



Full wwPDB X-ray Structure Validation Report

Feb 28, 2014 – 06:33 AM GMT

PDB ID : 3H0G
Title : RNA Polymerase II from Schizosaccharomyces pombe
Authors : Spahr, H.; Calero, G.; Bushnell, D.A.; Kornberg, R.D.
Deposited on : 2009-04-09
Resolution : 3.65 Å(reported)

This is a full wwPDB validation report for a publicly released PDB entry.
We welcome your comments at validation@mail.wwpdb.org
A user guide is available at <http://wwpdb.org/ValidationPDFNotes.html>

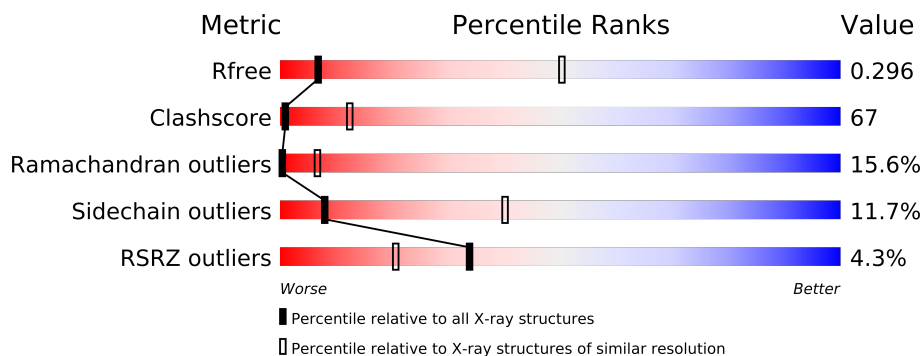
The following versions of software and data (see [references](#)) were used in the production of this report:

MolProbity : 4.02b-467
Mogul : 1.15 2013
Xtriage (Phenix) : dev-1323
EDS : stable22639
Percentile statistics : 21963
Refmac : 5.8.0049
CCP4 : 6.3.0 (Settle)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : stable22683

1 Overall quality at a glance

The reported resolution of this entry is 3.65 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.







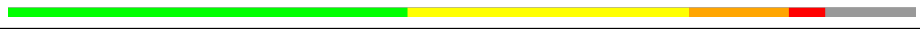
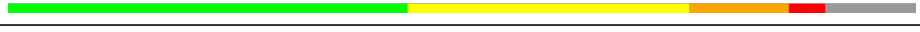



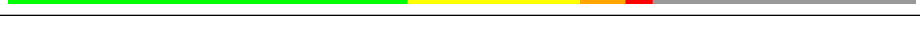
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	66092	1021 (3.94-3.38)
Clashscore	79885	1025 (3.90-3.42)
Ramachandran outliers	78287	1195 (3.92-3.40)
Sidechain outliers	78261	1193 (3.92-3.40)
RSRZ outliers	66119	1021 (3.94-3.38)

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. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density.

Mol	Chain	Length	Quality of chain
1	A	1752	
1	M	1752	
2	B	1210	
2	N	1210	
3	C	297	
3	O	297	
4	D	135	
4	P	135	
5	E	210	
5	Q	210	
6	F	142	
6	R	142	
7	G	172	
7	S	172	

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Mol	Chain	Length	Quality of chain
8	H	125	
8	T	125	
9	I	113	
9	U	113	
10	J	71	
10	V	71	
11	K	123	
11	W	123	
12	L	63	
12	X	63	

The following table lists non-polymeric compounds that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Geometry	Electron density
14	MG	A	2458	-	X

2 Entry composition

There are 14 unique types of molecules in this entry. The entry contains 62870 atoms, of which 0 are hydrogen and 0 are deuterium.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called DNA-directed RNA polymerase II subunit rpb1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	1496	Total	C	N	O	S	0	0	0
			11802	7415	2071	2246	70			
1	M	1476	Total	C	N	O	S	0	0	0
			11666	7334	2047	2216	69			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	1150	Total	C	N	O	S	0	0	0
			9180	5772	1630	1716	62			
2	N	1150	Total	C	N	O	S	0	0	0
			9180	5772	1630	1716	62			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	C	263	Total	C	N	O	S	0	0	0
			2088	1315	355	406	12			
3	O	263	Total	C	N	O	S	0	0	0
			2088	1315	355	406	12			

- Molecule 4 is a protein called DNA-directed RNA polymerase II subunit rpb4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D	130	Total	C	N	O	S	0	0	0
			1036	649	176	205	6			
4	P	130	Total	C	N	O	S	0	0	0
			1036	649	176	205	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	E	207	Total	C	N	O	S	0	0	0
			1663	1050	301	306	6			
5	Q	207	Total	C	N	O	S	0	0	0
			1663	1050	301	306	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F	83	Total	C	N	O	S	0	0	0
			656	416	112	125	3			
6	R	83	Total	C	N	O	S	0	0	0
			656	416	112	125	3			

- Molecule 7 is a protein called DNA-directed RNA polymerase II subunit rpb7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	G	170	Total	C	N	O	S	0	0	0
			1330	860	217	247	6			
7	S	170	Total	C	N	O	S	0	0	0
			1330	860	217	247	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	H	124	Total	C	N	O	S	0	0	0
			996	631	167	195	3			
8	T	124	Total	C	N	O	S	0	0	0
			996	631	167	195	3			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	I	111	Total	C	N	O	S	0	0	0
			902	551	164	176	11			
9	U	111	Total	C	N	O	S	0	0	0
			902	551	164	176	11			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	J	64	Total	C	N	O	S	0	0	0
			518	330	87	94	7			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	V	64	Total	C	N	O	S	0	0	0
			518	330	87	94	7			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	K	119	Total	C	N	O	S	0	0	0
			955	608	159	182	6			
11	W	119	Total	C	N	O	S	0	0	0
			955	608	159	182	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	L	45	Total	C	N	O	S	0	0	0
			368	225	74	61	8			
12	X	45	Total	C	N	O	S	0	0	0
			368	225	74	61	8			

- Molecule 13 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
13	J	1	Total	Zn	0	0
			1	1		
13	B	1	Total	Zn	0	0
			1	1		
13	I	2	Total	Zn	0	0
			2	2		
13	C	1	Total	Zn	0	0
			1	1		
13	V	1	Total	Zn	0	0
			1	1		
13	A	2	Total	Zn	0	0
			2	2		
13	N	1	Total	Zn	0	0
			1	1		
13	U	2	Total	Zn	0	0
			2	2		
13	X	1	Total	Zn	0	0
			1	1		
13	O	1	Total	Zn	0	0
			1	1		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
13	L	1	Total 1	Zn 1	0	0
13	M	2	Total 2	Zn 2	0	0

- Molecule 14 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

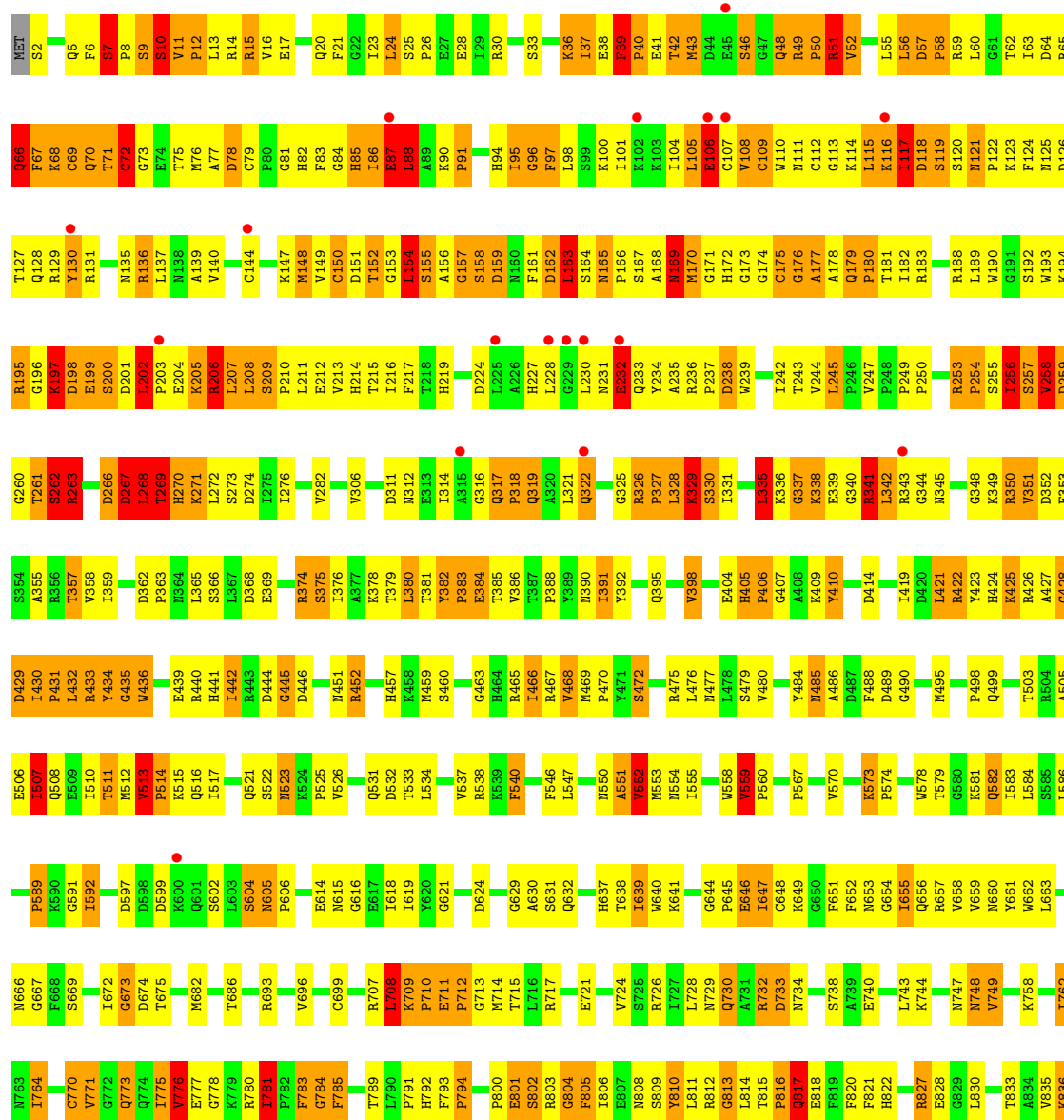
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
14	A	1	Total 1	Mg 1	0	0
14	M	1	Total 1	Mg 1	0	0

3 Residue-property plots

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

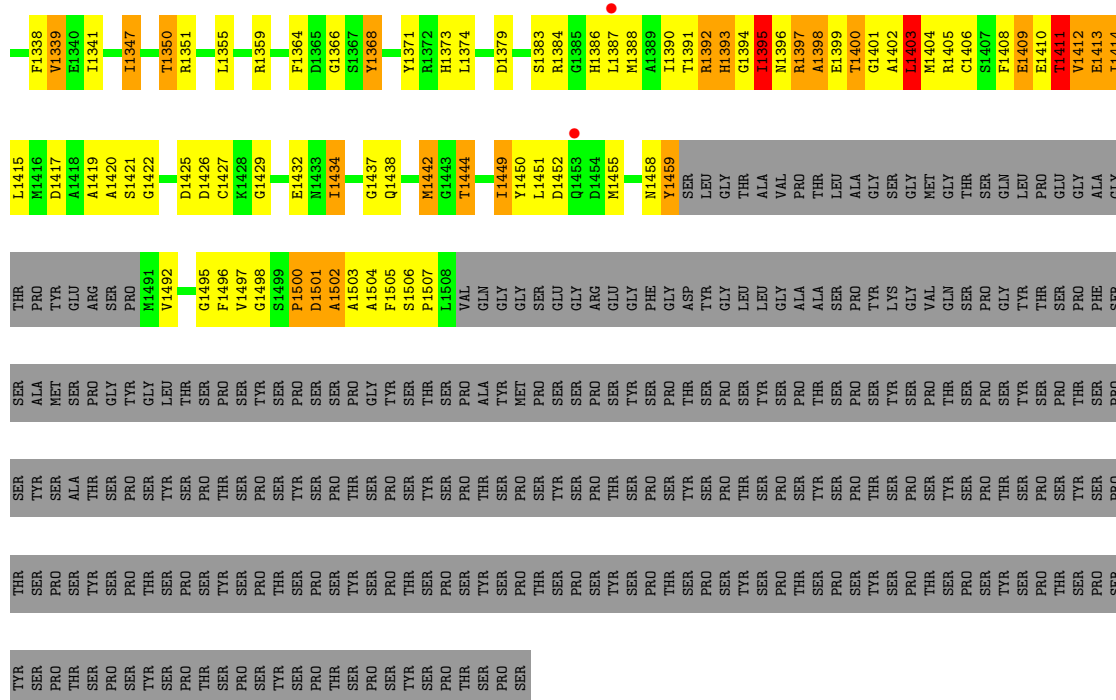
- Molecule 1: DNA-directed RNA polymerase II subunit rpb1

Chain A: 



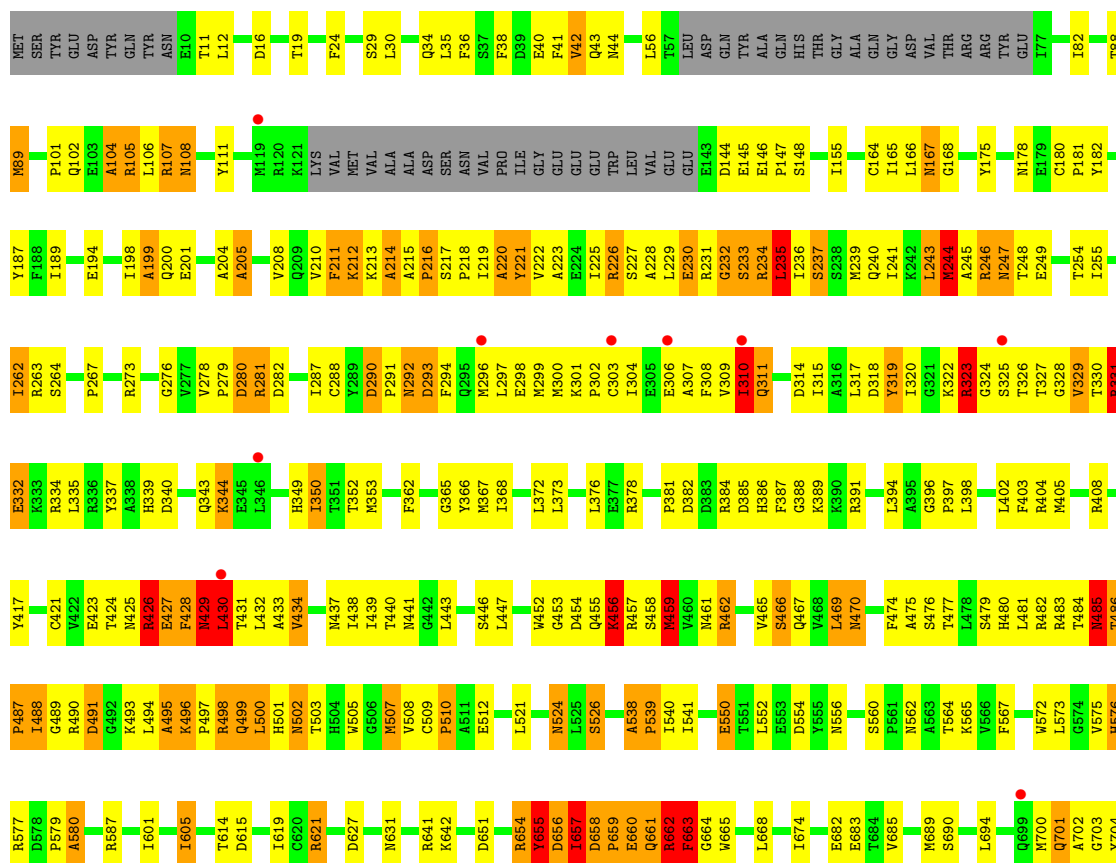


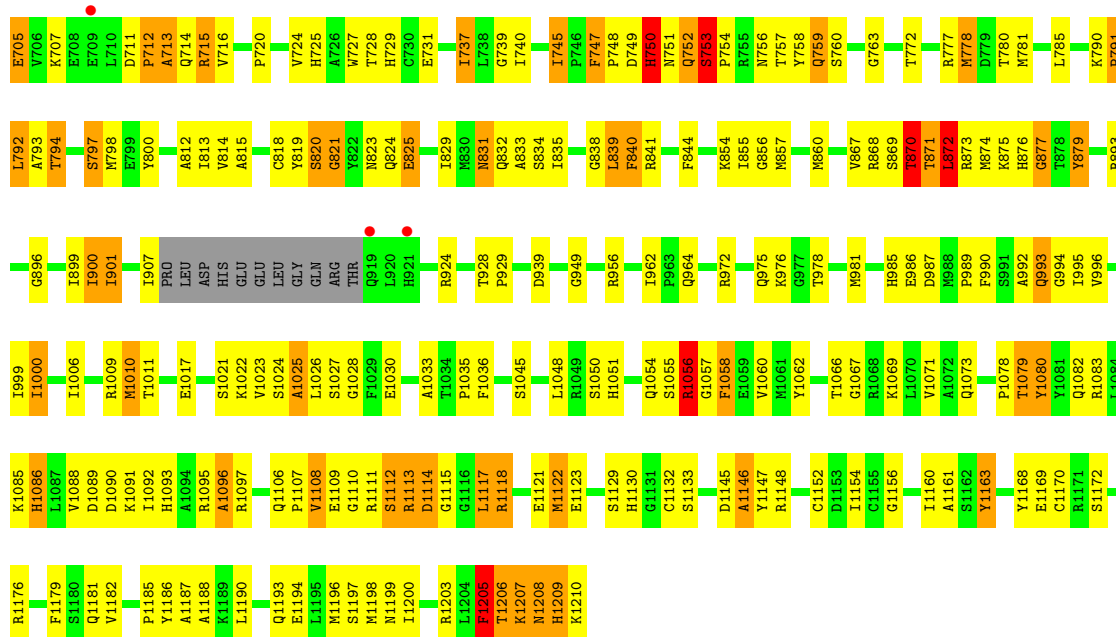
K1252	P1180	A1111	L1040	H917	R827	K744	I655	K573	F488	D414	R341	P254	R188	D126
A1253	D1181	K1112	N1041	E918	E828	N747	Q656	F574	D489	T419	L342	S255	L189	T127
D1254	E1183	N1113	K1042	N919	G829	N748	R657	W578	M495	G420	G343	S256	W190	Q128
D1255	E1184	N1114	V1043	S920	L830	V749	V658	T579	M496	L421	G344	S257	G191	R129
D1256	E1185	K1115	A1044	I921	T833	K758	V659	G580	V497	R422	N345	D258	S192	Y130
M1259	E1186	T1116	N922	N923	R834	K759	W661	K581	P498	Y423	G348	G260	W193	R131
I1260	N1187	S1118	I1048	D924	V835	I762	Y662	K582	Q499	H424	K349	T261	K194	N135
E1261	L1188	L1119	M1049	S925	R836	I763	W663	I583	T503	R425	R350	S262	R195	R136
E1262	T1120	E1051	N1052	S926	T837	N764	N666	L584	R504	R426	V351	R263	G196	R137
D1263	K1189	I1121	V1052	V927	A838	I765	S585	L586	R505	A427	D352	G284	D198	N138
V1264	Q1191	E1053	Q928	E939	E839	C770	G667	L586	A505	G428	F353	E265	E199	A139
F1265	S1192	E1053	Q928	E939	E839	C770	G668	L586	E506	D429	S354	D266	S200	V140
L1266	P1193	M1124	P1125	D929	G841	V771	S669	P589	I507	I430	A355	D267	D201	W141
M1273	W1194	W1126	P1063	I945	T842	G772	I672	I592	Q508	P431	R356	L268	L202	N142
L1274	L1195	G1064	G1064	C946	T843	G773	G673	I592	Q509	L432	P203	T269	P143	V143
E1275	L1196	E1065	M1066	K947	Q844	Q774	D674	D597	I510	R433	V358	K270	E204	K144
E1276	A1129	M1066	V1067	F948	R845	I775	D674	D597	I511	Y434	K271	K271	K205	K145
S1276	N1130	V1067	V1067	T949	R846	N776	T675	D599	M512	C435	L359	L272	R206	T146
I277	R1202	L1070	L1070	P950	K849	E777	M622	D599	V513	W436	D362	S273	L207	K147
S1278	A1203	A1071	A1071	P951	G778	G778	I622	S602	P514	E439	L365	D274	L208	M148
L1279	K1204	K952	K952	K952	K779	K779	T686	L603	K515	R440	S366	I275	S209	V149
R1280	M1205	G953	G953	G953	R780	R780	T686	L603	Q516	R440	S366	I276	P210	C150
G1281	L1206	D954	D954	D954	R857	F781	R633	S604	I517	H441	L367	K277	L211	D151
V1282	D1207	I1075	I1075	I957	Y858	F782	V696	N605	Q521	I442	D368	V282	E212	T152
P1283	K1208	G1076	G1076	W957	T861	F783	V696	P606	S222	R443	E369	V282	V213	G153
M1284	K1209	E1077	E1077	P960	T861	G785	V696	P606	S222	D444	R374	E286	H214	L154
T1286	L1145	P1077	P1077	P960	T861	F785	C699	E614	N523	G445	R374	E286	T215	S155
E1287	S1213	T1080	T1080	V961	N864	I781	C699	E614	N523	D446	S375	Y298	T216	A156
V1288	M1214	Q1081	Q1081	V962	A865	L790	L703	E616	K524	R451	K377	Y298	T218	G157
V1289	V1215	M1082	M1082	V963	D868	F791	K709	E616	K524	R452	K378	Q303	H219	S158
M1290	A1216	T1150	T1150	V965	R869	H792	P710	E616	K524	R457	S382	Q303	D224	N160
M1291	G1217	S1151	L1084	R965	T871	F793	E711	G621	T533	K458	T381	D311	D224	F161
K1294	F1223	N1085	N1085	N969	F872	P794	G713	G621	L534	M459	Y380	N312	D224	D162
I1295	E1224	T1086	T1086	H975	G875	P800	M714	D624	V637	S460	P383	I314	L228	L163
T1303	R1225	H1088	H1088	L976	E876	S802	L715	G629	R538	G463	P383	I314	G229	S164
A1307	D1226	Y1089	Y1089	E977	D877	R803	L716	A630	K539	H464	T385	G316	L230	N165
F1308	L1227	A1090	A1090	P981	G878	G804	R717	A630	R539	R465	V386	Q317	E232	P166
E1309	T1228	G1091	G1091	P981	L879	F805	E721	S631	F540	T466	T387	Q318	E232	A168
V1310	I1230	V1092	V1092	L985	D880	F805	E721	S631	F540	R467	P388	Q319	Y234	N169
V1311	D1234	S1094	S1094	L985	A881	I806	V724	H637	L547	V468	Y389	A320	A235	M170
L1312	K1238	K1095	K1095	D988	A881	S807	S725	T638	N550	M469	N391	Q322	R236	G171
E1313	L1239	N1096	N1096	P989	E885	Y810	R726	T638	N550	P470	Y392	Q322	P237	H172
T1314	I1240	T1098	T1098	G992	E876	S812	I727	W640	A551	Y471	Y392	Q322	D238	G173
V1317	I1241	L1099	L1099	L993	D877	L811	L728	K641	V552	S472	Q393	Q322	W239	G174
N1316	R1242	G1100	G1100	L996	F889	G813	Q730	G644	M553	R475	Q395	Q322	N240	G176
L1319	C1243	V1101	V1101	L996	F889	L814	A731	P645	N554	L476	V398	K329	I242	A177
T1320	R1244	P1102	P1102	T1001	Y903	T815	R732	E646	W558	L476	E404	K329	T243	A178
E1321	I1245	L1103	L1103	P816	R904	D733	I727	T647	V558	N477	E404	K329	V244	Q179
A1322	I1246	K1104	K1104	Q817	I905	P816	L728	K641	V558	L478	H405	I331	V244	P180
M1323	R1247	E1105	E1105	I1009	E918	N734	N729	K641	V558	V480	P406	I331	P246	T181
G1327	D1248	E1106	E1106	L1020	E909	S738	Q730	G644	V558	V480	P406	I331	P246	T181
V1328	D1249	I1107	I1107	L1020	E909	S738	Q730	G644	V558	V480	P406	I331	P246	T181
D1329	R1251	L1108	L1108	Y1038	L913	F820	A739	E651	P667	Y484	A408	K336	P249	K183
		N1109	N1109	N653	L913	F821	E740	F652	V570	N485	A408	K336	P249	K183
		I1179	I1179	R1039	Y916	H822	E740	F652	V570	N485	A408	K336	P249	K183
														G186
														L187



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

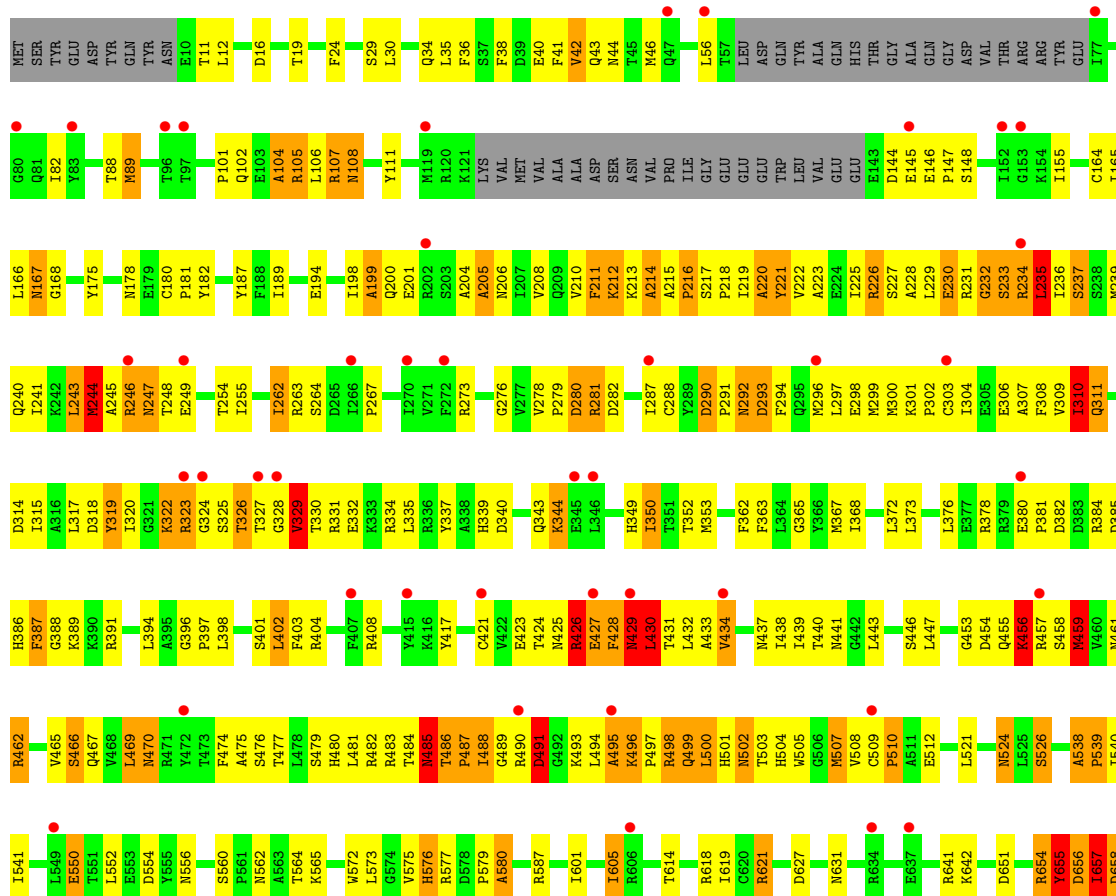
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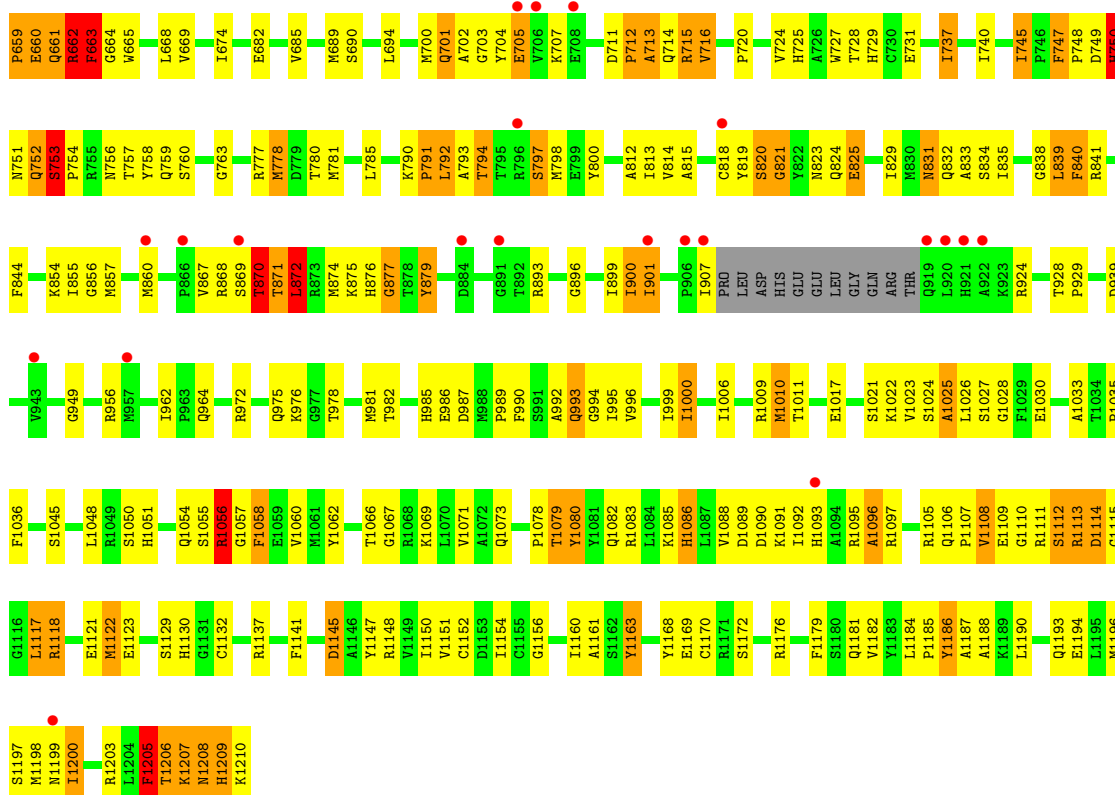




• Molecule 2: DNA-directed RNA polymerase II subunit RPB2

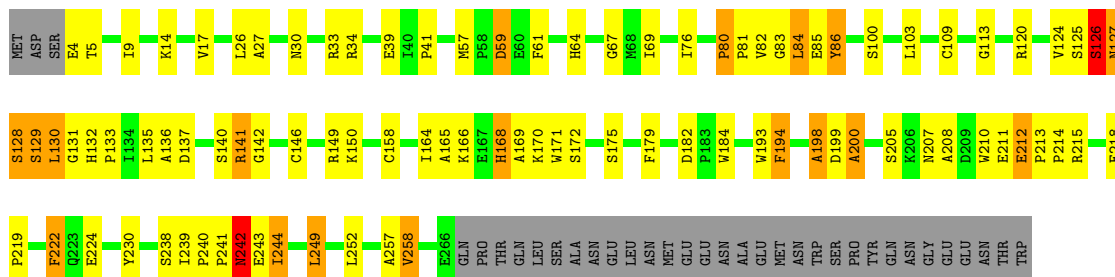
Chain N:





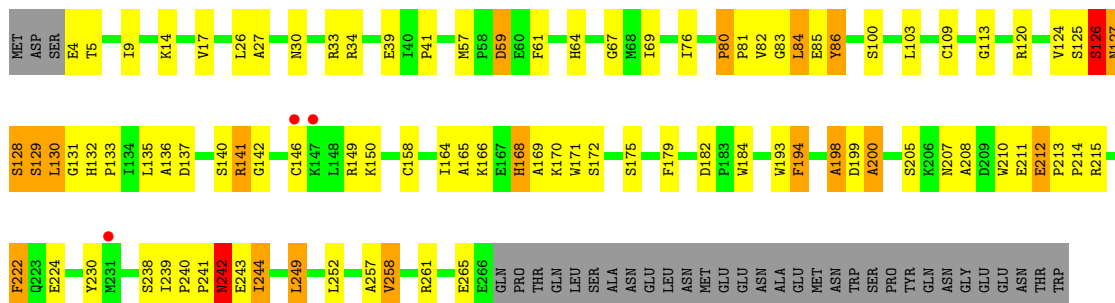
• Molecule 3: DNA-directed RNA polymerase II subunit RPB3

Chain C:



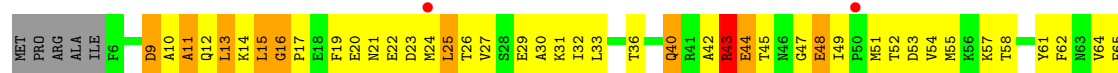
• Molecule 3: DNA-directed RNA polymerase II subunit RPB3

Chain O:



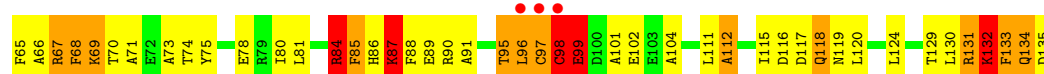
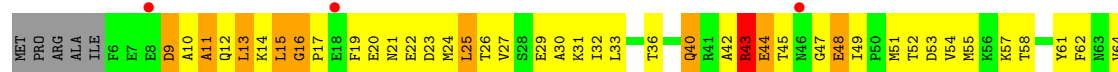
• Molecule 4: DNA-directed RNA polymerase II subunit rpb4

Chain D: 



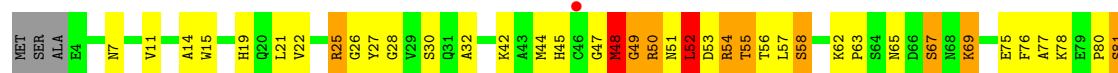
- Molecule 4: DNA-directed RNA polymerase II subunit rpb4

Chain P: 



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

Chain E: 



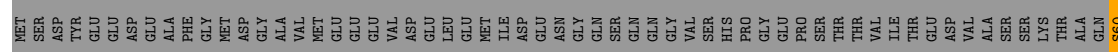
- Molecule 5: DNA-directed RNA polymerases I, II, and III subunit RPABC1

Chain Q: 



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

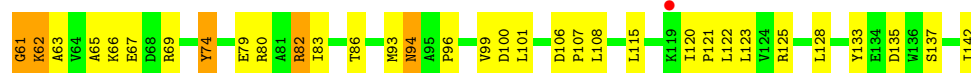
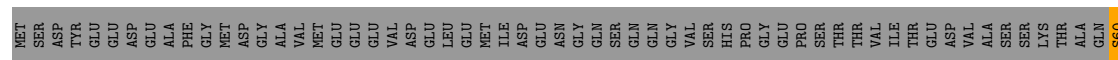
Chain F: 





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

Chain R:



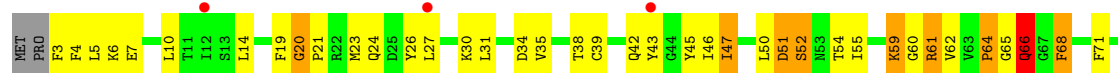
- Molecule 7: DNA-directed RNA polymerase II subunit rpb7

Chain G:



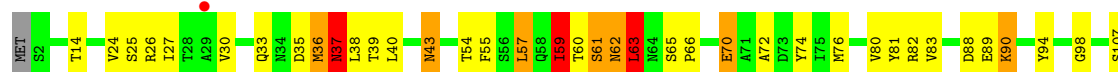
- Molecule 7: DNA-directed RNA polymerase II subunit rpb7

Chain S:



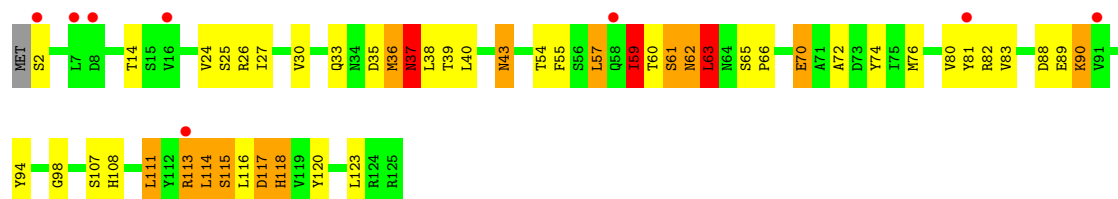
- Molecule 8: DNA-directed RNA polymerases I, II, and III subunit RPABC3

Chain H:



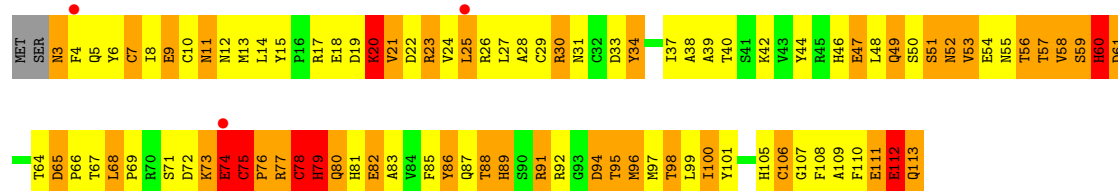
- Molecule 8: DNA-directed RNA polymerases I, II, and III subunit RPABC3

Chain T: 



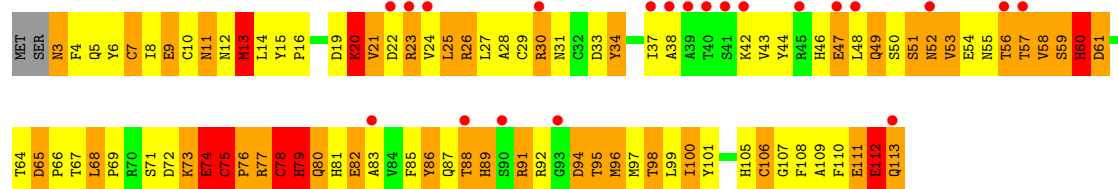
- Molecule 9: DNA-directed RNA polymerase II subunit RPB9

Chain I: 



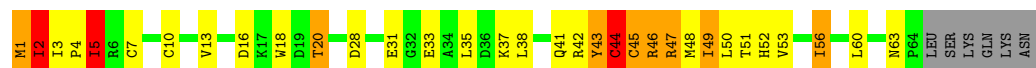
- Molecule 9: DNA-directed RNA polymerase II subunit RPB9

Chain U: 



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

Chain J: 



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

Chain V: 



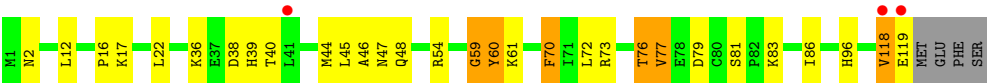
- Molecule 11: DNA-directed RNA polymerase II subunit RPB11

Chain K: 



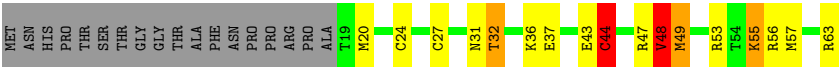
- Molecule 11: DNA-directed RNA polymerase II subunit RPB11

Chain W: 



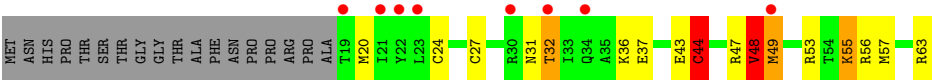
● Molecule 12: DNA-directed RNA polymerases I, II, and III subunit RPABC4

Chain L:



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

Chain X:



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	163.03Å 202.68Å 391.26Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	48.70 – 3.65 48.69 – 3.65	Depositor EDS
% Data completeness (in resolution range)	92.8 (48.70-3.65) 96.2 (48.69-3.65)	Depositor EDS
R_{merge}	0.09	Depositor
R_{sym}	0.09	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.66 (at 3.67Å)	Xtriage
Refinement program	PHENIX (phenix.refine)	Depositor
R, R_{free}	0.297 , 0.321 0.292 , 0.296	Depositor DCC
R_{free} test set	6923 reflections (4.99%)	DCC
Wilson B-factor (Å ²)	125.6	Xtriage
Anisotropy	0.296	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.26 , 115.5	EDS
Estimated twinning fraction	No twinning to report.	Xtriage
L-test for twinning	$\langle L \rangle = 0.39$, $\langle L^2 \rangle = 0.22$	Xtriage
Outliers	1 of 138803 reflections (0.001%)	Xtriage
F_o, F_c correlation	0.88	EDS
Total number of atoms	62870	wwPDB-VP
Average B, all atoms (Å ²)	203.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.85% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

5 Model quality

5.1 Standard geometry

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

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	A	0.41	0/12026	0.57	1/16260 (0.0%)
1	M	0.42	0/11887	0.56	1/16069 (0.0%)
2	B	0.44	0/9360	0.60	5/12643 (0.0%)
2	N	0.43	0/9360	0.59	5/12643 (0.0%)
3	C	0.44	0/2135	0.60	0/2904
3	O	0.44	0/2135	0.59	0/2904
4	D	0.24	0/1049	0.38	0/1412
4	P	0.24	0/1049	0.38	0/1412
5	E	0.38	0/1695	0.60	0/2287
5	Q	0.39	0/1695	0.60	0/2287
6	F	0.50	0/666	0.67	0/901
6	R	0.50	0/666	0.67	0/901
7	G	0.26	0/1361	0.57	3/1847 (0.2%)
7	S	0.26	0/1361	0.57	3/1847 (0.2%)
8	H	0.42	0/1010	0.65	0/1363
8	T	0.42	0/1010	0.65	0/1363
9	I	0.22	0/921	0.37	0/1246
9	U	0.24	0/921	0.37	0/1246
10	J	0.57	0/526	0.77	0/709
10	V	0.57	0/526	0.76	0/709
11	K	0.47	0/972	0.61	0/1317
11	W	0.47	0/972	0.61	0/1317
12	L	0.36	0/371	0.57	0/491
12	X	0.37	0/371	0.57	0/491
All	All	0.41	0/64045	0.58	18/86569 (0.0%)

There are no bond length outliers.

All (18) bond angle outliers are listed below:

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	992	ALA	N-CA-C	-5.71	95.59	111.00
2	N	992	ALA	N-CA-C	-5.69	95.65	111.00
7	G	167	ASP	CB-CG-OD2	5.38	123.14	118.30
7	S	167	ASP	CB-CG-OD2	5.35	123.12	118.30
2	N	711	ASP	CB-CG-OD2	5.30	123.07	118.30
1	M	224	ASP	CB-CG-OD2	5.22	123.00	118.30
1	A	224	ASP	CB-CG-OD2	5.22	123.00	118.30
2	N	491	ASP	CB-CG-OD2	5.21	122.99	118.30
2	B	314	ASP	CB-CG-OD2	5.21	122.99	118.30
2	B	711	ASP	CB-CG-OD2	5.20	122.98	118.30
7	G	34	ASP	CB-CG-OD2	5.18	122.97	118.30
2	N	314	ASP	CB-CG-OD2	5.17	122.96	118.30
7	S	34	ASP	CB-CG-OD2	5.17	122.95	118.30
7	S	89	ASP	CB-CG-OD2	5.15	122.93	118.30
2	B	340	ASP	CB-CG-OD2	5.14	122.92	118.30
2	B	491	ASP	CB-CG-OD2	5.12	122.90	118.30
2	N	340	ASP	CB-CG-OD2	5.12	122.90	118.30
7	G	89	ASP	CB-CG-OD2	5.09	122.88	118.30

There are no chirality outliers.

There are no planarity outliers.

5.2 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 hydrogens added by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, and the number in parentheses is this value normalized per 1000 atoms of the molecule in the chain. The Symm-Clashes column gives symmetry related clashes, in the same way as for the Clashes column.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	11802	0	378	1195	0
1	M	11666	0	241	1154	0
2	B	9180	0	30	486	0
2	N	9180	0	30	493	0
3	C	2088	0	0	65	0
3	O	2088	0	0	66	0
4	D	1036	0	0	145	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
4	P	1036	0	0	128	0
5	E	1663	0	0	54	0
5	Q	1663	0	0	56	0
6	F	656	0	0	22	0
6	R	656	0	0	27	0
7	G	1330	0	0	145	0
7	S	1330	0	0	148	0
8	H	996	0	0	35	0
8	T	996	0	0	36	0
9	I	902	0	0	121	0
9	U	902	0	0	120	0
10	J	518	0	0	23	0
10	V	518	0	0	23	0
11	K	955	0	2	15	0
11	W	955	0	2	16	0
12	L	368	0	0	7	0
12	X	368	0	0	7	0
13	A	2	0	0	0	0
13	B	1	0	0	0	0
13	C	1	0	0	0	0
13	I	2	0	0	0	0
13	J	1	0	0	0	0
13	L	1	0	0	0	0
13	M	2	0	0	0	0
13	N	1	0	0	0	0
13	O	1	0	0	0	0
13	U	2	0	0	0	0
13	V	1	0	0	0	0
13	X	1	0	0	0	0
14	A	1	0	0	0	0
14	M	1	0	0	0	0
All	All	62870	0	683	4253	0

Clashscore is defined as the number of clashes calculated for the entry per 1000 atoms (including hydrogens) of the entry. The overall clashscore for this entry is 67.

All (4253) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:1498:GLY:CA	1:M:1500:PRO:HD3	1.46	1.43
1:A:1489:SER:HB3	1:A:1490:PRO:CD	1.61	1.29
1:M:1498:GLY:HA3	1:M:1500:PRO:CD	1.61	1.28
4:D:24:MET:SD	4:D:88:PHE:CD1	2.30	1.24

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:P:24:MET:SD	4:P:88:PHE:CD1	2.30	1.24
1:M:1492:VAL:HG12	1:M:1496:PHE:CE2	1.76	1.21
1:A:517:ILE:CD1	1:A:640:TRP:CD1	2.24	1.21
1:M:517:ILE:CD1	1:M:640:TRP:CD1	2.24	1.20
1:M:1503:ALA:O	1:M:1507:PRO:HD3	1.42	1.18
1:M:1161:PRO:CG	1:M:1190:LYS:CG	2.22	1.17
1:A:108:VAL:CG1	1:A:113:GLY:CA	2.23	1.17
1:A:106:GLU:CB	1:A:144:CYS:SG	2.32	1.17
1:A:1161:PRO:CG	1:A:1190:LYS:CG	2.22	1.17
1:M:380:LEU:O	1:M:381:THR:CG2	1.94	1.16
1:A:380:LEU:O	1:A:381:THR:CG2	1.94	1.16
1:A:147:LYS:O	1:A:148:MET:CG	1.92	1.16
1:A:1290:MET:CE	1:A:1312:LEU:CD2	2.23	1.16
1:M:1492:VAL:CG1	1:M:1496:PHE:HE2	1.59	1.16
1:M:208:LEU:CD2	1:M:213:VAL:CG2	2.22	1.16
1:A:1465:VAL:HG13	1:A:1466:PRO:HA	1.28	1.16
1:A:64:ASP:CB	1:A:67:PHE:CE1	2.30	1.15
1:M:1167:GLU:O	1:M:1168:GLU:CG	1.93	1.15
1:A:1478:LEU:HD12	1:A:1479:PRO:HD2	1.28	1.15
1:A:1167:GLU:O	1:A:1168:GLU:CG	1.93	1.15
1:A:1465:VAL:CG1	1:A:1466:PRO:HB3	1.78	1.14
1:A:236:ARG:CB	1:A:239:TRP:CE3	2.30	1.14
4:P:32:ILE:CD1	4:P:74:THR:CG2	2.24	1.14
2:B:273:ARG:CD	2:B:310:ILE:CD1	2.26	1.14
1:M:236:ARG:CB	1:M:239:TRP:CE3	2.30	1.14
4:D:32:ILE:CD1	4:D:74:THR:CG2	2.24	1.13
2:N:273:ARG:CD	2:N:310:ILE:CD1	2.26	1.13
1:M:64:ASP:CB	1:M:67:PHE:CE1	2.30	1.13
1:A:205:LYS:O	1:A:206:ARG:CD	1.98	1.12
1:M:1194:TRP:CH2	1:M:1262:GLU:CB	2.32	1.11
1:A:1194:TRP:CH2	1:A:1262:GLU:CB	2.32	1.11
1:A:1150:THR:CG2	9:I:48:LEU:CD2	2.29	1.11
7:S:100:PHE:CB	7:S:111:VAL:CG1	2.30	1.10
1:M:1101:VAL:CG1	1:M:1102:PRO:CD	2.30	1.10
1:A:1101:VAL:CG1	1:A:1102:PRO:CD	2.30	1.10
1:A:1276:SER:CA	1:A:1277:ILE:CG1	2.30	1.10
1:A:1276:SER:CA	1:A:1277:ILE:CG2	2.30	1.10
1:A:708:LEU:CB	1:A:709:LYS:CA	2.30	1.10
1:M:1276:SER:CA	1:M:1277:ILE:CG1	2.30	1.10
1:A:381:THR:CA	1:A:382:TYR:CB	2.30	1.09
1:M:1166:ILE:CA	1:M:1167:GLU:CB	2.30	1.09
2:N:323:ARG:CB	2:N:324:GLY:CA	2.30	1.09

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:267:ASP:CB	1:A:268:LEU:CB	2.30	1.09
1:M:381:THR:CA	1:M:382:TYR:CB	2.30	1.09
1:A:1166:ILE:CA	1:A:1167:GLU:CB	2.30	1.09
2:B:292:ASN:CA	2:B:293:ASP:CB	2.30	1.09
1:M:202:LEU:CB	1:M:203:PRO:CD	2.30	1.09
1:M:1091:GLY:CA	1:M:1092:VAL:CG1	2.30	1.09
1:M:1091:GLY:CA	1:M:1092:VAL:CB	2.30	1.09
8:H:62:ASN:CA	8:H:63:LEU:CB	2.30	1.09
1:A:236:ARG:CB	1:A:239:TRP:CZ3	2.36	1.09
1:M:120:SER:CB	1:M:121:ASN:CB	2.30	1.09
8:H:62:ASN:CB	8:H:63:LEU:CB	2.30	1.09
8:T:62:ASN:CA	8:T:63:LEU:CB	2.30	1.09
1:M:708:LEU:CB	1:M:709:LYS:CA	2.30	1.08
1:A:120:SER:CB	1:A:121:ASN:CB	2.30	1.08
1:M:1089:TYR:CA	1:M:1090:ALA:CB	2.31	1.08
1:A:1089:TYR:CA	1:A:1090:ALA:CB	2.30	1.08
1:M:1276:SER:CA	1:M:1277:ILE:CG2	2.30	1.08
8:T:62:ASN:CB	8:T:63:LEU:CB	2.30	1.08
7:G:100:PHE:CB	7:G:111:VAL:CG1	2.30	1.08
2:N:229:LEU:CA	2:N:230:GLU:CB	2.30	1.08
2:B:229:LEU:CA	2:B:230:GLU:CB	2.30	1.08
1:A:419:ILE:CG2	1:A:425:LYS:CD	2.30	1.08
1:M:267:ASP:CB	1:M:268:LEU:CB	2.30	1.08
4:D:24:MET:CG	7:G:4:PHE:CE1	2.37	1.08
1:M:177:ALA:CB	1:M:178:ALA:CB	2.30	1.08
1:M:419:ILE:CG2	1:M:425:LYS:CD	2.30	1.08
1:A:64:ASP:CB	1:A:67:PHE:CZ	2.37	1.08
2:B:323:ARG:CB	2:B:324:GLY:CA	2.30	1.08
2:N:292:ASN:CA	2:N:293:ASP:CB	2.30	1.07
1:M:236:ARG:CB	1:M:239:TRP:CZ3	2.36	1.07
1:M:57:ASP:CB	1:M:58:PRO:CD	2.32	1.07
1:A:1465:VAL:CG1	1:A:1466:PRO:CA	2.32	1.07
1:M:1173:VAL:CG1	1:M:1177:PHE:CE2	2.38	1.07
4:P:24:MET:CG	7:S:4:PHE:CE1	2.37	1.06
1:M:64:ASP:CB	1:M:67:PHE:CZ	2.37	1.06
1:A:1091:GLY:CA	1:A:1092:VAL:CB	2.33	1.06
1:A:57:ASP:CB	1:A:58:PRO:CD	2.32	1.06
1:A:107:CYS:SG	1:A:140:VAL:CG1	2.44	1.06
1:M:165:ASN:CB	1:M:166:PRO:CA	2.33	1.06
1:A:1173:VAL:CG1	1:A:1177:PHE:CE2	2.38	1.05
1:A:230:LEU:CD1	1:A:237:PRO:CG	2.33	1.05
1:M:781:ILE:CG1	1:M:821:PHE:CE2	2.39	1.05

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1450:TYR:HD1	7:G:60:GLY:C	1.59	1.05
1:M:230:LEU:CD1	1:M:237:PRO:CG	2.33	1.05
2:N:488:ILE:CB	2:N:489:GLY:CA	2.34	1.05
1:A:1461:LEU:HB3	1:A:1462:GLY:CA	1.87	1.05
1:M:1492:VAL:HG12	1:M:1496:PHE:HE2	0.93	1.04
1:A:167:SER:N	1:A:168:ALA:CB	2.20	1.04
1:A:165:ASN:CB	1:A:166:PRO:CA	2.33	1.04
2:B:488:ILE:CB	2:B:489:GLY:CA	2.34	1.04
1:A:1496:PHE:CD2	4:D:33:LEU:CG	2.41	1.04
1:A:1496:PHE:HD2	4:D:33:LEU:CG	1.71	1.04
1:A:1465:VAL:HG13	1:A:1466:PRO:CA	1.86	1.04
1:M:107:CYS:SG	1:M:140:VAL:CG1	2.46	1.04
1:M:167:SER:N	1:M:168:ALA:CB	2.20	1.04
1:M:806:ILE:CD1	1:M:814:LEU:CD2	2.35	1.04
2:B:296:MET:CE	2:B:372:LEU:CB	2.36	1.04
2:N:296:MET:CE	2:N:372:LEU:CB	2.36	1.04
1:M:40:PRO:CG	1:M:276:ILE:CG2	2.36	1.03
1:A:1489:SER:CB	1:A:1490:PRO:HD3	1.89	1.02
1:A:1496:PHE:CD2	4:D:33:LEU:CD2	2.42	1.02
7:G:127:ASN:CB	7:G:128:PRO:CD	2.37	1.02
1:A:40:PRO:CG	1:A:276:ILE:CG2	2.35	1.02
2:B:310:ILE:CB	2:B:311:GLN:CA	2.37	1.02
1:M:25:SER:CB	1:M:239:TRP:NE1	2.23	1.02
1:A:1474:GLY:O	1:A:1475:THR:HG23	1.59	1.02
7:G:133:GLY:CA	7:G:134:GLU:CB	2.37	1.02
2:N:310:ILE:CB	2:N:311:GLN:CA	2.37	1.02
1:A:1071:ALA:CB	1:A:1373:HIS:CD2	2.43	1.01
1:A:25:SER:CB	1:A:239:TRP:NE1	2.23	1.01
7:S:127:ASN:CB	7:S:128:PRO:CD	2.37	1.01
4:P:51:MET:CE	4:P:55:MET:CE	2.38	1.01
7:S:133:GLY:CA	7:S:134:GLU:CB	2.37	1.01
1:A:846:ARG:NH1	1:A:1391:THR:CA	2.23	1.01
1:A:177:ALA:CB	1:A:178:ALA:CB	2.37	1.01
1:M:1071:ALA:CB	1:M:1373:HIS:CD2	2.43	1.01
1:A:1465:VAL:CG1	1:A:1466:PRO:CB	2.37	1.01
5:Q:49:GLY:CA	5:Q:50:ARG:CB	2.38	1.01
4:D:51:MET:CE	4:D:55:MET:CE	2.38	1.01
2:B:246:ARG:CG	2:B:247:ASN:N	2.21	1.01
1:M:83:PHE:CE2	2:N:1196:MET:CB	2.44	1.01
1:M:150:CYS:CB	1:M:176:GLY:CA	2.39	1.01
1:A:202:LEU:CB	1:A:203:PRO:CD	2.38	1.00
1:A:83:PHE:CE2	2:B:1196:MET:CB	2.44	1.00

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1461:LEU:HB3	1:A:1462:GLY:O	1.60	1.00
1:A:1465:VAL:HG12	1:A:1466:PRO:CB	1.91	1.00
2:N:290:ASP:CB	2:N:292:ASN:CG	2.30	1.00
2:N:246:ARG:CG	2:N:247:ASN:N	2.21	1.00
3:C:137:ASP:CG	3:C:140:SER:CB	2.30	1.00
3:O:137:ASP:CG	3:O:140:SER:CB	2.30	1.00
1:M:433:ARG:N	1:M:436:TRP:CZ2	2.30	1.00
9:U:73:LYS:N	9:U:81:HIS:CD2	2.30	1.00
9:I:73:LYS:N	9:I:81:HIS:CD2	2.30	1.00
1:M:846:ARG:NH1	1:M:1391:THR:CA	2.24	1.00
1:A:177:ALA:CB	1:A:178:ALA:C	2.30	1.00
1:M:177:ALA:CB	1:M:178:ALA:C	2.30	1.00
9:U:4:PHE:CE1	9:U:27:LEU:CD2	2.45	1.00
1:M:178:ALA:C	1:M:180:PRO:CD	2.30	0.99
2:N:215:ALA:C	2:N:217:SER:CB	2.30	0.99
5:E:49:GLY:CA	5:E:50:ARG:CB	2.38	0.99
4:D:132:LYS:CA	4:D:133:PHE:C	2.30	0.99
5:E:100:LYS:O	5:E:101:THR:CG2	2.10	0.99
1:A:108:VAL:CG1	1:A:113:GLY:C	2.30	0.99
2:B:290:ASP:CB	2:B:292:ASN:CG	2.30	0.99
4:P:11:ALA:CA	4:P:12:GLN:CB	2.40	0.99
4:D:85:PHE:CZ	4:D:115:ILE:CG1	2.46	0.99
2:N:291:PRO:CA	2:N:292:ASN:CB	2.40	0.99
1:A:161:PHE:CE2	1:A:165:ASN:ND2	2.31	0.99
1:M:161:PHE:CE2	1:M:165:ASN:ND2	2.31	0.99
7:S:146:LEU:CD1	7:S:164:MET:SD	2.50	0.99
4:D:11:ALA:CA	4:D:12:GLN:CB	2.40	0.99
2:N:907:ILE:CD1	2:N:924:ARG:NH2	2.26	0.99
5:Q:100:LYS:O	5:Q:101:THR:CG2	2.10	0.99
2:B:215:ALA:C	2:B:217:SER:CB	2.30	0.99
4:P:132:LYS:CA	4:P:133:PHE:C	2.30	0.99
9:I:4:PHE:CE1	9:I:27:LEU:CD2	2.45	0.98
7:G:146:LEU:CD1	7:G:164:MET:SD	2.50	0.98
2:B:907:ILE:CD1	2:B:924:ARG:NH2	2.26	0.98
1:A:50:PRO:O	1:A:51:ARG:CG	2.10	0.98
1:A:1117:PRO:O	1:A:1118:SER:O	1.81	0.98
1:M:1276:SER:CB	1:M:1277:ILE:CG1	2.41	0.98
2:B:291:PRO:CA	2:B:292:ASN:CB	2.40	0.98
1:A:433:ARG:N	1:A:436:TRP:CZ2	2.30	0.98
4:P:85:PHE:CZ	4:P:115:ILE:CG1	2.46	0.98
1:A:381:THR:OG1	1:A:382:TYR:O	1.82	0.98
1:M:110:TRP:CZ2	1:M:193:TRP:NE1	2.32	0.98

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:907:ILE:CD1	2:B:924:ARG:CZ	2.42	0.98
1:A:42:THR:CG2	1:A:55:LEU:CB	2.42	0.98
2:N:387:PHE:CD2	2:N:503:THR:CG2	2.46	0.98
1:A:1395:ILE:CD1	1:A:1397:ARG:CB	2.41	0.97
1:A:1465:VAL:HG12	1:A:1466:PRO:HB3	1.45	0.97
2:N:200:GLN:NE2	2:N:465:VAL:CG2	2.27	0.97
1:M:1496:PHE:HZ	4:P:75:TYR:CZ	1.82	0.97
1:M:775:ILE:CD1	1:M:775:ILE:C	2.30	0.97
8:H:63:LEU:C	8:H:63:LEU:CD2	2.32	0.97
9:U:73:LYS:CG	9:U:81:HIS:CD2	2.46	0.97
1:A:1489:SER:HB3	1:A:1490:PRO:HD3	0.98	0.97
1:M:381:THR:OG1	1:M:382:TYR:O	1.82	0.97
1:M:1117:PRO:O	1:M:1118:SER:O	1.81	0.97
9:I:73:LYS:CG	9:I:81:HIS:CD2	2.47	0.97
1:A:1392:ARG:O	1:A:1393:HIS:CG	2.18	0.96
2:B:200:GLN:NE2	2:B:465:VAL:CG2	2.27	0.96
7:G:80:TRP:CZ3	7:G:107:LEU:CB	2.49	0.96
2:N:907:ILE:CD1	2:N:924:ARG:CZ	2.42	0.96
1:M:42:THR:CG2	1:M:55:LEU:CB	2.42	0.96
1:A:1282:VAL:CG1	1:A:1285:ILE:CD1	2.42	0.96
1:M:1498:GLY:HA2	1:M:1500:PRO:HD3	1.48	0.96
1:A:517:ILE:CG1	1:A:640:TRP:NE1	2.28	0.96
1:A:775:ILE:CD1	1:A:775:ILE:C	2.30	0.96
1:A:1465:VAL:CG1	1:A:1466:PRO:HA	1.93	0.96
8:T:63:LEU:CD2	8:T:63:LEU:C	2.32	0.96
7:S:59:LYS:CB	7:S:60:GLY:CA	2.44	0.96
1:M:1403:LEU:CD2	1:M:1432:GLU:CG	2.44	0.96
1:M:517:ILE:CG1	1:M:640:TRP:NE1	2.28	0.96
1:A:1276:SER:CB	1:A:1277:ILE:CG1	2.44	0.96
4:D:99:GLU:CA	4:D:124:LEU:CD2	2.44	0.96
1:M:781:ILE:CG1	1:M:821:PHE:CD2	2.49	0.95
1:M:81:GLY:CA	1:M:249:PRO:CG	2.45	0.95
1:M:208:LEU:N	1:M:208:LEU:CD1	2.30	0.95
1:M:792:HIS:CB	1:M:817:GLN:NE2	2.29	0.95
7:S:80:TRP:CZ3	7:S:107:LEU:CB	2.49	0.95
1:M:15:ARG:NH2	7:S:64:PRO:CG	2.30	0.95
1:M:1492:VAL:CG1	1:M:1496:PHE:CE2	2.43	0.95
1:A:1403:LEU:CD2	1:A:1432:GLU:CG	2.44	0.95
1:A:271:LYS:CE	1:A:328:LEU:CG	2.45	0.95
1:M:267:ASP:N	1:M:268:LEU:CB	2.30	0.95
4:P:99:GLU:CA	4:P:124:LEU:CD2	2.44	0.95
4:P:58:THR:CB	4:P:62:PHE:CE2	2.50	0.95

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:646:GLU:CA	1:M:648:CYS:N	2.30	0.95
1:A:646:GLU:CA	1:A:648:CYS:N	2.30	0.95
1:A:1101:VAL:CG1	1:A:1102:PRO:N	2.30	0.94
1:M:1434:ILE:O	2:N:1141:PHE:CZ	2.20	0.94
1:M:40:PRO:CB	1:M:276:ILE:CG2	2.46	0.94
9:I:25:LEU:CB	9:I:38:ALA:CB	2.45	0.94
1:M:271:LYS:CE	1:M:328:LEU:CG	2.45	0.94
1:A:1165:VAL:CG1	1:A:1166:ILE:N	2.30	0.94
4:D:58:THR:CB	4:D:62:PHE:CE2	2.50	0.94
1:M:1395:ILE:CD1	1:M:1397:ARG:CB	2.44	0.94
1:A:81:GLY:CA	1:A:249:PRO:CG	2.45	0.94
2:B:290:ASP:CA	2:B:292:ASN:CB	2.46	0.94
1:A:90:LYS:NZ	1:A:282:VAL:CG1	2.31	0.94
1:A:119:SER:N	1:A:120:SER:CA	2.30	0.94
3:O:130:LEU:CD1	3:O:130:LEU:N	2.30	0.94
2:N:212:LYS:CG	2:N:213:LYS:N	2.26	0.94
1:A:1150:THR:CB	9:I:48:LEU:CD2	2.45	0.94
1:A:267:ASP:N	1:A:268:LEU:CB	2.30	0.94
1:M:90:LYS:NZ	1:M:282:VAL:CG1	2.31	0.93
1:A:1485:PRO:HD2	4:D:43:ARG:NH1	1.81	0.93
1:M:119:SER:N	1:M:120:SER:CA	2.30	0.93
2:N:290:ASP:CA	2:N:292:ASN:CB	2.46	0.93
1:A:1478:LEU:HD23	4:D:45:THR:O	1.68	0.93
1:A:40:PRO:CB	1:A:276:ILE:CG2	2.46	0.93
1:M:1276:SER:CA	1:M:1277:ILE:CB	2.46	0.93
2:N:290:ASP:CB	2:N:292:ASN:CB	2.47	0.93
7:S:52:SER:N	7:S:55:ILE:CD1	2.32	0.93
1:M:1496:PHE:CZ	4:P:75:TYR:CZ	2.56	0.93
2:B:212:LYS:CG	2:B:213:LYS:N	2.30	0.93
1:M:192:SER:CB	1:M:202:LEU:CA	2.47	0.93
7:S:46:ILE:CA	7:S:79:LEU:CD2	2.47	0.92
1:M:1165:VAL:CG1	1:M:1166:ILE:N	2.30	0.92
7:G:59:LYS:CB	7:G:60:GLY:CA	2.44	0.92
3:C:130:LEU:N	3:C:130:LEU:CD1	2.30	0.92
1:A:95:ILE:CG1	1:A:314:ILE:CD1	2.47	0.92
2:B:290:ASP:CB	2:B:292:ASN:CB	2.47	0.92
7:G:46:ILE:CA	7:G:79:LEU:CD2	2.47	0.92
1:A:1397:ARG:CG	1:A:1398:ALA:N	2.29	0.92
1:A:1461:LEU:HB3	1:A:1462:GLY:HA3	1.51	0.92
7:G:52:SER:N	7:G:55:ILE:CD1	2.32	0.92
1:A:64:ASP:C	1:A:67:PHE:CE1	2.43	0.92
7:G:39:CYS:SG	7:G:45:TYR:CG	2.63	0.92

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1496:PHE:HD2	4:D:33:LEU:CD2	1.81	0.91
7:G:114:HIS:CD2	7:G:114:HIS:C	2.44	0.91
2:N:264:SER:CB	2:N:322:LYS:NZ	2.33	0.91
7:S:39:CYS:SG	7:S:45:TYR:CG	2.63	0.91
1:M:1162:GLN:NE2	1:M:1162:GLN:CA	2.33	0.91
4:P:84:ARG:CG	4:P:85:PHE:N	2.32	0.91
1:M:141:TRP:O	1:M:144:CYS:SG	2.29	0.91
1:A:1461:LEU:HB3	1:A:1462:GLY:C	1.91	0.91
1:M:1397:ARG:CG	1:M:1398:ALA:N	2.30	0.91
1:M:1101:VAL:CG1	1:M:1102:PRO:N	2.30	0.91
1:A:1162:GLN:NE2	1:A:1162:GLN:CA	2.33	0.91
2:N:454:ASP:CG	2:N:455:GLN:CA	2.39	0.91
1:M:106:GLU:CB	1:M:144:CYS:CB	2.49	0.91
1:M:267:ASP:CA	1:M:268:LEU:CB	2.49	0.91
7:S:164:MET:CE	7:S:170:GLY:CA	2.49	0.91
1:A:267:ASP:CA	1:A:268:LEU:CB	2.49	0.90
1:M:177:ALA:CA	1:M:178:ALA:CB	2.47	0.90
7:S:114:HIS:C	7:S:114:HIS:CD2	2.44	0.90
1:M:177:ALA:CB	1:M:178:ALA:CA	2.49	0.90
1:A:177:ALA:CA	1:A:178:ALA:CB	2.48	0.90
1:M:64:ASP:C	1:M:67:PHE:CE1	2.43	0.90
2:B:488:ILE:CG2	2:B:489:GLY:CA	2.49	0.90
7:G:164:MET:CE	7:G:170:GLY:CA	2.49	0.90
7:G:5:LEU:CD1	7:G:50:LEU:CD1	2.50	0.90
1:A:1191:GLN:CB	1:A:1246:ILE:CG2	2.50	0.90
9:U:75:CYS:O	9:U:75:CYS:SG	2.30	0.90
4:D:99:GLU:CG	4:D:124:LEU:CD2	2.49	0.90
4:P:96:LEU:O	4:P:97:CYS:SG	2.30	0.90
1:M:155:SER:CB	1:M:169:ASN:CB	2.50	0.90
1:M:1498:GLY:HA3	1:M:1500:PRO:HD3	0.90	0.90
1:M:71:THR:O	1:M:72:CYS:SG	2.30	0.90
1:A:155:SER:CB	1:A:169:ASN:CB	2.50	0.90
4:P:97:CYS:O	4:P:98:CYS:SG	2.30	0.90
4:P:26:THR:OG1	4:P:29:GLU:CB	2.20	0.89
1:A:1412:VAL:CG1	1:A:1413:GLU:N	2.34	0.89
7:G:66:GLN:O	7:G:68:PHE:CE1	2.25	0.89
1:M:1191:GLN:CB	1:M:1246:ILE:CG2	2.49	0.89
2:B:454:ASP:CG	2:B:455:GLN:CA	2.39	0.89
4:D:96:LEU:O	4:D:97:CYS:SG	2.30	0.89
9:U:25:LEU:CB	9:U:38:ALA:CB	2.51	0.89
4:D:26:THR:OG1	4:D:29:GLU:CB	2.20	0.89
7:S:5:LEU:CD1	7:S:50:LEU:CD1	2.50	0.89

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:71:THR:O	1:A:72:CYS:SG	2.30	0.89
9:I:111:GLU:CG	9:I:112:GLU:N	2.36	0.89
1:M:1504:ALA:O	1:M:1507:PRO:HG2	1.73	0.89
9:I:75:CYS:O	9:I:75:CYS:SG	2.30	0.89
4:P:99:GLU:CG	4:P:124:LEU:CD2	2.50	0.89
1:A:1276:SER:CA	1:A:1277:ILE:CB	2.46	0.89
1:M:42:THR:CG2	1:M:43:MET:N	2.35	0.89
1:M:95:ILE:CD1	1:M:187:LEU:CD2	2.51	0.89
1:M:432:LEU:CA	1:M:436:TRP:CZ2	2.56	0.89
1:M:1506:SER:N	1:M:1507:PRO:HD2	1.87	0.89
1:M:50:PRO:O	1:M:51:ARG:CG	2.20	0.89
5:E:101:THR:CG2	5:E:126:THR:CG2	2.51	0.89
1:M:368:ASP:CG	1:M:649:LYS:CE	2.42	0.89
1:M:177:ALA:CB	1:M:179:GLN:CG	2.51	0.88
1:M:1412:VAL:CG1	1:M:1413:GLU:N	2.34	0.88
7:S:66:GLN:O	7:S:68:PHE:CE1	2.25	0.88
2:N:290:ASP:CB	2:N:292:ASN:ND2	2.37	0.88
2:N:488:ILE:CG2	2:N:489:GLY:CA	2.49	0.88
10:J:43:TYR:CB	10:J:44:CYS:CA	2.52	0.88
1:A:1496:PHE:HB3	4:D:29:GLU:OE2	1.73	0.88
4:D:97:CYS:O	4:D:98:CYS:SG	2.30	0.88
5:Q:101:THR:CG2	5:Q:126:THR:CG2	2.51	0.88
1:A:322:GLN:OE1	1:A:328:LEU:CG	2.22	0.88
1:A:1450:TYR:HD1	7:G:60:GLY:O	1.55	0.88
1:M:322:GLN:OE1	1:M:328:LEU:CG	2.22	0.88
1:A:432:LEU:CA	1:A:436:TRP:CZ2	2.56	0.88
1:A:166:PRO:C	1:A:168:ALA:CB	2.42	0.88
1:A:1472:GLY:O	1:A:1473:MET:HG2	1.74	0.88
2:B:290:ASP:CB	2:B:292:ASN:ND2	2.37	0.88
1:A:457:HIS:CG	1:A:1077:GLU:OE2	2.27	0.88
1:A:1081:GLN:NE2	1:A:1368:TYR:CE2	2.42	0.88
1:M:1450:TYR:HD1	7:S:61:ARG:CA	1.86	0.87
1:M:1081:GLN:NE2	1:M:1368:TYR:CE2	2.42	0.87
1:M:236:ARG:N	1:M:239:TRP:CE3	2.42	0.87
10:V:43:TYR:CB	10:V:44:CYS:CA	2.51	0.87
1:A:236:ARG:N	1:A:239:TRP:CE3	2.42	0.87
9:U:111:GLU:CG	9:U:112:GLU:N	2.36	0.87
4:P:97:CYS:SG	4:P:131:ARG:NH2	2.48	0.87
1:A:260:GLY:CA	2:B:924:ARG:NE	2.38	0.87
1:M:338:LYS:CG	1:M:343:ARG:CD	2.53	0.87
1:M:166:PRO:C	1:M:168:ALA:CB	2.42	0.87
2:B:1108:VAL:CG1	2:B:1115:GLY:O	2.23	0.87

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:775:ILE:C	1:M:776:VAL:CG1	2.43	0.86
1:A:42:THR:CG2	1:A:43:MET:N	2.35	0.86
1:A:1406:CYS:SG	1:A:1415:LEU:CD2	2.64	0.86
1:A:177:ALA:CB	1:A:178:ALA:CA	2.52	0.86
1:M:778:GLY:CA	1:M:1091:GLY:C	2.44	0.86
1:A:49:ARG:N	1:A:50:PRO:CD	2.38	0.86
4:D:97:CYS:SG	4:D:131:ARG:NH2	2.48	0.86
1:A:1462:GLY:O	1:A:1463:THR:HG22	1.74	0.86
3:O:129:SER:CB	3:O:130:LEU:CA	2.53	0.86
1:M:1406:CYS:SG	1:M:1415:LEU:CD2	2.64	0.86
11:K:118:VAL:CG2	11:K:119:GLU:N	2.37	0.86
1:A:353:PHE:CE2	1:A:381:THR:O	2.29	0.86
1:M:1089:TYR:N	1:M:1090:ALA:CB	2.38	0.86
1:A:266:ASP:CB	1:A:267:ASP:CB	2.54	0.86
1:M:193:TRP:O	1:M:200:SER:CB	2.24	0.86
1:A:775:ILE:C	1:A:776:VAL:CG1	2.43	0.86
4:P:99:GLU:CB	4:P:124:LEU:CD2	2.54	0.86
11:W:118:VAL:CG2	11:W:119:GLU:N	2.37	0.86
1:A:1223:PHE:CE2	1:A:1273:MET:SD	2.68	0.86
1:M:405:HIS:CB	1:M:406:PRO:CD	2.54	0.86
1:A:721:GLU:OE2	1:A:780:ARG:CD	2.24	0.86
1:A:1085:ASN:OD1	1:A:1088:HIS:CD2	2.29	0.85
3:C:129:SER:CB	3:C:130:LEU:CA	2.53	0.85
1:A:1089:TYR:N	1:A:1090:ALA:CB	2.37	0.85
1:M:806:ILE:CD1	1:M:814:LEU:CG	2.54	0.85
1:A:1485:PRO:O	1:A:1486:TYR:HB2	1.74	0.85
1:M:1140:GLN:O	1:M:1280:ARG:CB	2.23	0.85
2:N:1108:VAL:CG1	2:N:1115:GLY:O	2.23	0.85
1:M:120:SER:N	1:M:121:ASN:C	2.30	0.85
1:M:721:GLU:OE2	1:M:780:ARG:CD	2.24	0.85
4:D:99:GLU:CB	4:D:124:LEU:CD2	2.53	0.85
1:A:208:LEU:N	1:A:208:LEU:CD1	2.38	0.85
2:B:703:GLY:O	2:B:704:TYR:CD1	2.30	0.85
1:M:1223:PHE:CE2	1:M:1273:MET:SD	2.69	0.85
1:M:266:ASP:CB	1:M:267:ASP:CB	2.54	0.85
1:M:180:PRO:CB	1:M:192:SER:O	2.25	0.85
1:M:205:LYS:CG	1:M:206:ARG:N	2.37	0.85
1:M:49:ARG:N	1:M:50:PRO:CD	2.38	0.85
4:P:67:ARG:NH1	4:P:97:CYS:SG	2.50	0.85
1:A:1172:PHE:O	1:A:1176:PHE:CD2	2.30	0.84
1:A:810:TYR:CE2	2:B:751:ASN:O	2.29	0.84
4:D:67:ARG:NH1	4:D:97:CYS:SG	2.50	0.84

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:201:ASP:CB	1:A:206:ARG:NH1	2.40	0.84
1:M:126:ASP:O	1:M:130:TYR:CD2	2.30	0.84
1:M:1392:ARG:O	1:M:1393:HIS:CG	2.30	0.84
1:A:345:ASN:O	1:A:349:LYS:CE	2.25	0.84
1:A:1173:VAL:O	1:A:1177:PHE:CD2	2.30	0.84
1:M:1085:ASN:OD1	1:M:1088:HIS:CD2	2.30	0.84
1:A:770:CYS:O	1:A:771:VAL:CG2	2.26	0.84
1:A:405:HIS:CB	1:A:406:PRO:CD	2.54	0.84
1:M:150:CYS:CB	1:M:176:GLY:C	2.46	0.84
2:N:703:GLY:O	2:N:704:TYR:CD1	2.30	0.84
2:N:654:ARG:CB	2:N:655:TYR:CA	2.56	0.84
1:M:709:LYS:CB	1:M:710:PRO:CD	2.56	0.84
1:A:1450:TYR:O	1:A:1451:LEU:HD23	1.76	0.84
1:A:351:VAL:CG1	1:A:352:ASP:N	2.40	0.84
1:M:775:ILE:CG1	1:M:1089:TYR:CD2	2.61	0.84
4:D:129:THR:O	4:D:133:PHE:CD2	2.31	0.84
1:M:343:ARG:NH1	1:M:343:ARG:CG	2.41	0.84
5:Q:45:HIS:CE1	5:Q:57:LEU:CD1	2.60	0.84
5:E:45:HIS:CE1	5:E:57:LEU:CD1	2.60	0.83
1:M:106:GLU:CG	1:M:144:CYS:CB	2.56	0.83
4:P:99:GLU:O	4:P:124:LEU:CD2	2.27	0.83
1:A:1174:GLU:OE2	1:A:1242:ARG:CZ	2.26	0.83
4:D:19:PHE:CD1	7:G:81:ARG:NH1	2.46	0.83
1:A:120:SER:N	1:A:121:ASN:C	2.30	0.83
1:A:126:ASP:O	1:A:130:TYR:CD2	2.30	0.83
1:M:1450:TYR:O	1:M:1451:LEU:HD23	1.76	0.83
4:P:129:THR:O	4:P:133:PHE:CD2	2.31	0.83
1:A:1451:LEU:HD21	7:G:62:VAL:CG2	2.07	0.83
4:D:57:LYS:O	4:D:61:TYR:CD2	2.32	0.83
1:A:1089:TYR:CD2	1:A:1089:TYR:O	2.31	0.83
1:M:1173:VAL:O	1:M:1177:PHE:CD2	2.30	0.83
4:P:57:LYS:O	4:P:61:TYR:CD2	2.32	0.83
1:A:646:GLU:N	1:A:648:CYS:CB	2.42	0.83
1:M:1174:GLU:OE2	1:M:1242:ARG:CZ	2.26	0.83
1:M:351:VAL:CG1	1:M:352:ASP:N	2.40	0.83
1:M:179:GLN:N	1:M:180:PRO:CD	2.38	0.83
1:A:1450:TYR:CD1	7:G:60:GLY:O	2.31	0.83
1:M:770:CYS:O	1:M:771:VAL:CG2	2.26	0.83
5:Q:199:THR:N	5:Q:200:SER:CA	2.42	0.83
1:A:1089:TYR:CG	1:A:1089:TYR:O	2.31	0.83
4:P:19:PHE:CD1	7:S:81:ARG:NH1	2.46	0.83
1:A:6:PHE:CD2	1:A:78:ASP:OD2	2.32	0.82

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:822:HIS:NE2	2:N:753:SER:CB	2.42	0.82
1:M:66:GLN:O	1:M:67:PHE:CG	2.32	0.82
4:D:99:GLU:O	4:D:124:LEU:CD2	2.28	0.82
1:A:10:SER:CB	2:B:1168:TYR:OH	2.27	0.82
2:B:654:ARG:CB	2:B:655:TYR:CA	2.56	0.82
2:B:310:ILE:O	2:B:315:ILE:CG2	2.27	0.82
1:M:10:SER:CB	2:N:1168:TYR:OH	2.27	0.82
1:A:26:PRO:CD	1:A:239:TRP:CD1	2.62	0.82
1:M:646:GLU:N	1:M:648:CYS:CB	2.42	0.82
5:E:199:THR:N	5:E:200:SER:CA	2.41	0.82
1:M:382:TYR:CE1	1:M:446:ASP:OD1	2.33	0.82
1:A:66:GLN:O	1:A:67:PHE:CG	2.33	0.82
2:N:310:ILE:O	2:N:315:ILE:CG2	2.27	0.82
4:P:85:PHE:O	4:P:86:HIS:CG	2.33	0.82
1:A:120:SER:CB	1:A:121:ASN:CA	2.57	0.82
1:M:260:GLY:CA	2:N:924:ARG:NE	2.43	0.82
4:P:61:TYR:CE1	7:S:103:ASN:O	2.33	0.82
1:A:343:ARG:CD	2:B:1121:GLU:OE1	2.26	0.82
4:D:97:CYS:C	4:D:98:CYS:SG	2.58	0.82
4:P:97:CYS:C	4:P:98:CYS:SG	2.58	0.82
1:A:64:ASP:C	1:A:67:PHE:CD1	2.53	0.82
9:U:53:VAL:CG1	9:U:56:THR:CB	2.58	0.82
2:N:659:PRO:CA	2:N:660:GLU:C	2.48	0.82
1:M:26:PRO:CD	1:M:239:TRP:CD1	2.62	0.82
1:M:266:ASP:CA	1:M:267:ASP:CB	2.58	0.82
1:A:50:PRO:C	1:A:51:ARG:CG	2.48	0.82
9:I:53:VAL:CG1	9:I:56:THR:CB	2.58	0.82
2:B:264:SER:CB	2:B:322:LYS:NZ	2.43	0.82
1:M:64:ASP:C	1:M:67:PHE:CD1	2.53	0.81
1:A:83:PHE:CZ	2:B:1196:MET:CB	2.63	0.81
4:D:85:PHE:O	4:D:86:HIS:CG	2.33	0.81
1:M:1089:TYR:O	1:M:1089:TYR:CD2	2.33	0.81
1:M:1089:TYR:O	1:M:1089:TYR:CG	2.31	0.81
2:B:659:PRO:CA	2:B:660:GLU:C	2.48	0.81
7:G:146:LEU:CG	7:G:164:MET:SD	2.68	0.81
1:A:1119:LEU:CG	1:A:1314:THR:CG2	2.59	0.81
1:M:6:PHE:CD2	1:M:78:ASP:OD2	2.32	0.81
1:M:1260:ILE:CD1	9:U:30:ARG:NH2	2.44	0.81
9:U:6:TYR:O	9:U:14:LEU:CG	2.28	0.81
1:M:83:PHE:CZ	2:N:1196:MET:CB	2.63	0.81
7:S:146:LEU:CG	7:S:164:MET:SD	2.68	0.81
1:A:778:GLY:O	1:A:1092:VAL:CG2	2.29	0.81

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1119:LEU:CB	1:A:1314:THR:CG2	2.59	0.81
1:M:1450:TYR:HE2	6:R:125:ARG:NE	1.78	0.81
2:N:1141:PHE:CD1	2:N:1185:PRO:CG	2.64	0.81
7:G:51:ASP:CA	7:G:55:ILE:CD1	2.59	0.81
1:A:193:TRP:O	1:A:200:SER:CB	2.29	0.81
1:A:266:ASP:CA	1:A:267:ASP:CB	2.58	0.81
1:A:42:THR:O	1:A:43:MET:SD	2.39	0.81
9:I:20:LYS:CD	9:I:21:VAL:N	2.44	0.81
7:G:93:THR:CG2	7:G:101:PHE:O	2.29	0.81
4:D:61:TYR:CE1	7:G:103:ASN:O	2.33	0.81
7:G:10:LEU:CD2	7:G:35:VAL:CG2	2.59	0.81
2:N:328:GLY:O	2:N:329:VAL:CG2	2.29	0.81
1:A:353:PHE:CD2	1:A:381:THR:O	2.33	0.80
1:M:42:THR:O	1:M:43:MET:SD	2.39	0.80
2:N:391:ARG:NE	2:N:618:ARG:NH2	2.28	0.80
1:M:192:SER:CB	1:M:202:LEU:O	2.29	0.80
1:A:1260:ILE:CD1	9:I:30:ARG:NH2	2.44	0.80
1:M:120:SER:CB	1:M:121:ASN:CA	2.57	0.80
1:M:1195:LEU:CD1	1:M:1242:ARG:CD	2.60	0.80
1:M:810:TYR:CE2	2:N:751:ASN:O	2.35	0.80
1:A:1170:LYS:CE	1:A:1240:ILE:CD1	2.60	0.80
1:A:709:LYS:CB	1:A:710:PRO:CD	2.56	0.80
11:K:118:VAL:O	11:K:119:GLU:CG	2.30	0.80
7:S:93:THR:CG2	7:S:101:PHE:O	2.29	0.80
1:A:318:PRO:O	1:A:319:GLN:CG	2.30	0.80
1:M:94:HIS:O	1:M:98:LEU:CG	2.30	0.80
1:A:1465:VAL:HG12	1:A:1466:PRO:CA	2.09	0.80
1:A:120:SER:N	1:A:122:PRO:N	2.30	0.80
1:M:1119:LEU:CB	1:M:1314:THR:CG2	2.59	0.80
1:M:2:SER:CB	7:S:65:GLY:O	2.28	0.80
4:D:24:MET:CG	7:G:4:PHE:CZ	2.64	0.80
4:P:24:MET:CG	7:S:4:PHE:CZ	2.64	0.80
1:A:379:THR:O	1:A:380:LEU:CD2	2.30	0.80
1:A:66:GLN:C	1:A:67:PHE:CD1	2.55	0.80
1:M:120:SER:CB	1:M:121:ASN:O	2.30	0.80
1:M:263:ARG:NH2	1:M:263:ARG:CG	2.43	0.80
1:M:1119:LEU:CG	1:M:1314:THR:CG2	2.59	0.80
1:M:1450:TYR:CD1	7:S:60:GLY:O	2.35	0.80
1:A:645:PRO:O	1:A:646:GLU:CG	2.30	0.80
1:A:1195:LEU:CD1	1:A:1242:ARG:CD	2.59	0.80
7:G:3:PHE:CE1	7:G:80:TRP:CD1	2.70	0.80
1:M:1164:THR:O	1:M:1165:VAL:CG2	2.30	0.80

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:266:ASP:O	1:M:269:THR:CG2	2.30	0.80
7:S:51:ASP:CA	7:S:55:ILE:CD1	2.59	0.80
2:N:454:ASP:OD1	2:N:455:GLN:CA	2.30	0.80
1:A:1074:SER:O	1:A:1078:PRO:CD	2.30	0.80
2:N:752:GLN:O	2:N:754:PRO:CD	2.30	0.80
1:M:379:THR:O	1:M:380:LEU:CD2	2.30	0.80
1:A:1462:GLY:O	1:A:1463:THR:CG2	2.30	0.80
1:A:1100:GLY:O	1:A:1102:PRO:CD	2.30	0.80
4:P:69:LYS:O	4:P:70:THR:CG2	2.30	0.80
4:P:96:LEU:C	4:P:97:CYS:SG	2.60	0.80
1:A:1115:LYS:O	1:A:1117:PRO:CD	2.30	0.80
1:A:1260:ILE:O	1:A:1260:ILE:CG1	2.30	0.80
4:P:80:ILE:CD1	4:P:130:LEU:CD1	2.59	0.80
11:W:118:VAL:O	11:W:119:GLU:CG	2.30	0.80
9:U:101:TYR:CB	9:U:110:PHE:CZ	2.65	0.80
2:N:343:GLN:O	2:N:344:LYS:CG	2.30	0.80
1:A:178:ALA:O	1:A:179:GLN:CG	2.30	0.79
1:A:62:THR:CG2	1:A:75:THR:CG2	2.60	0.79
2:B:310:ILE:O	2:B:315:ILE:CB	2.30	0.79
1:M:62:THR:CG2	1:M:75:THR:CG2	2.60	0.79
1:M:66:GLN:C	1:M:67:PHE:CD1	2.55	0.79
1:M:775:ILE:O	1:M:776:VAL:CG1	2.30	0.79
1:A:775:ILE:O	1:A:776:VAL:CG1	2.30	0.79
1:A:266:ASP:O	1:A:269:THR:CG2	2.30	0.79
1:M:118:ASP:CB	1:M:120:SER:OG	2.30	0.79
4:D:69:LYS:O	4:D:70:THR:CG2	2.30	0.79
1:A:263:ARG:CD	1:A:263:ARG:O	2.30	0.79
7:S:10:LEU:CD2	7:S:35:VAL:CG2	2.59	0.79
2:B:660:GLU:O	2:B:661:GLN:CG	2.30	0.79
2:N:328:GLY:O	2:N:329:VAL:CG1	2.30	0.79
7:S:150:GLY:O	7:S:160:ALA:CB	2.30	0.79
1:M:1074:SER:O	1:M:1078:PRO:CD	2.30	0.79
1:M:318:PRO:O	1:M:319:GLN:CG	2.30	0.79
1:M:94:HIS:O	1:M:98:LEU:CB	2.30	0.79
1:A:1164:THR:O	1:A:1165:VAL:CG2	2.30	0.79
1:A:120:SER:CB	1:A:121:ASN:O	2.30	0.79
1:M:1176:PHE:O	1:M:1180:PRO:CD	2.30	0.79
1:M:1450:TYR:CE1	7:S:61:ARG:CB	2.64	0.79
4:D:43:ARG:O	4:D:44:GLU:CG	2.30	0.79
1:M:148:MET:O	1:M:149:VAL:CG2	2.30	0.79
1:M:1094:SER:O	1:M:1095:LYS:CG	2.30	0.79
1:A:161:PHE:O	1:A:166:PRO:CB	2.30	0.79

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:P:11:ALA:CB	4:P:12:GLN:CB	2.60	0.79
1:A:263:ARG:NH2	1:A:263:ARG:CG	2.43	0.79
4:P:43:ARG:O	4:P:44:GLU:CG	2.30	0.79
9:I:101:TYR:CB	9:I:110:PHE:CZ	2.65	0.79
4:D:11:ALA:CB	4:D:12:GLN:CB	2.60	0.79
1:M:1115:LYS:O	1:M:1117:PRO:CD	2.30	0.79
2:B:752:GLN:O	2:B:754:PRO:CD	2.30	0.79
1:M:1260:ILE:O	1:M:1260:ILE:CG1	2.30	0.79
2:B:343:GLN:O	2:B:344:LYS:CG	2.30	0.79
1:A:195:ARG:CB	1:A:196:GLY:CA	2.61	0.79
1:A:148:MET:O	1:A:149:VAL:CG2	2.30	0.79
1:A:1176:PHE:O	1:A:1180:PRO:CD	2.30	0.79
1:M:1100:GLY:O	1:M:1102:PRO:CD	2.30	0.79
1:A:120:SER:CB	1:A:121:ASN:C	2.51	0.79
1:M:161:PHE:O	1:M:166:PRO:CB	2.30	0.79
1:M:336:LYS:O	1:M:336:LYS:CG	2.30	0.79
2:N:660:GLU:O	2:N:661:GLN:CG	2.30	0.79
9:I:6:TYR:O	9:I:14:LEU:CD2	2.30	0.79
1:M:730:GLN:CA	1:M:733:ASP:OD1	2.31	0.79
1:M:856:VAL:CG2	1:M:1067:VAL:CG2	2.61	0.79
1:M:1504:ALA:O	1:M:1507:PRO:CG	2.30	0.79
1:A:64:ASP:O	1:A:67:PHE:CD1	2.36	0.79
8:T:63:LEU:CD2	8:T:63:LEU:O	2.30	0.79
1:A:1094:SER:O	1:A:1095:LYS:CG	2.31	0.79
7:S:3:PHE:CE1	7:S:80:TRP:CD1	2.70	0.79
1:A:335:LEU:CD2	1:A:335:LEU:N	2.45	0.79
2:B:329:VAL:CA	2:B:330:THR:CG2	2.61	0.79
1:A:1496:PHE:CG	4:D:29:GLU:CG	2.65	0.79
1:M:1170:LYS:CE	1:M:1240:ILE:CD1	2.60	0.79
1:M:1450:TYR:HE1	7:S:61:ARG:CB	1.95	0.79
1:M:368:ASP:OD2	1:M:649:LYS:CE	2.31	0.79
2:B:220:ALA:O	2:B:221:TYR:CD2	2.35	0.79
1:M:120:SER:N	1:M:122:PRO:N	2.30	0.79
1:M:645:PRO:O	1:M:646:GLU:CG	2.30	0.79
1:A:94:HIS:O	1:A:98:LEU:CG	2.30	0.79
1:M:102:LYS:CG	1:M:189:LEU:CD2	2.60	0.79
1:A:161:PHE:CD2	1:A:165:ASN:ND2	2.51	0.79
1:A:42:THR:CG2	1:A:55:LEU:CG	2.61	0.79
4:P:58:THR:O	4:P:62:PHE:CD2	2.36	0.79
4:D:58:THR:O	4:D:62:PHE:CD2	2.36	0.79
1:A:314:ILE:O	1:A:314:ILE:CG2	2.31	0.79
1:A:94:HIS:O	1:A:98:LEU:CB	2.30	0.79

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:454:ASP:OD1	2:B:455:GLN:CA	2.30	0.79
1:M:12:PRO:O	1:M:13:LEU:CD2	2.31	0.79
7:G:150:GLY:O	7:G:160:ALA:CB	2.30	0.79
4:P:27:VAL:CG2	4:P:95:THR:CG2	2.61	0.79
3:O:82:VAL:O	3:O:82:VAL:CG1	2.31	0.79
1:M:314:ILE:O	1:M:314:ILE:CG2	2.31	0.79
1:A:120:SER:OG	1:A:121:ASN:CB	2.30	0.79
1:M:335:LEU:N	1:M:335:LEU:CD2	2.45	0.79
8:T:70:GLU:OE1	8:T:70:GLU:CA	2.30	0.79
1:A:1082:MET:CE	1:A:1364:PHE:O	2.31	0.78
1:A:118:ASP:CB	1:A:120:SER:OG	2.30	0.78
1:A:1474:GLY:O	1:A:1475:THR:CG2	2.31	0.78
1:M:1434:ILE:C	2:N:1141:PHE:CZ	2.56	0.78
1:A:336:LYS:CG	1:A:336:LYS:O	2.30	0.78
1:A:331:ILE:O	1:A:335:LEU:CD2	2.32	0.78
4:P:47:GLY:O	4:P:48:GLU:CB	2.31	0.78
1:M:1082:MET:CE	1:M:1364:PHE:O	2.31	0.78
1:M:263:ARG:CD	1:M:263:ARG:O	2.30	0.78
2:N:220:ALA:O	2:N:221:TYR:CD2	2.35	0.78
1:M:176:GLY:O	1:M:177:ALA:CB	2.32	0.78
1:M:161:PHE:CD2	1:M:165:ASN:ND2	2.51	0.78
1:A:343:ARG:CG	1:A:1409:GLU:OE2	2.32	0.78
1:M:1150:THR:O	1:M:1151:SER:CB	2.32	0.78
4:D:27:VAL:CG2	4:D:95:THR:CG2	2.61	0.78
3:C:82:VAL:O	3:C:82:VAL:CG1	2.31	0.78
1:A:778:GLY:CA	1:A:1091:GLY:C	2.51	0.78
1:M:331:ILE:O	1:M:335:LEU:CD2	2.32	0.78
1:M:110:TRP:CZ2	1:M:180:PRO:CG	2.67	0.78
4:D:96:LEU:C	4:D:97:CYS:SG	2.60	0.78
2:B:656:ASP:O	2:B:657:ILE:CG2	2.32	0.78
1:A:196:GLY:O	1:A:197:LYS:CB	2.32	0.78
1:A:856:VAL:CG2	1:A:1067:VAL:CG2	2.61	0.78
4:D:25:LEU:CD1	7:G:5:LEU:CB	2.61	0.78
1:M:120:SER:CB	1:M:121:ASN:C	2.51	0.78
4:D:80:ILE:CD1	4:D:130:LEU:CD1	2.60	0.78
1:A:12:PRO:O	1:A:13:LEU:CD2	2.31	0.78
9:U:79:HIS:O	9:U:80:GLN:CB	2.31	0.78
1:M:153:GLY:CA	1:M:174:GLY:CA	2.61	0.78
8:H:63:LEU:O	8:H:63:LEU:CD2	2.30	0.78
4:P:25:LEU:CD1	7:S:5:LEU:CB	2.61	0.78
1:M:64:ASP:O	1:M:67:PHE:CD1	2.36	0.78
1:M:105:LEU:CD1	1:M:105:LEU:O	2.32	0.78

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:120:SER:OG	1:M:121:ASN:CB	2.30	0.78
1:M:48:GLN:CG	1:M:50:PRO:CG	2.61	0.78
1:M:71:THR:CG2	1:M:72:CYS:SG	2.71	0.78
2:B:296:MET:CE	2:B:372:LEU:C	2.52	0.78
2:N:660:GLU:O	2:N:661:GLN:CB	2.31	0.78
2:B:660:GLU:O	2:B:661:GLN:CB	2.31	0.78
1:A:177:ALA:CB	1:A:179:GLN:CG	2.62	0.78
2:N:310:ILE:O	2:N:315:ILE:CB	2.31	0.78
1:A:1255:ASP:O	1:A:1256:ASP:CB	2.32	0.78
2:N:330:THR:O	2:N:334:ARG:CB	2.32	0.78
2:N:429:ASN:O	2:N:430:LEU:CB	2.32	0.78
1:M:1165:VAL:O	1:M:1166:ILE:CG1	2.33	0.77
1:M:457:HIS:CG	1:M:1077:GLU:OE2	2.36	0.77
1:M:1255:ASP:O	1:M:1256:ASP:CB	2.32	0.77
2:N:972:ARG:CZ	2:N:1080:TYR:CE1	2.67	0.77
1:A:1165:VAL:O	1:A:1166:ILE:CG1	2.33	0.77
1:A:1151:SER:CA	1:A:1152:ALA:CB	2.62	0.77
1:A:267:ASP:N	1:A:268:LEU:C	2.38	0.77
1:M:267:ASP:N	1:M:268:LEU:C	2.38	0.77
1:A:48:GLN:CG	1:A:50:PRO:CG	2.61	0.77
1:A:71:THR:CG2	1:A:72:CYS:SG	2.71	0.77
1:M:42:THR:CG2	1:M:55:LEU:CG	2.61	0.77
1:M:1450:TYR:CD1	7:S:61:ARG:CA	2.67	0.77
1:M:337:GLY:CA	1:M:338:LYS:O	2.32	0.77
2:B:655:TYR:O	2:B:656:ASP:CB	2.31	0.77
1:A:362:ASP:OD1	1:A:365:LEU:CG	2.32	0.77
2:N:296:MET:CE	2:N:372:LEU:C	2.52	0.77
9:I:79:HIS:O	9:I:80:GLN:CB	2.31	0.77
1:A:1496:PHE:CE2	4:D:33:LEU:CD2	2.68	0.77
1:M:48:GLN:CG	1:M:50:PRO:CD	2.63	0.77
4:D:99:GLU:C	4:D:124:LEU:CD2	2.53	0.77
2:N:211:PHE:CZ	2:N:384:ARG:NH1	2.51	0.77
1:A:1466:PRO:O	1:A:1469:ALA:HB3	1.84	0.77
4:P:99:GLU:C	4:P:124:LEU:CD2	2.52	0.77
1:A:1140:GLN:O	1:A:1280:ARG:CB	2.33	0.77
8:H:70:GLU:CA	8:H:70:GLU:OE1	2.30	0.77
2:N:656:ASP:O	2:N:657:ILE:CG2	2.32	0.77
1:M:362:ASP:OD1	1:M:365:LEU:CG	2.32	0.77
1:M:105:LEU:O	1:M:106:GLU:CB	2.33	0.77
1:A:946:CYS:CB	1:A:949:ILE:CD1	2.62	0.77
1:A:1461:LEU:CB	1:A:1462:GLY:O	2.33	0.77
2:B:429:ASN:O	2:B:430:LEU:CB	2.32	0.77

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1411:THR:O	1:A:1412:VAL:CG1	2.33	0.77
1:A:337:GLY:CA	1:A:338:LYS:O	2.32	0.77
1:M:195:ARG:CG	1:M:196:GLY:CA	2.62	0.77
1:A:730:GLN:CA	1:A:733:ASP:OD1	2.31	0.77
9:I:51:SER:O	9:I:52:ASN:CB	2.33	0.77
1:M:1100:GLY:C	1:M:1102:PRO:CD	2.53	0.76
1:A:48:GLN:CG	1:A:50:PRO:CD	2.63	0.76
2:N:427:GLU:O	2:N:428:PHE:CB	2.33	0.76
4:D:47:GLY:O	4:D:48:GLU:CB	2.31	0.76
1:A:15:ARG:NH1	1:A:1438:GLN:NE2	2.33	0.76
1:M:946:CYS:CB	1:M:949:ILE:CD1	2.63	0.76
1:A:105:LEU:O	1:A:106:GLU:CB	2.32	0.76
1:M:1450:TYR:O	1:M:1451:LEU:CD2	2.33	0.76
1:A:1100:GLY:C	1:A:1102:PRO:CD	2.54	0.76
1:A:322:GLN:OE1	1:A:328:LEU:CB	2.34	0.76
1:A:1191:GLN:O	1:A:1246:ILE:CG2	2.34	0.76
2:N:655:TYR:O	2:N:656:ASP:CB	2.31	0.76
1:M:1259:MET:O	1:M:1260:ILE:CG1	2.33	0.76
2:B:972:ARG:CZ	2:B:1080:TYR:CE1	2.67	0.76
1:A:1150:THR:O	1:A:1151:SER:CB	2.31	0.76
1:A:1450:TYR:O	1:A:1451:LEU:CD2	2.33	0.76
1:M:1411:THR:O	1:M:1412:VAL:CG1	2.33	0.76
1:A:822:HIS:NE2	2:B:753:SER:CB	2.49	0.76
4:D:19:PHE:CE1	7:G:42:GLN:O	2.39	0.76
1:A:1259:MET:O	1:A:1260:ILE:CG1	2.33	0.76
9:I:6:TYR:O	9:I:14:LEU:CG	2.34	0.76
1:M:322:GLN:OE1	1:M:328:LEU:CB	2.34	0.76
4:D:57:LYS:CB	7:G:105:GLY:O	2.34	0.76
1:M:81:GLY:CA	1:M:249:PRO:CB	2.63	0.76
1:A:81:GLY:CA	1:A:249:PRO:CB	2.63	0.76
1:M:1151:SER:CA	1:M:1152:ALA:CB	2.63	0.76
2:B:427:GLU:O	2:B:428:PHE:CB	2.33	0.76
1:M:192:SER:CB	1:M:202:LEU:C	2.53	0.76
1:M:71:THR:C	1:M:72:CYS:SG	2.63	0.76
1:A:1392:ARG:O	1:A:1393:HIS:ND1	2.19	0.76
1:M:1191:GLN:O	1:M:1246:ILE:CG2	2.34	0.76
1:M:1290:MET:CE	1:M:1312:LEU:CD2	2.64	0.76
1:A:2:SER:CB	7:G:65:GLY:O	2.33	0.76
1:A:205:LYS:C	1:A:206:ARG:CD	2.53	0.76
1:M:846:ARG:CD	1:M:1390:ILE:O	2.33	0.76
1:M:101:ILE:CB	1:M:240:MET:SD	2.74	0.76
1:A:1104:LEU:CD1	1:A:1104:LEU:C	2.54	0.76

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:780:ARG:NH1	1:M:803:ARG:NH2	2.34	0.76
1:A:23:ILE:CD1	1:A:1420:ALA:CA	2.64	0.76
1:M:108:VAL:O	1:M:109:CYS:SG	2.44	0.76
1:A:119:SER:N	1:A:120:SER:CB	2.49	0.76
9:U:4:PHE:CD1	9:U:27:LEU:CD2	2.69	0.76
10:J:7:CYS:CB	10:J:45:CYS:CB	2.63	0.76
2:B:1205:PHE:CE2	2:B:1210:LYS:CB	2.69	0.76
1:M:1503:ALA:O	1:M:1507:PRO:CD	2.30	0.75
1:A:1465:VAL:HG13	1:A:1466:PRO:CB	2.09	0.75
4:P:57:LYS:CB	7:S:105:GLY:O	2.34	0.75
9:I:4:PHE:CD1	9:I:27:LEU:CD2	2.69	0.75
2:N:335:LEU:O	2:N:339:HIS:CD2	2.39	0.75
2:N:1205:PHE:CE2	2:N:1210:LYS:CB	2.69	0.75
4:P:14:LYS:O	4:P:15:LEU:CB	2.34	0.75
1:A:179:GLN:N	1:A:180:PRO:CD	2.49	0.75
1:A:71:THR:C	1:A:72:CYS:SG	2.63	0.75
1:A:70:GLN:O	1:A:71:THR:CB	2.35	0.75
9:U:20:LYS:CD	9:U:21:VAL:N	2.49	0.75
1:M:506:GLU:OE2	1:M:1444:THR:CG2	2.33	0.75
1:M:70:GLN:O	1:M:71:THR:CB	2.34	0.75
9:U:51:SER:O	9:U:52:ASN:CB	2.33	0.75
3:C:84:LEU:CD2	3:C:84:LEU:O	2.35	0.75
1:M:261:THR:O	1:M:262:SER:CB	2.33	0.75
9:U:6:TYR:O	9:U:14:LEU:CD1	2.34	0.75
1:A:950:PHE:CB	1:A:951:PRO:CD	2.64	0.75
2:N:871:THR:O	2:N:872:LEU:CG	2.35	0.75
1:M:119:SER:N	1:M:120:SER:CB	2.49	0.75
10:V:7:CYS:CB	10:V:45:CYS:CB	2.63	0.75
2:B:335:LEU:O	2:B:339:HIS:CD2	2.39	0.75
1:M:350:ARG:O	1:M:351:VAL:CB	2.34	0.75
2:N:425:ASN:O	2:N:426:ARG:CB	2.34	0.75
2:B:425:ASN:O	2:B:426:ARG:CB	2.34	0.75
2:B:871:THR:O	2:B:872:LEU:CG	2.35	0.75
1:M:198:ASP:O	1:M:199:GLU:CB	2.33	0.75
1:A:1223:PHE:CZ	1:A:1273:MET:SD	2.80	0.75
1:M:1077:GLU:N	1:M:1078:PRO:CD	2.50	0.75
1:M:1283:PRO:O	1:M:1284:ASN:CB	2.34	0.75
1:A:581:LYS:NZ	1:A:621:GLY:O	2.20	0.75
4:D:71:ALA:O	4:D:75:TYR:CD2	2.40	0.75
4:P:71:ALA:O	4:P:75:TYR:CD2	2.40	0.75
1:A:350:ARG:O	1:A:351:VAL:CB	2.34	0.75
1:M:118:ASP:CG	1:M:120:SER:OG	2.25	0.75

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:15:ARG:NH1	1:M:1438:GLN:NE2	2.33	0.75
4:P:43:ARG:O	4:P:44:GLU:CB	2.34	0.75
3:C:125:SER:O	3:C:126:SER:CB	2.35	0.75
3:O:84:LEU:CD2	3:O:84:LEU:O	2.34	0.75
1:A:106:GLU:CB	1:A:144:CYS:CB	2.65	0.75
1:A:261:THR:O	1:A:262:SER:CB	2.33	0.75
1:M:950:PHE:CB	1:M:951:PRO:CD	2.64	0.75
1:M:922:GLU:CB	1:M:923:ASN:CA	2.64	0.75
1:M:101:ILE:CD1	1:M:240:MET:CE	2.64	0.74
1:M:1104:LEU:CD1	1:M:1104:LEU:C	2.54	0.74
4:D:43:ARG:O	4:D:44:GLU:CB	2.34	0.74
1:M:1228:PHE:CE2	1:M:1246:ILE:CD1	2.70	0.74
4:P:19:PHE:CE1	7:S:42:GLN:O	2.39	0.74
2:N:993:GLN:N	2:N:994:GLY:CA	2.50	0.74
1:A:922:GLU:CB	1:A:923:ASN:CA	2.64	0.74
1:M:558:TRP:CH2	11:W:61:LYS:CG	2.70	0.74
1:M:581:LYS:NZ	1:M:621:GLY:O	2.20	0.74
1:A:118:ASP:CG	1:A:120:SER:OG	2.25	0.74
2:B:488:ILE:CD1	2:B:490:ARG:CG	2.65	0.74
1:M:196:GLY:O	1:M:197:LYS:CB	2.34	0.74
2:B:759:GLN:NE2	2:B:1082:GLN:OE1	2.20	0.74
1:A:66:GLN:C	1:A:67:PHE:CG	2.61	0.74
7:G:39:CYS:SG	7:G:45:TYR:CD2	2.81	0.74
4:D:19:PHE:CZ	7:G:42:GLN:O	2.41	0.74
2:B:219:ILE:CG2	2:B:220:ALA:N	2.50	0.74
1:A:1228:PHE:CE2	1:A:1246:ILE:CD1	2.70	0.74
1:M:195:ARG:CB	1:M:196:GLY:CA	2.65	0.74
1:A:558:TRP:CH2	11:K:61:LYS:CG	2.70	0.74
1:M:614:GLU:O	1:M:616:GLY:N	2.21	0.74
1:A:614:GLU:O	1:A:616:GLY:N	2.21	0.74
2:B:993:GLN:N	2:B:994:GLY:CA	2.50	0.74
2:N:1093:HIS:CE1	2:N:1114:ASP:O	2.41	0.74
4:D:14:LYS:O	4:D:15:LEU:CB	2.34	0.74
1:M:846:ARG:NH1	1:M:1392:ARG:N	2.34	0.74
1:M:5:GLN:O	1:M:8:PRO:CD	2.35	0.74
4:P:131:ARG:O	4:P:132:LYS:CB	2.36	0.74
7:G:39:CYS:SG	7:G:45:TYR:CD1	2.81	0.74
1:A:780:ARG:NH1	1:A:803:ARG:NH2	2.35	0.74
1:A:5:GLN:O	1:A:8:PRO:CD	2.35	0.74
7:S:39:CYS:SG	7:S:45:TYR:CD2	2.81	0.74
1:M:1506:SER:N	1:M:1507:PRO:CD	2.50	0.74
1:M:107:CYS:O	1:M:108:VAL:CG1	2.36	0.74

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:S:39:CYS:SG	7:S:45:TYR:CD1	2.81	0.74
1:A:1077:GLU:N	1:A:1078:PRO:CD	2.50	0.74
5:Q:28:GLY:N	5:Q:62:LYS:O	2.20	0.74
5:E:28:GLY:N	5:E:62:LYS:O	2.21	0.74
1:A:517:ILE:CG1	1:A:640:TRP:CD1	2.71	0.74
1:M:66:GLN:C	1:M:67:PHE:CG	2.61	0.74
9:U:48:LEU:O	9:U:49:GLN:CB	2.36	0.74
2:B:754:PRO:O	2:B:758:TYR:CD2	2.41	0.73
2:N:754:PRO:O	2:N:758:TYR:CD2	2.41	0.73
2:N:219:ILE:CG2	2:N:220:ALA:N	2.50	0.73
2:B:1093:HIS:CE1	2:B:1114:ASP:O	2.41	0.73
9:U:15:TYR:N	9:U:28:ALA:O	2.21	0.73
1:M:328:LEU:CD1	1:M:328:LEU:O	2.36	0.73
2:B:199:ALA:O	2:B:200:GLN:CG	2.36	0.73
3:O:125:SER:O	3:O:126:SER:CB	2.35	0.73
2:N:234:ARG:NH2	2:N:408:ARG:NH2	2.35	0.73
7:S:6:LYS:NZ	7:S:43:TYR:CE1	2.57	0.73
1:M:1223:PHE:CZ	1:M:1273:MET:SD	2.80	0.73
2:N:220:ALA:O	2:N:221:TYR:CB	2.35	0.73
7:G:6:LYS:NZ	7:G:43:TYR:CE1	2.57	0.73
1:A:1450:TYR:CD1	7:G:60:GLY:C	2.51	0.73
4:P:19:PHE:CZ	7:S:42:GLN:O	2.41	0.73
2:B:655:TYR:N	2:B:655:TYR:CD2	2.56	0.73
1:A:331:ILE:CD1	2:B:1198:MET:SD	2.76	0.73
2:B:220:ALA:O	2:B:221:TYR:CB	2.35	0.73
8:H:59:ILE:O	8:H:60:THR:CG2	2.36	0.73
8:T:59:ILE:O	8:T:60:THR:CG2	2.36	0.73
4:D:131:ARG:O	4:D:132:LYS:CB	2.36	0.73
1:M:318:PRO:O	1:M:319:GLN:CB	2.36	0.73
1:M:331:ILE:CD1	2:N:1198:MET:SD	2.76	0.73
2:B:869:SER:O	2:B:870:THR:CG2	2.37	0.73
1:A:322:GLN:OE1	1:A:328:LEU:CD2	2.36	0.73
1:A:1142:GLU:O	1:A:1281:GLY:CA	2.37	0.73
2:N:655:TYR:CD2	2:N:655:TYR:N	2.56	0.73
1:A:88:LEU:CB	1:A:243:THR:O	2.36	0.73
6:R:61:GLY:O	6:R:62:LYS:CG	2.37	0.73
1:A:232:GLU:CG	1:A:232:GLU:O	2.36	0.73
1:A:108:VAL:CG1	1:A:114:LYS:N	2.52	0.73
1:A:267:ASP:N	1:A:268:LEU:CA	2.51	0.73
1:M:267:ASP:N	1:M:268:LEU:CA	2.51	0.73
2:N:488:ILE:CD1	2:N:490:ARG:CG	2.65	0.73
1:M:1191:GLN:O	1:M:1246:ILE:CG1	2.37	0.73

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:23:ILE:CD1	1:M:1420:ALA:CA	2.66	0.73
1:A:154:LEU:N	1:A:173:GLY:C	2.42	0.73
1:A:312:ASN:ND2	1:A:330:SER:CB	2.52	0.73
2:N:199:ALA:O	2:N:200:GLN:CG	2.37	0.73
1:M:567:PRO:O	1:M:578:TRP:CZ3	2.41	0.73
1:M:312:ASN:ND2	1:M:330:SER:CB	2.52	0.73
1:A:846:ARG:NH1	1:A:1392:ARG:N	2.37	0.73
1:A:846:ARG:CD	1:A:1390:ILE:O	2.36	0.73
1:A:318:PRO:O	1:A:319:GLN:CB	2.36	0.73
2:B:328:GLY:O	2:B:329:VAL:CB	2.35	0.73
1:M:573:LYS:CB	1:M:574:PRO:CD	2.66	0.73
1:A:178:ALA:O	1:A:179:GLN:CB	2.36	0.73
1:M:101:ILE:CD1	1:M:240:MET:SD	2.77	0.73
1:A:260:GLY:CA	2:B:924:ARG:CD	2.67	0.73
1:A:573:LYS:CB	1:A:574:PRO:CD	2.66	0.73
1:M:349:LYS:NZ	2:N:1145:ASP:OD1	2.22	0.73
1:A:806:ILE:CD1	1:A:814:LEU:CD2	2.67	0.73
2:B:164:CYS:SG	2:B:165:ILE:N	2.62	0.73
1:M:517:ILE:CG1	1:M:640:TRP:CD1	2.71	0.72
7:G:116:VAL:CG1	7:G:117:PRO:CD	2.66	0.72
9:I:48:LEU:O	9:I:49:GLN:CB	2.36	0.72
1:M:1092:VAL:CG1	1:M:1092:VAL:O	2.37	0.72
1:M:322:GLN:OE1	1:M:328:LEU:CD2	2.36	0.72
1:M:159:ASP:O	1:M:161:PHE:CE1	2.42	0.72
1:A:159:ASP:O	1:A:161:PHE:CE1	2.42	0.72
1:A:101:ILE:CD1	1:A:217:PHE:CE2	2.72	0.72
2:B:101:PRO:CG	2:B:111:TYR:CE1	2.72	0.72
2:B:538:ALA:O	2:B:540:ILE:N	2.22	0.72
6:F:61:GLY:O	6:F:62:LYS:CG	2.37	0.72
1:M:232:GLU:O	1:M:232:GLU:CG	2.36	0.72
2:N:164:CYS:SG	2:N:165:ILE:N	2.62	0.72
1:A:919:ASN:O	1:A:920:SER:CB	2.37	0.72
7:S:116:VAL:CG1	7:S:117:PRO:CD	2.66	0.72
1:A:328:LEU:CD1	1:A:328:LEU:O	2.36	0.72
1:M:117:ILE:CG2	1:M:118:ASP:N	2.52	0.72
2:N:538:ALA:O	2:N:540:ILE:N	2.22	0.72
1:A:778:GLY:C	1:A:1092:VAL:CG2	2.57	0.72
1:A:1191:GLN:O	1:A:1246:ILE:CG1	2.37	0.72
1:M:30:ARG:NE	1:M:244:VAL:CG2	2.53	0.72
1:M:189:LEU:O	1:M:190:TRP:CD1	2.43	0.72
1:A:117:ILE:CG2	1:A:118:ASP:N	2.52	0.72
5:E:199:THR:N	5:E:201:GLY:N	2.38	0.72

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:E:27:TYR:CD2	5:E:63:PRO:CG	2.73	0.72
1:M:919:ASN:O	1:M:920:SER:CB	2.37	0.72
1:A:567:PRO:O	1:A:578:TRP:CZ3	2.41	0.72
7:S:122:PHE:CB	7:S:131:TYR:CE1	2.73	0.72
2:N:869:SER:O	2:N:870:THR:CG2	2.37	0.72
2:N:101:PRO:CG	2:N:111:TYR:CE1	2.72	0.72
6:R:123:LEU:CD2	6:R:137:SER:CA	2.68	0.72
1:M:1150:THR:CB	9:U:48:LEU:CD2	2.68	0.72
8:H:74:TYR:OH	8:H:76:MET:SD	2.48	0.72
1:A:250:PRO:O	1:A:253:ARG:N	2.23	0.72
1:A:178:ALA:C	1:A:180:PRO:CD	2.58	0.72
1:A:428:GLY:O	1:A:430:ILE:CD1	2.37	0.72
4:P:61:TYR:CE2	7:S:105:GLY:O	2.43	0.72
1:A:1282:VAL:CB	1:A:1285:ILE:CD1	2.68	0.72
1:A:24:LEU:CB	2:B:1199:ASN:O	2.38	0.72
2:B:1145:ASP:O	2:B:1147:TYR:N	2.22	0.72
8:T:116:LEU:O	8:T:118:HIS:N	2.23	0.72
1:M:182:ILE:CG2	1:M:190:TRP:O	2.37	0.71
1:M:190:TRP:CE3	1:M:204:GLU:O	2.43	0.71
1:A:429:ASP:O	1:A:430:ILE:CD1	2.38	0.71
1:M:23:ILE:CG1	1:M:1419:ALA:O	2.38	0.71
9:I:39:ALA:O	9:I:40:THR:CG2	2.38	0.71
7:G:122:PHE:CB	7:G:131:TYR:CE1	2.73	0.71
1:A:260:GLY:N	2:B:924:ARG:CD	2.53	0.71
1:M:341:ARG:NH2	2:N:1190:LEU:CD1	2.53	0.71
1:A:30:ARG:NE	1:A:244:VAL:CG2	2.53	0.71
2:N:1205:PHE:CE2	2:N:1210:LYS:CA	2.73	0.71
2:B:278:VAL:N	2:B:279:PRO:CD	2.53	0.71
1:M:429:ASP:O	1:M:430:ILE:CD1	2.38	0.71
1:M:51:ARG:O	1:M:52:VAL:CB	2.38	0.71
1:A:1484:THR:HG23	1:A:1484:THR:O	1.89	0.71
5:Q:199:THR:N	5:Q:201:GLY:N	2.38	0.71
2:N:378:ARG:CG	9:U:52:ASN:ND2	2.53	0.71
2:B:1205:PHE:CE2	2:B:1210:LYS:CA	2.73	0.71
1:M:84:GLY:O	1:M:247:VAL:N	2.24	0.71
1:A:381:THR:OG1	1:A:382:TYR:C	2.29	0.71
1:M:428:GLY:O	1:M:430:ILE:CD1	2.37	0.71
1:M:523:ASN:O	1:M:523:ASN:ND2	2.24	0.71
1:M:250:PRO:O	1:M:253:ARG:N	2.23	0.71
2:B:235:LEU:CD2	2:B:235:LEU:O	2.39	0.71
1:A:1450:TYR:HB3	7:G:60:GLY:O	1.89	0.71
2:B:869:SER:C	2:B:870:THR:CG2	2.58	0.71

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:T:74:TYR:OH	8:T:76:MET:SD	2.48	0.71
5:Q:27:TYR:CD2	5:Q:63:PRO:CG	2.73	0.71
7:G:101:PHE:CE1	7:G:110:PHE:CD1	2.79	0.71
7:S:101:PHE:CE1	7:S:110:PHE:CD1	2.79	0.71
3:O:80:PRO:CB	3:O:81:PRO:CD	2.69	0.71
1:M:1504:ALA:C	1:M:1507:PRO:HD2	2.11	0.71
1:M:382:TYR:CE2	1:M:440:ARG:NE	2.59	0.71
1:M:50:PRO:C	1:M:51:ARG:CG	2.58	0.71
1:A:341:ARG:NH2	2:B:1190:LEU:CD1	2.53	0.71
2:N:659:PRO:CB	2:N:661:GLN:NE2	2.54	0.71
1:A:523:ASN:O	1:A:523:ASN:ND2	2.24	0.71
1:A:65:ARG:N	1:A:67:PHE:CE1	2.59	0.71
1:M:1450:TYR:CB	7:S:60:GLY:O	2.39	0.71
6:F:123:LEU:CD2	6:F:137:SER:CA	2.68	0.71
1:A:269:THR:O	1:A:272:LEU:N	2.24	0.70
4:D:61:TYR:CE2	7:G:105:GLY:O	2.43	0.70
1:A:343:ARG:CG	2:B:1121:GLU:OE1	2.38	0.70
1:A:382:TYR:CE1	1:A:446:ASP:OD1	2.44	0.70
2:B:229:LEU:CD1	2:B:231:ARG:CZ	2.69	0.70
1:A:433:ARG:CB	1:A:436:TRP:CD2	2.74	0.70
1:M:1282:VAL:CG1	1:M:1285:ILE:CD1	2.68	0.70
1:A:366:SER:OG	1:A:369:GLU:CG	2.39	0.70
1:A:1177:PHE:O	1:A:1180:PRO:CG	2.40	0.70
2:B:754:PRO:O	2:B:758:TYR:CE2	2.45	0.70
8:H:116:LEU:O	8:H:118:HIS:N	2.23	0.70
1:A:230:LEU:CD1	1:A:237:PRO:CD	2.70	0.70
1:M:152:THR:O	1:M:174:GLY:CA	2.39	0.70
8:H:60:THR:CG2	8:H:61:SER:N	2.53	0.70
1:A:84:GLY:O	1:A:247:VAL:N	2.24	0.70
2:N:278:VAL:N	2:N:279:PRO:CD	2.53	0.70
2:B:659:PRO:CB	2:B:661:GLN:NE2	2.54	0.70
1:A:921:ILE:O	1:A:922:GLU:CB	2.40	0.70
1:M:100:LYS:NZ	1:M:1420:ALA:O	2.23	0.70
1:M:269:THR:O	1:M:272:LEU:N	2.24	0.70
1:M:793:PHE:CE1	1:M:817:GLN:OE1	2.44	0.70
1:M:1075:ILE:O	1:M:1078:PRO:CG	2.39	0.70
2:B:421:CYS:O	2:B:426:ARG:N	2.25	0.70
2:N:235:LEU:CD2	2:N:235:LEU:O	2.39	0.70
1:A:193:TRP:CZ3	1:A:206:ARG:CB	2.75	0.70
2:N:229:LEU:CD1	2:N:231:ARG:CZ	2.69	0.70
1:A:1484:THR:H	1:A:1485:PRO:HD3	1.55	0.70
2:B:1205:PHE:CE2	2:B:1210:LYS:O	2.45	0.70

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:785:PHE:CD1	1:A:785:PHE:N	2.60	0.70
1:M:255:SER:O	1:M:256:ILE:CB	2.40	0.70
1:M:773:GLN:NE2	1:M:780:ARG:CB	2.55	0.70
3:C:80:PRO:CB	3:C:81:PRO:CD	2.69	0.70
1:M:672:ILE:O	1:M:675:THR:N	2.25	0.70
1:A:1179:ILE:N	1:A:1180:PRO:CD	2.54	0.70
3:O:130:LEU:CB	3:O:131:GLY:CA	2.70	0.70
2:N:1205:PHE:CE2	2:N:1210:LYS:O	2.45	0.70
2:N:869:SER:C	2:N:870:THR:CG2	2.58	0.70
1:A:368:ASP:OD2	1:A:649:LYS:CE	2.40	0.70
1:M:374:ARG:NH1	1:M:374:ARG:CB	2.55	0.70
1:M:95:ILE:CG1	1:M:314:ILE:CD1	2.70	0.70
1:M:230:LEU:CD1	1:M:237:PRO:CD	2.70	0.70
2:B:292:ASN:N	2:B:293:ASP:CB	2.55	0.70
1:M:433:ARG:CB	1:M:436:TRP:CD2	2.74	0.70
1:M:260:GLY:O	1:M:261:THR:C	2.30	0.70
7:S:102:ALA:O	7:S:103:ASN:CG	2.30	0.70
3:C:130:LEU:CB	3:C:131:GLY:CA	2.70	0.70
1:A:1075:ILE:O	1:A:1078:PRO:CG	2.39	0.70
1:A:8:PRO:CG	2:B:1148:ARG:NE	2.54	0.70
1:M:921:ILE:O	1:M:922:GLU:CB	2.40	0.70
2:N:754:PRO:O	2:N:758:TYR:CE2	2.45	0.69
1:M:558:TRP:O	1:M:559:VAL:CG1	2.40	0.69
1:M:785:PHE:CD1	1:M:785:PHE:N	2.60	0.69
1:A:672:ILE:O	1:A:675:THR:N	2.25	0.69
1:M:381:THR:OG1	1:M:382:TYR:C	2.29	0.69
2:N:262:ILE:CG2	2:N:323:ARG:O	2.40	0.69
1:A:1480:GLU:CD	4:D:44:GLU:CG	2.60	0.69
1:A:516:GLN:NE2	2:B:1130:HIS:CD2	2.60	0.69
1:A:1466:PRO:O	1:A:1469:ALA:CB	2.40	0.69
1:M:120:SER:CA	1:M:121:ASN:C	2.61	0.69
2:B:262:ILE:CG2	2:B:323:ARG:O	2.40	0.69
2:N:292:ASN:N	2:N:293:ASP:CB	2.55	0.69
1:A:260:GLY:O	1:A:261:THR:C	2.30	0.69
1:A:773:GLN:NE2	1:A:780:ARG:CB	2.55	0.69
1:A:73:GLY:O	2:B:1163:TYR:CE2	2.45	0.69
2:B:1058:PHE:CE1	3:C:193:TRP:CD1	2.80	0.69
1:M:65:ARG:N	1:M:67:PHE:CE1	2.59	0.69
1:M:1179:ILE:N	1:M:1180:PRO:CD	2.54	0.69
9:U:6:TYR:O	9:U:7:CYS:CB	2.40	0.69
2:B:427:GLU:O	2:B:428:PHE:CD1	2.46	0.69
1:A:120:SER:CA	1:A:121:ASN:C	2.61	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:646:GLU:N	1:M:648:CYS:N	2.41	0.69
2:N:421:CYS:O	2:N:426:ARG:N	2.25	0.69
1:A:947:LYS:CA	1:A:948:PHE:O	2.41	0.69
2:N:1105:ARG:NH1	2:N:1186:TYR:CE1	2.60	0.69
2:N:1058:PHE:CE1	3:O:193:TRP:CD1	2.80	0.69
2:N:427:GLU:O	2:N:428:PHE:CD1	2.46	0.69
9:I:58:VAL:O	9:I:60:HIS:N	2.26	0.69
9:I:15:TYR:N	9:I:28:ALA:O	2.25	0.69
9:U:3:ASN:ND2	9:U:3:ASN:N	2.40	0.69
1:A:1450:TYR:CE1	7:G:61:ARG:CB	2.76	0.69
1:A:177:ALA:CB	1:A:178:ALA:O	2.39	0.69
1:A:271:LYS:CE	1:A:328:LEU:CD1	2.71	0.69
1:M:1177:PHE:O	1:M:1180:PRO:CG	2.40	0.69
1:A:1228:PHE:CD2	1:A:1246:ILE:CD1	2.75	0.69
1:M:1228:PHE:CD2	1:M:1246:ILE:CD1	2.75	0.69
2:N:659:PRO:CB	2:N:661:GLN:CG	2.70	0.69
9:I:6:TYR:O	9:I:7:CYS:CB	2.41	0.69
1:A:558:TRP:O	1:A:559:VAL:CG1	2.40	0.69
1:M:516:GLN:NE2	2:N:1130:HIS:CD2	2.60	0.69
1:M:73:GLY:O	2:N:1163:TYR:CE2	2.45	0.69
1:A:868:ASP:OD2	1:A:1384:ARG:NH1	2.26	0.69
7:G:102:ALA:O	7:G:103:ASN:CG	2.30	0.69
1:A:6:PHE:CE2	1:A:78:ASP:OD2	2.46	0.69
1:A:1496:PHE:CE2	4:D:33:LEU:CG	2.76	0.69
4:P:71:ALA:O	4:P:75:TYR:CE2	2.46	0.69
9:I:24:VAL:CG1	9:I:25:LEU:N	2.55	0.69
1:A:1485:PRO:O	1:A:1486:TYR:CB	2.38	0.69
1:A:255:SER:O	1:A:256:ILE:CB	2.41	0.69
1:A:1464:ALA:O	1:A:1465:VAL:HB	1.93	0.68
1:M:1167:GLU:O	1:M:1168:GLU:CB	2.41	0.68
1:M:1450:TYR:HE2	6:R:125:ARG:CD	2.05	0.68
2:B:659:PRO:CB	2:B:661:GLN:CG	2.70	0.68
8:T:60:THR:CG2	8:T:61:SER:N	2.53	0.68
4:D:71:ALA:O	4:D:75:TYR:CE2	2.46	0.68
1:M:1397:ARG:O	1:M:1398:ALA:CB	2.41	0.68
1:A:94:HIS:C	1:A:98:LEU:CG	2.61	0.68
2:B:1108:VAL:CG2	2:B:1109:GLU:N	2.57	0.68
2:B:417:TYR:CE2	2:B:421:CYS:SG	2.86	0.68
1:A:17:GLU:OE1	2:B:1207:LYS:CA	2.42	0.68
1:M:17:GLU:OE1	2:N:1207:LYS:CA	2.41	0.68
9:U:58:VAL:O	9:U:60:HIS:N	2.26	0.68
4:D:25:LEU:CD2	4:D:29:GLU:OE2	2.41	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:517:ILE:CD1	1:M:640:TRP:NE1	2.55	0.68
1:M:95:ILE:O	1:M:98:LEU:CB	2.41	0.68
1:A:1167:GLU:O	1:A:1168:GLU:CB	2.41	0.68
1:A:1450:TYR:C	1:A:1451:LEU:HG	2.14	0.68
9:I:81:HIS:ND1	9:I:82:GLU:N	2.41	0.68
9:I:69:PRO:CG	9:I:85:PHE:CE1	2.76	0.68
1:A:822:HIS:CE1	2:B:752:GLN:O	2.46	0.68
2:N:417:TYR:CE2	2:N:421:CYS:SG	2.86	0.68
1:A:525:PRO:CD	1:A:637:HIS:ND1	2.57	0.68
1:M:1119:LEU:N	1:M:1314:THR:CG2	2.57	0.68
6:R:93:MET:CE	7:S:66:GLN:O	2.42	0.68
1:M:947:LYS:CA	1:M:948:PHE:O	2.41	0.68
1:M:525:PRO:CD	1:M:637:HIS:ND1	2.57	0.68
1:M:793:PHE:CZ	1:M:817:GLN:OE1	2.47	0.68
9:U:69:PRO:CG	9:U:85:PHE:CE1	2.77	0.68
1:M:85:HIS:CB	1:M:244:VAL:CG1	2.72	0.68
1:A:368:ASP:CG	1:A:649:LYS:CE	2.62	0.68
9:I:3:ASN:ND2	9:I:3:ASN:N	2.40	0.68
1:M:1498:GLY:CA	1:M:1500:PRO:CD	2.39	0.68
1:M:1164:THR:O	1:M:1165:VAL:CB	2.41	0.68
1:M:236:ARG:CA	1:M:239:TRP:CE3	2.77	0.68
1:M:150:CYS:SG	1:M:176:GLY:C	2.72	0.68
1:A:155:SER:CB	1:A:169:ASN:CA	2.72	0.68
9:U:81:HIS:ND1	9:U:82:GLU:N	2.41	0.68
1:A:1174:GLU:OE2	1:A:1242:ARG:NE	2.27	0.68
1:M:1174:GLU:OE2	1:M:1242:ARG:NE	2.27	0.68
9:I:67:THR:O	9:I:67:THR:CG2	2.41	0.68
2:N:254:THR:CG2	2:N:302:PRO:CB	2.71	0.68
2:B:254:THR:CG2	2:B:302:PRO:CB	2.71	0.68
1:A:236:ARG:CA	1:A:239:TRP:CE3	2.77	0.68
1:M:1192:SER:N	1:M:1193:PRO:CD	2.57	0.68
9:U:24:VAL:CG1	9:U:25:LEU:N	2.57	0.68
1:M:6:PHE:CE2	1:M:78:ASP:OD2	2.46	0.68
1:M:1252:LYS:O	1:M:1253:ALA:CB	2.42	0.68
2:B:1080:TYR:N	2:B:1080:TYR:CD2	2.60	0.68
2:N:320:ILE:CG2	2:N:320:ILE:O	2.40	0.68
1:M:155:SER:CB	1:M:169:ASN:CA	2.72	0.68
1:M:820:PHE:CZ	2:N:500:LEU:CD1	2.77	0.68
1:M:812:ARG:CD	2:N:714:GLN:O	2.42	0.68
1:A:1394:GLY:O	1:A:1395:ILE:C	2.32	0.68
1:M:1071:ALA:CA	1:M:1373:HIS:CD2	2.77	0.68
1:A:1119:LEU:N	1:A:1314:THR:CG2	2.57	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:95:ILE:O	1:A:98:LEU:CB	2.41	0.68
2:N:1108:VAL:CG2	2:N:1109:GLU:N	2.57	0.68
9:U:67:THR:CG2	9:U:67:THR:O	2.41	0.68
1:A:1496:PHE:HD2	4:D:33:LEU:CD1	2.07	0.68
1:A:147:LYS:O	1:A:148:MET:CB	2.42	0.68
1:A:1478:LEU:CD1	1:A:1479:PRO:HD2	2.16	0.68
1:M:271:LYS:CE	1:M:328:LEU:CD1	2.71	0.68
1:A:1192:SER:N	1:A:1193:PRO:CD	2.57	0.68
1:A:780:ARG:NH1	1:A:803:ARG:NE	2.42	0.68
9:I:69:PRO:CB	9:I:85:PHE:CZ	2.77	0.68
1:A:1252:LYS:O	1:A:1253:ALA:CB	2.42	0.68
2:B:1205:PHE:CD2	2:B:1210:LYS:CB	2.77	0.68
5:E:54:ARG:O	5:E:55:THR:CB	2.42	0.68
1:A:1183:GLU:O	1:A:1186:GLU:CG	2.42	0.67
2:B:320:ILE:O	2:B:320:ILE:CG2	2.42	0.67
1:A:433:ARG:N	1:A:436:TRP:CE2	2.62	0.67
1:A:1450:TYR:CD1	7:G:61:ARG:CA	2.78	0.67
4:P:96:LEU:CD2	4:P:96:LEU:N	2.57	0.67
1:M:1450:TYR:C	1:M:1451:LEU:HG	2.14	0.67
1:A:1397:ARG:O	1:A:1398:ALA:CB	2.41	0.67
1:A:646:GLU:N	1:A:648:CYS:N	2.41	0.67
7:G:93:THR:O	7:G:140:LYS:CG	2.43	0.67
1:M:1183:GLU:O	1:M:1186:GLU:CG	2.42	0.67
1:A:1164:THR:O	1:A:1165:VAL:CB	2.41	0.67
1:M:433:ARG:N	1:M:436:TRP:CE2	2.62	0.67
4:P:25:LEU:CD2	4:P:29:GLU:OE2	2.41	0.67
1:A:23:ILE:CG1	1:A:1419:ALA:O	2.42	0.67
9:U:65:ASP:OD2	9:U:68:LEU:CD1	2.42	0.67
1:M:1276:SER:C	1:M:1277:ILE:CG1	2.61	0.67
4:P:67:ARG:O	4:P:68:PHE:CG	2.47	0.67
7:S:93:THR:O	7:S:140:LYS:CG	2.43	0.67
2:N:867:VAL:CG2	2:N:869:SER:OG	2.42	0.67
5:Q:54:ARG:O	5:Q:55:THR:CB	2.42	0.67
1:M:868:ASP:OD2	1:M:1384:ARG:NH1	2.26	0.67
1:A:429:ASP:C	1:A:430:ILE:CD1	2.63	0.67
1:M:38:GLU:O	1:M:40:PRO:CD	2.42	0.67
1:A:1071:ALA:CA	1:A:1373:HIS:CD2	2.77	0.67
4:P:11:ALA:CB	4:P:12:GLN:C	2.63	0.67
1:A:1283:PRO:O	1:A:1284:ASN:CB	2.41	0.67
1:M:1192:SER:CA	1:M:1245:ILE:O	2.43	0.67
5:E:57:LEU:O	5:E:58:SER:CB	2.43	0.67
9:U:69:PRO:CB	9:U:85:PHE:CZ	2.77	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:417:TYR:CZ	2:B:421:CYS:SG	2.87	0.67
1:M:1449:ILE:H	1:M:1449:ILE:HD12	1.59	0.67
2:B:1054:GLN:CB	2:B:1056:ARG:NE	2.58	0.67
1:A:1465:VAL:HG13	1:A:1466:PRO:HB3	1.72	0.67
1:A:65:ARG:C	1:A:67:PHE:CD1	2.68	0.67
1:A:1276:SER:C	1:A:1277:ILE:CG1	2.61	0.67
1:M:48:GLN:C	1:M:50:PRO:CD	2.63	0.67
1:A:167:SER:CA	1:A:168:ALA:CB	2.72	0.67
1:M:195:ARG:C	1:M:195:ARG:CD	2.61	0.67
9:I:94:ASP:O	9:I:96:MET:SD	2.52	0.67
1:M:429:ASP:C	1:M:430:ILE:CD1	2.63	0.67
1:M:404:GLU:O	1:M:405:HIS:C	2.33	0.67
5:Q:57:LEU:O	5:Q:58:SER:CB	2.43	0.67
4:D:67:ARG:O	4:D:68:PHE:CG	2.47	0.67
1:A:343:ARG:NE	1:A:1409:GLU:OE1	2.27	0.67
2:N:1205:PHE:CD2	2:N:1210:LYS:CB	2.77	0.67
2:B:867:VAL:CG2	2:B:869:SER:OG	2.42	0.67
2:N:325:SER:O	2:N:326:THR:CB	2.42	0.67
9:U:94:ASP:O	9:U:96:MET:SD	2.52	0.67
1:M:163:LEU:CG	1:M:163:LEU:O	2.41	0.67
1:M:167:SER:CA	1:M:168:ALA:CB	2.72	0.67
1:M:780:ARG:NH1	1:M:803:ARG:NE	2.42	0.67
1:A:38:GLU:O	1:A:40:PRO:CD	2.42	0.67
1:A:1192:SER:CA	1:A:1245:ILE:O	2.43	0.67
1:A:651:PHE:CZ	1:A:655:ILE:CD1	2.78	0.67
1:A:1493:ASP:OD1	4:D:33:LEU:CD2	2.43	0.67
1:A:1478:LEU:HD12	1:A:1479:PRO:CD	2.18	0.67
1:M:65:ARG:C	1:M:67:PHE:CD1	2.68	0.67
1:A:48:GLN:C	1:A:50:PRO:CD	2.63	0.67
4:P:26:THR:O	4:P:30:ALA:CB	2.43	0.67
2:B:212:LYS:NZ	2:B:381:PRO:CG	2.57	0.67
10:J:44:CYS:SG	10:J:45:CYS:N	2.69	0.67
2:N:417:TYR:CZ	2:N:421:CYS:SG	2.88	0.67
1:A:128:GLN:CG	1:A:139:ALA:CB	2.74	0.67
1:A:1484:THR:N	1:A:1485:PRO:CD	2.58	0.66
1:A:95:ILE:CG2	1:A:314:ILE:CD1	2.73	0.66
1:A:404:GLU:O	1:A:405:HIS:C	2.33	0.66
5:Q:199:THR:N	5:Q:200:SER:C	2.48	0.66
1:M:857:ARG:CG	1:M:857:ARG:NH1	2.58	0.66
1:A:163:LEU:CG	1:A:163:LEU:O	2.41	0.66
2:N:713:ALA:O	2:N:714:GLN:CG	2.44	0.66
4:D:11:ALA:CB	4:D:12:GLN:C	2.63	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:G:151:THR:CA	7:G:160:ALA:CB	2.73	0.66
1:A:857:ARG:CG	1:A:857:ARG:NH1	2.58	0.66
1:M:651:PHE:CZ	1:M:655:ILE:CD1	2.78	0.66
4:D:96:LEU:CD2	4:D:96:LEU:N	2.57	0.66
1:A:1119:LEU:CG	1:A:1314:THR:CB	2.74	0.66
7:G:147:LYS:CD	7:G:169:LEU:CD1	2.74	0.66
1:A:51:ARG:O	1:A:52:VAL:CB	2.43	0.66
2:B:215:ALA:O	2:B:217:SER:CB	2.44	0.66
7:G:46:ILE:CG1	7:G:79:LEU:CD2	2.74	0.66
1:A:822:HIS:NE2	2:B:752:GLN:C	2.49	0.66
1:A:349:LYS:NZ	2:B:1187:ALA:CB	2.59	0.66
9:I:65:ASP:OD2	9:I:68:LEU:CD1	2.42	0.66
1:A:183:ARG:CZ	1:A:203:PRO:CB	2.73	0.66
1:A:1450:TYR:HE2	6:F:125:ARG:CG	2.08	0.66
1:A:1485:PRO:CD	4:D:43:ARG:NH1	2.57	0.66
5:E:199:THR:N	5:E:200:SER:C	2.48	0.66
1:A:1449:ILE:HD12	1:A:1449:ILE:H	1.59	0.66
2:B:713:ALA:O	2:B:714:GLN:CG	2.44	0.66
2:B:287:ILE:CD1	2:B:368:ILE:CD1	2.74	0.66
1:A:269:THR:O	1:A:270:HIS:C	2.34	0.66
1:M:269:THR:O	1:M:270:HIS:C	2.34	0.66
1:M:28:GLU:OE1	2:N:1203:ARG:NH2	2.28	0.66
1:M:244:VAL:O	1:M:245:LEU:C	2.34	0.66
2:N:1054:GLN:CB	2:N:1056:ARG:NE	2.58	0.66
1:M:390:ASN:O	1:M:391:ILE:C	2.34	0.66
4:D:26:THR:O	4:D:30:ALA:CB	2.43	0.66
1:M:1451:LEU:HD21	7:S:62:VAL:CG2	2.25	0.66
1:M:128:GLN:CG	1:M:139:ALA:CB	2.73	0.66
7:S:147:LYS:CD	7:S:169:LEU:CD1	2.74	0.66
4:P:111:LEU:O	4:P:112:ALA:C	2.33	0.66
1:A:198:ASP:O	1:A:199:GLU:CB	2.42	0.66
2:N:831:ASN:ND2	2:N:831:ASN:C	2.48	0.66
1:M:1170:LYS:O	1:M:1172:PHE:N	2.29	0.66
1:M:1087:PHE:O	1:M:1088:HIS:C	2.34	0.66
1:M:1100:GLY:O	1:M:1101:VAL:C	2.34	0.66
1:M:780:ARG:O	1:M:781:ILE:C	2.34	0.66
2:B:874:MET:CG	2:B:879:TYR:OH	2.44	0.66
1:A:1170:LYS:O	1:A:1172:PHE:N	2.29	0.66
1:A:268:LEU:O	1:A:269:THR:C	2.34	0.66
9:U:19:ASP:O	9:U:20:LYS:C	2.34	0.66
2:N:874:MET:CG	2:N:879:TYR:OH	2.44	0.66
2:N:287:ILE:CD1	2:N:368:ILE:CD1	2.74	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:72:CYS:CB	2:N:1161:ALA:O	2.44	0.66
2:N:712:PRO:O	2:N:713:ALA:C	2.34	0.66
9:U:53:VAL:O	9:U:55:ASN:N	2.29	0.66
2:B:281:ARG:CG	9:I:6:TYR:CE1	2.79	0.66
2:N:211:PHE:CE2	2:N:384:ARG:CD	2.79	0.66
1:A:244:VAL:O	1:A:245:LEU:C	2.34	0.66
2:B:267:PRO:CB	2:B:306:GLU:OE1	2.44	0.66
1:A:816:PRO:O	1:A:818:GLU:N	2.29	0.66
1:M:104:ILE:O	1:M:105:LEU:C	2.34	0.65
1:A:72:CYS:CB	2:B:1161:ALA:O	2.44	0.65
7:G:134:GLU:O	7:G:135:ASP:C	2.34	0.65
2:B:654:ARG:CA	2:B:655:TYR:O	2.44	0.65
7:S:151:THR:CA	7:S:160:ALA:CB	2.73	0.65
1:M:24:LEU:CB	2:N:1199:ASN:O	2.44	0.65
8:T:72:ALA:CB	8:T:123:LEU:O	2.44	0.65
1:M:268:LEU:O	1:M:269:THR:C	2.34	0.65
7:S:46:ILE:CG1	7:S:79:LEU:CD2	2.74	0.65
10:V:44:CYS:SG	10:V:45:CYS:N	2.69	0.65
1:A:135:ASN:O	1:A:137:LEU:N	2.30	0.65
2:N:267:PRO:CB	2:N:306:GLU:OE1	2.44	0.65
1:A:104:ILE:O	1:A:105:LEU:C	2.35	0.65
1:M:150:CYS:SG	1:M:177:ALA:N	2.70	0.65
1:M:69:CYS:O	1:M:69:CYS:SG	2.55	0.65
1:A:194:LYS:CG	1:A:195:ARG:N	2.59	0.65
2:N:871:THR:O	2:N:872:LEU:CD2	2.44	0.65
2:B:871:THR:O	2:B:872:LEU:CD2	2.44	0.65
1:M:57:ASP:O	1:M:59:ARG:C	2.35	0.65
1:A:69:CYS:SG	1:A:69:CYS:O	2.54	0.65
4:D:70:THR:OG1	4:D:73:ALA:CB	2.45	0.65
7:G:164:MET:CE	7:G:170:GLY:N	2.59	0.65
1:A:457:HIS:CD2	1:A:1077:GLU:OE2	2.49	0.65
2:N:654:ARG:CA	2:N:655:TYR:O	2.44	0.65
8:H:72:ALA:CB	8:H:123:LEU:O	2.44	0.65
5:Q:51:ASN:O	5:Q:52:LEU:C	2.34	0.65
5:E:51:ASN:O	5:E:52:LEU:C	2.34	0.65
2:B:211:PHE:CZ	2:B:384:ARG:NH1	2.64	0.65
1:A:65:ARG:O	1:A:67:PHE:N	2.30	0.65
1:A:1100:GLY:O	1:A:1101:VAL:C	2.34	0.65
1:M:269:THR:O	1:M:271:LYS:N	2.30	0.65
1:A:1395:ILE:CG1	1:A:1395:ILE:O	2.45	0.65
4:D:129:THR:O	4:D:133:PHE:CB	2.45	0.65
9:U:6:TYR:O	9:U:14:LEU:CD2	2.44	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:I:78:CYS:O	9:I:79:HIS:CB	2.44	0.65
1:A:15:ARG:NH2	7:G:64:PRO:CG	2.60	0.65
2:B:712:PRO:O	2:B:713:ALA:C	2.34	0.65
2:N:457:ARG:O	2:N:459:MET:N	2.30	0.65
1:M:1501:ASP:O	1:M:1503:ALA:N	2.30	0.65
1:M:1100:GLY:O	1:M:1103:ARG:N	2.30	0.65
2:N:215:ALA:O	2:N:217:SER:CB	2.44	0.65
1:A:405:HIS:O	1:A:407:GLY:N	2.30	0.65
1:A:338:LYS:CG	1:A:339:GLU:N	2.60	0.65
2:B:1206:THR:OG1	2:B:1207:LYS:N	2.30	0.65
1:M:1279:LEU:O	1:M:1281:GLY:N	2.30	0.65
1:M:512:MET:O	1:M:514:PRO:N	2.30	0.65
1:M:835:VAL:O	1:M:837:THR:N	2.30	0.65
2:B:831:ASN:ND2	2:B:831:ASN:C	2.48	0.65
1:M:1500:PRO:O	1:M:1501:ASP:C	2.35	0.65
1:A:1490:PRO:O	1:A:1493:ASP:N	2.30	0.65
1:M:1496:PHE:CZ	4:P:75:TYR:CE1	2.85	0.65
1:A:192:SER:CB	1:A:202:LEU:CA	2.75	0.65
1:A:1261:GLU:O	1:A:1262:GLU:C	2.34	0.65
7:S:96:ASN:O	7:S:98:MET:N	2.30	0.65
1:M:120:SER:OG	1:M:121:ASN:ND2	2.30	0.65
1:M:269:THR:OG1	1:M:270:HIS:N	2.30	0.65
1:A:1484:THR:N	1:A:1485:PRO:HD3	2.11	0.65
1:M:1191:GLN:O	1:M:1192:SER:CB	2.44	0.65
1:M:405:HIS:O	1:M:407:GLY:N	2.30	0.65
1:A:1195:LEU:CD2	1:A:1242:ARG:CZ	2.75	0.65
1:A:6:PHE:O	1:A:8:PRO:N	2.30	0.65
2:B:1163:TYR:O	2:B:1163:TYR:CD1	2.50	0.65
1:M:809:SER:O	1:M:811:LEU:N	2.30	0.65
2:N:658:ASP:O	2:N:661:GLN:N	2.30	0.65
9:U:97:MET:O	9:U:99:LEU:N	2.30	0.65
2:N:1080:TYR:N	2:N:1080:TYR:CD2	2.60	0.65
1:M:948:PHE:O	1:M:950:PHE:N	2.30	0.65
1:M:20:GLN:OE1	2:N:1205:PHE:CD1	2.49	0.65
4:P:117:ASP:O	4:P:120:LEU:N	2.30	0.65
2:N:280:ASP:O	2:N:282:ASP:N	2.30	0.65
1:M:380:LEU:CD1	1:M:442:ILE:CD1	2.75	0.65
1:M:266:ASP:OD2	1:M:266:ASP:N	2.30	0.65
1:M:77:ALA:O	1:M:79:CYS:N	2.30	0.65
1:A:51:ARG:NH1	1:A:57:ASP:OD1	2.30	0.65
1:M:1119:LEU:CG	1:M:1314:THR:CB	2.74	0.65
4:D:42:ALA:O	4:D:44:GLU:N	2.30	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:780:ARG:O	1:A:781:ILE:C	2.34	0.65
2:N:1163:TYR:O	2:N:1163:TYR:CD1	2.50	0.65
7:S:155:ALA:O	7:S:157:GLU:N	2.30	0.65
7:G:155:ALA:O	7:G:157:GLU:N	2.30	0.65
2:B:280:ASP:O	2:B:282:ASP:N	2.30	0.65
1:M:353:PHE:CE2	1:M:381:THR:O	2.50	0.65
1:M:1261:GLU:O	1:M:1262:GLU:C	2.34	0.65
1:A:1087:PHE:O	1:A:1088:HIS:C	2.34	0.65
1:A:57:ASP:O	1:A:58:PRO:C	2.36	0.65
9:I:19:ASP:O	9:I:20:LYS:C	2.36	0.65
9:I:97:MET:O	9:I:99:LEU:N	2.30	0.65
2:N:430:LEU:O	2:N:432:LEU:N	2.30	0.65
2:N:662:ARG:O	2:N:664:GLY:N	2.30	0.65
4:D:53:ASP:OD1	4:D:54:VAL:N	2.30	0.65
2:B:662:ARG:O	2:B:664:GLY:N	2.30	0.65
1:A:629:GLY:O	1:A:631:SER:N	2.30	0.65
1:A:1490:PRO:O	1:A:1491:MET:C	2.36	0.65
1:A:268:LEU:O	1:A:270:HIS:N	2.30	0.65
1:M:193:TRP:CH2	1:M:206:ARG:CB	2.80	0.65
1:M:1402:ALA:O	1:M:1404:MET:N	2.30	0.65
1:A:1191:GLN:O	1:A:1192:SER:CB	2.44	0.65
2:N:281:ARG:CG	9:U:6:TYR:CE1	2.80	0.65
1:A:948:PHE:O	1:A:950:PHE:N	2.30	0.65
2:B:1207:LYS:O	2:B:1209:HIS:N	2.30	0.65
1:A:207:LEU:CD2	1:A:207:LEU:N	2.59	0.65
4:P:53:ASP:OD1	4:P:54:VAL:N	2.30	0.65
3:C:33:ARG:NE	3:C:179:PHE:CG	2.65	0.65
1:A:835:VAL:O	1:A:837:THR:N	2.30	0.65
1:M:236:ARG:O	1:M:239:TRP:N	2.30	0.64
2:N:273:ARG:NH1	2:N:310:ILE:CD1	2.60	0.64
1:M:1101:VAL:O	1:M:1103:ARG:N	2.30	0.64
1:M:268:LEU:O	1:M:270:HIS:N	2.30	0.64
1:A:77:ALA:O	1:A:79:CYS:N	2.30	0.64
7:S:164:MET:CE	7:S:170:GLY:N	2.59	0.64
1:A:822:HIS:NE2	2:B:752:GLN:O	2.30	0.64
1:M:1195:LEU:CD2	1:M:1242:ARG:CZ	2.75	0.64
1:A:24:LEU:CB	2:B:1199:ASN:C	2.65	0.64
1:M:712:PRO:O	1:M:714:MET:N	2.30	0.64
1:A:712:PRO:O	1:A:714:MET:N	2.30	0.64
1:A:1263:ASP:O	1:A:1266:LEU:N	2.30	0.64
1:A:159:ASP:O	1:A:161:PHE:CD1	2.50	0.64
9:U:81:HIS:CG	9:U:82:GLU:N	2.65	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:P:129:THR:O	4:P:133:PHE:CB	2.45	0.64
4:P:42:ALA:O	4:P:44:GLU:N	2.30	0.64
9:U:78:CYS:O	9:U:79:HIS:CB	2.44	0.64
2:B:759:GLN:O	2:B:763:GLY:N	2.30	0.64
4:D:111:LEU:O	4:D:112:ALA:C	2.33	0.64
2:B:820:SER:OG	2:B:821:GLY:N	2.31	0.64
1:M:640:TRP:O	1:M:644:GLY:CA	2.46	0.64
1:A:236:ARG:O	1:A:239:TRP:N	2.30	0.64
1:M:430:ILE:O	1:M:431:PRO:C	2.36	0.64
1:M:57:ASP:O	1:M:59:ARG:N	2.30	0.64
1:M:159:ASP:O	1:M:161:PHE:CD1	2.51	0.64
3:C:137:ASP:OD2	3:C:140:SER:CB	2.46	0.64
9:I:81:HIS:CG	9:I:82:GLU:N	2.65	0.64
4:P:70:THR:OG1	4:P:73:ALA:CB	2.45	0.64
2:B:758:TYR:O	2:B:760:SER:N	2.30	0.64
1:A:85:HIS:CB	1:A:244:VAL:CG1	2.74	0.64
2:B:497:PRO:O	2:B:499:GLN:N	2.30	0.64
2:N:507:MET:O	2:N:509:CYS:SG	2.55	0.64
2:B:507:MET:O	2:B:509:CYS:SG	2.55	0.64
1:A:1462:GLY:C	1:A:1463:THR:CG2	2.66	0.64
1:M:185:ASP:OD2	1:M:190:TRP:CZ3	2.51	0.64
1:A:120:SER:OG	1:A:121:ASN:ND2	2.30	0.64
1:A:57:ASP:O	1:A:59:ARG:C	2.35	0.64
1:A:1450:TYR:CB	7:G:60:GLY:O	2.45	0.64
2:B:200:GLN:OE1	2:B:487:PRO:CG	2.46	0.64
1:A:1412:VAL:O	1:A:1413:GLU:C	2.35	0.64
2:N:1207:LYS:O	2:N:1209:HIS:N	2.30	0.64
1:M:1449:ILE:HG22	6:R:123:LEU:O	1.97	0.64
2:N:1022:LYS:NZ	2:N:1057:GLY:O	2.31	0.64
9:U:95:THR:O	9:U:96:MET:C	2.36	0.64
1:M:390:ASN:O	1:M:392:TYR:N	2.30	0.64
2:N:759:GLN:O	2:N:763:GLY:N	2.29	0.64
2:B:273:ARG:NE	2:B:310:ILE:CD1	2.60	0.64
1:M:66:GLN:O	1:M:67:PHE:CD2	2.50	0.64
1:A:269:THR:O	1:A:271:LYS:N	2.30	0.64
7:G:96:ASN:O	7:G:98:MET:N	2.30	0.64
1:A:1402:ALA:O	1:A:1404:MET:N	2.30	0.64
1:M:1391:THR:O	1:M:1393:HIS:N	2.30	0.64
1:A:1279:LEU:O	1:A:1281:GLY:N	2.30	0.64
1:M:11:VAL:O	1:M:12:PRO:C	2.36	0.64
9:I:53:VAL:O	9:I:55:ASN:N	2.29	0.64
2:N:426:ARG:O	2:N:428:PHE:N	2.31	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:512:MET:O	1:A:514:PRO:N	2.30	0.64
1:M:185:ASP:CG	1:M:190:TRP:CZ3	2.71	0.64
2:N:290:ASP:OD2	2:N:290:ASP:C	2.35	0.64
1:A:57:ASP:O	1:A:59:ARG:N	2.30	0.64
1:A:809:SER:O	1:A:811:LEU:N	2.30	0.64
1:A:11:VAL:O	1:A:12:PRO:C	2.36	0.64
2:N:758:TYR:O	2:N:760:SER:N	2.30	0.64
2:B:658:ASP:O	2:B:661:GLN:N	2.30	0.64
2:N:1206:THR:OG1	2:N:1207:LYS:N	2.30	0.64
9:I:95:THR:O	9:I:96:MET:C	2.36	0.64
1:M:135:ASN:O	1:M:137:LEU:N	2.30	0.64
1:M:916:TYR:O	1:M:918:GLU:N	2.30	0.64
1:A:916:TYR:O	1:A:918:GLU:N	2.30	0.64
3:O:33:ARG:NE	3:O:179:PHE:CG	2.65	0.64
1:M:213:VAL:CG1	1:M:217:PHE:CE2	2.81	0.64
1:A:1461:LEU:CB	1:A:1462:GLY:HA3	2.16	0.64
1:A:66:GLN:O	1:A:67:PHE:CD2	2.50	0.64
2:B:273:ARG:NH1	2:B:310:ILE:CD1	2.60	0.64
1:A:1083:THR:CG2	1:A:1084:LEU:N	2.61	0.64
1:M:176:GLY:O	1:M:179:GLN:NE2	2.30	0.64
1:M:57:ASP:O	1:M:58:PRO:C	2.36	0.64
7:S:134:GLU:O	7:S:135:ASP:C	2.35	0.64
1:M:260:GLY:N	2:N:924:ARG:CD	2.60	0.64
2:N:328:GLY:O	2:N:329:VAL:CB	2.46	0.64
2:N:497:PRO:O	2:N:499:GLN:N	2.30	0.64
1:M:629:GLY:O	1:M:631:SER:N	2.30	0.64
2:B:457:ARG:O	2:B:459:MET:N	2.30	0.64
1:A:1489:SER:O	1:A:1490:PRO:C	2.36	0.64
1:M:1103:ARG:O	1:M:1106:GLU:N	2.30	0.64
1:A:269:THR:OG1	1:A:270:HIS:N	2.30	0.64
1:A:778:GLY:CA	1:A:1091:GLY:O	2.45	0.64
2:B:430:LEU:O	2:B:432:LEU:N	2.30	0.64
1:A:640:TRP:O	1:A:644:GLY:CA	2.46	0.64
1:M:1263:ASP:O	1:M:1266:LEU:N	2.30	0.64
1:A:1103:ARG:O	1:A:1106:GLU:N	2.30	0.64
1:M:1450:TYR:CD1	7:S:60:GLY:C	2.71	0.64
2:B:1022:LYS:NZ	2:B:1057:GLY:O	2.31	0.64
9:I:8:ILE:CG2	9:I:9:GLU:N	2.61	0.64
7:G:91:ILE:CG1	7:G:143:ASN:OD1	2.45	0.64
4:D:86:HIS:O	4:D:87:LYS:C	2.36	0.64
2:B:309:VAL:O	2:B:310:ILE:C	2.35	0.64
1:A:1100:GLY:O	1:A:1103:ARG:N	2.30	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:266:ASP:N	1:A:266:ASP:OD2	2.30	0.64
1:A:1391:THR:O	1:A:1393:HIS:N	2.31	0.64
1:A:1459:TYR:HD1	1:A:1460:SER:N	1.94	0.63
1:A:1101:VAL:O	1:A:1103:ARG:N	2.30	0.63
1:A:430:ILE:O	1:A:431:PRO:C	2.36	0.63
1:A:1450:TYR:CE2	6:F:125:ARG:CD	2.81	0.63
1:M:1395:ILE:CG1	1:M:1395:ILE:O	2.45	0.63
7:S:91:ILE:CG1	7:S:143:ASN:OD1	2.45	0.63
1:M:97:PHE:CZ	2:N:1200:ILE:CG2	2.81	0.63
1:M:87:GLU:O	1:M:88:LEU:CG	2.47	0.63
1:M:311:ASP:CB	1:M:314:ILE:CG1	2.77	0.63
1:M:65:ARG:O	1:M:67:PHE:N	2.30	0.63
1:M:1083:THR:CG2	1:M:1084:LEU:N	2.61	0.63
2:B:290:ASP:C	2:B:290:ASP:OD2	2.35	0.63
1:A:783:PHE:CE2	1:A:803:ARG:NH1	2.66	0.63
1:M:6:PHE:O	1:M:8:PRO:N	2.30	0.63
1:A:87:GLU:O	1:A:88:LEU:CG	2.47	0.63
1:A:258:VAL:O	1:A:259:ASP:C	2.36	0.63
2:N:232:GLY:O	2:N:233:SER:CB	2.46	0.63
1:M:789:THR:OG1	1:M:821:PHE:CZ	2.52	0.63
4:D:68:PHE:O	4:D:70:THR:N	2.31	0.63
2:N:391:ARG:CG	2:N:618:ARG:NH2	2.62	0.63
1:M:258:VAL:O	1:M:259:ASP:C	2.36	0.63
8:T:113:ARG:O	8:T:115:SER:N	2.31	0.63
1:A:1461:LEU:H	1:A:1461:LEU:HD12	1.63	0.63
1:A:1180:PRO:O	1:A:1181:ASP:C	2.36	0.63
7:S:126:ALA:O	7:S:127:ASN:C	2.37	0.63
1:A:215:THR:O	1:A:219:HIS:CD2	2.51	0.63
2:N:1148:ARG:CD	2:N:1181:GLN:NE2	2.61	0.63
1:M:1281:GLY:O	1:M:1283:PRO:CD	2.46	0.63
4:P:86:HIS:O	4:P:87:LYS:C	2.36	0.63
2:N:309:VAL:O	2:N:310:ILE:C	2.35	0.63
2:B:298:GLU:O	2:B:300:MET:N	2.32	0.63
2:B:232:GLY:O	2:B:233:SER:CB	2.46	0.63
2:N:300:MET:O	2:N:303:CYS:N	2.32	0.63
1:M:68:LYS:O	1:M:69:CYS:C	2.36	0.63
3:O:137:ASP:OD2	3:O:140:SER:CB	2.46	0.63
1:A:213:VAL:CG1	1:A:217:PHE:CE2	2.81	0.63
1:M:338:LYS:CG	1:M:339:GLU:N	2.60	0.63
4:D:117:ASP:O	4:D:120:LEU:N	2.30	0.63
1:A:176:GLY:O	1:A:177:ALA:CB	2.47	0.63
2:B:215:ALA:CA	2:B:217:SER:CB	2.76	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:N:200:GLN:OE1	2:N:487:PRO:CG	2.46	0.63
2:B:752:GLN:O	2:B:753:SER:CB	2.46	0.63
4:D:16:GLY:O	4:D:20:GLU:CG	2.47	0.63
8:H:113:ARG:O	8:H:115:SER:N	2.31	0.63
2:N:273:ARG:NE	2:N:310:ILE:CD1	2.60	0.63
2:N:215:ALA:CA	2:N:217:SER:CB	2.76	0.63
2:B:497:PRO:O	2:B:498:ARG:C	2.37	0.63
1:A:374:ARG:CB	1:A:374:ARG:NH1	2.62	0.63
2:B:318:ASP:O	2:B:320:ILE:N	2.31	0.63
2:N:318:ASP:O	2:N:320:ILE:N	2.31	0.63
1:M:803:ARG:O	1:M:804:GLY:C	2.37	0.63
1:M:1450:TYR:O	1:M:1451:LEU:HG	1.99	0.63
2:B:753:SER:CB	2:B:754:PRO:CD	2.76	0.63
1:M:1150:THR:O	1:M:1151:SER:OG	2.17	0.63
2:B:576:HIS:CD2	2:B:577:ARG:N	2.67	0.63
2:N:576:HIS:CD2	2:N:577:ARG:N	2.67	0.63
1:A:1466:PRO:O	1:A:1469:ALA:N	2.32	0.63
1:A:1094:SER:O	1:A:1095:LYS:CD	2.46	0.63
1:A:90:LYS:O	1:A:91:PRO:C	2.37	0.63
2:N:752:GLN:O	2:N:753:SER:CB	2.45	0.63
9:U:8:ILE:CG2	9:U:9:GLU:N	2.61	0.63
2:B:297:LEU:O	2:B:300:MET:N	2.32	0.62
1:A:68:LYS:O	1:A:69:CYS:C	2.37	0.62
9:I:20:LYS:CD	9:I:21:VAL:CG2	2.77	0.62
2:B:426:ARG:O	2:B:428:PHE:N	2.31	0.62
2:N:820:SER:OG	2:N:821:GLY:N	2.31	0.62
1:M:383:PRO:O	1:M:384:GLU:CB	2.47	0.62
2:N:229:LEU:CD1	2:N:231:ARG:NE	2.62	0.62
2:N:298:GLU:O	2:N:300:MET:N	2.32	0.62
1:M:51:ARG:NH1	1:M:57:ASP:OD1	2.32	0.62
1:M:40:PRO:CA	1:M:276:ILE:CG2	2.78	0.62
7:G:126:ALA:O	7:G:127:ASN:C	2.37	0.62
1:M:1392:ARG:O	1:M:1393:HIS:ND1	2.32	0.62
4:P:68:PHE:O	4:P:70:THR:N	2.31	0.62
1:A:5:GLN:O	1:A:8:PRO:CG	2.47	0.62
1:A:195:ARG:CG	1:A:196:GLY:CA	2.76	0.62
9:I:59:SER:O	9:I:61:ASP:N	2.32	0.62
3:C:168:HIS:CD2	3:C:170:LYS:CB	2.82	0.62
1:A:36:LYS:O	1:A:37:ILE:CB	2.47	0.62
3:C:249:LEU:N	3:C:249:LEU:CD1	2.63	0.62
1:A:1462:GLY:C	1:A:1463:THR:HG23	2.20	0.62
1:A:1150:THR:O	1:A:1151:SER:OG	2.17	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:43:MET:O	1:M:43:MET:CG	2.47	0.62
1:A:1395:ILE:O	1:A:1397:ARG:N	2.33	0.62
1:M:1450:TYR:O	1:M:1451:LEU:CG	2.47	0.62
1:M:1450:TYR:HB3	7:S:60:GLY:O	1.99	0.62
3:O:129:SER:OG	3:O:130:LEU:CA	2.48	0.62
1:A:1160:ASP:OD1	9:I:23:ARG:CD	2.47	0.62
1:M:1412:VAL:O	1:M:1413:GLU:C	2.35	0.62
2:N:753:SER:CB	2:N:754:PRO:CD	2.77	0.62
2:N:497:PRO:O	2:N:498:ARG:C	2.38	0.62
9:U:59:SER:O	9:U:61:ASP:N	2.32	0.62
1:A:180:PRO:CB	1:A:193:TRP:CD1	2.82	0.62
1:A:1458:ASN:O	1:A:1459:TYR:O	2.18	0.62
2:B:229:LEU:CD1	2:B:231:ARG:NE	2.62	0.62
1:A:59:ARG:N	1:A:60:LEU:CA	2.62	0.62
1:A:803:ARG:O	1:A:804:GLY:C	2.37	0.62
1:M:1149:VAL:O	1:M:1150:THR:C	2.38	0.62
1:M:345:ASN:O	1:M:349:LYS:CE	2.47	0.62
1:M:1183:GLU:O	1:M:1184:VAL:C	2.38	0.62
1:M:388:PRO:CG	6:R:94:ASN:ND2	2.61	0.62
4:D:58:THR:C	4:D:62:PHE:CD2	2.73	0.62
1:A:1485:PRO:C	1:A:1486:TYR:HD1	2.03	0.62
1:M:1247:ARG:CD	1:M:1250:ASP:OD2	2.47	0.62
1:M:5:GLN:O	1:M:8:PRO:CG	2.47	0.62
1:A:242:ILE:CD1	1:A:245:LEU:CD1	2.78	0.62
3:O:249:LEU:N	3:O:249:LEU:CD1	2.63	0.62
1:A:1490:PRO:O	1:A:1492:VAL:N	2.32	0.62
1:M:1094:SER:O	1:M:1095:LYS:CD	2.46	0.62
2:N:294:PHE:O	2:N:298:GLU:N	2.33	0.62
1:M:1180:PRO:O	1:M:1181:ASP:C	2.36	0.62
1:A:166:PRO:CB	1:A:168:ALA:CB	2.78	0.62
4:P:58:THR:C	4:P:62:PHE:CD2	2.73	0.62
9:U:20:LYS:O	9:U:21:VAL:C	2.38	0.62
1:M:810:TYR:CD2	2:N:751:ASN:O	2.52	0.62
2:N:663:PHE:O	2:N:663:PHE:CG	2.51	0.62
1:A:154:LEU:N	1:A:173:GLY:CA	2.63	0.62
1:M:1505:PHE:C	1:M:1507:PRO:HD2	2.19	0.62
4:D:24:MET:CE	4:D:88:PHE:CD1	2.83	0.62
4:P:24:MET:CE	4:P:88:PHE:CD1	2.83	0.62
1:A:1183:GLU:O	1:A:1184:VAL:C	2.38	0.62
2:B:300:MET:O	2:B:303:CYS:N	2.32	0.62
1:A:1450:TYR:O	1:A:1451:LEU:CG	2.47	0.62
1:M:1160:ASP:OD1	9:U:23:ARG:CD	2.47	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:I:112:GLU:O	9:I:113:GLN:C	2.37	0.62
2:B:663:PHE:CG	2:B:663:PHE:O	2.51	0.62
4:D:117:ASP:O	4:D:118:GLN:C	2.38	0.62
1:M:993:LEU:O	1:M:996:LEU:N	2.32	0.62
2:B:778:MET:C	2:B:778:MET:SD	2.78	0.62
1:A:1089:TYR:C	1:A:1089:TYR:CD2	2.73	0.62
1:M:191:GLY:O	1:M:193:TRP:CZ3	2.53	0.62
1:M:783:PHE:CE2	1:M:803:ARG:NH1	2.67	0.62
1:M:1402:ALA:O	1:M:1403:LEU:C	2.38	0.62
9:U:112:GLU:O	9:U:113:GLN:C	2.37	0.62
1:A:946:CYS:SG	1:A:946:CYS:O	2.58	0.62
1:M:156:ALA:O	1:M:157:GLY:C	2.38	0.62
9:U:88:THR:OG1	9:U:89:HIS:N	2.30	0.62
1:A:993:LEU:O	1:A:996:LEU:N	2.32	0.62
2:N:297:LEU:O	2:N:300:MET:N	2.32	0.62
1:A:1282:VAL:O	1:A:1283:PRO:C	2.37	0.62
1:M:646:GLU:CA	1:M:647:ILE:C	2.66	0.62
1:A:781:ILE:CG1	1:A:821:PHE:CE2	2.83	0.62
7:G:94:THR:CG2	8:T:2:SER:CA	2.78	0.62
4:P:117:ASP:O	4:P:118:GLN:C	2.38	0.62
3:O:127:ASN:O	3:O:128:SER:C	2.38	0.62
1:A:383:PRO:O	1:A:384:GLU:CB	2.47	0.62
2:N:778:MET:C	2:N:778:MET:SD	2.78	0.62
2:N:512:GLU:O	2:N:512:GLU:CG	2.48	0.62
1:M:1089:TYR:C	1:M:1089:TYR:CD2	2.74	0.62
1:M:166:PRO:CB	1:M:168:ALA:CB	2.78	0.62
1:A:1450:TYR:O	1:A:1451:LEU:HG	1.99	0.62
1:A:1247:ARG:CD	1:A:1250:ASP:OD2	2.47	0.62
2:B:705:GLU:OE1	2:B:707:LYS:CE	2.48	0.62
1:A:822:HIS:CE1	2:B:753:SER:CB	2.83	0.62
1:A:9:SER:O	1:A:10:SER:C	2.38	0.62
4:P:16:GLY:O	4:P:20:GLU:CG	2.47	0.62
2:N:867:VAL:O	2:N:869:SER:N	2.33	0.62
1:A:1452:ASP:OD1	6:F:123:LEU:CD1	2.48	0.62
1:A:156:ALA:O	1:A:157:GLY:C	2.38	0.62
1:M:1098:THR:O	1:M:1099:LEU:CB	2.48	0.62
1:A:148:MET:CE	1:A:181:THR:OG1	2.48	0.61
1:A:1282:VAL:CG1	1:A:1285:ILE:CG1	2.78	0.61
1:M:378:LYS:CA	1:M:441:HIS:CD2	2.82	0.61
1:A:341:ARG:O	1:A:343:ARG:N	2.33	0.61
9:U:87:GLN:NE2	9:U:97:MET:CE	2.62	0.61
2:B:281:ARG:CG	9:I:6:TYR:CZ	2.82	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:946:CYS:O	1:M:946:CYS:SG	2.58	0.61
1:A:808:ASN:CB	1:A:813:GLY:O	2.47	0.61
1:M:188:ARG:NH2	1:M:303:GLN:OE1	2.33	0.61
7:S:138:ILE:CG1	7:S:171:VAL:CG2	2.78	0.61
1:A:1489:SER:CB	1:A:1490:PRO:CD	2.40	0.61
1:M:90:LYS:O	1:M:91:PRO:C	2.37	0.61
7:G:95:VAL:CG1	7:G:131:TYR:CD2	2.83	0.61
1:M:59:ARG:N	1:M:60:LEU:CA	2.62	0.61
1:A:1402:ALA:O	1:A:1403:LEU:C	2.38	0.61
1:A:646:GLU:CA	1:A:647:ILE:C	2.66	0.61
3:C:129:SER:OG	3:C:130:LEU:CA	2.48	0.61
2:N:328:GLY:C	2:N:329:VAL:CG2	2.67	0.61
9:I:87:GLN:NE2	9:I:97:MET:CE	2.62	0.61
9:I:88:THR:OG1	9:I:89:HIS:N	2.30	0.61
1:M:36:LYS:O	1:M:37:ILE:CB	2.47	0.61
2:N:273:ARG:NH1	2:N:310:ILE:CG1	2.64	0.61
2:B:292:ASN:OD1	2:B:297:LEU:CD1	2.48	0.61
2:N:292:ASN:OD1	2:N:297:LEU:CD1	2.49	0.61
3:C:140:SER:O	3:C:141:ARG:CG	2.48	0.61
7:S:3:PHE:CZ	7:S:80:TRP:CD1	2.89	0.61
1:A:311:ASP:CB	1:A:314:ILE:CG1	2.78	0.61
3:O:168:HIS:CD2	3:O:170:LYS:CB	2.82	0.61
1:A:827:ARG:NH1	1:A:827:ARG:CG	2.63	0.61
2:B:294:PHE:O	2:B:298:GLU:N	2.33	0.61
1:A:40:PRO:CA	1:A:276:ILE:CG2	2.77	0.61
9:I:73:LYS:O	9:I:74:GLU:CB	2.48	0.61
1:A:1195:LEU:CD2	1:A:1242:ARG:NE	2.64	0.61
2:N:281:ARG:CG	9:U:6:TYR:CZ	2.84	0.61
1:M:242:ILE:CD1	1:M:245:LEU:CD1	2.78	0.61
1:A:111:ASN:OD1	1:A:216:ILE:CG1	2.47	0.61
1:M:64:ASP:CA	1:M:67:PHE:CE1	2.83	0.61
1:A:1149:VAL:O	1:A:1150:THR:C	2.38	0.61
7:S:95:VAL:CG1	7:S:131:TYR:CD2	2.83	0.61
1:M:778:GLY:CA	1:M:1091:GLY:O	2.48	0.61
1:M:254:PRO:CG	1:M:266:ASP:CG	2.69	0.61
1:M:169:ASN:O	1:M:170:MET:CG	2.48	0.61
2:N:705:GLU:OE1	2:N:707:LYS:CE	2.48	0.61
2:B:328:GLY:O	2:B:329:VAL:CG1	2.48	0.61
7:G:151:THR:CG2	7:G:160:ALA:CB	2.78	0.61
7:G:138:ILE:CG1	7:G:171:VAL:CG2	2.78	0.61
9:I:105:HIS:O	9:I:106:CYS:SG	2.57	0.61
1:M:465:ARG:O	1:M:466:ILE:O	2.18	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:180:CYS:O	2:B:182:TYR:N	2.33	0.61
1:A:1295:ILE:CG2	1:A:1307:ALA:O	2.49	0.61
3:O:140:SER:O	3:O:141:ARG:CG	2.48	0.61
9:U:73:LYS:O	9:U:74:GLU:CB	2.47	0.61
2:B:1185:PRO:C	2:B:1187:ALA:N	2.52	0.61
9:U:105:HIS:O	9:U:106:CYS:SG	2.57	0.61
1:A:388:PRO:CA	1:A:434:TYR:CE2	2.82	0.61
2:B:512:GLU:O	2:B:512:GLU:CG	2.48	0.61
1:A:108:VAL:O	1:A:109:CYS:SG	2.59	0.61
1:A:120:SER:N	1:A:122:PRO:CA	2.64	0.61
1:A:43:MET:CG	1:A:43:MET:O	2.47	0.61
1:M:1195:LEU:CD2	1:M:1242:ARG:NE	2.64	0.61
7:G:3:PHE:CZ	7:G:80:TRP:CD1	2.89	0.61
2:B:273:ARG:CZ	2:B:310:ILE:CD1	2.78	0.61
2:N:307:ALA:O	2:N:310:ILE:CG1	2.49	0.61
1:A:213:VAL:CG1	1:A:217:PHE:CZ	2.83	0.61
1:M:9:SER:O	1:M:10:SER:C	2.38	0.61
2:B:331:ARG:O	2:B:334:ARG:N	2.34	0.61
3:C:127:ASN:O	3:C:128:SER:C	2.38	0.61
1:A:465:ARG:O	1:A:466:ILE:O	2.18	0.61
2:N:180:CYS:O	2:N:182:TYR:N	2.33	0.61
1:A:484:TYR:O	1:A:485:ASN:C	2.39	0.61
1:A:64:ASP:CA	1:A:67:PHE:CE1	2.83	0.61
2:B:307:ALA:O	2:B:310:ILE:CG1	2.49	0.61
7:S:151:THR:CG2	7:S:160:ALA:CB	2.78	0.61
1:M:20:GLN:N	2:N:1203:ARG:O	2.34	0.61
2:B:273:ARG:NH1	2:B:310:ILE:CG1	2.64	0.61
1:M:159:ASP:OD1	1:M:159:ASP:N	2.34	0.61
1:A:159:ASP:N	1:A:159:ASP:OD1	2.34	0.61
1:A:169:ASN:O	1:A:170:MET:CG	2.48	0.61
1:M:1450:TYR:CE2	6:R:125:ARG:CG	2.84	0.61
9:U:20:LYS:CD	9:U:21:VAL:CG2	2.79	0.61
9:I:20:LYS:O	9:I:21:VAL:C	2.39	0.61
1:M:341:ARG:O	1:M:343:ARG:N	2.34	0.61
2:B:867:VAL:O	2:B:869:SER:N	2.33	0.61
1:A:107:CYS:O	1:A:108:VAL:CG2	2.49	0.60
1:M:789:THR:OG1	1:M:821:PHE:CE2	2.54	0.60
5:E:47:GLY:O	5:E:48:MET:C	2.40	0.60
1:A:905:ILE:N	1:A:905:ILE:CD1	2.64	0.60
1:M:25:SER:CB	1:M:239:TRP:CE2	2.84	0.60
2:N:759:GLN:NE2	2:N:1082:GLN:OE1	2.34	0.60
1:A:1098:THR:O	1:A:1099:LEU:CB	2.48	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:N:273:ARG:CZ	2:N:310:ILE:CD1	2.78	0.60
7:S:14:LEU:CD1	7:S:30:LYS:NZ	2.64	0.60
1:M:1458:ASN:O	1:M:1459:TYR:O	2.18	0.60
1:M:178:ALA:O	1:M:179:GLN:CB	2.49	0.60
1:M:1280:ARG:NH1	5:Q:6:LYS:NZ	2.50	0.60
2:N:155:ILE:CD1	2:N:403:PHE:CE1	2.85	0.60
1:A:1496:PHE:CD1	4:D:29:GLU:CG	2.84	0.60
1:A:178:ALA:O	1:A:179:GLN:NE2	2.34	0.60
1:A:20:GLN:N	2:B:1203:ARG:O	2.34	0.60
1:M:879:LEU:CD1	1:M:960:PRO:CG	2.79	0.60
7:G:14:LEU:CD1	7:G:30:LYS:NZ	2.64	0.60
1:M:836:LYS:O	1:M:840:THR:OG1	2.20	0.60
1:M:484:TYR:O	1:M:485:ASN:C	2.39	0.60
1:A:1489:SER:OG	4:D:40:GLN:NE2	2.34	0.60
2:N:1185:PRO:O	2:N:1188:ALA:N	2.35	0.60
1:A:317:GLN:N	1:A:318:PRO:CD	2.65	0.60
1:M:317:GLN:N	1:M:318:PRO:CD	2.65	0.60
2:B:42:VAL:N	2:B:43:GLN:C	2.55	0.60
1:M:827:ARG:NH1	1:M:827:ARG:CG	2.64	0.60
9:U:50:SER:O	9:U:51:SER:CB	2.50	0.60
2:N:243:LEU:C	2:N:244:MET:CG	2.70	0.60
6:R:106:ASP:O	6:R:108:LEU:N	2.35	0.60
1:A:60:LEU:O	1:A:82:HIS:CD2	2.55	0.60
1:M:1162:GLN:NE2	1:M:1162:GLN:C	2.55	0.60
1:M:154:LEU:N	1:M:173:GLY:C	2.54	0.60
1:A:604:SER:OG	1:A:605:ASN:N	2.35	0.60
1:M:905:ILE:N	1:M:905:ILE:CD1	2.64	0.60
1:A:1490:PRO:HG3	7:G:53:ASN:ND2	2.17	0.60
1:A:1183:GLU:O	1:A:1186:GLU:N	2.35	0.60
1:A:775:ILE:CD1	1:A:776:VAL:N	2.65	0.60
1:M:368:ASP:OD1	1:M:649:LYS:NZ	2.35	0.60
1:M:6:PHE:O	1:M:7:SER:C	2.39	0.60
4:D:132:LYS:CG	4:D:133:PHE:O	2.49	0.60
4:P:11:ALA:CB	4:P:12:GLN:CA	2.80	0.60
4:P:132:LYS:CG	4:P:133:PHE:O	2.49	0.60
9:U:29:CYS:SG	9:U:31:ASN:N	2.75	0.60
1:A:946:CYS:N	1:A:947:LYS:O	2.35	0.60
1:M:1282:VAL:O	1:M:1283:PRO:C	2.39	0.60
1:M:1183:GLU:O	1:M:1186:GLU:N	2.35	0.60
1:A:152:THR:O	1:A:174:GLY:CA	2.50	0.60
2:N:42:VAL:N	2:N:43:GLN:C	2.55	0.60
1:A:1465:VAL:HG12	1:A:1466:PRO:N	2.17	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1474:GLY:O	1:A:1475:THR:CB	2.50	0.59
7:S:145:ARG:CG	7:S:172:LEU:CD2	2.80	0.59
2:B:659:PRO:CA	2:B:660:GLU:O	2.50	0.59
2:B:243:LEU:C	2:B:244:MET:CG	2.70	0.59
1:M:128:GLN:O	1:M:136:ARG:CG	2.50	0.59
1:A:879:LEU:CD1	1:A:960:PRO:CG	2.79	0.59
1:A:640:TRP:N	1:A:641:LYS:O	2.35	0.59
1:M:430:ILE:O	1:M:430:ILE:CG1	2.49	0.59
9:U:72:ASP:CA	9:U:81:HIS:NE2	2.65	0.59
2:N:290:ASP:OD2	2:N:291:PRO:CD	2.50	0.59
1:M:60:LEU:O	1:M:82:HIS:CD2	2.55	0.59
9:I:72:ASP:CA	9:I:81:HIS:NE2	2.65	0.59
9:I:20:LYS:NZ	9:I:21:VAL:CG2	2.65	0.59
1:M:88:LEU:CB	1:M:243:THR:O	2.49	0.59
1:A:174:GLY:O	1:A:175:CYS:CB	2.50	0.59
2:N:236:ILE:O	2:N:237:SER:CB	2.51	0.59
2:B:1066:THR:C	3:C:30:ASN:ND2	2.56	0.59
2:B:319:TYR:CD2	2:B:319:TYR:O	2.56	0.59
1:M:1165:VAL:O	1:M:1166:ILE:CD1	2.50	0.59
1:A:1478:LEU:CD2	4:D:45:THR:O	2.47	0.59
1:M:775:ILE:CG2	1:M:1089:TYR:CE2	2.86	0.59
1:M:425:LYS:NZ	1:M:430:ILE:CG1	2.66	0.59
4:D:11:ALA:CB	4:D:12:GLN:CA	2.80	0.59
2:B:1185:PRO:O	2:B:1188:ALA:N	2.35	0.59
1:A:128:GLN:O	1:A:136:ARG:CG	2.50	0.59
1:A:1110:VAL:CG1	1:A:1110:VAL:O	2.50	0.59
6:F:106:ASP:O	6:F:108:LEU:N	2.35	0.59
1:M:775:ILE:CD1	1:M:776:VAL:N	2.65	0.59
7:G:97:LYS:CA	7:G:131:TYR:OH	2.50	0.59
9:I:75:CYS:O	9:I:76:PRO:C	2.40	0.59
1:A:1281:GLY:O	1:A:1283:PRO:CD	2.50	0.59
7:S:46:ILE:O	7:S:46:ILE:CG2	2.48	0.59
1:M:1144:THR:OG1	1:M:1145:THR:N	2.36	0.59
1:A:918:GLU:OE1	1:A:981:PRO:CG	2.51	0.59
3:C:103:LEU:N	3:C:158:CYS:O	2.36	0.59
2:B:290:ASP:OD2	2:B:291:PRO:CD	2.50	0.59
1:A:430:ILE:O	1:A:430:ILE:CG1	2.49	0.59
1:A:1450:TYR:CE2	6:F:125:ARG:CG	2.85	0.59
2:B:216:PRO:CB	2:B:217:SER:CA	2.81	0.59
2:N:1185:PRO:C	2:N:1187:ALA:N	2.53	0.59
7:S:68:PHE:CD1	7:S:68:PHE:N	2.68	0.59
9:I:29:CYS:SG	9:I:31:ASN:N	2.75	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:1110:VAL:O	1:M:1110:VAL:CG1	2.50	0.59
2:N:461:ASN:O	2:N:462:ARG:O	2.21	0.59
1:A:1165:VAL:O	1:A:1166:ILE:CD1	2.50	0.59
1:M:120:SER:N	1:M:122:PRO:CA	2.64	0.59
1:M:155:SER:CA	1:M:169:ASN:CA	2.81	0.59
1:A:6:PHE:O	1:A:7:SER:C	2.39	0.59
2:B:281:ARG:CB	9:I:6:TYR:CE1	2.85	0.59
2:N:872:LEU:CG	2:N:872:LEU:O	2.51	0.59
3:O:182:ASP:OD1	3:O:182:ASP:C	2.41	0.59
4:P:101:ALA:O	4:P:104:ALA:N	2.35	0.59
3:C:198:ALA:O	3:C:200:ALA:N	2.36	0.59
3:O:198:ALA:O	3:O:200:ALA:N	2.35	0.59
1:M:1084:LEU:O	1:M:1088:HIS:N	2.36	0.59
2:N:229:LEU:CD1	2:N:231:ARG:NH2	2.66	0.59
1:A:425:LYS:NZ	1:A:430:ILE:CG1	2.66	0.59
9:U:75:CYS:O	9:U:76:PRO:C	2.40	0.59
4:D:132:LYS:CA	4:D:133:PHE:O	2.51	0.59
1:M:1402:ALA:O	1:M:1405:ARG:N	2.36	0.59
1:A:1472:GLY:O	1:A:1473:MET:CG	2.49	0.59
1:A:1253:ALA:CB	1:A:1254:GLU:CA	2.81	0.59
1:M:1253:ALA:CB	1:M:1254:GLU:CA	2.81	0.59
1:M:946:CYS:N	1:M:947:LYS:O	2.36	0.59
2:B:871:THR:O	2:B:872:LEU:CB	2.50	0.59
1:A:567:PRO:O	1:A:578:TRP:CH2	2.56	0.59
1:M:87:GLU:O	1:M:88:LEU:CD2	2.51	0.59
1:A:1319:LEU:O	1:A:1321:GLU:N	2.36	0.59
1:M:604:SER:OG	1:M:605:ASN:N	2.35	0.59
4:D:101:ALA:O	4:D:104:ALA:N	2.35	0.59
1:A:1146:LEU:CD1	1:A:1274:LEU:CD2	2.80	0.59
1:M:111:ASN:OD1	1:M:216:ILE:CG1	2.51	0.59
1:M:350:ARG:CD	2:N:1117:LEU:O	2.51	0.59
1:A:350:ARG:CD	2:B:1117:LEU:O	2.51	0.59
2:N:812:ALA:N	2:N:1079:THR:O	2.36	0.59
2:B:872:LEU:CG	2:B:872:LEU:O	2.51	0.59
8:H:113:ARG:CG	8:H:114:LEU:N	2.64	0.59
1:A:388:PRO:CB	1:A:434:TYR:CE2	2.86	0.59
2:N:659:PRO:CA	2:N:660:GLU:O	2.50	0.59
1:M:1319:LEU:O	1:M:1321:GLU:N	2.36	0.59
10:J:4:PRO:O	10:J:5:ILE:CG2	2.51	0.59
5:Q:47:GLY:O	5:Q:48:MET:C	2.40	0.59
1:A:439:GLU:OE2	2:B:1097:ARG:NH2	2.36	0.59
3:O:103:LEU:N	3:O:158:CYS:O	2.36	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:1113:ARG:CG	2:B:1113:ARG:O	2.51	0.59
2:N:319:TYR:O	2:N:319:TYR:CD2	2.55	0.59
1:M:640:TRP:N	1:M:641:LYS:O	2.35	0.58
7:S:97:LYS:CA	7:S:131:TYR:OH	2.50	0.58
1:A:155:SER:CA	1:A:169:ASN:CA	2.81	0.58
2:B:281:ARG:CA	9:I:6:TYR:CE1	2.86	0.58
1:A:87:GLU:O	1:A:88:LEU:CD2	2.51	0.58
5:Q:118:ILE:O	5:Q:120:THR:N	2.36	0.58
1:A:747:ASN:O	1:A:748:ASN:O	2.21	0.58
2:N:304:ILE:O	2:N:307:ALA:N	2.36	0.58
1:M:846:ARG:NH1	1:M:1391:THR:C	2.55	0.58
1:M:1397:ARG:NH1	1:M:1400:THR:OG1	2.36	0.58
7:G:46:ILE:CG2	7:G:46:ILE:O	2.49	0.58
9:U:85:PHE:O	9:U:86:TYR:CB	2.51	0.58
1:M:154:LEU:N	1:M:173:GLY:CA	2.65	0.58
1:A:28:GLU:OE1	2:B:1203:ARG:NH2	2.37	0.58
10:V:4:PRO:O	10:V:5:ILE:CG2	2.51	0.58
12:X:48:VAL:O	12:X:49:MET:CB	2.51	0.58
2:N:700:MET:O	2:N:702:ALA:N	2.36	0.58
2:N:1066:THR:C	3:O:30:ASN:ND2	2.56	0.58
1:A:41:GLU:CG	1:A:41:GLU:O	2.52	0.58
7:G:145:ARG:CG	7:G:172:LEU:CD2	2.80	0.58
1:A:800:PRO:O	1:A:802:SER:N	2.36	0.58
9:I:55:ASN:O	9:I:56:THR:C	2.42	0.58
2:B:812:ALA:N	2:B:1079:THR:O	2.36	0.58
11:W:44:MET:O	11:W:46:ALA:N	2.36	0.58
5:E:118:ILE:O	5:E:120:THR:N	2.36	0.58
1:A:1084:LEU:O	1:A:1088:HIS:N	2.36	0.58
2:B:229:LEU:CD1	2:B:231:ARG:NH2	2.66	0.58
1:A:1094:SER:C	1:A:1095:LYS:CG	2.71	0.58
1:A:1397:ARG:NH1	1:A:1400:THR:OG1	2.36	0.58
1:M:260:GLY:CA	2:N:924:ARG:CD	2.81	0.58
1:A:1162:GLN:NE2	1:A:1162:GLN:C	2.55	0.58
1:M:918:GLU:OE1	1:M:981:PRO:CG	2.51	0.58
1:M:747:ASN:O	1:M:748:ASN:O	2.21	0.58
1:A:25:SER:CB	1:A:239:TRP:CE2	2.84	0.58
1:M:178:ALA:O	1:M:180:PRO:CD	2.50	0.58
7:G:68:PHE:N	7:G:68:PHE:CD1	2.68	0.58
2:N:871:THR:O	2:N:872:LEU:CB	2.50	0.58
1:M:1282:VAL:CB	1:M:1285:ILE:CD1	2.82	0.58
1:A:513:VAL:N	1:A:514:PRO:CD	2.66	0.58
8:H:111:LEU:C	8:H:113:ARG:N	2.56	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:439:GLU:OE2	2:N:1097:ARG:NH2	2.36	0.58
1:M:41:GLU:O	1:M:41:GLU:CG	2.52	0.58
2:N:213:LYS:O	2:N:214:ALA:CB	2.52	0.58
2:N:264:SER:OG	2:N:322:LYS:NZ	2.35	0.58
1:A:810:TYR:C	2:B:750:HIS:CD2	2.77	0.58
9:U:110:PHE:O	9:U:110:PHE:CD1	2.56	0.58
2:B:700:MET:O	2:B:702:ALA:N	2.36	0.58
2:N:701:GLN:NE2	2:N:725:HIS:O	2.37	0.58
1:M:1070:LEU:CD1	1:M:1071:ALA:N	2.67	0.58
1:M:174:GLY:O	1:M:175:CYS:CB	2.50	0.58
1:A:20:GLN:OE1	2:B:1205:PHE:CD1	2.57	0.58
1:M:567:PRO:O	1:M:578:TRP:CH2	2.56	0.58
11:K:44:MET:O	11:K:46:ALA:N	2.36	0.58
1:M:1504:ALA:C	1:M:1507:PRO:CD	2.72	0.58
9:I:50:SER:O	9:I:51:SER:CB	2.50	0.58
2:N:216:PRO:CB	2:N:217:SER:CA	2.81	0.58
1:A:1282:VAL:O	1:A:1282:VAL:CG1	2.51	0.58
1:A:945:LEU:O	1:A:949:ILE:CG2	2.52	0.58
2:N:605:ILE:CB	9:U:61:ASP:CB	2.81	0.58
9:U:37:ILE:CG2	9:U:38:ALA:N	2.66	0.58
1:A:573:LYS:CE	8:H:74:TYR:CZ	2.87	0.58
8:T:113:ARG:CG	8:T:114:LEU:N	2.64	0.58
2:N:694:LEU:CD2	2:N:727:TRP:CD1	2.87	0.58
2:N:790:LYS:O	2:N:792:LEU:N	2.37	0.58
1:A:177:ALA:CB	1:A:179:GLN:NE2	2.67	0.58
1:A:1466:PRO:O	1:A:1467:THR:C	2.42	0.58
1:M:800:PRO:O	1:M:802:SER:N	2.37	0.58
1:A:1402:ALA:O	1:A:1405:ARG:N	2.36	0.58
4:P:132:LYS:CA	4:P:133:PHE:O	2.51	0.58
1:M:1246:ILE:O	1:M:1247:ARG:CG	2.52	0.58
2:B:281:ARG:CB	9:I:6:TYR:CD1	2.87	0.58
1:A:816:PRO:CB	2:B:689:MET:CE	2.82	0.58
3:C:182:ASP:OD1	3:C:182:ASP:C	2.41	0.58
1:M:398:VAL:CG1	1:M:421:LEU:CD1	2.82	0.58
12:L:48:VAL:O	12:L:49:MET:CB	2.51	0.58
1:A:728:LEU:CD1	1:A:805:PHE:CD1	2.87	0.58
2:B:461:ASN:O	2:B:462:ARG:O	2.21	0.58
1:A:849:LYS:O	1:A:1408:PHE:CE2	2.56	0.58
4:D:36:THR:O	4:D:40:GLN:CG	2.52	0.57
2:B:304:ILE:O	2:B:307:ALA:N	2.36	0.57
1:A:432:LEU:C	1:A:436:TRP:CZ2	2.77	0.57
2:B:213:LYS:O	2:B:214:ALA:CB	2.52	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:G:114:HIS:NE2	7:G:115:LEU:CD2	2.67	0.57
9:I:110:PHE:CD1	9:I:110:PHE:O	2.56	0.57
2:N:831:ASN:ND2	2:N:833:ALA:N	2.52	0.57
2:B:694:LEU:CD2	2:B:727:TRP:CD1	2.87	0.57
2:N:189:ILE:O	2:N:189:ILE:CG1	2.52	0.57
1:A:1450:TYR:HD1	7:G:61:ARG:N	2.00	0.57
2:N:387:PHE:CE1	2:N:504:HIS:CD2	2.91	0.57
1:A:645:PRO:O	1:A:646:GLU:CB	2.52	0.57
7:G:114:HIS:CD2	7:G:114:HIS:O	2.56	0.57
9:I:22:ASP:O	9:I:23:ARG:CB	2.52	0.57
2:N:281:ARG:CB	9:U:6:TYR:CE1	2.86	0.57
4:P:14:LYS:O	4:P:15:LEU:CG	2.52	0.57
4:D:14:LYS:O	4:D:15:LEU:CG	2.52	0.57
1:M:24:LEU:CB	2:N:1199:ASN:C	2.73	0.57
2:B:701:GLN:NE2	2:B:725:HIS:O	2.37	0.57
1:M:775:ILE:CG2	1:M:1089:TYR:CD2	2.87	0.57
1:M:1434:ILE:O	2:N:1141:PHE:CE2	2.58	0.57
7:S:114:HIS:NE2	7:S:115:LEU:CD2	2.67	0.57
9:I:111:GLU:O	9:I:112:GLU:CB	2.52	0.57
1:M:1458:ASN:O	1:M:1459:TYR:C	2.42	0.57
2:B:236:ILE:O	2:B:237:SER:CB	2.50	0.57
1:M:215:THR:O	1:M:219:HIS:CD2	2.56	0.57
1:M:775:ILE:CG1	1:M:1089:TYR:CG	2.87	0.57
1:A:846:ARG:NH1	1:A:1391:THR:C	2.57	0.57
1:A:263:ARG:O	1:A:263:ARG:CG	2.52	0.57
5:Q:42:LYS:O	5:Q:45:HIS:O	2.21	0.57
5:E:42:LYS:O	5:E:45:HIS:O	2.21	0.57
9:I:85:PHE:O	9:I:86:TYR:CB	2.51	0.57
1:M:945:LEU:O	1:M:949:ILE:CG2	2.52	0.57
1:M:1146:LEU:CD1	1:M:1274:LEU:CD2	2.81	0.57
1:A:651:PHE:CE2	1:A:655:ILE:CD1	2.87	0.57
2:B:831:ASN:ND2	2:B:833:ALA:N	2.52	0.57
2:B:790:LYS:O	2:B:792:LEU:N	2.37	0.57
1:A:836:LYS:O	1:A:840:THR:OG1	2.22	0.57
1:A:1085:ASN:O	1:A:1087:PHE:N	2.38	0.57
7:G:95:VAL:CG1	7:G:131:TYR:CE2	2.88	0.57
1:A:1450:TYR:CD1	7:G:61:ARG:N	2.72	0.57
1:A:1450:TYR:HE2	6:F:125:ARG:CD	2.17	0.57
1:A:170:MET:O	1:A:170:MET:CG	2.53	0.57
1:A:1070:LEU:CD1	1:A:1071:ALA:N	2.67	0.57
7:S:114:HIS:CD2	7:S:114:HIS:O	2.56	0.57
10:J:56:ILE:N	10:J:56:ILE:CD1	2.68	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:398:VAL:CG1	1:A:421:LEU:CD1	2.82	0.57
1:M:1085:ASN:O	1:M:1087:PHE:N	2.38	0.57
1:M:1094:SER:C	1:M:1095:LYS:CG	2.71	0.57
1:A:1278:SER:O	1:A:1279:LEU:CB	2.50	0.57
9:U:49:GLN:NE2	9:U:51:SER:O	2.38	0.57
1:M:573:LYS:CE	8:T:74:TYR:CZ	2.87	0.57
1:A:33:SER:CB	1:A:85:HIS:N	2.68	0.57
1:M:651:PHE:CE2	1:M:655:ILE:CD1	2.87	0.57
1:A:71:THR:CG2	1:A:82:HIS:NE2	2.68	0.57
1:M:645:PRO:O	1:M:646:GLU:CB	2.51	0.57
9:U:111:GLU:O	9:U:112:GLU:CB	2.52	0.57
1:A:13:LEU:O	2:B:1181:GLN:O	2.22	0.57
1:M:1290:MET:SD	1:M:1311:VAL:N	2.78	0.57
1:A:24:LEU:N	2:B:1199:ASN:O	2.38	0.57
4:P:36:THR:O	4:P:40:GLN:CG	2.52	0.57
1:A:106:GLU:OE1	1:A:144:CYS:CB	2.53	0.57
1:M:381:THR:CB	1:M:440:ARG:O	2.53	0.57
1:M:189:LEU:C	1:M:190:TRP:CD1	2.78	0.57
1:A:1246:ILE:O	1:A:1247:ARG:CG	2.52	0.57
2:B:658:ASP:CB	2:B:659:PRO:CD	2.83	0.57
10:V:56:ILE:N	10:V:56:ILE:CD1	2.68	0.57
1:A:652:PHE:O	1:A:656:GLN:CB	2.53	0.57
1:M:1492:VAL:CG1	4:P:75:TYR:OH	2.53	0.57
1:A:25:SER:CB	1:A:239:TRP:CD1	2.87	0.57
9:I:49:GLN:NE2	9:I:51:SER:O	2.38	0.57
1:M:71:THR:CG2	1:M:82:HIS:NE2	2.68	0.57
2:N:486:THR:N	2:N:487:PRO:CD	2.68	0.57
1:M:368:ASP:OD1	1:M:649:LYS:CE	2.51	0.57
1:M:513:VAL:N	1:M:514:PRO:CD	2.66	0.57
8:T:114:LEU:O	8:T:115:SER:C	2.43	0.57
1:M:975:HIS:CE1	1:M:977:GLU:OE2	2.58	0.57
1:M:652:PHE:O	1:M:656:GLN:CB	2.53	0.57
9:I:51:SER:O	9:I:52:ASN:CG	2.43	0.57
4:D:51:MET:O	4:D:55:MET:CG	2.53	0.57
1:M:263:ARG:O	1:M:263:ARG:CG	2.52	0.57
9:U:55:ASN:O	9:U:56:THR:C	2.42	0.57
2:B:331:ARG:O	2:B:332:GLU:C	2.43	0.57
1:M:1142:GLU:O	1:M:1281:GLY:CA	2.53	0.57
2:B:605:ILE:CB	9:I:61:ASP:CB	2.82	0.57
2:N:778:MET:SD	2:N:778:MET:O	2.63	0.57
2:B:1073:GLN:CA	2:B:1073:GLN:OE1	2.53	0.57
1:M:1497:VAL:O	1:M:1497:VAL:HG12	2.04	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1458:ASN:O	1:A:1459:TYR:C	2.42	0.56
1:M:328:LEU:O	1:M:329:LYS:C	2.44	0.56
1:A:95:ILE:O	1:A:98:LEU:N	2.38	0.56
1:M:13:LEU:O	2:N:1181:GLN:O	2.22	0.56
9:I:108:PHE:O	9:I:110:PHE:N	2.37	0.56
2:N:1073:GLN:CA	2:N:1073:GLN:OE1	2.53	0.56
1:M:95:ILE:CD1	1:M:187:LEU:CD1	2.84	0.56
9:I:71:SER:N	9:I:83:ALA:O	2.38	0.56
2:B:215:ALA:O	2:B:216:PRO:C	2.43	0.56
1:M:86:ILE:O	1:M:86:ILE:CG2	2.52	0.56
2:N:576:HIS:CD2	2:N:577:ARG:O	2.58	0.56
1:A:151:ASP:CG	1:A:152:THR:N	2.58	0.56
2:B:564:THR:O	2:B:575:VAL:O	2.23	0.56
1:A:1180:PRO:O	1:A:1182:GLU:N	2.38	0.56
1:M:25:SER:CB	1:M:239:TRP:CD1	2.87	0.56
2:B:296:MET:SD	2:B:376:LEU:CD1	2.94	0.56
1:M:1450:TYR:CE2	6:R:125:ARG:CD	2.87	0.56
1:M:1394:GLY:O	1:M:1395:ILE:C	2.43	0.56
2:N:658:ASP:CB	2:N:659:PRO:CD	2.83	0.56
2:N:281:ARG:CB	9:U:6:TYR:CD1	2.88	0.56
1:M:948:PHE:C	1:M:950:PHE:N	2.59	0.56
1:M:1283:PRO:O	1:M:1284:ASN:ND2	2.39	0.56
2:B:1054:GLN:O	2:B:1056:ARG:N	2.38	0.56
1:A:975:HIS:CE1	1:A:977:GLU:OE2	2.58	0.56
1:A:1153:THR:OG1	9:I:46:HIS:CB	2.53	0.56
1:A:1379:ASP:O	1:A:1383:SER:CB	2.53	0.56
1:A:254:PRO:CG	1:A:266:ASP:CG	2.73	0.56
3:O:137:ASP:OD2	3:O:142:GLY:N	2.39	0.56
4:P:22:GLU:OE2	7:S:5:LEU:C	2.44	0.56
2:N:281:ARG:CA	9:U:6:TYR:CE1	2.87	0.56
1:M:472:SER:OG	2:N:964:GLN:NE2	2.39	0.56
1:M:16:VAL:CG2	2:N:1182:VAL:CG2	2.84	0.56
8:H:36:MET:O	8:H:37:ASN:O	2.24	0.56
1:A:1009:ILE:O	5:E:162:ARG:NH2	2.39	0.56
1:M:102:LYS:O	1:M:105:LEU:CD2	2.54	0.56
2:B:486:THR:N	2:B:487:PRO:CD	2.68	0.56
9:U:108:PHE:O	9:U:110:PHE:N	2.37	0.56
1:M:148:MET:C	1:M:149:VAL:CG2	2.74	0.56
9:U:51:SER:O	9:U:52:ASN:CG	2.43	0.56
1:A:919:ASN:N	1:A:919:ASN:ND2	2.54	0.56
2:B:576:HIS:CD2	2:B:577:ARG:O	2.58	0.56
1:M:1009:ILE:O	5:Q:162:ARG:NH2	2.39	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1465:VAL:HG12	1:A:1466:PRO:CD	2.35	0.56
7:S:95:VAL:CG1	7:S:131:TYR:CE2	2.88	0.56
1:M:414:ASP:OD1	1:M:433:ARG:NE	2.39	0.56
1:A:71:THR:CG2	2:B:1160:ILE:CG2	2.83	0.56
4:P:51:MET:O	4:P:55:MET:CG	2.53	0.56
7:S:50:LEU:O	7:S:54:THR:OG1	2.24	0.56
1:M:255:SER:OG	1:M:256:ILE:N	2.38	0.56
9:U:58:VAL:C	9:U:60:HIS:N	2.58	0.56
9:U:96:MET:SD	9:U:96:MET:N	2.79	0.56
1:A:816:PRO:C	1:A:818:GLU:N	2.59	0.56
1:A:1066:MET:CE	1:A:1442:MET:CA	2.84	0.56
1:M:728:LEU:CD1	1:M:805:PHE:CD1	2.88	0.56
1:M:1379:ASP:O	1:M:1383:SER:CB	2.54	0.56
1:A:114:LYS:O	1:A:115:LEU:C	2.44	0.56
1:M:429:ASP:O	1:M:430:ILE:C	2.44	0.56
2:N:215:ALA:O	2:N:216:PRO:C	2.43	0.56
1:A:98:LEU:O	1:A:101:ILE:CG2	2.54	0.56
1:M:1452:ASP:OD1	6:R:123:LEU:CD1	2.53	0.56
2:N:1022:LYS:O	2:N:1025:ALA:N	2.39	0.56
1:A:1112:LYS:CD	1:A:1112:LYS:N	2.69	0.56
1:M:1492:VAL:O	1:M:1496:PHE:CD2	2.59	0.56
1:A:328:LEU:O	1:A:329:LYS:C	2.44	0.56
1:M:780:ARG:NH1	1:M:803:ARG:CZ	2.69	0.56
2:N:296:MET:SD	2:N:376:LEU:CD1	2.94	0.56
1:M:1395:ILE:O	1:M:1397:ARG:N	2.38	0.56
9:U:22:ASP:O	9:U:23:ARG:CB	2.52	0.56
1:A:780:ARG:NH1	1:A:803:ARG:CZ	2.69	0.56
2:B:243:LEU:O	2:B:244:MET:CG	2.54	0.56
2:B:778:MET:SD	2:B:778:MET:O	2.63	0.56
3:O:168:HIS:O	3:O:170:LYS:N	2.39	0.56
1:A:1371:TYR:O	1:A:1371:TYR:CD2	2.59	0.56
2:N:386:HIS:CD2	2:N:388:GLY:CA	2.88	0.56
2:B:386:HIS:CD2	2:B:388:GLY:CA	2.88	0.56
1:M:170:MET:O	1:M:170:MET:CG	2.53	0.56
9:I:58:VAL:C	9:I:60:HIS:N	2.58	0.56
1:M:390:ASN:O	1:M:393:GLN:N	2.39	0.56
1:M:512:MET:C	1:M:514:PRO:CD	2.75	0.56
1:M:1112:LYS:CD	1:M:1112:LYS:N	2.69	0.56
1:M:1371:TYR:O	1:M:1371:TYR:CD2	2.59	0.56
2:N:1113:ARG:O	2:N:1113:ARG:CG	2.51	0.56
1:M:67:PHE:N	1:M:67:PHE:CD1	2.74	0.56
1:M:71:THR:CG2	2:N:1160:ILE:CG2	2.83	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:S:114:HIS:CD2	7:S:115:LEU:CD2	2.89	0.56
10:V:10:CYS:SG	10:V:44:CYS:SG	3.04	0.56
1:A:378:LYS:CA	1:A:441:HIS:CD2	2.89	0.56
1:A:343:ARG:NE	1:A:1409:GLU:OE2	2.39	0.56
9:I:96:MET:SD	9:I:96:MET:N	2.79	0.56
8:H:114:LEU:O	8:H:115:SER:C	2.43	0.56
1:M:836:LYS:CG	1:M:840:THR:CG2	2.84	0.56
7:S:152:ARG:N	7:S:159:PHE:O	2.39	0.56
2:N:1085:LYS:O	2:N:1086:HIS:CG	2.59	0.56
1:M:1139:THR:OG1	1:M:1208:LYS:CG	2.53	0.56
1:M:432:LEU:C	1:M:436:TRP:CZ2	2.77	0.55
1:A:1119:LEU:CD1	1:A:1121:ILE:HG13	2.36	0.55
11:K:118:VAL:C	11:K:119:GLU:CG	2.74	0.55
1:A:948:PHE:C	1:A:950:PHE:N	2.59	0.55
2:B:1022:LYS:O	2:B:1025:ALA:N	2.39	0.55
2:N:243:LEU:O	2:N:244:MET:CG	2.54	0.55
1:A:231:ASN:ND2	1:A:234:TYR:CD2	2.75	0.55
7:G:152:ARG:N	7:G:159:PHE:O	2.39	0.55
1:M:1105:LYS:O	1:M:1109:ASN:ND2	2.39	0.55
1:M:95:ILE:O	1:M:98:LEU:N	2.39	0.55
1:A:67:PHE:CD1	1:A:67:PHE:N	2.74	0.55
1:A:428:GLY:O	1:A:430:ILE:CG2	2.54	0.55
9:U:71:SER:N	9:U:83:ALA:O	2.38	0.55
4:P:25:LEU:N	7:S:3:PHE:O	2.39	0.55
9:I:37:ILE:CG2	9:I:38:ALA:N	2.69	0.55
1:M:316:GLY:O	1:M:317:GLN:CB	2.55	0.55
2:B:189:ILE:CG1	2:B:189:ILE:O	2.52	0.55
8:T:36:MET:O	8:T:37:ASN:O	2.23	0.55
9:I:10:CYS:O	9:I:11:ASN:C	2.44	0.55
1:A:1105:LYS:O	1:A:1109:ASN:ND2	2.39	0.55
1:M:1161:PRO:CG	1:M:1190:LYS:CB	2.84	0.55
1:A:1459:TYR:O	1:A:1460:SER:O	2.24	0.55
1:A:1170:LYS:N	1:A:1170:LYS:CD	2.69	0.55
1:M:39:PHE:O	1:M:40:PRO:C	2.45	0.55
7:G:134:GLU:O	7:G:136:GLN:N	2.39	0.55
1:M:457:HIS:CD2	1:M:1077:GLU:OE2	2.59	0.55
2:B:1207:LYS:CG	2:B:1208:ASN:N	2.70	0.55
1:M:919:ASN:ND2	1:M:919:ASN:N	2.54	0.55
2:N:243:LEU:O	2:N:254:THR:O	2.25	0.55
9:I:94:ASP:O	9:I:96:MET:N	2.40	0.55
1:M:889:PHE:CZ	1:M:1020:LEU:CD2	2.89	0.55
1:M:927:VAL:O	1:M:929:ASP:N	2.40	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:114:LYS:O	1:M:115:LEU:C	2.44	0.55
5:E:101:THR:CG2	5:E:126:THR:N	2.70	0.55
1:M:1119:LEU:CD1	1:M:1121:ILE:HG13	2.36	0.55
9:I:6:TYR:O	9:I:14:LEU:CD1	2.55	0.55
1:A:88:LEU:CG	1:A:243:THR:O	2.54	0.55
2:N:1054:GLN:O	2:N:1056:ARG:N	2.39	0.55
1:A:512:MET:C	1:A:514:PRO:CD	2.75	0.55
8:T:111:LEU:C	8:T:113:ARG:N	2.56	0.55
2:B:1095:ARG:CD	2:B:1096:ALA:N	2.69	0.55
4:D:86:HIS:O	4:D:88:PHE:N	2.40	0.55
1:M:1496:PHE:HZ	4:P:75:TYR:CE2	2.23	0.55
1:A:1467:THR:OG1	1:A:1468:LEU:N	2.35	0.55
1:M:1170:LYS:CD	1:M:1170:LYS:N	2.69	0.55
1:M:708:LEU:CB	1:M:709:LYS:C	2.75	0.55
1:M:1180:PRO:O	1:M:1182:GLU:N	2.38	0.55
7:S:134:GLU:O	7:S:136:GLN:N	2.39	0.55
3:C:137:ASP:OD2	3:C:142:GLY:N	2.39	0.55
1:A:86:ILE:CG2	1:A:86:ILE:O	2.52	0.55
9:I:59:SER:C	9:I:61:ASP:N	2.60	0.55
2:B:1095:ARG:CG	2:B:1096:ALA:N	2.70	0.55
2:B:1085:LYS:O	2:B:1086:HIS:CG	2.59	0.55
4:D:25:LEU:N	7:G:3:PHE:O	2.39	0.55
7:G:50:LEU:O	7:G:54:THR:OG1	2.24	0.55
1:A:517:ILE:CD1	1:A:640:TRP:NE1	2.55	0.55
1:A:1461:LEU:HD12	1:A:1461:LEU:N	2.21	0.55
1:A:414:ASP:OD1	1:A:433:ARG:NE	2.39	0.55
1:M:1404:MET:SD	1:M:1429:GLY:CA	2.95	0.55
1:M:1338:PHE:O	1:M:1339:VAL:C	2.45	0.55
1:A:16:VAL:CG2	2:B:1182:VAL:CG2	2.84	0.55
2:N:564:THR:O	2:N:575:VAL:O	2.24	0.55
7:S:130:ASN:ND2	7:S:139:GLU:OE2	2.40	0.55
4:P:86:HIS:O	4:P:88:PHE:N	2.40	0.55
1:M:213:VAL:CG1	1:M:217:PHE:CZ	2.89	0.55
1:M:123:LYS:O	1:M:127:THR:CG2	2.55	0.55
1:A:429:ASP:O	1:A:430:ILE:C	2.44	0.55
1:A:395:GLN:NE2	1:A:431:PRO:O	2.40	0.55
1:M:77:ALA:C	1:M:79:CYS:N	2.60	0.55
1:M:1450:TYR:CG	7:S:60:GLY:O	2.59	0.55
1:M:516:GLN:NE2	2:N:1130:HIS:NE2	2.55	0.55
9:U:59:SER:C	9:U:61:ASP:N	2.60	0.55
2:N:46:MET:CG	2:N:403:PHE:CE2	2.90	0.55
1:A:836:LYS:CG	1:A:840:THR:CG2	2.84	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:231:ASN:ND2	1:M:234:TYR:CD2	2.74	0.55
1:A:472:SER:OG	2:B:964:GLN:NE2	2.39	0.55
1:A:889:PHE:CZ	1:A:1020:LEU:CD2	2.89	0.55
4:D:22:GLU:OE2	7:G:5:LEU:C	2.44	0.55
1:M:1450:TYR:CE2	6:R:125:ARG:NE	2.68	0.55
10:J:10:CYS:SG	10:J:44:CYS:SG	3.04	0.55
1:A:1140:GLN:O	1:A:1280:ARG:CG	2.54	0.55
1:A:550:ASN:O	1:A:551:ALA:CB	2.55	0.55
5:Q:101:THR:CG2	5:Q:126:THR:N	2.70	0.55
7:G:114:HIS:CD2	7:G:115:LEU:CD2	2.89	0.55
1:A:812:ARG:N	1:A:813:GLY:CA	2.69	0.55
1:A:513:VAL:CG2	1:A:514:PRO:CD	2.85	0.55
3:C:168:HIS:O	3:C:170:LYS:N	2.39	0.55
2:B:841:ARG:CZ	3:C:64:HIS:ND1	2.70	0.55
3:C:212:GLU:CB	3:C:213:PRO:CA	2.85	0.55
1:M:121:ASN:ND2	1:M:121:ASN:N	2.55	0.55
1:A:101:ILE:CD1	1:A:217:PHE:CZ	2.90	0.55
2:N:972:ARG:NE	2:N:1080:TYR:CE1	2.75	0.55
1:A:516:GLN:NE2	2:B:1130:HIS:NE2	2.55	0.55
9:U:94:ASP:O	9:U:96:MET:N	2.40	0.55
2:N:819:TYR:O	2:N:820:SER:CB	2.55	0.55
1:A:180:PRO:CG	1:A:193:TRP:NE1	2.70	0.54
1:M:353:PHE:CD2	1:M:381:THR:O	2.60	0.54
1:M:6:PHE:C	1:M:8:PRO:CD	2.76	0.54
1:M:154:LEU:CA	1:M:173:GLY:CA	2.85	0.54
1:M:513:VAL:CG2	1:M:514:PRO:CD	2.85	0.54
2:B:402:LEU:CD1	2:B:452:TRP:CZ3	2.90	0.54
2:N:1095:ARG:CG	2:N:1096:ALA:N	2.70	0.54
1:A:183:ARG:NH2	1:A:203:PRO:C	2.61	0.54
1:A:1161:PRO:CG	1:A:1190:LYS:CB	2.84	0.54
1:M:208:LEU:O	1:M:209:SER:CB	2.54	0.54
1:M:150:CYS:SG	1:M:176:GLY:N	2.81	0.54
7:S:51:ASP:O	7:S:52:SER:CB	2.55	0.54
2:N:212:LYS:NZ	2:N:381:PRO:CG	2.70	0.54
1:A:6:PHE:C	1:A:8:PRO:CD	2.76	0.54
9:I:53:VAL:O	9:I:56:THR:N	2.40	0.54
9:I:79:HIS:CD2	9:I:79:HIS:C	2.81	0.54
1:A:255:SER:OG	1:A:256:ILE:N	2.39	0.54
2:B:243:LEU:O	2:B:254:THR:O	2.25	0.54
7:G:130:ASN:ND2	7:G:139:GLU:OE2	2.40	0.54
2:N:791:PRO:O	2:N:793:ALA:N	2.41	0.54
2:N:824:GLN:O	2:N:825:GLU:C	2.45	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:775:ILE:CG1	1:A:1089:TYR:CD2	2.91	0.54
1:A:39:PHE:O	1:A:40:PRO:C	2.45	0.54
4:P:97:CYS:CB	4:P:131:ARG:NH2	2.70	0.54
11:W:118:VAL:C	11:W:119:GLU:CG	2.74	0.54
1:A:1359:ARG:NH2	1:A:1371:TYR:CD1	2.76	0.54
4:D:24:MET:SD	4:D:88:PHE:CA	2.96	0.54
2:B:290:ASP:CA	2:B:292:ASN:CG	2.75	0.54
1:M:193:TRP:CZ3	1:M:206:ARG:CB	2.90	0.54
1:A:386:VAL:CG2	1:A:436:TRP:CD1	2.91	0.54
1:A:1404:MET:SD	1:A:1429:GLY:CA	2.95	0.54
9:I:101:TYR:CB	9:I:110:PHE:CE1	2.90	0.54
1:A:916:TYR:C	1:A:918:GLU:N	2.61	0.54
1:M:815:THR:OG1	1:M:818:GLU:CG	2.56	0.54
3:C:109:CYS:SG	3:C:149:ARG:O	2.66	0.54
8:T:33:GLN:O	8:T:35:ASP:N	2.41	0.54
1:A:1082:MET:O	1:A:1083:THR:C	2.46	0.54
1:A:708:LEU:CB	1:A:709:LYS:C	2.74	0.54
2:N:290:ASP:CA	2:N:292:ASN:CG	2.75	0.54
2:N:297:LEU:O	2:N:298:GLU:C	2.46	0.54
1:M:69:CYS:SG	1:M:79:CYS:SG	3.06	0.54
1:M:81:GLY:C	1:M:249:PRO:CG	2.76	0.54
7:G:10:LEU:CD2	7:G:31:LEU:CD1	2.86	0.54
1:M:1247:ARG:O	1:M:1248:ASP:C	2.46	0.54
3:O:212:GLU:CB	3:O:213:PRO:CA	2.85	0.54
11:K:38:ASP:O	11:K:39:HIS:CG	2.61	0.54
7:G:51:ASP:O	7:G:52:SER:CB	2.55	0.54
1:A:121:ASN:N	1:A:121:ASN:ND2	2.55	0.54
1:M:428:GLY:O	1:M:430:ILE:CG2	2.54	0.54
2:B:490:ARG:CG	2:B:490:ARG:O	2.56	0.54
1:M:1450:TYR:HD1	7:S:60:GLY:O	1.85	0.54
7:S:10:LEU:CD2	7:S:31:LEU:CD1	2.86	0.54
9:U:53:VAL:O	9:U:56:THR:N	2.40	0.54
2:B:972:ARG:NE	2:B:1080:TYR:CE1	2.75	0.54
1:M:452:ARG:NH1	1:M:486:ALA:CB	2.71	0.54
3:O:109:CYS:SG	3:O:149:ARG:O	2.66	0.54
1:A:927:VAL:O	1:A:929:ASP:N	2.40	0.54
1:A:123:LYS:O	1:A:127:THR:CG2	2.55	0.54
4:D:67:ARG:O	4:D:68:PHE:CD2	2.61	0.54
1:A:1485:PRO:C	1:A:1486:TYR:CD1	2.81	0.54
2:N:1207:LYS:CG	2:N:1208:ASN:N	2.70	0.54
1:A:86:ILE:O	1:A:87:GLU:C	2.46	0.54
1:A:1444:THR:CG2	1:A:1444:THR:O	2.56	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:N:1095:ARG:CD	2:N:1096:ALA:N	2.69	0.54
2:B:791:PRO:O	2:B:793:ALA:N	2.41	0.54
2:N:747:PHE:CD1	2:N:747:PHE:N	2.76	0.54
2:N:104:ALA:O	2:N:106:LEU:N	2.40	0.54
1:M:98:LEU:O	1:M:101:ILE:CG2	2.55	0.54
1:M:1103:ARG:O	1:M:1104:LEU:C	2.46	0.54
1:M:150:CYS:CB	1:M:176:GLY:N	2.71	0.54
4:P:67:ARG:O	4:P:68:PHE:CD2	2.61	0.54
1:A:81:GLY:C	1:A:249:PRO:CG	2.76	0.54
1:A:1247:ARG:O	1:A:1248:ASP:C	2.46	0.54
5:E:198:GLU:CB	5:E:199:THR:CA	2.86	0.54
1:M:135:ASN:C	1:M:137:LEU:N	2.60	0.54
1:M:913:LEU:O	1:M:916:TYR:N	2.41	0.54
1:A:913:LEU:O	1:A:916:TYR:N	2.41	0.54
1:M:540:PHE:CD2	1:M:662:TRP:CD1	2.95	0.54
2:N:841:ARG:CZ	3:O:64:HIS:ND1	2.70	0.54
4:P:24:MET:SD	4:P:88:PHE:CA	2.96	0.54
1:M:57:ASP:C	1:M:59:ARG:C	2.67	0.54
1:A:77:ALA:C	1:A:79:CYS:N	2.60	0.54
1:M:808:ASN:CB	1:M:813:GLY:O	2.55	0.54
1:A:802:SER:OG	1:A:803:ARG:N	2.41	0.54
1:A:810:TYR:CE2	2:B:751:ASN:C	2.81	0.54
2:B:508:VAL:CA	2:B:509:CYS:CB	2.86	0.54
2:B:747:PHE:CD1	2:B:747:PHE:N	2.76	0.54
1:A:1338:PHE:O	1:A:1339:VAL:C	2.45	0.54
1:A:382:TYR:CE2	1:A:440:ARG:NE	2.75	0.54
1:A:1290:MET:SD	1:A:1311:VAL:C	2.86	0.54
1:A:118:ASP:CG	1:A:172:HIS:ND1	2.62	0.54
1:A:69:CYS:SG	1:A:79:CYS:SG	3.06	0.54
4:D:51:MET:O	4:D:55:MET:CB	2.56	0.54
7:S:144:VAL:CG1	7:S:164:MET:CE	2.86	0.54
10:J:45:CYS:O	10:J:48:MET:CB	2.56	0.54
2:B:661:GLN:O	2:B:663:PHE:N	2.41	0.54
1:A:388:PRO:CB	1:A:434:TYR:OH	2.56	0.54
1:M:869:ILE:CD1	1:M:872:PHE:CE2	2.91	0.54
1:A:1461:LEU:H	1:A:1461:LEU:CD1	2.22	0.53
1:A:1194:TRP:CZ2	1:A:1262:GLU:CB	2.91	0.53
7:G:144:VAL:CG1	7:G:164:MET:CE	2.86	0.53
1:M:145:LYS:O	1:M:148:MET:CE	2.56	0.53
9:U:79:HIS:C	9:U:79:HIS:CD2	2.81	0.53
2:N:1021:SER:OG	2:N:1022:LYS:N	2.40	0.53
2:B:1036:PHE:CD1	2:B:1036:PHE:N	2.77	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:W:38:ASP:O	11:W:39:HIS:CG	2.61	0.53
1:A:538:ARG:O	1:A:540:PHE:N	2.41	0.53
1:M:101:ILE:CD1	1:M:217:PHE:CE2	2.91	0.53
1:A:56:LEU:CD1	1:A:56:LEU:C	2.77	0.53
4:P:51:MET:O	4:P:55:MET:CB	2.56	0.53
2:N:508:VAL:CA	2:N:509:CYS:CB	2.86	0.53
1:A:452:ARG:NH1	1:A:486:ALA:CB	2.71	0.53
2:N:700:MET:C	2:N:702:ALA:N	2.62	0.53
1:A:1065:GLU:O	1:A:1066:MET:CB	2.56	0.53
1:M:1359:ARG:NH2	1:M:1371:TYR:CD1	2.76	0.53
1:A:540:PHE:CD2	1:A:662:TRP:CD1	2.95	0.53
9:U:10:CYS:O	9:U:11:ASN:C	2.46	0.53
1:A:740:GLU:OE2	1:A:764:ILE:CB	2.57	0.53
1:M:976:LEU:CD1	1:M:1041:ASN:ND2	2.72	0.53
1:A:150:CYS:N	1:A:176:GLY:O	2.42	0.53
1:A:1450:TYR:OH	6:F:125:ARG:NH1	2.41	0.53
2:N:490:ARG:CG	2:N:490:ARG:O	2.56	0.53
1:M:56:LEU:CD1	1:M:56:LEU:C	2.77	0.53
2:N:661:GLN:O	2:N:663:PHE:N	2.41	0.53
9:I:69:PRO:CG	9:I:85:PHE:CZ	2.91	0.53
1:A:1140:GLN:NE2	1:A:1280:ARG:NH1	2.56	0.53
2:B:819:TYR:O	2:B:820:SER:CB	2.55	0.53
11:W:46:ALA:C	11:W:48:GLN:N	2.62	0.53
1:M:1065:GLU:O	1:M:1066:MET:CB	2.57	0.53
1:A:205:LYS:O	1:A:206:ARG:CB	2.55	0.53
1:A:1478:LEU:HD23	4:D:45:THR:C	2.29	0.53
1:A:1103:ARG:O	1:A:1104:LEU:C	2.46	0.53
2:B:297:LEU:O	2:B:298:GLU:C	2.46	0.53
1:M:118:ASP:CG	1:M:172:HIS:ND1	2.62	0.53
1:A:50:PRO:O	1:A:51:ARG:CB	2.57	0.53
9:U:69:PRO:CG	9:U:85:PHE:CZ	2.91	0.53
9:I:5:GLN:O	9:I:14:LEU:CG	2.56	0.53
1:A:1254:GLU:O	1:A:1255:ASP:C	2.47	0.53
1:M:1290:MET:CG	1:M:1310:TRP:CE3	2.91	0.53
2:B:1205:PHE:CD2	2:B:1210:LYS:CA	2.91	0.53
2:N:1205:PHE:CD2	2:N:1210:LYS:CA	2.91	0.53
1:M:463:GLY:O	1:M:512:MET:SD	2.67	0.53
1:A:434:TYR:CE1	6:R:101:LEU:O	2.62	0.53
1:A:976:LEU:CD1	1:A:1041:ASN:ND2	2.72	0.53
1:A:793:PHE:CZ	1:A:817:GLN:OE1	2.61	0.53
1:A:792:HIS:CB	1:A:817:GLN:NE2	2.71	0.53
1:M:550:ASN:O	1:M:551:ALA:CB	2.55	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:467:ARG:CA	1:A:468:VAL:CB	2.86	0.53
1:M:740:GLU:OE2	1:M:764:ILE:CB	2.57	0.53
2:B:824:GLN:O	2:B:825:GLU:C	2.45	0.53
1:M:95:ILE:O	1:M:96:GLY:C	2.46	0.53
1:A:1476:SER:O	1:A:1478:LEU:N	2.42	0.53
4:D:97:CYS:CB	4:D:131:ARG:NH2	2.71	0.53
1:A:1118:SER:C	1:A:1314:THR:CG2	2.77	0.53
1:A:343:ARG:NE	1:A:1409:GLU:CD	2.62	0.53
9:U:101:TYR:CB	9:U:110:PHE:CE1	2.90	0.53
9:U:99:LEU:CD2	9:U:100:ILE:O	2.57	0.53
1:M:1282:VAL:CG1	1:M:1282:VAL:O	2.55	0.53
1:M:835:VAL:C	1:M:837:THR:N	2.60	0.53
1:M:538:ARG:O	1:M:540:PHE:N	2.41	0.53
2:B:104:ALA:O	2:B:106:LEU:N	2.40	0.53
1:A:115:LEU:CD2	1:A:227:HIS:CD2	2.92	0.53
1:A:147:LYS:CG	1:A:148:MET:N	2.72	0.53
1:A:236:ARG:CG	1:A:239:TRP:CZ3	2.92	0.53
1:M:1082:MET:O	1:M:1083:THR:C	2.46	0.53
10:V:45:CYS:O	10:V:48:MET:CB	2.56	0.53
5:Q:198:GLU:CB	5:Q:199:THR:CA	2.86	0.53
1:M:822:HIS:CD2	2:N:753:SER:OG	2.62	0.53
1:A:835:VAL:C	1:A:837:THR:N	2.60	0.53
2:B:987:ASP:OD1	3:C:34:ARG:NH2	2.42	0.53
7:G:6:LYS:CG	7:G:7:GLU:N	2.72	0.53
7:S:96:ASN:C	7:S:98:MET:N	2.62	0.53
4:D:130:LEU:O	4:D:132:LYS:N	2.42	0.53
4:D:133:PHE:O	4:D:135:ASP:N	2.42	0.53
1:A:316:GLY:O	1:A:317:GLN:CB	2.55	0.53
1:M:1444:THR:O	1:M:1444:THR:CG2	2.56	0.53
1:A:355:ALA:CB	2:B:1093:HIS:O	2.56	0.53
1:M:1320:THR:CG2	1:M:1321:GLU:N	2.72	0.53
1:M:207:LEU:CD2	1:M:207:LEU:N	2.69	0.53
8:T:57:LEU:C	8:T:57:LEU:CD1	2.77	0.53
1:A:869:ILE:CD1	1:A:872:PHE:CE2	2.91	0.53
2:B:1062:TYR:CE2	2:B:1069:LYS:CG	2.92	0.53
1:A:1163:ASP:O	1:A:1164:THR:CG2	2.57	0.53
1:A:57:ASP:C	1:A:59:ARG:C	2.67	0.53
1:M:1450:TYR:CD1	7:S:61:ARG:CB	2.92	0.53
1:A:1174:GLU:CD	1:A:1242:ARG:CZ	2.77	0.53
9:U:5:GLN:C	9:U:14:LEU:CD1	2.77	0.53
1:M:1254:GLU:O	1:M:1255:ASP:C	2.47	0.53
2:N:1036:PHE:N	2:N:1036:PHE:CD1	2.77	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:N:685:VAL:CG1	2:N:728:THR:CG2	2.86	0.53
3:O:257:ALA:O	3:O:258:VAL:C	2.47	0.53
1:M:94:HIS:C	1:M:98:LEU:CG	2.77	0.53
1:A:1461:LEU:CB	1:A:1462:GLY:CA	2.64	0.53
1:A:21:PHE:O	1:A:1422:GLY:CA	2.57	0.53
1:M:1118:SER:C	1:M:1314:THR:CG2	2.77	0.53
7:S:6:LYS:CG	7:S:7:GLU:N	2.72	0.53
1:M:244:VAL:CG1	1:M:244:VAL:O	2.56	0.53
8:H:33:GLN:O	8:H:35:ASP:N	2.41	0.53
5:E:142:HIS:O	5:E:143:GLU:C	2.47	0.53
1:A:1290:MET:SD	1:A:1311:VAL:N	2.82	0.53
1:M:91:PRO:CB	1:M:210:PRO:CG	2.87	0.53
1:M:21:PHE:CZ	1:M:1403:LEU:CD1	2.91	0.53
1:A:1191:GLN:OE1	1:A:1192:SER:N	2.42	0.53
1:M:1191:GLN:OE1	1:M:1192:SER:N	2.42	0.53
10:J:10:CYS:SG	10:J:42:ARG:NE	2.82	0.53
11:K:46:ALA:C	11:K:48:GLN:N	2.62	0.53
5:Q:142:HIS:O	5:Q:143:GLU:C	2.47	0.53
4:P:130:LEU:O	4:P:132:LYS:N	2.42	0.52
1:M:1114:ILE:O	1:M:1115:LYS:C	2.47	0.52
10:V:10:CYS:SG	10:V:42:ARG:NE	2.82	0.52
1:A:800:PRO:C	1:A:802:SER:N	2.62	0.52
1:M:355:ALA:CB	2:N:1093:HIS:O	2.56	0.52
1:A:1320:THR:CG2	1:A:1321:GLU:N	2.72	0.52
8:H:57:LEU:C	8:H:57:LEU:CD1	2.77	0.52
2:B:1045:SER:O	2:B:1048:LEU:N	2.42	0.52
2:B:685:VAL:CG1	2:B:728:THR:CG2	2.87	0.52
4:P:85:PHE:O	4:P:86:HIS:CD2	2.63	0.52
1:M:710:PRO:O	1:M:711:GLU:CB	2.58	0.52
2:B:330:THR:O	2:B:334:ARG:CG	2.57	0.52
9:I:77:ARG:O	9:I:78:CYS:C	2.48	0.52
2:B:1021:SER:OG	2:B:1022:LYS:N	2.40	0.52
1:A:135:ASN:C	1:A:137:LEU:N	2.60	0.52
4:P:45:THR:CG2	4:P:49:ILE:CD1	2.88	0.52
2:N:1045:SER:O	2:N:1048:LEU:N	2.42	0.52
2:B:107:ARG:NH1	12:L:47:ARG:O	2.42	0.52
1:M:1163:ASP:O	1:M:1164:THR:CG2	2.57	0.52
2:N:298:GLU:C	2:N:300:MET:N	2.62	0.52
1:M:158:SER:N	1:M:159:ASP:C	2.63	0.52
1:M:21:PHE:O	1:M:1422:GLY:CA	2.57	0.52
1:A:95:ILE:O	1:A:96:GLY:C	2.47	0.52
10:V:42:ARG:CG	10:V:42:ARG:NH1	2.71	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:463:GLY:O	1:A:512:MET:SD	2.67	0.52
10:V:31:GLU:C	10:V:33:GLU:N	2.61	0.52
5:Q:15:TRP:CD2	5:Q:19:HIS:CE1	2.98	0.52
1:M:467:ARG:CA	1:M:468:VAL:CB	2.86	0.52
1:M:802:SER:OG	1:M:803:ARG:N	2.41	0.52
1:A:154:LEU:CA	1:A:173:GLY:CA	2.87	0.52
1:M:86:ILE:O	1:M:87:GLU:C	2.46	0.52
2:N:987:ASP:OD1	3:O:34:ARG:NH2	2.42	0.52
3:C:257:ALA:O	3:C:258:VAL:C	2.47	0.52
10:J:31:GLU:C	10:J:33:GLU:N	2.61	0.52
2:N:307:ALA:CB	2:N:310:ILE:CD1	2.88	0.52
7:G:96:ASN:C	7:G:98:MET:N	2.62	0.52
1:M:812:ARG:NH1	2:N:716:VAL:CG2	2.72	0.52
4:P:133:PHE:O	4:P:135:ASP:N	2.42	0.52
1:A:521:GLN:OE1	1:A:1077:GLU:OE1	2.27	0.52
1:A:1449:ILE:HD12	1:A:1449:ILE:N	2.25	0.52
2:N:107:ARG:NH1	12:X:47:ARG:O	2.42	0.52
4:D:85:PHE:O	4:D:86:HIS:CD2	2.63	0.52
1:M:236:ARG:CG	1:M:239:TRP:CZ3	2.92	0.52
1:M:800:PRO:C	1:M:802:SER:N	2.62	0.52
1:M:812:ARG:O	2:N:715:ARG:NE	2.43	0.52
7:S:52:SER:O	7:S:54:THR:N	2.43	0.52
1:M:822:HIS:CE1	2:N:753:SER:CB	2.92	0.52
2:B:343:GLN:O	2:B:344:LYS:CB	2.58	0.52
1:M:1495:GLY:O	4:P:78:GLU:OE2	2.27	0.52
1:A:710:PRO:O	1:A:711:GLU:CB	2.58	0.52
1:A:428:GLY:O	1:A:430:ILE:N	2.43	0.52
1:A:158:SER:N	1:A:159:ASP:C	2.63	0.52
2:N:715:ARG:CG	2:N:715:ARG:NH1	2.72	0.52
9:U:20:LYS:NZ	9:U:21:VAL:CG2	2.73	0.52
9:I:55:ASN:O	9:I:57:THR:N	2.43	0.52
1:A:257:SER:O	1:A:259:ASP:N	2.43	0.52
1:M:1125:PRO:CB	1:M:1128:ALA:C	2.78	0.52
2:B:1009:ARG:O	2:B:1010:MET:C	2.48	0.52
2:N:1062:TYR:CE2	2:N:1069:LYS:CG	2.92	0.52
1:M:653:ASN:O	1:M:657:ARG:CB	2.58	0.52
1:M:1104:LEU:CD1	1:M:1108:LEU:CD1	2.88	0.52
1:A:55:LEU:CD1	1:A:56:LEU:N	2.73	0.52
1:A:262:SER:O	1:A:263:ARG:CB	2.58	0.52
1:A:457:HIS:CD2	1:A:1077:GLU:CD	2.83	0.52
9:I:99:LEU:CD2	9:I:100:ILE:O	2.57	0.52
9:I:101:TYR:CG	9:I:110:PHE:CE1	2.98	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1164:THR:OG1	1:A:1165:VAL:N	2.43	0.52
1:M:177:ALA:CB	1:M:178:ALA:O	2.58	0.52
1:M:1425:ASP:O	1:M:1427:CYS:N	2.43	0.52
1:A:94:HIS:O	1:A:98:LEU:N	2.43	0.52
7:G:35:VAL:CG1	7:G:46:ILE:CD1	2.88	0.52
9:U:20:LYS:O	9:U:23:ARG:N	2.43	0.52
1:A:336:LYS:CB	1:A:1410:GLU:OE1	2.58	0.52
1:A:209:SER:OG	1:A:212:GLU:CD	2.48	0.52
1:M:1174:GLU:CD	1:M:1242:ARG:CZ	2.77	0.52
2:N:144:ASP:O	2:N:146:GLU:N	2.43	0.52
1:M:1101:VAL:N	1:M:1102:PRO:CD	2.73	0.52
1:M:271:LYS:CD	1:M:322:GLN:NE2	2.74	0.52
1:M:812:ARG:N	1:M:813:GLY:CA	2.73	0.52
2:N:907:ILE:CD1	2:N:924:ARG:NE	2.72	0.52
1:A:1081:GLN:NE2	1:A:1368:TYR:CD2	2.78	0.52
1:M:916:TYR:CE1	1:M:1039:ARG:NH2	2.78	0.52
1:A:916:TYR:CE1	1:A:1039:ARG:NH2	2.78	0.52
5:E:15:TRP:CD2	5:E:19:HIS:CE1	2.98	0.52
2:B:144:ASP:O	2:B:146:GLU:N	2.43	0.52
1:A:1125:PRO:CB	1:A:1128:ALA:C	2.79	0.52
9:I:91:ARG:CG	9:I:92:ARG:N	2.73	0.52
1:A:1288:VAL:CG1	1:A:1289:TYR:N	2.73	0.52
4:D:10:ALA:CA	7:G:84:ARG:O	2.58	0.52
1:A:1489:SER:HB3	1:A:1490:PRO:HD2	1.79	0.51
1:A:1290:MET:O	1:A:1291:MET:SD	2.69	0.51
4:D:45:THR:CG2	4:D:49:ILE:CD1	2.88	0.51
1:A:1085:ASN:C	1:A:1087:PHE:N	2.64	0.51
1:A:1425:ASP:O	1:A:1427:CYS:N	2.43	0.51
1:M:262:SER:O	1:M:263:ARG:CB	2.58	0.51
1:A:646:GLU:N	1:A:648:CYS:CA	2.74	0.51
7:S:35:VAL:CG1	7:S:46:ILE:CD1	2.88	0.51
7:S:46:ILE:O	7:S:47:ILE:C	2.48	0.51
1:M:195:ARG:CG	1:M:196:GLY:N	2.72	0.51
1:M:257:SER:O	1:M:259:ASP:N	2.43	0.51
2:B:287:ILE:CG1	2:B:368:ILE:CD1	2.88	0.51
1:A:375:SER:CB	11:K:2:ASN:ND2	2.73	0.51
1:M:776:VAL:O	1:M:777:GLU:C	2.49	0.51
1:A:1104:LEU:CD1	1:A:1108:LEU:CD1	2.88	0.51
1:A:1242:ARG:O	1:A:1243:CYS:SG	2.68	0.51
9:I:12:ASN:ND2	9:I:29:CYS:SG	2.83	0.51
7:G:90:ALA:O	7:G:143:ASN:CB	2.58	0.51
1:M:388:PRO:CA	1:M:434:TYR:CE2	2.92	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:326:ARG:O	1:M:327:PRO:C	2.49	0.51
1:A:326:ARG:O	1:A:327:PRO:C	2.49	0.51
1:A:653:ASN:O	1:A:657:ARG:CB	2.58	0.51
2:N:1009:ARG:O	2:N:1010:MET:C	2.48	0.51
1:A:1177:PHE:CD2	1:A:1230:ILE:CG2	2.93	0.51
1:A:431:PRO:O	1:A:432:LEU:CB	2.58	0.51
9:U:55:ASN:O	9:U:57:THR:N	2.43	0.51
9:U:77:ARG:O	9:U:78:CYS:C	2.48	0.51
1:A:244:VAL:CG1	1:A:244:VAL:O	2.56	0.51
1:A:835:VAL:O	1:A:838:ALA:N	2.43	0.51
1:M:916:TYR:C	1:M:918:GLU:N	2.61	0.51
7:S:90:ALA:O	7:S:143:ASN:CB	2.58	0.51
2:B:700:MET:C	2:B:702:ALA:N	2.62	0.51
2:B:1106:GLN:CB	2:B:1107:PRO:CD	2.89	0.51
10:J:52:HIS:CD2	10:J:53:VAL:N	2.78	0.51
1:M:342:LEU:CD1	1:M:1409:GLU:OE2	2.58	0.51
2:N:204:ALA:O	2:N:205:ALA:CB	2.58	0.51
1:A:148:MET:O	1:A:179:GLN:CA	2.58	0.51
1:M:1085:ASN:C	1:M:1087:PHE:N	2.64	0.51
1:M:110:TRP:CD1	1:M:110:TRP:O	2.63	0.51
1:A:433:ARG:N	1:A:436:TRP:CH2	2.77	0.51
1:M:55:LEU:CD1	1:M:56:LEU:N	2.73	0.51
1:A:1480:GLU:HG2	1:A:1481:GLY:N	2.25	0.51
1:M:336:LYS:CB	1:M:1410:GLU:OE1	2.58	0.51
2:B:1148:ARG:NH2	2:B:1163:TYR:CD2	2.79	0.51
9:U:101:TYR:CG	9:U:110:PHE:CE1	2.98	0.51
2:N:220:ALA:C	2:N:221:TYR:CD2	2.83	0.51
2:N:287:ILE:CG1	2:N:368:ILE:CD1	2.89	0.51
1:M:835:VAL:O	1:M:838:ALA:N	2.43	0.51
2:N:24:PHE:CD2	2:N:665:TRP:CE2	2.99	0.51
1:A:728:LEU:CD2	1:A:805:PHE:CE1	2.94	0.51
2:B:876:HIS:O	2:B:877:GLY:O	2.29	0.51
1:M:1288:VAL:CG1	1:M:1289:TYR:N	2.73	0.51
4:P:84:ARG:O	4:P:85:PHE:CB	2.58	0.51
1:M:1169:ASP:O	1:M:1170:LYS:C	2.49	0.51
1:A:1101:VAL:O	1:A:1104:LEU:N	2.43	0.51
1:M:1177:PHE:CD2	1:M:1230:ILE:CG2	2.93	0.51
4:P:98:CYS:CA	4:P:99:GLU:CG	2.88	0.51
2:B:220:ALA:C	2:B:221:TYR:CD2	2.83	0.51
1:M:653:ASN:O	1:M:657:ARG:CG	2.59	0.51
1:A:762:ILE:CG1	1:A:762:ILE:O	2.59	0.51
10:V:52:HIS:CD2	10:V:53:VAL:N	2.78	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:N:175:TYR:O	2:N:178:ASN:N	2.44	0.51
1:M:1101:VAL:O	1:M:1104:LEU:N	2.43	0.51
1:A:120:SER:OG	1:A:121:ASN:CG	2.49	0.51
1:M:428:GLY:O	1:M:430:ILE:N	2.43	0.51
1:M:1450:TYR:HA	7:S:60:GLY:O	2.11	0.51
2:N:812:ALA:O	2:N:814:VAL:N	2.44	0.51
2:B:1017:GLU:OE2	2:B:1080:TYR:CE2	2.63	0.51
2:B:812:ALA:O	2:B:814:VAL:N	2.44	0.51
1:M:1144:THR:O	1:M:1145:THR:CG2	2.58	0.51
2:B:879:TYR:N	2:B:879:TYR:CD2	2.78	0.51
1:A:605:ASN:ND2	1:A:605:ASN:N	2.59	0.51
1:M:728:LEU:CD2	1:M:805:PHE:CE1	2.94	0.51
7:S:100:PHE:CE1	7:S:131:TYR:CD2	2.99	0.51
4:D:98:CYS:CA	4:D:99:GLU:CG	2.88	0.51
10:J:42:ARG:NH1	10:J:42:ARG:CG	2.71	0.51
1:A:810:TYR:CD2	2:B:751:ASN:O	2.63	0.51
1:A:581:LYS:O	1:A:582:GLN:C	2.48	0.51
2:B:24:PHE:CD2	2:B:665:TRP:CE2	2.99	0.51
2:B:102:GLN:CG	2:B:105:ARG:CZ	2.89	0.51
4:P:10:ALA:CA	7:S:84:ARG:O	2.58	0.51
1:M:592:ILE:N	1:M:592:ILE:CD1	2.74	0.51
2:N:102:GLN:CG	2:N:105:ARG:CZ	2.89	0.51
2:N:899:ILE:CD1	2:N:899:ILE:C	2.79	0.51
2:B:307:ALA:CB	2:B:310:ILE:CD1	2.88	0.51
1:M:180:PRO:CA	1:M:192:SER:O	2.59	0.51
4:D:61:TYR:CD1	7:G:105:GLY:N	2.79	0.51
1:A:1114:ILE:O	1:A:1116:THR:N	2.44	0.51
1:A:1485:PRO:O	1:A:1486:TYR:CD1	2.63	0.51
1:M:1242:ARG:O	1:M:1243:CYS:SG	2.68	0.51
2:N:879:TYR:N	2:N:879:TYR:CD2	2.78	0.51
1:M:552:VAL:O	1:M:553:MET:C	2.49	0.51
2:B:899:ILE:C	2:B:899:ILE:CD1	2.79	0.51
1:A:1496:PHE:HB3	4:D:29:GLU:CD	2.30	0.51
1:A:62:THR:CG2	1:A:63:ILE:N	2.74	0.51
1:M:1194:TRP:CZ2	1:M:1262:GLU:CB	2.91	0.51
1:A:271:LYS:CD	1:A:322:GLN:NE2	2.74	0.51
2:B:300:MET:O	2:B:301:LYS:C	2.49	0.51
1:M:118:ASP:N	1:M:118:ASP:OD1	2.41	0.51
1:M:120:SER:OG	1:M:121:ASN:CG	2.49	0.51
1:A:59:ARG:N	1:A:60:LEU:CG	2.74	0.51
2:B:907:ILE:CD1	2:B:924:ARG:NE	2.73	0.51
1:A:1114:ILE:O	1:A:1115:LYS:C	2.47	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:S:23:MET:SD	7:S:71:PHE:CZ	3.04	0.51
1:A:94:HIS:CD2	1:A:97:PHE:CD2	2.98	0.51
1:M:1412:VAL:O	1:M:1414:ILE:N	2.44	0.51
1:A:820:PHE:CZ	2:B:500:LEU:CD1	2.94	0.51
1:A:343:ARG:NH2	1:A:1409:GLU:OE1	2.44	0.51
2:N:343:GLN:O	2:N:344:LYS:CB	2.58	0.51
1:M:1290:MET:O	1:M:1291:MET:SD	2.68	0.51
8:H:37:ASN:C	8:H:37:ASN:OD1	2.49	0.51
9:U:91:ARG:CG	9:U:92:ARG:N	2.73	0.51
2:B:175:TYR:O	2:B:178:ASN:N	2.44	0.51
1:M:1504:ALA:O	1:M:1507:PRO:HD2	2.11	0.51
7:G:52:SER:O	7:G:54:THR:N	2.43	0.51
1:A:352:ASP:O	1:A:353:PHE:C	2.49	0.51
1:M:83:PHE:CZ	2:N:1193:GLN:O	2.64	0.51
4:P:130:LEU:C	4:P:132:LYS:N	2.64	0.51
3:O:130:LEU:CD2	3:O:132:HIS:CD2	2.94	0.51
10:J:42:ARG:O	10:J:43:TYR:C	2.49	0.51
10:V:42:ARG:O	10:V:43:TYR:C	2.49	0.51
2:N:1206:THR:O	2:N:1207:LYS:O	2.29	0.51
1:M:581:LYS:O	1:M:582:GLN:C	2.48	0.51
3:O:4:GLU:N	3:O:5:THR:CA	2.74	0.51
4:D:84:ARG:O	4:D:85:PHE:CB	2.58	0.50
2:B:298:GLU:C	2:B:300:MET:N	2.62	0.50
1:M:106:GLU:O	1:M:116:LYS:CD	2.59	0.50
1:A:118:ASP:N	1:A:118:ASP:OD1	2.41	0.50
7:G:100:PHE:CE1	7:G:131:TYR:CD2	2.99	0.50
1:M:59:ARG:N	1:M:60:LEU:CG	2.74	0.50
7:G:46:ILE:O	7:G:47:ILE:C	2.48	0.50
1:M:822:HIS:NE2	2:N:752:GLN:O	2.44	0.50
9:U:5:GLN:O	9:U:14:LEU:CD1	2.59	0.50
1:M:318:PRO:C	1:M:319:GLN:CG	2.80	0.50
9:I:5:GLN:C	9:I:14:LEU:CD1	2.80	0.50
1:A:124:PHE:O	1:A:128:GLN:CG	2.59	0.50
1:M:87:GLU:O	1:M:88:LEU:CB	2.59	0.50
1:M:815:THR:O	1:M:818:GLU:N	2.44	0.50
2:B:204:ALA:O	2:B:205:ALA:CB	2.58	0.50
1:M:864:ASN:ND2	1:M:865:ALA:N	2.60	0.50
3:C:4:GLU:N	3:C:5:THR:CA	2.74	0.50
1:M:1498:GLY:HA3	1:M:1500:PRO:HD2	1.79	0.50
7:G:3:PHE:CD1	7:G:80:TRP:CD1	2.99	0.50
7:G:128:PRO:O	7:G:129:PRO:C	2.49	0.50
1:M:1071:ALA:CB	1:M:1373:HIS:CG	2.94	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:1425:ASP:C	1:M:1427:CYS:N	2.65	0.50
1:A:1412:VAL:O	1:A:1414:ILE:N	2.43	0.50
1:M:1081:GLN:NE2	1:M:1368:TYR:CD2	2.78	0.50
9:I:33:ASP:O	9:I:34:TYR:C	2.49	0.50
2:N:1017:GLU:OE2	2:N:1080:TYR:CE2	2.63	0.50
1:A:368:ASP:OD1	1:A:649:LYS:CE	2.60	0.50
2:N:651:ASP:OD2	2:N:662:ARG:CA	2.60	0.50
2:B:651:ASP:OD2	2:B:662:ARG:CA	2.59	0.50
9:I:8:ILE:O	9:I:9:GLU:CB	2.60	0.50
3:O:168:HIS:CD2	3:O:170:LYS:N	2.80	0.50
2:N:16:ASP:O	2:N:19:THR:CG2	2.60	0.50
2:N:1106:GLN:CB	2:N:1107:PRO:CD	2.89	0.50
1:A:110:TRP:CZ2	1:A:180:PRO:CG	2.94	0.50
1:A:178:ALA:C	1:A:179:GLN:CG	2.79	0.50
1:M:352:ASP:O	1:M:353:PHE:C	2.49	0.50
1:M:1164:THR:OG1	1:M:1165:VAL:N	2.43	0.50
1:A:1169:ASP:O	1:A:1170:LYS:C	2.49	0.50
1:M:62:THR:CG2	1:M:63:ILE:N	2.74	0.50
1:M:270:HIS:O	1:M:273:SER:OG	2.30	0.50
1:M:168:ALA:O	1:M:169:ASN:CB	2.58	0.50
1:A:1425:ASP:C	1:A:1427:CYS:N	2.65	0.50
3:C:137:ASP:OD1	3:C:140:SER:CB	2.60	0.50
1:A:94:HIS:O	1:A:95:ILE:C	2.50	0.50
1:A:94:HIS:NE2	1:A:97:PHE:CD2	2.79	0.50
1:A:342:LEU:CD1	1:A:1409:GLU:OE2	2.59	0.50
1:M:1259:MET:C	1:M:1260:ILE:CG2	2.78	0.50
1:A:815:THR:O	1:A:818:GLU:N	2.45	0.50
4:P:117:ASP:O	4:P:119:ASN:N	2.44	0.50
1:M:605:ASN:N	1:M:605:ASN:ND2	2.58	0.50
1:A:506:GLU:O	1:A:508:GLN:N	2.45	0.50
1:A:552:VAL:O	1:A:553:MET:C	2.49	0.50
2:B:715:ARG:CG	2:B:715:ARG:NH1	2.72	0.50
1:M:433:ARG:N	1:M:436:TRP:CH2	2.77	0.50
2:N:300:MET:O	2:N:301:LYS:C	2.49	0.50
1:M:162:ASP:OD1	1:M:162:ASP:N	2.45	0.50
7:S:128:PRO:O	7:S:129:PRO:C	2.49	0.50
4:D:130:LEU:C	4:D:132:LYS:N	2.64	0.50
1:M:646:GLU:N	1:M:648:CYS:CA	2.73	0.50
3:C:130:LEU:CD2	3:C:132:HIS:CD2	2.94	0.50
1:M:1280:ARG:CZ	5:Q:6:LYS:NZ	2.74	0.50
1:M:1150:THR:CG2	9:U:48:LEU:CD2	2.90	0.50
2:B:1206:THR:O	2:B:1207:LYS:O	2.29	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:1146:LEU:CD1	1:M:1274:LEU:CA	2.90	0.50
2:N:605:ILE:CG2	9:U:61:ASP:CB	2.90	0.50
1:A:793:PHE:CE1	1:A:817:GLN:OE1	2.65	0.50
1:M:762:ILE:CG1	1:M:762:ILE:O	2.59	0.50
2:N:840:PHE:CD1	2:N:840:PHE:N	2.79	0.50
1:A:192:SER:CB	1:A:201:ASP:O	2.60	0.50
1:A:1459:TYR:O	1:A:1460:SER:C	2.50	0.50
1:M:780:ARG:O	1:M:781:ILE:O	2.30	0.50
1:A:1071:ALA:CB	1:A:1373:HIS:CG	2.94	0.50
1:A:1390:ILE:CD1	1:A:1395:ILE:CG2	2.90	0.50
4:P:61:TYR:CD1	7:S:105:GLY:N	2.79	0.50
1:A:261:THR:O	1:A:261:THR:OG1	2.30	0.50
1:A:729:ASN:O	1:A:733:ASP:OD1	2.30	0.50
1:A:1449:ILE:HG22	6:F:123:LEU:O	2.12	0.50
3:C:168:HIS:CD2	3:C:170:LYS:N	2.80	0.50
9:I:64:THR:O	9:I:66:PRO:CD	2.60	0.50
7:G:23:MET:SD	7:G:71:PHE:CZ	3.04	0.50
1:M:654:GLY:O	1:M:658:VAL:N	2.45	0.50
1:A:743:LEU:O	1:A:744:LYS:C	2.50	0.50
1:M:1492:VAL:HG11	4:P:75:TYR:OH	2.12	0.50
1:A:1149:VAL:O	1:A:1151:SER:N	2.45	0.50
1:M:431:PRO:O	1:M:432:LEU:CB	2.58	0.50
1:A:1474:GLY:O	1:A:1475:THR:OG1	2.30	0.50
4:P:133:PHE:C	4:P:135:ASP:N	2.65	0.50
1:M:1450:TYR:HE2	6:R:125:ARG:CG	2.23	0.50
7:S:3:PHE:CD1	7:S:80:TRP:CD1	2.99	0.50
7:G:35:VAL:O	7:G:38:THR:OG1	2.30	0.50
1:A:1259:MET:C	1:A:1260:ILE:CG2	2.79	0.50
1:M:522:SER:O	1:M:523:ASN:ND2	2.44	0.50
3:C:80:PRO:O	3:C:83:GLY:O	2.30	0.50
1:A:512:MET:O	1:A:513:VAL:C	2.50	0.50
4:D:117:ASP:O	4:D:119:ASN:N	2.44	0.50
1:A:653:ASN:O	1:A:657:ARG:CG	2.59	0.50
1:M:488:PHE:O	2:N:978:THR:CG2	2.60	0.50
2:B:840:PHE:CD1	2:B:840:PHE:N	2.79	0.50
1:A:432:LEU:O	1:A:433:ARG:O	2.30	0.50
1:M:803:ARG:O	1:M:804:GLY:O	2.30	0.50
1:M:55:LEU:CD1	1:M:55:LEU:C	2.80	0.50
1:A:1395:ILE:CD1	1:A:1397:ARG:CD	2.90	0.50
1:A:83:PHE:CZ	2:B:1193:GLN:O	2.65	0.50
9:U:75:CYS:O	9:U:76:PRO:O	2.30	0.50
1:M:1149:VAL:O	1:M:1151:SER:N	2.45	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:154:LEU:N	1:M:174:GLY:N	2.59	0.50
8:H:117:ASP:O	8:H:118:HIS:O	2.30	0.50
7:S:19:PHE:O	7:S:20:GLY:O	2.30	0.50
2:N:206:ASN:N	2:N:227:SER:CB	2.75	0.50
1:A:488:PHE:O	2:B:978:THR:CG2	2.60	0.50
1:A:592:ILE:CD1	1:A:592:ILE:N	2.74	0.50
4:D:86:HIS:O	4:D:89:GLU:N	2.45	0.50
1:A:116:LYS:O	1:A:117:ILE:O	2.30	0.50
1:A:126:ASP:C	1:A:130:TYR:CE2	2.85	0.50
1:M:1114:ILE:O	1:M:1116:THR:N	2.44	0.50
1:A:457:HIS:CA	1:A:1077:GLU:OE2	2.59	0.50
2:B:703:GLY:C	2:B:704:TYR:CD1	2.85	0.50
2:N:703:GLY:C	2:N:704:TYR:CD1	2.84	0.50
1:M:151:ASP:O	1:M:152:THR:O	2.30	0.50
1:M:506:GLU:O	1:M:508:GLN:N	2.45	0.50
2:B:869:SER:O	3:O:261:ARG:NH2	2.45	0.50
6:F:60:SER:O	6:F:61:GLY:O	2.30	0.50
4:D:111:LEU:O	4:D:112:ALA:O	2.30	0.50
1:M:114:LYS:O	1:M:115:LEU:O	2.30	0.50
12:L:31:ASN:O	12:L:32:THR:C	2.50	0.50
1:A:654:GLY:O	1:A:658:VAL:N	2.45	0.50
4:P:86:HIS:O	4:P:89:GLU:N	2.45	0.50
1:M:64:ASP:O	1:M:75:THR:OG1	2.30	0.50
7:G:111:VAL:CG1	7:G:111:VAL:O	2.60	0.50
1:A:780:ARG:O	1:A:781:ILE:O	2.30	0.50
1:A:11:VAL:O	1:A:12:PRO:O	2.30	0.50
1:A:522:SER:O	1:A:523:ASN:ND2	2.44	0.50
2:N:664:GLY:O	2:N:665:TRP:CB	2.59	0.50
1:M:326:ARG:O	1:M:327:PRO:O	2.30	0.50
2:N:876:HIS:O	2:N:877:GLY:O	2.29	0.50
2:B:745:ILE:O	2:B:748:PRO:CD	2.60	0.50
1:A:1194:TRP:CH2	1:A:1262:GLU:CG	2.95	0.49
1:M:122:PRO:O	1:M:126:ASP:CG	2.51	0.49
1:M:126:ASP:C	1:M:130:TYR:CE2	2.85	0.49
1:M:185:ASP:OD1	1:M:185:ASP:O	2.30	0.49
1:A:126:ASP:C	1:A:130:TYR:CD2	2.85	0.49
7:G:103:ASN:OD1	7:G:108:ASN:OD1	2.30	0.49
2:B:215:ALA:O	2:B:217:SER:OG	2.30	0.49
9:U:33:ASP:O	9:U:34:TYR:C	2.49	0.49
1:A:1259:MET:O	1:A:1260:ILE:CG2	2.60	0.49
1:A:318:PRO:C	1:A:319:GLN:CG	2.80	0.49
1:M:729:ASN:O	1:M:733:ASP:OD1	2.30	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:153:GLY:O	1:A:154:LEU:O	2.30	0.49
8:H:74:TYR:CE2	8:H:76:MET:CG	2.95	0.49
1:M:124:PHE:O	1:M:128:GLN:CG	2.59	0.49
1:A:503:THR:C	1:A:505:ALA:N	2.64	0.49
2:B:502:ASN:N	2:B:502:ASN:OD1	2.44	0.49
2:B:16:ASP:O	2:B:19:THR:CG2	2.60	0.49
2:B:1088:VAL:O	2:B:1091:LYS:N	2.45	0.49
1:M:1504:ALA:O	1:M:1507:PRO:CD	2.59	0.49
1:M:208:LEU:O	1:M:212:GLU:OE1	2.31	0.49
1:A:64:ASP:O	1:A:75:THR:OG1	2.30	0.49
1:A:776:VAL:O	1:A:777:GLU:C	2.49	0.49
2:B:229:LEU:O	2:B:234:ARG:O	2.30	0.49
3:O:137:ASP:OD1	3:O:140:SER:CB	2.60	0.49
1:M:260:GLY:O	1:M:261:THR:O	2.30	0.49
7:S:35:VAL:O	7:S:38:THR:OG1	2.30	0.49
1:M:1259:MET:O	1:M:1260:ILE:CG2	2.60	0.49
1:M:921:ILE:O	1:M:922:GLU:OE1	2.30	0.49
8:T:117:ASP:O	8:T:118:HIS:O	2.30	0.49
5:Q:54:ARG:O	5:Q:55:THR:OG1	2.30	0.49
7:S:155:ALA:O	7:S:156:THR:OG1	2.30	0.49
2:B:605:ILE:CG2	9:I:61:ASP:CB	2.90	0.49
1:A:326:ARG:O	1:A:327:PRO:O	2.30	0.49
2:N:494:LEU:O	2:N:495:ALA:O	2.30	0.49
2:B:308:PHE:O	2:B:308:PHE:CD2	2.66	0.49
4:D:64:VAL:O	4:D:64:VAL:CG1	2.60	0.49
1:A:150:CYS:CB	1:A:176:GLY:N	2.75	0.49
1:A:1263:ASP:O	1:A:1264:VAL:C	2.51	0.49
1:A:266:ASP:O	1:A:269:THR:OG1	2.30	0.49
2:B:233:SER:O	2:B:234:ARG:O	2.30	0.49
1:M:161:PHE:CD2	1:M:165:ASN:CG	2.85	0.49
1:M:1313:GLU:O	1:M:1314:THR:O	2.30	0.49
1:A:803:ARG:O	1:A:804:GLY:O	2.30	0.49
1:A:730:GLN:O	1:A:733:ASP:OD1	2.30	0.49
1:A:87:GLU:O	1:A:88:LEU:CB	2.59	0.49
2:B:508:VAL:O	2:B:526:SER:CB	2.61	0.49
9:U:64:THR:O	9:U:66:PRO:CD	2.60	0.49
10:J:1:MET:O	10:J:2:ILE:O	2.31	0.49
3:O:26:LEU:O	3:O:27:ALA:C	2.51	0.49
2:N:308:PHE:CD2	2:N:308:PHE:O	2.66	0.49
1:A:114:LYS:O	1:A:115:LEU:O	2.30	0.49
1:M:212:GLU:O	1:M:215:THR:OG1	2.30	0.49
1:A:122:PRO:O	1:A:126:ASP:CG	2.51	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:N:229:LEU:O	2:N:234:ARG:O	2.30	0.49
1:A:162:ASP:OD1	1:A:162:ASP:N	2.45	0.49
1:A:168:ALA:O	1:A:169:ASN:CB	2.58	0.49
2:N:216:PRO:N	2:N:217:SER:CA	2.76	0.49
1:M:646:GLU:C	1:M:648:CYS:N	2.62	0.49
1:A:1075:ILE:C	1:A:1078:PRO:CD	2.81	0.49
1:M:11:VAL:O	1:M:12:PRO:O	2.30	0.49
1:M:1075:ILE:C	1:M:1078:PRO:CD	2.81	0.49
1:M:457:HIS:CA	1:M:1077:GLU:OE2	2.60	0.49
2:B:243:LEU:O	2:B:244:MET:O	2.30	0.49
2:B:664:GLY:O	2:B:665:TRP:CB	2.59	0.49
9:U:8:ILE:O	9:U:9:GLU:CB	2.59	0.49
1:M:231:ASN:O	1:M:235:ALA:O	2.30	0.49
1:M:743:LEU:O	1:M:744:LYS:C	2.50	0.49
2:N:187:TYR:CD1	2:N:194:GLU:OE1	2.65	0.49
1:A:270:HIS:O	1:A:273:SER:OG	2.30	0.49
1:M:178:ALA:O	1:M:179:GLN:CG	2.60	0.49
2:N:485:ASN:O	2:N:521:LEU:O	2.31	0.49
9:I:19:ASP:O	9:I:20:LYS:O	2.30	0.49
8:T:74:TYR:CE2	8:T:76:MET:CG	2.95	0.49
3:O:80:PRO:O	3:O:83:GLY:O	2.30	0.49
2:B:1057:GLY:O	2:B:1058:PHE:O	2.31	0.49
7:S:120:MET:CE	7:S:138:ILE:CD1	2.91	0.49
1:A:1064:GLY:CA	1:A:1065:GLU:CB	2.91	0.49
8:T:37:ASN:OD1	8:T:37:ASN:C	2.50	0.49
2:N:308:PHE:CG	2:N:308:PHE:O	2.65	0.49
12:X:31:ASN:O	12:X:32:THR:C	2.50	0.49
2:B:326:THR:OG1	2:B:326:THR:O	2.30	0.49
1:A:115:LEU:CD1	1:A:115:LEU:N	2.76	0.49
1:A:183:ARG:NH1	1:A:203:PRO:CB	2.76	0.49
1:M:116:LYS:O	1:M:117:ILE:O	2.30	0.49
7:G:102:ALA:O	7:G:103:ASN:OD1	2.30	0.49
1:A:1313:GLU:O	1:A:1314:THR:O	2.30	0.49
9:U:12:ASN:ND2	9:U:29:CYS:SG	2.85	0.49
2:N:243:LEU:O	2:N:244:MET:O	2.30	0.49
2:N:319:TYR:O	2:N:319:TYR:CG	2.65	0.49
2:B:494:LEU:O	2:B:495:ALA:O	2.30	0.49
1:M:885:GLU:O	1:M:886:TYR:C	2.50	0.49
11:W:76:THR:OG1	11:W:77:VAL:O	2.30	0.49
6:R:79:GLU:O	6:R:80:ARG:C	2.51	0.49
1:A:1496:PHE:HZ	4:D:32:ILE:CG2	2.26	0.49
1:A:236:ARG:O	1:A:237:PRO:C	2.51	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:776:VAL:O	1:M:776:VAL:CG2	2.56	0.49
1:A:1093:SER:O	1:A:1094:SER:OG	2.30	0.49
9:I:75:CYS:O	9:I:76:PRO:O	2.30	0.49
4:D:99:GLU:CG	4:D:124:LEU:CD1	2.90	0.49
1:M:261:THR:OG1	1:M:261:THR:O	2.30	0.49
1:A:260:GLY:O	1:A:261:THR:O	2.30	0.49
1:A:646:GLU:C	1:A:648:CYS:N	2.62	0.49
1:A:8:PRO:O	1:A:9:SER:OG	2.31	0.49
9:U:5:GLN:O	9:U:14:LEU:CG	2.60	0.49
1:A:921:ILE:O	1:A:922:GLU:CD	2.51	0.49
6:R:60:SER:O	6:R:61:GLY:O	2.30	0.49
2:B:165:ILE:CG2	2:B:165:ILE:O	2.60	0.49
2:N:24:PHE:CD2	2:N:665:TRP:CZ2	3.01	0.49
1:A:485:ASN:OD1	1:A:485:ASN:O	2.31	0.49
1:A:444:ASP:O	1:A:445:GLY:C	2.51	0.49
11:K:76:THR:OG1	11:K:77:VAL:O	2.30	0.49
1:A:864:ASN:ND2	1:A:865:ALA:N	2.60	0.49
2:B:187:TYR:CD1	2:B:194:GLU:OE1	2.65	0.49
1:M:104:ILE:O	1:M:105:LEU:O	2.30	0.49
1:M:126:ASP:C	1:M:130:TYR:CD2	2.85	0.49
1:M:202:LEU:N	1:M:204:GLU:OE2	2.45	0.49
1:M:266:ASP:O	1:M:269:THR:OG1	2.30	0.49
1:A:55:LEU:CD1	1:A:55:LEU:C	2.81	0.49
7:S:144:VAL:CG1	7:S:145:ARG:N	2.75	0.49
9:U:12:ASN:O	9:U:13:MET:O	2.30	0.49
5:E:54:ARG:O	5:E:55:THR:OG1	2.30	0.49
1:M:816:PRO:C	1:M:818:GLU:N	2.66	0.49
2:B:308:PHE:O	2:B:308:PHE:CG	2.65	0.49
2:N:1088:VAL:O	2:N:1091:LYS:N	2.45	0.49
1:A:180:PRO:CG	1:A:193:TRP:CD1	2.95	0.49
1:M:1194:TRP:CZ2	1:M:1262:GLU:CG	2.96	0.49
1:A:776:VAL:CG2	1:A:776:VAL:O	2.56	0.49
1:M:432:LEU:O	1:M:433:ARG:O	2.30	0.49
9:I:7:CYS:CB	9:I:34:TYR:CD2	2.96	0.49
1:M:512:MET:O	1:M:513:VAL:C	2.50	0.49
1:A:747:ASN:O	1:A:748:ASN:C	2.51	0.49
4:D:10:ALA:CB	7:G:84:ARG:O	2.61	0.49
12:L:43:GLU:C	12:L:44:CYS:SG	2.90	0.49
2:N:745:ILE:O	2:N:748:PRO:CD	2.60	0.49
4:P:64:VAL:O	4:P:64:VAL:CG1	2.60	0.49
4:P:85:PHE:O	4:P:86:HIS:ND1	2.46	0.49
1:A:1167:GLU:O	1:A:1167:GLU:CD	2.51	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:S:100:PHE:CZ	7:S:131:TYR:CD2	3.01	0.49
2:N:233:SER:O	2:N:234:ARG:O	2.30	0.49
4:D:133:PHE:C	4:D:135:ASP:N	2.65	0.49
2:B:216:PRO:N	2:B:217:SER:CA	2.76	0.49
7:S:103:ASN:OD1	7:S:108:ASN:OD1	2.30	0.49
7:G:144:VAL:CG1	7:G:145:ARG:N	2.75	0.49
1:A:1481:GLY:O	1:A:1482:ALA:HB3	2.13	0.49
1:A:1410:GLU:O	1:A:1411:THR:O	2.30	0.49
1:M:730:GLN:O	1:M:733:ASP:OD1	2.30	0.49
1:A:730:GLN:C	1:A:733:ASP:OD1	2.51	0.49
1:M:1143:HIS:O	1:M:1144:THR:OG1	2.31	0.49
1:M:1283:PRO:O	1:M:1284:ASN:CG	2.52	0.49
4:P:10:ALA:CB	7:S:84:ARG:O	2.60	0.49
2:N:1150:ILE:N	2:N:1150:ILE:CD1	2.76	0.49
2:B:476:SER:O	2:B:477:THR:C	2.52	0.49
1:M:1167:GLU:O	1:M:1167:GLU:CD	2.51	0.48
2:B:290:ASP:OD2	2:B:291:PRO:N	2.46	0.48
1:M:806:ILE:CG2	1:M:808:ASN:O	2.61	0.48
2:N:215:ALA:O	2:N:217:SER:OG	2.30	0.48
1:M:1410:GLU:O	1:M:1411:THR:O	2.30	0.48
5:E:58:SER:CB	5:E:75:GLU:CA	2.91	0.48
1:M:810:TYR:C	2:N:750:HIS:CD2	2.87	0.48
9:U:7:CYS:CB	9:U:34:TYR:CD2	2.96	0.48
1:A:1259:MET:O	1:A:1260:ILE:CB	2.60	0.48
2:N:1207:LYS:C	2:N:1209:HIS:N	2.66	0.48
1:M:573:LYS:NZ	8:T:74:TYR:CE1	2.81	0.48
1:A:573:LYS:NZ	8:H:74:TYR:CE1	2.81	0.48
4:P:111:LEU:O	4:P:112:ALA:O	2.30	0.48
2:N:508:VAL:O	2:N:526:SER:CB	2.60	0.48
1:A:231:ASN:O	1:A:235:ALA:O	2.30	0.48
1:M:1062:SER:CA	1:M:1063:PRO:O	2.61	0.48
1:A:1062:SER:CA	1:A:1063:PRO:O	2.61	0.48
1:M:95:ILE:O	1:M:96:GLY:O	2.30	0.48
1:M:1194:TRP:CH2	1:M:1262:GLU:CG	2.95	0.48
7:S:100:PHE:CZ	7:S:131:TYR:CG	3.01	0.48
7:G:100:PHE:CZ	7:G:131:TYR:CD2	3.01	0.48
1:A:395:GLN:CG	1:A:432:LEU:CD1	2.90	0.48
1:M:781:ILE:CG2	1:M:803:ARG:CA	2.91	0.48
1:A:161:PHE:CD2	1:A:165:ASN:CG	2.86	0.48
9:U:19:ASP:O	9:U:20:LYS:O	2.30	0.48
1:M:8:PRO:O	1:M:9:SER:OG	2.31	0.48
7:G:155:ALA:O	7:G:156:THR:OG1	2.30	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:N:41:PHE:N	2:N:42:VAL:O	2.46	0.48
1:M:816:PRO:O	1:M:818:GLU:N	2.46	0.48
12:X:43:GLU:C	12:X:44:CYS:SG	2.90	0.48
3:C:26:LEU:O	3:C:27:ALA:C	2.51	0.48
2:B:469:LEU:O	2:B:470:ASN:CB	2.61	0.48
2:N:469:LEU:O	2:N:470:ASN:CB	2.61	0.48
2:N:476:SER:O	2:N:477:THR:C	2.52	0.48
1:A:205:LYS:CG	1:A:206:ARG:NE	2.77	0.48
1:A:66:GLN:N	1:A:67:PHE:CE1	2.81	0.48
1:A:1476:SER:O	1:A:1477:GLN:C	2.52	0.48
1:M:66:GLN:N	1:M:67:PHE:CE1	2.81	0.48
7:G:100:PHE:CZ	7:G:131:TYR:CG	3.01	0.48
1:M:50:PRO:O	1:M:51:ARG:CB	2.61	0.48
2:N:502:ASN:OD1	2:N:502:ASN:N	2.44	0.48
1:A:1412:VAL:O	1:A:1415:LEU:N	2.47	0.48
2:B:281:ARG:CG	9:I:6:TYR:CD1	2.96	0.48
2:N:325:SER:O	2:N:326:THR:OG1	2.31	0.48
1:M:712:PRO:C	1:M:714:MET:N	2.67	0.48
7:G:120:MET:CE	7:G:138:ILE:CD1	2.91	0.48
1:M:1064:GLY:CA	1:M:1065:GLU:CB	2.91	0.48
1:A:875:GLY:O	1:A:877:ASP:N	2.47	0.48
10:J:49:ILE:CD1	10:J:50:LEU:N	2.76	0.48
10:V:49:ILE:CD1	10:V:50:LEU:N	2.76	0.48
1:A:885:GLU:O	1:A:886:TYR:C	2.50	0.48
2:B:505:TRP:CH2	2:B:731:GLU:OE1	2.66	0.48
6:F:79:GLU:O	6:F:80:ARG:C	2.51	0.48
1:M:1501:ASP:C	1:M:1503:ALA:N	2.66	0.48
1:M:395:GLN:NE2	1:M:431:PRO:O	2.46	0.48
6:F:125:ARG:CG	6:F:135:ASP:OD1	2.61	0.48
4:P:132:LYS:CA	4:P:134:GLN:N	2.75	0.48
1:M:1450:TYR:CA	7:S:60:GLY:O	2.61	0.48
1:M:1395:ILE:CD1	1:M:1397:ARG:CD	2.92	0.48
3:C:129:SER:C	3:C:130:LEU:CD1	2.81	0.48
7:G:114:HIS:CD2	7:G:115:LEU:N	2.81	0.48
2:B:329:VAL:O	2:B:329:VAL:CG1	2.61	0.48
2:B:1207:LYS:C	2:B:1209:HIS:N	2.66	0.48
4:D:15:LEU:O	4:D:16:GLY:C	2.52	0.48
1:A:712:PRO:C	1:A:714:MET:N	2.67	0.48
1:M:115:LEU:CD1	1:M:115:LEU:N	2.76	0.48
3:C:34:ARG:CZ	11:K:39:HIS:CD2	2.97	0.48
7:G:19:PHE:O	7:G:20:GLY:O	2.30	0.48
1:A:988:ASP:O	1:A:992:GLY:N	2.47	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:O:242:ASN:OD1	3:O:242:ASN:N	2.46	0.48
1:A:546:PHE:CE1	8:H:43:ASN:ND2	2.82	0.48
1:A:117:ILE:CG2	1:A:125:ASN:CB	2.92	0.48
9:I:72:ASP:O	9:I:73:LYS:O	2.31	0.48
2:N:485:ASN:O	2:N:486:THR:CB	2.61	0.48
1:M:730:GLN:C	1:M:733:ASP:OD1	2.51	0.48
1:A:20:GLN:O	2:B:1203:ARG:N	2.46	0.48
1:M:578:TRP:CD1	1:M:578:TRP:N	2.82	0.48
2:B:24:PHE:CD2	2:B:665:TRP:CZ2	3.01	0.48
2:B:41:PHE:N	2:B:42:VAL:O	2.46	0.48
2:N:505:TRP:CH2	2:N:731:GLU:OE1	2.66	0.48
3:C:85:GLU:O	3:C:86:TYR:C	2.51	0.48
1:A:189:LEU:O	1:A:190:TRP:CD1	2.67	0.48
7:S:111:VAL:O	7:S:111:VAL:CG1	2.60	0.48
1:A:846:ARG:CG	1:A:1390:ILE:CG2	2.92	0.48
4:P:99:GLU:CG	4:P:124:LEU:CD1	2.91	0.48
1:A:73:GLY:O	2:B:1163:TYR:CZ	2.67	0.48
1:M:1259:MET:O	1:M:1260:ILE:CB	2.60	0.48
2:B:428:PHE:O	2:B:429:ASN:CG	2.52	0.48
1:M:921:ILE:O	1:M:922:GLU:CD	2.51	0.48
1:A:921:ILE:O	1:A:922:GLU:OE1	2.30	0.48
2:N:165:ILE:CG2	2:N:165:ILE:O	2.60	0.48
2:N:576:HIS:C	2:N:576:HIS:CD2	2.87	0.48
1:M:747:ASN:O	1:M:748:ASN:C	2.51	0.48
1:A:638:THR:CG2	1:A:965:ARG:NH2	2.77	0.48
1:M:849:LYS:O	1:M:1408:PHE:CE2	2.67	0.48
1:M:236:ARG:O	1:M:237:PRO:C	2.51	0.48
1:A:414:ASP:OD2	1:A:433:ARG:CZ	2.61	0.48
1:A:40:PRO:CB	1:A:276:ILE:CB	2.92	0.48
1:A:42:THR:CB	1:A:55:LEU:CB	2.92	0.48
7:S:102:ALA:O	7:S:103:ASN:OD1	2.30	0.48
1:M:1437:GLY:O	2:N:1137:ARG:NE	2.46	0.48
1:M:1412:VAL:O	1:M:1415:LEU:N	2.47	0.48
1:M:20:GLN:O	2:N:1203:ARG:N	2.46	0.48
1:A:812:ARG:CD	2:B:714:GLN:O	2.61	0.48
1:M:156:ALA:O	1:M:157:GLY:O	2.32	0.48
3:O:34:ARG:CZ	11:W:39:HIS:CD2	2.97	0.48
6:R:79:GLU:O	6:R:82:ARG:N	2.47	0.48
1:M:90:LYS:CE	1:M:282:VAL:CG1	2.92	0.48
1:A:1463:THR:O	1:A:1464:ALA:HB2	2.14	0.48
1:A:1167:GLU:CG	1:A:1167:GLU:O	2.62	0.48
1:A:266:ASP:C	1:A:268:LEU:CB	2.82	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:40:PRO:CB	1:M:276:ILE:CB	2.91	0.48
1:M:1450:TYR:HD1	7:S:60:GLY:C	2.17	0.48
1:A:578:TRP:CD1	1:A:578:TRP:N	2.82	0.48
2:B:576:HIS:C	2:B:576:HIS:CD2	2.87	0.48
2:B:1067:GLY:N	3:C:30:ASN:ND2	2.62	0.48
1:A:553:MET:O	1:A:554:ASN:C	2.52	0.48
2:B:1088:VAL:O	2:B:1090:ASP:N	2.47	0.48
1:M:875:GLY:O	1:M:877:ASP:N	2.47	0.48
1:A:1043:VAL:CG1	1:A:1044:ALA:N	2.76	0.48
5:E:56:THR:CG2	5:E:56:THR:O	2.62	0.48
4:P:85:PHE:C	4:P:86:HIS:CG	2.87	0.48
1:A:148:MET:C	1:A:149:VAL:CG2	2.82	0.48
1:A:380:LEU:CD1	1:A:442:ILE:CD1	2.91	0.48
2:N:263:ARG:CD	2:N:323:ARG:O	2.62	0.48
1:M:109:CYS:CB	1:M:178:ALA:CB	2.92	0.48
1:A:1394:GLY:O	1:A:1395:ILE:O	2.32	0.48
9:U:72:ASP:O	9:U:73:LYS:O	2.31	0.48
2:B:485:ASN:O	2:B:486:THR:CB	2.61	0.48
2:B:485:ASN:O	2:B:521:LEU:O	2.32	0.48
7:S:114:HIS:CD2	7:S:115:LEU:N	2.81	0.48
2:B:427:GLU:O	2:B:428:PHE:CG	2.67	0.48
2:B:430:LEU:C	2:B:432:LEU:N	2.67	0.48
1:M:1281:GLY:O	1:M:1283:PRO:N	2.47	0.48
5:Q:27:TYR:CE2	5:Q:63:PRO:CG	2.97	0.48
1:M:485:ASN:OD1	1:M:485:ASN:O	2.31	0.48
1:M:1043:VAL:CG1	1:M:1044:ALA:N	2.76	0.48
1:M:988:ASP:O	1:M:992:GLY:N	2.47	0.48
5:Q:195:ARG:C	5:Q:197:SER:N	2.67	0.48
1:M:96:GLY:O	1:M:98:LEU:N	2.46	0.48
1:M:117:ILE:CG2	1:M:125:ASN:CB	2.92	0.48
1:M:414:ASP:OD2	1:M:433:ARG:CZ	2.61	0.48
4:P:22:GLU:OE2	7:S:6:LYS:CB	2.62	0.48
1:A:810:TYR:CD2	2:B:750:HIS:O	2.66	0.48
2:N:281:ARG:CG	9:U:6:TYR:CD1	2.97	0.48
2:N:330:THR:O	2:N:334:ARG:CG	2.62	0.48
2:N:1079:THR:OG1	2:N:1080:TYR:N	2.46	0.48
9:I:79:HIS:CD2	9:I:80:GLN:NE2	2.82	0.48
1:M:194:LYS:CG	1:M:195:ARG:N	2.77	0.48
2:N:1057:GLY:O	2:N:1058:PHE:O	2.31	0.48
1:M:1109:ASN:O	1:M:1111:ALA:N	2.47	0.48
2:N:1088:VAL:O	2:N:1090:ASP:N	2.47	0.48
1:M:503:THR:C	1:M:505:ALA:N	2.64	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:N:363:PHE:CZ	2:N:572:TRP:CB	2.97	0.48
1:M:444:ASP:O	1:M:445:GLY:C	2.51	0.48
1:A:390:ASN:O	1:A:391:ILE:C	2.52	0.48
2:B:674:ILE:CD1	2:B:674:ILE:O	2.62	0.48
1:M:1263:ASP:O	1:M:1264:VAL:C	2.51	0.47
1:A:432:LEU:CD2	1:A:436:TRP:CZ2	2.97	0.47
2:N:290:ASP:OD2	2:N:291:PRO:N	2.47	0.47
2:N:712:PRO:O	2:N:713:ALA:O	2.32	0.47
6:F:93:MET:CE	7:G:66:GLN:O	2.61	0.47
1:A:211:LEU:O	1:A:215:THR:CG2	2.62	0.47
2:N:654:ARG:CZ	2:N:657:ILE:CG2	2.92	0.47
2:B:654:ARG:CZ	2:B:657:ILE:CG2	2.91	0.47
9:U:99:LEU:CD2	9:U:99:LEU:C	2.82	0.47
1:A:947:LYS:CB	1:A:948:PHE:CA	2.92	0.47
2:N:1067:GLY:N	3:O:30:ASN:ND2	2.62	0.47
1:A:1109:ASN:O	1:A:1111:ALA:N	2.47	0.47
2:B:402:LEU:O	2:B:405:MET:N	2.47	0.47
3:O:85:GLU:O	3:O:86:TYR:C	2.51	0.47
1:M:375:SER:CB	11:W:2:ASN:ND2	2.77	0.47
1:M:546:PHE:CE1	8:T:43:ASN:ND2	2.82	0.47
2:N:1147:TYR:O	2:N:1184:LEU:O	2.32	0.47
2:B:366:TYR:CZ	2:B:567:PHE:CZ	3.02	0.47
1:M:1167:GLU:O	1:M:1167:GLU:CG	2.62	0.47
1:M:68:LYS:O	1:M:70:GLN:N	2.47	0.47
1:M:793:PHE:CZ	1:M:817:GLN:CD	2.88	0.47
9:I:20:LYS:O	9:I:23:ARG:N	2.47	0.47
9:U:25:LEU:CD1	9:U:38:ALA:CB	2.92	0.47
2:B:657:ILE:CD1	2:B:657:ILE:C	2.82	0.47
2:N:428:PHE:O	2:N:429:ASN:CG	2.52	0.47
1:A:214:HIS:CE1	1:A:238:ASP:O	2.67	0.47
2:N:1111:ARG:C	2:N:1112:SER:OG	2.52	0.47
5:E:132:GLU:O	5:E:133:SER:C	2.52	0.47
4:D:85:PHE:O	4:D:86:HIS:ND1	2.46	0.47
4:P:84:ARG:NH2	4:P:87:LYS:CE	2.77	0.47
1:M:432:LEU:CD2	1:M:436:TRP:CZ2	2.97	0.47
2:B:247:ASN:C	2:B:249:GLU:N	2.67	0.47
2:B:215:ALA:C	2:B:217:SER:CA	2.83	0.47
7:S:80:TRP:CZ3	7:S:107:LEU:CD2	2.98	0.47
1:A:781:ILE:CG2	1:A:803:ARG:CA	2.91	0.47
5:Q:198:GLU:N	5:Q:199:THR:CA	2.77	0.47
7:G:93:THR:CG2	7:G:94:THR:N	2.77	0.47
2:B:1079:THR:OG1	2:B:1080:TYR:N	2.46	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:N:1208:ASN:C	2:N:1210:LYS:N	2.68	0.47
1:M:73:GLY:O	2:N:1163:TYR:CZ	2.67	0.47
1:A:156:ALA:O	1:A:157:GLY:O	2.32	0.47
1:M:605:ASN:N	1:M:606:PRO:CA	2.77	0.47
3:O:210:TRP:O	3:O:211:GLU:CG	2.62	0.47
2:N:1026:LEU:CB	2:N:1051:HIS:CD2	2.98	0.47
2:N:674:ILE:O	2:N:674:ILE:CD1	2.62	0.47
1:M:640:TRP:N	1:M:641:LYS:C	2.68	0.47
1:A:228:LEU:O	1:A:230:LEU:N	2.47	0.47
1:M:42:THR:CB	1:M:55:LEU:CB	2.92	0.47
4:D:96:LEU:O	4:D:97:CYS:CB	2.62	0.47
9:U:33:ASP:O	9:U:34:TYR:O	2.33	0.47
5:E:27:TYR:CE2	5:E:63:PRO:CG	2.97	0.47
2:B:498:ARG:O	2:B:499:GLN:C	2.53	0.47
1:M:553:MET:O	1:M:554:ASN:C	2.52	0.47
10:V:1:MET:O	10:V:2:ILE:O	2.31	0.47
3:C:210:TRP:O	3:C:211:GLU:CG	2.62	0.47
1:A:640:TRP:N	1:A:641:LYS:C	2.68	0.47
1:A:1194:TRP:CZ2	1:A:1262:GLU:CG	2.96	0.47
7:S:93:THR:CG2	7:S:94:THR:N	2.77	0.47
9:I:33:ASP:O	9:I:34:TYR:O	2.33	0.47
1:M:947:LYS:CB	1:M:948:PHE:CA	2.92	0.47
1:M:388:PRO:CB	1:M:434:TYR:CE2	2.97	0.47
11:K:76:THR:CA	11:K:77:VAL:CB	2.92	0.47
2:N:844:PHE:CD1	2:N:844:PHE:O	2.68	0.47
2:N:985:HIS:CE1	2:N:996:VAL:CG1	2.98	0.47
1:A:126:ASP:O	1:A:130:TYR:CE2	2.67	0.47
1:A:68:LYS:O	1:A:70:GLN:N	2.47	0.47
1:A:1450:TYR:C	1:A:1451:LEU:CG	2.83	0.47
1:M:846:ARG:CG	1:M:1390:ILE:CG2	2.93	0.47
2:N:657:ILE:C	2:N:657:ILE:CD1	2.82	0.47
1:M:822:HIS:CD2	2:N:753:SER:CB	2.97	0.47
9:I:99:LEU:C	9:I:99:LEU:CD2	2.82	0.47
2:N:430:LEU:C	2:N:432:LEU:N	2.67	0.47
1:A:23:ILE:O	1:A:24:LEU:C	2.52	0.47
3:C:168:HIS:C	3:C:170:LYS:N	2.68	0.47
4:D:29:GLU:OE2	4:D:33:LEU:CD1	2.62	0.47
4:D:22:GLU:OE2	7:G:6:LYS:CB	2.62	0.47
1:A:150:CYS:CB	1:A:176:GLY:CA	2.93	0.47
1:A:1166:ILE:CD1	1:A:1171:ASP:OD2	2.63	0.47
1:M:126:ASP:O	1:M:130:TYR:CE2	2.67	0.47
1:M:431:PRO:O	1:M:432:LEU:CG	2.63	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:N:712:PRO:O	2:N:714:GLN:CG	2.63	0.47
4:P:96:LEU:O	4:P:97:CYS:CB	2.62	0.47
4:P:29:GLU:OE2	4:P:33:LEU:CD1	2.62	0.47
1:A:90:LYS:CE	1:A:282:VAL:CG1	2.92	0.47
5:Q:58:SER:CB	5:Q:75:GLU:CA	2.91	0.47
5:E:198:GLU:N	5:E:199:THR:CA	2.78	0.47
9:U:12:ASN:CG	9:U:13:MET:N	2.67	0.47
9:I:12:ASN:CG	9:I:13:MET:N	2.67	0.47
9:U:79:HIS:CD2	9:U:80:GLN:NE2	2.82	0.47
2:N:427:GLU:O	2:N:428:PHE:CG	2.67	0.47
2:B:1208:ASN:C	2:B:1210:LYS:N	2.67	0.47
1:M:23:ILE:O	1:M:24:LEU:C	2.52	0.47
2:B:712:PRO:O	2:B:714:GLN:CG	2.63	0.47
7:S:155:ALA:C	7:S:157:GLU:N	2.67	0.47
2:N:498:ARG:O	2:N:499:GLN:C	2.53	0.47
3:O:168:HIS:C	3:O:170:LYS:N	2.68	0.47
1:M:484:TYR:O	1:M:486:ALA:N	2.48	0.47
1:M:605:ASN:CB	1:M:606:PRO:C	2.83	0.47
2:N:1150:ILE:CG2	2:N:1151:VAL:N	2.78	0.47
2:B:1026:LEU:CB	2:B:1051:HIS:CD2	2.98	0.47
2:B:844:PHE:CD1	2:B:844:PHE:O	2.68	0.47
1:A:109:CYS:SG	1:A:112:CYS:SG	3.13	0.47
3:O:129:SER:C	3:O:130:LEU:CD1	2.82	0.47
1:M:1247:ARG:O	1:M:1248:ASP:O	2.33	0.47
1:M:388:PRO:CG	6:R:94:ASN:CG	2.82	0.47
7:G:14:LEU:CD2	7:G:27:LEU:CD2	2.92	0.47
11:W:76:THR:CA	11:W:77:VAL:CB	2.92	0.47
6:F:79:GLU:O	6:F:82:ARG:N	2.47	0.47
1:A:1143:HIS:O	1:A:1144:THR:OG1	2.33	0.47
5:E:195:ARG:C	5:E:197:SER:N	2.66	0.47
3:C:242:ASN:N	3:C:242:ASN:OD1	2.46	0.47
1:M:1501:ASP:O	1:M:1502:ALA:C	2.54	0.47
1:M:1166:ILE:CD1	1:M:1169:ASP:O	2.63	0.47
1:A:431:PRO:O	1:A:432:LEU:CG	2.63	0.47
1:M:312:ASN:ND2	1:M:330:SER:N	2.63	0.47
2:B:712:PRO:O	2:B:713:ALA:O	2.32	0.47
7:G:155:ALA:C	7:G:157:GLU:N	2.68	0.47
2:B:651:ASP:OD2	2:B:662:ARG:CB	2.63	0.47
1:A:484:TYR:O	1:A:486:ALA:N	2.48	0.47
1:A:605:ASN:CB	1:A:606:PRO:C	2.83	0.47
1:M:382:TYR:CZ	1:M:446:ASP:OD1	2.67	0.47
1:M:1101:VAL:C	1:M:1103:ARG:N	2.69	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:312:ASN:OD1	1:A:328:LEU:O	2.32	0.47
2:N:247:ASN:C	2:N:249:GLU:N	2.67	0.47
4:D:132:LYS:CA	4:D:134:GLN:N	2.75	0.47
7:S:51:ASP:OD1	7:S:55:ILE:CD1	2.63	0.47
1:M:1434:ILE:C	2:N:1141:PHE:CE2	2.88	0.47
1:A:770:CYS:C	1:A:771:VAL:CG2	2.84	0.47
2:B:1170:CYS:SG	2:B:1179:PHE:CE1	3.08	0.47
1:M:521:GLN:OE1	1:M:1077:GLU:OE1	2.32	0.47
4:P:43:ARG:C	4:P:44:GLU:CG	2.83	0.47
1:A:154:LEU:N	1:A:173:GLY:O	2.48	0.47
1:M:573:LYS:NZ	8:T:74:TYR:CZ	2.83	0.47
3:C:193:TRP:CE3	3:C:194:PHE:N	2.83	0.47
7:S:14:LEU:CD2	7:S:27:LEU:CD2	2.92	0.47
2:N:225:ILE:CD1	2:N:367:MET:SD	3.03	0.47
5:Q:132:GLU:O	5:Q:133:SER:C	2.52	0.47
7:G:51:ASP:OD1	7:G:55:ILE:CD1	2.63	0.46
1:M:1093:SER:O	1:M:1094:SER:OG	2.34	0.46
2:N:233:SER:O	2:N:234:ARG:C	2.54	0.46
1:M:419:ILE:CG2	1:M:419:ILE:O	2.63	0.46
1:A:21:PHE:CZ	1:A:1403:LEU:CD1	2.98	0.46
1:M:1119:LEU:CA	1:M:1314:THR:CG2	2.92	0.46
1:A:208:LEU:O	1:A:209:SER:CB	2.63	0.46
1:M:811:LEU:C	2:N:750:HIS:NE2	2.69	0.46
1:M:573:LYS:CE	8:T:74:TYR:CE1	2.98	0.46
2:N:651:ASP:OD2	2:N:662:ARG:CB	2.63	0.46
7:S:90:ALA:O	7:S:143:ASN:CA	2.63	0.46
7:S:19:PHE:O	7:S:20:GLY:C	2.54	0.46
2:B:985:HIS:CE1	2:B:996:VAL:CG1	2.98	0.46
10:J:18:TRP:C	10:J:20:THR:N	2.68	0.46
4:D:9:ASP:OD1	4:D:9:ASP:N	2.47	0.46
1:A:1459:TYR:HD1	1:A:1460:SER:H	1.61	0.46
1:A:1478:LEU:HD23	4:D:45:THR:N	2.30	0.46
1:A:1166:ILE:CD1	1:A:1169:ASP:O	2.63	0.46
2:B:234:ARG:NH2	2:B:408:ARG:NH2	2.63	0.46
1:M:266:ASP:C	1:M:268:LEU:CB	2.82	0.46
2:N:215:ALA:O	2:N:217:SER:N	2.48	0.46
4:P:98:CYS:CA	4:P:99:GLU:CB	2.93	0.46
4:D:43:ARG:C	4:D:44:GLU:CG	2.83	0.46
1:A:521:GLN:CG	1:A:1074:SER:CB	2.93	0.46
1:A:6:PHE:CE2	1:A:78:ASP:CG	2.89	0.46
2:B:1176:ARG:C	2:B:1179:PHE:CE2	2.89	0.46
1:M:6:PHE:CE2	1:M:78:ASP:CG	2.89	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:N:1170:CYS:SG	2:N:1179:PHE:CE1	3.08	0.46
2:N:373:LEU:O	2:N:378:ARG:N	2.49	0.46
1:A:1254:GLU:O	1:A:1256:ASP:N	2.48	0.46
4:P:15:LEU:O	4:P:20:GLU:OE2	2.33	0.46
7:G:90:ALA:O	7:G:143:ASN:CA	2.63	0.46
1:A:1146:LEU:CD1	1:A:1274:LEU:CA	2.94	0.46
2:N:749:ASP:OD2	2:N:1036:PHE:CE2	2.68	0.46
1:M:880:ASP:O	1:M:881:ALA:C	2.53	0.46
1:M:1492:VAL:HG13	1:M:1496:PHE:CE2	2.45	0.46
1:M:1492:VAL:HG13	4:P:75:TYR:OH	2.15	0.46
1:M:1166:ILE:CD1	1:M:1171:ASP:OD2	2.63	0.46
1:A:1157:TYR:CD1	9:I:18:GLU:OE2	2.68	0.46
1:M:254:PRO:CG	1:M:266:ASP:OD1	2.63	0.46
1:M:340:GLY:O	1:M:341:ARG:O	2.33	0.46
1:A:407:GLY:O	1:A:441:HIS:ND1	2.49	0.46
1:M:9:SER:O	1:M:10:SER:O	2.33	0.46
9:U:29:CYS:SG	9:U:30:ARG:N	2.88	0.46
1:A:573:LYS:NZ	8:H:74:TYR:CZ	2.83	0.46
1:A:547:LEU:N	1:A:578:TRP:O	2.49	0.46
1:A:33:SER:CB	1:A:84:GLY:CA	2.93	0.46
2:B:749:ASP:OD2	2:B:1036:PHE:CE2	2.68	0.46
2:B:225:ILE:CD1	2:B:367:MET:SD	3.03	0.46
8:T:107:SER:O	8:T:108:HIS:C	2.54	0.46
1:A:380:LEU:O	1:A:381:THR:CB	2.61	0.46
1:M:211:LEU:O	1:M:215:THR:CG2	2.64	0.46
2:N:311:GLN:CG	2:N:311:GLN:O	2.64	0.46
9:U:4:PHE:CE2	9:U:43:VAL:CG1	2.98	0.46
2:N:215:ALA:C	2:N:217:SER:CA	2.83	0.46
1:A:1119:LEU:CA	1:A:1314:THR:CG2	2.92	0.46
1:M:1450:TYR:C	1:M:1451:LEU:CG	2.83	0.46
1:A:1075:ILE:C	1:A:1078:PRO:CG	2.83	0.46
1:A:404:GLU:O	1:A:406:PRO:N	2.48	0.46
1:M:1075:ILE:C	1:M:1078:PRO:CG	2.83	0.46
1:M:146:THR:O	1:M:148:MET:CE	2.64	0.46
2:N:1208:ASN:O	2:N:1210:LYS:N	2.49	0.46
4:P:15:LEU:O	4:P:16:GLY:C	2.52	0.46
1:A:573:LYS:CE	8:H:74:TYR:CE1	2.99	0.46
2:B:1145:ASP:O	2:B:1146:ALA:C	2.52	0.46
2:B:1048:LEU:C	2:B:1050:SER:N	2.69	0.46
2:B:685:VAL:CG1	2:B:729:HIS:CE1	2.99	0.46
2:B:562:ASN:C	2:B:562:ASN:OD1	2.54	0.46
7:G:80:TRP:CZ3	7:G:107:LEU:CD2	2.98	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:778:GLY:CA	1:M:1091:GLY:CA	2.94	0.46
1:A:419:ILE:CG2	1:A:419:ILE:O	2.63	0.46
1:M:312:ASN:OD1	1:M:328:LEU:O	2.32	0.46
2:B:296:MET:CE	2:B:372:LEU:O	2.64	0.46
1:A:212:GLU:O	1:A:215:THR:OG1	2.34	0.46
1:A:7:SER:N	1:A:8:PRO:CD	2.79	0.46
9:I:29:CYS:SG	9:I:30:ARG:N	2.88	0.46
9:U:86:TYR:CD1	9:U:87:GLN:O	2.68	0.46
1:M:1254:GLU:O	1:M:1256:ASP:N	2.48	0.46
3:O:193:TRP:CE3	3:O:194:PHE:N	2.83	0.46
2:B:43:GLN:N	2:B:44:ASN:CB	2.79	0.46
1:M:480:VAL:O	1:M:480:VAL:CG1	2.63	0.46
1:M:143:VAL:O	1:M:147:LYS:N	2.49	0.46
1:A:1464:ALA:O	1:A:1465:VAL:CB	2.61	0.46
1:A:1476:SER:O	1:A:1478:LEU:O	2.32	0.46
5:Q:100:LYS:C	5:Q:101:THR:CG2	2.83	0.46
1:M:1437:GLY:CA	2:N:1141:PHE:CG	2.99	0.46
9:I:25:LEU:CD1	9:I:38:ALA:CB	2.93	0.46
1:A:822:HIS:CD2	2:B:753:SER:CB	2.99	0.46
2:N:1176:ARG:C	2:N:1179:PHE:CE2	2.89	0.46
7:G:101:PHE:CD1	7:G:110:PHE:CD1	3.04	0.46
1:M:732:ARG:CG	1:M:733:ASP:N	2.79	0.46
1:M:24:LEU:N	2:N:1199:ASN:O	2.49	0.46
1:M:785:PHE:CZ	1:M:791:PRO:CG	2.99	0.46
1:M:1062:SER:CB	1:M:1063:PRO:CA	2.93	0.46
6:R:99:VAL:CG1	6:R:100:ASP:N	2.78	0.46
3:C:39:GLU:OE2	3:C:166:LYS:NZ	2.49	0.46
4:P:9:ASP:N	4:P:9:ASP:OD1	2.48	0.46
1:A:382:TYR:CZ	1:A:446:ASP:OD1	2.68	0.46
1:M:228:LEU:O	1:M:230:LEU:N	2.47	0.46
1:M:181:THR:O	1:M:191:GLY:CA	2.64	0.46
4:D:98:CYS:CA	4:D:99:GLU:CB	2.93	0.46
7:S:150:GLY:O	7:S:160:ALA:CA	2.64	0.46
4:D:15:LEU:O	4:D:20:GLU:OE2	2.33	0.46
1:A:605:ASN:N	1:A:606:PRO:CA	2.77	0.46
1:A:1444:THR:CG2	2:B:1133:SER:OG	2.64	0.46
2:N:386:HIS:CB	2:N:389:LYS:N	2.79	0.46
1:M:348:GLY:O	2:N:1118:ARG:NH1	2.48	0.46
1:A:591:GLY:O	1:A:969:ASN:OD1	2.34	0.46
1:A:1101:VAL:C	1:A:1103:ARG:N	2.69	0.46
1:M:199:GLU:C	1:M:200:SER:OG	2.54	0.46
1:M:158:SER:O	1:M:158:SER:OG	2.33	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:10:SER:O	1:A:12:PRO:N	2.49	0.46
1:M:7:SER:N	1:M:8:PRO:CD	2.79	0.46
1:A:747:ASN:C	1:A:748:ASN:O	2.54	0.46
3:O:164:ILE:O	3:O:165:ALA:C	2.54	0.46
1:A:1264:VAL:O	1:A:1266:LEU:N	2.49	0.46
1:A:785:PHE:CZ	1:A:791:PRO:CG	2.99	0.46
1:M:131:ARG:O	1:M:136:ARG:NE	2.49	0.46
1:M:512:MET:C	1:M:514:PRO:N	2.68	0.46
3:C:67:GLY:CA	3:C:170:LYS:NZ	2.79	0.46
3:O:67:GLY:CA	3:O:170:LYS:NZ	2.79	0.46
2:B:386:HIS:CB	2:B:389:LYS:N	2.79	0.46
2:N:685:VAL:CG1	2:N:729:HIS:CE1	2.99	0.46
2:N:1048:LEU:C	2:N:1050:SER:N	2.69	0.46
8:H:107:SER:O	8:H:108:HIS:C	2.54	0.46
1:A:880:ASP:O	1:A:881:ALA:C	2.53	0.46
2:B:986:GLU:CD	2:B:986:GLU:N	2.69	0.46
1:A:1496:PHE:CD2	4:D:33:LEU:CD1	2.92	0.46
1:A:350:ARG:NH1	2:B:1117:LEU:O	2.49	0.46
2:B:311:GLN:CG	2:B:311:GLN:O	2.64	0.46
1:A:775:ILE:CD1	1:A:775:ILE:O	2.63	0.46
1:M:141:TRP:CA	1:M:144:CYS:SG	3.04	0.46
1:A:69:CYS:O	1:A:70:GLN:C	2.55	0.46
2:N:247:ASN:O	2:N:249:GLU:N	2.49	0.46
2:B:215:ALA:O	2:B:217:SER:N	2.48	0.46
4:P:61:TYR:O	4:P:65:PHE:CD2	2.69	0.46
1:A:9:SER:O	1:A:10:SER:O	2.34	0.46
1:M:10:SER:O	1:M:12:PRO:N	2.49	0.46
1:A:340:GLY:O	1:A:341:ARG:O	2.34	0.46
9:I:86:TYR:CD1	9:I:87:GLN:O	2.68	0.46
2:B:1027:SER:OG	2:B:1028:GLY:N	2.49	0.46
2:N:1027:SER:OG	2:N:1028:GLY:N	2.49	0.46
5:Q:116:LYS:O	5:Q:118:ILE:N	2.49	0.46
8:H:37:ASN:O	8:H:37:ASN:OD1	2.34	0.46
1:A:1062:SER:CB	1:A:1063:PRO:CA	2.93	0.46
1:M:366:SER:OG	1:M:369:GLU:CG	2.64	0.46
6:R:65:ALA:C	6:R:67:GLU:N	2.69	0.46
2:B:373:LEU:O	2:B:378:ARG:N	2.49	0.46
2:N:939:ASP:OD2	2:N:956:ARG:NH1	2.49	0.46
3:C:17:VAL:CG1	3:C:17:VAL:O	2.63	0.46
1:A:376:ILE:O	1:A:379:THR:N	2.49	0.45
1:A:1455:MET:O	1:A:1459:TYR:HB2	2.16	0.45
1:M:1264:VAL:O	1:M:1266:LEU:N	2.49	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1101:VAL:N	1:A:1102:PRO:CD	2.73	0.45
1:A:254:PRO:CG	1:A:266:ASP:OD1	2.64	0.45
1:A:312:ASN:ND2	1:A:330:SER:N	2.63	0.45
1:M:171:GLY:O	1:M:172:HIS:C	2.54	0.45
1:M:708:LEU:CG	1:M:709:LYS:O	2.64	0.45
1:M:271:LYS:CE	1:M:328:LEU:CB	2.94	0.45
1:M:820:PHE:O	1:M:821:PHE:C	2.54	0.45
4:D:61:TYR:O	4:D:65:PHE:CD2	2.68	0.45
2:B:428:PHE:C	2:B:429:ASN:CG	2.75	0.45
2:B:1208:ASN:O	2:B:1210:LYS:N	2.49	0.45
2:N:1205:PHE:CE2	2:N:1210:LYS:C	2.89	0.45
1:M:1282:VAL:CG1	1:M:1285:ILE:CG1	2.93	0.45
2:B:870:THR:OG1	2:B:870:THR:O	2.35	0.45
1:A:87:GLU:OE1	1:A:88:LEU:N	2.50	0.45
2:N:1021:SER:O	2:N:1024:SER:OG	2.34	0.45
8:T:37:ASN:OD1	8:T:37:ASN:O	2.34	0.45
2:N:829:ILE:O	2:N:829:ILE:CG1	2.64	0.45
2:N:562:ASN:OD1	2:N:562:ASN:C	2.54	0.45
6:F:99:VAL:CG1	6:F:100:ASP:N	2.78	0.45
2:N:856:GLY:CA	2:N:857:MET:C	2.85	0.45
2:N:986:GLU:CD	2:N:986:GLU:N	2.69	0.45
1:A:1103:ARG:CG	1:A:1104:LEU:N	2.78	0.45
1:A:708:LEU:CG	1:A:709:LYS:O	2.64	0.45
2:N:296:MET:CE	2:N:372:LEU:CA	2.94	0.45
4:D:129:THR:O	4:D:133:PHE:CG	2.70	0.45
9:I:5:GLN:O	9:I:14:LEU:CD1	2.64	0.45
2:B:1021:SER:O	2:B:1024:SER:OG	2.34	0.45
1:M:86:ILE:O	1:M:87:GLU:O	2.35	0.45
2:N:43:GLN:N	2:N:44:ASN:CB	2.79	0.45
2:B:319:TYR:CG	2:B:319:TYR:O	2.65	0.45
1:A:1442:MET:O	1:A:1444:THR:N	2.49	0.45
2:N:1111:ARG:O	2:N:1112:SER:OG	2.34	0.45
2:N:823:ASN:CG	2:N:823:ASN:O	2.54	0.45
3:O:205:SER:O	3:O:208:ALA:N	2.49	0.45
2:N:401:SER:CA	2:N:404:ARG:NH1	2.79	0.45
6:R:83:ILE:O	6:R:86:THR:N	2.50	0.45
10:V:18:TRP:C	10:V:20:THR:N	2.68	0.45
5:Q:202:ARG:O	5:Q:202:ARG:CG	2.63	0.45
2:B:310:ILE:O	2:B:315:ILE:CD1	2.64	0.45
2:N:315:ILE:O	2:N:318:ASP:N	2.50	0.45
1:M:1103:ARG:CG	1:M:1104:LEU:N	2.78	0.45
1:A:1087:PHE:O	1:A:1090:ALA:CB	2.64	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:783:PHE:O	1:M:784:GLY:O	2.34	0.45
7:G:135:ASP:O	7:G:136:GLN:C	2.55	0.45
1:M:770:CYS:C	1:M:771:VAL:CG2	2.84	0.45
9:I:98:THR:O	9:I:99:LEU:C	2.55	0.45
2:B:1205:PHE:CE2	2:B:1210:LYS:C	2.89	0.45
5:Q:116:LYS:C	5:Q:118:ILE:N	2.70	0.45
2:B:839:LEU:O	2:B:840:PHE:C	2.55	0.45
7:G:19:PHE:O	7:G:20:GLY:C	2.54	0.45
1:A:480:VAL:O	1:A:480:VAL:CG1	2.63	0.45
2:B:1111:ARG:O	2:B:1112:SER:OG	2.34	0.45
6:F:83:ILE:O	6:F:86:THR:N	2.50	0.45
5:E:202:ARG:O	5:E:202:ARG:CG	2.63	0.45
2:B:315:ILE:O	2:B:318:ASP:N	2.49	0.45
1:M:775:ILE:O	1:M:775:ILE:CD1	2.63	0.45
1:A:271:LYS:CE	1:A:328:LEU:CB	2.94	0.45
9:U:72:ASP:OD1	9:U:81:HIS:CE1	2.70	0.45
1:A:1247:ARG:O	1:A:1248:ASP:O	2.33	0.45
1:A:23:ILE:O	1:A:24:LEU:O	2.35	0.45
1:M:23:ILE:O	1:M:24:LEU:O	2.35	0.45
1:M:547:LEU:N	1:M:578:TRP:O	2.49	0.45
1:M:87:GLU:OE1	1:M:88:LEU:N	2.50	0.45
5:E:118:ILE:C	5:E:120:THR:N	2.70	0.45
1:M:747:ASN:C	1:M:748:ASN:O	2.54	0.45
1:M:1295:ILE:CG2	1:M:1309:GLU:CG	2.94	0.45
11:K:16:PRO:O	11:K:17:LYS:C	2.55	0.45
1:M:1101:VAL:O	1:M:1102:PRO:C	2.54	0.45
1:M:639:ILE:O	1:M:648:CYS:SG	2.75	0.45
1:A:639:ILE:O	1:A:648:CYS:SG	2.75	0.45
1:A:1191:GLN:C	1:A:1246:ILE:CG2	2.85	0.45
1:M:368:ASP:CG	1:M:649:LYS:NZ	2.69	0.45
1:M:404:GLU:O	1:M:406:PRO:N	2.48	0.45
2:B:659:PRO:CA	2:B:661:GLN:CG	2.95	0.45
2:N:1000:ILE:CG1	2:N:1000:ILE:O	2.65	0.45
2:B:1000:ILE:CG1	2:B:1000:ILE:O	2.65	0.45
1:M:1442:MET:O	1:M:1444:THR:N	2.49	0.45
1:M:1449:ILE:N	1:M:1449:ILE:HD12	2.25	0.45
1:A:256:ILE:CG2	1:A:257:SER:N	2.79	0.45
11:W:39:HIS:O	11:W:39:HIS:CD2	2.70	0.45
2:B:875:LYS:C	2:B:876:HIS:CD2	2.90	0.45
1:A:507:ILE:CA	1:A:511:THR:CG2	2.95	0.45
2:B:975:GLN:O	2:B:976:LYS:C	2.54	0.45
3:O:59:ASP:OD2	12:X:53:ARG:NH1	2.50	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:659:VAL:O	1:M:660:ASN:C	2.55	0.45
4:D:85:PHE:C	4:D:86:HIS:CG	2.87	0.45
1:M:69:CYS:O	1:M:70:GLN:C	2.55	0.45
1:A:1094:SER:O	1:A:1095:LYS:O	2.35	0.45
2:N:501:HIS:CD2	2:N:503:THR:OG1	2.69	0.45
7:S:23:MET:O	7:S:24:GLN:C	2.55	0.45
2:N:659:PRO:CA	2:N:661:GLN:CG	2.95	0.45
2:B:538:ALA:C	2:B:540:ILE:N	2.70	0.45
1:M:1455:MET:O	1:M:1459:TYR:HB2	2.16	0.45
5:E:116:LYS:O	5:E:118:ILE:N	2.49	0.45
11:K:39:HIS:O	11:K:39:HIS:CD2	2.70	0.45
2:B:501:HIS:CD2	2:B:503:THR:OG1	2.69	0.45
1:M:1295:ILE:CD1	1:M:1309:GLU:OE2	2.65	0.45
8:H:80:VAL:O	8:H:94:TYR:O	2.35	0.45
2:N:222:VAL:CG1	2:N:223:ALA:N	2.80	0.45
2:N:975:GLN:O	2:N:976:LYS:C	2.54	0.45
6:F:65:ALA:C	6:F:67:GLU:N	2.69	0.45
1:A:1177:PHE:C	1:A:1180:PRO:CD	2.85	0.45
2:N:310:ILE:O	2:N:315:ILE:CD1	2.65	0.45
7:S:122:PHE:CD1	7:S:122:PHE:O	2.69	0.45
1:M:1104:LEU:O	1:M:1104:LEU:CD1	2.64	0.45
1:A:1101:VAL:O	1:A:1102:PRO:C	2.54	0.45
1:A:1137:VAL:O	1:A:1140:GLN:N	2.49	0.45
9:I:39:ALA:C	9:I:40:THR:CG2	2.83	0.45
1:M:1109:ASN:C	1:M:1111:ALA:N	2.70	0.45
1:A:793:PHE:CZ	1:A:817:GLN:CD	2.90	0.45
2:N:875:LYS:C	2:N:876:HIS:CD2	2.90	0.45
2:B:325:SER:O	2:B:326:THR:OG1	2.34	0.45
1:A:696:VAL:O	1:A:699:CYS:N	2.50	0.45
1:M:887:GLN:CG	1:M:888:VAL:N	2.80	0.45
1:M:507:ILE:CA	1:M:511:THR:CG2	2.95	0.45
3:C:59:ASP:OD2	12:L:53:ARG:NH1	2.50	0.45
1:M:1386:HIS:ND1	5:Q:174:GLN:NE2	2.65	0.45
1:M:376:ILE:O	1:M:379:THR:N	2.49	0.45
1:M:1092:VAL:O	1:M:1093:SER:CB	2.65	0.45
1:M:1094:SER:O	1:M:1095:LYS:O	2.35	0.45
1:M:428:GLY:O	1:M:429:ASP:C	2.54	0.45
1:M:1413:GLU:O	1:M:1414:ILE:C	2.55	0.45
1:A:783:PHE:O	1:A:784:GLY:O	2.34	0.45
7:S:101:PHE:CD1	7:S:110:PHE:CD1	3.04	0.45
7:G:150:GLY:O	7:G:160:ALA:CA	2.64	0.45
1:M:1145:THR:CG2	1:M:1146:LEU:N	2.78	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:256:ILE:CG2	1:M:257:SER:N	2.79	0.45
10:V:56:ILE:O	10:V:60:LEU:N	2.50	0.45
7:G:23:MET:O	7:G:24:GLN:C	2.55	0.45
2:B:1111:ARG:C	2:B:1112:SER:OG	2.52	0.45
2:B:823:ASN:CG	2:B:823:ASN:O	2.54	0.45
3:C:207:ASN:ND2	3:C:230:TYR:CD2	2.85	0.45
3:O:171:TRP:O	3:O:172:SER:C	2.56	0.45
3:O:17:VAL:CG1	3:O:17:VAL:O	2.63	0.45
1:A:181:THR:C	1:A:182:ILE:CG1	2.85	0.45
1:M:380:LEU:O	1:M:381:THR:CB	2.61	0.45
1:A:1460:SER:O	1:A:1461:LEU:O	2.35	0.45
1:A:1478:LEU:HD23	4:D:45:THR:CA	2.47	0.45
1:M:75:THR:CB	1:M:76:MET:CA	2.95	0.45
2:B:233:SER:O	2:B:234:ARG:C	2.54	0.45
1:A:433:ARG:NH1	1:A:435:GLY:CA	2.79	0.45
9:I:73:LYS:CA	9:I:81:HIS:CD2	3.00	0.45
5:E:100:LYS:C	5:E:101:THR:CG2	2.83	0.45
1:M:1451:LEU:HD12	7:S:71:PHE:CZ	2.52	0.45
1:M:645:PRO:CA	1:M:648:CYS:CB	2.95	0.45
1:M:407:GLY:O	1:M:441:HIS:ND1	2.48	0.45
2:N:426:ARG:C	2:N:428:PHE:N	2.70	0.45
1:M:922:GLU:CB	1:M:924:ASP:N	2.80	0.45
1:A:922:GLU:CB	1:A:924:ASP:N	2.80	0.45
1:A:86:ILE:O	1:A:87:GLU:O	2.35	0.45
1:M:714:MET:CB	1:M:715:THR:CA	2.94	0.45
2:N:507:MET:N	2:N:507:MET:SD	2.90	0.45
2:N:839:LEU:O	2:N:840:PHE:C	2.55	0.45
1:A:887:GLN:CG	1:A:888:VAL:N	2.80	0.45
3:C:205:SER:O	3:C:208:ALA:N	2.49	0.45
2:B:222:VAL:CG1	2:B:223:ALA:N	2.80	0.45
5:Q:166:ARG:C	5:Q:168:THR:N	2.71	0.45
2:N:434:VAL:CG1	2:N:434:VAL:O	2.64	0.45
2:N:1023:VAL:CG1	2:N:1023:VAL:O	2.65	0.45
2:B:797:SER:O	2:B:797:SER:OG	2.35	0.45
1:M:433:ARG:NH1	1:M:435:GLY:CA	2.80	0.45
9:U:98:THR:O	9:U:99:LEU:C	2.54	0.45
2:B:220:ALA:O	2:B:221:TYR:CG	2.70	0.45
2:B:426:ARG:C	2:B:428:PHE:N	2.70	0.45
9:I:58:VAL:O	9:I:58:VAL:CG1	2.65	0.45
1:A:512:MET:C	1:A:514:PRO:N	2.68	0.45
5:E:116:LYS:C	5:E:118:ILE:N	2.70	0.45
10:J:56:ILE:O	10:J:60:LEU:N	2.50	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:O:39:GLU:OE2	3:O:166:LYS:NZ	2.49	0.45
3:C:59:ASP:N	3:C:59:ASP:OD1	2.50	0.45
2:B:829:ILE:CG1	2:B:829:ILE:O	2.64	0.45
2:B:856:GLY:CA	2:B:857:MET:C	2.85	0.45
10:J:47:ARG:O	10:J:51:THR:CG2	2.65	0.45
7:G:149:VAL:CG2	7:G:163:THR:CG2	2.95	0.45
1:M:1087:PHE:O	1:M:1090:ALA:CB	2.65	0.44
1:A:1104:LEU:O	1:A:1104:LEU:CD1	2.64	0.44
7:G:122:PHE:O	7:G:122:PHE:CD1	2.70	0.44
1:A:158:SER:O	1:A:158:SER:OG	2.33	0.44
2:B:296:MET:CE	2:B:372:LEU:CA	2.94	0.44
2:N:296:MET:CE	2:N:372:LEU:O	2.64	0.44
9:I:72:ASP:OD1	9:I:81:HIS:CE1	2.70	0.44
1:M:1121:ILE:CG2	1:M:1328:VAL:O	2.66	0.44
1:A:645:PRO:CA	1:A:648:CYS:CB	2.95	0.44
1:M:1191:GLN:C	1:M:1246:ILE:CG2	2.85	0.44
1:A:714:MET:CB	1:A:715:THR:CA	2.94	0.44
7:S:138:ILE:CD1	7:S:171:VAL:CG2	2.95	0.44
1:A:510:ILE:CD1	2:B:1132:CYS:SG	3.05	0.44
2:B:939:ASP:OD2	2:B:956:ARG:NH1	2.49	0.44
6:R:66:LYS:O	6:R:69:ARG:NH1	2.50	0.44
1:A:1276:SER:N	1:A:1277:ILE:CG2	2.79	0.44
2:B:247:ASN:O	2:B:249:GLU:N	2.48	0.44
3:C:135:LEU:CD2	3:C:141:ARG:C	2.86	0.44
3:O:135:LEU:CD2	3:O:141:ARG:C	2.86	0.44
1:M:1390:ILE:O	1:M:1390:ILE:CG2	2.66	0.44
6:R:125:ARG:NE	6:R:133:TYR:CE1	2.86	0.44
9:I:19:ASP:O	9:I:23:ARG:N	2.50	0.44
7:G:93:THR:O	7:G:140:LYS:CE	2.66	0.44
2:N:211:PHE:CE2	2:N:384:ARG:NH1	2.85	0.44
1:A:732:ARG:CG	1:A:733:ASP:N	2.79	0.44
1:A:15:ARG:CD	1:A:1438:GLN:NE2	2.81	0.44
2:B:815:ALA:O	2:B:1000:ILE:CB	2.65	0.44
2:N:685:VAL:CG1	2:N:729:HIS:ND1	2.80	0.44
2:B:685:VAL:CG1	2:B:729:HIS:ND1	2.80	0.44
2:N:105:ARG:O	2:N:108:ASN:N	2.50	0.44
3:C:164:ILE:O	3:C:165:ALA:C	2.54	0.44
1:M:1295:ILE:CG2	1:M:1307:ALA:O	2.65	0.44
2:B:579:PRO:O	2:B:580:ALA:C	2.56	0.44
1:A:1386:HIS:ND1	5:E:174:GLN:NE2	2.64	0.44
2:B:433:ALA:O	2:B:434:VAL:C	2.55	0.44
3:C:171:TRP:O	3:C:172:SER:C	2.56	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:1023:VAL:O	2:B:1023:VAL:CG1	2.65	0.44
5:Q:56:THR:O	5:Q:56:THR:CG2	2.62	0.44
1:M:812:ARG:CB	1:M:813:GLY:CA	2.96	0.44
1:A:1328:VAL:N	1:A:1329:ASP:CA	2.80	0.44
1:A:820:PHE:O	1:A:821:PHE:C	2.54	0.44
1:A:811:LEU:C	2:B:750:HIS:NE2	2.70	0.44
7:S:93:THR:O	7:S:140:LYS:CE	2.66	0.44
2:N:815:ALA:O	2:N:1000:ILE:CB	2.65	0.44
2:N:538:ALA:C	2:N:540:ILE:N	2.70	0.44
1:A:244:VAL:O	1:A:245:LEU:O	2.36	0.44
5:Q:53:ASP:O	5:Q:54:ARG:C	2.56	0.44
2:B:88:THR:OG1	2:B:89:MET:N	2.51	0.44
5:E:166:ARG:C	5:E:168:THR:N	2.71	0.44
1:M:1277:ILE:O	1:M:1278:SER:O	2.35	0.44
4:P:129:THR:O	4:P:133:PHE:CG	2.70	0.44
1:A:1121:ILE:CG2	1:A:1328:VAL:O	2.65	0.44
1:M:1450:TYR:CD1	7:S:61:ARG:N	2.85	0.44
2:B:657:ILE:CD1	2:B:657:ILE:N	2.81	0.44
2:N:1154:ILE:O	2:N:1205:PHE:CE1	2.71	0.44
1:A:522:SER:O	1:A:523:ASN:C	2.56	0.44
5:E:53:ASP:O	5:E:54:ARG:C	2.56	0.44
1:A:131:ARG:O	1:A:136:ARG:NE	2.49	0.44
1:M:359:ILE:CD1	1:M:359:ILE:O	2.66	0.44
2:N:621:ARG:NH2	2:N:682:GLU:CD	2.71	0.44
8:T:88:ASP:O	8:T:89:GLU:C	2.56	0.44
2:B:440:THR:CG2	2:B:441:ASN:N	2.81	0.44
4:D:25:LEU:CD2	4:D:29:GLU:OE1	2.66	0.44
1:A:1459:TYR:CD1	1:A:1460:SER:N	2.82	0.44
1:A:75:THR:CB	1:A:76:MET:CA	2.95	0.44
1:A:1450:TYR:CD1	7:G:61:ARG:CB	3.00	0.44
1:A:162:ASP:CA	1:A:165:ASN:CB	2.96	0.44
2:N:455:GLN:O	2:N:456:LYS:O	2.36	0.44
2:N:428:PHE:C	2:N:429:ASN:CG	2.75	0.44
2:B:317:LEU:CB	2:B:335:LEU:CD2	2.95	0.44
1:A:129:ARG:O	1:A:131:ARG:N	2.50	0.44
1:M:477:ASN:ND2	1:M:656:GLN:OE1	2.50	0.44
1:M:815:THR:OG1	1:M:818:GLU:CD	2.56	0.44
2:N:579:PRO:O	2:N:580:ALA:C	2.56	0.44
7:S:149:VAL:CG2	7:S:163:THR:CG2	2.95	0.44
3:O:207:ASN:ND2	3:O:230:TYR:CD2	2.85	0.44
2:N:900:ILE:N	2:N:900:ILE:CD1	2.80	0.44
1:M:1504:ALA:HA	1:M:1507:PRO:HG3	1.99	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:21:ASN:O	4:D:87:LYS:NZ	2.51	0.44
4:P:21:ASN:O	4:P:87:LYS:NZ	2.51	0.44
1:A:1183:GLU:O	1:A:1185:GLU:N	2.51	0.44
1:M:176:GLY:O	1:M:179:GLN:CD	2.56	0.44
1:A:171:GLY:O	1:A:172:HIS:C	2.55	0.44
4:D:65:PHE:O	4:D:67:ARG:N	2.50	0.44
4:P:65:PHE:O	4:P:67:ARG:N	2.50	0.44
2:N:198:ILE:O	2:N:199:ALA:O	2.36	0.44
1:A:94:HIS:O	1:A:95:ILE:O	2.36	0.44
1:M:368:ASP:OD2	1:M:649:LYS:NZ	2.50	0.44
1:M:810:TYR:CE2	2:N:752:GLN:CA	3.01	0.44
2:B:1154:ILE:O	2:B:1205:PHE:CE1	2.71	0.44
1:M:522:SER:O	1:M:523:ASN:C	2.56	0.44
2:B:990:PHE:CD1	3:C:179:PHE:CE2	3.06	0.44
2:N:990:PHE:CD1	3:O:179:PHE:CE2	3.06	0.44
3:O:59:ASP:OD1	3:O:59:ASP:N	2.50	0.44
1:M:510:ILE:CD1	2:N:1132:CYS:SG	3.05	0.44
2:N:433:ALA:O	2:N:434:VAL:C	2.55	0.44
1:M:696:VAL:O	1:M:699:CYS:N	2.50	0.44
1:A:1124:MET:CG	1:A:1327:GLY:O	2.66	0.44
1:A:1048:ILE:C	1:A:1050:GLY:N	2.71	0.44
2:N:440:THR:CG2	2:N:441:ASN:N	2.81	0.44
1:M:1096:ASN:O	1:M:1097:VAL:C	2.56	0.44
4:D:24:MET:SD	4:D:88:PHE:CG	3.04	0.44
1:M:237:PRO:C	1:M:239:TRP:N	2.71	0.44
1:M:1328:VAL:N	1:M:1329:ASP:CA	2.80	0.44
1:A:1484:THR:CG2	1:A:1484:THR:O	2.60	0.44
1:M:129:ARG:O	1:M:131:ARG:N	2.50	0.44
7:G:138:ILE:CD1	7:G:171:VAL:CG2	2.95	0.44
1:A:605:ASN:ND2	8:H:26:ARG:NH1	2.66	0.44
5:Q:195:ARG:O	5:Q:197:SER:N	2.51	0.44
2:N:88:THR:OG1	2:N:89:MET:N	2.51	0.44
1:M:214:HIS:CE1	1:M:238:ASP:O	2.71	0.44
2:B:166:LEU:O	2:B:168:GLY:N	2.51	0.44
1:A:1085:ASN:CA	1:A:1088:HIS:CD2	3.01	0.44
1:M:102:LYS:CD	1:M:189:LEU:CD2	2.96	0.44
1:M:1177:PHE:C	1:M:1180:PRO:CD	2.86	0.44
4:D:11:ALA:CB	4:D:13:LEU:N	2.81	0.44
2:B:198:ILE:O	2:B:199:ALA:O	2.36	0.44
2:B:465:VAL:CG1	2:B:465:VAL:O	2.64	0.44
1:A:336:LYS:CG	1:A:1410:GLU:OE1	2.66	0.44
2:B:752:GLN:C	2:B:754:PRO:CD	2.86	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:U:58:VAL:O	9:U:58:VAL:CG1	2.65	0.44
2:B:507:MET:N	2:B:507:MET:SD	2.90	0.44
1:A:359:ILE:O	1:A:359:ILE:CD1	2.66	0.44
1:M:1124:MET:CG	1:M:1327:GLY:O	2.66	0.44
8:T:80:VAL:O	8:T:94:TYR:O	2.35	0.44
11:K:59:GLY:O	11:K:60:TYR:CB	2.65	0.44
1:M:1188:LEU:O	1:M:1189:TYR:CB	2.66	0.44
1:A:1188:LEU:O	1:A:1189:TYR:CB	2.66	0.44
6:F:66:LYS:O	6:F:69:ARG:NH1	2.50	0.44
1:A:1492:VAL:HG12	1:A:1496:PHE:CE2	2.52	0.44
1:M:1085:ASN:CA	1:M:1088:HIS:CD2	3.01	0.44
1:A:428:GLY:O	1:A:429:ASP:C	2.54	0.44
1:M:162:ASP:CA	1:M:165:ASN:CB	2.96	0.44
3:C:137:ASP:CB	3:C:140:SER:CB	2.96	0.44
3:O:137:ASP:CB	3:O:140:SER:CB	2.96	0.44
2:B:480:HIS:CD2	2:B:483:ARG:NH1	2.86	0.44
2:N:480:HIS:CD2	2:N:483:ARG:NH1	2.85	0.44
1:M:350:ARG:NH1	2:N:1117:LEU:O	2.50	0.43
1:M:15:ARG:CD	1:M:1438:GLN:NE2	2.81	0.43
1:A:95:ILE:O	1:A:96:GLY:O	2.36	0.43
1:A:1413:GLU:O	1:A:1414:ILE:C	2.55	0.43
2:B:455:GLN:O	2:B:456:LYS:O	2.36	0.43
4:D:101:ALA:O	4:D:102:GLU:C	2.57	0.43
2:B:747:PHE:CE1	2:B:1033:ALA:CB	3.01	0.43
5:E:195:ARG:O	5:E:197:SER:N	2.51	0.43
6:R:99:VAL:O	6:R:100:ASP:C	2.57	0.43
6:F:99:VAL:O	6:F:100:ASP:C	2.57	0.43
8:T:89:GLU:O	8:T:90:LYS:O	2.36	0.43
10:V:47:ARG:O	10:V:51:THR:CG2	2.65	0.43
1:M:666:ASN:OD1	2:N:1071:VAL:CG2	2.66	0.43
2:B:900:ILE:N	2:B:900:ILE:CD1	2.80	0.43
1:M:94:HIS:O	1:M:95:ILE:C	2.56	0.43
1:A:1401:GLY:O	1:A:1405:ARG:NE	2.51	0.43
1:A:1404:MET:CG	1:A:1432:GLU:OE2	2.66	0.43
1:M:1119:LEU:O	1:M:1314:THR:N	2.51	0.43
6:R:125:ARG:CG	6:R:135:ASP:OD1	2.66	0.43
1:M:1404:MET:CG	1:M:1432:GLU:OE2	2.66	0.43
2:B:753:SER:O	2:B:756:ASN:N	2.51	0.43
2:N:753:SER:O	2:N:756:ASN:N	2.51	0.43
2:N:317:LEU:CB	2:N:335:LEU:CD2	2.95	0.43
1:M:33:SER:CB	1:M:85:HIS:N	2.81	0.43
5:Q:118:ILE:C	5:Q:120:THR:N	2.70	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1125:PRO:CB	1:A:1129:ALA:N	2.81	0.43
2:B:105:ARG:O	2:B:108:ASN:N	2.50	0.43
5:E:177:ASP:C	5:E:177:ASP:OD1	2.56	0.43
5:Q:11:VAL:O	5:Q:14:ALA:N	2.51	0.43
2:N:166:LEU:O	2:N:168:GLY:N	2.51	0.43
1:M:1497:VAL:O	1:M:1500:PRO:CD	2.65	0.43
1:A:1163:ASP:C	1:A:1164:THR:CG2	2.86	0.43
1:M:110:TRP:CH2	1:M:180:PRO:CG	3.00	0.43
4:P:11:ALA:CB	4:P:13:LEU:N	2.81	0.43
4:P:25:LEU:CD2	4:P:29:GLU:OE1	2.66	0.43
2:N:657:ILE:N	2:N:657:ILE:CD1	2.81	0.43
9:U:97:MET:C	9:U:99:LEU:N	2.71	0.43
1:M:1077:GLU:O	1:M:1080:THR:OG1	2.36	0.43
2:N:220:ALA:O	2:N:221:TYR:CG	2.70	0.43
2:N:831:ASN:ND2	2:N:832:GLN:N	2.66	0.43
1:M:605:ASN:ND2	8:T:26:ARG:NH1	2.66	0.43
2:B:155:ILE:CD1	2:B:403:PHE:CE1	3.01	0.43
3:O:241:PRO:O	3:O:242:ASN:CB	2.66	0.43
2:B:434:VAL:O	2:B:434:VAL:CG1	2.64	0.43
5:E:177:ASP:OD1	5:E:179:VAL:N	2.51	0.43
2:N:396:GLY:O	2:N:398:LEU:N	2.50	0.43
2:B:621:ARG:NH2	2:B:682:GLU:CD	2.71	0.43
2:N:423:GLU:C	2:N:424:THR:CG2	2.87	0.43
5:E:11:VAL:O	5:E:14:ALA:N	2.51	0.43
1:M:386:VAL:CG1	1:M:386:VAL:O	2.64	0.43
1:M:63:ILE:CG1	1:M:63:ILE:O	2.66	0.43
1:M:141:TRP:C	1:M:144:CYS:SG	2.96	0.43
7:S:135:ASP:N	7:S:135:ASP:OD2	2.51	0.43
1:M:336:LYS:CG	1:M:1410:GLU:OE1	2.66	0.43
1:A:1077:GLU:O	1:A:1080:THR:OG1	2.36	0.43
1:M:1183:GLU:O	1:M:1185:GLU:N	2.51	0.43
1:A:1109:ASN:C	1:A:1111:ALA:N	2.70	0.43
1:A:793:PHE:O	1:A:794:PRO:O	2.36	0.43
1:M:1125:PRO:CB	1:M:1129:ALA:N	2.81	0.43
2:B:325:SER:C	2:B:326:THR:CG2	2.87	0.43
1:M:1048:ILE:C	1:M:1050:GLY:N	2.71	0.43
5:Q:180:ALA:O	5:Q:184:GLY:N	2.51	0.43
1:A:62:THR:CG2	1:A:75:THR:CB	2.96	0.43
1:M:199:GLU:O	1:M:200:SER:OG	2.36	0.43
7:S:135:ASP:O	7:S:136:GLN:C	2.55	0.43
1:M:793:PHE:O	1:M:794:PRO:O	2.36	0.43
1:A:96:GLY:O	1:A:98:LEU:N	2.52	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:S:66:GLN:O	7:S:68:PHE:CD1	2.71	0.43
4:P:101:ALA:O	4:P:102:GLU:C	2.57	0.43
1:M:1320:THR:C	1:M:1322:ALA:N	2.72	0.43
5:Q:30:SER:C	5:Q:32:ALA:N	2.72	0.43
5:E:180:ALA:O	5:E:184:GLY:N	2.51	0.43
1:M:1504:ALA:C	1:M:1507:PRO:CG	2.87	0.43
1:M:1163:ASP:C	1:M:1164:THR:CG2	2.86	0.43
1:A:1167:GLU:O	1:A:1167:GLU:OE2	2.37	0.43
2:N:233:SER:OG	2:N:234:ARG:N	2.52	0.43
7:G:135:ASP:OD2	7:G:135:ASP:N	2.51	0.43
1:A:1119:LEU:O	1:A:1314:THR:N	2.51	0.43
2:N:330:THR:OG1	2:N:331:ARG:N	2.51	0.43
1:M:244:VAL:O	1:M:245:LEU:O	2.35	0.43
2:N:870:THR:OG1	2:N:870:THR:O	2.35	0.43
1:M:602:SER:C	1:M:604:SER:N	2.71	0.43
1:A:477:ASN:ND2	1:A:656:GLN:OE1	2.50	0.43
1:M:532:ASP:OD2	2:N:824:GLN:NE2	2.51	0.43
2:N:747:PHE:CE1	2:N:1033:ALA:CB	3.01	0.43
1:A:348:GLY:O	2:B:1118:ARG:NH1	2.52	0.43
1:A:724:VAL:C	1:A:726:ARG:N	2.72	0.43
5:Q:80:PRO:O	5:Q:81:SER:O	2.36	0.43
1:M:96:GLY:C	1:M:98:LEU:N	2.70	0.43
1:M:1167:GLU:O	1:M:1167:GLU:OE2	2.37	0.43
1:A:237:PRO:C	1:A:239:TRP:N	2.71	0.43
1:M:1083:THR:OG1	1:M:1101:VAL:CG1	2.67	0.43
1:A:1083:THR:OG1	1:A:1101:VAL:CG1	2.67	0.43
1:M:429:ASP:O	1:M:431:PRO:N	2.52	0.43
1:A:1114:ILE:CG1	1:A:1114:ILE:O	2.65	0.43
2:N:1185:PRO:O	2:N:1187:ALA:N	2.51	0.43
10:J:43:TYR:O	10:J:46:ARG:CG	2.67	0.43
2:B:1185:PRO:O	2:B:1187:ALA:N	2.51	0.43
7:S:147:LYS:O	7:S:148:ILE:C	2.57	0.43
2:N:225:ILE:O	2:N:227:SER:N	2.52	0.43
1:M:693:ARG:O	1:M:696:VAL:N	2.52	0.43
1:M:321:LEU:CD2	1:M:325:GLY:CA	2.97	0.43
8:H:89:GLU:O	8:H:90:LYS:O	2.36	0.43
1:M:1264:VAL:C	1:M:1266:LEU:N	2.72	0.43
7:G:100:PHE:CZ	7:G:131:TYR:CB	3.02	0.43
1:A:39:PHE:O	1:A:42:THR:N	2.52	0.43
4:D:58:THR:CB	4:D:62:PHE:CD2	3.02	0.43
7:G:114:HIS:CD2	7:G:115:LEU:CG	3.02	0.43
1:M:809:SER:C	1:M:811:LEU:N	2.72	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:N:752:GLN:C	2:N:754:PRO:CD	2.86	0.43
1:A:341:ARG:NH1	2:B:1194:GLU:OE1	2.51	0.43
9:I:97:MET:C	9:I:99:LEU:N	2.72	0.43
1:M:257:SER:C	1:M:259:ASP:N	2.72	0.43
1:M:88:LEU:CG	1:M:243:THR:O	2.67	0.43
8:H:33:GLN:C	8:H:35:ASP:N	2.72	0.43
2:B:437:ASN:OD1	2:B:441:ASN:CB	2.67	0.43
2:B:854:LYS:NZ	2:B:860:MET:SD	2.92	0.43
5:Q:177:ASP:OD1	5:Q:179:VAL:N	2.51	0.43
1:A:321:LEU:CD2	1:A:325:GLY:CA	2.97	0.43
1:A:1214:ASP:O	1:A:1217:GLY:N	2.52	0.43
3:C:136:ALA:CB	10:J:16:ASP:OD1	2.67	0.43
11:K:70:PHE:CD1	11:K:70:PHE:C	2.92	0.43
1:M:62:THR:CG2	1:M:75:THR:CB	2.96	0.43
7:S:100:PHE:CZ	7:S:131:TYR:CB	3.02	0.43
1:A:266:ASP:O	1:A:269:THR:CB	2.66	0.43
9:I:74:GLU:O	9:I:76:PRO:CD	2.67	0.43
1:A:1118:SER:O	1:A:1119:LEU:CB	2.67	0.43
1:A:96:GLY:C	1:A:98:LEU:N	2.73	0.43
1:M:1144:THR:OG1	1:M:1279:LEU:CB	2.67	0.43
1:A:257:SER:C	1:A:259:ASP:N	2.72	0.43
7:S:152:ARG:O	7:S:159:PHE:N	2.52	0.43
5:E:132:GLU:O	5:E:134:ASP:N	2.52	0.43
3:C:241:PRO:O	3:C:242:ASN:CB	2.66	0.43
1:A:1052:VAL:O	1:A:1053:GLU:C	2.57	0.43
2:B:798:MET:C	2:B:800:TYR:N	2.72	0.43
1:A:666:ASN:OD1	2:B:1071:VAL:CG2	2.66	0.43
2:N:797:SER:OG	2:N:797:SER:O	2.35	0.43
7:S:96:ASN:O	7:S:131:TYR:OH	2.37	0.43
2:B:233:SER:OG	2:B:234:ARG:N	2.52	0.43
1:M:39:PHE:O	1:M:42:THR:N	2.52	0.43
1:A:1388:MET:CE	1:A:1395:ILE:CD1	2.97	0.43
1:M:1114:ILE:O	1:M:1114:ILE:CG1	2.65	0.43
1:M:341:ARG:NH1	2:N:1194:GLU:OE1	2.51	0.43
2:B:495:ALA:O	2:B:496:LYS:O	2.37	0.43
2:B:225:ILE:O	2:B:227:SER:N	2.52	0.43
11:W:59:GLY:O	11:W:60:TYR:CB	2.65	0.43
5:Q:77:ALA:CB	5:Q:78:LYS:CA	2.97	0.43
4:P:84:ARG:O	4:P:90:ARG:CD	2.67	0.42
1:M:350:ARG:O	1:M:351:VAL:CG2	2.67	0.42
1:M:266:ASP:O	1:M:269:THR:CB	2.66	0.42
1:M:1401:GLY:O	1:M:1405:ARG:NE	2.51	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:N:814:VAL:CG1	2:N:815:ALA:N	2.82	0.42
1:A:1295:ILE:CG2	1:A:1309:GLU:CG	2.97	0.42
1:M:816:PRO:CB	2:N:689:MET:CE	2.97	0.42
2:N:437:ASN:OD1	2:N:441:ASN:CB	2.67	0.42
1:M:1052:VAL:O	1:M:1053:GLU:C	2.57	0.42
1:M:1214:ASP:O	1:M:1217:GLY:N	2.52	0.42
2:N:30:LEU:CD2	2:N:482:ARG:NH2	2.82	0.42
4:D:25:LEU:CD2	4:D:29:GLU:CD	2.87	0.42
1:M:236:ARG:N	1:M:239:TRP:CZ3	2.85	0.42
1:M:271:LYS:CD	1:M:328:LEU:CG	2.96	0.42
1:M:57:ASP:O	1:M:59:ARG:CA	2.67	0.42
1:A:1091:GLY:CA	1:A:1092:VAL:CG2	2.95	0.42
1:A:1117:PRO:O	1:A:1118:SER:C	2.53	0.42
2:B:465:VAL:O	2:B:466:SER:CB	2.67	0.42
7:S:51:ASP:C	7:S:55:ILE:CD1	2.87	0.42
10:V:43:TYR:O	10:V:46:ARG:CG	2.67	0.42
2:B:281:ARG:CG	9:I:6:TYR:CE2	3.02	0.42
1:M:947:LYS:CD	1:M:947:LYS:N	2.81	0.42
1:A:559:VAL:N	1:A:560:PRO:CA	2.82	0.42
1:A:558:TRP:CZ3	1:A:661:TYR:CD1	3.08	0.42
1:M:23:ILE:CD1	1:M:1419:ALA:O	2.67	0.42
9:I:65:ASP:O	9:I:67:THR:N	2.52	0.42
9:U:95:THR:O	9:U:96:MET:O	2.37	0.42
7:G:147:LYS:O	7:G:148:ILE:C	2.57	0.42
1:A:532:ASP:OD2	2:B:824:GLN:NE2	2.51	0.42
1:A:963:VAL:O	1:A:965:ARG:N	2.52	0.42
5:Q:175:LEU:O	5:Q:177:ASP:N	2.52	0.42
5:Q:21:LEU:CD2	5:Q:25:ARG:NE	2.82	0.42
1:M:451:ASN:ND2	2:N:1123:GLU:OE1	2.52	0.42
3:O:243:GLU:O	3:O:244:ILE:C	2.57	0.42
1:A:1096:ASN:O	1:A:1097:VAL:C	2.56	0.42
1:M:839:GLU:O	1:M:842:TYR:N	2.52	0.42
1:A:105:LEU:CD1	1:A:182:ILE:CD1	2.97	0.42
1:A:63:ILE:CG1	1:A:63:ILE:O	2.66	0.42
1:M:176:GLY:C	1:M:179:GLN:NE2	2.72	0.42
1:A:429:ASP:O	1:A:431:PRO:N	2.52	0.42
1:A:845:ARG:O	1:A:846:ARG:C	2.57	0.42
9:U:74:GLU:O	9:U:76:PRO:CD	2.67	0.42
2:N:465:VAL:O	2:N:466:SER:CB	2.67	0.42
7:S:114:HIS:CD2	7:S:115:LEU:CG	3.02	0.42
1:M:559:VAL:N	1:M:560:PRO:CA	2.82	0.42
4:D:52:THR:OG1	4:D:53:ASP:N	2.51	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:602:SER:C	1:A:604:SER:N	2.72	0.42
1:A:1320:THR:C	1:A:1322:ALA:N	2.72	0.42
1:A:805:PHE:CD2	1:A:805:PHE:C	2.92	0.42
1:M:231:ASN:C	1:M:233:GLN:N	2.73	0.42
8:T:33:GLN:C	8:T:35:ASP:N	2.72	0.42
5:E:15:TRP:CE2	5:E:19:HIS:CE1	3.07	0.42
5:E:15:TRP:CE3	5:E:19:HIS:CE1	3.08	0.42
2:N:380:GLU:OE2	9:U:91:ARG:N	2.52	0.42
5:Q:132:GLU:O	5:Q:134:ASP:N	2.52	0.42
1:M:887:GLN:N	1:M:957:TRP:O	2.53	0.42
5:E:175:LEU:O	5:E:177:ASP:N	2.52	0.42
10:V:35:LEU:O	10:V:38:LEU:N	2.52	0.42
1:M:724:VAL:C	1:M:726:ARG:N	2.72	0.42
3:O:61:PHE:O	3:O:61:PHE:CD2	2.73	0.42
1:M:526:VAL:O	1:M:526:VAL:CG1	2.67	0.42
1:A:192:SER:CB	1:A:202:LEU:C	2.88	0.42
1:M:271:LYS:O	1:M:274:ASP:N	2.52	0.42
1:A:163:LEU:N	1:A:165:ASN:N	2.68	0.42
1:A:1487:GLU:OE2	4:D:43:ARG:CG	2.67	0.42
1:A:810:TYR:CB	2:B:750:HIS:O	2.67	0.42
2:N:1199:ASN:ND2	2:N:1199:ASN:N	2.67	0.42
1:M:391:ILE:CG2	1:M:392:TYR:N	2.81	0.42
7:G:152:ARG:O	7:G:159:PHE:N	2.52	0.42
1:M:589:PRO:O	1:M:592:ILE:CD1	2.67	0.42
1:A:693:ARG:O	1:A:696:VAL:N	2.51	0.42
5:Q:177:ASP:OD1	5:Q:177:ASP:C	2.57	0.42
11:W:16:PRO:O	11:W:17:LYS:C	2.54	0.42
5:E:77:ALA:CB	5:E:78:LYS:CA	2.97	0.42
1:A:526:VAL:O	1:A:526:VAL:CG1	2.67	0.42
4:D:84:ARG:O	4:D:90:ARG:CD	2.67	0.42
1:A:1465:VAL:HG12	1:A:1466:PRO:CG	2.49	0.42
1:A:25:SER:CA	1:A:239:TRP:CD1	3.03	0.42
1:M:25:SER:CA	1:M:239:TRP:CD1	3.03	0.42
1:A:1157:TYR:CE1	1:A:1194:TRP:CZ3	3.08	0.42
1:M:121:ASN:N	1:M:122:PRO:CD	2.83	0.42
2:B:262:ILE:N	2:B:262:ILE:CD1	2.82	0.42
6:R:106:ASP:C	6:R:108:LEU:N	2.72	0.42
5:Q:15:TRP:CE2	5:Q:19:HIS:CE1	3.07	0.42
1:M:359:ILE:CD1	1:M:359:ILE:C	2.88	0.42
1:A:359:ILE:CD1	1:A:488:PHE:CD2	3.02	0.42
2:N:505:TRP:CZ2	2:N:737:ILE:CD1	3.02	0.42
5:E:21:LEU:CD2	5:E:25:ARG:NE	2.82	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:828:GLU:C	1:M:830:LEU:N	2.73	0.42
3:C:243:GLU:O	3:C:244:ILE:C	2.57	0.42
2:B:396:GLY:O	2:B:398:LEU:N	2.52	0.42
2:B:30:LEU:CD2	2:B:482:ARG:NH2	2.83	0.42
2:N:298:GLU:O	2:N:301:LYS:N	2.53	0.42
7:G:66:GLN:O	7:G:68:PHE:CD1	2.71	0.42
9:U:5:GLN:O	9:U:14:LEU:CB	2.67	0.42
1:A:947:LYS:CD	1:A:947:LYS:N	2.81	0.42
8:T:116:LEU:N	8:T:116:LEU:CD1	2.83	0.42
2:B:1025:ALA:O	2:B:1027:SER:N	2.53	0.42
1:A:198:ASP:N	1:A:198:ASP:OD1	2.51	0.42
2:B:180:CYS:C	2:B:182:TYR:N	2.73	0.42
2:B:505:TRP:CZ2	2:B:737:ILE:CD1	3.02	0.42
1:A:1131:MET:O	1:A:1134:ALA:N	2.52	0.42
1:A:451:ASN:ND2	2:B:1123:GLU:OE1	2.52	0.42
5:E:80:PRO:O	5:E:81:SER:O	2.36	0.42
1:A:839:GLU:O	1:A:842:TYR:N	2.52	0.42
10:J:35:LEU:O	10:J:38:LEU:N	2.52	0.42
1:A:271:LYS:O	1:A:274:ASP:N	2.52	0.42
1:A:271:LYS:CD	1:A:328:LEU:CG	2.96	0.42
1:M:150:CYS:CB	1:M:176:GLY:O	2.66	0.42
1:M:1118:SER:OG	1:M:1119:LEU:N	2.53	0.42
1:A:1483:GLY:HA2	4:D:43:ARG:NH1	2.35	0.42
1:A:781:ILE:O	1:A:781:ILE:CG2	2.68	0.42
1:A:809:SER:C	1:A:811:LEU:N	2.73	0.42
4:P:91:ALA:O	4:P:95:THR:OG1	2.38	0.42
1:A:946:CYS:CA	1:A:947:LYS:C	2.88	0.42
1:M:946:CYS:CA	1:M:947:LYS:C	2.88	0.42
4:P:52:THR:OG1	4:P:53:ASP:N	2.51	0.42
2:B:402:LEU:CD2	2:B:452:TRP:CE3	3.03	0.42
2:B:105:ARG:NH1	2:B:777:ARG:NH2	2.68	0.42
1:M:963:VAL:O	1:M:965:ARG:N	2.52	0.42
1:M:584:LEU:C	1:M:586:LEU:N	2.73	0.42
9:U:46:HIS:O	9:U:47:GLU:CB	2.67	0.42
1:M:1495:GLY:O	1:M:1498:GLY:O	2.38	0.42
1:M:1500:PRO:HG2	1:M:1501:ASP:H	1.83	0.42
1:M:204:GLU:CG	1:M:205:LYS:N	2.83	0.42
7:G:96:ASN:O	7:G:131:TYR:OH	2.37	0.42
9:U:73:LYS:CA	9:U:81:HIS:CD2	3.00	0.42
4:D:98:CYS:CB	4:D:99:GLU:OE1	2.68	0.42
2:N:486:THR:O	2:N:486:THR:OG1	2.36	0.42
1:A:337:GLY:CA	1:A:338:LYS:C	2.86	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:H:116:LEU:CD1	8:H:116:LEU:N	2.83	0.42
9:U:65:ASP:O	9:U:67:THR:N	2.52	0.42
2:B:875:LYS:O	2:B:876:HIS:C	2.58	0.42
1:M:359:ILE:CD1	1:M:488:PHE:CD2	3.02	0.42
1:A:589:PRO:O	1:A:592:ILE:CD1	2.67	0.42
2:N:1088:VAL:C	2:N:1090:ASP:N	2.73	0.42
2:N:854:LYS:NZ	2:N:860:MET:SD	2.92	0.42
3:O:238:SER:OG	3:O:239:ILE:N	2.52	0.42
1:A:828:GLU:C	1:A:830:LEU:N	2.73	0.42
1:A:178:ALA:O	1:A:179:GLN:CD	2.58	0.42
1:A:66:GLN:N	1:A:67:PHE:CD1	2.88	0.42
4:P:25:LEU:CD2	4:P:29:GLU:CD	2.87	0.42
1:A:781:ILE:CG1	1:A:821:PHE:CD2	3.03	0.42
1:M:810:TYR:O	2:N:750:HIS:CD2	2.72	0.42
9:I:95:THR:O	9:I:96:MET:O	2.37	0.42
2:N:105:ARG:NH1	2:N:777:ARG:NH2	2.68	0.42
2:B:838:GLY:O	2:B:839:LEU:C	2.55	0.42
2:N:875:LYS:O	2:N:876:HIS:C	2.58	0.42
1:A:390:ASN:O	1:A:392:TYR:N	2.53	0.42
5:Q:166:ARG:O	5:Q:168:THR:N	2.53	0.42
1:M:870:ILE:CD1	1:M:871:GLN:N	2.83	0.42
5:E:30:SER:C	5:E:32:ALA:N	2.72	0.42
2:N:349:HIS:O	2:N:350:ILE:CB	2.68	0.42
2:N:362:PHE:O	2:N:365:GLY:N	2.53	0.42
1:M:66:GLN:N	1:M:67:PHE:CD1	2.88	0.42
1:A:1261:GLU:O	1:A:1263:ASP:N	2.53	0.42
1:M:163:LEU:N	1:M:165:ASN:N	2.68	0.42
2:N:488:ILE:CB	2:N:490:ARG:N	2.83	0.42
7:G:126:ALA:O	7:G:128:PRO:N	2.53	0.42
7:G:119:ASP:CB	7:G:134:GLU:OE1	2.68	0.42
1:A:1398:ALA:CB	1:A:1405:ARG:NH2	2.83	0.42
1:A:208:LEU:CD2	1:A:209:SER:N	2.83	0.42
2:B:263:ARG:CB	2:B:322:LYS:CD	2.97	0.42
1:M:558:TRP:CZ3	1:M:661:TYR:CD1	3.08	0.42
2:B:831:ASN:ND2	2:B:832:GLN:N	2.66	0.42
1:M:422:ARG:O	1:M:423:TYR:C	2.59	0.42
5:Q:15:TRP:CE3	5:Q:19:HIS:CE1	3.08	0.42
2:N:838:GLY:O	2:N:839:LEU:C	2.55	0.42
2:B:501:HIS:O	2:B:502:ASN:C	2.58	0.42
2:B:1088:VAL:C	2:B:1090:ASP:N	2.73	0.42
1:A:963:VAL:C	1:A:965:ARG:N	2.74	0.42
1:A:1188:LEU:C	1:A:1189:TYR:CD1	2.94	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:H:88:ASP:O	8:H:89:GLU:C	2.56	0.42
2:B:423:GLU:C	2:B:424:THR:CG2	2.87	0.42
2:B:349:HIS:O	2:B:350:ILE:CB	2.68	0.42
1:A:104:ILE:O	1:A:105:LEU:O	2.37	0.41
1:M:210:PRO:O	1:M:211:LEU:C	2.58	0.41
1:A:1463:THR:O	1:A:1463:THR:OG1	2.30	0.41
1:A:1092:VAL:O	1:A:1093:SER:CB	2.68	0.41
2:B:488:ILE:CB	2:B:490:ARG:N	2.83	0.41
7:S:119:ASP:CB	7:S:134:GLU:OE1	2.68	0.41
1:A:1118:SER:OG	1:A:1119:LEU:N	2.53	0.41
9:U:100:ILE:C	9:U:101:TYR:CD1	2.93	0.41
9:I:100:ILE:C	9:I:101:TYR:CD1	2.93	0.41
1:M:151:ASP:CG	1:M:152:THR:N	2.73	0.41
1:M:1290:MET:C	1:M:1291:MET:SD	2.98	0.41
1:A:359:ILE:CD1	1:A:359:ILE:C	2.88	0.41
3:O:165:ALA:O	3:O:166:LYS:C	2.57	0.41
1:M:1188:LEU:C	1:M:1189:TYR:CD1	2.93	0.41
1:M:321:LEU:CD2	1:M:325:GLY:C	2.88	0.41
1:A:321:LEU:CD2	1:A:325:GLY:C	2.88	0.41
3:O:136:ALA:CB	10:V:16:ASP:OD1	2.67	0.41
1:A:659:VAL:O	1:A:660:ASN:C	2.55	0.41
2:N:474:PHE:O	2:N:475:ALA:C	2.59	0.41
7:G:51:ASP:C	7:G:55:ILE:CD1	2.87	0.41
1:M:1492:VAL:O	1:M:1496:PHE:HD2	2.02	0.41
1:A:1264:VAL:C	1:A:1266:LEU:N	2.72	0.41
2:N:501:HIS:O	2:N:502:ASN:C	2.59	0.41
7:S:23:MET:O	7:S:26:TYR:N	2.53	0.41
7:S:150:GLY:O	7:S:161:ILE:N	2.53	0.41
2:B:814:VAL:CG1	2:B:815:ALA:N	2.83	0.41
2:B:1199:ASN:N	2:B:1199:ASN:ND2	2.67	0.41
2:N:1207:LYS:O	2:N:1208:ASN:C	2.58	0.41
8:H:111:LEU:O	8:H:113:ARG:N	2.53	0.41
1:M:388:PRO:CG	1:M:434:TYR:CE2	3.03	0.41
1:A:1145:THR:CG2	1:A:1146:LEU:N	2.83	0.41
1:A:231:ASN:C	1:A:233:GLN:N	2.73	0.41
2:B:841:ARG:NH2	3:C:64:HIS:ND1	2.68	0.41
7:G:23:MET:O	7:G:26:TYR:N	2.53	0.41
2:N:443:LEU:CA	2:N:446:SER:OG	2.69	0.41
1:M:387:THR:C	1:M:389:TYR:N	2.73	0.41
2:B:362:PHE:O	2:B:365:GLY:N	2.53	0.41
3:C:61:PHE:O	3:C:61:PHE:CD2	2.73	0.41
1:A:624:ASP:OD1	1:A:624:ASP:N	2.52	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:P:24:MET:SD	4:P:88:PHE:CG	3.04	0.41
1:A:1290:MET:C	1:A:1291:MET:SD	2.98	0.41
2:N:262:ILE:CD1	2:N:262:ILE:N	2.82	0.41
7:S:126:ALA:O	7:S:128:PRO:N	2.53	0.41
2:N:465:VAL:O	2:N:465:VAL:CG1	2.64	0.41
1:M:1413:GLU:O	1:M:1417:ASP:N	2.53	0.41
7:G:150:GLY:O	7:G:161:ILE:N	2.53	0.41
4:D:91:ALA:O	4:D:95:THR:OG1	2.38	0.41
2:N:538:ALA:CB	2:N:539:PRO:CD	2.98	0.41
1:A:30:ARG:CG	1:A:244:VAL:CG1	2.98	0.41
6:F:106:ASP:C	6:F:108:LEU:N	2.72	0.41
2:N:495:ALA:O	2:N:496:LYS:O	2.39	0.41
1:M:510:ILE:CG1	1:M:511:THR:N	2.84	0.41
1:A:887:GLN:N	1:A:957:TRP:O	2.53	0.41
5:E:166:ARG:O	5:E:168:THR:N	2.53	0.41
5:Q:67:SER:O	5:Q:69:LYS:N	2.53	0.41
2:B:443:LEU:CA	2:B:446:SER:OG	2.69	0.41
5:Q:91:VAL:O	5:Q:94:LEU:N	2.54	0.41
1:A:584:LEU:C	1:A:586:LEU:N	2.73	0.41
2:B:572:TRP:CG	2:B:572:TRP:O	2.71	0.41
1:M:1261:GLU:O	1:M:1263:ASP:N	2.53	0.41
1:A:127:THR:CA	1:A:130:TYR:CD2	3.04	0.41
4:P:98:CYS:CB	4:P:99:GLU:OE1	2.68	0.41
2:B:486:THR:OG1	2:B:486:THR:O	2.36	0.41
1:A:195:ARG:CG	1:A:196:GLY:N	2.83	0.41
2:B:1207:LYS:O	2:B:1208:ASN:C	2.58	0.41
1:A:672:ILE:O	1:A:673:GLY:C	2.59	0.41
2:N:1025:ALA:O	2:N:1027:SER:N	2.53	0.41
8:T:111:LEU:O	8:T:113:ARG:N	2.53	0.41
1:M:926:SER:O	1:M:927:VAL:C	2.59	0.41
5:E:132:GLU:C	5:E:134:ASP:N	2.73	0.41
2:N:398:LEU:O	2:N:402:LEU:CG	2.69	0.41
1:A:584:LEU:C	1:A:584:LEU:CD2	2.88	0.41
2:N:1121:GLU:O	2:N:1122:MET:C	2.58	0.41
1:A:734:ASN:O	1:A:738:SER:OG	2.39	0.41
1:A:62:THR:CB	1:A:75:THR:CG2	2.99	0.41
1:M:1157:TYR:CE1	1:M:1194:TRP:CZ3	3.08	0.41
2:B:298:GLU:O	2:B:301:LYS:N	2.53	0.41
1:A:57:ASP:O	1:A:59:ARG:CA	2.67	0.41
10:V:43:TYR:N	10:V:44:CYS:CB	2.84	0.41
1:M:811:LEU:O	2:N:750:HIS:NE2	2.54	0.41
1:M:581:LYS:O	1:M:582:GLN:O	2.39	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:672:ILE:O	1:M:673:GLY:C	2.59	0.41
7:G:147:LYS:NZ	7:G:166:GLU:CB	2.84	0.41
2:B:385:ASP:O	2:B:386:HIS:C	2.59	0.41
2:N:841:ARG:NH2	3:O:64:HIS:ND1	2.68	0.41
2:B:621:ARG:NH2	2:B:682:GLU:OE2	2.53	0.41
1:A:570:VAL:O	1:A:570:VAL:CG1	2.68	0.41
2:N:901:ILE:CD1	2:N:928:THR:O	2.68	0.41
2:N:491:ASP:N	2:N:491:ASP:OD1	2.54	0.41
2:N:587:ARG:NH2	2:N:601:ILE:CD1	2.84	0.41
1:M:123:LYS:O	1:M:127:THR:N	2.53	0.41
1:M:127:THR:CA	1:M:130:TYR:CD2	3.04	0.41
1:M:178:ALA:C	1:M:179:GLN:CG	2.88	0.41
1:A:121:ASN:N	1:A:122:PRO:CD	2.83	0.41
10:J:43:TYR:N	10:J:44:CYS:CB	2.84	0.41
2:N:281:ARG:CG	9:U:6:TYR:CE2	3.03	0.41
1:M:922:GLU:CB	1:M:923:ASN:C	2.89	0.41
1:M:30:ARG:CG	1:M:244:VAL:CG1	2.98	0.41
1:M:672:ILE:O	1:M:674:ASP:N	2.54	0.41
7:G:90:ALA:CB	7:G:104:ILE:CG1	2.99	0.41
1:A:537:VAL:O	1:A:538:ARG:C	2.58	0.41
1:M:357:THR:CG2	1:M:358:VAL:N	2.84	0.41
1:M:150:CYS:SG	1:M:176:GLY:CA	3.08	0.41
1:A:123:LYS:O	1:A:127:THR:N	2.53	0.41
1:A:1450:TYR:CG	7:G:60:GLY:O	2.73	0.41
1:A:1403:LEU:CB	1:A:1425:ASP:OD2	2.68	0.41
1:M:845:ARG:O	1:M:846:ARG:C	2.57	0.41
7:G:66:GLN:CG	7:G:68:PHE:CE2	3.04	0.41
2:B:538:ALA:CB	2:B:539:PRO:CD	2.98	0.41
2:N:1021:SER:O	2:N:1022:LYS:C	2.59	0.41
1:M:421:LEU:O	1:M:422:ARG:O	2.39	0.41
9:I:46:HIS:O	9:I:47:GLU:CB	2.67	0.41
1:M:805:PHE:CD2	1:M:805:PHE:C	2.94	0.41
1:A:1041:ASN:O	1:A:1042:LYS:C	2.59	0.41
2:N:728:THR:CG2	2:N:729:HIS:N	2.84	0.41
3:C:165:ALA:O	3:C:166:LYS:C	2.57	0.41
1:A:507:ILE:O	1:A:507:ILE:CG1	2.68	0.41
1:M:507:ILE:O	1:M:507:ILE:CG1	2.68	0.41
10:J:35:LEU:C	10:J:37:LYS:N	2.73	0.41
1:A:870:ILE:CD1	1:A:871:GLN:N	2.83	0.41
2:B:901:ILE:CD1	2:B:928:THR:O	2.68	0.41
2:B:38:PHE:C	2:B:40:GLU:N	2.74	0.41
1:A:749:VAL:O	1:A:749:VAL:CG1	2.66	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:380:LEU:CD1	1:M:497:VAL:CG2	2.99	0.41
1:A:1450:TYR:CE2	6:F:125:ARG:NE	2.88	0.41
3:C:137:ASP:O	3:C:137:ASP:OD1	2.39	0.41
9:I:71:SER:O	9:I:72:ASP:OD1	2.38	0.41
4:P:65:PHE:CE1	7:S:89:ASP:CB	3.04	0.41
2:N:484:THR:O	2:N:485:ASN:O	2.39	0.41
1:M:1118:SER:O	1:M:1119:LEU:CB	2.67	0.41
1:M:1403:LEU:CB	1:M:1425:ASP:OD2	2.68	0.41
1:A:1413:GLU:O	1:A:1417:ASP:N	2.54	0.41
1:A:1223:PHE:CE2	1:A:1273:MET:CE	3.03	0.41
8:H:117:ASP:C	8:H:118:HIS:O	2.59	0.41
1:A:421:LEU:O	1:A:422:ARG:O	2.39	0.41
2:B:1095:ARG:O	2:B:1096:ALA:CB	2.69	0.41
2:B:166:LEU:O	2:B:167:ASN:C	2.58	0.41
1:M:584:LEU:C	1:M:584:LEU:CD2	2.88	0.41
1:A:409:LYS:O	1:A:410:TYR:O	2.39	0.41
2:B:474:PHE:O	2:B:475:ALA:C	2.58	0.41
2:B:479:SER:OG	2:B:524:ASN:ND2	2.54	0.41
1:A:350:ARG:O	1:A:351:VAL:CG2	2.68	0.41
1:M:94:HIS:C	1:M:98:LEU:CD1	2.89	0.41
1:A:1467:THR:O	1:A:1468:LEU:C	2.60	0.41
1:A:1165:VAL:O	1:A:1166:ILE:CB	2.69	0.41
1:A:428:GLY:C	1:A:430:ILE:N	2.74	0.41
1:M:428:GLY:C	1:M:430:ILE:N	2.74	0.41
2:N:288:CYS:CB	2:N:297:LEU:CD2	2.99	0.41
1:M:169:ASN:C	1:M:169:ASN:ND2	2.75	0.41
1:M:781:ILE:CG2	1:M:781:ILE:O	2.68	0.41
4:D:61:TYR:CE1	7:G:105:GLY:N	2.89	0.41
7:S:88:VAL:CG1	7:S:89:ASP:N	2.84	0.41
2:B:484:THR:O	2:B:485:ASN:O	2.39	0.41
1:A:95:ILE:CB	1:A:314:ILE:CD1	2.99	0.41
1:A:11:VAL:CG1	2:B:1179:PHE:CB	2.98	0.41
2:B:1121:GLU:O	2:B:1122:MET:C	2.58	0.41
1:A:1140:GLN:NE2	1:A:1280:ARG:CZ	2.84	0.41
1:A:100:LYS:NZ	1:A:1420:ALA:CB	2.84	0.41
2:N:832:GLN:OE1	2:N:982:THR:OG1	2.39	0.41
1:A:816:PRO:CG	2:B:1036:PHE:CD2	3.04	0.41
2:B:211:PHE:CE2	2:B:384:ARG:CD	3.04	0.41
3:O:33:ARG:CZ	3:O:179:PHE:CD1	3.04	0.41
2:N:180:CYS:C	2:N:182:TYR:N	2.73	0.41
2:N:42:VAL:CA	2:N:43:GLN:C	2.89	0.41
1:A:728:LEU:CD1	1:A:805:PHE:CE1	3.04	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:728:LEU:CD1	1:M:805:PHE:CE1	3.04	0.41
1:A:1371:TYR:CG	1:A:1371:TYR:O	2.74	0.41
1:M:1371:TYR:O	1:M:1371:TYR:CG	2.74	0.41
2:B:841:ARG:NH2	12:L:63:ARG:C	2.74	0.41
1:A:789:THR:CG2	1:A:793:PHE:CD2	3.04	0.41
2:B:728:THR:CG2	2:B:729:HIS:N	2.84	0.41
1:A:488:PHE:O	1:A:490:GLY:N	2.54	0.41
2:N:166:LEU:O	2:N:167:ASN:C	2.58	0.41
12:X:55:LYS:CB	12:X:56:ARG:CA	2.99	0.41
2:N:38:PHE:C	2:N:40:GLU:N	2.74	0.41
1:A:498:PRO:O	1:A:499:GLN:NE2	2.54	0.41
1:M:749:VAL:CG1	1:M:749:VAL:O	2.66	0.41
1:M:570:VAL:CG1	1:M:570:VAL:O	2.68	0.41
1:M:409:LYS:O	1:M:410:TYR:O	2.39	0.41
2:B:510:PRO:CG	2:B:739:GLY:N	2.84	0.41
1:M:624:ASP:OD1	1:M:624:ASP:N	2.52	0.41
2:B:288:CYS:CB	2:B:297:LEU:CD2	2.99	0.41
1:A:119:SER:O	1:A:122:PRO:CA	2.69	0.41
1:A:778:GLY:CA	1:A:1092:VAL:N	2.84	0.41
9:U:71:SER:O	9:U:72:ASP:OD1	2.38	0.41
1:M:1398:ALA:CB	1:M:1405:ARG:NH2	2.84	0.41
7:S:66:GLN:CG	7:S:68:PHE:CE2	3.04	0.41
5:Q:73:TYR:CE2	5:Q:75:GLU:OE2	2.74	0.41
1:M:11:VAL:CG1	2:N:1179:PHE:CB	2.98	0.41
7:S:147:LYS:NZ	7:S:166:GLU:CB	2.84	0.41
2:N:508:VAL:CG1	2:N:510:PRO:CA	2.99	0.41
1:A:512:MET:O	1:A:515:LYS:N	2.54	0.41
1:A:1371:TYR:CD2	1:A:1371:TYR:C	2.94	0.41
10:V:35:LEU:C	10:V:37:LYS:N	2.73	0.41
3:O:222:PHE:C	3:O:224:GLU:N	2.75	0.41
2:N:798:MET:C	2:N:800:TYR:N	2.72	0.41
2:B:641:ARG:O	2:B:642:LYS:C	2.58	0.41
1:M:498:PRO:O	1:M:499:GLN:NE2	2.54	0.41
1:A:1492:VAL:HG22	4:D:75:TYR:OH	2.21	0.40
10:J:45:CYS:O	10:J:48:MET:N	2.55	0.40
2:B:704:TYR:O	2:B:705:GLU:C	2.60	0.40
1:M:512:MET:O	1:M:515:LYS:N	2.54	0.40
1:A:388:PRO:CA	1:A:434:TYR:OH	2.69	0.40
1:A:422:ARG:O	1:A:423:TYR:C	2.59	0.40
1:M:1371:TYR:CD2	1:M:1371:TYR:C	2.94	0.40
1:A:231:ASN:O	1:A:233:GLN:N	2.54	0.40
2:B:402:LEU:O	2:B:403:PHE:C	2.59	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:537:VAL:O	1:M:538:ARG:C	2.58	0.40
1:M:1041:ASN:O	1:M:1042:LYS:C	2.59	0.40
1:A:510:ILE:CG1	1:A:511:THR:N	2.84	0.40
2:N:621:ARG:NH2	2:N:682:GLU:OE2	2.53	0.40
2:N:794:THR:OG1	2:N:798:MET:SD	2.79	0.40
1:A:236:ARG:N	1:A:239:TRP:CZ3	2.85	0.40
1:A:1160:ASP:C	1:A:1162:GLN:N	2.74	0.40
1:A:810:TYR:CE2	2:B:752:GLN:CA	3.05	0.40
9:I:79:HIS:CD2	9:I:79:HIS:O	2.75	0.40
2:B:540:ILE:CG1	2:B:541:ILE:N	2.84	0.40
1:A:672:ILE:O	1:A:674:ASP:N	2.54	0.40
3:C:64:HIS:CD2	3:C:64:HIS:O	2.74	0.40
2:N:1095:ARG:O	2:N:1096:ALA:CB	2.69	0.40
1:A:1347:ILE:O	1:A:1350:THR:CG2	2.69	0.40
2:N:479:SER:OG	2:N:524:ASN:ND2	2.54	0.40
5:E:67:SER:O	5:E:69:LYS:N	2.53	0.40
2:B:391:ARG:NH1	2:B:615:ASP:CB	2.84	0.40
2:N:641:ARG:O	2:N:642:LYS:C	2.58	0.40
11:W:70:PHE:CD1	11:W:70:PHE:C	2.93	0.40
1:M:1505:PHE:N	1:M:1507:PRO:HD2	2.37	0.40
1:A:205:LYS:C	1:A:206:ARG:CG	2.87	0.40
1:M:1165:VAL:O	1:M:1166:ILE:CB	2.69	0.40
1:M:1170:LYS:NZ	1:M:1238:LYS:CG	2.84	0.40
1:A:46:SER:OG	1:A:48:GLN:OE1	2.39	0.40
7:G:119:ASP:O	7:G:133:GLY:CA	2.69	0.40
7:S:119:ASP:O	7:S:133:GLY:CA	2.69	0.40
3:O:137:ASP:OD1	3:O:137:ASP:O	2.39	0.40
4:D:65:PHE:CE1	7:G:89:ASP:CB	3.04	0.40
1:M:1388:MET:CE	1:M:1395:ILE:CD1	2.99	0.40
1:M:338:LYS:CG	1:M:343:ARG:NE	2.83	0.40
1:M:876:GLU:OE1	5:Q:199:THR:OG1	2.40	0.40
1:A:947:LYS:CB	1:A:951:PRO:CD	2.99	0.40
1:A:812:ARG:CB	1:A:813:GLY:CA	3.00	0.40
2:B:180:CYS:SG	2:B:772:THR:CG2	3.10	0.40
2:N:385:ASP:O	2:N:386:HIS:C	2.59	0.40
2:N:572:TRP:CG	2:N:572:TRP:O	2.71	0.40
2:B:682:GLU:O	2:B:683:GLU:C	2.60	0.40
2:B:794:THR:OG1	2:B:798:MET:SD	2.79	0.40
5:E:139:ILE:CG1	5:E:140:THR:N	2.85	0.40
4:D:22:GLU:CD	7:G:6:LYS:CB	2.90	0.40
1:A:1182:GLU:O	1:A:1183:GLU:CB	2.70	0.40
1:M:190:TRP:CZ3	1:M:204:GLU:O	2.74	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:M:808:ASN:OD1	2:N:716:VAL:N	2.55	0.40
4:P:61:TYR:CE1	7:S:105:GLY:N	2.89	0.40
4:P:22:GLU:CD	7:S:6:LYS:CB	2.90	0.40
3:O:131:GLY:O	3:O:132:HIS:C	2.60	0.40
1:M:1160:ASP:C	1:M:1162:GLN:N	2.75	0.40
1:M:1191:GLN:O	1:M:1246:ILE:CB	2.70	0.40
2:B:758:TYR:C	2:B:760:SER:N	2.75	0.40
2:N:704:TYR:O	2:N:705:GLU:C	2.60	0.40
7:S:140:LYS:CG	7:S:140:LYS:O	2.70	0.40
1:A:922:GLU:CB	1:A:923:ASN:C	2.89	0.40
5:Q:51:ASN:O	5:Q:52:LEU:O	2.40	0.40
2:N:576:HIS:CD2	2:N:577:ARG:C	2.95	0.40
2:B:42:VAL:CA	2:B:43:GLN:C	2.89	0.40
1:M:231:ASN:O	1:M:233:GLN:N	2.54	0.40
2:B:841:ARG:NE	3:C:64:HIS:CE1	2.90	0.40
2:B:899:ILE:O	2:B:899:ILE:CD1	2.69	0.40
5:E:196:ARG:O	5:E:197:SER:O	2.39	0.40
1:M:963:VAL:C	1:M:965:ARG:N	2.74	0.40
1:M:1347:ILE:O	1:M:1350:THR:CG2	2.69	0.40
3:C:222:PHE:C	3:C:224:GLU:N	2.75	0.40
12:L:55:LYS:CB	12:L:56:ARG:CA	2.99	0.40
1:M:734:ASN:O	1:M:738:SER:OG	2.38	0.40
11:W:96:HIS:CD2	11:W:96:HIS:O	2.75	0.40
1:A:1465:VAL:HA	1:A:1466:PRO:HA	1.89	0.40
1:A:1170:LYS:NZ	1:A:1238:LYS:CG	2.84	0.40
2:B:229:LEU:CD2	2:B:229:LEU:N	2.84	0.40
5:E:47:GLY:O	5:E:49:GLY:O	2.39	0.40
4:D:132:LYS:CA	4:D:134:GLN:CB	3.00	0.40
4:P:61:TYR:CD2	7:S:105:GLY:CA	3.05	0.40
1:A:1413:GLU:O	1:A:1416:MET:N	2.55	0.40
10:V:45:CYS:O	10:V:48:MET:N	2.55	0.40
9:I:56:THR:O	9:I:57:THR:C	2.60	0.40
7:G:140:LYS:O	7:G:140:LYS:CG	2.70	0.40
9:U:79:HIS:CD2	9:U:79:HIS:O	2.75	0.40
1:M:153:GLY:O	1:M:154:LEU:O	2.39	0.40
1:A:581:LYS:O	1:A:582:GLN:O	2.39	0.40
2:N:540:ILE:CG1	2:N:541:ILE:N	2.84	0.40
8:T:117:ASP:C	8:T:118:HIS:O	2.59	0.40
1:A:816:PRO:CD	2:B:1036:PHE:CD2	3.05	0.40
1:A:926:SER:O	1:A:927:VAL:C	2.59	0.40
2:N:841:ARG:NH2	12:X:63:ARG:C	2.74	0.40
2:B:875:LYS:CG	3:O:265:GLU:OE2	2.70	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:1325:VAL:CG1	1:A:1326:GLU:N	2.84	0.40
3:C:218:GLU:N	3:C:219:PRO:CA	2.85	0.40
2:B:587:ARG:NH2	2:B:601:ILE:CD1	2.84	0.40
1:A:357:THR:CG2	1:A:358:VAL:N	2.84	0.40
3:C:238:SER:OG	3:C:239:ILE:N	2.52	0.40
1:A:306:VAL:O	1:A:306:VAL:CG1	2.69	0.40
6:R:74:TYR:CD1	6:R:74:TYR:N	2.90	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone ⓘ

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	1494/1752 (85%)	939 (63%)	280 (19%)	275 (18%)	0	4
1	M	1472/1752 (84%)	932 (63%)	281 (19%)	259 (18%)	0	5
2	B	1142/1210 (94%)	735 (64%)	245 (22%)	162 (14%)	0	9
2	N	1142/1210 (94%)	738 (65%)	243 (21%)	161 (14%)	0	9
3	C	261/297 (88%)	178 (68%)	56 (22%)	27 (10%)	1	16
3	O	261/297 (88%)	178 (68%)	56 (22%)	27 (10%)	1	16
4	D	128/135 (95%)	86 (67%)	20 (16%)	22 (17%)	0	5
4	P	128/135 (95%)	86 (67%)	20 (16%)	22 (17%)	0	5
5	E	205/210 (98%)	137 (67%)	43 (21%)	25 (12%)	1	12
5	Q	205/210 (98%)	137 (67%)	43 (21%)	25 (12%)	1	12
6	F	81/142 (57%)	58 (72%)	15 (18%)	8 (10%)	1	18
6	R	81/142 (57%)	57 (70%)	16 (20%)	8 (10%)	1	18
7	G	168/172 (98%)	128 (76%)	24 (14%)	16 (10%)	1	20
7	S	168/172 (98%)	128 (76%)	24 (14%)	16 (10%)	1	20
8	H	122/125 (98%)	73 (60%)	27 (22%)	22 (18%)	0	4
8	T	122/125 (98%)	73 (60%)	27 (22%)	22 (18%)	0	4

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	I	109/113 (96%)	46 (42%)	27 (25%)	36 (33%)	0	0
9	U	109/113 (96%)	45 (41%)	25 (23%)	39 (36%)	0	0
10	J	62/71 (87%)	41 (66%)	15 (24%)	6 (10%)	1	19
10	V	62/71 (87%)	41 (66%)	15 (24%)	6 (10%)	1	19
11	K	117/123 (95%)	80 (68%)	24 (20%)	13 (11%)	1	14
11	W	117/123 (95%)	80 (68%)	24 (20%)	13 (11%)	1	14
12	L	43/63 (68%)	23 (54%)	12 (28%)	8 (19%)	0	4
12	X	43/63 (68%)	23 (54%)	12 (28%)	8 (19%)	0	4
All	All	7842/8826 (89%)	5042 (64%)	1574 (20%)	1226 (16%)	0	7

All (1226) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	10	SER
1	A	12	PRO
1	A	37	ILE
1	A	42	THR
1	A	50	PRO
1	A	52	VAL
1	A	57	ASP
1	A	58	PRO
1	A	66	GLN
1	A	69	CYS
1	A	87	GLU
1	A	88	LEU
1	A	91	PRO
1	A	95	ILE
1	A	105	LEU
1	A	106	GLU
1	A	117	ILE
1	A	148	MET
1	A	152	THR
1	A	154	LEU
1	A	169	ASN
1	A	175	CYS
1	A	177	ALA
1	A	179	GLN
1	A	197	LYS
1	A	199	GLU

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Mol	Chain	Res	Type
1	A	202	LEU
1	A	256	ILE
1	A	258	VAL
1	A	261	THR
1	A	262	SER
1	A	263	ARG
1	A	267	ASP
1	A	269	THR
1	A	270	HIS
1	A	319	GLN
1	A	338	LYS
1	A	341	ARG
1	A	342	LEU
1	A	350	ARG
1	A	351	VAL
1	A	383	PRO
1	A	405	HIS
1	A	410	TYR
1	A	422	ARG
1	A	424	HIS
1	A	425	LYS
1	A	431	PRO
1	A	432	LEU
1	A	433	ARG
1	A	466	ILE
1	A	468	VAL
1	A	469	MET
1	A	507	ILE
1	A	540	PHE
1	A	551	ALA
1	A	559	VAL
1	A	573	LYS
1	A	582	GLN
1	A	599	ASP
1	A	630	ALA
1	A	632	GLN
1	A	709	LYS
1	A	771	VAL
1	A	776	VAL
1	A	794	PRO
1	A	804	GLY
1	A	922	GLU

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Mol	Chain	Res	Type
1	A	948	PHE
1	A	952	LYS
1	A	1088	HIS
1	A	1089	TYR
1	A	1101	VAL
1	A	1115	LYS
1	A	1118	SER
1	A	1151	SER
1	A	1152	ALA
1	A	1159	PRO
1	A	1165	VAL
1	A	1168	GLU
1	A	1181	ASP
1	A	1183	GLU
1	A	1184	VAL
1	A	1189	TYR
1	A	1192	SER
1	A	1256	ASP
1	A	1277	ILE
1	A	1282	VAL
1	A	1283	PRO
1	A	1284	ASN
1	A	1314	THR
1	A	1320	THR
1	A	1368	TYR
1	A	1392	ARG
1	A	1393	HIS
1	A	1395	ILE
1	A	1396	ASN
1	A	1398	ALA
1	A	1403	LEU
1	A	1411	THR
1	A	1413	GLU
1	A	1459	TYR
1	A	1460	SER
1	A	1461	LEU
1	A	1464	ALA
1	A	1466	PRO
1	A	1467	THR
1	A	1486	TYR
1	A	1489	SER
1	A	1490	PRO

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Mol	Chain	Res	Type
1	A	1491	MET
2	B	147	PRO
2	B	199	ALA
2	B	210	VAL
2	B	218	PRO
2	B	221	TYR
2	B	233	SER
2	B	234	ARG
2	B	235	LEU
2	B	244	MET
2	B	310	ILE
2	B	329	VAL
2	B	344	LYS
2	B	353	MET
2	B	426	ARG
2	B	428	PHE
2	B	430	LEU
2	B	456	LYS
2	B	458	SER
2	B	462	ARG
2	B	466	SER
2	B	485	ASN
2	B	486	THR
2	B	498	ARG
2	B	526	SER
2	B	554	ASP
2	B	576	HIS
2	B	580	ALA
2	B	656	ASP
2	B	657	ILE
2	B	659	PRO
2	B	661	GLN
2	B	662	ARG
2	B	663	PHE
2	B	716	VAL
2	B	720	PRO
2	B	750	HIS
2	B	753	SER
2	B	791	PRO
2	B	820	SER
2	B	870	THR
2	B	1010	MET

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Mol	Chain	Res	Type
2	B	1058	PHE
2	B	1096	ALA
2	B	1113	ARG
2	B	1146	ALA
2	B	1207	LYS
2	B	1208	ASN
3	C	124	VAL
3	C	126	SER
3	C	133	PRO
3	C	194	PHE
3	C	198	ALA
3	C	212	GLU
3	C	215	ARG
4	D	15	LEU
4	D	43	ARG
4	D	44	GLU
4	D	48	GLU
4	D	69	LYS
4	D	87	LYS
4	D	112	ALA
4	D	132	LYS
5	E	52	LEU
5	E	55	THR
5	E	58	SER
5	E	76	PHE
5	E	81	SER
5	E	197	SER
6	F	121	PRO
6	F	122	LEU
7	G	20	GLY
7	G	47	ILE
7	G	97	LYS
7	G	127	ASN
7	G	135	ASP
8	H	24	VAL
8	H	37	ASN
8	H	66	PRO
8	H	82	ARG
8	H	114	LEU
8	H	117	ASP
8	H	118	HIS
9	I	7	CYS

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Mol	Chain	Res	Type
9	I	20	LYS
9	I	21	VAL
9	I	23	ARG
9	I	49	GLN
9	I	51	SER
9	I	52	ASN
9	I	54	GLU
9	I	58	VAL
9	I	59	SER
9	I	74	GLU
9	I	79	HIS
9	I	80	GLN
9	I	96	MET
9	I	111	GLU
9	I	112	GLU
10	J	2	ILE
10	J	28	ASP
11	K	79	ASP
12	L	44	CYS
12	L	49	MET
1	M	10	SER
1	M	12	PRO
1	M	37	ILE
1	M	42	THR
1	M	50	PRO
1	M	52	VAL
1	M	57	ASP
1	M	58	PRO
1	M	66	GLN
1	M	69	CYS
1	M	87	GLU
1	M	88	LEU
1	M	91	PRO
1	M	95	ILE
1	M	105	LEU
1	M	106	GLU
1	M	117	ILE
1	M	152	THR
1	M	169	ASN
1	M	175	CYS
1	M	177	ALA
1	M	179	GLN

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Mol	Chain	Res	Type
1	M	197	LYS
1	M	198	ASP
1	M	199	GLU
1	M	202	LEU
1	M	256	ILE
1	M	258	VAL
1	M	261	THR
1	M	262	SER
1	M	263	ARG
1	M	267	ASP
1	M	269	THR
1	M	270	HIS
1	M	319	GLN
1	M	338	LYS
1	M	341	ARG
1	M	350	ARG
1	M	351	VAL
1	M	383	PRO
1	M	391	ILE
1	M	405	HIS
1	M	410	TYR
1	M	422	ARG
1	M	424	HIS
1	M	425	LYS
1	M	431	PRO
1	M	432	LEU
1	M	433	ARG
1	M	466	ILE
1	M	468	VAL
1	M	469	MET
1	M	507	ILE
1	M	540	PHE
1	M	551	ALA
1	M	559	VAL
1	M	573	LYS
1	M	582	GLN
1	M	599	ASP
1	M	630	ALA
1	M	632	GLN
1	M	709	LYS
1	M	771	VAL
1	M	776	VAL

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Mol	Chain	Res	Type
1	M	794	PRO
1	M	804	GLY
1	M	922	GLU
1	M	948	PHE
1	M	952	LYS
1	M	1088	HIS
1	M	1101	VAL
1	M	1115	LYS
1	M	1118	SER
1	M	1131	MET
1	M	1151	SER
1	M	1152	ALA
1	M	1159	PRO
1	M	1165	VAL
1	M	1168	GLU
1	M	1181	ASP
1	M	1183	GLU
1	M	1184	VAL
1	M	1189	TYR
1	M	1192	SER
1	M	1256	ASP
1	M	1277	ILE
1	M	1278	SER
1	M	1280	ARG
1	M	1282	VAL
1	M	1284	ASN
1	M	1314	THR
1	M	1320	THR
1	M	1368	TYR
1	M	1392	ARG
1	M	1395	ILE
1	M	1398	ALA
1	M	1403	LEU
1	M	1411	THR
1	M	1413	GLU
1	M	1500	PRO
2	N	147	PRO
2	N	199	ALA
2	N	210	VAL
2	N	218	PRO
2	N	221	TYR
2	N	233	SER

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Mol	Chain	Res	Type
2	N	234	ARG
2	N	235	LEU
2	N	244	MET
2	N	310	ILE
2	N	322	LYS
2	N	323	ARG
2	N	326	THR
2	N	329	VAL
2	N	344	LYS
2	N	353	MET
2	N	426	ARG
2	N	428	PHE
2	N	430	LEU
2	N	456	LYS
2	N	458	SER
2	N	462	ARG
2	N	466	SER
2	N	485	ASN
2	N	486	THR
2	N	498	ARG
2	N	526	SER
2	N	554	ASP
2	N	576	HIS
2	N	580	ALA
2	N	656	ASP
2	N	657	ILE
2	N	659	PRO
2	N	661	GLN
2	N	662	ARG
2	N	663	PHE
2	N	716	VAL
2	N	720	PRO
2	N	750	HIS
2	N	753	SER
2	N	791	PRO
2	N	820	SER
2	N	870	THR
2	N	1010	MET
2	N	1058	PHE
2	N	1096	ALA
2	N	1113	ARG
2	N	1207	LYS

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Mol	Chain	Res	Type
2	N	1208	ASN
3	O	124	VAL
3	O	126	SER
3	O	133	PRO
3	O	194	PHE
3	O	198	ALA
3	O	212	GLU
3	O	215	ARG
4	P	15	LEU
4	P	43	ARG
4	P	44	GLU
4	P	48	GLU
4	P	69	LYS
4	P	87	LYS
4	P	112	ALA
4	P	132	LYS
5	Q	52	LEU
5	Q	55	THR
5	Q	58	SER
5	Q	76	PHE
5	Q	81	SER
5	Q	197	SER
6	R	121	PRO
6	R	122	LEU
7	S	47	ILE
7	S	97	LYS
7	S	127	ASN
7	S	135	ASP
8	T	24	VAL
8	T	37	ASN
8	T	66	PRO
8	T	82	ARG
8	T	114	LEU
8	T	117	ASP
8	T	118	HIS
9	U	7	CYS
9	U	13	MET
9	U	20	LYS
9	U	21	VAL
9	U	49	GLN
9	U	51	SER
9	U	52	ASN

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Mol	Chain	Res	Type
9	U	54	GLU
9	U	58	VAL
9	U	59	SER
9	U	74	GLU
9	U	79	HIS
9	U	80	GLN
9	U	96	MET
9	U	111	GLU
9	U	112	GLU
10	V	2	ILE
10	V	28	ASP
11	W	79	ASP
12	X	44	CYS
12	X	49	MET
1	A	14	ARG
1	A	24	LEU
1	A	51	ARG
1	A	71	THR
1	A	72	CYS
1	A	78	ASP
1	A	96	GLY
1	A	108	VAL
1	A	115	LEU
1	A	136	ARG
1	A	157	GLY
1	A	162	ASP
1	A	163	LEU
1	A	180	PRO
1	A	198	ASP
1	A	232	GLU
1	A	327	PRO
1	A	329	LYS
1	A	335	LEU
1	A	337	GLY
1	A	428	GLY
1	A	429	ASP
1	A	445	GLY
1	A	485	ASN
1	A	552	VAL
1	A	604	SER
1	A	647	ILE
1	A	710	PRO

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Mol	Chain	Res	Type
1	A	748	ASN
1	A	749	VAL
1	A	784	GLY
1	A	801	GLU
1	A	805	PHE
1	A	810	TYR
1	A	817	GLN
1	A	836	LYS
1	A	909	GLU
1	A	917	MET
1	A	920	SER
1	A	927	VAL
1	A	928	GLN
1	A	949	ILE
1	A	976	LEU
1	A	1062	SER
1	A	1066	MET
1	A	1086	THR
1	A	1092	VAL
1	A	1095	LYS
1	A	1097	VAL
1	A	1119	LEU
1	A	1131	MET
1	A	1150	THR
1	A	1166	ILE
1	A	1170	LYS
1	A	1209	LYS
1	A	1247	ARG
1	A	1248	ASP
1	A	1253	ALA
1	A	1255	ASP
1	A	1262	GLU
1	A	1276	SER
1	A	1280	ARG
1	A	1366	GLY
1	A	1412	VAL
1	A	1475	THR
1	A	1477	GLN
1	A	1480	GLU
1	A	1483	GLY
2	B	105	ARG
2	B	108	ASN

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Mol	Chain	Res	Type
2	B	148	SER
2	B	181	PRO
2	B	214	ALA
2	B	226	ARG
2	B	237	SER
2	B	280	ASP
2	B	293	ASP
2	B	299	MET
2	B	319	TYR
2	B	323	ARG
2	B	331	ARG
2	B	350	ILE
2	B	431	THR
2	B	470	ASN
2	B	481	LEU
2	B	491	ASP
2	B	495	ALA
2	B	499	GLN
2	B	510	PRO
2	B	655	TYR
2	B	701	GLN
2	B	705	GLU
2	B	713	ALA
2	B	781	MET
2	B	792	LEU
2	B	813	ILE
2	B	825	GLU
2	B	868	ARG
2	B	871	THR
2	B	877	GLY
2	B	896	GLY
2	B	1006	ILE
2	B	1055	SER
2	B	1056	ARG
2	B	1086	HIS
2	B	1089	ASP
2	B	1110	GLY
2	B	1118	ARG
2	B	1172	SER
2	B	1205	PHE
3	C	128	SER
3	C	141	ARG

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Mol	Chain	Res	Type
3	C	150	LYS
3	C	199	ASP
3	C	200	ALA
3	C	244	ILE
4	D	66	ALA
4	D	81	LEU
4	D	118	GLN
4	D	134	GLN
5	E	22	VAL
5	E	25	ARG
5	E	48	MET
5	E	50	ARG
5	E	67	SER
5	E	69	LYS
5	E	98	ASN
5	E	119	ALA
5	E	129	THR
5	E	176	ALA
6	F	61	GLY
6	F	62	LYS
6	F	63	ALA
6	F	94	ASN
7	G	128	PRO
7	G	134	GLU
8	H	55	PHE
8	H	63	LEU
8	H	90	LYS
8	H	111	LEU
9	I	34	TYR
9	I	56	THR
9	I	60	HIS
9	I	73	LYS
9	I	76	PRO
9	I	86	TYR
9	I	98	THR
9	I	106	CYS
9	I	109	ALA
10	J	43	TYR
10	J	44	CYS
11	K	59	GLY
11	K	76	THR
12	L	36	LYS

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Mol	Chain	Res	Type
12	L	48	VAL
12	L	57	MET
1	M	14	ARG
1	M	24	LEU
1	M	71	THR
1	M	72	CYS
1	M	78	ASP
1	M	96	GLY
1	M	108	VAL
1	M	115	LEU
1	M	136	ARG
1	M	154	LEU
1	M	157	GLY
1	M	162	ASP
1	M	163	LEU
1	M	232	GLU
1	M	254	PRO
1	M	327	PRO
1	M	329	LYS
1	M	335	LEU
1	M	337	GLY
1	M	342	LEU
1	M	428	GLY
1	M	445	GLY
1	M	485	ASN
1	M	552	VAL
1	M	604	SER
1	M	647	ILE
1	M	710	PRO
1	M	748	ASN
1	M	749	VAL
1	M	784	GLY
1	M	801	GLU
1	M	805	PHE
1	M	810	TYR
1	M	836	LYS
1	M	909	GLU
1	M	917	MET
1	M	920	SER
1	M	927	VAL
1	M	928	GLN
1	M	949	ILE

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Mol	Chain	Res	Type
1	M	976	LEU
1	M	1062	SER
1	M	1066	MET
1	M	1086	THR
1	M	1089	TYR
1	M	1092	VAL
1	M	1093	SER
1	M	1095	LYS
1	M	1097	VAL
1	M	1119	LEU
1	M	1150	THR
1	M	1166	ILE
1	M	1170	LYS
1	M	1209	LYS
1	M	1247	ARG
1	M	1248	ASP
1	M	1253	ALA
1	M	1255	ASP
1	M	1262	GLU
1	M	1283	PRO
1	M	1366	GLY
1	M	1393	HIS
1	M	1396	ASN
1	M	1412	VAL
1	M	1501	ASP
1	M	1502	ALA
2	N	105	ARG
2	N	108	ASN
2	N	148	SER
2	N	181	PRO
2	N	214	ALA
2	N	226	ARG
2	N	237	SER
2	N	280	ASP
2	N	293	ASP
2	N	299	MET
2	N	319	TYR
2	N	350	ILE
2	N	431	THR
2	N	470	ASN
2	N	481	LEU
2	N	491	ASP

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Mol	Chain	Res	Type
2	N	495	ALA
2	N	499	GLN
2	N	510	PRO
2	N	655	TYR
2	N	701	GLN
2	N	705	GLU
2	N	713	ALA
2	N	781	MET
2	N	792	LEU
2	N	813	ILE
2	N	825	GLU
2	N	868	ARG
2	N	871	THR
2	N	877	GLY
2	N	893	ARG
2	N	896	GLY
2	N	1006	ILE
2	N	1055	SER
2	N	1056	ARG
2	N	1086	HIS
2	N	1089	ASP
2	N	1110	GLY
2	N	1118	ARG
2	N	1172	SER
2	N	1205	PHE
3	O	128	SER
3	O	141	ARG
3	O	150	LYS
3	O	199	ASP
3	O	200	ALA
3	O	244	ILE
4	P	66	ALA
4	P	81	LEU
4	P	118	GLN
4	P	134	GLN
5	Q	22	VAL
5	Q	25	ARG
5	Q	48	MET
5	Q	50	ARG
5	Q	67	SER
5	Q	69	LYS
5	Q	98	ASN

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Mol	Chain	Res	Type
5	Q	119	ALA
5	Q	129	THR
5	Q	176	ALA
6	R	61	GLY
6	R	62	LYS
6	R	94	ASN
7	S	20	GLY
7	S	128	PRO
7	S	134	GLU
8	T	55	PHE
8	T	63	LEU
8	T	90	LYS
8	T	111	LEU
9	U	23	ARG
9	U	34	TYR
9	U	56	THR
9	U	60	HIS
9	U	73	LYS
9	U	76	PRO
9	U	86	TYR
9	U	98	THR
9	U	106	CYS
9	U	109	ALA
10	V	43	TYR
10	V	44	CYS
11	W	59	GLY
11	W	76	THR
12	X	36	LYS
12	X	48	VAL
12	X	57	MET
1	A	39	PHE
1	A	40	PRO
1	A	109	CYS
1	A	130	TYR
1	A	165	ASN
1	A	210	PRO
1	A	254	PRO
1	A	259	ASP
1	A	382	TYR
1	A	384	GLU
1	A	391	ILE
1	A	427	ALA

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Mol	Chain	Res	Type
1	A	489	ASP
1	A	513	VAL
1	A	615	ASN
1	A	708	LEU
1	A	713	GLY
1	A	875	GLY
1	A	950	PHE
1	A	954	ASP
1	A	1042	LYS
1	A	1065	GLU
1	A	1090	ALA
1	A	1093	SER
1	A	1098	THR
1	A	1099	LEU
1	A	1102	PRO
1	A	1164	THR
1	A	1186	GLU
1	A	1239	LEU
1	A	1260	ILE
1	A	1264	VAL
1	A	1265	PHE
1	A	1286	THR
1	A	1294	LYS
1	A	1339	VAL
1	A	1409	GLU
1	A	1426	ASP
1	A	1472	GLY
1	A	1473	MET
2	B	11	THR
2	B	34	GLN
2	B	167	ASN
2	B	211	PHE
2	B	220	ALA
2	B	240	GLN
2	B	243	LEU
2	B	245	ALA
2	B	248	THR
2	B	276	GLY
2	B	292	ASN
2	B	387	PHE
2	B	394	LEU
2	B	467	GLN

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Mol	Chain	Res	Type
2	B	496	LYS
2	B	539	PRO
2	B	556	ASN
2	B	614	THR
2	B	621	ARG
2	B	627	ASP
2	B	660	GLU
2	B	712	PRO
2	B	821	GLY
2	B	872	LEU
2	B	893	ARG
2	B	1025	ALA
2	B	1078	PRO
2	B	1163	TYR
2	B	1206	THR
3	C	41	PRO
3	C	184	TRP
3	C	240	PRO
3	C	242	ASN
4	D	11	ALA
4	D	84	ARG
4	D	99	GLU
4	D	131	ARG
4	D	133	PHE
5	E	54	ARG
5	E	65	ASN
5	E	86	GLU
5	E	109	SER
5	E	117	ILE
5	E	167	GLU
6	F	107	PRO
7	G	66	GLN
7	G	102	ALA
7	G	103	ASN
7	G	106	PRO
8	H	81	TYR
8	H	115	SER
9	I	9	GLU
9	I	11	ASN
9	I	78	CYS
9	I	89	HIS
9	I	95	THR

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Mol	Chain	Res	Type
10	J	5	ILE
11	K	47	ASN
11	K	81	SER
1	M	39	PHE
1	M	40	PRO
1	M	51	ARG
1	M	97	PHE
1	M	130	TYR
1	M	165	ASN
1	M	180	PRO
1	M	245	LEU
1	M	259	ASP
1	M	382	TYR
1	M	384	GLU
1	M	427	ALA
1	M	429	ASP
1	M	489	ASP
1	M	513	VAL
1	M	597	ASP
1	M	615	ASN
1	M	713	GLY
1	M	817	GLN
1	M	875	GLY
1	M	950	PHE
1	M	954	ASP
1	M	1042	LYS
1	M	1065	GLU
1	M	1090	ALA
1	M	1098	THR
1	M	1099	LEU
1	M	1102	PRO
1	M	1164	THR
1	M	1186	GLU
1	M	1239	LEU
1	M	1260	ILE
1	M	1264	VAL
1	M	1265	PHE
1	M	1279	LEU
1	M	1286	THR
1	M	1294	LYS
1	M	1308	ASP
1	M	1339	VAL

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Mol	Chain	Res	Type
1	M	1409	GLU
1	M	1426	ASP
2	N	11	THR
2	N	34	GLN
2	N	167	ASN
2	N	211	PHE
2	N	220	ALA
2	N	240	GLN
2	N	243	LEU
2	N	245	ALA
2	N	248	THR
2	N	276	GLY
2	N	292	ASN
2	N	387	PHE
2	N	394	LEU
2	N	467	GLN
2	N	496	LYS
2	N	539	PRO
2	N	556	ASN
2	N	614	THR
2	N	621	ARG
2	N	627	ASP
2	N	658	ASP
2	N	660	GLU
2	N	712	PRO
2	N	821	GLY
2	N	872	LEU
2	N	1025	ALA
2	N	1078	PRO
2	N	1163	TYR
2	N	1206	THR
3	O	41	PRO
3	O	113	GLY
3	O	184	TRP
3	O	240	PRO
3	O	242	ASN
4	P	11	ALA
4	P	16	GLY
4	P	84	ARG
4	P	99	GLU
4	P	131	ARG
4	P	133	PHE

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Mol	Chain	Res	Type
5	Q	54	ARG
5	Q	65	ASN
5	Q	86	GLU
5	Q	109	SER
5	Q	117	ILE
6	R	63	ALA
6	R	107	PRO
7	S	66	GLN
7	S	102	ALA
7	S	103	ASN
7	S	106	PRO
8	T	81	TYR
8	T	115	SER
9	U	9	GLU
9	U	78	CYS
9	U	89	HIS
9	U	95	THR
10	V	5	ILE
11	W	47	ASN
11	W	81	SER
1	A	9	SER
1	A	70	GLN
1	A	170	MET
1	A	206	ARG
1	A	238	ASP
1	A	245	LEU
1	A	318	PRO
1	A	380	LEU
1	A	435	GLY
1	A	531	GLN
1	A	597	ASP
1	A	619	ILE
1	A	646	GLU
1	A	781	ILE
1	A	858	TYR
1	A	1144	THR
1	A	1167	GLU
1	A	1263	ASP
1	A	1279	LEU
1	A	1303	THR
1	A	1327	GLY
1	A	1479	PRO

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Mol	Chain	Res	Type
2	B	29	SER
2	B	36	PHE
2	B	104	ALA
2	B	205	ALA
2	B	216	PRO
2	B	230	GLU
2	B	239	MET
2	B	281	ARG
2	B	332	GLU
2	B	382	ASP
2	B	459	MET
2	B	631	ASN
2	B	658	ASP
2	B	724	VAL
2	B	1114	ASP
2	B	1156	GLY
2	B	1186	TYR
2	B	1209	HIS
3	C	113	GLY
3	C	168	HIS
3	C	175	SER
4	D	16	GLY
5	E	26	GLY
5	E	49	GLY
5	E	133	SER
7	G	21	PRO
7	G	52	SER
7	G	129	PRO
8	H	43	ASN
8	H	54	THR
8	H	59	ILE
9	I	82	GLU
9	I	91	ARG
9	I	107	GLY
11	K	22	LEU
11	K	36	LYS
11	K	40	THR
11	K	45	LEU
12	L	37	GLU
12	L	55	LYS
1	M	9	SER
1	M	70	GLN

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Mol	Chain	Res	Type
1	M	170	MET
1	M	178	ALA
1	M	200	SER
1	M	238	ASP
1	M	317	GLN
1	M	318	PRO
1	M	344	GLY
1	M	380	LEU
1	M	435	GLY
1	M	531	GLN
1	M	619	ILE
1	M	646	GLU
1	M	708	LEU
1	M	781	ILE
1	M	858	TYR
1	M	1167	GLU
1	M	1263	ASP
1	M	1303	THR
1	M	1327	GLY
2	N	29	SER
2	N	36	PHE
2	N	104	ALA
2	N	205	ALA
2	N	216	PRO
2	N	230	GLU
2	N	239	MET
2	N	281	ARG
2	N	382	ASP
2	N	459	MET
2	N	631	ASN
2	N	724	VAL
2	N	1114	ASP
2	N	1156	GLY
2	N	1186	TYR
2	N	1209	HIS
3	O	168	HIS
3	O	175	SER
5	Q	26	GLY
5	Q	49	GLY
5	Q	133	SER
5	Q	167	GLU
7	S	21	PRO

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Mol	Chain	Res	Type
7	S	52	SER
7	S	129	PRO
8	T	43	ASN
8	T	54	THR
8	T	59	ILE
9	U	11	ASN
9	U	26	ARG
9	U	82	GLU
9	U	91	ARG
9	U	107	GLY
11	W	22	LEU
11	W	36	LYS
11	W	40	THR
11	W	45	LEU
12	X	37	GLU
12	X	55	LYS
1	A	11	VAL
1	A	97	PHE
1	A	268	LEU
1	A	317	GLN
1	A	344	GLY
1	A	667	GLY
1	A	673	GLY
1	A	711	GLU
1	A	783	PHE
1	A	1038	TYR
1	A	1116	THR
1	A	1130	ASN
1	A	1145	THR
1	A	1308	ASP
1	A	1421	SER
2	B	12	LEU
2	B	56	LEU
2	B	107	ARG
2	B	228	ALA
2	B	429	ASN
2	B	487	PRO
2	B	538	ALA
2	B	605	ILE
2	B	737	ILE
2	B	929	PRO
2	B	949	GLY

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Mol	Chain	Res	Type
2	B	989	PRO
2	B	1030	GLU
2	B	1169	GLU
3	C	86	TYR
3	C	100	SER
3	C	169	ALA
3	C	214	PRO
3	C	222	PHE
4	D	68	PHE
4	D	116	ASP
7	G	64	PRO
8	H	30	VAL
8	H	113	ARG
8	H	120	TYR
9	I	75	CYS
10	J	63	ASN
11	K	60	TYR
11	K	70	PHE
11	K	77	VAL
1	M	11	VAL
1	M	255	SER
1	M	268	LEU
1	M	667	GLY
1	M	673	GLY
1	M	711	GLU
1	M	783	PHE
1	M	1038	TYR
1	M	1116	THR
1	M	1130	ASN
1	M	1421	SER
2	N	12	LEU
2	N	56	LEU
2	N	107	ARG
2	N	228	ALA
2	N	429	ASN
2	N	487	PRO
2	N	538	ALA
2	N	737	ILE
2	N	929	PRO
2	N	949	GLY
2	N	989	PRO
2	N	1030	GLU

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Mol	Chain	Res	Type
2	N	1169	GLU
3	O	86	TYR
3	O	100	SER
3	O	169	ALA
3	O	214	PRO
3	O	222	PHE
4	P	68	PHE
4	P	116	ASP
7	S	64	PRO
8	T	30	VAL
8	T	113	ARG
8	T	120	TYR
9	U	75	CYS
10	V	63	ASN
11	W	60	TYR
11	W	70	PHE
11	W	77	VAL
1	A	7	SER
1	A	209	SER
1	A	813	GLY
1	A	816	PRO
1	A	961	VAL
1	A	1009	ILE
1	A	1434	ILE
2	B	145	GLU
2	B	247	ASN
2	B	550	GLU
4	D	98	CYS
8	H	61	SER
12	L	32	THR
1	M	7	SER
1	M	209	SER
1	M	210	PRO
1	M	813	GLY
1	M	961	VAL
1	M	1009	ILE
1	M	1276	SER
1	M	1434	ILE
2	N	145	GLU
2	N	247	ASN
2	N	550	GLU
2	N	605	ILE

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Mol	Chain	Res	Type
4	P	98	CYS
8	T	61	SER
12	X	32	THR
1	A	406	PRO
1	A	514	PRO
1	A	589	PRO
1	A	1052	VAL
1	A	1110	VAL
1	A	1124	MET
2	B	42	VAL
2	B	232	GLY
2	B	434	VAL
2	B	560	SER
11	K	118	VAL
1	M	406	PRO
1	M	514	PRO
1	M	589	PRO
1	M	1052	VAL
1	M	1110	VAL
1	M	1124	MET
2	N	42	VAL
2	N	232	GLY
2	N	397	PRO
2	N	434	VAL
2	N	560	SER
11	W	118	VAL
1	A	176	GLY
2	B	453	GLY
2	B	855	ILE
2	B	1108	VAL
3	C	258	VAL
2	N	453	GLY
2	N	855	ILE
2	N	1108	VAL
3	O	258	VAL
9	U	65	ASP
1	A	1414	ILE
2	B	397	PRO
9	I	65	ASP
1	M	1414	ILE
1	A	470	PRO
1	A	1180	PRO

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Mol	Chain	Res	Type
4	D	17	PRO
7	G	148	ILE
8	H	83	VAL
9	I	53	VAL
1	M	470	PRO
1	M	1180	PRO
2	N	208	VAL
4	P	17	PRO
7	S	148	ILE
8	T	83	VAL
8	T	98	GLY
9	U	16	PRO
9	U	53	VAL
2	B	208	VAL
6	F	96	PRO
8	H	98	GLY
1	M	237	PRO
6	R	96	PRO
3	C	80	PRO
3	O	80	PRO
1	A	712	PRO
1	M	712	PRO
1	M	1063	PRO
1	A	1063	PRO

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution. The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	1301/1536 (85%)	1113 (86%)	188 (14%)	5	28
1	M	1286/1536 (84%)	1097 (85%)	189 (15%)	4	28
2	B	1012/1064 (95%)	914 (90%)	98 (10%)	12	51
2	N	1012/1064 (95%)	914 (90%)	98 (10%)	12	51
3	C	236/267 (88%)	220 (93%)	16 (7%)	22	71
3	O	236/267 (88%)	220 (93%)	16 (7%)	22	71
4	D	111/115 (96%)	94 (85%)	17 (15%)	4	26

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
4	P	111/115 (96%)	94 (85%)	17 (15%)	4	26
5	E	182/184 (99%)	169 (93%)	13 (7%)	21	69
5	Q	182/184 (99%)	169 (93%)	13 (7%)	21	69
6	F	71/121 (59%)	64 (90%)	7 (10%)	11	50
6	R	71/121 (59%)	64 (90%)	7 (10%)	11	50
7	G	146/148 (99%)	139 (95%)	7 (5%)	35	81
7	S	146/148 (99%)	139 (95%)	7 (5%)	35	81
8	H	113/114 (99%)	99 (88%)	14 (12%)	7	37
8	T	113/114 (99%)	99 (88%)	14 (12%)	7	37
9	I	103/105 (98%)	80 (78%)	23 (22%)	1	9
9	U	103/105 (98%)	80 (78%)	23 (22%)	1	9
10	J	59/66 (89%)	46 (78%)	13 (22%)	1	9
10	V	59/66 (89%)	46 (78%)	13 (22%)	1	9
11	K	109/113 (96%)	104 (95%)	5 (5%)	37	82
11	W	109/113 (96%)	103 (94%)	6 (6%)	30	78
12	L	39/53 (74%)	34 (87%)	5 (13%)	6	35
12	X	39/53 (74%)	34 (87%)	5 (13%)	6	35
All	All	6949/7772 (89%)	6135 (88%)	814 (12%)	8	40

All (814) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	7	SER
1	A	10	SER
1	A	15	ARG
1	A	36	LYS
1	A	39	PHE
1	A	43	MET
1	A	46	SER
1	A	48	GLN
1	A	49	ARG
1	A	51	ARG
1	A	56	LEU
1	A	66	GLN
1	A	67	PHE
1	A	68	LYS

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Mol	Chain	Res	Type
1	A	72	CYS
1	A	85	HIS
1	A	86	ILE
1	A	87	GLU
1	A	88	LEU
1	A	106	GLU
1	A	116	LYS
1	A	117	ILE
1	A	118	ASP
1	A	119	SER
1	A	121	ASN
1	A	150	CYS
1	A	154	LEU
1	A	155	SER
1	A	158	SER
1	A	159	ASP
1	A	163	LEU
1	A	164	SER
1	A	169	ASN
1	A	188	ARG
1	A	195	ARG
1	A	197	LYS
1	A	200	SER
1	A	202	LEU
1	A	204	GLU
1	A	205	LYS
1	A	206	ARG
1	A	207	LEU
1	A	208	LEU
1	A	232	GLU
1	A	253	ARG
1	A	256	ILE
1	A	257	SER
1	A	258	VAL
1	A	262	SER
1	A	263	ARG
1	A	266	ASP
1	A	267	ASP
1	A	268	LEU
1	A	269	THR
1	A	271	LYS
1	A	322	GLN

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Mol	Chain	Res	Type
1	A	326	ARG
1	A	328	LEU
1	A	329	LYS
1	A	330	SER
1	A	335	LEU
1	A	341	ARG
1	A	357	THR
1	A	363	PRO
1	A	374	ARG
1	A	375	SER
1	A	385	THR
1	A	398	VAL
1	A	421	LEU
1	A	426	ARG
1	A	430	ILE
1	A	434	TYR
1	A	436	TRP
1	A	442	ILE
1	A	452	ARG
1	A	459	MET
1	A	460	SER
1	A	472	SER
1	A	475	ARG
1	A	476	LEU
1	A	479	SER
1	A	495	MET
1	A	507	ILE
1	A	511	THR
1	A	513	VAL
1	A	523	ASN
1	A	533	THR
1	A	534	LEU
1	A	552	VAL
1	A	555	ILE
1	A	559	VAL
1	A	579	THR
1	A	583	ILE
1	A	592	ILE
1	A	605	ASN
1	A	618	ILE
1	A	639	ILE
1	A	655	ILE

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Mol	Chain	Res	Type
1	A	663	LEU
1	A	669	SER
1	A	682	MET
1	A	686	THR
1	A	707	ARG
1	A	708	LEU
1	A	717	ARG
1	A	730	GLN
1	A	732	ARG
1	A	733	ASP
1	A	758	LYS
1	A	762	ILE
1	A	764	ILE
1	A	770	CYS
1	A	773	GLN
1	A	775	ILE
1	A	776	VAL
1	A	781	ILE
1	A	785	PHE
1	A	801	GLU
1	A	802	SER
1	A	817	GLN
1	A	827	ARG
1	A	833	THR
1	A	837	THR
1	A	843	ILE
1	A	846	ARG
1	A	857	ARG
1	A	861	THR
1	A	864	ASN
1	A	869	ILE
1	A	886	TYR
1	A	905	ILE
1	A	919	ASN
1	A	921	ILE
1	A	922	GLU
1	A	946	CYS
1	A	947	LYS
1	A	948	PHE
1	A	969	ASN
1	A	985	LEU
1	A	989	ILE

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Mol	Chain	Res	Type
1	A	1001	THR
1	A	1086	THR
1	A	1087	PHE
1	A	1089	TYR
1	A	1093	SER
1	A	1095	LYS
1	A	1097	VAL
1	A	1098	THR
1	A	1103	ARG
1	A	1104	LEU
1	A	1112	LYS
1	A	1114	ILE
1	A	1119	LEU
1	A	1127	ILE
1	A	1140	GLN
1	A	1160	ASP
1	A	1162	GLN
1	A	1166	ILE
1	A	1169	ASP
1	A	1183	GLU
1	A	1246	ILE
1	A	1248	ASP
1	A	1250	ASP
1	A	1260	ILE
1	A	1261	GLU
1	A	1277	ILE
1	A	1309	GLU
1	A	1314	THR
1	A	1323	MET
1	A	1328	VAL
1	A	1341	ILE
1	A	1347	ILE
1	A	1350	THR
1	A	1351	ARG
1	A	1355	LEU
1	A	1374	LEU
1	A	1387	LEU
1	A	1395	ILE
1	A	1397	ARG
1	A	1399	GLU
1	A	1400	THR
1	A	1403	LEU

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Mol	Chain	Res	Type
1	A	1411	THR
1	A	1442	MET
1	A	1444	THR
1	A	1449	ILE
1	A	1459	TYR
1	A	1473	MET
2	B	35	LEU
2	B	82	ILE
2	B	89	MET
2	B	201	GLU
2	B	212	LYS
2	B	226	ARG
2	B	235	LEU
2	B	241	ILE
2	B	244	MET
2	B	246	ARG
2	B	255	ILE
2	B	262	ILE
2	B	290	ASP
2	B	310	ILE
2	B	311	GLN
2	B	323	ARG
2	B	327	THR
2	B	331	ARG
2	B	337	TYR
2	B	352	THR
2	B	404	ARG
2	B	426	ARG
2	B	427	GLU
2	B	429	ASN
2	B	430	LEU
2	B	438	ILE
2	B	439	ILE
2	B	447	LEU
2	B	456	LYS
2	B	459	MET
2	B	469	LEU
2	B	485	ASN
2	B	488	ILE
2	B	493	LYS
2	B	500	LEU
2	B	502	ASN

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Mol	Chain	Res	Type
2	B	507	MET
2	B	524	ASN
2	B	550	GLU
2	B	552	LEU
2	B	565	LYS
2	B	573	LEU
2	B	619	ILE
2	B	654	ARG
2	B	655	TYR
2	B	657	ILE
2	B	662	ARG
2	B	663	PHE
2	B	668	LEU
2	B	690	SER
2	B	715	ARG
2	B	740	ILE
2	B	745	ILE
2	B	747	PHE
2	B	750	HIS
2	B	752	GLN
2	B	753	SER
2	B	757	THR
2	B	759	GLN
2	B	778	MET
2	B	780	THR
2	B	785	LEU
2	B	794	THR
2	B	797	SER
2	B	818	CYS
2	B	831	ASN
2	B	834	SER
2	B	835	ILE
2	B	839	LEU
2	B	840	PHE
2	B	870	THR
2	B	872	LEU
2	B	873	ARG
2	B	879	TYR
2	B	900	ILE
2	B	901	ILE
2	B	962	ILE
2	B	981	MET

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Mol	Chain	Res	Type
2	B	993	GLN
2	B	995	ILE
2	B	999	ILE
2	B	1000	ILE
2	B	1011	THR
2	B	1035	PRO
2	B	1056	ARG
2	B	1060	VAL
2	B	1079	THR
2	B	1080	TYR
2	B	1083	ARG
2	B	1092	ILE
2	B	1112	SER
2	B	1117	LEU
2	B	1122	MET
2	B	1129	SER
2	B	1152	CYS
2	B	1197	SER
2	B	1200	ILE
2	B	1205	PHE
3	C	9	ILE
3	C	14	LYS
3	C	57	MET
3	C	59	ASP
3	C	69	ILE
3	C	76	ILE
3	C	84	LEU
3	C	120	ARG
3	C	126	SER
3	C	127	ASN
3	C	129	SER
3	C	130	LEU
3	C	146	CYS
3	C	242	ASN
3	C	249	LEU
3	C	252	LEU
4	D	9	ASP
4	D	13	LEU
4	D	23	ASP
4	D	25	LEU
4	D	31	LYS
4	D	40	GLN

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Mol	Chain	Res	Type
4	D	43	ARG
4	D	67	ARG
4	D	84	ARG
4	D	85	PHE
4	D	87	LYS
4	D	95	THR
4	D	96	LEU
4	D	97	CYS
4	D	98	CYS
4	D	99	GLU
4	D	132	LYS
5	E	7	ASN
5	E	44	MET
5	E	48	MET
5	E	52	LEU
5	E	84	ILE
5	E	139	ILE
5	E	148	HIS
5	E	162	ARG
5	E	168	THR
5	E	174	GLN
5	E	195	ARG
5	E	200	SER
5	E	209	CYS
6	F	60	SER
6	F	74	TYR
6	F	82	ARG
6	F	115	LEU
6	F	120	ILE
6	F	128	LEU
6	F	142	ILE
7	G	51	ASP
7	G	59	LYS
7	G	61	ARG
7	G	66	GLN
7	G	68	PHE
7	G	101	PHE
7	G	114	HIS
8	H	14	THR
8	H	25	SER
8	H	27	ILE
8	H	36	MET

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Mol	Chain	Res	Type
8	H	37	ASN
8	H	38	LEU
8	H	39	THR
8	H	40	LEU
8	H	57	LEU
8	H	59	ILE
8	H	62	ASN
8	H	63	LEU
8	H	65	SER
8	H	70	GLU
9	I	3	ASN
9	I	17	ARG
9	I	20	LYS
9	I	25	LEU
9	I	26	ARG
9	I	30	ARG
9	I	42	LYS
9	I	44	TYR
9	I	47	GLU
9	I	57	THR
9	I	60	HIS
9	I	61	ASP
9	I	68	LEU
9	I	74	GLU
9	I	75	CYS
9	I	77	ARG
9	I	78	CYS
9	I	79	HIS
9	I	88	THR
9	I	94	ASP
9	I	100	ILE
9	I	112	GLU
9	I	113	GLN
10	J	1	MET
10	J	2	ILE
10	J	3	ILE
10	J	5	ILE
10	J	13	VAL
10	J	20	THR
10	J	41	GLN
10	J	44	CYS
10	J	45	CYS

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Mol	Chain	Res	Type
10	J	46	ARG
10	J	47	ARG
10	J	49	ILE
10	J	56	ILE
11	K	12	LEU
11	K	54	ARG
11	K	72	LEU
11	K	73	ARG
11	K	86	ILE
12	L	20	MET
12	L	24	CYS
12	L	27	CYS
12	L	44	CYS
12	L	48	VAL
1	M	7	SER
1	M	10	SER
1	M	15	ARG
1	M	36	LYS
1	M	39	PHE
1	M	43	MET
1	M	46	SER
1	M	48	GLN
1	M	49	ARG
1	M	51	ARG
1	M	56	LEU
1	M	66	GLN
1	M	67	PHE
1	M	68	LYS
1	M	72	CYS
1	M	85	HIS
1	M	86	ILE
1	M	87	GLU
1	M	88	LEU
1	M	116	LYS
1	M	117	ILE
1	M	118	ASP
1	M	119	SER
1	M	121	ASN
1	M	147	LYS
1	M	148	MET
1	M	150	CYS
1	M	154	LEU

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Mol	Chain	Res	Type
1	M	155	SER
1	M	158	SER
1	M	159	ASP
1	M	163	LEU
1	M	164	SER
1	M	169	ASN
1	M	175	CYS
1	M	183	ARG
1	M	188	ARG
1	M	195	ARG
1	M	197	LYS
1	M	200	SER
1	M	206	ARG
1	M	207	LEU
1	M	208	LEU
1	M	209	SER
1	M	232	GLU
1	M	253	ARG
1	M	256	ILE
1	M	257	SER
1	M	258	VAL
1	M	262	SER
1	M	263	ARG
1	M	266	ASP
1	M	267	ASP
1	M	268	LEU
1	M	269	THR
1	M	271	LYS
1	M	322	GLN
1	M	326	ARG
1	M	328	LEU
1	M	329	LYS
1	M	330	SER
1	M	335	LEU
1	M	341	ARG
1	M	343	ARG
1	M	357	THR
1	M	374	ARG
1	M	385	THR
1	M	398	VAL
1	M	421	LEU
1	M	426	ARG

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Mol	Chain	Res	Type
1	M	430	ILE
1	M	434	TYR
1	M	436	TRP
1	M	442	ILE
1	M	452	ARG
1	M	459	MET
1	M	460	SER
1	M	472	SER
1	M	475	ARG
1	M	476	LEU
1	M	479	SER
1	M	495	MET
1	M	507	ILE
1	M	511	THR
1	M	513	VAL
1	M	523	ASN
1	M	533	THR
1	M	534	LEU
1	M	552	VAL
1	M	555	ILE
1	M	559	VAL
1	M	579	THR
1	M	583	ILE
1	M	592	ILE
1	M	605	ASN
1	M	618	ILE
1	M	639	ILE
1	M	655	ILE
1	M	663	LEU
1	M	669	SER
1	M	682	MET
1	M	686	THR
1	M	708	LEU
1	M	717	ARG
1	M	730	GLN
1	M	732	ARG
1	M	733	ASP
1	M	758	LYS
1	M	762	ILE
1	M	764	ILE
1	M	770	CYS
1	M	773	GLN

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Mol	Chain	Res	Type
1	M	775	ILE
1	M	776	VAL
1	M	781	ILE
1	M	785	PHE
1	M	801	GLU
1	M	802	SER
1	M	814	LEU
1	M	817	GLN
1	M	827	ARG
1	M	833	THR
1	M	837	THR
1	M	843	ILE
1	M	846	ARG
1	M	857	ARG
1	M	861	THR
1	M	864	ASN
1	M	869	ILE
1	M	886	TYR
1	M	905	ILE
1	M	919	ASN
1	M	921	ILE
1	M	922	GLU
1	M	946	CYS
1	M	947	LYS
1	M	948	PHE
1	M	969	ASN
1	M	985	LEU
1	M	989	ILE
1	M	1001	THR
1	M	1086	THR
1	M	1087	PHE
1	M	1089	TYR
1	M	1092	VAL
1	M	1093	SER
1	M	1095	LYS
1	M	1097	VAL
1	M	1098	THR
1	M	1103	ARG
1	M	1104	LEU
1	M	1112	LYS
1	M	1114	ILE
1	M	1119	LEU

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Mol	Chain	Res	Type
1	M	1127	ILE
1	M	1140	GLN
1	M	1160	ASP
1	M	1162	GLN
1	M	1166	ILE
1	M	1169	ASP
1	M	1183	GLU
1	M	1246	ILE
1	M	1248	ASP
1	M	1250	ASP
1	M	1260	ILE
1	M	1261	GLU
1	M	1277	ILE
1	M	1278	SER
1	M	1309	GLU
1	M	1314	THR
1	M	1323	MET
1	M	1328	VAL
1	M	1341	ILE
1	M	1347	ILE
1	M	1350	THR
1	M	1351	ARG
1	M	1355	LEU
1	M	1374	LEU
1	M	1387	LEU
1	M	1395	ILE
1	M	1397	ARG
1	M	1399	GLU
1	M	1400	THR
1	M	1403	LEU
1	M	1411	THR
1	M	1442	MET
1	M	1444	THR
1	M	1449	ILE
1	M	1459	TYR
2	N	35	LEU
2	N	82	ILE
2	N	89	MET
2	N	201	GLU
2	N	212	LYS
2	N	226	ARG
2	N	235	LEU

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Mol	Chain	Res	Type
2	N	241	ILE
2	N	244	MET
2	N	246	ARG
2	N	255	ILE
2	N	262	ILE
2	N	290	ASP
2	N	310	ILE
2	N	311	GLN
2	N	327	THR
2	N	329	VAL
2	N	332	GLU
2	N	337	TYR
2	N	352	THR
2	N	402	LEU
2	N	426	ARG
2	N	427	GLU
2	N	429	ASN
2	N	430	LEU
2	N	438	ILE
2	N	439	ILE
2	N	447	LEU
2	N	456	LYS
2	N	459	MET
2	N	469	LEU
2	N	485	ASN
2	N	488	ILE
2	N	493	LYS
2	N	500	LEU
2	N	502	ASN
2	N	507	MET
2	N	524	ASN
2	N	550	GLU
2	N	552	LEU
2	N	565	LYS
2	N	573	LEU
2	N	619	ILE
2	N	654	ARG
2	N	655	TYR
2	N	657	ILE
2	N	662	ARG
2	N	663	PHE
2	N	668	LEU

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Mol	Chain	Res	Type
2	N	669	VAL
2	N	690	SER
2	N	715	ARG
2	N	740	ILE
2	N	745	ILE
2	N	747	PHE
2	N	750	HIS
2	N	752	GLN
2	N	753	SER
2	N	757	THR
2	N	778	MET
2	N	780	THR
2	N	785	LEU
2	N	794	THR
2	N	797	SER
2	N	818	CYS
2	N	831	ASN
2	N	834	SER
2	N	835	ILE
2	N	839	LEU
2	N	840	PHE
2	N	870	THR
2	N	872	LEU
2	N	879	TYR
2	N	900	ILE
2	N	901	ILE
2	N	962	ILE
2	N	981	MET
2	N	993	GLN
2	N	995	ILE
2	N	999	ILE
2	N	1000	ILE
2	N	1011	THR
2	N	1035	PRO
2	N	1056	ARG
2	N	1060	VAL
2	N	1079	THR
2	N	1080	TYR
2	N	1083	ARG
2	N	1092	ILE
2	N	1112	SER
2	N	1117	LEU

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Mol	Chain	Res	Type
2	N	1122	MET
2	N	1129	SER
2	N	1145	ASP
2	N	1152	CYS
2	N	1197	SER
2	N	1200	ILE
2	N	1205	PHE
3	O	9	ILE
3	O	14	LYS
3	O	57	MET
3	O	59	ASP
3	O	69	ILE
3	O	76	ILE
3	O	84	LEU
3	O	120	ARG
3	O	126	SER
3	O	127	ASN
3	O	129	SER
3	O	130	LEU
3	O	146	CYS
3	O	242	ASN
3	O	249	LEU
3	O	252	LEU
4	P	9	ASP
4	P	13	LEU
4	P	23	ASP
4	P	25	LEU
4	P	31	LYS
4	P	40	GLN
4	P	43	ARG
4	P	67	ARG
4	P	84	ARG
4	P	85	PHE
4	P	87	LYS
4	P	95	THR
4	P	96	LEU
4	P	97	CYS
4	P	98	CYS
4	P	99	GLU
4	P	132	LYS
5	Q	7	ASN
5	Q	44	MET

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Mol	Chain	Res	Type
5	Q	48	MET
5	Q	52	LEU
5	Q	84	ILE
5	Q	139	ILE
5	Q	148	HIS
5	Q	162	ARG
5	Q	168	THR
5	Q	174	GLN
5	Q	195	ARG
5	Q	200	SER
5	Q	209	CYS
6	R	60	SER
6	R	74	TYR
6	R	82	ARG
6	R	115	LEU
6	R	120	ILE
6	R	128	LEU
6	R	142	ILE
7	S	51	ASP
7	S	59	LYS
7	S	61	ARG
7	S	66	GLN
7	S	68	PHE
7	S	101	PHE
7	S	114	HIS
8	T	14	THR
8	T	25	SER
8	T	27	ILE
8	T	36	MET
8	T	37	ASN
8	T	38	LEU
8	T	39	THR
8	T	40	LEU
8	T	57	LEU
8	T	59	ILE
8	T	62	ASN
8	T	63	LEU
8	T	65	SER
8	T	70	GLU
9	U	3	ASN
9	U	13	MET
9	U	20	LYS

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Mol	Chain	Res	Type
9	U	25	LEU
9	U	26	ARG
9	U	30	ARG
9	U	42	LYS
9	U	44	TYR
9	U	47	GLU
9	U	57	THR
9	U	60	HIS
9	U	61	ASP
9	U	68	LEU
9	U	74	GLU
9	U	75	CYS
9	U	77	ARG
9	U	78	CYS
9	U	79	HIS
9	U	88	THR
9	U	94	ASP
9	U	100	ILE
9	U	112	GLU
9	U	113	GLN
10	V	1	MET
10	V	2	ILE
10	V	3	ILE
10	V	5	ILE
10	V	13	VAL
10	V	20	THR
10	V	41	GLN
10	V	44	CYS
10	V	45	CYS
10	V	46	ARG
10	V	47	ARG
10	V	49	ILE
10	V	56	ILE
11	W	12	LEU
11	W	54	ARG
11	W	72	LEU
11	W	73	ARG
11	W	83	LYS
11	W	86	ILE
12	X	20	MET
12	X	24	CYS
12	X	27	CYS

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Mol	Chain	Res	Type
12	X	44	CYS
12	X	48	VAL

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. There are no such sidechains identified.

5.3.3 RNA ⓘ

There are no RNA chains in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

5.6 Ligand geometry ⓘ

Of 18 ligands modelled in this entry, 18 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	1496/1752 (85%)	0.27	42 (2%) 50 30	51, 150, 385, 628	0
1	M	1476/1752 (84%)	0.51	124 (8%) 11 8	83, 199, 449, 672	0
2	B	1150/1210 (95%)	0.22	12 (1%) 79 56	69, 143, 314, 580	0
2	N	1150/1210 (95%)	0.57	64 (5%) 24 14	85, 222, 419, 618	0
3	C	263/297 (88%)	0.03	0 100 100	80, 126, 252, 477	0
3	O	263/297 (88%)	0.27	3 (1%) 77 53	125, 190, 350, 511	0
4	D	130/135 (96%)	0.43	3 (2%) 57 35	128, 240, 360, 596	0
4	P	130/135 (96%)	0.55	6 (4%) 31 19	152, 287, 414, 545	0
5	E	207/210 (98%)	0.05	3 (1%) 72 47	70, 164, 293, 516	0
5	Q	207/210 (98%)	0.15	3 (1%) 72 47	119, 181, 373, 501	0
6	F	83/142 (58%)	-0.22	0 100 100	70, 97, 170, 232	0
6	R	83/142 (58%)	-0.07	1 (1%) 75 51	111, 126, 200, 335	0
7	G	170/172 (98%)	0.42	5 (2%) 49 30	92, 199, 323, 514	0
7	S	170/172 (98%)	1.01	28 (16%) 2 3	122, 240, 388, 494	0
8	H	124/125 (99%)	0.16	3 (2%) 56 34	82, 138, 298, 408	0
8	T	124/125 (99%)	0.45	8 (6%) 18 12	115, 197, 344, 429	0
9	I	111/113 (98%)	0.42	3 (2%) 52 31	98, 239, 367, 549	0
9	U	111/113 (98%)	1.25	21 (18%) 2 2	151, 330, 482, 585	0
10	J	64/71 (90%)	0.05	0 100 100	85, 108, 220, 304	0
10	V	64/71 (90%)	0.15	0 100 100	137, 203, 326, 373	0
11	K	119/123 (96%)	-0.06	0 100 100	60, 126, 221, 319	0
11	W	119/123 (96%)	0.39	3 (2%) 54 33	76, 168, 295, 470	0
12	L	45/63 (71%)	-0.03	0 100 100	93, 177, 299, 481	0
12	X	45/63 (71%)	0.82	8 (17%) 2 3	153, 277, 425, 580	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å ²)	Q<0.9
All	All	7904/8826 (89%)	0.36	340 (4%)	34	20	51, 181, 397, 672	0

All (340) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
11	W	119	GLU	14.3
9	U	39	ALA	10.7
1	A	107	CYS	9.2
1	M	1239	LEU	8.6
1	A	1195	LEU	8.4
9	U	40	THR	8.4
2	N	919	GLN	8.1
9	U	41	SER	7.6
1	M	1206	LEU	7.4
1	M	1168	GLU	7.3
1	A	1464	ALA	6.9
1	M	195	ARG	6.8
1	M	1242	ARG	6.2
11	W	118	VAL	6.0
9	U	42	LYS	5.9
2	N	921	HIS	5.7
1	M	1317	ILE	5.6
1	M	1207	ASP	5.6
4	P	97	CYS	5.5
1	M	322	GLN	5.2
1	M	1202	ARG	5.2
1	M	317	GLN	5.1
1	M	156	ALA	5.0
9	U	23	ARG	4.9
1	M	1157	TYR	4.9
2	N	96	THR	4.8
2	N	152	ILE	4.8
1	M	1195	LEU	4.8
9	U	57	THR	4.8
9	U	22	ASP	4.7
9	U	113	GLN	4.6
1	M	1246	ILE	4.6
9	U	83	ALA	4.6
1	A	1475	THR	4.5
7	S	163	THR	4.5
1	M	204	GLU	4.5
1	M	157	GLY	4.3

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Mol	Chain	Res	Type	RSRZ
1	A	1170	LYS	4.3
1	M	1086	THR	4.3
1	M	261	THR	4.2
1	M	314	ILE	4.2
2	N	457	ARG	4.2
7	S	90	ALA	4.2
1	M	328	LEU	4.1
2	N	920	LEU	4.0
1	M	1238	LYS	4.0
7	S	162	ALA	4.0
1	M	922	GLU	4.0
7	S	172	LEU	3.9
7	S	81	ARG	3.9
2	N	860	MET	3.9
2	N	153	GLY	3.9
2	N	83	TYR	3.9
1	M	184	LYS	3.9
1	M	1170	LYS	3.9
2	N	922	ALA	3.9
1	M	1127	ILE	3.9
1	A	1156	HIS	3.8
1	A	225	LEU	3.8
2	N	907	ILE	3.8
1	M	41	GLU	3.8
1	M	51	ARG	3.7
1	M	86	ILE	3.7
2	N	490	ARG	3.7
2	N	234	ARG	3.7
9	U	37	ILE	3.6
1	M	1148	THR	3.6
1	M	316	GLY	3.6
9	U	24	VAL	3.6
1	M	1090	ALA	3.6
1	M	95	ILE	3.5
1	M	286	GLU	3.5
7	S	151	THR	3.5
1	A	1465	VAL	3.5
1	M	93	PHE	3.5
4	P	46	ASN	3.4
7	S	158	ILE	3.4
1	M	246	PRO	3.4
12	X	34	GLN	3.4

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Mol	Chain	Res	Type	RSRZ
2	N	434	VAL	3.3
1	M	1253	ALA	3.3
1	M	1265	PHE	3.3
1	A	144	CYS	3.3
2	N	56	LEU	3.3
1	A	315	ALA	3.3
1	M	116	LYS	3.3
1	M	1197	ARG	3.3
7	S	106	PRO	3.3
2	N	77	ILE	3.2
7	G	81	ARG	3.2
7	S	138	ILE	3.2
2	N	328	GLY	3.2
1	A	232	GLU	3.2
8	T	2	SER	3.2
1	M	260	GLY	3.2
5	Q	50	ARG	3.2
7	S	165	LYS	3.1
7	S	12	ILE	3.1
1	M	1169	ASP	3.1
2	N	323	ARG	3.1
1	M	58	PRO	3.1
2	B	303	CYS	3.1
2	B	306	GLU	3.1
2	N	427	GLU	3.1
1	M	271	LYS	3.1
2	B	709	GLU	3.1
9	U	93	GLY	3.1
4	P	96	LEU	3.1
7	S	107	LEU	3.0
1	A	203	PRO	3.0
1	M	1191	GLN	3.0
1	A	1168	GLU	3.0
1	M	158	SER	3.0
2	N	119	MET	3.0
1	M	1083	THR	3.0
9	U	30	ARG	3.0
7	S	43	TYR	3.0
7	S	125	THR	3.0
1	M	267	ASP	3.0
7	G	158	ILE	3.0
1	M	1167	GLU	3.0

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Mol	Chain	Res	Type	RSRZ
2	N	884	ASP	2.9
2	N	327	THR	2.9
2	N	637	GLU	2.9
1	A	1253	ALA	2.9
1	M	203	PRO	2.9
12	X	19	THR	2.9
1	M	245	LEU	2.9
1	A	1242	ARG	2.9
1	M	1158	ASP	2.9
2	N	345	GLU	2.9
2	N	901	ILE	2.9
12	X	32	THR	2.9
2	N	324	GLY	2.9
1	M	320	ALA	2.9
1	M	424	HIS	2.9
9	U	38	ALA	2.9
1	M	1243	CYS	2.8
2	N	246	ARG	2.8
1	M	1088	HIS	2.8
1	A	1477	GLN	2.8
1	M	102	LYS	2.8
7	S	89	ASP	2.8
1	M	3	GLY	2.8
3	O	146	CYS	2.8
4	D	24	MET	2.8
9	I	4	PHE	2.8
7	S	150	GLY	2.8
5	Q	117	ILE	2.8
1	A	130	TYR	2.7
1	M	155	SER	2.7
1	M	107	CYS	2.7
1	M	166	PRO	2.7
2	N	706	VAL	2.7
1	M	17	GLU	2.7
7	S	115	LEU	2.7
1	A	229	GLY	2.7
8	T	81	TYR	2.7
11	W	41	LEU	2.7
2	N	906	PRO	2.7
9	I	25	LEU	2.7
1	A	1154	GLU	2.7
1	M	145	LYS	2.7

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Mol	Chain	Res	Type	RSRZ
9	U	47	GLU	2.7
2	N	705	GLU	2.6
12	X	22	TYR	2.6
1	M	1216	ALA	2.6
4	D	93	LEU	2.6
1	A	1480	GLU	2.6
2	N	472	TYR	2.6
1	M	1256	ASP	2.6
1	M	205	LYS	2.6
1	A	1466	PRO	2.6
8	T	7	LEU	2.6
1	M	259	ASP	2.6
1	A	230	LEU	2.6
1	M	1087	PHE	2.6
1	A	1243	CYS	2.6
1	A	343	ARG	2.6
1	M	1227	LEU	2.6
2	N	249	GLU	2.6
1	A	322	GLN	2.6
2	B	296	MET	2.6
1	M	208	LEU	2.6
7	S	154	ASP	2.6
2	N	415	TYR	2.6
2	N	202	ARG	2.6
8	T	91	VAL	2.6
2	N	145	GLU	2.6
1	M	1261	GLU	2.6
1	M	321	LEU	2.6
1	A	1200	LEU	2.5
5	Q	124	GLN	2.5
2	N	287	ILE	2.5
2	N	47	GLN	2.5
2	N	606	ARG	2.5
2	N	495	ALA	2.5
8	T	8	ASP	2.5
1	M	1190	LYS	2.5
7	S	140	LYS	2.5
7	S	147	LYS	2.5
9	U	45	ARG	2.5
7	S	27	LEU	2.5
2	N	818	CYS	2.5
8	T	58	GLN	2.5

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Mol	Chain	Res	Type	RSRZ
2	N	296	MET	2.5
1	M	128	GLN	2.5
1	M	1260	ILE	2.5
1	M	1176	PHE	2.5
2	N	407	PHE	2.5
1	A	1197	ARG	2.5
2	N	270	ILE	2.5
12	X	30	ARG	2.5
7	S	149	VAL	2.5
7	S	139	GLU	2.4
1	M	325	GLY	2.4
8	T	113	ARG	2.4
1	M	923	ASN	2.4
9	U	48	LEU	2.4
1	M	162	ASP	2.4
1	A	228	LEU	2.4
1	M	1182	GLU	2.4
1	M	277	LYS	2.4
3	O	147	LYS	2.4
2	N	266	ILE	2.4
1	A	1463	THR	2.4
1	M	202	LEU	2.4
2	B	346	LEU	2.4
2	N	429	ASN	2.4
1	A	1159	PRO	2.4
1	M	1081	GLN	2.4
1	M	903	TYR	2.4
1	M	1204	LYS	2.4
1	M	298	TYR	2.3
1	A	1474	GLY	2.3
1	M	92	VAL	2.3
5	E	46	CYS	2.3
6	R	119	LYS	2.3
2	N	303	CYS	2.3
1	M	54	GLY	2.3
1	M	165	ASN	2.3
1	M	1252	LYS	2.3
1	M	1156	HIS	2.3
2	B	919	GLN	2.3
1	A	116	LYS	2.3
1	M	1203	ALA	2.3
4	D	50	PRO	2.3

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Mol	Chain	Res	Type	RSRZ
1	A	1462	GLY	2.3
1	A	1483	GLY	2.3
2	N	634	ARG	2.3
2	N	346	LEU	2.3
7	S	153	THR	2.3
9	U	56	THR	2.3
7	S	80	TRP	2.3
1	M	4	ILE	2.2
2	N	943	VAL	2.2
1	A	1177	PHE	2.2
9	U	88	THR	2.2
1	M	1095	LYS	2.2
1	A	45	GLU	2.2
1	M	144	CYS	2.2
1	M	182	ILE	2.2
1	M	90	LYS	2.2
7	S	109	VAL	2.2
12	X	49	MET	2.2
2	N	1199	ASN	2.2
1	M	159	ASP	2.2
1	A	87	GLU	2.2
9	U	52	ASN	2.2
2	N	421	CYS	2.2
1	M	1161	PRO	2.2
2	N	509	CYS	2.2
4	P	98	CYS	2.2
1	M	1264	VAL	2.2
7	G	71	PHE	2.2
1	A	106	GLU	2.2
5	E	132	GLU	2.2
5	E	129	THR	2.2
1	A	1476	SER	2.2
1	M	164	SER	2.2
1	M	1234	ASP	2.2
1	M	1084	LEU	2.2
1	M	258	VAL	2.2
1	M	1179	ILE	2.2
2	N	869	SER	2.1
1	M	1215	VAL	2.1
1	M	1040	LEU	2.1
1	M	1245	ILE	2.1
1	M	21	PHE	2.1

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Mol	Chain	Res	Type	RSRZ
2	B	699	GLN	2.1
2	N	957	MET	2.1
4	P	18	GLU	2.1
1	A	102	LYS	2.1
1	A	600	LYS	2.1
1	M	100	LYS	2.1
2	N	796	ARG	2.1
2	B	119	MET	2.1
2	B	310	ILE	2.1
9	I	74	GLU	2.1
7	G	56	ASP	2.1
7	S	152	ARG	2.1
7	G	100	PHE	2.1
1	M	196	GLY	2.1
1	M	1162	GLN	2.1
12	X	21	ILE	2.1
2	B	430	LEU	2.1
1	M	1089	TYR	2.1
9	U	90	SER	2.1
12	X	23	LEU	2.1
2	B	325	SER	2.1
2	N	380	GLU	2.1
8	H	29	ALA	2.1
1	M	194	LYS	2.1
1	M	1212	MET	2.1
4	P	8	GLU	2.1
2	N	708	GLU	2.1
1	M	169	ASN	2.1
1	M	1225	ARG	2.1
1	M	708	LEU	2.1
2	B	921	HIS	2.1
2	N	1093	HIS	2.1
2	N	272	PHE	2.0
2	N	80	GLY	2.0
1	M	115	LEU	2.0
1	M	1091	GLY	2.0
2	N	97	THR	2.0
1	M	265	GLU	2.0
1	M	1453	GLN	2.0
7	S	91	ILE	2.0
1	M	187	LEU	2.0
8	H	110	LYS	2.0

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Mol	Chain	Res	Type	RSRZ
2	N	866	PRO	2.0
8	T	16	VAL	2.0
1	A	1160	ASP	2.0
1	M	160	ASN	2.0
1	M	1387	LEU	2.0
2	N	549	LEU	2.0
2	N	891	GLY	2.0
3	O	231	MET	2.0
8	H	113	ARG	2.0

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

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

6.3 Carbohydrates ⓘ

There are no carbohydrates in this entry.

6.4 Ligands ⓘ

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. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. 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	RSR	LLDF	B-factors(Å ²)	Q<0.9
14	MG	A	2458	1/1	1.66	37.54	109,109,109,109	0
13	ZN	A	2457	1/1	0.20	-0.22	122,122,122,122	0
13	ZN	N	2225	1/1	0.22	-0.66	180,180,180,180	0
13	ZN	I	1122	1/1	0.12	-0.79	126,126,126,126	0
13	ZN	B	2225	1/1	0.18	-0.90	149,149,149,149	0
13	ZN	X	1071	1/1	0.07	-1.04	195,195,195,195	0
13	ZN	M	2456	1/1	0.17	-1.09	432,432,432,432	0
13	ZN	C	1269	1/1	0.08	-1.16	122,122,122,122	0
13	ZN	L	1071	1/1	0.10	-1.18	123,123,123,123	0
13	ZN	M	2457	1/1	0.15	-1.36	172,172,172,172	0
13	ZN	J	1066	1/1	0.23	-1.49	87,87,87,87	0
13	ZN	A	2456	1/1	0.07	-1.70	245,245,245,245	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
13	ZN	V	1066	1/1	0.20	-1.90	155,155,155,155	0
13	ZN	O	1269	1/1	0.11	-1.92	189,189,189,189	0
14	MG	M	2458	1/1	0.26	-2.10	197,197,197,197	0
13	ZN	I	1121	1/1	0.07	-2.34	160,160,160,160	0
13	ZN	U	1121	1/1	0.06	-2.43	284,284,284,284	0
13	ZN	U	1122	1/1	0.05	-4.42	240,240,240,240	0

6.5 Other polymers ⓘ

There are no such residues in this entry.