1:G:475:GLU:OE2	1:G:637:ARG:HG3	1.79	0.82
1:G:263:ASN:ND2	1:G:265:LEU:HB2	1.95	0.82
1:D:473:THR:HG21	1:D:533:LEU:CD2	2.07	0.82
1:B:521:VAL:HG13	1:B:643:VAL:HG12	1.59	0.82
1:C:245:VAL:HG12	1:C:246:TYR:H	1.44	0.82
1:A:236:ARG:NH2	1:D:231:TRP:CE3	2.47	0.82
1:F:500:GLN:HB3	1:F:505:ILE:HG12	1.61	0.82
1:D:473:THR:CG2	1:D:533:LEU:HD22	2.09	0.82
1:E:533:LEU:HD23	1:E:629:VAL:CG1	2.10	0.82
1:A:357:SER:HB3	1:A:453:THR:HB	1.60	0.82
1:G:402:SER:HA	1:G:609:TYR:CG	2.14	0.82
1:F:249:LEU:HG	1:F:253:VAL:O	1.78	0.82
1:F:521:VAL:HG13	1:F:643:VAL:HG12	1.61	0.82
1:D:217:THR:OG1	1:D:218:GLY:N	2.12	0.82
1:G:170:ALA:O	1:G:172:GLU:N	2.11	0.82
1:E:217:THR:OG1	1:E:218:GLY:N	2.08	0.82
1:F:219:PHE:C	1:F:220:ARG:CG	2.45	0.82
1:F:246:TYR:HD1	1:F:258:VAL:CB	1.89	0.82
1:F:387:ILE:HD12	1:F:450:GLY:CA	2.08	0.82
1:H:153:LEU:CD2	1:H:162:HIS:ND1	2.43	0.82
1:B:148:PRO:HD3	1:B:188:TYR:CE2	2.15	0.82
1:C:430:TRP:HB3	1:C:571:TYR:HD2	1.45	0.82
1:D:148:PRO:HD3	1:D:188:TYR:CE2	2.14	0.82
1:H:263:ASN:ND2	1:H:265:LEU:HB2	1.94	0.82
1:D:387:ILE:HG21	1:D:450:GLY:HA2	1.60	0.82
1:B:42:ALA:O	1:B:95:ALA:HA	1.79	0.82
1:C:119:GLU:CB	1:C:121:PRO:HD2	2.09	0.82
1:G:153:LEU:CD2	1:G:162:HIS:ND1	2.43	0.82
1:B:430:TRP:HB3	1:B:571:TYR:HD2	1.44	0.82
1:A:231:TRP:CE3	1:D:236:ARG:NH2	2.48	0.82
1:E:651:GLN:HE21	1:F:492:ILE:HD13	1.43	0.82
1:G:220:ARG:HH12	1:G:223:LEU:HD22	1.44	0.82
1:H:253:VAL:HB	1:H:255:PHE:CZ	2.15	0.82
1:F:134:ARG:HB2	1:F:300:PHE:CE1	2.15	0.82
1:D:358:GLY:O	1:D:359:LEU:HB2	1.80	0.82
1:E:42:ALA:O	1:E:95:ALA:HA	1.78	0.82
1:B:540:LEU:CD2	1:B:621:LYS:NZ	2.42	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:230:GLN:C	1:D:232:HIS:H	1.80	0.81
1:B:501:MET:HA	1:B:505:ILE:HD13	1.62	0.81
1:G:111:PHE:HZ	1:G:572:ARG:CG	1.90	0.81
1:G:217:THR:OG1	1:G:218:GLY:N	2.12	0.81
1:A:263:ASN:ND2	1:A:265:LEU:HB2	1.94	0.81
1:G:179:CYS:HB2	1:G:181:GLU:CG	1.99	0.81
1:B:153:LEU:CD2	1:B:162:HIS:ND1	2.43	0.81
1:E:387:ILE:CD1	1:E:449:GLN:HG3	2.10	0.81
1:H:262:PRO:HB3	1:H:409:SER:OG	1.80	0.81
1:G:473:THR:CG2	1:G:633:MET:HG3	2.10	0.81
1:A:249:LEU:HG	1:A:253:VAL:O	1.80	0.81
1:A:230:GLN:C	1:A:232:HIS:H	1.81	0.81
1:D:42:ALA:O	1:D:95:ALA:HA	1.80	0.81
1:A:170:ALA:O	1:A:172:GLU:N	2.13	0.81
1:D:153:LEU:CD2	1:D:162:HIS:ND1	2.44	0.81
1:F:220:ARG:NH1	1:F:223:LEU:HD22	1.95	0.81
1:F:282:MET:CB	1:F:286:ARG:HG3	2.11	0.81
1:G:282:MET:CB	1:G:286:ARG:HG3	2.11	0.81
1:A:533:LEU:CD2	1:A:629:VAL:CG1	2.57	0.81
1:F:42:ALA:O	1:F:95:ALA:HA	1.80	0.81
1:E:253:VAL:HB	1:E:255:PHE:CZ	2.15	0.81
1:D:322:VAL:HG12	1:D:323:HIS:H	1.43	0.81
1:C:655:TRP:CD1	1:D:496:LYS:HB2	2.16	0.81
1:E:434:TRP:CD1	1:E:435:GLN:N	2.48	0.81
1:E:134:ARG:CA	1:E:300:PHE:HZ	1.94	0.81
1:C:42:ALA:O	1:C:95:ALA:HA	1.80	0.81
1:B:272:LYS:HG2	1:B:273:LEU:N	1.93	0.81
1:D:170:ALA:O	1:D:172:GLU:N	2.14	0.81
1:H:423:TYR:CE2	1:H:425:HIS:HB2	2.15	0.81
1:B:170:ALA:O	1:B:172:GLU:N	2.14	0.81
1:E:423:TYR:CE2	1:E:425:HIS:HB2	2.16	0.81
1:B:249:LEU:HG	1:B:253:VAL:O	1.79	0.81
1:H:434:TRP:HZ3	1:H:568:ARG:CG	1.94	0.81
1:E:245:VAL:HG12	1:E:246:TYR:H	1.44	0.81
1:E:661:ALA:HB1	1:F:662:CYS:SG	2.20	0.81
1:A:493:ASP:HB3	1:A:514:TRP:CH2	2.16	0.81
1:D:423:TYR:CE2	1:D:425:HIS:HB2	2.15	0.81
1:C:170:ALA:O	1:C:172:GLU:N	2.14	0.81
1:F:423:TYR:CE2	1:F:425:HIS:HB2	2.16	0.81
1:E:547:LEU:HD22	1:E:611:GLN:HG2	1.63	0.81
1:E:571:TYR:CZ	1:E:590:MET:SD	2.73	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:475:GLU:HG2	1:D:636:MET:CE	2.10	0.81
1:E:282:MET:CB	1:E:286:ARG:HG3	2.11	0.81
1:C:651:GLN:HE21	1:D:492:ILE:HD13	1.46	0.81
1:B:494:LEU:HD13	1:B:514:TRP:HB3	1.63	0.81
1:H:220:ARG:HH12	1:H:223:LEU:HD22	1.46	0.81
1:H:249:LEU:HG	1:H:253:VAL:O	1.80	0.81
1:B:179:CYS:HB2	1:B:181:GLU:CG	2.01	0.81
1:C:357:SER:HB3	1:C:453:THR:HB	1.63	0.81
1:A:272:LYS:HG2	1:A:273:LEU:N	1.94	0.80
1:H:148:PRO:HD3	1:H:188:TYR:CE2	2.15	0.80
1:C:423:TYR:CE2	1:C:425:HIS:HB2	2.17	0.80
1:H:42:ALA:O	1:H:95:ALA:HA	1.80	0.80
1:C:249:LEU:HG	1:C:253:VAL:O	1.80	0.80
1:A:153:LEU:CD2	1:A:162:HIS:ND1	2.44	0.80
1:F:153:LEU:CD2	1:F:162:HIS:ND1	2.43	0.80
1:F:134:ARG:HB2	1:F:300:PHE:HE1	1.44	0.80
1:G:387:ILE:HD11	1:G:449:GLN:HG3	1.60	0.80
1:A:423:TYR:CE2	1:A:425:HIS:HB2	2.16	0.80
1:B:423:TYR:CE2	1:B:425:HIS:HB2	2.16	0.80
1:F:322:VAL:HG12	1:F:323:HIS:H	1.45	0.80
1:B:219:PHE:C	1:B:220:ARG:CG	2.44	0.80
1:C:494:LEU:HD12	1:C:514:TRP:HE3	1.46	0.80
1:F:111:PHE:CZ	1:F:572:ARG:HG3	2.16	0.80
1:F:217:THR:OG1	1:F:218:GLY:N	2.09	0.80
1:G:249:LEU:HG	1:G:253:VAL:O	1.80	0.80
1:G:423:TYR:CE2	1:G:425:HIS:HB2	2.16	0.80
1:B:26:PHE:CE2	1:B:181:GLU:CD	2.55	0.80
1:B:563:LEU:HD21	1:B:596:LEU:HB2	1.62	0.80
1:H:170:ALA:O	1:H:172:GLU:N	2.14	0.80
1:D:570:LEU:HD23	1:D:590:MET:HG2	1.64	0.80
1:D:249:LEU:HG	1:D:253:VAL:O	1.82	0.80
1:G:434:TRP:CD1	1:G:435:GLN:N	2.49	0.80
1:E:434:TRP:CZ3	1:E:568:ARG:HA	2.17	0.80
1:B:253:VAL:HB	1:B:255:PHE:CZ	2.16	0.80
1:F:497:TYR:O	1:F:497:TYR:CD2	2.35	0.80
1:G:282:MET:HB2	1:G:286:ARG:CG	2.12	0.80
1:G:322:VAL:HG12	1:G:323:HIS:H	1.47	0.80
1:E:246:TYR:HD1	1:E:258:VAL:CB	1.91	0.80
1:G:148:PRO:HD3	1:G:188:TYR:CE2	2.16	0.80
1:A:282:MET:HB2	1:A:286:ARG:CG	2.12	0.80
1:F:170:ALA:O	1:F:172:GLU:N	2.14	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:358:GLY:O	1:F:359:LEU:HB2	1.81	0.80
1:G:134:ARG:HA	1:G:300:PHE:CZ	2.17	0.80
1:C:433:ILE:HB	1:C:571:TYR:CZ	2.16	0.80
1:D:434:TRP:CD1	1:D:435:GLN:N	2.50	0.80
1:H:433:ILE:HB	1:H:571:TYR:CZ	2.17	0.80
1:H:402:SER:HA	1:H:609:TYR:CD1	2.17	0.80
1:C:570:LEU:HB3	1:C:590:MET:HE3	1.64	0.79
1:E:119:GLU:CB	1:E:121:PRO:HD2	2.12	0.79
1:E:26:PHE:CE2	1:E:181:GLU:CD	2.56	0.79
1:A:282:MET:CB	1:A:286:ARG:HG3	2.11	0.79
1:D:134:ARG:HA	1:D:300:PHE:CZ	2.17	0.79
1:G:134:ARG:HA	1:G:300:PHE:HZ	1.45	0.79
1:G:42:ALA:O	1:G:95:ALA:HA	1.81	0.79
1:D:263:ASN:ND2	1:D:265:LEU:HB2	1.95	0.79
1:B:245:VAL:HG12	1:B:246:TYR:H	1.47	0.79
1:H:473:THR:CG2	1:H:533:LEU:HD22	2.13	0.79
1:D:282:MET:CB	1:D:286:ARG:HG3	2.12	0.79
1:A:579:ARG:HH22	1:D:580:ASP:HB3	1.47	0.79
1:A:655:TRP:NE1	1:B:496:LYS:HB2	1.95	0.79
1:F:282:MET:HB2	1:F:286:ARG:CG	2.12	0.79
1:A:246:TYR:HD1	1:A:258:VAL:CB	1.89	0.79
1:E:658:LEU:HD12	1:F:658:LEU:HA	1.63	0.79
1:E:358:GLY:O	1:E:359:LEU:HB2	1.81	0.79
1:C:497:TYR:N	1:D:655:TRP:HZ2	1.80	0.79
1:G:419:ARG:H	1:G:420:PRO:CD	1.95	0.79
1:E:263:ASN:ND2	1:E:265:LEU:HB2	1.98	0.79
1:F:357:SER:HB3	1:F:453:THR:HA	1.64	0.79
1:C:422:THR:HB	1:C:585:GLY:HA3	1.62	0.79
1:D:438:ARG:HG2	1:D:564:GLU:HG3	1.63	0.79
1:B:220:ARG:NH1	1:B:223:LEU:HD22	1.98	0.79
1:C:547:LEU:HD12	1:C:615:THR:HG22	1.61	0.79
1:C:547:LEU:HD13	1:C:615:THR:HG22	1.45	0.79
1:B:220:ARG:HH12	1:B:223:LEU:HD22	1.46	0.79
1:F:119:GLU:CB	1:F:121:PRO:HD2	2.13	0.79
1:F:533:LEU:HD23	1:F:629:VAL:HG13	1.62	0.79
1:C:134:ARG:HB2	1:C:300:PHE:HE1	1.46	0.79
1:A:358:GLY:O	1:A:359:LEU:HB2	1.80	0.79
1:C:120:GLY:O	1:C:124:THR:N	2.14	0.79
1:C:570:LEU:HB3	1:C:590:MET:CE	2.12	0.79
1:H:235:VAL:HB	1:H:243:ILE:HA	1.65	0.79
1:G:220:ARG:NH1	1:G:223:LEU:HD22	1.95	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:253:VAL:HB	1:D:255:PHE:CZ	2.18	0.79
1:C:246:TYR:HD1	1:C:258:VAL:CB	1.90	0.79
1:F:533:LEU:HD23	1:F:629:VAL:CG1	2.13	0.79
1:G:358:GLY:O	1:G:359:LEU:HB2	1.82	0.79
1:A:322:VAL:HG12	1:A:323:HIS:H	1.47	0.79
1:B:322:VAL:HG12	1:B:323:HIS:H	1.47	0.79
1:B:441:LYS:HB2	1:B:560:LEU:CD2	2.12	0.79
1:B:422:THR:HB	1:B:585:GLY:CA	2.13	0.79
1:A:434:TRP:HZ3	1:A:568:ARG:HG3	1.47	0.79
1:A:570:LEU:HD23	1:A:590:MET:HG2	1.64	0.79
1:E:419:ARG:HA	1:E:587:SER:OG	1.81	0.79
1:H:219:PHE:C	1:H:220:ARG:CG	2.49	0.79
1:C:235:VAL:HB	1:C:243:ILE:HA	1.64	0.79
1:C:322:VAL:HG12	1:C:323:HIS:H	1.48	0.79
1:H:358:GLY:O	1:H:359:LEU:HB2	1.82	0.79
1:D:220:ARG:HH12	1:D:223:LEU:HD22	1.47	0.79
1:A:409:SER:CB	1:A:412:ILE:HD12	2.13	0.79
1:E:651:GLN:NE2	1:F:492:ILE:HG23	1.97	0.79
1:G:409:SER:CB	1:G:412:ILE:HD12	2.13	0.78
1:D:245:VAL:HG12	1:D:246:TYR:H	1.47	0.78
1:D:637:ARG:O	1:D:641:LYS:HB2	1.81	0.78
1:E:134:ARG:HB2	1:E:300:PHE:CE1	2.17	0.78
1:C:134:ARG:CA	1:C:300:PHE:HZ	1.96	0.78
1:C:358:GLY:O	1:C:359:LEU:HB2	1.81	0.78
1:D:433:ILE:HB	1:D:571:TYR:CZ	2.19	0.78
1:D:219:PHE:C	1:D:220:ARG:CG	2.46	0.78
1:F:434:TRP:HE3	1:F:568:ARG:HA	1.44	0.78
1:E:494:LEU:HD12	1:E:514:TRP:HE3	1.46	0.78
1:H:217:THR:OG1	1:H:218:GLY:N	2.08	0.78
1:C:220:ARG:HH12	1:C:223:LEU:HD22	1.47	0.78
1:D:119:GLU:HB3	1:D:121:PRO:HD2	1.66	0.78
1:B:282:MET:CB	1:B:286:ARG:HG3	2.14	0.78
1:E:120:GLY:O	1:E:124:THR:N	2.16	0.78
1:F:419:ARG:H	1:F:420:PRO:CD	1.97	0.78
1:D:660:ILE:HG22	1:D:661:ALA:H	1.49	0.78
1:E:322:VAL:HG12	1:E:323:HIS:H	1.46	0.78
1:C:119:GLU:HB3	1:C:121:PRO:HD2	1.64	0.78
1:D:120:GLY:O	1:D:124:THR:N	2.17	0.78
1:E:409:SER:CB	1:E:412:ILE:HD12	2.14	0.78
1:D:235:VAL:HB	1:D:243:ILE:HA	1.65	0.78
1:H:26:PHE:CE2	1:H:181:GLU:OE1	2.37	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:473:THR:CG2	1:F:533:LEU:HD22	2.04	0.78
1:A:580:ASP:HB3	1:D:579:ARG:NH2	1.98	0.78
1:G:394:LYS:HE3	1:G:609:TYR:O	1.83	0.78
1:D:319:SER:OG	1:D:403:LEU:HB2	1.83	0.78
1:G:245:VAL:HG12	1:G:246:TYR:H	1.48	0.78
1:F:253:VAL:HB	1:F:255:PHE:CZ	2.19	0.78
1:C:282:MET:HB2	1:C:286:ARG:CG	2.13	0.78
1:B:434:TRP:CD1	1:B:435:GLN:N	2.51	0.78
1:B:571:TYR:CZ	1:B:590:MET:SD	2.77	0.78
1:A:217:THR:OG1	1:A:218:GLY:N	2.12	0.78
1:F:359:LEU:HA	1:F:460:ARG:HH12	1.49	0.78
1:B:263:ASN:ND2	1:B:265:LEU:HB2	1.96	0.78
1:H:434:TRP:CZ3	1:H:568:ARG:CA	2.64	0.78
1:F:134:ARG:CA	1:F:300:PHE:HZ	1.93	0.78
1:H:419:ARG:H	1:H:420:PRO:CD	1.97	0.77
1:C:282:MET:CB	1:C:286:ARG:HG3	2.13	0.77
1:D:547:LEU:CD1	1:D:615:THR:HG22	2.13	0.77
1:G:120:GLY:O	1:G:124:THR:N	2.17	0.77
1:E:422:THR:HB	1:E:585:GLY:C	2.03	0.77
1:A:220:ARG:HH12	1:A:223:LEU:HD22	1.46	0.77
1:C:409:SER:CB	1:C:412:ILE:HD12	2.15	0.77
1:C:419:ARG:H	1:C:420:PRO:CD	1.97	0.77
1:B:185:THR:HG23	1:B:187:GLN:CG	2.09	0.77
1:G:219:PHE:C	1:G:220:ARG:CG	2.51	0.77
1:H:282:MET:HB2	1:H:286:ARG:CG	2.14	0.77
1:D:434:TRP:HB3	1:D:571:TYR:HD1	1.43	0.77
1:H:219:PHE:O	1:H:220:ARG:HG3	1.84	0.77
1:B:387:ILE:HD12	1:B:450:GLY:CA	2.14	0.77
1:A:510:LEU:HD12	1:A:657:LEU:CD1	2.14	0.77
1:D:660:ILE:CG2	1:D:661:ALA:N	2.48	0.77
1:B:476:CYS:CB	1:B:636:MET:SD	2.72	0.77
1:B:419:ARG:H	1:B:420:PRO:CD	1.96	0.77
1:D:249:LEU:CD2	1:D:252:ALA:HA	2.15	0.77
1:F:249:LEU:CD2	1:F:252:ALA:HA	2.15	0.77
1:C:547:LEU:CD1	1:C:615:THR:CG2	2.51	0.77
1:A:533:LEU:CD2	1:A:629:VAL:HG13	2.15	0.77
1:B:282:MET:HB2	1:B:286:ARG:CG	2.14	0.77
1:E:220:ARG:HH12	1:E:223:LEU:HD22	1.49	0.77
1:E:272:LYS:HB2	1:E:306:ILE:CG2	2.15	0.77
1:G:253:VAL:HB	1:G:255:PHE:CZ	2.20	0.77
1:A:245:VAL:HG12	1:A:246:TYR:H	1.48	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:387:ILE:HD11	1:A:449:GLN:HG3	1.67	0.77
1:B:119:GLU:CB	1:B:121:PRO:HD2	2.14	0.77
1:H:245:VAL:HG12	1:H:246:TYR:H	1.49	0.77
1:H:220:ARG:NH1	1:H:223:LEU:HD22	1.99	0.77
1:E:492:ILE:HG23	1:F:651:GLN:HE22	1.48	0.77
1:A:253:VAL:HB	1:A:255:PHE:CZ	2.20	0.77
1:F:529:GLU:HG3	1:F:633:MET:HE1	1.67	0.77
1:A:529:GLU:HG3	1:A:633:MET:CE	2.14	0.77
1:H:282:MET:CB	1:H:286:ARG:HG3	2.13	0.77
1:C:434:TRP:HE3	1:C:568:ARG:HA	1.50	0.77
1:A:120:GLY:O	1:A:124:THR:N	2.18	0.77
1:E:570:LEU:HB3	1:E:590:MET:CE	2.15	0.77
1:F:235:VAL:HB	1:F:243:ILE:HA	1.67	0.77
1:C:134:ARG:HB2	1:C:300:PHE:CE1	2.19	0.77
1:D:441:LYS:HD2	1:D:561:ASP:OD1	1.84	0.77
1:B:527:GLU:C	1:B:529:GLU:H	1.87	0.77
1:H:409:SER:CB	1:H:412:ILE:HD12	2.15	0.77
1:H:582:ARG:HD2	1:H:582:ARG:H	1.49	0.77
1:H:118:LYS:CG	1:H:264:HIS:O	2.31	0.77
1:F:26:PHE:CZ	1:F:179:CYS:HB3	2.19	0.77
1:F:517:MET:HE3	1:F:647:GLN:OE1	1.85	0.77
1:D:282:MET:HB2	1:D:286:ARG:CG	2.13	0.77
1:C:193:LEU:HB2	1:C:196:GLN:HE22	1.48	0.77
1:B:479:LEU:C	1:B:640:GLU:OE2	2.24	0.76
1:A:219:PHE:O	1:A:220:ARG:HG3	1.85	0.76
1:C:220:ARG:NH1	1:C:223:LEU:HD22	1.99	0.76
1:C:253:VAL:HB	1:C:255:PHE:CZ	2.20	0.76
1:D:433:ILE:HB	1:D:571:TYR:OH	1.84	0.76
1:F:245:VAL:HG12	1:F:246:TYR:H	1.48	0.76
1:D:536:LYS:HB3	1:D:625:LEU:CD1	2.16	0.76
1:G:402:SER:HA	1:G:609:TYR:CD1	2.20	0.76
1:C:582:ARG:H	1:C:582:ARG:HD2	1.50	0.76
1:D:515:ARG:HA	1:D:518:GLU:CD	2.04	0.76
1:C:107:TYR:O	1:C:110:GLN:N	2.18	0.76
1:C:185:THR:HG23	1:C:187:GLN:CG	2.08	0.76
1:E:220:ARG:NH1	1:E:223:LEU:HD22	1.99	0.76
1:F:272:LYS:HB2	1:F:306:ILE:CG2	2.15	0.76
1:F:409:SER:CB	1:F:412:ILE:HD12	2.14	0.76
1:E:282:MET:HB2	1:E:286:ARG:CG	2.11	0.76
1:C:434:TRP:CD1	1:C:435:GLN:N	2.54	0.76
1:B:120:GLY:O	1:B:124:THR:N	2.18	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:272:LYS:HB2	1:G:306:ILE:CG2	2.16	0.76
1:G:570:LEU:HB3	1:G:590:MET:CE	2.15	0.76
1:A:419:ARG:H	1:A:420:PRO:CD	1.97	0.76
1:A:235:VAL:HB	1:A:243:ILE:HA	1.66	0.76
1:G:359:LEU:HA	1:G:460:ARG:NH1	2.00	0.76
1:C:515:ARG:HA	1:C:518:GLU:CD	2.04	0.76
1:A:219:PHE:C	1:A:220:ARG:CG	2.49	0.76
1:A:220:ARG:NH1	1:A:223:LEU:HD22	2.00	0.76
1:C:272:LYS:HB2	1:C:306:ILE:CG2	2.15	0.76
1:B:409:SER:CB	1:B:412:ILE:HD12	2.15	0.76
1:A:422:THR:HB	1:A:585:GLY:HA2	1.64	0.76
1:H:193:LEU:HB2	1:H:196:GLN:HE22	1.49	0.76
1:D:220:ARG:NH1	1:D:223:LEU:HD22	1.98	0.76
1:B:235:VAL:HB	1:B:243:ILE:HA	1.67	0.76
1:C:485:PHE:CE2	1:D:485:PHE:CB	2.69	0.76
1:F:521:VAL:HG22	1:F:643:VAL:CG1	2.15	0.76
1:B:358:GLY:O	1:B:359:LEU:HB2	1.83	0.76
1:D:419:ARG:H	1:D:420:PRO:CD	1.97	0.76
1:A:107:TYR:CD1	1:A:153:LEU:HD12	2.21	0.76
1:C:286:ARG:HA	1:C:290:THR:HG22	1.67	0.76
1:D:430:TRP:HB3	1:D:571:TYR:CD2	2.17	0.76
1:G:434:TRP:HB3	1:G:571:TYR:HD1	1.49	0.76
1:F:119:GLU:HB3	1:F:121:PRO:HD2	1.68	0.76
1:G:235:VAL:HB	1:G:243:ILE:HA	1.68	0.76
1:E:515:ARG:HA	1:E:518:GLU:CD	2.06	0.76
1:C:434:TRP:HB3	1:C:571:TYR:HD1	1.44	0.76
1:D:272:LYS:HB2	1:D:306:ILE:CG2	2.16	0.76
1:D:570:LEU:HB3	1:D:590:MET:CE	2.15	0.76
1:E:655:TRP:HE1	1:F:496:LYS:HB2	0.67	0.76
1:G:119:GLU:CB	1:G:121:PRO:HD2	2.16	0.76
1:E:661:ALA:O	1:F:661:ALA:O	2.04	0.76
1:A:316:ASN:O	1:A:388:PHE:O	2.04	0.76
1:F:563:LEU:HD21	1:F:596:LEU:HB2	1.68	0.76
1:C:573:ARG:HH22	1:D:573:ARG:HH12	1.31	0.76
1:C:573:ARG:NH2	1:D:573:ARG:HH12	1.84	0.76
1:D:185:THR:HG23	1:D:187:GLN:CG	2.07	0.76
1:E:419:ARG:H	1:E:420:PRO:CD	1.98	0.76
1:A:473:THR:HG21	1:A:533:LEU:CD2	2.14	0.76
1:E:658:LEU:HA	1:F:658:LEU:CD1	2.16	0.76
1:B:476:CYS:HA	1:B:636:MET:SD	2.25	0.76
1:A:186:LEU:O	1:A:188:TYR:N	2.18	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:107:TYR:CD1	1:E:153:LEU:HD12	2.21	0.76
1:H:119:GLU:CB	1:H:121:PRO:HD2	2.16	0.76
1:E:666:ARG:NH1	1:F:502:GLU:HG3	2.01	0.75
1:B:515:ARG:HA	1:B:518:GLU:CD	2.06	0.75
1:E:249:LEU:CD2	1:E:252:ALA:HA	2.16	0.75
1:C:26:PHE:CE2	1:C:181:GLU:CD	2.58	0.75
1:C:662:CYS:SG	1:D:661:ALA:HB1	2.27	0.75
1:F:193:LEU:HD22	1:F:231:TRP:CD1	2.21	0.75
1:A:118:LYS:CG	1:A:264:HIS:O	2.32	0.75
1:A:434:TRP:CD1	1:A:435:GLN:N	2.53	0.75
1:A:476:CYS:HB2	1:A:636:MET:SD	2.26	0.75
1:F:327:VAL:HG11	1:F:367:LEU:CB	2.16	0.75
1:B:272:LYS:HB2	1:B:306:ILE:CG2	2.16	0.75
1:B:500:GLN:HB3	1:B:505:ILE:CG1	2.16	0.75
1:F:515:ARG:HA	1:F:518:GLU:CD	2.07	0.75
1:F:443:ASP:O	1:F:446:ARG:CB	2.34	0.75
1:A:582:ARG:HD2	1:A:582:ARG:H	1.51	0.75
1:F:582:ARG:H	1:F:582:ARG:HD2	1.50	0.75
1:E:119:GLU:HB3	1:E:121:PRO:HD2	1.69	0.75
1:B:394:LYS:CE	1:B:401:ILE:HA	2.17	0.75
1:H:322:VAL:HG12	1:H:323:HIS:H	1.52	0.75
1:E:582:ARG:HD2	1:E:582:ARG:H	1.52	0.75
1:B:434:TRP:HE3	1:B:568:ARG:HA	1.45	0.75
1:A:434:TRP:CZ3	1:A:568:ARG:CA	2.68	0.75
1:E:272:LYS:HB2	1:E:306:ILE:HG21	1.68	0.75
1:G:26:PHE:CZ	1:G:179:CYS:HB3	2.21	0.75
1:C:533:LEU:HD23	1:C:629:VAL:HG13	1.67	0.75
1:B:134:ARG:HB2	1:B:300:PHE:HE1	1.52	0.75
1:D:171:LYS:HG3	1:D:171:LYS:O	1.87	0.75
1:D:193:LEU:HD22	1:D:231:TRP:CD1	2.20	0.75
1:H:443:ASP:O	1:H:446:ARG:HB2	1.86	0.75
1:G:193:LEU:HB2	1:G:196:GLN:HE22	1.51	0.75
1:C:272:LYS:HB2	1:C:306:ILE:HG21	1.68	0.75
1:D:409:SER:CB	1:D:412:ILE:HD12	2.16	0.75
1:A:430:TRP:HB3	1:A:571:TYR:HD2	1.50	0.75
1:F:107:TYR:O	1:F:110:GLN:N	2.20	0.75
1:F:434:TRP:CD1	1:F:435:GLN:N	2.54	0.75
1:B:107:TYR:CD1	1:B:153:LEU:HD12	2.22	0.75
1:D:582:ARG:HD2	1:D:582:ARG:H	1.50	0.75
1:C:424:THR:OG1	1:C:425:HIS:ND1	2.17	0.75
1:B:536:LYS:O	1:B:625:LEU:HD13	1.87	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:496:LYS:HB2	1:F:655:TRP:HE1	0.66	0.75
1:A:588:ASN:CG	1:A:589:ASP:H	1.89	0.75
1:B:357:SER:HA	1:B:453:THR:HB	1.68	0.75
1:A:18:LYS:HZ2	1:A:33:ILE:HG21	1.51	0.75
1:G:327:VAL:HG11	1:G:367:LEU:CB	2.16	0.75
1:A:515:ARG:HA	1:A:518:GLU:CD	2.07	0.75
1:G:582:ARG:H	1:G:582:ARG:HD2	1.49	0.75
1:C:107:TYR:CD1	1:C:153:LEU:HD12	2.22	0.75
1:D:107:TYR:CD1	1:D:153:LEU:HD12	2.22	0.75
1:G:434:TRP:CZ3	1:G:568:ARG:CA	2.70	0.75
1:A:272:LYS:HB2	1:A:306:ILE:CG2	2.17	0.75
1:F:185:THR:HG23	1:F:187:GLN:CG	2.08	0.75
1:E:502:GLU:HG3	1:F:666:ARG:HH12	1.51	0.75
1:G:473:THR:HG21	1:G:533:LEU:CD2	2.14	0.75
1:G:387:ILE:CD1	1:G:450:GLY:HA2	2.16	0.75
1:H:327:VAL:HG11	1:H:367:LEU:CB	2.17	0.75
1:B:394:LYS:HE2	1:B:401:ILE:CA	2.17	0.75
1:B:494:LEU:CD1	1:B:514:TRP:HB3	2.17	0.74
1:F:118:LYS:HG2	1:F:265:LEU:HA	1.69	0.74
1:H:107:TYR:CD1	1:H:153:LEU:HD12	2.22	0.74
1:C:533:LEU:CD2	1:C:629:VAL:HG11	2.13	0.74
1:E:502:GLU:HG3	1:F:666:ARG:HH11	1.51	0.74
1:E:660:ILE:HG22	1:E:661:ALA:H	1.51	0.74
1:E:665:VAL:CG2	1:F:665:VAL:HG22	2.17	0.74
1:B:193:LEU:HB2	1:B:196:GLN:HE22	1.52	0.74
1:C:654:LEU:CD1	1:D:655:TRP:CE3	2.69	0.74
1:E:503:PHE:O	1:E:505:ILE:HG13	1.86	0.74
1:B:118:LYS:CG	1:B:264:HIS:O	2.34	0.74
1:H:412:ILE:HG23	1:H:433:ILE:HD12	1.69	0.74
1:H:570:LEU:HB3	1:H:590:MET:HE2	1.69	0.74
1:E:235:VAL:HB	1:E:243:ILE:HA	1.68	0.74
1:A:107:TYR:O	1:A:110:GLN:N	2.20	0.74
1:F:517:MET:O	1:F:517:MET:HG2	1.87	0.74
1:F:521:VAL:HG22	1:F:643:VAL:HG13	1.67	0.74
1:A:327:VAL:HG11	1:A:367:LEU:CB	2.16	0.74
1:F:660:ILE:CG2	1:F:661:ALA:N	2.51	0.74
1:D:660:ILE:CG2	1:D:661:ALA:H	2.00	0.74
1:B:582:ARG:H	1:B:582:ARG:HD2	1.51	0.74
1:A:422:THR:HB	1:A:585:GLY:HA3	1.69	0.74
1:F:107:TYR:CD1	1:F:153:LEU:HD12	2.22	0.74
1:F:394:LYS:HG3	1:F:613:SER:HB2	1.69	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:217:THR:OG1	1:C:218:GLY:N	2.15	0.74
1:H:588:ASN:CG	1:H:589:ASP:H	1.89	0.74
1:B:18:LYS:HZ2	1:B:33:ILE:HG21	1.52	0.74
1:E:660:ILE:CG2	1:E:661:ALA:N	2.50	0.74
1:E:424:THR:OG1	1:E:425:HIS:ND1	2.19	0.74
1:H:272:LYS:HB2	1:H:306:ILE:CG2	2.17	0.74
1:H:357:SER:HA	1:H:453:THR:HB	1.67	0.74
1:F:193:LEU:HB2	1:F:196:GLN:HE22	1.53	0.74
1:D:18:LYS:HZ2	1:D:33:ILE:HG21	1.52	0.74
1:E:28:TYR:O	1:E:44:LYS:HA	1.87	0.74
1:D:107:TYR:O	1:D:110:GLN:N	2.20	0.74
1:D:186:LEU:O	1:D:188:TYR:N	2.20	0.74
1:A:119:GLU:CB	1:A:121:PRO:HD2	2.16	0.74
1:D:26:PHE:HE2	1:D:181:GLU:OE1	1.69	0.74
1:H:387:ILE:CD1	1:H:449:GLN:HG3	2.06	0.74
1:G:316:ASN:O	1:G:388:PHE:O	2.06	0.74
1:D:193:LEU:HB2	1:D:196:GLN:HE22	1.53	0.74
1:C:316:ASN:O	1:C:388:PHE:O	2.06	0.74
1:D:588:ASN:CG	1:D:589:ASP:H	1.89	0.74
1:B:286:ARG:HA	1:B:290:THR:HG22	1.70	0.74
1:E:107:TYR:O	1:E:110:GLN:N	2.21	0.74
1:E:658:LEU:HA	1:F:658:LEU:HD12	1.69	0.74
1:B:540:LEU:HD11	1:B:621:LYS:HB3	1.69	0.74
1:A:517:MET:HG2	1:A:517:MET:O	1.88	0.74
1:H:430:TRP:HB3	1:H:571:TYR:HD2	1.53	0.74
1:D:26:PHE:CE2	1:D:181:GLU:CD	2.61	0.74
1:H:120:GLY:O	1:H:124:THR:N	2.19	0.74
1:C:18:LYS:HZ2	1:C:33:ILE:HG21	1.52	0.74
1:B:500:GLN:C	1:B:505:ILE:HG12	2.08	0.74
1:E:143:HIS:HD2	1:E:145:ASP:O	1.71	0.73
1:B:107:TYR:O	1:B:110:GLN:N	2.20	0.73
1:C:658:LEU:CD1	1:D:658:LEU:HA	2.17	0.73
1:A:193:LEU:HB2	1:A:196:GLN:HE22	1.52	0.73
1:F:143:HIS:HD2	1:F:145:ASP:O	1.70	0.73
1:C:646:ARG:O	1:C:650:ARG:HG2	1.89	0.73
1:E:319:SER:OG	1:E:403:LEU:CB	2.35	0.73
1:A:529:GLU:HG3	1:A:633:MET:HE1	1.70	0.73
1:F:387:ILE:HD11	1:F:449:GLN:HG3	1.69	0.73
1:A:660:ILE:HG22	1:A:661:ALA:H	1.53	0.73
1:C:660:ILE:CG2	1:C:661:ALA:N	2.50	0.73
1:H:451:GLN:CD	1:H:611:GLN:NE2	2.41	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:389:LEU:HD11	1:G:454:SER:OG	1.87	0.73
1:B:517:MET:HG2	1:B:517:MET:O	1.87	0.73
1:B:119:GLU:HB3	1:B:121:PRO:HD2	1.69	0.73
1:H:570:LEU:HB3	1:H:590:MET:HE3	1.69	0.73
1:G:588:ASN:CG	1:G:589:ASP:H	1.91	0.73
1:F:430:TRP:CE3	1:F:574:LEU:HD22	2.23	0.73
1:F:570:LEU:HD23	1:F:590:MET:CG	2.16	0.73
1:G:185:THR:HG23	1:G:187:GLN:CG	2.08	0.73
1:G:249:LEU:CD2	1:G:252:ALA:HA	2.18	0.73
1:D:28:TYR:O	1:D:44:LYS:HA	1.89	0.73
1:D:438:ARG:HG2	1:D:564:GLU:CG	2.18	0.73
1:E:654:LEU:CD1	1:F:655:TRP:CZ3	2.70	0.73
1:H:119:GLU:HB3	1:H:121:PRO:HD2	1.71	0.73
1:E:171:LYS:O	1:E:171:LYS:HG3	1.88	0.73
1:A:171:LYS:O	1:A:171:LYS:HG3	1.87	0.73
1:C:28:TYR:O	1:C:44:LYS:HA	1.89	0.73
1:C:219:PHE:O	1:C:220:ARG:HG3	1.85	0.73
1:B:249:LEU:CD2	1:B:252:ALA:HA	2.18	0.73
1:F:186:LEU:O	1:F:188:TYR:N	2.22	0.73
1:H:107:TYR:O	1:H:110:GLN:N	2.21	0.73
1:B:186:LEU:O	1:B:188:TYR:N	2.22	0.73
1:B:134:ARG:CA	1:B:300:PHE:HZ	2.01	0.73
1:A:134:ARG:HB2	1:A:300:PHE:HE1	1.53	0.73
1:H:171:LYS:O	1:H:171:LYS:HG3	1.88	0.73
1:A:424:THR:OG1	1:A:425:HIS:ND1	2.19	0.73
1:F:353:LEU:HB3	1:F:361:LEU:HD12	1.70	0.73
1:G:171:LYS:HG3	1:G:171:LYS:O	1.88	0.73
1:F:660:ILE:HG22	1:F:661:ALA:H	1.53	0.73
1:D:422:THR:HB	1:D:585:GLY:C	2.09	0.73
1:B:26:PHE:HE2	1:B:181:GLU:OE1	1.70	0.73
1:A:143:HIS:HD2	1:A:145:ASP:O	1.71	0.73
1:C:660:ILE:CG2	1:C:661:ALA:H	2.02	0.73
1:E:193:LEU:HB2	1:E:196:GLN:HE22	1.53	0.73
1:H:466:SER:O	1:H:541:GLN:NE2	2.21	0.73
1:C:143:HIS:HD2	1:C:145:ASP:O	1.72	0.73
1:E:480:LYS:HE3	1:E:527:GLU:HB2	1.71	0.73
1:C:533:LEU:CD2	1:C:629:VAL:HG13	2.17	0.73
1:H:424:THR:OG1	1:H:425:HIS:ND1	2.18	0.73
1:C:660:ILE:HG22	1:C:661:ALA:H	1.52	0.73
1:A:28:TYR:O	1:A:44:LYS:HA	1.88	0.73
1:D:118:LYS:CG	1:D:264:HIS:O	2.37	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:254:LYS:O	1:H:255:PHE:CD2	2.42	0.73
1:C:517:MET:HG2	1:C:517:MET:O	1.87	0.73
1:H:186:LEU:O	1:H:188:TYR:N	2.22	0.73
1:E:316:ASN:O	1:E:388:PHE:O	2.06	0.73
1:F:536:LYS:HB3	1:F:625:LEU:CD1	2.18	0.73
1:G:472:MET:HG2	1:G:633:MET:HB2	1.70	0.73
1:F:171:LYS:HG3	1:F:171:LYS:O	1.88	0.73
1:E:651:GLN:NE2	1:F:492:ILE:CG2	2.52	0.73
1:E:660:ILE:CG2	1:E:661:ALA:H	2.01	0.73
1:C:666:ARG:HG3	1:D:503:PHE:CE1	2.24	0.73
1:B:588:ASN:CG	1:B:589:ASP:H	1.91	0.73
1:E:254:LYS:C	1:E:255:PHE:CG	2.62	0.73
1:C:485:PHE:CZ	1:D:485:PHE:HB2	2.23	0.73
1:E:422:THR:HB	1:E:585:GLY:HA2	1.68	0.72
1:E:479:LEU:HD11	1:E:641:LYS:HG3	1.70	0.72
1:F:517:MET:CE	1:F:647:GLN:OE1	2.37	0.72
1:C:665:VAL:HG13	1:D:665:VAL:HG13	1.69	0.72
1:H:472:MET:SD	1:H:633:MET:HB2	2.30	0.72
1:G:107:TYR:CD1	1:G:153:LEU:HD12	2.23	0.72
1:E:111:PHE:CZ	1:E:572:ARG:HG3	2.23	0.72
1:G:186:LEU:O	1:G:188:TYR:N	2.22	0.72
1:D:143:HIS:HD2	1:D:145:ASP:O	1.71	0.72
1:F:387:ILE:CD1	1:F:450:GLY:CA	2.67	0.72
1:E:18:LYS:HZ2	1:E:33:ILE:HD12	1.53	0.72
1:A:660:ILE:CG2	1:A:661:ALA:N	2.51	0.72
1:F:28:TYR:O	1:F:44:LYS:HA	1.88	0.72
1:E:430:TRP:HB3	1:E:571:TYR:HD2	1.52	0.72
1:E:134:ARG:CA	1:E:300:PHE:CZ	2.72	0.72
1:H:286:ARG:HA	1:H:290:THR:HG22	1.72	0.72
1:G:107:TYR:O	1:G:110:GLN:N	2.22	0.72
1:E:186:LEU:O	1:E:188:TYR:N	2.21	0.72
1:D:286:ARG:HA	1:D:290:THR:HG22	1.71	0.72
1:B:327:VAL:HG11	1:B:367:LEU:CB	2.18	0.72
1:B:660:ILE:CG2	1:B:661:ALA:N	2.52	0.72
1:A:353:LEU:HB3	1:A:361:LEU:HD12	1.71	0.72
1:B:419:ARG:O	1:B:419:ARG:HG2	1.90	0.72
1:F:120:GLY:O	1:F:124:THR:N	2.20	0.72
1:C:286:ARG:HA	1:C:290:THR:CG2	2.20	0.72
1:B:660:ILE:HG22	1:B:661:ALA:H	1.55	0.72
1:B:424:THR:OG1	1:B:425:HIS:ND1	2.18	0.72
1:B:402:SER:HA	1:B:609:TYR:CD1	2.25	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:119:GLU:HB3	1:G:121:PRO:HD2	1.72	0.72
1:F:412:ILE:HG23	1:F:433:ILE:HD12	1.72	0.72
1:A:286:ARG:HG2	1:A:286:ARG:NH1	2.05	0.72
1:G:143:HIS:HD2	1:G:145:ASP:O	1.73	0.72
1:C:419:ARG:O	1:C:419:ARG:HG2	1.89	0.72
1:B:438:ARG:NH1	1:B:568:ARG:HH21	1.87	0.72
1:H:419:ARG:O	1:H:419:ARG:HG2	1.88	0.72
1:H:143:HIS:HD2	1:H:145:ASP:O	1.73	0.72
1:F:424:THR:OG1	1:F:425:HIS:ND1	2.19	0.72
1:B:28:TYR:O	1:B:44:LYS:HA	1.89	0.72
1:C:422:THR:HB	1:C:585:GLY:C	2.09	0.72
1:D:412:ILE:HG23	1:D:433:ILE:HD12	1.71	0.72
1:A:263:ASN:HD21	1:A:265:LEU:CB	1.99	0.72
1:E:588:ASN:CG	1:E:589:ASP:H	1.92	0.72
1:B:550:ASN:HD21	1:B:611:GLN:CG	2.01	0.72
1:C:480:LYS:NZ	1:C:527:GLU:HB2	2.04	0.72
1:F:322:VAL:HG12	1:F:323:HIS:N	2.05	0.72
1:F:359:LEU:HA	1:F:460:ARG:NH1	2.04	0.72
1:C:419:ARG:HA	1:C:587:SER:CB	2.19	0.72
1:G:28:TYR:O	1:G:44:LYS:HA	1.88	0.72
1:F:434:TRP:HZ3	1:F:568:ARG:HG3	1.53	0.72
1:A:286:ARG:HA	1:A:290:THR:HG22	1.72	0.72
1:A:337:LYS:HD3	1:A:348:GLU:HB3	1.72	0.72
1:C:654:LEU:HD23	1:D:654:LEU:HD21	1.66	0.71
1:A:646:ARG:O	1:A:650:ARG:HG2	1.90	0.71
1:B:254:LYS:C	1:B:255:PHE:CG	2.64	0.71
1:A:433:ILE:CG2	1:A:571:TYR:OH	2.38	0.71
1:E:419:ARG:O	1:E:419:ARG:HG2	1.89	0.71
1:F:588:ASN:CG	1:F:589:ASP:H	1.93	0.71
1:D:517:MET:O	1:D:517:MET:HG2	1.90	0.71
1:E:646:ARG:O	1:E:650:ARG:HG2	1.90	0.71
1:E:286:ARG:HA	1:E:290:THR:HG22	1.70	0.71
1:B:134:ARG:HB2	1:B:300:PHE:CE1	2.25	0.71
1:C:284:HIS:NE2	1:E:342:GLN:NE2	2.38	0.71
1:H:28:TYR:O	1:H:44:LYS:HA	1.89	0.71
1:E:254:LYS:O	1:E:255:PHE:CD2	2.43	0.71
1:C:486:PHE:CE1	1:C:647:GLN:HB3	2.25	0.71
1:C:643:VAL:O	1:C:644:VAL:HG23	1.90	0.71
1:C:171:LYS:O	1:C:171:LYS:HG3	1.89	0.71
1:C:387:ILE:HD11	1:C:449:GLN:HG3	1.70	0.71
1:D:337:LYS:HD3	1:D:348:GLU:HB3	1.72	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:475:GLU:O	1:B:478:GLN:N	2.22	0.71
1:A:230:GLN:C	1:A:232:HIS:N	2.43	0.71
1:H:434:TRP:CD1	1:H:434:TRP:C	2.64	0.71
1:E:409:SER:HB2	1:E:412:ILE:HD12	1.72	0.71
1:H:249:LEU:CD2	1:H:252:ALA:HA	2.17	0.71
1:H:254:LYS:C	1:H:255:PHE:CG	2.64	0.71
1:A:665:VAL:HG13	1:B:665:VAL:CG1	2.16	0.71
1:A:510:LEU:HD12	1:A:657:LEU:HD12	1.72	0.71
1:D:322:VAL:HG12	1:D:323:HIS:N	2.04	0.71
1:C:337:LYS:HD3	1:C:348:GLU:HB3	1.72	0.71
1:B:272:LYS:HB2	1:B:306:ILE:HG21	1.72	0.71
1:F:272:LYS:HB2	1:F:306:ILE:HG21	1.70	0.71
1:H:185:THR:HG23	1:H:187:GLN:CG	2.11	0.71
1:B:171:LYS:HG3	1:B:171:LYS:O	1.89	0.71
1:G:322:VAL:HG12	1:G:323:HIS:N	2.06	0.71
1:F:118:LYS:CG	1:F:265:LEU:HA	2.20	0.71
1:D:191:PRO:HG3	1:D:234:LYS:NZ	2.06	0.71
1:D:646:ARG:O	1:D:650:ARG:HG2	1.89	0.71
1:B:26:PHE:HE2	1:B:181:GLU:CD	1.92	0.71
1:D:327:VAL:HG11	1:D:367:LEU:CB	2.19	0.71
1:G:337:LYS:HD3	1:G:348:GLU:HB3	1.71	0.71
1:G:341:GLN:OE1	1:G:347:PRO:HB3	1.89	0.71
1:H:248:ASP:C	1:H:248:ASP:OD1	2.29	0.71
1:C:503:PHE:H	1:C:505:ILE:HD11	1.56	0.71
1:B:646:ARG:O	1:B:650:ARG:HG2	1.90	0.71
1:C:412:ILE:HG23	1:C:433:ILE:HD12	1.73	0.71
1:D:272:LYS:HB2	1:D:306:ILE:HG21	1.72	0.71
1:B:494:LEU:CD1	1:B:514:TRP:HE3	2.00	0.71
1:E:185:THR:HG23	1:E:187:GLN:CG	2.07	0.71
1:E:417:PRO:O	1:E:418:LYS:HG3	1.91	0.71
1:G:286:ARG:HA	1:G:290:THR:HG22	1.72	0.71
1:H:337:LYS:HD3	1:H:348:GLU:HB3	1.71	0.71
1:C:254:LYS:C	1:C:255:PHE:CG	2.62	0.71
1:B:115:CYS:HB2	1:B:435:GLN:HG3	1.72	0.71
1:G:438:ARG:NH1	1:G:568:ARG:HH21	1.89	0.71
1:H:316:ASN:O	1:H:388:PHE:O	2.08	0.71
1:E:517:MET:HG2	1:E:517:MET:O	1.89	0.71
1:F:533:LEU:CD2	1:F:629:VAL:CG1	2.68	0.71
1:D:547:LEU:HD13	1:D:615:THR:CG2	2.20	0.71
1:A:322:VAL:HG12	1:A:323:HIS:N	2.06	0.71
1:E:665:VAL:HG22	1:F:665:VAL:CG2	2.21	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:402:SER:HA	1:B:609:TYR:CG	2.26	0.71
1:D:353:LEU:HB3	1:D:361:LEU:HD12	1.71	0.71
1:B:643:VAL:O	1:B:644:VAL:HG23	1.91	0.71
1:A:185:THR:HG23	1:A:187:GLN:CG	2.12	0.71
1:G:272:LYS:HB2	1:G:306:ILE:HG21	1.72	0.71
1:H:134:ARG:CA	1:H:300:PHE:CZ	2.68	0.71
1:C:492:ILE:HG21	1:D:651:GLN:NE2	2.06	0.71
1:B:143:HIS:HD2	1:B:145:ASP:O	1.73	0.71
1:D:424:THR:OG1	1:D:425:HIS:ND1	2.17	0.71
1:G:353:LEU:HB3	1:G:361:LEU:HD12	1.71	0.71
1:B:433:ILE:HB	1:B:571:TYR:CZ	2.26	0.71
1:F:286:ARG:HA	1:F:290:THR:HG22	1.73	0.71
1:B:193:LEU:HD22	1:B:231:TRP:CD1	2.25	0.71
1:B:444:CYS:C	1:B:446:ARG:H	1.94	0.71
1:B:479:LEU:HD12	1:B:640:GLU:HB3	1.72	0.70
1:A:249:LEU:CD2	1:A:252:ALA:HA	2.19	0.70
1:B:412:ILE:HG23	1:B:433:ILE:HD12	1.73	0.70
1:A:655:TRP:CZ3	1:B:654:LEU:HD12	2.26	0.70
1:C:179:CYS:CB	1:C:181:GLU:CG	2.66	0.70
1:C:588:ASN:CG	1:C:589:ASP:H	1.92	0.70
1:D:419:ARG:HA	1:D:587:SER:OG	1.91	0.70
1:B:253:VAL:HB	1:B:255:PHE:HZ	1.55	0.70
1:G:409:SER:HB2	1:G:412:ILE:HD12	1.72	0.70
1:E:253:VAL:HB	1:E:255:PHE:HZ	1.53	0.70
1:F:646:ARG:O	1:F:650:ARG:HG2	1.91	0.70
1:F:337:LYS:HD3	1:F:348:GLU:HB3	1.73	0.70
1:A:419:ARG:HG2	1:A:419:ARG:O	1.91	0.70
1:E:422:THR:HB	1:E:585:GLY:HA3	1.72	0.70
1:H:253:VAL:HB	1:H:255:PHE:HZ	1.55	0.70
1:H:26:PHE:HZ	1:H:179:CYS:HB3	1.56	0.70
1:D:357:SER:HA	1:D:453:THR:HB	1.73	0.70
1:C:497:TYR:HE2	1:C:511:LEU:HD22	1.56	0.70
1:B:647:GLN:CD	1:B:647:GLN:N	2.44	0.70
1:E:503:PHE:H	1:E:505:ILE:HD11	1.55	0.70
1:A:409:SER:HB2	1:A:412:ILE:HD12	1.74	0.70
1:B:322:VAL:HG12	1:B:323:HIS:N	2.05	0.70
1:F:500:GLN:CB	1:F:505:ILE:HG12	2.21	0.70
1:H:263:ASN:HD21	1:H:265:LEU:CB	1.99	0.70
1:E:480:LYS:CE	1:E:527:GLU:HB2	2.21	0.70
1:G:130:SER:O	1:G:300:PHE:CE1	2.44	0.70
1:H:341:GLN:OE1	1:H:347:PRO:HB3	1.91	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:263:ASN:HD21	1:F:265:LEU:CB	1.99	0.70
1:A:26:PHE:CZ	1:A:179:CYS:HB3	2.27	0.70
1:D:286:ARG:HA	1:D:290:THR:CG2	2.22	0.70
1:B:114:CYS:O	1:B:115:CYS:HB2	1.91	0.70
1:B:286:ARG:NH1	1:B:286:ARG:HG2	2.04	0.70
1:H:412:ILE:HG23	1:H:433:ILE:CD1	2.21	0.70
1:D:187:GLN:CB	1:D:223:LEU:CD2	2.60	0.70
1:F:419:ARG:O	1:F:419:ARG:HG2	1.91	0.70
1:C:649:LYS:HA	1:C:652:GLN:HB2	1.73	0.70
1:D:316:ASN:O	1:D:388:PHE:O	2.09	0.70
1:G:18:LYS:HZ2	1:G:33:ILE:HD12	1.55	0.70
1:H:18:LYS:HZ2	1:H:33:ILE:HD12	1.57	0.70
1:A:660:ILE:CG2	1:A:661:ALA:H	2.05	0.70
1:C:322:VAL:HG12	1:C:323:HIS:N	2.05	0.70
1:C:353:LEU:HB3	1:C:361:LEU:HD12	1.72	0.70
1:A:513:ALA:HB1	1:A:650:ARG:HH12	1.56	0.70
1:D:434:TRP:HE3	1:D:568:ARG:HA	1.52	0.70
1:G:434:TRP:CZ3	1:G:568:ARG:HG3	2.25	0.70
1:A:441:LYS:HB2	1:A:560:LEU:CD2	2.21	0.70
1:E:337:LYS:HD3	1:E:348:GLU:HB3	1.72	0.70
1:B:286:ARG:HA	1:B:290:THR:CG2	2.22	0.70
1:E:114:CYS:O	1:E:115:CYS:HB2	1.92	0.70
1:E:260:PRO:HG3	1:E:274:GLU:HG2	1.74	0.70
1:E:322:VAL:HG12	1:E:323:HIS:N	2.06	0.70
1:C:654:LEU:HD21	1:D:654:LEU:HD23	1.71	0.70
1:C:263:ASN:HD21	1:C:265:LEU:CB	1.98	0.70
1:D:419:ARG:O	1:D:419:ARG:HG2	1.91	0.70
1:A:655:TRP:CZ3	1:B:654:LEU:CD1	2.75	0.70
1:G:571:TYR:CZ	1:G:590:MET:SD	2.85	0.70
1:E:263:ASN:HD21	1:E:265:LEU:CB	2.02	0.70
1:G:412:ILE:HG23	1:G:433:ILE:HD12	1.74	0.69
1:E:248:ASP:OD1	1:E:248:ASP:C	2.30	0.69
1:E:286:ARG:HA	1:E:290:THR:CG2	2.21	0.69
1:B:33:ILE:HD11	1:B:40:GLN:CD	2.12	0.69
1:D:472:MET:SD	1:D:633:MET:HB2	2.31	0.69
1:A:118:LYS:HG2	1:A:265:LEU:HA	1.73	0.69
1:F:254:LYS:C	1:F:255:PHE:CG	2.65	0.69
1:D:479:LEU:HD12	1:D:640:GLU:HB3	1.74	0.69
1:H:272:LYS:HB2	1:H:306:ILE:HG21	1.72	0.69
1:B:337:LYS:HD3	1:B:348:GLU:HB3	1.74	0.69
1:B:263:ASN:HD21	1:B:265:LEU:CB	2.01	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:419:ARG:HG2	1:G:419:ARG:O	1.90	0.69
1:G:434:TRP:CD1	1:G:434:TRP:C	2.65	0.69
1:A:412:ILE:HG23	1:A:433:ILE:HD12	1.74	0.69
1:F:120:GLY:H	1:F:122:ILE:H	1.41	0.69
1:E:493:ASP:HB3	1:E:514:TRP:CH2	2.28	0.69
1:E:33:ILE:HD11	1:E:40:GLN:CD	2.13	0.69
1:C:249:LEU:CD2	1:C:252:ALA:HA	2.18	0.69
1:D:422:THR:HG22	1:D:426:LEU:HD21	1.74	0.69
1:H:115:CYS:HB2	1:H:435:GLN:HG3	1.74	0.69
1:F:230:GLN:C	1:F:232:HIS:N	2.44	0.69
1:A:119:GLU:HB3	1:A:121:PRO:HD2	1.73	0.69
1:F:18:LYS:HZ2	1:F:33:ILE:HD12	1.57	0.69
1:A:341:GLN:OE1	1:A:347:PRO:HB3	1.91	0.69
1:D:230:GLN:C	1:D:232:HIS:N	2.43	0.69
1:E:26:PHE:CE2	1:E:181:GLU:OE1	2.43	0.69
1:B:16:GLU:HA	1:B:83:LEU:HD22	1.75	0.69
1:H:353:LEU:HB3	1:H:361:LEU:HD12	1.73	0.69
1:B:353:LEU:HB3	1:B:361:LEU:HD12	1.73	0.69
1:B:341:GLN:OE1	1:B:347:PRO:HB3	1.92	0.69
1:D:341:GLN:OE1	1:D:347:PRO:HB3	1.92	0.69
1:C:118:LYS:NZ	1:C:123:ARG:HH22	1.90	0.69
1:H:286:ARG:HA	1:H:290:THR:CG2	2.23	0.69
1:E:497:TYR:HE2	1:E:511:LEU:HD22	1.53	0.69
1:C:402:SER:HA	1:C:609:TYR:CG	2.27	0.69
1:E:62:ILE:HD12	1:E:94:LEU:HB2	1.74	0.69
1:H:33:ILE:HD11	1:H:40:GLN:CD	2.13	0.69
1:D:350:GLU:HG2	1:D:391:ASP:HB2	1.75	0.69
1:C:433:ILE:CG2	1:C:571:TYR:OH	2.40	0.69
1:B:417:PRO:O	1:B:418:LYS:HG3	1.92	0.69
1:F:409:SER:HB2	1:F:412:ILE:HD12	1.73	0.69
1:G:254:LYS:C	1:G:255:PHE:CG	2.66	0.69
1:A:62:ILE:HD12	1:A:94:LEU:HB2	1.74	0.69
1:F:660:ILE:CG2	1:F:661:ALA:H	2.03	0.69
1:B:521:VAL:CG1	1:B:643:VAL:HG12	2.22	0.69
1:D:120:GLY:H	1:D:122:ILE:H	1.41	0.69
1:F:496:LYS:O	1:F:499:GLU:HB2	1.93	0.69
1:B:434:TRP:C	1:B:434:TRP:CD1	2.65	0.69
1:H:419:ARG:N	1:H:420:PRO:HD3	2.03	0.69
1:F:179:CYS:CB	1:F:181:GLU:CG	2.67	0.69
1:C:33:ILE:HD11	1:C:40:GLN:CD	2.13	0.69
1:H:62:ILE:HD12	1:H:94:LEU:HB2	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:660:ILE:C	1:A:662:CYS:H	1.96	0.69
1:E:327:VAL:HG11	1:E:367:LEU:CB	2.21	0.69
1:C:660:ILE:C	1:C:662:CYS:H	1.96	0.69
1:F:341:GLN:OE1	1:F:347:PRO:HB3	1.93	0.69
1:C:248:ASP:OD1	1:C:248:ASP:C	2.30	0.69
1:B:120:GLY:H	1:B:122:ILE:H	1.40	0.69
1:B:438:ARG:HG2	1:B:564:GLU:CG	2.23	0.69
1:F:412:ILE:HG23	1:F:433:ILE:CD1	2.23	0.69
1:H:260:PRO:HB2	1:H:273:LEU:HD13	1.75	0.69
1:A:134:ARG:HB2	1:A:300:PHE:CE1	2.27	0.69
1:D:16:GLU:HA	1:D:83:LEU:HD22	1.75	0.69
1:C:327:VAL:HG11	1:C:367:LEU:CB	2.21	0.69
1:C:40:GLN:HB3	1:C:98:TYR:HD2	1.58	0.69
1:C:62:ILE:HD12	1:C:94:LEU:HB2	1.75	0.69
1:H:40:GLN:HB3	1:H:98:TYR:HD2	1.58	0.69
1:A:254:LYS:C	1:A:255:PHE:CG	2.65	0.69
1:E:500:GLN:HB3	1:E:505:ILE:HG12	1.73	0.69
1:B:219:PHE:O	1:B:220:ARG:HG3	1.85	0.69
1:H:143:HIS:CE1	1:H:167:LEU:HB2	2.28	0.69
1:C:485:PHE:CD2	1:D:485:PHE:CD2	2.80	0.69
1:D:647:GLN:CD	1:D:647:GLN:N	2.46	0.69
1:E:478:GLN:HB2	1:F:478:GLN:HA	1.75	0.69
1:F:497:TYR:HE2	1:F:511:LEU:HD22	1.52	0.69
1:A:33:ILE:HD11	1:A:40:GLN:CD	2.13	0.69
1:E:40:GLN:HB3	1:E:98:TYR:HD2	1.58	0.69
1:G:33:ILE:HD11	1:G:40:GLN:CD	2.13	0.69
1:B:660:ILE:CG2	1:B:661:ALA:H	2.05	0.69
1:C:496:LYS:O	1:C:499:GLU:HB2	1.93	0.68
1:C:186:LEU:O	1:C:188:TYR:N	2.24	0.68
1:D:254:LYS:C	1:D:255:PHE:CG	2.66	0.68
1:B:496:LYS:O	1:B:499:GLU:HB2	1.94	0.68
1:G:115:CYS:O	1:G:263:ASN:HA	1.93	0.68
1:E:434:TRP:C	1:E:434:TRP:CD1	2.63	0.68
1:B:62:ILE:HD12	1:B:94:LEU:HB2	1.74	0.68
1:D:505:ILE:O	1:D:506:THR:O	2.10	0.68
1:D:422:THR:HB	1:D:585:GLY:HA2	1.75	0.68
1:A:272:LYS:HB2	1:A:306:ILE:HG21	1.73	0.68
1:E:120:GLY:H	1:E:122:ILE:H	1.39	0.68
1:H:319:SER:C	1:H:321:ARG:H	1.96	0.68
1:D:319:SER:OG	1:D:403:LEU:CB	2.41	0.68
1:D:434:TRP:HZ3	1:D:568:ARG:CB	2.05	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:417:PRO:O	1:G:418:LYS:HG3	1.93	0.68
1:G:434:TRP:HZ3	1:G:568:ARG:CG	2.06	0.68
1:D:26:PHE:HE2	1:D:181:GLU:CD	1.97	0.68
1:C:492:ILE:HD13	1:D:651:GLN:NE2	2.04	0.68
1:C:473:THR:HG21	1:C:533:LEU:HD21	1.76	0.68
1:D:62:ILE:HD12	1:D:94:LEU:HB2	1.75	0.68
1:E:665:VAL:CG2	1:F:665:VAL:CG2	2.71	0.68
1:H:433:ILE:CG2	1:H:571:TYR:OH	2.42	0.68
1:A:118:LYS:HG3	1:A:118:LYS:O	1.93	0.68
1:A:120:GLY:H	1:A:122:ILE:H	1.41	0.68
1:E:265:LEU:CD2	1:E:269:LEU:HB3	2.24	0.68
1:C:26:PHE:CE2	1:C:181:GLU:OE1	2.46	0.68
1:H:265:LEU:CD2	1:H:269:LEU:HB3	2.23	0.68
1:F:643:VAL:O	1:F:644:VAL:HG23	1.94	0.68
1:B:40:GLN:HB3	1:B:98:TYR:HD2	1.58	0.68
1:G:134:ARG:HB2	1:G:300:PHE:CE1	2.28	0.68
1:E:353:LEU:HB3	1:E:361:LEU:HD12	1.74	0.68
1:A:517:MET:SD	1:A:650:ARG:CG	2.75	0.68
1:C:260:PRO:HB2	1:C:273:LEU:HD13	1.76	0.68
1:D:412:ILE:HG23	1:D:433:ILE:CD1	2.24	0.68
1:G:263:ASN:HD21	1:G:265:LEU:CB	1.99	0.68
1:D:475:GLU:HG2	1:D:636:MET:HE3	1.75	0.68
1:A:286:ARG:HA	1:A:290:THR:CG2	2.24	0.68
1:E:16:GLU:HA	1:E:83:LEU:HD22	1.75	0.68
1:G:40:GLN:HB3	1:G:98:TYR:HD2	1.58	0.68
1:C:114:CYS:O	1:C:115:CYS:HB2	1.93	0.68
1:B:438:ARG:HG2	1:B:564:GLU:CD	2.13	0.68
1:E:191:PRO:HG3	1:E:234:LYS:NZ	2.08	0.68
1:C:549:ARG:O	1:C:550:ASN:HB2	1.93	0.68
1:H:120:GLY:H	1:H:122:ILE:H	1.42	0.68
1:E:486:PHE:HZ	1:E:517:MET:CE	2.05	0.68
1:F:316:ASN:O	1:F:388:PHE:O	2.12	0.68
1:A:16:GLU:HA	1:A:83:LEU:HD22	1.75	0.68
1:F:16:GLU:HA	1:F:83:LEU:HD22	1.75	0.68
1:G:536:LYS:O	1:G:625:LEU:HD13	1.94	0.68
1:D:409:SER:HB2	1:D:412:ILE:HD12	1.76	0.68
1:H:417:PRO:O	1:H:418:LYS:HG3	1.92	0.68
1:C:286:ARG:HG2	1:C:286:ARG:NH1	2.08	0.68
1:C:16:GLU:HA	1:C:83:LEU:HD22	1.76	0.68
1:B:660:ILE:C	1:B:662:CYS:H	1.95	0.68
1:G:143:HIS:CE1	1:G:167:LEU:HB2	2.28	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:494:LEU:HD12	1:D:514:TRP:CE3	2.22	0.68
1:A:224:PRO:HG2	1:A:255:PHE:CE2	2.29	0.68
1:D:419:ARG:N	1:D:420:PRO:HD3	2.04	0.68
1:B:412:ILE:HG23	1:B:433:ILE:CD1	2.24	0.68
1:B:438:ARG:HG2	1:B:564:GLU:HG3	1.75	0.68
1:B:505:ILE:O	1:B:506:THR:O	2.11	0.68
1:F:417:PRO:O	1:F:418:LYS:HG3	1.93	0.68
1:A:549:ARG:O	1:A:550:ASN:HB2	1.94	0.68
1:F:62:ILE:HD12	1:F:94:LEU:HB2	1.74	0.68
1:H:394:LYS:HE2	1:H:401:ILE:HA	1.75	0.68
1:C:409:SER:HB2	1:C:412:ILE:HD12	1.74	0.68
1:C:417:PRO:O	1:C:418:LYS:HG3	1.93	0.68
1:D:434:TRP:C	1:D:434:TRP:CD1	2.65	0.68
1:B:434:TRP:HZ3	1:B:568:ARG:HG3	1.59	0.68
1:C:647:GLN:CD	1:C:647:GLN:N	2.43	0.68
1:F:40:GLN:HB3	1:F:98:TYR:HD2	1.59	0.68
1:A:319:SER:C	1:A:321:ARG:H	1.96	0.68
1:F:350:GLU:HG2	1:F:391:ASP:HB2	1.76	0.68
1:H:115:CYS:CB	1:H:435:GLN:HG3	2.24	0.68
1:G:118:LYS:O	1:G:118:LYS:HG3	1.93	0.68
1:F:434:TRP:CD1	1:F:434:TRP:C	2.67	0.68
1:F:434:TRP:HB3	1:F:571:TYR:HD1	1.51	0.68
1:G:219:PHE:O	1:G:220:ARG:HG3	1.88	0.68
1:D:479:LEU:HB3	1:D:640:GLU:OE2	1.94	0.68
1:D:643:VAL:O	1:D:644:VAL:HG23	1.94	0.68
1:H:179:CYS:CB	1:H:181:GLU:CG	2.66	0.68
1:D:286:ARG:HG2	1:D:286:ARG:NH1	2.08	0.68
1:D:33:ILE:HD11	1:D:40:GLN:CD	2.14	0.68
1:G:16:GLU:HA	1:G:83:LEU:HD22	1.76	0.68
1:H:536:LYS:HB3	1:H:625:LEU:HD22	1.74	0.68
1:H:16:GLU:HA	1:H:83:LEU:HD22	1.74	0.68
1:D:111:PHE:HZ	1:D:572:ARG:HG3	1.57	0.67
1:G:475:GLU:CG	1:G:636:MET:CE	2.57	0.67
1:A:434:TRP:CD1	1:A:434:TRP:C	2.67	0.67
1:F:254:LYS:O	1:F:255:PHE:CD2	2.47	0.67
1:E:643:VAL:O	1:E:644:VAL:HG23	1.93	0.67
1:E:286:ARG:NH1	1:E:286:ARG:HG2	2.09	0.67
1:B:387:ILE:HD11	1:B:449:GLN:HG3	1.76	0.67
1:C:394:LYS:CG	1:C:613:SER:HB2	2.24	0.67
1:D:319:SER:C	1:D:321:ARG:H	1.97	0.67
1:B:254:LYS:O	1:B:255:PHE:CD2	2.46	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:571:TYR:CE2	1:H:590:MET:HG3	2.29	0.67
1:D:219:PHE:O	1:D:220:ARG:HG3	1.82	0.67
1:G:118:LYS:HG2	1:G:264:HIS:O	1.95	0.67
1:A:118:LYS:CG	1:A:265:LEU:HA	2.24	0.67
1:E:647:GLN:CD	1:E:647:GLN:N	2.46	0.67
1:F:319:SER:C	1:F:321:ARG:H	1.98	0.67
1:A:134:ARG:CA	1:A:300:PHE:HZ	2.06	0.67
1:F:33:ILE:HD11	1:F:40:GLN:CD	2.13	0.67
1:A:318:VAL:O	1:A:320:GLY:N	2.27	0.67
1:C:654:LEU:HD22	1:D:654:LEU:CD2	2.25	0.67
1:D:496:LYS:O	1:D:499:GLU:HB2	1.93	0.67
1:B:571:TYR:CE2	1:B:590:MET:HG3	2.29	0.67
1:H:286:ARG:NH1	1:H:286:ARG:HG2	2.09	0.67
1:G:318:VAL:O	1:G:320:GLY:N	2.28	0.67
1:A:643:VAL:O	1:A:644:VAL:HG23	1.94	0.67
1:B:479:LEU:O	1:B:640:GLU:OE2	2.13	0.67
1:A:248:ASP:OD1	1:A:248:ASP:C	2.33	0.67
1:D:417:PRO:O	1:D:418:LYS:HG3	1.93	0.67
1:B:248:ASP:OD1	1:B:248:ASP:C	2.32	0.67
1:B:244:VAL:HG12	1:B:278:GLN:OE1	1.94	0.67
1:F:248:ASP:C	1:F:248:ASP:OD1	2.33	0.67
1:B:319:SER:C	1:B:321:ARG:H	1.98	0.67
1:C:253:VAL:HB	1:C:255:PHE:HZ	1.58	0.67
1:C:434:TRP:CD1	1:C:434:TRP:C	2.66	0.67
1:F:505:ILE:O	1:F:506:THR:O	2.13	0.67
1:C:283:TRP:O	1:C:284:HIS:HB2	1.94	0.67
1:C:412:ILE:HG23	1:C:433:ILE:CD1	2.24	0.67
1:D:418:LYS:O	1:D:419:ARG:HB2	1.95	0.67
1:D:438:ARG:CG	1:D:564:GLU:HG3	2.25	0.67
1:F:503:PHE:H	1:F:505:ILE:HD11	1.59	0.67
1:B:409:SER:HB2	1:B:412:ILE:HD12	1.76	0.67
1:G:419:ARG:N	1:G:420:PRO:HD3	2.03	0.67
1:G:179:CYS:CB	1:G:181:GLU:CG	2.67	0.67
1:G:62:ILE:HD12	1:G:94:LEU:HB2	1.76	0.67
1:G:71:PRO:O	1:G:72:ASN:HB2	1.94	0.67
1:A:505:ILE:O	1:A:506:THR:O	2.12	0.67
1:E:350:GLU:HG2	1:E:391:ASP:HB2	1.76	0.67
1:G:260:PRO:HB2	1:G:273:LEU:HD13	1.77	0.67
1:A:105:ARG:O	1:A:108:LEU:N	2.28	0.67
1:F:143:HIS:CE1	1:F:167:LEU:HB2	2.29	0.67
1:H:322:VAL:HG12	1:H:323:HIS:N	2.10	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:549:ARG:O	1:H:550:ASN:HB2	1.95	0.67
1:H:409:SER:HB2	1:H:412:ILE:HD12	1.74	0.67
1:H:419:ARG:HA	1:H:587:SER:OG	1.94	0.67
1:G:262:PRO:HB3	1:G:409:SER:OG	1.94	0.67
1:E:412:ILE:HG23	1:E:433:ILE:HD12	1.76	0.67
1:E:422:THR:HG22	1:E:426:LEU:HD21	1.77	0.67
1:G:286:ARG:HA	1:G:290:THR:CG2	2.24	0.67
1:G:473:THR:HG22	1:G:633:MET:HG3	1.74	0.67
1:G:319:SER:C	1:G:321:ARG:H	1.97	0.67
1:C:254:LYS:O	1:C:255:PHE:CD2	2.47	0.67
1:G:265:LEU:CD2	1:G:269:LEU:HB3	2.25	0.67
1:G:245:VAL:O	1:G:257:SER:O	2.13	0.67
1:D:40:GLN:HB3	1:D:98:TYR:HD2	1.59	0.67
1:B:350:GLU:HG2	1:B:391:ASP:HB2	1.75	0.67
1:C:118:LYS:HG2	1:C:265:LEU:HA	1.77	0.67
1:D:263:ASN:HD21	1:D:265:LEU:CB	1.99	0.67
1:B:260:PRO:HB2	1:B:273:LEU:HD13	1.78	0.67
1:G:105:ARG:O	1:G:108:LEU:N	2.28	0.67
1:G:114:CYS:O	1:G:115:CYS:HB2	1.95	0.67
1:E:263:ASN:ND2	1:E:265:LEU:H	1.93	0.67
1:F:286:ARG:HG2	1:F:286:ARG:NH1	2.09	0.67
1:D:143:HIS:CE1	1:D:167:LEU:HB2	2.30	0.67
1:G:549:ARG:O	1:G:550:ASN:HB2	1.95	0.67
1:D:260:PRO:HB2	1:D:273:LEU:HD13	1.75	0.66
1:E:570:LEU:HB3	1:E:590:MET:HE3	1.76	0.66
1:G:248:ASP:C	1:G:248:ASP:OD1	2.33	0.66
1:A:462:ASN:HD21	1:A:540:LEU:HB2	1.60	0.66
1:C:319:SER:C	1:C:321:ARG:H	1.97	0.66
1:D:120:GLY:O	1:D:123:ARG:N	2.29	0.66
1:D:254:LYS:O	1:D:255:PHE:CD2	2.48	0.66
1:F:260:PRO:HB2	1:F:273:LEU:HD13	1.78	0.66
1:G:191:PRO:HG3	1:G:234:LYS:NZ	2.10	0.66
1:E:26:PHE:HE2	1:E:181:GLU:CD	1.97	0.66
1:A:143:HIS:CE1	1:A:167:LEU:HB2	2.30	0.66
1:C:658:LEU:HD12	1:D:658:LEU:HA	1.76	0.66
1:E:549:ARG:O	1:E:550:ASN:HB2	1.93	0.66
1:C:496:LYS:HB2	1:D:655:TRP:CD1	2.25	0.66
1:A:254:LYS:O	1:A:255:PHE:CD2	2.49	0.66
1:D:224:PRO:HG2	1:D:255:PHE:CE2	2.30	0.66
1:A:496:LYS:O	1:A:499:GLU:HB2	1.96	0.66
1:E:462:ASN:ND2	1:E:540:LEU:HB2	2.09	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:651:GLN:HE22	1:F:492:ILE:CG2	2.04	0.66
1:G:609:TYR:O	1:G:612:LEU:HB3	1.95	0.66
1:G:424:THR:OG1	1:G:425:HIS:ND1	2.20	0.66
1:B:402:SER:O	1:B:403:LEU:HB2	1.95	0.66
1:C:505:ILE:O	1:C:506:THR:O	2.12	0.66
1:C:263:ASN:ND2	1:C:265:LEU:H	1.94	0.66
1:F:224:PRO:HG2	1:F:255:PHE:CE2	2.31	0.66
1:F:433:ILE:HB	1:F:571:TYR:CZ	2.29	0.66
1:G:254:LYS:O	1:G:255:PHE:CD2	2.48	0.66
1:D:179:CYS:CB	1:D:181:GLU:CG	2.67	0.66
1:H:118:LYS:NZ	1:H:123:ARG:HH22	1.94	0.66
1:B:316:ASN:O	1:B:388:PHE:O	2.13	0.66
1:E:492:ILE:CG2	1:F:651:GLN:HE22	2.07	0.66
1:B:143:HIS:CE1	1:B:167:LEU:HB2	2.30	0.66
1:D:660:ILE:C	1:D:662:CYS:H	1.99	0.66
1:C:514:TRP:O	1:C:518:GLU:N	2.28	0.66
1:C:115:CYS:HB2	1:C:435:GLN:HG3	1.77	0.66
1:B:118:LYS:NZ	1:B:123:ARG:HH22	1.93	0.66
1:A:114:CYS:O	1:A:115:CYS:HB2	1.95	0.66
1:D:549:ARG:O	1:D:550:ASN:HB2	1.94	0.66
1:C:208:PHE:HD2	1:C:211:LEU:HD23	1.61	0.66
1:C:434:TRP:HZ3	1:C:568:ARG:HG3	1.60	0.66
1:C:433:ILE:HB	1:C:571:TYR:OH	1.96	0.66
1:F:500:GLN:HB3	1:F:505:ILE:CG1	2.26	0.66
1:E:118:LYS:CG	1:E:265:LEU:HA	2.26	0.66
1:E:418:LYS:O	1:E:419:ARG:HB2	1.96	0.66
1:F:286:ARG:HA	1:F:290:THR:CG2	2.24	0.66
1:E:319:SER:C	1:E:321:ARG:H	1.98	0.66
1:E:660:ILE:C	1:E:662:CYS:H	1.99	0.66
1:B:626:SER:HB2	1:B:630:LYS:HE3	1.77	0.66
1:A:647:GLN:N	1:A:647:GLN:CD	2.47	0.66
1:B:475:GLU:O	1:B:476:CYS:C	2.32	0.66
1:D:422:THR:HB	1:D:585:GLY:HA3	1.75	0.66
1:E:118:LYS:NZ	1:E:123:ARG:HH22	1.94	0.66
1:G:253:VAL:HB	1:G:255:PHE:HZ	1.59	0.66
1:D:517:MET:HG3	1:D:646:ARG:HH11	1.60	0.66
1:B:179:CYS:CB	1:B:181:GLU:CG	2.69	0.66
1:G:286:ARG:NH1	1:G:286:ARG:HG2	2.08	0.66
1:F:357:SER:CA	1:F:453:THR:HB	2.25	0.66
1:C:402:SER:O	1:C:403:LEU:HB2	1.96	0.66
1:G:134:ARG:CA	1:G:300:PHE:HZ	2.09	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:253:VAL:HB	1:A:255:PHE:HZ	1.60	0.66
1:C:418:LYS:O	1:C:419:ARG:HB2	1.94	0.66
1:H:438:ARG:HG2	1:H:564:GLU:CD	2.16	0.66
1:H:438:ARG:NH1	1:H:568:ARG:HH21	1.93	0.66
1:F:494:LEU:HD12	1:F:514:TRP:HE3	1.59	0.66
1:C:193:LEU:O	1:C:196:GLN:OE1	2.13	0.66
1:G:350:GLU:HG2	1:G:391:ASP:HB2	1.77	0.66
1:B:475:GLU:C	1:B:477:GLU:N	2.48	0.66
1:E:179:CYS:CB	1:E:181:GLU:CG	2.68	0.66
1:C:626:SER:HB2	1:C:630:LYS:HE3	1.78	0.66
1:C:659:LYS:HG2	1:D:500:GLN:HE22	1.60	0.66
1:H:224:PRO:HG3	1:H:428:ARG:HH22	1.61	0.66
1:A:40:GLN:HB3	1:A:98:TYR:HD2	1.60	0.66
1:E:49:GLU:HA	1:E:55:ARG:HD3	1.78	0.66
1:F:549:ARG:O	1:F:550:ASN:HB2	1.94	0.66
1:B:245:VAL:O	1:B:257:SER:O	2.14	0.65
1:F:430:TRP:HB3	1:F:571:TYR:HD2	1.61	0.65
1:F:647:GLN:N	1:F:647:GLN:CD	2.47	0.65
1:G:473:THR:CG2	1:G:533:LEU:HD22	2.22	0.65
1:F:660:ILE:C	1:F:662:CYS:H	1.99	0.65
1:B:394:LYS:CD	1:B:401:ILE:HA	2.26	0.65
1:D:550:ASN:OD1	1:D:611:GLN:OE1	2.14	0.65
1:E:665:VAL:HG13	1:F:665:VAL:HG13	1.78	0.65
1:G:49:GLU:HA	1:G:55:ARG:HD3	1.78	0.65
1:D:105:ARG:O	1:D:108:LEU:N	2.29	0.65
1:E:230:GLN:C	1:E:232:HIS:N	2.44	0.65
1:A:654:LEU:CD2	1:B:654:LEU:HD22	2.19	0.65
1:A:260:PRO:HG3	1:A:274:GLU:HG2	1.79	0.65
1:A:418:LYS:O	1:A:419:ARG:HB2	1.95	0.65
1:A:422:THR:HG22	1:A:426:LEU:HD21	1.78	0.65
1:E:153:LEU:CD2	1:E:162:HIS:HD1	2.08	0.65
1:F:418:LYS:O	1:F:419:ARG:HB2	1.95	0.65
1:E:283:TRP:O	1:E:284:HIS:HB2	1.94	0.65
1:B:540:LEU:CD2	1:B:621:LYS:HZ2	2.09	0.65
1:B:71:PRO:O	1:B:72:ASN:HB2	1.96	0.65
1:C:71:PRO:O	1:C:72:ASN:HB2	1.95	0.65
1:H:49:GLU:HA	1:H:55:ARG:HD3	1.78	0.65
1:B:479:LEU:CB	1:B:640:GLU:OE2	2.36	0.65
1:A:654:LEU:HD23	1:B:654:LEU:HD21	1.75	0.65
1:G:120:GLY:H	1:G:122:ILE:H	1.44	0.65
1:A:503:PHE:CD1	1:B:666:ARG:HB2	2.31	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:244:VAL:HG12	1:C:278:GLN:OE1	1.97	0.65
1:D:265:LEU:CD2	1:D:269:LEU:HB3	2.26	0.65
1:B:286:ARG:HH11	1:B:286:ARG:HG2	1.60	0.65
1:A:265:LEU:CD2	1:A:269:LEU:HB3	2.27	0.65
1:F:116:GLY:HA2	1:F:217:THR:O	1.95	0.65
1:F:419:ARG:N	1:F:420:PRO:HD3	2.03	0.65
1:F:422:THR:HB	1:F:585:GLY:HA2	1.77	0.65
1:C:245:VAL:O	1:C:257:SER:O	2.14	0.65
1:H:107:TYR:HE1	1:H:153:LEU:HB2	1.61	0.65
1:H:260:PRO:HG3	1:H:274:GLU:HG2	1.77	0.65
1:A:16:GLU:HG2	1:A:83:LEU:HD13	1.79	0.65
1:E:341:GLN:OE1	1:E:347:PRO:HB3	1.96	0.65
1:C:571:TYR:CZ	1:C:590:MET:SD	2.90	0.65
1:D:644:VAL:CA	1:D:647:GLN:HE21	2.08	0.65
1:G:533:LEU:CD2	1:G:629:VAL:HG13	2.25	0.65
1:G:387:ILE:HD12	1:G:450:GLY:HA2	1.79	0.65
1:F:49:GLU:HA	1:F:55:ARG:HD3	1.78	0.65
1:C:503:PHE:O	1:C:505:ILE:HG13	1.97	0.65
1:C:105:ARG:O	1:C:108:LEU:N	2.30	0.65
1:E:505:ILE:O	1:E:506:THR:O	2.14	0.65
1:A:260:PRO:HB2	1:A:273:LEU:HD13	1.79	0.65
1:E:412:ILE:HG23	1:E:433:ILE:CD1	2.26	0.65
1:F:244:VAL:HG12	1:F:278:GLN:OE1	1.96	0.65
1:C:26:PHE:HE2	1:C:181:GLU:CD	1.98	0.65
1:E:486:PHE:CE1	1:E:647:GLN:HB3	2.31	0.65
1:F:318:VAL:O	1:F:320:GLY:N	2.30	0.65
1:F:319:SER:OG	1:F:403:LEU:HB2	1.97	0.65
1:G:443:ASP:O	1:G:446:ARG:HB2	1.96	0.65
1:H:350:GLU:HG2	1:H:391:ASP:HB2	1.77	0.65
1:C:192:GLU:HA	1:C:192:GLU:OE1	1.96	0.65
1:B:476:CYS:CA	1:B:636:MET:SD	2.84	0.65
1:D:118:LYS:O	1:D:118:LYS:HG3	1.96	0.65
1:E:143:HIS:CE1	1:E:167:LEU:HB2	2.30	0.65
1:G:571:TYR:CE2	1:G:590:MET:HG3	2.31	0.65
1:F:114:CYS:O	1:F:115:CYS:HB2	1.95	0.65
1:A:350:GLU:HG2	1:A:391:ASP:HB2	1.78	0.65
1:D:253:VAL:HB	1:D:255:PHE:HZ	1.58	0.65
1:G:118:LYS:NZ	1:G:123:ARG:HH22	1.94	0.65
1:A:434:TRP:HZ3	1:A:568:ARG:CG	2.09	0.65
1:F:191:PRO:HG3	1:F:234:LYS:NZ	2.11	0.65
1:C:193:LEU:HD22	1:C:231:TRP:CD1	2.32	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:49:GLU:HA	1:A:55:ARG:HD3	1.79	0.65
1:H:71:PRO:O	1:H:72:ASN:HB2	1.95	0.65
1:C:434:TRP:HZ3	1:C:568:ARG:HA	1.60	0.65
1:D:114:CYS:O	1:D:115:CYS:HB2	1.96	0.65
1:B:224:PRO:HG2	1:B:255:PHE:CE2	2.32	0.65
1:B:422:THR:HB	1:B:585:GLY:HA3	1.78	0.65
1:H:418:LYS:O	1:H:419:ARG:HB2	1.95	0.65
1:B:514:TRP:O	1:B:518:GLU:N	2.29	0.65
1:G:224:PRO:HG2	1:G:255:PHE:CE2	2.31	0.65
1:B:549:ARG:O	1:B:550:ASN:HB2	1.96	0.65
1:E:486:PHE:HZ	1:E:517:MET:HE2	1.61	0.65
1:A:286:ARG:HH11	1:A:286:ARG:HG2	1.60	0.65
1:D:441:LYS:HB2	1:D:560:LEU:HD21	1.78	0.65
1:A:357:SER:HA	1:A:453:THR:HB	1.78	0.65
1:C:318:VAL:O	1:C:320:GLY:N	2.29	0.65
1:A:610:ASP:O	1:A:613:SER:HB3	1.96	0.65
1:H:283:TRP:O	1:H:284:HIS:HB2	1.95	0.65
1:A:478:GLN:HB2	1:B:478:GLN:HB2	1.77	0.65
1:B:475:GLU:HG2	1:B:476:CYS:N	2.12	0.65
1:D:119:GLU:CB	1:D:121:PRO:CD	2.75	0.65
1:D:438:ARG:HG2	1:D:564:GLU:CD	2.17	0.65
1:E:496:LYS:O	1:E:499:GLU:HB2	1.97	0.65
1:E:260:PRO:HB2	1:E:273:LEU:HD13	1.79	0.65
1:E:434:TRP:HB3	1:E:571:TYR:HD1	1.60	0.65
1:F:422:THR:HG22	1:F:426:LEU:HD21	1.78	0.65
1:H:193:LEU:O	1:H:196:GLN:OE1	2.14	0.65
1:E:16:GLU:HG2	1:E:83:LEU:HD13	1.79	0.65
1:D:610:ASP:O	1:D:613:SER:HB3	1.97	0.65
1:D:248:ASP:C	1:D:248:ASP:OD1	2.34	0.65
1:D:497:TYR:HE2	1:D:511:LEU:HD22	1.59	0.64
1:A:193:LEU:HD22	1:A:231:TRP:CD1	2.32	0.64
1:A:417:PRO:O	1:A:418:LYS:HG3	1.96	0.64
1:A:438:ARG:HG2	1:A:564:GLU:CD	2.17	0.64
1:E:244:VAL:HG12	1:E:278:GLN:OE1	1.97	0.64
1:F:222:PHE:CG	1:F:255:PHE:HB3	2.32	0.64
1:D:476:CYS:HA	1:D:636:MET:SD	2.38	0.64
1:F:480:LYS:HZ1	1:F:527:GLU:HB2	1.62	0.64
1:A:533:LEU:CD2	1:A:629:VAL:HG11	2.21	0.64
1:D:387:ILE:HG21	1:D:450:GLY:CA	2.28	0.64
1:H:402:SER:O	1:H:403:LEU:HB2	1.96	0.64
1:C:384:GLY:O	1:C:385:ASP:HB2	1.96	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:49:GLU:HA	1:C:55:ARG:HD3	1.78	0.64
1:C:118:LYS:CG	1:C:265:LEU:HA	2.28	0.64
1:D:110:GLN:O	1:D:111:PHE:CB	2.37	0.64
1:E:654:LEU:HD12	1:F:655:TRP:CZ3	2.31	0.64
1:B:260:PRO:HG3	1:B:274:GLU:HG2	1.78	0.64
1:G:118:LYS:HG2	1:G:265:LEU:HA	1.77	0.64
1:G:260:PRO:HG3	1:G:274:GLU:HG2	1.78	0.64
1:A:412:ILE:HG23	1:A:433:ILE:CD1	2.27	0.64
1:F:437:ILE:HG13	1:F:594:LEU:CD1	2.27	0.64
1:H:318:VAL:O	1:H:320:GLY:N	2.30	0.64
1:C:16:GLU:HG2	1:C:83:LEU:HD13	1.79	0.64
1:D:318:VAL:O	1:D:320:GLY:N	2.30	0.64
1:C:581:GLN:O	1:C:584:PRO:HD2	1.97	0.64
1:B:283:TRP:O	1:B:284:HIS:HB2	1.97	0.64
1:A:71:PRO:O	1:A:72:ASN:HB2	1.96	0.64
1:B:118:LYS:HG3	1:B:118:LYS:O	1.96	0.64
1:E:120:GLY:O	1:E:123:ARG:N	2.31	0.64
1:F:118:LYS:NZ	1:F:123:ARG:HH22	1.95	0.64
1:F:479:LEU:HD11	1:F:641:LYS:HG3	1.79	0.64
1:G:581:GLN:O	1:G:584:PRO:HD2	1.98	0.64
1:G:107:TYR:HE1	1:G:153:LEU:HB2	1.62	0.64
1:E:118:LYS:HG2	1:E:265:LEU:HA	1.77	0.64
1:F:105:ARG:O	1:F:108:LEU:N	2.31	0.64
1:A:514:TRP:O	1:A:518:GLU:N	2.30	0.64
1:D:444:CYS:C	1:D:446:ARG:H	2.01	0.64
1:D:105:ARG:O	1:D:107:TYR:N	2.31	0.64
1:D:244:VAL:HG12	1:D:278:GLN:OE1	1.97	0.64
1:H:437:ILE:HG22	1:H:564:GLU:HB2	1.78	0.64
1:H:434:TRP:HZ3	1:H:568:ARG:CA	2.10	0.64
1:G:244:VAL:HG12	1:G:278:GLN:OE1	1.97	0.64
1:A:115:CYS:O	1:A:263:ASN:HA	1.98	0.64
1:B:246:TYR:CD1	1:B:258:VAL:CB	2.70	0.64
1:F:253:VAL:HB	1:F:255:PHE:HZ	1.60	0.64
1:C:143:HIS:CE1	1:C:167:LEU:HB2	2.31	0.64
1:F:644:VAL:CA	1:F:647:GLN:HE21	2.10	0.64
1:C:224:PRO:HG2	1:C:255:PHE:CE2	2.33	0.64
1:G:418:LYS:O	1:G:419:ARG:HB2	1.95	0.64
1:H:105:ARG:O	1:H:108:LEU:N	2.31	0.64
1:C:529:GLU:HG3	1:C:633:MET:CE	2.27	0.64
1:F:402:SER:O	1:F:403:LEU:HB2	1.96	0.64
1:D:387:ILE:HD11	1:D:449:GLN:CG	2.28	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:387:ILE:HD12	1:D:450:GLY:N	2.12	0.64
1:G:16:GLU:HG2	1:G:83:LEU:HD13	1.79	0.64
1:H:171:LYS:HA	1:H:177:GLU:HA	1.80	0.64
1:A:70:HIS:CD2	1:A:71:PRO:O	2.51	0.64
1:D:49:GLU:HA	1:D:55:ARG:HD3	1.78	0.64
1:C:341:GLN:OE1	1:C:347:PRO:HB3	1.97	0.64
1:B:418:LYS:O	1:B:419:ARG:HB2	1.95	0.64
1:H:114:CYS:O	1:H:115:CYS:HB2	1.97	0.64
1:H:422:THR:HG22	1:H:426:LEU:HD21	1.80	0.64
1:A:193:LEU:O	1:A:196:GLN:OE1	2.16	0.64
1:A:118:LYS:NZ	1:A:123:ARG:HH22	1.96	0.64
1:A:433:ILE:HB	1:A:571:TYR:OH	1.97	0.64
1:H:222:PHE:CG	1:H:255:PHE:HB3	2.33	0.64
1:A:547:LEU:HD12	1:A:615:THR:HG22	1.77	0.64
1:D:16:GLU:HG2	1:D:83:LEU:HD13	1.78	0.64
1:A:503:PHE:HE1	1:B:666:ARG:HG3	1.62	0.64
1:E:665:VAL:HG21	1:F:665:VAL:HG22	1.78	0.64
1:B:443:ASP:O	1:B:446:ARG:HB2	1.97	0.64
1:A:244:VAL:HG12	1:A:278:GLN:OE1	1.96	0.64
1:F:570:LEU:CB	1:F:590:MET:CE	2.75	0.64
1:B:107:TYR:HE1	1:B:153:LEU:HB2	1.63	0.64
1:A:386:LEU:H	1:A:386:LEU:HD12	1.63	0.64
1:C:118:LYS:O	1:C:118:LYS:HG3	1.97	0.64
1:C:230:GLN:C	1:C:232:HIS:N	2.44	0.64
1:E:245:VAL:O	1:E:257:SER:O	2.15	0.64
1:F:260:PRO:HG3	1:F:274:GLU:HG2	1.79	0.64
1:D:245:VAL:O	1:D:257:SER:O	2.16	0.64
1:C:206:TRP:C	1:C:206:TRP:CD1	2.71	0.64
1:C:485:PHE:CE2	1:D:485:PHE:CG	2.85	0.64
1:C:286:ARG:HG2	1:C:286:ARG:HH11	1.62	0.64
1:B:387:ILE:CD1	1:B:450:GLY:CA	2.74	0.64
1:H:193:LEU:CD2	1:H:231:TRP:CD1	2.80	0.64
1:B:384:GLY:O	1:B:385:ASP:HB2	1.97	0.64
1:B:644:VAL:CA	1:B:647:GLN:HE21	2.09	0.64
1:C:119:GLU:CB	1:C:121:PRO:CD	2.76	0.64
1:C:260:PRO:HG3	1:C:274:GLU:HG2	1.78	0.64
1:D:111:PHE:CZ	1:D:572:ARG:HG3	2.33	0.64
1:F:153:LEU:CD2	1:F:162:HIS:HD1	2.11	0.64
1:F:387:ILE:CD1	1:F:450:GLY:N	2.60	0.64
1:F:402:SER:HA	1:F:609:TYR:CG	2.33	0.64
1:D:581:GLN:O	1:D:584:PRO:HD2	1.98	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:402:SER:O	1:G:403:LEU:HB2	1.98	0.64
1:C:316:ASN:O	1:C:317:MET:HB2	1.98	0.64
1:G:334:GLN:HA	1:G:337:LYS:HB2	1.80	0.64
1:D:350:GLU:HA	1:D:391:ASP:OD2	1.98	0.64
1:C:120:GLY:H	1:C:122:ILE:H	1.45	0.63
1:B:433:ILE:HB	1:B:571:TYR:OH	1.98	0.63
1:B:503:PHE:H	1:B:505:ILE:HD11	1.62	0.63
1:G:412:ILE:HG23	1:G:433:ILE:CD1	2.28	0.63
1:H:145:ASP:OD1	1:H:167:LEU:HD13	1.97	0.63
1:H:245:VAL:O	1:H:257:SER:O	2.16	0.63
1:F:220:ARG:HH12	1:F:223:LEU:CD2	2.10	0.63
1:H:224:PRO:HG2	1:H:255:PHE:CE2	2.34	0.63
1:F:352:GLU:O	1:F:388:PHE:HA	1.99	0.63
1:D:171:LYS:HA	1:D:177:GLU:HA	1.80	0.63
1:F:626:SER:HB2	1:F:630:LYS:HE3	1.78	0.63
1:E:71:PRO:O	1:E:72:ASN:HB2	1.97	0.63
1:B:49:GLU:HA	1:B:55:ARG:HD3	1.79	0.63
1:B:408:GLU:O	1:B:409:SER:HB2	1.98	0.63
1:G:111:PHE:CZ	1:G:572:ARG:CG	2.70	0.63
1:G:153:LEU:CD2	1:G:162:HIS:HD1	2.11	0.63
1:E:105:ARG:O	1:E:108:LEU:N	2.30	0.63
1:E:473:THR:CG2	1:E:533:LEU:CD2	2.70	0.63
1:E:514:TRP:O	1:E:518:GLU:N	2.31	0.63
1:B:16:GLU:HG2	1:B:83:LEU:HD13	1.79	0.63
1:D:193:LEU:O	1:D:196:GLN:OE1	2.16	0.63
1:E:193:LEU:O	1:E:196:GLN:OE1	2.16	0.63
1:H:70:HIS:CD2	1:H:71:PRO:O	2.52	0.63
1:C:107:TYR:HE1	1:C:153:LEU:HB2	1.63	0.63
1:D:434:TRP:CE3	1:D:568:ARG:CA	2.68	0.63
1:C:573:ARG:HH22	1:D:573:ARG:NH1	1.95	0.63
1:G:422:THR:HG22	1:G:426:LEU:HD21	1.80	0.63
1:D:246:TYR:CD1	1:D:258:VAL:CB	2.70	0.63
1:F:444:CYS:C	1:F:446:ARG:N	2.50	0.63
1:D:70:HIS:CD2	1:D:71:PRO:O	2.51	0.63
1:A:145:ASP:OD1	1:A:167:LEU:HD13	1.98	0.63
1:G:70:HIS:CD2	1:G:71:PRO:O	2.51	0.63
1:H:444:CYS:C	1:H:446:ARG:H	2.02	0.63
1:B:120:GLY:HA2	1:B:123:ARG:H	1.63	0.63
1:A:105:ARG:O	1:A:107:TYR:N	2.31	0.63
1:G:220:ARG:HH12	1:G:223:LEU:CD2	2.12	0.63
1:B:70:HIS:CD2	1:B:71:PRO:O	2.52	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:408:GLU:O	1:D:409:SER:HB2	1.98	0.63
1:D:434:TRP:HB3	1:D:571:TYR:CE1	2.32	0.63
1:B:262:PRO:HB3	1:B:409:SER:HG	1.62	0.63
1:B:265:LEU:CD2	1:B:269:LEU:HB3	2.27	0.63
1:D:222:PHE:CG	1:D:255:PHE:HB3	2.34	0.63
1:E:433:ILE:HB	1:E:571:TYR:CZ	2.33	0.63
1:F:262:PRO:HB3	1:F:409:SER:HG	1.60	0.63
1:G:316:ASN:O	1:G:317:MET:HB2	1.96	0.63
1:D:352:GLU:O	1:D:388:PHE:HA	1.99	0.63
1:D:402:SER:O	1:D:403:LEU:HB2	1.99	0.63
1:D:402:SER:HA	1:D:609:TYR:CG	2.32	0.63
1:F:581:GLN:O	1:F:584:PRO:HD2	1.98	0.63
1:B:389:LEU:HD11	1:B:454:SER:OG	1.99	0.63
1:C:265:LEU:CD2	1:C:269:LEU:HB3	2.28	0.63
1:D:260:PRO:HG3	1:D:274:GLU:HG2	1.80	0.63
1:D:438:ARG:NH1	1:D:568:ARG:HH21	1.96	0.63
1:G:120:GLY:O	1:G:123:ARG:N	2.32	0.63
1:A:105:ARG:O	1:A:106:LYS:C	2.36	0.63
1:H:16:GLU:HG2	1:H:83:LEU:HD13	1.79	0.63
1:A:626:SER:HB2	1:A:630:LYS:HE3	1.81	0.63
1:D:208:PHE:HD2	1:D:211:LEU:HD23	1.62	0.63
1:A:651:GLN:NE2	1:B:492:ILE:HG23	2.14	0.63
1:F:286:ARG:HH11	1:F:286:ARG:HG2	1.64	0.63
1:H:244:VAL:HG12	1:H:278:GLN:OE1	1.99	0.63
1:H:387:ILE:HG21	1:H:450:GLY:CA	2.25	0.63
1:E:318:VAL:O	1:E:320:GLY:N	2.31	0.63
1:C:527:GLU:O	1:C:529:GLU:N	2.30	0.63
1:D:71:PRO:O	1:D:72:ASN:HB2	1.98	0.63
1:A:150:ASN:ND2	1:A:167:LEU:HD12	2.11	0.63
1:E:581:GLN:O	1:E:584:PRO:HD2	1.98	0.63
1:B:350:GLU:HA	1:B:391:ASP:OD2	1.98	0.63
1:E:208:PHE:HD2	1:E:211:LEU:HD23	1.63	0.63
1:A:384:GLY:O	1:A:385:ASP:HB2	1.96	0.63
1:C:666:ARG:HG3	1:D:503:PHE:HE1	1.64	0.63
1:B:120:GLY:O	1:B:123:ARG:N	2.32	0.63
1:G:434:TRP:HZ3	1:G:568:ARG:CA	2.11	0.63
1:A:438:ARG:NH1	1:A:568:ARG:HH21	1.97	0.63
1:F:118:LYS:O	1:F:118:LYS:HG3	1.99	0.63
1:C:145:ASP:OD1	1:C:167:LEU:HD13	1.99	0.63
1:C:644:VAL:CA	1:C:647:GLN:HE21	2.10	0.63
1:E:644:VAL:CA	1:E:647:GLN:HE21	2.11	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:665:VAL:HG11	1:B:665:VAL:HG22	1.80	0.63
1:A:357:SER:CB	1:A:453:THR:HB	2.29	0.63
1:C:70:HIS:CD2	1:C:71:PRO:O	2.52	0.63
1:E:626:SER:HB2	1:E:630:LYS:HE3	1.81	0.63
1:F:71:PRO:O	1:F:72:ASN:HB2	1.98	0.63
1:D:107:TYR:HE1	1:D:153:LEU:HB2	1.64	0.63
1:B:430:TRP:HB3	1:B:571:TYR:CD2	2.30	0.63
1:G:230:GLN:C	1:G:232:HIS:N	2.44	0.63
1:F:265:LEU:CD2	1:F:269:LEU:HB3	2.28	0.63
1:F:319:SER:CB	1:F:403:LEU:HB2	2.29	0.63
1:D:286:ARG:HG2	1:D:286:ARG:HH11	1.64	0.63
1:A:581:GLN:O	1:A:584:PRO:HD2	1.99	0.63
1:G:134:ARG:HB2	1:G:300:PHE:HE1	1.62	0.63
1:E:345:GLY:O	1:E:347:PRO:HD3	1.99	0.63
1:C:350:GLU:HG2	1:C:391:ASP:HB2	1.79	0.63
1:B:192:GLU:OE1	1:B:192:GLU:HA	1.99	0.63
1:D:260:PRO:CB	1:D:273:LEU:HD13	2.30	0.62
1:A:430:TRP:CE3	1:A:574:LEU:HD22	2.34	0.62
1:A:419:ARG:HA	1:A:587:SER:OG	1.98	0.62
1:E:222:PHE:CG	1:E:255:PHE:HB3	2.34	0.62
1:F:514:TRP:O	1:F:518:GLU:N	2.29	0.62
1:F:171:LYS:HA	1:F:177:GLU:HA	1.81	0.62
1:A:644:VAL:CA	1:A:647:GLN:HE21	2.10	0.62
1:G:263:ASN:ND2	1:G:265:LEU:H	1.97	0.62
1:H:316:ASN:O	1:H:317:MET:HB2	1.99	0.62
1:E:517:MET:CE	1:E:647:GLN:OE1	2.47	0.62
1:B:105:ARG:O	1:B:106:LYS:C	2.38	0.62
1:E:386:LEU:H	1:E:386:LEU:HD12	1.63	0.62
1:E:70:HIS:CD2	1:E:71:PRO:O	2.52	0.62
1:C:500:GLN:HB3	1:C:505:ILE:HG12	1.81	0.62
1:H:581:GLN:O	1:H:584:PRO:HD2	1.99	0.62
1:E:478:GLN:HA	1:F:478:GLN:HB2	1.81	0.62
1:D:143:HIS:CD2	1:D:145:ASP:O	2.51	0.62
1:G:30:LEU:HD13	1:G:32:TRP:HE1	1.65	0.62
1:A:150:ASN:OD1	1:A:150:ASN:N	2.32	0.62
1:A:494:LEU:HD12	1:A:514:TRP:HE3	1.63	0.62
1:G:610:ASP:O	1:G:613:SER:HB3	1.99	0.62
1:H:394:LYS:HG2	1:H:401:ILE:N	2.12	0.62
1:E:350:GLU:HA	1:E:391:ASP:OD2	1.99	0.62
1:F:70:HIS:CD2	1:F:71:PRO:O	2.52	0.62
1:H:626:SER:HB2	1:H:630:LYS:HE3	1.79	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:192:GLU:OE1	1:D:192:GLU:HA	1.98	0.62
1:C:260:PRO:CB	1:C:273:LEU:HD13	2.29	0.62
1:F:143:HIS:CD2	1:F:145:ASP:O	2.51	0.62
1:E:387:ILE:HD12	1:E:450:GLY:N	2.14	0.62
1:G:150:ASN:N	1:G:150:ASN:OD1	2.32	0.62
1:G:283:TRP:O	1:G:284:HIS:HB2	1.99	0.62
1:H:63:GLN:O	1:H:67:LYS:HB2	1.99	0.62
1:E:547:LEU:HD22	1:E:611:GLN:CG	2.28	0.62
1:C:419:ARG:NH1	1:C:588:ASN:HA	2.14	0.62
1:D:105:ARG:O	1:D:106:LYS:C	2.38	0.62
1:D:186:LEU:HD23	1:D:227:GLN:HG2	1.81	0.62
1:G:419:ARG:HA	1:G:587:SER:OG	2.00	0.62
1:B:134:ARG:CA	1:B:300:PHE:CZ	2.80	0.62
1:G:387:ILE:HD13	1:G:450:GLY:HA2	1.79	0.62
1:F:447:LEU:HD12	1:F:605:VAL:CG2	2.28	0.62
1:G:17:MET:HA	1:G:33:ILE:O	2.00	0.62
1:D:119:GLU:HB2	1:D:121:PRO:CD	2.29	0.62
1:A:208:PHE:HD2	1:A:211:LEU:HD23	1.65	0.62
1:A:263:ASN:ND2	1:A:265:LEU:H	1.96	0.62
1:E:107:TYR:HE1	1:E:153:LEU:HB2	1.64	0.62
1:B:581:GLN:O	1:B:584:PRO:HD2	2.00	0.62
1:H:208:PHE:HD2	1:H:211:LEU:HD23	1.63	0.62
1:F:192:GLU:OE1	1:F:192:GLU:HA	1.98	0.62
1:A:222:PHE:CG	1:A:255:PHE:HB3	2.35	0.62
1:B:222:PHE:CG	1:B:255:PHE:HB3	2.35	0.62
1:G:103:ASP:HB3	1:G:106:LYS:HG3	1.81	0.62
1:F:150:ASN:ND2	1:F:167:LEU:HD12	2.14	0.62
1:E:286:ARG:HH11	1:E:286:ARG:HG2	1.64	0.62
1:F:16:GLU:HG2	1:F:83:LEU:HD13	1.80	0.62
1:B:359:LEU:HA	1:B:460:ARG:HH12	1.64	0.62
1:D:386:LEU:HD12	1:D:386:LEU:H	1.62	0.62
1:G:563:LEU:HD21	1:G:596:LEU:HB2	1.81	0.62
1:C:105:ARG:O	1:C:106:LYS:C	2.38	0.62
1:B:276:TRP:CE3	1:B:277:LEU:HD23	2.34	0.62
1:B:501:MET:C	1:B:505:ILE:HD11	2.20	0.62
1:E:206:TRP:CD1	1:E:206:TRP:C	2.73	0.62
1:D:480:LYS:NZ	1:D:527:GLU:HB2	2.15	0.62
1:D:190:ALA:HB2	1:D:206:TRP:CG	2.35	0.62
1:F:134:ARG:CA	1:F:300:PHE:CZ	2.75	0.62
1:G:580:ASP:HA	1:G:582:ARG:NH1	2.15	0.62
1:E:192:GLU:OE1	1:E:192:GLU:HA	2.00	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:105:ARG:O	1:C:107:TYR:N	2.32	0.62
1:C:422:THR:HG22	1:C:426:LEU:HD21	1.81	0.62
1:C:422:THR:CB	1:C:585:GLY:C	2.67	0.62
1:H:153:LEU:CD2	1:H:162:HIS:HD1	2.12	0.62
1:B:105:ARG:O	1:B:108:LEU:N	2.32	0.62
1:E:402:SER:HA	1:E:609:TYR:CG	2.35	0.62
1:F:30:LEU:HD13	1:F:32:TRP:HE1	1.65	0.62
1:F:368:THR:HA	1:F:371:VAL:CG2	2.30	0.62
1:B:441:LYS:HB2	1:B:560:LEU:HD22	1.81	0.62
1:B:193:LEU:O	1:B:196:GLN:OE1	2.17	0.62
1:D:514:TRP:O	1:D:518:GLU:N	2.30	0.62
1:E:150:ASN:ND2	1:E:167:LEU:HD12	2.14	0.62
1:A:426:LEU:HB2	1:A:574:LEU:HD21	1.82	0.62
1:F:105:ARG:O	1:F:106:LYS:C	2.38	0.62
1:F:105:ARG:O	1:F:107:TYR:N	2.33	0.62
1:D:480:LYS:CE	1:D:527:GLU:HB2	2.30	0.62
1:B:318:VAL:O	1:B:320:GLY:N	2.32	0.62
1:A:580:ASP:HA	1:A:582:ARG:NH1	2.15	0.62
1:H:334:GLN:HA	1:H:337:LYS:HB2	1.82	0.62
1:G:386:LEU:HD12	1:G:386:LEU:H	1.62	0.62
1:H:72:ASN:O	1:H:163:LYS:HA	2.00	0.62
1:H:384:GLY:O	1:H:385:ASP:HB2	2.00	0.62
1:A:224:PRO:HG2	1:A:255:PHE:HE2	1.64	0.61
1:D:118:LYS:NZ	1:D:123:ARG:HH22	1.96	0.61
1:A:107:TYR:HE1	1:A:153:LEU:HB2	1.63	0.61
1:A:434:TRP:HZ3	1:A:568:ARG:CA	2.09	0.61
1:A:434:TRP:CZ3	1:A:568:ARG:HG3	2.31	0.61
1:A:179:CYS:CB	1:A:181:GLU:CG	2.67	0.61
1:H:103:ASP:HB3	1:H:106:LYS:HG3	1.82	0.61
1:H:118:LYS:HG3	1:H:118:LYS:O	1.99	0.61
1:H:17:MET:HA	1:H:33:ILE:O	2.00	0.61
1:G:150:ASN:ND2	1:G:167:LEU:HD12	2.13	0.61
1:B:143:HIS:CD2	1:B:145:ASP:O	2.53	0.61
1:A:345:GLY:O	1:A:347:PRO:HD3	2.00	0.61
1:A:192:GLU:HA	1:A:192:GLU:OE1	1.99	0.61
1:D:263:ASN:ND2	1:D:265:LEU:H	1.98	0.61
1:B:263:ASN:ND2	1:B:265:LEU:H	1.96	0.61
1:A:571:TYR:CZ	1:A:590:MET:SD	2.93	0.61
1:F:208:PHE:HD2	1:F:211:LEU:HD23	1.64	0.61
1:H:263:ASN:ND2	1:H:265:LEU:H	1.98	0.61
1:A:527:GLU:C	1:A:529:GLU:H	2.02	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:198:LYS:C	1:E:200:THR:H	2.04	0.61
1:C:580:ASP:HA	1:C:582:ARG:NH1	2.15	0.61
1:H:386:LEU:HD12	1:H:386:LEU:H	1.64	0.61
1:B:72:ASN:O	1:B:163:LYS:HA	2.00	0.61
1:A:651:GLN:HE22	1:B:492:ILE:HG23	1.65	0.61
1:A:153:LEU:CD2	1:A:162:HIS:HD1	2.14	0.61
1:A:434:TRP:HZ3	1:A:568:ARG:HA	1.54	0.61
1:E:116:GLY:HA2	1:E:217:THR:O	2.00	0.61
1:F:146:LEU:HA	1:F:150:ASN:HD21	1.65	0.61
1:H:260:PRO:CB	1:H:273:LEU:HD13	2.29	0.61
1:D:150:ASN:OD1	1:D:150:ASN:N	2.33	0.61
1:B:171:LYS:HA	1:B:177:GLU:HA	1.82	0.61
1:C:660:ILE:HG23	1:C:661:ALA:N	2.15	0.61
1:F:63:GLN:O	1:F:67:LYS:HB2	2.00	0.61
1:C:441:LYS:HB2	1:C:560:LEU:CD2	2.29	0.61
1:H:408:GLU:O	1:H:409:SER:HB2	1.99	0.61
1:E:150:ASN:OD1	1:E:150:ASN:N	2.34	0.61
1:E:105:ARG:O	1:E:107:TYR:N	2.33	0.61
1:E:224:PRO:HG2	1:E:255:PHE:CE2	2.36	0.61
1:F:416:ASP:CG	1:F:417:PRO:HD3	2.21	0.61
1:H:286:ARG:HH11	1:H:286:ARG:HG2	1.64	0.61
1:A:17:MET:HA	1:A:33:ILE:O	2.00	0.61
1:A:143:HIS:CD2	1:A:145:ASP:O	2.52	0.61
1:D:334:GLN:HA	1:D:337:LYS:HB2	1.81	0.61
1:A:350:GLU:HA	1:A:391:ASP:OD2	1.99	0.61
1:B:422:THR:HG22	1:B:426:LEU:HD21	1.81	0.61
1:G:408:GLU:O	1:G:409:SER:HB2	2.00	0.61
1:F:567:ALA:HA	1:F:590:MET:HE1	1.82	0.61
1:A:665:VAL:CG1	1:B:665:VAL:HG22	2.30	0.61
1:G:145:ASP:OD1	1:G:167:LEU:HD13	2.01	0.61
1:F:660:ILE:HG23	1:F:661:ALA:N	2.15	0.61
1:B:441:LYS:HD2	1:B:561:ASP:OD1	2.01	0.61
1:G:193:LEU:O	1:G:196:GLN:OE1	2.18	0.61
1:F:386:LEU:H	1:F:386:LEU:HD12	1.64	0.61
1:C:386:LEU:H	1:C:386:LEU:HD12	1.65	0.61
1:F:345:GLY:O	1:F:347:PRO:HD3	2.00	0.61
1:D:283:TRP:O	1:D:284:HIS:HB2	2.01	0.61
1:C:408:GLU:O	1:C:409:SER:HB2	2.00	0.61
1:E:105:ARG:HG2	1:E:109:ASN:HD21	1.66	0.61
1:E:271:GLY:HA2	1:E:275:ARG:HH21	1.66	0.61
1:G:222:PHE:CG	1:G:255:PHE:HB3	2.35	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:245:VAL:O	1:A:257:SER:O	2.18	0.61
1:C:191:PRO:HG3	1:C:234:LYS:NZ	2.16	0.61
1:E:402:SER:O	1:E:403:LEU:HB2	2.01	0.61
1:A:402:SER:O	1:A:403:LEU:HB2	1.99	0.61
1:A:334:GLN:HA	1:A:337:LYS:HB2	1.82	0.61
1:D:384:GLY:O	1:D:385:ASP:HB2	1.99	0.61
1:A:63:GLN:O	1:A:67:LYS:HB2	2.01	0.61
1:B:208:PHE:HD2	1:B:211:LEU:HD23	1.65	0.61
1:C:120:GLY:O	1:C:123:ARG:N	2.33	0.61
1:A:120:GLY:O	1:A:123:ARG:N	2.33	0.61
1:A:438:ARG:HG2	1:A:564:GLU:CG	2.30	0.61
1:E:105:ARG:O	1:E:106:LYS:C	2.38	0.61
1:E:118:LYS:HG3	1:E:118:LYS:O	2.00	0.61
1:E:408:GLU:O	1:E:409:SER:HB2	2.01	0.61
1:E:422:THR:CB	1:E:585:GLY:C	2.69	0.61
1:F:107:TYR:HE1	1:F:153:LEU:HB2	1.64	0.61
1:E:462:ASN:ND2	1:E:540:LEU:CB	2.63	0.61
1:B:26:PHE:CE2	1:B:181:GLU:OE1	2.53	0.61
1:G:316:ASN:O	1:G:317:MET:CB	2.49	0.61
1:A:658:LEU:HA	1:B:658:LEU:CD1	2.31	0.61
1:B:17:MET:HA	1:B:33:ILE:O	1.99	0.61
1:F:17:MET:HA	1:F:33:ILE:O	2.00	0.61
1:E:43:ILE:HA	1:E:94:LEU:O	2.00	0.61
1:A:492:ILE:HD13	1:B:651:GLN:HE21	1.66	0.61
1:E:547:LEU:HD12	1:E:615:THR:CG2	2.04	0.61
1:H:422:THR:HB	1:H:585:GLY:HA3	1.81	0.61
1:B:153:LEU:CD2	1:B:162:HIS:HD1	2.12	0.61
1:C:30:LEU:HD13	1:C:32:TRP:HE1	1.66	0.61
1:A:316:ASN:O	1:A:317:MET:HB2	1.99	0.61
1:H:359:LEU:HA	1:H:460:ARG:HH12	1.66	0.61
1:D:660:ILE:HG23	1:D:661:ALA:N	2.14	0.61
1:C:72:ASN:O	1:C:163:LYS:HA	2.01	0.61
1:C:373:ASP:C	1:C:374:CYS:SG	2.79	0.61
1:A:283:TRP:O	1:A:284:HIS:HB2	2.00	0.61
1:E:500:GLN:CB	1:E:505:ILE:HG12	2.30	0.61
1:A:408:GLU:O	1:A:409:SER:HB2	2.01	0.61
1:F:563:LEU:HD23	1:F:597:ALA:HB2	1.83	0.61
1:F:580:ASP:HA	1:F:582:ARG:NH1	2.16	0.61
1:E:334:GLN:HA	1:E:337:LYS:HB2	1.83	0.61
1:B:386:LEU:HD12	1:B:386:LEU:H	1.65	0.61
1:B:345:GLY:O	1:B:347:PRO:HD3	2.01	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:434:TRP:HB3	1:B:571:TYR:CE1	2.36	0.61
1:B:570:LEU:HD23	1:B:590:MET:HG2	1.81	0.61
1:G:105:ARG:HG2	1:G:109:ASN:HD21	1.66	0.61
1:F:437:ILE:HG13	1:F:594:LEU:HD12	1.81	0.61
1:C:143:HIS:CD2	1:C:145:ASP:O	2.53	0.61
1:G:206:TRP:C	1:G:206:TRP:CD1	2.74	0.61
1:H:120:GLY:HA2	1:H:123:ARG:HB2	1.83	0.61
1:B:105:ARG:O	1:B:107:TYR:N	2.34	0.61
1:E:402:SER:HA	1:E:609:TYR:CD1	2.36	0.61
1:B:352:GLU:O	1:B:388:PHE:HA	2.00	0.61
1:E:17:MET:HA	1:E:33:ILE:O	2.01	0.61
1:A:357:SER:HB3	1:A:453:THR:CB	2.31	0.61
1:E:384:GLY:O	1:E:385:ASP:HB2	2.00	0.61
1:H:192:GLU:OE1	1:H:192:GLU:HA	2.00	0.61
1:B:637:ARG:O	1:B:641:LYS:N	2.28	0.60
1:C:153:LEU:CD2	1:C:162:HIS:HD1	2.10	0.60
1:D:153:LEU:CD2	1:D:162:HIS:HD1	2.13	0.60
1:B:120:GLY:HA2	1:B:123:ARG:HB2	1.83	0.60
1:G:409:SER:HB3	1:G:412:ILE:HD12	1.83	0.60
1:H:143:HIS:CD2	1:H:145:ASP:O	2.54	0.60
1:E:119:GLU:CB	1:E:121:PRO:CD	2.80	0.60
1:F:271:GLY:HA2	1:F:275:ARG:HH21	1.65	0.60
1:F:434:TRP:CZ3	1:F:568:ARG:CA	2.77	0.60
1:F:26:PHE:HE2	1:F:181:GLU:OE1	1.84	0.60
1:D:387:ILE:HD12	1:D:450:GLY:HA2	1.82	0.60
1:F:423:TYR:CD2	1:F:424:THR:HG23	2.35	0.60
1:G:444:CYS:C	1:G:446:ARG:H	2.04	0.60
1:G:626:SER:HB2	1:G:630:LYS:HE3	1.80	0.60
1:C:654:LEU:HD11	1:D:655:TRP:HE3	1.64	0.60
1:A:644:VAL:HG12	1:A:644:VAL:O	2.01	0.60
1:H:580:ASP:HA	1:H:582:ARG:NH1	2.16	0.60
1:G:260:PRO:CB	1:G:273:LEU:HD13	2.31	0.60
1:G:438:ARG:HG2	1:G:564:GLU:CD	2.20	0.60
1:F:145:ASP:OD1	1:F:167:LEU:HD13	2.01	0.60
1:D:145:ASP:OD1	1:D:167:LEU:HD13	2.00	0.60
1:C:651:GLN:HE22	1:D:492:ILE:CG2	1.98	0.60
1:H:368:THR:HA	1:H:371:VAL:CG2	2.31	0.60
1:E:492:ILE:CG2	1:F:651:GLN:NE2	2.63	0.60
1:E:580:ASP:HA	1:E:582:ARG:NH1	2.16	0.60
1:D:345:GLY:O	1:D:347:PRO:HD3	2.00	0.60
1:D:626:SER:HB2	1:D:630:LYS:HE3	1.81	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:503:PHE:H	1:D:505:ILE:HD11	1.66	0.60
1:D:434:TRP:HZ3	1:D:568:ARG:HG3	1.66	0.60
1:B:220:ARG:HH12	1:B:223:LEU:CD2	2.14	0.60
1:A:500:GLN:HE22	1:B:659:LYS:HG2	1.65	0.60
1:E:115:CYS:HB2	1:E:435:GLN:HG3	1.83	0.60
1:E:434:TRP:HE3	1:E:568:ARG:HA	1.62	0.60
1:F:120:GLY:HA2	1:F:123:ARG:H	1.67	0.60
1:F:120:GLY:O	1:F:123:ARG:N	2.35	0.60
1:F:18:LYS:HZ2	1:F:33:ILE:HG21	1.66	0.60
1:A:171:LYS:HA	1:A:177:GLU:HA	1.83	0.60
1:C:333:LEU:HD11	1:C:353:LEU:HD13	1.83	0.60
1:C:222:PHE:CG	1:C:255:PHE:HB3	2.36	0.60
1:H:416:ASP:CG	1:H:417:PRO:HD3	2.22	0.60
1:D:220:ARG:HH12	1:D:223:LEU:CD2	2.14	0.60
1:E:117:LEU:O	1:E:119:GLU:HG2	2.00	0.60
1:E:462:ASN:HD21	1:E:540:LEU:CB	2.13	0.60
1:E:527:GLU:O	1:E:529:GLU:N	2.35	0.60
1:H:18:LYS:HZ2	1:H:33:ILE:HG21	1.64	0.60
1:H:43:ILE:HA	1:H:94:LEU:O	2.01	0.60
1:G:146:LEU:HA	1:G:150:ASN:HD21	1.67	0.60
1:F:193:LEU:O	1:F:196:GLN:OE1	2.18	0.60
1:A:220:ARG:HH12	1:A:223:LEU:CD2	2.15	0.60
1:B:419:ARG:N	1:B:420:PRO:HD3	2.03	0.60
1:E:265:LEU:HD21	1:E:269:LEU:HB3	1.83	0.60
1:F:110:GLN:O	1:F:111:PHE:CB	2.34	0.60
1:F:120:GLY:HA2	1:F:123:ARG:HB2	1.84	0.60
1:F:245:VAL:O	1:F:257:SER:O	2.19	0.60
1:E:473:THR:CG2	1:E:533:LEU:HD22	2.26	0.60
1:H:387:ILE:CD1	1:H:450:GLY:N	2.64	0.60
1:F:527:GLU:O	1:F:529:GLU:N	2.35	0.60
1:D:146:LEU:HA	1:D:150:ASN:HD21	1.66	0.60
1:A:83:LEU:HD21	1:A:86:LEU:HD11	1.83	0.60
1:B:30:LEU:HD13	1:B:32:TRP:HE1	1.67	0.60
1:D:30:LEU:HD13	1:D:32:TRP:HE1	1.66	0.60
1:D:43:ILE:HA	1:D:94:LEU:O	2.01	0.60
1:C:17:MET:HA	1:C:33:ILE:O	2.01	0.60
1:C:171:LYS:HA	1:C:177:GLU:HA	1.82	0.60
1:A:72:ASN:O	1:A:163:LYS:HA	2.01	0.60
1:F:441:LYS:HB2	1:F:560:LEU:CD2	2.32	0.60
1:F:384:GLY:O	1:F:385:ASP:HB2	2.01	0.60
1:C:263:ASN:ND2	1:C:265:LEU:N	2.49	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:570:LEU:HB3	1:E:590:MET:HE2	1.83	0.60
1:G:208:PHE:HD2	1:G:211:LEU:HD23	1.66	0.60
1:H:451:GLN:CD	1:H:611:GLN:HE22	2.03	0.60
1:B:334:GLN:HA	1:B:337:LYS:HB2	1.82	0.60
1:A:222:PHE:CZ	1:A:225:ASN:HB2	2.37	0.60
1:H:570:LEU:HD23	1:H:590:MET:HG2	1.82	0.60
1:D:224:PRO:HG2	1:D:255:PHE:HE2	1.66	0.60
1:H:230:GLN:C	1:H:232:HIS:N	2.44	0.60
1:E:145:ASP:OD1	1:E:167:LEU:HD13	2.01	0.60
1:E:143:HIS:CD2	1:E:145:ASP:O	2.52	0.60
1:A:409:SER:HB3	1:A:412:ILE:HD12	1.82	0.60
1:H:352:GLU:O	1:H:388:PHE:HA	2.02	0.60
1:E:644:VAL:O	1:E:644:VAL:HG12	2.02	0.60
1:E:517:MET:HE3	1:E:647:GLN:OE1	2.01	0.60
1:E:30:LEU:HD13	1:E:32:TRP:HE1	1.66	0.60
1:F:333:LEU:HD11	1:F:353:LEU:HD13	1.82	0.60
1:B:50:LEU:H	1:B:55:ARG:HD3	1.67	0.60
1:G:68:LEU:HB3	1:G:135:TYR:HE2	1.66	0.60
1:B:503:PHE:O	1:B:505:ILE:HG13	2.02	0.60
1:E:120:GLY:HA2	1:E:123:ARG:H	1.65	0.60
1:F:115:CYS:O	1:F:263:ASN:HA	2.01	0.60
1:F:587:SER:OG	1:F:588:ASN:N	2.34	0.60
1:C:150:ASN:N	1:C:150:ASN:OD1	2.31	0.60
1:F:493:ASP:HB3	1:F:514:TRP:CH2	2.36	0.60
1:D:387:ILE:CD1	1:D:450:GLY:N	2.65	0.60
1:D:580:ASP:HA	1:D:582:ARG:NH1	2.16	0.60
1:C:63:GLN:O	1:C:67:LYS:HB2	2.02	0.60
1:E:63:GLN:O	1:E:67:LYS:HB2	2.01	0.60
1:C:497:TYR:HB2	1:D:655:TRP:CH2	2.37	0.60
1:C:422:THR:CB	1:C:585:GLY:CA	2.69	0.60
1:G:105:ARG:O	1:G:107:TYR:N	2.35	0.60
1:A:419:ARG:N	1:A:420:PRO:HD3	2.04	0.60
1:F:119:GLU:CB	1:F:121:PRO:CD	2.80	0.60
1:F:224:PRO:HG2	1:F:255:PHE:HE2	1.67	0.60
1:F:408:GLU:O	1:F:409:SER:HB2	2.01	0.60
1:H:220:ARG:HH12	1:H:223:LEU:CD2	2.14	0.60
1:C:246:TYR:CD1	1:C:258:VAL:CB	2.71	0.60
1:C:502:GLU:HG3	1:D:666:ARG:HH11	1.64	0.60
1:F:283:TRP:O	1:F:284:HIS:HB2	2.01	0.60
1:H:271:GLY:HA2	1:H:275:ARG:HH21	1.65	0.60
1:H:182:PHE:CE1	1:H:194:LEU:HD22	2.36	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:103:ASP:HB3	1:D:106:LYS:HG3	1.84	0.60
1:F:503:PHE:C	1:F:505:ILE:H	2.05	0.60
1:B:260:PRO:CB	1:B:273:LEU:HD13	2.32	0.60
1:B:230:GLN:C	1:B:232:HIS:N	2.43	0.60
1:H:206:TRP:CD1	1:H:206:TRP:C	2.74	0.60
1:G:286:ARG:HG2	1:G:286:ARG:HH11	1.64	0.60
1:D:17:MET:HA	1:D:33:ILE:O	2.01	0.60
1:D:316:ASN:O	1:D:317:MET:HB2	2.00	0.60
1:E:171:LYS:HA	1:E:177:GLU:HA	1.82	0.60
1:D:63:GLN:O	1:D:67:LYS:HB2	2.01	0.60
1:B:63:GLN:O	1:B:67:LYS:HB2	2.01	0.60
1:D:500:GLN:HB3	1:D:505:ILE:HG12	1.84	0.59
1:B:271:GLY:HA2	1:B:275:ARG:HH21	1.67	0.59
1:H:409:SER:HB3	1:H:412:ILE:HD12	1.84	0.59
1:G:271:GLY:HA2	1:G:275:ARG:HH21	1.67	0.59
1:C:473:THR:CG2	1:C:533:LEU:HD22	2.27	0.59
1:C:632:VAL:C	1:C:633:MET:SD	2.81	0.59
1:G:352:GLU:O	1:G:388:PHE:HA	2.02	0.59
1:C:43:ILE:HA	1:C:94:LEU:O	2.02	0.59
1:H:423:TYR:CD2	1:H:424:THR:HG23	2.37	0.59
1:D:333:LEU:HD11	1:D:353:LEU:HD13	1.84	0.59
1:G:198:LYS:C	1:G:200:THR:H	2.05	0.59
1:G:192:GLU:HA	1:G:192:GLU:OE1	2.02	0.59
1:C:496:LYS:CB	1:D:655:TRP:NE1	2.09	0.59
1:C:119:GLU:HB2	1:C:121:PRO:CD	2.32	0.59
1:D:416:ASP:CG	1:D:417:PRO:HD3	2.22	0.59
1:B:434:TRP:HZ3	1:B:568:ARG:CB	2.15	0.59
1:E:219:PHE:O	1:E:220:ARG:HG3	1.88	0.59
1:E:222:PHE:CZ	1:E:225:ASN:HB2	2.38	0.59
1:F:260:PRO:CB	1:F:273:LEU:HD13	2.32	0.59
1:C:150:ASN:ND2	1:C:167:LEU:HD12	2.13	0.59
1:F:206:TRP:CD1	1:F:206:TRP:C	2.76	0.59
1:B:105:ARG:HG2	1:B:109:ASN:HD21	1.66	0.59
1:C:134:ARG:CA	1:C:300:PHE:CZ	2.76	0.59
1:D:319:SER:O	1:D:321:ARG:N	2.35	0.59
1:A:182:PHE:CE1	1:A:194:LEU:HD22	2.37	0.59
1:G:276:TRP:CE3	1:G:277:LEU:HD23	2.37	0.59
1:A:246:TYR:CD1	1:A:258:VAL:CB	2.70	0.59
1:C:485:PHE:CE1	1:D:485:PHE:CD1	2.90	0.59
1:H:276:TRP:CE3	1:H:277:LEU:HD23	2.37	0.59
1:H:134:ARG:HD2	1:H:300:PHE:CE1	2.37	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:476:CYS:HB2	1:C:636:MET:SD	2.42	0.59
1:B:103:ASP:HB3	1:B:106:LYS:HG3	1.85	0.59
1:E:319:SER:CB	1:E:403:LEU:HB2	2.31	0.59
1:H:193:LEU:HD22	1:H:231:TRP:NE1	2.16	0.59
1:B:150:ASN:ND2	1:B:167:LEU:HD12	2.15	0.59
1:B:150:ASN:OD1	1:B:150:ASN:N	2.35	0.59
1:G:394:LYS:HD2	1:G:613:SER:HB2	1.82	0.59
1:C:316:ASN:O	1:C:317:MET:CB	2.50	0.59
1:B:423:TYR:CD2	1:B:424:THR:HG23	2.36	0.59
1:D:632:VAL:C	1:D:633:MET:SD	2.81	0.59
1:D:531:GLN:O	1:D:535:ASP:N	2.34	0.59
1:E:472:MET:O	1:E:472:MET:HG3	2.03	0.59
1:D:409:SER:HB3	1:D:412:ILE:HD12	1.84	0.59
1:D:433:ILE:CB	1:D:571:TYR:OH	2.49	0.59
1:A:276:TRP:CE3	1:A:277:LEU:HD23	2.37	0.59
1:H:316:ASN:O	1:H:317:MET:CB	2.50	0.59
1:A:146:LEU:HA	1:A:150:ASN:HD21	1.67	0.59
1:H:30:LEU:HD13	1:H:32:TRP:HE1	1.67	0.59
1:G:171:LYS:HA	1:G:177:GLU:HA	1.83	0.59
1:B:146:LEU:HA	1:B:150:ASN:HD21	1.67	0.59
1:G:350:GLU:HA	1:G:391:ASP:OD2	2.02	0.59
1:E:50:LEU:H	1:E:55:ARG:HD3	1.68	0.59
1:C:50:LEU:H	1:C:55:ARG:HD3	1.68	0.59
1:A:531:GLN:O	1:A:535:ASP:N	2.35	0.59
1:D:182:PHE:CE1	1:D:194:LEU:HD22	2.38	0.59
1:B:119:GLU:CB	1:B:121:PRO:CD	2.80	0.59
1:H:150:ASN:ND2	1:H:167:LEU:HD12	2.15	0.59
1:E:103:ASP:HB3	1:E:106:LYS:HG3	1.83	0.59
1:E:570:LEU:HD23	1:E:590:MET:HG2	1.83	0.59
1:F:105:ARG:HG2	1:F:109:ASN:HD21	1.67	0.59
1:F:319:SER:OG	1:F:403:LEU:CB	2.50	0.59
1:F:387:ILE:HG21	1:F:450:GLY:CA	2.29	0.59
1:D:83:LEU:HD21	1:D:86:LEU:HD11	1.85	0.59
1:E:660:ILE:HG23	1:E:661:ALA:N	2.15	0.59
1:A:333:LEU:HD11	1:A:353:LEU:HD13	1.85	0.59
1:F:334:GLN:HA	1:F:337:LYS:HB2	1.84	0.59
1:G:120:GLY:HA2	1:G:123:ARG:HB2	1.85	0.59
1:G:416:ASP:CG	1:G:417:PRO:HD3	2.23	0.59
1:E:116:GLY:N	1:E:217:THR:O	2.36	0.59
1:H:265:LEU:HD21	1:H:269:LEU:HB3	1.85	0.59
1:A:285:GLN:NE2	1:A:286:ARG:HH12	2.00	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:497:TYR:HD2	1:E:497:TYR:O	1.85	0.59
1:A:30:LEU:HD13	1:A:32:TRP:HE1	1.65	0.59
1:B:540:LEU:HD22	1:B:621:LYS:NZ	2.17	0.59
1:G:200:THR:O	1:G:201:VAL:C	2.41	0.59
1:G:63:GLN:O	1:G:67:LYS:HB2	2.02	0.59
1:D:433:ILE:CG2	1:D:571:TYR:OH	2.50	0.59
1:B:416:ASP:CG	1:B:417:PRO:HD3	2.23	0.59
1:H:587:SER:OG	1:H:588:ASN:N	2.35	0.59
1:F:434:TRP:HZ3	1:F:568:ARG:HA	1.58	0.59
1:D:191:PRO:HG3	1:D:234:LYS:HZ2	1.67	0.59
1:C:644:VAL:HG12	1:C:644:VAL:O	2.03	0.59
1:A:43:ILE:HA	1:A:94:LEU:O	2.01	0.59
1:G:368:THR:HA	1:G:371:VAL:CG2	2.32	0.59
1:A:352:GLU:O	1:A:388:PHE:HA	2.03	0.59
1:A:423:TYR:CD2	1:A:424:THR:HG23	2.37	0.59
1:D:394:LYS:HE3	1:D:609:TYR:C	2.22	0.59
1:B:580:ASP:HA	1:B:582:ARG:NH1	2.17	0.59
1:F:531:GLN:O	1:F:535:ASP:N	2.36	0.59
1:G:384:GLY:O	1:G:385:ASP:HB2	2.00	0.59
1:B:409:SER:HB3	1:B:412:ILE:HD12	1.82	0.59
1:B:501:MET:CA	1:B:505:ILE:HD13	2.33	0.59
1:G:434:TRP:HZ3	1:G:568:ARG:HA	1.57	0.59
1:A:368:THR:HA	1:A:371:VAL:CG2	2.32	0.59
1:A:497:TYR:HD2	1:A:497:TYR:O	1.85	0.59
1:C:462:ASN:HD21	1:C:540:LEU:CB	2.13	0.59
1:D:319:SER:CB	1:D:403:LEU:HB2	2.32	0.59
1:C:249:LEU:O	1:C:250:THR:HG23	2.03	0.59
1:G:222:PHE:CZ	1:G:225:ASN:HB2	2.38	0.59
1:H:105:ARG:O	1:H:107:TYR:N	2.36	0.59
1:H:119:GLU:CB	1:H:121:PRO:CD	2.81	0.59
1:G:83:LEU:HD21	1:G:86:LEU:HD11	1.84	0.59
1:E:423:TYR:CD2	1:E:424:THR:HG23	2.38	0.59
1:G:345:GLY:O	1:G:347:PRO:HD3	2.02	0.59
1:D:50:LEU:H	1:D:55:ARG:HD3	1.68	0.59
1:B:182:PHE:CE1	1:B:194:LEU:HD22	2.37	0.59
1:A:478:GLN:CG	1:A:479:LEU:N	2.66	0.59
1:B:500:GLN:O	1:B:505:ILE:HG21	2.03	0.59
1:A:271:GLY:HA2	1:A:275:ARG:HH21	1.68	0.59
1:E:105:ARG:HH11	1:E:105:ARG:HG3	1.68	0.59
1:A:243:ILE:N	1:A:245:VAL:HG23	2.17	0.59
1:D:521:VAL:HG13	1:D:643:VAL:HG12	1.85	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:83:LEU:HD21	1:E:86:LEU:HD11	1.85	0.59
1:B:145:ASP:OD1	1:B:167:LEU:HD13	2.02	0.59
1:G:333:LEU:HD11	1:G:353:LEU:HD13	1.84	0.59
1:F:50:LEU:H	1:F:55:ARG:HD3	1.68	0.59
1:C:200:THR:O	1:C:201:VAL:C	2.41	0.59
1:E:182:PHE:CE1	1:E:194:LEU:HD22	2.38	0.59
1:C:416:ASP:CG	1:C:417:PRO:HD3	2.22	0.58
1:C:426:LEU:HB2	1:C:574:LEU:HD21	1.83	0.58
1:E:655:TRP:CZ3	1:F:654:LEU:CD1	2.85	0.58
1:E:146:LEU:HA	1:E:150:ASN:HD21	1.67	0.58
1:A:117:LEU:O	1:A:119:GLU:HG2	2.03	0.58
1:H:243:ILE:N	1:H:245:VAL:HG23	2.18	0.58
1:E:416:ASP:CG	1:E:417:PRO:HD3	2.23	0.58
1:F:409:SER:HB3	1:F:412:ILE:HD12	1.85	0.58
1:G:246:TYR:CD1	1:G:258:VAL:CB	2.70	0.58
1:H:105:ARG:HG2	1:H:109:ASN:HD21	1.67	0.58
1:F:521:VAL:CG1	1:F:643:VAL:HG12	2.31	0.58
1:A:660:ILE:HG23	1:A:661:ALA:N	2.18	0.58
1:B:394:LYS:HD3	1:B:401:ILE:HA	1.84	0.58
1:A:319:SER:O	1:A:321:ARG:N	2.34	0.58
1:B:333:LEU:HD11	1:B:353:LEU:HD13	1.84	0.58
1:C:345:GLY:O	1:C:347:PRO:HD3	2.03	0.58
1:D:271:GLY:HA2	1:D:275:ARG:HH21	1.67	0.58
1:A:120:GLY:HA2	1:A:123:ARG:HB2	1.85	0.58
1:E:571:TYR:CE2	1:E:590:MET:HG3	2.38	0.58
1:G:243:ILE:N	1:G:245:VAL:HG23	2.18	0.58
1:E:352:GLU:O	1:E:388:PHE:HA	2.02	0.58
1:F:43:ILE:HA	1:F:94:LEU:O	2.03	0.58
1:D:131:SER:O	1:D:134:ARG:HB3	2.03	0.58
1:C:83:LEU:HD21	1:C:86:LEU:HD11	1.84	0.58
1:C:362:ASN:C	1:C:364:ALA:H	2.07	0.58
1:H:422:THR:HB	1:H:585:GLY:C	2.22	0.58
1:H:120:GLY:O	1:H:123:ARG:N	2.36	0.58
1:B:610:ASP:O	1:B:613:SER:HB3	2.03	0.58
1:B:521:VAL:HG13	1:B:643:VAL:HG11	1.83	0.58
1:C:222:PHE:CZ	1:C:225:ASN:HB2	2.39	0.58
1:E:191:PRO:HG3	1:E:234:LYS:HZ3	1.69	0.58
1:E:260:PRO:CG	1:E:274:GLU:HG2	2.33	0.58
1:F:263:ASN:ND2	1:F:265:LEU:H	2.01	0.58
1:F:484:ASP:C	1:F:486:PHE:N	2.56	0.58
1:B:83:LEU:HD21	1:B:86:LEU:HD11	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:352:GLU:O	1:C:388:PHE:HA	2.02	0.58
1:G:531:GLN:O	1:G:535:ASP:N	2.36	0.58
1:A:455:MET:HE2	1:A:455:MET:O	2.03	0.58
1:D:222:PHE:CZ	1:D:225:ASN:HB2	2.37	0.58
1:H:246:TYR:CD1	1:H:258:VAL:CB	2.70	0.58
1:E:119:GLU:HB2	1:E:121:PRO:CD	2.34	0.58
1:E:419:ARG:N	1:E:420:PRO:HD3	2.04	0.58
1:A:206:TRP:C	1:A:206:TRP:CD1	2.76	0.58
1:F:480:LYS:CE	1:F:527:GLU:HB2	2.33	0.58
1:D:316:ASN:O	1:D:317:MET:CB	2.51	0.58
1:G:43:ILE:HA	1:G:94:LEU:O	2.02	0.58
1:A:504:GLY:N	1:B:662:CYS:SG	2.77	0.58
1:C:423:TYR:CD2	1:C:424:THR:HG23	2.38	0.58
1:B:480:LYS:NZ	1:B:527:GLU:HB2	2.19	0.58
1:B:484:ASP:C	1:B:486:PHE:N	2.56	0.58
1:A:222:PHE:CD2	1:A:255:PHE:CD2	2.92	0.58
1:F:220:ARG:NH1	1:F:223:LEU:CD2	2.65	0.58
1:B:206:TRP:CD1	1:B:206:TRP:C	2.77	0.58
1:E:357:SER:HA	1:E:453:THR:HB	1.85	0.58
1:E:131:SER:O	1:E:134:ARG:HB3	2.03	0.58
1:B:387:ILE:HG21	1:B:450:GLY:CA	2.31	0.58
1:B:43:ILE:HA	1:B:94:LEU:O	2.03	0.58
1:D:387:ILE:CD1	1:D:449:GLN:HG3	2.32	0.58
1:E:368:THR:HA	1:E:371:VAL:CG2	2.31	0.58
1:A:50:LEU:H	1:A:55:ARG:HD3	1.68	0.58
1:C:350:GLU:HA	1:C:391:ASP:OD2	2.03	0.58
1:E:183:VAL:HG12	1:E:184:GLY:N	2.19	0.58
1:B:531:GLN:O	1:B:535:ASP:N	2.36	0.58
1:B:183:VAL:HG12	1:B:184:GLY:N	2.19	0.58
1:D:120:GLY:HA2	1:D:123:ARG:HB2	1.85	0.58
1:D:437:ILE:HG13	1:D:594:LEU:HD12	1.85	0.58
1:E:500:GLN:HB3	1:E:505:ILE:CG1	2.33	0.58
1:E:243:ILE:N	1:E:245:VAL:HG23	2.19	0.58
1:A:120:GLY:HA2	1:A:123:ARG:H	1.68	0.58
1:A:416:ASP:CG	1:A:417:PRO:HD3	2.24	0.58
1:E:394:LYS:CG	1:E:613:SER:HB2	2.32	0.58
1:G:315:MET:HB3	1:G:387:ILE:HA	1.85	0.58
1:H:350:GLU:HA	1:H:391:ASP:OD2	2.03	0.58
1:E:72:ASN:H	1:E:163:LYS:HE2	1.67	0.58
1:C:116:GLY:N	1:C:217:THR:O	2.36	0.58
1:C:570:LEU:HD23	1:C:590:MET:HG2	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:587:SER:OG	1:C:588:ASN:N	2.31	0.58
1:E:654:LEU:HD21	1:F:654:LEU:HD23	1.86	0.58
1:E:659:LYS:HG2	1:F:500:GLN:HE22	1.68	0.58
1:B:434:TRP:CZ3	1:B:568:ARG:HG3	2.39	0.58
1:G:118:LYS:CG	1:G:265:LEU:HA	2.33	0.58
1:G:265:LEU:HD23	1:G:269:LEU:HB3	1.85	0.58
1:E:263:ASN:ND2	1:E:265:LEU:N	2.51	0.58
1:F:249:LEU:HD23	1:F:252:ALA:CA	2.24	0.58
1:G:247:ASP:HB2	1:G:255:PHE:O	2.04	0.58
1:H:222:PHE:CZ	1:H:225:ASN:HB2	2.38	0.58
1:H:285:GLN:NE2	1:H:286:ARG:HH12	2.02	0.58
1:G:441:LYS:HB2	1:G:560:LEU:CD2	2.34	0.58
1:D:276:TRP:CE3	1:D:277:LEU:HD23	2.39	0.58
1:B:570:LEU:HB3	1:B:590:MET:CE	2.34	0.58
1:H:582:ARG:CD	1:H:582:ARG:H	2.17	0.58
1:G:587:SER:OG	1:G:588:ASN:N	2.37	0.58
1:A:260:PRO:CB	1:A:273:LEU:HD13	2.33	0.58
1:B:191:PRO:HG3	1:B:234:LYS:NZ	2.19	0.58
1:E:220:ARG:HH12	1:E:223:LEU:CD2	2.17	0.58
1:E:249:LEU:O	1:E:250:THR:HG23	2.04	0.58
1:F:434:TRP:HZ3	1:F:568:ARG:CG	2.17	0.58
1:H:387:ILE:HD12	1:H:450:GLY:HA2	1.84	0.58
1:G:182:PHE:CE1	1:G:194:LEU:HD22	2.39	0.58
1:E:409:SER:HB3	1:E:412:ILE:HD12	1.85	0.58
1:F:276:TRP:CE3	1:F:277:LEU:HD23	2.38	0.58
1:F:433:ILE:CG2	1:F:571:TYR:OH	2.52	0.58
1:G:220:ARG:NH1	1:G:223:LEU:CD2	2.67	0.58
1:C:146:LEU:HA	1:C:150:ASN:HD21	1.69	0.58
1:A:580:ASP:HB3	1:D:579:ARG:HH22	1.69	0.58
1:C:387:ILE:HD12	1:C:450:GLY:HA2	1.84	0.58
1:C:531:GLN:O	1:C:535:ASP:N	2.36	0.58
1:B:478:GLN:CG	1:B:479:LEU:N	2.66	0.57
1:C:220:ARG:HH12	1:C:223:LEU:CD2	2.16	0.57
1:C:409:SER:HB3	1:C:412:ILE:HD12	1.84	0.57
1:B:222:PHE:CZ	1:B:225:ASN:HB2	2.38	0.57
1:B:434:TRP:HZ3	1:B:568:ARG:CG	2.17	0.57
1:B:587:SER:OG	1:B:588:ASN:N	2.35	0.57
1:H:437:ILE:CG2	1:H:564:GLU:HB2	2.34	0.57
1:G:119:GLU:CB	1:G:121:PRO:CD	2.82	0.57
1:A:263:ASN:ND2	1:A:265:LEU:N	2.52	0.57
1:H:146:LEU:HA	1:H:150:ASN:HD21	1.68	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:222:PHE:CD2	1:F:255:PHE:CD2	2.91	0.57
1:C:478:GLN:CG	1:C:479:LEU:N	2.67	0.57
1:D:476:CYS:HB2	1:D:636:MET:SD	2.43	0.57
1:H:105:ARG:O	1:H:106:LYS:C	2.42	0.57
1:E:527:GLU:HG2	1:E:530:VAL:HG13	1.86	0.57
1:A:480:LYS:NZ	1:A:527:GLU:HB2	2.19	0.57
1:H:472:MET:O	1:H:472:MET:HG3	2.04	0.57
1:A:484:ASP:C	1:A:486:PHE:N	2.56	0.57
1:C:118:LYS:HD3	1:C:265:LEU:HD12	1.85	0.57
1:C:116:GLY:HA2	1:C:217:THR:O	2.04	0.57
1:D:213:PHE:O	1:D:216:ILE:N	2.37	0.57
1:D:434:TRP:HZ3	1:D:568:ARG:CG	2.16	0.57
1:G:120:GLY:HA2	1:G:123:ARG:H	1.69	0.57
1:A:437:ILE:HG13	1:A:594:LEU:HD12	1.86	0.57
1:E:426:LEU:HB2	1:E:574:LEU:HD21	1.85	0.57
1:G:249:LEU:O	1:G:250:THR:HG23	2.05	0.57
1:H:265:LEU:HD23	1:H:269:LEU:HB3	1.85	0.57
1:B:660:ILE:HG23	1:B:661:ALA:N	2.18	0.57
1:G:171:LYS:HD2	1:G:177:GLU:HG2	1.85	0.57
1:H:447:LEU:HD12	1:H:605:VAL:HG22	1.85	0.57
1:G:362:ASN:C	1:G:364:ALA:H	2.06	0.57
1:H:362:ASN:C	1:H:364:ALA:H	2.07	0.57
1:B:644:VAL:HG12	1:B:644:VAL:O	2.03	0.57
1:D:105:ARG:HG3	1:D:105:ARG:HH11	1.69	0.57
1:E:666:ARG:HH11	1:F:502:GLU:HG3	1.68	0.57
1:B:115:CYS:CB	1:B:435:GLN:HG3	2.33	0.57
1:E:107:TYR:HD1	1:E:153:LEU:HD12	1.69	0.57
1:F:118:LYS:HD3	1:F:265:LEU:HD12	1.85	0.57
1:H:315:MET:HB3	1:H:387:ILE:HA	1.85	0.57
1:F:637:ARG:O	1:F:641:LYS:N	2.31	0.57
1:C:492:ILE:CD1	1:D:651:GLN:HE21	2.10	0.57
1:D:285:GLN:NE2	1:D:286:ARG:HH12	2.01	0.57
1:G:143:HIS:CD2	1:G:145:ASP:O	2.54	0.57
1:C:661:ALA:O	1:D:661:ALA:O	2.21	0.57
1:D:362:ASN:C	1:D:364:ALA:H	2.07	0.57
1:C:655:TRP:NE1	1:D:496:LYS:CB	2.45	0.57
1:C:666:ARG:HD2	1:D:503:PHE:CD1	2.39	0.57
1:B:478:GLN:HE21	1:B:479:LEU:HD23	1.69	0.57
1:C:105:ARG:HG3	1:C:105:ARG:HH11	1.68	0.57
1:C:276:TRP:CE3	1:C:277:LEU:HD23	2.39	0.57
1:D:120:GLY:HA2	1:D:123:ARG:H	1.70	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:115:CYS:SG	1:D:432:GLN:HA	2.45	0.57
1:A:105:ARG:HG2	1:A:109:ASN:HD21	1.67	0.57
1:H:120:GLY:HA2	1:H:123:ARG:H	1.68	0.57
1:H:274:GLU:O	1:H:278:GLN:HB2	2.05	0.57
1:F:134:ARG:HD2	1:F:300:PHE:CE1	2.39	0.57
1:B:315:MET:HB3	1:B:387:ILE:HA	1.85	0.57
1:A:30:LEU:HD13	1:A:32:TRP:NE1	2.19	0.57
1:F:83:LEU:HD21	1:F:86:LEU:HD11	1.85	0.57
1:G:30:LEU:HD13	1:G:32:TRP:NE1	2.20	0.57
1:E:492:ILE:HG23	1:F:651:GLN:NE2	2.17	0.57
1:A:316:ASN:O	1:A:317:MET:CB	2.51	0.57
1:D:423:TYR:CD2	1:D:424:THR:HG23	2.38	0.57
1:H:83:LEU:HD21	1:H:86:LEU:HD11	1.85	0.57
1:A:651:GLN:NE2	1:B:492:ILE:CG2	2.67	0.57
1:C:224:PRO:HG2	1:C:255:PHE:HE2	1.67	0.57
1:D:438:ARG:HG2	1:D:564:GLU:OE1	2.05	0.57
1:G:105:ARG:O	1:G:106:LYS:C	2.40	0.57
1:E:229:VAL:HG13	1:H:229:VAL:CG1	2.29	0.57
1:C:484:ASP:C	1:C:486:PHE:N	2.56	0.57
1:E:632:VAL:C	1:E:633:MET:SD	2.83	0.57
1:E:316:ASN:O	1:E:317:MET:HB2	2.04	0.57
1:D:171:LYS:HD2	1:D:177:GLU:HG2	1.87	0.57
1:A:315:MET:HB3	1:A:387:ILE:HA	1.86	0.57
1:C:120:GLY:HA2	1:C:123:ARG:H	1.69	0.57
1:A:119:GLU:CB	1:A:121:PRO:CD	2.81	0.57
1:A:115:CYS:HB2	1:A:435:GLN:HG3	1.85	0.57
1:H:107:TYR:HA	1:H:110:GLN:HB2	1.86	0.57
1:E:480:LYS:HZ2	1:E:525:GLY:C	2.08	0.57
1:B:105:ARG:HG3	1:B:105:ARG:HH11	1.69	0.57
1:A:563:LEU:HD23	1:A:597:ALA:HB2	1.85	0.57
1:A:200:THR:O	1:A:201:VAL:C	2.43	0.57
1:C:472:MET:O	1:C:472:MET:HG3	2.04	0.57
1:B:480:LYS:CE	1:B:527:GLU:HB2	2.35	0.57
1:C:120:GLY:HA2	1:C:123:ARG:HB2	1.85	0.57
1:G:117:LEU:O	1:G:119:GLU:HG2	2.04	0.57
1:A:119:GLU:HB2	1:A:121:PRO:CD	2.35	0.57
1:E:115:CYS:O	1:E:263:ASN:HA	2.05	0.57
1:F:434:TRP:HZ3	1:F:568:ARG:CA	2.16	0.57
1:E:473:THR:CG2	1:E:533:LEU:HD21	2.33	0.57
1:F:478:GLN:CG	1:F:479:LEU:N	2.67	0.57
1:B:198:LYS:C	1:B:200:THR:H	2.08	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:570:LEU:HD23	1:D:590:MET:CG	2.32	0.57
1:E:189:LEU:CG	1:E:190:ALA:N	2.64	0.57
1:E:262:PRO:HB3	1:E:409:SER:HG	1.69	0.57
1:E:434:TRP:HZ3	1:E:568:ARG:HG3	1.68	0.57
1:G:285:GLN:NE2	1:G:286:ARG:HH12	2.02	0.57
1:D:536:LYS:O	1:D:625:LEU:CD1	2.45	0.57
1:C:338:SER:OG	1:E:284:HIS:HE1	1.88	0.57
1:C:319:SER:O	1:C:321:ARG:N	2.34	0.57
1:F:350:GLU:HA	1:F:391:ASP:OD2	2.04	0.57
1:C:271:GLY:HA2	1:C:275:ARG:HH21	1.70	0.57
1:B:438:ARG:HG2	1:B:564:GLU:OE1	2.05	0.57
1:E:274:GLU:O	1:E:278:GLN:HB2	2.05	0.57
1:D:478:GLN:CG	1:D:479:LEU:N	2.68	0.57
1:B:319:SER:O	1:B:321:ARG:N	2.34	0.57
1:B:387:ILE:CD1	1:B:450:GLY:N	2.68	0.57
1:D:387:ILE:HD12	1:D:450:GLY:CA	2.35	0.57
1:H:171:LYS:HD2	1:H:177:GLU:HG2	1.86	0.57
1:G:50:LEU:H	1:G:55:ARG:HD3	1.70	0.57
1:H:50:LEU:H	1:H:55:ARG:HD3	1.69	0.57
1:F:362:ASN:C	1:F:364:ALA:H	2.08	0.57
1:B:118:LYS:HG2	1:B:265:LEU:HA	1.87	0.57
1:B:285:GLN:NE2	1:B:286:ARG:HH12	2.03	0.57
1:A:231:TRP:HE3	1:D:236:ARG:NH2	1.98	0.57
1:G:108:LEU:HD21	1:G:215:CYS:SG	2.45	0.57
1:A:103:ASP:HB3	1:A:106:LYS:HG3	1.87	0.57
1:A:265:LEU:HD23	1:A:269:LEU:HB3	1.86	0.57
1:E:120:GLY:HA2	1:E:123:ARG:HB2	1.87	0.57
1:F:249:LEU:O	1:F:250:THR:HG23	2.05	0.57
1:F:243:ILE:N	1:F:245:VAL:HG23	2.19	0.57
1:H:131:SER:O	1:H:134:ARG:HB3	2.05	0.57
1:F:517:MET:SD	1:F:650:ARG:HG3	2.45	0.57
1:B:540:LEU:CD2	1:B:621:LYS:HZ1	2.18	0.57
1:G:130:SER:O	1:G:300:PHE:HE1	1.88	0.57
1:D:386:LEU:H	1:D:386:LEU:CD1	2.18	0.57
1:E:333:LEU:HD11	1:E:353:LEU:HD13	1.86	0.57
1:H:333:LEU:HD11	1:H:353:LEU:HD13	1.87	0.57
1:A:373:ASP:C	1:A:374:CYS:SG	2.83	0.57
1:B:490:ILE:O	1:B:490:ILE:HG23	2.04	0.57
1:A:247:ASP:HB2	1:A:255:PHE:O	2.06	0.56
1:C:415:GLN:NE2	1:C:429:VAL:HG11	2.20	0.56
1:E:655:TRP:NE1	1:F:496:LYS:CB	2.37	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:570:LEU:CB	1:H:590:MET:HE2	2.35	0.56
1:A:570:LEU:HD23	1:A:590:MET:CG	2.34	0.56
1:F:434:TRP:CZ3	1:F:568:ARG:HG3	2.39	0.56
1:D:533:LEU:CD2	1:D:629:VAL:HG13	2.35	0.56
1:H:107:TYR:HD1	1:H:153:LEU:HD12	1.70	0.56
1:B:362:ASN:C	1:B:364:ALA:H	2.07	0.56
1:C:497:TYR:O	1:C:497:TYR:HD2	1.83	0.56
1:A:249:LEU:HA	1:A:253:VAL:O	2.05	0.56
1:C:103:ASP:HB3	1:C:106:LYS:HG3	1.87	0.56
1:C:107:TYR:O	1:C:110:GLN:CB	2.53	0.56
1:C:111:PHE:HZ	1:C:572:ARG:CG	2.08	0.56
1:C:117:LEU:O	1:C:119:GLU:HG2	2.04	0.56
1:D:249:LEU:HD23	1:D:252:ALA:CA	2.24	0.56
1:E:587:SER:OG	1:E:588:ASN:N	2.34	0.56
1:F:125:LEU:HD21	1:F:215:CYS:SG	2.45	0.56
1:F:213:PHE:O	1:F:216:ILE:N	2.38	0.56
1:G:249:LEU:HA	1:G:253:VAL:O	2.05	0.56
1:C:536:LYS:HB3	1:C:625:LEU:CD1	2.14	0.56
1:A:189:LEU:CG	1:A:190:ALA:N	2.64	0.56
1:B:368:THR:HA	1:B:371:VAL:CG2	2.32	0.56
1:G:423:TYR:CD2	1:G:424:THR:HG23	2.40	0.56
1:F:182:PHE:CE1	1:F:194:LEU:HD22	2.40	0.56
1:F:490:ILE:HG23	1:F:490:ILE:O	2.05	0.56
1:C:105:ARG:HG2	1:C:109:ASN:HD21	1.70	0.56
1:C:107:TYR:HD1	1:C:153:LEU:HD12	1.70	0.56
1:C:222:PHE:CD2	1:C:224:PRO:O	2.59	0.56
1:D:105:ARG:HG2	1:D:109:ASN:HD21	1.69	0.56
1:B:224:PRO:HG2	1:B:255:PHE:HE2	1.69	0.56
1:G:274:GLU:O	1:G:278:GLN:HB2	2.05	0.56
1:E:260:PRO:CB	1:E:273:LEU:HD13	2.35	0.56
1:F:247:ASP:HB2	1:F:255:PHE:O	2.05	0.56
1:F:422:THR:HB	1:F:585:GLY:HA3	1.84	0.56
1:H:249:LEU:HD23	1:H:252:ALA:CA	2.27	0.56
1:C:243:ILE:N	1:C:245:VAL:HG23	2.20	0.56
1:C:451:GLN:CD	1:C:611:GLN:NE2	2.59	0.56
1:E:478:GLN:HE21	1:E:479:LEU:HD23	1.70	0.56
1:F:472:MET:SD	1:F:633:MET:HB2	2.45	0.56
1:F:319:SER:O	1:F:321:ARG:N	2.35	0.56
1:F:536:LYS:O	1:F:625:LEU:HD13	2.05	0.56
1:A:540:LEU:HD11	1:A:622:ALA:HB2	1.86	0.56
1:D:30:LEU:HD13	1:D:32:TRP:NE1	2.21	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:30:LEU:HD13	1:F:32:TRP:NE1	2.20	0.56
1:D:315:MET:HB3	1:D:387:ILE:HA	1.86	0.56
1:D:198:LYS:HG2	1:D:284:HIS:HA	1.87	0.56
1:C:373:ASP:CG	1:C:374:CYS:SG	2.83	0.56
1:C:183:VAL:HG12	1:C:184:GLY:N	2.20	0.56
1:E:490:ILE:HG23	1:E:490:ILE:O	2.03	0.56
1:E:531:GLN:O	1:E:535:ASP:N	2.35	0.56
1:E:362:ASN:C	1:E:364:ALA:H	2.09	0.56
1:C:222:PHE:CD2	1:C:255:PHE:CD2	2.93	0.56
1:C:430:TRP:CE3	1:C:574:LEU:HD22	2.40	0.56
1:C:433:ILE:CB	1:C:571:TYR:OH	2.53	0.56
1:D:262:PRO:HB3	1:D:409:SER:HG	1.65	0.56
1:B:262:PRO:CB	1:B:409:SER:OG	2.45	0.56
1:D:222:PHE:CD2	1:D:255:PHE:CD2	2.93	0.56
1:G:224:PRO:HG2	1:G:255:PHE:HE2	1.68	0.56
1:E:171:LYS:HD2	1:E:177:GLU:HG2	1.88	0.56
1:B:171:LYS:HD2	1:B:177:GLU:HG2	1.88	0.56
1:C:582:ARG:CD	1:C:582:ARG:H	2.19	0.56
1:F:389:LEU:HD11	1:F:454:SER:OG	2.05	0.56
1:B:451:GLN:NE2	1:B:608:ILE:O	2.38	0.56
1:B:472:MET:HG3	1:B:472:MET:O	2.05	0.56
1:C:496:LYS:HB2	1:D:655:TRP:HE1	0.43	0.56
1:A:249:LEU:HD23	1:A:252:ALA:CA	2.27	0.56
1:A:249:LEU:O	1:A:250:THR:HG23	2.05	0.56
1:C:107:TYR:HA	1:C:110:GLN:HB2	1.87	0.56
1:A:438:ARG:HG2	1:A:564:GLU:HG3	1.86	0.56
1:E:107:TYR:HA	1:E:110:GLN:HB2	1.88	0.56
1:C:485:PHE:CE2	1:D:485:PHE:HB2	2.37	0.56
1:B:107:TYR:HA	1:B:110:GLN:HB2	1.87	0.56
1:A:527:GLU:C	1:A:529:GLU:N	2.55	0.56
1:H:531:GLN:O	1:H:535:ASP:N	2.35	0.56
1:D:540:LEU:CD1	1:D:622:ALA:HB2	2.36	0.56
1:B:521:VAL:CG1	1:B:643:VAL:CG1	2.78	0.56
1:C:265:LEU:HD21	1:C:269:LEU:HB3	1.87	0.56
1:F:119:GLU:HB2	1:F:121:PRO:CD	2.36	0.56
1:E:480:LYS:NZ	1:E:525:GLY:C	2.59	0.56
1:E:521:VAL:HA	1:E:524:CYS:HG	1.67	0.56
1:G:473:THR:HG21	1:G:629:VAL:HG13	1.87	0.56
1:G:472:MET:CG	1:G:633:MET:HB2	2.35	0.56
1:E:30:LEU:HD13	1:E:32:TRP:NE1	2.20	0.56
1:E:62:ILE:HG23	1:E:94:LEU:HD13	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:357:SER:HB3	1:D:453:THR:HB	1.86	0.56
1:A:28:TYR:HD2	1:A:45:GLN:HE21	1.54	0.56
1:D:198:LYS:C	1:D:200:THR:H	2.08	0.56
1:B:200:THR:O	1:B:201:VAL:C	2.43	0.56
1:A:183:VAL:HG12	1:A:184:GLY:N	2.20	0.56
1:B:632:VAL:C	1:B:633:MET:SD	2.84	0.56
1:B:119:GLU:HB2	1:B:121:PRO:CD	2.35	0.56
1:G:105:ARG:HG3	1:G:105:ARG:HH11	1.70	0.56
1:G:263:ASN:ND2	1:G:265:LEU:N	2.53	0.56
1:H:224:PRO:HG2	1:H:255:PHE:HE2	1.70	0.56
1:G:190:ALA:HB3	1:G:203:VAL:HG22	1.88	0.56
1:H:387:ILE:HD12	1:H:450:GLY:N	2.21	0.56
1:A:171:LYS:HD2	1:A:177:GLU:HG2	1.86	0.56
1:D:368:THR:HA	1:D:371:VAL:CG2	2.32	0.56
1:C:540:LEU:HD12	1:C:622:ALA:HB2	1.87	0.56
1:D:200:THR:O	1:D:201:VAL:C	2.42	0.56
1:D:503:PHE:O	1:D:505:ILE:HG13	2.06	0.56
1:C:263:ASN:HD21	1:C:265:LEU:H	1.53	0.56
1:C:263:ASN:HD21	1:C:265:LEU:N	2.02	0.56
1:C:430:TRP:HB3	1:C:571:TYR:CD2	2.33	0.56
1:B:222:PHE:CD2	1:B:224:PRO:O	2.59	0.56
1:B:249:LEU:HD23	1:B:252:ALA:CA	2.28	0.56
1:G:430:TRP:HB3	1:G:571:TYR:HD2	1.71	0.56
1:E:276:TRP:CE3	1:E:277:LEU:HD23	2.40	0.56
1:C:547:LEU:HD13	1:C:615:THR:HG23	1.82	0.56
1:F:144:ARG:HD2	1:F:171:LYS:CB	2.36	0.56
1:F:171:LYS:HD2	1:F:177:GLU:HG2	1.86	0.56
1:B:626:SER:OG	1:B:627:PRO:HD3	2.05	0.56
1:D:274:GLU:O	1:D:278:GLN:HB2	2.06	0.56
1:B:429:VAL:HG12	1:B:430:TRP:HD1	1.70	0.56
1:F:107:TYR:HD1	1:F:153:LEU:HD12	1.70	0.56
1:F:274:GLU:O	1:F:278:GLN:HB2	2.06	0.56
1:D:484:ASP:C	1:D:486:PHE:N	2.58	0.56
1:H:104:LEU:HB3	1:H:148:PRO:O	2.05	0.56
1:H:117:LEU:O	1:H:119:GLU:HG2	2.05	0.56
1:E:315:MET:HB3	1:E:387:ILE:HA	1.88	0.56
1:F:131:SER:O	1:F:134:ARG:HB3	2.05	0.56
1:F:316:ASN:O	1:F:317:MET:HB2	2.06	0.56
1:G:18:LYS:HZ2	1:G:33:ILE:HG21	1.70	0.56
1:C:626:SER:OG	1:C:627:PRO:HD3	2.06	0.56
1:H:200:THR:O	1:H:201:VAL:C	2.44	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:626:SER:OG	1:D:627:PRO:HD3	2.06	0.56
1:B:362:ASN:O	1:B:364:ALA:N	2.39	0.56
1:A:362:ASN:C	1:A:364:ALA:H	2.09	0.56
1:C:274:GLU:O	1:C:278:GLN:HB2	2.06	0.56
1:E:655:TRP:CD1	1:F:496:LYS:HB2	2.37	0.56
1:H:433:ILE:HG21	1:H:571:TYR:OH	2.05	0.56
1:D:222:PHE:CD2	1:D:224:PRO:O	2.59	0.56
1:A:437:ILE:HG22	1:A:564:GLU:HB2	1.88	0.56
1:A:433:ILE:CB	1:A:571:TYR:OH	2.53	0.56
1:F:429:VAL:HG12	1:F:430:TRP:HD1	1.69	0.56
1:G:222:PHE:CD2	1:G:255:PHE:CD2	2.94	0.56
1:D:480:LYS:HE3	1:D:527:GLU:HB2	1.88	0.56
1:G:359:LEU:CA	1:G:460:ARG:HH12	2.11	0.56
1:B:320:GLY:O	1:B:321:ARG:C	2.45	0.56
1:G:319:SER:O	1:G:321:ARG:N	2.35	0.56
1:B:62:ILE:HG23	1:B:94:LEU:HD13	1.88	0.56
1:D:134:ARG:HB2	1:D:300:PHE:HE1	1.69	0.56
1:C:171:LYS:HD2	1:C:177:GLU:HG2	1.87	0.56
1:C:315:MET:HB3	1:C:387:ILE:HA	1.88	0.56
1:E:665:VAL:HG22	1:F:665:VAL:HG21	1.88	0.56
1:C:350:GLU:OE2	1:C:391:ASP:O	2.23	0.56
1:G:419:ARG:NH1	1:G:588:ASN:HA	2.21	0.55
1:A:116:GLY:N	1:A:217:THR:O	2.39	0.55
1:A:429:VAL:HG12	1:A:430:TRP:HD1	1.72	0.55
1:A:587:SER:OG	1:A:588:ASN:N	2.38	0.55
1:F:219:PHE:O	1:F:220:ARG:HG3	1.85	0.55
1:H:220:ARG:CB	1:H:221:PRO:HD2	2.35	0.55
1:A:547:LEU:CD1	1:A:615:THR:CG2	2.54	0.55
1:C:485:PHE:CD2	1:D:485:PHE:CG	2.94	0.55
1:D:26:PHE:CE2	1:D:181:GLU:OE1	2.55	0.55
1:E:478:GLN:CG	1:E:479:LEU:N	2.69	0.55
1:F:517:MET:HG3	1:F:646:ARG:NH1	2.13	0.55
1:B:316:ASN:O	1:B:317:MET:HB2	2.05	0.55
1:A:131:SER:O	1:A:134:ARG:HB3	2.06	0.55
1:G:386:LEU:CD1	1:G:386:LEU:H	2.20	0.55
1:D:499:GLU:C	1:D:500:GLN:HE21	2.10	0.55
1:C:262:PRO:HB3	1:C:409:SER:HG	1.69	0.55
1:C:419:ARG:CA	1:C:587:SER:OG	2.51	0.55
1:D:265:LEU:HD21	1:D:269:LEU:HB3	1.87	0.55
1:D:263:ASN:ND2	1:D:265:LEU:N	2.54	0.55
1:B:220:ARG:NH1	1:B:223:LEU:CD2	2.70	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:263:ASN:ND2	1:B:265:LEU:N	2.54	0.55
1:D:220:ARG:CB	1:D:221:PRO:HD2	2.37	0.55
1:G:107:TYR:HD1	1:G:153:LEU:HD12	1.71	0.55
1:E:576:GLU:OE2	1:F:573:ARG:NH2	2.40	0.55
1:G:220:ARG:CB	1:G:221:PRO:HD2	2.37	0.55
1:H:222:PHE:CD2	1:H:224:PRO:O	2.60	0.55
1:C:455:MET:HE1	1:C:547:LEU:HB2	1.87	0.55
1:C:131:SER:O	1:C:134:ARG:HB3	2.06	0.55
1:D:320:GLY:O	1:D:321:ARG:C	2.45	0.55
1:F:582:ARG:CD	1:F:582:ARG:H	2.19	0.55
1:C:334:GLN:HA	1:C:337:LYS:HB2	1.87	0.55
1:B:89:ASN:HB3	1:B:91:LEU:H	1.72	0.55
1:D:183:VAL:HG12	1:D:184:GLY:N	2.21	0.55
1:A:478:GLN:HE21	1:A:479:LEU:HD23	1.71	0.55
1:E:503:PHE:C	1:E:505:ILE:H	2.09	0.55
1:G:429:VAL:HG12	1:G:430:TRP:HD1	1.69	0.55
1:G:570:LEU:HD23	1:G:590:MET:HG2	1.87	0.55
1:A:116:GLY:HA2	1:A:217:THR:O	2.07	0.55
1:H:191:PRO:HG3	1:H:234:LYS:NZ	2.22	0.55
1:D:517:MET:HG3	1:D:646:ARG:NH1	2.21	0.55
1:H:105:ARG:HG3	1:H:105:ARG:HH11	1.71	0.55
1:H:260:PRO:CG	1:H:274:GLU:HG2	2.36	0.55
1:B:316:ASN:O	1:B:317:MET:CB	2.55	0.55
1:C:368:THR:HA	1:C:371:VAL:CG2	2.31	0.55
1:C:502:GLU:HG3	1:D:666:ARG:HH12	1.70	0.55
1:A:386:LEU:CD1	1:A:386:LEU:H	2.19	0.55
1:B:28:TYR:HD2	1:B:45:GLN:HE21	1.53	0.55
1:H:183:VAL:HG12	1:H:184:GLY:N	2.21	0.55
1:D:490:ILE:HG23	1:D:490:ILE:O	2.06	0.55
1:C:249:LEU:HD23	1:C:252:ALA:CA	2.27	0.55
1:B:274:GLU:O	1:B:278:GLN:HB2	2.06	0.55
1:D:150:ASN:ND2	1:D:167:LEU:HD12	2.16	0.55
1:F:315:MET:HB3	1:F:387:ILE:HA	1.87	0.55
1:F:387:ILE:HG22	1:F:388:PHE:H	1.71	0.55
1:H:30:LEU:HD13	1:H:32:TRP:NE1	2.22	0.55
1:A:236:ARG:NH2	1:D:231:TRP:HE3	1.98	0.55
1:D:472:MET:O	1:D:472:MET:HG3	2.06	0.55
1:C:362:ASN:O	1:C:364:ALA:N	2.40	0.55
1:A:198:LYS:C	1:A:200:THR:H	2.10	0.55
1:D:422:THR:CB	1:D:585:GLY:C	2.74	0.55
1:B:570:LEU:HB3	1:B:590:MET:HE3	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:430:TRP:CE3	1:H:574:LEU:HD22	2.42	0.55
1:D:249:LEU:O	1:D:250:THR:HG23	2.07	0.55
1:G:433:ILE:HB	1:G:571:TYR:CZ	2.42	0.55
1:A:120:GLY:N	1:A:122:ILE:H	2.05	0.55
1:E:187:GLN:CB	1:E:223:LEU:CD2	2.71	0.55
1:E:265:LEU:HD23	1:E:269:LEU:HB3	1.88	0.55
1:F:104:LEU:HB3	1:F:148:PRO:O	2.07	0.55
1:F:285:GLN:NE2	1:F:286:ARG:HH12	2.04	0.55
1:H:249:LEU:O	1:H:250:THR:HG23	2.06	0.55
1:C:641:LYS:HB3	1:C:645:ARG:NH2	2.16	0.55
1:D:206:TRP:CD1	1:D:206:TRP:C	2.78	0.55
1:A:632:VAL:C	1:A:633:MET:SD	2.85	0.55
1:C:30:LEU:HD13	1:C:32:TRP:NE1	2.20	0.55
1:E:200:THR:O	1:E:201:VAL:C	2.45	0.55
1:C:182:PHE:CE1	1:C:194:LEU:HD22	2.41	0.55
1:C:260:PRO:CG	1:C:274:GLU:HG2	2.37	0.55
1:G:107:TYR:HA	1:G:110:GLN:HB2	1.89	0.55
1:A:422:THR:HB	1:A:585:GLY:C	2.27	0.55
1:D:243:ILE:N	1:D:245:VAL:HG23	2.22	0.55
1:C:235:VAL:CB	1:C:243:ILE:HA	2.36	0.55
1:C:478:GLN:HE21	1:C:479:LEU:HD23	1.71	0.55
1:H:263:ASN:ND2	1:H:265:LEU:N	2.54	0.55
1:H:387:ILE:HD12	1:H:450:GLY:CA	2.37	0.55
1:F:478:GLN:HE21	1:F:479:LEU:HD23	1.72	0.55
1:F:472:MET:HG3	1:F:472:MET:O	2.07	0.55
1:B:107:TYR:O	1:B:110:GLN:CB	2.55	0.55
1:A:134:ARG:CA	1:A:300:PHE:CZ	2.84	0.55
1:B:144:ARG:HD2	1:B:171:LYS:CB	2.36	0.55
1:H:345:GLY:O	1:H:347:PRO:HD3	2.06	0.55
1:C:89:ASN:HB3	1:C:91:LEU:H	1.72	0.55
1:B:497:TYR:CE2	1:B:511:LEU:HD22	2.42	0.55
1:E:107:TYR:O	1:E:110:GLN:CB	2.54	0.55
1:E:224:PRO:HG2	1:E:255:PHE:HE2	1.71	0.55
1:F:222:PHE:CZ	1:F:225:ASN:HB2	2.40	0.55
1:H:247:ASP:HB2	1:H:255:PHE:O	2.07	0.55
1:A:191:PRO:HG3	1:A:234:LYS:NZ	2.21	0.55
1:C:478:GLN:OE1	1:D:481:ALA:CB	2.55	0.55
1:C:647:GLN:OE1	1:C:647:GLN:CA	2.55	0.55
1:D:478:GLN:HE21	1:D:479:LEU:HD23	1.72	0.55
1:H:449:GLN:HA	1:H:449:GLN:OE1	2.06	0.55
1:F:644:VAL:HG12	1:F:644:VAL:O	2.07	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:297:VAL:HB	1:E:301:GLN:H	1.72	0.55
1:C:633:MET:N	1:C:633:MET:SD	2.80	0.55
1:H:282:MET:HA	1:H:282:MET:HE2	1.88	0.55
1:A:62:ILE:HG23	1:A:94:LEU:HD13	1.89	0.55
1:B:30:LEU:HD13	1:B:32:TRP:NE1	2.21	0.55
1:B:660:ILE:O	1:B:662:CYS:N	2.40	0.55
1:C:28:TYR:HD2	1:C:45:GLN:HE21	1.53	0.55
1:D:443:ASP:O	1:D:446:ARG:HB2	2.05	0.55
1:E:89:ASN:HB3	1:E:91:LEU:H	1.72	0.55
1:D:157:PRO:HD2	1:D:161:ILE:HD11	1.89	0.55
1:C:490:ILE:O	1:C:490:ILE:HG23	2.07	0.55
1:C:499:GLU:C	1:C:500:GLN:HE21	2.10	0.55
1:B:120:GLY:N	1:B:122:ILE:H	2.05	0.55
1:B:433:ILE:CG2	1:B:571:TYR:OH	2.55	0.55
1:A:570:LEU:HB3	1:A:590:MET:HE2	1.86	0.55
1:B:243:ILE:N	1:B:245:VAL:HG23	2.21	0.55
1:F:103:ASP:HB3	1:F:106:LYS:HG3	1.89	0.55
1:G:104:LEU:HB3	1:G:148:PRO:O	2.07	0.55
1:E:285:GLN:NE2	1:E:286:ARG:HH12	2.05	0.55
1:B:131:SER:O	1:B:134:ARG:HB3	2.07	0.55
1:H:28:TYR:HD2	1:H:45:GLN:HE21	1.54	0.55
1:E:386:LEU:H	1:E:386:LEU:CD1	2.20	0.55
1:A:507:SER:C	1:A:509:LYS:H	2.10	0.55
1:E:626:SER:OG	1:E:627:PRO:HD3	2.07	0.55
1:A:521:VAL:HA	1:A:524:CYS:HG	1.69	0.55
1:A:220:ARG:CB	1:A:221:PRO:HD2	2.36	0.55
1:B:120:GLY:CA	1:B:123:ARG:H	2.19	0.55
1:E:373:ASP:C	1:E:374:CYS:SG	2.85	0.55
1:E:430:TRP:CE3	1:E:574:LEU:HD22	2.42	0.55
1:F:107:TYR:HA	1:F:110:GLN:HB2	1.89	0.55
1:F:265:LEU:HD23	1:F:269:LEU:HB3	1.88	0.55
1:B:107:TYR:HD1	1:B:153:LEU:HD12	1.70	0.55
1:C:529:GLU:HG3	1:C:633:MET:HE1	1.89	0.55
1:C:651:GLN:NE2	1:D:492:ILE:HG21	2.20	0.55
1:F:316:ASN:O	1:F:317:MET:CB	2.55	0.55
1:F:320:GLY:O	1:F:321:ARG:C	2.44	0.55
1:G:144:ARG:HD2	1:G:171:LYS:CB	2.37	0.55
1:G:131:SER:O	1:G:134:ARG:HB3	2.07	0.55
1:D:362:ASN:O	1:D:364:ALA:N	2.40	0.55
1:B:157:PRO:HD2	1:B:161:ILE:HD11	1.88	0.55
1:D:448:LEU:HD23	1:D:608:ILE:HG12	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:100:GLU:H	1:A:154:GLN:HG3	1.72	0.55
1:A:100:GLU:N	1:A:154:GLN:HG3	2.21	0.55
1:D:265:LEU:HD23	1:D:269:LEU:HB3	1.87	0.55
1:B:438:ARG:CG	1:B:564:GLU:HG3	2.35	0.55
1:H:426:LEU:HB2	1:H:574:LEU:HD21	1.88	0.55
1:H:429:VAL:HG12	1:H:430:TRP:HD1	1.72	0.55
1:E:247:ASP:HB2	1:E:255:PHE:O	2.06	0.55
1:H:222:PHE:CD2	1:H:255:PHE:CD2	2.94	0.55
1:D:527:GLU:O	1:D:529:GLU:N	2.40	0.55
1:H:265:LEU:HD23	1:H:269:LEU:CB	2.37	0.55
1:E:18:LYS:HZ2	1:E:33:ILE:HG21	1.72	0.55
1:E:193:LEU:HD22	1:E:231:TRP:CD1	2.41	0.55
1:F:28:TYR:HD2	1:F:45:GLN:HE21	1.54	0.55
1:G:89:ASN:HB3	1:G:91:LEU:H	1.72	0.55
1:H:564:GLU:OE2	1:H:568:ARG:NH2	2.41	0.54
1:B:499:GLU:C	1:B:500:GLN:HE21	2.10	0.54
1:F:148:PRO:HD3	1:F:188:TYR:CZ	2.42	0.54
1:H:119:GLU:HB2	1:H:121:PRO:CD	2.36	0.54
1:G:632:VAL:C	1:G:633:MET:SD	2.86	0.54
1:E:28:TYR:HD2	1:E:45:GLN:HE21	1.54	0.54
1:H:386:LEU:CD1	1:H:386:LEU:H	2.20	0.54
1:D:350:GLU:OE2	1:D:391:ASP:O	2.26	0.54
1:H:89:ASN:HB3	1:H:91:LEU:H	1.72	0.54
1:B:616:VAL:HG13	1:B:619:LYS:HD2	1.88	0.54
1:G:183:VAL:HG12	1:G:184:GLY:N	2.20	0.54
1:F:200:THR:O	1:F:201:VAL:C	2.44	0.54
1:C:666:ARG:CG	1:D:503:PHE:CE1	2.90	0.54
1:C:224:PRO:HG3	1:C:428:ARG:HH22	1.73	0.54
1:C:434:TRP:CZ3	1:C:568:ARG:CA	2.82	0.54
1:D:107:TYR:HD1	1:D:153:LEU:HD12	1.69	0.54
1:B:249:LEU:O	1:B:250:THR:HG23	2.06	0.54
1:B:265:LEU:HD21	1:B:269:LEU:HB3	1.89	0.54
1:A:235:VAL:CB	1:A:243:ILE:HA	2.37	0.54
1:C:26:PHE:CE2	1:C:179:CYS:HB3	2.40	0.54
1:D:475:GLU:CD	1:D:636:MET:HE1	2.28	0.54
1:F:632:VAL:C	1:F:633:MET:SD	2.86	0.54
1:C:658:LEU:HA	1:D:658:LEU:HD12	1.90	0.54
1:D:514:TRP:O	1:D:518:GLU:HG3	2.06	0.54
1:D:587:SER:OG	1:D:588:ASN:N	2.36	0.54
1:D:220:ARG:NH1	1:D:223:LEU:CD2	2.69	0.54
1:A:274:GLU:O	1:A:278:GLN:HB2	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:150:ASN:N	1:H:150:ASN:OD1	2.33	0.54
1:E:148:PRO:HD3	1:E:188:TYR:CZ	2.42	0.54
1:E:263:ASN:HD21	1:E:265:LEU:N	2.05	0.54
1:E:373:ASP:CG	1:E:374:CYS:SG	2.85	0.54
1:E:540:LEU:HD12	1:E:622:ALA:HB2	1.81	0.54
1:E:449:GLN:OE1	1:E:449:GLN:HA	2.08	0.54
1:B:297:VAL:HB	1:B:301:GLN:H	1.72	0.54
1:A:327:VAL:CG1	1:A:367:LEU:HB2	2.31	0.54
1:C:660:ILE:O	1:C:662:CYS:N	2.40	0.54
1:F:386:LEU:H	1:F:386:LEU:CD1	2.20	0.54
1:H:626:SER:OG	1:H:627:PRO:HD3	2.07	0.54
1:G:626:SER:OG	1:G:627:PRO:HD3	2.07	0.54
1:H:157:PRO:HD2	1:H:161:ILE:HD11	1.89	0.54
1:C:157:PRO:HD2	1:C:161:ILE:HD11	1.90	0.54
1:B:260:PRO:CG	1:B:274:GLU:HG2	2.37	0.54
1:A:105:ARG:HH11	1:A:105:ARG:HG3	1.71	0.54
1:A:570:LEU:CB	1:A:590:MET:CE	2.78	0.54
1:E:222:PHE:CD2	1:E:224:PRO:O	2.61	0.54
1:F:246:TYR:CD1	1:F:258:VAL:CB	2.71	0.54
1:C:637:ARG:O	1:C:641:LYS:HB2	2.08	0.54
1:H:449:GLN:NE2	1:H:453:THR:HG22	2.22	0.54
1:F:521:VAL:HG13	1:F:643:VAL:CG1	2.36	0.54
1:E:536:LYS:HB3	1:E:625:LEU:CD1	2.15	0.54
1:F:616:VAL:HG13	1:F:619:LYS:HD2	1.90	0.54
1:D:536:LYS:HB3	1:D:625:LEU:CD2	2.37	0.54
1:E:494:LEU:HD21	1:E:518:GLU:OE2	2.06	0.54
1:H:144:ARG:HD2	1:H:171:LYS:CB	2.38	0.54
1:G:362:ASN:O	1:G:364:ALA:N	2.40	0.54
1:C:497:TYR:HB2	1:D:655:TRP:HH2	1.72	0.54
1:E:507:SER:C	1:E:509:LYS:H	2.11	0.54
1:G:265:LEU:HD21	1:G:269:LEU:HB3	1.88	0.54
1:A:104:LEU:HB3	1:A:148:PRO:O	2.07	0.54
1:F:107:TYR:O	1:F:110:GLN:CB	2.55	0.54
1:C:486:PHE:HZ	1:C:517:MET:HE2	1.72	0.54
1:E:484:ASP:C	1:E:486:PHE:N	2.58	0.54
1:E:144:ARG:HD2	1:E:171:LYS:CB	2.38	0.54
1:C:144:ARG:HD2	1:C:171:LYS:CB	2.38	0.54
1:A:510:LEU:HD12	1:A:657:LEU:HD13	1.88	0.54
1:F:394:LYS:HE2	1:F:401:ILE:HA	1.88	0.54
1:H:362:ASN:O	1:H:364:ALA:N	2.41	0.54
1:F:89:ASN:HB3	1:F:91:LEU:H	1.73	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:641:LYS:HB3	1:B:645:ARG:NH2	2.13	0.54
1:C:419:ARG:N	1:C:420:PRO:HD3	2.04	0.54
1:D:104:LEU:HB3	1:D:148:PRO:O	2.08	0.54
1:D:429:VAL:HG12	1:D:430:TRP:HD1	1.72	0.54
1:D:426:LEU:HB2	1:D:574:LEU:HD21	1.89	0.54
1:B:117:LEU:O	1:B:119:GLU:HG2	2.07	0.54
1:B:501:MET:CA	1:B:505:ILE:CD1	2.85	0.54
1:G:119:GLU:HB2	1:G:121:PRO:CD	2.38	0.54
1:H:297:VAL:HB	1:H:301:GLN:H	1.73	0.54
1:F:641:LYS:HB3	1:F:645:ARG:NH2	2.15	0.54
1:C:297:VAL:HB	1:C:301:GLN:H	1.72	0.54
1:G:28:TYR:HD2	1:G:45:GLN:HE21	1.54	0.54
1:C:386:LEU:H	1:C:386:LEU:CD1	2.21	0.54
1:E:89:ASN:C	1:E:91:LEU:H	2.11	0.54
1:F:566:GLN:HG2	1:F:593:LEU:HD11	1.90	0.54
1:B:521:VAL:HG21	1:B:646:ARG:HD2	1.90	0.54
1:C:429:VAL:O	1:C:433:ILE:HG12	2.08	0.54
1:C:419:ARG:HA	1:C:587:SER:HB3	1.90	0.54
1:D:117:LEU:O	1:D:119:GLU:HG2	2.07	0.54
1:D:430:TRP:CB	1:D:571:TYR:CD2	2.90	0.54
1:H:571:TYR:CE2	1:H:590:MET:CG	2.91	0.54
1:A:433:ILE:HG21	1:A:571:TYR:OH	2.08	0.54
1:A:26:PHE:CE2	1:A:181:GLU:CD	2.81	0.54
1:E:387:ILE:HD11	1:E:449:GLN:CB	2.37	0.54
1:G:327:VAL:CG1	1:G:367:LEU:HB2	2.31	0.54
1:H:62:ILE:HG23	1:H:94:LEU:HD13	1.89	0.54
1:H:458:LEU:CD1	1:H:544:SER:HB2	2.37	0.54
1:A:68:LEU:HB3	1:A:135:TYR:HE2	1.72	0.54
1:C:148:PRO:HD3	1:C:188:TYR:CZ	2.42	0.54
1:E:233:GLY:C	1:E:235:VAL:H	2.12	0.54
1:A:260:PRO:CG	1:A:274:GLU:HG2	2.38	0.54
1:G:71:PRO:O	1:G:72:ASN:CB	2.55	0.54
1:D:614:LYS:O	1:D:617:VAL:HB	2.07	0.54
1:C:277:LEU:C	1:C:279:CYS:H	2.11	0.54
1:B:233:GLY:C	1:B:235:VAL:H	2.12	0.54
1:B:245:VAL:HG12	1:B:246:TYR:N	2.22	0.54
1:F:263:ASN:ND2	1:F:265:LEU:N	2.56	0.54
1:F:115:CYS:HB2	1:F:435:GLN:HG3	1.89	0.54
1:H:212:ALA:O	1:H:213:PHE:C	2.45	0.54
1:F:447:LEU:HD12	1:F:605:VAL:HG22	1.89	0.54
1:D:32:TRP:CD1	1:D:43:ILE:HD13	2.43	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:134:ARG:CA	1:D:300:PHE:HZ	2.17	0.54
1:D:144:ARG:HD2	1:D:171:LYS:CB	2.37	0.54
1:B:582:ARG:H	1:B:582:ARG:CD	2.20	0.54
1:C:71:PRO:O	1:C:72:ASN:CB	2.56	0.54
1:A:626:SER:OG	1:A:627:PRO:HD3	2.07	0.54
1:F:183:VAL:HG12	1:F:184:GLY:N	2.23	0.54
1:A:472:MET:HG3	1:A:472:MET:O	2.08	0.54
1:B:118:LYS:CG	1:B:265:LEU:HA	2.38	0.54
1:G:263:ASN:HD21	1:G:265:LEU:N	2.06	0.54
1:G:260:PRO:CG	1:G:274:GLU:HG2	2.38	0.54
1:G:430:TRP:CZ3	1:G:574:LEU:HD13	2.43	0.54
1:A:434:TRP:HZ3	1:A:568:ARG:CB	2.21	0.54
1:B:235:VAL:CB	1:B:243:ILE:HA	2.38	0.54
1:E:118:LYS:HD3	1:E:265:LEU:HD12	1.90	0.54
1:E:263:ASN:HD21	1:E:265:LEU:H	1.54	0.54
1:H:249:LEU:HA	1:H:253:VAL:O	2.07	0.54
1:B:614:LYS:O	1:B:617:VAL:HB	2.09	0.54
1:E:316:ASN:O	1:E:317:MET:CB	2.55	0.54
1:E:387:ILE:HG21	1:E:450:GLY:HA2	1.89	0.54
1:E:514:TRP:O	1:E:518:GLU:HG3	2.07	0.54
1:B:449:GLN:OE1	1:B:449:GLN:HA	2.07	0.54
1:C:89:ASN:C	1:C:91:LEU:H	2.11	0.54
1:E:616:VAL:HG13	1:E:619:LYS:HD2	1.90	0.54
1:C:500:GLN:CB	1:C:505:ILE:HG12	2.38	0.53
1:B:475:GLU:O	1:B:477:GLU:N	2.41	0.53
1:H:235:VAL:CB	1:H:243:ILE:HA	2.35	0.53
1:G:187:GLN:HB3	1:G:223:LEU:HD22	1.81	0.53
1:H:118:LYS:CG	1:H:265:LEU:HA	2.39	0.53
1:E:319:SER:O	1:E:321:ARG:N	2.35	0.53
1:D:190:ALA:HB2	1:D:206:TRP:CD1	2.43	0.53
1:B:357:SER:HB3	1:B:453:THR:HA	1.90	0.53
1:E:350:GLU:OE2	1:E:391:ASP:O	2.26	0.53
1:E:157:PRO:HD2	1:E:161:ILE:HD11	1.90	0.53
1:D:500:GLN:CB	1:D:505:ILE:HG12	2.38	0.53
1:D:107:TYR:O	1:D:110:GLN:CB	2.57	0.53
1:B:249:LEU:HA	1:B:253:VAL:O	2.08	0.53
1:G:438:ARG:HG2	1:G:564:GLU:CG	2.38	0.53
1:E:415:GLN:NE2	1:E:429:VAL:HG11	2.23	0.53
1:E:641:LYS:HB3	1:E:645:ARG:NH2	2.13	0.53
1:F:514:TRP:O	1:F:518:GLU:HG3	2.08	0.53
1:G:282:MET:HA	1:G:282:MET:HE2	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:472:MET:O	1:G:472:MET:HG3	2.08	0.53
1:G:449:GLN:NE2	1:G:453:THR:HG22	2.23	0.53
1:F:327:VAL:CG1	1:F:367:LEU:HB2	2.32	0.53
1:D:62:ILE:HG23	1:D:94:LEU:HD13	1.89	0.53
1:A:660:ILE:O	1:A:662:CYS:N	2.40	0.53
1:F:362:ASN:O	1:F:364:ALA:N	2.41	0.53
1:B:480:LYS:HE3	1:B:527:GLU:HB2	1.89	0.53
1:D:415:GLN:NE2	1:D:429:VAL:HG11	2.22	0.53
1:G:118:LYS:HB2	1:G:265:LEU:HD12	1.90	0.53
1:E:222:PHE:CD2	1:E:255:PHE:CD2	2.96	0.53
1:F:105:ARG:HH11	1:F:105:ARG:HG3	1.74	0.53
1:F:272:LYS:HG3	1:F:276:TRP:HB2	1.90	0.53
1:G:449:GLN:OE1	1:G:449:GLN:HA	2.07	0.53
1:E:658:LEU:CD1	1:F:658:LEU:HD12	2.33	0.53
1:C:62:ILE:HG23	1:C:94:LEU:HD13	1.89	0.53
1:A:582:ARG:CD	1:A:582:ARG:H	2.20	0.53
1:A:144:ARG:HD2	1:A:171:LYS:CB	2.38	0.53
1:B:359:LEU:HA	1:B:460:ARG:NH1	2.23	0.53
1:E:582:ARG:CD	1:E:582:ARG:H	2.20	0.53
1:B:649:LYS:HA	1:B:652:GLN:CB	2.39	0.53
1:H:89:ASN:C	1:H:91:LEU:H	2.12	0.53
1:C:616:VAL:HG13	1:C:619:LYS:HD2	1.90	0.53
1:D:616:VAL:HG13	1:D:619:LYS:HD2	1.90	0.53
1:C:496:LYS:C	1:D:655:TRP:HZ2	2.11	0.53
1:C:104:LEU:HB3	1:C:148:PRO:O	2.09	0.53
1:B:220:ARG:CB	1:B:221:PRO:HD2	2.39	0.53
1:B:222:PHE:CD2	1:B:255:PHE:CD2	2.96	0.53
1:E:235:VAL:CB	1:E:243:ILE:HA	2.38	0.53
1:A:107:TYR:HA	1:A:110:GLN:HB2	1.90	0.53
1:A:107:TYR:O	1:A:110:GLN:CB	2.57	0.53
1:A:119:GLU:HB2	1:A:121:PRO:HB2	1.90	0.53
1:E:118:LYS:NZ	1:E:123:ARG:HH12	2.06	0.53
1:E:564:GLU:OE2	1:E:568:ARG:NH2	2.41	0.53
1:A:245:VAL:HG12	1:A:246:TYR:N	2.22	0.53
1:D:644:VAL:HG12	1:D:644:VAL:O	2.08	0.53
1:H:319:SER:O	1:H:321:ARG:N	2.35	0.53
1:H:472:MET:SD	1:H:633:MET:CB	2.96	0.53
1:D:68:LEU:HB3	1:D:135:TYR:HE2	1.73	0.53
1:A:490:ILE:O	1:A:490:ILE:HG23	2.08	0.53
1:A:89:ASN:HB3	1:A:91:LEU:HB2	1.91	0.53
1:B:494:LEU:CD1	1:B:514:TRP:CB	2.85	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:190:ALA:HB2	1:H:206:TRP:CG	2.44	0.53
1:E:265:LEU:HD23	1:E:269:LEU:CB	2.38	0.53
1:E:429:VAL:HG12	1:E:430:TRP:HD1	1.73	0.53
1:F:226:TRP:CD1	1:F:227:GLN:HB3	2.44	0.53
1:F:260:PRO:CG	1:F:274:GLU:HG2	2.38	0.53
1:D:647:GLN:OE1	1:D:647:GLN:CA	2.57	0.53
1:H:118:LYS:HG2	1:H:265:LEU:HA	1.89	0.53
1:E:282:MET:HA	1:E:282:MET:HE2	1.90	0.53
1:F:32:TRP:CD1	1:F:43:ILE:HD13	2.43	0.53
1:A:71:PRO:O	1:A:72:ASN:CB	2.57	0.53
1:F:626:SER:OG	1:F:627:PRO:HD3	2.09	0.53
1:C:89:ASN:HB3	1:C:91:LEU:HB2	1.90	0.53
1:A:89:ASN:HB3	1:A:91:LEU:H	1.72	0.53
1:G:373:ASP:C	1:G:374:CYS:SG	2.87	0.53
1:B:656:ASN:OD1	1:B:656:ASN:C	2.46	0.53
1:F:157:PRO:HD2	1:F:161:ILE:HD11	1.89	0.53
1:C:507:SER:C	1:C:509:LYS:H	2.12	0.53
1:B:226:TRP:CD1	1:B:227:GLN:HB3	2.44	0.53
1:D:115:CYS:HB2	1:D:435:GLN:HG3	1.90	0.53
1:D:125:LEU:HD21	1:D:215:CYS:SG	2.49	0.53
1:F:499:GLU:C	1:F:500:GLN:HE21	2.12	0.53
1:B:263:ASN:HD21	1:B:265:LEU:H	1.56	0.53
1:G:564:GLU:OE2	1:G:568:ARG:NH2	2.41	0.53
1:A:265:LEU:HD21	1:A:269:LEU:HB3	1.90	0.53
1:G:249:LEU:HD23	1:G:252:ALA:CA	2.27	0.53
1:D:644:VAL:HA	1:D:647:GLN:NE2	2.18	0.53
1:B:113:ASN:HA	1:B:116:GLY:O	2.09	0.53
1:E:511:LEU:HG	1:E:515:ARG:CZ	2.38	0.53
1:G:387:ILE:HG22	1:G:388:PHE:H	1.72	0.53
1:A:297:VAL:HB	1:A:301:GLN:H	1.74	0.53
1:H:32:TRP:CD1	1:H:43:ILE:HD13	2.43	0.53
1:C:348:GLU:CD	1:C:348:GLU:H	2.11	0.53
1:E:362:ASN:O	1:E:364:ALA:N	2.42	0.53
1:B:229:VAL:CG1	1:C:229:VAL:HG13	2.32	0.53
1:B:277:LEU:C	1:B:279:CYS:H	2.12	0.53
1:E:226:TRP:CD1	1:E:227:GLN:HB3	2.44	0.53
1:F:150:ASN:N	1:F:150:ASN:OD1	2.39	0.53
1:D:641:LYS:HB3	1:D:645:ARG:NH2	2.13	0.53
1:F:642:ILE:HG12	1:F:645:ARG:CZ	2.39	0.53
1:E:387:ILE:CD1	1:E:450:GLY:N	2.71	0.53
1:F:317:MET:CE	1:F:609:TYR:CZ	2.92	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:402:SER:HA	1:C:609:TYR:CD1	2.43	0.53
1:D:28:TYR:HD2	1:D:45:GLN:HE21	1.54	0.53
1:C:308:SER:O	1:C:309:LEU:HB2	2.09	0.53
1:A:157:PRO:HD2	1:A:161:ILE:HD11	1.90	0.53
1:D:308:SER:O	1:D:309:LEU:HB2	2.09	0.53
1:B:373:ASP:C	1:B:374:CYS:SG	2.87	0.53
1:C:109:ASN:O	1:C:111:PHE:N	2.42	0.53
1:C:433:ILE:HG21	1:C:571:TYR:OH	2.08	0.53
1:B:265:LEU:HD23	1:B:269:LEU:HB3	1.89	0.53
1:H:433:ILE:HB	1:H:571:TYR:OH	2.09	0.53
1:G:107:TYR:O	1:G:110:GLN:CB	2.56	0.53
1:G:116:GLY:N	1:G:217:THR:O	2.42	0.53
1:A:148:PRO:HD3	1:A:188:TYR:CZ	2.43	0.53
1:A:213:PHE:O	1:A:216:ILE:N	2.42	0.53
1:A:263:ASN:HD21	1:A:265:LEU:N	2.06	0.53
1:E:107:TYR:CE1	1:E:153:LEU:HD12	2.44	0.53
1:E:249:LEU:HD23	1:E:252:ALA:CA	2.26	0.53
1:E:118:LYS:CB	1:E:264:HIS:O	2.57	0.53
1:E:433:ILE:CG2	1:E:571:TYR:OH	2.56	0.53
1:D:233:GLY:C	1:D:235:VAL:H	2.11	0.53
1:H:107:TYR:O	1:H:110:GLN:CB	2.56	0.53
1:E:633:MET:N	1:E:633:MET:SD	2.82	0.53
1:D:189:LEU:CG	1:D:190:ALA:N	2.66	0.53
1:F:449:GLN:NE2	1:F:453:THR:HG22	2.24	0.53
1:C:282:MET:HA	1:C:282:MET:HE2	1.90	0.53
1:C:285:GLN:NE2	1:C:286:ARG:HH12	2.05	0.53
1:E:493:ASP:HB3	1:E:514:TRP:CZ3	2.44	0.53
1:F:444:CYS:O	1:F:446:ARG:N	2.41	0.53
1:C:32:TRP:CD1	1:C:43:ILE:HD13	2.44	0.53
1:G:582:ARG:H	1:G:582:ARG:CD	2.18	0.53
1:B:71:PRO:O	1:B:72:ASN:CB	2.57	0.53
1:F:614:LYS:O	1:F:617:VAL:HB	2.09	0.53
1:A:616:VAL:HG13	1:A:619:LYS:HD2	1.91	0.53
1:E:653:GLU:HA	1:E:656:ASN:HB3	1.91	0.53
1:H:614:LYS:O	1:H:617:VAL:HB	2.09	0.53
1:D:107:TYR:HA	1:D:110:GLN:HB2	1.90	0.53
1:D:434:TRP:CZ3	1:D:568:ARG:HG3	2.44	0.53
1:A:499:GLU:C	1:A:500:GLN:HE21	2.12	0.53
1:E:104:LEU:HB3	1:E:148:PRO:O	2.09	0.53
1:E:116:GLY:CA	1:E:217:THR:O	2.57	0.53
1:E:416:ASP:OD1	1:E:416:ASP:N	2.40	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:153:LEU:HD23	1:H:162:HIS:CB	2.39	0.53
1:H:387:ILE:HG22	1:H:388:PHE:H	1.73	0.53
1:B:32:TRP:CD1	1:B:43:ILE:HD13	2.44	0.53
1:F:62:ILE:HG23	1:F:94:LEU:HD13	1.90	0.53
1:D:394:LYS:HG3	1:D:613:SER:HB2	1.90	0.53
1:A:362:ASN:O	1:A:364:ALA:N	2.42	0.53
1:F:137:HIS:ND1	1:F:201:VAL:HG13	2.24	0.53
1:B:473:THR:CG2	1:B:533:LEU:HD22	2.31	0.53
1:D:120:GLY:CA	1:D:123:ARG:H	2.22	0.53
1:D:260:PRO:CG	1:D:274:GLU:HG2	2.39	0.53
1:A:438:ARG:HG2	1:A:564:GLU:OE1	2.08	0.53
1:E:430:TRP:HB3	1:E:571:TYR:CD2	2.39	0.53
1:F:119:GLU:HB2	1:F:121:PRO:HB2	1.91	0.53
1:F:146:LEU:HB3	1:F:207:SER:HB2	1.91	0.53
1:F:387:ILE:HD13	1:F:450:GLY:HA2	1.89	0.53
1:B:357:SER:CA	1:B:453:THR:HB	2.36	0.53
1:C:449:GLN:HA	1:C:449:GLN:OE1	2.07	0.53
1:C:198:LYS:C	1:C:200:THR:H	2.12	0.53
1:A:373:ASP:CG	1:A:374:CYS:SG	2.88	0.53
1:G:157:PRO:HD2	1:G:161:ILE:HD11	1.90	0.53
1:D:148:PRO:HD3	1:D:188:TYR:CZ	2.44	0.52
1:E:245:VAL:HG12	1:E:246:TYR:N	2.20	0.52
1:G:272:LYS:HG3	1:G:276:TRP:HB2	1.91	0.52
1:E:220:ARG:NH1	1:E:223:LEU:CD2	2.71	0.52
1:E:123:ARG:HD2	1:E:374:CYS:SG	2.50	0.52
1:E:642:ILE:HG12	1:E:645:ARG:NH1	2.24	0.52
1:E:320:GLY:O	1:E:321:ARG:C	2.47	0.52
1:A:285:GLN:HE21	1:A:286:ARG:HH12	1.57	0.52
1:F:449:GLN:OE1	1:F:449:GLN:HA	2.09	0.52
1:D:536:LYS:HB3	1:D:625:LEU:HD22	1.90	0.52
1:E:348:GLU:H	1:E:348:GLU:CD	2.11	0.52
1:F:72:ASN:H	1:F:163:LYS:HE2	1.73	0.52
1:A:641:LYS:HB3	1:A:645:ARG:NH2	2.12	0.52
1:G:213:PHE:O	1:G:216:ILE:N	2.42	0.52
1:F:120:GLY:N	1:F:122:ILE:H	2.06	0.52
1:F:116:GLY:CA	1:F:217:THR:O	2.57	0.52
1:F:265:LEU:HD21	1:F:269:LEU:HB3	1.91	0.52
1:F:415:GLN:NE2	1:F:429:VAL:HG11	2.24	0.52
1:E:540:LEU:HD13	1:E:622:ALA:HB2	1.82	0.52
1:C:485:PHE:CZ	1:D:485:PHE:CB	2.91	0.52
1:D:26:PHE:CE2	1:D:179:CYS:HB3	2.41	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:109:ASN:O	1:B:111:PHE:N	2.42	0.52
1:G:70:HIS:NE2	1:G:131:SER:O	2.43	0.52
1:H:313:SER:HA	1:H:324:THR:HA	1.90	0.52
1:C:614:LYS:O	1:C:617:VAL:HB	2.10	0.52
1:B:226:TRP:HD1	1:B:227:GLN:H	1.41	0.52
1:C:226:TRP:CD1	1:C:227:GLN:HB3	2.44	0.52
1:C:247:ASP:HB2	1:C:255:PHE:O	2.08	0.52
1:B:213:PHE:O	1:B:216:ILE:N	2.42	0.52
1:A:654:LEU:HD11	1:B:655:TRP:CE3	2.44	0.52
1:E:260:PRO:CD	1:E:274:GLU:HG2	2.39	0.52
1:F:409:SER:HB2	1:F:412:ILE:CD1	2.39	0.52
1:G:533:LEU:HD23	1:G:629:VAL:HG13	1.91	0.52
1:C:462:ASN:ND2	1:C:540:LEU:CB	2.71	0.52
1:D:633:MET:N	1:D:633:MET:SD	2.82	0.52
1:B:89:ASN:C	1:B:91:LEU:H	2.12	0.52
1:E:89:ASN:HB3	1:E:91:LEU:HB2	1.92	0.52
1:A:89:ASN:C	1:A:91:LEU:H	2.12	0.52
1:A:308:SER:O	1:A:309:LEU:HB2	2.10	0.52
1:D:89:ASN:HB3	1:D:91:LEU:H	1.74	0.52
1:B:642:ILE:HG12	1:B:645:ARG:CZ	2.40	0.52
1:C:213:PHE:O	1:C:216:ILE:N	2.41	0.52
1:D:107:TYR:CE1	1:D:153:LEU:HD12	2.44	0.52
1:E:145:ASP:OD2	1:E:167:LEU:HD13	2.09	0.52
1:A:277:LEU:C	1:A:279:CYS:H	2.13	0.52
1:C:233:GLY:C	1:C:235:VAL:H	2.12	0.52
1:D:521:VAL:HG13	1:D:643:VAL:CG1	2.40	0.52
1:H:148:PRO:HD3	1:H:188:TYR:CZ	2.45	0.52
1:E:529:GLU:HG3	1:E:633:MET:CE	2.39	0.52
1:F:647:GLN:CA	1:F:647:GLN:OE1	2.58	0.52
1:B:153:LEU:HD23	1:B:162:HIS:CB	2.40	0.52
1:G:320:GLY:O	1:G:321:ARG:C	2.47	0.52
1:B:540:LEU:HD22	1:B:621:LYS:HZ1	1.74	0.52
1:D:89:ASN:HB3	1:D:91:LEU:HB2	1.91	0.52
1:C:165:ILE:HG12	1:C:166:ASP:H	1.74	0.52
1:F:308:SER:O	1:F:309:LEU:HB2	2.09	0.52
1:E:499:GLU:C	1:E:500:GLN:HE21	2.13	0.52
1:H:434:TRP:HZ3	1:H:568:ARG:CB	2.22	0.52
1:A:107:TYR:CE1	1:A:153:LEU:HD12	2.44	0.52
1:A:107:TYR:HD1	1:A:153:LEU:HD12	1.68	0.52
1:E:120:GLY:CA	1:E:123:ARG:H	2.21	0.52
1:F:222:PHE:CD2	1:F:224:PRO:O	2.63	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:426:LEU:HB3	1:F:430:TRP:CD1	2.45	0.52
1:G:226:TRP:CD1	1:G:227:GLN:HB3	2.45	0.52
1:E:449:GLN:NE2	1:E:453:THR:HG22	2.25	0.52
1:C:521:VAL:HA	1:C:524:CYS:HG	1.72	0.52
1:H:193:LEU:CB	1:H:196:GLN:HE22	2.22	0.52
1:D:660:ILE:O	1:D:662:CYS:N	2.42	0.52
1:A:348:GLU:CD	1:A:348:GLU:H	2.13	0.52
1:F:180:THR:O	1:F:180:THR:HG22	2.10	0.52
1:G:180:THR:O	1:G:180:THR:HG22	2.10	0.52
1:C:494:LEU:HD21	1:C:518:GLU:OE2	2.09	0.52
1:A:642:ILE:HG12	1:A:645:ARG:NH1	2.25	0.52
1:A:517:MET:CE	1:A:650:ARG:HG3	2.39	0.52
1:B:647:GLN:CA	1:B:647:GLN:OE1	2.57	0.52
1:A:221:PRO:O	1:A:222:PHE:HB3	2.09	0.52
1:C:409:SER:HB2	1:C:412:ILE:CD1	2.40	0.52
1:D:109:ASN:O	1:D:111:PHE:N	2.43	0.52
1:G:415:GLN:NE2	1:G:429:VAL:HG11	2.24	0.52
1:B:104:LEU:HB3	1:B:148:PRO:O	2.10	0.52
1:B:387:ILE:HG22	1:B:388:PHE:H	1.74	0.52
1:A:32:TRP:CD1	1:A:43:ILE:HD13	2.44	0.52
1:A:387:ILE:HD11	1:A:449:GLN:CG	2.39	0.52
1:A:387:ILE:HG22	1:A:388:PHE:H	1.74	0.52
1:H:71:PRO:O	1:H:72:ASN:CB	2.57	0.52
1:D:534:VAL:HG13	1:D:535:ASP:N	2.24	0.52
1:C:653:GLU:HA	1:C:656:ASN:HB3	1.90	0.52
1:A:222:PHE:CD2	1:A:224:PRO:O	2.63	0.52
1:C:107:TYR:CE1	1:C:153:LEU:HD12	2.44	0.52
1:C:272:LYS:HG2	1:C:273:LEU:CA	2.40	0.52
1:A:213:PHE:CD2	1:A:213:PHE:C	2.83	0.52
1:A:265:LEU:HD23	1:A:269:LEU:CB	2.40	0.52
1:E:220:ARG:CB	1:E:221:PRO:HD2	2.39	0.52
1:F:117:LEU:O	1:F:119:GLU:HG2	2.10	0.52
1:F:153:LEU:HD23	1:F:162:HIS:CB	2.40	0.52
1:D:475:GLU:HG2	1:D:636:MET:HE1	1.88	0.52
1:G:145:ASP:OD2	1:G:167:LEU:HD13	2.10	0.52
1:B:145:ASP:OD2	1:B:167:LEU:HD13	2.09	0.52
1:H:632:VAL:C	1:H:633:MET:SD	2.88	0.52
1:G:68:LEU:HB3	1:G:135:TYR:CE2	2.45	0.52
1:D:531:GLN:HA	1:D:534:VAL:HG12	1.91	0.52
1:F:656:ASN:C	1:F:656:ASN:OD1	2.48	0.52
1:D:165:ILE:HG12	1:D:166:ASP:H	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:570:LEU:HD23	1:D:590:MET:CE	2.40	0.52
1:B:263:ASN:HD21	1:B:265:LEU:N	2.06	0.52
1:H:409:SER:HB2	1:H:412:ILE:CD1	2.40	0.52
1:B:494:LEU:HD22	1:B:518:GLU:OE2	2.07	0.52
1:D:245:VAL:HG12	1:D:246:TYR:N	2.22	0.52
1:C:245:VAL:HG12	1:C:246:TYR:N	2.20	0.52
1:B:107:TYR:CE1	1:B:153:LEU:HD12	2.45	0.52
1:B:540:LEU:HD11	1:B:621:LYS:CB	2.39	0.52
1:H:394:LYS:CE	1:H:401:ILE:HA	2.40	0.52
1:H:540:LEU:HD21	1:H:621:LYS:HB3	1.91	0.52
1:D:180:THR:O	1:D:180:THR:HG22	2.10	0.52
1:C:118:LYS:NZ	1:C:123:ARG:HH12	2.08	0.52
1:G:437:ILE:HG22	1:G:564:GLU:HB2	1.92	0.52
1:A:437:ILE:HG13	1:A:594:LEU:CD1	2.39	0.52
1:H:145:ASP:OD2	1:H:167:LEU:HD13	2.10	0.52
1:E:249:LEU:HD23	1:E:253:VAL:H	1.75	0.52
1:F:571:TYR:CZ	1:F:590:MET:SD	3.03	0.52
1:G:32:TRP:CD1	1:G:43:ILE:HD13	2.45	0.52
1:A:145:ASP:OD2	1:A:167:LEU:HD13	2.09	0.52
1:C:368:THR:HG22	1:C:368:THR:O	2.10	0.52
1:E:322:VAL:HG21	1:E:446:ARG:NH1	2.24	0.52
1:A:534:VAL:HG13	1:A:535:ASP:N	2.24	0.52
1:A:373:ASP:OD1	1:A:374:CYS:N	2.43	0.52
1:E:165:ILE:HG12	1:E:166:ASP:H	1.75	0.52
1:C:514:TRP:O	1:C:518:GLU:HG3	2.10	0.52
1:D:507:SER:C	1:D:509:LYS:H	2.14	0.52
1:D:115:CYS:O	1:D:263:ASN:HA	2.09	0.52
1:B:415:GLN:NE2	1:B:429:VAL:HG11	2.25	0.52
1:D:221:PRO:O	1:D:222:PHE:HB3	2.09	0.52
1:B:507:SER:C	1:B:509:LYS:H	2.13	0.52
1:A:429:VAL:O	1:A:433:ILE:HG12	2.10	0.52
1:F:120:GLY:CA	1:F:123:ARG:H	2.22	0.52
1:F:438:ARG:NH1	1:F:568:ARG:HH21	2.08	0.52
1:H:226:TRP:CD1	1:H:227:GLN:HB3	2.45	0.52
1:F:233:GLY:C	1:F:235:VAL:H	2.13	0.52
1:F:529:GLU:HG3	1:F:633:MET:CE	2.39	0.52
1:G:285:GLN:HE21	1:G:286:ARG:HH12	1.58	0.52
1:H:248:ASP:O	1:H:248:ASP:OD1	2.28	0.52
1:C:531:GLN:HA	1:C:534:VAL:HG12	1.92	0.52
1:E:534:VAL:HG13	1:E:535:ASP:N	2.25	0.52
1:A:642:ILE:HG12	1:A:645:ARG:CZ	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:434:TRP:HZ3	1:C:568:ARG:CA	2.21	0.51
1:D:412:ILE:HG12	1:D:433:ILE:CD1	2.40	0.51
1:G:433:ILE:CG2	1:G:571:TYR:OH	2.57	0.51
1:A:120:GLY:CA	1:A:123:ARG:H	2.23	0.51
1:E:115:CYS:SG	1:E:432:GLN:HA	2.50	0.51
1:F:117:LEU:O	1:F:122:ILE:HD11	2.09	0.51
1:F:426:LEU:HB2	1:F:574:LEU:HD21	1.90	0.51
1:F:245:VAL:HG12	1:F:246:TYR:N	2.22	0.51
1:A:527:GLU:HG2	1:A:530:VAL:HG13	1.92	0.51
1:D:387:ILE:HG22	1:D:388:PHE:H	1.74	0.51
1:G:62:ILE:HG23	1:G:94:LEU:HD13	1.92	0.51
1:D:582:ARG:H	1:D:582:ARG:CD	2.19	0.51
1:A:653:GLU:HA	1:A:656:ASN:HB3	1.92	0.51
1:G:534:VAL:HG13	1:G:535:ASP:N	2.25	0.51
1:G:89:ASN:C	1:G:91:LEU:H	2.12	0.51
1:F:89:ASN:C	1:F:91:LEU:H	2.11	0.51
1:D:89:ASN:C	1:D:91:LEU:H	2.13	0.51
1:A:165:ILE:HG12	1:A:166:ASP:H	1.75	0.51
1:B:180:THR:HG22	1:B:180:THR:O	2.10	0.51
1:D:153:LEU:HD23	1:D:162:HIS:CB	2.40	0.51
1:G:153:LEU:HD23	1:G:162:HIS:CB	2.40	0.51
1:E:119:GLU:HB2	1:E:121:PRO:HB2	1.92	0.51
1:F:107:TYR:CE1	1:F:153:LEU:HD12	2.45	0.51
1:H:220:ARG:HB3	1:H:221:PRO:HD2	1.92	0.51
1:A:26:PHE:HE2	1:A:181:GLU:CD	2.13	0.51
1:H:119:GLU:HB2	1:H:121:PRO:HB2	1.91	0.51
1:F:297:VAL:HB	1:F:301:GLN:H	1.75	0.51
1:C:286:ARG:O	1:C:290:THR:HG21	2.10	0.51
1:G:339:TRP:HA	1:G:342:GLN:CB	2.34	0.51
1:G:322:VAL:CG1	1:G:323:HIS:H	2.21	0.51
1:C:580:ASP:HA	1:C:582:ARG:HH11	1.75	0.51
1:H:632:VAL:HG12	1:H:633:MET:HE1	1.91	0.51
1:G:341:GLN:O	1:G:345:GLY:N	2.43	0.51
1:F:348:GLU:CD	1:F:348:GLU:H	2.12	0.51
1:E:71:PRO:O	1:E:72:ASN:CB	2.58	0.51
1:C:373:ASP:OD1	1:C:374:CYS:N	2.42	0.51
1:H:447:LEU:HD12	1:H:605:VAL:CG2	2.40	0.51
1:A:614:LYS:O	1:A:617:VAL:HB	2.10	0.51
1:A:478:GLN:HG3	1:A:479:LEU:N	2.25	0.51
1:C:265:LEU:HD23	1:C:269:LEU:HB3	1.93	0.51
1:D:224:PRO:HG3	1:D:428:ARG:HH22	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:514:TRP:O	1:B:518:GLU:HG3	2.10	0.51
1:A:409:SER:HB2	1:A:412:ILE:CD1	2.39	0.51
1:E:272:LYS:HG2	1:E:273:LEU:CA	2.40	0.51
1:D:235:VAL:CB	1:D:243:ILE:HA	2.37	0.51
1:C:145:ASP:OD2	1:C:167:LEU:HD13	2.10	0.51
1:B:547:LEU:O	1:B:550:ASN:ND2	2.44	0.51
1:D:642:ILE:HG12	1:D:645:ARG:CZ	2.40	0.51
1:D:282:MET:HA	1:D:282:MET:HE2	1.91	0.51
1:C:462:ASN:ND2	1:C:540:LEU:HB2	2.19	0.51
1:D:193:LEU:CB	1:D:196:GLN:HE22	2.23	0.51
1:C:387:ILE:HG22	1:C:388:PHE:H	1.76	0.51
1:G:134:ARG:CA	1:G:300:PHE:CZ	2.86	0.51
1:G:72:ASN:O	1:G:163:LYS:HA	2.11	0.51
1:G:297:VAL:HB	1:G:301:GLN:H	1.75	0.51
1:C:322:VAL:CG1	1:C:323:HIS:H	2.21	0.51
1:D:402:SER:HA	1:D:609:TYR:CD1	2.45	0.51
1:H:348:GLU:CD	1:H:348:GLU:H	2.13	0.51
1:B:350:GLU:OE2	1:B:391:ASP:O	2.29	0.51
1:C:511:LEU:HG	1:C:515:ARG:CZ	2.40	0.51
1:D:263:ASN:HD21	1:D:265:LEU:N	2.07	0.51
1:B:285:GLN:HG2	1:B:285:GLN:O	2.11	0.51
1:B:285:GLN:HE21	1:B:286:ARG:HH12	1.59	0.51
1:A:113:ASN:HA	1:A:116:GLY:O	2.10	0.51
1:A:263:ASN:HD21	1:A:265:LEU:H	1.57	0.51
1:E:571:TYR:OH	1:E:590:MET:SD	2.69	0.51
1:F:119:GLU:HB3	1:F:121:PRO:CD	2.40	0.51
1:F:220:ARG:CB	1:F:221:PRO:HD2	2.41	0.51
1:E:642:ILE:HG12	1:E:645:ARG:CZ	2.40	0.51
1:E:357:SER:HB3	1:E:453:THR:HB	1.93	0.51
1:A:282:MET:HA	1:A:282:MET:HE2	1.91	0.51
1:B:327:VAL:CG1	1:B:367:LEU:HB2	2.34	0.51
1:D:449:GLN:OE1	1:D:449:GLN:HA	2.09	0.51
1:D:297:VAL:HB	1:D:301:GLN:H	1.74	0.51
1:A:580:ASP:CB	1:D:579:ARG:NH2	2.71	0.51
1:A:320:GLY:O	1:A:321:ARG:C	2.48	0.51
1:B:442:GLU:HB3	1:B:446:ARG:HH21	1.75	0.51
1:H:547:LEU:O	1:H:550:ASN:ND2	2.44	0.51
1:B:89:ASN:HB3	1:B:91:LEU:HB2	1.92	0.51
1:G:100:GLU:H	1:G:154:GLN:HG3	1.74	0.51
1:F:303:LEU:O	1:F:307:LEU:HB2	2.11	0.51
1:B:642:ILE:HG12	1:B:645:ARG:NH1	2.25	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:107:TYR:C	1:C:110:GLN:H	2.12	0.51
1:C:249:LEU:HA	1:C:253:VAL:O	2.11	0.51
1:C:429:VAL:HG12	1:C:430:TRP:HD1	1.75	0.51
1:D:272:LYS:HG3	1:D:276:TRP:HB2	1.93	0.51
1:E:246:TYR:CD1	1:E:258:VAL:CB	2.72	0.51
1:G:265:LEU:HD23	1:G:269:LEU:CB	2.40	0.51
1:A:120:GLY:C	1:A:122:ILE:N	2.63	0.51
1:H:145:ASP:CG	1:H:167:LEU:HD13	2.31	0.51
1:E:249:LEU:HA	1:E:253:VAL:O	2.11	0.51
1:F:213:PHE:CD2	1:F:213:PHE:C	2.84	0.51
1:F:118:LYS:CD	1:F:265:LEU:HA	2.39	0.51
1:B:550:ASN:HD21	1:B:611:GLN:HG3	1.74	0.51
1:F:642:ILE:HG12	1:F:645:ARG:NH1	2.25	0.51
1:C:134:ARG:HD2	1:C:300:PHE:CE1	2.45	0.51
1:A:580:ASP:HA	1:A:582:ARG:HH11	1.75	0.51
1:C:320:GLY:O	1:C:321:ARG:C	2.48	0.51
1:B:348:GLU:H	1:B:348:GLU:CD	2.14	0.51
1:B:386:LEU:CD1	1:B:386:LEU:H	2.22	0.51
1:H:534:VAL:HG13	1:H:535:ASP:N	2.26	0.51
1:F:373:ASP:CG	1:F:374:CYS:SG	2.89	0.51
1:F:507:SER:C	1:F:509:LYS:H	2.13	0.51
1:G:120:GLY:CA	1:G:123:ARG:H	2.23	0.51
1:F:107:TYR:O	1:F:110:GLN:HB2	2.11	0.51
1:F:107:TYR:C	1:F:110:GLN:H	2.13	0.51
1:G:148:PRO:HD3	1:G:188:TYR:CZ	2.45	0.51
1:D:191:PRO:HG3	1:D:234:LYS:HZ3	1.76	0.51
1:C:547:LEU:HD22	1:C:611:GLN:HG2	1.93	0.51
1:F:145:ASP:OD2	1:F:167:LEU:HD13	2.11	0.51
1:B:107:TYR:O	1:B:110:GLN:HB2	2.11	0.51
1:E:32:TRP:CD1	1:E:43:ILE:HD13	2.46	0.51
1:D:368:THR:HG22	1:D:368:THR:O	2.11	0.51
1:G:165:ILE:HG12	1:G:166:ASP:H	1.74	0.51
1:D:120:GLY:C	1:D:122:ILE:N	2.63	0.51
1:D:426:LEU:HB3	1:D:430:TRP:CD1	2.46	0.51
1:D:247:ASP:HB2	1:D:255:PHE:O	2.11	0.51
1:G:429:VAL:O	1:G:433:ILE:HG12	2.10	0.51
1:G:434:TRP:HZ3	1:G:568:ARG:CB	2.24	0.51
1:A:153:LEU:HD23	1:A:162:HIS:CB	2.40	0.51
1:A:415:GLN:NE2	1:A:429:VAL:HG11	2.26	0.51
1:A:570:LEU:CB	1:A:590:MET:HE2	2.39	0.51
1:F:564:GLU:OE2	1:F:568:ARG:NH2	2.44	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:245:VAL:HG12	1:G:246:TYR:N	2.22	0.51
1:A:449:GLN:NE2	1:A:453:THR:HG22	2.25	0.51
1:A:449:GLN:HA	1:A:449:GLN:OE1	2.10	0.51
1:A:357:SER:CA	1:A:453:THR:HB	2.41	0.51
1:A:350:GLU:OE2	1:A:391:ASP:O	2.28	0.51
1:A:531:GLN:O	1:A:535:ASP:HB3	2.11	0.51
1:C:511:LEU:HD21	1:C:515:ARG:NH2	2.26	0.51
1:A:647:GLN:OE1	1:A:647:GLN:CA	2.58	0.51
1:A:226:TRP:CD1	1:A:227:GLN:HB3	2.45	0.51
1:B:286:ARG:O	1:B:290:THR:HG21	2.11	0.51
1:B:571:TYR:OH	1:B:590:MET:SD	2.64	0.51
1:A:119:GLU:HB2	1:A:121:PRO:CB	2.41	0.51
1:E:254:LYS:N	1:E:255:PHE:CE1	2.79	0.51
1:F:226:TRP:CG	1:F:227:GLN:N	2.59	0.51
1:G:222:PHE:CD2	1:G:224:PRO:O	2.63	0.51
1:B:148:PRO:HD3	1:B:188:TYR:CZ	2.45	0.51
1:E:387:ILE:HG22	1:E:388:PHE:H	1.76	0.51
1:A:440:LEU:HD12	1:A:597:ALA:O	2.10	0.51
1:F:322:VAL:CG1	1:F:323:HIS:H	2.20	0.51
1:D:632:VAL:HG12	1:D:633:MET:HE1	1.93	0.51
1:D:341:GLN:O	1:D:345:GLY:N	2.44	0.51
1:F:534:VAL:HG13	1:F:535:ASP:N	2.25	0.51
1:G:100:GLU:N	1:G:154:GLN:HG3	2.26	0.51
1:B:313:SER:HA	1:B:324:THR:HA	1.93	0.51
1:C:153:LEU:HD23	1:C:162:HIS:CB	2.40	0.51
1:D:588:ASN:OD1	1:D:589:ASP:N	2.44	0.51
1:H:440:LEU:HD12	1:H:597:ALA:O	2.11	0.51
1:D:249:LEU:HA	1:D:253:VAL:O	2.11	0.51
1:B:497:TYR:O	1:B:497:TYR:HD2	1.85	0.51
1:G:119:GLU:HB2	1:G:121:PRO:HB2	1.93	0.51
1:G:426:LEU:HB3	1:G:430:TRP:CD1	2.45	0.51
1:A:272:LYS:HG3	1:A:276:TRP:HB2	1.93	0.51
1:E:409:SER:HB2	1:E:412:ILE:CD1	2.38	0.51
1:F:429:VAL:O	1:F:433:ILE:HG12	2.10	0.51
1:D:479:LEU:HD12	1:D:640:GLU:CB	2.40	0.51
1:D:642:ILE:HG12	1:D:645:ARG:NH1	2.25	0.51
1:E:647:GLN:OE1	1:E:647:GLN:CA	2.58	0.51
1:F:529:GLU:O	1:F:533:LEU:HG	2.10	0.51
1:G:633:MET:N	1:G:633:MET:SD	2.84	0.51
1:G:387:ILE:CD1	1:G:450:GLY:CA	2.87	0.51
1:E:580:ASP:HA	1:E:582:ARG:HH11	1.76	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:451:GLN:OE1	1:H:611:GLN:NE2	2.44	0.51
1:H:547:LEU:HD13	1:H:615:THR:HG22	1.93	0.51
1:D:444:CYS:O	1:D:446:ARG:N	2.44	0.51
1:F:71:PRO:O	1:F:72:ASN:CB	2.58	0.51
1:A:531:GLN:HA	1:A:534:VAL:HG12	1.92	0.51
1:C:656:ASN:OD1	1:C:656:ASN:C	2.48	0.51
1:H:165:ILE:HG12	1:H:166:ASP:H	1.76	0.51
1:A:220:ARG:NH1	1:A:223:LEU:CD2	2.71	0.51
1:C:107:TYR:O	1:C:110:GLN:HB2	2.10	0.51
1:C:116:GLY:CA	1:C:217:THR:O	2.59	0.51
1:D:265:LEU:HD23	1:D:269:LEU:CB	2.41	0.51
1:D:422:THR:HG21	1:D:586:ASP:C	2.30	0.51
1:G:409:SER:HB2	1:G:412:ILE:CD1	2.38	0.51
1:A:109:ASN:O	1:A:111:PHE:N	2.44	0.51
1:E:107:TYR:O	1:E:110:GLN:HB2	2.10	0.51
1:F:226:TRP:HD1	1:F:227:GLN:N	2.04	0.51
1:H:320:GLY:O	1:H:321:ARG:C	2.49	0.51
1:G:26:PHE:CE2	1:G:181:GLU:CD	2.84	0.51
1:D:189:LEU:HD12	1:D:207:SER:HB3	1.93	0.51
1:E:649:LYS:HA	1:E:652:GLN:HB2	1.92	0.51
1:F:368:THR:HG22	1:F:368:THR:O	2.11	0.51
1:C:449:GLN:NE2	1:C:453:THR:HG22	2.26	0.51
1:B:531:GLN:O	1:B:535:ASP:HB3	2.11	0.51
1:C:534:VAL:HG13	1:C:535:ASP:N	2.25	0.51
1:G:89:ASN:HB3	1:G:91:LEU:HB2	1.92	0.51
1:A:313:SER:HA	1:A:324:THR:HA	1.92	0.51
1:C:666:ARG:HD2	1:D:503:PHE:HD1	1.75	0.50
1:B:521:VAL:HA	1:B:524:CYS:HG	1.75	0.50
1:C:437:ILE:HG22	1:C:564:GLU:HB2	1.92	0.50
1:D:226:TRP:CD1	1:D:227:GLN:HB3	2.45	0.50
1:B:409:SER:HB2	1:B:412:ILE:CD1	2.40	0.50
1:G:121:PRO:HA	1:G:124:THR:OG1	2.11	0.50
1:A:588:ASN:OD1	1:A:589:ASP:N	2.43	0.50
1:A:233:GLY:C	1:A:235:VAL:H	2.14	0.50
1:D:475:GLU:CG	1:D:636:MET:CE	2.85	0.50
1:B:449:GLN:NE2	1:B:453:THR:HG22	2.26	0.50
1:A:18:LYS:NZ	1:A:33:ILE:HD12	2.27	0.50
1:B:660:ILE:C	1:B:662:CYS:N	2.65	0.50
1:E:368:THR:HG22	1:E:368:THR:O	2.11	0.50
1:F:350:GLU:OE2	1:F:391:ASP:O	2.29	0.50
1:H:89:ASN:HB3	1:H:91:LEU:HB2	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:308:SER:O	1:H:309:LEU:HB2	2.12	0.50
1:C:303:LEU:O	1:C:307:LEU:HB2	2.11	0.50
1:D:117:LEU:O	1:D:122:ILE:HD11	2.11	0.50
1:B:221:PRO:O	1:B:222:PHE:HB3	2.11	0.50
1:G:107:TYR:CE1	1:G:153:LEU:HD12	2.46	0.50
1:G:270:ALA:HB1	1:G:274:GLU:OE2	2.12	0.50
1:A:107:TYR:C	1:A:110:GLN:H	2.14	0.50
1:A:118:LYS:HD3	1:A:265:LEU:HD12	1.94	0.50
1:E:118:LYS:CD	1:E:265:LEU:HA	2.42	0.50
1:E:153:LEU:HD23	1:E:162:HIS:CB	2.40	0.50
1:E:213:PHE:O	1:E:216:ILE:N	2.43	0.50
1:D:476:CYS:CA	1:D:636:MET:SD	2.98	0.50
1:H:260:PRO:CD	1:H:274:GLU:HG2	2.41	0.50
1:E:480:LYS:NZ	1:E:527:GLU:HB2	2.27	0.50
1:D:285:GLN:HE21	1:D:286:ARG:HH12	1.57	0.50
1:D:116:GLY:HA2	1:D:217:THR:O	2.12	0.50
1:G:580:ASP:HA	1:G:582:ARG:HH11	1.75	0.50
1:F:361:LEU:HD11	1:F:386:LEU:HD23	1.94	0.50
1:H:633:MET:N	1:H:633:MET:SD	2.84	0.50
1:F:60:LEU:HD21	1:F:175:GLN:HB3	1.91	0.50
1:A:655:TRP:CE3	1:B:654:LEU:HD12	2.35	0.50
1:G:263:ASN:HD21	1:G:265:LEU:H	1.57	0.50
1:H:233:GLY:C	1:H:235:VAL:H	2.14	0.50
1:A:547:LEU:O	1:A:550:ASN:ND2	2.45	0.50
1:H:213:PHE:O	1:H:216:ILE:N	2.45	0.50
1:B:110:GLN:O	1:B:111:PHE:CB	2.37	0.50
1:E:494:LEU:CD2	1:E:518:GLU:OE2	2.59	0.50
1:D:547:LEU:HD12	1:D:615:THR:HG22	1.93	0.50
1:B:441:LYS:HB2	1:B:560:LEU:HD21	1.93	0.50
1:G:193:LEU:HD22	1:G:231:TRP:CD1	2.47	0.50
1:B:193:LEU:CB	1:B:196:GLN:HE22	2.23	0.50
1:H:394:LYS:HE2	1:H:401:ILE:CA	2.40	0.50
1:G:531:GLN:O	1:G:535:ASP:HB3	2.12	0.50
1:H:303:LEU:O	1:H:307:LEU:HB2	2.10	0.50
1:E:180:THR:O	1:E:180:THR:HG22	2.12	0.50
1:C:180:THR:HG22	1:C:180:THR:O	2.11	0.50
1:A:220:ARG:HB3	1:A:221:PRO:HD2	1.92	0.50
1:C:113:ASN:HA	1:C:116:GLY:O	2.12	0.50
1:C:119:GLU:HB2	1:C:121:PRO:HB2	1.93	0.50
1:C:564:GLU:OE2	1:C:568:ARG:NH2	2.43	0.50
1:D:119:GLU:HB2	1:D:121:PRO:HB2	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:272:LYS:HG3	1:B:276:TRP:HB2	1.93	0.50
1:B:419:ARG:HA	1:B:587:SER:OG	2.11	0.50
1:H:434:TRP:CZ3	1:H:568:ARG:CG	2.82	0.50
1:F:221:PRO:O	1:F:222:PHE:HB3	2.11	0.50
1:H:226:TRP:HB3	1:H:229:VAL:CG2	2.42	0.50
1:F:235:VAL:CB	1:F:243:ILE:HA	2.38	0.50
1:D:529:GLU:O	1:D:533:LEU:HG	2.12	0.50
1:G:26:PHE:HE2	1:G:181:GLU:OE1	1.95	0.50
1:F:497:TYR:HD2	1:F:497:TYR:O	1.91	0.50
1:C:529:GLU:O	1:C:533:LEU:HG	2.11	0.50
1:C:473:THR:CG2	1:C:533:LEU:CD2	2.80	0.50
1:C:285:GLN:O	1:C:285:GLN:HG2	2.12	0.50
1:G:529:GLU:O	1:G:533:LEU:HG	2.11	0.50
1:A:33:ILE:HG22	1:A:34:HIS:C	2.31	0.50
1:D:18:LYS:NZ	1:D:33:ILE:HD12	2.27	0.50
1:D:134:ARG:HB2	1:D:300:PHE:CE1	2.46	0.50
1:A:145:ASP:CG	1:A:167:LEU:HD13	2.32	0.50
1:H:402:SER:HB3	1:H:609:TYR:HB2	1.94	0.50
1:H:609:TYR:O	1:H:612:LEU:HB3	2.12	0.50
1:H:359:LEU:HA	1:H:460:ARG:NH1	2.25	0.50
1:D:656:ASN:C	1:D:656:ASN:OD1	2.49	0.50
1:G:614:LYS:O	1:G:617:VAL:HB	2.11	0.50
1:B:159:ARG:HD3	1:B:375:THR:HG21	1.93	0.50
1:C:260:PRO:CD	1:C:274:GLU:HG2	2.41	0.50
1:C:412:ILE:HG12	1:C:433:ILE:CD1	2.42	0.50
1:H:415:GLN:NE2	1:H:429:VAL:HG11	2.26	0.50
1:B:500:GLN:CA	1:B:505:ILE:HG12	2.41	0.50
1:B:511:LEU:HG	1:B:515:ARG:CZ	2.42	0.50
1:F:113:ASN:HA	1:F:116:GLY:O	2.12	0.50
1:F:120:GLY:C	1:F:122:ILE:N	2.65	0.50
1:F:248:ASP:O	1:F:248:ASP:OD1	2.30	0.50
1:F:412:ILE:HG12	1:F:433:ILE:CD1	2.41	0.50
1:F:437:ILE:CG1	1:F:594:LEU:HD12	2.41	0.50
1:H:254:LYS:N	1:H:255:PHE:CE1	2.80	0.50
1:B:547:LEU:HD11	1:B:614:LYS:HB3	1.81	0.50
1:H:107:TYR:CE1	1:H:153:LEU:HD12	2.45	0.50
1:E:486:PHE:CZ	1:E:517:MET:HE2	2.44	0.50
1:B:107:TYR:C	1:B:110:GLN:H	2.13	0.50
1:A:447:LEU:HD13	1:A:609:TYR:HE1	1.75	0.50
1:F:89:ASN:HB3	1:F:91:LEU:HB2	1.91	0.50
1:G:616:VAL:HG13	1:G:619:LYS:HD2	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:479:LEU:HD11	1:A:641:LYS:HG3	1.92	0.50
1:D:107:TYR:O	1:D:110:GLN:HB2	2.12	0.50
1:D:222:PHE:CE2	1:D:224:PRO:O	2.64	0.50
1:A:118:LYS:NZ	1:A:123:ARG:HH12	2.10	0.50
1:H:189:LEU:HD12	1:H:207:SER:HB3	1.94	0.50
1:F:109:ASN:O	1:F:111:PHE:N	2.45	0.50
1:C:485:PHE:CD1	1:D:485:PHE:CD1	3.00	0.50
1:H:109:ASN:O	1:H:111:PHE:N	2.45	0.50
1:E:285:GLN:O	1:E:285:GLN:HG2	2.12	0.50
1:F:660:ILE:O	1:F:662:CYS:N	2.45	0.50
1:A:514:TRP:O	1:A:518:GLU:HG3	2.11	0.50
1:B:444:CYS:C	1:B:446:ARG:N	2.63	0.50
1:G:308:SER:O	1:G:309:LEU:HB2	2.12	0.50
1:H:180:THR:O	1:H:180:THR:HG22	2.11	0.50
1:G:313:SER:HA	1:G:324:THR:HA	1.92	0.50
1:B:487:ARG:HH21	1:B:522:GLU:HA	1.77	0.50
1:C:120:GLY:CA	1:C:123:ARG:H	2.24	0.50
1:C:265:LEU:HD23	1:C:269:LEU:CB	2.42	0.50
1:D:437:ILE:HG13	1:D:594:LEU:CD1	2.41	0.50
1:D:564:GLU:OE2	1:D:568:ARG:NH2	2.44	0.50
1:G:277:LEU:C	1:G:279:CYS:H	2.14	0.50
1:G:186:LEU:HD23	1:G:227:GLN:HG2	1.94	0.50
1:G:191:PRO:HG3	1:G:234:LYS:HZ3	1.75	0.50
1:F:26:PHE:CE2	1:F:179:CYS:HB3	2.47	0.50
1:F:26:PHE:CE2	1:F:181:GLU:CD	2.85	0.50
1:E:134:ARG:HD2	1:E:300:PHE:CE1	2.46	0.50
1:F:317:MET:HE1	1:F:609:TYR:CZ	2.46	0.50
1:D:441:LYS:CB	1:D:560:LEU:HD21	2.42	0.50
1:C:327:VAL:CG1	1:C:367:LEU:HB2	2.36	0.50
1:F:339:TRP:HA	1:F:342:GLN:CB	2.35	0.50
1:F:72:ASN:O	1:F:163:LYS:HA	2.12	0.50
1:F:534:VAL:CG1	1:F:535:ASP:N	2.75	0.50
1:D:493:ASP:HB3	1:D:514:TRP:CH2	2.47	0.50
1:C:418:LYS:O	1:C:419:ARG:CB	2.60	0.50
1:D:429:VAL:O	1:D:433:ILE:HG12	2.11	0.50
1:B:247:ASP:HB2	1:B:255:PHE:O	2.11	0.50
1:B:265:LEU:HD23	1:B:269:LEU:CB	2.42	0.50
1:E:221:PRO:O	1:E:222:PHE:HB3	2.11	0.50
1:E:272:LYS:HG3	1:E:276:TRP:HB2	1.94	0.50
1:F:216:ILE:HG21	1:F:273:LEU:HD12	1.94	0.50
1:G:220:ARG:HB3	1:G:221:PRO:HD2	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:547:LEU:O	1:C:550:ASN:ND2	2.44	0.50
1:A:286:ARG:O	1:A:290:THR:HG21	2.12	0.50
1:C:649:LYS:HA	1:C:652:GLN:CB	2.41	0.50
1:C:18:LYS:NZ	1:C:33:ILE:HD12	2.26	0.50
1:C:459:LEU:CD1	1:C:548:GLN:HB3	2.41	0.50
1:B:368:THR:O	1:B:368:THR:HG22	2.12	0.50
1:A:387:ILE:HD12	1:A:450:GLY:HA2	1.94	0.50
1:G:361:LEU:HD11	1:G:386:LEU:HD23	1.94	0.50
1:B:389:LEU:HD12	1:B:389:LEU:N	2.26	0.50
1:F:531:GLN:HA	1:F:534:VAL:HG12	1.92	0.50
1:F:373:ASP:C	1:F:374:CYS:SG	2.90	0.50
1:E:308:SER:O	1:E:309:LEU:HB2	2.10	0.50
1:D:107:TYR:C	1:D:110:GLN:H	2.14	0.50
1:D:594:LEU:O	1:D:598:ILE:HG13	2.12	0.50
1:B:260:PRO:CD	1:B:274:GLU:HG2	2.42	0.50
1:A:588:ASN:CG	1:A:589:ASP:N	2.63	0.50
1:E:120:GLY:N	1:E:122:ILE:H	2.06	0.50
1:E:426:LEU:HB3	1:E:430:TRP:CD1	2.47	0.50
1:H:272:LYS:HG3	1:H:276:TRP:HB2	1.93	0.50
1:H:277:LEU:C	1:H:279:CYS:H	2.15	0.50
1:B:26:PHE:HZ	1:B:179:CYS:HB3	1.73	0.50
1:D:33:ILE:HG22	1:D:34:HIS:C	2.32	0.50
1:D:71:PRO:O	1:D:72:ASN:CB	2.59	0.50
1:G:368:THR:O	1:G:368:THR:HG22	2.11	0.50
1:H:390:PHE:HZ	1:H:612:LEU:HD11	1.77	0.50
1:C:361:LEU:HD11	1:C:386:LEU:HD23	1.94	0.50
1:A:341:GLN:O	1:A:345:GLY:N	2.45	0.50
1:G:547:LEU:O	1:G:550:ASN:ND2	2.44	0.50
1:E:534:VAL:CG1	1:E:535:ASP:N	2.75	0.50
1:D:313:SER:HA	1:D:324:THR:HA	1.94	0.50
1:C:115:CYS:CB	1:C:435:GLN:HG3	2.42	0.49
1:C:115:CYS:O	1:C:263:ASN:HA	2.12	0.49
1:C:573:ARG:HH12	1:D:573:ARG:CZ	2.15	0.49
1:D:226:TRP:HB3	1:D:229:VAL:CG2	2.41	0.49
1:A:269:LEU:HD22	1:A:272:LYS:HE3	1.94	0.49
1:E:107:TYR:C	1:E:110:GLN:H	2.14	0.49
1:E:120:GLY:C	1:E:122:ILE:N	2.65	0.49
1:F:226:TRP:HB3	1:F:229:VAL:CG2	2.41	0.49
1:F:249:LEU:HD23	1:F:253:VAL:H	1.76	0.49
1:F:265:LEU:HD23	1:F:269:LEU:CB	2.42	0.49
1:F:282:MET:HA	1:F:282:MET:HE2	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:233:GLY:C	1:G:235:VAL:H	2.16	0.49
1:H:272:LYS:HG2	1:H:273:LEU:CA	2.42	0.49
1:G:286:ARG:O	1:G:290:THR:HG21	2.12	0.49
1:G:33:ILE:HG22	1:G:34:HIS:C	2.32	0.49
1:D:113:ASN:HA	1:D:116:GLY:O	2.12	0.49
1:F:341:GLN:O	1:F:345:GLY:N	2.45	0.49
1:G:443:ASP:O	1:G:446:ARG:CB	2.59	0.49
1:A:534:VAL:CG1	1:A:535:ASP:N	2.74	0.49
1:G:534:VAL:CG1	1:G:535:ASP:N	2.75	0.49
1:C:313:SER:HA	1:C:324:THR:HA	1.92	0.49
1:E:303:LEU:O	1:E:307:LEU:HB2	2.12	0.49
1:C:115:CYS:SG	1:C:432:GLN:HA	2.52	0.49
1:C:119:GLU:HB3	1:C:121:PRO:CD	2.37	0.49
1:C:117:LEU:O	1:C:122:ILE:HD11	2.12	0.49
1:C:434:TRP:HZ3	1:C:568:ARG:CG	2.24	0.49
1:C:570:LEU:HB3	1:C:590:MET:HE2	1.91	0.49
1:D:262:PRO:HB3	1:D:409:SER:CB	2.41	0.49
1:B:433:ILE:HG21	1:B:590:MET:O	2.11	0.49
1:H:588:ASN:OD1	1:H:589:ASP:N	2.44	0.49
1:A:107:TYR:O	1:A:110:GLN:HB2	2.12	0.49
1:H:190:ALA:HB2	1:H:206:TRP:CD1	2.46	0.49
1:E:109:ASN:O	1:E:111:PHE:N	2.45	0.49
1:E:187:GLN:HB3	1:E:223:LEU:HD22	1.86	0.49
1:F:116:GLY:N	1:F:217:THR:O	2.44	0.49
1:G:190:ALA:HB2	1:G:206:TRP:CG	2.47	0.49
1:C:517:MET:SD	1:C:650:ARG:HG3	2.52	0.49
1:H:120:GLY:C	1:H:122:ILE:N	2.66	0.49
1:B:116:GLY:N	1:B:217:THR:O	2.45	0.49
1:F:402:SER:HA	1:F:609:TYR:CD1	2.47	0.49
1:E:423:TYR:O	1:E:425:HIS:N	2.45	0.49
1:F:394:LYS:CG	1:F:613:SER:HB2	2.42	0.49
1:A:361:LEU:HD11	1:A:386:LEU:HD23	1.94	0.49
1:D:534:VAL:CG1	1:D:535:ASP:N	2.74	0.49
1:B:534:VAL:HG13	1:B:535:ASP:N	2.25	0.49
1:B:303:LEU:O	1:B:307:LEU:HB2	2.13	0.49
1:D:303:LEU:O	1:D:307:LEU:HB2	2.12	0.49
1:B:165:ILE:HG12	1:B:166:ASP:H	1.78	0.49
1:D:390:PHE:CZ	1:D:612:LEU:HD11	2.46	0.49
1:C:654:LEU:CD2	1:D:654:LEU:HD22	2.36	0.49
1:B:226:TRP:HB3	1:B:229:VAL:CG2	2.42	0.49
1:B:115:CYS:SG	1:B:432:GLN:HA	2.51	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:588:ASN:OD1	1:B:589:ASP:N	2.44	0.49
1:G:107:TYR:O	1:G:110:GLN:HB2	2.12	0.49
1:G:109:ASN:O	1:G:111:PHE:N	2.45	0.49
1:G:125:LEU:CA	1:G:162:HIS:NE2	2.70	0.49
1:G:588:ASN:OD1	1:G:589:ASP:N	2.45	0.49
1:E:153:LEU:HD22	1:E:162:HIS:HD1	1.78	0.49
1:F:277:LEU:C	1:F:279:CYS:H	2.16	0.49
1:E:33:ILE:HG22	1:E:34:HIS:C	2.33	0.49
1:D:580:ASP:HA	1:D:582:ARG:HH11	1.76	0.49
1:C:583:THR:HB	1:C:584:PRO:CD	2.42	0.49
1:F:580:ASP:HA	1:F:582:ARG:HH11	1.76	0.49
1:D:348:GLU:H	1:D:348:GLU:CD	2.14	0.49
1:G:348:GLU:H	1:G:348:GLU:CD	2.14	0.49
1:G:443:ASP:O	1:G:446:ARG:N	2.45	0.49
1:F:531:GLN:O	1:F:535:ASP:HB3	2.12	0.49
1:B:531:GLN:HA	1:B:534:VAL:HG12	1.93	0.49
1:H:113:ASN:HA	1:H:116:GLY:O	2.12	0.49
1:E:547:LEU:O	1:E:550:ASN:ND2	2.45	0.49
1:C:272:LYS:HG3	1:C:276:TRP:HB2	1.93	0.49
1:D:119:GLU:HB2	1:D:121:PRO:CB	2.43	0.49
1:D:588:ASN:CG	1:D:589:ASP:N	2.62	0.49
1:A:426:LEU:HB3	1:A:430:TRP:CD1	2.47	0.49
1:E:118:LYS:HD3	1:E:265:LEU:HA	1.94	0.49
1:E:419:ARG:NH1	1:E:588:ASN:HA	2.27	0.49
1:H:120:GLY:CA	1:H:123:ARG:H	2.25	0.49
1:H:120:GLY:N	1:H:122:ILE:H	2.08	0.49
1:F:478:GLN:HG3	1:F:479:LEU:N	2.26	0.49
1:A:573:ARG:HH22	1:B:572:ARG:HD3	1.77	0.49
1:D:285:GLN:O	1:D:285:GLN:HG2	2.12	0.49
1:B:130:SER:O	1:B:300:PHE:CE1	2.66	0.49
1:F:18:LYS:NZ	1:F:33:ILE:HD12	2.26	0.49
1:F:33:ILE:HG22	1:F:34:HIS:C	2.32	0.49
1:A:368:THR:HG22	1:A:368:THR:O	2.11	0.49
1:D:394:LYS:CG	1:D:613:SER:HB2	2.42	0.49
1:A:441:LYS:HD2	1:A:561:ASP:OD1	2.13	0.49
1:E:531:GLN:HA	1:E:534:VAL:HG12	1.93	0.49
1:B:373:ASP:OD1	1:B:374:CYS:N	2.45	0.49
1:F:313:SER:HA	1:F:324:THR:HA	1.93	0.49
1:A:226:TRP:HB3	1:A:229:VAL:CG2	2.42	0.49
1:C:212:ALA:O	1:C:213:PHE:C	2.51	0.49
1:C:254:LYS:N	1:C:255:PHE:CE1	2.80	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:426:LEU:HB3	1:C:430:TRP:CD1	2.47	0.49
1:H:434:TRP:HE3	1:H:568:ARG:CA	2.08	0.49
1:G:116:GLY:CA	1:G:216:ILE:O	2.60	0.49
1:F:260:PRO:CD	1:F:274:GLU:HG2	2.43	0.49
1:H:118:LYS:NZ	1:H:123:ARG:HH12	2.10	0.49
1:H:263:ASN:HD21	1:H:265:LEU:H	1.60	0.49
1:D:145:ASP:OD2	1:D:167:LEU:HD13	2.12	0.49
1:G:285:GLN:O	1:G:285:GLN:HG2	2.12	0.49
1:D:72:ASN:O	1:D:163:LYS:HA	2.12	0.49
1:C:33:ILE:HG22	1:C:34:HIS:C	2.32	0.49
1:A:493:ASP:HB3	1:A:514:TRP:HH2	1.74	0.49
1:A:656:ASN:C	1:A:656:ASN:OD1	2.50	0.49
1:A:319:SER:C	1:A:321:ARG:N	2.65	0.49
1:C:387:ILE:HD11	1:C:449:GLN:CG	2.42	0.49
1:D:531:GLN:O	1:D:535:ASP:HB3	2.12	0.49
1:H:531:GLN:HA	1:H:534:VAL:HG12	1.94	0.49
1:G:303:LEU:O	1:G:307:LEU:HB2	2.13	0.49
1:C:118:LYS:CB	1:C:264:HIS:O	2.59	0.49
1:C:220:ARG:CB	1:C:221:PRO:HD2	2.42	0.49
1:H:412:ILE:HG12	1:H:433:ILE:CD1	2.42	0.49
1:A:193:LEU:CB	1:A:196:GLN:HE22	2.24	0.49
1:G:120:GLY:N	1:G:122:ILE:H	2.08	0.49
1:G:269:LEU:HD22	1:G:272:LYS:HE3	1.94	0.49
1:A:270:ALA:HB1	1:A:274:GLU:OE2	2.13	0.49
1:A:564:GLU:OE2	1:A:568:ARG:NH2	2.45	0.49
1:E:119:GLU:HB3	1:E:121:PRO:CD	2.42	0.49
1:E:216:ILE:HG21	1:E:273:LEU:CD1	2.43	0.49
1:G:235:VAL:CB	1:G:243:ILE:HA	2.39	0.49
1:C:642:ILE:HG12	1:C:645:ARG:CZ	2.42	0.49
1:D:478:GLN:HG3	1:D:479:LEU:N	2.28	0.49
1:H:119:GLU:HB2	1:H:121:PRO:CB	2.43	0.49
1:A:633:MET:SD	1:A:633:MET:N	2.85	0.49
1:E:494:LEU:HD12	1:E:514:TRP:CE3	2.37	0.49
1:E:511:LEU:HD21	1:E:515:ARG:NH2	2.27	0.49
1:A:303:LEU:O	1:A:307:LEU:HB2	2.12	0.49
1:A:180:THR:O	1:A:180:THR:HG22	2.13	0.49
1:E:550:ASN:OD1	1:E:611:GLN:OE1	2.30	0.49
1:C:655:TRP:CZ2	1:D:497:TYR:HB2	2.48	0.49
1:C:119:GLU:HB2	1:C:121:PRO:CB	2.43	0.49
1:D:263:ASN:HD21	1:D:265:LEU:H	1.58	0.49
1:D:276:TRP:CZ2	1:D:280:MET:HG3	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:276:TRP:CZ2	1:G:280:MET:HG3	2.47	0.49
1:G:416:ASP:OD1	1:G:416:ASP:N	2.41	0.49
1:H:245:VAL:HG12	1:H:246:TYR:N	2.24	0.49
1:F:118:LYS:HD3	1:F:265:LEU:HA	1.95	0.49
1:F:263:ASN:HD21	1:F:265:LEU:N	2.10	0.49
1:G:226:TRP:HB3	1:G:229:VAL:CG2	2.42	0.49
1:A:246:TYR:HB2	1:A:256:SER:HB3	1.94	0.49
1:C:478:GLN:HG3	1:C:479:LEU:N	2.27	0.49
1:B:189:LEU:HD12	1:B:207:SER:HB3	1.94	0.49
1:H:269:LEU:HD22	1:H:272:LYS:HE3	1.95	0.49
1:A:285:GLN:HG2	1:A:285:GLN:O	2.12	0.49
1:H:285:GLN:HE21	1:H:286:ARG:HH12	1.58	0.49
1:C:342:GLN:NE2	1:E:284:HIS:NE2	2.59	0.49
1:A:583:THR:HB	1:A:584:PRO:CD	2.43	0.49
1:B:339:TRP:HA	1:B:342:GLN:CB	2.36	0.49
1:H:423:TYR:O	1:H:425:HIS:N	2.45	0.49
1:C:660:ILE:C	1:C:662:CYS:N	2.65	0.49
1:G:583:THR:HB	1:G:584:PRO:CD	2.43	0.49
1:E:193:LEU:CB	1:E:196:GLN:HE22	2.25	0.49
1:C:665:VAL:HG21	1:D:665:VAL:HG22	1.95	0.49
1:B:72:ASN:O	1:B:164:ILE:HG22	2.13	0.49
1:G:198:LYS:C	1:G:200:THR:N	2.66	0.49
1:C:655:TRP:CE3	1:D:654:LEU:HD12	2.47	0.49
1:C:153:LEU:HD22	1:C:162:HIS:HD1	1.78	0.49
1:E:146:LEU:HB3	1:E:207:SER:HB2	1.95	0.49
1:G:213:PHE:CD2	1:G:213:PHE:C	2.86	0.49
1:A:571:TYR:CE2	1:A:590:MET:HG3	2.48	0.49
1:E:186:LEU:HD23	1:E:227:GLN:HG2	1.94	0.49
1:E:269:LEU:HD22	1:E:272:LYS:HE3	1.95	0.49
1:H:249:LEU:HD23	1:H:253:VAL:H	1.77	0.49
1:C:643:VAL:O	1:C:644:VAL:CG2	2.59	0.49
1:B:190:ALA:HB2	1:B:206:TRP:CG	2.48	0.49
1:F:486:PHE:CE1	1:F:647:GLN:HB3	2.48	0.49
1:A:662:CYS:SG	1:B:661:ALA:HB1	2.53	0.49
1:H:390:PHE:CZ	1:H:612:LEU:HD11	2.48	0.49
1:A:322:VAL:CG1	1:A:323:HIS:H	2.21	0.49
1:C:665:VAL:CG2	1:D:665:VAL:HG22	2.43	0.49
1:F:566:GLN:HG2	1:F:593:LEU:CD1	2.42	0.49
1:G:594:LEU:O	1:G:598:ILE:HG13	2.13	0.49
1:D:497:TYR:HD2	1:D:497:TYR:O	1.85	0.49
1:C:118:LYS:HD3	1:C:265:LEU:HA	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:216:ILE:HG21	1:C:273:LEU:HD12	1.95	0.49
1:C:118:LYS:CD	1:C:265:LEU:HA	2.42	0.49
1:D:418:LYS:O	1:D:419:ARG:CB	2.61	0.49
1:G:438:ARG:HH11	1:G:568:ARG:HH21	1.57	0.49
1:E:277:LEU:C	1:E:279:CYS:H	2.15	0.49
1:H:263:ASN:HD21	1:H:265:LEU:N	2.09	0.49
1:F:493:ASP:HB3	1:F:514:TRP:CZ3	2.48	0.49
1:E:660:ILE:O	1:E:662:CYS:N	2.45	0.49
1:D:322:VAL:CG1	1:D:323:HIS:H	2.17	0.49
1:C:423:TYR:O	1:C:425:HIS:N	2.45	0.49
1:A:492:ILE:HG23	1:B:651:GLN:HE22	1.77	0.49
1:G:531:GLN:HA	1:G:534:VAL:HG12	1.94	0.49
1:B:644:VAL:HA	1:B:647:GLN:NE2	2.19	0.49
1:B:222:PHE:HD2	1:B:224:PRO:HD2	1.78	0.49
1:B:434:TRP:CE3	1:B:568:ARG:CA	2.68	0.49
1:H:588:ASN:CG	1:H:589:ASP:N	2.63	0.49
1:G:422:THR:HB	1:G:585:GLY:CA	2.42	0.49
1:E:270:ALA:HB1	1:E:274:GLU:OE2	2.13	0.49
1:C:646:ARG:HG3	1:C:647:GLN:CD	2.30	0.49
1:E:529:GLU:O	1:E:533:LEU:HG	2.13	0.49
1:B:18:LYS:NZ	1:B:33:ILE:HD12	2.27	0.49
1:B:583:THR:HB	1:B:584:PRO:CD	2.43	0.49
1:B:341:GLN:O	1:B:345:GLY:N	2.45	0.49
1:E:469:LYS:NZ	1:E:630:LYS:HE2	2.28	0.49
1:C:534:VAL:CG1	1:C:535:ASP:N	2.75	0.49
1:E:531:GLN:O	1:E:535:ASP:HB3	2.13	0.49
1:B:653:GLU:HA	1:B:656:ASN:HB3	1.95	0.49
1:B:478:GLN:HG3	1:B:479:LEU:N	2.27	0.48
1:B:529:GLU:O	1:B:533:LEU:HG	2.12	0.48
1:D:249:LEU:HD23	1:D:253:VAL:H	1.78	0.48
1:E:234:LYS:O	1:E:235:VAL:O	2.31	0.48
1:G:107:TYR:C	1:G:110:GLN:H	2.15	0.48
1:F:119:GLU:HB2	1:F:121:PRO:CB	2.43	0.48
1:F:249:LEU:HA	1:F:253:VAL:O	2.13	0.48
1:H:220:ARG:NH1	1:H:223:LEU:CD2	2.70	0.48
1:C:145:ASP:CG	1:C:167:LEU:HD13	2.32	0.48
1:D:527:GLU:HG2	1:D:530:VAL:HG13	1.95	0.48
1:C:281:LEU:O	1:C:282:MET:HG2	2.12	0.48
1:E:651:GLN:NE2	1:F:492:ILE:HG21	2.26	0.48
1:B:145:ASP:CG	1:B:167:LEU:HD13	2.33	0.48
1:C:42:ALA:HB3	1:C:96:MET:HB2	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:350:GLU:OE2	1:H:391:ASP:O	2.30	0.48
1:B:534:VAL:CG1	1:B:535:ASP:N	2.75	0.48
1:H:534:VAL:CG1	1:H:535:ASP:N	2.76	0.48
1:E:656:ASN:OD1	1:E:656:ASN:C	2.50	0.48
1:B:308:SER:O	1:B:309:LEU:HB2	2.12	0.48
1:C:120:GLY:N	1:C:122:ILE:H	2.11	0.48
1:B:120:GLY:C	1:B:122:ILE:N	2.64	0.48
1:B:422:THR:HB	1:B:585:GLY:C	2.34	0.48
1:A:654:LEU:C	1:A:654:LEU:HD23	2.33	0.48
1:G:113:ASN:HA	1:G:116:GLY:O	2.12	0.48
1:G:120:GLY:C	1:G:122:ILE:N	2.66	0.48
1:G:588:ASN:CG	1:G:589:ASP:N	2.65	0.48
1:F:272:LYS:HG2	1:F:273:LEU:CA	2.41	0.48
1:E:517:MET:SD	1:E:650:ARG:HG3	2.52	0.48
1:H:529:GLU:O	1:H:533:LEU:HG	2.12	0.48
1:B:319:SER:C	1:B:321:ARG:N	2.66	0.48
1:A:16:GLU:HG2	1:A:83:LEU:CD1	2.43	0.48
1:G:145:ASP:CG	1:G:167:LEU:HD13	2.33	0.48
1:C:387:ILE:HD12	1:C:450:GLY:CA	2.44	0.48
1:H:444:CYS:O	1:H:446:ARG:N	2.46	0.48
1:A:441:LYS:HB2	1:A:560:LEU:HD22	1.93	0.48
1:D:444:CYS:C	1:D:446:ARG:N	2.66	0.48
1:C:531:GLN:O	1:C:535:ASP:HB3	2.13	0.48
1:C:220:ARG:NH1	1:C:223:LEU:CD2	2.71	0.48
1:C:226:TRP:CG	1:C:227:GLN:N	2.62	0.48
1:E:654:LEU:HD23	1:F:654:LEU:HD21	1.85	0.48
1:E:145:ASP:CG	1:E:167:LEU:HD13	2.33	0.48
1:G:216:ILE:HG21	1:G:273:LEU:HD12	1.96	0.48
1:E:373:ASP:OD1	1:E:374:CYS:N	2.46	0.48
1:F:319:SER:C	1:F:321:ARG:N	2.66	0.48
1:G:359:LEU:CA	1:G:460:ARG:NH1	2.71	0.48
1:E:492:ILE:HG21	1:F:651:GLN:NE2	2.27	0.48
1:C:319:SER:C	1:C:321:ARG:N	2.66	0.48
1:B:440:LEU:HD12	1:B:597:ALA:O	2.14	0.48
1:G:389:LEU:N	1:G:389:LEU:HD12	2.28	0.48
1:G:444:CYS:C	1:G:446:ARG:N	2.66	0.48
1:H:137:HIS:ND1	1:H:201:VAL:HG13	2.28	0.48
1:C:341:GLN:O	1:C:345:GLY:N	2.47	0.48
1:B:633:MET:SD	1:B:633:MET:N	2.86	0.48
1:E:545:VAL:HA	1:E:548:GLN:HG2	1.95	0.48
1:B:517:MET:CE	1:B:650:ARG:HG3	2.43	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:216:ILE:HG21	1:D:273:LEU:HD12	1.94	0.48
1:B:118:LYS:NZ	1:B:123:ARG:HH12	2.11	0.48
1:B:213:PHE:CD2	1:B:213:PHE:C	2.86	0.48
1:B:270:ALA:HB1	1:B:274:GLU:OE2	2.13	0.48
1:G:116:GLY:HA3	1:G:216:ILE:O	2.14	0.48
1:A:430:TRP:HB3	1:A:571:TYR:CD2	2.40	0.48
1:E:119:GLU:HB2	1:E:121:PRO:CB	2.43	0.48
1:E:226:TRP:HB3	1:E:229:VAL:CG2	2.43	0.48
1:E:422:THR:HG22	1:E:426:LEU:HD11	1.96	0.48
1:H:107:TYR:C	1:H:110:GLN:H	2.15	0.48
1:H:286:ARG:O	1:H:290:THR:HG21	2.13	0.48
1:G:472:MET:HG2	1:G:633:MET:CB	2.40	0.48
1:C:30:LEU:HB2	1:C:43:ILE:HB	1.96	0.48
1:G:402:SER:HB3	1:G:609:TYR:HB2	1.94	0.48
1:E:583:THR:HB	1:E:584:PRO:CD	2.43	0.48
1:C:386:LEU:N	1:C:386:LEU:HD12	2.29	0.48
1:D:653:GLU:HA	1:D:656:ASN:HB3	1.95	0.48
1:C:249:LEU:HD23	1:C:253:VAL:H	1.78	0.48
1:D:409:SER:HB2	1:D:412:ILE:CD1	2.41	0.48
1:D:426:LEU:O	1:D:430:TRP:N	2.42	0.48
1:D:434:TRP:CZ3	1:D:568:ARG:CB	2.91	0.48
1:B:437:ILE:HG22	1:B:564:GLU:HB2	1.96	0.48
1:A:418:LYS:HB3	1:A:420:PRO:HD3	1.95	0.48
1:F:285:GLN:HE21	1:F:286:ARG:HH12	1.60	0.48
1:F:418:LYS:HB3	1:F:420:PRO:HD3	1.95	0.48
1:C:485:PHE:CD1	1:D:485:PHE:CE1	3.02	0.48
1:C:647:GLN:HA	1:C:647:GLN:OE1	2.14	0.48
1:A:658:LEU:HA	1:B:658:LEU:HD12	1.95	0.48
1:B:144:ARG:HD2	1:B:171:LYS:HB3	1.95	0.48
1:D:423:TYR:O	1:D:425:HIS:N	2.46	0.48
1:B:580:ASP:HA	1:B:582:ARG:HH11	1.77	0.48
1:E:72:ASN:O	1:E:163:LYS:HA	2.14	0.48
1:D:102:GLY:O	1:D:152:VAL:HA	2.14	0.48
1:E:313:SER:HA	1:E:324:THR:HA	1.94	0.48
1:B:643:VAL:O	1:B:644:VAL:CG2	2.60	0.48
1:C:248:ASP:O	1:C:248:ASP:OD1	2.30	0.48
1:E:655:TRP:CZ3	1:F:654:LEU:HD12	2.47	0.48
1:B:248:ASP:O	1:B:248:ASP:OD1	2.31	0.48
1:B:276:TRP:CZ2	1:B:280:MET:HG3	2.49	0.48
1:D:220:ARG:HB3	1:D:221:PRO:HD2	1.95	0.48
1:B:511:LEU:HD21	1:B:515:ARG:NH2	2.29	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:190:ALA:HB2	1:E:206:TRP:CG	2.47	0.48
1:G:118:LYS:CG	1:G:264:HIS:O	2.62	0.48
1:A:105:ARG:HG2	1:A:109:ASN:ND2	2.29	0.48
1:F:276:TRP:CZ2	1:F:280:MET:HG3	2.49	0.48
1:E:130:SER:O	1:E:300:PHE:CE1	2.65	0.48
1:B:33:ILE:HG22	1:B:34:HIS:C	2.34	0.48
1:G:18:LYS:NZ	1:G:33:ILE:HD12	2.27	0.48
1:C:522:GLU:C	1:C:523:LEU:HG	2.33	0.48
1:B:540:LEU:CD2	1:B:621:LYS:CE	2.91	0.48
1:C:449:GLN:O	1:C:450:GLY:C	2.51	0.48
1:D:394:LYS:HE3	1:D:609:TYR:O	2.14	0.48
1:D:361:LEU:HD11	1:D:386:LEU:HD23	1.96	0.48
1:F:547:LEU:O	1:F:550:ASN:ND2	2.47	0.48
1:F:653:GLU:HA	1:F:656:ASN:HB3	1.94	0.48
1:D:494:LEU:HD21	1:D:518:GLU:OE2	2.14	0.48
1:C:221:PRO:O	1:C:222:PHE:HB3	2.12	0.48
1:B:276:TRP:CE3	1:B:277:LEU:CD2	2.96	0.48
1:B:426:LEU:HB3	1:B:430:TRP:CD1	2.49	0.48
1:H:438:ARG:HH11	1:H:568:ARG:HH21	1.59	0.48
1:G:272:LYS:HG2	1:G:273:LEU:CA	2.44	0.48
1:A:216:ILE:HG21	1:A:273:LEU:HD12	1.96	0.48
1:A:418:LYS:O	1:A:419:ARG:CB	2.61	0.48
1:E:220:ARG:HB3	1:E:221:PRO:HD2	1.95	0.48
1:E:418:LYS:O	1:E:419:ARG:CB	2.62	0.48
1:F:115:CYS:SG	1:F:432:GLN:HA	2.54	0.48
1:F:435:GLN:O	1:F:439:ALA:N	2.46	0.48
1:F:191:PRO:HG3	1:F:234:LYS:HZ3	1.77	0.48
1:C:485:PHE:CE2	1:D:485:PHE:HB3	2.49	0.48
1:H:107:TYR:O	1:H:110:GLN:HB2	2.13	0.48
1:F:637:ARG:O	1:F:641:LYS:HB2	2.12	0.48
1:E:198:LYS:HG2	1:E:284:HIS:HA	1.96	0.48
1:A:660:ILE:C	1:A:662:CYS:N	2.65	0.48
1:E:42:ALA:HB3	1:E:96:MET:HB2	1.96	0.48
1:C:387:ILE:HD12	1:C:450:GLY:N	2.28	0.48
1:E:322:VAL:HG21	1:E:446:ARG:HH12	1.78	0.48
1:D:319:SER:C	1:D:321:ARG:N	2.66	0.48
1:B:448:LEU:HD23	1:B:608:ILE:HG12	1.95	0.48
1:B:373:ASP:CG	1:B:374:CYS:SG	2.92	0.48
1:H:373:ASP:C	1:H:374:CYS:SG	2.92	0.48
1:D:500:GLN:HB3	1:D:505:ILE:CG1	2.44	0.48
1:A:479:LEU:HD12	1:A:640:GLU:CB	2.26	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:650:ARG:HD3	1:B:650:ARG:HA	1.64	0.48
1:D:272:LYS:HG2	1:D:273:LEU:CA	2.43	0.48
1:B:269:LEU:HD22	1:B:272:LYS:HE3	1.96	0.48
1:A:655:TRP:CH2	1:B:497:TYR:HB2	2.48	0.48
1:B:654:LEU:HD23	1:B:654:LEU:C	2.34	0.48
1:E:569:ASP:HB3	1:E:573:ARG:HD3	1.95	0.48
1:F:285:GLN:O	1:F:285:GLN:HG2	2.13	0.48
1:F:317:MET:HE3	1:F:609:TYR:CE2	2.49	0.48
1:C:285:GLN:HE21	1:C:286:ARG:HH12	1.62	0.48
1:C:339:TRP:HA	1:C:342:GLN:CB	2.37	0.48
1:D:547:LEU:O	1:D:550:ASN:ND2	2.46	0.48
1:H:632:VAL:CG1	1:H:633:MET:HE1	2.44	0.48
1:H:616:VAL:HG13	1:H:619:LYS:HD2	1.95	0.48
1:E:614:LYS:O	1:E:617:VAL:HB	2.13	0.48
1:A:513:ALA:HB1	1:A:650:ARG:NH1	2.26	0.48
1:B:480:LYS:HE2	1:B:640:GLU:OE1	2.13	0.48
1:D:120:GLY:N	1:D:122:ILE:H	2.07	0.48
1:D:212:ALA:O	1:D:213:PHE:C	2.52	0.48
1:D:437:ILE:HG22	1:D:564:GLU:HB2	1.94	0.48
1:E:654:LEU:HD11	1:F:655:TRP:HE3	1.60	0.48
1:B:433:ILE:CB	1:B:571:TYR:OH	2.61	0.48
1:H:437:ILE:HG22	1:H:564:GLU:CB	2.43	0.48
1:A:119:GLU:HB3	1:A:121:PRO:CD	2.44	0.48
1:E:105:ARG:HG2	1:E:109:ASN:ND2	2.29	0.48
1:E:422:THR:HG21	1:E:586:ASP:C	2.34	0.48
1:F:118:LYS:NZ	1:F:123:ARG:HH12	2.10	0.48
1:E:643:VAL:O	1:E:644:VAL:CG2	2.61	0.48
1:E:650:ARG:HA	1:E:650:ARG:HD3	1.63	0.48
1:F:650:ARG:HD3	1:F:650:ARG:HA	1.66	0.48
1:F:473:THR:CG2	1:F:533:LEU:CD2	2.80	0.48
1:A:536:LYS:HD3	1:A:625:LEU:HD22	1.95	0.48
1:E:327:VAL:CG1	1:E:367:LEU:HB2	2.36	0.48
1:A:522:GLU:C	1:A:523:LEU:HG	2.33	0.48
1:E:581:GLN:O	1:E:582:ARG:C	2.53	0.48
1:E:210:THR:O	1:E:211:LEU:C	2.52	0.48
1:H:84:GLN:HB3	1:H:85:LYS:H	1.50	0.48
1:C:500:GLN:HE22	1:D:659:LYS:HG2	1.78	0.48
1:D:124:THR:OG1	1:D:162:HIS:HE1	1.97	0.48
1:B:412:ILE:HG12	1:B:433:ILE:CD1	2.44	0.48
1:H:426:LEU:HB3	1:H:430:TRP:CD1	2.49	0.48
1:E:125:LEU:HD21	1:E:215:CYS:SG	2.54	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:248:ASP:OD1	1:E:248:ASP:O	2.31	0.48
1:D:286:ARG:O	1:D:290:THR:HG21	2.13	0.48
1:B:16:GLU:HG2	1:B:83:LEU:CD1	2.44	0.48
1:F:16:GLU:HG2	1:F:83:LEU:CD1	2.44	0.48
1:B:423:TYR:O	1:B:425:HIS:N	2.47	0.48
1:G:42:ALA:HB3	1:G:96:MET:HB2	1.96	0.48
1:E:665:VAL:HG21	1:F:665:VAL:CG2	2.40	0.48
1:G:386:LEU:HD12	1:G:386:LEU:N	2.27	0.48
1:D:210:THR:O	1:D:211:LEU:C	2.52	0.48
1:C:594:LEU:O	1:C:598:ILE:HG13	2.14	0.48
1:A:389:LEU:HD12	1:A:389:LEU:N	2.29	0.48
1:A:249:LEU:HB3	1:A:250:THR:H	1.39	0.47
1:C:105:ARG:NH1	1:C:105:ARG:HG3	2.29	0.47
1:D:119:GLU:HB3	1:D:121:PRO:CD	2.39	0.47
1:B:249:LEU:HD23	1:B:253:VAL:H	1.77	0.47
1:H:434:TRP:CB	1:H:571:TYR:CD1	2.80	0.47
1:A:430:TRP:CZ3	1:A:574:LEU:HD13	2.49	0.47
1:B:191:PRO:HG3	1:B:234:LYS:HZ2	1.78	0.47
1:E:118:LYS:HG2	1:E:264:HIS:C	2.28	0.47
1:E:213:PHE:CD2	1:E:213:PHE:C	2.87	0.47
1:F:588:ASN:CG	1:F:589:ASP:N	2.66	0.47
1:H:130:SER:O	1:H:300:PHE:CE1	2.66	0.47
1:F:511:LEU:HG	1:F:515:ARG:CZ	2.43	0.47
1:H:33:ILE:HG22	1:H:34:HIS:C	2.34	0.47
1:C:658:LEU:HA	1:D:658:LEU:CD1	2.44	0.47
1:C:581:GLN:O	1:C:582:ARG:C	2.52	0.47
1:H:394:LYS:CD	1:H:401:ILE:HA	2.44	0.47
1:B:649:LYS:HA	1:B:652:GLN:HB2	1.94	0.47
1:H:455:MET:HE3	1:H:455:MET:O	2.14	0.47
1:B:254:LYS:N	1:B:255:PHE:CE1	2.82	0.47
1:B:272:LYS:HG2	1:B:273:LEU:CA	2.43	0.47
1:H:580:ASP:HA	1:H:582:ARG:HH11	1.76	0.47
1:H:583:THR:HB	1:H:584:PRO:CD	2.44	0.47
1:H:571:TYR:OH	1:H:590:MET:SD	2.72	0.47
1:A:260:PRO:CD	1:A:274:GLU:HG2	2.44	0.47
1:A:272:LYS:HG2	1:A:273:LEU:CA	2.44	0.47
1:F:260:PRO:HB3	1:F:273:LEU:HD22	1.96	0.47
1:F:263:ASN:HD21	1:F:265:LEU:H	1.62	0.47
1:F:426:LEU:O	1:F:430:TRP:N	2.41	0.47
1:E:530:VAL:CA	1:E:533:LEU:HD12	2.30	0.47
1:A:529:GLU:O	1:A:533:LEU:HG	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:480:LYS:NZ	1:C:525:GLY:C	2.67	0.47
1:C:297:VAL:HG23	1:C:301:GLN:HE21	1.80	0.47
1:D:449:GLN:NE2	1:D:453:THR:HG22	2.29	0.47
1:D:449:GLN:O	1:D:450:GLY:C	2.53	0.47
1:H:18:LYS:NZ	1:H:33:ILE:HD12	2.26	0.47
1:F:423:TYR:O	1:F:425:HIS:N	2.47	0.47
1:A:423:TYR:O	1:A:425:HIS:N	2.47	0.47
1:A:386:LEU:HD12	1:A:386:LEU:N	2.28	0.47
1:B:402:SER:O	1:B:403:LEU:CB	2.61	0.47
1:H:341:GLN:O	1:H:345:GLY:N	2.47	0.47
1:B:545:VAL:HA	1:B:548:GLN:HG2	1.96	0.47
1:C:389:LEU:HD12	1:C:389:LEU:N	2.29	0.47
1:C:563:LEU:HD23	1:C:597:ALA:HB2	1.96	0.47
1:D:260:PRO:CD	1:D:274:GLU:HG2	2.44	0.47
1:B:222:PHE:CE2	1:B:224:PRO:O	2.67	0.47
1:B:435:GLN:O	1:B:439:ALA:N	2.46	0.47
1:H:418:LYS:HB3	1:H:420:PRO:HD3	1.95	0.47
1:H:430:TRP:HB3	1:H:571:TYR:CD2	2.42	0.47
1:H:429:VAL:O	1:H:433:ILE:HG12	2.13	0.47
1:F:430:TRP:HZ2	1:F:586:ASP:O	1.97	0.47
1:G:248:ASP:O	1:G:248:ASP:OD1	2.32	0.47
1:H:253:VAL:HB	1:H:255:PHE:CE1	2.50	0.47
1:F:511:LEU:HD21	1:F:515:ARG:NH2	2.29	0.47
1:E:198:LYS:C	1:E:200:THR:N	2.68	0.47
1:D:171:LYS:CG	1:D:171:LYS:O	2.59	0.47
1:A:503:PHE:CE1	1:B:666:ARG:HG3	2.45	0.47
1:E:322:VAL:CG1	1:E:323:HIS:H	2.21	0.47
1:E:469:LYS:NZ	1:E:630:LYS:CE	2.77	0.47
1:D:451:GLN:NE2	1:D:608:ILE:O	2.47	0.47
1:G:545:VAL:HA	1:G:548:GLN:HG2	1.96	0.47
1:A:545:VAL:HA	1:A:548:GLN:HG2	1.96	0.47
1:G:390:PHE:CD1	1:G:390:PHE:N	2.83	0.47
1:C:102:GLY:O	1:C:152:VAL:HA	2.14	0.47
1:C:247:ASP:HB3	1:C:248:ASP:H	1.51	0.47
1:D:213:PHE:CD2	1:D:213:PHE:C	2.88	0.47
1:D:418:LYS:HB3	1:D:420:PRO:HD3	1.97	0.47
1:B:119:GLU:HB2	1:B:121:PRO:HB2	1.95	0.47
1:H:412:ILE:O	1:H:415:GLN:HB2	2.15	0.47
1:H:438:ARG:HG2	1:H:564:GLU:OE1	2.14	0.47
1:A:116:GLY:CA	1:A:217:THR:O	2.62	0.47
1:A:276:TRP:CZ2	1:A:280:MET:HG3	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:438:ARG:HG2	1:F:564:GLU:CD	2.35	0.47
1:F:229:VAL:CG1	1:G:229:VAL:HG13	2.27	0.47
1:G:189:LEU:HA	1:G:189:LEU:HD12	1.66	0.47
1:F:165:ILE:HG12	1:F:166:ASP:H	1.78	0.47
1:C:642:ILE:HG12	1:C:645:ARG:NH1	2.29	0.47
1:D:530:VAL:CA	1:D:533:LEU:HD12	2.30	0.47
1:E:281:LEU:O	1:E:282:MET:HG2	2.14	0.47
1:B:105:ARG:HG2	1:B:109:ASN:ND2	2.30	0.47
1:B:125:LEU:CA	1:B:162:HIS:NE2	2.70	0.47
1:D:145:ASP:CG	1:D:167:LEU:HD13	2.34	0.47
1:F:30:LEU:HB2	1:F:43:ILE:HB	1.95	0.47
1:C:16:GLU:HG2	1:C:83:LEU:CD1	2.43	0.47
1:D:583:THR:HB	1:D:584:PRO:CD	2.44	0.47
1:A:511:LEU:HG	1:A:515:ARG:CZ	2.44	0.47
1:B:581:GLN:O	1:B:582:ARG:C	2.52	0.47
1:C:441:LYS:HB2	1:C:560:LEU:HD22	1.96	0.47
1:F:389:LEU:CD2	1:F:612:LEU:HD21	2.45	0.47
1:A:102:GLY:O	1:A:152:VAL:HA	2.14	0.47
1:E:436:THR:O	1:E:440:LEU:HG	2.14	0.47
1:C:222:PHE:CE2	1:C:224:PRO:O	2.66	0.47
1:D:277:LEU:C	1:D:279:CYS:H	2.16	0.47
1:B:121:PRO:HA	1:B:124:THR:OG1	2.14	0.47
1:G:426:LEU:O	1:G:430:TRP:N	2.43	0.47
1:G:438:ARG:HG2	1:G:564:GLU:HG3	1.96	0.47
1:A:117:LEU:O	1:A:122:ILE:HD11	2.14	0.47
1:E:113:ASN:HA	1:E:116:GLY:O	2.13	0.47
1:E:588:ASN:OD1	1:E:589:ASP:N	2.47	0.47
1:H:222:PHE:CE2	1:H:224:PRO:O	2.67	0.47
1:B:133:LEU:O	1:B:134:ARG:C	2.53	0.47
1:C:402:SER:O	1:C:403:LEU:CB	2.62	0.47
1:B:30:LEU:HB2	1:B:43:ILE:HB	1.96	0.47
1:H:339:TRP:HA	1:H:342:GLN:CB	2.36	0.47
1:G:144:ARG:HD2	1:G:171:LYS:HB3	1.96	0.47
1:B:540:LEU:HD22	1:B:621:LYS:CE	2.44	0.47
1:D:386:LEU:N	1:D:386:LEU:HD12	2.27	0.47
1:H:74:VAL:HG21	1:H:165:ILE:HA	1.96	0.47
1:H:373:ASP:CG	1:H:374:CYS:SG	2.93	0.47
1:C:226:TRP:HB3	1:C:229:VAL:CG2	2.43	0.47
1:C:270:ALA:HB1	1:C:274:GLU:OE2	2.14	0.47
1:B:220:ARG:HB3	1:B:221:PRO:HD2	1.97	0.47
1:G:438:ARG:HG2	1:G:564:GLU:OE1	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:429:VAL:O	1:E:433:ILE:HG12	2.15	0.47
1:A:189:LEU:HD12	1:A:207:SER:HB3	1.95	0.47
1:F:145:ASP:CG	1:F:167:LEU:HD13	2.33	0.47
1:E:286:ARG:O	1:E:290:THR:HG21	2.14	0.47
1:E:297:VAL:HG23	1:E:301:GLN:HE21	1.79	0.47
1:B:357:SER:HB3	1:B:453:THR:HB	1.97	0.47
1:F:144:ARG:HD2	1:F:171:LYS:HB3	1.95	0.47
1:H:386:LEU:HD12	1:H:386:LEU:N	2.29	0.47
1:D:373:ASP:CG	1:D:374:CYS:SG	2.93	0.47
1:C:494:LEU:CD2	1:C:518:GLU:OE2	2.63	0.47
1:C:659:LYS:CG	1:D:500:GLN:HE22	2.26	0.47
1:C:434:TRP:CZ3	1:C:568:ARG:HG3	2.46	0.47
1:D:570:LEU:CB	1:D:590:MET:CE	2.91	0.47
1:B:249:LEU:HB3	1:B:250:THR:H	1.38	0.47
1:B:282:MET:HE2	1:B:282:MET:HA	1.97	0.47
1:B:418:LYS:HB3	1:B:420:PRO:HD3	1.96	0.47
1:G:153:LEU:HD23	1:G:162:HIS:HB3	1.97	0.47
1:G:276:TRP:CE3	1:G:277:LEU:CD2	2.98	0.47
1:E:570:LEU:CB	1:E:590:MET:HE2	2.45	0.47
1:G:221:PRO:O	1:G:222:PHE:HB3	2.14	0.47
1:E:419:ARG:HA	1:E:587:SER:CB	2.45	0.47
1:A:189:LEU:HD12	1:A:189:LEU:HA	1.65	0.47
1:D:647:GLN:OE1	1:D:647:GLN:HA	2.15	0.47
1:H:270:ALA:HB1	1:H:274:GLU:OE2	2.14	0.47
1:H:121:PRO:HA	1:H:124:THR:OG1	2.15	0.47
1:E:285:GLN:HE21	1:E:286:ARG:HH12	1.62	0.47
1:F:633:MET:N	1:F:633:MET:SD	2.87	0.47
1:H:285:GLN:HG2	1:H:285:GLN:O	2.15	0.47
1:G:632:VAL:HG12	1:G:633:MET:HE1	1.95	0.47
1:E:16:GLU:HG2	1:E:83:LEU:CD1	2.44	0.47
1:E:30:LEU:HB2	1:E:43:ILE:HB	1.96	0.47
1:C:144:ARG:HD2	1:C:171:LYS:HB3	1.97	0.47
1:G:402:SER:O	1:G:403:LEU:CB	2.63	0.47
1:H:64:ILE:HG12	1:H:172:GLU:OE1	2.15	0.47
1:G:72:ASN:O	1:G:164:ILE:HG22	2.15	0.47
1:B:322:VAL:CG1	1:B:323:HIS:H	2.22	0.47
1:B:444:CYS:O	1:B:446:ARG:N	2.47	0.47
1:E:386:LEU:HD12	1:E:386:LEU:N	2.27	0.47
1:E:361:LEU:HD11	1:E:386:LEU:HD23	1.96	0.47
1:D:350:GLU:CG	1:D:391:ASP:HB2	2.44	0.47
1:E:341:GLN:O	1:E:345:GLY:N	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:72:ASN:H	1:H:163:LYS:HE2	1.79	0.47
1:D:248:ASP:O	1:D:248:ASP:OD1	2.33	0.47
1:H:531:GLN:O	1:H:535:ASP:HB3	2.13	0.47
1:F:373:ASP:OD1	1:F:374:CYS:N	2.47	0.47
1:C:500:GLN:HB3	1:C:505:ILE:CG1	2.44	0.47
1:A:249:LEU:HD23	1:A:253:VAL:H	1.80	0.47
1:D:570:LEU:CD2	1:D:590:MET:HE2	2.45	0.47
1:B:117:LEU:O	1:B:122:ILE:HD11	2.15	0.47
1:B:212:ALA:O	1:B:213:PHE:C	2.53	0.47
1:H:433:ILE:CB	1:H:571:TYR:OH	2.63	0.47
1:G:105:ARG:HG2	1:G:109:ASN:ND2	2.29	0.47
1:G:119:GLU:HB2	1:G:121:PRO:CB	2.45	0.47
1:G:418:LYS:O	1:G:419:ARG:CB	2.62	0.47
1:A:115:CYS:SG	1:A:432:GLN:HA	2.54	0.47
1:H:189:LEU:HD12	1:H:189:LEU:HA	1.68	0.47
1:E:418:LYS:HB3	1:E:420:PRO:HD3	1.96	0.47
1:F:594:LEU:O	1:F:598:ILE:HG13	2.14	0.47
1:C:297:VAL:HG23	1:C:301:GLN:NE2	2.30	0.47
1:G:359:LEU:N	1:G:460:ARG:NH1	2.62	0.47
1:A:30:LEU:HB2	1:A:43:ILE:HB	1.96	0.47
1:H:536:LYS:HB3	1:H:625:LEU:CD2	2.44	0.47
1:H:402:SER:O	1:H:403:LEU:CB	2.62	0.47
1:D:447:LEU:HD13	1:D:609:TYR:HE1	1.80	0.47
1:F:193:LEU:CB	1:F:196:GLN:HE22	2.24	0.47
1:D:373:ASP:OD1	1:D:374:CYS:N	2.48	0.47
1:B:486:PHE:CE1	1:B:647:GLN:HB3	2.50	0.47
1:C:570:LEU:HD23	1:C:590:MET:CE	2.44	0.47
1:F:654:LEU:HD23	1:F:654:LEU:C	2.35	0.47
1:B:564:GLU:OE2	1:B:568:ARG:NH2	2.47	0.47
1:H:594:LEU:O	1:H:598:ILE:HG13	2.15	0.47
1:A:115:CYS:CB	1:A:435:GLN:HG3	2.45	0.47
1:E:212:ALA:O	1:E:213:PHE:C	2.53	0.47
1:E:222:PHE:CE2	1:E:224:PRO:O	2.68	0.47
1:F:286:ARG:O	1:F:290:THR:HG21	2.14	0.47
1:F:588:ASN:OD1	1:F:589:ASP:N	2.47	0.47
1:D:479:LEU:O	1:D:640:GLU:OE2	2.32	0.47
1:H:276:TRP:CZ2	1:H:280:MET:HG3	2.50	0.47
1:E:387:ILE:HD11	1:E:449:GLN:HB3	1.96	0.47
1:C:130:SER:O	1:C:300:PHE:CE1	2.68	0.47
1:H:368:THR:HG22	1:H:368:THR:O	2.14	0.47
1:A:42:ALA:HB3	1:A:96:MET:HB2	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:373:ASP:OD1	1:G:374:CYS:N	2.48	0.47
1:C:654:LEU:CD1	1:D:655:TRP:CZ3	2.98	0.47
1:C:213:PHE:C	1:C:213:PHE:CD2	2.88	0.47
1:B:120:GLY:CA	1:B:123:ARG:HB2	2.44	0.47
1:H:418:LYS:O	1:H:419:ARG:CB	2.61	0.47
1:G:216:ILE:HG21	1:G:273:LEU:CD1	2.45	0.47
1:G:260:PRO:CD	1:G:274:GLU:HG2	2.45	0.47
1:G:419:ARG:HA	1:G:587:SER:CB	2.45	0.47
1:A:110:GLN:O	1:A:111:PHE:CB	2.36	0.47
1:A:216:ILE:HG21	1:A:273:LEU:CD1	2.45	0.47
1:A:422:THR:HG22	1:A:426:LEU:HD11	1.96	0.47
1:F:210:THR:O	1:F:211:LEU:C	2.53	0.47
1:F:213:PHE:HD2	1:F:214:GLU:N	2.13	0.47
1:C:644:VAL:HA	1:C:647:GLN:NE2	2.19	0.47
1:H:276:TRP:CE3	1:H:277:LEU:CD2	2.98	0.47
1:B:102:GLY:O	1:B:152:VAL:HA	2.14	0.47
1:H:530:VAL:CA	1:H:533:LEU:HD12	2.31	0.47
1:F:387:ILE:HD12	1:F:450:GLY:N	2.27	0.47
1:G:387:ILE:HD12	1:G:450:GLY:CA	2.44	0.47
1:G:449:GLN:NE2	1:G:453:THR:CG2	2.78	0.47
1:G:30:LEU:HB2	1:G:43:ILE:HB	1.95	0.47
1:H:30:LEU:HB2	1:H:43:ILE:HB	1.97	0.47
1:A:319:SER:OG	1:A:403:LEU:HB2	2.14	0.47
1:G:423:TYR:O	1:G:425:HIS:N	2.48	0.47
1:F:583:THR:HB	1:F:584:PRO:CD	2.44	0.47
1:F:386:LEU:N	1:F:386:LEU:HD12	2.28	0.47
1:D:545:VAL:HA	1:D:548:GLN:HG2	1.97	0.47
1:D:511:LEU:HG	1:D:515:ARG:CZ	2.45	0.46
1:C:120:GLY:C	1:C:122:ILE:N	2.69	0.46
1:B:119:GLU:HB2	1:B:121:PRO:CB	2.45	0.46
1:B:118:LYS:HD3	1:B:265:LEU:HD12	1.98	0.46
1:F:430:TRP:CZ3	1:F:574:LEU:HD13	2.51	0.46
1:H:222:PHE:HD2	1:H:224:PRO:HD2	1.80	0.46
1:F:189:LEU:CG	1:F:190:ALA:N	2.66	0.46
1:H:153:LEU:HD22	1:H:162:HIS:HD1	1.80	0.46
1:H:111:PHE:CE2	1:H:572:ARG:HG3	2.47	0.46
1:F:478:GLN:O	1:F:482:LYS:HB3	2.16	0.46
1:F:296:ASN:ND2	1:F:302:ALA:HB2	2.30	0.46
1:F:402:SER:O	1:F:403:LEU:CB	2.62	0.46
1:D:327:VAL:CG1	1:D:367:LEU:HB2	2.34	0.46
1:E:291:ASP:HA	1:E:292:PRO:HD3	1.82	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:475:GLU:HG2	1:F:636:MET:CE	2.45	0.46
1:D:389:LEU:HD12	1:D:389:LEU:N	2.30	0.46
1:A:390:PHE:CD1	1:A:390:PHE:N	2.83	0.46
1:H:389:LEU:N	1:H:389:LEU:HD12	2.30	0.46
1:D:118:LYS:HB3	1:D:264:HIS:CD2	2.50	0.46
1:A:231:TRP:HZ3	1:D:232:HIS:NE2	2.14	0.46
1:E:125:LEU:CA	1:E:162:HIS:NE2	2.72	0.46
1:F:564:GLU:HG2	1:F:564:GLU:O	2.15	0.46
1:H:221:PRO:O	1:H:222:PHE:HB3	2.15	0.46
1:G:189:LEU:HD12	1:G:207:SER:HB3	1.97	0.46
1:F:130:SER:O	1:F:300:PHE:CE1	2.68	0.46
1:D:30:LEU:HB2	1:D:43:ILE:HB	1.97	0.46
1:E:522:GLU:C	1:E:523:LEU:HG	2.35	0.46
1:D:144:ARG:HD2	1:D:171:LYS:HB3	1.97	0.46
1:C:357:SER:CB	1:C:453:THR:HB	2.41	0.46
1:G:581:GLN:O	1:G:582:ARG:C	2.53	0.46
1:B:386:LEU:HD12	1:B:386:LEU:N	2.30	0.46
1:A:394:LYS:HG3	1:A:613:SER:HB2	1.96	0.46
1:D:390:PHE:CD1	1:D:390:PHE:N	2.84	0.46
1:G:296:ASN:ND2	1:G:302:ALA:HB2	2.31	0.46
1:G:102:GLY:O	1:G:152:VAL:HA	2.16	0.46
1:C:503:PHE:C	1:C:505:ILE:H	2.17	0.46
1:A:517:MET:HE1	1:A:647:GLN:OE1	2.16	0.46
1:A:643:VAL:O	1:A:644:VAL:CG2	2.62	0.46
1:B:646:ARG:HG3	1:B:647:GLN:CD	2.33	0.46
1:A:226:TRP:CG	1:A:227:GLN:N	2.65	0.46
1:D:422:THR:HG22	1:D:426:LEU:HD11	1.97	0.46
1:B:115:CYS:O	1:B:263:ASN:HA	2.15	0.46
1:G:412:ILE:O	1:G:415:GLN:HB2	2.15	0.46
1:H:234:LYS:O	1:H:235:VAL:O	2.33	0.46
1:F:416:ASP:OD1	1:F:416:ASP:N	2.39	0.46
1:D:478:GLN:O	1:D:482:LYS:HB3	2.15	0.46
1:D:643:VAL:O	1:D:644:VAL:CG2	2.62	0.46
1:H:357:SER:HB3	1:H:453:THR:HA	1.97	0.46
1:G:281:LEU:O	1:G:282:MET:HG2	2.15	0.46
1:A:540:LEU:HD12	1:A:622:ALA:HB2	1.93	0.46
1:D:581:GLN:O	1:D:582:ARG:C	2.53	0.46
1:A:447:LEU:HD13	1:A:609:TYR:CE1	2.50	0.46
1:E:594:LEU:O	1:E:598:ILE:HG13	2.15	0.46
1:B:390:PHE:N	1:B:390:PHE:CD1	2.83	0.46
1:F:390:PHE:N	1:F:390:PHE:CD1	2.83	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:467:LYS:HD3	1:B:467:LYS:HA	1.75	0.46
1:D:500:GLN:C	1:D:505:ILE:HG12	2.36	0.46
1:A:475:GLU:O	1:A:478:GLN:HG2	2.15	0.46
1:C:418:LYS:HB3	1:C:420:PRO:HD3	1.97	0.46
1:D:270:ALA:HB1	1:D:274:GLU:OE2	2.16	0.46
1:E:666:ARG:HG3	1:F:503:PHE:HE1	1.81	0.46
1:H:571:TYR:CE2	1:H:590:MET:SD	3.07	0.46
1:A:118:LYS:CB	1:A:264:HIS:O	2.64	0.46
1:A:276:TRP:CE3	1:A:277:LEU:CD2	2.98	0.46
1:E:222:PHE:HD2	1:E:224:PRO:HD2	1.80	0.46
1:E:412:ILE:O	1:E:415:GLN:HB2	2.16	0.46
1:F:216:ILE:HG21	1:F:273:LEU:CD1	2.46	0.46
1:F:412:ILE:O	1:F:415:GLN:HB2	2.16	0.46
1:G:249:LEU:HD23	1:G:253:VAL:H	1.80	0.46
1:C:189:LEU:HD12	1:C:189:LEU:HA	1.67	0.46
1:F:191:PRO:HG3	1:F:234:LYS:HZ2	1.79	0.46
1:D:533:LEU:HD23	1:D:629:VAL:HG13	1.97	0.46
1:D:146:LEU:HB3	1:D:207:SER:HB2	1.97	0.46
1:C:610:ASP:O	1:C:613:SER:HB3	2.15	0.46
1:C:545:VAL:HA	1:C:548:GLN:HG2	1.96	0.46
1:H:144:ARG:HD2	1:H:171:LYS:HB3	1.96	0.46
1:H:42:ALA:HB3	1:H:96:MET:HB2	1.97	0.46
1:E:350:GLU:CG	1:E:391:ASP:HB2	2.45	0.46
1:D:373:ASP:C	1:D:374:CYS:SG	2.93	0.46
1:H:102:GLY:O	1:H:152:VAL:HA	2.15	0.46
1:F:102:GLY:O	1:F:152:VAL:HA	2.15	0.46
1:E:547:LEU:CD1	1:E:615:THR:HG21	2.04	0.46
1:C:506:THR:HG22	1:C:507:SER:H	1.81	0.46
1:D:506:THR:HG22	1:D:507:SER:H	1.80	0.46
1:C:422:THR:HG22	1:C:426:LEU:HD11	1.97	0.46
1:C:438:ARG:HG2	1:C:564:GLU:HG3	1.98	0.46
1:D:569:ASP:HB3	1:D:573:ARG:HD3	1.98	0.46
1:G:418:LYS:HB3	1:G:420:PRO:HD3	1.96	0.46
1:A:118:LYS:CD	1:A:265:LEU:HA	2.45	0.46
1:E:216:ILE:HG21	1:E:273:LEU:HD12	1.96	0.46
1:D:475:GLU:CG	1:D:636:MET:HE1	2.45	0.46
1:H:105:ARG:HG2	1:H:109:ASN:ND2	2.30	0.46
1:H:118:LYS:CB	1:H:264:HIS:O	2.63	0.46
1:H:119:GLU:HB3	1:H:121:PRO:CD	2.42	0.46
1:C:281:LEU:C	1:C:282:MET:HG2	2.36	0.46
1:B:449:GLN:O	1:B:450:GLY:C	2.52	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:444:CYS:O	1:F:447:LEU:N	2.47	0.46
1:F:522:GLU:C	1:F:523:LEU:HG	2.35	0.46
1:E:144:ARG:HD2	1:E:171:LYS:HB3	1.97	0.46
1:A:497:TYR:CE2	1:A:511:LEU:HD22	2.50	0.46
1:B:361:LEU:HD11	1:B:386:LEU:HD23	1.97	0.46
1:D:55:ARG:HB2	1:D:55:ARG:HE	1.53	0.46
1:H:614:LYS:HA	1:H:614:LYS:HD3	1.80	0.46
1:B:479:LEU:HB3	1:B:640:GLU:CD	2.29	0.46
1:C:226:TRP:HD1	1:C:227:GLN:N	2.03	0.46
1:C:412:ILE:O	1:C:415:GLN:HB2	2.16	0.46
1:C:588:ASN:OD1	1:C:589:ASP:N	2.48	0.46
1:D:187:GLN:HB3	1:D:223:LEU:HD22	1.79	0.46
1:G:412:ILE:HG12	1:G:433:ILE:CD1	2.46	0.46
1:A:412:ILE:O	1:A:415:GLN:HB2	2.15	0.46
1:E:186:LEU:C	1:E:188:TYR:H	2.19	0.46
1:E:222:PHE:HB3	1:E:255:PHE:HB3	1.98	0.46
1:F:220:ARG:HB3	1:F:221:PRO:HD2	1.97	0.46
1:F:438:ARG:HG2	1:F:564:GLU:HG3	1.98	0.46
1:C:235:VAL:CG1	1:C:243:ILE:N	2.71	0.46
1:H:449:GLN:NE2	1:H:453:THR:CG2	2.78	0.46
1:E:644:VAL:HA	1:E:647:GLN:NE2	2.20	0.46
1:F:643:VAL:O	1:F:644:VAL:CG2	2.62	0.46
1:B:105:ARG:NH1	1:B:105:ARG:HG3	2.31	0.46
1:B:153:LEU:HD22	1:B:162:HIS:HD1	1.81	0.46
1:F:449:GLN:NE2	1:F:453:THR:CG2	2.79	0.46
1:H:281:LEU:O	1:H:282:MET:HG2	2.16	0.46
1:C:133:LEU:O	1:C:134:ARG:C	2.53	0.46
1:H:327:VAL:CG1	1:H:367:LEU:HB2	2.32	0.46
1:D:16:GLU:HG2	1:D:83:LEU:CD1	2.43	0.46
1:H:208:PHE:O	1:H:211:LEU:HB3	2.15	0.46
1:C:137:HIS:ND1	1:C:201:VAL:HG13	2.31	0.46
1:B:74:VAL:HG21	1:B:165:ILE:HA	1.98	0.46
1:G:455:MET:HB2	1:G:455:MET:HE3	1.83	0.46
1:E:452:ARG:HD2	1:E:550:ASN:ND2	2.30	0.46
1:C:276:TRP:CE3	1:C:277:LEU:CD2	2.98	0.46
1:C:422:THR:CB	1:C:585:GLY:HA3	2.40	0.46
1:D:408:GLU:HA	1:D:408:GLU:OE2	2.16	0.46
1:H:581:GLN:O	1:H:582:ARG:C	2.53	0.46
1:G:422:THR:HG22	1:G:426:LEU:HD11	1.97	0.46
1:E:102:GLY:O	1:E:152:VAL:HA	2.15	0.46
1:E:265:LEU:CD2	1:E:269:LEU:CB	2.94	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:250:THR:C	1:H:251:GLY:O	2.54	0.46
1:E:646:ARG:HG3	1:E:647:GLN:CD	2.31	0.46
1:E:647:GLN:OE1	1:E:647:GLN:HA	2.16	0.46
1:G:16:GLU:HG2	1:G:83:LEU:CD1	2.44	0.46
1:A:581:GLN:O	1:A:582:ARG:C	2.54	0.46
1:D:522:GLU:C	1:D:523:LEU:HG	2.35	0.46
1:H:390:PHE:N	1:H:390:PHE:CD1	2.83	0.46
1:C:358:GLY:O	1:C:359:LEU:CB	2.60	0.46
1:E:322:VAL:CG2	1:E:446:ARG:NH1	2.77	0.46
1:F:581:GLN:O	1:F:582:ARG:C	2.53	0.46
1:H:322:VAL:CG1	1:H:323:HIS:H	2.25	0.46
1:E:72:ASN:O	1:E:164:ILE:HG22	2.16	0.46
1:H:74:VAL:CG2	1:H:165:ILE:HA	2.46	0.46
1:E:21:LEU:HD12	1:E:29:VAL:HG12	1.98	0.46
1:C:497:TYR:CA	1:D:655:TRP:HZ2	2.29	0.46
1:C:216:ILE:HG21	1:C:273:LEU:CD1	2.46	0.46
1:D:153:LEU:HD22	1:D:162:HIS:HD1	1.81	0.46
1:D:412:ILE:O	1:D:415:GLN:HB2	2.15	0.46
1:B:269:LEU:C	1:B:271:GLY:N	2.68	0.46
1:B:418:LYS:O	1:B:419:ARG:CB	2.61	0.46
1:G:105:ARG:CZ	1:G:149:GLU:OE2	2.64	0.46
1:G:564:GLU:HG2	1:G:564:GLU:O	2.16	0.46
1:G:571:TYR:CE2	1:G:590:MET:CG	2.98	0.46
1:A:594:LEU:O	1:A:598:ILE:HG13	2.16	0.46
1:H:117:LEU:O	1:H:122:ILE:HD11	2.14	0.46
1:H:216:ILE:HG21	1:H:273:LEU:HD12	1.96	0.46
1:E:533:LEU:CD2	1:E:629:VAL:CG1	2.88	0.46
1:E:478:GLN:HG3	1:E:479:LEU:N	2.30	0.46
1:F:647:GLN:OE1	1:F:647:GLN:HA	2.15	0.46
1:C:480:LYS:HE3	1:C:527:GLU:CB	2.39	0.46
1:A:658:LEU:HD12	1:B:658:LEU:CD1	2.33	0.46
1:C:193:LEU:CB	1:C:196:GLN:HE22	2.21	0.46
1:F:193:LEU:CD2	1:F:231:TRP:CD1	2.97	0.46
1:C:55:ARG:HB2	1:C:55:ARG:HE	1.54	0.46
1:A:644:VAL:HA	1:A:647:GLN:NE2	2.20	0.46
1:B:647:GLN:HA	1:B:647:GLN:OE1	2.15	0.46
1:C:125:LEU:HD21	1:C:215:CYS:SG	2.56	0.46
1:C:569:ASP:HB3	1:C:573:ARG:HD3	1.97	0.46
1:G:475:GLU:OE2	1:G:637:ARG:CG	2.58	0.46
1:E:246:TYR:HB2	1:E:256:SER:HB3	1.98	0.46
1:E:105:ARG:CZ	1:E:149:GLU:OE2	2.64	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:572:ARG:HD3	1:F:573:ARG:HH22	1.80	0.46
1:F:433:ILE:HG23	1:F:594:LEU:HD22	1.97	0.46
1:G:26:PHE:HE2	1:G:181:GLU:CD	2.19	0.46
1:G:210:THR:N	1:G:281:LEU:HD11	2.31	0.46
1:G:359:LEU:H	1:G:460:ARG:NH1	2.14	0.46
1:F:447:LEU:HD12	1:F:605:VAL:HG21	1.98	0.46
1:A:144:ARG:HD2	1:A:171:LYS:HB3	1.97	0.46
1:E:660:ILE:C	1:E:662:CYS:N	2.68	0.46
1:B:540:LEU:HD21	1:B:621:LYS:HD2	1.97	0.46
1:D:402:SER:O	1:D:403:LEU:CB	2.64	0.46
1:H:323:HIS:HB3	1:H:325:TYR:CE1	2.51	0.46
1:H:296:ASN:ND2	1:H:302:ALA:HB2	2.30	0.46
1:G:81:ASP:HA	1:G:84:GLN:HE21	1.81	0.46
1:C:467:LYS:HD3	1:C:467:LYS:HA	1.76	0.46
1:B:522:GLU:C	1:B:523:LEU:HG	2.36	0.46
1:C:269:LEU:HD22	1:C:272:LYS:HE3	1.97	0.46
1:C:573:ARG:NH1	1:D:573:ARG:NH2	2.10	0.46
1:D:125:LEU:CA	1:D:162:HIS:NE2	2.71	0.46
1:G:212:ALA:O	1:G:213:PHE:C	2.54	0.46
1:A:125:LEU:HD21	1:A:215:CYS:SG	2.56	0.46
1:B:246:TYR:HB2	1:B:256:SER:HB3	1.98	0.46
1:E:412:ILE:O	1:E:416:ASP:OD1	2.34	0.46
1:F:153:LEU:HD23	1:F:162:HIS:HB3	1.98	0.46
1:F:269:LEU:HD22	1:F:272:LYS:HE3	1.97	0.46
1:F:276:TRP:CE3	1:F:277:LEU:CD2	2.99	0.46
1:C:484:ASP:C	1:C:486:PHE:H	2.20	0.46
1:H:216:ILE:HG21	1:H:273:LEU:CD1	2.45	0.46
1:E:662:CYS:SG	1:F:661:ALA:CB	2.97	0.46
1:G:323:HIS:HB3	1:G:325:TYR:CE1	2.51	0.46
1:H:16:GLU:HG2	1:H:83:LEU:CD1	2.44	0.46
1:A:651:GLN:HE22	1:B:492:ILE:CG2	2.25	0.46
1:G:563:LEU:HD23	1:G:597:ALA:HB2	1.97	0.46
1:B:651:GLN:O	1:B:652:GLN:C	2.55	0.46
1:G:373:ASP:CG	1:G:374:CYS:SG	2.94	0.46
1:E:614:LYS:HA	1:E:614:LYS:HD3	1.81	0.46
1:C:105:ARG:HG2	1:C:109:ASN:ND2	2.31	0.45
1:E:666:ARG:HG3	1:F:503:PHE:CE1	2.51	0.45
1:F:222:PHE:HB3	1:F:255:PHE:HB3	1.98	0.45
1:F:419:ARG:NH1	1:F:588:ASN:HA	2.32	0.45
1:C:246:TYR:HB2	1:C:256:SER:HB3	1.98	0.45
1:F:246:TYR:HB2	1:F:256:SER:HB3	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:133:LEU:O	1:H:134:ARG:C	2.54	0.45
1:A:316:ASN:N	1:A:321:ARG:O	2.49	0.45
1:B:540:LEU:HD21	1:B:621:LYS:HZ2	1.80	0.45
1:C:316:ASN:N	1:C:321:ARG:O	2.49	0.45
1:H:361:LEU:HD11	1:H:386:LEU:HD23	1.98	0.45
1:H:72:ASN:O	1:H:164:ILE:HG22	2.16	0.45
1:E:469:LYS:HD2	1:E:630:LYS:HG2	1.98	0.45
1:E:469:LYS:NZ	1:E:630:LYS:HD3	2.31	0.45
1:A:247:ASP:HB3	1:A:248:ASP:H	1.49	0.45
1:C:222:PHE:HD2	1:C:224:PRO:HD2	1.81	0.45
1:C:440:LEU:HD12	1:C:597:ALA:O	2.17	0.45
1:D:260:PRO:HB3	1:D:273:LEU:HD22	1.98	0.45
1:B:564:GLU:O	1:B:564:GLU:HG2	2.16	0.45
1:E:118:LYS:HZ1	1:E:123:ARG:HH12	1.63	0.45
1:F:105:ARG:HG2	1:F:109:ASN:ND2	2.30	0.45
1:H:569:ASP:HB3	1:H:573:ARG:HD3	1.97	0.45
1:E:449:GLN:O	1:E:450:GLY:C	2.55	0.45
1:A:449:GLN:O	1:A:450:GLY:C	2.54	0.45
1:B:42:ALA:HB3	1:B:96:MET:HB2	1.97	0.45
1:B:563:LEU:HD23	1:B:597:ALA:HB2	1.98	0.45
1:G:193:LEU:CB	1:G:196:GLN:HE22	2.24	0.45
1:E:50:LEU:H	1:E:55:ARG:CD	2.29	0.45
1:H:135:TYR:O	1:H:139:ASN:ND2	2.48	0.45
1:H:198:LYS:HG2	1:H:284:HIS:HA	1.98	0.45
1:A:140:ARG:NH2	1:A:174:ASP:OD2	2.50	0.45
1:B:296:ASN:ND2	1:B:302:ALA:HB2	2.31	0.45
1:A:248:ASP:OD1	1:A:248:ASP:O	2.34	0.45
1:C:225:ASN:OD1	1:C:229:VAL:HG12	2.15	0.45
1:D:416:ASP:HB3	1:D:591:VAL:HG13	1.98	0.45
1:H:422:THR:HG22	1:H:426:LEU:HD11	1.98	0.45
1:A:186:LEU:C	1:A:188:TYR:H	2.19	0.45
1:E:224:PRO:HG3	1:E:428:ARG:HH22	1.81	0.45
1:E:249:LEU:HB3	1:E:250:THR:H	1.39	0.45
1:E:422:THR:HG22	1:E:426:LEU:CD2	2.46	0.45
1:F:120:GLY:CA	1:F:123:ARG:HB2	2.47	0.45
1:F:148:PRO:HD2	1:F:149:GLU:OE2	2.16	0.45
1:F:418:LYS:O	1:F:419:ARG:CB	2.61	0.45
1:D:235:VAL:CG1	1:D:243:ILE:N	2.71	0.45
1:C:191:PRO:HG3	1:C:234:LYS:HZ2	1.80	0.45
1:B:116:GLY:HA2	1:B:217:THR:O	2.17	0.45
1:E:497:TYR:CD2	1:E:511:LEU:HD22	2.48	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:323:HIS:HB3	1:E:325:TYR:CE1	2.52	0.45
1:A:560:LEU:HD12	1:A:601:PHE:HB2	1.98	0.45
1:B:350:GLU:CG	1:B:391:ASP:HB2	2.44	0.45
1:B:448:LEU:HB2	1:B:608:ILE:HD11	1.97	0.45
1:G:312:LEU:O	1:G:324:THR:HG23	2.17	0.45
1:B:81:ASP:HA	1:B:84:GLN:HE21	1.82	0.45
1:A:647:GLN:OE1	1:A:647:GLN:HA	2.16	0.45
1:A:222:PHE:CE2	1:A:224:PRO:O	2.70	0.45
1:C:272:LYS:O	1:C:273:LEU:C	2.55	0.45
1:C:571:TYR:CE2	1:C:590:MET:HG3	2.52	0.45
1:D:216:ILE:HG21	1:D:273:LEU:CD1	2.46	0.45
1:B:416:ASP:OD1	1:B:416:ASP:N	2.39	0.45
1:B:426:LEU:O	1:B:430:TRP:N	2.45	0.45
1:D:249:LEU:HB3	1:D:250:THR:H	1.37	0.45
1:E:412:ILE:HG12	1:E:433:ILE:CD1	2.46	0.45
1:F:412:ILE:O	1:F:416:ASP:OD1	2.34	0.45
1:F:433:ILE:HG21	1:F:571:TYR:OH	2.15	0.45
1:H:153:LEU:HD23	1:H:162:HIS:HB3	1.97	0.45
1:H:118:LYS:HD3	1:H:265:LEU:HD12	1.97	0.45
1:F:521:VAL:HA	1:F:524:CYS:HG	1.76	0.45
1:A:665:VAL:HG22	1:B:665:VAL:HG21	1.97	0.45
1:C:530:VAL:CA	1:C:533:LEU:HD12	2.30	0.45
1:C:284:HIS:HE1	1:E:338:SER:OG	1.99	0.45
1:A:402:SER:HB2	1:A:403:LEU:H	1.67	0.45
1:B:322:VAL:CG1	1:B:323:HIS:N	2.76	0.45
1:B:443:ASP:O	1:B:446:ARG:CB	2.65	0.45
1:A:506:THR:HG22	1:A:507:SER:H	1.80	0.45
1:D:140:ARG:NH2	1:D:174:ASP:OD2	2.49	0.45
1:F:436:THR:O	1:F:440:LEU:HG	2.15	0.45
1:E:458:LEU:CD1	1:E:544:SER:HB3	2.47	0.45
1:F:135:TYR:O	1:F:139:ASN:ND2	2.47	0.45
1:A:646:ARG:HG3	1:A:647:GLN:CD	2.32	0.45
1:F:506:THR:HG22	1:F:507:SER:H	1.81	0.45
1:G:569:ASP:HB3	1:G:573:ARG:HD3	1.98	0.45
1:A:212:ALA:O	1:A:213:PHE:C	2.55	0.45
1:A:412:ILE:HG12	1:A:433:ILE:CD1	2.45	0.45
1:H:191:PRO:HG3	1:H:234:LYS:HZ3	1.81	0.45
1:H:235:VAL:CG1	1:H:243:ILE:N	2.73	0.45
1:E:117:LEU:O	1:E:122:ILE:HD11	2.16	0.45
1:E:462:ASN:ND2	1:E:540:LEU:HB3	2.31	0.45
1:D:486:PHE:HZ	1:D:517:MET:HE1	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:479:LEU:C	1:D:640:GLU:OE2	2.55	0.45
1:A:133:LEU:O	1:A:134:ARG:C	2.54	0.45
1:D:297:VAL:HG23	1:D:301:GLN:HE21	1.82	0.45
1:A:402:SER:HA	1:A:609:TYR:CG	2.51	0.45
1:D:42:ALA:HB3	1:D:96:MET:HB2	1.97	0.45
1:G:133:LEU:O	1:G:134:ARG:C	2.54	0.45
1:D:660:ILE:C	1:D:662:CYS:N	2.67	0.45
1:D:402:SER:HB3	1:D:609:TYR:HB2	1.99	0.45
1:G:350:GLU:OE2	1:G:391:ASP:O	2.33	0.45
1:H:373:ASP:OD1	1:H:374:CYS:N	2.49	0.45
1:H:81:ASP:HA	1:H:84:GLN:HE21	1.81	0.45
1:A:296:ASN:ND2	1:A:302:ALA:HB2	2.30	0.45
1:F:470:ASN:HD22	1:F:470:ASN:N	2.15	0.45
1:B:484:ASP:C	1:B:486:PHE:H	2.20	0.45
1:C:220:ARG:HB3	1:C:221:PRO:HD2	1.98	0.45
1:D:213:PHE:O	1:D:214:GLU:C	2.54	0.45
1:D:276:TRP:CE3	1:D:277:LEU:CD2	3.00	0.45
1:A:438:ARG:CG	1:A:564:GLU:HG3	2.46	0.45
1:E:103:ASP:O	1:E:105:ARG:N	2.50	0.45
1:E:115:CYS:CB	1:E:435:GLN:HG3	2.46	0.45
1:F:153:LEU:HD22	1:F:162:HIS:HD1	1.81	0.45
1:F:270:ALA:HB1	1:F:274:GLU:OE2	2.16	0.45
1:G:234:LYS:O	1:G:235:VAL:O	2.35	0.45
1:D:475:GLU:O	1:D:478:GLN:HG2	2.17	0.45
1:H:125:LEU:HD21	1:H:215:CYS:SG	2.56	0.45
1:H:297:VAL:HG23	1:H:301:GLN:NE2	2.32	0.45
1:B:102:GLY:CA	1:B:152:VAL:HG13	2.47	0.45
1:D:189:LEU:HA	1:D:189:LEU:HD12	1.63	0.45
1:B:134:ARG:HD2	1:B:300:PHE:CE1	2.52	0.45
1:A:134:ARG:HD2	1:A:300:PHE:CE1	2.52	0.45
1:G:300:PHE:O	1:G:301:GLN:C	2.55	0.45
1:C:72:ASN:H	1:C:163:LYS:HE2	1.82	0.45
1:F:545:VAL:HA	1:F:548:GLN:HG2	1.99	0.45
1:D:84:GLN:HB3	1:D:85:LYS:H	1.50	0.45
1:C:654:LEU:HD22	1:D:654:LEU:HD21	1.74	0.45
1:A:254:LYS:N	1:A:255:PHE:CE1	2.85	0.45
1:D:260:PRO:HB2	1:D:273:LEU:CD1	2.45	0.45
1:B:119:GLU:HB3	1:B:121:PRO:CD	2.41	0.45
1:B:408:GLU:HA	1:B:408:GLU:OE2	2.16	0.45
1:B:418:LYS:HB3	1:B:419:ARG:H	1.67	0.45
1:H:426:LEU:O	1:H:430:TRP:N	2.43	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:501:MET:HA	1:B:505:ILE:CD1	2.39	0.45
1:B:500:GLN:HB2	1:B:505:ILE:HG23	1.98	0.45
1:A:105:ARG:CZ	1:A:149:GLU:OE2	2.65	0.45
1:A:409:SER:CB	1:A:412:ILE:CD1	2.92	0.45
1:F:103:ASP:O	1:F:105:ARG:N	2.50	0.45
1:H:26:PHE:CE2	1:H:181:GLU:CG	2.99	0.45
1:E:632:VAL:HB	1:E:633:MET:HE2	1.99	0.45
1:F:642:ILE:C	1:F:644:VAL:H	2.20	0.45
1:F:449:GLN:O	1:F:450:GLY:C	2.54	0.45
1:B:297:VAL:HG23	1:B:301:GLN:HE21	1.82	0.45
1:A:130:SER:O	1:A:300:PHE:CE1	2.69	0.45
1:G:297:VAL:HG23	1:G:301:GLN:HE21	1.81	0.45
1:H:102:GLY:CA	1:H:152:VAL:HG13	2.47	0.45
1:B:528:ARG:HA	1:B:530:VAL:HG22	1.99	0.45
1:C:110:GLN:O	1:C:111:PHE:CB	2.33	0.45
1:B:276:TRP:HE3	1:B:277:LEU:HD23	1.81	0.45
1:B:422:THR:HG22	1:B:426:LEU:HD11	1.98	0.45
1:B:430:TRP:CE3	1:B:574:LEU:HD22	2.50	0.45
1:E:191:PRO:HG3	1:E:234:LYS:HZ2	1.82	0.45
1:G:111:PHE:HE2	1:G:572:ARG:HE	1.64	0.45
1:G:124:THR:O	1:G:127:SER:N	2.48	0.45
1:E:253:VAL:HB	1:E:255:PHE:CE1	2.52	0.45
1:E:276:TRP:CZ2	1:E:280:MET:HG3	2.52	0.45
1:E:276:TRP:CE3	1:E:277:LEU:CD2	3.00	0.45
1:G:206:TRP:CD1	1:G:207:SER:N	2.85	0.45
1:H:297:VAL:HG23	1:H:301:GLN:HE21	1.81	0.45
1:E:517:MET:HE1	1:E:647:GLN:OE1	2.15	0.45
1:E:297:VAL:HG23	1:E:301:GLN:NE2	2.31	0.45
1:B:300:PHE:O	1:B:301:GLN:C	2.55	0.45
1:C:373:ASP:O	1:C:374:CYS:CB	2.65	0.45
1:D:135:TYR:O	1:D:139:ASN:ND2	2.49	0.45
1:H:21:LEU:HD12	1:H:29:VAL:HG12	1.99	0.45
1:B:21:LEU:HD12	1:B:29:VAL:HG12	1.99	0.45
1:B:470:ASN:HD22	1:B:470:ASN:N	2.14	0.45
1:A:81:ASP:HA	1:A:84:GLN:HE21	1.82	0.45
1:A:222:PHE:HB2	1:A:255:PHE:HD2	1.82	0.45
1:C:222:PHE:HB3	1:C:255:PHE:HB3	1.99	0.45
1:D:120:GLY:CA	1:D:123:ARG:HB2	2.47	0.45
1:B:429:VAL:O	1:B:433:ILE:HG12	2.17	0.45
1:A:118:LYS:HD3	1:A:265:LEU:HA	1.99	0.45
1:F:222:PHE:CE2	1:F:224:PRO:O	2.70	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:246:TYR:HB2	1:D:256:SER:HB3	1.97	0.45
1:C:485:PHE:CZ	1:D:485:PHE:CG	3.04	0.45
1:H:105:ARG:CZ	1:H:149:GLU:OE2	2.65	0.45
1:B:153:LEU:HD23	1:B:162:HIS:HB3	1.98	0.45
1:D:488:SER:O	1:D:492:ILE:HG22	2.17	0.45
1:F:443:ASP:O	1:F:446:ARG:N	2.50	0.45
1:D:134:ARG:CA	1:D:300:PHE:CZ	2.97	0.45
1:B:569:ASP:HB3	1:B:573:ARG:HD3	1.99	0.45
1:E:661:ALA:CB	1:F:662:CYS:SG	2.99	0.45
1:A:402:SER:O	1:A:403:LEU:CB	2.64	0.45
1:F:42:ALA:HB3	1:F:96:MET:HB2	1.98	0.45
1:F:50:LEU:H	1:F:55:ARG:CD	2.30	0.45
1:H:70:HIS:HB2	1:H:135:TYR:CD2	2.52	0.45
1:G:137:HIS:ND1	1:G:201:VAL:HG13	2.32	0.45
1:G:84:GLN:HB3	1:G:85:LYS:H	1.51	0.45
1:A:566:GLN:HG2	1:A:593:LEU:HD11	1.99	0.45
1:A:291:ASP:HA	1:A:292:PRO:HD3	1.83	0.45
1:B:530:VAL:CA	1:B:533:LEU:HD12	2.32	0.45
1:C:588:ASN:CG	1:C:589:ASP:N	2.66	0.45
1:D:422:THR:HG22	1:D:426:LEU:CD2	2.44	0.45
1:D:430:TRP:HA	1:D:571:TYR:CE2	2.52	0.45
1:B:412:ILE:O	1:B:415:GLN:HB2	2.17	0.45
1:H:583:THR:O	1:H:584:PRO:C	2.56	0.45
1:E:118:LYS:CB	1:E:264:HIS:C	2.85	0.45
1:E:124:THR:O	1:E:127:SER:N	2.50	0.45
1:F:121:PRO:HA	1:F:124:THR:OG1	2.17	0.45
1:G:246:TYR:HB2	1:G:256:SER:HB3	1.99	0.45
1:D:521:VAL:HA	1:D:524:CYS:HG	1.75	0.45
1:E:478:GLN:O	1:E:482:LYS:HB3	2.15	0.45
1:F:644:VAL:HA	1:F:647:GLN:NE2	2.20	0.45
1:A:569:ASP:HB3	1:A:573:ARG:HD3	1.98	0.45
1:E:319:SER:C	1:E:321:ARG:N	2.67	0.45
1:F:317:MET:HE3	1:F:609:TYR:CZ	2.52	0.45
1:E:494:LEU:HD13	1:E:514:TRP:HB3	1.99	0.45
1:G:18:LYS:HD2	1:G:33:ILE:HB	1.99	0.45
1:A:494:LEU:HD12	1:A:514:TRP:CE3	2.48	0.45
1:A:510:LEU:HB2	1:A:657:LEU:HD13	1.99	0.45
1:E:665:VAL:HG22	1:F:665:VAL:CG1	2.47	0.45
1:C:21:LEU:HD12	1:C:29:VAL:HG12	1.99	0.45
1:H:467:LYS:HD3	1:H:467:LYS:HA	1.74	0.45
1:C:654:LEU:HD23	1:C:654:LEU:C	2.38	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:517:MET:CE	1:A:647:GLN:OE1	2.65	0.44
1:D:435:GLN:O	1:D:439:ALA:N	2.50	0.44
1:H:409:SER:CB	1:H:412:ILE:CD1	2.93	0.44
1:H:419:ARG:HA	1:H:587:SER:CB	2.47	0.44
1:D:222:PHE:CE2	1:D:225:ASN:CB	2.89	0.44
1:A:213:PHE:HD2	1:A:214:GLU:N	2.15	0.44
1:B:233:GLY:O	1:B:235:VAL:N	2.50	0.44
1:E:588:ASN:CG	1:E:589:ASP:N	2.66	0.44
1:F:422:THR:HG22	1:F:426:LEU:HD11	1.98	0.44
1:E:573:ARG:HH12	1:F:573:ARG:HH12	1.65	0.44
1:G:249:LEU:HB3	1:G:250:THR:H	1.39	0.44
1:C:206:TRP:CD1	1:C:207:SER:N	2.85	0.44
1:B:105:ARG:CZ	1:B:149:GLU:OE2	2.66	0.44
1:C:18:LYS:HD2	1:C:33:ILE:HB	1.98	0.44
1:B:436:THR:O	1:B:440:LEU:HG	2.17	0.44
1:B:323:HIS:HB3	1:B:325:TYR:CE1	2.52	0.44
1:D:100:GLU:H	1:D:154:GLN:HG3	1.82	0.44
1:F:81:ASP:HA	1:F:84:GLN:HE21	1.82	0.44
1:C:272:LYS:HG2	1:C:273:LEU:HA	1.99	0.44
1:E:189:LEU:HD12	1:E:207:SER:HB3	1.99	0.44
1:G:117:LEU:O	1:G:122:ILE:HD11	2.16	0.44
1:G:272:LYS:O	1:G:273:LEU:C	2.55	0.44
1:A:422:THR:CB	1:A:585:GLY:C	2.84	0.44
1:B:234:LYS:O	1:B:235:VAL:O	2.35	0.44
1:E:564:GLU:O	1:E:564:GLU:HG2	2.18	0.44
1:G:222:PHE:CE2	1:G:224:PRO:O	2.70	0.44
1:H:222:PHE:HB3	1:H:255:PHE:HB3	1.99	0.44
1:D:475:GLU:CG	1:D:636:MET:HE3	2.45	0.44
1:H:105:ARG:NH1	1:H:105:ARG:HG3	2.33	0.44
1:E:527:GLU:C	1:E:529:GLU:N	2.69	0.44
1:H:319:SER:C	1:H:321:ARG:N	2.65	0.44
1:F:484:ASP:O	1:F:485:PHE:C	2.55	0.44
1:E:536:LYS:CG	1:E:625:LEU:HD13	2.47	0.44
1:E:281:LEU:C	1:E:282:MET:HG2	2.38	0.44
1:D:18:LYS:HD2	1:D:33:ILE:HB	1.99	0.44
1:H:18:LYS:HD2	1:H:33:ILE:HB	1.99	0.44
1:C:387:ILE:CD1	1:C:450:GLY:N	2.80	0.44
1:F:193:LEU:HD22	1:F:231:TRP:NE1	2.32	0.44
1:D:296:ASN:ND2	1:D:302:ALA:HB2	2.32	0.44
1:F:291:ASP:HA	1:F:292:PRO:HD3	1.81	0.44
1:C:153:LEU:HD23	1:C:162:HIS:HB3	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:269:LEU:HD22	1:D:272:LYS:HE3	1.99	0.44
1:B:434:TRP:CZ3	1:B:568:ARG:CB	2.97	0.44
1:G:260:PRO:HB2	1:G:273:LEU:CD1	2.47	0.44
1:C:234:LYS:O	1:C:235:VAL:O	2.35	0.44
1:D:642:ILE:C	1:D:644:VAL:H	2.20	0.44
1:A:26:PHE:HE2	1:A:181:GLU:OE1	2.00	0.44
1:H:213:PHE:CD2	1:H:213:PHE:C	2.90	0.44
1:H:272:LYS:O	1:H:273:LEU:C	2.55	0.44
1:F:530:VAL:CA	1:F:533:LEU:HD12	2.30	0.44
1:E:316:ASN:N	1:E:321:ARG:O	2.50	0.44
1:A:466:SER:HB3	1:A:537:MET:HE1	1.98	0.44
1:E:492:ILE:HD13	1:F:651:GLN:NE2	2.22	0.44
1:E:665:VAL:CG2	1:F:665:VAL:HG21	2.45	0.44
1:C:361:LEU:HD23	1:C:361:LEU:HA	1.87	0.44
1:F:389:LEU:N	1:F:389:LEU:HD12	2.32	0.44
1:C:496:LYS:C	1:D:655:TRP:CZ2	2.91	0.44
1:D:105:ARG:CZ	1:D:149:GLU:OE2	2.66	0.44
1:D:153:LEU:HD23	1:D:162:HIS:HB3	1.99	0.44
1:E:654:LEU:HD23	1:E:654:LEU:C	2.38	0.44
1:B:412:ILE:O	1:B:416:ASP:OD1	2.36	0.44
1:H:422:THR:HB	1:H:585:GLY:HA2	1.96	0.44
1:H:436:THR:O	1:H:440:LEU:HG	2.17	0.44
1:D:222:PHE:HD2	1:D:224:PRO:HD2	1.83	0.44
1:D:254:LYS:N	1:D:255:PHE:CE1	2.85	0.44
1:B:506:THR:HG22	1:B:507:SER:H	1.82	0.44
1:A:153:LEU:HD23	1:A:162:HIS:HB3	1.98	0.44
1:A:153:LEU:HD22	1:A:162:HIS:HD1	1.83	0.44
1:F:430:TRP:HB3	1:F:571:TYR:CD2	2.47	0.44
1:C:484:ASP:O	1:C:485:PHE:C	2.55	0.44
1:H:444:CYS:C	1:H:446:ARG:N	2.69	0.44
1:A:455:MET:O	1:A:455:MET:CE	2.65	0.44
1:G:307:LEU:O	1:G:307:LEU:HD23	2.18	0.44
1:A:102:GLY:CA	1:A:152:VAL:HG13	2.47	0.44
1:D:100:GLU:N	1:D:154:GLN:HG3	2.31	0.44
1:C:140:ARG:NH2	1:C:174:ASP:OD2	2.51	0.44
1:C:390:PHE:N	1:C:390:PHE:CD1	2.85	0.44
1:D:654:LEU:HD23	1:D:654:LEU:C	2.38	0.44
1:A:222:PHE:HB3	1:A:255:PHE:HB3	1.99	0.44
1:C:426:LEU:O	1:C:430:TRP:N	2.43	0.44
1:B:118:LYS:CG	1:B:118:LYS:O	2.64	0.44
1:G:105:ARG:HG3	1:G:105:ARG:NH1	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:120:GLY:CA	1:G:123:ARG:HB2	2.47	0.44
1:A:269:LEU:C	1:A:271:GLY:N	2.68	0.44
1:E:104:LEU:N	1:E:151:ILE:O	2.35	0.44
1:A:234:LYS:O	1:A:235:VAL:O	2.36	0.44
1:H:316:ASN:O	1:H:317:MET:HG2	2.18	0.44
1:E:482:LYS:C	1:E:484:ASP:N	2.71	0.44
1:F:297:VAL:HG23	1:F:301:GLN:HE21	1.82	0.44
1:G:319:SER:C	1:G:321:ARG:N	2.66	0.44
1:H:271:GLY:HA2	1:H:275:ARG:NH2	2.32	0.44
1:D:81:ASP:HA	1:D:84:GLN:HE21	1.83	0.44
1:F:140:ARG:NH2	1:F:174:ASP:OD2	2.50	0.44
1:A:21:LEU:HD12	1:A:29:VAL:HG12	1.99	0.44
1:H:545:VAL:HA	1:H:548:GLN:HG2	1.98	0.44
1:D:436:THR:O	1:D:440:LEU:HG	2.17	0.44
1:H:312:LEU:HA	1:H:312:LEU:HD23	1.53	0.44
1:F:467:LYS:HA	1:F:467:LYS:HD3	1.75	0.44
1:C:124:THR:O	1:C:127:SER:N	2.50	0.44
1:C:438:ARG:HG2	1:C:564:GLU:OE1	2.18	0.44
1:D:438:ARG:CG	1:D:564:GLU:CG	2.90	0.44
1:B:185:THR:CG2	1:B:187:GLN:CG	2.81	0.44
1:H:412:ILE:HG12	1:H:433:ILE:HD13	1.99	0.44
1:D:253:VAL:HB	1:D:255:PHE:CE1	2.53	0.44
1:B:515:ARG:HA	1:B:518:GLU:OE2	2.18	0.44
1:G:260:PRO:HB3	1:G:273:LEU:HD22	1.99	0.44
1:A:148:PRO:HD2	1:A:149:GLU:OE2	2.18	0.44
1:F:187:GLN:CB	1:F:223:LEU:CD2	2.76	0.44
1:G:254:LYS:N	1:G:255:PHE:CE1	2.86	0.44
1:A:190:ALA:HB2	1:A:206:TRP:CG	2.53	0.44
1:G:191:PRO:HG3	1:G:234:LYS:HZ2	1.80	0.44
1:F:480:LYS:HE3	1:F:527:GLU:HB2	1.99	0.44
1:B:102:GLY:HA3	1:B:152:VAL:HG13	1.99	0.44
1:C:394:LYS:HE3	1:C:609:TYR:O	2.17	0.44
1:D:297:VAL:HG23	1:D:301:GLN:NE2	2.33	0.44
1:C:459:LEU:HD12	1:C:548:GLN:HB3	2.00	0.44
1:A:579:ARG:HA	1:A:582:ARG:NH2	2.33	0.44
1:D:579:ARG:HA	1:D:582:ARG:NH2	2.33	0.44
1:C:72:ASN:O	1:C:164:ILE:HG22	2.18	0.44
1:C:346:ILE:HG23	1:C:346:ILE:O	2.18	0.44
1:A:312:LEU:O	1:A:324:THR:HG23	2.18	0.44
1:F:21:LEU:HD12	1:F:29:VAL:HG12	1.99	0.44
1:C:493:ASP:HB3	1:C:514:TRP:CH2	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:642:ILE:C	1:B:644:VAL:H	2.21	0.44
1:A:226:TRP:HD1	1:A:227:GLN:N	2.08	0.44
1:C:120:GLY:CA	1:C:123:ARG:HB2	2.47	0.44
1:B:124:THR:O	1:B:127:SER:N	2.51	0.44
1:B:437:ILE:HG13	1:B:594:LEU:HD12	1.99	0.44
1:E:189:LEU:HD12	1:E:189:LEU:HA	1.66	0.44
1:A:118:LYS:CG	1:A:118:LYS:O	2.63	0.44
1:F:222:PHE:HD2	1:F:224:PRO:HD2	1.82	0.44
1:F:253:VAL:HB	1:F:255:PHE:CE1	2.53	0.44
1:F:569:ASP:HB3	1:F:573:ARG:HD3	1.98	0.44
1:C:547:LEU:HD22	1:C:611:GLN:CG	2.48	0.44
1:C:650:ARG:HD3	1:C:650:ARG:HA	1.70	0.44
1:H:387:ILE:CD1	1:H:450:GLY:HA2	2.47	0.44
1:H:134:ARG:CB	1:H:300:PHE:CE1	2.91	0.44
1:E:449:GLN:NE2	1:E:453:THR:CG2	2.81	0.44
1:C:651:GLN:HE21	1:D:492:ILE:CG2	2.23	0.44
1:G:387:ILE:HD13	1:G:450:GLY:CA	2.47	0.44
1:A:339:TRP:HA	1:A:342:GLN:CB	2.36	0.44
1:A:350:GLU:CG	1:A:391:ASP:HB2	2.47	0.44
1:H:73:VAL:HB	1:H:164:ILE:HG23	1.99	0.44
1:G:312:LEU:HD23	1:G:312:LEU:HA	1.49	0.44
1:E:312:LEU:O	1:E:324:THR:HG23	2.17	0.44
1:C:494:LEU:HD12	1:C:514:TRP:CE3	2.38	0.44
1:C:121:PRO:HA	1:C:124:THR:OG1	2.18	0.44
1:C:249:LEU:HB3	1:C:250:THR:H	1.42	0.44
1:C:269:LEU:C	1:C:271:GLY:N	2.68	0.44
1:D:186:LEU:C	1:D:188:TYR:H	2.19	0.44
1:D:412:ILE:HG12	1:D:433:ILE:HD13	1.99	0.44
1:E:500:GLN:C	1:E:505:ILE:HG12	2.38	0.44
1:D:222:PHE:HB3	1:D:255:PHE:HB3	1.99	0.44
1:A:103:ASP:O	1:A:105:ARG:N	2.50	0.44
1:A:210:THR:O	1:A:211:LEU:C	2.57	0.44
1:H:143:HIS:NE2	1:H:167:LEU:HB2	2.33	0.44
1:F:118:LYS:HZ1	1:F:123:ARG:HH12	1.66	0.44
1:F:212:ALA:O	1:F:213:PHE:C	2.56	0.44
1:G:222:PHE:HD2	1:G:224:PRO:HD2	1.83	0.44
1:F:486:PHE:HZ	1:F:517:MET:CE	2.30	0.44
1:A:286:ARG:HH11	1:A:286:ARG:CG	2.30	0.44
1:E:300:PHE:O	1:E:301:GLN:C	2.55	0.44
1:F:300:PHE:O	1:F:301:GLN:C	2.56	0.44
1:E:475:GLU:HG2	1:E:636:MET:HE1	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:18:LYS:HD2	1:F:33:ILE:HB	2.00	0.44
1:A:511:LEU:HD21	1:A:515:ARG:NH2	2.32	0.44
1:E:195:GLU:O	1:E:196:GLN:HB2	2.18	0.44
1:B:73:VAL:HB	1:B:164:ILE:HG23	2.00	0.44
1:G:362:ASN:C	1:G:364:ALA:N	2.71	0.44
1:E:81:ASP:HA	1:E:84:GLN:HE21	1.82	0.44
1:E:389:LEU:N	1:E:389:LEU:HD12	2.32	0.44
1:B:479:LEU:HD12	1:B:640:GLU:CB	2.45	0.44
1:D:105:ARG:HG2	1:D:109:ASN:ND2	2.32	0.44
1:H:261:THR:HB	1:H:262:PRO:HD2	2.00	0.44
1:H:434:TRP:CZ3	1:H:568:ARG:CB	2.99	0.44
1:G:103:ASP:O	1:G:105:ARG:N	2.51	0.44
1:F:225:ASN:OD1	1:F:229:VAL:HG12	2.18	0.44
1:G:222:PHE:HB3	1:G:255:PHE:HB3	2.00	0.44
1:H:120:GLY:CA	1:H:123:ARG:HB2	2.47	0.44
1:H:316:ASN:N	1:H:321:ARG:O	2.51	0.44
1:A:528:ARG:HA	1:A:530:VAL:HG22	2.00	0.44
1:F:316:ASN:O	1:F:317:MET:HG2	2.18	0.44
1:B:297:VAL:HG23	1:B:301:GLN:NE2	2.33	0.44
1:A:16:GLU:HB3	1:A:17:MET:H	1.71	0.44
1:A:18:LYS:HD2	1:A:33:ILE:HB	2.00	0.44
1:B:18:LYS:HD2	1:B:33:ILE:HB	2.00	0.44
1:D:134:ARG:HD2	1:D:300:PHE:CE1	2.53	0.44
1:C:284:HIS:NE2	1:E:342:GLN:CD	2.71	0.44
1:C:195:GLU:O	1:C:196:GLN:HB2	2.18	0.44
1:B:649:LYS:HA	1:B:652:GLN:HB3	2.00	0.44
1:D:448:LEU:HB2	1:D:608:ILE:HD11	1.99	0.44
1:F:84:GLN:HB3	1:F:85:LYS:H	1.50	0.44
1:H:560:LEU:CD1	1:H:601:PHE:HB2	2.48	0.44
1:H:68:LEU:HD11	1:H:141:ILE:HD12	1.98	0.44
1:C:118:LYS:CG	1:C:118:LYS:O	2.65	0.43
1:C:105:ARG:CZ	1:C:149:GLU:OE2	2.65	0.43
1:B:216:ILE:HG21	1:B:273:LEU:CD1	2.48	0.43
1:B:438:ARG:HH11	1:B:568:ARG:HH21	1.63	0.43
1:H:233:GLY:O	1:H:235:VAL:N	2.52	0.43
1:F:434:TRP:HZ3	1:F:568:ARG:CB	2.30	0.43
1:F:438:ARG:HG2	1:F:564:GLU:CG	2.48	0.43
1:F:297:VAL:HG23	1:F:301:GLN:NE2	2.33	0.43
1:D:133:LEU:O	1:D:134:ARG:C	2.56	0.43
1:D:339:TRP:HA	1:D:342:GLN:CB	2.38	0.43
1:H:171:LYS:O	1:H:171:LYS:CG	2.60	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:323:HIS:HB3	1:D:325:TYR:CE1	2.52	0.43
1:C:323:HIS:HB3	1:C:325:TYR:CE1	2.53	0.43
1:C:333:LEU:O	1:C:336:LEU:N	2.51	0.43
1:H:362:ASN:C	1:H:364:ALA:N	2.71	0.43
1:D:362:ASN:C	1:D:364:ALA:N	2.71	0.43
1:A:607:LEU:HA	1:A:607:LEU:HD23	1.88	0.43
1:A:484:ASP:C	1:A:486:PHE:H	2.20	0.43
1:C:422:THR:OG1	1:C:585:GLY:C	2.56	0.43
1:B:216:ILE:HG21	1:B:273:LEU:HD12	1.99	0.43
1:B:571:TYR:CE2	1:B:590:MET:CG	3.00	0.43
1:G:430:TRP:CD2	1:G:574:LEU:HD22	2.53	0.43
1:A:105:ARG:NH1	1:A:105:ARG:HG3	2.33	0.43
1:E:153:LEU:HD23	1:E:162:HIS:HB3	1.99	0.43
1:E:247:ASP:HB3	1:E:248:ASP:H	1.52	0.43
1:F:269:LEU:C	1:F:271:GLY:N	2.71	0.43
1:D:233:GLY:O	1:D:235:VAL:N	2.49	0.43
1:A:451:GLN:CD	1:A:611:GLN:NE2	2.71	0.43
1:H:212:ALA:O	1:H:215:CYS:N	2.51	0.43
1:H:281:LEU:C	1:H:282:MET:HG2	2.38	0.43
1:G:449:GLN:O	1:G:450:GLY:C	2.56	0.43
1:A:462:ASN:HD21	1:A:540:LEU:CB	2.29	0.43
1:C:338:SER:OG	1:C:339:TRP:N	2.52	0.43
1:D:57:ARG:NE	1:D:177:GLU:O	2.51	0.43
1:G:144:ARG:HD2	1:G:171:LYS:HB2	2.00	0.43
1:G:143:HIS:NE2	1:G:167:LEU:HB2	2.34	0.43
1:G:297:VAL:HG23	1:G:301:GLN:NE2	2.33	0.43
1:E:358:GLY:O	1:E:359:LEU:CB	2.60	0.43
1:D:50:LEU:H	1:D:55:ARG:CD	2.30	0.43
1:C:350:GLU:CG	1:C:391:ASP:HB2	2.48	0.43
1:F:441:LYS:HD2	1:F:561:ASP:OD1	2.19	0.43
1:B:84:GLN:HB3	1:B:85:LYS:H	1.50	0.43
1:C:81:ASP:HA	1:C:84:GLN:HE21	1.83	0.43
1:D:502:GLU:OE1	1:D:502:GLU:N	2.51	0.43
1:H:470:ASN:HD22	1:H:470:ASN:N	2.16	0.43
1:C:276:TRP:CZ2	1:C:280:MET:HG3	2.53	0.43
1:C:438:ARG:HG2	1:C:564:GLU:CD	2.38	0.43
1:C:422:THR:OG1	1:C:585:GLY:O	2.36	0.43
1:D:412:ILE:O	1:D:416:ASP:OD1	2.36	0.43
1:B:250:THR:C	1:B:251:GLY:O	2.54	0.43
1:B:281:LEU:O	1:B:282:MET:HE3	2.17	0.43
1:H:408:GLU:HA	1:H:408:GLU:OE2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:579:ARG:HA	1:H:582:ARG:NH2	2.33	0.43
1:A:121:PRO:HA	1:A:124:THR:OG1	2.19	0.43
1:A:260:PRO:HB3	1:A:273:LEU:HD22	2.00	0.43
1:E:117:LEU:O	1:E:117:LEU:HG	2.18	0.43
1:E:408:GLU:HA	1:E:408:GLU:OE2	2.18	0.43
1:D:528:ARG:HA	1:D:530:VAL:HG22	2.00	0.43
1:H:110:GLN:O	1:H:111:PHE:CB	2.34	0.43
1:F:171:LYS:O	1:F:171:LYS:CG	2.60	0.43
1:A:316:ASN:O	1:A:317:MET:HG2	2.18	0.43
1:D:394:LYS:HB2	1:D:613:SER:HB2	2.00	0.43
1:B:74:VAL:CG2	1:B:165:ILE:HA	2.48	0.43
1:A:102:GLY:HA3	1:A:152:VAL:HG13	1.99	0.43
1:C:139:ASN:O	1:C:141:ILE:HG13	2.18	0.43
1:D:268:ILE:HD12	1:D:268:ILE:HA	1.86	0.43
1:D:470:ASN:HD22	1:D:470:ASN:N	2.16	0.43
1:G:470:ASN:N	1:G:470:ASN:HD22	2.16	0.43
1:C:655:TRP:HZ2	1:D:497:TYR:HB2	1.82	0.43
1:D:503:PHE:C	1:D:505:ILE:H	2.21	0.43
1:A:222:PHE:HD2	1:A:224:PRO:HD2	1.83	0.43
1:D:226:TRP:HD1	1:D:227:GLN:N	2.06	0.43
1:D:430:TRP:C	1:D:571:TYR:CD2	2.92	0.43
1:E:505:ILE:HG13	1:E:505:ILE:H	1.52	0.43
1:B:272:LYS:O	1:B:273:LEU:C	2.56	0.43
1:H:430:TRP:CB	1:H:571:TYR:HD2	2.29	0.43
1:G:412:ILE:O	1:G:416:ASP:OD1	2.36	0.43
1:G:414:LEU:O	1:G:418:LYS:HB2	2.19	0.43
1:A:276:TRP:HE3	1:A:277:LEU:HD23	1.83	0.43
1:A:435:GLN:O	1:A:439:ALA:N	2.50	0.43
1:H:146:LEU:HB3	1:H:207:SER:HB2	2.00	0.43
1:E:433:ILE:HB	1:E:571:TYR:OH	2.18	0.43
1:F:281:LEU:O	1:F:282:MET:HG2	2.17	0.43
1:C:642:ILE:C	1:C:644:VAL:H	2.21	0.43
1:E:394:LYS:HE3	1:E:609:TYR:O	2.19	0.43
1:E:133:LEU:O	1:E:134:ARG:C	2.56	0.43
1:F:317:MET:HA	1:F:609:TYR:OH	2.19	0.43
1:D:281:LEU:O	1:D:282:MET:HG2	2.19	0.43
1:G:533:LEU:O	1:G:537:MET:HG2	2.18	0.43
1:E:18:LYS:NZ	1:E:33:ILE:HD12	2.27	0.43
1:E:137:HIS:ND1	1:E:201:VAL:HG13	2.33	0.43
1:D:116:GLY:N	1:D:217:THR:O	2.50	0.43
1:D:394:LYS:CB	1:D:613:SER:HB2	2.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:583:THR:O	1:C:584:PRO:C	2.57	0.43
1:G:581:GLN:H	1:G:582:ARG:HD2	1.83	0.43
1:E:55:ARG:HE	1:E:55:ARG:HB2	1.54	0.43
1:H:50:LEU:H	1:H:55:ARG:CD	2.31	0.43
1:B:362:ASN:C	1:B:364:ALA:N	2.71	0.43
1:D:19:GLU:HB3	1:D:20:ARG:H	1.65	0.43
1:D:21:LEU:HD12	1:D:29:VAL:HG12	2.00	0.43
1:B:19:GLU:HB3	1:B:20:ARG:H	1.66	0.43
1:A:470:ASN:N	1:A:470:ASN:HD22	2.16	0.43
1:C:654:LEU:HD22	1:D:654:LEU:HD22	2.00	0.43
1:D:511:LEU:HD21	1:D:515:ARG:NH2	2.34	0.43
1:B:253:VAL:HB	1:B:255:PHE:CE1	2.52	0.43
1:H:246:TYR:CE1	1:H:258:VAL:HB	2.45	0.43
1:F:125:LEU:HD12	1:F:129:ILE:HG12	2.00	0.43
1:C:478:GLN:O	1:C:482:LYS:HB3	2.19	0.43
1:D:533:LEU:O	1:D:537:MET:HG2	2.19	0.43
1:D:480:LYS:NZ	1:D:640:GLU:OE1	2.49	0.43
1:B:189:LEU:CG	1:B:190:ALA:N	2.65	0.43
1:H:300:PHE:O	1:H:301:GLN:C	2.57	0.43
1:E:642:ILE:C	1:E:644:VAL:H	2.22	0.43
1:E:319:SER:OG	1:E:403:LEU:HB3	2.17	0.43
1:A:281:LEU:O	1:A:282:MET:HG2	2.18	0.43
1:E:144:ARG:HD2	1:E:171:LYS:HB2	2.01	0.43
1:D:581:GLN:H	1:D:582:ARG:HD2	1.84	0.43
1:A:323:HIS:HB3	1:A:325:TYR:CE1	2.53	0.43
1:G:346:ILE:HG23	1:G:346:ILE:O	2.18	0.43
1:D:346:ILE:HG23	1:D:346:ILE:O	2.18	0.43
1:E:490:ILE:O	1:E:490:ILE:CG2	2.67	0.43
1:D:494:LEU:HD13	1:D:514:TRP:HB3	2.01	0.43
1:B:646:ARG:CG	1:B:647:GLN:NE2	2.54	0.43
1:E:506:THR:HG22	1:E:507:SER:H	1.82	0.43
1:H:437:ILE:HG13	1:H:594:LEU:HD12	2.01	0.43
1:A:412:ILE:O	1:A:416:ASP:OD1	2.37	0.43
1:E:269:LEU:C	1:E:271:GLY:N	2.70	0.43
1:F:412:ILE:HG12	1:F:433:ILE:HD13	2.01	0.43
1:H:249:LEU:HB3	1:H:250:THR:H	1.35	0.43
1:C:25:GLY:O	1:C:181:GLU:HG3	2.19	0.43
1:C:486:PHE:HZ	1:C:517:MET:CE	2.31	0.43
1:C:478:GLN:OE1	1:D:481:ALA:HB3	2.19	0.43
1:A:300:PHE:O	1:A:301:GLN:C	2.56	0.43
1:A:502:GLU:OE1	1:A:502:GLU:N	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:581:GLN:H	1:C:582:ARG:HD2	1.83	0.43
1:E:579:ARG:HA	1:E:582:ARG:NH2	2.34	0.43
1:A:505:ILE:O	1:A:505:ILE:HG22	2.18	0.43
1:E:208:PHE:O	1:E:211:LEU:HB3	2.19	0.43
1:E:312:LEU:HD23	1:E:312:LEU:HA	1.48	0.43
1:F:607:LEU:HD23	1:F:607:LEU:HA	1.85	0.43
1:C:505:ILE:H	1:C:505:ILE:HG13	1.56	0.43
1:C:659:LYS:CD	1:D:500:GLN:HE22	2.32	0.43
1:C:148:PRO:HG3	1:C:188:TYR:OH	2.18	0.43
1:C:254:LYS:O	1:C:255:PHE:CG	2.72	0.43
1:C:408:GLU:HA	1:C:408:GLU:OE2	2.17	0.43
1:D:261:THR:HB	1:D:262:PRO:HD2	2.01	0.43
1:E:233:GLY:O	1:E:235:VAL:N	2.49	0.43
1:E:571:TYR:CE2	1:E:590:MET:CG	3.00	0.43
1:F:422:THR:HG22	1:F:426:LEU:CD2	2.47	0.43
1:E:319:SER:HB3	1:E:402:SER:O	2.19	0.43
1:C:480:LYS:HZ2	1:C:525:GLY:C	2.21	0.43
1:D:300:PHE:O	1:D:301:GLN:C	2.57	0.43
1:F:614:LYS:HA	1:F:614:LYS:HD3	1.75	0.43
1:B:312:LEU:HA	1:B:312:LEU:HD23	1.50	0.43
1:B:307:LEU:O	1:B:307:LEU:HD23	2.19	0.43
1:H:455:MET:HB2	1:H:455:MET:HE3	1.82	0.43
1:C:607:LEU:HD23	1:C:607:LEU:HA	1.85	0.43
1:C:655:TRP:CD1	1:D:496:LYS:CB	2.95	0.43
1:C:110:GLN:HB3	1:C:113:ASN:ND2	2.34	0.43
1:D:226:TRP:CG	1:D:227:GLN:N	2.61	0.43
1:D:276:TRP:CE2	1:D:280:MET:HG3	2.54	0.43
1:D:115:CYS:CB	1:D:435:GLN:HG3	2.48	0.43
1:B:118:LYS:CB	1:B:264:HIS:O	2.66	0.43
1:E:206:TRP:CD1	1:E:207:SER:N	2.87	0.43
1:E:185:THR:CG2	1:E:187:GLN:CG	2.80	0.43
1:E:433:ILE:HG21	1:E:571:TYR:OH	2.19	0.43
1:E:571:TYR:CE2	1:E:590:MET:SD	3.11	0.43
1:G:225:ASN:OD1	1:G:229:VAL:HG12	2.17	0.43
1:A:233:GLY:O	1:A:235:VAL:N	2.51	0.43
1:F:206:TRP:CD1	1:F:207:SER:N	2.87	0.43
1:H:449:GLN:O	1:H:450:GLY:C	2.57	0.43
1:C:651:GLN:O	1:C:652:GLN:C	2.57	0.43
1:C:296:ASN:ND2	1:C:302:ALA:HB2	2.34	0.43
1:C:18:LYS:HZ2	1:C:33:ILE:HD12	1.83	0.43
1:C:579:ARG:HA	1:C:582:ARG:NH2	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:208:PHE:O	1:D:211:LEU:HB3	2.19	0.43
1:H:102:GLY:HA3	1:H:152:VAL:HG13	2.00	0.43
1:G:268:ILE:HD12	1:G:268:ILE:HA	1.92	0.43
1:A:467:LYS:HD3	1:A:467:LYS:HA	1.75	0.43
1:C:102:GLY:CA	1:C:152:VAL:HG13	2.49	0.43
1:D:567:ALA:O	1:D:571:TYR:HD1	2.02	0.43
1:B:222:PHE:HB3	1:B:255:PHE:HB3	2.00	0.43
1:B:588:ASN:CG	1:B:589:ASP:N	2.65	0.43
1:B:594:LEU:O	1:B:598:ILE:HG13	2.19	0.43
1:H:416:ASP:N	1:H:416:ASP:OD1	2.39	0.43
1:D:219:PHE:CE1	1:D:428:ARG:NE	2.87	0.43
1:A:272:LYS:CG	1:A:273:LEU:N	2.68	0.43
1:E:254:LYS:O	1:E:255:PHE:CG	2.70	0.43
1:E:435:GLN:O	1:E:439:ALA:N	2.51	0.43
1:F:272:LYS:CG	1:F:273:LEU:N	2.63	0.43
1:C:485:PHE:CG	1:D:485:PHE:CD2	3.06	0.43
1:D:636:MET:HE2	1:D:637:ARG:N	2.33	0.43
1:B:190:ALA:HB2	1:B:206:TRP:CD1	2.54	0.43
1:E:484:ASP:C	1:E:486:PHE:H	2.22	0.43
1:E:524:CYS:SG	1:E:643:VAL:HG11	2.59	0.43
1:F:528:ARG:HA	1:F:530:VAL:HG22	2.01	0.43
1:E:387:ILE:HD12	1:E:450:GLY:HA2	2.01	0.43
1:E:339:TRP:HA	1:E:342:GLN:CB	2.36	0.43
1:F:579:ARG:HA	1:F:582:ARG:NH2	2.33	0.43
1:G:195:GLU:O	1:G:196:GLN:HB2	2.19	0.43
1:F:361:LEU:HD23	1:F:361:LEU:HA	1.85	0.43
1:G:361:LEU:HA	1:G:361:LEU:HD23	1.85	0.43
1:A:50:LEU:H	1:A:55:ARG:CD	2.30	0.43
1:A:455:MET:HB2	1:A:455:MET:HE3	1.87	0.43
1:H:307:LEU:O	1:H:307:LEU:HD23	2.18	0.43
1:D:102:GLY:CA	1:D:152:VAL:HG13	2.49	0.43
1:E:390:PHE:CD1	1:E:390:PHE:N	2.87	0.43
1:D:501:MET:C	1:D:505:ILE:HD11	2.38	0.43
1:D:105:ARG:NH1	1:D:105:ARG:HG3	2.31	0.43
1:D:212:ALA:O	1:D:215:CYS:N	2.52	0.43
1:D:272:LYS:O	1:D:273:LEU:C	2.57	0.43
1:G:153:LEU:HD22	1:G:162:HIS:HD1	1.81	0.43
1:G:430:TRP:O	1:G:431:GLY:C	2.57	0.43
1:G:433:ILE:HG21	1:G:571:TYR:OH	2.19	0.43
1:A:120:GLY:CA	1:A:123:ARG:HB2	2.47	0.43
1:F:408:GLU:OE2	1:F:408:GLU:HA	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:125:LEU:CA	1:H:162:HIS:NE2	2.70	0.43
1:H:272:LYS:HG2	1:H:273:LEU:HA	2.01	0.43
1:E:296:ASN:CG	1:E:297:VAL:N	2.72	0.43
1:E:296:ASN:ND2	1:E:302:ALA:HB2	2.33	0.43
1:G:533:LEU:HD22	1:G:629:VAL:HG13	2.00	0.43
1:B:449:GLN:NE2	1:B:453:THR:CG2	2.82	0.43
1:E:563:LEU:CD2	1:E:596:LEU:HB2	2.36	0.43
1:C:171:LYS:O	1:C:171:LYS:CG	2.62	0.43
1:A:387:ILE:HD12	1:A:450:GLY:N	2.34	0.43
1:C:665:VAL:CG2	1:D:665:VAL:CG2	2.96	0.43
1:D:68:LEU:HB3	1:D:135:TYR:CE2	2.52	0.43
1:F:312:LEU:HD23	1:F:312:LEU:HA	1.50	0.43
1:C:68:LEU:HB3	1:C:135:TYR:HE2	1.83	0.43
1:G:140:ARG:NH2	1:G:174:ASP:OD2	2.51	0.43
1:B:346:ILE:HG23	1:B:346:ILE:O	2.18	0.43
1:C:209:GLY:O	1:C:212:ALA:HB3	2.19	0.42
1:B:430:TRP:HZ2	1:B:586:ASP:O	2.00	0.42
1:E:121:PRO:HA	1:E:124:THR:OG1	2.19	0.42
1:E:260:PRO:HB3	1:E:273:LEU:HD22	2.00	0.42
1:C:246:TYR:CE1	1:C:258:VAL:HB	2.44	0.42
1:F:233:GLY:O	1:F:235:VAL:N	2.52	0.42
1:D:521:VAL:CG1	1:D:643:VAL:HG12	2.49	0.42
1:H:119:GLU:CB	1:H:121:PRO:HB2	2.49	0.42
1:B:103:ASP:O	1:B:105:ARG:N	2.52	0.42
1:G:281:LEU:C	1:G:282:MET:HG2	2.40	0.42
1:C:529:GLU:HG3	1:C:633:MET:HE3	1.99	0.42
1:A:297:VAL:HG23	1:A:301:GLN:HE21	1.83	0.42
1:E:18:LYS:HD2	1:E:33:ILE:HB	1.99	0.42
1:D:144:ARG:HD2	1:D:171:LYS:HB2	2.00	0.42
1:A:387:ILE:CD1	1:A:449:GLN:HG3	2.44	0.42
1:B:579:ARG:HA	1:B:582:ARG:NH2	2.34	0.42
1:A:441:LYS:HB2	1:A:560:LEU:HD21	1.97	0.42
1:D:632:VAL:O	1:D:633:MET:SD	2.77	0.42
1:B:336:LEU:O	1:B:340:LEU:N	2.52	0.42
1:E:469:LYS:HZ2	1:E:630:LYS:CE	2.32	0.42
1:A:373:ASP:O	1:A:374:CYS:CB	2.67	0.42
1:A:68:LEU:HB3	1:A:135:TYR:CE2	2.53	0.42
1:A:225:ASN:OD1	1:A:229:VAL:HG12	2.19	0.42
1:C:416:ASP:HB3	1:C:591:VAL:HG13	2.01	0.42
1:C:430:TRP:CB	1:C:571:TYR:CD2	3.02	0.42
1:C:436:THR:O	1:C:440:LEU:HG	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:103:ASP:O	1:D:105:ARG:N	2.52	0.42
1:B:222:PHE:HE2	1:B:225:ASN:HB2	1.71	0.42
1:B:281:LEU:O	1:B:282:MET:HG2	2.19	0.42
1:G:408:GLU:OE2	1:G:408:GLU:HA	2.19	0.42
1:A:276:TRP:CE2	1:A:280:MET:HG3	2.54	0.42
1:A:564:GLU:O	1:A:564:GLU:HG2	2.19	0.42
1:H:206:TRP:CD1	1:H:207:SER:N	2.88	0.42
1:E:124:THR:OG1	1:E:162:HIS:HE1	2.03	0.42
1:F:105:ARG:CZ	1:F:149:GLU:OE2	2.67	0.42
1:C:146:LEU:HB3	1:C:207:SER:HB2	2.00	0.42
1:C:452:ARG:HE	1:C:550:ASN:HD22	1.67	0.42
1:H:26:PHE:CE2	1:H:181:GLU:OE2	2.70	0.42
1:E:16:GLU:HB3	1:E:17:MET:H	1.68	0.42
1:A:449:GLN:NE2	1:A:453:THR:CG2	2.82	0.42
1:B:540:LEU:HD22	1:B:621:LYS:HE3	2.00	0.42
1:C:316:ASN:O	1:C:317:MET:HG2	2.19	0.42
1:D:319:SER:OG	1:D:403:LEU:HB3	2.17	0.42
1:F:55:ARG:HB2	1:F:55:ARG:HE	1.52	0.42
1:B:50:LEU:H	1:B:55:ARG:CD	2.29	0.42
1:C:362:ASN:C	1:C:364:ALA:N	2.71	0.42
1:E:362:ASN:C	1:E:364:ALA:N	2.72	0.42
1:A:139:ASN:O	1:A:141:ILE:HG13	2.19	0.42
1:F:451:GLN:CD	1:F:611:GLN:NE2	2.72	0.42
1:C:213:PHE:CE2	1:C:217:THR:OG1	2.69	0.42
1:D:118:LYS:CG	1:D:118:LYS:O	2.65	0.42
1:D:125:LEU:HD12	1:D:129:ILE:HG12	2.01	0.42
1:B:438:ARG:HH12	1:B:568:ARG:HH21	1.66	0.42
1:G:110:GLN:HB3	1:G:113:ASN:ND2	2.33	0.42
1:G:118:LYS:NZ	1:G:123:ARG:HH12	2.17	0.42
1:A:119:GLU:CB	1:A:121:PRO:HB2	2.50	0.42
1:H:190:ALA:O	1:H:191:PRO:C	2.58	0.42
1:C:233:GLY:O	1:C:235:VAL:N	2.52	0.42
1:B:148:PRO:HD2	1:B:149:GLU:OE2	2.19	0.42
1:E:494:LEU:CD1	1:E:514:TRP:HB3	2.50	0.42
1:B:316:ASN:O	1:B:317:MET:HG2	2.18	0.42
1:H:338:SER:OG	1:H:339:TRP:N	2.52	0.42
1:D:583:THR:O	1:D:584:PRO:C	2.57	0.42
1:G:70:HIS:HB3	1:G:73:VAL:CG1	2.49	0.42
1:H:350:GLU:CG	1:H:391:ASP:HB2	2.47	0.42
1:B:210:THR:O	1:B:211:LEU:C	2.58	0.42
1:G:198:LYS:O	1:G:200:THR:N	2.42	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:545:VAL:HG13	1:B:548:GLN:NE2	2.35	0.42
1:G:19:GLU:HB3	1:G:20:ARG:H	1.66	0.42
1:C:410:VAL:O	1:C:411:SER:C	2.57	0.42
1:F:346:ILE:O	1:F:346:ILE:HG23	2.19	0.42
1:E:455:MET:O	1:E:455:MET:CE	2.68	0.42
1:A:219:PHE:HB2	1:A:220:ARG:H	1.55	0.42
1:C:222:PHE:HE2	1:C:225:ASN:HB2	1.76	0.42
1:C:412:ILE:HG12	1:C:433:ILE:HD13	2.01	0.42
1:D:186:LEU:CD2	1:D:227:GLN:HG2	2.47	0.42
1:E:496:LYS:CB	1:F:655:TRP:NE1	2.39	0.42
1:B:438:ARG:CG	1:B:564:GLU:CG	2.95	0.42
1:G:125:LEU:HD12	1:G:129:ILE:HG12	2.01	0.42
1:G:271:GLY:HA2	1:G:275:ARG:NH2	2.34	0.42
1:A:124:THR:OG1	1:A:162:HIS:HE1	2.02	0.42
1:H:246:TYR:HB2	1:H:256:SER:HB3	2.00	0.42
1:F:110:GLN:HB3	1:F:113:ASN:ND2	2.34	0.42
1:F:247:ASP:HB3	1:F:248:ASP:H	1.51	0.42
1:F:118:LYS:CB	1:F:264:HIS:O	2.67	0.42
1:F:433:ILE:HB	1:F:571:TYR:OH	2.19	0.42
1:F:437:ILE:HG22	1:F:564:GLU:HB2	2.00	0.42
1:G:186:LEU:C	1:G:188:TYR:H	2.22	0.42
1:F:189:LEU:HA	1:F:189:LEU:HD12	1.69	0.42
1:F:25:GLY:O	1:F:181:GLU:HG3	2.19	0.42
1:E:481:ALA:O	1:E:484:ASP:HB2	2.20	0.42
1:F:484:ASP:C	1:F:486:PHE:H	2.20	0.42
1:E:402:SER:O	1:E:403:LEU:CB	2.66	0.42
1:H:528:ARG:HA	1:H:530:VAL:HG22	2.02	0.42
1:D:17:MET:CB	1:D:32:TRP:HB3	2.36	0.42
1:D:195:GLU:O	1:D:196:GLN:HB2	2.19	0.42
1:C:315:MET:SD	1:C:321:ARG:HA	2.59	0.42
1:C:449:GLN:NE2	1:C:453:THR:CG2	2.82	0.42
1:F:323:HIS:HB3	1:F:325:TYR:CE1	2.55	0.42
1:A:358:GLY:O	1:A:359:LEU:CB	2.59	0.42
1:G:583:THR:O	1:G:584:PRO:C	2.58	0.42
1:G:350:GLU:CG	1:G:391:ASP:HB2	2.48	0.42
1:C:50:LEU:H	1:C:55:ARG:CD	2.30	0.42
1:A:312:LEU:HA	1:A:312:LEU:HD23	1.50	0.42
1:E:309:LEU:C	1:E:310:LYS:HG3	2.39	0.42
1:B:406:HIS:HA	1:B:407:PRO:HD2	1.83	0.42
1:B:410:VAL:O	1:B:411:SER:C	2.58	0.42
1:C:470:ASN:HD22	1:C:470:ASN:N	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:479:LEU:HD11	1:B:641:LYS:HG3	2.00	0.42
1:C:412:ILE:O	1:C:416:ASP:OD1	2.38	0.42
1:C:564:GLU:HG2	1:C:564:GLU:O	2.19	0.42
1:B:244:VAL:HG22	1:B:282:MET:SD	2.60	0.42
1:G:115:CYS:HB2	1:G:435:GLN:HG3	2.00	0.42
1:G:269:LEU:C	1:G:271:GLY:N	2.71	0.42
1:A:408:GLU:OE2	1:A:408:GLU:HA	2.18	0.42
1:C:455:MET:HB2	1:C:455:MET:HE3	1.80	0.42
1:C:452:ARG:HD2	1:C:550:ASN:ND2	2.35	0.42
1:D:484:ASP:O	1:D:485:PHE:C	2.58	0.42
1:F:525:GLY:HA2	1:F:640:GLU:CG	2.49	0.42
1:F:629:VAL:HG12	1:F:629:VAL:O	2.19	0.42
1:C:528:ARG:HA	1:C:530:VAL:HG22	2.00	0.42
1:F:402:SER:HB2	1:F:403:LEU:H	1.65	0.42
1:F:387:ILE:HD13	1:F:450:GLY:CA	2.46	0.42
1:C:300:PHE:O	1:C:301:GLN:C	2.55	0.42
1:A:436:THR:O	1:A:440:LEU:HG	2.20	0.42
1:A:583:THR:O	1:A:584:PRO:C	2.58	0.42
1:F:583:THR:O	1:F:584:PRO:C	2.58	0.42
1:G:50:LEU:H	1:G:55:ARG:CD	2.32	0.42
1:E:307:LEU:HD23	1:E:307:LEU:O	2.20	0.42
1:B:447:LEU:HD12	1:B:605:VAL:CG2	2.49	0.42
1:C:60:LEU:HD21	1:C:175:GLN:HB3	2.01	0.42
1:B:533:LEU:O	1:B:537:MET:HG2	2.20	0.42
1:D:104:LEU:N	1:D:151:ILE:O	2.33	0.42
1:D:153:LEU:CA	1:D:162:HIS:HB3	2.39	0.42
1:D:118:LYS:HG2	1:D:265:LEU:HA	2.02	0.42
1:D:571:TYR:CZ	1:D:590:MET:SD	3.12	0.42
1:H:438:ARG:HG2	1:H:564:GLU:CG	2.49	0.42
1:F:186:LEU:C	1:F:188:TYR:H	2.22	0.42
1:H:222:PHE:CE2	1:H:225:ASN:CB	2.90	0.42
1:B:614:LYS:HD3	1:B:614:LYS:HA	1.80	0.42
1:C:486:PHE:CG	1:C:486:PHE:O	2.72	0.42
1:H:315:MET:SD	1:H:321:ARG:HA	2.59	0.42
1:G:210:THR:O	1:G:211:LEU:C	2.58	0.42
1:G:316:ASN:O	1:G:317:MET:HG2	2.19	0.42
1:B:33:ILE:HD11	1:B:40:GLN:OE1	2.20	0.42
1:F:144:ARG:HD2	1:F:171:LYS:HB2	2.00	0.42
1:F:488:SER:O	1:F:492:ILE:HG22	2.20	0.42
1:A:661:ALA:HB1	1:B:662:CYS:SG	2.60	0.42
1:C:502:GLU:OE1	1:C:502:GLU:N	2.53	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:581:GLN:H	1:B:582:ARG:HD2	1.84	0.42
1:A:361:LEU:HD23	1:A:361:LEU:HA	1.86	0.42
1:B:402:SER:HB2	1:B:403:LEU:H	1.65	0.42
1:E:333:LEU:O	1:E:336:LEU:N	2.53	0.42
1:D:632:VAL:CG1	1:D:633:MET:HE1	2.48	0.42
1:H:336:LEU:O	1:H:340:LEU:N	2.52	0.42
1:D:312:LEU:O	1:D:324:THR:HG23	2.20	0.42
1:F:475:GLU:HG2	1:F:636:MET:HE1	2.02	0.42
1:G:455:MET:O	1:G:455:MET:HE2	2.20	0.42
1:C:103:ASP:O	1:C:105:ARG:N	2.53	0.42
1:C:418:LYS:HB3	1:C:419:ARG:H	1.67	0.42
1:C:430:TRP:O	1:C:431:GLY:C	2.58	0.42
1:D:148:PRO:HD2	1:D:149:GLU:OE2	2.20	0.42
1:G:434:TRP:CZ3	1:G:568:ARG:CG	2.95	0.42
1:E:373:ASP:O	1:E:374:CYS:CB	2.67	0.42
1:F:119:GLU:CB	1:F:121:PRO:HB2	2.49	0.42
1:F:125:LEU:CA	1:F:162:HIS:NE2	2.71	0.42
1:F:261:THR:HB	1:F:262:PRO:HD2	2.01	0.42
1:H:225:ASN:OD1	1:H:229:VAL:HG12	2.20	0.42
1:F:190:ALA:HB2	1:F:206:TRP:CG	2.55	0.42
1:E:629:VAL:HG12	1:E:629:VAL:O	2.20	0.42
1:B:125:LEU:HD21	1:B:215:CYS:SG	2.60	0.42
1:E:502:GLU:N	1:E:502:GLU:OE1	2.53	0.42
1:G:632:VAL:CG1	1:G:633:MET:HE1	2.50	0.42
1:D:33:ILE:HG22	1:D:35:GLN:HA	2.02	0.42
1:G:579:ARG:HA	1:G:582:ARG:NH2	2.34	0.42
1:H:361:LEU:HD23	1:H:361:LEU:HA	1.87	0.42
1:F:139:ASN:O	1:F:141:ILE:HG13	2.19	0.42
1:E:140:ARG:NH2	1:E:174:ASP:OD2	2.51	0.42
1:B:140:ARG:NH2	1:B:174:ASP:OD2	2.50	0.42
1:D:515:ARG:HA	1:D:518:GLU:OE2	2.19	0.42
1:A:478:GLN:HA	1:B:478:GLN:OE1	2.20	0.42
1:B:478:GLN:O	1:B:482:LYS:HB3	2.20	0.42
1:C:213:PHE:O	1:C:214:GLU:C	2.58	0.42
1:C:416:ASP:N	1:C:416:ASP:OD1	2.39	0.42
1:H:581:GLN:H	1:H:582:ARG:HD2	1.85	0.42
1:E:120:GLY:O	1:E:123:ARG:CA	2.68	0.42
1:F:225:ASN:HB3	1:F:226:TRP:H	1.69	0.42
1:F:272:LYS:HG2	1:F:273:LEU:HA	2.02	0.42
1:F:430:TRP:O	1:F:431:GLY:C	2.58	0.42
1:C:190:ALA:O	1:C:191:PRO:C	2.58	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:189:LEU:CG	1:G:190:ALA:N	2.68	0.42
1:C:646:ARG:C	1:C:647:GLN:OE1	2.57	0.42
1:H:273:LEU:O	1:H:276:TRP:N	2.53	0.42
1:D:651:GLN:O	1:D:652:GLN:C	2.57	0.42
1:E:134:ARG:CB	1:E:300:PHE:CE1	2.97	0.42
1:C:466:SER:HB3	1:C:537:MET:HE1	2.02	0.42
1:G:316:ASN:N	1:G:321:ARG:O	2.52	0.42
1:A:33:ILE:HD11	1:A:40:GLN:OE1	2.20	0.42
1:A:33:ILE:HG22	1:A:35:GLN:HA	2.02	0.42
1:C:18:LYS:HG3	1:C:35:GLN:HG2	2.02	0.42
1:A:144:ARG:HD2	1:A:171:LYS:HB2	2.02	0.42
1:F:350:GLU:CG	1:F:391:ASP:HB2	2.46	0.42
1:H:198:LYS:C	1:H:200:THR:H	2.23	0.42
1:F:312:LEU:O	1:F:324:THR:HG23	2.20	0.42
1:D:102:GLY:HA3	1:D:152:VAL:HG13	2.02	0.42
1:B:455:MET:CE	1:B:455:MET:O	2.68	0.42
1:G:139:ASN:O	1:G:141:ILE:HG13	2.19	0.42
1:C:125:LEU:CA	1:C:162:HIS:NE2	2.74	0.42
1:D:569:ASP:HA	1:D:572:ARG:HB3	2.02	0.42
1:D:433:ILE:HG23	1:D:594:LEU:HD22	2.01	0.42
1:E:505:ILE:O	1:E:505:ILE:HG22	2.19	0.42
1:H:412:ILE:O	1:H:416:ASP:OD1	2.38	0.42
1:D:222:PHE:HB2	1:D:255:PHE:HD2	1.85	0.42
1:E:235:VAL:CG1	1:E:243:ILE:N	2.74	0.42
1:G:213:PHE:O	1:G:214:GLU:C	2.58	0.42
1:E:102:GLY:CA	1:E:152:VAL:HG13	2.49	0.42
1:E:272:LYS:HG2	1:E:273:LEU:HA	2.02	0.42
1:F:105:ARG:HG3	1:F:105:ARG:NH1	2.35	0.42
1:F:272:LYS:O	1:F:273:LEU:C	2.58	0.42
1:C:517:MET:CE	1:C:647:GLN:OE1	2.68	0.42
1:D:646:ARG:HG3	1:D:647:GLN:CD	2.33	0.42
1:D:650:ARG:HA	1:D:650:ARG:HD3	1.67	0.42
1:H:260:PRO:HB3	1:H:273:LEU:HD22	2.01	0.42
1:G:530:VAL:CA	1:G:533:LEU:HD12	2.32	0.42
1:G:629:VAL:HG12	1:G:629:VAL:O	2.20	0.42
1:E:18:LYS:HZ2	1:E:33:ILE:CD1	2.29	0.42
1:E:17:MET:CB	1:E:32:TRP:HB3	2.37	0.42
1:G:33:ILE:HD11	1:G:40:GLN:OE1	2.20	0.42
1:C:33:ILE:HD11	1:C:40:GLN:OE1	2.20	0.42
1:B:358:GLY:O	1:B:359:LEU:CB	2.63	0.42
1:B:583:THR:O	1:B:584:PRO:C	2.58	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:70:HIS:HB2	1:E:135:TYR:CD2	2.54	0.42
1:A:651:GLN:O	1:A:652:GLN:C	2.57	0.42
1:B:312:LEU:O	1:B:324:THR:HG23	2.19	0.42
1:G:614:LYS:HA	1:G:614:LYS:HD3	1.79	0.42
1:G:406:HIS:HA	1:G:407:PRO:HD2	1.83	0.42
1:A:484:ASP:O	1:A:485:PHE:C	2.57	0.42
1:B:517:MET:SD	1:B:650:ARG:HG3	2.60	0.42
1:C:438:ARG:HG2	1:C:564:GLU:CG	2.50	0.42
1:D:570:LEU:CD2	1:D:590:MET:CE	2.98	0.42
1:B:269:LEU:HD22	1:B:272:LYS:HB3	2.02	0.42
1:B:500:GLN:HB3	1:B:505:ILE:HG13	2.00	0.42
1:B:503:PHE:N	1:B:505:ILE:HD11	2.32	0.42
1:G:110:GLN:O	1:G:111:PHE:CB	2.37	0.42
1:G:422:THR:HG22	1:G:426:LEU:CD2	2.49	0.42
1:A:426:LEU:O	1:A:430:TRP:N	2.46	0.42
1:A:570:LEU:HD23	1:A:590:MET:CE	2.50	0.42
1:E:110:GLN:HB3	1:E:113:ASN:ND2	2.34	0.42
1:F:124:THR:OG1	1:F:162:HIS:HE1	2.02	0.42
1:G:253:VAL:HB	1:G:255:PHE:CE1	2.54	0.42
1:A:235:VAL:CG1	1:A:243:ILE:N	2.74	0.42
1:C:190:ALA:HB2	1:C:206:TRP:CG	2.55	0.42
1:G:528:ARG:HA	1:G:530:VAL:HG22	2.02	0.42
1:A:143:HIS:NE2	1:A:167:LEU:HB2	2.35	0.42
1:D:402:SER:HB2	1:D:403:LEU:H	1.65	0.42
1:C:74:VAL:HG21	1:C:165:ILE:HA	2.01	0.42
1:C:307:LEU:O	1:C:307:LEU:HD23	2.20	0.42
1:A:84:GLN:HB3	1:A:85:LYS:H	1.51	0.42
1:G:21:LEU:HD12	1:G:29:VAL:HG12	2.00	0.42
1:C:109:ASN:O	1:C:110:GLN:C	2.58	0.41
1:C:273:LEU:O	1:C:276:TRP:N	2.53	0.41
1:D:213:PHE:HD2	1:D:214:GLU:N	2.18	0.41
1:B:430:TRP:O	1:B:431:GLY:C	2.58	0.41
1:B:434:TRP:O	1:B:435:GLN:C	2.55	0.41
1:E:190:ALA:O	1:E:191:PRO:C	2.58	0.41
1:G:276:TRP:HE3	1:G:277:LEU:HD23	1.84	0.41
1:A:272:LYS:O	1:A:273:LEU:C	2.58	0.41
1:C:484:ASP:OD1	1:C:487:ARG:NH1	2.53	0.41
1:F:133:LEU:O	1:F:134:ARG:C	2.57	0.41
1:C:527:GLU:HG2	1:C:530:VAL:HG13	2.02	0.41
1:B:33:ILE:HG23	1:B:39:GLU:H	1.85	0.41
1:G:18:LYS:HZ2	1:G:33:ILE:CD1	2.30	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:16:GLU:HB3	1:C:17:MET:H	1.68	0.41
1:C:545:VAL:HG13	1:C:548:GLN:NE2	2.35	0.41
1:A:503:PHE:HB3	1:B:662:CYS:SG	2.60	0.41
1:A:198:LYS:C	1:A:200:THR:N	2.73	0.41
1:D:139:ASN:O	1:D:141:ILE:HG13	2.20	0.41
1:E:346:ILE:O	1:E:346:ILE:HG23	2.20	0.41
1:D:467:LYS:HD3	1:D:467:LYS:HA	1.75	0.41
1:A:478:GLN:O	1:A:482:LYS:HB3	2.20	0.41
1:A:222:PHE:CE2	1:A:225:ASN:CB	2.89	0.41
1:A:250:THR:C	1:A:251:GLY:O	2.58	0.41
1:C:114:CYS:O	1:C:115:CYS:CB	2.64	0.41
1:C:118:LYS:HZ1	1:C:123:ARG:HH12	1.67	0.41
1:C:569:ASP:HA	1:C:572:ARG:HB3	2.02	0.41
1:D:262:PRO:HG2	1:D:432:GLN:HG2	2.03	0.41
1:B:114:CYS:O	1:B:115:CYS:CB	2.64	0.41
1:G:213:PHE:HD2	1:G:214:GLU:N	2.18	0.41
1:A:210:THR:O	1:A:213:PHE:N	2.53	0.41
1:E:102:GLY:HA3	1:E:152:VAL:HG13	2.02	0.41
1:E:272:LYS:O	1:E:273:LEU:C	2.57	0.41
1:E:409:SER:CB	1:E:412:ILE:CD1	2.93	0.41
1:E:565:GLU:O	1:E:568:ARG:HB3	2.20	0.41
1:F:222:PHE:HB2	1:F:255:PHE:HD2	1.85	0.41
1:F:254:LYS:N	1:F:255:PHE:CE1	2.87	0.41
1:G:185:THR:CG2	1:G:187:GLN:CG	2.80	0.41
1:H:222:PHE:HB2	1:H:255:PHE:HD2	1.84	0.41
1:F:165:ILE:O	1:F:167:LEU:N	2.48	0.41
1:H:124:THR:O	1:H:127:SER:N	2.52	0.41
1:H:148:PRO:HD2	1:H:149:GLU:OE2	2.20	0.41
1:F:26:PHE:CE2	1:F:181:GLU:OE1	2.68	0.41
1:E:485:PHE:CD2	1:F:485:PHE:CD2	3.08	0.41
1:A:665:VAL:CG2	1:B:665:VAL:HG21	2.49	0.41
1:A:533:LEU:O	1:A:537:MET:HG2	2.20	0.41
1:C:533:LEU:O	1:C:537:MET:HG2	2.20	0.41
1:F:352:GLU:OE1	1:F:619:LYS:NZ	2.32	0.41
1:A:297:VAL:HG23	1:A:301:GLN:NE2	2.35	0.41
1:F:18:LYS:HG3	1:F:35:GLN:HG2	2.03	0.41
1:C:144:ARG:HD2	1:C:171:LYS:HB2	2.01	0.41
1:E:583:THR:O	1:E:584:PRO:C	2.58	0.41
1:E:665:VAL:HG11	1:F:664:LYS:O	2.20	0.41
1:A:566:GLN:HG2	1:A:593:LEU:CD1	2.51	0.41
1:F:455:MET:HB2	1:F:455:MET:HE3	1.81	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:494:LEU:CD1	1:D:514:TRP:HB3	2.50	0.41
1:F:502:GLU:OE1	1:F:502:GLU:N	2.53	0.41
1:G:475:GLU:CD	1:G:636:MET:HE1	2.40	0.41
1:A:124:THR:O	1:A:127:SER:N	2.53	0.41
1:A:104:LEU:N	1:A:151:ILE:O	2.33	0.41
1:A:567:ALA:HA	1:A:590:MET:HE1	2.02	0.41
1:A:430:TRP:CB	1:A:571:TYR:HD2	2.27	0.41
1:E:103:ASP:O	1:E:106:LYS:N	2.53	0.41
1:E:120:GLY:CA	1:E:123:ARG:HB2	2.48	0.41
1:E:222:PHE:CB	1:E:255:PHE:HB3	2.50	0.41
1:E:434:TRP:HZ3	1:E:568:ARG:HA	1.75	0.41
1:F:118:LYS:HG2	1:F:264:HIS:C	2.32	0.41
1:F:118:LYS:HG2	1:F:265:LEU:CA	2.46	0.41
1:H:186:LEU:C	1:H:188:TYR:H	2.22	0.41
1:E:527:GLU:C	1:E:529:GLU:H	2.23	0.41
1:F:517:MET:CG	1:F:646:ARG:HH11	2.18	0.41
1:E:33:ILE:HG22	1:E:35:GLN:HA	2.03	0.41
1:D:316:ASN:O	1:D:317:MET:HG2	2.21	0.41
1:D:563:LEU:HD21	1:D:596:LEU:HB2	2.02	0.41
1:H:443:ASP:O	1:H:446:ARG:CB	2.62	0.41
1:B:195:GLU:O	1:B:196:GLN:HB2	2.20	0.41
1:A:410:VAL:O	1:A:411:SER:C	2.59	0.41
1:H:291:ASP:HA	1:H:292:PRO:HD3	1.82	0.41
1:A:268:ILE:HA	1:A:268:ILE:HD12	1.91	0.41
1:C:222:PHE:HB2	1:C:255:PHE:HD2	1.85	0.41
1:C:277:LEU:C	1:C:279:CYS:N	2.74	0.41
1:D:118:LYS:NZ	1:D:123:ARG:HH12	2.18	0.41
1:D:414:LEU:O	1:D:418:LYS:HB2	2.20	0.41
1:D:430:TRP:O	1:D:431:GLY:C	2.59	0.41
1:D:434:TRP:O	1:D:435:GLN:C	2.56	0.41
1:B:501:MET:C	1:B:505:ILE:CD1	2.87	0.41
1:H:189:LEU:CG	1:H:190:ALA:N	2.70	0.41
1:F:213:PHE:O	1:F:214:GLU:C	2.58	0.41
1:H:222:PHE:HE2	1:H:225:ASN:HB2	1.72	0.41
1:D:234:LYS:O	1:D:235:VAL:O	2.38	0.41
1:D:246:TYR:CE1	1:D:258:VAL:HB	2.46	0.41
1:F:479:LEU:HB3	1:F:640:GLU:OE2	2.21	0.41
1:F:357:SER:CB	1:F:453:THR:HB	2.51	0.41
1:G:18:LYS:HG3	1:G:35:GLN:HG2	2.03	0.41
1:A:315:MET:SD	1:A:321:ARG:HA	2.61	0.41
1:E:581:GLN:H	1:E:582:ARG:HD2	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:451:GLN:NE2	1:H:611:GLN:NE2	2.68	0.41
1:E:336:LEU:O	1:E:337:LYS:C	2.57	0.41
1:B:70:HIS:HB3	1:B:73:VAL:CG1	2.50	0.41
1:D:198:LYS:C	1:D:200:THR:N	2.74	0.41
1:G:102:GLY:CA	1:G:152:VAL:HG13	2.51	0.41
1:F:102:GLY:CA	1:F:152:VAL:HG13	2.50	0.41
1:B:455:MET:HE3	1:B:455:MET:O	2.20	0.41
1:F:268:ILE:HA	1:F:268:ILE:HD12	1.90	0.41
1:E:470:ASN:HD22	1:E:470:ASN:N	2.18	0.41
1:B:428:ARG:HB2	1:B:429:VAL:H	1.69	0.41
1:A:110:GLN:HB3	1:A:113:ASN:ND2	2.35	0.41
1:A:422:THR:HG22	1:A:426:LEU:CD2	2.47	0.41
1:A:430:TRP:O	1:A:431:GLY:C	2.59	0.41
1:F:260:PRO:HB2	1:F:273:LEU:CD1	2.47	0.41
1:F:244:VAL:HG22	1:F:282:MET:SD	2.61	0.41
1:G:226:TRP:HD1	1:G:227:GLN:N	2.10	0.41
1:C:536:LYS:CB	1:C:625:LEU:HD13	2.16	0.41
1:A:547:LEU:HD22	1:A:611:GLN:HG2	2.01	0.41
1:A:529:GLU:HG3	1:A:633:MET:HE3	1.97	0.41
1:E:497:TYR:C	1:E:497:TYR:CD2	2.94	0.41
1:B:16:GLU:C	1:B:17:MET:HG3	2.41	0.41
1:D:70:HIS:HB3	1:D:73:VAL:CG1	2.50	0.41
1:H:33:ILE:HG22	1:H:35:GLN:HA	2.02	0.41
1:H:32:TRP:HD1	1:H:43:ILE:HD13	1.85	0.41
1:H:423:TYR:CE1	1:H:425:HIS:O	2.74	0.41
1:E:424:THR:HG1	1:E:425:HIS:HD1	1.54	0.41
1:G:55:ARG:HB2	1:G:55:ARG:HE	1.54	0.41
1:B:198:LYS:C	1:B:200:THR:N	2.73	0.41
1:D:614:LYS:HA	1:D:614:LYS:HD3	1.79	0.41
1:B:606:ILE:O	1:B:607:LEU:C	2.58	0.41
1:A:517:MET:HG3	1:A:646:ARG:HH11	1.85	0.41
1:C:435:GLN:O	1:C:439:ALA:N	2.51	0.41
1:D:209:GLY:O	1:D:212:ALA:HB3	2.21	0.41
1:E:500:GLN:HE22	1:F:659:LYS:HG2	1.85	0.41
1:B:120:GLY:O	1:B:123:ARG:CA	2.69	0.41
1:B:261:THR:HB	1:B:262:PRO:HD2	2.02	0.41
1:A:195:GLU:O	1:A:196:GLN:HB2	2.20	0.41
1:F:234:LYS:O	1:F:235:VAL:O	2.38	0.41
1:F:235:VAL:CG1	1:F:243:ILE:N	2.72	0.41
1:F:473:THR:HB	1:F:533:LEU:HD13	2.03	0.41
1:B:186:LEU:C	1:B:188:TYR:H	2.22	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:281:LEU:C	1:D:282:MET:HG2	2.41	0.41
1:G:472:MET:CG	1:G:633:MET:CB	2.99	0.41
1:H:195:GLU:O	1:H:196:GLN:HB2	2.20	0.41
1:E:563:LEU:HD21	1:E:596:LEU:CB	2.35	0.41
1:F:33:ILE:HG22	1:F:35:GLN:HA	2.02	0.41
1:H:18:LYS:HG3	1:H:35:GLN:HG2	2.03	0.41
1:A:581:GLN:H	1:A:582:ARG:HD2	1.84	0.41
1:H:144:ARG:HD2	1:H:171:LYS:HB2	2.01	0.41
1:A:510:LEU:HD22	1:A:653:GLU:HB2	2.02	0.41
1:F:581:GLN:H	1:F:582:ARG:HD2	1.85	0.41
1:C:210:THR:O	1:C:211:LEU:C	2.59	0.41
1:A:70:HIS:HB3	1:A:73:VAL:CG1	2.50	0.41
1:C:346:ILE:HA	1:C:347:PRO:HD3	1.83	0.41
1:B:488:SER:O	1:B:492:ILE:HG22	2.20	0.41
1:E:469:LYS:HZ3	1:E:630:LYS:HE2	1.84	0.41
1:G:455:MET:O	1:G:455:MET:CE	2.68	0.41
1:E:455:MET:O	1:E:455:MET:HE3	2.21	0.41
1:F:459:LEU:HD23	1:F:459:LEU:O	2.21	0.41
1:H:346:ILE:HG23	1:H:346:ILE:O	2.20	0.41
1:C:515:ARG:HA	1:C:518:GLU:OE2	2.20	0.41
1:A:642:ILE:C	1:A:644:VAL:H	2.22	0.41
1:B:226:TRP:CG	1:B:227:GLN:N	2.62	0.41
1:C:119:GLU:CB	1:C:121:PRO:HB2	2.50	0.41
1:C:119:GLU:HB2	1:C:121:PRO:N	2.36	0.41
1:B:265:LEU:HG	1:B:266:SER:H	1.86	0.41
1:D:222:PHE:HE2	1:D:225:ASN:HB2	1.72	0.41
1:A:437:ILE:CG1	1:A:594:LEU:HD12	2.50	0.41
1:E:569:ASP:HA	1:E:572:ARG:HB3	2.03	0.41
1:F:249:LEU:HB3	1:F:250:THR:H	1.38	0.41
1:A:206:TRP:CD1	1:A:207:SER:N	2.88	0.41
1:D:646:ARG:CG	1:D:647:GLN:NE2	2.54	0.41
1:E:533:LEU:O	1:E:537:MET:HG2	2.20	0.41
1:F:533:LEU:O	1:F:537:MET:HG2	2.20	0.41
1:E:387:ILE:HD12	1:E:450:GLY:CA	2.49	0.41
1:C:527:GLU:C	1:C:529:GLU:N	2.73	0.41
1:A:658:LEU:CD1	1:B:658:LEU:HA	2.51	0.41
1:D:18:LYS:HG3	1:D:35:GLN:HG2	2.02	0.41
1:E:33:ILE:HD11	1:E:40:GLN:OE1	2.20	0.41
1:D:449:GLN:NE2	1:D:453:THR:CG2	2.83	0.41
1:G:33:ILE:HG22	1:G:35:GLN:HA	2.02	0.41
1:B:144:ARG:HD2	1:B:171:LYS:HB2	2.00	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:660:ILE:C	1:F:662:CYS:N	2.68	0.41
1:A:307:LEU:HD23	1:A:307:LEU:O	2.21	0.41
1:B:139:ASN:O	1:B:141:ILE:HG13	2.21	0.41
1:C:539:ALA:O	1:C:543:ASP:HB2	2.20	0.41
1:D:497:TYR:C	1:D:497:TYR:CD2	2.93	0.41
1:C:114:CYS:O	1:C:114:CYS:SG	2.79	0.41
1:C:571:TYR:CE1	1:C:590:MET:HE1	2.56	0.41
1:D:119:GLU:HB2	1:D:121:PRO:N	2.36	0.41
1:D:121:PRO:HA	1:D:124:THR:OG1	2.21	0.41
1:B:412:ILE:HG12	1:B:433:ILE:HD13	2.03	0.41
1:H:564:GLU:HG2	1:H:564:GLU:O	2.20	0.41
1:E:105:ARG:HG3	1:E:105:ARG:NH1	2.31	0.41
1:F:222:PHE:CB	1:F:255:PHE:HB3	2.50	0.41
1:F:281:LEU:C	1:F:282:MET:HG2	2.41	0.41
1:C:189:LEU:HD12	1:C:207:SER:HB3	2.03	0.41
1:C:451:GLN:OE1	1:C:611:GLN:NE2	2.54	0.41
1:H:533:LEU:O	1:H:537:MET:HG2	2.20	0.41
1:C:480:LYS:O	1:C:483:LEU:HB3	2.20	0.41
1:F:16:GLU:C	1:F:17:MET:HG3	2.41	0.41
1:G:16:GLU:C	1:G:17:MET:HG3	2.41	0.41
1:G:142:ILE:HG22	1:G:144:ARG:H	1.86	0.41
1:H:25:GLY:HA2	1:H:169:TYR:OH	2.21	0.41
1:D:540:LEU:HD13	1:D:622:ALA:HB2	2.03	0.41
1:A:362:ASN:C	1:A:364:ALA:N	2.72	0.41
1:F:540:LEU:CD1	1:F:622:ALA:HB2	2.50	0.41
1:H:610:ASP:O	1:H:613:SER:HB3	2.20	0.41
1:H:636:MET:HE2	1:H:637:ARG:N	2.35	0.41
1:E:139:ASN:O	1:E:141:ILE:HG13	2.21	0.41
1:C:655:TRP:CZ3	1:D:654:LEU:HD12	2.56	0.41
1:C:654:LEU:HD12	1:D:655:TRP:CZ3	2.56	0.41
1:D:118:LYS:CB	1:D:264:HIS:O	2.69	0.41
1:D:564:GLU:O	1:D:564:GLU:HG2	2.20	0.41
1:C:148:PRO:HD2	1:C:149:GLU:OE2	2.21	0.41
1:C:437:ILE:HG12	1:C:597:ALA:HB3	2.03	0.41
1:E:503:PHE:N	1:E:505:ILE:HD11	2.29	0.41
1:F:503:PHE:C	1:F:505:ILE:HG13	2.40	0.41
1:B:222:PHE:HB2	1:B:255:PHE:HD2	1.86	0.41
1:B:285:GLN:CG	1:B:285:GLN:O	2.69	0.41
1:G:119:GLU:HB3	1:G:121:PRO:CD	2.43	0.41
1:G:567:ALA:O	1:G:571:TYR:CD1	2.74	0.41
1:G:273:LEU:O	1:G:276:TRP:N	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:276:TRP:CE2	1:G:280:MET:HG3	2.55	0.41
1:E:260:PRO:HB2	1:E:273:LEU:CD1	2.50	0.41
1:E:273:LEU:O	1:E:276:TRP:N	2.54	0.41
1:F:148:PRO:HG3	1:F:188:TYR:OH	2.21	0.41
1:F:276:TRP:HE3	1:F:277:LEU:HD23	1.85	0.41
1:A:246:TYR:CE1	1:A:258:VAL:HB	2.45	0.41
1:D:485:PHE:C	1:D:485:PHE:CD1	2.94	0.41
1:D:484:ASP:OD1	1:D:487:ARG:NH1	2.54	0.41
1:E:528:ARG:HA	1:E:530:VAL:HG22	2.03	0.41
1:H:107:TYR:CA	1:H:110:GLN:HB2	2.51	0.41
1:E:527:GLU:HG2	1:E:530:VAL:CG1	2.50	0.41
1:E:486:PHE:O	1:E:486:PHE:CG	2.73	0.41
1:A:281:LEU:C	1:A:282:MET:HG2	2.41	0.41
1:E:515:ARG:HA	1:E:518:GLU:OE2	2.21	0.41
1:D:72:ASN:O	1:D:164:ILE:HG22	2.21	0.41
1:E:142:ILE:HG12	1:E:201:VAL:HA	2.02	0.41
1:H:169:TYR:CD2	1:H:169:TYR:N	2.89	0.41
1:C:387:ILE:HG21	1:C:450:GLY:HA2	2.03	0.41
1:F:579:ARG:NH2	1:G:580:ASP:HB3	2.36	0.41
1:A:336:LEU:O	1:A:337:LYS:C	2.59	0.41
1:G:346:ILE:HA	1:G:347:PRO:HD3	1.84	0.41
1:B:55:ARG:HE	1:B:55:ARG:HB2	1.53	0.41
1:B:656:ASN:OD1	1:B:656:ASN:O	2.39	0.41
1:E:455:MET:HB2	1:E:455:MET:HE3	1.80	0.41
1:F:455:MET:CE	1:F:455:MET:O	2.69	0.41
1:H:159:ARG:HD3	1:H:375:THR:HG21	2.03	0.41
1:E:268:ILE:HD12	1:E:268:ILE:HA	1.90	0.41
1:E:459:LEU:HD23	1:E:459:LEU:O	2.21	0.41
1:B:629:VAL:O	1:B:629:VAL:HG12	2.21	0.41
1:C:102:GLY:O	1:C:103:ASP:C	2.60	0.41
1:C:250:THR:C	1:C:251:GLY:O	2.58	0.41
1:D:120:GLY:C	1:D:123:ARG:H	2.25	0.41
1:E:654:LEU:HD21	1:F:654:LEU:HD21	1.70	0.41
1:H:583:THR:O	1:H:585:GLY:N	2.54	0.41
1:D:222:PHE:CB	1:D:255:PHE:HB3	2.51	0.41
1:B:497:TYR:C	1:B:497:TYR:CD2	2.93	0.41
1:G:261:THR:HB	1:G:262:PRO:HD2	2.03	0.41
1:A:148:PRO:HG3	1:A:188:TYR:OH	2.20	0.41
1:E:118:LYS:CG	1:E:118:LYS:O	2.68	0.41
1:E:148:PRO:HD2	1:E:149:GLU:OE2	2.21	0.41
1:E:250:THR:C	1:E:251:GLY:O	2.58	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:210:THR:N	1:F:281:LEU:HD11	2.35	0.41
1:F:438:ARG:HG2	1:F:564:GLU:OE1	2.21	0.41
1:G:222:PHE:HB2	1:G:255:PHE:HD2	1.85	0.41
1:H:276:TRP:CE2	1:H:280:MET:HG3	2.56	0.41
1:B:502:GLU:N	1:B:502:GLU:OE1	2.54	0.41
1:B:125:LEU:HD12	1:B:129:ILE:HG12	2.02	0.41
1:E:476:CYS:HB2	1:E:636:MET:SD	2.61	0.41
1:G:533:LEU:HD21	1:G:633:MET:HE3	2.03	0.41
1:H:58:TRP:CZ3	1:H:62:ILE:HG13	2.57	0.41
1:E:651:GLN:O	1:E:652:GLN:C	2.59	0.41
1:C:336:LEU:O	1:C:337:LYS:C	2.60	0.41
1:D:346:ILE:HA	1:D:347:PRO:HD3	1.83	0.41
1:H:210:THR:O	1:H:211:LEU:C	2.60	0.41
1:B:373:ASP:O	1:B:374:CYS:CB	2.69	0.41
1:B:603:LYS:O	1:B:606:ILE:HG13	2.21	0.41
1:F:539:ALA:O	1:F:543:ASP:HB2	2.21	0.41
1:G:436:THR:O	1:G:440:LEU:HG	2.20	0.41
1:H:140:ARG:NH2	1:H:174:ASP:OD2	2.52	0.41
1:C:186:LEU:HD23	1:C:227:GLN:HG2	2.03	0.40
1:B:260:PRO:HB2	1:B:273:LEU:CD1	2.49	0.40
1:H:437:ILE:HG12	1:H:597:ALA:HB3	2.03	0.40
1:D:250:THR:C	1:D:251:GLY:O	2.59	0.40
1:B:505:ILE:HG22	1:B:505:ILE:O	2.22	0.40
1:F:570:LEU:CB	1:F:590:MET:HE2	2.51	0.40
1:F:143:HIS:NE2	1:F:167:LEU:HB2	2.35	0.40
1:H:449:GLN:O	1:H:453:THR:HG23	2.21	0.40
1:E:482:LYS:C	1:E:484:ASP:H	2.23	0.40
1:B:102:GLY:O	1:B:103:ASP:C	2.60	0.40
1:F:515:ARG:HA	1:F:518:GLU:OE2	2.21	0.40
1:D:206:TRP:CD1	1:D:207:SER:N	2.89	0.40
1:F:296:ASN:CG	1:F:297:VAL:N	2.75	0.40
1:A:150:ASN:ND2	1:A:167:LEU:CD1	2.82	0.40
1:D:169:TYR:N	1:D:169:TYR:CD2	2.89	0.40
1:A:497:TYR:C	1:A:497:TYR:CD2	2.94	0.40
1:C:357:SER:HB3	1:C:453:THR:CB	2.41	0.40
1:F:195:GLU:O	1:F:196:GLN:HB2	2.20	0.40
1:C:208:PHE:O	1:C:211:LEU:HB3	2.22	0.40
1:E:50:LEU:N	1:E:55:ARG:HD3	2.35	0.40
1:F:441:LYS:HB2	1:F:560:LEU:HD22	2.03	0.40
1:G:373:ASP:O	1:G:374:CYS:CB	2.68	0.40
1:H:68:LEU:HD11	1:H:141:ILE:CD1	2.51	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:467:LYS:HA	1:E:467:LYS:HD3	1.75	0.40
1:D:269:LEU:HD23	1:D:269:LEU:HA	1.89	0.40
1:D:567:ALA:O	1:D:571:TYR:CD1	2.74	0.40
1:G:212:ALA:O	1:G:215:CYS:N	2.55	0.40
1:G:571:TYR:OH	1:G:590:MET:SD	2.79	0.40
1:A:213:PHE:O	1:A:214:GLU:C	2.59	0.40
1:E:102:GLY:O	1:E:103:ASP:C	2.59	0.40
1:E:428:ARG:HB2	1:E:429:VAL:H	1.69	0.40
1:A:190:ALA:O	1:A:191:PRO:C	2.60	0.40
1:G:190:ALA:O	1:G:191:PRO:C	2.59	0.40
1:F:517:MET:HE1	1:F:647:GLN:OE1	2.18	0.40
1:F:497:TYR:CD2	1:F:511:LEU:HD22	2.50	0.40
1:A:480:LYS:HZ2	1:A:527:GLU:HB2	1.86	0.40
1:A:629:VAL:HG12	1:A:629:VAL:O	2.21	0.40
1:F:33:ILE:HD11	1:F:40:GLN:OE1	2.21	0.40
1:D:580:ASP:O	1:D:580:ASP:CG	2.60	0.40
1:F:651:GLN:O	1:F:652:GLN:C	2.59	0.40
1:G:423:TYR:CE1	1:G:425:HIS:O	2.74	0.40
1:D:361:LEU:HD23	1:D:361:LEU:HA	1.85	0.40
1:E:336:LEU:O	1:E:340:LEU:N	2.54	0.40
1:B:208:PHE:O	1:B:211:LEU:HB3	2.21	0.40
1:C:614:LYS:HA	1:C:614:LYS:HD3	1.80	0.40
1:E:545:VAL:HG13	1:E:548:GLN:NE2	2.36	0.40
1:F:606:ILE:O	1:F:607:LEU:C	2.58	0.40
1:C:497:TYR:C	1:C:497:TYR:CD2	2.93	0.40
1:A:482:LYS:C	1:A:484:ASP:N	2.74	0.40
1:C:120:GLY:O	1:C:123:ARG:CA	2.69	0.40
1:C:434:TRP:HZ3	1:C:568:ARG:CB	2.35	0.40
1:D:109:ASN:O	1:D:110:GLN:C	2.60	0.40
1:E:654:LEU:HD22	1:F:654:LEU:CD2	2.45	0.40
1:B:276:TRP:CE2	1:B:280:MET:HG3	2.56	0.40
1:E:246:TYR:CE1	1:E:258:VAL:HB	2.44	0.40
1:G:105:ARG:NE	1:G:149:GLU:OE2	2.55	0.40
1:G:118:LYS:HZ1	1:G:123:ARG:HH22	1.68	0.40
1:G:409:SER:CB	1:G:412:ILE:CD1	2.92	0.40
1:A:208:PHE:O	1:A:211:LEU:HB3	2.21	0.40
1:A:438:ARG:HH11	1:A:568:ARG:HH21	1.67	0.40
1:E:209:GLY:O	1:E:212:ALA:HB3	2.21	0.40
1:E:414:LEU:O	1:E:418:LYS:HB2	2.22	0.40
1:F:260:PRO:HB3	1:F:273:LEU:CD2	2.51	0.40
1:G:247:ASP:HB3	1:G:248:ASP:H	1.47	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:481:ALA:O	1:C:484:ASP:HB2	2.22	0.40
1:D:484:ASP:C	1:D:486:PHE:H	2.22	0.40
1:C:485:PHE:CB	1:D:485:PHE:CE2	3.05	0.40
1:H:118:LYS:HZ1	1:H:123:ARG:HH12	1.68	0.40
1:F:486:PHE:O	1:F:486:PHE:CG	2.75	0.40
1:E:316:ASN:O	1:E:317:MET:HG2	2.21	0.40
1:A:285:GLN:O	1:A:285:GLN:CG	2.69	0.40
1:F:32:TRP:HD1	1:F:43:ILE:HD13	1.86	0.40
1:D:142:ILE:HG22	1:D:144:ARG:H	1.86	0.40
1:A:449:GLN:O	1:A:453:THR:HG23	2.20	0.40
1:G:402:SER:HB2	1:G:403:LEU:H	1.66	0.40
1:D:50:LEU:N	1:D:55:ARG:HD3	2.36	0.40
1:C:441:LYS:HB2	1:C:560:LEU:HD21	2.02	0.40
1:A:488:SER:O	1:A:492:ILE:HG22	2.21	0.40
1:C:135:TYR:O	1:C:139:ASN:ND2	2.52	0.40
1:D:60:LEU:HD21	1:D:175:GLN:HB3	2.03	0.40
1:E:410:VAL:O	1:E:411:SER:C	2.59	0.40
1:B:485:PHE:C	1:B:485:PHE:CD1	2.95	0.40
1:B:484:ASP:OD1	1:B:487:ARG:NH1	2.54	0.40
1:C:273:LEU:HB3	1:C:274:GLU:H	1.73	0.40
1:D:434:TRP:NE1	1:D:435:GLN:OE1	2.55	0.40
1:B:247:ASP:HB3	1:B:248:ASP:H	1.50	0.40
1:B:260:PRO:O	1:B:261:THR:OG1	2.37	0.40
1:G:567:ALA:O	1:G:571:TYR:HD1	2.03	0.40
1:G:565:GLU:O	1:G:568:ARG:HB3	2.22	0.40
1:G:569:ASP:HA	1:G:572:ARG:HB3	2.03	0.40
1:E:426:LEU:O	1:E:430:TRP:N	2.45	0.40
1:F:276:TRP:CE2	1:F:280:MET:HG3	2.56	0.40
1:F:569:ASP:HA	1:F:572:ARG:HB3	2.03	0.40
1:H:185:THR:CG2	1:H:187:GLN:CG	2.83	0.40
1:C:485:PHE:CG	1:D:485:PHE:CE2	3.09	0.40
1:D:476:CYS:CB	1:D:636:MET:SD	3.09	0.40
1:F:481:ALA:O	1:F:484:ASP:HB2	2.22	0.40
1:B:110:GLN:HB3	1:B:113:ASN:ND2	2.35	0.40
1:E:321:ARG:NE	1:E:443:ASP:OD1	2.54	0.40
1:E:449:GLN:O	1:E:453:THR:HG23	2.21	0.40
1:D:143:HIS:NE2	1:D:167:LEU:HB2	2.36	0.40
1:C:632:VAL:O	1:C:633:MET:SD	2.79	0.40
1:B:316:ASN:N	1:B:321:ARG:O	2.54	0.40
1:G:58:TRP:CZ3	1:G:62:ILE:HG13	2.57	0.40
1:C:32:TRP:HD1	1:C:43:ILE:HD13	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:33:ILE:HD11	1:H:40:GLN:OE1	2.21	0.40
1:C:462:ASN:ND2	1:C:540:LEU:HB3	2.37	0.40
1:C:28:TYR:HD2	1:C:45:GLN:NE2	2.19	0.40
1:F:490:ILE:CG2	1:F:490:ILE:O	2.68	0.40
1:C:312:LEU:O	1:C:324:THR:HG23	2.21	0.40
1:D:307:LEU:O	1:D:307:LEU:HD23	2.20	0.40
1:E:406:HIS:HA	1:E:407:PRO:HD2	1.84	0.40
1:H:629:VAL:O	1:H:629:VAL:HG12	2.21	0.40
1:A:222:PHE:CZ	1:A:225:ASN:CB	3.04	0.40
1:D:272:LYS:HG2	1:D:273:LEU:HA	2.03	0.40
1:B:272:LYS:HG2	1:B:273:LEU:HA	2.02	0.40
1:B:277:LEU:C	1:B:279:CYS:N	2.74	0.40
1:G:122:ILE:O	1:G:126:LEU:HB2	2.22	0.40
1:G:269:LEU:HD22	1:G:272:LYS:HB3	2.03	0.40
1:A:565:GLU:O	1:A:568:ARG:HB3	2.20	0.40
1:F:114:CYS:O	1:F:114:CYS:SG	2.80	0.40
1:F:186:LEU:HD23	1:F:227:GLN:HG2	2.03	0.40
1:H:569:ASP:HA	1:H:572:ARG:HB3	2.03	0.40
1:B:104:LEU:N	1:B:151:ILE:O	2.33	0.40
1:A:530:VAL:CA	1:A:533:LEU:HD12	2.32	0.40
1:C:296:ASN:CG	1:C:297:VAL:N	2.75	0.40
1:G:473:THR:HB	1:G:533:LEU:HD13	2.04	0.40
1:D:16:GLU:C	1:D:17:MET:HG3	2.42	0.40
1:D:33:ILE:HD11	1:D:40:GLN:OE1	2.21	0.40
1:D:70:HIS:NE2	1:D:131:SER:O	2.54	0.40
1:B:28:TYR:HD2	1:B:45:GLN:NE2	2.19	0.40
1:A:346:ILE:HA	1:A:347:PRO:HD3	1.84	0.40
1:H:333:LEU:O	1:H:336:LEU:N	2.55	0.40
1:B:333:LEU:O	1:B:336:LEU:N	2.54	0.40
1:B:135:TYR:O	1:B:139:ASN:ND2	2.51	0.40
1:F:410:VAL:O	1:F:413:VAL:HG12	2.22	0.40
1:C:291:ASP:HA	1:C:292:PRO:HD3	1.82	0.40

All (6) 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:A:501:MET:SD	1:E:364:ALA:O[1_565]	1.61	0.59
1:E:515:ARG:NH1	1:H:394:LYS:NZ[1_465]	1.76	0.44
1:B:617:VAL:CG2	1:C:519:GLN:OE1[1_465]	1.96	0.24

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:522:GLU:OE1	1:C:295:PRO:CB[1_565]	2.01	0.19
1:A:522:GLU:OE1	1:C:295:PRO:CG[1_565]	2.04	0.16
1:B:394:LYS:NZ	1:C:515:ARG:NH1[1_465]	2.19	0.01

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	610/676 (90%)	360 (59%)	145 (24%)	105 (17%)	0	3
1	B	610/676 (90%)	362 (59%)	143 (23%)	105 (17%)	0	3
1	C	610/676 (90%)	359 (59%)	147 (24%)	104 (17%)	0	3
1	D	610/676 (90%)	363 (60%)	143 (23%)	104 (17%)	0	3
1	E	610/676 (90%)	361 (59%)	147 (24%)	102 (17%)	0	4
1	F	610/676 (90%)	362 (59%)	144 (24%)	104 (17%)	0	3
1	G	527/676 (78%)	310 (59%)	126 (24%)	91 (17%)	0	3
1	H	527/676 (78%)	313 (59%)	121 (23%)	93 (18%)	0	3
All	All	4714/5408 (87%)	2790 (59%)	1116 (24%)	808 (17%)	0	3

All (808) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	101	GLY
1	A	106	LYS
1	A	110	GLN
1	A	111	PHE
1	A	166	ASP
1	A	171	LYS
1	A	183	VAL
1	A	187	GLN
1	A	191	PRO

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Mol	Chain	Res	Type
1	A	195	GLU
1	A	202	THR
1	A	214	GLU
1	A	231	TRP
1	A	235	VAL
1	A	300	PHE
1	A	319	SER
1	A	330	ASN
1	A	350	GLU
1	A	359	LEU
1	A	372	ILE
1	A	403	LEU
1	A	419	ARG
1	A	420	PRO
1	A	424	THR
1	A	506	THR
1	A	528	ARG
1	A	582	ARG
1	A	584	PRO
1	A	588	ASN
1	B	101	GLY
1	B	106	LYS
1	B	110	GLN
1	B	111	PHE
1	B	166	ASP
1	B	171	LYS
1	B	183	VAL
1	B	187	GLN
1	B	191	PRO
1	B	195	GLU
1	B	201	VAL
1	B	202	THR
1	B	231	TRP
1	B	235	VAL
1	B	300	PHE
1	B	319	SER
1	B	330	ASN
1	B	350	GLU
1	B	359	LEU
1	B	363	SER
1	B	372	ILE
1	B	403	LEU

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Mol	Chain	Res	Type
1	B	419	ARG
1	B	420	PRO
1	B	424	THR
1	B	506	THR
1	B	528	ARG
1	B	582	ARG
1	B	584	PRO
1	B	661	ALA
1	C	101	GLY
1	C	106	LYS
1	C	110	GLN
1	C	111	PHE
1	C	166	ASP
1	C	171	LYS
1	C	183	VAL
1	C	187	GLN
1	C	191	PRO
1	C	195	GLU
1	C	201	VAL
1	C	202	THR
1	C	231	TRP
1	C	235	VAL
1	C	273	LEU
1	C	300	PHE
1	C	319	SER
1	C	330	ASN
1	C	350	GLU
1	C	359	LEU
1	C	363	SER
1	C	372	ILE
1	C	403	LEU
1	C	419	ARG
1	C	420	PRO
1	C	424	THR
1	C	506	THR
1	C	528	ARG
1	C	582	ARG
1	C	584	PRO
1	C	661	ALA
1	D	101	GLY
1	D	106	LYS
1	D	110	GLN

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Mol	Chain	Res	Type
1	D	111	PHE
1	D	166	ASP
1	D	171	LYS
1	D	183	VAL
1	D	187	GLN
1	D	191	PRO
1	D	195	GLU
1	D	201	VAL
1	D	202	THR
1	D	231	TRP
1	D	235	VAL
1	D	300	PHE
1	D	319	SER
1	D	330	ASN
1	D	350	GLU
1	D	359	LEU
1	D	363	SER
1	D	372	ILE
1	D	386	LEU
1	D	403	LEU
1	D	419	ARG
1	D	420	PRO
1	D	424	THR
1	D	506	THR
1	D	582	ARG
1	D	584	PRO
1	D	661	ALA
1	E	101	GLY
1	E	106	LYS
1	E	110	GLN
1	E	111	PHE
1	E	166	ASP
1	E	171	LYS
1	E	183	VAL
1	E	187	GLN
1	E	191	PRO
1	E	195	GLU
1	E	202	THR
1	E	231	TRP
1	E	235	VAL
1	E	273	LEU
1	E	300	PHE

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Mol	Chain	Res	Type
1	E	319	SER
1	E	330	ASN
1	E	350	GLU
1	E	359	LEU
1	E	372	ILE
1	E	403	LEU
1	E	419	ARG
1	E	420	PRO
1	E	424	THR
1	E	506	THR
1	E	582	ARG
1	E	584	PRO
1	E	661	ALA
1	F	101	GLY
1	F	106	LYS
1	F	110	GLN
1	F	111	PHE
1	F	166	ASP
1	F	171	LYS
1	F	183	VAL
1	F	187	GLN
1	F	191	PRO
1	F	195	GLU
1	F	201	VAL
1	F	202	THR
1	F	214	GLU
1	F	231	TRP
1	F	235	VAL
1	F	273	LEU
1	F	300	PHE
1	F	319	SER
1	F	330	ASN
1	F	350	GLU
1	F	359	LEU
1	F	372	ILE
1	F	403	LEU
1	F	419	ARG
1	F	420	PRO
1	F	424	THR
1	F	506	THR
1	F	582	ARG
1	F	584	PRO

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Mol	Chain	Res	Type
1	G	101	GLY
1	G	106	LYS
1	G	110	GLN
1	G	111	PHE
1	G	166	ASP
1	G	171	LYS
1	G	183	VAL
1	G	187	GLN
1	G	191	PRO
1	G	195	GLU
1	G	201	VAL
1	G	202	THR
1	G	231	TRP
1	G	235	VAL
1	G	273	LEU
1	G	300	PHE
1	G	319	SER
1	G	330	ASN
1	G	350	GLU
1	G	359	LEU
1	G	363	SER
1	G	372	ILE
1	G	403	LEU
1	G	419	ARG
1	G	420	PRO
1	G	424	THR
1	G	582	ARG
1	G	584	PRO
1	H	101	GLY
1	H	106	LYS
1	H	110	GLN
1	H	111	PHE
1	H	166	ASP
1	H	171	LYS
1	H	183	VAL
1	H	187	GLN
1	H	191	PRO
1	H	195	GLU
1	H	201	VAL
1	H	202	THR
1	H	231	TRP
1	H	235	VAL

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Mol	Chain	Res	Type
1	H	273	LEU
1	H	300	PHE
1	H	319	SER
1	H	330	ASN
1	H	350	GLU
1	H	359	LEU
1	H	372	ILE
1	H	403	LEU
1	H	419	ARG
1	H	420	PRO
1	H	424	THR
1	H	582	ARG
1	H	584	PRO
1	H	588	ASN
1	A	36	ASP
1	A	74	VAL
1	A	103	ASP
1	A	134	ARG
1	A	179	CYS
1	A	184	GLY
1	A	189	LEU
1	A	201	VAL
1	A	222	PHE
1	A	250	THR
1	A	251	GLY
1	A	273	LEU
1	A	298	GLY
1	A	308	SER
1	A	317	MET
1	A	363	SER
1	A	371	VAL
1	A	374	CYS
1	A	385	ASP
1	A	386	LEU
1	A	503	PHE
1	A	661	ALA
1	B	36	ASP
1	B	74	VAL
1	B	103	ASP
1	B	134	ARG
1	B	160	LEU
1	B	179	CYS

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Mol	Chain	Res	Type
1	B	184	GLY
1	B	189	LEU
1	B	214	GLU
1	B	222	PHE
1	B	250	THR
1	B	251	GLY
1	B	273	LEU
1	B	298	GLY
1	B	317	MET
1	B	320	GLY
1	B	321	ARG
1	B	371	VAL
1	B	374	CYS
1	B	385	ASP
1	B	386	LEU
1	B	476	CYS
1	B	588	ASN
1	C	36	ASP
1	C	74	VAL
1	C	85	LYS
1	C	134	ARG
1	C	160	LEU
1	C	179	CYS
1	C	184	GLY
1	C	214	GLU
1	C	222	PHE
1	C	230	GLN
1	C	250	THR
1	C	251	GLY
1	C	298	GLY
1	C	308	SER
1	C	317	MET
1	C	371	VAL
1	C	374	CYS
1	C	385	ASP
1	C	386	LEU
1	C	427	ARG
1	C	588	ASN
1	C	643	VAL
1	D	36	ASP
1	D	74	VAL
1	D	103	ASP

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Mol	Chain	Res	Type
1	D	134	ARG
1	D	160	LEU
1	D	179	CYS
1	D	184	GLY
1	D	189	LEU
1	D	213	PHE
1	D	214	GLU
1	D	222	PHE
1	D	250	THR
1	D	251	GLY
1	D	273	LEU
1	D	298	GLY
1	D	317	MET
1	D	320	GLY
1	D	321	ARG
1	D	371	VAL
1	D	374	CYS
1	D	385	ASP
1	D	528	ARG
1	D	588	ASN
1	D	643	VAL
1	E	36	ASP
1	E	74	VAL
1	E	103	ASP
1	E	134	ARG
1	E	160	LEU
1	E	179	CYS
1	E	184	GLY
1	E	189	LEU
1	E	201	VAL
1	E	214	GLU
1	E	222	PHE
1	E	250	THR
1	E	251	GLY
1	E	298	GLY
1	E	308	SER
1	E	317	MET
1	E	320	GLY
1	E	363	SER
1	E	371	VAL
1	E	374	CYS
1	E	385	ASP

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Mol	Chain	Res	Type
1	E	386	LEU
1	E	503	PHE
1	E	528	ARG
1	E	588	ASN
1	E	643	VAL
1	F	36	ASP
1	F	74	VAL
1	F	103	ASP
1	F	134	ARG
1	F	160	LEU
1	F	179	CYS
1	F	184	GLY
1	F	189	LEU
1	F	213	PHE
1	F	222	PHE
1	F	250	THR
1	F	251	GLY
1	F	298	GLY
1	F	308	SER
1	F	317	MET
1	F	320	GLY
1	F	363	SER
1	F	371	VAL
1	F	374	CYS
1	F	385	ASP
1	F	386	LEU
1	F	503	PHE
1	F	588	ASN
1	F	643	VAL
1	F	661	ALA
1	G	36	ASP
1	G	74	VAL
1	G	103	ASP
1	G	134	ARG
1	G	160	LEU
1	G	179	CYS
1	G	184	GLY
1	G	189	LEU
1	G	214	GLU
1	G	222	PHE
1	G	230	GLN
1	G	250	THR

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Mol	Chain	Res	Type
1	G	251	GLY
1	G	298	GLY
1	G	308	SER
1	G	317	MET
1	G	371	VAL
1	G	374	CYS
1	G	385	ASP
1	G	386	LEU
1	G	588	ASN
1	H	36	ASP
1	H	74	VAL
1	H	103	ASP
1	H	134	ARG
1	H	160	LEU
1	H	179	CYS
1	H	184	GLY
1	H	189	LEU
1	H	222	PHE
1	H	230	GLN
1	H	250	THR
1	H	251	GLY
1	H	298	GLY
1	H	308	SER
1	H	317	MET
1	H	363	SER
1	H	371	VAL
1	H	374	CYS
1	H	385	ASP
1	H	386	LEU
1	A	48	GLN
1	A	49	GLU
1	A	85	LYS
1	A	105	ARG
1	A	115	CYS
1	A	160	LEU
1	A	194	LEU
1	A	213	PHE
1	A	218	GLY
1	A	230	GLN
1	A	234	LYS
1	A	320	GLY
1	A	321	ARG

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Mol	Chain	Res	Type
1	A	333	LEU
1	A	348	GLU
1	A	364	ALA
1	A	409	SER
1	A	507	SER
1	A	508	GLU
1	A	530	VAL
1	A	550	ASN
1	A	583	THR
1	A	587	SER
1	A	597	ALA
1	A	643	VAL
1	B	48	GLN
1	B	49	GLU
1	B	85	LYS
1	B	105	ARG
1	B	115	CYS
1	B	194	LEU
1	B	213	PHE
1	B	218	GLY
1	B	230	GLN
1	B	234	LYS
1	B	308	SER
1	B	333	LEU
1	B	348	GLU
1	B	364	ALA
1	B	409	SER
1	B	427	ARG
1	B	450	GLY
1	B	489	SER
1	B	507	SER
1	B	508	GLU
1	B	530	VAL
1	B	550	ASN
1	B	583	THR
1	B	587	SER
1	B	597	ALA
1	B	643	VAL
1	C	48	GLN
1	C	49	GLU
1	C	103	ASP
1	C	105	ARG

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Mol	Chain	Res	Type
1	C	115	CYS
1	C	189	LEU
1	C	194	LEU
1	C	213	PHE
1	C	234	LYS
1	C	320	GLY
1	C	321	ARG
1	C	333	LEU
1	C	348	GLU
1	C	364	ALA
1	C	409	SER
1	C	450	GLY
1	C	483	LEU
1	C	489	SER
1	C	503	PHE
1	C	508	GLU
1	C	530	VAL
1	C	550	ASN
1	C	583	THR
1	C	587	SER
1	C	597	ALA
1	D	48	GLN
1	D	49	GLU
1	D	85	LYS
1	D	105	ARG
1	D	115	CYS
1	D	194	LEU
1	D	230	GLN
1	D	234	LYS
1	D	308	SER
1	D	333	LEU
1	D	348	GLU
1	D	364	ALA
1	D	409	SER
1	D	450	GLY
1	D	483	LEU
1	D	503	PHE
1	D	508	GLU
1	D	530	VAL
1	D	550	ASN
1	D	583	THR
1	D	587	SER

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Mol	Chain	Res	Type
1	D	597	ALA
1	E	48	GLN
1	E	49	GLU
1	E	85	LYS
1	E	115	CYS
1	E	194	LEU
1	E	213	PHE
1	E	230	GLN
1	E	234	LYS
1	E	321	ARG
1	E	333	LEU
1	E	348	GLU
1	E	364	ALA
1	E	409	SER
1	E	427	ARG
1	E	483	LEU
1	E	507	SER
1	E	508	GLU
1	E	530	VAL
1	E	550	ASN
1	E	583	THR
1	E	587	SER
1	F	49	GLU
1	F	85	LYS
1	F	105	ARG
1	F	115	CYS
1	F	194	LEU
1	F	218	GLY
1	F	230	GLN
1	F	234	LYS
1	F	321	ARG
1	F	333	LEU
1	F	348	GLU
1	F	364	ALA
1	F	409	SER
1	F	489	SER
1	F	507	SER
1	F	508	GLU
1	F	528	ARG
1	F	530	VAL
1	F	550	ASN
1	F	583	THR

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Mol	Chain	Res	Type
1	F	587	SER
1	G	48	GLN
1	G	49	GLU
1	G	85	LYS
1	G	194	LEU
1	G	213	PHE
1	G	218	GLY
1	G	234	LYS
1	G	320	GLY
1	G	321	ARG
1	G	333	LEU
1	G	348	GLU
1	G	409	SER
1	G	530	VAL
1	G	550	ASN
1	G	583	THR
1	G	587	SER
1	G	597	ALA
1	H	48	GLN
1	H	49	GLU
1	H	85	LYS
1	H	105	ARG
1	H	115	CYS
1	H	194	LEU
1	H	214	GLU
1	H	234	LYS
1	H	320	GLY
1	H	321	ARG
1	H	333	LEU
1	H	348	GLU
1	H	364	ALA
1	H	409	SER
1	H	427	ARG
1	H	450	GLY
1	H	530	VAL
1	H	550	ASN
1	H	583	THR
1	H	587	SER
1	H	597	ALA
1	A	121	PRO
1	A	144	ARG
1	A	199	TYR

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Mol	Chain	Res	Type
1	A	284	HIS
1	A	418	LYS
1	A	427	ARG
1	A	450	GLY
1	A	483	LEU
1	A	489	SER
1	A	549	ARG
1	A	629	VAL
1	B	121	PRO
1	B	144	ARG
1	B	199	TYR
1	B	284	HIS
1	B	309	LEU
1	B	418	LYS
1	B	503	PHE
1	B	549	ARG
1	B	629	VAL
1	C	78	GLU
1	C	121	PRO
1	C	144	ARG
1	C	218	GLY
1	C	284	HIS
1	C	418	LYS
1	C	507	SER
1	C	549	ARG
1	C	629	VAL
1	D	121	PRO
1	D	144	ARG
1	D	218	GLY
1	D	418	LYS
1	D	427	ARG
1	D	489	SER
1	D	507	SER
1	D	549	ARG
1	D	629	VAL
1	D	644	VAL
1	E	105	ARG
1	E	121	PRO
1	E	144	ARG
1	E	218	GLY
1	E	418	LYS
1	E	450	GLY

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Mol	Chain	Res	Type
1	E	489	SER
1	E	549	ARG
1	E	597	ALA
1	E	629	VAL
1	F	48	GLN
1	F	144	ARG
1	F	418	LYS
1	F	427	ARG
1	F	450	GLY
1	F	483	LEU
1	F	549	ARG
1	F	597	ALA
1	F	629	VAL
1	G	105	ARG
1	G	115	CYS
1	G	121	PRO
1	G	144	ARG
1	G	364	ALA
1	G	418	LYS
1	G	427	ARG
1	G	549	ARG
1	G	629	VAL
1	H	121	PRO
1	H	144	ARG
1	H	213	PHE
1	H	218	GLY
1	H	284	HIS
1	H	309	LEU
1	H	418	LYS
1	H	549	ARG
1	H	629	VAL
1	A	72	ASN
1	A	78	GLU
1	A	220	ARG
1	A	227	GLN
1	A	261	THR
1	A	309	LEU
1	A	445	ALA
1	A	644	VAL
1	B	72	ASN
1	B	78	GLU
1	B	220	ARG

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Mol	Chain	Res	Type
1	B	261	THR
1	B	388	PHE
1	B	483	LEU
1	B	644	VAL
1	C	72	ASN
1	C	220	ARG
1	C	261	THR
1	C	445	ALA
1	C	644	VAL
1	D	78	GLU
1	D	220	ARG
1	D	261	THR
1	D	284	HIS
1	D	309	LEU
1	D	388	PHE
1	D	445	ALA
1	E	35	GLN
1	E	78	GLU
1	E	220	ARG
1	E	261	THR
1	E	284	HIS
1	E	644	VAL
1	F	78	GLU
1	F	121	PRO
1	F	199	TYR
1	F	220	ARG
1	F	261	THR
1	F	284	HIS
1	F	388	PHE
1	F	431	GLY
1	F	445	ALA
1	F	644	VAL
1	G	72	ASN
1	G	78	GLU
1	G	193	LEU
1	G	220	ARG
1	G	227	GLN
1	G	261	THR
1	G	284	HIS
1	G	309	LEU
1	G	450	GLY
1	H	78	GLU

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Mol	Chain	Res	Type
1	H	220	ARG
1	H	261	THR
1	H	431	GLY
1	H	445	ALA
1	A	35	GLN
1	A	388	PHE
1	A	431	GLY
1	A	626	SER
1	A	665	VAL
1	B	227	GLN
1	B	431	GLY
1	B	577	ARG
1	B	626	SER
1	B	665	VAL
1	C	193	LEU
1	C	199	TYR
1	C	227	GLN
1	C	388	PHE
1	C	431	GLY
1	C	577	ARG
1	C	626	SER
1	C	665	VAL
1	D	199	TYR
1	D	227	GLN
1	D	626	SER
1	D	665	VAL
1	E	72	ASN
1	E	431	GLY
1	E	445	ALA
1	E	577	ARG
1	E	626	SER
1	E	665	VAL
1	F	72	ASN
1	F	227	GLN
1	F	626	SER
1	F	665	VAL
1	G	388	PHE
1	G	577	ARG
1	H	72	ASN
1	H	199	TYR
1	A	407	PRO
1	A	577	ARG

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Mol	Chain	Res	Type
1	D	407	PRO
1	D	431	GLY
1	F	577	ARG
1	G	407	PRO
1	G	431	GLY
1	G	626	SER
1	H	227	GLN
1	H	407	PRO
1	H	577	ARG
1	H	626	SER
1	B	165	ILE
1	B	407	PRO
1	C	407	PRO
1	D	165	ILE
1	D	577	ARG
1	E	227	GLN
1	E	407	PRO
1	F	165	ILE
1	F	407	PRO
1	A	165	ILE
1	B	387	ILE
1	C	165	ILE
1	E	165	ILE
1	F	387	ILE
1	G	165	ILE
1	H	165	ILE
1	B	260	PRO
1	D	260	PRO
1	D	295	PRO
1	D	387	ILE
1	E	295	PRO
1	E	387	ILE
1	F	260	PRO
1	F	295	PRO
1	G	260	PRO
1	H	260	PRO
1	H	295	PRO
1	A	260	PRO
1	A	295	PRO
1	B	295	PRO
1	C	260	PRO
1	C	295	PRO

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Mol	Chain	Res	Type
1	H	387	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	563/609 (92%)	520 (92%)	43 (8%)	16	56
1	B	563/609 (92%)	521 (92%)	42 (8%)	17	57
1	C	563/609 (92%)	520 (92%)	43 (8%)	16	56
1	D	563/609 (92%)	519 (92%)	44 (8%)	16	55
1	E	563/609 (92%)	520 (92%)	43 (8%)	16	56
1	F	563/609 (92%)	521 (92%)	42 (8%)	17	57
1	G	488/609 (80%)	456 (93%)	32 (7%)	21	63
1	H	488/609 (80%)	455 (93%)	33 (7%)	20	61
All	All	4354/4872 (89%)	4032 (93%)	322 (7%)	17	57

All (322) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	16	GLU
1	A	51	SER
1	A	114	CYS
1	A	123	ARG
1	A	134	ARG
1	A	145	ASP
1	A	150	ASN
1	A	210	THR
1	A	234	LYS
1	A	248	ASP
1	A	263	ASN
1	A	266	SER
1	A	278	GLN
1	A	301	GLN

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Mol	Chain	Res	Type
1	A	313	SER
1	A	314	VAL
1	A	330	ASN
1	A	357	SER
1	A	390	PHE
1	A	408	GLU
1	A	422	THR
1	A	424	THR
1	A	429	VAL
1	A	434	TRP
1	A	436	THR
1	A	444	CYS
1	A	448	LEU
1	A	453	THR
1	A	455	MET
1	A	479	LEU
1	A	490	ILE
1	A	494	LEU
1	A	497	TYR
1	A	505	ILE
1	A	517	MET
1	A	535	ASP
1	A	564	GLU
1	A	590	MET
1	A	610	ASP
1	A	616	VAL
1	A	654	LEU
1	A	659	LYS
1	A	662	CYS
1	B	16	GLU
1	B	51	SER
1	B	114	CYS
1	B	123	ARG
1	B	134	ARG
1	B	145	ASP
1	B	150	ASN
1	B	210	THR
1	B	234	LYS
1	B	248	ASP
1	B	263	ASN
1	B	266	SER
1	B	278	GLN

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Mol	Chain	Res	Type
1	B	301	GLN
1	B	313	SER
1	B	330	ASN
1	B	339	TRP
1	B	357	SER
1	B	390	PHE
1	B	408	GLU
1	B	422	THR
1	B	424	THR
1	B	429	VAL
1	B	434	TRP
1	B	436	THR
1	B	444	CYS
1	B	448	LEU
1	B	453	THR
1	B	455	MET
1	B	479	LEU
1	B	490	ILE
1	B	494	LEU
1	B	497	TYR
1	B	505	ILE
1	B	517	MET
1	B	535	ASP
1	B	564	GLU
1	B	590	MET
1	B	616	VAL
1	B	654	LEU
1	B	659	LYS
1	B	662	CYS
1	C	16	GLU
1	C	51	SER
1	C	114	CYS
1	C	123	ARG
1	C	134	ARG
1	C	145	ASP
1	C	150	ASN
1	C	210	THR
1	C	234	LYS
1	C	248	ASP
1	C	263	ASN
1	C	266	SER
1	C	278	GLN

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Mol	Chain	Res	Type
1	C	301	GLN
1	C	313	SER
1	C	314	VAL
1	C	330	ASN
1	C	357	SER
1	C	390	PHE
1	C	408	GLU
1	C	422	THR
1	C	424	THR
1	C	429	VAL
1	C	434	TRP
1	C	436	THR
1	C	444	CYS
1	C	448	LEU
1	C	453	THR
1	C	455	MET
1	C	479	LEU
1	C	490	ILE
1	C	497	TYR
1	C	505	ILE
1	C	517	MET
1	C	564	GLU
1	C	590	MET
1	C	602	GLU
1	C	606	ILE
1	C	610	ASP
1	C	616	VAL
1	C	654	LEU
1	C	659	LYS
1	C	662	CYS
1	D	16	GLU
1	D	51	SER
1	D	114	CYS
1	D	123	ARG
1	D	134	ARG
1	D	145	ASP
1	D	150	ASN
1	D	210	THR
1	D	219	PHE
1	D	234	LYS
1	D	248	ASP
1	D	263	ASN

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Mol	Chain	Res	Type
1	D	266	SER
1	D	278	GLN
1	D	301	GLN
1	D	313	SER
1	D	330	ASN
1	D	339	TRP
1	D	357	SER
1	D	390	PHE
1	D	408	GLU
1	D	422	THR
1	D	424	THR
1	D	429	VAL
1	D	434	TRP
1	D	436	THR
1	D	444	CYS
1	D	448	LEU
1	D	453	THR
1	D	455	MET
1	D	479	LEU
1	D	490	ILE
1	D	494	LEU
1	D	497	TYR
1	D	505	ILE
1	D	517	MET
1	D	564	GLU
1	D	590	MET
1	D	602	GLU
1	D	610	ASP
1	D	616	VAL
1	D	654	LEU
1	D	659	LYS
1	D	662	CYS
1	E	16	GLU
1	E	51	SER
1	E	114	CYS
1	E	123	ARG
1	E	134	ARG
1	E	145	ASP
1	E	150	ASN
1	E	210	THR
1	E	219	PHE
1	E	234	LYS

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Mol	Chain	Res	Type
1	E	248	ASP
1	E	263	ASN
1	E	266	SER
1	E	278	GLN
1	E	301	GLN
1	E	313	SER
1	E	314	VAL
1	E	330	ASN
1	E	357	SER
1	E	390	PHE
1	E	408	GLU
1	E	422	THR
1	E	424	THR
1	E	429	VAL
1	E	434	TRP
1	E	436	THR
1	E	444	CYS
1	E	448	LEU
1	E	453	THR
1	E	455	MET
1	E	479	LEU
1	E	490	ILE
1	E	497	TYR
1	E	505	ILE
1	E	517	MET
1	E	564	GLU
1	E	590	MET
1	E	606	ILE
1	E	610	ASP
1	E	616	VAL
1	E	654	LEU
1	E	659	LYS
1	E	662	CYS
1	F	16	GLU
1	F	51	SER
1	F	114	CYS
1	F	123	ARG
1	F	134	ARG
1	F	145	ASP
1	F	150	ASN
1	F	210	THR
1	F	219	PHE

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Mol	Chain	Res	Type
1	F	234	LYS
1	F	248	ASP
1	F	263	ASN
1	F	266	SER
1	F	278	GLN
1	F	301	GLN
1	F	313	SER
1	F	330	ASN
1	F	339	TRP
1	F	357	SER
1	F	390	PHE
1	F	408	GLU
1	F	422	THR
1	F	424	THR
1	F	429	VAL
1	F	434	TRP
1	F	444	CYS
1	F	448	LEU
1	F	453	THR
1	F	455	MET
1	F	479	LEU
1	F	490	ILE
1	F	497	TYR
1	F	505	ILE
1	F	517	MET
1	F	564	GLU
1	F	590	MET
1	F	602	GLU
1	F	610	ASP
1	F	616	VAL
1	F	654	LEU
1	F	659	LYS
1	F	662	CYS
1	G	16	GLU
1	G	51	SER
1	G	114	CYS
1	G	123	ARG
1	G	134	ARG
1	G	145	ASP
1	G	150	ASN
1	G	210	THR
1	G	234	LYS

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Mol	Chain	Res	Type
1	G	248	ASP
1	G	263	ASN
1	G	266	SER
1	G	278	GLN
1	G	301	GLN
1	G	313	SER
1	G	330	ASN
1	G	357	SER
1	G	390	PHE
1	G	408	GLU
1	G	422	THR
1	G	424	THR
1	G	429	VAL
1	G	434	TRP
1	G	444	CYS
1	G	448	LEU
1	G	453	THR
1	G	455	MET
1	G	564	GLU
1	G	590	MET
1	G	602	GLU
1	G	610	ASP
1	G	616	VAL
1	H	16	GLU
1	H	51	SER
1	H	114	CYS
1	H	123	ARG
1	H	134	ARG
1	H	145	ASP
1	H	150	ASN
1	H	210	THR
1	H	234	LYS
1	H	248	ASP
1	H	263	ASN
1	H	266	SER
1	H	278	GLN
1	H	301	GLN
1	H	313	SER
1	H	330	ASN
1	H	339	TRP
1	H	357	SER
1	H	390	PHE

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Mol	Chain	Res	Type
1	H	408	GLU
1	H	422	THR
1	H	424	THR
1	H	429	VAL
1	H	434	TRP
1	H	436	THR
1	H	444	CYS
1	H	448	LEU
1	H	453	THR
1	H	455	MET
1	H	535	ASP
1	H	564	GLU
1	H	590	MET
1	H	616	VAL

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (123) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	109	ASN
1	A	143	HIS
1	A	196	GLN
1	A	263	ASN
1	A	264	HIS
1	A	294	ASN
1	A	301	GLN
1	A	332	ASN
1	A	449	GLN
1	A	462	ASN
1	A	470	ASN
1	A	478	GLN
1	A	491	GLN
1	A	500	GLN
1	A	541	GLN
1	A	550	ASN
1	A	651	GLN
1	B	70	HIS
1	B	109	ASN
1	B	143	HIS
1	B	196	GLN
1	B	263	ASN
1	B	264	HIS
1	B	294	ASN

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Mol	Chain	Res	Type
1	B	301	GLN
1	B	332	ASN
1	B	449	GLN
1	B	451	GLN
1	B	470	ASN
1	B	491	GLN
1	B	500	GLN
1	B	550	ASN
1	B	651	GLN
1	C	70	HIS
1	C	143	HIS
1	C	196	GLN
1	C	263	ASN
1	C	294	ASN
1	C	301	GLN
1	C	332	ASN
1	C	342	GLN
1	C	449	GLN
1	C	462	ASN
1	C	491	GLN
1	C	500	GLN
1	C	541	GLN
1	C	550	ASN
1	C	651	GLN
1	D	109	ASN
1	D	143	HIS
1	D	196	GLN
1	D	263	ASN
1	D	264	HIS
1	D	294	ASN
1	D	301	GLN
1	D	332	ASN
1	D	449	GLN
1	D	478	GLN
1	D	491	GLN
1	D	500	GLN
1	D	550	ASN
1	D	647	GLN
1	D	651	GLN
1	E	70	HIS
1	E	109	ASN
1	E	143	HIS

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Mol	Chain	Res	Type
1	E	196	GLN
1	E	263	ASN
1	E	264	HIS
1	E	294	ASN
1	E	301	GLN
1	E	332	ASN
1	E	342	GLN
1	E	449	GLN
1	E	462	ASN
1	E	478	GLN
1	E	491	GLN
1	E	500	GLN
1	E	541	GLN
1	E	550	ASN
1	E	651	GLN
1	F	70	HIS
1	F	109	ASN
1	F	143	HIS
1	F	196	GLN
1	F	263	ASN
1	F	264	HIS
1	F	294	ASN
1	F	301	GLN
1	F	332	ASN
1	F	449	GLN
1	F	457	ASN
1	F	470	ASN
1	F	478	GLN
1	F	491	GLN
1	F	500	GLN
1	F	550	ASN
1	F	599	GLN
1	F	651	GLN
1	G	84	GLN
1	G	109	ASN
1	G	143	HIS
1	G	196	GLN
1	G	263	ASN
1	G	294	ASN
1	G	301	GLN
1	G	332	ASN
1	G	449	GLN

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Mol	Chain	Res	Type
1	G	550	ASN
1	G	611	GLN
1	H	70	HIS
1	H	84	GLN
1	H	109	ASN
1	H	143	HIS
1	H	196	GLN
1	H	263	ASN
1	H	264	HIS
1	H	294	ASN
1	H	301	GLN
1	H	332	ASN
1	H	449	GLN
1	H	470	ASN
1	H	611	GLN

5.3.3 RNA

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates

There are no carbohydrates in this entry.

5.6 Ligand geometry

There are no ligands in this entry.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 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, 95^{th} 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	622/676 (92%)	0.10	28 (4%)	37	26	76, 189, 275, 337	0
1	B	622/676 (92%)	0.09	25 (4%)	42	29	71, 191, 274, 336	0
1	C	622/676 (92%)	0.18	19 (3%)	52	38	58, 188, 275, 327	0
1	D	622/676 (92%)	0.05	37 (5%)	26	17	85, 194, 278, 327	0
1	E	622/676 (92%)	0.19	22 (3%)	48	34	74, 190, 274, 330	0
1	F	622/676 (92%)	0.15	38 (6%)	25	16	93, 200, 283, 331	0
1	G	541/676 (80%)	0.22	43 (7%)	15	10	96, 214, 302, 387	0
1	H	541/676 (80%)	0.09	28 (5%)	31	22	79, 194, 293, 423	0
All	All	4814/5408 (89%)	0.13	240 (4%)	32	22	58, 195, 283, 423	0

All (240) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	93	LEU	8.3
1	G	571	TYR	8.2
1	F	155	PRO	8.2
1	G	454	SER	6.9
1	F	40	GLN	6.4
1	A	65	MET	6.2
1	D	65	MET	6.1
1	D	87	ALA	6.0
1	E	199	TYR	5.8
1	H	47	ARG	5.7
1	A	172	GLU	5.6
1	F	298	GLY	5.5
1	A	41	VAL	5.5
1	H	537	MET	5.2
1	F	571	TYR	5.0
1	F	65	MET	4.9

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Mol	Chain	Res	Type	RSRZ
1	G	65	MET	4.8
1	H	388	PHE	4.8
1	C	89	ASN	4.8
1	F	510	LEU	4.6
1	D	93	LEU	4.6
1	G	360	ALA	4.5
1	B	666	ARG	4.4
1	F	88	PRO	4.3
1	E	17	MET	4.2
1	H	528	ARG	4.1
1	A	40	GLN	4.0
1	F	176	GLY	3.9
1	C	93	LEU	3.9
1	G	327	VAL	3.9
1	D	437	ILE	3.8
1	A	176	GLY	3.8
1	G	93	LEU	3.8
1	A	175	GLN	3.8
1	A	506	THR	3.8
1	D	654	LEU	3.8
1	D	166	ASP	3.8
1	G	404	PRO	3.8
1	E	47	ARG	3.8
1	F	73	VAL	3.8
1	D	625	LEU	3.8
1	H	571	TYR	3.7
1	F	87	ALA	3.7
1	D	141	ILE	3.7
1	G	389	LEU	3.7
1	G	535	ASP	3.7
1	D	164	ILE	3.7
1	E	244	VAL	3.6
1	F	41	VAL	3.6
1	F	54	ASN	3.6
1	A	141	ILE	3.6
1	H	65	MET	3.6
1	H	544	SER	3.6
1	F	93	LEU	3.5
1	F	299	CYS	3.5
1	G	236	ARG	3.5
1	G	47	ARG	3.5
1	F	32	TRP	3.4

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Mol	Chain	Res	Type	RSRZ
1	H	88	PRO	3.4
1	D	571	TYR	3.4
1	E	384	GLY	3.4
1	F	157	PRO	3.4
1	G	351	GLN	3.3
1	F	175	GLN	3.3
1	B	39	GLU	3.3
1	B	41	VAL	3.3
1	G	41	VAL	3.3
1	E	571	TYR	3.3
1	A	503	PHE	3.3
1	H	31	ARG	3.2
1	C	244	VAL	3.2
1	D	94	LEU	3.2
1	G	388	PHE	3.2
1	A	507	SER	3.2
1	A	236	ARG	3.2
1	G	437	ILE	3.2
1	D	17	MET	3.2
1	A	86	LEU	3.1
1	G	469	LYS	3.1
1	D	80	PRO	3.1
1	D	236	ARG	3.1
1	F	497	TYR	3.1
1	F	199	TYR	3.1
1	G	390	PHE	3.0
1	B	42	ALA	3.0
1	E	198	LYS	3.0
1	H	453	THR	2.9
1	C	92	PRO	2.9
1	G	73	VAL	2.9
1	H	61	GLU	2.9
1	F	61	GLU	2.9
1	G	603	LYS	2.9
1	D	85	LYS	2.9
1	A	87	ALA	2.9
1	E	32	TRP	2.9
1	G	548	GLN	2.9
1	H	29	VAL	2.9
1	D	172	GLU	2.9
1	G	402	SER	2.8
1	C	508	GLU	2.8

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Mol	Chain	Res	Type	RSRZ
1	D	578	PRO	2.8
1	A	367	LEU	2.8
1	D	640	GLU	2.8
1	B	87	ALA	2.8
1	G	353	LEU	2.8
1	H	40	GLN	2.8
1	G	406	HIS	2.8
1	H	454	SER	2.8
1	E	61	GLU	2.8
1	G	141	ILE	2.8
1	G	40	GLN	2.8
1	G	455	MET	2.8
1	D	40	GLN	2.7
1	E	507	SER	2.7
1	A	384	GLY	2.7
1	B	394	LYS	2.7
1	E	295	PRO	2.6
1	C	153	LEU	2.6
1	D	60	LEU	2.6
1	B	21	LEU	2.6
1	B	354	LEU	2.6
1	F	74	VAL	2.6
1	H	541	GLN	2.6
1	B	47	ARG	2.6
1	B	497	TYR	2.6
1	E	541	GLN	2.6
1	H	42	ALA	2.6
1	A	472	MET	2.6
1	B	571	TYR	2.6
1	E	294	ASN	2.6
1	G	370	TYR	2.6
1	F	591	VAL	2.6
1	H	96	MET	2.6
1	D	21	LEU	2.5
1	B	165	ILE	2.5
1	E	41	VAL	2.5
1	F	236	ARG	2.5
1	E	175	GLN	2.5
1	B	353	LEU	2.5
1	A	548	GLN	2.4
1	A	171	LYS	2.4
1	C	77	ARG	2.4

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Mol	Chain	Res	Type	RSRZ
1	F	172	GLU	2.4
1	F	666	ARG	2.4
1	E	150	ASN	2.4
1	A	88	PRO	2.4
1	C	96	MET	2.4
1	C	41	VAL	2.4
1	F	590	MET	2.4
1	D	81	ASP	2.4
1	D	510	LEU	2.4
1	G	46	CYS	2.4
1	H	39	GLU	2.4
1	A	170	ALA	2.3
1	E	284	HIS	2.3
1	C	278	GLN	2.3
1	C	629	VAL	2.3
1	D	600	SER	2.3
1	A	80	PRO	2.3
1	G	636	MET	2.3
1	D	198	LYS	2.3
1	G	39	GLU	2.3
1	D	514	TRP	2.3
1	A	39	GLU	2.3
1	E	160	LEU	2.3
1	B	388	PHE	2.3
1	A	143	HIS	2.3
1	B	327	VAL	2.3
1	B	454	SER	2.3
1	B	447	LEU	2.3
1	G	166	ASP	2.3
1	D	608	ILE	2.3
1	C	279	CYS	2.3
1	D	46	CYS	2.3
1	E	563	LEU	2.3
1	G	45	GLN	2.3
1	H	38	GLY	2.3
1	D	354	LEU	2.3
1	H	30	LEU	2.3
1	B	485	PHE	2.3
1	E	146	LEU	2.3
1	D	208	PHE	2.3
1	G	470	ASN	2.3
1	A	77	ARG	2.3

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Mol	Chain	Res	Type	RSRZ
1	H	41	VAL	2.3
1	H	37	THR	2.2
1	F	233	GLY	2.2
1	C	305	SER	2.2
1	G	401	ILE	2.2
1	D	197	LYS	2.2
1	A	69	ASN	2.2
1	F	156	GLY	2.2
1	E	291	ASP	2.2
1	F	593	LEU	2.2
1	F	158	GLN	2.2
1	H	461	TYR	2.2
1	C	32	TRP	2.2
1	F	615	THR	2.2
1	F	514	TRP	2.2
1	G	38	GLY	2.2
1	C	648	GLU	2.2
1	D	170	ALA	2.2
1	C	17	MET	2.2
1	G	62	ILE	2.2
1	C	571	TYR	2.2
1	B	551	PRO	2.2
1	G	407	PRO	2.2
1	A	101	GLY	2.2
1	D	77	ARG	2.1
1	B	93	LEU	2.1
1	F	154	GLN	2.1
1	C	308	SER	2.1
1	G	205	TYR	2.1
1	B	367	LEU	2.1
1	H	548	GLN	2.1
1	B	17	MET	2.1
1	G	452	ARG	2.1
1	F	394	LYS	2.1
1	B	68	LEU	2.1
1	G	457	ASN	2.1
1	B	40	GLN	2.1
1	F	164	ILE	2.0
1	H	159	ARG	2.0
1	D	88	PRO	2.0
1	D	264	HIS	2.0
1	B	164	ILE	2.0

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Mol	Chain	Res	Type	RSRZ
1	F	513	ALA	2.0
1	G	544	SER	2.0
1	G	600	SER	2.0
1	H	367	LEU	2.0
1	H	95	ALA	2.0
1	H	551	PRO	2.0
1	D	593	LEU	2.0
1	A	388	PHE	2.0
1	E	508	GLU	2.0
1	C	415	GLN	2.0
1	F	384	GLY	2.0
1	G	433	ILE	2.0
1	F	567	ALA	2.0
1	D	62	ILE	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)

There are no ligands in this entry.

6.5 Other polymers (i)

There are no such residues in this entry.