



Full wwPDB X-ray Structure Validation Report ⓘ

May 29, 2020 – 03:10 am BST

PDB ID : 3H3V
Title : Yeast RNAP II containing poly(A)-signal sequence in the active site
Authors : Dengl, S.; Cramer, P.
Deposited on : 2009-04-17
Resolution : 4.00 Å(reported)

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

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

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

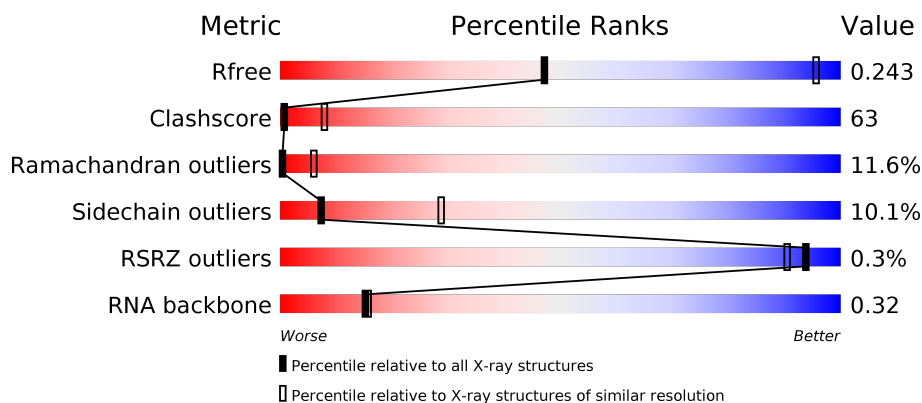
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 4.00 Å.

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





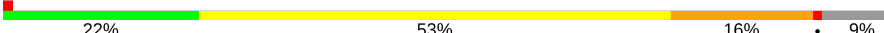
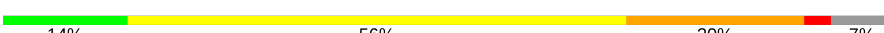
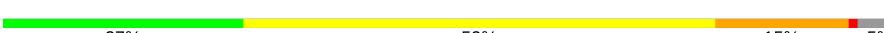




Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	1087 (4.30-3.70)
Clashscore	141614	1148 (4.30-3.70)
Ramachandran outliers	138981	1108 (4.30-3.70)
Sidechain outliers	138945	1099 (4.30-3.70)
RSRZ outliers	127900	1028 (4.34-3.66)
RNA backbone	3102	1048 (5.00-3.00)

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

Mol	Chain	Length	Quality of chain
1	B	1733	
2	C	1224	
3	D	318	
4	E	221	

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Mol	Chain	Length	Quality of chain
5	F	215	
6	G	155	
7	H	171	
8	I	146	
9	J	122	
10	K	70	
11	L	120	
12	M	70	
13	N	14	
14	P	16	
15	T	26	

2 Entry composition

There are 17 unique types of molecules in this entry. The entry contains 31777 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 II subunit RPB1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	B	1416	Total	C	N	O	S	0	0	0
			11140	7021	1946	2111	62			

- Molecule 2 is a protein called DNA-directed RNA polymerase II subunit RPB2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	C	1108	Total	C	N	O	S	0	0	0
			8810	5580	1541	1634	55			

- Molecule 3 is a protein called DNA-directed RNA polymerase II subunit RPB3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	D	266	Total	C	N	O	S	0	0	0
			2095	1317	348	417	13			

- Molecule 4 is a protein called DNA-directed RNA polymerase II subunit RPB4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	E	177	Total	C	N	O	S	0	0	0
			1427	882	256	287	2			

- Molecule 5 is a protein called DNA-directed RNA polymerases I, II, and III subunit RPABC1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	F	214	Total	C	N	O	S	0	0	0
			1752	1111	309	321	11			

- Molecule 6 is a protein called DNA-directed RNA polymerases I, II, and III subunit RPABC2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	G	84	Total	C	N	O	S	0	0	0
			679	434	115	127	3			

- Molecule 7 is a protein called DNA-directed RNA polymerase II subunit RPB7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	H	171	Total	C	N	O	S	0	0	0
			1340	861	222	249	8			

- Molecule 8 is a protein called DNA-directed RNA polymerases I, II, and III subunit RPABC3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	I	133	Total	C	N	O	S	0	0	0
			1068	673	180	211	4			

- Molecule 9 is a protein called DNA-directed RNA polymerase II subunit RPB9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	J	119	Total	C	N	O	S	0	0	0
			971	596	179	186	10			

- Molecule 10 is a protein called DNA-directed RNA polymerases I, II, and III subunit RPABC5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	K	65	Total	C	N	O	S	0	0	0
			532	339	93	94	6			

- Molecule 11 is a protein called DNA-directed RNA polymerase II subunit RPB11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	L	114	Total	C	N	O	S	0	0	0
			919	590	156	171	2			

- Molecule 12 is a protein called DNA-directed RNA polymerases I, II, and III subunit RPABC4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	M	46	Total	C	N	O	S	0	0	0
			364	224	72	64	4			

- Molecule 13 is a DNA chain called 5'-D(*AP*GP*CP*TP*CP*AP*AP*GP*TP*AP*GP*C
P*TP*GP*CP*TP*TP*TP*AP*TP*TP*GP*CP*AP*TP*T)-3'.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	N	7	Total	C	N	O	P	11	0	0
			138	67	26	39	6			

- Molecule 14 is a RNA chain called 5'-D(*CP*AP*GP*CP*TP*AP*CP*TP*TP*GP*AP*GP*CP*T)-3'.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	P	8	Total	C	N	O	P	0	0	0
			168	77	33	51	7			

- Molecule 15 is a DNA chain called 5'-R(*UP*GP*CP*AP*UP*UP*UP*CP*GP*CP*AP*AP*UP*AP*AP*A)-3'.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	T	18	Total	C	N	O	P	8	0	0
			365	177	60	111	17			

- Molecule 16 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
16	J	2	Total	Zn	0	0
			2	2		
16	D	1	Total	Zn	0	0
			1	1		
16	K	1	Total	Zn	0	0
			1	1		
16	B	2	Total	Zn	0	0
			2	2		
16	C	1	Total	Zn	0	0
			1	1		
16	M	1	Total	Zn	0	0
			1	1		

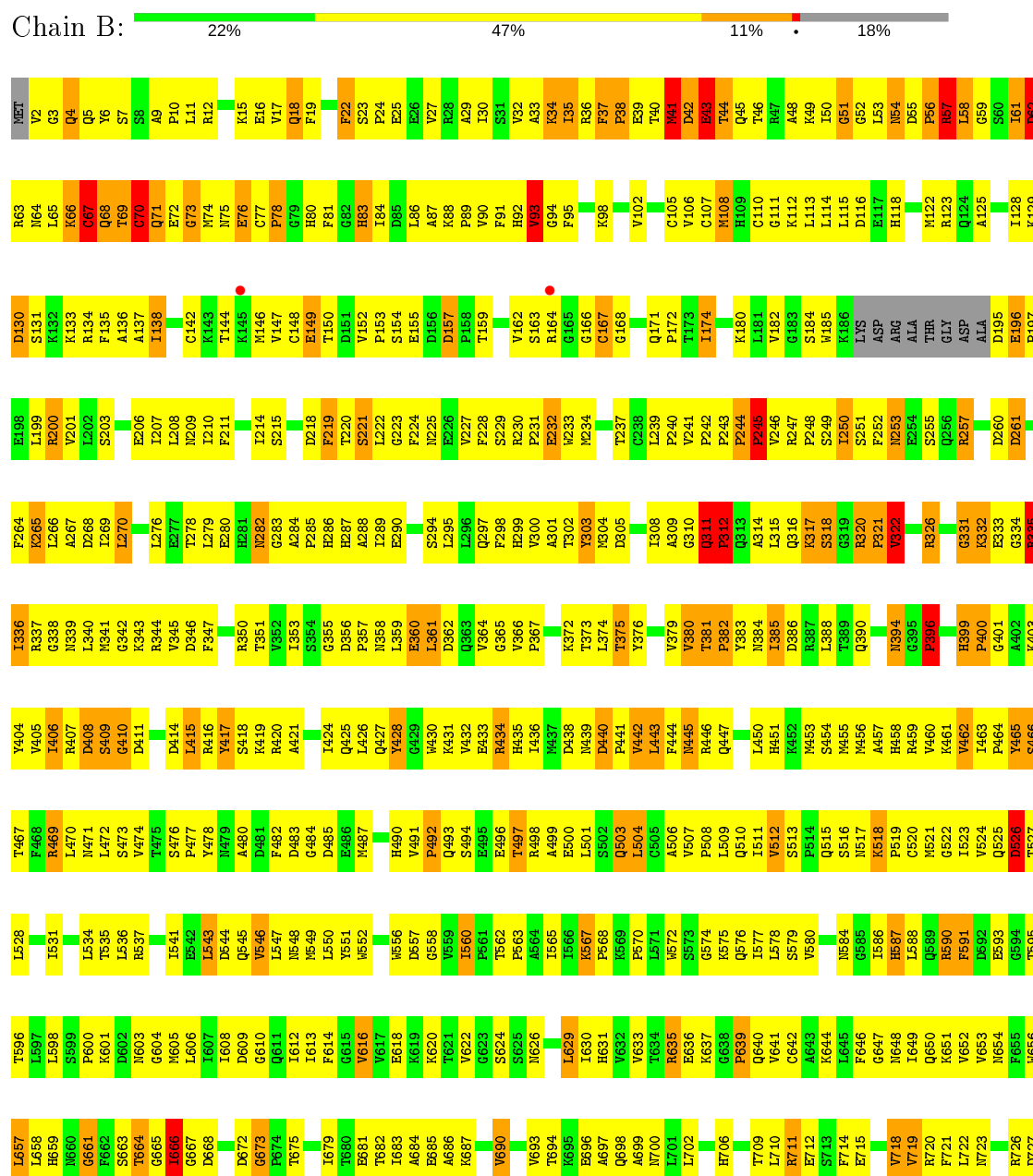
- Molecule 17 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
17	B	1	Total	Mg	0	0
			1	1		

3 Residue-property plots

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

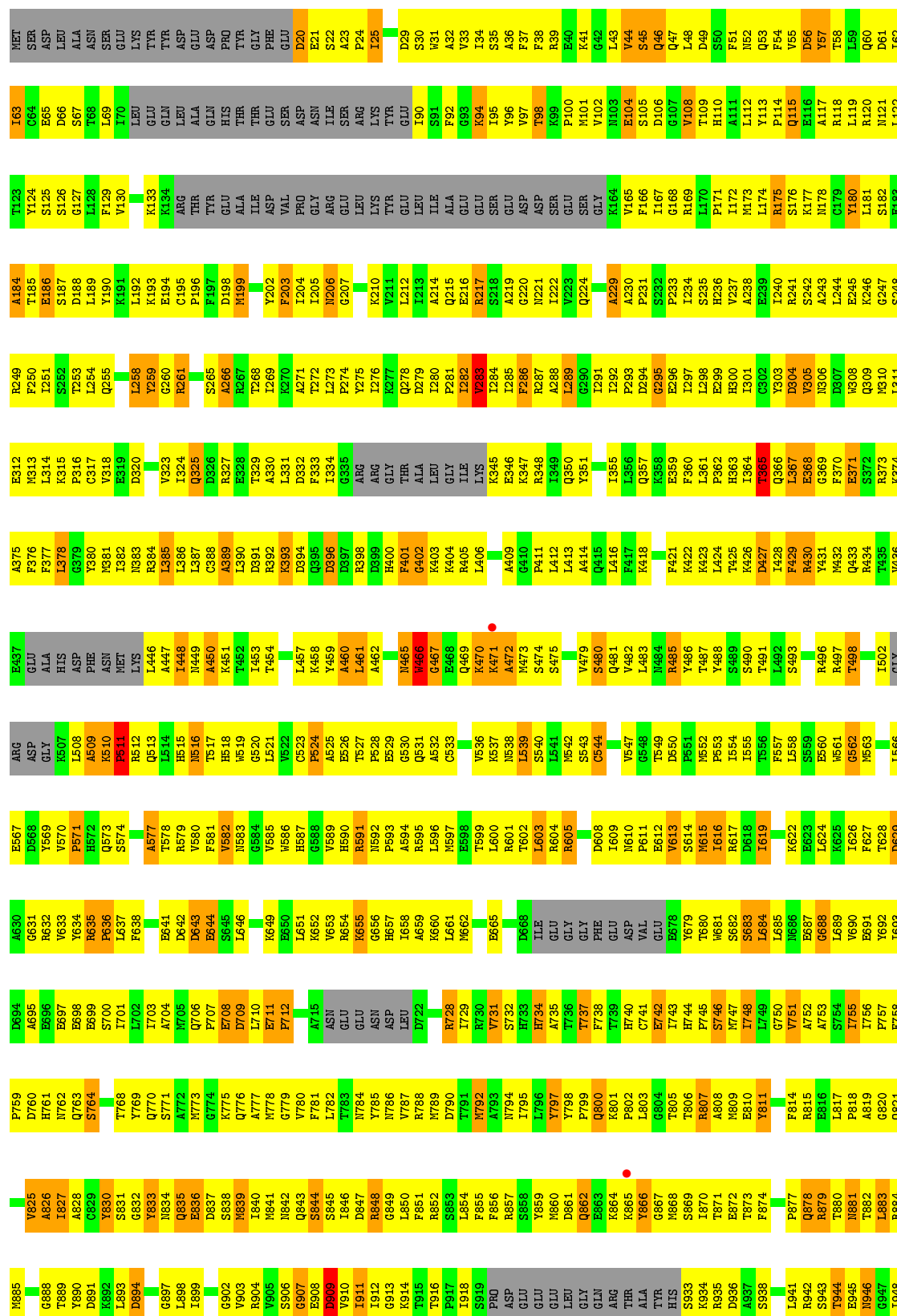
- Molecule 1: DNA-directed RNA polymerase II subunit RPB1



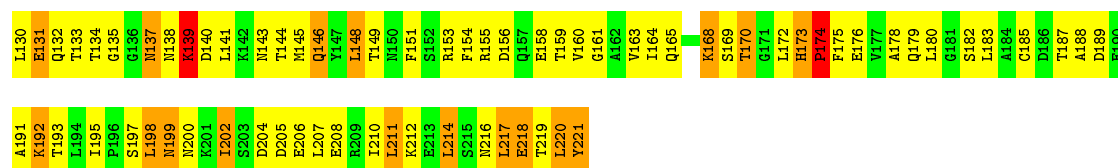
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SER	PRO	THR	THR	THR	PHE	E1447	V1319	M1259	L1192	D1127	V1064	M1004	R940	Y868	I802	A729
SER	PRO	ALA	ALA	ALA	GLN	S1449	G1321	L1260	L1193	Q1128	G1065	I1006	R941	G869	S803	L732
THR	PRO	GLY	GLY	GLY	I1322	R1194	D1323	K1261	R1194	Q1130	V1086	I1007	L942	D871	L805	V735
SER	THR	GLY	GLY	GLY	P1324	T1263	D1325	E1263	L1197	A1131	A1068	Q1008	L943	G872	R806	I736
ASN	PRO	ASP	ASP	ASP	T1325	E1265	R1326	E1265	D1196	L1133	G1072	Q1009	R944	M873	G807	L737
GLN	PRO	GLN	GLN	GLN	R1327	M1266	T1327	M1267	L1198	L1133	E1074	A1010	Y946	D874	L808	K738
THR	PRO	THR	THR	THR	A1201	T1267	T1328	T1267	A1201	I1134	P1075	R1012	V947	D739	L740	D739
THR	PRO	THR	THR	THR	T1329	E1268	T1329	E1268	A1202	A1137	A1076	D1013	V948	H877	E812	L740
THR	PRO	THR	THR	THR	M1330	E1269	T1330	E1269	K1205	I1138	T1077	V1015	E951	F813	F814	N741
THR	PRO	THR	THR	THR	S1331	M1270	T1331	M1270	D1206	H1140	Q1078	T1016	A952	F815	F815	V743
THR	PRO	THR	THR	THR	F1332	I1271	F1332	I1271	L1207	T1141	M1079	L1017	A953	S882	A816	V747
THR	PRO	THR	THR	THR	I1333	T1272	D1333	T1272	T1208	T1142	T1080	F1018	N954	L883	A817	
THR	PRO	THR	THR	THR	D1334	R1273	M1209	R1273	M1209	L1143	L1081	C1019	P955	D884	M818	
THR	PRO	THR	THR	THR	E1403	R1274	K1144	R1274	G1210	K1144	ASN	C1020	L956	T885	G819	S751
THR	PRO	THR	THR	THR	M1336	G1275	V1145	G1275	D1211	S1145	THR	L1021	P957	I886	G820	K752
THR	PRO	THR	THR	THR	E1337	V1276	T1146	V1276	V1212	PHE	PHE	L1022	V958	G887	R831	G753
THR	PRO	THR	THR	THR	V1338	T1277	T1147	T1277	G1213	HIS	HIS	R1023	N959	D890	I825	S754
THR	PRO	THR	THR	THR	L1339	M1278	E1214	M1278	E1214	PHE	PHE	S1024	P960	F755	I756	
THR	PRO	THR	THR	THR	G1340	I1279	R1215	I1279	R1215	ALA	ALA	R1025	R961	R826	T827	I757
THR	PRO	THR	THR	THR	I1341	E1280	R1281	E1280	Q1218	GLY	GLY	L1026	R962	A828	I758	A759
THR	PRO	THR	THR	THR	A1342	V1281	T1152	V1281	T1219	VAL	VAL	A1027	I963	R897	R829	
THR	PRO	THR	THR	THR	A1343	V1282	T1153	V1282	T1220	ALA	ALA	T1028	I964	R898	R830	Q760
THR	PRO	THR	THR	THR	G1344	V1283	V1154	V1283	F1221	SER	SER	R1029	Q965	R899	M761	S762
THR	PRO	THR	THR	THR	R1345	M1284	D1155	M1284	K1221	K1093	K1032	V1031	Q968	R901	T834	A763
THR	PRO	THR	THR	THR	A1346	Y1287	P1156	Y1287	D1223	P1156	T1095	L1033	H972	R839	G835	C764
THR	PRO	THR	THR	THR	E1347	R1288	E1157	R1288	D1224	D1157	S1096	Q1034	I973	R840	Y836	V765
THR	PRO	THR	THR	THR	V1348	R1289	P1158	R1289	F1225	P1158	G1097	E1036	H974	R839	G766	Q767
THR	PRO	THR	THR	THR	K1350	V1291	R1159	V1291	V1226	R1159	I1035	R1036	I975	R839	Q767	Q768
THR	PRO	THR	THR	THR	E1351	T1292	S1160	T1292	W1228	S1160	R1037	D1042	H976	K843	K773	
THR	PRO	THR	THR	THR	V1352	T1293	V1162	T1293	D1229	V1162	L1101	Q1039	I977	A844	R774	I775
THR	PRO	THR	THR	THR	M1354	P1294	T1163	P1294	E1230	T1163	K1102	K1038	K977	V780	D781	
THR	PRO	THR	THR	THR	V1355	T1295	E1165	T1295	D1231	E1165	E1103	Q1040	P978	M849	R782	
THR	PRO	THR	THR	THR	D1359	G1296	E1166	G1296	N1232	E1166	L1104	A1041	I979	E846	L783	
THR	PRO	THR	THR	THR	Y1298	V1298	E1170	V1298	L1236	E1170	V1107	W1045	I983	D847	V780	
THR	PRO	THR	THR	THR	K1300	K1300	R1238	K1300	I1238	R1238	A1108	L1046	I984	M849	R782	
THR	PRO	THR	THR	THR	E1301	F1302	R1239	E1301	R1239	H1173	M1110	S1047	D865	H851	L783	
THR	PRO	THR	THR	THR	H1367	M1304	R1241	H1367	C1240	F1174	M1111	N1048	I986	Y852	L784	
THR	PRO	THR	THR	THR	M1368	W1304	V1242	M1368	V1242	S1175	K1112	I1049	Y987	D853	P785	
THR	PRO	THR	THR	THR	A1369	V1305	V1243	A1369	V1243	T1113	E1050	L923	I988	N854	H786	
THR	PRO	THR	THR	THR	L1370	L1306	ARG	L1370	ARG	P1114	A1051	T855		T855	F787	
THR	PRO	THR	THR	THR	L1371	E1307	PRO	L1371	PRO	LEU	Q1052	L925	D992	T856	S788	
THR	PRO	THR	THR	THR	V1372	T1308	LYS	V1372	LYS	ASP	F1115	Q926	D993	R857	K789	
THR	PRO	THR	THR	THR	D1373	D1308	SER	D1373	SER	GLU	L1053	L926	L993	R857		
THR	PRO	THR	THR	THR	V1374	D1309	SER	V1374	SER	GLU	L1054	V927	Q994	N858	S793	
THR	PRO	THR	THR	THR	M1375	G1310	LEU	M1375	LEU	ALA	L1055	L928	E995	S859	P794	
THR	PRO	THR	THR	THR	T1376	V1311	ASP	T1376	ASP	GLU	S1056	L929	N996	L860	G796	
THR	PRO	THR	THR	THR	T1377	M1312	ALA	T1377	ALA	GLN	L1057	E332	I997	G861	S796	
THR	PRO	THR	THR	THR	Q1378	M1313	GLU	Q1378	GLU	SER	V1058	Y933	V999	V862	K797	
THR	PRO	THR	THR	THR	G1379	S1314	THR	G1379	THR	PHE	H1059	R934	I933	V863	G798	
THR	PRO	THR	THR	THR	D1442	E1315	ASP	D1442	ASP	ASP	G1123	L1000	L1001	R864	F799	
THR	PRO	THR	THR	THR	M1444	V1316	GLU	M1444	GLU	Q1187	H123	Q935	R1001	R864	F866	
THR	PRO	THR	THR	THR	L1445	M1317	E1254	M1317	E1254	Q1188	E1062		G1002	L936		

- Molecule 2: DNA-directed RNA polymerase II subunit RPB2

Chain C:  21% 55% 14% • 9%

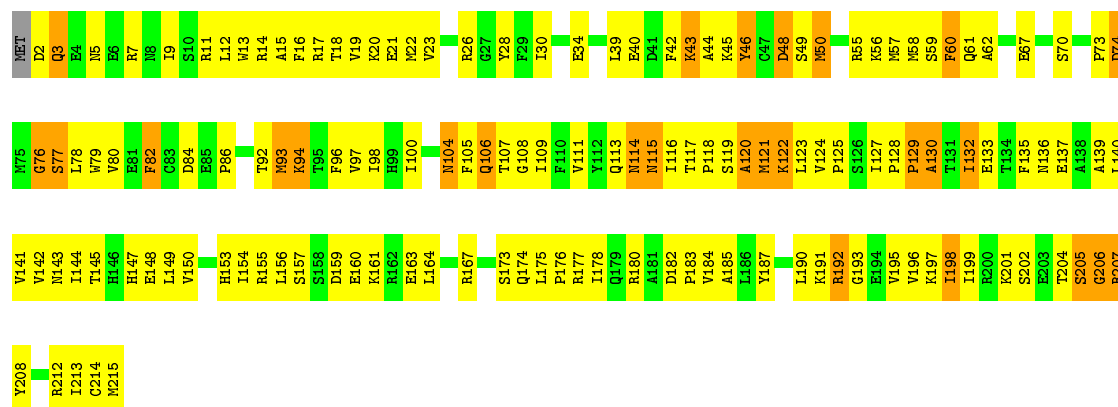






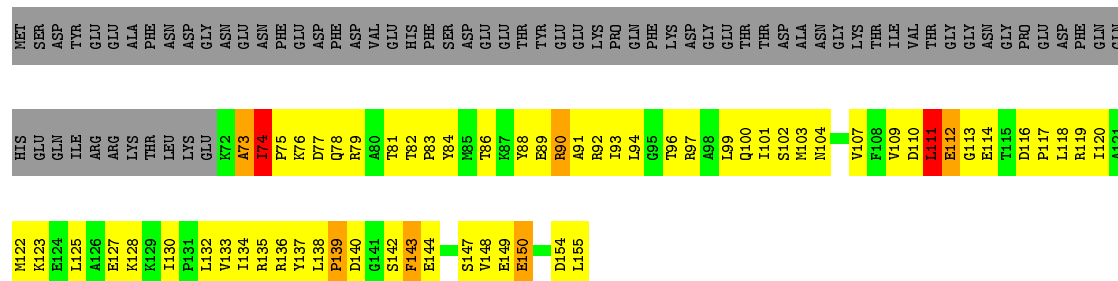
• Molecule 5: DNA-directed RNA polymerases I, II, and III subunit RPABC1

Chain F: 33% 53% 13%



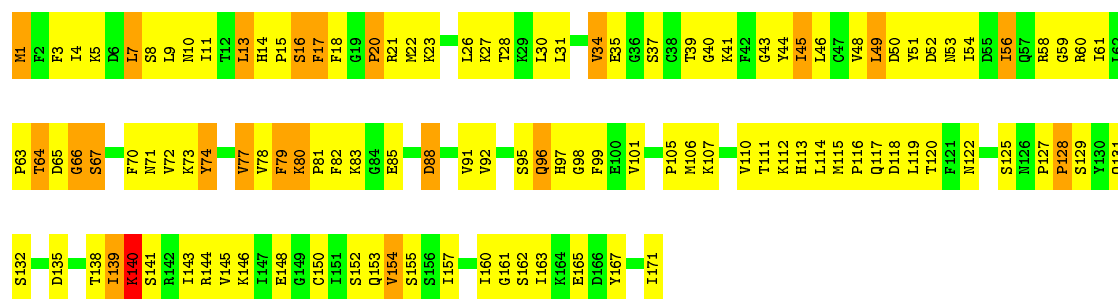
• Molecule 6: DNA-directed RNA polymerases I, II, and III subunit RPABC2

Chain G: 14% 35% 46%

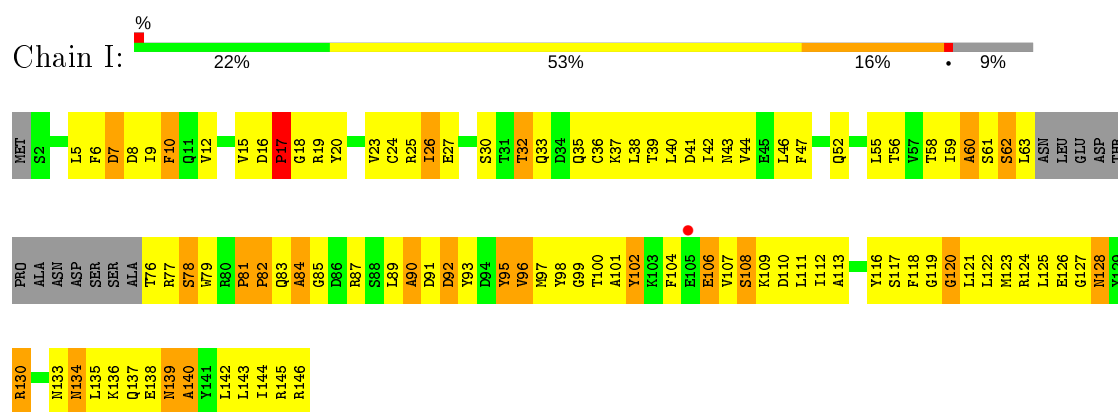


• Molecule 7: DNA-directed RNA polymerase II subunit RPB7

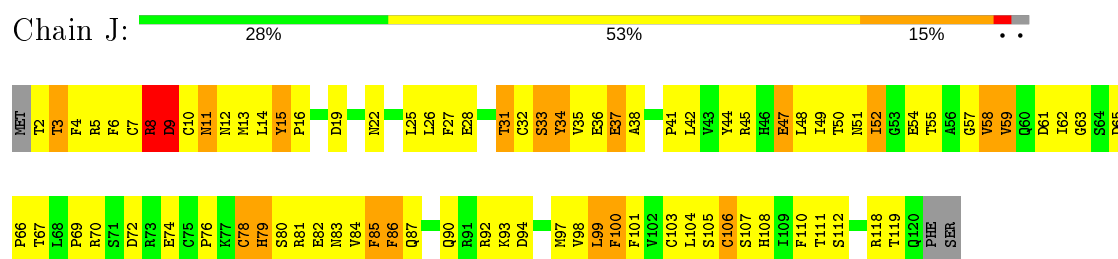
Chain H: 32% 55% 13%



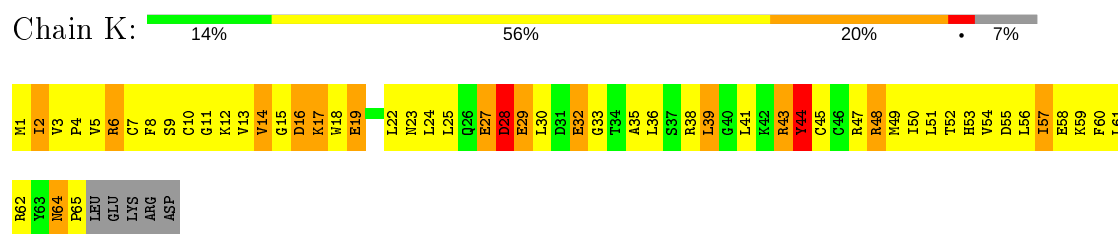
• Molecule 8: DNA-directed RNA polymerases I, II, and III subunit RPABC3



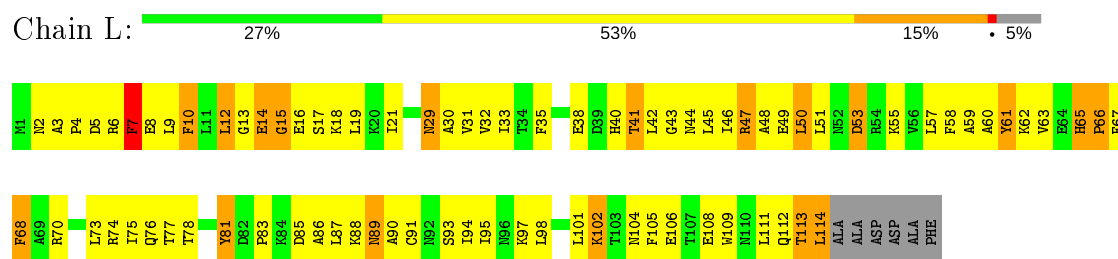
- Molecule 9: DNA-directed RNA polymerase II subunit RPB9



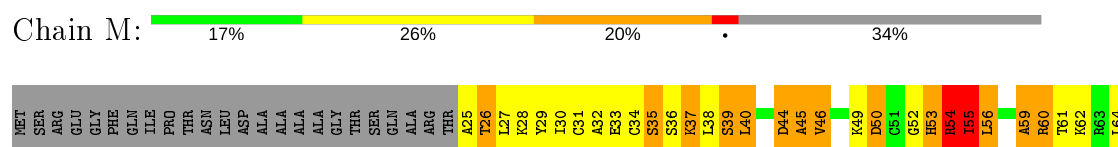
- Molecule 10: DNA-directed RNA polymerases I, II, and III subunit RPABC5



- Molecule 11: DNA-directed RNA polymerase II subunit RPB11



- Molecule 12: DNA-directed RNA polymerases I, II, and III subunit RPABC4

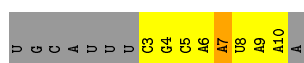




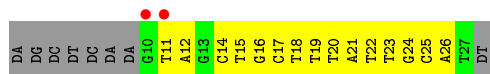
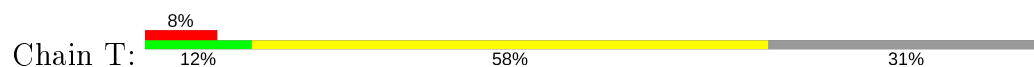
- Molecule 13: 5'-D(*AP*GP*CP*TP*CP*AP*AP*GP*TP*AP*GP*CP*TP*GP*CP*TP*TP*TP*AP*TP*TP*GP*CP*AP*TP*T)-3'



- Molecule 14: 5'-D(*CP*AP*GP*CP*TP*AP*CP*TP*TP*GP*AP*GP*CP*T)-3'



- Molecule 15: 5'-R(*UP*GP*CP*AP*UP*UP*UP*CP*GP*CP*AP*AP*UP*AP*AP*A)-3',



4 Data and refinement statistics

Property	Value	Source
Space group	C 2 2 21	Depositor
Cell constants a, b, c, α , β , γ	222.47Å 391.62Å 284.12Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	50.00 – 4.00 48.99 – 4.00	Depositor EDS
% Data completeness (in resolution range)	(Not available) (50.00-4.00) 100.0 (48.99-4.00)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	0.11	Depositor
$\langle I/\sigma(I) \rangle$ ¹	2.57 (at 4.00Å)	Xtriage
Refinement program	CNS 1.2	Depositor
R, R_{free}	0.205 , 0.241 0.215 , 0.243	Depositor DCC
R_{free} test set	16372 reflections (8.09%)	wwPDB-VP
Wilson B-factor (Å ²)	131.8	Xtriage
Anisotropy	0.506	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.27 , 82.9	EDS
L-test for twinning ²	$\langle L \rangle = 0.46$, $\langle L^2 \rangle = 0.29$	Xtriage
Estimated twinning fraction	0.024 for 1/2*h-1/2*k,-3/2*h-1/2*k,-l 0.024 for 1/2*h+1/2*k,3/2*h-1/2*k,-l	Xtriage
F_o, F_c correlation	0.92	EDS
Total number of atoms	31777	wwPDB-VP
Average B, all atoms (Å ²)	138.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.92% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: 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	B	0.43	0/11339	0.71	4/15334 (0.0%)
2	C	0.43	0/8981	0.69	1/12108 (0.0%)
3	D	0.43	0/2133	0.71	0/2891
4	E	0.43	0/1437	0.69	0/1925
5	F	0.42	0/1788	0.67	0/2406
6	G	0.48	0/691	0.77	0/933
7	H	0.47	0/1368	0.73	0/1844
8	I	0.41	0/1086	0.69	0/1470
9	J	0.40	0/989	0.66	0/1331
10	K	0.44	0/541	0.75	0/727
11	L	0.45	0/937	0.69	0/1265
12	M	0.48	0/366	0.72	0/485
13	N	0.70	0/154	0.88	0/235
14	P	0.55	0/188	0.94	0/291
15	T	0.42	0/407	0.95	0/627
All	All	0.44	0/32405	0.71	5/43872 (0.0%)

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
10	K	0	1

There are no bond length outliers.

All (5) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	311	GLN	N-CA-C	5.60	126.11	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	56	PRO	N-CA-C	-5.54	97.71	112.10
1	B	425	GLN	N-CA-C	-5.38	96.48	111.00
2	C	1163	CYS	N-CA-C	-5.21	96.94	111.00
1	B	440	ASP	N-CA-C	-5.02	97.44	111.00

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
10	K	44	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	B	11140	0	11215	1481	0
2	C	8810	0	8847	1266	0
3	D	2095	0	2051	295	0
4	E	1427	0	1451	175	0
5	F	1752	0	1776	183	0
6	G	679	0	701	98	0
7	H	1340	0	1357	185	0
8	I	1068	0	1040	166	0
9	J	971	0	929	123	0
10	K	532	0	542	122	0
11	L	919	0	929	135	0
12	M	364	0	388	57	0
13	N	138	0	80	8	0
14	P	168	0	88	15	0
15	T	365	0	208	48	0
16	B	2	0	0	0	0
16	C	1	0	0	0	0
16	D	1	0	0	0	0
16	J	2	0	0	0	0
16	K	1	0	0	0	0
16	M	1	0	0	0	0
17	B	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
All	All	31777	0	31602	3977	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 63.

All (3977) 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)
15:T:21:DA:C2'	15:T:22:DT:H5'	1.58	1.32
15:T:21:DA:H2''	15:T:22:DT:C5'	1.65	1.25
15:T:20:DT:C2'	15:T:21:DA:H5'	1.73	1.18
11:L:47:ARG:HH11	11:L:47:ARG:HB3	1.11	1.15
15:T:20:DT:H2'	15:T:21:DA:H5'	1.13	1.12
2:C:1072:MET:HE3	2:C:1085:ILE:HB	1.28	1.12
3:D:101:LEU:HD13	3:D:118:LEU:HD23	1.31	1.10
2:C:622:LYS:HE2	9:J:59:VAL:HG22	1.21	1.08
1:B:590:ARG:HH21	1:B:620:LYS:HB3	1.10	1.08
4:E:134:THR:HG22	4:E:135:GLY:H	1.13	1.08
1:B:53:LEU:HD23	1:B:54:ASN:H	1.14	1.07
1:B:356:ASP:HB2	1:B:469:ARG:HH12	1.19	1.07
1:B:981:LEU:HD21	1:B:1039:LYS:HA	1.35	1.06
2:C:839:MET:HG3	2:C:1010:LEU:HD12	1.37	1.06
1:B:682:THR:HG23	1:B:728:LYS:HE3	1.30	1.06
12:M:32:ALA:HB3	12:M:55:ILE:HD12	1.36	1.06
2:C:1197:PRO:HG2	2:C:1200:ALA:HB2	1.38	1.06
7:H:13:LEU:HD21	7:H:17:PHE:HB2	1.32	1.06
1:B:535:THR:HG21	1:B:616:VAL:HA	1.38	1.05
8:I:100:THR:HG23	8:I:138:GLU:HA	1.38	1.03
2:C:603:LEU:HD12	2:C:609:ILE:HG13	1.39	1.02
8:I:59:ILE:HG22	8:I:60:ALA:H	1.19	1.02
1:B:1445:ILE:H	1:B:1445:ILE:HD12	1.20	1.02
2:C:278:GLN:HG2	2:C:279:ASP:H	1.24	1.02
2:C:189:LEU:HA	2:C:192:LEU:HD12	1.40	1.02
1:B:443:LEU:HD21	1:B:455:MET:HB3	1.36	1.01
4:E:170:THR:HB	4:E:172:LEU:HG	1.43	1.00
2:C:516:ASN:HD22	2:C:516:ASN:N	1.58	1.00
2:C:577:ALA:HB1	2:C:589:VAL:HG11	1.41	1.00
1:B:901:LEU:HB2	1:B:926:GLN:HG2	1.42	1.00
1:B:1329:THR:H	1:B:1335:ILE:HD11	1.27	1.00
15:T:21:DA:C2'	15:T:22:DT:C5'	2.30	1.00
2:C:96:TYR:HB2	2:C:129:PHE:HB2	1.44	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:340:LEU:HD13	1:B:1429:ILE:HG23	1.42	0.99
6:G:111:LEU:H	6:G:111:LEU:HD12	1.26	0.99
3:D:57:VAL:HG11	10:K:60:PHE:HB3	1.44	0.99
1:B:1017:LEU:HB2	5:F:206:GLY:H	1.27	0.99
1:B:855:THR:HG21	1:B:857:ARG:HE	1.23	0.99
1:B:1444:MET:HE1	6:G:135:ARG:HB2	1.43	0.98
4:E:12:ARG:HH22	4:E:14:ARG:HG3	1.27	0.97
2:C:516:ASN:H	2:C:516:ASN:HD22	1.12	0.97
4:E:5:THR:HG22	7:H:8:SER:O	1.63	0.97
1:B:446:ARG:HD3	1:B:480:ALA:HB2	1.46	0.97
1:B:981:LEU:CD2	1:B:1039:LYS:HA	1.95	0.96
2:C:168:GLY:H	2:C:450:ALA:HB1	1.26	0.96
1:B:399:HIS:HB3	1:B:400:PRO:HD3	1.48	0.96
4:E:185:CYS:HB2	4:E:211:LEU:HD21	1.45	0.96
2:C:800:GLN:HG2	10:K:52:THR:CG2	1.96	0.96
4:E:40:HIS:HB2	7:H:73:LYS:HZ2	1.30	0.96
1:B:768:GLN:HG2	1:B:816:HIS:HA	1.48	0.96
1:B:1161:THR:HG22	1:B:1163:ILE:H	1.30	0.95
1:B:567:LYS:CD	1:B:568:PRO:HD2	1.96	0.95
4:E:14:ARG:HH22	4:E:16:LYS:HZ1	1.14	0.95
1:B:40:THR:HG22	1:B:41:MET:HG3	1.45	0.95
2:C:121:ASN:HA	2:C:207:GLY:HA2	1.48	0.95
5:F:180:ARG:HH21	5:F:192:ARG:HB2	1.27	0.95
2:C:728:ARG:HH12	2:C:1047:PHE:HB3	1.31	0.95
11:L:49:GLU:HG3	11:L:94:ILE:HG12	1.44	0.95
10:K:1:MET:H1	10:K:57:ILE:N	1.64	0.95
2:C:999:MET:HG3	2:C:1000:PRO:HD2	1.49	0.94
1:B:55:ASP:C	1:B:57:ARG:H	1.69	0.94
1:B:567:LYS:CG	1:B:568:PRO:HD2	1.98	0.94
1:B:563:PRO:HG3	1:B:572:TRP:CZ2	2.01	0.94
3:D:166:GLU:HG3	11:L:10:PHE:HZ	1.31	0.93
15:T:25:DC:H42	15:T:26:DA:N6	1.66	0.93
2:C:23:ALA:HB1	2:C:24:PRO:HD2	1.48	0.93
10:K:12:LYS:O	10:K:14:VAL:HG23	1.69	0.93
1:B:1006:ILE:HD11	5:F:163:GLU:HG3	1.48	0.93
1:B:1193:LEU:HD22	1:B:1260:LEU:HD11	1.51	0.93
12:M:49:LYS:O	12:M:50:ASP:HB2	1.65	0.93
1:B:37:PHE:HB2	1:B:52:GLY:HA3	1.51	0.93
8:I:23:VAL:HG22	8:I:43:ASN:HA	1.51	0.93
1:B:1424:VAL:HG13	1:B:1436:ILE:HD11	1.52	0.92
1:B:658:LEU:HD13	2:C:831:SER:H	1.33	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:524:VAL:HG12	1:B:525:GLN:H	1.34	0.92
1:B:754:SER:H	1:B:757:ASN:HD22	1.18	0.92
1:B:1002:GLY:HA3	1:B:1007:ILE:HG21	1.50	0.91
7:H:7:LEU:HB2	7:H:74:TYR:HE2	1.35	0.91
1:B:1208:THR:HG22	1:B:1210:GLY:H	1.35	0.91
1:B:547:LEU:HB3	11:L:58:PHE:HE1	1.31	0.91
1:B:41:MET:CB	1:B:49:LYS:HA	2.01	0.91
10:K:1:MET:N	10:K:57:ILE:H	1.68	0.91
2:C:515:HIS:H	2:C:518:HIS:HD2	1.13	0.91
15:T:25:DC:N4	15:T:26:DA:H62	1.67	0.91
4:E:40:HIS:HB2	7:H:73:LYS:NZ	1.86	0.91
2:C:483:LEU:HD11	2:C:491:THR:HG23	1.51	0.91
1:B:225:ASN:HD22	1:B:228:PHE:H	1.18	0.90
2:C:806:THR:HG22	2:C:808:ALA:H	1.37	0.90
1:B:1160:SER:HA	1:B:1170:ILE:HD13	1.53	0.90
11:L:47:ARG:NH1	11:L:47:ARG:HB3	1.85	0.90
6:G:90:ARG:HG3	6:G:91:ALA:N	1.85	0.90
2:C:821:GLN:HE22	2:C:851:PHE:HA	1.36	0.90
4:E:56:ARG:HD3	4:E:149:THR:HA	1.54	0.90
1:B:1341:ILE:HG23	1:B:1342:GLU:H	1.35	0.89
2:C:1156:ASP:HB3	2:C:1198:TYR:H	1.37	0.89
2:C:642:ASP:HA	2:C:649:LYS:HA	1.51	0.89
1:B:537:ARG:HD2	8:I:20:TYR:HE1	1.35	0.89
1:B:899:VAL:HG13	1:B:908:LEU:HD21	1.54	0.89
1:B:265:LYS:HG2	1:B:303:TYR:HA	1.55	0.89
1:B:110:CYS:HB3	1:B:167:CYS:SG	2.13	0.89
1:B:913:LEU:HD12	1:B:914:GLU:H	1.38	0.89
2:C:214:ALA:HB3	2:C:498:THR:HA	1.52	0.89
8:I:59:ILE:HG22	8:I:60:ALA:N	1.86	0.89
1:B:347:PHE:H	2:C:1107:ALA:HA	1.38	0.89
2:C:217:ARG:HE	2:C:405:ARG:HB2	1.37	0.89
2:C:810:GLU:HA	2:C:815:ARG:HH12	1.36	0.88
6:G:86:THR:OG1	6:G:89:GLU:HG3	1.74	0.88
2:C:778:MET:HE2	2:C:1094:ARG:HG2	1.55	0.88
5:F:19:VAL:O	5:F:23:VAL:HG23	1.73	0.88
1:B:470:LEU:H	1:B:470:LEU:HD23	1.38	0.88
1:B:534:LEU:O	1:B:574:GLY:HA3	1.74	0.88
2:C:112:LEU:HD21	2:C:117:ALA:HB2	1.56	0.88
2:C:46:GLN:HG3	2:C:47:GLN:H	1.36	0.88
7:H:91:VAL:HB	7:H:139:ILE:O	1.72	0.88
15:T:18:DT:H2''	15:T:19:DT:H5'	1.56	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:356:ASP:HB2	1:B:469:ARG:NH1	1.87	0.88
1:B:779:PHE:CE1	1:B:785:PRO:HD3	2.08	0.88
1:B:590:ARG:HH21	1:B:620:LYS:CB	1.87	0.88
1:B:779:PHE:HE1	1:B:785:PRO:HD3	1.37	0.87
11:L:12:LEU:H	11:L:12:LEU:HD12	1.39	0.87
12:M:27:LEU:HD13	12:M:37:LYS:HE2	1.56	0.87
2:C:1159:ARG:HB3	2:C:1159:ARG:NH1	1.88	0.87
1:B:1017:LEU:HB3	5:F:205:SER:HA	1.53	0.87
1:B:828:ALA:CB	2:C:530:GLY:HA2	2.04	0.87
5:F:156:LEU:HD12	5:F:195:VAL:HB	1.56	0.87
2:C:737:THR:HG21	9:J:66:PRO:HA	1.56	0.87
6:G:82:THR:HG22	6:G:84:TYR:H	1.36	0.87
2:C:847:ASP:HB3	3:D:167:HIS:NE2	1.90	0.87
2:C:1159:ARG:HH11	2:C:1159:ARG:HB3	1.38	0.86
10:K:44:TYR:HA	10:K:47:ARG:HB2	1.57	0.86
3:D:6:PRO:HB3	3:D:25:VAL:HG12	1.55	0.86
2:C:100:PRO:HD2	2:C:180:TYR:HE1	1.40	0.86
8:I:15:VAL:HG22	8:I:26:ILE:HD11	1.58	0.86
9:J:111:THR:HG22	9:J:112:SER:H	1.41	0.86
2:C:654:ARG:H	2:C:657:HIS:HD2	1.21	0.86
1:B:567:LYS:HB3	8:I:96:VAL:H	1.41	0.86
1:B:568:PRO:HG2	8:I:46:LEU:HD22	1.58	0.86
2:C:393:LYS:HE3	2:C:393:LYS:HA	1.58	0.85
1:B:709:THR:HG22	1:B:711:ARG:H	1.39	0.85
2:C:387:LEU:O	2:C:392:ARG:HB2	1.76	0.85
2:C:1065:GLN:HG3	2:C:1067:ARG:H	1.39	0.85
8:I:59:ILE:CG2	8:I:60:ALA:H	1.89	0.85
2:C:856:PHE:HD2	2:C:967:ARG:HD2	1.41	0.85
4:E:56:ARG:HB2	4:E:148:LEU:HD22	1.59	0.85
10:K:57:ILE:HA	10:K:60:PHE:HD2	1.41	0.85
3:D:47:ASP:HA	12:M:69:ALA:HB3	1.57	0.85
1:B:53:LEU:HD23	1:B:54:ASN:N	1.92	0.85
2:C:1180:PHE:HB3	2:C:1191:ILE:CD1	2.06	0.85
15:T:20:DT:C2'	15:T:21:DA:C5'	2.54	0.85
1:B:321:PRO:O	1:B:322:VAL:HB	1.75	0.84
5:F:117:THR:HG22	5:F:119:SER:H	1.41	0.84
2:C:549:THR:HG22	2:C:550:ASP:H	1.41	0.84
1:B:1094:VAL:HG13	1:B:1113:THR:HG21	1.58	0.84
1:B:265:LYS:HA	1:B:265:LYS:HE3	1.60	0.84
1:B:901:LEU:H	1:B:926:GLN:NE2	1.75	0.84
1:B:172:PRO:HD3	1:B:185:TRP:NE1	1.93	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:39:ALA:HA	3:D:164:ALA:HB3	1.60	0.84
3:D:45:ALA:HA	3:D:72:LEU:HD12	1.59	0.84
4:E:63:LEU:HD12	4:E:129:LEU:HG	1.58	0.84
1:B:196:GLU:HG3	1:B:197:PRO:HD2	1.59	0.84
2:C:521:LEU:HD22	2:C:633:VAL:HG12	1.58	0.84
2:C:1002:THR:HG23	2:C:1006:ILE:HG13	1.59	0.83
2:C:261:ARG:NH1	2:C:261:ARG:HB3	1.93	0.83
4:E:134:THR:HG22	4:E:135:GLY:N	1.93	0.83
1:B:353:ILE:HG21	1:B:487:MET:HE3	1.59	0.83
2:C:579:ARG:HB2	2:C:586:TRP:NE1	1.92	0.83
7:H:30:LEU:HD13	7:H:72:VAL:HG11	1.61	0.83
4:E:47:LEU:HD11	7:H:3:PHE:CD2	2.13	0.83
1:B:567:LYS:HD3	8:I:95:TYR:CG	2.14	0.83
2:C:210:LYS:HD3	2:C:481:GLN:O	1.78	0.83
2:C:825:VAL:HG12	2:C:826:ALA:N	1.93	0.83
2:C:770:GLN:OE1	2:C:983:ARG:HA	1.78	0.83
9:J:85:PHE:HD2	9:J:85:PHE:H	1.24	0.83
1:B:341:MET:CE	1:B:843:LYS:HZ1	1.90	0.83
1:B:1341:ILE:HG23	1:B:1342:GLU:N	1.93	0.83
2:C:899:ILE:HD11	2:C:911:ILE:HA	1.59	0.82
11:L:65:HIS:HD2	11:L:67:PHE:H	1.25	0.82
2:C:1072:MET:CE	2:C:1085:ILE:HB	2.08	0.82
1:B:598:LEU:HA	8:I:122:LEU:HD13	1.59	0.82
1:B:244:PRO:HB2	1:B:245:PRO:HD3	1.60	0.82
2:C:773:MET:CE	2:C:985:GLY:HA2	2.08	0.82
1:B:679:ILE:HG12	1:B:732:LEU:HD12	1.62	0.82
3:D:7:GLN:HG2	11:L:104:ASN:HD22	1.44	0.82
2:C:762:ASN:HD21	2:C:1024:ALA:HB3	1.44	0.82
6:G:132:LEU:HD11	7:H:61:ILE:HD11	1.62	0.82
10:K:48:ARG:HD2	10:K:49:MET:N	1.95	0.82
1:B:528:LEU:HD23	1:B:751:SER:HB3	1.62	0.81
2:C:953:LEU:HD21	2:C:965:LYS:HB2	1.62	0.81
1:B:343:LYS:HZ2	2:C:1151:LEU:HB3	1.45	0.81
2:C:520:GLY:H	2:C:748:ILE:HG22	1.45	0.81
11:L:113:THR:O	11:L:114:LEU:HB2	1.79	0.81
6:G:118:LEU:O	6:G:118:LEU:HD12	1.79	0.81
11:L:21:ILE:HG12	11:L:33:ILE:HG12	1.60	0.81
1:B:1116:LEU:HB3	1:B:1308:THR:HG21	1.63	0.81
2:C:102:VAL:HG21	2:C:112:LEU:HD22	1.61	0.81
2:C:359:GLU:O	2:C:362:PRO:HD3	1.79	0.81
4:E:47:LEU:HD11	7:H:3:PHE:HD2	1.42	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:T:18:DT:C2'	15:T:19:DT:H5'	2.09	0.81
1:B:12:ARG:O	2:C:1194:ILE:HG22	1.81	0.81
2:C:952:VAL:HG22	2:C:966:VAL:HG13	1.62	0.81
8:I:55:LEU:HD22	8:I:144:ILE:CG2	2.10	0.81
2:C:579:ARG:HB2	2:C:586:TRP:HE1	1.43	0.81
8:I:135:LEU:HD13	8:I:137:GLN:HE21	1.45	0.81
1:B:849:MET:CE	1:B:1061:GLY:HA2	2.09	0.81
10:K:3:VAL:HG21	10:K:18:TRP:HB2	1.62	0.81
10:K:1:MET:H1	10:K:57:ILE:H	0.86	0.80
2:C:244:LEU:HD21	2:C:366:GLN:NE2	1.96	0.80
3:D:46:ILE:HG23	3:D:157:CYS:HB3	1.63	0.80
3:D:238:ILE:CG2	3:D:242:GLN:HB2	2.11	0.80
1:B:855:THR:CG2	1:B:857:ARG:HE	1.94	0.80
2:C:37:PHE:CE1	2:C:41:LYS:HG3	2.17	0.80
7:H:106:MET:HG2	7:H:107:LYS:N	1.96	0.80
9:J:50:THR:HG23	9:J:52:ILE:HG23	1.63	0.80
2:C:210:LYS:HE2	2:C:462:ALA:HA	1.62	0.80
1:B:1148:ILE:HD11	1:B:1198:ASP:HA	1.64	0.80
1:B:929:LEU:HD21	1:B:983:ILE:HG21	1.62	0.80
1:B:783:THR:HG21	1:B:815:PHE:CZ	2.16	0.80
1:B:993:LEU:HD23	1:B:1022:LEU:HD21	1.62	0.80
12:M:27:LEU:HB3	12:M:37:LYS:HD3	1.64	0.80
1:B:1226:VAL:HG22	1:B:1240:CYS:HB3	1.62	0.80
1:B:440:ASP:H	1:B:460:VAL:HG12	1.47	0.79
1:B:913:LEU:HD12	1:B:914:GLU:N	1.96	0.79
1:B:1343:ALA:HB2	5:F:150:VAL:HG22	1.63	0.79
8:I:81:PRO:HB2	8:I:82:PRO:HD2	1.64	0.79
15:T:24:DG:H3'	15:T:25:DC:H5''	1.65	0.79
1:B:1242:VAL:HG12	1:B:1243:VAL:H	1.45	0.79
1:B:743:VAL:O	1:B:747:VAL:HG23	1.82	0.79
2:C:1069:PHE:HD1	2:C:1069:PHE:H	1.27	0.79
2:C:1085:ILE:N	2:C:1085:ILE:HD12	1.97	0.79
2:C:169:ARG:HB2	2:C:454:THR:HG23	1.65	0.79
3:D:67:LEU:HD11	3:D:155:LEU:HD13	1.64	0.79
5:F:153:HIS:HB3	5:F:196:VAL:CG1	2.11	0.79
1:B:849:MET:HE1	1:B:1061:GLY:HA2	1.65	0.79
2:C:1147:LEU:O	2:C:1151:LEU:HD13	1.80	0.79
3:D:70:ILE:HG12	3:D:142:VAL:HG11	1.64	0.79
1:B:1373:ASP:HA	1:B:1376:THR:HG22	1.65	0.79
5:F:80:VAL:HG22	5:F:109:ILE:HD12	1.64	0.79
7:H:45:ILE:HA	7:H:78:VAL:HG12	1.64	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:135:PHE:HB3	5:F:140:LEU:HD11	1.64	0.79
1:B:973:ILE:HD11	1:B:1038:THR:HG23	1.64	0.79
2:C:756:ILE:O	2:C:759:PRO:HD3	1.83	0.79
5:F:180:ARG:NH2	5:F:192:ARG:HB2	1.96	0.79
2:C:515:HIS:HD2	2:C:517:THR:H	1.28	0.79
2:C:593:PRO:HG2	2:C:617:ARG:NH2	1.97	0.78
3:D:44:LEU:HB2	3:D:77:ILE:HD11	1.63	0.78
5:F:198:ILE:HD11	5:F:212:ARG:HG3	1.63	0.78
9:J:93:LYS:HD2	9:J:93:LYS:H	1.46	0.78
2:C:847:ASP:HB3	3:D:167:HIS:CD2	2.17	0.78
5:F:78:LEU:HD21	5:F:80:VAL:HG23	1.66	0.78
1:B:767:GLN:NE2	1:B:774:ARG:HB3	1.99	0.78
1:B:180:LYS:NZ	1:B:294:SER:HB3	1.99	0.78
2:C:1084:GLN:NE2	2:C:1084:GLN:H	1.81	0.78
2:C:167:ILE:HG22	2:C:453:ILE:HD11	1.64	0.78
8:I:17:PRO:HB3	8:I:24:CYS:SG	2.24	0.78
15:T:21:DA:H2''	15:T:22:DT:H5'	0.82	0.78
4:E:159:THR:O	4:E:163:VAL:HG23	1.84	0.78
2:C:800:GLN:HG2	10:K:52:THR:HG22	1.64	0.78
11:L:47:ARG:HH11	11:L:47:ARG:CB	1.95	0.78
2:C:516:ASN:ND2	2:C:516:ASN:H	1.72	0.78
3:D:32:SER:O	3:D:36:VAL:HG23	1.84	0.78
7:H:14:HIS:CD2	7:H:16:SER:HB2	2.19	0.78
1:B:1325:THR:O	1:B:1325:THR:HG22	1.83	0.78
1:B:845:LEU:HD22	1:B:1374:VAL:HG21	1.65	0.78
1:B:857:ARG:HD3	1:B:861:GLY:O	1.83	0.78
2:C:25:ILE:HD11	2:C:653:VAL:O	1.82	0.78
2:C:167:ILE:HG22	2:C:453:ILE:CD1	2.14	0.78
1:B:1148:ILE:HG12	9:J:49:ILE:HD12	1.65	0.78
2:C:29:ASP:HB3	2:C:658:ILE:HD13	1.65	0.78
5:F:202:SER:OG	5:F:204:THR:HG22	1.83	0.78
8:I:42:ILE:HG23	8:I:95:TYR:HE1	1.47	0.78
2:C:329:THR:HA	2:C:332:ASP:HB3	1.67	0.77
3:D:43:THR:HG22	3:D:44:LEU:H	1.47	0.77
1:B:1193:LEU:HD22	1:B:1260:LEU:CD1	2.14	0.77
1:B:608:ILE:HB	1:B:613:ILE:HD11	1.65	0.77
3:D:147:LEU:HB2	3:D:151:GLN:HB2	1.65	0.77
3:D:196:ASP:HB3	3:D:199:LYS:HB2	1.65	0.77
2:C:798:TYR:HE2	3:D:62:PHE:CE2	2.03	0.77
2:C:1099:VAL:HG13	2:C:1100:ASP:N	1.98	0.77
5:F:94:LYS:NZ	5:F:98:ILE:HD11	1.99	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:667:GLY:HA3	3:D:192:TRP:CH2	2.19	0.77
1:B:836:TYR:CE2	1:B:840:ARG:HD2	2.18	0.77
2:C:1181:GLU:HG3	2:C:1188:LYS:HE3	1.67	0.77
2:C:830:TYR:CE2	2:C:1000:PRO:HD3	2.18	0.77
4:E:134:THR:CG2	4:E:135:GLY:H	1.96	0.77
4:E:202:ILE:HG21	4:E:207:LEU:HB2	1.66	0.77
10:K:4:PRO:HD3	10:K:53:HIS:CD2	2.20	0.77
3:D:175:ALA:HB2	10:K:10:CYS:HB2	1.66	0.77
1:B:885:THR:O	1:B:940:ARG:HD2	1.83	0.77
2:C:261:ARG:HB3	2:C:261:ARG:HH11	1.47	0.77
2:C:794:ASN:O	2:C:795:ILE:HD12	1.85	0.77
7:H:15:PRO:HA	7:H:18:PHE:CD1	2.20	0.77
3:D:47:ASP:HA	12:M:69:ALA:CB	2.14	0.77
3:D:163:ILE:N	3:D:163:ILE:HD13	1.98	0.77
4:E:71:LYS:HG2	4:E:74:GLN:HE21	1.50	0.77
7:H:143:ILE:HG22	7:H:144:ARG:N	2.00	0.77
7:H:14:HIS:ND1	7:H:15:PRO:HD2	2.00	0.77
1:B:524:VAL:HG12	1:B:525:GLN:N	2.00	0.77
2:C:828:ALA:HB2	2:C:1085:ILE:HG23	1.67	0.77
2:C:589:VAL:HG12	2:C:590:HIS:H	1.50	0.77
1:B:763:ALA:O	1:B:803:SER:HB3	1.84	0.76
2:C:563:MET:CE	2:C:580:VAL:HB	2.15	0.76
2:C:825:VAL:CG1	2:C:826:ALA:H	1.96	0.76
5:F:56:LYS:HE3	5:F:84:ASP:HB2	1.67	0.76
1:B:1116:LEU:HB3	1:B:1308:THR:CG2	2.15	0.76
7:H:115:MET:HB2	7:H:116:PRO:HD2	1.66	0.76
14:P:3:C:H2'	14:P:4:G:C8	2.20	0.76
1:B:41:MET:N	1:B:41:MET:HE3	2.00	0.76
2:C:975:GLN:O	2:C:990:ILE:HD12	1.85	0.76
3:D:67:LEU:HD11	3:D:155:LEU:CD1	2.15	0.76
9:J:58:VAL:HG13	9:J:62:ILE:HD12	1.68	0.76
1:B:1030:ARG:HG3	1:B:1034:GLU:OE2	1.84	0.76
6:G:77:ASP:O	6:G:78:GLN:HB2	1.83	0.76
1:B:1189:SER:O	1:B:1241:ARG:HD3	1.86	0.76
2:C:33:VAL:HG21	2:C:638:PHE:HZ	1.51	0.76
6:G:89:GLU:O	6:G:93:ILE:HG13	1.85	0.76
1:B:816:HIS:CD2	2:C:764:SER:HB2	2.21	0.76
7:H:139:ILE:HG22	7:H:140:LYS:H	1.50	0.76
2:C:100:PRO:HD2	2:C:180:TYR:CE1	2.20	0.76
2:C:825:VAL:CG1	2:C:826:ALA:N	2.48	0.76
2:C:874:PHE:HA	2:C:913:GLY:O	1.85	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:66:ARG:NH1	10:K:2:ILE:HG21	2.01	0.76
1:B:1015:VAL:HG12	1:B:1019:CYS:SG	2.25	0.76
3:D:254:LYS:O	3:D:258:ILE:HD13	1.85	0.76
8:I:38:LEU:HD12	8:I:124:ARG:O	1.86	0.76
11:L:21:ILE:CG2	11:L:31:VAL:HG11	2.16	0.76
1:B:55:ASP:C	1:B:57:ARG:N	2.37	0.75
2:C:235:SER:HB3	2:C:258:LEU:HG	1.68	0.75
2:C:69:LEU:HD11	2:C:425:THR:HG23	1.67	0.75
3:D:133:ILE:HD11	3:D:237:SER:HA	1.67	0.75
7:H:4:ILE:HG12	7:H:77:VAL:HG23	1.66	0.75
3:D:6:PRO:HB2	11:L:101:LEU:HD12	1.68	0.75
3:D:76:ASP:OD2	3:D:128:ASN:N	2.19	0.75
13:N:2:DA:H2'	13:N:3:DG:C8	2.20	0.75
2:C:217:ARG:HD2	2:C:217:ARG:C	2.06	0.75
2:C:603:LEU:HD13	2:C:608:ASP:HB2	1.68	0.75
1:B:230:ARG:H	1:B:233:TRP:HE3	1.28	0.75
1:B:590:ARG:NH2	1:B:620:LYS:HB3	1.95	0.75
2:C:39:ARG:NH2	2:C:665:GLU:HG2	2.01	0.75
2:C:879:ARG:NH1	2:C:883:LEU:HD13	2.00	0.75
1:B:1143:LEU:O	1:B:1146:VAL:HG23	1.87	0.75
1:B:382:PRO:HD3	1:B:428:TYR:CE2	2.21	0.75
1:B:447:GLN:HE22	15:T:20:DT:H4'	1.52	0.75
1:B:668:ASP:HB3	1:B:741:ASN:HD21	1.52	0.75
7:H:9:LEU:HD23	7:H:30:LEU:HD12	1.69	0.75
1:B:1424:VAL:HG13	1:B:1436:ILE:CD1	2.16	0.75
10:K:14:VAL:HG12	10:K:14:VAL:O	1.85	0.75
1:B:1438:THR:HB	2:C:1144:ALA:HB3	1.66	0.75
2:C:616:ILE:HD12	2:C:616:ILE:N	2.00	0.75
3:D:208:GLU:O	3:D:210:GLU:N	2.20	0.75
1:B:1394:THR:HG22	1:B:1395:GLY:H	1.52	0.74
2:C:770:GLN:CD	2:C:983:ARG:HA	2.08	0.74
1:B:1004:ASN:ND2	5:F:167:ARG:HD2	2.01	0.74
1:B:1402:PHE:CE1	1:B:1403:GLU:HG3	2.21	0.74
1:B:518:LYS:HE2	1:B:624:SER:O	1.87	0.74
2:C:1196:ILE:HD12	2:C:1200:ALA:HB3	1.68	0.74
2:C:29:ASP:HB3	2:C:658:ILE:CD1	2.16	0.74
1:B:946:VAL:HG13	5:F:201:LYS:HB3	1.67	0.74
7:H:44:TYR:HE1	7:H:157:ILE:H	1.34	0.74
9:J:14:LEU:HA	9:J:28:GLU:O	1.86	0.74
1:B:1208:THR:HB	1:B:1211:GLN:HG3	1.70	0.74
7:H:88:ASP:HB3	7:H:144:ARG:HA	1.68	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:537:ARG:HD2	8:I:20:TYR:CE1	2.21	0.74
9:J:51:ASN:O	9:J:54:GLU:HG3	1.87	0.74
1:B:567:LYS:HD2	1:B:568:PRO:HD2	1.66	0.74
3:D:166:GLU:HG3	11:L:10:PHE:CZ	2.19	0.74
9:J:25:LEU:HB3	9:J:38:ALA:HB2	1.69	0.74
1:B:1116:LEU:N	1:B:1308:THR:HG22	2.02	0.74
3:D:45:ALA:O	3:D:159:ALA:HA	1.86	0.74
1:B:353:ILE:HD13	1:B:487:MET:HE2	1.69	0.74
2:C:69:LEU:HB3	2:C:429:PHE:HE1	1.51	0.74
4:E:144:THR:O	4:E:148:LEU:HB2	1.87	0.74
2:C:1007:VAL:HG22	2:C:1008:PRO:HD2	1.69	0.74
5:F:23:VAL:HG13	5:F:78:LEU:HD13	1.68	0.74
2:C:402:GLY:HA3	2:C:695:ALA:HB3	1.70	0.74
5:F:145:THR:HG21	5:F:187:TYR:CE2	2.23	0.74
10:K:48:ARG:HE	10:K:49:MET:HE2	1.53	0.74
11:L:46:ILE:O	11:L:50:LEU:HB2	1.87	0.74
1:B:388:LEU:HD23	1:B:432:VAL:HB	1.68	0.74
1:B:4:GLN:O	1:B:5:GLN:HB2	1.86	0.74
3:D:38:ILE:HA	3:D:173:ALA:HB2	1.68	0.74
7:H:1:MET:SD	7:H:79:PHE:HD1	2.10	0.74
1:B:547:LEU:HB3	11:L:58:PHE:CE1	2.20	0.73
1:B:741:ASN:HD22	1:B:741:ASN:C	1.89	0.73
5:F:16:PHE:CZ	5:F:20:LYS:HE2	2.23	0.73
1:B:1394:THR:HG21	1:B:1398:MET:SD	2.27	0.73
2:C:731:VAL:HG12	2:C:732:SER:H	1.53	0.73
1:B:1329:THR:HG22	1:B:1331:SER:H	1.53	0.73
1:B:23:SER:HA	1:B:233:TRP:NE1	2.03	0.73
2:C:102:VAL:CG2	2:C:112:LEU:HD22	2.18	0.73
2:C:185:THR:O	2:C:188:ASP:HB2	1.88	0.73
4:E:12:ARG:NH2	4:E:14:ARG:HG3	2.00	0.73
6:G:90:ARG:HD3	6:G:155:LEU:HD12	1.70	0.73
1:B:659:HIS:HA	2:C:1074:ASN:HD22	1.53	0.73
1:B:541:ILE:HD13	1:B:549:MET:CE	2.18	0.73
1:B:682:THR:CG2	1:B:728:LYS:HE3	2.16	0.73
2:C:274:PRO:HG2	2:C:359:GLU:HB3	1.70	0.73
9:J:82:GLU:O	9:J:104:LEU:HG	1.88	0.73
6:G:73:ALA:HA	6:G:143:PHE:HE1	1.54	0.73
7:H:139:ILE:HG22	7:H:140:LYS:N	2.01	0.73
11:L:65:HIS:CD2	11:L:67:PHE:H	2.05	0.73
1:B:41:MET:HB2	1:B:49:LYS:HA	1.69	0.73
1:B:903:ASN:HD22	1:B:904:THR:N	1.87	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:810:GLU:HA	2:C:815:ARG:NH1	2.02	0.73
11:L:49:GLU:HG3	11:L:94:ILE:CG1	2.19	0.73
1:B:1114:PRO:HB2	1:B:1311:VAL:HG23	1.71	0.73
5:F:94:LYS:HZ3	5:F:98:ILE:HD11	1.54	0.73
5:F:78:LEU:HA	5:F:107:THR:HB	1.71	0.73
1:B:1028:THR:O	1:B:1032:LEU:HD12	1.88	0.72
1:B:722:LEU:HD12	1:B:722:LEU:H	1.53	0.72
2:C:758:PHE:HB3	2:C:761:HIS:HD2	1.53	0.72
8:I:89:LEU:C	8:I:91:ASP:H	1.92	0.72
1:B:1208:THR:O	1:B:1212:VAL:HG23	1.90	0.72
1:B:855:THR:HG21	1:B:857:ARG:NE	2.03	0.72
8:I:84:ALA:HA	8:I:87:ARG:HB2	1.70	0.72
10:K:64:ASN:HB3	10:K:65:PRO:CD	2.19	0.72
2:C:902:GLY:O	12:M:65:VAL:HG11	1.88	0.72
1:B:339:ASN:HB3	2:C:1117:GLN:HE22	1.54	0.72
2:C:378:LEU:O	2:C:378:LEU:HD12	1.89	0.72
15:T:20:DT:H2'	15:T:21:DA:C5'	2.06	0.72
1:B:90:VAL:CG1	1:B:297:GLN:HA	2.20	0.72
1:B:965:GLN:O	1:B:968:GLN:HB2	1.90	0.72
2:C:295:GLY:H	2:C:298:LEU:HD23	1.54	0.72
6:G:119:ARG:HG3	6:G:119:ARG:HH11	1.53	0.72
6:G:76:LYS:C	6:G:79:ARG:HD2	2.10	0.72
10:K:1:MET:H3	10:K:56:LEU:N	1.86	0.72
1:B:1369:ALA:O	1:B:1372:VAL:HG12	1.88	0.72
1:B:269:ILE:HD13	1:B:300:VAL:HG22	1.71	0.72
1:B:56:PRO:HD2	1:B:58:LEU:HG	1.71	0.72
1:B:709:THR:HB	1:B:712:GLU:HG3	1.70	0.72
2:C:642:ASP:HB3	2:C:649:LYS:CG	2.20	0.72
3:D:66:ARG:NH2	10:K:3:VAL:O	2.23	0.72
8:I:130:ARG:HB3	8:I:134:ASN:H	1.53	0.72
1:B:215:SER:HB3	1:B:218:ASP:HB2	1.69	0.72
1:B:965:GLN:HA	1:B:968:GLN:HG3	1.72	0.72
11:L:53:ASP:OD1	11:L:55:LYS:HB2	1.90	0.72
13:N:3:DG:H2''	13:N:4:DC:OP2	1.88	0.72
1:B:71:GLN:HE22	2:C:1176:ASN:ND2	1.88	0.72
2:C:882:THR:HG22	2:C:884:ARG:H	1.53	0.72
7:H:143:ILE:HG22	7:H:144:ARG:H	1.54	0.72
11:L:21:ILE:HG23	11:L:31:VAL:HG11	1.70	0.72
6:G:109:VAL:HG12	6:G:110:ASP:N	2.05	0.72
12:M:53:HIS:HB3	12:M:55:ILE:HD13	1.71	0.72
2:C:773:MET:HE2	2:C:985:GLY:HA2	1.71	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:798:TYR:CE2	3:D:62:PHE:HE2	2.08	0.72
2:C:865:LYS:NZ	2:C:869:SER:HA	2.03	0.72
8:I:93:TYR:HB3	8:I:144:ILE:O	1.89	0.72
12:M:40:LEU:HD13	12:M:44:ASP:HB3	1.71	0.72
1:B:41:MET:HB3	1:B:49:LYS:HA	1.71	0.71
1:B:427:GLN:HG3	1:B:430:TRP:CE2	2.25	0.71
7:H:79:PHE:HE2	7:H:105:PRO:HG2	1.54	0.71
10:K:44:TYR:HD2	10:K:44:TYR:H	1.36	0.71
1:B:993:LEU:CD2	1:B:1022:LEU:HD21	2.20	0.71
10:K:23:ASN:C	10:K:25:LEU:H	1.93	0.71
1:B:639:PRO:HG2	1:B:640:GLN:H	1.53	0.71
2:C:910:VAL:HG12	2:C:912:ILE:H	1.55	0.71
4:E:128:VAL:O	4:E:132:GLN:HG3	1.90	0.71
1:B:1342:GLU:OE2	5:F:212:ARG:NH1	2.24	0.71
1:B:567:LYS:CB	8:I:95:TYR:HA	2.20	0.71
1:B:586:ILE:HG22	1:B:587:HIS:N	2.05	0.71
2:C:351:TYR:O	2:C:355:ILE:HG13	1.90	0.71
2:C:642:ASP:HB3	2:C:649:LYS:HG3	1.72	0.71
7:H:7:LEU:HD12	7:H:74:TYR:OH	1.90	0.71
1:B:1261:LYS:HE3	9:J:44:TYR:CD2	2.26	0.71
2:C:819:ALA:HB1	2:C:1093:GLN:HE21	1.56	0.71
3:D:238:ILE:HG23	3:D:242:GLN:HB2	1.71	0.71
4:E:14:ARG:HH22	4:E:16:LYS:NZ	1.86	0.71
5:F:23:VAL:HB	5:F:30:ILE:HD11	1.71	0.71
1:B:1017:LEU:CB	5:F:205:SER:HA	2.19	0.71
2:C:1201:LYS:HE3	2:C:1205:GLN:OE1	1.90	0.71
2:C:175:ARG:HG2	2:C:175:ARG:HH11	1.56	0.71
2:C:758:PHE:HB3	2:C:761:HIS:CD2	2.25	0.71
8:I:127:GLY:O	8:I:128:ASN:HB2	1.91	0.71
1:B:1312:ASN:O	1:B:1316:VAL:HG23	1.89	0.71
1:B:866:PHE:C	1:B:867:ILE:HD12	2.11	0.71
2:C:1182:CYS:O	2:C:1182:CYS:SG	2.48	0.71
2:C:642:ASP:HB3	2:C:649:LYS:CD	2.20	0.71
2:C:879:ARG:HH12	2:C:883:LEU:HD13	1.56	0.71
1:B:657:LEU:HD12	1:B:657:LEU:O	1.91	0.71
1:B:67:CYS:O	1:B:70:CYS:HB3	1.91	0.71
1:B:827:THR:HG22	1:B:828:ALA:N	2.06	0.71
2:C:69:LEU:HB3	2:C:429:PHE:CE1	2.25	0.71
5:F:16:PHE:CE2	5:F:20:LYS:HE2	2.24	0.71
7:H:15:PRO:HA	7:H:18:PHE:CE1	2.26	0.71
1:B:567:LYS:HB3	8:I:96:VAL:N	2.05	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1187:ASN:O	2:C:1188:LYS:HB2	1.90	0.70
7:H:80:LYS:N	7:H:80:LYS:HD3	2.06	0.70
1:B:1261:LYS:HA	1:B:1264:GLU:HB3	1.73	0.70
1:B:483:ASP:HB2	2:C:987:LYS:HG3	1.73	0.70
1:B:49:LYS:HZ1	1:B:61:ILE:H	1.39	0.70
1:B:710:LEU:HD13	9:J:94:ASP:O	1.90	0.70
2:C:168:GLY:N	2:C:450:ALA:HB1	2.04	0.70
7:H:7:LEU:HB2	7:H:74:TYR:CE2	2.24	0.70
1:B:53:LEU:HD22	1:B:54:ASN:ND2	2.06	0.70
1:B:92:HIS:O	1:B:94:GLY:N	2.24	0.70
2:C:276:ILE:HG22	2:C:278:GLN:O	1.90	0.70
3:D:194:GLU:O	3:D:195:GLN:HG3	1.91	0.70
1:B:496:GLU:HG2	6:G:99:LEU:HD22	1.73	0.70
2:C:955:THR:CG2	2:C:956:THR:N	2.54	0.70
3:D:179:GLU:HG2	3:D:180:TYR:N	2.07	0.70
4:E:71:LYS:HG2	4:E:74:GLN:NE2	2.06	0.70
8:I:102:TYR:OH	8:I:122:LEU:HD22	1.91	0.70
8:I:81:PRO:CB	8:I:82:PRO:HD2	2.21	0.70
2:C:190:TYR:CE2	10:K:62:ARG:HB3	2.26	0.70
1:B:49:LYS:HZ1	1:B:61:ILE:N	1.89	0.70
1:B:728:LYS:O	1:B:732:LEU:HG	1.91	0.70
3:D:244:VAL:O	3:D:248:ILE:HG13	1.90	0.70
2:C:190:TYR:CD2	10:K:62:ARG:HB3	2.26	0.70
15:T:21:DA:H2'	15:T:22:DT:C5'	2.21	0.70
1:B:87:ALA:HB3	1:B:276:LEU:HD23	1.73	0.70
2:C:90:ILE:HD12	2:C:432:MET:SD	2.32	0.70
2:C:102:VAL:HG13	2:C:958:GLN:HE21	1.56	0.70
3:D:74:SER:HB3	3:D:77:ILE:HG12	1.74	0.70
6:G:111:LEU:H	6:G:111:LEU:CD1	2.03	0.70
2:C:313:MET:HE3	2:C:386:LEU:HD22	1.74	0.70
2:C:542:MET:CE	2:C:743:ILE:HG13	2.22	0.70
9:J:111:THR:HG22	9:J:112:SER:N	2.06	0.70
1:B:340:LEU:HD13	1:B:1429:ILE:CG2	2.20	0.70
2:C:847:ASP:C	2:C:849:GLY:H	1.94	0.70
1:B:53:LEU:CD2	1:B:54:ASN:H	2.00	0.70
1:B:567:LYS:HG3	1:B:568:PRO:HD2	1.73	0.70
1:B:886:ILE:HG23	1:B:887:GLY:N	2.06	0.70
1:B:886:ILE:HD12	1:B:943:LEU:HB3	1.72	0.70
1:B:351:THR:HB	2:C:1103:ILE:HD12	1.74	0.70
8:I:100:THR:OG1	8:I:138:GLU:HG3	1.90	0.70
1:B:105:CYS:O	1:B:114:LEU:HG	1.92	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1445:ILE:CD1	1:B:1445:ILE:H	2.00	0.70
1:B:416:ARG:C	1:B:417:TYR:HD2	1.95	0.70
1:B:1208:THR:HG22	1:B:1210:GLY:N	2.04	0.69
1:B:382:PRO:HB3	1:B:428:TYR:CE2	2.26	0.69
1:B:567:LYS:HD3	8:I:95:TYR:CD2	2.27	0.69
1:B:600:PRO:HG2	1:B:601:LYS:H	1.56	0.69
1:B:1063:MET:CG	1:B:1436:ILE:HG23	2.22	0.69
1:B:915:SER:O	1:B:919:ILE:HG13	1.91	0.69
1:B:881:GLN:HE22	1:B:960:ILE:H	1.39	0.69
2:C:1122:ARG:HB3	15:T:22:DT:OP1	1.91	0.69
2:C:654:ARG:H	2:C:657:HIS:CD2	2.08	0.69
3:D:184:ASN:HD21	3:D:187:LYS:HA	1.56	0.69
3:D:209:TYR:H	3:D:209:TYR:HD1	1.40	0.69
3:D:56:THR:HG22	3:D:58:LEU:HD23	1.73	0.69
11:L:45:LEU:HG	11:L:94:ILE:HD13	1.73	0.69
1:B:91:PHE:H	1:B:297:GLN:HE22	1.40	0.69
1:B:382:PRO:HB3	1:B:428:TYR:HE2	1.57	0.69
2:C:1085:ILE:HD12	2:C:1085:ILE:H	1.57	0.69
1:B:1436:ILE:HD13	2:C:1139:ILE:HG23	1.73	0.69
1:B:853:ASP:O	1:B:854:ASN:HB2	1.91	0.69
2:C:52:ASN:OD1	2:C:177:LYS:HB2	1.92	0.69
7:H:39:THR:HG22	7:H:41:LYS:H	1.57	0.69
11:L:29:ASN:O	11:L:76:GLN:HG3	1.92	0.69
5:F:135:PHE:HD2	5:F:140:LEU:HD21	1.56	0.69
1:B:49:LYS:NZ	1:B:61:ILE:HG13	2.07	0.69
2:C:1007:VAL:CG2	2:C:1008:PRO:HD2	2.22	0.69
2:C:378:LEU:O	2:C:382:ILE:HG13	1.92	0.69
2:C:916:THR:O	2:C:935:ARG:HG2	1.92	0.69
7:H:145:VAL:HG12	7:H:146:LYS:N	2.08	0.69
1:B:1445:ILE:HG12	7:H:18:PHE:CE2	2.27	0.69
1:B:535:THR:CG2	1:B:616:VAL:HA	2.20	0.69
2:C:728:ARG:NH1	2:C:1047:PHE:HB3	2.07	0.69
2:C:210:LYS:HD2	2:C:480:SER:OG	1.91	0.69
2:C:910:VAL:HG12	2:C:911:ILE:N	2.07	0.69
7:H:59:GLY:HA3	7:H:70:PHE:CD2	2.28	0.69
11:L:50:LEU:HD11	11:L:75:ILE:HD13	1.75	0.69
12:M:32:ALA:HB3	12:M:55:ILE:CD1	2.18	0.69
2:C:800:GLN:HG2	10:K:52:THR:HG21	1.73	0.69
1:B:738:LYS:HB2	1:B:740:LEU:HG	1.74	0.69
1:B:845:LEU:HB3	1:B:848:ILE:HD12	1.75	0.69
2:C:1084:GLN:HE21	2:C:1084:GLN:H	1.40	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:14:ARG:HH21	5:F:141:VAL:HG12	1.57	0.69
5:F:22:MET:CE	5:F:26:ARG:HE	2.06	0.69
6:G:109:VAL:HG12	6:G:110:ASP:H	1.57	0.69
7:H:61:ILE:HG23	7:H:66:GLY:O	1.93	0.69
8:I:40:LEU:HD22	8:I:123:MET:HE3	1.74	0.69
11:L:58:PHE:HE2	11:L:74:ARG:HE	1.39	0.69
1:B:567:LYS:HB3	8:I:95:TYR:HA	1.74	0.69
2:C:100:PRO:HG3	2:C:172:ILE:HD12	1.74	0.69
2:C:906:SER:O	2:C:941:LEU:HD23	1.93	0.69
3:D:163:ILE:HD13	3:D:163:ILE:H	1.55	0.69
13:N:2:DA:H2''	13:N:3:DG:O5'	1.93	0.69
1:B:1063:MET:SD	1:B:1436:ILE:HG23	2.33	0.69
1:B:182:VAL:HG22	1:B:201:VAL:HA	1.74	0.69
15:T:25:DC:H42	15:T:26:DA:H62	1.24	0.69
1:B:469:ARG:HH11	1:B:469:ARG:HB3	1.57	0.68
1:B:844:ALA:O	1:B:845:LEU:HD23	1.92	0.68
3:D:241:ASP:O	3:D:245:VAL:HG23	1.93	0.68
3:D:69:LEU:HD12	3:D:69:LEU:N	2.08	0.68
1:B:768:GLN:CG	1:B:816:HIS:HA	2.22	0.68
1:B:86:LEU:HG	1:B:237:THR:O	1.93	0.68
2:C:361:LEU:HD21	2:C:377:PHE:CD2	2.28	0.68
8:I:24:CYS:HB2	8:I:44:VAL:HG21	1.75	0.68
8:I:42:ILE:HG23	8:I:95:TYR:CE1	2.28	0.68
1:B:683:ILE:HG21	1:B:801:GLU:HG3	1.74	0.68
2:C:174:LEU:HD22	2:C:202:TYR:CE1	2.29	0.68
2:C:295:GLY:N	2:C:298:LEU:HD23	2.09	0.68
2:C:461:LEU:N	2:C:461:LEU:HD12	2.08	0.68
2:C:57:TYR:HD1	2:C:57:TYR:N	1.92	0.68
1:B:244:PRO:O	1:B:246:VAL:N	2.27	0.68
2:C:539:LEU:H	2:C:539:LEU:HD12	1.59	0.68
15:T:21:DA:C2'	15:T:22:DT:O5'	2.41	0.68
1:B:637:LYS:HB3	1:B:641:VAL:HG11	1.75	0.68
2:C:189:LEU:HD12	2:C:196:PRO:HA	1.74	0.68
6:G:111:LEU:HD12	6:G:111:LEU:N	2.06	0.68
6:G:82:THR:HG22	6:G:84:TYR:N	2.08	0.68
1:B:19:PHE:O	1:B:1416:ALA:HA	1.94	0.68
2:C:1095:LEU:H	2:C:1095:LEU:HD12	1.59	0.68
1:B:351:THR:HB	2:C:1103:ILE:CD1	2.24	0.68
2:C:53:GLN:HG2	2:C:547:VAL:CG2	2.24	0.68
2:C:569:TYR:CE1	2:C:589:VAL:HG21	2.29	0.68
2:C:570:VAL:HB	2:C:573:GLN:HB3	1.74	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:579:ARG:HG2	2:C:579:ARG:HH11	1.58	0.68
2:C:798:TYR:CE2	3:D:62:PHE:CE2	2.81	0.68
5:F:213:ILE:HG12	5:F:214:CYS:N	2.09	0.68
1:B:215:SER:HB3	1:B:218:ASP:OD2	1.94	0.68
1:B:34:LYS:HG2	1:B:36:ARG:NH2	2.09	0.68
1:B:92:HIS:HB3	1:B:95:PHE:HB2	1.76	0.68
2:C:243:ALA:CB	2:C:251:ILE:HG12	2.24	0.68
2:C:25:ILE:HD12	2:C:651:LEU:HD13	1.76	0.68
2:C:651:LEU:HD11	2:C:707:PRO:CB	2.24	0.68
5:F:114:ASN:O	5:F:115:ASN:HB3	1.94	0.68
12:M:38:LEU:O	12:M:39:SER:HB3	1.93	0.68
2:C:361:LEU:HD21	2:C:377:PHE:HD2	1.58	0.68
3:D:18:VAL:HG23	3:D:240:VAL:HB	1.76	0.68
1:B:1127:ASP:CG	1:B:1130:GLN:HB2	2.14	0.68
2:C:1180:PHE:HB3	2:C:1191:ILE:HD12	1.75	0.68
2:C:405:ARG:NE	2:C:632:ARG:HG3	2.09	0.68
2:C:955:THR:HG22	2:C:956:THR:N	2.08	0.68
1:B:1341:ILE:CG2	1:B:1342:GLU:H	2.06	0.67
2:C:380:TYR:O	2:C:384:ARG:HG2	1.95	0.67
2:C:398:ARG:HH11	2:C:398:ARG:HG3	1.59	0.67
2:C:589:VAL:HG12	2:C:590:HIS:N	2.09	0.67
2:C:619:ILE:HD12	9:J:65:ASP:HB2	1.76	0.67
3:D:144:ILE:HG22	3:D:145:CYS:N	2.09	0.67
3:D:142:VAL:H	10:K:16:ASP:HB3	1.58	0.67
1:B:973:ILE:CD1	1:B:1038:THR:HG23	2.24	0.67
1:B:1198:ASP:HB3	1:B:1201:ALA:HB3	1.74	0.67
1:B:1263:ILE:O	1:B:1267:MET:HG3	1.94	0.67
1:B:1373:ASP:O	1:B:1376:THR:HG22	1.94	0.67
1:B:93:VAL:HG22	1:B:301:ALA:HA	1.76	0.67
7:H:9:LEU:HD12	7:H:10:ASN:N	2.10	0.67
1:B:446:ARG:HB2	1:B:487:MET:SD	2.34	0.67
2:C:622:LYS:HE2	9:J:59:VAL:CG2	2.13	0.67
8:I:89:LEU:HB3	8:I:91:ASP:OD1	1.94	0.67
10:K:44:TYR:N	10:K:44:TYR:HD2	1.93	0.67
1:B:1152:ILE:HG23	1:B:1193:LEU:HD13	1.76	0.67
1:B:34:LYS:H	1:B:34:LYS:HD3	1.59	0.67
1:B:444:PHE:HB3	1:B:458:HIS:CD2	2.29	0.67
2:C:255:GLN:O	2:C:271:ALA:HB1	1.93	0.67
1:B:973:ILE:HG21	1:B:1036:ARG:O	1.95	0.67
1:B:821:ARG:HD2	1:B:825:ILE:HD11	1.77	0.67
2:C:291:ILE:HD11	2:C:375:ALA:HB1	1.76	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:12:ARG:HH22	4:E:14:ARG:CG	2.02	0.67
5:F:13:TRP:O	5:F:16:PHE:HB3	1.95	0.67
2:C:777:ALA:HA	2:C:1095:LEU:HA	1.75	0.67
3:D:34:ARG:HA	3:D:37:MET:HE2	1.76	0.67
5:F:182:ASP:HB3	5:F:185:ALA:HB2	1.75	0.67
1:B:1227:ILE:HG22	1:B:1228:TRP:N	2.09	0.67
1:B:519:PRO:HD3	1:B:631:HIS:HD1	1.60	0.67
2:C:185:THR:H	2:C:188:ASP:HB2	1.60	0.67
3:D:17:ASN:N	3:D:240:VAL:HG11	2.10	0.67
5:F:161:LYS:HD2	5:F:195:VAL:HG23	1.76	0.67
5:F:22:MET:HE3	5:F:26:ARG:HH21	1.58	0.67
1:B:577:ILE:O	1:B:580:VAL:HG23	1.94	0.67
1:B:341:MET:HE2	1:B:843:LYS:HZ1	1.58	0.67
2:C:1099:VAL:HG22	2:C:1103:ILE:HD13	1.74	0.67
3:D:5:GLY:O	3:D:7:GLN:HG3	1.95	0.67
1:B:1211:GLN:O	1:B:1214:GLU:HB2	1.95	0.67
1:B:61:ILE:HG22	1:B:62:ASP:H	1.58	0.67
2:C:1099:VAL:CG1	2:C:1100:ASP:N	2.58	0.67
4:E:153:ARG:HB3	4:E:154:PHE:CE1	2.30	0.67
4:E:47:LEU:HD13	4:E:48:ILE:N	2.10	0.67
7:H:96:GLN:HG3	7:H:97:HIS:CD2	2.30	0.67
2:C:842:ASN:O	2:C:846:ILE:HG13	1.95	0.67
5:F:191:LYS:O	5:F:193:GLY:N	2.27	0.67
7:H:145:VAL:HG12	7:H:146:LYS:H	1.60	0.67
8:I:63:LEU:C	8:I:90:ALA:HB3	2.16	0.67
1:B:567:LYS:CD	8:I:95:TYR:HA	2.25	0.66
2:C:911:ILE:HD11	2:C:941:LEU:HD13	1.76	0.66
3:D:46:ILE:HD12	3:D:67:LEU:HB3	1.77	0.66
7:H:111:THR:HG22	7:H:113:HIS:H	1.59	0.66
1:B:590:ARG:O	1:B:591:PHE:HB2	1.93	0.66
1:B:794:PRO:HG2	1:B:795:GLU:OE2	1.95	0.66
5:F:15:ALA:HA	5:F:140:LEU:O	1.95	0.66
7:H:51:TYR:O	7:H:54:ILE:HG13	1.96	0.66
10:K:36:LEU:HB2	10:K:47:ARG:HH12	1.59	0.66
2:C:101:MET:HB3	2:C:109:THR:HG22	1.76	0.66
1:B:29:ALA:HB1	2:C:1184:GLY:HA3	1.77	0.66
2:C:794:ASN:C	2:C:795:ILE:HD12	2.15	0.66
1:B:1325:THR:O	5:F:148:GLU:HB2	1.95	0.66
1:B:1445:ILE:N	1:B:1445:ILE:HD12	2.02	0.66
1:B:399:HIS:CB	1:B:400:PRO:HD3	2.24	0.66
2:C:687:GLU:O	2:C:689:LEU:HG	1.96	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:746:SER:HB2	2:C:1046:PRO:HG2	1.76	0.66
4:E:170:THR:CB	4:E:172:LEU:HG	2.22	0.66
8:I:27:GLU:HG2	8:I:39:THR:HG23	1.77	0.66
1:B:765:VAL:HG12	1:B:766:GLY:N	2.09	0.66
1:B:903:ASN:HD22	1:B:904:THR:H	1.41	0.66
2:C:826:ALA:HB2	2:C:1008:PRO:HB3	1.77	0.66
3:D:176:ILE:HG22	3:D:177:GLU:N	2.09	0.66
8:I:15:VAL:HG22	8:I:26:ILE:CD1	2.26	0.66
1:B:285:PRO:HG2	1:B:288:ALA:HB3	1.77	0.66
1:B:56:PRO:O	1:B:57:ARG:HD2	1.96	0.66
2:C:243:ALA:HB2	2:C:251:ILE:HG12	1.78	0.66
8:I:89:LEU:O	8:I:91:ASP:N	2.26	0.66
9:J:7:CYS:HB3	9:J:14:LEU:HD21	1.77	0.66
15:T:14:DC:H2"	15:T:15:DT:H71	1.77	0.66
1:B:418:SER:O	1:B:420:ARG:N	2.28	0.66
1:B:406:ILE:HG13	1:B:431:LYS:HB3	1.78	0.66
9:J:80:SER:HB2	9:J:103:CYS:SG	2.36	0.66
1:B:852:TYR:CD2	1:B:1060:PRO:HB2	2.31	0.66
1:B:690:VAL:HG11	1:B:794:PRO:HD3	1.78	0.66
1:B:899:VAL:CG1	1:B:908:LEU:HD21	2.24	0.66
2:C:1016:ALA:O	2:C:1020:ARG:HG3	1.96	0.66
2:C:792:MET:CE	2:C:857:ARG:HH12	2.08	0.66
6:G:97:ARG:O	6:G:101:ILE:HG13	1.96	0.66
8:I:98:TYR:HE1	8:I:139:ASN:HA	1.61	0.66
1:B:1242:VAL:O	1:B:1243:VAL:HB	1.96	0.66
1:B:382:PRO:HD3	1:B:428:TYR:CD2	2.30	0.66
1:B:606:LEU:HB3	1:B:614:PHE:CE2	2.31	0.66
1:B:70:CYS:O	1:B:72:GLU:HG2	1.96	0.66
2:C:1202:LEU:O	2:C:1206:GLU:HG3	1.95	0.66
2:C:278:GLN:HG2	2:C:279:ASP:N	2.05	0.66
2:C:850:LEU:HD12	2:C:851:PHE:N	2.11	0.66
6:G:73:ALA:HA	6:G:143:PHE:CE1	2.30	0.66
12:M:32:ALA:H	12:M:55:ILE:HG13	1.60	0.66
12:M:40:LEU:HD22	12:M:44:ASP:CG	2.17	0.66
1:B:332:LYS:HA	1:B:337:ARG:HD2	1.78	0.66
1:B:50:ILE:C	1:B:52:GLY:H	2.00	0.66
1:B:567:LYS:HD3	8:I:95:TYR:HA	1.78	0.66
2:C:1180:PHE:HB3	2:C:1191:ILE:HD13	1.77	0.66
2:C:20:ASP:O	2:C:22:SER:N	2.28	0.66
3:D:147:LEU:HD23	3:D:147:LEU:N	2.09	0.66
4:E:53:SER:H	4:E:148:LEU:CD2	2.09	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:H:117:GLN:C	7:H:119:LEU:H	1.98	0.66
4:E:40:HIS:CB	7:H:73:LYS:NZ	2.58	0.66
8:I:40:LEU:HD13	8:I:123:MET:HB2	1.78	0.66
1:B:441:PRO:HG3	1:B:498:ARG:HB2	1.77	0.65
2:C:327:ARG:O	2:C:331:LEU:HD13	1.95	0.65
2:C:63:ILE:O	2:C:67:SER:HB3	1.97	0.65
2:C:990:ILE:HG22	2:C:991:GLY:N	2.10	0.65
1:B:239:LEU:HD12	1:B:240:PRO:HD2	1.77	0.65
2:C:1079:LYS:HG2	2:C:1080:LYS:H	1.61	0.65
3:D:179:GLU:HG2	3:D:180:TYR:H	1.61	0.65
3:D:253:LYS:O	3:D:256:ALA:HB3	1.96	0.65
1:B:869:GLY:O	5:F:204:THR:HG21	1.96	0.65
1:B:714:PHE:O	1:B:718:VAL:HG23	1.97	0.65
1:B:870:GLU:HG2	5:F:208:TYR:CG	2.31	0.65
5:F:61:GLN:HB2	5:F:79:TRP:HE3	1.61	0.65
1:B:308:ILE:HG22	1:B:309:ALA:H	1.60	0.65
1:B:443:LEU:CD2	1:B:455:MET:HB3	2.20	0.65
1:B:590:ARG:HB2	1:B:590:ARG:HH11	1.61	0.65
1:B:920:LEU:HD23	1:B:921:GLY:N	2.10	0.65
3:D:242:GLN:C	3:D:244:VAL:H	1.99	0.65
2:C:1001:PHE:CD2	3:D:34:ARG:NH2	2.65	0.65
3:D:165:LYS:O	11:L:6:ARG:NH1	2.30	0.65
11:L:55:LYS:HD2	11:L:81:TYR:CD1	2.32	0.65
1:B:919:ILE:HG21	1:B:983:ILE:HD11	1.78	0.65
1:B:90:VAL:HG11	1:B:297:GLN:HA	1.79	0.65
1:B:310:GLY:O	1:B:312:PRO:HD2	1.97	0.65
1:B:298:PHE:CZ	1:B:314:ALA:HB2	2.32	0.65
1:B:298:PHE:HZ	1:B:314:ALA:HB2	1.61	0.65
2:C:1160:VAL:HG11	2:C:1169:MET:SD	2.36	0.65
2:C:217:ARG:NE	2:C:405:ARG:HB2	2.10	0.65
2:C:563:MET:HE1	2:C:580:VAL:HB	1.77	0.65
3:D:251:LEU:O	3:D:251:LEU:HD12	1.95	0.65
7:H:65:ASP:O	7:H:67:SER:N	2.29	0.65
10:K:2:ILE:HG22	10:K:3:VAL:O	1.96	0.65
3:D:184:ASN:ND2	3:D:187:LYS:HA	2.12	0.65
3:D:43:THR:HG22	3:D:44:LEU:N	2.12	0.65
6:G:135:ARG:HG2	6:G:137:TYR:CE1	2.31	0.65
1:B:1450:LEU:O	1:B:1450:LEU:HG	1.96	0.65
1:B:709:THR:HG22	1:B:711:ARG:N	2.12	0.65
2:C:1002:THR:O	2:C:1004:GLU:N	2.29	0.65
2:C:1079:LYS:HA	3:D:27:LEU:HD21	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:314:LEU:HD12	2:C:314:LEU:H	1.61	0.65
7:H:115:MET:HB3	7:H:163:ILE:HD11	1.78	0.65
8:I:139:ASN:O	8:I:140:ALA:HB2	1.97	0.65
10:K:5:VAL:HG12	10:K:6:ARG:HG3	1.77	0.65
1:B:34:LYS:HG2	1:B:36:ARG:HH21	1.60	0.65
1:B:560:ILE:HG13	8:I:78:SER:HB2	1.78	0.65
1:B:49:LYS:HE2	1:B:61:ILE:HD12	1.77	0.65
2:C:1084:GLN:N	2:C:1084:GLN:NE2	2.44	0.65
2:C:1096:ARG:O	2:C:1097:HIS:HB2	1.97	0.65
3:D:214:ASN:HB3	3:D:217:ASP:OD2	1.96	0.65
8:I:43:ASN:ND2	8:I:46:LEU:HD12	2.11	0.65
1:B:1050:GLU:HG2	1:B:1051:ALA:N	2.12	0.65
1:B:1411:GLU:HA	1:B:1414:ALA:HB3	1.78	0.65
2:C:770:GLN:HG2	2:C:983:ARG:O	1.97	0.65
2:C:918:ILE:HD12	2:C:935:ARG:NH1	2.12	0.65
2:C:953:LEU:O	2:C:953:LEU:HD23	1.97	0.65
1:B:353:ILE:HG21	1:B:487:MET:HG3	1.78	0.64
1:B:541:ILE:HD13	1:B:549:MET:HE3	1.78	0.64
5:F:17:ARG:O	5:F:21:GLU:HG3	1.96	0.64
9:J:26:LEU:HD23	9:J:37:GLU:HA	1.78	0.64
1:B:591:PHE:HA	1:B:595:THR:HG21	1.80	0.64
2:C:1166:CYS:HB2	2:C:1215:ARG:NH1	2.12	0.64
2:C:301:ILE:HG21	2:C:314:LEU:HD21	1.79	0.64
2:C:651:LEU:HD11	2:C:707:PRO:HB2	1.79	0.64
1:B:305:ASP:OD1	1:B:326:ARG:HD2	1.98	0.64
1:B:694:THR:O	1:B:698:GLN:HG3	1.96	0.64
1:B:659:HIS:HA	2:C:1074:ASN:ND2	2.13	0.64
2:C:210:LYS:HE2	2:C:462:ALA:CA	2.26	0.64
2:C:574:SER:HB3	2:C:577:ALA:HB2	1.79	0.64
5:F:67:GLU:O	5:F:70:SER:HB3	1.96	0.64
7:H:35:GLU:OE2	7:H:48:VAL:HG23	1.96	0.64
11:L:57:LEU:HD12	11:L:77:THR:O	1.97	0.64
1:B:1289:ARG:HD2	1:B:1303:GLU:OE2	1.97	0.64
2:C:496:ARG:O	2:C:539:LEU:HD12	1.97	0.64
2:C:880:THR:HG21	2:C:934:LYS:HE3	1.80	0.64
1:B:504:LEU:HD11	6:G:91:ALA:HB1	1.78	0.64
7:H:110:VAL:HG22	7:H:161:GLY:O	1.96	0.64
1:B:896:ARG:NH2	1:B:1030:ARG:HH21	1.96	0.64
1:B:1348:LEU:HG	1:B:1372:VAL:CG2	2.27	0.64
1:B:320:ARG:NH2	14:P:3:C:H1'	2.12	0.64
1:B:960:ILE:O	1:B:963:ILE:HG22	1.98	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:343:LYS:NZ	2:C:1151:LEU:HB3	2.12	0.64
2:C:57:TYR:CD1	2:C:57:TYR:N	2.63	0.64
2:C:953:LEU:CD2	2:C:965:LYS:HB2	2.28	0.64
3:D:61:GLU:HA	3:D:64:ALA:HB3	1.80	0.64
4:E:180:LEU:HD23	4:E:195:ILE:HD12	1.77	0.64
5:F:2:ASP:O	5:F:3:GLN:HG2	1.98	0.64
7:H:43:GLY:HA3	7:H:80:LYS:HB3	1.78	0.64
1:B:1121:GLU:HG3	1:B:1122:PRO:HD2	1.78	0.64
1:B:427:GLN:HG3	1:B:430:TRP:CZ2	2.32	0.64
1:B:961:ARG:HH11	1:B:961:ARG:HG3	1.62	0.64
3:D:261:ALA:HA	3:D:264:GLN:OE1	1.98	0.64
2:C:801:LYS:O	10:K:52:THR:CG2	2.45	0.64
2:C:801:LYS:O	10:K:52:THR:HG23	1.96	0.64
1:B:834:THR:HG21	1:B:1077:THR:HA	1.77	0.64
2:C:1079:LYS:HG2	2:C:1080:LYS:N	2.13	0.64
2:C:825:VAL:HG12	2:C:826:ALA:H	1.58	0.64
4:E:131:GLU:O	4:E:132:GLN:HG2	1.97	0.64
4:E:204:ASP:O	4:E:208:GLU:HB2	1.98	0.64
8:I:95:TYR:HE2	8:I:97:MET:CG	2.11	0.64
1:B:444:PHE:HB3	1:B:458:HIS:HD2	1.63	0.64
1:B:69:THR:O	1:B:71:GLN:N	2.30	0.64
2:C:269:ILE:HG21	2:C:282:ILE:HD13	1.79	0.64
5:F:23:VAL:O	5:F:28:TYR:HB2	1.97	0.64
10:K:35:ALA:O	10:K:39:LEU:HD12	1.97	0.64
12:M:39:SER:O	12:M:40:LEU:HG	1.98	0.64
1:B:138:ILE:HG21	1:B:222:LEU:HD21	1.79	0.64
1:B:768:GLN:HG2	1:B:816:HIS:CA	2.26	0.64
2:C:114:PRO:HG3	2:C:181:LEU:HD11	1.80	0.64
3:D:248:ILE:HD13	11:L:101:LEU:HD23	1.80	0.64
4:E:164:ILE:HG22	4:E:168:LYS:HG3	1.78	0.64
1:B:883:LEU:O	1:B:886:ILE:HG22	1.97	0.64
2:C:577:ALA:CB	2:C:589:VAL:HG11	2.20	0.64
2:C:661:LEU:HD23	2:C:679:TYR:O	1.97	0.64
2:C:652:LYS:HB3	2:C:689:LEU:HD23	1.80	0.64
2:C:956:THR:CG2	2:C:960:GLY:HA2	2.28	0.64
4:E:146:GLN:O	4:E:149:THR:HG22	1.97	0.64
10:K:1:MET:N	10:K:56:LEU:N	2.45	0.64
1:B:1119:TYR:HA	1:B:1305:VAL:HG13	1.79	0.63
1:B:374:LEU:C	1:B:436:ILE:HD11	2.17	0.63
1:B:477:PRO:HG2	1:B:521:MET:HG2	1.80	0.63
1:B:853:ASP:OD1	1:B:855:THR:N	2.31	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1022:THR:O	2:C:1022:THR:HG23	1.98	0.63
2:C:113:TYR:HE2	2:C:192:LEU:HD22	1.63	0.63
2:C:355:ILE:O	2:C:359:GLU:HB2	1.98	0.63
2:C:797:TYR:HB2	2:C:852:ARG:O	1.98	0.63
7:H:106:MET:HG2	7:H:107:LYS:H	1.60	0.63
1:B:1225:PHE:CZ	1:B:1227:ILE:HD11	2.33	0.63
1:B:184:SER:HB3	1:B:199:LEU:CD2	2.28	0.63
1:B:675:THR:O	1:B:679:ILE:HG13	1.97	0.63
2:C:780:VAL:HG21	10:K:56:LEU:HD11	1.79	0.63
1:B:883:LEU:HD11	1:B:1017:LEU:HD11	1.81	0.63
1:B:40:THR:HB	1:B:41:MET:HE3	1.79	0.63
1:B:353:ILE:HD13	1:B:487:MET:CE	2.29	0.63
2:C:65:GLU:OE2	2:C:247:GLY:HA2	1.95	0.63
8:I:99:GLY:HA3	8:I:118:PHE:HA	1.81	0.63
1:B:40:THR:HB	1:B:41:MET:CE	2.27	0.63
2:C:305:VAL:O	2:C:305:VAL:HG12	1.98	0.63
2:C:899:ILE:CD1	2:C:911:ILE:HA	2.27	0.63
15:T:11:DT:H2"	15:T:12:DA:OP2	1.99	0.63
1:B:1120:LEU:H	1:B:1120:LEU:HD13	1.64	0.63
1:B:881:GLN:NE2	1:B:958:VAL:O	2.32	0.63
2:C:310:MET:O	2:C:313:MET:HB2	1.99	0.63
2:C:461:LEU:H	2:C:461:LEU:HD12	1.64	0.63
2:C:865:LYS:HB2	2:C:961:LEU:HD21	1.81	0.63
6:G:119:ARG:HG3	6:G:119:ARG:NH1	2.13	0.63
6:G:73:ALA:O	6:G:74:ILE:HG13	1.98	0.63
7:H:15:PRO:HG3	7:H:66:GLY:HA3	1.79	0.63
3:D:8:VAL:HG11	11:L:105:PHE:HD1	1.63	0.63
1:B:287:HIS:HA	1:B:290:GLU:HG2	1.81	0.63
1:B:372:LYS:HA	1:B:435:HIS:ND1	2.13	0.63
1:B:901:LEU:O	1:B:921:GLY:N	2.31	0.63
1:B:996:ASN:O	1:B:998:LEU:N	2.29	0.63
2:C:431:TYR:CD1	2:C:447:ALA:HB2	2.34	0.63
2:C:844:SER:HB3	2:C:848:ARG:HH12	1.64	0.63
4:E:27:LEU:HD13	4:E:173:HIS:HB2	1.81	0.63
10:K:43:ARG:H	10:K:43:ARG:HD3	1.63	0.63
1:B:1022:LEU:HD11	1:B:1026:LEU:HD12	1.81	0.63
1:B:1042:PHE:CE2	1:B:1046:LEU:HD11	2.33	0.63
1:B:107:CYS:HA	1:B:171:GLN:OE1	1.98	0.63
2:C:510:LYS:CG	2:C:511:PRO:HD3	2.28	0.63
4:E:173:HIS:O	4:E:175:PHE:N	2.31	0.63
5:F:13:TRP:CE3	5:F:39:LEU:HD13	2.34	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:H:106:MET:CG	7:H:107:LYS:N	2.60	0.63
8:I:95:TYR:CE2	8:I:97:MET:HG3	2.33	0.63
1:B:185:TRP:CZ3	1:B:200:ARG:HG2	2.34	0.63
1:B:399:HIS:HB3	1:B:400:PRO:CD	2.27	0.63
1:B:535:THR:HG21	1:B:616:VAL:CA	2.24	0.63
1:B:32:VAL:HG21	1:B:68:GLN:HE21	1.64	0.63
1:B:751:SER:O	1:B:752:LYS:HB2	1.96	0.63
1:B:899:VAL:HB	1:B:929:LEU:HD12	1.80	0.63
2:C:1020:ARG:HB2	2:C:1022:THR:HG22	1.79	0.63
2:C:105:SER:O	2:C:106:ASP:HB2	1.98	0.63
2:C:113:TYR:CE2	2:C:192:LEU:HD22	2.34	0.63
3:D:164:ALA:HA	3:D:167:HIS:O	1.99	0.63
1:B:134:ARG:HD2	1:B:221:SER:O	1.99	0.63
2:C:515:HIS:H	2:C:518:HIS:CD2	2.05	0.63
2:C:842:ASN:ND2	2:C:845:SER:OG	2.31	0.63
3:D:18:VAL:CG2	3:D:240:VAL:HB	2.28	0.63
3:D:45:ALA:HA	3:D:72:LEU:CD1	2.28	0.63
4:E:29:LEU:HD13	7:H:82:PHE:CZ	2.34	0.63
1:B:1074:GLU:HB3	1:B:1075:PRO:HD3	1.81	0.62
1:B:445:ASN:HB2	1:B:454:SER:O	1.98	0.62
2:C:334:ILE:O	2:C:334:ILE:HG22	1.99	0.62
2:C:580:VAL:HG22	2:C:624:LEU:HB3	1.81	0.62
2:C:821:GLN:NE2	2:C:851:PHE:HA	2.13	0.62
3:D:8:VAL:HG21	11:L:105:PHE:HA	1.80	0.62
7:H:15:PRO:CG	7:H:66:GLY:HA3	2.29	0.62
11:L:21:ILE:HG23	11:L:31:VAL:CG1	2.28	0.62
11:L:31:VAL:HG12	11:L:32:VAL:N	2.14	0.62
1:B:902:LEU:HG	1:B:926:GLN:HG3	1.81	0.62
1:B:963:ILE:HD11	1:B:1048:ASN:CB	2.29	0.62
1:B:78:PRO:HA	2:C:1201:LYS:NZ	2.14	0.62
2:C:192:LEU:O	2:C:193:LYS:HB2	1.99	0.62
2:C:37:PHE:HE2	2:C:542:MET:HA	1.63	0.62
2:C:880:THR:HB	2:C:934:LYS:HD2	1.80	0.62
1:B:41:MET:H	1:B:41:MET:HE3	1.64	0.62
1:B:519:PRO:HD3	1:B:631:HIS:ND1	2.14	0.62
2:C:365:THR:HG23	2:C:367:LEU:H	1.65	0.62
2:C:515:HIS:O	2:C:518:HIS:HB2	2.00	0.62
2:C:579:ARG:NH1	2:C:579:ARG:HG2	2.14	0.62
2:C:850:LEU:HD12	2:C:851:PHE:H	1.65	0.62
9:J:50:THR:CG2	9:J:52:ILE:HG23	2.27	0.62
10:K:44:TYR:N	10:K:44:TYR:CD2	2.64	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:193:LYS:NZ	12:M:32:ALA:HB1	2.15	0.62
1:B:252:PHE:O	1:B:253:ASN:HB2	1.98	0.62
1:B:513:SER:OG	1:B:515:GLN:HG2	1.99	0.62
1:B:684:ALA:O	1:B:687:LYS:HB2	2.00	0.62
2:C:314:LEU:O	2:C:317:CYS:HB3	1.98	0.62
2:C:810:GLU:CA	2:C:815:ARG:HH12	2.09	0.62
2:C:843:GLN:O	2:C:846:ILE:N	2.32	0.62
4:E:175:PHE:HZ	7:H:85:GLU:HG3	1.63	0.62
1:B:719:VAL:HG12	1:B:723:ASN:HD21	1.65	0.62
2:C:839:MET:HG3	2:C:1010:LEU:CD1	2.22	0.62
3:D:100:THR:HG22	3:D:101:LEU:N	2.14	0.62
3:D:31:ASN:OD1	3:D:34:ARG:HD3	1.98	0.62
6:G:75:PRO:HG2	6:G:77:ASP:O	1.99	0.62
6:G:132:LEU:HD11	7:H:61:ILE:CD1	2.30	0.62
9:J:35:VAL:HG12	9:J:36:GLU:N	2.14	0.62
3:D:235:VAL:HG12	10:K:13:VAL:CG2	2.29	0.62
1:B:1224:LEU:HD11	1:B:1240:CYS:HB2	1.82	0.62
1:B:1325:THR:HG23	5:F:148:GLU:N	2.14	0.62
3:D:36:VAL:HG21	3:D:251:LEU:HB2	1.80	0.62
1:B:1441:PHE:CZ	6:G:89:GLU:HA	2.34	0.62
1:B:1029:ARG:HD2	1:B:1033:GLN:NE2	2.13	0.62
1:B:1102:LYS:HG2	1:B:1106:ASN:HD21	1.64	0.62
1:B:1349:TYR:CA	1:B:1372:VAL:HG21	2.29	0.62
1:B:2:VAL:HG11	2:C:1157:ALA:HB1	1.82	0.62
1:B:341:MET:HE1	1:B:843:LYS:NZ	2.14	0.62
1:B:35:ILE:O	1:B:35:ILE:HG22	1.99	0.62
1:B:35:ILE:O	1:B:84:ILE:HG13	2.00	0.62
1:B:863:VAL:HG11	1:B:866:PHE:CE2	2.34	0.62
1:B:11:LEU:HD12	2:C:1193:GLN:O	2.00	0.62
2:C:526:GLU:HG2	2:C:538:ASN:HD22	1.64	0.62
2:C:792:MET:HE1	2:C:857:ARG:HH12	1.63	0.62
2:C:859:TYR:OH	2:C:941:LEU:HD12	1.99	0.62
7:H:122:ASN:HD22	7:H:125:SER:HB3	1.64	0.62
8:I:127:GLY:HA3	8:I:130:ARG:HH22	1.64	0.62
9:J:8:ARG:O	9:J:9:ASP:HB2	2.00	0.62
1:B:222:LEU:O	1:B:224:PHE:N	2.33	0.62
1:B:316:GLN:HB2	1:B:322:VAL:HG23	1.82	0.62
2:C:115:GLN:HG2	2:C:193:LYS:HB2	1.81	0.62
2:C:220:GLY:O	2:C:222:ILE:HG13	2.00	0.62
2:C:604:ARG:NH1	2:C:691:GLU:OE2	2.33	0.62
3:D:163:ILE:HD11	11:L:10:PHE:CE1	2.34	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:110:CYS:SG	1:B:111:GLY:N	2.72	0.62
1:B:57:ARG:HH11	1:B:57:ARG:HG2	1.64	0.62
1:B:809:THR:HG23	1:B:812:GLU:OE1	2.00	0.62
1:B:1430:LEU:O	2:C:1196:ILE:HG22	2.00	0.62
2:C:205:ILE:N	2:C:205:ILE:HD12	2.14	0.62
2:C:364:ILE:HG12	2:C:585:VAL:HG13	1.80	0.62
4:E:30:GLY:O	4:E:32:GLU:N	2.33	0.62
7:H:106:MET:CG	7:H:107:LYS:H	2.12	0.62
1:B:148:CYS:O	1:B:168:GLY:HA2	2.00	0.62
1:B:55:ASP:N	1:B:56:PRO:HD3	2.15	0.62
1:B:67:CYS:C	1:B:68:GLN:HG3	2.21	0.62
1:B:2:VAL:CG1	2:C:1157:ALA:HB1	2.29	0.62
2:C:1181:GLU:CG	2:C:1188:LYS:HE3	2.30	0.62
2:C:467:GLY:N	2:C:475:SER:HB3	2.15	0.62
2:C:405:ARG:HE	2:C:629:ASP:HB3	1.64	0.62
4:E:7:THR:HG21	4:E:32:GLU:OE2	2.00	0.62
5:F:153:HIS:HB3	5:F:196:VAL:HG11	1.82	0.62
1:B:1153:TYR:CE1	9:J:42:LEU:HD13	2.35	0.62
1:B:54:ASN:C	1:B:56:PRO:HD3	2.20	0.61
2:C:36:ALA:HA	2:C:39:ARG:HD2	1.81	0.61
3:D:148:ARG:HD3	3:D:149:LYS:HG3	1.82	0.61
3:D:147:LEU:HD12	3:D:151:GLN:O	2.00	0.61
5:F:15:ALA:O	5:F:19:VAL:HG23	2.00	0.61
1:B:1074:GLU:HB3	1:B:1075:PRO:CD	2.29	0.61
1:B:180:LYS:HZ2	1:B:294:SER:HB3	1.66	0.61
1:B:265:LYS:HD3	1:B:302:THR:HG22	1.82	0.61
1:B:38:PRO:HA	1:B:270:LEU:HD23	1.81	0.61
1:B:50:ILE:O	1:B:52:GLY:N	2.33	0.61
2:C:294:ASP:O	2:C:296:GLU:N	2.29	0.61
2:C:309:GLN:HG3	9:J:52:ILE:HD13	1.82	0.61
2:C:519:TRP:CH2	2:C:748:ILE:HD13	2.36	0.61
2:C:792:MET:H	2:C:857:ARG:HA	1.64	0.61
4:E:24:ALA:C	4:E:26:THR:H	2.04	0.61
4:E:60:LYS:O	4:E:64:VAL:HG23	1.99	0.61
9:J:50:THR:HG23	9:J:52:ILE:CG2	2.30	0.61
2:C:737:THR:CG2	9:J:66:PRO:HA	2.29	0.61
1:B:1155:ASP:OD2	1:B:1161:THR:HA	1.99	0.61
1:B:215:SER:HB3	1:B:218:ASP:CB	2.30	0.61
2:C:1072:MET:HB2	2:C:1085:ILE:HD13	1.82	0.61
2:C:172:ILE:HD13	2:C:178:ASN:HD22	1.63	0.61
2:C:583:ASN:OD1	2:C:628:THR:HG22	2.00	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:J:62:ILE:O	9:J:62:ILE:HG12	1.99	0.61
1:B:885:THR:O	1:B:885:THR:HG22	1.99	0.61
1:B:899:VAL:HG13	1:B:908:LEU:CD2	2.30	0.61
2:C:1169:MET:CE	2:C:1201:LYS:HA	2.30	0.61
3:D:31:ASN:O	3:D:34:ARG:HB3	2.00	0.61
7:H:7:LEU:HD12	7:H:74:TYR:HH	1.65	0.61
7:H:80:LYS:HD3	7:H:80:LYS:H	1.65	0.61
1:B:1074:GLU:C	1:B:1076:ALA:H	2.02	0.61
1:B:184:SER:HB3	1:B:199:LEU:HD23	1.82	0.61
2:C:778:MET:CE	2:C:1094:ARG:HG2	2.28	0.61
2:C:108:VAL:HG12	2:C:109:THR:H	1.66	0.61
2:C:20:ASP:C	2:C:22:SER:H	2.02	0.61
2:C:593:PRO:HG2	2:C:617:ARG:HH21	1.64	0.61
2:C:910:VAL:HG12	2:C:911:ILE:H	1.63	0.61
10:K:64:ASN:HB3	10:K:65:PRO:HD3	1.81	0.61
11:L:61:TYR:CD2	11:L:61:TYR:C	2.70	0.61
1:B:1348:LEU:HG	1:B:1372:VAL:HG23	1.83	0.61
1:B:18:GLN:HB2	2:C:1215:ARG:HB2	1.82	0.61
1:B:88:LYS:HE3	1:B:280:GLU:OE2	2.00	0.61
2:C:1012:ILE:HD13	2:C:1092:TYR:OH	1.99	0.61
2:C:1182:CYS:O	2:C:1183:LYS:O	2.19	0.61
2:C:1196:ILE:HD12	2:C:1200:ALA:CB	2.30	0.61
2:C:745:PRO:O	2:C:747:MET:N	2.34	0.61
3:D:116:LYS:HD3	3:D:140:ASN:HB3	1.82	0.61
4:E:207:LEU:O	4:E:211:LEU:HB2	2.01	0.61
9:J:13:MET:CE	9:J:14:LEU:H	2.13	0.61
1:B:1315:GLU:C	1:B:1317:MET:H	2.04	0.61
1:B:1444:MET:CG	7:H:60:ARG:HA	2.31	0.61
2:C:244:LEU:HD11	2:C:366:GLN:HE22	1.65	0.61
2:C:390:LEU:O	2:C:392:ARG:HG3	2.00	0.61
4:E:33:PHE:CE1	7:H:80:LYS:HE3	2.36	0.61
7:H:37:SER:OG	7:H:45:ILE:HB	2.01	0.61
1:B:317:LYS:O	1:B:318:SER:HB3	1.99	0.61
1:B:417:TYR:N	1:B:417:TYR:HD2	1.99	0.61
2:C:287:ARG:HG2	2:C:292:ILE:HA	1.83	0.61
3:D:238:ILE:HG22	3:D:243:VAL:HG23	1.82	0.61
9:J:13:MET:HE3	9:J:14:LEU:H	1.65	0.61
11:L:10:PHE:CD2	11:L:10:PHE:N	2.68	0.61
1:B:152:VAL:HG13	1:B:153:PRO:HD2	1.82	0.61
1:B:222:LEU:O	1:B:224:PHE:HD1	1.83	0.61
1:B:890:ASP:H	1:B:1296:GLY:HA3	1.65	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:868:MET:O	2:C:870:ILE:HG13	2.00	0.61
2:C:884:ARG:HB2	2:C:935:ARG:HA	1.83	0.61
2:C:884:ARG:O	2:C:936:ASP:HB3	1.99	0.61
7:H:26:LEU:HD11	7:H:70:PHE:CD1	2.36	0.61
10:K:8:PHE:H	10:K:49:MET:CE	2.13	0.61
1:B:224:PHE:CD2	1:B:231:PRO:HG3	2.36	0.61
1:B:266:LEU:HD21	1:B:303:TYR:CE1	2.36	0.61
1:B:567:LYS:HD2	1:B:568:PRO:CD	2.31	0.61
1:B:57:ARG:NH1	1:B:57:ARG:HG2	2.15	0.61
1:B:666:ILE:HD11	2:C:1067:ARG:O	2.01	0.61
2:C:1079:LYS:CA	3:D:27:LEU:HD21	2.31	0.61
2:C:44:VAL:CG1	2:C:199:MET:HG2	2.30	0.61
2:C:510:LYS:HG3	2:C:511:PRO:HD3	1.82	0.61
3:D:22:LEU:HD21	3:D:25:VAL:HG11	1.81	0.61
7:H:66:GLY:O	7:H:67:SER:C	2.38	0.61
8:I:44:VAL:O	8:I:44:VAL:HG12	2.00	0.61
9:J:82:GLU:HB3	9:J:104:LEU:CD1	2.31	0.61
1:B:1404:GLU:HB2	1:B:1408:ILE:HG13	1.82	0.60
1:B:53:LEU:CD2	1:B:54:ASN:HD22	2.14	0.60
2:C:288:ALA:HB1	2:C:331:LEU:HD12	1.83	0.60
4:E:205:ASP:O	4:E:208:GLU:HB3	2.00	0.60
1:B:1325:THR:HG23	5:F:148:GLU:H	1.63	0.60
5:F:157:SER:OG	5:F:160:GLU:HG3	2.01	0.60
1:B:265:LYS:HG2	1:B:303:TYR:CA	2.30	0.60
1:B:806:ARG:HH12	2:C:729:ILE:HD11	1.66	0.60
4:E:16:LYS:NZ	4:E:16:LYS:HB3	2.15	0.60
4:E:8:PHE:CE2	7:H:73:LYS:HD3	2.37	0.60
1:B:364:VAL:HG13	1:B:364:VAL:O	2.00	0.60
1:B:446:ARG:CD	1:B:480:ALA:HB2	2.25	0.60
1:B:1042:PHE:HE2	1:B:1046:LEU:HD11	1.66	0.60
1:B:500:GLU:OE2	1:B:1438:THR:HG21	2.01	0.60
1:B:635:ARG:HH11	1:B:635:ARG:HA	1.64	0.60
2:C:1220:ARG:NH1	2:C:1220:ARG:HB3	2.16	0.60
2:C:603:LEU:HD13	2:C:608:ASP:CB	2.30	0.60
2:C:642:ASP:HB3	2:C:649:LYS:HD2	1.84	0.60
2:C:735:ALA:O	2:C:738:PHE:HE1	1.84	0.60
1:B:93:VAL:HG13	1:B:301:ALA:HB1	1.83	0.60
1:B:92:HIS:O	1:B:95:PHE:N	2.34	0.60
2:C:493:SER:HA	2:C:751:VAL:HG21	1.83	0.60
2:C:758:PHE:HZ	2:C:1031:LEU:HD22	1.67	0.60
3:D:39:ALA:CA	3:D:164:ALA:HB3	2.31	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:40:HIS:ND1	4:E:41:GLN:HG3	2.16	0.60
6:G:89:GLU:HB3	6:G:134:ILE:CD1	2.32	0.60
1:B:1443:VAL:O	1:B:1444:MET:HG3	2.02	0.60
1:B:418:SER:C	1:B:420:ARG:H	2.04	0.60
1:B:93:VAL:HG21	1:B:301:ALA:O	2.01	0.60
2:C:1017:ILE:H	2:C:1018:PRO:CD	2.15	0.60
2:C:217:ARG:O	2:C:217:ARG:HD2	2.00	0.60
2:C:37:PHE:HE1	2:C:41:LYS:HG3	1.64	0.60
2:C:497:ARG:NH2	2:C:775:LYS:NZ	2.49	0.60
2:C:745:PRO:C	2:C:747:MET:H	2.04	0.60
1:B:1151:GLU:HA	9:J:44:TYR:O	2.01	0.60
15:T:15:DT:H2"	15:T:16:DG:OP2	2.00	0.60
15:T:24:DG:H5'	15:T:25:DC:OP2	2.02	0.60
1:B:341:MET:HE1	2:C:1135:ARG:NH1	2.16	0.60
1:B:741:ASN:HD22	1:B:742:ASN:N	2.00	0.60
2:C:821:GLN:HE22	2:C:851:PHE:CA	2.13	0.60
1:B:1227:ILE:HG22	1:B:1228:TRP:H	1.66	0.60
1:B:1329:THR:HG22	1:B:1331:SER:N	2.17	0.60
1:B:311:GLN:O	1:B:312:PRO:C	2.40	0.60
1:B:647:GLY:O	1:B:651:LYS:HG3	2.01	0.60
2:C:878:GLN:HA	2:C:885:MET:SD	2.42	0.60
1:B:1001:ARG:O	1:B:1002:GLY:O	2.19	0.60
1:B:1101:LEU:HD11	1:B:1105:LEU:HD11	1.83	0.60
1:B:871:ASP:OD2	1:B:873:MET:HB2	2.02	0.60
2:C:1106:ARG:HD2	2:C:1125:ASP:O	2.01	0.60
1:B:350:ARG:HB2	2:C:1128:LEU:HD11	1.83	0.60
2:C:117:ALA:HB1	2:C:122:LEU:HB2	1.84	0.60
2:C:215:GLN:NE2	2:C:215:GLN:HA	2.17	0.60
2:C:879:ARG:HD3	2:C:883:LEU:HD22	1.84	0.60
5:F:55:ARG:C	5:F:57:MET:H	2.05	0.60
7:H:91:VAL:HG23	7:H:141:SER:O	2.02	0.60
1:B:1161:THR:HG22	1:B:1163:ILE:HG13	1.82	0.60
2:C:983:ARG:HD2	2:C:1091:TYR:HB3	1.84	0.60
4:E:145:MET:O	4:E:149:THR:HB	2.01	0.60
5:F:48:ASP:CG	5:F:49:SER:H	2.03	0.60
9:J:106:CYS:SG	9:J:108:HIS:HB2	2.42	0.60
2:C:992:ILE:HD11	11:L:66:PRO:HB2	1.84	0.60
2:C:1181:GLU:HG3	2:C:1188:LYS:CE	2.32	0.59
2:C:273:LEU:HD12	2:C:276:ILE:HD11	1.84	0.59
2:C:281:PRO:HG2	2:C:284:ILE:HG13	1.83	0.59
2:C:562:GLY:O	2:C:590:HIS:ND1	2.31	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:67:SER:HB2	2:C:92:PHE:HD1	1.67	0.59
7:H:1:MET:SD	7:H:79:PHE:CD1	2.95	0.59
1:B:339:ASN:HB3	2:C:1117:GLN:NE2	2.17	0.59
2:C:496:ARG:HH12	2:C:539:LEU:HB2	1.66	0.59
4:E:64:VAL:HG22	4:E:129:LEU:HD22	1.83	0.59
8:I:102:TYR:N	8:I:102:TYR:CD2	2.70	0.59
1:B:1027:ALA:O	1:B:1031:VAL:HG23	2.02	0.59
1:B:986:ILE:HD12	1:B:1032:LEU:HD11	1.84	0.59
1:B:1349:TYR:CE1	1:B:1368:MET:HE3	2.37	0.59
1:B:567:LYS:HB2	1:B:568:PRO:CD	2.32	0.59
1:B:925:LEU:HD13	1:B:983:ILE:HD12	1.83	0.59
2:C:980:PHE:HD2	2:C:1094:ARG:HA	1.67	0.59
1:B:351:THR:CG2	2:C:1103:ILE:HG13	2.32	0.59
2:C:373:ARG:HA	2:C:566:LEU:HD23	1.84	0.59
2:C:882:THR:HG22	2:C:884:ARG:HB2	1.83	0.59
3:D:138:GLU:N	3:D:138:GLU:OE1	2.36	0.59
5:F:118:PRO:O	5:F:122:LYS:HG3	2.02	0.59
7:H:23:LYS:HG3	7:H:56:ILE:HD13	1.85	0.59
8:I:81:PRO:CB	8:I:82:PRO:CD	2.80	0.59
1:B:1129:GLU:HG3	1:B:1132:LYS:HD2	1.83	0.59
1:B:1143:LEU:HB2	1:B:1271:ILE:HG21	1.83	0.59
1:B:1420:ASP:HB3	1:B:1422:ARG:HG3	1.83	0.59
1:B:466:SER:HB3	11:L:2:ASN:ND2	2.17	0.59
2:C:286:PHE:CD1	2:C:297:ILE:HG23	2.38	0.59
2:C:519:TRP:HE1	2:C:635:ARG:NH2	2.00	0.59
2:C:847:ASP:C	2:C:849:GLY:N	2.56	0.59
2:C:865:LYS:HZ2	2:C:869:SER:HA	1.65	0.59
2:C:956:THR:HG23	2:C:960:GLY:HA2	1.84	0.59
3:D:112:ASN:HB3	3:D:114:TYR:CE1	2.38	0.59
10:K:28:ASP:O	10:K:30:LEU:HG	2.01	0.59
1:B:1076:ALA:HA	1:B:1079:MET:CE	2.32	0.59
1:B:358:ASN:C	1:B:359:LEU:HD23	2.23	0.59
1:B:445:ASN:HB2	1:B:455:MET:HA	1.84	0.59
1:B:511:ILE:HA	1:B:521:MET:HE3	1.84	0.59
2:C:600:LEU:O	2:C:609:ILE:HD12	2.02	0.59
2:C:782:LEU:HD12	2:C:788:ARG:HH11	1.66	0.59
3:D:73:GLN:NE2	3:D:75:MET:HB2	2.18	0.59
4:E:54:GLU:O	4:E:58:VAL:HG23	2.03	0.59
1:B:1017:LEU:HB2	5:F:206:GLY:N	2.09	0.59
1:B:1120:LEU:HD23	1:B:1124:HIS:O	2.02	0.59
1:B:629:LEU:HD22	1:B:633:VAL:HG23	1.83	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:994:GLN:O	1:B:996:ASN:N	2.35	0.59
10:K:7:CYS:SG	10:K:49:MET:HE3	2.42	0.59
1:B:1193:LEU:HB2	1:B:1260:LEU:HD11	1.83	0.59
1:B:1341:ILE:CG2	1:B:1342:GLU:N	2.63	0.59
1:B:1420:ASP:O	1:B:1421:CYS:HB2	2.02	0.59
1:B:195:ASP:O	1:B:196:GLU:HB3	2.01	0.59
1:B:230:ARG:HB2	1:B:233:TRP:CE3	2.38	0.59
2:C:1099:VAL:CG1	2:C:1100:ASP:H	2.15	0.59
2:C:402:GLY:CA	2:C:695:ALA:HB3	2.32	0.59
2:C:806:THR:HG23	2:C:1046:PRO:HD3	1.85	0.59
2:C:982:SER:HB3	2:C:1092:TYR:HE2	1.66	0.59
7:H:31:LEU:CD2	7:H:48:VAL:HG21	2.33	0.59
10:K:16:ASP:OD1	10:K:17:LYS:HD2	2.02	0.59
1:B:1041:ALA:O	1:B:1045:VAL:HG23	2.02	0.59
1:B:629:LEU:O	1:B:633:VAL:HG23	2.03	0.59
2:C:982:SER:HB3	2:C:1092:TYR:CE2	2.37	0.59
2:C:610:ASN:HB3	2:C:613:VAL:HG23	1.84	0.59
3:D:35:ARG:NH1	11:L:41:THR:H	1.99	0.59
4:E:195:ILE:HG22	4:E:198:LEU:HG	1.84	0.59
10:K:14:VAL:HG12	10:K:50:ILE:HD11	1.84	0.59
1:B:144:THR:O	1:B:146:MET:HG3	2.03	0.59
1:B:341:MET:CE	1:B:843:LYS:NZ	2.66	0.59
1:B:901:LEU:HG	1:B:926:GLN:HE21	1.68	0.59
1:B:979:SER:OG	1:B:980:ASP:N	2.32	0.59
2:C:100:PRO:CD	2:C:180:TYR:HE1	2.12	0.59
2:C:604:ARG:HA	2:C:609:ILE:O	2.03	0.59
1:B:1148:ILE:HG23	9:J:49:ILE:HB	1.84	0.59
9:J:69:PRO:HG2	9:J:85:PHE:CD2	2.38	0.59
1:B:381:THR:C	1:B:383:TYR:H	2.06	0.59
1:B:40:THR:C	1:B:41:MET:HG3	2.22	0.59
1:B:477:PRO:CG	1:B:521:MET:HG2	2.33	0.59
2:C:563:MET:HE3	2:C:580:VAL:HB	1.82	0.59
2:C:797:TYR:OH	2:C:971:THR:HG21	2.03	0.59
8:I:98:TYR:CE1	8:I:139:ASN:HA	2.38	0.59
11:L:55:LYS:HD2	11:L:81:TYR:HD1	1.68	0.59
1:B:1050:GLU:O	1:B:1053:PHE:N	2.36	0.58
2:C:1181:GLU:H	2:C:1188:LYS:HG2	1.69	0.58
2:C:171:PRO:HD2	2:C:457:LEU:HD13	1.85	0.58
2:C:280:ILE:HB	2:C:285:ILE:HD11	1.83	0.58
2:C:331:LEU:O	2:C:334:ILE:HB	2.03	0.58
6:G:111:LEU:O	6:G:113:GLY:N	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:K:22:LEU:O	10:K:22:LEU:HD12	2.02	0.58
1:B:679:ILE:HG12	1:B:732:LEU:CD1	2.33	0.58
2:C:1167:GLY:HA3	2:C:1216:LEU:H	1.68	0.58
2:C:126:SER:OG	2:C:172:ILE:HD11	2.03	0.58
2:C:833:TYR:N	2:C:833:TYR:HD1	2.02	0.58
2:C:955:THR:CG2	2:C:956:THR:H	2.14	0.58
7:H:129:SER:HB3	7:H:138:THR:OG1	2.03	0.58
12:M:30:ILE:HG22	12:M:31:CYS:N	2.17	0.58
1:B:663:SER:OG	1:B:664:THR:N	2.36	0.58
1:B:901:LEU:HD22	1:B:919:ILE:HG22	1.83	0.58
1:B:932:GLU:OE1	1:B:987:VAL:HG22	2.03	0.58
2:C:102:VAL:HG13	2:C:958:GLN:NE2	2.18	0.58
7:H:114:LEU:HG	7:H:162:SER:HB3	1.84	0.58
1:B:71:GLN:HG3	1:B:72:GLU:N	2.19	0.58
1:B:886:ILE:CG2	1:B:887:GLY:N	2.66	0.58
1:B:986:ILE:HG22	1:B:987:VAL:N	2.18	0.58
2:C:731:VAL:HG12	2:C:732:SER:N	2.18	0.58
2:C:885:MET:HA	2:C:936:ASP:HB3	1.85	0.58
2:C:98:THR:HG23	2:C:127:GLY:O	2.03	0.58
7:H:138:THR:CG2	7:H:139:ILE:HG13	2.33	0.58
8:I:118:PHE:O	8:I:120:GLY:N	2.35	0.58
1:B:469:ARG:HB3	1:B:469:ARG:NH1	2.19	0.58
1:B:446:ARG:HB2	1:B:487:MET:HG2	1.86	0.58
1:B:35:ILE:HB	1:B:83:HIS:O	2.02	0.58
1:B:335:ARG:HH11	2:C:1202:LEU:HD13	1.66	0.58
2:C:273:LEU:HB2	2:C:276:ILE:CD1	2.34	0.58
2:C:701:ILE:HD11	2:C:703:ILE:HD11	1.84	0.58
2:C:806:THR:HB	2:C:809:MET:HG3	1.84	0.58
2:C:811:TYR:N	2:C:811:TYR:CD1	2.70	0.58
2:C:880:THR:O	2:C:881:ASN:HB2	2.02	0.58
3:D:98:VAL:HG12	3:D:99:LEU:N	2.18	0.58
1:B:49:LYS:HZ1	1:B:61:ILE:HG13	1.66	0.58
1:B:947:PHE:HE2	1:B:954:TRP:CD2	2.22	0.58
2:C:978:ASP:OD2	2:C:1098:MET:HG2	2.03	0.58
2:C:1163:CYS:SG	2:C:1165:ILE:HB	2.44	0.58
3:D:98:VAL:HG12	3:D:99:LEU:H	1.67	0.58
7:H:45:ILE:HD13	7:H:78:VAL:CG1	2.34	0.58
1:B:1299:VAL:HG12	1:B:1300:LYS:H	1.68	0.58
1:B:403:LYS:O	1:B:415:LEU:HB2	2.03	0.58
1:B:675:THR:OG1	1:B:736:ASN:ND2	2.37	0.58
1:B:787:PHE:CE1	1:B:796:SER:HA	2.38	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:118:ARG:HG2	2:C:204:ILE:HD13	1.86	0.58
1:B:41:MET:HB3	1:B:50:ILE:H	1.69	0.58
1:B:567:LYS:CB	1:B:568:PRO:CD	2.81	0.58
1:B:997:LEU:HD13	1:B:1018:PHE:HE2	1.69	0.58
2:C:313:MET:O	2:C:316:PRO:HD2	2.03	0.58
2:C:843:GLN:O	2:C:846:ILE:HB	2.03	0.58
3:D:172:PRO:O	3:D:235:VAL:CG2	2.52	0.58
4:E:14:ARG:NH2	4:E:16:LYS:HZ1	1.94	0.58
5:F:127:ILE:HG13	5:F:127:ILE:O	2.04	0.58
6:G:75:PRO:C	6:G:77:ASP:H	2.07	0.58
1:B:1317:MET:O	1:B:1322:ILE:HD11	2.03	0.58
1:B:84:ILE:HG22	1:B:239:LEU:HB3	1.85	0.58
1:B:652:VAL:HG12	1:B:653:VAL:N	2.18	0.58
1:B:69:THR:C	1:B:71:GLN:H	2.07	0.58
1:B:798:GLY:HA2	1:B:815:PHE:HD1	1.68	0.58
1:B:7:SER:HB3	2:C:1193:GLN:OE1	2.04	0.58
2:C:1172:ILE:HG22	2:C:1172:ILE:O	2.03	0.58
2:C:121:ASN:HA	2:C:207:GLY:CA	2.28	0.58
2:C:184:ALA:HB1	2:C:188:ASP:HB3	1.85	0.58
2:C:398:ARG:HG3	2:C:398:ARG:NH1	2.18	0.58
2:C:542:MET:HE1	2:C:743:ILE:HG13	1.86	0.58
2:C:521:LEU:HB3	2:C:633:VAL:HG11	1.86	0.58
2:C:857:ARG:HD2	2:C:945:GLU:OE1	2.03	0.58
4:E:5:THR:HG23	7:H:9:LEU:HB2	1.86	0.58
5:F:111:VAL:HG12	5:F:137:GLU:HG2	1.86	0.58
6:G:79:ARG:HB3	6:G:144:GLU:CD	2.23	0.58
7:H:1:MET:O	7:H:3:PHE:CE1	2.57	0.58
11:L:42:LEU:O	11:L:46:ILE:HG13	2.04	0.58
1:B:981:LEU:HD23	1:B:1039:LYS:HA	1.85	0.58
1:B:1118:VAL:HG23	1:B:1306:LEU:HB2	1.85	0.58
1:B:499:ALA:O	1:B:503:GLN:HB2	2.04	0.58
1:B:55:ASP:O	1:B:55:ASP:CG	2.41	0.58
2:C:310:MET:O	2:C:314:LEU:HD12	2.04	0.58
2:C:471:LYS:O	2:C:472:ALA:CB	2.52	0.58
3:D:38:ILE:HA	3:D:173:ALA:CB	2.33	0.58
1:B:913:LEU:HD23	1:B:919:ILE:HD12	1.84	0.57
2:C:244:LEU:O	2:C:249:ARG:HG2	2.03	0.57
2:C:862:GLN:HG2	2:C:963:PHE:HD1	1.69	0.57
1:B:1436:ILE:O	1:B:1437:GLY:C	2.43	0.57
1:B:438:ASP:OD1	1:B:461:LYS:HA	2.04	0.57
1:B:584:ASN:HA	1:B:609:ASP:O	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:711:ARG:NH2	9:J:87:GLN:OE1	2.38	0.57
1:B:63:ARG:HA	1:B:74:MET:SD	2.44	0.57
1:B:756:ILE:O	1:B:759:ALA:HB3	2.04	0.57
2:C:129:PHE:CE2	2:C:166:PHE:HD1	2.22	0.57
2:C:63:ILE:HA	2:C:421:PHE:CE2	2.39	0.57
2:C:459:TYR:CE1	2:C:469:GLN:HG2	2.39	0.57
2:C:56:ASP:HB3	2:C:57:TYR:CD1	2.38	0.57
2:C:617:ARG:HA	2:C:624:LEU:HD12	1.87	0.57
3:D:232:VAL:HG21	3:D:244:VAL:HG22	1.86	0.57
3:D:6:PRO:CB	3:D:25:VAL:HG12	2.33	0.57
7:H:127:PRO:HG3	7:H:139:ILE:HD12	1.86	0.57
9:J:99:LEU:N	9:J:99:LEU:HD23	2.19	0.57
11:L:18:LYS:NZ	11:L:38:GLU:HG2	2.19	0.57
1:B:1057:VAL:HG12	1:B:1058:VAL:N	2.19	0.57
1:B:1402:PHE:CD1	1:B:1403:GLU:HG3	2.38	0.57
1:B:814:PHE:O	1:B:818:MET:HG3	2.04	0.57
4:E:34:GLN:C	4:E:36:LYS:H	2.07	0.57
11:L:68:PHE:HD1	11:L:70:ARG:NH1	2.01	0.57
1:B:1127:ASP:OD1	1:B:1130:GLN:HB2	2.04	0.57
1:B:1205:LYS:O	1:B:1207:LEU:HG	2.03	0.57
1:B:1230:GLU:O	1:B:1232:ASN:N	2.38	0.57
1:B:1138:ILE:HG21	1:B:1316:VAL:HG13	1.87	0.57
1:B:138:ILE:HG21	1:B:222:LEU:CD2	2.33	0.57
2:C:1192:TYR:CD1	2:C:1192:TYR:N	2.73	0.57
2:C:388:CYS:O	2:C:390:LEU:N	2.36	0.57
2:C:446:LEU:HG	2:C:446:LEU:O	2.03	0.57
4:E:66:ARG:HD2	4:E:133:THR:HB	1.84	0.57
5:F:22:MET:HE2	5:F:26:ARG:HE	1.70	0.57
1:B:1373:ASP:HA	1:B:1376:THR:CG2	2.33	0.57
1:B:147:VAL:O	1:B:149:GLU:HG3	2.04	0.57
1:B:401:GLY:C	1:B:435:HIS:CD2	2.78	0.57
1:B:417:TYR:N	1:B:417:TYR:CD2	2.72	0.57
2:C:778:MET:HE1	2:C:1094:ARG:NE	2.19	0.57
2:C:834:ASN:HB3	2:C:840:ILE:HG13	1.85	0.57
2:C:882:THR:CG2	2:C:884:ARG:HB2	2.35	0.57
3:D:31:ASN:HA	3:D:34:ARG:HB3	1.86	0.57
9:J:119:THR:O	9:J:119:THR:HG22	2.04	0.57
9:J:15:TYR:N	9:J:15:TYR:CD1	2.71	0.57
1:B:180:LYS:HZ1	1:B:294:SER:HB3	1.65	0.57
3:D:43:THR:CG2	3:D:44:LEU:H	2.10	0.57
4:E:16:LYS:HG2	4:E:18:VAL:HG12	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:37:GLN:OE1	7:H:5:LYS:HD2	2.05	0.57
5:F:178:ILE:HB	5:F:212:ARG:HD3	1.85	0.57
13:N:2:DA:C2'	13:N:3:DG:C8	2.88	0.57
1:B:726:ARG:O	1:B:729:ALA:HB3	2.04	0.57
1:B:984:LYS:HG2	1:B:988:LEU:HD12	1.86	0.57
2:C:803:LEU:HD12	2:C:1032:SER:HB3	1.86	0.57
2:C:1197:PRO:O	2:C:1200:ALA:HB3	2.04	0.57
2:C:273:LEU:HD22	2:C:360:PHE:HD1	1.69	0.57
2:C:361:LEU:HD11	2:C:381:MET:HE1	1.85	0.57
2:C:363:HIS:O	2:C:364:ILE:HB	2.04	0.57
1:B:87:ALA:CB	1:B:276:LEU:HD23	2.35	0.57
1:B:35:ILE:HA	1:B:52:GLY:O	2.04	0.57
1:B:445:ASN:HA	1:B:478:TYR:HE2	1.70	0.57
2:C:254:LEU:HD23	2:C:381:MET:HE1	1.86	0.57
2:C:582:VAL:HB	2:C:587:HIS:CD2	2.40	0.57
7:H:83:LYS:HE2	7:H:150:CYS:H	1.68	0.57
10:K:23:ASN:O	10:K:25:LEU:N	2.38	0.57
12:M:27:LEU:HB3	12:M:37:LYS:CD	2.34	0.57
1:B:320:ARG:HH22	14:P:3:C:H1'	1.67	0.57
1:B:1198:ASP:HB3	1:B:1201:ALA:CB	2.34	0.57
1:B:567:LYS:HB3	8:I:95:TYR:CA	2.34	0.57
2:C:1069:PHE:N	2:C:1069:PHE:CD1	2.73	0.57
1:B:667:GLY:HA3	3:D:192:TRP:HH2	1.69	0.57
8:I:128:ASN:H	8:I:130:ARG:NH2	2.02	0.57
1:B:1276:VAL:HB	1:B:1279:ILE:HD12	1.86	0.57
1:B:436:ILE:N	1:B:436:ILE:HD13	2.19	0.57
1:B:545:GLN:C	1:B:547:LEU:N	2.56	0.57
1:B:84:ILE:HD11	1:B:270:LEU:HD13	1.87	0.57
1:B:903:ASN:ND2	1:B:904:THR:N	2.52	0.57
1:B:903:ASN:O	1:B:907:THR:HB	2.05	0.57
1:B:346:ASP:HB3	2:C:1108:ARG:H	1.70	0.57
2:C:176:SER:O	2:C:182:SER:HB3	2.05	0.57
3:D:74:SER:HB3	3:D:77:ILE:CG1	2.34	0.57
5:F:100:ILE:HG23	5:F:105:PHE:CD1	2.39	0.57
7:H:154:VAL:HG12	7:H:155:SER:N	2.20	0.57
14:P:5:C:H2'	14:P:6:A:C8	2.40	0.57
1:B:1373:ASP:CA	1:B:1376:THR:HG22	2.34	0.56
1:B:37:PHE:N	1:B:37:PHE:HD1	2.03	0.56
2:C:240:ILE:CG2	2:C:254:LEU:HB3	2.35	0.56
2:C:345:LYS:O	2:C:347:LYS:HG2	2.05	0.56
2:C:433:GLN:O	2:C:434:ARG:HG3	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:J:92:ARG:HG2	9:J:94:ASP:OD1	2.05	0.56
14:P:6:A:H2'	14:P:7:A:C8	2.40	0.56
1:B:541:ILE:HD13	1:B:549:MET:HE1	1.87	0.56
2:C:780:VAL:HG12	2:C:782:LEU:O	2.05	0.56
4:E:153:ARG:C	4:E:154:PHE:CD1	2.78	0.56
12:M:25:ALA:O	12:M:26:THR:HB	2.05	0.56
1:B:1072:ILE:HD11	1:B:1368:MET:HA	1.86	0.56
1:B:590:ARG:HD3	1:B:604:GLY:HA2	1.87	0.56
1:B:596:THR:C	1:B:598:LEU:H	2.08	0.56
1:B:881:GLN:O	1:B:953:ASN:HA	2.05	0.56
1:B:901:LEU:HA	1:B:907:THR:OG1	2.06	0.56
1:B:90:VAL:HG13	1:B:297:GLN:HA	1.86	0.56
1:B:881:GLN:NE2	1:B:959:ASN:HA	2.21	0.56
1:B:22:PHE:CD1	2:C:1213:THR:HG22	2.40	0.56
2:C:129:PHE:HE2	2:C:166:PHE:HD1	1.54	0.56
2:C:129:PHE:HE2	2:C:166:PHE:CD1	2.22	0.56
3:D:137:LYS:HB3	3:D:138:GLU:OE1	2.04	0.56
3:D:20:PHE:HE1	3:D:22:LEU:HB2	1.71	0.56
4:E:64:VAL:O	4:E:67:ARG:N	2.38	0.56
7:H:13:LEU:O	7:H:67:SER:HA	2.05	0.56
7:H:23:LYS:HG3	7:H:56:ILE:CD1	2.35	0.56
1:B:1373:ASP:O	1:B:1376:THR:N	2.39	0.56
1:B:401:GLY:C	1:B:435:HIS:HD2	2.09	0.56
1:B:719:VAL:CG1	1:B:723:ASN:HD21	2.18	0.56
1:B:984:LYS:O	1:B:988:LEU:HB2	2.06	0.56
2:C:1002:THR:O	2:C:1005:GLY:N	2.37	0.56
2:C:180:TYR:HD1	2:C:180:TYR:H	1.53	0.56
3:D:116:LYS:O	3:D:118:LEU:N	2.37	0.56
3:D:249:ASP:O	3:D:252:GLN:HB3	2.05	0.56
7:H:129:SER:CB	7:H:138:THR:OG1	2.52	0.56
7:H:26:LEU:HD12	7:H:56:ILE:HG21	1.86	0.56
1:B:1130:GLN:O	1:B:1134:ILE:HG13	2.04	0.56
1:B:1334:ASP:C	1:B:1336:MET:H	2.07	0.56
1:B:334:GLY:O	1:B:336:ILE:N	2.39	0.56
1:B:34:LYS:N	1:B:34:LYS:HD3	2.20	0.56
1:B:494:SER:O	1:B:497:THR:HB	2.05	0.56
1:B:719:VAL:HG12	1:B:723:ASN:ND2	2.20	0.56
1:B:751:SER:O	1:B:752:LYS:CB	2.53	0.56
2:C:999:MET:HG2	2:C:1007:VAL:HG22	1.86	0.56
2:C:1187:ASN:O	2:C:1188:LYS:CB	2.54	0.56
2:C:204:ILE:C	2:C:205:ILE:HD12	2.25	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:278:GLN:CG	2:C:279:ASP:H	2.06	0.56
2:C:838:SER:HA	2:C:989:THR:O	2.05	0.56
4:E:198:LEU:O	4:E:200:ASN:N	2.38	0.56
5:F:147:HIS:HD2	5:F:149:LEU:HB2	1.70	0.56
5:F:5:ASN:O	5:F:9:ILE:HG13	2.05	0.56
1:B:1444:MET:HG2	7:H:60:ARG:HA	1.87	0.56
8:I:36:CYS:HA	8:I:126:GLU:O	2.05	0.56
10:K:14:VAL:CG1	10:K:50:ILE:HD11	2.36	0.56
10:K:57:ILE:HA	10:K:60:PHE:CD2	2.30	0.56
3:D:258:ILE:HG23	11:L:19:LEU:HD11	1.88	0.56
11:L:19:LEU:HD22	11:L:33:ILE:CG2	2.36	0.56
1:B:1120:LEU:CD1	1:B:1120:LEU:N	2.68	0.56
1:B:211:PHE:HA	1:B:214:ILE:HG13	1.88	0.56
1:B:225:ASN:ND2	1:B:227:VAL:H	2.03	0.56
1:B:503:GLN:C	1:B:504:LEU:HD12	2.25	0.56
1:B:524:VAL:CG1	1:B:525:GLN:H	2.12	0.56
1:B:586:ILE:CG2	1:B:587:HIS:N	2.68	0.56
2:C:1099:VAL:HG13	2:C:1100:ASP:H	1.70	0.56
2:C:496:ARG:NH1	2:C:496:ARG:HB3	2.20	0.56
1:B:98:LYS:HE2	1:B:224:PHE:CZ	2.40	0.56
2:C:1169:MET:HE1	2:C:1201:LYS:HA	1.86	0.56
2:C:459:TYR:CZ	2:C:469:GLN:HG2	2.41	0.56
1:B:347:PHE:CE2	1:B:375:THR:HG23	2.40	0.56
1:B:37:PHE:N	1:B:37:PHE:CD1	2.74	0.56
1:B:382:PRO:CB	1:B:428:TYR:HE2	2.17	0.56
2:C:102:VAL:HG23	2:C:112:LEU:HB2	1.86	0.56
2:C:212:LEU:HD12	2:C:409:ALA:HB1	1.87	0.56
2:C:56:ASP:HB3	2:C:57:TYR:HD1	1.71	0.56
2:C:957:ASN:HB3	2:C:961:LEU:H	1.70	0.56
4:E:59:ILE:HG21	4:E:145:MET:SD	2.46	0.56
5:F:156:LEU:HA	5:F:160:GLU:OE1	2.04	0.56
8:I:18:GLY:O	8:I:19:ARG:HB2	2.05	0.56
11:L:46:ILE:O	11:L:46:ILE:HG22	2.06	0.56
1:B:1114:PRO:HG2	1:B:1115:SER:H	1.70	0.56
1:B:1349:TYR:HA	1:B:1372:VAL:HG21	1.87	0.56
1:B:18:GLN:NE2	1:B:228:PHE:CE1	2.74	0.56
1:B:37:PHE:HB2	1:B:52:GLY:CA	2.30	0.56
1:B:527:THR:HG21	1:B:650:GLN:HA	1.87	0.56
1:B:693:VAL:HG21	1:B:721:PHE:HE1	1.70	0.56
2:C:422:LYS:O	2:C:426:LYS:HG2	2.05	0.56
2:C:542:MET:HB3	2:C:636:PRO:HD2	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:616:ILE:HG23	2:C:700:SER:OG	2.06	0.56
2:C:758:PHE:CE1	2:C:1027:ILE:HG22	2.41	0.56
8:I:100:THR:HG22	8:I:101:ALA:N	2.21	0.56
1:B:1076:ALA:HA	1:B:1079:MET:HE1	1.88	0.56
2:C:215:GLN:OE1	2:C:479:VAL:HG22	2.06	0.56
2:C:411:PRO:O	2:C:414:ALA:HB3	2.06	0.56
2:C:521:LEU:HD13	2:C:633:VAL:HB	1.87	0.56
3:D:56:THR:CG2	3:D:58:LEU:HD23	2.36	0.56
6:G:90:ARG:CG	6:G:91:ALA:N	2.63	0.56
1:B:367:PRO:HA	1:B:463:ILE:O	2.05	0.56
2:C:221:ASN:N	2:C:241:ARG:O	2.31	0.56
5:F:93:MET:SD	5:F:97:VAL:HG23	2.46	0.56
7:H:13:LEU:HD12	7:H:26:LEU:HD21	1.88	0.56
11:L:109:TRP:O	11:L:112:GLN:HB2	2.06	0.56
11:L:58:PHE:HE2	11:L:74:ARG:NE	2.04	0.56
1:B:545:GLN:C	1:B:547:LEU:H	2.09	0.55
1:B:78:PRO:HA	2:C:1201:LYS:HZ2	1.71	0.55
1:B:347:PHE:N	2:C:1107:ALA:HA	2.17	0.55
2:C:1151:LEU:CD1	2:C:1151:LEU:N	2.68	0.55
2:C:423:LYS:HE2	2:C:470:LYS:NZ	2.21	0.55
2:C:758:PHE:CE2	2:C:1044:ALA:HA	2.40	0.55
2:C:833:TYR:CD1	2:C:833:TYR:N	2.70	0.55
2:C:871:THR:HG22	2:C:872:GLU:N	2.21	0.55
2:C:871:THR:HG22	2:C:872:GLU:O	2.06	0.55
2:C:906:SER:HA	2:C:946:ASN:HB2	1.86	0.55
2:C:956:THR:HG22	2:C:957:ASN:O	2.07	0.55
4:E:183:LEU:HD22	7:H:144:ARG:NH2	2.21	0.55
1:B:1152:ILE:HG22	1:B:1192:LEU:O	2.07	0.55
1:B:230:ARG:N	1:B:233:TRP:CE3	2.62	0.55
1:B:441:PRO:CG	1:B:498:ARG:HB2	2.36	0.55
1:B:808:LEU:HD23	1:B:813:PHE:HA	1.88	0.55
2:C:1047:PHE:CD1	2:C:1047:PHE:N	2.74	0.55
2:C:1156:ASP:HB3	2:C:1198:TYR:N	2.17	0.55
2:C:311:LEU:O	2:C:312:GLU:C	2.44	0.55
1:B:315:LEU:HD12	2:C:471:LYS:HB3	1.88	0.55
3:D:254:LYS:C	3:D:256:ALA:H	2.09	0.55
3:D:48:SER:HB3	3:D:158:VAL:HB	1.87	0.55
1:B:857:ARG:NH2	6:G:139:PRO:HG3	2.21	0.55
7:H:79:PHE:CE2	7:H:105:PRO:HG2	2.37	0.55
1:B:698:GLN:HA	9:J:97:MET:O	2.06	0.55
1:B:1226:VAL:HG22	1:B:1240:CYS:CB	2.33	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1242:VAL:HG12	1:B:1243:VAL:N	2.19	0.55
1:B:1325:THR:O	1:B:1325:THR:CG2	2.54	0.55
1:B:224:PHE:CG	1:B:231:PRO:HG3	2.41	0.55
1:B:53:LEU:CD2	1:B:54:ASN:ND2	2.68	0.55
1:B:666:ILE:HD12	1:B:666:ILE:N	2.21	0.55
2:C:38:PHE:CD1	2:C:811:TYR:CD2	2.94	0.55
2:C:577:ALA:HB1	2:C:589:VAL:CG1	2.27	0.55
4:E:137:ASN:H	4:E:137:ASN:ND2	2.04	0.55
5:F:135:PHE:CD2	5:F:140:LEU:HD21	2.38	0.55
6:G:82:THR:CG2	6:G:84:TYR:H	2.16	0.55
9:J:55:THR:HG22	9:J:55:THR:O	2.06	0.55
9:J:59:VAL:C	9:J:61:ASP:H	2.10	0.55
1:B:1149:ALA:HB2	9:J:47:GLU:HA	1.88	0.55
1:B:1266:THR:O	1:B:1270:ASN:HB2	2.06	0.55
1:B:353:ILE:CG2	1:B:487:MET:HE3	2.35	0.55
1:B:541:ILE:HG21	1:B:549:MET:CE	2.36	0.55
2:C:757:PRO:HG3	2:C:1028:GLU:OE2	2.06	0.55
2:C:418:LYS:HE2	2:C:422:LYS:NZ	2.21	0.55
2:C:986:GLN:OE1	2:C:986:GLN:HA	2.05	0.55
8:I:59:ILE:O	8:I:60:ALA:HB3	2.06	0.55
10:K:48:ARG:C	10:K:48:ARG:HD2	2.27	0.55
15:T:21:DA:H2'	15:T:22:DT:O5'	2.03	0.55
1:B:1210:GLY:O	1:B:1214:GLU:HG2	2.06	0.55
1:B:1261:LYS:CA	1:B:1264:GLU:HB3	2.36	0.55
1:B:1319:VAL:HG13	1:B:1320:PRO:HD2	1.88	0.55
1:B:33:ALA:HB1	1:B:56:PRO:HB2	1.89	0.55
2:C:25:ILE:HG22	2:C:29:ASP:CB	2.36	0.55
2:C:552:MET:HA	2:C:555:ILE:HB	1.89	0.55
2:C:708:GLU:O	2:C:710:LEU:N	2.39	0.55
4:E:69:ALA:HA	4:E:72:ARG:HG3	1.88	0.55
5:F:153:HIS:CE1	5:F:184:VAL:HG11	2.41	0.55
7:H:31:LEU:HD22	7:H:48:VAL:HG21	1.89	0.55
8:I:118:PHE:C	8:I:120:GLY:H	2.10	0.55
9:J:5:ARG:O	9:J:14:LEU:HG	2.07	0.55
10:K:23:ASN:C	10:K:25:LEU:N	2.60	0.55
1:B:1280:GLU:O	1:B:1282:VAL:HG23	2.06	0.55
1:B:244:PRO:HB2	1:B:245:PRO:CD	2.32	0.55
1:B:322:VAL:O	1:B:322:VAL:HG12	2.07	0.55
2:C:483:LEU:HD21	2:C:491:THR:HG23	1.89	0.55
3:D:182:PRO:HG3	3:D:206:ASN:O	2.06	0.55
6:G:130:ILE:O	6:G:148:VAL:HG21	2.06	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1002:GLY:HA3	1:B:1007:ILE:CG2	2.30	0.55
1:B:230:ARG:N	1:B:233:TRP:HE3	2.02	0.55
1:B:545:GLN:O	1:B:547:LEU:N	2.40	0.55
2:C:51:PHE:CD2	2:C:173:MET:HB3	2.41	0.55
2:C:221:ASN:OD1	2:C:242:SER:HA	2.06	0.55
2:C:273:LEU:HD22	2:C:360:PHE:CD1	2.42	0.55
2:C:315:LYS:N	2:C:316:PRO:HD2	2.21	0.55
5:F:147:HIS:CD2	5:F:149:LEU:H	2.25	0.55
7:H:153:GLN:HG3	7:H:154:VAL:HG23	1.87	0.55
1:B:1351:GLU:O	1:B:1355:VAL:HG23	2.07	0.55
1:B:61:ILE:HG22	1:B:62:ASP:N	2.22	0.55
2:C:1008:PRO:HB2	2:C:1010:LEU:O	2.07	0.55
2:C:508:LEU:O	2:C:509:ALA:HB3	2.07	0.55
2:C:583:ASN:HD21	2:C:628:THR:CG2	2.20	0.55
2:C:637:LEU:HD21	2:C:742:GLU:OE2	2.07	0.55
2:C:520:GLY:N	2:C:748:ILE:HG22	2.19	0.55
2:C:973:ILE:HG23	2:C:974:PRO:HD2	1.88	0.55
5:F:78:LEU:HD21	5:F:80:VAL:CG2	2.37	0.55
1:B:1149:ALA:CB	9:J:47:GLU:HA	2.36	0.55
1:B:150:THR:HG23	1:B:166:GLY:HA2	1.89	0.55
1:B:608:ILE:C	1:B:610:GLY:H	2.10	0.55
2:C:60:GLN:HE22	2:C:94:LYS:HA	1.72	0.55
3:D:80:LEU:HD22	3:D:129:ILE:HD13	1.88	0.55
5:F:43:LYS:O	5:F:45:LYS:N	2.40	0.55
7:H:81:PRO:HG3	7:H:106:MET:SD	2.46	0.55
7:H:143:ILE:CG2	7:H:144:ARG:H	2.20	0.55
8:I:130:ARG:HA	8:I:133:ASN:HB2	1.89	0.55
8:I:139:ASN:O	8:I:140:ALA:CB	2.55	0.55
10:K:8:PHE:H	10:K:49:MET:HE1	1.70	0.55
11:L:93:SER:O	11:L:97:LYS:HG3	2.06	0.55
1:B:407:ARG:HG2	1:B:430:TRP:CZ2	2.41	0.55
1:B:682:THR:HG23	1:B:728:LYS:CE	2.22	0.55
1:B:828:ALA:HB3	2:C:530:GLY:HA2	1.87	0.55
2:C:654:ARG:N	2:C:657:HIS:HD2	1.96	0.55
3:D:11:ARG:HD3	3:D:209:TYR:OH	2.07	0.55
4:E:35:LEU:HA	4:E:47:LEU:HB2	1.89	0.55
5:F:121:MET:O	5:F:124:VAL:HG23	2.07	0.55
1:B:185:TRP:HZ3	1:B:200:ARG:HG2	1.71	0.54
1:B:503:GLN:HE21	6:G:90:ARG:HH21	1.54	0.54
1:B:586:ILE:HG22	1:B:587:HIS:H	1.69	0.54
2:C:1103:ILE:O	2:C:1122:ARG:NH1	2.40	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:423:LYS:HE2	2:C:470:LYS:HZ1	1.72	0.54
2:C:843:GLN:O	2:C:844:SER:C	2.45	0.54
3:D:212:PRO:HB3	3:D:213:PRO:HD2	1.89	0.54
4:E:5:THR:CG2	7:H:9:LEU:HB2	2.36	0.54
5:F:157:SER:C	5:F:159:ASP:H	2.09	0.54
5:F:78:LEU:C	5:F:78:LEU:HD23	2.28	0.54
1:B:172:PRO:HB3	1:B:185:TRP:CD2	2.42	0.54
1:B:206:GLU:O	1:B:210:ILE:HG13	2.07	0.54
1:B:87:ALA:HB3	1:B:276:LEU:CD2	2.37	0.54
1:B:709:THR:HG22	1:B:710:LEU:N	2.22	0.54
1:B:827:THR:CG2	1:B:828:ALA:N	2.70	0.54
1:B:29:ALA:HB1	2:C:1184:GLY:CA	2.36	0.54
2:C:361:LEU:HD21	2:C:377:PHE:HB3	1.88	0.54
3:D:46:ILE:CG2	3:D:157:CYS:HB3	2.35	0.54
3:D:173:ALA:O	3:D:174:ALA:HB3	2.06	0.54
3:D:34:ARG:O	3:D:38:ILE:HG13	2.07	0.54
3:D:44:LEU:HG	3:D:159:ALA:HB1	1.88	0.54
7:H:3:PHE:CD1	7:H:80:LYS:NZ	2.75	0.54
8:I:107:VAL:O	8:I:108:SER:O	2.25	0.54
1:B:374:LEU:CB	1:B:436:ILE:HD11	2.37	0.54
1:B:54:ASN:HD21	1:B:247:ARG:HH12	1.55	0.54
1:B:829:VAL:C	1:B:831:THR:H	2.10	0.54
2:C:485:ARG:NH2	2:C:782:LEU:HD11	2.22	0.54
2:C:942:ARG:O	2:C:944:THR:N	2.41	0.54
5:F:22:MET:HE3	5:F:26:ARG:HE	1.71	0.54
6:G:89:GLU:OE2	6:G:134:ILE:HG21	2.07	0.54
12:M:38:LEU:CD1	12:M:49:LYS:HG2	2.38	0.54
1:B:172:PRO:HD3	1:B:185:TRP:CE2	2.43	0.54
1:B:347:PHE:HE2	1:B:375:THR:HG23	1.73	0.54
1:B:356:ASP:CB	1:B:469:ARG:HH12	2.08	0.54
1:B:498:ARG:HA	1:B:501:LEU:HD12	1.88	0.54
1:B:765:VAL:HG23	1:B:802:ASN:O	2.07	0.54
1:B:896:ARG:NH2	1:B:1030:ARG:NH2	2.56	0.54
2:C:1095:LEU:N	2:C:1095:LEU:HD12	2.22	0.54
2:C:542:MET:HE2	2:C:743:ILE:HG13	1.89	0.54
4:E:53:SER:H	4:E:148:LEU:HD21	1.72	0.54
5:F:93:MET:HE3	5:F:123:LEU:HB2	1.87	0.54
8:I:40:LEU:HD22	8:I:123:MET:CE	2.37	0.54
8:I:135:LEU:HD13	8:I:137:GLN:NE2	2.19	0.54
9:J:35:VAL:HG12	9:J:36:GLU:H	1.73	0.54
11:L:19:LEU:HD21	11:L:35:PHE:CE2	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:T:19:DT:H2'	15:T:20:DT:C6	2.42	0.54
1:B:1213:GLY:O	1:B:1214:GLU:C	2.45	0.54
1:B:1394:THR:HG22	1:B:1395:GLY:N	2.21	0.54
1:B:18:GLN:CB	2:C:1215:ARG:HB2	2.37	0.54
1:B:353:ILE:CD1	1:B:487:MET:HE2	2.36	0.54
1:B:69:THR:C	1:B:71:GLN:N	2.61	0.54
2:C:984:HIS:NE2	2:C:1025:HIS:HA	2.23	0.54
2:C:312:GLU:O	2:C:315:LYS:HB2	2.07	0.54
2:C:240:ILE:HG21	2:C:381:MET:HE1	1.89	0.54
2:C:693:ILE:HD11	2:C:740:HIS:CD2	2.43	0.54
3:D:174:ALA:O	3:D:175:ALA:HB2	2.08	0.54
4:E:160:VAL:O	4:E:164:ILE:HG13	2.06	0.54
6:G:86:THR:HG23	6:G:89:GLU:OE1	2.08	0.54
9:J:34:TYR:CD2	9:J:35:VAL:N	2.75	0.54
1:B:1144:LYS:HD2	1:B:1268:LEU:O	2.08	0.54
1:B:1308:THR:HG23	1:B:1309:ASP:N	2.21	0.54
1:B:149:GLU:HB2	1:B:164:ARG:HH21	1.72	0.54
1:B:500:GLU:OE2	2:C:1145:SER:HB2	2.06	0.54
1:B:853:ASP:OD1	1:B:855:THR:HG22	2.08	0.54
2:C:1001:PHE:CZ	2:C:1073:TYR:HB2	2.42	0.54
2:C:314:LEU:O	2:C:318:VAL:HG23	2.08	0.54
2:C:449:ASN:C	2:C:451:LYS:H	2.10	0.54
2:C:642:ASP:CB	2:C:649:LYS:HG3	2.38	0.54
3:D:175:ALA:HB3	10:K:43:ARG:HH22	1.71	0.54
3:D:255:VAL:HG12	11:L:91:CYS:HB3	1.90	0.54
1:B:809:THR:H	1:B:812:GLU:HB2	1.71	0.54
1:B:901:LEU:H	1:B:926:GLN:CD	2.10	0.54
1:B:91:PHE:N	1:B:297:GLN:HE22	2.04	0.54
2:C:393:LYS:CE	2:C:393:LYS:HA	2.35	0.54
2:C:247:GLY:H	2:C:418:LYS:HZ1	1.54	0.54
1:B:472:LEU:HD11	2:C:835:GLN:NE2	2.22	0.54
2:C:1084:GLN:OE1	3:D:189:THR:HG22	2.08	0.54
2:C:1001:PHE:CE2	3:D:34:ARG:CZ	2.91	0.54
3:D:35:ARG:HA	3:D:38:ILE:HD12	1.89	0.54
4:E:118:THR:HB	4:E:121:LYS:CB	2.38	0.54
4:E:141:LEU:HD12	4:E:141:LEU:O	2.07	0.54
4:E:207:LEU:HD12	4:E:207:LEU:O	2.08	0.54
6:G:116:ASP:O	6:G:120:ILE:HG13	2.07	0.54
7:H:14:HIS:CD2	7:H:16:SER:CB	2.91	0.54
9:J:93:LYS:CD	9:J:93:LYS:H	2.18	0.54
15:T:25:DC:N4	15:T:26:DA:N6	2.34	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:834:THR:HG21	1:B:1077:THR:CA	2.38	0.54
1:B:367:PRO:HB3	1:B:466:SER:HA	1.89	0.54
1:B:471:ASN:OD1	1:B:472:LEU:N	2.41	0.54
1:B:639:PRO:HG2	1:B:640:GLN:N	2.22	0.54
1:B:977:LYS:HB3	1:B:978:PRO:HD2	1.89	0.54
2:C:1183:LYS:O	2:C:1183:LYS:HE3	2.06	0.54
2:C:357:GLN:O	2:C:366:GLN:HA	2.08	0.54
2:C:601:ARG:O	2:C:605:ARG:HG3	2.08	0.54
2:C:651:LEU:HD11	2:C:707:PRO:HB3	1.89	0.54
5:F:213:ILE:HG12	5:F:214:CYS:H	1.69	0.54
1:B:17:VAL:HG23	1:B:1421:CYS:SG	2.48	0.54
1:B:35:ILE:HD13	1:B:241:VAL:HG11	1.88	0.54
1:B:251:SER:HA	1:B:257:ARG:O	2.08	0.54
1:B:443:LEU:HD12	2:C:1146:PHE:CE2	2.42	0.54
1:B:485:ASP:OD1	14:P:10:A:H4'	2.08	0.54
1:B:827:THR:O	1:B:831:THR:HB	2.08	0.54
2:C:762:ASN:ND2	2:C:1024:ALA:HB3	2.18	0.54
2:C:25:ILE:HD12	2:C:651:LEU:CD1	2.36	0.54
2:C:274:PRO:O	2:C:275:TYR:HB2	2.07	0.54
2:C:365:THR:HG21	2:C:370:PHE:CD1	2.43	0.54
2:C:642:ASP:CA	2:C:649:LYS:HG3	2.38	0.54
2:C:745:PRO:C	2:C:747:MET:N	2.60	0.54
5:F:14:ARG:HH21	5:F:141:VAL:CG1	2.21	0.54
7:H:44:TYR:CD2	7:H:105:PRO:HB2	2.43	0.54
8:I:59:ILE:CG2	8:I:60:ALA:N	2.56	0.54
1:B:1152:ILE:HD11	9:J:44:TYR:HD2	1.73	0.54
1:B:1022:LEU:CD1	1:B:1026:LEU:HD12	2.38	0.54
1:B:834:THR:HG21	1:B:1077:THR:OG1	2.08	0.54
1:B:1152:ILE:HG13	9:J:44:TYR:HB3	1.90	0.54
1:B:115:LEU:HD12	1:B:142:CYS:HB3	1.89	0.54
1:B:1324:PRO:HB2	5:F:142:VAL:HG11	1.88	0.54
1:B:1343:ALA:HB2	5:F:150:VAL:CG2	2.35	0.54
1:B:1349:TYR:HE1	1:B:1368:MET:HE3	1.73	0.54
2:C:1015:HIS:O	2:C:1018:PRO:HD2	2.08	0.54
1:B:490:HIS:HB3	2:C:1150:ARG:NH1	2.22	0.54
2:C:1180:PHE:O	2:C:1181:GLU:O	2.26	0.54
3:D:246:ARG:HA	3:D:249:ASP:HB3	1.89	0.54
11:L:18:LYS:HZ2	11:L:38:GLU:HG2	1.71	0.54
11:L:48:ALA:O	11:L:51:LEU:N	2.39	0.54
1:B:1254:ALA:O	1:B:1255:GLU:HB2	2.07	0.53
1:B:1329:THR:CG2	1:B:1331:SER:HB3	2.38	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:101:MET:HA	2:C:112:LEU:H	1.73	0.53
2:C:288:ALA:CB	2:C:331:LEU:HD12	2.38	0.53
2:C:653:VAL:HA	2:C:689:LEU:HD22	1.89	0.53
1:B:1001:ARG:NE	6:G:83:PRO:HD3	2.23	0.53
8:I:15:VAL:HA	8:I:26:ILE:HG12	1.90	0.53
1:B:152:VAL:CG1	1:B:153:PRO:HD2	2.38	0.53
1:B:709:THR:HB	1:B:712:GLU:H	1.73	0.53
1:B:858:ASN:HD22	1:B:858:ASN:C	2.11	0.53
2:C:117:ALA:CB	2:C:122:LEU:HB2	2.38	0.53
2:C:642:ASP:CA	2:C:649:LYS:HA	2.29	0.53
11:L:40:HIS:O	11:L:43:GLY:N	2.41	0.53
11:L:58:PHE:CD1	11:L:59:ALA:N	2.76	0.53
3:D:52:GLU:HA	12:M:64:LEU:HD22	1.90	0.53
1:B:1118:VAL:CG2	1:B:1306:LEU:HB2	2.38	0.53
1:B:1264:GLU:HG3	1:B:1265:ASN:N	2.22	0.53
1:B:524:VAL:CG1	1:B:525:GLN:N	2.71	0.53
1:B:526:ASP:HB2	2:C:835:GLN:OE1	2.07	0.53
1:B:606:LEU:HB3	1:B:614:PHE:CD2	2.44	0.53
1:B:896:ARG:HD3	1:B:897:TYR:CE1	2.44	0.53
2:C:112:LEU:HD12	2:C:113:TYR:H	1.72	0.53
2:C:100:PRO:HD3	2:C:172:ILE:CD1	2.38	0.53
2:C:23:ALA:HB1	2:C:24:PRO:CD	2.29	0.53
2:C:365:THR:HG23	2:C:367:LEU:N	2.23	0.53
2:C:400:HIS:O	2:C:402:GLY:N	2.41	0.53
2:C:498:THR:CG2	2:C:537:LYS:HB2	2.38	0.53
2:C:653:VAL:HG22	2:C:689:LEU:HB3	1.90	0.53
2:C:707:PRO:HG2	2:C:708:GLU:H	1.72	0.53
3:D:69:LEU:HD12	3:D:69:LEU:H	1.73	0.53
4:E:154:PHE:CE2	4:E:163:VAL:HG21	2.43	0.53
5:F:156:LEU:HD12	5:F:195:VAL:CB	2.32	0.53
5:F:192:ARG:O	5:F:192:ARG:HG2	2.07	0.53
8:I:32:THR:HG22	8:I:33:GLN:OE1	2.07	0.53
9:J:76:PRO:HD2	9:J:108:HIS:HD2	1.73	0.53
9:J:111:THR:CG2	9:J:112:SER:H	2.18	0.53
15:T:18:DT:OP2	15:T:18:DT:C7	2.57	0.53
15:T:24:DG:C2	15:T:25:DC:H1'	2.43	0.53
1:B:416:ARG:HG3	1:B:417:TYR:CE2	2.44	0.53
1:B:365:GLY:HA3	1:B:463:ILE:HD13	1.91	0.53
2:C:1115:THR:HG22	2:C:1117:GLN:HG3	1.91	0.53
2:C:1183:LYS:C	2:C:1185:CYS:H	2.12	0.53
2:C:165:VAL:HG11	2:C:448:ILE:HD13	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:233:PRO:HG2	2:C:234:ILE:HD13	1.90	0.53
2:C:273:LEU:O	2:C:276:ILE:HB	2.07	0.53
2:C:308:TRP:HZ3	9:J:45:ARG:HB3	1.72	0.53
2:C:46:GLN:HG3	2:C:47:GLN:N	2.14	0.53
2:C:483:LEU:CD1	2:C:491:THR:HG23	2.31	0.53
2:C:53:GLN:HG2	2:C:547:VAL:HG21	1.90	0.53
2:C:807:ARG:HG2	2:C:1045:SER:OG	2.08	0.53
3:D:65:HIS:CE1	3:D:69:LEU:HD11	2.42	0.53
6:G:76:LYS:O	6:G:79:ARG:HD2	2.08	0.53
11:L:65:HIS:C	11:L:65:HIS:CD2	2.82	0.53
11:L:68:PHE:CD1	11:L:70:ARG:NH1	2.76	0.53
1:B:1431:GLY:HA3	2:C:1152:MET:HE2	1.91	0.53
1:B:215:SER:HB3	1:B:218:ASP:CG	2.29	0.53
1:B:332:LYS:H	1:B:337:ARG:HB3	1.74	0.53
1:B:547:LEU:HD13	11:L:58:PHE:HD1	1.74	0.53
1:B:32:VAL:O	1:B:57:ARG:HD3	2.09	0.53
1:B:760:GLN:HG2	1:B:765:VAL:HA	1.89	0.53
2:C:1110:PRO:HG3	2:C:1124:ARG:O	2.08	0.53
1:B:10:PRO:HD2	2:C:1191:ILE:O	2.09	0.53
2:C:431:TYR:CG	2:C:447:ALA:HB2	2.42	0.53
2:C:516:ASN:ND2	2:C:516:ASN:N	2.30	0.53
2:C:642:ASP:C	2:C:644:GLU:H	2.11	0.53
2:C:1006:ILE:HD13	10:K:44:TYR:HE2	1.74	0.53
12:M:49:LYS:O	12:M:50:ASP:CB	2.47	0.53
1:B:1370:LEU:O	1:B:1373:ASP:HB2	2.09	0.53
1:B:399:HIS:CB	1:B:400:PRO:CD	2.86	0.53
1:B:53:LEU:CD2	1:B:54:ASN:N	2.68	0.53
1:B:62:ASP:HB3	1:B:64:ASN:ND2	2.23	0.53
3:D:183:TRP:CZ2	3:D:207:CYS:HB3	2.44	0.53
7:H:49:LEU:HD21	7:H:77:VAL:HB	1.89	0.53
15:T:20:DT:C3'	15:T:21:DA:H5'	2.34	0.53
1:B:1197:LEU:HD11	1:B:1238:ILE:HD11	1.90	0.53
1:B:30:ILE:HG23	2:C:1170:THR:HG23	1.91	0.53
1:B:382:PRO:CD	1:B:428:TYR:CE2	2.89	0.53
1:B:401:GLY:CA	1:B:435:HIS:HD2	2.22	0.53
1:B:814:PHE:O	1:B:817:ALA:HB3	2.09	0.53
1:B:947:PHE:CD1	1:B:947:PHE:N	2.76	0.53
2:C:224:GLN:O	2:C:238:ALA:HA	2.08	0.53
2:C:233:PRO:HG2	2:C:234:ILE:CD1	2.38	0.53
2:C:309:GLN:O	2:C:312:GLU:HB3	2.08	0.53
2:C:510:LYS:CB	2:C:511:PRO:HD3	2.39	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:98:VAL:HG23	3:D:122:SER:HB3	1.90	0.53
4:E:216:ASN:O	4:E:218:GLU:N	2.42	0.53
8:I:106:GLU:HG2	8:I:112:ILE:HG12	1.91	0.53
8:I:47:PHE:CD2	8:I:95:TYR:HD1	2.27	0.53
8:I:81:PRO:HB2	8:I:82:PRO:CD	2.36	0.53
8:I:89:LEU:C	8:I:91:ASP:N	2.60	0.53
11:L:19:LEU:HD21	11:L:35:PHE:CD2	2.42	0.53
12:M:34:CYS:O	12:M:36:SER:N	2.41	0.53
1:B:963:ILE:HD11	1:B:1048:ASN:HB2	1.89	0.53
1:B:711:ARG:O	1:B:714:PHE:HB3	2.08	0.53
1:B:75:ASN:O	1:B:76:GLU:CB	2.57	0.53
1:B:783:THR:HG22	1:B:784:LEU:CD2	2.38	0.53
2:C:1147:LEU:HD23	2:C:1148:LYS:N	2.24	0.53
2:C:114:PRO:HD3	2:C:124:TYR:CE1	2.44	0.53
2:C:292:ILE:HG23	2:C:325:GLN:O	2.08	0.53
2:C:637:LEU:HD22	2:C:741:CYS:O	2.09	0.53
2:C:990:ILE:CG2	2:C:991:GLY:N	2.71	0.53
3:D:134:ILE:HG23	3:D:141:GLY:H	1.74	0.53
6:G:110:ASP:O	6:G:112:GLU:N	2.42	0.53
1:B:1152:ILE:CG1	9:J:44:TYR:HB3	2.39	0.53
9:J:74:GLU:HB2	9:J:79:HIS:HA	1.89	0.53
10:K:3:VAL:CG2	10:K:18:TRP:HB2	2.34	0.53
1:B:1106:ASN:O	1:B:1107:VAL:HB	2.09	0.53
1:B:1224:LEU:HD12	1:B:1241:ARG:O	2.08	0.53
1:B:1308:THR:HG23	1:B:1310:GLY:H	1.74	0.53
1:B:1316:VAL:HG12	1:B:1316:VAL:O	2.09	0.53
1:B:1454:MET:HG3	1:B:1454:MET:O	2.09	0.53
1:B:668:ASP:OD1	1:B:741:ASN:ND2	2.42	0.53
2:C:1106:ARG:HD3	2:C:1126:GLY:O	2.09	0.53
1:B:1438:THR:HB	2:C:1144:ALA:CB	2.36	0.53
2:C:1162:ILE:HD11	2:C:1194:ILE:HD13	1.90	0.53
2:C:96:TYR:N	2:C:129:PHE:O	2.30	0.53
2:C:203:PHE:HB3	2:C:205:ILE:HD11	1.91	0.53
2:C:370:PHE:HD2	2:C:373:ARG:CD	2.22	0.53
2:C:613:VAL:HG13	2:C:627:PHE:O	2.08	0.53
2:C:889:THR:HG22	2:C:891:ASP:H	1.74	0.53
4:E:66:ARG:O	4:E:70:PHE:HB2	2.08	0.53
6:G:93:ILE:HD13	6:G:148:VAL:HG12	1.91	0.53
1:B:504:LEU:HD11	6:G:91:ALA:CB	2.38	0.53
8:I:25:ARG:HA	8:I:41:ASP:HA	1.90	0.53
1:B:1152:ILE:HD11	9:J:44:TYR:HB3	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1323:ASP:O	1:B:1325:THR:N	2.38	0.53
1:B:34:LYS:CG	1:B:36:ARG:HH21	2.22	0.53
1:B:416:ARG:C	1:B:417:TYR:CD2	2.80	0.53
1:B:527:THR:CG2	1:B:650:GLN:HA	2.39	0.53
1:B:548:ASN:HA	11:L:60:ALA:HB1	1.91	0.53
2:C:430:ARG:O	2:C:434:ARG:HD2	2.08	0.53
2:C:750:GLY:O	2:C:751:VAL:C	2.46	0.53
4:E:185:CYS:HB2	4:E:211:LEU:CD2	2.29	0.53
7:H:27:LYS:O	7:H:30:LEU:N	2.41	0.53
8:I:55:LEU:HD22	8:I:144:ILE:HG21	1.90	0.53
1:B:1443:VAL:HG23	1:B:1443:VAL:O	2.09	0.52
1:B:249:SER:O	1:B:250:ILE:HG13	2.09	0.52
1:B:416:ARG:HG3	1:B:417:TYR:CD2	2.44	0.52
1:B:470:LEU:H	1:B:470:LEU:CD2	2.17	0.52
1:B:551:TYR:CE2	11:L:62:LYS:HE2	2.44	0.52
1:B:774:ARG:NH2	1:B:797:LYS:HB2	2.24	0.52
2:C:1177:HIS:CB	2:C:1179:GLN:HE21	2.21	0.52
2:C:117:ALA:HA	2:C:122:LEU:HD12	1.90	0.52
2:C:999:MET:HG3	2:C:1000:PRO:CD	2.33	0.52
3:D:208:GLU:C	3:D:210:GLU:H	2.13	0.52
4:E:217:LEU:O	4:E:219:THR:N	2.41	0.52
1:B:1239:ARG:HB3	1:B:1239:ARG:HH11	1.74	0.52
1:B:1323:ASP:C	1:B:1325:THR:H	2.12	0.52
1:B:1348:LEU:O	1:B:1352:VAL:HG23	2.08	0.52
1:B:860:LEU:CD1	1:B:1393:ASN:HD22	2.22	0.52
1:B:54:ASN:ND2	1:B:247:ARG:HH12	2.07	0.52
1:B:593:GLU:C	1:B:595:THR:H	2.12	0.52
1:B:528:LEU:CD2	1:B:751:SER:HB3	2.38	0.52
2:C:304:ASP:OD1	2:C:306:ASN:HB2	2.09	0.52
2:C:44:VAL:HG11	2:C:199:MET:HG2	1.91	0.52
2:C:212:LEU:HD21	2:C:461:LEU:HG	1.90	0.52
2:C:582:VAL:HG23	2:C:626:ILE:HB	1.91	0.52
2:C:732:SER:HB2	2:C:734:HIS:CD2	2.44	0.52
2:C:758:PHE:CZ	2:C:1044:ALA:HA	2.44	0.52
2:C:827:ILE:HG12	2:C:1012:ILE:HG13	1.91	0.52
2:C:844:SER:HB3	2:C:848:ARG:NH1	2.24	0.52
2:C:955:THR:HG22	2:C:956:THR:O	2.09	0.52
3:D:239:PRO:HB2	3:D:241:ASP:OD1	2.09	0.52
3:D:255:VAL:O	3:D:255:VAL:HG12	2.09	0.52
5:F:108:GLY:HA3	5:F:132:ILE:HG22	1.90	0.52
7:H:79:PHE:CE2	7:H:105:PRO:CG	2.93	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:L:17:SER:O	11:L:18:LYS:C	2.45	0.52
1:B:883:LEU:CD2	1:B:1021:LEU:HB2	2.40	0.52
1:B:1313:LEU:HD23	1:B:1338:VAL:HG21	1.91	0.52
1:B:388:LEU:CD2	1:B:432:VAL:HB	2.37	0.52
1:B:442:VAL:O	1:B:457:ALA:HA	2.10	0.52
2:C:1174:LYS:O	2:C:1176:ASN:N	2.42	0.52
2:C:95:ILE:HG13	2:C:129:PHE:O	2.08	0.52
2:C:44:VAL:O	2:C:45:SER:C	2.48	0.52
2:C:899:ILE:HG22	2:C:903:VAL:HG21	1.91	0.52
2:C:90:ILE:HG23	2:C:133:LYS:O	2.09	0.52
8:I:26:ILE:HG23	8:I:27:GLU:N	2.24	0.52
1:B:1193:LEU:CD2	1:B:1260:LEU:HD11	2.32	0.52
1:B:1427:ASN:O	1:B:1431:GLY:N	2.41	0.52
1:B:172:PRO:HG3	1:B:185:TRP:CZ2	2.45	0.52
1:B:399:HIS:O	1:B:401:GLY:N	2.43	0.52
1:B:541:ILE:HG22	1:B:546:VAL:HG23	1.90	0.52
2:C:1001:PHE:CE1	2:C:1073:TYR:HB2	2.45	0.52
1:B:1428:VAL:HG22	2:C:1151:LEU:HD21	1.90	0.52
2:C:298:LEU:N	2:C:298:LEU:HD22	2.24	0.52
3:D:7:GLN:HG2	11:L:104:ASN:ND2	2.19	0.52
4:E:192:LYS:HD2	4:E:199:ASN:HA	1.91	0.52
6:G:79:ARG:HB3	6:G:144:GLU:OE1	2.09	0.52
1:B:332:LYS:CA	1:B:337:ARG:HD2	2.39	0.52
1:B:556:TRP:CE3	1:B:558:GLY:HA2	2.45	0.52
2:C:1106:ARG:HG3	2:C:1107:ALA:N	2.23	0.52
2:C:1120:GLU:HG2	2:C:1121:GLY:N	2.23	0.52
2:C:240:ILE:HG22	2:C:254:LEU:HB3	1.91	0.52
2:C:34:ILE:HD13	2:C:747:MET:HE2	1.91	0.52
2:C:825:VAL:HG13	2:C:826:ALA:H	1.73	0.52
2:C:995:ARG:NH1	3:D:165:LYS:HA	2.25	0.52
3:D:18:VAL:HG12	3:D:18:VAL:O	2.09	0.52
1:B:1289:ARG:NH1	1:B:1326:ARG:NH1	2.58	0.52
1:B:1364:ASN:O	1:B:1366:ARG:HG3	2.10	0.52
1:B:747:VAL:HG21	1:B:758:ILE:HD11	1.91	0.52
2:C:510:LYS:HG3	2:C:511:PRO:CD	2.38	0.52
2:C:525:ALA:O	2:C:768:THR:HG23	2.09	0.52
2:C:916:THR:HB	2:C:935:ARG:HD2	1.90	0.52
3:D:116:LYS:HG3	3:D:117:ASP:N	2.24	0.52
4:E:141:LEU:HD22	7:H:46:LEU:O	2.09	0.52
7:H:125:SER:OG	7:H:128:PRO:HA	2.09	0.52
7:H:98:GLY:HA3	7:H:110:VAL:O	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:568:PRO:CG	8:I:46:LEU:HD22	2.37	0.52
11:L:55:LYS:HB3	11:L:81:TYR:CE1	2.45	0.52
1:B:1004:ASN:OD1	1:B:1005:GLU:N	2.42	0.52
1:B:1341:ILE:HD12	1:B:1379:GLY:O	2.10	0.52
1:B:560:ILE:CG1	8:I:78:SER:HB2	2.39	0.52
1:B:798:GLY:HA2	1:B:815:PHE:CD1	2.45	0.52
1:B:947:PHE:CE2	1:B:954:TRP:CE2	2.98	0.52
2:C:245:GLU:O	2:C:246:LYS:HG3	2.09	0.52
8:I:40:LEU:CD1	8:I:123:MET:HB2	2.40	0.52
12:M:28:LYS:O	12:M:29:TYR:HD2	1.93	0.52
1:B:1006:ILE:O	1:B:1009:ASN:HB2	2.09	0.52
1:B:107:CYS:HA	1:B:171:GLN:CD	2.30	0.52
1:B:34:LYS:HB2	1:B:36:ARG:HH21	1.75	0.52
1:B:476:SER:N	1:B:477:PRO:CD	2.73	0.52
1:B:556:TRP:CZ3	1:B:558:GLY:HA2	2.45	0.52
2:C:1097:HIS:N	2:C:1098:MET:HE2	2.25	0.52
2:C:467:GLY:N	2:C:475:SER:CB	2.72	0.52
3:D:31:ASN:O	3:D:32:SER:C	2.48	0.52
3:D:69:LEU:O	10:K:6:ARG:HD2	2.10	0.52
12:M:55:ILE:O	12:M:56:LEU:HB2	2.07	0.52
1:B:853:ASP:O	1:B:1000:LEU:HD21	2.10	0.52
1:B:1018:PHE:O	1:B:1021:LEU:HB3	2.10	0.52
1:B:1107:VAL:HG12	1:B:1107:VAL:O	2.10	0.52
1:B:1381:LEU:HD23	1:B:1381:LEU:N	2.25	0.52
1:B:466:SER:CB	11:L:2:ASN:HD22	2.22	0.52
1:B:547:LEU:HD22	11:L:58:PHE:CD1	2.45	0.52
1:B:710:LEU:HD12	1:B:710:LEU:H	1.75	0.52
1:B:863:VAL:HG11	1:B:866:PHE:CD2	2.45	0.52
2:C:115:GLN:HB2	2:C:194:GLU:HG2	1.92	0.52
2:C:100:PRO:CG	2:C:172:ILE:HD12	2.39	0.52
2:C:248:SER:H	2:C:418:LYS:NZ	2.08	0.52
2:C:332:ASP:C	2:C:334:ILE:H	2.13	0.52
2:C:745:PRO:O	2:C:748:ILE:HG12	2.10	0.52
2:C:976:ILE:O	2:C:990:ILE:HB	2.10	0.52
4:E:130:LEU:O	4:E:132:GLN:N	2.32	0.52
5:F:190:LEU:O	5:F:191:LYS:HG2	2.10	0.52
6:G:116:ASP:HB3	6:G:119:ARG:HB2	1.91	0.52
6:G:75:PRO:C	6:G:77:ASP:N	2.63	0.52
9:J:2:THR:O	9:J:3:THR:C	2.48	0.52
11:L:55:LYS:HB3	11:L:81:TYR:CD1	2.44	0.52
1:B:1332:PHE:CE1	1:B:1348:LEU:HD13	2.45	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:219:PHE:CE2	1:B:231:PRO:HD2	2.45	0.52
1:B:91:PHE:HB2	1:B:297:GLN:HE22	1.75	0.52
1:B:522:GLY:HA2	1:B:630:ILE:CD1	2.39	0.52
2:C:637:LEU:HD11	2:C:703:ILE:HD13	1.91	0.52
2:C:642:ASP:O	2:C:644:GLU:N	2.40	0.52
3:D:18:VAL:O	3:D:20:PHE:HD2	1.93	0.52
3:D:203:GLN:HG2	3:D:207:CYS:SG	2.50	0.52
4:E:16:LYS:HZ3	4:E:16:LYS:HB3	1.74	0.52
5:F:55:ARG:C	5:F:57:MET:N	2.63	0.52
2:C:294:ASP:HB2	9:J:12:ASN:HA	1.91	0.52
10:K:53:HIS:HE1	10:K:55:ASP:OD1	1.94	0.52
1:B:1437:GLY:O	1:B:1439:GLY:N	2.43	0.51
1:B:466:SER:O	1:B:467:THR:HG23	2.10	0.51
1:B:498:ARG:HG3	1:B:499:ALA:H	1.75	0.51
1:B:590:ARG:CD	1:B:604:GLY:HA2	2.39	0.51
1:B:606:LEU:HD11	1:B:608:ILE:HG13	1.92	0.51
2:C:1085:ILE:CD1	2:C:1085:ILE:H	2.22	0.51
3:D:112:ASN:CB	3:D:114:TYR:CE1	2.93	0.51
7:H:143:ILE:CG2	7:H:144:ARG:N	2.69	0.51
1:B:1152:ILE:HD11	9:J:44:TYR:CD2	2.46	0.51
1:B:247:ARG:HH11	1:B:247:ARG:HG3	1.75	0.51
1:B:250:ILE:O	1:B:250:ILE:HG22	2.10	0.51
1:B:355:GLY:N	1:B:482:PHE:CZ	2.78	0.51
1:B:482:PHE:CE1	2:C:836:GLU:HB2	2.45	0.51
1:B:50:ILE:C	1:B:52:GLY:N	2.64	0.51
1:B:947:PHE:CD2	1:B:954:TRP:CE2	2.98	0.51
2:C:1010:LEU:O	2:C:1011:ILE:CG1	2.58	0.51
2:C:172:ILE:CD1	2:C:178:ASN:HD22	2.23	0.51
2:C:298:LEU:CD2	2:C:298:LEU:H	2.22	0.51
2:C:364:ILE:HG22	2:C:365:THR:N	2.25	0.51
2:C:579:ARG:CB	2:C:586:TRP:HE1	2.18	0.51
3:D:176:ILE:CG2	3:D:177:GLU:N	2.72	0.51
5:F:154:ILE:O	5:F:196:VAL:HA	2.11	0.51
1:B:1063:MET:SD	1:B:1436:ILE:HG12	2.50	0.51
1:B:1114:PRO:HB2	1:B:1311:VAL:CG2	2.39	0.51
1:B:116:ASP:C	1:B:118:HIS:H	2.13	0.51
1:B:108:MET:HB3	1:B:210:ILE:HD13	1.91	0.51
1:B:24:PRO:HD2	1:B:233:TRP:HE1	1.74	0.51
1:B:458:HIS:CE1	1:B:507:VAL:HG21	2.45	0.51
1:B:6:TYR:CD1	1:B:7:SER:N	2.78	0.51
1:B:951:GLU:HB3	1:B:954:TRP:HZ2	1.74	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:425:THR:HA	2:C:428:ILE:HD12	1.91	0.51
2:C:654:ARG:HG3	2:C:654:ARG:HH11	1.76	0.51
2:C:810:GLU:HB2	2:C:815:ARG:HH22	1.76	0.51
4:E:16:LYS:CG	4:E:18:VAL:HG12	2.40	0.51
1:B:1006:ILE:CD1	5:F:163:GLU:HG3	2.31	0.51
4:E:40:HIS:CB	7:H:73:LYS:HZ2	2.10	0.51
1:B:1138:ILE:CG2	1:B:1316:VAL:HG13	2.40	0.51
1:B:34:LYS:CB	1:B:36:ARG:HH21	2.23	0.51
1:B:821:ARG:HB2	1:B:821:ARG:NH1	2.25	0.51
2:C:203:PHE:N	2:C:203:PHE:CD1	2.79	0.51
2:C:324:ILE:CG2	2:C:325:GLN:N	2.73	0.51
2:C:549:THR:HG22	2:C:550:ASP:N	2.19	0.51
2:C:583:ASN:HD21	2:C:628:THR:HG22	1.74	0.51
8:I:143:LEU:N	8:I:143:LEU:HD12	2.26	0.51
9:J:13:MET:O	9:J:14:LEU:HD23	2.11	0.51
1:B:1019:CYS:O	1:B:1022:LEU:N	2.44	0.51
1:B:1336:MET:HE3	1:B:1381:LEU:HG	1.93	0.51
1:B:586:ILE:CG2	1:B:587:HIS:H	2.23	0.51
1:B:853:ASP:C	1:B:853:ASP:OD1	2.49	0.51
2:C:603:LEU:CD1	2:C:609:ILE:HG13	2.27	0.51
2:C:63:ILE:HA	2:C:421:PHE:HE2	1.76	0.51
3:D:242:GLN:C	3:D:244:VAL:N	2.63	0.51
3:D:56:THR:HG21	3:D:145:CYS:SG	2.50	0.51
9:J:101:PHE:HB2	9:J:110:PHE:CE2	2.45	0.51
11:L:10:PHE:HD2	11:L:10:PHE:N	2.09	0.51
1:B:852:TYR:CE2	1:B:1060:PRO:HB2	2.45	0.51
1:B:526:ASP:OD1	2:C:1013:ASN:ND2	2.42	0.51
2:C:547:VAL:HG12	2:C:612:GLU:OE2	2.11	0.51
2:C:614:SER:OG	2:C:627:PHE:HB2	2.10	0.51
2:C:806:THR:HG21	2:C:808:ALA:HB3	1.91	0.51
2:C:848:ARG:HD2	10:K:8:PHE:O	2.11	0.51
4:E:29:LEU:HD22	7:H:82:PHE:CE2	2.46	0.51
7:H:112:LYS:NZ	7:H:120:THR:HA	2.26	0.51
1:B:1121:GLU:CG	1:B:1122:PRO:HD2	2.40	0.51
1:B:248:PRO:O	1:B:260:ASP:HB2	2.09	0.51
1:B:358:ASN:O	1:B:359:LEU:HD23	2.11	0.51
1:B:476:SER:N	1:B:477:PRO:HD3	2.26	0.51
1:B:54:ASN:HD22	1:B:54:ASN:N	2.08	0.51
1:B:779:PHE:O	1:B:780:VAL:C	2.49	0.51
1:B:848:ILE:HA	1:B:857:ARG:O	2.11	0.51
2:C:185:THR:O	2:C:186:GLU:C	2.49	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:708:GLU:HG3	2:C:709:ASP:H	1.75	0.51
2:C:752:ALA:O	2:C:755:ILE:HG13	2.11	0.51
3:D:232:VAL:HG11	3:D:244:VAL:HG22	1.92	0.51
4:E:172:LEU:HB3	4:E:176:GLU:OE1	2.11	0.51
4:E:216:ASN:C	4:E:218:GLU:N	2.64	0.51
5:F:182:ASP:O	5:F:185:ALA:HB3	2.10	0.51
5:F:23:VAL:HB	5:F:30:ILE:CD1	2.39	0.51
7:H:14:HIS:HD2	7:H:16:SER:HB2	1.70	0.51
1:B:268:ASP:HB3	1:B:299:HIS:ND1	2.26	0.51
1:B:453:MET:HB3	1:B:456:MET:HE2	1.93	0.51
1:B:351:THR:HG22	2:C:1103:ILE:HA	1.92	0.51
2:C:244:LEU:HD21	2:C:366:GLN:HE21	1.71	0.51
2:C:284:ILE:HD13	2:C:333:PHE:HD2	1.76	0.51
2:C:582:VAL:HA	2:C:626:ILE:O	2.10	0.51
2:C:840:ILE:CG2	2:C:994:TYR:HD1	2.24	0.51
4:E:220:LEU:O	4:E:221:TYR:HD1	1.93	0.51
5:F:96:PHE:CE1	5:F:100:ILE:HD11	2.46	0.51
7:H:132:SER:HB3	7:H:135:ASP:HB2	1.92	0.51
9:J:82:GLU:HB3	9:J:104:LEU:HG	1.93	0.51
1:B:709:THR:HG23	9:J:94:ASP:HA	1.91	0.51
11:L:57:LEU:H	11:L:77:THR:HA	1.75	0.51
1:B:1121:GLU:HB3	1:B:1124:HIS:HD2	1.75	0.51
1:B:882:SER:HA	1:B:952:ALA:O	2.11	0.51
2:C:1032:SER:O	2:C:1036:ALA:HB2	2.11	0.51
2:C:165:VAL:O	2:C:167:ILE:HD12	2.11	0.51
2:C:498:THR:HG22	2:C:537:LYS:H	1.75	0.51
2:C:834:ASN:HA	2:C:838:SER:O	2.09	0.51
6:G:103:MET:HE1	7:H:65:ASP:HA	1.92	0.51
9:J:55:THR:HG22	9:J:58:VAL:HG21	1.93	0.51
12:M:31:CYS:HA	12:M:56:LEU:HD23	1.92	0.51
1:B:1350:LYS:O	1:B:1354:ASN:ND2	2.44	0.51
1:B:102:VAL:HG11	1:B:211:PHE:CE2	2.46	0.51
1:B:958:VAL:HG12	1:B:960:ILE:HG13	1.92	0.51
2:C:273:LEU:HB2	2:C:276:ILE:HG13	1.93	0.51
2:C:345:LYS:HG3	2:C:348:ARG:HH21	1.75	0.51
2:C:471:LYS:O	2:C:472:ALA:HB2	2.10	0.51
3:D:235:VAL:HG12	10:K:13:VAL:HG22	1.93	0.51
4:E:11:ARG:HD3	4:E:12:ARG:N	2.26	0.51
4:E:51:ASN:O	4:E:54:GLU:HB3	2.11	0.51
1:B:1342:GLU:OE2	5:F:198:ILE:HD13	2.11	0.51
9:J:45:ARG:HE	9:J:47:GLU:HG3	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1299:VAL:HG12	1:B:1300:LYS:N	2.25	0.50
1:B:639:PRO:CG	1:B:640:GLN:H	2.21	0.50
1:B:875:ALA:O	1:B:878:ILE:HG13	2.10	0.50
1:B:898:ARG:HB2	1:B:933:TYR:HE1	1.76	0.50
2:C:758:PHE:CE1	2:C:1027:ILE:CG2	2.94	0.50
2:C:167:ILE:HG22	2:C:453:ILE:HD12	1.91	0.50
2:C:29:ASP:CB	2:C:658:ILE:HD13	2.39	0.50
2:C:911:ILE:O	2:C:911:ILE:HG22	2.10	0.50
3:D:70:ILE:HG22	3:D:70:ILE:O	2.10	0.50
3:D:99:LEU:O	3:D:156:THR:HA	2.11	0.50
5:F:153:HIS:HB3	5:F:196:VAL:HG13	1.88	0.50
7:H:117:GLN:O	7:H:119:LEU:N	2.45	0.50
1:B:942:PHE:C	1:B:942:PHE:CD2	2.84	0.50
2:C:1160:VAL:HG12	2:C:1161:HIS:N	2.26	0.50
2:C:126:SER:O	2:C:169:ARG:HA	2.11	0.50
2:C:820:GLY:C	2:C:821:GLN:HG3	2.31	0.50
2:C:911:ILE:HD11	2:C:941:LEU:CD1	2.41	0.50
2:C:948:ILE:HG22	2:C:949:VAL:O	2.11	0.50
3:D:77:ILE:HG23	3:D:161:LYS:HE3	1.93	0.50
3:D:204:SER:O	3:D:207:CYS:SG	2.68	0.50
3:D:63:ILE:HA	3:D:66:ARG:HG3	1.94	0.50
8:I:42:ILE:O	8:I:44:VAL:HG23	2.11	0.50
12:M:55:ILE:O	12:M:56:LEU:CB	2.59	0.50
1:B:1015:VAL:CG1	1:B:1019:CYS:SG	2.98	0.50
1:B:1094:VAL:HG13	1:B:1113:THR:CG2	2.36	0.50
1:B:268:ASP:HB3	1:B:299:HIS:CE1	2.47	0.50
1:B:528:LEU:O	1:B:531:ILE:HG22	2.12	0.50
1:B:537:ARG:HH22	8:I:122:LEU:CD1	2.24	0.50
1:B:608:ILE:HG13	1:B:613:ILE:HD12	1.94	0.50
1:B:665:GLY:HA3	2:C:1086:PHE:CD1	2.46	0.50
1:B:754:SER:O	1:B:755:PHE:C	2.49	0.50
2:C:1212:ILE:O	2:C:1214:PRO:HD3	2.11	0.50
1:B:357:PRO:HD2	2:C:833:TYR:CE1	2.47	0.50
2:C:861:ASP:OD1	2:C:914:LYS:HD2	2.11	0.50
2:C:865:LYS:HZ3	2:C:869:SER:HA	1.74	0.50
3:D:213:PRO:O	3:D:214:ASN:CB	2.59	0.50
3:D:243:VAL:O	3:D:243:VAL:HG12	2.11	0.50
5:F:182:ASP:HB3	5:F:185:ALA:CB	2.41	0.50
11:L:6:ARG:O	11:L:9:LEU:HG	2.11	0.50
11:L:73:LEU:CD2	11:L:75:ILE:HD11	2.40	0.50
12:M:30:ILE:O	12:M:56:LEU:HA	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:M:52:GLY:O	12:M:54:ARG:N	2.44	0.50
1:B:1332:PHE:N	1:B:1332:PHE:CD2	2.80	0.50
1:B:1445:ILE:HD11	7:H:61:ILE:HG12	1.93	0.50
1:B:362:ASP:OD2	1:B:459:ARG:HD3	2.11	0.50
1:B:42:ASP:O	1:B:44:THR:N	2.41	0.50
1:B:598:LEU:HD22	8:I:25:ARG:NH1	2.27	0.50
1:B:635:ARG:HA	1:B:635:ARG:NH1	2.25	0.50
1:B:997:LEU:HD13	1:B:1018:PHE:CE2	2.46	0.50
2:C:1034:VAL:HG12	2:C:1035:ALA:N	2.25	0.50
2:C:1069:PHE:HA	2:C:1085:ILE:O	2.11	0.50
2:C:409:ALA:O	2:C:413:LEU:HG	2.11	0.50
3:D:213:PRO:HG2	3:D:214:ASN:H	1.77	0.50
3:D:22:LEU:HD11	11:L:101:LEU:HD11	1.94	0.50
4:E:10:THR:O	4:E:10:THR:HG22	2.12	0.50
6:G:88:TYR:N	6:G:88:TYR:CD1	2.79	0.50
7:H:49:LEU:HD23	7:H:49:LEU:N	2.25	0.50
7:H:63:PRO:O	7:H:64:THR:CB	2.59	0.50
8:I:130:ARG:HB3	8:I:133:ASN:HB2	1.93	0.50
11:L:68:PHE:N	11:L:68:PHE:CD2	2.76	0.50
11:L:6:ARG:O	11:L:8:GLU:N	2.45	0.50
1:B:1317:MET:HE2	1:B:1327:ILE:HG21	1.94	0.50
1:B:568:PRO:HB2	3:D:221:TYR:CZ	2.46	0.50
1:B:622:VAL:O	1:B:622:VAL:HG13	2.11	0.50
2:C:1095:LEU:H	2:C:1095:LEU:CD1	2.21	0.50
1:B:1063:MET:HG3	2:C:1139:ILE:O	2.12	0.50
8:I:127:GLY:O	8:I:128:ASN:CB	2.58	0.50
8:I:35:GLN:O	8:I:37:LYS:HG3	2.12	0.50
13:N:1:DC:H2''	13:N:2:DA:O5'	2.12	0.50
1:B:1153:TYR:HB2	1:B:1192:LEU:HD23	1.93	0.50
1:B:637:LYS:O	1:B:641:VAL:HG21	2.12	0.50
1:B:942:PHE:HD2	1:B:942:PHE:C	2.15	0.50
2:C:1010:LEU:O	2:C:1011:ILE:HG13	2.11	0.50
2:C:910:VAL:CG1	2:C:911:ILE:N	2.75	0.50
3:D:191:TYR:HD2	3:D:201:TRP:CD1	2.29	0.50
5:F:176:PRO:O	5:F:212:ARG:HA	2.12	0.50
7:H:115:MET:HB2	7:H:116:PRO:CD	2.37	0.50
1:B:1015:VAL:O	1:B:1017:LEU:N	2.45	0.50
1:B:1329:THR:HG22	1:B:1331:SER:HB3	1.93	0.50
1:B:86:LEU:HD21	1:B:239:LEU:HB2	1.93	0.50
1:B:91:PHE:H	1:B:297:GLN:NE2	2.07	0.50
1:B:901:LEU:HB2	1:B:926:GLN:CG	2.28	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:992:ASP:O	1:B:993:LEU:C	2.49	0.50
2:C:1196:ILE:HB	2:C:1197:PRO:HD2	1.94	0.50
2:C:236:HIS:CE1	2:C:389:ALA:HA	2.47	0.50
2:C:265:SER:O	2:C:266:ALA:HB3	2.11	0.50
2:C:461:LEU:H	2:C:461:LEU:CD1	2.25	0.50
2:C:508:LEU:HG	2:C:509:ALA:N	2.27	0.50
2:C:58:THR:O	2:C:62:ILE:HG13	2.11	0.50
2:C:945:GLU:O	2:C:946:ASN:HB3	2.10	0.50
3:D:228:PHE:N	3:D:228:PHE:CD1	2.80	0.50
4:E:161:GLY:O	4:E:165:GLN:HG3	2.11	0.50
5:F:145:THR:HG21	5:F:187:TYR:CD2	2.46	0.50
8:I:95:TYR:CE2	8:I:97:MET:CG	2.92	0.50
12:M:38:LEU:O	12:M:39:SER:CB	2.58	0.50
1:B:1008:GLN:O	1:B:1011:GLN:HB3	2.11	0.50
1:B:1334:ASP:O	1:B:1336:MET:N	2.45	0.50
1:B:498:ARG:HG3	1:B:499:ALA:N	2.26	0.50
1:B:596:THR:C	1:B:598:LEU:N	2.63	0.50
2:C:1004:GLU:HB2	2:C:1006:ILE:HG12	1.94	0.50
2:C:1079:LYS:CG	2:C:1080:LYS:H	2.22	0.50
2:C:118:ARG:HD3	2:C:204:ILE:CD1	2.41	0.50
2:C:247:GLY:O	2:C:248:SER:HB3	2.11	0.50
2:C:656:GLY:O	2:C:657:HIS:C	2.50	0.50
2:C:846:ILE:HG23	2:C:974:PRO:HG2	1.93	0.50
5:F:108:GLY:HA3	5:F:132:ILE:CG2	2.42	0.50
8:I:59:ILE:O	8:I:60:ALA:CB	2.59	0.50
9:J:82:GLU:HB3	9:J:104:LEU:HD12	1.94	0.50
9:J:82:GLU:OE2	9:J:104:LEU:HD12	2.11	0.50
1:B:1187:GLN:HG3	1:B:1188:GLN:HG3	1.94	0.50
1:B:1451:VAL:O	1:B:1454:MET:HG2	2.12	0.50
1:B:260:ASP:OD1	1:B:261:ASP:N	2.45	0.50
1:B:300:VAL:O	1:B:300:VAL:HG12	2.12	0.50
2:C:1072:MET:HE1	2:C:1087:PHE:HD1	1.76	0.50
2:C:1008:PRO:HD3	2:C:1087:PHE:HE1	1.76	0.50
2:C:189:LEU:O	2:C:192:LEU:N	2.36	0.50
2:C:281:PRO:O	2:C:283:VAL:N	2.45	0.50
2:C:611:PRO:HG2	2:C:685:LEU:HD21	1.92	0.50
2:C:873:THR:CG2	2:C:874:PHE:N	2.75	0.50
2:C:955:THR:HG23	2:C:956:THR:H	1.76	0.50
4:E:176:GLU:HG2	4:E:197:SER:OG	2.11	0.50
4:E:51:ASN:OD1	4:E:51:ASN:O	2.30	0.50
6:G:77:ASP:OD1	6:G:78:GLN:N	2.45	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:G:75:PRO:HG3	6:G:78:GLN:OE1	2.12	0.50
7:H:52:ASP:C	7:H:53:ASN:HD22	2.14	0.50
14:P:8:U:H2'	14:P:9:A:C8	2.47	0.50
1:B:1100:ARG:NH2	1:B:1351:GLU:HG2	2.27	0.49
1:B:1371:LEU:O	1:B:1375:MET:HG3	2.12	0.49
1:B:1397:LEU:O	1:B:1400:CYS:HB3	2.12	0.49
1:B:1418:LEU:HD12	1:B:1419:ASP:N	2.27	0.49
1:B:409:SER:O	1:B:411:ASP:N	2.45	0.49
1:B:546:VAL:HG21	1:B:572:TRP:CE3	2.46	0.49
1:B:886:ILE:CG2	1:B:887:GLY:H	2.25	0.49
2:C:185:THR:N	2:C:188:ASP:HB2	2.26	0.49
2:C:601:ARG:HD3	2:C:605:ARG:HH21	1.77	0.49
5:F:163:GLU:O	5:F:164:LEU:C	2.49	0.49
1:B:852:TYR:CD1	6:G:136:ARG:HB3	2.47	0.49
4:E:144:THR:HG21	7:H:46:LEU:HD13	1.94	0.49
11:L:7:PHE:HA	11:L:10:PHE:CE2	2.47	0.49
15:T:18:DT:O5'	15:T:18:DT:H6	1.94	0.49
1:B:1254:ALA:O	1:B:1255:GLU:CB	2.60	0.49
1:B:1389:PHE:CD1	1:B:1390:ASN:N	2.80	0.49
1:B:344:ARG:HD2	2:C:1118:PRO:O	2.11	0.49
1:B:50:ILE:HG22	1:B:52:GLY:H	1.77	0.49
1:B:722:LEU:N	1:B:722:LEU:HD12	2.26	0.49
1:B:373:THR:HG21	2:C:1105:ALA:CB	2.42	0.49
2:C:234:ILE:HG21	2:C:237:VAL:HG23	1.94	0.49
2:C:401:PHE:HD2	2:C:521:LEU:HD12	1.77	0.49
2:C:704:ALA:HB2	2:C:738:PHE:CD2	2.47	0.49
2:C:981:ALA:HB2	2:C:987:LYS:HA	1.94	0.49
3:D:128:ASN:O	3:D:129:ILE:HG13	2.11	0.49
6:G:93:ILE:HD11	6:G:134:ILE:HD11	1.95	0.49
8:I:8:ASP:HB3	8:I:10:PHE:CE1	2.47	0.49
1:B:896:ARG:HH22	1:B:1030:ARG:HH21	1.59	0.49
1:B:1198:ASP:O	1:B:1202:MET:HG2	2.13	0.49
1:B:588:LEU:O	1:B:606:LEU:HA	2.12	0.49
1:B:896:ARG:HD3	1:B:897:TYR:HE1	1.77	0.49
1:B:946:VAL:HB	1:B:947:PHE:HD1	1.76	0.49
2:C:35:SER:O	2:C:39:ARG:HG3	2.12	0.49
2:C:570:VAL:CB	2:C:573:GLN:HB3	2.41	0.49
2:C:785:TYR:CD1	2:C:785:TYR:C	2.86	0.49
2:C:806:THR:CG2	2:C:808:ALA:HB3	2.42	0.49
3:D:254:LYS:C	3:D:256:ALA:N	2.65	0.49
8:I:5:LEU:HD12	8:I:60:ALA:HA	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:J:106:CYS:O	9:J:107:SER:HB2	2.11	0.49
1:B:134:ARG:O	1:B:138:ILE:HG13	2.12	0.49
1:B:1377:THR:O	1:B:1379:GLY:N	2.45	0.49
1:B:1441:PHE:CE2	6:G:89:GLU:HG2	2.48	0.49
1:B:396:PRO:HG3	1:B:416:ARG:HB3	1.95	0.49
1:B:347:PHE:CE2	1:B:493:GLN:OE1	2.64	0.49
1:B:68:GLN:C	1:B:70:CYS:H	2.15	0.49
1:B:32:VAL:HG21	1:B:68:GLN:NE2	2.25	0.49
2:C:1110:PRO:O	2:C:1119:VAL:HG13	2.11	0.49
1:B:12:ARG:CZ	2:C:1192:TYR:HE2	2.25	0.49
2:C:203:PHE:HD1	2:C:203:PHE:N	2.11	0.49
2:C:385:LEU:HD23	2:C:386:LEU:HD23	1.94	0.49
2:C:388:CYS:O	2:C:391:ASP:N	2.45	0.49
2:C:638:PHE:HB3	2:C:651:LEU:HD22	1.94	0.49
2:C:798:TYR:CD1	10:K:4:PRO:HB3	2.48	0.49
3:D:254:LYS:O	3:D:256:ALA:N	2.45	0.49
5:F:61:GLN:HB2	5:F:79:TRP:CE3	2.44	0.49
6:G:143:PHE:CD1	6:G:143:PHE:C	2.86	0.49
8:I:101:ALA:HB2	8:I:116:TYR:CE1	2.47	0.49
10:K:27:GLU:C	10:K:29:GLU:H	2.16	0.49
11:L:61:TYR:O	11:L:62:LYS:HB3	2.12	0.49
11:L:90:ALA:O	11:L:94:ILE:HG13	2.12	0.49
1:B:225:ASN:HD22	1:B:228:PHE:N	1.97	0.49
1:B:360:GLU:O	1:B:361:LEU:C	2.51	0.49
1:B:446:ARG:HB2	1:B:487:MET:CG	2.42	0.49
1:B:608:ILE:C	1:B:610:GLY:N	2.65	0.49
1:B:872:GLY:C	1:B:1058:VAL:HG23	2.33	0.49
2:C:401:PHE:CD2	2:C:521:LEU:HD12	2.48	0.49
2:C:412:LEU:HB3	2:C:466:TRP:CZ2	2.47	0.49
2:C:785:TYR:CD1	2:C:786:ASN:N	2.80	0.49
2:C:861:ASP:OD1	2:C:862:GLN:N	2.45	0.49
2:C:859:TYR:CZ	2:C:941:LEU:HD12	2.47	0.49
4:E:51:ASN:O	4:E:52:LEU:O	2.31	0.49
5:F:124:VAL:N	5:F:125:PRO:HD2	2.28	0.49
5:F:16:PHE:O	5:F:19:VAL:N	2.45	0.49
5:F:50:MET:HG3	5:F:50:MET:O	2.12	0.49
5:F:46:TYR:CD2	5:F:58:MET:HG2	2.47	0.49
8:I:6:PHE:O	8:I:58:THR:HA	2.12	0.49
9:J:11:ASN:C	9:J:12:ASN:HD22	2.15	0.49
9:J:69:PRO:HG2	9:J:85:PHE:CE2	2.47	0.49
12:M:61:THR:HG22	12:M:62:LYS:N	2.27	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1116:LEU:HB3	1:B:1308:THR:HG22	1.95	0.49
1:B:1161:THR:CG2	1:B:1163:ILE:HG13	2.42	0.49
1:B:1344:GLY:O	1:B:1345:ARG:C	2.51	0.49
1:B:278:THR:O	1:B:278:THR:HG22	2.12	0.49
2:C:108:VAL:HG12	2:C:109:THR:N	2.25	0.49
2:C:531:GLN:HG3	2:C:532:ALA:H	1.76	0.49
2:C:526:GLU:HB2	2:C:771:SER:HB3	1.94	0.49
4:E:195:ILE:HG22	4:E:195:ILE:O	2.13	0.49
5:F:23:VAL:HG13	5:F:78:LEU:CD1	2.39	0.49
8:I:138:GLU:HG2	8:I:139:ASN:N	2.28	0.49
15:T:18:DT:C2'	15:T:19:DT:C5'	2.88	0.49
1:B:1423:GLY:O	1:B:1426:GLU:HB2	2.13	0.49
1:B:244:PRO:CB	1:B:245:PRO:CD	2.91	0.49
1:B:408:ASP:O	1:B:410:GLY:N	2.38	0.49
1:B:963:ILE:HD11	1:B:1048:ASN:HB3	1.93	0.49
2:C:1072:MET:CE	2:C:1087:PHE:HD1	2.25	0.49
2:C:1166:CYS:O	2:C:1168:LEU:N	2.45	0.49
2:C:1201:LYS:CG	2:C:1202:LEU:N	2.75	0.49
2:C:175:ARG:HG2	2:C:175:ARG:NH1	2.27	0.49
2:C:44:VAL:HG13	2:C:199:MET:HG2	1.94	0.49
2:C:483:LEU:HD11	2:C:491:THR:CG2	2.33	0.49
2:C:60:GLN:NE2	2:C:94:LYS:HA	2.28	0.49
2:C:798:TYR:HE2	3:D:62:PHE:CZ	2.30	0.49
2:C:975:GLN:HG2	2:C:976:ILE:N	2.28	0.49
5:F:117:THR:HG22	5:F:119:SER:N	2.21	0.49
5:F:135:PHE:CB	5:F:140:LEU:HD11	2.40	0.49
11:L:12:LEU:HD12	11:L:12:LEU:N	2.20	0.49
11:L:67:PHE:C	11:L:68:PHE:HD2	2.16	0.49
12:M:44:ASP:O	12:M:45:ALA:HB3	2.11	0.49
1:B:1305:VAL:HG12	1:B:1306:LEU:N	2.27	0.49
1:B:356:ASP:OD1	1:B:358:ASN:HB2	2.13	0.49
1:B:44:THR:O	1:B:44:THR:HG22	2.12	0.49
1:B:567:LYS:CG	1:B:568:PRO:CD	2.80	0.49
1:B:586:ILE:HB	1:B:610:GLY:HA2	1.95	0.49
1:B:590:ARG:NH2	1:B:620:LYS:C	2.66	0.49
1:B:901:LEU:N	1:B:926:GLN:NE2	2.55	0.49
2:C:1135:ARG:O	2:C:1136:ASP:C	2.50	0.49
2:C:864:LYS:N	2:C:872:GLU:OE1	2.40	0.49
1:B:667:GLY:CA	3:D:192:TRP:CH2	2.95	0.49
3:D:133:ILE:HD13	3:D:236:GLY:C	2.32	0.49
4:E:12:ARG:HH12	4:E:14:ARG:HG3	1.78	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:24:ALA:O	4:E:26:THR:N	2.36	0.49
4:E:33:PHE:CE2	7:H:80:LYS:NZ	2.73	0.49
5:F:106:GLN:HA	5:F:130:ALA:HA	1.95	0.49
5:F:128:PRO:HA	5:F:129:PRO:C	2.32	0.49
8:I:82:PRO:C	8:I:84:ALA:H	2.16	0.49
1:B:852:TYR:CD2	1:B:1060:PRO:CB	2.96	0.49
1:B:1444:MET:HG3	7:H:60:ARG:HA	1.94	0.49
1:B:162:VAL:HG12	1:B:163:SER:N	2.27	0.49
1:B:457:ALA:HB3	1:B:506:ALA:HA	1.94	0.49
1:B:598:LEU:HD23	8:I:122:LEU:HD12	1.95	0.49
1:B:738:LYS:HD2	1:B:740:LEU:HD21	1.95	0.49
2:C:1017:ILE:N	2:C:1018:PRO:CD	2.76	0.49
2:C:203:PHE:HB3	2:C:205:ILE:CD1	2.43	0.49
2:C:254:LEU:CD2	2:C:361:LEU:HD13	2.43	0.49
2:C:446:LEU:O	2:C:447:ALA:HB3	2.13	0.49
3:D:99:LEU:HA	3:D:119:VAL:O	2.12	0.49
3:D:114:TYR:HB3	3:D:140:ASN:O	2.13	0.49
6:G:76:LYS:HE3	6:G:150:GLU:OE2	2.12	0.49
1:B:1323:ASP:OD1	1:B:1326:ARG:HG3	2.13	0.49
1:B:1335:ILE:O	1:B:1335:ILE:CG2	2.61	0.49
1:B:24:PRO:HG2	1:B:25:GLU:OE1	2.12	0.49
1:B:613:ILE:O	1:B:614:PHE:HB3	2.12	0.49
1:B:341:MET:HE1	1:B:843:LYS:HZ1	1.65	0.49
1:B:954:TRP:HB3	1:B:955:PRO:HD2	1.95	0.49
2:C:1181:GLU:O	2:C:1182:CYS:CB	2.60	0.49
2:C:199:MET:N	2:C:199:MET:SD	2.86	0.49
2:C:792:MET:HE2	2:C:857:ARG:NH1	2.28	0.49
4:E:34:GLN:C	4:E:36:LYS:N	2.65	0.49
1:B:537:ARG:HH12	8:I:122:LEU:HG	1.77	0.49
8:I:26:ILE:CG2	8:I:27:GLU:N	2.76	0.49
9:J:105:SER:O	9:J:106:CYS:HB2	2.12	0.49
11:L:40:HIS:O	11:L:41:THR:C	2.51	0.49
1:B:1380:GLY:C	1:B:1381:LEU:HD23	2.33	0.48
1:B:1389:PHE:CG	1:B:1390:ASN:N	2.81	0.48
1:B:34:LYS:N	1:B:34:LYS:CD	2.76	0.48
1:B:374:LEU:HB2	1:B:436:ILE:HD11	1.95	0.48
1:B:53:LEU:O	1:B:54:ASN:O	2.31	0.48
2:C:243:ALA:HB1	2:C:251:ILE:HG12	1.93	0.48
2:C:288:ALA:HA	2:C:331:LEU:HD12	1.94	0.48
3:D:16:ASP:C	3:D:240:VAL:HG11	2.33	0.48
3:D:26:ASP:O	3:D:27:LEU:C	2.50	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:64:VAL:HA	4:E:129:LEU:HD11	1.95	0.48
7:H:9:LEU:HD12	7:H:10:ASN:H	1.76	0.48
8:I:56:THR:HB	8:I:145:ARG:HG2	1.95	0.48
10:K:5:VAL:O	10:K:6:ARG:O	2.31	0.48
3:D:10:ILE:HD12	11:L:108:GLU:O	2.13	0.48
1:B:1146:VAL:HG11	1:B:1202:MET:SD	2.53	0.48
1:B:135:PHE:CD1	1:B:222:LEU:HD22	2.48	0.48
1:B:40:THR:HG22	1:B:41:MET:CG	2.31	0.48
1:B:971:PHE:HE2	1:B:1040:GLN:HG2	1.78	0.48
2:C:1098:MET:H	2:C:1098:MET:HE3	1.78	0.48
2:C:114:PRO:HG2	2:C:115:GLN:H	1.77	0.48
2:C:1162:ILE:HD11	2:C:1194:ILE:CD1	2.43	0.48
2:C:30:SER:HB3	2:C:743:ILE:O	2.13	0.48
2:C:324:ILE:HG12	2:C:329:THR:HG22	1.95	0.48
2:C:351:TYR:CD2	2:C:355:ILE:HD11	2.49	0.48
3:D:100:THR:HG21	3:D:102:GLN:HE21	1.78	0.48
4:E:23:ASN:O	7:H:83:LYS:HB2	2.14	0.48
5:F:157:SER:OG	5:F:159:ASP:HB2	2.14	0.48
7:H:117:GLN:C	7:H:119:LEU:N	2.66	0.48
9:J:101:PHE:HB2	9:J:110:PHE:CZ	2.47	0.48
9:J:85:PHE:CD2	9:J:85:PHE:N	2.72	0.48
9:J:99:LEU:O	9:J:111:THR:HG23	2.13	0.48
11:L:13:GLY:O	11:L:14:GLU:C	2.51	0.48
11:L:50:LEU:HD11	11:L:75:ILE:CD1	2.42	0.48
1:B:1333:ILE:O	1:B:1333:ILE:HD13	2.13	0.48
1:B:90:VAL:HG12	1:B:297:GLN:NE2	2.28	0.48
2:C:1010:LEU:C	2:C:1011:ILE:HG13	2.34	0.48
2:C:361:LEU:N	2:C:362:PRO:CD	2.76	0.48
2:C:363:HIS:O	2:C:365:THR:N	2.41	0.48
2:C:554:ILE:O	2:C:558:LEU:HG	2.13	0.48
2:C:847:ASP:O	2:C:849:GLY:N	2.46	0.48
3:D:44:LEU:CG	3:D:159:ALA:HB1	2.43	0.48
4:E:14:ARG:NH2	4:E:16:LYS:NZ	2.59	0.48
4:E:41:GLN:HB2	4:E:43:GLU:HG3	1.94	0.48
8:I:123:MET:HE3	8:I:142:LEU:HD21	1.94	0.48
10:K:64:ASN:CB	10:K:65:PRO:CD	2.89	0.48
1:B:137:ALA:O	1:B:138:ILE:C	2.51	0.48
1:B:366:VAL:HG21	1:B:460:VAL:HG23	1.96	0.48
1:B:598:LEU:HA	8:I:122:LEU:CD1	2.38	0.48
1:B:35:ILE:HG22	1:B:84:ILE:HD12	1.95	0.48
2:C:1138:MET:HE2	2:C:1143:ALA:HB3	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:1183:LYS:HE3	2:C:1183:LYS:N	2.29	0.48
2:C:259:TYR:HB2	2:C:268:THR:HG23	1.96	0.48
2:C:288:ALA:CA	2:C:331:LEU:HD12	2.43	0.48
2:C:459:TYR:CD1	2:C:469:GLN:NE2	2.81	0.48
2:C:658:ILE:HG22	2:C:659:ALA:N	2.27	0.48
2:C:779:GLY:O	2:C:795:ILE:HA	2.13	0.48
2:C:802:PRO:HG2	2:C:805:THR:HG22	1.95	0.48
3:D:43:THR:O	3:D:77:ILE:HG13	2.12	0.48
1:B:1006:ILE:HD12	5:F:167:ARG:CG	2.44	0.48
4:E:189:ASP:HB3	7:H:167:TYR:OH	2.13	0.48
8:I:58:THR:HB	8:I:143:LEU:HD13	1.94	0.48
10:K:16:ASP:OD1	10:K:17:LYS:CD	2.62	0.48
11:L:60:ALA:O	11:L:73:LEU:HD12	2.14	0.48
15:T:18:DT:OP2	15:T:18:DT:H73	2.14	0.48
1:B:1011:GLN:HE21	1:B:1015:VAL:HG21	1.77	0.48
1:B:129:LYS:O	1:B:130:ASP:HB2	2.14	0.48
1:B:279:LEU:HB3	1:B:289:ILE:HD11	1.95	0.48
1:B:305:ASP:CG	1:B:326:ARG:HD2	2.33	0.48
1:B:332:LYS:O	1:B:333:GLU:HB2	2.13	0.48
1:B:513:SER:HB2	1:B:520:CYS:HB3	1.95	0.48
1:B:650:GLN:HB3	1:B:654:ASN:ND2	2.28	0.48
1:B:942:PHE:HD2	1:B:942:PHE:O	1.96	0.48
2:C:1085:ILE:HG22	2:C:1086:PHE:N	2.28	0.48
2:C:1151:LEU:N	2:C:1151:LEU:HD12	2.28	0.48
2:C:180:TYR:N	2:C:180:TYR:CD1	2.81	0.48
2:C:797:TYR:HE1	2:C:854:LEU:HD23	1.78	0.48
2:C:890:TYR:O	2:C:893:LEU:HB2	2.13	0.48
3:D:73:GLN:HE21	3:D:75:MET:N	2.10	0.48
7:H:139:ILE:CG2	7:H:140:LYS:H	2.16	0.48
1:B:698:GLN:NE2	9:J:99:LEU:HD21	2.28	0.48
1:B:1030:ARG:NH1	1:B:1035:TYR:OH	2.46	0.48
1:B:1152:ILE:CD1	9:J:44:TYR:HB3	2.44	0.48
1:B:1227:ILE:CG2	1:B:1228:TRP:N	2.77	0.48
1:B:302:THR:O	1:B:304:MET:N	2.47	0.48
1:B:390:GLN:HE21	1:B:394:ASN:HD21	1.62	0.48
1:B:718:VAL:O	1:B:722:LEU:HD12	2.13	0.48
2:C:744:HIS:ND1	2:C:745:PRO:HD2	2.29	0.48
2:C:773:MET:HA	2:C:776:GLN:HE21	1.78	0.48
2:C:843:GLN:N	2:C:994:TYR:O	2.31	0.48
5:F:136:ASN:HB3	5:F:139:ALA:HB3	1.95	0.48
6:G:75:PRO:HG2	6:G:78:GLN:HB2	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:J:69:PRO:HB2	9:J:85:PHE:CE2	2.49	0.48
10:K:35:ALA:C	10:K:39:LEU:HD12	2.33	0.48
1:B:1443:VAL:HG23	7:H:61:ILE:HB	1.96	0.48
1:B:491:VAL:HG12	1:B:492:PRO:O	2.14	0.48
1:B:836:TYR:CZ	1:B:840:ARG:HD2	2.48	0.48
1:B:912:LEU:O	1:B:978:PRO:HA	2.14	0.48
2:C:1079:LYS:CG	2:C:1080:LYS:N	2.75	0.48
2:C:486:TYR:N	2:C:486:TYR:CD2	2.80	0.48
2:C:508:LEU:O	2:C:509:ALA:CB	2.62	0.48
4:E:71:LYS:HA	4:E:74:GLN:HG3	1.96	0.48
8:I:104:PHE:CE2	8:I:136:LYS:HG2	2.49	0.48
10:K:3:VAL:CG1	10:K:15:GLY:HA2	2.43	0.48
10:K:4:PRO:HD3	10:K:53:HIS:HD2	1.76	0.48
1:B:1220:PHE:O	1:B:1221:LYS:HB2	2.14	0.48
1:B:1155:ASP:HB3	1:B:1241:ARG:HH21	1.79	0.48
1:B:1334:ASP:C	1:B:1336:MET:N	2.67	0.48
1:B:1450:LEU:O	1:B:1450:LEU:CG	2.60	0.48
1:B:298:PHE:O	1:B:301:ALA:HB3	2.12	0.48
1:B:826:ASP:O	1:B:827:THR:C	2.52	0.48
1:B:88:LYS:HB3	1:B:89:PRO:HD2	1.95	0.48
2:C:1006:ILE:HG23	10:K:43:ARG:HG3	1.96	0.48
2:C:834:ASN:ND2	2:C:1013:ASN:HA	2.29	0.48
2:C:1044:ALA:O	2:C:1045:SER:O	2.31	0.48
6:G:96:THR:O	6:G:100:GLN:HG3	2.14	0.48
8:I:102:TYR:H	8:I:102:TYR:HD2	1.57	0.48
8:I:130:ARG:HB3	8:I:133:ASN:CB	2.44	0.48
11:L:47:ARG:C	11:L:47:ARG:HD2	2.34	0.48
1:B:114:LEU:O	1:B:115:LEU:HG	2.13	0.48
1:B:1276:VAL:HB	1:B:1279:ILE:CD1	2.43	0.48
1:B:351:THR:HG21	2:C:1103:ILE:HG13	1.95	0.48
1:B:567:LYS:CB	1:B:568:PRO:HD2	2.41	0.48
1:B:826:ASP:O	1:B:830:LYS:N	2.32	0.48
1:B:858:ASN:ND2	1:B:860:LEU:H	2.12	0.48
1:B:923:LEU:O	1:B:927:VAL:HG23	2.14	0.48
2:C:1005:GLY:O	2:C:1006:ILE:C	2.51	0.48
2:C:479:VAL:HG12	2:C:480:SER:N	2.29	0.48
2:C:637:LEU:O	2:C:690:VAL:HG13	2.14	0.48
3:D:148:ARG:CD	3:D:149:LYS:H	2.27	0.48
3:D:18:VAL:O	3:D:19:ASP:C	2.52	0.48
3:D:133:ILE:CD1	3:D:237:SER:N	2.77	0.48
3:D:35:ARG:NH1	11:L:40:HIS:HB2	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:173:SER:O	5:F:175:LEU:N	2.46	0.48
7:H:13:LEU:HD23	7:H:14:HIS:N	2.28	0.48
7:H:10:ASN:OD1	7:H:71:ASN:HA	2.12	0.48
8:I:10:PHE:CD1	8:I:10:PHE:N	2.82	0.48
9:J:78:CYS:SG	9:J:106:CYS:HB2	2.54	0.48
9:J:58:VAL:HG13	9:J:62:ILE:CD1	2.41	0.48
3:D:235:VAL:HG12	10:K:13:VAL:HG23	1.96	0.48
11:L:2:ASN:O	11:L:3:ALA:C	2.53	0.48
2:C:193:LYS:HZ2	12:M:32:ALA:HB1	1.78	0.48
1:B:1140:HIS:HA	1:B:1274:ARG:O	2.14	0.48
1:B:1120:LEU:CD1	1:B:1304:TRP:O	2.61	0.48
1:B:1332:PHE:H	1:B:1332:PHE:HD2	1.62	0.48
1:B:504:LEU:N	1:B:504:LEU:HD12	2.29	0.48
1:B:512:VAL:HA	1:B:519:PRO:HA	1.95	0.48
1:B:774:ARG:NH1	1:B:797:LYS:HG3	2.28	0.48
1:B:490:HIS:ND1	2:C:1150:ARG:NH1	2.62	0.48
2:C:1215:ARG:C	2:C:1216:LEU:HD23	2.35	0.48
2:C:368:GLU:O	2:C:370:PHE:N	2.42	0.48
3:D:161:LYS:O	3:D:170:TRP:NE1	2.47	0.48
3:D:22:LEU:HD13	3:D:230:MET:HE1	1.95	0.48
3:D:232:VAL:HG11	3:D:244:VAL:CG2	2.44	0.48
1:B:870:GLU:HB2	5:F:204:THR:HG21	1.96	0.48
7:H:140:LYS:H	7:H:140:LYS:HG2	1.38	0.48
11:L:30:ALA:HB2	11:L:76:GLN:HG3	1.95	0.48
2:C:852:ARG:NH2	12:M:70:ARG:OXT	2.26	0.48
1:B:12:ARG:NH2	2:C:1192:TYR:HE2	2.12	0.47
1:B:317:LYS:O	1:B:318:SER:CB	2.62	0.47
1:B:384:ASN:C	1:B:386:ASP:N	2.66	0.47
1:B:722:LEU:HD23	1:B:799:PHE:CD1	2.49	0.47
2:C:258:LEU:HG	2:C:258:LEU:O	2.14	0.47
2:C:291:ILE:HD13	2:C:300:HIS:CD2	2.49	0.47
2:C:562:GLY:HA3	2:C:590:HIS:CE1	2.49	0.47
2:C:604:ARG:HB2	2:C:609:ILE:HB	1.95	0.47
2:C:687:GLU:O	2:C:688:GLY:C	2.52	0.47
2:C:773:MET:HE1	2:C:985:GLY:HA2	1.94	0.47
3:D:221:TYR:CD2	8:I:46:LEU:HD23	2.48	0.47
5:F:77:SER:O	5:F:105:PHE:HB3	2.14	0.47
5:F:93:MET:SD	5:F:97:VAL:CG2	3.02	0.47
7:H:43:GLY:HA2	7:H:157:ILE:HD11	1.96	0.47
7:H:39:THR:O	7:H:43:GLY:N	2.43	0.47
8:I:116:TYR:HB2	8:I:123:MET:HB3	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:355:GLY:N	1:B:482:PHE:CE1	2.81	0.47
1:B:548:ASN:OD1	11:L:60:ALA:HB1	2.13	0.47
1:B:54:ASN:HD21	1:B:247:ARG:NH1	2.11	0.47
1:B:784:LEU:HD11	1:B:815:PHE:CE2	2.48	0.47
2:C:1002:THR:HG23	2:C:1006:ILE:O	2.14	0.47
2:C:1034:VAL:O	2:C:1036:ALA:N	2.47	0.47
2:C:367:LEU:HD12	2:C:370:PHE:CZ	2.48	0.47
2:C:405:ARG:HD2	2:C:631:GLY:HA3	1.96	0.47
2:C:45:SER:O	2:C:48:LEU:N	2.47	0.47
2:C:591:ARG:O	2:C:593:PRO:HD3	2.14	0.47
3:D:143:LEU:HD21	3:D:146:LYS:HE2	1.96	0.47
3:D:172:PRO:O	3:D:235:VAL:HG22	2.12	0.47
3:D:83:SER:OG	3:D:160:LYS:HD3	2.14	0.47
6:G:103:MET:HE3	7:H:66:GLY:N	2.30	0.47
14:P:8:U:O2'	14:P:9:A:H5'	2.13	0.47
1:B:1242:VAL:O	1:B:1243:VAL:CB	2.60	0.47
1:B:50:ILE:HG22	1:B:52:GLY:N	2.28	0.47
1:B:629:LEU:HD22	1:B:633:VAL:CG2	2.44	0.47
1:B:784:LEU:HD21	1:B:815:PHE:HE2	1.80	0.47
2:C:1004:GLU:OE2	2:C:1064:TYR:CE2	2.67	0.47
1:B:78:PRO:CA	2:C:1201:LYS:HZ2	2.27	0.47
3:D:252:GLN:HG3	11:L:95:ILE:HG23	1.96	0.47
4:E:118:THR:HB	4:E:121:LYS:HB3	1.94	0.47
5:F:124:VAL:CG1	5:F:132:ILE:HG13	2.44	0.47
5:F:42:PHE:CE1	5:F:58:MET:HE3	2.49	0.47
6:G:135:ARG:CZ	6:G:143:PHE:CE2	2.97	0.47
7:H:145:VAL:CG1	7:H:146:LYS:N	2.76	0.47
8:I:40:LEU:HD12	8:I:122:LEU:O	2.14	0.47
10:K:19:GLU:O	10:K:23:ASN:HB2	2.14	0.47
11:L:108:GLU:O	11:L:112:GLN:HG2	2.15	0.47
1:B:116:ASP:C	1:B:118:HIS:N	2.68	0.47
1:B:1224:LEU:HD12	1:B:1225:PHE:N	2.29	0.47
1:B:184:SER:CB	1:B:199:LEU:HD23	2.44	0.47
1:B:441:PRO:HD2	1:B:498:ARG:CZ	2.44	0.47
1:B:796:SER:C	1:B:798:GLY:H	2.18	0.47
2:C:1081:LEU:O	2:C:1083:ALA:N	2.48	0.47
2:C:273:LEU:HG	2:C:276:ILE:HD12	1.95	0.47
2:C:298:LEU:CD2	2:C:298:LEU:N	2.77	0.47
2:C:600:LEU:HD13	2:C:626:ILE:HD11	1.96	0.47
2:C:628:THR:O	2:C:628:THR:HG23	2.13	0.47
1:B:816:HIS:CD2	2:C:764:SER:H	2.32	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:811:TYR:H	2:C:811:TYR:HD1	1.61	0.47
2:C:792:MET:CE	2:C:857:ARG:NH1	2.76	0.47
2:C:908:GLU:O	2:C:909:ASP:O	2.33	0.47
5:F:43:LYS:C	5:F:45:LYS:H	2.18	0.47
7:H:91:VAL:HG22	7:H:101:VAL:HG22	1.97	0.47
8:I:109:LYS:HB2	8:I:111:LEU:HD12	1.96	0.47
10:K:2:ILE:HG12	10:K:57:ILE:HD12	1.95	0.47
12:M:53:HIS:O	12:M:55:ILE:HG12	2.15	0.47
1:B:381:THR:O	1:B:383:TYR:N	2.48	0.47
1:B:43:GLU:O	1:B:44:THR:HB	2.13	0.47
1:B:455:MET:HE3	2:C:1134:GLU:HG3	1.97	0.47
1:B:535:THR:HG23	1:B:575:LYS:HG2	1.95	0.47
1:B:789:LYS:HE3	9:J:67:THR:OG1	2.14	0.47
1:B:919:ILE:HG23	1:B:925:LEU:HD12	1.97	0.47
2:C:284:ILE:HD13	2:C:333:PHE:CD2	2.49	0.47
2:C:792:MET:HA	2:C:856:PHE:O	2.14	0.47
3:D:77:ILE:HA	3:D:129:ILE:HD11	1.97	0.47
3:D:142:VAL:H	10:K:16:ASP:CB	2.27	0.47
3:D:148:ARG:CG	3:D:149:LYS:H	2.28	0.47
1:B:667:GLY:CA	3:D:192:TRP:HH2	2.27	0.47
2:C:996:ARG:NH1	3:D:38:ILE:HG23	2.30	0.47
3:D:69:LEU:CD1	3:D:69:LEU:N	2.77	0.47
4:E:56:ARG:CD	4:E:149:THR:HA	2.36	0.47
9:J:4:PHE:HE1	9:J:6:PHE:HE2	1.63	0.47
10:K:56:LEU:O	10:K:59:LYS:N	2.48	0.47
1:B:1048:ASN:O	1:B:1049:ILE:C	2.52	0.47
1:B:1097:GLY:O	1:B:1100:ARG:HB3	2.14	0.47
1:B:1335:ILE:O	1:B:1335:ILE:HG22	2.14	0.47
1:B:1336:MET:HE2	1:B:1381:LEU:HD23	1.97	0.47
1:B:15:LYS:HG3	2:C:1219:ASP:HA	1.97	0.47
1:B:295:LEU:O	1:B:298:PHE:HB3	2.15	0.47
1:B:753:GLY:HA2	1:B:757:ASN:ND2	2.30	0.47
1:B:898:ARG:HB2	1:B:933:TYR:CE1	2.49	0.47
1:B:959:ASN:OD1	1:B:961:ARG:HB3	2.14	0.47
2:C:1079:LYS:N	3:D:27:LEU:HD21	2.30	0.47
2:C:980:PHE:CA	2:C:1095:LEU:HD11	2.44	0.47
1:B:335:ARG:NH1	2:C:1202:LEU:HD13	2.29	0.47
2:C:473:MET:C	2:C:475:SER:H	2.18	0.47
3:D:44:LEU:HA	3:D:160:LYS:O	2.13	0.47
4:E:210:ILE:O	4:E:214:LEU:HD23	2.14	0.47
6:G:130:ILE:O	6:G:148:VAL:CG2	2.62	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:H:30:LEU:HD13	7:H:72:VAL:CG1	2.39	0.47
4:E:47:LEU:HD11	7:H:3:PHE:CE2	2.49	0.47
8:I:102:TYR:N	8:I:102:TYR:HD2	2.09	0.47
8:I:128:ASN:O	8:I:128:ASN:OD1	2.32	0.47
8:I:84:ALA:CA	8:I:87:ARG:HB2	2.40	0.47
1:B:567:LYS:CB	8:I:96:VAL:H	2.20	0.47
3:D:114:TYR:HE2	10:K:19:GLU:OE2	1.97	0.47
11:L:63:VAL:HG23	11:L:63:VAL:O	2.14	0.47
10:K:65:PRO:HG3	12:M:32:ALA:O	2.14	0.47
1:B:1317:MET:CE	1:B:1327:ILE:HG21	2.44	0.47
1:B:1329:THR:O	1:B:1331:SER:N	2.48	0.47
1:B:1345:ARG:HD2	1:B:1373:ASP:OD1	2.13	0.47
1:B:1402:PHE:O	1:B:1403:GLU:HB2	2.14	0.47
1:B:331:GLY:O	1:B:332:LYS:O	2.33	0.47
1:B:49:LYS:NZ	1:B:61:ILE:H	2.11	0.47
1:B:63:ARG:HG2	1:B:74:MET:SD	2.54	0.47
1:B:951:GLU:HB3	1:B:954:TRP:CZ2	2.49	0.47
1:B:961:ARG:NH1	1:B:961:ARG:HG3	2.28	0.47
2:C:980:PHE:CD2	2:C:1094:ARG:HA	2.50	0.47
2:C:776:GLN:O	2:C:1095:LEU:HA	2.14	0.47
1:B:1410:PHE:HA	2:C:1212:ILE:CD1	2.45	0.47
2:C:284:ILE:HG23	2:C:324:ILE:CD1	2.44	0.47
2:C:483:LEU:HD21	2:C:491:THR:CG2	2.45	0.47
2:C:530:GLY:O	2:C:533:CYS:HB2	2.15	0.47
2:C:373:ARG:HD2	2:C:567:GLU:OE2	2.14	0.47
2:C:782:LEU:HB3	2:C:784:ASN:OD1	2.15	0.47
2:C:897:GLY:O	2:C:898:LEU:HD23	2.15	0.47
3:D:186:LEU:HD12	3:D:186:LEU:N	2.30	0.47
3:D:89:GLU:O	3:D:90:ASP:HB3	2.15	0.47
4:E:27:LEU:CD1	4:E:173:HIS:HB2	2.43	0.47
8:I:113:ALA:HB2	8:I:126:GLU:HG3	1.97	0.47
1:B:1161:THR:HG22	1:B:1162:VAL:N	2.29	0.47
1:B:243:PRO:HB2	1:B:244:PRO:HD2	1.97	0.47
1:B:537:ARG:NH1	8:I:120:GLY:O	2.48	0.47
1:B:781:ASP:O	1:B:789:LYS:HA	2.14	0.47
2:C:230:ALA:N	2:C:231:PRO:HD2	2.29	0.47
2:C:461:LEU:N	2:C:461:LEU:CD1	2.77	0.47
2:C:611:PRO:O	2:C:692:TYR:HB2	2.14	0.47
2:C:797:TYR:O	2:C:799:PRO:HD3	2.14	0.47
3:D:77:ILE:HD13	3:D:77:ILE:HA	1.68	0.47
5:F:111:VAL:CG1	5:F:137:GLU:HG2	2.45	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:11:ARG:HH21	5:F:141:VAL:HG21	1.79	0.47
5:F:26:ARG:HH22	5:F:133:GLU:CD	2.17	0.47
8:I:40:LEU:HD23	8:I:42:ILE:HD11	1.97	0.47
12:M:30:ILE:HG22	12:M:31:CYS:H	1.79	0.47
12:M:36:SER:O	12:M:37:LYS:O	2.33	0.47
1:B:297:GLN:O	1:B:301:ALA:HB2	2.14	0.47
1:B:367:PRO:HB3	1:B:465:TYR:O	2.15	0.47
2:C:1125:ASP:O	2:C:1126:GLY:O	2.33	0.47
2:C:1161:HIS:NE2	2:C:1175:LEU:HD21	2.29	0.47
2:C:581:PHE:HA	2:C:585:VAL:O	2.15	0.47
2:C:882:THR:HG21	2:C:935:ARG:CA	2.45	0.47
2:C:941:LEU:HD21	2:C:946:ASN:HA	1.97	0.47
3:D:181:ASP:OD1	3:D:185:LYS:HB2	2.15	0.47
1:B:1340:GLY:HA2	5:F:183:PRO:HD2	1.96	0.47
6:G:109:VAL:HG11	6:G:127:GLU:OE2	2.14	0.47
7:H:51:TYR:C	7:H:51:TYR:CD2	2.88	0.47
7:H:59:GLY:HA3	7:H:70:PHE:CE2	2.50	0.47
11:L:73:LEU:HD21	11:L:75:ILE:HD11	1.96	0.47
1:B:115:LEU:CD1	1:B:142:CYS:HB3	2.45	0.47
1:B:1239:ARG:HB3	1:B:1239:ARG:NH1	2.30	0.47
1:B:1446:ASP:O	1:B:1447:GLU:C	2.53	0.47
1:B:492:PRO:O	1:B:493:GLN:NE2	2.47	0.47
1:B:774:ARG:O	1:B:775:ILE:C	2.52	0.47
1:B:780:VAL:HG23	2:C:699:GLU:OE1	2.14	0.47
2:C:370:PHE:HD2	2:C:373:ARG:HD2	1.79	0.47
3:D:113:VAL:O	3:D:144:ILE:N	2.48	0.47
1:B:1377:THR:HA	5:F:212:ARG:HH21	1.79	0.47
7:H:27:LYS:HD3	7:H:51:TYR:CE2	2.50	0.47
7:H:88:ASP:N	7:H:88:ASP:OD2	2.40	0.47
10:K:36:LEU:CB	10:K:47:ARG:HH12	2.27	0.47
1:B:1315:GLU:C	1:B:1317:MET:N	2.67	0.47
1:B:1364:ASN:O	1:B:1365:TYR:C	2.53	0.47
1:B:1376:THR:HG23	1:B:1377:THR:N	2.29	0.47
1:B:665:GLY:O	1:B:667:GLY:N	2.48	0.47
1:B:821:ARG:HH11	1:B:821:ARG:HB2	1.80	0.47
2:C:1115:THR:O	2:C:1115:THR:HG22	2.13	0.47
2:C:129:PHE:HD2	2:C:166:PHE:HA	1.79	0.47
2:C:313:MET:CE	2:C:386:LEU:HD22	2.42	0.47
2:C:430:ARG:HB3	2:C:434:ARG:CZ	2.45	0.47
2:C:376:PHE:CZ	2:C:569:TYR:HB3	2.50	0.47
2:C:582:VAL:CG2	2:C:626:ILE:HB	2.45	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:899:ILE:HG22	2:C:903:VAL:CG2	2.45	0.47
5:F:136:ASN:HB3	5:F:139:ALA:CB	2.45	0.47
7:H:138:THR:HG23	7:H:139:ILE:HG13	1.97	0.47
7:H:153:GLN:O	7:H:154:VAL:C	2.53	0.47
7:H:34:VAL:HG11	7:H:74:TYR:OH	2.14	0.47
7:H:80:LYS:O	7:H:80:LYS:HG2	2.15	0.47
9:J:100:PHE:CD1	9:J:100:PHE:N	2.83	0.47
1:B:547:LEU:HD13	11:L:58:PHE:CD1	2.50	0.47
15:T:18:DT:H2'	15:T:19:DT:H5'	1.95	0.47
1:B:1036:ARG:HG2	1:B:1036:ARG:HH11	1.80	0.46
1:B:264:PHE:O	1:B:267:ALA:HB3	2.14	0.46
1:B:418:SER:C	1:B:420:ARG:N	2.67	0.46
1:B:965:GLN:HA	1:B:968:GLN:CG	2.44	0.46
2:C:1138:MET:CE	2:C:1143:ALA:HB3	2.45	0.46
2:C:254:LEU:HD23	2:C:381:MET:CE	2.44	0.46
2:C:324:ILE:HG22	2:C:325:GLN:N	2.29	0.46
2:C:596:LEU:O	2:C:599:THR:HB	2.15	0.46
2:C:882:THR:O	2:C:884:ARG:N	2.48	0.46
1:B:255:SER:OG	2:C:918:ILE:HG21	2.15	0.46
4:E:214:LEU:C	4:E:216:ASN:H	2.18	0.46
4:E:6:SER:OG	4:E:7:THR:N	2.47	0.46
5:F:177:ARG:HD3	5:F:215:MET:CG	2.44	0.46
5:F:39:LEU:O	5:F:43:LYS:HG3	2.14	0.46
8:I:127:GLY:CA	8:I:130:ARG:HH22	2.28	0.46
11:L:77:THR:HG23	11:L:83:PRO:HB3	1.97	0.46
1:B:208:LEU:HD23	1:B:208:LEU:C	2.36	0.46
1:B:346:ASP:HB3	2:C:1108:ARG:N	2.30	0.46
2:C:1183:LYS:HA	2:C:1186:ASP:HA	1.97	0.46
2:C:308:TRP:CZ3	9:J:45:ARG:HB3	2.49	0.46
2:C:386:LEU:C	2:C:388:CYS:N	2.68	0.46
2:C:467:GLY:CA	2:C:475:SER:HB3	2.44	0.46
2:C:753:ALA:HA	2:C:756:ILE:HD12	1.97	0.46
2:C:903:VAL:HG12	2:C:904:ARG:N	2.29	0.46
3:D:124:LEU:O	3:D:127:ARG:HG2	2.16	0.46
3:D:191:TYR:HB3	3:D:201:TRP:CD1	2.50	0.46
4:E:51:ASN:HB3	4:E:178:ALA:HA	1.98	0.46
6:G:99:LEU:O	6:G:102:SER:OG	2.29	0.46
7:H:21:ARG:HA	7:H:21:ARG:HD3	1.68	0.46
15:T:14:DC:C2'	15:T:15:DT:H71	2.43	0.46
1:B:1385:THR:HG22	1:B:1386:ARG:H	1.79	0.46
1:B:23:SER:HA	1:B:233:TRP:CD1	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:399:HIS:CE1	1:B:462:VAL:HG11	2.49	0.46
1:B:591:PHE:HA	1:B:595:THR:OG1	2.15	0.46
1:B:61:ILE:O	1:B:63:ARG:N	2.49	0.46
1:B:793:SER:HB2	1:B:794:PRO:HD2	1.97	0.46
2:C:1151:LEU:CD1	2:C:1151:LEU:H	2.28	0.46
2:C:1159:ARG:HD3	2:C:1193:GLN:HB2	1.96	0.46
2:C:493:SER:N	2:C:751:VAL:HG11	2.30	0.46
2:C:825:VAL:O	2:C:826:ALA:HB2	2.14	0.46
2:C:865:LYS:HE2	2:C:871:THR:OG1	2.15	0.46
3:D:132:PRO:O	3:D:133:ILE:C	2.54	0.46
3:D:133:ILE:HD11	3:D:237:SER:CA	2.42	0.46
3:D:45:ALA:CA	3:D:72:LEU:HD12	2.37	0.46
4:E:59:ILE:O	4:E:60:LYS:C	2.51	0.46
7:H:145:VAL:CG1	7:H:146:LYS:H	2.27	0.46
8:I:91:ASP:C	8:I:93:TYR:H	2.18	0.46
11:L:42:LEU:HD21	11:L:46:ILE:HD11	1.97	0.46
12:M:27:LEU:HD23	12:M:27:LEU:H	1.79	0.46
3:D:47:ASP:CA	12:M:69:ALA:CB	2.91	0.46
1:B:1074:GLU:C	1:B:1076:ALA:N	2.68	0.46
1:B:1173:HIS:C	1:B:1174:PHE:HD1	2.17	0.46
1:B:1385:THR:HG22	1:B:1386:ARG:N	2.30	0.46
1:B:1418:LEU:HD12	1:B:1419:ASP:H	1.79	0.46
1:B:22:PHE:CE2	1:B:30:ILE:HD12	2.50	0.46
1:B:51:GLY:HA2	1:B:56:PRO:HA	1.97	0.46
1:B:591:PHE:CD2	1:B:595:THR:HB	2.50	0.46
2:C:171:PRO:HD2	2:C:457:LEU:CD1	2.46	0.46
2:C:47:GLN:HB3	2:C:173:MET:HE1	1.98	0.46
1:B:828:ALA:HB1	2:C:530:GLY:HA2	1.91	0.46
3:D:234:SER:OG	3:D:235:VAL:N	2.48	0.46
4:E:118:THR:HG22	4:E:118:THR:O	2.15	0.46
7:H:138:THR:HG22	7:H:139:ILE:HG13	1.96	0.46
10:K:36:LEU:HD22	10:K:41:LEU:HD12	1.96	0.46
10:K:48:ARG:CD	10:K:49:MET:N	2.75	0.46
11:L:19:LEU:HD22	11:L:33:ILE:HG21	1.98	0.46
1:B:1164:PRO:HG2	1:B:1165:GLU:H	1.80	0.46
1:B:445:ASN:HA	1:B:478:TYR:CE2	2.49	0.46
1:B:500:GLU:O	1:B:504:LEU:HD13	2.15	0.46
1:B:710:LEU:HD12	1:B:710:LEU:N	2.30	0.46
1:B:807:GLY:HA2	2:C:760:ASP:O	2.15	0.46
1:B:868:TYR:C	1:B:868:TYR:CD1	2.85	0.46
1:B:886:ILE:HB	1:B:943:LEU:HD12	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:276:ILE:O	2:C:276:ILE:HG22	2.15	0.46
2:C:498:THR:HG22	2:C:537:LYS:HB2	1.96	0.46
2:C:579:ARG:NH1	2:C:622:LYS:O	2.49	0.46
2:C:755:ILE:H	2:C:755:ILE:HG13	1.50	0.46
4:E:12:ARG:HH21	4:E:12:ARG:HG3	1.80	0.46
4:E:20:GLU:O	4:E:21:GLU:O	2.32	0.46
5:F:147:HIS:HD2	5:F:149:LEU:H	1.62	0.46
1:B:1006:ILE:HD12	5:F:167:ARG:HG3	1.98	0.46
8:I:145:ARG:HG3	8:I:146:ARG:HG3	1.97	0.46
2:C:1006:ILE:HD13	10:K:44:TYR:CE2	2.51	0.46
10:K:9:SER:HB2	10:K:45:CYS:HB2	1.97	0.46
1:B:1102:LYS:O	1:B:1106:ASN:ND2	2.49	0.46
1:B:1215:ARG:NH1	1:B:1272:THR:O	2.49	0.46
1:B:1330:ASN:O	1:B:1332:PHE:N	2.48	0.46
1:B:442:VAL:HG12	1:B:490:HIS:O	2.14	0.46
1:B:51:GLY:O	1:B:56:PRO:HB3	2.16	0.46
1:B:563:PRO:HG3	1:B:572:TRP:CE2	2.49	0.46
1:B:639:PRO:CG	1:B:640:GLN:N	2.79	0.46
1:B:71:GLN:CG	1:B:72:GLU:N	2.77	0.46
1:B:867:ILE:N	1:B:867:ILE:HD12	2.31	0.46
2:C:803:LEU:CD1	2:C:1032:SER:HB3	2.46	0.46
2:C:1174:LYS:O	2:C:1175:LEU:C	2.54	0.46
2:C:1197:PRO:HG2	2:C:1200:ALA:CB	2.27	0.46
2:C:299:GLU:HB3	2:C:571:PRO:HG3	1.97	0.46
2:C:388:CYS:C	2:C:390:LEU:H	2.19	0.46
2:C:557:PHE:C	2:C:557:PHE:CD2	2.89	0.46
2:C:570:VAL:CG2	2:C:573:GLN:HB3	2.46	0.46
2:C:615:MET:C	2:C:616:ILE:HD12	2.36	0.46
2:C:873:THR:HG22	2:C:874:PHE:N	2.31	0.46
2:C:910:VAL:CG1	2:C:911:ILE:H	2.27	0.46
5:F:11:ARG:C	5:F:13:TRP:N	2.69	0.46
6:G:109:VAL:CG1	6:G:110:ASP:N	2.74	0.46
10:K:57:ILE:HG12	10:K:61:LEU:HD11	1.96	0.46
12:M:70:ARG:HH11	12:M:70:ARG:HG2	1.80	0.46
1:B:1403:GLU:O	15:T:16:DG:OP1	2.33	0.46
1:B:1411:GLU:O	1:B:1411:GLU:HG2	2.15	0.46
1:B:157:ASP:C	1:B:159:THR:H	2.18	0.46
1:B:23:SER:O	1:B:27:VAL:HG23	2.16	0.46
1:B:709:THR:CB	1:B:712:GLU:HG3	2.42	0.46
1:B:77:CYS:C	1:B:78:PRO:O	2.51	0.46
1:B:886:ILE:HD12	1:B:943:LEU:CB	2.42	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:933:TYR:O	1:B:937:VAL:HG23	2.15	0.46
1:B:947:PHE:HD1	1:B:947:PHE:N	2.13	0.46
2:C:1002:THR:CG2	2:C:1006:ILE:HG13	2.37	0.46
2:C:758:PHE:CZ	2:C:1031:LEU:HD22	2.48	0.46
1:B:1424:VAL:HG11	2:C:1139:ILE:HD13	1.97	0.46
3:D:115:SER:HB3	3:D:142:VAL:HB	1.98	0.46
3:D:229:TYR:N	3:D:229:TYR:CD1	2.84	0.46
5:F:116:ILE:HG22	5:F:120:ALA:HB3	1.97	0.46
6:G:94:LEU:HD21	6:G:122:MET:HA	1.98	0.46
8:I:58:THR:HG22	8:I:59:ILE:H	1.81	0.46
3:D:6:PRO:HG2	11:L:101:LEU:HB2	1.98	0.46
1:B:203:SER:O	1:B:206:GLU:HB3	2.15	0.46
1:B:84:ILE:HD11	1:B:270:LEU:HD22	1.97	0.46
1:B:90:VAL:HG13	1:B:297:GLN:CD	2.36	0.46
1:B:403:LYS:O	1:B:404:TYR:CD2	2.68	0.46
1:B:438:ASP:O	1:B:439:ASN:HB2	2.15	0.46
1:B:572:TRP:HA	1:B:576:GLN:OE1	2.16	0.46
1:B:650:GLN:HB3	1:B:654:ASN:HD21	1.81	0.46
1:B:72:GLU:O	1:B:73:GLY:O	2.34	0.46
2:C:1098:MET:H	2:C:1098:MET:CE	2.27	0.46
2:C:1099:VAL:O	2:C:1101:ASP:N	2.49	0.46
2:C:240:ILE:HD13	2:C:377:PHE:HE2	1.81	0.46
2:C:244:LEU:HD13	2:C:247:GLY:O	2.15	0.46
2:C:361:LEU:HD11	2:C:381:MET:CE	2.44	0.46
2:C:557:PHE:O	2:C:557:PHE:CD2	2.69	0.46
2:C:654:ARG:O	2:C:656:GLY:N	2.48	0.46
2:C:807:ARG:NH1	2:C:807:ARG:HB3	2.30	0.46
2:C:879:ARG:NH1	2:C:883:LEU:HD22	2.30	0.46
3:D:163:ILE:N	3:D:163:ILE:CD1	2.68	0.46
3:D:191:TYR:CD2	3:D:201:TRP:CD1	3.04	0.46
3:D:221:TYR:CE1	3:D:222:LYS:HG3	2.51	0.46
3:D:252:GLN:CG	11:L:95:ILE:HG23	2.46	0.46
4:E:64:VAL:CG2	4:E:129:LEU:HD22	2.46	0.46
5:F:144:ILE:HG13	5:F:145:THR:N	2.29	0.46
5:F:60:PHE:C	5:F:60:PHE:CD2	2.88	0.46
9:J:72:ASP:HA	9:J:81:ARG:O	2.15	0.46
14:P:3:C:H42	15:T:26:DA:N6	2.13	0.46
1:B:106:VAL:HG12	1:B:107:CYS:N	2.30	0.46
1:B:591:PHE:HA	1:B:595:THR:CG2	2.45	0.46
1:B:578:LEU:HD23	1:B:612:ILE:CD1	2.46	0.46
1:B:590:ARG:NH2	1:B:620:LYS:CB	2.65	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:877:HIS:ND1	1:B:1056:SER:HA	2.31	0.46
1:B:897:TYR:N	1:B:897:TYR:CD1	2.84	0.46
2:C:1214:PRO:HG2	2:C:1214:PRO:O	2.16	0.46
2:C:172:ILE:HG22	2:C:173:MET:N	2.31	0.46
2:C:56:ASP:CB	2:C:57:TYR:HD1	2.28	0.46
2:C:583:ASN:ND2	2:C:628:THR:HG22	2.30	0.46
5:F:202:SER:HG	5:F:204:THR:HG22	1.80	0.46
1:B:172:PRO:HA	1:B:184:SER:O	2.16	0.46
1:B:843:LYS:HA	1:B:846:GLU:HG3	1.98	0.46
2:C:840:ILE:HB	2:C:1011:ILE:HB	1.98	0.46
2:C:746:SER:CB	2:C:1046:PRO:HG2	2.45	0.46
2:C:276:ILE:HD13	2:C:280:ILE:HD11	1.98	0.46
2:C:29:ASP:O	2:C:30:SER:C	2.54	0.46
2:C:329:THR:O	2:C:329:THR:HG22	2.16	0.46
2:C:33:VAL:HG21	2:C:638:PHE:CZ	2.40	0.46
2:C:216:GLU:HA	2:C:406:LEU:HD23	1.97	0.46
2:C:637:LEU:HD22	2:C:742:GLU:HA	1.97	0.46
2:C:841:MET:O	2:C:993:THR:HA	2.16	0.46
4:E:137:ASN:HD22	4:E:138:ASN:N	2.14	0.46
5:F:157:SER:C	5:F:159:ASP:N	2.69	0.46
8:I:7:ASP:O	8:I:8:ASP:HB2	2.15	0.46
10:K:14:VAL:CG1	10:K:14:VAL:O	2.58	0.46
11:L:86:ALA:HA	11:L:89:ASN:ND2	2.31	0.46
15:T:22:DT:C2'	15:T:23:DT:O5'	2.64	0.46
1:B:1280:GLU:O	1:B:1281:ARG:C	2.54	0.45
1:B:18:GLN:HB3	2:C:1215:ARG:HG3	1.97	0.45
1:B:445:ASN:CB	1:B:455:MET:HG2	2.46	0.45
1:B:546:VAL:O	1:B:550:LEU:HG	2.16	0.45
2:C:1166:CYS:O	2:C:1166:CYS:SG	2.73	0.45
2:C:363:HIS:HD2	2:C:585:VAL:HG22	1.81	0.45
2:C:423:LYS:CE	2:C:470:LYS:HZ1	2.30	0.45
2:C:878:GLN:O	2:C:879:ARG:C	2.54	0.45
3:D:147:LEU:CD2	3:D:147:LEU:N	2.79	0.45
2:C:847:ASP:CB	3:D:167:HIS:CD2	2.95	0.45
3:D:238:ILE:HG21	3:D:242:GLN:HB2	1.95	0.45
4:E:24:ALA:C	4:E:26:THR:N	2.69	0.45
4:E:8:PHE:O	4:E:9:GLN:HB2	2.14	0.45
1:B:857:ARG:NH1	6:G:139:PRO:HB2	2.31	0.45
8:I:83:GLN:C	8:I:85:GLY:H	2.19	0.45
12:M:28:LYS:HB3	12:M:39:SER:HA	1.97	0.45
15:T:11:DT:H1'	15:T:12:DA:H5'	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:266:LEU:HD21	1:B:303:TYR:CZ	2.51	0.45
1:B:350:ARG:CB	2:C:1128:LEU:HD11	2.46	0.45
1:B:427:GLN:HB2	1:B:430:TRP:CD1	2.51	0.45
1:B:709:THR:HG21	9:J:93:LYS:O	2.16	0.45
2:C:1000:PRO:O	2:C:1007:VAL:HG23	2.16	0.45
2:C:195:CYS:SG	2:C:196:PRO:HD2	2.56	0.45
2:C:367:LEU:HD12	2:C:370:PHE:CE1	2.51	0.45
2:C:388:CYS:C	2:C:390:LEU:N	2.70	0.45
2:C:544:CYS:HB3	2:C:634:TYR:CE1	2.51	0.45
2:C:885:MET:HA	2:C:936:ASP:CB	2.46	0.45
3:D:35:ARG:HH11	11:L:41:THR:N	2.14	0.45
3:D:69:LEU:CD1	3:D:69:LEU:H	2.30	0.45
4:E:59:ILE:O	4:E:63:LEU:HB2	2.16	0.45
6:G:138:LEU:HB2	6:G:142:SER:O	2.15	0.45
6:G:75:PRO:O	6:G:77:ASP:O	2.34	0.45
7:H:95:SER:C	7:H:97:HIS:H	2.19	0.45
8:I:62:SER:OG	8:I:63:LEU:N	2.48	0.45
1:B:1147:THR:HA	1:B:1197:LEU:HD23	1.98	0.45
1:B:343:LYS:HB3	2:C:1117:GLN:OE1	2.17	0.45
1:B:630:ILE:HD13	1:B:646:PHE:CZ	2.51	0.45
2:C:1034:VAL:HG21	2:C:1055:ILE:HG23	1.98	0.45
2:C:1106:ARG:NH2	2:C:1109:GLY:H	2.14	0.45
1:B:782:ARG:NH2	2:C:699:GLU:O	2.45	0.45
3:D:100:THR:HG22	3:D:101:LEU:H	1.80	0.45
3:D:101:LEU:HD13	3:D:118:LEU:CD2	2.23	0.45
3:D:133:ILE:HD13	3:D:237:SER:N	2.32	0.45
3:D:91:HIS:CD2	3:D:91:HIS:O	2.69	0.45
5:F:124:VAL:HG13	5:F:132:ILE:HG13	1.98	0.45
6:G:135:ARG:HD3	6:G:143:PHE:CE2	2.50	0.45
8:I:82:PRO:O	8:I:84:ALA:N	2.36	0.45
8:I:84:ALA:HA	8:I:87:ARG:HD2	1.98	0.45
13:N:6:DA:C2	15:T:12:DA:C2	3.04	0.45
1:B:1220:PHE:CE2	1:B:1263:ILE:HG23	2.51	0.45
1:B:414:ASP:OD1	1:B:416:ARG:CG	2.65	0.45
1:B:434:ARG:HD2	1:B:435:HIS:O	2.16	0.45
2:C:33:VAL:O	2:C:36:ALA:HB3	2.15	0.45
2:C:542:MET:HG2	2:C:747:MET:HB3	1.98	0.45
2:C:560:GLU:O	2:C:561:TRP:CD1	2.70	0.45
2:C:731:VAL:CG1	2:C:732:SER:H	2.23	0.45
2:C:996:ARG:HH21	3:D:175:ALA:HA	1.81	0.45
3:D:11:ARG:HD3	3:D:209:TYR:CZ	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:176:GLU:O	4:E:179:GLN:N	2.49	0.45
5:F:13:TRP:CZ3	5:F:39:LEU:HB2	2.51	0.45
7:H:22:MET:O	7:H:23:LYS:C	2.54	0.45
9:J:32:CYS:SG	9:J:33:SER:N	2.86	0.45
1:B:1159:ARG:O	1:B:1160:SER:HB3	2.16	0.45
1:B:219:PHE:CD2	1:B:231:PRO:HD2	2.51	0.45
1:B:320:ARG:HA	1:B:321:PRO:HD3	1.87	0.45
1:B:578:LEU:HD23	1:B:612:ILE:HD11	1.99	0.45
1:B:522:GLY:HA2	1:B:630:ILE:HD13	1.98	0.45
1:B:696:GLU:OE2	1:B:702:LEU:HD21	2.17	0.45
2:C:1107:ALA:O	2:C:1108:ARG:O	2.35	0.45
2:C:54:PHE:HE1	2:C:414:ALA:HA	1.81	0.45
2:C:859:TYR:OH	2:C:941:LEU:CD1	2.65	0.45
3:D:8:VAL:HG21	11:L:105:PHE:CA	2.46	0.45
5:F:156:LEU:HD12	5:F:195:VAL:CG1	2.46	0.45
5:F:207:ARG:HH11	5:F:207:ARG:CB	2.29	0.45
5:F:34:GLU:O	5:F:34:GLU:HG2	2.16	0.45
7:H:91:VAL:HA	7:H:101:VAL:HA	1.98	0.45
8:I:76:THR:O	8:I:76:THR:HG22	2.15	0.45
1:B:1403:GLU:OE2	15:T:16:DG:H4'	2.16	0.45
1:B:1170:ILE:HG13	1:B:1170:ILE:H	1.49	0.45
1:B:302:THR:HA	1:B:305:ASP:O	2.17	0.45
1:B:482:PHE:C	1:B:484:GLY:H	2.20	0.45
1:B:511:ILE:O	1:B:519:PRO:HA	2.17	0.45
1:B:699:ALA:O	1:B:700:ASN:CB	2.65	0.45
1:B:878:ILE:HG22	1:B:956:LEU:N	2.32	0.45
2:C:1099:VAL:C	2:C:1101:ASP:H	2.19	0.45
2:C:1111:MET:SD	2:C:1118:PRO:HA	2.56	0.45
2:C:995:ARG:HH11	3:D:165:LYS:HA	1.82	0.45
4:E:140:ASP:O	4:E:143:ASN:N	2.49	0.45
9:J:86:PHE:CE1	9:J:100:PHE:HB2	2.52	0.45
9:J:8:ARG:HG3	9:J:34:TYR:CE1	2.52	0.45
1:B:1154:TYR:N	9:J:41:PRO:O	2.49	0.45
9:J:4:PHE:C	9:J:4:PHE:CD1	2.90	0.45
9:J:55:THR:HG23	9:J:86:PHE:CZ	2.52	0.45
2:C:1039:GLY:O	10:K:32:GLU:HB2	2.15	0.45
1:B:1209:MET:SD	1:B:1236:LEU:HB3	2.57	0.45
1:B:332:LYS:HB2	1:B:337:ARG:NH1	2.32	0.45
1:B:38:PRO:HG2	1:B:39:GLU:N	2.31	0.45
1:B:606:LEU:CB	1:B:614:PHE:CE2	3.00	0.45
1:B:697:ALA:HB2	1:B:702:LEU:HD12	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:510:LYS:CB	2:C:511:PRO:CD	2.94	0.45
2:C:683:SER:O	2:C:685:LEU:N	2.50	0.45
3:D:183:TRP:O	3:D:185:LYS:N	2.50	0.45
3:D:226:ASP:O	3:D:227:THR:HB	2.17	0.45
4:E:52:LEU:HB2	4:E:182:SER:HB3	1.98	0.45
4:E:68:ARG:O	4:E:72:ARG:HG3	2.16	0.45
7:H:1:MET:SD	7:H:1:MET:C	2.95	0.45
7:H:45:ILE:O	7:H:45:ILE:HG22	2.17	0.45
9:J:54:GLU:OE2	9:J:118:ARG:NH1	2.49	0.45
2:C:110:HIS:CD2	12:M:54:ARG:HH22	2.35	0.45
1:B:130:ASP:H	1:B:134:ARG:HH21	1.64	0.45
1:B:1411:GLU:HA	1:B:1414:ALA:CB	2.46	0.45
1:B:24:PRO:HD2	1:B:233:TRP:NE1	2.32	0.45
1:B:390:GLN:HE21	1:B:394:ASN:ND2	2.15	0.45
1:B:470:LEU:HD13	1:B:487:MET:HE1	1.99	0.45
1:B:898:ARG:HD3	1:B:933:TYR:CD1	2.52	0.45
2:C:983:ARG:CD	2:C:1091:TYR:HB3	2.47	0.45
2:C:1146:PHE:CZ	2:C:1150:ARG:HD2	2.52	0.45
2:C:118:ARG:HD3	2:C:204:ILE:HD13	1.99	0.45
2:C:205:ILE:N	2:C:205:ILE:CD1	2.79	0.45
2:C:400:HIS:ND1	2:C:400:HIS:O	2.48	0.45
2:C:53:GLN:HG2	2:C:547:VAL:HG22	1.95	0.45
2:C:616:ILE:HG13	2:C:697:GLU:HG2	1.98	0.45
3:D:10:ILE:CG2	3:D:13:ALA:HB2	2.46	0.45
3:D:3:GLU:OE1	3:D:4:GLU:HB2	2.17	0.45
3:D:8:VAL:HG11	11:L:105:PHE:CD1	2.48	0.45
4:E:51:ASN:O	4:E:52:LEU:C	2.54	0.45
5:F:113:GLN:HA	5:F:137:GLU:HG3	1.99	0.45
5:F:48:ASP:CG	5:F:49:SER:N	2.70	0.45
6:G:120:ILE:O	6:G:123:LYS:HB3	2.17	0.45
9:J:101:PHE:CD1	9:J:101:PHE:N	2.84	0.45
11:L:42:LEU:HD21	11:L:46:ILE:CD1	2.46	0.45
12:M:38:LEU:HD11	12:M:49:LYS:HE2	1.98	0.45
1:B:1120:LEU:HD21	1:B:1304:TRP:O	2.17	0.45
1:B:1444:MET:HE3	1:B:1444:MET:HB2	1.86	0.45
1:B:344:ARG:HG2	1:B:344:ARG:HH11	1.81	0.45
1:B:836:TYR:CD2	1:B:840:ARG:HD2	2.50	0.45
1:B:873:MET:HG2	1:B:957:PRO:HB3	1.99	0.45
1:B:500:GLU:OE1	2:C:1143:ALA:C	2.55	0.45
2:C:1151:LEU:H	2:C:1151:LEU:HD13	1.81	0.45
1:B:81:PHE:CE1	2:C:1208:MET:HE2	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:100:PRO:HD3	2:C:172:ILE:HD12	1.99	0.45
2:C:224:GLN:HA	2:C:396:ASP:OD2	2.17	0.45
2:C:247:GLY:N	2:C:418:LYS:HZ1	2.14	0.45
2:C:467:GLY:H	2:C:475:SER:CB	2.30	0.45
2:C:487:THR:O	2:C:490:SER:HB3	2.17	0.45
2:C:65:GLU:HG3	2:C:66:ASP:OD1	2.17	0.45
2:C:635:ARG:NH2	2:C:742:GLU:OE2	2.48	0.45
2:C:952:VAL:HG13	2:C:966:VAL:HG22	1.97	0.45
3:D:67:LEU:CD1	3:D:155:LEU:HD13	2.42	0.45
3:D:169:LYS:NZ	12:M:69:ALA:HB3	2.32	0.45
4:E:35:LEU:CD2	4:E:173:HIS:HB3	2.46	0.45
4:E:216:ASN:O	4:E:217:LEU:C	2.54	0.45
5:F:154:ILE:HG22	5:F:155:ARG:N	2.30	0.45
5:F:161:LYS:HD2	5:F:195:VAL:CG2	2.46	0.45
5:F:197:LYS:HE2	5:F:199:ILE:HD11	1.98	0.45
6:G:125:LEU:O	6:G:125:LEU:HG	2.16	0.45
8:I:58:THR:HG22	8:I:59:ILE:N	2.31	0.45
9:J:34:TYR:O	9:J:35:VAL:CG2	2.65	0.45
10:K:16:ASP:O	10:K:18:TRP:N	2.49	0.45
10:K:36:LEU:HD11	10:K:51:LEU:HB2	1.98	0.45
10:K:57:ILE:CA	10:K:60:PHE:HD2	2.22	0.45
1:B:1120:LEU:HD11	1:B:1304:TRP:O	2.17	0.45
1:B:1434:ALA:O	1:B:1436:ILE:N	2.50	0.45
1:B:207:ILE:O	1:B:211:PHE:HD1	2.00	0.45
1:B:366:VAL:CG2	1:B:460:VAL:HG23	2.47	0.45
1:B:921:GLY:O	1:B:922:ASP:C	2.55	0.45
1:B:946:VAL:HB	1:B:947:PHE:CD1	2.52	0.45
2:C:1163:CYS:HB3	2:C:1166:CYS:O	2.17	0.45
2:C:281:PRO:HD2	2:C:284:ILE:HD12	1.98	0.45
2:C:294:ASP:C	2:C:296:GLU:H	2.17	0.45
2:C:360:PHE:HD2	2:C:374:LYS:HD3	1.82	0.45
3:D:258:ILE:N	3:D:258:ILE:HD12	2.32	0.45
3:D:70:ILE:HD11	3:D:144:ILE:CG1	2.47	0.45
5:F:124:VAL:N	5:F:125:PRO:CD	2.80	0.45
7:H:119:LEU:HD12	7:H:131:GLN:C	2.37	0.45
10:K:1:MET:N	10:K:55:ASP:C	2.70	0.45
1:B:1120:LEU:CD2	1:B:1304:TRP:O	2.65	0.44
1:B:1155:ASP:OD2	1:B:1162:VAL:N	2.49	0.44
1:B:24:PRO:HB3	1:B:237:THR:HB	1.99	0.44
1:B:338:GLY:O	1:B:342:GLY:O	2.35	0.44
1:B:497:THR:HG22	1:B:498:ARG:N	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:544:ASP:CG	1:B:545:GLN:N	2.70	0.44
1:B:567:LYS:HE3	8:I:46:LEU:HB3	1.98	0.44
2:C:1096:ARG:O	2:C:1097:HIS:CB	2.62	0.44
2:C:977:GLY:HA3	2:C:1099:VAL:HB	2.00	0.44
2:C:644:GLU:C	2:C:646:LEU:H	2.21	0.44
2:C:707:PRO:O	2:C:711:GLU:HG2	2.17	0.44
1:B:358:ASN:ND2	2:C:833:TYR:OH	2.50	0.44
2:C:935:ARG:HG3	2:C:935:ARG:O	2.18	0.44
3:D:34:ARG:HA	3:D:37:MET:CE	2.46	0.44
4:E:40:HIS:C	4:E:42:GLY:H	2.20	0.44
7:H:15:PRO:HG2	7:H:66:GLY:HA3	1.99	0.44
8:I:98:TYR:CD1	8:I:99:GLY:N	2.85	0.44
1:B:218:ASP:O	1:B:219:PHE:C	2.55	0.44
1:B:497:THR:O	1:B:500:GLU:N	2.42	0.44
1:B:541:ILE:HD12	1:B:577:ILE:HD11	1.99	0.44
1:B:899:VAL:CB	1:B:929:LEU:HD12	2.45	0.44
2:C:254:LEU:HD22	2:C:361:LEU:HD13	1.99	0.44
2:C:253:THR:HG22	2:C:254:LEU:N	2.33	0.44
2:C:34:ILE:O	2:C:37:PHE:N	2.51	0.44
2:C:449:ASN:O	2:C:451:LYS:N	2.50	0.44
2:C:45:SER:O	2:C:46:GLN:C	2.54	0.44
2:C:35:SER:HA	2:C:811:TYR:HE2	1.81	0.44
4:E:138:ASN:ND2	7:H:35:GLU:HB3	2.32	0.44
5:F:23:VAL:HG12	5:F:28:TYR:HB2	1.99	0.44
7:H:27:LYS:O	7:H:30:LEU:HB3	2.18	0.44
1:B:567:LYS:CG	8:I:95:TYR:HA	2.48	0.44
9:J:15:TYR:HD1	9:J:15:TYR:N	2.13	0.44
10:K:56:LEU:O	10:K:57:ILE:C	2.54	0.44
10:K:57:ILE:HG12	10:K:61:LEU:CD1	2.48	0.44
1:B:1189:SER:OG	1:B:1256:GLU:OE1	2.22	0.44
1:B:1343:ALA:O	1:B:1346:ALA:HB3	2.18	0.44
1:B:372:LYS:HA	1:B:435:HIS:HD1	1.82	0.44
1:B:375:THR:OG1	1:B:376:TYR:N	2.49	0.44
1:B:380:VAL:HG23	1:B:430:TRP:O	2.17	0.44
1:B:709:THR:CG2	1:B:711:ARG:HB2	2.46	0.44
1:B:940:ARG:HH11	1:B:940:ARG:HG2	1.82	0.44
2:C:102:VAL:O	2:C:104:GLU:HG2	2.17	0.44
2:C:129:PHE:CD2	2:C:166:PHE:HA	2.52	0.44
2:C:361:LEU:HG	2:C:363:HIS:CE1	2.52	0.44
2:C:362:PRO:C	2:C:363:HIS:O	2.55	0.44
2:C:51:PHE:CZ	2:C:172:ILE:HA	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:25:ILE:HG23	2:C:658:ILE:HD12	2.00	0.44
2:C:683:SER:C	2:C:685:LEU:N	2.70	0.44
2:C:529:GLU:OE1	2:C:769:TYR:CE2	2.71	0.44
2:C:841:MET:SD	2:C:846:ILE:HD11	2.57	0.44
2:C:842:ASN:ND2	2:C:845:SER:CB	2.80	0.44
2:C:843:GLN:HB3	2:C:994:TYR:O	2.18	0.44
1:B:1441:PHE:HZ	6:G:89:GLU:HA	1.79	0.44
11:L:68:PHE:N	11:L:68:PHE:HD2	2.15	0.44
15:T:24:DG:H2'	15:T:25:DC:O4'	2.17	0.44
1:B:1423:GLY:HA3	1:B:1426:GLU:HG2	1.98	0.44
1:B:108:MET:HA	1:B:210:ILE:HG23	1.99	0.44
1:B:241:VAL:HA	1:B:242:PRO:HD2	1.88	0.44
1:B:269:ILE:CG2	1:B:300:VAL:HG22	2.47	0.44
1:B:546:VAL:HG12	1:B:546:VAL:O	2.16	0.44
1:B:49:LYS:NZ	1:B:61:ILE:N	2.63	0.44
1:B:709:THR:HG21	1:B:711:ARG:HB2	1.99	0.44
1:B:808:LEU:HD23	1:B:813:PHE:N	2.33	0.44
2:C:1065:GLN:HB2	3:D:201:TRP:CZ3	2.53	0.44
2:C:31:TRP:CZ3	2:C:34:ILE:HD12	2.53	0.44
2:C:167:ILE:CG2	2:C:453:ILE:HD11	2.42	0.44
2:C:570:VAL:HB	2:C:573:GLN:CB	2.47	0.44
2:C:658:ILE:HG22	2:C:662:MET:HE2	1.98	0.44
2:C:906:SER:O	2:C:907:GLY:O	2.35	0.44
5:F:182:ASP:OD1	5:F:183:PRO:HD2	2.17	0.44
8:I:8:ASP:C	8:I:9:ILE:HG13	2.38	0.44
9:J:16:PRO:HB3	9:J:27:PHE:CE2	2.52	0.44
10:K:57:ILE:HG23	10:K:58:GLU:N	2.33	0.44
2:C:1076:HIS:CD2	11:L:40:HIS:CE1	3.05	0.44
12:M:34:CYS:SG	12:M:34:CYS:O	2.74	0.44
14:P:6:A:C4	14:P:7:A:C8	3.06	0.44
14:P:8:U:H2'	14:P:9:A:H8	1.83	0.44
1:B:1126:ALA:O	1:B:1128:GLN:N	2.47	0.44
1:B:1437:GLY:O	1:B:1438:THR:C	2.54	0.44
1:B:123:ARG:NH2	1:B:155:GLU:HG2	2.33	0.44
1:B:241:VAL:HG13	1:B:266:LEU:HD13	1.98	0.44
1:B:601:LYS:HB2	1:B:603:ASN:ND2	2.33	0.44
1:B:626:ASN:O	1:B:631:HIS:CD2	2.71	0.44
2:C:418:LYS:HE2	2:C:422:LYS:HZ1	1.82	0.44
2:C:806:THR:C	2:C:808:ALA:N	2.71	0.44
2:C:838:SER:CA	2:C:989:THR:O	2.66	0.44
2:C:899:ILE:HD11	2:C:911:ILE:HG12	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:I:93:TYR:N	8:I:93:TYR:CD1	2.85	0.44
3:D:66:ARG:CZ	10:K:2:ILE:HG21	2.47	0.44
15:T:21:DA:H2'	15:T:22:DT:C6	2.53	0.44
1:B:1118:VAL:HG12	1:B:1327:ILE:HG13	1.98	0.44
1:B:1272:THR:C	1:B:1273:LEU:HD12	2.38	0.44
1:B:1447:GLU:OE2	7:H:23:LYS:HB2	2.17	0.44
1:B:648:ASN:O	1:B:649:ILE:C	2.54	0.44
1:B:886:ILE:HG23	1:B:887:GLY:H	1.78	0.44
2:C:1004:GLU:OE2	2:C:1064:TYR:HE2	2.01	0.44
2:C:1162:ILE:HG23	2:C:1168:LEU:O	2.18	0.44
1:B:16:GLU:CD	2:C:1220:ARG:HA	2.38	0.44
2:C:684:LEU:O	2:C:689:LEU:HB2	2.17	0.44
2:C:683:SER:C	2:C:685:LEU:H	2.20	0.44
2:C:636:PRO:O	2:C:743:ILE:HD11	2.17	0.44
2:C:753:ALA:HA	2:C:756:ILE:CD1	2.48	0.44
3:D:67:LEU:HD13	3:D:157:CYS:SG	2.57	0.44
1:B:227:VAL:HG12	4:E:15:LEU:HD23	1.98	0.44
5:F:12:LEU:HD22	5:F:55:ARG:CZ	2.48	0.44
9:J:83:ASN:OD1	9:J:103:CYS:HA	2.16	0.44
10:K:30:LEU:HD11	10:K:38:ARG:HH12	1.82	0.44
11:L:33:ILE:HD13	11:L:87:LEU:HD22	1.99	0.44
14:P:6:A:H2'	14:P:7:A:O4'	2.17	0.44
1:B:1224:LEU:HG	1:B:1226:VAL:HG23	2.00	0.44
1:B:1287:TYR:O	1:B:1302:PRO:HA	2.18	0.44
1:B:22:PHE:HD2	1:B:27:VAL:HG22	1.83	0.44
1:B:230:ARG:O	1:B:231:PRO:C	2.55	0.44
1:B:765:VAL:HG12	1:B:766:GLY:H	1.81	0.44
2:C:984:HIS:CD2	2:C:1025:HIS:HA	2.52	0.44
2:C:378:LEU:C	2:C:378:LEU:HD12	2.38	0.44
2:C:681:TRP:O	2:C:684:LEU:N	2.51	0.44
3:D:101:LEU:C	3:D:102:GLN:HG3	2.38	0.44
3:D:155:LEU:HB3	3:D:156:THR:H	1.46	0.44
5:F:78:LEU:CD2	5:F:80:VAL:HG23	2.43	0.44
11:L:85:ASP:O	11:L:88:LYS:HB2	2.17	0.44
11:L:87:LEU:O	11:L:90:ALA:HB3	2.18	0.44
1:B:1051:ALA:O	1:B:1055:ARG:HG3	2.18	0.44
1:B:1104:ILE:C	1:B:1106:ASN:N	2.71	0.44
1:B:1118:VAL:HG23	1:B:1118:VAL:O	2.17	0.44
1:B:22:PHE:CD2	1:B:27:VAL:HG22	2.53	0.44
1:B:516:SER:O	1:B:517:ASN:C	2.55	0.44
1:B:867:ILE:HG22	1:B:872:GLY:N	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:185:THR:H	2:C:188:ASP:CB	2.29	0.44
2:C:282:ILE:CD1	2:C:382:ILE:HG21	2.48	0.44
2:C:425:THR:O	2:C:428:ILE:HB	2.18	0.44
2:C:882:THR:HB	2:C:934:LYS:O	2.17	0.44
2:C:880:THR:CB	2:C:934:LYS:HD2	2.46	0.44
7:H:18:PHE:HA	7:H:22:MET:CE	2.48	0.44
7:H:88:ASP:HB3	7:H:144:ARG:CA	2.42	0.44
11:L:68:PHE:HB3	11:L:70:ARG:NH1	2.32	0.44
1:B:1215:ARG:HA	1:B:1215:ARG:HD2	1.86	0.44
1:B:1239:ARG:HH22	1:B:1241:ARG:HH22	1.65	0.44
1:B:1349:TYR:HB2	1:B:1372:VAL:HG21	1.98	0.44
1:B:243:PRO:CB	1:B:244:PRO:HD2	2.46	0.44
1:B:409:SER:O	1:B:410:GLY:C	2.56	0.44
1:B:507:VAL:N	1:B:508:PRO:CD	2.81	0.44
1:B:577:ILE:C	1:B:579:SER:N	2.69	0.44
1:B:18:GLN:O	2:C:1215:ARG:HG2	2.18	0.44
2:C:1165:ILE:O	2:C:1217:TYR:CE1	2.71	0.44
2:C:303:TYR:O	2:C:304:ASP:HB2	2.18	0.44
2:C:361:LEU:HG	2:C:363:HIS:HE1	1.82	0.44
2:C:881:ASN:O	2:C:883:LEU:HG	2.18	0.44
2:C:913:GLY:HA2	2:C:938:SER:OG	2.18	0.44
4:E:208:GLU:O	4:E:212:LYS:HG3	2.18	0.44
4:E:40:HIS:CE1	4:E:41:GLN:HG3	2.53	0.44
5:F:175:LEU:HD23	5:F:175:LEU:HA	1.78	0.44
7:H:3:PHE:N	7:H:3:PHE:CD1	2.85	0.44
10:K:53:HIS:C	10:K:53:HIS:ND1	2.71	0.44
1:B:108:MET:SD	1:B:108:MET:N	2.91	0.43
1:B:1346:ALA:CB	5:F:149:LEU:HD12	2.48	0.43
1:B:239:LEU:HA	1:B:240:PRO:HD2	1.90	0.43
1:B:466:SER:O	2:C:1103:ILE:HD11	2.18	0.43
1:B:92:HIS:O	1:B:93:VAL:C	2.56	0.43
2:C:255:GLN:O	2:C:271:ALA:CB	2.66	0.43
2:C:293:PRO:HD2	2:C:296:GLU:OE1	2.18	0.43
2:C:39:ARG:NH2	2:C:665:GLU:CG	2.77	0.43
2:C:465:ASN:HD22	2:C:465:ASN:N	2.15	0.43
3:D:83:SER:OG	3:D:160:LYS:HB3	2.17	0.43
4:E:29:LEU:N	4:E:29:LEU:HD23	2.32	0.43
7:H:91:VAL:HG12	7:H:92:VAL:N	2.32	0.43
8:I:130:ARG:CB	8:I:134:ASN:H	2.25	0.43
8:I:55:LEU:HD22	8:I:144:ILE:HG23	1.96	0.43
10:K:1:MET:N	10:K:57:ILE:HG22	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:K:64:ASN:HD22	10:K:65:PRO:HD3	1.83	0.43
1:B:1156:PRO:O	1:B:1158:PRO:HD3	2.18	0.43
1:B:1138:ILE:O	1:B:1275:GLY:HA3	2.19	0.43
1:B:367:PRO:CB	1:B:466:SER:HA	2.48	0.43
1:B:552:TRP:HE1	11:L:62:LYS:HB2	1.83	0.43
1:B:668:ASP:HB3	1:B:741:ASN:ND2	2.27	0.43
1:B:858:ASN:C	1:B:858:ASN:ND2	2.71	0.43
2:C:1072:MET:HE3	2:C:1085:ILE:CB	2.21	0.43
1:B:351:THR:HG22	2:C:1103:ILE:HG13	2.00	0.43
2:C:1142:GLY:O	2:C:1144:ALA:N	2.51	0.43
1:B:2:VAL:HG13	2:C:1157:ALA:HB1	2.00	0.43
2:C:234:ILE:N	2:C:234:ILE:HD12	2.34	0.43
2:C:289:LEU:HD22	2:C:371:GLU:O	2.17	0.43
2:C:582:VAL:HB	2:C:587:HIS:HD2	1.82	0.43
2:C:616:ILE:N	2:C:616:ILE:CD1	2.70	0.43
3:D:44:LEU:HD23	3:D:72:LEU:HD12	2.00	0.43
4:E:156:ASP:HB2	4:E:159:THR:HG23	2.01	0.43
5:F:18:THR:O	5:F:19:VAL:C	2.57	0.43
8:I:56:THR:O	8:I:144:ILE:HA	2.18	0.43
10:K:3:VAL:HA	10:K:53:HIS:CD2	2.53	0.43
10:K:1:MET:H2	10:K:55:ASP:HA	1.82	0.43
1:B:1114:PRO:HG2	1:B:1115:SER:N	2.33	0.43
1:B:414:ASP:C	1:B:414:ASP:OD1	2.57	0.43
1:B:43:GLU:HG3	1:B:46:THR:O	2.18	0.43
2:C:1007:VAL:HG22	2:C:1008:PRO:CD	2.43	0.43
2:C:1065:GLN:NE2	2:C:1066:SER:H	2.16	0.43
2:C:1165:ILE:O	2:C:1217:TYR:HE1	2.00	0.43
2:C:329:THR:CA	2:C:332:ASP:HB3	2.44	0.43
2:C:390:LEU:O	2:C:391:ASP:C	2.56	0.43
2:C:653:VAL:CG2	2:C:689:LEU:HB3	2.48	0.43
2:C:757:PRO:HD3	2:C:983:ARG:NH2	2.33	0.43
2:C:488:TYR:CG	2:C:817:LEU:HD12	2.53	0.43
2:C:860:MET:HG2	2:C:861:ASP:N	2.32	0.43
4:E:156:ASP:C	4:E:158:GLU:H	2.21	0.43
5:F:124:VAL:HB	5:F:125:PRO:HD3	2.00	0.43
5:F:20:LYS:HZ3	5:F:60:PHE:HE1	1.63	0.43
6:G:138:LEU:O	6:G:140:ASP:N	2.50	0.43
6:G:76:LYS:NZ	7:H:58:ARG:HH22	2.16	0.43
7:H:39:THR:HG22	7:H:40:GLY:N	2.33	0.43
9:J:82:GLU:HB3	9:J:104:LEU:CG	2.47	0.43
11:L:7:PHE:C	11:L:7:PHE:CD1	2.91	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1142:THR:O	1:B:1143:LEU:C	2.56	0.43
1:B:297:GLN:O	1:B:297:GLN:HG3	2.18	0.43
1:B:353:ILE:HG21	1:B:487:MET:CG	2.48	0.43
1:B:38:PRO:HG2	1:B:39:GLU:H	1.83	0.43
1:B:808:LEU:CD2	1:B:813:PHE:HA	2.47	0.43
2:C:234:ILE:HG21	2:C:237:VAL:CG2	2.48	0.43
2:C:31:TRP:O	2:C:32:ALA:C	2.57	0.43
2:C:519:TRP:CD1	2:C:519:TRP:C	2.91	0.43
2:C:637:LEU:CD2	2:C:742:GLU:HA	2.48	0.43
5:F:113:GLN:HG2	5:F:137:GLU:OE1	2.18	0.43
5:F:153:HIS:ND1	5:F:184:VAL:HG11	2.33	0.43
8:I:95:TYR:HB3	8:I:144:ILE:HB	1.99	0.43
8:I:84:ALA:O	8:I:89:LEU:HD21	2.18	0.43
10:K:3:VAL:HG11	10:K:14:VAL:O	2.18	0.43
10:K:52:THR:O	10:K:53:HIS:C	2.57	0.43
2:C:1076:HIS:CD2	11:L:40:HIS:NE2	2.85	0.43
15:T:24:DG:H3'	15:T:25:DC:C5'	2.43	0.43
1:B:1039:LYS:HE3	1:B:1043:ASP:OD2	2.18	0.43
1:B:1226:VAL:HG13	1:B:1239:ARG:O	2.18	0.43
1:B:196:GLU:HG3	1:B:197:PRO:CD	2.41	0.43
1:B:54:ASN:H	1:B:54:ASN:HD22	1.66	0.43
1:B:605:MET:HE1	1:B:612:ILE:HG23	1.99	0.43
1:B:786:HIS:HE1	2:C:519:TRP:CZ2	2.36	0.43
1:B:982:THR:O	1:B:985:ASP:HB2	2.19	0.43
2:C:1035:ALA:HB1	2:C:1040:ASN:O	2.17	0.43
1:B:443:LEU:HD12	2:C:1146:PHE:CZ	2.54	0.43
2:C:229:ALA:HB1	2:C:231:PRO:HD2	2.01	0.43
2:C:496:ARG:HH11	2:C:496:ARG:HB3	1.81	0.43
2:C:908:GLU:O	2:C:909:ASP:C	2.56	0.43
3:D:142:VAL:O	3:D:142:VAL:HG12	2.19	0.43
3:D:236:GLY:O	3:D:237:SER:C	2.57	0.43
3:D:97:VAL:HB	3:D:159:ALA:HB3	2.00	0.43
4:E:206:GLU:C	4:E:208:GLU:N	2.70	0.43
4:E:175:PHE:CZ	7:H:85:GLU:HG3	2.48	0.43
9:J:74:GLU:HB2	9:J:79:HIS:CA	2.48	0.43
1:B:1026:LEU:HA	1:B:1026:LEU:HD23	1.76	0.43
1:B:1127:ASP:HB3	1:B:1130:GLN:HB3	2.01	0.43
1:B:113:LEU:HG	1:B:218:ASP:OD1	2.19	0.43
1:B:1227:ILE:CG2	1:B:1228:TRP:H	2.30	0.43
1:B:1377:THR:OG1	1:B:1378:GLN:N	2.47	0.43
1:B:83:HIS:HA	1:B:239:LEU:O	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:244:PRO:CB	1:B:245:PRO:HD3	2.37	0.43
1:B:269:ILE:HG23	1:B:300:VAL:CG2	2.48	0.43
1:B:463:ILE:HD12	1:B:469:ARG:CD	2.48	0.43
2:C:1102:LYS:C	2:C:1122:ARG:NH1	2.72	0.43
2:C:273:LEU:CG	2:C:276:ILE:HD12	2.48	0.43
2:C:281:PRO:C	2:C:283:VAL:N	2.72	0.43
2:C:31:TRP:CE3	2:C:34:ILE:HD12	2.54	0.43
2:C:383:ASN:ND2	2:C:387:LEU:HD22	2.34	0.43
2:C:806:THR:CG2	2:C:808:ALA:H	2.20	0.43
3:D:174:ALA:O	3:D:175:ALA:CB	2.67	0.43
4:E:187:THR:HG22	4:E:188:ALA:H	1.84	0.43
4:E:31:GLN:C	4:E:33:PHE:H	2.22	0.43
7:H:99:PHE:HZ	7:H:163:ILE:HD13	1.83	0.43
7:H:1:MET:O	7:H:3:PHE:HE1	2.00	0.43
7:H:35:GLU:CG	7:H:48:VAL:HG23	2.48	0.43
8:I:93:TYR:HB3	8:I:144:ILE:C	2.39	0.43
10:K:43:ARG:HG2	10:K:45:CYS:SG	2.59	0.43
11:L:59:ALA:HA	11:L:74:ARG:O	2.18	0.43
1:B:971:PHE:CE2	1:B:1040:GLN:HG2	2.54	0.43
1:B:1377:THR:O	1:B:1378:GLN:C	2.57	0.43
1:B:16:GLU:HB3	1:B:1418:LEU:HD11	1.99	0.43
1:B:207:ILE:HG23	1:B:211:PHE:CE1	2.53	0.43
1:B:345:VAL:CG1	2:C:1130:PHE:HB2	2.49	0.43
1:B:722:LEU:H	1:B:722:LEU:CD1	2.28	0.43
2:C:1183:LYS:CE	2:C:1183:LYS:N	2.82	0.43
2:C:1200:ALA:O	2:C:1201:LYS:C	2.57	0.43
2:C:314:LEU:N	2:C:314:LEU:HD12	2.31	0.43
2:C:459:TYR:HE2	2:C:465:ASN:HB2	1.83	0.43
2:C:55:VAL:HG13	2:C:97:VAL:HG21	2.00	0.43
2:C:866:TYR:N	2:C:866:TYR:CD1	2.87	0.43
2:C:956:THR:HG22	2:C:957:ASN:N	2.34	0.43
3:D:29:MET:CE	11:L:98:LEU:HG	2.48	0.43
3:D:53:THR:HG22	3:D:54:ASN:N	2.34	0.43
4:E:153:ARG:HB3	4:E:154:PHE:CD1	2.53	0.43
4:E:63:LEU:HB3	4:E:129:LEU:HD21	2.00	0.43
5:F:124:VAL:HG13	5:F:132:ILE:CG1	2.48	0.43
5:F:46:TYR:N	5:F:46:TYR:CD1	2.87	0.43
1:B:1055:ARG:NE	6:G:154:ASP:OD1	2.47	0.43
7:H:1:MET:HE3	7:H:81:PRO:HA	2.01	0.43
7:H:20:PRO:CD	7:H:21:ARG:H	2.32	0.43
10:K:58:GLU:HA	10:K:61:LEU:HD12	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:M:27:LEU:N	12:M:27:LEU:HD23	2.34	0.43
12:M:52:GLY:O	12:M:53:HIS:C	2.56	0.43
1:B:1021:LEU:O	1:B:1024:SER:HB3	2.19	0.43
1:B:122:MET:O	1:B:125:ALA:HB3	2.19	0.43
1:B:230:ARG:HB3	1:B:232:GLU:HG2	1.99	0.43
2:C:1034:VAL:O	2:C:1037:LEU:N	2.51	0.43
2:C:1215:ARG:O	2:C:1216:LEU:HD23	2.18	0.43
2:C:1219:ASP:O	2:C:1219:ASP:OD1	2.36	0.43
2:C:247:GLY:H	2:C:418:LYS:NZ	2.17	0.43
2:C:281:PRO:HB2	2:C:283:VAL:HG23	2.00	0.43
2:C:510:LYS:HB2	2:C:511:PRO:HD3	2.01	0.43
3:D:31:ASN:O	3:D:35:ARG:HG3	2.17	0.43
3:D:91:HIS:HD2	3:D:91:HIS:O	2.01	0.43
6:G:118:LEU:O	6:G:122:MET:HG3	2.17	0.43
8:I:30:SER:HB3	8:I:36:CYS:HB3	2.00	0.43
2:C:798:TYR:CE1	10:K:4:PRO:HB3	2.54	0.43
1:B:1283:VAL:HG12	1:B:1284:MET:N	2.32	0.43
1:B:1291:VAL:HG13	1:B:1292:PRO:N	2.33	0.43
1:B:229:SER:HB3	1:B:1413:GLY:O	2.18	0.43
1:B:146:MET:HB3	1:B:171:GLN:O	2.18	0.43
1:B:741:ASN:C	1:B:741:ASN:ND2	2.62	0.43
1:B:884:ASP:C	1:B:886:ILE:H	2.22	0.43
1:B:997:LEU:N	1:B:997:LEU:HD23	2.34	0.43
1:B:9:ALA:HB1	1:B:10:PRO:HD2	2.00	0.43
2:C:125:SER:CB	2:C:171:PRO:HA	2.49	0.43
2:C:48:LEU:O	2:C:49:ASP:C	2.57	0.43
2:C:531:GLN:HG3	2:C:532:ALA:N	2.34	0.43
2:C:641:GLU:C	2:C:643:ASP:H	2.21	0.43
1:B:658:LEU:CD1	2:C:830:TYR:CD1	3.02	0.43
2:C:882:THR:HG1	2:C:933:SER:N	2.17	0.43
5:F:94:LYS:O	5:F:98:ILE:HG13	2.19	0.43
5:F:79:TRP:CD1	5:F:96:PHE:HE1	2.37	0.43
9:J:58:VAL:O	9:J:58:VAL:HG12	2.19	0.43
9:J:7:CYS:HB2	9:J:34:TYR:CG	2.54	0.43
3:D:10:ILE:CD1	11:L:109:TRP:HA	2.49	0.43
1:B:1167:GLU:O	1:B:1170:ILE:HG13	2.19	0.43
1:B:1313:LEU:O	1:B:1315:GLU:N	2.52	0.43
1:B:80:HIS:N	1:B:243:PRO:HG3	2.33	0.43
1:B:265:LYS:HD3	1:B:302:THR:CG2	2.48	0.43
1:B:381:THR:C	1:B:383:TYR:N	2.71	0.43
1:B:850:VAL:HG12	1:B:1060:PRO:HA	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:853:ASP:CG	1:B:855:THR:HG22	2.38	0.43
1:B:946:VAL:HG22	5:F:201:LYS:HD2	2.00	0.43
2:C:1033:LYS:NZ	2:C:1070:GLU:OE1	2.50	0.43
2:C:347:LYS:O	2:C:350:GLN:HB3	2.18	0.43
2:C:531:GLN:CG	2:C:532:ALA:H	2.31	0.43
2:C:882:THR:HB	2:C:934:LYS:C	2.39	0.43
2:C:948:ILE:O	2:C:968:VAL:HG13	2.19	0.43
3:D:100:THR:CG2	3:D:102:GLN:HE21	2.32	0.43
3:D:100:THR:HG21	3:D:102:GLN:NE2	2.34	0.43
3:D:208:GLU:C	3:D:210:GLU:N	2.71	0.43
4:E:34:GLN:O	4:E:47:LEU:HD23	2.18	0.43
5:F:82:PHE:CD1	5:F:82:PHE:N	2.87	0.43
6:G:147:SER:O	6:G:148:VAL:C	2.57	0.43
7:H:1:MET:O	7:H:1:MET:CE	2.67	0.43
7:H:80:LYS:HE2	7:H:82:PHE:CE1	2.54	0.43
8:I:113:ALA:HA	8:I:125:LEU:O	2.19	0.43
8:I:15:VAL:CG2	8:I:26:ILE:HD11	2.37	0.43
9:J:105:SER:O	9:J:106:CYS:CB	2.66	0.43
9:J:54:GLU:OE2	9:J:118:ARG:CZ	2.67	0.43
9:J:26:LEU:HD22	9:J:35:VAL:HG12	2.01	0.43
1:B:133:LYS:O	1:B:136:ALA:HB3	2.19	0.42
1:B:1368:MET:O	1:B:1372:VAL:HB	2.18	0.42
1:B:40:THR:HB	1:B:41:MET:HE2	1.99	0.42
1:B:774:ARG:HB2	1:B:797:LYS:HB3	2.01	0.42
1:B:853:ASP:OD1	1:B:855:THR:CB	2.67	0.42
2:C:1003:ALA:HA	3:D:178:PHE:O	2.18	0.42
1:B:345:VAL:HG11	2:C:1130:PHE:HB2	2.00	0.42
2:C:308:TRP:CD1	2:C:308:TRP:N	2.86	0.42
2:C:498:THR:HG22	2:C:537:LYS:O	2.18	0.42
2:C:657:HIS:O	2:C:660:LYS:HB3	2.19	0.42
2:C:680:THR:HB	2:C:681:TRP:H	1.55	0.42
2:C:792:MET:HG3	2:C:855:PHE:CE1	2.54	0.42
3:D:44:LEU:HD21	3:D:159:ALA:HB1	2.01	0.42
6:G:116:ASP:HB3	6:G:119:ARG:CB	2.49	0.42
6:G:88:TYR:HD1	6:G:88:TYR:H	1.66	0.42
7:H:15:PRO:O	7:H:16:SER:C	2.57	0.42
8:I:116:TYR:HE2	8:I:140:ALA:HB3	1.84	0.42
9:J:90:GLN:HE21	9:J:92:ARG:HD2	1.82	0.42
1:B:465:TYR:CZ	11:L:4:PRO:HD2	2.54	0.42
1:B:1007:ILE:O	1:B:1010:ALA:N	2.52	0.42
1:B:1265:ASN:C	1:B:1267:MET:N	2.71	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:208:LEU:HD23	1:B:209:ASN:N	2.34	0.42
1:B:247:ARG:NH1	1:B:247:ARG:HG3	2.35	0.42
1:B:380:VAL:CG1	1:B:385:ILE:HG12	2.49	0.42
2:C:1027:ILE:C	2:C:1029:CYS:N	2.72	0.42
2:C:1102:LYS:O	2:C:1103:ILE:C	2.58	0.42
2:C:1160:VAL:CG1	2:C:1161:HIS:N	2.82	0.42
1:B:30:ILE:HD11	2:C:1168:LEU:CD1	2.49	0.42
2:C:1177:HIS:HB2	2:C:1179:GLN:HE21	1.84	0.42
1:B:1409:LEU:HD13	2:C:1207:LEU:HD21	2.01	0.42
2:C:303:TYR:HH	2:C:586:TRP:HH2	1.65	0.42
2:C:37:PHE:CD1	2:C:41:LYS:HG3	2.53	0.42
2:C:487:THR:CG2	2:C:488:TYR:N	2.82	0.42
2:C:553:PRO:O	2:C:557:PHE:HB2	2.18	0.42
2:C:599:THR:O	2:C:603:LEU:HB2	2.19	0.42
2:C:801:LYS:O	10:K:52:THR:HG21	2.17	0.42
2:C:893:LEU:HD22	2:C:897:GLY:C	2.39	0.42
2:C:95:ILE:HG13	2:C:130:VAL:HG22	2.01	0.42
3:D:101:LEU:HD12	3:D:101:LEU:HA	1.88	0.42
4:E:30:GLY:O	4:E:31:GLN:C	2.57	0.42
8:I:118:PHE:C	8:I:120:GLY:N	2.73	0.42
11:L:31:VAL:CG1	11:L:32:VAL:N	2.81	0.42
1:B:1215:ARG:HH11	1:B:1215:ARG:HG2	1.82	0.42
1:B:1064:VAL:HG12	1:B:1370:LEU:HD22	2.01	0.42
1:B:1437:GLY:HA3	6:G:88:TYR:CD2	2.53	0.42
1:B:269:ILE:HG12	1:B:299:HIS:HB3	2.01	0.42
1:B:269:ILE:HD11	1:B:300:VAL:HA	2.00	0.42
1:B:497:THR:O	1:B:498:ARG:C	2.57	0.42
1:B:590:ARG:HH11	1:B:590:ARG:CB	2.30	0.42
1:B:715:GLU:O	1:B:718:VAL:HB	2.19	0.42
1:B:787:PHE:HE1	1:B:796:SER:HA	1.82	0.42
1:B:898:ARG:HA	1:B:933:TYR:CD1	2.55	0.42
2:C:1084:GLN:N	2:C:1084:GLN:HE21	2.09	0.42
2:C:424:LEU:O	2:C:428:ILE:HG13	2.19	0.42
2:C:528:PRO:HG3	2:C:536:VAL:HB	2.01	0.42
2:C:659:ALA:HA	2:C:662:MET:HE2	2.00	0.42
2:C:662:MET:HA	2:C:665:GLU:HB2	2.01	0.42
1:B:658:LEU:HD11	2:C:830:TYR:CE1	2.55	0.42
3:D:107:SER:C	3:D:109:SER:H	2.23	0.42
3:D:99:LEU:HD23	3:D:120:ILE:HA	2.00	0.42
3:D:242:GLN:O	3:D:244:VAL:N	2.53	0.42
4:E:160:VAL:O	4:E:160:VAL:HG12	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:H:44:TYR:HD2	7:H:105:PRO:HB2	1.85	0.42
8:I:117:SER:HA	8:I:121:LEU:O	2.19	0.42
2:C:1039:GLY:HA2	10:K:51:LEU:HD21	2.01	0.42
3:D:35:ARG:HH11	11:L:41:THR:H	1.62	0.42
12:M:59:ALA:O	12:M:60:ARG:O	2.38	0.42
15:T:18:DT:OP2	15:T:18:DT:H72	2.19	0.42
1:B:1005:GLU:O	1:B:1006:ILE:C	2.58	0.42
1:B:1011:GLN:NE2	1:B:1015:VAL:HG21	2.34	0.42
1:B:1398:MET:C	1:B:1400:CYS:N	2.73	0.42
1:B:1063:MET:HG3	1:B:1436:ILE:HG23	2.01	0.42
1:B:364:VAL:CG1	1:B:364:VAL:O	2.68	0.42
1:B:567:LYS:NZ	8:I:47:PHE:HB3	2.34	0.42
1:B:761:MET:HA	1:B:804:TYR:HB2	2.00	0.42
1:B:864:ILE:O	1:B:865:GLN:HG2	2.20	0.42
2:C:1017:ILE:H	2:C:1018:PRO:HD2	1.84	0.42
2:C:1034:VAL:C	2:C:1036:ALA:N	2.72	0.42
2:C:119:LEU:HD23	2:C:789:MET:HB2	2.02	0.42
2:C:185:THR:O	2:C:188:ASP:N	2.52	0.42
2:C:698:GLU:O	2:C:701:ILE:HG12	2.20	0.42
2:C:861:ASP:CG	2:C:914:LYS:HD2	2.38	0.42
2:C:948:ILE:HD12	2:C:969:ARG:NH1	2.34	0.42
3:D:44:LEU:CD2	3:D:159:ALA:HB1	2.49	0.42
3:D:186:LEU:HD21	3:D:224:GLN:C	2.40	0.42
5:F:160:GLU:O	5:F:163:GLU:HB3	2.19	0.42
8:I:15:VAL:HG13	8:I:26:ILE:HG13	2.01	0.42
9:J:70:ARG:NH1	9:J:84:VAL:HB	2.35	0.42
1:B:1017:LEU:O	1:B:1018:PHE:C	2.57	0.42
1:B:1040:GLN:O	1:B:1041:ALA:C	2.58	0.42
1:B:1214:GLU:O	1:B:1218:GLN:HG2	2.19	0.42
1:B:1279:ILE:HG23	1:B:1308:THR:OG1	2.20	0.42
1:B:420:ARG:O	1:B:421:ALA:C	2.58	0.42
1:B:427:GLN:HB2	1:B:430:TRP:CG	2.54	0.42
1:B:404:TYR:HB2	1:B:433:GLU:HB2	2.00	0.42
1:B:44:THR:O	1:B:45:GLN:HB2	2.18	0.42
1:B:543:LEU:O	1:B:544:ASP:C	2.57	0.42
1:B:557:ASP:N	1:B:557:ASP:OD1	2.52	0.42
1:B:565:ILE:O	1:B:570:PRO:HA	2.19	0.42
1:B:546:VAL:HG21	1:B:572:TRP:HB2	2.01	0.42
1:B:606:LEU:HG	1:B:613:ILE:HB	2.00	0.42
1:B:786:HIS:O	1:B:787:PHE:HD2	2.01	0.42
1:B:820:GLY:O	1:B:821:ARG:C	2.57	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:858:ASN:HD22	1:B:858:ASN:H	1.68	0.42
2:C:286:PHE:HE1	2:C:301:ILE:HD11	1.84	0.42
2:C:401:PHE:C	2:C:403:LYS:H	2.23	0.42
2:C:487:THR:HG22	2:C:488:TYR:N	2.34	0.42
2:C:566:LEU:HD22	2:C:586:TRP:HB3	2.01	0.42
2:C:638:PHE:HB2	2:C:741:CYS:HB3	2.01	0.42
2:C:496:ARG:HD3	2:C:751:VAL:HG22	2.01	0.42
2:C:799:PRO:HB3	2:C:818:PRO:HG2	2.00	0.42
3:D:33:LEU:O	3:D:34:ARG:C	2.57	0.42
4:E:17:LYS:O	4:E:17:LYS:HD3	2.19	0.42
4:E:66:ARG:HG3	7:H:51:TYR:CD1	2.55	0.42
8:I:130:ARG:CA	8:I:133:ASN:HB2	2.50	0.42
9:J:19:ASP:OD1	9:J:22:ASN:HB2	2.19	0.42
10:K:51:LEU:O	10:K:51:LEU:HD12	2.18	0.42
10:K:53:HIS:CE1	10:K:55:ASP:OD1	2.72	0.42
11:L:29:ASN:O	11:L:30:ALA:HB2	2.20	0.42
1:B:1259:MET:O	1:B:1261:LYS:N	2.49	0.42
1:B:1293:SER:OG	1:B:1295:THR:CG2	2.67	0.42
1:B:1116:LEU:HB2	1:B:1329:THR:OG1	2.20	0.42
1:B:399:HIS:CG	1:B:400:PRO:N	2.85	0.42
1:B:773:LYS:HG3	1:B:773:LYS:H	1.58	0.42
1:B:808:LEU:HD23	1:B:812:GLU:C	2.39	0.42
1:B:858:ASN:ND2	1:B:858:ASN:H	2.17	0.42
1:B:885:THR:O	1:B:885:THR:CG2	2.66	0.42
1:B:666:ILE:HD11	2:C:1086:PHE:HE1	1.85	0.42
2:C:120:ARG:HB2	2:C:122:LEU:HG	2.00	0.42
2:C:997:GLU:HB3	3:D:35:ARG:NH2	2.34	0.42
3:D:167:HIS:CD2	3:D:168:ALA:H	2.37	0.42
3:D:189:THR:HG22	3:D:190:ASP:N	2.34	0.42
5:F:177:ARG:HD3	5:F:215:MET:HG2	2.02	0.42
5:F:61:GLN:HG2	5:F:62:ALA:N	2.35	0.42
6:G:92:ARG:O	6:G:93:ILE:C	2.56	0.42
8:I:96:VAL:HG13	8:I:143:LEU:HG	2.01	0.42
9:J:69:PRO:HB2	9:J:85:PHE:HE2	1.84	0.42
12:M:46:VAL:O	12:M:46:VAL:HG12	2.19	0.42
13:N:5:DT:H2"	13:N:6:DA:C8	2.54	0.42
1:B:1111:MET:HG3	1:B:1113:THR:O	2.19	0.42
1:B:1239:ARG:HH22	1:B:1241:ARG:NH2	2.16	0.42
1:B:241:VAL:O	1:B:241:VAL:HG12	2.19	0.42
1:B:382:PRO:CD	1:B:428:TYR:HE2	2.32	0.42
1:B:471:ASN:O	1:B:474:VAL:HG12	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:873:MET:HG3	1:B:1056:SER:O	2.20	0.42
2:C:1130:PHE:CD2	2:C:1130:PHE:O	2.73	0.42
1:B:658:LEU:CD1	2:C:831:SER:H	2.19	0.42
3:D:6:PRO:CG	11:L:101:LEU:HB2	2.49	0.42
4:E:18:VAL:O	4:E:18:VAL:HG13	2.19	0.42
5:F:22:MET:HE3	5:F:26:ARG:NH2	2.30	0.42
7:H:106:MET:HB3	7:H:106:MET:HE2	1.72	0.42
8:I:100:THR:HA	8:I:138:GLU:O	2.20	0.42
11:L:42:LEU:CD2	11:L:46:ILE:CD1	2.98	0.42
11:L:5:ASP:O	11:L:6:ARG:C	2.57	0.42
1:B:1277:GLU:O	1:B:1278:ASN:HB2	2.20	0.42
1:B:56:PRO:O	1:B:57:ARG:CG	2.68	0.42
1:B:681:GLU:HA	1:B:684:ALA:HB3	2.01	0.42
2:C:1066:SER:O	2:C:1067:ARG:HD3	2.18	0.42
2:C:1159:ARG:HH11	2:C:1159:ARG:CB	2.21	0.42
2:C:205:ILE:O	2:C:206:ASN:C	2.57	0.42
2:C:272:THR:OG1	2:C:279:ASP:OD1	2.37	0.42
2:C:30:SER:O	2:C:33:VAL:HG23	2.20	0.42
2:C:401:PHE:O	2:C:404:LYS:N	2.45	0.42
2:C:578:THR:HG23	2:C:622:LYS:C	2.40	0.42
2:C:653:VAL:CA	2:C:689:LEU:HD22	2.49	0.42
2:C:880:THR:HG22	2:C:880:THR:O	2.20	0.42
2:C:899:ILE:HD11	2:C:911:ILE:CA	2.42	0.42
2:C:997:GLU:N	2:C:997:GLU:OE2	2.51	0.42
3:D:49:VAL:CG1	3:D:155:LEU:HD22	2.50	0.42
8:I:116:TYR:O	8:I:122:LEU:HA	2.19	0.42
10:K:57:ILE:O	10:K:60:PHE:HB2	2.20	0.42
1:B:1194:ARG:HH11	1:B:1194:ARG:HG2	1.83	0.42
1:B:1266:THR:HA	1:B:1270:ASN:HD22	1.84	0.42
1:B:1346:ALA:HB3	5:F:149:LEU:HD12	2.02	0.42
1:B:108:MET:HA	1:B:210:ILE:CG2	2.50	0.42
1:B:350:ARG:HH11	1:B:350:ARG:HG3	1.84	0.42
1:B:578:LEU:HG	1:B:578:LEU:O	2.19	0.42
1:B:808:LEU:HG	1:B:812:GLU:HB3	2.02	0.42
1:B:818:MET:H	1:B:818:MET:HG3	1.70	0.42
1:B:898:ARG:HA	1:B:933:TYR:HD1	1.85	0.42
1:B:373:THR:HG21	2:C:1105:ALA:HB3	2.01	0.42
2:C:1182:CYS:O	2:C:1183:LYS:C	2.58	0.42
1:B:17:VAL:HA	2:C:1215:ARG:O	2.20	0.42
2:C:175:ARG:HH11	2:C:175:ARG:CG	2.28	0.42
2:C:405:ARG:HD2	2:C:631:GLY:CA	2.50	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:693:ILE:HD13	2:C:701:ILE:HD13	2.02	0.42
7:H:148:GLU:HB2	7:H:160:ILE:O	2.20	0.42
7:H:45:ILE:HD13	7:H:45:ILE:HA	1.89	0.42
10:K:3:VAL:HG12	10:K:15:GLY:HA2	2.00	0.42
2:C:1039:GLY:HA2	10:K:51:LEU:CD2	2.49	0.42
11:L:31:VAL:HG12	11:L:32:VAL:H	1.81	0.42
1:B:106:VAL:HG13	1:B:112:LYS:C	2.40	0.42
1:B:1163:ILE:HG22	1:B:1164:PRO:HD2	2.02	0.42
1:B:1173:HIS:O	1:B:1174:PHE:HD1	2.03	0.42
1:B:1446:ASP:HB2	6:G:133:VAL:HG23	2.01	0.42
1:B:266:LEU:O	1:B:267:ALA:C	2.57	0.42
1:B:92:HIS:CD2	1:B:304:MET:HE3	2.54	0.42
1:B:337:ARG:O	1:B:337:ARG:HG2	2.19	0.42
1:B:509:LEU:C	1:B:511:ILE:H	2.22	0.42
1:B:600:PRO:CG	1:B:601:LYS:H	2.30	0.42
1:B:644:LYS:O	1:B:647:GLY:N	2.53	0.42
1:B:786:HIS:CD2	1:B:786:HIS:N	2.86	0.42
1:B:337:ARG:NH2	1:B:839:ARG:HH12	2.18	0.42
2:C:1203:LEU:O	2:C:1207:LEU:HG	2.20	0.42
2:C:364:ILE:CG1	2:C:585:VAL:HG13	2.49	0.42
2:C:910:VAL:HG12	2:C:912:ILE:N	2.29	0.42
2:C:970:THR:HG22	2:C:971:THR:N	2.34	0.42
2:C:843:GLN:CB	2:C:994:TYR:O	2.68	0.42
4:E:119:ARG:HD3	4:E:221:TYR:CD2	2.55	0.42
4:E:187:THR:HG22	4:E:188:ALA:N	2.35	0.42
1:B:1341:ILE:HG22	5:F:182:ASP:OD2	2.20	0.42
6:G:109:VAL:CG1	6:G:110:ASP:H	2.26	0.42
8:I:93:TYR:HA	8:I:145:ARG:HB3	2.02	0.42
8:I:83:GLN:O	8:I:85:GLY:N	2.53	0.42
9:J:100:PHE:HD1	9:J:100:PHE:N	2.18	0.42
10:K:1:MET:HE2	10:K:56:LEU:HD12	2.02	0.42
1:B:1313:LEU:HD11	1:B:1317:MET:HE1	2.02	0.41
1:B:382:PRO:CB	1:B:428:TYR:CE2	2.96	0.41
1:B:552:TRP:HE1	11:L:62:LYS:CB	2.33	0.41
1:B:65:LEU:O	1:B:66:LYS:C	2.59	0.41
1:B:853:ASP:OD1	1:B:855:THR:HB	2.20	0.41
2:C:1135:ARG:NH2	2:C:1136:ASP:OD1	2.52	0.41
2:C:345:LYS:O	2:C:346:GLU:HB2	2.20	0.41
2:C:449:ASN:C	2:C:451:LYS:N	2.73	0.41
2:C:519:TRP:NE1	2:C:635:ARG:NH2	2.67	0.41
2:C:882:THR:C	2:C:884:ARG:H	2.23	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:D:116:LYS:HG3	3:D:117:ASP:H	1.84	0.41
3:D:148:ARG:HD3	3:D:149:LYS:H	1.85	0.41
3:D:174:ALA:O	10:K:10:CYS:O	2.38	0.41
3:D:66:ARG:NH1	10:K:2:ILE:CG2	2.78	0.41
4:E:118:THR:HB	4:E:121:LYS:HB2	2.01	0.41
4:E:139:LYS:C	4:E:139:LYS:HD3	2.40	0.41
4:E:13:ARG:HH11	4:E:13:ARG:HG2	1.85	0.41
4:E:185:CYS:O	4:E:211:LEU:HD22	2.19	0.41
8:I:16:ASP:HA	8:I:17:PRO:HD3	1.91	0.41
1:B:709:THR:CG2	9:J:93:LYS:O	2.68	0.41
10:K:44:TYR:O	10:K:47:ARG:HB2	2.19	0.41
1:B:1313:LEU:HD23	1:B:1338:VAL:CG2	2.50	0.41
1:B:1370:LEU:O	1:B:1374:VAL:HG23	2.20	0.41
1:B:1405:THR:HB	1:B:1406:VAL:H	1.54	0.41
1:B:1437:GLY:CA	6:G:88:TYR:CD2	3.03	0.41
1:B:174:ILE:HG13	1:B:174:ILE:H	1.66	0.41
1:B:224:PHE:CE2	1:B:234:MET:HE2	2.55	0.41
1:B:414:ASP:OD1	1:B:416:ARG:HG2	2.21	0.41
1:B:471:ASN:OD1	1:B:473:SER:N	2.54	0.41
1:B:860:LEU:HA	1:B:1422:ARG:NH1	2.34	0.41
2:C:1002:THR:O	2:C:1003:ALA:C	2.57	0.41
2:C:34:ILE:HD13	2:C:747:MET:CE	2.51	0.41
3:D:104:PHE:HD2	3:D:105:GLY:N	2.17	0.41
4:E:137:ASN:N	4:E:137:ASN:ND2	2.67	0.41
4:E:220:LEU:HB3	4:E:221:TYR:H	1.57	0.41
5:F:167:ARG:HA	5:F:167:ARG:HD3	1.72	0.41
6:G:130:ILE:HB	6:G:148:VAL:HG21	2.01	0.41
8:I:142:LEU:C	8:I:143:LEU:HD12	2.41	0.41
8:I:91:ASP:O	8:I:93:TYR:N	2.49	0.41
1:B:1332:PHE:HD2	1:B:1332:PHE:N	2.17	0.41
1:B:345:VAL:HG23	1:B:346:ASP:O	2.20	0.41
1:B:405:VAL:HG23	1:B:415:LEU:HD11	2.03	0.41
1:B:855:THR:HG23	1:B:857:ARG:HG3	2.01	0.41
2:C:210:LYS:HG3	2:C:461:LEU:O	2.20	0.41
2:C:24:PRO:O	2:C:655:LYS:HB2	2.21	0.41
2:C:593:PRO:HG2	2:C:617:ARG:CZ	2.51	0.41
4:E:180:LEU:CD2	4:E:195:ILE:HD12	2.48	0.41
5:F:129:PRO:O	5:F:130:ALA:C	2.58	0.41
7:H:15:PRO:HD3	7:H:67:SER:N	2.36	0.41
7:H:27:LYS:O	7:H:28:THR:C	2.58	0.41
7:H:7:LEU:HD12	7:H:74:TYR:CZ	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:J:13:MET:HG3	9:J:14:LEU:N	2.35	0.41
9:J:84:VAL:O	9:J:84:VAL:HG13	2.20	0.41
2:C:992:ILE:CD1	11:L:66:PRO:HB2	2.49	0.41
11:L:49:GLU:OE2	11:L:97:LYS:HE3	2.20	0.41
12:M:55:ILE:H	12:M:55:ILE:HG12	1.60	0.41
1:B:836:TYR:HE1	15:T:17:DC:OP1	2.03	0.41
1:B:1134:ILE:O	1:B:1137:ALA:HB3	2.21	0.41
1:B:1148:ILE:HD11	1:B:1198:ASP:CA	2.43	0.41
1:B:1215:ARG:NH1	1:B:1215:ARG:HG2	2.35	0.41
1:B:1425:SER:O	1:B:1429:ILE:HG13	2.20	0.41
1:B:344:ARG:NH1	1:B:344:ARG:HG2	2.35	0.41
1:B:384:ASN:HB2	1:B:388:LEU:HD12	2.02	0.41
1:B:613:ILE:HG22	1:B:614:PHE:HD2	1.85	0.41
1:B:710:LEU:CD1	1:B:710:LEU:H	2.33	0.41
1:B:758:ILE:H	1:B:758:ILE:HG13	1.73	0.41
2:C:1034:VAL:C	2:C:1036:ALA:H	2.23	0.41
2:C:446:LEU:HD23	2:C:446:LEU:N	2.36	0.41
2:C:54:PHE:O	2:C:58:THR:HB	2.21	0.41
2:C:613:VAL:CG1	2:C:627:PHE:O	2.68	0.41
2:C:711:GLU:H	2:C:712:PRO:HD2	1.86	0.41
2:C:809:MET:HE1	2:C:814:PHE:CD2	2.55	0.41
4:E:173:HIS:HA	4:E:174:PRO:HD2	1.64	0.41
4:E:7:THR:O	4:E:9:GLN:N	2.53	0.41
5:F:142:VAL:HG12	5:F:143:ASN:N	2.36	0.41
5:F:76:GLY:HA3	5:F:106:GLN:HB3	2.02	0.41
6:G:89:GLU:HB3	6:G:134:ILE:HD11	2.00	0.41
11:L:15:GLY:O	11:L:16:GLU:HG3	2.20	0.41
11:L:35:PHE:HE1	11:L:73:LEU:HB3	1.85	0.41
11:L:89:ASN:O	11:L:90:ALA:C	2.59	0.41
1:B:1303:GLU:HG3	1:B:1303:GLU:O	2.19	0.41
1:B:1349:TYR:O	1:B:1350:LYS:C	2.58	0.41
1:B:1446:ASP:HB2	6:G:133:VAL:CG2	2.50	0.41
1:B:289:ILE:CG2	1:B:290:GLU:N	2.84	0.41
1:B:382:PRO:HB3	1:B:428:TYR:OH	2.20	0.41
1:B:568:PRO:HB2	3:D:221:TYR:CE1	2.55	0.41
1:B:577:ILE:O	1:B:579:SER:N	2.53	0.41
1:B:61:ILE:CG2	1:B:62:ASP:H	2.23	0.41
1:B:849:MET:CE	1:B:1061:GLY:CA	2.92	0.41
1:B:874:ASP:O	1:B:875:ALA:C	2.57	0.41
2:C:280:ILE:CG2	2:C:285:ILE:HG13	2.50	0.41
2:C:594:ALA:HA	2:C:617:ARG:NH1	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:661:LEU:HD11	2:C:684:LEU:HD11	2.03	0.41
2:C:780:VAL:HG21	10:K:56:LEU:CD1	2.46	0.41
2:C:781:PHE:HE1	2:C:788:ARG:HD3	1.84	0.41
2:C:873:THR:O	2:C:914:LYS:HA	2.20	0.41
3:D:236:GLY:C	3:D:238:ILE:N	2.73	0.41
5:F:16:PHE:O	5:F:19:VAL:HG23	2.21	0.41
5:F:144:ILE:HD13	5:F:183:PRO:HB3	2.02	0.41
5:F:190:LEU:C	5:F:191:LYS:HG2	2.40	0.41
5:F:42:PHE:HZ	5:F:58:MET:HE1	1.85	0.41
6:G:128:LYS:HD3	6:G:149:GLU:O	2.20	0.41
7:H:139:ILE:CG2	7:H:140:LYS:N	2.70	0.41
7:H:23:LYS:HE2	7:H:27:LYS:HE3	2.03	0.41
7:H:77:VAL:CG1	7:H:77:VAL:O	2.68	0.41
8:I:100:THR:CG2	8:I:101:ALA:N	2.84	0.41
9:J:82:GLU:C	9:J:104:LEU:HG	2.40	0.41
12:M:38:LEU:CD1	12:M:49:LYS:HE2	2.51	0.41
1:B:1029:ARG:HD2	1:B:1033:GLN:HE22	1.81	0.41
1:B:1104:ILE:O	1:B:1106:ASN:N	2.53	0.41
1:B:1268:LEU:O	1:B:1269:GLU:HG2	2.21	0.41
1:B:944:ARG:NE	1:B:1298:TYR:HE1	2.18	0.41
1:B:567:LYS:HZ3	8:I:47:PHE:HB3	1.85	0.41
1:B:49:LYS:HZ3	1:B:61:ILE:HG13	1.84	0.41
1:B:650:GLN:C	1:B:654:ASN:ND2	2.74	0.41
1:B:779:PHE:HD2	1:B:779:PHE:HA	1.79	0.41
1:B:932:GLU:O	1:B:935:GLN:N	2.52	0.41
2:C:181:LEU:HD21	2:C:194:GLU:HG3	2.03	0.41
2:C:486:TYR:CE1	2:C:1096:ARG:NH2	2.85	0.41
2:C:527:THR:OG1	2:C:528:PRO:HD2	2.19	0.41
2:C:376:PHE:HB3	2:C:586:TRP:CZ3	2.55	0.41
2:C:597:MET:HE3	2:C:601:ARG:HG3	2.03	0.41
3:D:146:LYS:C	3:D:147:LEU:HD23	2.41	0.41
3:D:22:LEU:HD13	3:D:230:MET:CE	2.50	0.41
3:D:252:GLN:O	3:D:253:LYS:C	2.59	0.41
3:D:75:MET:HE2	3:D:239:PRO:HD3	2.02	0.41
5:F:190:LEU:N	5:F:190:LEU:HD23	2.36	0.41
4:E:32:GLU:HG3	7:H:5:LYS:HE2	2.03	0.41
9:J:59:VAL:O	9:J:62:ILE:HG22	2.20	0.41
1:B:320:ARG:NH2	14:P:3:C:O2'	2.54	0.41
1:B:63:ARG:HA	1:B:74:MET:CE	2.51	0.41
2:C:186:GLU:HB3	2:C:187:SER:H	1.67	0.41
2:C:34:ILE:O	2:C:35:SER:C	2.57	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:C:282:ILE:HG21	2:C:382:ILE:CD1	2.51	0.41
2:C:512:ARG:HG2	2:C:512:ARG:HH11	1.86	0.41
2:C:566:LEU:O	2:C:567:GLU:C	2.59	0.41
2:C:681:TRP:O	2:C:682:SER:C	2.59	0.41
2:C:526:GLU:CB	2:C:771:SER:HB3	2.51	0.41
2:C:797:TYR:CE1	2:C:854:LEU:HD23	2.56	0.41
2:C:911:ILE:O	2:C:912:ILE:HG13	2.20	0.41
3:D:11:ARG:HB3	3:D:12:GLU:H	1.67	0.41
3:D:113:VAL:O	3:D:143:LEU:HD12	2.20	0.41
3:D:241:ASP:O	3:D:244:VAL:HB	2.21	0.41
3:D:260:LEU:O	3:D:263:THR:HB	2.21	0.41
5:F:13:TRP:HB2	5:F:42:PHE:CE2	2.56	0.41
6:G:114:GLU:HA	6:G:114:GLU:OE2	2.21	0.41
10:K:28:ASP:O	10:K:29:GLU:C	2.58	0.41
12:M:28:LYS:C	12:M:29:TYR:HD2	2.23	0.41
14:P:7:A:H2'	14:P:7:A:N3	2.35	0.41
15:T:20:DT:H2''	15:T:21:DA:C5'	2.47	0.41
1:B:1068:ALA:HB1	1:B:1367:HIS:HA	2.02	0.41
1:B:12:ARG:NE	2:C:1192:TYR:HE2	2.18	0.41
1:B:498:ARG:O	1:B:501:LEU:N	2.54	0.41
1:B:600:PRO:HG2	1:B:601:LYS:N	2.31	0.41
1:B:672:ASP:O	1:B:673:GLY:C	2.59	0.41
1:B:919:ILE:O	1:B:920:LEU:C	2.59	0.41
2:C:1074:ASN:N	2:C:1081:LEU:CD2	2.84	0.41
2:C:308:TRP:HA	2:C:311:LEU:HD12	2.02	0.41
2:C:324:ILE:HD13	2:C:330:ALA:HA	2.02	0.41
2:C:370:PHE:HD2	2:C:373:ARG:HD3	1.86	0.41
2:C:51:PHE:HZ	2:C:172:ILE:HA	1.86	0.41
2:C:706:GLN:H	2:C:710:LEU:HD12	1.85	0.41
2:C:519:TRP:CZ3	2:C:748:ILE:HD13	2.56	0.41
2:C:752:ALA:O	2:C:753:ALA:C	2.59	0.41
2:C:802:PRO:HG2	2:C:805:THR:CG2	2.51	0.41
2:C:890:TYR:CE2	2:C:910:VAL:HG21	2.56	0.41
2:C:95:ILE:CG1	2:C:130:VAL:HG22	2.50	0.41
3:D:258:ILE:CD1	3:D:258:ILE:N	2.84	0.41
3:D:264:GLN:H	3:D:264:GLN:HG3	1.51	0.41
4:E:156:ASP:HB3	4:E:158:GLU:H	1.86	0.41
4:E:214:LEU:O	4:E:218:GLU:HB2	2.21	0.41
4:E:67:ARG:HG2	4:E:67:ARG:O	2.21	0.41
8:I:101:ALA:HA	8:I:116:TYR:HA	2.03	0.41
8:I:61:SER:O	8:I:62:SER:HB2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:J:36:GLU:O	9:J:37:GLU:O	2.38	0.41
10:K:32:GLU:H	10:K:32:GLU:CD	2.23	0.41
10:K:48:ARG:O	10:K:49:MET:C	2.59	0.41
11:L:58:PHE:HB3	11:L:76:GLN:HE21	1.86	0.41
12:M:54:ARG:HG3	12:M:54:ARG:H	1.55	0.41
13:N:2:DA:OP1	13:N:2:DA:H4'	2.21	0.41
1:B:447:GLN:NE2	15:T:20:DT:H4'	2.29	0.41
1:B:1101:LEU:HD11	1:B:1105:LEU:CD1	2.49	0.41
1:B:1114:PRO:CG	1:B:1115:SER:H	2.34	0.41
1:B:1068:ALA:HA	1:B:1367:HIS:ND1	2.36	0.41
1:B:22:PHE:HE2	1:B:30:ILE:HD12	1.84	0.41
1:B:384:ASN:O	1:B:386:ASP:N	2.53	0.41
1:B:464:PRO:O	1:B:465:TYR:HB2	2.21	0.41
1:B:503:GLN:HE21	6:G:90:ARG:NH2	2.17	0.41
1:B:72:GLU:OE2	2:C:1175:LEU:HD12	2.20	0.41
1:B:850:VAL:HG21	1:B:1058:VAL:HG11	2.03	0.41
2:C:1064:TYR:O	2:C:1065:GLN:C	2.58	0.41
2:C:287:ARG:C	2:C:289:LEU:N	2.74	0.41
2:C:303:TYR:N	2:C:303:TYR:CD2	2.88	0.41
2:C:38:PHE:CD2	2:C:43:LEU:HD23	2.56	0.41
2:C:523:CYS:SG	2:C:524:PRO:HD2	2.61	0.41
2:C:589:VAL:CG1	2:C:590:HIS:H	2.28	0.41
2:C:784:ASN:O	2:C:788:ARG:HG3	2.21	0.41
2:C:910:VAL:C	2:C:911:ILE:HG13	2.42	0.41
3:D:98:VAL:O	3:D:99:LEU:HD23	2.20	0.41
5:F:84:ASP:O	5:F:86:PRO:HD3	2.21	0.41
6:G:81:THR:HG23	6:G:144:GLU:OE2	2.21	0.41
6:G:81:THR:HG23	6:G:144:GLU:CD	2.42	0.41
12:M:30:ILE:CG2	12:M:31:CYS:N	2.84	0.41
15:T:14:DC:H2"	15:T:15:DT:C7	2.46	0.41
1:B:1151:GLU:HB3	1:B:1153:TYR:HE1	1.86	0.41
1:B:265:LYS:HG3	1:B:303:TYR:HB2	2.02	0.41
1:B:316:GLN:O	1:B:318:SER:N	2.54	0.41
2:C:1069:PHE:N	2:C:1069:PHE:HD1	2.04	0.41
2:C:1104:HIS:CG	2:C:1122:ARG:HB2	2.56	0.41
2:C:281:PRO:HB3	2:C:320:ASP:OD2	2.21	0.41
2:C:466:TRP:HA	2:C:466:TRP:CE3	2.55	0.41
2:C:469:GLN:HB2	2:C:470:LYS:H	1.60	0.41
2:C:882:THR:HG21	2:C:935:ARG:HA	2.02	0.41
4:E:137:ASN:HD22	4:E:137:ASN:N	2.19	0.41
7:H:13:LEU:HD22	7:H:14:HIS:O	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:H:59:GLY:CA	7:H:70:PHE:CD2	3.00	0.41
7:H:79:PHE:CE2	7:H:105:PRO:HD2	2.55	0.41
10:K:10:CYS:SG	10:K:11:GLY:N	2.94	0.41
10:K:44:TYR:CA	10:K:47:ARG:HB2	2.39	0.41
11:L:102:LYS:O	11:L:106:GLU:HG3	2.21	0.41
12:M:33:GLU:C	12:M:35:SER:H	2.24	0.41
1:B:332:LYS:NZ	15:T:19:DT:OP2	2.51	0.41
1:B:1147:THR:HB	9:J:48:LEU:HD12	2.03	0.41
1:B:1306:LEU:HA	1:B:1306:LEU:HD23	1.83	0.41
1:B:1392:SER:O	1:B:1394:THR:N	2.53	0.41
1:B:1409:LEU:CD1	2:C:1207:LEU:HD11	2.50	0.41
1:B:196:GLU:CG	1:B:197:PRO:HD2	2.40	0.41
1:B:289:ILE:HG22	1:B:290:GLU:N	2.36	0.41
2:C:273:LEU:HB2	2:C:276:ILE:CG1	2.51	0.41
2:C:899:ILE:CG1	2:C:911:ILE:HA	2.51	0.41
3:D:52:GLU:HA	12:M:64:LEU:CD2	2.50	0.41
4:E:137:ASN:H	4:E:137:ASN:HD22	1.69	0.41
4:E:75:LYS:O	4:E:76:LYS:HB2	2.21	0.41
1:B:560:ILE:HG13	8:I:79:TRP:H	1.85	0.41
10:K:47:ARG:NH1	10:K:47:ARG:HG2	2.36	0.41
10:K:41:LEU:HD11	10:K:50:ILE:HG13	2.03	0.41
2:C:815:ARG:O	10:K:54:VAL:HG21	2.20	0.41
11:L:76:GLN:HG2	11:L:77:THR:N	2.35	0.41
12:M:70:ARG:NH1	12:M:70:ARG:HG2	2.36	0.41
1:B:973:ILE:HD11	1:B:1038:THR:H	1.86	0.40
1:B:1127:ASP:O	1:B:1130:GLN:N	2.54	0.40
1:B:506:ALA:O	1:B:509:LEU:HB2	2.21	0.40
1:B:719:VAL:O	1:B:721:PHE:N	2.54	0.40
1:B:767:GLN:NE2	1:B:798:GLY:O	2.54	0.40
1:B:808:LEU:HD23	1:B:813:PHE:CA	2.51	0.40
1:B:870:GLU:HG2	5:F:208:TYR:CD1	2.56	0.40
2:C:287:ARG:C	2:C:289:LEU:H	2.24	0.40
2:C:69:LEU:HD13	2:C:429:PHE:CD1	2.57	0.40
2:C:498:THR:HG22	2:C:537:LYS:N	2.36	0.40
2:C:592:ASN:OD1	2:C:595:ARG:HG3	2.20	0.40
3:D:100:THR:HB	3:D:119:VAL:HB	2.03	0.40
4:E:63:LEU:O	4:E:129:LEU:HD11	2.21	0.40
9:J:10:CYS:SG	9:J:31:THR:HB	2.62	0.40
9:J:35:VAL:CG1	9:J:36:GLU:N	2.83	0.40
11:L:44:ASN:N	11:L:61:TYR:CE1	2.89	0.40
11:L:58:PHE:CE2	11:L:74:ARG:NE	2.77	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:998:LEU:HD22	1:B:1001:ARG:HG3	2.04	0.40
1:B:1226:VAL:HG12	1:B:1227:ILE:N	2.36	0.40
1:B:1376:THR:CG2	1:B:1377:THR:N	2.84	0.40
1:B:218:ASP:O	1:B:219:PHE:O	2.39	0.40
1:B:282:ASN:O	1:B:284:ALA:N	2.55	0.40
1:B:426:LEU:HD13	1:B:432:VAL:HG21	2.03	0.40
1:B:608:ILE:O	1:B:610:GLY:N	2.55	0.40
1:B:6:TYR:CD1	1:B:6:TYR:C	2.93	0.40
1:B:853:ASP:OD1	1:B:855:THR:CG2	2.70	0.40
1:B:956:LEU:HD23	1:B:956:LEU:HA	1.79	0.40
1:B:964:ILE:HG22	1:B:965:GLN:N	2.36	0.40
2:C:1223:ASP:O	2:C:1224:PHE:HB2	2.21	0.40
2:C:165:VAL:HG11	2:C:448:ILE:CD1	2.50	0.40
2:C:118:ARG:CG	2:C:204:ILE:HD13	2.49	0.40
2:C:472:ALA:C	2:C:474:SER:H	2.24	0.40
2:C:515:HIS:CD2	2:C:516:ASN:N	2.90	0.40
2:C:877:PRO:C	2:C:878:GLN:HG3	2.42	0.40
2:C:899:ILE:CG2	2:C:903:VAL:HG21	2.52	0.40
4:E:51:ASN:ND2	4:E:54:GLU:OE2	2.53	0.40
1:B:1442:ASP:HB2	6:G:135:ARG:HB3	2.04	0.40
8:I:98:TYR:C	8:I:118:PHE:HD2	2.24	0.40
8:I:92:ASP:C	8:I:93:TYR:CD1	2.94	0.40
9:J:98:VAL:HG12	9:J:111:THR:HG22	2.03	0.40
1:B:466:SER:CB	11:L:2:ASN:ND2	2.82	0.40
1:B:848:ILE:HB	1:B:1065:GLY:HA3	2.03	0.40
1:B:112:LYS:HG2	1:B:113:LEU:N	2.36	0.40
1:B:1341:ILE:O	1:B:1344:GLY:N	2.54	0.40
1:B:1389:PHE:C	1:B:1389:PHE:CD1	2.94	0.40
1:B:269:ILE:HG23	1:B:300:VAL:HG22	2.03	0.40
1:B:534:LEU:HD13	1:B:656:TRP:CG	2.56	0.40
1:B:685:GLU:HG3	1:B:686:ALA:N	2.35	0.40
1:B:784:LEU:HB3	1:B:785:PRO:HD2	2.02	0.40
1:B:661:GLY:HA3	2:C:1081:LEU:HD12	2.03	0.40
2:C:31:TRP:HA	2:C:31:TRP:CE3	2.55	0.40
2:C:487:THR:O	2:C:488:TYR:C	2.59	0.40
2:C:899:ILE:HD11	2:C:910:VAL:O	2.21	0.40
2:C:975:GLN:HG2	2:C:976:ILE:H	1.86	0.40
3:D:66:ARG:NH2	10:K:5:VAL:HG23	2.36	0.40
4:E:151:PHE:CD1	4:E:151:PHE:N	2.89	0.40
4:E:191:ALA:O	4:E:193:THR:N	2.55	0.40
6:G:103:MET:O	6:G:104:ASN:HB2	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:G:143:PHE:CD1	6:G:143:PHE:N	2.88	0.40
8:I:104:PHE:CZ	8:I:136:LYS:HG2	2.56	0.40
10:K:13:VAL:C	10:K:14:VAL:HG23	2.41	0.40
14:P:5:C:H2'	14:P:6:A:H8	1.85	0.40
1:B:1260:LEU:HD12	1:B:1260:LEU:C	2.42	0.40
1:B:231:PRO:C	1:B:233:TRP:H	2.25	0.40
1:B:523:ILE:CD1	1:B:649:ILE:HG21	2.51	0.40
2:C:1115:THR:HG22	2:C:1117:GLN:CG	2.51	0.40
2:C:1221:SER:O	2:C:1223:ASP:N	2.55	0.40
2:C:308:TRP:O	2:C:312:GLU:N	2.46	0.40
2:C:458:LYS:O	2:C:459:TYR:C	2.60	0.40
2:C:460:ALA:O	2:C:462:ALA:N	2.47	0.40
2:C:611:PRO:HB3	2:C:685:LEU:HD11	2.03	0.40
2:C:540:SER:HB3	2:C:747:MET:O	2.21	0.40
2:C:999:MET:HG2	2:C:1007:VAL:CG2	2.52	0.40
3:D:131:HIS:HA	3:D:132:PRO:HD3	1.78	0.40
4:E:141:LEU:HD12	4:E:145:MET:HG2	2.03	0.40
4:E:40:HIS:CE1	4:E:41:GLN:CG	3.04	0.40
5:F:117:THR:C	5:F:119:SER:H	2.23	0.40
5:F:11:ARG:O	5:F:13:TRP:N	2.54	0.40
5:F:147:HIS:CD2	5:F:149:LEU:HB2	2.52	0.40
6:G:82:THR:HA	6:G:83:PRO:HD3	1.79	0.40
8:I:128:ASN:CG	8:I:128:ASN:O	2.59	0.40
8:I:63:LEU:C	8:I:90:ALA:CB	2.86	0.40
1:B:1010:ALA:O	1:B:1013:ASP:HB2	2.20	0.40
1:B:1019:CYS:O	1:B:1020:CYS:C	2.59	0.40
1:B:1140:HIS:CE1	1:B:1272:THR:HG23	2.56	0.40
1:B:1317:MET:C	1:B:1319:VAL:H	2.24	0.40
1:B:376:TYR:CD2	1:B:376:TYR:C	2.95	0.40
1:B:666:ILE:HG12	2:C:1030:LEU:HD22	2.04	0.40
1:B:735:VAL:HG12	1:B:735:VAL:O	2.21	0.40
1:B:754:SER:N	1:B:757:ASN:HD22	2.00	0.40
1:B:767:GLN:HE21	1:B:774:ARG:HB3	1.79	0.40
1:B:844:ALA:C	1:B:845:LEU:HD23	2.41	0.40
1:B:874:ASP:C	1:B:874:ASP:OD1	2.60	0.40
2:C:193:LYS:HD3	2:C:787:VAL:HG11	2.03	0.40
2:C:237:VAL:HG12	2:C:238:ALA:N	2.36	0.40
2:C:293:PRO:HG2	2:C:296:GLU:CB	2.51	0.40
2:C:416:LEU:HD11	2:C:466:TRP:CZ2	2.57	0.40
2:C:882:THR:HG22	2:C:884:ARG:CB	2.50	0.40
4:E:12:ARG:NH1	4:E:14:ARG:HG3	2.36	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:F:16:PHE:O	5:F:17:ARG:C	2.59	0.40
6:G:89:GLU:HB3	6:G:134:ILE:HD13	2.03	0.40
7:H:114:LEU:HD23	7:H:161:GLY:C	2.41	0.40
7:H:88:ASP:CB	7:H:144:ARG:HA	2.44	0.40
8:I:24:CYS:CB	8:I:44:VAL:HG21	2.48	0.40
9:J:34:TYR:C	9:J:35:VAL:HG23	2.42	0.40
9:J:61:ASP:C	9:J:63:GLY:H	2.24	0.40
9:J:7:CYS:C	9:J:8:ARG:O	2.57	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	B	1406/1733 (81%)	965 (69%)	284 (20%)	157 (11%)	0	7
2	C	1090/1224 (89%)	719 (66%)	243 (22%)	128 (12%)	0	6
3	D	264/318 (83%)	163 (62%)	70 (26%)	31 (12%)	0	6
4	E	173/221 (78%)	107 (62%)	43 (25%)	23 (13%)	0	4
5	F	212/215 (99%)	154 (73%)	36 (17%)	22 (10%)	0	8
6	G	82/155 (53%)	62 (76%)	13 (16%)	7 (8%)	1	12
7	H	169/171 (99%)	129 (76%)	26 (15%)	14 (8%)	1	13
8	I	129/146 (88%)	79 (61%)	30 (23%)	20 (16%)	0	3
9	J	117/122 (96%)	80 (68%)	24 (20%)	13 (11%)	0	7
10	K	63/70 (90%)	38 (60%)	12 (19%)	13 (21%)	0	2
11	L	112/120 (93%)	81 (72%)	24 (21%)	7 (6%)	1	18
12	M	44/70 (63%)	22 (50%)	8 (18%)	14 (32%)	0	0
All	All	3861/4565 (85%)	2599 (67%)	813 (21%)	449 (12%)	0	6

All (449) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	B	4	GLN
1	B	41	MET
1	B	48	ALA
1	B	54	ASN
1	B	57	ARG
1	B	62	ASP
1	B	67	CYS
1	B	93	VAL
1	B	130	ASP
1	B	149	GLU
1	B	154	SER
1	B	223	GLY
1	B	245	PRO
1	B	250	ILE
1	B	286	HIS
1	B	311	GLN
1	B	312	PRO
1	B	318	SER
1	B	322	VAL
1	B	331	GLY
1	B	332	LYS
1	B	335	ARG
1	B	336	ILE
1	B	409	SER
1	B	419	LYS
1	B	536	LEU
1	B	543	LEU
1	B	567	LYS
1	B	752	LYS
1	B	755	PHE
1	B	765	VAL
1	B	780	VAL
1	B	789	LYS
1	B	980	ASP
1	B	986	ILE
1	B	995	GLU
1	B	1002	GLY
1	B	1016	THR
1	B	1114	PRO
1	B	1115	SER
1	B	1120	LEU
1	B	1124	HIS

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Mol	Chain	Res	Type
1	B	1212	VAL
1	B	1223	ASP
1	B	1231	ASP
1	B	1242	VAL
1	B	1255	GLU
1	B	1261	LYS
1	B	1341	ILE
1	B	1365	TYR
1	B	1377	THR
1	B	1378	GLN
1	B	1393	ASN
2	C	21	GLU
2	C	45	SER
2	C	46	GLN
2	C	108	VAL
2	C	186	GLU
2	C	367	LEU
2	C	401	PHE
2	C	448	ILE
2	C	470	LYS
2	C	472	ALA
2	C	509	ALA
2	C	510	LYS
2	C	591	ARG
2	C	708	GLU
2	C	709	ASP
2	C	731	VAL
2	C	751	VAL
2	C	826	ALA
2	C	907	GLY
2	C	909	ASP
2	C	943	SER
2	C	1003	ALA
2	C	1006	ILE
2	C	1011	ILE
2	C	1045	SER
2	C	1046	PRO
2	C	1156	ASP
2	C	1171	VAL
2	C	1175	LEU
2	C	1181	GLU
2	C	1182	CYS

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Mol	Chain	Res	Type
2	C	1183	LYS
3	D	81	GLU
3	D	117	ASP
3	D	149	LYS
3	D	156	THR
3	D	175	ALA
3	D	184	ASN
3	D	209	TYR
4	E	9	GLN
4	E	19	GLU
4	E	21	GLU
4	E	31	GLN
4	E	169	SER
4	E	173	HIS
4	E	174	PRO
4	E	199	ASN
4	E	218	GLU
4	E	220	LEU
5	F	43	LYS
5	F	44	ALA
5	F	48	ASP
5	F	59	SER
5	F	73	PRO
5	F	129	PRO
5	F	192	ARG
5	F	206	GLY
6	G	73	ALA
7	H	66	GLY
7	H	154	VAL
8	I	17	PRO
8	I	77	ARG
8	I	78	SER
8	I	81	PRO
8	I	84	ALA
8	I	108	SER
8	I	128	ASN
8	I	140	ALA
9	J	11	ASN
9	J	37	GLU
9	J	106	CYS
10	K	6	ARG
10	K	32	GLU

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Mol	Chain	Res	Type
10	K	64	ASN
11	L	29	ASN
12	M	35	SER
12	M	37	LYS
12	M	50	ASP
12	M	53	HIS
12	M	55	ILE
12	M	59	ALA
12	M	60	ARG
1	B	42	ASP
1	B	44	THR
1	B	51	GLY
1	B	58	LEU
1	B	66	LYS
1	B	70	CYS
1	B	73	GLY
1	B	76	GLU
1	B	167	CYS
1	B	257	ARG
1	B	283	GLY
1	B	303	TYR
1	B	317	LYS
1	B	410	GLY
1	B	415	LEU
1	B	666	ILE
1	B	718	VAL
1	B	719	VAL
1	B	829	VAL
1	B	846	GLU
1	B	847	ASP
1	B	871	ASP
1	B	968	GLN
1	B	979	SER
1	B	1050	GLU
1	B	1064	VAL
1	B	1116	LEU
1	B	1221	LYS
1	B	1314	SER
1	B	1335	ILE
1	B	1366	ARG
1	B	1405	THR
1	B	1438	THR

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Mol	Chain	Res	Type
2	C	184	ALA
2	C	206	ASN
2	C	229	ALA
2	C	260	GLY
2	C	304	ASP
2	C	305	VAL
2	C	365	THR
2	C	368	GLU
2	C	369	GLY
2	C	389	ALA
2	C	450	ALA
2	C	460	ALA
2	C	466	TRP
2	C	467	GLY
2	C	471	LYS
2	C	480	SER
2	C	511	PRO
2	C	543	SER
2	C	643	ASP
2	C	655	LYS
2	C	688	GLY
2	C	728	ARG
2	C	734	HIS
2	C	746	SER
2	C	825	VAL
2	C	827	ILE
2	C	883	LEU
2	C	1041	GLU
2	C	1082	MET
2	C	1096	ARG
2	C	1108	ARG
2	C	1112	GLN
2	C	1126	GLY
2	C	1155	SER
2	C	1167	GLY
2	C	1186	ASP
2	C	1188	LYS
3	D	94	LYS
3	D	110	THR
3	D	133	ILE
3	D	161	LYS
3	D	214	ASN

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Mol	Chain	Res	Type
4	E	20	GLU
4	E	52	LEU
5	F	74	ASP
5	F	76	GLY
5	F	106	GLN
5	F	121	MET
5	F	174	GLN
7	H	17	PHE
7	H	64	THR
7	H	118	ASP
7	H	140	LYS
8	I	12	VAL
8	I	60	ALA
8	I	82	PRO
8	I	90	ALA
8	I	134	ASN
8	I	139	ASN
9	J	3	THR
9	J	8	ARG
9	J	33	SER
9	J	47	GLU
9	J	58	VAL
9	J	79	HIS
10	K	2	ILE
10	K	17	LYS
10	K	24	LEU
10	K	27	GLU
10	K	28	ASP
10	K	29	GLU
10	K	39	LEU
11	L	7	PHE
11	L	14	GLU
11	L	15	GLY
1	B	3	GLY
1	B	43	GLU
1	B	59	GLY
1	B	69	THR
1	B	131	SER
1	B	219	PHE
1	B	232	GLU
1	B	244	PRO
1	B	253	ASN

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Mol	Chain	Res	Type
1	B	361	LEU
1	B	399	HIS
1	B	526	ASP
1	B	591	PHE
1	B	639	PRO
1	B	706	HIS
1	B	720	ARG
1	B	922	ASP
1	B	997	LEU
1	B	1139	GLU
1	B	1402	PHE
1	B	1448	GLU
2	C	219	ALA
2	C	266	ALA
2	C	295	GLY
2	C	427	ASP
2	C	430	ARG
2	C	613	VAL
2	C	711	GLU
2	C	712	PRO
2	C	792	MET
2	C	836	GLU
2	C	848	ARG
2	C	881	ASN
2	C	888	GLY
2	C	894	ASP
2	C	1018	PRO
2	C	1035	ALA
2	C	1074	ASN
2	C	1075	GLY
2	C	1100	ASP
2	C	1157	ALA
2	C	1176	ASN
3	D	60	ASP
3	D	95	CYS
3	D	138	GLU
3	D	148	ARG
3	D	240	VAL
4	E	8	PHE
4	E	131	GLU
4	E	139	LYS
4	E	198	LEU

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Mol	Chain	Res	Type
5	F	3	GLN
5	F	50	MET
5	F	130	ALA
5	F	205	SER
7	H	20	PRO
7	H	67	SER
7	H	96	GLN
8	I	120	GLY
9	J	34	TYR
9	J	78	CYS
12	M	54	ARG
1	B	128	ILE
1	B	220	THR
1	B	424	ILE
1	B	428	TYR
1	B	465	TYR
1	B	510	GLN
1	B	587	HIS
1	B	636	GLU
1	B	825	ILE
1	B	958	VAL
1	B	1013	ASP
1	B	1051	ALA
1	B	1054	LEU
1	B	1105	LEU
1	B	1109	LYS
1	B	1229	SER
1	B	1330	ASN
1	B	1390	ASN
2	C	56	ASP
2	C	94	LYS
2	C	115	GLN
2	C	198	ASP
2	C	282	ILE
2	C	394	ASP
2	C	402	GLY
2	C	436	VAL
2	C	461	LEU
2	C	465	ASN
2	C	605	ARG
2	C	879	ARG
2	C	978	ASP

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Mol	Chain	Res	Type
2	C	1143	ALA
3	D	87	PHE
3	D	90	ASP
3	D	206	ASN
3	D	213	PRO
4	E	25	ALA
4	E	192	LYS
4	E	217	LEU
5	F	115	ASN
5	F	120	ALA
5	F	122	LYS
6	G	112	GLU
6	G	150	GLU
7	H	16	SER
7	H	50	ASP
7	H	139	ILE
8	I	52	GLN
9	J	9	ASP
12	M	26	THR
12	M	39	SER
12	M	45	ALA
12	M	56	LEU
1	B	61	ILE
1	B	71	GLN
1	B	196	GLU
1	B	382	PRO
1	B	497	THR
1	B	661	GLY
1	B	775	ILE
1	B	821	ARG
1	B	972	HIS
1	B	1067	LEU
1	B	1324	PRO
1	B	1379	GLY
1	B	1394	THR
2	C	261	ARG
2	C	283	VAL
2	C	577	ALA
2	C	684	LEU
2	C	764	SER
2	C	800	GLN
2	C	832	GLY

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Mol	Chain	Res	Type
2	C	946	ASN
2	C	982	SER
2	C	1097	HIS
3	D	9	LYS
3	D	132	PRO
3	D	173	ALA
3	D	208	GLU
4	E	32	GLU
4	E	155	ARG
4	E	168	LYS
5	F	40	GLU
6	G	111	LEU
6	G	139	PRO
7	H	128	PRO
8	I	32	THR
8	I	62	SER
8	I	92	ASP
8	I	119	GLY
9	J	57	GLY
10	K	33	GLY
11	L	41	THR
12	M	40	LEU
1	B	321	PRO
1	B	400	PRO
1	B	759	ALA
1	B	975	HIS
1	B	1128	GLN
2	C	259	TYR
2	C	325	GLN
2	C	763	GLN
2	C	1131	GLY
2	C	1165	ILE
2	C	1170	THR
3	D	142	VAL
3	D	217	ASP
5	F	104	ASN
10	K	14	VAL
10	K	57	ILE
11	L	53	ASP
1	B	492	PRO
1	B	546	VAL
1	B	673	GLY

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Mol	Chain	Res	Type
1	B	916	GLY
2	C	524	PRO
2	C	1017	ILE
3	D	139	GLY
3	D	243	VAL
6	G	74	ILE
6	G	117	PRO
7	H	34	VAL
11	L	66	PRO
1	B	35	ILE
1	B	78	PRO
1	B	138	ILE
1	B	380	VAL
1	B	1006	ILE
2	C	562	GLY
3	D	255	VAL
4	E	202	ILE
12	M	46	VAL
1	B	38	PRO
1	B	396	PRO
1	B	948	VAL
2	C	911	ILE
2	C	1214	PRO
3	D	70	ILE
1	B	1435	PRO
2	C	571	PRO
2	C	636	PRO
2	C	867	GLY
1	B	1107	VAL

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	B	1239/1520 (82%)	1113 (90%)	126 (10%)	7	28
2	C	962/1061 (91%)	867 (90%)	95 (10%)	8	29

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
3	D	234/274 (85%)	209 (89%)	25 (11%)	6	27
4	E	159/200 (80%)	136 (86%)	23 (14%)	3	18
5	F	196/197 (100%)	182 (93%)	14 (7%)	14	42
6	G	74/137 (54%)	69 (93%)	5 (7%)	16	44
7	H	152/152 (100%)	136 (90%)	16 (10%)	7	27
8	I	117/128 (91%)	107 (92%)	10 (8%)	10	37
9	J	113/116 (97%)	103 (91%)	10 (9%)	10	35
10	K	60/65 (92%)	54 (90%)	6 (10%)	7	29
11	L	99/102 (97%)	84 (85%)	15 (15%)	3	16
12	M	40/57 (70%)	36 (90%)	4 (10%)	7	29
All	All	3445/4009 (86%)	3096 (90%)	349 (10%)	7	29

All (349) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	B	18	GLN
1	B	22	PHE
1	B	34	LYS
1	B	37	PHE
1	B	41	MET
1	B	43	GLU
1	B	57	ARG
1	B	62	ASP
1	B	67	CYS
1	B	68	GLN
1	B	70	CYS
1	B	83	HIS
1	B	93	VAL
1	B	108	MET
1	B	157	ASP
1	B	174	ILE
1	B	200	ARG
1	B	221	SER
1	B	245	PRO
1	B	261	ASP
1	B	265	LYS
1	B	270	LEU
1	B	282	ASN

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Mol	Chain	Res	Type
1	B	312	PRO
1	B	320	ARG
1	B	322	VAL
1	B	326	ARG
1	B	335	ARG
1	B	360	GLU
1	B	375	THR
1	B	379	VAL
1	B	381	THR
1	B	385	ILE
1	B	394	ASN
1	B	396	PRO
1	B	406	ILE
1	B	408	ASP
1	B	417	TYR
1	B	434	ARG
1	B	442	VAL
1	B	443	LEU
1	B	445	ASN
1	B	450	LEU
1	B	451	HIS
1	B	462	VAL
1	B	466	SER
1	B	469	ARG
1	B	503	GLN
1	B	504	LEU
1	B	512	VAL
1	B	518	LYS
1	B	526	ASP
1	B	560	ILE
1	B	562	THR
1	B	590	ARG
1	B	616	VAL
1	B	618	GLU
1	B	629	LEU
1	B	635	ARG
1	B	642	CYS
1	B	657	LEU
1	B	664	THR
1	B	666	ILE
1	B	690	VAL
1	B	711	ARG

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Mol	Chain	Res	Type
1	B	727	ASP
1	B	741	ASN
1	B	764	CYS
1	B	768	GLN
1	B	774	ARG
1	B	779	PHE
1	B	821	ARG
1	B	827	THR
1	B	852	TYR
1	B	858	ASN
1	B	890	ASP
1	B	903	ASN
1	B	904	THR
1	B	906	HIS
1	B	907	THR
1	B	941	LYS
1	B	942	PHE
1	B	947	PHE
1	B	998	LEU
1	B	1035	TYR
1	B	1037	LEU
1	B	1067	LEU
1	B	1095	THR
1	B	1116	LEU
1	B	1120	LEU
1	B	1122	PRO
1	B	1138	ILE
1	B	1146	VAL
1	B	1147	THR
1	B	1152	ILE
1	B	1163	ILE
1	B	1170	ILE
1	B	1173	HIS
1	B	1194	ARG
1	B	1206	ASP
1	B	1240	CYS
1	B	1264	GLU
1	B	1271	ILE
1	B	1291	VAL
1	B	1295	THR
1	B	1298	TYR
1	B	1309	ASP

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Mol	Chain	Res	Type
1	B	1332	PHE
1	B	1333	ILE
1	B	1351	GLU
1	B	1359	ASP
1	B	1366	ARG
1	B	1372	VAL
1	B	1385	THR
1	B	1386	ARG
1	B	1389	PHE
1	B	1391	ARG
1	B	1393	ASN
1	B	1400	CYS
1	B	1405	THR
1	B	1425	SER
1	B	1428	VAL
1	B	1432	GLN
1	B	1442	ASP
1	B	1444	MET
1	B	1445	ILE
2	C	20	ASP
2	C	25	ILE
2	C	44	VAL
2	C	57	TYR
2	C	61	ASP
2	C	63	ILE
2	C	98	THR
2	C	104	GLU
2	C	175	ARG
2	C	180	TYR
2	C	199	MET
2	C	203	PHE
2	C	217	ARG
2	C	250	PHE
2	C	258	LEU
2	C	283	VAL
2	C	286	PHE
2	C	289	LEU
2	C	323	VAL
2	C	365	THR
2	C	371	GLU
2	C	378	LEU
2	C	385	LEU

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Mol	Chain	Res	Type
2	C	393	LYS
2	C	396	ASP
2	C	427	ASP
2	C	429	PHE
2	C	466	TRP
2	C	482	VAL
2	C	485	ARG
2	C	498	THR
2	C	502	ILE
2	C	511	PRO
2	C	513	GLN
2	C	516	ASN
2	C	539	LEU
2	C	544	CYS
2	C	582	VAL
2	C	602	THR
2	C	603	LEU
2	C	615	MET
2	C	616	ILE
2	C	619	ILE
2	C	629	ASP
2	C	635	ARG
2	C	644	GLU
2	C	683	SER
2	C	737	THR
2	C	742	GLU
2	C	748	ILE
2	C	755	ILE
2	C	790	ASP
2	C	797	TYR
2	C	807	ARG
2	C	811	TYR
2	C	830	TYR
2	C	833	TYR
2	C	835	GLN
2	C	837	ASP
2	C	839	MET
2	C	844	SER
2	C	862	GLN
2	C	866	TYR
2	C	878	GLN
2	C	894	ASP

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Mol	Chain	Res	Type
2	C	909	ASP
2	C	944	THR
2	C	953	LEU
2	C	978	ASP
2	C	999	MET
2	C	1002	THR
2	C	1010	LEU
2	C	1045	SER
2	C	1046	PRO
2	C	1047	PHE
2	C	1060	ARG
2	C	1069	PHE
2	C	1076	HIS
2	C	1077	THR
2	C	1084	GLN
2	C	1092	TYR
2	C	1095	LEU
2	C	1098	MET
2	C	1108	ARG
2	C	1122	ARG
2	C	1151	LEU
2	C	1159	ARG
2	C	1170	THR
2	C	1182	CYS
2	C	1183	LYS
2	C	1185	CYS
2	C	1192	TYR
2	C	1202	LEU
2	C	1212	ILE
2	C	1222	ARG
3	D	3	GLU
3	D	8	VAL
3	D	26	ASP
3	D	29	MET
3	D	58	LEU
3	D	62	PHE
3	D	74	SER
3	D	77	ILE
3	D	83	SER
3	D	91	HIS
3	D	104	PHE
3	D	138	GLU

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Mol	Chain	Res	Type
3	D	140	ASN
3	D	147	LEU
3	D	148	ARG
3	D	163	ILE
3	D	170	TRP
3	D	190	ASP
3	D	193	TYR
3	D	209	TYR
3	D	226	ASP
3	D	228	PHE
3	D	235	VAL
3	D	240	VAL
3	D	266	ASP
4	E	5	THR
4	E	8	PHE
4	E	9	GLN
4	E	11	ARG
4	E	13	ARG
4	E	14	ARG
4	E	20	GLU
4	E	22	GLU
4	E	31	GLN
4	E	40	HIS
4	E	47	LEU
4	E	50	LEU
4	E	63	LEU
4	E	70	PHE
4	E	137	ASN
4	E	139	LYS
4	E	146	GLN
4	E	148	LEU
4	E	170	THR
4	E	174	PRO
4	E	211	LEU
4	E	214	LEU
4	E	221	TYR
5	F	7	ARG
5	F	46	TYR
5	F	60	PHE
5	F	74	ASP
5	F	77	SER
5	F	82	PHE

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Mol	Chain	Res	Type
5	F	92	THR
5	F	93	MET
5	F	94	LYS
5	F	104	ASN
5	F	114	ASN
5	F	132	ILE
5	F	198	ILE
5	F	207	ARG
6	G	74	ILE
6	G	90	ARG
6	G	107	VAL
6	G	111	LEU
6	G	143	PHE
7	H	1	MET
7	H	7	LEU
7	H	11	ILE
7	H	13	LEU
7	H	45	ILE
7	H	49	LEU
7	H	56	ILE
7	H	74	TYR
7	H	77	VAL
7	H	79	PHE
7	H	80	LYS
7	H	88	ASP
7	H	140	LYS
7	H	152	SER
7	H	165	GLU
7	H	171	ILE
8	I	7	ASP
8	I	10	PHE
8	I	17	PRO
8	I	26	ILE
8	I	95	TYR
8	I	96	VAL
8	I	102	TYR
8	I	106	GLU
8	I	110	ASP
8	I	130	ARG
9	J	8	ARG
9	J	9	ASP
9	J	15	TYR

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Mol	Chain	Res	Type
9	J	31	THR
9	J	52	ILE
9	J	59	VAL
9	J	85	PHE
9	J	86	PHE
9	J	99	LEU
9	J	100	PHE
10	K	16	ASP
10	K	19	GLU
10	K	28	ASP
10	K	43	ARG
10	K	44	TYR
10	K	48	ARG
11	L	7	PHE
11	L	10	PHE
11	L	12	LEU
11	L	47	ARG
11	L	50	LEU
11	L	61	TYR
11	L	65	HIS
11	L	68	PHE
11	L	78	THR
11	L	81	TYR
11	L	89	ASN
11	L	102	LYS
11	L	111	LEU
11	L	113	THR
11	L	114	LEU
12	M	44	ASP
12	M	54	ARG
12	M	55	ILE
12	M	70	ARG

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (106) such sidechains are listed below:

Mol	Chain	Res	Type
1	B	54	ASN
1	B	64	ASN
1	B	68	GLN
1	B	71	GLN
1	B	169	ASN
1	B	171	GLN

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Mol	Chain	Res	Type
1	B	225	ASN
1	B	256	GLN
1	B	297	GLN
1	B	339	ASN
1	B	358	ASN
1	B	394	ASN
1	B	435	HIS
1	B	493	GLN
1	B	603	ASN
1	B	654	ASN
1	B	698	GLN
1	B	723	ASN
1	B	736	ASN
1	B	741	ASN
1	B	757	ASN
1	B	760	GLN
1	B	786	HIS
1	B	858	ASN
1	B	881	GLN
1	B	903	ASN
1	B	926	GLN
1	B	965	GLN
1	B	1033	GLN
1	B	1106	ASN
1	B	1124	HIS
1	B	1130	GLN
1	B	1140	HIS
1	B	1173	HIS
1	B	1188	GLN
1	B	1203	ASN
1	B	1218	GLN
1	B	1258	HIS
1	B	1270	ASN
1	B	1354	ASN
1	B	1393	ASN
2	C	60	GLN
2	C	110	HIS
2	C	121	ASN
2	C	178	ASN
2	C	236	HIS
2	C	363	HIS
2	C	366	GLN

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Mol	Chain	Res	Type
2	C	383	ASN
2	C	465	ASN
2	C	515	HIS
2	C	516	ASN
2	C	518	HIS
2	C	538	ASN
2	C	734	HIS
2	C	744	HIS
2	C	763	GLN
2	C	770	GLN
2	C	776	GLN
2	C	821	GLN
2	C	842	ASN
2	C	862	GLN
2	C	957	ASN
2	C	958	GLN
2	C	1065	GLN
2	C	1074	ASN
2	C	1084	GLN
2	C	1093	GLN
2	C	1117	GLN
2	C	1161	HIS
2	C	1176	ASN
2	C	1179	GLN
3	D	24	ASN
3	D	65	HIS
3	D	73	GLN
3	D	91	HIS
3	D	102	GLN
3	D	112	ASN
3	D	167	HIS
4	E	39	ASN
4	E	74	GLN
4	E	137	ASN
4	E	143	ASN
4	E	173	HIS
4	E	199	ASN
5	F	101	GLN
5	F	104	ASN
5	F	114	ASN
5	F	147	HIS
7	H	14	HIS

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Mol	Chain	Res	Type
7	H	53	ASN
7	H	97	HIS
7	H	122	ASN
7	H	126	ASN
7	H	153	GLN
7	H	158	HIS
8	I	137	GLN
9	J	12	ASN
9	J	90	GLN
9	J	108	HIS
11	L	44	ASN
11	L	65	HIS
11	L	76	GLN
11	L	89	ASN
11	L	110	ASN
12	M	53	HIS

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
14	P	7/16 (43%)	1 (14%)	0

All (1) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
14	P	7	A

There are no RNA pucker outliers to report.

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

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

5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

5.6 Ligand geometry

Of 9 ligands modelled in this entry, 9 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	B	1416/1733 (81%)	-0.37	4 (0%) 94 90	76, 129, 175, 200	0
2	C	1108/1224 (90%)	-0.32	2 (0%) 95 93	79, 140, 185, 200	0
3	D	266/318 (83%)	-0.41	0 100 100	93, 126, 168, 188	0
4	E	177/221 (80%)	-0.34	0 100 100	106, 142, 182, 190	0
5	F	214/215 (99%)	-0.33	0 100 100	99, 161, 187, 200	0
6	G	84/155 (54%)	-0.52	0 100 100	73, 107, 138, 147	0
7	H	171/171 (100%)	-0.34	0 100 100	98, 127, 164, 174	0
8	I	133/146 (91%)	0.02	1 (0%) 86 79	134, 165, 186, 196	0
9	J	119/122 (97%)	-0.31	0 100 100	122, 165, 189, 200	0
10	K	65/70 (92%)	-0.59	0 100 100	92, 121, 158, 169	0
11	L	114/120 (95%)	-0.39	0 100 100	94, 128, 156, 170	0
12	M	46/70 (65%)	-0.03	0 100 100	120, 172, 195, 198	0
13	N	7/14 (50%)	1.23	3 (42%) 0 0	199, 200, 200, 200	1 (14%)
14	P	8/16 (50%)	0.06	0 100 100	198, 199, 200, 200	0
15	T	18/26 (69%)	0.65	2 (11%) 5 5	178, 199, 200, 200	1 (5%)
All	All	3946/4621 (85%)	-0.33	12 (0%) 94 90	73, 136, 184, 200	2 (0%)

All (12) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	1176	LEU	3.9
13	N	7	DC	2.9
15	T	11	DT	2.8
2	C	471	LYS	2.8
1	B	1455	PRO	2.3
8	I	105	GLU	2.3
2	C	865	LYS	2.2

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Mol	Chain	Res	Type	RSRZ
13	N	6	DA	2.2
1	B	145	LYS	2.2
15	T	10	DG	2.0
1	B	164	ARG	2.0
13	N	5	DT	2.0

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

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

6.3 Carbohydrates [i](#)

There are no carbohydrates in this entry.

6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
17	MG	B	1736	1/1	0.86	0.10	153,153,153,153	0
16	ZN	J	124	1/1	0.92	0.03	200,200,200,200	0
16	ZN	M	71	1/1	0.98	0.05	174,174,174,174	0
16	ZN	D	319	1/1	0.99	0.13	98,98,98,98	0
16	ZN	B	1735	1/1	0.99	0.12	110,110,110,110	0
16	ZN	K	71	1/1	0.99	0.25	113,113,113,113	0
16	ZN	J	123	1/1	0.99	0.16	136,136,136,136	0
16	ZN	B	1734	1/1	0.99	0.04	149,149,149,149	0
16	ZN	C	1225	1/1	0.99	0.23	104,104,104,104	0

6.5 Other polymers [i](#)

There are no such residues in this entry.