



Full wwPDB X-ray Structure Validation Report ⓘ

Oct 13, 2020 – 02:58 PM EDT

PDB ID : 3G61
Title : Structure of P-glycoprotein Reveals a Molecular Basis for Poly-Specific Drug Binding
Authors : Aller, S.G.; Yu, J.; Ward, A.; Weng, Y.; Chittaboina, S.; Zhuo, R.; Harrell, P.M.; Trinh, Y.T.; Zhang, Q.; Urbatsch, I.L.; Chang, G.
Deposited on : 2009-02-05
Resolution : 4.35 Å(reported)

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A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

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

MolProbity : 4.02b-467
Mogul : 1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix) : 1.13
EDS : 2.14.6
buster-report : 1.1.7 (2018)
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac : 5.8.0158
CCP4 : 7.0.044 (Gargrove)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.14.6

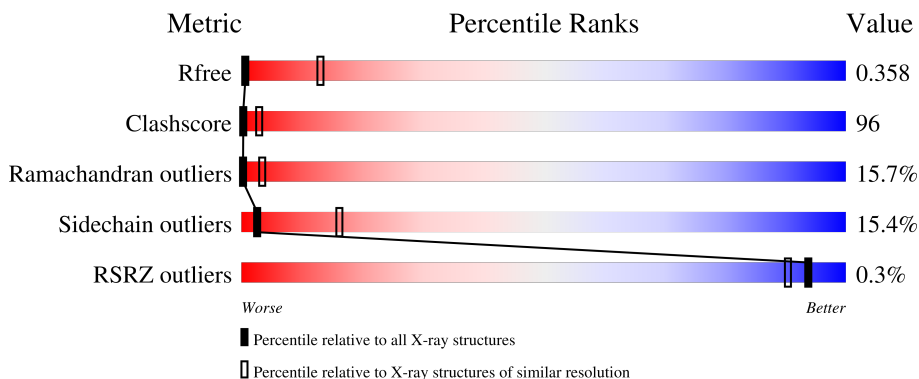
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 4.35 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	1018 (4.84-3.80)
Clashscore	141614	1081 (4.84-3.80)
Ramachandran outliers	138981	1033 (4.84-3.80)
Sidechain outliers	138945	1016 (4.84-3.80)
RSRZ outliers	127900	1078 (4.92-3.70)

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

Mol	Chain	Length	Quality of chain
1	A	1284	
1	B	1284	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
2	2J8	A	6002	-	-	-	X
2	2J8	B	6003	-	-	-	X
2	2J8	B	6004	-	-	-	X

2 Entry composition i

There are 2 unique types of molecules in this entry. The entry contains 18448 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.

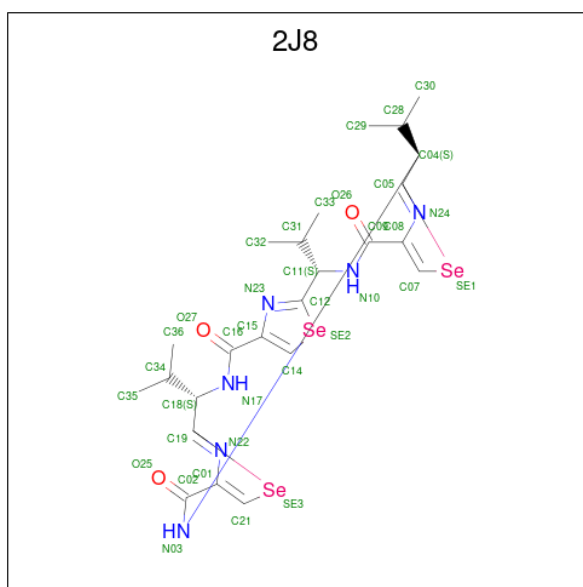
- Molecule 1 is a protein called Multidrug resistance protein 1a.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	1182	9171	5895	1552	1686	38	0	0	0
1	B	1182	9171	5895	1552	1686	38	0	0	0

There are 16 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	1277	TYR	-	expression tag	UNP Q5I1Y5
A	1278	VAL	-	expression tag	UNP Q5I1Y5
A	1279	HIS	-	expression tag	UNP Q5I1Y5
A	1280	HIS	-	expression tag	UNP Q5I1Y5
A	1281	HIS	-	expression tag	UNP Q5I1Y5
A	1282	HIS	-	expression tag	UNP Q5I1Y5
A	1283	HIS	-	expression tag	UNP Q5I1Y5
A	1284	HIS	-	expression tag	UNP Q5I1Y5
B	1277	TYR	-	expression tag	UNP Q5I1Y5
B	1278	VAL	-	expression tag	UNP Q5I1Y5
B	1279	HIS	-	expression tag	UNP Q5I1Y5
B	1280	HIS	-	expression tag	UNP Q5I1Y5
B	1281	HIS	-	expression tag	UNP Q5I1Y5
B	1282	HIS	-	expression tag	UNP Q5I1Y5
B	1283	HIS	-	expression tag	UNP Q5I1Y5
B	1284	HIS	-	expression tag	UNP Q5I1Y5

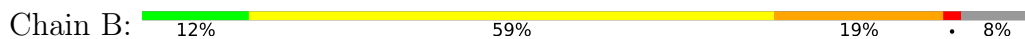
- Molecule 2 is (4S,11S,18S)-4,11,18-tri(propan-2-yl)-6,13,20-triselenena-3,10,17,22,23,24-hexaazatetracyclo[17.2.1.1 5,8 .1 12,15]tetracos-1(21),5(24),7,12(23),14,19(22)-hexaene-2,9,16-tri one (three-letter code: 2J8) (formula: C₂₄H₃₀N₆O₃Se₃).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
			Total	C	N	O	Se		
2	A	1	Total	C	N	O	Se	0	0
			36	24	6	3	3		
2	A	1	Total	C	N	O	Se	0	0
			17	11	3	1	2		
2	B	1	Total	C	N	O	Se	0	0
			36	24	6	3	3		
2	B	1	Total	C	N	O	Se	0	0
			17	11	3	1	2		

S729	M792	L853	Y916	A976	Y1040	V1102	R164	C1223	G61	V124	D184	K245	S305
K730	L793	T854	A917	I977	P1041	Q1103	R166	I1224	V62	A125	K185	A246	Y306
V732	R794	L855	Q918	I978	T1042	W1104	V1166	V1226	A63	Y126	I186	G247	L308
G733	R795	L856	Q919	F979	R1043	L1105	G1166	L1226	L64	I127	G187	A248	A309
V734	D796	L857	G980	R797	P1044	A1106	D1167	H1228	P65	Q128	M188	V249	F310
F735	V797	L858	G981	A981	S1045	A1107	K1168	R1228	L66	V129	F189	A250	W311
T736	W799	A859	I992	M982	T1046	Q1108	G1169	R1229	M67	S130	F190	E251	Y312
	F800	I860	F923	Q986	V1047	L1109	T1170	L1230	M68	L131	Q191	E252	G312
P740	D801	V861	Y924	Q986	V1048	G1110	Q1171	M1231	L69	W132	A192	V253	G313
P741	D802	P862	R925	V987	L1049	I1111	L1172	T1232	I70	L133	M193	A254	T314
E742	D803	I863	N926	S988	Q1050	V1112	S1173	I1233	F71	L134	A194	A255	S315
T743	P803	I864	A927	S989	G1051	S1113	G1174	A1234	G72	A135	T195	A256	L316
	K804	A865	M928	A991	L1052	Q1114	G1175	M1235	L67	A136	F196	V257	V317
	M805	I866	K929	A991	S1053	E1115	Q1176	A1236	M74	G137	F197	R258	I318
Q746	T806	A867	K930	P992	L1054	P1116	K1177	I1239	M69	F131	G198	T259	S319
M747	T807		A931	P992	L1055	I1117	Q1178	I1239	T75	W133	R138	V260	K320
S748	G808	V870	D993	R994	E1055	I1118	R1179	V1240	D76	L135	F199	K321	E321
M749	A809	E871	A995	Y994	V1056	F1119	L1180	L1241	S77	L136	F200	A257	E322
L750	L810	M872	F934	K996	L1057	L1120	A1181	I1242	F78	H141	I201	A258	S323
F751	T811	M872	F934	K996	K1058	D1120	A1182	Q1243	V81	K142	I202	G284	I324
S752	T812	L875	G985	A997	G1059	S1122	I1182	M1244	G82	R144	G203	G285	G325
L753	R813	Q878	V999	T998	Q1060	I1123	R1184	M1245	M83	Q145	T204	G286	Q326
L754	R814	F938	F938	S1000	L1062	A1124	A1185	K1246		K146	R206	K267	Q327
F755	L815	A879	S939	A1001	A1063	E1125	L1186	L1247	K86	F147	G207	K268	L328
L756	M816	A890	S1002	F940	L1064	M1126	V1187	K1248	M87	F148	W208	E269	T329
I757	D817	K881	F941	H1003	V1065	I1127	R1188	E1249	S88	H149	K209	L270	V330
L758	A818	D882	T942	I1004	G1066	A1128	Q1189	L1250	I89	A150	L210	E271	F331
G759	A819	K883	A943	I1005	S1067	Y1129	A1190	G1251	N90	P151	T211	R272	F332
I760	K884	K884	M944	A951	G1068	G1130	H1191	T1252	M91	M152	L212	W273	S333
T761	R821	E885	M945	A951	S1069	I1131	L1192	H1253	S92	M153	V213	M274	S334
S762	K822	L886	Y946	I1009	A1064	M1132	L1193	Q1254	E83	Q154	I214	M275	L335
F763	G823	E887	F947	K1010	L1065	S1133	L1194	Q1255	A94	E155	L215	E155	L336
I764	G888	G888	S948	I1011	V1066	R1134	L1195	L1256	D95	I156	A216	E156	G337
F766	S889	S889	Y949	E1013	G1067	V1136	E1196	L1257	A98	W158	I217	E278	A338
F767	R890	K891	A950	I1014	Q1077	S1137	A1197	Q1259	M99	F159	R219	E279	F339
L768	L892	K892	C952	I1017	L1078	Y1138	T1199	K1260	F100	D160	W200	A280	S340
Q769	L829	E823	F953	Y1017	L1079	E1139	S1200	G1261	M98	A101	V161	K281	V341
G770	A830	G824	A954	S1018	E1080	E1140	R1201	I1262	F39	H162	K102	R282	G342
F771	V831	I832	F955	T1019	R1081	I1141	D1202	Y1263	R40	L103	D163	L283	Q343
T772	I832	I832	F955	S1018	F1082	V1142	D1203	F1264	Y41	E104	L223	I284	A344
F773	F833	I897	G956	Q1020	Y1083	R1143	T1204	S1265	A42	E105	G105	I285	S345
G774	Q834	E898	Y958	L1022	D1084	A1144	E1205	M1266	C43	E106	G106	K286	P346
K775	M835	E899	L959	K1093	P1085	A1145	S1206	V1267	W44	L167	M107	K287	N347
A776	I836	F900	V960	P1024	H1086	K1146	E1207		L45	M168	T108	I288	I348
E777	A837	R901	T961	M1025	A1087	E1147	K1208	Q1270	D46	T169	T109	A229	E349
I779	M838	T902	Q962	M1026	G1088	A1148	V1209	A1271	R47	R170	R110	K230	F351
L780	L839	V903	Q963	L1027	S1089	M1149	V1210	GLY	L48	L171	A111	L232	A352
T781	G840	V904	L964	E1028	V1090	I1150	Q1211	ALA	Y49	T172	Y112	L232	N353
G842	T841	S905	M965	G1029	F1091	H1151	E1212	LYS	M60	D173	Y113	S233	A354
R783	G843	L906	T966	M1030	L1092	Q1152	A1213	ARG	L51	D174	Y114	S234	R355
L784	I844	T907	F967	Y1031	D1093	F1153	L1214	SER	V52	V175	T115	F235	K356
R785	I844	Q1032	E968	Q1032	G1094	I1154	D1215	TYR	G53	S176	G116	T236	A357
Y786	E909	F1033	R969	F1033	K1095	I1155	K1216	VAL	T54	K177	I117	K237	A358
M787	Q910	V970	Y970	Y970	E1096	S1156	A1217	HIS	L55	L178	G118	K238	F359
V788	L847	L971	L971	G1035	L1097	L1157	R1218	HIS	A56	M179	A119	E239	E360
K789	Y849	E913	L972	V1037	K1038	F1158	E1219	HIS	A57	E160	G120	L301	V361
F790	R790	T914	F973	F1038	Q1099	K1169	R1220	HIS	I58	G181	V121	A242	F362
S791	Q852	M915	S975	M1039	M1101	Y1161	T1222	HIS	I59	L122	I122	Y243	K363

• Molecule 1: Multidrug resistance protein 1a



MET	G61	V124	D184	K245	S305
GLU	V62	A125	K185	A246	Y306
LEU	L224	L126	I186	G247	L308
GLU	V1226	G166	G187	A248	A309
GLU	L1226	L127	M188	V249	F310
ASP	H1228	V129	F189	A250	W311
LEU	R1229	M67	F190	E251	Y312
LYS	L1230	M68	Q191	E252	G312
GLY	M1231	L69	W132	V253	G313
ARG	T1232	I70	L133	A254	T314
ALA	I1233	F71	L134	A255	S315
ASP	G1234	G72	A135	A256	L316
LYS	M1235	D73	F196	V257	V317
ASN	A1236	M74	G137	R258	I318
PHE	I1239	M69	F131	T259	S319
SER	V1240	D76	W133	V260	K320
LYS	L1241	S77	L136	K321	E321
MET	I1242	F78	H141	A257	E322
GLY	Q1243	V81	K142	I201	S323
LYS	M1244	G82	R144	G203	I324
LYS	G1245	M83	Q145	T204	G325
SER	K1246		K146	R206	Q326
LYS	L1186	K86	F147	G207	Q327
GLU	V1187	M87	F148	W208	L328
LYS	I1127	S88	H149	K209	T329
LYS	A1128	I89	A150	L210	V330
GLU	Y1129	N90	P151	T211	F331
LYS	G1130	M91	M152	L212	F332
LYS	I1131	S92	M153	V213	S333
PRO	M1132	E83	Q154	I214	M274
ALA	S1133	A94	E155	L215	M275
V33	R1134	D95	I156	A216	R276
S34	V1135	A98	W158	I217	L277
V35	V1136	A98	F159	R219	A338
L36	S1137	M99	D160	W200	F339
T37	Y1138	F100	A101	V161	S340
M38	E1139	A101	H162	K102	V341
F39	I1140	K102	H163	G222	G342
R40	V1141	L103	D163	L223	Q343
Y41	R1142	E104	V164	S224	A344
A42	V1143	E105	G165	A225	S345
C43	A1144	E106	E166	G226	K286
W44	A1145	M107	L167	I237	K287
L45	K1146	T108	M168	W228	A288
D46	E1147	T109	T169	A229	I289
R47	A1148	R170	R171	K230	T290
L48	M1149	A111	L171	L231	A291
Y49	I1150	Y112	T172	L232	N292
M60	H1151	Y113	D173	S233	K353
L51	Q1152	Y114	D174	S234	A354
V52	F1153	T115	V175	S235	R355
G53	G1154	G116	S176	F236	K356
T54	I1155	G117	K177	T236	A357
L55	S1156	G118	L178	D237	A298
A56	L1157	A119	M179	K238	F359
A57	L1157	A119	M179	E239	L300
I58	F1158	G120	E160	L301	V361
I59	K1160	V121	G181	A242	F362
I60	L1160	I122	L122	Y243	K363
H60	Y1161	T1222	G183	A244	I364

C1223	Y1161	M1101	Y1040	1977	A917	T854	R794	G733	GLY	D609	E547	Y486	S425	I365
I1224	V1102	V1102	P1041	Y978	Q918	L855	Q795	V794	PRO	E610	L548	G487	G426	D866
V1225	Q1103	Q1103	T1042	F979	S919	L856	D796	F794	HIS	M612	L549	R488	C427	N367
I1226	M1104	M1104	R1043	G980	L920	L857	V797	T736	ASP	M612	L550	E489	G428	K368
A1227	L1105	L1105	P1044	A981	Q921	L858	S798	H737	GLN	E614	D551	D490	K429	P369
H1228	R1106	R1106	S1045	M982	I922	A859	V799	G738	ASP	E614	E552	V491	S430	S370
R1229	A1107	A1107	I1046	P923	P923	I860	F800	G739	ARG	K615	A553	T492	T431	I371
L1230	Q1108	Q1108	P1047	G985	V924	V861	D801	F740	LYS	G616	T554	M493	D372	D372
S1231	L1109	L1109	V1048	Q986	R925	P862	D802	P741	LEU	F617	S555	D494	V433	S373
T1232	G1110	G1110	L1049	F987	N926	I863	R803	F742	SER	F618	E495	D494	Q434	F374
I1233	I1111	I1111	Q1050	S988	A927	I864	X804	T743	THR	F619	D558	I496	L435	S375
Q1234	M1112	M1112	G1051	S989	M928	A865	R805	G746	LYS	K620	E559	E497	M436	K376
M1235	S1113	S1113	L1052	K929	K929	I866	T806	Q746	GLU	L621	E560	K498	Q437	S377
A1236	Q1114	Q1114	S1053	A991	K930	A867	T807	N747	ALA	V622	S561	A499	M437	S377
	E1115	E1115	L1054	P992	A931	V870	G909	S748	L694	Q625	E562	V500	R438	G376
I1239	P1116	P1116	E1055	D993	H932	V870	A809	N749	K501	Q625	E562	V500	R438	H379
V1240	I1117	I1117	K1056	Y994	F934	R872	L810	L750	V688	ALA	V564	E502	Y440	K380
I1241	L1118	L1118	K1057	A995	F934	R872	T811	L751	P689	ALA	V565	E503	D441	P381
I1242	F1119	F1119	K1058	K996	G935	L875	T812	S752	GLY	ALA	V566	A503	P442	D382
Q1243	D1120	D1120	G1059	A997	I936	L875	R813	L753	ASN	ASN	A567	A505	L443	N383
N1244	C1121	C1121	Q1060	T998	T937	L875	L814	L754	GLU	GLU	A568	Y506	D444	I384
K1245	S1122	S1122	T1061	F999	F938	Q878	A815	F755	S692	GLU	A569	D507	M446	Q385
K1246	I1123	I1123	L1062	S1000	S939	Q879	A816	F756	F693	ILE	L569	F508	M446	G386
V1247	A1124	A1124	A1063	A1001	F940	L880	D817	I757	W694	LEU	D570	V447	N387	N387
K1248	E1125	E1125	L1064	S1002	T941	X881	A818	L758	R695	LEU	K571	I509	S448	L388
E1249	M1126	M1126	V1065	H1003	Q942	D882	A819	G759	L697	ASN	A572	M510	I449	E389
G1250	I1127	I1127	G1066	I1004	A943	R883	Q820	F760	R698	ASN	R573	K511	D450	F390
H1251	A1128	A1128	S1067	I1005	N944	K884	R821	I761	R699	GLU	E574	L512	D453	K391
T1252	Y1129	Y1129	S1068	R1006	F945	E885	R822	F762	ALA	ALA	G575	P513	N392	N392
H1253	G1130	G1130	G1069	I1007	Y946	R886	K823	F763	CYS	CYS	R576	H514	I454	I393
Q1254	D1131	D1131	C1070	I1008	F947	E887	A824	I764	LYS	LYS	T577	Q515	R455	H394
Q1255	M1132	M1132	G1071	S943	S943	G888	T825	F765	SER	SER	T578	F516	T456	F395
L1256	S1133	S1133	K1072	E1009	E948	S889	G826	F766	LYS	LYS	I579	D517	I457	S386
A1258	R1134	R1134	V1075	K1010	Y949	S890	G826	F766	ASP	ASP	V580	T518	M468	Y397
Q1259	V1135	V1135	V1076	P1012	A950	R891	S827	F767	GLU	GLU	V581	L519	M468	P398
K1260	L1136	L1136	E1076	E1013	C952	K892	R828	L768	ILE	ILE	A682	V520	R460	S399
K1261	S1137	S1137	Q1077	I1014	F953	A893	L829	Q770	ASP	ASP	H583	G521	Y461	R400
G1261	Y1138	Y1138	L1078	D1015	R954	T894	V831	G770	ASN	ASN	R584	E522	L462	K401
	E1139	E1139	L1079	S1016	F955	E895	L832	T772	LEU	LEU	L585	R523	E464	E402
	E1140	E1140	E1080	G956	G956	A896	L832	T772	MET	MET	V588	G524	E464	V403
F1264	I1141	I1141	R1081	T1019	A957	R897	Q834	F773	F711	ARG	V588	L527	I465	Q404
M1266	V1142	V1142	F1082	Q1020	Y958	E398	R835	G774	F712	SER	R589	L527	I466	I405
E1205	R1143	R1143	Y1083	G1021	L959	R899	R836	A775	C713	SER	N590	S528	G467	L406
	A1144	A1144	D1084	L1022	V960	F900	A837	G777	A714	LYS	A591	G529	V468	K407
	A1145	A1145	P1085	K1023	T961	R901	N838	E778	I715	ASP	D592	G530	V469	G408
	K1146	K1146	M1086	P1024	Q962	T902	L839	E778	I716	SER	V693	Q531	S470	L409
	E1147	E1147	A1087	M1025	Q963	V903	G840	L780	M17	GLY	I594	K532	Q471	M410
	M1148	M1148	G1088	M1026	L964	V904	T841	L781	SER	SER	A595	Q533	E472	L411
	I1149	I1149	S1089	L1027	N965	S905	G842	K782	LEU	LEU	G596	R534	P473	K412
	L1150	L1150	V1090	E1028	T966	L906	I843	R783	ILE	ILE	D598	A536	V474	V413
	H1151	H1151	F1091	E1028	F967	T907	I844	L784	ARG	ARG	G599	I537	L475	K414
	Q1152	Q1152	L1092	V1031	E968	R908	I844	R785	ARG	ARG	G600	I537	F476	S415
	F1153	F1153	D1093	Q1032	N969	E909	S846	Y786	GLY	GLY	V601	A538	A477	G416
	L1154	L1154	G1094	F1033	Q910	L847	L847	N787	SER	SER	I602	R539	T478	Q417
	D1155	D1155	K1095	S1034	L971	I848	V788	V726	THR	THR	I603	A540	T479	T418
	A1156	A1156	E1096	E912	F912	F889	F789	I727	ARG	ARG	V604	L541	I480	V419
	L1157	L1157	I1097	V1036	V973	E913	G850	V789	LYS	LYS	Q605	V542	A420	A420
	P1158	P1158	K1098	F1037	F974	N914	R851	K790	SER	SER	G606	R543	E482	L421
	D1159	D1159	F1038	F1038	N915	N915	R852	S791	ILE	ILE	N607	M544	V422	V422
	K1160	K1160	L1100	M1039	A976	Y916	L853	L793	CYS	CYS	H608	K546	R485	N424

4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	97.74Å 114.98Å 375.81Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	19.95 – 4.35 19.95 – 4.35	Depositor EDS
% Data completeness (in resolution range)	93.3 (19.95-4.35) 93.2 (19.95-4.35)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	4.03 (at 4.36Å)	Xtrriage
Refinement program	CNS	Depositor
R, R_{free}	0.308 , 0.356 0.312 , 0.358	Depositor DCC
R_{free} test set	2807 reflections (9.92%)	wwPDB-VP
Wilson B-factor (Å ²)	195.7	Xtrriage
Anisotropy	0.362	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.16 , 39.2	EDS
L-test for twinning ²	$\langle L \rangle = 0.47$, $\langle L^2 \rangle = 0.30$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.91	EDS
Total number of atoms	18448	wwPDB-VP
Average B, all atoms (Å ²)	182.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.34% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality i

5.1 Standard geometry i

Bond lengths and bond angles in the following residue types are not validated in this section: 2J8

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	A	0.40	0/9339	0.72	12/12626 (0.1%)
1	B	0.39	0/9339	0.71	14/12626 (0.1%)
All	All	0.40	0/18678	0.72	26/25252 (0.1%)

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

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

There are no bond length outliers.

All (26) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	370	SER	N-CA-C	10.10	138.27	111.00
1	B	1159	ASP	N-CA-C	-8.41	88.29	111.00
1	A	374	PHE	N-CA-C	8.32	133.47	111.00
1	A	450	ASP	N-CA-C	-8.05	89.26	111.00
1	A	1098	LYS	N-CA-C	-7.76	90.04	111.00
1	A	1159	ASP	N-CA-C	-7.42	90.98	111.00
1	B	165	GLY	N-CA-C	-6.93	95.76	113.10
1	A	267	LYS	N-CA-C	6.71	129.13	111.00
1	A	165	GLY	N-CA-C	-6.52	96.79	113.10
1	B	1098	LYS	N-CA-C	-6.25	94.14	111.00
1	A	1017	TYR	N-CA-C	6.13	127.55	111.00
1	A	575	GLY	N-CA-C	-6.05	97.97	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	64	LEU	C-N-CD	6.02	141.04	128.40
1	B	267	LYS	N-CA-C	5.97	127.12	111.00
1	A	64	LEU	C-N-CD	5.96	140.92	128.40
1	A	164	VAL	N-CA-C	5.91	126.95	111.00
1	B	1206	SER	CB-CA-C	5.85	121.21	110.10
1	B	450	ASP	N-CA-C	-5.72	95.56	111.00
1	A	552	GLU	CB-CA-C	-5.70	98.99	110.40
1	A	164	VAL	CB-CA-C	-5.59	100.77	111.40
1	B	575	GLY	N-CA-C	-5.56	99.21	113.10
1	B	370	SER	CB-CA-C	-5.40	99.84	110.10
1	B	852	GLN	N-CA-C	-5.35	96.55	111.00
1	B	851	TRP	CB-CA-C	-5.17	100.06	110.40
1	B	164	VAL	N-CA-C	5.07	124.68	111.00
1	B	804	LYS	N-CA-C	-5.03	97.43	111.00

There are no chirality outliers.

All (2) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	916	TYR	Sidechain
1	B	916	TYR	Sidechain

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	9171	0	9344	1807	0
1	B	9171	0	9344	1791	0
2	A	53	0	36	5	0
2	B	53	0	36	20	0
All	All	18448	0	18760	3588	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 96.

All (3588) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:718:GLY:O	1:B:722:PRO:HD2	1.44	1.17
1:A:718:GLY:O	1:A:722:PRO:HD2	1.43	1.15
1:B:858:LEU:O	1:B:862:PRO:HD2	1.47	1.15
1:A:195:THR:HB	1:A:340:SER:HB2	1.27	1.14
1:B:35:VAL:HG23	1:B:36:LEU:H	1.13	1.11
1:A:858:LEU:O	1:A:862:PRO:HD2	1.50	1.09
1:B:195:THR:HB	1:B:340:SER:HB2	1.30	1.09
1:A:35:VAL:HG23	1:A:36:LEU:H	1.14	1.08
1:B:1011:THR:H	1:B:1012:PRO:HD2	1.16	1.07
1:B:711:ILE:HD11	1:B:832:ILE:HG21	1.37	1.06
1:B:691:ALA:HA	1:B:1002:SER:OG	1.55	1.06
1:A:523:ARG:HD3	1:A:524:GLY:H	1.20	1.05
1:A:711:ILE:HD11	1:A:832:ILE:HG21	1.39	1.05
1:B:61:GLY:O	1:B:65:PRO:HD2	1.56	1.04
1:A:61:GLY:O	1:A:65:PRO:HD2	1.56	1.04
1:B:851:TRP:HA	1:B:854:THR:HB	1.38	1.04
1:A:387:ASN:HD22	1:A:414:LYS:HA	1.21	1.04
1:B:1063:ALA:HB3	1:B:1239:ILE:HA	1.37	1.04
1:A:826:GLY:HA2	1:A:829:LEU:HD12	1.39	1.03
1:B:387:ASN:HD22	1:B:414:LYS:HA	1.23	1.03
1:B:523:ARG:HD3	1:B:524:GLY:H	1.19	1.03
1:A:253:VAL:HB	1:A:1119:PHE:HE1	1.17	1.03
1:A:853:LEU:HD22	1:A:853:LEU:H	1.20	1.03
1:B:1039:ASN:HB2	1:B:1047:PRO:HA	1.39	1.03
1:B:766:PHE:HA	1:B:769:GLN:HE21	1.24	1.02
1:A:1039:ASN:HB2	1:A:1047:PRO:HA	1.38	1.01
1:A:1018:SER:O	1:A:1101:ASN:HB2	1.59	1.01
1:B:959:LEU:HD22	1:B:964:LEU:HB2	1.41	1.01
1:A:1144:ALA:HA	1:A:1186:LEU:HD11	1.43	1.01
1:A:1063:ALA:HB3	1:A:1239:ILE:HA	1.39	1.00
1:B:1090:VAL:HG13	1:B:1097:ILE:HB	1.40	1.00
1:A:384:ILE:HG22	1:A:385:GLN:H	1.24	1.00
1:B:826:GLY:HA2	1:B:829:LEU:HD12	1.40	0.99
1:A:766:PHE:HA	1:A:769:GLN:HE21	1.25	0.99
1:A:1090:VAL:HG13	1:A:1097:ILE:HB	1.40	0.99
1:A:158:TRP:HE1	1:A:900:PHE:CB	1.75	0.99
1:B:897:ILE:HG13	1:B:898:GLU:H	1.26	0.99
1:B:1144:ALA:HA	1:B:1186:LEU:HD11	1.42	0.98
1:B:1036:VAL:HB	1:B:1052:LEU:HB3	1.45	0.98
1:A:1218:ARG:HH22	1:A:1235:ASN:HD22	1.10	0.98
1:A:429:LYS:HD3	1:A:429:LYS:H	1.27	0.97
1:A:1022:LEU:HG	1:A:1104:TRP:NE1	1.80	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1218:ARG:HH22	1:B:1235:ASN:HD22	1.10	0.96
1:A:373:SER:O	1:A:374:PHE:HB2	1.62	0.96
1:A:1036:VAL:HB	1:A:1052:LEU:HB3	1.44	0.95
1:A:394:HIS:HA	1:A:406:LEU:O	1.66	0.95
1:B:339:PHE:CE2	2:B:6003:2J8:SE3	2.69	0.95
1:B:978:VAL:HG21	2:B:6003:2J8:H30	1.46	0.95
1:A:996:LYS:H	1:A:996:LYS:HD3	1.30	0.95
1:B:1011:THR:H	1:B:1012:PRO:CD	1.79	0.95
1:B:339:PHE:CZ	2:B:6003:2J8:SE3	2.69	0.94
1:A:897:ILE:HG13	1:A:898:GLU:H	1.29	0.94
1:B:523:ARG:CD	1:B:524:GLY:H	1.79	0.94
1:B:919:SER:O	1:B:923:PRO:HD2	1.67	0.94
1:A:616:GLY:O	1:A:620:LYS:HB2	1.66	0.94
1:B:996:LYS:H	1:B:996:LYS:HD3	1.30	0.94
1:A:1013:GLU:O	1:A:1014:ILE:HG23	1.68	0.93
1:B:394:HIS:HA	1:B:406:LEU:O	1.69	0.93
1:A:798:SER:OG	1:A:1041:PRO:HG2	1.69	0.93
1:A:158:TRP:HE1	1:A:900:PHE:HB3	1.31	0.92
1:B:318:ILE:HD11	1:B:325:GLY:N	1.83	0.92
1:A:797:VAL:HG21	1:A:1013:GLU:HG3	1.49	0.92
1:A:800:PHE:O	1:A:803:PRO:HD3	1.70	0.92
1:B:797:VAL:HG12	1:B:798:SER:H	1.35	0.92
1:B:795:GLN:HA	1:B:1012:PRO:HG3	1.52	0.92
1:B:1216:LYS:HE2	1:B:1216:LYS:HA	1.52	0.92
1:A:686:GLU:HG2	1:A:813:ARG:HH22	1.33	0.92
1:B:118:GLY:O	1:B:121:VAL:HG22	1.70	0.92
1:B:616:GLY:O	1:B:620:LYS:HB2	1.68	0.92
1:A:919:SER:O	1:A:923:PRO:HD2	1.70	0.91
1:A:964:LEU:HD13	1:A:965:MET:N	1.84	0.91
1:B:484:ILE:HG21	1:B:496:ILE:HD12	1.51	0.91
1:A:118:GLY:O	1:A:121:VAL:HG22	1.70	0.91
1:A:253:VAL:HB	1:A:1119:PHE:CE1	2.06	0.91
1:A:484:ILE:HG21	1:A:496:ILE:HD12	1.51	0.91
1:B:964:LEU:HD13	1:B:965:MET:N	1.85	0.91
1:B:690:PRO:HG2	1:B:1006:ARG:NH2	1.85	0.91
1:A:523:ARG:CD	1:A:524:GLY:H	1.83	0.91
1:B:202:ILE:HD12	1:B:203:GLY:N	1.86	0.91
1:B:318:ILE:HD13	1:B:327:VAL:HG13	1.54	0.90
1:B:892:ILE:HB	1:B:916:TYR:HE1	1.37	0.90
1:B:155:GLU:O	1:B:157:GLY:N	2.03	0.90
1:A:155:GLU:O	1:A:157:GLY:N	2.05	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1202:LEU:HD21	1:B:1206:SER:HB3	1.54	0.90
1:B:1091:PHE:HE1	1:B:1096:GLU:HG2	1.37	0.90
1:B:318:ILE:HD11	1:B:324:ILE:HG12	1.54	0.89
1:A:892:ILE:HB	1:A:916:TYR:HE1	1.37	0.89
1:B:202:ILE:HD12	1:B:203:GLY:H	1.36	0.89
1:A:278:GLU:O	1:A:282:ARG:HG2	1.71	0.89
1:B:816:ASN:O	1:B:820:GLN:HG2	1.71	0.89
1:A:270:LEU:HD23	1:A:270:LEU:H	1.36	0.89
1:A:816:ASN:O	1:A:820:GLN:HG2	1.72	0.88
1:A:72:GLY:HA2	1:A:326:GLN:NE2	1.88	0.88
1:B:270:LEU:HD23	1:B:270:LEU:H	1.35	0.88
1:B:278:GLU:O	1:B:282:ARG:HG2	1.73	0.88
1:A:292:ASN:HA	1:A:295:MET:HB2	1.55	0.88
1:A:267:LYS:N	1:A:270:LEU:HD21	1.89	0.88
1:B:207:GLY:HA3	1:B:211:THR:HB	1.54	0.88
1:B:384:ILE:HG22	1:B:385:GLN:H	1.36	0.88
1:B:889:SER:HA	1:B:892:ILE:HD11	1.56	0.88
1:A:318:ILE:HD11	1:A:325:GLY:H	1.39	0.87
1:B:386:GLY:HA3	1:B:450:ASP:HA	1.54	0.87
1:A:1216:LYS:HA	1:A:1216:LYS:HE2	1.54	0.87
1:A:34:SER:O	1:A:38:MET:HB2	1.74	0.87
1:A:478:THR:HG22	1:A:479:THR:H	1.39	0.87
1:A:1179:ARG:HH21	1:A:1209:VAL:HG11	1.39	0.87
1:A:122:LEU:HD12	1:A:939:SER:HB2	1.56	0.87
1:B:64:LEU:O	1:B:67:MET:HB3	1.74	0.87
1:B:209:LYS:O	1:B:212:LEU:HB3	1.72	0.87
1:B:72:GLY:HA2	1:B:326:GLN:NE2	1.90	0.87
1:A:67:MET:HE2	1:A:117:ILE:HG21	1.57	0.87
1:A:1261:GLY:H	1:A:1264:PHE:HB3	1.38	0.87
1:A:202:ILE:HD12	1:A:203:GLY:H	1.39	0.87
1:A:603:VAL:HG23	1:A:604:GLU:H	1.40	0.87
1:A:202:ILE:HD12	1:A:203:GLY:N	1.88	0.87
1:A:360:GLU:HA	1:A:363:LYS:HE2	1.56	0.87
1:B:267:LYS:N	1:B:270:LEU:HD21	1.89	0.87
1:A:1091:PHE:HE1	1:A:1096:GLU:HG2	1.37	0.86
1:B:1179:ARG:HH21	1:B:1209:VAL:HG11	1.39	0.86
1:B:379:HIS:O	1:B:381:PRO:HD3	1.75	0.86
1:B:34:SER:O	1:B:38:MET:HB2	1.74	0.86
1:B:1128:ALA:HB2	1:B:1141:ILE:HG21	1.57	0.86
1:B:1261:GLY:H	1:B:1264:PHE:HB3	1.38	0.86
1:B:603:VAL:HG23	1:B:604:GLU:H	1.39	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1020:GLN:HG2	1:B:1021:GLY:H	1.41	0.86
1:A:1202:LEU:HG	1:A:1203:ASP:H	1.41	0.86
1:B:964:LEU:HD13	1:B:965:MET:H	1.39	0.86
1:B:379:HIS:HB3	1:B:457:ILE:HA	1.58	0.86
1:A:1128:ALA:HB2	1:A:1141:ILE:HG21	1.58	0.86
1:B:67:MET:HE2	1:B:117:ILE:HG21	1.58	0.86
1:B:853:LEU:H	1:B:853:LEU:HD22	1.39	0.85
1:A:1202:LEU:HD21	1:A:1206:SER:HB3	1.59	0.85
1:A:49:TYR:OH	1:A:130:SER:HB2	1.76	0.85
1:A:697:LEU:O	1:A:700:ASN:HB3	1.76	0.85
1:B:49:TYR:OH	1:B:130:SER:HB2	1.76	0.85
1:A:64:LEU:O	1:A:67:MET:HB3	1.76	0.85
1:B:907:THR:C	1:B:908:ARG:HE	1.79	0.85
1:B:742:GLU:O	1:B:746:GLN:HG2	1.77	0.85
1:A:386:GLY:HA3	1:A:450:ASP:HA	1.59	0.84
1:A:889:SER:HA	1:A:892:ILE:HD11	1.58	0.84
1:B:210:LEU:HG	1:B:322:TYR:CD2	2.12	0.84
1:A:907:THR:C	1:A:908:ARG:HE	1.80	0.84
1:B:800:PHE:O	1:B:803:PRO:HD3	1.78	0.84
1:A:35:VAL:HG23	1:A:36:LEU:N	1.93	0.84
1:B:974:PHE:HB2	2:B:6004:2J8:SE2	2.26	0.84
1:B:292:ASN:HA	1:B:295:MET:HB2	1.58	0.84
1:A:791:SER:HA	1:A:1010:LYS:HE2	1.59	0.84
1:A:694:TRP:O	1:A:697:LEU:HG	1.77	0.84
1:B:478:THR:HG22	1:B:479:THR:H	1.41	0.84
1:B:360:GLU:HA	1:B:363:LYS:HE2	1.58	0.84
1:A:964:LEU:HD13	1:A:965:MET:H	1.37	0.83
1:B:986:GLN:HE22	2:B:6003:2J8:H31	1.41	0.83
1:B:697:LEU:O	1:B:700:ASN:HB3	1.78	0.83
1:A:136:ALA:HB2	1:A:182:ILE:HB	1.61	0.83
1:B:1197:GLU:HG2	1:B:1227:ALA:HA	1.60	0.83
1:B:267:LYS:HB3	1:B:790:LYS:HE3	1.59	0.83
1:B:164:VAL:HG12	1:B:164:VAL:O	1.76	0.83
1:B:324:ILE:HG13	1:B:326:GLN:HB3	1.61	0.83
1:B:35:VAL:HG23	1:B:36:LEU:N	1.92	0.83
1:B:811:THR:O	1:B:814:LEU:HB2	1.79	0.83
1:A:158:TRP:HA	1:A:162:HIS:HD2	1.42	0.83
1:A:689:PRO:HB2	1:A:690:PRO:HD3	1.61	0.83
1:B:374:PHE:HE1	1:B:376:LYS:HB2	1.43	0.83
1:B:552:GLU:O	1:B:554:THR:N	2.11	0.83
1:A:801:ASP:HB3	1:A:1083:TYR:OH	1.78	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1202:LEU:HG	1:B:1203:ASP:H	1.42	0.83
1:A:204:PHE:HA	1:A:211:THR:HG21	1.58	0.82
1:A:742:GLU:O	1:A:746:GLN:HG2	1.77	0.82
1:A:1120:ASP:HB3	1:A:1168:LYS:HA	1.61	0.82
1:A:969:ASN:HA	1:A:972:LEU:HD13	1.62	0.82
1:B:942:GLN:O	1:B:945:MET:HB3	1.80	0.82
1:A:1197:GLU:HG2	1:A:1227:ALA:HA	1.60	0.82
1:B:226:GLY:O	1:B:230:LYS:HG2	1.80	0.82
1:B:128:GLN:O	1:B:131:PHE:HB3	1.80	0.82
1:A:859:ALA:O	1:A:863:ILE:HG13	1.80	0.81
1:A:713:CYS:CB	1:A:768:LEU:HD11	2.11	0.81
1:A:812:THR:HG22	1:A:816:ASN:HD22	1.44	0.81
1:A:853:LEU:HG	1:A:973:VAL:HG22	1.62	0.81
1:B:401:LYS:HD2	1:B:401:LYS:H	1.45	0.81
1:B:136:ALA:HB2	1:B:182:ILE:HB	1.62	0.81
1:A:401:LYS:HD2	1:A:401:LYS:H	1.45	0.81
1:A:762:SER:HA	1:A:765:THR:HG22	1.60	0.81
1:A:226:GLY:O	1:A:230:LYS:HG2	1.80	0.81
1:B:286:LYS:HA	1:B:289:ILE:HB	1.62	0.81
1:A:39:PHE:CE2	1:A:355:ARG:HA	2.16	0.81
1:B:766:PHE:O	1:B:769:GLN:HG2	1.80	0.81
1:B:713:CYS:CB	1:B:768:LEU:HD11	2.10	0.81
1:A:185:LYS:HZ2	1:A:186:ILE:N	1.79	0.81
1:A:289:ILE:O	1:A:293:ILE:HG12	1.80	0.81
1:B:158:TRP:HA	1:B:162:HIS:HD2	1.45	0.81
1:B:324:ILE:HG13	1:B:326:GLN:CB	2.10	0.81
1:B:762:SER:HA	1:B:765:THR:HG22	1.61	0.81
1:A:183:GLY:O	1:A:186:ILE:HG13	1.81	0.81
1:A:942:GLN:O	1:A:945:MET:HB3	1.81	0.81
1:B:35:VAL:HG12	1:B:359:TYR:CE2	2.15	0.81
1:B:429:LYS:HD3	1:B:429:LYS:H	1.45	0.81
1:B:694:TRP:O	1:B:697:LEU:HG	1.80	0.81
1:A:212:LEU:HA	1:A:215:LEU:HG	1.63	0.80
1:B:982:MET:HG3	2:B:6003:2J8:H33	1.63	0.80
1:A:1181:ALA:O	1:A:1184:ARG:HB3	1.81	0.80
1:A:110:TYR:HA	1:A:113:TYR:HD2	1.46	0.80
1:A:363:LYS:O	1:A:367:ASN:HB3	1.81	0.80
1:B:1120:ASP:HB3	1:B:1168:LYS:HA	1.63	0.80
1:B:183:GLY:O	1:B:186:ILE:HG13	1.80	0.80
1:A:527:LEU:HD23	1:A:527:LEU:H	1.46	0.80
1:A:168:ASN:HB3	1:A:897:ILE:CD1	2.10	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:61:GLY:O	1:B:65:PRO:CD	2.29	0.80
1:B:318:ILE:HD11	1:B:325:GLY:H	1.45	0.80
1:B:363:LYS:O	1:B:367:ASN:HB3	1.82	0.80
1:A:286:LYS:HA	1:A:289:ILE:HB	1.62	0.80
1:B:39:PHE:CE2	1:B:355:ARG:HA	2.17	0.80
1:A:1092:LEU:HB3	1:A:1097:ILE:HD11	1.64	0.80
1:A:857:LEU:HD11	1:A:977:ILE:HG12	1.64	0.80
1:A:291:ALA:HA	1:A:294:SER:HB2	1.64	0.79
1:A:35:VAL:HG12	1:A:359:TYR:CE2	2.15	0.79
1:A:61:GLY:O	1:A:65:PRO:CD	2.30	0.79
1:A:766:PHE:O	1:A:769:GLN:HG2	1.82	0.79
1:A:958:TYR:O	1:A:966:THR:HG21	1.83	0.79
1:B:100:PHE:HB2	1:B:961:THR:HG23	1.64	0.79
1:B:257:ILE:O	1:B:260:VAL:HB	1.83	0.79
1:B:812:THR:HG22	1:B:816:ASN:HD22	1.44	0.79
1:B:889:SER:O	1:B:892:ILE:HG13	1.80	0.79
1:A:969:ASN:HD22	1:A:970:VAL:N	1.79	0.79
1:A:207:GLY:HA3	1:A:211:THR:H	1.48	0.79
1:A:834:GLN:HB3	1:A:986:GLN:HG2	1.65	0.79
1:B:820:GLN:HG3	1:B:1000:SER:CB	2.12	0.79
1:A:140:ILE:HG13	1:A:179:ASN:HD22	1.46	0.79
1:A:257:ILE:O	1:A:260:VAL:HB	1.83	0.79
1:B:969:ASN:HA	1:B:972:LEU:HD13	1.63	0.79
1:B:1181:ALA:O	1:B:1184:ARG:HB3	1.83	0.79
1:B:339:PHE:CE1	2:B:6003:2J8:SE3	2.86	0.79
1:A:512:LEU:HD12	1:A:513:PRO:HD2	1.65	0.79
1:A:756:LEU:HD12	1:A:757:ILE:N	1.98	0.79
1:B:1092:LEU:HB3	1:B:1097:ILE:HD11	1.64	0.79
1:B:110:TYR:HA	1:B:113:TYR:HD2	1.47	0.79
1:B:289:ILE:O	1:B:293:ILE:HG12	1.81	0.79
1:B:339:PHE:CD2	2:B:6003:2J8:SE3	2.86	0.79
1:B:102:LYS:HA	1:B:102:LYS:HE3	1.65	0.78
1:B:727:ILE:HG21	1:B:754:LEU:HG	1.64	0.78
1:A:1154:ILE:HD13	1:A:1161:TYR:CE2	2.19	0.78
1:A:852:GLN:HB2	1:A:853:LEU:HD22	1.65	0.78
1:B:834:GLN:HB3	1:B:986:GLN:HG2	1.66	0.78
1:A:727:ILE:HG21	1:A:754:LEU:HG	1.63	0.78
1:A:770:GLY:HA2	1:A:773:PHE:CZ	2.19	0.78
1:A:811:THR:O	1:A:814:LEU:HB2	1.84	0.78
1:A:992:PRO:HB2	1:A:996:LYS:NZ	1.98	0.78
1:A:278:GLU:C	1:A:282:ARG:HG2	2.03	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:102:LYS:HA	1:A:102:LYS:HE3	1.65	0.78
1:A:574:GLU:HG3	1:A:574:GLU:O	1.84	0.78
1:A:797:VAL:HG12	1:A:798:SER:H	1.48	0.78
1:B:278:GLU:C	1:B:282:ARG:HG2	2.03	0.78
1:B:239:GLU:HG3	1:B:288:ALA:CB	2.13	0.78
1:A:467:GLY:HA3	1:A:545:PRO:HG3	1.64	0.78
1:B:314:THR:HG23	1:B:327:VAL:HG21	1.66	0.78
1:B:467:GLY:HA3	1:B:545:PRO:HG3	1.66	0.78
1:B:756:LEU:HD12	1:B:757:ILE:N	1.99	0.78
1:A:1145:ALA:CB	1:A:1154:ILE:HD12	2.14	0.78
1:A:47:ARG:O	1:A:50:MET:HB3	1.83	0.78
1:B:263:PHE:HE1	1:B:1129:TYR:HB3	1.49	0.78
1:B:375:SER:C	1:B:376:LYS:HD2	2.04	0.78
1:B:770:GLY:HA2	1:B:773:PHE:CZ	2.19	0.78
1:B:117:ILE:O	1:B:121:VAL:HG13	1.83	0.78
1:B:969:ASN:HD22	1:B:970:VAL:N	1.80	0.78
1:B:992:PRO:HB2	1:B:996:LYS:NZ	1.98	0.78
1:A:128:GLN:O	1:A:131:PHE:HB3	1.84	0.78
1:A:239:GLU:HG3	1:A:288:ALA:CB	2.14	0.78
1:A:892:ILE:HB	1:A:916:TYR:CE1	2.19	0.78
1:B:1183:ALA:O	1:B:1187:VAL:HB	1.84	0.78
1:B:1010:LYS:HD2	1:B:1010:LYS:H	1.49	0.77
1:B:140:ILE:HG13	1:B:179:ASN:HD22	1.46	0.77
1:B:512:LEU:HD12	1:B:513:PRO:HD2	1.65	0.77
1:B:892:ILE:HB	1:B:916:TYR:CE1	2.18	0.77
1:A:889:SER:O	1:A:892:ILE:HG13	1.83	0.77
1:B:210:LEU:HD23	1:B:317:VAL:HG11	1.65	0.77
1:B:527:LEU:HD23	1:B:527:LEU:H	1.47	0.77
1:A:303:TYR:O	1:A:306:TYR:HB3	1.84	0.77
1:B:291:ALA:HA	1:B:294:SER:HB2	1.65	0.77
1:B:303:TYR:O	1:B:306:TYR:HB3	1.84	0.77
1:A:692:SER:OG	1:A:696:ILE:HG23	1.84	0.77
1:B:1120:ASP:HA	1:B:1165:VAL:CG2	2.15	0.77
1:B:1158:PRO:O	1:B:1159:ASP:HB2	1.85	0.77
1:B:449:ILE:HD13	1:B:450:ASP:N	1.99	0.77
1:B:523:ARG:HD3	1:B:524:GLY:N	1.99	0.77
1:A:1120:ASP:HA	1:A:1165:VAL:CG2	2.14	0.77
1:A:573:ARG:HD2	1:A:578:THR:HG21	1.67	0.77
1:B:185:LYS:HZ2	1:B:186:ILE:N	1.80	0.77
1:B:574:GLU:HG3	1:B:574:GLU:O	1.85	0.77
1:A:1159:ASP:O	1:A:1160:LYS:HG3	1.84	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:210:LEU:HD23	1:A:317:VAL:HG11	1.65	0.77
1:A:385:GLN:HE21	1:A:386:GLY:H	1.33	0.77
1:B:1023:LYS:HB3	1:B:1026:MET:HG2	1.65	0.77
1:B:1120:ASP:HA	1:B:1165:VAL:HG21	1.67	0.77
1:B:693:PHE:H	1:B:693:PHE:HD2	1.31	0.77
1:A:1120:ASP:HA	1:A:1165:VAL:HG21	1.67	0.76
1:A:164:VAL:O	1:A:164:VAL:HG12	1.84	0.76
1:B:713:CYS:HB3	1:B:768:LEU:HD11	1.67	0.76
1:A:117:ILE:O	1:A:121:VAL:HG13	1.85	0.76
1:B:1167:ASP:O	1:B:1168:LYS:HB2	1.85	0.76
1:B:321:GLU:O	1:B:323:SER:N	2.17	0.76
1:A:361:VAL:O	1:A:365:ILE:HD12	1.85	0.76
1:A:820:GLN:HG3	1:A:1000:SER:CB	2.14	0.76
1:A:238:LYS:NZ	1:A:242:ALA:HB2	2.00	0.76
1:A:806:THR:O	1:A:810:LEU:HG	1.86	0.76
1:B:212:LEU:HA	1:B:215:LEU:HG	1.65	0.76
1:A:1183:ALA:O	1:A:1187:VAL:HB	1.86	0.76
1:A:178:ILE:HG12	1:A:358:ALA:CB	2.14	0.76
1:A:713:CYS:HB3	1:A:768:LEU:HD11	1.68	0.76
1:B:1010:LYS:O	1:B:1011:THR:HG23	1.85	0.76
1:B:306:TYR:O	1:B:310:PHE:HB2	1.86	0.76
1:B:178:ILE:HG12	1:B:358:ALA:CB	2.15	0.76
1:B:731:VAL:HG22	1:B:750:LEU:HB3	1.68	0.76
1:A:1039:ASN:CB	1:A:1047:PRO:HA	2.16	0.75
1:B:385:GLN:HE21	1:B:386:GLY:H	1.34	0.75
1:A:207:GLY:HA3	1:A:211:THR:HB	1.67	0.75
1:A:306:TYR:O	1:A:310:PHE:HB2	1.85	0.75
1:A:50:MET:HG3	1:A:131:PHE:CZ	2.22	0.75
1:B:238:LYS:NZ	1:B:242:ALA:HB2	2.01	0.75
1:B:362:PHE:HA	1:B:365:ILE:HD12	1.68	0.75
1:A:1179:ARG:NH2	1:A:1209:VAL:HG11	2.01	0.75
1:A:552:GLU:O	1:A:554:THR:N	2.20	0.75
1:A:158:TRP:NE1	1:A:900:PHE:CB	2.50	0.75
1:B:272:ARG:O	1:B:276:ASN:HB2	1.87	0.75
1:B:302:ILE:O	1:B:305:SER:HB3	1.85	0.75
1:B:859:ALA:O	1:B:863:ILE:HG13	1.85	0.75
1:A:324:ILE:HG13	1:A:326:GLN:CB	2.16	0.75
1:A:731:VAL:HG22	1:A:750:LEU:HB3	1.67	0.75
1:B:384:ILE:HG22	1:B:385:GLN:N	2.01	0.75
1:A:467:GLY:CA	1:A:545:PRO:HG3	2.16	0.75
1:A:780:LEU:O	1:A:784:LEU:HD23	1.87	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:573:ARG:HD2	1:B:578:THR:HG21	1.67	0.75
1:B:849:TYR:HB3	1:B:854:THR:OG1	1.87	0.75
1:B:970:VAL:O	1:B:973:VAL:HB	1.87	0.75
1:A:484:ILE:HG23	1:A:542:VAL:HG21	1.68	0.74
1:A:531:GLN:O	1:A:534:ARG:HB2	1.87	0.74
1:A:945:MET:SD	1:A:946:TYR:N	2.60	0.74
1:A:519:LEU:H	1:A:519:LEU:HD13	1.52	0.74
1:B:1020:GLN:HG2	1:B:1021:GLY:N	2.00	0.74
1:B:118:GLY:HA3	1:B:946:TYR:CE2	2.22	0.74
1:B:902:THR:C	1:B:904:VAL:N	2.39	0.74
1:A:387:ASN:ND2	1:A:414:LYS:HA	2.01	0.74
1:A:927:ALA:HA	1:A:930:LYS:HE3	1.69	0.74
1:B:47:ARG:O	1:B:50:MET:HB3	1.86	0.74
1:A:156:ILE:N	1:A:156:ILE:HD12	2.02	0.74
1:B:531:GLN:O	1:B:534:ARG:HB2	1.87	0.74
1:B:945:MET:SD	1:B:946:TYR:N	2.60	0.74
1:A:589:ARG:O	1:A:591:ALA:N	2.17	0.74
1:A:695:ARG:O	1:A:699:LEU:HD23	1.87	0.74
1:A:718:GLY:O	1:A:722:PRO:CD	2.31	0.74
1:A:1167:ASP:O	1:A:1168:LYS:HB2	1.86	0.74
1:A:155:GLU:HB3	1:A:156:ILE:HD12	1.68	0.74
1:B:704:TRP:CZ2	1:B:707:PHE:HB2	2.22	0.74
1:B:1122:SER:HA	1:B:1164:ARG:HA	1.69	0.74
1:B:239:GLU:HB3	1:B:285:ILE:HG12	1.69	0.74
1:B:991:ALA:HB1	1:B:992:PRO:HD2	1.70	0.74
1:A:1081:ARG:NH2	1:A:1098:LYS:O	2.20	0.74
1:A:307:ALA:CB	1:A:754:LEU:HD22	2.17	0.74
1:A:195:THR:CB	1:A:340:SER:HB2	2.15	0.74
1:A:791:SER:N	1:A:794:ARG:HH21	1.86	0.74
1:A:902:THR:C	1:A:904:VAL:N	2.38	0.74
1:B:484:ILE:HG23	1:B:542:VAL:HG21	1.68	0.74
1:A:302:ILE:O	1:A:305:SER:HB3	1.88	0.73
1:A:523:ARG:HD3	1:A:524:GLY:N	2.00	0.73
1:B:780:LEU:O	1:B:784:LEU:HD23	1.88	0.73
1:A:588:VAL:O	1:A:591:ALA:HB2	1.88	0.73
1:B:155:GLU:HB3	1:B:156:ILE:HD12	1.71	0.73
1:B:387:ASN:ND2	1:B:414:LYS:HA	2.03	0.73
1:B:50:MET:HG3	1:B:131:PHE:CZ	2.22	0.73
1:B:543:ARG:NH1	1:B:905:SER:HB3	2.02	0.73
1:A:1091:PHE:CE1	1:A:1096:GLU:HG2	2.22	0.73
1:B:1179:ARG:NH2	1:B:1209:VAL:HG11	2.02	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:215:LEU:O	1:B:219:PRO:HD2	1.88	0.73
1:A:225:ALA:HA	1:A:302:ILE:HD12	1.70	0.73
1:A:902:THR:C	1:A:904:VAL:H	1.90	0.73
1:B:695:ARG:O	1:B:699:LEU:HD23	1.88	0.73
1:A:35:VAL:CG2	1:A:36:LEU:H	1.98	0.73
1:A:420:ALA:C	1:A:421:LEU:HD12	2.09	0.73
1:A:704:TRP:CZ2	1:A:707:PHE:HB2	2.23	0.73
1:A:960:VAL:HG12	1:A:966:THR:OG1	1.87	0.73
1:B:878:GLN:O	1:B:882:ASP:HB2	1.88	0.73
1:B:786:TYR:HE2	1:B:790:LYS:HZ3	1.34	0.73
1:A:834:GLN:HG3	1:A:835:ASN:N	2.04	0.73
1:B:163:ASP:HB2	1:B:166:GLU:HB3	1.69	0.73
1:B:467:GLY:CA	1:B:545:PRO:HG3	2.19	0.73
1:B:233:SER:O	1:B:236:THR:HB	1.89	0.73
1:A:1037:VAL:HG12	1:A:1051:GLY:H	1.53	0.72
1:A:1022:LEU:HG	1:A:1104:TRP:CE2	2.23	0.72
1:A:158:TRP:NE1	1:A:900:PHE:HB2	2.04	0.72
1:A:272:ARG:O	1:A:276:ASN:HB2	1.88	0.72
1:A:611:LEU:HD23	1:A:618:TYR:HB2	1.71	0.72
1:B:1076:VAL:HG13	1:B:1194:LEU:HD13	1.70	0.72
1:B:419:VAL:HG23	1:B:593:VAL:HG13	1.71	0.72
1:B:791:SER:O	1:B:795:GLN:HB2	1.89	0.72
1:B:846:SER:O	1:B:849:TYR:HB2	1.89	0.72
1:B:927:ALA:HA	1:B:930:LYS:HE3	1.70	0.72
1:A:254:LEU:N	1:A:254:LEU:HD22	2.04	0.72
1:A:991:ALA:HB1	1:A:992:PRO:HD2	1.69	0.72
1:B:254:LEU:HD22	1:B:254:LEU:N	2.04	0.72
1:A:1037:VAL:HG21	1:A:1087:ALA:HB3	1.71	0.72
1:A:233:SER:O	1:A:236:THR:HB	1.89	0.72
1:B:213:VAL:O	1:B:217:ILE:HG12	1.89	0.72
1:B:484:ILE:CG2	1:B:496:ILE:HD12	2.19	0.72
1:A:1076:VAL:HG13	1:A:1194:LEU:HD13	1.70	0.72
1:A:550:LEU:HB2	1:A:580:VAL:HG23	1.72	0.72
1:A:168:ASN:HB3	1:A:897:ILE:HD13	1.69	0.72
1:B:797:VAL:O	1:B:799:TRP:N	2.23	0.72
1:A:913:GLU:HA	1:A:913:GLU:OE2	1.89	0.72
1:B:1091:PHE:CE1	1:B:1096:GLU:HG2	2.22	0.72
1:B:740:PRO:HG2	1:B:741:PRO:HD3	1.70	0.72
1:A:1080:GLU:OE2	1:A:1109:LEU:HD12	1.90	0.72
1:B:1037:VAL:HG12	1:B:1051:GLY:H	1.54	0.72
1:B:1147:GLU:HB3	1:B:1186:LEU:HD22	1.71	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:156:ILE:HD12	1:B:156:ILE:N	2.04	0.72
1:B:519:LEU:HD13	1:B:519:LEU:H	1.52	0.72
1:B:589:ARG:O	1:B:591:ALA:N	2.20	0.72
1:B:766:PHE:HA	1:B:769:GLN:NE2	2.04	0.72
1:B:888:GLY:O	1:B:892:ILE:HG12	1.90	0.72
1:A:1012:PRO:O	1:A:1013:GLU:HB2	1.89	0.72
1:A:1150:ILE:O	1:A:1154:ILE:HG13	1.88	0.72
1:A:970:VAL:O	1:A:973:VAL:HB	1.88	0.72
1:B:86:LYS:HG2	1:B:738:GLY:O	1.89	0.72
1:A:202:ILE:HG12	1:A:333:SER:OG	1.89	0.72
1:A:471:GLN:HA	1:A:553:ALA:HA	1.72	0.72
1:B:202:ILE:HG12	1:B:333:SER:OG	1.90	0.72
1:A:1040:TYR:O	1:A:1042:THR:HG22	1.89	0.72
1:A:215:LEU:O	1:A:219:PRO:HD2	1.90	0.72
1:A:324:ILE:HG13	1:A:326:GLN:HB3	1.72	0.72
1:A:385:GLN:NE2	1:A:386:GLY:H	1.87	0.72
1:A:534:ARG:NH2	1:A:564:VAL:HG11	2.05	0.72
1:A:711:ILE:O	1:A:715:ILE:HG12	1.90	0.72
1:A:178:ILE:HG12	1:A:358:ALA:HB2	1.72	0.71
1:A:922:ILE:HB	1:A:923:PRO:HD3	1.71	0.71
1:B:1076:VAL:HG13	1:B:1194:LEU:HD22	1.72	0.71
1:B:225:ALA:HA	1:B:302:ILE:HD12	1.71	0.71
1:B:588:VAL:O	1:B:591:ALA:HB2	1.90	0.71
1:A:318:ILE:HD11	1:A:325:GLY:N	2.05	0.71
1:A:878:GLN:O	1:A:882:ASP:HB2	1.89	0.71
1:B:1037:VAL:HG21	1:B:1087:ALA:HB3	1.72	0.71
1:B:453:ASP:HB3	1:B:456:THR:HG23	1.72	0.71
1:A:1014:ILE:HD13	1:A:1106:ARG:NH1	2.05	0.71
1:A:846:SER:O	1:A:849:TYR:HB2	1.91	0.71
1:B:267:LYS:H	1:B:270:LEU:HD21	1.52	0.71
1:B:711:ILE:O	1:B:715:ILE:HG12	1.89	0.71
1:B:718:GLY:O	1:B:722:PRO:CD	2.32	0.71
1:B:806:THR:O	1:B:810:LEU:HG	1.90	0.71
1:A:1014:ILE:HD13	1:A:1106:ARG:HH12	1.55	0.71
1:A:246:ALA:HB1	1:A:277:LEU:HB3	1.72	0.71
1:A:265:GLY:HA2	1:A:793:LEU:HD21	1.72	0.71
1:A:897:ILE:HG13	1:A:898:GLU:N	2.04	0.71
1:B:447:VAL:HG13	1:B:454:ILE:CG2	2.21	0.71
1:B:970:VAL:HG23	1:B:971:LEU:HD22	1.72	0.71
1:A:1039:ASN:HB2	1:A:1047:PRO:CA	2.19	0.71
1:A:740:PRO:HG2	1:A:741:PRO:HD3	1.70	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:791:SER:O	1:A:795:GLN:HB2	1.90	0.71
1:A:888:GLY:O	1:A:892:ILE:HG12	1.91	0.71
1:A:78:PHE:HZ	1:A:967:PHE:O	1.74	0.71
1:B:1037:VAL:CG2	1:B:1087:ALA:HB3	2.21	0.71
1:B:1260:LYS:HD2	1:B:1260:LYS:H	1.55	0.71
1:A:1145:ALA:HB2	1:A:1154:ILE:HD12	1.71	0.71
1:A:59:ILE:HD11	1:A:124:VAL:HG11	1.73	0.71
1:A:453:ASP:HB3	1:A:456:THR:HG23	1.71	0.71
1:B:1079:LEU:HD23	1:B:1194:LEU:HD11	1.73	0.71
1:B:58:ILE:HG13	1:B:193:MET:HG3	1.73	0.71
1:B:534:ARG:NH2	1:B:564:VAL:HG11	2.05	0.71
1:A:163:ASP:HB2	1:A:166:GLU:HB3	1.73	0.71
1:A:970:VAL:HG23	1:A:971:LEU:HD22	1.73	0.71
1:B:246:ALA:HB1	1:B:277:LEU:HB3	1.71	0.71
1:B:897:ILE:HG13	1:B:898:GLU:N	2.01	0.71
1:B:902:THR:C	1:B:904:VAL:H	1.91	0.71
1:A:429:LYS:HD3	1:A:429:LYS:N	2.05	0.71
1:A:158:TRP:CZ2	1:A:900:PHE:HB2	2.26	0.71
1:A:900:PHE:C	1:A:902:THR:H	1.93	0.71
1:B:1036:VAL:HG11	1:B:1052:LEU:HD23	1.73	0.71
1:B:386:GLY:CA	1:B:450:ASP:HA	2.21	0.71
1:B:429:LYS:N	1:B:429:LYS:HD3	2.06	0.71
1:B:550:LEU:HB2	1:B:580:VAL:HG23	1.72	0.71
1:A:213:VAL:O	1:A:217:ILE:HG12	1.91	0.71
1:A:419:VAL:HG23	1:A:593:VAL:HG13	1.71	0.71
1:A:484:ILE:CG2	1:A:496:ILE:HD12	2.19	0.71
1:B:1039:ASN:CB	1:B:1047:PRO:HA	2.16	0.71
1:B:35:VAL:CG2	1:B:36:LEU:H	1.97	0.71
1:A:1037:VAL:CG2	1:A:1087:ALA:HB3	2.21	0.70
1:A:174:ASP:O	1:A:178:ILE:HG13	1.91	0.70
1:A:68:MET:O	1:A:71:PHE:HB3	1.91	0.70
1:B:318:ILE:CD1	1:B:325:GLY:H	2.03	0.70
1:B:409:LEU:CD2	1:B:602:ILE:HB	2.21	0.70
1:A:35:VAL:CG2	1:A:355:ARG:HH21	2.05	0.70
1:B:611:LEU:HD23	1:B:618:TYR:HB2	1.72	0.70
1:A:1036:VAL:HG11	1:A:1052:LEU:HD23	1.73	0.70
1:A:1019:THR:OG1	1:A:1101:ASN:HA	1.91	0.70
1:B:133:CYS:O	1:B:134:LEU:C	2.30	0.70
1:B:385:GLN:NE2	1:B:386:GLY:H	1.89	0.70
1:B:791:SER:N	1:B:794:ARG:HH21	1.89	0.70
1:A:1076:VAL:HG13	1:A:1194:LEU:HD22	1.72	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:979:PHE:O	1:A:982:MET:HB3	1.91	0.70
1:B:304:ALA:HB2	1:B:758:LEU:HD23	1.72	0.70
1:B:607:ASN:HB3	1:B:610:GLU:OE2	1.92	0.70
1:B:834:GLN:HG3	1:B:835:ASN:N	2.05	0.70
1:A:1122:SER:HA	1:A:1164:ARG:HA	1.72	0.70
1:A:811:THR:HA	1:A:814:LEU:HD23	1.73	0.70
1:A:834:GLN:HG3	1:A:835:ASN:H	1.56	0.70
1:B:1040:TYR:O	1:B:1042:THR:HG22	1.91	0.70
1:B:1202:LEU:HD21	1:B:1206:SER:CB	2.20	0.70
1:A:285:ILE:O	1:A:289:ILE:HG12	1.91	0.70
1:A:449:ILE:HD13	1:A:450:ASP:N	2.06	0.70
1:B:900:PHE:C	1:B:902:THR:H	1.94	0.70
1:A:324:ILE:CG1	1:A:326:GLN:H	2.05	0.70
1:B:1036:VAL:CB	1:B:1052:LEU:HB3	2.22	0.70
1:B:1080:GLU:OE2	1:B:1109:LEU:HD12	1.90	0.70
1:B:261:ILE:C	1:B:263:PHE:H	1.95	0.70
1:B:374:PHE:HD1	1:B:375:SER:H	1.40	0.70
1:B:392:ASN:O	1:B:445:GLY:HA3	1.92	0.70
1:A:527:LEU:HD23	1:A:527:LEU:N	2.06	0.70
1:A:618:TYR:O	1:A:622:VAL:HG23	1.91	0.70
1:B:35:VAL:CG2	1:B:355:ARG:HH21	2.05	0.70
1:B:834:GLN:HG3	1:B:835:ASN:H	1.57	0.70
1:A:1147:GLU:HB3	1:A:1186:LEU:HD22	1.73	0.69
1:A:1178:GLN:O	1:A:1181:ALA:HB3	1.92	0.69
1:A:354:ALA:O	1:A:358:ALA:HB3	1.92	0.69
1:A:60:HIS:O	1:A:63:ALA:HB3	1.92	0.69
1:B:318:ILE:CD1	1:B:324:ILE:HG12	2.20	0.69
1:A:423:GLY:HA2	1:A:597:PHE:O	1.93	0.69
1:A:607:ASN:HB3	1:A:610:GLU:OE2	1.92	0.69
1:B:297:ALA:O	1:B:301:LEU:HB2	1.92	0.69
1:B:537:ILE:O	1:B:538:ALA:C	2.30	0.69
1:A:218:SER:HB2	1:A:219:PRO:CD	2.22	0.69
1:A:727:ILE:O	1:A:731:VAL:HG23	1.92	0.69
1:B:178:ILE:HG12	1:B:358:ALA:HB2	1.72	0.69
1:B:285:ILE:O	1:B:289:ILE:HG12	1.91	0.69
1:B:232:LEU:HB2	1:B:295:MET:SD	2.32	0.69
1:B:322:TYR:CZ	1:B:324:ILE:HD12	2.27	0.69
1:A:786:TYR:HE2	1:A:790:LYS:HZ3	1.41	0.69
1:B:409:LEU:HD13	1:B:410:ASN:N	2.08	0.69
1:B:819:ALA:O	1:B:822:LYS:HB3	1.91	0.69
1:B:913:GLU:HA	1:B:913:GLU:OE2	1.92	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:99:MET:HB3	1:B:960:VAL:O	1.92	0.69
1:A:467:GLY:N	1:A:545:PRO:HG3	2.08	0.69
1:A:883:LYS:HA	1:A:886:LEU:HG	1.73	0.69
1:B:207:GLY:HA3	1:B:211:THR:N	2.08	0.69
1:B:218:SER:HB2	1:B:219:PRO:CD	2.22	0.69
1:A:138:ARG:NH2	1:B:515:GLN:HE21	1.91	0.69
1:A:58:ILE:HG13	1:A:193:MET:HG3	1.74	0.69
1:A:406:LEU:HD11	1:A:432:THR:CG2	2.23	0.69
1:A:857:LEU:HD13	1:A:976:ALA:HB3	1.74	0.69
1:B:913:GLU:HA	1:B:916:TYR:HD2	1.58	0.69
1:A:125:ALA:O	1:A:129:VAL:HG23	1.93	0.69
1:A:204:PHE:CA	1:A:211:THR:HG21	2.21	0.69
1:A:232:LEU:HB2	1:A:295:MET:SD	2.32	0.69
1:A:447:VAL:HG13	1:A:454:ILE:CG2	2.22	0.69
1:B:354:ALA:O	1:B:358:ALA:HB3	1.93	0.69
1:A:1079:LEU:HD23	1:A:1194:LEU:HD11	1.73	0.69
1:B:218:SER:HB2	1:B:219:PRO:HD3	1.75	0.69
1:B:420:ALA:C	1:B:421:LEU:HD12	2.12	0.69
1:B:60:HIS:O	1:B:63:ALA:HB3	1.92	0.69
1:B:849:TYR:HD1	1:B:854:THR:HA	1.58	0.69
1:A:217:ILE:HG13	1:A:218:SER:N	2.08	0.69
1:A:388:LEU:HB2	1:A:413:VAL:HG12	1.73	0.69
1:A:409:LEU:CD2	1:A:602:ILE:HB	2.22	0.69
1:A:409:LEU:HD13	1:A:410:ASN:N	2.08	0.69
1:A:45:LEU:H	1:A:45:LEU:HD22	1.57	0.69
1:B:1142:VAL:O	1:B:1146:LYS:HG2	1.92	0.69
1:B:59:ILE:HD11	1:B:124:VAL:HG11	1.73	0.69
1:B:35:VAL:O	1:B:39:PHE:HB2	1.92	0.69
1:B:527:LEU:HD23	1:B:527:LEU:N	2.07	0.69
1:B:883:LYS:HA	1:B:886:LEU:HG	1.74	0.69
1:A:219:PRO:O	1:A:223:LEU:HG	1.91	0.69
1:A:585:LEU:HD12	1:A:618:TYR:HE1	1.56	0.69
1:B:585:LEU:HD12	1:B:618:TYR:HE1	1.56	0.69
1:B:972:LEU:O	1:B:975:SER:HB2	1.93	0.69
1:A:133:CYS:O	1:A:134:LEU:C	2.29	0.69
1:A:519:LEU:HD13	1:A:519:LEU:N	2.07	0.69
1:A:267:LYS:H	1:A:270:LEU:HD21	1.56	0.68
1:A:482:GLU:O	1:A:485:ARG:N	2.26	0.68
1:B:121:VAL:HG23	1:B:122:LEU:N	2.08	0.68
1:B:324:ILE:CG1	1:B:326:GLN:H	2.05	0.68
1:A:1053:SER:C	1:A:1054:LEU:HD22	2.13	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:354:ALA:O	1:A:358:ALA:CB	2.41	0.68
1:A:791:SER:HB3	1:A:1010:LYS:HG2	1.75	0.68
1:B:615:LYS:HA	1:B:619:PHE:CD2	2.28	0.68
1:A:1243:GLN:O	1:A:1246:LYS:HD2	1.93	0.68
1:A:282:ARG:HB3	1:A:778:GLU:HG2	1.74	0.68
1:A:389:GLU:HB2	1:A:448:SER:HB3	1.75	0.68
1:B:1053:SER:C	1:B:1054:LEU:HD22	2.13	0.68
1:B:857:LEU:CD1	1:B:976:ALA:HB3	2.23	0.68
1:A:1137:SER:OG	1:A:1140:GLU:HB2	1.93	0.68
1:A:1158:PRO:O	1:A:1159:ASP:HB2	1.94	0.68
1:A:158:TRP:HE1	1:A:900:PHE:HB2	1.55	0.68
1:A:819:ALA:O	1:A:822:LYS:HB3	1.94	0.68
1:B:389:GLU:HB2	1:B:448:SER:HB3	1.74	0.68
1:A:210:LEU:HG	1:A:322:TYR:CD2	2.29	0.68
1:A:537:ILE:O	1:A:538:ALA:C	2.30	0.68
1:A:615:LYS:HA	1:A:619:PHE:CD2	2.28	0.68
1:A:972:LEU:O	1:A:975:SER:HB2	1.93	0.68
1:B:1166:GLY:O	1:B:1167:ASP:HB3	1.93	0.68
1:B:310:PHE:CE2	1:B:331:PHE:HB3	2.28	0.68
1:A:1166:GLY:O	1:A:1167:ASP:HB3	1.93	0.68
1:A:297:ALA:O	1:A:301:LEU:HB2	1.93	0.68
1:A:362:PHE:HA	1:A:365:ILE:HD12	1.75	0.68
1:A:1036:VAL:CB	1:A:1052:LEU:HB3	2.22	0.68
1:A:1142:VAL:O	1:A:1146:LYS:HG2	1.94	0.68
1:A:36:LEU:HD12	1:A:37:THR:N	2.07	0.68
1:A:585:LEU:HD22	1:A:585:LEU:H	1.59	0.68
1:B:1102:VAL:HG13	1:B:1103:GLN:H	1.59	0.68
1:B:388:LEU:HB2	1:B:413:VAL:HG12	1.75	0.68
1:B:979:PHE:O	1:B:982:MET:HB3	1.94	0.68
1:A:256:ALA:O	1:A:260:VAL:HG23	1.94	0.68
1:B:1037:VAL:HG22	1:B:1087:ALA:O	1.93	0.68
1:B:1137:SER:OG	1:B:1140:GLU:HB2	1.94	0.68
1:A:443:LEU:HD23	1:A:443:LEU:O	1.93	0.68
1:B:1032:GLN:HE21	1:B:1055:GLU:CG	2.07	0.68
1:B:1243:GLN:O	1:B:1246:LYS:HD2	1.94	0.68
1:A:697:LEU:HB3	1:A:828:ARG:NH2	2.09	0.68
1:A:826:GLY:O	1:A:829:LEU:HB2	1.94	0.68
1:A:911:LYS:O	1:A:914:THR:HB	1.94	0.68
1:B:1039:ASN:HB2	1:B:1047:PRO:CA	2.20	0.68
1:B:519:LEU:HD13	1:B:519:LEU:N	2.09	0.68
1:B:922:ILE:HB	1:B:923:PRO:HD3	1.75	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:315:SER:OG	1:A:747:ASN:HB3	1.95	0.67
1:B:45:LEU:H	1:B:45:LEU:HD22	1.57	0.67
1:B:357:ALA:O	1:B:361:VAL:HG22	1.95	0.67
1:B:36:LEU:HD12	1:B:37:THR:N	2.08	0.67
1:A:288:ALA:HA	1:A:291:ALA:HB3	1.75	0.67
1:A:91:MET:HB2	1:A:94:ALA:HB3	1.76	0.67
1:B:354:ALA:O	1:B:358:ALA:CB	2.42	0.67
1:B:390:PHE:HB2	1:B:411:LEU:O	1.94	0.67
1:B:401:LYS:CD	1:B:401:LYS:H	2.06	0.67
1:B:433:VAL:HG13	1:B:549:LEU:HD23	1.74	0.67
1:B:534:ARG:HH21	1:B:564:VAL:HG11	1.60	0.67
1:B:697:LEU:HB3	1:B:828:ARG:NH2	2.09	0.67
1:B:315:SER:CB	1:B:747:ASN:HD22	2.08	0.67
1:A:218:SER:HB2	1:A:219:PRO:HD3	1.75	0.67
1:A:314:THR:O	1:A:318:ILE:HG22	1.94	0.67
1:A:78:PHE:CZ	1:A:967:PHE:O	2.48	0.67
1:B:187:GLY:O	1:B:190:PHE:HB3	1.94	0.67
1:B:286:LYS:HE2	1:B:778:GLU:HG2	1.77	0.67
1:B:919:SER:O	1:B:923:PRO:CD	2.42	0.67
1:B:91:MET:HB2	1:B:94:ALA:HB3	1.75	0.67
1:B:99:MET:HB2	1:B:961:THR:O	1.95	0.67
1:A:1037:VAL:HG22	1:A:1087:ALA:O	1.94	0.67
1:A:552:GLU:O	1:A:555:SER:N	2.25	0.67
1:B:286:LYS:HG2	1:B:778:GLU:HG3	1.75	0.67
1:B:207:GLY:HA3	1:B:211:THR:H	1.59	0.67
1:B:338:ALA:O	1:B:341:VAL:HB	1.94	0.67
1:B:482:GLU:O	1:B:485:ARG:N	2.27	0.67
1:A:1114:GLN:HE22	1:A:1200:SER:HB2	1.58	0.67
1:A:141:HIS:O	1:A:144:ARG:HB3	1.95	0.67
1:A:696:ILE:HD13	1:A:998:THR:HG23	1.75	0.67
1:B:1019:THR:HG22	1:B:1100:LEU:HD12	1.76	0.67
1:B:1229:ARG:C	1:B:1231:SER:H	1.98	0.67
1:B:68:MET:O	1:B:71:PHE:HB3	1.94	0.67
1:B:811:THR:HA	1:B:814:LEU:HD23	1.75	0.67
1:A:35:VAL:O	1:A:39:PHE:HB2	1.94	0.67
1:B:1137:SER:HB3	1:B:1140:GLU:CB	2.25	0.67
1:B:55:LEU:O	1:B:59:ILE:HG23	1.95	0.67
1:B:850:GLY:C	1:B:852:GLN:H	1.98	0.67
1:B:696:ILE:HD13	1:B:998:THR:HG23	1.75	0.67
1:A:1137:SER:HB3	1:A:1140:GLU:CB	2.24	0.67
1:A:318:ILE:HG23	1:A:735:PHE:CE2	2.29	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:74:MET:SD	1:A:953:PHE:CE1	2.88	0.67
1:B:618:TYR:O	1:B:622:VAL:HG23	1.94	0.67
1:B:799:TRP:HA	1:B:799:TRP:HE3	1.60	0.67
1:B:909:GLU:O	1:B:912:PHE:HB2	1.95	0.67
1:A:138:ARG:NH2	1:B:515:GLN:NE2	2.42	0.66
1:A:261:ILE:C	1:A:263:PHE:H	1.98	0.66
1:B:98:ALA:O	1:B:102:LYS:HG2	1.95	0.66
1:B:1063:ALA:HA	1:B:1225:VAL:HG13	1.77	0.66
1:B:210:LEU:HG	1:B:322:TYR:HD2	1.58	0.66
1:B:773:PHE:O	1:B:776:ALA:HB3	1.95	0.66
1:A:1032:GLN:HE21	1:A:1055:GLU:CG	2.07	0.66
1:A:1154:ILE:HD13	1:A:1161:TYR:HE2	1.58	0.66
1:A:214:ILE:HG12	1:A:331:PHE:CE1	2.30	0.66
1:A:386:GLY:CA	1:A:450:ASP:HA	2.24	0.66
1:A:901:ARG:HD3	1:A:901:ARG:H	1.59	0.66
1:B:125:ALA:O	1:B:129:VAL:HG23	1.94	0.66
1:B:908:ARG:O	1:B:909:GLU:C	2.34	0.66
1:A:1229:ARG:C	1:A:1231:SER:H	1.99	0.66
1:A:1260:LYS:HD2	1:A:1260:LYS:H	1.59	0.66
1:A:35:VAL:HG21	1:A:355:ARG:HH21	1.60	0.66
1:B:164:VAL:CG1	1:B:164:VAL:O	2.43	0.66
1:B:414:LYS:HB2	1:B:417:GLN:OE1	1.96	0.66
1:B:447:VAL:HG13	1:B:454:ILE:HG22	1.77	0.66
1:B:851:TRP:HA	1:B:854:THR:CB	2.21	0.66
1:B:122:LEU:HD12	1:B:939:SER:HB2	1.77	0.66
1:B:978:VAL:HG22	2:B:6003:2J8:H29	1.77	0.66
1:A:1001:ALA:O	1:A:1005:ILE:HG13	1.94	0.66
1:A:175:VAL:HG13	1:A:176:SER:N	2.10	0.66
1:A:238:LYS:HZ2	1:A:242:ALA:HB2	1.58	0.66
1:A:357:ALA:O	1:A:361:VAL:HG22	1.94	0.66
1:A:212:LEU:HA	1:A:215:LEU:CG	2.26	0.66
1:A:318:ILE:HG23	1:A:735:PHE:CZ	2.30	0.66
1:B:207:GLY:HA3	1:B:211:THR:CB	2.24	0.66
1:B:238:LYS:HZ3	1:B:242:ALA:HB2	1.57	0.66
1:A:121:VAL:HG23	1:A:122:LEU:N	2.09	0.66
1:A:900:PHE:O	1:A:902:THR:N	2.21	0.66
1:B:256:ALA:O	1:B:260:VAL:HG23	1.95	0.66
1:A:401:LYS:H	1:A:401:LYS:CD	2.07	0.66
1:A:534:ARG:HH21	1:A:564:VAL:HG11	1.60	0.66
1:A:790:LYS:HB3	1:A:794:ARG:NH2	2.10	0.66
1:B:219:PRO:O	1:B:223:LEU:HG	1.96	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:288:ALA:HA	1:B:291:ALA:HB3	1.78	0.66
1:B:318:ILE:HD13	1:B:327:VAL:CG1	2.25	0.66
1:B:443:LEU:O	1:B:443:LEU:HD23	1.96	0.66
1:B:458:ASN:ND2	1:B:459:VAL:N	2.44	0.66
1:B:468:VAL:HG22	1:B:549:LEU:HD13	1.78	0.66
1:A:239:GLU:HB3	1:A:285:ILE:HG12	1.78	0.66
1:A:282:ARG:O	1:A:286:LYS:HD3	1.96	0.66
1:A:909:GLU:O	1:A:912:PHE:HB2	1.96	0.66
1:B:1179:ARG:HA	1:B:1182:ILE:HG13	1.77	0.66
1:B:1184:ARG:O	1:B:1187:VAL:HG12	1.95	0.66
1:B:207:GLY:CA	1:B:211:THR:HB	2.24	0.66
1:A:414:LYS:HB2	1:A:417:GLN:OE1	1.95	0.66
1:B:985:GLY:HA3	2:B:6003:2J8:H32A	1.76	0.66
1:A:458:ASN:ND2	1:A:459:VAL:N	2.44	0.66
1:B:217:ILE:HG13	1:B:218:SER:N	2.11	0.66
1:B:68:MET:SD	1:B:332:PHE:HE1	2.18	0.66
1:B:147:PHE:CD2	1:B:365:ILE:HG12	2.31	0.66
1:B:465:ILE:O	1:B:545:PRO:HB2	1.96	0.66
1:B:697:LEU:HD12	1:B:698:LYS:N	2.11	0.66
1:A:447:VAL:HG13	1:A:454:ILE:HG22	1.78	0.65
1:A:468:VAL:HG22	1:A:549:LEU:HD13	1.77	0.65
1:B:141:HIS:O	1:B:144:ARG:HB3	1.96	0.65
1:B:467:GLY:N	1:B:545:PRO:HG3	2.11	0.65
1:A:1137:SER:CB	1:A:1140:GLU:HB2	2.26	0.65
1:A:158:TRP:CE2	1:A:900:PHE:HB2	2.31	0.65
1:A:214:ILE:HD11	1:A:330:VAL:HB	1.78	0.65
1:A:98:ALA:O	1:A:102:LYS:HG2	1.96	0.65
1:A:324:ILE:HG13	1:A:326:GLN:H	1.61	0.65
1:A:438:ARG:HB2	1:A:462:LEU:HD21	1.78	0.65
1:A:892:ILE:CB	1:A:916:TYR:HE1	2.09	0.65
1:B:1144:ALA:HA	1:B:1186:LEU:CD1	2.23	0.65
1:B:379:HIS:CD2	1:B:380:LYS:H	2.14	0.65
1:B:972:LEU:N	1:B:972:LEU:HD12	2.12	0.65
1:A:889:SER:OG	1:A:919:SER:HB2	1.96	0.65
1:B:286:LYS:HE2	1:B:778:GLU:CG	2.26	0.65
1:B:585:LEU:HD22	1:B:585:LEU:H	1.61	0.65
1:B:790:LYS:HB3	1:B:794:ARG:NH2	2.11	0.65
1:B:799:TRP:HA	1:B:799:TRP:CE3	2.28	0.65
1:A:462:LEU:O	1:A:466:ILE:HD13	1.96	0.65
1:A:533:GLN:NE2	1:A:553:ALA:HB1	2.11	0.65
1:A:148:PHE:HD2	1:A:913:GLU:OE2	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1063:ALA:HB2	1:B:1236:ALA:HB1	1.79	0.65
1:A:207:GLY:HA3	1:A:211:THR:N	2.11	0.65
1:A:43:GLY:HA3	1:A:46:ASP:HB2	1.79	0.65
1:A:55:LEU:O	1:A:59:ILE:HG23	1.97	0.65
1:A:857:LEU:CD1	1:A:977:ILE:HG12	2.25	0.65
1:B:727:ILE:O	1:B:731:VAL:HG23	1.96	0.65
1:A:1106:ARG:O	1:A:1109:LEU:HD22	1.96	0.65
1:A:68:MET:SD	1:A:332:PHE:HE1	2.19	0.65
1:A:338:ALA:O	1:A:341:VAL:HB	1.95	0.65
1:A:799:TRP:CE3	1:A:799:TRP:HA	2.29	0.65
1:A:799:TRP:HA	1:A:799:TRP:HE3	1.60	0.65
1:A:919:SER:O	1:A:923:PRO:CD	2.45	0.65
1:B:1114:GLN:HE22	1:B:1200:SER:HB2	1.61	0.65
1:B:536:ALA:O	1:B:539:ARG:HB3	1.97	0.65
1:B:158:TRP:CZ2	1:B:900:PHE:HB2	2.32	0.65
1:A:1063:ALA:HA	1:A:1225:VAL:HG13	1.79	0.65
1:A:322:TYR:CZ	1:A:324:ILE:CD1	2.80	0.65
1:A:564:VAL:O	1:A:567:ALA:HB3	1.96	0.65
1:A:589:ARG:C	1:A:591:ALA:H	2.00	0.65
1:A:697:LEU:HD12	1:A:698:LYS:N	2.11	0.65
1:B:1036:VAL:HB	1:B:1052:LEU:CB	2.24	0.65
1:B:211:THR:O	1:B:215:LEU:HG	1.97	0.65
1:A:1195:LEU:HD23	1:A:1214:LEU:HD11	1.79	0.65
1:B:1138:TYR:O	1:B:1142:VAL:HG23	1.97	0.65
1:B:288:ALA:O	1:B:291:ALA:HB3	1.97	0.65
1:B:769:GLN:HG3	1:B:773:PHE:HE2	1.62	0.65
1:A:257:ILE:HD13	1:A:257:ILE:C	2.17	0.65
1:A:315:SER:HA	1:A:747:ASN:HD22	1.61	0.65
1:A:388:LEU:HD13	1:A:413:VAL:HG13	1.79	0.65
1:A:883:LYS:O	1:A:887:GLU:HB2	1.97	0.65
1:B:1137:SER:CB	1:B:1140:GLU:HB2	2.26	0.65
1:A:1179:ARG:HA	1:A:1182:ILE:HG13	1.78	0.64
1:A:834:GLN:O	1:A:837:ALA:HB3	1.96	0.64
1:A:972:LEU:N	1:A:972:LEU:HD12	2.13	0.64
1:A:857:LEU:HG	1:A:977:ILE:CD1	2.27	0.64
1:B:198:GLY:O	1:B:202:ILE:HG13	1.97	0.64
1:B:324:ILE:HG12	1:B:326:GLN:H	1.61	0.64
1:B:361:VAL:O	1:B:365:ILE:HD12	1.96	0.64
1:B:879:ALA:O	1:B:883:LYS:HG2	1.97	0.64
1:A:1023:LYS:HG3	1:A:1026:MET:HG3	1.80	0.64
1:A:1102:VAL:HG13	1:A:1103:GLN:H	1.61	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:371:ILE:CG2	1:A:371:ILE:O	2.45	0.64
1:A:549:LEU:N	1:A:549:LEU:HD12	2.13	0.64
1:A:722:PRO:HG2	1:A:841:THR:CB	2.27	0.64
1:B:690:PRO:HG2	1:B:1006:ARG:HH22	1.60	0.64
1:B:762:SER:O	1:B:765:THR:HG22	1.96	0.64
1:B:838:ASN:ND2	1:B:979:PHE:HB3	2.11	0.64
1:B:845:ILE:HA	1:B:848:ILE:HG22	1.78	0.64
1:B:892:ILE:CB	1:B:916:TYR:HE1	2.09	0.64
1:A:762:SER:O	1:A:765:THR:HG22	1.97	0.64
1:B:107:MET:HA	1:B:110:TYR:HD2	1.62	0.64
1:B:1128:ALA:CB	1:B:1136:VAL:HG13	2.27	0.64
1:B:174:ASP:O	1:B:178:ILE:HG13	1.97	0.64
1:B:857:LEU:HD12	1:B:973:VAL:HG13	1.79	0.64
1:A:390:PHE:HB2	1:A:411:LEU:O	1.98	0.64
1:B:339:PHE:CE1	2:B:6003:2J8:C21	2.81	0.64
1:B:478:THR:HG21	1:B:482:GLU:HG3	1.80	0.64
1:B:692:SER:HB2	1:B:695:ARG:HB3	1.78	0.64
1:B:857:LEU:HD11	1:B:976:ALA:HB3	1.79	0.64
1:B:911:LYS:O	1:B:914:THR:HB	1.97	0.64
1:A:1116:PRO:HB3	1:A:1178:GLN:OE1	1.97	0.64
1:A:1199:THR:CG2	1:A:1210:VAL:HG11	2.28	0.64
1:A:288:ALA:O	1:A:291:ALA:HB3	1.98	0.64
1:A:419:VAL:O	1:A:579:ILE:HA	1.96	0.64
1:A:688:VAL:HG22	1:A:1003:HIS:CE1	2.33	0.64
1:A:308:LEU:HA	1:A:751:PHE:CE2	2.32	0.64
1:B:1205:GLU:HA	1:B:1208:LYS:HB3	1.80	0.64
1:B:1195:LEU:HD23	1:B:1214:LEU:HD11	1.79	0.64
1:B:458:ASN:ND2	1:B:459:VAL:H	1.94	0.64
1:B:58:ILE:HD12	1:B:58:ILE:H	1.63	0.64
1:B:762:SER:CA	1:B:765:THR:HG22	2.28	0.64
1:B:883:LYS:O	1:B:887:GLU:HB2	1.96	0.64
1:A:1138:TYR:O	1:A:1142:VAL:HG23	1.97	0.64
1:A:158:TRP:HA	1:A:162:HIS:CD2	2.30	0.64
1:A:198:GLY:O	1:A:202:ILE:HG13	1.98	0.64
1:A:536:ALA:O	1:A:539:ARG:HB3	1.98	0.64
1:B:1116:PRO:HB3	1:B:1178:GLN:OE1	1.97	0.64
1:B:359:TYR:HA	1:B:362:PHE:HB3	1.80	0.64
1:B:438:ARG:HB2	1:B:462:LEU:HD21	1.78	0.64
1:B:889:SER:OG	1:B:919:SER:HB2	1.97	0.64
1:B:901:ARG:HD3	1:B:901:ARG:H	1.60	0.64
1:A:1020:GLN:NE2	1:A:1022:LEU:H	1.95	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:211:THR:O	1:A:215:LEU:HG	1.98	0.64
1:A:267:LYS:HA	1:A:270:LEU:HD11	1.79	0.64
1:A:292:ASN:CA	1:A:295:MET:HB2	2.26	0.64
1:A:838:ASN:ND2	1:A:979:PHE:HB3	2.12	0.64
1:B:76:ASP:OD1	1:B:326:GLN:HB2	1.98	0.64
1:B:423:GLY:HA2	1:B:597:PHE:O	1.98	0.64
1:B:478:THR:CG2	1:B:482:GLU:HG3	2.28	0.64
1:A:1081:ARG:CZ	1:A:1098:LYS:O	2.46	0.64
1:A:279:GLU:HG2	1:A:782:LYS:NZ	2.13	0.64
1:A:147:PHE:CD2	1:A:365:ILE:HG12	2.33	0.64
1:A:458:ASN:ND2	1:A:459:VAL:H	1.96	0.64
1:A:996:LYS:CD	1:A:996:LYS:H	2.08	0.64
1:B:1159:ASP:O	1:B:1160:LYS:HG3	1.98	0.64
1:A:585:LEU:O	1:A:588:VAL:HB	1.97	0.64
1:B:1178:GLN:O	1:B:1181:ALA:HB3	1.97	0.64
1:B:175:VAL:HG13	1:B:176:SER:N	2.13	0.64
1:A:1128:ALA:CB	1:A:1136:VAL:HG13	2.27	0.64
1:A:392:ASN:O	1:A:445:GLY:HA3	1.98	0.64
1:A:465:ILE:O	1:A:545:PRO:HB2	1.98	0.64
1:A:59:ILE:CD1	1:A:124:VAL:HG11	2.28	0.64
1:B:1192:ILE:HD13	1:B:1193:LEU:N	2.12	0.64
1:B:322:TYR:CZ	1:B:324:ILE:CD1	2.81	0.64
1:B:464:GLU:HA	1:B:543:ARG:NH2	2.12	0.64
1:B:750:LEU:O	1:B:753:LEU:HB3	1.98	0.64
1:B:834:GLN:O	1:B:837:ALA:HB3	1.97	0.64
1:B:853:LEU:N	1:B:853:LEU:HD22	2.12	0.64
1:A:1184:ARG:O	1:A:1187:VAL:HG12	1.98	0.63
1:A:913:GLU:HA	1:A:916:TYR:HD2	1.62	0.63
1:B:458:ASN:HD22	1:B:459:VAL:H	1.46	0.63
1:B:59:ILE:CD1	1:B:124:VAL:HG11	2.28	0.63
1:A:478:THR:CG2	1:A:482:GLU:HG3	2.28	0.63
1:A:762:SER:HA	1:A:765:THR:CG2	2.29	0.63
1:A:795:GLN:HE21	1:A:796:ASP:N	1.96	0.63
1:A:879:ALA:O	1:A:883:LYS:HG2	1.98	0.63
1:A:891:LYS:O	1:A:894:THR:HB	1.98	0.63
1:B:212:LEU:HA	1:B:215:LEU:CG	2.28	0.63
1:B:239:GLU:HB3	1:B:285:ILE:CG1	2.28	0.63
1:B:564:VAL:O	1:B:567:ALA:HB3	1.99	0.63
1:B:891:LYS:O	1:B:894:THR:HB	1.99	0.63
1:B:910:GLN:O	1:B:911:LYS:C	2.37	0.63
1:A:478:THR:HG21	1:A:482:GLU:HG3	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:133:CYS:SG	1:B:931:ALA:HA	2.39	0.63
1:A:212:LEU:HD12	1:A:215:LEU:HB2	1.80	0.63
1:A:267:LYS:HG2	1:A:793:LEU:HG	1.79	0.63
1:B:263:PHE:CE1	1:B:1129:TYR:HB3	2.32	0.63
1:B:548:LEU:C	1:B:549:LEU:HD12	2.19	0.63
1:A:1014:ILE:O	1:A:1014:ILE:HD12	1.98	0.63
1:A:239:GLU:HB3	1:A:285:ILE:CG1	2.28	0.63
1:A:458:ASN:HD22	1:A:459:VAL:H	1.47	0.63
1:A:471:GLN:O	1:A:473:PRO:HD3	1.98	0.63
1:A:492:THR:HG22	1:A:494:ASP:H	1.63	0.63
1:A:933:VAL:O	1:A:936:ILE:HG22	1.99	0.63
1:B:341:VAL:O	1:B:344:ALA:HB3	1.99	0.63
1:B:933:VAL:O	1:B:936:ILE:HG22	1.98	0.63
1:A:908:ARG:O	1:A:909:GLU:C	2.34	0.63
1:B:1092:LEU:HD13	1:B:1100:LEU:HD21	1.81	0.63
1:B:35:VAL:HG21	1:B:355:ARG:HH21	1.60	0.63
1:B:43:GLY:HA3	1:B:46:ASP:HB2	1.80	0.63
1:A:164:VAL:O	1:A:164:VAL:CG1	2.47	0.63
1:A:187:GLY:O	1:A:190:PHE:HB3	1.98	0.63
1:A:762:SER:CA	1:A:765:THR:HG22	2.28	0.63
1:B:1102:VAL:HG13	1:B:1103:GLN:N	2.14	0.63
1:B:1199:THR:CG2	1:B:1210:VAL:HG11	2.28	0.63
1:B:296:GLY:O	1:B:300:LEU:HG	1.97	0.63
1:A:1036:VAL:HB	1:A:1052:LEU:CB	2.24	0.63
1:A:107:MET:HA	1:A:110:TYR:HD2	1.62	0.63
1:A:172:THR:O	1:A:175:VAL:HG12	1.99	0.63
1:A:296:GLY:O	1:A:300:LEU:HG	1.99	0.63
1:A:855:LEU:O	1:A:858:LEU:HG	1.99	0.63
1:B:147:PHE:O	1:B:151:ILE:HG13	1.99	0.63
1:B:204:PHE:HA	1:B:211:THR:HG21	1.80	0.63
1:B:282:ARG:O	1:B:286:LYS:HD3	1.99	0.63
1:B:462:LEU:O	1:B:466:ILE:HD13	1.99	0.63
1:B:1106:ARG:O	1:B:1109:LEU:HD22	1.99	0.63
1:B:339:PHE:CD1	2:B:6003:2J8:SE3	3.02	0.63
1:B:785:ARG:HH21	1:B:815:ALA:HA	1.63	0.63
1:A:374:PHE:CE2	1:A:376:LYS:HB3	2.34	0.62
1:A:540:ALA:O	1:A:543:ARG:HB3	1.98	0.62
1:A:58:ILE:H	1:A:58:ILE:HD12	1.64	0.62
1:B:217:ILE:HD11	1:B:331:PHE:HE2	1.64	0.62
1:B:195:THR:CB	1:B:340:SER:HB2	2.18	0.62
1:B:471:GLN:HA	1:B:553:ALA:HA	1.79	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:59:ILE:CG1	1:B:124:VAL:HG11	2.29	0.62
1:B:722:PRO:HG2	1:B:841:THR:CB	2.29	0.62
1:B:943:ALA:O	1:B:947:PHE:HB2	1.99	0.62
1:A:1005:ILE:O	1:A:1008:ILE:HG22	1.99	0.62
1:A:1063:ALA:HB2	1:A:1236:ALA:HB1	1.80	0.62
1:A:315:SER:HA	1:A:747:ASN:ND2	2.14	0.62
1:A:214:ILE:HG12	1:A:331:PHE:CZ	2.34	0.62
1:A:943:ALA:O	1:A:947:PHE:HB2	1.99	0.62
1:B:318:ILE:CD1	1:B:327:VAL:HG13	2.29	0.62
1:B:894:THR:O	1:B:897:ILE:HG13	1.99	0.62
1:A:1095:LYS:HD2	1:A:1095:LYS:H	1.64	0.62
1:A:769:GLN:HG3	1:A:773:PHE:HE2	1.63	0.62
1:A:785:ARG:HH21	1:A:815:ALA:HA	1.64	0.62
1:B:864:ILE:HD12	1:B:865:ALA:N	2.14	0.62
1:A:1109:LEU:HD23	1:A:1109:LEU:O	1.99	0.62
1:A:548:LEU:HD23	1:A:549:LEU:N	2.14	0.62
1:B:123:ILE:O	1:B:127:ILE:HG12	2.00	0.62
1:B:858:LEU:HD12	1:B:859:ALA:N	2.14	0.62
1:A:1097:ILE:HG23	1:A:1105:LEU:HD22	1.81	0.62
1:A:59:ILE:CG1	1:A:124:VAL:HG11	2.29	0.62
1:A:1261:GLY:H	1:A:1264:PHE:CB	2.11	0.62
1:A:310:PHE:CE2	1:A:331:PHE:HB3	2.35	0.62
1:A:462:LEU:HD12	1:A:466:ILE:HD13	1.80	0.62
1:A:894:THR:O	1:A:897:ILE:HG13	1.99	0.62
1:B:1011:THR:N	1:B:1012:PRO:CD	2.56	0.62
1:B:1097:ILE:HG23	1:B:1105:LEU:HD22	1.82	0.62
1:B:221:LEU:HD11	1:B:309:ALA:HB3	1.79	0.62
1:A:1102:VAL:HG13	1:A:1103:GLN:N	2.14	0.62
1:A:155:GLU:CB	1:A:156:ILE:HD12	2.30	0.62
1:A:144:ARG:NH1	1:A:175:VAL:HG11	2.15	0.62
1:A:286:LYS:O	1:A:290:THR:HG23	1.99	0.62
1:A:76:ASP:OD1	1:A:326:GLN:HB2	1.99	0.62
1:A:359:TYR:HA	1:A:362:PHE:HB3	1.80	0.62
1:A:933:VAL:O	1:A:934:PHE:C	2.38	0.62
1:B:1026:MET:O	1:B:1026:MET:HG3	1.99	0.62
1:B:549:LEU:N	1:B:549:LEU:HD12	2.13	0.62
1:B:304:ALA:CB	1:B:758:LEU:HD23	2.29	0.62
1:A:1144:ALA:HA	1:A:1186:LEU:CD1	2.23	0.62
1:A:1192:ILE:HD13	1:A:1193:LEU:N	2.15	0.62
1:A:175:VAL:HG13	1:A:176:SER:H	1.64	0.62
1:B:441:ASP:CG	1:B:442:PRO:HD2	2.20	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1129:TYR:CD2	1:A:1184:ARG:HG3	2.35	0.62
1:A:750:LEU:O	1:A:753:LEU:HB3	1.99	0.62
1:A:864:ILE:HD12	1:A:865:ALA:N	2.14	0.62
1:B:502:GLU:OE1	1:B:541:LEU:HD11	2.00	0.62
1:B:419:VAL:O	1:B:579:ILE:HA	1.99	0.62
1:A:1218:ARG:HH22	1:A:1235:ASN:ND2	1.90	0.62
1:A:502:GLU:OE1	1:A:541:LEU:HD11	2.00	0.62
1:A:548:LEU:C	1:A:549:LEU:HD12	2.19	0.62
1:A:910:GLN:O	1:A:911:LYS:C	2.38	0.62
1:B:144:ARG:NH1	1:B:175:VAL:HG11	2.15	0.62
1:B:411:LEU:HD23	1:B:412:LYS:N	2.15	0.62
1:B:462:LEU:HD12	1:B:466:ILE:HD13	1.80	0.62
1:B:585:LEU:O	1:B:588:VAL:HB	1.99	0.62
1:B:900:PHE:O	1:B:903:VAL:HG12	1.99	0.62
1:A:123:ILE:O	1:A:127:ILE:HG12	1.99	0.62
1:A:221:LEU:HD11	1:A:309:ALA:HB3	1.81	0.62
1:A:298:ALA:O	1:A:302:ILE:HG13	1.99	0.62
1:A:429:LYS:H	1:A:429:LYS:CD	2.09	0.62
1:A:257:ILE:HG21	1:A:800:PHE:HB3	1.81	0.62
1:A:978:VAL:CG2	2:A:6001:2J8:H29	2.30	0.62
1:A:992:PRO:C	1:A:994:TYR:H	2.03	0.62
1:B:1063:ALA:HB2	1:B:1236:ALA:CB	2.30	0.62
1:B:548:LEU:HD23	1:B:549:LEU:N	2.13	0.62
1:B:559:THR:O	1:B:562:GLU:HB3	2.00	0.62
1:B:971:LEU:O	1:B:974:PHE:HB3	1.99	0.62
1:A:254:LEU:H	1:A:254:LEU:HD22	1.64	0.61
1:A:360:GLU:HA	1:A:363:LYS:CE	2.29	0.61
1:A:441:ASP:CG	1:A:442:PRO:HD2	2.21	0.61
1:A:379:HIS:HB3	1:A:457:ILE:HA	1.80	0.61
1:A:883:LYS:HD3	1:A:886:LEU:HD21	1.82	0.61
1:A:902:THR:O	1:A:904:VAL:N	2.33	0.61
1:A:959:LEU:HD22	1:A:964:LEU:HG	1.81	0.61
1:B:1150:ILE:O	1:B:1154:ILE:HG13	2.00	0.61
1:B:254:LEU:H	1:B:254:LEU:HD22	1.63	0.61
1:B:589:ARG:C	1:B:591:ALA:H	2.02	0.61
1:B:904:VAL:HG13	1:B:905:SER:N	2.15	0.61
1:B:996:LYS:H	1:B:996:LYS:CD	2.08	0.61
1:A:341:VAL:O	1:A:344:ALA:HB3	2.00	0.61
1:B:339:PHE:CG	2:B:6003:2J8:SE3	3.03	0.61
1:A:1058:LYS:O	1:A:1060:GLN:HG3	2.00	0.61
1:A:1260:LYS:N	1:A:1260:LYS:HD2	2.16	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1063:ALA:HB2	1:A:1236:ALA:CB	2.30	0.61
1:A:1092:LEU:HD13	1:A:1100:LEU:HD21	1.81	0.61
1:A:365:ILE:HG22	1:A:366:ASP:N	2.15	0.61
1:A:858:LEU:HD12	1:A:859:ALA:N	2.15	0.61
1:B:1001:ALA:O	1:B:1005:ILE:HG13	2.00	0.61
1:B:1260:LYS:HD2	1:B:1260:LYS:N	2.15	0.61
1:B:172:THR:O	1:B:175:VAL:HG12	2.00	0.61
1:B:795:GLN:HE21	1:B:796:ASP:N	1.98	0.61
1:A:1205:GLU:HA	1:A:1208:LYS:HB3	1.81	0.61
1:A:1252:THR:HG23	1:A:1255:GLN:HB2	1.82	0.61
1:A:810:LEU:O	1:A:813:ARG:HB2	1.99	0.61
1:B:1095:LYS:HD2	1:B:1095:LYS:H	1.64	0.61
1:B:267:LYS:HA	1:B:270:LEU:HD11	1.83	0.61
1:B:292:ASN:CA	1:B:295:MET:HB2	2.29	0.61
1:B:388:LEU:HD13	1:B:413:VAL:HG13	1.81	0.61
1:B:691:ALA:HA	1:B:1002:SER:HG	1.65	0.61
1:A:927:ALA:HA	1:A:930:LYS:CE	2.30	0.61
1:A:722:PRO:HA	1:A:979:PHE:CZ	2.35	0.61
1:B:1129:TYR:CD2	1:B:1184:ARG:HG3	2.35	0.61
1:A:515:GLN:HE21	1:B:138:ARG:NH2	1.98	0.61
1:B:509:ILE:HD12	1:B:510:MET:N	2.15	0.61
1:A:39:PHE:HE2	1:A:358:ALA:HB3	1.65	0.61
1:B:982:MET:HA	2:B:6003:2J8:H32	1.83	0.61
1:A:1090:VAL:HG13	1:A:1097:ILE:CB	2.25	0.61
1:A:265:GLY:CA	1:A:793:LEU:HD21	2.31	0.61
1:A:720:LEU:O	1:A:723:ALA:HB3	2.00	0.61
1:A:845:ILE:HA	1:A:848:ILE:HG22	1.81	0.61
1:A:857:LEU:HG	1:A:977:ILE:HD11	1.83	0.61
1:B:1042:THR:C	1:B:1044:PRO:HD2	2.21	0.61
1:B:1113:SER:HA	1:B:1196:ASP:HB3	1.83	0.61
1:B:810:LEU:O	1:B:813:ARG:HB2	2.00	0.61
1:A:1023:LYS:NZ	1:A:1023:LYS:HB3	2.16	0.61
1:A:1202:LEU:CG	1:A:1203:ASP:H	2.11	0.61
1:A:1248:LYS:HG2	1:A:1262:ILE:HD12	1.83	0.61
1:A:773:PHE:CD1	1:A:774:GLY:N	2.68	0.61
1:B:883:LYS:HD3	1:B:886:LEU:HD21	1.82	0.61
1:A:303:TYR:CZ	2:A:6001:2J8:SE1	3.04	0.61
1:A:509:ILE:HD12	1:A:510:MET:N	2.15	0.61
1:A:766:PHE:HA	1:A:769:GLN:NE2	2.06	0.61
1:B:170:ARG:HB2	1:B:174:ASP:OD1	2.01	0.61
1:B:212:LEU:HD12	1:B:215:LEU:HB2	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:720:LEU:HD11	1:B:758:LEU:HA	1.83	0.61
1:A:756:LEU:HD12	1:A:757:ILE:HG12	1.83	0.60
1:B:1252:THR:HG23	1:B:1255:GLN:HB2	1.82	0.60
1:B:168:ASN:O	1:B:171:LEU:HB3	2.01	0.60
1:A:1042:THR:C	1:A:1044:PRO:HD2	2.22	0.60
1:A:170:ARG:HB2	1:A:174:ASP:OD1	2.00	0.60
1:B:1005:ILE:O	1:B:1008:ILE:HG22	2.01	0.60
1:B:382:ASP:HA	1:B:461:TYR:OH	2.01	0.60
1:B:959:LEU:HD22	1:B:964:LEU:CB	2.25	0.60
1:A:797:VAL:HG21	1:A:1013:GLU:CG	2.26	0.60
1:B:1048:VAL:O	1:B:1049:LEU:HD22	2.02	0.60
1:B:360:GLU:HA	1:B:363:LYS:CE	2.30	0.60
1:B:773:PHE:CD1	1:B:774:GLY:N	2.68	0.60
1:A:318:ILE:HD13	1:A:327:VAL:HG13	1.83	0.60
1:A:464:GLU:HA	1:A:543:ARG:NH2	2.16	0.60
1:B:257:ILE:HD13	1:B:257:ILE:C	2.21	0.60
1:B:689:PRO:N	1:B:690:PRO:HD2	2.17	0.60
1:B:711:ILE:HG13	1:B:715:ILE:HD11	1.83	0.60
1:B:855:LEU:O	1:B:858:LEU:HG	2.02	0.60
1:A:1043:ARG:N	1:A:1044:PRO:HD2	2.17	0.60
1:B:471:GLN:O	1:B:473:PRO:HD3	2.00	0.60
1:B:722:PRO:HA	1:B:979:PHE:CZ	2.36	0.60
1:A:1176:GLN:O	1:A:1180:ILE:HG13	2.01	0.60
1:A:384:ILE:HG22	1:A:385:GLN:N	2.05	0.60
1:A:971:LEU:O	1:A:974:PHE:HB3	2.01	0.60
1:B:379:HIS:HB2	1:B:456:THR:O	2.01	0.60
1:B:720:LEU:O	1:B:723:ALA:HB3	2.00	0.60
1:B:927:ALA:HA	1:B:930:LYS:CE	2.31	0.60
1:A:374:PHE:CE2	1:A:376:LYS:CB	2.84	0.60
1:A:411:LEU:HD23	1:A:412:LYS:N	2.17	0.60
1:A:711:ILE:HG13	1:A:715:ILE:HD11	1.83	0.60
1:A:727:ILE:HD12	1:A:754:LEU:CA	2.32	0.60
1:A:853:LEU:CD2	1:A:853:LEU:H	1.96	0.60
1:B:1063:ALA:HB3	1:B:1239:ILE:CA	2.24	0.60
1:B:1150:ILE:HB	1:B:1179:ARG:HB3	1.83	0.60
1:B:358:ALA:O	1:B:362:PHE:HB2	2.01	0.60
1:B:365:ILE:HG22	1:B:366:ASP:N	2.17	0.60
1:B:507:ASP:O	1:B:510:MET:N	2.35	0.60
1:B:762:SER:HA	1:B:765:THR:CG2	2.29	0.60
1:B:827:SER:O	1:B:831:VAL:HG23	2.01	0.60
1:A:905:SER:O	1:A:907:THR:N	2.35	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:430:SER:O	1:B:434:GLN:HG3	2.02	0.60
1:B:540:ALA:O	1:B:543:ARG:HB3	2.01	0.60
1:A:465:ILE:C	1:A:466:ILE:HD12	2.22	0.60
1:A:797:VAL:HG12	1:A:798:SER:N	2.16	0.60
1:A:883:LYS:HA	1:A:886:LEU:CG	2.32	0.60
1:B:1023:LYS:O	1:B:1025:ASN:N	2.35	0.60
1:B:902:THR:O	1:B:904:VAL:N	2.35	0.60
1:B:978:VAL:O	1:B:981:ALA:HB3	2.02	0.60
1:A:1178:GLN:O	1:A:1182:ILE:HG12	2.02	0.59
1:A:136:ALA:HB2	1:A:182:ILE:CB	2.32	0.59
1:A:692:SER:HB2	1:A:695:ARG:HB3	1.84	0.59
1:B:155:GLU:CB	1:B:156:ILE:HD12	2.30	0.59
1:B:465:ILE:C	1:B:466:ILE:HD12	2.22	0.59
1:B:492:THR:HG22	1:B:494:ASP:H	1.66	0.59
1:B:861:VAL:HB	1:B:862:PRO:CD	2.32	0.59
1:A:1150:ILE:HB	1:A:1179:ARG:HB3	1.82	0.59
1:A:245:LYS:HZ1	1:A:245:LYS:HA	1.67	0.59
1:A:322:TYR:CZ	1:A:324:ILE:HD12	2.38	0.59
1:A:388:LEU:N	1:A:388:LEU:HD12	2.17	0.59
1:A:713:CYS:O	1:A:716:ILE:HG12	2.02	0.59
1:A:722:PRO:CG	1:A:841:THR:HB	2.31	0.59
1:A:861:VAL:HB	1:A:862:PRO:CD	2.32	0.59
1:B:1133:SER:O	1:B:1135:VAL:N	2.35	0.59
1:B:175:VAL:HG13	1:B:176:SER:H	1.68	0.59
1:B:279:GLU:HG2	1:B:782:LYS:HZ2	1.66	0.59
1:B:321:GLU:HG3	1:B:322:TYR:N	2.17	0.59
1:B:39:PHE:HE2	1:B:358:ALA:HB3	1.65	0.59
1:A:1062:LEU:HD12	1:A:1224:ILE:HG23	1.85	0.59
1:A:147:PHE:O	1:A:151:ILE:HG13	2.01	0.59
1:A:437:GLN:NE2	1:A:468:VAL:HG21	2.17	0.59
1:A:703:GLU:HB3	1:A:780:LEU:HD23	1.84	0.59
1:B:211:THR:O	1:B:214:ILE:HB	2.02	0.59
1:B:554:THR:OG1	1:B:562:GLU:HG3	2.03	0.59
1:A:1048:VAL:O	1:A:1049:LEU:HD22	2.01	0.59
1:A:1113:SER:HA	1:A:1196:ASP:HB3	1.83	0.59
1:A:267:LYS:HA	1:A:270:LEU:HD21	1.83	0.59
1:A:297:ALA:HB1	1:A:763:PHE:CD2	2.38	0.59
1:A:559:THR:O	1:A:562:GLU:HB3	2.01	0.59
1:A:251:GLU:OE1	1:A:811:THR:HB	2.02	0.59
1:A:827:SER:O	1:A:828:ARG:C	2.41	0.59
1:B:267:LYS:HB3	1:B:790:LYS:CE	2.30	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:401:LYS:HD2	1:B:401:LYS:N	2.15	0.59
1:B:552:GLU:O	1:B:555:SER:N	2.33	0.59
1:B:847:LEU:C	1:B:849:TYR:H	2.04	0.59
1:B:850:GLY:O	1:B:852:GLN:N	2.35	0.59
1:A:818:ALA:O	1:A:821:VAL:HG22	2.03	0.59
1:A:894:THR:O	1:A:895:GLU:C	2.41	0.59
1:B:1058:LYS:O	1:B:1060:GLN:HG3	2.02	0.59
1:B:1020:GLN:HB3	1:B:1101:ASN:CB	2.32	0.59
1:B:245:LYS:HA	1:B:245:LYS:HZ1	1.66	0.59
1:A:1189:GLN:N	1:A:1190:PRO:HD3	2.18	0.59
1:A:324:ILE:HG13	1:A:326:GLN:N	2.17	0.59
1:A:773:PHE:O	1:A:776:ALA:HB3	2.02	0.59
1:A:784:LEU:HG	1:A:821:VAL:HG21	1.84	0.59
1:B:1020:GLN:HB3	1:B:1101:ASN:HB2	1.85	0.59
1:B:1189:GLN:N	1:B:1190:PRO:HD3	2.18	0.59
1:B:1218:ARG:HH22	1:B:1235:ASN:ND2	1.90	0.59
1:B:310:PHE:CZ	1:B:331:PHE:HB3	2.38	0.59
1:B:437:GLN:NE2	1:B:468:VAL:HG21	2.17	0.59
1:B:784:LEU:HG	1:B:821:VAL:HG21	1.84	0.59
1:A:324:ILE:HG13	1:A:326:GLN:CA	2.33	0.59
1:B:207:GLY:O	1:B:209:LYS:N	2.33	0.59
1:B:212:LEU:O	1:B:215:LEU:N	2.36	0.59
1:B:238:LYS:HD3	1:B:238:LYS:O	2.03	0.59
1:B:491:VAL:HG21	1:B:496:ILE:HD11	1.85	0.59
1:B:756:LEU:HD12	1:B:757:ILE:HG12	1.85	0.59
1:A:211:THR:O	1:A:214:ILE:HB	2.03	0.59
1:A:611:LEU:O	1:A:614:GLU:HB3	2.03	0.59
1:B:1043:ARG:N	1:B:1044:PRO:HD2	2.17	0.59
1:B:317:VAL:HG12	1:B:317:VAL:O	2.03	0.59
1:B:374:PHE:HD1	1:B:375:SER:N	2.01	0.59
1:A:168:ASN:O	1:A:171:LEU:HB3	2.01	0.59
1:A:297:ALA:HB1	1:A:763:PHE:HA	1.85	0.59
1:A:491:VAL:HG21	1:A:496:ILE:HD11	1.85	0.59
1:A:65:PRO:O	1:A:68:MET:N	2.36	0.59
1:B:1109:LEU:O	1:B:1109:LEU:HD23	2.03	0.59
1:B:856:LEU:HD21	1:B:952:CYS:HA	1.85	0.59
1:A:1109:LEU:HD21	1:A:1188:ARG:HH11	1.68	0.59
1:A:49:TYR:HH	1:A:130:SER:HB2	1.66	0.59
1:A:904:VAL:HG13	1:A:905:SER:N	2.17	0.59
1:B:313:GLY:O	1:B:317:VAL:HG23	2.03	0.59
1:B:473:PRO:HB3	1:B:533:GLN:HA	1.85	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:603:VAL:HG23	1:B:604:GLU:N	2.14	0.59
1:B:611:LEU:O	1:B:614:GLU:HB3	2.03	0.59
1:B:690:PRO:HG2	1:B:1006:ARG:CZ	2.32	0.59
1:A:118:GLY:O	1:A:119:ALA:C	2.42	0.58
1:A:405:ILE:HD12	1:A:427:CYS:HB3	1.85	0.58
1:B:1020:GLN:CG	1:B:1021:GLY:N	2.66	0.58
1:B:223:LEU:O	1:B:227:ILE:HG13	2.04	0.58
1:B:722:PRO:HG2	1:B:841:THR:OG1	2.03	0.58
1:B:933:VAL:O	1:B:934:PHE:C	2.39	0.58
1:A:1022:LEU:O	1:A:1022:LEU:CD2	2.51	0.58
1:A:358:ALA:O	1:A:362:PHE:HB2	2.02	0.58
1:A:721:GLN:HG3	1:A:979:PHE:HE1	1.67	0.58
1:B:53:GLY:O	1:B:56:ALA:HB3	2.02	0.58
1:B:813:ARG:HA	1:B:817:ASP:OD2	2.02	0.58
1:A:114:TYR:CB	1:A:950:ALA:HB2	2.33	0.58
1:A:209:LYS:O	1:A:212:LEU:HB3	2.04	0.58
1:A:345:SER:HB3	1:A:346:PRO:HD3	1.85	0.58
1:A:756:LEU:CD1	1:A:757:ILE:HG12	2.34	0.58
1:A:960:VAL:CG1	1:A:966:THR:OG1	2.51	0.58
1:B:930:LYS:O	1:B:933:VAL:HB	2.03	0.58
1:B:837:ALA:HB1	1:B:982:MET:HE1	1.83	0.58
1:A:186:ILE:HG13	1:A:187:GLY:H	1.68	0.58
1:A:214:ILE:HG12	1:A:331:PHE:CD1	2.39	0.58
1:B:1090:VAL:HG13	1:B:1097:ILE:CB	2.25	0.58
1:B:110:TYR:HA	1:B:113:TYR:CD2	2.35	0.58
1:B:1195:LEU:HD12	1:B:1195:LEU:N	2.18	0.58
1:B:1221:ARG:HD2	1:B:1221:ARG:N	2.19	0.58
1:B:548:LEU:HD22	1:B:550:LEU:HD11	1.85	0.58
1:B:986:GLN:NE2	2:B:6003:2J8:H31	2.17	0.58
1:A:548:LEU:HD22	1:A:550:LEU:HD11	1.85	0.58
1:A:611:LEU:HB3	1:A:618:TYR:HB3	1.86	0.58
1:A:722:PRO:HG2	1:A:841:THR:OG1	2.02	0.58
1:B:1248:LYS:HG2	1:B:1262:ILE:HD12	1.84	0.58
1:B:136:ALA:HB2	1:B:182:ILE:CB	2.32	0.58
1:B:65:PRO:O	1:B:68:MET:N	2.36	0.58
1:A:491:VAL:HG21	1:A:496:ILE:CD1	2.33	0.58
1:B:286:LYS:O	1:B:290:THR:HG23	2.02	0.58
1:B:713:CYS:O	1:B:716:ILE:HG12	2.02	0.58
1:B:806:THR:HG23	1:B:809:ALA:H	1.69	0.58
1:A:207:GLY:HA3	1:A:211:THR:CB	2.34	0.58
1:A:210:LEU:O	1:A:214:ILE:HG13	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:251:GLU:O	1:A:254:LEU:HD11	2.04	0.58
1:A:554:THR:OG1	1:A:562:GLU:HG3	2.04	0.58
1:A:72:GLY:HA2	1:A:326:GLN:HE21	1.66	0.58
1:A:286:LYS:NZ	1:A:822:LYS:HZ2	2.02	0.58
1:A:897:ILE:CG1	1:A:898:GLU:H	2.11	0.58
1:A:103:LEU:HB2	1:A:960:VAL:CG2	2.34	0.58
1:B:210:LEU:O	1:B:214:ILE:HG13	2.04	0.58
1:B:818:ALA:O	1:B:821:VAL:HG22	2.04	0.58
1:A:1221:ARG:N	1:A:1221:ARG:HD2	2.19	0.58
1:B:1081:ARG:NH2	1:B:1098:LYS:O	2.37	0.58
1:B:1176:GLN:O	1:B:1180:ILE:HG13	2.04	0.58
1:B:1062:LEU:HD12	1:B:1224:ILE:HG23	1.85	0.58
1:B:314:THR:O	1:B:318:ILE:HG22	2.03	0.58
1:B:703:GLU:HB3	1:B:780:LEU:HD23	1.84	0.58
1:B:158:TRP:HZ2	1:B:900:PHE:HB2	1.66	0.58
1:B:992:PRO:HB2	1:B:996:LYS:HZ3	1.67	0.58
1:A:1012:PRO:O	1:A:1013:GLU:CB	2.51	0.58
1:A:1141:ILE:O	1:A:1144:ALA:HB3	2.04	0.58
1:A:1195:LEU:N	1:A:1195:LEU:HD12	2.18	0.58
1:A:212:LEU:O	1:A:215:LEU:N	2.37	0.58
1:A:284:GLY:O	1:A:287:LYS:HB3	2.04	0.58
1:A:720:LEU:HD11	1:A:758:LEU:HA	1.85	0.58
1:A:722:PRO:HG2	1:A:841:THR:HB	1.85	0.58
1:A:847:LEU:C	1:A:849:TYR:H	2.05	0.58
1:B:186:ILE:HG13	1:B:187:GLY:H	1.69	0.58
1:B:199:GLY:O	1:B:203:GLY:HA3	2.04	0.58
1:B:374:PHE:HD1	1:B:376:LYS:H	1.50	0.58
1:B:56:ALA:O	1:B:59:ILE:HG13	2.04	0.58
1:B:594:ILE:O	1:B:605:GLN:HA	2.04	0.58
1:B:970:VAL:HA	1:B:973:VAL:HG23	1.86	0.58
1:A:603:VAL:HG23	1:A:604:GLU:N	2.15	0.58
1:A:780:LEU:O	1:A:784:LEU:HB2	2.04	0.58
1:B:1049:LEU:CD1	1:B:1052:LEU:HD22	2.33	0.58
1:B:491:VAL:HG21	1:B:496:ILE:CD1	2.33	0.58
1:A:497:GLU:O	1:A:500:VAL:HG22	2.04	0.57
1:A:59:ILE:HG12	1:A:124:VAL:HG11	1.86	0.57
1:A:856:LEU:HD21	1:A:952:CYS:HA	1.86	0.57
1:A:900:PHE:O	1:A:903:VAL:HG12	2.04	0.57
1:B:118:GLY:O	1:B:119:ALA:C	2.42	0.57
1:B:279:GLU:O	1:B:282:ARG:HB2	2.04	0.57
1:B:298:ALA:O	1:B:302:ILE:HG13	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:59:ILE:HG12	1:B:124:VAL:HG11	1.86	0.57
1:B:603:VAL:CG2	1:B:604:GLU:H	2.08	0.57
1:B:978:VAL:CG2	2:B:6003:2J8:H29	2.34	0.57
1:A:1009:GLU:C	1:A:1010:LYS:HG3	2.23	0.57
1:A:1185:ALA:O	1:A:1190:PRO:HD3	2.04	0.57
1:A:313:GLY:O	1:A:317:VAL:HG23	2.04	0.57
1:A:401:LYS:HD2	1:A:401:LYS:N	2.16	0.57
1:A:970:VAL:HA	1:A:973:VAL:HG23	1.85	0.57
1:B:158:TRP:HA	1:B:162:HIS:CD2	2.33	0.57
1:B:849:TYR:HD1	1:B:854:THR:CA	2.16	0.57
1:A:790:LYS:HB3	1:A:794:ARG:CZ	2.34	0.57
1:A:813:ARG:HA	1:A:817:ASP:OD2	2.03	0.57
1:A:827:SER:HG	1:A:994:TYR:HD2	1.52	0.57
1:B:1141:ILE:O	1:B:1144:ALA:HB3	2.05	0.57
1:B:209:LYS:C	1:B:212:LEU:HB3	2.25	0.57
1:B:371:ILE:C	1:B:373:SER:H	2.08	0.57
1:B:388:LEU:N	1:B:388:LEU:HD12	2.18	0.57
1:B:611:LEU:HD23	1:B:618:TYR:CB	2.34	0.57
1:B:883:LYS:HA	1:B:886:LEU:CG	2.33	0.57
1:B:921:GLN:HG2	1:B:922:ILE:HD12	1.86	0.57
1:A:1049:LEU:CD1	1:A:1052:LEU:HD22	2.33	0.57
1:A:210:LEU:HG	1:A:322:TYR:HD2	1.67	0.57
1:A:425:SER:HB3	1:A:599:GLY:HA3	1.86	0.57
1:B:1032:GLN:HB2	1:B:1091:PHE:HB2	1.86	0.57
1:B:1109:LEU:HD21	1:B:1188:ARG:HH11	1.68	0.57
1:B:1137:SER:HB3	1:B:1140:GLU:HB2	1.85	0.57
1:B:263:PHE:HD1	1:B:1188:ARG:HH22	1.52	0.57
1:B:251:GLU:O	1:B:254:LEU:HD11	2.03	0.57
1:B:497:GLU:O	1:B:500:VAL:HG22	2.04	0.57
1:B:837:ALA:HB1	1:B:982:MET:CE	2.34	0.57
1:A:1127:ILE:O	1:A:1129:TYR:N	2.34	0.57
1:A:861:VAL:HB	1:A:862:PRO:HD3	1.86	0.57
1:B:175:VAL:HA	1:B:178:ILE:HD12	1.87	0.57
1:B:693:PHE:CD2	1:B:693:PHE:N	2.71	0.57
1:B:788:VAL:O	1:B:791:SER:N	2.38	0.57
1:B:826:GLY:O	1:B:829:LEU:HB2	2.05	0.57
1:A:1133:SER:O	1:A:1135:VAL:N	2.37	0.57
1:A:1072:LYS:HB3	1:A:1226:ILE:HD13	1.87	0.57
1:A:186:ILE:HG13	1:A:187:GLY:N	2.20	0.57
1:A:53:GLY:O	1:A:56:ALA:HB3	2.04	0.57
1:A:611:LEU:HD23	1:A:618:TYR:CB	2.34	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:731:VAL:HG22	1:B:750:LEU:CB	2.35	0.57
1:B:797:VAL:HG12	1:B:798:SER:N	2.14	0.57
1:B:722:PRO:CG	1:B:841:THR:HB	2.34	0.57
1:B:921:GLN:HG2	1:B:922:ILE:N	2.20	0.57
1:B:721:GLN:HG3	1:B:979:PHE:HE1	1.67	0.57
1:A:144:ARG:HH12	1:A:175:VAL:HG11	1.70	0.57
1:A:175:VAL:HA	1:A:178:ILE:HD12	1.86	0.57
1:B:1149:ASN:OD1	1:B:1209:VAL:HG22	2.05	0.57
1:B:1151:HIS:HA	1:B:1154:ILE:HG13	1.85	0.57
1:B:215:LEU:C	1:B:219:PRO:HD2	2.25	0.57
1:B:324:ILE:C	1:B:326:GLN:N	2.56	0.57
1:B:765:THR:HG23	1:B:766:PHE:N	2.19	0.57
1:A:1092:LEU:HD13	1:A:1100:LEU:CD2	2.34	0.57
1:B:1014:ILE:HA	1:B:1102:VAL:HG11	1.87	0.57
1:B:132:TRP:CD2	1:B:183:GLY:HA3	2.40	0.57
1:B:314:THR:O	1:B:315:SER:C	2.43	0.57
1:B:41:TYR:O	1:B:42:ALA:HB3	2.05	0.57
1:A:1170:THR:HG22	1:A:1170:THR:O	2.04	0.57
1:A:238:LYS:O	1:A:238:LYS:HD3	2.03	0.57
1:A:324:ILE:C	1:A:326:GLN:N	2.56	0.57
1:A:371:ILE:O	1:A:371:ILE:HG22	2.05	0.57
1:A:56:ALA:O	1:A:59:ILE:HG13	2.04	0.57
1:A:583:HIS:O	1:A:585:LEU:HD22	2.04	0.57
1:A:612:MET:HA	1:A:619:PHE:HB2	1.86	0.57
1:B:178:ILE:HG12	1:B:358:ALA:HB1	1.85	0.57
1:B:43:GLY:CA	1:B:46:ASP:HB2	2.35	0.57
1:B:457:ILE:HD11	1:B:462:LEU:HD13	1.87	0.57
1:B:621:LEU:HD22	1:B:621:LEU:H	1.70	0.57
1:B:756:LEU:CD1	1:B:757:ILE:HG12	2.35	0.57
1:A:1137:SER:HB3	1:A:1140:GLU:HB2	1.85	0.57
1:A:1179:ARG:HH21	1:A:1209:VAL:CG1	2.13	0.57
1:A:765:THR:HG23	1:A:766:PHE:N	2.20	0.57
1:A:853:LEU:O	1:A:854:THR:C	2.44	0.57
1:B:801:ASP:HB3	1:B:1083:TYR:CE2	2.40	0.57
1:B:1142:VAL:HA	1:B:1161:TYR:OH	2.05	0.57
1:B:1208:LYS:C	1:B:1208:LYS:HD3	2.25	0.57
1:B:118:GLY:O	1:B:121:VAL:N	2.37	0.57
1:B:324:ILE:HG13	1:B:326:GLN:CA	2.35	0.57
1:B:470:SER:HA	1:B:551:ASP:HB3	1.85	0.57
1:B:64:LEU:HD11	1:B:945:MET:CE	2.35	0.57
1:A:157:GLY:HA2	1:A:160:ASP:OD2	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:178:ILE:HG12	1:A:358:ALA:HB1	1.84	0.56
1:A:457:ILE:HD11	1:A:462:LEU:HD13	1.87	0.56
1:A:621:LEU:H	1:A:621:LEU:HD22	1.70	0.56
1:A:806:THR:HG23	1:A:809:ALA:H	1.70	0.56
1:B:1129:TYR:O	1:B:1131:ASP:N	2.37	0.56
1:B:186:ILE:HG13	1:B:187:GLY:N	2.20	0.56
1:B:322:TYR:CE2	1:B:324:ILE:CD1	2.88	0.56
1:A:1063:ALA:HB3	1:A:1239:ILE:CA	2.25	0.56
1:A:490:ASP:O	1:A:491:VAL:HB	2.05	0.56
1:A:992:PRO:O	1:A:994:TYR:N	2.37	0.56
1:B:388:LEU:HB2	1:B:413:VAL:CG1	2.35	0.56
1:B:421:LEU:HD11	1:B:579:ILE:HD11	1.87	0.56
1:B:541:LEU:O	1:B:541:LEU:HD13	2.04	0.56
1:B:57:ALA:O	1:B:60:HIS:N	2.38	0.56
1:B:612:MET:HA	1:B:619:PHE:HB2	1.87	0.56
1:B:752:SER:O	1:B:755:PHE:HB3	2.05	0.56
1:B:777:GLY:CA	1:B:822:LYS:HG3	2.35	0.56
1:A:1129:TYR:O	1:A:1131:ASP:N	2.39	0.56
1:A:128:GLN:HG3	1:A:129:VAL:N	2.19	0.56
1:B:1011:THR:N	1:B:1012:PRO:HD2	2.01	0.56
1:B:1092:LEU:HD13	1:B:1100:LEU:CD2	2.34	0.56
1:B:203:GLY:C	1:B:211:THR:OG1	2.43	0.56
1:B:212:LEU:CD1	1:B:215:LEU:HD12	2.34	0.56
1:B:825:THR:O	1:B:829:LEU:HG	2.05	0.56
1:B:900:PHE:O	1:B:902:THR:N	2.26	0.56
1:A:1139:GLU:CD	1:A:1139:GLU:H	2.09	0.56
1:A:265:GLY:C	1:A:267:LYS:HG3	2.26	0.56
1:A:278:GLU:HA	1:A:282:ARG:CZ	2.35	0.56
1:A:473:PRO:HB3	1:A:533:GLN:HA	1.87	0.56
1:A:731:VAL:HG22	1:A:750:LEU:CB	2.34	0.56
1:A:837:ALA:HB1	1:A:982:MET:CE	2.36	0.56
1:B:1099:GLN:HG2	1:B:1099:GLN:O	2.05	0.56
1:B:284:GLY:O	1:B:287:LYS:HB3	2.05	0.56
1:B:358:ALA:O	1:B:362:PHE:CB	2.54	0.56
1:B:379:HIS:HD2	1:B:380:LYS:H	1.53	0.56
1:B:790:LYS:HB3	1:B:794:ARG:CZ	2.34	0.56
1:A:132:TRP:CD2	1:A:183:GLY:HA3	2.41	0.56
1:A:317:VAL:HG12	1:A:317:VAL:O	2.05	0.56
1:A:706:TYR:C	1:A:706:TYR:CD1	2.78	0.56
1:A:279:GLU:HG2	1:A:782:LYS:HZ2	1.69	0.56
1:A:270:LEU:HD13	1:A:789:PHE:CZ	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:902:THR:O	1:A:905:SER:N	2.35	0.56
1:B:265:GLY:C	1:B:267:LYS:HG3	2.26	0.56
1:B:611:LEU:HB3	1:B:618:TYR:HB3	1.88	0.56
1:A:1149:ASN:OD1	1:A:1209:VAL:HG22	2.05	0.56
1:A:1214:LEU:HD23	1:A:1218:ARG:HD3	1.87	0.56
1:A:199:GLY:O	1:A:203:GLY:HA3	2.05	0.56
1:A:267:LYS:CA	1:A:270:LEU:HD21	2.36	0.56
1:A:964:LEU:CD1	1:A:965:MET:H	2.16	0.56
1:B:101:ALA:O	1:B:105:GLU:HB2	2.04	0.56
1:B:1185:ALA:O	1:B:1190:PRO:HD3	2.04	0.56
1:B:129:VAL:HB	1:B:935:GLY:HA2	1.88	0.56
1:B:282:ARG:HB3	1:B:778:GLU:OE1	2.06	0.56
1:B:158:TRP:HE1	1:B:900:PHE:HB3	1.69	0.56
1:A:212:LEU:CD1	1:A:215:LEU:HD12	2.35	0.56
1:B:1072:LYS:HB3	1:B:1226:ILE:HD13	1.87	0.56
1:B:1140:GLU:O	1:B:1143:ARG:HB3	2.06	0.56
1:B:217:ILE:O	1:B:221:LEU:HG	2.05	0.56
1:B:253:VAL:C	1:B:254:LEU:HD13	2.26	0.56
1:B:425:SER:HB3	1:B:599:GLY:HA3	1.87	0.56
1:B:779:ILE:HG13	1:B:780:LEU:N	2.20	0.56
1:A:185:LYS:O	1:A:186:ILE:C	2.44	0.56
1:A:731:VAL:HA	1:A:750:LEU:HD13	1.87	0.56
1:A:752:SER:O	1:A:755:PHE:HB3	2.06	0.56
1:B:1120:ASP:HA	1:B:1165:VAL:HG22	1.87	0.56
1:B:1214:LEU:HD23	1:B:1218:ARG:HD3	1.87	0.56
1:B:278:GLU:HA	1:B:282:ARG:CZ	2.36	0.56
1:B:383:ASN:O	1:B:384:ILE:C	2.44	0.56
1:A:238:LYS:C	1:A:238:LYS:HD3	2.26	0.56
1:A:253:VAL:C	1:A:254:LEU:HD13	2.27	0.56
1:A:777:GLY:CA	1:A:822:LYS:HG3	2.35	0.56
1:B:1027:LEU:HD23	1:B:1028:GLU:H	1.71	0.56
1:B:1139:GLU:H	1:B:1139:GLU:CD	2.09	0.56
1:B:1239:ILE:N	1:B:1239:ILE:HD12	2.20	0.56
1:B:861:VAL:HB	1:B:862:PRO:HD3	1.87	0.56
1:B:962:GLN:O	1:B:963:GLN:HB2	2.06	0.56
1:A:1124:ALA:HB2	1:A:1161:TYR:O	2.06	0.56
1:A:153:ASN:HA	1:A:155:GLU:OE2	2.06	0.56
1:A:779:ILE:HG13	1:A:780:LEU:N	2.20	0.56
1:B:306:TYR:CD2	1:B:307:ALA:N	2.74	0.56
1:B:406:LEU:HD23	1:B:431:THR:HG21	1.86	0.56
1:B:490:ASP:O	1:B:491:VAL:HB	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:101:ALA:O	1:A:105:GLU:HB2	2.06	0.56
1:A:1142:VAL:HA	1:A:1161:TYR:OH	2.06	0.56
1:A:204:PHE:HA	1:A:211:THR:CG2	2.34	0.56
1:A:358:ALA:O	1:A:362:PHE:CB	2.54	0.56
1:A:857:LEU:CD1	1:A:976:ALA:HB3	2.36	0.56
1:B:1166:GLY:HA3	1:B:1171:GLN:OE1	2.05	0.56
1:B:1172:LEU:HD22	1:B:1176:GLN:HG2	1.88	0.56
1:B:214:ILE:HG12	1:B:331:PHE:CZ	2.40	0.56
1:B:311:TRP:HA	1:B:311:TRP:HE3	1.71	0.56
1:B:894:THR:O	1:B:895:GLU:C	2.45	0.56
1:A:421:LEU:HD11	1:A:579:ILE:HD11	1.88	0.55
1:A:482:GLU:O	1:A:483:ASN:C	2.45	0.55
1:A:749:ASN:HD22	1:A:749:ASN:C	2.10	0.55
1:A:862:PRO:O	1:A:866:ILE:HG12	2.06	0.55
1:B:1170:THR:HG22	1:B:1170:THR:O	2.06	0.55
1:B:121:VAL:CG2	1:B:122:LEU:N	2.69	0.55
1:A:138:ARG:HH22	1:B:515:GLN:HE21	1.53	0.55
1:B:959:LEU:HD13	1:B:964:LEU:HG	1.88	0.55
1:A:1099:GLN:O	1:A:1099:GLN:HG2	2.06	0.55
1:A:1120:ASP:HA	1:A:1165:VAL:HG22	1.86	0.55
1:A:1207:GLU:O	1:A:1211:GLN:HG2	2.06	0.55
1:A:288:ALA:HA	1:A:291:ALA:CB	2.37	0.55
1:A:288:ALA:CA	1:A:291:ALA:HB3	2.36	0.55
1:A:328:LEU:C	1:A:328:LEU:HD12	2.26	0.55
1:A:43:GLY:CA	1:A:46:ASP:HB2	2.37	0.55
1:A:825:THR:O	1:A:829:LEU:HG	2.06	0.55
1:B:67:MET:CE	1:B:117:ILE:HG21	2.34	0.55
1:B:128:GLN:HG3	1:B:129:VAL:N	2.21	0.55
1:B:207:GLY:CA	1:B:211:THR:H	2.19	0.55
1:B:345:SER:HB3	1:B:346:PRO:HD3	1.86	0.55
1:B:429:LYS:CD	1:B:429:LYS:H	2.07	0.55
1:B:72:GLY:HA2	1:B:326:GLN:HE21	1.68	0.55
1:A:1145:ALA:HB1	1:A:1154:ILE:HD12	1.88	0.55
1:A:322:TYR:CE2	1:A:324:ILE:CD1	2.89	0.55
1:A:788:VAL:O	1:A:791:SER:N	2.40	0.55
1:A:858:LEU:C	1:A:858:LEU:HD12	2.26	0.55
1:A:906:LEU:HD23	1:A:906:LEU:O	2.05	0.55
1:B:188:MET:HG3	1:B:348:ILE:CD1	2.35	0.55
1:B:201:ILE:HG22	1:B:202:ILE:N	2.21	0.55
1:B:845:ILE:HA	1:B:848:ILE:CG2	2.36	0.55
1:A:1193:LEU:HB2	1:A:1223:CYS:HB2	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1199:THR:HG21	1:A:1210:VAL:HG11	1.88	0.55
1:A:449:ILE:O	1:A:450:ASP:C	2.45	0.55
1:A:470:SER:HA	1:A:551:ASP:HB3	1.89	0.55
1:A:899:ASN:OD1	1:A:901:ARG:NH2	2.39	0.55
1:B:459:VAL:O	1:B:462:LEU:HB3	2.06	0.55
1:A:1032:GLN:HB2	1:A:1091:PHE:HB2	1.87	0.55
1:A:1137:SER:O	1:A:1141:ILE:HG23	2.06	0.55
1:A:133:CYS:O	1:A:135:ALA:N	2.39	0.55
1:A:188:MET:HG3	1:A:348:ILE:CD1	2.35	0.55
1:A:239:GLU:HG3	1:A:288:ALA:HB3	1.89	0.55
1:A:306:TYR:CD2	1:A:307:ALA:N	2.74	0.55
1:A:388:LEU:HB2	1:A:413:VAL:CG1	2.35	0.55
1:A:484:ILE:HG21	1:A:496:ILE:CD1	2.32	0.55
1:A:541:LEU:HD13	1:A:541:LEU:O	2.06	0.55
1:A:817:ASP:OD1	1:A:1000:SER:HB3	2.07	0.55
1:A:921:GLN:HG2	1:A:922:ILE:N	2.21	0.55
1:B:106:GLU:HG3	1:B:110:TYR:CE2	2.42	0.55
1:B:1145:ALA:HB2	1:B:1154:ILE:HD12	1.88	0.55
1:B:144:ARG:HH12	1:B:175:VAL:HG11	1.70	0.55
1:B:59:ILE:HG13	1:B:60:HIS:N	2.22	0.55
1:B:154:GLN:HE21	1:B:157:GLY:HA3	1.71	0.55
1:B:238:LYS:C	1:B:238:LYS:HD3	2.27	0.55
1:B:902:THR:O	1:B:905:SER:N	2.36	0.55
1:A:1018:SER:O	1:A:1101:ASN:CB	2.46	0.55
1:A:201:ILE:HG22	1:A:202:ILE:N	2.20	0.55
1:A:379:HIS:O	1:A:381:PRO:HD3	2.07	0.55
1:A:461:TYR:O	1:A:465:ILE:HG12	2.06	0.55
1:B:1229:ARG:C	1:B:1231:SER:N	2.59	0.55
1:B:211:THR:HA	1:B:214:ILE:CD1	2.37	0.55
1:B:311:TRP:HA	1:B:311:TRP:CE3	2.42	0.55
1:B:708:VAL:HG13	1:B:709:VAL:N	2.21	0.55
1:A:1229:ARG:C	1:A:1231:SER:N	2.59	0.55
1:A:214:ILE:CD1	1:A:330:VAL:HB	2.37	0.55
1:B:1056:VAL:CG2	1:B:1062:LEU:HB2	2.37	0.55
1:B:899:ASN:OD1	1:B:901:ARG:NH2	2.39	0.55
1:A:1172:LEU:HD22	1:A:1176:GLN:HG2	1.89	0.55
1:A:67:MET:CE	1:A:117:ILE:HG21	2.34	0.55
1:A:121:VAL:CG2	1:A:122:LEU:N	2.70	0.55
1:A:731:VAL:HA	1:A:750:LEU:CD1	2.36	0.55
1:B:409:LEU:HD21	1:B:602:ILE:HB	1.88	0.55
1:B:543:ARG:NH2	1:B:905:SER:O	2.40	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:713:CYS:SG	1:B:768:LEU:HD11	2.47	0.55
1:B:847:LEU:C	1:B:849:TYR:N	2.60	0.55
1:B:849:TYR:CB	1:B:854:THR:OG1	2.55	0.55
1:B:902:THR:HG23	1:B:903:VAL:H	1.72	0.55
1:A:1059:GLY:HA2	1:A:1221:ARG:C	2.27	0.55
1:A:311:TRP:HA	1:A:311:TRP:CE3	2.42	0.55
1:A:546:LYS:O	1:A:577:THR:HG23	2.06	0.55
1:A:856:LEU:O	1:A:859:ALA:HB3	2.07	0.55
1:B:328:LEU:O	1:B:332:PHE:HB3	2.07	0.55
1:B:566:GLN:HA	1:B:569:LEU:HD12	1.89	0.55
1:B:688:VAL:O	1:B:688:VAL:HG23	2.06	0.55
1:B:722:PRO:HG2	1:B:841:THR:HB	1.87	0.55
1:B:862:PRO:O	1:B:866:ILE:HG12	2.07	0.55
1:B:992:PRO:C	1:B:994:TYR:H	2.11	0.55
1:A:245:LYS:NZ	1:A:245:LYS:HA	2.21	0.54
1:A:286:LYS:HE3	1:A:822:LYS:NZ	2.22	0.54
1:A:33:VAL:O	1:A:34:SER:C	2.45	0.54
1:A:35:VAL:HG12	1:A:359:TYR:CZ	2.42	0.54
1:A:374:PHE:HE2	1:A:376:LYS:CB	2.20	0.54
1:A:930:LYS:O	1:A:933:VAL:HB	2.07	0.54
1:A:994:TYR:O	1:A:994:TYR:HD1	1.90	0.54
1:B:171:LEU:HD13	1:B:172:THR:N	2.21	0.54
1:B:727:ILE:HD12	1:B:754:LEU:CA	2.37	0.54
1:B:858:LEU:HD12	1:B:858:LEU:C	2.27	0.54
1:A:1037:VAL:HG23	1:A:1037:VAL:O	2.08	0.54
1:A:1239:ILE:N	1:A:1239:ILE:HD12	2.22	0.54
1:A:171:LEU:HD13	1:A:172:THR:N	2.21	0.54
1:A:182:ILE:O	1:A:185:LYS:HB3	2.06	0.54
1:A:215:LEU:C	1:A:219:PRO:HD2	2.27	0.54
1:A:548:LEU:HD22	1:A:550:LEU:CD1	2.38	0.54
1:A:801:ASP:HB3	1:A:1083:TYR:CZ	2.42	0.54
1:A:837:ALA:HB1	1:A:982:MET:HE1	1.89	0.54
1:B:1092:LEU:HD23	1:B:1093:ASP:H	1.72	0.54
1:B:1199:THR:HG21	1:B:1210:VAL:HG11	1.89	0.54
1:B:548:LEU:HD22	1:B:550:LEU:CD1	2.37	0.54
1:B:70:ILE:O	1:B:71:PHE:C	2.46	0.54
1:B:86:LYS:HE2	1:B:739:GLY:HA2	1.89	0.54
1:A:106:GLU:HG3	1:A:110:TYR:CE2	2.42	0.54
1:A:447:VAL:HG13	1:A:454:ILE:HG21	1.90	0.54
1:A:702:THR:C	1:A:704:TRP:H	2.11	0.54
1:A:708:VAL:HG13	1:A:709:VAL:N	2.22	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:812:THR:HG22	1:A:816:ASN:ND2	2.19	0.54
1:A:961:THR:O	1:A:962:GLN:HB3	2.08	0.54
1:A:722:PRO:HA	1:A:979:PHE:HZ	1.72	0.54
1:B:157:GLY:HA2	1:B:160:ASP:OD2	2.07	0.54
1:B:731:VAL:HA	1:B:750:LEU:HD13	1.89	0.54
1:B:129:VAL:CB	1:B:935:GLY:HA2	2.37	0.54
1:A:217:ILE:O	1:A:221:LEU:HG	2.08	0.54
1:A:282:ARG:HH11	1:A:282:ARG:N	2.04	0.54
1:A:478:THR:HG22	1:A:479:THR:N	2.17	0.54
1:A:254:LEU:HD23	1:A:811:THR:CG2	2.38	0.54
1:A:811:THR:CA	1:A:814:LEU:HD23	2.37	0.54
1:B:1204:THR:HG23	1:B:1205:GLU:N	2.21	0.54
1:B:207:GLY:C	1:B:209:LYS:H	2.11	0.54
1:B:905:SER:HB2	1:B:908:ARG:NH1	2.21	0.54
1:A:110:TYR:HA	1:A:113:TYR:CD2	2.34	0.54
1:A:118:GLY:O	1:A:121:VAL:N	2.40	0.54
1:A:211:THR:HA	1:A:214:ILE:CD1	2.37	0.54
1:A:215:LEU:O	1:A:219:PRO:CD	2.56	0.54
1:A:434:GLN:O	1:A:436:MET:N	2.41	0.54
1:B:1064:LEU:HD12	1:B:1226:ILE:HB	1.90	0.54
1:B:159:PHE:O	1:B:160:ASP:C	2.46	0.54
1:B:328:LEU:C	1:B:328:LEU:HD12	2.28	0.54
1:B:39:PHE:CD2	1:B:355:ARG:HA	2.42	0.54
1:B:905:SER:O	1:B:907:THR:N	2.39	0.54
1:A:1052:LEU:HG	1:A:1053:SER:N	2.22	0.54
1:A:311:TRP:HE3	1:A:311:TRP:HA	1.71	0.54
1:A:328:LEU:O	1:A:332:PHE:HB3	2.08	0.54
1:A:45:LEU:HD22	1:A:45:LEU:N	2.22	0.54
1:A:777:GLY:HA2	1:A:822:LYS:HG3	1.90	0.54
1:B:1246:LYS:H	1:B:1246:LYS:HD2	1.72	0.54
1:B:171:LEU:O	1:B:175:VAL:HG12	2.08	0.54
1:B:447:VAL:HG13	1:B:454:ILE:HG21	1.88	0.54
1:A:291:ALA:HA	1:A:294:SER:CB	2.37	0.54
1:A:507:ASP:O	1:A:510:MET:N	2.39	0.54
1:A:703:GLU:HG2	1:A:784:LEU:HD21	1.90	0.54
1:A:315:SER:CA	1:A:747:ASN:HD22	2.21	0.54
1:A:827:SER:O	1:A:831:VAL:HG23	2.08	0.54
1:A:921:GLN:HG2	1:A:922:ILE:CD1	2.37	0.54
1:B:1193:LEU:HB2	1:B:1223:CYS:HB2	1.90	0.54
1:B:215:LEU:CA	1:B:219:PRO:HD2	2.38	0.54
1:B:35:VAL:HG12	1:B:359:TYR:CZ	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:138:ARG:HH22	1:B:515:GLN:NE2	2.06	0.54
1:B:853:LEU:O	1:B:854:THR:C	2.45	0.54
1:B:129:VAL:HG11	1:B:935:GLY:N	2.22	0.54
1:A:39:PHE:CD2	1:A:355:ARG:HA	2.42	0.54
1:A:69:LEU:O	1:A:72:GLY:N	2.40	0.54
1:A:315:SER:CB	1:A:747:ASN:HD22	2.21	0.54
1:B:1207:GLU:O	1:B:1211:GLN:HG2	2.08	0.54
1:B:1214:LEU:HD23	1:B:1214:LEU:O	2.08	0.54
1:B:288:ALA:HA	1:B:291:ALA:CB	2.38	0.54
1:B:706:TYR:C	1:B:706:TYR:CD1	2.80	0.54
1:B:749:ASN:O	1:B:750:LEU:C	2.45	0.54
1:B:731:VAL:HA	1:B:750:LEU:CD1	2.38	0.54
1:B:730:LYS:HG2	1:B:750:LEU:HD22	1.90	0.54
1:B:893:ALA:O	1:B:897:ILE:HG12	2.07	0.54
1:B:921:GLN:HG2	1:B:922:ILE:CD1	2.38	0.54
1:A:1050:GLN:HG2	1:A:1245:GLY:HA3	1.89	0.54
1:A:1166:GLY:HA3	1:A:1171:GLN:OE1	2.07	0.54
1:A:686:GLU:H	1:A:686:GLU:CD	2.11	0.54
1:B:1059:GLY:HA2	1:B:1221:ARG:C	2.28	0.54
1:B:1193:LEU:HD11	1:B:1217:ALA:O	2.08	0.54
1:B:1202:LEU:CG	1:B:1203:ASP:H	2.12	0.54
1:B:352:ALA:O	1:B:355:ARG:HB3	2.08	0.54
1:B:812:THR:HG22	1:B:816:ASN:ND2	2.19	0.54
1:B:992:PRO:HB2	1:B:996:LYS:CE	2.38	0.54
1:A:1056:VAL:CG2	1:A:1062:LEU:HB2	2.37	0.54
1:A:936:ILE:HG23	1:A:937:THR:N	2.23	0.54
1:A:962:GLN:O	1:A:963:GLN:HB2	2.06	0.54
1:B:133:CYS:O	1:B:135:ALA:N	2.41	0.54
1:B:182:ILE:O	1:B:185:LYS:HB3	2.07	0.54
1:B:546:LYS:O	1:B:577:THR:HG23	2.08	0.54
1:B:722:PRO:HA	1:B:979:PHE:HZ	1.73	0.54
1:B:741:PRO:O	1:B:742:GLU:HB2	2.07	0.54
1:B:749:ASN:C	1:B:749:ASN:HD22	2.11	0.54
1:B:843:ILE:HA	1:B:846:SER:HB2	1.90	0.54
1:B:906:LEU:HD23	1:B:906:LEU:O	2.08	0.54
1:A:1023:LYS:HG3	1:A:1026:MET:CG	2.38	0.53
1:A:713:CYS:SG	1:A:768:LEU:HD11	2.47	0.53
1:A:992:PRO:HB2	1:A:996:LYS:CE	2.38	0.53
1:B:817:ASP:OD1	1:B:1000:SER:HB3	2.08	0.53
1:B:285:ILE:CG2	1:B:286:LYS:HD2	2.38	0.53
1:B:239:GLU:HG3	1:B:288:ALA:HB3	1.88	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:214:ILE:HG12	1:B:331:PHE:CE1	2.43	0.53
1:B:479:THR:HA	1:B:518:THR:O	2.08	0.53
1:B:419:VAL:CG2	1:B:593:VAL:HG13	2.38	0.53
1:B:695:ARG:HD3	1:B:699:LEU:HD23	1.90	0.53
1:B:703:GLU:HG2	1:B:784:LEU:HD21	1.90	0.53
1:B:765:THR:O	1:B:768:LEU:HG	2.08	0.53
1:B:827:SER:HG	1:B:994:TYR:HD2	1.56	0.53
1:A:188:MET:HG3	1:A:348:ILE:HD13	1.90	0.53
1:A:429:LYS:HB3	1:A:581:ILE:HD13	1.89	0.53
1:A:318:ILE:HG13	1:A:735:PHE:CZ	2.43	0.53
1:A:902:THR:HG23	1:A:903:VAL:H	1.72	0.53
1:B:505:ALA:O	1:B:509:ILE:HG23	2.08	0.53
1:B:561:SER:O	1:B:565:VAL:HG23	2.08	0.53
1:B:729:SER:HA	1:B:971:LEU:HB3	1.90	0.53
1:A:171:LEU:O	1:A:175:VAL:HG12	2.09	0.53
1:A:519:LEU:HD11	1:B:925:ARG:HD3	1.88	0.53
1:A:57:ALA:O	1:A:60:HIS:N	2.41	0.53
1:A:905:SER:HB2	1:A:908:ARG:NH1	2.23	0.53
1:A:990:PHE:O	1:A:991:ALA:O	2.26	0.53
1:B:1261:GLY:H	1:B:1264:PHE:CB	2.12	0.53
1:A:921:GLN:OE1	1:B:479:THR:HG21	2.08	0.53
1:B:972:LEU:CD1	1:B:972:LEU:N	2.71	0.53
1:A:370:SER:O	1:A:371:ILE:HB	2.08	0.53
1:A:422:VAL:HG22	1:A:595:ALA:O	2.08	0.53
1:A:846:SER:HA	1:A:849:TYR:CG	2.43	0.53
1:A:99:MET:HB3	1:A:960:VAL:O	2.07	0.53
1:B:282:ARG:N	1:B:282:ARG:HH11	2.06	0.53
1:B:484:ILE:HG21	1:B:496:ILE:CD1	2.32	0.53
1:B:885:GLU:HB3	1:B:923:PRO:HG3	1.90	0.53
1:A:1032:GLN:HE21	1:A:1055:GLU:HG3	1.71	0.53
1:A:1076:VAL:CG1	1:A:1194:LEU:HD13	2.39	0.53
1:A:154:GLN:HE21	1:A:157:GLY:HA3	1.73	0.53
1:A:38:MET:O	1:A:41:TYR:HB3	2.08	0.53
1:A:422:VAL:O	1:A:597:PHE:HB2	2.08	0.53
1:B:1243:GLN:O	1:B:1244:ASN:C	2.47	0.53
1:B:248:ALA:C	1:B:250:ALA:H	2.11	0.53
1:B:290:THR:HG22	1:B:770:GLY:C	2.28	0.53
1:B:696:ILE:O	1:B:700:ASN:HB2	2.08	0.53
1:B:709:VAL:HG13	1:B:710:GLY:N	2.24	0.53
1:A:1014:ILE:HB	1:A:1102:VAL:HG21	1.91	0.53
1:A:1064:LEU:HB3	1:A:1226:ILE:HG22	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:184:ASP:O	1:A:187:GLY:N	2.41	0.53
1:A:881:LYS:O	1:A:884:LYS:HB2	2.08	0.53
1:B:131:PHE:CD2	1:B:131:PHE:C	2.81	0.53
1:B:215:LEU:HA	1:B:219:PRO:HD2	1.89	0.53
1:B:374:PHE:CD1	1:B:375:SER:N	2.74	0.53
1:B:811:THR:CA	1:B:814:LEU:HD23	2.38	0.53
1:B:958:TYR:O	1:B:966:THR:OG1	2.21	0.53
1:A:1204:THR:OG1	1:A:1205:GLU:N	2.42	0.53
1:A:696:ILE:O	1:A:700:ASN:HB2	2.09	0.53
1:A:800:PHE:HA	1:A:803:PRO:HB3	1.90	0.53
1:B:1052:LEU:HG	1:B:1053:SER:N	2.23	0.53
1:B:324:ILE:HD11	1:B:327:VAL:HG13	1.90	0.53
1:B:37:THR:O	1:B:38:MET:C	2.45	0.53
1:B:45:LEU:HD22	1:B:45:LEU:N	2.23	0.53
1:B:692:SER:HB2	1:B:695:ARG:CB	2.39	0.53
1:B:307:ALA:CB	1:B:754:LEU:HD22	2.39	0.53
1:B:827:SER:O	1:B:828:ARG:C	2.47	0.53
1:B:846:SER:HA	1:B:849:TYR:CG	2.44	0.53
1:A:68:MET:O	1:A:329:THR:HG23	2.08	0.53
1:A:432:THR:O	1:A:433:VAL:C	2.48	0.53
1:A:795:GLN:HE21	1:A:796:ASP:H	1.56	0.53
1:B:1057:LYS:H	1:B:1057:LYS:HD2	1.73	0.53
1:B:1064:LEU:HB3	1:B:1226:ILE:HG22	1.90	0.53
1:B:381:PRO:HD2	1:B:461:TYR:CD2	2.44	0.53
1:B:684:LEU:N	1:B:684:LEU:HD23	2.23	0.53
1:B:881:LYS:HB2	1:B:881:LYS:NZ	2.24	0.53
1:B:936:ILE:HG23	1:B:937:THR:N	2.24	0.53
1:B:969:ASN:O	1:B:972:LEU:N	2.40	0.53
1:A:1076:VAL:HG11	1:A:1111:ILE:HD13	1.90	0.53
1:A:1234:GLN:HG2	1:A:1253:HIS:CD2	2.44	0.53
1:A:730:LYS:HG2	1:A:750:LEU:HD22	1.90	0.53
1:A:741:PRO:O	1:A:742:GLU:HB2	2.09	0.53
1:A:749:ASN:O	1:A:750:LEU:C	2.47	0.53
1:B:1038:PHE:HB2	1:B:1085:PRO:HA	1.90	0.53
1:B:1179:ARG:HH21	1:B:1209:VAL:CG1	2.14	0.53
1:B:1260:LYS:CD	1:B:1260:LYS:H	2.20	0.53
1:B:217:ILE:HD11	1:B:331:PHE:CE2	2.44	0.53
1:B:69:LEU:O	1:B:72:GLY:N	2.42	0.53
1:A:1064:LEU:CD1	1:A:1072:LYS:HG2	2.39	0.53
1:A:215:LEU:CA	1:A:219:PRO:HD2	2.39	0.53
1:A:215:LEU:HA	1:A:219:PRO:HD2	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:203:GLY:O	1:A:215:LEU:HD21	2.08	0.53
1:A:267:LYS:HB3	1:A:790:LYS:NZ	2.24	0.53
1:A:308:LEU:HA	1:A:751:PHE:CD2	2.44	0.53
1:A:395:PHE:HB3	1:A:406:LEU:HB2	1.91	0.53
1:A:409:LEU:HD21	1:A:602:ILE:HB	1.89	0.53
1:A:978:VAL:O	1:A:981:ALA:HB3	2.08	0.53
1:B:153:ASN:HA	1:B:155:GLU:OE2	2.09	0.53
1:B:246:ALA:CB	1:B:277:LEU:HB3	2.38	0.53
1:B:297:ALA:HB1	1:B:763:PHE:CD2	2.43	0.53
1:B:881:LYS:O	1:B:884:LYS:HB2	2.09	0.53
1:A:1193:LEU:HD11	1:A:1217:ALA:O	2.08	0.52
1:A:1199:THR:HG23	1:A:1210:VAL:HG11	1.90	0.52
1:A:223:LEU:O	1:A:227:ILE:HG13	2.09	0.52
1:A:385:GLN:HE21	1:A:386:GLY:N	2.06	0.52
1:A:765:THR:O	1:A:768:LEU:HG	2.09	0.52
1:A:899:ASN:O	1:A:902:THR:HG22	2.10	0.52
1:A:722:PRO:HG3	1:A:979:PHE:CE1	2.44	0.52
1:B:1032:GLN:HE21	1:B:1055:GLU:HG3	1.72	0.52
1:B:245:LYS:HA	1:B:245:LYS:NZ	2.23	0.52
1:B:722:PRO:HG3	1:B:979:PHE:CE1	2.44	0.52
1:B:992:PRO:O	1:B:994:TYR:N	2.42	0.52
1:A:1064:LEU:HD12	1:A:1226:ILE:HB	1.89	0.52
1:A:1246:LYS:HD2	1:A:1246:LYS:H	1.74	0.52
1:A:283:LEU:HD12	1:A:284:GLY:N	2.24	0.52
1:A:436:MET:HE3	1:A:454:ILE:HD12	1.90	0.52
1:A:70:ILE:O	1:A:71:PHE:C	2.44	0.52
1:B:215:LEU:O	1:B:219:PRO:CD	2.55	0.52
1:B:288:ALA:CA	1:B:291:ALA:HB3	2.37	0.52
1:B:422:VAL:HG22	1:B:595:ALA:O	2.08	0.52
1:A:1208:LYS:HD3	1:A:1208:LYS:C	2.29	0.52
1:A:157:GLY:HA2	1:A:160:ASP:CG	2.30	0.52
1:A:324:ILE:HG12	1:A:326:GLN:H	1.74	0.52
1:A:498:LYS:C	1:A:498:LYS:HD3	2.29	0.52
1:A:566:GLN:HA	1:A:569:LEU:HD12	1.91	0.52
1:A:729:SER:HA	1:A:971:LEU:HB3	1.90	0.52
1:A:972:LEU:N	1:A:972:LEU:CD1	2.72	0.52
1:B:1118:LEU:HD12	1:B:1118:LEU:O	2.10	0.52
1:B:1270:GLN:HG2	1:B:1271:ALA:N	2.25	0.52
1:B:231:ILE:HG22	1:B:232:LEU:HD22	1.91	0.52
1:B:297:ALA:HB1	1:B:763:PHE:HA	1.90	0.52
1:B:308:LEU:HD13	1:B:755:PHE:CE1	2.45	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:461:TYR:O	1:B:465:ILE:HG12	2.08	0.52
1:B:478:THR:HG22	1:B:479:THR:N	2.18	0.52
1:B:543:ARG:HH12	1:B:905:SER:HB3	1.73	0.52
1:B:824:ALA:O	1:B:828:ARG:HG2	2.10	0.52
1:A:1206:SER:O	1:A:1210:VAL:HG23	2.10	0.52
1:A:124:VAL:HG23	1:A:125:ALA:N	2.25	0.52
1:A:45:LEU:H	1:A:45:LEU:CD2	2.22	0.52
1:A:693:PHE:C	1:A:695:ARG:H	2.11	0.52
1:B:1124:ALA:HB2	1:B:1161:TYR:O	2.09	0.52
1:B:1144:ALA:CA	1:B:1186:LEU:HD11	2.30	0.52
1:B:197:PHE:O	1:B:201:ILE:HG12	2.09	0.52
1:B:397:TYR:HB3	1:B:398:PRO:HD2	1.91	0.52
1:B:68:MET:CE	1:B:68:MET:HA	2.39	0.52
1:B:795:GLN:HE21	1:B:796:ASP:H	1.57	0.52
1:B:899:ASN:HA	1:B:901:ARG:NH1	2.25	0.52
1:B:990:PHE:O	1:B:991:ALA:O	2.27	0.52
1:A:1031:VAL:HB	1:A:1056:VAL:HG12	1.91	0.52
1:A:1038:PHE:HB2	1:A:1085:PRO:HA	1.91	0.52
1:A:709:VAL:HG13	1:A:710:GLY:N	2.24	0.52
1:B:1050:GLN:HG2	1:B:1245:GLY:HA3	1.91	0.52
1:B:111:ALA:HA	1:B:114:TYR:HE1	1.73	0.52
1:B:504:ASN:OD1	1:B:568:ALA:HB2	2.09	0.52
1:B:780:LEU:O	1:B:784:LEU:HB2	2.09	0.52
1:A:1032:GLN:O	1:A:1090:VAL:HA	2.10	0.52
1:A:434:GLN:O	1:A:435:LEU:C	2.46	0.52
1:A:480:ILE:O	1:A:481:ALA:C	2.47	0.52
1:A:504:ASN:OD1	1:A:568:ALA:HB2	2.10	0.52
1:A:523:ARG:CD	1:A:524:GLY:N	2.65	0.52
1:A:68:MET:HA	1:A:68:MET:CE	2.39	0.52
1:B:1037:VAL:O	1:B:1037:VAL:HG23	2.08	0.52
1:B:1076:VAL:CG1	1:B:1194:LEU:HD13	2.39	0.52
1:B:1234:GLN:HG2	1:B:1253:HIS:CD2	2.44	0.52
1:B:185:LYS:O	1:B:186:ILE:C	2.46	0.52
1:B:188:MET:HG3	1:B:348:ILE:HD13	1.90	0.52
1:B:901:ARG:N	1:B:901:ARG:HD3	2.24	0.52
1:A:791:SER:CA	1:A:1010:LYS:HE2	2.34	0.52
1:A:1092:LEU:HD23	1:A:1093:ASP:H	1.74	0.52
1:A:1118:LEU:HD12	1:A:1118:LEU:O	2.10	0.52
1:A:182:ILE:O	1:A:185:LYS:HE3	2.10	0.52
1:A:207:GLY:C	1:A:209:LYS:H	2.13	0.52
1:A:594:ILE:O	1:A:605:GLN:HA	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:769:GLN:HG3	1:A:773:PHE:CE2	2.43	0.52
1:B:1067:SER:O	1:B:1068:SER:HB2	2.09	0.52
1:B:167:LEU:HD23	1:B:167:LEU:C	2.30	0.52
1:B:318:ILE:CG1	1:B:325:GLY:H	2.22	0.52
1:B:712:PHE:O	1:B:715:ILE:N	2.42	0.52
1:A:1202:LEU:HD21	1:A:1206:SER:CB	2.37	0.52
1:A:1267:VAL:HG13	1:A:1270:GLN:OE1	2.10	0.52
1:A:231:ILE:HG22	1:A:232:LEU:HD22	1.92	0.52
1:A:362:PHE:O	1:A:365:ILE:HB	2.10	0.52
1:A:59:ILE:HG13	1:A:60:HIS:N	2.24	0.52
1:A:702:THR:HB	1:A:703:GLU:OE1	2.10	0.52
1:A:994:TYR:O	1:A:994:TYR:CD1	2.63	0.52
1:B:1064:LEU:CD1	1:B:1072:LYS:HG2	2.39	0.52
1:B:33:VAL:O	1:B:34:SER:C	2.47	0.52
1:B:64:LEU:N	1:B:64:LEU:HD22	2.25	0.52
1:B:970:VAL:CG2	1:B:971:LEU:HD22	2.40	0.52
1:A:37:THR:O	1:A:38:MET:C	2.48	0.52
1:A:419:VAL:CG2	1:A:593:VAL:HG13	2.38	0.52
1:A:697:LEU:C	1:A:697:LEU:HD12	2.30	0.52
1:B:1057:LYS:N	1:B:1057:LYS:HD2	2.25	0.52
1:B:1076:VAL:HG11	1:B:1111:ILE:HD13	1.90	0.52
1:B:111:ALA:HA	1:B:114:TYR:CE1	2.45	0.52
1:B:291:ALA:HA	1:B:294:SER:CB	2.38	0.52
1:B:336:ILE:HD12	2:B:6004:2J8:SE3	2.60	0.52
1:B:480:ILE:O	1:B:481:ALA:C	2.47	0.52
1:B:50:MET:HG3	1:B:131:PHE:CE2	2.45	0.52
1:A:1088:GLY:O	1:A:1089:SER:HB2	2.10	0.52
1:A:1140:GLU:O	1:A:1143:ARG:HB3	2.10	0.52
1:A:397:TYR:HB3	1:A:398:PRO:HD2	1.92	0.52
1:A:453:ASP:HB3	1:A:456:THR:CG2	2.40	0.52
1:B:211:THR:HA	1:B:214:ILE:HD12	1.92	0.52
1:B:362:PHE:O	1:B:365:ILE:HB	2.10	0.52
1:B:38:MET:O	1:B:41:TYR:HB3	2.08	0.52
1:B:813:ARG:HD3	1:B:817:ASP:OD2	2.10	0.52
1:A:1020:GLN:NE2	1:A:1022:LEU:N	2.58	0.51
1:A:1132:ASN:OD1	1:A:1134:ARG:HG2	2.10	0.51
1:A:131:PHE:CD2	1:A:131:PHE:C	2.82	0.51
1:A:212:LEU:O	1:A:213:VAL:C	2.48	0.51
1:A:263:PHE:HE1	1:A:1129:TYR:HB3	1.74	0.51
1:A:278:GLU:HA	1:A:282:ARG:NH2	2.24	0.51
1:A:459:VAL:O	1:A:462:LEU:HB3	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:492:THR:C	1:A:494:ASP:N	2.63	0.51
1:A:50:MET:HG3	1:A:131:PHE:CE2	2.45	0.51
1:A:540:ALA:O	1:A:543:ARG:CB	2.58	0.51
1:A:552:GLU:HB3	1:A:555:SER:OG	2.10	0.51
1:A:686:GLU:CG	1:A:813:ARG:HH22	2.13	0.51
1:A:813:ARG:HD3	1:A:817:ASP:OD2	2.11	0.51
1:A:843:ILE:HA	1:A:846:SER:HB2	1.92	0.51
1:A:957:ALA:O	1:A:960:VAL:HG13	2.10	0.51
1:B:1267:VAL:HG13	1:B:1270:GLN:OE1	2.10	0.51
1:B:210:LEU:HD13	1:B:210:LEU:C	2.30	0.51
1:B:336:ILE:CD1	2:B:6004:2J8:SE3	3.09	0.51
1:B:395:PHE:HB3	1:B:406:LEU:HB2	1.91	0.51
1:B:463:ARG:HG3	1:B:463:ARG:HH11	1.76	0.51
1:B:48:LEU:O	1:B:49:TYR:C	2.46	0.51
1:B:498:LYS:HD3	1:B:498:LYS:C	2.31	0.51
1:B:697:LEU:C	1:B:697:LEU:HD12	2.30	0.51
1:B:900:PHE:C	1:B:902:THR:N	2.63	0.51
1:A:1243:GLN:O	1:A:1244:ASN:C	2.48	0.51
1:A:167:LEU:HD23	1:A:167:LEU:C	2.31	0.51
1:A:203:GLY:C	1:A:211:THR:OG1	2.49	0.51
1:A:258:ARG:O	1:A:259:THR:C	2.49	0.51
1:A:847:LEU:C	1:A:849:TYR:N	2.63	0.51
1:B:1023:LYS:HB3	1:B:1026:MET:CG	2.38	0.51
1:B:185:LYS:HZ2	1:B:186:ILE:CA	2.23	0.51
1:B:184:ASP:O	1:B:187:GLY:N	2.43	0.51
1:B:360:GLU:O	1:B:363:LYS:HB2	2.10	0.51
1:B:469:VAL:HG12	1:B:553:ALA:HB2	1.91	0.51
1:B:53:GLY:HA2	1:B:127:ILE:HG22	1.92	0.51
1:B:68:MET:O	1:B:329:THR:HG23	2.11	0.51
1:B:976:ALA:HA	1:B:979:PHE:HD2	1.75	0.51
1:A:1019:THR:HB	1:A:1099:GLN:O	2.09	0.51
1:A:1101:ASN:O	1:A:1102:VAL:C	2.48	0.51
1:A:156:ILE:HG23	1:A:439:LEU:HD12	1.91	0.51
1:A:695:ARG:HD3	1:A:699:LEU:HD23	1.91	0.51
1:A:976:ALA:HA	1:A:979:PHE:HD2	1.74	0.51
1:B:106:GLU:HG3	1:B:110:TYR:CZ	2.45	0.51
1:B:1154:ILE:CD1	1:B:1161:TYR:CE2	2.93	0.51
1:B:1173:SER:HB3	1:B:1176:GLN:NE2	2.25	0.51
1:B:125:ALA:O	1:B:128:GLN:HG2	2.11	0.51
1:B:384:ILE:CG2	1:B:385:GLN:N	2.72	0.51
1:B:551:ASP:HA	1:B:581:ILE:CG2	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:57:ALA:O	1:B:58:ILE:C	2.49	0.51
1:B:702:THR:O	1:B:704:TRP:N	2.43	0.51
1:B:730:LYS:HG2	1:B:750:LEU:CD2	2.40	0.51
1:B:899:ASN:O	1:B:902:THR:HG22	2.11	0.51
1:B:905:SER:OG	1:B:908:ARG:NH2	2.43	0.51
1:A:1122:SER:O	1:A:1125:GLU:HB2	2.11	0.51
1:A:285:ILE:CG2	1:A:286:LYS:HD2	2.40	0.51
1:A:70:ILE:O	1:A:74:MET:HG2	2.11	0.51
1:A:845:ILE:HA	1:A:848:ILE:CG2	2.40	0.51
1:A:885:GLU:HB3	1:A:923:PRO:HG3	1.92	0.51
1:A:148:PHE:HB3	1:A:913:GLU:CD	2.31	0.51
1:A:916:TYR:O	1:A:920:LEU:HD23	2.11	0.51
1:A:970:VAL:O	1:A:973:VAL:CB	2.58	0.51
1:A:853:LEU:CG	1:A:973:VAL:HG22	2.38	0.51
1:B:212:LEU:O	1:B:213:VAL:C	2.49	0.51
1:B:232:LEU:HD22	1:B:232:LEU:N	2.26	0.51
1:B:260:VAL:O	1:B:263:PHE:HB3	2.09	0.51
1:B:45:LEU:H	1:B:45:LEU:CD2	2.23	0.51
1:B:282:ARG:HB3	1:B:778:GLU:CD	2.31	0.51
1:B:81:VAL:HG22	1:B:102:LYS:HG3	1.93	0.51
1:A:1067:SER:O	1:A:1068:SER:HB2	2.10	0.51
1:A:106:GLU:HG3	1:A:110:TYR:CZ	2.46	0.51
1:A:1173:SER:HB3	1:A:1176:GLN:NE2	2.25	0.51
1:A:131:PHE:CZ	1:A:185:LYS:NZ	2.75	0.51
1:A:155:GLU:O	1:A:156:ILE:C	2.49	0.51
1:A:41:TYR:O	1:A:42:ALA:HB3	2.10	0.51
1:A:730:LYS:HG2	1:A:750:LEU:CD2	2.41	0.51
1:A:133:CYS:SG	1:A:931:ALA:HA	2.51	0.51
1:B:155:GLU:O	1:B:156:ILE:C	2.48	0.51
1:B:278:GLU:HA	1:B:282:ARG:NH2	2.26	0.51
1:B:342:GLY:O	1:B:345:SER:N	2.43	0.51
1:B:534:ARG:O	1:B:537:ILE:HB	2.10	0.51
1:B:51:LEU:O	1:B:54:THR:HB	2.10	0.51
1:A:1038:PHE:CG	1:A:1039:ASN:N	2.78	0.51
1:A:1078:LEU:HD23	1:A:1083:TYR:O	2.11	0.51
1:A:136:ALA:CB	1:A:182:ILE:HB	2.38	0.51
1:A:57:ALA:O	1:A:58:ILE:C	2.49	0.51
1:A:425:SER:HB3	1:A:599:GLY:CA	2.40	0.51
1:A:824:ALA:O	1:A:828:ARG:HG2	2.09	0.51
1:A:711:ILE:CD1	1:A:832:ILE:HD13	2.40	0.51
1:A:905:SER:OG	1:A:908:ARG:NH2	2.44	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1031:VAL:HB	1:B:1056:VAL:HG12	1.91	0.51
1:B:147:PHE:CE2	1:B:365:ILE:HG12	2.46	0.51
1:B:371:ILE:O	1:B:373:SER:N	2.43	0.51
1:B:742:GLU:OE2	1:B:742:GLU:HA	2.11	0.51
1:B:799:TRP:O	1:B:803:PRO:HB3	2.10	0.51
1:A:111:ALA:HA	1:A:114:TYR:HE1	1.76	0.51
1:A:1242:ILE:HG12	1:A:1246:LYS:O	2.11	0.51
1:A:210:LEU:C	1:A:210:LEU:HD13	2.31	0.51
1:A:282:ARG:C	1:A:286:LYS:HD3	2.31	0.51
1:A:352:ALA:O	1:A:355:ARG:HB3	2.10	0.51
1:A:374:PHE:HE2	1:A:376:LYS:HB2	1.76	0.51
1:A:551:ASP:HA	1:A:581:ILE:CG2	2.41	0.51
1:A:881:LYS:NZ	1:A:881:LYS:HB2	2.26	0.51
1:B:786:TYR:O	1:B:787:MET:C	2.49	0.51
1:A:1013:GLU:O	1:A:1014:ILE:CG2	2.52	0.51
1:A:1057:LYS:H	1:A:1057:LYS:HD2	1.74	0.51
1:A:51:LEU:O	1:A:54:THR:HB	2.10	0.51
1:A:64:LEU:N	1:A:64:LEU:HD22	2.26	0.51
1:A:793:LEU:C	1:A:795:GLN:H	2.14	0.51
1:A:286:LYS:NZ	1:A:822:LYS:NZ	2.59	0.51
1:B:1038:PHE:CG	1:B:1039:ASN:N	2.78	0.51
1:B:1132:ASN:OD1	1:B:1134:ARG:HG2	2.11	0.51
1:B:1144:ALA:HB2	1:B:1187:VAL:HG23	1.93	0.51
1:B:1148:ALA:HB1	1:B:1179:ARG:O	2.11	0.51
1:B:958:TYR:O	1:B:966:THR:HG21	2.10	0.51
1:A:1001:ALA:O	1:A:1004:ILE:HG22	2.11	0.51
1:A:225:ALA:HB2	1:A:302:ILE:HG21	1.92	0.51
1:A:314:THR:O	1:A:315:SER:C	2.48	0.51
1:A:324:ILE:HD11	1:A:327:VAL:HG13	1.92	0.51
1:A:398:PRO:HD3	1:A:440:TYR:CE2	2.46	0.51
1:A:588:VAL:O	1:A:591:ALA:CB	2.57	0.51
1:A:686:GLU:HG2	1:A:813:ARG:NH2	2.13	0.51
1:A:72:GLY:O	1:A:75:THR:N	2.43	0.51
1:A:901:ARG:HD3	1:A:901:ARG:N	2.23	0.51
1:B:1199:THR:HG23	1:B:1210:VAL:HG11	1.92	0.51
1:B:282:ARG:HB3	1:B:778:GLU:HG2	1.93	0.51
1:B:225:ALA:HB2	1:B:302:ILE:HG21	1.91	0.51
1:B:769:GLN:HG3	1:B:773:PHE:CE2	2.43	0.51
1:B:856:LEU:O	1:B:859:ALA:HB3	2.10	0.51
1:B:949:TYR:CE2	1:B:977:ILE:HG21	2.46	0.51
1:B:955:PHE:O	1:B:958:TYR:HB3	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1050:GLN:H	1:A:1245:GLY:HA2	1.76	0.51
1:A:1057:LYS:N	1:A:1057:LYS:HD2	2.26	0.51
1:A:1114:GLN:HE22	1:A:1200:SER:CB	2.23	0.51
1:A:113:TYR:CG	1:A:114:TYR:N	2.79	0.51
1:A:185:LYS:HZ2	1:A:186:ILE:CA	2.24	0.51
1:A:573:ARG:O	1:A:575:GLY:N	2.43	0.51
1:B:1123:ILE:HG12	1:B:1124:ALA:N	2.26	0.51
1:B:121:VAL:HG23	1:B:122:LEU:H	1.74	0.51
1:B:124:VAL:HG23	1:B:125:ALA:N	2.26	0.51
1:B:462:LEU:HD12	1:B:466:ILE:CD1	2.40	0.51
1:B:806:THR:OG1	1:B:807:THR:N	2.44	0.51
1:A:81:VAL:HG22	1:A:102:LYS:HG3	1.93	0.50
1:A:131:PHE:O	1:A:132:TRP:C	2.48	0.50
1:A:702:THR:O	1:A:704:TRP:N	2.44	0.50
1:A:74:MET:HG3	1:A:75:THR:N	2.26	0.50
1:A:703:GLU:HA	1:A:783:ARG:HH12	1.75	0.50
1:B:1037:VAL:HG12	1:B:1051:GLY:N	2.24	0.50
1:A:118:GLY:HA3	1:A:946:TYR:CE2	2.46	0.50
1:A:260:VAL:O	1:A:263:PHE:HB3	2.11	0.50
1:A:279:GLU:O	1:A:282:ARG:HB2	2.11	0.50
1:A:68:MET:SD	1:A:332:PHE:CE1	3.02	0.50
1:A:48:LEU:O	1:A:49:TYR:C	2.49	0.50
1:A:566:GLN:NE2	1:A:569:LEU:HD12	2.26	0.50
1:B:1149:ASN:OD1	1:B:1213:ALA:HB2	2.11	0.50
1:B:552:GLU:HB3	1:B:555:SER:HB2	1.93	0.50
1:B:702:THR:C	1:B:704:TRP:H	2.13	0.50
1:B:748:SER:O	1:B:751:PHE:HD1	1.94	0.50
1:B:910:GLN:O	1:B:913:GLU:N	2.44	0.50
1:B:970:VAL:O	1:B:973:VAL:CB	2.58	0.50
1:A:1023:LYS:HZ3	1:A:1023:LYS:HB3	1.77	0.50
1:A:1214:LEU:HD23	1:A:1214:LEU:O	2.11	0.50
1:A:922:ILE:CB	1:A:923:PRO:HD3	2.38	0.50
1:B:131:PHE:HD2	1:B:131:PHE:C	2.15	0.50
1:B:583:HIS:O	1:B:585:LEU:HD22	2.10	0.50
1:A:1067:SER:OG	1:A:1244:ASN:ND2	2.45	0.50
1:A:113:TYR:CD1	1:A:114:TYR:N	2.80	0.50
1:A:1149:ASN:OD1	1:A:1213:ALA:HB2	2.10	0.50
1:A:114:TYR:HB3	1:A:950:ALA:HB2	1.94	0.50
1:A:53:GLY:HA2	1:A:127:ILE:HG22	1.93	0.50
1:A:207:GLY:CA	1:A:211:THR:H	2.22	0.50
1:A:218:SER:CB	1:A:219:PRO:CD	2.90	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:286:LYS:HE3	1:A:822:LYS:HZ1	1.75	0.50
1:B:1032:GLN:O	1:B:1090:VAL:HA	2.11	0.50
1:B:1204:THR:OG1	1:B:1205:GLU:N	2.42	0.50
1:B:604:GLU:OE2	1:B:616:GLY:HA3	2.12	0.50
1:B:702:THR:HB	1:B:703:GLU:OE1	2.11	0.50
1:B:74:MET:HG3	1:B:75:THR:N	2.27	0.50
1:B:777:GLY:HA2	1:B:822:LYS:HG3	1.93	0.50
1:A:1027:LEU:HD12	1:A:1027:LEU:N	2.26	0.50
1:A:1037:VAL:HG12	1:A:1051:GLY:N	2.24	0.50
1:A:1144:ALA:HB2	1:A:1187:VAL:HG23	1.92	0.50
1:A:159:PHE:O	1:A:160:ASP:C	2.48	0.50
1:A:326:GLN:HE21	1:A:329:THR:HG1	1.57	0.50
1:A:384:ILE:CG2	1:A:385:GLN:H	2.03	0.50
1:A:433:VAL:CG1	1:A:549:LEU:HD23	2.41	0.50
1:A:267:LYS:HB3	1:A:790:LYS:CE	2.41	0.50
1:A:892:ILE:O	1:A:893:ALA:C	2.49	0.50
1:A:906:LEU:HG	1:A:909:GLU:CD	2.31	0.50
1:B:573:ARG:O	1:B:575:GLY:N	2.45	0.50
1:A:1028:GLU:HB2	1:A:1093:ASP:OD1	2.12	0.50
1:A:1081:ARG:NH1	1:A:1098:LYS:O	2.44	0.50
1:A:362:PHE:HA	1:A:365:ILE:CD1	2.41	0.50
1:A:462:LEU:HD12	1:A:466:ILE:CD1	2.40	0.50
1:A:463:ARG:HG3	1:A:463:ARG:HH11	1.76	0.50
1:A:505:ALA:O	1:A:509:ILE:HG23	2.10	0.50
1:A:469:VAL:HG12	1:A:553:ALA:HB2	1.94	0.50
1:A:561:SER:O	1:A:565:VAL:HG23	2.10	0.50
1:A:905:SER:C	1:A:907:THR:H	2.14	0.50
1:A:91:MET:HB3	1:A:93:GLU:OE2	2.12	0.50
1:B:113:TYR:CG	1:B:114:TYR:N	2.79	0.50
1:B:283:LEU:HD12	1:B:284:GLY:N	2.25	0.50
1:B:454:ILE:HG23	1:B:455:ARG:N	2.27	0.50
1:B:695:ARG:HD3	1:B:699:LEU:CD2	2.42	0.50
1:B:780:LEU:C	1:B:784:LEU:HD23	2.32	0.50
1:A:342:GLY:O	1:A:346:PRO:CD	2.60	0.50
1:A:544:ASN:HB2	1:A:576:ARG:HH21	1.77	0.50
1:A:899:ASN:HA	1:A:901:ARG:NH1	2.25	0.50
1:B:1001:ALA:O	1:B:1004:ILE:HG22	2.12	0.50
1:B:113:TYR:CD1	1:B:114:TYR:N	2.79	0.50
1:B:131:PHE:O	1:B:132:TRP:C	2.49	0.50
1:B:171:LEU:C	1:B:171:LEU:HD13	2.32	0.50
1:B:186:ILE:CG1	1:B:187:GLY:N	2.75	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:482:GLU:O	1:B:483:ASN:C	2.48	0.50
1:B:566:GLN:NE2	1:B:569:LEU:HD12	2.26	0.50
1:B:603:VAL:HG21	1:B:617:ILE:HG13	1.94	0.50
1:B:906:LEU:HG	1:B:909:GLU:CD	2.31	0.50
1:B:957:ALA:O	1:B:960:VAL:HG13	2.12	0.50
1:A:374:PHE:CD2	1:A:376:LYS:HB3	2.47	0.50
1:A:384:ILE:O	1:A:385:GLN:O	2.30	0.50
1:A:603:VAL:HG21	1:A:617:ILE:HG13	1.94	0.50
1:A:937:THR:OG1	1:A:938:PHE:N	2.44	0.50
1:A:945:MET:O	1:A:949:TYR:HD1	1.95	0.50
1:A:955:PHE:O	1:A:958:TYR:HB3	2.12	0.50
1:B:1023:LYS:CB	1:B:1026:MET:HG2	2.41	0.50
1:B:49:TYR:HH	1:B:130:SER:HB2	1.75	0.50
1:B:453:ASP:HB3	1:B:456:THR:CG2	2.41	0.50
1:B:853:LEU:CD2	1:B:853:LEU:H	2.16	0.50
1:A:1196:ASP:OD2	1:A:1226:ILE:HD11	2.12	0.50
1:A:534:ARG:O	1:A:537:ILE:HB	2.12	0.50
1:A:697:LEU:HB3	1:A:828:ARG:CZ	2.41	0.50
1:A:118:GLY:HA3	1:A:946:TYR:CD2	2.46	0.50
1:B:114:TYR:CB	1:B:950:ALA:HB2	2.42	0.50
1:B:1178:GLN:O	1:B:1182:ILE:HG12	2.11	0.50
1:B:1196:ASP:OD2	1:B:1226:ILE:HD11	2.12	0.50
1:B:182:ILE:O	1:B:185:LYS:HE3	2.11	0.50
1:B:189:PHE:O	1:B:190:PHE:C	2.51	0.50
1:B:218:SER:CB	1:B:219:PRO:CD	2.90	0.50
1:B:820:GLN:HG3	1:B:1000:SER:HB3	1.92	0.50
1:A:1079:LEU:C	1:A:1081:ARG:N	2.66	0.49
1:A:689:PRO:HB2	1:A:690:PRO:CD	2.37	0.49
1:A:799:TRP:O	1:A:803:PRO:HB3	2.12	0.49
1:A:848:ILE:HG12	1:A:848:ILE:O	2.12	0.49
1:A:972:LEU:O	1:A:975:SER:CB	2.60	0.49
1:B:1067:SER:OG	1:B:1244:ASN:ND2	2.45	0.49
1:B:1154:ILE:HD13	1:B:1161:TYR:CE2	2.47	0.49
1:B:897:ILE:CG1	1:B:898:GLU:H	2.10	0.49
1:B:91:MET:HB3	1:B:93:GLU:OE2	2.12	0.49
1:A:131:PHE:C	1:A:131:PHE:HD2	2.16	0.49
1:A:232:LEU:HD22	1:A:232:LEU:N	2.27	0.49
1:A:238:LYS:HZ3	1:A:242:ALA:HB2	1.77	0.49
1:A:304:ALA:HB2	1:A:758:LEU:HD23	1.94	0.49
1:A:393:ILE:HG13	1:A:409:LEU:HB3	1.94	0.49
1:A:507:ASP:OD1	1:A:508:PHE:N	2.35	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:778:GLU:O	1:A:779:ILE:C	2.49	0.49
1:B:1175:GLY:O	1:B:1179:ARG:HG3	2.12	0.49
1:B:1050:GLN:H	1:B:1245:GLY:HA2	1.77	0.49
1:B:1249:GLU:OE1	1:B:1262:ILE:HB	2.12	0.49
1:B:406:LEU:HD12	1:B:409:LEU:HB2	1.93	0.49
1:B:536:ALA:O	1:B:537:ILE:O	2.30	0.49
1:B:70:ILE:O	1:B:74:MET:HG2	2.12	0.49
1:B:937:THR:OG1	1:B:938:PHE:N	2.45	0.49
1:A:1255:GLN:HG2	1:A:1259:GLN:HE22	1.77	0.49
1:A:265:GLY:O	1:A:267:LYS:HG3	2.12	0.49
1:A:361:VAL:O	1:A:365:ILE:CD1	2.59	0.49
1:A:969:ASN:O	1:A:972:LEU:N	2.44	0.49
1:B:1229:ARG:O	1:B:1231:SER:N	2.45	0.49
1:B:265:GLY:O	1:B:267:LYS:HG3	2.11	0.49
1:B:342:GLY:O	1:B:346:PRO:CD	2.60	0.49
1:B:544:ASN:HB2	1:B:576:ARG:HH21	1.77	0.49
1:B:900:PHE:CD1	1:B:900:PHE:C	2.85	0.49
1:B:969:ASN:HD22	1:B:970:VAL:H	1.57	0.49
1:A:1078:LEU:C	1:A:1081:ARG:H	2.15	0.49
1:A:1076:VAL:HG22	1:A:1194:LEU:HD22	1.95	0.49
1:A:1216:LYS:HA	1:A:1216:LYS:CE	2.36	0.49
1:A:406:LEU:HD12	1:A:409:LEU:HB2	1.93	0.49
1:A:454:ILE:HG23	1:A:455:ARG:N	2.27	0.49
1:A:44:TRP:CD1	1:A:45:LEU:HD22	2.47	0.49
1:A:520:VAL:HG12	1:A:523:ARG:O	2.11	0.49
1:A:695:ARG:HD3	1:A:699:LEU:CD2	2.42	0.49
1:A:730:LYS:O	1:A:733:GLY:N	2.46	0.49
1:A:748:SER:O	1:A:751:PHE:HD1	1.94	0.49
1:A:795:GLN:NE2	1:A:796:ASP:H	2.10	0.49
1:A:893:ALA:O	1:A:897:ILE:HG12	2.13	0.49
1:B:1022:LEU:O	1:B:1023:LYS:O	2.31	0.49
1:B:1046:ILE:N	1:B:1046:ILE:HD12	2.28	0.49
1:B:1062:LEU:HB3	1:B:1224:ILE:HA	1.94	0.49
1:B:697:LEU:HB3	1:B:828:ARG:CZ	2.43	0.49
1:B:934:PHE:O	1:B:935:GLY:C	2.48	0.49
1:A:1041:PRO:O	1:A:1042:THR:HB	2.13	0.49
1:A:111:ALA:HA	1:A:114:TYR:CE1	2.47	0.49
1:A:246:ALA:CB	1:A:277:LEU:HB3	2.39	0.49
1:A:214:ILE:HG12	1:A:331:PHE:CE2	2.48	0.49
1:A:585:LEU:CD2	1:A:585:LEU:H	2.25	0.49
1:A:585:LEU:HD12	1:A:618:TYR:CE1	2.43	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:712:PHE:O	1:A:715:ILE:N	2.45	0.49
1:A:806:THR:OG1	1:A:807:THR:N	2.45	0.49
1:A:883:LYS:CA	1:A:886:LEU:HG	2.43	0.49
1:A:962:GLN:HG2	1:A:962:GLN:O	2.13	0.49
1:B:1032:GLN:NE2	1:B:1055:GLU:HG3	2.28	0.49
1:B:158:TRP:C	1:B:158:TRP:CD1	2.86	0.49
1:B:261:ILE:C	1:B:263:PHE:N	2.62	0.49
1:B:327:VAL:HG23	1:B:328:LEU:N	2.27	0.49
1:B:44:TRP:CD1	1:B:45:LEU:HD22	2.47	0.49
1:B:588:VAL:O	1:B:591:ALA:CB	2.59	0.49
1:B:118:GLY:HA3	1:B:946:TYR:CD2	2.48	0.49
1:B:974:PHE:O	1:B:978:VAL:HG12	2.13	0.49
1:A:121:VAL:CG2	1:A:122:LEU:H	2.25	0.49
1:A:1249:GLU:OE1	1:A:1262:ILE:HB	2.13	0.49
1:A:186:ILE:CG1	1:A:187:GLY:N	2.75	0.49
1:A:248:ALA:C	1:A:250:ALA:H	2.14	0.49
1:A:807:THR:O	1:A:811:THR:HG23	2.13	0.49
1:B:1041:PRO:O	1:B:1042:THR:HB	2.13	0.49
1:B:1137:SER:O	1:B:1141:ILE:HG23	2.12	0.49
1:B:1076:VAL:HG22	1:B:1194:LEU:HD22	1.95	0.49
1:B:492:THR:C	1:B:494:ASP:N	2.64	0.49
1:B:425:SER:HB3	1:B:599:GLY:CA	2.43	0.49
1:B:68:MET:SD	1:B:332:PHE:CE1	3.02	0.49
1:B:703:GLU:HA	1:B:783:ARG:HH12	1.76	0.49
1:B:711:ILE:CD1	1:B:832:ILE:HD13	2.42	0.49
1:A:171:LEU:HD13	1:A:171:LEU:C	2.33	0.49
1:A:286:LYS:CE	1:A:822:LYS:NZ	2.76	0.49
1:A:742:GLU:HA	1:A:742:GLU:OE2	2.12	0.49
1:A:969:ASN:HD22	1:A:970:VAL:H	1.56	0.49
1:A:99:MET:N	1:A:99:MET:SD	2.85	0.49
1:A:1186:LEU:HD12	1:A:1187:VAL:N	2.28	0.49
1:A:1260:LYS:CD	1:A:1260:LYS:H	2.23	0.49
1:A:154:GLN:HG2	1:A:154:GLN:O	2.13	0.49
1:A:207:GLY:O	1:A:209:LYS:N	2.46	0.49
1:A:418:THR:HG22	1:A:578:THR:CG2	2.43	0.49
1:B:1114:GLN:HE22	1:B:1200:SER:CB	2.25	0.49
1:B:286:LYS:HG2	1:B:778:GLU:CG	2.43	0.49
1:B:422:VAL:O	1:B:597:PHE:HB2	2.12	0.49
1:B:398:PRO:HD3	1:B:440:TYR:CE2	2.47	0.49
1:B:64:LEU:HD11	1:B:945:MET:HE1	1.95	0.49
1:B:835:ASN:O	1:B:836:ILE:C	2.50	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:342:GLY:O	1:A:346:PRO:HD2	2.12	0.49
1:A:158:TRP:NE1	1:A:900:PHE:HB3	2.12	0.49
1:A:922:ILE:HB	1:A:923:PRO:CD	2.41	0.49
1:B:1147:GLU:HB3	1:B:1186:LEU:CD2	2.40	0.49
1:B:324:ILE:HG13	1:B:326:GLN:N	2.28	0.49
1:B:65:PRO:O	1:B:66:LEU:C	2.50	0.49
1:B:962:GLN:O	1:B:962:GLN:HG2	2.13	0.49
1:A:1057:LYS:N	1:A:1060:GLN:NE2	2.61	0.49
1:A:433:VAL:HG13	1:A:549:LEU:HD23	1.95	0.49
1:A:849:TYR:OH	1:A:976:ALA:CB	2.61	0.49
1:B:121:VAL:CG2	1:B:122:LEU:H	2.25	0.49
1:B:321:GLU:HG3	1:B:322:TYR:H	1.76	0.49
1:B:385:GLN:HE21	1:B:386:GLY:N	2.08	0.49
1:B:848:ILE:O	1:B:848:ILE:HG12	2.11	0.49
1:B:850:GLY:C	1:B:852:GLN:N	2.65	0.49
1:A:1032:GLN:NE2	1:A:1055:GLU:HG3	2.27	0.48
1:A:1037:VAL:CG2	1:A:1037:VAL:O	2.61	0.48
1:A:1046:ILE:N	1:A:1046:ILE:HD12	2.28	0.48
1:A:520:VAL:CG1	1:A:524:GLY:HA2	2.43	0.48
1:A:77:SER:O	1:A:81:VAL:HG23	2.13	0.48
1:B:1088:GLY:O	1:B:1089:SER:HB2	2.12	0.48
1:B:158:TRP:HE1	1:B:900:PHE:CB	2.26	0.48
1:B:202:ILE:O	1:B:204:PHE:N	2.45	0.48
1:B:303:TYR:O	1:B:306:TYR:CB	2.60	0.48
1:B:418:THR:HG22	1:B:578:THR:CG2	2.42	0.48
1:B:99:MET:SD	1:B:99:MET:N	2.86	0.48
1:A:121:VAL:O	1:A:122:LEU:C	2.51	0.48
1:A:342:GLY:O	1:A:345:SER:N	2.47	0.48
1:A:360:GLU:O	1:A:363:LYS:HB2	2.13	0.48
1:A:780:LEU:C	1:A:784:LEU:HD23	2.33	0.48
1:B:1186:LEU:HD12	1:B:1187:VAL:N	2.28	0.48
1:B:916:TYR:O	1:B:920:LEU:HD23	2.13	0.48
1:A:1009:GLU:O	1:A:1010:LYS:HG3	2.13	0.48
1:A:199:GLY:HA2	1:A:334:VAL:HG23	1.95	0.48
1:A:211:THR:HA	1:A:214:ILE:HD12	1.95	0.48
1:A:376:LYS:C	1:A:376:LYS:HD2	2.33	0.48
1:A:479:THR:O	1:A:482:GLU:HB2	2.13	0.48
1:A:781:THR:HG23	1:A:818:ALA:HB1	1.95	0.48
1:A:900:PHE:C	1:A:902:THR:N	2.61	0.48
1:B:1145:ALA:CB	1:B:1154:ILE:HD12	2.44	0.48
1:B:188:MET:SD	1:B:188:MET:C	2.92	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:291:ALA:CA	1:B:294:SER:HB2	2.40	0.48
1:B:484:ILE:CG2	1:B:496:ILE:CD1	2.91	0.48
1:B:969:ASN:HD22	1:B:969:ASN:C	2.16	0.48
1:A:121:VAL:HG23	1:A:122:LEU:H	1.76	0.48
1:A:301:LEU:O	1:A:304:ALA:HB3	2.13	0.48
1:A:327:VAL:HG23	1:A:328:LEU:N	2.28	0.48
1:A:368:LYS:O	1:A:369:PRO:C	2.51	0.48
1:A:374:PHE:CE2	1:A:376:LYS:HB2	2.48	0.48
1:A:550:LEU:N	1:A:550:LEU:HD12	2.29	0.48
1:A:978:VAL:HG21	2:A:6001:2J8:H29	1.95	0.48
1:A:728:PHE:O	1:A:732:VAL:HG22	2.13	0.48
1:A:783:ARG:HG2	1:A:783:ARG:HH11	1.78	0.48
1:B:1037:VAL:CG2	1:B:1037:VAL:O	2.61	0.48
1:B:154:GLN:O	1:B:154:GLN:HG2	2.13	0.48
1:B:207:GLY:HA2	1:B:210:LEU:HD12	1.94	0.48
1:B:324:ILE:HG13	1:B:326:GLN:H	1.76	0.48
1:B:86:LYS:HE2	1:B:738:GLY:C	2.33	0.48
1:B:781:THR:HG23	1:B:818:ALA:HB1	1.94	0.48
1:B:894:THR:HA	1:B:897:ILE:HD11	1.96	0.48
1:B:905:SER:C	1:B:907:THR:H	2.17	0.48
1:B:922:ILE:CB	1:B:923:PRO:HD3	2.41	0.48
1:B:945:MET:O	1:B:949:TYR:HD1	1.96	0.48
1:A:204:PHE:O	1:A:211:THR:HG21	2.14	0.48
1:A:420:ALA:O	1:A:421:LEU:HD12	2.14	0.48
1:A:479:THR:HA	1:A:518:THR:O	2.14	0.48
1:A:51:LEU:O	1:A:52:VAL:C	2.52	0.48
1:A:728:PHE:CE1	2:A:6002:2J8:SE2	3.16	0.48
1:A:785:ARG:O	1:A:786:TYR:C	2.52	0.48
1:A:797:VAL:O	1:A:801:ASP:HB2	2.14	0.48
1:A:908:ARG:N	1:A:908:ARG:CD	2.76	0.48
1:B:1057:LYS:N	1:B:1060:GLN:NE2	2.62	0.48
1:B:238:LYS:HZ2	1:B:242:ALA:HB2	1.78	0.48
1:B:318:ILE:HD13	1:B:327:VAL:HG22	1.95	0.48
1:B:324:ILE:HD11	1:B:327:VAL:CG1	2.43	0.48
1:B:306:TYR:CE1	1:B:335:LEU:HD22	2.49	0.48
1:B:35:VAL:HA	1:B:359:TYR:CD2	2.49	0.48
1:B:464:GLU:HA	1:B:543:ARG:CZ	2.43	0.48
1:B:711:ILE:HD11	1:B:832:ILE:CG2	2.27	0.48
1:B:711:ILE:O	1:B:714:ALA:HB3	2.14	0.48
1:B:77:SER:O	1:B:81:VAL:HG23	2.14	0.48
1:B:907:THR:N	1:B:908:ARG:NE	2.60	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1147:GLU:HB3	1:A:1186:LEU:CD2	2.42	0.48
1:A:214:ILE:CG2	1:A:334:VAL:HG11	2.43	0.48
1:A:212:LEU:C	1:A:214:ILE:N	2.65	0.48
1:A:348:ILE:O	1:A:351:PHE:N	2.47	0.48
1:A:465:ILE:HG22	1:A:465:ILE:O	2.13	0.48
1:A:970:VAL:CG2	1:A:971:LEU:HD22	2.40	0.48
1:B:1255:GLN:O	1:B:1258:ALA:HB3	2.13	0.48
1:B:144:ARG:O	1:B:145:GLN:C	2.50	0.48
1:B:181:GLY:HA3	1:B:354:ALA:CB	2.44	0.48
1:B:332:PHE:O	1:B:335:LEU:HB3	2.13	0.48
1:B:471:GLN:OE1	1:B:472:GLU:N	2.45	0.48
1:B:883:LYS:CA	1:B:886:LEU:HG	2.43	0.48
1:B:906:LEU:C	1:B:908:ARG:HD2	2.34	0.48
1:A:1137:SER:HB3	1:A:1140:GLU:HB3	1.94	0.48
1:A:128:GLN:O	1:A:131:PHE:N	2.47	0.48
1:A:144:ARG:O	1:A:145:GLN:C	2.52	0.48
1:A:183:GLY:O	1:A:186:ILE:CG1	2.58	0.48
1:A:702:THR:C	1:A:704:TRP:N	2.66	0.48
1:A:721:GLN:O	1:A:722:PRO:C	2.51	0.48
1:A:148:PHE:CD2	1:A:913:GLU:OE2	2.64	0.48
1:B:1001:ALA:O	1:B:1005:ILE:CG1	2.62	0.48
1:B:106:GLU:OE2	1:B:109:THR:HB	2.14	0.48
1:B:1078:LEU:HD23	1:B:1083:TYR:O	2.13	0.48
1:B:1242:ILE:HG12	1:B:1246:LYS:O	2.14	0.48
1:B:529:GLY:HA2	1:B:532:LYS:HD3	1.96	0.48
1:B:540:ALA:O	1:B:543:ARG:CB	2.61	0.48
1:B:293:ILE:HG21	1:B:770:GLY:HA3	1.96	0.48
1:B:793:LEU:C	1:B:795:GLN:H	2.17	0.48
1:A:1032:GLN:HE21	1:A:1055:GLU:HB2	1.79	0.48
1:A:158:TRP:C	1:A:158:TRP:CD1	2.87	0.48
1:A:189:PHE:O	1:A:190:PHE:C	2.52	0.48
1:A:479:THR:OG1	1:A:482:GLU:HG2	2.13	0.48
1:A:749:ASN:ND2	1:A:749:ASN:C	2.67	0.48
1:A:861:VAL:O	1:A:862:PRO:C	2.51	0.48
1:A:886:LEU:HD12	1:A:887:GLU:N	2.28	0.48
1:A:934:PHE:O	1:A:935:GLY:C	2.51	0.48
1:B:218:SER:CB	1:B:219:PRO:HD3	2.44	0.48
1:B:316:LEU:C	1:B:318:ILE:H	2.17	0.48
1:B:342:GLY:O	1:B:346:PRO:HD2	2.12	0.48
1:B:38:MET:O	1:B:39:PHE:C	2.52	0.48
1:B:523:ARG:CD	1:B:524:GLY:N	2.63	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:520:VAL:HG12	1:B:523:ARG:O	2.13	0.48
1:B:849:TYR:OH	1:B:976:ALA:CB	2.61	0.48
1:A:217:ILE:HG13	1:A:218:SER:H	1.78	0.48
1:A:318:ILE:HD13	1:A:327:VAL:CG1	2.44	0.48
1:A:531:GLN:O	1:A:535:ILE:HG12	2.14	0.48
1:B:128:GLN:O	1:B:131:PHE:N	2.47	0.48
1:B:393:ILE:HG13	1:B:409:LEU:HB3	1.95	0.48
1:B:783:ARG:HG2	1:B:783:ARG:HH11	1.77	0.48
1:A:1029:GLY:O	1:A:1031:VAL:N	2.47	0.48
1:A:1217:ALA:O	1:A:1221:ARG:HD3	2.14	0.48
1:A:140:ILE:HG13	1:A:179:ASN:HB2	1.95	0.48
1:A:197:PHE:O	1:A:201:ILE:HG12	2.13	0.48
1:A:257:ILE:HD13	1:A:257:ILE:O	2.12	0.48
1:A:506:TYR:O	1:A:510:MET:HG2	2.14	0.48
1:A:538:ALA:O	1:A:541:LEU:HB3	2.13	0.48
1:A:727:ILE:HD11	1:A:753:LEU:CG	2.44	0.48
1:A:711:ILE:CD1	1:A:832:ILE:HG21	2.28	0.48
1:A:923:PRO:HA	1:A:926:ASN:HB3	1.96	0.48
1:B:1032:GLN:HE21	1:B:1055:GLU:HB2	1.78	0.48
1:B:1255:GLN:HG2	1:B:1259:GLN:HE22	1.78	0.48
1:B:484:ILE:O	1:B:487:GLY:N	2.46	0.48
1:B:532:LYS:O	1:B:533:GLN:C	2.52	0.48
1:B:533:GLN:O	1:B:536:ALA:HB3	2.14	0.48
1:B:730:LYS:O	1:B:733:GLY:N	2.46	0.48
1:B:902:THR:OG1	1:B:908:ARG:HD3	2.14	0.48
1:B:908:ARG:N	1:B:908:ARG:CD	2.77	0.48
1:A:1056:VAL:HG13	1:A:1056:VAL:O	2.14	0.47
1:A:1092:LEU:O	1:A:1093:ASP:HB3	2.14	0.47
1:A:1020:GLN:NE2	1:A:1104:TRP:CE3	2.77	0.47
1:A:175:VAL:CG1	1:A:176:SER:H	2.27	0.47
1:A:386:GLY:HA3	1:A:450:ASP:CA	2.39	0.47
1:A:773:PHE:C	1:A:773:PHE:CD1	2.87	0.47
1:A:835:ASN:O	1:A:836:ILE:C	2.52	0.47
1:A:907:THR:C	1:A:908:ARG:NE	2.60	0.47
1:A:959:LEU:O	1:A:964:LEU:HB3	2.13	0.47
1:B:1032:GLN:NE2	1:B:1055:GLU:HB2	2.29	0.47
1:B:136:ALA:O	1:B:139:GLN:HB2	2.14	0.47
1:B:311:TRP:CD1	1:B:754:LEU:HD13	2.49	0.47
1:B:550:LEU:N	1:B:550:LEU:HD12	2.28	0.47
1:B:282:ARG:HG3	1:B:782:LYS:HD3	1.96	0.47
1:A:1057:LYS:H	1:A:1060:GLN:NE2	2.12	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:188:MET:C	1:A:188:MET:SD	2.92	0.47
1:A:539:ARG:O	1:A:540:ALA:C	2.52	0.47
1:A:625:GLN:O	1:A:626:THR:HB	2.14	0.47
1:A:706:TYR:O	1:A:707:PHE:CG	2.67	0.47
1:A:734:VAL:HG11	1:A:746:GLN:HB3	1.96	0.47
1:A:861:VAL:O	1:A:864:ILE:HG13	2.14	0.47
1:A:908:ARG:N	1:A:908:ARG:HD2	2.29	0.47
1:A:910:GLN:O	1:A:913:GLU:N	2.46	0.47
1:A:948:SER:O	1:A:952:CYS:HB2	2.13	0.47
1:B:1019:THR:O	1:B:1101:ASN:N	2.43	0.47
1:B:1117:ILE:HG13	1:B:1118:LEU:N	2.30	0.47
1:B:449:ILE:HD13	1:B:449:ILE:C	2.34	0.47
1:B:479:THR:OG1	1:B:482:GLU:HG2	2.15	0.47
1:B:538:ALA:O	1:B:539:ARG:C	2.53	0.47
1:B:625:GLN:O	1:B:626:THR:HB	2.14	0.47
1:B:308:LEU:HD12	1:B:751:PHE:CE2	2.48	0.47
1:A:1117:ILE:HG13	1:A:1118:LEU:N	2.30	0.47
1:A:207:GLY:CA	1:A:211:THR:HB	2.39	0.47
1:A:270:LEU:HD23	1:A:270:LEU:N	2.17	0.47
1:A:324:ILE:HD11	1:A:327:VAL:CG1	2.45	0.47
1:A:398:PRO:O	1:A:400:ARG:N	2.46	0.47
1:A:430:SER:O	1:A:431:THR:C	2.52	0.47
1:A:464:GLU:HA	1:A:543:ARG:CZ	2.43	0.47
1:A:800:PHE:C	1:A:803:PRO:HD3	2.31	0.47
1:B:1154:ILE:CD1	1:B:1161:TYR:HE2	2.27	0.47
1:B:204:PHE:N	1:B:211:THR:OG1	2.47	0.47
1:B:285:ILE:HG22	1:B:286:LYS:HD2	1.96	0.47
1:B:397:TYR:CB	1:B:398:PRO:HD2	2.44	0.47
1:B:539:ARG:O	1:B:540:ALA:C	2.52	0.47
1:B:589:ARG:C	1:B:591:ALA:N	2.65	0.47
1:B:702:THR:C	1:B:704:TRP:N	2.67	0.47
1:A:1062:LEU:HB3	1:A:1224:ILE:HA	1.95	0.47
1:A:533:GLN:HE21	1:A:553:ALA:HB1	1.79	0.47
1:A:732:VAL:HG21	1:A:971:LEU:HG	1.97	0.47
1:A:853:LEU:HG	1:A:973:VAL:CG2	2.40	0.47
1:B:191:GLN:O	1:B:192:ALA:C	2.53	0.47
1:B:212:LEU:HD12	1:B:215:LEU:HD12	1.95	0.47
1:B:258:ARG:O	1:B:259:THR:C	2.52	0.47
1:B:279:GLU:HA	1:B:782:LYS:HZ2	1.79	0.47
1:B:282:ARG:HB3	1:B:778:GLU:CG	2.44	0.47
1:B:348:ILE:O	1:B:351:PHE:N	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:566:GLN:HA	1:B:569:LEU:CD1	2.44	0.47
1:B:795:GLN:NE2	1:B:796:ASP:H	2.11	0.47
1:B:785:ARG:NH2	1:B:815:ALA:HA	2.29	0.47
1:B:820:GLN:CB	1:B:1000:SER:HB2	2.44	0.47
1:B:886:LEU:HD12	1:B:887:GLU:N	2.30	0.47
1:B:904:VAL:CG1	1:B:905:SER:N	2.77	0.47
1:B:959:LEU:O	1:B:964:LEU:HB3	2.14	0.47
1:A:125:ALA:O	1:A:128:GLN:HG2	2.15	0.47
1:A:202:ILE:O	1:A:204:PHE:N	2.45	0.47
1:A:269:GLU:O	1:A:270:LEU:C	2.52	0.47
1:A:188:MET:HB2	1:A:347:ASN:HB3	1.96	0.47
1:A:376:LYS:NZ	1:A:377:SER:HB2	2.30	0.47
1:A:469:VAL:HG12	1:A:553:ALA:CB	2.45	0.47
1:A:928:MET:O	1:A:931:ALA:HB3	2.14	0.47
1:A:943:ALA:HA	1:A:946:TYR:HE1	1.79	0.47
1:B:1077:GLN:O	1:B:1080:GLU:HB2	2.15	0.47
1:B:1214:LEU:HD23	1:B:1214:LEU:C	2.34	0.47
1:B:121:VAL:O	1:B:122:LEU:C	2.51	0.47
1:B:157:GLY:HA2	1:B:160:ASP:CG	2.34	0.47
1:B:286:LYS:CA	1:B:289:ILE:HB	2.39	0.47
1:B:362:PHE:CA	1:B:365:ILE:HD12	2.41	0.47
1:B:432:THR:O	1:B:435:LEU:HB2	2.15	0.47
1:B:465:ILE:O	1:B:465:ILE:HG22	2.14	0.47
1:B:727:ILE:HD12	1:B:754:LEU:HB2	1.97	0.47
1:B:861:VAL:O	1:B:864:ILE:HG13	2.15	0.47
1:B:915:MET:O	1:B:918:GLN:HB2	2.14	0.47
1:B:923:PRO:HA	1:B:926:ASN:HB3	1.96	0.47
1:B:943:ALA:HA	1:B:946:TYR:CE1	2.50	0.47
1:A:1032:GLN:NE2	1:A:1055:GLU:HB2	2.29	0.47
1:A:1077:GLN:O	1:A:1080:GLU:HB2	2.15	0.47
1:A:191:GLN:O	1:A:192:ALA:C	2.53	0.47
1:A:210:LEU:C	1:A:212:LEU:N	2.65	0.47
1:A:212:LEU:HD12	1:A:215:LEU:HD12	1.96	0.47
1:A:288:ALA:C	1:A:291:ALA:HB3	2.35	0.47
1:A:295:MET:HA	1:A:295:MET:CE	2.45	0.47
1:A:62:VAL:C	1:A:65:PRO:HD2	2.35	0.47
1:A:796:ASP:O	1:A:797:VAL:HB	2.14	0.47
1:A:821:VAL:O	1:A:822:LYS:C	2.52	0.47
1:A:867:ALA:O	1:A:870:VAL:HG12	2.14	0.47
1:B:267:LYS:CA	1:B:270:LEU:HD21	2.45	0.47
1:B:290:THR:HG22	1:B:771:PHE:N	2.30	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:382:ASP:HA	1:B:461:TYR:HH	1.80	0.47
1:B:384:ILE:CG2	1:B:385:GLN:H	2.12	0.47
1:B:159:PHE:HD2	1:B:440:TYR:HH	1.62	0.47
1:A:106:GLU:OE2	1:A:109:THR:HB	2.15	0.47
1:A:1079:LEU:C	1:A:1081:ARG:H	2.17	0.47
1:A:1229:ARG:O	1:A:1231:SER:N	2.47	0.47
1:A:498:LYS:HZ3	1:A:502:GLU:CD	2.18	0.47
1:A:533:GLN:O	1:A:536:ALA:HB3	2.14	0.47
1:A:308:LEU:HD13	1:A:755:PHE:CE1	2.50	0.47
1:A:900:PHE:C	1:A:900:PHE:CD1	2.88	0.47
1:A:902:THR:OG1	1:A:908:ARG:HD3	2.15	0.47
1:B:1023:LYS:C	1:B:1025:ASN:H	2.18	0.47
1:B:1101:ASN:O	1:B:1102:VAL:C	2.53	0.47
1:B:140:ILE:HG13	1:B:179:ASN:HB2	1.95	0.47
1:B:282:ARG:C	1:B:286:LYS:HD3	2.35	0.47
1:B:55:LEU:C	1:B:55:LEU:HD23	2.35	0.47
1:B:315:SER:HB3	1:B:747:ASN:HD22	1.77	0.47
1:B:807:THR:O	1:B:811:THR:HG23	2.14	0.47
1:A:1225:VAL:O	1:A:1225:VAL:HG13	2.15	0.47
1:A:519:LEU:HD11	1:B:925:ARG:CD	2.45	0.47
1:A:784:LEU:O	1:A:785:ARG:C	2.53	0.47
1:A:786:TYR:O	1:A:787:MET:C	2.52	0.47
1:B:212:LEU:HD13	1:B:215:LEU:HD12	1.96	0.47
1:B:249:VAL:O	1:B:249:VAL:HG12	2.15	0.47
1:B:394:HIS:HB2	1:B:444:ASP:HB3	1.97	0.47
1:B:429:LYS:CD	1:B:429:LYS:N	2.74	0.47
1:B:51:LEU:O	1:B:52:VAL:C	2.52	0.47
1:B:65:PRO:C	1:B:67:MET:N	2.65	0.47
1:B:290:THR:HG21	1:B:771:PHE:HA	1.97	0.47
1:B:943:ALA:HA	1:B:946:TYR:HE1	1.79	0.47
1:B:976:ALA:O	1:B:979:PHE:HB2	2.14	0.47
1:B:992:PRO:HB2	1:B:996:LYS:HE2	1.96	0.47
1:A:144:ARG:NH1	1:A:175:VAL:HG21	2.30	0.47
1:A:332:PHE:O	1:A:335:LEU:HB3	2.14	0.47
1:A:535:ILE:O	1:A:538:ALA:HB3	2.15	0.47
1:A:796:ASP:O	1:A:797:VAL:CB	2.62	0.47
1:B:140:ILE:O	1:B:143:ILE:N	2.48	0.47
1:B:236:THR:O	1:B:239:GLU:HB2	2.15	0.47
1:B:257:ILE:HG23	1:B:258:ARG:N	2.30	0.47
1:B:320:LYS:O	1:B:323:SER:OG	2.32	0.47
1:B:479:THR:O	1:B:482:GLU:HB2	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:506:TYR:O	1:B:510:MET:HG2	2.14	0.47
1:B:554:THR:HG23	1:B:555:SER:N	2.29	0.47
1:B:779:ILE:HG13	1:B:780:LEU:H	1.79	0.47
1:B:861:VAL:O	1:B:862:PRO:C	2.50	0.47
1:A:519:LEU:CD1	1:B:925:ARG:HD3	2.45	0.47
1:A:1141:ILE:HG13	1:A:1142:VAL:N	2.30	0.47
1:A:136:ALA:O	1:A:139:GLN:HB2	2.15	0.47
1:A:943:ALA:HA	1:A:946:TYR:CE1	2.49	0.47
1:A:992:PRO:HB2	1:A:996:LYS:HZ3	1.76	0.47
1:B:1141:ILE:HG13	1:B:1142:VAL:N	2.30	0.47
1:B:1252:THR:HG23	1:B:1255:GLN:CB	2.44	0.47
1:B:183:GLY:O	1:B:186:ILE:CG1	2.57	0.47
1:B:278:GLU:O	1:B:279:GLU:C	2.53	0.47
1:B:295:MET:HA	1:B:295:MET:CE	2.45	0.47
1:B:321:GLU:O	1:B:322:TYR:C	2.54	0.47
1:B:353:ASN:O	1:B:354:ALA:C	2.53	0.47
1:B:552:GLU:HB3	1:B:555:SER:CB	2.45	0.47
1:B:732:VAL:HG21	1:B:971:LEU:HG	1.97	0.47
1:B:841:THR:O	1:B:845:ILE:HG13	2.14	0.47
1:B:892:ILE:O	1:B:893:ALA:C	2.53	0.47
1:A:100:PHE:HB2	1:A:961:THR:HG23	1.97	0.47
1:A:903:VAL:HG23	1:A:906:LEU:HD12	1.97	0.47
1:B:1056:VAL:HG13	1:B:1056:VAL:O	2.15	0.47
1:B:1122:SER:O	1:B:1125:GLU:HB2	2.15	0.47
1:B:144:ARG:NH1	1:B:175:VAL:HG21	2.30	0.47
1:B:362:PHE:HA	1:B:365:ILE:CD1	2.40	0.47
1:B:706:TYR:O	1:B:707:PHE:CG	2.67	0.47
1:B:726:VAL:HA	1:B:729:SER:OG	2.15	0.47
1:B:72:GLY:O	1:B:75:THR:N	2.48	0.47
1:B:773:PHE:CD1	1:B:773:PHE:C	2.88	0.47
1:A:1043:ARG:N	1:A:1044:PRO:CD	2.78	0.46
1:A:1249:GLU:CD	1:A:1262:ILE:HB	2.35	0.46
1:A:212:LEU:HD13	1:A:215:LEU:HD12	1.95	0.46
1:A:249:VAL:O	1:A:249:VAL:HG12	2.15	0.46
1:A:181:GLY:HA3	1:A:354:ALA:CB	2.44	0.46
1:A:484:ILE:CG2	1:A:496:ILE:CD1	2.91	0.46
1:A:554:THR:HG23	1:A:555:SER:N	2.31	0.46
1:A:849:TYR:OH	1:A:976:ALA:HB2	2.15	0.46
1:A:992:PRO:C	1:A:994:TYR:N	2.68	0.46
1:B:1127:ILE:O	1:B:1129:TYR:N	2.36	0.46
1:B:1127:ILE:C	1:B:1129:TYR:H	2.17	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:263:PHE:HD1	1:B:1188:ARG:NH2	2.14	0.46
1:B:202:ILE:CD1	1:B:203:GLY:H	2.19	0.46
1:B:314:THR:HG22	1:B:315:SER:N	2.30	0.46
1:B:538:ALA:O	1:B:541:LEU:HB3	2.15	0.46
1:B:64:LEU:HD11	1:B:945:MET:HE2	1.97	0.46
1:B:885:GLU:CB	1:B:923:PRO:HG3	2.45	0.46
1:B:882:ASP:O	1:B:886:LEU:HG	2.16	0.46
1:A:1255:GLN:O	1:A:1258:ALA:HB3	2.16	0.46
1:A:135:ALA:O	1:A:136:ALA:C	2.53	0.46
1:A:165:GLY:O	1:A:168:ASN:OD1	2.34	0.46
1:A:218:SER:CB	1:A:219:PRO:HD3	2.43	0.46
1:A:261:ILE:C	1:A:263:PHE:N	2.64	0.46
1:A:382:ASP:OD2	1:A:382:ASP:N	2.47	0.46
1:A:397:TYR:CB	1:A:398:PRO:HD2	2.46	0.46
1:A:711:ILE:CD1	1:A:832:ILE:CD1	2.94	0.46
1:A:718:GLY:HA3	1:A:837:ALA:HB2	1.97	0.46
1:A:894:THR:O	1:A:896:ALA:N	2.48	0.46
1:A:90:ASN:HB2	1:A:91:MET:HE3	1.97	0.46
1:B:1014:ILE:O	1:B:1015:ASP:CG	2.53	0.46
1:B:1216:LYS:HA	1:B:1216:LYS:CE	2.34	0.46
1:B:348:ILE:O	1:B:349:GLU:C	2.52	0.46
1:B:734:VAL:CG1	1:B:735:PHE:N	2.79	0.46
1:B:791:SER:O	1:B:795:GLN:CB	2.60	0.46
1:B:90:ASN:HB2	1:B:91:MET:HE3	1.96	0.46
1:A:1214:LEU:C	1:A:1214:LEU:HD23	2.36	0.46
1:A:210:LEU:HD23	1:A:317:VAL:CG1	2.41	0.46
1:A:236:THR:O	1:A:239:GLU:HB2	2.14	0.46
1:A:318:ILE:O	1:A:735:PHE:HZ	1.99	0.46
1:A:460:ARG:O	1:A:461:TYR:C	2.53	0.46
1:A:59:ILE:HD12	1:A:59:ILE:C	2.36	0.46
1:A:716:ILE:HG13	1:A:717:ASN:N	2.30	0.46
1:B:1137:SER:HB3	1:B:1140:GLU:HB3	1.96	0.46
1:B:536:ALA:O	1:B:537:ILE:C	2.54	0.46
1:B:604:GLU:OE1	1:B:617:ILE:HB	2.15	0.46
1:B:62:VAL:C	1:B:65:PRO:HD2	2.36	0.46
1:B:908:ARG:N	1:B:908:ARG:HD2	2.30	0.46
1:A:1092:LEU:HD23	1:A:1093:ASP:N	2.30	0.46
1:A:128:GLN:O	1:A:129:VAL:C	2.51	0.46
1:A:348:ILE:O	1:A:349:GLU:C	2.52	0.46
1:A:604:GLU:OE2	1:A:616:GLY:HA3	2.15	0.46
1:A:65:PRO:O	1:A:66:LEU:C	2.53	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:908:ARG:O	1:A:911:LYS:N	2.49	0.46
1:A:962:GLN:O	1:A:963:GLN:CB	2.63	0.46
1:B:1225:VAL:HG13	1:B:1225:VAL:O	2.14	0.46
1:B:137:GLY:O	1:B:138:ARG:C	2.54	0.46
1:B:218:SER:O	1:B:219:PRO:C	2.52	0.46
1:B:281:LYS:O	1:B:285:ILE:HB	2.15	0.46
1:B:35:VAL:HG21	1:B:355:ARG:NH2	2.29	0.46
1:B:528:SER:OG	1:B:531:GLN:HG3	2.15	0.46
1:B:578:THR:OG1	1:B:579:ILE:N	2.48	0.46
1:B:721:GLN:O	1:B:722:PRO:C	2.51	0.46
1:B:994:TYR:N	1:B:996:LYS:HZ1	2.13	0.46
1:A:1019:THR:O	1:A:1020:GLN:HB3	2.14	0.46
1:A:1080:GLU:CD	1:A:1109:LEU:HD12	2.36	0.46
1:A:308:LEU:HD12	1:A:751:PHE:CE2	2.51	0.46
1:A:353:ASN:O	1:A:354:ALA:C	2.53	0.46
1:A:35:VAL:HA	1:A:359:TYR:CD2	2.50	0.46
1:A:38:MET:O	1:A:39:PHE:C	2.54	0.46
1:A:428:GLY:O	1:A:432:THR:HG23	2.16	0.46
1:A:532:LYS:O	1:A:533:GLN:C	2.53	0.46
1:A:604:GLU:OE1	1:A:617:ILE:HB	2.14	0.46
1:A:71:PHE:CZ	1:A:328:LEU:HD11	2.51	0.46
1:A:770:GLY:HA2	1:A:773:PHE:CE2	2.50	0.46
1:A:882:ASP:O	1:A:886:LEU:HG	2.15	0.46
1:A:902:THR:CA	1:A:904:VAL:HG12	2.46	0.46
1:B:1022:LEU:O	1:B:1026:MET:HG2	2.16	0.46
1:B:214:ILE:O	1:B:215:LEU:C	2.54	0.46
1:B:311:TRP:CZ2	1:B:728:PHE:CE2	3.04	0.46
1:B:386:GLY:HA3	1:B:450:ASP:CA	2.37	0.46
1:B:921:GLN:CG	1:B:922:ILE:HD12	2.44	0.46
1:B:969:ASN:O	1:B:972:LEU:HB2	2.15	0.46
1:A:1093:ASP:OD2	1:A:1093:ASP:C	2.53	0.46
1:A:137:GLY:O	1:A:138:ARG:C	2.53	0.46
1:A:257:ILE:HG23	1:A:258:ARG:N	2.30	0.46
1:A:730:LYS:HZ3	1:A:750:LEU:HD21	1.80	0.46
1:A:841:THR:O	1:A:845:ILE:HG13	2.15	0.46
1:B:1043:ARG:N	1:B:1044:PRO:CD	2.79	0.46
1:B:1092:LEU:HD23	1:B:1093:ASP:N	2.30	0.46
1:B:1092:LEU:O	1:B:1093:ASP:HB3	2.16	0.46
1:B:266:GLN:HB2	1:B:270:LEU:CD2	2.46	0.46
1:B:270:LEU:CD2	1:B:270:LEU:H	2.16	0.46
1:B:288:ALA:C	1:B:291:ALA:HB3	2.35	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:59:ILE:HD12	1:B:59:ILE:C	2.36	0.46
1:B:749:ASN:C	1:B:749:ASN:ND2	2.68	0.46
1:B:286:LYS:HE2	1:B:778:GLU:HG3	1.97	0.46
1:B:800:PHE:HA	1:B:803:PRO:HB3	1.97	0.46
1:B:962:GLN:O	1:B:963:GLN:CB	2.63	0.46
1:A:1078:LEU:O	1:A:1081:ARG:N	2.48	0.46
1:A:1270:GLN:O	1:A:1271:ALA:C	2.53	0.46
1:B:1079:LEU:C	1:B:1081:ARG:N	2.67	0.46
1:B:1142:VAL:HG22	1:B:1161:TYR:HE1	1.80	0.46
1:B:131:PHE:CZ	1:B:185:LYS:NZ	2.75	0.46
1:B:356:GLY:O	1:B:357:ALA:C	2.54	0.46
1:B:727:ILE:HD11	1:B:753:LEU:CG	2.46	0.46
1:A:1056:VAL:HG23	1:A:1060:GLN:HE22	1.81	0.46
1:A:1154:ILE:CD1	1:A:1161:TYR:CE2	2.96	0.46
1:A:528:SER:OG	1:A:531:GLN:HG3	2.16	0.46
1:A:543:ARG:NH1	1:A:905:SER:HB3	2.31	0.46
1:B:1033:PHE:CD1	1:B:1036:VAL:HG22	2.51	0.46
1:B:207:GLY:HA3	1:B:211:THR:CA	2.44	0.46
1:B:267:LYS:HA	1:B:270:LEU:HD21	1.98	0.46
1:B:318:ILE:HD12	1:B:324:ILE:H	1.79	0.46
1:B:466:ILE:N	1:B:466:ILE:HD12	2.31	0.46
1:B:585:LEU:HD12	1:B:618:TYR:CE1	2.43	0.46
1:B:902:THR:CA	1:B:904:VAL:HG12	2.46	0.46
1:A:1252:THR:HG23	1:A:1255:GLN:CB	2.45	0.46
1:A:183:GLY:O	1:A:184:ASP:C	2.54	0.46
1:A:475:LEU:HD12	1:A:532:LYS:HG2	1.98	0.46
1:A:729:SER:CB	1:A:971:LEU:HB3	2.46	0.46
1:A:72:GLY:O	1:A:73:ASP:C	2.54	0.46
1:A:885:GLU:CB	1:A:923:PRO:HG3	2.46	0.46
1:B:1131:ASP:OD1	1:B:1134:ARG:HG3	2.15	0.46
1:B:118:GLY:HA3	1:B:946:TYR:CZ	2.50	0.46
1:B:199:GLY:HA2	1:B:334:VAL:HG23	1.97	0.46
1:B:762:SER:O	1:B:763:PHE:C	2.53	0.46
1:B:817:ASP:O	1:B:821:VAL:HG13	2.16	0.46
1:B:113:TYR:OH	1:B:950:ALA:HA	2.15	0.46
1:B:849:TYR:OH	1:B:976:ALA:HB2	2.16	0.46
1:A:1131:ASP:OD1	1:A:1134:ARG:HG3	2.15	0.46
1:A:449:ILE:C	1:A:449:ILE:HD13	2.35	0.46
1:A:549:LEU:N	1:A:549:LEU:CD1	2.79	0.46
1:A:55:LEU:O	1:A:56:ALA:C	2.53	0.46
1:A:775:LYS:O	1:A:776:ALA:C	2.54	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:817:ASP:O	1:A:821:VAL:HG13	2.15	0.46
1:B:1057:LYS:H	1:B:1060:GLN:NE2	2.13	0.46
1:B:1093:ASP:C	1:B:1093:ASP:OD2	2.55	0.46
1:B:1080:GLU:CD	1:B:1109:LEU:HD12	2.36	0.46
1:B:165:GLY:O	1:B:168:ASN:OD1	2.34	0.46
1:B:203:GLY:O	1:B:215:LEU:HD21	2.16	0.46
1:B:411:LEU:HD23	1:B:411:LEU:C	2.37	0.46
1:B:475:LEU:HD12	1:B:532:LYS:HG2	1.98	0.46
1:A:1095:LYS:CD	1:A:1095:LYS:H	2.29	0.45
1:A:1148:ALA:HB1	1:A:1179:ARG:O	2.14	0.45
1:A:1193:LEU:HB2	1:A:1223:CYS:CB	2.45	0.45
1:A:227:ILE:HG22	1:A:228:TRP:N	2.31	0.45
1:A:472:GLU:OE1	1:A:472:GLU:HA	2.15	0.45
1:A:904:VAL:CG1	1:A:905:SER:N	2.78	0.45
1:A:974:PHE:O	1:A:978:VAL:HG12	2.15	0.45
1:B:1078:LEU:C	1:B:1081:ARG:H	2.20	0.45
1:B:585:LEU:H	1:B:585:LEU:CD2	2.26	0.45
1:B:705:PRO:O	1:B:706:TYR:HB3	2.16	0.45
1:B:790:LYS:O	1:B:793:LEU:N	2.49	0.45
1:B:796:ASP:O	1:B:797:VAL:HB	2.15	0.45
1:B:851:TRP:CA	1:B:854:THR:HB	2.26	0.45
1:A:1196:ASP:HA	1:A:1226:ILE:CG1	2.47	0.45
1:A:458:ASN:HD22	1:A:459:VAL:N	2.11	0.45
1:A:489:GLU:O	1:A:491:VAL:HG12	2.16	0.45
1:A:68:MET:HA	1:A:68:MET:HE2	1.98	0.45
1:A:921:GLN:HG2	1:A:922:ILE:HD13	1.98	0.45
1:A:932:HIS:O	1:A:933:VAL:C	2.55	0.45
1:A:976:ALA:O	1:A:979:PHE:HB2	2.16	0.45
1:B:1079:LEU:C	1:B:1081:ARG:H	2.18	0.45
1:B:235:PHE:O	1:B:239:GLU:HG2	2.16	0.45
1:B:188:MET:HB2	1:B:347:ASN:HB3	1.97	0.45
1:B:394:HIS:O	1:B:443:LEU:HB3	2.17	0.45
1:B:433:VAL:O	1:B:434:GLN:C	2.54	0.45
1:B:734:VAL:HG11	1:B:746:GLN:HB3	1.98	0.45
1:B:770:GLY:HA2	1:B:773:PHE:CE2	2.50	0.45
1:B:890:GLY:O	1:B:893:ALA:HB3	2.16	0.45
1:B:908:ARG:O	1:B:911:LYS:N	2.49	0.45
1:A:345:SER:O	1:A:346:PRO:C	2.53	0.45
1:A:463:ARG:NH1	1:A:463:ARG:HG3	2.32	0.45
1:A:504:ASN:HB3	1:A:571:LYS:NZ	2.32	0.45
1:B:1150:ILE:HD13	1:B:1176:GLN:HA	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:133:CYS:HB2	1:B:931:ALA:HB1	1.98	0.45
1:B:139:GLN:O	1:B:140:ILE:C	2.54	0.45
1:B:257:ILE:HD13	1:B:257:ILE:O	2.16	0.45
1:B:381:PRO:HD2	1:B:461:TYR:CE2	2.51	0.45
1:B:478:THR:HG22	1:B:482:GLU:HG3	1.99	0.45
1:B:527:LEU:CD2	1:B:527:LEU:N	2.77	0.45
1:B:72:GLY:O	1:B:73:ASP:C	2.55	0.45
1:B:717:ASN:ND2	1:B:765:THR:CG2	2.79	0.45
1:B:821:VAL:CG2	1:B:822:LYS:N	2.80	0.45
1:B:948:SER:O	1:B:952:CYS:HB2	2.15	0.45
1:B:964:LEU:CD1	1:B:965:MET:H	2.18	0.45
1:A:1063:ALA:CB	1:A:1239:ILE:HG13	2.46	0.45
1:A:1142:VAL:HG22	1:A:1161:TYR:HE1	1.80	0.45
1:A:235:PHE:O	1:A:239:GLU:HG2	2.16	0.45
1:A:57:ALA:O	1:A:60:HIS:HB3	2.17	0.45
1:A:693:PHE:O	1:A:694:TRP:HB2	2.15	0.45
1:A:710:GLY:O	1:A:711:ILE:C	2.55	0.45
1:A:789:PHE:O	1:A:792:MET:HB2	2.16	0.45
1:A:804:LYS:HE3	1:A:804:LYS:N	2.32	0.45
1:A:820:GLN:CB	1:A:1000:SER:HB2	2.46	0.45
1:A:992:PRO:HB2	1:A:996:LYS:HE2	1.98	0.45
1:B:1036:VAL:CG1	1:B:1052:LEU:HB3	2.45	0.45
1:B:1206:SER:O	1:B:1207:GLU:C	2.55	0.45
1:B:212:LEU:C	1:B:214:ILE:N	2.66	0.45
1:B:359:TYR:O	1:B:362:PHE:HB3	2.16	0.45
1:B:580:VAL:HG22	1:B:581:ILE:N	2.31	0.45
1:B:785:ARG:O	1:B:786:TYR:C	2.54	0.45
1:B:949:TYR:HE2	1:B:977:ILE:HG21	1.82	0.45
1:A:1032:GLN:HE21	1:A:1055:GLU:CB	2.29	0.45
1:A:1020:GLN:HB3	1:A:1100:LEU:HD12	1.97	0.45
1:A:1101:ASN:OD1	1:A:1103:GLN:HB3	2.17	0.45
1:A:286:LYS:CA	1:A:289:ILE:HB	2.40	0.45
1:A:413:VAL:HG21	1:A:419:VAL:CG1	2.47	0.45
1:A:533:GLN:OE1	1:A:533:GLN:HA	2.17	0.45
1:A:578:THR:OG1	1:A:579:ILE:N	2.47	0.45
1:A:717:ASN:ND2	1:A:765:THR:CG2	2.79	0.45
1:A:907:THR:N	1:A:908:ARG:NE	2.64	0.45
1:B:114:TYR:CB	1:B:950:ALA:CB	2.95	0.45
1:B:114:TYR:HB3	1:B:950:ALA:CB	2.46	0.45
1:B:326:GLN:HE21	1:B:329:THR:HG1	1.60	0.45
1:B:390:PHE:HZ	1:B:436:MET:HG2	1.82	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:428:GLY:O	1:B:431:THR:HB	2.16	0.45
1:B:504:ASN:HB3	1:B:571:LYS:NZ	2.31	0.45
1:B:71:PHE:O	1:B:71:PHE:HD2	1.98	0.45
1:B:922:ILE:HB	1:B:923:PRO:CD	2.45	0.45
1:B:972:LEU:O	1:B:975:SER:CB	2.63	0.45
1:B:993:ASP:C	1:B:995:ALA:H	2.19	0.45
1:A:1033:PHE:CD1	1:A:1036:VAL:HG22	2.52	0.45
1:A:1036:VAL:CG1	1:A:1052:LEU:HB3	2.45	0.45
1:A:1119:PHE:O	1:A:1165:VAL:HG11	2.17	0.45
1:A:316:LEU:C	1:A:318:ILE:H	2.20	0.45
1:A:359:TYR:O	1:A:362:PHE:HB3	2.17	0.45
1:A:519:LEU:H	1:A:519:LEU:HD22	1.80	0.45
1:A:528:SER:O	1:A:529:GLY:C	2.53	0.45
1:A:762:SER:O	1:A:763:PHE:C	2.53	0.45
1:A:779:ILE:HG13	1:A:780:LEU:H	1.82	0.45
1:A:846:SER:C	1:A:849:TYR:HB2	2.37	0.45
1:A:906:LEU:C	1:A:908:ARG:HD2	2.37	0.45
1:B:114:TYR:HB3	1:B:950:ALA:HB2	1.99	0.45
1:B:269:GLU:O	1:B:270:LEU:C	2.54	0.45
1:B:318:ILE:CD1	1:B:324:ILE:H	2.29	0.45
1:B:71:PHE:CZ	1:B:328:LEU:HD11	2.52	0.45
1:B:346:PRO:O	1:B:349:GLU:HB3	2.16	0.45
1:B:535:ILE:O	1:B:536:ALA:C	2.54	0.45
1:B:690:PRO:O	1:B:691:ALA:C	2.54	0.45
1:A:152:MET:HG3	1:A:909:GLU:HG3	1.98	0.45
1:A:136:ALA:HB2	1:A:182:ILE:CG2	2.47	0.45
1:A:200:PHE:O	1:A:201:ILE:C	2.54	0.45
1:A:208:TRP:O	1:A:209:LYS:HE3	2.17	0.45
1:A:426:GLY:O	1:A:427:CYS:HB2	2.17	0.45
1:A:55:LEU:HD23	1:A:55:LEU:C	2.36	0.45
1:A:992:PRO:HB2	1:A:996:LYS:HZ1	1.79	0.45
1:B:1056:VAL:HG23	1:B:1060:GLN:HE22	1.81	0.45
1:B:1195:LEU:CD1	1:B:1195:LEU:N	2.80	0.45
1:B:140:ILE:O	1:B:141:HIS:C	2.55	0.45
1:B:322:TYR:CE2	1:B:327:VAL:HG12	2.52	0.45
1:B:472:GLU:OE1	1:B:472:GLU:HA	2.16	0.45
1:B:528:SER:O	1:B:529:GLY:C	2.55	0.45
1:B:559:THR:O	1:B:562:GLU:N	2.49	0.45
1:B:711:ILE:HG23	1:B:712:PHE:N	2.32	0.45
1:B:729:SER:CB	1:B:971:LEU:HB3	2.47	0.45
1:B:852:GLN:O	1:B:856:LEU:HB3	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:788:VAL:HG21	1:A:1004:ILE:HD11	1.98	0.45
1:A:1022:LEU:O	1:A:1022:LEU:HD22	2.17	0.45
1:A:1029:GLY:O	1:A:1031:VAL:HG23	2.16	0.45
1:A:270:LEU:HB3	1:A:789:PHE:CE1	2.52	0.45
1:A:529:GLY:HA2	1:A:532:LYS:HD3	1.97	0.45
1:A:566:GLN:HA	1:A:569:LEU:CD1	2.47	0.45
1:A:603:VAL:CG2	1:A:604:GLU:H	2.09	0.45
1:A:65:PRO:C	1:A:67:MET:N	2.67	0.45
1:A:718:GLY:CA	1:A:837:ALA:CB	2.94	0.45
1:B:1035:GLY:C	1:B:1052:LEU:O	2.55	0.45
1:B:1095:LYS:CD	1:B:1095:LYS:H	2.30	0.45
1:B:248:ALA:C	1:B:250:ALA:N	2.68	0.45
1:B:301:LEU:O	1:B:304:ALA:HB3	2.17	0.45
1:B:431:THR:O	1:B:435:LEU:HD23	2.17	0.45
1:B:792:MET:HA	1:B:795:GLN:HB2	1.98	0.45
1:B:834:GLN:O	1:B:835:ASN:O	2.35	0.45
1:A:150:ALA:O	1:A:151:ILE:C	2.55	0.45
1:A:248:ALA:C	1:A:250:ALA:N	2.71	0.45
1:A:295:MET:O	1:A:298:ALA:N	2.50	0.45
1:A:466:ILE:HD12	1:A:466:ILE:N	2.32	0.45
1:A:792:MET:HA	1:A:795:GLN:HB2	1.98	0.45
1:A:812:THR:O	1:A:813:ARG:C	2.54	0.45
1:B:1037:VAL:HA	1:B:1049:LEU:O	2.16	0.45
1:B:175:VAL:CG1	1:B:176:SER:N	2.79	0.45
1:B:366:ASP:O	1:B:367:ASN:C	2.55	0.45
1:B:531:GLN:O	1:B:532:LYS:C	2.55	0.45
1:B:68:MET:HA	1:B:68:MET:HE1	1.97	0.45
1:B:711:ILE:CD1	1:B:832:ILE:CD1	2.94	0.45
1:B:820:GLN:HG3	1:B:1000:SER:HB2	1.98	0.45
1:B:286:LYS:HE3	1:B:822:LYS:HZ1	1.81	0.45
1:A:1094:GLY:O	1:A:1095:LYS:O	2.35	0.45
1:A:314:THR:HG22	1:A:315:SER:N	2.31	0.45
1:A:322:TYR:CE2	1:A:327:VAL:HG12	2.52	0.45
1:A:389:GLU:OE1	1:A:412:LYS:HB2	2.16	0.45
1:A:734:VAL:CG1	1:A:735:PHE:N	2.79	0.45
1:A:810:LEU:O	1:A:811:THR:C	2.55	0.45
1:B:1248:LYS:CG	1:B:1262:ILE:HD12	2.46	0.45
1:B:549:LEU:N	1:B:549:LEU:CD1	2.79	0.45
1:B:716:ILE:HG13	1:B:717:ASN:N	2.30	0.45
1:B:728:PHE:O	1:B:732:VAL:HG22	2.17	0.45
1:B:903:VAL:HG23	1:B:906:LEU:HD12	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:140:ILE:O	1:A:143:ILE:N	2.50	0.44
1:A:132:TRP:HB2	1:A:186:ILE:HG12	1.99	0.44
1:A:214:ILE:O	1:A:215:LEU:C	2.56	0.44
1:A:278:GLU:O	1:A:282:ARG:NH1	2.49	0.44
1:A:35:VAL:HG21	1:A:355:ARG:NH2	2.29	0.44
1:A:370:SER:OG	1:A:374:PHE:CD1	2.65	0.44
1:A:388:LEU:N	1:A:388:LEU:CD1	2.80	0.44
1:A:52:VAL:O	1:A:53:GLY:C	2.53	0.44
1:A:693:PHE:O	1:A:693:PHE:CD1	2.70	0.44
1:B:1064:LEU:HB3	1:B:1226:ILE:HA	1.98	0.44
1:B:270:LEU:HD23	1:B:270:LEU:N	2.17	0.44
1:B:326:GLN:O	1:B:327:VAL:C	2.55	0.44
1:B:50:MET:O	1:B:51:LEU:C	2.55	0.44
1:B:537:ILE:O	1:B:540:ALA:N	2.51	0.44
1:B:899:ASN:HA	1:B:901:ARG:CZ	2.47	0.44
1:B:913:GLU:CA	1:B:913:GLU:OE2	2.64	0.44
1:B:972:LEU:HA	1:B:975:SER:OG	2.18	0.44
1:A:1037:VAL:HG22	1:A:1087:ALA:HB3	1.99	0.44
1:A:1156:SER:O	1:A:1157:LEU:O	2.35	0.44
1:A:1178:GLN:HA	1:A:1178:GLN:OE1	2.17	0.44
1:A:303:TYR:O	1:A:306:TYR:N	2.50	0.44
1:A:404:GLN:O	1:A:404:GLN:HG2	2.18	0.44
1:A:464:GLU:C	1:A:466:ILE:H	2.20	0.44
1:A:580:VAL:HG22	1:A:581:ILE:N	2.32	0.44
1:A:721:GLN:HG3	1:A:979:PHE:CE1	2.51	0.44
1:A:788:VAL:O	1:A:789:PHE:C	2.54	0.44
1:A:821:VAL:C	1:A:823:GLY:N	2.69	0.44
1:B:1179:ARG:O	1:B:1182:ILE:HB	2.18	0.44
1:B:136:ALA:HB2	1:B:182:ILE:CG2	2.47	0.44
1:B:314:THR:HG23	1:B:327:VAL:CG2	2.42	0.44
1:B:463:ARG:NH1	1:B:463:ARG:HG3	2.32	0.44
1:B:974:PHE:CB	2:B:6004:2J8:SE2	3.09	0.44
1:B:800:PHE:C	1:B:803:PRO:HD3	2.35	0.44
1:A:1027:LEU:CD1	1:A:1027:LEU:N	2.81	0.44
1:A:109:THR:O	1:A:113:TYR:HB3	2.17	0.44
1:A:1150:ILE:HD13	1:A:1176:GLN:HA	1.99	0.44
1:A:131:PHE:CZ	1:A:186:ILE:HG22	2.53	0.44
1:A:175:VAL:CG1	1:A:176:SER:N	2.76	0.44
1:A:308:LEU:HA	1:A:751:PHE:HE2	1.81	0.44
1:A:147:PHE:CG	1:A:365:ILE:HG12	2.52	0.44
1:A:471:GLN:OE1	1:A:472:GLU:N	2.46	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:732:VAL:O	1:A:736:THR:HG23	2.18	0.44
1:A:764:ILE:HG22	1:A:768:LEU:HD23	2.00	0.44
1:A:257:ILE:HG13	1:A:800:PHE:CD2	2.52	0.44
1:A:894:THR:HA	1:A:897:ILE:HD11	1.97	0.44
1:B:1063:ALA:CB	1:B:1239:ILE:HG13	2.46	0.44
1:B:1119:PHE:O	1:B:1165:VAL:HG11	2.16	0.44
1:B:1217:ALA:O	1:B:1221:ARG:HD3	2.16	0.44
1:B:174:ASP:O	1:B:175:VAL:C	2.54	0.44
1:B:210:LEU:C	1:B:212:LEU:N	2.66	0.44
1:B:506:TYR:O	1:B:509:ILE:HG13	2.17	0.44
1:B:509:ILE:HD13	1:B:516:PHE:CE1	2.52	0.44
1:B:519:LEU:HD22	1:B:519:LEU:H	1.82	0.44
1:B:537:ILE:O	1:B:539:ARG:N	2.51	0.44
1:B:539:ARG:O	1:B:542:VAL:N	2.50	0.44
1:B:836:ILE:O	1:B:837:ALA:C	2.55	0.44
1:B:846:SER:C	1:B:849:TYR:HB2	2.37	0.44
1:B:849:TYR:CD1	1:B:854:THR:HA	2.44	0.44
1:B:907:THR:C	1:B:908:ARG:NE	2.59	0.44
1:A:1011:THR:O	1:A:1012:PRO:C	2.55	0.44
1:A:1023:LYS:HD2	1:A:1095:LYS:NZ	2.32	0.44
1:A:1128:ALA:HB2	1:A:1141:ILE:CG2	2.38	0.44
1:A:510:MET:SD	1:A:515:GLN:OE1	2.76	0.44
1:A:509:ILE:HD13	1:A:516:PHE:CE1	2.52	0.44
1:A:609:ASP:O	1:A:613:ARG:HB2	2.18	0.44
1:A:899:ASN:HA	1:A:901:ARG:CZ	2.47	0.44
1:A:996:LYS:N	1:A:996:LYS:HD3	2.12	0.44
1:B:1038:PHE:CD1	1:B:1039:ASN:N	2.85	0.44
1:B:1101:ASN:OD1	1:B:1103:GLN:HB3	2.18	0.44
1:B:132:TRP:HB2	1:B:186:ILE:HG12	1.99	0.44
1:B:282:ARG:HD3	1:B:286:LYS:HZ3	1.82	0.44
1:B:543:ARG:NH1	1:B:905:SER:CB	2.76	0.44
1:B:718:GLY:HA3	1:B:837:ALA:HB2	1.99	0.44
1:A:1033:PHE:O	1:A:1053:SER:HA	2.17	0.44
1:A:1195:LEU:O	1:A:1226:ILE:HG13	2.18	0.44
1:A:120:GLY:O	1:A:121:VAL:C	2.56	0.44
1:A:266:GLN:HB2	1:A:270:LEU:CD2	2.47	0.44
1:A:406:LEU:HD11	1:A:432:THR:HG22	1.97	0.44
1:A:536:ALA:O	1:A:537:ILE:O	2.36	0.44
1:A:468:VAL:CG2	1:A:549:LEU:HD13	2.47	0.44
1:A:791:SER:O	1:A:795:GLN:CB	2.62	0.44
1:A:821:VAL:CG2	1:A:822:LYS:N	2.80	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:286:LYS:CE	1:A:822:LYS:HZ2	2.30	0.44
1:A:921:GLN:HG2	1:A:922:ILE:HD12	1.99	0.44
1:A:972:LEU:HA	1:A:975:SER:OG	2.18	0.44
1:B:1156:SER:O	1:B:1157:LEU:O	2.36	0.44
1:B:239:GLU:O	1:B:243:TYR:HB2	2.17	0.44
1:B:39:PHE:CZ	1:B:178:ILE:HG23	2.53	0.44
1:B:431:THR:O	1:B:432:THR:C	2.55	0.44
1:B:764:ILE:HG22	1:B:768:LEU:HD23	2.00	0.44
1:B:788:VAL:O	1:B:791:SER:HB2	2.18	0.44
1:B:938:PHE:O	1:B:941:THR:N	2.50	0.44
1:B:974:PHE:CE2	1:B:978:VAL:HB	2.53	0.44
1:A:1038:PHE:CD1	1:A:1039:ASN:N	2.86	0.44
1:A:1114:GLN:OE1	1:A:1197:GLU:HB2	2.17	0.44
1:A:1204:THR:HG23	1:A:1205:GLU:N	2.33	0.44
1:A:174:ASP:O	1:A:175:VAL:C	2.54	0.44
1:A:411:LEU:HD23	1:A:411:LEU:C	2.38	0.44
1:A:431:THR:O	1:A:434:GLN:HB3	2.18	0.44
1:A:559:THR:O	1:A:562:GLU:N	2.51	0.44
1:A:585:LEU:N	1:A:585:LEU:HD22	2.31	0.44
1:A:279:GLU:HG2	1:A:782:LYS:CD	2.47	0.44
1:A:915:MET:O	1:A:918:GLN:HB2	2.17	0.44
1:B:1032:GLN:HE21	1:B:1055:GLU:CB	2.28	0.44
1:B:113:TYR:C	1:B:113:TYR:CD1	2.90	0.44
1:B:398:PRO:O	1:B:400:ARG:N	2.47	0.44
1:B:409:LEU:C	1:B:409:LEU:HD13	2.38	0.44
1:B:55:LEU:O	1:B:56:ALA:C	2.55	0.44
1:B:727:ILE:HG22	1:B:728:PHE:N	2.33	0.44
1:B:78:PHE:HZ	1:B:967:PHE:O	2.01	0.44
1:B:718:GLY:CA	1:B:837:ALA:CB	2.95	0.44
1:B:932:HIS:O	1:B:933:VAL:C	2.54	0.44
1:B:977:ILE:O	1:B:980:GLY:N	2.50	0.44
1:A:1027:LEU:CD1	1:A:1027:LEU:H	2.30	0.44
1:A:1030:ASN:HA	1:A:1056:VAL:O	2.17	0.44
1:A:1014:ILE:CD1	1:A:1106:ARG:HH12	2.27	0.44
1:A:112:TYR:CD2	1:A:112:TYR:N	2.85	0.44
1:A:247:GLY:O	1:A:250:ALA:HB3	2.17	0.44
1:A:438:ARG:CZ	1:A:455:ARG:HA	2.48	0.44
1:A:833:PHE:CG	1:A:834:GLN:N	2.86	0.44
1:A:967:PHE:CD2	1:A:967:PHE:N	2.86	0.44
1:B:1202:LEU:HG	1:B:1203:ASP:N	2.21	0.44
1:B:1196:ASP:HA	1:B:1226:ILE:CG1	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1249:GLU:CD	1:B:1262:ILE:HB	2.37	0.44
1:B:150:ALA:O	1:B:153:ASN:N	2.41	0.44
1:B:282:ARG:HA	1:B:282:ARG:HD3	1.81	0.44
1:B:361:VAL:O	1:B:365:ILE:CD1	2.63	0.44
1:B:432:THR:O	1:B:433:VAL:C	2.55	0.44
1:B:460:ARG:O	1:B:461:TYR:C	2.54	0.44
1:B:52:VAL:O	1:B:53:GLY:C	2.55	0.44
1:B:468:VAL:CG2	1:B:549:LEU:HD13	2.47	0.44
1:B:688:VAL:HB	1:B:1006:ARG:HH22	1.82	0.44
1:B:71:PHE:CD2	1:B:71:PHE:C	2.91	0.44
1:B:885:GLU:HB3	1:B:923:PRO:CG	2.48	0.44
1:B:957:ALA:O	1:B:958:TYR:C	2.56	0.44
1:B:81:VAL:HG13	1:B:99:MET:HG3	2.00	0.44
1:A:1023:LYS:HD2	1:A:1095:LYS:CE	2.48	0.44
1:A:1195:LEU:CD1	1:A:1195:LEU:N	2.81	0.44
1:A:258:ARG:O	1:A:261:ILE:N	2.51	0.44
1:A:267:LYS:HB3	1:A:790:LYS:HE3	1.99	0.44
1:A:282:ARG:HA	1:A:282:ARG:HD3	1.82	0.44
1:A:303:TYR:O	1:A:306:TYR:CB	2.60	0.44
1:A:449:ILE:HG21	1:A:457:ILE:HD13	2.00	0.44
1:A:476:PHE:O	1:A:520:VAL:HB	2.18	0.44
1:A:711:ILE:O	1:A:714:ALA:HB3	2.17	0.44
1:A:726:VAL:HA	1:A:729:SER:OG	2.18	0.44
1:A:925:ARG:HG2	1:B:514:HIS:ND1	2.33	0.44
1:A:974:PHE:CE2	1:A:978:VAL:HB	2.52	0.44
1:B:1252:THR:CG2	1:B:1255:GLN:HB2	2.47	0.44
1:B:227:ILE:HG22	1:B:228:TRP:N	2.32	0.44
1:B:280:ALA:C	1:B:282:ARG:H	2.21	0.44
1:B:431:THR:HG22	1:B:435:LEU:HD23	1.99	0.44
1:B:449:ILE:HG21	1:B:457:ILE:HD13	2.00	0.44
1:B:510:MET:SD	1:B:515:GLN:OE1	2.76	0.44
1:B:689:PRO:N	1:B:690:PRO:CD	2.81	0.44
1:B:788:VAL:HG21	1:B:1004:ILE:HD11	1.99	0.44
1:A:1049:LEU:HD11	1:A:1052:LEU:HD22	2.00	0.44
1:A:218:SER:O	1:A:219:PRO:C	2.56	0.44
1:A:214:ILE:HA	1:A:331:PHE:CE2	2.53	0.44
1:A:147:PHE:CE2	1:A:365:ILE:HG12	2.53	0.44
1:A:39:PHE:CZ	1:A:178:ILE:HG23	2.53	0.44
1:A:927:ALA:HA	1:A:930:LYS:HG2	1.99	0.44
1:A:969:ASN:C	1:A:969:ASN:HD22	2.15	0.44
1:A:969:ASN:O	1:A:972:LEU:HB2	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:112:TYR:CD2	1:B:112:TYR:N	2.86	0.44
1:B:208:TRP:O	1:B:209:LYS:HG2	2.18	0.44
1:B:255:ALA:C	1:B:257:ILE:N	2.71	0.44
1:B:476:PHE:O	1:B:520:VAL:HB	2.18	0.44
1:B:751:PHE:CG	1:B:752:SER:N	2.86	0.44
1:A:113:TYR:CD1	1:A:113:TYR:C	2.91	0.43
1:A:1059:GLY:HA2	1:A:1222:THR:N	2.33	0.43
1:A:394:HIS:HB2	1:A:444:ASP:HB3	1.99	0.43
1:A:589:ARG:C	1:A:591:ALA:N	2.62	0.43
1:A:711:ILE:HG23	1:A:712:PHE:N	2.33	0.43
1:B:1064:LEU:HD13	1:B:1064:LEU:C	2.38	0.43
1:B:210:LEU:HD23	1:B:317:VAL:CG1	2.41	0.43
1:B:514:HIS:HB2	1:B:518:THR:OG1	2.18	0.43
1:B:60:HIS:O	1:B:63:ALA:CB	2.65	0.43
1:B:710:GLY:O	1:B:711:ILE:C	2.55	0.43
1:B:71:PHE:HD2	1:B:71:PHE:C	2.22	0.43
1:B:777:GLY:HA3	1:B:822:LYS:HG3	2.00	0.43
1:A:1037:VAL:HA	1:A:1049:LEU:O	2.18	0.43
1:A:156:ILE:HG23	1:A:439:LEU:CD1	2.48	0.43
1:A:185:LYS:NZ	1:A:186:ILE:HG22	2.33	0.43
1:A:281:LYS:O	1:A:285:ILE:HB	2.18	0.43
1:A:285:ILE:HG22	1:A:286:LYS:HD2	1.99	0.43
1:A:527:LEU:CD2	1:A:527:LEU:N	2.77	0.43
1:A:751:PHE:CG	1:A:752:SER:N	2.85	0.43
1:A:936:ILE:HG23	1:A:937:THR:H	1.83	0.43
1:B:109:THR:O	1:B:113:TYR:HB3	2.17	0.43
1:B:1154:ILE:HD12	1:B:1161:TYR:CE2	2.53	0.43
1:B:175:VAL:CG1	1:B:176:SER:H	2.31	0.43
1:B:243:TYR:CD2	1:B:243:TYR:C	2.91	0.43
1:B:388:LEU:HD22	1:B:413:VAL:HG11	2.00	0.43
1:B:509:ILE:C	1:B:509:ILE:HD12	2.39	0.43
1:B:57:ALA:O	1:B:60:HIS:HB3	2.17	0.43
1:B:753:LEU:O	1:B:754:LEU:C	2.56	0.43
1:B:148:PHE:HD2	1:B:913:GLU:OE2	2.01	0.43
1:A:1075:VAL:O	1:A:1076:VAL:C	2.55	0.43
1:A:377:SER:O	1:A:458:ASN:ND2	2.51	0.43
1:A:751:PHE:CD1	1:A:752:SER:N	2.86	0.43
1:A:755:PHE:O	1:A:756:LEU:C	2.56	0.43
1:A:912:PHE:O	1:A:913:GLU:C	2.57	0.43
1:A:993:ASP:C	1:A:995:ALA:H	2.21	0.43
1:B:1049:LEU:HD11	1:B:1052:LEU:HD22	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1056:VAL:HG21	1:B:1062:LEU:HB2	2.00	0.43
1:B:159:PHE:HD2	1:B:440:TYR:OH	2.00	0.43
1:B:533:GLN:HA	1:B:533:GLN:OE1	2.18	0.43
1:B:535:ILE:HG12	1:B:535:ILE:H	1.48	0.43
1:B:339:PHE:CZ	2:B:6003:2J8:C21	3.01	0.43
1:B:614:GLU:O	1:B:615:LYS:C	2.56	0.43
1:B:784:LEU:O	1:B:788:VAL:HG23	2.18	0.43
1:A:139:GLN:O	1:A:140:ILE:C	2.55	0.43
1:A:291:ALA:CA	1:A:294:SER:HB2	2.39	0.43
1:A:361:VAL:C	1:A:365:ILE:HD12	2.38	0.43
1:A:482:GLU:O	1:A:484:ILE:N	2.51	0.43
1:A:538:ALA:O	1:A:539:ARG:C	2.56	0.43
1:A:717:ASN:O	1:A:720:LEU:HB3	2.18	0.43
1:A:727:ILE:HD11	1:A:753:LEU:HD23	2.00	0.43
1:B:1193:LEU:HB2	1:B:1223:CYS:CB	2.48	0.43
1:B:1114:GLN:OE1	1:B:1197:GLU:HB2	2.18	0.43
1:B:1260:LYS:HA	1:B:1264:PHE:HB2	2.00	0.43
1:B:428:GLY:O	1:B:432:THR:HG23	2.19	0.43
1:B:592:ASP:O	1:B:593:VAL:HB	2.19	0.43
1:B:821:VAL:HG23	1:B:822:LYS:N	2.34	0.43
1:B:860:ILE:CG2	1:B:948:SER:HB3	2.48	0.43
1:A:1019:THR:OG1	1:A:1101:ASN:CA	2.63	0.43
1:A:1042:THR:HG23	1:A:1042:THR:O	2.18	0.43
1:A:1151:HIS:HA	1:A:1154:ILE:HB	2.01	0.43
1:A:1175:GLY:O	1:A:1179:ARG:HG3	2.17	0.43
1:A:172:THR:O	1:A:175:VAL:CG1	2.66	0.43
1:A:239:GLU:O	1:A:243:TYR:HB2	2.17	0.43
1:A:271:GLU:OE2	1:A:271:GLU:C	2.56	0.43
1:A:287:LYS:HA	1:A:290:THR:OG1	2.19	0.43
1:A:388:LEU:HD22	1:A:413:VAL:HG11	2.01	0.43
1:A:492:THR:HB	1:A:495:GLU:OE2	2.18	0.43
1:A:757:ILE:HG23	1:A:761:ILE:HD12	2.01	0.43
1:A:820:GLN:HG3	1:A:1000:SER:HB3	1.95	0.43
1:A:718:GLY:HA3	1:A:837:ALA:CB	2.48	0.43
1:A:95:ASP:O	1:A:99:MET:HB2	2.18	0.43
1:A:994:TYR:N	1:A:996:LYS:HZ1	2.16	0.43
1:B:1010:LYS:HB3	1:B:1012:PRO:HD2	2.00	0.43
1:B:132:TRP:CG	1:B:183:GLY:HA3	2.53	0.43
1:B:183:GLY:O	1:B:184:ASP:C	2.55	0.43
1:B:131:PHE:CZ	1:B:186:ILE:HG22	2.52	0.43
1:B:345:SER:O	1:B:346:PRO:C	2.56	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:387:ASN:N	1:B:450:ASP:HA	2.33	0.43
1:B:307:ALA:HB1	1:B:754:LEU:HD22	1.99	0.43
1:A:1150:ILE:O	1:A:1150:ILE:HG13	2.19	0.43
1:A:140:ILE:HG13	1:A:179:ASN:ND2	2.23	0.43
1:A:366:ASP:O	1:A:367:ASN:C	2.56	0.43
1:A:71:PHE:C	1:A:71:PHE:CD2	2.92	0.43
1:A:71:PHE:HD2	1:A:71:PHE:O	2.02	0.43
1:A:857:LEU:O	1:A:860:ILE:N	2.51	0.43
1:A:971:LEU:N	1:A:971:LEU:HD22	2.34	0.43
1:B:802:ASP:CB	1:B:1041:PRO:HB2	2.48	0.43
1:B:158:TRP:O	1:B:158:TRP:HD1	2.01	0.43
1:B:404:GLN:HG2	1:B:404:GLN:O	2.17	0.43
1:B:405:ILE:HD12	1:B:427:CYS:CB	2.48	0.43
1:B:449:ILE:O	1:B:450:ASP:C	2.56	0.43
1:B:721:GLN:HG3	1:B:979:PHE:CE1	2.51	0.43
1:B:927:ALA:HA	1:B:930:LYS:HG2	2.00	0.43
1:B:722:PRO:HG3	1:B:979:PHE:CZ	2.54	0.43
1:A:116:GLY:O	1:A:117:ILE:C	2.56	0.43
1:A:1252:THR:CG2	1:A:1255:GLN:HB2	2.48	0.43
1:A:150:ALA:O	1:A:153:ASN:N	2.43	0.43
1:A:480:ILE:C	1:A:482:GLU:N	2.71	0.43
1:A:530:GLY:O	1:A:531:GLN:C	2.56	0.43
1:A:692:SER:O	1:A:692:SER:OG	2.37	0.43
1:A:764:ILE:O	1:A:768:LEU:HD23	2.19	0.43
1:A:785:ARG:NH2	1:A:815:ALA:HA	2.30	0.43
1:B:1031:VAL:HB	1:B:1056:VAL:CG1	2.49	0.43
1:B:1123:ILE:HG12	1:B:1124:ALA:H	1.82	0.43
1:B:1150:ILE:HG13	1:B:1150:ILE:O	2.18	0.43
1:B:1196:ASP:HA	1:B:1226:ILE:HG13	2.00	0.43
1:B:271:GLU:OE2	1:B:271:GLU:C	2.57	0.43
1:B:438:ARG:CZ	1:B:455:ARG:HA	2.48	0.43
1:B:573:ARG:C	1:B:575:GLY:H	2.22	0.43
1:B:727:ILE:HD11	1:B:753:LEU:HD23	2.00	0.43
1:B:283:LEU:HA	1:B:778:GLU:OE2	2.18	0.43
1:B:886:LEU:HD12	1:B:886:LEU:C	2.39	0.43
1:B:934:PHE:HD1	1:B:934:PHE:H	1.66	0.43
1:A:1025:ASN:CG	1:A:1025:ASN:O	2.57	0.43
1:A:1123:ILE:HG12	1:A:1124:ALA:N	2.33	0.43
1:A:1250:HIS:N	1:A:1256:LEU:HD21	2.34	0.43
1:A:209:LYS:C	1:A:212:LEU:HB3	2.38	0.43
1:A:279:GLU:CG	1:A:782:LYS:HD2	2.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:369:PRO:O	1:A:370:SER:C	2.57	0.43
1:A:393:ILE:CG1	1:A:409:LEU:HB3	2.48	0.43
1:A:71:PHE:HD2	1:A:71:PHE:C	2.22	0.43
1:A:308:LEU:CA	1:A:751:PHE:HE2	2.32	0.43
1:A:114:TYR:CG	1:A:950:ALA:CB	3.01	0.43
1:B:1138:TYR:O	1:B:1141:ILE:HG12	2.18	0.43
1:B:1143:ARG:O	1:B:1146:LYS:HB2	2.18	0.43
1:B:136:ALA:CB	1:B:182:ILE:HB	2.40	0.43
1:B:320:LYS:O	1:B:321:GLU:O	2.36	0.43
1:B:389:GLU:OE1	1:B:412:LYS:HB2	2.18	0.43
1:A:170:ARG:HB2	1:A:174:ASP:CG	2.39	0.43
1:A:202:ILE:C	1:A:204:PHE:H	2.22	0.43
1:A:387:ASN:N	1:A:450:ASP:HA	2.33	0.43
1:A:429:LYS:O	1:A:432:THR:OG1	2.30	0.43
1:A:707:PHE:O	1:A:710:GLY:N	2.51	0.43
1:B:1126:ASN:O	1:B:1129:TYR:CG	2.72	0.43
1:B:247:GLY:O	1:B:250:ALA:HB3	2.18	0.43
1:B:303:TYR:O	1:B:306:TYR:N	2.51	0.43
1:B:389:GLU:O	1:B:447:VAL:HA	2.19	0.43
1:B:435:LEU:HD13	1:B:435:LEU:HA	1.82	0.43
1:B:751:PHE:CD1	1:B:752:SER:N	2.87	0.43
1:B:821:VAL:O	1:B:822:LYS:C	2.58	0.43
1:A:1114:GLN:O	1:A:1116:PRO:HD3	2.19	0.43
1:A:324:ILE:O	1:A:325:GLY:C	2.58	0.43
1:A:326:GLN:O	1:A:327:VAL:C	2.57	0.43
1:A:217:ILE:HD11	1:A:331:PHE:HE2	1.84	0.43
1:A:356:GLY:O	1:A:357:ALA:C	2.56	0.43
1:A:601:VAL:HG13	1:A:601:VAL:O	2.19	0.43
1:A:727:ILE:HG22	1:A:728:PHE:N	2.34	0.43
1:A:81:VAL:HG13	1:A:99:MET:HG3	2.01	0.43
1:B:1092:LEU:HB3	1:B:1097:ILE:CD1	2.44	0.43
1:B:1109:LEU:HD21	1:B:1188:ARG:NH1	2.33	0.43
1:B:128:GLN:O	1:B:129:VAL:C	2.56	0.43
1:B:135:ALA:O	1:B:136:ALA:C	2.57	0.43
1:B:413:VAL:HG21	1:B:419:VAL:CG1	2.48	0.43
1:B:492:THR:O	1:B:494:ASP:N	2.52	0.43
1:B:520:VAL:CG1	1:B:524:GLY:HA2	2.49	0.43
1:B:756:LEU:O	1:B:760:ILE:HB	2.17	0.43
1:B:784:LEU:O	1:B:785:ARG:C	2.56	0.43
1:B:814:LEU:HD22	1:B:814:LEU:N	2.34	0.43
1:A:1022:LEU:O	1:A:1022:LEU:HD23	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:102:LYS:CA	1:A:102:LYS:HE3	2.44	0.42
1:A:1026:MET:SD	1:A:1104:TRP:CH2	3.12	0.42
1:A:1204:THR:HG23	1:A:1206:SER:H	1.84	0.42
1:A:1229:ARG:HD2	1:A:1229:ARG:HA	1.81	0.42
1:A:282:ARG:HB3	1:A:778:GLU:CG	2.45	0.42
1:A:318:ILE:HD11	1:A:324:ILE:H	1.84	0.42
1:A:421:LEU:N	1:A:421:LEU:HD12	2.34	0.42
1:A:492:THR:O	1:A:494:ASP:N	2.52	0.42
1:A:790:LYS:O	1:A:793:LEU:N	2.52	0.42
1:A:792:MET:CE	1:A:810:LEU:HD22	2.49	0.42
1:A:857:LEU:HD12	1:A:973:VAL:HG13	1.99	0.42
1:A:896:ALA:O	1:A:897:ILE:C	2.56	0.42
1:B:1143:ARG:HG2	1:B:1143:ARG:HH11	1.83	0.42
1:B:1178:GLN:OE1	1:B:1178:GLN:HA	2.19	0.42
1:B:266:GLN:HB2	1:B:270:LEU:HD21	2.01	0.42
1:B:278:GLU:O	1:B:282:ARG:NH1	2.52	0.42
1:B:393:ILE:CG1	1:B:409:LEU:HB3	2.49	0.42
1:B:492:THR:HB	1:B:495:GLU:OE2	2.18	0.42
1:B:484:ILE:CG2	1:B:542:VAL:HG21	2.46	0.42
1:B:54:THR:O	1:B:57:ALA:HB3	2.18	0.42
1:B:857:LEU:O	1:B:860:ILE:N	2.52	0.42
1:B:936:ILE:HG23	1:B:937:THR:H	1.83	0.42
1:B:967:PHE:N	1:B:967:PHE:CD2	2.86	0.42
1:A:1064:LEU:C	1:A:1064:LEU:HD13	2.39	0.42
1:A:1117:ILE:O	1:A:1184:ARG:NH2	2.53	0.42
1:A:1143:ARG:HH11	1:A:1143:ARG:HG2	1.84	0.42
1:A:1202:LEU:HG	1:A:1203:ASP:N	2.22	0.42
1:A:346:PRO:O	1:A:349:GLU:HB3	2.18	0.42
1:A:389:GLU:O	1:A:447:VAL:HA	2.19	0.42
1:A:402:GLU:OE2	1:A:402:GLU:CA	2.67	0.42
1:A:536:ALA:O	1:A:537:ILE:C	2.58	0.42
1:A:686:GLU:HB2	1:A:687:ASP:H	1.61	0.42
1:A:705:PRO:O	1:A:706:TYR:HB3	2.19	0.42
1:A:810:LEU:O	1:A:813:ARG:N	2.52	0.42
1:A:722:PRO:CB	1:A:841:THR:HB	2.50	0.42
1:A:722:PRO:HG3	1:A:979:PHE:CZ	2.54	0.42
1:A:993:ASP:O	1:A:994:TYR:HB3	2.18	0.42
1:A:827:SER:OG	1:A:994:TYR:HD2	2.02	0.42
1:B:120:GLY:O	1:B:121:VAL:C	2.56	0.42
1:B:140:ILE:HG13	1:B:179:ASN:ND2	2.23	0.42
1:B:185:LYS:NZ	1:B:186:ILE:HG22	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:200:PHE:O	1:B:201:ILE:C	2.57	0.42
1:B:304:ALA:CA	1:B:758:LEU:HD23	2.49	0.42
1:B:304:ALA:O	1:B:307:ALA:HB3	2.19	0.42
1:B:482:GLU:O	1:B:484:ILE:N	2.52	0.42
1:B:492:THR:C	1:B:494:ASP:H	2.23	0.42
1:B:473:PRO:HB3	1:B:533:GLN:CA	2.48	0.42
1:B:717:ASN:O	1:B:720:LEU:HB3	2.18	0.42
1:B:986:GLN:C	1:B:988:SER:H	2.23	0.42
1:B:827:SER:OG	1:B:994:TYR:HD2	2.02	0.42
1:A:1026:MET:HE2	1:A:1095:LYS:HD3	2.01	0.42
1:A:1153:PHE:O	1:A:1157:LEU:HD23	2.19	0.42
1:A:1196:ASP:HA	1:A:1226:ILE:HG13	1.99	0.42
1:A:140:ILE:O	1:A:141:HIS:C	2.57	0.42
1:A:381:PRO:O	1:A:461:TYR:OH	2.33	0.42
1:A:449:ILE:HD13	1:A:450:ASP:HB2	2.01	0.42
1:A:535:ILE:O	1:A:536:ALA:C	2.58	0.42
1:A:708:VAL:CG1	1:A:709:VAL:N	2.83	0.42
1:A:722:PRO:HB2	1:A:841:THR:HG21	2.01	0.42
1:A:892:ILE:CG1	1:A:916:TYR:HE1	2.32	0.42
1:B:1081:ARG:O	1:B:1081:ARG:HG2	2.19	0.42
1:B:346:PRO:O	1:B:347:ASN:C	2.57	0.42
1:B:375:SER:HB2	1:B:376:LYS:NZ	2.33	0.42
1:B:732:VAL:O	1:B:736:THR:HG23	2.19	0.42
1:B:718:GLY:HA3	1:B:837:ALA:CB	2.49	0.42
1:B:83:ASN:HD22	1:B:83:ASN:HA	1.53	0.42
1:B:912:PHE:O	1:B:913:GLU:C	2.58	0.42
1:B:860:ILE:HG21	1:B:948:SER:HB3	2.01	0.42
1:B:964:LEU:CD1	1:B:965:MET:N	2.72	0.42
1:B:971:LEU:HD22	1:B:971:LEU:N	2.34	0.42
1:B:972:LEU:CD1	1:B:972:LEU:H	2.31	0.42
1:A:1035:GLY:C	1:A:1052:LEU:O	2.57	0.42
1:A:1023:LYS:HD2	1:A:1095:LYS:HE2	2.01	0.42
1:A:278:GLU:O	1:A:279:GLU:C	2.57	0.42
1:A:293:ILE:HG22	1:A:766:PHE:HB3	2.01	0.42
1:A:217:ILE:HD11	1:A:331:PHE:CE2	2.55	0.42
1:A:214:ILE:HG12	1:A:331:PHE:CG	2.53	0.42
1:A:409:LEU:HD13	1:A:409:LEU:C	2.39	0.42
1:A:457:ILE:CD1	1:A:462:LEU:HD13	2.50	0.42
1:A:50:MET:O	1:A:51:LEU:C	2.56	0.42
1:A:539:ARG:O	1:A:542:VAL:N	2.52	0.42
1:A:708:VAL:O	1:A:709:VAL:C	2.58	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:718:GLY:CA	1:A:837:ALA:HB2	2.50	0.42
1:A:885:GLU:HB3	1:A:923:PRO:CG	2.49	0.42
1:A:897:ILE:O	1:A:898:GLU:C	2.57	0.42
1:A:987:VAL:O	1:A:987:VAL:HG22	2.19	0.42
1:B:1050:GLN:HG2	1:B:1245:GLY:CA	2.49	0.42
1:B:132:TRP:CD2	1:B:183:GLY:CA	3.03	0.42
1:B:433:VAL:O	1:B:436:MET:N	2.41	0.42
1:B:74:MET:SD	1:B:953:PHE:CE1	3.13	0.42
1:B:764:ILE:O	1:B:768:LEU:HD23	2.19	0.42
1:B:782:LYS:O	1:B:783:ARG:C	2.57	0.42
1:B:789:PHE:HD2	1:B:789:PHE:O	2.01	0.42
1:B:711:ILE:CD1	1:B:832:ILE:HG21	2.27	0.42
1:B:993:ASP:O	1:B:994:TYR:HB3	2.20	0.42
1:A:208:TRP:O	1:A:209:LYS:CE	2.68	0.42
1:A:369:PRO:O	1:A:370:SER:O	2.38	0.42
1:A:506:TYR:O	1:A:509:ILE:HG13	2.19	0.42
1:A:753:LEU:O	1:A:754:LEU:C	2.58	0.42
1:A:790:LYS:CB	1:A:794:ARG:NH2	2.82	0.42
1:A:836:ILE:O	1:A:837:ALA:C	2.55	0.42
1:B:212:LEU:O	1:B:214:ILE:N	2.52	0.42
1:B:357:ALA:O	1:B:361:VAL:HG13	2.19	0.42
1:B:388:LEU:N	1:B:388:LEU:CD1	2.81	0.42
1:B:535:ILE:O	1:B:538:ALA:HB3	2.20	0.42
1:B:757:ILE:HG23	1:B:761:ILE:HD12	2.02	0.42
1:B:792:MET:CE	1:B:810:LEU:HD22	2.49	0.42
1:B:859:ALA:O	1:B:863:ILE:CG1	2.60	0.42
1:A:114:TYR:O	1:A:115:THR:C	2.55	0.42
1:A:1263:TYR:O	1:A:1266:MET:HB2	2.20	0.42
1:A:132:TRP:CG	1:A:183:GLY:HA3	2.54	0.42
1:A:727:ILE:CG2	1:A:728:PHE:N	2.83	0.42
1:A:83:ASN:HA	1:A:83:ASN:HD22	1.50	0.42
1:A:848:ILE:O	1:A:849:TYR:O	2.38	0.42
1:A:972:LEU:H	1:A:972:LEU:CD1	2.33	0.42
1:B:1153:PHE:HA	1:B:1157:LEU:HD23	2.01	0.42
1:B:464:GLU:C	1:B:466:ILE:H	2.22	0.42
1:B:47:ARG:O	1:B:48:LEU:C	2.57	0.42
1:A:357:ALA:O	1:A:361:VAL:HG13	2.19	0.42
1:A:584:ARG:O	1:A:585:LEU:C	2.57	0.42
1:A:727:ILE:HD12	1:A:754:LEU:HA	2.01	0.42
1:A:821:VAL:HG23	1:A:822:LYS:N	2.34	0.42
1:A:860:ILE:CG2	1:A:948:SER:HB3	2.50	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:732:VAL:CG2	1:A:971:LEU:HG	2.50	0.42
1:B:1153:PHE:O	1:B:1157:LEU:HD23	2.20	0.42
1:B:75:THR:HB	1:B:326:GLN:HE22	1.84	0.42
1:B:379:HIS:CD2	1:B:380:LYS:N	2.84	0.42
1:B:439:LEU:HB3	1:B:440:TYR:H	1.71	0.42
1:B:454:ILE:O	1:B:457:ILE:HG12	2.20	0.42
1:B:530:GLY:O	1:B:531:GLN:C	2.57	0.42
1:B:531:GLN:O	1:B:535:ILE:HG12	2.20	0.42
1:B:585:LEU:HD22	1:B:585:LEU:N	2.33	0.42
1:B:318:ILE:HG23	1:B:735:PHE:CZ	2.54	0.42
1:B:754:LEU:O	1:B:754:LEU:HD23	2.19	0.42
1:B:792:MET:O	1:B:793:LEU:C	2.58	0.42
1:B:875:LEU:C	1:B:875:LEU:HD23	2.40	0.42
1:A:1143:ARG:O	1:A:1146:LYS:HB2	2.20	0.42
1:A:1218:ARG:C	1:A:1220:GLY:H	2.23	0.42
1:A:1064:LEU:HB3	1:A:1226:ILE:HA	2.00	0.42
1:A:1241:VAL:HB	1:A:1249:GLU:HB2	2.00	0.42
1:A:270:LEU:CB	1:A:789:PHE:CE1	3.02	0.42
1:A:394:HIS:O	1:A:443:LEU:HB3	2.19	0.42
1:A:464:GLU:C	1:A:466:ILE:N	2.72	0.42
1:A:483:ASN:O	1:A:486:TYR:HB2	2.20	0.42
1:A:509:ILE:HD11	1:A:510:MET:HG2	2.01	0.42
1:A:535:ILE:HG12	1:A:535:ILE:H	1.46	0.42
1:A:711:ILE:CG1	1:A:715:ILE:HD11	2.49	0.42
1:A:730:LYS:O	1:A:731:VAL:C	2.58	0.42
1:A:934:PHE:HD1	1:A:934:PHE:H	1.66	0.42
1:A:968:GLU:O	1:A:971:LEU:HD23	2.20	0.42
1:B:1057:LYS:H	1:B:1057:LYS:CD	2.33	0.42
1:B:114:TYR:O	1:B:115:THR:C	2.58	0.42
1:B:349:GLU:O	1:B:352:ALA:HB3	2.20	0.42
1:B:376:LYS:N	1:B:376:LYS:HD2	2.35	0.42
1:B:727:ILE:HD12	1:B:754:LEU:CB	2.50	0.42
1:B:796:ASP:O	1:B:797:VAL:CB	2.67	0.42
1:B:810:LEU:O	1:B:811:THR:C	2.58	0.42
1:A:1022:LEU:HG	1:A:1104:TRP:HE1	1.74	0.42
1:A:1062:LEU:C	1:A:1062:LEU:HD13	2.40	0.42
1:A:163:ASP:O	1:A:165:GLY:N	2.50	0.42
1:A:333:SER:O	1:A:336:ILE:HB	2.19	0.42
1:A:566:GLN:CD	1:A:569:LEU:HD12	2.40	0.42
1:A:817:ASP:OD1	1:A:1000:SER:CB	2.68	0.42
1:A:827:SER:O	1:A:830:ALA:N	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:49:TYR:OH	1:B:130:SER:CB	2.60	0.42
1:B:509:ILE:HD11	1:B:510:MET:HG2	2.01	0.42
1:B:765:THR:CG2	1:B:766:PHE:N	2.83	0.42
1:B:812:THR:O	1:B:813:ARG:C	2.58	0.42
1:A:1001:ALA:O	1:A:1005:ILE:CG1	2.63	0.42
1:A:1023:LYS:C	1:A:1025:ASN:H	2.23	0.42
1:A:1026:MET:C	1:A:1028:GLU:H	2.23	0.42
1:A:1052:LEU:HG	1:A:1054:LEU:CD2	2.50	0.42
1:A:1063:ALA:HA	1:A:1225:VAL:CG1	2.49	0.42
1:A:263:PHE:CE1	1:A:1129:TYR:HB3	2.54	0.42
1:A:1131:ASP:OD2	1:A:1188:ARG:NE	2.53	0.42
1:A:173:ASP:O	1:A:177:LYS:HG3	2.19	0.42
1:A:373:SER:O	1:A:374:PHE:CB	2.44	0.42
1:A:388:LEU:HD12	1:A:388:LEU:H	1.84	0.42
1:A:421:LEU:O	1:A:581:ILE:HD12	2.20	0.42
1:A:74:MET:SD	1:A:953:PHE:HE1	2.38	0.42
1:A:307:ALA:HB1	1:A:754:LEU:HD22	1.98	0.42
1:A:827:SER:O	1:A:829:LEU:N	2.52	0.42
1:B:1042:THR:HG23	1:B:1042:THR:O	2.20	0.42
1:B:1058:LYS:HE3	1:B:1058:LYS:HB2	1.86	0.42
1:B:1239:ILE:H	1:B:1239:ILE:HD12	1.84	0.42
1:B:324:ILE:O	1:B:325:GLY:C	2.58	0.42
1:B:388:LEU:H	1:B:388:LEU:HD12	1.85	0.42
1:B:490:ASP:O	1:B:491:VAL:CB	2.68	0.42
1:B:552:GLU:HB3	1:B:555:SER:OG	2.19	0.42
1:B:609:ASP:O	1:B:613:ARG:HB2	2.20	0.42
1:B:749:ASN:O	1:B:752:SER:N	2.53	0.42
1:B:788:VAL:O	1:B:789:PHE:C	2.58	0.42
1:B:91:MET:H	1:B:91:MET:HG3	1.49	0.42
1:B:921:GLN:CG	1:B:922:ILE:N	2.81	0.42
1:A:1011:THR:HG23	1:A:1011:THR:O	2.20	0.41
1:A:1127:ILE:C	1:A:1129:TYR:H	2.17	0.41
1:A:243:TYR:CD2	1:A:243:TYR:C	2.92	0.41
1:A:282:ARG:O	1:A:283:LEU:C	2.58	0.41
1:A:303:TYR:C	1:A:303:TYR:CD1	2.93	0.41
1:A:318:ILE:CG1	1:A:735:PHE:CZ	3.03	0.41
1:A:324:ILE:C	1:A:326:GLN:H	2.22	0.41
1:A:75:THR:HB	1:A:326:GLN:HE22	1.84	0.41
1:A:534:ARG:HH21	1:A:564:VAL:CG1	2.29	0.41
1:A:789:PHE:HD2	1:A:789:PHE:O	2.03	0.41
1:B:1076:VAL:HG13	1:B:1194:LEU:CD1	2.45	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1128:ALA:HB2	1:B:1141:ILE:CG2	2.38	0.41
1:B:1147:GLU:CB	1:B:1186:LEU:HD22	2.46	0.41
1:B:1241:VAL:HB	1:B:1249:GLU:HB2	2.01	0.41
1:B:1250:HIS:N	1:B:1256:LEU:HD21	2.35	0.41
1:B:1248:LYS:HG2	1:B:1262:ILE:CD1	2.48	0.41
1:B:844:ILE:O	1:B:847:LEU:HB2	2.20	0.41
1:B:867:ALA:O	1:B:870:VAL:HG12	2.20	0.41
1:A:1052:LEU:HD11	1:A:1054:LEU:HD21	2.02	0.41
1:A:492:THR:C	1:A:494:ASP:H	2.24	0.41
1:A:814:LEU:N	1:A:814:LEU:HD22	2.34	0.41
1:A:890:GLY:O	1:A:893:ALA:HB3	2.20	0.41
1:B:1113:SER:OG	1:B:1114:GLN:N	2.53	0.41
1:B:1114:GLN:O	1:B:1116:PRO:HD3	2.19	0.41
1:B:116:GLY:O	1:B:117:ILE:C	2.58	0.41
1:B:229:ALA:HB1	1:B:299:PHE:CE2	2.54	0.41
1:B:239:GLU:HG3	1:B:288:ALA:HB2	1.98	0.41
1:B:295:MET:C	1:B:297:ALA:N	2.73	0.41
1:B:464:GLU:C	1:B:466:ILE:N	2.74	0.41
1:B:489:GLU:O	1:B:491:VAL:HG12	2.19	0.41
1:B:611:LEU:HA	1:B:614:GLU:HB3	2.02	0.41
1:B:790:LYS:CB	1:B:794:ARG:NH2	2.82	0.41
1:B:843:ILE:O	1:B:846:SER:HB2	2.20	0.41
1:B:95:ASP:O	1:B:99:MET:HB2	2.20	0.41
1:A:1081:ARG:O	1:A:1081:ARG:HG2	2.20	0.41
1:A:1113:SER:OG	1:A:1114:GLN:N	2.52	0.41
1:A:1179:ARG:O	1:A:1182:ILE:HB	2.20	0.41
1:A:128:GLN:CG	1:A:129:VAL:N	2.82	0.41
1:A:155:GLU:HB3	1:A:156:ILE:CD1	2.45	0.41
1:A:239:GLU:HB3	1:A:285:ILE:HG13	1.99	0.41
1:A:266:GLN:HB2	1:A:270:LEU:HD21	2.01	0.41
1:A:318:ILE:CD1	1:A:324:ILE:H	2.32	0.41
1:A:466:ILE:HG22	1:A:468:VAL:HG23	2.02	0.41
1:A:490:ASP:O	1:A:491:VAL:CB	2.67	0.41
1:A:604:GLU:HG3	1:A:604:GLU:H	1.52	0.41
1:A:902:THR:C	1:A:904:VAL:HG12	2.41	0.41
1:A:905:SER:O	1:A:907:THR:HG23	2.20	0.41
1:A:938:PHE:O	1:A:941:THR:N	2.53	0.41
1:B:100:PHE:O	1:B:103:LEU:HB3	2.21	0.41
1:B:1076:VAL:HG13	1:B:1194:LEU:CD2	2.46	0.41
1:B:1028:GLU:O	1:B:1093:ASP:OD1	2.39	0.41
1:B:1151:HIS:HA	1:B:1154:ILE:HB	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:150:ALA:O	1:B:151:ILE:C	2.58	0.41
1:B:354:ALA:O	1:B:358:ALA:HB2	2.20	0.41
1:B:147:PHE:CG	1:B:365:ILE:HG12	2.56	0.41
1:B:480:ILE:C	1:B:482:GLU:N	2.70	0.41
1:B:543:ARG:NH1	1:B:543:ARG:HG2	2.35	0.41
1:B:715:ILE:O	1:B:718:GLY:N	2.53	0.41
1:B:775:LYS:O	1:B:776:ALA:C	2.58	0.41
1:A:1000:SER:O	1:A:1004:ILE:HG22	2.20	0.41
1:A:1050:GLN:HG2	1:A:1245:GLY:CA	2.49	0.41
1:A:1052:LEU:HG	1:A:1053:SER:H	1.84	0.41
1:A:1031:VAL:HB	1:A:1056:VAL:CG1	2.49	0.41
1:A:1058:LYS:HB2	1:A:1058:LYS:HE3	1.87	0.41
1:A:1144:ALA:CA	1:A:1186:LEU:HD11	2.30	0.41
1:A:362:PHE:CA	1:A:365:ILE:HD12	2.47	0.41
1:A:478:THR:HG22	1:A:482:GLU:HG3	1.99	0.41
1:A:467:GLY:H	1:A:545:PRO:HG3	1.82	0.41
1:A:722:PRO:HG2	1:A:841:THR:HG1	1.82	0.41
1:A:74:MET:SD	1:A:953:PHE:CD1	3.13	0.41
1:A:762:SER:C	1:A:765:THR:HG22	2.41	0.41
1:B:1131:ASP:OD2	1:B:1188:ARG:NE	2.53	0.41
1:B:1261:GLY:N	1:B:1264:PHE:HB3	2.20	0.41
1:B:155:GLU:HB3	1:B:156:ILE:CD1	2.46	0.41
1:B:420:ALA:O	1:B:421:LEU:HD12	2.19	0.41
1:B:421:LEU:N	1:B:421:LEU:HD12	2.35	0.41
1:B:415:SER:HA	1:B:577:THR:HB	2.01	0.41
1:B:290:THR:CG2	1:B:771:PHE:HA	2.51	0.41
1:B:787:MET:O	1:B:790:LYS:HB2	2.21	0.41
1:B:722:PRO:HB2	1:B:841:THR:HG21	2.03	0.41
1:B:897:ILE:O	1:B:898:GLU:C	2.58	0.41
1:B:892:ILE:CG1	1:B:916:TYR:HE1	2.33	0.41
1:B:987:VAL:HG22	1:B:987:VAL:O	2.21	0.41
1:A:1076:VAL:HG13	1:A:1194:LEU:CD1	2.45	0.41
1:A:1138:TYR:HA	1:A:1141:ILE:HG12	2.03	0.41
1:A:1177:LYS:O	1:A:1180:ILE:N	2.53	0.41
1:A:1147:GLU:CB	1:A:1186:LEU:HD22	2.48	0.41
1:A:1202:LEU:CG	1:A:1203:ASP:N	2.81	0.41
1:A:346:PRO:O	1:A:347:ASN:C	2.54	0.41
1:A:383:ASN:O	1:A:384:ILE:HB	2.20	0.41
1:A:592:ASP:O	1:A:593:VAL:HB	2.20	0.41
1:A:756:LEU:O	1:A:760:ILE:HB	2.20	0.41
1:A:961:THR:O	1:A:962:GLN:CB	2.69	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:967:PHE:CD1	1:A:968:GLU:N	2.88	0.41
1:B:817:ASP:OD1	1:B:1000:SER:CB	2.68	0.41
1:B:1102:VAL:CG1	1:B:1103:GLN:N	2.83	0.41
1:B:170:ARG:HB2	1:B:174:ASP:CG	2.40	0.41
1:B:303:TYR:CD1	1:B:303:TYR:C	2.94	0.41
1:B:309:ALA:O	1:B:310:PHE:O	2.39	0.41
1:B:928:MET:O	1:B:931:ALA:HB3	2.20	0.41
1:B:133:CYS:HB3	1:B:931:ALA:CB	2.50	0.41
1:A:103:LEU:HB2	1:A:960:VAL:HG23	2.02	0.41
1:A:1109:LEU:N	1:A:1109:LEU:HD23	2.35	0.41
1:A:1166:GLY:O	1:A:1167:ASP:CB	2.64	0.41
1:A:1203:ASP:C	1:A:1204:THR:HG22	2.40	0.41
1:A:255:ALA:C	1:A:257:ILE:N	2.73	0.41
1:A:327:VAL:O	1:A:328:LEU:C	2.59	0.41
1:A:354:ALA:O	1:A:355:ARG:C	2.57	0.41
1:A:913:GLU:CA	1:A:913:GLU:OE2	2.63	0.41
1:A:92:SER:O	1:A:96:LYS:HG3	2.20	0.41
1:B:1078:LEU:O	1:B:1081:ARG:N	2.53	0.41
1:B:1150:ILE:O	1:B:1154:ILE:CG1	2.68	0.41
1:B:173:ASP:O	1:B:177:LYS:HG3	2.21	0.41
1:B:197:PHE:O	1:B:201:ILE:N	2.54	0.41
1:B:215:LEU:HA	1:B:219:PRO:CD	2.49	0.41
1:B:314:THR:O	1:B:316:LEU:N	2.54	0.41
1:B:327:VAL:O	1:B:328:LEU:C	2.59	0.41
1:B:727:ILE:HD11	1:B:753:LEU:HB3	2.01	0.41
1:B:896:ALA:O	1:B:897:ILE:C	2.59	0.41
1:A:1192:ILE:HA	1:A:1222:THR:O	2.21	0.41
1:A:1260:LYS:HA	1:A:1264:PHE:HB2	2.01	0.41
1:A:978:VAL:HG22	2:A:6001:2J8:H29	2.01	0.41
1:A:875:LEU:C	1:A:875:LEU:HD23	2.41	0.41
1:A:921:GLN:CG	1:A:922:ILE:N	2.84	0.41
1:A:954:ARG:HE	1:A:955:PHE:HA	1.85	0.41
1:A:973:VAL:O	1:A:974:PHE:C	2.59	0.41
1:B:1000:SER:O	1:B:1004:ILE:HG22	2.21	0.41
1:B:1052:LEU:HD11	1:B:1054:LEU:HD21	2.02	0.41
1:B:1109:LEU:N	1:B:1109:LEU:HD23	2.36	0.41
1:B:295:MET:O	1:B:298:ALA:N	2.53	0.41
1:B:358:ALA:O	1:B:362:PHE:N	2.52	0.41
1:B:449:ILE:HD13	1:B:450:ASP:HB2	2.03	0.41
1:B:387:ASN:O	1:B:450:ASP:O	2.39	0.41
1:B:718:GLY:CA	1:B:837:ALA:HB2	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:776:ALA:O	1:B:780:LEU:HG	2.21	0.41
1:B:717:ASN:HB3	1:B:833:PHE:CE1	2.56	0.41
1:B:833:PHE:CG	1:B:834:GLN:N	2.88	0.41
1:B:133:CYS:CB	1:B:931:ALA:HB1	2.50	0.41
1:B:968:GLU:O	1:B:971:LEU:HD23	2.21	0.41
1:A:1017:TYR:HB3	1:A:1018:SER:H	1.42	0.41
1:A:1056:VAL:HG21	1:A:1062:LEU:HB2	2.01	0.41
1:A:1065:VAL:HG13	1:A:1241:VAL:HG22	2.02	0.41
1:A:229:ALA:HB1	1:A:299:PHE:CE2	2.55	0.41
1:A:354:ALA:O	1:A:358:ALA:HB2	2.19	0.41
1:A:480:ILE:O	1:A:482:GLU:N	2.54	0.41
1:A:712:PHE:O	1:A:713:CYS:C	2.58	0.41
1:A:727:ILE:HD11	1:A:753:LEU:HB3	2.02	0.41
1:A:730:LYS:NZ	1:A:750:LEU:HD21	2.36	0.41
1:A:788:VAL:O	1:A:791:SER:HB2	2.21	0.41
1:A:797:VAL:CG1	1:A:798:SER:H	2.20	0.41
1:A:814:LEU:CD2	1:A:814:LEU:H	2.34	0.41
1:A:148:PHE:HB3	1:A:913:GLU:OE1	2.21	0.41
1:B:1059:GLY:HA2	1:B:1222:THR:N	2.35	0.41
1:B:402:GLU:CA	1:B:402:GLU:OE2	2.68	0.41
1:B:491:VAL:HG23	1:B:495:GLU:OE1	2.21	0.41
1:B:507:ASP:OD1	1:B:508:PHE:N	2.37	0.41
1:B:604:GLU:HG3	1:B:604:GLU:H	1.51	0.41
1:B:762:SER:O	1:B:764:ILE:N	2.54	0.41
1:B:843:ILE:HA	1:B:846:SER:CB	2.50	0.41
1:B:946:TYR:CG	1:B:947:PHE:N	2.89	0.41
1:A:1020:GLN:C	1:A:1020:GLN:OE1	2.59	0.41
1:A:1153:PHE:HA	1:A:1157:LEU:HD23	2.02	0.41
1:A:251:GLU:O	1:A:252:GLU:HB2	2.21	0.41
1:A:267:LYS:O	1:A:790:LYS:NZ	2.52	0.41
1:A:282:ARG:HD3	1:A:286:LYS:NZ	2.36	0.41
1:A:311:TRP:CA	1:A:311:TRP:CE3	3.04	0.41
1:A:39:PHE:CE2	1:A:358:ALA:HB3	2.52	0.41
1:A:358:ALA:O	1:A:362:PHE:N	2.54	0.41
1:A:438:ARG:O	1:A:439:LEU:O	2.39	0.41
1:A:531:GLN:O	1:A:532:LYS:C	2.57	0.41
1:A:415:SER:HA	1:A:577:THR:HB	2.03	0.41
1:A:614:GLU:O	1:A:615:LYS:C	2.58	0.41
1:A:722:PRO:O	1:A:725:SER:OG	2.32	0.41
1:A:713:CYS:SG	1:A:769:GLN:HB3	2.61	0.41
1:A:782:LYS:O	1:A:783:ARG:C	2.58	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:986:GLN:C	1:A:988:SER:H	2.24	0.41
1:B:1052:LEU:HG	1:B:1054:LEU:CD2	2.50	0.41
1:B:1037:VAL:HG22	1:B:1087:ALA:HB3	1.99	0.41
1:B:1108:GLN:H	1:B:1108:GLN:HE21	1.68	0.41
1:B:178:ILE:HG13	1:B:178:ILE:H	1.73	0.41
1:B:276:ASN:HD22	1:B:276:ASN:HA	1.70	0.41
1:B:308:LEU:HD13	1:B:755:PHE:CD1	2.55	0.41
1:B:356:GLY:O	1:B:358:ALA:N	2.54	0.41
1:B:457:ILE:CD1	1:B:462:LEU:HD13	2.49	0.41
1:B:730:LYS:NZ	1:B:750:LEU:HD21	2.36	0.41
1:B:778:GLU:O	1:B:779:ILE:C	2.58	0.41
1:B:789:PHE:O	1:B:792:MET:HB2	2.20	0.41
1:A:1109:LEU:HD23	1:A:1109:LEU:H	1.86	0.41
1:A:214:ILE:HG21	1:A:334:VAL:HG11	2.01	0.41
1:A:711:ILE:HD11	1:A:832:ILE:CG2	2.29	0.41
1:A:728:PHE:C	1:A:728:PHE:CD1	2.95	0.41
1:A:886:LEU:C	1:A:886:LEU:HD12	2.41	0.41
1:B:1054:LEU:HD22	1:B:1054:LEU:N	2.35	0.41
1:B:1233:ILE:HG13	1:B:1233:ILE:O	2.21	0.41
1:B:185:LYS:HE3	1:B:185:LYS:HB3	1.90	0.41
1:B:268:LYS:NZ	1:B:272:ARG:HD3	2.36	0.41
1:B:432:THR:OG1	1:B:433:VAL:N	2.53	0.41
1:B:58:ILE:CD1	1:B:58:ILE:H	2.33	0.41
1:B:757:ILE:HG22	1:B:758:LEU:N	2.35	0.41
1:B:713:CYS:SG	1:B:769:GLN:HB3	2.61	0.41
1:A:1108:GLN:H	1:A:1108:GLN:HE21	1.68	0.41
1:A:1126:ASN:O	1:A:1129:TYR:CG	2.74	0.41
1:A:1233:ILE:HG13	1:A:1233:ILE:O	2.20	0.41
1:A:318:ILE:HD12	1:A:322:TYR:O	2.21	0.41
1:A:349:GLU:O	1:A:352:ALA:HB3	2.21	0.41
1:A:364:ILE:HG22	1:A:364:ILE:O	2.20	0.41
1:A:401:LYS:O	1:A:402:GLU:C	2.59	0.41
1:A:509:ILE:HD12	1:A:509:ILE:C	2.40	0.41
1:A:541:LEU:HD13	1:A:541:LEU:C	2.41	0.41
1:A:573:ARG:C	1:A:575:GLY:H	2.22	0.41
1:A:611:LEU:HA	1:A:614:GLU:HB3	2.03	0.41
1:A:103:LEU:HD13	1:A:960:VAL:HG22	2.02	0.41
1:B:1027:LEU:HD23	1:B:1028:GLU:N	2.34	0.41
1:B:167:LEU:O	1:B:170:ARG:HG2	2.20	0.41
1:B:430:SER:O	1:B:433:VAL:HB	2.21	0.41
1:B:433:VAL:O	1:B:436:MET:HB2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:466:ILE:HG22	1:B:468:VAL:HG23	2.03	0.41
1:B:566:GLN:CD	1:B:569:LEU:HD12	2.40	0.41
1:B:722:PRO:HA	1:B:979:PHE:CE1	2.55	0.41
1:B:804:LYS:N	1:B:804:LYS:HE3	2.35	0.41
1:B:821:VAL:C	1:B:823:GLY:N	2.71	0.41
1:A:1138:TYR:O	1:A:1141:ILE:HG12	2.21	0.40
1:A:1234:GLN:O	1:A:1236:ALA:N	2.51	0.40
1:A:1267:VAL:O	1:A:1270:GLN:HB3	2.21	0.40
1:A:167:LEU:O	1:A:170:ARG:HG2	2.21	0.40
1:A:279:GLU:CG	1:A:782:LYS:CD	2.99	0.40
1:A:214:ILE:HG12	1:A:331:PHE:CD2	2.56	0.40
1:A:484:ILE:O	1:A:487:GLY:N	2.55	0.40
1:A:52:VAL:O	1:A:55:LEU:HB3	2.22	0.40
1:A:54:THR:O	1:A:57:ALA:HB3	2.22	0.40
1:A:706:TYR:O	1:A:707:PHE:CD2	2.74	0.40
1:A:729:SER:HA	1:A:971:LEU:CB	2.50	0.40
1:B:1033:PHE:O	1:B:1053:SER:HA	2.21	0.40
1:B:1065:VAL:HG13	1:B:1241:VAL:HG22	2.03	0.40
1:B:298:ALA:O	1:B:302:ILE:CG1	2.68	0.40
1:B:310:PHE:HB3	1:B:311:TRP:H	1.61	0.40
1:B:484:ILE:O	1:B:485:ARG:C	2.60	0.40
1:B:433:VAL:CG1	1:B:549:LEU:HD23	2.48	0.40
1:A:1109:LEU:HD21	1:A:1188:ARG:NH1	2.33	0.40
1:A:1218:ARG:O	1:A:1219:GLU:HB3	2.21	0.40
1:A:132:TRP:CD2	1:A:183:GLY:CA	3.04	0.40
1:A:212:LEU:O	1:A:214:ILE:N	2.55	0.40
1:A:318:ILE:HD11	1:A:324:ILE:HG12	2.02	0.40
1:A:491:VAL:HG23	1:A:495:GLU:OE1	2.21	0.40
1:A:611:LEU:HB2	1:A:618:TYR:HD2	1.86	0.40
1:A:765:THR:CG2	1:A:766:PHE:N	2.83	0.40
1:A:861:VAL:CB	1:A:862:PRO:CD	2.99	0.40
1:A:990:PHE:HB3	1:A:991:ALA:H	1.72	0.40
1:B:1071:GLY:O	1:B:1075:VAL:HG23	2.21	0.40
1:B:1173:SER:HB3	1:B:1176:GLN:HE22	1.85	0.40
1:B:1263:TYR:O	1:B:1266:MET:HB2	2.20	0.40
1:B:128:GLN:CG	1:B:129:VAL:N	2.83	0.40
1:B:258:ARG:O	1:B:261:ILE:N	2.54	0.40
1:B:324:ILE:C	1:B:326:GLN:H	2.23	0.40
1:B:404:GLN:HE21	1:B:404:GLN:HB3	1.64	0.40
1:B:473:PRO:O	1:B:532:LYS:HE2	2.22	0.40
1:B:601:VAL:O	1:B:601:VAL:HG13	2.20	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:954:ARG:C	1:B:954:ARG:CD	2.90	0.40
1:B:967:PHE:CD1	1:B:968:GLU:N	2.87	0.40
1:B:993:ASP:N	1:B:996:LYS:HZ1	2.18	0.40
1:A:1057:LYS:CD	1:A:1057:LYS:H	2.34	0.40
1:A:1026:MET:CE	1:A:1095:LYS:HD3	2.52	0.40
1:A:1261:GLY:N	1:A:1264:PHE:HB3	2.20	0.40
1:A:158:TRP:O	1:A:158:TRP:HD1	2.03	0.40
1:A:827:SER:C	1:A:829:LEU:N	2.72	0.40
1:A:930:LYS:O	1:A:931:ALA:C	2.58	0.40
1:A:977:ILE:O	1:A:980:GLY:N	2.53	0.40
1:B:1062:LEU:HD13	1:B:1062:LEU:C	2.41	0.40
1:B:1165:VAL:O	1:B:1171:GLN:HG2	2.21	0.40
1:B:188:MET:O	1:B:189:PHE:C	2.58	0.40
1:B:191:GLN:O	1:B:194:ALA:N	2.54	0.40
1:B:202:ILE:C	1:B:204:PHE:H	2.24	0.40
1:B:39:PHE:CE2	1:B:358:ALA:HB3	2.52	0.40
1:B:437:GLN:HE21	1:B:468:VAL:HG21	1.86	0.40
1:B:548:LEU:HD23	1:B:549:LEU:H	1.86	0.40
1:B:689:PRO:HG2	1:B:690:PRO:HD3	2.02	0.40
1:B:712:PHE:O	1:B:713:CYS:C	2.59	0.40
1:B:765:THR:HG23	1:B:766:PHE:H	1.84	0.40
1:B:913:GLU:CA	1:B:916:TYR:HD2	2.31	0.40
1:B:732:VAL:CG2	1:B:971:LEU:HG	2.51	0.40
1:A:791:SER:CB	1:A:1010:LYS:HE2	2.52	0.40
1:A:1083:TYR:N	1:A:1083:TYR:CD1	2.89	0.40
1:A:1157:LEU:O	1:A:1158:PRO:C	2.60	0.40
1:A:268:LYS:NZ	1:A:272:ARG:HD3	2.36	0.40
1:A:195:THR:HB	1:A:337:GLY:O	2.22	0.40
1:A:47:ARG:O	1:A:48:LEU:C	2.58	0.40
1:A:721:GLN:HB3	1:A:722:PRO:HD3	2.04	0.40
1:A:799:TRP:O	1:A:803:PRO:CA	2.70	0.40
1:A:947:PHE:HA	1:A:947:PHE:HD2	1.77	0.40
1:A:969:ASN:CA	1:A:972:LEU:HD13	2.43	0.40
1:B:146:LYS:O	1:B:150:ALA:HB2	2.21	0.40
1:B:268:LYS:C	1:B:268:LYS:HD3	2.41	0.40
1:B:282:ARG:HD3	1:B:286:LYS:NZ	2.37	0.40
1:B:534:ARG:HH21	1:B:564:VAL:CG1	2.29	0.40
1:B:778:GLU:HB3	1:B:782:LYS:HE2	2.03	0.40
1:B:990:PHE:HB3	1:B:991:ALA:H	1.72	0.40
1:A:1056:VAL:HG23	1:A:1062:LEU:HB2	2.04	0.40
1:A:395:PHE:HA	1:A:443:LEU:CB	2.52	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:404:GLN:HB3	1:A:404:GLN:HE21	1.63	0.40
1:A:472:GLU:OE1	1:A:473:PRO:HD2	2.22	0.40
1:A:476:PHE:CD2	1:A:486:TYR:HE1	2.39	0.40
1:A:727:ILE:HD12	1:A:754:LEU:CB	2.52	0.40
1:A:784:LEU:O	1:A:788:VAL:HG23	2.21	0.40
1:A:834:GLN:O	1:A:835:ASN:O	2.39	0.40
1:A:860:ILE:HG21	1:A:948:SER:HB3	2.02	0.40
1:A:946:TYR:CG	1:A:947:PHE:N	2.90	0.40
1:B:1075:VAL:O	1:B:1076:VAL:C	2.58	0.40
1:B:1083:TYR:N	1:B:1083:TYR:CD1	2.89	0.40
1:B:1234:GLN:O	1:B:1236:ALA:N	2.52	0.40
1:B:311:TRP:CA	1:B:311:TRP:CE3	3.04	0.40
1:B:429:LYS:NZ	1:B:581:ILE:HD11	2.37	0.40
1:B:480:ILE:O	1:B:482:GLU:N	2.54	0.40
1:B:607:ASN:O	1:B:608:HIS:C	2.59	0.40
1:B:708:VAL:CG1	1:B:709:VAL:N	2.83	0.40
1:B:795:GLN:CD	1:B:1012:PRO:HD3	2.42	0.40
1:B:814:LEU:H	1:B:814:LEU:CD2	2.35	0.40
1:B:852:GLN:OE1	1:B:955:PHE:O	2.39	0.40
1:B:721:GLN:HG2	1:B:982:MET:SD	2.62	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	A	1178/1284 (92%)	685 (58%)	305 (26%)	188 (16%)	0 3
1	B	1178/1284 (92%)	678 (58%)	318 (27%)	182 (15%)	0 3
All	All	2356/2568 (92%)	1363 (58%)	623 (26%)	370 (16%)	0 3

All (370) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	35	VAL
1	A	52	VAL
1	A	88	SER
1	A	131	PHE
1	A	133	CYS
1	A	134	LEU
1	A	135	ALA
1	A	155	GLU
1	A	156	ILE
1	A	164	VAL
1	A	201	ILE
1	A	208	TRP
1	A	209	LYS
1	A	267	LYS
1	A	276	ASN
1	A	310	PHE
1	A	371	ILE
1	A	374	PHE
1	A	384	ILE
1	A	385	GLN
1	A	400	ARG
1	A	439	LEU
1	A	489	GLU
1	A	491	VAL
1	A	537	ILE
1	A	553	ALA
1	A	574	GLU
1	A	590	ASN
1	A	593	VAL
1	A	731	VAL
1	A	755	PHE
1	A	757	ILE
1	A	788	VAL
1	A	797	VAL
1	A	799	TRP
1	A	835	ASN
1	A	849	TYR
1	A	901	ARG
1	A	906	LEU
1	A	909	GLU
1	A	933	VAL
1	A	963	GLN
1	A	990	PHE

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Mol	Chain	Res	Type
1	A	993	ASP
1	A	1012	PRO
1	A	1014	ILE
1	A	1020	GLN
1	A	1042	THR
1	A	1057	LYS
1	A	1093	ASP
1	A	1098	LYS
1	A	1134	ARG
1	A	1158	PRO
1	A	1244	ASN
1	B	35	VAL
1	B	52	VAL
1	B	88	SER
1	B	131	PHE
1	B	133	CYS
1	B	134	LEU
1	B	135	ALA
1	B	155	GLU
1	B	156	ILE
1	B	164	VAL
1	B	201	ILE
1	B	274	ASN
1	B	276	ASN
1	B	310	PHE
1	B	321	GLU
1	B	322	TYR
1	B	370	SER
1	B	372	ASP
1	B	400	ARG
1	B	439	LEU
1	B	489	GLU
1	B	491	VAL
1	B	537	ILE
1	B	553	ALA
1	B	574	GLU
1	B	590	ASN
1	B	593	VAL
1	B	731	VAL
1	B	755	PHE
1	B	757	ILE
1	B	797	VAL

Continued on next page...

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Mol	Chain	Res	Type
1	B	798	SER
1	B	835	ASN
1	B	849	TYR
1	B	901	ARG
1	B	906	LEU
1	B	909	GLU
1	B	933	VAL
1	B	963	GLN
1	B	990	PHE
1	B	993	ASP
1	B	1011	THR
1	B	1012	PRO
1	B	1014	ILE
1	B	1023	LYS
1	B	1042	THR
1	B	1057	LYS
1	B	1093	ASP
1	B	1134	ARG
1	B	1158	PRO
1	B	1244	ASN
1	A	34	SER
1	A	44	TRP
1	A	72	GLY
1	A	90	ASN
1	A	132	TRP
1	A	137	GLY
1	A	140	ILE
1	A	144	ARG
1	A	160	ASP
1	A	203	GLY
1	A	216	ALA
1	A	274	ASN
1	A	308	LEU
1	A	356	GLY
1	A	373	SER
1	A	404	GLN
1	A	407	LYS
1	A	408	GLY
1	A	424	ASN
1	A	521	GLY
1	A	539	ARG
1	A	620	LYS

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Mol	Chain	Res	Type
1	A	687	ASP
1	A	712	PHE
1	A	796	ASP
1	A	815	ALA
1	A	837	ALA
1	A	947	PHE
1	A	959	LEU
1	A	991	ALA
1	A	1028	GLU
1	A	1030	ASN
1	A	1095	LYS
1	A	1114	GLN
1	A	1128	ALA
1	A	1129	TYR
1	A	1130	GLY
1	A	1155	ASP
1	A	1157	LEU
1	A	1160	LYS
1	A	1198	ALA
1	A	1262	ILE
1	B	34	SER
1	B	44	TRP
1	B	72	GLY
1	B	132	TRP
1	B	140	ILE
1	B	160	ASP
1	B	190	PHE
1	B	203	GLY
1	B	216	ALA
1	B	267	LYS
1	B	308	LEU
1	B	320	LYS
1	B	356	GLY
1	B	404	GLN
1	B	408	GLY
1	B	424	ASN
1	B	521	GLY
1	B	522	GLU
1	B	539	ARG
1	B	620	LYS
1	B	712	PHE
1	B	788	VAL

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Mol	Chain	Res	Type
1	B	796	ASP
1	B	799	TRP
1	B	814	LEU
1	B	815	ALA
1	B	837	ALA
1	B	851	TRP
1	B	947	PHE
1	B	959	LEU
1	B	991	ALA
1	B	1016	SER
1	B	1024	PRO
1	B	1095	LYS
1	B	1098	LYS
1	B	1114	GLN
1	B	1128	ALA
1	B	1129	TYR
1	B	1130	GLY
1	B	1155	ASP
1	B	1198	ALA
1	B	1262	ILE
1	A	73	ASP
1	A	118	GLY
1	A	190	PHE
1	A	317	VAL
1	A	320	LYS
1	A	355	ARG
1	A	369	PRO
1	A	370	SER
1	A	434	GLN
1	A	435	LEU
1	A	522	GLU
1	A	552	GLU
1	A	703	GLU
1	A	707	PHE
1	A	758	LEU
1	A	778	GLU
1	A	794	ARG
1	A	814	LEU
1	A	833	PHE
1	A	839	LEU
1	A	908	ARG
1	A	935	GLY

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Mol	Chain	Res	Type
1	A	945	MET
1	A	965	MET
1	A	969	ASN
1	A	975	SER
1	A	995	ALA
1	A	1013	GLU
1	A	1017	TYR
1	A	1018	SER
1	A	1027	LEU
1	A	1041	PRO
1	A	1230	LEU
1	A	1235	ASN
1	B	73	ASP
1	B	90	ASN
1	B	118	GLY
1	B	137	GLY
1	B	144	ARG
1	B	208	TRP
1	B	355	ARG
1	B	373	SER
1	B	385	GLN
1	B	407	LYS
1	B	703	GLU
1	B	707	PHE
1	B	758	LEU
1	B	772	THR
1	B	778	GLU
1	B	833	PHE
1	B	839	LEU
1	B	854	THR
1	B	908	ARG
1	B	935	GLY
1	B	945	MET
1	B	965	MET
1	B	969	ASN
1	B	975	SER
1	B	1010	LYS
1	B	1015	ASP
1	B	1041	PRO
1	B	1157	LEU
1	B	1159	ASP
1	B	1160	LYS

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Mol	Chain	Res	Type
1	B	1230	LEU
1	A	152	MET
1	A	402	GLU
1	A	523	ARG
1	A	538	ALA
1	A	558	ASP
1	A	608	HIS
1	A	766	PHE
1	A	772	THR
1	A	786	TYR
1	A	806	THR
1	A	854	THR
1	A	894	THR
1	A	895	GLU
1	A	912	PHE
1	A	958	TYR
1	A	1046	ILE
1	A	1102	VAL
1	A	1156	SER
1	A	1159	ASP
1	A	1204	THR
1	B	317	VAL
1	B	369	PRO
1	B	377	SER
1	B	384	ILE
1	B	433	VAL
1	B	538	ALA
1	B	608	HIS
1	B	691	ALA
1	B	766	PHE
1	B	786	TYR
1	B	794	ARG
1	B	912	PHE
1	B	958	TYR
1	B	1013	GLU
1	B	1020	GLN
1	B	1046	ILE
1	B	1102	VAL
1	B	1156	SER
1	B	1235	ASN
1	A	218	SER
1	A	258	ARG

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Mol	Chain	Res	Type
1	A	269	GLU
1	A	352	ALA
1	A	429	LYS
1	A	559	THR
1	A	690	PRO
1	A	705	PRO
1	A	748	SER
1	A	753	LEU
1	A	793	LEU
1	A	1024	PRO
1	A	1036	VAL
1	A	1101	ASN
1	B	209	LYS
1	B	218	SER
1	B	258	ARG
1	B	352	ALA
1	B	381	PRO
1	B	402	GLU
1	B	507	ASP
1	B	558	ASP
1	B	559	THR
1	B	692	SER
1	B	705	PRO
1	B	753	LEU
1	B	894	THR
1	B	1036	VAL
1	B	1206	SER
1	A	161	VAL
1	A	280	ALA
1	A	322	TYR
1	A	507	ASP
1	A	759	GLY
1	A	897	ILE
1	A	1085	PRO
1	B	161	VAL
1	B	315	SER
1	B	523	ARG
1	B	598	ASP
1	B	759	GLY
1	B	806	THR
1	B	1019	THR
1	B	1136	VAL

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Mol	Chain	Res	Type
1	B	1168	LYS
1	A	214	ILE
1	A	545	PRO
1	A	603	VAL
1	A	689	PRO
1	A	1069	GLY
1	A	1136	VAL
1	A	1166	GLY
1	B	603	VAL
1	B	1085	PRO
1	A	381	PRO
1	B	214	ILE
1	B	897	ILE
1	B	1166	GLY
1	A	227	ILE
1	A	1047	PRO
1	A	1094	GLY
1	B	545	PRO
1	B	999	VAL
1	B	1069	GLY
1	B	1094	GLY
1	A	121	VAL
1	A	601	VAL
1	A	999	VAL
1	A	1127	ILE
1	B	116	GLY
1	B	121	VAL
1	B	227	ILE
1	B	601	VAL
1	B	1047	PRO
1	B	1127	ILE
1	A	116	GLY
1	A	831	VAL

5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	976/1065 (92%)	823 (84%)	153 (16%)	2	16
1	B	976/1065 (92%)	829 (85%)	147 (15%)	3	17
All	All	1952/2130 (92%)	1652 (85%)	300 (15%)	2	16

All (300) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	41	TYR
1	A	59	ILE
1	A	70	ILE
1	A	71	PHE
1	A	76	ASP
1	A	83	ASN
1	A	87	ASN
1	A	91	MET
1	A	93	GLU
1	A	99	MET
1	A	102	LYS
1	A	113	TYR
1	A	131	PHE
1	A	132	TRP
1	A	156	ILE
1	A	158	TRP
1	A	163	ASP
1	A	189	PHE
1	A	206	ARG
1	A	209	LYS
1	A	210	LEU
1	A	219	PRO
1	A	227	ILE
1	A	228	TRP
1	A	231	ILE
1	A	238	LYS
1	A	243	TYR
1	A	245	LYS
1	A	252	GLU
1	A	254	LEU
1	A	257	ILE
1	A	267	LYS
1	A	270	LEU
1	A	276	ASN
1	A	281	LYS

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Mol	Chain	Res	Type
1	A	282	ARG
1	A	285	ILE
1	A	295	MET
1	A	302	ILE
1	A	306	TYR
1	A	308	LEU
1	A	310	PHE
1	A	324	ILE
1	A	328	LEU
1	A	330	VAL
1	A	336	ILE
1	A	366	ASP
1	A	376	LYS
1	A	382	ASP
1	A	397	TYR
1	A	401	LYS
1	A	402	GLU
1	A	404	GLN
1	A	405	ILE
1	A	429	LYS
1	A	438	ARG
1	A	439	LEU
1	A	447	VAL
1	A	449	ILE
1	A	461	TYR
1	A	470	SER
1	A	471	GLN
1	A	493	MET
1	A	495	GLU
1	A	519	LEU
1	A	527	LEU
1	A	535	ILE
1	A	549	LEU
1	A	577	THR
1	A	578	THR
1	A	592	ASP
1	A	602	ILE
1	A	604	GLU
1	A	613	ARG
1	A	686	GLU
1	A	687	ASP
1	A	694	TRP

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Mol	Chain	Res	Type
1	A	695	ARG
1	A	697	LEU
1	A	703	GLU
1	A	711	ILE
1	A	721	GLN
1	A	722	PRO
1	A	727	ILE
1	A	734	VAL
1	A	743	THR
1	A	749	ASN
1	A	751	PHE
1	A	786	TYR
1	A	789	PHE
1	A	795	GLN
1	A	799	TRP
1	A	804	LYS
1	A	816	ASN
1	A	834	GLN
1	A	841	THR
1	A	849	TYR
1	A	853	LEU
1	A	862	PRO
1	A	863	ILE
1	A	872	MET
1	A	881	LYS
1	A	892	ILE
1	A	900	PHE
1	A	902	THR
1	A	905	SER
1	A	908	ARG
1	A	909	GLU
1	A	911	LYS
1	A	912	PHE
1	A	922	ILE
1	A	936	ILE
1	A	945	MET
1	A	947	PHE
1	A	953	PHE
1	A	954	ARG
1	A	968	GLU
1	A	969	ASN
1	A	974	PHE

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Mol	Chain	Res	Type
1	A	993	ASP
1	A	996	LYS
1	A	1005	ILE
1	A	1008	ILE
1	A	1010	LYS
1	A	1011	THR
1	A	1012	PRO
1	A	1013	GLU
1	A	1020	GLN
1	A	1023	LYS
1	A	1025	ASN
1	A	1039	ASN
1	A	1041	PRO
1	A	1060	GLN
1	A	1083	TYR
1	A	1108	GLN
1	A	1109	LEU
1	A	1118	LEU
1	A	1123	ILE
1	A	1131	ASP
1	A	1138	TYR
1	A	1140	GLU
1	A	1158	PRO
1	A	1161	TYR
1	A	1182	ILE
1	A	1187	VAL
1	A	1192	ILE
1	A	1221	ARG
1	A	1229	ARG
1	A	1233	ILE
1	A	1242	ILE
1	A	1246	LYS
1	A	1254	GLN
1	A	1262	ILE
1	B	41	TYR
1	B	59	ILE
1	B	70	ILE
1	B	71	PHE
1	B	76	ASP
1	B	83	ASN
1	B	87	ASN
1	B	91	MET

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Mol	Chain	Res	Type
1	B	93	GLU
1	B	99	MET
1	B	102	LYS
1	B	113	TYR
1	B	123	ILE
1	B	131	PHE
1	B	132	TRP
1	B	147	PHE
1	B	156	ILE
1	B	158	TRP
1	B	163	ASP
1	B	189	PHE
1	B	206	ARG
1	B	210	LEU
1	B	219	PRO
1	B	227	ILE
1	B	228	TRP
1	B	231	ILE
1	B	238	LYS
1	B	243	TYR
1	B	245	LYS
1	B	252	GLU
1	B	254	LEU
1	B	257	ILE
1	B	267	LYS
1	B	270	LEU
1	B	276	ASN
1	B	281	LYS
1	B	282	ARG
1	B	285	ILE
1	B	295	MET
1	B	302	ILE
1	B	306	TYR
1	B	308	LEU
1	B	310	PHE
1	B	324	ILE
1	B	328	LEU
1	B	330	VAL
1	B	336	ILE
1	B	366	ASP
1	B	397	TYR
1	B	401	LYS

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Mol	Chain	Res	Type
1	B	402	GLU
1	B	404	GLN
1	B	405	ILE
1	B	429	LYS
1	B	436	MET
1	B	438	ARG
1	B	439	LEU
1	B	449	ILE
1	B	461	TYR
1	B	471	GLN
1	B	493	MET
1	B	495	GLU
1	B	519	LEU
1	B	527	LEU
1	B	535	ILE
1	B	549	LEU
1	B	577	THR
1	B	578	THR
1	B	592	ASP
1	B	602	ILE
1	B	604	GLU
1	B	613	ARG
1	B	684	LEU
1	B	693	PHE
1	B	694	TRP
1	B	695	ARG
1	B	697	LEU
1	B	703	GLU
1	B	711	ILE
1	B	721	GLN
1	B	722	PRO
1	B	727	ILE
1	B	734	VAL
1	B	743	THR
1	B	749	ASN
1	B	751	PHE
1	B	786	TYR
1	B	789	PHE
1	B	795	GLN
1	B	799	TRP
1	B	804	LYS
1	B	816	ASN

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Mol	Chain	Res	Type
1	B	834	GLN
1	B	841	THR
1	B	849	TYR
1	B	853	LEU
1	B	862	PRO
1	B	863	ILE
1	B	872	MET
1	B	881	LYS
1	B	892	ILE
1	B	900	PHE
1	B	902	THR
1	B	905	SER
1	B	908	ARG
1	B	909	GLU
1	B	911	LYS
1	B	912	PHE
1	B	936	ILE
1	B	945	MET
1	B	947	PHE
1	B	953	PHE
1	B	968	GLU
1	B	969	ASN
1	B	974	PHE
1	B	993	ASP
1	B	996	LYS
1	B	1005	ILE
1	B	1007	ILE
1	B	1008	ILE
1	B	1011	THR
1	B	1013	GLU
1	B	1022	LEU
1	B	1039	ASN
1	B	1041	PRO
1	B	1060	GLN
1	B	1083	TYR
1	B	1108	GLN
1	B	1109	LEU
1	B	1118	LEU
1	B	1123	ILE
1	B	1131	ASP
1	B	1138	TYR
1	B	1140	GLU

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Mol	Chain	Res	Type
1	B	1154	ILE
1	B	1158	PRO
1	B	1161	TYR
1	B	1182	ILE
1	B	1187	VAL
1	B	1192	ILE
1	B	1221	ARG
1	B	1229	ARG
1	B	1233	ILE
1	B	1242	ILE
1	B	1246	LYS
1	B	1254	GLN
1	B	1262	ILE

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (78) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	60	HIS
1	A	83	ASN
1	A	87	ASN
1	A	153	ASN
1	A	154	GLN
1	A	179	ASN
1	A	274	ASN
1	A	275	ASN
1	A	276	ASN
1	A	385	GLN
1	A	387	ASN
1	A	394	HIS
1	A	404	GLN
1	A	434	GLN
1	A	437	GLN
1	A	458	ASN
1	A	515	GLN
1	A	625	GLN
1	A	717	ASN
1	A	721	GLN
1	A	749	ASN
1	A	769	GLN
1	A	795	GLN
1	A	816	ASN
1	A	834	GLN

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Mol	Chain	Res	Type
1	A	878	GLN
1	A	962	GLN
1	A	969	ASN
1	A	1003	HIS
1	A	1032	GLN
1	A	1039	ASN
1	A	1099	GLN
1	A	1108	GLN
1	A	1114	GLN
1	A	1149	ASN
1	A	1235	ASN
1	A	1244	ASN
1	A	1253	HIS
1	B	60	HIS
1	B	83	ASN
1	B	87	ASN
1	B	153	ASN
1	B	154	GLN
1	B	179	ASN
1	B	274	ASN
1	B	276	ASN
1	B	379	HIS
1	B	385	GLN
1	B	387	ASN
1	B	394	HIS
1	B	404	GLN
1	B	434	GLN
1	B	437	GLN
1	B	458	ASN
1	B	515	GLN
1	B	625	GLN
1	B	717	ASN
1	B	721	GLN
1	B	747	ASN
1	B	749	ASN
1	B	769	GLN
1	B	795	GLN
1	B	816	ASN
1	B	834	GLN
1	B	852	GLN
1	B	878	GLN
1	B	963	GLN

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Mol	Chain	Res	Type
1	B	969	ASN
1	B	1003	HIS
1	B	1032	GLN
1	B	1039	ASN
1	B	1099	GLN
1	B	1108	GLN
1	B	1114	GLN
1	B	1149	ASN
1	B	1235	ASN
1	B	1244	ASN
1	B	1253	HIS

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

4 ligands are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
2	2J8	A	6001	-	21,39,39	1.59	3 (14%)	24,57,57	1.59	6 (25%)
2	2J8	B	6003	-	21,39,39	1.61	3 (14%)	24,57,57	1.47	5 (20%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
2	2J8	A	6002	-	9,18,39	1.60	1 (11%)	8,24,57	1.56	2 (25%)
2	2J8	B	6004	-	9,18,39	1.72	1 (11%)	8,24,57	1.72	2 (25%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	2J8	A	6001	-	-	0/24/48/48	0/3/4/4
2	2J8	B	6003	-	-	0/24/48/48	0/3/4/4
2	2J8	A	6002	-	-	0/8/16/48	0/2/2/4
2	2J8	B	6004	-	-	0/8/16/48	0/2/2/4

All (8) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	6004	2J8	C16-N17	4.75	1.44	1.34
2	A	6002	2J8	C16-N17	4.46	1.43	1.34
2	B	6003	2J8	C16-N17	4.38	1.43	1.34
2	A	6001	2J8	C16-N17	3.92	1.42	1.34
2	A	6001	2J8	C02-N03	3.82	1.42	1.34
2	A	6001	2J8	C09-N10	3.80	1.42	1.34
2	B	6003	2J8	C09-N10	3.64	1.42	1.34
2	B	6003	2J8	C02-N03	3.16	1.41	1.34

All (15) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	6001	2J8	C36-C34-C18	3.53	114.63	111.24
2	B	6004	2J8	C36-C34-C18	3.39	114.50	111.24
2	A	6002	2J8	C36-C34-C18	3.26	114.38	111.24
2	B	6004	2J8	C18-N17-C16	3.12	127.28	122.28
2	A	6001	2J8	C11-N10-C09	3.11	127.26	122.28
2	B	6003	2J8	C36-C34-C18	3.11	114.23	111.24
2	A	6001	2J8	C32-C31-C11	3.10	114.22	111.24
2	A	6001	2J8	C04-N03-C02	2.85	126.84	122.28
2	B	6003	2J8	C11-N10-C09	2.83	126.82	122.28
2	B	6003	2J8	C18-N17-C16	2.77	126.72	122.28
2	A	6001	2J8	C18-N17-C16	2.74	126.66	122.28
2	B	6003	2J8	C32-C31-C11	2.60	113.74	111.24
2	A	6002	2J8	C18-N17-C16	2.55	126.37	122.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	6001	2J8	C29-C28-C04	2.39	113.54	111.24
2	B	6003	2J8	C29-C28-C04	2.08	113.23	111.24

There are no chirality outliers.

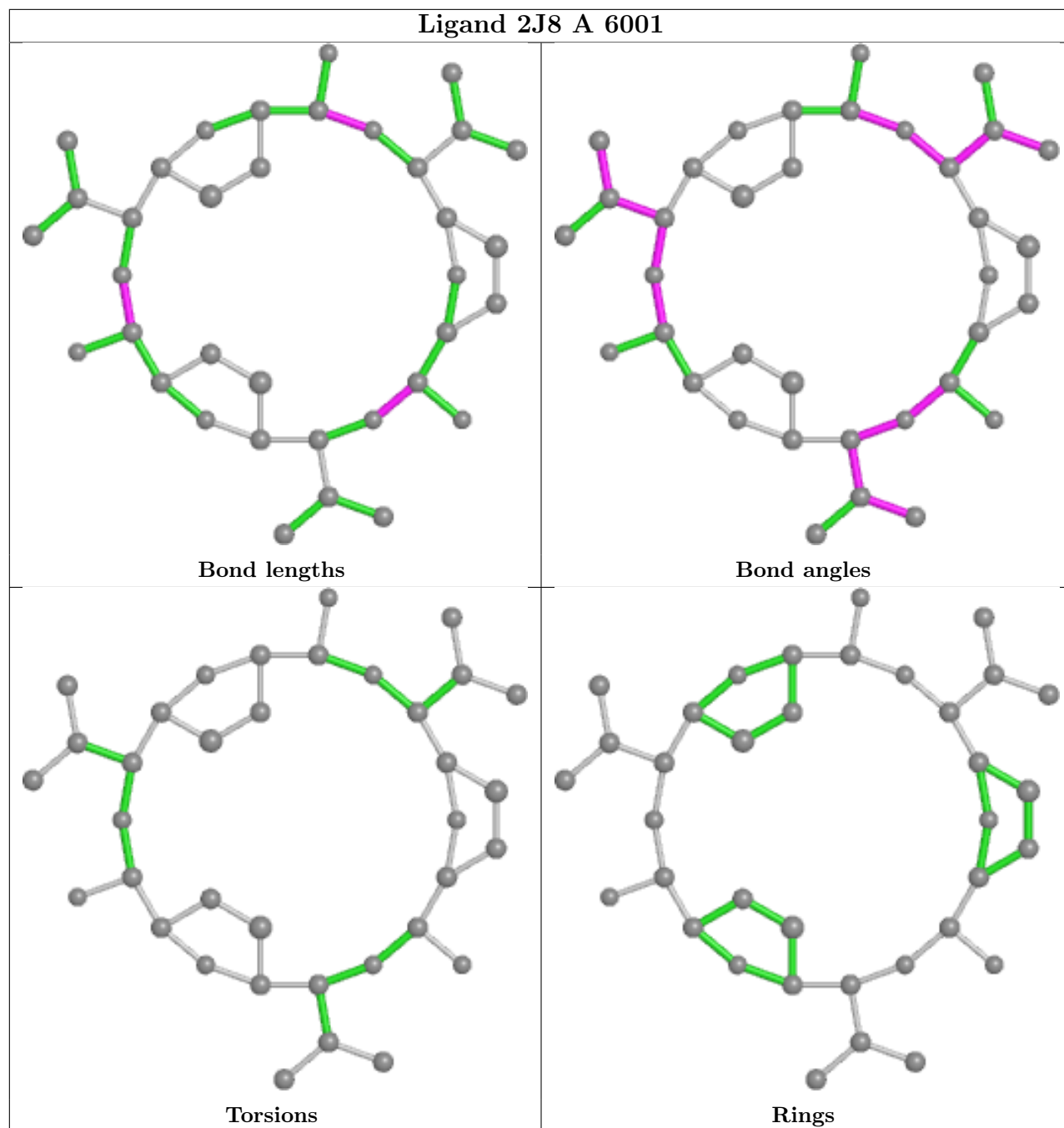
There are no torsion outliers.

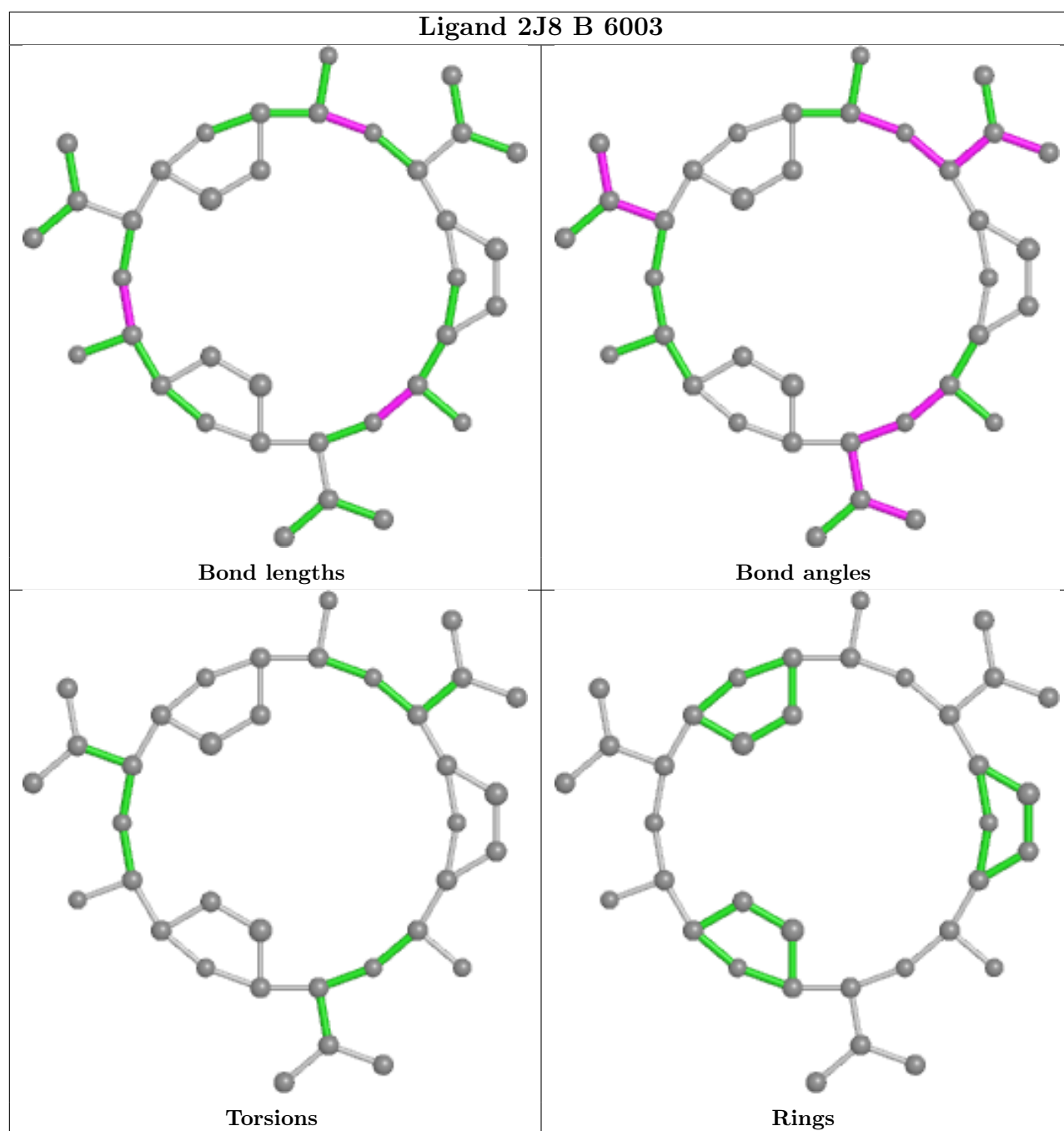
There are no ring outliers.

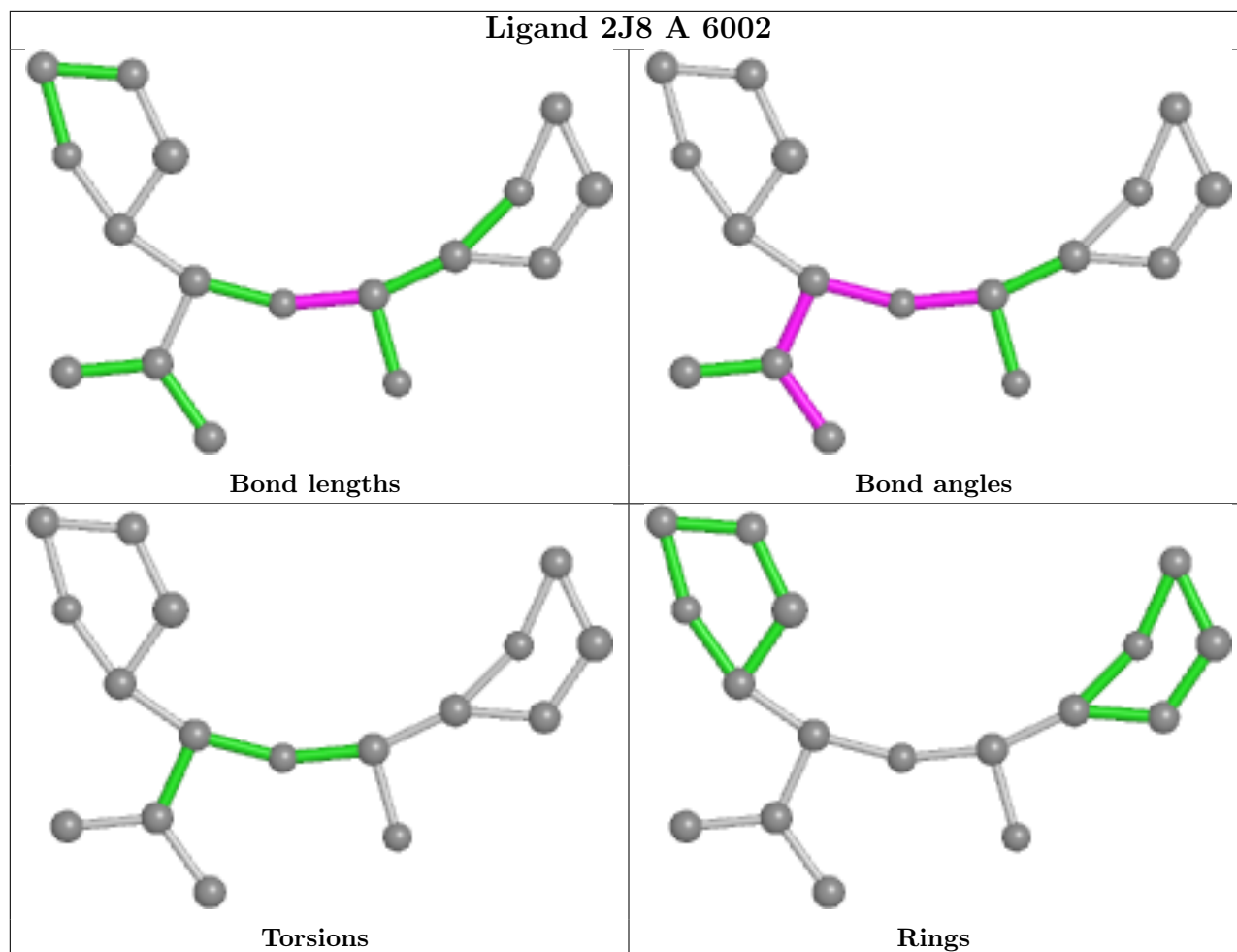
4 monomers are involved in 25 short contacts:

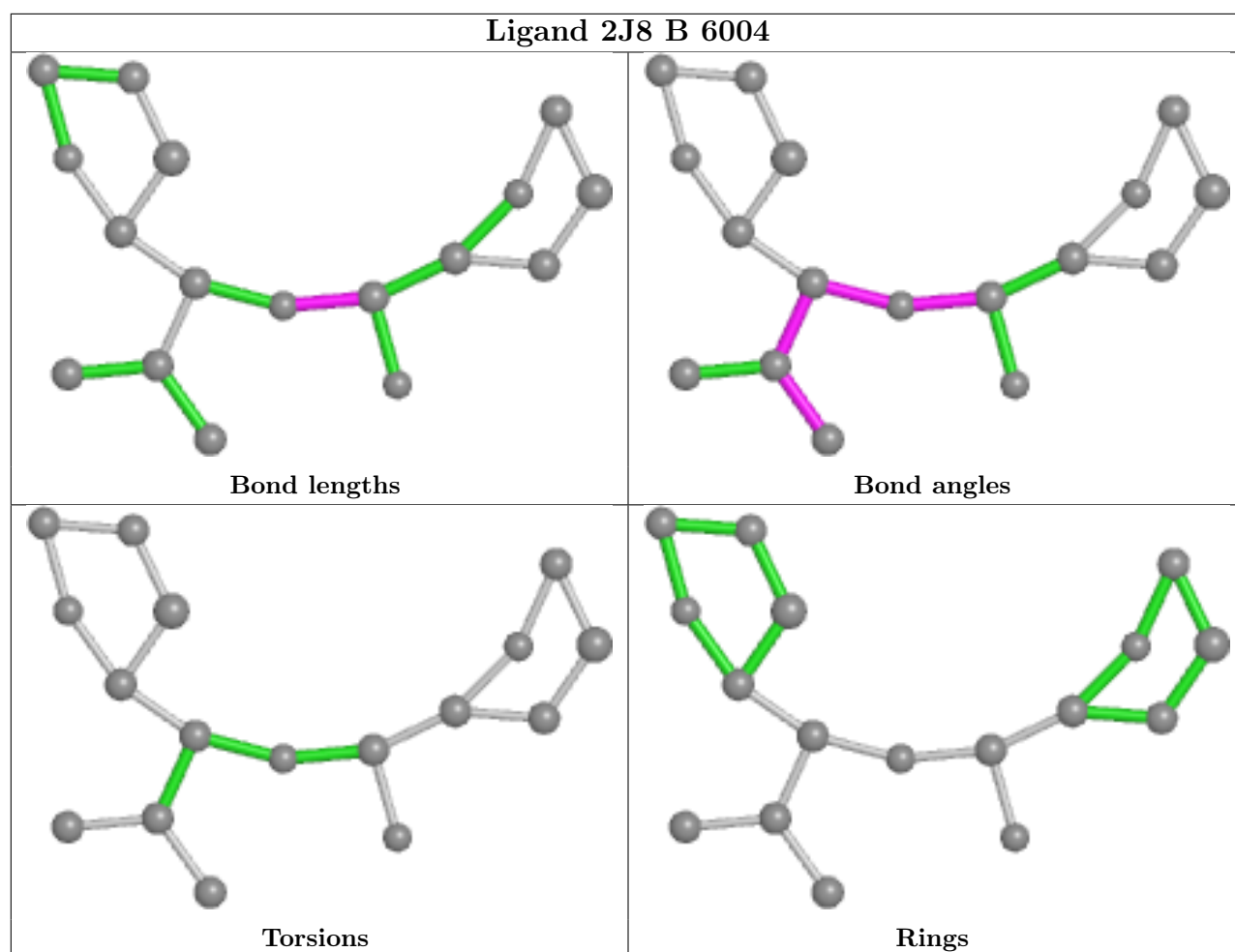
Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	A	6001	2J8	4	0
2	B	6003	2J8	16	0
2	A	6002	2J8	1	0
2	B	6004	2J8	4	0

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









5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data [i](#)

6.1 Protein, DNA and RNA chains [i](#)

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	1182/1284 (92%)	-0.58	3 (0%) 94 90	115, 180, 210, 247	0
1	B	1182/1284 (92%)	-0.56	3 (0%) 94 90	97, 183, 214, 303	0
All	All	2364/2568 (92%)	-0.57	6 (0%) 94 90	97, 182, 212, 303	0

All (6) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	1024	PRO	3.7
1	A	962	GLN	3.4
1	B	1244	ASN	3.0
1	A	1228	HIS	2.4
1	A	624	THR	2.1
1	B	962	GLN	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](#)

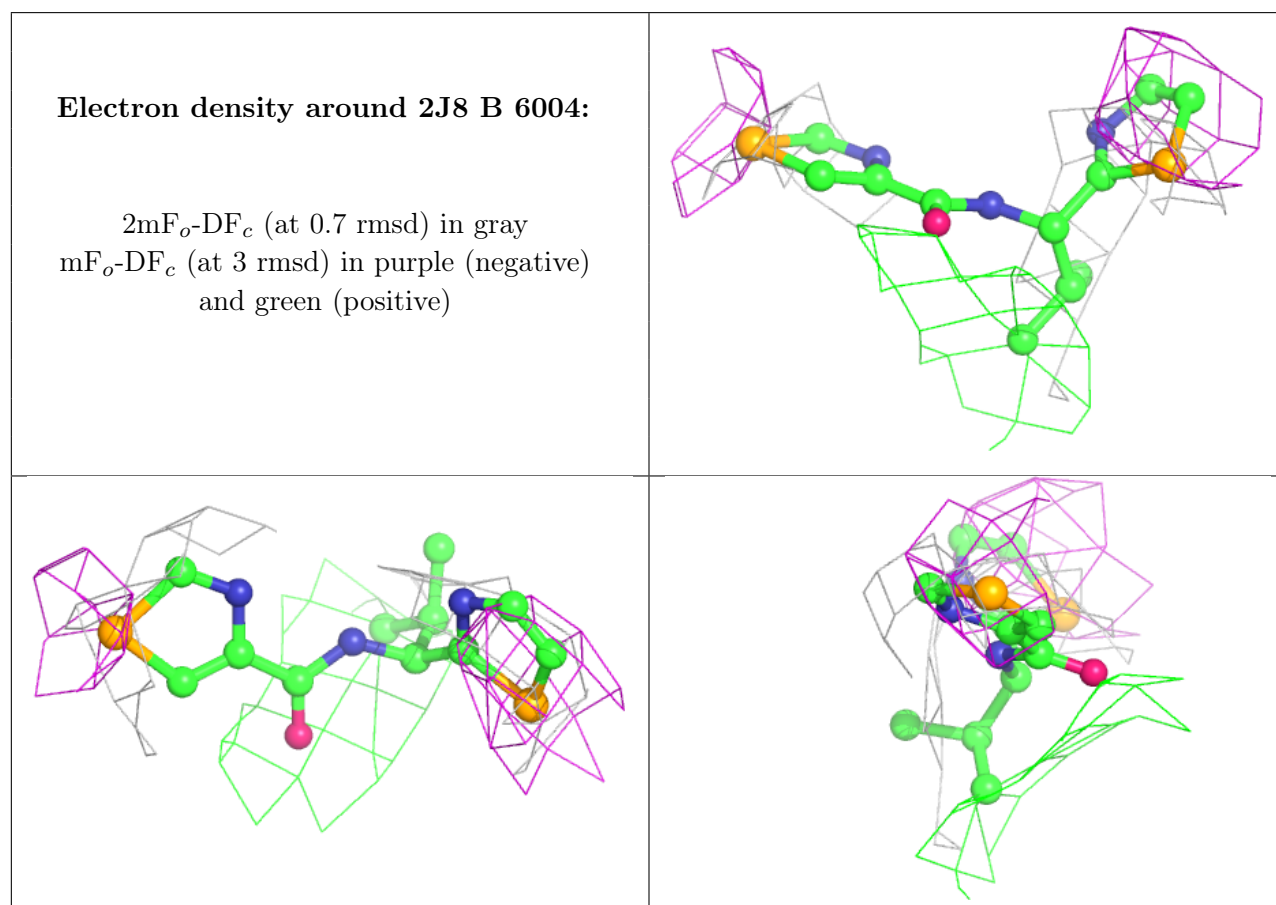
There are no monosaccharides in this entry.

6.4 Ligands [i](#)

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

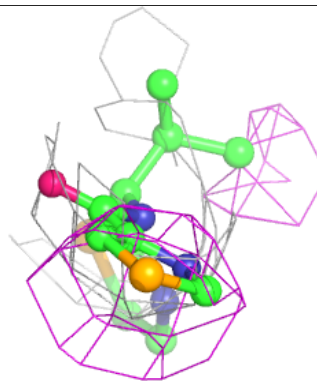
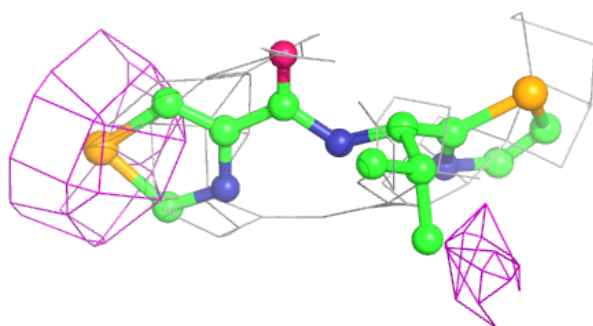
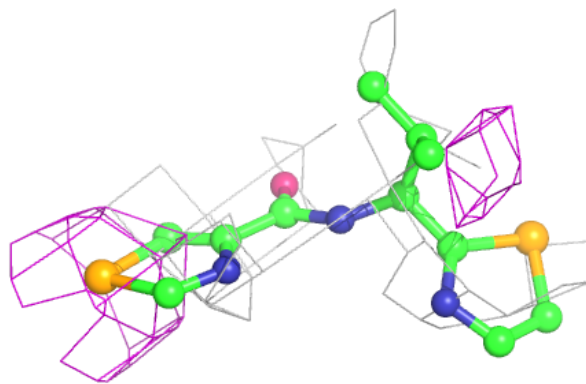
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
2	2J8	B	6004	17/36	0.52	0.48	185,185,185,185	0
2	2J8	A	6002	17/36	0.68	0.52	185,185,185,185	0
2	2J8	B	6003	36/36	0.69	0.44	185,185,185,185	0
2	2J8	A	6001	36/36	0.80	0.36	185,185,185,185	0

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



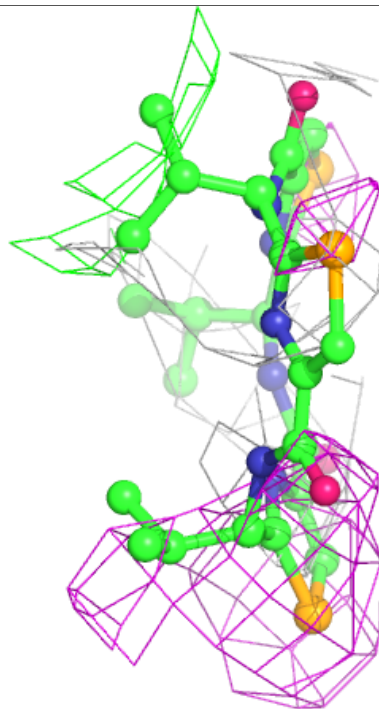
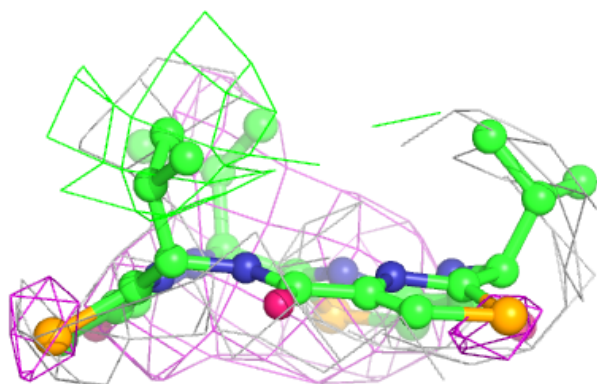
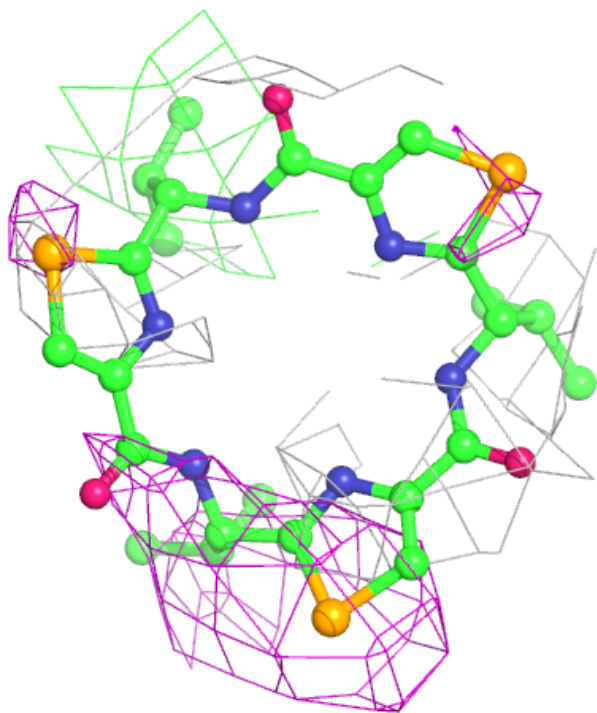
Electron density around 2J8 A 6002:

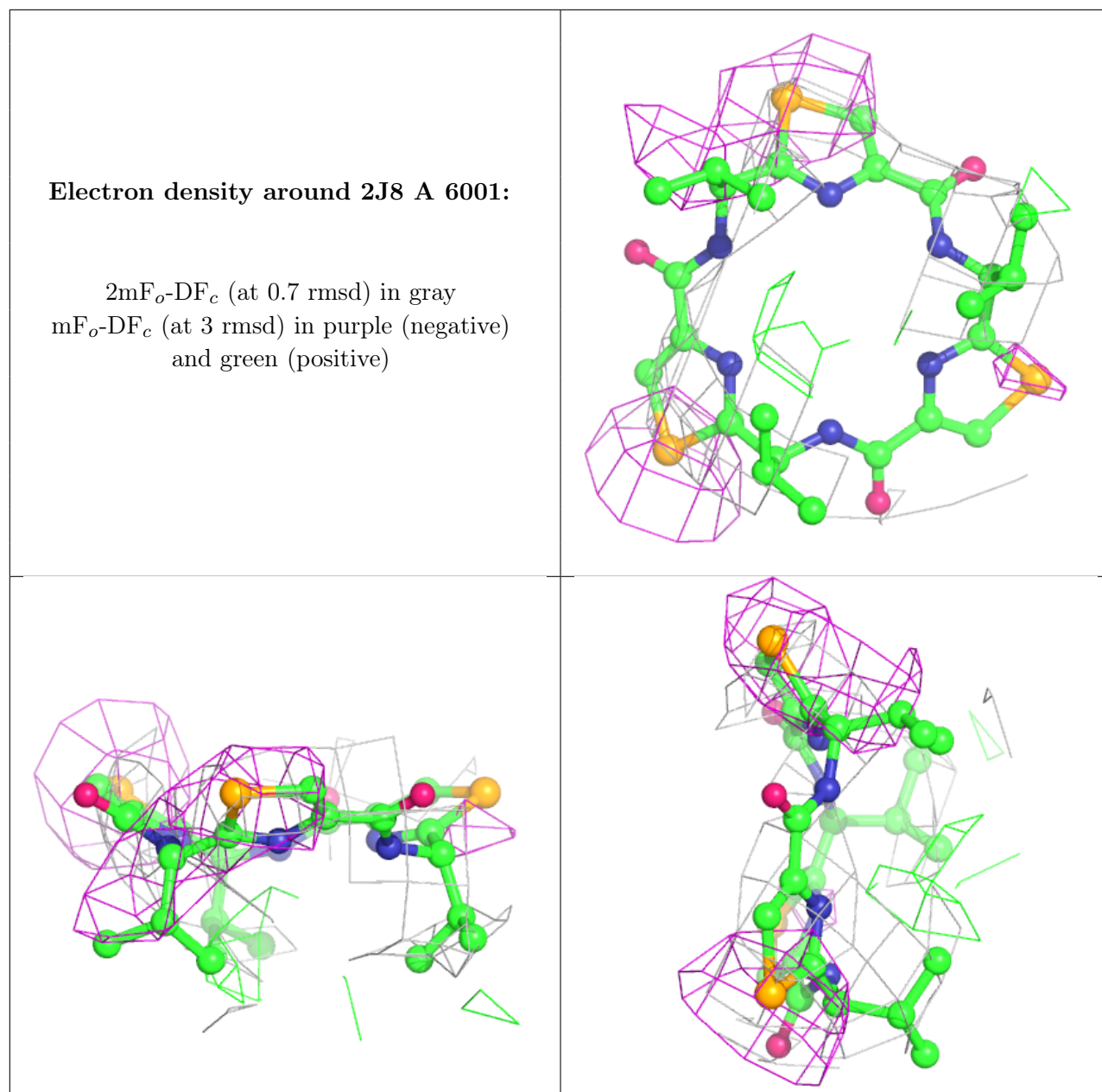
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around 2J8 B 6003:

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





6.5 Other polymers [i](#)

There are no such residues in this entry.