



Full wwPDB X-ray Structure Validation Report ⓘ

Jun 20, 2017 – 05:33 PM EDT

PDB ID : 1HQM
Title : CRYSTAL STRUCTURE OF THERMUS AQUATICUS CORE RNA POLYMERASE-INCLUDES COMPLETE STRUCTURE WITH SIDE-CHAINS (EXCEPT FOR DISORDERED REGIONS)-FURTHER REFINED FROM ORIGINAL DEPOSITION-CONTAINS ADDITIONAL SEQUENCE INFORMATION
Authors : Minakhin, L.; Bhagat, S.; Brunning, A.; Campbell, E.A.; Darst, S.A.; Ebright, R.H.; Severinov, K.
Deposited on : 2000-12-18
Resolution : 3.30 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 ⓘ symbol.

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

MolProbity : 4.02b-467
Xtriage (Phenix) : **NOT EXECUTED**
EDS : **NOT EXECUTED**
Percentile statistics : 20161228.v01 (using entries in the PDB archive December 28th 2016)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : rb-20029077

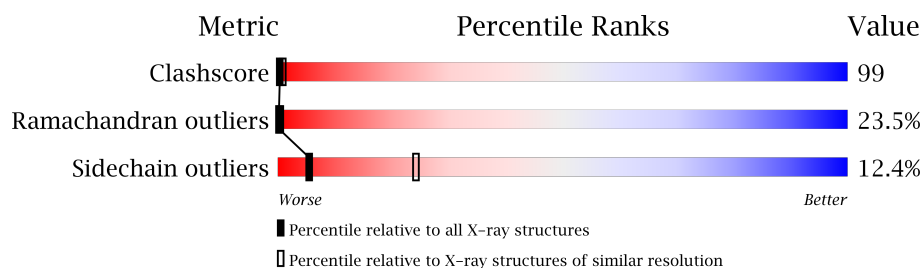
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.30 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
Clashscore	112137	1100 (3.36-3.24)
Ramachandran outliers	110173	1081 (3.36-3.24)
Sidechain outliers	110143	1080 (3.36-3.24)

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 $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Note EDS was not executed.

Mol	Chain	Length	Quality of chain
1	A	313	
1	B	313	
2	C	1119	
3	D	1265	
4	E	99	

2 Entry composition

There are 6 unique types of molecules in this entry. The entry contains 21254 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 DNA-directed RNA polymerase subunit alpha.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	223	Total	C	N	O	S	0	0	0
			1750	1118	302	328	2			
1	B	229	Total	C	N	O	S	0	0	0
			1776	1135	305	334	2			

There are 10 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	?	-	LYS	deletion	UNP Q9KWU8
A	93	ARG	MET	conflict	UNP Q9KWU8
A	94	TRP	ALA	conflict	UNP Q9KWU8
A	95	ARG	SER	conflict	UNP Q9KWU8
A	111	VAL	GLY	conflict	UNP Q9KWU8
B	?	-	LYS	deletion	UNP Q9KWU8
B	93	ARG	MET	conflict	UNP Q9KWU8
B	94	TRP	ALA	conflict	UNP Q9KWU8
B	95	ARG	SER	conflict	UNP Q9KWU8
B	111	VAL	GLY	conflict	UNP Q9KWU8

- Molecule 2 is a protein called DNA-directed RNA polymerase subunit beta.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	C	1113	Total	C	N	O	S	12	0	0
			8508	5386	1514	1585	23			

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C	2	LYS	GLU	conflict	UNP Q9KWU7

- Molecule 3 is a protein called DNA-directed RNA polymerase subunit beta'.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	D	1175	Total	C	N	O	S	17	0	0
			8499	5328	1549	1595	27			

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
D	119	PHE	SER	conflict	UNP Q9KWU6
D	863	THR	VAL	conflict	UNP Q9KWU6
D	866	THR	VAL	conflict	UNP Q9KWU6
D	876	ASN	SER	conflict	UNP Q9KWU6
D	947	ILE	-	insertion	UNP Q9KWU6
D	1010	ASN	LYS	conflict	UNP Q9KWU6
D	1117	LYS	ASN	conflict	UNP Q9KWU6
D	1389	PRO	ARG	conflict	UNP Q9KWU6

- Molecule 4 is a protein called DNA-directed RNA polymerase subunit omega.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	E	98	Total	C	N	O	S	0	0	0
			719	453	132	130	4			

- Molecule 5 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
5	D	1	Total	Mg	0	0
			1	1		

- Molecule 6 is ZINC ION (three-letter code: ZN) (formula: Zn).

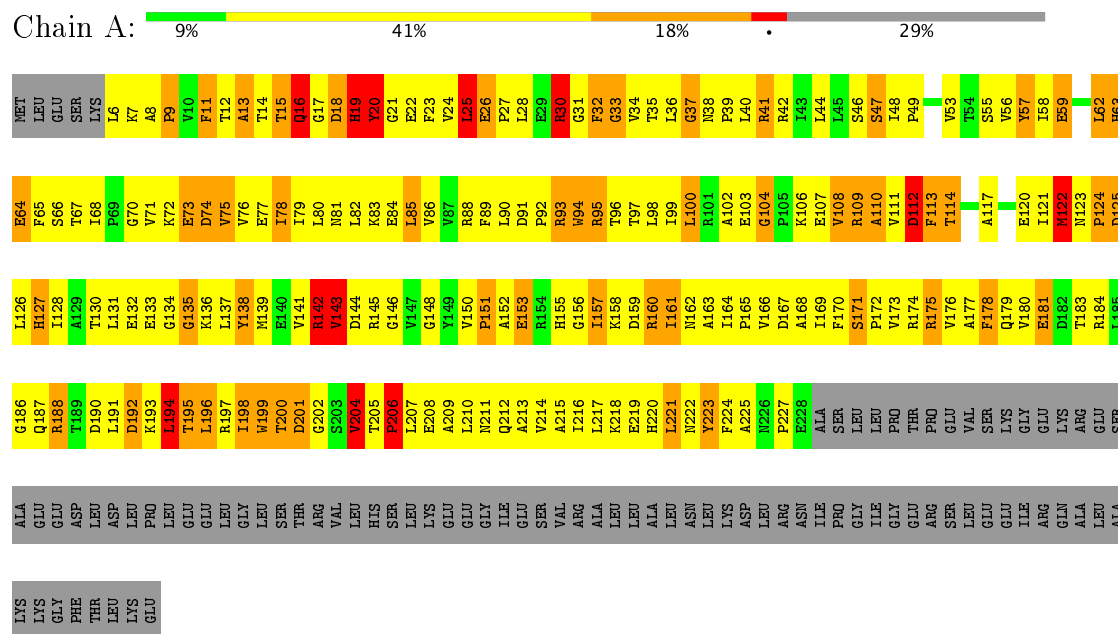
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
6	D	1	Total	Zn	0	0
			1	1		

3 Residue-property plots

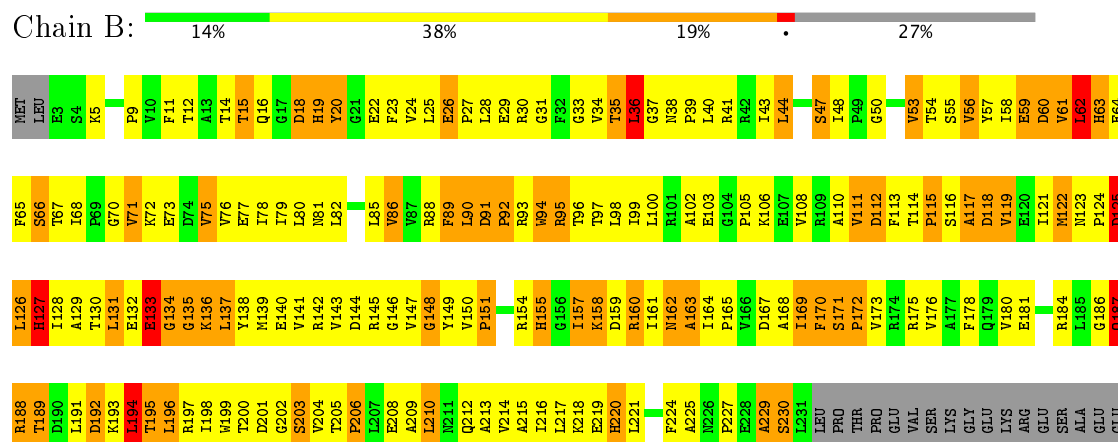
These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

Note EDS was not executed.

- Molecule 1: DNA-directed RNA polymerase subunit alpha



- Molecule 1: DNA-directed RNA polymerase subunit alpha

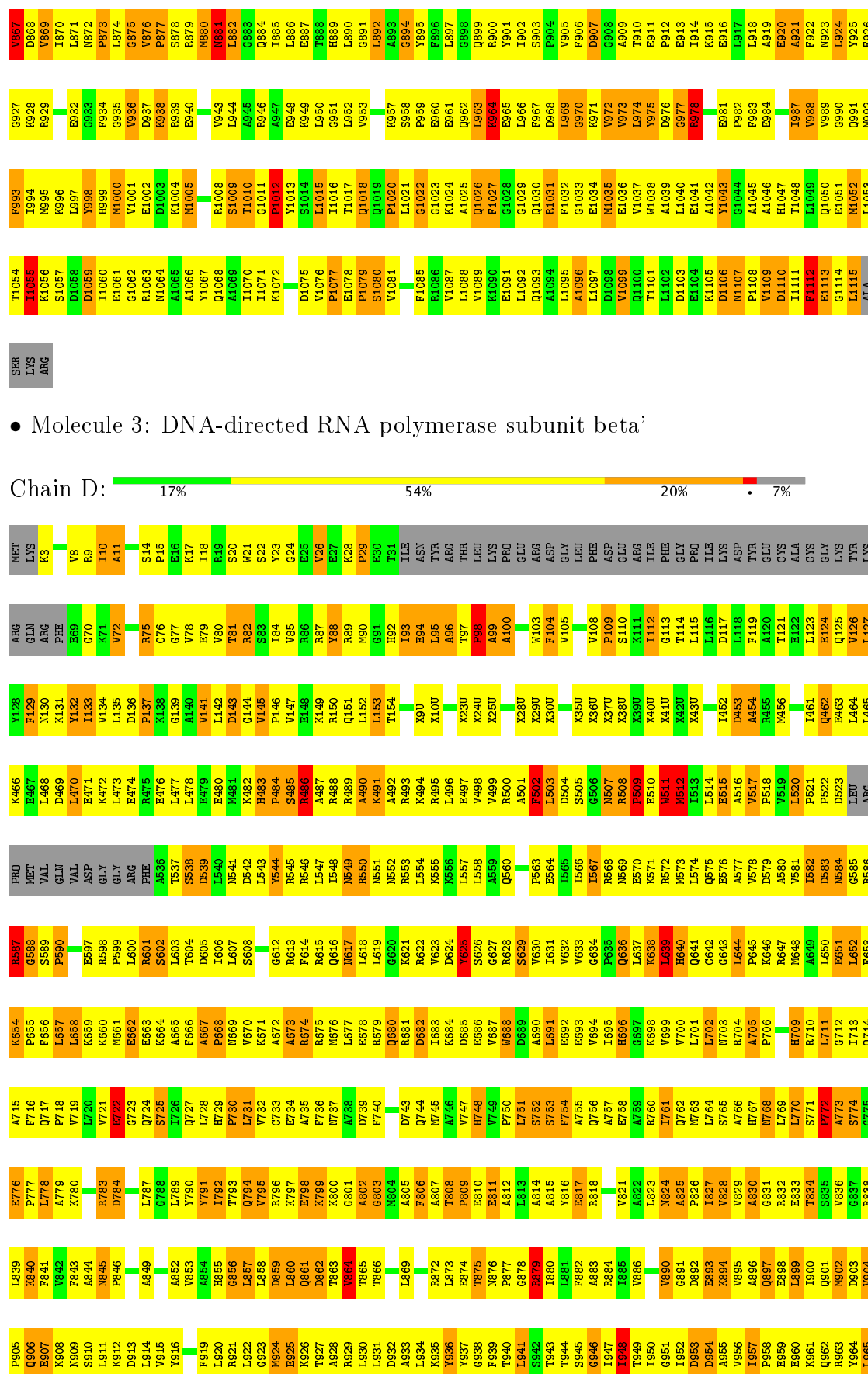


ASP	PHE
LEU	THR
ASP	LEU
LEU	LYS
PRO	GLU
LEU	
GLU	
LEU	
GLY	
LEU	
SER	
THR	
ARG	
VAL	
LEU	
SER	
SER	
LEU	
LYS	
GLU	
GLY	
GLY	
ILE	
GLU	
SER	
VAL	
ARG	
ALA	
LEU	
ALA	
ASN	
LEU	
LYS	
ASP	
LEU	
ARG	
ASN	
ILE	
PRO	
GLY	
ILE	
GLY	
GLU	
ILE	
ARG	
GLN	
ALA	
LEU	
ALA	
LYS	
LYS	
GLY	

• Molecule 2: DNA-directed RNA polymerase subunit beta

Chain C: 15% 56% 26% ..

L804	I742	G681	N556	I496	R432	K371	L310	P247	V186	T122	G62
R805	R743	G682	R557	A497	T433	L372	F311	P248	N187	E123	G63
R806	R744	N683	A558	A498	H434	V373	A334	K249	K188	L214	L64
R807	I745	G684	L559	A499	A435	K374	L313	K250	R189	F127	V65
D810	G746	E685	M560	M500	G436	S375	T214	D251	K190	I128	L66
	A747	D886	G561	T501	R437	K376	A315	D252	F191	I129	G67
P811	E748	A687	S562	P502	I438	P377	G316	A253	P192	G131	E70
G812	V749	L688	N563	L503	E504	L378	V317	L254	L193	M130	R18
R813	K750	V689	M564	E505	P440	A379	P318	A255	V194	G131	E71
R814	F751	G690	G565	G505	V441	A380	G319	V256	L195		E11
R815	G752	A691	T566	D506	E442	A381	G320	L257	L196	R134	V12
K816	D753	G692	Q567	R507	T443	L382	E321	E258	L197	V135	I13
G818	I754	E593	S631	A568	P444	K383	V322	G259	R198	I136	I73
	L755	L694	N569	A509	E445	E384	D323	L260	V199	V137	D75
R819	V756	G695	P633	T510	G446	F385	D324	L261	L200	S138	F76
R820	G757	K696	G634	D511	A447	F386	I325	A262	G201	Q139	E77
E821	R758	R697	L571	M512	I448	S387	D326	D263	V202	L140	F78
R822	V759	A698	L572	V513	I449	K388	H327	E264	D203	H141	T19
R823	S760	A699	R573	V514		S389	L328	K265	Q204	R142	E20
R824	F761	T700	Q575	A515	T453	Q390	G329	R266	E205	S143	D81
R825	G762	T701	A576	R516	S454	L391	N330	V267	L206	P144	B32
R826	G763	S702	P641	R517	L455	S392	R331	D268	L207	G145	C83
E827	E674	I703	R642	M518	A456	Q393	R332	L269	V208	V146	B84
A828	G765	H704	V643	V519	A457	F394	I333	G270	R209	I147	S25
Q829	R766	R705	R644	E520	Y458	K395	R334	E271	E210	F148	R86
R830	P767	E706	V645	P521	A459	D396	V336	G273	L211	T149	D87
R831	S768	G707	G646	G522	R460	E397	V337	R274	S212	P150	L88
R832	P769	V708	D647	L523	V461	T398	G337	K275	A213	D151	T89
L833	E770	E709	R648	V524	D462	N399	E338		Y214	P152	L30
Q834	E771	I710	V649	A525	A463	P400	L339		G215	A153	Q91
R835	R772	E711	K650	E526	L464	L401	N340	E278	D216	E152	Q31
R836	L773	A712	M581	P527	G465	S402	A341	L217	R154	P155	A32
R837	L774	G652	V587	E528	F466	S403	L348	L281	V218	G156	P93
K838	K775	D714	V529	V529	I467	L404	Q343	G282	Q219	R157	P35
L839	S776	T715	E530	E530	R468	R405	F344	G283	G220	V158	P36
A840	I777	K716	F531	F531	T469	A406	R345	G284	L221	I159	E37
N841		L717	M532	M532	P470	R407	V346	L285	L222	A160	L98
R842	R780	F718	L595	D533	R471	R408	L348	S286	D223	K161	Q99
R843	K781	P719	Y596	V534	R472	R409	L348		E224	I162	E40
G844	A782	P659	E597	S535	R473	L410	A349	T289	A225	I163	T101
N845	R783	R721	E598	P536	V474	S411	R350	L290	V226	P164	V42
K846	G784	I722	E599	K537	K475	A412	L351	V291	L227	L165	K103
G847	V785	E662	D600	V538		L413	A352	G292	A228	P166	I44
R848	K786	R724	G601	Q539	V479	G414	R353	F293	K229	K167	T105
R849	D787	D725	E664	F540	T480	P415	G354	E294	R230	G106	A46
A850	T788	I726	F665	S541	E481	G416	V355	E294	G169	R168	A47
K851	S789	P727	L666	V604	E482		R356	G296	P231	P170	F48
L852	R790	H728	A667	K605	V483	T419	E357		E232	K108	F49
R853	K791	L729	V606	M543	V484	R420	R358	E297	E233	K109	K49
P854	V792	S730	D607	M545	Y485	A421	K359	F298	A234	I172	E50
R855	F793	E731	G608	L546	M486	R422	V360	K299	E234	D173	T51
E856	V794	A732	T691	V547	T487	A423	N361	D300	V236	L174	F52
R857	G795	F733	R610	R548	R487	G424	G362	E301	R237	E175	P53
M858	E796	L734	I611	F549	A488	F425	S363	V302	L238	F114	I54
P859	G797	R735	A612	L550	E490	D426		F303		L115	E55
R860	V799	F736	V613	E618	E491	V427	T366	L304	L241	G116	E56
R861	N800	L737	R614	E551	E491	R428	R367	P305	L242	V181	G57
P862	K801	L738	V615	H552	D492	A429	T368	T306	R243	L182	D58
D863	G802	E739	E616	D554	R493	D429	T369	L307	R244	T183	K59
			E617	D554	Y494	F430	P369	R308	G245	M184	L120
			E617	E555	T495	V431	A270	V200	R246	K195	G60



- Molecule 4: DNA-directed RNA polymerase subunit omega

4 Data and refinement statistics

Xtriage (Phenix) and EDS were not executed - this section is therefore incomplete.

Property	Value	Source
Space group	P 41 21 2	Depositor
Cell constants a, b, c, α , β , γ	200.76 Å 200.76 Å 292.94 Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	8.00 – 3.30	Depositor
% Data completeness (in resolution range)	(Not available) (8.00-3.30)	Depositor
R_{merge}	0.10	Depositor
R_{sym}	(Not available)	Depositor
Refinement program	CNS 0.9	Depositor
R, R_{free}	0.300 , 0.360	Depositor
Estimated twinning fraction	No twinning to report.	Xtriage
Total number of atoms	21254	wwPDB-VP
Average B, all atoms (Å ²)	80.0	wwPDB-VP

5 Model quality

5.1 Standard geometry

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

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	A	0.42	0/1786	0.77	0/2434
1	B	0.39	0/1812	0.74	0/2471
2	C	0.42	0/8672	0.78	5/11752 (0.0%)
3	D	0.42	0/8437	0.78	14/11443 (0.1%)
4	E	0.35	0/730	0.65	0/991
All	All	0.41	0/21437	0.77	19/29091 (0.1%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	1
2	C	0	1
All	All	0	2

There are no bond length outliers.

All (19) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	834	THR	N-CA-C	-6.40	93.72	111.00
3	D	137	PRO	N-CA-CB	6.22	110.77	103.30
2	C	580	MET	N-CA-C	6.19	127.70	111.00
2	C	836	GLY	N-CA-C	-6.04	97.99	113.10
2	C	329	GLY	N-CA-C	-5.97	98.17	113.10
3	D	1280	GLY	N-CA-C	5.83	127.66	113.10
3	D	639	LEU	N-CA-C	-5.70	95.62	111.00
3	D	1205	CYS	N-CA-C	-5.66	95.72	111.00
2	C	831	ARG	N-CA-C	5.58	126.05	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	29	PRO	N-CA-CB	5.57	109.98	103.30
3	D	512	MET	N-CA-C	-5.51	96.12	111.00
2	C	73	ILE	N-CA-C	-5.42	96.38	111.00
3	D	1066	LEU	CA-CB-CG	5.40	127.73	115.30
3	D	109	PRO	N-CA-CB	5.37	109.74	103.30
3	D	98	PRO	N-CA-CB	5.31	109.67	103.30
3	D	1043	ARG	N-CA-C	-5.29	96.71	111.00
3	D	1066	LEU	N-CA-C	-5.25	96.83	111.00
3	D	146	PRO	N-CA-CB	5.23	109.58	103.30
3	D	1070	GLU	N-CA-C	-5.21	96.94	111.00

There are no chirality outliers.

All (2) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	138	TYR	Sidechain
2	C	975	TYR	Sidechain

5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	1750	0	1759	403	0
1	B	1776	0	1776	323	0
2	C	8508	0	8418	1886	0
3	D	8499	0	7993	1651	0
4	E	719	0	685	125	0
5	D	1	0	0	0	0
6	D	1	0	0	0	0
All	All	21254	0	20631	4161	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 99.

All (4161) 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)
3:D:1020:PRO:HB2	3:D:1023:VAL:HB	1.20	1.18
2:C:508:ILE:H	2:C:508:ILE:HD13	1.10	1.15
2:C:438:ILE:HG21	2:C:470:PRO:HB3	1.22	1.15
2:C:605:LYS:HG2	2:C:606:VAL:H	1.05	1.14
2:C:262:ALA:HB1	2:C:266:ARG:HD2	1.23	1.14
1:A:41:ARG:HB3	1:A:41:ARG:HH11	1.03	1.12
3:D:483:HIS:H	3:D:484:PRO:HD2	1.10	1.12
3:D:129:PHE:HA	3:D:454:ALA:HB1	1.19	1.12
3:D:1148:ARG:HB3	3:D:1189:VAL:HG21	1.32	1.11
3:D:860:LEU:HA	3:D:877:PRO:HG2	1.16	1.11
3:D:772:PRO:HG3	3:D:778:LEU:HB2	1.24	1.10
2:C:438:ILE:HD13	2:C:470:PRO:HD3	1.32	1.10
3:D:890:VAL:HG11	3:D:922:LEU:HD13	1.23	1.10
2:C:256:TYR:HA	2:C:260:LEU:HD13	1.28	1.10
3:D:879:ARG:HG3	3:D:904:VAL:HG22	1.26	1.09
2:C:12:VAL:HG12	2:C:13:ILE:H	0.97	1.08
1:B:26:GLU:HB3	1:B:27:PRO:HD3	1.25	1.08
3:D:1080:LYS:HG3	3:D:1081:GLY:H	0.99	1.07
3:D:1035:GLN:HA	3:D:1035:GLN:HE21	1.16	1.07
2:C:580:MET:HB2	2:C:584:GLU:HG3	1.34	1.07
1:A:157:ILE:HD11	1:A:160:ARG:HE	1.19	1.06
3:D:1025:ALA:HA	3:D:1029:ALA:HB3	1.32	1.06
2:C:892:LEU:HD23	2:C:892:LEU:H	1.17	1.06
2:C:253:ALA:HA	2:C:256:TYR:HB2	1.27	1.05
1:A:62:LEU:HD12	1:A:62:LEU:H	1.19	1.05
1:A:26:GLU:HB3	1:A:27:PRO:CD	1.85	1.05
3:D:862:ASP:HA	3:D:876:ASN:HB3	1.38	1.05
2:C:630:ARG:HB3	2:C:705:ILE:HD11	1.35	1.04
2:C:159:ILE:HD11	2:C:310:LEU:HD22	1.39	1.04
3:D:521:PRO:HG2	3:D:522:PRO:HD3	1.35	1.04
2:C:195:LEU:HB2	2:C:227:LEU:HD13	1.38	1.04
2:C:969:LEU:HD13	3:D:952:ILE:HB	1.33	1.04
2:C:110:GLU:HG2	2:C:369:PRO:HG2	1.38	1.03
2:C:813:VAL:HG12	2:C:814:GLU:H	1.24	1.03
1:B:26:GLU:HB3	1:B:27:PRO:CD	1.85	1.03
2:C:551:GLU:HG3	2:C:906:PHE:HD2	1.21	1.03
2:C:110:GLU:CG	2:C:369:PRO:HG2	1.89	1.03
2:C:605:LYS:HG3	2:C:612:ALA:H	1.20	1.02
2:C:605:LYS:HA	2:C:612:ALA:HB3	1.07	1.02
3:D:1460:LEU:HB3	3:D:1466:ASN:HD21	1.19	1.01
3:D:1281:VAL:HG13	3:D:1316:ASP:HA	1.42	1.01
3:D:1016:TYR:HA	3:D:1019:ASN:HD22	1.24	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1016:TYR:HB3	3:D:1020:PRO:HD3	1.41	1.01
1:A:41:ARG:HB3	1:A:41:ARG:NH1	1.76	1.01
2:C:15:LEU:HD21	2:C:461:VAL:HG21	1.43	1.00
3:D:1281:VAL:HG12	3:D:1282:VAL:HG23	1.41	1.00
2:C:376:ARG:H	2:C:377:PRO:HD2	1.26	1.00
3:D:1253:ILE:HD12	3:D:1270:LYS:HB2	1.41	1.00
2:C:502:PRO:HB2	2:C:507:ARG:CZ	1.91	1.00
2:C:257:LEU:HD13	2:C:264:PRO:HG3	1.42	1.00
2:C:701:THR:HG22	2:C:832:LYS:HA	1.44	1.00
2:C:17:PRO:HG2	2:C:19:THR:H	1.23	1.00
2:C:99:GLN:HB3	2:C:109:LYS:HG2	1.41	1.00
3:D:772:PRO:CG	3:D:778:LEU:HB2	1.91	0.99
1:A:157:ILE:HG23	1:A:158:LYS:H	1.27	0.99
2:C:597:ALA:HA	2:C:614:ARG:NH1	1.77	0.99
3:D:1080:LYS:HG3	3:D:1081:GLY:N	1.78	0.98
2:C:1060:ILE:HG22	2:C:1064:ASN:HD21	1.27	0.98
3:D:795:VAL:HG23	3:D:904:VAL:HG11	1.42	0.98
2:C:613:VAL:HG11	2:C:619:ARG:HD2	1.43	0.98
2:C:889:HIS:CE1	3:D:951:GLY:H	1.81	0.98
2:C:159:ILE:HG12	2:C:310:LEU:HD13	1.42	0.97
2:C:654:LEU:HD11	2:C:657:ASP:HA	1.45	0.97
2:C:211:LEU:HD22	2:C:304:LEU:HD12	1.45	0.97
3:D:901:GLN:HB2	3:D:905:PRO:HG3	1.44	0.97
2:C:631:SER:HB2	2:C:635:THR:H	1.30	0.96
2:C:841:ASN:HD21	2:C:845:ASN:H	1.12	0.96
2:C:672:VAL:HG22	2:C:868:ASP:OD2	1.64	0.96
3:D:1267:ARG:O	3:D:1269:PRO:HD3	1.63	0.96
2:C:438:ILE:CG2	2:C:470:PRO:HB3	1.95	0.96
1:B:149:TYR:HE1	1:B:169:ILE:HG22	1.30	0.96
2:C:796:GLU:HG3	3:D:681:ARG:HH12	1.28	0.96
2:C:13:ILE:HG22	2:C:14:PRO:HD2	1.46	0.96
3:D:948:ILE:HD13	3:D:948:ILE:H	1.29	0.96
2:C:208:VAL:HG11	2:C:218:VAL:HG11	1.45	0.95
2:C:579:VAL:HG21	2:C:887:GLU:HG3	1.47	0.95
2:C:918:LEU:HD22	2:C:968:ASP:HA	1.48	0.95
3:D:1232:GLU:HB3	3:D:1233:PRO:HD3	1.46	0.95
3:D:1096:THR:O	3:D:1100:VAL:HG23	1.66	0.95
1:A:16:GLN:HE21	1:A:17:GLY:H	1.06	0.95
2:C:1045:ALA:HB1	2:C:1048:THR:HB	1.46	0.95
2:C:845:ASN:HD22	2:C:884:GLN:HE22	0.96	0.95
2:C:162:ILE:HA	2:C:171:TRP:HZ3	1.28	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:879:ARG:NH1	3:D:904:VAL:HA	1.81	0.95
2:C:101:ILE:HG22	2:C:102:HIS:H	1.31	0.94
3:D:1365:HIS:CG	3:D:1366:ASP:H	1.84	0.94
2:C:12:VAL:HG12	2:C:13:ILE:N	1.80	0.94
1:B:85:LEU:HA	1:B:123:ASN:HD21	1.33	0.94
2:C:140:ILE:HG22	2:C:333:ILE:HG12	1.49	0.94
2:C:161:SER:HB2	2:C:172:ILE:HG22	1.49	0.94
2:C:181:VAL:HG12	2:C:182:VAL:HG23	1.50	0.94
2:C:710:ILE:HD13	2:C:823:VAL:HB	1.48	0.94
2:C:168:ARG:HH21	2:C:266:ARG:HD3	1.33	0.94
2:C:676:ILE:CG2	2:C:873:PRO:HB3	1.97	0.93
3:D:879:ARG:HH11	3:D:904:VAL:HA	1.29	0.93
2:C:137:VAL:HG21	2:C:393:GLN:OE1	1.69	0.93
3:D:1263:LEU:HD23	3:D:1353:ILE:HG12	1.50	0.93
3:D:1126:MET:HG2	3:D:1127:ASP:H	1.32	0.93
2:C:401:LEU:HD21	2:C:543:ASN:HB2	1.49	0.93
2:C:551:GLU:HG3	2:C:906:PHE:CD2	2.04	0.93
2:C:845:ASN:HD22	2:C:884:GLN:NE2	1.66	0.93
2:C:77:PRO:HD3	2:C:93:PRO:HD3	1.47	0.93
1:B:86:VAL:HG23	1:B:123:ASN:CG	1.88	0.92
2:C:860:HIS:HD2	2:C:977:GLY:HA3	1.33	0.92
3:D:1038:GLN:HG3	3:D:1043:ARG:HD3	1.52	0.92
1:A:75:VAL:HA	1:A:78:ILE:HD12	1.50	0.92
2:C:768:SER:HB2	2:C:769:PRO:HD2	1.52	0.92
3:D:631:ILE:HD13	3:D:745:MET:HE2	1.51	0.92
3:D:1157:LEU:HD12	3:D:1178:ALA:HA	1.50	0.92
3:D:966:GLU:HA	3:D:969:ASP:HB2	1.51	0.91
2:C:861:LEU:HG	2:C:862:PRO:HD2	1.49	0.91
3:D:1282:VAL:HG13	3:D:1315:LYS:HA	1.51	0.91
2:C:742:ILE:HG23	2:C:756:VAL:HG22	1.52	0.91
3:D:477:LEU:HA	3:D:480:GLU:HB3	1.51	0.91
3:D:699:VAL:H	3:D:756:GLN:NE2	1.69	0.91
3:D:721:VAL:HG12	3:D:722:GLU:H	1.33	0.91
1:A:194:LEU:HD23	1:A:195:THR:H	1.33	0.91
3:D:1278:ILE:HG22	3:D:1280:GLY:H	1.34	0.91
3:D:129:PHE:CA	3:D:454:ALA:HB1	2.00	0.91
3:D:92:HIS:HA	3:D:517:VAL:HG12	1.49	0.91
3:D:483:HIS:HA	3:D:489:ARG:HG3	1.51	0.91
3:D:1458:ASP:OD1	3:D:1460:LEU:HD23	1.70	0.91
3:D:1148:ARG:HB3	3:D:1189:VAL:CG2	2.00	0.90
2:C:1103:ASP:HB2	2:C:1108:PRO:HB2	1.49	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1276:SER:H	3:D:1323:GLY:HA2	1.37	0.90
2:C:22:GLN:HE21	2:C:336:VAL:HG21	1.36	0.90
2:C:195:LEU:HD13	2:C:227:LEU:HD22	1.52	0.90
3:D:1004:VAL:O	3:D:1008:VAL:HG12	1.71	0.90
3:D:1274:VAL:N	3:D:1325:PRO:HG3	1.87	0.90
1:B:142:ARG:HG2	1:B:143:VAL:H	1.35	0.89
2:C:889:HIS:HE1	3:D:951:GLY:H	1.20	0.89
3:D:772:PRO:HG3	3:D:778:LEU:CB	2.02	0.89
3:D:836:VAL:O	3:D:865:THR:HG23	1.71	0.89
3:D:654:LYS:HB3	3:D:655:PRO:HD3	1.53	0.89
1:A:79:ILE:HD11	1:A:164:ILE:CD1	2.02	0.89
2:C:605:LYS:HG2	2:C:607:ASP:H	1.35	0.89
2:C:882:LEU:N	2:C:882:LEU:HD23	1.88	0.89
1:B:213:ALA:HA	1:B:216:ILE:HD12	1.54	0.89
2:C:762:LYS:HD2	2:C:786:LYS:HD2	1.51	0.89
3:D:483:HIS:N	3:D:484:PRO:HD2	1.87	0.89
2:C:31:GLN:HE21	2:C:39:ARG:HD2	1.38	0.89
3:D:127:LEU:HA	3:D:456:MET:HB2	1.54	0.89
1:A:179:GLN:HG3	2:C:934:PHE:CD2	2.08	0.89
3:D:1031:GLY:O	3:D:1032:ASN:HB3	1.72	0.89
3:D:1324:GLN:H	3:D:1325:PRO:HD2	1.35	0.89
2:C:1076:VAL:HG11	3:D:753:SER:HB2	1.53	0.89
2:C:12:VAL:CG1	2:C:13:ILE:H	1.81	0.89
2:C:897:LEU:HB2	2:C:921:ALA:HB2	1.55	0.89
1:A:164:ILE:HG13	1:A:164:ILE:O	1.73	0.88
2:C:162:ILE:HA	2:C:171:TRP:CZ3	2.08	0.88
2:C:969:LEU:HD11	3:D:953:ASP:H	1.38	0.88
2:C:577:PRO:HG2	2:C:580:MET:HB3	1.56	0.88
2:C:613:VAL:HA	2:C:620:LEU:O	1.73	0.88
2:C:428:ARG:HA	2:C:431:HIS:CD2	2.08	0.88
3:D:1035:GLN:HA	3:D:1035:GLN:NE2	1.89	0.88
3:D:860:LEU:C	3:D:862:ASP:H	1.67	0.88
3:D:1102:VAL:HG21	3:D:1425:VAL:HG13	1.55	0.88
3:D:1460:LEU:HB3	3:D:1466:ASN:ND2	1.89	0.88
3:D:675:ARG:HA	3:D:678:GLU:HB3	1.55	0.88
3:D:824:ASN:O	3:D:830:ALA:HB1	1.74	0.88
2:C:730:SER:O	2:C:732:ALA:N	2.06	0.88
3:D:787:LEU:HD21	3:D:947:ILE:HD11	1.54	0.88
2:C:845:ASN:ND2	2:C:884:GLN:HE22	1.70	0.87
2:C:605:LYS:HG2	2:C:606:VAL:N	1.89	0.87
1:A:41:ARG:HG2	1:A:176:VAL:HG12	1.55	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:605:LYS:HA	2:C:612:ALA:CB	2.01	0.87
2:C:801:VAL:HG21	2:C:828:ALA:HB2	1.55	0.87
2:C:257:LEU:HD22	2:C:264:PRO:HD3	1.57	0.87
2:C:333:ILE:CD1	2:C:468:ARG:HE	1.87	0.87
2:C:816:LYS:HD2	2:C:817:PRO:HD2	1.56	0.87
3:D:1060:SER:HB3	3:D:1066:LEU:HD22	1.54	0.87
3:D:811:GLU:HA	3:D:814:ALA:HB3	1.54	0.87
2:C:491:GLU:HA	2:C:531:PHE:HA	1.56	0.87
2:C:836:GLY:HA3	2:C:1001:VAL:HG21	1.57	0.87
1:B:173:VAL:HA	1:B:200:THR:HG22	1.55	0.87
2:C:508:ILE:CD1	2:C:508:ILE:H	1.88	0.86
2:C:642:ARG:NH1	2:C:663:GLU:HB3	1.89	0.86
2:C:875:GLY:HA2	2:C:879:ARG:HG3	1.57	0.86
1:A:90:LEU:HD11	1:A:120:GLU:HG3	1.54	0.86
2:C:729:LEU:HD21	2:C:754:ILE:HG13	1.57	0.86
1:A:199:TRP:HD1	1:A:200:THR:H	1.23	0.86
2:C:5:ARG:HH22	2:C:10:ARG:NH1	1.73	0.86
2:C:15:LEU:HD21	2:C:461:VAL:CG2	2.04	0.86
2:C:159:ILE:CG1	2:C:310:LEU:HD13	2.04	0.86
1:A:26:GLU:HB3	1:A:27:PRO:HD3	1.55	0.86
2:C:671:ASN:HA	2:C:993:PHE:HA	1.56	0.86
3:D:1124:PHE:CE2	3:D:1185:ARG:HG2	2.10	0.86
3:D:684:LYS:HD3	3:D:685:ASP:H	1.40	0.86
2:C:304:LEU:H	2:C:305:PRO:CD	1.89	0.86
2:C:266:ARG:HG2	2:C:268:ASP:H	1.38	0.86
3:D:558:LEU:HG	3:D:567:ILE:HD11	1.57	0.86
2:C:735:ARG:HA	2:C:737:LEU:O	1.76	0.86
2:C:263:ASP:HB3	2:C:264:PRO:HD3	1.56	0.85
2:C:726:ILE:HD12	2:C:726:ILE:H	1.38	0.85
3:D:890:VAL:CG1	3:D:922:LEU:HD13	2.06	0.85
2:C:605:LYS:NZ	2:C:611:ILE:HG13	1.90	0.85
2:C:253:ALA:CA	2:C:256:TYR:HB2	2.06	0.85
3:D:1193:LEU:HG	3:D:1370:GLU:HB3	1.58	0.85
3:D:691:LEU:HA	3:D:694:VAL:HB	1.59	0.85
3:D:1365:HIS:ND1	3:D:1366:ASP:N	2.24	0.85
2:C:398:THR:O	2:C:635:THR:HG21	1.77	0.85
2:C:841:ASN:ND2	2:C:845:ASN:H	1.73	0.85
2:C:551:GLU:HA	2:C:906:PHE:HE2	1.41	0.85
2:C:915:LYS:HD2	2:C:968:ASP:HB3	1.56	0.85
1:A:161:ILE:HG12	1:A:162:ASN:OD1	1.75	0.85
1:B:78:ILE:HG13	1:B:129:ALA:HB2	1.58	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:183:THR:HG21	2:C:190:LYS:HG3	1.55	0.85
3:D:1016:TYR:HB3	3:D:1019:ASN:HB2	1.59	0.84
3:D:899:LEU:HD11	3:D:921:ARG:HD2	1.59	0.84
1:A:41:ARG:HH11	1:A:41:ARG:CB	1.88	0.84
1:B:105:PRO:HB3	1:B:133:GLU:H	1.40	0.84
2:C:100:LEU:HD21	2:C:368:THR:HA	1.58	0.84
2:C:946:ARG:NE	3:D:861:GLN:HE22	1.74	0.84
3:D:1267:ARG:O	3:D:1269:PRO:CD	2.26	0.84
2:C:836:GLY:HA3	2:C:1001:VAL:CG2	2.07	0.84
2:C:446:GLY:HA2	2:C:449:ILE:HD11	1.58	0.84
4:E:40:LEU:HD21	4:E:67:GLU:HA	1.59	0.84
3:D:827:ILE:O	3:D:828:VAL:HG23	1.76	0.84
2:C:142:ARG:HE	2:C:324:ASP:HA	1.41	0.84
2:C:564:MET:SD	2:C:840:ALA:HB1	2.17	0.84
2:C:613:VAL:HG13	2:C:620:LEU:H	1.42	0.84
2:C:328:LEU:O	2:C:467:ILE:HG21	1.77	0.84
3:D:1048:LYS:HG2	3:D:1054:PHE:CE1	2.13	0.84
1:B:102:ALA:HB1	1:B:131:LEU:HD11	1.59	0.83
2:C:260:LEU:O	2:C:261:LEU:HD23	1.77	0.83
2:C:397:GLU:H	2:C:633:GLN:NE2	1.76	0.83
3:D:1087:LEU:HD12	3:D:1090:ALA:HB3	1.58	0.83
3:D:783:ARG:O	3:D:784:ASP:HB2	1.77	0.83
2:C:758:ARG:O	2:C:788:THR:HG23	1.78	0.83
1:A:179:GLN:HE21	2:C:934:PHE:HB3	1.42	0.83
3:D:483:HIS:H	3:D:484:PRO:CD	1.85	0.83
3:D:1271:ALA:HB3	3:D:1329:GLY:HA3	1.59	0.83
1:B:77:GLU:O	1:B:81:ASN:HB2	1.77	0.83
1:B:91:ASP:H	1:B:92:PRO:CD	1.91	0.83
2:C:253:ALA:HA	2:C:256:TYR:CB	2.07	0.83
2:C:267:TYR:HD1	2:C:273:GLY:HA3	1.43	0.83
3:D:1148:ARG:CB	3:D:1189:VAL:HG21	2.09	0.83
1:B:150:VAL:HG11	1:B:154:ARG:HG2	1.59	0.83
2:C:533:ASP:HB3	2:C:538:GLN:NE2	1.93	0.83
1:B:90:LEU:HD11	1:B:118:ASP:HA	1.61	0.83
2:C:632:ASN:HB2	2:C:633:GLN:NE2	1.94	0.83
2:C:97:ARG:HG2	2:C:112:GLU:H	1.42	0.83
2:C:1052:MET:O	2:C:1053:LEU:HD13	1.79	0.83
3:D:1016:TYR:HA	3:D:1019:ASN:ND2	1.94	0.83
3:D:721:VAL:HG12	3:D:722:GLU:N	1.92	0.83
2:C:920:GLU:HG2	2:C:921:ALA:H	1.43	0.83
2:C:15:LEU:HD12	2:C:16:PRO:HD2	1.60	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:88:ARG:HB2	1:A:122:MET:SD	2.19	0.82
2:C:605:LYS:CA	2:C:612:ALA:HB3	2.01	0.82
3:D:89:ARG:O	3:D:520:LEU:HD11	1.76	0.82
2:C:861:LEU:CG	2:C:862:PRO:HD2	2.09	0.82
3:D:1275:ILE:HA	3:D:1323:GLY:N	1.95	0.82
3:D:1324:GLN:H	3:D:1325:PRO:CD	1.92	0.82
2:C:749:VAL:HG11	2:C:792:VAL:HG21	1.58	0.82
2:C:102:HIS:HD2	2:C:106:GLY:HA3	1.42	0.82
2:C:860:HIS:CD2	2:C:977:GLY:HA3	2.15	0.82
2:C:940:GLU:HA	2:C:973:VAL:HG21	1.61	0.82
3:D:709:HIS:ND1	3:D:1232:GLU:HG3	1.95	0.82
3:D:1311:ARG:HA	3:D:1324:GLN:O	1.80	0.82
2:C:801:VAL:CG2	2:C:828:ALA:HB2	2.09	0.82
3:D:728:LEU:HD22	3:D:745:MET:CE	2.09	0.82
3:D:1277:GLU:HG3	3:D:1304:TYR:OH	1.79	0.82
3:D:790:TYR:CE2	3:D:906:GLN:HB3	2.14	0.82
2:C:750:LYS:HB2	2:C:751:PRO:HD2	1.61	0.81
2:C:642:ARG:HH11	2:C:654:LEU:HD23	1.45	0.81
3:D:638:LYS:HA	3:D:729:HIS:CG	2.15	0.81
2:C:1013:TYR:HE2	2:C:1018:GLN:HE22	1.28	0.81
2:C:34:VAL:HG11	2:C:39:ARG:HG2	1.63	0.81
2:C:80:GLN:O	2:C:81:ASP:HB2	1.79	0.81
3:D:1237:LEU:HD11	3:D:1357:TYR:CE2	2.16	0.81
3:D:465:LEU:HD23	3:D:509:PRO:HB3	1.61	0.81
3:D:1085:THR:C	3:D:1087:LEU:H	1.82	0.81
1:A:71:VAL:HG13	1:A:131:LEU:HB3	1.61	0.81
2:C:146:VAL:HG22	2:C:161:SER:HA	1.61	0.81
2:C:376:ARG:N	2:C:377:PRO:HD2	1.95	0.81
3:D:1142:GLU:HA	3:D:1172:VAL:HG11	1.63	0.81
3:D:521:PRO:CG	3:D:522:PRO:HD3	2.09	0.81
2:C:1055:ILE:H	2:C:1055:ILE:HD12	1.46	0.81
2:C:216:ASP:O	2:C:218:VAL:HG23	1.81	0.81
2:C:495:THR:HG22	2:C:496:ILE:H	1.45	0.81
2:C:969:LEU:CD1	3:D:952:ILE:HB	2.11	0.81
2:C:1008:ARG:NH1	2:C:1020:PRO:HB3	1.95	0.81
2:C:892:LEU:H	2:C:892:LEU:CD2	1.93	0.81
2:C:892:LEU:HD23	2:C:892:LEU:N	1.94	0.81
3:D:1068:VAL:HG12	3:D:1070:GLU:HB2	1.63	0.81
2:C:574:ALA:O	2:C:667:ALA:HB1	1.82	0.80
2:C:331:ARG:O	2:C:467:ILE:HG12	1.82	0.80
2:C:177:GLU:HG2	2:C:181:VAL:H	1.47	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1275:ILE:HG22	3:D:1322:ALA:HA	1.63	0.80
1:B:56:VAL:O	1:B:164:ILE:HG12	1.82	0.80
3:D:1043:ARG:HH21	3:D:1066:LEU:HD21	1.45	0.80
3:D:750:PRO:HG2	3:D:756:GLN:OE1	1.81	0.80
1:B:150:VAL:HB	1:B:168:ALA:HB3	1.61	0.80
2:C:439:CYS:HB2	2:C:468:ARG:NH1	1.96	0.80
2:C:569:VAL:HG13	2:C:569:VAL:O	1.80	0.80
3:D:1263:LEU:HD23	3:D:1353:ILE:CG1	2.11	0.80
2:C:363:SER:O	2:C:367:LEU:HB2	1.80	0.80
2:C:872:ASN:HD21	2:C:874:LEU:HB3	1.47	0.80
3:D:1221:ALA:HB2	3:D:1475:ALA:HB1	1.63	0.80
2:C:602:GLU:H	2:C:647:GLN:HA	1.46	0.80
3:D:969:ASP:O	3:D:972:LEU:HB2	1.81	0.80
2:C:172:ILE:HD11	2:C:184:MET:SD	2.21	0.80
2:C:21:ILE:HG23	2:C:460:ARG:NH2	1.96	0.80
2:C:613:VAL:HG12	2:C:615:TYR:H	1.46	0.80
3:D:1155:GLU:HB3	3:D:1160:ARG:HA	1.64	0.80
3:D:1275:ILE:HA	3:D:1323:GLY:H	1.46	0.80
3:D:1451:ALA:HA	3:D:1456:LYS:HG3	1.62	0.80
3:D:569:ASN:O	3:D:572:ARG:HG2	1.81	0.80
3:D:864:VAL:HG12	3:D:874:GLU:O	1.82	0.80
2:C:523:ILE:C	2:C:525:ALA:H	1.85	0.79
2:C:1038:TRP:CD1	3:D:1100:VAL:HG11	2.17	0.79
3:D:518:PRO:HA	3:D:544:TYR:CZ	2.16	0.79
2:C:77:PRO:HD3	2:C:93:PRO:CD	2.11	0.79
3:D:662:GLU:HG3	3:D:670:VAL:HG23	1.64	0.79
3:D:688:TRP:HA	3:D:688:TRP:CE3	2.16	0.79
3:D:840:LYS:CB	3:D:846:PRO:HA	2.13	0.79
2:C:673:LEU:O	2:C:868:ASP:HB2	1.81	0.79
3:D:507:ASN:O	3:D:508:ARG:HG2	1.82	0.79
3:D:770:LEU:CD1	3:D:770:LEU:H	1.95	0.79
2:C:134:ARG:HA	2:C:394:PHE:O	1.82	0.79
2:C:57:GLY:H	2:C:356:ARG:NH1	1.79	0.79
3:D:858:LEU:HD11	3:D:865:THR:HG21	1.64	0.79
2:C:399:ASN:ND2	2:C:401:LEU:H	1.81	0.79
3:D:1404:LEU:O	3:D:1408:LEU:HB2	1.83	0.79
3:D:1482:VAL:O	3:D:1483:ARG:HG3	1.83	0.79
1:B:25:LEU:HD11	1:B:28:LEU:HD12	1.65	0.79
2:C:200:LEU:HD13	2:C:290:LEU:HD13	1.65	0.79
3:D:772:PRO:HD2	3:D:776:GLU:O	1.83	0.79
3:D:1102:VAL:CG2	3:D:1425:VAL:HG13	2.13	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:508:ARG:O	3:D:510:GLU:HG3	1.84	0.78
2:C:1012:PRO:HB3	2:C:1023:GLY:HA3	1.64	0.78
2:C:469:THR:HG22	2:C:484:VAL:HG23	1.63	0.78
3:D:1049:PRO:HD3	3:D:1076:HIS:ND1	1.98	0.78
1:B:33:GLY:HA2	1:B:194:LEU:HD23	1.64	0.78
2:C:1055:ILE:HG22	2:C:1066:ALA:HB2	1.65	0.78
3:D:1330:ALA:HB3	3:D:1333:PRO:HG3	1.63	0.78
3:D:1157:LEU:O	3:D:1157:LEU:HD23	1.82	0.78
3:D:669:ASN:O	3:D:672:ALA:HB3	1.83	0.78
3:D:860:LEU:HA	3:D:877:PRO:CG	2.08	0.78
2:C:493:ARG:HH12	3:D:1070:GLU:HA	1.49	0.78
1:B:95:ARG:O	1:B:95:ARG:HD2	1.83	0.78
2:C:491:GLU:O	2:C:509:ALA:HB1	1.84	0.78
3:D:776:GLU:HB3	3:D:912:LYS:HE3	1.66	0.78
3:D:1104:HIS:C	3:D:1106:ILE:H	1.86	0.78
3:D:1145:LEU:HB2	3:D:1172:VAL:HG13	1.66	0.78
2:C:139:GLN:OE1	2:C:414:GLY:HA3	1.84	0.78
2:C:475:LYS:CB	2:C:527:GLU:H	1.96	0.78
2:C:571:LEU:N	2:C:571:LEU:HD12	1.99	0.78
1:A:41:ARG:HE	2:C:860:HIS:CE1	2.02	0.78
3:D:705:ALA:HB3	3:D:706:PRO:HD2	1.66	0.78
1:A:25:LEU:HD12	1:A:28:LEU:HD21	1.65	0.77
2:C:274:ARG:HG3	2:C:275:TYR:HD1	1.49	0.77
2:C:565:GLN:HE21	2:C:668:LEU:HD12	1.49	0.77
2:C:722:ILE:HD13	2:C:823:VAL:HG23	1.66	0.77
2:C:950:LEU:HB3	3:D:1019:ASN:OD1	1.85	0.77
3:D:1354:GLN:HE21	3:D:1369:ILE:CD1	1.97	0.77
2:C:66:LEU:HD23	2:C:355:VAL:HG21	1.66	0.77
2:C:460:ARG:HD2	2:C:464:LEU:CD2	2.14	0.77
3:D:709:HIS:CE1	3:D:1232:GLU:HG3	2.20	0.77
2:C:676:ILE:HG23	2:C:873:PRO:HB3	1.65	0.77
3:D:659:LYS:HD3	3:D:659:LYS:O	1.83	0.77
3:D:890:VAL:HG11	3:D:922:LEU:CD1	2.10	0.77
2:C:796:GLU:HG3	3:D:681:ARG:NH1	1.98	0.77
2:C:355:VAL:O	2:C:359:MET:HG2	1.84	0.77
2:C:101:ILE:HG22	2:C:102:HIS:N	1.98	0.77
3:D:630:VAL:O	3:D:725:SER:HA	1.83	0.77
2:C:997:LEU:O	2:C:999:HIS:N	2.17	0.77
3:D:1077:GLY:O	3:D:1080:LYS:HG2	1.85	0.77
3:D:997:TRP:HA	3:D:1000:THR:HG22	1.67	0.77
1:B:147:VAL:HG23	1:B:148:GLY:H	1.49	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:613:VAL:HG12	2:C:615:TYR:N	1.99	0.77
2:C:974:LEU:HD23	2:C:987:ILE:HB	1.67	0.77
3:D:795:VAL:HA	3:D:862:ASP:CB	2.14	0.77
2:C:559:LEU:HD12	2:C:559:LEU:C	2.05	0.77
2:C:769:PRO:O	2:C:771:GLU:N	2.18	0.77
1:B:91:ASP:H	1:B:92:PRO:HD2	1.48	0.76
2:C:358:ARG:HB2	2:C:372:LEU:HD23	1.67	0.76
3:D:1381:GLU:CD	3:D:1392:GLU:HG3	2.06	0.76
2:C:525:ALA:HB1	2:C:526:PRO:HD2	1.65	0.76
3:D:75:ARG:O	3:D:77:GLY:N	2.18	0.76
1:A:141:VAL:HG22	1:A:142:ARG:O	1.85	0.76
1:A:142:ARG:O	1:A:143:VAL:HG13	1.86	0.76
2:C:743:VAL:HG11	2:C:800:VAL:HG21	1.68	0.76
3:D:1281:VAL:HG12	3:D:1282:VAL:CG2	2.15	0.76
2:C:567:GLN:O	2:C:997:LEU:HA	1.85	0.76
1:A:159:ASP:O	1:A:161:ILE:HG22	1.85	0.76
1:A:161:ILE:HG23	1:A:162:ASN:N	2.00	0.76
2:C:807:ARG:O	2:C:810:ASP:HB2	1.84	0.76
1:B:85:LEU:HA	1:B:123:ASN:ND2	2.00	0.76
2:C:1034:GLU:CD	3:D:1097:ARG:HH12	1.89	0.76
2:C:915:LYS:O	2:C:919:ALA:N	2.14	0.76
1:B:97:THR:HG22	1:B:98:LEU:H	1.50	0.76
2:C:283:VAL:HG12	2:C:284:GLY:H	1.50	0.76
2:C:597:ALA:HA	2:C:614:ARG:HH12	1.51	0.76
2:C:595:LEU:HG	2:C:655:LEU:HD22	1.68	0.76
3:D:1097:ARG:HH11	3:D:1097:ARG:HG3	1.49	0.76
3:D:731:LEU:HD13	3:D:931:LEU:HD12	1.67	0.76
3:D:1332:ASP:O	3:D:1334:HIS:N	2.15	0.76
3:D:1332:ASP:C	3:D:1334:HIS:H	1.90	0.76
3:D:1102:VAL:HG21	3:D:1425:VAL:HG22	1.67	0.76
2:C:256:TYR:C	2:C:260:LEU:HB3	2.06	0.76
3:D:1020:PRO:HB2	3:D:1023:VAL:CB	2.10	0.76
3:D:10:ILE:HG12	3:D:11:ALA:H	1.49	0.76
3:D:805:ALA:HB3	3:D:827:ILE:HA	1.68	0.76
1:A:205:THR:HG23	1:A:206:PRO:HD2	1.65	0.75
2:C:161:SER:CB	2:C:172:ILE:HG22	2.15	0.75
2:C:291:VAL:HB	2:C:299:LYS:HG3	1.67	0.75
2:C:344:PHE:C	2:C:346:VAL:H	1.89	0.75
2:C:376:ARG:H	2:C:377:PRO:CD	2.00	0.75
2:C:758:ARG:HH11	2:C:758:ARG:HG3	1.51	0.75
3:D:797:LYS:O	3:D:799:LYS:N	2.19	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:905:PRO:O	3:D:906:GLN:HB2	1.84	0.75
3:D:909:ASN:O	3:D:912:LYS:HB3	1.87	0.75
1:A:30:ARG:HD3	1:A:30:ARG:H	1.52	0.75
2:C:911:GLU:O	2:C:915:LYS:HG2	1.86	0.75
2:C:525:ALA:O	2:C:527:GLU:N	2.19	0.75
2:C:474:VAL:HG13	2:C:530:GLU:HA	1.67	0.75
2:C:755:LEU:HB3	2:C:790:LEU:HD23	1.67	0.75
2:C:869:VAL:HG21	2:C:871:LEU:HD13	1.66	0.75
2:C:943:VAL:HG21	2:C:973:VAL:HG13	1.65	0.75
3:D:1266:ALA:O	3:D:1267:ARG:HG3	1.85	0.75
1:B:44:LEU:O	1:B:173:VAL:HG21	1.87	0.75
2:C:168:ARG:NH2	2:C:266:ARG:HD3	2.00	0.75
2:C:262:ALA:CB	2:C:266:ARG:HD2	2.12	0.75
2:C:836:GLY:C	2:C:837:ASP:OD2	2.25	0.75
3:D:659:LYS:NZ	3:D:663:GLU:HB2	2.01	0.75
2:C:996:LYS:HE2	2:C:1000:MET:HE3	1.69	0.75
2:C:115:LEU:HD12	2:C:116:GLY:H	1.51	0.75
2:C:810:ASP:OD1	2:C:811:PRO:HD2	1.86	0.75
3:D:1015:ASN:O	3:D:1016:TYR:CG	2.39	0.75
3:D:1063:ARG:HH11	3:D:1063:ARG:HG3	1.50	0.75
1:B:212:GLN:O	1:B:216:ILE:HG13	1.86	0.75
2:C:920:GLU:O	2:C:922:PHE:N	2.19	0.75
3:D:1149:VAL:HG23	3:D:1166:TYR:CD2	2.21	0.75
3:D:860:LEU:O	3:D:862:ASP:N	2.20	0.75
3:D:969:ASP:HA	3:D:972:LEU:HD12	1.67	0.75
2:C:1009:SER:O	2:C:1010:THR:HG23	1.86	0.75
2:C:519:GLY:C	2:C:521:PRO:HD3	2.07	0.75
3:D:1108:VAL:O	3:D:1218:ILE:HD13	1.87	0.75
3:D:699:VAL:H	3:D:756:GLN:HE21	1.33	0.75
3:D:972:LEU:O	3:D:975:ILE:HG22	1.85	0.75
2:C:48:PHE:CE2	2:C:71:TYR:HB3	2.22	0.74
3:D:1274:VAL:H	3:D:1325:PRO:HG3	1.52	0.74
3:D:728:LEU:HD22	3:D:745:MET:HE1	1.68	0.74
2:C:804:LEU:HD12	2:C:805:ARG:H	1.51	0.74
3:D:860:LEU:C	3:D:862:ASP:N	2.37	0.74
1:B:89:PHE:HD1	1:B:94:TRP:HB3	1.52	0.74
2:C:614:ARG:CZ	2:C:623:HIS:HE1	2.00	0.74
2:C:755:LEU:HD23	2:C:792:VAL:HG23	1.70	0.74
2:C:438:ILE:CD1	2:C:470:PRO:HD3	2.15	0.74
3:D:643:GLY:HA3	3:D:727:GLN:H	1.52	0.74
1:A:86:VAL:HG13	1:A:122:MET:HB2	1.68	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:208:VAL:HG11	2:C:218:VAL:CG1	2.18	0.74
2:C:910:THR:HG22	2:C:912:PRO:HD2	1.70	0.74
2:C:862:PRO:HA	2:C:975:TYR:CE1	2.23	0.74
3:D:518:PRO:HA	3:D:544:TYR:CE1	2.22	0.74
1:A:16:GLN:NE2	1:A:17:GLY:H	1.82	0.74
2:C:184:MET:HB3	2:C:191:PHE:CZ	2.22	0.74
2:C:31:GLN:NE2	2:C:39:ARG:HD2	2.02	0.74
2:C:395:LYS:HG2	2:C:397:GLU:HG3	1.67	0.74
3:D:639:LEU:HD23	3:D:729:HIS:CD2	2.23	0.74
1:A:220:HIS:HA	1:A:223:TYR:CD2	2.23	0.74
3:D:1069:LEU:C	3:D:1071:TYR:H	1.89	0.74
2:C:401:LEU:HD21	2:C:543:ASN:CB	2.17	0.74
2:C:438:ILE:HG21	2:C:470:PRO:CB	2.12	0.74
1:B:105:PRO:HA	1:B:132:GLU:HA	1.70	0.74
2:C:468:ARG:CD	2:C:468:ARG:H	2.01	0.74
2:C:467:ILE:O	2:C:469:THR:HG23	1.87	0.74
3:D:1364:LEU:O	3:D:1365:HIS:O	2.06	0.74
2:C:243:ARG:HG3	2:C:244:PRO:HA	1.70	0.74
2:C:437:ARG:O	2:C:438:ILE:HG23	1.87	0.74
3:D:606:ILE:HD12	3:D:606:ILE:N	2.03	0.74
3:D:731:LEU:CD1	3:D:931:LEU:HD12	2.17	0.74
1:B:86:VAL:HG23	1:B:123:ASN:ND2	2.02	0.73
2:C:1030:GLN:OE1	3:D:628:ARG:HG3	1.87	0.73
2:C:266:ARG:HG2	2:C:268:ASP:N	2.02	0.73
3:D:566:ILE:O	3:D:566:ILE:HG22	1.88	0.73
3:D:586:ARG:O	3:D:587:ARG:HD3	1.88	0.73
2:C:151:ASP:HA	2:C:158:TYR:HD2	1.54	0.73
2:C:461:VAL:HB	2:C:471:TYR:OH	1.89	0.73
3:D:721:VAL:CG1	3:D:722:GLU:H	2.00	0.73
2:C:142:ARG:HG3	2:C:147:TYR:OH	1.87	0.73
2:C:755:LEU:HD23	2:C:792:VAL:CG2	2.18	0.73
3:D:1278:ILE:HG22	3:D:1279:ASP:N	2.03	0.73
1:A:166:VAL:HG12	1:A:167:ASP:N	2.03	0.73
2:C:581:THR:O	2:C:584:GLU:HG2	1.87	0.73
2:C:32:ALA:HB2	2:C:73:ILE:HD13	1.69	0.73
1:B:35:THR:O	1:B:35:THR:HG22	1.87	0.73
2:C:750:LYS:HE3	3:D:680:GLN:HE22	1.54	0.73
3:D:1047:GLN:HA	3:D:1053:THR:HA	1.70	0.73
3:D:675:ARG:HA	3:D:678:GLU:CB	2.18	0.73
1:A:30:ARG:HD2	1:A:191:LEU:N	2.04	0.73
1:B:85:LEU:CA	1:B:123:ASN:HD21	2.01	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:283:VAL:HG12	2:C:284:GLY:N	2.03	0.73
2:C:333:ILE:HD11	2:C:468:ARG:HE	1.53	0.73
3:D:1148:ARG:HH12	3:D:1191:SER:HB2	1.54	0.73
1:B:62:LEU:HD22	1:B:162:ASN:OD1	1.89	0.73
2:C:66:LEU:HA	2:C:100:LEU:HA	1.69	0.73
2:C:722:ILE:HD12	2:C:821:GLU:CD	2.08	0.73
2:C:55:GLU:O	2:C:56:GLU:HB3	1.89	0.73
2:C:775:ARG:HA	2:C:780:GLU:CB	2.18	0.73
2:C:263:ASP:CB	2:C:264:PRO:HD3	2.19	0.73
3:D:590:PRO:C	3:D:600:LEU:HD21	2.09	0.72
3:D:925:GLU:N	3:D:925:GLU:OE1	2.22	0.72
4:E:91:ARG:HB3	4:E:92:LEU:HD12	1.71	0.72
2:C:355:VAL:HG23	2:C:372:LEU:HD22	1.71	0.72
3:D:1012:PHE:HB2	3:D:1020:PRO:HG2	1.71	0.72
3:D:1364:LEU:HD23	3:D:1365:HIS:H	1.53	0.72
1:A:161:ILE:HG12	1:A:162:ASN:CG	2.10	0.72
2:C:17:PRO:HD2	2:C:20:GLU:HB2	1.69	0.72
3:D:1008:VAL:HG21	3:D:1040:CYS:HB2	1.70	0.72
3:D:1135:LEU:H	3:D:1135:LEU:HD23	1.53	0.72
3:D:546:ARG:O	3:D:550:ARG:HB2	1.89	0.72
3:D:87:ARG:HA	3:D:522:PRO:HG2	1.70	0.72
1:A:79:ILE:HD11	1:A:164:ILE:HD12	1.70	0.72
1:B:54:THR:HG21	1:B:144:ASP:HB2	1.72	0.72
3:D:1436:LEU:HB2	3:D:1458:ASP:OD2	1.88	0.72
2:C:399:ASN:C	2:C:399:ASN:HD22	1.93	0.72
2:C:424:GLY:O	2:C:427:VAL:HG23	1.89	0.72
2:C:508:ILE:N	2:C:508:ILE:HD13	1.95	0.72
2:C:9:ILE:HG22	2:C:10:ARG:N	2.05	0.72
3:D:547:LEU:HD13	3:D:577:ALA:O	1.89	0.72
1:A:66:SER:HB2	1:A:75:VAL:HG21	1.72	0.72
1:A:224:PHE:HE1	1:B:36:LEU:HD11	1.54	0.72
2:C:140:ILE:CG2	2:C:333:ILE:HG12	2.19	0.72
2:C:16:PRO:HA	2:C:586:ARG:HH22	1.53	0.72
2:C:881:ASN:HD22	2:C:881:ASN:N	1.87	0.72
3:D:975:ILE:HA	3:D:978:ALA:HB3	1.70	0.72
1:B:58:ILE:HG23	1:B:139:MET:HG2	1.69	0.72
2:C:129:ILE:HD13	2:C:386:PHE:HB3	1.70	0.72
3:D:1079:ARG:O	3:D:1082:GLY:N	2.21	0.72
2:C:1032:PHE:HB2	3:D:623:VAL:HG23	1.71	0.72
3:D:518:PRO:HB3	3:D:544:TYR:CG	2.24	0.72
4:E:19:LEU:HD11	4:E:23:VAL:HG23	1.71	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:30:ARG:HA	1:A:192:ASP:OD1	1.89	0.72
2:C:399:ASN:ND2	2:C:399:ASN:C	2.43	0.72
3:D:1060:SER:CB	3:D:1066:LEU:HD22	2.19	0.72
3:D:1339:ALA:O	3:D:1340:LYS:HB2	1.89	0.72
3:D:1408:LEU:C	3:D:1410:ALA:H	1.92	0.72
1:B:194:LEU:CD1	1:B:196:LEU:HD13	2.20	0.71
2:C:115:LEU:HG	2:C:378:LEU:HD22	1.71	0.71
2:C:290:LEU:HD21	2:C:298:PHE:HD2	1.55	0.71
2:C:310:LEU:O	2:C:313:LEU:HD23	1.89	0.71
2:C:580:MET:HB2	2:C:584:GLU:CG	2.16	0.71
2:C:703:ILE:HD11	2:C:830:LYS:HE2	1.71	0.71
3:D:1009:PHE:HE1	3:D:1036:ILE:HG13	1.54	0.71
3:D:1104:HIS:HE1	3:D:1463:LEU:H	1.35	0.71
3:D:709:HIS:HA	3:D:1228:GLU:HB3	1.71	0.71
2:C:732:ALA:O	2:C:736:ASP:HB2	1.90	0.71
2:C:804:LEU:HD12	2:C:805:ARG:N	2.05	0.71
2:C:256:TYR:O	2:C:260:LEU:HB3	1.90	0.71
2:C:536:PRO:O	2:C:538:GLN:N	2.23	0.71
3:D:590:PRO:O	3:D:600:LEU:HD11	1.90	0.71
4:E:4:PRO:HB2	4:E:66:LYS:HE2	1.70	0.71
1:B:90:LEU:CD1	1:B:118:ASP:HA	2.19	0.71
2:C:31:GLN:NE2	2:C:39:ARG:HB3	2.05	0.71
4:E:8:LYS:HE2	4:E:69:LEU:HD11	1.71	0.71
1:B:100:LEU:HD22	1:B:139:MET:CE	2.21	0.71
2:C:1051:GLU:HA	2:C:1055:ILE:CD1	2.21	0.71
2:C:492:ASP:O	2:C:532:MET:HA	1.90	0.71
3:D:1209:ASP:O	3:D:1210:LEU:HB3	1.89	0.71
3:D:856:GLY:O	3:D:857:LEU:HD13	1.89	0.71
2:C:511:ASP:OD1	2:C:516:ARG:HB2	1.89	0.71
2:C:588:VAL:O	2:C:589:ARG:HG2	1.91	0.71
2:C:963:LEU:O	2:C:966:LEU:N	2.23	0.71
3:D:1044:GLY:CA	3:D:1058:VAL:H	2.02	0.71
3:D:1075:SER:O	3:D:1078:ALA:HB3	1.91	0.71
3:D:1286:GLU:HG3	3:D:1291:LEU:HD11	1.70	0.71
3:D:772:PRO:HD3	3:D:778:LEU:H	1.54	0.71
2:C:198:ARG:HG2	2:C:228:ALA:HA	1.71	0.71
2:C:100:LEU:HG	2:C:369:PRO:HD3	1.70	0.71
2:C:711:GLU:HG2	2:C:822:VAL:HG22	1.71	0.71
2:C:889:HIS:C	2:C:891:GLY:H	1.92	0.71
2:C:929:ARG:HH11	2:C:936:VAL:H	1.35	0.71
1:A:222:ASN:O	1:A:224:PHE:N	2.24	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:231:PRO:O	2:C:233:GLU:N	2.24	0.71
2:C:420:ARG:HD3	2:C:420:ARG:H	1.56	0.71
1:A:72:LYS:HA	2:C:607:ASP:HB3	1.73	0.71
2:C:603:VAL:HG21	2:C:646:GLY:N	2.05	0.71
3:D:1000:THR:O	3:D:1004:VAL:HG23	1.90	0.71
3:D:1080:LYS:CG	3:D:1081:GLY:H	1.89	0.71
3:D:911:LEU:O	3:D:915:VAL:HG23	1.90	0.71
3:D:969:ASP:O	3:D:972:LEU:N	2.22	0.71
3:D:767:HIS:CE1	4:E:6:ILE:HG13	2.25	0.71
2:C:165:LEU:HD22	2:C:334:ARG:HD3	1.73	0.71
3:D:1018:PHE:HA	3:D:1024:MET:SD	2.30	0.71
2:C:987:ILE:HA	3:D:948:ILE:CG2	2.20	0.71
1:B:77:GLU:HA	1:B:77:GLU:OE1	1.89	0.71
2:C:162:ILE:HG13	2:C:171:TRP:CH2	2.25	0.71
2:C:630:ARG:CB	2:C:705:ILE:HD11	2.19	0.71
2:C:726:ILE:HD12	2:C:726:ILE:N	2.06	0.71
1:A:110:ALA:O	1:A:113:PHE:HB2	1.91	0.70
2:C:1051:GLU:HG3	2:C:1055:ILE:HD13	1.73	0.70
3:D:1063:ARG:C	3:D:1063:ARG:HD3	2.11	0.70
3:D:1110:GLU:O	3:D:1218:ILE:HD11	1.90	0.70
3:D:1365:HIS:CG	3:D:1366:ASP:N	2.55	0.70
3:D:1382:VAL:HG12	3:D:1383:THR:H	1.56	0.70
3:D:770:LEU:H	3:D:770:LEU:HD12	1.55	0.70
4:E:28:GLN:HG2	4:E:28:GLN:O	1.91	0.70
2:C:399:ASN:ND2	2:C:401:LEU:N	2.39	0.70
3:D:1286:GLU:HG3	3:D:1291:LEU:CD1	2.21	0.70
3:D:688:TRP:O	3:D:690:ALA:N	2.23	0.70
2:C:110:GLU:HG3	2:C:369:PRO:O	1.90	0.70
3:D:1482:VAL:HG12	4:E:21:VAL:HG21	1.72	0.70
2:C:1013:TYR:HE2	2:C:1018:GLN:NE2	1.88	0.70
2:C:290:LEU:HD21	2:C:298:PHE:CD2	2.27	0.70
2:C:358:ARG:HB2	2:C:372:LEU:CD2	2.20	0.70
2:C:20:GLU:CD	2:C:461:VAL:HG22	2.12	0.70
2:C:640:ARG:HH11	2:C:640:ARG:HG3	1.56	0.70
2:C:659:PRO:HG2	2:C:660:ALA:H	1.56	0.70
3:D:806:PHE:H	3:D:827:ILE:HA	1.56	0.70
1:B:100:LEU:HD11	1:B:112:ASP:HB2	1.72	0.70
2:C:467:ILE:HG22	2:C:484:VAL:HG21	1.74	0.70
3:D:684:LYS:HD3	3:D:685:ASP:N	2.06	0.70
2:C:546:LEU:HD22	2:C:584:GLU:OE2	1.90	0.70
2:C:567:GLN:HB2	2:C:997:LEU:HD22	1.74	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:8:ARG:HB3	2:C:9:ILE:HD12	1.73	0.70
1:A:161:ILE:HG23	1:A:162:ASN:H	1.55	0.70
2:C:614:ARG:CZ	2:C:623:HIS:CE1	2.75	0.70
2:C:743:VAL:HG23	2:C:755:LEU:O	1.92	0.70
2:C:78:PHE:CZ	2:C:812:GLY:HA3	2.26	0.70
3:D:500:ARG:O	3:D:504:ASP:HB2	1.92	0.70
3:D:793:THR:HB	3:D:879:ARG:NH1	2.05	0.70
1:A:211:ASN:O	1:A:214:VAL:HG22	1.91	0.70
2:C:831:ARG:HH12	2:C:1002:GLU:HB2	1.56	0.70
2:C:976:ASP:O	2:C:978:ARG:N	2.24	0.70
3:D:543:LEU:HD13	3:D:581:VAL:HA	1.74	0.70
2:C:988:VAL:HG12	3:D:948:ILE:HG13	1.72	0.70
2:C:1067:TYR:CE1	2:C:1071:ILE:HD11	2.27	0.70
2:C:94:LEU:O	2:C:115:LEU:HB3	1.91	0.70
3:D:990:TYR:OH	3:D:1053:THR:HG23	1.91	0.70
2:C:946:ARG:NE	3:D:861:GLN:NE2	2.39	0.70
1:B:14:THR:OG1	1:B:22:GLU:HB2	1.91	0.70
2:C:13:ILE:N	2:C:13:ILE:HD12	2.07	0.70
2:C:325:ILE:O	2:C:327:HIS:N	2.25	0.70
2:C:15:LEU:CD2	2:C:461:VAL:HG21	2.22	0.70
2:C:695:LEU:HD21	2:C:833:LEU:HB3	1.73	0.70
3:D:502:PHE:HZ	3:D:511:TRP:HZ2	1.37	0.70
3:D:552:ASN:C	3:D:554:LEU:H	1.93	0.70
1:A:62:LEU:HD12	1:A:62:LEU:N	2.02	0.69
1:B:124:PRO:HG2	1:B:125:ASP:OD2	1.91	0.69
2:C:164:PRO:HG2	2:C:168:ARG:HB3	1.72	0.69
2:C:929:ARG:NH1	2:C:936:VAL:H	1.90	0.69
3:D:9:ARG:HA	3:D:1457:LYS:HA	1.72	0.69
3:D:25(U):UNK:HA	3:D:40(U):UNK:O	1.92	0.69
1:A:18:ASP:O	1:A:19:HIS:CG	2.45	0.69
3:D:1484:PHE:CZ	4:E:18:ARG:HG3	2.27	0.69
1:A:184:ARG:HE	1:A:193:LYS:HD2	1.56	0.69
2:C:62:GLY:C	2:C:103:LYS:HB2	2.13	0.69
3:D:1044:GLY:HA2	3:D:1058:VAL:HG23	1.72	0.69
3:D:1283:ARG:HG2	3:D:1283:ARG:HH11	1.57	0.69
3:D:1352:GLU:OE1	3:D:1355:LYS:HD2	1.92	0.69
3:D:601:ARG:NH1	3:D:601:ARG:HA	2.07	0.69
2:C:1107:ASN:N	2:C:1108:PRO:HD3	2.07	0.69
2:C:256:TYR:O	2:C:260:LEU:HD22	1.91	0.69
2:C:56:GLU:HB2	2:C:356:ARG:HH11	1.58	0.69
2:C:474:VAL:HG22	2:C:530:GLU:HA	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:753:ASP:O	2:C:791:ARG:HA	1.92	0.69
3:D:705:ALA:CB	3:D:706:PRO:CD	2.70	0.69
3:D:807:ALA:C	3:D:809:PRO:HD3	2.13	0.69
3:D:805:ALA:HB3	3:D:827:ILE:CB	2.22	0.69
1:B:41:ARG:HG2	1:B:176:VAL:HG12	1.73	0.69
2:C:95:TYR:CD2	2:C:114:PHE:HA	2.27	0.69
2:C:129:ILE:CD1	2:C:386:PHE:HB3	2.23	0.69
1:B:76:VAL:HA	1:B:79:ILE:HB	1.73	0.69
2:C:198:ARG:CG	2:C:228:ALA:HA	2.23	0.69
2:C:843:HIS:HD2	2:C:884:GLN:HA	1.56	0.69
3:D:997:TRP:CD2	3:D:1057:PRO:HG3	2.27	0.69
3:D:1430:LEU:HD13	3:D:1441:PHE:CD2	2.27	0.69
1:B:188:ARG:HD3	1:B:191:LEU:HD21	1.73	0.69
2:C:95:TYR:HD2	2:C:114:PHE:HA	1.57	0.69
1:A:41:ARG:HG2	1:A:176:VAL:CG1	2.23	0.69
2:C:1008:ARG:HG3	2:C:1009:SER:H	1.57	0.69
2:C:676:ILE:O	2:C:677:MET:HB3	1.92	0.69
2:C:700:TYR:HB2	2:C:833:LEU:HD22	1.75	0.69
3:D:129:PHE:HA	3:D:454:ALA:CB	2.10	0.69
3:D:1206:TYR:CD1	3:D:1367:LYS:HD2	2.28	0.69
2:C:1001:VAL:HG11	3:D:724:GLN:HB3	1.75	0.69
3:D:875:THR:HG23	3:D:879:ARG:HB3	1.75	0.69
3:D:986:ASP:O	3:D:989:ARG:HB3	1.92	0.69
1:B:14:THR:HB	1:B:22:GLU:N	2.07	0.69
2:C:13:ILE:CG2	2:C:14:PRO:HD2	2.20	0.69
2:C:397:GLU:HB2	2:C:633:GLN:HE21	1.58	0.69
2:C:603:VAL:HG23	2:C:604:VAL:H	1.57	0.69
2:C:852:ILE:H	2:C:852:ILE:HD13	1.56	0.69
3:D:1038:GLN:CG	3:D:1043:ARG:HD3	2.22	0.69
3:D:1139:SER:O	3:D:1142:GLU:HB3	1.93	0.69
3:D:1323:GLY:O	3:D:1324:GLN:HG2	1.91	0.69
2:C:202:TYR:HE1	2:C:304:LEU:HB3	1.58	0.69
2:C:328:LEU:C	2:C:467:ILE:HD13	2.13	0.69
3:D:699:VAL:HG12	3:D:717:GLN:HG3	1.75	0.69
1:A:130:THR:O	1:A:130:THR:HG22	1.93	0.68
1:B:114:THR:O	1:B:116:SER:N	2.22	0.68
1:B:175:ARG:HB3	1:B:199:TRP:HB2	1.73	0.68
2:C:17:PRO:HA	2:C:586:ARG:NH2	2.09	0.68
2:C:689:VAL:HG11	2:C:853:LEU:HD22	1.75	0.68
2:C:870:ILE:O	2:C:870:ILE:HG22	1.92	0.68
3:D:1354:GLN:HE21	3:D:1369:ILE:HD12	1.56	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:955:ALA:O	3:D:1063:ARG:HG3	1.92	0.68
1:B:142:ARG:HG2	1:B:143:VAL:N	2.07	0.68
2:C:813:VAL:HG12	2:C:814:GLU:N	2.05	0.68
3:D:1005:THR:OG1	3:D:1037:ARG:HD2	1.93	0.68
3:D:808:THR:N	3:D:809:PRO:HD3	2.08	0.68
1:A:166:VAL:HG12	1:A:167:ASP:H	1.58	0.68
1:B:149:TYR:CE1	1:B:169:ILE:HG22	2.22	0.68
2:C:399:ASN:HB3	2:C:568:ALA:HB3	1.74	0.68
2:C:676:ILE:HG21	2:C:873:PRO:HB3	1.75	0.68
3:D:639:LEU:N	3:D:729:HIS:CD2	2.61	0.68
3:D:659:LYS:HZ3	3:D:663:GLU:HB2	1.59	0.68
1:A:192:ASP:HB3	2:C:938:LYS:HD2	1.76	0.68
1:B:168:ALA:HB1	1:B:170:PHE:CZ	2.28	0.68
2:C:110:GLU:HG2	2:C:369:PRO:CG	2.19	0.68
2:C:267:TYR:CD1	2:C:273:GLY:HA3	2.26	0.68
3:D:1058:VAL:HG12	3:D:1068:VAL:HG21	1.75	0.68
3:D:1108:VAL:HG21	3:D:1216:VAL:HG11	1.76	0.68
2:C:1005:MET:HG2	3:D:724:GLN:HG3	1.76	0.68
2:C:843:HIS:CD2	2:C:884:GLN:HA	2.28	0.68
1:B:76:VAL:HB	3:D:872:ARG:HH22	1.58	0.68
4:E:9:LEU:HD23	4:E:69:LEU:HD13	1.74	0.68
2:C:946:ARG:CZ	2:C:984:GLU:HB2	2.24	0.68
3:D:674:ARG:O	3:D:678:GLU:HB2	1.93	0.68
3:D:687:VAL:O	3:D:690:ALA:HB2	1.94	0.68
1:A:227:PRO:HA	1:B:11:PHE:O	1.94	0.68
2:C:1020:PRO:O	2:C:1021:LEU:HG	1.93	0.68
2:C:140:ILE:HD12	2:C:331:ARG:HD3	1.74	0.68
2:C:552:HIS:CD2	2:C:886:LEU:HD12	2.28	0.68
2:C:726:ILE:CD1	2:C:726:ILE:H	2.07	0.68
3:D:864:VAL:HA	3:D:875:THR:O	1.93	0.68
3:D:89:ARG:C	3:D:520:LEU:HD21	2.13	0.68
4:E:30:LEU:HD12	4:E:37:ASN:HB2	1.76	0.68
1:B:44:LEU:HD23	1:B:198:ILE:HD11	1.76	0.68
2:C:241:LEU:O	2:C:242:LEU:HD12	1.94	0.68
2:C:943:VAL:O	2:C:946:ARG:N	2.25	0.68
3:D:1253:ILE:C	3:D:1255:GLN:H	1.97	0.68
3:D:462:GLN:HA	3:D:512:MET:CE	2.24	0.68
4:E:13:VAL:HG21	4:E:19:LEU:HB2	1.75	0.68
1:A:187:GLN:O	1:A:188:ARG:HB3	1.93	0.68
1:B:103:GLU:O	1:B:135:GLY:HA3	1.94	0.68
1:A:194:LEU:CD2	1:A:195:THR:H	2.06	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:178:PHE:HB2	1:B:196:LEU:HD12	1.76	0.68
2:C:304:LEU:H	2:C:305:PRO:HD3	1.56	0.68
2:C:491:GLU:CG	2:C:510:THR:HB	2.24	0.68
2:C:682:TYR:CE1	2:C:851:LYS:HD2	2.29	0.68
3:D:1043:ARG:HH21	3:D:1066:LEU:CD2	2.05	0.68
3:D:1167:LEU:HB2	3:D:1171:ASP:CB	2.23	0.68
1:B:19:HIS:O	1:B:206:PRO:HG2	1.94	0.67
1:B:66:SER:OG	1:B:67:THR:N	2.27	0.67
2:C:1060:ILE:O	2:C:1061:GLU:C	2.33	0.67
2:C:1095:LEU:O	2:C:1096:ALA:HB3	1.94	0.67
2:C:184:MET:HE2	2:C:191:PHE:HZ	1.60	0.67
2:C:531:PHE:O	2:C:532:MET:HB2	1.93	0.67
2:C:761:PHE:O	2:C:762:LYS:O	2.12	0.67
3:D:1148:ARG:HD2	3:D:1189:VAL:HG21	1.77	0.67
3:D:14:SER:HA	3:D:510:GLU:OE1	1.94	0.67
3:D:644:LEU:HD21	3:D:747:VAL:HG21	1.76	0.67
2:C:14:PRO:O	2:C:15:LEU:HB3	1.94	0.67
2:C:181:VAL:HG12	2:C:182:VAL:H	1.59	0.67
3:D:1167:LEU:HB2	3:D:1171:ASP:HB2	1.75	0.67
3:D:1282:VAL:HG22	3:D:1315:LYS:CA	2.24	0.67
3:D:1305:LYS:H	3:D:1305:LYS:HD3	1.57	0.67
3:D:639:LEU:O	3:D:640:HIS:CB	2.42	0.67
2:C:946:ARG:HE	3:D:861:GLN:CD	1.98	0.67
4:E:6:ILE:HD12	4:E:10:PHE:CE1	2.29	0.67
1:A:106:LYS:HE3	1:A:108:VAL:HG22	1.77	0.67
2:C:115:LEU:HD12	2:C:116:GLY:N	2.08	0.67
2:C:369:PRO:C	2:C:371:LYS:H	1.98	0.67
2:C:605:LYS:HD2	2:C:607:ASP:CG	2.13	0.67
2:C:807:ARG:HA	2:C:821:GLU:HA	1.76	0.67
2:C:1004:LYS:HD3	3:D:744:GLN:NE2	2.09	0.67
3:D:795:VAL:HG22	3:D:876:ASN:OD1	1.95	0.67
1:A:98:LEU:O	1:A:99:ILE:HG13	1.94	0.67
1:B:89:PHE:CD1	1:B:94:TRP:HB3	2.29	0.67
2:C:872:ASN:HD21	2:C:874:LEU:CB	2.07	0.67
3:D:1283:ARG:HH21	3:D:1285:GLU:HG3	1.60	0.67
3:D:1348:TYR:O	3:D:1352:GLU:HB2	1.94	0.67
3:D:1460:LEU:HD13	3:D:1471:ARG:HH11	1.59	0.67
2:C:136:ILE:CG2	2:C:336:VAL:HG22	2.24	0.67
2:C:159:ILE:HD11	2:C:310:LEU:CD2	2.21	0.67
3:D:772:PRO:HD3	3:D:778:LEU:N	2.10	0.67
1:B:40:LEU:C	1:B:44:LEU:HD22	2.14	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:202:TYR:HE1	2:C:304:LEU:CB	2.06	0.67
2:C:688:ILE:HD12	2:C:871:LEU:HD12	1.76	0.67
2:C:839:LEU:O	2:C:994:ILE:HG22	1.95	0.67
3:D:538:SER:HA	3:D:541:ASN:ND2	2.08	0.67
3:D:589:SER:O	3:D:600:LEU:HG	1.95	0.67
1:B:78:ILE:CG1	1:B:129:ALA:HB2	2.24	0.67
1:B:86:VAL:N	1:B:123:ASN:HD21	1.92	0.67
2:C:157:ARG:HD3	2:C:157:ARG:H	1.59	0.67
1:A:111:VAL:CG2	1:A:125:ASP:H	2.06	0.67
1:B:151:PRO:HA	1:B:167:ASP:OD1	1.95	0.67
2:C:13:ILE:O	2:C:15:LEU:N	2.28	0.67
2:C:299:LYS:HD2	2:C:299:LYS:O	1.94	0.67
2:C:775:ARG:O	2:C:780:GLU:N	2.28	0.67
2:C:886:LEU:HD22	2:C:914:ILE:HD13	1.76	0.67
1:B:38:ASN:HB3	1:B:39:PRO:HD3	1.76	0.67
2:C:278:GLU:HG2	2:C:283:VAL:HG13	1.77	0.67
2:C:772:ARG:NH1	2:C:776:SER:HB3	2.10	0.67
3:D:1281:VAL:HG12	3:D:1282:VAL:H	1.60	0.67
2:C:654:LEU:HD22	2:C:664:GLY:N	2.10	0.67
3:D:1008:VAL:HG13	3:D:1009:PHE:N	2.10	0.67
3:D:1206:TYR:O	3:D:1207:GLY:O	2.12	0.67
1:A:150:VAL:O	1:A:168:ALA:HB3	1.95	0.66
1:A:88:ARG:HD3	1:A:120:GLU:CD	2.14	0.66
2:C:80:GLN:OE1	2:C:122:THR:HG23	1.95	0.66
2:C:304:LEU:N	2:C:305:PRO:CD	2.57	0.66
2:C:722:ILE:HA	2:C:758:ARG:HB2	1.77	0.66
3:D:1324:GLN:N	3:D:1325:PRO:CD	2.58	0.66
2:C:21:ILE:CD1	2:C:455:LEU:HD21	2.25	0.66
2:C:54:ILE:HG21	2:C:355:VAL:HG11	1.77	0.66
3:D:552:ASN:HA	3:D:555:LYS:HB3	1.76	0.66
3:D:669:ASN:OD1	3:D:671:LYS:HG2	1.94	0.66
1:B:30:ARG:HA	1:B:192:ASP:OD1	1.95	0.66
1:A:221:LEU:HD11	1:B:217:LEU:HD23	1.76	0.66
2:C:307:LEU:O	2:C:310:LEU:HB3	1.94	0.66
3:D:538:SER:HA	3:D:541:ASN:HD22	1.59	0.66
3:D:970:ARG:CZ	3:D:971:LYS:HE3	2.25	0.66
1:A:85:LEU:HA	1:A:123:ASN:HD21	1.59	0.66
2:C:13:ILE:C	2:C:15:LEU:H	1.98	0.66
2:C:446:GLY:HA2	2:C:449:ILE:CD1	2.26	0.66
2:C:813:VAL:HG11	2:C:815:LEU:HD11	1.77	0.66
1:A:15:THR:HG22	1:B:229:ALA:HB1	1.76	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:24:VAL:HG22	1:B:195:THR:HG23	1.78	0.66
3:D:1110:GLU:H	3:D:1218:ILE:HD12	1.61	0.66
3:D:648:MET:O	3:D:652:LEU:HD22	1.95	0.66
2:C:44:ILE:HD12	2:C:44:ILE:H	1.59	0.66
2:C:394:PHE:CE2	2:C:632:ASN:HB3	2.31	0.66
3:D:863:THR:O	3:D:864:VAL:HG23	1.96	0.66
2:C:9:ILE:HG22	2:C:10:ARG:H	1.61	0.66
2:C:468:ARG:HD2	2:C:468:ARG:H	1.60	0.66
2:C:889:HIS:HE1	3:D:951:GLY:N	1.91	0.66
3:D:1110:GLU:HG3	3:D:1111:ALA:N	2.10	0.66
3:D:1203:GLN:O	3:D:1204:LYS:HB2	1.96	0.66
3:D:688:TRP:HE3	3:D:688:TRP:HA	1.59	0.66
3:D:765:SER:O	3:D:769:LEU:HB2	1.96	0.66
4:E:14:ASP:CG	4:E:15:SER:H	1.99	0.66
1:A:6:LEU:C	1:A:8:ALA:H	1.99	0.66
1:B:172:PRO:HB3	1:B:204:VAL:HB	1.78	0.66
2:C:1113:GLU:C	2:C:1115:LEU:H	1.97	0.66
3:D:1093:GLY:HA2	3:D:1097:ARG:HH21	1.59	0.66
3:D:1150:LEU:O	3:D:1164:GLY:HA2	1.96	0.66
3:D:1156:ALA:HB1	3:D:1183:GLU:HB3	1.77	0.66
3:D:907:GLU:HB3	3:D:911:LEU:CD2	2.26	0.66
3:D:975:ILE:HD13	3:D:975:ILE:O	1.95	0.66
2:C:183:THR:CG2	2:C:190:LYS:HG3	2.26	0.66
2:C:270:GLY:HA3	2:C:274:ARG:HG2	1.78	0.66
2:C:676:ILE:O	2:C:677:MET:CB	2.44	0.66
2:C:691:SER:HB2	2:C:858:MET:CE	2.25	0.66
2:C:937:ASP:OD1	2:C:939:ARG:HD3	1.95	0.66
1:B:26:GLU:CB	1:B:27:PRO:CD	2.70	0.66
2:C:285:LEU:CD2	2:C:286:SER:H	2.09	0.66
2:C:728:HIS:C	2:C:730:SER:H	1.99	0.66
2:C:1026:GLN:HE21	3:D:674:ARG:HH21	1.43	0.66
2:C:149:THR:OG1	2:C:323:ASP:HA	1.96	0.65
2:C:101:ILE:CG2	2:C:102:HIS:H	2.07	0.65
2:C:211:LEU:HG	2:C:212:SER:N	2.08	0.65
2:C:605:LYS:CG	2:C:606:VAL:H	1.87	0.65
2:C:918:LEU:CD2	2:C:968:ASP:HA	2.25	0.65
3:D:1237:LEU:HD11	3:D:1357:TYR:HE2	1.61	0.65
3:D:1383:THR:HG23	3:D:1419:LYS:HE3	1.78	0.65
3:D:890:VAL:HG12	3:D:891:GLY:H	1.61	0.65
4:E:47:LYS:HE2	4:E:54:LEU:HD23	1.77	0.65
3:D:1016:TYR:CB	3:D:1020:PRO:HD3	2.22	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1157:LEU:HD12	3:D:1178:ALA:CA	2.23	0.65
3:D:1225:VAL:HG12	3:D:1225:VAL:O	1.96	0.65
3:D:477:LEU:HA	3:D:480:GLU:CB	2.27	0.65
3:D:710:ARG:NH1	3:D:768:ASN:HD21	1.94	0.65
2:C:1021:LEU:HD21	3:D:622:ARG:NE	2.12	0.65
2:C:139:GLN:HA	2:C:411:SER:O	1.95	0.65
2:C:149:THR:HB	2:C:158:TYR:CE1	2.32	0.65
2:C:21:ILE:HD11	2:C:455:LEU:HD21	1.77	0.65
2:C:222:LEU:O	2:C:225:ALA:N	2.29	0.65
2:C:352:ALA:HA	2:C:355:VAL:HG12	1.78	0.65
2:C:613:VAL:HG11	2:C:619:ARG:HA	1.78	0.65
2:C:873:PRO:O	2:C:877:PRO:HD2	1.97	0.65
3:D:1095:LEU:HD12	3:D:1099:LEU:HD13	1.76	0.65
3:D:769:LEU:HD22	3:D:779:ALA:HB2	1.78	0.65
3:D:906:GLN:OE1	3:D:906:GLN:N	2.29	0.65
3:D:911:LEU:HD22	3:D:911:LEU:H	1.61	0.65
1:A:109:ARG:HB2	1:A:125:ASP:O	1.96	0.65
2:C:1055:ILE:CG2	2:C:1066:ALA:HB2	2.26	0.65
2:C:266:ARG:C	2:C:268:ASP:H	1.99	0.65
3:D:1079:ARG:O	3:D:1081:GLY:N	2.30	0.65
1:A:183:THR:O	1:A:184:ARG:HD3	1.95	0.65
1:A:41:ARG:HH21	2:C:860:HIS:CD2	2.15	0.65
3:D:1110:GLU:H	3:D:1218:ILE:CD1	2.09	0.65
1:A:82:LEU:CD2	1:A:128:ILE:HD13	2.27	0.65
2:C:1034:GLU:O	2:C:1037:VAL:N	2.29	0.65
2:C:255:ALA:C	2:C:257:LEU:H	1.99	0.65
2:C:717:LEU:HD13	2:C:762:LYS:HA	1.77	0.65
2:C:903:SER:HB2	2:C:909:ALA:HB2	1.79	0.65
3:D:1272:LYS:HA	3:D:1331:ILE:HA	1.78	0.65
3:D:1432:THR:OG1	3:D:1433:LYS:HD3	1.96	0.65
3:D:465:LEU:HB2	3:D:512:MET:HE1	1.79	0.65
1:A:88:ARG:HB3	1:A:120:GLU:HB2	1.79	0.65
1:B:125:ASP:O	1:B:126:LEU:HB3	1.97	0.65
1:B:68:ILE:N	1:B:68:ILE:HD12	2.11	0.65
1:B:91:ASP:N	1:B:92:PRO:HD2	2.12	0.65
2:C:1012:PRO:HB3	2:C:1022:GLY:O	1.96	0.65
2:C:1072:LYS:O	3:D:659:LYS:HE3	1.97	0.65
2:C:328:LEU:HB3	2:C:467:ILE:HG21	1.77	0.65
2:C:492:ASP:H	2:C:531:PHE:CB	2.09	0.65
1:A:194:LEU:HD23	1:A:195:THR:N	2.10	0.65
1:B:213:ALA:HA	1:B:216:ILE:CD1	2.26	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1202:CYS:SG	3:D:1203:GLN:N	2.69	0.65
3:D:520:LEU:HB3	3:D:521:PRO:HD2	1.79	0.65
3:D:639:LEU:O	3:D:640:HIS:HB3	1.96	0.65
3:D:874:GLU:O	3:D:875:THR:O	2.15	0.65
2:C:970:GLY:HA3	3:D:950:ILE:HD13	1.78	0.65
3:D:1484:PHE:CE1	4:E:22:VAL:HG23	2.32	0.65
2:C:595:LEU:HG	2:C:655:LEU:CD2	2.27	0.65
2:C:892:LEU:HD12	2:C:967:PHE:CZ	2.33	0.65
3:D:1119:ILE:HD12	3:D:1119:ILE:N	2.12	0.65
3:D:890:VAL:HA	3:D:926:LYS:HZ1	1.60	0.65
1:A:194:LEU:O	1:A:195:THR:HB	1.97	0.64
2:C:1008:ARG:CG	2:C:1009:SER:H	2.10	0.64
2:C:164:PRO:HD3	2:C:267:TYR:CD2	2.32	0.64
2:C:759:THR:HB	2:C:785:VAL:HG22	1.79	0.64
3:D:1016:TYR:CA	3:D:1019:ASN:HD22	2.05	0.64
3:D:1085:THR:C	3:D:1087:LEU:N	2.48	0.64
2:C:987:ILE:HA	3:D:948:ILE:HG21	1.79	0.64
1:A:111:VAL:C	1:A:113:PHE:H	2.01	0.64
1:B:147:VAL:HG23	1:B:148:GLY:N	2.12	0.64
2:C:16:PRO:HA	2:C:586:ARG:NH2	2.12	0.64
2:C:141:HIS:CE1	2:C:332:ARG:HD3	2.32	0.64
3:D:1061:SER:C	3:D:1063:ARG:H	2.00	0.64
3:D:1167:LEU:H	3:D:1167:LEU:CD2	2.11	0.64
1:A:194:LEU:HD23	1:A:196:LEU:H	1.62	0.64
2:C:1067:TYR:O	2:C:1071:ILE:HD13	1.98	0.64
2:C:525:ALA:HB1	2:C:526:PRO:CD	2.27	0.64
3:D:1008:VAL:HG13	3:D:1009:PHE:H	1.61	0.64
3:D:1137:LYS:O	3:D:1139:SER:N	2.29	0.64
2:C:136:ILE:HB	2:C:336:VAL:HG22	1.80	0.64
2:C:603:VAL:HG21	2:C:645:VAL:HA	1.79	0.64
3:D:1048:LYS:HB3	3:D:1049:PRO:HD2	1.78	0.64
3:D:1134:ARG:HD2	3:D:1135:LEU:HD23	1.80	0.64
3:D:1238:THR:HG22	3:D:1240:ARG:H	1.62	0.64
3:D:638:LYS:O	3:D:639:LEU:HG	1.98	0.64
2:C:184:MET:HG2	2:C:193:LEU:HD23	1.80	0.64
2:C:218:VAL:O	2:C:221:LEU:N	2.31	0.64
2:C:710:ILE:HG13	2:C:790:LEU:HD13	1.80	0.64
3:D:729:HIS:NE2	3:D:731:LEU:HB2	2.13	0.64
1:A:102:ALA:HB3	1:A:137:LEU:HB3	1.80	0.64
2:C:495:THR:HG22	2:C:496:ILE:N	2.12	0.64
2:C:564:MET:SD	2:C:846:LYS:HB3	2.38	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:889:HIS:CE1	3:D:950:ILE:HG22	2.32	0.64
3:D:790:TYR:CD2	3:D:906:GLN:HB3	2.33	0.64
3:D:791:TYR:HE1	3:D:1024:MET:HG3	1.63	0.64
3:D:879:ARG:CG	3:D:904:VAL:HG22	2.16	0.64
2:C:140:ILE:CD1	2:C:331:ARG:HD3	2.28	0.64
2:C:64:LEU:HB3	2:C:359:MET:CE	2.28	0.64
2:C:875:GLY:CA	2:C:879:ARG:HG3	2.26	0.64
3:D:1104:HIS:HA	3:D:1223:GLY:HA3	1.80	0.64
3:D:499:VAL:O	3:D:503:LEU:N	2.29	0.64
3:D:558:LEU:CG	3:D:567:ILE:HD11	2.27	0.64
3:D:877:PRO:O	3:D:880:ILE:HB	1.97	0.64
1:B:215:ALA:O	1:B:219:GLU:HB2	1.97	0.64
2:C:1008:ARG:CG	2:C:1009:SER:N	2.61	0.64
2:C:1051:GLU:HA	2:C:1055:ILE:HD12	1.77	0.64
2:C:18:LEU:O	2:C:408:ARG:HD3	1.97	0.64
2:C:333:ILE:CD1	2:C:468:ARG:NE	2.61	0.64
2:C:605:LYS:HE2	2:C:611:ILE:HG23	1.79	0.64
2:C:7:GLY:O	2:C:8:ARG:HG3	1.97	0.64
3:D:1354:GLN:CD	3:D:1365:HIS:HB2	2.18	0.64
3:D:793:THR:HB	3:D:879:ARG:CZ	2.27	0.64
3:D:879:ARG:CZ	3:D:905:PRO:HD2	2.27	0.64
1:A:156:GLY:O	1:A:163:ALA:HB1	1.98	0.64
2:C:1011:GLY:O	2:C:1013:TYR:N	2.31	0.64
2:C:25:SER:O	2:C:28:LYS:HG2	1.97	0.64
2:C:322:VAL:O	2:C:322:VAL:HG13	1.98	0.64
1:A:120:GLU:O	1:A:121:ILE:HD13	1.98	0.64
2:C:94:LEU:HD23	2:C:344:PHE:HZ	1.63	0.64
3:D:836:VAL:HG11	3:D:858:LEU:CG	2.27	0.64
1:A:28:LEU:HD23	1:B:220:HIS:HE1	1.63	0.63
1:B:111:VAL:HG23	1:B:124:PRO:O	1.97	0.63
2:C:274:ARG:HG3	2:C:275:TYR:N	2.12	0.63
2:C:31:GLN:O	2:C:33:ASP:N	2.32	0.63
2:C:87:ASP:OD2	2:C:824:ARG:NH2	2.29	0.63
2:C:924:LEU:N	2:C:924:LEU:HD23	2.12	0.63
3:D:1081:GLY:O	3:D:1085:THR:HG23	1.97	0.63
3:D:1380:VAL:HG13	3:D:1397:GLU:HB2	1.80	0.63
1:A:184:ARG:NE	1:A:193:LYS:HD2	2.13	0.63
1:A:93:ARG:O	1:A:94:TRP:HB3	1.96	0.63
1:B:100:LEU:HD22	1:B:139:MET:HE1	1.80	0.63
2:C:148:PHE:HA	2:C:159:ILE:HA	1.80	0.63
2:C:460:ARG:HD2	2:C:464:LEU:HD22	1.81	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:441:VAL:HB	3:D:1075:SER:HB2	1.80	0.63
3:D:1108:VAL:HG13	3:D:1203:GLN:HA	1.79	0.63
3:D:1345:VAL:O	3:D:1348:TYR:N	2.31	0.63
3:D:638:LYS:CB	3:D:932:ASP:OD1	2.46	0.63
4:E:14:ASP:OD1	4:E:18:ARG:HD2	1.98	0.63
1:A:164:ILE:CG1	1:A:164:ILE:O	2.43	0.63
1:A:88:ARG:HD3	1:A:120:GLU:OE2	1.99	0.63
1:B:44:LEU:CD2	1:B:198:ILE:HD11	2.27	0.63
1:B:88:ARG:HB2	1:B:122:MET:SD	2.38	0.63
1:B:98:LEU:O	1:B:140:GLU:HA	1.98	0.63
2:C:1055:ILE:H	2:C:1055:ILE:CD1	2.07	0.63
2:C:110:GLU:CB	2:C:369:PRO:HG2	2.28	0.63
2:C:246:ASP:O	2:C:248:PRO:HD3	1.97	0.63
2:C:551:GLU:HA	2:C:906:PHE:CE2	2.30	0.63
2:C:148:PHE:CE1	2:C:309:TYR:CD2	2.87	0.63
2:C:149:THR:HG23	2:C:150:PRO:HD2	1.80	0.63
2:C:246:ASP:HB3	2:C:247:PRO:HD2	1.80	0.63
2:C:253:ALA:O	2:C:254:LEU:HB3	1.97	0.63
2:C:115:LEU:CG	2:C:378:LEU:HD22	2.29	0.63
2:C:734:LEU:O	2:C:737:LEU:O	2.17	0.63
3:D:627:GLY:O	3:D:747:VAL:HG12	1.99	0.63
1:A:223:TYR:CE1	1:B:9:PRO:HD2	2.33	0.63
2:C:1015:LEU:HD12	2:C:1016:ILE:HG12	1.80	0.63
2:C:141:HIS:NE2	2:C:332:ARG:HD3	2.14	0.63
2:C:439:CYS:CB	2:C:468:ARG:HH12	2.12	0.63
2:C:924:LEU:O	2:C:928:LYS:HG3	1.98	0.63
3:D:863:THR:C	3:D:864:VAL:HG23	2.19	0.63
4:E:38:THR:HG22	4:E:39:VAL:H	1.62	0.63
1:A:177:ALA:O	1:A:178:PHE:HB3	1.98	0.63
2:C:333:ILE:HD11	2:C:468:ARG:NE	2.12	0.63
2:C:595:LEU:HD21	2:C:623:HIS:HB3	1.80	0.63
2:C:862:PRO:HG3	2:C:925:TYR:OH	1.98	0.63
2:C:877:PRO:HG2	2:C:878:SER:H	1.64	0.63
2:C:996:LYS:CE	2:C:1000:MET:HE3	2.27	0.63
3:D:1208:TYR:HA	3:D:1215:PRO:HA	1.81	0.63
3:D:970:ARG:HG3	3:D:971:LYS:N	2.14	0.63
1:A:102:ALA:HA	1:A:106:LYS:NZ	2.14	0.63
1:A:19:HIS:HB2	1:A:200:THR:HA	1.81	0.63
1:A:57:TYR:CD2	1:A:57:TYR:C	2.71	0.63
2:C:1012:PRO:CB	2:C:1023:GLY:HA3	2.29	0.63
2:C:842:ARG:HH21	2:C:887:GLU:CD	2.01	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1081:GLY:HA2	3:D:1084:ASP:HB2	1.79	0.63
3:D:637:LEU:CB	3:D:641:GLN:HG3	2.29	0.63
1:A:56:VAL:HG11	1:A:82:LEU:CD1	2.28	0.63
1:B:193:LYS:O	1:B:193:LYS:HG2	1.98	0.63
2:C:212:SER:O	2:C:218:VAL:HG21	1.98	0.63
2:C:712:ALA:HB3	2:C:820:ARG:O	1.98	0.63
3:D:864:VAL:HG12	3:D:874:GLU:C	2.18	0.63
1:A:108:VAL:O	1:A:128:ILE:HB	1.98	0.63
2:C:605:LYS:HG2	2:C:607:ASP:N	2.10	0.63
2:C:969:LEU:HD13	3:D:952:ILE:CB	2.19	0.63
3:D:1267:ARG:O	3:D:1269:PRO:N	2.31	0.63
3:D:702:LEU:O	3:D:713:ILE:O	2.17	0.63
3:D:729:HIS:HE2	3:D:731:LEU:HB2	1.64	0.63
4:E:48:MET:O	4:E:54:LEU:HA	1.99	0.63
1:B:110:ALA:HA	1:B:113:PHE:HE1	1.63	0.62
1:B:99:ILE:HG12	1:B:140:GLU:HG2	1.81	0.62
2:C:1105:LYS:C	2:C:1108:PRO:HD3	2.18	0.62
2:C:852:ILE:N	2:C:852:ILE:HD13	2.13	0.62
2:C:861:LEU:HG	2:C:862:PRO:CD	2.27	0.62
3:D:103:TRP:O	3:D:104:PHE:CB	2.46	0.62
3:D:1066:LEU:O	3:D:1068:VAL:N	2.32	0.62
3:D:1106:ILE:HG23	3:D:1201:VAL:H	1.63	0.62
3:D:1402:GLU:C	3:D:1404:LEU:H	2.02	0.62
3:D:124:GLU:HA	3:D:456:MET:SD	2.40	0.62
3:D:770:LEU:HD12	3:D:770:LEU:N	2.14	0.62
3:D:866:THR:HA	3:D:873:LEU:O	1.98	0.62
1:A:126:LEU:HG	1:A:126:LEU:O	1.99	0.62
2:C:172:ILE:CD1	2:C:184:MET:SD	2.87	0.62
2:C:446:GLY:O	2:C:447:ALA:HB3	1.99	0.62
3:D:1087:LEU:HA	3:D:1090:ALA:HB3	1.80	0.62
3:D:1108:VAL:HG11	3:D:1216:VAL:HG12	1.79	0.62
3:D:1279:ASP:HA	3:D:1318:ASP:O	2.00	0.62
3:D:729:HIS:CE1	3:D:730:PRO:HG2	2.34	0.62
3:D:795:VAL:CG2	3:D:904:VAL:HG11	2.23	0.62
1:A:104:GLY:HA2	1:A:135:GLY:H	1.64	0.62
1:A:210:LEU:O	1:A:213:ALA:HB3	1.99	0.62
1:B:111:VAL:C	1:B:113:PHE:H	2.01	0.62
2:C:162:ILE:CA	2:C:171:TRP:HZ3	2.07	0.62
2:C:631:SER:CB	2:C:635:THR:H	2.09	0.62
2:C:859:PRO:HD2	2:C:867:VAL:HG21	1.82	0.62
3:D:1087:LEU:HD13	3:D:1239:MET:HB2	1.79	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1354:GLN:OE1	3:D:1365:HIS:HB2	1.99	0.62
3:D:696:HIS:CE1	4:E:48:MET:HG3	2.34	0.62
2:C:984:GLU:CG	3:D:945:SER:HA	2.29	0.62
4:E:38:THR:HG22	4:E:40:LEU:H	1.65	0.62
2:C:481:GLU:N	2:C:481:GLU:OE1	2.33	0.62
2:C:760:SER:HB2	2:C:788:THR:HG21	1.80	0.62
2:C:881:ASN:N	2:C:881:ASN:ND2	2.46	0.62
2:C:552:HIS:CE1	3:D:1065:GLY:HA2	2.33	0.62
2:C:1097:LEU:HD13	3:D:10:ILE:HD11	1.81	0.62
3:D:1322:ALA:O	3:D:1324:GLN:N	2.32	0.62
1:B:210:LEU:O	1:B:214:VAL:HG23	1.99	0.62
2:C:84:ARG:HA	2:C:131:GLY:HA2	1.80	0.62
2:C:30:LEU:HA	2:C:44:ILE:HD13	1.80	0.62
2:C:632:ASN:HB2	2:C:633:GLN:HE22	1.63	0.62
4:E:68:LEU:HA	4:E:73:LEU:CD1	2.28	0.62
1:A:100:LEU:C	1:A:100:LEU:HD12	2.19	0.62
1:A:44:LEU:HD13	1:A:198:ILE:HG13	1.82	0.62
1:B:56:VAL:HB	1:B:164:ILE:HD11	1.81	0.62
2:C:323:ASP:C	2:C:325:ILE:N	2.47	0.62
2:C:408:ARG:NH2	2:C:457:ALA:HA	2.15	0.62
3:D:1054:PHE:CE2	3:D:1073:ILE:HG13	2.34	0.62
3:D:1229:SER:O	3:D:1233:PRO:HD2	1.99	0.62
2:C:99:GLN:HA	2:C:108:ILE:O	1.98	0.62
2:C:162:ILE:N	2:C:162:ILE:HD12	2.14	0.62
2:C:159:ILE:HB	2:C:174:LEU:HB2	1.80	0.62
2:C:336:VAL:HA	2:C:339:LEU:HD13	1.80	0.62
2:C:579:VAL:HG23	2:C:842:ARG:HH22	1.64	0.62
2:C:605:LYS:HZ1	2:C:611:ILE:HG13	1.64	0.62
2:C:570:PRO:HB3	2:C:660:ALA:HB2	1.80	0.62
2:C:706:GLU:CD	2:C:707:ARG:H	2.02	0.62
2:C:839:LEU:HD23	2:C:849:VAL:HG23	1.80	0.62
2:C:687:ALA:HB1	2:C:850:ALA:HB2	1.82	0.62
2:C:981:GLU:HB3	2:C:982:PRO:HD2	1.81	0.62
2:C:1054:THR:HB	2:C:1055:ILE:HD12	1.81	0.62
2:C:20:GLU:OE1	2:C:461:VAL:HG22	2.00	0.62
2:C:707:ARG:HG3	2:C:707:ARG:O	1.98	0.62
3:D:1035:GLN:HE21	3:D:1035:GLN:CA	2.04	0.62
3:D:1284:ILE:O	3:D:1284:ILE:HG22	2.00	0.62
3:D:1484:PHE:CE2	4:E:18:ARG:HG3	2.34	0.62
3:D:98:PRO:CB	3:D:574:LEU:HD23	2.30	0.62
3:D:795:VAL:HG22	3:D:876:ASN:ND2	2.14	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:880:ILE:O	3:D:883:ALA:HB3	1.99	0.62
1:B:150:VAL:HB	1:B:168:ALA:CB	2.30	0.62
1:B:176:VAL:HG13	1:B:198:ILE:HD12	1.81	0.62
2:C:1087:VAL:O	2:C:1091:GLU:HB2	1.99	0.62
2:C:352:ALA:O	2:C:355:VAL:HG12	2.00	0.62
2:C:21:ILE:HD12	2:C:460:ARG:HH21	1.63	0.62
2:C:540:PHE:CE1	2:C:906:PHE:HE1	2.17	0.62
2:C:944:LEU:HD21	2:C:963:LEU:HD22	1.81	0.62
3:D:1282:VAL:CG1	3:D:1315:LYS:HA	2.27	0.62
3:D:578:VAL:HG12	3:D:582:ILE:HD11	1.80	0.62
3:D:582:ILE:O	3:D:584:ASN:N	2.33	0.62
3:D:699:VAL:N	3:D:756:GLN:NE2	2.44	0.62
3:D:631:ILE:HG21	3:D:745:MET:CE	2.30	0.62
3:D:805:ALA:HB3	3:D:827:ILE:CA	2.29	0.62
1:A:157:ILE:HG23	1:A:158:LYS:N	2.07	0.62
1:A:161:ILE:HD13	1:A:162:ASN:HD21	1.65	0.62
1:A:191:LEU:HD23	1:A:191:LEU:H	1.65	0.62
1:B:91:ASP:N	1:B:92:PRO:CD	2.63	0.62
2:C:310:LEU:O	2:C:313:LEU:N	2.32	0.62
1:A:56:VAL:HG11	1:A:82:LEU:HD12	1.81	0.61
2:C:285:LEU:HD22	2:C:286:SER:H	1.63	0.61
2:C:497:ALA:HA	2:C:502:PRO:HG3	1.81	0.61
3:D:1044:GLY:HA2	3:D:1058:VAL:H	1.65	0.61
3:D:498:VAL:O	3:D:502:PHE:HB2	2.00	0.61
3:D:952:ILE:O	3:D:954:ASP:O	2.18	0.61
1:B:176:VAL:HG13	1:B:198:ILE:CD1	2.30	0.61
2:C:181:VAL:HG12	2:C:182:VAL:N	2.15	0.61
2:C:202:TYR:CE1	2:C:304:LEU:HD13	2.35	0.61
2:C:399:ASN:HD21	2:C:401:LEU:HB3	1.65	0.61
2:C:672:VAL:HG22	2:C:868:ASP:CG	2.20	0.61
2:C:813:VAL:CG1	2:C:815:LEU:HD11	2.31	0.61
3:D:691:LEU:C	3:D:693:GLU:N	2.52	0.61
3:D:701:LEU:HA	3:D:715:ALA:HB2	1.82	0.61
1:B:173:VAL:HA	1:B:200:THR:CG2	2.30	0.61
2:C:17:PRO:HG2	2:C:19:THR:N	2.06	0.61
2:C:363:SER:HB3	2:C:366:THR:HB	1.83	0.61
2:C:515:ALA:HB2	3:D:1070:GLU:OE2	2.00	0.61
2:C:564:MET:SD	2:C:840:ALA:CB	2.87	0.61
2:C:754:ILE:HA	2:C:791:ARG:HG2	1.82	0.61
3:D:1254:THR:HA	3:D:1259:ARG:HD2	1.81	0.61
3:D:566:ILE:HA	3:D:569:ASN:OD1	2.00	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:643:GLY:O	3:D:644:LEU:HB2	1.98	0.61
1:A:137:LEU:O	1:A:139:MET:HG3	2.00	0.61
1:B:55:SER:HA	1:B:165:PRO:HA	1.82	0.61
2:C:257:LEU:CD1	2:C:264:PRO:HG3	2.26	0.61
2:C:348:LEU:HD12	2:C:378:LEU:HD11	1.82	0.61
2:C:21:ILE:HD12	2:C:460:ARG:NH2	2.15	0.61
2:C:654:LEU:O	2:C:655:LEU:C	2.38	0.61
2:C:836:GLY:C	2:C:848:VAL:HG23	2.21	0.61
3:D:1464:LYS:O	3:D:1468:ILE:HG13	2.01	0.61
3:D:691:LEU:C	3:D:693:GLU:H	2.03	0.61
3:D:795:VAL:HG12	3:D:796:ARG:N	2.16	0.61
1:A:184:ARG:HH21	1:A:193:LYS:HE3	1.66	0.61
1:A:172:PRO:O	1:A:201:ASP:HA	2.00	0.61
1:B:212:GLN:O	1:B:215:ALA:HB3	2.00	0.61
2:C:1036:GLU:O	2:C:1039:ALA:HB3	2.00	0.61
2:C:285:LEU:HD11	2:C:302:VAL:CG2	2.31	0.61
2:C:421:GLU:HG2	2:C:424:GLY:N	2.15	0.61
2:C:65:VAL:HG23	2:C:101:ILE:HB	1.81	0.61
2:C:672:VAL:O	2:C:991:GLN:HA	2.01	0.61
2:C:682:TYR:CD1	2:C:851:LYS:HD2	2.35	0.61
3:D:1015:ASN:O	3:D:1016:TYR:CB	2.48	0.61
3:D:1069:LEU:C	3:D:1071:TYR:N	2.51	0.61
3:D:606:ILE:HD12	3:D:606:ILE:H	1.63	0.61
3:D:654:LYS:HB3	3:D:655:PRO:CD	2.26	0.61
2:C:196:LEU:HD11	2:C:200:LEU:HD21	1.82	0.61
2:C:439:CYS:HB2	2:C:468:ARG:HH12	1.64	0.61
2:C:588:VAL:HG23	2:C:666:LEU:HB2	1.83	0.61
2:C:759:THR:HB	2:C:785:VAL:CG2	2.30	0.61
3:D:1264:PHE:O	3:D:1425:VAL:HB	2.00	0.61
3:D:1278:ILE:CG2	3:D:1279:ASP:N	2.64	0.61
3:D:1460:LEU:CD1	3:D:1471:ARG:HH11	2.14	0.61
3:D:578:VAL:C	3:D:580:ALA:H	2.02	0.61
3:D:957:ILE:HG23	3:D:1040:CYS:O	2.01	0.61
1:A:124:PRO:HG2	1:A:125:ASP:OD1	2.01	0.61
2:C:204:GLN:HG3	2:C:205:GLU:HG2	1.82	0.61
2:C:354:GLY:O	2:C:358:ARG:HG2	2.01	0.61
2:C:457:ALA:O	2:C:459:ALA:N	2.34	0.61
2:C:922:PHE:C	2:C:924:LEU:H	2.02	0.61
3:D:1102:VAL:HG21	3:D:1425:VAL:CG1	2.30	0.61
3:D:1283:ARG:CG	3:D:1294:PHE:HB2	2.31	0.61
3:D:149:LYS:O	3:D:153:LEU:N	2.22	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:86:VAL:HG21	1:A:202:GLY:CA	2.30	0.61
2:C:128:ILE:N	2:C:128:ILE:HD12	2.14	0.61
2:C:185:LYS:HA	2:C:189:ARG:O	2.01	0.61
2:C:413:LEU:HD11	2:C:448:ASN:OD1	2.00	0.61
2:C:636:ALA:HB3	2:C:703:ILE:O	2.01	0.61
2:C:970:GLY:CA	3:D:950:ILE:HD13	2.31	0.61
3:D:625:TYR:HE1	3:D:751:LEU:HD21	1.66	0.61
2:C:491:GLU:CD	2:C:510:THR:HB	2.22	0.61
2:C:570:PRO:C	2:C:571:LEU:HD12	2.21	0.61
2:C:613:VAL:HG21	2:C:619:ARG:NE	2.16	0.61
2:C:691:SER:HB2	2:C:858:MET:HE1	1.82	0.61
2:C:859:PRO:HD2	2:C:867:VAL:CG2	2.31	0.61
3:D:1012:PHE:HA	3:D:1015:ASN:O	2.01	0.61
3:D:1087:LEU:HA	3:D:1090:ALA:CB	2.30	0.61
3:D:1482:VAL:CG1	4:E:21:VAL:HG21	2.30	0.61
3:D:849:ALA:O	3:D:853:VAL:HG23	2.00	0.61
3:D:961:LYS:CE	3:D:1042:MET:HB3	2.31	0.61
1:A:208:GLU:HB3	1:A:212:GLN:HE21	1.65	0.61
2:C:327:HIS:C	2:C:329:GLY:H	2.04	0.61
2:C:402:SER:O	2:C:403:SER:C	2.39	0.61
2:C:460:ARG:NH1	2:C:464:LEU:HD21	2.15	0.61
2:C:843:HIS:HD2	2:C:884:GLN:CA	2.14	0.61
3:D:1089:THR:HA	3:D:1092:SER:CB	2.30	0.61
3:D:1252:ASP:C	3:D:1254:THR:H	2.04	0.61
3:D:966:GLU:O	3:D:970:ARG:N	2.34	0.61
3:D:1487:VAL:HB	4:E:85:LEU:HD11	1.83	0.60
1:B:110:ALA:HB3	1:B:125:ASP:O	2.01	0.60
2:C:568:ALA:O	2:C:569:VAL:HG12	2.01	0.60
2:C:874:LEU:HD12	2:C:875:GLY:H	1.67	0.60
3:D:1123:LEU:HG	3:D:1141:ILE:HD13	1.82	0.60
3:D:1130:THR:O	3:D:1131:ARG:C	2.37	0.60
3:D:1146:TYR:CD2	3:D:1147:GLY:N	2.69	0.60
3:D:1330:ALA:O	3:D:1332:ASP:N	2.34	0.60
3:D:1379:TYR:CD1	3:D:1423:MET:HG3	2.36	0.60
3:D:705:ALA:HB3	3:D:706:PRO:CD	2.30	0.60
2:C:1043:TYR:CD2	3:D:763:MET:HG2	2.36	0.60
3:D:952:ILE:O	3:D:954:ASP:N	2.34	0.60
3:D:754:PHE:CD1	4:E:24:ALA:HB1	2.36	0.60
3:D:1473:ILE:O	3:D:1478:GLY:HA3	2.01	0.60
3:D:477:LEU:HD12	3:D:480:GLU:HB3	1.83	0.60
1:B:102:ALA:HB3	1:B:136:LYS:O	2.01	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:710:ILE:N	2:C:710:ILE:HD12	2.15	0.60
2:C:745:ILE:HA	2:C:800:VAL:HG12	1.83	0.60
3:D:777:PRO:HD2	3:D:912:LYS:HE3	1.82	0.60
1:A:109:ARG:H	1:A:109:ARG:CD	2.13	0.60
2:C:63:GLY:HA2	2:C:102:HIS:HA	1.82	0.60
2:C:86:LYS:HA	2:C:806:LEU:HD11	1.83	0.60
3:D:1293:VAL:HG23	3:D:1306:LEU:HD22	1.82	0.60
3:D:1381:GLU:HB3	3:D:1419:LYS:HD2	1.84	0.60
3:D:907:GLU:HB3	3:D:911:LEU:HD22	1.83	0.60
3:D:948:ILE:HD13	3:D:948:ILE:N	2.09	0.60
2:C:291:VAL:CB	2:C:299:LYS:HE3	2.32	0.60
2:C:328:LEU:HB3	2:C:467:ILE:CG2	2.31	0.60
2:C:502:PRO:HB2	2:C:507:ARG:NH2	2.17	0.60
3:D:1449:THR:O	3:D:1452:ALA:HB3	2.01	0.60
3:D:1476:GLY:C	3:D:1478:GLY:H	2.05	0.60
3:D:511:TRP:O	3:D:512:MET:HG3	2.02	0.60
1:B:184:ARG:CB	1:B:189:THR:HA	2.32	0.60
2:C:568:ALA:O	2:C:569:VAL:HB	2.01	0.60
2:C:568:ALA:O	2:C:569:VAL:CB	2.49	0.60
2:C:613:VAL:HG13	2:C:620:LEU:N	2.15	0.60
2:C:63:GLY:CA	2:C:102:HIS:HA	2.31	0.60
2:C:950:LEU:O	2:C:951:GLY:C	2.40	0.60
3:D:1467:VAL:O	3:D:1470:GLY:N	2.33	0.60
2:C:1020:PRO:HG2	3:D:624:ASP:HB2	1.82	0.60
3:D:752:SER:O	3:D:754:PHE:N	2.34	0.60
1:B:159:ASP:O	1:B:161:ILE:N	2.34	0.60
2:C:290:LEU:HD12	2:C:300:ASP:HA	1.84	0.60
2:C:981:GLU:H	2:C:981:GLU:CD	2.05	0.60
3:D:1138:ARG:HD2	3:D:1138:ARG:H	1.66	0.60
3:D:1281:VAL:HG12	3:D:1282:VAL:N	2.16	0.60
3:D:1354:GLN:O	3:D:1356:VAL:N	2.35	0.60
1:A:31:GLY:N	1:A:192:ASP:OD1	2.35	0.60
1:B:25:LEU:HD11	1:B:28:LEU:CD1	2.30	0.60
2:C:1005:MET:CG	3:D:724:GLN:HG3	2.31	0.60
2:C:1107:ASN:N	2:C:1108:PRO:CD	2.65	0.60
2:C:30:LEU:O	2:C:31:GLN:C	2.41	0.60
2:C:396:ASP:HB3	2:C:402:SER:HB3	1.84	0.60
1:A:72:LYS:CA	2:C:607:ASP:HB3	2.31	0.60
2:C:685:GLU:HB3	2:C:686:ASP:OD1	2.01	0.60
2:C:873:PRO:O	2:C:877:PRO:CD	2.50	0.60
2:C:984:GLU:O	3:D:945:SER:O	2.20	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1070:GLU:HG3	3:D:1073:ILE:CG1	2.32	0.60
3:D:1111:ALA:HA	3:D:1203:GLN:O	2.01	0.60
3:D:1354:GLN:O	3:D:1355:LYS:C	2.38	0.60
2:C:13:ILE:HG22	2:C:14:PRO:CD	2.28	0.60
2:C:588:VAL:HG12	2:C:588:VAL:O	2.00	0.60
2:C:565:GLN:HG3	2:C:668:LEU:CD1	2.32	0.60
3:D:616:GLN:O	3:D:617:ASN:HB2	2.00	0.60
3:D:638:LYS:CB	3:D:935:LYS:HD3	2.31	0.60
1:A:179:GLN:HE21	2:C:934:PHE:CB	2.11	0.59
1:B:58:ILE:CG2	1:B:139:MET:HG2	2.32	0.59
2:C:208:VAL:HG21	2:C:218:VAL:HG13	1.84	0.59
2:C:355:VAL:HG13	2:C:356:ARG:N	2.17	0.59
2:C:428:ARG:HA	2:C:431:HIS:HD2	1.65	0.59
2:C:460:ARG:O	2:C:461:VAL:HB	2.01	0.59
2:C:874:LEU:O	2:C:876:VAL:N	2.35	0.59
3:D:510:GLU:O	3:D:512:MET:N	2.35	0.59
1:B:93:ARG:O	1:B:94:TRP:O	2.20	0.59
2:C:502:PRO:HB2	2:C:507:ARG:NH1	2.16	0.59
2:C:772:ARG:HD3	2:C:772:ARG:O	2.02	0.59
2:C:837:ASP:N	2:C:837:ASP:OD2	2.35	0.59
2:C:673:LEU:CD2	2:C:867:VAL:HG12	2.32	0.59
2:C:958:SER:HB2	2:C:959:PRO:HD2	1.84	0.59
2:C:946:ARG:NH1	2:C:984:GLU:HB2	2.15	0.59
3:D:657:LEU:O	3:D:660:LYS:N	2.26	0.59
3:D:663:GLU:C	3:D:665:ALA:H	2.05	0.59
3:D:787:LEU:HD12	3:D:787:LEU:O	2.01	0.59
3:D:90:MET:N	3:D:520:LEU:HD21	2.16	0.59
1:A:114:THR:HG23	1:A:114:THR:O	2.03	0.59
1:B:41:ARG:HA	1:B:176:VAL:HG11	1.84	0.59
2:C:21:ILE:CD1	2:C:460:ARG:HH21	2.15	0.59
2:C:285:LEU:HD11	2:C:302:VAL:HG21	1.85	0.59
2:C:423:ALA:HA	2:C:427:VAL:HG21	1.84	0.59
2:C:803:ARG:HD2	2:C:803:ARG:O	2.01	0.59
2:C:551:GLU:CG	2:C:906:PHE:HD2	2.07	0.59
2:C:918:LEU:HD13	2:C:968:ASP:O	2.02	0.59
3:D:1018:PHE:HA	3:D:1024:MET:HE1	1.84	0.59
3:D:1220:GLU:HA	4:E:17:TYR:OH	2.02	0.59
3:D:829:VAL:O	3:D:830:ALA:CB	2.50	0.59
1:A:111:VAL:O	1:A:113:PHE:N	2.35	0.59
1:A:35:THR:HG21	1:B:43:ILE:HD11	1.83	0.59
1:A:38:ASN:HB3	1:A:39:PRO:HD3	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:85:LEU:C	1:A:85:LEU:HD23	2.22	0.59
2:C:497:ALA:C	2:C:502:PRO:HA	2.22	0.59
2:C:5:ARG:HH22	2:C:10:ARG:HH11	1.49	0.59
2:C:841:ASN:HD21	2:C:845:ASN:N	1.93	0.59
2:C:882:LEU:HD11	2:C:884:GLN:NE2	2.18	0.59
3:D:1364:LEU:CD2	3:D:1365:HIS:H	2.16	0.59
3:D:18:ILE:HD12	3:D:18:ILE:H	1.67	0.59
3:D:846:PRO:HG3	3:D:880:ILE:HD12	1.83	0.59
3:D:794:GLN:OE1	3:D:906:GLN:NE2	2.35	0.59
1:A:12:THR:HG22	1:A:13:ALA:H	1.66	0.59
1:A:84:GLU:O	1:A:85:LEU:C	2.40	0.59
1:A:98:LEU:HB3	1:A:113:PHE:HD2	1.66	0.59
2:C:613:VAL:HG22	2:C:620:LEU:C	2.21	0.59
2:C:764:GLU:OE2	2:C:786:LYS:HE3	2.03	0.59
3:D:1010:ASN:O	3:D:1013:GLU:HB3	2.03	0.59
3:D:1095:LEU:CD1	3:D:1099:LEU:HD13	2.30	0.59
3:D:514:LEU:O	3:D:515:GLU:CB	2.50	0.59
3:D:604:THR:O	3:D:608:SER:HB3	2.03	0.59
3:D:803:GLY:O	3:D:826:PRO:N	2.35	0.59
1:A:191:LEU:HD23	1:A:191:LEU:N	2.17	0.59
2:C:640:ARG:O	2:C:656:ALA:HB1	2.02	0.59
2:C:600:ASP:C	2:C:648:ARG:HB2	2.23	0.59
2:C:910:THR:HB	2:C:913:GLU:HG3	1.85	0.59
3:D:1097:ARG:NH1	3:D:1097:ARG:HG3	2.18	0.59
3:D:1332:ASP:C	3:D:1334:HIS:N	2.56	0.59
3:D:1433:LYS:CG	3:D:1434:SER:H	2.14	0.59
3:D:14:SER:O	3:D:17:LYS:N	2.33	0.59
3:D:979:TYR:C	3:D:981:MET:N	2.56	0.59
2:C:202:TYR:OH	2:C:304:LEU:HD22	2.03	0.59
2:C:163:ILE:HG22	2:C:265:LYS:NZ	2.18	0.59
2:C:376:ARG:N	2:C:377:PRO:CD	2.61	0.59
2:C:603:VAL:O	2:C:604:VAL:HB	2.02	0.59
2:C:842:ARG:NH2	2:C:887:GLU:OE1	2.34	0.59
2:C:872:ASN:ND2	2:C:874:LEU:N	2.51	0.59
3:D:1104:HIS:ND1	3:D:1105:GLU:N	2.50	0.59
3:D:1268:ARG:HH12	3:D:1331:ILE:CB	2.16	0.59
3:D:954:ASP:O	3:D:955:ALA:HB3	2.03	0.59
1:B:105:PRO:HB3	1:B:132:GLU:HG3	1.85	0.59
1:B:173:VAL:HG12	1:B:200:THR:CG2	2.33	0.59
2:C:493:ARG:HH12	3:D:1070:GLU:CA	2.16	0.59
1:A:133:GLU:OE1	2:C:606:VAL:HB	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:700:TYR:CB	2:C:833:LEU:HD22	2.32	0.59
2:C:701:THR:HG22	2:C:832:LYS:CA	2.27	0.59
2:C:743:VAL:HG12	2:C:744:ARG:N	2.18	0.59
3:D:601:ARG:HD3	3:D:605:ASP:CG	2.23	0.59
1:A:26:GLU:CB	1:A:27:PRO:CD	2.72	0.59
2:C:1034:GLU:HA	2:C:1037:VAL:HG23	1.84	0.59
2:C:257:LEU:O	2:C:259:GLY:N	2.36	0.59
2:C:344:PHE:O	2:C:346:VAL:N	2.36	0.59
2:C:565:GLN:HG3	2:C:668:LEU:HD13	1.84	0.59
3:D:616:GLN:O	3:D:617:ASN:CB	2.50	0.59
3:D:719:VAL:O	3:D:721:VAL:HG23	2.03	0.59
3:D:638:LYS:CB	3:D:729:HIS:CE1	2.86	0.59
1:A:23:PHE:CD2	1:A:210:LEU:HD22	2.37	0.59
2:C:1034:GLU:CG	2:C:1035:MET:N	2.66	0.59
2:C:196:LEU:O	2:C:200:LEU:HG	2.03	0.59
2:C:457:ALA:C	2:C:459:ALA:H	2.07	0.59
2:C:571:LEU:N	2:C:571:LEU:CD1	2.65	0.59
2:C:915:LYS:O	2:C:916:GLU:C	2.41	0.59
3:D:1482:VAL:HG13	3:D:1484:PHE:HE2	1.67	0.59
3:D:657:LEU:HD12	3:D:660:LYS:HB3	1.84	0.59
1:A:111:VAL:HG22	1:A:124:PRO:HB2	1.85	0.58
2:C:54:ILE:O	2:C:65:VAL:O	2.21	0.58
2:C:613:VAL:HG21	2:C:619:ARG:HG3	1.85	0.58
2:C:398:THR:OG1	2:C:633:GLN:HG3	2.02	0.58
2:C:682:TYR:HB3	2:C:689:VAL:HG22	1.85	0.58
2:C:845:ASN:HD21	2:C:876:VAL:HG11	1.68	0.58
2:C:881:ASN:C	2:C:882:LEU:HD23	2.23	0.58
2:C:901:TYR:O	2:C:902:ILE:HD12	2.03	0.58
3:D:1284:ILE:HG12	3:D:1293:VAL:HG13	1.85	0.58
1:A:38:ASN:O	1:A:41:ARG:N	2.36	0.58
2:C:40:GLU:HG2	2:C:41:ASN:ND2	2.18	0.58
2:C:642:ARG:H	2:C:656:ALA:HB2	1.68	0.58
2:C:772:ARG:HH11	2:C:776:SER:HB3	1.68	0.58
3:D:791:TYR:CE1	3:D:1024:MET:HG3	2.38	0.58
4:E:81:PRO:HB2	4:E:84:ARG:HB2	1.84	0.58
1:A:200:THR:HG22	1:A:201:ASP:N	2.18	0.58
2:C:115:LEU:CD1	2:C:116:GLY:H	2.15	0.58
2:C:308:ARG:O	2:C:310:LEU:N	2.37	0.58
2:C:501:THR:O	2:C:502:PRO:C	2.41	0.58
2:C:54:ILE:HD13	2:C:355:VAL:HG13	1.84	0.58
2:C:852:ILE:O	2:C:852:ILE:HG12	2.02	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1275:ILE:HA	3:D:1323:GLY:CA	2.33	0.58
3:D:1273:ALA:HB1	3:D:1325:PRO:HG2	1.85	0.58
3:D:564:GLU:HA	3:D:567:ILE:HG22	1.85	0.58
3:D:901:GLN:CB	3:D:905:PRO:HG3	2.27	0.58
1:B:117:ALA:O	1:B:119:VAL:N	2.36	0.58
2:C:290:LEU:HA	2:C:300:ASP:HA	1.83	0.58
2:C:362:GLY:HA3	2:C:367:LEU:HD23	1.84	0.58
2:C:570:PRO:CG	2:C:635:THR:HG23	2.33	0.58
2:C:987:ILE:HA	3:D:948:ILE:HG23	1.85	0.58
3:D:1438:ALA:HA	3:D:1441:PHE:HD1	1.68	0.58
1:A:224:PHE:HD2	1:B:11:PHE:CZ	2.21	0.58
1:B:194:LEU:HD11	1:B:196:LEU:HD13	1.86	0.58
1:B:24:VAL:HG22	1:B:195:THR:HA	1.86	0.58
2:C:290:LEU:HD11	2:C:298:PHE:HB3	1.84	0.58
2:C:360:VAL:O	2:C:361:MET:C	2.41	0.58
2:C:460:ARG:HH11	2:C:464:LEU:HD21	1.67	0.58
3:D:1257:LEU:HB3	3:D:1258:PRO:HD3	1.86	0.58
3:D:1295:VAL:O	3:D:1295:VAL:HG12	2.04	0.58
3:D:1305:LYS:N	3:D:1305:LYS:HD3	2.18	0.58
3:D:1379:TYR:CD1	3:D:1379:TYR:N	2.72	0.58
3:D:607:LEU:HD11	3:D:614:PHE:CZ	2.38	0.58
2:C:1055:ILE:N	2:C:1055:ILE:HD12	2.18	0.58
2:C:352:ALA:C	2:C:355:VAL:HG12	2.23	0.58
2:C:523:ILE:C	2:C:525:ALA:N	2.56	0.58
2:C:654:LEU:HD12	2:C:654:LEU:O	2.03	0.58
3:D:1043:ARG:NH2	3:D:1066:LEU:HD21	2.17	0.58
3:D:1104:HIS:O	3:D:1106:ILE:N	2.36	0.58
1:B:79:ILE:HD11	1:B:164:ILE:HD12	1.84	0.58
2:C:13:ILE:C	2:C:15:LEU:N	2.55	0.58
2:C:140:ILE:HB	2:C:332:ARG:O	2.04	0.58
2:C:165:LEU:O	2:C:167:LYS:N	2.36	0.58
2:C:605:LYS:HG3	2:C:612:ALA:N	2.05	0.58
3:D:711:LEU:HD12	3:D:778:LEU:HD23	1.86	0.58
1:B:41:ARG:HG2	1:B:176:VAL:CG1	2.33	0.58
2:C:1008:ARG:HD2	2:C:1029:GLY:N	2.17	0.58
2:C:112:GLU:O	2:C:113:VAL:HB	2.04	0.58
2:C:265:LYS:O	2:C:266:ARG:HB2	2.04	0.58
2:C:342:ASP:O	2:C:346:VAL:HG23	2.03	0.58
2:C:443:THR:HB	2:C:444:PRO:HD3	1.86	0.58
2:C:443:THR:O	2:C:444:PRO:O	2.22	0.58
2:C:573:ARG:O	2:C:575:GLN:HG3	2.04	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:725:ASP:OD1	2:C:725:ASP:O	2.20	0.58
3:D:1482:VAL:HG11	4:E:18:ARG:HA	1.84	0.58
3:D:496:LEU:HG	3:D:500:ARG:HG2	1.85	0.58
3:D:654:LYS:O	3:D:657:LEU:N	2.37	0.58
3:D:859:ASP:OD1	3:D:861:GLN:NE2	2.36	0.58
2:C:163:ILE:HB	2:C:164:PRO:HD2	1.84	0.58
2:C:271:GLU:O	2:C:272:ALA:HB3	2.03	0.58
2:C:600:ASP:HA	2:C:648:ARG:HD2	1.86	0.58
2:C:603:VAL:HG21	2:C:645:VAL:CA	2.34	0.58
3:D:1068:VAL:CG1	3:D:1070:GLU:HB2	2.32	0.58
3:D:961:LYS:HE3	3:D:1042:MET:HB3	1.86	0.58
4:E:38:THR:HG22	4:E:39:VAL:N	2.19	0.58
1:A:91:ASP:HB3	1:A:94:TRP:NE1	2.19	0.58
2:C:552:HIS:ND1	3:D:1065:GLY:HA2	2.17	0.58
2:C:889:HIS:CE1	3:D:951:GLY:N	2.62	0.58
3:D:501:ALA:HB1	3:D:1454:ALA:HA	1.86	0.58
3:D:704:ARG:HH11	3:D:704:ARG:HG2	1.67	0.58
3:D:853:VAL:HG13	3:D:858:LEU:O	2.04	0.58
3:D:908:LYS:HD2	3:D:1028:GLY:HA3	1.86	0.58
3:D:925:GLU:O	3:D:928:ALA:HB3	2.04	0.58
3:D:979:TYR:C	3:D:981:MET:H	2.05	0.58
1:A:16:GLN:HG3	1:A:20:TYR:HB3	1.86	0.57
2:C:266:ARG:HG2	2:C:268:ASP:CA	2.34	0.57
2:C:509:ALA:O	2:C:515:ALA:O	2.22	0.57
2:C:642:ARG:O	2:C:643:VAL:HG23	2.04	0.57
2:C:679:PHE:HB2	2:C:870:ILE:HG21	1.86	0.57
2:C:795:GLY:O	2:C:797:GLY:N	2.37	0.57
2:C:710:ILE:HD12	2:C:823:VAL:O	2.03	0.57
2:C:936:VAL:HG13	2:C:940:GLU:HB2	1.86	0.57
3:D:1044:GLY:HA3	3:D:1058:VAL:H	1.69	0.57
3:D:1212:MET:C	3:D:1214:ARG:H	2.07	0.57
3:D:17:LYS:O	3:D:20:SER:N	2.34	0.57
4:E:50:THR:O	4:E:52:GLU:N	2.37	0.57
1:A:123:ASN:O	1:A:124:PRO:O	2.22	0.57
1:A:19:HIS:HA	1:A:201:ASP:OD1	2.03	0.57
1:A:39:PRO:HA	1:B:35:THR:HG23	1.86	0.57
1:B:86:VAL:H	1:B:123:ASN:HD21	1.52	0.57
2:C:1008:ARG:HD2	2:C:1029:GLY:H	1.69	0.57
2:C:102:HIS:HB3	2:C:104:ASP:OD1	2.04	0.57
2:C:139:GLN:NE2	2:C:334:ARG:HH21	2.02	0.57
2:C:163:ILE:HD12	2:C:163:ILE:O	2.03	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:541:SER:OG	2:C:544:THR:HB	2.04	0.57
2:C:892:LEU:HA	2:C:895:TYR:HB3	1.85	0.57
2:C:906:PHE:O	2:C:907:ASP:HB2	2.04	0.57
3:D:1238:THR:HG22	3:D:1239:MET:N	2.19	0.57
3:D:1221:ALA:HB2	3:D:1475:ALA:CB	2.32	0.57
3:D:770:LEU:CD1	3:D:770:LEU:N	2.66	0.57
2:C:946:ARG:HE	3:D:861:GLN:NE2	2.00	0.57
4:E:40:LEU:HB3	4:E:44:GLU:O	2.03	0.57
2:C:1085:PHE:CD1	3:D:1469:LEU:HD22	2.39	0.57
2:C:202:TYR:HB3	2:C:207:LEU:HD13	1.85	0.57
2:C:492:ASP:N	2:C:531:PHE:CB	2.66	0.57
2:C:848:VAL:HG12	3:D:740:PHE:O	2.04	0.57
2:C:552:HIS:NE2	2:C:886:LEU:HD12	2.19	0.57
3:D:1210:LEU:O	3:D:1210:LEU:HG	2.05	0.57
3:D:1434:SER:HB3	3:D:1465:GLU:OE2	2.03	0.57
3:D:660:LYS:O	3:D:664:LYS:N	2.28	0.57
3:D:728:LEU:CD2	3:D:745:MET:HE1	2.34	0.57
3:D:625:TYR:CE1	3:D:751:LEU:HD11	2.39	0.57
3:D:87:ARG:O	3:D:88:TYR:O	2.22	0.57
3:D:929:ARG:HH11	3:D:929:ARG:HG2	1.69	0.57
1:A:111:VAL:HG23	1:A:125:ASP:N	2.19	0.57
1:B:178:PHE:CB	1:B:196:LEU:HD12	2.34	0.57
2:C:1036:GLU:O	2:C:1040:LEU:HD23	2.03	0.57
2:C:291:VAL:HB	2:C:299:LYS:HE3	1.86	0.57
2:C:38:LYS:O	2:C:39:ARG:HB2	2.03	0.57
2:C:501:THR:O	2:C:507:ARG:NH2	2.37	0.57
2:C:642:ARG:H	2:C:656:ALA:CA	2.17	0.57
3:D:1077:GLY:HA2	3:D:1080:LYS:HG2	1.87	0.57
3:D:1262:GLU:CD	3:D:1269:PRO:HB3	2.25	0.57
3:D:1485:THR:HG23	4:E:85:LEU:HD22	1.86	0.57
3:D:1495:ALA:HB1	4:E:91:ARG:HD3	1.86	0.57
3:D:507:ASN:O	3:D:508:ARG:CG	2.52	0.57
3:D:793:THR:HG22	3:D:879:ARG:HA	1.86	0.57
1:B:70:GLY:O	1:B:131:LEU:HB2	2.04	0.57
2:C:1045:ALA:HB1	2:C:1048:THR:CB	2.29	0.57
2:C:283:VAL:CG1	2:C:284:GLY:H	2.17	0.57
2:C:389:SER:C	2:C:391:LEU:H	2.07	0.57
2:C:434:HIS:C	2:C:436:GLY:H	2.08	0.57
2:C:568:ALA:CB	2:C:668:LEU:HD22	2.33	0.57
2:C:72:ARG:HD3	2:C:112:GLU:OE1	2.04	0.57
3:D:1087:LEU:HD12	3:D:1090:ALA:CB	2.33	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:638:LYS:HA	3:D:729:HIS:CD2	2.39	0.57
3:D:642:CYS:SG	3:D:702:LEU:HD23	2.45	0.57
3:D:747:VAL:HG22	3:D:747:VAL:O	2.05	0.57
1:A:215:ALA:O	1:A:218:LYS:HB2	2.04	0.57
2:C:144:PRO:HA	2:C:162:ILE:HG22	1.87	0.57
2:C:910:THR:CG2	2:C:912:PRO:HD2	2.33	0.57
2:C:996:LYS:O	2:C:996:LYS:HG2	2.05	0.57
3:D:1020:PRO:C	3:D:1022:TYR:H	2.06	0.57
3:D:1102:VAL:HA	3:D:1429:ALA:HB2	1.86	0.57
3:D:1426:THR:C	3:D:1428:SER:H	2.08	0.57
3:D:642:CYS:O	3:D:719:VAL:HB	2.05	0.57
2:C:1034:GLU:O	2:C:1037:VAL:HG23	2.05	0.57
2:C:255:ALA:C	2:C:257:LEU:N	2.57	0.57
2:C:528:GLU:O	2:C:529:VAL:CB	2.53	0.57
2:C:839:LEU:HB3	2:C:994:ILE:HG21	1.86	0.57
2:C:959:PRO:HG2	2:C:960:GLU:H	1.70	0.57
3:D:582:ILE:HG22	3:D:583:ASP:H	1.70	0.57
3:D:808:THR:N	3:D:809:PRO:CD	2.67	0.57
4:E:82:GLU:O	4:E:85:LEU:HB3	2.05	0.57
2:C:313:LEU:O	2:C:313:LEU:HG	2.05	0.57
2:C:34:VAL:HG11	2:C:38:LYS:HG3	1.87	0.57
2:C:368:THR:HB	2:C:369:PRO:HD2	1.87	0.57
2:C:816:LYS:NZ	2:C:817:PRO:HG2	2.20	0.57
2:C:957:LYS:HB3	2:C:961:GLU:HB3	1.85	0.57
3:D:730:PRO:O	3:D:731:LEU:C	2.42	0.57
3:D:936:TYR:CD2	3:D:936:TYR:C	2.77	0.57
1:A:123:ASN:ND2	1:A:126:LEU:HD22	2.20	0.57
2:C:439:CYS:HA	2:C:455:LEU:HA	1.86	0.57
2:C:54:ILE:HD11	2:C:359:MET:SD	2.44	0.57
2:C:613:VAL:CG1	2:C:619:ARG:HA	2.33	0.57
2:C:698:ASP:OD2	2:C:701:THR:HG21	2.05	0.57
3:D:607:LEU:O	3:D:608:SER:HB2	2.05	0.57
3:D:688:TRP:C	3:D:690:ALA:H	2.07	0.57
3:D:709:HIS:HA	3:D:1228:GLU:CB	2.35	0.57
2:C:151:ASP:HA	2:C:158:TYR:CD2	2.37	0.57
2:C:176:VAL:HG11	2:C:311:PHE:HE2	1.69	0.57
2:C:580:MET:O	2:C:581:THR:CB	2.52	0.57
2:C:613:VAL:HG21	2:C:619:ARG:HE	1.70	0.57
2:C:987:ILE:HD11	3:D:946:GLY:CA	2.35	0.57
3:D:1020:PRO:C	3:D:1022:TYR:N	2.55	0.57
3:D:1137:LYS:HE3	3:D:1140:ASP:OD1	2.05	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:768:ASN:HD22	4:E:16:LYS:NZ	2.02	0.57
1:A:100:LEU:HD23	1:A:113:PHE:CE1	2.39	0.56
1:A:162:ASN:O	1:A:164:ILE:HG23	2.05	0.56
1:A:204:VAL:HG23	1:A:205:THR:N	2.19	0.56
1:A:67:THR:O	1:A:67:THR:HG23	2.05	0.56
2:C:1105:LYS:H	2:C:1108:PRO:HG2	1.70	0.56
2:C:502:PRO:O	2:C:507:ARG:NH2	2.37	0.56
2:C:845:ASN:ND2	2:C:884:GLN:NE2	2.42	0.56
3:D:1104:HIS:C	3:D:1106:ILE:N	2.57	0.56
3:D:1252:ASP:HB2	3:D:1270:LYS:NZ	2.19	0.56
3:D:1404:LEU:C	3:D:1408:LEU:HB2	2.25	0.56
3:D:1265:GLU:OE2	3:D:1424:GLY:O	2.23	0.56
3:D:586:ARG:O	3:D:588:GLY:N	2.38	0.56
3:D:95:LEU:O	3:D:96:ALA:HB2	2.04	0.56
1:B:173:VAL:CA	1:B:200:THR:HG22	2.32	0.56
1:A:15:THR:CG2	1:B:229:ALA:HB1	2.35	0.56
2:C:148:PHE:HE2	2:C:310:LEU:HB2	1.70	0.56
3:D:23(U):UNK:CB	3:D:43(U):UNK:N	2.69	0.56
3:D:486:ARG:CG	3:D:487:ALA:H	2.18	0.56
3:D:858:LEU:O	3:D:860:LEU:N	2.38	0.56
3:D:977:GLN:C	3:D:979:TYR:H	2.09	0.56
2:C:1060:ILE:O	2:C:1064:ASN:ND2	2.38	0.56
2:C:118:LEU:HD23	2:C:118:LEU:O	2.05	0.56
2:C:184:MET:CE	2:C:191:PHE:HZ	2.17	0.56
2:C:352:ALA:CA	2:C:355:VAL:HG12	2.34	0.56
2:C:549:PHE:CE2	2:C:886:LEU:HB3	2.41	0.56
3:D:1232:GLU:HB3	3:D:1233:PRO:CD	2.30	0.56
3:D:1400:ASP:OD2	3:D:1418:TRP:CE3	2.58	0.56
3:D:97:THR:O	3:D:571:LYS:HE2	2.05	0.56
4:E:27:ALA:HB1	4:E:60:ALA:HB1	1.86	0.56
1:A:58:ILE:HG23	1:A:139:MET:HG2	1.86	0.56
2:C:110:GLU:HG3	2:C:369:PRO:C	2.26	0.56
2:C:260:LEU:HD23	2:C:261:LEU:HB3	1.87	0.56
2:C:305:PRO:HB3	2:C:308:ARG:HH21	1.71	0.56
2:C:455:LEU:HD12	2:C:455:LEU:C	2.25	0.56
2:C:5:ARG:HG3	2:C:902:ILE:CG2	2.36	0.56
2:C:603:VAL:HG21	2:C:645:VAL:C	2.26	0.56
2:C:705:ILE:HD12	2:C:705:ILE:O	2.05	0.56
2:C:80:GLN:O	2:C:81:ASP:CB	2.50	0.56
2:C:860:HIS:H	2:C:977:GLY:H	1.53	0.56
3:D:1108:VAL:HG21	3:D:1216:VAL:CG1	2.35	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:709:HIS:CA	3:D:1228:GLU:HB3	2.35	0.56
3:D:795:VAL:HG22	3:D:876:ASN:CG	2.25	0.56
1:A:56:VAL:HG23	1:A:164:ILE:HD11	1.87	0.56
1:A:174:ARG:O	1:A:175:ARG:HB2	2.06	0.56
1:B:86:VAL:H	1:B:123:ASN:ND2	2.03	0.56
2:C:257:LEU:HB3	2:C:264:PRO:CG	2.35	0.56
2:C:344:PHE:C	2:C:346:VAL:N	2.58	0.56
2:C:421:GLU:HG3	2:C:422:ARG:N	2.20	0.56
2:C:642:ARG:H	2:C:656:ALA:CB	2.17	0.56
2:C:839:LEU:HD12	2:C:994:ILE:CG2	2.35	0.56
3:D:1093:GLY:HA2	3:D:1097:ARG:NH2	2.20	0.56
3:D:1108:VAL:HA	3:D:1202:CYS:O	2.06	0.56
3:D:1327:THR:C	3:D:1329:GLY:H	2.09	0.56
3:D:1418:TRP:HD1	3:D:1419:LYS:O	1.89	0.56
3:D:614:PHE:CD1	3:D:1439:ALA:HB1	2.39	0.56
3:D:544:TYR:OH	3:D:603:LEU:HD21	2.05	0.56
3:D:855:HIS:O	3:D:857:LEU:HD22	2.06	0.56
3:D:836:VAL:HG11	3:D:858:LEU:HD21	1.86	0.56
3:D:96:ALA:O	3:D:97:THR:C	2.43	0.56
4:E:81:PRO:CB	4:E:84:ARG:HD2	2.36	0.56
1:A:91:ASP:HB3	1:A:94:TRP:HE1	1.71	0.56
2:C:1062:GLY:O	2:C:1063:ARG:C	2.43	0.56
2:C:15:LEU:HD11	2:C:461:VAL:HG21	1.86	0.56
2:C:328:LEU:O	2:C:467:ILE:HD13	2.05	0.56
2:C:493:ARG:NH2	3:D:1070:GLU:OE2	2.38	0.56
2:C:547:ILE:HG23	2:C:843:HIS:CE1	2.40	0.56
2:C:760:SER:CB	2:C:788:THR:HG21	2.35	0.56
2:C:876:VAL:HB	2:C:877:PRO:CD	2.35	0.56
3:D:1155:GLU:CB	3:D:1160:ARG:HG2	2.35	0.56
3:D:1327:THR:O	3:D:1329:GLY:N	2.34	0.56
3:D:858:LEU:HB3	3:D:877:PRO:HG3	1.86	0.56
3:D:955:ALA:HA	3:D:1040:CYS:SG	2.46	0.56
3:D:975:ILE:HD12	3:D:989:ARG:HG3	1.86	0.56
4:E:59:ASN:ND2	4:E:62:THR:OG1	2.37	0.56
2:C:136:ILE:CB	2:C:336:VAL:HG22	2.34	0.56
2:C:249:LYS:O	2:C:250:LYS:C	2.44	0.56
2:C:35:PRO:O	2:C:37:GLU:N	2.31	0.56
3:D:1104:HIS:CE1	3:D:1463:LEU:H	2.18	0.56
3:D:1172:VAL:O	3:D:1176:ILE:HG12	2.06	0.56
3:D:1191:SER:H	3:D:1194:THR:HG22	1.70	0.56
3:D:1408:LEU:C	3:D:1410:ALA:N	2.58	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1458:ASP:CG	3:D:1460:LEU:HD23	2.24	0.56
3:D:948:ILE:CD1	3:D:948:ILE:H	2.09	0.56
4:E:26:ARG:HH21	4:E:67:GLU:CD	2.08	0.56
1:B:105:PRO:HB3	1:B:133:GLU:N	2.16	0.56
2:C:11:GLU:OE1	2:C:473:ARG:HG3	2.06	0.56
1:A:72:LYS:CB	2:C:607:ASP:HB3	2.35	0.56
2:C:722:ILE:HD13	2:C:823:VAL:CG2	2.34	0.56
3:D:961:LYS:HE3	3:D:1042:MET:H	1.70	0.56
3:D:1138:ARG:HD2	3:D:1138:ARG:N	2.20	0.56
3:D:548:ILE:C	3:D:550:ARG:H	2.09	0.56
3:D:728:LEU:HD22	3:D:745:MET:HE3	1.85	0.56
2:C:984:GLU:HG3	3:D:945:SER:HA	1.86	0.56
1:A:28:LEU:HD23	1:B:220:HIS:CE1	2.41	0.56
2:C:251:ASP:O	2:C:252:LYS:HB3	2.04	0.56
2:C:51:THR:OG1	2:C:348:LEU:HD23	2.05	0.56
2:C:394:PHE:O	2:C:395:LYS:HB2	2.06	0.56
2:C:410:ILE:HD13	2:C:468:ARG:HH21	1.70	0.56
2:C:523:ILE:O	2:C:525:ALA:N	2.39	0.56
2:C:545:ASN:HB2	2:C:583:LEU:HD12	1.86	0.56
3:D:508:ARG:O	3:D:508:ARG:HG3	2.06	0.56
3:D:860:LEU:HD12	3:D:878:GLY:HA2	1.88	0.56
1:A:133:GLU:HB3	2:C:606:VAL:HG23	1.88	0.56
1:A:161:ILE:CG2	1:A:162:ASN:N	2.69	0.56
1:A:196:LEU:HG	1:A:198:ILE:CD1	2.36	0.56
2:C:204:GLN:O	2:C:205:GLU:HB2	2.06	0.56
2:C:100:LEU:HD21	2:C:367:LEU:O	2.06	0.56
2:C:369:PRO:C	2:C:371:LYS:N	2.57	0.56
2:C:29:ALA:O	2:C:43:GLY:HA3	2.06	0.56
2:C:491:GLU:HG2	2:C:510:THR:O	2.05	0.56
2:C:401:LEU:CD2	2:C:543:ASN:HB2	2.30	0.56
2:C:648:ARG:HG2	2:C:648:ARG:HH11	1.70	0.56
2:C:758:ARG:NH1	2:C:758:ARG:HG3	2.19	0.56
2:C:872:ASN:HD21	2:C:874:LEU:CA	2.19	0.56
3:D:1063:ARG:HG3	3:D:1063:ARG:NH1	2.21	0.56
3:D:1127:ASP:OD1	3:D:1129:VAL:HB	2.06	0.56
3:D:518:PRO:HB3	3:D:544:TYR:CD1	2.41	0.56
3:D:551:ASN:HA	3:D:574:LEU:HD13	1.87	0.56
3:D:899:LEU:H	3:D:899:LEU:HD22	1.69	0.56
4:E:23:VAL:HG21	4:E:65:MET:HG2	1.87	0.56
4:E:8:LYS:NZ	4:E:69:LEU:HD21	2.20	0.56
1:A:86:VAL:HG12	1:A:123:ASN:CG	2.26	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:198:ILE:O	1:A:198:ILE:HG22	2.04	0.56
1:B:99:ILE:HA	1:B:139:MET:O	2.06	0.56
1:B:168:ALA:HB1	1:B:170:PHE:CE1	2.41	0.56
1:A:224:PHE:CE1	1:B:36:LEU:HD11	2.37	0.56
2:C:274:ARG:HG3	2:C:275:TYR:CD1	2.38	0.56
2:C:391:LEU:HD22	2:C:415:PRO:HD3	1.88	0.56
2:C:428:ARG:CZ	3:D:1086:ALA:HB3	2.36	0.56
2:C:460:ARG:HD2	2:C:464:LEU:HD21	1.84	0.56
2:C:498:GLN:CB	2:C:503:LEU:H	2.19	0.56
2:C:869:VAL:CG2	2:C:871:LEU:HD13	2.36	0.56
3:D:26:VAL:H	3:D:79:GLU:CB	2.19	0.56
1:A:70:GLY:HA2	2:C:606:VAL:CG2	2.36	0.55
1:B:172:PRO:O	1:B:200:THR:HB	2.06	0.55
2:C:136:ILE:HB	2:C:336:VAL:CG2	2.36	0.55
2:C:149:THR:HB	2:C:158:TYR:CZ	2.41	0.55
2:C:193:LEU:HD13	2:C:193:LEU:O	2.06	0.55
2:C:21:ILE:HG23	2:C:460:ARG:HH21	1.71	0.55
2:C:474:VAL:HG22	2:C:530:GLU:CA	2.36	0.55
2:C:640:ARG:NH1	2:C:640:ARG:HG3	2.21	0.55
3:D:1193:LEU:HD21	3:D:1370:GLU:HA	1.87	0.55
3:D:1195:CYS:SG	3:D:1202:CYS:HB2	2.46	0.55
3:D:126:VAL:H	3:D:456:MET:HE2	1.71	0.55
3:D:1354:GLN:HE21	3:D:1369:ILE:HD11	1.71	0.55
3:D:661:MET:CE	3:D:677:LEU:HD21	2.36	0.55
3:D:764:LEU:HG	3:D:766:ALA:H	1.70	0.55
4:E:30:LEU:O	4:E:32:ARG:N	2.36	0.55
2:C:683:ASN:ND2	2:C:870:ILE:HG22	2.22	0.55
2:C:745:ILE:HD12	2:C:802:GLY:HA2	1.87	0.55
2:C:902:ILE:O	2:C:902:ILE:HG22	2.05	0.55
3:D:1180:GLU:C	3:D:1182:GLY:H	2.08	0.55
3:D:127:LEU:O	3:D:145:VAL:HA	2.06	0.55
3:D:796:ARG:NH2	3:D:861:GLN:OE1	2.39	0.55
3:D:875:THR:CG2	3:D:876:ASN:N	2.69	0.55
3:D:899:LEU:O	3:D:900:ILE:CG1	2.55	0.55
3:D:908:LYS:HG2	3:D:909:ASN:N	2.21	0.55
1:A:131:LEU:HD21	1:A:137:LEU:HD22	1.88	0.55
2:C:80:GLN:HG3	2:C:90:TYR:CE1	2.41	0.55
2:C:878:SER:OG	2:C:879:ARG:N	2.38	0.55
2:C:674:VAL:N	2:C:990:GLY:O	2.36	0.55
3:D:1145:LEU:HD11	3:D:1187:VAL:HG21	1.88	0.55
3:D:1349:LEU:HG	3:D:1376:MET:HE3	1.87	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1354:GLN:NE2	3:D:1369:ILE:HD11	2.21	0.55
3:D:542:ASP:O	3:D:543:LEU:C	2.44	0.55
3:D:767:HIS:CE1	4:E:2:ALA:HB1	2.41	0.55
3:D:87:ARG:CA	3:D:522:PRO:HG2	2.37	0.55
1:A:21:GLY:HA3	1:A:23:PHE:CZ	2.40	0.55
2:C:208:VAL:HG12	2:C:209:ARG:N	2.21	0.55
2:C:336:VAL:HA	2:C:339:LEU:CD1	2.37	0.55
2:C:841:ASN:C	2:C:841:ASN:HD22	2.09	0.55
2:C:987:ILE:HG22	2:C:987:ILE:O	2.04	0.55
3:D:654:LYS:O	3:D:657:LEU:HB3	2.07	0.55
3:D:662:GLU:HG3	3:D:670:VAL:CG2	2.36	0.55
2:C:987:ILE:HD11	3:D:946:GLY:HA3	1.88	0.55
1:A:163:ALA:O	1:A:164:ILE:C	2.45	0.55
1:B:94:TRP:NE1	1:B:119:VAL:HG21	2.21	0.55
1:B:150:VAL:CB	1:B:168:ALA:HB3	2.34	0.55
2:C:466:PHE:CD1	2:C:466:PHE:C	2.80	0.55
3:D:1203:GLN:O	3:D:1204:LYS:CB	2.54	0.55
3:D:1323:GLY:O	3:D:1324:GLN:CG	2.55	0.55
3:D:141:VAL:O	3:D:143:ASP:N	2.35	0.55
3:D:575:GLN:HG3	3:D:579:ASP:OD1	2.05	0.55
3:D:710:ARG:HG3	3:D:711:LEU:N	2.22	0.55
3:D:986:ASP:O	3:D:989:ARG:N	2.38	0.55
1:A:107:GLU:O	1:A:109:ARG:N	2.39	0.55
1:A:13:ALA:O	1:A:15:THR:N	2.40	0.55
1:B:125:ASP:N	1:B:125:ASP:OD2	2.40	0.55
1:B:100:LEU:HD22	1:B:139:MET:HE2	1.89	0.55
2:C:404:LEU:HD23	2:C:587:VAL:HG13	1.89	0.55
2:C:752:GLY:O	2:C:791:ARG:HD3	2.07	0.55
3:D:1167:LEU:HD22	3:D:1167:LEU:H	1.70	0.55
3:D:1148:ARG:CG	3:D:1189:VAL:HG21	2.36	0.55
3:D:1382:VAL:HG23	3:D:1393:GLY:H	1.71	0.55
3:D:1377:LEU:CD1	3:D:1422:LEU:HG	2.36	0.55
3:D:1438:ALA:HA	3:D:1441:PHE:CD1	2.42	0.55
3:D:604:THR:HG22	3:D:608:SER:HB3	1.88	0.55
3:D:764:LEU:HD12	3:D:765:SER:H	1.71	0.55
4:E:13:VAL:CG2	4:E:19:LEU:HB2	2.35	0.55
1:B:25:LEU:HD12	1:B:25:LEU:C	2.27	0.55
2:C:208:VAL:HG22	2:C:212:SER:OG	2.06	0.55
2:C:263:ASP:HB3	2:C:264:PRO:CD	2.32	0.55
2:C:380:ALA:O	2:C:384:GLU:N	2.40	0.55
2:C:675:ALA:HB2	2:C:989:VAL:HG22	1.87	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1126:MET:CG	3:D:1127:ASP:H	2.07	0.55
3:D:1108:VAL:HG11	3:D:1216:VAL:CG1	2.36	0.55
3:D:1278:ILE:CG2	3:D:1279:ASP:H	2.18	0.55
1:A:216:ILE:HG22	1:A:220:HIS:CD2	2.41	0.55
1:B:40:LEU:O	1:B:44:LEU:HB2	2.07	0.55
2:C:352:ALA:HA	2:C:355:VAL:CG1	2.36	0.55
2:C:889:HIS:C	2:C:891:GLY:N	2.59	0.55
3:D:483:HIS:N	3:D:484:PRO:CD	2.56	0.55
3:D:949:THR:HG22	3:D:949:THR:O	2.06	0.55
1:A:102:ALA:HB1	1:A:106:LYS:HE2	1.87	0.55
1:A:41:ARG:C	1:A:41:ARG:HD2	2.28	0.55
2:C:260:LEU:O	2:C:261:LEU:O	2.25	0.55
2:C:704:HIS:ND1	2:C:831:ARG:HD2	2.21	0.55
2:C:876:VAL:O	2:C:880:MET:HB2	2.06	0.55
2:C:882:LEU:CD2	2:C:882:LEU:N	2.62	0.55
3:D:1118:TYR:C	3:D:1119:ILE:HD12	2.28	0.55
3:D:497:GLU:HG2	3:D:1390:LEU:HD21	1.89	0.55
3:D:496:LEU:HD11	3:D:500:ARG:CZ	2.36	0.55
3:D:679:ARG:O	3:D:681:ARG:N	2.38	0.55
3:D:950:ILE:HD12	3:D:953:ASP:HB2	1.87	0.55
2:C:17:PRO:HD2	2:C:20:GLU:CB	2.36	0.55
2:C:312:ALA:HB1	2:C:318:PRO:CG	2.36	0.55
2:C:494:TYR:O	2:C:495:THR:CB	2.55	0.55
2:C:642:ARG:HD3	2:C:654:LEU:HD23	1.89	0.55
2:C:683:ASN:HA	2:C:687:ALA:O	2.07	0.55
1:A:41:ARG:NE	2:C:860:HIS:NE2	2.52	0.55
3:D:1104:HIS:CA	3:D:1223:GLY:HA3	2.36	0.55
3:D:691:LEU:HD12	3:D:692:GLU:H	1.70	0.55
3:D:752:SER:O	3:D:753:SER:C	2.46	0.55
3:D:795:VAL:HG22	3:D:876:ASN:HD21	1.70	0.55
3:D:903:ASP:OD1	3:D:903:ASP:O	2.24	0.55
1:A:100:LEU:HD23	1:A:113:PHE:CD1	2.42	0.54
1:A:82:LEU:HD23	1:A:128:ILE:HD13	1.88	0.54
1:B:131:LEU:HD23	1:B:131:LEU:O	2.07	0.54
2:C:831:ARG:HH12	2:C:1002:GLU:CB	2.18	0.54
2:C:150:PRO:HA	2:C:157:ARG:HA	1.89	0.54
2:C:194:VAL:O	2:C:197:LEU:HB2	2.06	0.54
2:C:340:MET:C	2:C:340:MET:SD	2.86	0.54
2:C:460:ARG:CG	2:C:461:VAL:H	2.20	0.54
2:C:729:LEU:HD23	2:C:734:LEU:CD2	2.37	0.54
3:D:1154:VAL:HG11	3:D:1175:LEU:HD21	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1205:CYS:C	3:D:1207:GLY:H	2.10	0.54
3:D:1486:GLN:HA	4:E:75:PHE:HA	1.88	0.54
3:D:664:LYS:O	3:D:665:ALA:HB3	2.07	0.54
3:D:965:LEU:O	3:D:967:GLU:N	2.38	0.54
4:E:22:VAL:HG12	4:E:23:VAL:N	2.23	0.54
1:A:131:LEU:CD2	1:A:137:LEU:HD22	2.37	0.54
1:B:102:ALA:HB3	1:B:137:LEU:O	2.07	0.54
1:B:73:GLU:OE2	1:B:73:GLU:N	2.40	0.54
2:C:389:SER:C	2:C:391:LEU:N	2.60	0.54
2:C:821:GLU:O	2:C:822:VAL:HG23	2.06	0.54
2:C:928:LYS:O	2:C:929:ARG:C	2.44	0.54
3:D:1220:GLU:O	3:D:1222:VAL:HG23	2.07	0.54
3:D:687:VAL:O	3:D:688:TRP:C	2.46	0.54
3:D:879:ARG:NH1	3:D:905:PRO:HD2	2.22	0.54
4:E:78:ASN:ND2	4:E:79:LEU:HG	2.22	0.54
1:B:102:ALA:CB	1:B:137:LEU:HB3	2.37	0.54
2:C:162:ILE:HG13	2:C:171:TRP:CZ3	2.42	0.54
2:C:22:GLN:NE2	2:C:336:VAL:HG21	2.15	0.54
2:C:394:PHE:HE2	2:C:632:ASN:HB3	1.72	0.54
2:C:434:HIS:O	2:C:436:GLY:N	2.40	0.54
2:C:569:VAL:HG11	2:C:996:LYS:O	2.08	0.54
2:C:729:LEU:HD23	2:C:734:LEU:HD23	1.90	0.54
3:D:1221:ALA:O	3:D:1225:VAL:HG23	2.08	0.54
3:D:1282:VAL:HG22	3:D:1315:LYS:HA	1.88	0.54
3:D:1354:GLN:O	3:D:1357:TYR:N	2.40	0.54
3:D:135:LEU:HA	3:D:139:GLY:O	2.07	0.54
1:A:103:GLU:H	1:A:106:LYS:HZ3	1.54	0.54
1:B:124:PRO:HG2	1:B:125:ASP:H	1.72	0.54
2:C:1012:PRO:HG3	2:C:1024:LYS:H	1.71	0.54
2:C:177:GLU:HG2	2:C:181:VAL:N	2.19	0.54
2:C:203:ASP:O	2:C:206:THR:HG22	2.08	0.54
2:C:408:ARG:NH2	2:C:456:ALA:O	2.40	0.54
2:C:89:THR:HA	2:C:129:ILE:HA	1.89	0.54
3:D:1235:THR:HG22	3:D:1235:THR:O	2.08	0.54
3:D:1292:SER:HA	3:D:1304:TYR:O	2.07	0.54
3:D:1436:LEU:HD22	3:D:1458:ASP:OD2	2.08	0.54
3:D:572:ARG:HG3	3:D:573:MET:HG3	1.89	0.54
3:D:801:GLY:O	3:D:802:ALA:HB2	2.08	0.54
3:D:899:LEU:C	3:D:900:ILE:HG13	2.28	0.54
1:A:24:VAL:HA	1:A:195:THR:HA	1.89	0.54
1:B:33:GLY:CA	1:B:194:LEU:HD23	2.37	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:76:VAL:O	1:B:79:ILE:HB	2.07	0.54
2:C:1030:GLN:HE22	3:D:628:ARG:HD3	1.73	0.54
2:C:743:VAL:CG1	2:C:800:VAL:HG21	2.36	0.54
3:D:958:PRO:HG3	3:D:1008:VAL:HB	1.89	0.54
3:D:661:MET:SD	3:D:677:LEU:HD21	2.46	0.54
3:D:703:ASN:OD1	3:D:704:ARG:N	2.41	0.54
3:D:849:ALA:O	3:D:852:ALA:HB3	2.07	0.54
1:A:62:LEU:CD1	1:A:62:LEU:H	1.93	0.54
2:C:312:ALA:HB1	2:C:318:PRO:HG3	1.90	0.54
2:C:544:THR:C	2:C:546:LEU:H	2.09	0.54
2:C:727:PRO:HG3	2:C:785:VAL:O	2.07	0.54
2:C:862:PRO:HA	2:C:975:TYR:CD1	2.42	0.54
3:D:1089:THR:HA	3:D:1092:SER:HB2	1.88	0.54
3:D:552:ASN:HA	3:D:555:LYS:CB	2.37	0.54
3:D:634:GLY:O	3:D:636:GLN:OE1	2.26	0.54
1:A:142:ARG:CG	1:A:143:VAL:H	2.20	0.54
1:A:170:PHE:O	1:A:171:SER:C	2.46	0.54
1:B:62:LEU:HD23	1:B:62:LEU:N	2.23	0.54
2:C:169:GLY:HA2	2:C:264:PRO:O	2.07	0.54
2:C:324:ASP:C	2:C:326:ASP:H	2.10	0.54
2:C:347:GLY:O	2:C:377:PRO:HB2	2.07	0.54
2:C:445:GLU:O	2:C:449:ILE:HD13	2.06	0.54
2:C:520:GLU:N	2:C:521:PRO:HD3	2.23	0.54
2:C:18:LEU:HD13	2:C:542:LEU:HD21	1.89	0.54
2:C:690:ILE:HD13	2:C:869:VAL:HA	1.89	0.54
2:C:701:THR:CG2	2:C:832:LYS:HA	2.27	0.54
3:D:1044:GLY:O	3:D:1058:VAL:HG23	2.08	0.54
3:D:1110:GLU:HG3	3:D:1111:ALA:H	1.70	0.54
3:D:1353:ILE:O	3:D:1354:GLN:C	2.46	0.54
3:D:542:ASP:O	3:D:545:ARG:N	2.40	0.54
3:D:597:GLU:HG2	3:D:598:ARG:H	1.72	0.54
2:C:648:ARG:NH1	2:C:653:ASP:OD2	2.38	0.54
2:C:642:ARG:H	2:C:656:ALA:HA	1.73	0.54
2:C:957:LYS:HB3	2:C:961:GLU:CB	2.38	0.54
3:D:663:GLU:C	3:D:665:ALA:N	2.60	0.54
3:D:729:HIS:ND1	3:D:730:PRO:HG2	2.23	0.54
3:D:904:VAL:HG12	3:D:906:GLN:OE1	2.08	0.54
1:A:30:ARG:HH11	1:A:191:LEU:H	1.56	0.54
1:B:122:MET:O	1:B:124:PRO:HD3	2.08	0.54
1:A:35:THR:HG23	1:B:39:PRO:HB3	1.89	0.54
2:C:110:GLU:O	2:C:113:VAL:HG23	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:17:PRO:CD	2:C:20:GLU:HB2	2.38	0.54
2:C:18:LEU:HD22	2:C:542:LEU:HD22	1.90	0.54
2:C:203:ASP:O	2:C:204:GLN:C	2.45	0.54
2:C:469:THR:HB	2:C:482:GLU:O	2.07	0.54
3:D:1253:ILE:O	3:D:1259:ARG:HB2	2.08	0.54
3:D:558:LEU:C	3:D:560:GLN:H	2.10	0.54
1:A:74:ASP:O	1:A:76:VAL:N	2.41	0.54
1:B:86:VAL:N	1:B:123:ASN:ND2	2.56	0.54
1:B:34:VAL:HG12	1:B:35:THR:N	2.23	0.54
2:C:165:LEU:C	2:C:167:LYS:H	2.11	0.54
2:C:261:LEU:HD21	2:C:263:ASP:HB3	1.89	0.54
2:C:267:TYR:N	2:C:267:TYR:CD2	2.73	0.54
2:C:731:GLU:O	2:C:733:ALA:N	2.41	0.54
2:C:745:ILE:HG22	2:C:746:GLY:N	2.23	0.54
3:D:1265:GLU:O	3:D:1266:ALA:HB3	2.08	0.54
3:D:733:CYS:O	3:D:736:PHE:HB2	2.08	0.54
1:A:157:ILE:HD11	1:A:160:ARG:NE	2.04	0.53
1:A:56:VAL:O	1:A:164:ILE:HG12	2.07	0.53
1:B:108:VAL:O	1:B:108:VAL:HG12	2.07	0.53
2:C:134:ARG:HH12	2:C:392:SER:CB	2.20	0.53
2:C:336:VAL:O	2:C:339:LEU:N	2.36	0.53
2:C:598:GLU:HG3	2:C:614:ARG:NH2	2.23	0.53
2:C:816:LYS:HZ2	2:C:817:PRO:HG2	1.74	0.53
3:D:1061:SER:C	3:D:1063:ARG:N	2.61	0.53
3:D:573:MET:HA	3:D:576:GLU:HB2	1.89	0.53
3:D:657:LEU:CD1	3:D:690:ALA:HB1	2.37	0.53
3:D:811:GLU:HA	3:D:814:ALA:CB	2.34	0.53
3:D:959:GLU:C	3:D:961:LYS:H	2.12	0.53
4:E:79:LEU:C	4:E:81:PRO:HD2	2.28	0.53
1:A:223:TYR:O	1:A:225:ALA:N	2.40	0.53
2:C:111:ASP:O	2:C:113:VAL:N	2.40	0.53
2:C:320:HIS:C	2:C:322:VAL:N	2.61	0.53
2:C:492:ASP:H	2:C:532:MET:H	1.56	0.53
2:C:556:ASN:O	2:C:559:LEU:HG	2.08	0.53
3:D:1354:GLN:NE2	3:D:1369:ILE:CD1	2.71	0.53
3:D:1381:GLU:OE1	3:D:1392:GLU:HG3	2.08	0.53
3:D:500:ARG:O	3:D:504:ASP:N	2.41	0.53
3:D:99:ALA:O	3:D:100:ALA:HB2	2.07	0.53
1:A:127:HIS:CE1	1:A:130:THR:HG1	2.26	0.53
1:A:181:GLU:O	1:A:193:LYS:HB3	2.08	0.53
1:A:37:GLY:CA	1:A:194:LEU:HD11	2.39	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:197:ARG:HH12	2:C:932:GLU:CD	2.12	0.53
1:B:14:THR:HG21	1:B:22:GLU:HG3	1.90	0.53
2:C:1068:GLN:O	2:C:1072:LYS:HG3	2.09	0.53
2:C:433:THR:OG1	2:C:441:VAL:HG12	2.08	0.53
2:C:718:GLY:HA3	2:C:761:PHE:CD1	2.42	0.53
2:C:677:MET:H	2:C:873:PRO:HD3	1.73	0.53
2:C:914:ILE:O	2:C:918:LEU:HB2	2.08	0.53
3:D:1060:SER:OG	3:D:1066:LEU:HD13	2.08	0.53
3:D:1148:ARG:HD2	3:D:1189:VAL:CG2	2.37	0.53
3:D:1236:GLN:O	3:D:1237:LEU:HD23	2.08	0.53
3:D:1385:PRO:HB2	3:D:1388:SER:O	2.09	0.53
3:D:1409:ILE:HG22	3:D:1409:ILE:O	2.08	0.53
3:D:936:TYR:CE2	3:D:940:THR:HG21	2.44	0.53
4:E:3:GLU:HB2	4:E:6:ILE:CG1	2.38	0.53
1:A:198:ILE:HG21	1:A:206:PRO:HA	1.89	0.53
1:B:117:ALA:C	1:B:119:VAL:H	2.12	0.53
1:B:203:SER:OG	1:B:204:VAL:N	2.40	0.53
2:C:996:LYS:HE2	2:C:1000:MET:CE	2.38	0.53
2:C:162:ILE:HG13	2:C:171:TRP:HH2	1.72	0.53
2:C:253:ALA:O	2:C:255:ALA:N	2.37	0.53
2:C:706:GLU:HA	2:C:706:GLU:OE1	2.09	0.53
2:C:815:LEU:N	2:C:815:LEU:HD12	2.23	0.53
2:C:840:ALA:HA	2:C:846:LYS:HA	1.90	0.53
2:C:903:SER:OG	2:C:909:ALA:HB3	2.08	0.53
2:C:922:PHE:C	2:C:924:LEU:N	2.62	0.53
3:D:1009:PHE:O	3:D:1009:PHE:CD2	2.61	0.53
3:D:1206:TYR:HD2	3:D:1216:VAL:HG21	1.73	0.53
3:D:647:ARG:O	3:D:650:LEU:HB3	2.07	0.53
3:D:761:ILE:HG21	4:E:20:THR:OG1	2.09	0.53
2:C:1076:VAL:O	2:C:1078:GLU:HG3	2.09	0.53
2:C:194:VAL:HG22	2:C:221:LEU:CD1	2.38	0.53
2:C:290:LEU:HG	2:C:291:VAL:N	2.24	0.53
2:C:628:TYR:N	2:C:628:TYR:CD1	2.76	0.53
2:C:890:LEU:O	2:C:890:LEU:HG	2.09	0.53
3:D:1402:GLU:C	3:D:1404:LEU:N	2.62	0.53
3:D:815:ALA:HB3	3:D:832:ARG:HD2	1.90	0.53
4:E:77:GLU:OE1	4:E:77:GLU:HA	2.09	0.53
1:A:122:MET:SD	1:A:122:MET:N	2.70	0.53
1:A:46:SER:OG	2:C:856:GLU:HG2	2.07	0.53
1:A:71:VAL:HA	1:A:131:LEU:HA	1.90	0.53
2:C:970:GLY:HA2	3:D:950:ILE:HG21	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:957:ILE:HD11	3:D:1063:ARG:HD2	1.91	0.53
3:D:1451:ALA:HA	3:D:1456:LYS:CG	2.36	0.53
3:D:660:LYS:O	3:D:664:LYS:HB2	2.08	0.53
3:D:691:LEU:HD12	3:D:691:LEU:N	2.23	0.53
2:C:1005:MET:SD	3:D:724:GLN:HA	2.49	0.53
1:A:199:TRP:O	1:A:200:THR:O	2.26	0.53
1:A:91:ASP:CG	1:A:92:PRO:HD2	2.29	0.53
2:C:1034:GLU:HG3	2:C:1035:MET:N	2.24	0.53
2:C:134:ARG:NH2	2:C:393:GLN:HA	2.24	0.53
2:C:399:ASN:HD22	2:C:401:LEU:H	1.53	0.53
2:C:42:VAL:HG12	2:C:43:GLY:H	1.74	0.53
2:C:491:GLU:O	2:C:509:ALA:CB	2.55	0.53
2:C:690:ILE:O	2:C:852:ILE:HA	2.09	0.53
2:C:816:LYS:HB3	2:C:819:VAL:HG21	1.89	0.53
3:D:1039:LEU:O	3:D:1061:SER:O	2.27	0.53
3:D:1037:ARG:O	3:D:1041:GLY:O	2.27	0.53
3:D:1106:ILE:HD12	3:D:1371:ILE:CG2	2.39	0.53
3:D:502:PHE:HZ	3:D:511:TRP:CZ2	2.23	0.53
3:D:661:MET:O	3:D:664:LYS:HB3	2.09	0.53
4:E:27:ALA:C	4:E:29:GLN:H	2.11	0.53
1:A:223:TYR:CD1	1:B:9:PRO:HD2	2.44	0.53
2:C:136:ILE:HG22	2:C:336:VAL:HG22	1.90	0.53
2:C:163:ILE:HG21	2:C:169:GLY:C	2.29	0.53
2:C:163:ILE:HG12	2:C:169:GLY:O	2.08	0.53
2:C:157:ARG:HG3	2:C:313:LEU:HG	1.91	0.53
2:C:613:VAL:HG11	2:C:619:ARG:CD	2.29	0.53
2:C:701:THR:HG22	2:C:832:LYS:HG2	1.91	0.53
3:D:1484:PHE:O	3:D:1485:THR:C	2.48	0.53
3:D:636:GLN:HE21	3:D:642:CYS:HA	1.73	0.53
3:D:681:ARG:O	3:D:682:ASP:HB3	2.09	0.53
3:D:862:ASP:CA	3:D:876:ASN:HB3	2.25	0.53
3:D:924:MET:O	3:D:927:THR:N	2.42	0.53
3:D:966:GLU:O	3:D:969:ASP:N	2.42	0.53
3:D:1484:PHE:HE1	4:E:22:VAL:HG23	1.74	0.53
2:C:257:LEU:HB3	2:C:264:PRO:HG3	1.90	0.53
2:C:614:ARG:NH1	2:C:623:HIS:HE1	2.05	0.53
3:D:636:GLN:HE21	3:D:642:CYS:CA	2.21	0.53
3:D:679:ARG:O	3:D:680:GLN:HG2	2.09	0.53
3:D:764:LEU:HD23	3:D:767:HIS:NE2	2.24	0.53
3:D:772:PRO:O	3:D:773:ALA:C	2.47	0.53
3:D:937:TYR:O	3:D:938:GLY:C	2.47	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:111:VAL:HG22	1:A:124:PRO:CB	2.38	0.53
1:A:57:TYR:HD2	1:A:57:TYR:C	2.11	0.53
1:A:98:LEU:HB3	1:A:113:PHE:CD2	2.43	0.53
2:C:1012:PRO:HG2	2:C:1027:PHE:HA	1.91	0.53
2:C:159:ILE:HD12	2:C:174:LEU:HB2	1.91	0.53
2:C:232:GLU:C	2:C:234:ALA:N	2.62	0.53
2:C:356:ARG:HA	2:C:359:MET:HG3	1.91	0.53
2:C:45:GLN:O	2:C:48:PHE:HB2	2.09	0.53
2:C:605:LYS:HZ3	2:C:611:ILE:HG13	1.70	0.53
2:C:689:VAL:CG1	2:C:853:LEU:HD22	2.39	0.53
2:C:897:LEU:O	2:C:899:GLN:HG3	2.09	0.53
3:D:1320:VAL:O	3:D:1321:GLU:C	2.47	0.53
3:D:617:ASN:O	3:D:619:LEU:O	2.27	0.53
2:C:21:ILE:HG23	2:C:460:ARG:HH22	1.73	0.52
2:C:258:PHE:N	2:C:258:PHE:CD1	2.77	0.52
2:C:342:ASP:O	2:C:345:ARG:HB2	2.09	0.52
2:C:723:THR:OG1	2:C:724:ARG:N	2.43	0.52
3:D:1219:GLY:C	4:E:17:TYR:HE2	2.12	0.52
3:D:1481:PHE:CD2	3:D:1481:PHE:O	2.62	0.52
3:D:709:HIS:CD2	3:D:711:LEU:HB2	2.44	0.52
1:A:102:ALA:CB	1:A:131:LEU:HD21	2.39	0.52
1:A:79:ILE:HG23	1:A:166:VAL:HG22	1.91	0.52
2:C:1030:GLN:CB	3:D:626:SER:HB3	2.39	0.52
2:C:208:VAL:HG11	2:C:218:VAL:HG21	1.92	0.52
2:C:517:ARG:NH2	3:D:976:GLU:OE1	2.43	0.52
2:C:820:ARG:O	2:C:821:GLU:HB3	2.08	0.52
3:D:1048:LYS:HG2	3:D:1054:PHE:CZ	2.45	0.52
3:D:1070:GLU:C	3:D:1072:PHE:N	2.60	0.52
3:D:1410:ALA:O	3:D:1414:VAL:N	2.42	0.52
3:D:502:PHE:O	3:D:504:ASP:N	2.42	0.52
3:D:543:LEU:HB3	3:D:581:VAL:HG22	1.92	0.52
2:C:1052:MET:CG	3:D:623:VAL:HG22	2.39	0.52
4:E:68:LEU:HA	4:E:73:LEU:HD11	1.90	0.52
1:A:205:THR:CG2	1:A:206:PRO:HD2	2.37	0.52
1:B:19:HIS:O	1:B:20:TYR:C	2.46	0.52
2:C:176:VAL:HG12	2:C:182:VAL:HG22	1.90	0.52
2:C:491:GLU:HG2	2:C:510:THR:HB	1.91	0.52
2:C:610:ARG:CB	2:C:624:PRO:HA	2.39	0.52
2:C:87:ASP:CG	2:C:824:ARG:HH22	2.12	0.52
2:C:890:LEU:HD11	2:C:901:TYR:CE2	2.44	0.52
3:D:1089:THR:HA	3:D:1092:SER:HB3	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1358:ARG:HH22	3:D:1365:HIS:CD2	2.26	0.52
3:D:1494:LYS:C	3:D:1496:ILE:H	2.12	0.52
3:D:668:PRO:HG2	3:D:672:ALA:CB	2.40	0.52
3:D:645:PRO:HA	3:D:722:GLU:O	2.09	0.52
1:B:113:PHE:O	1:B:115:PRO:HD3	2.09	0.52
2:C:1005:MET:O	2:C:1005:MET:HG3	2.09	0.52
2:C:421:GLU:HG3	2:C:423:ALA:H	1.74	0.52
2:C:637:PHE:C	2:C:637:PHE:CD1	2.83	0.52
3:D:1060:SER:OG	3:D:1068:VAL:HG23	2.09	0.52
3:D:26:VAL:C	3:D:28:LYS:H	2.11	0.52
3:D:28(U):UNK:O	3:D:29(U):UNK:O	2.27	0.52
3:D:564:GLU:HA	3:D:567:ILE:CG2	2.39	0.52
3:D:747:VAL:O	3:D:748:HIS:O	2.28	0.52
3:D:795:VAL:CG2	3:D:876:ASN:HD21	2.23	0.52
3:D:855:HIS:O	3:D:857:LEU:CD2	2.57	0.52
3:D:969:ASP:O	3:D:970:ARG:C	2.47	0.52
3:D:767:HIS:NE2	4:E:6:ILE:HG13	2.23	0.52
1:A:181:GLU:OE2	2:C:934:PHE:HD2	1.92	0.52
1:A:199:TRP:HD1	1:A:200:THR:HG1	1.55	0.52
1:A:96:THR:OG1	1:A:97:THR:N	2.43	0.52
1:B:105:PRO:HD3	1:B:133:GLU:HA	1.91	0.52
2:C:202:TYR:O	2:C:203:ASP:HB3	2.09	0.52
2:C:332:ARG:HG2	2:C:333:ILE:N	2.23	0.52
2:C:662:GLU:O	2:C:664:GLY:N	2.42	0.52
2:C:8:ARG:C	2:C:9:ILE:HD12	2.30	0.52
3:D:1061:SER:O	3:D:1062:PHE:HB2	2.09	0.52
3:D:1152:ARG:N	3:D:1163:GLU:HG2	2.24	0.52
3:D:1259:ARG:C	3:D:1261:ILE:N	2.63	0.52
3:D:688:TRP:C	3:D:690:ALA:N	2.61	0.52
1:A:102:ALA:HB3	1:A:137:LEU:CB	2.39	0.52
1:B:59:GLU:O	1:B:60:ASP:HB2	2.09	0.52
2:C:1063:ARG:O	2:C:1066:ALA:HB3	2.09	0.52
2:C:559:LEU:HD12	2:C:560:MET:N	2.25	0.52
2:C:577:PRO:HA	2:C:671:ASN:HD22	1.73	0.52
2:C:593:ALA:HB1	2:C:659:PRO:HD3	1.90	0.52
3:D:590:PRO:O	3:D:600:LEU:HD21	2.09	0.52
3:D:792:ILE:HG23	3:D:792:ILE:O	2.10	0.52
3:D:815:ALA:O	3:D:817:GLU:N	2.43	0.52
2:C:1088:LEU:HD21	3:D:614:PHE:HE2	1.75	0.52
2:C:368:THR:OG1	2:C:371:LYS:HD2	2.09	0.52
3:D:1062:PHE:CE1	3:D:1066:LEU:HD23	2.45	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1070:GLU:HG3	3:D:1073:ILE:HB	1.92	0.52
3:D:1148:ARG:CD	3:D:1189:VAL:HG21	2.38	0.52
3:D:710:ARG:NH2	3:D:1220:GLU:OE2	2.42	0.52
3:D:601:ARG:HH11	3:D:601:ARG:HA	1.73	0.52
3:D:628:ARG:O	3:D:629:SER:HB2	2.10	0.52
1:A:11:PHE:HD1	1:A:25:LEU:HD23	1.75	0.52
1:B:37:GLY:HA3	1:B:194:LEU:HD21	1.90	0.52
2:C:184:MET:CG	2:C:193:LEU:HD23	2.40	0.52
2:C:34:VAL:HG13	2:C:35:PRO:HD2	1.92	0.52
2:C:134:ARG:HH12	2:C:392:SER:HB2	1.74	0.52
2:C:631:SER:CB	2:C:635:THR:HB	2.40	0.52
2:C:637:PHE:CG	2:C:637:PHE:O	2.62	0.52
2:C:974:LEU:HD23	2:C:987:ILE:CB	2.39	0.52
3:D:1052:GLU:O	3:D:1053:THR:O	2.28	0.52
3:D:1093:GLY:HA2	3:D:1097:ARG:HE	1.74	0.52
3:D:112:ILE:O	3:D:114:THR:N	2.42	0.52
3:D:1107:VAL:HG22	3:D:1221:ALA:HA	1.91	0.52
3:D:1315:LYS:O	3:D:1316:ASP:O	2.27	0.52
3:D:1404:LEU:CD2	3:D:1416:VAL:H	2.23	0.52
3:D:1466:ASN:HD21	3:D:1471:ARG:HH11	1.55	0.52
3:D:653:PHE:O	3:D:654:LYS:C	2.48	0.52
3:D:687:VAL:O	3:D:690:ALA:N	2.43	0.52
3:D:927:THR:HG22	3:D:931:LEU:HD23	1.92	0.52
1:A:142:ARG:HG3	1:A:143:VAL:H	1.74	0.52
1:A:30:ARG:CA	1:A:191:LEU:HA	2.40	0.52
2:C:215:GLY:O	2:C:216:ASP:C	2.48	0.52
2:C:266:ARG:HG2	2:C:268:ASP:HA	1.92	0.52
2:C:283:VAL:CG1	2:C:284:GLY:N	2.71	0.52
2:C:427:VAL:C	2:C:429:ASP:H	2.13	0.52
2:C:872:ASN:OD1	2:C:873:PRO:HD2	2.09	0.52
2:C:912:PRO:O	2:C:915:LYS:HB2	2.10	0.52
3:D:1340:LYS:O	3:D:1340:LYS:HG3	2.10	0.52
3:D:1380:VAL:HG22	3:D:1395:VAL:O	2.10	0.52
3:D:1458:ASP:C	3:D:1460:LEU:H	2.13	0.52
3:D:575:GLN:O	3:D:579:ASP:N	2.32	0.52
2:C:1043:TYR:CE2	3:D:763:MET:HA	2.45	0.52
1:A:26:GLU:HB3	1:A:27:PRO:HD2	1.86	0.52
2:C:163:ILE:HG22	2:C:265:LYS:HZ1	1.74	0.52
2:C:774:LEU:HA	2:C:777:ILE:HD12	1.92	0.52
2:C:837:ASP:O	2:C:848:VAL:HA	2.10	0.52
2:C:970:GLY:N	3:D:950:ILE:HG21	2.25	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:987:ILE:CA	3:D:948:ILE:HG21	2.39	0.52
3:D:1018:PHE:HA	3:D:1024:MET:CE	2.40	0.52
3:D:1066:LEU:C	3:D:1068:VAL:H	2.13	0.52
3:D:1232:GLU:C	3:D:1234:GLY:H	2.13	0.52
3:D:1482:VAL:CG1	4:E:18:ARG:HA	2.40	0.52
3:D:1482:VAL:HG13	3:D:1484:PHE:CE2	2.45	0.52
3:D:839:LEU:O	3:D:840:LYS:O	2.28	0.52
3:D:836:VAL:HG11	3:D:858:LEU:HG	1.91	0.52
1:A:102:ALA:HB2	1:A:108:VAL:HG21	1.91	0.51
1:A:131:LEU:CD2	1:A:137:LEU:HB2	2.40	0.51
1:A:79:ILE:CG2	1:A:166:VAL:HG13	2.40	0.51
1:A:80:LEU:HD23	1:A:83:LYS:NZ	2.24	0.51
1:B:133:GLU:OE1	1:B:134:GLY:N	2.38	0.51
2:C:110:GLU:HB2	2:C:369:PRO:HG2	1.91	0.51
2:C:172:ILE:HG13	2:C:186:VAL:HG22	1.92	0.51
2:C:569:VAL:O	2:C:569:VAL:CG1	2.52	0.51
2:C:642:ARG:CD	2:C:654:LEU:HD23	2.40	0.51
2:C:65:VAL:CG2	2:C:101:ILE:HB	2.39	0.51
2:C:918:LEU:HD22	2:C:968:ASP:CA	2.30	0.51
2:C:77:PRO:CD	2:C:92:ALA:HA	2.40	0.51
3:D:1060:SER:OG	3:D:1066:LEU:HA	2.09	0.51
3:D:1259:ARG:O	3:D:1261:ILE:N	2.43	0.51
3:D:1273:ALA:HB2	3:D:1327:THR:CB	2.40	0.51
3:D:1281:VAL:CG1	3:D:1282:VAL:HG23	2.28	0.51
3:D:1271:ALA:CB	3:D:1329:GLY:HA3	2.35	0.51
3:D:1403:ALA:O	3:D:1416:VAL:HG21	2.10	0.51
3:D:772:PRO:CD	3:D:778:LEU:N	2.73	0.51
1:A:109:ARG:O	1:A:111:VAL:N	2.43	0.51
1:A:35:THR:CG2	1:B:39:PRO:HB3	2.40	0.51
1:A:53:VAL:HG13	1:A:141:VAL:HG23	1.91	0.51
1:B:133:GLU:CG	1:B:134:GLY:N	2.72	0.51
1:B:98:LEU:HB2	1:B:141:VAL:O	2.10	0.51
2:C:211:LEU:HD22	2:C:304:LEU:CD1	2.29	0.51
2:C:666:LEU:HD12	2:C:667:ALA:N	2.24	0.51
2:C:676:ILE:CG2	2:C:677:MET:N	2.73	0.51
2:C:743:VAL:CG1	2:C:744:ARG:N	2.73	0.51
2:C:549:PHE:CE2	2:C:886:LEU:HD13	2.46	0.51
2:C:987:ILE:O	2:C:988:VAL:C	2.48	0.51
3:D:1312:LEU:O	3:D:1313:LEU:O	2.27	0.51
3:D:502:PHE:C	3:D:504:ASP:N	2.64	0.51
3:D:578:VAL:HG12	3:D:582:ILE:CD1	2.39	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:691:LEU:O	3:D:693:GLU:N	2.43	0.51
3:D:773:ALA:O	3:D:774:SER:HB2	2.10	0.51
4:E:68:LEU:HA	4:E:73:LEU:HD12	1.92	0.51
2:C:163:ILE:C	2:C:163:ILE:HD12	2.31	0.51
2:C:208:VAL:O	2:C:209:ARG:HB2	2.10	0.51
2:C:344:PHE:CE2	2:C:378:LEU:HD23	2.46	0.51
2:C:547:ILE:HG23	2:C:843:HIS:HE1	1.75	0.51
2:C:64:LEU:HB3	2:C:359:MET:HE1	1.93	0.51
3:D:1149:VAL:O	3:D:1149:VAL:HG12	2.11	0.51
3:D:1193:LEU:HB3	3:D:1346:GLU:OE1	2.10	0.51
3:D:1479:SER:C	3:D:1481:PHE:N	2.60	0.51
3:D:35(U):UNK:O	3:D:36(U):UNK:CB	2.57	0.51
3:D:552:ASN:C	3:D:554:LEU:N	2.63	0.51
3:D:578:VAL:C	3:D:580:ALA:N	2.63	0.51
3:D:601:ARG:HD3	3:D:605:ASP:OD2	2.10	0.51
3:D:687:VAL:O	3:D:690:ALA:CB	2.56	0.51
3:D:699:VAL:HG22	3:D:756:GLN:HE21	1.74	0.51
3:D:927:THR:HG22	3:D:931:LEU:CD2	2.40	0.51
4:E:61:VAL:O	4:E:64:ALA:HB3	2.10	0.51
1:A:111:VAL:CG2	1:A:125:ASP:N	2.73	0.51
1:A:112:ASP:OD2	1:A:112:ASP:N	2.42	0.51
1:A:142:ARG:HH11	1:A:142:ARG:HG2	1.73	0.51
1:B:100:LEU:CD1	1:B:112:ASP:HB2	2.40	0.51
1:B:34:VAL:C	1:B:36:LEU:H	2.13	0.51
1:B:64:GLU:O	1:B:75:VAL:HB	2.10	0.51
2:C:162:ILE:HD12	2:C:162:ILE:H	1.74	0.51
2:C:14:PRO:HA	2:C:458:TYR:CD1	2.46	0.51
2:C:563:ASN:O	2:C:566:THR:N	2.43	0.51
2:C:572:ILE:O	2:C:573:ARG:HB2	2.09	0.51
2:C:836:GLY:O	2:C:848:VAL:HG23	2.10	0.51
2:C:839:LEU:O	2:C:995:MET:O	2.29	0.51
3:D:1232:GLU:O	3:D:1234:GLY:N	2.35	0.51
3:D:1401:VAL:HG12	3:D:1401:VAL:O	2.11	0.51
3:D:685:ASP:O	3:D:687:VAL:N	2.44	0.51
3:D:753:SER:O	3:D:754:PHE:C	2.47	0.51
3:D:776:GLU:HB3	3:D:912:LYS:CE	2.38	0.51
3:D:808:THR:O	3:D:808:THR:HG22	2.09	0.51
3:D:890:VAL:HG12	3:D:891:GLY:N	2.24	0.51
4:E:19:LEU:CD1	4:E:23:VAL:HG23	2.40	0.51
1:A:217:LEU:CD2	1:B:221:LEU:HD11	2.40	0.51
1:A:220:HIS:HA	1:A:223:TYR:HD2	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:320:HIS:O	2:C:322:VAL:HG12	2.10	0.51
2:C:425:PHE:O	2:C:426:ASP:OD1	2.28	0.51
2:C:572:ILE:O	2:C:573:ARG:CB	2.58	0.51
2:C:577:PRO:CG	2:C:580:MET:HB3	2.35	0.51
1:A:74:ASP:OD2	2:C:627:ARG:NH2	2.43	0.51
2:C:655:LEU:O	2:C:656:ALA:HB3	2.09	0.51
2:C:694:LEU:O	2:C:699:PHE:HB2	2.09	0.51
2:C:675:ALA:CB	2:C:989:VAL:HG22	2.41	0.51
3:D:1138:ARG:H	3:D:1138:ARG:CD	2.18	0.51
3:D:1207:GLY:O	3:D:1208:TYR:O	2.29	0.51
2:C:1009:SER:HA	3:D:625:TYR:CD2	2.45	0.51
3:D:779:ALA:O	3:D:931:LEU:HD11	2.11	0.51
3:D:893:GLU:O	3:D:894:LYS:HB2	2.11	0.51
4:E:59:ASN:HB3	4:E:62:THR:OG1	2.10	0.51
1:A:134:GLY:O	1:A:136:LYS:N	2.44	0.51
1:A:163:ALA:O	1:A:164:ILE:HG12	2.10	0.51
1:A:196:LEU:N	1:A:196:LEU:HD23	2.26	0.51
1:B:125:ASP:O	1:B:126:LEU:CB	2.59	0.51
1:B:154:ARG:O	1:B:155:HIS:HB2	2.11	0.51
1:A:42:ARG:NE	1:B:35:THR:OG1	2.40	0.51
1:B:99:ILE:HD13	1:B:138:TYR:OH	2.11	0.51
2:C:455:LEU:HD12	2:C:456:ALA:O	2.10	0.51
2:C:531:PHE:O	2:C:532:MET:CB	2.59	0.51
2:C:774:LEU:HD23	2:C:777:ILE:HD12	1.91	0.51
2:C:877:PRO:O	2:C:881:ASN:N	2.43	0.51
3:D:1320:VAL:HG21	3:D:1339:ALA:O	2.11	0.51
3:D:1353:ILE:HG22	3:D:1354:GLN:N	2.25	0.51
3:D:681:ARG:O	3:D:682:ASP:CB	2.58	0.51
3:D:902:MET:HE2	3:D:902:MET:O	2.10	0.51
2:C:970:GLY:CA	3:D:950:ILE:HG21	2.41	0.51
1:A:86:VAL:HG21	1:A:202:GLY:HA3	1.92	0.51
1:A:22:GLU:HA	1:A:197:ARG:HA	1.92	0.51
2:C:1021:LEU:HD21	3:D:622:ARG:CZ	2.41	0.51
2:C:263:ASP:CB	2:C:264:PRO:CD	2.88	0.51
2:C:495:THR:CG2	2:C:496:ILE:H	2.21	0.51
2:C:692:GLU:HG2	2:C:696:LYS:HE3	1.92	0.51
2:C:882:LEU:HD11	2:C:884:GLN:HE21	1.75	0.51
3:D:1018:PHE:O	3:D:1020:PRO:N	2.43	0.51
3:D:628:ARG:HB3	3:D:628:ARG:HH11	1.76	0.51
3:D:683:ILE:CG2	3:D:687:VAL:HB	2.40	0.51
3:D:906:GLN:O	3:D:907:GLU:HB2	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:936:TYR:C	3:D:936:TYR:HD2	2.13	0.51
1:A:99:ILE:O	1:A:114:THR:CG2	2.58	0.51
1:A:82:LEU:HD21	1:A:128:ILE:HD13	1.92	0.51
1:A:79:ILE:HD11	1:A:164:ILE:CG1	2.40	0.51
2:C:1018:GLN:HE21	2:C:1060:ILE:HG12	1.76	0.51
2:C:474:VAL:CG1	2:C:530:GLU:HA	2.40	0.51
2:C:654:LEU:HD11	2:C:657:ASP:CA	2.30	0.51
2:C:690:ILE:HG22	2:C:852:ILE:HG22	1.93	0.51
2:C:843:HIS:HD2	2:C:884:GLN:CB	2.24	0.51
2:C:892:LEU:C	2:C:894:GLY:H	2.15	0.51
2:C:9:ILE:CG2	2:C:10:ARG:N	2.71	0.51
3:D:1095:LEU:HD22	3:D:1257:LEU:HD11	1.92	0.51
3:D:1257:LEU:O	3:D:1260:VAL:N	2.44	0.51
3:D:1283:ARG:HH21	3:D:1285:GLU:CG	2.22	0.51
3:D:1404:LEU:HD21	3:D:1416:VAL:N	2.25	0.51
3:D:520:LEU:HB3	3:D:521:PRO:CD	2.38	0.51
3:D:678:GLU:C	3:D:680:GLN:H	2.14	0.51
3:D:772:PRO:CB	3:D:778:LEU:HB2	2.38	0.51
3:D:829:VAL:O	3:D:830:ALA:HB2	2.11	0.51
3:D:907:GLU:HB3	3:D:911:LEU:HD21	1.93	0.51
4:E:21:VAL:O	4:E:24:ALA:HB3	2.11	0.51
4:E:9:LEU:CD2	4:E:69:LEU:HD13	2.41	0.51
1:A:156:GLY:O	1:A:163:ALA:CB	2.57	0.51
1:A:23:PHE:HZ	1:A:206:PRO:HB2	1.76	0.51
2:C:1108:PRO:O	2:C:1109:VAL:C	2.49	0.51
2:C:226:VAL:O	2:C:229:MET:HG2	2.11	0.51
2:C:391:LEU:HD22	2:C:415:PRO:CD	2.41	0.51
2:C:400:PRO:HG3	2:C:659:PRO:HG2	1.93	0.51
3:D:1282:VAL:HG22	3:D:1315:LYS:C	2.31	0.51
3:D:1342:PRO:O	3:D:1343:GLU:C	2.48	0.51
3:D:469:ASP:O	3:D:471:GLU:N	2.43	0.51
1:A:219:GLU:O	1:A:222:ASN:HB2	2.11	0.51
2:C:298:PHE:N	2:C:298:PHE:CD1	2.79	0.51
2:C:568:ALA:O	2:C:569:VAL:CG1	2.58	0.51
2:C:906:PHE:CD1	3:D:1069:LEU:HD12	2.45	0.51
2:C:953:VAL:HG13	2:C:965:GLU:OE1	2.10	0.51
2:C:97:ARG:HG2	2:C:112:GLU:N	2.17	0.51
3:D:1108:VAL:O	3:D:1218:ILE:HA	2.11	0.51
3:D:1220:GLU:O	3:D:1222:VAL:N	2.44	0.51
3:D:953:ASP:O	3:D:954:ASP:CB	2.59	0.51
3:D:989:ARG:O	3:D:993:VAL:HG23	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:142:ARG:NH1	1:A:144:ASP:OD1	2.44	0.50
2:C:1026:GLN:O	2:C:1027:PHE:CB	2.60	0.50
2:C:102:HIS:CD2	2:C:106:GLY:HA3	2.34	0.50
2:C:310:LEU:O	2:C:311:PHE:C	2.49	0.50
2:C:140:ILE:HD11	2:C:331:ARG:HH11	1.76	0.50
2:C:550:LEU:HB3	2:C:905:VAL:HG13	1.93	0.50
2:C:578:VAL:O	2:C:901:TYR:N	2.28	0.50
2:C:722:ILE:HD12	2:C:821:GLU:OE1	2.11	0.50
2:C:800:VAL:O	2:C:800:VAL:HG12	2.11	0.50
2:C:944:LEU:C	2:C:946:ARG:H	2.15	0.50
3:D:1083:ALA:O	3:D:1086:ALA:HB3	2.11	0.50
3:D:1373:VAL:HA	3:D:1376:MET:HE2	1.93	0.50
3:D:1426:THR:O	3:D:1428:SER:N	2.43	0.50
3:D:30(U):UNK:HA	3:D:35(U):UNK:O	2.11	0.50
3:D:659:LYS:HZ2	3:D:663:GLU:HB2	1.75	0.50
3:D:770:LEU:HB2	3:D:919:PHE:HE1	1.76	0.50
3:D:963:ARG:HG2	3:D:967:GLU:OE2	2.10	0.50
1:A:103:GLU:H	1:A:106:LYS:CE	2.25	0.50
1:A:157:ILE:HG12	1:A:158:LYS:N	2.26	0.50
1:B:100:LEU:HA	1:B:113:PHE:HA	1.94	0.50
1:B:175:ARG:HD3	1:B:199:TRP:CD1	2.46	0.50
2:C:153:ALA:O	2:C:154:ARG:HD3	2.12	0.50
2:C:540:PHE:CE1	2:C:906:PHE:CE1	2.98	0.50
2:C:544:THR:C	2:C:546:LEU:N	2.63	0.50
2:C:749:VAL:CG1	2:C:792:VAL:HG21	2.35	0.50
3:D:998:THR:O	3:D:1002:GLU:HG3	2.12	0.50
3:D:1148:ARG:O	3:D:1166:TYR:HA	2.11	0.50
3:D:115:LEU:C	3:D:117:ASP:H	2.14	0.50
3:D:1214:ARG:HG3	3:D:1215:PRO:N	2.26	0.50
2:C:1009:SER:HB2	3:D:651:GLU:OE1	2.12	0.50
3:D:657:LEU:O	3:D:658:LEU:C	2.49	0.50
3:D:631:ILE:HG21	3:D:745:MET:HE3	1.93	0.50
1:A:58:ILE:HG21	1:A:68:ILE:CD1	2.41	0.50
1:B:56:VAL:HG13	1:B:141:VAL:HG23	1.92	0.50
1:B:208:GLU:O	1:B:212:GLN:HB2	2.11	0.50
2:C:1095:LEU:O	2:C:1096:ALA:CB	2.57	0.50
2:C:139:GLN:HG3	2:C:140:ILE:N	2.24	0.50
2:C:17:PRO:O	2:C:18:LEU:HG	2.10	0.50
2:C:559:LEU:C	2:C:559:LEU:CD1	2.76	0.50
2:C:655:LEU:HD23	2:C:655:LEU:O	2.11	0.50
2:C:672:VAL:HG21	2:C:694:LEU:HD21	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1019:ASN:O	3:D:1021:LEU:N	2.43	0.50
2:C:881:ASN:HB3	3:D:1039:LEU:HG	1.92	0.50
3:D:644:LEU:O	3:D:645:PRO:C	2.48	0.50
3:D:92:HIS:HA	3:D:517:VAL:CG1	2.33	0.50
3:D:947:ILE:HG13	3:D:947:ILE:O	2.10	0.50
3:D:978:ALA:O	3:D:984:LEU:HD12	2.11	0.50
2:C:148:PHE:O	2:C:149:THR:CB	2.58	0.50
2:C:901:TYR:C	2:C:902:ILE:HD12	2.32	0.50
3:D:1012:PHE:CB	3:D:1020:PRO:HG2	2.40	0.50
3:D:1098:LYS:O	3:D:1102:VAL:HG23	2.11	0.50
3:D:1102:VAL:HG21	3:D:1425:VAL:CG2	2.37	0.50
3:D:1104:HIS:O	3:D:1105:GLU:HB3	2.12	0.50
3:D:1382:VAL:HG12	3:D:1383:THR:N	2.22	0.50
2:C:1071:ILE:O	3:D:659:LYS:CG	2.60	0.50
3:D:639:LEU:HD23	3:D:729:HIS:NE2	2.25	0.50
3:D:836:VAL:CB	3:D:858:LEU:HD21	2.42	0.50
3:D:865:THR:N	3:D:875:THR:O	2.45	0.50
3:D:935:LYS:HG2	3:D:939:PHE:CE1	2.47	0.50
1:A:111:VAL:C	1:A:113:PHE:N	2.64	0.50
1:A:191:LEU:CD2	1:A:191:LEU:H	2.24	0.50
1:B:132:GLU:HG2	1:B:133:GLU:N	2.26	0.50
1:B:40:LEU:HD22	1:B:40:LEU:N	2.26	0.50
2:C:140:ILE:HD11	2:C:331:ARG:NH1	2.26	0.50
2:C:151:ASP:HB2	2:C:156:GLY:O	2.12	0.50
2:C:291:VAL:HB	2:C:299:LYS:CG	2.38	0.50
2:C:291:VAL:HG21	2:C:299:LYS:NZ	2.26	0.50
2:C:399:ASN:HD22	2:C:400:PRO:N	2.10	0.50
2:C:544:THR:O	2:C:546:LEU:N	2.44	0.50
2:C:755:LEU:HD11	2:C:825:VAL:HB	1.93	0.50
2:C:964:LYS:NZ	2:C:964:LYS:HB2	2.26	0.50
3:D:1460:LEU:CD1	3:D:1471:ARG:NH1	2.75	0.50
3:D:637:LEU:O	3:D:638:LYS:C	2.49	0.50
1:B:133:GLU:O	1:B:135:GLY:N	2.39	0.50
2:C:323:ASP:O	2:C:325:ILE:N	2.45	0.50
2:C:66:LEU:HD23	2:C:355:VAL:CG2	2.38	0.50
2:C:356:ARG:O	2:C:359:MET:HB2	2.11	0.50
1:A:77:GLU:OE2	2:C:640:ARG:NH1	2.45	0.50
2:C:603:VAL:HG13	2:C:646:GLY:O	2.12	0.50
2:C:754:ILE:HD13	2:C:791:ARG:HG2	1.92	0.50
2:C:863:ASP:OD2	2:C:863:ASP:C	2.48	0.50
3:D:1043:ARG:O	3:D:1043:ARG:HG3	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1066:LEU:C	3:D:1068:VAL:N	2.65	0.50
3:D:1145:LEU:N	3:D:1145:LEU:HD23	2.26	0.50
3:D:1381:GLU:CG	3:D:1392:GLU:HG3	2.41	0.50
3:D:494:LYS:O	3:D:495:ARG:C	2.50	0.50
2:C:1088:LEU:HD11	3:D:614:PHE:CE2	2.47	0.50
1:A:142:ARG:HE	1:A:158:LYS:CE	2.24	0.50
1:A:142:ARG:CZ	1:A:144:ASP:OD1	2.59	0.50
1:A:194:LEU:CD2	1:A:196:LEU:HD22	2.42	0.50
1:B:193:LYS:O	1:B:194:LEU:O	2.29	0.50
2:C:11:GLU:OE2	2:C:473:ARG:NE	2.44	0.50
2:C:225:ALA:O	2:C:228:ALA:N	2.45	0.50
2:C:257:LEU:HB2	2:C:258:PHE:HD1	1.77	0.50
2:C:317:VAL:N	2:C:318:PRO:HD2	2.27	0.50
2:C:110:GLU:HG3	2:C:370:ALA:HB3	1.94	0.50
2:C:68:PHE:CD2	2:C:98:LEU:HD22	2.47	0.50
2:C:750:LYS:HB2	2:C:751:PRO:CD	2.36	0.50
2:C:77:PRO:HD2	2:C:92:ALA:HA	1.94	0.50
2:C:86:LYS:NZ	2:C:811:PRO:HG2	2.27	0.50
2:C:872:ASN:HD21	2:C:874:LEU:N	2.09	0.50
3:D:1060:SER:OG	3:D:1068:VAL:CG2	2.60	0.50
3:D:1122:PRO:C	3:D:1123:LEU:HD12	2.32	0.50
3:D:1385:PRO:HG3	3:D:1390:LEU:O	2.12	0.50
3:D:702:LEU:HD12	3:D:745:MET:SD	2.52	0.50
3:D:757:ALA:HB2	4:E:61:VAL:HG11	1.93	0.50
3:D:836:VAL:HG11	3:D:858:LEU:CD2	2.41	0.50
3:D:912:LYS:O	3:D:915:VAL:HB	2.12	0.50
3:D:910:SER:HA	3:D:913:ASP:OD2	2.11	0.50
3:D:966:GLU:O	3:D:967:GLU:C	2.48	0.50
4:E:26:ARG:NH2	4:E:30:LEU:HD13	2.26	0.50
1:A:217:LEU:O	1:A:221:LEU:HD23	2.11	0.50
1:A:221:LEU:O	1:A:224:PHE:HD1	1.94	0.50
1:B:100:LEU:HD12	1:B:112:ASP:C	2.32	0.50
1:B:173:VAL:HG12	1:B:200:THR:HG22	1.94	0.50
1:A:221:LEU:HD21	1:B:217:LEU:HD23	1.92	0.50
1:B:94:TRP:CD1	1:B:96:THR:HG23	2.47	0.50
1:B:97:THR:HG22	1:B:98:LEU:N	2.25	0.50
2:C:831:ARG:NH1	2:C:1002:GLU:HB2	2.22	0.50
2:C:64:LEU:N	2:C:101:ILE:O	2.41	0.50
2:C:487:THR:O	2:C:489:SER:N	2.45	0.50
1:A:72:LYS:HB2	2:C:607:ASP:HB3	1.94	0.50
2:C:570:PRO:HG3	2:C:635:THR:HG23	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:877:PRO:O	2:C:878:SER:C	2.50	0.50
3:D:1156:ALA:C	3:D:1158:GLY:H	2.15	0.50
3:D:566:ILE:O	3:D:566:ILE:CG2	2.60	0.50
3:D:674:ARG:NH1	3:D:678:GLU:HG3	2.27	0.50
3:D:703:ASN:CG	3:D:704:ARG:N	2.65	0.50
3:D:739:ASP:OD1	3:D:743:ASP:OD2	2.30	0.50
3:D:795:VAL:CA	3:D:862:ASP:CB	2.88	0.50
3:D:1212:MET:HE2	4:E:16:LYS:HD2	1.94	0.50
4:E:15:SER:O	4:E:18:ARG:N	2.45	0.50
4:E:61:VAL:HA	4:E:64:ALA:HB3	1.94	0.50
4:E:26:ARG:NE	4:E:67:GLU:OE2	2.44	0.50
1:A:102:ALA:HB3	1:A:131:LEU:HD21	1.93	0.50
1:A:89:PHE:HB2	1:A:145:ARG:NH2	2.26	0.50
2:C:1095:LEU:HD11	3:D:582:ILE:HG23	1.93	0.50
2:C:563:ASN:O	2:C:565:GLN:N	2.45	0.50
3:D:1157:LEU:O	3:D:1157:LEU:CD2	2.57	0.50
3:D:117:ASP:C	3:D:119:PHE:N	2.66	0.50
3:D:126:VAL:N	3:D:456:MET:HE2	2.26	0.50
3:D:897:GLN:OE1	3:D:902:MET:HG2	2.12	0.50
2:C:399:ASN:CB	2:C:568:ALA:HB3	2.42	0.49
2:C:566:THR:C	2:C:568:ALA:H	2.15	0.49
2:C:603:VAL:HG11	2:C:646:GLY:H	1.77	0.49
2:C:589:ARG:NH2	2:C:654:LEU:HD12	2.27	0.49
2:C:707:ARG:HB3	2:C:826:PHE:CD1	2.46	0.49
3:D:995:GLN:O	3:D:999:GLU:HG3	2.12	0.49
1:A:166:VAL:CG1	1:A:167:ASP:N	2.72	0.49
1:A:194:LEU:O	1:A:195:THR:CB	2.59	0.49
1:A:91:ASP:OD1	1:A:92:PRO:N	2.45	0.49
1:B:108:VAL:O	1:B:127:HIS:O	2.30	0.49
1:B:146:GLY:HA3	1:B:170:PHE:CE1	2.47	0.49
1:B:41:ARG:HD3	1:B:41:ARG:C	2.32	0.49
2:C:1030:GLN:NE2	2:C:1031:ARG:H	2.10	0.49
2:C:91:GLN:HA	2:C:119:PRO:HA	1.94	0.49
2:C:12:VAL:CG1	2:C:13:ILE:N	2.53	0.49
2:C:598:GLU:HG3	2:C:614:ARG:CZ	2.42	0.49
2:C:755:LEU:O	2:C:755:LEU:HD13	2.12	0.49
2:C:910:THR:C	2:C:912:PRO:HD2	2.33	0.49
2:C:493:ARG:HH22	3:D:1070:GLU:CD	2.16	0.49
3:D:1196:GLN:O	3:D:1197:THR:HG23	2.12	0.49
3:D:461:ILE:HA	3:D:464:LEU:HD12	1.94	0.49
2:C:1030:GLN:OE1	3:D:628:ARG:CG	2.58	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1043:TYR:HE2	3:D:763:MET:HA	1.76	0.49
3:D:921:ARG:O	3:D:922:LEU:HD23	2.12	0.49
4:E:45:ARG:O	4:E:47:LYS:HG3	2.12	0.49
4:E:26:ARG:NH2	4:E:67:GLU:OE2	2.45	0.49
4:E:68:LEU:C	4:E:70:THR:H	2.15	0.49
1:A:56:VAL:CG2	1:A:164:ILE:HD11	2.43	0.49
1:A:85:LEU:O	1:A:85:LEU:HD23	2.11	0.49
1:A:221:LEU:HD12	1:B:214:VAL:HG13	1.94	0.49
1:B:25:LEU:CD1	1:B:28:LEU:CD1	2.90	0.49
1:B:73:GLU:OE1	1:B:127:HIS:NE2	2.45	0.49
2:C:224:GLU:C	2:C:226:VAL:N	2.65	0.49
2:C:243:ARG:HG3	2:C:244:PRO:CA	2.42	0.49
2:C:342:ASP:HA	2:C:345:ARG:HB2	1.93	0.49
2:C:115:LEU:HA	2:C:375:SER:OG	2.12	0.49
2:C:540:PHE:CZ	2:C:906:PHE:HE1	2.31	0.49
2:C:699:PHE:O	2:C:701:THR:N	2.45	0.49
2:C:875:GLY:O	2:C:876:VAL:C	2.49	0.49
3:D:1276:SER:OG	3:D:1295:VAL:HG11	2.11	0.49
3:D:1404:LEU:HD21	3:D:1416:VAL:H	1.77	0.49
3:D:492:ALA:O	3:D:495:ARG:HB2	2.12	0.49
3:D:558:LEU:C	3:D:560:GLN:N	2.66	0.49
1:A:166:VAL:CG1	1:A:167:ASP:H	2.25	0.49
1:A:196:LEU:N	1:A:196:LEU:CD2	2.75	0.49
1:A:19:HIS:ND1	1:A:19:HIS:C	2.65	0.49
1:A:220:HIS:O	1:A:221:LEU:C	2.50	0.49
1:A:30:ARG:NH1	1:A:191:LEU:HD22	2.28	0.49
1:B:187:GLN:HE22	3:D:646:LYS:NZ	2.11	0.49
1:B:14:THR:HB	1:B:22:GLU:H	1.76	0.49
1:B:58:ILE:HG12	1:B:139:MET:HB3	1.95	0.49
2:C:1051:GLU:HG2	2:C:1056:LYS:HE2	1.93	0.49
2:C:134:ARG:HH22	2:C:392:SER:C	2.14	0.49
2:C:207:LEU:HG	2:C:208:VAL:N	2.27	0.49
2:C:253:ALA:HA	2:C:256:TYR:CG	2.46	0.49
2:C:323:ASP:C	2:C:325:ILE:H	2.13	0.49
2:C:504:GLU:O	2:C:506:ASP:N	2.44	0.49
2:C:629:ALA:C	2:C:630:ARG:HD3	2.33	0.49
2:C:988:VAL:HG12	3:D:948:ILE:CG1	2.42	0.49
2:C:66:LEU:HD11	2:C:98:LEU:CB	2.43	0.49
3:D:1070:GLU:O	3:D:1073:ILE:N	2.46	0.49
3:D:669:ASN:OD1	3:D:670:VAL:N	2.45	0.49
4:E:67:GLU:O	4:E:70:THR:HB	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:124:PRO:O	1:A:125:ASP:C	2.51	0.49
1:A:206:PRO:O	1:A:207:LEU:C	2.50	0.49
2:C:15:LEU:HD11	2:C:461:VAL:HG11	1.93	0.49
2:C:195:LEU:CD1	2:C:227:LEU:HD22	2.35	0.49
2:C:252:LYS:HZ3	2:C:293:PHE:HA	1.78	0.49
2:C:320:HIS:C	2:C:322:VAL:H	2.14	0.49
2:C:443:THR:H	2:C:444:PRO:HD2	1.77	0.49
2:C:439:CYS:SG	2:C:468:ARG:NH2	2.82	0.49
2:C:628:TYR:N	2:C:628:TYR:HD1	2.10	0.49
2:C:77:PRO:CD	2:C:93:PRO:HD3	2.32	0.49
3:D:1485:THR:O	3:D:1487:VAL:HG23	2.11	0.49
2:C:1030:GLN:NE2	3:D:628:ARG:HD3	2.28	0.49
3:D:700:VAL:HG13	3:D:748:HIS:O	2.12	0.49
3:D:792:ILE:CG2	3:D:793:THR:HG23	2.42	0.49
1:B:36:LEU:O	1:B:40:LEU:HD23	2.13	0.49
1:B:58:ILE:HG12	1:B:139:MET:CB	2.43	0.49
2:C:134:ARG:HB3	2:C:134:ARG:NH1	2.28	0.49
2:C:215:GLY:O	2:C:216:ASP:O	2.31	0.49
2:C:642:ARG:N	2:C:656:ALA:HA	2.27	0.49
3:D:1435:TRP:CD1	3:D:1448:LEU:HD12	2.48	0.49
3:D:615:ARG:O	3:D:618:LEU:HB2	2.13	0.49
3:D:675:ARG:CA	3:D:678:GLU:HB3	2.37	0.49
3:D:810:GLU:C	3:D:812:ALA:N	2.65	0.49
3:D:94:GLU:O	3:D:95:LEU:C	2.51	0.49
1:A:142:ARG:HG2	1:A:144:ASP:OD1	2.12	0.49
1:A:174:ARG:HB2	1:A:200:THR:HB	1.93	0.49
1:B:62:LEU:O	1:B:63:HIS:C	2.50	0.49
2:C:291:VAL:HG11	2:C:299:LYS:HE3	1.94	0.49
2:C:673:LEU:HA	2:C:991:GLN:HA	1.95	0.49
2:C:729:LEU:O	2:C:729:LEU:HG	2.13	0.49
3:D:1458:ASP:O	3:D:1460:LEU:N	2.46	0.49
3:D:970:ARG:NH2	3:D:971:LYS:HE3	2.28	0.49
1:B:121:ILE:HG22	1:B:121:ILE:O	2.12	0.49
1:B:63:HIS:HB3	1:B:65:PHE:CE2	2.47	0.49
1:B:86:VAL:H	1:B:123:ASN:CG	2.16	0.49
2:C:1068:GLN:HG3	2:C:1072:LYS:HE3	1.94	0.49
2:C:115:LEU:CG	2:C:116:GLY:H	2.25	0.49
2:C:25:SER:HA	2:C:28:LYS:HE2	1.95	0.49
2:C:31:GLN:HG2	2:C:39:ARG:HD2	1.95	0.49
2:C:604:VAL:HG11	2:C:619:ARG:HH22	1.77	0.49
3:D:1015:ASN:C	3:D:1016:TYR:CG	2.83	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:483:HIS:CB	3:D:493:ARG:HH21	2.25	0.49
3:D:537:THR:HG22	3:D:537:THR:O	2.12	0.49
3:D:894:LYS:O	3:D:895:VAL:C	2.49	0.49
1:A:103:GLU:H	1:A:106:LYS:HE2	1.78	0.49
1:A:160:ARG:O	1:A:161:ILE:HB	2.13	0.49
1:A:38:ASN:HD21	1:A:41:ARG:HH22	1.61	0.49
1:A:98:LEU:C	1:A:99:ILE:HG13	2.33	0.49
1:B:30:ARG:NH1	2:C:854:PRO:HB3	2.28	0.49
1:B:81:ASN:HD21	1:B:127:HIS:HB3	1.77	0.49
2:C:1015:LEU:O	2:C:1016:ILE:HD13	2.13	0.49
2:C:253:ALA:HA	2:C:256:TYR:CD1	2.47	0.49
2:C:270:GLY:O	2:C:271:GLU:O	2.31	0.49
2:C:159:ILE:CD1	2:C:310:LEU:HD22	2.28	0.49
2:C:333:ILE:HD12	2:C:468:ARG:HE	1.74	0.49
2:C:728:HIS:O	2:C:730:SER:N	2.45	0.49
2:C:79:SER:N	2:C:82:GLU:OE1	2.43	0.49
3:D:1009:PHE:CE1	3:D:1036:ILE:HG13	2.43	0.49
3:D:1008:VAL:HG21	3:D:1040:CYS:CB	2.42	0.49
3:D:1200:GLY:O	3:D:1202:CYS:N	2.36	0.49
3:D:1271:ALA:HB1	3:D:1327:THR:CB	2.43	0.49
3:D:1424:GLY:O	3:D:1426:THR:N	2.39	0.49
3:D:476:GLU:O	3:D:480:GLU:HB2	2.13	0.49
3:D:636:GLN:NE2	3:D:642:CYS:HA	2.28	0.49
3:D:670:VAL:O	3:D:673:ALA:HB3	2.13	0.49
1:A:132:GLU:O	2:C:606:VAL:HG23	2.13	0.49
1:A:55:SER:HB2	1:A:156:GLY:HA3	1.94	0.49
1:B:180:VAL:O	1:B:180:VAL:HG13	2.13	0.49
1:B:34:VAL:O	1:B:36:LEU:N	2.42	0.49
2:C:259:GLY:HA2	2:C:289:THR:O	2.13	0.49
2:C:274:ARG:HG3	2:C:275:TYR:H	1.77	0.49
2:C:491:GLU:HA	2:C:531:PHE:CA	2.36	0.49
2:C:549:PHE:HD2	2:C:552:HIS:CD2	2.31	0.49
2:C:693:GLU:OE1	2:C:696:LYS:HD2	2.12	0.49
2:C:946:ARG:HH12	2:C:984:GLU:C	2.17	0.49
2:C:948:GLU:O	2:C:951:GLY:N	2.46	0.49
3:D:997:TRP:CD1	3:D:1057:PRO:HD3	2.48	0.49
3:D:1263:LEU:CD2	3:D:1353:ILE:HA	2.43	0.49
3:D:1305:LYS:H	3:D:1305:LYS:CD	2.23	0.49
3:D:1381:GLU:HG2	3:D:1392:GLU:HA	1.95	0.49
3:D:603:LEU:HA	3:D:606:ILE:HD13	1.94	0.49
3:D:691:LEU:HA	3:D:694:VAL:CB	2.39	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:214:VAL:O	1:A:218:LYS:HG3	2.13	0.48
1:B:70:GLY:O	1:B:71:VAL:HG23	2.13	0.48
2:C:11:GLU:OE1	2:C:479:VAL:HG12	2.13	0.48
2:C:32:ALA:O	2:C:34:VAL:N	2.46	0.48
2:C:601:GLY:O	2:C:602:GLU:CB	2.60	0.48
2:C:636:ALA:CB	2:C:703:ILE:O	2.61	0.48
3:D:1044:GLY:HA2	3:D:1058:VAL:N	2.28	0.48
3:D:952:ILE:HG12	3:D:1063:ARG:NH2	2.27	0.48
3:D:1104:HIS:N	3:D:1223:GLY:HA3	2.28	0.48
3:D:1273:ALA:O	3:D:1331:ILE:CB	2.61	0.48
3:D:680:GLN:O	3:D:681:ARG:HG3	2.12	0.48
3:D:70:GLY:C	3:D:72:VAL:H	2.16	0.48
3:D:995:GLN:HA	3:D:998:THR:HB	1.95	0.48
2:C:1060:ILE:CG2	2:C:1064:ASN:HD21	2.12	0.48
2:C:140:ILE:HG22	2:C:333:ILE:CG1	2.32	0.48
2:C:182:VAL:HG12	2:C:193:LEU:HG	1.95	0.48
2:C:198:ARG:HG3	2:C:228:ALA:HA	1.95	0.48
2:C:379:GLU:O	2:C:381:ALA:N	2.46	0.48
2:C:397:GLU:N	2:C:633:GLN:NE2	2.53	0.48
2:C:976:ASP:C	2:C:978:ARG:H	2.16	0.48
3:D:1104:HIS:CG	3:D:1105:GLU:N	2.81	0.48
3:D:1126:MET:HG2	3:D:1127:ASP:N	2.15	0.48
3:D:1104:HIS:H	3:D:1223:GLY:CA	2.26	0.48
3:D:722:GLU:HB3	3:D:723:GLY:H	1.44	0.48
3:D:806:PHE:HA	3:D:827:ILE:O	2.12	0.48
3:D:900:ILE:HG22	3:D:901:GLN:N	2.27	0.48
3:D:923:GLY:O	3:D:926:LYS:HB2	2.13	0.48
4:E:68:LEU:HD12	4:E:73:LEU:HD12	1.95	0.48
2:C:461:VAL:O	2:C:461:VAL:HG12	2.13	0.48
2:C:50:GLU:O	2:C:52:PHE:N	2.45	0.48
2:C:600:ASP:CA	2:C:648:ARG:HD2	2.44	0.48
2:C:679:PHE:O	2:C:681:GLY:N	2.46	0.48
2:C:774:LEU:O	2:C:777:ILE:HB	2.14	0.48
3:D:1124:PHE:HE2	3:D:1185:ARG:HA	1.77	0.48
3:D:1253:ILE:C	3:D:1255:GLN:N	2.65	0.48
3:D:1348:TYR:CZ	3:D:1352:GLU:HG2	2.48	0.48
3:D:564:GLU:O	3:D:568:ARG:HG2	2.13	0.48
3:D:643:GLY:HA3	3:D:727:GLN:N	2.25	0.48
3:D:88:TYR:O	3:D:520:LEU:HD13	2.13	0.48
1:A:222:ASN:C	1:A:224:PHE:N	2.67	0.48
2:C:479:VAL:O	2:C:480:THR:HG22	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:568:ALA:HB2	2:C:668:LEU:HD22	1.94	0.48
2:C:728:HIS:C	2:C:730:SER:N	2.65	0.48
2:C:854:PRO:O	2:C:855:VAL:C	2.51	0.48
2:C:95:TYR:HB3	2:C:114:PHE:HA	1.94	0.48
3:D:1012:PHE:O	3:D:1013:GLU:C	2.52	0.48
3:D:123:LEU:O	3:D:124:GLU:C	2.51	0.48
3:D:1357:TYR:HB3	3:D:1362:VAL:HB	1.96	0.48
3:D:1484:PHE:CD1	4:E:75:PHE:HB2	2.49	0.48
3:D:149:LYS:O	3:D:150:ARG:C	2.51	0.48
3:D:765:SER:HB2	3:D:769:LEU:HD12	1.96	0.48
3:D:924:MET:O	3:D:925:GLU:C	2.51	0.48
4:E:18:ARG:O	4:E:21:VAL:HB	2.13	0.48
1:A:30:ARG:CZ	1:A:190:ASP:HB3	2.43	0.48
1:A:6:LEU:O	1:A:7:LYS:HB2	2.13	0.48
1:B:173:VAL:HG12	1:B:200:THR:HG21	1.94	0.48
1:B:88:ARG:HB3	1:B:122:MET:HE1	1.95	0.48
2:C:100:LEU:O	2:C:101:ILE:HD13	2.13	0.48
2:C:389:SER:O	2:C:391:LEU:N	2.47	0.48
2:C:580:MET:CB	2:C:584:GLU:HG3	2.25	0.48
3:D:1024:MET:SD	3:D:1024:MET:N	2.86	0.48
3:D:1104:HIS:H	3:D:1223:GLY:HA3	1.78	0.48
3:D:1222:VAL:O	3:D:1226:ALA:N	2.46	0.48
3:D:1084:ASP:OD2	3:D:1238:THR:HG23	2.13	0.48
3:D:777:PRO:CG	3:D:912:LYS:HG3	2.43	0.48
3:D:935:LYS:HG2	3:D:939:PHE:CD1	2.48	0.48
3:D:958:PRO:HD3	3:D:1008:VAL:HG23	1.96	0.48
4:E:54:LEU:O	4:E:55:TYR:CB	2.60	0.48
4:E:23:VAL:HG12	4:E:61:VAL:HG12	1.95	0.48
1:A:175:ARG:HB3	1:A:199:TRP:HB3	1.95	0.48
1:A:217:LEU:HD23	1:B:221:LEU:HD11	1.96	0.48
1:B:64:GLU:HA	1:B:75:VAL:HG11	1.95	0.48
2:C:195:LEU:CB	2:C:227:LEU:HD13	2.28	0.48
2:C:335:THR:O	2:C:336:VAL:C	2.52	0.48
2:C:346:VAL:O	2:C:347:GLY:C	2.52	0.48
2:C:400:PRO:O	2:C:401:LEU:C	2.51	0.48
2:C:399:ASN:HD21	2:C:401:LEU:N	2.09	0.48
2:C:733:ALA:O	2:C:734:LEU:C	2.51	0.48
3:D:1079:ARG:O	3:D:1080:LYS:C	2.51	0.48
3:D:1156:ALA:C	3:D:1158:GLY:N	2.66	0.48
3:D:1257:LEU:O	3:D:1259:ARG:N	2.45	0.48
3:D:1344:ALA:O	3:D:1345:VAL:C	2.51	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:161:ILE:CD1	1:A:162:ASN:HD21	2.25	0.48
1:B:33:GLY:HA3	1:B:180:VAL:HG21	1.96	0.48
2:C:139:GLN:NE2	2:C:334:ARG:NH2	2.62	0.48
2:C:145:GLY:O	2:C:146:VAL:HG23	2.12	0.48
2:C:324:ASP:O	2:C:326:ASP:N	2.46	0.48
2:C:501:THR:HG23	2:C:524:VAL:CB	2.44	0.48
2:C:641:PRO:HA	2:C:656:ALA:CB	2.43	0.48
2:C:710:ILE:CG1	2:C:790:LEU:HD13	2.43	0.48
2:C:86:LYS:O	2:C:88:LEU:HG	2.14	0.48
2:C:963:LEU:O	2:C:965:GLU:N	2.47	0.48
3:D:1157:LEU:H	3:D:1183:GLU:CD	2.17	0.48
3:D:1422:LEU:HD23	3:D:1422:LEU:C	2.34	0.48
3:D:1484:PHE:HE1	4:E:22:VAL:CG2	2.27	0.48
3:D:571:LYS:C	3:D:573:MET:N	2.66	0.48
3:D:656:PHE:CD2	3:D:698:LYS:NZ	2.82	0.48
4:E:81:PRO:O	4:E:85:LEU:N	2.47	0.48
2:C:148:PHE:N	2:C:148:PHE:CD1	2.81	0.48
2:C:290:LEU:HD12	2:C:300:ASP:CA	2.43	0.48
2:C:327:HIS:O	2:C:330:ASN:N	2.47	0.48
2:C:38:LYS:O	2:C:39:ARG:O	2.32	0.48
2:C:466:PHE:HD1	2:C:466:PHE:C	2.17	0.48
2:C:596:TYR:O	2:C:655:LEU:HD13	2.13	0.48
2:C:575:GLN:O	2:C:667:ALA:HB1	2.13	0.48
2:C:970:GLY:HA2	3:D:950:ILE:CG2	2.43	0.48
2:C:840:ALA:HB3	2:C:997:LEU:HD11	1.96	0.48
3:D:1152:ARG:O	3:D:1153:GLU:C	2.51	0.48
3:D:1133:LEU:HD13	3:D:1185:ARG:HH12	1.78	0.48
2:C:1042:ALA:HB2	3:D:1228:GLU:OE1	2.13	0.48
3:D:545:ARG:CG	3:D:546:ARG:N	2.77	0.48
3:D:969:ASP:O	3:D:971:LYS:N	2.47	0.48
1:A:161:ILE:CG2	1:A:162:ASN:H	2.24	0.48
1:B:23:PHE:HD1	1:B:210:LEU:HD22	1.77	0.48
2:C:423:ALA:CA	2:C:427:VAL:HG21	2.44	0.48
2:C:736:ASP:O	2:C:737:LEU:HG	2.14	0.48
2:C:750:LYS:HG3	3:D:680:GLN:NE2	2.29	0.48
2:C:768:SER:O	2:C:769:PRO:O	2.32	0.48
2:C:876:VAL:HB	2:C:877:PRO:HD3	1.95	0.48
2:C:6:PHE:HD1	2:C:902:ILE:O	1.97	0.48
3:D:1330:ALA:O	3:D:1331:ILE:C	2.51	0.48
3:D:462:GLN:HA	3:D:512:MET:SD	2.54	0.48
3:D:698:LYS:O	3:D:718:PRO:HD2	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:936:TYR:O	3:D:940:THR:HG22	2.13	0.48
3:D:979:TYR:CG	3:D:989:ARG:HD2	2.49	0.48
1:A:126:LEU:CG	1:A:126:LEU:O	2.61	0.48
1:A:76:VAL:O	1:A:77:GLU:C	2.52	0.48
1:A:221:LEU:HD21	1:B:217:LEU:CD2	2.43	0.48
1:B:58:ILE:HG22	1:B:58:ILE:O	2.14	0.48
1:B:71:VAL:HA	1:B:131:LEU:HA	1.95	0.48
2:C:149:THR:CG2	2:C:150:PRO:HD2	2.44	0.48
2:C:223:ASP:C	2:C:225:ALA:H	2.18	0.48
2:C:48:PHE:O	2:C:49:LYS:C	2.51	0.48
2:C:588:VAL:HG21	2:C:666:LEU:HA	1.96	0.48
3:D:1328:ARG:O	3:D:1330:ALA:N	2.47	0.48
3:D:1336:LEU:C	3:D:1336:LEU:HD23	2.33	0.48
3:D:1426:THR:C	3:D:1428:SER:N	2.67	0.48
3:D:973:ARG:C	3:D:975:ILE:H	2.17	0.48
3:D:1212:MET:CE	4:E:16:LYS:HD2	2.43	0.48
4:E:91:ARG:HB3	4:E:92:LEU:CD1	2.43	0.48
1:A:142:ARG:HE	1:A:158:LYS:HE2	1.79	0.47
1:A:187:GLN:O	1:A:188:ARG:CB	2.62	0.47
1:A:206:PRO:O	1:A:209:ALA:N	2.46	0.47
1:A:34:VAL:C	1:A:36:LEU:N	2.67	0.47
1:A:38:ASN:O	1:A:39:PRO:C	2.52	0.47
1:B:111:VAL:O	1:B:113:PHE:N	2.47	0.47
2:C:1072:LYS:O	3:D:659:LYS:HG3	2.14	0.47
2:C:1095:LEU:CD1	3:D:603:LEU:HD23	2.45	0.47
2:C:394:PHE:CD2	2:C:632:ASN:HB3	2.48	0.47
2:C:57:GLY:H	2:C:356:ARG:HH12	1.60	0.47
2:C:605:LYS:HD3	2:C:607:ASP:HA	1.95	0.47
2:C:693:GLU:OE1	2:C:693:GLU:HA	2.14	0.47
2:C:754:ILE:HD13	2:C:791:ARG:NE	2.29	0.47
2:C:915:LYS:O	2:C:918:LEU:N	2.47	0.47
3:D:1019:ASN:HB2	3:D:1020:PRO:HD3	1.96	0.47
3:D:1060:SER:CB	3:D:1066:LEU:HA	2.43	0.47
3:D:1062:PHE:CD1	3:D:1066:LEU:HD23	2.49	0.47
3:D:1167:LEU:HB2	3:D:1171:ASP:HB3	1.95	0.47
3:D:1329:GLY:O	3:D:1331:ILE:N	2.47	0.47
3:D:485:SER:OG	3:D:488:ARG:HD2	2.13	0.47
3:D:997:TRP:CE3	3:D:1000:THR:HG21	2.48	0.47
2:C:172:ILE:HD13	2:C:303:PHE:CZ	2.49	0.47
3:D:1230:ILE:HG22	3:D:1357:TYR:OH	2.13	0.47
3:D:1479:SER:O	3:D:1482:VAL:N	2.42	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:480:GLU:O	3:D:493:ARG:NH2	2.46	0.47
1:B:181:GLU:O	1:B:193:LYS:HB3	2.14	0.47
2:C:1042:ALA:HB1	3:D:1225:VAL:HG22	1.94	0.47
2:C:238:LEU:O	2:C:241:LEU:N	2.47	0.47
2:C:55:GLU:OE1	2:C:55:GLU:N	2.43	0.47
2:C:688:ILE:HG23	2:C:871:LEU:HD12	1.96	0.47
2:C:728:HIS:NE2	2:C:783:ARG:NH1	2.63	0.47
2:C:805:ARG:NH2	2:C:821:GLU:OE2	2.48	0.47
3:D:1315:LYS:O	3:D:1316:ASP:C	2.52	0.47
3:D:1431:SER:O	3:D:1432:THR:HB	2.15	0.47
3:D:1485:THR:HG21	4:E:79:LEU:HB2	1.96	0.47
3:D:653:PHE:O	3:D:656:PHE:N	2.48	0.47
3:D:760:ARG:O	3:D:761:ILE:HG13	2.15	0.47
3:D:901:GLN:O	3:D:905:PRO:HD3	2.14	0.47
3:D:925:GLU:OE1	4:E:7:ASP:OD2	2.32	0.47
1:A:222:ASN:O	1:A:223:TYR:C	2.53	0.47
1:B:144:ASP:CG	1:B:145:ARG:H	2.18	0.47
1:B:14:THR:O	1:B:15:THR:O	2.32	0.47
2:C:1018:GLN:HA	2:C:1018:GLN:OE1	2.13	0.47
2:C:177:GLU:CG	2:C:181:VAL:H	2.23	0.47
2:C:379:GLU:O	2:C:380:ALA:C	2.51	0.47
2:C:378:LEU:O	2:C:382:LEU:HB3	2.14	0.47
2:C:489:SER:O	2:C:490:GLU:CB	2.61	0.47
2:C:685:GLU:OE1	2:C:685:GLU:HA	2.13	0.47
2:C:882:LEU:CD1	2:C:884:GLN:HE21	2.27	0.47
2:C:963:LEU:O	2:C:964:LYS:C	2.52	0.47
3:D:1043:ARG:NH2	3:D:1062:PHE:CZ	2.82	0.47
2:C:1005:MET:HB2	3:D:629:SER:CB	2.44	0.47
3:D:704:ARG:HH11	3:D:704:ARG:CG	2.27	0.47
3:D:88:TYR:O	3:D:89:ARG:CB	2.61	0.47
1:A:102:ALA:HA	1:A:106:LYS:HZ1	1.79	0.47
1:A:11:PHE:CD1	1:A:25:LEU:HD23	2.49	0.47
1:A:127:HIS:CE1	1:A:130:THR:OG1	2.68	0.47
1:B:187:GLN:HG2	3:D:688:TRP:HD1	1.80	0.47
1:B:62:LEU:HB2	1:B:63:HIS:H	1.51	0.47
2:C:165:LEU:HD22	2:C:334:ARG:CD	2.42	0.47
2:C:26:TYR:HB2	2:C:121:MET:HE1	1.95	0.47
2:C:369:PRO:O	2:C:370:ALA:HB3	2.15	0.47
2:C:420:ARG:N	2:C:420:ARG:HD3	2.25	0.47
2:C:514:VAL:C	2:C:516:ARG:H	2.17	0.47
2:C:589:ARG:NH2	2:C:654:LEU:HA	2.29	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:713:ARG:HB2	2:C:720:GLU:OE1	2.14	0.47
2:C:768:SER:CB	2:C:769:PRO:HD2	2.34	0.47
2:C:876:VAL:HA	2:C:880:MET:SD	2.54	0.47
2:C:912:PRO:O	2:C:916:GLU:N	2.41	0.47
3:D:10:ILE:HG23	3:D:11:ALA:N	2.28	0.47
3:D:121:THR:CB	3:D:461:ILE:HD11	2.45	0.47
3:D:551:ASN:HD22	3:D:574:LEU:HD13	1.79	0.47
2:C:1043:TYR:CE1	3:D:710:ARG:HB2	2.50	0.47
3:D:901:GLN:O	3:D:903:ASP:N	2.48	0.47
3:D:988:GLU:O	3:D:992:GLN:HB2	2.14	0.47
4:E:40:LEU:C	4:E:42:PRO:HD2	2.34	0.47
3:D:1484:PHE:CE1	4:E:75:PHE:HB2	2.50	0.47
4:E:86:GLN:O	4:E:89:MET:HB2	2.13	0.47
1:B:206:PRO:O	1:B:209:ALA:HB3	2.15	0.47
1:B:78:ILE:HG13	1:B:128:ILE:O	2.15	0.47
2:C:324:ASP:C	2:C:326:ASP:N	2.66	0.47
2:C:437:ARG:O	2:C:437:ARG:HG3	2.15	0.47
2:C:520:GLU:N	2:C:521:PRO:CD	2.77	0.47
2:C:642:ARG:HB3	2:C:656:ALA:HA	1.96	0.47
2:C:650:LYS:O	2:C:651:LYS:CB	2.62	0.47
1:A:83:LYS:HZ2	2:C:698:ASP:HB2	1.80	0.47
2:C:713:ARG:CZ	2:C:819:VAL:HG22	2.45	0.47
2:C:762:LYS:HD2	2:C:786:LYS:CD	2.36	0.47
2:C:549:PHE:CE1	2:C:886:LEU:O	2.68	0.47
2:C:926:PHE:HE1	2:C:929:ARG:NH1	2.13	0.47
3:D:1200:GLY:C	3:D:1202:CYS:H	2.15	0.47
3:D:580:ALA:O	3:D:584:ASN:HB2	2.15	0.47
3:D:683:ILE:HG22	3:D:687:VAL:HB	1.96	0.47
1:B:187:GLN:CG	3:D:688:TRP:HD1	2.27	0.47
3:D:836:VAL:HG21	3:D:858:LEU:HD21	1.95	0.47
3:D:962:GLN:O	3:D:965:LEU:O	2.33	0.47
4:E:14:ASP:CG	4:E:15:SER:N	2.67	0.47
1:A:18:ASP:HA	1:A:205:THR:OG1	2.15	0.47
1:B:78:ILE:O	1:B:82:LEU:N	2.48	0.47
2:C:308:ARG:C	2:C:310:LEU:N	2.68	0.47
2:C:387:SER:O	2:C:388:ARG:HG3	2.14	0.47
2:C:581:THR:O	2:C:583:LEU:N	2.48	0.47
2:C:605:LYS:CE	2:C:611:ILE:HG13	2.45	0.47
2:C:845:ASN:ND2	2:C:876:VAL:HG11	2.30	0.47
2:C:683:ASN:ND2	2:C:870:ILE:O	2.39	0.47
2:C:969:LEU:HD12	3:D:950:ILE:CG2	2.45	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1038:TRP:NE1	3:D:1100:VAL:HG11	2.29	0.47
3:D:1379:TYR:O	3:D:1421:LEU:HB3	2.15	0.47
3:D:1460:LEU:HD13	3:D:1471:ARG:HD3	1.97	0.47
2:C:1046:ALA:CB	3:D:1473:ILE:HB	2.44	0.47
3:D:24(U):UNK:O	3:D:41(U):UNK:HA	2.15	0.47
3:D:630:VAL:O	3:D:725:SER:CA	2.59	0.47
3:D:657:LEU:HD11	3:D:690:ALA:HB1	1.96	0.47
3:D:810:GLU:O	3:D:812:ALA:N	2.48	0.47
3:D:947:ILE:O	3:D:947:ILE:CG1	2.63	0.47
1:B:31:GLY:H	1:B:192:ASP:CG	2.17	0.47
2:C:1113:GLU:C	2:C:1115:LEU:N	2.64	0.47
2:C:148:PHE:CD2	2:C:159:ILE:HG23	2.49	0.47
2:C:181:VAL:HG21	2:C:220:GLY:HA3	1.96	0.47
2:C:257:LEU:HD22	2:C:264:PRO:CD	2.38	0.47
2:C:332:ARG:HG2	2:C:333:ILE:H	1.79	0.47
2:C:430:VAL:O	2:C:431:HIS:C	2.53	0.47
2:C:572:ILE:HG13	2:C:572:ILE:O	2.14	0.47
2:C:605:LYS:HD2	2:C:607:ASP:OD2	2.14	0.47
2:C:754:ILE:CD1	2:C:791:ARG:NE	2.78	0.47
2:C:852:ILE:CD1	2:C:852:ILE:N	2.78	0.47
3:D:1156:ALA:O	3:D:1158:GLY:N	2.48	0.47
3:D:1214:ARG:HG3	3:D:1215:PRO:HD2	1.96	0.47
3:D:1257:LEU:O	3:D:1258:PRO:C	2.53	0.47
3:D:26:VAL:C	3:D:28:LYS:N	2.68	0.47
1:A:142:ARG:HG2	1:A:142:ARG:NH1	2.30	0.47
1:A:159:ASP:O	1:A:161:ILE:N	2.47	0.47
1:A:6:LEU:C	1:A:8:ALA:N	2.66	0.47
2:C:445:GLU:HB3	2:C:446:GLY:H	1.49	0.47
2:C:602:GLU:O	2:C:603:VAL:HG13	2.14	0.47
2:C:689:VAL:HB	2:C:870:ILE:HB	1.97	0.47
2:C:694:LEU:HD22	2:C:699:PHE:CD2	2.50	0.47
2:C:763:GLY:O	2:C:764:GLU:C	2.52	0.47
2:C:773:LEU:O	2:C:777:ILE:HG13	2.15	0.47
2:C:857:ASP:HB3	2:C:978:ARG:HG3	1.97	0.47
2:C:892:LEU:O	2:C:894:GLY:N	2.42	0.47
2:C:923:ASN:O	2:C:927:GLY:HA3	2.15	0.47
3:D:1214:ARG:HG3	3:D:1215:PRO:CD	2.45	0.47
3:D:1237:LEU:HD11	3:D:1357:TYR:CD2	2.48	0.47
3:D:1340:LYS:O	3:D:1340:LYS:CG	2.63	0.47
3:D:1484:PHE:CZ	4:E:22:VAL:HG23	2.50	0.47
3:D:547:LEU:HD13	3:D:577:ALA:C	2.35	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:811:GLU:CA	3:D:814:ALA:HB3	2.36	0.47
3:D:836:VAL:HG11	3:D:858:LEU:HD11	1.95	0.47
3:D:911:LEU:N	3:D:911:LEU:HD22	2.30	0.47
1:A:100:LEU:HD11	1:A:137:LEU:HD23	1.97	0.47
1:B:154:ARG:O	1:B:155:HIS:CB	2.62	0.47
1:B:159:ASP:OD2	1:B:161:ILE:O	2.33	0.47
1:B:23:PHE:CD1	1:B:210:LEU:HD22	2.50	0.47
2:C:14:PRO:HA	2:C:458:TYR:CE1	2.50	0.47
2:C:397:GLU:HB2	2:C:633:GLN:NE2	2.26	0.47
2:C:642:ARG:CB	2:C:656:ALA:HA	2.45	0.47
2:C:735:ARG:CA	2:C:737:LEU:O	2.58	0.47
2:C:953:VAL:HG11	2:C:962:GLN:HB3	1.96	0.47
3:D:1155:GLU:O	3:D:1156:ALA:HB2	2.15	0.47
3:D:1348:TYR:O	3:D:1352:GLU:CB	2.62	0.47
3:D:810:GLU:O	3:D:810:GLU:HG2	2.14	0.47
3:D:932:ASP:O	3:D:933:ALA:C	2.53	0.47
1:B:89:PHE:HZ	1:B:145:ARG:HE	1.55	0.47
2:C:208:VAL:CG1	2:C:218:VAL:HG21	2.45	0.47
2:C:261:LEU:HD11	2:C:263:ASP:HB2	1.96	0.47
2:C:434:HIS:C	2:C:436:GLY:N	2.68	0.47
2:C:727:PRO:HD2	2:C:759:THR:HG22	1.96	0.47
2:C:71:TYR:HA	2:C:96:ALA:HB2	1.97	0.47
3:D:1012:PHE:CE2	3:D:1023:VAL:HG11	2.50	0.47
2:C:432:ARG:NH1	3:D:1049:PRO:O	2.48	0.47
2:C:428:ARG:NH2	3:D:1086:ALA:O	2.48	0.47
3:D:1276:SER:H	3:D:1323:GLY:CA	2.18	0.47
3:D:1306:LEU:HD21	3:D:1311:ARG:CB	2.45	0.47
3:D:1345:VAL:O	3:D:1346:GLU:C	2.53	0.47
3:D:502:PHE:C	3:D:504:ASP:H	2.19	0.47
3:D:552:ASN:O	3:D:554:LEU:N	2.47	0.47
2:C:796:GLU:CG	3:D:681:ARG:HH12	2.13	0.47
3:D:760:ARG:NH2	4:E:3:GLU:OE2	2.48	0.47
3:D:87:ARG:CB	3:D:522:PRO:HG2	2.45	0.47
3:D:910:SER:O	3:D:911:LEU:C	2.54	0.47
3:D:916:TYR:O	3:D:919:PHE:HB3	2.15	0.47
3:D:997:TRP:HA	3:D:1000:THR:CG2	2.42	0.47
1:A:79:ILE:HD11	1:A:164:ILE:HG13	1.97	0.46
1:B:164:ILE:HG13	1:B:164:ILE:O	2.16	0.46
1:B:22:GLU:HA	1:B:196:LEU:O	2.15	0.46
2:C:1034:GLU:OE2	3:D:1097:ARG:NH1	2.46	0.46
2:C:22:GLN:O	2:C:24:GLU:N	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:269:LEU:O	2:C:274:ARG:NH2	2.49	0.46
2:C:359:MET:SD	2:C:372:LEU:HD11	2.55	0.46
2:C:378:LEU:O	2:C:382:LEU:CB	2.63	0.46
2:C:582:GLY:O	2:C:585:GLU:HG3	2.15	0.46
2:C:616:GLU:O	2:C:618:GLY:N	2.47	0.46
2:C:601:GLY:HA3	2:C:648:ARG:N	2.30	0.46
2:C:6:PHE:N	2:C:6:PHE:CD1	2.82	0.46
2:C:861:LEU:CD2	2:C:862:PRO:HD2	2.45	0.46
2:C:565:GLN:HB2	2:C:995:MET:SD	2.56	0.46
3:D:1282:VAL:HG13	3:D:1315:LYS:CA	2.36	0.46
3:D:465:LEU:CD2	3:D:509:PRO:HB3	2.41	0.46
3:D:543:LEU:HD21	3:D:600:LEU:HD12	1.98	0.46
3:D:772:PRO:HG3	3:D:778:LEU:HD22	1.97	0.46
3:D:795:VAL:N	3:D:862:ASP:CB	2.78	0.46
3:D:930:LEU:CD1	3:D:934:LEU:HG	2.45	0.46
1:A:79:ILE:HD11	1:A:164:ILE:HD11	1.95	0.46
1:A:89:PHE:HB2	1:A:145:ARG:HH21	1.79	0.46
2:C:252:LYS:HZ1	2:C:293:PHE:H	1.64	0.46
2:C:472:ARG:O	2:C:479:VAL:O	2.33	0.46
2:C:472:ARG:O	2:C:480:THR:HG22	2.14	0.46
2:C:881:ASN:ND2	3:D:1035:GLN:CG	2.78	0.46
2:C:1085:PHE:CE1	3:D:1469:LEU:HD22	2.49	0.46
3:D:546:ARG:HH21	3:D:577:ALA:HA	1.79	0.46
1:A:142:ARG:O	1:A:143:VAL:HG22	2.15	0.46
1:A:25:LEU:HB3	1:A:26:GLU:H	1.59	0.46
2:C:257:LEU:O	2:C:258:PHE:C	2.53	0.46
2:C:356:ARG:HD2	2:C:356:ARG:O	2.16	0.46
2:C:46:ALA:O	2:C:47:ALA:C	2.53	0.46
2:C:63:GLY:O	2:C:64:LEU:HB2	2.16	0.46
2:C:742:ILE:HG12	2:C:756:VAL:HG13	1.97	0.46
2:C:758:ARG:O	2:C:787:ASP:O	2.33	0.46
3:D:1050:SER:O	3:D:1051:GLY:C	2.54	0.46
3:D:477:LEU:CA	3:D:480:GLU:HB3	2.34	0.46
3:D:522:PRO:O	3:D:523:ASP:CB	2.63	0.46
3:D:645:PRO:HG3	3:D:724:GLN:O	2.14	0.46
3:D:710:ARG:C	3:D:712:GLY:H	2.19	0.46
3:D:718:PRO:O	3:D:719:VAL:HG23	2.15	0.46
1:B:110:ALA:CA	1:B:113:PHE:HE1	2.26	0.46
1:B:62:LEU:O	1:B:63:HIS:O	2.34	0.46
2:C:35:PRO:C	2:C:37:GLU:H	2.17	0.46
2:C:390:GLN:CD	2:C:413:LEU:O	2.53	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:420:ARG:CD	2:C:420:ARG:H	2.20	0.46
2:C:423:ALA:C	2:C:427:VAL:HG21	2.35	0.46
2:C:455:LEU:HD12	2:C:455:LEU:O	2.16	0.46
2:C:491:GLU:O	2:C:491:GLU:HG3	2.15	0.46
2:C:814:GLU:HG3	2:C:814:GLU:O	2.15	0.46
2:C:96:ALA:O	2:C:98:LEU:HG	2.16	0.46
3:D:1063:ARG:HD3	3:D:1064:GLU:N	2.30	0.46
3:D:1364:LEU:HG	3:D:1365:HIS:N	2.31	0.46
3:D:673:ALA:O	3:D:676:MET:N	2.48	0.46
3:D:724:GLN:O	3:D:725:SER:O	2.32	0.46
2:C:1051:GLU:OE2	3:D:752:SER:OG	2.30	0.46
4:E:87:LYS:O	4:E:90:GLU:HB3	2.15	0.46
1:B:172:PRO:CB	1:B:204:VAL:HB	2.45	0.46
2:C:1034:GLU:OE1	3:D:1097:ARG:NH1	2.49	0.46
2:C:128:ILE:CD1	2:C:128:ILE:N	2.79	0.46
2:C:262:ALA:HB1	2:C:266:ARG:CD	2.17	0.46
2:C:305:PRO:HB3	2:C:308:ARG:NH2	2.30	0.46
2:C:148:PHE:CE2	2:C:310:LEU:HA	2.50	0.46
2:C:54:ILE:HG12	2:C:355:VAL:CG1	2.45	0.46
2:C:795:GLY:O	2:C:796:GLU:C	2.54	0.46
2:C:833:LEU:C	2:C:834:GLN:HG3	2.35	0.46
2:C:857:ASP:O	2:C:858:MET:HB2	2.15	0.46
2:C:881:ASN:ND2	3:D:1035:GLN:OE1	2.49	0.46
2:C:996:LYS:NZ	2:C:1000:MET:HE3	2.31	0.46
3:D:1108:VAL:HG23	3:D:1222:VAL:HG23	1.97	0.46
3:D:131:LYS:O	3:D:132:TYR:C	2.54	0.46
3:D:21:TRP:O	3:D:23:TYR:N	2.48	0.46
3:D:566:ILE:O	3:D:570:GLU:HG3	2.16	0.46
3:D:590:PRO:HA	3:D:600:LEU:HD21	1.98	0.46
3:D:911:LEU:H	3:D:911:LEU:CD2	2.28	0.46
3:D:950:ILE:HB	3:D:953:ASP:HB3	1.98	0.46
1:A:205:THR:O	1:A:208:GLU:HB2	2.15	0.46
1:B:213:ALA:O	1:B:216:ILE:N	2.49	0.46
2:C:100:LEU:HD21	2:C:368:THR:CA	2.39	0.46
2:C:1080:SER:OG	2:C:1081:VAL:N	2.48	0.46
2:C:291:VAL:CG1	2:C:299:LYS:HE3	2.46	0.46
2:C:440:PRO:HD2	2:C:456:ALA:N	2.31	0.46
2:C:554:ASP:O	2:C:555:ALA:C	2.54	0.46
2:C:726:ILE:HB	2:C:729:LEU:HD23	1.96	0.46
2:C:794:PRO:HG2	2:C:1027:PHE:HB3	1.98	0.46
3:D:1016:TYR:CB	3:D:1019:ASN:HB2	2.39	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1084:ASP:O	3:D:1087:LEU:N	2.48	0.46
3:D:1155:GLU:CB	3:D:1160:ARG:HA	2.42	0.46
3:D:485:SER:OG	3:D:488:ARG:HB2	2.16	0.46
3:D:733:CYS:O	3:D:737:ASN:N	2.45	0.46
3:D:973:ARG:HA	3:D:976:GLU:HB2	1.97	0.46
4:E:68:LEU:CD1	4:E:73:LEU:HD12	2.46	0.46
1:A:18:ASP:O	1:A:19:HIS:CD2	2.69	0.46
1:B:225:ALA:O	1:B:227:PRO:HD3	2.15	0.46
1:B:58:ILE:O	1:B:59:GLU:O	2.34	0.46
2:C:439:CYS:O	2:C:440:PRO:O	2.34	0.46
2:C:44:ILE:HD12	2:C:44:ILE:N	2.29	0.46
2:C:613:VAL:HG12	2:C:615:TYR:CA	2.46	0.46
2:C:892:LEU:C	2:C:894:GLY:N	2.68	0.46
2:C:944:LEU:HD21	2:C:963:LEU:CD2	2.46	0.46
3:D:958:PRO:HG3	3:D:1008:VAL:CA	2.46	0.46
3:D:1131:ARG:H	3:D:1131:ARG:HD2	1.81	0.46
3:D:549:ASN:HD22	3:D:549:ASN:N	2.13	0.46
3:D:693:GLU:O	3:D:696:HIS:HB3	2.15	0.46
3:D:756:GLN:O	3:D:760:ARG:HG2	2.16	0.46
3:D:925:GLU:HG2	3:D:926:LYS:H	1.81	0.46
1:A:208:GLU:O	1:A:212:GLN:HG3	2.15	0.46
1:B:187:GLN:O	1:B:188:ARG:C	2.53	0.46
2:C:440:PRO:HG2	2:C:454:SER:O	2.16	0.46
2:C:766:GLU:O	2:C:768:SER:N	2.47	0.46
2:C:770:GLU:O	2:C:774:LEU:N	2.35	0.46
2:C:810:ASP:HB3	2:C:813:VAL:CG2	2.46	0.46
2:C:950:LEU:O	3:D:1019:ASN:OD1	2.34	0.46
3:D:1073:ILE:HD12	3:D:1073:ILE:N	2.31	0.46
3:D:1126:MET:CE	3:D:1133:LEU:HD21	2.45	0.46
3:D:1180:GLU:C	3:D:1182:GLY:N	2.70	0.46
3:D:1232:GLU:CB	3:D:1233:PRO:HD3	2.33	0.46
3:D:18:ILE:HA	3:D:21:TRP:CE3	2.51	0.46
3:D:538:SER:CA	3:D:541:ASN:HD22	2.25	0.46
3:D:878:GLY:O	3:D:880:ILE:N	2.48	0.46
3:D:98:PRO:O	3:D:99:ALA:HB2	2.16	0.46
4:E:4:PRO:CB	4:E:66:LYS:HE2	2.41	0.46
1:A:103:GLU:O	1:A:104:GLY:C	2.54	0.46
1:B:60:ASP:O	1:B:61:VAL:O	2.33	0.46
2:C:1040:LEU:N	2:C:1040:LEU:HD22	2.31	0.46
2:C:17:PRO:O	2:C:18:LEU:CB	2.63	0.46
2:C:31:GLN:NE2	2:C:39:ARG:CB	2.77	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:323:ASP:O	2:C:324:ASP:C	2.51	0.46
2:C:42:VAL:HG12	2:C:43:GLY:N	2.30	0.46
2:C:439:CYS:SG	2:C:453:THR:HG21	2.55	0.46
2:C:682:TYR:CB	2:C:689:VAL:HG22	2.45	0.46
2:C:814:GLU:C	2:C:815:LEU:HD12	2.36	0.46
2:C:837:ASP:H	2:C:1001:VAL:CG2	2.29	0.46
2:C:839:LEU:CD2	2:C:849:VAL:HG23	2.46	0.46
2:C:876:VAL:O	2:C:880:MET:SD	2.74	0.46
2:C:940:GLU:O	2:C:944:LEU:HG	2.16	0.46
3:D:1025:ALA:O	3:D:1028:GLY:N	2.43	0.46
3:D:1070:GLU:HG3	3:D:1073:ILE:HD13	1.98	0.46
3:D:477:LEU:O	3:D:477:LEU:HD12	2.16	0.46
3:D:547:LEU:HA	3:D:577:ALA:HB1	1.98	0.46
3:D:612:GLY:O	3:D:614:PHE:N	2.49	0.46
3:D:709:HIS:HD2	3:D:711:LEU:HB2	1.81	0.46
2:C:1043:TYR:CD1	3:D:710:ARG:HB2	2.51	0.46
3:D:930:LEU:HD12	3:D:934:LEU:HG	1.97	0.46
1:A:123:ASN:C	1:A:124:PRO:O	2.53	0.46
1:A:127:HIS:CD2	1:A:127:HIS:C	2.88	0.46
1:A:19:HIS:O	1:A:20:TYR:O	2.34	0.46
1:B:154:ARG:HD3	1:B:154:ARG:HA	1.71	0.46
2:C:145:GLY:O	2:C:162:ILE:N	2.45	0.46
2:C:399:ASN:HD21	2:C:401:LEU:CB	2.26	0.46
2:C:479:VAL:O	2:C:480:THR:O	2.33	0.46
2:C:714:ASP:O	2:C:715:THR:O	2.34	0.46
2:C:939:ARG:CZ	2:C:975:TYR:CE2	2.99	0.46
2:C:974:LEU:HD22	2:C:989:VAL:CG2	2.45	0.46
3:D:1173:HIS:O	3:D:1176:ILE:HB	2.16	0.46
3:D:1386:GLY:C	3:D:1388:SER:H	2.19	0.46
3:D:1460:LEU:HD13	3:D:1471:ARG:CD	2.46	0.46
3:D:1474:PRO:O	3:D:1479:SER:N	2.49	0.46
3:D:502:PHE:CD1	3:D:507:ASN:ND2	2.84	0.46
3:D:545:ARG:C	3:D:547:LEU:N	2.67	0.46
1:A:103:GLU:O	1:A:104:GLY:O	2.34	0.45
1:A:79:ILE:HG23	1:A:166:VAL:CG2	2.46	0.45
1:B:24:VAL:CG2	1:B:195:THR:HG23	2.45	0.45
2:C:1067:TYR:CZ	2:C:1071:ILE:HD11	2.51	0.45
2:C:1101:THR:HB	2:C:1110:ASP:CB	2.47	0.45
2:C:20:GLU:O	2:C:21:ILE:C	2.53	0.45
2:C:216:ASP:O	2:C:217:LEU:C	2.54	0.45
2:C:148:PHE:HE1	2:C:309:TYR:CD2	2.33	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:30:LEU:HG	2:C:30:LEU:O	2.16	0.45
2:C:327:HIS:C	2:C:329:GLY:N	2.69	0.45
2:C:408:ARG:HH22	2:C:457:ALA:HA	1.81	0.45
2:C:648:ARG:CG	2:C:648:ARG:HH11	2.28	0.45
2:C:744:ARG:O	2:C:747:ALA:HB2	2.16	0.45
2:C:92:ALA:HB2	2:C:120:LEU:HD11	1.97	0.45
1:A:179:GLN:NE2	2:C:934:PHE:HB3	2.19	0.45
3:D:1206:TYR:CD2	3:D:1216:VAL:HG21	2.50	0.45
3:D:1270:LYS:O	3:D:1271:ALA:C	2.54	0.45
3:D:1342:PRO:HD2	3:D:1343:GLU:OE1	2.16	0.45
3:D:8:VAL:O	3:D:1435:TRP:CH2	2.69	0.45
3:D:496:LEU:HD11	3:D:500:ARG:NE	2.30	0.45
3:D:586:ARG:C	3:D:587:ARG:HD3	2.36	0.45
3:D:612:GLY:O	3:D:615:ARG:N	2.43	0.45
2:C:796:GLU:CG	3:D:681:ARG:NH1	2.73	0.45
3:D:792:ILE:HG22	3:D:793:THR:HG23	1.98	0.45
3:D:856:GLY:C	3:D:857:LEU:HD22	2.36	0.45
3:D:965:LEU:O	3:D:966:GLU:HB3	2.17	0.45
1:A:142:ARG:C	1:A:143:VAL:HG22	2.36	0.45
1:A:151:PRO:O	1:A:153:GLU:N	2.49	0.45
1:A:32:PHE:N	1:A:32:PHE:CD1	2.84	0.45
1:A:80:LEU:HD23	1:A:83:LYS:HZ1	1.80	0.45
2:C:157:ARG:H	2:C:157:ARG:CD	2.21	0.45
2:C:203:ASP:H	2:C:207:LEU:HB2	1.81	0.45
2:C:325:ILE:C	2:C:327:HIS:N	2.70	0.45
2:C:380:ALA:O	2:C:384:GLU:HB2	2.17	0.45
2:C:460:ARG:CG	2:C:461:VAL:N	2.78	0.45
2:C:460:ARG:O	2:C:461:VAL:CB	2.64	0.45
2:C:653:ASP:O	2:C:653:ASP:OD1	2.34	0.45
2:C:897:LEU:HG	2:C:899:GLN:CD	2.36	0.45
3:D:1080:LYS:C	3:D:1082:GLY:N	2.70	0.45
3:D:1275:ILE:HD12	3:D:1275:ILE:O	2.16	0.45
3:D:1377:LEU:HD11	3:D:1422:LEU:HG	1.98	0.45
3:D:470:LEU:O	3:D:472:LYS:N	2.49	0.45
3:D:650:LEU:HD21	3:D:683:ILE:HD11	1.98	0.45
3:D:77:GLY:C	3:D:79:GLU:H	2.18	0.45
3:D:734:GLU:OE2	3:D:780:LYS:NZ	2.50	0.45
4:E:6:ILE:CG2	4:E:7:ASP:N	2.79	0.45
1:B:90:LEU:HG	1:B:118:ASP:O	2.17	0.45
2:C:837:ASP:N	2:C:1001:VAL:HG23	2.31	0.45
2:C:1008:ARG:CD	2:C:1029:GLY:H	2.29	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:144:PRO:HA	2:C:162:ILE:CG2	2.45	0.45
2:C:165:LEU:HD21	2:C:338:GLU:OE1	2.16	0.45
2:C:363:SER:O	2:C:367:LEU:N	2.40	0.45
2:C:497:ALA:HA	2:C:502:PRO:CB	2.47	0.45
2:C:564:MET:CE	2:C:846:LYS:HG2	2.46	0.45
2:C:918:LEU:CD1	2:C:968:ASP:O	2.65	0.45
2:C:959:PRO:HG2	2:C:960:GLU:N	2.32	0.45
3:D:10:ILE:HG12	3:D:11:ALA:N	2.26	0.45
3:D:1110:GLU:O	3:D:1203:GLN:CB	2.65	0.45
3:D:1205:CYS:C	3:D:1207:GLY:N	2.70	0.45
3:D:1278:ILE:HG22	3:D:1279:ASP:H	1.71	0.45
3:D:1345:VAL:O	3:D:1349:LEU:HD22	2.15	0.45
3:D:1364:LEU:CG	3:D:1365:HIS:N	2.79	0.45
2:C:1026:GLN:NE2	3:D:674:ARG:HH21	2.13	0.45
3:D:754:PHE:O	3:D:758:GLU:HG2	2.16	0.45
3:D:875:THR:HG23	3:D:879:ARG:CB	2.43	0.45
4:E:15:SER:O	4:E:18:ARG:HB3	2.16	0.45
1:A:85:LEU:CA	1:A:123:ASN:HD21	2.28	0.45
1:B:111:VAL:C	1:B:113:PHE:N	2.69	0.45
1:B:12:THR:O	1:B:24:VAL:N	2.48	0.45
1:B:59:GLU:O	1:B:60:ASP:CB	2.64	0.45
2:C:1107:ASN:H	2:C:1108:PRO:HD3	1.81	0.45
2:C:159:ILE:HG21	2:C:306:THR:OG1	2.16	0.45
2:C:145:GLY:N	2:C:162:ILE:HB	2.32	0.45
2:C:281:LEU:C	2:C:283:VAL:H	2.20	0.45
2:C:340:MET:O	2:C:340:MET:SD	2.74	0.45
2:C:520:GLU:O	2:C:521:PRO:C	2.54	0.45
2:C:708:TYR:N	2:C:708:TYR:CD1	2.84	0.45
2:C:906:PHE:O	2:C:907:ASP:CB	2.64	0.45
2:C:80:GLN:HG3	2:C:90:TYR:CZ	2.52	0.45
3:D:1008:VAL:CG1	3:D:1009:PHE:N	2.80	0.45
3:D:1077:GLY:O	3:D:1078:ALA:C	2.55	0.45
3:D:9(U):UNK:O	3:D:10(U):UNK:CB	2.63	0.45
3:D:709:HIS:H	3:D:1228:GLU:HB3	1.82	0.45
3:D:1484:PHE:HB2	4:E:76:GLY:O	2.17	0.45
3:D:728:LEU:HD13	3:D:745:MET:CE	2.47	0.45
3:D:701:LEU:HD21	3:D:763:MET:HE1	1.98	0.45
3:D:794:GLN:HB3	3:D:1018:PHE:CZ	2.52	0.45
3:D:863:THR:C	3:D:864:VAL:CG2	2.85	0.45
3:D:958:PRO:O	3:D:959:GLU:C	2.54	0.45
3:D:975:ILE:HD11	3:D:984:LEU:HD13	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:121:ILE:O	1:A:122:MET:C	2.55	0.45
1:B:41:ARG:HD3	1:B:41:ARG:O	2.17	0.45
2:C:328:LEU:CB	2:C:484:VAL:HG11	2.46	0.45
2:C:421:GLU:O	2:C:423:ALA:N	2.50	0.45
2:C:442:GLU:O	2:C:442:GLU:HG3	2.15	0.45
2:C:586:ARG:O	2:C:586:ARG:HG3	2.16	0.45
2:C:603:VAL:HG23	2:C:604:VAL:N	2.27	0.45
2:C:674:VAL:HG23	2:C:675:ALA:O	2.16	0.45
2:C:745:ILE:C	2:C:747:ALA:H	2.20	0.45
2:C:755:LEU:HD12	2:C:756:VAL:HG23	1.97	0.45
2:C:7:GLY:HA2	2:C:907:ASP:OD2	2.16	0.45
3:D:1085:THR:O	3:D:1087:LEU:N	2.50	0.45
3:D:1259:ARG:HG3	3:D:1259:ARG:NH1	2.31	0.45
3:D:1463:LEU:O	3:D:1464:LYS:C	2.55	0.45
3:D:469:ASP:O	3:D:470:LEU:C	2.55	0.45
3:D:890:VAL:CG1	3:D:891:GLY:H	2.25	0.45
3:D:985:THR:O	3:D:986:ASP:C	2.54	0.45
4:E:68:LEU:C	4:E:70:THR:N	2.69	0.45
1:A:77:GLU:O	1:A:78:ILE:C	2.54	0.45
1:A:78:ILE:O	1:A:81:ASN:N	2.50	0.45
1:B:36:LEU:O	1:B:39:PRO:HD2	2.16	0.45
2:C:142:ARG:NH1	2:C:142:ARG:HG2	2.32	0.45
2:C:200:LEU:HD23	2:C:200:LEU:N	2.30	0.45
2:C:384:GLU:OE2	2:C:388:ARG:HD2	2.17	0.45
2:C:442:GLU:OE2	2:C:544:THR:HG21	2.17	0.45
1:A:65:PHE:HD2	2:C:628:TYR:CE2	2.35	0.45
2:C:688:ILE:HD12	2:C:871:LEU:CD1	2.46	0.45
3:D:1252:ASP:C	3:D:1254:THR:N	2.70	0.45
3:D:899:LEU:O	3:D:900:ILE:HG13	2.16	0.45
3:D:993:VAL:O	3:D:996:LEU:HB3	2.17	0.45
1:B:122:MET:N	1:B:122:MET:HE3	2.32	0.45
1:B:85:LEU:C	1:B:123:ASN:HD21	2.19	0.45
1:B:97:THR:HA	1:B:142:ARG:HA	1.98	0.45
2:C:1008:ARG:HB2	2:C:1029:GLY:H	1.81	0.45
2:C:1026:GLN:O	2:C:1027:PHE:HB2	2.17	0.45
2:C:194:VAL:HG22	2:C:221:LEU:HD12	1.97	0.45
2:C:335:THR:O	2:C:338:GLU:N	2.45	0.45
2:C:969:LEU:HD11	3:D:953:ASP:N	2.20	0.45
3:D:1080:LYS:C	3:D:1082:GLY:H	2.19	0.45
3:D:462:GLN:O	3:D:463:GLU:C	2.54	0.45
3:D:507:ASN:ND2	3:D:508:ARG:H	2.14	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:696:HIS:CD2	4:E:57:ASP:HB2	2.51	0.45
1:A:180:VAL:O	1:A:181:GLU:C	2.55	0.45
1:B:56:VAL:HG11	1:B:58:ILE:HD11	1.99	0.45
2:C:15:LEU:HD21	2:C:461:VAL:HG23	1.96	0.45
2:C:164:PRO:HD3	2:C:267:TYR:HD2	1.78	0.45
2:C:274:ARG:O	2:C:278:GLU:HB2	2.17	0.45
2:C:321:GLU:O	2:C:322:VAL:C	2.56	0.45
2:C:564:MET:CG	2:C:997:LEU:HD11	2.46	0.45
2:C:63:GLY:HA2	2:C:102:HIS:CA	2.46	0.45
2:C:659:PRO:HG2	2:C:660:ALA:N	2.28	0.45
2:C:703:ILE:HA	2:C:829:GLN:O	2.16	0.45
3:D:1070:GLU:HG3	3:D:1073:ILE:CB	2.46	0.45
3:D:1093:GLY:HA2	3:D:1097:ARG:NE	2.32	0.45
3:D:1126:MET:CG	3:D:1127:ASP:N	2.78	0.45
3:D:1195:CYS:SG	3:D:1202:CYS:CB	3.04	0.45
3:D:15:PRO:HD3	3:D:510:GLU:HB3	1.98	0.45
3:D:625:TYR:CE1	3:D:751:LEU:HD21	2.48	0.45
3:D:633:VAL:O	3:D:633:VAL:HG13	2.16	0.45
3:D:701:LEU:HA	3:D:715:ALA:CB	2.45	0.45
3:D:806:PHE:CA	3:D:827:ILE:O	2.65	0.45
1:A:200:THR:CG2	1:A:201:ASP:N	2.80	0.45
2:C:1030:GLN:HE21	2:C:1031:ARG:H	1.63	0.45
2:C:1037:VAL:O	2:C:1041:GLU:HG3	2.17	0.45
2:C:1045:ALA:CB	2:C:1048:THR:HB	2.33	0.45
2:C:163:ILE:HG21	2:C:170:PRO:N	2.32	0.45
2:C:204:GLN:O	2:C:205:GLU:CB	2.65	0.45
2:C:461:VAL:O	2:C:462:ASP:CB	2.65	0.45
2:C:559:LEU:HA	2:C:562:SER:HB3	1.99	0.45
2:C:742:ILE:HD13	2:C:823:VAL:HG13	1.99	0.45
2:C:874:LEU:CD1	2:C:875:GLY:H	2.30	0.45
2:C:981:GLU:HB3	2:C:982:PRO:CD	2.47	0.45
3:D:1252:ASP:O	3:D:1254:THR:N	2.44	0.45
3:D:1268:ARG:NH1	3:D:1331:ILE:CB	2.80	0.45
3:D:130:ASN:CB	3:D:464:LEU:HD21	2.47	0.45
3:D:1320:VAL:O	3:D:1322:ALA:N	2.50	0.45
3:D:699:VAL:HA	3:D:716:PHE:O	2.17	0.45
3:D:770:LEU:O	3:D:771:SER:HB2	2.16	0.45
1:B:30:ARG:O	1:B:30:ARG:HG3	2.17	0.45
2:C:1092:LEU:HD22	2:C:1097:LEU:HD12	1.99	0.45
2:C:157:ARG:HD3	2:C:157:ARG:N	2.28	0.45
2:C:212:SER:HB2	2:C:218:VAL:CG2	2.47	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:589:ARG:HH12	2:C:596:TYR:HA	1.81	0.45
2:C:614:ARG:O	2:C:615:TYR:CB	2.65	0.45
3:D:104:PHE:O	3:D:511:TRP:HZ3	2.00	0.45
3:D:1146:TYR:HD2	3:D:1147:GLY:N	2.13	0.45
3:D:1317:GLY:O	3:D:1318:ASP:CB	2.64	0.45
3:D:1421:LEU:HD12	3:D:1422:LEU:H	1.82	0.45
3:D:1466:ASN:HD21	3:D:1471:ARG:NH1	2.15	0.45
3:D:638:LYS:O	3:D:639:LEU:CB	2.65	0.45
3:D:728:LEU:HD13	3:D:745:MET:HE3	1.98	0.45
1:A:44:LEU:O	1:A:173:VAL:HG21	2.18	0.44
1:A:30:ARG:HD2	1:A:190:ASP:HB3	1.99	0.44
1:A:214:VAL:HG23	1:A:215:ALA:N	2.31	0.44
1:A:66:SER:CB	1:A:75:VAL:HG21	2.44	0.44
1:B:133:GLU:CD	1:B:134:GLY:H	2.19	0.44
1:B:138:TYR:CE2	1:B:140:GLU:HG3	2.52	0.44
1:B:56:VAL:O	1:B:163:ALA:O	2.35	0.44
1:B:147:VAL:O	1:B:170:PHE:O	2.34	0.44
2:C:1004:LYS:O	2:C:1005:MET:HB3	2.17	0.44
2:C:1042:ALA:CB	3:D:1228:GLU:OE1	2.66	0.44
2:C:196:LEU:O	2:C:199:VAL:HB	2.17	0.44
2:C:231:PRO:HA	2:C:234:ALA:HB2	1.98	0.44
2:C:552:HIS:CE1	3:D:1065:GLY:CA	3.00	0.44
2:C:610:ARG:O	2:C:611:ILE:C	2.54	0.44
2:C:684:PHE:O	2:C:685:GLU:HB2	2.17	0.44
2:C:86:LYS:CE	2:C:811:PRO:HG2	2.47	0.44
3:D:1031:GLY:O	3:D:1032:ASN:CB	2.55	0.44
3:D:1155:GLU:HB3	3:D:1160:ARG:HG2	1.98	0.44
3:D:1463:LEU:O	3:D:1465:GLU:N	2.50	0.44
3:D:151:GLN:O	3:D:152:LEU:C	2.55	0.44
3:D:17:LYS:O	3:D:18:ILE:C	2.54	0.44
3:D:805:ALA:HB1	3:D:809:PRO:HD2	1.99	0.44
3:D:972:LEU:O	3:D:976:GLU:HG2	2.17	0.44
1:A:161:ILE:HG23	1:A:162:ASN:ND2	2.31	0.44
2:C:1055:ILE:HG21	2:C:1077:PRO:HB3	1.99	0.44
2:C:17:PRO:HA	2:C:586:ARG:HH21	1.82	0.44
2:C:9:ILE:HD13	2:C:494:TYR:CE1	2.52	0.44
2:C:18:LEU:HD13	2:C:542:LEU:CD2	2.47	0.44
2:C:589:ARG:HH21	2:C:654:LEU:CD1	2.30	0.44
2:C:729:LEU:CD2	2:C:734:LEU:HD23	2.47	0.44
2:C:677:MET:N	2:C:873:PRO:HD3	2.32	0.44
3:D:117:ASP:C	3:D:119:PHE:H	2.19	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1312:LEU:O	3:D:1324:GLN:OE1	2.34	0.44
3:D:1340:LYS:HA	3:D:1340:LYS:HD2	1.84	0.44
3:D:1487:VAL:O	4:E:79:LEU:CD1	2.65	0.44
3:D:575:GLN:O	3:D:578:VAL:N	2.47	0.44
3:D:603:LEU:O	3:D:606:ILE:HD13	2.17	0.44
3:D:606:ILE:CD1	3:D:606:ILE:N	2.75	0.44
3:D:773:ALA:O	3:D:774:SER:CB	2.65	0.44
3:D:896:ALA:O	3:D:899:LEU:N	2.48	0.44
3:D:954:ASP:HA	3:D:956:VAL:HG23	2.00	0.44
4:E:57:ASP:HA	4:E:58:PRO:HD3	1.81	0.44
1:A:196:LEU:H	1:A:196:LEU:CD2	2.31	0.44
1:A:24:VAL:HG12	1:A:25:LEU:O	2.17	0.44
1:B:105:PRO:CA	1:B:132:GLU:HA	2.43	0.44
2:C:22:GLN:HA	2:C:25:SER:HB3	1.99	0.44
2:C:377:PRO:HG2	2:C:378:LEU:H	1.82	0.44
2:C:474:VAL:HA	2:C:527:GLU:CB	2.47	0.44
2:C:501:THR:N	2:C:502:PRO:CD	2.80	0.44
2:C:474:VAL:HG12	2:C:526:PRO:HB3	1.99	0.44
2:C:603:VAL:O	2:C:613:VAL:O	2.35	0.44
2:C:48:PHE:HE2	2:C:71:TYR:HB3	1.80	0.44
2:C:873:PRO:O	2:C:877:PRO:CG	2.65	0.44
3:D:1282:VAL:HB	3:D:1283:ARG:H	1.29	0.44
3:D:131:LYS:CB	3:D:454:ALA:HA	2.47	0.44
3:D:1276:SER:N	3:D:1323:GLY:HA2	2.19	0.44
3:D:1381:GLU:O	3:D:1419:LYS:N	2.50	0.44
3:D:628:ARG:HB3	3:D:628:ARG:NH1	2.32	0.44
3:D:642:CYS:SG	3:D:702:LEU:CD2	3.05	0.44
3:D:657:LEU:HD13	3:D:690:ALA:HB1	1.99	0.44
3:D:925:GLU:HG2	3:D:926:LYS:N	2.33	0.44
1:A:75:VAL:HA	1:A:78:ILE:CD1	2.36	0.44
1:B:141:VAL:O	1:B:141:VAL:HG13	2.17	0.44
1:B:159:ASP:O	1:B:160:ARG:C	2.56	0.44
2:C:1032:PHE:HB2	3:D:623:VAL:CG2	2.43	0.44
2:C:1054:THR:O	2:C:1056:LYS:N	2.50	0.44
2:C:243:ARG:CG	2:C:244:PRO:HA	2.44	0.44
2:C:141:HIS:HE2	2:C:332:ARG:HD3	1.82	0.44
2:C:526:PRO:O	2:C:527:GLU:C	2.55	0.44
2:C:473:ARG:O	2:C:531:PHE:O	2.34	0.44
1:A:65:PHE:HD2	2:C:628:TYR:HE2	1.65	0.44
2:C:882:LEU:CD1	2:C:884:GLN:NE2	2.80	0.44
2:C:9:ILE:HD13	2:C:494:TYR:HE1	1.82	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1167:LEU:HD23	3:D:1167:LEU:O	2.18	0.44
3:D:1349:LEU:HG	3:D:1376:MET:CE	2.47	0.44
3:D:37(U):UNK:O	3:D:38(U):UNK:CB	2.65	0.44
3:D:550:ARG:NH2	3:D:573:MET:SD	2.90	0.44
3:D:694:VAL:O	3:D:695:ILE:C	2.56	0.44
3:D:845:ASN:CB	3:D:846:PRO:HD2	2.48	0.44
2:C:987:ILE:HD11	3:D:946:GLY:C	2.38	0.44
1:A:102:ALA:CB	1:A:108:VAL:HG21	2.47	0.44
1:A:180:VAL:HG23	2:C:939:ARG:HH11	1.83	0.44
1:B:100:LEU:HD21	1:B:108:VAL:HG13	1.99	0.44
1:B:136:LYS:HG2	1:B:137:LEU:N	2.32	0.44
1:B:50:GLY:HA3	1:B:172:PRO:HD3	2.00	0.44
2:C:1054:THR:HG22	2:C:1055:ILE:N	2.33	0.44
2:C:218:VAL:O	2:C:219:GLN:C	2.55	0.44
2:C:494:TYR:O	2:C:495:THR:OG1	2.33	0.44
2:C:815:LEU:HD23	2:C:822:VAL:CG2	2.48	0.44
2:C:843:HIS:CD2	2:C:884:GLN:CA	2.96	0.44
2:C:918:LEU:O	2:C:918:LEU:HD23	2.18	0.44
2:C:920:GLU:C	2:C:922:PHE:N	2.68	0.44
2:C:949:LYS:C	2:C:951:GLY:H	2.19	0.44
3:D:1224:VAL:C	3:D:1226:ALA:H	2.21	0.44
3:D:1283:ARG:HG2	3:D:1283:ARG:NH1	2.26	0.44
3:D:1379:TYR:OH	3:D:1432:THR:HB	2.17	0.44
3:D:1444:THR:O	3:D:1448:LEU:HB2	2.18	0.44
3:D:480:GLU:HA	3:D:493:ARG:NH1	2.32	0.44
3:D:794:GLN:O	3:D:795:VAL:HG23	2.18	0.44
3:D:805:ALA:O	3:D:806:PHE:CB	2.66	0.44
3:D:916:TYR:CE2	3:D:920:LEU:HD21	2.52	0.44
2:C:100:LEU:HD12	2:C:100:LEU:C	2.38	0.44
2:C:1059:ASP:OD1	2:C:1062:GLY:N	2.38	0.44
2:C:141:HIS:CE1	2:C:334:ARG:HG3	2.53	0.44
2:C:31:GLN:CG	2:C:39:ARG:HD2	2.48	0.44
2:C:355:VAL:CG1	2:C:356:ARG:N	2.80	0.44
2:C:457:ALA:C	2:C:459:ALA:N	2.70	0.44
2:C:525:ALA:O	2:C:526:PRO:C	2.56	0.44
2:C:569:VAL:O	2:C:571:LEU:HD12	2.17	0.44
1:A:70:GLY:HA2	2:C:606:VAL:HG22	2.00	0.44
2:C:674:VAL:HB	2:C:869:VAL:HG13	1.99	0.44
2:C:676:ILE:O	2:C:677:MET:HG2	2.17	0.44
2:C:780:GLU:O	2:C:781:LYS:C	2.55	0.44
2:C:835:VAL:CG1	3:D:632:VAL:HG21	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:860:HIS:CD2	2:C:977:GLY:CA	2.95	0.44
2:C:870:ILE:CG2	2:C:870:ILE:O	2.63	0.44
2:C:885:ILE:C	2:C:887:GLU:H	2.21	0.44
2:C:925:TYR:OH	2:C:972:VAL:HG21	2.16	0.44
3:D:1070:GLU:HG3	3:D:1073:ILE:HG12	2.00	0.44
3:D:1283:ARG:HB3	3:D:1294:PHE:HB2	1.99	0.44
3:D:1373:VAL:HG22	3:D:1376:MET:CE	2.47	0.44
3:D:752:SER:O	3:D:755:ALA:N	2.48	0.44
3:D:758:GLU:HB3	4:E:20:THR:CG2	2.48	0.44
3:D:711:LEU:HD21	3:D:768:ASN:O	2.18	0.44
3:D:935:LYS:CG	3:D:939:PHE:HE1	2.30	0.44
3:D:977:GLN:OE1	3:D:980:GLU:OE1	2.35	0.44
1:A:102:ALA:O	1:A:135:GLY:O	2.36	0.44
1:A:156:GLY:H	1:A:165:PRO:HB3	1.83	0.44
1:A:32:PHE:HD1	1:A:32:PHE:N	2.16	0.44
1:A:94:TRP:CZ3	1:A:96:THR:HB	2.53	0.44
1:B:19:HIS:H	1:B:19:HIS:CD2	2.35	0.44
1:B:86:VAL:HG23	1:B:123:ASN:OD1	2.16	0.44
2:C:1092:LEU:CD2	2:C:1097:LEU:HD12	2.48	0.44
2:C:129:ILE:HG21	2:C:387:SER:HB2	2.00	0.44
2:C:482:GLU:CB	2:C:486:MET:SD	3.06	0.44
2:C:572:ILE:O	2:C:573:ARG:HG3	2.18	0.44
2:C:580:MET:CB	2:C:584:GLU:OE1	2.66	0.44
2:C:601:GLY:CA	2:C:648:ARG:N	2.80	0.44
2:C:641:PRO:HA	2:C:656:ALA:HB2	1.98	0.44
2:C:87:ASP:O	2:C:88:LEU:HD23	2.17	0.44
2:C:984:GLU:HG2	3:D:944:THR:O	2.17	0.44
3:D:1018:PHE:O	3:D:1019:ASN:C	2.55	0.44
3:D:1167:LEU:CD2	3:D:1167:LEU:N	2.77	0.44
3:D:1238:THR:HG22	3:D:1239:MET:H	1.81	0.44
3:D:482:LYS:HD3	3:D:492:ALA:HB3	2.00	0.44
3:D:704:ARG:O	3:D:705:ALA:O	2.35	0.44
3:D:831:GLY:C	3:D:833:GLU:H	2.21	0.44
3:D:787:LEU:CD2	3:D:947:ILE:HD11	2.37	0.44
3:D:950:ILE:H	3:D:950:ILE:HG13	1.63	0.44
1:A:102:ALA:CB	1:A:137:LEU:HB3	2.47	0.44
1:A:93:ARG:O	1:A:94:TRP:CB	2.63	0.44
1:B:184:ARG:C	1:B:186:GLY:N	2.70	0.44
1:B:53:VAL:CG2	1:B:85:LEU:HD23	2.48	0.44
2:C:234:ALA:O	2:C:235:MET:C	2.55	0.44
2:C:110:GLU:HB3	2:C:370:ALA:HB2	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:427:VAL:HG12	2:C:431:HIS:NE2	2.33	0.44
2:C:474:VAL:HG12	2:C:526:PRO:CA	2.47	0.44
2:C:536:PRO:O	2:C:537:LYS:C	2.56	0.44
2:C:563:ASN:O	2:C:564:MET:C	2.55	0.44
2:C:567:GLN:O	2:C:568:ALA:O	2.35	0.44
2:C:706:GLU:CG	2:C:707:ARG:H	2.31	0.44
2:C:78:PHE:HD2	2:C:82:GLU:OE1	2.01	0.44
2:C:845:ASN:ND2	2:C:876:VAL:CG1	2.81	0.44
3:D:1042:MET:HG2	3:D:1043:ARG:N	2.33	0.44
3:D:1179:ALA:HA	3:D:1184:VAL:O	2.18	0.44
3:D:1259:ARG:C	3:D:1261:ILE:H	2.19	0.44
3:D:1473:ILE:HA	3:D:1473:ILE:HD13	1.89	0.44
3:D:543:LEU:C	3:D:545:ARG:H	2.20	0.44
3:D:657:LEU:O	3:D:659:LYS:N	2.50	0.44
3:D:674:ARG:NH1	3:D:678:GLU:CG	2.80	0.44
3:D:699:VAL:HG22	3:D:756:GLN:NE2	2.33	0.44
3:D:81:THR:O	3:D:82:ARG:CB	2.66	0.44
3:D:760:ARG:HH11	4:E:59:ASN:HD21	1.66	0.44
3:D:1490:GLN:CB	4:E:72:ARG:HD2	2.48	0.44
4:E:80:VAL:N	4:E:81:PRO:HD2	2.32	0.44
1:B:180:VAL:HG22	1:B:180:VAL:O	2.16	0.44
1:B:221:LEU:O	1:B:224:PHE:HD1	2.01	0.44
1:B:53:VAL:HG12	1:B:54:THR:N	2.32	0.44
2:C:208:VAL:HG12	2:C:209:ARG:H	1.82	0.44
2:C:165:LEU:HD11	2:C:338:GLU:OE1	2.18	0.44
2:C:425:PHE:O	2:C:426:ASP:CB	2.65	0.44
2:C:699:PHE:C	2:C:701:THR:H	2.21	0.44
2:C:97:ARG:NH2	2:C:109:LYS:NZ	2.66	0.44
3:D:1107:VAL:HG12	3:D:1109:ARG:HG3	2.00	0.44
3:D:108:VAL:O	3:D:110:SER:N	2.51	0.44
3:D:1109:ARG:O	3:D:1110:GLU:CB	2.65	0.44
3:D:1142:GLU:C	3:D:1144:GLY:H	2.22	0.44
3:D:1239:MET:HG3	3:D:1239:MET:O	2.18	0.44
3:D:131:LYS:O	3:D:133:ILE:N	2.51	0.44
3:D:1433:LYS:HG2	3:D:1434:SER:H	1.80	0.44
3:D:495:ARG:O	3:D:496:LEU:C	2.56	0.44
3:D:659:LYS:C	3:D:659:LYS:HD3	2.38	0.44
3:D:711:LEU:HB3	3:D:735:ALA:HB1	1.99	0.44
3:D:794:GLN:O	3:D:795:VAL:CB	2.66	0.44
2:C:1112:PHE:C	2:C:1114:GLY:N	2.71	0.43
2:C:258:PHE:HD1	2:C:258:PHE:N	2.15	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:442:GLU:O	2:C:559:LEU:HB2	2.18	0.43
2:C:574:ALA:O	2:C:575:GLN:O	2.35	0.43
2:C:735:ARG:C	2:C:737:LEU:N	2.62	0.43
2:C:862:PRO:HA	2:C:975:TYR:HE1	1.77	0.43
2:C:89:THR:HG23	2:C:129:ILE:HG12	2.00	0.43
3:D:1337:LEU:O	3:D:1341:GLY:N	2.51	0.43
3:D:618:LEU:HA	3:D:618:LEU:HD23	1.77	0.43
3:D:795:VAL:H	3:D:862:ASP:CB	2.31	0.43
3:D:8:VAL:HG12	3:D:8:VAL:O	2.17	0.43
4:E:39:VAL:HG12	4:E:39:VAL:O	2.17	0.43
1:A:103:GLU:H	1:A:106:LYS:NZ	2.16	0.43
1:A:26:GLU:OE2	1:A:184:ARG:NE	2.50	0.43
1:A:9:PRO:HG3	1:A:25:LEU:HD13	2.00	0.43
1:B:111:VAL:CG2	1:B:124:PRO:HA	2.48	0.43
1:B:58:ILE:HA	1:B:138:TYR:O	2.18	0.43
1:B:89:PHE:CG	1:B:89:PHE:O	2.71	0.43
2:C:112:GLU:O	2:C:113:VAL:CB	2.65	0.43
2:C:159:ILE:HD12	2:C:174:LEU:CB	2.47	0.43
2:C:396:ASP:O	2:C:403:SER:N	2.51	0.43
2:C:525:ALA:CB	2:C:526:PRO:CD	2.94	0.43
2:C:474:VAL:CG2	2:C:530:GLU:HA	2.45	0.43
1:A:80:LEU:HD11	2:C:572:ILE:HD12	1.99	0.43
2:C:6:PHE:CD2	2:C:909:ALA:N	2.81	0.43
2:C:738:ASP:HA	2:C:743:VAL:HA	1.99	0.43
2:C:836:GLY:O	2:C:837:ASP:O	2.37	0.43
2:C:837:ASP:O	2:C:848:VAL:HG23	2.18	0.43
2:C:94:LEU:HD23	2:C:344:PHE:CZ	2.50	0.43
3:D:1016:TYR:HB3	3:D:1020:PRO:CD	2.30	0.43
3:D:1196:GLN:O	3:D:1197:THR:OG1	2.36	0.43
3:D:578:VAL:O	3:D:582:ILE:HG13	2.19	0.43
3:D:601:ARG:O	3:D:602:SER:O	2.37	0.43
3:D:645:PRO:HG3	3:D:724:GLN:C	2.38	0.43
3:D:638:LYS:CA	3:D:729:HIS:CD2	3.01	0.43
3:D:767:HIS:O	3:D:769:LEU:N	2.47	0.43
3:D:810:GLU:C	3:D:812:ALA:H	2.20	0.43
3:D:815:ALA:CB	3:D:832:ARG:HD2	2.48	0.43
3:D:948:ILE:HG12	3:D:950:ILE:HG13	1.99	0.43
4:E:59:ASN:O	4:E:62:THR:HB	2.17	0.43
1:A:125:ASP:HB2	1:A:126:LEU:H	1.55	0.43
2:C:66:LEU:CA	2:C:100:LEU:HA	2.45	0.43
2:C:115:LEU:CD2	2:C:378:LEU:HD22	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:16:PRO:HA	2:C:17:PRO:HA	1.52	0.43
2:C:261:LEU:HD21	2:C:263:ASP:CB	2.48	0.43
2:C:310:LEU:HA	2:C:313:LEU:CD2	2.48	0.43
2:C:328:LEU:HD21	2:C:468:ARG:NH1	2.33	0.43
2:C:399:ASN:HD22	2:C:401:LEU:N	2.12	0.43
2:C:439:CYS:HA	2:C:440:PRO:HD2	1.80	0.43
2:C:446:GLY:O	2:C:447:ALA:CB	2.63	0.43
2:C:54:ILE:HG12	2:C:355:VAL:HG11	2.00	0.43
2:C:654:LEU:HD21	2:C:657:ASP:CG	2.38	0.43
2:C:679:PHE:CE2	2:C:978:ARG:NH2	2.86	0.43
2:C:681:GLY:O	2:C:684:PHE:HB2	2.18	0.43
2:C:9:ILE:O	2:C:10:ARG:CB	2.66	0.43
3:D:1004:VAL:O	3:D:1007:ALA:HB3	2.17	0.43
3:D:100:ALA:HA	3:D:575:GLN:OE1	2.18	0.43
3:D:1015:ASN:O	3:D:1016:TYR:HB2	2.16	0.43
3:D:1100:VAL:O	3:D:1104:HIS:HB3	2.18	0.43
3:D:1145:LEU:HB2	3:D:1172:VAL:CG1	2.44	0.43
3:D:1327:THR:C	3:D:1329:GLY:N	2.71	0.43
3:D:1366:ASP:O	3:D:1367:LYS:HB2	2.18	0.43
3:D:1423:MET:HB3	3:D:1428:SER:HB2	2.00	0.43
3:D:710:ARG:O	3:D:712:GLY:N	2.51	0.43
3:D:729:HIS:ND1	3:D:730:PRO:CD	2.81	0.43
3:D:880:ILE:O	3:D:883:ALA:N	2.50	0.43
1:A:158:LYS:O	1:A:160:ARG:N	2.49	0.43
1:A:183:THR:O	1:A:183:THR:HG23	2.18	0.43
1:A:72:LYS:O	1:A:73:GLU:O	2.36	0.43
1:B:65:PHE:CD1	1:B:65:PHE:O	2.71	0.43
2:C:1051:GLU:OE2	3:D:751:LEU:CB	2.66	0.43
2:C:1112:PHE:C	2:C:1114:GLY:H	2.22	0.43
2:C:160:ALA:HA	2:C:173:ASP:OD1	2.19	0.43
2:C:193:LEU:HD13	2:C:193:LEU:C	2.38	0.43
2:C:721:ARG:O	2:C:758:ARG:HB2	2.19	0.43
2:C:759:THR:HA	2:C:786:LYS:O	2.18	0.43
2:C:83:CYS:SG	2:C:90:TYR:HA	2.57	0.43
3:D:1012:PHE:CD2	3:D:1023:VAL:HG11	2.53	0.43
3:D:104:PHE:O	3:D:511:TRP:CZ3	2.71	0.43
3:D:1094:TYR:HE2	3:D:1098:LYS:HE3	1.83	0.43
3:D:1214:ARG:HD2	3:D:1215:PRO:HD2	1.99	0.43
3:D:1276:SER:HA	3:D:1304:TYR:CE1	2.52	0.43
3:D:1344:ALA:O	3:D:1346:GLU:N	2.52	0.43
3:D:502:PHE:CD1	3:D:1453:ILE:HG23	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:482:LYS:HE2	3:D:488:ARG:O	2.17	0.43
3:D:571:LYS:C	3:D:573:MET:H	2.21	0.43
4:E:9:LEU:C	4:E:11:GLY:N	2.71	0.43
1:A:55:SER:O	1:A:141:VAL:HA	2.18	0.43
1:A:59:GLU:OE2	1:A:136:LYS:HE3	2.18	0.43
1:B:23:PHE:O	1:B:195:THR:HA	2.18	0.43
1:B:79:ILE:HG22	1:B:80:LEU:N	2.34	0.43
1:B:89:PHE:CZ	1:B:145:ARG:NE	2.77	0.43
2:C:104:ASP:O	2:C:105:THR:O	2.36	0.43
2:C:168:ARG:NH1	2:C:268:ASP:OD2	2.51	0.43
2:C:304:LEU:H	2:C:305:PRO:HD2	1.78	0.43
2:C:551:GLU:CD	2:C:906:PHE:H	2.22	0.43
3:D:1077:GLY:CA	3:D:1080:LYS:HG2	2.48	0.43
2:C:1005:MET:HB2	3:D:629:SER:HB2	2.01	0.43
1:A:146:GLY:HA3	1:A:170:PHE:CZ	2.53	0.43
1:B:86:VAL:N	1:B:123:ASN:OD1	2.51	0.43
1:B:133:GLU:CG	1:B:134:GLY:H	2.31	0.43
2:C:1011:GLY:O	2:C:1012:PRO:C	2.56	0.43
2:C:1109:VAL:O	2:C:1109:VAL:HG13	2.17	0.43
2:C:161:SER:OG	2:C:172:ILE:HG22	2.19	0.43
2:C:327:HIS:O	2:C:329:GLY:N	2.38	0.43
2:C:439:CYS:CB	2:C:468:ARG:NH1	2.70	0.43
2:C:514:VAL:C	2:C:516:ARG:N	2.72	0.43
2:C:521:PRO:O	2:C:522:VAL:C	2.56	0.43
2:C:676:ILE:O	2:C:677:MET:CG	2.67	0.43
2:C:821:GLU:O	2:C:822:VAL:CG2	2.66	0.43
2:C:920:GLU:HG2	2:C:921:ALA:N	2.21	0.43
3:D:1023:VAL:HA	3:D:1026:GLN:CB	2.49	0.43
3:D:1049:PRO:HD3	3:D:1076:HIS:CE1	2.54	0.43
3:D:1374:ARG:O	3:D:1377:LEU:N	2.52	0.43
2:C:1053:LEU:HD12	3:D:621:LYS:HD2	2.01	0.43
3:D:899:LEU:O	3:D:900:ILE:HG12	2.18	0.43
3:D:990:TYR:HD2	3:D:991:ASP:OD1	2.01	0.43
1:B:159:ASP:O	1:B:159:ASP:CG	2.57	0.43
1:B:19:HIS:N	1:B:19:HIS:CD2	2.86	0.43
1:B:218:LYS:O	1:B:219:GLU:C	2.57	0.43
2:C:91:GLN:HB3	2:C:117:HIS:HB3	2.01	0.43
2:C:406:HIS:ND1	2:C:406:HIS:O	2.51	0.43
2:C:421:GLU:H	2:C:424:GLY:HA3	1.84	0.43
2:C:555:ALA:O	2:C:556:ASN:C	2.57	0.43
2:C:922:PHE:CE2	2:C:964:LYS:HB2	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:971:LYS:O	2:C:972:VAL:O	2.36	0.43
3:D:1017:PRO:HG2	3:D:1018:PHE:CD1	2.54	0.43
3:D:1262:GLU:CD	3:D:1269:PRO:CB	2.87	0.43
3:D:637:LEU:O	3:D:639:LEU:O	2.36	0.43
3:D:683:ILE:HG22	3:D:684:LYS:N	2.33	0.43
3:D:643:GLY:CA	3:D:727:GLN:HB2	2.49	0.43
3:D:817:GLU:O	3:D:818:ARG:HB3	2.19	0.43
3:D:836:VAL:HG21	3:D:858:LEU:CD2	2.47	0.43
3:D:940:THR:O	3:D:943:THR:HB	2.19	0.43
1:B:132:GLU:CG	1:B:133:GLU:N	2.82	0.43
2:C:304:LEU:HD23	2:C:305:PRO:HG3	2.01	0.43
2:C:352:ALA:O	2:C:355:VAL:CG1	2.67	0.43
2:C:668:LEU:HD23	2:C:668:LEU:HA	1.79	0.43
2:C:735:ARG:C	2:C:737:LEU:H	2.13	0.43
2:C:754:ILE:HD13	2:C:791:ARG:CG	2.48	0.43
2:C:91:GLN:HE22	2:C:383:ARG:HD2	1.83	0.43
2:C:920:GLU:C	2:C:922:PHE:H	2.22	0.43
2:C:964:LYS:HZ3	2:C:964:LYS:HB2	1.84	0.43
3:D:1291:LEU:HB3	3:D:1306:LEU:HB3	2.00	0.43
3:D:638:LYS:C	3:D:729:HIS:CD2	2.92	0.43
3:D:886:VAL:HG22	3:D:930:LEU:HD11	2.01	0.43
3:D:95:LEU:O	3:D:96:ALA:CB	2.64	0.43
1:A:110:ALA:N	1:A:128:ILE:HG13	2.34	0.43
1:A:157:ILE:HG13	1:A:160:ARG:HG2	2.00	0.43
1:B:170:PHE:O	1:B:171:SER:OG	2.36	0.43
1:B:86:VAL:HG13	1:B:202:GLY:HA2	2.01	0.43
1:B:16:GLN:HB2	1:B:20:TYR:O	2.19	0.43
2:C:304:LEU:HD23	2:C:305:PRO:CD	2.49	0.43
2:C:421:GLU:CG	2:C:423:ALA:H	2.32	0.43
2:C:445:GLU:O	2:C:449:ILE:CD1	2.67	0.43
1:A:83:LYS:NZ	2:C:698:ASP:HB2	2.34	0.43
2:C:710:ILE:CD1	2:C:823:VAL:HB	2.35	0.43
2:C:911:GLU:N	2:C:912:PRO:HD2	2.34	0.43
2:C:918:LEU:O	2:C:920:GLU:O	2.37	0.43
3:D:1033:PRO:O	3:D:1034:GLN:C	2.57	0.43
3:D:1347:ARG:HA	3:D:1347:ARG:HD2	1.87	0.43
3:D:1397:GLU:O	3:D:1400:ASP:HB3	2.18	0.43
1:A:36:LEU:O	1:A:40:LEU:HG	2.19	0.43
1:B:47:SER:O	1:B:48:ILE:HG12	2.19	0.43
2:C:1089:VAL:O	2:C:1093:GLN:HG3	2.18	0.43
2:C:222:LEU:O	2:C:223:ASP:C	2.56	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:257:LEU:C	2:C:259:GLY:N	2.69	0.43
2:C:290:LEU:HD12	2:C:300:ASP:N	2.34	0.43
2:C:412:ALA:C	2:C:414:GLY:H	2.21	0.43
2:C:801:VAL:CG2	2:C:828:ALA:CB	2.91	0.43
2:C:918:LEU:HD13	2:C:968:ASP:HA	2.00	0.43
3:D:704:ARG:CG	3:D:704:ARG:NH1	2.82	0.43
3:D:861:GLN:O	3:D:862:ASP:CB	2.67	0.43
3:D:882:PHE:C	3:D:884:ARG:N	2.71	0.43
3:D:899:LEU:C	3:D:900:ILE:CG1	2.88	0.43
1:A:217:LEU:HG	1:A:221:LEU:HD23	2.01	0.42
1:B:123:ASN:OD1	1:B:123:ASN:N	2.38	0.42
2:C:1050:GLN:HG2	2:C:1054:THR:OG1	2.19	0.42
2:C:298:PHE:N	2:C:298:PHE:HD1	2.16	0.42
2:C:443:THR:N	2:C:444:PRO:HD2	2.34	0.42
2:C:42:VAL:N	2:C:46:ALA:HB2	2.33	0.42
2:C:706:GLU:CD	2:C:707:ARG:N	2.71	0.42
2:C:731:GLU:C	2:C:733:ALA:N	2.72	0.42
2:C:910:THR:CB	2:C:912:PRO:HD2	2.49	0.42
3:D:1102:VAL:HG12	3:D:1375:GLN:HB3	2.01	0.42
3:D:1364:LEU:CG	3:D:1365:HIS:H	2.32	0.42
3:D:486:ARG:HG3	3:D:487:ALA:H	1.84	0.42
2:C:1021:LEU:HG	3:D:622:ARG:HG3	2.00	0.42
3:D:653:PHE:CD1	3:D:653:PHE:N	2.87	0.42
3:D:795:VAL:CG1	3:D:796:ARG:N	2.82	0.42
1:A:109:ARG:H	1:A:109:ARG:HD2	1.83	0.42
1:A:58:ILE:HG21	1:A:68:ILE:HD13	2.00	0.42
1:B:99:ILE:O	1:B:114:THR:N	2.52	0.42
2:C:21:ILE:O	2:C:335:THR:HG21	2.19	0.42
2:C:225:ALA:O	2:C:229:MET:HG2	2.20	0.42
2:C:360:VAL:HG12	2:C:361:MET:N	2.35	0.42
2:C:394:PHE:O	2:C:395:LYS:CB	2.67	0.42
2:C:414:GLY:C	2:C:419:THR:HG21	2.39	0.42
2:C:549:PHE:O	2:C:550:LEU:C	2.58	0.42
2:C:6:PHE:CE2	2:C:909:ALA:HA	2.54	0.42
2:C:872:ASN:ND2	2:C:874:LEU:H	2.17	0.42
3:D:100:ALA:HB2	3:D:575:GLN:HG3	2.01	0.42
3:D:1195:CYS:SG	3:D:1202:CYS:SG	3.17	0.42
3:D:477:LEU:CD1	3:D:480:GLU:HB3	2.46	0.42
3:D:490:ALA:O	3:D:491:LYS:C	2.58	0.42
3:D:844:ALA:O	3:D:845:ASN:CB	2.67	0.42
3:D:855:HIS:O	3:D:856:GLY:C	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:836:VAL:CG1	3:D:858:LEU:HD21	2.47	0.42
3:D:876:ASN:HD21	3:D:904:VAL:HG21	1.84	0.42
3:D:875:THR:HG22	3:D:876:ASN:O	2.19	0.42
3:D:936:TYR:O	3:D:937:TYR:C	2.57	0.42
1:A:109:ARG:HD3	1:A:112:ASP:OD2	2.20	0.42
1:A:142:ARG:NE	1:A:158:LYS:HE2	2.34	0.42
1:A:153:GLU:O	1:A:155:HIS:N	2.50	0.42
1:A:161:ILE:HG12	1:A:162:ASN:ND2	2.34	0.42
1:A:184:ARG:HE	1:A:193:LYS:CD	2.27	0.42
1:A:95:ARG:HD3	1:A:95:ARG:H	1.84	0.42
1:B:117:ALA:C	1:B:119:VAL:N	2.73	0.42
1:B:159:ASP:O	1:B:161:ILE:O	2.38	0.42
1:B:201:ASP:O	1:B:203:SER:N	2.48	0.42
1:B:198:ILE:HG22	1:B:206:PRO:HB3	2.00	0.42
1:B:76:VAL:CA	1:B:79:ILE:HB	2.46	0.42
2:C:12:VAL:CG1	2:C:13:ILE:HD12	2.49	0.42
2:C:25:SER:O	2:C:26:TYR:C	2.57	0.42
2:C:325:ILE:O	2:C:326:ASP:C	2.57	0.42
2:C:355:VAL:HG13	2:C:356:ARG:H	1.81	0.42
2:C:428:ARG:NH1	3:D:1083:ALA:O	2.53	0.42
2:C:583:LEU:O	2:C:584:GLU:C	2.57	0.42
2:C:66:LEU:HD11	2:C:98:LEU:HB3	2.01	0.42
2:C:858:MET:HE3	2:C:867:VAL:HG23	2.01	0.42
2:C:688:ILE:CG2	2:C:869:VAL:HG23	2.49	0.42
2:C:939:ARG:NH2	2:C:975:TYR:CZ	2.87	0.42
3:D:1060:SER:C	3:D:1062:PHE:H	2.23	0.42
3:D:1061:SER:O	3:D:1063:ARG:N	2.40	0.42
3:D:1063:ARG:CG	3:D:1063:ARG:NH1	2.82	0.42
3:D:1084:ASP:O	3:D:1086:ALA:N	2.51	0.42
3:D:538:SER:O	3:D:539:ASP:C	2.57	0.42
3:D:647:ARG:HA	3:D:647:ARG:HD2	1.82	0.42
3:D:772:PRO:HG3	3:D:778:LEU:CD2	2.49	0.42
3:D:92:HIS:O	3:D:93:ILE:C	2.58	0.42
1:A:109:ARG:H	1:A:109:ARG:HD3	1.85	0.42
1:A:99:ILE:O	1:A:114:THR:HG22	2.19	0.42
1:A:104:GLY:N	1:A:135:GLY:HA3	2.34	0.42
1:A:26:GLU:OE1	1:A:184:ARG:HG3	2.19	0.42
1:B:82:LEU:HD21	1:B:141:VAL:CG2	2.49	0.42
1:B:86:VAL:HG11	1:B:201:ASP:O	2.19	0.42
1:B:47:SER:O	1:B:216:ILE:HD13	2.20	0.42
2:C:181:VAL:O	2:C:182:VAL:C	2.58	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:201:GLY:O	2:C:202:TYR:O	2.37	0.42
2:C:253:ALA:C	2:C:255:ALA:N	2.73	0.42
2:C:497:ALA:HA	2:C:502:PRO:CG	2.45	0.42
2:C:56:GLU:HG2	2:C:57:GLY:N	2.34	0.42
2:C:672:VAL:HG13	2:C:868:ASP:HB2	2.01	0.42
2:C:920:GLU:O	2:C:921:ALA:C	2.58	0.42
3:D:100:ALA:HB1	3:D:579:ASP:OD1	2.19	0.42
3:D:1060:SER:HG	3:D:1068:VAL:CG2	2.32	0.42
3:D:472:LYS:C	3:D:474:GLU:N	2.73	0.42
3:D:554:LEU:O	3:D:558:LEU:HB2	2.19	0.42
3:D:583:ASP:O	3:D:585:GLY:N	2.41	0.42
2:C:1047:HIS:CD2	3:D:754:PHE:CD2	3.07	0.42
3:D:864:VAL:HA	3:D:875:THR:C	2.40	0.42
3:D:696:HIS:HD2	4:E:57:ASP:HB2	1.83	0.42
1:A:186:GLY:O	1:A:187:GLN:HG3	2.19	0.42
1:B:213:ALA:HA	1:B:216:ILE:CG1	2.49	0.42
2:C:232:GLU:O	2:C:233:GLU:C	2.58	0.42
2:C:46:ALA:O	2:C:50:GLU:N	2.42	0.42
2:C:745:ILE:C	2:C:747:ALA:N	2.73	0.42
2:C:920:GLU:CG	2:C:921:ALA:N	2.82	0.42
2:C:969:LEU:HG	2:C:970:GLY:H	1.85	0.42
3:D:1044:GLY:HA3	3:D:1057:PRO:HB2	2.00	0.42
3:D:1070:GLU:C	3:D:1072:PHE:H	2.23	0.42
3:D:1087:LEU:CA	3:D:1090:ALA:HB3	2.49	0.42
3:D:1232:GLU:OE1	3:D:1233:PRO:HG3	2.19	0.42
3:D:473:LEU:HD23	3:D:503:LEU:HD11	2.02	0.42
3:D:485:SER:CB	3:D:488:ARG:HB2	2.49	0.42
3:D:545:ARG:HG2	3:D:546:ARG:N	2.34	0.42
3:D:634:GLY:N	3:D:728:LEU:O	2.47	0.42
3:D:875:THR:HG22	3:D:876:ASN:N	2.33	0.42
3:D:896:ALA:O	3:D:897:GLN:C	2.57	0.42
3:D:970:ARG:NH2	3:D:971:LYS:NZ	2.68	0.42
1:B:158:LYS:HB3	1:B:159:ASP:H	1.55	0.42
1:B:194:LEU:O	1:B:195:THR:CB	2.67	0.42
2:C:1070:ILE:HD12	2:C:1070:ILE:N	2.33	0.42
2:C:197:LEU:HD22	2:C:202:TYR:CD1	2.54	0.42
2:C:100:LEU:CG	2:C:369:PRO:HD3	2.44	0.42
2:C:140:ILE:HG23	2:C:410:ILE:CG2	2.50	0.42
2:C:421:GLU:C	2:C:423:ALA:N	2.73	0.42
2:C:764:GLU:N	2:C:764:GLU:OE1	2.52	0.42
2:C:857:ASP:OD1	2:C:978:ARG:HG2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1084:ASP:C	3:D:1086:ALA:N	2.73	0.42
3:D:1109:ARG:O	3:D:1110:GLU:HB3	2.20	0.42
3:D:129:PHE:O	3:D:130:ASN:CB	2.67	0.42
3:D:1382:VAL:HG23	3:D:1393:GLY:N	2.33	0.42
3:D:557:LEU:HG	3:D:557:LEU:O	2.20	0.42
3:D:730:PRO:O	3:D:732:VAL:N	2.53	0.42
3:D:758:GLU:HB3	4:E:20:THR:HG21	2.00	0.42
3:D:836:VAL:HG11	3:D:858:LEU:CD1	2.48	0.42
3:D:896:ALA:O	3:D:898:GLU:N	2.52	0.42
4:E:50:THR:HG22	4:E:50:THR:O	2.20	0.42
1:A:32:PHE:O	1:A:34:VAL:N	2.53	0.42
1:A:38:ASN:CG	1:A:41:ARG:HH12	2.23	0.42
2:C:317:VAL:N	2:C:318:PRO:CD	2.82	0.42
2:C:493:ARG:NH2	3:D:1070:GLU:CD	2.73	0.42
2:C:609:THR:O	2:C:609:THR:HG22	2.20	0.42
2:C:758:ARG:HG2	2:C:758:ARG:O	2.18	0.42
2:C:935:GLY:O	2:C:936:VAL:O	2.37	0.42
3:D:1021:LEU:HD23	3:D:1021:LEU:HA	1.83	0.42
3:D:1035:GLN:O	3:D:1038:GLN:HB3	2.20	0.42
3:D:1067:THR:O	3:D:1068:VAL:C	2.57	0.42
3:D:1121:VAL:HA	3:D:1122:PRO:HD2	1.92	0.42
3:D:1408:LEU:O	3:D:1410:ALA:N	2.53	0.42
3:D:1480:ASP:C	3:D:1482:VAL:H	2.23	0.42
3:D:465:LEU:HB3	3:D:509:PRO:HB2	2.02	0.42
3:D:485:SER:HB3	3:D:488:ARG:HB2	2.01	0.42
3:D:639:LEU:HD21	3:D:731:LEU:HB2	2.02	0.42
3:D:643:GLY:HA2	3:D:721:VAL:HG21	2.01	0.42
3:D:685:ASP:C	3:D:687:VAL:N	2.72	0.42
3:D:709:HIS:N	3:D:1228:GLU:HB3	2.35	0.42
1:A:103:GLU:C	1:A:135:GLY:HA3	2.40	0.42
1:A:34:VAL:O	1:A:35:THR:C	2.57	0.42
1:B:80:LEU:C	1:B:82:LEU:N	2.73	0.42
2:C:351:LEU:HD11	2:C:373:VAL:HG22	2.00	0.42
2:C:410:ILE:CD1	2:C:468:ARG:HH21	2.31	0.42
2:C:595:LEU:HD21	2:C:623:HIS:CB	2.48	0.42
2:C:611:ILE:HD11	2:C:641:PRO:HA	2.02	0.42
2:C:755:LEU:HD11	2:C:825:VAL:CG1	2.50	0.42
2:C:943:VAL:O	2:C:944:LEU:C	2.56	0.42
3:D:1087:LEU:O	3:D:1087:LEU:HG	2.19	0.42
3:D:1095:LEU:O	3:D:1096:THR:C	2.57	0.42
3:D:1110:GLU:OE2	3:D:1197:THR:HG21	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1476:GLY:C	3:D:1478:GLY:N	2.71	0.42
3:D:462:GLN:O	3:D:465:LEU:N	2.52	0.42
3:D:502:PHE:CG	3:D:507:ASN:ND2	2.87	0.42
3:D:699:VAL:N	3:D:756:GLN:HE22	2.18	0.42
3:D:700:VAL:N	3:D:716:PHE:O	2.46	0.42
3:D:959:GLU:O	3:D:961:LYS:N	2.49	0.42
4:E:13:VAL:HG12	4:E:75:PHE:CZ	2.55	0.42
1:A:108:VAL:HG21	1:A:137:LEU:CD2	2.49	0.42
1:A:16:GLN:HE21	1:A:17:GLY:N	1.91	0.42
1:A:193:LYS:O	1:A:193:LYS:HG2	2.19	0.42
1:A:194:LEU:CG	1:A:195:THR:H	2.31	0.42
1:A:199:TRP:HD1	1:A:200:THR:OG1	2.03	0.42
1:B:105:PRO:O	1:B:106:LYS:HD3	2.19	0.42
1:B:194:LEU:HD22	1:B:194:LEU:HA	1.90	0.42
2:C:1008:ARG:HG2	2:C:1009:SER:N	2.32	0.42
2:C:1075:ASP:OD1	2:C:1076:VAL:N	2.50	0.42
2:C:1111:ILE:O	2:C:1112:PHE:O	2.37	0.42
2:C:184:MET:SD	2:C:303:PHE:HE2	2.43	0.42
2:C:274:ARG:NE	2:C:275:TYR:CE1	2.88	0.42
2:C:391:LEU:HD12	2:C:391:LEU:HA	1.84	0.42
2:C:474:VAL:O	2:C:526:PRO:HA	2.20	0.42
2:C:692:GLU:O	2:C:693:GLU:C	2.59	0.42
2:C:816:LYS:HB3	2:C:819:VAL:CG2	2.50	0.42
3:D:1170:GLU:O	3:D:1173:HIS:HB2	2.20	0.42
3:D:1200:GLY:C	3:D:1202:CYS:N	2.72	0.42
3:D:1294:PHE:HA	3:D:1302:LYS:O	2.19	0.42
3:D:1279:ASP:CA	3:D:1318:ASP:O	2.68	0.42
3:D:1433:LYS:CG	3:D:1434:SER:N	2.83	0.42
2:C:1091:GLU:OE1	3:D:606:ILE:CG2	2.67	0.42
3:D:628:ARG:CB	3:D:628:ARG:NH1	2.83	0.42
3:D:643:GLY:O	3:D:719:VAL:O	2.37	0.42
3:D:691:LEU:HD12	3:D:692:GLU:N	2.35	0.42
3:D:772:PRO:CG	3:D:778:LEU:HD22	2.50	0.42
4:E:3:GLU:HB2	4:E:6:ILE:HG12	2.02	0.42
1:A:208:GLU:HB3	1:A:212:GLN:NE2	2.34	0.42
1:A:38:ASN:HA	1:A:178:PHE:CE2	2.55	0.42
1:A:48:ILE:HA	1:A:49:PRO:HD3	1.92	0.42
2:C:1055:ILE:CD1	2:C:1055:ILE:N	2.80	0.42
2:C:224:GLU:C	2:C:226:VAL:H	2.23	0.42
2:C:253:ALA:C	2:C:256:TYR:H	2.23	0.42
2:C:384:GLU:O	2:C:388:ARG:HB2	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:580:MET:O	2:C:581:THR:HB	2.19	0.42
2:C:5:ARG:HG3	2:C:902:ILE:HG21	2.01	0.42
2:C:709:GLU:O	2:C:710:ILE:HG13	2.19	0.42
2:C:872:ASN:ND2	2:C:874:LEU:HB3	2.24	0.42
3:D:1148:ARG:NH1	3:D:1191:SER:HB2	2.29	0.42
2:C:1042:ALA:O	3:D:1225:VAL:CG2	2.68	0.42
3:D:1278:ILE:CD1	3:D:1302:LYS:HD3	2.49	0.42
3:D:496:LEU:O	3:D:500:ARG:HG2	2.20	0.42
3:D:636:GLN:C	3:D:638:LYS:H	2.24	0.42
3:D:638:LYS:O	3:D:639:LEU:CG	2.66	0.42
3:D:631:ILE:CD1	3:D:745:MET:HE2	2.35	0.42
3:D:824:ASN:O	3:D:825:ALA:O	2.38	0.42
3:D:856:GLY:O	3:D:857:LEU:HD22	2.20	0.42
3:D:941:LEU:C	3:D:943:THR:N	2.73	0.42
3:D:954:ASP:O	3:D:955:ALA:CB	2.68	0.42
4:E:9:LEU:C	4:E:11:GLY:H	2.22	0.42
1:B:94:TRP:NE1	1:B:119:VAL:CG2	2.83	0.41
2:C:232:GLU:O	2:C:234:ALA:N	2.52	0.41
2:C:480:THR:HG23	2:C:480:THR:O	2.20	0.41
2:C:541:SER:O	2:C:545:ASN:ND2	2.53	0.41
2:C:581:THR:O	2:C:582:GLY:C	2.58	0.41
2:C:59:LYS:O	2:C:61:LYS:HE2	2.20	0.41
2:C:768:SER:HB2	2:C:769:PRO:CD	2.36	0.41
2:C:792:VAL:HA	2:C:793:PRO:HD2	1.74	0.41
2:C:813:VAL:CG1	2:C:814:GLU:H	2.05	0.41
2:C:755:LEU:HD11	2:C:825:VAL:CB	2.50	0.41
3:D:997:TRP:CE2	3:D:1057:PRO:HG3	2.53	0.41
3:D:500:ARG:HG3	3:D:1389:PRO:HG3	2.02	0.41
3:D:645:PRO:HG2	3:D:724:GLN:HA	2.02	0.41
3:D:662:GLU:OE1	3:D:662:GLU:C	2.58	0.41
3:D:761:ILE:HG22	3:D:762:GLN:N	2.35	0.41
3:D:903:ASP:O	3:D:905:PRO:HD3	2.20	0.41
3:D:905:PRO:O	3:D:906:GLN:CB	2.58	0.41
4:E:38:THR:HG22	4:E:41:GLU:H	1.85	0.41
1:A:30:ARG:HH22	1:A:188:ARG:HB3	1.84	0.41
1:A:31:GLY:C	1:A:33:GLY:H	2.23	0.41
1:B:128:ILE:O	1:B:129:ALA:HB2	2.20	0.41
1:A:15:THR:HG22	1:B:230:SER:H	1.85	0.41
1:B:26:GLU:O	1:B:27:PRO:C	2.58	0.41
2:C:165:LEU:C	2:C:167:LYS:N	2.73	0.41
2:C:257:LEU:HD22	2:C:263:ASP:HB3	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:54:ILE:CD1	2:C:355:VAL:HG13	2.50	0.41
2:C:437:ARG:C	2:C:438:ILE:HG12	2.40	0.41
2:C:20:GLU:OE2	2:C:461:VAL:HG22	2.20	0.41
2:C:401:LEU:HD21	2:C:543:ASN:HD22	1.84	0.41
2:C:662:GLU:O	2:C:663:GLU:C	2.57	0.41
2:C:705:ILE:HD12	2:C:705:ILE:C	2.40	0.41
2:C:787:ASP:C	2:C:787:ASP:OD1	2.58	0.41
2:C:841:ASN:ND2	2:C:843:HIS:H	2.17	0.41
2:C:677:MET:CA	2:C:873:PRO:HD3	2.49	0.41
2:C:910:THR:O	2:C:913:GLU:N	2.53	0.41
3:D:1337:LEU:HB2	3:D:1345:VAL:HG21	2.02	0.41
3:D:1463:LEU:C	3:D:1465:GLU:N	2.73	0.41
3:D:452:ILE:O	3:D:453:ASP:C	2.57	0.41
3:D:789:LEU:HD23	3:D:789:LEU:HA	1.69	0.41
3:D:853:VAL:HG22	3:D:858:LEU:HB2	2.02	0.41
3:D:896:ALA:HA	3:D:899:LEU:CD2	2.50	0.41
3:D:92:HIS:O	3:D:94:GLU:N	2.53	0.41
4:E:48:MET:HB3	4:E:55:TYR:O	2.20	0.41
1:A:58:ILE:HG21	1:A:68:ILE:HD11	2.02	0.41
1:A:64:GLU:CG	1:A:65:PHE:H	2.33	0.41
1:A:64:GLU:OE2	1:A:76:VAL:HG13	2.20	0.41
2:C:1071:ILE:O	3:D:659:LYS:HG2	2.20	0.41
2:C:184:MET:HB3	2:C:191:PHE:CE2	2.55	0.41
2:C:202:TYR:O	2:C:203:ASP:CB	2.68	0.41
2:C:614:ARG:NH2	2:C:623:HIS:CE1	2.88	0.41
2:C:69:LEU:HB3	2:C:70:GLU:H	1.54	0.41
2:C:722:ILE:HA	2:C:758:ARG:CB	2.48	0.41
2:C:841:ASN:C	2:C:841:ASN:ND2	2.71	0.41
2:C:903:SER:CB	2:C:909:ALA:HB2	2.48	0.41
3:D:1141:ILE:O	3:D:1145:LEU:N	2.46	0.41
3:D:1144:GLY:C	3:D:1145:LEU:HD23	2.41	0.41
3:D:492:ALA:O	3:D:493:ARG:C	2.59	0.41
3:D:563:PRO:O	3:D:564:GLU:HB3	2.20	0.41
3:D:575:GLN:O	3:D:578:VAL:HB	2.20	0.41
3:D:636:GLN:HB3	3:D:641:GLN:HB2	2.01	0.41
3:D:953:ASP:O	3:D:953:ASP:OD1	2.37	0.41
4:E:82:GLU:HA	4:E:85:LEU:HB3	2.02	0.41
1:A:103:GLU:N	1:A:106:LYS:HE2	2.34	0.41
1:A:18:ASP:O	1:A:19:HIS:CB	2.68	0.41
1:A:99:ILE:HG23	1:A:138:TYR:CE1	2.55	0.41
1:B:142:ARG:O	1:B:143:VAL:HG23	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:101:ILE:CG2	2:C:102:HIS:N	2.69	0.41
2:C:103:LYS:HD3	2:C:103:LYS:HA	1.87	0.41
2:C:1054:THR:HG21	2:C:1079:PRO:HB3	2.02	0.41
2:C:224:GLU:O	2:C:226:VAL:N	2.53	0.41
2:C:233:GLU:OE2	2:C:237:ARG:NE	2.52	0.41
2:C:159:ILE:CD1	2:C:310:LEU:HB2	2.50	0.41
2:C:54:ILE:CD1	2:C:359:MET:HE2	2.50	0.41
2:C:367:LEU:CD1	2:C:372:LEU:HG	2.50	0.41
2:C:419:THR:O	2:C:420:ARG:C	2.58	0.41
2:C:44:ILE:CD1	2:C:44:ILE:H	2.28	0.41
2:C:468:ARG:HD3	2:C:468:ARG:H	1.80	0.41
2:C:52:PHE:O	2:C:53:PRO:C	2.56	0.41
2:C:32:ALA:CB	2:C:73:ILE:HD13	2.43	0.41
3:D:1156:ALA:CB	3:D:1183:GLU:HB3	2.48	0.41
3:D:1232:GLU:C	3:D:1234:GLY:N	2.73	0.41
3:D:1252:ASP:HB2	3:D:1270:LYS:HZ3	1.83	0.41
3:D:1281:VAL:CG1	3:D:1282:VAL:H	2.32	0.41
3:D:1479:SER:O	3:D:1480:ASP:C	2.59	0.41
3:D:643:GLY:HA3	3:D:727:GLN:HB2	2.01	0.41
3:D:794:GLN:O	3:D:795:VAL:HB	2.21	0.41
3:D:841:PHE:O	3:D:845:ASN:N	2.44	0.41
3:D:855:HIS:O	3:D:857:LEU:N	2.53	0.41
3:D:899:LEU:N	3:D:899:LEU:HD13	2.35	0.41
1:A:168:ALA:O	1:A:169:ILE:HD13	2.20	0.41
1:A:41:ARG:O	1:A:41:ARG:HD2	2.20	0.41
1:B:64:GLU:HG3	1:B:79:ILE:HG13	2.02	0.41
2:C:129:ILE:HD11	2:C:386:PHE:CD2	2.56	0.41
2:C:149:THR:HG23	2:C:323:ASP:HA	2.03	0.41
2:C:148:PHE:CE2	2:C:159:ILE:HG23	2.56	0.41
2:C:142:ARG:NE	2:C:324:ASP:HA	2.23	0.41
2:C:34:VAL:CG1	2:C:35:PRO:N	2.83	0.41
2:C:743:VAL:CG2	2:C:755:LEU:O	2.66	0.41
2:C:758:ARG:CG	2:C:758:ARG:NH1	2.83	0.41
2:C:703:ILE:HG13	2:C:830:LYS:HG3	2.01	0.41
3:D:1015:ASN:O	3:D:1016:TYR:CD2	2.73	0.41
3:D:1135:LEU:N	3:D:1135:LEU:HD23	2.29	0.41
3:D:492:ALA:O	3:D:495:ARG:N	2.54	0.41
3:D:516:ALA:O	3:D:517:VAL:HG13	2.21	0.41
3:D:590:PRO:HA	3:D:600:LEU:CD2	2.50	0.41
3:D:666:PHE:O	3:D:667:ALA:O	2.38	0.41
1:B:72:LYS:HB3	1:B:130:THR:HB	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:53:VAL:HA	1:B:143:VAL:HA	2.02	0.41
2:C:284:GLY:O	2:C:285:LEU:HB2	2.19	0.41
2:C:200:LEU:HD13	2:C:300:ASP:HB3	2.03	0.41
2:C:394:PHE:HB3	2:C:395:LYS:H	1.52	0.41
2:C:577:PRO:HA	2:C:671:ASN:ND2	2.36	0.41
2:C:613:VAL:O	2:C:614:ARG:C	2.58	0.41
2:C:750:LYS:HE2	2:C:753:ASP:OD1	2.21	0.41
3:D:1119:ILE:CD1	3:D:1119:ILE:N	2.81	0.41
3:D:1386:GLY:C	3:D:1388:SER:N	2.74	0.41
3:D:1467:VAL:O	3:D:1468:ILE:C	2.59	0.41
3:D:663:GLU:O	3:D:665:ALA:N	2.53	0.41
3:D:930:LEU:HD11	3:D:934:LEU:HD11	2.02	0.41
4:E:91:ARG:C	4:E:92:LEU:HD12	2.41	0.41
1:A:181:GLU:OE2	2:C:934:PHE:CD2	2.73	0.41
1:B:94:TRP:HE1	1:B:119:VAL:HG21	1.84	0.41
1:B:149:TYR:HE1	1:B:169:ILE:CG2	2.17	0.41
1:B:205:THR:OG1	1:B:208:GLU:HB2	2.21	0.41
2:C:278:GLU:HG3	2:C:284:GLY:N	2.35	0.41
2:C:755:LEU:HD11	2:C:825:VAL:HG11	2.03	0.41
2:C:840:ALA:CA	2:C:846:LYS:HA	2.50	0.41
3:D:1120:SER:HB3	3:D:1186:GLU:HB3	2.03	0.41
3:D:1458:ASP:OD1	3:D:1458:ASP:O	2.39	0.41
3:D:590:PRO:CA	3:D:600:LEU:HD21	2.50	0.41
3:D:732:VAL:O	3:D:733:CYS:C	2.59	0.41
3:D:734:GLU:O	3:D:735:ALA:C	2.57	0.41
1:A:42:ARG:HH12	2:C:857:ASP:CG	2.24	0.41
1:B:170:PHE:C	1:B:171:SER:OG	2.59	0.41
1:B:94:TRP:NE1	1:B:96:THR:HG23	2.36	0.41
2:C:271:GLU:O	2:C:272:ALA:CB	2.68	0.41
2:C:285:LEU:HD11	2:C:302:VAL:HG22	2.01	0.41
2:C:555:ALA:O	2:C:558:ALA:HB3	2.21	0.41
2:C:565:GLN:HB2	2:C:995:MET:CE	2.50	0.41
2:C:610:ARG:O	2:C:612:ALA:N	2.53	0.41
2:C:649:VAL:CB	2:C:653:ASP:HB3	2.50	0.41
2:C:684:PHE:O	2:C:686:ASP:N	2.54	0.41
2:C:701:THR:HA	2:C:832:LYS:HA	2.03	0.41
2:C:773:LEU:O	2:C:774:LEU:C	2.59	0.41
2:C:845:ASN:HD21	2:C:876:VAL:CG1	2.33	0.41
3:D:1068:VAL:C	3:D:1070:GLU:H	2.22	0.41
3:D:1102:VAL:HG22	3:D:1425:VAL:O	2.21	0.41
3:D:1119:ILE:HG22	3:D:1120:SER:N	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1146:TYR:HD2	3:D:1147:GLY:H	1.68	0.41
3:D:1222:VAL:O	3:D:1223:GLY:C	2.59	0.41
3:D:1479:SER:O	3:D:1481:PHE:N	2.54	0.41
3:D:630:VAL:HG12	3:D:631:ILE:O	2.20	0.41
3:D:633:VAL:N	3:D:740:PHE:CE2	2.89	0.41
3:D:772:PRO:HD2	3:D:777:PRO:HA	2.03	0.41
4:E:6:ILE:HG22	4:E:7:ASP:N	2.36	0.41
1:A:175:ARG:NH2	1:A:199:TRP:CH2	2.89	0.41
1:B:108:VAL:HB	1:B:129:ALA:O	2.21	0.41
2:C:1114:GLY:O	2:C:1115:LEU:HB2	2.20	0.41
2:C:399:ASN:ND2	2:C:399:ASN:O	2.53	0.41
2:C:15:LEU:CD1	2:C:461:VAL:HG11	2.50	0.41
2:C:613:VAL:HG21	2:C:619:ARG:CD	2.50	0.41
2:C:635:THR:HG23	2:C:635:THR:O	2.20	0.41
2:C:676:ILE:HG22	2:C:677:MET:N	2.36	0.41
2:C:744:ARG:O	2:C:747:ALA:CB	2.69	0.41
2:C:95:TYR:HB3	2:C:113:VAL:O	2.21	0.41
2:C:915:LYS:CD	2:C:968:ASP:HB3	2.38	0.41
3:D:1212:MET:O	3:D:1213:ALA:HB3	2.20	0.41
3:D:127:LEU:HA	3:D:456:MET:CB	2.38	0.41
3:D:1282:VAL:HG22	3:D:1315:LYS:CB	2.51	0.41
3:D:1438:ALA:O	3:D:1441:PHE:HB2	2.21	0.41
3:D:1494:LYS:O	3:D:1496:ILE:N	2.53	0.41
1:B:80:LEU:HD13	3:D:839:LEU:HA	2.03	0.41
1:A:11:PHE:HZ	1:A:210:LEU:HD21	1.86	0.41
1:A:19:HIS:H	1:A:206:PRO:CD	2.33	0.41
1:B:40:LEU:N	1:B:40:LEU:CD2	2.84	0.41
2:C:332:ARG:NH1	2:C:465:GLY:O	2.51	0.41
2:C:11:GLU:HB3	2:C:534:VAL:HG12	2.03	0.41
2:C:547:ILE:O	2:C:547:ILE:HG22	2.20	0.41
2:C:576:ALA:HB3	2:C:900:ARG:HH11	1.86	0.41
2:C:924:LEU:O	2:C:925:TYR:C	2.59	0.41
2:C:994:ILE:N	2:C:994:ILE:HD13	2.36	0.41
3:D:633:VAL:HA	3:D:740:PHE:CZ	2.56	0.41
3:D:865:THR:O	3:D:866:THR:C	2.58	0.41
3:D:8:VAL:O	3:D:1435:TRP:CZ3	2.74	0.41
3:D:976:GLU:OE1	3:D:989:ARG:NH2	2.54	0.41
4:E:92:LEU:HD12	4:E:92:LEU:N	2.36	0.41
1:A:89:PHE:CB	1:A:145:ARG:NH2	2.84	0.41
1:A:41:ARG:HD3	1:A:176:VAL:O	2.21	0.41
1:A:80:LEU:HA	1:A:83:LYS:HE3	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:363:SER:HB3	2:C:366:THR:CB	2.49	0.41
2:C:378:LEU:N	2:C:378:LEU:HD12	2.36	0.41
2:C:642:ARG:HB3	2:C:656:ALA:H	1.86	0.41
2:C:870:ILE:HD13	2:C:870:ILE:HA	1.80	0.41
2:C:892:LEU:HA	2:C:895:TYR:CB	2.50	0.41
2:C:905:VAL:O	2:C:906:PHE:HB2	2.21	0.41
2:C:915:LYS:NZ	3:D:952:ILE:HD11	2.36	0.41
2:C:73:ILE:HD12	2:C:94:LEU:HD13	2.03	0.41
3:D:1066:LEU:O	3:D:1066:LEU:HD12	2.21	0.41
3:D:1367:LYS:O	3:D:1369:ILE:N	2.54	0.41
3:D:1334:HIS:CE1	3:D:1422:LEU:HB3	2.55	0.41
3:D:482:LYS:HD3	3:D:492:ALA:CB	2.51	0.41
3:D:642:CYS:HB2	3:D:716:PHE:HB2	2.03	0.41
3:D:876:ASN:O	3:D:877:PRO:C	2.59	0.41
3:D:924:MET:N	4:E:7:ASP:OD2	2.54	0.41
4:E:34:ARG:O	4:E:35:PHE:CB	2.69	0.41
1:A:12:THR:O	1:A:13:ALA:HB2	2.21	0.40
1:A:21:GLY:O	1:A:23:PHE:CE2	2.75	0.40
1:B:78:ILE:CD1	1:B:129:ALA:HB2	2.51	0.40
1:B:157:ILE:O	1:B:158:LYS:C	2.59	0.40
1:B:29:GLU:OE1	1:B:188:ARG:NH2	2.54	0.40
2:C:1036:GLU:CD	2:C:1036:GLU:N	2.75	0.40
2:C:1052:MET:HG3	3:D:623:VAL:HG22	2.02	0.40
2:C:181:VAL:CG1	2:C:182:VAL:H	2.30	0.40
2:C:252:LYS:NZ	2:C:293:PHE:H	2.18	0.40
2:C:467:ILE:CG2	2:C:484:VAL:HG21	2.47	0.40
2:C:603:VAL:HG22	2:C:646:GLY:O	2.21	0.40
2:C:648:ARG:CG	2:C:648:ARG:NH1	2.82	0.40
2:C:578:VAL:HG23	2:C:671:ASN:ND2	2.36	0.40
2:C:874:LEU:O	2:C:875:GLY:C	2.59	0.40
2:C:880:MET:C	2:C:881:ASN:ND2	2.75	0.40
3:D:961:LYS:NZ	3:D:1042:MET:HB3	2.36	0.40
3:D:1097:ARG:NH1	3:D:1097:ARG:CG	2.81	0.40
3:D:521:PRO:O	3:D:523:ASP:N	2.53	0.40
3:D:603:LEU:HA	3:D:606:ILE:CD1	2.50	0.40
3:D:653:PHE:O	3:D:656:PHE:HB2	2.21	0.40
3:D:721:VAL:CG1	3:D:722:GLU:N	2.61	0.40
3:D:797:LYS:C	3:D:798:GLU:HG2	2.41	0.40
3:D:928:ALA:O	3:D:931:LEU:HB2	2.21	0.40
2:C:969:LEU:HD12	3:D:950:ILE:HG21	2.03	0.40
1:A:142:ARG:HD2	1:A:158:LYS:HE3	2.01	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:71:VAL:O	1:B:71:VAL:HG12	2.20	0.40
1:B:56:VAL:HG21	1:B:82:LEU:CD2	2.51	0.40
2:C:1106:ASP:OD2	3:D:1457:LYS:NZ	2.55	0.40
2:C:200:LEU:HD22	2:C:290:LEU:HD11	2.03	0.40
2:C:266:ARG:NE	2:C:268:ASP:HA	2.36	0.40
2:C:707:ARG:HB3	2:C:826:PHE:HD1	1.87	0.40
2:C:750:LYS:HG2	2:C:753:ASP:OD2	2.21	0.40
2:C:876:VAL:HA	2:C:880:MET:CE	2.50	0.40
2:C:842:ARG:NH2	2:C:887:GLU:CD	2.72	0.40
3:D:1012:PHE:O	3:D:1014:GLU:N	2.54	0.40
3:D:1062:PHE:HA	3:D:1062:PHE:HD1	1.76	0.40
2:C:1099:VAL:HA	3:D:10:ILE:HA	2.02	0.40
3:D:1175:LEU:HD23	3:D:1175:LEU:HA	1.92	0.40
3:D:1337:LEU:HD22	3:D:1422:LEU:HD12	2.03	0.40
3:D:1458:ASP:C	3:D:1460:LEU:N	2.73	0.40
3:D:14:SER:C	3:D:17:LYS:H	2.23	0.40
3:D:543:LEU:HB3	3:D:581:VAL:CG2	2.51	0.40
3:D:583:ASP:C	3:D:585:GLY:H	2.23	0.40
3:D:879:ARG:HD2	3:D:904:VAL:N	2.36	0.40
1:A:63:HIS:CD2	1:A:164:ILE:HG22	2.56	0.40
1:A:148:GLY:O	1:A:170:PHE:HB2	2.22	0.40
1:A:180:VAL:O	1:A:180:VAL:HG12	2.22	0.40
1:A:21:GLY:O	1:A:23:PHE:CD2	2.75	0.40
1:A:90:LEU:HD21	1:A:120:GLU:OE2	2.22	0.40
1:B:20:TYR:HE2	1:B:197:ARG:HB3	1.86	0.40
2:C:142:ARG:CZ	2:C:147:TYR:HE1	2.35	0.40
2:C:187:ASN:OD1	2:C:188:LYS:N	2.46	0.40
2:C:209:ARG:O	2:C:210:GLU:HB2	2.21	0.40
2:C:30:LEU:O	2:C:32:ALA:N	2.54	0.40
2:C:536:PRO:O	2:C:538:GLN:HG2	2.22	0.40
2:C:552:HIS:NE2	2:C:886:LEU:CD1	2.82	0.40
2:C:605:LYS:CG	2:C:607:ASP:H	2.20	0.40
2:C:609:THR:CG2	2:C:609:THR:O	2.70	0.40
2:C:756:VAL:H	2:C:790:LEU:HB3	1.87	0.40
2:C:813:VAL:HG12	2:C:815:LEU:CD1	2.51	0.40
2:C:811:PRO:O	2:C:813:VAL:N	2.54	0.40
2:C:837:ASP:HB3	2:C:1000:MET:HA	2.03	0.40
2:C:875:GLY:O	2:C:877:PRO:N	2.54	0.40
2:C:987:ILE:C	3:D:948:ILE:HG21	2.41	0.40
2:C:839:LEU:HD12	2:C:994:ILE:HG21	2.01	0.40
2:C:998:TYR:O	2:C:998:TYR:CG	2.74	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:1006:GLN:O	3:D:1010:ASN:HB3	2.22	0.40
3:D:1102:VAL:HG11	3:D:1425:VAL:HG22	2.03	0.40
3:D:1197:THR:O	3:D:1199:TYR:N	2.54	0.40
3:D:1282:VAL:HG13	3:D:1314:VAL:O	2.21	0.40
3:D:1403:ALA:HB1	3:D:1416:VAL:HG21	2.03	0.40
3:D:1403:ALA:CB	3:D:1416:VAL:HG11	2.52	0.40
3:D:586:ARG:C	3:D:588:GLY:H	2.24	0.40
3:D:645:PRO:HD2	3:D:648:MET:HG2	2.03	0.40
3:D:767:HIS:HE1	4:E:2:ALA:HB1	1.84	0.40
3:D:973:ARG:C	3:D:975:ILE:N	2.75	0.40
4:E:5:GLY:O	4:E:9:LEU:HG	2.21	0.40
1:A:179:GLN:HG3	2:C:934:PHE:CG	2.55	0.40
1:A:216:ILE:HG22	1:A:220:HIS:HD2	1.86	0.40
1:A:64:GLU:HG3	1:A:65:PHE:H	1.86	0.40
1:A:77:GLU:O	1:A:80:LEU:N	2.55	0.40
1:B:178:PHE:CG	1:B:178:PHE:O	2.74	0.40
1:B:194:LEU:O	1:B:195:THR:OG1	2.34	0.40
1:B:40:LEU:H	1:B:40:LEU:CD2	2.34	0.40
1:B:40:LEU:HD12	1:B:214:VAL:HG22	2.04	0.40
2:C:1107:ASN:OD1	2:C:1107:ASN:O	2.39	0.40
2:C:124:ASP:OD1	2:C:124:ASP:C	2.60	0.40
2:C:171:TRP:CE3	2:C:171:TRP:HA	2.57	0.40
2:C:32:ALA:C	2:C:34:VAL:N	2.73	0.40
2:C:580:MET:HB3	2:C:584:GLU:OE1	2.22	0.40
2:C:629:ALA:O	2:C:705:ILE:HG12	2.21	0.40
2:C:686:ASP:N	2:C:686:ASP:OD1	2.54	0.40
2:C:691:SER:HB2	2:C:858:MET:HE2	2.03	0.40
2:C:729:LEU:O	2:C:734:LEU:HG	2.20	0.40
2:C:760:SER:N	2:C:785:VAL:HG22	2.37	0.40
2:C:79:SER:O	2:C:80:GLN:C	2.58	0.40
1:B:30:ARG:CZ	2:C:854:PRO:HB3	2.52	0.40
2:C:976:ASP:C	2:C:978:ARG:N	2.74	0.40
3:D:964:TYR:HE2	3:D:1003:LYS:HB3	1.86	0.40
3:D:1446:HIS:CD2	3:D:1446:HIS:C	2.94	0.40
3:D:1458:ASP:OD1	3:D:1460:LEU:HA	2.22	0.40
3:D:477:LEU:O	3:D:478:LEU:C	2.59	0.40
2:C:684:PHE:HB3	3:D:633:VAL:HG21	2.03	0.40
3:D:806:PHE:H	3:D:827:ILE:CA	2.31	0.40
3:D:841:PHE:C	3:D:843:PHE:H	2.25	0.40
3:D:879:ARG:HH11	3:D:904:VAL:CA	2.17	0.40
3:D:990:TYR:CE1	3:D:994:ILE:HD11	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:97:GLU:C	4:E:98:GLU:HG3	2.42	0.40
1:A:109:ARG:HA	1:A:128:ILE:H	1.87	0.40
1:A:31:GLY:H	1:A:192:ASP:CG	2.23	0.40
1:A:64:GLU:CG	1:A:65:PHE:N	2.84	0.40
2:C:1108:PRO:HB3	3:D:3:LYS:NZ	2.37	0.40
2:C:127:PHE:CE2	2:C:386:PHE:CE2	3.10	0.40
2:C:196:LEU:CD1	2:C:200:LEU:HD21	2.50	0.40
2:C:508:ILE:HA	2:C:517:ARG:O	2.21	0.40
2:C:565:GLN:CG	2:C:565:GLN:O	2.69	0.40
2:C:612:ALA:O	2:C:613:VAL:O	2.40	0.40
3:D:1135:LEU:O	3:D:1135:LEU:HG	2.21	0.40
3:D:1156:ALA:HB1	3:D:1183:GLU:CB	2.46	0.40
3:D:1283:ARG:CG	3:D:1283:ARG:NH1	2.82	0.40
3:D:1443:ASN:OD1	3:D:1443:ASN:N	2.54	0.40
3:D:23:TYR:O	3:D:24:GLY:C	2.59	0.40
3:D:573:MET:O	3:D:574:LEU:C	2.58	0.40
3:D:669:ASN:CG	3:D:671:LYS:HG2	2.41	0.40
3:D:806:PHE:N	3:D:827:ILE:HA	2.30	0.40
3:D:934:LEU:HA	3:D:934:LEU:HD23	1.86	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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	221/313 (71%)	98 (44%)	68 (31%)	55 (25%)	0	0
1	B	227/313 (72%)	109 (48%)	61 (27%)	57 (25%)	0	0
2	C	1111/1119 (99%)	559 (50%)	300 (27%)	252 (23%)	0	0
3	D	1127/1265 (89%)	543 (48%)	319 (28%)	265 (24%)	0	0
4	E	96/99 (97%)	49 (51%)	22 (23%)	25 (26%)	0	0

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
All	All	2782/3109 (90%)	1358 (49%)	770 (28%)	654 (24%)	0 0

All (654) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	26	GLU
1	A	59	GLU
1	A	64	GLU
1	A	73	GLU
1	A	75	VAL
1	A	108	VAL
1	A	110	ALA
1	A	114	THR
1	A	143	VAL
1	A	157	ILE
1	A	160	ARG
1	A	161	ILE
1	A	195	THR
1	A	200	THR
1	A	223	TYR
1	B	15	THR
1	B	26	GLU
1	B	47	SER
1	B	59	GLU
1	B	61	VAL
1	B	63	HIS
1	B	66	SER
1	B	91	ASP
1	B	92	PRO
1	B	94	TRP
1	B	95	ARG
1	B	118	ASP
1	B	157	ILE
1	B	160	ARG
1	B	187	GLN
1	B	189	THR
1	B	194	LEU
1	B	195	THR
2	C	10	ARG
2	C	18	LEU
2	C	31	GLN
2	C	32	ALA

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Mol	Chain	Res	Type
2	C	42	VAL
2	C	81	ASP
2	C	105	THR
2	C	149	THR
2	C	153	ALA
2	C	155	PRO
2	C	164	PRO
2	C	181	VAL
2	C	182	VAL
2	C	202	TYR
2	C	210	GLU
2	C	216	ASP
2	C	258	PHE
2	C	261	LEU
2	C	271	GLU
2	C	283	VAL
2	C	322	VAL
2	C	326	ASP
2	C	360	VAL
2	C	361	MET
2	C	375	SER
2	C	388	ARG
2	C	394	PHE
2	C	395	LYS
2	C	402	SER
2	C	425	PHE
2	C	426	ASP
2	C	431	HIS
2	C	438	ILE
2	C	440	PRO
2	C	444	PRO
2	C	449	ILE
2	C	457	ALA
2	C	458	TYR
2	C	461	VAL
2	C	462	ASP
2	C	467	ILE
2	C	468	ARG
2	C	480	THR
2	C	488	ALA
2	C	495	THR
2	C	502	PRO

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Mol	Chain	Res	Type
2	C	513	VAL
2	C	516	ARG
2	C	517	ARG
2	C	520	GLU
2	C	524	VAL
2	C	526	PRO
2	C	529	VAL
2	C	537	LYS
2	C	564	MET
2	C	568	ALA
2	C	569	VAL
2	C	573	ARG
2	C	575	GLN
2	C	600	ASP
2	C	605	LYS
2	C	613	VAL
2	C	643	VAL
2	C	648	ARG
2	C	657	ASP
2	C	659	PRO
2	C	663	GLU
2	C	677	MET
2	C	680	ASP
2	C	715	THR
2	C	731	GLU
2	C	732	ALA
2	C	734	LEU
2	C	762	LYS
2	C	764	GLU
2	C	777	ILE
2	C	796	GLU
2	C	800	VAL
2	C	811	PRO
2	C	814	GLU
2	C	837	ASP
2	C	840	ALA
2	C	876	VAL
2	C	881	ASN
2	C	907	ASP
2	C	921	ALA
2	C	936	VAL
2	C	963	LEU

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Mol	Chain	Res	Type
2	C	969	LEU
2	C	972	VAL
2	C	977	GLY
2	C	998	TYR
2	C	1012	PRO
2	C	1025	ALA
2	C	1043	TYR
2	C	1055	ILE
2	C	1059	ASP
2	C	1109	VAL
2	C	1110	ASP
2	C	1112	PHE
3	D	72	VAL
3	D	76	CYS
3	D	78	VAL
3	D	81	THR
3	D	84	ILE
3	D	88	TYR
3	D	93	ILE
3	D	96	ALA
3	D	98	PRO
3	D	99	ALA
3	D	104	PHE
3	D	112	ILE
3	D	113	GLY
3	D	124	GLU
3	D	126	VAL
3	D	132	TYR
3	D	133	ILE
3	D	137	PRO
3	D	453	ASP
3	D	468	LEU
3	D	483	HIS
3	D	486	ARG
3	D	491	LYS
3	D	509	PRO
3	D	511	TRP
3	D	512	MET
3	D	515	GLU
3	D	539	ASP
3	D	582	ILE
3	D	583	ASP

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Mol	Chain	Res	Type
3	D	587	ARG
3	D	602	SER
3	D	617	ASN
3	D	625	TYR
3	D	658	LEU
3	D	705	ALA
3	D	709	HIS
3	D	725	SER
3	D	748	HIS
3	D	753	SER
3	D	773	ALA
3	D	774	SER
3	D	783	ARG
3	D	795	VAL
3	D	798	GLU
3	D	800	LYS
3	D	802	ALA
3	D	817	GLU
3	D	828	VAL
3	D	830	ALA
3	D	840	LYS
3	D	859	ASP
3	D	869	LEU
3	D	875	THR
3	D	892	ASP
3	D	902	MET
3	D	953	ASP
3	D	1016	TYR
3	D	1029	ALA
3	D	1032	ASN
3	D	1053	THR
3	D	1080	LYS
3	D	1110	GLU
3	D	1112	ASP
3	D	1115	THR
3	D	1129	VAL
3	D	1138	ARG
3	D	1197	THR
3	D	1204	LYS
3	D	1207	GLY
3	D	1208	TYR
3	D	1268	ARG

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Mol	Chain	Res	Type
3	D	1280	GLY
3	D	1282	VAL
3	D	1313	LEU
3	D	1314	VAL
3	D	1316	ASP
3	D	1318	ASP
3	D	1321	GLU
3	D	1323	GLY
3	D	1324	GLN
3	D	1330	ALA
3	D	1331	ILE
3	D	1340	LYS
3	D	1345	VAL
3	D	1355	LYS
3	D	1365	HIS
3	D	1443	ASN
3	D	1453	ILE
3	D	1456	LYS
3	D	1489	ASP
4	E	2	ALA
4	E	12	MET
4	E	30	LEU
4	E	38	THR
4	E	42	PRO
4	E	51	LEU
4	E	55	TYR
4	E	56	ASP
4	E	72	ARG
4	E	94	PRO
4	E	95	THR
1	A	11	PHE
1	A	13	ALA
1	A	14	THR
1	A	19	HIS
1	A	20	TYR
1	A	25	LEU
1	A	30	ARG
1	A	47	SER
1	A	78	ILE
1	A	85	LEU
1	A	94	TRP
1	A	104	GLY

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Mol	Chain	Res	Type
1	A	112	ASP
1	A	124	PRO
1	A	127	HIS
1	A	135	GLY
1	A	142	ARG
1	A	152	ALA
1	A	153	GLU
1	A	194	LEU
1	B	5	LYS
1	B	18	ASP
1	B	35	THR
1	B	53	VAL
1	B	62	LEU
1	B	90	LEU
1	B	112	ASP
1	B	117	ALA
1	B	125	ASP
1	B	136	LYS
1	B	137	LEU
1	B	158	LYS
2	C	23	VAL
2	C	33	ASP
2	C	36	PRO
2	C	56	GLU
2	C	66	LEU
2	C	112	GLU
2	C	166	PRO
2	C	168	ARG
2	C	223	ASP
2	C	232	GLU
2	C	266	ARG
2	C	273	GLY
2	C	295	ASP
2	C	309	TYR
2	C	315	ALA
2	C	319	GLY
2	C	336	VAL
2	C	345	ARG
2	C	362	GLY
2	C	386	PHE
2	C	403	SER
2	C	424	GLY

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Mol	Chain	Res	Type
2	C	435	TYR
2	C	439	CYS
2	C	463	ALA
2	C	498	GLN
2	C	505	GLY
2	C	527	GLU
2	C	555	ALA
2	C	582	GLY
2	C	603	VAL
2	C	629	ALA
2	C	700	TYR
2	C	713	ARG
2	C	716	LYS
2	C	729	LEU
2	C	770	GLU
2	C	788	THR
2	C	791	ARG
2	C	812	GLY
2	C	813	VAL
2	C	822	VAL
2	C	857	ASP
2	C	875	GLY
2	C	920	GLU
2	C	970	GLY
2	C	988	VAL
2	C	993	PHE
2	C	1033	GLY
2	C	1057	SER
2	C	1080	SER
2	C	1096	ALA
3	D	22	SER
3	D	26	VAL
3	D	29	PRO
3	D	82	ARG
3	D	85	VAL
3	D	95	LEU
3	D	125	GLN
3	D	129	PHE
3	D	136	ASP
3	D	141	VAL
3	D	142	LEU
3	D	143	ASP

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Mol	Chain	Res	Type
3	D	454	ALA
3	D	466	LYS
3	D	470	LEU
3	D	503	LEU
3	D	505	SER
3	D	507	ASN
3	D	520	LEU
3	D	549	ASN
3	D	584	ASN
3	D	588	GLY
3	D	590	PRO
3	D	613	ARG
3	D	629	SER
3	D	636	GLN
3	D	638	LYS
3	D	680	GLN
3	D	682	ASP
3	D	686	GLU
3	D	711	LEU
3	D	730	PRO
3	D	761	ILE
3	D	784	ASP
3	D	803	GLY
3	D	809	PRO
3	D	816	TYR
3	D	823	LEU
3	D	825	ALA
3	D	827	ILE
3	D	838	ARG
3	D	856	GLY
3	D	861	GLN
3	D	893	GLU
3	D	924	MET
3	D	946	GLY
3	D	996	LEU
3	D	1007	ALA
3	D	1066	LEU
3	D	1067	THR
3	D	1095	LEU
3	D	1103	ALA
3	D	1113	CYS
3	D	1198	ARG

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Mol	Chain	Res	Type
3	D	1201	VAL
3	D	1202	CYS
3	D	1221	ALA
3	D	1256	GLY
3	D	1283	ARG
3	D	1307	PRO
3	D	1311	ARG
3	D	1322	ALA
3	D	1341	GLY
3	D	1427	LYS
3	D	1459	GLU
3	D	1462	GLY
4	E	35	PHE
4	E	64	ALA
1	A	18	ASP
1	A	74	ASP
1	A	93	ARG
1	A	117	ALA
1	A	122	MET
1	A	151	PRO
1	A	178	PHE
1	A	181	GLU
1	B	20	TYR
1	B	60	ASP
1	B	126	LEU
1	B	127	HIS
1	B	135	GLY
1	B	188	ARG
1	B	203	SER
1	B	210	LEU
2	C	9	ILE
2	C	38	LYS
2	C	77	PRO
2	C	187	ASN
2	C	204	GLN
2	C	250	LYS
2	C	285	LEU
2	C	302	VAL
2	C	325	ILE
2	C	380	ALA
2	C	385	PHE
2	C	398	THR

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Mol	Chain	Res	Type
2	C	420	ARG
2	C	428	ARG
2	C	432	ARG
2	C	490	GLU
2	C	499	ALA
2	C	528	GLU
2	C	574	ALA
2	C	581	THR
2	C	589	ARG
2	C	606	VAL
2	C	645	VAL
2	C	685	GLU
2	C	699	PHE
2	C	756	VAL
2	C	768	SER
2	C	769	PRO
2	C	793	PRO
2	C	877	PRO
2	C	964	LYS
2	C	992	MET
2	C	1009	SER
2	C	1020	PRO
2	C	1026	GLN
3	D	11	ALA
3	D	94	GLU
3	D	105	VAL
3	D	153	LEU
3	D	485	SER
3	D	502	PHE
3	D	553	ARG
3	D	599	PRO
3	D	667	ALA
3	D	714	GLN
3	D	722	GLU
3	D	768	ASN
3	D	806	PHE
3	D	808	THR
3	D	824	ASN
3	D	862	ASP
3	D	879	ARG
3	D	897	GLN
3	D	969	ASP

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Mol	Chain	Res	Type
3	D	970	ARG
3	D	1009	PHE
3	D	1131	ARG
3	D	1157	LEU
3	D	1288	GLU
3	D	1315	LYS
3	D	1344	ALA
3	D	1368	HIS
3	D	1475	ALA
3	D	1483	ARG
3	D	1485	THR
3	D	1495	ALA
1	A	9	PRO
1	A	15	THR
1	A	16	GLN
1	B	75	VAL
1	B	115	PRO
1	B	155	HIS
1	B	206	PRO
1	B	229	ALA
2	C	14	PRO
2	C	39	ARG
2	C	231	PRO
2	C	264	PRO
2	C	290	LEU
2	C	308	ARG
2	C	367	LEU
2	C	422	ARG
2	C	469	THR
2	C	506	ASP
2	C	532	MET
2	C	545	ASN
2	C	567	GLN
2	C	596	TYR
2	C	602	GLU
2	C	607	ASP
2	C	743	VAL
2	C	973	VAL
2	C	974	LEU
2	C	978	ARG
2	C	1027	PHE
3	D	75	ARG

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Mol	Chain	Res	Type
3	D	100	ALA
3	D	144	GLY
3	D	538	SER
3	D	657	LEU
3	D	696	HIS
3	D	811	GLU
3	D	890	VAL
3	D	904	VAL
3	D	907	GLU
3	D	954	ASP
3	D	960	GLU
3	D	978	ALA
3	D	1019	ASN
3	D	1104	HIS
3	D	1152	ARG
3	D	1254	THR
3	D	1271	ALA
3	D	1354	GLN
3	D	1441	PHE
3	D	1454	ALA
3	D	1477	THR
4	E	4	PRO
4	E	31	LEU
4	E	39	VAL
4	E	60	ALA
4	E	93	TYR
1	A	171	SER
1	A	175	ARG
1	A	188	ARG
1	A	206	PRO
1	B	36	LEU
1	B	119	VAL
1	B	148	GLY
1	B	151	PRO
1	B	162	ASN
1	B	163	ALA
1	B	172	PRO
1	B	230	SER
2	C	116	GLY
2	C	157	ARG
2	C	203	ASP
2	C	205	GLU

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Mol	Chain	Res	Type
2	C	297	GLU
2	C	443	THR
2	C	460	ARG
2	C	483	VAL
2	C	536	PRO
2	C	556	ASN
2	C	619	ARG
2	C	717	LEU
2	C	858	MET
2	C	859	PRO
2	C	938	LYS
2	C	1035	MET
2	C	1113	GLU
3	D	80	VAL
3	D	127	LEU
3	D	154	THR
3	D	490	ALA
3	D	508	ARG
3	D	639	LEU
3	D	640	HIS
3	D	644	LEU
3	D	668	PRO
3	D	731	LEU
3	D	776	GLU
3	D	799	LYS
3	D	857	LEU
3	D	894	LYS
3	D	984	LEU
3	D	1044	GLY
3	D	1045	LEU
3	D	1085	THR
3	D	1267	ARG
3	D	1329	GLY
3	D	1367	LYS
3	D	1389	PRO
3	D	1415	PRO
4	E	41	GLU
4	E	50	THR
4	E	70	THR
1	A	32	PHE
1	B	71	VAL
1	B	111	VAL

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Mol	Chain	Res	Type
1	B	133	GLU
1	B	192	ASP
2	C	113	VAL
2	C	114	PHE
2	C	156	GLY
2	C	234	ALA
2	C	243	ARG
2	C	304	LEU
2	C	390	GLN
2	C	416	GLY
2	C	535	SER
2	C	1099	VAL
2	C	1107	ASN
3	D	134	VAL
3	D	145	VAL
3	D	544	TYR
3	D	654	LYS
3	D	673	ALA
3	D	864	VAL
3	D	1051	GLY
3	D	1156	ALA
3	D	1253	ILE
3	D	1258	PRO
3	D	1276	SER
3	D	1333	PRO
3	D	1420	PRO
3	D	1425	VAL
3	D	1465	GLU
4	E	28	GLN
4	E	96	GLU
1	A	37	GLY
1	A	204	VAL
1	B	134	GLY
1	B	169	ILE
2	C	12	VAL
2	C	75	ASP
2	C	474	VAL
2	C	894	GLY
2	C	1079	PRO
3	D	109	PRO
3	D	484	PRO
3	D	1108	VAL

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Mol	Chain	Res	Type
3	D	1216	VAL
3	D	1260	VAL
3	D	1320	VAL
3	D	1353	ILE
2	C	501	THR
2	C	855	VAL
3	D	147	VAL
3	D	1409	ILE
3	D	1447	VAL
4	E	71	GLY
1	A	198	ILE
2	C	263	ASP
2	C	376	ARG
2	C	604	VAL
2	C	987	ILE
1	A	33	GLY
2	C	1022	GLY
3	D	772	PRO
3	D	821	VAL
3	D	845	ASN
4	E	80	VAL
2	C	867	VAL
2	C	1077	PRO
3	D	10	ILE
3	D	948	ILE
3	D	994	ILE
3	D	1023	VAL
2	C	17	PRO
2	C	244	PRO

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	A	190/271 (70%)	163 (86%)	27 (14%)	4 19
1	B	191/271 (70%)	171 (90%)	20 (10%)	8 31

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	C	869/936 (93%)	747 (86%)	122 (14%)	4	19
3	D	782/1036 (76%)	693 (89%)	89 (11%)	7	28
4	E	67/88 (76%)	64 (96%)	3 (4%)	32	67
All	All	2099/2602 (81%)	1838 (88%)	261 (12%)	5	24

All (261) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	16	GLN
1	A	19	HIS
1	A	20	TYR
1	A	25	LEU
1	A	30	ARG
1	A	41	ARG
1	A	47	SER
1	A	57	TYR
1	A	62	LEU
1	A	63	HIS
1	A	95	ARG
1	A	100	LEU
1	A	109	ARG
1	A	112	ASP
1	A	113	PHE
1	A	122	MET
1	A	125	ASP
1	A	142	ARG
1	A	143	VAL
1	A	192	ASP
1	A	194	LEU
1	A	196	LEU
1	A	199	TRP
1	A	201	ASP
1	A	204	VAL
1	A	206	PRO
1	A	221	LEU
1	B	18	ASP
1	B	19	HIS
1	B	36	LEU
1	B	44	LEU
1	B	56	VAL
1	B	57	TYR

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Mol	Chain	Res	Type
1	B	62	LEU
1	B	86	VAL
1	B	89	PHE
1	B	122	MET
1	B	125	ASP
1	B	127	HIS
1	B	131	LEU
1	B	133	GLU
1	B	170	PHE
1	B	171	SER
1	B	187	GLN
1	B	194	LEU
1	B	196	LEU
1	B	220	HIS
2	C	13	ILE
2	C	36	PRO
2	C	54	ILE
2	C	56	GLU
2	C	67	ASP
2	C	70	GLU
2	C	75	ASP
2	C	95	TYR
2	C	115	LEU
2	C	118	LEU
2	C	139	GLN
2	C	142	ARG
2	C	147	TYR
2	C	155	PRO
2	C	171	TRP
2	C	172	ILE
2	C	177	GLU
2	C	198	ARG
2	C	206	THR
2	C	212	SER
2	C	214	TYR
2	C	216	ASP
2	C	232	GLU
2	C	256	TYR
2	C	258	PHE
2	C	261	LEU
2	C	264	PRO
2	C	267	TYR

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Mol	Chain	Res	Type
2	C	285	LEU
2	C	298	PHE
2	C	299	LYS
2	C	303	PHE
2	C	304	LEU
2	C	306	THR
2	C	313	LEU
2	C	324	ASP
2	C	335	THR
2	C	344	PHE
2	C	350	ARG
2	C	356	ARG
2	C	367	LEU
2	C	372	LEU
2	C	391	LEU
2	C	393	GLN
2	C	394	PHE
2	C	399	ASN
2	C	421	GLU
2	C	429	ASP
2	C	434	HIS
2	C	435	TYR
2	C	441	VAL
2	C	443	THR
2	C	448	ASN
2	C	466	PHE
2	C	468	ARG
2	C	502	PRO
2	C	508	ILE
2	C	526	PRO
2	C	534	VAL
2	C	535	SER
2	C	544	THR
2	C	559	LEU
2	C	571	LEU
2	C	579	VAL
2	C	580	MET
2	C	584	GLU
2	C	627	ARG
2	C	630	ARG
2	C	633	GLN
2	C	635	THR

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Mol	Chain	Res	Type
2	C	637	PHE
2	C	672	VAL
2	C	674	VAL
2	C	676	ILE
2	C	680	ASP
2	C	686	ASP
2	C	690	ILE
2	C	693	GLU
2	C	698	ASP
2	C	699	PHE
2	C	710	ILE
2	C	723	THR
2	C	739	GLU
2	C	750	LYS
2	C	755	LEU
2	C	758	ARG
2	C	764	GLU
2	C	770	GLU
2	C	772	ARG
2	C	810	ASP
2	C	834	GLN
2	C	837	ASP
2	C	841	ASN
2	C	846	LYS
2	C	852	ILE
2	C	853	LEU
2	C	861	LEU
2	C	867	VAL
2	C	869	VAL
2	C	873	PRO
2	C	880	MET
2	C	881	ASN
2	C	882	LEU
2	C	892	LEU
2	C	924	LEU
2	C	952	LEU
2	C	964	LYS
2	C	978	ARG
2	C	983	PHE
2	C	1000	MET
2	C	1005	MET
2	C	1010	THR

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Mol	Chain	Res	Type
2	C	1012	PRO
2	C	1015	LEU
2	C	1017	THR
2	C	1018	GLN
2	C	1031	ARG
2	C	1052	MET
2	C	1055	ILE
2	C	1106	ASP
2	C	1112	PHE
2	C	1115	LEU
3	D	462	GLN
3	D	486	ARG
3	D	502	PHE
3	D	509	PRO
3	D	511	TRP
3	D	517	VAL
3	D	550	ARG
3	D	567	ILE
3	D	587	ARG
3	D	601	ARG
3	D	625	TYR
3	D	651	GLU
3	D	652	LEU
3	D	662	GLU
3	D	674	ARG
3	D	688	TRP
3	D	691	LEU
3	D	702	LEU
3	D	722	GLU
3	D	751	LEU
3	D	752	SER
3	D	754	PHE
3	D	770	LEU
3	D	772	PRO
3	D	778	LEU
3	D	791	TYR
3	D	792	ILE
3	D	794	GLN
3	D	834	THR
3	D	860	LEU
3	D	864	VAL
3	D	879	ARG

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Mol	Chain	Res	Type
3	D	899	LEU
3	D	906	GLN
3	D	914	LEU
3	D	925	GLU
3	D	936	TYR
3	D	941	LEU
3	D	948	ILE
3	D	957	ILE
3	D	965	LEU
3	D	969	ASP
3	D	972	LEU
3	D	975	ILE
3	D	984	LEU
3	D	985	THR
3	D	988	GLU
3	D	1001	THR
3	D	1010	ASN
3	D	1012	PHE
3	D	1032	ASN
3	D	1034	GLN
3	D	1035	GLN
3	D	1039	LEU
3	D	1042	MET
3	D	1045	LEU
3	D	1046	MET
3	D	1053	THR
3	D	1058	VAL
3	D	1062	PHE
3	D	1063	ARG
3	D	1066	LEU
3	D	1091	ASP
3	D	1094	TYR
3	D	1104	HIS
3	D	1106	ILE
3	D	1109	ARG
3	D	1124	PHE
3	D	1131	ARG
3	D	1138	ARG
3	D	1167	LEU
3	D	1195	CYS
3	D	1197	THR
3	D	1254	THR

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Mol	Chain	Res	Type
3	D	1265	GLU
3	D	1269	PRO
3	D	1274	VAL
3	D	1282	VAL
3	D	1289	ASP
3	D	1292	SER
3	D	1300	PHE
3	D	1305	LYS
3	D	1316	ASP
3	D	1364	LEU
3	D	1383	THR
3	D	1433	LYS
3	D	1435	TRP
3	D	1445	THR
3	D	1448	LEU
4	E	6	ILE
4	E	7	ASP
4	E	32	ARG

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (68) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	16	GLN
1	A	162	ASN
1	A	179	GLN
1	A	212	GLN
1	A	220	HIS
1	A	226	ASN
1	B	19	HIS
1	B	155	HIS
1	B	187	GLN
1	B	212	GLN
1	B	220	HIS
1	B	222	ASN
2	C	22	GLN
2	C	31	GLN
2	C	91	GLN
2	C	102	HIS
2	C	139	GLN
2	C	374	ASN
2	C	399	ASN
2	C	538	GLN

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Mol	Chain	Res	Type
2	C	543	ASN
2	C	563	ASN
2	C	565	GLN
2	C	623	HIS
2	C	632	ASN
2	C	633	GLN
2	C	671	ASN
2	C	704	HIS
2	C	841	ASN
2	C	843	HIS
2	C	845	ASN
2	C	860	HIS
2	C	872	ASN
2	C	881	ASN
2	C	889	HIS
2	C	991	GLN
2	C	1006	HIS
2	C	1018	GLN
2	C	1026	GLN
2	C	1030	GLN
2	C	1047	HIS
2	C	1064	ASN
2	C	1107	ASN
3	D	507	ASN
3	D	541	ASN
3	D	549	ASN
3	D	551	ASN
3	D	552	ASN
3	D	584	ASN
3	D	636	GLN
3	D	680	GLN
3	D	696	HIS
3	D	727	GLN
3	D	737	ASN
3	D	756	GLN
3	D	762	GLN
3	D	768	ASN
3	D	917	GLN
3	D	977	GLN
3	D	1038	GLN
3	D	1125	GLN
3	D	1354	GLN

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Mol	Chain	Res	Type
3	D	1368	HIS
3	D	1375	GLN
3	D	1442	GLN
3	D	1446	HIS
3	D	1466	ASN
4	E	59	ASN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

5.6 Ligand geometry ⓘ

Of 2 ligands modelled in this entry, 2 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

The following chains have linkage breaks:

Mol	Chain	Number of breaks
3	D	3

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	D	155:ASP	C	2(U):UNK	N	55.17
1	D	46(U):UNK	C	452:ILE	N	46.65
1	D	10(U):UNK	C	20(U):UNK	N	14.79

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

EDS was not executed - this section is therefore empty.

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

EDS was not executed - this section is therefore empty.

6.3 Carbohydrates ⓘ

EDS was not executed - this section is therefore empty.

6.4 Ligands ⓘ

EDS was not executed - this section is therefore empty.

6.5 Other polymers ⓘ

EDS was not executed - this section is therefore empty.