



Full wwPDB X-ray Structure Validation Report

Feb 26, 2014 – 11:24 PM GMT

PDB ID : 2PMZ
Title : Archaeal RNA polymerase from Sulfolobus solfataricus
Authors : Murakami, K.S.
Deposited on : 2007-04-23
Resolution : 3.40 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>

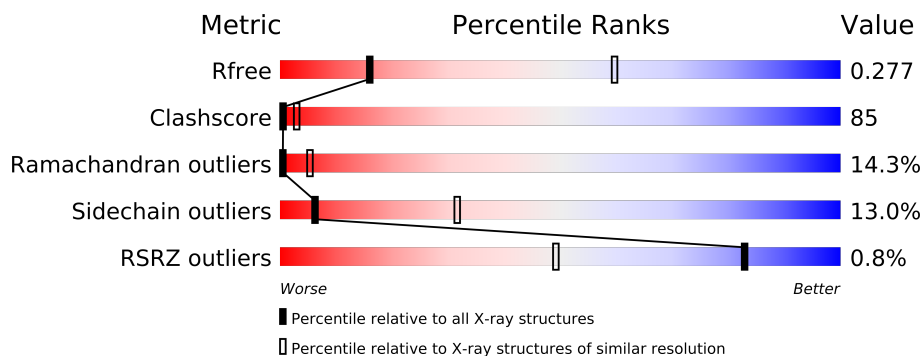
The following versions of software and data (see [references](#)) were used in the production of this report:

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 3.40 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.



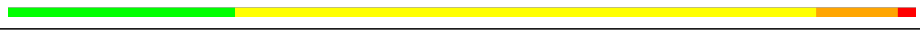
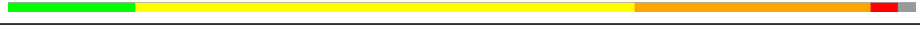
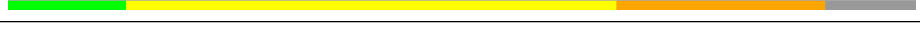
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	66092	1017 (3.52-3.28)
Clashscore	79885	1214 (3.50-3.30)
Ramachandran outliers	78287	1177 (3.50-3.30)
Sidechain outliers	78261	1177 (3.50-3.30)
RSRZ outliers	66119	1017 (3.52-3.28)

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	880	
1	Q	880	
2	C	392	
2	G	392	
3	B	1124	
3	R	1124	
4	D	265	
4	S	265	
5	E	180	
5	T	180	
6	F	113	
6	U	113	
7	H	84	
7	V	84	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
8	K	95	
8	W	95	
9	L	92	
9	X	92	
10	N	66	
10	Y	66	
11	P	48	
11	Z	48	

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

Mol	Type	Chain	Res	Geometry	Electron density
13	MG	Q	1003	-	X

2 Entry composition

There are 14 unique types of molecules in this entry. The entry contains 48122 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 subunit A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	776	Total	C	N	O	S	0	0	0
			6173	3936	1081	1135	21			
1	Q	776	Total	C	N	O	S	0	0	0
			6173	3936	1081	1135	21			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	C	279	Total	C	N	O	S	0	0	0
			2169	1376	375	412	6			
2	G	279	Total	C	N	O	S	0	0	0
			2169	1376	375	412	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	B	1090	Total	C	N	O	S	0	0	0
			8645	5483	1529	1602	31			
3	R	1090	Total	C	N	O	S	0	0	0
			8645	5483	1529	1602	31			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D	264	Total	C	N	O	S	0	0	0
			2114	1355	342	403	14			
4	S	264	Total	C	N	O	S	0	0	0
			2114	1355	342	403	14			

- Molecule 5 is a protein called DNA-directed RNA polymerase subunit E.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	E	176	Total	C	N	O	S	0	0	0
			1402	903	236	259	4			
5	T	176	Total	C	N	O	S	0	0	0
			1402	903	236	259	4			

- Molecule 6 is a protein called DNA-directed RNA polymerase subunit F.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F	89	Total	C	N	O	S	0	0	0
			694	433	115	142	4			
6	U	89	Total	C	N	O	S	0	0	0
			694	433	115	142	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	H	74	Total	C	N	O		0	0	0
			611	397	109	105				
7	V	74	Total	C	N	O		0	0	0
			611	397	109	105				

- Molecule 8 is a protein called DNA-directed RNA polymerase subunit K.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	K	82	Total	C	N	O	S	0	0	0
			658	420	121	116	1			
8	W	82	Total	C	N	O	S	0	0	0
			658	420	121	116	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	L	92	Total	C	N	O	S	0	0	0
			723	459	121	141	2			
9	X	92	Total	C	N	O	S	0	0	0
			723	459	121	141	2			

- Molecule 10 is a protein called DNA-directed RNA polymerase subunit N.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	N	64	Total	C	N	O	S	0	0	0
			514	326	94	88	6			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	Y	64	Total	C	N	O	S	0	0	0
			514	326	94	88	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	P	43	Total	C	N	O	S	0	0	0
			346	230	58	53	5			
11	Z	43	Total	C	N	O	S	0	0	0
			346	230	58	53	5			

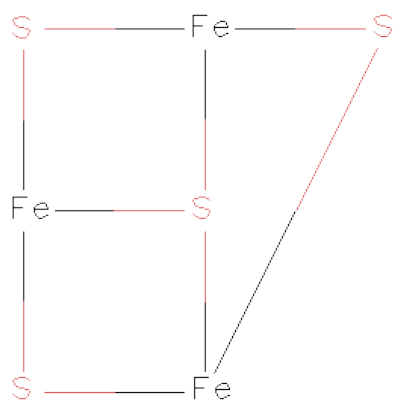
- Molecule 12 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
12	P	1	Total	Zn	0	0
			1	1		
12	Q	1	Total	Zn	0	0
			1	1		
12	B	1	Total	Zn	0	0
			1	1		
12	Z	1	Total	Zn	0	0
			1	1		
12	A	1	Total	Zn	0	0
			1	1		
12	N	1	Total	Zn	0	0
			1	1		
12	R	1	Total	Zn	0	0
			1	1		
12	Y	1	Total	Zn	0	0
			1	1		

- Molecule 13 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
13	Q	1	Total	Mg	0	0
			1	1		
13	A	1	Total	Mg	0	0
			1	1		

- Molecule 14 is FE3-S4 CLUSTER (three-letter code: F3S) (formula: Fe₃S₄).



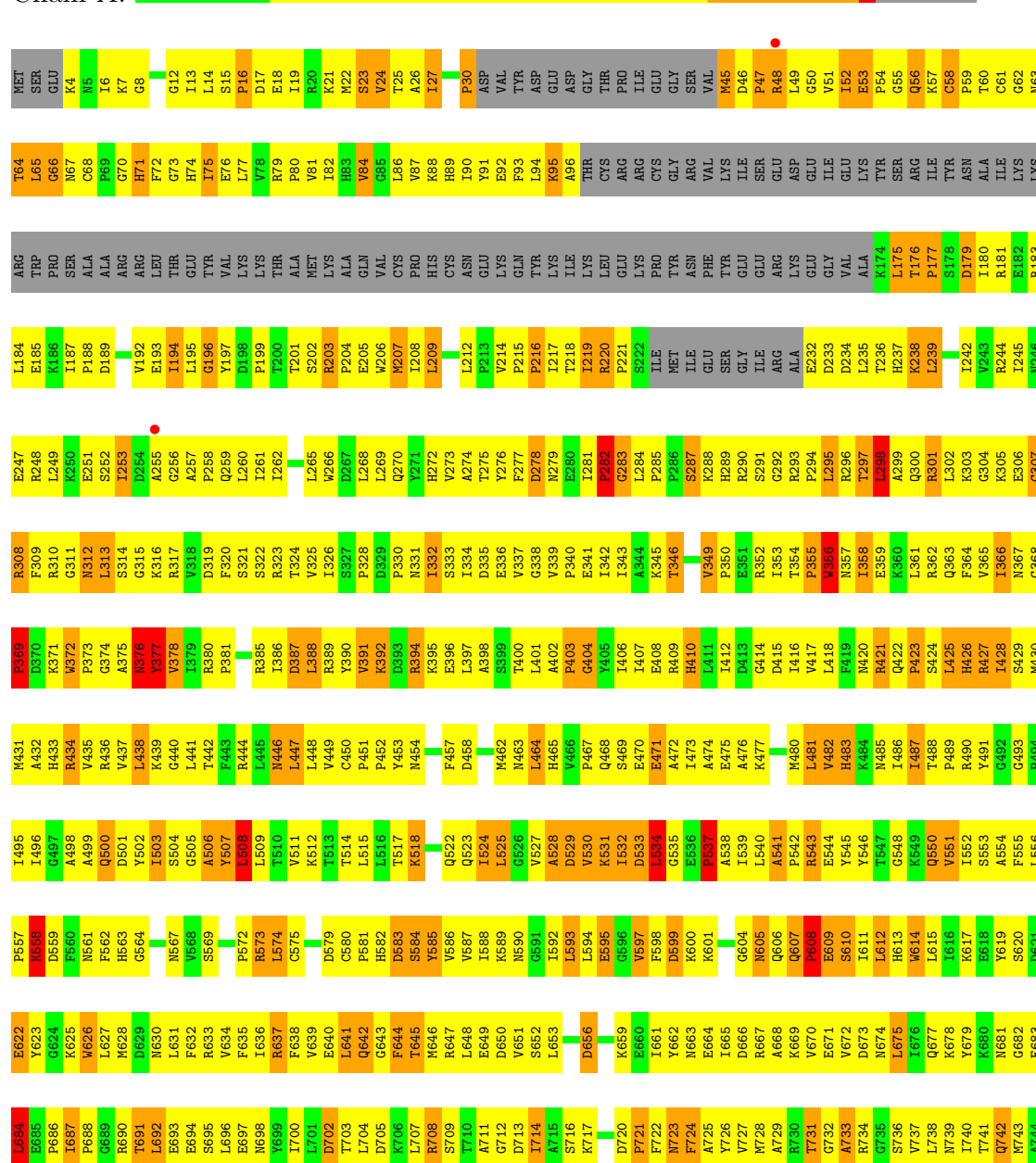
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
14	D	1	Total	Fe	S	0	0
			7	3	4		
14	S	1	Total	Fe	S	0	0
			7	3	4		

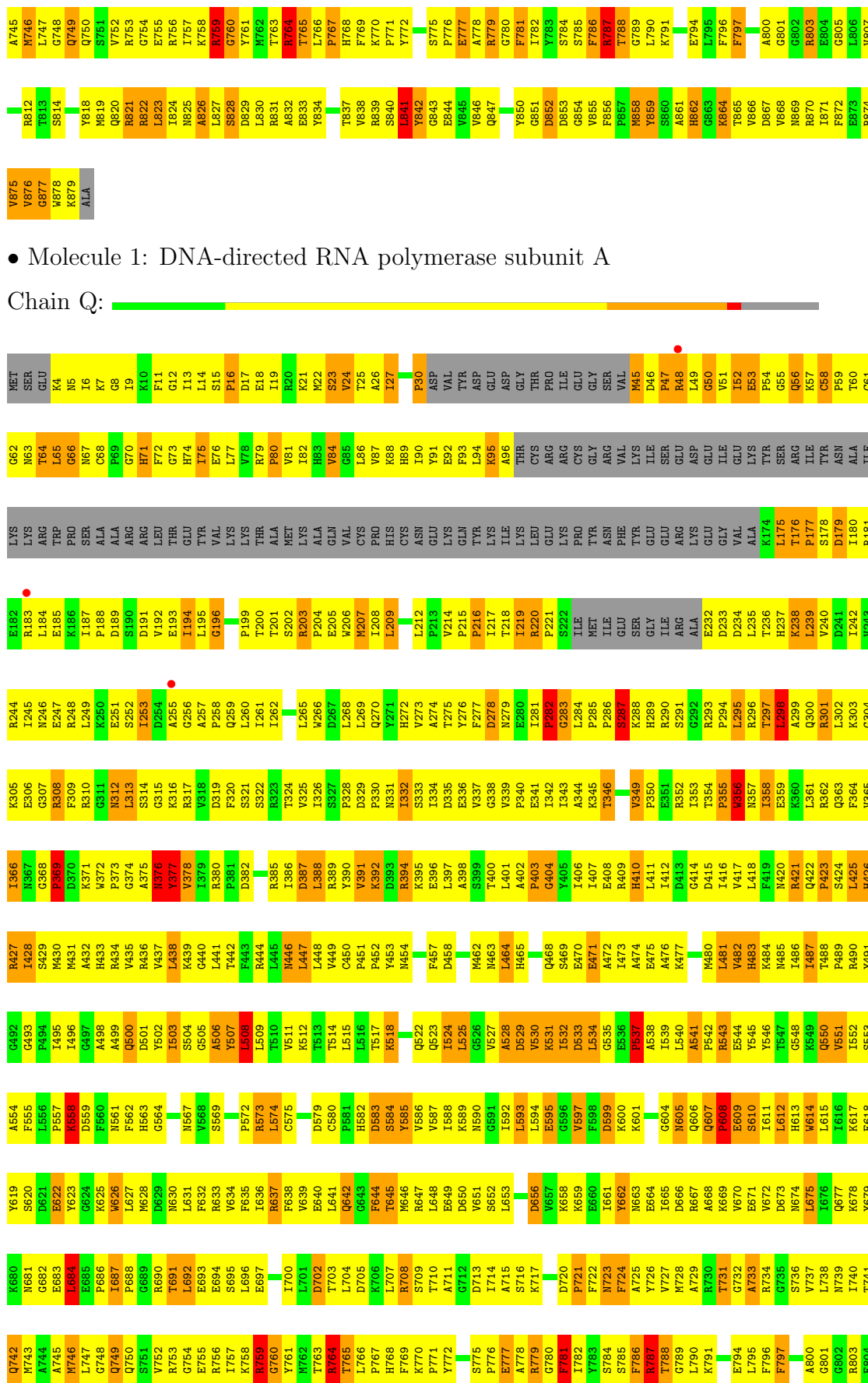
3 Residue-property plots

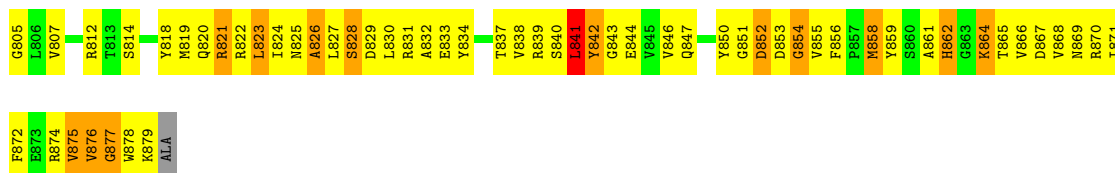
These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according 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 subunit A

Chain A:

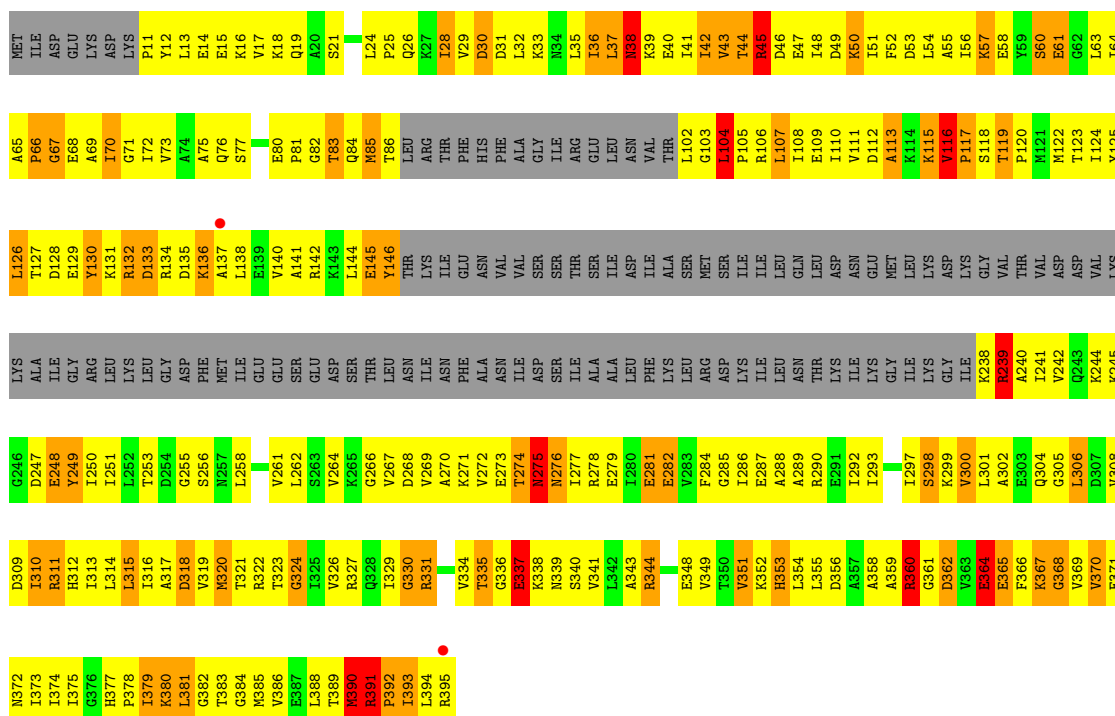






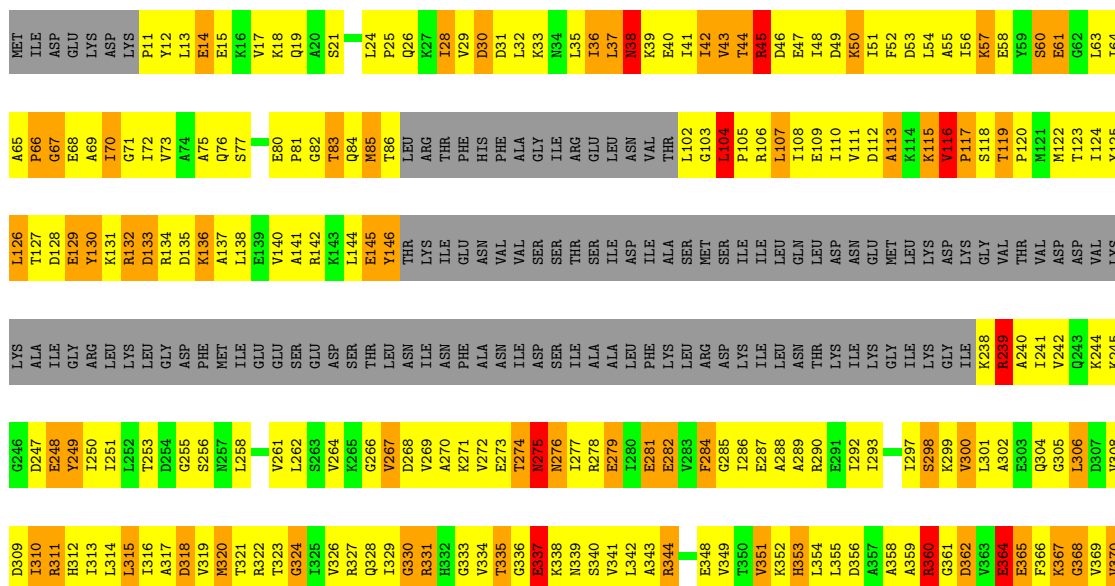
- Molecule 2: DNA-directed RNA polymerase subunit A''

Chain C:



- Molecule 2: DNA-directed RNA polymerase subunit A''

Chain G:

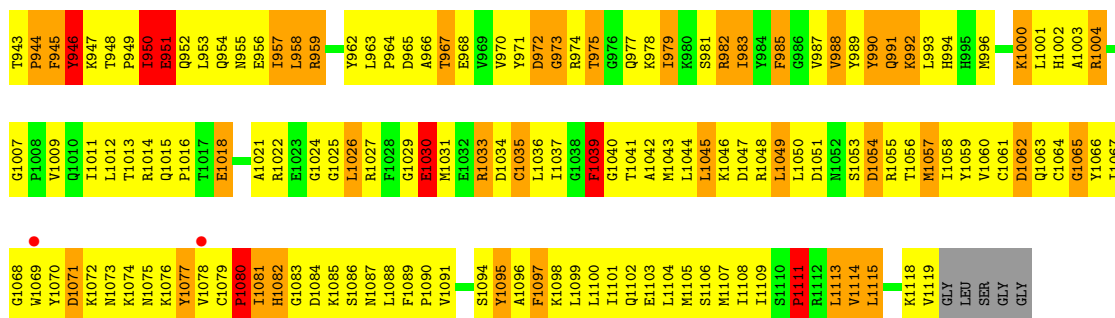


E371	N372	I373	I374	I375	G376	G377	P378	P379	K380	L381	G382	T383	G384	M385	E386	E387	L388	T389	K390	P392	I393	L394	R395
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

• Molecule 3: DNA-directed RNA polymerase subunit B

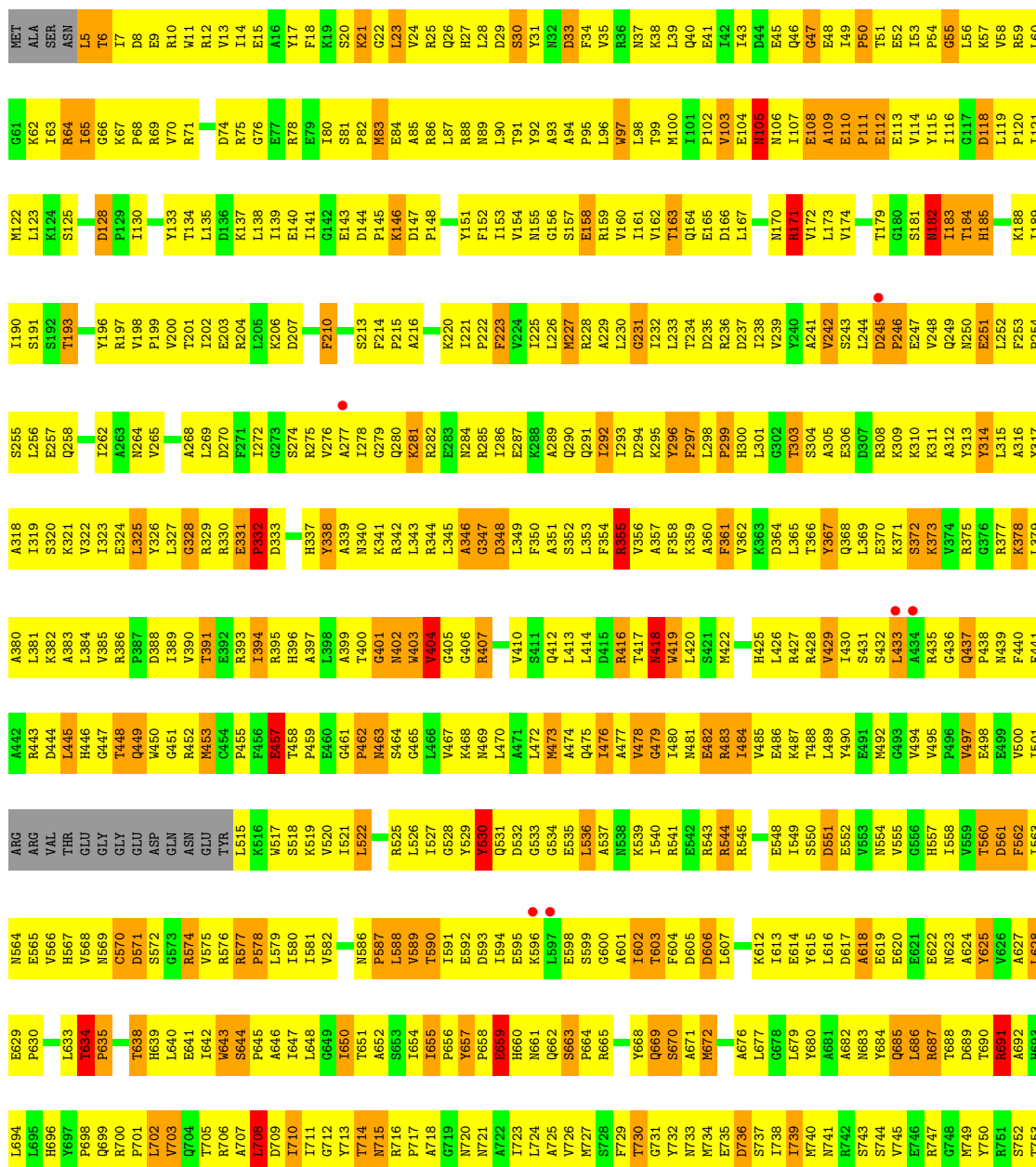
Chain B:

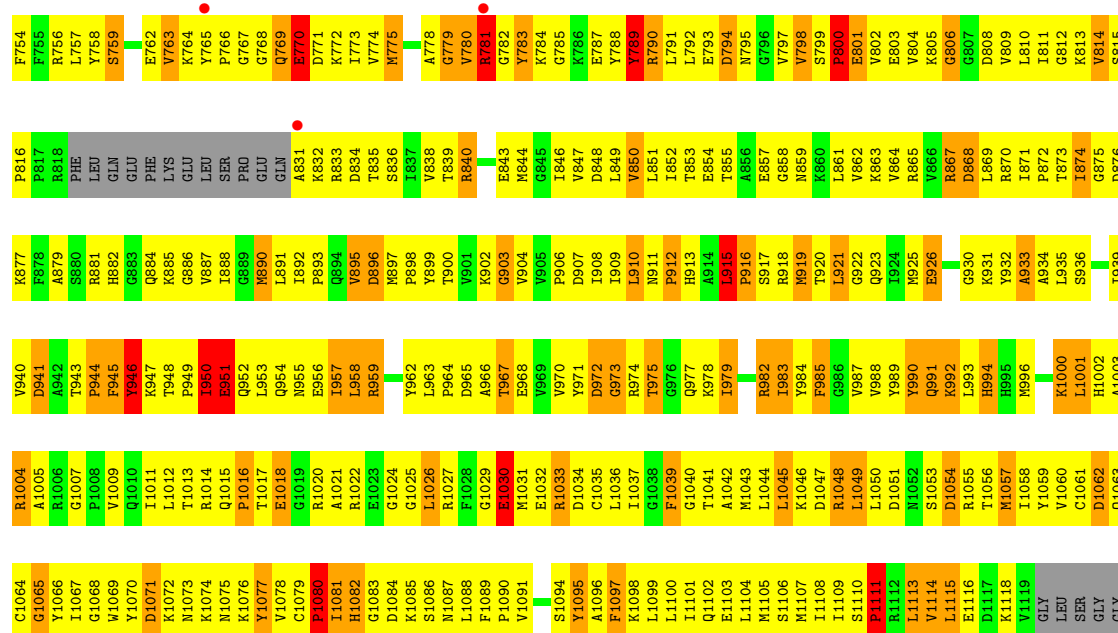
F878	F879	P817	F755	L694	E629	E565	ARG	R443	L381	S320	E257	I196	D128	R64	F878	F879	P817	F755	L694	E629	E565	ARG	R443	L381	S320	E257	I196	D128	R64
R818	R819	PHE	R757	L695	P630	V566	VAL	D444	K382	K321	Q258	R197	I128	T65	R818	R819	PHE	R757	L695	P630	V566	VAL	D444	K382	K321	Q258	R197	I128	T65
R881	R882	LEU	R758	L696	T633	V568	THR	L445	A383	V322	I262	Y198	I130	G66	R881	R882	LEU	R758	L696	T633	V568	THR	L445	A383	V322	I262	Y198	I130	G66
R882	R883	GLN	S759	Q698	P635	V569	GLY	H446	V385	E324	A263	P199	I130	K67	R882	R883	GLN	S759	Q698	P635	V569	GLY	H446	V385	E324	A263	P199	I130	K67
R883	R884	GLU		Q699	P635	C570	GLY	T448	R386	L325	N264	V200	Y133	R69	R883	R884	GLU		Q699	P635	C570	GLY	T448	R386	L325	N264	V200	Y133	R69
R884	R885	PHE	E762	R701	T638	D571	GLU	Q449	F387	Y326	V265	T201	T134	V70	R884	R885	PHE	E762	R701	T638	D571	GLU	Q449	F387	Y326	V265	T201	T134	V70
R885	R886	LYS	R763	R702	T638	S572	ASP	W450	D388	L327	T202	L202	L135	R71	R885	R886	LYS	R763	R702	T638	S572	ASP	W450	D388	L327	T202	L202	L135	R71
R886	R887	GLU	R764	L702	H639	E573	GLN	Q451	L389	G328	E203	R204	D136	D74	R886	R887	GLU	R764	L702	H639	E573	GLN	Q451	L389	G328	E203	R204	D136	D74
R887	R888	LEU	R765	W703	L640	R574	ASN	R452	V390	R329	D270	R204	L138	G75	R887	R888	LEU	R765	W703	L640	R574	ASN	R452	V390	R329	D270	R204	L138	G75
R888	R889	SER	R766	Q704	E841	V575	GLU	M453	T391	R330	D270	R204	L138	G75	R888	R889	SER	R766	Q704	E841	V575	GLU	M453	T391	R330	D270	R204	L138	G75
R889	R890	PRO	R767	T705	I642	R576	TYR	C454	E392	R331	F271	K206	L139	E77	R889	R890	PRO	R767	T705	I642	R576	TYR	C454	E392	R331	F271	K206	L139	E77
R890	R891	GLU	R768	R706	W443	R577	LEU	P455	R393	P332	L272	G207	E140	E77	R890	R891	GLU	R768	R706	W443	R577	LEU	P455	R393	P332	L272	G207	E140	E77
R891	R892	GLN	R769	A707	S644	P578	GLY	F456	T394	D333	G273	G208	G142	E79	R891	R892	GLN	R769	A707	S644	P578	GLY	F456	T394	D333	G273	G208	G142	E79
R892	R893	R832	E770	L708	P645	L579	LEU	W517	R395	D334	S274	T209	G141	E79	R892	R893	R832	E770	L708	P645	L579	LEU	W517	R395	D334	S274	T209	G141	E79
R893	R894	R833	D771	D709	A646	L580	LEU	S518	H396	D334	R275	F210	E143	E79	R893	R894	R833	D771	D709	A646	L580	LEU	S518	H396	D334	S274	T209	G141	E79
R894	R895	R833	D772	R710	I647	L581	LEU	P459	A397	H337	V276	H211	E144	S81	R894	R895	R833	D772	R710	I647	L581	LEU	P459	A397	H337	V276	H211	E144	S81
R895	R896	D834	I773	L711	I650	V582	LEU	E460	L398	H337	A277	V212	E145	P82	R895	R896	D834	I773	L711	I650	V582	LEU	E460	L398	H337	A277	V212	E144	S81
R896	R897	R835	M774	G712	T650	N586	LEU	G461	A399	Y338	L278	S213	K146	P82	R896	R897	R835	M774	G712	T650	N586	LEU	G461	A399	Y338	L278	S213	K146	P82
R897	R898	R836	M775	G713	T651	L522	LEU	P462	T400	N340	G279	F214	E84	R83	R897	R898	R836	M775	G713	T651	L522	LEU	P462	T400	N340	G279	F214	E84	R83
R898	R899	R837		T714	A652	P587	LEU	M463	G401	K341	Q280	P215	P148	R83	R898	R899	R837		T714	A652	P587	LEU	M463	G401	K341	Q280	P215	P148	R83
R899	R900	R838	A778	R715	S653	L587	LEU	N402	N402	R342	K281	A216		R83	R899	R900	R838	A778	R715	S653	L587	LEU	N402	N402	R342	K281	A216		R83
R900	R901	R839	R779	R716	I654	V589	LEU	G465	V403	L343	R282	L87	E151	R83	R900	R901	R839	R779	R716	I654	V589	LEU	G465	V403	L343	R282	L87	E151	R83
R901	R902	R840	R780	R717	I655	T590	LEU	L466	V404	R344	E283	K220	F152	R83	R901	R902	R840	R780	R717	I655	T590	LEU	L466	V404	R344	E283	K220	F152	R83
R902	R903		R781	A718	P656	L591	LEU	V467	G405	L345	N294	I221	F153	R89	R902	R903		R781	A718	P656	L591	LEU	V467	G405	L345	N294	I221	F153	R89
R903	R904	R844	R782	G719	P657	E592	LEU	W468	A406	A346	R285	F223	V154	Q26	R903	R904	R844	R782	G719	P657	E592	LEU	W468	A406	A346	R285	F223	V154	Q26
R904	R905	R844	R783	R720	P658	D593	LEU	M469	R407	G347	I286	F222	N155	T91	R904	R905	R844	R783	R720	P658	D593	LEU	M469	R407	G347	I286	F222	N155	T91
R905	R906		R784	R721	S659	L594	LEU	L470	V410	D348	E287	V224	G156	Y92	R905	R906		R784	R721	S659	L594	LEU	L470	V410	D348	E287	V224	G156	Y92
R906	R907		R785	A722	H660	E595	LEU	A471	V410	L349	K286	I225	F162	L28	R906	R907		R785	A722	H660	E595	LEU	A471	V410	L349	K286	I225	F162	L28
R907	R908		R786	R723	N661	K596	LEU	L472	V411	F350	A289	L226	E158	A94	R907	R908		R786	R723	N661	K596	LEU	L472	V411	F350	A289	L226	E158	A94
R908	R909		R787	L724	Q662	L597	LEU	M473	Q412	A351	Q290	R227	F159	P95	R908	R909		R787	L724	Q662	L597	LEU	M473	Q412	A351	Q290	R227	F159	P95
R909	R910		R788	A725	S663	E598	LEU	A474	L413	S352	Q291	R228	V160	L96	R909	R910		R788	A725	S663	E598	LEU	A474	L413	S352	Q291	R228	V160	L96
R910	R911	R850	R789	R726	P664	S599	LEU	Q475	L414	L353	I292	A229	I161	W97	R910	R911	R850	R789	R726	P664	S599	LEU	Q475	L414	L353	I292	A229	I161	W97
R911	R912		R790	R727	R665	G600	LEU	I476	D415	F354	I293	L230	V162	L98	R911	R912		R790	R727	R665	G600	LEU	I476	D415	F354	I293	L230	V162	L98
R912	R913		R791	S728	N666	A601	LEU	A477	R416	R355	K286	I225	T163	T99	R912	R913		R791	S728	N666	A601	LEU	A477	R416	R355	K286	I225	T163	T99
R913	R914	R853	R792	R729	T667	L602	LEU	Q478	Q417	V356	K295	L232	Q164	H00	R913	R914	R853	R792	R729	T667	L602	LEU	Q478	Q417	V356	K295	L232	Q164	H00
R914	R915	R854	R793	R730	Q668	L603	LEU	G479	R418	A357	I296	L233	E165	I101	R914	R915	R854	R793	R730	Q668	L603	LEU	G479	R418	A357	I296	L233	E165	I101
R915	R916		R794	G731	Q669	F604	LEU	W480	W419	F358	L297	T234	D166	F102	R915	R916		R794	G731	Q669	F604	LEU	W480	W419	F358	L297	T234	D166	F102
R916	R917		R795	R732	S670	D605	LEU	M481	L420	K359	D298	D235	V103	F103	R916	R917		R795	R732	S670	D605	LEU	M481	L420	K359	D298	D235	V103	F103
R917	R918		R796	R733	A671	D606	LEU	E482	S421	A360	P299	R236	T179	E104	R917	R918		R796	R733	A671	D606	LEU	E482	S421	A360	P299	R236	T179	E104
R918	R919		R797	R734	M672	L607	LEU	R483	Q422	F361	H300	D237	N170	N105	R918	R919		R797	R734	M672	L607	LEU	R483	Q422	F361	H300	D237	N170	N105
R919	R920	R859	R798	R735	E672	V608	LEU	I484	Q422	V362	L301	I238	E172	N106	R919	R920	R859	R798	R735	E672	V608	LEU	I484	Q422	V362	L301	I238	E172	N106
R920	R921		R799	D736	A676	R736	LEU	W485	H425	K363	G302	I238	V172	I107	R920	R921		R799	D736	A676	R736	LEU	W485	H425	K363	G302	I238	V172	I107
R921	R922	R860	R800	R737	L677	K612	LEU	E486	L426	R363	T303	V239	L173	Q46	R921	R922	R860	R800	R737	L677	K612	LEU	E486	L426	R363	T303	V239	L173	Q46
R922	R923	R862	R801	R738	Q678	L613	LEU	K487	R427	L365	S304	A241	E110	A109	R922	R923	R862	R801	R738	Q678	L613	LEU	K487	R427	L365	S304	A241	E110	A109
R923	R924	R863	R802	R739	L679	E614	LEU	T488	R428	T366	A305	V242	E110	E149	R923	R924	R863	R802	R739	L679	E614	LEU	T488	R428	T366	A305	V242	E110	E149
R924	R925	R864	R803	R740	Y680	V615	LEU	L489	Q429	V367	E306	S243	T179	P111	R924	R925	R864	R803											



• Molecule 3: DNA-directed RNA polymerase subunit B

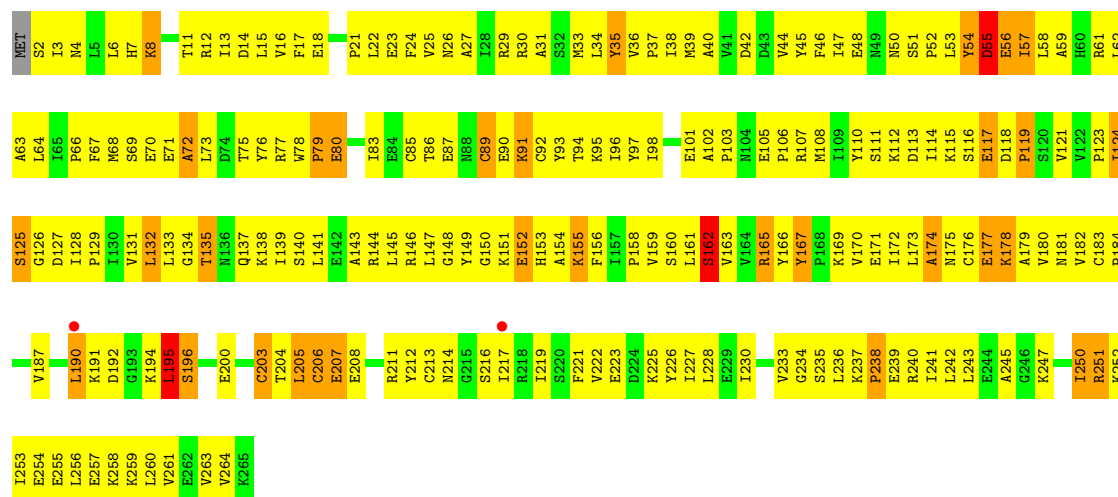
Chain R:





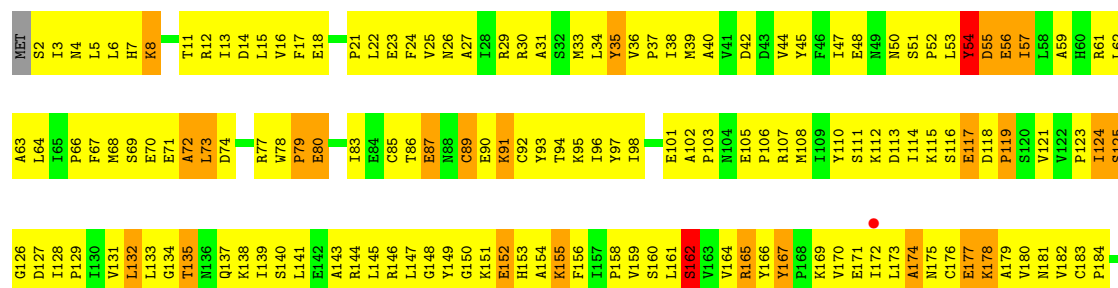
• Molecule 4: DNA-directed RNA polymerase subunit D

Chain D:



• Molecule 4: DNA-directed RNA polymerase subunit D

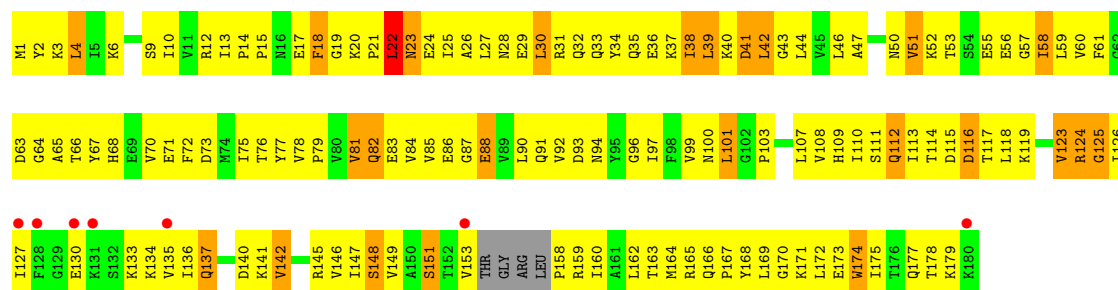
Chain S:





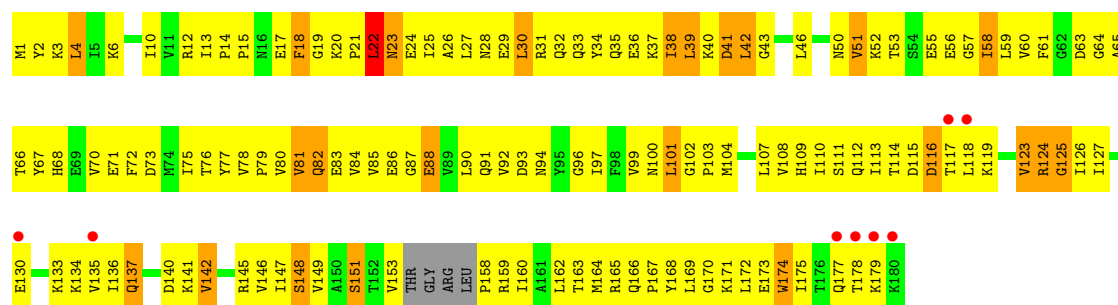
• Molecule 5: DNA-directed RNA polymerase subunit E

Chain E:



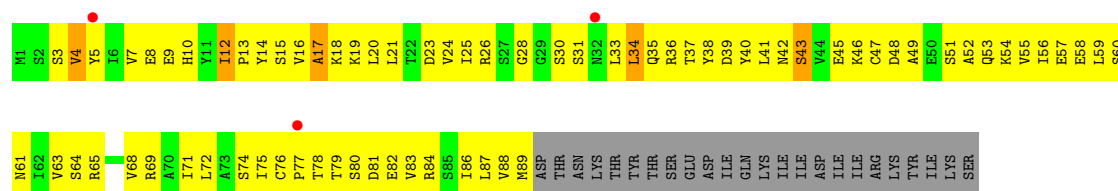
• Molecule 5: DNA-directed RNA polymerase subunit E

Chain T:



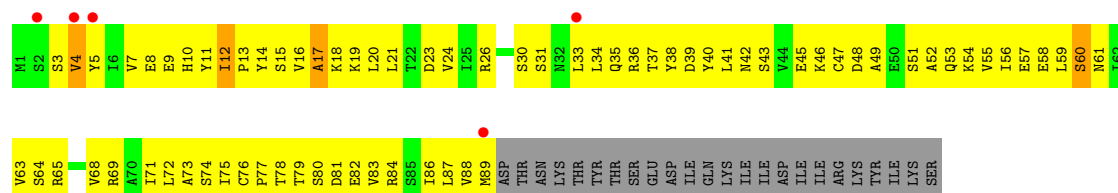
• Molecule 6: DNA-directed RNA polymerase subunit F

Chain F:



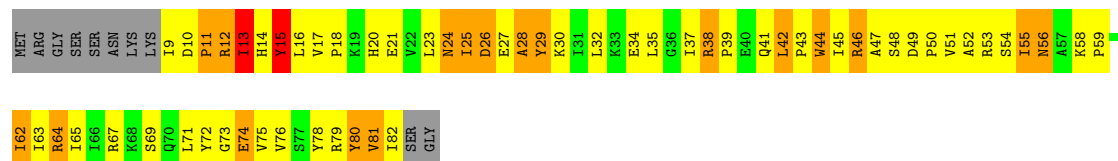
• Molecule 6: DNA-directed RNA polymerase subunit F

Chain U:



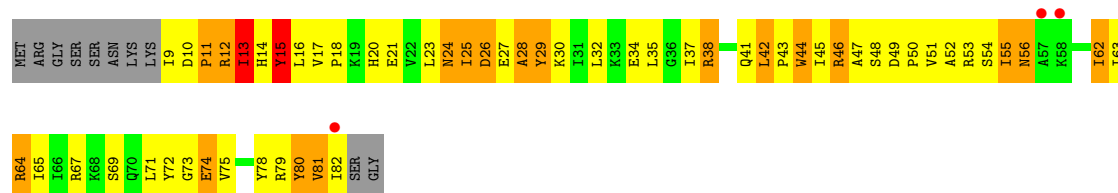
- Molecule 7: DNA-directed RNA polymerase subunit H

Chain H:



- Molecule 7: DNA-directed RNA polymerase subunit H

Chain V:



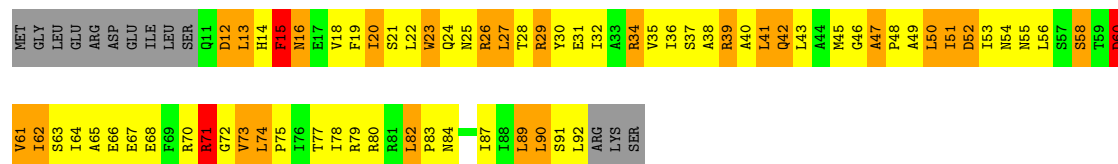
- Molecule 8: DNA-directed RNA polymerase subunit K

Chain K:



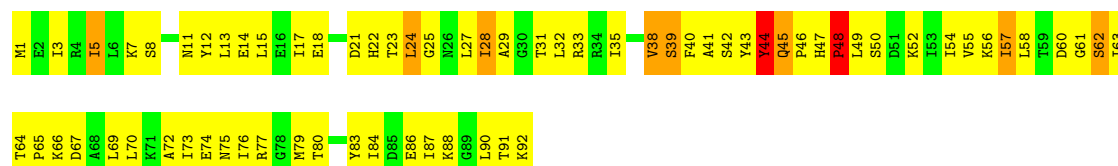
- Molecule 8: DNA-directed RNA polymerase subunit K

Chain W:



- Molecule 9: DNA-directed RNA polymerase subunit L

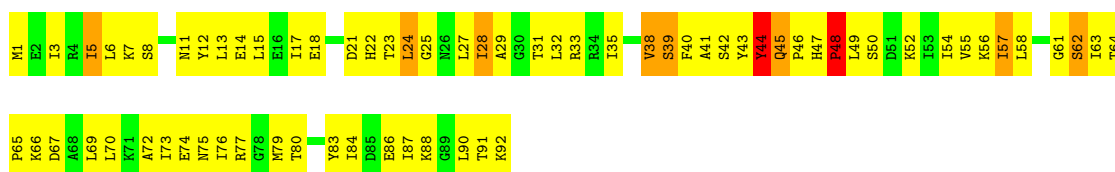
Chain L:



- Molecule 9: DNA-directed RNA polymerase subunit L

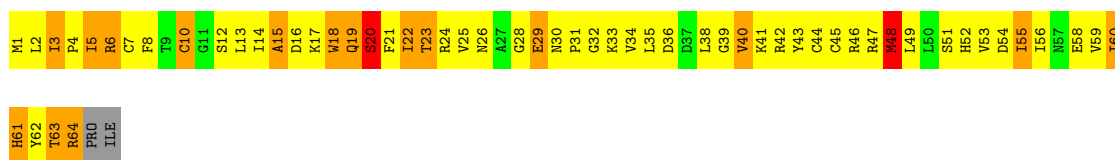
Chain X:





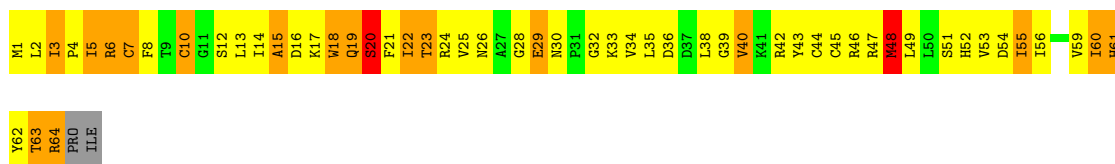
• Molecule 10: DNA-directed RNA polymerase subunit N

Chain N:



• Molecule 10: DNA-directed RNA polymerase subunit N

Chain Y:



• Molecule 11: DNA-directed RNA polymerase subunit P

Chain P:



• Molecule 11: DNA-directed RNA polymerase subunit P

Chain Z:



4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	125.82Å 201.24Å 196.05Å 90.00° 100.92° 90.00°	Depositor
Resolution (Å)	39.79 – 3.40 39.79 – 3.40	Depositor EDS
% Data completeness (in resolution range)	80.4 (39.79-3.40) 80.3 (39.79-3.40)	Depositor EDS
R_{merge}	0.10	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.73 (at 3.40Å)	Xtriage
Refinement program	REFMAC 5.2	Depositor
R, R_{free}	0.274 , 0.343 0.272 , 0.277	Depositor DCC
R_{free} test set	5323 reflections (5.31%)	DCC
Wilson B-factor (Å ²)	79.3	Xtriage
Anisotropy	0.345	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.28 , 43.8	EDS
Estimated twinning fraction	No twinning to report.	Xtriage
L-test for twinning	$\langle L \rangle = 0.41$, $\langle L^2 \rangle = 0.23$	Xtriage
Outliers	0 of 105618 reflections	Xtriage
F_o, F_c correlation	0.86	EDS
Total number of atoms	48122	wwPDB-VP
Average B, all atoms (Å ²)	93.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 6.66% 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, F3S, 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	0.48	0/6306	0.80	4/8539 (0.0%)
1	Q	0.46	0/6306	0.79	4/8539 (0.0%)
2	C	0.46	0/2189	0.81	0/2947
2	G	0.43	0/2189	0.80	0/2947
3	B	0.46	0/8810	0.79	5/11921 (0.0%)
3	R	0.45	0/8810	0.79	3/11921 (0.0%)
4	D	0.40	0/2152	0.68	0/2911
4	S	0.37	0/2152	0.67	0/2911
5	E	0.38	0/1423	0.69	0/1919
5	T	0.37	0/1423	0.69	0/1919
6	F	0.35	0/701	0.63	0/949
6	U	0.35	0/701	0.62	0/949
7	H	0.44	0/625	0.76	0/848
7	V	0.41	0/625	0.76	0/848
8	K	0.50	0/667	0.82	0/903
8	W	0.49	0/667	0.81	0/903
9	L	0.39	0/733	0.72	0/986
9	X	0.38	0/733	0.72	0/986
10	N	0.38	0/523	0.75	0/705
10	Y	0.37	0/523	0.74	0/705
11	P	0.45	0/354	0.68	0/475
11	Z	0.46	0/354	0.67	0/475
All	All	0.44	0/48966	0.77	16/66206 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
3	B	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
3	R	0	1
4	D	0	1
4	S	0	1
All	All	0	4

There are no bond length outliers.

All (16) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	841	LEU	CA-CB-CG	7.67	132.93	115.30
1	Q	841	LEU	CA-CB-CG	7.56	132.69	115.30
3	B	436	GLY	N-CA-C	-6.16	97.70	113.10
3	R	436	GLY	N-CA-C	-5.97	98.17	113.10
1	A	508	LEU	N-CA-C	-5.89	95.11	111.00
3	B	522	LEU	CA-CB-CG	5.79	128.62	115.30
3	B	946	TYR	N-CA-C	5.64	126.23	111.00
1	Q	508	LEU	N-CA-C	-5.52	96.11	111.00
1	Q	787	ARG	N-CA-C	-5.50	96.16	111.00
3	R	522	LEU	CA-CB-CG	5.47	127.87	115.30
3	B	1039	PHE	N-CA-C	-5.37	96.50	111.00
1	A	787	ARG	N-CA-C	-5.33	96.60	111.00
3	R	946	TYR	N-CA-C	5.30	125.31	111.00
1	Q	854	GLY	N-CA-C	-5.22	100.05	113.10
1	A	534	LEU	CA-CB-CG	5.16	127.16	115.30
3	B	45	GLU	N-CA-C	-5.01	97.46	111.00

There are no chirality outliers.

All (4) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
3	B	314	TYR	Sidechain
4	D	54	TYR	Sidechain
3	R	314	TYR	Sidechain
4	S	54	TYR	Sidechain

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	6173	0	6243	1147	0
1	Q	6173	0	6243	1128	0
2	C	2169	0	2288	501	0
2	G	2169	0	2288	526	0
3	B	8645	0	8782	1656	0
3	R	8645	0	8780	1698	0
4	D	2114	0	2145	357	0
4	S	2114	0	2145	348	0
5	E	1402	0	1467	222	0
5	T	1402	0	1467	246	0
6	F	694	0	705	129	0
6	U	694	0	705	139	0
7	H	611	0	641	117	0
7	V	611	0	641	125	0
8	K	658	0	692	161	0
8	W	658	0	692	174	0
9	L	723	0	749	94	0
9	X	723	0	749	91	0
10	N	514	0	528	159	0
10	Y	514	0	529	151	0
11	P	346	0	376	63	0
11	Z	346	0	375	58	0
12	A	1	0	0	0	0
12	B	1	0	0	0	0
12	N	1	0	0	0	0
12	P	1	0	0	0	0
12	Q	1	0	0	0	0
12	R	1	0	0	0	0
12	Y	1	0	0	0	0
12	Z	1	0	0	0	0
13	A	1	0	0	0	0
13	Q	1	0	0	0	0
14	D	7	0	0	4	0
14	S	7	0	0	3	0
All	All	48122	0	49230	8272	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 85.

All (8272) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:238:LYS:NZ	1:A:297:THR:HB	1.42	1.31
1:Q:238:LYS:NZ	1:Q:297:THR:HB	1.43	1.31
1:A:803:ARG:HG2	3:B:444:ASP:HA	1.20	1.17
1:A:308:ARG:HH21	3:B:1099:LEU:HD13	1.10	1.16
3:R:329:ARG:HD2	3:R:562:PHE:HB3	1.24	1.15
3:R:88:ARG:HD3	3:R:853:THR:HG21	1.25	1.15
11:Z:46:LYS:H	11:Z:46:LYS:HD2	1.06	1.15
3:B:329:ARG:HD2	3:B:562:PHE:HB3	1.24	1.14
11:P:46:LYS:HD2	11:P:46:LYS:H	1.06	1.14
3:B:88:ARG:HD3	3:B:853:THR:HG21	1.26	1.14
1:Q:803:ARG:HG2	3:R:444:ASP:HA	1.17	1.13
1:A:418:LEU:HD21	3:B:1044:LEU:HD21	1.24	1.12
3:B:560:THR:HG22	3:B:562:PHE:H	1.02	1.11
6:U:16:VAL:HG21	6:U:53:GLN:HG3	1.32	1.11
1:Q:290:ARG:HD2	1:Q:291:SER:H	1.11	1.11
4:D:190:LEU:HD22	4:D:195:LEU:HA	1.32	1.11
1:Q:308:ARG:HH21	3:R:1099:LEU:HD13	1.09	1.10
1:A:868:VAL:HG22	2:C:39:LYS:HZ3	1.11	1.10
2:C:274:THR:HG22	2:C:275:ASN:H	1.15	1.10
7:V:29:TYR:HA	7:V:32:LEU:HD12	1.16	1.10
3:B:640:LEU:CD2	3:B:641:GLU:H	1.65	1.10
3:R:560:THR:HG22	3:R:562:PHE:H	1.02	1.09
7:H:29:TYR:HA	7:H:32:LEU:HD12	1.12	1.09
3:R:581:ILE:HD11	3:R:614:GLU:HB2	1.31	1.08
3:R:458:THR:HG21	3:R:465:GLY:H	1.14	1.08
6:F:16:VAL:HG21	6:F:53:GLN:HG3	1.31	1.08
3:R:640:LEU:CD2	3:R:641:GLU:H	1.67	1.07
2:G:274:THR:HG22	2:G:275:ASN:H	1.11	1.07
2:G:340:SER:HB3	2:G:371:GLU:HG2	1.09	1.07
1:Q:418:LEU:HD21	3:R:1044:LEU:HD21	1.37	1.07
3:R:869:LEU:HD11	4:S:56:GLU:HB3	1.34	1.07
2:G:309:ASP:OD2	2:G:311:ARG:HD3	1.55	1.07
3:B:249:GLN:HG3	3:B:250:ASN:H	1.20	1.07
3:B:650:ILE:H	3:B:650:ILE:HD13	1.16	1.07
2:C:55:ALA:HA	2:C:58:GLU:HG3	1.37	1.06
7:H:12:ARG:H	7:H:12:ARG:HD3	1.18	1.06
4:S:190:LEU:HD22	4:S:195:LEU:HA	1.31	1.06
1:Q:369:PRO:HB3	1:Q:376:ASN:HB3	1.37	1.06
3:B:458:THR:HG21	3:B:465:GLY:H	1.14	1.06
2:C:340:SER:HB3	2:C:371:GLU:HG2	1.08	1.06
3:B:581:ILE:HD11	3:B:614:GLU:HB2	1.36	1.06
3:R:650:ILE:H	3:R:650:ILE:HD13	1.15	1.05
1:Q:866:VAL:HG12	1:Q:869:ASN:H	1.19	1.05

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:58:CYS:SG	1:A:59:PRO:HD2	1.95	1.05
1:A:290:ARG:HD2	1:A:291:SER:H	1.09	1.05
3:R:569:ASN:HB3	3:R:574:ARG:HH22	1.21	1.04
1:Q:575:CYS:SG	1:Q:580:CYS:HB3	1.97	1.04
3:B:640:LEU:HD23	3:B:641:GLU:H	1.18	1.04
2:G:286:ILE:HD12	7:V:45:ILE:HG13	1.36	1.04
2:G:390:MET:HB2	5:T:56:GLU:HG3	1.38	1.04
1:Q:874:ARG:HE	2:G:53:ASP:HB3	1.18	1.04
3:B:26:GLN:O	3:B:345:LEU:HD23	1.55	1.04
3:R:890:MET:HE2	3:R:891:LEU:H	1.21	1.04
4:D:191:LYS:HB2	4:D:194:LYS:HD2	1.37	1.04
3:B:569:ASN:HB3	3:B:574:ARG:HH22	1.24	1.03
7:V:12:ARG:H	7:V:12:ARG:HD3	1.17	1.03
4:S:191:LYS:HB2	4:S:194:LYS:HD2	1.41	1.03
3:R:705:THR:HG22	3:R:706:ARG:H	1.24	1.03
3:R:640:LEU:HD23	3:R:641:GLU:H	1.19	1.02
1:A:874:ARG:HE	2:C:53:ASP:HB3	1.19	1.02
2:C:340:SER:HB3	2:C:371:GLU:CG	1.87	1.02
1:A:575:CYS:SG	1:A:580:CYS:HB3	1.99	1.02
3:B:479:GLY:HA2	3:B:552:GLU:HB3	1.41	1.02
5:T:179:LYS:HE2	6:U:81:ASP:HB2	1.40	1.02
3:R:853:THR:HG22	3:R:854:GLU:H	1.24	1.02
3:B:1033:ARG:NH1	3:B:1034:ASP:OD2	1.90	1.02
3:R:242:VAL:HA	3:R:316:ALA:HB1	1.38	1.02
1:Q:868:VAL:HG22	2:G:39:LYS:HZ3	1.23	1.02
3:B:874:ILE:H	3:B:874:ILE:HD12	1.23	1.02
3:R:479:GLY:HA2	3:R:552:GLU:HB3	1.38	1.02
1:A:866:VAL:HG12	1:A:869:ASN:H	1.20	1.02
3:B:242:VAL:HA	3:B:316:ALA:HB1	1.38	1.02
1:Q:826:ALA:HB2	2:G:335:THR:HG23	1.38	1.02
2:G:340:SER:HB3	2:G:371:GLU:CG	1.89	1.02
1:Q:760:GLY:HA3	3:R:447:GLY:HA3	1.42	1.01
1:A:749:GLN:H	1:A:781:PHE:HA	1.24	1.01
1:Q:58:CYS:SG	1:Q:59:PRO:HD2	2.00	1.01
1:A:743:MET:HG3	3:B:919:MET:HE2	1.40	1.01
1:A:238:LYS:HZ1	1:A:297:THR:CB	1.71	1.01
1:A:365:VAL:HG23	1:A:388:LEU:HD11	1.43	1.01
2:G:69:ALA:HB2	2:G:381:LEU:HD22	1.43	1.01
3:R:582:VAL:HG13	3:R:586:ASN:H	1.21	1.01
3:R:65:ILE:HD12	3:R:65:ILE:H	1.22	1.01
1:A:830:LEU:HD23	1:A:840:SER:HB3	1.43	1.00
3:R:26:GLN:O	3:R:345:LEU:HD23	1.60	1.00

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:175:LEU:HD23	1:Q:176:THR:H	1.25	1.00
5:T:166:GLN:HB2	5:T:169:LEU:HD12	1.41	1.00
2:C:310:ILE:H	2:C:310:ILE:HD12	1.27	1.00
3:B:582:VAL:HG13	3:B:586:ASN:H	1.23	1.00
4:D:131:VAL:HG22	4:D:132:LEU:H	1.27	1.00
3:B:65:ILE:H	3:B:65:ILE:HD12	1.26	1.00
3:B:24:VAL:HG11	3:B:426:LEU:HD13	1.43	1.00
3:R:249:GLN:HG3	3:R:250:ASN:H	1.22	0.99
3:B:853:THR:HG22	3:B:854:GLU:H	1.26	0.99
2:C:309:ASP:OD2	2:C:311:ARG:HD3	1.61	0.99
10:N:35:LEU:HD22	10:N:40:VAL:HG21	1.43	0.99
1:Q:365:VAL:HG23	1:Q:388:LEU:HD11	1.42	0.99
3:R:197:ARG:NH2	3:R:359:LYS:HG2	1.75	0.99
1:A:79:ARG:HB2	1:A:266:TRP:CE3	1.97	0.99
1:A:293:ARG:HH11	1:A:296:ARG:NH2	1.59	0.99
2:C:102:LEU:HD23	2:C:103:GLY:N	1.77	0.99
2:C:329:ILE:HA	2:C:334:VAL:HG12	1.44	0.99
1:A:175:LEU:HD23	1:A:176:THR:H	1.25	0.99
1:A:369:PRO:HB3	1:A:376:ASN:HB3	1.41	0.99
3:B:108:GLU:O	3:B:110:GLU:HG3	1.63	0.99
3:B:890:MET:HE2	3:B:891:LEU:H	1.24	0.99
2:C:69:ALA:HB2	2:C:381:LEU:HD22	1.44	0.99
4:S:131:VAL:HG22	4:S:132:LEU:H	1.28	0.98
3:R:1033:ARG:NH1	3:R:1034:ASP:OD2	1.94	0.98
1:Q:293:ARG:HH11	1:Q:296:ARG:NH2	1.61	0.98
4:S:175:ASN:HA	4:S:195:LEU:HD11	1.45	0.98
1:Q:238:LYS:HZ1	1:Q:297:THR:HB	0.86	0.98
1:Q:176:THR:HG23	1:Q:179:ASP:HB2	1.46	0.98
3:R:47:GLY:HA2	3:R:58:VAL:O	1.62	0.98
3:B:197:ARG:NH2	3:B:359:LYS:HG2	1.79	0.98
1:A:826:ALA:HB2	2:C:335:THR:HG23	1.45	0.98
4:S:11:THR:O	4:S:238:PRO:HB3	1.64	0.98
3:B:557:HIS:N	3:B:623:ASN:HD21	1.61	0.98
5:E:166:GLN:HB2	5:E:169:LEU:HD12	1.42	0.98
3:B:588:LEU:HD13	3:B:612:LYS:HB3	1.44	0.97
2:G:55:ALA:HA	2:G:58:GLU:HG3	1.42	0.97
3:B:982:ARG:O	3:B:983:ILE:HG12	1.63	0.97
1:Q:749:GLN:H	1:Q:781:PHE:HA	1.24	0.97
1:Q:79:ARG:HB2	1:Q:266:TRP:CE3	1.99	0.97
3:R:201:THR:HG23	3:R:215:PRO:HG3	1.45	0.97
3:B:781:ARG:HD3	3:B:782:GLY:H	1.30	0.97
4:D:11:THR:O	4:D:238:PRO:HB3	1.63	0.97

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:238:LYS:HZ2	1:Q:276:TYR:HA	1.27	0.97
2:G:289:ALA:O	2:G:292:ILE:HG22	1.64	0.96
10:Y:35:LEU:HD22	10:Y:40:VAL:HG21	1.45	0.96
1:A:376:ASN:O	1:A:377:TYR:HB2	1.65	0.96
3:R:759:SER:HB2	3:R:862:VAL:O	1.64	0.96
3:B:557:HIS:H	3:B:623:ASN:HD21	1.03	0.96
5:T:53:THR:HB	5:T:71:GLU:H	1.28	0.96
3:B:628:LEU:HD23	3:B:628:LEU:H	1.29	0.96
2:C:104:LEU:HB3	2:C:105:PRO:HD3	1.47	0.96
4:D:175:ASN:HA	4:D:195:LEU:HD11	1.48	0.96
2:G:25:PRO:HD3	2:G:33:LYS:HD2	1.48	0.96
1:Q:830:LEU:HD23	1:Q:840:SER:HB3	1.45	0.96
2:C:286:ILE:HD12	7:H:45:ILE:HG13	1.48	0.96
3:B:47:GLY:HA2	3:B:58:VAL:O	1.66	0.96
2:G:102:LEU:HD23	2:G:103:GLY:N	1.80	0.96
1:Q:600:LYS:HE3	1:Q:732:GLY:HA2	1.48	0.96
3:R:982:ARG:O	3:R:983:ILE:HG12	1.64	0.95
3:B:201:THR:HG23	3:B:215:PRO:HG3	1.45	0.95
3:B:702:LEU:H	3:B:721:ASN:ND2	1.64	0.95
5:E:53:THR:HB	5:E:71:GLU:H	1.31	0.95
3:R:781:ARG:HD3	3:R:782:GLY:H	1.31	0.95
5:E:84:VAL:HG21	6:F:86:ILE:HG12	1.47	0.95
11:Z:26:CYS:SG	11:Z:29:CYS:HB2	2.06	0.95
3:B:1074:LYS:HB3	3:B:1076:LYS:HE2	1.49	0.95
1:A:354:THR:HB	1:A:355:PRO:HD2	1.48	0.95
1:Q:81:VAL:HG23	1:Q:209:LEU:HB2	1.48	0.95
4:S:98:ILE:HD11	4:S:114:ILE:HG23	1.47	0.95
1:A:290:ARG:HD2	1:A:291:SER:N	1.81	0.95
1:Q:376:ASN:O	1:Q:377:TYR:HB2	1.66	0.95
1:A:672:VAL:HG13	1:A:700:ILE:HD12	1.48	0.95
3:R:628:LEU:H	3:R:628:LEU:HD23	1.30	0.94
1:Q:653:LEU:HD11	1:Q:745:ALA:HB2	1.47	0.94
1:A:653:LEU:HD11	1:A:745:ALA:HB2	1.49	0.94
1:A:473:ILE:HD12	1:A:474:ALA:N	1.82	0.94
2:G:80:GLU:HB3	2:G:81:PRO:HD3	1.50	0.94
3:B:221:ILE:HG21	3:B:226:LEU:HG	1.49	0.94
1:Q:743:MET:HG3	3:R:919:MET:HE2	1.48	0.94
1:Q:855:VAL:HG22	2:G:64:ILE:HB	1.48	0.94
3:R:1060:VAL:HG12	3:R:1065:GLY:HA3	1.47	0.94
3:B:946:TYR:HD2	3:B:947:LYS:N	1.65	0.94
1:A:238:LYS:HZ2	1:A:276:TYR:HA	1.30	0.94
5:T:179:LYS:NZ	6:U:79:THR:HB	1.83	0.94

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:43:ILE:HG21	3:B:63:ILE:HD11	1.50	0.94
2:G:344:ARG:HB2	2:G:344:ARG:HH11	1.33	0.94
3:B:705:THR:HG22	3:B:706:ARG:H	1.31	0.94
3:R:702:LEU:H	3:R:721:ASN:HD21	0.96	0.94
1:A:765:THR:HG22	1:A:766:LEU:HD23	1.50	0.94
1:A:81:VAL:HG23	1:A:209:LEU:HB2	1.49	0.94
3:R:764:LYS:HZ3	3:R:814:VAL:H	0.95	0.94
3:R:764:LYS:HZ3	3:R:814:VAL:N	1.66	0.94
1:Q:803:ARG:CG	3:R:444:ASP:HA	1.97	0.93
5:T:84:VAL:HG21	6:U:86:ILE:HG12	1.50	0.93
2:C:25:PRO:HD3	2:C:33:LYS:HD2	1.48	0.93
2:G:329:ILE:HA	2:G:334:VAL:HG12	1.50	0.93
1:A:293:ARG:HH11	1:A:296:ARG:HH22	0.94	0.93
11:P:26:CYS:SG	11:P:29:CYS:HB2	2.07	0.93
1:Q:238:LYS:HZ1	1:Q:297:THR:CB	1.78	0.93
1:Q:650:ASP:HB3	1:Q:723:ASN:ND2	1.81	0.93
1:A:637:ARG:HH11	3:B:974:ARG:HH12	1.16	0.93
5:T:179:LYS:CE	6:U:81:ASP:HB2	1.97	0.93
1:A:650:ASP:HB3	1:A:723:ASN:ND2	1.82	0.93
3:R:946:TYR:HD2	3:R:947:LYS:N	1.67	0.93
1:Q:352:ARG:HD3	1:Q:406:ILE:HD12	1.50	0.93
1:A:855:VAL:HG22	2:C:64:ILE:HB	1.49	0.93
3:R:537:ALA:HB2	3:R:557:HIS:NE2	1.84	0.93
1:Q:290:ARG:HD2	1:Q:291:SER:N	1.82	0.93
1:A:90:ILE:HD11	1:A:207:MET:HB3	1.51	0.93
3:R:38:LYS:HG3	3:R:39:LEU:H	1.30	0.93
3:R:108:GLU:O	3:R:110:GLU:HG3	1.69	0.93
2:C:344:ARG:HH11	2:C:344:ARG:HB2	1.33	0.93
3:B:954:GLN:HA	3:B:957:ILE:HD11	1.50	0.93
1:A:803:ARG:CG	3:B:444:ASP:HA	1.97	0.92
3:R:339:ALA:HB2	3:R:618:ALA:HB3	1.50	0.92
1:A:176:THR:HG23	1:A:179:ASP:HB2	1.49	0.92
1:Q:868:VAL:HG22	2:G:39:LYS:NZ	1.83	0.92
3:R:686:LEU:HD12	3:R:686:LEU:H	1.33	0.92
3:B:686:LEU:H	3:B:686:LEU:HD12	1.34	0.92
1:Q:338:GLY:HA3	1:Q:444:ARG:HG2	1.49	0.92
10:Y:42:ARG:HG3	10:Y:43:TYR:H	1.33	0.92
2:C:270:ALA:HA	7:H:14:HIS:ND1	1.85	0.92
3:R:557:HIS:H	3:R:623:ASN:HD21	1.11	0.92
3:R:43:ILE:HG21	3:R:63:ILE:HD11	1.49	0.92
3:R:1004:ARG:HH11	3:R:1025:GLY:H	1.18	0.92
1:Q:765:THR:HG22	1:Q:766:LEU:HD23	1.49	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:90:ILE:HD11	1:Q:207:MET:HB3	1.50	0.92
8:K:90:LEU:N	8:K:90:LEU:HD23	1.85	0.92
3:B:771:ASP:HB2	3:B:816:PRO:HD3	1.51	0.92
1:Q:238:LYS:NZ	1:Q:297:THR:CB	2.32	0.92
3:B:537:ALA:HB2	3:B:557:HIS:NE2	1.83	0.92
3:B:781:ARG:CD	3:B:782:GLY:H	1.83	0.92
3:B:764:LYS:HZ3	3:B:814:VAL:H	1.01	0.92
1:A:50:GLY:HA2	1:A:68:CYS:SG	2.09	0.92
3:B:854:GLU:HA	3:B:859:ASN:O	1.70	0.92
2:C:120:PRO:HA	2:C:275:ASN:ND2	1.84	0.92
2:G:120:PRO:HA	2:G:275:ASN:ND2	1.84	0.92
11:P:26:CYS:HB2	11:P:27:PRO:HD2	1.49	0.92
3:R:557:HIS:N	3:R:623:ASN:HD21	1.66	0.92
3:R:24:VAL:HG11	3:R:426:LEU:HD13	1.51	0.92
1:Q:672:VAL:HG13	1:Q:700:ILE:HD12	1.49	0.92
1:A:338:GLY:HA3	1:A:444:ARG:HG2	1.48	0.92
1:Q:238:LYS:HZ2	1:Q:276:TYR:CA	1.82	0.91
1:Q:331:ASN:O	1:Q:332:ILE:HB	1.69	0.91
1:A:308:ARG:NH2	3:B:1099:LEU:HD13	1.85	0.91
10:N:42:ARG:HG3	10:N:43:TYR:H	1.35	0.91
3:B:172:VAL:HG22	3:B:189:ILE:HD11	1.52	0.91
1:A:238:LYS:HZ1	1:A:297:THR:HB	0.79	0.91
2:C:55:ALA:HA	2:C:58:GLU:CG	2.00	0.91
1:Q:647:ARG:HH11	3:R:965:ASP:HB2	1.34	0.91
7:V:12:ARG:CD	7:V:12:ARG:H	1.83	0.91
1:A:507:TYR:OH	1:A:727:VAL:HG13	1.71	0.91
2:C:391:ARG:HG3	2:C:391:ARG:HH11	1.36	0.91
1:Q:293:ARG:HH11	1:Q:296:ARG:HH22	0.94	0.91
2:G:310:ILE:H	2:G:310:ILE:HD12	1.34	0.91
3:R:781:ARG:CD	3:R:782:GLY:H	1.83	0.91
1:Q:604:GLY:C	1:Q:606:GLN:H	1.70	0.91
1:Q:50:GLY:HA2	1:Q:68:CYS:SG	2.11	0.91
8:W:53:ILE:H	8:W:53:ILE:HD12	1.35	0.91
3:B:869:LEU:HD11	4:D:56:GLU:HB3	1.51	0.90
3:R:473:MET:HA	3:R:577:ARG:HH21	1.35	0.90
4:D:98:ILE:HD11	4:D:114:ILE:HG23	1.53	0.90
6:F:18:LYS:HE2	6:F:41:LEU:HB3	1.54	0.90
3:R:954:GLN:HA	3:R:957:ILE:HD11	1.54	0.90
1:Q:354:THR:HB	1:Q:355:PRO:HD2	1.51	0.90
3:B:759:SER:HB2	3:B:862:VAL:O	1.72	0.90
2:C:115:LYS:O	2:C:116:VAL:HG13	1.72	0.90
5:E:39:LEU:HD23	5:E:40:LYS:H	1.37	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:1004:ARG:HH11	3:B:1025:GLY:H	1.18	0.90
7:H:12:ARG:H	7:H:12:ARG:CD	1.82	0.90
3:B:1069:TRP:CD1	3:B:1088:LEU:HD22	2.07	0.90
2:G:310:ILE:O	2:G:314:LEU:HD23	1.69	0.90
5:T:179:LYS:HZ1	6:U:82:GLU:H	1.17	0.90
2:C:390:MET:HB2	5:E:56:GLU:HG3	1.53	0.90
2:C:337:GLU:HG2	2:C:338:LYS:H	1.37	0.90
2:C:310:ILE:O	2:C:314:LEU:HD23	1.72	0.90
6:U:18:LYS:HE2	6:U:41:LEU:HB3	1.54	0.90
3:R:874:ILE:HD12	3:R:874:ILE:H	1.36	0.90
3:R:560:THR:HG22	3:R:562:PHE:N	1.86	0.89
1:A:868:VAL:HG22	2:C:39:LYS:NZ	1.85	0.89
3:R:437:GLN:HB3	3:R:438:PRO:HD2	1.54	0.89
1:A:647:ARG:HH11	3:B:965:ASP:HB2	1.36	0.89
3:R:854:GLU:HA	3:R:859:ASN:O	1.72	0.89
3:R:221:ILE:HG21	3:R:226:LEU:HG	1.55	0.89
8:W:90:LEU:HD23	8:W:90:LEU:N	1.88	0.89
3:B:702:LEU:H	3:B:721:ASN:HD21	0.91	0.89
1:A:760:GLY:HA3	3:B:447:GLY:HA3	1.53	0.89
3:B:276:VAL:HG12	3:B:277:ALA:H	1.36	0.89
2:C:262:LEU:HD22	2:C:269:VAL:HG13	1.55	0.89
3:R:702:LEU:H	3:R:721:ASN:ND2	1.69	0.89
3:B:1050:LEU:HD23	3:B:1051:ASP:H	1.38	0.89
3:B:38:LYS:HG3	3:B:39:LEU:H	1.35	0.89
5:E:179:LYS:NZ	6:F:79:THR:HB	1.88	0.89
2:C:80:GLU:HB3	2:C:81:PRO:HD3	1.55	0.89
4:S:44:VAL:HA	4:S:143:ALA:HA	1.55	0.89
1:Q:637:ARG:HH11	3:R:974:ARG:HH12	1.19	0.89
1:Q:365:VAL:HG11	1:Q:401:LEU:HD11	1.54	0.89
3:R:588:LEU:HD13	3:R:612:LYS:HB3	1.51	0.89
3:B:373:LYS:HE3	3:B:375:ARG:HD2	1.53	0.89
3:R:276:VAL:HG12	3:R:277:ALA:H	1.38	0.89
11:Z:26:CYS:HB2	11:Z:27:PRO:HD2	1.55	0.89
1:Q:421:ARG:HB2	1:Q:462:MET:HE3	1.55	0.89
2:C:289:ALA:O	2:C:292:ILE:HG22	1.73	0.89
3:B:700:ARG:HG3	3:B:714:THR:HG22	1.52	0.89
9:L:64:THR:HG22	9:L:65:PRO:HD2	1.52	0.89
1:Q:308:ARG:NH2	3:R:1099:LEU:HD13	1.86	0.89
3:R:554:ASN:HD21	3:R:576:ARG:HH21	1.15	0.89
1:A:600:LYS:HE3	1:A:732:GLY:HA2	1.55	0.89
3:B:1060:VAL:HG12	3:B:1065:GLY:HA3	1.54	0.88
2:G:340:SER:CB	2:G:371:GLU:HG2	2.02	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:503:ILE:HD11	1:Q:733:ALA:N	1.88	0.88
2:C:340:SER:CB	2:C:371:GLU:HG2	2.02	0.88
3:B:591:ILE:HG12	3:B:612:LYS:HZ2	1.38	0.88
1:A:249:LEU:HD13	1:A:266:TRP:CE3	2.07	0.88
1:Q:16:PRO:HD3	1:Q:206:TRP:CD1	2.06	0.88
3:B:851:LEU:HA	11:P:35:PHE:HB3	1.54	0.88
3:B:60:LEU:HD22	3:B:98:LEU:HD21	1.53	0.88
1:Q:203:ARG:HH11	1:Q:203:ARG:HG3	1.38	0.88
1:A:875:VAL:O	1:A:877:GLY:N	2.06	0.88
1:Q:518:LYS:HE3	1:Q:544:GLU:HB2	1.56	0.88
3:B:437:GLN:HB3	3:B:438:PRO:HD2	1.52	0.88
4:D:230:ILE:HG13	4:D:242:LEU:HD21	1.56	0.88
1:Q:875:VAL:O	1:Q:877:GLY:N	2.07	0.88
3:R:602:ILE:HG22	3:R:603:THR:H	1.39	0.88
1:Q:704:LEU:HD13	1:Q:781:PHE:HD1	1.37	0.88
3:B:560:THR:HG22	3:B:562:PHE:N	1.86	0.88
10:N:3:ILE:HD12	10:N:3:ILE:H	1.36	0.88
8:K:39:ARG:HD3	8:K:74:LEU:HD23	1.53	0.88
3:B:1011:ILE:H	3:B:1011:ILE:HD12	1.37	0.88
1:Q:704:LEU:HD22	1:Q:781:PHE:CE1	2.09	0.88
3:B:416:ARG:NH1	3:B:687:ARG:NH2	2.21	0.88
2:C:145:GLU:HA	2:C:239:ARG:H	1.36	0.88
1:A:290:ARG:HH11	1:A:291:SER:HB2	1.39	0.88
3:B:403:TRP:O	3:B:404:VAL:HG23	1.73	0.88
2:G:145:GLU:HA	2:G:239:ARG:H	1.38	0.88
1:A:503:ILE:HD11	1:A:733:ALA:N	1.89	0.88
3:R:771:ASP:HB2	3:R:816:PRO:HD3	1.54	0.88
1:A:590:ASN:ND2	3:R:377:ARG:HB2	1.88	0.88
5:E:79:PRO:HG3	5:E:160:ILE:HD11	1.54	0.87
1:A:548:GLY:O	1:A:551:VAL:HG12	1.73	0.87
1:Q:807:VAL:HG21	3:R:443:ARG:HD3	1.55	0.87
3:B:769:GLN:O	3:B:770:GLU:HB3	1.74	0.87
3:B:702:LEU:N	3:B:721:ASN:HD21	1.72	0.87
5:E:116:ASP:CG	5:E:117:THR:H	1.78	0.87
5:E:179:LYS:HZ3	6:F:79:THR:HB	1.40	0.87
8:K:53:ILE:H	8:K:53:ILE:HD12	1.37	0.87
9:X:64:THR:HG22	9:X:65:PRO:HD2	1.54	0.87
1:A:283:GLY:C	1:A:285:PRO:HD2	1.95	0.87
3:R:1074:LYS:HB3	3:R:1076:LYS:HE2	1.56	0.87
3:R:569:ASN:CB	3:R:574:ARG:HH22	1.88	0.87
1:Q:249:LEU:HD13	1:Q:266:TRP:CE3	2.08	0.87
2:G:55:ALA:HA	2:G:58:GLU:CG	2.03	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:554:ASN:HD21	3:B:576:ARG:HH21	1.17	0.87
5:T:116:ASP:CG	5:T:117:THR:H	1.78	0.87
1:A:16:PRO:HD3	1:A:206:TRP:CD1	2.09	0.87
10:N:38:LEU:HD23	10:N:39:GLY:H	1.40	0.87
3:R:773:ILE:HG12	3:R:813:LYS:HG2	1.57	0.87
3:R:536:LEU:HD11	3:R:540:ILE:HD12	1.57	0.87
1:A:532:ILE:HD11	9:L:56:LYS:HD3	1.57	0.87
1:Q:563:HIS:HB2	1:Q:872:PHE:HE2	1.39	0.87
11:P:46:LYS:H	11:P:46:LYS:CD	1.88	0.86
1:A:518:LYS:HE3	1:A:544:GLU:HB2	1.56	0.86
4:S:230:ILE:HG13	4:S:242:LEU:HD21	1.57	0.86
1:A:604:GLY:C	1:A:606:GLN:H	1.74	0.86
5:T:39:LEU:HD23	5:T:40:LYS:H	1.40	0.86
3:R:1069:TRP:CD1	3:R:1088:LEU:HD22	2.10	0.86
3:B:1080:PRO:O	3:B:1081:ILE:HG13	1.75	0.86
3:R:650:ILE:H	3:R:650:ILE:CD1	1.88	0.86
4:D:40:ALA:HB3	4:D:156:PHE:HE2	1.41	0.86
3:R:851:LEU:HA	11:Z:35:PHE:HB3	1.57	0.86
3:R:416:ARG:NH1	3:R:687:ARG:NH2	2.23	0.86
3:B:497:VAL:HG12	3:B:498:GLU:N	1.90	0.86
3:R:591:ILE:HG12	3:R:612:LYS:HZ2	1.40	0.86
3:R:517:TRP:HD1	3:R:531:GLN:H	1.20	0.86
3:R:1011:ILE:HD12	3:R:1011:ILE:H	1.39	0.86
4:D:190:LEU:CD2	4:D:195:LEU:HA	2.05	0.86
2:G:290:ARG:HG3	2:G:321:THR:OG1	1.75	0.86
2:G:393:ILE:HG21	2:G:395:ARG:HH21	1.41	0.86
3:B:339:ALA:HB2	3:B:618:ALA:HB3	1.58	0.86
1:A:749:GLN:N	1:A:781:PHE:HA	1.89	0.86
3:R:943:THR:HG22	3:R:944:PRO:HD2	1.55	0.86
3:R:769:GLN:O	3:R:770:GLU:HB3	1.75	0.86
2:G:392:PRO:HB3	5:T:22:LEU:HD11	1.58	0.86
1:Q:491:TYR:HB3	1:Q:607:GLN:OE1	1.73	0.86
1:Q:749:GLN:N	1:Q:781:PHE:HA	1.90	0.86
3:B:764:LYS:HZ3	3:B:814:VAL:N	1.73	0.86
3:R:172:VAL:HG22	3:R:189:ILE:HD11	1.54	0.86
2:G:115:LYS:O	2:G:116:VAL:HG13	1.74	0.86
7:V:42:LEU:HD11	7:V:80:TYR:HB2	1.58	0.86
3:B:943:THR:HG22	3:B:944:PRO:HD2	1.55	0.86
2:G:270:ALA:HA	7:V:14:HIS:ND1	1.91	0.86
3:R:700:ARG:HG3	3:R:714:THR:HG22	1.55	0.85
3:R:569:ASN:HB3	3:R:574:ARG:NH2	1.91	0.85
10:N:7:CYS:HB3	10:N:45:CYS:SG	2.16	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:4:LYS:HD3	3:B:1091:VAL:HB	1.59	0.85
11:P:46:LYS:HD2	11:P:46:LYS:N	1.90	0.85
8:W:39:ARG:HD3	8:W:74:LEU:HD23	1.57	0.85
4:S:190:LEU:CD2	4:S:195:LEU:HA	2.06	0.85
3:R:587:PRO:O	3:R:588:LEU:HD23	1.76	0.85
1:Q:283:GLY:C	1:Q:285:PRO:HD2	1.96	0.85
1:Q:290:ARG:HH11	1:Q:291:SER:HB2	1.40	0.85
1:Q:507:TYR:OH	1:Q:727:VAL:HG13	1.77	0.85
3:B:539:LYS:O	3:B:543:ARG:HG3	1.75	0.85
3:R:560:THR:HB	3:R:563:ILE:HB	1.57	0.85
11:Z:46:LYS:N	11:Z:46:LYS:HD2	1.90	0.85
11:Z:46:LYS:CD	11:Z:46:LYS:H	1.89	0.85
2:C:290:ARG:HG3	2:C:321:THR:OG1	1.76	0.85
3:R:248:VAL:HG11	3:R:329:ARG:HH12	1.42	0.85
1:Q:473:ILE:HD12	1:Q:474:ALA:N	1.90	0.85
3:B:569:ASN:CB	3:B:574:ARG:HH22	1.90	0.85
1:A:853:ASP:HB2	2:C:311:ARG:HH12	1.41	0.85
3:R:458:THR:CG2	3:R:465:GLY:H	1.90	0.85
3:R:338:TYR:HB2	3:R:448:THR:HG21	1.57	0.85
3:B:458:THR:CG2	3:B:465:GLY:H	1.88	0.85
2:G:391:ARG:HH11	2:G:391:ARG:HG3	1.41	0.85
1:Q:256:GLY:O	1:Q:258:PRO:HD3	1.77	0.85
2:G:104:LEU:HB3	2:G:105:PRO:HD3	1.56	0.85
2:C:244:LYS:HE2	2:C:247:ASP:HA	1.59	0.85
1:A:558:LYS:HG3	3:R:104:GLU:HB2	1.59	0.84
3:R:797:VAL:HB	11:Z:36:MET:HE1	1.58	0.84
1:A:331:ASN:O	1:A:332:ILE:HB	1.75	0.84
1:A:563:HIS:HB2	1:A:872:PHE:HE2	1.41	0.84
3:R:672:MET:HG2	3:R:993:LEU:HD21	1.59	0.84
1:Q:317:ARG:HA	3:R:1027:ARG:HA	1.58	0.84
7:H:11:PRO:HG2	7:H:50:PRO:O	1.76	0.84
1:A:491:TYR:HB3	1:A:607:GLN:OE1	1.78	0.84
1:A:238:LYS:HZ2	1:A:276:TYR:CA	1.91	0.84
3:B:1014:ARG:HG3	3:B:1095:TYR:CD2	2.13	0.84
3:B:325:LEU:HD21	3:B:332:PRO:HD3	1.59	0.84
3:B:119:LEU:HD12	3:B:120:PRO:HD2	1.58	0.84
3:B:874:ILE:N	3:B:874:ILE:HD12	1.91	0.84
10:N:7:CYS:SG	10:N:48:MET:HG3	2.17	0.84
2:C:70:ILE:HA	2:C:73:VAL:HG22	1.60	0.84
3:B:587:PRO:O	3:B:588:LEU:HD23	1.76	0.84
2:C:389:THR:HG21	8:K:79:ARG:NH1	1.93	0.84
3:B:418:ASN:HD21	3:B:420:LEU:HB3	1.43	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:851:LEU:HG	11:P:35:PHE:HD2	1.39	0.84
1:Q:828:SER:HB2	2:G:72:ILE:HD11	1.57	0.84
5:E:75:ILE:HG21	6:F:21:LEU:HD21	1.59	0.84
1:A:352:ARG:HD3	1:A:406:ILE:HD12	1.57	0.84
3:R:922:GLY:HA2	3:R:925:MET:HB2	1.58	0.84
2:G:244:LYS:HE2	2:G:247:ASP:HA	1.59	0.84
2:G:262:LEU:HD22	2:G:269:VAL:HG13	1.58	0.84
3:R:696:HIS:ND1	4:S:57:ILE:HD11	1.92	0.84
3:B:536:LEU:HD11	3:B:540:ILE:HD12	1.59	0.84
3:B:473:MET:HA	3:B:577:ARG:HH21	1.38	0.83
1:A:527:VAL:HG13	1:A:630:ASN:HB3	1.59	0.83
3:R:803:GLU:HB3	3:R:805:LYS:NZ	1.92	0.83
2:G:274:THR:HG22	2:G:275:ASN:N	1.92	0.83
1:A:290:ARG:NH1	1:A:291:SER:HB2	1.92	0.83
3:B:191:SER:HA	3:B:300:HIS:NE2	1.92	0.83
1:A:365:VAL:HG11	1:A:401:LEU:HD11	1.60	0.83
10:N:60:ILE:HG23	10:N:61:HIS:H	1.40	0.83
3:R:189:ILE:HB	3:R:203:GLU:HB2	1.60	0.83
1:A:502:TYR:HE1	1:A:636:ILE:HD11	1.43	0.83
3:R:204:ARG:HB2	3:R:213:SER:OG	1.78	0.83
1:A:317:ARG:HA	3:B:1027:ARG:HA	1.60	0.83
3:B:579:LEU:HD12	3:B:616:LEU:HD12	1.58	0.83
1:Q:548:GLY:O	1:Q:551:VAL:HG12	1.78	0.83
3:B:315:LEU:O	3:B:319:ILE:HG12	1.79	0.83
4:D:131:VAL:HG22	4:D:132:LEU:N	1.90	0.83
1:Q:527:VAL:HG13	1:Q:630:ASN:HB3	1.60	0.83
3:R:60:LEU:HD22	3:R:98:LEU:HD21	1.58	0.83
3:R:451:GLY:H	3:R:647:ILE:HG23	1.42	0.83
3:R:1014:ARG:HG3	3:R:1095:TYR:CD2	2.14	0.83
3:B:330:ARG:O	3:B:331:GLU:HB2	1.78	0.83
3:B:517:TRP:HD1	3:B:531:GLN:H	1.23	0.83
10:N:64:ARG:HD3	10:N:64:ARG:H	1.42	0.83
3:B:338:TYR:HB2	3:B:448:THR:HG21	1.60	0.83
4:S:131:VAL:HG22	4:S:132:LEU:N	1.93	0.83
10:Y:60:ILE:HG23	10:Y:61:HIS:H	1.43	0.83
1:Q:647:ARG:NH1	3:R:965:ASP:HB2	1.93	0.83
1:Q:369:PRO:CB	1:Q:376:ASN:HB3	2.08	0.83
3:R:582:VAL:HG13	3:R:586:ASN:N	1.93	0.83
1:Q:290:ARG:NH1	1:Q:291:SER:HB2	1.94	0.83
3:B:582:VAL:HG13	3:B:586:ASN:N	1.94	0.83
3:R:591:ILE:HD12	3:R:591:ILE:H	1.43	0.83
1:A:219:ILE:HD13	1:A:219:ILE:H	1.43	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:391:ARG:HH22	8:W:39:ARG:NH1	1.75	0.83
3:R:702:LEU:N	3:R:721:ASN:HD21	1.76	0.83
3:B:591:ILE:H	3:B:591:ILE:HD12	1.41	0.83
2:G:337:GLU:HG2	2:G:338:LYS:H	1.44	0.83
3:R:330:ARG:O	3:R:331:GLU:HB2	1.79	0.83
3:B:702:LEU:HD13	10:N:47:ARG:CZ	2.08	0.83
3:R:665:ARG:HG3	3:R:920:THR:HG21	1.60	0.83
7:V:28:ALA:HB1	7:V:62:ILE:HD11	1.60	0.82
3:B:59:ARG:HH22	3:B:107:ILE:HB	1.44	0.82
5:T:53:THR:HB	5:T:71:GLU:N	1.92	0.82
3:R:873:THR:HG22	3:R:874:ILE:N	1.94	0.82
3:B:1069:TRP:CH2	3:B:1077:TYR:HB2	2.14	0.82
3:B:220:LYS:H	3:B:275:ARG:NH1	1.77	0.82
1:Q:853:ASP:HB2	2:G:311:ARG:HH12	1.44	0.82
1:Q:716:SER:HB2	1:Q:726:TYR:OH	1.79	0.82
5:T:39:LEU:HD22	5:T:42:LEU:HG	1.61	0.82
4:D:144:ARG:C	4:D:145:LEU:HD12	2.00	0.82
4:S:25:VAL:HG21	4:S:226:TYR:HD1	1.45	0.82
3:B:904:VAL:HG21	10:N:42:ARG:HE	1.42	0.82
1:A:647:ARG:NH1	3:B:965:ASP:HB2	1.95	0.82
3:R:98:LEU:HD12	3:R:116:ILE:HD11	1.61	0.82
3:B:1072:LYS:HG2	3:B:1077:TYR:HB3	1.59	0.82
3:R:902:LYS:HB2	10:Y:42:ARG:NH1	1.94	0.82
2:G:57:LYS:HE3	2:G:57:LYS:HA	1.59	0.82
1:A:691:THR:HG22	1:A:692:LEU:HD12	1.58	0.82
3:R:497:VAL:HG12	3:R:498:GLU:N	1.91	0.82
3:R:220:LYS:H	3:R:275:ARG:NH1	1.77	0.82
3:B:246:PRO:HG2	3:B:249:GLN:HG2	1.59	0.82
4:S:40:ALA:HB3	4:S:156:PHE:HE2	1.45	0.82
3:B:490:TYR:HE1	3:B:527:ILE:HG21	1.43	0.82
6:U:19:LYS:HG3	6:U:49:ALA:HB2	1.60	0.82
3:B:453:MET:HG2	3:B:468:LYS:HD2	1.61	0.82
10:Y:64:ARG:HD3	10:Y:64:ARG:H	1.44	0.82
2:C:57:LYS:HA	2:C:57:LYS:HE3	1.62	0.82
5:E:39:LEU:HD22	5:E:42:LEU:HG	1.62	0.82
3:B:560:THR:HB	3:B:563:ILE:HB	1.58	0.82
4:D:53:LEU:HD22	4:D:57:ILE:HG21	1.62	0.82
7:H:42:LEU:HD11	7:H:80:TYR:HB2	1.60	0.82
3:R:373:LYS:HE3	3:R:375:ARG:HD2	1.60	0.82
4:D:44:VAL:HA	4:D:143:ALA:HA	1.62	0.82
3:B:497:VAL:HG23	3:B:527:ILE:O	1.80	0.82
3:B:797:VAL:HB	11:P:36:MET:HE1	1.59	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:T:79:PRO:HG3	5:T:160:ILE:HD11	1.59	0.82
3:B:933:ALA:HB3	10:N:47:ARG:HH12	1.44	0.82
3:R:59:ARG:HH22	3:R:107:ILE:HB	1.44	0.82
3:B:803:GLU:HB3	3:B:805:LYS:NZ	1.94	0.82
1:A:747:LEU:HD11	1:A:790:LEU:HD21	1.60	0.82
3:R:246:PRO:HG2	3:R:249:GLN:HG2	1.60	0.82
7:H:28:ALA:HB1	7:H:62:ILE:HD11	1.60	0.82
2:G:269:VAL:HA	2:G:272:VAL:HG23	1.62	0.82
3:B:569:ASN:HB3	3:B:574:ARG:NH2	1.94	0.82
1:A:704:LEU:HD13	1:A:781:PHE:HD1	1.43	0.82
5:E:82:GLN:HA	5:E:145:ARG:HG3	1.62	0.82
2:C:393:ILE:HG21	2:C:395:ARG:HH21	1.45	0.82
1:A:807:VAL:HG21	3:B:443:ARG:HD3	1.61	0.82
3:R:490:TYR:HE1	3:R:527:ILE:HG21	1.43	0.82
3:R:418:ASN:HD21	3:R:420:LEU:HB3	1.43	0.82
3:B:874:ILE:H	3:B:874:ILE:CD1	1.91	0.81
1:A:203:ARG:HH11	1:A:203:ARG:HG3	1.43	0.81
3:B:355:ARG:HB2	3:B:355:ARG:NH1	1.95	0.81
3:R:325:LEU:HD21	3:R:332:PRO:HD3	1.60	0.81
3:B:248:VAL:HG11	3:B:329:ARG:HH12	1.43	0.81
7:V:11:PRO:HG2	7:V:50:PRO:O	1.80	0.81
1:A:704:LEU:HD22	1:A:781:PHE:CE1	2.13	0.81
3:B:700:ARG:O	10:N:51:SER:HB2	1.80	0.81
1:A:238:LYS:NZ	1:A:297:THR:CB	2.37	0.81
3:B:650:ILE:H	3:B:650:ILE:CD1	1.90	0.81
3:R:726:VAL:HG12	3:R:912:PRO:HG3	1.61	0.81
3:R:191:SER:HA	3:R:300:HIS:NE2	1.94	0.81
10:N:38:LEU:HD23	10:N:39:GLY:N	1.95	0.81
3:R:687:ARG:NH1	3:R:689:ASP:OD1	2.13	0.81
3:R:665:ARG:HG3	3:R:920:THR:CG2	2.10	0.81
3:R:453:MET:HG2	3:R:468:LYS:HD2	1.60	0.81
3:R:539:LYS:O	3:R:543:ARG:HG3	1.79	0.81
3:B:204:ARG:HB2	3:B:213:SER:OG	1.79	0.81
1:Q:4:LYS:NZ	3:R:1115:LEU:HB3	1.95	0.81
3:R:119:LEU:HD12	3:R:120:PRO:HD2	1.61	0.81
5:E:179:LYS:HZ1	6:F:82:GLU:HG3	1.45	0.81
3:R:579:LEU:HD12	3:R:616:LEU:HD12	1.61	0.81
3:R:1050:LEU:HD23	3:R:1051:ASP:H	1.42	0.81
4:S:66:PRO:HB2	4:S:124:ILE:HG12	1.61	0.81
10:Y:38:LEU:HD23	10:Y:39:GLY:H	1.46	0.81
3:B:589:VAL:O	3:B:591:ILE:N	2.14	0.81
3:B:602:ILE:HG22	3:B:603:THR:H	1.43	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:691:THR:HG22	1:Q:692:LEU:HD12	1.61	0.81
3:B:962:TYR:OH	10:N:42:ARG:HD2	1.80	0.81
5:E:53:THR:HB	5:E:71:GLU:N	1.95	0.81
3:R:50:PRO:HG2	3:R:51:THR:H	1.46	0.81
1:A:279:ASN:HB2	1:A:297:THR:CG2	2.10	0.81
3:B:14:ILE:O	3:B:17:TYR:HB3	1.80	0.81
1:A:743:MET:O	1:A:785:SER:HB2	1.80	0.81
3:B:1004:ARG:HH21	3:B:1007:GLY:H	1.29	0.81
3:B:848:ASP:HB2	3:B:867:ARG:HB2	1.61	0.81
3:R:700:ARG:O	10:Y:51:SER:HB2	1.80	0.81
3:R:851:LEU:HG	11:Z:35:PHE:HD2	1.44	0.81
5:T:53:THR:HG23	5:T:55:GLU:HG3	1.63	0.81
1:A:238:LYS:NZ	1:A:276:TYR:HA	1.95	0.81
2:G:390:MET:HB2	5:T:56:GLU:CG	2.11	0.81
3:R:902:LYS:HB3	10:Y:42:ARG:HD3	1.64	0.81
3:R:197:ARG:HH22	3:R:359:LYS:HG2	1.46	0.81
3:R:813:LYS:O	3:R:814:VAL:HG23	1.80	0.81
3:R:933:ALA:HB3	10:Y:47:ARG:HH12	1.46	0.80
3:R:88:ARG:NH1	3:R:854:GLU:O	2.13	0.80
4:D:190:LEU:HD22	4:D:195:LEU:CA	2.12	0.80
3:R:962:TYR:OH	10:Y:42:ARG:HD2	1.81	0.80
3:B:451:GLY:H	3:B:647:ILE:HG23	1.44	0.80
8:K:63:SER:C	8:K:65:ALA:H	1.85	0.80
1:A:276:TYR:HD2	1:A:277:PHE:CE1	1.98	0.80
2:G:120:PRO:HA	2:G:275:ASN:HD21	1.46	0.80
7:V:45:ILE:HG22	7:V:80:TYR:H	1.45	0.80
1:A:369:PRO:CB	1:A:376:ASN:HB3	2.11	0.80
3:B:557:HIS:H	3:B:623:ASN:ND2	1.78	0.80
3:B:813:LYS:O	3:B:814:VAL:HG23	1.81	0.80
3:R:248:VAL:HG21	3:R:329:ARG:HH22	1.45	0.80
3:R:602:ILE:HG22	3:R:603:THR:N	1.96	0.80
4:S:13:ILE:CD1	4:S:238:PRO:HB2	2.12	0.80
3:R:361:PHE:HE1	3:R:385:VAL:HG13	1.45	0.80
2:G:85:MET:HB3	2:G:304:GLN:OE1	1.82	0.80
1:A:181:ARG:O	1:A:185:GLU:HG3	1.82	0.80
3:R:589:VAL:O	3:R:591:ILE:N	2.14	0.80
3:R:403:TRP:O	3:R:404:VAL:HG23	1.81	0.80
1:Q:747:LEU:HD11	1:Q:790:LEU:HD21	1.63	0.80
2:G:379:ILE:HD11	3:R:1042:ALA:HA	1.62	0.80
5:T:82:GLN:HA	5:T:145:ARG:HG3	1.63	0.80
3:B:355:ARG:HB2	3:B:355:ARG:HH11	1.47	0.80
3:B:386:ARG:HB2	3:B:389:ILE:HD11	1.64	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:1047:ASP:HA	3:R:1051:ASP:HB2	1.64	0.80
3:B:88:ARG:NH1	3:B:854:GLU:O	2.14	0.80
2:C:269:VAL:HA	2:C:272:VAL:HG23	1.63	0.80
2:G:28:ILE:HB	8:W:18:VAL:HG21	1.64	0.80
4:S:34:LEU:HD22	4:S:151:LYS:HB2	1.63	0.80
4:S:175:ASN:HA	4:S:195:LEU:CD1	2.11	0.80
4:S:37:PRO:HA	4:S:148:GLY:O	1.82	0.80
5:E:53:THR:HG23	5:E:55:GLU:HG3	1.63	0.80
3:R:764:LYS:NZ	3:R:814:VAL:H	1.79	0.80
3:B:189:ILE:HB	3:B:203:GLU:HB2	1.61	0.80
3:R:1080:PRO:O	3:R:1081:ILE:HG13	1.81	0.80
3:R:318:ALA:O	3:R:321:LYS:HB2	1.82	0.80
3:B:318:ALA:O	3:B:321:LYS:HB2	1.81	0.80
1:Q:721:PRO:HA	1:Q:726:TYR:HD1	1.46	0.80
3:B:475:GLN:HG2	3:B:476:ILE:H	1.46	0.80
3:B:702:LEU:HD13	10:N:47:ARG:NE	1.96	0.80
5:E:107:LEU:HD12	5:E:108:VAL:H	1.45	0.80
2:C:392:PRO:HB3	5:E:22:LEU:HD11	1.64	0.80
1:A:57:LYS:HD2	1:A:60:THR:HA	1.65	0.79
5:T:107:LEU:HD12	5:T:108:VAL:H	1.46	0.79
5:T:38:ILE:HG22	5:T:39:LEU:H	1.47	0.79
3:B:855:THR:HB	3:B:857:GLU:HG2	1.64	0.79
3:R:1014:ARG:HG2	3:R:1014:ARG:HH11	1.48	0.79
6:F:19:LYS:HG3	6:F:49:ALA:HB2	1.62	0.79
3:R:450:TRP:HZ2	3:R:641:GLU:OE1	1.64	0.79
7:V:12:ARG:N	7:V:12:ARG:HD3	1.96	0.79
4:S:144:ARG:C	4:S:145:LEU:HD12	2.03	0.79
1:A:245:ILE:HD13	1:A:268:LEU:HB3	1.65	0.79
10:Y:3:ILE:HD12	10:Y:3:ILE:H	1.47	0.79
1:A:764:ARG:HH11	1:A:764:ARG:HB3	1.47	0.79
3:B:98:LEU:HD12	3:B:116:ILE:HD11	1.61	0.79
3:R:1004:ARG:NH1	3:R:1025:GLY:H	1.81	0.79
1:Q:764:ARG:HH11	1:Q:764:ARG:HB3	1.47	0.79
3:R:248:VAL:HA	3:R:251:GLU:OE2	1.83	0.79
3:R:315:LEU:O	3:R:319:ILE:HG12	1.83	0.79
3:B:249:GLN:HG3	3:B:250:ASN:N	1.98	0.79
3:R:801:GLU:HG3	11:Z:38:ARG:NH2	1.98	0.79
1:A:256:GLY:O	1:A:258:PRO:HD3	1.81	0.79
3:B:403:TRP:C	3:B:404:VAL:HG23	2.01	0.79
3:R:579:LEU:O	3:R:613:ILE:HG23	1.83	0.79
3:R:148:PRO:HG3	3:R:422:MET:HE3	1.65	0.79
1:A:421:ARG:HB2	1:A:462:MET:HE3	1.65	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:248:VAL:HG21	3:B:329:ARG:HH22	1.47	0.79
3:R:702:LEU:HD13	10:Y:47:ARG:CZ	2.13	0.79
4:S:53:LEU:HD22	4:S:57:ILE:HG21	1.63	0.79
1:Q:486:ILE:HD11	1:Q:628:MET:CE	2.13	0.79
3:R:386:ARG:HB2	3:R:389:ILE:HD11	1.64	0.79
3:B:687:ARG:NH1	3:B:689:ASP:OD1	2.16	0.79
1:Q:541:ALA:HB1	1:Q:542:PRO:HD3	1.65	0.79
1:Q:181:ARG:O	1:Q:185:GLU:HG3	1.82	0.79
3:B:223:PHE:CE1	3:B:227:MET:HG3	2.18	0.79
1:Q:452:PRO:HA	1:Q:495:ILE:HD11	1.63	0.79
1:A:289:HIS:HB2	1:A:295:LEU:HD21	1.64	0.79
3:B:64:ARG:O	3:B:97:TRP:HB2	1.83	0.79
8:W:92:LEU:O	8:W:92:LEU:HD23	1.82	0.79
1:A:830:LEU:CD2	1:A:840:SER:HB3	2.13	0.79
7:H:12:ARG:N	7:H:12:ARG:HD3	1.96	0.79
4:S:190:LEU:HD22	4:S:195:LEU:CA	2.12	0.79
5:T:179:LYS:NZ	6:U:81:ASP:HB2	1.98	0.79
3:B:739:ILE:HG23	3:B:909:ILE:HB	1.63	0.79
1:Q:16:PRO:HD3	1:Q:206:TRP:HD1	1.45	0.79
3:R:874:ILE:HD12	3:R:874:ILE:N	1.98	0.79
1:A:446:ASN:HD22	1:A:446:ASN:C	1.86	0.79
3:R:355:ARG:HB2	3:R:355:ARG:NH1	1.98	0.79
1:Q:216:PRO:HG2	1:Q:219:ILE:HD12	1.65	0.79
2:C:310:ILE:HD12	2:C:310:ILE:N	1.98	0.79
2:C:274:THR:HG22	2:C:275:ASN:N	1.96	0.79
1:Q:397:LEU:HA	1:Q:400:THR:OG1	1.83	0.79
5:T:179:LYS:HZ2	6:U:79:THR:HB	1.47	0.78
1:Q:324:THR:HG22	1:Q:325:VAL:H	1.47	0.78
10:N:1:MET:HB3	10:N:56:ILE:HD13	1.65	0.78
3:R:739:ILE:HG23	3:R:909:ILE:HB	1.63	0.78
5:T:179:LYS:HZ1	6:U:82:GLU:N	1.80	0.78
3:B:922:GLY:HA2	3:B:925:MET:HB2	1.65	0.78
1:A:301:ARG:O	1:A:302:LEU:HG	1.83	0.78
1:A:716:SER:HB2	1:A:726:TYR:OH	1.83	0.78
1:A:721:PRO:HA	1:A:726:TYR:HD1	1.49	0.78
1:Q:14:LEU:HB3	3:R:1108:ILE:HG23	1.64	0.78
3:B:248:VAL:HA	3:B:251:GLU:OE2	1.84	0.78
2:C:120:PRO:HA	2:C:275:ASN:HD21	1.47	0.78
10:Y:38:LEU:HD23	10:Y:39:GLY:N	1.98	0.78
1:A:59:PRO:O	1:A:60:THR:HG22	1.84	0.78
3:R:14:ILE:O	3:R:17:TYR:HB3	1.83	0.78
1:A:14:LEU:HB3	3:B:1108:ILE:HG23	1.66	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:145:GLU:HG2	2:C:240:ALA:H	1.47	0.78
1:A:477:LYS:O	1:A:481:LEU:HB2	1.82	0.78
2:G:383:THR:HG22	3:R:1042:ALA:H	1.47	0.78
3:R:650:ILE:HD13	3:R:650:ILE:N	1.97	0.78
1:Q:219:ILE:HD13	1:Q:219:ILE:H	1.47	0.78
3:B:234:THR:HG22	3:B:236:ARG:H	1.49	0.78
1:A:334:ILE:HD11	1:A:628:MET:HB3	1.64	0.78
1:A:293:ARG:NH1	1:A:296:ARG:HH22	1.79	0.78
1:A:530:VAL:HG13	1:A:530:VAL:O	1.81	0.78
3:R:1072:LYS:HG2	3:R:1077:TYR:HB3	1.63	0.78
3:B:602:ILE:HG22	3:B:603:THR:N	1.98	0.78
3:B:873:THR:HG22	3:B:874:ILE:N	1.96	0.78
1:A:509:LEU:O	1:A:548:GLY:HA3	1.84	0.78
3:R:355:ARG:HB2	3:R:355:ARG:HH11	1.49	0.78
4:D:66:PRO:HB2	4:D:124:ILE:HG12	1.65	0.78
3:R:1069:TRP:CH2	3:R:1077:TYR:HB2	2.17	0.78
1:A:486:ILE:HD11	1:A:628:MET:CE	2.14	0.78
5:E:135:VAL:H	5:E:174:TRP:HZ2	1.31	0.78
2:C:28:ILE:HD13	8:K:14:HIS:CB	2.14	0.78
1:Q:600:LYS:HB2	1:Q:732:GLY:HA3	1.65	0.78
1:Q:59:PRO:O	1:Q:60:THR:HG22	1.84	0.78
3:B:773:ILE:HG12	3:B:813:LYS:HG2	1.64	0.78
5:T:142:VAL:HG12	5:T:171:LYS:HA	1.65	0.78
8:W:63:SER:C	8:W:65:ALA:H	1.86	0.78
4:D:175:ASN:HA	4:D:195:LEU:CD1	2.14	0.78
2:C:329:ILE:HA	2:C:334:VAL:CG1	2.11	0.78
3:B:450:TRP:HZ2	3:B:641:GLU:OE1	1.66	0.78
3:R:435:ARG:HH11	3:R:435:ARG:HG2	1.49	0.78
3:R:234:THR:HG22	3:R:236:ARG:H	1.49	0.78
2:G:111:VAL:CG1	2:G:329:ILE:HD12	2.14	0.78
3:B:1033:ARG:HG3	3:B:1033:ARG:HH11	1.49	0.78
4:D:25:VAL:HG21	4:D:226:TYR:HD1	1.47	0.78
1:Q:563:HIS:HB2	1:Q:872:PHE:CE2	2.18	0.78
1:Q:336:GLU:HA	1:Q:434:ARG:O	1.84	0.78
3:B:445:LEU:HD21	3:B:455:PRO:HA	1.64	0.78
4:D:177:GLU:HB2	4:D:178:LYS:NZ	1.99	0.78
1:Q:276:TYR:HD2	1:Q:277:PHE:CE1	2.01	0.77
1:Q:293:ARG:HG2	1:Q:296:ARG:NH2	2.00	0.77
2:G:70:ILE:HA	2:G:73:VAL:HG22	1.65	0.77
3:B:650:ILE:HD13	3:B:650:ILE:N	1.98	0.77
3:B:852:ILE:HG23	3:B:862:VAL:HG22	1.66	0.77
7:V:15:TYR:HB3	7:V:16:LEU:HD12	1.66	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:Y:7:CYS:HB3	10:Y:45:CYS:SG	2.24	0.77
3:R:361:PHE:CE1	3:R:385:VAL:HG13	2.18	0.77
1:Q:589:LYS:NZ	1:Q:879:LYS:H	1.81	0.77
1:A:324:THR:HG22	1:A:325:VAL:H	1.47	0.77
5:T:18:PHE:HB2	8:W:48:PRO:HD2	1.65	0.77
3:R:749:MET:HB2	10:Y:8:PHE:CD1	2.20	0.77
3:B:749:MET:HB2	10:N:8:PHE:CD1	2.19	0.77
3:R:557:HIS:H	3:R:623:ASN:ND2	1.82	0.77
4:S:4:ASN:HA	9:X:90:LEU:HD22	1.66	0.77
3:B:435:ARG:HH11	3:B:435:ARG:HG2	1.48	0.77
2:G:392:PRO:CB	5:T:22:LEU:HD21	2.14	0.77
3:R:965:ASP:O	3:R:967:THR:N	2.17	0.77
3:R:554:ASN:ND2	3:R:576:ARG:HH21	1.82	0.77
5:T:145:ARG:NH2	5:T:169:LEU:HD11	2.00	0.77
1:A:728:MET:CE	3:B:913:HIS:HA	2.15	0.77
3:R:757:LEU:HD23	3:R:758:TYR:N	2.00	0.77
3:B:1047:ASP:HA	3:B:1051:ASP:HB2	1.66	0.77
3:R:803:GLU:HB3	3:R:805:LYS:HZ1	1.50	0.77
3:R:497:VAL:HG23	3:R:527:ILE:O	1.84	0.77
1:Q:464:LEU:HD13	1:Q:465:HIS:N	2.00	0.77
1:A:339:VAL:HG21	1:A:435:VAL:HG23	1.65	0.77
3:B:918:ARG:O	3:B:920:THR:HG23	1.85	0.77
1:Q:289:HIS:HB2	1:Q:295:LEU:HD21	1.66	0.77
1:Q:830:LEU:CD2	1:Q:840:SER:HB3	2.14	0.77
1:Q:475:GLU:CD	2:G:383:THR:HG21	2.05	0.77
2:C:28:ILE:HD13	8:K:14:HIS:HB3	1.66	0.77
3:R:301:LEU:HD22	3:R:483:ARG:HH21	1.49	0.77
1:Q:57:LYS:HD2	1:Q:60:THR:HA	1.67	0.77
3:B:726:VAL:HG12	3:B:912:PRO:HG3	1.66	0.77
3:B:965:ASP:O	3:B:967:THR:N	2.18	0.77
3:B:764:LYS:NZ	3:B:814:VAL:H	1.81	0.77
7:H:15:TYR:HB3	7:H:16:LEU:HD12	1.67	0.77
6:F:14:TYR:CD1	6:F:74:SER:HB2	2.19	0.77
3:R:749:MET:HG2	3:R:750:TYR:CD1	2.20	0.77
4:D:148:GLY:HA3	4:D:156:PHE:CD1	2.20	0.77
3:R:1004:ARG:HH21	3:R:1007:GLY:H	1.33	0.77
2:G:281:GLU:OE1	2:G:326:VAL:HG12	1.84	0.77
3:B:902:LYS:HB2	10:N:42:ARG:NH1	2.00	0.77
3:B:361:PHE:HE1	3:B:385:VAL:HG13	1.49	0.77
1:Q:238:LYS:NZ	1:Q:276:TYR:HA	2.00	0.77
7:V:45:ILE:HB	7:V:79:ARG:HB3	1.67	0.77
3:B:702:LEU:HB3	10:N:47:ARG:NH2	1.98	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:1033:ARG:HG3	3:R:1033:ARG:HH11	1.50	0.77
1:Q:90:ILE:HG21	1:Q:208:ILE:HD11	1.67	0.77
1:Q:509:LEU:O	1:Q:548:GLY:HA3	1.84	0.77
5:T:75:ILE:HG21	6:U:21:LEU:HD21	1.67	0.77
1:Q:262:ILE:HG12	1:Q:266:TRP:NE1	2.00	0.77
2:G:390:MET:HG3	5:T:57:GLY:N	2.00	0.77
5:T:64:GLY:H	8:W:41:LEU:CD2	1.97	0.77
8:W:18:VAL:HG12	8:W:22:LEU:HD12	1.66	0.77
9:X:31:THR:O	9:X:35:ILE:HG12	1.85	0.77
2:G:145:GLU:HG2	2:G:240:ALA:H	1.48	0.77
1:Q:339:VAL:HG21	1:Q:435:VAL:HG23	1.67	0.77
3:B:50:PRO:HG2	3:B:51:THR:H	1.50	0.77
2:C:331:ARG:HD2	2:C:349:VAL:HG12	1.67	0.77
3:R:249:GLN:HG3	3:R:250:ASN:N	1.99	0.77
3:B:640:LEU:HD23	3:B:641:GLU:N	1.97	0.77
3:R:554:ASN:HD21	3:R:576:ARG:NH2	1.83	0.77
3:R:855:THR:HB	3:R:857:GLU:HG2	1.67	0.77
3:R:206:LYS:O	3:R:210:PHE:HA	1.85	0.76
4:S:8:LYS:HD2	4:S:13:ILE:HG12	1.65	0.76
3:B:758:TYR:O	3:B:759:SER:HB3	1.84	0.76
3:R:248:VAL:HG11	3:R:329:ARG:NH1	2.00	0.76
8:W:18:VAL:O	8:W:22:LEU:HB2	1.85	0.76
3:R:654:ILE:HD12	3:R:654:ILE:H	1.49	0.76
8:W:50:LEU:CD2	8:W:75:PRO:HD3	2.16	0.76
4:S:180:VAL:CG2	4:S:190:LEU:HG	2.16	0.76
3:B:749:MET:HG2	3:B:750:TYR:CD1	2.21	0.76
3:B:727:MET:HE3	3:B:898:PRO:HG3	1.67	0.76
2:C:85:MET:HB3	2:C:304:GLN:OE1	1.86	0.76
3:R:223:PHE:CE1	3:R:227:MET:HG3	2.21	0.76
6:F:16:VAL:HG22	6:F:49:ALA:HA	1.67	0.76
1:Q:477:LYS:O	1:Q:481:LEU:HB2	1.86	0.76
3:B:301:LEU:HD22	3:B:483:ARG:HH21	1.49	0.76
3:R:403:TRP:C	3:R:404:VAL:HG23	2.04	0.76
1:A:502:TYR:CE1	1:A:636:ILE:HD11	2.20	0.76
1:A:336:GLU:HA	1:A:434:ARG:O	1.85	0.76
1:Q:52:ILE:O	1:Q:53:GLU:HB2	1.85	0.76
3:R:473:MET:HA	3:R:577:ARG:NH2	2.00	0.76
9:X:72:ALA:O	9:X:76:ILE:HG12	1.85	0.76
2:G:14:GLU:O	2:G:17:VAL:HG12	1.86	0.76
1:Q:666:ASP:O	1:Q:670:VAL:HG13	1.85	0.76
3:B:560:THR:CG2	3:B:562:PHE:H	1.92	0.76
2:C:120:PRO:HB3	2:C:256:SER:HB3	1.68	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:T:101:LEU:HD21	5:T:162:LEU:HD11	1.68	0.76
9:L:72:ALA:O	9:L:76:ILE:HG12	1.85	0.76
3:R:848:ASP:HB2	3:R:867:ARG:HB2	1.64	0.76
2:C:379:ILE:HD11	3:B:1042:ALA:HA	1.67	0.76
2:C:277:ILE:HG22	2:C:278:ARG:H	1.48	0.76
5:T:18:PHE:CE2	8:W:42:GLN:HG2	2.20	0.76
4:S:79:PRO:O	4:S:83:ILE:HG13	1.86	0.76
3:B:473:MET:HA	3:B:577:ARG:NH2	1.99	0.76
3:R:708:LEU:HD13	3:R:713:TYR:HB3	1.66	0.76
5:T:179:LYS:NZ	6:U:82:GLU:H	1.84	0.76
1:A:262:ILE:HG12	1:A:266:TRP:NE1	2.01	0.76
3:B:708:LEU:HD13	3:B:713:TYR:HB3	1.68	0.76
3:R:764:LYS:NZ	3:R:772:LYS:O	2.15	0.76
4:D:4:ASN:HA	9:L:90:LEU:HD22	1.67	0.76
4:S:177:GLU:HB2	4:S:178:LYS:NZ	2.00	0.76
3:R:475:GLN:HG2	3:R:476:ILE:H	1.49	0.76
1:A:16:PRO:HD3	1:A:206:TRP:HD1	1.47	0.76
3:B:727:MET:HE2	3:B:983:ILE:HG21	1.67	0.76
1:A:193:GLU:O	1:A:195:LEU:N	2.19	0.76
1:A:487:ILE:HD12	1:A:487:ILE:H	1.48	0.76
8:W:50:LEU:HD23	8:W:75:PRO:HD3	1.67	0.76
2:G:310:ILE:HD12	2:G:310:ILE:N	2.00	0.76
3:B:1004:ARG:NH1	3:B:1025:GLY:H	1.83	0.76
1:A:541:ALA:HB1	1:A:542:PRO:HD3	1.68	0.76
2:G:331:ARG:HD2	2:G:349:VAL:HG12	1.68	0.76
1:Q:245:ILE:HD13	1:Q:268:LEU:HB3	1.68	0.76
2:G:391:ARG:NH1	2:G:391:ARG:HG3	2.00	0.76
3:R:64:ARG:HG2	3:R:64:ARG:HH11	1.49	0.76
5:T:134:LYS:HD3	5:T:174:TRP:NE1	2.02	0.76
3:R:702:LEU:HD13	10:Y:47:ARG:NE	2.01	0.75
3:R:987:VAL:HG11	10:Y:47:ARG:NE	1.99	0.75
4:S:250:ILE:HA	4:S:253:ILE:HG22	1.68	0.75
1:A:864:LYS:O	1:A:864:LYS:HG3	1.86	0.75
1:A:569:SER:HB2	1:A:584:SER:OG	1.86	0.75
1:A:293:ARG:HG2	1:A:296:ARG:NH2	2.01	0.75
3:R:861:LEU:HD12	3:R:862:VAL:N	2.01	0.75
8:K:50:LEU:HD23	8:K:75:PRO:HD3	1.67	0.75
9:L:31:THR:O	9:L:35:ILE:HG12	1.85	0.75
3:R:1060:VAL:CG1	3:R:1065:GLY:HA3	2.15	0.75
1:A:308:ARG:HH21	3:B:1099:LEU:CD1	1.96	0.75
3:R:581:ILE:HD11	3:R:614:GLU:CB	2.16	0.75
6:U:16:VAL:CG2	6:U:53:GLN:HG3	2.15	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:H:45:ILE:HG22	7:H:80:TYR:H	1.50	0.75
7:V:45:ILE:O	7:V:81:VAL:HA	1.86	0.75
1:Q:530:VAL:O	1:Q:530:VAL:HG13	1.85	0.75
3:B:870:ARG:NH1	3:B:996:MET:HB2	2.01	0.75
4:S:148:GLY:HA3	4:S:156:PHE:CD1	2.22	0.75
5:T:170:GLY:N	5:T:175:ILE:HD11	2.00	0.75
5:E:179:LYS:NZ	6:F:82:GLU:HG3	2.02	0.75
1:Q:667:ARG:O	1:Q:670:VAL:HG22	1.87	0.75
3:B:183:ILE:HB	3:B:207:ASP:C	2.05	0.75
1:Q:293:ARG:NH1	1:Q:296:ARG:HH22	1.79	0.75
2:G:277:ILE:O	2:G:279:GLU:N	2.16	0.75
3:B:457:GLU:HG2	3:B:469:ASN:OD1	1.87	0.75
1:A:733:ALA:HB1	3:B:913:HIS:HE1	1.52	0.75
1:A:563:HIS:HB2	1:A:872:PHE:CE2	2.20	0.75
5:T:135:VAL:H	5:T:174:TRP:HZ2	1.31	0.75
3:B:147:ASP:OD2	3:B:148:PRO:HD2	1.85	0.75
7:V:65:ILE:HD12	7:V:65:ILE:N	2.02	0.75
1:A:216:PRO:HG2	1:A:219:ILE:HD12	1.68	0.75
10:Y:7:CYS:SG	10:Y:48:MET:HG3	2.26	0.75
3:R:536:LEU:HD11	3:R:540:ILE:CD1	2.16	0.75
8:K:34:ARG:O	8:K:37:SER:HB2	1.87	0.75
1:Q:308:ARG:HG3	1:Q:312:ASN:HD22	1.50	0.75
3:R:1087:ASN:O	3:R:1088:LEU:HG	1.86	0.75
6:U:15:SER:O	6:U:19:LYS:HE2	1.86	0.75
2:G:107:LEU:O	2:G:111:VAL:HG23	1.86	0.75
3:B:594:ILE:HD12	3:B:601:ALA:HB2	1.69	0.75
3:R:739:ILE:CG2	3:R:909:ILE:HB	2.17	0.75
2:G:329:ILE:HA	2:G:334:VAL:CG1	2.17	0.75
7:V:23:LEU:HD12	7:V:62:ILE:HG12	1.69	0.75
3:B:554:ASN:ND2	3:B:576:ARG:HH21	1.83	0.75
5:T:149:VAL:HG13	5:T:159:ARG:O	1.86	0.75
3:B:771:ASP:CB	3:B:816:PRO:HD3	2.17	0.75
8:K:50:LEU:CD2	8:K:75:PRO:HD3	2.16	0.75
4:D:38:ILE:O	4:D:147:LEU:HA	1.86	0.75
6:F:35:GLN:HA	6:F:38:TYR:CD1	2.22	0.75
1:Q:681:ASN:O	1:Q:683:GLU:HG3	1.86	0.75
6:U:16:VAL:HG22	6:U:49:ALA:HA	1.66	0.75
1:Q:334:ILE:HD11	1:Q:628:MET:HB3	1.68	0.75
1:A:176:THR:O	1:A:180:ILE:HG13	1.87	0.75
3:R:104:GLU:O	3:R:105:ASN:HB2	1.85	0.75
1:A:528:ALA:O	1:A:530:VAL:HG12	1.87	0.75
3:R:490:TYR:CE1	3:R:527:ILE:HG21	2.21	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:665:ARG:HG3	3:B:920:THR:CG2	2.17	0.75
1:A:539:ILE:HB	1:A:545:TYR:HB2	1.67	0.75
3:R:458:THR:HG21	3:R:465:GLY:N	1.97	0.74
3:R:457:GLU:HG2	3:R:469:ASN:OD1	1.87	0.74
2:C:55:ALA:CA	2:C:58:GLU:HG3	2.17	0.74
4:S:175:ASN:CA	4:S:195:LEU:HD11	2.17	0.74
3:B:554:ASN:HD21	3:B:576:ARG:NH2	1.83	0.74
1:Q:176:THR:O	1:Q:180:ILE:HG13	1.87	0.74
1:A:551:VAL:HG13	1:A:552:ILE:N	2.02	0.74
5:E:6:LYS:HE3	6:F:8:GLU:HB2	1.67	0.74
2:G:355:LEU:CD2	3:R:1109:ILE:HD11	2.18	0.74
3:B:1069:TRP:HB2	3:B:1078:VAL:O	1.85	0.74
3:R:904:VAL:HG21	10:Y:42:ARG:HE	1.52	0.74
1:Q:491:TYR:CB	1:Q:607:GLN:OE1	2.34	0.74
3:B:1114:VAL:HG23	3:B:1115:LEU:N	2.02	0.74
1:A:90:ILE:HG21	1:A:208:ILE:HD11	1.69	0.74
3:R:918:ARG:O	3:R:920:THR:HG23	1.86	0.74
1:A:412:ILE:HD12	1:A:415:ASP:HB2	1.67	0.74
4:D:131:VAL:CG2	4:D:132:LEU:H	1.99	0.74
2:G:286:ILE:CD1	7:V:45:ILE:HG13	2.17	0.74
5:T:107:LEU:HD12	5:T:108:VAL:N	2.02	0.74
3:B:724:LEU:HD12	3:B:908:ILE:HG22	1.69	0.74
3:R:64:ARG:O	3:R:97:TRP:HB2	1.86	0.74
1:Q:502:TYR:HE1	1:Q:636:ILE:HD11	1.52	0.74
3:R:445:LEU:HD21	3:R:455:PRO:HA	1.67	0.74
8:K:92:LEU:O	8:K:92:LEU:HD23	1.86	0.74
1:Q:426:HIS:CD2	1:Q:490:ARG:HH12	2.06	0.74
1:Q:538:ALA:HB2	1:Q:550:GLN:OE1	1.88	0.74
4:S:38:ILE:O	4:S:147:LEU:HA	1.87	0.74
1:A:681:ASN:O	1:A:683:GLU:HG3	1.86	0.74
4:S:131:VAL:CG2	4:S:132:LEU:H	2.01	0.74
3:B:458:THR:HG21	3:B:465:GLY:N	1.96	0.74
1:A:600:LYS:HB2	1:A:732:GLY:HA3	1.70	0.74
2:C:391:ARG:HG3	2:C:391:ARG:NH1	1.96	0.74
5:E:170:GLY:N	5:E:175:ILE:HD11	2.01	0.74
5:T:38:ILE:O	5:T:39:LEU:HB2	1.87	0.74
6:F:30:SER:HG	6:F:38:TYR:HE1	1.35	0.74
1:Q:328:PRO:HG3	1:Q:457:PHE:CG	2.23	0.74
3:B:104:GLU:O	3:B:105:ASN:HB2	1.86	0.74
3:B:1014:ARG:HG2	3:B:1014:ARG:HH11	1.52	0.74
1:Q:632:PHE:HA	1:Q:635:PHE:CD1	2.22	0.74
5:T:97:ILE:HD12	5:T:113:ILE:HD11	1.70	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:640:GLU:OE1	3:B:974:ARG:NH1	2.20	0.74
3:R:59:ARG:NH2	3:R:107:ILE:HB	2.01	0.74
5:E:39:LEU:HD23	5:E:40:LYS:N	2.02	0.74
4:D:250:ILE:HA	4:D:253:ILE:HG22	1.70	0.74
5:E:142:VAL:HG12	5:E:171:LYS:HA	1.69	0.74
5:E:145:ARG:NH2	5:E:169:LEU:HD11	2.03	0.74
1:Q:743:MET:O	1:Q:785:SER:HB2	1.87	0.74
3:B:490:TYR:CE1	3:B:527:ILE:HG21	2.22	0.74
3:B:665:ARG:HG3	3:B:920:THR:HG21	1.69	0.74
1:Q:238:LYS:CD	1:Q:276:TYR:HA	2.18	0.74
1:Q:301:ARG:O	1:Q:302:LEU:HG	1.87	0.74
2:G:391:ARG:HH21	8:W:42:GLN:CD	1.90	0.74
4:S:222:VAL:HG11	4:S:225:LYS:HD3	1.69	0.74
3:B:393:ARG:HE	3:B:403:TRP:HZ3	1.35	0.74
4:D:40:ALA:HB3	4:D:156:PHE:CE2	2.22	0.74
7:V:65:ILE:HD12	7:V:65:ILE:H	1.53	0.74
4:S:89:CYS:O	4:S:92:CYS:HB2	1.88	0.74
1:Q:723:ASN:ND2	1:Q:723:ASN:C	2.40	0.74
3:R:975:THR:OG1	3:R:977:GLN:HG2	1.87	0.74
1:Q:539:ILE:HB	1:Q:545:TYR:HB2	1.69	0.74
1:A:418:LEU:HD21	3:B:1044:LEU:CD2	2.14	0.74
1:Q:288:LYS:HG2	1:Q:294:PRO:HA	1.70	0.74
1:A:828:SER:HB2	2:C:72:ILE:HD11	1.70	0.74
7:H:45:ILE:O	7:H:81:VAL:HA	1.87	0.74
1:Q:827:LEU:HD11	2:G:315:LEU:HD13	1.68	0.74
7:H:13:ILE:HG23	7:H:14:HIS:H	1.53	0.74
3:R:65:ILE:N	3:R:65:ILE:HD12	2.00	0.74
3:R:48:GLU:HG3	3:R:365:LEU:HD23	1.70	0.74
1:Q:206:TRP:O	1:Q:208:ILE:N	2.20	0.74
5:E:38:ILE:HG22	5:E:39:LEU:H	1.51	0.74
1:A:475:GLU:CD	2:C:383:THR:HG21	2.08	0.73
2:C:107:LEU:O	2:C:111:VAL:HG23	1.88	0.73
1:Q:826:ALA:HB1	2:G:334:VAL:HG13	1.67	0.73
1:Q:864:LYS:O	1:Q:864:LYS:HG3	1.87	0.73
1:Q:647:ARG:HH11	3:R:965:ASP:CB	2.01	0.73
3:R:10:ARG:HB2	3:R:642:ILE:O	1.88	0.73
3:B:401:GLY:O	3:B:402:ASN:O	2.06	0.73
4:D:37:PRO:HA	4:D:148:GLY:O	1.87	0.73
4:D:79:PRO:O	4:D:83:ILE:HG13	1.88	0.73
7:H:65:ILE:N	7:H:65:ILE:HD12	2.03	0.73
2:G:331:ARG:HD3	2:G:348:GLU:HB3	1.70	0.73
7:H:45:ILE:HB	7:H:79:ARG:HB3	1.68	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:F:56:ILE:HG23	6:F:69:ARG:HB3	1.70	0.73
1:Q:487:ILE:H	1:Q:487:ILE:HD12	1.53	0.73
1:A:761:TYR:CE2	1:A:767:PRO:HD3	2.24	0.73
3:R:38:LYS:HG3	3:R:39:LEU:N	2.02	0.73
6:F:77:PRO:HG3	6:F:83:VAL:HG22	1.69	0.73
2:C:144:LEU:O	2:C:146:TYR:N	2.21	0.73
5:T:41:ASP:C	5:T:42:LEU:HD23	2.07	0.73
4:D:89:CYS:O	4:D:92:CYS:HB2	1.87	0.73
2:G:277:ILE:HG22	2:G:278:ARG:H	1.54	0.73
3:B:361:PHE:CE1	3:B:385:VAL:HG13	2.23	0.73
5:E:113:ILE:HG23	5:E:114:THR:H	1.53	0.73
5:E:34:TYR:O	5:E:37:LYS:HB2	1.88	0.73
2:C:281:GLU:OE1	2:C:326:VAL:HG12	1.87	0.73
2:C:355:LEU:CD2	3:B:1109:ILE:HD11	2.18	0.73
3:R:214:PHE:HZ	3:R:297:PHE:HA	1.54	0.73
3:B:1051:ASP:O	3:B:1055:ARG:HD2	1.87	0.73
9:X:62:SER:O	9:X:63:ILE:HD13	1.88	0.73
1:A:666:ASP:O	1:A:670:VAL:HG13	1.87	0.73
3:R:763:VAL:HG23	3:R:859:ASN:OD1	1.88	0.73
1:Q:293:ARG:NH1	1:Q:296:ARG:NH2	2.36	0.73
4:D:175:ASN:HA	4:D:195:LEU:HD21	1.70	0.73
2:G:122:MET:SD	2:G:256:SER:HA	2.29	0.73
1:A:874:ARG:HE	2:C:53:ASP:CB	1.98	0.73
3:R:193:THR:OG1	3:R:198:VAL:HA	1.88	0.73
1:A:293:ARG:NH1	1:A:296:ARG:NH2	2.35	0.73
3:R:52:GLU:HB2	3:R:56:LEU:HB3	1.71	0.73
3:R:555:VAL:HG22	3:R:568:VAL:HA	1.70	0.73
6:U:14:TYR:CD1	6:U:74:SER:HB2	2.23	0.73
3:B:579:LEU:O	3:B:613:ILE:HG23	1.88	0.73
3:B:59:ARG:NH2	3:B:107:ILE:HB	2.02	0.73
4:D:222:VAL:HG11	4:D:225:LYS:HD3	1.70	0.73
2:C:389:THR:HG21	8:K:79:ARG:HH12	1.53	0.73
5:T:34:TYR:O	5:T:37:LYS:HB2	1.88	0.73
1:A:827:LEU:HD11	2:C:315:LEU:HD13	1.71	0.73
2:C:111:VAL:CG1	2:C:329:ILE:HD12	2.16	0.73
4:S:228:LEU:HD11	4:S:230:ILE:HD11	1.70	0.73
5:E:101:LEU:HD21	5:E:162:LEU:HD11	1.71	0.73
3:R:59:ARG:HH22	3:R:107:ILE:HD12	1.54	0.73
2:G:250:ILE:HG22	2:G:251:ILE:H	1.54	0.73
7:H:69:SER:HB2	7:H:75:VAL:HG23	1.70	0.73
1:A:397:LEU:HA	1:A:400:THR:OG1	1.89	0.73
6:U:12:ILE:HG22	6:U:13:PRO:HD2	1.71	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:4:LYS:HD3	3:R:1091:VAL:HB	1.70	0.73
3:R:890:MET:HE2	3:R:891:LEU:N	2.02	0.73
3:R:473:MET:SD	3:R:474:ALA:N	2.61	0.73
3:B:197:ARG:HH22	3:B:359:LYS:HG2	1.50	0.73
1:A:52:ILE:O	1:A:53:GLU:HB2	1.89	0.73
2:G:120:PRO:HB3	2:G:256:SER:HB3	1.70	0.73
3:R:724:LEU:HD12	3:R:908:ILE:HG22	1.69	0.73
3:R:897:MET:SD	3:R:906:PRO:HG2	2.29	0.73
1:A:507:TYR:HB3	1:A:597:VAL:HG13	1.69	0.73
4:D:13:ILE:CD1	4:D:238:PRO:HB2	2.17	0.73
3:B:757:LEU:HD23	3:B:758:TYR:N	2.03	0.73
3:B:203:GLU:HA	3:B:203:GLU:OE1	1.87	0.73
2:G:144:LEU:O	2:G:146:TYR:N	2.21	0.73
1:A:530:VAL:O	1:A:532:ILE:HG13	1.89	0.73
3:R:870:ARG:NH1	3:R:996:MET:HB2	2.04	0.73
3:R:68:PRO:HA	3:R:93:ALA:O	1.89	0.73
2:C:331:ARG:HD3	2:C:348:GLU:HB3	1.71	0.73
1:Q:761:TYR:CE2	1:Q:767:PRO:HD3	2.23	0.73
3:R:239:VAL:HA	3:R:253:PHE:CE2	2.23	0.73
5:E:134:LYS:HD3	5:E:174:TRP:NE1	2.04	0.73
5:E:107:LEU:HD12	5:E:108:VAL:N	2.02	0.73
1:Q:775:SER:OG	1:Q:776:PRO:HD2	1.89	0.73
3:R:758:TYR:O	3:R:759:SER:HB3	1.88	0.73
2:G:241:ILE:HG22	2:G:242:VAL:N	2.04	0.73
1:Q:239:LEU:HD12	1:Q:276:TYR:HE1	1.54	0.72
3:B:248:VAL:HG11	3:B:329:ARG:NH1	2.02	0.72
1:Q:839:ARG:HA	1:Q:844:GLU:O	1.89	0.72
1:Q:847:GLN:HG2	2:G:318:ASP:OD1	1.90	0.72
1:Q:446:ASN:HD22	1:Q:446:ASN:C	1.92	0.72
3:B:987:VAL:HG11	10:N:47:ARG:NE	2.03	0.72
10:N:35:LEU:CD2	10:N:40:VAL:HG21	2.18	0.72
1:Q:561:ASN:HA	1:Q:588:ILE:O	1.89	0.72
2:C:250:ILE:HG22	2:C:251:ILE:H	1.54	0.72
1:A:377:TYR:H	1:A:388:LEU:HB3	1.54	0.72
1:A:723:ASN:C	1:A:723:ASN:ND2	2.41	0.72
3:B:708:LEU:HD13	3:B:708:LEU:O	1.89	0.72
3:R:401:GLY:O	3:R:402:ASN:O	2.08	0.72
3:B:317:TYR:CD2	3:B:526:LEU:HD13	2.24	0.72
1:Q:409:ARG:HB3	1:Q:409:ARG:NH1	2.04	0.72
1:A:537:PRO:HB2	1:A:540:LEU:HD21	1.71	0.72
10:Y:55:ILE:H	10:Y:55:ILE:HD13	1.54	0.72
2:G:72:ILE:O	2:G:76:GLN:HB2	1.89	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:24:LEU:HD11	2:G:58:GLU:OE1	1.89	0.72
1:Q:728:MET:CE	3:R:913:HIS:HA	2.18	0.72
3:R:65:ILE:CD1	3:R:65:ILE:H	2.01	0.72
3:B:373:LYS:CE	3:B:375:ARG:HD2	2.19	0.72
4:D:8:LYS:HD2	4:D:13:ILE:HG12	1.69	0.72
1:A:450:CYS:HB2	1:A:451:PRO:HD3	1.71	0.72
3:B:780:VAL:HG11	3:B:831:ALA:HB3	1.70	0.72
3:B:1109:ILE:O	3:B:1111:PRO:HD3	1.89	0.72
6:F:15:SER:O	6:F:19:LYS:HE2	1.88	0.72
3:R:640:LEU:HD23	3:R:641:GLU:N	2.00	0.72
3:R:602:ILE:CG2	3:R:603:THR:H	2.02	0.72
5:T:113:ILE:HG23	5:T:114:THR:H	1.54	0.72
5:E:149:VAL:HG13	5:E:159:ARG:O	1.90	0.72
1:A:507:TYR:HB2	1:A:511:VAL:HG13	1.72	0.72
3:R:43:ILE:HG21	3:R:63:ILE:CD1	2.20	0.72
9:L:84:ILE:O	9:L:87:ILE:HG22	1.89	0.72
3:B:900:THR:HG21	3:B:968:GLU:OE2	1.88	0.72
2:G:274:THR:HG22	2:G:276:ASN:H	1.52	0.72
8:K:18:VAL:O	8:K:22:LEU:HB2	1.88	0.72
3:R:874:ILE:H	3:R:874:ILE:CD1	2.03	0.72
1:Q:589:LYS:HZ3	1:Q:879:LYS:H	1.37	0.72
1:A:491:TYR:CB	1:A:607:GLN:OE1	2.37	0.72
3:R:163:THR:HG23	3:R:428:ARG:O	1.88	0.72
3:R:869:LEU:HD11	4:S:56:GLU:CB	2.15	0.72
1:Q:733:ALA:HB1	3:R:913:HIS:HE1	1.54	0.72
1:A:288:LYS:HG2	1:A:294:PRO:HA	1.71	0.72
3:B:43:ILE:HG21	3:B:63:ILE:CD1	2.19	0.72
1:Q:81:VAL:HG12	1:Q:270:GLN:HG3	1.71	0.72
2:C:391:ARG:HH21	8:K:42:GLN:CD	1.92	0.72
5:E:179:LYS:HE2	6:F:81:ASP:HB2	1.72	0.72
1:A:512:LYS:HG3	1:A:583:ASP:OD2	1.87	0.72
1:Q:530:VAL:O	1:Q:532:ILE:HG13	1.90	0.72
1:A:7:LYS:HE2	2:C:365:GLU:OE2	1.89	0.72
3:B:64:ARG:HG2	3:B:64:ARG:HH11	1.54	0.72
2:C:391:ARG:HH22	8:K:39:ARG:NH1	1.87	0.72
1:A:426:HIS:CD2	1:A:490:ARG:HH12	2.06	0.72
1:Q:409:ARG:HB3	1:Q:409:ARG:HH11	1.55	0.72
1:A:831:ARG:HH21	2:C:385:MET:HB2	1.54	0.72
3:B:1060:VAL:CG1	3:B:1065:GLY:HA3	2.19	0.72
2:C:383:THR:HG22	3:B:1042:ALA:H	1.55	0.72
1:A:826:ALA:HB1	2:C:334:VAL:HG13	1.71	0.72
1:Q:7:LYS:HE2	2:G:365:GLU:OE2	1.90	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:6:ILE:HG13	3:R:1091:VAL:HG21	1.71	0.72
1:Q:377:TYR:H	1:Q:388:LEU:HB3	1.54	0.72
5:E:39:LEU:HD23	5:E:41:ASP:H	1.54	0.72
7:V:21:GLU:O	7:V:63:ILE:HG23	1.90	0.72
3:R:1069:TRP:HB2	3:R:1078:VAL:O	1.90	0.72
2:C:277:ILE:O	2:C:279:GLU:N	2.19	0.72
2:C:72:ILE:O	2:C:76:GLN:HB2	1.88	0.72
6:U:77:PRO:HG3	6:U:83:VAL:HG22	1.72	0.72
3:B:902:LYS:HB3	10:N:42:ARG:HD3	1.72	0.72
3:B:699:GLN:NE2	10:N:48:MET:HE3	2.05	0.72
1:A:206:TRP:O	1:A:208:ILE:N	2.22	0.72
3:B:48:GLU:HG3	3:B:365:LEU:HD23	1.71	0.72
3:R:781:ARG:CG	3:R:782:GLY:H	2.02	0.72
3:B:764:LYS:HD3	3:B:815:SER:HA	1.70	0.72
1:A:632:PHE:HA	1:A:635:PHE:CD1	2.25	0.72
8:W:61:VAL:HG12	8:W:62:ILE:H	1.53	0.72
3:R:430:ILE:HG12	3:R:467:VAL:HG23	1.71	0.72
10:Y:1:MET:HB3	10:Y:56:ILE:HD13	1.72	0.72
2:C:241:ILE:HG22	2:C:242:VAL:N	2.05	0.72
3:R:364:ASP:O	3:R:367:TYR:HB3	1.89	0.72
2:G:40:GLU:O	2:G:45:ARG:HG2	1.90	0.72
1:A:308:ARG:HG3	1:A:312:ASN:HD22	1.54	0.71
3:R:544:ARG:HH11	3:R:544:ARG:HG3	1.54	0.71
3:R:560:THR:CG2	3:R:562:PHE:H	1.92	0.71
3:B:81:SER:HB3	3:B:84:GLU:HG3	1.71	0.71
1:Q:4:LYS:HG2	1:Q:5:ASN:N	2.04	0.71
8:K:18:VAL:HG12	8:K:22:LEU:HD12	1.72	0.71
3:B:390:VAL:O	3:B:394:ILE:HB	1.90	0.71
1:A:733:ALA:HB1	3:B:913:HIS:CE1	2.25	0.71
3:B:781:ARG:CG	3:B:782:GLY:H	2.02	0.71
3:B:861:LEU:HD12	3:B:862:VAL:N	2.05	0.71
3:B:68:PRO:HA	3:B:93:ALA:O	1.90	0.71
3:R:698:PRO:HB3	3:R:717:PRO:HG2	1.72	0.71
3:B:88:ARG:CD	3:B:853:THR:HG21	2.13	0.71
3:R:594:ILE:HD12	3:R:601:ALA:HB2	1.71	0.71
3:B:39:LEU:HD11	3:B:354:PHE:CE2	2.24	0.71
3:B:116:ILE:HD12	3:B:361:PHE:CZ	2.25	0.71
8:K:26:ARG:HG2	8:K:90:LEU:HB3	1.72	0.71
5:E:41:ASP:C	5:E:42:LEU:HD23	2.10	0.71
3:R:147:ASP:OD2	3:R:148:PRO:HD2	1.89	0.71
1:A:238:LYS:CD	1:A:276:TYR:HA	2.20	0.71
3:B:654:ILE:H	3:B:654:ILE:HD12	1.53	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:228:LEU:HD11	4:D:230:ILE:HD11	1.72	0.71
2:G:301:LEU:HD12	2:G:302:ALA:N	2.05	0.71
2:C:388:LEU:HD11	8:K:34:ARG:HG3	1.71	0.71
10:N:55:ILE:H	10:N:55:ILE:HD13	1.55	0.71
3:R:88:ARG:CD	3:R:853:THR:HG21	2.14	0.71
4:D:175:ASN:CA	4:D:195:LEU:HD11	2.19	0.71
4:D:190:LEU:HA	4:D:194:LYS:O	1.90	0.71
7:V:69:SER:HB2	7:V:75:VAL:HG23	1.71	0.71
9:X:40:PHE:HE2	9:X:42:SER:HG	1.38	0.71
1:A:551:VAL:HG13	1:A:552:ILE:H	1.56	0.71
3:R:393:ARG:HE	3:R:403:TRP:HZ3	1.36	0.71
3:B:1050:LEU:HD23	3:B:1051:ASP:N	2.05	0.71
1:Q:47:PRO:HG2	1:Q:48:ARG:HD3	1.73	0.71
6:U:35:GLN:HA	6:U:38:TYR:CD1	2.25	0.71
3:R:1079:CYS:SG	3:R:1080:PRO:HD2	2.31	0.71
2:G:115:LYS:HD2	2:G:276:ASN:HD22	1.55	0.71
3:R:725:ALA:HB2	3:R:906:PRO:HB3	1.73	0.71
3:B:911:ASN:ND2	3:B:913:HIS:HB2	2.05	0.71
1:A:589:LYS:NZ	1:A:879:LYS:H	1.88	0.71
3:R:59:ARG:HH22	3:R:107:ILE:CG1	2.04	0.71
3:B:210:PHE:HZ	3:B:323:ILE:HG22	1.56	0.71
3:B:330:ARG:HG2	3:B:330:ARG:HH11	1.56	0.71
3:B:139:ILE:HG21	10:N:61:HIS:HD2	1.56	0.71
8:W:39:ARG:NH2	8:W:50:LEU:HD13	2.06	0.71
3:R:930:GLY:HA2	10:Y:47:ARG:HH22	1.54	0.71
1:Q:864:LYS:HG3	2:G:32:LEU:HD11	1.72	0.71
3:R:427:ARG:HH11	3:R:650:ILE:HD12	1.55	0.71
3:B:371:LYS:O	3:B:373:LYS:N	2.23	0.71
3:B:910:LEU:HD23	3:B:911:ASN:N	2.06	0.71
3:R:762:GLU:O	3:R:764:LYS:HG3	1.91	0.71
1:A:538:ALA:HB2	1:A:550:GLN:OE1	1.91	0.71
1:A:350:PRO:HD3	1:A:468:GLN:HE22	1.56	0.71
3:B:416:ARG:HH12	3:B:687:ARG:HH21	1.39	0.71
3:B:663:SER:HB3	3:B:664:PRO:HD3	1.71	0.71
2:C:115:LYS:HD2	2:C:276:ASN:HD22	1.56	0.71
4:S:98:ILE:CG1	4:S:114:ILE:HG12	2.21	0.71
3:R:21:LYS:HA	3:R:25:ARG:CZ	2.20	0.71
2:C:69:ALA:CB	2:C:381:LEU:HD22	2.20	0.71
1:Q:653:LEU:CD1	1:Q:745:ALA:HB2	2.18	0.71
3:B:1004:ARG:NH2	3:B:1007:GLY:H	1.87	0.71
1:A:518:LYS:CE	1:A:544:GLU:HB2	2.19	0.71
1:Q:245:ILE:HD13	1:Q:268:LEU:HD13	1.71	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:T:3:LYS:HA	6:U:12:ILE:HG13	1.73	0.71
6:U:56:ILE:HG23	6:U:69:ARG:HB3	1.71	0.71
2:G:322:ARG:HD2	2:G:322:ARG:N	2.04	0.71
3:R:1114:VAL:HG23	3:R:1115:LEU:N	2.06	0.71
2:G:393:ILE:HB	5:T:18:PHE:O	1.91	0.71
1:Q:874:ARG:HE	2:G:53:ASP:CB	1.98	0.71
9:X:84:ILE:O	9:X:87:ILE:HG22	1.91	0.71
3:B:536:LEU:HD11	3:B:540:ILE:CD1	2.20	0.71
3:R:771:ASP:CB	3:R:816:PRO:HD3	2.20	0.71
3:R:390:VAL:O	3:R:394:ILE:HB	1.90	0.71
3:B:52:GLU:HB2	3:B:56:LEU:HB3	1.73	0.71
1:A:667:ARG:O	1:A:670:VAL:HG22	1.91	0.71
3:R:663:SER:HB3	3:R:664:PRO:HD3	1.71	0.71
3:B:239:VAL:HA	3:B:253:PHE:CE2	2.25	0.71
1:Q:491:TYR:HB2	1:Q:607:GLN:HE22	1.54	0.71
3:B:555:VAL:HG22	3:B:568:VAL:HA	1.73	0.71
3:B:21:LYS:HA	3:B:25:ARG:CZ	2.21	0.71
3:B:214:PHE:HZ	3:B:297:PHE:HA	1.55	0.71
5:T:179:LYS:HZ3	6:U:79:THR:HB	1.54	0.71
1:A:452:PRO:HA	1:A:495:ILE:HD11	1.72	0.71
8:W:61:VAL:HG12	8:W:62:ILE:N	2.06	0.71
3:R:183:ILE:HB	3:R:207:ASP:C	2.10	0.71
2:C:322:ARG:HD2	2:C:322:ARG:N	2.05	0.71
4:S:51:SER:HB2	4:S:52:PRO:HD2	1.73	0.71
3:B:700:ARG:N	10:N:51:SER:O	2.22	0.71
1:Q:756:ARG:NH2	1:Q:776:PRO:HA	2.06	0.71
3:R:39:LEU:HD11	3:R:354:PHE:CE2	2.26	0.71
3:B:252:LEU:HD12	3:B:323:ILE:HB	1.73	0.70
3:R:971:TYR:CE2	4:S:165:ARG:HA	2.25	0.70
3:B:10:ARG:HB2	3:B:642:ILE:O	1.90	0.70
1:Q:736:SER:HB3	1:Q:739:ASN:OD1	1.90	0.70
3:R:371:LYS:O	3:R:373:LYS:N	2.23	0.70
3:R:1109:ILE:O	3:R:1111:PRO:HD3	1.91	0.70
4:D:51:SER:HB2	4:D:52:PRO:HD2	1.73	0.70
1:A:481:LEU:HD23	1:A:482:VAL:H	1.55	0.70
1:A:15:SER:HA	1:A:203:ARG:NH2	2.07	0.70
2:G:141:ALA:HA	2:G:144:LEU:HD12	1.73	0.70
5:T:39:LEU:HD23	5:T:40:LYS:N	2.06	0.70
3:R:416:ARG:NH1	3:R:687:ARG:HH21	1.87	0.70
1:Q:537:PRO:HB2	1:Q:540:LEU:HD21	1.73	0.70
2:G:130:TYR:CD1	2:G:136:LYS:HG3	2.27	0.70
3:B:206:LYS:O	3:B:210:PHE:HA	1.90	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:F:16:VAL:CG2	6:F:53:GLN:HG3	2.15	0.70
8:W:26:ARG:HG2	8:W:90:LEU:HB3	1.74	0.70
3:R:591:ILE:HG12	3:R:612:LYS:NZ	2.06	0.70
1:Q:553:SER:OG	1:Q:592:ILE:HA	1.91	0.70
3:R:252:LEU:HD12	3:R:323:ILE:HB	1.74	0.70
1:Q:485:ASN:HD21	3:R:1039:PHE:HE2	1.38	0.70
4:S:66:PRO:HG2	10:Y:13:LEU:HD21	1.72	0.70
1:Q:507:TYR:HB2	1:Q:511:VAL:HG13	1.72	0.70
1:A:364:PHE:CE1	1:A:409:ARG:HD2	2.26	0.70
4:D:90:GLU:C	4:D:92:CYS:H	1.95	0.70
4:D:180:VAL:CG2	4:D:190:LEU:HG	2.20	0.70
2:G:115:LYS:HB2	2:G:278:ARG:HG3	1.72	0.70
2:G:28:ILE:HD12	8:W:18:VAL:HG23	1.73	0.70
1:Q:604:GLY:C	1:Q:606:GLN:N	2.44	0.70
3:B:480:ILE:HG22	3:B:481:ASN:N	2.06	0.70
3:B:193:THR:OG1	3:B:198:VAL:HA	1.91	0.70
1:A:637:ARG:HD3	1:A:640:GLU:CD	2.12	0.70
1:Q:742:GLN:HB2	3:R:919:MET:HE3	1.73	0.70
5:E:100:ASN:HD21	6:F:36:ARG:HD3	1.55	0.70
1:A:279:ASN:HB2	1:A:297:THR:HG21	1.74	0.70
3:B:437:GLN:HB3	3:B:438:PRO:CD	2.21	0.70
3:R:1114:VAL:C	3:R:1115:LEU:HD23	2.12	0.70
3:R:932:TYR:CD2	3:R:953:LEU:HD22	2.27	0.70
3:B:764:LYS:NZ	3:B:772:LYS:O	2.24	0.70
1:A:328:PRO:HG3	1:A:457:PHE:CG	2.27	0.70
2:C:14:GLU:O	2:C:17:VAL:HG12	1.90	0.70
3:B:1097:PHE:CE2	3:B:1101:ILE:HD11	2.27	0.70
3:B:763:VAL:HG23	3:B:859:ASN:OD1	1.90	0.70
5:T:15:PRO:HB2	8:W:45:MET:O	1.91	0.70
1:Q:528:ALA:O	1:Q:530:VAL:HG12	1.91	0.70
3:R:482:GLU:O	3:R:484:ILE:N	2.25	0.70
3:R:852:ILE:HG23	3:R:862:VAL:HG22	1.74	0.70
3:R:764:LYS:HD3	3:R:815:SER:HA	1.74	0.70
3:R:203:GLU:HA	3:R:203:GLU:OE1	1.91	0.70
11:P:10:TRP:O	11:P:11:LYS:HB2	1.92	0.70
1:Q:279:ASN:HB2	1:Q:297:THR:CG2	2.22	0.70
1:A:6:ILE:HG13	3:B:1091:VAL:HG21	1.74	0.70
3:B:518:SER:HB3	3:B:564:ASN:ND2	2.07	0.70
3:B:591:ILE:HG12	3:B:612:LYS:NZ	2.06	0.70
3:B:932:TYR:CD2	3:B:953:LEU:HD22	2.26	0.70
3:B:116:ILE:HG23	3:B:361:PHE:CE1	2.27	0.70
1:Q:841:LEU:HD11	2:G:339:ASN:HB3	1.74	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:814:VAL:HG11	3:B:832:LYS:HB3	1.74	0.70
1:Q:551:VAL:HG13	1:Q:552:ILE:N	2.06	0.70
5:E:17:GLU:HG2	5:E:20:LYS:NZ	2.06	0.70
1:A:252:SER:O	1:A:257:ALA:HB2	1.92	0.70
2:G:69:ALA:CB	2:G:381:LEU:HD22	2.20	0.70
7:V:12:ARG:HH12	7:V:55:ILE:HB	1.57	0.70
7:H:12:ARG:HH12	7:H:55:ILE:HB	1.57	0.70
4:S:34:LEU:HA	4:S:150:GLY:HA3	1.74	0.70
3:B:430:ILE:HG12	3:B:467:VAL:HG23	1.73	0.70
1:A:866:VAL:HG12	1:A:869:ASN:N	2.03	0.70
3:B:723:ILE:HD12	10:N:43:TYR:HE1	1.57	0.70
5:E:126:ILE:HD11	5:E:137:GLN:HG2	1.72	0.70
1:A:644:PHE:HA	1:A:724:PHE:HE2	1.57	0.70
1:A:728:MET:O	1:A:733:ALA:HB3	1.91	0.70
3:R:116:ILE:HD12	3:R:361:PHE:CZ	2.27	0.70
3:B:416:ARG:NH1	3:B:687:ARG:HH21	1.87	0.70
1:Q:412:ILE:HD12	1:Q:415:ASP:HB2	1.72	0.70
1:Q:458:ASP:HA	3:R:886:GLY:HA2	1.73	0.70
7:H:65:ILE:H	7:H:65:ILE:HD12	1.57	0.70
3:R:210:PHE:HZ	3:R:323:ILE:HG22	1.56	0.70
3:R:81:SER:HB3	3:R:84:GLU:HG3	1.73	0.70
1:Q:828:SER:HB2	2:G:72:ILE:CD1	2.21	0.70
8:W:79:ARG:HG3	8:W:79:ARG:HH11	1.57	0.70
1:Q:644:PHE:HA	1:Q:724:PHE:HE2	1.57	0.70
3:R:590:THR:HA	3:R:593:ASP:OD2	1.90	0.70
3:R:522:LEU:O	3:R:525:ARG:HB3	1.92	0.70
1:A:756:ARG:NH2	1:A:776:PRO:HA	2.07	0.70
3:B:59:ARG:HH22	3:B:107:ILE:HD12	1.57	0.70
4:D:18:GLU:CD	4:D:225:LYS:HD2	2.12	0.70
4:D:6:LEU:HD13	4:D:16:VAL:HG21	1.73	0.70
3:R:52:GLU:HG3	3:R:56:LEU:HD23	1.74	0.70
1:Q:737:VAL:HG23	1:Q:738:LEU:HD22	1.72	0.70
1:Q:346:THR:HG21	3:R:1003:ALA:HB1	1.72	0.70
2:C:274:THR:HG22	2:C:276:ASN:H	1.56	0.69
6:F:12:ILE:HG22	6:F:13:PRO:HD2	1.74	0.69
2:G:392:PRO:HG3	5:T:68:HIS:CE1	2.27	0.69
3:R:702:LEU:HB3	10:Y:47:ARG:NH2	2.07	0.69
1:Q:637:ARG:HD3	1:Q:640:GLU:CD	2.12	0.69
1:A:253:ILE:HG13	1:A:262:ILE:HD11	1.73	0.69
1:A:647:ARG:HH11	3:B:965:ASP:CB	2.03	0.69
1:Q:518:LYS:CE	1:Q:544:GLU:HB2	2.22	0.69
3:B:683:ASN:O	3:B:685:GLN:N	2.25	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:88:ARG:HD3	3:R:853:THR:CG2	2.15	0.69
10:N:19:GLN:HA	10:N:22:ILE:HD11	1.73	0.69
1:Q:525:LEU:C	1:Q:527:VAL:H	1.96	0.69
4:S:40:ALA:HB3	4:S:156:PHE:CE2	2.25	0.69
3:B:1114:VAL:C	3:B:1115:LEU:HD23	2.12	0.69
3:B:63:ILE:HD12	3:B:63:ILE:N	2.07	0.69
1:A:653:LEU:CD1	1:A:745:ALA:HB2	2.21	0.69
1:A:841:LEU:O	1:A:843:GLY:N	2.25	0.69
8:W:34:ARG:O	8:W:37:SER:HB2	1.92	0.69
1:Q:238:LYS:NZ	1:Q:275:THR:O	2.24	0.69
3:R:1014:ARG:HG2	3:R:1014:ARG:NH1	2.04	0.69
3:R:904:VAL:CG2	10:Y:42:ARG:HG2	2.22	0.69
1:Q:575:CYS:SG	1:Q:580:CYS:CB	2.77	0.69
4:D:34:LEU:HA	4:D:150:GLY:HA3	1.75	0.69
2:G:344:ARG:NH1	2:G:344:ARG:HB2	2.07	0.69
8:W:28:THR:OG1	8:W:31:GLU:HG3	1.92	0.69
5:E:31:ARG:C	5:E:33:GLN:H	1.95	0.69
2:C:368:GLY:HA3	2:C:371:GLU:OE1	1.92	0.69
3:B:890:MET:HE2	3:B:891:LEU:N	2.03	0.69
1:Q:704:LEU:HD22	1:Q:781:PHE:HE1	1.56	0.69
5:T:53:THR:O	5:T:70:VAL:HG13	1.93	0.69
1:A:553:SER:OG	1:A:592:ILE:HA	1.92	0.69
3:R:64:ARG:H	3:R:97:TRP:HB2	1.56	0.69
5:T:39:LEU:HD23	5:T:41:ASP:H	1.56	0.69
3:B:662:GLN:HG2	3:B:664:PRO:HD2	1.74	0.69
1:A:737:VAL:HG23	1:A:738:LEU:HD22	1.75	0.69
3:B:698:PRO:HB3	3:B:717:PRO:HG2	1.74	0.69
7:V:62:ILE:HD13	7:V:62:ILE:H	1.57	0.69
1:Q:203:ARG:NH1	1:Q:206:TRP:HB2	2.07	0.69
3:R:360:ALA:HB2	3:R:393:ARG:NH1	2.08	0.69
1:Q:324:THR:HG21	1:Q:441:LEU:O	1.92	0.69
2:C:141:ALA:HA	2:C:144:LEU:HD12	1.75	0.69
1:A:491:TYR:HB2	1:A:607:GLN:HE22	1.57	0.69
10:N:22:ILE:HD13	10:N:22:ILE:N	2.08	0.69
4:S:175:ASN:HA	4:S:195:LEU:HD21	1.72	0.69
3:B:59:ARG:HH22	3:B:107:ILE:CB	2.06	0.69
3:R:764:LYS:HZ1	3:R:772:LYS:C	1.94	0.69
8:K:39:ARG:NH2	8:K:50:LEU:HD13	2.06	0.69
3:R:873:THR:CG2	3:R:874:ILE:N	2.55	0.69
1:A:458:ASP:HA	3:B:886:GLY:HA2	1.74	0.69
1:Q:262:ILE:HG12	1:Q:266:TRP:HE1	1.56	0.69
7:H:23:LEU:HD12	7:H:62:ILE:HG12	1.72	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:458:THR:HG23	3:R:467:VAL:O	1.92	0.69
10:Y:19:GLN:HA	10:Y:22:ILE:HD11	1.74	0.69
3:R:971:TYR:CZ	4:S:165:ARG:HA	2.28	0.69
1:Q:532:ILE:HD11	9:X:56:LYS:HD3	1.72	0.69
3:B:522:LEU:O	3:B:525:ARG:HB3	1.93	0.69
3:B:934:ALA:O	10:N:46:ARG:HD3	1.92	0.69
3:B:851:LEU:HG	11:P:35:PHE:CD2	2.26	0.69
4:S:90:GLU:C	4:S:92:CYS:H	1.96	0.69
1:A:337:VAL:HG23	1:A:433:HIS:CB	2.23	0.69
1:Q:253:ILE:HG13	1:Q:262:ILE:HD11	1.75	0.69
3:R:518:SER:HB3	3:R:564:ASN:ND2	2.07	0.69
4:D:191:LYS:CB	4:D:194:LYS:HD2	2.21	0.69
10:Y:3:ILE:HD11	10:Y:18:TRP:CE3	2.27	0.69
4:S:250:ILE:HA	4:S:253:ILE:CG2	2.23	0.69
3:R:427:ARG:NH1	3:R:650:ILE:HD12	2.08	0.69
3:B:38:LYS:HG3	3:B:39:LEU:N	2.06	0.69
3:B:967:THR:HB	3:B:982:ARG:HG2	1.74	0.69
4:D:34:LEU:HD22	4:D:151:LYS:HB2	1.74	0.69
3:R:688:THR:OG1	3:R:863:LYS:HD3	1.92	0.69
8:K:45:MET:CE	8:K:45:MET:HA	2.23	0.69
1:A:324:THR:HG21	1:A:441:LEU:O	1.92	0.69
8:K:28:THR:OG1	8:K:31:GLU:HG3	1.93	0.69
1:Q:483:HIS:CD2	1:Q:625:LYS:HD2	2.28	0.69
7:H:9:ILE:O	7:H:9:ILE:HG22	1.93	0.69
1:A:313:LEU:HD21	3:B:1100:LEU:HD22	1.75	0.69
2:C:310:ILE:CD1	2:C:310:ILE:H	2.01	0.69
2:C:107:LEU:O	2:C:110:ILE:HG22	1.93	0.69
3:R:1057:MET:O	3:R:1058:ILE:HD13	1.93	0.69
1:Q:501:ASP:OD2	3:R:913:HIS:HD2	1.75	0.69
1:Q:353:ILE:HG13	1:Q:361:LEU:HD23	1.73	0.69
1:A:464:LEU:HD13	1:A:465:HIS:N	2.08	0.69
3:B:943:THR:HG22	3:B:944:PRO:CD	2.23	0.69
3:B:707:ALA:O	3:B:711:ILE:HG13	1.92	0.69
9:L:62:SER:O	9:L:63:ILE:HD13	1.92	0.69
3:B:1119:VAL:HG21	6:F:4:VAL:HG11	1.74	0.69
3:R:700:ARG:N	10:Y:51:SER:O	2.26	0.69
1:Q:376:ASN:O	1:Q:377:TYR:CB	2.40	0.69
1:A:58:CYS:SG	1:A:59:PRO:CD	2.80	0.69
4:D:67:PHE:HD2	4:D:121:VAL:HG12	1.58	0.69
3:R:1050:LEU:HD23	3:R:1051:ASP:N	2.06	0.69
3:B:672:MET:HG2	3:B:993:LEU:HD21	1.74	0.69
3:B:164:GLN:HG2	3:B:349:LEU:HD21	1.75	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:27:ILE:HG23	1:A:45:MET:HG2	1.73	0.68
1:Q:238:LYS:CE	1:Q:297:THR:HB	2.22	0.68
3:B:139:ILE:HD12	10:N:61:HIS:CD2	2.27	0.68
3:B:450:TRP:CZ2	3:B:641:GLU:OE1	2.46	0.68
1:A:765:THR:HG21	1:A:797:PHE:HE2	1.58	0.68
3:R:480:ILE:HG22	3:R:481:ASN:N	2.08	0.68
2:C:370:VAL:O	2:C:373:ILE:HG22	1.93	0.68
1:A:841:LEU:HD11	2:C:339:ASN:HB3	1.74	0.68
1:A:525:LEU:C	1:A:527:VAL:H	1.96	0.68
4:S:63:ALA:HB1	4:S:155:LYS:HZ3	1.58	0.68
3:R:780:VAL:HG11	3:R:831:ALA:HB3	1.75	0.68
2:G:38:ASN:N	2:G:38:ASN:HD22	1.90	0.68
2:C:38:ASN:HD22	2:C:38:ASN:N	1.91	0.68
3:R:1061:CYS:HB3	3:R:1065:GLY:N	2.09	0.68
3:B:321:LYS:HD2	3:B:330:ARG:HE	1.58	0.68
3:B:330:ARG:NH1	3:B:330:ARG:HG2	2.07	0.68
10:Y:42:ARG:CG	10:Y:43:TYR:H	2.06	0.68
1:A:697:GLU:OE1	1:A:756:ARG:HD3	1.94	0.68
3:R:814:VAL:HG11	3:R:832:LYS:HB3	1.74	0.68
2:C:146:TYR:HD1	2:C:146:TYR:H	1.38	0.68
1:A:534:LEU:HD13	1:A:535:GLY:N	2.09	0.68
7:V:20:HIS:O	7:V:21:GLU:HG3	1.94	0.68
3:R:1074:LYS:HA	3:R:1074:LYS:HE2	1.76	0.68
7:H:23:LEU:HD21	7:H:64:ARG:HB2	1.76	0.68
1:Q:476:ALA:HB2	3:R:1044:LEU:HD13	1.74	0.68
7:V:23:LEU:HD21	7:V:64:ARG:HB2	1.75	0.68
3:B:6:THR:HG22	3:B:7:ILE:H	1.58	0.68
1:A:877:GLY:HA3	3:R:377:ARG:NH1	2.08	0.68
1:Q:561:ASN:ND2	1:Q:590:ASN:H	1.90	0.68
3:B:806:GLY:O	3:B:839:THR:HB	1.93	0.68
1:Q:502:TYR:CE1	1:Q:636:ILE:HD11	2.28	0.68
3:B:52:GLU:HG3	3:B:56:LEU:HD23	1.75	0.68
3:B:364:ASP:O	3:B:367:TYR:HB3	1.93	0.68
3:B:959:ARG:HG2	3:B:959:ARG:HH11	1.57	0.68
1:A:27:ILE:N	1:A:27:ILE:HD12	2.07	0.68
2:G:355:LEU:HD23	3:R:1109:ILE:HD11	1.76	0.68
1:Q:427:ARG:N	2:G:76:GLN:NE2	2.41	0.68
4:S:190:LEU:HA	4:S:194:LYS:O	1.92	0.68
3:B:482:GLU:O	3:B:484:ILE:N	2.25	0.68
3:B:65:ILE:HD12	3:B:65:ILE:N	2.04	0.68
3:B:762:GLU:O	3:B:764:LYS:HG3	1.93	0.68
1:A:409:ARG:NH1	1:A:409:ARG:HB3	2.07	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:130:TYR:CD1	2:C:136:LYS:HG3	2.28	0.68
3:B:725:ALA:HB2	3:B:906:PRO:HB3	1.74	0.68
7:H:21:GLU:O	7:H:63:ILE:HG23	1.92	0.68
2:C:13:LEU:CD2	2:C:16:LYS:HZ2	2.06	0.68
11:Z:10:TRP:O	11:Z:11:LYS:HB2	1.93	0.68
1:Q:708:ARG:HG3	1:Q:709:SER:N	2.06	0.68
3:R:707:ALA:O	3:R:711:ILE:HG13	1.93	0.68
2:C:122:MET:SD	2:C:256:SER:HA	2.33	0.68
1:A:837:THR:HG22	1:A:838:VAL:H	1.59	0.68
2:C:24:LEU:HD11	2:C:58:GLU:OE1	1.93	0.68
1:Q:640:GLU:OE1	3:R:974:ARG:NH1	2.26	0.68
1:Q:569:SER:HB2	1:Q:584:SER:OG	1.92	0.68
3:B:582:VAL:HG22	3:B:586:ASN:O	1.93	0.68
3:B:590:THR:HA	3:B:593:ASP:OD2	1.94	0.68
3:B:873:THR:CG2	3:B:874:ILE:N	2.57	0.68
3:B:59:ARG:HH22	3:B:107:ILE:CG1	2.06	0.68
1:Q:696:LEU:O	1:Q:700:ILE:HG12	1.94	0.68
3:R:368:GLN:HE22	3:R:386:ARG:HE	1.40	0.68
3:R:59:ARG:HH22	3:R:107:ILE:CB	2.05	0.68
3:R:277:ALA:HB3	3:R:280:GLN:OE1	1.92	0.68
3:B:1074:LYS:HE2	3:B:1074:LYS:HA	1.75	0.68
10:N:52:HIS:NE2	10:N:54:ASP:HB2	2.09	0.68
1:A:827:LEU:HG	2:C:75:ALA:HB2	1.75	0.68
2:G:390:MET:CB	5:T:56:GLU:HG3	2.21	0.68
3:R:934:ALA:HB2	10:Y:47:ARG:HD3	1.75	0.68
1:Q:733:ALA:HB1	3:R:913:HIS:CE1	2.29	0.68
3:R:911:ASN:ND2	3:R:913:HIS:HB2	2.07	0.68
9:X:40:PHE:HB3	9:X:58:LEU:HB3	1.74	0.68
3:R:119:LEU:HD12	3:R:120:PRO:CD	2.22	0.68
3:R:708:LEU:O	3:R:708:LEU:HD13	1.94	0.68
3:B:975:THR:OG1	3:B:977:GLN:HG2	1.94	0.68
1:Q:697:GLU:OE1	1:Q:756:ARG:HD3	1.93	0.68
9:X:15:LEU:HB3	9:X:55:VAL:HG23	1.76	0.68
1:Q:612:LEU:HA	1:Q:615:LEU:HD12	1.74	0.68
1:Q:27:ILE:N	1:Q:27:ILE:HD12	2.09	0.68
1:Q:313:LEU:HD21	3:R:1100:LEU:HD22	1.74	0.68
1:Q:4:LYS:HZ2	3:R:1115:LEU:HB3	1.57	0.68
2:G:393:ILE:CG2	2:G:395:ARG:HH21	2.07	0.68
2:G:28:ILE:HD13	8:W:14:HIS:CB	2.23	0.68
1:A:575:CYS:SG	1:A:580:CYS:CB	2.81	0.68
1:Q:57:LYS:HB3	1:Q:62:GLY:HA2	1.76	0.68
1:A:177:PRO:HG2	1:A:270:GLN:HE22	1.59	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:E:113:ILE:HG23	5:E:114:THR:N	2.09	0.68
5:E:116:ASP:CG	5:E:117:THR:N	2.47	0.68
1:A:647:ARG:HB2	1:A:650:ASP:OD2	1.94	0.68
1:A:878:TRP:CZ3	2:C:50:LYS:HE2	2.29	0.68
2:G:301:LEU:HA	2:G:304:GLN:HG3	1.76	0.68
2:C:301:LEU:HD12	2:C:302:ALA:N	2.08	0.68
8:W:32:ILE:O	8:W:35:VAL:HG22	1.94	0.68
7:H:24:ASN:O	7:H:26:ASP:N	2.27	0.68
1:A:864:LYS:HG3	2:C:32:LEU:HD11	1.76	0.68
1:Q:728:MET:HE1	3:R:913:HIS:HA	1.75	0.68
4:S:16:VAL:HG12	4:S:16:VAL:O	1.93	0.68
3:B:899:TYR:CE1	3:B:971:TYR:HB2	2.29	0.68
1:A:506:ALA:HA	1:A:635:PHE:CE2	2.28	0.68
1:A:506:ALA:HA	1:A:635:PHE:HE2	1.59	0.68
1:Q:350:PRO:HD3	1:Q:468:GLN:HE22	1.58	0.68
9:X:15:LEU:HB3	9:X:55:VAL:CG2	2.24	0.68
1:Q:27:ILE:HG23	1:Q:45:MET:HG2	1.75	0.68
5:E:4:LEU:HD21	5:E:73:ASP:HB3	1.76	0.68
1:Q:512:LYS:HG3	1:Q:583:ASP:OD2	1.93	0.68
1:Q:308:ARG:HH21	3:R:1099:LEU:CD1	1.97	0.68
2:C:269:VAL:HA	2:C:272:VAL:CG2	2.24	0.68
8:W:82:LEU:HB2	8:W:83:PRO:HD2	1.76	0.68
7:V:34:GLU:HG3	8:W:84:ASN:OD1	1.94	0.68
10:Y:52:HIS:NE2	10:Y:54:ASP:HB2	2.09	0.68
1:Q:481:LEU:HD23	1:Q:482:VAL:H	1.58	0.68
1:Q:507:TYR:HB3	1:Q:597:VAL:HG13	1.76	0.68
3:R:63:ILE:N	3:R:63:ILE:HD12	2.08	0.68
3:R:1004:ARG:NH2	3:R:1007:GLY:H	1.92	0.68
3:R:806:GLY:O	3:R:839:THR:HB	1.93	0.68
3:B:163:THR:HG23	3:B:428:ARG:O	1.94	0.68
3:B:244:LEU:C	3:B:246:PRO:HD3	2.14	0.68
5:E:3:LYS:HA	6:F:12:ILE:HG13	1.75	0.68
10:Y:22:ILE:HD13	10:Y:22:ILE:N	2.08	0.68
2:G:310:ILE:HG22	2:G:314:LEU:CD2	2.24	0.68
3:B:427:ARG:HH11	3:B:650:ILE:HD12	1.59	0.68
3:B:602:ILE:CG2	3:B:603:THR:H	2.06	0.68
5:E:126:ILE:HG23	5:E:136:ILE:H	1.59	0.68
8:W:53:ILE:CD1	8:W:53:ILE:H	2.06	0.68
1:Q:878:TRP:CZ3	2:G:50:LYS:HE2	2.29	0.68
3:R:317:TYR:CD2	3:R:526:LEU:HD13	2.29	0.68
3:R:453:MET:HE3	3:R:470:LEU:HA	1.75	0.68
2:C:11:PRO:O	2:C:14:GLU:HG3	1.94	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:900:THR:HG21	3:R:968:GLU:OE2	1.93	0.68
1:Q:252:SER:O	1:Q:257:ALA:HB2	1.92	0.68
7:V:24:ASN:O	7:V:26:ASP:N	2.27	0.68
3:B:696:HIS:ND1	4:D:57:ILE:HD11	2.09	0.67
7:H:64:ARG:NH2	8:K:12:ASP:OD1	2.26	0.67
8:K:23:TRP:CE3	8:K:23:TRP:HA	2.28	0.67
8:K:23:TRP:HE3	8:K:23:TRP:HA	1.59	0.67
3:B:427:ARG:NH1	3:B:650:ILE:HD12	2.09	0.67
3:R:971:TYR:CZ	3:R:978:LYS:HB3	2.30	0.67
4:S:12:ARG:HA	4:S:230:ILE:O	1.94	0.67
3:R:161:ILE:HG21	3:R:346:ALA:HA	1.76	0.67
5:T:179:LYS:HE2	6:U:81:ASP:CB	2.21	0.67
1:Q:55:GLY:O	1:Q:57:LYS:N	2.27	0.67
1:A:387:ASP:CG	1:A:388:LEU:H	1.97	0.67
3:B:360:ALA:HB2	3:B:393:ARG:NH1	2.08	0.67
3:B:530:TYR:OH	3:B:536:LEU:HB2	1.94	0.67
3:R:536:LEU:HD13	3:R:536:LEU:C	2.15	0.67
1:A:567:ASN:HB2	1:A:601:LYS:HG2	1.74	0.67
5:T:31:ARG:C	5:T:33:GLN:H	1.94	0.67
3:R:1069:TRP:HB3	3:R:1079:CYS:HA	1.77	0.67
2:C:115:LYS:HE2	2:C:279:GLU:HB2	1.76	0.67
1:A:427:ARG:N	2:C:76:GLN:NE2	2.42	0.67
8:W:82:LEU:H	8:W:82:LEU:HD23	1.58	0.67
2:G:277:ILE:C	2:G:279:GLU:H	1.98	0.67
2:G:393:ILE:HG22	2:G:394:LEU:H	1.58	0.67
10:Y:35:LEU:CD2	10:Y:40:VAL:HG21	2.22	0.67
10:N:43:TYR:HA	10:N:46:ARG:HB3	1.75	0.67
1:A:262:ILE:HG12	1:A:266:TRP:HE1	1.58	0.67
8:K:79:ARG:HG3	8:K:79:ARG:HH11	1.59	0.67
1:Q:876:VAL:O	1:Q:878:TRP:N	2.27	0.67
4:D:235:SER:O	4:D:236:LEU:HD12	1.94	0.67
1:A:47:PRO:HG2	1:A:48:ARG:H	1.59	0.67
1:Q:765:THR:HG21	1:Q:797:PHE:HE2	1.58	0.67
3:R:450:TRP:CZ2	3:R:641:GLU:OE1	2.45	0.67
3:B:480:ILE:HG22	3:B:481:ASN:H	1.58	0.67
10:N:42:ARG:CG	10:N:43:TYR:H	2.07	0.67
3:B:40:GLN:HE22	3:B:62:LYS:HA	1.59	0.67
1:Q:203:ARG:CZ	1:Q:206:TRP:HB2	2.23	0.67
1:Q:551:VAL:HG13	1:Q:552:ILE:H	1.60	0.67
2:C:40:GLU:O	2:C:45:ARG:HG2	1.93	0.67
3:R:1097:PHE:CE2	3:R:1101:ILE:HD11	2.30	0.67
3:R:727:MET:HE2	3:R:983:ILE:HG21	1.77	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:119:LEU:HD12	3:B:120:PRO:CD	2.24	0.67
5:T:110:ILE:O	5:T:113:ILE:HG22	1.94	0.67
5:T:83:GLU:O	5:T:145:ARG:HA	1.94	0.67
3:B:739:ILE:CG2	3:B:909:ILE:HB	2.23	0.67
4:D:217:ILE:N	4:D:217:ILE:HD12	2.10	0.67
1:A:872:PHE:CG	1:A:876:VAL:HG21	2.29	0.67
3:B:690:THR:HG22	3:B:691:ARG:HG3	1.76	0.67
1:Q:331:ASN:O	1:Q:332:ILE:CB	2.42	0.67
3:B:189:ILE:HB	3:B:203:GLU:CB	2.24	0.67
1:Q:324:THR:HG22	1:Q:325:VAL:N	2.08	0.67
9:L:40:PHE:HB3	9:L:58:LEU:HB3	1.76	0.67
3:R:330:ARG:HG2	3:R:330:ARG:HH11	1.59	0.67
3:R:433:LEU:HB2	3:R:435:ARG:CZ	2.25	0.67
3:R:972:ASP:OD2	3:R:974:ARG:HG2	1.95	0.67
3:B:946:TYR:CD2	3:B:947:LYS:N	2.49	0.67
1:A:324:THR:HG22	1:A:325:VAL:N	2.10	0.67
6:U:30:SER:HG	6:U:38:TYR:HE1	1.39	0.67
8:K:71:ARG:HB2	8:K:71:ARG:HH11	1.59	0.67
3:R:959:ARG:HH11	3:R:959:ARG:HG2	1.59	0.67
3:B:1057:MET:O	3:B:1058:ILE:HD13	1.95	0.67
2:C:104:LEU:HB3	2:C:105:PRO:CD	2.22	0.67
3:B:544:ARG:HH11	3:B:544:ARG:HG3	1.58	0.67
5:T:126:ILE:HD11	5:T:137:GLN:HG2	1.76	0.67
3:B:536:LEU:C	3:B:536:LEU:HD13	2.14	0.67
5:E:83:GLU:O	5:E:145:ARG:HA	1.95	0.67
8:W:60:ASP:N	8:W:60:ASP:OD2	2.27	0.67
4:D:64:LEU:HD22	10:N:6:ARG:HD3	1.76	0.67
1:Q:238:LYS:HD3	1:Q:276:TYR:HA	1.76	0.67
1:Q:402:ALA:O	1:Q:404:GLY:N	2.28	0.67
5:T:126:ILE:HG23	5:T:136:ILE:H	1.59	0.67
3:R:690:THR:HG22	3:R:691:ARG:HG3	1.77	0.67
1:Q:15:SER:HA	1:Q:203:ARG:NH2	2.09	0.67
2:G:388:LEU:HD11	8:W:34:ARG:HG3	1.76	0.67
3:R:683:ASN:O	3:R:685:GLN:N	2.28	0.67
7:V:38:ARG:HH11	7:V:38:ARG:HG2	1.60	0.67
3:B:1009:VAL:HG12	3:B:1016:PRO:HA	1.77	0.67
3:B:1069:TRP:HB3	3:B:1079:CYS:HA	1.74	0.67
3:B:1079:CYS:SG	3:B:1080:PRO:HD2	2.34	0.67
3:R:244:LEU:C	3:R:246:PRO:HD3	2.15	0.67
8:W:45:MET:HE2	8:W:45:MET:HA	1.76	0.67
4:S:51:SER:HA	4:S:137:GLN:NE2	2.10	0.67
1:Q:490:ARG:HG3	2:G:77:SER:HB3	1.76	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:910:LEU:HD23	3:R:911:ASN:N	2.10	0.67
3:R:967:THR:HB	3:R:982:ARG:HG2	1.77	0.67
1:A:203:ARG:NH1	1:A:206:TRP:HB2	2.08	0.67
3:R:373:LYS:CE	3:R:375:ARG:HD2	2.25	0.67
3:B:157:SER:O	3:B:158:GLU:HB2	1.95	0.67
1:A:490:ARG:HG3	2:C:77:SER:HB3	1.77	0.67
4:D:250:ILE:HA	4:D:253:ILE:CG2	2.25	0.67
6:U:31:SER:HA	6:U:35:GLN:HE21	1.58	0.67
1:Q:567:ASN:HB3	1:Q:599:ASP:OD2	1.95	0.67
5:T:4:LEU:HD21	5:T:73:ASP:HB3	1.76	0.67
2:G:63:LEU:HD21	8:W:23:TRP:CZ3	2.30	0.67
1:Q:534:LEU:HD23	9:X:39:SER:OG	1.95	0.67
3:B:581:ILE:HD11	3:B:614:GLU:CB	2.19	0.67
5:E:110:ILE:O	5:E:113:ILE:HG22	1.95	0.67
6:F:79:THR:O	6:F:83:VAL:HG23	1.95	0.67
2:G:146:TYR:HD1	2:G:146:TYR:H	1.38	0.67
1:A:47:PRO:HG2	1:A:48:ARG:HD3	1.75	0.67
1:Q:567:ASN:HB2	1:Q:601:LYS:HG2	1.75	0.67
3:R:200:VAL:HG13	3:R:200:VAL:O	1.95	0.67
3:B:853:THR:HG23	11:P:32:LYS:O	1.94	0.67
1:Q:490:ARG:HA	2:G:312:HIS:HE1	1.58	0.67
1:Q:728:MET:O	1:Q:733:ALA:HB3	1.95	0.67
4:S:205:LEU:HA	4:S:221:PHE:HZ	1.60	0.67
1:Q:721:PRO:HA	1:Q:726:TYR:CD1	2.30	0.67
1:A:376:ASN:O	1:A:377:TYR:CB	2.41	0.67
3:B:971:TYR:CE2	4:D:165:ARG:HA	2.30	0.67
3:B:754:PHE:HE2	3:B:756:ARG:HB2	1.60	0.67
3:R:189:ILE:HB	3:R:203:GLU:CB	2.24	0.67
1:Q:328:PRO:HG3	1:Q:457:PHE:CD1	2.30	0.67
1:A:245:ILE:HD13	1:A:268:LEU:HD13	1.75	0.66
1:Q:199:PRO:HA	1:Q:202:SER:O	1.94	0.66
3:B:1014:ARG:HG2	3:B:1014:ARG:NH1	2.08	0.66
1:A:842:TYR:HB3	1:A:844:GLU:HG3	1.77	0.66
7:H:29:TYR:HA	7:H:32:LEU:CD1	2.07	0.66
2:G:28:ILE:HG21	8:W:14:HIS:HB3	1.76	0.66
1:Q:645:THR:OG1	1:Q:646:MET:N	2.29	0.66
6:U:79:THR:HG22	6:U:80:SER:H	1.58	0.66
1:A:749:GLN:H	1:A:781:PHE:CA	2.06	0.66
1:A:648:LEU:HD23	1:A:648:LEU:O	1.95	0.66
1:Q:558:LYS:HD3	1:Q:558:LYS:H	1.59	0.66
2:C:126:LEU:HD11	2:C:249:TYR:HB2	1.77	0.66
1:A:446:ASN:ND2	1:A:446:ASN:C	2.48	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:409:ARG:HH11	1:A:409:ARG:HB3	1.59	0.66
7:H:20:HIS:O	7:H:21:GLU:HG3	1.94	0.66
1:A:390:TYR:HD1	1:A:391:VAL:HG23	1.60	0.66
6:F:52:ALA:HA	6:F:55:VAL:HG23	1.76	0.66
1:A:346:THR:HG21	3:B:1003:ALA:HB1	1.75	0.66
1:Q:203:ARG:CG	1:Q:203:ARG:HH11	2.09	0.66
1:Q:648:LEU:O	1:Q:648:LEU:HD23	1.94	0.66
3:R:278:ILE:HG22	3:R:279:GLY:N	2.10	0.66
1:A:604:GLY:C	1:A:606:GLN:N	2.48	0.66
1:A:337:VAL:HG23	1:A:433:HIS:HB3	1.77	0.66
8:K:70:ARG:HB3	8:K:70:ARG:HH11	1.60	0.66
1:Q:193:GLU:O	1:Q:195:LEU:N	2.27	0.66
2:G:369:VAL:O	2:G:373:ILE:HB	1.95	0.66
1:Q:308:ARG:NH2	3:R:1012:LEU:HD11	2.11	0.66
3:R:1069:TRP:HE1	3:R:1088:LEU:CB	2.09	0.66
3:R:591:ILE:HD11	3:R:612:LYS:HZ3	1.60	0.66
3:B:59:ARG:HH12	3:B:107:ILE:HD12	1.60	0.66
1:A:490:ARG:HA	2:C:312:HIS:HE1	1.61	0.66
4:S:67:PHE:HD2	4:S:121:VAL:HG12	1.59	0.66
1:A:481:LEU:CD2	1:A:482:VAL:H	2.07	0.66
1:A:480:MET:HG2	3:B:1039:PHE:CE1	2.31	0.66
2:C:115:LYS:HB2	2:C:278:ARG:HG3	1.78	0.66
3:R:934:ALA:O	10:Y:46:ARG:HD3	1.96	0.66
1:Q:489:PRO:HB3	1:Q:858:MET:HG3	1.75	0.66
5:T:113:ILE:HG23	5:T:114:THR:N	2.08	0.66
4:D:12:ARG:HA	4:D:230:ILE:O	1.95	0.66
5:E:179:LYS:HZ1	6:F:82:GLU:H	1.43	0.66
1:A:522:GLN:HG2	9:L:40:PHE:CE1	2.30	0.66
3:R:943:THR:HG22	3:R:944:PRO:CD	2.25	0.66
8:K:61:VAL:HG12	8:K:62:ILE:H	1.60	0.66
3:B:870:ARG:CZ	3:B:996:MET:SD	2.83	0.66
1:A:199:PRO:HA	1:A:202:SER:O	1.95	0.66
1:A:238:LYS:CE	1:A:297:THR:HB	2.25	0.66
1:A:68:CYS:SG	1:A:71:HIS:NE2	2.67	0.66
2:C:122:MET:HB2	2:C:253:THR:OG1	1.96	0.66
2:C:277:ILE:C	2:C:279:GLU:H	1.97	0.66
6:F:53:GLN:O	6:F:57:GLU:HG3	1.94	0.66
3:R:861:LEU:HD12	3:R:862:VAL:H	1.61	0.66
3:R:1107:MET:C	3:R:1108:ILE:HD12	2.16	0.66
2:C:390:MET:HG3	5:E:57:GLY:N	2.10	0.66
3:R:838:VAL:HG12	3:R:839:THR:H	1.60	0.66
1:Q:765:THR:HG22	1:Q:766:LEU:CD2	2.24	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:253:PHE:N	3:R:254:PRO:HD2	2.11	0.66
3:B:70:VAL:HG22	3:B:78:ARG:O	1.96	0.66
10:N:30:ASN:O	10:N:34:VAL:HG23	1.95	0.66
8:W:45:MET:HA	8:W:45:MET:CE	2.25	0.66
1:Q:874:ARG:NE	2:G:53:ASP:HB3	2.03	0.66
1:Q:387:ASP:CG	1:Q:388:LEU:H	1.99	0.66
3:R:591:ILE:CG1	3:R:612:LYS:NZ	2.58	0.66
1:A:775:SER:OG	1:A:776:PRO:HD2	1.94	0.66
3:R:197:ARG:HB2	3:R:199:PRO:HD3	1.76	0.66
3:R:1033:ARG:CG	3:R:1033:ARG:HH11	2.08	0.66
3:B:978:LYS:HZ1	4:D:205:LEU:HD13	1.60	0.66
1:A:558:LYS:CG	3:R:104:GLU:HB2	2.26	0.66
1:Q:872:PHE:CG	1:Q:876:VAL:HG21	2.31	0.66
1:A:349:VAL:HG21	1:A:415:ASP:OD2	1.96	0.66
3:B:897:MET:SD	3:B:906:PRO:HG2	2.36	0.66
3:R:164:GLN:HG2	3:R:349:LEU:HD21	1.77	0.66
1:Q:752:VAL:C	1:Q:754:GLY:H	2.00	0.66
3:B:853:THR:HG22	3:B:854:GLU:N	2.06	0.66
2:G:269:VAL:HA	2:G:272:VAL:CG2	2.26	0.66
2:G:54:LEU:O	2:G:58:GLU:HG3	1.96	0.66
1:Q:486:ILE:HD11	1:Q:628:MET:HE2	1.78	0.66
1:Q:345:LYS:HA	1:Q:410:HIS:CD2	2.30	0.66
3:B:588:LEU:HD22	3:B:612:LYS:HG2	1.78	0.66
3:B:48:GLU:HG2	3:B:58:VAL:HB	1.77	0.66
1:A:525:LEU:HD11	1:A:530:VAL:HG11	1.78	0.66
3:R:1081:ILE:HG21	3:R:1085:LYS:NZ	2.10	0.66
7:V:18:PRO:HB2	7:V:67:ARG:HA	1.78	0.66
4:S:108:MET:HE1	10:Y:2:LEU:HD21	1.77	0.66
1:Q:531:LYS:O	1:Q:532:ILE:HB	1.96	0.66
3:B:545:ARG:NE	3:B:581:ILE:HD13	2.10	0.66
1:A:203:ARG:CZ	1:A:206:TRP:HB2	2.26	0.66
4:D:205:LEU:HA	4:D:221:PHE:HZ	1.59	0.66
8:W:53:ILE:N	8:W:53:ILE:HD12	2.08	0.66
3:B:277:ALA:HB3	3:B:280:GLN:OE1	1.94	0.66
1:Q:390:TYR:HD1	1:Q:391:VAL:HG23	1.61	0.66
3:R:153:ILE:CG2	3:R:156:GLY:HA2	2.26	0.66
1:Q:316:LYS:HE2	3:R:1094:SER:HG	1.59	0.66
3:R:765:TYR:CG	3:R:766:PRO:HD2	2.31	0.66
4:D:191:LYS:H	4:D:194:LYS:HB2	1.60	0.66
3:R:946:TYR:CD2	3:R:947:LYS:N	2.51	0.66
4:S:18:GLU:CD	4:S:225:LYS:HD2	2.17	0.66
1:A:765:THR:HG22	1:A:766:LEU:CD2	2.25	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:721:PRO:HA	1:A:726:TYR:CD1	2.31	0.66
3:B:930:GLY:HA2	10:N:47:ARG:HH22	1.60	0.66
5:E:126:ILE:CD1	5:E:137:GLN:HG2	2.26	0.66
1:Q:15:SER:O	1:Q:19:ILE:HG13	1.95	0.66
3:R:530:TYR:OH	3:R:536:LEU:HB2	1.95	0.66
1:A:561:ASN:HA	1:A:588:ILE:O	1.96	0.66
3:R:116:ILE:HG23	3:R:361:PHE:CE1	2.31	0.66
6:F:79:THR:HG22	6:F:80:SER:H	1.61	0.66
1:Q:364:PHE:CE1	1:Q:409:ARG:HD2	2.31	0.66
3:B:200:VAL:O	3:B:200:VAL:HG13	1.96	0.66
1:A:438:LEU:O	1:A:438:LEU:HD23	1.95	0.66
3:R:70:VAL:HG22	3:R:78:ARG:O	1.96	0.66
7:H:62:ILE:HD13	7:H:62:ILE:H	1.61	0.66
7:V:13:ILE:HG23	7:V:14:HIS:H	1.61	0.66
1:A:57:LYS:HB3	1:A:62:GLY:HA2	1.78	0.66
3:B:473:MET:SD	3:B:474:ALA:N	2.69	0.66
1:A:876:VAL:O	1:A:878:TRP:N	2.29	0.66
4:D:98:ILE:CG1	4:D:114:ILE:HG12	2.24	0.66
1:Q:807:VAL:CG1	3:R:443:ARG:HH11	2.09	0.66
2:G:11:PRO:O	2:G:14:GLU:HG3	1.96	0.66
6:F:31:SER:HA	6:F:35:GLN:HE21	1.60	0.66
3:B:488:THR:HG21	3:B:549:ILE:HD11	1.77	0.66
3:R:222:PRO:HD2	3:R:225:ILE:HD12	1.77	0.66
3:R:1099:LEU:HB3	3:R:1103:GLU:OE1	1.96	0.65
2:C:63:LEU:HD23	2:C:63:LEU:O	1.97	0.65
1:Q:234:ASP:OD2	1:Q:296:ARG:HD3	1.96	0.65
2:G:392:PRO:HB3	5:T:22:LEU:HD21	1.77	0.65
1:Q:650:ASP:HB3	1:Q:723:ASN:HD21	1.59	0.65
3:R:727:MET:HE2	3:R:983:ILE:HG13	1.79	0.65
3:R:600:GLY:O	3:R:602:ILE:HG13	1.96	0.65
3:B:479:GLY:HA2	3:B:552:GLU:CB	2.23	0.65
1:A:558:LYS:HD3	1:A:558:LYS:H	1.60	0.65
3:B:855:THR:C	3:B:857:GLU:N	2.48	0.65
1:A:446:ASN:HD22	1:A:447:LEU:N	1.93	0.65
3:B:67:LYS:HB3	3:B:68:PRO:HD2	1.78	0.65
1:A:861:ALA:O	1:A:862:HIS:CD2	2.49	0.65
4:D:77:ARG:N	4:D:91:LYS:O	2.28	0.65
1:Q:831:ARG:HH21	2:G:385:MET:HB2	1.61	0.65
1:Q:308:ARG:O	1:Q:313:LEU:HB2	1.96	0.65
3:R:1085:LYS:HE3	3:R:1086:SER:HB3	1.76	0.65
1:Q:763:THR:C	1:Q:764:ARG:HG2	2.15	0.65
1:A:867:ASP:OD1	2:C:32:LEU:HB3	1.96	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:321:THR:HG22	7:V:79:ARG:HH12	1.62	0.65
1:A:736:SER:HB3	1:A:739:ASN:OD1	1.97	0.65
2:C:393:ILE:HG22	2:C:394:LEU:H	1.60	0.65
3:B:417:THR:O	3:B:418:ASN:HB3	1.95	0.65
3:B:838:VAL:HG12	3:B:839:THR:H	1.61	0.65
3:R:662:GLN:HG2	3:R:664:PRO:HD2	1.78	0.65
3:B:792:LEU:HD11	3:B:809:VAL:CG1	2.25	0.65
3:B:343:LEU:N	3:B:343:LEU:HD12	2.10	0.65
3:B:1069:TRP:HE1	3:B:1088:LEU:CB	2.08	0.65
3:R:330:ARG:HG2	3:R:330:ARG:NH1	2.10	0.65
2:C:329:ILE:CA	2:C:334:VAL:HG12	2.24	0.65
8:K:82:LEU:HB2	8:K:83:PRO:HD2	1.77	0.65
2:G:288:ALA:HB2	7:V:17:VAL:HB	1.78	0.65
4:S:29:ARG:HG3	4:S:162:SER:O	1.96	0.65
10:N:10:CYS:HB3	10:N:44:CYS:SG	2.35	0.65
3:B:108:GLU:O	3:B:110:GLU:N	2.29	0.65
3:R:102:PRO:HG2	3:R:108:GLU:OE2	1.96	0.65
3:B:89:ASN:HD21	3:B:863:LYS:NZ	1.94	0.65
8:K:61:VAL:HG12	8:K:62:ILE:N	2.12	0.65
1:Q:47:PRO:HG2	1:Q:48:ARG:H	1.61	0.65
3:R:235:ASP:O	3:R:239:VAL:HG23	1.96	0.65
6:U:52:ALA:HA	6:U:55:VAL:HG23	1.76	0.65
3:B:453:MET:HE3	3:B:470:LEU:HA	1.79	0.65
3:B:640:LEU:CD2	3:B:641:GLU:N	2.50	0.65
2:G:318:ASP:O	2:G:322:ARG:HD3	1.96	0.65
5:T:64:GLY:N	8:W:41:LEU:CD2	2.59	0.65
3:R:48:GLU:HG2	3:R:58:VAL:HB	1.77	0.65
3:B:197:ARG:HB2	3:B:199:PRO:HD3	1.78	0.65
1:A:501:ASP:OD2	3:B:913:HIS:HD2	1.80	0.65
3:B:656:PRO:HD3	3:B:881:ARG:HH21	1.62	0.65
1:A:877:GLY:CA	3:R:377:ARG:HH12	2.10	0.65
1:A:483:HIS:CD2	1:A:625:LYS:HD2	2.32	0.65
1:A:276:TYR:HD2	1:A:277:PHE:CD1	2.15	0.65
1:A:859:TYR:HB2	2:C:64:ILE:CG1	2.27	0.65
2:C:111:VAL:HG13	2:C:329:ILE:HD12	1.77	0.65
1:A:823:LEU:HB3	2:C:329:ILE:HD13	1.79	0.65
7:H:81:VAL:O	7:H:82:ILE:HG12	1.97	0.65
1:Q:827:LEU:HG	2:G:75:ALA:HB2	1.77	0.65
5:T:18:PHE:CD2	8:W:47:ALA:HB1	2.32	0.65
1:Q:431:MET:CE	1:Q:482:VAL:HG13	2.27	0.65
3:R:600:GLY:C	3:R:602:ILE:H	2.00	0.65
3:B:214:PHE:CG	3:B:215:PRO:HD2	2.31	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:81:VAL:HG12	1:A:270:GLN:HG3	1.78	0.65
1:Q:90:ILE:HG23	1:Q:184:LEU:HD11	1.79	0.65
3:R:628:LEU:HD23	3:R:628:LEU:N	2.09	0.65
6:F:77:PRO:CG	6:F:83:VAL:HG22	2.25	0.65
1:Q:517:THR:HG22	1:Q:518:LYS:N	2.11	0.65
8:W:91:SER:O	8:W:92:LEU:CB	2.43	0.65
3:B:794:ASP:OD2	11:P:18:LEU:HD11	1.95	0.65
3:R:517:TRP:HD1	3:R:531:GLN:N	1.94	0.65
3:R:70:VAL:HG13	3:R:80:ILE:HD13	1.79	0.65
3:B:244:LEU:HD13	3:B:500:VAL:HB	1.78	0.65
3:B:88:ARG:HD3	3:B:853:THR:CG2	2.15	0.65
1:A:853:ASP:OD2	2:C:311:ARG:NH2	2.29	0.65
1:Q:842:TYR:HB3	1:Q:844:GLU:HG3	1.79	0.65
1:Q:6:ILE:HD13	3:R:1113:LEU:HD22	1.79	0.65
10:Y:3:ILE:HG12	10:Y:18:TRP:CG	2.31	0.65
8:W:26:ARG:HB3	8:W:27:LEU:HD12	1.79	0.65
1:Q:646:MET:CE	1:Q:725:ALA:HB2	2.26	0.65
3:B:591:ILE:CG1	3:B:612:LYS:NZ	2.59	0.65
6:U:79:THR:O	6:U:83:VAL:HG23	1.96	0.65
3:R:214:PHE:CG	3:R:215:PRO:HD2	2.32	0.65
5:T:116:ASP:CG	5:T:117:THR:N	2.46	0.65
3:R:812:GLY:HA2	3:R:836:SER:HB3	1.78	0.65
5:E:38:ILE:O	5:E:39:LEU:HB2	1.94	0.65
1:A:531:LYS:O	1:A:532:ILE:HB	1.96	0.65
1:A:752:VAL:C	1:A:754:GLY:H	2.00	0.65
7:V:9:ILE:O	7:V:9:ILE:HG22	1.95	0.65
7:H:38:ARG:HG2	7:H:38:ARG:HH11	1.60	0.65
3:R:1054:ASP:HB2	3:R:1094:SER:HA	1.77	0.65
3:B:1069:TRP:NE1	3:B:1088:LEU:HD13	2.12	0.65
5:T:64:GLY:N	8:W:41:LEU:HD22	2.12	0.65
3:R:139:ILE:HG21	10:Y:61:HIS:HD2	1.62	0.65
7:H:52:ALA:C	7:H:54:SER:H	1.99	0.65
1:A:567:ASN:HB3	1:A:599:ASP:OD2	1.97	0.65
3:B:789:TYR:O	3:B:791:LEU:N	2.30	0.65
1:A:319:ASP:O	1:A:320:PHE:HB2	1.96	0.65
8:W:71:ARG:HH11	8:W:71:ARG:HB2	1.61	0.65
3:B:1085:LYS:HE3	3:B:1086:SER:HB3	1.78	0.65
3:R:244:LEU:HD13	3:R:500:VAL:HB	1.78	0.65
2:G:379:ILE:H	2:G:379:ILE:HD13	1.61	0.65
1:Q:480:MET:HG2	3:R:1039:PHE:CE1	2.32	0.65
1:Q:450:CYS:HB2	1:Q:451:PRO:HD3	1.78	0.65
1:Q:647:ARG:HB2	1:Q:650:ASP:OD2	1.96	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:214:PHE:CD1	3:B:215:PRO:HD2	2.32	0.65
1:Q:16:PRO:HG2	1:Q:17:ASP:H	1.62	0.65
3:R:98:LEU:HD11	3:R:100:MET:HG3	1.79	0.65
3:R:873:THR:CG2	3:R:874:ILE:H	2.10	0.65
3:R:672:MET:CG	3:R:993:LEU:HD21	2.26	0.65
3:B:803:GLU:HB3	3:B:805:LYS:HZ1	1.59	0.65
3:B:210:PHE:CZ	3:B:323:ILE:HG22	2.32	0.65
5:T:86:GLU:OE1	6:U:75:ILE:HG23	1.97	0.65
1:Q:609:GLU:HB3	1:Q:614:TRP:CZ2	2.32	0.65
3:B:458:THR:HG23	3:B:467:VAL:O	1.96	0.65
1:A:8:GLY:O	3:B:1114:VAL:HG13	1.96	0.65
3:R:6:THR:HG22	3:R:7:ILE:H	1.61	0.65
1:A:177:PRO:HG2	1:A:270:GLN:NE2	2.12	0.65
1:A:203:ARG:HH11	1:A:203:ARG:CG	2.10	0.65
3:B:368:GLN:HE22	3:B:386:ARG:HE	1.42	0.65
3:B:895:VAL:HG11	4:D:34:LEU:HD21	1.79	0.65
1:A:609:GLU:HB3	1:A:614:TRP:CZ2	2.32	0.65
2:C:244:LYS:HA	2:C:249:TYR:HA	1.78	0.65
1:A:831:ARG:HH21	2:C:385:MET:CG	2.09	0.65
3:B:419:TRP:CZ3	3:B:712:GLY:HA3	2.31	0.65
10:Y:43:TYR:HA	10:Y:46:ARG:HB3	1.78	0.65
1:Q:488:THR:CG2	1:Q:490:ARG:H	2.09	0.65
1:A:728:MET:HE1	3:B:913:HIS:HA	1.78	0.65
1:Q:177:PRO:HG2	1:Q:270:GLN:HE22	1.60	0.65
3:R:59:ARG:HH22	3:R:107:ILE:CD1	2.10	0.65
3:R:148:PRO:HG3	3:R:422:MET:CE	2.27	0.65
10:N:6:ARG:HA	10:N:12:SER:O	1.96	0.65
4:S:258:LYS:O	4:S:261:VAL:HG22	1.97	0.65
2:G:123:THR:OG1	2:G:273:GLU:HB3	1.97	0.65
1:A:825:ASN:O	1:A:828:SER:HB3	1.97	0.64
2:G:392:PRO:HG3	5:T:68:HIS:HE1	1.63	0.64
3:R:480:ILE:HG22	3:R:481:ASN:H	1.62	0.64
1:A:353:ILE:HG13	1:A:361:LEU:HD23	1.78	0.64
3:R:851:LEU:HG	11:Z:35:PHE:CD2	2.29	0.64
3:B:153:ILE:CG2	3:B:156:GLY:HA2	2.25	0.64
2:G:244:LYS:HA	2:G:249:TYR:HA	1.79	0.64
5:T:17:GLU:HG2	5:T:20:LYS:NZ	2.10	0.64
1:Q:245:ILE:CD1	1:Q:268:LEU:HB3	2.26	0.64
3:R:946:TYR:CD1	3:R:949:PRO:HA	2.32	0.64
1:Q:522:GLN:OE1	9:X:40:PHE:HA	1.97	0.64
1:A:16:PRO:HG2	1:A:17:ASP:H	1.63	0.64
3:B:971:TYR:CZ	3:B:978:LYS:HB3	2.31	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:282:ARG:HA	3:B:285:ARG:HD2	1.78	0.64
1:A:339:VAL:CG2	1:A:435:VAL:HG23	2.27	0.64
5:T:50:ASN:O	5:T:72:PHE:HA	1.96	0.64
9:L:15:LEU:HB3	9:L:55:VAL:HG23	1.79	0.64
2:G:377:HIS:ND1	2:G:378:PRO:HD2	2.13	0.64
3:R:778:ALA:HA	3:R:783:TYR:CE1	2.32	0.64
3:B:1087:ASN:O	3:B:1088:LEU:HG	1.97	0.64
1:Q:763:THR:HG21	1:Q:772:TYR:CD2	2.32	0.64
3:R:545:ARG:NE	3:R:581:ILE:HD13	2.12	0.64
3:B:696:HIS:HE2	3:B:753:THR:HG1	1.45	0.64
2:G:102:LEU:HD23	2:G:103:GLY:H	1.58	0.64
1:Q:6:ILE:HD11	3:R:1091:VAL:HG11	1.79	0.64
4:S:98:ILE:CD1	4:S:114:ILE:HG23	2.24	0.64
3:B:624:ALA:HB1	3:B:639:HIS:HD2	1.63	0.64
3:B:591:ILE:CG1	3:B:612:LYS:HZ2	2.08	0.64
1:A:176:THR:HG23	1:A:179:ASP:CB	2.26	0.64
3:B:64:ARG:H	3:B:97:TRP:HB2	1.61	0.64
3:R:557:HIS:CE1	3:R:566:VAL:HG13	2.32	0.64
2:C:344:ARG:NH1	2:C:344:ARG:HB2	2.08	0.64
1:Q:325:VAL:O	1:Q:442:THR:HB	1.97	0.64
3:R:157:SER:O	3:R:158:GLU:HB2	1.96	0.64
8:K:32:ILE:O	8:K:35:VAL:HG22	1.96	0.64
2:G:250:ILE:HG22	2:G:251:ILE:N	2.12	0.64
3:B:663:SER:CB	3:B:664:PRO:HD3	2.27	0.64
5:T:26:ALA:O	5:T:30:LEU:HB2	1.96	0.64
2:C:123:THR:OG1	2:C:273:GLU:HB3	1.97	0.64
1:A:245:ILE:CD1	1:A:268:LEU:HB3	2.27	0.64
3:B:1054:ASP:HB2	3:B:1094:SER:HA	1.78	0.64
3:R:853:THR:HG23	11:Z:32:LYS:O	1.98	0.64
6:U:53:GLN:O	6:U:57:GLU:HG3	1.97	0.64
1:A:839:ARG:HA	1:A:844:GLU:O	1.97	0.64
7:H:34:GLU:HG3	8:K:84:ASN:OD1	1.97	0.64
3:R:582:VAL:HG22	3:R:586:ASN:O	1.97	0.64
3:B:934:ALA:HB2	10:N:47:ARG:HD3	1.77	0.64
1:A:90:ILE:CD1	1:A:207:MET:HB3	2.27	0.64
1:Q:749:GLN:H	1:Q:781:PHE:CA	2.07	0.64
3:R:40:GLN:HE22	3:R:62:LYS:HA	1.62	0.64
3:R:98:LEU:CD1	3:R:100:MET:HG3	2.27	0.64
1:Q:338:GLY:HA3	1:Q:444:ARG:CG	2.26	0.64
2:G:297:ILE:C	2:G:299:LYS:H	1.99	0.64
5:E:29:GLU:O	5:E:33:GLN:HG3	1.97	0.64
1:A:71:HIS:HB3	3:B:1070:TYR:OH	1.97	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:558:ILE:HG12	3:R:567:HIS:CD2	2.33	0.64
2:C:102:LEU:HD23	2:C:103:GLY:H	1.60	0.64
8:W:82:LEU:HD12	8:W:84:ASN:HB2	1.79	0.64
4:S:105:GLU:N	4:S:135:THR:HG22	2.13	0.64
2:G:55:ALA:CA	2:G:58:GLU:HG3	2.22	0.64
3:R:20:SER:O	3:R:21:LYS:HG2	1.96	0.64
3:R:591:ILE:HG21	3:R:607:LEU:HD21	1.80	0.64
3:R:5:LEU:O	3:R:5:LEU:HD22	1.97	0.64
1:A:345:LYS:HA	1:A:410:HIS:CD2	2.32	0.64
3:B:727:MET:HB2	3:B:983:ILE:HD12	1.78	0.64
3:B:971:TYR:CZ	4:D:165:ARG:HA	2.33	0.64
2:G:297:ILE:HG22	2:G:313:ILE:HD13	1.80	0.64
3:R:171:ARG:HD2	3:R:342:ARG:NH2	2.13	0.64
3:R:729:PHE:O	3:R:731:GLY:N	2.29	0.64
3:B:495:VAL:O	3:B:528:GLY:HA3	1.98	0.64
3:R:595:GLU:HA	3:R:599:SER:HB3	1.78	0.64
1:A:486:ILE:HD11	1:A:628:MET:HE1	1.78	0.64
2:C:103:GLY:HA3	2:C:300:VAL:HG13	1.80	0.64
3:B:433:LEU:HB2	3:B:435:ARG:CZ	2.27	0.64
2:G:282:GLU:O	7:V:50:PRO:HB3	1.97	0.64
3:R:705:THR:HG22	3:R:706:ARG:N	2.05	0.64
1:A:234:ASP:OD2	1:A:296:ARG:HD3	1.96	0.64
3:B:393:ARG:HH21	3:B:403:TRP:HH2	1.42	0.64
1:A:646:MET:CE	1:A:725:ALA:HB2	2.27	0.64
1:Q:349:VAL:HG21	1:Q:415:ASP:OD2	1.98	0.64
10:Y:55:ILE:O	10:Y:59:VAL:HG23	1.97	0.64
1:Q:79:ARG:HB2	1:Q:266:TRP:HE3	1.61	0.64
3:B:246:PRO:HG2	3:B:249:GLN:CG	2.28	0.64
7:V:42:LEU:CD1	7:V:80:TYR:HB2	2.26	0.64
8:W:43:LEU:CD1	8:W:64:ILE:HG13	2.28	0.64
1:Q:859:TYR:HB2	2:G:64:ILE:CG1	2.28	0.64
1:Q:334:ILE:HG22	1:Q:482:VAL:HG11	1.78	0.64
1:Q:452:PRO:HA	1:Q:495:ILE:CD1	2.28	0.64
4:S:23:GLU:O	9:X:27:LEU:HD13	1.98	0.64
6:U:77:PRO:CG	6:U:83:VAL:HG22	2.28	0.64
1:A:386:ILE:O	1:A:387:ASP:O	2.14	0.64
3:B:557:HIS:CE1	3:B:566:VAL:HG13	2.32	0.64
4:D:16:VAL:O	4:D:16:VAL:HG12	1.97	0.64
3:R:800:PRO:HG2	11:Z:37:VAL:HA	1.80	0.64
3:B:278:ILE:HG22	3:B:279:GLY:N	2.12	0.64
2:C:250:ILE:HG22	2:C:251:ILE:N	2.13	0.64
4:D:236:LEU:HB2	4:D:241:ILE:HD11	1.80	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:792:LEU:HD11	3:R:809:VAL:CG1	2.27	0.64
2:C:305:GLY:O	2:C:306:LEU:O	2.16	0.64
3:B:1081:ILE:HG21	3:B:1085:LYS:NZ	2.13	0.64
3:B:245:ASP:N	3:B:246:PRO:HD3	2.13	0.64
3:B:765:TYR:CG	3:B:766:PRO:HD2	2.32	0.64
10:Y:54:ASP:OD2	10:Y:56:ILE:HG22	1.98	0.64
3:R:8:ASP:O	3:R:12:ARG:HG2	1.98	0.64
4:D:29:ARG:HG3	4:D:162:SER:O	1.97	0.64
9:L:87:ILE:CG2	9:L:88:LYS:N	2.61	0.64
3:R:624:ALA:HB1	3:R:639:HIS:HD2	1.63	0.64
10:N:54:ASP:OD2	10:N:56:ILE:HG22	1.98	0.64
1:Q:446:ASN:HD22	1:Q:447:LEU:N	1.95	0.64
1:Q:369:PRO:HA	1:Q:410:HIS:HE1	1.63	0.64
3:B:600:GLY:O	3:B:602:ILE:HG13	1.98	0.64
3:B:588:LEU:CD1	3:B:612:LYS:HB3	2.24	0.64
3:B:904:VAL:CG2	10:N:42:ARG:HG2	2.28	0.64
3:B:1004:ARG:C	3:B:1004:ARG:HD3	2.17	0.64
3:R:154:VAL:HG21	3:R:399:ALA:CB	2.27	0.64
3:B:154:VAL:HG21	3:B:399:ALA:CB	2.28	0.64
3:R:348:ASP:N	3:R:348:ASP:OD2	2.31	0.64
3:R:183:ILE:HG13	3:R:206:LYS:HB3	1.80	0.64
2:G:310:ILE:H	2:G:310:ILE:CD1	2.08	0.64
2:G:28:ILE:HD13	8:W:14:HIS:HB3	1.80	0.64
2:C:52:PHE:O	2:C:55:ALA:HB3	1.98	0.64
1:Q:506:ALA:HA	1:Q:635:PHE:CE2	2.33	0.64
3:B:463:ASN:HB3	3:B:467:VAL:HG12	1.80	0.64
3:B:630:PRO:O	3:B:633:LEU:HB3	1.97	0.64
3:R:591:ILE:CG1	3:R:612:LYS:HZ2	2.10	0.64
3:B:43:ILE:O	3:B:43:ILE:HG22	1.98	0.64
1:Q:90:ILE:CD1	1:Q:207:MET:HB3	2.27	0.64
1:A:589:LYS:HD3	1:A:877:GLY:O	1.98	0.64
3:B:691:ARG:NH1	3:B:756:ARG:NH2	2.45	0.64
4:D:39:MET:HE3	4:D:72:ALA:HB1	1.78	0.64
8:K:60:ASP:OD2	8:K:60:ASP:N	2.31	0.64
3:R:663:SER:CB	3:R:664:PRO:HD3	2.28	0.64
5:T:29:GLU:O	5:T:33:GLN:HG3	1.98	0.64
8:W:70:ARG:HB3	8:W:70:ARG:HH11	1.62	0.64
3:B:778:ALA:HA	3:B:783:TYR:CE1	2.32	0.64
1:Q:12:GLY:HA2	2:G:358:ALA:O	1.97	0.63
3:R:518:SER:CB	3:R:564:ASN:ND2	2.61	0.63
2:C:318:ASP:O	2:C:322:ARG:HD3	1.98	0.63
8:W:23:TRP:CE3	8:W:23:TRP:HA	2.32	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:S:6:LEU:HD13	4:S:16:VAL:HG21	1.79	0.63
1:Q:176:THR:HG23	1:Q:179:ASP:CB	2.25	0.63
3:B:98:LEU:CD1	3:B:100:MET:HG3	2.28	0.63
4:S:13:ILE:HD11	4:S:238:PRO:HB2	1.80	0.63
1:Q:15:SER:HB2	1:Q:16:PRO:HD2	1.79	0.63
3:B:861:LEU:HD12	3:B:862:VAL:H	1.63	0.63
4:D:115:LYS:O	4:D:116:SER:HB3	1.97	0.63
1:A:219:ILE:HD13	1:A:219:ILE:N	2.12	0.63
3:R:210:PHE:CZ	3:R:323:ILE:HG22	2.32	0.63
3:B:518:SER:CB	3:B:564:ASN:ND2	2.61	0.63
2:C:379:ILE:HD13	2:C:379:ILE:H	1.63	0.63
1:A:833:GLU:HG3	1:A:839:ARG:HG3	1.80	0.63
2:G:122:MET:HB2	2:G:253:THR:OG1	1.97	0.63
4:S:124:ILE:O	4:S:125:SER:HB2	1.97	0.63
3:R:893:PRO:HG2	3:R:896:ASP:OD1	1.98	0.63
3:B:63:ILE:HG13	3:B:98:LEU:HD23	1.79	0.63
2:C:369:VAL:O	2:C:373:ILE:HB	1.98	0.63
1:A:728:MET:HE3	3:B:913:HIS:HA	1.80	0.63
3:R:358:PHE:O	3:R:362:VAL:HG23	1.98	0.63
3:R:402:ASN:HB2	3:R:410:VAL:HB	1.81	0.63
9:L:35:ILE:HD11	9:L:75:ASN:ND2	2.13	0.63
2:G:126:LEU:HD11	2:G:249:TYR:HB2	1.79	0.63
2:C:297:ILE:HG22	2:C:313:ILE:HD13	1.79	0.63
1:A:656:ASP:HA	1:A:659:LYS:HD2	1.80	0.63
4:S:77:ARG:N	4:S:91:LYS:O	2.28	0.63
1:A:238:LYS:HD3	1:A:276:TYR:HA	1.80	0.63
1:Q:68:CYS:SG	1:Q:71:HIS:NE2	2.71	0.63
1:A:6:ILE:HD11	3:B:1091:VAL:HG11	1.79	0.63
3:R:853:THR:HG22	3:R:854:GLU:N	2.04	0.63
2:C:52:PHE:HA	2:C:55:ALA:HB3	1.81	0.63
1:Q:448:LEU:O	1:Q:451:PRO:HD2	1.98	0.63
1:Q:866:VAL:HG12	1:Q:869:ASN:N	2.02	0.63
3:B:193:THR:HG1	3:B:198:VAL:HA	1.63	0.63
3:B:727:MET:CE	3:B:898:PRO:HG3	2.29	0.63
3:R:403:TRP:CG	3:R:404:VAL:N	2.65	0.63
3:R:680:TYR:HE1	3:R:687:ARG:HH12	1.46	0.63
1:Q:417:VAL:HG11	1:Q:464:LEU:CD1	2.27	0.63
1:Q:339:VAL:CG2	1:Q:435:VAL:HG23	2.27	0.63
3:B:745:VAL:HG13	3:B:872:PRO:HG2	1.81	0.63
4:D:48:GLU:OE2	4:D:138:LYS:HD3	1.98	0.63
4:S:48:GLU:OE2	4:S:138:LYS:HD3	1.98	0.63
2:G:354:LEU:O	3:R:1109:ILE:HD12	1.99	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:370:VAL:O	2:G:373:ILE:HG22	1.98	0.63
3:R:81:SER:O	3:R:84:GLU:HB2	1.97	0.63
3:B:253:PHE:N	3:B:254:PRO:HD2	2.12	0.63
3:B:325:LEU:HD13	3:B:330:ARG:HB2	1.80	0.63
3:B:81:SER:O	3:B:84:GLU:HB2	1.99	0.63
1:A:476:ALA:HB2	3:B:1044:LEU:HD13	1.80	0.63
1:A:489:PRO:HB3	1:A:858:MET:HG3	1.81	0.63
2:C:274:THR:CG2	2:C:275:ASN:H	1.94	0.63
2:G:115:LYS:HE2	2:G:279:GLU:HB2	1.79	0.63
1:Q:506:ALA:HA	1:Q:635:PHE:HE2	1.63	0.63
3:R:214:PHE:CD1	3:R:215:PRO:HD2	2.34	0.63
3:B:699:GLN:HG3	3:B:720:ASN:ND2	2.13	0.63
3:B:910:LEU:HD23	3:B:911:ASN:H	1.62	0.63
1:Q:704:LEU:HD13	1:Q:781:PHE:CD1	2.27	0.63
3:R:43:ILE:HG22	3:R:43:ILE:O	1.97	0.63
3:R:63:ILE:HG13	3:R:98:LEU:HD23	1.80	0.63
3:B:850:VAL:HG13	3:B:864:VAL:HG22	1.80	0.63
8:K:90:LEU:HD23	8:K:90:LEU:H	1.64	0.63
1:A:687:ILE:HG13	1:A:695:SER:HB3	1.81	0.63
3:R:495:VAL:O	3:R:528:GLY:HA3	1.98	0.63
1:Q:308:ARG:HH22	3:R:1012:LEU:HD11	1.62	0.63
3:R:1049:LEU:O	3:R:1049:LEU:HD12	1.97	0.63
1:A:827:LEU:CD2	2:C:316:ILE:HD13	2.28	0.63
2:G:111:VAL:HG13	2:G:329:ILE:HD12	1.78	0.63
2:G:57:LYS:HE3	2:G:57:LYS:CA	2.26	0.63
3:R:754:PHE:HE2	3:R:756:ARG:HB2	1.64	0.63
1:A:354:THR:HB	1:A:355:PRO:CD	2.27	0.63
1:A:589:LYS:HZ3	1:A:879:LYS:H	1.46	0.63
3:R:416:ARG:HH12	3:R:687:ARG:HH21	1.47	0.63
8:W:71:ARG:HB3	8:W:73:VAL:CG1	2.29	0.63
5:T:63:ASP:OD2	5:T:65:ALA:HB3	1.98	0.63
3:B:1069:TRP:CZ3	3:B:1077:TYR:HB2	2.34	0.63
2:C:355:LEU:HD23	3:B:1109:ILE:HD11	1.80	0.63
2:G:292:ILE:HD13	7:V:16:LEU:HD21	1.78	0.63
8:W:23:TRP:HE3	8:W:23:TRP:HA	1.63	0.63
1:A:79:ARG:HB2	1:A:266:TRP:HE3	1.60	0.63
1:A:90:ILE:HG23	1:A:184:LEU:HD11	1.81	0.63
3:R:628:LEU:H	3:R:628:LEU:CD2	2.09	0.63
3:R:1004:ARG:C	3:R:1004:ARG:HD3	2.19	0.63
1:Q:782:ILE:N	1:Q:782:ILE:HD12	2.14	0.63
1:A:831:ARG:HH21	2:C:385:MET:CB	2.10	0.63
1:A:708:ARG:O	1:A:711:ALA:HB3	1.98	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:794:ASP:OD2	11:Z:18:LEU:HD11	1.98	0.63
1:Q:438:LEU:O	1:Q:438:LEU:HD23	1.98	0.63
1:Q:245:ILE:HD13	1:Q:268:LEU:CD1	2.28	0.63
1:A:431:MET:CE	1:A:482:VAL:HG13	2.29	0.63
2:C:310:ILE:HG22	2:C:314:LEU:CD2	2.27	0.63
2:C:106:ARG:HD2	2:C:109:GLU:OE1	1.99	0.63
7:H:42:LEU:CD1	7:H:80:TYR:HB2	2.29	0.63
2:G:35:LEU:O	2:G:39:LYS:HG3	1.99	0.63
7:V:23:LEU:HB3	7:V:28:ALA:HB2	1.79	0.63
1:Q:534:LEU:HD13	1:Q:535:GLY:N	2.14	0.63
3:R:727:MET:HB2	3:R:983:ILE:HD12	1.79	0.63
4:S:35:TYR:HE2	9:X:23:THR:HG21	1.63	0.63
4:S:24:PHE:HZ	9:X:80:THR:HA	1.64	0.63
1:Q:353:ILE:HD11	1:Q:407:ILE:HG23	1.80	0.63
6:U:79:THR:HG22	6:U:80:SER:N	2.13	0.63
1:Q:58:CYS:SG	1:Q:59:PRO:CD	2.83	0.63
1:Q:841:LEU:O	1:Q:843:GLY:N	2.32	0.63
8:K:53:ILE:CD1	8:K:53:ILE:H	2.08	0.63
1:A:528:ALA:O	1:A:530:VAL:N	2.32	0.63
3:B:855:THR:CB	3:B:857:GLU:HG2	2.28	0.63
3:R:677:LEU:HD12	3:R:992:LYS:CD	2.29	0.63
1:A:328:PRO:HG3	1:A:457:PHE:CD1	2.34	0.63
1:Q:615:LEU:O	1:Q:619:TYR:HB2	1.99	0.63
3:B:789:TYR:HB3	3:B:792:LEU:HD12	1.80	0.63
9:L:15:LEU:HB3	9:L:55:VAL:CG2	2.29	0.63
3:B:159:ARG:HD3	3:B:399:ALA:HA	1.80	0.63
2:G:305:GLY:O	2:G:306:LEU:O	2.17	0.63
6:U:23:ASP:HA	6:U:26:ARG:CD	2.29	0.63
3:B:70:VAL:HG13	3:B:80:ILE:HD13	1.79	0.63
1:Q:834:TYR:CE1	8:W:80:ARG:HD3	2.34	0.63
1:Q:386:ILE:O	1:Q:387:ASP:O	2.16	0.63
3:R:701:PRO:HG3	3:R:708:LEU:HD11	1.79	0.63
1:A:402:ALA:O	1:A:404:GLY:N	2.31	0.63
1:Q:180:ILE:O	1:Q:183:ARG:HB2	1.98	0.63
3:B:59:ARG:HH12	3:B:107:ILE:CD1	2.11	0.63
3:R:691:ARG:NH1	3:R:756:ARG:NH2	2.47	0.63
3:R:59:ARG:HH12	3:R:107:ILE:HD12	1.64	0.63
1:A:558:LYS:HZ1	3:R:108:GLU:HG3	1.64	0.63
3:R:108:GLU:O	3:R:110:GLU:N	2.31	0.63
1:A:338:GLY:HA3	1:A:444:ARG:CG	2.24	0.63
3:B:280:GLN:O	3:B:285:ARG:NH1	2.32	0.63
1:Q:589:LYS:HD3	1:Q:877:GLY:O	1.98	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:881:ARG:HH11	3:R:989:TYR:CB	2.12	0.63
2:G:126:LEU:HD12	2:G:131:LYS:HG3	1.81	0.63
3:R:148:PRO:HG3	3:R:422:MET:SD	2.39	0.63
1:A:448:LEU:O	1:A:451:PRO:HD2	1.99	0.63
3:B:419:TRP:HZ3	3:B:712:GLY:HA3	1.64	0.63
3:R:28:LEU:HG	3:R:122:MET:CE	2.27	0.63
2:G:356:ASP:O	2:G:360:ARG:HB2	1.99	0.63
1:A:4:LYS:HB2	3:B:1089:PHE:HB3	1.81	0.63
8:W:12:ASP:O	8:W:13:LEU:HB2	1.98	0.63
3:B:591:ILE:HG21	3:B:607:LEU:HD21	1.81	0.63
3:B:600:GLY:C	3:B:602:ILE:H	2.00	0.63
1:A:573:ARG:HH21	1:A:721:PRO:HB3	1.64	0.63
3:B:946:TYR:CD1	3:B:949:PRO:HA	2.34	0.63
3:B:403:TRP:CG	3:B:404:VAL:N	2.65	0.63
3:B:764:LYS:HD2	3:B:771:ASP:HB2	1.81	0.63
1:Q:258:PRO:O	1:Q:260:LEU:N	2.32	0.63
2:C:132:ARG:HA	2:C:249:TYR:CD1	2.34	0.63
2:G:126:LEU:HB2	2:G:131:LYS:HG3	1.79	0.63
1:A:782:ILE:N	1:A:782:ILE:HD12	2.14	0.63
10:N:55:ILE:O	10:N:59:VAL:HG23	1.99	0.63
10:Y:6:ARG:HA	10:Y:12:SER:O	1.98	0.63
1:Q:337:VAL:HG23	1:Q:433:HIS:HB3	1.81	0.63
1:A:25:THR:HG22	1:A:27:ILE:H	1.63	0.62
3:B:1099:LEU:HB3	3:B:1103:GLU:OE1	1.98	0.62
3:R:245:ASP:N	3:R:246:PRO:HD3	2.13	0.62
1:Q:827:LEU:CD2	2:G:316:ILE:HD13	2.29	0.62
3:R:1058:ILE:O	3:R:1091:VAL:HG12	1.99	0.62
3:R:723:ILE:HD12	10:Y:43:TYR:HE1	1.63	0.62
2:G:52:PHE:O	2:G:55:ALA:HB3	1.98	0.62
3:R:910:LEU:HD23	3:R:911:ASN:H	1.64	0.62
4:S:191:LYS:CB	4:S:194:LYS:HD2	2.25	0.62
3:B:161:ILE:HG21	3:B:346:ALA:HA	1.80	0.62
1:A:369:PRO:HA	1:A:410:HIS:HE1	1.64	0.62
1:A:234:ASP:C	1:A:236:THR:H	2.00	0.62
5:E:127:ILE:HB	5:E:136:ILE:HG13	1.80	0.62
1:Q:177:PRO:HG2	1:Q:270:GLN:NE2	2.13	0.62
3:R:537:ALA:HB2	3:R:557:HIS:CD2	2.34	0.62
3:R:557:HIS:ND1	3:R:566:VAL:HG22	2.14	0.62
3:B:764:LYS:HZ1	3:B:772:LYS:C	2.01	0.62
3:B:812:GLY:HA2	3:B:836:SER:HB3	1.79	0.62
3:R:838:VAL:HG12	3:R:839:THR:N	2.13	0.62
3:R:803:GLU:HG2	3:R:846:ILE:CG1	2.29	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:148:PRO:HG3	3:B:422:MET:SD	2.39	0.62
3:R:789:TYR:HB3	3:R:792:LEU:HD12	1.81	0.62
6:F:23:ASP:HA	6:F:26:ARG:CD	2.29	0.62
1:Q:219:ILE:HD13	1:Q:219:ILE:N	2.13	0.62
1:Q:71:HIS:HB3	3:R:1070:TYR:OH	1.98	0.62
3:R:1069:TRP:HE1	3:R:1088:LEU:HB3	1.64	0.62
3:R:321:LYS:HD2	3:R:330:ARG:HE	1.63	0.62
3:R:638:THR:HB	3:R:639:HIS:CD2	2.34	0.62
3:B:242:VAL:CA	3:B:316:ALA:HB1	2.24	0.62
8:K:82:LEU:H	8:K:82:LEU:HD23	1.64	0.62
2:G:112:ASP:O	2:G:113:ALA:HB3	1.99	0.62
2:G:391:ARG:HH21	8:W:42:GLN:CG	2.11	0.62
4:S:217:ILE:HD12	4:S:217:ILE:N	2.13	0.62
1:A:55:GLY:O	1:A:57:LYS:N	2.32	0.62
1:Q:573:ARG:HH21	1:Q:721:PRO:HB3	1.63	0.62
1:A:704:LEU:HD22	1:A:781:PHE:HE1	1.60	0.62
1:A:723:ASN:HD22	1:A:723:ASN:C	2.02	0.62
3:B:850:VAL:O	11:P:35:PHE:HB2	1.99	0.62
3:B:287:GLU:C	3:B:289:ALA:H	2.02	0.62
2:C:112:ASP:O	2:C:113:ALA:HB3	2.00	0.62
5:E:171:LYS:HE2	5:E:173:GLU:HB2	1.79	0.62
7:V:55:ILE:HG23	7:V:55:ILE:O	1.99	0.62
1:Q:418:LEU:HD11	3:R:1044:LEU:HD11	1.80	0.62
2:G:310:ILE:HG22	2:G:314:LEU:HD23	1.81	0.62
2:G:389:THR:HG21	8:W:79:ARG:NH1	2.13	0.62
3:B:17:TYR:OH	3:B:474:ALA:HA	1.99	0.62
3:B:5:LEU:O	3:B:5:LEU:HD22	1.99	0.62
1:A:775:SER:HB3	1:A:777:GLU:HG2	1.81	0.62
10:N:42:ARG:O	10:N:46:ARG:HB2	2.00	0.62
3:B:373:LYS:HE3	3:B:375:ARG:CD	2.28	0.62
2:C:47:GLU:HA	2:C:50:LYS:HD2	1.79	0.62
4:D:69:SER:HA	4:D:72:ALA:HB3	1.80	0.62
2:C:301:LEU:HA	2:C:304:GLN:HG3	1.81	0.62
3:B:677:LEU:HD12	3:B:992:LYS:CD	2.28	0.62
4:S:236:LEU:HB2	4:S:241:ILE:HD11	1.80	0.62
1:Q:337:VAL:HG23	1:Q:433:HIS:CB	2.29	0.62
5:T:6:LYS:HE3	6:U:8:GLU:HB2	1.79	0.62
1:Q:312:ASN:HB3	3:R:1015:GLN:OE1	1.98	0.62
1:Q:764:ARG:O	1:Q:766:LEU:N	2.32	0.62
2:C:292:ILE:HG23	2:C:293:ILE:N	2.14	0.62
2:G:390:MET:HE2	5:T:66:THR:HG23	1.81	0.62
3:R:904:VAL:HG21	10:Y:42:ARG:HG2	1.81	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:80:GLU:HB3	2:G:81:PRO:CD	2.28	0.62
1:A:764:ARG:CB	1:A:764:ARG:HH11	2.12	0.62
3:B:476:ILE:N	3:B:476:ILE:HD13	2.15	0.62
3:R:473:MET:SD	3:R:475:GLN:N	2.72	0.62
10:N:42:ARG:HG3	10:N:43:TYR:N	2.12	0.62
1:A:15:SER:O	1:A:19:ILE:HG13	1.99	0.62
3:B:887:VAL:CG1	3:B:888:ILE:N	2.61	0.62
1:Q:648:LEU:O	1:Q:651:VAL:HG12	1.98	0.62
1:Q:741:THR:O	1:Q:743:MET:N	2.33	0.62
2:C:126:LEU:HB2	2:C:131:LYS:HG3	1.80	0.62
2:C:126:LEU:HD12	2:C:131:LYS:HG3	1.80	0.62
7:V:24:ASN:HB2	7:V:27:GLU:OE2	1.99	0.62
5:T:103:PRO:HB3	6:U:37:THR:OG1	1.98	0.62
3:R:1077:TYR:HD1	3:R:1077:TYR:O	1.82	0.62
1:Q:764:ARG:CB	1:Q:764:ARG:HH11	2.11	0.62
3:R:248:VAL:HG21	3:R:329:ARG:NH2	2.15	0.62
3:B:230:LEU:HD13	3:B:312:ALA:CB	2.30	0.62
3:B:325:LEU:HD12	3:B:328:GLY:HA2	1.81	0.62
7:H:18:PRO:HB2	7:H:67:ARG:HA	1.81	0.62
2:G:107:LEU:O	2:G:110:ILE:HG22	1.99	0.62
1:Q:644:PHE:HA	1:Q:724:PHE:CE2	2.34	0.62
1:A:696:LEU:O	1:A:700:ILE:HG12	2.00	0.62
3:B:116:ILE:HG23	3:B:361:PHE:CZ	2.34	0.62
1:Q:746:MET:H	1:Q:785:SER:HB3	1.65	0.62
3:R:59:ARG:HH12	3:R:107:ILE:CD1	2.13	0.62
8:K:26:ARG:HB3	8:K:27:LEU:HD12	1.80	0.62
8:K:45:MET:HA	8:K:45:MET:HE2	1.82	0.62
6:F:79:THR:HG22	6:F:80:SER:N	2.14	0.62
4:S:235:SER:O	4:S:236:LEU:HD12	1.98	0.62
4:S:69:SER:HA	4:S:72:ALA:HB3	1.81	0.62
4:D:101:GLU:HG2	4:D:102:ALA:H	1.64	0.62
1:Q:319:ASP:O	1:Q:320:PHE:HB2	1.99	0.62
3:R:248:VAL:O	3:R:251:GLU:HB2	1.99	0.62
3:R:230:LEU:HD13	3:R:312:ALA:CB	2.30	0.62
2:G:115:LYS:HB2	2:G:278:ARG:CG	2.29	0.62
3:R:702:LEU:HB2	3:R:721:ASN:CG	2.19	0.62
2:C:28:ILE:HD13	8:K:14:HIS:CG	2.34	0.62
4:S:206:CYS:O	4:S:207:GLU:HB2	1.98	0.62
3:R:602:ILE:CG2	3:R:603:THR:N	2.62	0.62
1:A:220:ARG:HA	1:A:233:ASP:OD1	2.00	0.62
3:B:536:LEU:HD13	3:B:537:ALA:N	2.14	0.62
4:D:148:GLY:HA3	4:D:156:PHE:CE1	2.34	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:561:ASN:ND2	1:A:590:ASN:H	1.98	0.62
1:A:446:ASN:O	1:A:448:LEU:N	2.32	0.62
2:G:68:GLU:HB3	8:W:30:TYR:CZ	2.34	0.62
9:L:18:GLU:HG3	9:L:52:LYS:HG2	1.82	0.62
3:B:518:SER:HB3	3:B:564:ASN:HD21	1.64	0.62
4:D:105:GLU:N	4:D:135:THR:HG22	2.15	0.62
8:K:12:ASP:O	8:K:13:LEU:HB2	1.97	0.62
1:A:837:THR:HG22	1:A:838:VAL:N	2.13	0.62
6:F:16:VAL:C	6:F:18:LYS:H	2.03	0.62
2:G:115:LYS:HD3	2:G:278:ARG:HB3	1.82	0.62
2:G:368:GLY:HA3	2:G:371:GLU:OE1	1.99	0.62
7:V:62:ILE:HD13	7:V:62:ILE:N	2.14	0.62
3:B:537:ALA:HB2	3:B:557:HIS:CD2	2.34	0.62
1:A:350:PRO:HD3	1:A:468:GLN:NE2	2.15	0.62
2:G:131:LYS:HB3	2:G:248:GLU:HG2	1.81	0.62
3:R:1051:ASP:O	3:R:1055:ARG:HD2	2.00	0.62
5:T:36:GLU:OE2	6:U:34:LEU:HD11	1.98	0.62
4:D:63:ALA:HB1	4:D:155:LYS:HZ3	1.64	0.62
1:A:612:LEU:HA	1:A:615:LEU:HD12	1.81	0.62
1:A:238:LYS:HZ2	1:A:276:TYR:C	2.02	0.62
3:R:70:VAL:HG11	3:R:80:ILE:HG21	1.81	0.62
3:B:319:ILE:O	3:B:323:ILE:HG12	2.00	0.62
10:N:64:ARG:N	10:N:64:ARG:HD3	2.13	0.62
1:Q:220:ARG:HA	1:Q:233:ASP:OD1	2.00	0.62
2:G:106:ARG:HD2	2:G:109:GLU:OE1	2.00	0.62
1:Q:418:LEU:HD21	3:R:1044:LEU:CD2	2.22	0.62
3:R:702:LEU:HB2	3:R:721:ASN:ND2	2.15	0.62
10:Y:24:ARG:HD2	10:Y:34:VAL:HG13	1.82	0.62
1:Q:856:PHE:CD1	1:Q:858:MET:HB2	2.35	0.62
3:R:899:TYR:CE1	3:R:971:TYR:HB2	2.35	0.62
1:Q:175:LEU:CD2	1:Q:176:THR:H	2.06	0.62
1:A:13:ILE:HD11	1:A:86:LEU:HD13	1.82	0.62
4:D:183:CYS:SG	14:D:1001:F3S:S4	2.98	0.62
1:Q:672:VAL:HG13	1:Q:700:ILE:CD1	2.28	0.62
3:R:282:ARG:HA	3:R:285:ARG:HD2	1.82	0.62
8:K:53:ILE:N	8:K:53:ILE:HD12	2.12	0.62
1:A:284:LEU:N	1:A:285:PRO:HD2	2.13	0.62
3:R:158:GLU:OE2	3:R:416:ARG:NH1	2.32	0.62
1:A:258:PRO:O	1:A:260:LEU:N	2.33	0.62
8:K:91:SER:O	8:K:92:LEU:CB	2.48	0.62
1:A:23:SER:OG	1:A:73:GLY:HA2	2.00	0.62
3:R:651:THR:HG22	3:R:670:SER:HA	1.82	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:V:25:ILE:H	7:V:25:ILE:HD12	1.63	0.62
1:Q:317:ARG:NH1	3:R:1018:GLU:HG3	2.15	0.62
3:R:1083:GLY:C	3:R:1085:LYS:H	2.03	0.62
3:R:243:SER:HB2	3:R:246:PRO:HG3	1.82	0.62
3:B:517:TRP:HD1	3:B:531:GLN:N	1.94	0.62
4:D:173:LEU:O	4:D:174:ALA:HB2	2.00	0.62
1:Q:488:THR:HG22	1:Q:490:ARG:H	1.64	0.62
1:Q:608:PRO:O	1:Q:609:GLU:HG2	1.99	0.62
3:B:469:ASN:HD22	3:B:469:ASN:N	1.98	0.62
3:R:343:LEU:N	3:R:343:LEU:HD12	2.14	0.62
3:B:353:LEU:HA	3:B:404:VAL:HG11	1.81	0.62
1:A:645:THR:OG1	1:A:646:MET:N	2.33	0.62
2:G:339:ASN:OD1	2:G:344:ARG:HD2	2.00	0.62
4:D:124:ILE:O	4:D:125:SER:HB2	1.99	0.62
1:Q:25:THR:HG22	1:Q:27:ILE:H	1.64	0.62
9:L:46:PRO:HD2	9:L:52:LYS:O	1.99	0.62
8:K:55:ASN:O	8:K:56:LEU:HB3	1.99	0.62
2:C:15:GLU:HA	2:C:18:LYS:CD	2.30	0.62
3:B:651:THR:HG22	3:B:670:SER:HA	1.82	0.62
8:K:21:SER:O	8:K:24:GLN:HG3	2.00	0.62
2:G:115:LYS:C	2:G:116:VAL:HG22	2.20	0.62
4:S:176:CYS:N	4:S:195:LEU:HD21	2.15	0.62
1:A:15:SER:HB2	1:A:16:PRO:HD2	1.80	0.62
1:A:650:ASP:HB3	1:A:723:ASN:HD21	1.65	0.62
3:B:688:THR:OG1	3:B:863:LYS:HD3	2.00	0.62
5:E:50:ASN:O	5:E:72:PHE:HA	1.99	0.62
3:R:419:TRP:CZ3	3:R:712:GLY:HA3	2.34	0.62
3:R:287:GLU:C	3:R:289:ALA:H	2.03	0.62
9:X:46:PRO:HD2	9:X:52:LYS:O	2.00	0.62
2:C:311:ARG:HD3	2:C:311:ARG:H	1.63	0.61
3:R:741:ASN:OD1	3:R:743:SER:N	2.33	0.61
1:Q:867:ASP:OD1	2:G:32:LEU:HB3	2.00	0.61
7:H:55:ILE:O	7:H:55:ILE:HG23	2.00	0.61
4:S:191:LYS:H	4:S:194:LYS:HB2	1.65	0.61
3:B:555:VAL:HA	3:B:567:HIS:O	2.00	0.61
3:R:764:LYS:HD2	3:R:771:ASP:HB2	1.82	0.61
3:R:773:ILE:HG12	3:R:813:LYS:CG	2.30	0.61
3:R:873:THR:HG22	3:R:874:ILE:H	1.64	0.61
2:C:145:GLU:HG2	2:C:239:ARG:HA	1.82	0.61
9:L:40:PHE:HE2	9:L:42:SER:HG	1.46	0.61
4:D:250:ILE:HD11	9:L:84:ILE:HD11	1.82	0.61
5:E:26:ALA:O	5:E:30:LEU:HB2	2.00	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:299:ALA:HB1	2:G:351:VAL:HG11	1.81	0.61
3:B:1077:TYR:HD1	3:B:1077:TYR:O	1.82	0.61
3:R:339:ALA:HB2	3:R:618:ALA:CB	2.28	0.61
1:A:821:ARG:HG2	1:A:821:ARG:HH11	1.64	0.61
1:Q:828:SER:C	1:Q:830:LEU:H	2.03	0.61
2:G:393:ILE:HG21	2:G:395:ARG:NH2	2.12	0.61
1:Q:471:GLU:OE1	8:W:41:LEU:HD13	2.01	0.61
7:H:52:ALA:C	7:H:54:SER:N	2.51	0.61
3:B:638:THR:HB	3:B:639:HIS:CD2	2.34	0.61
3:R:12:ARG:HH11	3:R:596:LYS:HG2	1.65	0.61
3:B:1033:ARG:CG	3:B:1033:ARG:HH11	2.10	0.61
1:A:378:VAL:HG12	1:A:388:LEU:HD12	1.82	0.61
1:A:180:ILE:O	1:A:183:ARG:HB2	1.99	0.61
5:E:97:ILE:HD12	5:E:113:ILE:HD11	1.81	0.61
1:A:500:GLN:HB2	3:B:913:HIS:CG	2.34	0.61
3:R:1004:ARG:NH1	3:R:1024:GLY:HA2	2.16	0.61
2:C:389:THR:CG2	8:K:77:THR:HB	2.29	0.61
1:Q:276:TYR:HD2	1:Q:277:PHE:HE1	1.44	0.61
3:R:325:LEU:HD13	3:R:330:ARG:HB2	1.81	0.61
3:R:70:VAL:HG11	3:R:90:LEU:HD23	1.82	0.61
4:D:51:SER:HA	4:D:137:GLN:NE2	2.14	0.61
2:C:310:ILE:HG22	2:C:314:LEU:HD23	1.82	0.61
1:Q:823:LEU:HB3	2:G:329:ILE:HD13	1.82	0.61
2:G:383:THR:CG2	3:R:1042:ALA:H	2.13	0.61
8:W:50:LEU:O	8:W:52:ASP:HB2	2.00	0.61
1:Q:525:LEU:HD11	1:Q:530:VAL:HG11	1.81	0.61
3:R:895:VAL:HG11	4:S:34:LEU:HD21	1.82	0.61
1:A:763:THR:HG21	1:A:772:TYR:CD2	2.35	0.61
3:R:476:ILE:N	3:R:476:ILE:HD13	2.14	0.61
3:B:702:LEU:HD13	10:N:47:ARG:CD	2.30	0.61
1:A:206:TRP:CH2	1:A:209:LEU:HD23	2.35	0.61
3:B:911:ASN:HD22	3:B:913:HIS:HB2	1.63	0.61
3:R:536:LEU:HD13	3:R:537:ALA:N	2.15	0.61
3:R:63:ILE:HG13	3:R:98:LEU:CB	2.31	0.61
1:Q:807:VAL:HG13	3:R:443:ARG:NH1	2.15	0.61
2:C:12:TYR:O	2:C:13:LEU:HD23	2.00	0.61
5:T:17:GLU:HB3	5:T:20:LYS:HD2	1.82	0.61
3:R:319:ILE:O	3:R:323:ILE:HG12	2.00	0.61
3:R:81:SER:OG	3:R:141:ILE:HG23	2.00	0.61
7:H:23:LEU:HB2	7:H:62:ILE:O	2.00	0.61
7:V:52:ALA:C	7:V:54:SER:H	2.01	0.61
2:C:24:LEU:HD21	2:C:58:GLU:HB3	1.82	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:887:VAL:CG1	3:R:888:ILE:N	2.63	0.61
1:A:739:ASN:HB2	3:B:919:MET:SD	2.40	0.61
1:A:787:ARG:NH2	1:A:788:THR:HA	2.16	0.61
1:A:377:TYR:HE1	1:A:385:ARG:HG2	1.65	0.61
3:B:402:ASN:HB2	3:B:410:VAL:HB	1.82	0.61
3:B:533:GLY:O	3:B:535:GLU:N	2.33	0.61
1:Q:326:ILE:HG13	1:Q:326:ILE:O	2.00	0.61
1:Q:807:VAL:HG21	3:R:443:ARG:CD	2.30	0.61
1:Q:876:VAL:C	1:Q:878:TRP:H	2.03	0.61
1:Q:234:ASP:C	1:Q:236:THR:H	2.03	0.61
1:Q:837:THR:HG22	1:Q:838:VAL:H	1.65	0.61
7:V:15:TYR:HD2	7:V:16:LEU:CD1	2.13	0.61
3:R:930:GLY:HA3	3:R:987:VAL:HB	1.82	0.61
2:G:52:PHE:O	2:G:56:ILE:N	2.27	0.61
4:S:159:VAL:HG22	4:S:160:SER:N	2.16	0.61
3:B:687:ARG:CG	3:B:687:ARG:HH11	2.12	0.61
1:A:522:GLN:OE1	9:L:40:PHE:HA	2.01	0.61
1:A:425:LEU:O	1:A:426:HIS:HB2	1.99	0.61
2:G:132:ARG:HA	2:G:249:TYR:CD1	2.35	0.61
7:H:24:ASN:HB2	7:H:27:GLU:OE2	2.00	0.61
3:B:96:LEU:O	3:B:115:TYR:HA	2.00	0.61
4:S:259:LYS:O	4:S:263:VAL:HG23	2.00	0.61
3:R:1012:LEU:O	3:R:1095:TYR:HE2	1.83	0.61
1:A:308:ARG:O	1:A:313:LEU:HB2	2.01	0.61
3:R:560:THR:HG22	3:R:561:ASP:N	2.13	0.61
1:A:486:ILE:HD11	1:A:628:MET:HE2	1.81	0.61
1:Q:821:ARG:HG2	1:Q:821:ARG:HH11	1.65	0.61
2:G:52:PHE:HA	2:G:55:ALA:HB3	1.81	0.61
7:V:23:LEU:HB2	7:V:62:ILE:O	2.01	0.61
1:Q:723:ASN:HD22	1:Q:724:PHE:N	1.97	0.61
4:S:173:LEU:O	4:S:174:ALA:HB2	2.00	0.61
3:B:595:GLU:HA	3:B:599:SER:HB3	1.82	0.61
3:B:12:ARG:HH11	3:B:596:LYS:HG2	1.65	0.61
3:R:479:GLY:HA2	3:R:552:GLU:CB	2.21	0.61
1:A:175:LEU:CD2	1:A:176:THR:H	2.08	0.61
1:A:77:LEU:HD13	1:A:81:VAL:HG22	1.81	0.61
5:E:82:GLN:HA	5:E:145:ARG:CG	2.31	0.61
3:R:63:ILE:CD1	3:R:98:LEU:HD23	2.31	0.61
8:K:43:LEU:CD1	8:K:64:ILE:HG13	2.31	0.61
3:R:867:ARG:NH2	4:S:54:TYR:CE2	2.68	0.61
8:K:71:ARG:HB3	8:K:73:VAL:CG1	2.30	0.61
1:Q:656:ASP:HA	1:Q:659:LYS:HD2	1.81	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:687:ILE:HG13	1:Q:695:SER:HB3	1.82	0.61
6:F:88:VAL:HG12	6:F:89:MET:H	1.65	0.61
3:B:1061:CYS:HB3	3:B:1065:GLY:N	2.16	0.61
2:C:109:GLU:O	2:C:113:ALA:HA	2.00	0.61
7:H:15:TYR:HD2	7:H:16:LEU:CD1	2.14	0.61
10:Y:64:ARG:N	10:Y:64:ARG:HD3	2.14	0.61
1:Q:853:ASP:OD2	2:G:311:ARG:NH2	2.34	0.61
2:C:54:LEU:O	2:C:58:GLU:HG3	2.00	0.61
1:Q:500:GLN:HB2	3:R:913:HIS:CG	2.35	0.61
3:R:911:ASN:HD22	3:R:913:HIS:HB2	1.65	0.61
3:R:6:THR:HB	3:R:9:GLU:CB	2.30	0.61
1:A:775:SER:CB	1:A:777:GLU:HG2	2.31	0.61
4:D:6:LEU:HD13	4:D:16:VAL:CG2	2.30	0.61
3:R:690:THR:HG22	3:R:691:ARG:CG	2.31	0.61
3:R:881:ARG:HH11	3:R:989:TYR:HB3	1.64	0.61
3:B:803:GLU:HG2	3:B:846:ILE:CG1	2.31	0.61
4:S:101:GLU:HG2	4:S:102:ALA:H	1.65	0.61
4:D:257:GLU:O	4:D:260:LEU:HB3	2.00	0.61
3:R:414:LEU:HA	3:R:425:HIS:HD2	1.65	0.61
3:B:1070:TYR:O	3:B:1071:ASP:O	2.18	0.61
7:V:52:ALA:C	7:V:54:SER:N	2.52	0.61
1:Q:486:ILE:HD11	1:Q:628:MET:HE1	1.80	0.61
1:Q:446:ASN:ND2	1:Q:446:ASN:C	2.53	0.61
3:R:300:HIS:O	3:R:301:LEU:C	2.39	0.61
3:B:972:ASP:OD2	3:B:974:ARG:HG2	2.00	0.61
1:A:355:PRO:HG2	1:A:356:TRP:CE2	2.35	0.61
3:R:533:GLY:O	3:R:535:GLU:N	2.33	0.61
2:G:47:GLU:HA	2:G:50:LYS:HD2	1.81	0.61
1:Q:789:GLY:HA2	3:R:659:GLU:O	2.00	0.61
3:R:497:VAL:CG1	3:R:498:GLU:N	2.63	0.61
3:B:803:GLU:HB3	3:B:805:LYS:HZ2	1.65	0.61
3:R:855:THR:C	3:R:857:GLU:N	2.51	0.61
5:E:30:LEU:HD11	5:E:72:PHE:CD2	2.36	0.61
8:W:55:ASN:O	8:W:56:LEU:HB3	2.00	0.61
1:A:238:LYS:NZ	1:A:275:THR:O	2.34	0.61
1:A:215:PRO:HB3	3:B:1106:SER:HB3	1.83	0.61
1:Q:262:ILE:CG1	1:Q:266:TRP:HE1	2.13	0.61
3:B:560:THR:HG22	3:B:561:ASP:N	2.15	0.61
2:G:274:THR:CG2	2:G:275:ASN:H	1.91	0.61
1:Q:427:ARG:N	2:G:76:GLN:HE22	1.98	0.61
4:S:115:LYS:O	4:S:116:SER:HB3	2.00	0.61
2:G:24:LEU:HD21	2:G:58:GLU:HB3	1.82	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:488:THR:OG1	1:Q:495:ILE:HB	2.00	0.61
5:T:145:ARG:O	5:T:163:THR:HG22	2.00	0.61
1:A:79:ARG:HB2	1:A:266:TRP:CZ3	2.36	0.61
3:B:59:ARG:HH22	3:B:107:ILE:CD1	2.13	0.61
3:R:1004:ARG:HH11	3:R:1025:GLY:N	1.94	0.61
5:T:171:LYS:HE2	5:T:173:GLU:HB2	1.81	0.61
3:R:67:LYS:HB3	3:R:68:PRO:HD2	1.83	0.61
5:E:100:ASN:ND2	6:F:36:ARG:HD3	2.16	0.61
3:B:171:ARG:HD2	3:B:342:ARG:NH2	2.15	0.61
3:R:1079:CYS:O	3:R:1081:ILE:N	2.28	0.61
3:B:1069:TRP:HE1	3:B:1088:LEU:HB3	1.64	0.61
3:B:1069:TRP:HD1	3:B:1088:LEU:HD22	1.64	0.61
3:R:325:LEU:HD12	3:R:328:GLY:HA2	1.82	0.61
3:R:555:VAL:HA	3:R:567:HIS:O	2.01	0.61
10:N:20:SER:O	10:N:24:ARG:HG3	2.01	0.61
3:R:640:LEU:HD22	3:R:641:GLU:H	1.64	0.61
2:G:103:GLY:HA3	2:G:300:VAL:HG13	1.81	0.61
2:G:109:GLU:OE2	2:G:117:PRO:HA	2.01	0.61
1:Q:522:GLN:HE21	9:X:33:ARG:HD3	1.66	0.61
1:Q:723:ASN:HD22	1:Q:723:ASN:C	2.02	0.61
11:P:26:CYS:CB	11:P:27:PRO:HD2	2.28	0.61
1:A:878:TRP:HZ3	2:C:50:LYS:HE2	1.65	0.61
1:A:470:GLU:HB2	8:K:41:LEU:HD12	1.82	0.61
3:B:276:VAL:HG12	3:B:277:ALA:N	2.13	0.61
2:C:131:LYS:HB3	2:C:248:GLU:HG2	1.83	0.61
3:B:838:VAL:HG12	3:B:839:THR:N	2.14	0.61
4:D:24:PHE:HZ	9:L:80:THR:HA	1.66	0.61
5:E:17:GLU:OE1	5:E:25:ILE:HD12	2.01	0.61
3:B:414:LEU:HA	3:B:425:HIS:HD2	1.65	0.61
1:A:334:ILE:HG22	1:A:482:VAL:HG11	1.81	0.60
1:A:485:ASN:HD21	3:B:1039:PHE:HE2	1.48	0.60
3:R:437:GLN:HB3	3:R:438:PRO:CD	2.23	0.60
10:Y:10:CYS:HB3	10:Y:44:CYS:SG	2.42	0.60
3:B:403:TRP:C	3:B:404:VAL:CG2	2.68	0.60
3:B:658:PRO:C	3:B:660:HIS:H	2.03	0.60
3:B:922:GLY:O	3:B:926:GLU:HB2	2.01	0.60
3:B:814:VAL:HG22	3:B:834:ASP:HA	1.83	0.60
4:S:39:MET:HE3	4:S:72:ALA:HB1	1.83	0.60
4:S:101:GLU:OE1	4:S:138:LYS:HD2	2.01	0.60
4:D:258:LYS:O	4:D:261:VAL:HG22	2.02	0.60
1:Q:239:LEU:HD12	1:Q:276:TYR:CE1	2.36	0.60
1:A:416:ILE:HG12	1:A:477:LYS:HB2	1.83	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:U:16:VAL:C	6:U:18:LYS:H	2.05	0.60
2:C:115:LYS:HD3	2:C:278:ARG:HB3	1.83	0.60
3:R:463:ASN:HB3	3:R:467:VAL:HG12	1.83	0.60
2:G:390:MET:SD	5:T:58:ILE:N	2.74	0.60
9:X:35:ILE:HD11	9:X:75:ASN:ND2	2.15	0.60
1:A:764:ARG:O	1:A:766:LEU:N	2.35	0.60
3:R:295:LYS:C	3:R:296:TYR:HD1	2.05	0.60
3:B:723:ILE:HB	3:B:907:ASP:OD2	2.02	0.60
1:A:249:LEU:HD13	1:A:266:TRP:CZ3	2.36	0.60
1:A:644:PHE:HA	1:A:724:PHE:CE2	2.34	0.60
3:B:881:ARG:HH11	3:B:989:TYR:CB	2.14	0.60
1:A:488:THR:CG2	1:A:490:ARG:H	2.14	0.60
3:R:922:GLY:O	3:R:926:GLU:N	2.30	0.60
1:Q:708:ARG:O	1:Q:711:ALA:HB3	2.02	0.60
3:R:173:LEU:HA	3:R:333:ASP:OD2	2.01	0.60
3:R:1069:TRP:CZ3	3:R:1077:TYR:HB2	2.36	0.60
2:C:115:LYS:HB2	2:C:278:ARG:CG	2.31	0.60
1:A:847:GLN:HG2	2:C:318:ASP:OD1	2.01	0.60
1:Q:522:GLN:HG2	9:X:40:PHE:CE1	2.36	0.60
3:B:558:ILE:HG12	3:B:567:HIS:CD2	2.36	0.60
3:R:738:ILE:HG23	3:R:888:ILE:HA	1.81	0.60
10:N:39:GLY:O	10:N:40:VAL:HG23	2.02	0.60
3:B:1107:MET:C	3:B:1108:ILE:HD12	2.22	0.60
3:R:98:LEU:HD11	3:R:100:MET:CG	2.32	0.60
2:C:337:GLU:OE2	2:C:339:ASN:ND2	2.34	0.60
2:C:393:ILE:CG2	2:C:395:ARG:HH21	2.11	0.60
1:A:488:THR:OG1	1:A:495:ILE:HB	2.00	0.60
3:R:803:GLU:HG2	3:R:846:ILE:HG13	1.83	0.60
4:D:23:GLU:O	9:L:27:LEU:HD13	2.01	0.60
5:T:31:ARG:O	5:T:33:GLN:N	2.33	0.60
8:W:70:ARG:C	8:W:72:GLY:H	2.05	0.60
3:R:414:LEU:HA	3:R:425:HIS:CD2	2.36	0.60
10:N:3:ILE:HG12	10:N:18:TRP:CG	2.36	0.60
4:S:98:ILE:HD11	4:S:114:ILE:CG2	2.27	0.60
4:S:50:ASN:HD22	10:Y:64:ARG:HD2	1.66	0.60
7:V:64:ARG:NH2	8:W:12:ASP:OD1	2.35	0.60
2:C:57:LYS:CA	2:C:57:LYS:HE3	2.28	0.60
4:S:183:CYS:SG	14:S:1001:F3S:S4	3.00	0.60
1:Q:573:ARG:NH2	1:Q:721:PRO:HB3	2.17	0.60
3:R:63:ILE:HD11	3:R:98:LEU:HD23	1.82	0.60
3:B:800:PRO:HD3	3:B:850:VAL:HG23	1.84	0.60
6:U:88:VAL:HG12	6:U:89:MET:H	1.67	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:348:ASP:OD2	3:B:348:ASP:N	2.33	0.60
1:Q:853:ASP:OD1	1:Q:864:LYS:HD3	2.00	0.60
3:R:971:TYR:CE2	3:R:978:LYS:HB3	2.37	0.60
3:B:602:ILE:CG2	3:B:603:THR:N	2.64	0.60
3:B:954:GLN:HA	3:B:957:ILE:CD1	2.27	0.60
3:B:102:PRO:HG2	3:B:108:GLU:OE2	2.02	0.60
3:R:373:LYS:HG3	3:R:375:ARG:HB2	1.83	0.60
9:L:7:LYS:H	9:L:14:GLU:HB3	1.66	0.60
1:Q:690:ARG:HD2	1:Q:694:GLU:OE1	2.01	0.60
3:R:855:THR:CB	3:R:857:GLU:HG2	2.31	0.60
3:R:870:ARG:CZ	3:R:996:MET:SD	2.89	0.60
8:K:70:ARG:C	8:K:72:GLY:H	2.05	0.60
6:U:87:LEU:HD23	6:U:88:VAL:O	2.01	0.60
3:R:488:THR:HG21	3:R:549:ILE:HD11	1.83	0.60
3:B:82:PRO:HG2	3:B:143:GLU:OE1	2.01	0.60
2:C:134:ARG:O	2:C:138:LEU:HD12	2.02	0.60
3:B:28:LEU:HG	3:B:122:MET:CE	2.31	0.60
3:R:246:PRO:HG2	3:R:249:GLN:CG	2.29	0.60
3:R:242:VAL:CA	3:R:316:ALA:HB1	2.24	0.60
3:B:243:SER:HB2	3:B:246:PRO:HG3	1.82	0.60
3:B:70:VAL:HG11	3:B:80:ILE:HG21	1.84	0.60
1:A:864:LYS:HE3	2:C:32:LEU:CD1	2.32	0.60
2:G:329:ILE:CA	2:G:334:VAL:HG12	2.28	0.60
10:Y:30:ASN:O	10:Y:34:VAL:HG23	2.02	0.60
10:Y:42:ARG:O	10:Y:46:ARG:HB2	2.01	0.60
10:Y:43:TYR:HA	10:Y:46:ARG:CB	2.31	0.60
3:R:963:LEU:HD22	4:S:208:GLU:HG3	1.83	0.60
1:Q:363:GLN:O	1:Q:366:ILE:HG23	2.01	0.60
3:B:20:SER:O	3:B:21:LYS:HG2	2.02	0.60
3:B:932:TYR:O	3:B:933:ALA:HB2	2.01	0.60
3:B:111:PRO:O	3:B:112:GLU:HB3	2.02	0.60
3:B:781:ARG:CG	3:B:782:GLY:N	2.65	0.60
1:Q:13:ILE:HD11	1:Q:86:LEU:HD13	1.82	0.60
8:K:38:ALA:HB1	8:K:42:GLN:HE22	1.67	0.60
1:A:608:PRO:O	1:A:609:GLU:HG2	2.01	0.60
8:W:63:SER:C	8:W:65:ALA:N	2.54	0.60
4:D:101:GLU:OE1	4:D:138:LYS:HD2	2.01	0.60
9:X:18:GLU:HG3	9:X:52:LYS:HG2	1.82	0.60
3:B:414:LEU:HA	3:B:425:HIS:CD2	2.37	0.60
3:B:679:LEU:HD23	3:B:716:ARG:HD3	1.83	0.60
2:G:261:VAL:HG12	2:G:261:VAL:O	2.02	0.60
1:Q:249:LEU:HD13	1:Q:266:TRP:CZ3	2.35	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:355:LEU:HD22	3:B:1109:ILE:HD11	1.83	0.60
1:Q:833:GLU:HG3	1:Q:839:ARG:HG3	1.82	0.60
1:Q:827:LEU:HD23	2:G:316:ILE:HD13	1.84	0.60
10:Y:39:GLY:O	10:Y:40:VAL:HG23	2.02	0.60
3:R:676:ALA:HB1	3:R:718:ALA:HB1	1.84	0.60
1:A:742:GLN:HB2	3:B:919:MET:HE3	1.82	0.60
3:R:63:ILE:CG1	3:R:98:LEU:HD23	2.32	0.60
3:R:64:ARG:HG2	3:R:64:ARG:NH1	2.16	0.60
3:R:59:ARG:NH2	3:R:107:ILE:HD12	2.16	0.60
1:Q:30:PRO:HB2	1:Q:244:ARG:HG3	1.83	0.60
1:A:299:ALA:HB1	2:C:351:VAL:HG11	1.82	0.60
1:Q:245:ILE:CD1	1:Q:268:LEU:HD13	2.31	0.60
1:Q:276:TYR:CD2	1:Q:277:PHE:CE1	2.87	0.60
3:R:518:SER:HB3	3:R:564:ASN:HD21	1.66	0.60
3:R:853:THR:CG2	3:R:854:GLU:H	2.07	0.60
10:N:24:ARG:HD2	10:N:34:VAL:HG13	1.82	0.60
6:U:59:LEU:HD13	6:U:69:ARG:HG2	1.82	0.60
2:G:389:THR:CG2	8:W:77:THR:HB	2.31	0.60
3:B:576:ARG:HD3	3:B:615:TYR:HD2	1.67	0.60
3:B:930:GLY:HA3	3:B:987:VAL:HB	1.84	0.60
1:Q:775:SER:HB3	1:Q:777:GLU:HG2	1.84	0.60
4:D:13:ILE:HD11	4:D:238:PRO:HB2	1.84	0.60
4:S:4:ASN:O	4:S:15:LEU:HA	2.01	0.60
8:W:35:VAL:HG23	8:W:36:ILE:N	2.17	0.60
5:E:31:ARG:O	5:E:33:GLN:N	2.33	0.60
5:E:50:ASN:HB2	5:E:73:ASP:OD2	2.01	0.60
3:R:419:TRP:HZ3	3:R:712:GLY:HA3	1.66	0.60
6:U:72:LEU:C	6:U:74:SER:H	2.05	0.60
4:D:175:ASN:HA	4:D:195:LEU:CD2	2.30	0.60
2:G:292:ILE:HG23	2:G:293:ILE:N	2.16	0.60
5:T:15:PRO:HG2	8:W:45:MET:HB3	1.83	0.60
3:R:932:TYR:O	3:R:933:ALA:HB2	2.02	0.60
1:Q:604:GLY:O	1:Q:606:GLN:N	2.34	0.60
1:Q:525:LEU:HG	9:X:40:PHE:HZ	1.66	0.60
3:B:6:THR:HB	3:B:9:GLU:CB	2.31	0.60
3:R:6:THR:HB	3:R:9:GLU:HB3	1.84	0.60
1:A:377:TYR:OH	1:A:385:ARG:HD2	2.01	0.60
3:B:738:ILE:HG23	3:B:888:ILE:HA	1.84	0.60
3:B:701:PRO:HG3	3:B:708:LEU:HD11	1.82	0.60
3:R:377:ARG:O	3:R:378:LYS:HB2	2.00	0.60
3:R:393:ARG:HH21	3:R:403:TRP:HH2	1.44	0.60
2:C:392:PRO:HG3	5:E:68:HIS:CE1	2.37	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:204:ARG:HB2	3:R:213:SER:HG	1.64	0.60
1:Q:691:THR:CG2	1:Q:692:LEU:HD12	2.32	0.60
1:A:412:ILE:O	1:A:415:ASP:HB2	2.02	0.60
4:S:38:ILE:HD12	4:S:39:MET:N	2.15	0.60
3:B:906:PRO:HD3	3:B:985:PHE:HZ	1.66	0.60
3:R:789:TYR:O	3:R:791:LEU:N	2.35	0.60
3:B:741:ASN:OD1	3:B:743:SER:N	2.34	0.60
3:B:729:PHE:C	3:B:731:GLY:H	2.05	0.60
3:R:1069:TRP:HD1	3:R:1088:LEU:HD22	1.65	0.60
1:A:4:LYS:HD2	3:B:1089:PHE:CB	2.31	0.60
3:R:80:ILE:CD1	3:R:92:TYR:HA	2.31	0.60
2:C:262:LEU:HD22	2:C:269:VAL:CG1	2.30	0.60
3:R:1036:LEU:HD12	3:R:1045:LEU:HB2	1.82	0.60
3:R:699:GLN:NE2	10:Y:48:MET:HE3	2.17	0.60
2:G:311:ARG:HD3	2:G:311:ARG:H	1.65	0.60
2:G:28:ILE:HD12	8:W:18:VAL:CG2	2.31	0.60
4:S:171:GLU:O	4:S:217:ILE:HG23	2.01	0.60
1:A:763:THR:C	1:A:764:ARG:HG2	2.21	0.60
3:R:6:THR:N	3:R:9:GLU:OE2	2.35	0.60
3:R:291:GLN:HB3	3:R:295:LYS:HE2	1.83	0.60
1:A:648:LEU:O	1:A:651:VAL:HG12	2.01	0.60
5:T:126:ILE:CD1	5:T:137:GLN:HG2	2.32	0.60
5:E:145:ARG:O	5:E:163:THR:HG22	2.01	0.60
3:R:759:SER:HB3	3:R:863:LYS:HA	1.84	0.60
3:B:764:LYS:HD3	3:B:815:SER:CA	2.32	0.60
3:R:280:GLN:O	3:R:285:ARG:NH1	2.34	0.60
2:G:15:GLU:HA	2:G:18:LYS:CD	2.31	0.60
3:R:1061:CYS:HB3	3:R:1065:GLY:HA2	1.84	0.59
1:Q:288:LYS:HG2	1:Q:294:PRO:CA	2.31	0.59
2:G:109:GLU:O	2:G:113:ALA:HA	2.02	0.59
4:S:26:ASN:O	4:S:30:ARG:HG3	2.02	0.59
3:B:6:THR:N	3:B:9:GLU:OE2	2.34	0.59
3:R:906:PRO:HD3	3:R:985:PHE:HZ	1.67	0.59
1:A:363:GLN:O	1:A:366:ILE:HG23	2.01	0.59
3:B:63:ILE:CG1	3:B:98:LEU:HD23	2.32	0.59
3:B:628:LEU:HD23	3:B:628:LEU:N	2.08	0.59
2:C:390:MET:HB2	5:E:56:GLU:CG	2.28	0.59
1:Q:543:ARG:HG2	1:Q:544:GLU:H	1.67	0.59
1:Q:831:ARG:HH21	2:G:385:MET:CG	2.15	0.59
1:Q:276:TYR:CD2	1:Q:277:PHE:HE1	2.21	0.59
3:B:206:LYS:HE3	3:B:220:LYS:NZ	2.17	0.59
4:D:108:MET:HE1	10:N:2:LEU:HD21	1.83	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:35:LEU:O	2:C:39:LYS:HG3	2.02	0.59
1:A:827:LEU:HD23	2:C:316:ILE:HD13	1.82	0.59
1:A:427:ARG:N	2:C:76:GLN:HE22	2.00	0.59
7:V:18:PRO:CB	7:V:67:ARG:HA	2.32	0.59
1:Q:362:ARG:O	1:Q:366:ILE:HG22	2.02	0.59
1:Q:377:TYR:HE1	1:Q:385:ARG:HG2	1.67	0.59
1:A:573:ARG:NH2	1:A:721:PRO:HB3	2.17	0.59
3:B:557:HIS:ND1	3:B:566:VAL:HG22	2.17	0.59
1:Q:206:TRP:CH2	1:Q:209:LEU:HD23	2.37	0.59
3:B:690:THR:HG22	3:B:691:ARG:CG	2.32	0.59
2:C:391:ARG:CB	8:K:75:PRO:HB2	2.32	0.59
5:E:17:GLU:HB3	5:E:20:LYS:HD2	1.83	0.59
8:W:34:ARG:O	8:W:34:ARG:HD2	2.01	0.59
3:R:729:PHE:CD2	3:R:730:THR:HG23	2.36	0.59
5:E:63:ASP:OD2	5:E:65:ALA:HB3	2.02	0.59
1:Q:238:LYS:HZ2	1:Q:276:TYR:C	2.05	0.59
3:B:1083:GLY:C	3:B:1085:LYS:H	2.05	0.59
3:B:210:PHE:HE2	3:B:319:ILE:HG23	1.67	0.59
1:A:828:SER:C	1:A:830:LEU:H	2.05	0.59
1:Q:827:LEU:CD1	1:Q:830:LEU:HD12	2.33	0.59
8:W:21:SER:O	8:W:24:GLN:HG3	2.02	0.59
1:A:874:ARG:NE	2:C:53:ASP:HB3	2.04	0.59
1:Q:524:ILE:CG2	1:Q:634:VAL:HG13	2.32	0.59
3:R:589:VAL:HG12	3:R:590:THR:N	2.16	0.59
3:R:576:ARG:HD3	3:R:615:TYR:HD2	1.65	0.59
3:R:291:GLN:C	3:R:293:ILE:H	2.05	0.59
10:N:43:TYR:HA	10:N:46:ARG:CB	2.30	0.59
3:B:63:ILE:HG13	3:B:98:LEU:CB	2.32	0.59
4:D:27:ALA:HB1	9:L:23:THR:HG22	1.84	0.59
3:B:680:TYR:HE1	3:B:687:ARG:HH12	1.48	0.59
1:A:525:LEU:CD1	1:A:530:VAL:HG11	2.33	0.59
3:R:729:PHE:C	3:R:731:GLY:H	2.05	0.59
3:R:849:LEU:HB3	3:R:865:ARG:HG2	1.84	0.59
3:R:1009:VAL:HG12	3:R:1016:PRO:HA	1.83	0.59
3:R:560:THR:CG2	3:R:561:ASP:N	2.64	0.59
4:D:52:PRO:HB2	10:N:56:ILE:HD11	1.82	0.59
7:H:23:LEU:HB3	7:H:28:ALA:HB2	1.84	0.59
6:F:47:CYS:HB2	6:F:52:ALA:HB2	1.84	0.59
1:Q:609:GLU:HB3	1:Q:614:TRP:CE2	2.37	0.59
2:C:49:ASP:O	2:C:52:PHE:N	2.35	0.59
1:A:64:THR:O	1:A:66:GLY:N	2.36	0.59
3:B:591:ILE:HD11	3:B:612:LYS:HZ3	1.68	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:376:ASN:N	1:A:376:ASN:ND2	2.51	0.59
4:D:171:GLU:O	4:D:217:ILE:HG23	2.01	0.59
1:A:552:ILE:HD11	1:A:593:LEU:HD12	1.84	0.59
3:B:52:GLU:HG3	3:B:56:LEU:CD2	2.32	0.59
3:R:1040:GLY:HA3	8:W:30:TYR:HE2	1.67	0.59
3:B:164:GLN:CG	3:B:349:LEU:HD21	2.32	0.59
1:Q:64:THR:HG22	1:Q:65:LEU:H	1.68	0.59
3:R:1009:VAL:HB	3:R:1014:ARG:O	2.02	0.59
3:B:183:ILE:HG13	3:B:206:LYS:HB3	1.83	0.59
5:E:88:GLU:H	5:E:99:VAL:CG1	2.15	0.59
2:G:262:LEU:HD22	2:G:269:VAL:CG1	2.31	0.59
1:Q:446:ASN:O	1:Q:448:LEU:N	2.35	0.59
3:R:978:LYS:HZ3	4:S:205:LEU:HD22	1.67	0.59
3:B:153:ILE:HG22	3:B:156:GLY:HA2	1.83	0.59
1:A:522:GLN:HE21	9:L:33:ARG:HD3	1.67	0.59
1:A:609:GLU:HB3	1:A:614:TRP:CE2	2.38	0.59
1:Q:284:LEU:N	1:Q:285:PRO:HD2	2.17	0.59
1:Q:417:VAL:HG13	1:Q:465:HIS:O	2.03	0.59
7:V:65:ILE:CD1	7:V:65:ILE:H	2.15	0.59
1:A:615:LEU:O	1:A:619:TYR:HB2	2.03	0.59
11:P:17:GLN:C	11:P:19:LYS:H	2.05	0.59
3:B:1009:VAL:HB	3:B:1014:ARG:O	2.03	0.59
1:A:487:ILE:HD12	1:A:487:ILE:N	2.18	0.59
2:C:277:ILE:C	2:C:279:GLU:N	2.55	0.59
1:Q:768:HIS:NE2	3:R:450:TRP:CZ2	2.68	0.59
2:G:39:LYS:O	2:G:43:VAL:HG23	2.03	0.59
1:Q:491:TYR:HB2	1:Q:607:GLN:NE2	2.16	0.59
7:V:23:LEU:CD1	7:V:62:ILE:HG12	2.33	0.59
8:W:90:LEU:H	8:W:90:LEU:HD23	1.67	0.59
3:B:295:LYS:C	3:B:296:TYR:HD1	2.06	0.59
1:A:377:TYR:H	1:A:388:LEU:CB	2.16	0.59
3:B:63:ILE:HD11	3:B:98:LEU:HD23	1.85	0.59
3:R:89:ASN:HD21	3:R:863:LYS:NZ	2.01	0.59
3:R:814:VAL:HG22	3:R:834:ASP:HA	1.83	0.59
1:A:604:GLY:O	1:A:606:GLN:N	2.35	0.59
4:D:247:LYS:HA	4:D:250:ILE:HD12	1.84	0.59
2:C:361:GLY:O	2:C:362:ASP:O	2.20	0.59
3:B:80:ILE:CD1	3:B:92:TYR:HA	2.33	0.59
1:A:418:LEU:HD11	3:B:1044:LEU:HD11	1.85	0.59
6:U:14:TYR:O	6:U:18:LYS:HG3	2.03	0.59
1:A:827:LEU:CD1	1:A:830:LEU:HD12	2.33	0.59
3:B:640:LEU:HD22	3:B:641:GLU:H	1.60	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:475:GLN:HG2	3:B:476:ILE:N	2.15	0.59
3:B:699:GLN:HE22	10:N:48:MET:HE3	1.66	0.59
3:B:355:ARG:CB	3:B:355:ARG:HH11	2.15	0.59
3:R:781:ARG:CG	3:R:782:GLY:N	2.65	0.59
4:D:97:TYR:C	4:D:98:ILE:HD12	2.23	0.59
1:Q:371:LYS:HD3	1:Q:372:TRP:N	2.17	0.59
6:F:87:LEU:HD23	6:F:88:VAL:O	2.03	0.59
2:G:12:TYR:O	2:G:13:LEU:HD23	2.02	0.59
3:R:1000:LYS:O	3:R:1001:LEU:HB2	2.02	0.59
1:Q:293:ARG:H	1:Q:293:ARG:HD2	1.68	0.59
2:G:268:ASP:OD1	2:G:270:ALA:HB3	2.03	0.59
2:G:284:PHE:CE2	7:V:14:HIS:HB2	2.37	0.59
3:B:296:TYR:HD1	3:B:296:TYR:N	2.01	0.59
4:D:98:ILE:CD1	4:D:114:ILE:HG23	2.29	0.59
1:A:517:THR:HG22	1:A:518:LYS:N	2.17	0.59
6:F:35:GLN:O	6:F:38:TYR:HB2	2.02	0.59
5:T:30:LEU:HD11	5:T:72:PHE:CD2	2.38	0.59
3:R:182:ASN:HD22	3:R:182:ASN:N	1.99	0.59
1:Q:23:SER:O	1:Q:24:VAL:HG13	2.02	0.59
3:B:1058:ILE:O	3:B:1091:VAL:HG12	2.03	0.59
3:B:515:LEU:N	3:B:517:TRP:CE3	2.71	0.59
4:D:194:LYS:O	4:D:196:SER:N	2.35	0.59
3:R:902:LYS:CB	10:Y:42:ARG:HD3	2.33	0.59
3:R:954:GLN:HA	3:R:957:ILE:CD1	2.31	0.59
4:S:98:ILE:HG13	4:S:114:ILE:HA	1.85	0.59
1:Q:487:ILE:HD12	1:Q:487:ILE:N	2.18	0.59
4:S:175:ASN:HA	4:S:195:LEU:CD2	2.31	0.59
3:R:814:VAL:CG1	3:R:832:LYS:HB3	2.32	0.59
1:A:876:VAL:C	1:A:878:TRP:H	2.05	0.59
4:D:114:ILE:HD12	4:D:123:PRO:HG2	1.84	0.59
3:B:805:LYS:HG3	3:B:844:MET:HB2	1.85	0.59
3:R:417:THR:O	3:R:418:ASN:HB3	2.03	0.59
1:Q:350:PRO:HD3	1:Q:468:GLN:NE2	2.17	0.59
2:C:297:ILE:C	2:C:299:LYS:H	2.04	0.59
8:K:70:ARG:NH1	8:K:70:ARG:HB3	2.18	0.59
1:A:23:SER:O	1:A:24:VAL:HG13	2.03	0.59
3:R:735:GLU:O	3:R:736:ASP:C	2.41	0.59
2:G:355:LEU:HD22	3:R:1109:ILE:HD11	1.85	0.59
3:R:515:LEU:N	3:R:517:TRP:CE3	2.71	0.59
4:D:175:ASN:CA	4:D:195:LEU:HD21	2.33	0.59
2:G:392:PRO:HB3	5:T:22:LEU:CD1	2.31	0.59
9:X:87:ILE:CG2	9:X:88:LYS:N	2.66	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:630:PRO:O	3:R:633:LEU:HB3	2.03	0.59
5:T:168:TYR:O	5:T:175:ILE:HD13	2.03	0.59
2:C:391:ARG:H	2:C:392:PRO:HD3	1.68	0.59
2:G:241:ILE:HG22	2:G:242:VAL:H	1.68	0.59
3:B:795:ASN:HD21	11:P:36:MET:CE	2.14	0.59
4:D:177:GLU:HB2	4:D:178:LYS:HZ3	1.66	0.59
1:A:708:ARG:HG3	1:A:709:SER:N	2.18	0.59
1:Q:64:THR:O	1:Q:66:GLY:N	2.36	0.59
3:B:560:THR:CG2	3:B:561:ASP:N	2.66	0.58
5:T:2:TYR:CZ	6:U:41:LEU:HD21	2.38	0.58
7:V:45:ILE:CB	7:V:79:ARG:HB3	2.33	0.58
3:B:291:GLN:HB3	3:B:295:LYS:HE2	1.84	0.58
1:A:362:ARG:O	1:A:366:ILE:HG22	2.04	0.58
5:T:82:GLN:HA	5:T:145:ARG:CG	2.33	0.58
3:B:702:LEU:HB2	3:B:721:ASN:CG	2.22	0.58
1:A:262:ILE:CG1	1:A:266:TRP:HE1	2.16	0.58
1:A:723:ASN:HD22	1:A:724:PHE:N	2.00	0.58
3:B:727:MET:HE3	3:B:898:PRO:CG	2.32	0.58
1:A:532:ILE:HD11	9:L:56:LYS:CD	2.31	0.58
3:R:795:ASN:HD21	11:Z:36:MET:CE	2.16	0.58
1:A:317:ARG:NH1	3:B:1018:GLU:HG3	2.18	0.58
4:D:38:ILE:HD12	4:D:39:MET:N	2.18	0.58
1:A:412:ILE:O	1:A:412:ILE:HD12	2.03	0.58
8:W:70:ARG:NH1	8:W:70:ARG:HB3	2.18	0.58
1:A:244:ARG:O	1:A:248:ARG:HG3	2.02	0.58
11:Z:8:LYS:HD3	11:Z:13:PHE:HB3	1.85	0.58
3:B:294:ASP:HB3	3:B:303:THR:O	2.02	0.58
3:R:1079:CYS:C	3:R:1081:ILE:H	2.05	0.58
3:B:1079:CYS:O	3:B:1081:ILE:N	2.28	0.58
3:B:1012:LEU:O	3:B:1095:TYR:HE2	1.86	0.58
2:G:286:ILE:HD13	2:G:324:GLY:O	2.03	0.58
7:V:81:VAL:O	7:V:82:ILE:HG12	2.03	0.58
1:Q:4:LYS:HG2	1:Q:5:ASN:H	1.66	0.58
1:A:870:ARG:CZ	2:C:57:LYS:O	2.52	0.58
2:C:28:ILE:HD12	8:K:18:VAL:HG23	1.84	0.58
1:Q:507:TYR:HH	1:Q:727:VAL:HG13	1.68	0.58
3:B:281:LYS:O	3:B:285:ARG:HG3	2.03	0.58
1:Q:552:ILE:HD11	1:Q:593:LEU:HD12	1.85	0.58
1:A:491:TYR:HB2	1:A:607:GLN:NE2	2.18	0.58
1:A:409:ARG:HH21	1:A:412:ILE:CG1	2.16	0.58
3:R:159:ARG:HD3	3:R:399:ALA:HA	1.83	0.58
3:R:154:VAL:HG21	3:R:399:ALA:HB2	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:729:PHE:O	3:B:731:GLY:N	2.36	0.58
3:R:558:ILE:HG12	3:R:567:HIS:HD2	1.68	0.58
6:F:18:LYS:HE2	6:F:41:LEU:CB	2.28	0.58
1:Q:820:GLN:O	1:Q:824:ILE:HG12	2.03	0.58
1:Q:825:ASN:O	1:Q:826:ALA:C	2.41	0.58
2:C:28:ILE:HB	8:K:18:VAL:HG21	1.84	0.58
3:R:982:ARG:O	3:R:983:ILE:CG1	2.45	0.58
2:C:377:HIS:ND1	2:C:378:PRO:HD2	2.17	0.58
5:T:117:THR:O	5:T:118:LEU:HD23	2.03	0.58
3:R:52:GLU:HG3	3:R:56:LEU:CD2	2.32	0.58
3:B:814:VAL:CG1	3:B:832:LYS:HB3	2.32	0.58
1:Q:258:PRO:C	1:Q:260:LEU:H	2.06	0.58
1:Q:541:ALA:HB1	1:Q:542:PRO:CD	2.33	0.58
3:B:677:LEU:HD12	3:B:992:LYS:HD3	1.84	0.58
2:G:386:VAL:HG13	8:W:34:ARG:HG2	1.85	0.58
3:B:173:LEU:HA	3:B:333:ASP:OD2	2.02	0.58
3:B:735:GLU:O	3:B:736:ASP:C	2.41	0.58
3:R:96:LEU:O	3:R:115:TYR:HA	2.03	0.58
3:R:247:GLU:HA	3:R:250:ASN:ND2	2.19	0.58
3:R:244:LEU:HD13	3:R:500:VAL:CG1	2.34	0.58
1:A:828:SER:HB2	2:C:72:ILE:CD1	2.32	0.58
2:C:119:THR:N	2:C:120:PRO:HD3	2.18	0.58
1:Q:4:LYS:HD2	3:R:1089:PHE:HB3	1.85	0.58
8:W:46:GLY:O	8:W:47:ALA:O	2.21	0.58
5:T:18:PHE:CB	8:W:48:PRO:HD2	2.33	0.58
2:C:268:ASP:OD1	2:C:270:ALA:HB3	2.04	0.58
4:S:148:GLY:HA3	4:S:156:PHE:CE1	2.38	0.58
1:Q:378:VAL:HG12	1:Q:388:LEU:HD12	1.86	0.58
3:B:8:ASP:O	3:B:12:ARG:HG2	2.03	0.58
5:T:179:LYS:HZ3	6:U:81:ASP:HB2	1.66	0.58
3:B:98:LEU:HD11	3:B:100:MET:HG3	1.86	0.58
3:B:358:PHE:O	3:B:362:VAL:HG23	2.03	0.58
3:R:361:PHE:CD2	3:R:361:PHE:C	2.76	0.58
2:C:390:MET:CE	5:E:66:THR:HG23	2.34	0.58
2:C:390:MET:SD	5:E:58:ILE:N	2.77	0.58
9:L:11:ASN:O	9:L:58:LEU:HD12	2.03	0.58
1:Q:336:GLU:OE2	1:Q:436:ARG:HD3	2.03	0.58
4:D:4:ASN:O	4:D:15:LEU:HA	2.02	0.58
5:T:50:ASN:HB2	5:T:73:ASP:OD2	2.03	0.58
3:R:294:ASP:HB3	3:R:303:THR:O	2.03	0.58
1:Q:79:ARG:HB2	1:Q:266:TRP:CZ3	2.38	0.58
3:B:248:VAL:O	3:B:251:GLU:HB2	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:81:SER:OG	3:B:141:ILE:HG23	2.03	0.58
3:B:448:THR:C	3:B:450:TRP:H	2.07	0.58
3:R:338:TYR:CZ	3:R:341:LYS:NZ	2.67	0.58
3:R:723:ILE:HB	3:R:907:ASP:OD2	2.04	0.58
1:Q:870:ARG:CZ	2:G:57:LYS:O	2.51	0.58
1:Q:632:PHE:HA	1:Q:635:PHE:CE1	2.39	0.58
3:R:600:GLY:C	3:R:602:ILE:N	2.57	0.58
3:B:298:LEU:C	3:B:300:HIS:H	2.06	0.58
1:A:672:VAL:HG11	1:A:776:PRO:HD3	1.86	0.58
3:B:63:ILE:CD1	3:B:98:LEU:HD23	2.34	0.58
3:R:654:ILE:HG22	3:R:881:ARG:HG2	1.85	0.58
1:A:12:GLY:HA2	2:C:358:ALA:O	2.04	0.58
2:C:127:THR:HA	2:C:266:GLY:O	2.02	0.58
3:B:1079:CYS:C	3:B:1081:ILE:H	2.04	0.58
3:R:518:SER:CB	3:R:564:ASN:HD22	2.16	0.58
4:D:128:ILE:HG12	10:N:16:ASP:HB3	1.86	0.58
1:A:864:LYS:HE3	2:C:32:LEU:HD11	1.84	0.58
6:U:14:TYR:HE2	6:U:40:TYR:HH	1.50	0.58
6:F:18:LYS:CE	6:F:41:LEU:HB3	2.31	0.58
3:R:448:THR:C	3:R:450:TRP:H	2.06	0.58
4:S:97:TYR:C	4:S:98:ILE:HD12	2.22	0.58
1:Q:425:LEU:O	1:Q:426:HIS:HB2	2.02	0.58
1:Q:376:ASN:ND2	1:Q:376:ASN:N	2.48	0.58
3:R:713:TYR:OH	3:R:718:ALA:HB3	2.03	0.58
3:R:296:TYR:N	3:R:296:TYR:HD1	2.01	0.58
1:A:353:ILE:HD11	1:A:407:ILE:HG23	1.84	0.58
3:B:388:ASP:C	3:B:390:VAL:N	2.55	0.58
3:B:881:ARG:HH11	3:B:989:TYR:HB3	1.68	0.58
4:D:159:VAL:HG22	4:D:160:SER:N	2.18	0.58
5:E:53:THR:O	5:E:70:VAL:HG13	2.04	0.58
1:A:872:PHE:HA	1:A:876:VAL:HB	1.84	0.58
3:R:106:ASN:O	3:R:108:GLU:HG3	2.04	0.58
9:L:66:LYS:O	9:L:70:LEU:HD13	2.03	0.58
9:L:70:LEU:HA	9:L:73:ILE:HB	1.85	0.58
2:C:245:LYS:HD2	2:C:250:ILE:HD12	1.86	0.58
1:Q:541:ALA:CB	1:Q:542:PRO:CD	2.82	0.58
1:Q:412:ILE:HD12	1:Q:412:ILE:O	2.03	0.58
7:V:63:ILE:HD12	7:V:63:ILE:N	2.18	0.58
3:R:153:ILE:HG22	3:R:156:GLY:HA2	1.85	0.58
4:D:45:TYR:HD1	11:P:44:ILE:HG12	1.68	0.58
3:R:1070:TYR:O	3:R:1071:ASP:O	2.22	0.58
3:B:316:ALA:C	3:B:318:ALA:H	2.07	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:518:SER:CB	3:B:564:ASN:HD22	2.17	0.58
2:G:119:THR:N	2:G:120:PRO:HD3	2.18	0.58
1:Q:812:ARG:HG3	2:G:86:THR:HG23	1.84	0.58
3:B:59:ARG:NH2	3:B:107:ILE:HD12	2.18	0.58
1:Q:355:PRO:HG2	1:Q:356:TRP:CE2	2.38	0.58
9:X:66:LYS:O	9:X:70:LEU:HD13	2.04	0.58
1:A:522:GLN:NE2	9:L:33:ARG:HD3	2.18	0.58
1:A:524:ILE:CG2	1:A:634:VAL:HG13	2.33	0.58
1:A:499:ALA:HB3	3:B:734:MET:HE3	1.86	0.58
8:K:36:ILE:O	8:K:40:ALA:HB2	2.04	0.58
11:Z:17:GLN:C	11:Z:19:LYS:H	2.06	0.58
1:A:4:LYS:HD2	3:B:1089:PHE:HB3	1.84	0.58
3:R:769:GLN:O	3:R:770:GLU:CB	2.51	0.58
5:T:100:ASN:HD21	6:U:36:ARG:HD3	1.69	0.58
6:U:52:ALA:HA	6:U:55:VAL:CG2	2.34	0.58
2:C:321:THR:HG22	7:H:79:ARG:HH12	1.69	0.58
3:R:435:ARG:HH11	3:R:435:ARG:CG	2.17	0.58
2:G:277:ILE:C	2:G:279:GLU:N	2.55	0.58
2:G:63:LEU:HD23	2:G:63:LEU:O	2.03	0.58
3:B:298:LEU:N	3:B:299:PRO:HD3	2.19	0.58
1:A:749:GLN:CA	1:A:781:PHE:HA	2.33	0.58
1:A:727:VAL:HG12	1:A:728:MET:N	2.19	0.58
1:A:877:GLY:C	3:R:377:ARG:HH12	2.07	0.58
3:B:416:ARG:NH1	3:B:687:ARG:HH22	1.99	0.58
1:A:499:ALA:HB3	3:B:734:MET:CE	2.33	0.58
3:R:123:LEU:HD21	3:R:153:ILE:HD11	1.85	0.58
3:R:1061:CYS:HB3	3:R:1065:GLY:CA	2.34	0.58
3:B:247:GLU:HA	3:B:250:ASN:ND2	2.18	0.58
7:H:62:ILE:HD13	7:H:62:ILE:N	2.19	0.58
1:A:427:ARG:H	2:C:76:GLN:NE2	2.00	0.58
2:G:103:GLY:HA2	2:G:106:ARG:HB3	1.85	0.58
2:G:115:LYS:HD2	2:G:276:ASN:ND2	2.18	0.58
1:Q:837:THR:HG22	1:Q:838:VAL:N	2.19	0.58
1:Q:490:ARG:HG2	1:Q:491:TYR:CD2	2.39	0.58
3:B:296:TYR:CD1	3:B:296:TYR:N	2.72	0.58
3:B:1033:ARG:HD2	3:B:1037:ILE:HD11	1.86	0.58
5:T:166:GLN:HB3	5:T:167:PRO:HD2	1.85	0.58
1:A:507:TYR:O	1:A:508:LEU:HB2	2.04	0.58
1:Q:77:LEU:HD13	1:Q:81:VAL:HG22	1.85	0.58
3:R:116:ILE:HG23	3:R:361:PHE:CZ	2.38	0.58
2:C:390:MET:HE2	5:E:66:THR:HG23	1.86	0.58
3:B:803:GLU:HG2	3:B:846:ILE:HG13	1.86	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:253:PHE:N	3:R:254:PRO:CD	2.66	0.58
3:B:253:PHE:N	3:B:254:PRO:CD	2.67	0.58
4:D:129:PRO:HG2	10:N:15:ALA:HB1	1.86	0.58
6:U:18:LYS:HE2	6:U:41:LEU:CB	2.29	0.58
4:D:176:CYS:N	4:D:195:LEU:HD21	2.18	0.58
10:Y:21:PHE:HE2	10:Y:35:LEU:HD23	1.69	0.58
1:Q:481:LEU:CD2	1:Q:482:VAL:H	2.17	0.58
4:S:31:ALA:HA	4:S:35:TYR:CD2	2.39	0.58
1:A:288:LYS:HG2	1:A:294:PRO:CA	2.33	0.58
3:B:6:THR:HB	3:B:9:GLU:HB3	1.86	0.58
5:T:147:ILE:CG1	5:T:163:THR:HB	2.34	0.58
10:N:40:VAL:O	10:N:40:VAL:HG12	2.03	0.58
10:N:7:CYS:CB	10:N:45:CYS:SG	2.90	0.58
1:A:293:ARG:H	1:A:293:ARG:HD2	1.69	0.58
5:E:117:THR:O	5:E:118:LEU:HD23	2.04	0.58
3:B:893:PRO:HG2	3:B:896:ASP:OD1	2.04	0.58
3:B:971:TYR:CE2	3:B:978:LYS:HB3	2.39	0.58
3:R:386:ARG:HB2	3:R:389:ILE:CD1	2.34	0.58
3:R:403:TRP:C	3:R:404:VAL:CG2	2.73	0.58
8:K:50:LEU:O	8:K:52:ASP:HB2	2.03	0.58
1:A:524:ILE:HG22	1:A:524:ILE:O	2.04	0.58
1:Q:876:VAL:C	1:Q:878:TRP:N	2.58	0.58
1:A:452:PRO:HA	1:A:495:ILE:CD1	2.34	0.58
3:R:922:GLY:O	3:R:926:GLU:HB2	2.03	0.58
6:F:35:GLN:HA	6:F:38:TYR:HD1	1.68	0.58
1:Q:831:ARG:HH21	2:G:385:MET:CB	2.17	0.58
1:A:610:SER:O	1:A:613:HIS:HB3	2.03	0.58
2:C:356:ASP:O	2:C:360:ARG:HB2	2.03	0.58
1:A:276:TYR:CD2	1:A:277:PHE:CE1	2.89	0.57
8:K:15:PHE:O	8:K:19:PHE:HB2	2.04	0.57
3:B:167:LEU:O	3:B:341:LYS:HA	2.04	0.57
1:Q:499:ALA:HB3	3:R:734:MET:CE	2.34	0.57
4:S:194:LYS:O	4:S:196:SER:N	2.37	0.57
4:S:169:LYS:HE2	4:S:222:VAL:HG22	1.85	0.57
4:S:25:VAL:HG21	4:S:226:TYR:CD1	2.33	0.57
1:Q:584:SER:OG	1:Q:585:TYR:N	2.37	0.57
3:B:21:LYS:HA	3:B:25:ARG:NH1	2.19	0.57
3:B:702:LEU:CD2	3:B:933:ALA:HB1	2.34	0.57
5:E:166:GLN:HB3	5:E:167:PRO:HD2	1.86	0.57
1:A:789:GLY:HA2	3:B:659:GLU:O	2.04	0.57
3:B:812:GLY:HA2	3:B:836:SER:CB	2.33	0.57
5:E:179:LYS:NZ	6:F:82:GLU:H	2.01	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:497:VAL:CG1	3:B:498:GLU:N	2.62	0.57
3:R:658:PRO:C	3:R:660:HIS:H	2.07	0.57
3:R:881:ARG:NH1	3:R:989:TYR:CB	2.67	0.57
3:R:1046:LYS:C	3:R:1048:ARG:H	2.08	0.57
1:Q:409:ARG:NH2	1:Q:415:ASP:OD2	2.37	0.57
5:T:17:GLU:OE1	5:T:25:ILE:HD12	2.04	0.57
1:Q:656:ASP:O	1:Q:659:LYS:HB2	2.04	0.57
3:B:1085:LYS:O	3:B:1086:SER:OG	2.17	0.57
2:C:321:THR:HB	2:C:322:ARG:HH11	1.69	0.57
6:F:14:TYR:O	6:F:18:LYS:HG3	2.03	0.57
1:Q:431:MET:HE1	1:Q:482:VAL:HG13	1.86	0.57
3:B:457:GLU:OE1	3:B:652:ALA:HB2	2.05	0.57
3:B:300:HIS:O	3:B:301:LEU:C	2.42	0.57
1:A:672:VAL:HG13	1:A:700:ILE:CD1	2.28	0.57
5:T:127:ILE:HB	5:T:136:ILE:HG13	1.85	0.57
4:D:206:CYS:O	4:D:207:GLU:HB2	2.03	0.57
3:R:160:VAL:HG21	3:R:426:LEU:HD23	1.86	0.57
3:B:158:GLU:OE2	3:B:416:ARG:NH1	2.36	0.57
1:A:567:ASN:N	1:A:599:ASP:OD2	2.36	0.57
1:A:543:ARG:HG2	1:A:544:GLU:H	1.68	0.57
8:K:63:SER:C	8:K:65:ALA:N	2.54	0.57
1:A:372:TRP:HB3	1:A:373:PRO:HD3	1.84	0.57
8:K:34:ARG:HD2	8:K:34:ARG:O	2.04	0.57
2:G:134:ARG:O	2:G:138:LEU:HD12	2.04	0.57
1:A:238:LYS:HZ3	1:A:297:THR:HB	1.63	0.57
3:R:1054:ASP:HB3	3:R:1095:TYR:H	1.69	0.57
3:R:1071:ASP:C	3:R:1073:ASN:H	2.06	0.57
1:A:853:ASP:OD1	1:A:864:LYS:HD3	2.05	0.57
6:U:18:LYS:CE	6:U:41:LEU:HB3	2.32	0.57
1:Q:427:ARG:H	2:G:76:GLN:NE2	1.99	0.57
4:S:98:ILE:HG12	4:S:114:ILE:HG12	1.87	0.57
2:G:54:LEU:O	2:G:54:LEU:HD23	2.04	0.57
3:B:800:PRO:HG2	11:P:37:VAL:HA	1.86	0.57
4:D:22:LEU:C	4:D:24:PHE:H	2.07	0.57
3:R:1064:CYS:SG	3:R:1064:CYS:O	2.62	0.57
3:R:1060:VAL:C	3:R:1088:LEU:HD23	2.25	0.57
3:R:230:LEU:HD13	3:R:312:ALA:HA	1.84	0.57
10:N:3:ILE:HD11	10:N:18:TRP:CE3	2.39	0.57
1:A:480:MET:HG2	3:B:1039:PHE:CD1	2.40	0.57
6:F:51:SER:O	6:F:54:LYS:HB3	2.03	0.57
3:R:338:TYR:HB2	3:R:448:THR:CG2	2.31	0.57
10:Y:42:ARG:HG3	10:Y:43:TYR:N	2.11	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:31:ASP:C	2:C:31:ASP:OD1	2.42	0.57
2:C:28:ILE:HD12	8:K:18:VAL:CG2	2.34	0.57
4:S:222:VAL:HG11	4:S:225:LYS:CD	2.35	0.57
3:B:361:PHE:C	3:B:361:PHE:CD2	2.77	0.57
3:R:800:PRO:HD3	3:R:850:VAL:HG23	1.86	0.57
3:B:705:THR:HG22	3:B:706:ARG:N	2.10	0.57
3:R:812:GLY:HA2	3:R:836:SER:CB	2.34	0.57
3:B:800:PRO:HG2	11:P:37:VAL:C	2.24	0.57
2:G:323:THR:O	2:G:323:THR:HG22	2.04	0.57
3:B:235:ASP:O	3:B:239:VAL:HG23	2.05	0.57
10:N:60:ILE:HG23	10:N:61:HIS:N	2.17	0.57
11:P:24:VAL:O	11:P:24:VAL:HG13	2.04	0.57
7:H:23:LEU:CD1	7:H:62:ILE:HG12	2.34	0.57
1:A:825:ASN:O	1:A:826:ALA:C	2.43	0.57
6:F:60:SER:HB3	6:F:69:ARG:NH1	2.19	0.57
3:R:640:LEU:CD2	3:R:641:GLU:N	2.52	0.57
3:R:963:LEU:HD12	3:R:967:THR:O	2.05	0.57
4:S:175:ASN:CA	4:S:195:LEU:HD21	2.34	0.57
3:B:25:ARG:O	3:B:29:ASP:HB2	2.05	0.57
3:B:629:GLU:HB3	3:B:630:PRO:HD2	1.87	0.57
1:A:378:VAL:CG1	1:A:388:LEU:HD12	2.35	0.57
11:Z:26:CYS:CB	11:Z:27:PRO:HD2	2.32	0.57
1:A:371:LYS:HD3	1:A:372:TRP:N	2.18	0.57
6:U:31:SER:CA	6:U:35:GLN:HE21	2.17	0.57
1:A:245:ILE:HD13	1:A:268:LEU:CD1	2.34	0.57
3:B:1049:LEU:O	3:B:1049:LEU:HD12	2.03	0.57
6:U:65:ARG:O	6:U:69:ARG:HG3	2.05	0.57
1:Q:839:ARG:NH2	8:W:83:PRO:HG3	2.20	0.57
6:F:59:LEU:HD13	6:F:69:ARG:HG2	1.86	0.57
3:R:702:LEU:CD2	3:R:933:ALA:HB1	2.35	0.57
1:Q:867:ASP:HB2	2:G:39:LYS:HZ1	1.68	0.57
4:S:195:LEU:O	4:S:196:SER:O	2.22	0.57
1:Q:866:VAL:HB	1:Q:869:ASN:HB3	1.86	0.57
3:B:473:MET:SD	3:B:475:GLN:N	2.77	0.57
3:B:98:LEU:HD11	3:B:100:MET:CG	2.33	0.57
3:B:64:ARG:NH1	3:B:64:ARG:HG2	2.19	0.57
3:B:658:PRO:O	3:B:660:HIS:N	2.35	0.57
1:A:490:ARG:HG2	1:A:491:TYR:CD2	2.38	0.57
1:A:422:GLN:NE2	1:A:463:ASN:HD21	2.02	0.57
9:X:29:ALA:HA	9:X:32:LEU:HB2	1.85	0.57
3:B:1080:PRO:O	3:B:1081:ILE:CG1	2.51	0.57
3:B:1095:TYR:CE1	3:B:1098:LYS:HD2	2.40	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:134:GLY:O	4:D:137:GLN:HG3	2.05	0.57
2:G:49:ASP:O	2:G:52:PHE:N	2.36	0.57
2:C:53:ASP:O	2:C:57:LYS:HB2	2.04	0.57
1:Q:522:GLN:NE2	9:X:33:ARG:HD3	2.20	0.57
1:Q:499:ALA:HB3	3:R:734:MET:HE3	1.86	0.57
3:B:624:ALA:HB1	3:B:639:HIS:CD2	2.39	0.57
1:A:638:PHE:CE2	1:A:642:GLN:HG3	2.40	0.57
3:R:781:ARG:HD3	3:R:782:GLY:N	2.13	0.57
1:Q:81:VAL:HG12	1:Q:270:GLN:CG	2.34	0.57
1:Q:352:ARG:HD3	1:Q:406:ILE:CD1	2.27	0.57
3:R:368:GLN:HE22	3:R:386:ARG:NE	2.03	0.57
3:R:662:GLN:CG	3:R:664:PRO:HD2	2.34	0.57
11:Z:18:LEU:C	11:Z:20:VAL:H	2.08	0.57
4:S:257:GLU:O	4:S:260:LEU:HB3	2.04	0.57
3:R:206:LYS:HE3	3:R:220:LYS:NZ	2.18	0.57
3:R:82:PRO:HG2	3:R:143:GLU:OE1	2.04	0.57
2:C:109:GLU:OE2	2:C:117:PRO:HA	2.05	0.57
6:F:52:ALA:HA	6:F:55:VAL:CG2	2.35	0.57
6:F:65:ARG:O	6:F:69:ARG:HG3	2.05	0.57
2:G:392:PRO:HB2	5:T:22:LEU:HD21	1.87	0.57
2:G:390:MET:CE	5:T:66:THR:HG23	2.35	0.57
4:S:111:SER:OG	4:S:126:GLY:HA2	2.04	0.57
1:Q:334:ILE:HG22	1:Q:482:VAL:CG1	2.34	0.57
1:Q:490:ARG:HA	2:G:312:HIS:CE1	2.39	0.57
1:Q:368:GLY:O	1:Q:374:GLY:HA3	2.05	0.57
3:B:600:GLY:C	3:B:602:ILE:N	2.58	0.57
3:B:749:MET:HG2	3:B:750:TYR:HD1	1.69	0.57
3:B:921:LEU:C	3:B:923:GLN:H	2.08	0.57
3:R:852:ILE:CD1	11:Z:35:PHE:HA	2.35	0.57
3:B:676:ALA:HB1	3:B:718:ALA:HB1	1.87	0.57
1:A:877:GLY:CA	3:R:377:ARG:NH1	2.67	0.57
1:Q:791:LYS:HB2	1:Q:794:GLU:HG3	1.87	0.57
1:A:422:GLN:HA	1:A:424:SER:N	2.20	0.57
2:G:127:THR:HA	2:G:266:GLY:O	2.04	0.57
2:C:261:VAL:O	2:C:261:VAL:HG12	2.05	0.57
3:B:243:SER:CB	3:B:246:PRO:HG3	2.34	0.57
2:C:104:LEU:O	2:C:108:ILE:HG12	2.05	0.57
2:C:115:LYS:C	2:C:116:VAL:HG22	2.24	0.57
3:B:338:TYR:CZ	3:B:341:LYS:NZ	2.70	0.57
3:B:338:TYR:HB2	3:B:448:THR:CG2	2.32	0.57
3:R:448:THR:HG22	3:R:449:GLN:H	1.70	0.57
10:Y:20:SER:O	10:Y:24:ARG:HG3	2.05	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:377:TYR:OH	1:Q:385:ARG:HD2	2.04	0.57
3:B:544:ARG:NH2	3:B:614:GLU:OE1	2.38	0.57
1:A:691:THR:CG2	1:A:692:LEU:HD12	2.30	0.57
1:A:746:MET:H	1:A:785:SER:HB3	1.69	0.57
1:Q:749:GLN:CA	1:Q:781:PHE:HA	2.35	0.57
1:Q:741:THR:O	1:Q:742:GLN:C	2.43	0.57
2:C:339:ASN:OD1	2:C:344:ARG:HD2	2.05	0.57
3:B:1046:LYS:C	3:B:1048:ARG:H	2.08	0.57
1:A:529:ASP:HB3	1:A:626:TRP:NE1	2.20	0.57
3:R:805:LYS:HG3	3:R:844:MET:HB2	1.87	0.57
3:B:672:MET:CG	3:B:993:LEU:HD21	2.34	0.57
4:D:170:VAL:HG23	4:D:200:GLU:HG3	1.85	0.57
4:D:86:THR:O	4:D:87:GLU:HB3	2.05	0.57
11:P:39:LYS:O	11:P:41:THR:N	2.38	0.57
1:A:279:ASN:HB2	1:A:297:THR:HG23	1.84	0.57
3:B:324:GLU:O	3:B:325:LEU:HB2	2.05	0.57
4:S:36:VAL:HB	4:S:158:PRO:HG3	1.87	0.57
4:S:250:ILE:CA	4:S:253:ILE:HG22	2.35	0.57
3:R:193:THR:HG21	3:R:197:ARG:H	1.69	0.57
1:A:589:LYS:O	1:A:592:ILE:HB	2.05	0.57
3:B:759:SER:HB3	3:B:863:LYS:HA	1.86	0.57
3:B:764:LYS:HB3	3:B:815:SER:HB2	1.86	0.57
2:C:390:MET:C	2:C:391:ARG:HD3	2.24	0.57
2:C:392:PRO:HG3	5:E:68:HIS:HE1	1.70	0.57
2:C:391:ARG:HB2	8:K:75:PRO:HB2	1.86	0.57
5:E:39:LEU:CD2	5:E:41:ASP:H	2.18	0.57
3:R:276:VAL:HG12	3:R:277:ALA:N	2.15	0.57
2:G:241:ILE:CG2	2:G:242:VAL:N	2.67	0.57
1:A:534:LEU:HD23	9:L:39:SER:OG	2.03	0.57
7:H:63:ILE:HD12	7:H:63:ILE:N	2.20	0.57
2:C:359:ALA:O	2:C:361:GLY:N	2.37	0.57
10:N:22:ILE:CD1	10:N:22:ILE:H	2.18	0.56
1:Q:847:GLN:OE1	1:Q:850:TYR:HA	2.04	0.56
7:V:16:LEU:H	7:V:16:LEU:HD12	1.70	0.56
7:V:51:VAL:O	7:V:54:SER:HB3	2.04	0.56
2:G:384:GLY:HA2	5:T:61:PHE:CZ	2.40	0.56
7:H:51:VAL:O	7:H:54:SER:HB3	2.04	0.56
1:A:690:ARG:HD2	1:A:694:GLU:OE1	2.04	0.56
5:T:79:PRO:HG3	5:T:160:ILE:CD1	2.34	0.56
1:A:86:LEU:HB3	1:A:207:MET:HE1	1.86	0.56
3:R:800:PRO:HB2	11:Z:38:ARG:HA	1.85	0.56
11:Z:6:CYS:O	11:Z:37:VAL:HG12	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:691:ARG:HH12	3:B:756:ARG:NH2	2.03	0.56
3:R:281:LYS:O	3:R:285:ARG:HG3	2.05	0.56
9:X:70:LEU:HA	9:X:73:ILE:HB	1.87	0.56
1:Q:412:ILE:O	1:Q:415:ASP:HB2	2.05	0.56
8:K:35:VAL:HG23	8:K:36:ILE:N	2.19	0.56
1:Q:567:ASN:HD22	1:Q:731:THR:CA	2.18	0.56
4:S:252:LYS:O	4:S:255:GLU:N	2.38	0.56
1:A:620:SER:C	1:A:622:GLU:H	2.08	0.56
1:Q:245:ILE:HD13	1:Q:268:LEU:CB	2.33	0.56
3:B:70:VAL:HG11	3:B:90:LEU:HD23	1.86	0.56
4:D:194:LYS:C	4:D:196:SER:H	2.08	0.56
2:C:115:LYS:HD2	2:C:276:ASN:ND2	2.20	0.56
1:A:834:TYR:CE1	8:K:80:ARG:HD3	2.39	0.56
2:G:284:PHE:HE2	7:V:14:HIS:HB2	1.70	0.56
10:Y:21:PHE:CZ	10:Y:38:LEU:HD13	2.40	0.56
4:S:16:VAL:HG13	4:S:167:TYR:CE1	2.40	0.56
4:S:18:GLU:HB2	4:S:225:LYS:HE3	1.85	0.56
9:X:35:ILE:O	9:X:38:VAL:HG23	2.05	0.56
3:R:298:LEU:C	3:R:300:HIS:H	2.08	0.56
3:B:699:GLN:HA	10:N:51:SER:O	2.06	0.56
3:B:193:THR:HG21	3:B:197:ARG:H	1.70	0.56
8:K:26:ARG:HG2	8:K:90:LEU:CB	2.35	0.56
3:B:202:ILE:HG22	3:B:203:GLU:N	2.20	0.56
4:D:96:ILE:HD11	4:D:143:ALA:HB3	1.87	0.56
3:R:202:ILE:HG22	3:R:203:GLU:N	2.19	0.56
1:A:245:ILE:HD13	1:A:268:LEU:CB	2.34	0.56
3:B:1061:CYS:HB3	3:B:1065:GLY:HA2	1.87	0.56
3:B:1071:ASP:C	3:B:1073:ASN:H	2.08	0.56
2:C:354:LEU:O	3:B:1109:ILE:HD12	2.06	0.56
10:N:60:ILE:HG23	10:N:61:HIS:ND1	2.21	0.56
1:A:853:ASP:CB	2:C:311:ARG:HH12	2.15	0.56
3:B:1041:THR:HG23	3:B:1041:THR:O	2.05	0.56
5:T:2:TYR:CE2	6:U:41:LEU:HD11	2.40	0.56
1:Q:220:ARG:H	1:Q:221:PRO:HD3	1.70	0.56
1:Q:237:HIS:HE1	1:Q:290:ARG:HH21	1.53	0.56
2:C:315:LEU:O	2:C:319:VAL:HG23	2.05	0.56
3:B:435:ARG:HH11	3:B:435:ARG:CG	2.16	0.56
8:W:50:LEU:CD1	8:W:50:LEU:H	2.18	0.56
10:Y:21:PHE:CE1	10:Y:38:LEU:HD13	2.41	0.56
4:S:169:LYS:O	4:S:219:ILE:HA	2.05	0.56
3:R:475:GLN:HG2	3:R:476:ILE:N	2.17	0.56
3:R:21:LYS:HA	3:R:25:ARG:NH1	2.21	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:298:LEU:O	3:B:300:HIS:N	2.37	0.56
3:B:873:THR:CG2	3:B:874:ILE:H	2.16	0.56
5:T:108:VAL:HG11	5:T:164:MET:SD	2.45	0.56
10:N:21:PHE:HE2	10:N:35:LEU:HD23	1.70	0.56
3:B:63:ILE:HG13	3:B:98:LEU:HA	1.86	0.56
4:D:169:LYS:HE2	4:D:222:VAL:HG22	1.86	0.56
1:Q:775:SER:CB	1:Q:777:GLU:HG2	2.34	0.56
1:A:646:MET:SD	3:B:915:LEU:HD23	2.45	0.56
3:R:850:VAL:HG13	3:R:864:VAL:HG22	1.87	0.56
3:R:64:ARG:N	3:R:97:TRP:HB2	2.21	0.56
2:C:391:ARG:HH21	8:K:42:GLN:CG	2.19	0.56
5:E:179:LYS:HZ2	6:F:79:THR:HB	1.70	0.56
2:C:80:GLU:HB3	2:C:81:PRO:CD	2.34	0.56
2:C:241:ILE:CG2	2:C:242:VAL:N	2.68	0.56
1:Q:807:VAL:CG1	3:R:443:ARG:NH1	2.67	0.56
3:R:687:ARG:HH11	3:R:687:ARG:CG	2.18	0.56
3:R:145:PRO:C	3:R:147:ASP:H	2.09	0.56
1:A:409:ARG:NH2	1:A:415:ASP:OD2	2.38	0.56
4:D:21:PRO:HG2	4:D:24:PHE:HB2	1.88	0.56
3:B:780:VAL:HG12	3:B:831:ALA:N	2.21	0.56
6:U:30:SER:OG	6:U:31:SER:N	2.37	0.56
3:B:662:GLN:CG	3:B:664:PRO:HD2	2.34	0.56
1:Q:64:THR:HG22	1:Q:65:LEU:N	2.19	0.56
3:R:314:TYR:CD1	3:R:314:TYR:N	2.73	0.56
3:B:270:ASP:C	3:B:272:ILE:H	2.09	0.56
1:Q:238:LYS:HZ3	1:Q:297:THR:HB	1.61	0.56
3:R:210:PHE:HE2	3:R:319:ILE:HG23	1.69	0.56
3:R:247:GLU:C	3:R:249:GLN:N	2.58	0.56
1:A:853:ASP:HB2	2:C:311:ARG:NH1	2.17	0.56
2:G:286:ILE:HD11	7:V:46:ARG:H	1.71	0.56
2:G:390:MET:C	2:G:391:ARG:HD3	2.26	0.56
2:G:393:ILE:HG22	2:G:394:LEU:N	2.19	0.56
1:Q:864:LYS:HE3	2:G:32:LEU:HD11	1.87	0.56
2:G:63:LEU:C	2:G:64:ILE:HD12	2.25	0.56
1:Q:529:ASP:HB3	1:Q:626:TRP:NE1	2.20	0.56
9:X:7:LYS:H	9:X:14:GLU:HB3	1.70	0.56
1:A:765:THR:O	1:A:766:LEU:HD22	2.06	0.56
3:B:12:ARG:HG3	3:B:596:LYS:HG2	1.87	0.56
3:B:589:VAL:HG12	3:B:590:THR:N	2.20	0.56
1:A:365:VAL:HG11	1:A:401:LEU:CD1	2.34	0.56
3:B:982:ARG:O	3:B:983:ILE:CG1	2.46	0.56
4:D:151:LYS:O	4:D:152:GLU:O	2.24	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:686:LEU:CD1	3:R:686:LEU:H	2.13	0.56
3:R:63:ILE:HG13	3:R:98:LEU:HA	1.87	0.56
2:C:337:GLU:CG	2:C:338:LYS:H	2.13	0.56
3:B:1004:ARG:HH11	3:B:1025:GLY:N	1.97	0.56
1:A:567:ASN:ND2	1:A:731:THR:N	2.54	0.56
9:L:39:SER:HB3	9:L:58:LEU:O	2.05	0.56
6:F:30:SER:HB2	6:F:34:LEU:CD1	2.34	0.56
4:D:90:GLU:O	4:D:92:CYS:N	2.39	0.56
1:A:831:ARG:NH2	2:C:385:MET:CG	2.68	0.56
3:B:1070:TYR:N	3:B:1070:TYR:CD2	2.72	0.56
3:R:130:ILE:HA	3:R:133:TYR:CD1	2.41	0.56
2:C:41:ILE:HG22	2:C:42:ILE:HD12	1.87	0.56
7:H:18:PRO:CB	7:H:67:ARG:HA	2.35	0.56
6:F:59:LEU:HD23	6:F:59:LEU:O	2.06	0.56
7:V:80:TYR:O	7:V:81:VAL:HB	2.06	0.56
3:R:699:GLN:HA	10:Y:51:SER:O	2.04	0.56
4:S:114:ILE:HD12	4:S:123:PRO:HG2	1.86	0.56
7:H:12:ARG:C	7:H:13:ILE:HG22	2.26	0.56
4:S:13:ILE:HG13	4:S:238:PRO:HB2	1.88	0.56
1:A:727:VAL:O	1:A:729:ALA:O	2.23	0.56
3:B:655:ILE:O	3:B:658:PRO:HD3	2.06	0.56
3:B:895:VAL:HG23	3:B:896:ASP:OD1	2.05	0.56
4:D:203:CYS:SG	4:D:204:THR:N	2.78	0.56
3:R:537:ALA:HB2	3:R:557:HIS:HE2	1.67	0.56
3:R:386:ARG:CB	3:R:389:ILE:HD11	2.35	0.56
2:G:145:GLU:HG2	2:G:239:ARG:HA	1.87	0.56
3:R:157:SER:O	3:R:158:GLU:CB	2.54	0.56
1:Q:664:GLU:OE2	1:Q:667:ARG:HD3	2.05	0.56
4:S:235:SER:C	4:S:236:LEU:HD12	2.26	0.56
5:T:17:GLU:HG2	5:T:20:LYS:HZ3	1.68	0.56
8:W:78:ILE:O	8:W:89:LEU:HA	2.05	0.56
1:A:308:ARG:HG3	1:A:312:ASN:ND2	2.21	0.56
2:C:331:ARG:HD3	2:C:348:GLU:CB	2.35	0.56
3:B:245:ASP:N	3:B:246:PRO:CD	2.69	0.56
3:B:230:LEU:HD13	3:B:312:ALA:HA	1.86	0.56
3:B:768:GLY:O	3:B:769:GLN:HB2	2.06	0.56
1:A:833:GLU:OE2	1:A:839:ARG:HB2	2.04	0.56
2:G:391:ARG:H	2:G:392:PRO:HD3	1.69	0.56
2:G:55:ALA:HA	2:G:58:GLU:OE2	2.06	0.56
1:Q:528:ALA:O	1:Q:530:VAL:N	2.39	0.56
3:R:727:MET:CE	3:R:898:PRO:HG3	2.36	0.56
3:R:911:ASN:HD22	3:R:913:HIS:H	1.52	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:647:ARG:NH2	3:R:982:ARG:HH12	2.04	0.56
3:B:397:ALA:O	3:B:402:ASN:HA	2.06	0.56
3:B:59:ARG:NH1	3:B:107:ILE:HD12	2.20	0.56
4:D:36:VAL:HB	4:D:158:PRO:HG3	1.87	0.56
2:G:337:GLU:CG	2:G:338:LYS:H	2.18	0.56
3:R:34:PHE:HE1	3:R:351:ALA:HA	1.71	0.56
4:D:237:LYS:O	4:D:240:ARG:HB3	2.06	0.56
3:B:1000:LYS:O	3:B:1001:LEU:HB2	2.05	0.56
1:A:679:TYR:OH	1:A:693:GLU:HG2	2.06	0.56
3:B:429:VAL:HG11	3:B:453:MET:HE1	1.87	0.56
6:F:41:LEU:O	6:F:43:SER:N	2.33	0.56
2:G:104:LEU:HB3	2:G:105:PRO:CD	2.30	0.56
9:X:11:ASN:O	9:X:58:LEU:HD12	2.06	0.56
2:C:343:ALA:HB2	2:C:371:GLU:HG3	1.87	0.56
3:R:12:ARG:HG3	3:R:596:LYS:HG2	1.88	0.56
1:A:672:VAL:O	1:A:673:ASP:C	2.43	0.56
1:A:704:LEU:HD13	1:A:781:PHE:CD1	2.33	0.56
4:S:7:HIS:ND1	4:S:8:LYS:N	2.54	0.56
5:E:108:VAL:HG11	5:E:164:MET:SD	2.45	0.56
4:D:25:VAL:HG21	4:D:226:TYR:CD1	2.36	0.56
1:A:354:THR:O	1:A:355:PRO:O	2.24	0.56
3:R:541:ARG:NH2	3:R:557:HIS:HD2	2.03	0.56
1:Q:354:THR:HB	1:Q:355:PRO:CD	2.29	0.56
1:A:530:VAL:CG1	1:A:530:VAL:O	2.54	0.56
1:A:567:ASN:HD22	1:A:731:THR:CA	2.18	0.56
4:D:235:SER:C	4:D:236:LEU:HD12	2.25	0.56
3:B:855:THR:CG2	3:B:857:GLU:HG2	2.36	0.56
8:W:91:SER:O	8:W:92:LEU:HB2	2.05	0.56
1:Q:409:ARG:CB	1:Q:409:ARG:HH11	2.19	0.56
3:B:294:ASP:O	3:B:303:THR:HG23	2.06	0.56
9:L:29:ALA:HA	9:L:32:LEU:HB2	1.86	0.56
1:Q:679:TYR:OH	1:Q:693:GLU:HG2	2.06	0.56
1:Q:610:SER:O	1:Q:613:HIS:HB3	2.06	0.56
1:A:245:ILE:HD12	1:A:272:HIS:CD2	2.40	0.56
3:B:1069:TRP:NE1	3:B:1088:LEU:HD22	2.21	0.56
6:U:51:SER:O	6:U:54:LYS:HB3	2.06	0.56
6:U:59:LEU:O	6:U:59:LEU:HD23	2.06	0.56
3:R:699:GLN:HG3	3:R:720:ASN:ND2	2.20	0.56
3:R:745:VAL:HG13	3:R:872:PRO:HG2	1.87	0.56
8:W:26:ARG:HG2	8:W:90:LEU:CB	2.36	0.56
1:Q:504:SER:O	1:Q:508:LEU:HD12	2.05	0.56
1:Q:727:VAL:HG12	1:Q:728:MET:N	2.21	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:702:LEU:HB2	3:B:721:ASN:ND2	2.21	0.56
3:B:749:MET:HE1	3:B:907:ASP:HB3	1.88	0.56
3:B:60:LEU:CD2	3:B:98:LEU:HD21	2.32	0.56
1:A:647:ARG:NH2	3:B:982:ARG:HH12	2.03	0.56
3:R:851:LEU:HA	11:Z:35:PHE:CB	2.34	0.56
3:B:784:LYS:HE3	3:B:834:ASP:HB3	1.88	0.56
10:N:13:LEU:O	10:N:14:ILE:HD13	2.05	0.56
8:K:54:ASN:ND2	8:K:58:SER:H	2.03	0.56
2:C:126:LEU:HD12	2:C:131:LYS:CG	2.35	0.56
2:C:68:GLU:HB3	8:K:30:TYR:CZ	2.41	0.56
3:B:877:LYS:HE3	3:B:885:LYS:HD2	1.88	0.56
3:R:270:ASP:C	3:R:272:ILE:H	2.08	0.56
4:D:259:LYS:O	4:D:263:VAL:HG23	2.05	0.56
3:R:1070:TYR:N	3:R:1070:TYR:CD2	2.71	0.56
3:B:247:GLU:C	3:B:249:GLN:N	2.58	0.56
7:H:45:ILE:CB	7:H:79:ARG:HB3	2.35	0.56
6:F:72:LEU:C	6:F:74:SER:H	2.07	0.56
2:G:41:ILE:HG22	2:G:42:ILE:HD12	1.87	0.56
3:B:904:VAL:CG2	10:N:42:ARG:HE	2.14	0.56
3:R:764:LYS:HD3	3:R:815:SER:CA	2.35	0.56
3:R:111:PRO:O	3:R:112:GLU:HB3	2.04	0.56
1:A:558:LYS:H	1:A:558:LYS:CD	2.13	0.56
2:C:391:ARG:N	2:C:392:PRO:HD3	2.21	0.56
3:R:877:LYS:HE3	3:R:885:LYS:HD2	1.88	0.56
3:R:429:VAL:HG11	3:R:453:MET:HE1	1.88	0.56
1:Q:185:GLU:HA	1:Q:205:GLU:HG2	1.88	0.56
5:E:17:GLU:HG2	5:E:20:LYS:HZ3	1.71	0.56
1:Q:567:ASN:ND2	1:Q:731:THR:N	2.54	0.56
1:Q:88:LYS:O	1:Q:92:GLU:HG3	2.06	0.56
3:B:314:TYR:N	3:B:314:TYR:CD1	2.72	0.56
1:A:194:ILE:O	1:A:194:ILE:HG22	2.06	0.56
1:Q:212:LEU:CD2	1:Q:242:ILE:HD13	2.36	0.56
3:R:624:ALA:HB1	3:R:639:HIS:CD2	2.39	0.56
6:U:72:LEU:HD23	6:U:86:ILE:CD1	2.36	0.56
4:D:190:LEU:HD23	4:D:190:LEU:N	2.21	0.56
7:H:35:LEU:O	7:H:37:ILE:HG13	2.06	0.56
7:H:80:TYR:O	7:H:81:VAL:HB	2.04	0.56
2:G:315:LEU:O	2:G:319:VAL:HG23	2.06	0.56
1:Q:826:ALA:CB	2:G:335:THR:HG23	2.26	0.56
5:T:18:PHE:HE2	8:W:42:GLN:HG2	1.70	0.56
4:S:125:SER:C	4:S:127:ASP:H	2.10	0.56
10:Y:22:ILE:HD13	10:Y:23:THR:H	1.71	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:734:ARG:HG3	3:R:917:SER:HB3	1.87	0.56
4:S:6:LEU:HD13	4:S:16:VAL:CG2	2.35	0.56
3:R:25:ARG:O	3:R:29:ASP:HB2	2.05	0.56
1:A:866:VAL:HB	1:A:869:ASN:HB3	1.87	0.56
1:A:234:ASP:C	1:A:236:THR:N	2.58	0.56
3:B:116:ILE:HG22	3:B:390:VAL:HG21	1.88	0.56
3:B:654:ILE:HG22	3:B:881:ARG:HG2	1.88	0.56
3:R:800:PRO:O	3:R:802:VAL:N	2.33	0.56
1:Q:90:ILE:CG2	1:Q:208:ILE:HD11	2.35	0.56
2:C:44:THR:HG22	2:C:46:ASP:OD2	2.06	0.56
11:P:37:VAL:HG22	11:P:38:ARG:N	2.21	0.56
8:K:39:ARG:HH21	8:K:50:LEU:HD13	1.71	0.56
8:K:50:LEU:H	8:K:50:LEU:CD1	2.19	0.56
1:Q:878:TRP:HZ3	2:G:50:LYS:HE2	1.68	0.56
3:B:804:VAL:C	3:B:805:LYS:HD2	2.26	0.56
1:A:807:VAL:CG1	3:B:443:ARG:HH11	2.18	0.56
3:B:855:THR:C	3:B:857:GLU:H	2.08	0.56
3:B:870:ARG:NH2	3:B:996:MET:SD	2.79	0.56
6:U:35:GLN:O	6:U:38:TYR:HB2	2.06	0.56
4:D:64:LEU:HD22	10:N:6:ARG:CD	2.36	0.56
4:S:48:GLU:HB3	4:S:140:SER:HB3	1.86	0.56
1:Q:23:SER:OG	1:Q:73:GLY:HA2	2.06	0.56
4:D:45:TYR:CD1	11:P:44:ILE:HG12	2.41	0.56
3:R:245:ASP:N	3:R:246:PRO:CD	2.69	0.55
5:T:64:GLY:H	8:W:41:LEU:HD23	1.72	0.55
3:R:930:GLY:HA2	10:Y:47:ARG:NH2	2.20	0.55
4:S:96:ILE:HD11	4:S:143:ALA:HB3	1.88	0.55
2:G:53:ASP:O	2:G:57:LYS:HB2	2.06	0.55
1:Q:489:PRO:CB	1:Q:858:MET:HG3	2.36	0.55
1:Q:732:GLY:O	1:Q:733:ALA:C	2.43	0.55
3:B:587:PRO:C	3:B:588:LEU:HG	2.25	0.55
3:R:17:TYR:OH	3:R:474:ALA:HA	2.05	0.55
3:R:474:ALA:HB2	3:R:578:PRO:HG3	1.86	0.55
1:A:377:TYR:CE1	1:A:385:ARG:HG2	2.41	0.55
5:T:97:ILE:HD12	5:T:113:ILE:CD1	2.36	0.55
3:B:849:LEU:HB3	3:B:865:ARG:HG2	1.87	0.55
3:B:188:LYS:HA	3:B:203:GLU:O	2.06	0.55
2:C:126:LEU:HD12	2:C:131:LYS:HA	1.86	0.55
4:S:177:GLU:HB2	4:S:178:LYS:HZ3	1.69	0.55
2:G:245:LYS:HD2	2:G:250:ILE:HD12	1.87	0.55
3:R:164:GLN:CG	3:R:349:LEU:HD21	2.36	0.55
2:G:331:ARG:HD3	2:G:348:GLU:CB	2.35	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:279:ASN:HB2	1:Q:297:THR:HG23	1.88	0.55
3:R:1012:LEU:C	3:R:1012:LEU:HD13	2.26	0.55
3:B:248:VAL:HG21	3:B:329:ARG:NH2	2.17	0.55
3:B:562:PHE:CD1	3:B:562:PHE:N	2.73	0.55
3:B:130:ILE:HA	3:B:133:TYR:CD1	2.40	0.55
10:N:22:ILE:HD13	10:N:22:ILE:H	1.71	0.55
2:C:277:ILE:HG22	2:C:278:ARG:N	2.19	0.55
2:C:286:ILE:HD13	2:C:324:GLY:O	2.06	0.55
7:H:16:LEU:H	7:H:16:LEU:HD12	1.71	0.55
5:E:171:LYS:HG2	5:E:172:LEU:N	2.21	0.55
1:Q:827:LEU:HD13	2:G:319:VAL:HG21	1.88	0.55
8:W:50:LEU:O	8:W:51:ILE:C	2.44	0.55
1:Q:864:LYS:HE3	2:G:32:LEU:CD1	2.35	0.55
3:R:895:VAL:HG23	3:R:896:ASP:OD1	2.05	0.55
4:S:160:SER:HB3	4:S:233:VAL:HG12	1.87	0.55
1:A:765:THR:HG21	1:A:797:PHE:CE2	2.39	0.55
3:R:296:TYR:N	3:R:296:TYR:CD1	2.72	0.55
3:B:377:ARG:O	3:B:378:LYS:HB2	2.05	0.55
4:D:7:HIS:ND1	4:D:8:LYS:N	2.53	0.55
1:Q:746:MET:N	1:Q:785:SER:HB3	2.20	0.55
1:Q:787:ARG:NH2	1:Q:788:THR:HA	2.21	0.55
2:C:393:ILE:HG21	2:C:395:ARG:NH2	2.16	0.55
1:A:488:THR:HG22	1:A:490:ARG:H	1.71	0.55
2:C:132:ARG:HA	2:C:249:TYR:HD1	1.71	0.55
3:B:867:ARG:NH2	4:D:54:TYR:CE2	2.73	0.55
1:A:325:VAL:O	1:A:442:THR:HB	2.06	0.55
7:H:65:ILE:H	7:H:65:ILE:CD1	2.18	0.55
8:K:71:ARG:HB2	8:K:71:ARG:NH1	2.20	0.55
4:D:48:GLU:HB3	4:D:140:SER:HB3	1.88	0.55
3:R:1067:ILE:HG12	3:R:1068:GLY:N	2.21	0.55
1:Q:759:ARG:H	1:Q:779:ARG:HH21	1.54	0.55
3:R:324:GLU:O	3:R:325:LEU:HB2	2.06	0.55
3:B:319:ILE:C	3:B:321:LYS:H	2.09	0.55
3:B:769:GLN:O	3:B:770:GLU:CB	2.51	0.55
1:A:334:ILE:HG22	1:A:482:VAL:CG1	2.36	0.55
6:U:14:TYR:C	6:U:18:LYS:HE3	2.27	0.55
6:U:56:ILE:HG23	6:U:69:ARG:CB	2.36	0.55
3:R:978:LYS:HG2	4:S:166:TYR:HE2	1.71	0.55
4:S:182:VAL:O	4:S:184:PRO:HD3	2.06	0.55
4:S:21:PRO:HG2	4:S:24:PHE:HB2	1.87	0.55
1:Q:369:PRO:HG3	1:Q:389:ARG:HA	1.88	0.55
2:C:366:PHE:O	2:C:368:GLY:N	2.39	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:577:ARG:HE	3:B:578:PRO:HD2	1.71	0.55
3:B:5:LEU:HA	3:B:9:GLU:OE2	2.06	0.55
3:B:881:ARG:NH1	3:B:989:TYR:CB	2.70	0.55
4:D:98:ILE:HG13	4:D:114:ILE:HA	1.88	0.55
1:A:417:VAL:HG11	1:A:464:LEU:CD1	2.36	0.55
1:A:606:GLN:HE21	1:A:608:PRO:HG2	1.72	0.55
1:A:490:ARG:HA	2:C:312:HIS:CE1	2.41	0.55
3:B:148:PRO:HG3	3:B:422:MET:CE	2.37	0.55
10:Y:55:ILE:H	10:Y:55:ILE:CD1	2.19	0.55
10:N:55:ILE:CD1	10:N:55:ILE:H	2.20	0.55
4:D:240:ARG:O	4:D:243:LEU:HB3	2.07	0.55
2:G:359:ALA:O	2:G:361:GLY:N	2.38	0.55
3:B:92:TYR:OH	3:B:128:ASP:OD2	2.24	0.55
7:V:12:ARG:C	7:V:13:ILE:HG22	2.26	0.55
1:Q:485:ASN:ND2	3:R:1039:PHE:HE2	2.02	0.55
3:R:902:LYS:HB3	10:Y:42:ARG:CD	2.35	0.55
10:Y:22:ILE:CD1	10:Y:22:ILE:H	2.19	0.55
3:R:935:LEU:HD23	10:Y:43:TYR:HB3	1.88	0.55
1:Q:525:LEU:CD1	1:Q:530:VAL:HG11	2.35	0.55
9:X:39:SER:HB3	9:X:58:LEU:O	2.07	0.55
1:Q:407:ILE:HD12	1:Q:407:ILE:C	2.26	0.55
1:A:64:THR:HG22	1:A:65:LEU:H	1.71	0.55
3:B:107:ILE:HG12	3:B:110:GLU:OE2	2.06	0.55
5:E:147:ILE:CG1	5:E:163:THR:HB	2.37	0.55
4:D:18:GLU:HB2	4:D:225:LYS:HE3	1.88	0.55
3:R:800:PRO:HG2	11:Z:37:VAL:C	2.26	0.55
3:R:64:ARG:H	3:R:97:TRP:CB	2.18	0.55
1:Q:588:ILE:HA	1:Q:592:ILE:O	2.06	0.55
6:U:30:SER:HB2	6:U:34:LEU:CD1	2.36	0.55
2:G:380:LYS:HA	2:G:380:LYS:HE2	1.87	0.55
2:C:39:LYS:O	2:C:43:VAL:HG23	2.06	0.55
6:U:48:ASP:H	6:U:51:SER:HG	1.53	0.55
1:A:847:GLN:OE1	1:A:850:TYR:HA	2.05	0.55
2:G:70:ILE:HD13	2:G:71:GLY:N	2.21	0.55
8:W:50:LEU:H	8:W:50:LEU:HD12	1.72	0.55
4:S:190:LEU:N	4:S:190:LEU:HD23	2.22	0.55
3:B:373:LYS:HG3	3:B:375:ARG:HB2	1.89	0.55
3:B:781:ARG:HD3	3:B:782:GLY:N	2.12	0.55
4:D:13:ILE:HG13	4:D:238:PRO:HB2	1.89	0.55
3:R:352:SER:O	3:R:404:VAL:HG11	2.06	0.55
3:B:800:PRO:HB2	11:P:38:ARG:HA	1.87	0.55
5:E:39:LEU:HD23	5:E:41:ASP:N	2.21	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:L:7:LYS:HE3	9:L:12:TYR:HE2	1.72	0.55
3:R:294:ASP:O	3:R:303:THR:HG23	2.06	0.55
4:S:86:THR:O	4:S:87:GLU:HB3	2.07	0.55
3:R:461:GLY:O	3:R:464:SER:HB3	2.05	0.55
4:S:133:LEU:HD21	4:S:139:ILE:CD1	2.37	0.55
3:B:340:ASN:O	3:B:340:ASN:CG	2.43	0.55
2:G:349:VAL:CG2	2:G:352:LYS:HB2	2.36	0.55
3:B:88:ARG:HG2	11:P:33:ILE:HD11	1.88	0.55
2:C:60:SER:O	2:C:63:LEU:HB3	2.06	0.55
1:Q:838:VAL:HG13	2:G:70:ILE:HD11	1.89	0.55
1:Q:486:ILE:HG23	1:Q:487:ILE:HG13	1.88	0.55
8:W:18:VAL:CG1	8:W:22:LEU:HD12	2.34	0.55
3:B:480:ILE:HD11	3:B:550:SER:CB	2.36	0.55
3:B:368:GLN:HE22	3:B:386:ARG:NE	2.04	0.55
3:R:784:LYS:HE3	3:R:834:ASP:HB3	1.88	0.55
1:A:588:ILE:HA	1:A:592:ILE:O	2.07	0.55
3:R:373:LYS:HE2	3:R:378:LYS:HE3	1.88	0.55
3:B:764:LYS:HB3	3:B:815:SER:CB	2.36	0.55
3:B:1004:ARG:NH1	3:B:1024:GLY:HA2	2.21	0.55
1:Q:558:LYS:CD	1:Q:558:LYS:H	2.16	0.55
3:B:157:SER:O	3:B:158:GLU:CB	2.54	0.55
1:A:258:PRO:C	1:A:260:LEU:H	2.09	0.55
3:B:154:VAL:HG21	3:B:399:ALA:HB2	1.87	0.55
1:A:30:PRO:HB2	1:A:244:ARG:HG3	1.87	0.55
4:D:170:VAL:CG2	4:D:200:GLU:HG3	2.36	0.55
10:N:62:TYR:O	10:N:63:THR:OG1	2.21	0.55
2:G:31:ASP:OD1	2:G:31:ASP:C	2.44	0.55
3:R:296:TYR:O	3:R:297:PHE:HB2	2.07	0.55
3:R:298:LEU:N	3:R:299:PRO:HD3	2.22	0.55
3:B:702:LEU:HD13	10:N:47:ARG:HD2	1.88	0.55
3:R:691:ARG:HH12	3:R:756:ARG:NH2	2.04	0.55
3:R:397:ALA:O	3:R:402:ASN:HA	2.06	0.55
3:B:691:ARG:HB3	3:B:754:PHE:CZ	2.41	0.55
3:B:855:THR:HB	3:B:857:GLU:CG	2.36	0.55
4:S:47:ILE:HB	4:S:140:SER:O	2.07	0.55
4:S:64:LEU:HD22	10:Y:6:ARG:HD3	1.89	0.55
3:B:27:HIS:O	3:B:30:SER:HB3	2.07	0.55
3:R:231:GLY:O	3:R:232:ILE:HD13	2.06	0.55
3:R:316:ALA:C	3:R:318:ALA:H	2.09	0.55
4:D:134:GLY:O	4:D:135:THR:O	2.25	0.55
3:B:1036:LEU:HD12	3:B:1045:LEU:HB2	1.87	0.55
6:U:51:SER:O	6:U:55:VAL:HG23	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:H:46:ARG:O	7:H:49:ASP:HB2	2.07	0.55
7:V:46:ARG:O	7:V:49:ASP:HB2	2.06	0.55
1:Q:334:ILE:CD1	1:Q:628:MET:HB3	2.37	0.55
1:Q:507:TYR:HB2	1:Q:511:VAL:CG1	2.36	0.55
1:Q:724:PHE:O	1:Q:727:VAL:HB	2.06	0.55
1:Q:503:ILE:HD11	1:Q:732:GLY:C	2.26	0.55
4:S:21:PRO:HG3	9:X:79:MET:CE	2.37	0.55
5:T:145:ARG:HB2	5:T:145:ARG:CZ	2.37	0.55
5:T:145:ARG:HB2	5:T:145:ARG:NH1	2.21	0.55
1:A:13:ILE:CD1	1:A:86:LEU:HD13	2.37	0.55
1:A:90:ILE:CG2	1:A:208:ILE:HD11	2.37	0.55
5:E:79:PRO:HG3	5:E:160:ILE:CD1	2.32	0.55
4:D:26:ASN:O	4:D:29:ARG:HB3	2.07	0.55
1:Q:13:ILE:CD1	1:Q:86:LEU:HD13	2.37	0.55
3:R:530:TYR:OH	3:R:536:LEU:HG	2.07	0.55
11:P:37:VAL:HG22	11:P:38:ARG:H	1.71	0.55
5:E:179:LYS:CE	6:F:81:ASP:HB2	2.35	0.55
2:C:238:LYS:O	2:C:239:ARG:HB2	2.07	0.55
1:A:352:ARG:HA	1:A:406:ILE:HA	1.88	0.55
2:G:301:LEU:HA	2:G:304:GLN:CG	2.37	0.55
1:A:537:PRO:HB2	1:A:540:LEU:CD2	2.36	0.55
4:S:69:SER:O	4:S:70:GLU:C	2.46	0.55
1:A:47:PRO:HG2	1:A:48:ARG:CD	2.37	0.55
2:G:138:LEU:O	2:G:142:ARG:HG3	2.07	0.55
3:B:69:ARG:O	3:B:70:VAL:HG13	2.06	0.55
6:U:72:LEU:HD23	6:U:86:ILE:HD13	1.88	0.55
3:R:167:LEU:O	3:R:341:LYS:HA	2.06	0.55
7:V:43:PRO:HB2	7:V:78:TYR:O	2.06	0.55
8:W:15:PHE:O	8:W:19:PHE:HB2	2.07	0.55
3:B:873:THR:HG22	3:B:874:ILE:H	1.71	0.55
5:E:81:VAL:O	5:E:82:GLN:HB2	2.06	0.55
4:D:226:TYR:C	4:D:227:ILE:HG13	2.27	0.55
3:R:380:ALA:O	3:R:383:ALA:N	2.37	0.55
3:R:63:ILE:HG13	3:R:98:LEU:HB2	1.88	0.55
3:B:813:LYS:H	3:B:836:SER:HB3	1.72	0.55
2:C:393:ILE:HG22	2:C:394:LEU:N	2.22	0.55
8:K:50:LEU:O	8:K:51:ILE:C	2.45	0.55
2:C:241:ILE:HG22	2:C:242:VAL:H	1.69	0.55
3:R:655:ILE:O	3:R:658:PRO:HD3	2.06	0.55
1:Q:47:PRO:HG2	1:Q:48:ARG:CD	2.36	0.55
11:P:18:LEU:C	11:P:20:VAL:H	2.09	0.55
3:B:265:VAL:O	3:B:269:LEU:HG	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:238:LYS:CE	1:Q:276:TYR:HA	2.36	0.55
1:A:301:ARG:NH1	1:A:308:ARG:NH1	2.54	0.55
3:R:248:VAL:CG1	3:R:329:ARG:HH12	2.18	0.55
3:R:562:PHE:N	3:R:562:PHE:CD1	2.75	0.55
10:N:22:ILE:CD1	10:N:22:ILE:N	2.70	0.55
7:V:37:ILE:HD12	7:V:37:ILE:O	2.07	0.55
10:Y:22:ILE:CD1	10:Y:22:ILE:N	2.70	0.55
2:G:65:ALA:HB1	8:W:19:PHE:CZ	2.41	0.55
1:Q:505:GLY:O	1:Q:506:ALA:C	2.44	0.55
1:Q:377:TYR:H	1:Q:388:LEU:CB	2.18	0.55
1:Q:374:GLY:O	1:Q:410:HIS:HB2	2.07	0.55
3:B:544:ARG:NH2	3:B:620:GLU:OE2	2.40	0.55
3:R:906:PRO:HD3	3:R:985:PHE:CZ	2.42	0.55
5:T:147:ILE:HD11	5:T:163:THR:HB	1.88	0.55
3:B:34:PHE:HE1	3:B:351:ALA:HA	1.72	0.55
3:B:386:ARG:HB2	3:B:389:ILE:CD1	2.35	0.55
1:A:876:VAL:C	1:A:878:TRP:N	2.59	0.55
3:R:388:ASP:C	3:R:390:VAL:N	2.55	0.55
3:B:89:ASN:HD21	3:B:863:LYS:HZ3	1.52	0.55
1:Q:872:PHE:HA	1:Q:876:VAL:HB	1.88	0.55
3:R:921:LEU:C	3:R:923:GLN:H	2.10	0.55
2:G:126:LEU:HD12	2:G:131:LYS:HA	1.89	0.55
1:A:409:ARG:HE	1:A:412:ILE:HG12	1.70	0.55
4:S:177:GLU:HB2	4:S:178:LYS:HZ2	1.71	0.55
1:Q:567:ASN:N	1:Q:599:ASP:OD2	2.39	0.55
3:R:478:VAL:HA	3:R:572:SER:CB	2.37	0.55
2:C:380:LYS:HA	2:C:380:LYS:HE2	1.88	0.55
9:X:5:ILE:HD13	9:X:5:ILE:O	2.07	0.55
1:Q:214:VAL:O	1:Q:214:VAL:HG12	2.06	0.55
1:A:242:ILE:HD13	1:A:273:VAL:HG22	1.88	0.54
3:R:1014:ARG:HD2	3:R:1095:TYR:CD1	2.43	0.54
3:R:183:ILE:H	3:R:183:ILE:HD13	1.72	0.54
2:C:63:LEU:C	2:C:64:ILE:HD12	2.27	0.54
2:C:63:LEU:HD21	8:K:23:TRP:CZ3	2.43	0.54
6:F:56:ILE:HG23	6:F:69:ARG:CB	2.36	0.54
7:V:55:ILE:O	7:V:56:ASN:C	2.44	0.54
1:Q:4:LYS:HD2	3:R:1089:PHE:CB	2.36	0.54
1:Q:8:GLY:O	3:R:1114:VAL:HG13	2.07	0.54
1:Q:480:MET:HG2	3:R:1039:PHE:CD1	2.42	0.54
2:G:26:GLN:C	2:G:28:ILE:H	2.09	0.54
1:Q:853:ASP:CB	2:G:311:ARG:HH12	2.18	0.54
4:S:247:LYS:HA	4:S:250:ILE:HD12	1.87	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:572:PRO:HG2	1:Q:573:ARG:HD3	1.89	0.54
3:R:587:PRO:C	3:R:588:LEU:HG	2.27	0.54
11:P:26:CYS:HB2	11:P:27:PRO:CD	2.32	0.54
1:A:877:GLY:C	3:R:377:ARG:NH1	2.61	0.54
4:D:66:PRO:HG2	10:N:13:LEU:HD21	1.89	0.54
1:A:505:GLY:O	1:A:506:ALA:C	2.45	0.54
9:L:35:ILE:O	9:L:38:VAL:HG23	2.07	0.54
3:R:657:TYR:HA	3:R:659:GLU:OE2	2.06	0.54
3:R:656:PRO:HD3	3:R:881:ARG:HH21	1.71	0.54
4:D:38:ILE:O	4:D:147:LEU:HD23	2.06	0.54
3:R:855:THR:CG2	3:R:857:GLU:HG2	2.37	0.54
3:B:871:ILE:HG22	3:B:872:PRO:HD2	1.88	0.54
2:C:138:LEU:O	2:C:142:ARG:HG3	2.06	0.54
3:B:134:THR:O	3:B:135:LEU:C	2.45	0.54
2:G:44:THR:HG22	2:G:46:ASP:OD2	2.07	0.54
1:Q:422:GLN:HA	1:Q:424:SER:N	2.22	0.54
3:B:1022:ARG:HG2	3:B:1022:ARG:O	2.08	0.54
2:G:358:ALA:HB2	3:R:1109:ILE:HD12	1.88	0.54
1:Q:308:ARG:HG3	1:Q:312:ASN:ND2	2.21	0.54
1:Q:765:THR:HG21	1:Q:797:PHE:CE2	2.40	0.54
3:R:85:ALA:CB	3:R:92:TYR:HB2	2.37	0.54
2:G:80:GLU:CB	2:G:81:PRO:HD3	2.27	0.54
1:Q:428:ILE:HG23	1:Q:452:PRO:HB2	1.88	0.54
2:C:26:GLN:C	2:C:28:ILE:H	2.09	0.54
1:A:65:LEU:O	1:A:67:ASN:N	2.40	0.54
1:A:86:LEU:HB3	1:A:207:MET:CE	2.36	0.54
3:B:386:ARG:CB	3:B:389:ILE:HD11	2.35	0.54
3:B:971:TYR:O	3:B:973:GLY:N	2.40	0.54
4:D:26:ASN:O	4:D:30:ARG:HG3	2.06	0.54
1:Q:19:ILE:HA	1:Q:22:MET:CE	2.37	0.54
1:Q:417:VAL:HG11	1:Q:464:LEU:HD11	1.88	0.54
1:Q:375:ALA:CB	1:Q:409:ARG:HA	2.37	0.54
3:B:145:PRO:C	3:B:147:ASP:H	2.10	0.54
1:Q:720:ASP:C	1:Q:722:PHE:H	2.10	0.54
2:G:354:LEU:HD13	3:R:1104:LEU:HD21	1.90	0.54
3:B:1054:ASP:HB3	3:B:1095:TYR:H	1.72	0.54
3:B:1101:ILE:O	3:B:1105:MET:HG3	2.07	0.54
2:C:331:ARG:HH11	2:C:331:ARG:HB3	1.72	0.54
3:B:183:ILE:HD13	3:B:183:ILE:H	1.72	0.54
2:C:292:ILE:HD13	7:H:16:LEU:HD21	1.90	0.54
3:R:469:ASN:HD22	3:R:469:ASN:N	2.04	0.54
2:G:104:LEU:O	2:G:108:ILE:HG12	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:287:GLU:OE1	7:V:67:ARG:NH2	2.40	0.54
2:G:321:THR:HB	2:G:322:ARG:HH11	1.72	0.54
2:G:391:ARG:N	2:G:392:PRO:HD3	2.22	0.54
4:S:66:PRO:CG	10:Y:13:LEU:HD21	2.37	0.54
10:Y:60:ILE:HG23	10:Y:61:HIS:N	2.19	0.54
3:R:972:ASP:HB3	3:R:975:THR:HG23	1.89	0.54
4:S:250:ILE:HD11	9:X:84:ILE:HD11	1.89	0.54
3:R:740:MET:O	3:R:891:LEU:HA	2.07	0.54
1:A:13:ILE:O	1:A:13:ILE:HG22	2.05	0.54
3:B:530:TYR:OH	3:B:536:LEU:HG	2.06	0.54
3:B:800:PRO:O	3:B:802:VAL:N	2.34	0.54
4:D:111:SER:OG	4:D:126:GLY:HA2	2.07	0.54
2:G:241:ILE:CG2	2:G:242:VAL:H	2.21	0.54
1:Q:807:VAL:HG11	3:R:443:ARG:HH11	1.71	0.54
2:G:126:LEU:HD12	2:G:131:LYS:CG	2.37	0.54
1:A:336:GLU:OE2	1:A:436:ARG:HD3	2.07	0.54
4:D:250:ILE:CA	4:D:253:ILE:HG22	2.37	0.54
1:A:656:ASP:O	1:A:659:LYS:HB2	2.07	0.54
4:S:170:VAL:HG23	4:S:200:GLU:HG3	1.88	0.54
1:A:238:LYS:CE	1:A:276:TYR:HA	2.37	0.54
1:Q:316:LYS:HE2	3:R:1054:ASP:OD2	2.06	0.54
1:A:4:LYS:HD2	3:B:1089:PHE:C	2.27	0.54
1:A:308:ARG:HH22	3:B:1012:LEU:HD11	1.71	0.54
3:R:319:ILE:C	3:R:321:LYS:H	2.11	0.54
3:B:244:LEU:HD13	3:B:500:VAL:CG1	2.38	0.54
2:C:258:LEU:HD21	2:C:284:PHE:CE1	2.42	0.54
6:F:14:TYR:C	6:F:18:LYS:HE3	2.28	0.54
3:R:749:MET:HG2	3:R:750:TYR:HD1	1.71	0.54
7:H:55:ILE:O	7:H:56:ASN:C	2.46	0.54
1:Q:378:VAL:CG1	1:Q:388:LEU:HD12	2.37	0.54
3:B:582:VAL:CG1	3:B:586:ASN:H	2.08	0.54
3:R:629:GLU:HB3	3:R:630:PRO:HD2	1.89	0.54
1:A:746:MET:N	1:A:785:SER:HB3	2.23	0.54
3:B:950:ILE:O	3:B:952:GLN:N	2.40	0.54
1:A:220:ARG:H	1:A:221:PRO:HD3	1.72	0.54
1:A:184:LEU:HD22	1:A:204:PRO:HB2	1.89	0.54
1:A:13:ILE:HD11	1:A:86:LEU:CD1	2.37	0.54
3:B:740:MET:O	3:B:891:LEU:HA	2.07	0.54
3:B:727:MET:CB	3:B:983:ILE:HD12	2.37	0.54
4:D:158:PRO:O	4:D:233:VAL:HG22	2.08	0.54
1:Q:672:VAL:HG11	1:Q:776:PRO:HD3	1.89	0.54
3:R:104:GLU:O	3:R:105:ASN:CB	2.56	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:691:ARG:NH1	3:B:756:ARG:HH21	2.05	0.54
3:B:943:THR:CG2	3:B:944:PRO:HD2	2.34	0.54
1:A:447:LEU:HD13	3:B:734:MET:SD	2.47	0.54
8:W:71:ARG:NH1	8:W:71:ARG:HB2	2.22	0.54
3:B:91:THR:HA	3:B:155:ASN:H	1.72	0.54
1:Q:65:LEU:O	1:Q:67:ASN:N	2.40	0.54
2:G:361:GLY:O	2:G:362:ASP:O	2.25	0.54
1:Q:312:ASN:HA	1:Q:315:GLY:O	2.08	0.54
3:B:231:GLY:O	3:B:232:ILE:HD13	2.08	0.54
1:A:475:GLU:OE1	3:B:1043:MET:HB2	2.08	0.54
1:Q:288:LYS:HD3	1:Q:294:PRO:HG3	1.89	0.54
2:C:111:VAL:HG13	2:C:329:ILE:CD1	2.38	0.54
5:E:140:ASP:O	5:E:142:VAL:HG13	2.07	0.54
3:R:904:VAL:HG13	10:Y:44:CYS:HB3	1.89	0.54
2:G:389:THR:HG21	8:W:79:ARG:HH12	1.71	0.54
3:R:963:LEU:HD13	3:R:982:ARG:NH2	2.23	0.54
3:R:727:MET:CB	3:R:983:ILE:HD12	2.37	0.54
1:A:763:THR:HG22	1:A:772:TYR:H	1.72	0.54
1:A:64:THR:HG22	1:A:65:LEU:N	2.22	0.54
3:R:5:LEU:HA	3:R:9:GLU:OE2	2.08	0.54
3:R:298:LEU:O	3:R:300:HIS:N	2.40	0.54
5:E:145:ARG:CZ	5:E:145:ARG:HB2	2.37	0.54
3:B:669:GLN:HE21	3:B:669:GLN:HA	1.71	0.54
3:B:921:LEU:O	3:B:923:GLN:N	2.41	0.54
3:B:974:ARG:O	9:L:22:HIS:HB3	2.08	0.54
8:W:54:ASN:ND2	8:W:58:SER:H	2.06	0.54
2:C:386:VAL:HG13	8:K:34:ARG:HG2	1.90	0.54
4:S:39:MET:N	4:S:69:SER:OG	2.40	0.54
3:B:1067:ILE:HG12	3:B:1068:GLY:N	2.23	0.54
6:F:46:LYS:HE3	6:F:75:ILE:O	2.08	0.54
5:E:93:ASP:CG	5:E:94:ASN:N	2.61	0.54
1:Q:761:TYR:HB3	3:R:622:GLU:OE1	2.07	0.54
1:Q:765:THR:O	1:Q:766:LEU:HD22	2.07	0.54
10:N:60:ILE:O	10:N:62:TYR:N	2.40	0.54
6:U:60:SER:HB3	6:U:69:ARG:NH1	2.23	0.54
2:C:70:ILE:HA	2:C:73:VAL:CG2	2.36	0.54
8:K:82:LEU:HD12	8:K:84:ASN:HB2	1.89	0.54
5:E:87:GLY:O	5:E:88:GLU:HB2	2.07	0.54
5:T:58:ILE:N	5:T:58:ILE:HD12	2.23	0.54
3:R:139:ILE:HD12	10:Y:61:HIS:CD2	2.42	0.54
4:S:97:TYR:HB2	4:S:115:LYS:HB2	1.89	0.54
10:Y:21:PHE:O	10:Y:25:VAL:HG23	2.08	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:974:ARG:O	9:X:22:HIS:HB3	2.07	0.54
1:A:63:ASN:O	1:A:64:THR:O	2.25	0.54
1:A:507:TYR:O	1:A:508:LEU:CB	2.56	0.54
1:Q:781:PHE:C	1:Q:781:PHE:HD2	2.11	0.54
3:R:764:LYS:HB3	3:R:815:SER:HB2	1.90	0.54
3:R:369:LEU:CD2	3:R:384:LEU:HD13	2.38	0.54
3:B:800:PRO:HG2	11:P:37:VAL:CA	2.38	0.54
3:B:773:ILE:HG12	3:B:813:LYS:CG	2.36	0.54
5:E:64:GLY:H	8:K:41:LEU:CD2	2.19	0.54
4:D:97:TYR:HB2	4:D:115:LYS:HB2	1.90	0.54
1:Q:326:ILE:HG21	1:Q:462:MET:HG3	1.90	0.54
3:B:687:ARG:NH1	3:B:687:ARG:HG3	2.22	0.54
1:A:807:VAL:HG21	3:B:443:ARG:CD	2.35	0.54
5:T:171:LYS:HG2	5:T:172:LEU:N	2.23	0.54
8:K:91:SER:OG	8:K:92:LEU:N	2.40	0.54
3:B:305:ALA:O	3:B:308:ARG:HG3	2.08	0.54
11:Z:39:LYS:O	11:Z:41:THR:N	2.40	0.54
2:C:323:THR:O	2:C:323:THR:HG22	2.07	0.54
3:R:243:SER:CB	3:R:246:PRO:HG3	2.37	0.54
2:C:42:ILE:HG22	2:C:43:VAL:N	2.22	0.54
8:W:39:ARG:HH21	8:W:50:LEU:HD13	1.71	0.54
3:B:291:GLN:C	3:B:293:ILE:H	2.10	0.54
1:A:739:ASN:O	3:B:919:MET:HE3	2.08	0.54
3:B:537:ALA:HB2	3:B:557:HIS:HE2	1.67	0.54
1:A:724:PHE:O	1:A:727:VAL:HB	2.07	0.54
3:B:963:LEU:HD12	3:B:967:THR:O	2.08	0.54
4:D:18:GLU:HG3	4:D:225:LYS:HG2	1.90	0.54
4:D:31:ALA:HA	4:D:35:TYR:CD2	2.43	0.54
4:D:78:TRP:CD1	4:D:78:TRP:N	2.75	0.54
3:R:64:ARG:HG2	3:R:97:TRP:CG	2.43	0.54
3:B:123:LEU:HD21	3:B:153:ILE:HD11	1.88	0.54
3:B:801:GLU:HG3	11:P:38:ARG:NH2	2.22	0.54
8:W:53:ILE:HG22	8:W:54:ASN:N	2.23	0.54
1:A:527:VAL:CG1	1:A:530:VAL:HB	2.38	0.54
1:A:541:ALA:CB	1:A:542:PRO:CD	2.85	0.54
3:R:265:VAL:O	3:R:269:LEU:HG	2.07	0.54
3:B:1077:TYR:O	3:B:1077:TYR:CD1	2.61	0.54
3:R:544:ARG:NH2	3:R:614:GLU:OE1	2.41	0.54
6:U:18:LYS:HG2	6:U:41:LEU:HB3	1.90	0.54
2:C:276:ASN:O	2:C:279:GLU:HB3	2.08	0.54
1:Q:609:GLU:CD	1:Q:614:TRP:HZ2	2.10	0.54
1:A:289:HIS:HB2	1:A:295:LEU:CD2	2.36	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:572:PRO:HG2	1:A:573:ARG:HD3	1.90	0.54
4:D:12:ARG:NH2	4:D:14:ASP:OD2	2.40	0.54
4:D:222:VAL:HG11	4:D:225:LYS:CD	2.37	0.54
5:T:53:THR:HG22	5:T:70:VAL:HA	1.90	0.54
3:R:993:LEU:HD12	3:R:993:LEU:N	2.23	0.54
4:S:94:THR:CG2	4:S:145:LEU:HB2	2.38	0.54
5:T:174:TRP:CE3	5:T:174:TRP:HA	2.42	0.54
6:F:30:SER:HB2	6:F:34:LEU:HD12	1.88	0.54
8:W:36:ILE:O	8:W:40:ALA:HB2	2.07	0.54
3:B:28:LEU:O	3:B:30:SER:N	2.34	0.54
1:Q:343:ILE:HD11	3:R:1001:LEU:CD1	2.37	0.54
4:S:117:GLU:O	4:S:119:PRO:HD3	2.08	0.54
11:P:22:PRO:HG2	11:P:23:GLY:H	1.72	0.54
2:G:133:ASP:C	2:G:135:ASP:H	2.11	0.54
3:R:1054:ASP:HB3	3:R:1095:TYR:N	2.23	0.54
3:B:1064:CYS:SG	3:B:1064:CYS:O	2.65	0.54
3:B:88:ARG:HB3	3:B:90:LEU:HD13	1.89	0.54
2:C:115:LYS:O	2:C:115:LYS:HG3	2.08	0.54
3:B:452:ARG:HH11	3:B:452:ARG:HG3	1.73	0.54
7:H:42:LEU:HD13	7:H:79:ARG:O	2.08	0.54
1:Q:830:LEU:HD22	1:Q:846:VAL:HG21	1.89	0.54
4:S:68:MET:HE1	4:S:234:GLY:O	2.08	0.54
1:Q:646:MET:HE2	1:Q:725:ALA:HB2	1.90	0.54
3:R:739:ILE:O	3:R:739:ILE:HG12	2.07	0.54
3:R:215:PRO:O	3:R:216:ALA:HB3	2.08	0.54
3:R:198:VAL:HG12	3:R:198:VAL:O	2.08	0.54
3:B:106:ASN:O	3:B:108:GLU:HG3	2.08	0.54
5:E:117:THR:HG21	5:E:130:GLU:CG	2.38	0.54
3:R:764:LYS:HB3	3:R:815:SER:CB	2.38	0.54
3:R:59:ARG:NH1	3:R:107:ILE:HD12	2.23	0.54
5:T:38:ILE:HD13	5:T:153:VAL:O	2.08	0.54
1:A:352:ARG:HD3	1:A:406:ILE:CD1	2.33	0.54
1:Q:409:ARG:HE	1:Q:412:ILE:HG12	1.71	0.54
1:A:540:LEU:O	1:A:541:ALA:O	2.25	0.54
3:R:181:SER:O	3:R:182:ASN:HB2	2.08	0.54
4:S:2:SER:N	9:X:86:GLU:OE1	2.41	0.54
1:Q:276:TYR:HD2	1:Q:277:PHE:CD1	2.25	0.54
3:R:1095:TYR:CE1	3:R:1098:LYS:HD2	2.42	0.54
1:A:308:ARG:HH11	1:A:308:ARG:HB2	1.73	0.54
3:B:1074:LYS:CB	3:B:1076:LYS:HE2	2.31	0.54
1:A:856:PHE:CD1	1:A:858:MET:HB2	2.43	0.54
3:B:1036:LEU:HD13	3:B:1044:LEU:HD23	1.88	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:258:LEU:HB2	2:C:279:GLU:OE2	2.07	0.54
1:Q:833:GLU:OE2	1:Q:839:ARG:HB2	2.08	0.54
3:R:696:HIS:HE2	3:R:753:THR:HG1	1.54	0.54
4:S:125:SER:O	4:S:127:ASP:N	2.37	0.54
2:C:55:ALA:O	2:C:58:GLU:N	2.41	0.54
1:Q:727:VAL:O	1:Q:729:ALA:O	2.26	0.54
3:B:295:LYS:HG3	3:B:296:TYR:CD1	2.43	0.54
1:A:692:LEU:H	1:A:692:LEU:HD12	1.73	0.54
3:R:814:VAL:HA	3:R:834:ASP:O	2.08	0.54
3:R:353:LEU:HA	3:R:404:VAL:HG11	1.90	0.54
3:R:354:PHE:O	3:R:355:ARG:C	2.46	0.54
1:A:185:GLU:HA	1:A:205:GLU:HG2	1.90	0.54
3:R:677:LEU:HD12	3:R:992:LYS:HD3	1.88	0.54
1:Q:26:ALA:HA	1:Q:74:HIS:CE1	2.43	0.54
5:T:109:HIS:HD2	5:T:111:SER:OG	1.91	0.54
4:S:42:ASP:OD2	4:S:146:ARG:NE	2.38	0.54
3:B:182:ASN:HD22	3:B:182:ASN:N	2.06	0.54
1:A:239:LEU:HD12	1:A:276:TYR:HE1	1.73	0.53
1:A:74:HIS:O	1:A:75:ILE:HD12	2.08	0.53
3:B:130:ILE:HA	3:B:133:TYR:CE1	2.43	0.53
1:Q:234:ASP:C	1:Q:236:THR:N	2.62	0.53
2:G:109:GLU:O	2:G:113:ALA:CA	2.56	0.53
2:G:28:ILE:HD13	8:W:14:HIS:CG	2.42	0.53
1:A:288:LYS:HD3	1:A:294:PRO:HG3	1.89	0.53
3:R:588:LEU:HD22	3:R:612:LYS:HG2	1.90	0.53
1:A:369:PRO:HB3	1:A:376:ASN:CB	2.28	0.53
10:N:21:PHE:O	10:N:25:VAL:HG23	2.08	0.53
1:A:732:GLY:O	1:A:733:ALA:C	2.45	0.53
3:B:910:LEU:CD2	3:B:911:ASN:N	2.71	0.53
4:D:34:LEU:O	4:D:150:GLY:N	2.41	0.53
3:R:800:PRO:HG2	11:Z:37:VAL:CA	2.37	0.53
4:D:125:SER:C	4:D:127:ASP:H	2.11	0.53
1:Q:548:GLY:C	1:Q:550:GLN:N	2.61	0.53
1:A:332:ILE:HD12	1:A:332:ILE:N	2.23	0.53
3:R:803:GLU:HB3	3:R:805:LYS:HZ2	1.71	0.53
1:A:747:LEU:CD1	1:A:790:LEU:HD11	2.38	0.53
2:C:297:ILE:O	2:C:301:LEU:HG	2.08	0.53
1:A:541:ALA:HB1	1:A:542:PRO:CD	2.37	0.53
8:K:78:ILE:O	8:K:89:LEU:HA	2.07	0.53
7:V:25:ILE:N	7:V:25:ILE:HD12	2.23	0.53
9:X:3:ILE:CD1	9:X:17:ILE:HG23	2.37	0.53
3:R:1022:ARG:HG2	3:R:1022:ARG:O	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:1041:THR:HG23	3:R:1041:THR:O	2.08	0.53
1:A:238:LYS:O	1:A:242:ILE:HG13	2.09	0.53
1:A:316:LYS:HZ3	3:B:1049:LEU:HD12	1.72	0.53
2:C:349:VAL:CG2	2:C:352:LYS:HB2	2.38	0.53
3:B:246:PRO:O	3:B:248:VAL:N	2.35	0.53
3:B:81:SER:H	3:B:84:GLU:HB2	1.74	0.53
2:C:103:GLY:HA2	2:C:106:ARG:HB3	1.90	0.53
2:C:109:GLU:O	2:C:113:ALA:CA	2.56	0.53
6:F:18:LYS:HD2	6:F:45:GLU:HG2	1.90	0.53
2:G:285:GLY:HA2	7:V:50:PRO:HD2	1.89	0.53
7:V:15:TYR:HD2	7:V:16:LEU:HD12	1.73	0.53
7:V:44:TRP:O	7:V:79:ARG:HD3	2.07	0.53
3:R:940:VAL:HG21	3:R:953:LEU:HD11	1.90	0.53
3:R:904:VAL:CG2	10:Y:42:ARG:HE	2.21	0.53
2:G:64:ILE:HG22	2:G:65:ALA:N	2.22	0.53
1:Q:416:ILE:HG12	1:Q:477:LYS:HB2	1.90	0.53
7:H:13:ILE:HG23	7:H:14:HIS:N	2.23	0.53
4:S:18:GLU:HG3	4:S:225:LYS:HG2	1.90	0.53
1:A:763:THR:CG2	1:A:772:TYR:HA	2.39	0.53
3:R:588:LEU:CD1	3:R:612:LYS:HB3	2.32	0.53
1:A:775:SER:OG	1:A:777:GLU:HG2	2.07	0.53
1:A:358:ILE:O	1:A:362:ARG:HG3	2.08	0.53
5:T:117:THR:HG21	5:T:130:GLU:CG	2.39	0.53
5:E:145:ARG:NH1	5:E:145:ARG:HB2	2.23	0.53
3:R:691:ARG:NH1	3:R:756:ARG:HH21	2.06	0.53
1:A:632:PHE:HA	1:A:635:PHE:CE1	2.42	0.53
1:Q:540:LEU:O	1:Q:541:ALA:O	2.26	0.53
1:Q:670:VAL:HG23	1:Q:671:GLU:N	2.24	0.53
6:F:31:SER:CA	6:F:35:GLN:HE21	2.20	0.53
3:R:737:SER:HA	3:R:886:GLY:HA3	1.90	0.53
4:S:170:VAL:CG2	4:S:200:GLU:HG3	2.39	0.53
3:B:489:LEU:HB3	3:B:494:VAL:HG21	1.89	0.53
3:R:1061:CYS:N	3:R:1088:LEU:HD23	2.24	0.53
3:R:1087:ASN:C	3:R:1088:LEU:HG	2.28	0.53
3:B:1069:TRP:CD1	3:B:1088:LEU:HD13	2.42	0.53
1:Q:763:THR:HG22	1:Q:772:TYR:H	1.71	0.53
6:F:14:TYR:HE2	6:F:40:TYR:HH	1.56	0.53
2:G:392:PRO:O	2:G:393:ILE:O	2.26	0.53
3:R:696:HIS:CG	4:S:57:ILE:HD11	2.42	0.53
2:G:24:LEU:N	2:G:25:PRO:HD2	2.24	0.53
4:S:34:LEU:O	4:S:150:GLY:N	2.40	0.53
1:Q:358:ILE:HD12	1:Q:403:PRO:HD3	1.91	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:291:GLN:HB3	3:B:295:LYS:CE	2.38	0.53
5:T:81:VAL:O	5:T:82:GLN:HB2	2.09	0.53
3:R:198:VAL:N	3:R:199:PRO:CD	2.71	0.53
2:C:390:MET:HA	2:C:390:MET:HE2	1.89	0.53
8:K:53:ILE:HG22	8:K:54:ASN:N	2.22	0.53
1:A:609:GLU:CD	1:A:614:TRP:HZ2	2.11	0.53
3:R:680:TYR:CE2	3:R:692:ALA:HB1	2.43	0.53
3:R:669:GLN:C	3:R:671:ALA:H	2.10	0.53
3:R:926:GLU:HB3	3:R:988:VAL:HG22	1.90	0.53
3:R:804:VAL:HG23	3:R:847:VAL:HG23	1.90	0.53
1:A:539:ILE:CB	1:A:545:TYR:HB2	2.35	0.53
3:B:906:PRO:HD3	3:B:985:PHE:CZ	2.42	0.53
3:R:153:ILE:O	3:R:153:ILE:HG22	2.07	0.53
7:H:38:ARG:NH1	7:H:38:ARG:HG2	2.23	0.53
3:B:419:TRP:HZ3	3:B:712:GLY:CA	2.21	0.53
1:A:84:VAL:O	1:A:87:VAL:HG12	2.09	0.53
2:C:349:VAL:HG13	2:C:353:HIS:CD2	2.44	0.53
3:B:85:ALA:CB	3:B:92:TYR:HB2	2.39	0.53
1:Q:220:ARG:N	1:Q:221:PRO:CD	2.70	0.53
2:C:120:PRO:CB	2:C:256:SER:HB3	2.37	0.53
1:A:838:VAL:HG13	2:C:70:ILE:HD11	1.91	0.53
2:G:374:ILE:HG22	2:G:375:ILE:N	2.22	0.53
4:S:96:ILE:HG22	4:S:116:SER:HA	1.90	0.53
2:G:31:ASP:C	2:G:33:LYS:N	2.61	0.53
2:G:64:ILE:CG2	2:G:65:ALA:N	2.72	0.53
1:Q:647:ARG:NH2	4:S:211:ARG:HH12	2.07	0.53
3:B:558:ILE:HG12	3:B:567:HIS:HD2	1.72	0.53
3:R:214:PHE:HZ	3:R:297:PHE:CA	2.20	0.53
3:R:480:ILE:HD11	3:R:550:SER:CB	2.38	0.53
3:B:63:ILE:HG13	3:B:98:LEU:HB2	1.90	0.53
4:S:13:ILE:CG1	4:S:238:PRO:HB2	2.37	0.53
3:B:541:ARG:NH2	3:B:557:HIS:HD2	2.06	0.53
3:B:557:HIS:ND1	3:B:566:VAL:HG13	2.23	0.53
1:A:728:MET:HE3	3:B:913:HIS:ND1	2.23	0.53
3:B:657:TYR:HA	3:B:659:GLU:OE2	2.07	0.53
3:B:895:VAL:HG11	4:D:34:LEU:CD2	2.39	0.53
4:D:16:VAL:HG13	4:D:167:TYR:CE1	2.44	0.53
4:D:169:LYS:O	4:D:219:ILE:HA	2.08	0.53
3:R:188:LYS:HA	3:R:203:GLU:O	2.09	0.53
1:Q:417:VAL:CG1	1:Q:464:LEU:CD1	2.86	0.53
1:Q:537:PRO:HB2	1:Q:540:LEU:CD2	2.38	0.53
4:D:42:ASP:OD2	4:D:146:ARG:NE	2.39	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:245:ILE:CD1	1:A:268:LEU:HD13	2.38	0.53
3:B:1054:ASP:HB3	3:B:1095:TYR:N	2.24	0.53
3:R:88:ARG:HB3	3:R:90:LEU:HD13	1.91	0.53
6:U:49:ALA:O	6:U:53:GLN:HB2	2.09	0.53
6:U:55:VAL:O	6:U:59:LEU:HB2	2.08	0.53
10:Y:22:ILE:HD13	10:Y:22:ILE:H	1.73	0.53
3:R:747:ARG:HD3	10:Y:8:PHE:HA	1.91	0.53
2:G:42:ILE:HG22	2:G:43:VAL:N	2.23	0.53
2:G:57:LYS:CE	2:G:57:LYS:HA	2.35	0.53
1:Q:489:PRO:CA	1:Q:858:MET:HG3	2.37	0.53
1:A:220:ARG:N	1:A:221:PRO:CD	2.72	0.53
1:A:18:GLU:O	1:A:22:MET:HB3	2.09	0.53
3:B:739:ILE:O	3:B:739:ILE:HG12	2.08	0.53
1:A:878:TRP:CE2	3:R:377:ARG:HD3	2.44	0.53
4:D:69:SER:O	4:D:70:GLU:C	2.46	0.53
1:Q:539:ILE:CB	1:Q:545:TYR:HB2	2.36	0.53
3:B:737:SER:HA	3:B:886:GLY:HA3	1.89	0.53
4:S:107:ARG:N	4:S:133:LEU:O	2.32	0.53
8:K:46:GLY:O	8:K:47:ALA:O	2.26	0.53
11:P:42:ILE:O	11:P:42:ILE:HG23	2.09	0.53
1:Q:249:LEU:HD12	1:Q:269:LEU:HD11	1.91	0.53
1:Q:308:ARG:HH11	1:Q:308:ARG:HB2	1.73	0.53
3:B:1061:CYS:HB2	3:B:1079:CYS:SG	2.49	0.53
3:R:768:GLY:O	3:R:769:GLN:HB2	2.08	0.53
4:D:195:LEU:O	4:D:196:SER:O	2.26	0.53
3:B:167:LEU:HD12	3:B:190:ILE:HD12	1.90	0.53
7:H:15:TYR:HD2	7:H:16:LEU:HD12	1.74	0.53
6:F:57:GLU:C	6:F:59:LEU:H	2.12	0.53
1:Q:475:GLU:OE1	3:R:1043:MET:N	2.40	0.53
2:G:390:MET:HG3	5:T:56:GLU:HG2	1.89	0.53
3:R:975:THR:O	4:S:26:ASN:ND2	2.41	0.53
4:S:194:LYS:C	4:S:196:SER:H	2.10	0.53
3:R:978:LYS:HZ1	4:S:205:LEU:HD13	1.73	0.53
3:R:895:VAL:HG11	4:S:34:LEU:CG	2.39	0.53
4:S:78:TRP:CD1	4:S:78:TRP:N	2.76	0.53
1:A:407:ILE:C	1:A:407:ILE:HD12	2.29	0.53
3:B:356:VAL:HG13	3:B:357:ALA:N	2.24	0.53
1:Q:206:TRP:CZ3	3:R:1108:ILE:HG21	2.44	0.53
3:R:537:ALA:HB1	3:R:541:ARG:CZ	2.38	0.53
8:K:50:LEU:H	8:K:50:LEU:HD12	1.73	0.53
3:B:1046:LYS:NZ	3:B:1051:ASP:OD2	2.38	0.53
2:G:238:LYS:O	2:G:239:ARG:HB2	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:331:ASN:O	1:A:332:ILE:CB	2.47	0.53
5:T:174:TRP:HE3	5:T:174:TRP:HA	1.73	0.53
2:C:388:LEU:CD1	8:K:34:ARG:HG3	2.38	0.53
4:S:153:HIS:O	4:S:155:LYS:N	2.36	0.53
6:U:23:ASP:O	6:U:26:ARG:HB2	2.09	0.53
1:Q:87:VAL:HG13	1:Q:88:LYS:H	1.73	0.53
3:B:1012:LEU:HD13	3:B:1012:LEU:C	2.28	0.53
5:T:102:GLY:HA2	6:U:40:TYR:CB	2.39	0.53
1:A:820:GLN:O	1:A:824:ILE:HG12	2.09	0.53
2:C:70:ILE:HD13	2:C:71:GLY:N	2.24	0.53
5:E:87:GLY:HA2	6:F:40:TYR:HE1	1.73	0.53
3:R:167:LEU:HD12	3:R:190:ILE:HD12	1.91	0.53
7:V:42:LEU:HD13	7:V:79:ARG:O	2.08	0.53
4:S:3:ILE:CD1	9:X:83:TYR:HA	2.39	0.53
4:S:80:GLU:O	4:S:83:ILE:HB	2.09	0.53
9:X:38:VAL:O	9:X:40:PHE:N	2.42	0.53
1:A:237:HIS:HE1	1:A:290:ARG:HH21	1.57	0.53
3:B:904:VAL:HG21	10:N:42:ARG:HG2	1.89	0.53
5:E:168:TYR:O	5:E:175:ILE:HD13	2.09	0.53
1:A:532:ILE:HD12	9:L:12:TYR:OH	2.09	0.53
9:L:38:VAL:O	9:L:40:PHE:N	2.42	0.53
1:A:664:GLU:OE2	1:A:667:ARG:HD3	2.09	0.53
9:L:61:GLY:O	9:L:62:SER:C	2.46	0.53
3:B:134:THR:HG22	3:B:137:LYS:HG3	1.89	0.53
4:D:117:GLU:O	4:D:119:PRO:HD3	2.08	0.53
3:R:91:THR:HA	3:R:155:ASN:H	1.73	0.53
9:X:92:LYS:HD2	9:X:92:LYS:N	2.24	0.53
3:R:1061:CYS:HB3	3:R:1064:CYS:C	2.30	0.53
3:R:1077:TYR:CD1	3:R:1077:TYR:O	2.62	0.53
3:R:1061:CYS:HA	3:R:1088:LEU:HD23	1.91	0.53
3:R:220:LYS:O	3:R:275:ARG:NH1	2.42	0.53
7:H:42:LEU:HD22	7:H:79:ARG:O	2.09	0.53
5:E:141:LYS:HB2	5:E:172:LEU:CD1	2.38	0.53
6:F:55:VAL:O	6:F:59:LEU:HB2	2.08	0.53
2:G:109:GLU:O	2:G:113:ALA:N	2.41	0.53
10:Y:13:LEU:O	10:Y:14:ILE:HD13	2.08	0.53
10:Y:62:TYR:O	10:Y:63:THR:OG1	2.15	0.53
2:G:30:ASP:O	2:G:31:ASP:HB3	2.09	0.53
1:Q:525:LEU:C	1:Q:527:VAL:N	2.63	0.53
1:Q:637:ARG:HD3	1:Q:640:GLU:OE1	2.08	0.53
4:S:33:MET:O	4:S:150:GLY:HA3	2.09	0.53
1:Q:377:TYR:CE1	1:Q:385:ARG:HG2	2.43	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:592:GLU:O	3:R:596:LYS:HG3	2.09	0.53
1:A:369:PRO:HG3	1:A:389:ARG:HA	1.90	0.53
1:Q:352:ARG:HA	1:Q:406:ILE:HA	1.91	0.53
1:A:872:PHE:HA	1:A:876:VAL:CG2	2.39	0.53
3:R:52:GLU:CB	3:R:56:LEU:HB3	2.38	0.53
3:B:282:ARG:HD3	3:B:285:ARG:CD	2.39	0.53
4:D:94:THR:OG1	4:D:95:LYS:N	2.42	0.53
5:T:134:LYS:HD3	5:T:174:TRP:HE1	1.74	0.53
5:T:88:GLU:H	5:T:99:VAL:CG1	2.22	0.53
4:D:21:PRO:HG3	9:L:79:MET:CE	2.39	0.53
3:B:707:ALA:C	3:B:709:ASP:H	2.12	0.53
2:C:16:LYS:HZ3	3:R:75:ARG:HH12	1.56	0.53
1:A:656:ASP:HA	1:A:659:LYS:CD	2.39	0.53
3:B:286:ILE:O	3:B:289:ALA:HB3	2.09	0.53
9:L:3:ILE:CD1	9:L:17:ILE:HG23	2.38	0.53
11:P:8:LYS:HD3	11:P:13:PHE:HB3	1.91	0.53
1:Q:249:LEU:HD21	1:Q:265:LEU:CB	2.39	0.53
3:B:1061:CYS:HB3	3:B:1065:GLY:CA	2.39	0.53
3:R:555:VAL:CG2	3:R:568:VAL:HG22	2.38	0.53
1:A:820:GLN:HA	1:A:823:LEU:HD11	1.90	0.53
1:A:828:SER:O	1:A:830:LEU:N	2.37	0.53
2:C:287:GLU:OE1	7:H:67:ARG:NH2	2.41	0.53
1:Q:825:ASN:O	1:Q:828:SER:HB3	2.08	0.53
1:Q:469:SER:O	1:Q:473:ILE:HG13	2.09	0.53
10:Y:7:CYS:CB	10:Y:45:CYS:SG	2.96	0.53
8:W:77:THR:HG23	8:W:90:LEU:O	2.08	0.53
1:Q:626:TRP:O	1:Q:627:LEU:C	2.47	0.53
1:Q:365:VAL:HG11	1:Q:401:LEU:CD1	2.30	0.53
3:B:555:VAL:CG2	3:B:568:VAL:HG22	2.39	0.53
3:B:474:ALA:HB2	3:B:578:PRO:HG3	1.91	0.53
3:R:725:ALA:CB	3:R:906:PRO:HB3	2.38	0.53
3:R:5:LEU:N	3:R:5:LEU:HD13	2.23	0.53
1:A:345:LYS:HG2	1:A:410:HIS:CD2	2.44	0.53
1:A:552:ILE:C	1:A:554:ALA:H	2.11	0.53
1:A:607:GLN:O	1:A:609:GLU:N	2.42	0.53
3:R:669:GLN:HE21	3:R:669:GLN:HA	1.73	0.53
3:B:104:GLU:O	3:B:105:ASN:CB	2.57	0.53
7:H:65:ILE:N	7:H:65:ILE:CD1	2.72	0.53
1:A:667:ARG:HH11	1:A:667:ARG:HG2	1.74	0.53
6:F:23:ASP:O	6:F:26:ARG:HB2	2.09	0.53
3:B:461:GLY:O	3:B:464:SER:HB3	2.09	0.53
1:A:342:ILE:N	1:A:342:ILE:HD13	2.24	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:26:ALA:HA	1:A:74:HIS:CE1	2.43	0.53
3:R:1069:TRP:NE1	3:R:1088:LEU:HD13	2.23	0.53
3:R:234:THR:O	3:R:237:ASP:HB2	2.09	0.53
3:R:545:ARG:CZ	3:R:581:ILE:HG21	2.39	0.53
3:R:92:TYR:OH	3:R:128:ASP:OD2	2.26	0.53
3:B:853:THR:OG1	11:P:33:ILE:HD13	2.08	0.53
6:U:47:CYS:HB2	6:U:52:ALA:HB2	1.90	0.53
3:R:433:LEU:HD12	3:R:435:ARG:HH22	1.71	0.53
1:Q:828:SER:O	1:Q:830:LEU:N	2.39	0.53
4:S:66:PRO:HG2	10:Y:13:LEU:HD11	1.91	0.53
1:Q:649:GLU:HA	1:Q:652:SER:OG	2.09	0.53
4:S:80:GLU:HA	4:S:83:ILE:CD1	2.39	0.53
2:C:368:GLY:O	2:C:372:ASN:HB2	2.08	0.53
3:B:592:GLU:O	3:B:596:LYS:HG3	2.08	0.53
3:R:14:ILE:HG23	3:R:15:GLU:N	2.24	0.53
1:A:575:CYS:SG	1:A:584:SER:HB3	2.49	0.53
3:B:354:PHE:O	3:B:355:ARG:C	2.47	0.53
3:B:64:ARG:N	3:B:97:TRP:HB2	2.24	0.53
1:Q:781:PHE:CD2	1:Q:781:PHE:C	2.82	0.53
3:B:628:LEU:CD2	3:B:628:LEU:H	2.08	0.53
1:Q:93:PHE:CE2	1:Q:204:PRO:HB3	2.44	0.53
3:R:355:ARG:CB	3:R:355:ARG:HH11	2.19	0.53
11:P:6:CYS:O	11:P:37:VAL:HG12	2.09	0.53
3:R:804:VAL:C	3:R:805:LYS:HD2	2.29	0.53
1:A:451:PRO:HG2	1:A:605:ASN:OD1	2.09	0.53
7:H:69:SER:HB2	7:H:75:VAL:CG2	2.38	0.53
1:A:612:LEU:C	1:A:612:LEU:HD23	2.29	0.53
1:Q:819:MET:HA	1:Q:822:ARG:HE	1.74	0.53
2:C:382:GLY:C	2:C:384:GLY:H	2.12	0.53
1:Q:279:ASN:HB2	1:Q:297:THR:HG21	1.92	0.52
3:B:1074:LYS:HB2	3:B:1076:LYS:HG3	1.91	0.52
3:B:854:GLU:HG3	11:P:24:VAL:HG11	1.90	0.52
4:D:174:ALA:O	4:D:195:LEU:HD13	2.08	0.52
6:F:18:LYS:HG2	6:F:41:LEU:HB3	1.90	0.52
2:G:120:PRO:CA	2:G:275:ASN:ND2	2.67	0.52
4:S:98:ILE:HB	4:S:141:LEU:HD11	1.90	0.52
3:R:895:VAL:HG11	4:S:34:LEU:CD2	2.39	0.52
3:R:898:PRO:HB2	3:R:970:VAL:HG21	1.91	0.52
3:B:904:VAL:HG21	10:N:42:ARG:NE	2.20	0.52
3:B:198:VAL:N	3:B:199:PRO:CD	2.73	0.52
3:B:978:LYS:HG2	4:D:166:TYR:HE2	1.75	0.52
1:Q:672:VAL:O	1:Q:673:ASP:C	2.48	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:184:LEU:HD22	1:Q:204:PRO:HB2	1.90	0.52
8:K:90:LEU:N	8:K:90:LEU:CD2	2.56	0.52
9:L:64:THR:CG2	9:L:65:PRO:HD2	2.32	0.52
4:S:38:ILE:O	4:S:147:LEU:HD23	2.09	0.52
2:G:38:ASN:N	2:G:38:ASN:ND2	2.56	0.52
3:R:27:HIS:O	3:R:30:SER:HB3	2.09	0.52
4:S:237:LYS:O	4:S:240:ARG:HB3	2.08	0.52
3:R:305:ALA:O	3:R:308:ARG:HG3	2.08	0.52
5:T:77:TYR:O	5:T:78:VAL:HG23	2.09	0.52
9:L:5:ILE:O	9:L:5:ILE:HD13	2.10	0.52
1:A:308:ARG:NH2	3:B:1012:LEU:HD11	2.23	0.52
3:B:1080:PRO:C	3:B:1081:ILE:HG13	2.30	0.52
2:C:352:LYS:O	2:C:354:LEU:N	2.42	0.52
3:R:245:ASP:CG	3:R:515:LEU:HG	2.29	0.52
1:A:335:ASP:OD1	1:A:482:VAL:HB	2.09	0.52
2:G:111:VAL:HG13	2:G:329:ILE:CD1	2.38	0.52
2:G:115:LYS:O	2:G:115:LYS:HG3	2.08	0.52
3:R:590:THR:O	3:R:593:ASP:HB2	2.10	0.52
3:B:537:ALA:CB	3:B:557:HIS:NE2	2.66	0.52
1:A:646:MET:HE2	1:A:725:ALA:HB2	1.90	0.52
3:R:64:ARG:HB2	3:R:97:TRP:CD1	2.43	0.52
4:D:39:MET:N	4:D:69:SER:OG	2.42	0.52
3:R:855:THR:HB	3:R:857:GLU:CG	2.39	0.52
11:Z:20:VAL:C	11:Z:21:LEU:HD23	2.30	0.52
4:S:240:ARG:O	4:S:243:LEU:HB3	2.09	0.52
5:E:46:LEU:HD11	5:E:77:TYR:HB2	1.91	0.52
3:R:1061:CYS:HB2	3:R:1079:CYS:SG	2.49	0.52
1:A:301:ARG:O	1:A:302:LEU:CG	2.56	0.52
3:B:184:THR:N	3:B:207:ASP:O	2.42	0.52
3:B:174:VAL:HG11	3:B:325:LEU:HD23	1.90	0.52
1:A:856:PHE:HB3	1:A:859:TYR:CD1	2.43	0.52
1:A:859:TYR:HB2	2:C:64:ILE:HG13	1.91	0.52
2:C:383:THR:O	5:E:61:PHE:HZ	1.92	0.52
6:U:46:LYS:HE3	6:U:75:ILE:O	2.10	0.52
3:B:165:GLU:O	3:B:432:SER:HB2	2.09	0.52
3:B:432:SER:O	3:B:435:ARG:NE	2.43	0.52
7:H:43:PRO:HB2	7:H:78:TYR:O	2.09	0.52
2:G:288:ALA:HA	7:V:16:LEU:O	2.10	0.52
4:S:106:PRO:HA	4:S:134:GLY:HA2	1.90	0.52
10:Y:35:LEU:O	10:Y:38:LEU:O	2.27	0.52
1:Q:856:PHE:HD1	1:Q:858:MET:HB2	1.73	0.52
4:S:206:CYS:O	4:S:207:GLU:CB	2.57	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:S:30:ARG:NH1	9:X:21:ASP:OD1	2.42	0.52
1:A:759:ARG:H	1:A:779:ARG:HH21	1.56	0.52
3:B:17:TYR:HB2	3:B:604:PHE:CD1	2.45	0.52
3:R:582:VAL:CG1	3:R:586:ASN:H	2.08	0.52
3:R:603:THR:O	3:R:604:PHE:C	2.46	0.52
3:B:935:LEU:HD23	10:N:43:TYR:HB3	1.91	0.52
3:R:193:THR:HG21	3:R:197:ARG:N	2.24	0.52
3:B:380:ALA:O	3:B:383:ALA:N	2.42	0.52
4:D:165:ARG:HE	4:D:227:ILE:HB	1.74	0.52
3:R:688:THR:HG23	3:R:688:THR:O	2.10	0.52
1:Q:203:ARG:NH1	1:Q:203:ARG:HG3	2.16	0.52
1:Q:206:TRP:CH2	3:R:1108:ILE:HG21	2.45	0.52
4:D:98:ILE:HB	4:D:141:LEU:HD11	1.91	0.52
1:Q:872:PHE:CD2	1:Q:876:VAL:HG21	2.43	0.52
2:G:132:ARG:HA	2:G:249:TYR:HD1	1.71	0.52
3:R:840:ARG:HH11	3:R:1021:ALA:HB2	1.73	0.52
1:A:807:VAL:HG13	3:B:443:ARG:NH1	2.24	0.52
1:Q:409:ARG:HH21	1:Q:412:ILE:CG1	2.22	0.52
6:F:30:SER:OG	6:F:31:SER:N	2.42	0.52
6:U:30:SER:HB2	6:U:34:LEU:HD12	1.90	0.52
3:R:196:TYR:CE2	3:R:303:THR:HG21	2.44	0.52
3:B:181:SER:O	3:B:182:ASN:HB2	2.09	0.52
1:Q:49:LEU:HD22	1:Q:71:HIS:O	2.09	0.52
1:Q:761:TYR:O	3:R:622:GLU:OE1	2.28	0.52
2:C:311:ARG:NH1	7:H:71:LEU:HD13	2.24	0.52
5:E:174:TRP:CE3	5:E:174:TRP:HA	2.44	0.52
6:F:48:ASP:H	6:F:51:SER:HG	1.56	0.52
2:G:368:GLY:O	2:G:372:ASN:HB2	2.10	0.52
3:R:1059:TYR:CD2	3:R:1090:PRO:HG3	2.44	0.52
3:R:749:MET:HE1	3:R:907:ASP:HB3	1.92	0.52
3:R:871:ILE:HG22	3:R:872:PRO:HD2	1.90	0.52
1:Q:607:GLN:O	1:Q:609:GLU:N	2.42	0.52
4:S:22:LEU:C	4:S:24:PHE:H	2.13	0.52
2:C:374:ILE:HG22	2:C:375:ILE:N	2.23	0.52
3:R:94:ALA:O	3:R:119:LEU:N	2.43	0.52
3:B:930:GLY:HA2	10:N:47:ARG:NH2	2.24	0.52
1:A:19:ILE:HA	1:A:22:MET:CE	2.39	0.52
3:B:112:GLU:O	3:B:114:VAL:HG23	2.10	0.52
1:A:734:ARG:HG3	3:B:917:SER:HB3	1.92	0.52
4:D:160:SER:HB3	4:D:233:VAL:HG12	1.90	0.52
4:D:80:GLU:O	4:D:83:ILE:HB	2.10	0.52
3:R:852:ILE:HD12	11:Z:35:PHE:HA	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:337:GLU:OE2	2:G:339:ASN:ND2	2.42	0.52
1:Q:354:THR:O	1:Q:355:PRO:O	2.28	0.52
3:R:643:TRP:CZ3	3:R:645:PRO:HB2	2.44	0.52
1:Q:414:GLY:HA2	1:Q:434:ARG:NE	2.24	0.52
2:C:386:VAL:HG21	8:K:31:GLU:HA	1.91	0.52
1:A:52:ILE:H	1:A:52:ILE:HD13	1.74	0.52
5:T:17:GLU:CB	5:T:20:LYS:HD2	2.39	0.52
3:B:28:LEU:C	3:B:30:SER:H	2.11	0.52
9:L:24:LEU:O	9:L:28:ILE:HG12	2.09	0.52
3:B:551:ASP:OD2	3:B:551:ASP:N	2.42	0.52
1:Q:249:LEU:HD21	1:Q:265:LEU:HB2	1.90	0.52
3:R:1085:LYS:C	3:R:1087:ASN:H	2.11	0.52
3:B:869:LEU:HD11	4:D:56:GLU:CB	2.32	0.52
4:D:172:ILE:HG21	4:D:195:LEU:HD13	1.90	0.52
6:F:14:TYR:H	6:F:14:TYR:HD1	1.57	0.52
2:G:311:ARG:HG3	2:G:311:ARG:HH11	1.74	0.52
2:G:42:ILE:H	2:G:42:ILE:CD1	2.21	0.52
4:S:250:ILE:O	4:S:254:GLU:HB2	2.10	0.52
3:B:215:PRO:O	3:B:216:ALA:HB3	2.09	0.52
3:B:221:ILE:CG2	3:B:226:LEU:HG	2.30	0.52
3:B:64:ARG:H	3:B:97:TRP:CB	2.22	0.52
3:B:530:TYR:CD2	3:B:530:TYR:O	2.62	0.52
5:E:113:ILE:O	5:E:164:MET:HB2	2.09	0.52
3:R:834:ASP:O	3:R:835:THR:HB	2.10	0.52
1:A:563:HIS:CD2	1:A:587:VAL:HG13	2.44	0.52
1:A:558:LYS:HE3	3:R:106:ASN:H	1.74	0.52
2:C:392:PRO:HB3	5:E:22:LEU:CD1	2.37	0.52
6:F:78:THR:HB	6:F:82:GLU:OE2	2.09	0.52
1:A:420:ASN:HD22	1:A:421:ARG:N	2.07	0.52
4:S:133:LEU:HD21	4:S:139:ILE:HD11	1.91	0.52
1:A:720:ASP:C	1:A:722:PHE:H	2.12	0.52
1:A:212:LEU:CD2	1:A:242:ILE:HD13	2.40	0.52
3:B:1014:ARG:HG3	3:B:1095:TYR:CE2	2.43	0.52
3:R:544:ARG:NH2	3:R:620:GLU:OE2	2.43	0.52
3:B:717:PRO:HD3	10:N:53:VAL:HG11	1.92	0.52
3:R:407:ARG:NH2	3:R:433:LEU:HG	2.24	0.52
2:G:42:ILE:N	2:G:42:ILE:HD12	2.25	0.52
10:N:21:PHE:CZ	10:N:38:LEU:HD13	2.44	0.52
1:A:94:LEU:HD11	1:A:180:ILE:HG23	1.91	0.52
3:B:391:THR:O	3:B:394:ILE:HG22	2.09	0.52
5:E:127:ILE:H	5:E:136:ILE:HB	1.74	0.52
3:R:112:GLU:O	3:R:114:VAL:HG23	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:791:LYS:HB2	1:A:794:GLU:HG3	1.91	0.52
1:Q:417:VAL:CG1	1:Q:464:LEU:HD13	2.39	0.52
5:E:17:GLU:HG2	5:E:20:LYS:HZ2	1.74	0.52
3:B:222:PRO:HD2	3:B:225:ILE:HD12	1.90	0.52
2:C:331:ARG:HH11	2:C:331:ARG:CB	2.22	0.52
1:Q:763:THR:CG2	1:Q:772:TYR:HA	2.40	0.52
4:D:134:GLY:O	4:D:135:THR:C	2.48	0.52
1:A:487:ILE:O	1:A:858:MET:HE2	2.10	0.52
2:C:65:ALA:HB1	8:K:19:PHE:CZ	2.45	0.52
1:Q:507:TYR:O	1:Q:508:LEU:HB2	2.08	0.52
4:S:172:ILE:N	4:S:172:ILE:HD12	2.25	0.52
4:S:203:CYS:O	4:S:204:THR:HG23	2.09	0.52
3:R:708:LEU:CD1	3:R:713:TYR:HB3	2.38	0.52
3:R:291:GLN:HB3	3:R:295:LYS:CE	2.39	0.52
1:A:785:SER:H	1:A:788:THR:HB	1.75	0.52
3:R:799:SER:O	3:R:802:VAL:HG23	2.10	0.52
1:Q:739:ASN:HB2	3:R:919:MET:SD	2.49	0.52
1:A:465:HIS:HD2	3:B:1048:ARG:HD2	1.75	0.52
3:B:680:TYR:CE2	3:B:692:ALA:HB1	2.45	0.52
5:T:39:LEU:HD23	5:T:41:ASP:N	2.24	0.52
4:D:69:SER:HB2	4:D:236:LEU:HD11	1.91	0.52
1:Q:468:GLN:HB2	3:R:1047:ASP:OD2	2.10	0.52
1:A:420:ASN:ND2	1:A:421:ARG:N	2.58	0.52
1:Q:372:TRP:HB3	1:Q:373:PRO:HD3	1.91	0.52
3:B:683:ASN:C	3:B:685:GLN:H	2.13	0.52
2:C:38:ASN:ND2	2:C:38:ASN:N	2.57	0.52
1:Q:319:ASP:HB3	3:R:1005:ALA:O	2.10	0.52
1:Q:687:ILE:CG1	1:Q:695:SER:HB3	2.40	0.52
4:S:133:LEU:HD21	4:S:139:ILE:HG12	1.90	0.52
9:X:8:SER:HB2	9:X:13:LEU:CD1	2.39	0.52
3:B:625:TYR:N	3:B:625:TYR:CD1	2.78	0.52
1:A:6:ILE:HD13	3:B:1113:LEU:HD22	1.91	0.52
3:R:544:ARG:NH1	3:R:544:ARG:HG3	2.18	0.52
3:B:234:THR:O	3:B:237:ASP:HB2	2.10	0.52
3:B:321:LYS:HD2	3:B:330:ARG:NE	2.24	0.52
3:B:81:SER:O	3:B:84:GLU:N	2.37	0.52
1:A:830:LEU:HD22	1:A:846:VAL:HG21	1.91	0.52
2:C:327:ARG:CZ	2:C:334:VAL:HG23	2.39	0.52
8:W:38:ALA:HB1	8:W:42:GLN:HE22	1.75	0.52
3:R:214:PHE:CZ	3:R:297:PHE:HA	2.40	0.52
1:A:374:GLY:O	1:A:410:HIS:HB2	2.10	0.52
3:B:64:ARG:HG2	3:B:97:TRP:CG	2.45	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:911:ASN:HD22	3:B:913:HIS:H	1.55	0.52
1:Q:13:ILE:HD11	1:Q:86:LEU:CD1	2.40	0.52
3:B:713:TYR:OH	3:B:718:ALA:HB3	2.08	0.52
2:C:337:GLU:OE2	2:C:339:ASN:CG	2.47	0.52
3:B:814:VAL:HA	3:B:834:ASP:O	2.10	0.52
4:D:96:ILE:HG22	4:D:116:SER:HA	1.91	0.52
3:B:1047:ASP:HA	3:B:1051:ASP:CB	2.39	0.52
1:A:428:ILE:HG23	1:A:452:PRO:HB2	1.92	0.52
2:C:132:ARG:HH11	2:C:132:ARG:HG3	1.75	0.52
5:T:88:GLU:HA	5:T:141:LYS:HA	1.92	0.52
5:E:17:GLU:CB	5:E:20:LYS:HD2	2.39	0.52
3:B:993:LEU:N	3:B:993:LEU:HD12	2.24	0.52
3:B:959:ARG:HG2	3:B:959:ARG:NH1	2.25	0.52
2:C:383:THR:CG2	3:B:1042:ALA:H	2.21	0.52
3:B:448:THR:HG22	3:B:449:GLN:H	1.74	0.52
2:G:366:PHE:CZ	2:G:375:ILE:HD12	2.45	0.52
4:S:50:ASN:ND2	10:Y:64:ARG:NH1	2.57	0.52
4:S:180:VAL:HG21	4:S:190:LEU:HG	1.90	0.52
4:S:174:ALA:O	4:S:195:LEU:HD13	2.09	0.52
1:A:741:THR:O	1:A:743:MET:N	2.43	0.52
4:D:187:VAL:HG21	14:D:1001:F3S:S4	2.50	0.52
11:Z:37:VAL:HG22	11:Z:38:ARG:H	1.74	0.52
11:Z:37:VAL:HG22	11:Z:38:ARG:N	2.25	0.52
3:B:708:LEU:CD1	3:B:713:TYR:HB3	2.38	0.52
1:Q:332:ILE:HD12	1:Q:332:ILE:N	2.25	0.52
2:C:240:ALA:O	2:C:241:ILE:HG13	2.10	0.52
2:G:132:ARG:HH11	2:G:132:ARG:HG3	1.74	0.52
5:E:13:ILE:HG23	5:E:25:ILE:HG21	1.91	0.52
1:A:687:ILE:CG1	1:A:695:SER:HB3	2.40	0.52
3:R:1101:ILE:O	3:R:1105:MET:HG3	2.10	0.52
3:R:69:ARG:O	3:R:70:VAL:HG13	2.10	0.52
3:B:256:LEU:C	3:B:258:GLN:H	2.13	0.52
2:C:42:ILE:CD1	2:C:42:ILE:H	2.23	0.52
8:W:82:LEU:CD1	8:W:84:ASN:HB2	2.39	0.52
1:Q:820:GLN:HA	1:Q:823:LEU:HD11	1.91	0.52
2:G:390:MET:HA	2:G:390:MET:HE2	1.91	0.52
10:Y:60:ILE:O	10:Y:62:TYR:N	2.42	0.52
4:S:254:GLU:HG3	9:X:77:ARG:HH12	1.75	0.52
3:B:603:THR:O	3:B:604:PHE:C	2.49	0.52
3:R:345:LEU:O	3:R:346:ALA:C	2.48	0.52
3:R:582:VAL:HG11	3:R:633:LEU:HD11	1.91	0.52
1:A:749:GLN:HA	1:A:781:PHE:HA	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:741:THR:O	1:A:742:GLN:C	2.48	0.52
5:E:108:VAL:HG22	5:E:162:LEU:HB2	1.91	0.52
1:A:500:GLN:CG	1:A:501:ASP:H	2.22	0.52
4:D:182:VAL:O	4:D:184:PRO:HD3	2.09	0.52
1:Q:785:SER:O	1:Q:787:ARG:N	2.43	0.52
3:R:63:ILE:HA	3:R:98:LEU:HA	1.91	0.52
2:C:389:THR:HG22	8:K:77:THR:HB	1.92	0.52
4:D:112:LYS:HB3	4:D:126:GLY:O	2.08	0.52
9:L:69:LEU:HD23	9:L:69:LEU:C	2.30	0.52
2:C:145:GLU:HG2	2:C:240:ALA:N	2.21	0.52
5:T:39:LEU:CD2	5:T:41:ASP:H	2.20	0.52
3:R:658:PRO:O	3:R:660:HIS:N	2.41	0.52
8:W:35:VAL:CG2	8:W:36:ILE:N	2.73	0.52
1:Q:27:ILE:HB	1:Q:75:ILE:HD12	1.91	0.52
3:R:959:ARG:NH1	3:R:959:ARG:HG2	2.25	0.52
3:B:729:PHE:CD2	3:B:730:THR:HG23	2.45	0.52
1:Q:245:ILE:HD12	1:Q:272:HIS:CD2	2.44	0.51
3:R:1080:PRO:O	3:R:1081:ILE:CG1	2.54	0.51
3:B:206:LYS:HE3	3:B:220:LYS:HZ2	1.75	0.51
3:B:139:ILE:HD12	10:N:61:HIS:NE2	2.25	0.51
7:V:42:LEU:HD22	7:V:79:ARG:O	2.10	0.51
7:V:43:PRO:O	7:V:44:TRP:HB2	2.10	0.51
10:Y:44:CYS:SG	10:Y:45:CYS:N	2.83	0.51
3:R:910:LEU:CD2	3:R:911:ASN:N	2.72	0.51
3:B:457:GLU:N	3:B:457:GLU:OE1	2.43	0.51
3:R:6:THR:HB	3:R:9:GLU:H	1.74	0.51
1:A:575:CYS:SG	1:A:582:HIS:HB2	2.51	0.51
1:A:387:ASP:OD2	1:A:389:ARG:N	2.43	0.51
3:B:160:VAL:HG21	3:B:426:LEU:HD23	1.91	0.51
1:A:206:TRP:CH2	3:B:1108:ILE:HG21	2.45	0.51
1:A:647:ARG:HB2	1:A:650:ASP:CG	2.30	0.51
3:B:963:LEU:HD13	3:B:982:ARG:NH2	2.24	0.51
4:D:35:TYR:HE2	9:L:23:THR:HG21	1.74	0.51
3:R:688:THR:CG2	3:R:863:LYS:HZ2	2.23	0.51
3:R:813:LYS:H	3:R:836:SER:HB3	1.74	0.51
3:R:557:HIS:ND1	3:R:566:VAL:HG13	2.25	0.51
3:B:852:ILE:HD12	11:P:35:PHE:HA	1.92	0.51
4:D:177:GLU:HB2	4:D:178:LYS:HZ2	1.71	0.51
3:R:870:ARG:NH2	3:R:996:MET:SD	2.83	0.51
1:Q:74:HIS:O	1:Q:75:ILE:HD12	2.10	0.51
5:E:9:SER:HB3	6:F:3:SER:HB2	1.92	0.51
4:D:133:LEU:HD21	4:D:139:ILE:CD1	2.40	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:625:TYR:N	3:R:625:TYR:CD1	2.77	0.51
1:A:276:TYR:HD2	1:A:277:PHE:HE1	1.51	0.51
2:G:352:LYS:O	2:G:354:LEU:N	2.43	0.51
1:A:316:LYS:HE2	3:B:1094:SER:HG	1.75	0.51
3:B:1060:VAL:C	3:B:1088:LEU:HD23	2.30	0.51
1:A:473:ILE:HD12	1:A:474:ALA:H	1.72	0.51
2:C:109:GLU:O	2:C:113:ALA:N	2.43	0.51
7:H:42:LEU:HB2	7:H:43:PRO:HD2	1.93	0.51
2:G:258:LEU:HB2	2:G:279:GLU:OE2	2.11	0.51
3:R:950:ILE:O	3:R:952:GLN:N	2.43	0.51
10:Y:22:ILE:O	10:Y:26:ASN:ND2	2.42	0.51
3:R:963:LEU:CD2	4:S:208:GLU:HG3	2.40	0.51
4:S:159:VAL:HG23	4:S:231:GLU:O	2.10	0.51
1:Q:376:ASN:HD22	1:Q:376:ASN:N	2.08	0.51
1:A:289:HIS:ND1	1:A:290:ARG:HG3	2.26	0.51
1:Q:575:CYS:SG	1:Q:582:HIS:HB2	2.51	0.51
1:A:368:GLY:O	1:A:374:GLY:HA3	2.10	0.51
3:R:116:ILE:HG22	3:R:390:VAL:HG21	1.91	0.51
3:R:98:LEU:HD13	3:R:98:LEU:C	2.31	0.51
3:B:764:LYS:HD2	3:B:771:ASP:CB	2.40	0.51
1:A:471:GLU:OE1	8:K:41:LEU:HD13	2.10	0.51
2:C:241:ILE:CG2	2:C:242:VAL:H	2.22	0.51
9:X:64:THR:CG2	9:X:65:PRO:HD2	2.33	0.51
1:A:488:THR:OG1	1:A:495:ILE:HD12	2.11	0.51
1:Q:747:LEU:CD1	1:Q:790:LEU:HD11	2.41	0.51
1:A:349:VAL:HG21	1:A:409:ARG:NH2	2.25	0.51
3:R:992:LYS:HE3	3:R:996:MET:SD	2.50	0.51
3:R:780:VAL:HG12	3:R:831:ALA:N	2.25	0.51
1:Q:422:GLN:NE2	1:Q:463:ASN:HD21	2.08	0.51
1:Q:301:ARG:O	1:Q:302:LEU:CG	2.57	0.51
1:A:312:ASN:HA	1:A:315:GLY:O	2.10	0.51
2:C:106:ARG:HH11	2:C:106:ARG:HG2	1.76	0.51
3:R:457:GLU:OE1	3:R:652:ALA:HB2	2.09	0.51
6:F:14:TYR:CD1	6:F:74:SER:CB	2.93	0.51
2:G:120:PRO:CB	2:G:256:SER:HB3	2.39	0.51
2:G:70:ILE:HD13	2:G:71:GLY:H	1.75	0.51
1:Q:826:ALA:HB1	2:G:334:VAL:CG1	2.37	0.51
7:V:42:LEU:HB2	7:V:43:PRO:HD2	1.93	0.51
4:S:134:GLY:O	4:S:135:THR:C	2.48	0.51
1:Q:638:PHE:CE2	1:Q:642:GLN:HG3	2.46	0.51
4:S:226:TYR:C	4:S:227:ILE:HG13	2.30	0.51
4:S:34:LEU:HD22	4:S:151:LYS:CB	2.37	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:352:SER:O	3:B:404:VAL:HG11	2.11	0.51
3:B:64:ARG:HB2	3:B:97:TRP:CD1	2.45	0.51
1:A:504:SER:O	1:A:508:LEU:HD12	2.10	0.51
3:B:705:THR:CG2	3:B:706:ARG:H	2.12	0.51
3:R:541:ARG:NH2	3:R:557:HIS:CD2	2.77	0.51
3:B:834:ASP:O	3:B:835:THR:HB	2.10	0.51
1:Q:543:ARG:CG	1:Q:544:GLU:H	2.24	0.51
9:L:35:ILE:CD1	9:L:75:ASN:ND2	2.73	0.51
1:A:491:TYR:HD1	1:A:607:GLN:NE2	2.08	0.51
1:Q:782:ILE:HG22	1:Q:784:SER:N	2.25	0.51
4:S:90:GLU:C	4:S:92:CYS:N	2.64	0.51
1:Q:831:ARG:NH2	2:G:385:MET:CG	2.74	0.51
3:R:170:ASN:O	3:R:171:ARG:O	2.29	0.51
2:G:331:ARG:CB	2:G:331:ARG:HH11	2.24	0.51
1:Q:242:ILE:HD13	1:Q:273:VAL:HG22	1.92	0.51
1:A:312:ASN:HB3	3:B:1015:GLN:OE1	2.11	0.51
3:B:245:ASP:CG	3:B:515:LEU:HG	2.30	0.51
1:A:475:GLU:OE1	3:B:1043:MET:N	2.40	0.51
6:U:57:GLU:C	6:U:59:LEU:H	2.13	0.51
2:C:292:ILE:CG2	2:C:293:ILE:N	2.74	0.51
7:H:44:TRP:O	7:H:79:ARG:HD3	2.11	0.51
3:R:457:GLU:OE1	3:R:457:GLU:N	2.43	0.51
5:E:174:TRP:HE3	5:E:174:TRP:HA	1.76	0.51
5:T:64:GLY:O	8:W:42:GLN:HG3	2.10	0.51
1:Q:491:TYR:HD1	1:Q:607:GLN:NE2	2.09	0.51
1:Q:647:ARG:HB2	1:Q:650:ASP:CG	2.31	0.51
4:S:79:PRO:HB2	4:S:149:TYR:HE1	1.75	0.51
1:A:64:THR:CG2	1:A:65:LEU:H	2.22	0.51
3:B:291:GLN:O	3:B:295:LYS:HG2	2.10	0.51
3:B:63:ILE:HA	3:B:98:LEU:HA	1.92	0.51
3:B:198:VAL:O	3:B:198:VAL:HG12	2.10	0.51
1:A:723:ASN:O	1:A:724:PHE:C	2.48	0.51
3:R:89:ASN:HD21	3:R:863:LYS:HZ3	1.58	0.51
1:A:552:ILE:HD12	1:A:552:ILE:C	2.30	0.51
5:E:58:ILE:HD12	5:E:58:ILE:N	2.25	0.51
5:T:173:GLU:O	5:T:177:GLN:OE1	2.29	0.51
9:X:43:TYR:O	9:X:44:TYR:HB3	2.11	0.51
1:Q:620:SER:C	1:Q:622:GLU:H	2.12	0.51
3:B:694:LEU:HD13	3:B:694:LEU:C	2.31	0.51
1:A:68:CYS:SG	1:A:71:HIS:CE1	3.03	0.51
3:B:227:MET:O	3:B:232:ILE:HB	2.11	0.51
1:A:486:ILE:HG23	1:A:487:ILE:HG13	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:812:ARG:HG3	2:C:86:THR:HG23	1.93	0.51
6:F:68:VAL:O	6:F:72:LEU:HG	2.11	0.51
3:R:869:LEU:HD21	4:S:56:GLU:HB2	1.92	0.51
2:C:24:LEU:N	2:C:25:PRO:HD2	2.25	0.51
1:Q:527:VAL:CG1	1:Q:530:VAL:HB	2.40	0.51
1:Q:345:LYS:HG2	1:Q:410:HIS:CD2	2.45	0.51
3:B:5:LEU:N	3:B:5:LEU:HD13	2.26	0.51
3:R:94:ALA:O	3:R:118:ASP:HA	2.11	0.51
3:R:297:PHE:O	3:R:298:LEU:HB2	2.10	0.51
3:B:353:LEU:O	3:B:356:VAL:HG12	2.11	0.51
3:B:887:VAL:HG12	3:B:888:ILE:N	2.25	0.51
4:D:206:CYS:HB3	14:D:1001:F3S:S3	2.51	0.51
1:Q:742:GLN:HB2	3:R:919:MET:CE	2.39	0.51
1:Q:52:ILE:HD13	1:Q:52:ILE:H	1.75	0.51
6:F:30:SER:CB	6:F:38:TYR:HE1	2.24	0.51
9:X:15:LEU:O	9:X:54:ILE:HA	2.10	0.51
3:B:871:ILE:CG2	3:B:872:PRO:HD2	2.41	0.51
1:Q:656:ASP:HA	1:Q:659:LYS:CD	2.40	0.51
1:Q:63:ASN:O	1:Q:64:THR:O	2.29	0.51
9:L:45:GLN:HE22	9:L:48:PRO:CD	2.23	0.51
10:N:33:LYS:HA	10:N:36:ASP:OD2	2.11	0.51
3:B:1061:CYS:HA	3:B:1088:LEU:HD23	1.93	0.51
3:B:1081:ILE:HG21	3:B:1085:LYS:HZ2	1.76	0.51
1:Q:289:HIS:HB2	1:Q:295:LEU:CD2	2.38	0.51
7:H:16:LEU:N	7:H:16:LEU:HD12	2.26	0.51
3:R:165:GLU:O	3:R:432:SER:HB2	2.10	0.51
2:G:343:ALA:HB2	2:G:371:GLU:HG3	1.92	0.51
3:R:702:LEU:HD13	10:Y:47:ARG:CD	2.41	0.51
1:Q:488:THR:HG22	1:Q:491:TYR:H	1.76	0.51
1:Q:853:ASP:HB2	2:G:311:ARG:NH1	2.21	0.51
1:Q:856:PHE:HB3	1:Q:859:TYR:CD1	2.45	0.51
3:B:346:ALA:O	3:B:350:PHE:N	2.44	0.51
3:R:291:GLN:O	3:R:295:LYS:HG2	2.10	0.51
10:N:21:PHE:CE1	10:N:38:LEU:HD13	2.46	0.51
3:B:193:THR:HG21	3:B:197:ARG:N	2.26	0.51
1:A:503:ILE:HD11	1:A:732:GLY:C	2.31	0.51
3:B:963:LEU:HD22	4:D:208:GLU:HG3	1.91	0.51
4:D:13:ILE:CG1	4:D:238:PRO:HB2	2.40	0.51
3:R:109:ALA:O	3:R:110:GLU:O	2.29	0.51
2:C:393:ILE:HB	5:E:18:PHE:O	2.10	0.51
5:E:179:LYS:HZ1	6:F:82:GLU:N	2.06	0.51
2:C:126:LEU:HG	2:C:249:TYR:O	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:654:ILE:HD12	3:R:654:ILE:N	2.22	0.51
3:R:1046:LYS:NZ	3:R:1051:ASP:OD2	2.40	0.51
2:G:297:ILE:O	2:G:301:LEU:HG	2.10	0.51
1:A:414:GLY:HA2	1:A:434:ARG:NE	2.26	0.51
4:S:67:PHE:HD2	4:S:121:VAL:CG1	2.23	0.51
9:X:61:GLY:O	9:X:63:ILE:N	2.44	0.51
6:U:31:SER:HA	6:U:35:GLN:NE2	2.26	0.51
3:B:672:MET:CE	3:B:885:LYS:HD3	2.40	0.51
1:Q:27:ILE:CG2	1:Q:75:ILE:HD11	2.41	0.51
7:V:73:GLY:O	7:V:74:GLU:HG3	2.10	0.51
3:R:679:LEU:HD23	3:R:716:ARG:HG2	1.93	0.51
3:R:1061:CYS:H	3:R:1065:GLY:HA2	1.76	0.51
1:A:49:LEU:HD22	1:A:71:HIS:O	2.11	0.51
3:R:247:GLU:C	3:R:249:GLN:H	2.13	0.51
3:R:88:ARG:HG2	11:Z:33:ILE:HD11	1.93	0.51
3:R:70:VAL:CG1	3:R:90:LEU:HD23	2.41	0.51
3:B:247:GLU:C	3:B:249:GLN:H	2.13	0.51
3:B:325:LEU:HD21	3:B:332:PRO:CD	2.36	0.51
3:B:248:VAL:CG2	3:B:329:ARG:HH22	2.20	0.51
10:N:18:TRP:CH2	10:N:54:ASP:OD1	2.64	0.51
1:A:768:HIS:NE2	3:B:450:TRP:CZ2	2.79	0.51
5:E:134:LYS:HD3	5:E:174:TRP:HE1	1.76	0.51
2:G:287:GLU:OE2	7:V:79:ARG:CZ	2.59	0.51
2:G:391:ARG:HH21	8:W:42:GLN:HG2	1.76	0.51
7:V:69:SER:HB2	7:V:75:VAL:CG2	2.38	0.51
2:C:55:ALA:HA	2:C:58:GLU:OE2	2.10	0.51
4:S:165:ARG:HE	4:S:227:ILE:HB	1.74	0.51
6:U:78:THR:HB	6:U:82:GLU:OE2	2.10	0.51
3:R:262:ILE:N	3:R:262:ILE:HD12	2.25	0.51
1:A:785:SER:O	1:A:787:ARG:N	2.43	0.51
3:R:193:THR:CB	3:R:197:ARG:O	2.59	0.51
4:D:204:THR:O	4:D:206:CYS:N	2.44	0.51
3:R:278:ILE:HG23	3:R:285:ARG:HH22	1.75	0.51
3:B:840:ARG:HH11	3:B:1021:ALA:HB2	1.76	0.51
3:R:1047:ASP:HA	3:R:1051:ASP:CB	2.38	0.51
1:Q:181:ARG:HG2	1:Q:181:ARG:HH11	1.75	0.51
1:A:796:PHE:CZ	3:B:445:LEU:HB3	2.46	0.51
4:S:90:GLU:O	4:S:92:CYS:N	2.39	0.51
1:A:665:ILE:HG13	1:A:666:ASP:N	2.25	0.51
1:Q:238:LYS:O	1:Q:242:ILE:HG13	2.11	0.51
1:Q:764:ARG:NH1	1:Q:769:PHE:O	2.42	0.51
3:R:81:SER:H	3:R:84:GLU:HB2	1.75	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:859:TYR:HB2	2:C:64:ILE:HG12	1.93	0.51
7:V:45:ILE:CG2	7:V:79:ARG:HB3	2.41	0.51
1:Q:470:GLU:HB2	8:W:41:LEU:HD12	1.93	0.51
3:R:871:ILE:CG2	3:R:872:PRO:HD2	2.41	0.51
10:Y:18:TRP:O	10:Y:20:SER:N	2.44	0.51
10:Y:40:VAL:HG11	10:Y:46:ARG:HG3	1.93	0.51
10:Y:60:ILE:HG23	10:Y:61:HIS:ND1	2.25	0.51
2:G:24:LEU:O	2:G:29:VAL:HG23	2.11	0.51
1:Q:334:ILE:CG2	1:Q:482:VAL:HG11	2.40	0.51
7:V:23:LEU:CD2	7:V:64:ARG:HB2	2.40	0.51
8:W:79:ARG:NH1	8:W:79:ARG:HG3	2.25	0.51
2:C:54:LEU:O	2:C:58:GLU:N	2.44	0.51
8:K:18:VAL:CG1	8:K:22:LEU:HD12	2.39	0.51
3:R:972:ASP:HB3	3:R:975:THR:CG2	2.41	0.51
4:S:21:PRO:HB2	4:S:23:GLU:OE1	2.11	0.51
1:A:761:TYR:HB3	3:B:622:GLU:OE1	2.10	0.51
3:B:587:PRO:O	3:B:588:LEU:CD2	2.54	0.51
3:R:343:LEU:HD11	3:R:575:VAL:CG2	2.41	0.51
1:A:748:GLY:HA2	1:A:781:PHE:CD2	2.45	0.51
5:T:127:ILE:HG22	5:T:127:ILE:O	2.10	0.51
5:T:147:ILE:O	5:T:148:SER:CB	2.58	0.51
3:B:669:GLN:C	3:B:671:ALA:H	2.13	0.51
11:Z:16:GLU:CD	11:Z:26:CYS:HB2	2.31	0.51
1:Q:15:SER:HA	1:Q:203:ARG:HH21	1.74	0.51
1:A:548:GLY:C	1:A:550:GLN:N	2.63	0.51
3:B:1004:ARG:HG3	3:B:1004:ARG:HH11	1.76	0.51
1:A:525:LEU:C	1:A:527:VAL:N	2.62	0.51
1:Q:872:PHE:HA	1:Q:876:VAL:CG2	2.40	0.51
1:A:607:GLN:O	1:A:608:PRO:C	2.49	0.51
3:B:804:VAL:HG23	3:B:847:VAL:HG23	1.91	0.51
1:Q:691:THR:O	1:Q:694:GLU:HB2	2.10	0.51
5:T:87:GLY:O	5:T:88:GLU:HB2	2.11	0.51
3:R:855:THR:C	3:R:857:GLU:H	2.12	0.51
2:C:301:LEU:HA	2:C:304:GLN:CG	2.41	0.51
8:K:31:GLU:O	8:K:35:VAL:HG13	2.10	0.51
4:D:3:ILE:CD1	9:L:83:TYR:HA	2.41	0.51
1:Q:612:LEU:C	1:Q:612:LEU:HD23	2.32	0.51
1:Q:340:PRO:HB2	1:Q:343:ILE:HG12	1.91	0.51
1:A:661:ILE:HD11	1:A:714:ILE:HB	1.93	0.51
5:E:109:HIS:HD2	5:E:111:SER:OG	1.94	0.51
4:S:71:GLU:O	4:S:73:LEU:N	2.44	0.51
3:R:1081:ILE:HG21	3:R:1085:LYS:HZ2	1.76	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:1014:ARG:HD2	3:B:1095:TYR:CD1	2.46	0.51
11:Z:24:VAL:HG13	11:Z:24:VAL:O	2.09	0.51
1:A:851:GLY:C	1:A:853:ASP:H	2.13	0.51
5:E:2:TYR:CE2	6:F:41:LEU:HD11	2.45	0.51
3:R:452:ARG:HG3	3:R:452:ARG:HH11	1.76	0.51
4:S:66:PRO:CG	10:Y:13:LEU:HD11	2.40	0.51
1:Q:859:TYR:HB2	2:G:64:ILE:HG13	1.92	0.51
1:Q:728:MET:HE3	3:R:913:HIS:HA	1.92	0.51
1:A:759:ARG:NH2	1:A:763:THR:HG23	2.26	0.51
3:B:94:ALA:O	3:B:119:LEU:N	2.44	0.51
3:R:17:TYR:HB2	3:R:604:PHE:CD1	2.45	0.51
3:B:355:ARG:HG2	3:B:356:VAL:N	2.26	0.51
3:B:393:ARG:O	3:B:393:ARG:HG2	2.11	0.51
3:B:972:ASP:HB3	3:B:975:THR:HG23	1.93	0.51
3:R:60:LEU:CD2	3:R:98:LEU:HD21	2.34	0.51
3:R:1004:ARG:HG3	3:R:1004:ARG:HH11	1.75	0.51
1:A:375:ALA:CB	1:A:409:ARG:HA	2.41	0.51
3:B:52:GLU:CG	3:B:56:LEU:HD23	2.40	0.51
2:C:16:LYS:HZ3	3:R:75:ARG:NH1	2.09	0.51
1:Q:330:PRO:HG3	3:R:731:GLY:O	2.10	0.51
1:A:323:ARG:HB2	3:B:1026:LEU:HD12	1.92	0.51
3:R:879:ALA:HA	3:R:884:GLN:O	2.10	0.51
2:G:331:ARG:HH11	2:G:331:ARG:HB3	1.75	0.51
11:Z:46:LYS:NZ	11:Z:46:LYS:HB3	2.26	0.51
4:D:106:PRO:HA	4:D:134:GLY:HA2	1.92	0.51
7:H:80:TYR:O	7:H:81:VAL:CB	2.59	0.51
10:Y:20:SER:HA	10:Y:23:THR:HB	1.92	0.51
2:G:51:ILE:O	2:G:55:ALA:HB2	2.11	0.51
1:Q:353:ILE:CD1	1:Q:407:ILE:HG23	2.40	0.51
3:B:226:LEU:C	3:B:228:ARG:H	2.14	0.51
5:T:119:LYS:HE3	5:T:130:GLU:OE2	2.11	0.51
3:B:975:THR:O	4:D:26:ASN:ND2	2.44	0.51
5:E:38:ILE:HD13	5:E:153:VAL:O	2.11	0.51
5:E:43:GLY:HA3	5:E:76:THR:HG21	1.93	0.51
3:R:282:ARG:HD3	3:R:285:ARG:CD	2.41	0.51
1:Q:552:ILE:C	1:Q:552:ILE:HD12	2.32	0.51
3:B:687:ARG:HH11	3:B:687:ARG:HB3	1.76	0.51
11:Z:17:GLN:O	11:Z:19:LYS:N	2.44	0.51
9:X:1:MET:SD	9:X:3:ILE:HD11	2.51	0.51
3:R:679:LEU:HD23	3:R:716:ARG:HD3	1.92	0.51
1:Q:308:ARG:NH2	3:R:1012:LEU:CD1	2.74	0.50
3:R:521:ILE:HB	3:R:567:HIS:ND1	2.26	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:227:MET:HE3	3:B:312:ALA:HB1	1.92	0.50
1:A:334:ILE:CD1	1:A:628:MET:HB3	2.38	0.50
6:F:54:LYS:HZ2	6:F:54:LYS:HB2	1.75	0.50
1:Q:500:GLN:CG	1:Q:501:ASP:H	2.24	0.50
3:R:724:LEU:HD13	3:R:990:TYR:CE2	2.46	0.50
3:B:339:ALA:HB2	3:B:618:ALA:CB	2.34	0.50
3:B:372:SER:O	3:B:373:LYS:HB2	2.10	0.50
4:D:30:ARG:NH1	9:L:21:ASP:OD1	2.43	0.50
1:Q:86:LEU:HB3	1:Q:207:MET:CE	2.40	0.50
3:R:108:GLU:OE2	3:R:108:GLU:C	2.50	0.50
3:B:123:LEU:HD22	3:B:151:TYR:CE1	2.46	0.50
3:B:771:ASP:CG	3:B:816:PRO:HD3	2.31	0.50
4:D:124:ILE:HG13	4:D:124:ILE:O	2.11	0.50
3:R:644:SER:O	3:R:647:ILE:HG13	2.11	0.50
1:Q:27:ILE:HB	1:Q:75:ILE:CD1	2.40	0.50
3:R:22:GLY:O	3:R:23:LEU:C	2.49	0.50
2:G:331:ARG:HB2	2:G:348:GLU:HG3	1.92	0.50
3:R:1083:GLY:C	3:R:1085:LYS:N	2.64	0.50
2:C:104:LEU:C	2:C:104:LEU:CD2	2.80	0.50
2:C:253:THR:C	2:C:255:GLY:H	2.14	0.50
3:B:433:LEU:HD12	3:B:435:ARG:HH22	1.75	0.50
7:H:49:ASP:O	7:H:53:ARG:HB3	2.11	0.50
5:E:173:GLU:O	5:E:177:GLN:OE1	2.29	0.50
2:G:269:VAL:CA	2:G:272:VAL:HG23	2.39	0.50
4:S:134:GLY:O	4:S:135:THR:O	2.29	0.50
2:C:30:ASP:O	2:C:31:ASP:HB3	2.12	0.50
4:S:167:TYR:HB2	4:S:225:LYS:O	2.11	0.50
4:S:27:ALA:HB1	9:X:23:THR:HG22	1.92	0.50
1:Q:365:VAL:HG22	1:Q:365:VAL:O	2.11	0.50
3:R:345:LEU:HD11	3:R:476:ILE:HG13	1.92	0.50
3:B:301:LEU:HD22	3:B:483:ARG:NH2	2.24	0.50
3:B:537:ALA:CB	3:B:557:HIS:HE2	2.24	0.50
3:B:537:ALA:HB1	3:B:541:ARG:CZ	2.41	0.50
5:E:147:ILE:O	5:E:148:SER:CB	2.59	0.50
3:B:727:MET:HB3	3:B:983:ILE:HG23	1.92	0.50
1:Q:748:GLY:HA2	1:Q:781:PHE:CD2	2.46	0.50
1:Q:785:SER:C	1:Q:787:ARG:H	2.15	0.50
3:R:764:LYS:NZ	3:R:814:VAL:N	2.47	0.50
3:R:530:TYR:CD2	3:R:530:TYR:O	2.64	0.50
2:C:390:MET:O	2:C:391:ARG:HB3	2.11	0.50
3:B:687:ARG:NH1	3:B:687:ARG:CG	2.73	0.50
1:A:626:TRP:O	1:A:627:LEU:C	2.49	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:881:ARG:NH1	3:R:989:TYR:HB3	2.27	0.50
5:T:140:ASP:O	5:T:142:VAL:HG13	2.11	0.50
1:Q:665:ILE:HG13	1:Q:666:ASP:N	2.26	0.50
1:Q:667:ARG:O	1:Q:670:VAL:CG2	2.56	0.50
9:L:61:GLY:O	9:L:63:ILE:N	2.43	0.50
2:C:16:LYS:NZ	3:R:75:ARG:HH12	2.09	0.50
11:P:20:VAL:C	11:P:21:LEU:HD23	2.32	0.50
3:R:778:ALA:HA	3:R:783:TYR:CZ	2.46	0.50
5:T:46:LEU:HD11	5:T:77:TYR:HB2	1.93	0.50
9:L:92:LYS:HD2	9:L:92:LYS:N	2.26	0.50
3:B:237:ASP:O	3:B:241:ALA:HB2	2.11	0.50
6:F:51:SER:O	6:F:55:VAL:HG23	2.12	0.50
4:S:106:PRO:HD3	4:S:135:THR:HG23	1.93	0.50
2:G:55:ALA:O	2:G:58:GLU:HB2	2.11	0.50
1:Q:607:GLN:HB2	1:Q:608:PRO:CD	2.40	0.50
1:Q:723:ASN:O	1:Q:724:PHE:C	2.49	0.50
1:A:742:GLN:HB2	3:B:919:MET:CE	2.41	0.50
5:T:126:ILE:CG2	5:T:136:ILE:H	2.23	0.50
10:N:35:LEU:O	10:N:38:LEU:O	2.29	0.50
3:B:368:GLN:NE2	3:B:386:ARG:HE	2.07	0.50
3:B:373:LYS:CD	3:B:375:ARG:HD2	2.42	0.50
4:D:79:PRO:HB2	4:D:149:TYR:HE1	1.76	0.50
4:D:6:LEU:HB3	4:D:14:ASP:HB2	1.93	0.50
3:R:759:SER:CB	3:R:863:LYS:HA	2.40	0.50
3:B:45:GLU:HG3	3:B:46:GLN:N	2.26	0.50
8:K:50:LEU:O	8:K:52:ASP:N	2.44	0.50
5:E:43:GLY:HA3	5:E:76:THR:CG2	2.42	0.50
1:A:807:VAL:CG2	3:B:443:ARG:HD3	2.39	0.50
6:U:30:SER:HB3	6:U:38:TYR:HE1	1.76	0.50
3:R:662:GLN:O	3:R:663:SER:C	2.50	0.50
11:Z:22:PRO:HG2	11:Z:23:GLY:H	1.76	0.50
4:S:59:ALA:O	4:S:62:LEU:HB2	2.11	0.50
1:A:277:PHE:HD1	1:A:277:PHE:N	2.09	0.50
2:C:331:ARG:HB2	2:C:348:GLU:HG3	1.93	0.50
3:R:184:THR:N	3:R:207:ASP:O	2.44	0.50
3:R:252:LEU:CD1	3:R:323:ILE:HB	2.41	0.50
1:A:469:SER:O	1:A:473:ILE:HG13	2.12	0.50
7:H:43:PRO:O	7:H:44:TRP:HB2	2.09	0.50
3:R:448:THR:HG22	3:R:452:ARG:HD2	1.94	0.50
7:V:16:LEU:HD12	7:V:16:LEU:N	2.27	0.50
7:V:43:PRO:O	7:V:44:TRP:CB	2.60	0.50
3:R:930:GLY:O	10:Y:47:ARG:NH1	2.45	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:489:PRO:HA	1:Q:858:MET:HG3	1.93	0.50
1:A:234:ASP:O	1:A:236:THR:N	2.44	0.50
1:A:19:ILE:HA	1:A:22:MET:HE1	1.94	0.50
1:A:93:PHE:CE2	1:A:204:PRO:HB3	2.46	0.50
5:E:101:LEU:HD11	5:E:160:ILE:HG21	1.93	0.50
5:E:147:ILE:HD11	5:E:163:THR:HB	1.94	0.50
3:B:895:VAL:HG11	4:D:34:LEU:CG	2.41	0.50
4:D:18:GLU:OE1	4:D:225:LYS:HD2	2.11	0.50
1:Q:775:SER:OG	1:Q:777:GLU:HG2	2.12	0.50
5:E:53:THR:HG22	5:E:70:VAL:HA	1.93	0.50
3:R:358:PHE:C	3:R:360:ALA:N	2.65	0.50
2:C:336:GLY:C	2:C:337:GLU:OE1	2.50	0.50
1:Q:420:ASN:ND2	1:Q:421:ARG:N	2.60	0.50
1:Q:589:LYS:O	1:Q:592:ILE:HB	2.10	0.50
1:Q:563:HIS:CD2	1:Q:587:VAL:HG13	2.47	0.50
3:B:846:ILE:O	3:B:846:ILE:HG22	2.11	0.50
1:A:409:ARG:HH11	1:A:409:ARG:CB	2.24	0.50
8:K:35:VAL:CG2	8:K:36:ILE:N	2.73	0.50
3:B:369:LEU:HD21	3:B:379:LEU:HD22	1.94	0.50
3:R:134:THR:HG22	3:R:137:LYS:HG3	1.93	0.50
3:R:340:ASN:CG	3:R:340:ASN:O	2.50	0.50
1:A:277:PHE:CD1	1:A:277:PHE:N	2.79	0.50
3:B:1066:TYR:CD2	3:B:1105:MET:HE3	2.46	0.50
3:R:184:THR:HG22	3:R:185:HIS:N	2.27	0.50
1:A:489:PRO:CA	1:A:858:MET:HG3	2.41	0.50
1:Q:220:ARG:H	1:Q:221:PRO:CD	2.25	0.50
8:W:82:LEU:N	8:W:82:LEU:HD23	2.26	0.50
6:F:40:TYR:O	6:F:43:SER:OG	2.29	0.50
1:Q:485:ASN:ND2	3:R:1039:PHE:CE2	2.79	0.50
4:S:6:LEU:HB3	4:S:14:ASP:HB2	1.93	0.50
3:B:6:THR:HB	3:B:9:GLU:H	1.76	0.50
5:T:108:VAL:HG22	5:T:162:LEU:HB2	1.93	0.50
5:T:113:ILE:O	5:T:164:MET:HB2	2.12	0.50
3:B:904:VAL:HG13	10:N:44:CYS:HB3	1.94	0.50
1:A:203:ARG:HG3	1:A:203:ARG:NH1	2.21	0.50
3:B:111:PRO:O	3:B:112:GLU:CB	2.60	0.50
1:A:649:GLU:HA	1:A:652:SER:OG	2.12	0.50
1:Q:785:SER:H	1:Q:788:THR:HB	1.76	0.50
3:R:360:ALA:HB2	3:R:393:ARG:HH12	1.77	0.50
3:R:97:TRP:O	3:R:98:LEU:HB3	2.11	0.50
3:B:688:THR:O	3:B:688:THR:HG23	2.10	0.50
4:D:112:LYS:C	4:D:114:ILE:H	2.14	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:66:PRO:O	4:D:123:PRO:HA	2.11	0.50
3:R:672:MET:CE	3:R:885:LYS:HD3	2.42	0.50
1:Q:791:LYS:H	1:Q:794:GLU:HB2	1.76	0.50
7:V:38:ARG:NH1	7:V:38:ARG:HG2	2.25	0.50
3:R:419:TRP:HZ3	3:R:712:GLY:CA	2.24	0.50
3:B:369:LEU:CD2	3:B:384:LEU:HD13	2.41	0.50
10:Y:33:LYS:HA	10:Y:36:ASP:OD2	2.11	0.50
4:D:252:LYS:O	4:D:255:GLU:N	2.44	0.50
10:N:20:SER:HA	10:N:23:THR:HB	1.92	0.50
2:C:379:ILE:HD13	2:C:379:ILE:N	2.26	0.50
1:Q:289:HIS:ND1	1:Q:290:ARG:HG3	2.27	0.50
3:R:432:SER:O	3:R:435:ARG:NE	2.44	0.50
3:R:741:ASN:O	3:R:745:VAL:HG23	2.12	0.50
1:Q:396:GLU:C	1:Q:398:ALA:H	2.15	0.50
1:A:764:ARG:NH1	1:A:769:PHE:O	2.44	0.50
1:Q:756:ARG:HH22	1:Q:776:PRO:HA	1.75	0.50
3:R:532:ASP:OD1	3:R:535:GLU:HB2	2.11	0.50
1:A:872:PHE:CD2	1:A:876:VAL:HG21	2.46	0.50
3:R:369:LEU:HD21	3:R:379:LEU:HD22	1.92	0.50
3:B:799:SER:O	3:B:802:VAL:HG23	2.12	0.50
5:T:43:GLY:HA3	5:T:76:THR:HG21	1.92	0.50
1:Q:692:LEU:HD12	1:Q:692:LEU:H	1.76	0.50
1:A:420:ASN:HD22	1:A:421:ARG:H	1.60	0.50
4:D:90:GLU:C	4:D:92:CYS:N	2.63	0.50
4:D:47:ILE:HB	4:D:140:SER:O	2.11	0.50
11:Z:21:LEU:HD23	11:Z:21:LEU:N	2.25	0.50
3:B:265:VAL:O	3:B:268:ALA:HB3	2.12	0.50
3:B:412:GLN:NE2	3:B:425:HIS:HE1	2.09	0.50
4:D:45:TYR:HE1	11:P:44:ILE:HD13	1.77	0.50
5:E:93:ASP:CG	5:E:94:ASN:H	2.14	0.50
7:H:25:ILE:H	7:H:25:ILE:HD12	1.76	0.50
7:H:73:GLY:O	7:H:74:GLU:HG3	2.11	0.50
3:B:1087:ASN:C	3:B:1088:LEU:HG	2.32	0.50
3:B:254:PRO:O	3:B:257:GLU:N	2.44	0.50
3:B:763:VAL:HG22	3:B:770:GLU:HG3	1.92	0.50
10:N:16:ASP:OD2	10:N:17:LYS:HG3	2.11	0.50
1:Q:220:ARG:HD2	1:Q:236:THR:OG1	2.11	0.50
1:A:830:LEU:HD13	1:A:846:VAL:HG21	1.92	0.50
3:B:407:ARG:NH2	3:B:433:LEU:HG	2.26	0.50
2:G:365:GLU:HG2	2:G:366:PHE:N	2.27	0.50
5:T:15:PRO:HG2	8:W:45:MET:CB	2.42	0.50
2:G:390:MET:SD	5:T:57:GLY:C	2.90	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:859:TYR:HB2	2:G:64:ILE:HG12	1.94	0.50
1:Q:486:ILE:CD1	1:Q:628:MET:HE2	2.42	0.50
4:S:172:ILE:HG21	4:S:195:LEU:HD13	1.92	0.50
1:A:761:TYR:CB	1:A:764:ARG:HG3	2.40	0.50
1:A:584:SER:OG	1:A:585:TYR:N	2.43	0.50
3:R:221:ILE:CG2	3:R:226:LEU:HG	2.36	0.50
3:R:295:LYS:HG3	3:R:296:TYR:CD1	2.47	0.50
3:B:358:PHE:C	3:B:360:ALA:N	2.65	0.50
3:B:373:LYS:HE2	3:B:378:LYS:HE3	1.94	0.50
5:E:126:ILE:CG2	5:E:136:ILE:H	2.23	0.50
3:B:661:ASN:ND2	3:B:921:LEU:O	2.42	0.50
3:R:764:LYS:HD2	3:R:771:ASP:CB	2.41	0.50
3:R:368:GLN:NE2	3:R:386:ARG:HE	2.07	0.50
3:R:393:ARG:NE	3:R:403:TRP:HZ3	2.07	0.50
9:L:14:GLU:OE1	9:L:56:LYS:HG2	2.11	0.50
1:Q:464:LEU:CD1	1:Q:465:HIS:N	2.72	0.50
8:W:91:SER:OG	8:W:92:LEU:N	2.45	0.50
3:B:780:VAL:HG11	3:B:831:ALA:CB	2.41	0.50
6:U:35:GLN:HA	6:U:38:TYR:HD1	1.71	0.50
5:T:13:ILE:HG23	5:T:25:ILE:HG21	1.93	0.50
3:R:28:LEU:C	3:R:30:SER:H	2.15	0.50
2:C:15:GLU:HA	2:C:18:LYS:HD2	1.92	0.50
1:Q:64:THR:CG2	1:Q:65:LEU:H	2.20	0.50
1:A:340:PRO:HB2	1:A:343:ILE:HG12	1.92	0.50
3:R:903:GLY:HA3	4:S:161:LEU:HD12	1.92	0.50
1:Q:304:GLY:C	1:Q:310:ARG:HD2	2.32	0.50
5:E:123:VAL:C	5:E:125:GLY:N	2.65	0.50
3:R:1080:PRO:C	3:R:1081:ILE:HG13	2.32	0.50
3:B:70:VAL:CG1	3:B:80:ILE:HD13	2.41	0.50
1:Q:447:LEU:HD13	3:R:734:MET:SD	2.51	0.50
3:R:965:ASP:C	3:R:967:THR:H	2.14	0.50
3:B:345:LEU:N	3:B:345:LEU:HD12	2.27	0.50
3:B:345:LEU:O	3:B:346:ALA:C	2.50	0.50
3:R:6:THR:O	3:R:7:ILE:HD13	2.12	0.50
1:A:203:ARG:CG	1:A:203:ARG:NH1	2.70	0.50
3:B:388:ASP:O	3:B:391:THR:N	2.45	0.50
3:R:1033:ARG:HD2	3:R:1037:ILE:HD11	1.94	0.50
3:B:532:ASP:OD1	3:B:535:GLU:HB2	2.11	0.50
1:Q:749:GLN:HA	1:Q:781:PHE:HA	1.94	0.50
3:R:50:PRO:CG	3:R:51:THR:H	2.16	0.50
2:C:133:ASP:C	2:C:135:ASP:H	2.13	0.50
1:Q:668:ALA:CB	1:Q:707:LEU:HD13	2.41	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:330:PRO:HG3	3:B:731:GLY:O	2.12	0.50
1:Q:720:ASP:O	1:Q:722:PHE:N	2.45	0.50
2:G:349:VAL:HG13	2:G:353:HIS:CD2	2.47	0.50
3:R:1085:LYS:O	3:R:1086:SER:OG	2.22	0.50
3:B:1085:LYS:C	3:B:1087:ASN:H	2.16	0.50
3:R:237:ASP:O	3:R:241:ALA:HB2	2.12	0.50
3:B:167:LEU:HD12	3:B:190:ILE:CD1	2.41	0.50
7:H:80:TYR:CE1	7:H:82:ILE:HD11	2.47	0.50
6:F:49:ALA:O	6:F:53:GLN:HB2	2.11	0.50
1:Q:508:LEU:HB3	1:Q:638:PHE:HE2	1.77	0.50
1:Q:532:ILE:HD12	9:X:12:TYR:OH	2.12	0.50
3:B:545:ARG:CZ	3:B:581:ILE:HG21	2.41	0.50
3:B:214:PHE:HZ	3:B:297:PHE:CA	2.22	0.50
3:B:1033:ARG:HG3	3:B:1034:ASP:N	2.26	0.50
1:A:785:SER:C	1:A:787:ARG:H	2.16	0.50
3:B:97:TRP:HZ3	3:B:113:GLU:CD	2.16	0.50
3:R:111:PRO:O	3:R:112:GLU:CB	2.60	0.50
8:K:26:ARG:CG	8:K:90:LEU:HD13	2.42	0.50
3:B:189:ILE:CB	3:B:203:GLU:HB2	2.38	0.50
4:D:98:ILE:HG12	4:D:114:ILE:HG12	1.93	0.50
4:D:69:SER:CA	4:D:72:ALA:HB3	2.42	0.50
4:D:94:THR:CG2	4:D:145:LEU:HB2	2.42	0.50
3:B:52:GLU:O	3:B:53:ILE:C	2.51	0.50
2:G:386:VAL:HG11	8:W:34:ARG:HB2	1.94	0.50
6:F:23:ASP:HA	6:F:26:ARG:NE	2.27	0.50
1:Q:87:VAL:HG13	1:Q:88:LYS:N	2.26	0.50
3:R:489:LEU:HB3	3:R:494:VAL:HG21	1.94	0.50
3:R:1063:GLN:HE22	3:R:1085:LYS:HD2	1.76	0.49
3:R:1098:LYS:O	3:R:1102:GLN:HG3	2.12	0.49
3:R:248:VAL:CG2	3:R:329:ARG:HH22	2.18	0.49
3:B:184:THR:HG22	3:B:185:HIS:N	2.27	0.49
2:C:286:ILE:HD11	7:H:46:ARG:H	1.76	0.49
3:R:430:ILE:HG22	3:R:431:SER:O	2.12	0.49
1:Q:4:LYS:HZ2	3:R:1115:LEU:CB	2.23	0.49
10:Y:40:VAL:HG12	10:Y:40:VAL:O	2.11	0.49
2:G:389:THR:HG22	8:W:77:THR:HB	1.93	0.49
2:C:57:LYS:HA	2:C:57:LYS:CE	2.39	0.49
1:Q:647:ARG:HH21	4:S:211:ARG:HH12	1.59	0.49
3:B:481:ASN:O	3:B:482:GLU:O	2.29	0.49
3:R:226:LEU:C	3:R:228:ARG:H	2.16	0.49
5:E:147:ILE:HG12	5:E:163:THR:HB	1.93	0.49
4:D:205:LEU:O	4:D:207:GLU:N	2.45	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:97:TRP:HZ3	3:R:113:GLU:CD	2.15	0.49
3:B:1047:ASP:CG	3:B:1047:ASP:O	2.50	0.49
3:R:926:GLU:CD	3:R:988:VAL:HG22	2.33	0.49
2:G:326:VAL:HG13	2:G:326:VAL:O	2.11	0.49
3:R:707:ALA:C	3:R:709:ASP:H	2.15	0.49
4:D:64:LEU:HD13	10:N:6:ARG:HB2	1.92	0.49
4:S:256:LEU:HD12	9:X:3:ILE:HG13	1.94	0.49
2:G:133:ASP:C	2:G:135:ASP:N	2.65	0.49
3:B:22:GLY:O	3:B:23:LEU:C	2.49	0.49
1:Q:199:PRO:O	1:Q:200:THR:OG1	2.22	0.49
3:R:254:PRO:O	3:R:257:GLU:N	2.44	0.49
3:R:174:VAL:HG11	3:R:325:LEU:HD23	1.93	0.49
3:R:70:VAL:CG1	3:R:80:ILE:HD13	2.41	0.49
4:D:53:LEU:HD22	4:D:57:ILE:CG2	2.40	0.49
2:C:42:ILE:N	2:C:42:ILE:HD12	2.27	0.49
6:U:54:LYS:NZ	6:U:54:LYS:HB2	2.27	0.49
2:C:287:GLU:OE2	7:H:79:ARG:CZ	2.61	0.49
2:G:391:ARG:NH2	5:T:18:PHE:HE2	2.11	0.49
5:T:18:PHE:CD2	8:W:47:ALA:CB	2.94	0.49
1:Q:533:ASP:O	1:Q:534:LEU:O	2.31	0.49
3:R:727:MET:HB3	3:R:983:ILE:HG23	1.94	0.49
1:Q:392:LYS:O	1:Q:394:ARG:N	2.45	0.49
3:B:14:ILE:HG23	3:B:15:GLU:N	2.27	0.49
1:A:691:THR:HG22	1:A:692:LEU:N	2.27	0.49
1:A:781:PHE:HD2	1:A:781:PHE:C	2.15	0.49
3:B:97:TRP:O	3:B:98:LEU:HB3	2.11	0.49
3:B:978:LYS:HD2	4:D:205:LEU:HD22	1.95	0.49
1:A:534:LEU:HD23	9:L:39:SER:O	2.12	0.49
1:A:543:ARG:CG	1:A:544:GLU:H	2.24	0.49
4:S:69:SER:HB2	4:S:236:LEU:HD11	1.94	0.49
4:D:250:ILE:O	4:D:254:GLU:HB2	2.12	0.49
3:B:789:TYR:CD2	3:B:789:TYR:N	2.69	0.49
3:B:792:LEU:HD11	3:B:809:VAL:HG11	1.94	0.49
6:U:23:ASP:HA	6:U:26:ARG:NE	2.27	0.49
1:A:87:VAL:HG13	1:A:88:LYS:H	1.78	0.49
3:B:879:ALA:HA	3:B:884:GLN:O	2.13	0.49
1:A:214:VAL:O	1:A:214:VAL:HG12	2.12	0.49
3:R:1086:SER:C	3:R:1087:ASN:O	2.50	0.49
3:R:1014:ARG:HG3	3:R:1095:TYR:CE2	2.46	0.49
3:B:1086:SER:C	3:B:1087:ASN:O	2.49	0.49
3:R:256:LEU:C	3:R:258:GLN:H	2.15	0.49
4:S:108:MET:CE	10:Y:2:LEU:HD21	2.41	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:35:LEU:O	2:G:39:LYS:HE3	2.11	0.49
1:Q:854:GLY:O	2:G:65:ALA:HA	2.12	0.49
1:Q:851:GLY:C	1:Q:853:ASP:H	2.15	0.49
2:C:55:ALA:O	2:C:58:GLU:HB2	2.11	0.49
3:R:727:MET:HE3	3:R:898:PRO:HG3	1.93	0.49
3:B:521:ILE:HB	3:B:567:HIS:ND1	2.27	0.49
1:A:582:HIS:C	1:A:584:SER:H	2.15	0.49
1:A:365:VAL:HG22	1:A:365:VAL:O	2.12	0.49
5:T:127:ILE:H	5:T:136:ILE:HB	1.76	0.49
3:B:902:LYS:CB	10:N:42:ARG:HD3	2.42	0.49
1:A:81:VAL:HG12	1:A:270:GLN:CG	2.40	0.49
3:B:358:PHE:C	3:B:360:ALA:H	2.16	0.49
3:R:45:GLU:HG3	3:R:46:GLN:N	2.26	0.49
5:E:127:ILE:HG22	5:E:127:ILE:O	2.12	0.49
4:D:203:CYS:O	4:D:204:THR:HG23	2.12	0.49
4:D:206:CYS:O	4:D:207:GLU:CB	2.61	0.49
3:B:686:LEU:H	3:B:686:LEU:CD1	2.14	0.49
3:B:852:ILE:HG23	3:B:862:VAL:CG2	2.39	0.49
3:B:852:ILE:CD1	11:P:35:PHE:HA	2.43	0.49
2:C:392:PRO:O	2:C:393:ILE:O	2.30	0.49
8:K:50:LEU:CD2	8:K:74:LEU:HA	2.42	0.49
1:A:465:HIS:CD2	3:B:1048:ARG:HD2	2.47	0.49
1:A:555:PHE:HD1	1:A:626:TRP:CH2	2.30	0.49
5:T:43:GLY:HA3	5:T:76:THR:CG2	2.42	0.49
1:Q:464:LEU:HD13	1:Q:465:HIS:H	1.75	0.49
4:S:4:ASN:HA	9:X:90:LEU:CD2	2.40	0.49
8:K:91:SER:O	8:K:92:LEU:HB2	2.12	0.49
11:P:21:LEU:N	11:P:21:LEU:HD23	2.28	0.49
3:R:34:PHE:CE1	3:R:351:ALA:HA	2.47	0.49
4:D:133:LEU:HD21	4:D:139:ILE:HG12	1.93	0.49
1:A:702:ASP:O	1:A:703:THR:C	2.49	0.49
3:B:570:CYS:O	3:B:571:ASP:O	2.31	0.49
1:A:814:SER:O	1:A:818:TYR:HB2	2.11	0.49
3:B:1069:TRP:CZ3	3:B:1077:TYR:CB	2.95	0.49
3:B:1074:LYS:CB	3:B:1076:LYS:HG3	2.42	0.49
3:R:325:LEU:HD21	3:R:332:PRO:CD	2.37	0.49
6:U:14:TYR:HD1	6:U:14:TYR:H	1.60	0.49
7:H:47:ALA:C	7:H:49:ASP:H	2.15	0.49
2:G:276:ASN:O	2:G:279:GLU:HB3	2.11	0.49
1:Q:821:ARG:O	1:Q:825:ASN:ND2	2.41	0.49
1:Q:827:LEU:HD12	1:Q:830:LEU:HD12	1.94	0.49
1:Q:830:LEU:HD13	1:Q:846:VAL:HG21	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:V:49:ASP:O	7:V:53:ARG:HB3	2.12	0.49
2:G:55:ALA:O	2:G:58:GLU:N	2.45	0.49
3:R:1033:ARG:NH1	3:R:1033:ARG:CG	2.71	0.49
3:R:530:TYR:OH	3:R:536:LEU:CB	2.60	0.49
3:R:52:GLU:CG	3:R:56:LEU:HD23	2.42	0.49
1:Q:517:THR:CG2	1:Q:518:LYS:N	2.75	0.49
3:B:805:LYS:O	3:B:806:GLY:O	2.31	0.49
6:F:30:SER:OG	6:F:38:TYR:HE1	1.92	0.49
10:Y:55:ILE:N	10:Y:55:ILE:HD13	2.26	0.49
3:B:343:LEU:N	3:B:343:LEU:CD1	2.74	0.49
3:B:146:LYS:HB2	3:B:716:ARG:HH22	1.78	0.49
1:A:323:ARG:HD2	3:B:1026:LEU:HD11	1.95	0.49
9:X:45:GLN:HE22	9:X:48:PRO:CD	2.24	0.49
3:R:854:GLU:OE2	11:Z:24:VAL:HB	2.12	0.49
3:B:252:LEU:CD1	3:B:323:ILE:HB	2.41	0.49
3:B:563:ILE:HG22	3:B:564:ASN:N	2.28	0.49
1:A:418:LEU:CD1	3:B:1044:LEU:HD11	2.42	0.49
1:A:431:MET:HE1	1:A:482:VAL:HG13	1.93	0.49
6:U:41:LEU:O	6:U:43:SER:N	2.33	0.49
6:U:52:ALA:C	6:U:54:LYS:H	2.16	0.49
2:C:104:LEU:CB	2:C:105:PRO:HD3	2.31	0.49
7:H:15:TYR:CD2	7:H:16:LEU:HD12	2.48	0.49
3:R:341:LYS:HZ2	3:R:341:LYS:HB3	1.77	0.49
2:G:366:PHE:O	2:G:368:GLY:N	2.45	0.49
2:G:391:ARG:CB	8:W:75:PRO:HB2	2.43	0.49
4:S:134:GLY:O	4:S:137:GLN:HG3	2.11	0.49
4:S:66:PRO:HB2	4:S:124:ILE:CG1	2.38	0.49
1:Q:608:PRO:O	1:Q:609:GLU:CG	2.61	0.49
1:Q:500:GLN:O	1:Q:501:ASP:C	2.50	0.49
4:S:206:CYS:HB3	14:S:1001:F3S:S3	2.52	0.49
3:R:887:VAL:HG12	3:R:888:ILE:N	2.26	0.49
3:B:292:ILE:O	3:B:293:ILE:HD13	2.11	0.49
3:B:191:SER:CA	3:B:300:HIS:NE2	2.72	0.49
1:A:353:ILE:CD1	1:A:407:ILE:HG23	2.42	0.49
5:E:166:GLN:HB2	5:E:169:LEU:CD1	2.30	0.49
5:E:81:VAL:O	5:E:82:GLN:CB	2.61	0.49
4:D:33:MET:O	4:D:150:GLY:HA3	2.13	0.49
5:T:53:THR:OG1	5:T:71:GLU:HB2	2.12	0.49
1:Q:18:GLU:O	1:Q:22:MET:HB3	2.12	0.49
3:B:278:ILE:HG23	3:B:285:ARG:HH22	1.78	0.49
1:A:181:ARG:HG2	1:A:181:ARG:HH11	1.78	0.49
1:Q:515:LEU:HD11	1:Q:539:ILE:HG13	1.93	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:85:CYS:O	4:D:89:CYS:SG	2.70	0.49
3:B:683:ASN:C	3:B:685:GLN:N	2.63	0.49
1:A:396:GLU:C	1:A:398:ALA:H	2.15	0.49
1:A:188:PRO:O	1:A:192:VAL:HG23	2.12	0.49
1:Q:390:TYR:O	1:Q:391:VAL:HB	2.12	0.49
3:R:294:ASP:O	3:R:303:THR:HA	2.13	0.49
1:A:720:ASP:O	1:A:722:PHE:N	2.45	0.49
4:D:68:MET:HE1	4:D:234:GLY:O	2.12	0.49
1:Q:11:PHE:HA	3:R:1110:SER:O	2.12	0.49
3:R:1069:TRP:CE3	3:R:1070:TYR:O	2.65	0.49
1:Q:759:ARG:N	1:Q:779:ARG:HH21	2.10	0.49
3:R:330:ARG:CG	3:R:330:ARG:HH11	2.25	0.49
3:B:564:ASN:O	3:B:564:ASN:ND2	2.45	0.49
6:F:18:LYS:NZ	6:F:41:LEU:O	2.41	0.49
7:V:15:TYR:CD2	7:V:16:LEU:HD12	2.48	0.49
4:S:68:MET:HA	4:S:68:MET:CE	2.43	0.49
10:Y:18:TRP:CZ2	10:Y:22:ILE:HG21	2.47	0.49
3:B:589:VAL:O	3:B:590:THR:C	2.50	0.49
3:R:738:ILE:HG12	3:R:739:ILE:N	2.28	0.49
3:B:221:ILE:HD12	3:B:221:ILE:N	2.27	0.49
3:B:296:TYR:O	3:B:297:PHE:HB2	2.11	0.49
3:R:292:ILE:O	3:R:293:ILE:HD13	2.12	0.49
1:A:756:ARG:HH22	1:A:776:PRO:HA	1.78	0.49
1:A:781:PHE:C	1:A:781:PHE:CD2	2.86	0.49
1:A:341:GLU:O	1:A:345:LYS:HG3	2.13	0.49
1:Q:94:LEU:HD11	1:Q:180:ILE:HG23	1.94	0.49
3:R:690:THR:O	3:R:691:ARG:O	2.30	0.49
1:Q:13:ILE:HG22	1:Q:13:ILE:O	2.10	0.49
3:B:851:LEU:HA	11:P:35:PHE:CB	2.34	0.49
1:A:533:ASP:O	1:A:534:LEU:O	2.31	0.49
3:R:416:ARG:CZ	3:R:687:ARG:NH2	2.75	0.49
3:B:943:THR:CG2	3:B:944:PRO:CD	2.90	0.49
8:K:61:VAL:C	8:K:63:SER:H	2.16	0.49
1:Q:397:LEU:HD23	1:Q:400:THR:OG1	2.13	0.49
1:A:752:VAL:C	1:A:754:GLY:N	2.66	0.49
3:B:144:ASP:HB3	3:B:682:ALA:HB3	1.94	0.49
3:B:1029:GLY:O	3:B:1030:GLU:C	2.50	0.49
3:R:763:VAL:HG22	3:R:770:GLU:HG3	1.94	0.49
3:B:696:HIS:CG	4:D:57:ILE:HD11	2.47	0.49
4:D:108:MET:HG3	4:D:110:TYR:CE1	2.46	0.49
11:P:31:TYR:HE2	11:P:33:ILE:CG1	2.26	0.49
7:V:35:LEU:O	7:V:37:ILE:HG13	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:448:THR:O	3:B:450:TRP:N	2.46	0.49
3:B:448:THR:HG22	3:B:452:ARG:HD2	1.93	0.49
2:G:258:LEU:HD21	2:G:284:PHE:CE1	2.48	0.49
2:G:379:ILE:N	2:G:379:ILE:HD13	2.26	0.49
4:S:80:GLU:HA	4:S:83:ILE:HD12	1.95	0.49
1:Q:357:ASN:O	1:Q:359:GLU:N	2.46	0.49
3:B:644:SER:C	3:B:646:ALA:H	2.16	0.49
3:R:221:ILE:N	3:R:221:ILE:HD12	2.27	0.49
1:A:249:LEU:HD21	1:A:265:LEU:CB	2.41	0.49
3:B:899:TYR:O	3:B:971:TYR:N	2.39	0.49
3:B:898:PRO:HB2	3:B:970:VAL:HG21	1.94	0.49
3:R:757:LEU:HD23	3:R:758:TYR:H	1.76	0.49
3:R:759:SER:CB	3:R:862:VAL:O	2.51	0.49
3:R:97:TRP:HZ3	3:R:113:GLU:OE2	1.95	0.49
3:R:353:LEU:HD13	3:R:404:VAL:HG22	1.94	0.49
3:R:355:ARG:HG2	3:R:356:VAL:N	2.26	0.49
3:R:52:GLU:O	3:R:53:ILE:C	2.51	0.49
3:B:800:PRO:HD3	3:B:850:VAL:CG2	2.42	0.49
3:B:282:ARG:HD3	3:B:285:ARG:HD2	1.95	0.49
3:R:278:ILE:CG2	3:R:279:GLY:N	2.76	0.49
1:A:428:ILE:CG2	1:A:428:ILE:O	2.61	0.49
4:D:67:PHE:HD2	4:D:121:VAL:CG1	2.24	0.49
7:V:20:HIS:HB3	7:V:63:ILE:HG21	1.95	0.49
6:U:30:SER:CB	6:U:38:TYR:HE1	2.24	0.49
3:B:662:GLN:O	3:B:663:SER:C	2.50	0.49
2:C:12:TYR:N	2:C:12:TYR:CD1	2.81	0.49
5:T:31:ARG:C	5:T:33:GLN:N	2.64	0.49
3:B:794:ASP:N	3:B:794:ASP:OD1	2.43	0.49
3:R:903:GLY:HA3	4:S:161:LEU:CD1	2.43	0.49
9:L:8:SER:HB2	9:L:13:LEU:CD1	2.42	0.49
3:R:563:ILE:HG22	3:R:564:ASN:N	2.28	0.49
3:R:564:ASN:ND2	3:R:564:ASN:O	2.46	0.49
2:C:64:ILE:HG22	2:C:65:ALA:N	2.28	0.49
2:C:330:GLY:O	2:C:335:THR:OG1	2.31	0.49
6:F:52:ALA:C	6:F:54:LYS:H	2.16	0.49
3:R:167:LEU:HD12	3:R:190:ILE:CD1	2.43	0.49
1:Q:728:MET:HE2	3:R:916:PRO:HG3	1.95	0.49
3:B:214:PHE:CZ	3:B:297:PHE:HA	2.42	0.49
3:B:655:ILE:HG12	3:B:669:GLN:HG2	1.94	0.49
3:R:801:GLU:HG3	11:Z:38:ARG:CZ	2.43	0.49
8:K:51:ILE:O	8:K:51:ILE:HG22	2.13	0.49
6:F:17:ALA:O	6:F:21:LEU:HG	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:644:SER:C	3:R:646:ALA:H	2.15	0.49
1:A:397:LEU:HD23	1:A:400:THR:OG1	2.13	0.49
3:R:286:ILE:O	3:R:289:ALA:HB3	2.13	0.49
3:B:1069:TRP:CE3	3:B:1070:TYR:O	2.66	0.49
2:C:354:LEU:HD13	3:B:1104:LEU:HD21	1.95	0.49
3:R:238:ILE:HA	3:R:241:ALA:HB3	1.94	0.49
3:R:854:GLU:HG3	11:Z:24:VAL:HG11	1.94	0.49
1:A:489:PRO:CB	1:A:858:MET:HG3	2.42	0.49
1:A:855:VAL:O	1:A:855:VAL:HG12	2.12	0.49
7:H:37:ILE:HD12	7:H:37:ILE:O	2.12	0.49
5:E:88:GLU:HA	5:E:141:LYS:HA	1.95	0.49
6:F:57:GLU:O	6:F:59:LEU:N	2.46	0.49
7:V:80:TYR:O	7:V:81:VAL:CB	2.61	0.49
8:W:19:PHE:O	8:W:20:ILE:C	2.52	0.49
4:S:180:VAL:HG22	4:S:190:LEU:HG	1.95	0.49
1:Q:353:ILE:O	1:Q:403:PRO:HA	2.13	0.49
3:R:604:PHE:O	3:R:607:LEU:HB2	2.13	0.49
5:T:166:GLN:HB2	5:T:169:LEU:CD1	2.29	0.49
3:B:109:ALA:O	3:B:110:GLU:O	2.31	0.49
3:B:353:LEU:HD13	3:B:404:VAL:HG22	1.95	0.49
1:Q:704:LEU:HD22	1:Q:781:PHE:CD1	2.48	0.49
3:R:536:LEU:O	3:R:539:LYS:N	2.46	0.49
1:A:558:LYS:NZ	3:R:108:GLU:CG	2.76	0.49
2:C:337:GLU:HG2	2:C:338:LYS:N	2.18	0.49
3:B:153:ILE:HG22	3:B:153:ILE:O	2.13	0.49
3:B:690:THR:O	3:B:691:ARG:C	2.51	0.49
2:C:389:THR:HG22	8:K:77:THR:O	2.12	0.49
1:Q:552:ILE:C	1:Q:554:ALA:H	2.15	0.49
3:R:717:PRO:HD3	10:Y:53:VAL:HG11	1.93	0.49
5:E:31:ARG:C	5:E:33:GLN:N	2.65	0.49
3:R:478:VAL:HA	3:R:572:SER:HA	1.95	0.49
1:Q:702:ASP:O	1:Q:703:THR:C	2.51	0.49
1:Q:297:THR:O	1:Q:298:LEU:C	2.51	0.49
3:R:620:GLU:C	3:R:622:GLU:N	2.64	0.49
3:B:239:VAL:HG12	3:B:249:GLN:HE22	1.77	0.49
11:P:46:LYS:HB3	11:P:46:LYS:NZ	2.27	0.49
10:N:18:TRP:CZ2	10:N:22:ILE:HG21	2.48	0.49
5:T:102:GLY:HA2	6:U:40:TYR:CG	2.48	0.49
2:C:258:LEU:O	2:C:262:LEU:HG	2.13	0.49
3:R:435:ARG:NH1	3:R:435:ARG:CG	2.75	0.49
2:G:390:MET:O	2:G:391:ARG:HB3	2.12	0.49
4:S:112:LYS:C	4:S:114:ILE:H	2.15	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:S:26:ASN:O	4:S:29:ARG:HB3	2.13	0.49
5:T:113:ILE:CG2	5:T:114:THR:H	2.25	0.49
3:B:958:LEU:O	3:B:958:LEU:HD23	2.13	0.49
3:B:530:TYR:OH	3:B:536:LEU:CB	2.59	0.49
5:E:96:GLY:HA2	5:E:110:ILE:CD1	2.43	0.49
3:R:690:THR:O	3:R:691:ARG:C	2.51	0.49
3:R:691:ARG:HB3	3:R:754:PHE:CZ	2.48	0.49
3:R:764:LYS:NZ	3:R:814:VAL:O	2.41	0.49
11:P:16:GLU:CD	11:P:26:CYS:HB2	2.32	0.49
2:C:389:THR:O	2:C:389:THR:HG23	2.12	0.49
1:A:525:LEU:HD12	9:L:56:LYS:HE3	1.95	0.49
4:D:4:ASN:HA	9:L:90:LEU:CD2	2.41	0.49
3:B:147:ASP:OD2	3:B:148:PRO:CD	2.59	0.49
2:C:326:VAL:O	2:C:326:VAL:HG13	2.12	0.49
3:R:181:SER:O	3:R:182:ASN:CB	2.61	0.49
1:Q:261:ILE:HG22	1:Q:261:ILE:O	2.13	0.49
1:A:75:ILE:HG23	1:A:75:ILE:O	2.12	0.48
1:Q:212:LEU:HD21	1:Q:242:ILE:HD13	1.95	0.48
3:R:1013:THR:HB	3:R:1015:GLN:HG3	1.93	0.48
3:B:1061:CYS:H	3:B:1065:GLY:HA2	1.78	0.48
3:B:1094:SER:O	3:B:1096:ALA:N	2.46	0.48
3:R:130:ILE:HA	3:R:133:TYR:CE1	2.47	0.48
3:B:696:HIS:HE1	3:B:869:LEU:HD23	1.78	0.48
2:C:311:ARG:HH11	2:C:311:ARG:HG3	1.77	0.48
2:C:262:LEU:CD2	2:C:269:VAL:HG13	2.36	0.48
2:C:285:GLY:HA2	7:H:50:PRO:HD2	1.94	0.48
2:C:288:ALA:HB2	7:H:17:VAL:HB	1.95	0.48
6:F:54:LYS:NZ	6:F:54:LYS:HB2	2.27	0.48
6:F:72:LEU:HD23	6:F:86:ILE:CD1	2.42	0.48
5:T:15:PRO:HA	5:T:18:PHE:CD1	2.48	0.48
3:R:911:ASN:O	3:R:913:HIS:N	2.46	0.48
3:R:971:TYR:O	3:R:973:GLY:N	2.43	0.48
4:S:216:SER:C	4:S:217:ILE:HD12	2.34	0.48
9:X:14:GLU:OE1	9:X:56:LYS:HG2	2.12	0.48
3:B:555:VAL:O	3:B:620:GLU:HG3	2.13	0.48
1:Q:582:HIS:C	1:Q:584:SER:H	2.15	0.48
3:B:20:SER:O	3:B:25:ARG:NH2	2.45	0.48
3:B:644:SER:O	3:B:647:ILE:HG13	2.13	0.48
3:R:634:THR:HB	3:R:635:PRO:HD3	1.95	0.48
3:R:481:ASN:O	3:R:482:GLU:O	2.31	0.48
5:T:96:GLY:HA2	5:T:110:ILE:CD1	2.43	0.48
1:A:15:SER:HA	1:A:203:ARG:HH21	1.77	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:368:GLN:O	3:B:372:SER:HB3	2.12	0.48
3:R:537:ALA:CB	3:R:557:HIS:HE2	2.24	0.48
3:R:189:ILE:CB	3:R:203:GLU:HB2	2.39	0.48
3:R:1047:ASP:O	3:R:1047:ASP:CG	2.51	0.48
3:B:867:ARG:O	3:B:868:ASP:HB2	2.13	0.48
4:D:24:PHE:CZ	9:L:80:THR:HA	2.47	0.48
2:G:388:LEU:CD1	8:W:34:ARG:HG3	2.43	0.48
5:E:77:TYR:O	5:E:78:VAL:HG23	2.12	0.48
5:E:103:PRO:HB3	6:F:37:THR:OG1	2.13	0.48
3:B:99:THR:O	3:B:99:THR:HG22	2.13	0.48
3:R:551:ASP:OD2	3:R:551:ASP:N	2.42	0.48
8:W:87:ILE:HD12	8:W:87:ILE:N	2.27	0.48
5:T:123:VAL:C	5:T:125:GLY:N	2.65	0.48
3:R:555:VAL:O	3:R:620:GLU:HG3	2.12	0.48
2:C:104:LEU:O	2:C:104:LEU:HD23	2.13	0.48
1:Q:335:ASP:OD1	1:Q:482:VAL:HB	2.13	0.48
2:C:31:ASP:C	2:C:33:LYS:N	2.63	0.48
1:Q:632:PHE:HA	1:Q:635:PHE:HD1	1.75	0.48
3:R:569:ASN:HB3	3:R:574:ARG:CZ	2.43	0.48
3:B:591:ILE:O	3:B:594:ILE:HG13	2.13	0.48
3:R:11:TRP:O	3:R:14:ILE:HG22	2.13	0.48
3:B:292:ILE:O	3:B:292:ILE:HG22	2.13	0.48
1:A:407:ILE:HD12	1:A:407:ILE:O	2.13	0.48
3:B:65:ILE:HG22	3:B:66:GLY:H	1.78	0.48
3:B:733:ASN:HB3	3:B:739:ILE:HG22	1.95	0.48
1:A:637:ARG:HD3	1:A:640:GLU:OE1	2.13	0.48
1:A:734:ARG:HG2	3:B:913:HIS:O	2.12	0.48
3:R:402:ASN:O	3:R:403:TRP:HB2	2.13	0.48
1:A:468:GLN:HB2	3:B:1047:ASP:OD2	2.13	0.48
3:R:687:ARG:HH11	3:R:687:ARG:HB3	1.78	0.48
3:R:943:THR:CG2	3:R:944:PRO:HD2	2.36	0.48
1:Q:417:VAL:HG11	1:Q:464:LEU:CD2	2.43	0.48
8:K:60:ASP:O	8:K:61:VAL:O	2.31	0.48
1:Q:349:VAL:HG21	1:Q:409:ARG:NH2	2.28	0.48
3:B:148:PRO:HG3	3:B:422:MET:HE1	1.94	0.48
2:C:388:LEU:CG	8:K:34:ARG:HG3	2.43	0.48
1:A:670:VAL:HG23	1:A:671:GLU:N	2.27	0.48
3:B:778:ALA:HA	3:B:783:TYR:CZ	2.48	0.48
3:R:173:LEU:HD22	3:R:333:ASP:HB3	1.95	0.48
2:G:15:GLU:HA	2:G:18:LYS:CG	2.43	0.48
2:G:12:TYR:CD1	2:G:12:TYR:N	2.81	0.48
3:R:134:THR:O	3:R:135:LEU:C	2.50	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:564:GLY:O	1:A:586:VAL:N	2.42	0.48
2:G:349:VAL:HG21	2:G:352:LYS:HB2	1.94	0.48
3:B:1061:CYS:N	3:B:1088:LEU:HD23	2.29	0.48
1:Q:752:VAL:C	1:Q:754:GLY:N	2.66	0.48
11:Z:31:TYR:HE2	11:Z:33:ILE:CG1	2.26	0.48
3:B:247:GLU:HA	3:B:250:ASN:HD22	1.78	0.48
1:A:485:ASN:ND2	3:B:1039:PHE:HE2	2.11	0.48
2:C:64:ILE:CG2	2:C:65:ALA:N	2.77	0.48
6:F:41:LEU:C	6:F:43:SER:H	2.15	0.48
2:G:258:LEU:O	2:G:262:LEU:HG	2.12	0.48
2:G:327:ARG:CZ	2:G:334:VAL:HG23	2.43	0.48
3:R:958:LEU:C	3:R:958:LEU:HD23	2.34	0.48
4:S:24:PHE:CZ	9:X:80:THR:HA	2.46	0.48
1:Q:353:ILE:HD12	1:Q:353:ILE:N	2.28	0.48
1:A:369:PRO:HA	1:A:410:HIS:CE1	2.48	0.48
3:B:699:GLN:NE2	10:N:48:MET:CE	2.74	0.48
3:B:97:TRP:O	3:B:114:VAL:O	2.31	0.48
4:D:69:SER:HA	4:D:72:ALA:CB	2.42	0.48
3:B:204:ARG:HB2	3:B:213:SER:HG	1.75	0.48
5:T:171:LYS:HB3	5:T:174:TRP:CD1	2.49	0.48
9:X:61:GLY:O	9:X:62:SER:C	2.51	0.48
3:R:75:ARG:HD3	3:R:75:ARG:N	2.28	0.48
3:B:395:ARG:O	3:B:399:ALA:CB	2.62	0.48
4:D:153:HIS:O	4:D:155:LYS:N	2.36	0.48
11:P:17:GLN:O	11:P:19:LYS:N	2.46	0.48
11:Z:42:ILE:HG23	11:Z:42:ILE:O	2.13	0.48
3:R:694:LEU:C	3:R:694:LEU:HD13	2.34	0.48
3:R:144:ASP:HB3	3:R:682:ALA:HB3	1.96	0.48
3:B:1083:GLY:C	3:B:1085:LYS:N	2.66	0.48
3:R:239:VAL:HG12	3:R:249:GLN:HE22	1.78	0.48
1:A:851:GLY:O	1:A:853:ASP:N	2.46	0.48
2:G:330:GLY:O	2:G:335:THR:OG1	2.31	0.48
3:R:1036:LEU:O	3:R:1039:PHE:O	2.31	0.48
8:W:43:LEU:C	8:W:45:MET:H	2.16	0.48
4:S:112:LYS:HB3	4:S:126:GLY:O	2.13	0.48
4:S:131:VAL:CG2	4:S:132:LEU:N	2.63	0.48
1:Q:870:ARG:NH2	2:G:57:LYS:O	2.47	0.48
1:Q:507:TYR:O	1:Q:508:LEU:CB	2.60	0.48
3:B:94:ALA:O	3:B:118:ASP:HA	2.13	0.48
3:R:479:GLY:C	3:R:480:ILE:HG13	2.34	0.48
1:A:387:ASP:CG	1:A:388:LEU:N	2.66	0.48
5:T:147:ILE:HG12	5:T:163:THR:HB	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:89:HIS:O	1:A:93:PHE:HD1	1.97	0.48
5:E:97:ILE:HD11	5:E:136:ILE:HG21	1.95	0.48
3:B:724:LEU:HD13	3:B:990:TYR:CE2	2.48	0.48
3:B:978:LYS:HE2	4:D:205:LEU:HD13	1.94	0.48
4:D:34:LEU:O	4:D:36:VAL:N	2.46	0.48
1:Q:86:LEU:HB3	1:Q:207:MET:HE1	1.93	0.48
3:B:676:ALA:HB2	3:B:991:GLN:NE2	2.29	0.48
3:R:278:ILE:HG23	3:R:285:ARG:NH2	2.28	0.48
3:R:579:LEU:HD12	3:R:616:LEU:CD1	2.39	0.48
8:K:70:ARG:C	8:K:72:GLY:N	2.67	0.48
3:B:170:ASN:O	3:B:171:ARG:O	2.32	0.48
1:Q:84:VAL:O	1:Q:87:VAL:HG12	2.13	0.48
9:X:8:SER:HB2	9:X:13:LEU:HD13	1.95	0.48
3:B:979:ILE:CD1	3:B:981:SER:H	2.26	0.48
1:Q:189:ASP:O	1:Q:199:PRO:HG3	2.13	0.48
3:R:1029:GLY:O	3:R:1030:GLU:C	2.52	0.48
3:R:1076:LYS:O	3:R:1078:VAL:HG23	2.13	0.48
3:R:84:GLU:O	3:R:88:ARG:N	2.38	0.48
4:D:106:PRO:HD3	4:D:135:THR:HG23	1.95	0.48
10:N:22:ILE:O	10:N:26:ASN:ND2	2.45	0.48
1:A:418:LEU:HD23	1:A:430:MET:CE	2.44	0.48
1:A:827:LEU:HD13	2:C:319:VAL:HG21	1.95	0.48
1:A:833:GLU:CG	1:A:839:ARG:HG3	2.43	0.48
1:Q:475:GLU:OE1	3:R:1043:MET:HB2	2.13	0.48
2:G:389:THR:O	2:G:389:THR:HG23	2.12	0.48
1:Q:428:ILE:HG21	1:Q:495:ILE:HD13	1.95	0.48
4:S:12:ARG:NH2	4:S:14:ASP:OD2	2.46	0.48
4:S:205:LEU:O	4:S:207:GLU:N	2.47	0.48
1:Q:402:ALA:O	1:Q:403:PRO:C	2.51	0.48
3:B:544:ARG:NH1	3:B:544:ARG:HG3	2.25	0.48
3:R:292:ILE:HG22	3:R:292:ILE:O	2.14	0.48
5:T:96:GLY:HA2	5:T:110:ILE:HG12	1.95	0.48
5:E:149:VAL:HG11	5:E:160:ILE:HD12	1.96	0.48
3:R:38:LYS:CG	3:R:39:LEU:H	2.16	0.48
3:R:107:ILE:HG12	3:R:110:GLU:OE2	2.14	0.48
8:K:26:ARG:HG2	8:K:90:LEU:HD13	1.96	0.48
3:B:764:LYS:NZ	3:B:814:VAL:N	2.50	0.48
4:D:98:ILE:HD11	4:D:114:ILE:CG2	2.32	0.48
1:Q:551:VAL:HG13	1:Q:552:ILE:HG23	1.94	0.48
9:L:33:ARG:HG2	9:L:41:ALA:HB3	1.94	0.48
2:G:126:LEU:HG	2:G:249:TYR:O	2.14	0.48
5:T:141:LYS:HB2	5:T:172:LEU:CD1	2.43	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:52:GLU:CB	3:B:56:LEU:HB3	2.42	0.48
10:N:55:ILE:N	10:N:55:ILE:HD13	2.27	0.48
1:A:392:LYS:O	1:A:394:ARG:N	2.46	0.48
3:B:643:TRP:CZ3	3:B:645:PRO:HB2	2.49	0.48
3:B:478:VAL:HA	3:B:572:SER:HA	1.95	0.48
3:B:75:ARG:N	3:B:75:ARG:HD3	2.29	0.48
3:R:1014:ARG:HD2	3:R:1095:TYR:CE1	2.48	0.48
3:R:325:LEU:O	3:R:326:TYR:C	2.51	0.48
3:R:520:VAL:C	3:R:521:ILE:HD12	2.34	0.48
7:H:23:LEU:CD2	7:H:64:ARG:HB2	2.41	0.48
5:E:2:TYR:CZ	6:F:41:LEU:HD21	2.49	0.48
3:R:448:THR:O	3:R:450:TRP:N	2.46	0.48
3:R:952:GLN:O	3:R:953:LEU:C	2.51	0.48
4:S:167:TYR:HD2	4:S:222:VAL:HG21	1.78	0.48
1:Q:363:GLN:O	1:Q:366:ILE:CG2	2.62	0.48
3:B:301:LEU:CD2	3:B:483:ARG:HH21	2.22	0.48
1:A:700:ILE:O	1:A:704:LEU:HG	2.14	0.48
1:A:402:ALA:O	1:A:403:PRO:C	2.50	0.48
1:A:249:LEU:HD12	1:A:269:LEU:HD11	1.95	0.48
1:A:17:ASP:O	1:A:21:LYS:HG3	2.14	0.48
3:R:373:LYS:CG	3:R:375:ARG:HB2	2.43	0.48
1:A:417:VAL:HG13	1:A:465:HIS:O	2.14	0.48
3:B:687:ARG:CB	3:B:687:ARG:HH11	2.25	0.48
2:C:238:LYS:C	2:C:239:ARG:HD3	2.33	0.48
8:K:30:TYR:CD1	8:K:30:TYR:N	2.81	0.48
3:R:122:MET:HB2	3:R:152:PHE:CE1	2.48	0.48
3:R:290:GLN:NE2	3:R:308:ARG:HH12	2.12	0.48
5:T:123:VAL:C	5:T:125:GLY:H	2.17	0.48
3:B:478:VAL:HA	3:B:572:SER:CB	2.43	0.48
1:Q:192:VAL:CG1	1:Q:199:PRO:HD3	2.43	0.48
7:H:43:PRO:O	7:H:44:TRP:CB	2.60	0.48
2:C:286:ILE:CD1	7:H:45:ILE:HG13	2.33	0.48
2:G:253:THR:C	2:G:255:GLY:H	2.17	0.48
7:V:45:ILE:HG22	7:V:80:TYR:N	2.23	0.48
1:Q:4:LYS:HZ1	3:R:1115:LEU:HB3	1.75	0.48
2:G:55:ALA:HA	2:G:58:GLU:CD	2.33	0.48
9:X:7:LYS:HE3	9:X:12:TYR:HE2	1.77	0.48
9:X:87:ILE:O	9:X:91:THR:HG23	2.13	0.48
1:A:294:PRO:O	1:A:295:LEU:O	2.30	0.48
3:R:346:ALA:O	3:R:350:PHE:N	2.46	0.48
3:R:577:ARG:HE	3:R:578:PRO:HD2	1.78	0.48
3:B:1033:ARG:NH1	3:B:1033:ARG:CG	2.72	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:191:SER:OG	3:R:299:PRO:HD2	2.14	0.48
5:T:101:LEU:HD11	5:T:160:ILE:HG21	1.95	0.48
3:B:102:PRO:C	3:B:108:GLU:OE1	2.52	0.48
3:B:658:PRO:C	3:B:660:HIS:N	2.67	0.48
3:B:724:LEU:CD1	3:B:908:ILE:HG22	2.41	0.48
1:Q:89:HIS:O	1:Q:93:PHE:HD1	1.95	0.48
3:R:63:ILE:HG13	3:R:98:LEU:CA	2.43	0.48
1:A:417:VAL:HG11	1:A:464:LEU:CD2	2.43	0.48
3:R:282:ARG:HD3	3:R:285:ARG:HD2	1.94	0.48
2:C:135:ASP:C	2:C:137:ALA:H	2.17	0.48
2:G:145:GLU:HG2	2:G:240:ALA:N	2.24	0.48
2:G:238:LYS:C	2:G:239:ARG:HD3	2.33	0.48
3:R:497:VAL:HG12	3:R:498:GLU:H	1.72	0.48
3:B:229:ALA:HB1	3:B:269:LEU:HD23	1.96	0.48
4:D:63:ALA:HB1	4:D:155:LYS:NZ	2.27	0.48
3:R:146:LYS:HE2	3:R:715:ASN:OD1	2.13	0.48
3:B:1070:TYR:O	3:B:1071:ASP:C	2.51	0.48
3:R:128:ASP:OD1	3:R:130:ILE:HG13	2.14	0.48
1:A:854:GLY:O	2:C:65:ALA:HA	2.12	0.48
2:G:278:ARG:O	2:G:282:GLU:HG3	2.14	0.48
8:W:50:LEU:CD2	8:W:74:LEU:HA	2.43	0.48
4:S:108:MET:HG3	4:S:110:TYR:CE1	2.48	0.48
1:Q:607:GLN:O	1:Q:608:PRO:C	2.52	0.48
1:Q:600:LYS:HE3	1:Q:732:GLY:CA	2.33	0.48
3:R:724:LEU:HD13	3:R:990:TYR:HE2	1.78	0.48
1:Q:358:ILE:O	1:Q:362:ARG:HG3	2.14	0.48
1:Q:407:ILE:HD12	1:Q:407:ILE:O	2.13	0.48
3:B:457:GLU:O	3:B:458:THR:OG1	2.30	0.48
3:B:480:ILE:CG2	3:B:481:ASN:N	2.77	0.48
1:A:507:TYR:HB2	1:A:511:VAL:CG1	2.40	0.48
3:B:926:GLU:CD	3:B:988:VAL:HG22	2.34	0.48
1:A:647:ARG:NH2	4:D:211:ARG:HH12	2.12	0.48
3:R:850:VAL:O	11:Z:35:PHE:HB2	2.14	0.48
3:R:97:TRP:O	3:R:114:VAL:O	2.32	0.48
1:Q:807:VAL:CG2	3:R:443:ARG:HD3	2.35	0.48
3:R:921:LEU:O	3:R:923:GLN:N	2.46	0.48
3:B:741:ASN:O	3:B:745:VAL:HG23	2.13	0.48
2:G:15:GLU:HA	2:G:18:LYS:HG3	1.96	0.48
3:B:294:ASP:O	3:B:303:THR:HA	2.14	0.48
4:D:45:TYR:CE1	11:P:44:ILE:HG23	2.49	0.48
3:B:134:THR:N	3:B:137:LYS:HB2	2.29	0.48
8:K:87:ILE:HD12	8:K:87:ILE:N	2.28	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:331:ARG:CD	2:G:348:GLU:HB3	2.42	0.48
3:B:1014:ARG:HD2	3:B:1095:TYR:CE1	2.48	0.48
3:B:248:VAL:CG1	3:B:329:ARG:HH12	2.20	0.48
4:D:129:PRO:CG	10:N:15:ALA:HB1	2.44	0.48
6:U:16:VAL:C	6:U:18:LYS:N	2.67	0.48
6:U:18:LYS:HD2	6:U:45:GLU:HG2	1.96	0.48
6:U:56:ILE:O	6:U:59:LEU:HB3	2.14	0.48
2:G:382:GLY:C	2:G:384:GLY:H	2.16	0.48
3:R:904:VAL:HG22	10:Y:44:CYS:HB3	1.96	0.48
3:R:727:MET:HA	3:R:912:PRO:HG2	1.96	0.48
4:S:203:CYS:SG	4:S:204:THR:N	2.87	0.48
3:R:890:MET:HG2	3:R:892:ILE:HD11	1.96	0.48
3:B:700:ARG:HB3	10:N:51:SER:HA	1.96	0.48
3:B:940:VAL:HG23	3:B:947:LYS:HD3	1.95	0.48
1:A:551:VAL:HG13	1:A:552:ILE:HG23	1.95	0.48
3:B:690:THR:O	3:B:691:ARG:O	2.31	0.48
1:Q:420:ASN:HD22	1:Q:421:ARG:H	1.62	0.48
3:B:526:LEU:HD23	3:B:526:LEU:C	2.34	0.48
3:R:840:ARG:HB2	3:R:843:GLU:CB	2.44	0.48
8:K:71:ARG:HB3	8:K:73:VAL:HG13	1.96	0.48
3:R:683:ASN:C	3:R:685:GLN:N	2.65	0.48
3:R:412:GLN:NE2	3:R:425:HIS:HE1	2.12	0.48
3:B:122:MET:HB2	3:B:152:PHE:CE1	2.49	0.48
1:Q:23:SER:OG	1:Q:24:VAL:N	2.45	0.48
3:B:735:GLU:O	3:B:736:ASP:O	2.32	0.48
1:A:87:VAL:HG13	1:A:88:LYS:N	2.28	0.48
5:E:123:VAL:C	5:E:125:GLY:H	2.16	0.48
4:D:71:GLU:O	4:D:73:LEU:N	2.46	0.48
1:Q:316:LYS:HZ3	3:R:1049:LEU:HD12	1.79	0.48
2:G:373:ILE:CD1	3:R:1049:LEU:HD22	2.44	0.48
1:Q:764:ARG:NH2	3:R:624:ALA:O	2.47	0.48
10:N:22:ILE:HD13	10:N:23:THR:H	1.78	0.48
4:D:180:VAL:HG21	4:D:190:LEU:HG	1.93	0.48
2:C:269:VAL:CA	2:C:272:VAL:HG23	2.38	0.48
7:H:45:ILE:HB	7:H:79:ARG:CB	2.42	0.48
5:E:171:LYS:HB3	5:E:174:TRP:CD1	2.49	0.48
2:G:262:LEU:CD2	2:G:269:VAL:HG13	2.38	0.48
2:G:390:MET:CE	5:T:58:ILE:C	2.82	0.48
4:S:61:ARG:HH21	10:Y:2:LEU:HD13	1.78	0.48
2:C:55:ALA:C	2:C:57:LYS:N	2.64	0.48
9:X:83:TYR:O	9:X:87:ILE:HB	2.14	0.48
1:Q:387:ASP:OD2	1:Q:389:ARG:N	2.47	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:430:ILE:HG22	3:B:431:SER:O	2.14	0.48
1:A:294:PRO:O	1:A:295:LEU:C	2.52	0.48
5:T:170:GLY:H	5:T:175:ILE:HD11	1.76	0.48
1:A:648:LEU:HD23	1:A:648:LEU:C	2.34	0.48
3:B:24:VAL:HG21	3:B:426:LEU:HD12	1.95	0.48
3:B:723:ILE:HD12	10:N:43:TYR:CE1	2.43	0.48
3:B:360:ALA:HB2	3:B:393:ARG:HH12	1.79	0.48
3:B:557:HIS:N	3:B:623:ASN:ND2	2.43	0.48
3:B:724:LEU:HD13	3:B:990:TYR:HE2	1.79	0.48
4:D:167:TYR:HD2	4:D:222:VAL:HG21	1.78	0.48
2:C:46:ASP:O	2:C:50:LYS:NZ	2.46	0.48
3:R:373:LYS:HE3	3:R:375:ARG:CD	2.37	0.48
6:U:30:SER:HB3	6:U:38:TYR:CE1	2.49	0.48
8:W:71:ARG:HB3	8:W:73:VAL:HG13	1.96	0.48
1:Q:87:VAL:O	1:Q:91:TYR:HB2	2.14	0.48
1:Q:194:ILE:O	1:Q:194:ILE:HG22	2.12	0.48
1:A:27:ILE:HB	1:A:75:ILE:CD1	2.44	0.47
3:R:1070:TYR:O	3:R:1071:ASP:C	2.53	0.47
2:C:349:VAL:HG21	2:C:352:LYS:HB2	1.96	0.47
3:R:238:ILE:HA	3:R:241:ALA:CB	2.44	0.47
4:D:131:VAL:HA	10:N:2:LEU:HD11	1.94	0.47
2:C:35:LEU:O	2:C:39:LYS:HE3	2.14	0.47
8:K:21:SER:C	8:K:23:TRP:H	2.17	0.47
4:D:175:ASN:OD1	4:D:195:LEU:HG	2.14	0.47
7:H:45:ILE:CG2	7:H:79:ARG:HB3	2.43	0.47
2:G:390:MET:HE3	2:G:390:MET:H	1.79	0.47
10:Y:18:TRP:CH2	10:Y:54:ASP:OD1	2.67	0.47
2:G:60:SER:O	2:G:63:LEU:HB3	2.14	0.47
8:W:26:ARG:CG	8:W:90:LEU:HD13	2.44	0.47
2:C:28:ILE:HG21	8:K:14:HIS:HB3	1.96	0.47
1:Q:734:ARG:HG2	3:R:913:HIS:O	2.14	0.47
3:R:569:ASN:HB3	3:R:574:ARG:HH12	1.79	0.47
3:B:589:VAL:C	3:B:591:ILE:HD12	2.34	0.47
3:B:579:LEU:CD1	3:B:616:LEU:HD12	2.38	0.47
3:R:476:ILE:N	3:R:476:ILE:CD1	2.76	0.47
3:R:591:ILE:CD1	3:R:612:LYS:HZ3	2.25	0.47
3:B:541:ARG:NH2	3:B:557:HIS:CD2	2.82	0.47
3:B:911:ASN:O	3:B:913:HIS:N	2.47	0.47
4:D:216:SER:C	4:D:217:ILE:HD12	2.32	0.47
3:B:974:ARG:HB2	9:L:22:HIS:CD2	2.48	0.47
1:Q:203:ARG:HD3	1:Q:203:ARG:N	2.29	0.47
1:Q:648:LEU:HD23	1:Q:648:LEU:C	2.33	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:872:PHE:CD2	1:A:876:VAL:HG11	2.49	0.47
1:A:747:LEU:HG	1:A:784:SER:O	2.14	0.47
2:G:298:SER:O	2:G:302:ALA:HB2	2.14	0.47
1:A:415:ASP:H	1:A:435:VAL:HG12	1.79	0.47
6:U:21:LEU:HA	6:U:24:VAL:HG23	1.96	0.47
4:D:250:ILE:H	4:D:250:ILE:HG13	1.42	0.47
1:A:390:TYR:O	1:A:391:VAL:HB	2.14	0.47
1:Q:196:GLY:HA3	2:G:360:ARG:HH21	1.78	0.47
1:A:87:VAL:O	1:A:91:TYR:HB2	2.14	0.47
1:Q:713:ASP:O	1:Q:717:LYS:HD2	2.14	0.47
3:B:1059:TYR:CD2	3:B:1090:PRO:HG3	2.50	0.47
3:R:206:LYS:HE3	3:R:220:LYS:HZ2	1.79	0.47
3:R:244:LEU:HD13	3:R:500:VAL:CB	2.42	0.47
3:B:238:ILE:HA	3:B:241:ALA:HB3	1.95	0.47
2:C:112:ASP:O	2:C:113:ALA:CB	2.62	0.47
2:G:392:PRO:HB3	5:T:22:LEU:CD2	2.44	0.47
2:G:311:ARG:CD	2:G:311:ARG:N	2.77	0.47
1:A:870:ARG:NH2	2:C:57:LYS:O	2.47	0.47
3:R:724:LEU:CD1	3:R:908:ILE:HG22	2.42	0.47
4:S:159:VAL:HG23	4:S:231:GLU:C	2.35	0.47
9:X:35:ILE:CD1	9:X:75:ASN:ND2	2.77	0.47
3:B:620:GLU:C	3:B:622:GLU:N	2.66	0.47
1:Q:573:ARG:HA	1:Q:582:HIS:CD2	2.49	0.47
3:B:18:PHE:C	3:B:20:SER:H	2.18	0.47
3:B:579:LEU:HD12	3:B:616:LEU:CD1	2.38	0.47
3:B:604:PHE:O	3:B:607:LEU:HB2	2.14	0.47
3:R:446:HIS:O	3:R:447:GLY:C	2.51	0.47
3:B:950:ILE:O	3:B:951:GLU:C	2.52	0.47
5:E:82:GLN:CA	5:E:145:ARG:HG3	2.40	0.47
3:B:922:GLY:O	3:B:926:GLU:N	2.39	0.47
3:B:972:ASP:HB3	3:B:975:THR:CG2	2.44	0.47
3:B:972:ASP:O	3:B:974:ARG:N	2.48	0.47
1:A:551:VAL:CG1	1:A:552:ILE:N	2.72	0.47
4:D:66:PRO:CG	10:N:13:LEU:HD11	2.45	0.47
3:R:416:ARG:NH1	3:R:687:ARG:HH22	2.04	0.47
1:Q:782:ILE:HG22	1:Q:784:SER:H	1.77	0.47
4:D:21:PRO:HB2	4:D:23:GLU:OE1	2.14	0.47
3:B:663:SER:CB	3:B:664:PRO:CD	2.92	0.47
3:B:1119:VAL:HG13	5:E:10:ILE:CD1	2.44	0.47
3:R:86:ARG:HA	3:R:156:GLY:HA3	1.95	0.47
3:B:419:TRP:HZ3	3:B:712:GLY:C	2.17	0.47
1:Q:814:SER:O	1:Q:818:TYR:HB2	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:342:ILE:HD13	1:Q:342:ILE:N	2.29	0.47
1:A:316:LYS:HE2	3:B:1094:SER:OG	2.14	0.47
3:B:1099:LEU:O	3:B:1102:GLN:HB2	2.14	0.47
1:Q:764:ARG:CB	1:Q:764:ARG:NH1	2.77	0.47
3:R:80:ILE:HD11	3:R:92:TYR:HA	1.95	0.47
3:B:249:GLN:HB2	3:B:253:PHE:CE1	2.49	0.47
3:B:407:ARG:HE	3:B:407:ARG:CA	2.28	0.47
3:R:430:ILE:HG12	3:R:467:VAL:CG2	2.40	0.47
1:Q:8:GLY:HA2	2:G:365:GLU:HA	1.95	0.47
1:Q:524:ILE:HG22	1:Q:524:ILE:O	2.14	0.47
4:S:247:LYS:HA	4:S:250:ILE:CD1	2.44	0.47
9:X:33:ARG:HG2	9:X:41:ALA:HB3	1.95	0.47
3:B:297:PHE:O	3:B:298:LEU:HB2	2.15	0.47
5:T:81:VAL:O	5:T:82:GLN:CB	2.62	0.47
3:B:65:ILE:CD1	3:B:65:ILE:H	2.05	0.47
3:B:402:ASN:O	3:B:403:TRP:HB2	2.12	0.47
5:E:119:LYS:HE3	5:E:130:GLU:OE2	2.14	0.47
3:B:654:ILE:N	3:B:654:ILE:HD12	2.26	0.47
3:R:771:ASP:CG	3:R:816:PRO:HD3	2.34	0.47
5:E:168:TYR:CE2	6:F:81:ASP:HB3	2.49	0.47
1:Q:421:ARG:HG3	1:Q:462:MET:HG2	1.96	0.47
1:A:525:LEU:HG	9:L:40:PHE:HZ	1.79	0.47
1:Q:563:HIS:ND1	1:Q:876:VAL:HG13	2.29	0.47
2:G:131:LYS:O	2:G:249:TYR:N	2.47	0.47
1:A:747:LEU:HD12	1:A:790:LEU:HD11	1.96	0.47
4:S:94:THR:O	4:S:95:LYS:HG3	2.15	0.47
3:B:53:ILE:HB	3:B:54:PRO:HD3	1.96	0.47
6:U:33:LEU:O	6:U:34:LEU:HD23	2.15	0.47
5:E:90:LEU:O	5:E:91:GLN:HB2	2.15	0.47
3:R:683:ASN:C	3:R:685:GLN:H	2.17	0.47
1:Q:390:TYR:O	1:Q:391:VAL:CB	2.62	0.47
2:C:15:GLU:HA	2:C:18:LYS:CG	2.44	0.47
3:B:146:LYS:HE2	3:B:715:ASN:OD1	2.14	0.47
3:B:679:LEU:HD23	3:B:716:ARG:CD	2.45	0.47
3:B:309:LYS:C	3:B:311:LYS:H	2.17	0.47
1:A:276:TYR:CD2	1:A:277:PHE:HE1	2.31	0.47
3:R:1066:TYR:CD2	3:R:1105:MET:HE3	2.49	0.47
1:A:431:MET:HB2	1:A:453:TYR:OH	2.14	0.47
2:C:311:ARG:CD	2:C:311:ARG:N	2.77	0.47
1:A:867:ASP:HB2	2:C:39:LYS:HZ2	1.79	0.47
2:G:37:LEU:O	2:G:39:LYS:N	2.47	0.47
1:Q:864:LYS:HE2	7:V:71:LEU:O	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:51:ILE:O	2:C:55:ALA:HB2	2.13	0.47
9:X:12:TYR:HA	9:X:57:ILE:O	2.14	0.47
3:B:590:THR:O	3:B:593:ASP:HB2	2.14	0.47
1:Q:59:PRO:HG2	1:Q:61:CYS:SG	2.54	0.47
1:A:353:ILE:O	1:A:403:PRO:HA	2.13	0.47
5:T:114:THR:C	5:T:165:ARG:HE	2.18	0.47
3:B:958:LEU:C	3:B:958:LEU:HD23	2.34	0.47
1:A:220:ARG:H	1:A:221:PRO:CD	2.27	0.47
1:A:208:ILE:HD12	1:A:208:ILE:N	2.30	0.47
3:B:34:PHE:CE1	3:B:351:ALA:HA	2.48	0.47
3:B:393:ARG:NE	3:B:403:TRP:HZ3	2.06	0.47
3:B:63:ILE:CD1	3:B:63:ILE:N	2.75	0.47
3:B:669:GLN:NE2	3:B:669:GLN:HA	2.30	0.47
3:R:393:ARG:O	3:R:393:ARG:HG2	2.14	0.47
3:B:759:SER:CB	3:B:863:LYS:HA	2.44	0.47
3:B:1051:ASP:HA	3:B:1055:ARG:HG2	1.96	0.47
1:Q:181:ARG:NH1	1:Q:185:GLU:OE2	2.47	0.47
1:Q:667:ARG:HG2	1:Q:667:ARG:HH11	1.80	0.47
4:D:254:GLU:HG3	9:L:77:ARG:HH12	1.79	0.47
2:G:386:VAL:HG21	8:W:31:GLU:HA	1.95	0.47
1:A:196:GLY:HA3	2:C:360:ARG:HH21	1.80	0.47
1:Q:305:LYS:N	1:Q:310:ARG:HD2	2.28	0.47
9:X:24:LEU:O	9:X:28:ILE:HG12	2.14	0.47
3:B:1078:VAL:HG11	3:B:1082:HIS:HB3	1.96	0.47
3:R:70:VAL:CG1	3:R:80:ILE:HG21	2.45	0.47
3:R:81:SER:O	3:R:84:GLU:N	2.37	0.47
3:B:330:ARG:HH11	3:B:330:ARG:CG	2.22	0.47
2:G:277:ILE:HG22	2:G:278:ARG:N	2.25	0.47
1:Q:828:SER:C	1:Q:830:LEU:N	2.68	0.47
5:T:18:PHE:CZ	8:W:42:GLN:HG2	2.49	0.47
1:Q:449:VAL:O	1:Q:452:PRO:HG2	2.14	0.47
8:W:16:ASN:O	8:W:19:PHE:HB3	2.14	0.47
3:B:594:ILE:C	3:B:599:SER:HB3	2.35	0.47
3:B:633:LEU:O	3:B:635:PRO:HD2	2.15	0.47
1:A:500:GLN:O	1:A:501:ASP:C	2.51	0.47
1:A:727:VAL:O	1:A:728:MET:C	2.52	0.47
3:B:669:GLN:CA	3:B:669:GLN:NE2	2.78	0.47
1:Q:206:TRP:C	1:Q:208:ILE:H	2.18	0.47
2:C:390:MET:CE	5:E:58:ILE:C	2.83	0.47
4:D:96:ILE:CG1	4:D:143:ALA:HB3	2.44	0.47
5:E:168:TYR:CZ	6:F:81:ASP:HB3	2.49	0.47
1:A:607:GLN:HB2	1:A:608:PRO:CD	2.43	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:687:ARG:NH1	3:R:687:ARG:HG3	2.28	0.47
1:Q:282:PRO:O	1:Q:283:GLY:O	2.32	0.47
3:R:669:GLN:HG2	3:R:881:ARG:O	2.15	0.47
3:B:1040:GLY:HA3	8:K:30:TYR:HE2	1.80	0.47
3:B:56:LEU:CD1	3:B:104:GLU:HG2	2.45	0.47
1:A:664:GLU:OE1	1:A:707:LEU:HD22	2.14	0.47
5:T:29:GLU:OE1	5:T:29:GLU:HA	2.15	0.47
4:S:47:ILE:HB	4:S:140:SER:OG	2.14	0.47
1:Q:244:ARG:O	1:Q:248:ARG:HG3	2.14	0.47
3:B:462:PRO:C	3:B:464:SER:H	2.17	0.47
4:D:133:LEU:HD21	4:D:139:ILE:HD11	1.96	0.47
9:L:47:HIS:NE2	9:L:49:LEU:HB2	2.30	0.47
3:R:1069:TRP:NE1	3:R:1088:LEU:HD22	2.27	0.47
1:A:219:ILE:CD1	1:A:219:ILE:N	2.78	0.47
3:B:1079:CYS:SG	3:B:1080:PRO:CD	3.03	0.47
1:Q:757:ILE:O	1:Q:779:ARG:HA	2.15	0.47
3:B:1036:LEU:O	3:B:1039:PHE:O	2.33	0.47
2:C:275:ASN:O	2:C:275:ASN:OD1	2.33	0.47
3:R:457:GLU:O	3:R:458:THR:OG1	2.31	0.47
6:F:54:LYS:HZ2	6:F:54:LYS:CB	2.28	0.47
6:F:72:LEU:HD23	6:F:86:ILE:HD13	1.95	0.47
2:G:86:THR:O	2:G:104:LEU:CD1	2.62	0.47
2:G:275:ASN:O	2:G:275:ASN:OD1	2.33	0.47
2:G:379:ILE:CD1	3:R:1045:LEU:HD22	2.44	0.47
10:Y:22:ILE:HG12	10:Y:23:THR:N	2.29	0.47
1:Q:490:ARG:CZ	2:G:80:GLU:HG3	2.45	0.47
1:Q:341:GLU:O	1:Q:345:LYS:HG3	2.14	0.47
2:C:365:GLU:HG2	2:C:366:PHE:N	2.30	0.47
3:R:633:LEU:O	3:R:635:PRO:N	2.48	0.47
3:B:956:GLU:C	3:B:958:LEU:H	2.17	0.47
3:R:1033:ARG:HG3	3:R:1034:ASP:N	2.28	0.47
5:E:97:ILE:CD1	5:E:136:ILE:HG21	2.44	0.47
1:Q:696:LEU:C	1:Q:696:LEU:HD13	2.34	0.47
1:Q:208:ILE:HD12	1:Q:208:ILE:N	2.28	0.47
3:R:536:LEU:CD2	3:R:540:ILE:HG13	2.44	0.47
1:Q:444:ARG:HH11	1:Q:444:ARG:HG3	1.79	0.47
1:Q:551:VAL:CG1	1:Q:552:ILE:N	2.75	0.47
2:G:132:ARG:H	2:G:132:ARG:NE	2.11	0.47
1:A:807:VAL:CG1	3:B:443:ARG:NH1	2.77	0.47
1:Q:415:ASP:O	1:Q:435:VAL:HG12	2.13	0.47
2:C:12:TYR:H	2:C:12:TYR:HD1	1.62	0.47
4:S:101:GLU:HG2	4:S:102:ALA:N	2.28	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:15:GLU:HA	2:G:18:LYS:HD2	1.95	0.47
2:G:12:TYR:HD1	2:G:12:TYR:H	1.63	0.47
1:A:304:GLY:C	1:A:310:ARG:HD2	2.35	0.47
3:B:538:ASN:O	3:B:542:GLU:HG3	2.14	0.47
1:A:214:VAL:HG22	1:A:239:LEU:HD21	1.95	0.47
1:A:27:ILE:HB	1:A:75:ILE:HD12	1.96	0.47
3:R:1069:TRP:CD1	3:R:1088:LEU:HD13	2.50	0.47
3:R:1071:ASP:C	3:R:1073:ASN:N	2.68	0.47
3:R:227:MET:O	3:R:232:ILE:HB	2.15	0.47
3:R:321:LYS:HD2	3:R:330:ARG:NE	2.27	0.47
3:B:248:VAL:HA	3:B:251:GLU:CD	2.34	0.47
3:B:244:LEU:HD13	3:B:500:VAL:CB	2.43	0.47
3:B:560:THR:HG22	3:B:563:ILE:H	1.80	0.47
6:U:68:VAL:O	6:U:72:LEU:HG	2.14	0.47
6:U:36:ARG:O	6:U:40:TYR:N	2.43	0.47
1:Q:217:ILE:O	1:Q:221:PRO:HD3	2.15	0.47
4:D:172:ILE:HD12	4:D:172:ILE:N	2.30	0.47
1:A:820:GLN:O	1:A:823:LEU:HD12	2.14	0.47
1:A:819:MET:HA	1:A:822:ARG:HE	1.80	0.47
7:H:81:VAL:O	7:H:82:ILE:CG1	2.63	0.47
3:R:407:ARG:HE	3:R:407:ARG:HA	1.80	0.47
2:G:124:ILE:HG12	2:G:272:VAL:HG13	1.97	0.47
1:Q:830:LEU:CD2	1:Q:846:VAL:HG21	2.44	0.47
2:G:390:MET:HE1	5:T:58:ILE:O	2.14	0.47
1:Q:428:ILE:CG2	1:Q:452:PRO:HB2	2.44	0.47
1:Q:488:THR:HG22	1:Q:490:ARG:N	2.29	0.47
8:W:26:ARG:HB3	8:W:27:LEU:CD1	2.43	0.47
1:Q:498:ALA:HB3	1:Q:503:ILE:HG22	1.96	0.47
4:S:151:LYS:O	4:S:152:GLU:O	2.33	0.47
1:Q:532:ILE:HG22	1:Q:532:ILE:O	2.15	0.47
1:A:757:ILE:O	1:A:779:ARG:HA	2.15	0.47
1:A:759:ARG:HH21	1:A:763:THR:HG23	1.80	0.47
3:R:17:TYR:HA	3:R:604:PHE:CB	2.44	0.47
3:R:587:PRO:O	3:R:588:LEU:CD2	2.56	0.47
3:R:589:VAL:O	3:R:590:THR:C	2.53	0.47
3:R:589:VAL:C	3:R:591:ILE:HD12	2.34	0.47
3:B:702:LEU:HD22	10:N:47:ARG:NH1	2.29	0.47
1:A:217:ILE:O	1:A:221:PRO:HD3	2.14	0.47
3:B:381:LEU:O	3:B:385:VAL:HG23	2.15	0.47
3:B:63:ILE:HG13	3:B:98:LEU:CA	2.44	0.47
3:B:97:TRP:HZ3	3:B:113:GLU:OE2	1.97	0.47
4:D:34:LEU:HD22	4:D:151:LYS:CB	2.43	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:80:GLU:HA	4:D:83:ILE:CD1	2.45	0.47
1:Q:700:ILE:O	1:Q:704:LEU:HG	2.15	0.47
1:Q:17:ASP:O	1:Q:21:LYS:HG3	2.15	0.47
3:R:537:ALA:CB	3:R:557:HIS:NE2	2.66	0.47
3:R:63:ILE:N	3:R:63:ILE:CD1	2.76	0.47
3:R:102:PRO:C	3:R:108:GLU:OE1	2.53	0.47
3:R:56:LEU:CD1	3:R:104:GLU:HG2	2.44	0.47
8:K:49:ALA:O	8:K:50:LEU:O	2.32	0.47
8:K:41:LEU:HD23	8:K:45:MET:HG3	1.96	0.47
8:K:43:LEU:C	8:K:45:MET:H	2.18	0.47
1:Q:551:VAL:CG1	1:Q:552:ILE:H	2.26	0.47
2:C:133:ASP:C	2:C:135:ASP:N	2.67	0.47
2:G:146:TYR:HB2	2:G:238:LYS:HD3	1.96	0.47
5:T:38:ILE:HG22	5:T:39:LEU:N	2.24	0.47
5:T:41:ASP:O	5:T:42:LEU:HD23	2.14	0.47
3:R:661:ASN:ND2	3:R:921:LEU:O	2.43	0.47
4:D:94:THR:O	4:D:95:LYS:HG3	2.15	0.47
1:Q:747:LEU:HG	1:Q:784:SER:O	2.15	0.47
1:Q:415:ASP:H	1:Q:435:VAL:HG12	1.79	0.47
4:S:38:ILE:HD12	4:S:39:MET:C	2.34	0.47
4:D:247:LYS:HA	4:D:250:ILE:CD1	2.45	0.47
5:E:21:PRO:HG2	5:E:24:GLU:OE2	2.15	0.47
8:K:71:ARG:O	8:K:72:GLY:C	2.51	0.47
5:T:23:ASN:HA	5:T:26:ALA:HB3	1.96	0.47
9:L:15:LEU:O	9:L:54:ILE:HA	2.15	0.47
4:D:101:GLU:CG	4:D:102:ALA:H	2.28	0.47
1:A:23:SER:OG	1:A:24:VAL:N	2.46	0.47
4:D:263:VAL:O	4:D:263:VAL:HG12	2.15	0.47
5:E:123:VAL:O	5:E:125:GLY:N	2.48	0.47
5:T:123:VAL:O	5:T:125:GLY:N	2.48	0.47
1:A:557:PRO:HD3	1:A:623:TYR:OH	2.15	0.47
3:R:1076:LYS:O	3:R:1078:VAL:N	2.48	0.47
3:B:183:ILE:HB	3:B:207:ASP:O	2.14	0.47
4:D:50:ASN:HD22	10:N:64:ARG:NH1	2.12	0.47
2:G:124:ILE:CG2	2:G:267:VAL:HG13	2.44	0.47
1:Q:418:LEU:HD23	1:Q:430:MET:HE2	1.97	0.47
1:Q:645:THR:HA	3:R:912:PRO:HG2	1.97	0.47
4:S:176:CYS:H	4:S:195:LEU:CD2	2.27	0.47
1:Q:532:ILE:HG23	9:X:40:PHE:CD1	2.50	0.47
3:B:17:TYR:HA	3:B:604:PHE:HB2	1.96	0.47
3:R:343:LEU:N	3:R:343:LEU:CD1	2.77	0.47
3:R:474:ALA:HB3	3:R:578:PRO:HD3	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:N:48:MET:HE3	10:N:48:MET:HA	1.97	0.47
3:R:193:THR:HG1	3:R:198:VAL:HA	1.80	0.47
3:B:97:TRP:CE3	3:B:113:GLU:HB3	2.50	0.47
5:E:96:GLY:HA2	5:E:110:ILE:HG12	1.96	0.47
5:E:113:ILE:CG2	5:E:114:THR:H	2.26	0.47
1:A:647:ARG:HH21	4:D:211:ARG:HH12	1.62	0.47
3:R:800:PRO:HG2	11:Z:38:ARG:N	2.30	0.47
3:B:762:GLU:OE2	3:B:773:ILE:HG13	2.15	0.47
3:R:490:TYR:OH	3:R:527:ILE:HG23	2.14	0.47
4:D:256:LEU:HD12	9:L:3:ILE:HG13	1.96	0.47
1:Q:68:CYS:SG	1:Q:71:HIS:CE1	3.08	0.47
3:R:1061:CYS:CA	3:R:1088:LEU:HD23	2.45	0.47
3:R:1073:ASN:C	3:R:1075:ASN:N	2.67	0.47
1:Q:757:ILE:HG22	1:Q:757:ILE:O	2.15	0.47
1:Q:758:LYS:HB2	1:Q:759:ARG:HD2	1.96	0.47
3:B:320:SER:O	3:B:324:GLU:OE2	2.32	0.47
10:N:24:ARG:HD2	10:N:34:VAL:CG1	2.44	0.47
1:A:469:SER:HB2	1:A:472:ALA:H	1.80	0.47
2:C:310:ILE:CD1	2:C:310:ILE:N	2.67	0.47
2:C:37:LEU:O	2:C:39:LYS:N	2.47	0.47
2:C:70:ILE:HD13	2:C:71:GLY:H	1.79	0.47
6:F:9:GLU:O	6:F:10:HIS:ND1	2.47	0.47
2:G:106:ARG:HG2	2:G:106:ARG:HH11	1.79	0.47
3:R:950:ILE:C	3:R:952:GLN:N	2.68	0.47
4:S:125:SER:C	4:S:127:ASP:N	2.68	0.47
7:V:62:ILE:H	7:V:62:ILE:CD1	2.27	0.47
2:C:55:ALA:HA	2:C:58:GLU:CD	2.34	0.47
1:Q:646:MET:SD	3:R:915:LEU:HD23	2.55	0.47
3:B:291:GLN:O	3:B:295:LYS:HE2	2.14	0.47
1:A:363:GLN:O	1:A:366:ILE:CG2	2.62	0.47
3:B:669:GLN:HG2	3:B:881:ARG:O	2.15	0.47
1:Q:674:ASN:OD1	1:Q:675:LEU:N	2.48	0.47
3:R:814:VAL:O	3:R:814:VAL:HG12	2.15	0.47
1:A:552:ILE:C	1:A:554:ALA:N	2.68	0.47
3:R:366:THR:O	3:R:370:GLU:HB2	2.15	0.47
8:K:74:LEU:N	8:K:74:LEU:HD12	2.29	0.47
1:Q:561:ASN:HD22	1:Q:589:LYS:HA	1.79	0.47
1:A:488:THR:HG22	1:A:491:TYR:H	1.78	0.47
1:A:336:GLU:OE1	1:A:436:ARG:NH1	2.48	0.47
3:B:725:ALA:HB1	3:B:985:PHE:CE1	2.50	0.47
10:N:28:GLY:O	10:N:29:GLU:O	2.32	0.47
1:A:4:LYS:HE2	3:B:1060:VAL:HG23	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:80:ILE:HD11	3:B:92:TYR:HA	1.97	0.47
1:A:481:LEU:CD2	1:A:482:VAL:N	2.75	0.47
2:C:65:ALA:HB1	8:K:19:PHE:CE1	2.50	0.47
2:C:72:ILE:HG22	2:C:76:GLN:OE1	2.15	0.47
2:G:366:PHE:HB3	2:G:372:ASN:OD1	2.14	0.47
8:W:50:LEU:O	8:W:52:ASP:N	2.48	0.47
2:G:42:ILE:H	2:G:42:ILE:HD12	1.79	0.47
2:G:65:ALA:HB1	8:W:19:PHE:CE1	2.50	0.47
2:C:52:PHE:O	2:C:56:ILE:HG12	2.15	0.47
2:C:366:PHE:CZ	2:C:375:ILE:HD12	2.50	0.47
1:A:61:CYS:HB3	1:A:63:ASN:HD21	1.80	0.47
1:Q:579:ASP:O	1:Q:580:CYS:SG	2.70	0.47
3:B:582:VAL:HG11	3:B:633:LEU:HD11	1.97	0.47
3:R:725:ALA:HB1	3:R:985:PHE:CE1	2.50	0.47
1:A:675:LEU:CD2	1:A:684:LEU:HD11	2.45	0.47
1:A:353:ILE:CG1	1:A:361:LEU:HD23	2.44	0.47
3:B:935:LEU:O	10:N:46:ARG:NH1	2.48	0.47
5:E:97:ILE:HD12	5:E:113:ILE:CD1	2.43	0.47
3:B:11:TRP:CZ2	3:B:706:ARG:HG2	2.49	0.47
3:R:116:ILE:HD12	3:R:361:PHE:HZ	1.79	0.47
2:C:337:GLU:N	2:C:337:GLU:CD	2.68	0.47
3:B:86:ARG:HA	3:B:156:GLY:HA3	1.96	0.47
2:C:392:PRO:CB	5:E:22:LEU:HD21	2.45	0.47
4:D:66:PRO:HB2	4:D:124:ILE:CG1	2.41	0.47
5:E:38:ILE:H	5:E:38:ILE:HD12	1.80	0.47
3:B:446:HIS:O	3:B:447:GLY:C	2.54	0.47
1:Q:517:THR:HG22	1:Q:518:LYS:H	1.80	0.47
9:X:65:PRO:HG2	9:X:66:LYS:H	1.79	0.47
3:R:655:ILE:HG12	3:R:669:GLN:HG2	1.98	0.47
8:W:61:VAL:C	8:W:63:SER:H	2.18	0.47
1:A:193:GLU:C	1:A:195:LEU:H	2.18	0.47
1:A:667:ARG:NH1	1:A:667:ARG:HG2	2.29	0.47
8:W:28:THR:O	8:W:31:GLU:N	2.48	0.47
1:A:752:VAL:O	1:A:753:ARG:HB3	2.14	0.47
4:S:101:GLU:CG	4:S:102:ALA:H	2.28	0.47
1:A:23:SER:O	1:A:24:VAL:CG1	2.63	0.47
5:E:109:HIS:CD2	5:E:111:SER:H	2.33	0.47
1:A:305:LYS:N	1:A:310:ARG:HD2	2.29	0.47
1:Q:564:GLY:O	1:Q:586:VAL:N	2.45	0.47
5:T:151:SER:HB3	5:T:158:PRO:HB3	1.97	0.47
1:Q:594:LEU:O	1:Q:595:GLU:O	2.32	0.47
1:A:297:THR:O	1:A:300:GLN:HB3	2.14	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:262:ILE:CD1	1:Q:266:TRP:HE1	2.27	0.46
1:Q:276:TYR:CD2	1:Q:277:PHE:CD1	3.03	0.46
1:Q:302:LEU:HA	1:Q:308:ARG:H	1.80	0.46
3:B:1013:THR:HB	3:B:1015:GLN:HG3	1.96	0.46
3:B:1083:GLY:O	3:B:1085:LYS:N	2.48	0.46
1:Q:759:ARG:NH2	1:Q:763:THR:HG23	2.30	0.46
3:R:252:LEU:C	3:R:254:PRO:HD2	2.35	0.46
3:B:243:SER:O	3:B:249:GLN:OE1	2.32	0.46
1:A:830:LEU:CD2	1:A:846:VAL:HG21	2.46	0.46
8:W:80:ARG:O	8:W:82:LEU:HD23	2.15	0.46
1:A:837:THR:HG23	1:A:847:GLN:O	2.15	0.46
6:F:16:VAL:C	6:F:18:LYS:N	2.65	0.46
6:F:57:GLU:C	6:F:59:LEU:N	2.67	0.46
3:R:1036:LEU:HD13	3:R:1044:LEU:HD23	1.97	0.46
3:R:902:LYS:O	3:R:904:VAL:HG23	2.15	0.46
3:R:699:GLN:HE22	10:Y:48:MET:HE3	1.81	0.46
2:G:65:ALA:CB	8:W:19:PHE:CE1	2.98	0.46
4:S:167:TYR:CD1	4:S:227:ILE:HD11	2.50	0.46
4:S:21:PRO:HG3	9:X:79:MET:HE1	1.96	0.46
1:Q:387:ASP:CG	1:Q:388:LEU:N	2.68	0.46
1:A:8:GLY:HA2	2:C:365:GLU:HA	1.97	0.46
3:B:344:ARG:C	3:B:345:LEU:HD12	2.36	0.46
3:B:569:ASN:HB3	3:B:574:ARG:HH12	1.80	0.46
1:A:674:ASN:O	1:A:677:GLN:N	2.48	0.46
1:A:749:GLN:HA	1:A:781:PHE:CA	2.45	0.46
3:B:38:LYS:CG	3:B:39:LEU:H	2.19	0.46
3:B:64:ARG:N	3:B:64:ARG:HD3	2.30	0.46
3:B:536:LEU:O	3:B:539:LYS:N	2.48	0.46
3:B:278:ILE:CG2	3:B:279:GLY:N	2.78	0.46
1:A:490:ARG:HG3	2:C:308:VAL:HG23	1.96	0.46
3:B:50:PRO:CG	3:B:51:THR:H	2.19	0.46
3:B:793:GLU:HB3	3:B:794:ASP:H	1.62	0.46
1:Q:212:LEU:HD23	1:Q:242:ILE:HG21	1.97	0.46
3:R:1061:CYS:HA	3:R:1088:LEU:CD2	2.45	0.46
3:R:1074:LYS:CB	3:R:1076:LYS:HE2	2.36	0.46
3:B:1076:LYS:O	3:B:1078:VAL:N	2.48	0.46
3:B:1098:LYS:O	3:B:1102:GLN:HG3	2.15	0.46
3:B:1113:LEU:HD12	3:B:1113:LEU:H	1.79	0.46
3:R:247:GLU:HA	3:R:250:ASN:HD22	1.80	0.46
3:R:227:MET:HE3	3:R:312:ALA:HB1	1.96	0.46
3:B:768:GLY:O	3:B:769:GLN:CB	2.63	0.46
8:K:19:PHE:O	8:K:20:ILE:C	2.53	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:407:ARG:HA	3:B:407:ARG:HE	1.80	0.46
2:G:292:ILE:CG2	2:G:293:ILE:N	2.78	0.46
7:V:80:TYR:CE1	7:V:82:ILE:HD11	2.49	0.46
3:R:946:TYR:HD2	3:R:947:LYS:H	0.81	0.46
10:Y:7:CYS:SG	10:Y:45:CYS:SG	3.13	0.46
2:G:41:ILE:CG2	2:G:42:ILE:HD12	2.45	0.46
2:G:55:ALA:C	2:G:57:LYS:N	2.66	0.46
2:C:54:LEU:HD23	2:C:54:LEU:O	2.15	0.46
3:R:972:ASP:O	3:R:975:THR:HG23	2.15	0.46
4:S:30:ARG:O	4:S:34:LEU:HG	2.16	0.46
3:R:591:ILE:CG1	3:R:612:LYS:HZ3	2.29	0.46
3:B:262:ILE:HD12	3:B:262:ILE:N	2.29	0.46
3:B:226:LEU:HD13	3:B:297:PHE:HE1	1.81	0.46
1:A:691:THR:O	1:A:694:GLU:HB2	2.15	0.46
1:A:376:ASN:N	1:A:376:ASN:HD22	2.13	0.46
5:T:147:ILE:CD1	5:T:163:THR:HB	2.45	0.46
3:B:915:LEU:HB3	3:B:916:PRO:CD	2.45	0.46
3:B:978:LYS:NZ	4:D:205:LEU:HD13	2.29	0.46
3:R:63:ILE:HA	3:R:98:LEU:H	1.81	0.46
5:E:170:GLY:H	5:E:175:ILE:HD11	1.79	0.46
3:R:659:GLU:O	3:R:660:HIS:CD2	2.68	0.46
3:R:867:ARG:O	3:R:868:ASP:HB2	2.15	0.46
3:B:725:ALA:CB	3:B:906:PRO:HB3	2.42	0.46
1:A:390:TYR:O	1:A:391:VAL:CB	2.63	0.46
3:R:123:LEU:HD22	3:R:151:TYR:CE1	2.50	0.46
3:B:28:LEU:C	3:B:30:SER:N	2.68	0.46
1:A:357:ASN:O	1:A:359:GLU:N	2.48	0.46
1:A:218:THR:CG2	3:B:1098:LYS:NZ	2.78	0.46
1:A:218:THR:HG21	3:B:1098:LYS:NZ	2.31	0.46
1:A:316:LYS:HE2	3:B:1054:ASP:OD2	2.15	0.46
3:B:1069:TRP:CH2	3:B:1077:TYR:CB	2.94	0.46
3:R:250:ASN:O	3:R:252:LEU:N	2.48	0.46
3:R:128:ASP:OD1	3:R:130:ILE:CG1	2.63	0.46
4:D:128:ILE:CG1	10:N:16:ASP:HB3	2.45	0.46
1:A:487:ILE:HG22	1:A:493:GLY:C	2.35	0.46
3:B:341:LYS:HZ2	3:B:341:LYS:HB3	1.80	0.46
1:A:839:ARG:NH2	8:K:83:PRO:HG3	2.30	0.46
4:S:105:GLU:N	4:S:135:THR:CG2	2.79	0.46
3:R:963:LEU:HA	3:R:964:PRO:HD3	1.80	0.46
4:S:173:LEU:O	4:S:174:ALA:CB	2.64	0.46
4:S:182:VAL:HG11	4:S:212:TYR:CG	2.51	0.46
1:A:757:ILE:O	1:A:757:ILE:HG22	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:759:ARG:N	1:A:779:ARG:HH21	2.12	0.46
1:A:58:CYS:CB	1:A:59:PRO:CD	2.93	0.46
3:R:482:GLU:O	3:R:483:ARG:C	2.53	0.46
3:B:940:VAL:HG21	3:B:953:LEU:HD11	1.96	0.46
3:B:910:LEU:HD12	3:B:923:GLN:HE21	1.80	0.46
1:A:841:LEU:C	1:A:843:GLY:H	2.18	0.46
2:C:390:MET:HG3	5:E:56:GLU:HG2	1.96	0.46
4:D:66:PRO:CG	10:N:13:LEU:HD21	2.45	0.46
3:R:274:SER:C	3:R:276:VAL:H	2.19	0.46
3:B:1011:ILE:H	3:B:1011:ILE:CD1	2.12	0.46
3:R:669:GLN:NE2	3:R:669:GLN:HA	2.30	0.46
3:B:797:VAL:HG12	3:B:798:VAL:O	2.15	0.46
1:A:750:GLN:HG3	1:A:782:ILE:HD11	1.97	0.46
1:Q:691:THR:HG22	1:Q:692:LEU:N	2.30	0.46
8:W:61:VAL:CG1	8:W:62:ILE:H	2.24	0.46
1:Q:434:ARG:HB3	1:Q:434:ARG:HE	1.47	0.46
6:F:30:SER:HB3	6:F:38:TYR:HE1	1.80	0.46
3:B:707:ALA:O	3:B:709:ASP:N	2.48	0.46
2:G:135:ASP:C	2:G:137:ALA:H	2.18	0.46
3:B:23:LEU:H	3:B:23:LEU:HD22	1.80	0.46
3:B:903:GLY:HA3	4:D:161:LEU:HD12	1.98	0.46
1:Q:212:LEU:HD21	1:Q:242:ILE:CD1	2.46	0.46
3:R:1074:LYS:HB2	3:R:1076:LYS:HG3	1.97	0.46
3:B:251:GLU:C	3:B:252:LEU:HG	2.35	0.46
3:B:80:ILE:HD12	3:B:92:TYR:HA	1.97	0.46
7:V:45:ILE:HB	7:V:79:ARG:CB	2.41	0.46
7:V:12:ARG:HD2	7:V:51:VAL:HG13	1.97	0.46
1:Q:505:GLY:O	1:Q:506:ALA:O	2.34	0.46
1:Q:529:ASP:O	1:Q:530:VAL:C	2.54	0.46
1:Q:528:ALA:N	1:Q:630:ASN:OD1	2.36	0.46
1:Q:647:ARG:HD2	3:R:965:ASP:HB3	1.97	0.46
3:B:545:ARG:HE	3:B:581:ILE:HD13	1.80	0.46
1:Q:575:CYS:SG	1:Q:584:SER:HB3	2.55	0.46
3:B:345:LEU:HD11	3:B:476:ILE:HG13	1.97	0.46
3:R:21:LYS:HD3	3:R:25:ARG:CZ	2.45	0.46
1:A:361:LEU:HD11	1:A:407:ILE:HD11	1.98	0.46
1:A:249:LEU:HD21	1:A:265:LEU:HB2	1.98	0.46
3:R:46:GLN:O	3:R:47:GLY:O	2.33	0.46
5:E:85:VAL:HG11	5:E:101:LEU:HD13	1.97	0.46
3:B:963:LEU:CD2	4:D:208:GLU:HG3	2.46	0.46
1:A:551:VAL:CG1	1:A:552:ILE:H	2.24	0.46
3:R:356:VAL:HG13	3:R:357:ALA:N	2.29	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:358:PHE:C	3:R:360:ALA:H	2.18	0.46
3:R:372:SER:O	3:R:373:LYS:HB2	2.14	0.46
3:B:280:GLN:O	3:B:281:LYS:C	2.53	0.46
5:E:175:ILE:HA	5:E:178:THR:OG1	2.16	0.46
1:A:529:ASP:O	1:A:530:VAL:C	2.54	0.46
1:A:631:LEU:HG	1:A:635:PHE:HE1	1.80	0.46
3:R:526:LEU:HD23	3:R:526:LEU:C	2.36	0.46
3:R:526:LEU:HD23	3:R:527:ILE:N	2.30	0.46
2:G:297:ILE:C	2:G:299:LYS:N	2.68	0.46
1:A:541:ALA:CB	1:A:542:PRO:HD3	2.40	0.46
9:L:87:ILE:HG22	9:L:88:LYS:H	1.80	0.46
3:R:663:SER:CB	3:R:664:PRO:CD	2.93	0.46
11:P:20:VAL:HG23	11:P:20:VAL:O	2.15	0.46
1:A:752:VAL:HG11	1:A:800:ALA:O	2.16	0.46
3:R:229:ALA:HB1	3:R:269:LEU:HD23	1.97	0.46
3:B:196:TYR:CE2	3:B:303:THR:HG21	2.50	0.46
3:B:173:LEU:HD22	3:B:333:ASP:HB3	1.97	0.46
5:E:1:MET:HB2	5:E:78:VAL:O	2.15	0.46
3:R:1069:TRP:CZ3	3:R:1077:TYR:CB	2.98	0.46
3:R:251:GLU:C	3:R:252:LEU:HG	2.36	0.46
4:D:105:GLU:N	4:D:135:THR:CG2	2.79	0.46
2:C:106:ARG:O	2:C:107:LEU:C	2.51	0.46
2:G:106:ARG:O	2:G:109:GLU:N	2.48	0.46
2:G:112:ASP:O	2:G:113:ALA:CB	2.62	0.46
2:G:269:VAL:HG12	7:V:14:HIS:CD2	2.51	0.46
3:R:935:LEU:CD2	10:Y:43:TYR:HB3	2.45	0.46
3:R:955:ASN:O	3:R:958:LEU:HB3	2.14	0.46
1:Q:425:LEU:CD2	2:G:83:THR:HG21	2.45	0.46
4:S:187:VAL:HG21	14:S:1001:F3S:S4	2.56	0.46
1:Q:584:SER:O	1:Q:585:TYR:C	2.53	0.46
3:B:17:TYR:HA	3:B:604:PHE:CB	2.45	0.46
1:A:584:SER:O	1:A:585:TYR:C	2.54	0.46
3:B:482:GLU:O	3:B:483:ARG:C	2.53	0.46
3:R:480:ILE:CG2	3:R:481:ASN:N	2.78	0.46
3:R:65:ILE:HG22	3:R:66:GLY:H	1.80	0.46
5:T:117:THR:HG21	5:T:130:GLU:HG3	1.98	0.46
8:K:79:ARG:HG3	8:K:79:ARG:NH1	2.27	0.46
9:X:69:LEU:C	9:X:69:LEU:HD23	2.36	0.46
1:A:608:PRO:O	1:A:609:GLU:CG	2.63	0.46
2:G:130:TYR:HB3	2:G:136:LYS:HG3	1.98	0.46
1:Q:75:ILE:HG23	1:Q:75:ILE:O	2.14	0.46
3:B:290:GLN:NE2	3:B:308:ARG:HH12	2.13	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:95:PRO:HB2	3:R:115:TYR:CD2	2.51	0.46
1:A:307:GLY:O	1:A:311:GLY:HA3	2.14	0.46
2:G:104:LEU:CD2	2:G:104:LEU:C	2.84	0.46
1:Q:8:GLY:H	2:G:366:PHE:HE1	1.62	0.46
3:R:931:LYS:HB3	3:R:957:ILE:HG21	1.98	0.46
10:Y:3:ILE:HA	10:Y:52:HIS:NE2	2.30	0.46
3:R:902:LYS:CB	10:Y:42:ARG:NH1	2.75	0.46
2:C:24:LEU:O	2:C:29:VAL:HG23	2.15	0.46
3:R:875:GLY:HA2	3:R:887:VAL:HG11	1.98	0.46
6:U:80:SER:O	6:U:84:ARG:HB2	2.15	0.46
5:T:85:VAL:HG11	5:T:101:LEU:HD13	1.98	0.46
3:R:764:LYS:CD	3:R:815:SER:HA	2.43	0.46
1:A:590:ASN:OD1	3:R:377:ARG:HD2	2.16	0.46
5:E:15:PRO:HA	5:E:18:PHE:CD1	2.50	0.46
1:Q:325:VAL:CG2	1:Q:442:THR:HG22	2.46	0.46
1:A:506:ALA:N	1:A:635:PHE:HD2	2.12	0.46
1:Q:872:PHE:CD2	1:Q:876:VAL:HG11	2.51	0.46
2:C:131:LYS:O	2:C:249:TYR:N	2.49	0.46
3:R:655:ILE:HG23	3:R:881:ARG:O	2.14	0.46
1:A:782:ILE:HG22	1:A:784:SER:N	2.31	0.46
9:L:83:TYR:O	9:L:87:ILE:HB	2.15	0.46
8:W:70:ARG:C	8:W:72:GLY:N	2.67	0.46
3:R:790:ARG:C	3:R:792:LEU:N	2.69	0.46
3:R:28:LEU:O	3:R:30:SER:N	2.38	0.46
3:R:265:VAL:O	3:R:268:ALA:HB3	2.16	0.46
3:B:134:THR:O	3:B:137:LYS:N	2.49	0.46
3:R:309:LYS:C	3:R:311:LYS:H	2.18	0.46
3:R:1079:CYS:SG	3:R:1080:PRO:CD	3.02	0.46
3:B:1063:GLN:HE22	3:B:1085:LYS:HD2	1.80	0.46
1:A:4:LYS:HB3	3:B:1090:PRO:O	2.15	0.46
1:Q:761:TYR:CB	1:Q:764:ARG:HG3	2.45	0.46
3:B:220:LYS:O	3:B:275:ARG:NH1	2.48	0.46
10:N:3:ILE:HG22	10:N:4:PRO:CD	2.46	0.46
4:D:134:GLY:HA3	10:N:60:ILE:HD11	1.98	0.46
4:D:50:ASN:ND2	10:N:64:ARG:NH1	2.63	0.46
2:C:289:ALA:O	2:C:290:ARG:C	2.54	0.46
3:R:1113:LEU:H	3:R:1113:LEU:HD12	1.79	0.46
1:Q:418:LEU:HD23	1:Q:430:MET:CE	2.46	0.46
3:R:699:GLN:CA	10:Y:51:SER:O	2.63	0.46
1:Q:449:VAL:O	1:Q:449:VAL:HG12	2.16	0.46
1:A:704:LEU:HD22	1:A:781:PHE:CD1	2.50	0.46
1:A:206:TRP:C	1:A:208:ILE:H	2.19	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:498:ALA:HB3	1:A:503:ILE:HG22	1.98	0.46
3:B:727:MET:HA	3:B:912:PRO:HG2	1.97	0.46
3:R:353:LEU:O	3:R:354:PHE:C	2.54	0.46
1:A:841:LEU:CD2	2:C:367:LYS:HB2	2.46	0.46
1:A:282:PRO:O	1:A:283:GLY:O	2.34	0.46
3:R:846:ILE:HG22	3:R:846:ILE:O	2.15	0.46
1:Q:364:PHE:HD2	1:Q:373:PRO:O	1.99	0.46
3:B:343:LEU:HD11	3:B:575:VAL:CG2	2.45	0.46
3:R:789:TYR:CD2	3:R:789:TYR:N	2.68	0.46
1:A:276:TYR:CD2	1:A:277:PHE:CD1	3.01	0.46
10:N:63:THR:HB	10:N:64:ARG:HD3	1.96	0.46
1:A:489:PRO:HA	1:A:858:MET:HG3	1.96	0.46
1:A:853:ASP:HB3	1:A:855:VAL:HB	1.97	0.46
1:A:827:LEU:HD11	2:C:315:LEU:CD1	2.44	0.46
2:C:120:PRO:CA	2:C:275:ASN:ND2	2.67	0.46
3:B:435:ARG:NH1	3:B:435:ARG:CG	2.75	0.46
3:B:429:VAL:CG1	3:B:453:MET:HE1	2.46	0.46
1:Q:820:GLN:O	1:Q:823:LEU:HD12	2.15	0.46
10:Y:24:ARG:HD2	10:Y:34:VAL:CG1	2.45	0.46
4:S:158:PRO:O	4:S:233:VAL:HG22	2.15	0.46
1:A:573:ARG:HA	1:A:582:HIS:CD2	2.51	0.46
3:B:482:GLU:OE2	3:B:525:ARG:NH1	2.49	0.46
5:T:168:TYR:CE2	6:U:81:ASP:HB3	2.51	0.46
3:B:926:GLU:HB3	3:B:988:VAL:HG22	1.98	0.46
4:D:182:VAL:HG11	4:D:212:TYR:CG	2.50	0.46
3:R:54:PRO:O	3:R:56:LEU:N	2.49	0.46
3:B:814:VAL:O	3:B:814:VAL:HG12	2.15	0.46
9:L:7:LYS:HE3	9:L:12:TYR:CE2	2.50	0.46
5:T:38:ILE:H	5:T:38:ILE:HD12	1.81	0.46
3:R:687:ARG:CB	3:R:687:ARG:HH11	2.29	0.46
4:S:178:LYS:HA	4:S:181:ASN:HD22	1.81	0.46
3:B:992:LYS:HE3	3:B:996:MET:SD	2.56	0.46
1:A:667:ARG:O	1:A:670:VAL:CG2	2.62	0.46
4:D:101:GLU:HG2	4:D:102:ALA:N	2.29	0.46
3:B:225:ILE:HD13	3:B:271:PHE:HB3	1.97	0.46
3:R:979:ILE:C	3:R:979:ILE:HD12	2.36	0.46
6:U:63:VAL:HG12	6:U:63:VAL:O	2.16	0.46
3:R:441:GLU:HG2	3:R:441:GLU:O	2.16	0.46
1:A:212:LEU:HD23	1:A:242:ILE:HG21	1.98	0.46
3:R:1083:GLY:O	3:R:1085:LYS:N	2.49	0.46
1:Q:752:VAL:HG11	1:Q:800:ALA:O	2.15	0.46
3:R:249:GLN:O	3:R:250:ASN:C	2.55	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:80:ILE:HD12	3:R:92:TYR:HA	1.97	0.46
10:N:23:THR:HG22	10:N:24:ARG:N	2.30	0.46
6:U:13:PRO:HB2	6:U:73:ALA:O	2.15	0.46
6:U:18:LYS:HZ2	6:U:45:GLU:HG2	1.80	0.46
2:G:103:GLY:HA3	2:G:300:VAL:CG1	2.45	0.46
2:G:117:PRO:HD2	2:G:120:PRO:HG3	1.98	0.46
2:G:70:ILE:HA	2:G:73:VAL:CG2	2.42	0.46
4:S:141:LEU:HD12	4:S:141:LEU:C	2.37	0.46
4:S:52:PRO:CG	10:Y:56:ILE:HD11	2.46	0.46
1:Q:451:PRO:HG2	1:Q:605:ASN:OD1	2.16	0.46
1:Q:524:ILE:HG23	1:Q:634:VAL:HG13	1.98	0.46
1:Q:728:MET:HE3	3:R:913:HIS:ND1	2.30	0.46
3:B:13:VAL:HG22	3:B:592:GLU:OE2	2.16	0.46
3:R:5:LEU:HB2	3:R:630:PRO:HG3	1.97	0.46
3:R:226:LEU:HD13	3:R:297:PHE:HE1	1.81	0.46
5:T:163:THR:C	5:T:164:MET:HG3	2.35	0.46
3:B:904:VAL:CG2	10:N:42:ARG:NE	2.78	0.46
3:B:543:ARG:NH2	3:B:548:GLU:OE2	2.48	0.46
5:E:124:ARG:NH2	5:E:137:GLN:OE1	2.49	0.46
4:D:167:TYR:CD1	4:D:227:ILE:HD11	2.50	0.46
1:Q:675:LEU:CD2	1:Q:684:LEU:HD11	2.46	0.46
3:R:97:TRP:CE3	3:R:113:GLU:HB3	2.51	0.46
3:B:754:PHE:CE2	3:B:756:ARG:HB2	2.47	0.46
3:B:814:VAL:HA	3:B:833:ARG:O	2.15	0.46
1:Q:441:LEU:HD12	3:R:873:THR:HG21	1.97	0.46
3:B:274:SER:C	3:B:276:VAL:H	2.20	0.46
9:L:69:LEU:HD23	9:L:73:ILE:HG12	1.97	0.46
1:A:532:ILE:O	1:A:532:ILE:HG22	2.16	0.46
3:R:657:TYR:O	3:R:658:PRO:C	2.53	0.46
3:R:656:PRO:HG3	3:R:926:GLU:HG3	1.97	0.46
9:L:87:ILE:HG23	9:L:88:LYS:N	2.31	0.46
11:Z:9:CYS:SG	11:Z:10:TRP:O	2.74	0.46
1:A:391:VAL:O	1:A:392:LYS:O	2.34	0.46
1:Q:12:GLY:HA3	1:Q:201:THR:O	2.16	0.46
3:R:248:VAL:HA	3:R:251:GLU:CD	2.35	0.46
3:B:238:ILE:HA	3:B:241:ALA:CB	2.46	0.46
3:B:252:LEU:C	3:B:254:PRO:HD2	2.36	0.46
3:B:519:LYS:HD2	3:B:565:GLU:HG2	1.98	0.46
10:N:53:VAL:O	10:N:54:ASP:HB3	2.16	0.46
3:B:139:ILE:CG2	10:N:61:HIS:HD2	2.26	0.46
2:C:41:ILE:CG2	2:C:42:ILE:HD12	2.45	0.46
10:Y:23:THR:HG22	10:Y:24:ARG:N	2.31	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:V:28:ALA:C	7:V:30:LYS:H	2.20	0.46
3:R:898:PRO:HA	3:R:971:TYR:O	2.15	0.46
4:S:204:THR:O	4:S:206:CYS:N	2.48	0.46
1:A:759:ARG:HH21	1:A:763:THR:HA	1.81	0.46
1:Q:569:SER:HB2	1:Q:584:SER:HG	1.78	0.46
5:T:179:LYS:NZ	6:U:82:GLU:HG3	2.31	0.46
5:T:113:ILE:CG2	5:T:114:THR:N	2.78	0.46
1:Q:19:ILE:HA	1:Q:22:MET:HE2	1.98	0.46
3:R:813:LYS:HE2	3:R:835:THR:HG21	1.98	0.46
1:Q:552:ILE:C	1:Q:554:ALA:N	2.69	0.46
3:R:202:ILE:CG2	3:R:203:GLU:N	2.79	0.46
3:B:804:VAL:CG1	3:B:805:LYS:N	2.79	0.46
1:Q:665:ILE:O	1:Q:669:LYS:HG3	2.15	0.46
3:R:867:ARG:CZ	4:S:54:TYR:CE2	2.99	0.46
8:K:28:THR:O	8:K:31:GLU:N	2.48	0.46
3:B:54:PRO:O	3:B:55:GLY:C	2.55	0.46
3:R:367:TYR:HD2	3:R:367:TYR:C	2.19	0.46
4:S:63:ALA:HB1	4:S:155:LYS:NZ	2.28	0.46
3:R:790:ARG:HG3	3:R:791:LEU:HD23	1.98	0.46
4:D:155:LYS:NZ	11:P:47:ALA:O	2.48	0.46
9:L:45:GLN:HE22	9:L:48:PRO:N	2.13	0.46
9:X:45:GLN:OE1	9:X:45:GLN:O	2.34	0.46
5:T:10:ILE:HD12	5:T:10:ILE:N	2.30	0.46
1:A:302:LEU:HA	1:A:308:ARG:H	1.82	0.45
3:B:1073:ASN:C	3:B:1075:ASN:N	2.67	0.45
1:A:313:LEU:CD2	3:B:1100:LEU:HD22	2.46	0.45
3:R:248:VAL:HG21	3:R:329:ARG:HH12	1.81	0.45
2:C:311:ARG:HD3	2:C:311:ARG:N	2.29	0.45
6:U:40:TYR:O	6:U:43:SER:OG	2.30	0.45
1:Q:234:ASP:O	1:Q:236:THR:N	2.49	0.45
7:V:54:SER:O	7:V:56:ASN:N	2.49	0.45
2:G:365:GLU:CG	2:G:366:PHE:H	2.29	0.45
2:G:384:GLY:HA2	5:T:61:PHE:HZ	1.80	0.45
3:R:744:SER:HB3	10:Y:8:PHE:HB3	1.98	0.45
3:R:934:ALA:HB2	10:Y:47:ARG:HH11	1.80	0.45
1:Q:532:ILE:CG2	1:Q:532:ILE:O	2.64	0.45
1:Q:555:PHE:CD2	1:Q:631:LEU:HD13	2.50	0.45
4:S:34:LEU:O	4:S:36:VAL:N	2.49	0.45
1:Q:369:PRO:HB3	1:Q:376:ASN:CB	2.26	0.45
3:B:577:ARG:HG2	3:B:579:LEU:HD21	1.98	0.45
3:B:633:LEU:O	3:B:635:PRO:N	2.49	0.45
3:R:18:PHE:C	3:R:20:SER:H	2.19	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:474:ALA:HB1	3:R:615:TYR:CE2	2.52	0.45
5:T:149:VAL:HG21	5:T:160:ILE:HG13	1.98	0.45
3:B:952:GLN:O	3:B:953:LEU:C	2.55	0.45
1:A:94:LEU:C	1:A:96:ALA:H	2.18	0.45
3:B:719:GLY:O	3:B:989:TYR:CE1	2.69	0.45
3:B:965:ASP:C	3:B:967:THR:H	2.16	0.45
3:B:975:THR:CG2	3:B:977:GLN:HG2	2.46	0.45
4:D:27:ALA:HB1	9:L:23:THR:CG2	2.46	0.45
3:B:705:THR:HB	3:B:708:LEU:HB2	1.98	0.45
1:A:552:ILE:HD12	1:A:553:SER:N	2.31	0.45
3:R:373:LYS:CD	3:R:375:ARG:HD2	2.46	0.45
3:R:391:THR:O	3:R:394:ILE:HG22	2.16	0.45
1:A:440:GLY:HA3	1:A:444:ARG:NH2	2.31	0.45
3:R:278:ILE:HG22	3:R:279:GLY:H	1.79	0.45
2:C:146:TYR:HB2	2:C:238:LYS:HD3	1.99	0.45
2:G:240:ALA:O	2:G:241:ILE:HG13	2.16	0.45
1:A:522:GLN:HG2	9:L:40:PHE:CD1	2.51	0.45
3:R:147:ASP:OD2	3:R:148:PRO:CD	2.63	0.45
1:Q:397:LEU:O	1:Q:400:THR:HB	2.16	0.45
6:U:20:LEU:O	6:U:24:VAL:HG23	2.16	0.45
4:S:178:LYS:O	4:S:179:ALA:C	2.54	0.45
11:P:9:CYS:SG	11:P:10:TRP:O	2.74	0.45
3:B:651:THR:CG2	3:B:670:SER:HA	2.45	0.45
4:D:107:ARG:N	4:D:133:LEU:O	2.32	0.45
4:D:133:LEU:HD11	4:D:139:ILE:HG12	1.98	0.45
3:R:1078:VAL:HG11	3:R:1082:HIS:HB3	1.97	0.45
3:B:1061:CYS:HB3	3:B:1064:CYS:C	2.36	0.45
3:R:249:GLN:HB2	3:R:253:PHE:CE1	2.51	0.45
1:A:821:ARG:O	1:A:825:ASN:ND2	2.43	0.45
2:C:124:ILE:CG2	2:C:267:VAL:HG13	2.46	0.45
2:C:315:LEU:HD23	2:C:315:LEU:HA	1.85	0.45
6:F:18:LYS:HZ2	6:F:45:GLU:HG2	1.81	0.45
1:Q:474:ALA:C	1:Q:476:ALA:N	2.70	0.45
4:S:52:PRO:HB2	10:Y:56:ILE:HD11	1.98	0.45
1:Q:631:LEU:HG	1:Q:635:PHE:HE1	1.81	0.45
4:S:176:CYS:N	4:S:195:LEU:CD2	2.79	0.45
3:B:457:GLU:C	3:B:458:THR:OG1	2.55	0.45
1:A:184:LEU:HB3	1:A:204:PRO:HB2	1.97	0.45
4:D:149:TYR:O	4:D:150:GLY:C	2.54	0.45
4:D:187:VAL:HG21	4:D:203:CYS:HB2	1.99	0.45
4:D:204:THR:O	4:D:205:LEU:C	2.54	0.45
2:C:395:ARG:HG2	5:E:19:GLY:HA3	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:E:179:LYS:HZ1	6:F:82:GLU:CG	2.24	0.45
3:R:654:ILE:CD1	3:R:654:ILE:H	2.24	0.45
3:R:808:ASP:O	3:R:838:VAL:HG13	2.17	0.45
4:D:178:LYS:O	4:D:179:ALA:C	2.54	0.45
1:A:415:ASP:O	1:A:435:VAL:HG12	2.17	0.45
3:R:367:TYR:CD2	3:R:367:TYR:C	2.90	0.45
5:E:10:ILE:HD12	5:E:10:ILE:N	2.32	0.45
2:C:130:TYR:HB3	2:C:136:LYS:HG3	1.98	0.45
3:B:790:ARG:C	3:B:792:LEU:N	2.69	0.45
3:R:549:ILE:HD13	3:R:549:ILE:HA	1.84	0.45
1:Q:861:ALA:O	1:Q:862:HIS:CD2	2.69	0.45
4:D:2:SER:N	9:L:86:GLU:OE1	2.49	0.45
2:G:369:VAL:HG11	2:G:381:LEU:HD21	1.98	0.45
1:Q:309:PHE:HA	1:Q:313:LEU:HB2	1.97	0.45
3:R:232:ILE:HG23	3:R:237:ASP:HB3	1.98	0.45
3:R:330:ARG:O	3:R:331:GLU:CB	2.60	0.45
1:Q:418:LEU:CD1	3:R:1044:LEU:HD11	2.44	0.45
3:R:935:LEU:O	10:Y:46:ARG:NH1	2.49	0.45
4:S:110:TYR:HA	4:S:128:ILE:O	2.16	0.45
1:Q:506:ALA:N	1:Q:635:PHE:HD2	2.15	0.45
3:R:899:TYR:OH	4:S:164:VAL:HB	2.16	0.45
3:R:974:ARG:HB2	9:X:22:HIS:CD2	2.50	0.45
1:Q:361:LEU:HG	1:Q:407:ILE:HG12	1.97	0.45
1:A:764:ARG:CB	1:A:764:ARG:NH1	2.78	0.45
3:R:589:VAL:O	3:R:592:GLU:N	2.46	0.45
3:R:6:THR:CB	3:R:9:GLU:CB	2.95	0.45
1:Q:175:LEU:HD23	1:Q:176:THR:N	2.10	0.45
5:T:114:THR:CG2	5:T:115:ASP:N	2.80	0.45
3:B:702:LEU:HD22	3:B:933:ALA:HB1	1.96	0.45
3:B:110:GLU:HA	3:B:111:PRO:HA	1.72	0.45
3:B:193:THR:CB	3:B:197:ARG:O	2.64	0.45
5:E:117:THR:HG21	5:E:130:GLU:HG3	1.98	0.45
1:A:508:LEU:HB3	1:A:638:PHE:HE2	1.82	0.45
4:D:213:CYS:CB	4:D:217:ILE:HD13	2.46	0.45
5:T:27:LEU:HD23	5:T:28:ASN:N	2.31	0.45
2:G:337:GLU:CD	2:G:337:GLU:N	2.69	0.45
1:A:589:LYS:O	1:A:592:ILE:CB	2.65	0.45
5:E:18:PHE:CE2	8:K:42:GLN:HG2	2.51	0.45
2:C:137:ALA:O	2:C:140:VAL:N	2.40	0.45
1:A:529:ASP:OD2	1:A:529:ASP:O	2.33	0.45
4:D:145:LEU:HD12	4:D:145:LEU:N	2.30	0.45
3:B:804:VAL:O	3:B:805:LYS:HD2	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:805:LYS:O	3:B:806:GLY:C	2.55	0.45
1:Q:464:LEU:C	1:Q:464:LEU:CD1	2.85	0.45
8:W:61:VAL:CG1	8:W:62:ILE:N	2.76	0.45
1:Q:375:ALA:HB2	1:Q:409:ARG:HA	1.98	0.45
4:S:39:MET:O	4:S:67:PHE:HB2	2.17	0.45
2:C:16:LYS:NZ	3:R:75:ARG:NH1	2.64	0.45
1:A:394:ARG:O	1:A:398:ALA:HB2	2.17	0.45
1:A:12:GLY:HA3	1:A:201:THR:O	2.17	0.45
3:B:790:ARG:HG3	3:B:791:LEU:HD23	1.99	0.45
3:R:651:THR:CG2	3:R:670:SER:HA	2.45	0.45
6:F:88:VAL:HG12	6:F:89:MET:N	2.31	0.45
1:Q:23:SER:O	1:Q:24:VAL:CG1	2.64	0.45
9:X:45:GLN:HE22	9:X:48:PRO:HD3	1.82	0.45
3:B:979:ILE:HD13	3:B:981:SER:H	1.82	0.45
3:B:1076:LYS:O	3:B:1078:VAL:HG23	2.16	0.45
3:B:250:ASN:O	3:B:252:LEU:N	2.50	0.45
3:B:128:ASP:OD1	3:B:130:ILE:HG13	2.16	0.45
4:D:52:PRO:CB	10:N:56:ILE:HD11	2.46	0.45
2:C:65:ALA:CB	8:K:19:PHE:CE1	2.99	0.45
6:U:57:GLU:O	6:U:59:LEU:N	2.50	0.45
6:U:57:GLU:C	6:U:59:LEU:N	2.68	0.45
2:C:104:LEU:C	2:C:104:LEU:HD23	2.37	0.45
3:R:946:TYR:CE1	3:R:949:PRO:HA	2.51	0.45
3:R:940:VAL:HG23	3:R:947:LYS:HD3	1.98	0.45
2:G:311:ARG:NH1	7:V:71:LEU:HD13	2.32	0.45
1:Q:487:ILE:O	1:Q:858:MET:HE2	2.15	0.45
4:S:175:ASN:OD1	4:S:195:LEU:HG	2.15	0.45
1:Q:58:CYS:CB	1:Q:59:PRO:CD	2.94	0.45
3:B:934:ALA:HB1	10:N:43:TYR:HB2	1.99	0.45
3:B:103:VAL:HG13	3:B:106:ASN:C	2.37	0.45
3:B:62:LYS:C	3:B:63:ILE:HD12	2.35	0.45
1:A:498:ALA:CB	1:A:503:ILE:HG22	2.46	0.45
3:B:921:LEU:C	3:B:923:GLN:N	2.69	0.45
3:B:757:LEU:HD23	3:B:758:TYR:H	1.77	0.45
5:E:39:LEU:HD13	5:E:42:LEU:CD1	2.47	0.45
5:T:39:LEU:HD13	5:T:42:LEU:CD1	2.46	0.45
3:R:654:ILE:O	3:R:654:ILE:HG22	2.16	0.45
1:Q:750:GLN:HG3	1:Q:782:ILE:HD11	1.98	0.45
4:S:93:TYR:CE1	4:S:144:ARG:NH2	2.84	0.45
1:Q:796:PHE:CZ	3:R:445:LEU:HB3	2.51	0.45
8:W:30:TYR:N	8:W:30:TYR:CD1	2.84	0.45
7:H:20:HIS:HB3	7:H:63:ILE:HG21	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:489:LEU:O	3:R:492:MET:N	2.46	0.45
5:T:3:LYS:CA	6:U:12:ILE:HG13	2.46	0.45
4:D:173:LEU:O	4:D:174:ALA:CB	2.63	0.45
6:F:14:TYR:O	6:F:18:LYS:HE3	2.17	0.45
2:G:321:THR:CG2	7:V:79:ARG:HH12	2.28	0.45
8:W:43:LEU:HD13	8:W:64:ILE:HD11	1.98	0.45
3:R:950:ILE:O	3:R:951:GLU:C	2.54	0.45
4:S:134:GLY:HA3	10:Y:60:ILE:HD11	1.99	0.45
1:Q:490:ARG:HG3	2:G:308:VAL:HG23	1.97	0.45
1:Q:431:MET:HE3	1:Q:482:VAL:HA	1.98	0.45
1:Q:490:ARG:HD3	2:G:77:SER:O	2.17	0.45
8:W:26:ARG:HG2	8:W:90:LEU:HD13	1.99	0.45
4:S:159:VAL:CG2	4:S:160:SER:N	2.78	0.45
1:Q:394:ARG:O	1:Q:398:ALA:HB2	2.16	0.45
3:R:13:VAL:HG22	3:R:592:GLU:OE2	2.17	0.45
1:A:672:VAL:CG1	1:A:700:ILE:HD12	2.35	0.45
1:Q:51:VAL:HG23	1:Q:58:CYS:HB3	1.98	0.45
3:B:950:ILE:C	3:B:952:GLN:N	2.69	0.45
1:A:206:TRP:CZ3	1:A:209:LEU:HD23	2.52	0.45
1:Q:651:VAL:HG21	1:Q:743:MET:HB3	1.97	0.45
1:A:550:GLN:O	1:A:553:SER:N	2.49	0.45
3:R:51:THR:HG21	3:R:370:GLU:OE1	2.17	0.45
8:K:27:LEU:N	8:K:27:LEU:HD12	2.31	0.45
3:B:278:ILE:HG23	3:B:285:ARG:NH2	2.31	0.45
1:A:417:VAL:CG1	1:A:464:LEU:HD13	2.47	0.45
1:A:529:ASP:HB3	1:A:626:TRP:CD1	2.51	0.45
9:L:12:TYR:HA	9:L:57:ILE:O	2.17	0.45
3:B:526:LEU:HD23	3:B:527:ILE:N	2.31	0.45
3:R:804:VAL:HG12	3:R:805:LYS:N	2.31	0.45
3:R:805:LYS:O	3:R:806:GLY:C	2.55	0.45
4:D:38:ILE:HD12	4:D:39:MET:C	2.37	0.45
2:G:281:GLU:OE1	2:G:326:VAL:CG1	2.62	0.45
1:Q:664:GLU:OE1	1:Q:707:LEU:HD22	2.16	0.45
6:F:30:SER:HB3	6:F:38:TYR:CE1	2.51	0.45
3:B:707:ALA:C	3:B:709:ASP:N	2.70	0.45
3:B:367:TYR:C	3:B:367:TYR:HD2	2.20	0.45
3:B:745:VAL:CG1	3:B:872:PRO:HG2	2.45	0.45
3:B:304:SER:O	3:B:305:ALA:C	2.55	0.45
2:C:359:ALA:C	2:C:361:GLY:H	2.20	0.45
4:S:133:LEU:HD21	4:S:139:ILE:CG1	2.46	0.45
3:B:181:SER:O	3:B:182:ASN:CB	2.64	0.45
3:R:33:ASP:OD1	3:R:33:ASP:C	2.54	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:852:ASP:HB2	7:H:71:LEU:HD12	1.99	0.45
4:D:190:LEU:HD11	4:D:195:LEU:HD23	1.98	0.45
1:A:828:SER:C	1:A:830:LEU:N	2.70	0.45
1:A:830:LEU:CD1	1:A:846:VAL:HG21	2.47	0.45
6:F:16:VAL:O	6:F:18:LYS:N	2.49	0.45
2:G:103:GLY:O	2:G:105:PRO:HD3	2.17	0.45
4:S:68:MET:HA	4:S:68:MET:HE3	1.99	0.45
2:G:32:LEU:O	2:G:36:ILE:HG13	2.17	0.45
3:B:463:ASN:HB3	3:B:467:VAL:CG1	2.45	0.45
10:N:40:VAL:HG11	10:N:46:ARG:HG3	1.98	0.45
3:B:978:LYS:NZ	4:D:205:LEU:HD22	2.32	0.45
3:R:800:PRO:HD3	3:R:850:VAL:CG2	2.45	0.45
3:R:353:LEU:O	3:R:356:VAL:HG12	2.16	0.45
3:B:764:LYS:CD	3:B:815:SER:HA	2.41	0.45
5:E:64:GLY:N	8:K:41:LEU:CD2	2.79	0.45
1:Q:550:GLN:O	1:Q:553:SER:N	2.49	0.45
1:A:527:VAL:HG11	1:A:530:VAL:HB	1.97	0.45
1:A:326:ILE:O	1:A:326:ILE:HG13	2.16	0.45
8:K:34:ARG:C	8:K:37:SER:HB2	2.36	0.45
4:S:69:SER:HA	4:S:72:ALA:CB	2.47	0.45
1:A:665:ILE:O	1:A:669:LYS:HG3	2.17	0.45
7:V:20:HIS:HB3	7:V:63:ILE:CG2	2.46	0.45
8:W:70:ARG:O	8:W:72:GLY:N	2.49	0.45
10:Y:5:ILE:O	10:Y:6:ARG:HB2	2.16	0.45
8:K:55:ASN:O	8:K:56:LEU:CB	2.65	0.45
1:Q:30:PRO:CB	1:Q:244:ARG:HA	2.46	0.45
1:A:88:LYS:O	1:A:92:GLU:HG3	2.16	0.45
3:B:462:PRO:O	3:B:464:SER:N	2.49	0.45
5:T:1:MET:HB2	5:T:78:VAL:O	2.16	0.45
10:Y:28:GLY:O	10:Y:29:GLU:O	2.34	0.45
2:C:341:VAL:HG13	2:C:364:GLU:HG2	1.98	0.45
1:Q:238:LYS:HZ3	1:Q:297:THR:CB	2.21	0.45
3:B:1071:ASP:C	3:B:1073:ASN:N	2.69	0.45
3:R:330:ARG:NH2	3:R:565:GLU:OE2	2.50	0.45
3:R:768:GLY:O	3:R:769:GLN:CB	2.64	0.45
3:B:854:GLU:OE2	11:P:24:VAL:HB	2.17	0.45
1:Q:217:ILE:HD13	1:Q:220:ARG:CZ	2.46	0.45
1:A:823:LEU:HD13	2:C:75:ALA:O	2.16	0.45
2:C:320:MET:HA	2:C:327:ARG:HG2	1.99	0.45
8:W:41:LEU:HD23	8:W:45:MET:HG3	1.99	0.45
4:S:50:ASN:ND2	10:Y:64:ARG:CZ	2.80	0.45
10:Y:43:TYR:CD1	10:Y:44:CYS:N	2.85	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:52:PHE:CA	2:G:55:ALA:HB3	2.46	0.45
1:Q:488:THR:OG1	1:Q:495:ILE:HD12	2.16	0.45
1:Q:529:ASP:O	1:Q:529:ASP:OD2	2.34	0.45
1:Q:555:PHE:HD1	1:Q:626:TRP:CH2	2.34	0.45
3:B:337:HIS:CD2	3:B:339:ALA:HB3	2.52	0.45
3:R:17:TYR:HA	3:R:604:PHE:HB2	1.97	0.45
1:A:361:LEU:HG	1:A:407:ILE:HG12	1.98	0.45
1:A:358:ILE:HD12	1:A:403:PRO:HD3	1.99	0.45
5:T:147:ILE:O	5:T:148:SER:HB3	2.17	0.45
1:A:220:ARG:NH1	1:A:236:THR:HG23	2.32	0.45
5:E:114:THR:C	5:E:165:ARG:HE	2.20	0.45
5:E:113:ILE:CG2	5:E:114:THR:N	2.79	0.45
5:E:147:ILE:O	5:E:148:SER:HB3	2.17	0.45
1:A:649:GLU:HG3	3:B:965:ASP:OD1	2.17	0.45
1:A:872:PHE:HA	1:A:876:VAL:CB	2.45	0.45
3:R:368:GLN:O	3:R:372:SER:HB3	2.15	0.45
1:A:841:LEU:HD23	2:C:367:LYS:HB2	1.99	0.45
4:D:125:SER:C	4:D:127:ASP:N	2.70	0.45
6:F:80:SER:O	6:F:84:ARG:HB2	2.16	0.45
2:C:132:ARG:NE	2:C:132:ARG:H	2.14	0.45
1:A:261:ILE:O	1:A:261:ILE:HG22	2.16	0.45
4:S:39:MET:CB	4:S:69:SER:OG	2.65	0.45
1:Q:661:ILE:HD12	1:Q:711:ALA:HB1	1.98	0.45
3:B:395:ARG:O	3:B:399:ALA:HB3	2.16	0.45
3:R:270:ASP:C	3:R:272:ILE:N	2.70	0.45
2:G:328:GLN:O	2:G:333:GLY:HA3	2.16	0.45
1:Q:297:THR:O	1:Q:300:GLN:N	2.50	0.45
3:B:1069:TRP:HB2	3:B:1070:TYR:H	1.59	0.45
3:R:223:PHE:CD2	3:R:256:LEU:HD22	2.52	0.45
3:R:618:ALA:C	3:R:620:GLU:N	2.68	0.45
3:B:230:LEU:HD13	3:B:312:ALA:CA	2.47	0.45
3:B:766:PRO:O	3:B:768:GLY:N	2.49	0.45
10:N:22:ILE:HG12	10:N:23:THR:N	2.32	0.45
1:A:474:ALA:C	1:A:476:ALA:N	2.69	0.45
8:K:13:LEU:HD23	8:K:15:PHE:HE1	1.82	0.45
6:U:14:TYR:CD1	6:U:74:SER:CB	2.96	0.45
2:C:124:ILE:HG12	2:C:272:VAL:HG13	1.98	0.45
2:G:285:GLY:N	7:V:50:PRO:HG3	2.31	0.45
2:G:390:MET:O	2:G:391:ARG:CD	2.64	0.45
4:S:132:LEU:HD12	10:Y:60:ILE:HD13	1.97	0.45
2:C:52:PHE:O	2:C:56:ILE:N	2.28	0.45
1:Q:524:ILE:O	1:Q:525:LEU:CD2	2.65	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:6:THR:CB	3:R:9:GLU:HB3	2.47	0.45
10:N:21:PHE:HE2	10:N:35:LEU:CD2	2.29	0.45
3:B:749:MET:CB	10:N:8:PHE:CD1	2.98	0.45
3:B:661:ASN:OD1	3:B:882:HIS:HB3	2.17	0.45
4:D:228:LEU:CD1	4:D:230:ILE:HD11	2.44	0.45
1:Q:749:GLN:HA	1:Q:781:PHE:CA	2.47	0.45
1:Q:184:LEU:HB3	1:Q:204:PRO:HB2	1.98	0.45
3:R:64:ARG:HD3	3:R:64:ARG:N	2.32	0.45
3:B:688:THR:CG2	3:B:863:LYS:HZ2	2.30	0.45
8:K:77:THR:HG23	8:K:90:LEU:O	2.17	0.45
3:R:281:LYS:HB2	3:R:284:ASN:HB2	1.99	0.45
3:B:798:VAL:O	11:P:36:MET:SD	2.75	0.45
1:A:181:ARG:NH1	1:A:185:GLU:OE2	2.50	0.45
1:A:831:ARG:NH2	2:C:385:MET:HG3	2.30	0.45
2:G:130:TYR:CD1	2:G:136:LYS:HE3	2.52	0.45
7:H:20:HIS:HB3	7:H:63:ILE:CG2	2.46	0.45
3:R:419:TRP:HZ3	3:R:712:GLY:C	2.20	0.45
3:B:303:THR:HG22	3:B:303:THR:O	2.16	0.45
3:R:462:PRO:C	3:R:464:SER:H	2.19	0.45
9:L:45:GLN:HE22	9:L:48:PRO:HD3	1.82	0.45
3:R:679:LEU:HD23	3:R:716:ARG:CG	2.46	0.45
1:A:594:LEU:O	1:A:595:GLU:O	2.34	0.45
3:R:230:LEU:HD13	3:R:312:ALA:CA	2.46	0.45
1:A:430:MET:HB2	3:B:1035:CYS:SG	2.57	0.45
3:B:453:MET:CG	3:B:468:LYS:HD2	2.40	0.45
3:R:405:GLY:O	3:R:407:ARG:N	2.50	0.45
2:G:320:MET:HA	2:G:327:ARG:HG2	1.98	0.45
1:Q:826:ALA:H	2:G:335:THR:HG22	1.81	0.45
1:Q:428:ILE:HD13	1:Q:428:ILE:HA	1.82	0.45
1:Q:498:ALA:CB	1:Q:503:ILE:HG22	2.47	0.45
3:B:479:GLY:C	3:B:480:ILE:HG13	2.36	0.45
3:B:956:GLU:C	3:B:958:LEU:N	2.70	0.45
1:A:79:ARG:CB	1:A:266:TRP:CE3	2.86	0.45
1:A:645:THR:HA	3:B:912:PRO:HG2	1.98	0.45
1:Q:678:LYS:HD2	1:Q:684:LEU:HG	1.99	0.45
3:R:388:ASP:O	3:R:391:THR:N	2.50	0.45
3:R:53:ILE:HB	3:R:54:PRO:HD3	1.98	0.45
1:A:635:PHE:O	1:A:639:VAL:HG23	2.17	0.45
1:A:517:THR:CG2	1:A:518:LYS:N	2.79	0.45
3:B:804:VAL:HG12	3:B:805:LYS:N	2.31	0.45
1:A:807:VAL:HG11	3:B:443:ARG:HH11	1.80	0.45
1:Q:465:HIS:HD2	3:R:1048:ARG:HD2	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:541:ALA:O	1:A:542:PRO:C	2.54	0.45
2:G:130:TYR:CB	2:G:136:LYS:HG3	2.47	0.45
3:R:1040:GLY:HA3	8:W:30:TYR:CE2	2.50	0.45
5:T:63:ASP:OD2	5:T:65:ALA:CB	2.63	0.45
1:Q:72:PHE:CD2	1:Q:72:PHE:N	2.85	0.45
1:Q:84:VAL:HG11	1:Q:274:ALA:HB1	1.98	0.45
3:B:137:LYS:O	3:B:140:GLU:HB2	2.17	0.45
3:B:538:ASN:O	3:B:542:GLU:CG	2.65	0.45
4:S:129:PRO:HG2	10:Y:15:ALA:HB1	1.99	0.45
4:D:75:THR:OG1	4:D:76:TYR:CD1	2.70	0.45
1:Q:218:THR:O	1:Q:218:THR:HG22	2.17	0.45
3:R:560:THR:HG22	3:R:563:ILE:H	1.82	0.45
10:N:1:MET:O	10:N:2:LEU:HB2	2.17	0.45
4:D:52:PRO:CG	10:N:56:ILE:HD11	2.47	0.45
5:T:90:LEU:O	5:T:91:GLN:HB2	2.17	0.45
2:C:285:GLY:N	7:H:50:PRO:HG3	2.32	0.45
2:G:285:GLY:N	7:V:50:PRO:CG	2.80	0.45
7:V:47:ALA:HB2	7:V:81:VAL:HG13	1.98	0.45
2:G:365:GLU:C	2:G:366:PHE:CD1	2.90	0.45
8:W:39:ARG:NE	8:W:68:GLU:OE1	2.50	0.45
3:R:696:HIS:HE1	3:R:869:LEU:HD23	1.82	0.45
1:Q:852:ASP:HB2	7:V:71:LEU:HD12	1.99	0.45
3:R:978:LYS:NZ	4:S:205:LEU:HD13	2.32	0.45
1:A:579:ASP:O	1:A:580:CYS:SG	2.75	0.45
1:A:580:CYS:HA	1:A:581:PRO:HD2	1.77	0.45
3:B:483:ARG:HA	3:B:486:GLU:HG2	1.99	0.45
5:T:175:ILE:HG22	5:T:175:ILE:O	2.17	0.45
3:R:301:LEU:HD22	3:R:483:ARG:NH2	2.26	0.45
1:A:353:ILE:N	1:A:353:ILE:HD12	2.31	0.45
3:B:955:ASN:O	3:B:958:LEU:HB3	2.17	0.45
3:B:116:ILE:HD12	3:B:361:PHE:HZ	1.75	0.45
3:B:353:LEU:O	3:B:354:PHE:C	2.55	0.45
3:B:657:TYR:O	3:B:658:PRO:C	2.55	0.45
1:A:728:MET:HG2	3:B:913:HIS:CE1	2.52	0.45
3:B:988:VAL:CG1	3:B:989:TYR:N	2.80	0.45
1:Q:674:ASN:O	1:Q:677:GLN:N	2.50	0.45
3:R:87:LEU:HD22	3:R:851:LEU:CD1	2.47	0.45
3:R:50:PRO:HB3	3:R:57:LYS:HG2	1.98	0.45
3:R:280:GLN:O	3:R:281:LYS:C	2.54	0.45
3:R:988:VAL:CG1	3:R:989:TYR:N	2.80	0.45
1:Q:782:ILE:HG12	1:Q:790:LEU:HD11	1.98	0.45
4:S:145:LEU:N	4:S:145:LEU:HD12	2.32	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:326:ILE:HG21	1:A:462:MET:HG3	1.98	0.45
1:Q:364:PHE:HA	1:Q:373:PRO:O	2.17	0.45
2:C:130:TYR:CB	2:C:136:LYS:HG3	2.47	0.45
1:A:187:ILE:HA	1:A:188:PRO:HD3	1.75	0.45
3:B:95:PRO:HB2	3:B:115:TYR:CD2	2.52	0.45
3:R:735:GLU:O	3:R:736:ASP:O	2.34	0.45
3:B:489:LEU:O	3:B:492:MET:N	2.49	0.45
1:A:84:VAL:HG11	1:A:274:ALA:HB1	1.99	0.45
7:H:25:ILE:N	7:H:25:ILE:HD12	2.32	0.45
6:U:9:GLU:O	6:U:10:HIS:ND1	2.50	0.45
3:R:49:ILE:H	3:R:49:ILE:HG13	1.57	0.45
6:F:63:VAL:O	6:F:63:VAL:HG12	2.17	0.45
1:A:46:ASP:OD1	1:A:46:ASP:O	2.35	0.45
1:Q:188:PRO:O	1:Q:192:VAL:HG23	2.17	0.44
1:Q:219:ILE:CD1	1:Q:219:ILE:N	2.80	0.44
1:Q:301:ARG:NH1	1:Q:308:ARG:NH1	2.65	0.44
1:Q:308:ARG:HH22	3:R:1012:LEU:CD1	2.29	0.44
3:R:85:ALA:O	3:R:90:LEU:N	2.48	0.44
3:B:92:TYR:CD2	3:B:92:TYR:O	2.70	0.44
1:A:486:ILE:CD1	1:A:628:MET:HE2	2.47	0.44
6:F:56:ILE:O	6:F:59:LEU:HB3	2.17	0.44
2:G:104:LEU:O	2:G:104:LEU:HD23	2.17	0.44
2:G:284:PHE:CD1	2:G:284:PHE:N	2.85	0.44
2:G:383:THR:O	5:T:61:PHE:HZ	2.00	0.44
3:R:702:LEU:HD22	3:R:933:ALA:HB1	1.99	0.44
1:Q:487:ILE:HG22	1:Q:493:GLY:C	2.38	0.44
3:R:724:LEU:HD11	3:R:910:LEU:HB2	1.99	0.44
3:R:972:ASP:O	3:R:974:ARG:N	2.50	0.44
4:S:149:TYR:O	4:S:150:GLY:C	2.55	0.44
2:C:365:GLU:C	2:C:366:PHE:CD1	2.90	0.44
3:R:569:ASN:CG	3:R:574:ARG:HH22	2.21	0.44
3:B:569:ASN:HB3	3:B:574:ARG:CZ	2.45	0.44
3:R:344:ARG:C	3:R:345:LEU:HD12	2.37	0.44
3:R:633:LEU:C	3:R:635:PRO:HD2	2.38	0.44
3:R:633:LEU:O	3:R:635:PRO:HD2	2.17	0.44
3:R:705:THR:HB	3:R:708:LEU:HB2	1.99	0.44
1:A:785:SER:C	1:A:787:ARG:N	2.70	0.44
3:B:930:GLY:O	10:N:47:ARG:NH1	2.50	0.44
3:B:947:LYS:HG2	3:B:948:THR:OG1	2.16	0.44
10:N:44:CYS:SG	10:N:45:CYS:N	2.90	0.44
3:B:388:ASP:OD1	3:B:391:THR:OG1	2.21	0.44
5:E:115:ASP:O	5:E:116:ASP:HB2	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:167:TYR:HB2	4:D:225:LYS:O	2.17	0.44
1:Q:206:TRP:C	1:Q:208:ILE:N	2.70	0.44
1:A:558:LYS:CD	3:R:104:GLU:HB2	2.47	0.44
3:R:51:THR:O	3:R:51:THR:HG22	2.17	0.44
3:B:202:ILE:CG2	3:B:203:GLU:N	2.80	0.44
5:E:58:ILE:HG22	5:E:59:LEU:N	2.32	0.44
5:E:41:ASP:O	5:E:42:LEU:HD23	2.17	0.44
5:E:179:LYS:NZ	6:F:81:ASP:HB2	2.32	0.44
9:X:67:ASP:C	9:X:69:LEU:N	2.70	0.44
9:X:70:LEU:HD12	9:X:70:LEU:N	2.33	0.44
1:A:490:ARG:CG	2:C:77:SER:HB3	2.47	0.44
3:R:669:GLN:CA	3:R:669:GLN:NE2	2.79	0.44
1:A:364:PHE:HD2	1:A:373:PRO:O	2.00	0.44
1:A:409:ARG:HH21	1:A:412:ILE:HG13	1.81	0.44
8:K:28:THR:O	8:K:29:ARG:C	2.55	0.44
2:G:388:LEU:CG	8:W:34:ARG:HG3	2.47	0.44
2:G:67:GLY:HA2	2:G:385:MET:HE1	1.98	0.44
1:Q:330:PRO:HG2	3:R:730:THR:O	2.17	0.44
1:Q:659:LYS:O	1:Q:663:ASN:HB2	2.17	0.44
1:Q:72:PHE:HD2	1:Q:72:PHE:N	2.16	0.44
5:T:1:MET:HE2	6:U:11:TYR:CD2	2.53	0.44
3:R:320:SER:O	3:R:324:GLU:OE2	2.35	0.44
3:B:249:GLN:C	3:B:253:PHE:CE1	2.90	0.44
10:N:60:ILE:HG13	10:N:61:HIS:N	2.31	0.44
6:U:18:LYS:NZ	6:U:41:LEU:O	2.43	0.44
1:Q:827:LEU:CD1	2:G:315:LEU:HD13	2.43	0.44
3:R:872:PRO:HA	3:R:876:ASP:OD2	2.17	0.44
4:S:98:ILE:HD11	4:S:114:ILE:HG12	1.99	0.44
10:Y:18:TRP:O	10:Y:21:PHE:HD1	2.00	0.44
2:G:52:PHE:O	2:G:56:ILE:HG12	2.17	0.44
1:Q:853:ASP:HB3	1:Q:855:VAL:HB	1.99	0.44
1:Q:501:ASP:HB2	3:R:734:MET:SD	2.57	0.44
3:R:895:VAL:HG11	4:S:34:LEU:HG	1.99	0.44
1:Q:649:GLU:HG3	3:R:965:ASP:OD1	2.16	0.44
1:Q:362:ARG:HA	1:Q:365:VAL:HG12	1.99	0.44
3:B:602:ILE:HB	3:B:606:ASP:HB2	2.00	0.44
3:B:946:TYR:CE1	3:B:949:PRO:HA	2.53	0.44
3:B:530:TYR:OH	3:B:536:LEU:CG	2.65	0.44
3:B:536:LEU:O	3:B:539:LYS:HB2	2.17	0.44
3:B:724:LEU:HD11	3:B:910:LEU:HB2	1.99	0.44
1:Q:785:SER:C	1:Q:787:ARG:N	2.70	0.44
3:R:536:LEU:O	3:R:537:ALA:C	2.55	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:388:ASP:OD1	3:R:391:THR:OG1	2.25	0.44
3:B:281:LYS:HB2	3:B:284:ASN:HB2	1.98	0.44
5:T:42:LEU:O	5:T:76:THR:HG21	2.17	0.44
2:G:301:LEU:O	2:G:304:GLN:HB2	2.17	0.44
8:W:60:ASP:O	8:W:61:VAL:O	2.35	0.44
4:D:178:LYS:HA	4:D:181:ASN:HD22	1.82	0.44
6:U:17:ALA:O	6:U:21:LEU:HG	2.16	0.44
1:Q:687:ILE:CD1	1:Q:695:SER:HB3	2.47	0.44
5:E:86:GLU:OE1	6:F:75:ILE:HG23	2.17	0.44
3:B:979:ILE:HD12	3:B:979:ILE:C	2.37	0.44
1:A:219:ILE:HG22	3:B:1099:LEU:HD23	2.00	0.44
3:R:545:ARG:HE	3:R:581:ILE:HD13	1.81	0.44
1:A:432:ALA:O	1:A:481:LEU:HD23	2.18	0.44
8:K:16:ASN:O	8:K:19:PHE:HB3	2.17	0.44
6:U:14:TYR:HE2	6:U:40:TYR:OH	2.00	0.44
2:C:278:ARG:O	2:C:282:GLU:HG3	2.17	0.44
6:F:60:SER:HA	6:F:69:ARG:NH2	2.33	0.44
2:G:115:LYS:O	2:G:116:VAL:CG1	2.56	0.44
3:R:1059:TYR:CE2	3:R:1090:PRO:HG3	2.52	0.44
2:G:391:ARG:HH22	8:W:39:ARG:HH12	1.62	0.44
10:Y:63:THR:HB	10:Y:64:ARG:HD3	2.00	0.44
8:W:13:LEU:HD23	8:W:15:PHE:HE1	1.82	0.44
8:W:27:LEU:HD12	8:W:27:LEU:N	2.33	0.44
1:Q:376:ASN:HA	1:Q:388:LEU:HD22	1.98	0.44
3:B:474:ALA:HB1	3:B:615:TYR:CE2	2.52	0.44
3:R:191:SER:CA	3:R:300:HIS:NE2	2.72	0.44
1:A:697:GLU:OE1	1:A:756:ARG:CD	2.64	0.44
2:C:369:VAL:HG11	2:C:381:LEU:HD21	1.99	0.44
5:E:163:THR:C	5:E:164:MET:HG3	2.37	0.44
5:E:175:ILE:HG22	5:E:175:ILE:O	2.17	0.44
2:C:80:GLU:CB	2:C:81:PRO:HD3	2.33	0.44
9:L:65:PRO:HG2	9:L:66:LYS:H	1.81	0.44
3:B:490:TYR:OH	3:B:527:ILE:HG23	2.16	0.44
3:R:840:ARG:NH1	3:R:1021:ALA:HB2	2.33	0.44
3:B:855:THR:HB	3:B:857:GLU:H	1.81	0.44
1:Q:541:ALA:CB	1:Q:542:PRO:HD3	2.39	0.44
6:U:21:LEU:HA	6:U:24:VAL:CG2	2.48	0.44
7:V:24:ASN:O	7:V:27:GLU:HG2	2.17	0.44
2:C:15:GLU:O	2:C:19:GLN:N	2.51	0.44
3:R:137:LYS:O	3:R:140:GLU:HB2	2.18	0.44
4:D:59:ALA:O	4:D:62:LEU:HB2	2.17	0.44
1:Q:215:PRO:HB3	3:R:1106:SER:HB3	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:1091:VAL:O	3:B:1091:VAL:HG13	2.17	0.44
1:Q:752:VAL:O	1:Q:753:ARG:HB3	2.18	0.44
3:R:519:LYS:HD2	3:R:565:GLU:HG2	1.98	0.44
3:R:766:PRO:O	3:R:768:GLY:N	2.51	0.44
3:B:563:ILE:HG23	3:B:565:GLU:OE1	2.18	0.44
8:K:80:ARG:O	8:K:82:LEU:HD23	2.17	0.44
3:R:457:GLU:C	3:R:458:THR:OG1	2.56	0.44
2:G:106:ARG:O	2:G:107:LEU:C	2.55	0.44
8:W:74:LEU:N	8:W:74:LEU:HD12	2.32	0.44
3:R:702:LEU:HD13	10:Y:47:ARG:HD2	2.00	0.44
4:S:50:ASN:HD22	10:Y:64:ARG:NH1	2.15	0.44
2:G:21:SER:O	2:G:33:LYS:HE3	2.18	0.44
1:Q:488:THR:HG23	1:Q:490:ARG:H	1.82	0.44
1:Q:495:ILE:O	1:Q:495:ILE:HG12	2.18	0.44
1:Q:523:GLN:O	1:Q:525:LEU:N	2.51	0.44
1:Q:369:PRO:HA	1:Q:410:HIS:CE1	2.47	0.44
3:B:430:ILE:HG12	3:B:467:VAL:CG2	2.42	0.44
3:B:472:LEU:HD12	3:B:646:ALA:HA	1.99	0.44
5:T:164:MET:HA	5:T:169:LEU:HB3	1.99	0.44
1:A:217:ILE:HD13	1:A:220:ARG:CZ	2.47	0.44
1:A:77:LEU:HD13	1:A:81:VAL:CG2	2.47	0.44
3:B:1108:ILE:HG22	3:B:1108:ILE:O	2.17	0.44
3:B:108:GLU:OE2	3:B:108:GLU:C	2.56	0.44
1:A:647:ARG:HD2	3:B:965:ASP:HB3	1.99	0.44
3:B:881:ARG:NH1	3:B:989:TYR:HB3	2.31	0.44
3:B:655:ILE:HG23	3:B:881:ARG:O	2.17	0.44
1:Q:203:ARG:CG	1:Q:203:ARG:NH1	2.68	0.44
1:A:532:ILE:CG2	1:A:532:ILE:O	2.66	0.44
3:B:805:LYS:O	3:B:808:ASP:CG	2.56	0.44
1:A:747:LEU:HB2	1:A:782:ILE:HB	1.99	0.44
1:Q:737:VAL:HA	1:Q:740:ILE:HB	1.98	0.44
1:Q:720:ASP:C	1:Q:722:PHE:N	2.71	0.44
1:Q:262:ILE:O	1:Q:266:TRP:CD1	2.71	0.44
3:B:325:LEU:HD13	3:B:331:GLU:H	1.82	0.44
10:N:18:TRP:O	10:N:20:SER:N	2.49	0.44
11:P:31:TYR:HE2	11:P:33:ILE:HG13	1.82	0.44
1:A:487:ILE:CD1	1:A:487:ILE:N	2.80	0.44
3:R:640:LEU:HD22	3:R:641:GLU:O	2.17	0.44
7:V:42:LEU:O	7:V:43:PRO:C	2.56	0.44
7:V:47:ALA:C	7:V:49:ASP:H	2.19	0.44
2:G:309:ASP:OD2	2:G:310:ILE:N	2.51	0.44
1:Q:431:MET:HB2	1:Q:453:TYR:OH	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:W:14:HIS:O	8:W:15:PHE:C	2.55	0.44
7:H:54:SER:HB3	7:H:55:ILE:H	1.64	0.44
4:S:190:LEU:HD11	4:S:195:LEU:HD23	2.00	0.44
3:B:18:PHE:C	3:B:20:SER:N	2.71	0.44
3:B:634:THR:HB	3:B:635:PRO:HD3	1.99	0.44
1:A:362:ARG:HA	1:A:365:VAL:HG12	2.00	0.44
3:B:902:LYS:HB3	10:N:42:ARG:CD	2.46	0.44
3:B:932:TYR:HB2	3:B:957:ILE:HG23	1.99	0.44
10:N:42:ARG:CG	10:N:43:TYR:N	2.76	0.44
3:R:193:THR:HG21	3:R:197:ARG:C	2.38	0.44
1:A:220:ARG:HD2	1:A:236:THR:OG1	2.17	0.44
5:E:149:VAL:HG13	5:E:159:ARG:C	2.37	0.44
3:B:46:GLN:O	3:B:47:GLY:O	2.35	0.44
8:K:26:ARG:HB3	8:K:27:LEU:CD1	2.46	0.44
3:R:797:VAL:HG12	3:R:798:VAL:O	2.17	0.44
3:R:839:THR:O	3:R:840:ARG:C	2.56	0.44
5:T:135:VAL:N	5:T:174:TRP:HZ2	2.09	0.44
9:L:83:TYR:CZ	9:L:87:ILE:HD12	2.52	0.44
7:H:9:ILE:O	7:H:9:ILE:CG2	2.63	0.44
3:B:367:TYR:C	3:B:367:TYR:CD2	2.90	0.44
1:A:687:ILE:CD1	1:A:695:SER:HB3	2.47	0.44
3:B:413:LEU:O	3:B:414:LEU:C	2.54	0.44
5:T:109:HIS:CD2	5:T:111:SER:H	2.35	0.44
3:R:1094:SER:O	3:R:1096:ALA:N	2.51	0.44
3:B:235:ASP:C	3:B:237:ASP:H	2.19	0.44
3:B:1041:THR:OG1	3:B:1044:LEU:HB3	2.18	0.44
6:U:41:LEU:C	6:U:43:SER:H	2.16	0.44
3:B:405:GLY:O	3:B:407:ARG:N	2.51	0.44
7:V:47:ALA:HB2	7:V:81:VAL:CG1	2.48	0.44
2:G:379:ILE:HD12	3:R:1045:LEU:HD22	1.99	0.44
2:G:311:ARG:HD3	2:G:311:ARG:N	2.30	0.44
3:R:899:TYR:HE2	4:S:29:ARG:CZ	2.31	0.44
3:R:972:ASP:CG	3:R:974:ARG:HG2	2.38	0.44
1:Q:377:TYR:N	1:Q:388:LEU:HB3	2.28	0.44
1:Q:394:ARG:HB3	1:Q:395:LYS:H	1.66	0.44
3:B:119:LEU:HD11	3:B:350:PHE:CE2	2.52	0.44
3:B:119:LEU:HD11	3:B:350:PHE:HE2	1.83	0.44
3:R:11:TRP:CZ2	3:R:706:ARG:HG2	2.53	0.44
3:B:747:ARG:HD3	10:N:8:PHE:HA	1.99	0.44
1:A:206:TRP:CE3	1:A:206:TRP:O	2.71	0.44
3:B:895:VAL:CG1	4:D:34:LEU:HD21	2.44	0.44
4:D:80:GLU:HA	4:D:83:ILE:HD12	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:82:ILE:HG23	1:Q:82:ILE:O	2.18	0.44
3:R:54:PRO:O	3:R:55:GLY:C	2.55	0.44
2:C:390:MET:CB	5:E:56:GLU:HG3	2.35	0.44
8:K:61:VAL:CG1	8:K:62:ILE:H	2.29	0.44
8:K:32:ILE:O	8:K:36:ILE:HG13	2.17	0.44
3:B:54:PRO:O	3:B:56:LEU:N	2.50	0.44
8:W:34:ARG:C	8:W:37:SER:HB2	2.38	0.44
3:R:707:ALA:C	3:R:709:ASP:N	2.71	0.44
1:A:189:ASP:O	1:A:199:PRO:HG3	2.17	0.44
8:W:71:ARG:O	8:W:72:GLY:C	2.56	0.44
4:S:48:GLU:HB3	4:S:140:SER:CB	2.48	0.44
2:G:359:ALA:C	2:G:361:GLY:H	2.21	0.44
11:P:22:PRO:HG2	11:P:23:GLY:N	2.32	0.44
1:Q:321:SER:O	1:Q:322:SER:HB2	2.18	0.44
3:R:1069:TRP:HH2	3:R:1072:LYS:HE3	1.82	0.44
1:A:309:PHE:HA	1:A:313:LEU:HB2	1.99	0.44
3:B:1061:CYS:CA	3:B:1088:LEU:HD23	2.48	0.44
6:U:16:VAL:O	6:U:18:LYS:N	2.51	0.44
8:K:82:LEU:HB2	8:K:83:PRO:CD	2.46	0.44
3:R:163:THR:CG2	3:R:428:ARG:O	2.63	0.44
3:R:745:VAL:CG1	3:R:872:PRO:HG2	2.48	0.44
4:S:96:ILE:CG1	4:S:143:ALA:HB3	2.47	0.44
2:G:21:SER:O	2:G:33:LYS:CE	2.66	0.44
1:Q:530:VAL:O	1:Q:530:VAL:CG1	2.58	0.44
4:S:213:CYS:CB	4:S:217:ILE:HD13	2.48	0.44
3:B:633:LEU:C	3:B:635:PRO:HD2	2.38	0.44
3:R:228:ARG:NH2	3:R:233:LEU:O	2.51	0.44
1:A:696:LEU:HD13	1:A:696:LEU:C	2.38	0.44
3:B:699:GLN:CA	10:N:51:SER:O	2.65	0.44
3:R:371:LYS:HB2	3:R:372:SER:H	1.65	0.44
3:B:83:MET:CE	3:B:686:LEU:HB2	2.48	0.44
4:D:125:SER:O	4:D:127:ASP:N	2.41	0.44
1:A:505:GLY:O	1:A:506:ALA:O	2.36	0.44
6:F:20:LEU:O	6:F:24:VAL:HG23	2.18	0.44
1:Q:465:HIS:CD2	3:R:1048:ARG:HD2	2.53	0.44
4:D:178:LYS:O	4:D:181:ASN:N	2.51	0.44
2:C:67:GLY:HA2	2:C:385:MET:HE1	2.00	0.44
2:C:130:TYR:CG	2:C:136:LYS:HG3	2.52	0.44
10:N:5:ILE:O	10:N:6:ARG:HB2	2.18	0.44
3:R:287:GLU:C	3:R:289:ALA:N	2.71	0.44
1:Q:30:PRO:HD3	1:Q:247:GLU:OE1	2.18	0.44
3:R:462:PRO:O	3:R:464:SER:N	2.51	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:396:HIS:C	3:R:400:THR:HG22	2.38	0.44
1:Q:778:ALA:O	1:Q:780:GLY:N	2.50	0.44
5:E:44:LEU:HG	5:E:44:LEU:O	2.16	0.44
1:Q:216:PRO:HG2	1:Q:219:ILE:CD1	2.44	0.44
1:A:313:LEU:HD21	3:B:1100:LEU:CD2	2.47	0.44
3:R:138:LEU:O	3:R:141:ILE:HB	2.17	0.44
3:B:138:LEU:O	3:B:141:ILE:HB	2.18	0.44
2:C:103:GLY:HA3	2:C:300:VAL:CG1	2.47	0.44
7:H:47:ALA:HB2	7:H:81:VAL:HG13	1.99	0.44
3:R:407:ARG:CA	3:R:407:ARG:HE	2.31	0.44
3:R:448:THR:C	3:R:450:TRP:N	2.71	0.44
2:G:37:LEU:C	2:G:39:LYS:H	2.21	0.44
2:G:54:LEU:O	2:G:58:GLU:N	2.51	0.44
8:W:21:SER:C	8:W:23:TRP:H	2.21	0.44
3:B:520:VAL:C	3:B:521:ILE:HD12	2.38	0.44
3:B:569:ASN:CG	3:B:574:ARG:HH22	2.20	0.44
3:R:20:SER:O	3:R:25:ARG:NH2	2.51	0.44
1:A:376:ASN:HA	1:A:388:LEU:HD22	2.00	0.44
3:R:193:THR:OG1	3:R:197:ARG:O	2.36	0.44
3:B:738:ILE:HG12	3:B:739:ILE:N	2.32	0.44
1:A:727:VAL:O	1:A:729:ALA:N	2.51	0.44
1:A:500:GLN:HB2	3:B:913:HIS:CD2	2.52	0.44
3:R:388:ASP:O	3:R:389:ILE:C	2.56	0.44
3:R:63:ILE:HG13	3:R:98:LEU:CD2	2.46	0.44
1:Q:444:ARG:NH1	1:Q:444:ARG:HG3	2.33	0.44
3:B:687:ARG:HG3	3:B:687:ARG:HH11	1.77	0.44
3:B:416:ARG:HH12	3:B:687:ARG:NH2	1.99	0.44
2:C:145:GLU:O	2:C:146:TYR:O	2.36	0.44
9:X:69:LEU:HD23	9:X:73:ILE:HG12	2.00	0.44
1:A:524:ILE:HG23	1:A:634:VAL:HG13	1.99	0.44
1:A:491:TYR:HD2	2:C:308:VAL:HA	1.83	0.44
1:A:331:ASN:ND2	3:B:732:TYR:OH	2.48	0.44
3:B:366:THR:O	3:B:370:GLU:HB2	2.18	0.44
2:C:301:LEU:O	2:C:304:GLN:HB2	2.17	0.44
2:C:386:VAL:HG13	2:C:386:VAL:O	2.18	0.44
2:G:386:VAL:HG11	8:W:34:ARG:CB	2.47	0.44
1:A:192:VAL:CG1	1:A:199:PRO:HD3	2.47	0.44
3:B:789:TYR:HA	3:B:792:LEU:HD12	1.98	0.44
4:S:64:LEU:O	10:Y:6:ARG:HD2	2.17	0.44
9:L:46:PRO:CD	9:L:52:LYS:O	2.65	0.44
2:C:134:ARG:O	2:C:138:LEU:HB2	2.17	0.44
3:B:679:LEU:HD23	3:B:716:ARG:HG2	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:196:GLY:C	1:A:197:TYR:CD1	2.92	0.44
3:R:146:LYS:HB2	3:R:716:ARG:HH22	1.82	0.44
3:B:379:LEU:HA	3:B:379:LEU:HD23	1.80	0.44
4:D:161:LEU:HG	4:D:163:VAL:HG23	2.00	0.44
2:C:82:GLY:C	2:C:84:GLN:H	2.21	0.44
1:A:275:THR:HA	1:A:278:ASP:O	2.18	0.44
3:R:1014:ARG:CG	3:R:1014:ARG:HH11	2.22	0.44
1:A:218:THR:HG22	1:A:218:THR:O	2.17	0.44
3:R:235:ASP:C	3:R:237:ASP:H	2.21	0.44
3:R:853:THR:OG1	11:Z:33:ILE:HD13	2.17	0.44
2:C:42:ILE:HD12	2:C:42:ILE:H	1.82	0.44
8:K:12:ASP:O	8:K:13:LEU:CB	2.63	0.44
3:R:947:LYS:HG2	3:R:948:THR:OG1	2.17	0.44
10:Y:20:SER:CA	10:Y:23:THR:HB	2.47	0.44
2:G:25:PRO:O	2:G:28:ILE:HA	2.18	0.44
1:Q:366:ILE:HD13	1:Q:395:LYS:HA	2.00	0.44
1:A:761:TYR:HB2	1:A:764:ARG:HG3	2.00	0.44
3:B:618:ALA:C	3:B:620:GLU:N	2.71	0.44
3:R:14:ILE:HG12	3:R:18:PHE:CE2	2.52	0.44
3:B:898:PRO:HA	3:B:971:TYR:O	2.17	0.44
3:B:988:VAL:HG13	3:B:989:TYR:N	2.33	0.44
4:D:78:TRP:HB3	4:D:79:PRO:HD2	2.00	0.44
3:R:799:SER:HB2	3:R:800:PRO:HD2	1.99	0.44
1:Q:19:ILE:HA	1:Q:22:MET:HE1	1.98	0.44
3:B:51:THR:HG21	3:B:370:GLU:OE1	2.16	0.44
4:S:178:LYS:O	4:S:181:ASN:N	2.50	0.44
5:E:36:GLU:OE2	6:F:34:LEU:HD11	2.18	0.44
1:A:512:LYS:N	1:A:583:ASP:OD2	2.50	0.44
1:Q:47:PRO:CG	1:Q:48:ARG:HD3	2.46	0.44
2:G:130:TYR:CG	2:G:136:LYS:HG3	2.52	0.44
8:W:32:ILE:O	8:W:36:ILE:HG13	2.17	0.44
1:A:752:VAL:O	1:A:753:ARG:CB	2.65	0.44
3:B:778:ALA:HB2	3:B:786:LYS:HE2	2.00	0.44
4:S:263:VAL:HG12	4:S:263:VAL:O	2.18	0.44
11:P:17:GLN:C	11:P:19:LYS:N	2.70	0.44
1:A:30:PRO:HD3	1:A:247:GLU:OE1	2.18	0.44
3:B:735:GLU:OE2	3:B:735:GLU:HA	2.18	0.44
3:R:134:THR:O	3:R:137:LYS:N	2.50	0.44
4:D:55:ASP:O	4:D:59:ALA:HB2	2.18	0.44
1:A:770:LYS:CG	1:A:771:PRO:HD2	2.48	0.44
1:Q:219:ILE:HG22	3:R:1099:LEU:HD23	2.00	0.43
3:R:1074:LYS:CB	3:R:1076:LYS:HG3	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:1062:ASP:N	3:B:1062:ASP:OD1	2.51	0.43
2:C:331:ARG:CD	2:C:348:GLU:HB3	2.45	0.43
11:Z:31:TYR:HE2	11:Z:33:ILE:HG13	1.83	0.43
3:B:227:MET:HE2	3:B:232:ILE:HG13	2.00	0.43
3:B:325:LEU:O	3:B:326:TYR:C	2.57	0.43
3:B:84:GLU:O	3:B:88:ARG:N	2.45	0.43
1:A:418:LEU:HD23	1:A:430:MET:HE1	2.00	0.43
6:U:14:TYR:O	6:U:18:LYS:HE3	2.17	0.43
7:V:32:LEU:HD23	7:V:37:ILE:CD1	2.48	0.43
3:R:723:ILE:HD12	10:Y:43:TYR:CE1	2.48	0.43
4:S:128:ILE:HG12	10:Y:16:ASP:HB3	2.00	0.43
4:S:204:THR:O	4:S:205:LEU:C	2.56	0.43
2:C:365:GLU:CG	2:C:366:PHE:H	2.31	0.43
1:Q:572:PRO:HG2	1:Q:573:ARG:CD	2.47	0.43
3:B:24:VAL:HG21	3:B:426:LEU:CD1	2.48	0.43
1:A:206:TRP:C	1:A:208:ILE:N	2.71	0.43
3:B:63:ILE:HA	3:B:98:LEU:H	1.83	0.43
3:B:890:MET:HG2	3:B:892:ILE:HD11	2.00	0.43
3:B:533:GLY:C	3:B:535:GLU:H	2.21	0.43
3:B:978:LYS:HZ3	4:D:205:LEU:HD22	1.82	0.43
3:R:1108:ILE:HD12	3:R:1108:ILE:N	2.32	0.43
1:Q:558:LYS:HA	1:Q:590:ASN:O	2.17	0.43
1:A:598:PHE:O	1:A:599:ASP:HB3	2.18	0.43
1:Q:563:HIS:CE1	1:Q:876:VAL:HG13	2.51	0.43
5:T:42:LEU:N	5:T:42:LEU:HD23	2.33	0.43
1:A:331:ASN:C	1:A:332:ILE:CD1	2.86	0.43
1:A:782:ILE:HG21	1:A:790:LEU:HD13	2.00	0.43
2:C:298:SER:O	2:C:302:ALA:HB2	2.18	0.43
9:L:87:ILE:HG22	9:L:88:LYS:N	2.32	0.43
1:A:713:ASP:O	1:A:717:LYS:HD2	2.18	0.43
3:R:128:ASP:OD1	3:R:130:ILE:N	2.51	0.43
3:B:249:GLN:O	3:B:250:ASN:C	2.56	0.43
4:D:108:MET:HE1	10:N:2:LEU:CD2	2.48	0.43
1:A:821:ARG:HG2	1:A:821:ARG:NH1	2.32	0.43
8:W:82:LEU:HD12	8:W:84:ASN:HD22	1.83	0.43
1:Q:823:LEU:HD13	2:G:75:ALA:O	2.17	0.43
1:A:870:ARG:NH1	2:C:58:GLU:HA	2.33	0.43
3:B:469:ASN:ND2	3:B:469:ASN:N	2.66	0.43
3:B:339:ALA:HB1	3:B:619:GLU:HB2	2.00	0.43
3:B:617:ASP:O	3:B:618:ALA:HB2	2.18	0.43
3:B:580:ILE:HG12	3:B:642:ILE:HG12	2.00	0.43
3:R:602:ILE:HB	3:R:606:ASP:HB2	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:574:LEU:CD2	1:A:575:CYS:N	2.80	0.43
3:B:191:SER:HB3	3:B:298:LEU:HA	1.99	0.43
3:B:228:ARG:NH1	3:B:262:ILE:O	2.51	0.43
3:R:482:GLU:OE2	3:R:525:ARG:NH1	2.51	0.43
3:B:39:LEU:O	3:B:43:ILE:HG12	2.16	0.43
3:B:393:ARG:NH2	3:B:403:TRP:HH2	2.13	0.43
3:B:536:LEU:CD2	3:B:540:ILE:HG13	2.49	0.43
5:E:149:VAL:HG22	5:E:160:ILE:HA	1.99	0.43
4:D:78:TRP:HD1	4:D:78:TRP:N	2.16	0.43
3:B:627:ALA:O	3:B:628:LEU:C	2.56	0.43
3:R:356:VAL:HG11	3:R:404:VAL:HG13	2.00	0.43
5:E:18:PHE:HB2	8:K:48:PRO:HD2	2.00	0.43
4:D:44:VAL:HB	4:D:46:PHE:CE1	2.54	0.43
3:R:804:VAL:CG1	3:R:805:LYS:N	2.80	0.43
3:R:805:LYS:O	3:R:808:ASP:CG	2.56	0.43
1:Q:782:ILE:HG21	1:Q:790:LEU:HD13	2.01	0.43
1:A:324:THR:CG2	1:A:325:VAL:H	2.26	0.43
5:E:29:GLU:HA	5:E:29:GLU:OE1	2.18	0.43
1:Q:661:ILE:HD11	1:Q:714:ILE:HB	1.99	0.43
2:C:40:GLU:O	2:C:45:ARG:CG	2.65	0.43
3:R:303:THR:HG22	3:R:303:THR:O	2.18	0.43
11:Z:17:GLN:C	11:Z:19:LYS:N	2.71	0.43
3:R:290:GLN:HE21	3:R:308:ARG:HH12	1.66	0.43
6:U:71:ILE:O	6:U:71:ILE:HG22	2.18	0.43
3:B:441:GLU:O	3:B:441:GLU:HG2	2.18	0.43
1:Q:316:LYS:HE2	3:R:1094:SER:OG	2.17	0.43
1:Q:79:ARG:HD2	1:Q:266:TRP:CE3	2.53	0.43
1:Q:759:ARG:HH21	1:Q:763:THR:HG23	1.83	0.43
3:R:81:SER:HB3	3:R:84:GLU:CG	2.46	0.43
3:B:70:VAL:CG1	3:B:80:ILE:HG21	2.48	0.43
3:B:869:LEU:HD21	4:D:56:GLU:HB2	1.99	0.43
1:A:334:ILE:HD11	1:A:628:MET:CB	2.43	0.43
1:A:449:VAL:O	1:A:449:VAL:HG12	2.17	0.43
1:A:864:LYS:HE2	7:H:71:LEU:O	2.18	0.43
2:C:106:ARG:O	2:C:109:GLU:N	2.52	0.43
3:R:749:MET:CE	3:R:907:ASP:HB3	2.48	0.43
2:G:42:ILE:N	2:G:42:ILE:CD1	2.81	0.43
1:Q:491:TYR:HD2	2:G:308:VAL:HA	1.83	0.43
1:Q:832:ALA:CB	2:G:66:PRO:HB2	2.48	0.43
1:Q:635:PHE:O	1:Q:639:VAL:HG23	2.19	0.43
5:T:179:LYS:HZ1	6:U:82:GLU:HG3	1.83	0.43
5:T:149:VAL:HG13	5:T:159:ARG:C	2.38	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:262:ILE:HG23	1:A:266:TRP:CD1	2.53	0.43
5:E:164:MET:HA	5:E:169:LEU:HB3	1.99	0.43
1:A:638:PHE:CZ	1:A:642:GLN:HG3	2.52	0.43
3:B:654:ILE:H	3:B:654:ILE:CD1	2.27	0.43
3:B:669:GLN:CA	3:B:669:GLN:HE21	2.29	0.43
3:B:963:LEU:HA	3:B:964:PRO:HD3	1.81	0.43
4:D:148:GLY:HA2	4:D:152:GLU:OE1	2.19	0.43
4:D:159:VAL:CG2	4:D:160:SER:N	2.81	0.43
1:Q:206:TRP:CZ3	1:Q:209:LEU:HD23	2.53	0.43
4:D:141:LEU:C	4:D:141:LEU:HD12	2.38	0.43
3:B:279:GLY:H	3:B:285:ARG:HH22	1.66	0.43
1:A:532:ILE:O	1:A:533:ASP:C	2.57	0.43
3:B:797:VAL:HG22	3:B:811:ILE:HG12	2.01	0.43
8:K:61:VAL:CG1	8:K:62:ILE:N	2.80	0.43
2:C:85:MET:HG3	2:C:85:MET:H	1.65	0.43
1:A:515:LEU:HD11	1:A:539:ILE:HG13	2.00	0.43
7:H:20:HIS:CD2	7:H:20:HIS:N	2.86	0.43
1:A:23:SER:C	1:A:24:VAL:HG13	2.38	0.43
3:B:412:GLN:NE2	3:B:425:HIS:CE1	2.87	0.43
1:A:330:PRO:HG2	3:B:730:THR:O	2.19	0.43
1:A:30:PRO:CB	1:A:244:ARG:HA	2.48	0.43
3:R:34:PHE:HD1	3:R:351:ALA:HB2	1.83	0.43
9:X:25:GLY:O	9:X:43:TYR:CG	2.71	0.43
1:A:238:LYS:NZ	1:A:276:TYR:CA	2.66	0.43
3:R:1100:LEU:O	3:R:1101:ILE:C	2.57	0.43
3:R:246:PRO:O	3:R:248:VAL:N	2.37	0.43
3:R:249:GLN:C	3:R:253:PHE:CE1	2.92	0.43
2:C:37:LEU:C	2:C:39:LYS:H	2.21	0.43
2:C:103:GLY:CA	2:C:300:VAL:HG13	2.47	0.43
2:G:285:GLY:H	7:V:50:PRO:HG3	1.83	0.43
1:Q:830:LEU:CD1	1:Q:846:VAL:HG21	2.48	0.43
5:T:14:PRO:HA	5:T:15:PRO:HD3	1.90	0.43
4:S:52:PRO:O	4:S:53:LEU:HD23	2.18	0.43
10:Y:3:ILE:HG22	10:Y:4:PRO:CD	2.48	0.43
1:Q:606:GLN:HE21	1:Q:608:PRO:HG2	1.82	0.43
1:Q:851:GLY:O	1:Q:853:ASP:N	2.50	0.43
4:S:148:GLY:HA2	4:S:152:GLU:OE1	2.18	0.43
1:A:758:LYS:HB2	1:A:759:ARG:HD2	1.99	0.43
3:R:569:ASN:HB3	3:R:574:ARG:NH1	2.33	0.43
1:Q:573:ARG:O	1:Q:574:LEU:C	2.56	0.43
3:R:343:LEU:HD11	3:R:575:VAL:HG23	2.01	0.43
3:R:5:LEU:N	3:R:5:LEU:CD1	2.82	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:572:PRO:HG2	1:A:573:ARG:CD	2.47	0.43
3:B:214:PHE:CE2	3:B:296:TYR:O	2.71	0.43
3:R:291:GLN:C	3:R:293:ILE:N	2.71	0.43
3:R:291:GLN:O	3:R:293:ILE:N	2.50	0.43
3:B:958:LEU:C	3:B:958:LEU:CD2	2.87	0.43
3:B:727:MET:CE	3:B:898:PRO:CG	2.94	0.43
4:D:205:LEU:O	4:D:206:CYS:C	2.54	0.43
3:R:429:VAL:CG1	3:R:453:MET:HE1	2.48	0.43
1:A:258:PRO:HB2	1:A:261:ILE:HD12	2.00	0.43
4:S:5:LEU:HD11	9:X:90:LEU:O	2.18	0.43
6:F:33:LEU:O	6:F:34:LEU:HD23	2.18	0.43
3:R:707:ALA:O	3:R:709:ASP:N	2.52	0.43
3:R:790:ARG:C	3:R:792:LEU:H	2.22	0.43
1:A:620:SER:C	1:A:622:GLU:N	2.72	0.43
4:D:68:MET:HA	4:D:68:MET:CE	2.49	0.43
6:F:25:ILE:HA	6:F:28:GLY:O	2.18	0.43
1:Q:557:PRO:HD3	1:Q:623:TYR:OH	2.18	0.43
1:Q:245:ILE:HG22	1:Q:245:ILE:O	2.18	0.43
3:B:316:ALA:C	3:B:318:ALA:N	2.71	0.43
3:B:70:VAL:CG1	3:B:90:LEU:HD23	2.47	0.43
6:U:54:LYS:HA	6:U:57:GLU:OE1	2.19	0.43
6:U:59:LEU:CD1	6:U:69:ARG:HG2	2.47	0.43
2:C:271:LYS:O	2:C:272:VAL:C	2.57	0.43
7:H:32:LEU:HD23	7:H:37:ILE:CD1	2.48	0.43
2:G:286:ILE:HG13	7:V:49:ASP:CG	2.39	0.43
7:V:45:ILE:HG22	7:V:81:VAL:N	2.33	0.43
5:T:18:PHE:HB2	8:W:47:ALA:HA	2.01	0.43
10:Y:3:ILE:HG22	10:Y:4:PRO:HD2	1.99	0.43
3:R:700:ARG:HB3	10:Y:51:SER:HA	2.00	0.43
3:R:972:ASP:OD2	3:R:974:ARG:CG	2.66	0.43
3:B:345:LEU:N	3:B:345:LEU:CD1	2.82	0.43
3:B:589:VAL:O	3:B:592:GLU:N	2.46	0.43
3:B:5:LEU:HB2	3:B:630:PRO:HG3	2.00	0.43
1:A:697:GLU:O	1:A:700:ILE:N	2.51	0.43
1:A:377:TYR:O	1:A:408:GLU:HB2	2.19	0.43
3:B:373:LYS:CG	3:B:375:ARG:HB2	2.48	0.43
5:E:114:THR:CG2	5:E:115:ASP:N	2.81	0.43
3:B:899:TYR:CE2	4:D:29:ARG:CZ	3.02	0.43
5:E:51:VAL:C	5:E:53:THR:H	2.20	0.43
1:Q:651:VAL:CG2	1:Q:743:MET:HB3	2.48	0.43
1:A:872:PHE:CD1	1:A:876:VAL:HG21	2.53	0.43
1:A:558:LYS:HD2	3:R:104:GLU:HB2	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:K:41:LEU:O	8:K:42:GLN:C	2.55	0.43
1:A:417:VAL:CG1	1:A:464:LEU:CD1	2.96	0.43
1:Q:550:GLN:O	1:Q:553:SER:HB3	2.19	0.43
1:A:524:ILE:O	1:A:525:LEU:CD2	2.66	0.43
3:R:687:ARG:HH11	3:R:687:ARG:HG3	1.83	0.43
1:A:364:PHE:HE1	1:A:409:ARG:HD2	1.80	0.43
8:K:28:THR:O	8:K:30:TYR:N	2.52	0.43
4:S:69:SER:CA	4:S:72:ALA:HB3	2.45	0.43
5:E:23:ASN:HA	5:E:26:ALA:HB3	2.00	0.43
3:B:790:ARG:C	3:B:792:LEU:H	2.21	0.43
3:B:343:LEU:HD11	3:B:575:VAL:HG23	2.01	0.43
2:C:359:ALA:C	2:C:361:GLY:N	2.72	0.43
2:G:134:ARG:O	2:G:138:LEU:HB2	2.18	0.43
5:T:1:MET:CE	6:U:11:TYR:HD2	2.31	0.43
3:B:1088:LEU:C	3:B:1089:PHE:HD2	2.22	0.43
3:B:1041:THR:OG1	3:B:1044:LEU:CB	2.67	0.43
3:R:433:LEU:HD12	3:R:435:ARG:HH12	1.83	0.43
2:G:103:GLY:O	2:G:104:LEU:CB	2.65	0.43
2:G:322:ARG:HA	7:V:43:PRO:O	2.18	0.43
1:Q:837:THR:HG23	1:Q:847:GLN:O	2.18	0.43
8:W:50:LEU:HD23	8:W:74:LEU:HA	2.01	0.43
3:R:911:ASN:ND2	3:R:913:HIS:H	2.16	0.43
1:Q:353:ILE:CG1	1:Q:361:LEU:HD23	2.44	0.43
1:A:761:TYR:O	3:B:622:GLU:OE1	2.36	0.43
3:R:733:ASN:HB3	3:R:739:ILE:HG22	2.01	0.43
3:R:474:ALA:CB	3:R:578:PRO:HD3	2.49	0.43
3:R:591:ILE:O	3:R:594:ILE:HG13	2.19	0.43
3:B:191:SER:OG	3:B:299:PRO:HD2	2.18	0.43
3:B:535:GLU:O	3:B:536:LEU:C	2.57	0.43
4:D:217:ILE:N	4:D:217:ILE:CD1	2.78	0.43
3:R:852:ILE:HD12	3:R:852:ILE:N	2.33	0.43
3:R:533:GLY:C	3:R:535:GLU:H	2.22	0.43
3:B:691:ARG:HB3	3:B:754:PHE:HZ	1.82	0.43
3:B:89:ASN:ND2	3:B:863:LYS:NZ	2.63	0.43
2:C:390:MET:SD	5:E:57:GLY:C	2.96	0.43
2:C:391:ARG:HH21	8:K:42:GLN:HG2	1.82	0.43
2:C:240:ALA:HB1	2:C:251:ILE:HG23	2.01	0.43
3:R:838:VAL:CG1	3:R:839:THR:N	2.82	0.43
4:D:93:TYR:CE1	4:D:144:ARG:NH2	2.86	0.43
1:A:325:VAL:CG2	1:A:442:THR:HG22	2.49	0.43
1:A:195:LEU:HD12	1:A:195:LEU:N	2.34	0.43
6:F:30:SER:HB2	6:F:34:LEU:CB	2.49	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:250:ILE:CG2	2:G:251:ILE:H	2.29	0.43
6:U:30:SER:OG	6:U:38:TYR:HE1	1.98	0.43
2:C:130:TYR:CD1	2:C:136:LYS:HE3	2.53	0.43
1:A:394:ARG:O	1:A:395:LYS:C	2.57	0.43
3:R:28:LEU:C	3:R:30:SER:N	2.72	0.43
3:B:270:ASP:C	3:B:272:ILE:N	2.71	0.43
1:Q:92:GLU:O	1:Q:95:LYS:HB2	2.18	0.43
3:B:903:GLY:H	4:D:163:VAL:HG22	1.84	0.43
9:L:43:TYR:O	9:L:44:TYR:HB3	2.17	0.43
1:Q:770:LYS:CG	1:Q:771:PRO:HD2	2.49	0.43
1:A:72:PHE:CD2	1:A:72:PHE:N	2.86	0.43
1:A:272:HIS:O	1:A:275:THR:HB	2.18	0.43
1:Q:238:LYS:HD3	1:Q:276:TYR:CA	2.46	0.43
1:A:313:LEU:HD12	1:A:313:LEU:HA	1.86	0.43
3:B:1062:ASP:OD1	3:B:1087:ASN:O	2.37	0.43
4:D:52:PRO:O	4:D:53:LEU:HD23	2.18	0.43
4:D:61:ARG:HH11	4:D:61:ARG:HG2	1.83	0.43
1:A:481:LEU:HD23	1:A:482:VAL:N	2.28	0.43
1:A:864:LYS:O	1:A:864:LYS:CG	2.58	0.43
1:Q:294:PRO:O	1:Q:295:LEU:O	2.37	0.43
1:A:827:LEU:HD12	1:A:830:LEU:HD12	1.99	0.43
1:Q:7:LYS:HD3	3:R:1116:GLU:CD	2.39	0.43
3:R:932:TYR:HB2	3:R:957:ILE:HG23	2.00	0.43
4:S:205:LEU:O	4:S:206:CYS:C	2.57	0.43
1:Q:522:GLN:HG2	9:X:40:PHE:CD1	2.53	0.43
9:X:80:THR:O	9:X:83:TYR:HB3	2.18	0.43
1:A:761:TYR:HB3	1:A:764:ARG:HG3	2.00	0.43
3:B:595:GLU:CA	3:B:599:SER:HB3	2.49	0.43
3:R:892:ILE:CG2	3:R:897:MET:HE2	2.48	0.43
3:B:479:GLY:CA	3:B:552:GLU:HB3	2.30	0.43
3:B:952:GLN:O	3:B:955:ASN:N	2.52	0.43
3:B:708:LEU:O	3:B:708:LEU:CD1	2.61	0.43
3:R:543:ARG:NH2	3:R:548:GLU:OE2	2.49	0.43
3:R:393:ARG:NH2	3:R:403:TRP:HH2	2.15	0.43
3:R:62:LYS:C	3:R:63:ILE:HD12	2.38	0.43
3:B:691:ARG:CZ	3:B:756:ARG:HH21	2.32	0.43
8:K:74:LEU:HA	8:K:75:PRO:HD3	1.81	0.43
3:B:416:ARG:CZ	3:B:687:ARG:NH2	2.82	0.43
3:B:490:TYR:CE1	3:B:527:ILE:CG2	2.99	0.43
6:F:21:LEU:HA	6:F:24:VAL:HG23	2.01	0.43
3:R:988:VAL:HG13	3:R:989:TYR:N	2.33	0.43
7:V:20:HIS:CD2	7:V:20:HIS:N	2.86	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:779:GLY:O	3:R:780:VAL:HG22	2.19	0.43
2:G:359:ALA:C	2:G:361:GLY:N	2.71	0.43
2:C:382:GLY:C	2:C:384:GLY:N	2.72	0.43
3:B:369:LEU:HA	3:B:369:LEU:HD23	1.84	0.43
5:E:27:LEU:HD23	5:E:28:ASN:N	2.34	0.43
5:T:93:ASP:CG	5:T:94:ASN:N	2.71	0.43
2:G:354:LEU:HD13	3:R:1104:LEU:CD2	2.48	0.43
1:Q:79:ARG:CB	1:Q:266:TRP:CE3	2.88	0.43
3:R:1099:LEU:O	3:R:1102:GLN:HB2	2.19	0.43
1:A:218:THR:HG21	3:B:1098:LYS:HZ1	1.83	0.43
2:C:379:ILE:CD1	3:B:1045:LEU:HD22	2.49	0.43
3:B:433:LEU:HD12	3:B:435:ARG:HH12	1.84	0.43
2:C:322:ARG:N	2:C:322:ARG:CD	2.78	0.43
1:Q:870:ARG:NH1	2:G:58:GLU:HA	2.34	0.43
1:Q:874:ARG:HD3	1:Q:874:ARG:HA	1.72	0.43
2:C:25:PRO:HG3	2:C:33:LYS:NZ	2.34	0.43
3:R:915:LEU:HB3	3:R:916:PRO:CD	2.48	0.43
4:S:182:VAL:HG23	4:S:183:CYS:N	2.34	0.43
3:B:591:ILE:CG1	3:B:612:LYS:HZ3	2.32	0.43
1:A:573:ARG:O	1:A:574:LEU:C	2.57	0.43
1:A:748:GLY:HA2	1:A:781:PHE:CE2	2.54	0.43
10:N:43:TYR:CD1	10:N:44:CYS:N	2.87	0.43
1:A:233:ASP:O	1:A:236:THR:HB	2.18	0.43
3:B:358:PHE:O	3:B:360:ALA:N	2.52	0.43
4:D:217:ILE:O	4:D:219:ILE:HG13	2.19	0.43
1:Q:697:GLU:OE1	1:Q:756:ARG:CD	2.65	0.43
11:P:26:CYS:CB	11:P:27:PRO:CD	2.93	0.43
3:R:381:LEU:O	3:R:385:VAL:HG23	2.19	0.43
3:B:813:LYS:HE2	3:B:835:THR:HG21	2.01	0.43
4:D:44:VAL:HB	4:D:46:PHE:HE1	1.82	0.43
1:A:467:PRO:HA	3:B:1047:ASP:OD1	2.19	0.43
2:G:146:TYR:CD1	2:G:146:TYR:N	2.72	0.43
8:K:54:ASN:ND2	8:K:58:SER:HB2	2.34	0.43
1:A:606:GLN:NE2	1:A:608:PRO:HG2	2.33	0.43
5:T:38:ILE:CG2	5:T:39:LEU:H	2.17	0.43
3:R:1020:ARG:O	3:R:1021:ALA:C	2.56	0.43
1:A:193:GLU:C	1:A:195:LEU:N	2.71	0.43
8:W:35:VAL:C	8:W:37:SER:N	2.72	0.43
1:Q:193:GLU:C	1:Q:195:LEU:H	2.22	0.43
3:R:789:TYR:HA	3:R:792:LEU:HD12	2.01	0.43
6:U:88:VAL:HG12	6:U:89:MET:N	2.32	0.43
5:E:63:ASP:OD2	5:E:65:ALA:CB	2.66	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:247:GLU:O	1:A:251:GLU:HG3	2.19	0.43
3:R:304:SER:O	3:R:305:ALA:C	2.56	0.43
9:L:8:SER:HB2	9:L:13:LEU:HD13	2.00	0.43
1:A:72:PHE:HD2	1:A:72:PHE:N	2.17	0.43
1:A:212:LEU:HD21	1:A:242:ILE:HD13	2.00	0.43
1:A:302:LEU:HD12	1:A:302:LEU:O	2.19	0.43
3:B:1081:ILE:CG2	3:B:1085:LYS:NZ	2.82	0.43
5:T:100:ASN:ND2	6:U:36:ARG:HD3	2.32	0.43
2:C:318:ASP:OD2	2:C:322:ARG:NH1	2.51	0.43
3:R:428:ARG:HG2	3:R:469:ASN:ND2	2.34	0.43
3:R:463:ASN:HB3	3:R:467:VAL:CG1	2.49	0.43
5:E:3:LYS:HE2	6:F:9:GLU:OE2	2.19	0.43
1:Q:825:ASN:O	1:Q:827:LEU:N	2.51	0.43
10:Y:14:ILE:HG22	10:Y:49:LEU:HD21	2.01	0.43
10:Y:60:ILE:HG13	10:Y:61:HIS:N	2.34	0.43
8:W:12:ASP:O	8:W:13:LEU:CB	2.63	0.43
4:S:228:LEU:CD1	4:S:230:ILE:HD11	2.44	0.43
3:B:430:ILE:HG22	3:B:431:SER:N	2.33	0.43
1:A:61:CYS:HB3	1:A:63:ASN:ND2	2.33	0.43
6:U:79:THR:C	6:U:81:ASP:H	2.22	0.43
3:R:191:SER:HB3	3:R:298:LEU:HA	2.01	0.43
1:A:694:GLU:O	1:A:697:GLU:HB2	2.19	0.43
1:A:381:PRO:HB3	1:A:404:GLY:O	2.19	0.43
10:N:21:PHE:CE2	10:N:49:LEU:HD13	2.54	0.43
3:B:536:LEU:O	3:B:537:ALA:C	2.57	0.43
3:R:50:PRO:HG2	3:R:51:THR:N	2.25	0.43
4:D:98:ILE:HD11	4:D:114:ILE:HG12	2.00	0.43
5:E:38:ILE:CG2	5:E:39:LEU:H	2.20	0.43
3:R:658:PRO:C	3:R:660:HIS:N	2.71	0.43
1:A:782:ILE:HG22	1:A:784:SER:H	1.82	0.43
1:Q:747:LEU:HD12	1:Q:782:ILE:HG12	2.01	0.43
3:B:51:THR:HG22	3:B:51:THR:O	2.17	0.43
6:U:31:SER:O	6:U:35:GLN:HG3	2.19	0.43
5:E:23:ASN:O	5:E:24:GLU:C	2.58	0.43
1:A:47:PRO:HG2	1:A:48:ARG:N	2.32	0.43
5:T:21:PRO:HG2	5:T:24:GLU:OE2	2.19	0.43
5:T:23:ASN:O	5:T:24:GLU:C	2.57	0.43
3:R:790:ARG:HG3	3:R:791:LEU:N	2.34	0.43
3:R:395:ARG:O	3:R:399:ALA:CB	2.67	0.43
3:B:679:LEU:HD23	3:B:716:ARG:CG	2.49	0.43
5:T:104:MET:HE1	5:T:158:PRO:O	2.19	0.43
2:G:82:GLY:C	2:G:84:GLN:H	2.22	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:H:58:LYS:HA	7:H:59:PRO:HD3	1.87	0.43
1:A:245:ILE:HG22	1:A:245:ILE:O	2.18	0.43
1:Q:242:ILE:HD11	1:Q:273:VAL:HA	2.00	0.43
10:N:3:ILE:HG22	10:N:4:PRO:HD2	1.99	0.43
1:A:334:ILE:HG23	1:A:449:VAL:CG2	2.48	0.43
1:A:856:PHE:HB3	1:A:859:TYR:CE1	2.54	0.43
1:Q:839:ARG:NH1	7:V:37:ILE:HG23	2.34	0.43
8:K:82:LEU:HD23	8:K:82:LEU:N	2.30	0.43
3:R:459:PRO:HD2	3:R:467:VAL:HG13	2.01	0.43
5:E:88:GLU:H	5:E:99:VAL:HG12	1.81	0.43
2:G:271:LYS:O	2:G:272:VAL:C	2.57	0.43
1:Q:827:LEU:CG	2:G:75:ALA:HB2	2.46	0.43
3:R:958:LEU:O	3:R:958:LEU:HD23	2.18	0.43
10:Y:21:PHE:HE2	10:Y:35:LEU:CD2	2.30	0.43
1:Q:481:LEU:CD2	1:Q:482:VAL:N	2.81	0.43
4:S:175:ASN:C	4:S:195:LEU:HD21	2.39	0.43
4:S:217:ILE:O	4:S:219:ILE:HG13	2.18	0.43
3:B:586:ASN:HA	3:B:587:PRO:HD3	1.75	0.43
3:B:9:GLU:HA	3:B:592:GLU:OE1	2.19	0.43
3:R:890:MET:HG3	3:R:891:LEU:N	2.34	0.43
3:B:569:ASN:HB3	3:B:574:ARG:NH1	2.34	0.43
3:R:345:LEU:HD12	3:R:345:LEU:N	2.34	0.43
3:R:214:PHE:CE2	3:R:296:TYR:O	2.72	0.43
3:R:301:LEU:CD2	3:R:483:ARG:HH21	2.24	0.43
3:B:749:MET:CE	3:B:907:ASP:HB3	2.47	0.43
3:B:31:TYR:O	3:B:34:PHE:HB3	2.19	0.43
4:D:182:VAL:HG23	4:D:183:CYS:N	2.34	0.43
3:R:83:MET:CE	3:R:686:LEU:HB2	2.49	0.43
3:B:771:ASP:OD1	3:B:816:PRO:HG3	2.19	0.43
3:B:276:VAL:CG1	3:B:277:ALA:H	2.19	0.43
1:Q:420:ASN:HD22	1:Q:421:ARG:N	2.16	0.43
1:A:506:ALA:HB1	1:A:598:PHE:CB	2.49	0.43
1:A:425:LEU:HD13	1:A:425:LEU:O	2.19	0.43
3:R:921:LEU:C	3:R:923:GLN:N	2.72	0.43
2:G:132:ARG:CD	2:G:132:ARG:H	2.32	0.43
3:R:805:LYS:O	3:R:806:GLY:O	2.37	0.43
1:A:782:ILE:HG12	1:A:790:LEU:HD11	2.00	0.43
1:A:791:LYS:H	1:A:794:GLU:HB2	1.84	0.43
2:G:85:MET:HG3	2:G:85:MET:H	1.68	0.43
1:Q:364:PHE:CE2	1:Q:373:PRO:HB3	2.53	0.43
3:B:50:PRO:HB3	3:B:57:LYS:HG2	2.00	0.43
8:W:28:THR:O	8:W:29:ARG:C	2.57	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:Z:20:VAL:O	11:Z:20:VAL:HG23	2.19	0.43
4:S:133:LEU:HD11	4:S:139:ILE:HG12	2.00	0.43
1:A:84:VAL:HG11	1:A:281:ILE:HD12	2.01	0.43
3:B:774:VAL:O	3:B:775:MET:C	2.57	0.43
3:B:529:TYR:CD1	3:B:529:TYR:N	2.87	0.43
1:A:297:THR:O	1:A:300:GLN:N	2.52	0.42
3:R:1081:ILE:CG2	3:R:1085:LYS:NZ	2.80	0.42
3:B:1073:ASN:O	3:B:1074:LYS:HB2	2.19	0.42
3:B:321:LYS:HB3	3:B:321:LYS:HE3	1.81	0.42
3:B:559:VAL:O	3:B:563:ILE:O	2.37	0.42
3:B:697:TYR:CD1	10:N:4:PRO:HG3	2.54	0.42
10:N:3:ILE:HA	10:N:52:HIS:NE2	2.33	0.42
1:Q:220:ARG:NH1	1:Q:236:THR:HG23	2.34	0.42
1:Q:294:PRO:O	1:Q:295:LEU:C	2.56	0.42
6:F:52:ALA:C	6:F:54:LYS:N	2.72	0.42
2:G:390:MET:CG	5:T:56:GLU:HG2	2.49	0.42
2:G:379:ILE:HD12	3:R:1045:LEU:CD2	2.48	0.42
3:R:932:TYR:O	3:R:933:ALA:CB	2.66	0.42
1:Q:377:TYR:HE1	1:Q:385:ARG:CG	2.32	0.42
3:R:708:LEU:O	3:R:708:LEU:CD1	2.65	0.42
1:A:675:LEU:HD23	1:A:684:LEU:HD11	2.01	0.42
1:A:345:LYS:O	1:A:346:THR:C	2.56	0.42
1:A:79:ARG:HD2	1:A:266:TRP:CE3	2.53	0.42
5:E:147:ILE:CD1	5:E:163:THR:HB	2.49	0.42
2:G:336:GLY:C	2:G:337:GLU:OE1	2.57	0.42
3:B:87:LEU:HD22	3:B:851:LEU:CD1	2.48	0.42
8:K:26:ARG:HG2	8:K:90:LEU:CD1	2.49	0.42
1:A:417:VAL:HG11	1:A:464:LEU:HD11	2.00	0.42
2:G:140:VAL:O	2:G:144:LEU:HG	2.18	0.42
1:A:364:PHE:CE2	1:A:373:PRO:HB3	2.54	0.42
9:L:87:ILE:O	9:L:91:THR:HG23	2.19	0.42
3:B:672:MET:HE2	3:B:885:LYS:HD3	2.00	0.42
11:Z:13:PHE:CD1	11:Z:13:PHE:N	2.87	0.42
1:A:343:ILE:HD11	3:B:1001:LEU:HG	2.01	0.42
9:L:47:HIS:O	9:L:48:PRO:C	2.57	0.42
3:R:679:LEU:HD23	3:R:716:ARG:CD	2.49	0.42
3:R:1105:MET:HG3	3:R:1111:PRO:HG3	2.01	0.42
1:Q:759:ARG:HH21	1:Q:763:THR:HA	1.85	0.42
3:R:243:SER:O	3:R:249:GLN:OE1	2.37	0.42
3:R:253:PHE:HA	3:R:256:LEU:CD1	2.49	0.42
7:H:62:ILE:H	7:H:62:ILE:CD1	2.31	0.42
4:D:176:CYS:H	4:D:195:LEU:CD2	2.31	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:267:VAL:HG12	2:C:267:VAL:O	2.19	0.42
6:F:54:LYS:HA	6:F:57:GLU:OE1	2.19	0.42
3:R:958:LEU:C	3:R:958:LEU:CD2	2.88	0.42
3:R:899:TYR:O	3:R:971:TYR:N	2.42	0.42
4:S:250:ILE:HG13	4:S:250:ILE:H	1.43	0.42
3:R:895:VAL:CG1	4:S:34:LEU:HD21	2.47	0.42
3:R:580:ILE:HG12	3:R:642:ILE:HG12	2.00	0.42
1:A:651:VAL:HG21	1:A:743:MET:HB3	2.01	0.42
1:A:377:TYR:HE1	1:A:385:ARG:CG	2.30	0.42
5:T:97:ILE:HD11	5:T:136:ILE:HG21	2.01	0.42
1:A:206:TRP:CZ3	3:B:1108:ILE:HG21	2.54	0.42
3:R:530:TYR:OH	3:R:536:LEU:CG	2.67	0.42
3:R:39:LEU:O	3:R:43:ILE:HG12	2.19	0.42
3:R:50:PRO:CG	3:R:51:THR:N	2.81	0.42
8:K:49:ALA:O	8:K:50:LEU:C	2.57	0.42
8:K:50:LEU:HD23	8:K:74:LEU:HA	2.00	0.42
4:D:66:PRO:HG2	10:N:13:LEU:HD11	2.01	0.42
6:F:79:THR:C	6:F:81:ASP:H	2.22	0.42
1:A:283:GLY:C	1:A:285:PRO:CD	2.79	0.42
3:R:882:HIS:HE1	3:R:926:GLU:OE1	2.02	0.42
3:B:838:VAL:CG1	3:B:839:THR:H	2.31	0.42
2:C:297:ILE:C	2:C:299:LYS:N	2.72	0.42
1:Q:737:VAL:HG23	1:Q:738:LEU:N	2.34	0.42
8:W:31:GLU:O	8:W:35:VAL:HG13	2.20	0.42
3:B:287:GLU:C	3:B:289:ALA:N	2.70	0.42
2:C:15:GLU:HA	2:C:18:LYS:HG3	2.00	0.42
3:R:134:THR:N	3:R:137:LYS:HB2	2.34	0.42
9:X:45:GLN:HE22	9:X:48:PRO:N	2.16	0.42
1:A:25:THR:HG22	1:A:26:ALA:N	2.35	0.42
3:R:1105:MET:HG2	3:R:1111:PRO:CD	2.50	0.42
3:R:234:THR:CG2	3:R:236:ARG:HB2	2.49	0.42
3:R:234:THR:HB	3:R:237:ASP:OD2	2.19	0.42
3:R:325:LEU:HD13	3:R:331:GLU:H	1.84	0.42
3:B:243:SER:OG	3:B:246:PRO:HG3	2.18	0.42
2:C:60:SER:OG	2:C:61:GLU:N	2.51	0.42
2:C:117:PRO:HD2	2:C:120:PRO:HG3	2.00	0.42
7:H:49:ASP:CG	7:H:50:PRO:HD2	2.39	0.42
3:R:435:ARG:C	3:R:437:GLN:H	2.23	0.42
3:R:1059:TYR:HA	3:R:1089:PHE:O	2.20	0.42
3:R:957:ILE:HG12	3:R:957:ILE:H	1.46	0.42
4:S:123:PRO:C	4:S:125:SER:H	2.23	0.42
4:S:131:VAL:HA	10:Y:2:LEU:HD11	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:21:LYS:CA	3:B:25:ARG:NH1	2.82	0.42
3:R:5:LEU:HG	3:R:630:PRO:HB2	2.00	0.42
3:R:705:THR:CG2	3:R:706:ARG:H	2.06	0.42
1:A:249:LEU:HD21	1:A:265:LEU:HB3	2.02	0.42
3:B:97:TRP:CZ3	3:B:113:GLU:HB3	2.54	0.42
4:D:79:PRO:HG2	4:D:149:TYR:CE1	2.54	0.42
4:D:165:ARG:HH11	4:D:165:ARG:HG2	1.83	0.42
4:D:167:TYR:HB3	4:D:222:VAL:HB	2.01	0.42
3:B:899:TYR:HE2	4:D:29:ARG:CZ	2.32	0.42
1:Q:675:LEU:HD23	1:Q:684:LEU:HD11	2.01	0.42
3:R:536:LEU:O	3:R:539:LYS:HB2	2.19	0.42
3:R:381:LEU:C	3:R:383:ALA:H	2.21	0.42
3:R:98:LEU:HD22	3:R:99:THR:N	2.33	0.42
8:K:90:LEU:H	8:K:90:LEU:CD2	2.25	0.42
4:D:39:MET:HG2	4:D:121:VAL:HG11	2.01	0.42
5:T:134:LYS:HD3	5:T:174:TRP:CD1	2.53	0.42
1:Q:670:VAL:CG2	1:Q:671:GLU:N	2.82	0.42
1:A:737:VAL:HG23	1:A:738:LEU:N	2.34	0.42
5:T:31:ARG:HG2	5:T:35:GLN:OE1	2.19	0.42
3:B:789:TYR:HB2	3:B:790:ARG:H	1.74	0.42
4:D:48:GLU:HB3	4:D:140:SER:CB	2.49	0.42
1:A:268:LEU:HA	1:A:268:LEU:HD23	1.94	0.42
1:Q:272:HIS:O	1:Q:275:THR:HB	2.18	0.42
3:R:1071:ASP:O	3:R:1073:ASN:N	2.46	0.42
1:Q:759:ARG:HE	1:Q:759:ARG:HB3	1.56	0.42
3:R:339:ALA:HB1	3:R:619:GLU:HB2	2.00	0.42
3:B:128:ASP:OD1	3:B:130:ILE:CG1	2.67	0.42
4:D:108:MET:CG	4:D:110:TYR:CE1	3.03	0.42
2:C:65:ALA:HB2	8:K:19:PHE:HE1	1.84	0.42
2:C:115:LYS:O	2:C:116:VAL:CG1	2.54	0.42
3:B:435:ARG:C	3:B:437:GLN:H	2.21	0.42
3:B:640:LEU:HD22	3:B:641:GLU:O	2.19	0.42
5:E:134:LYS:HD3	5:E:174:TRP:CD1	2.55	0.42
1:Q:427:ARG:NH1	2:G:73:VAL:HG11	2.34	0.42
8:W:41:LEU:O	8:W:42:GLN:C	2.57	0.42
4:S:53:LEU:HD22	4:S:57:ILE:CG2	2.40	0.42
7:H:54:SER:O	7:H:56:ASN:N	2.52	0.42
1:Q:525:LEU:HG	9:X:40:PHE:CZ	2.52	0.42
1:Q:527:VAL:HG11	1:Q:530:VAL:HB	1.99	0.42
9:X:7:LYS:HE3	9:X:12:TYR:CE2	2.53	0.42
3:B:574:ARG:O	3:B:574:ARG:HG3	2.19	0.42
3:B:744:SER:HB3	10:N:8:PHE:HB3	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:381:LEU:C	3:B:383:ALA:H	2.22	0.42
5:E:92:VAL:CG1	5:E:127:ILE:HG12	2.49	0.42
1:A:638:PHE:CD1	1:A:641:LEU:HD11	2.54	0.42
1:A:649:GLU:HG3	3:B:965:ASP:OD2	2.19	0.42
3:B:963:LEU:HD22	3:B:982:ARG:NH2	2.34	0.42
5:T:51:VAL:C	5:T:53:THR:H	2.23	0.42
3:R:369:LEU:HG	3:R:384:LEU:HD13	2.01	0.42
2:C:390:MET:O	2:C:391:ARG:CD	2.66	0.42
9:L:66:LYS:O	9:L:70:LEU:CD1	2.67	0.42
1:A:523:GLN:O	1:A:525:LEU:N	2.53	0.42
1:A:488:THR:HG23	1:A:490:ARG:H	1.84	0.42
3:R:943:THR:CG2	3:R:944:PRO:CD	2.94	0.42
3:R:657:TYR:N	3:R:658:PRO:CD	2.83	0.42
3:R:451:GLY:N	3:R:647:ILE:HG23	2.22	0.42
1:Q:782:ILE:HG23	1:Q:794:GLU:CD	2.39	0.42
5:T:142:VAL:CG1	5:T:171:LYS:HA	2.43	0.42
4:D:178:LYS:HA	4:D:181:ASN:ND2	2.34	0.42
9:L:74:GLU:O	9:L:77:ARG:HB3	2.20	0.42
3:B:269:LEU:HD13	3:B:290:GLN:HG3	2.01	0.42
5:E:46:LEU:O	5:E:47:ALA:HB2	2.18	0.42
9:X:47:HIS:NE2	9:X:49:LEU:HB2	2.34	0.42
1:A:212:LEU:HD21	1:A:242:ILE:CD1	2.49	0.42
2:G:358:ALA:HB2	3:R:1109:ILE:CD1	2.49	0.42
1:Q:187:ILE:HA	1:Q:188:PRO:HD3	1.75	0.42
1:A:316:LYS:HD2	3:B:1049:LEU:O	2.19	0.42
3:B:138:LEU:O	3:B:139:ILE:C	2.58	0.42
6:U:52:ALA:C	6:U:54:LYS:N	2.72	0.42
1:Q:233:ASP:O	1:Q:236:THR:HB	2.19	0.42
1:Q:833:GLU:CG	1:Q:839:ARG:HG3	2.48	0.42
2:G:365:GLU:CG	2:G:366:PHE:N	2.83	0.42
2:G:389:THR:HG22	8:W:77:THR:O	2.20	0.42
3:R:963:LEU:HD13	3:R:982:ARG:CZ	2.50	0.42
3:R:972:ASP:OD2	3:R:974:ARG:CD	2.68	0.42
9:X:74:GLU:O	9:X:75:ASN:C	2.57	0.42
1:Q:377:TYR:O	1:Q:408:GLU:HB2	2.19	0.42
3:B:459:PRO:HD2	3:B:467:VAL:HG13	2.00	0.42
3:R:5:LEU:HD23	3:R:630:PRO:HG2	2.00	0.42
1:A:672:VAL:O	1:A:674:ASN:N	2.52	0.42
1:A:13:ILE:HD12	1:A:207:MET:HG2	2.01	0.42
3:B:1108:ILE:N	3:B:1108:ILE:HD12	2.34	0.42
3:B:34:PHE:HD1	3:B:351:ALA:HB2	1.84	0.42
3:B:388:ASP:C	3:B:390:VAL:H	2.23	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:203:CYS:HA	14:D:1001:F3S:S4	2.59	0.42
4:D:165:ARG:NH1	4:D:165:ARG:HG2	2.34	0.42
4:D:7:HIS:O	4:D:8:LYS:HB2	2.20	0.42
3:R:57:LYS:O	3:R:103:VAL:HB	2.20	0.42
3:R:108:GLU:HB2	3:R:109:ALA:H	1.69	0.42
3:R:24:VAL:HG21	3:R:426:LEU:HD12	2.01	0.42
2:C:393:ILE:HB	5:E:19:GLY:HA2	2.02	0.42
4:D:111:SER:O	4:D:114:ILE:HG13	2.19	0.42
5:E:42:LEU:O	5:E:76:THR:HG21	2.19	0.42
3:B:1004:ARG:CZ	3:B:1007:GLY:H	2.32	0.42
1:Q:548:GLY:C	1:Q:550:GLN:H	2.23	0.42
1:A:425:LEU:CD2	2:C:83:THR:HG21	2.50	0.42
1:A:607:GLN:N	1:A:608:PRO:HD2	2.34	0.42
2:C:126:LEU:CD1	2:C:131:LYS:HA	2.50	0.42
3:B:840:ARG:HB2	3:B:843:GLU:CB	2.49	0.42
1:Q:750:GLN:OE1	1:Q:801:GLY:HA3	2.19	0.42
1:Q:336:GLU:OE1	1:Q:436:ARG:NH1	2.52	0.42
2:C:388:LEU:HD21	8:K:34:ARG:HG3	2.02	0.42
8:W:28:THR:O	8:W:30:TYR:N	2.52	0.42
1:A:659:LYS:O	1:A:663:ASN:HB2	2.19	0.42
3:B:269:LEU:HD13	3:B:286:ILE:HG23	2.01	0.42
9:L:1:MET:HA	9:L:18:GLU:O	2.19	0.42
1:A:613:HIS:O	1:A:615:LEU:N	2.53	0.42
1:Q:687:ILE:HD11	1:Q:695:SER:HB3	2.01	0.42
1:A:30:PRO:HB2	1:A:244:ARG:CG	2.48	0.42
3:R:439:ASN:C	3:R:440:PHE:HD1	2.21	0.42
5:E:151:SER:HB3	5:E:158:PRO:HB3	2.00	0.42
3:B:941:ASP:OD1	3:B:941:ASP:C	2.57	0.42
1:Q:219:ILE:HA	3:R:1012:LEU:CD2	2.49	0.42
1:Q:246:ASN:OD1	1:Q:269:LEU:HD13	2.19	0.42
1:Q:268:LEU:O	1:Q:272:HIS:HD2	2.03	0.42
3:R:1069:TRP:HB2	3:R:1070:TYR:H	1.59	0.42
3:R:1012:LEU:CD1	3:R:1099:LEU:HD13	2.49	0.42
1:A:316:LYS:NZ	3:B:1049:LEU:HD12	2.34	0.42
3:B:1105:MET:HG3	3:B:1111:PRO:HG3	2.01	0.42
3:B:253:PHE:HA	3:B:256:LEU:CD1	2.49	0.42
2:C:65:ALA:CB	8:K:19:PHE:HE1	2.32	0.42
1:Q:842:TYR:O	7:V:41:GLN:NE2	2.52	0.42
4:S:108:MET:CG	4:S:110:TYR:CE1	3.02	0.42
10:Y:22:ILE:CG1	10:Y:23:THR:N	2.82	0.42
1:Q:859:TYR:CD1	2:G:64:ILE:HG23	2.53	0.42
8:W:15:PHE:HD1	8:W:16:ASN:H	1.68	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:52:PHE:CA	2:C:55:ALA:HB3	2.46	0.42
3:R:982:ARG:NH2	4:S:208:GLU:HG2	2.34	0.42
1:Q:396:GLU:C	1:Q:398:ALA:N	2.73	0.42
3:B:6:THR:CB	3:B:9:GLU:CB	2.97	0.42
3:R:484:ILE:H	3:R:484:ILE:HG13	1.29	0.42
1:Q:94:LEU:C	1:Q:96:ALA:H	2.23	0.42
5:T:136:ILE:HG22	5:T:136:ILE:O	2.19	0.42
5:T:82:GLN:CA	5:T:145:ARG:HG3	2.41	0.42
1:A:643:GLY:O	1:A:644:PHE:CB	2.67	0.42
3:B:656:PRO:HG3	3:B:926:GLU:HG3	2.00	0.42
4:D:78:TRP:O	4:D:80:GLU:N	2.52	0.42
1:A:747:LEU:HD12	1:A:782:ILE:HG12	2.01	0.42
1:Q:782:ILE:H	1:Q:782:ILE:HD12	1.81	0.42
3:B:855:THR:O	3:B:858:GLY:N	2.53	0.42
4:S:94:THR:O	4:S:144:ARG:HG3	2.20	0.42
1:Q:457:PHE:HB2	3:R:737:SER:HB2	2.00	0.42
6:U:30:SER:HB2	6:U:34:LEU:CB	2.49	0.42
11:P:9:CYS:SG	11:P:10:TRP:N	2.93	0.42
1:A:737:VAL:HA	1:A:740:ILE:HB	2.01	0.42
3:R:123:LEU:HD12	3:R:123:LEU:N	2.35	0.42
8:W:66:GLU:O	8:W:70:ARG:HG3	2.19	0.42
3:B:290:GLN:HE21	3:B:308:ARG:HH12	1.66	0.42
9:X:47:HIS:O	9:X:48:PRO:C	2.58	0.42
4:S:129:PRO:CG	10:Y:15:ALA:HB1	2.49	0.42
1:A:215:PRO:HD2	1:A:276:TYR:OH	2.19	0.42
3:B:1105:MET:HG2	3:B:1111:PRO:CD	2.50	0.42
3:R:81:SER:O	3:R:82:PRO:C	2.58	0.42
4:D:110:TYR:HA	4:D:128:ILE:O	2.19	0.42
4:D:51:SER:HB2	4:D:52:PRO:CD	2.47	0.42
3:B:448:THR:C	3:B:450:TRP:N	2.71	0.42
7:H:15:TYR:HD2	7:H:16:LEU:HD11	1.84	0.42
7:H:47:ALA:HB2	7:H:81:VAL:CG1	2.50	0.42
7:H:45:ILE:HB	7:H:79:ARG:CD	2.49	0.42
7:V:45:ILE:O	7:V:81:VAL:CA	2.63	0.42
3:R:1091:VAL:HG13	3:R:1091:VAL:O	2.19	0.42
3:R:963:LEU:HD22	3:R:982:ARG:NH2	2.35	0.42
4:S:18:GLU:HG3	4:S:225:LYS:CG	2.50	0.42
4:S:79:PRO:HG2	4:S:149:TYR:CE1	2.54	0.42
3:R:574:ARG:O	3:R:574:ARG:HG3	2.19	0.42
3:B:582:VAL:HG13	3:B:586:ASN:O	2.20	0.42
3:R:18:PHE:C	3:R:20:SER:N	2.72	0.42
3:B:719:GLY:N	3:B:989:TYR:OH	2.52	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:672:VAL:O	1:Q:675:LEU:N	2.53	0.42
2:G:337:GLU:OE2	2:G:339:ASN:CG	2.58	0.42
3:R:814:VAL:HA	3:R:833:ARG:O	2.19	0.42
3:R:103:VAL:HG13	3:R:106:ASN:C	2.40	0.42
1:A:558:LYS:HZ3	3:R:108:GLU:HG2	1.85	0.42
2:C:390:MET:HE3	5:E:58:ILE:C	2.40	0.42
4:D:111:SER:O	4:D:114:ILE:CG1	2.67	0.42
3:R:279:GLY:H	3:R:285:ARG:HH22	1.66	0.42
9:L:70:LEU:N	9:L:70:LEU:HD12	2.35	0.42
9:X:69:LEU:O	9:X:72:ALA:HB3	2.20	0.42
1:Q:872:PHE:HA	1:Q:876:VAL:CB	2.48	0.42
1:A:490:ARG:CD	1:A:491:TYR:CE2	3.03	0.42
3:R:797:VAL:HG22	3:R:811:ILE:HG12	2.00	0.42
1:A:450:CYS:N	1:A:451:PRO:CD	2.83	0.42
11:P:11:LYS:O	11:P:12:THR:HG23	2.20	0.42
2:G:133:ASP:O	2:G:135:ASP:N	2.52	0.42
5:E:35:GLN:HE21	5:E:47:ALA:HA	1.84	0.42
1:Q:46:ASP:OD1	1:Q:46:ASP:O	2.37	0.42
1:A:27:ILE:CG2	1:A:75:ILE:HD11	2.50	0.42
3:R:1061:CYS:N	3:R:1065:GLY:HA2	2.35	0.42
3:R:1064:CYS:O	3:R:1066:TYR:N	2.53	0.42
3:B:1064:CYS:SG	3:B:1081:ILE:HD12	2.59	0.42
3:B:1101:ILE:HG23	3:B:1111:PRO:HB2	2.02	0.42
1:Q:759:ARG:N	1:Q:779:ARG:NH2	2.68	0.42
3:R:227:MET:HE2	3:R:232:ILE:HG13	2.01	0.42
3:R:254:PRO:HG2	3:R:255:SER:H	1.84	0.42
3:R:316:ALA:C	3:R:318:ALA:N	2.72	0.42
3:R:763:VAL:HG23	3:R:859:ASN:CG	2.39	0.42
4:D:61:ARG:HH21	10:N:2:LEU:HD13	1.85	0.42
1:A:480:MET:C	1:A:481:LEU:O	2.56	0.42
1:A:856:PHE:HD1	1:A:858:MET:HB2	1.81	0.42
7:H:28:ALA:C	7:H:30:LYS:H	2.23	0.42
5:T:90:LEU:CD1	5:T:100:ASN:HB2	2.49	0.42
2:C:118:SER:O	2:C:119:THR:CB	2.68	0.42
5:T:67:TYR:N	5:T:67:TYR:CD1	2.88	0.42
4:S:98:ILE:CD1	4:S:114:ILE:HG12	2.49	0.42
4:S:124:ILE:O	4:S:125:SER:CB	2.66	0.42
2:G:63:LEU:HD21	8:W:23:TRP:CH2	2.55	0.42
1:Q:486:ILE:HA	1:Q:496:ILE:HD12	2.02	0.42
7:V:75:VAL:HG13	8:W:15:PHE:HE2	1.85	0.42
3:R:21:LYS:HD3	3:R:25:ARG:NE	2.35	0.42
5:T:115:ASP:O	5:T:116:ASP:HB2	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:203:ARG:HD3	1:A:203:ARG:N	2.34	0.42
4:S:13:ILE:CD1	4:S:239:GLU:N	2.82	0.42
5:E:53:THR:OG1	5:E:71:GLU:HB2	2.19	0.42
1:A:563:HIS:CE1	1:A:876:VAL:HG13	2.55	0.42
4:D:111:SER:OG	4:D:125:SER:O	2.37	0.42
3:B:282:ARG:HD3	3:B:285:ARG:HD3	2.01	0.42
2:G:145:GLU:O	2:G:146:TYR:O	2.38	0.42
3:R:1011:ILE:H	3:R:1011:ILE:CD1	2.13	0.42
3:R:838:VAL:CG1	3:R:839:THR:H	2.30	0.42
3:R:644:SER:N	3:R:645:PRO:CD	2.82	0.42
1:A:786:PHE:CE2	1:A:790:LEU:HD21	2.55	0.42
1:A:539:ILE:HB	1:A:545:TYR:CB	2.44	0.42
1:A:831:ARG:NH2	2:C:385:MET:SD	2.92	0.42
3:B:792:LEU:HD21	3:B:809:VAL:O	2.20	0.42
1:Q:329:ASP:HA	1:Q:330:PRO:HD3	1.80	0.42
9:X:46:PRO:CD	9:X:52:LYS:O	2.67	0.42
4:D:256:LEU:O	4:D:257:GLU:C	2.58	0.42
4:D:251:ARG:HG3	4:D:251:ARG:NH1	2.35	0.42
1:Q:199:PRO:C	1:Q:201:THR:H	2.23	0.42
3:B:1059:TYR:HA	3:B:1089:PHE:O	2.20	0.42
3:B:92:TYR:HD2	3:B:92:TYR:O	2.03	0.42
1:A:856:PHE:HB3	1:A:859:TYR:HD1	1.84	0.42
1:Q:237:HIS:O	1:Q:240:VAL:HB	2.19	0.42
8:K:82:LEU:CD1	8:K:84:ASN:HB2	2.49	0.42
2:G:292:ILE:HB	7:V:16:LEU:HD22	2.02	0.42
2:G:322:ARG:HH21	7:V:43:PRO:HG3	1.85	0.42
4:S:116:SER:O	4:S:118:ASP:N	2.53	0.42
4:S:124:ILE:HG13	4:S:124:ILE:O	2.18	0.42
4:S:66:PRO:O	4:S:123:PRO:HA	2.20	0.42
2:G:310:ILE:CD1	2:G:310:ILE:N	2.70	0.42
3:B:298:LEU:C	3:B:300:HIS:N	2.73	0.42
5:T:92:VAL:HG11	5:T:127:ILE:HG12	2.01	0.42
5:E:149:VAL:HG21	5:E:160:ILE:HG13	2.00	0.42
3:B:882:HIS:HE1	3:B:926:GLU:OE1	2.03	0.42
3:B:978:LYS:CE	4:D:205:LEU:HD13	2.50	0.42
1:Q:672:VAL:O	1:Q:674:ASN:N	2.53	0.42
4:D:11:THR:HA	4:D:238:PRO:HD3	2.02	0.42
3:R:83:MET:HE3	3:R:686:LEU:HB2	2.01	0.42
1:A:563:HIS:ND1	1:A:876:VAL:HG13	2.35	0.42
3:R:98:LEU:HD13	3:R:98:LEU:O	2.19	0.42
2:C:144:LEU:O	2:C:145:GLU:C	2.58	0.42
3:R:661:ASN:OD1	3:R:882:HIS:HB3	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:922:GLY:CA	3:R:925:MET:HB2	2.39	0.42
1:Q:541:ALA:O	1:Q:542:PRO:C	2.55	0.42
1:A:364:PHE:CD1	1:A:409:ARG:HD2	2.55	0.42
8:K:36:ILE:HG13	8:K:36:ILE:H	1.60	0.42
1:Q:611:ILE:O	1:Q:615:LEU:HG	2.20	0.42
8:K:70:ARG:O	8:K:72:GLY:N	2.52	0.42
1:Q:195:LEU:N	1:Q:195:LEU:HD12	2.35	0.42
3:R:123:LEU:CD1	3:R:123:LEU:N	2.83	0.42
1:Q:320:PHE:HA	3:R:1005:ALA:HA	2.02	0.42
1:Q:687:ILE:HD11	1:Q:695:SER:CB	2.50	0.42
5:T:1:MET:HG3	5:T:80:VAL:HG21	2.02	0.42
11:Z:25:ARG:HD2	11:Z:30:GLY:HA2	2.02	0.42
4:S:251:ARG:NH1	4:S:251:ARG:HG3	2.35	0.42
10:N:20:SER:CA	10:N:23:THR:HB	2.50	0.42
2:C:102:LEU:CD2	2:C:103:GLY:N	2.67	0.42
1:A:826:ALA:CB	2:C:335:THR:HG23	2.33	0.42
3:B:338:TYR:CE2	3:B:341:LYS:NZ	2.88	0.42
3:B:407:ARG:HE	3:B:407:ARG:N	2.18	0.42
7:H:17:VAL:HG13	7:H:17:VAL:O	2.20	0.42
7:H:45:ILE:HG22	7:H:81:VAL:N	2.35	0.42
3:R:338:TYR:CE2	3:R:341:LYS:NZ	2.88	0.42
2:G:322:ARG:CD	2:G:322:ARG:N	2.78	0.42
7:V:81:VAL:O	7:V:82:ILE:CG1	2.68	0.42
3:R:702:LEU:HD22	10:Y:47:ARG:NH1	2.35	0.42
3:R:956:GLU:C	3:R:958:LEU:H	2.24	0.42
10:Y:20:SER:H	10:Y:22:ILE:CD1	2.32	0.42
3:R:702:LEU:HD12	10:Y:51:SER:HB3	2.02	0.42
1:Q:428:ILE:CG2	1:Q:428:ILE:O	2.68	0.42
1:Q:481:LEU:HD23	1:Q:482:VAL:N	2.30	0.42
2:C:21:SER:O	2:C:33:LYS:HE3	2.20	0.42
2:C:55:ALA:C	2:C:58:GLU:H	2.23	0.42
1:Q:530:VAL:O	1:Q:532:ILE:N	2.52	0.42
1:A:59:PRO:HG2	1:A:61:CYS:SG	2.60	0.42
3:B:935:LEU:CD2	10:N:43:TYR:HB3	2.49	0.42
1:Q:841:LEU:CD2	2:G:367:LYS:HB2	2.49	0.42
3:R:533:GLY:O	3:R:536:LEU:N	2.52	0.42
2:C:146:TYR:CD1	2:C:146:TYR:N	2.72	0.42
2:C:240:ALA:C	2:C:241:ILE:HG13	2.40	0.42
3:R:472:LEU:HD12	3:R:646:ALA:HA	2.02	0.42
3:B:838:VAL:CG1	3:B:839:THR:N	2.83	0.42
5:T:88:GLU:H	5:T:99:VAL:HG12	1.85	0.42
2:C:386:VAL:HG11	8:K:34:ARG:HB2	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:S:67:PHE:CD2	4:S:121:VAL:HG12	2.47	0.42
4:S:72:ALA:C	4:S:74:ASP:H	2.23	0.42
4:S:85:CYS:O	4:S:89:CYS:SG	2.77	0.42
3:B:725:ALA:CB	3:B:985:PHE:CE1	3.03	0.42
5:E:30:LEU:HD11	5:E:72:PHE:CE2	2.54	0.42
1:A:47:PRO:CG	1:A:48:ARG:H	2.31	0.42
3:R:595:GLU:CA	3:R:599:SER:HB3	2.47	0.42
3:R:413:LEU:O	3:R:414:LEU:C	2.59	0.42
1:A:343:ILE:HD11	3:B:1001:LEU:CD1	2.49	0.42
1:A:556:LEU:HA	1:A:557:PRO:HD3	1.86	0.42
1:Q:658:LYS:O	1:Q:662:TYR:HB2	2.20	0.42
1:Q:9:ILE:HD12	2:G:342:LEU:HD11	2.02	0.42
3:R:570:CYS:O	3:R:571:ASP:O	2.38	0.42
3:R:485:VAL:C	3:R:487:LYS:H	2.23	0.42
1:A:562:PHE:CD2	1:A:611:ILE:HG12	2.55	0.42
1:A:297:THR:O	1:A:298:LEU:C	2.58	0.41
1:Q:275:THR:HA	1:Q:278:ASP:O	2.20	0.41
1:Q:298:LEU:O	1:Q:301:ARG:N	2.52	0.41
3:R:1012:LEU:O	3:R:1095:TYR:CE2	2.68	0.41
3:R:337:HIS:CD2	3:R:339:ALA:HB3	2.55	0.41
3:B:183:ILE:O	3:B:184:THR:O	2.38	0.41
3:B:517:TRP:CD1	3:B:531:GLN:N	2.81	0.41
2:C:379:ILE:CD1	3:B:1042:ALA:HA	2.45	0.41
8:K:15:PHE:HD1	8:K:16:ASN:OD1	2.03	0.41
6:U:72:LEU:C	6:U:74:SER:N	2.72	0.41
2:C:108:ILE:O	2:C:109:GLU:C	2.57	0.41
6:F:59:LEU:C	6:F:61:ASN:H	2.23	0.41
3:R:165:GLU:OE2	3:R:338:TYR:OH	2.31	0.41
2:G:117:PRO:HD3	2:G:276:ASN:HD21	1.85	0.41
8:W:49:ALA:O	8:W:50:LEU:O	2.38	0.41
10:Y:16:ASP:OD2	10:Y:17:LYS:HG3	2.19	0.41
1:Q:334:ILE:CG2	1:Q:482:VAL:CG1	2.97	0.41
1:Q:508:LEU:O	1:Q:638:PHE:CE2	2.73	0.41
1:Q:363:GLN:HA	1:Q:366:ILE:CG2	2.50	0.41
3:B:626:VAL:HA	3:B:639:HIS:O	2.20	0.41
3:B:582:VAL:CG1	3:B:586:ASN:N	2.75	0.41
1:A:697:GLU:O	1:A:698:ASN:C	2.58	0.41
1:A:363:GLN:HA	1:A:366:ILE:CG2	2.50	0.41
5:T:149:VAL:HG22	5:T:160:ILE:HA	2.01	0.41
3:B:353:LEU:HA	3:B:404:VAL:CG1	2.46	0.41
3:B:39:LEU:HD11	3:B:354:PHE:CZ	2.55	0.41
3:B:533:GLY:O	3:B:536:LEU:N	2.49	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:727:VAL:C	1:A:729:ALA:N	2.72	0.41
3:R:691:ARG:CZ	3:R:756:ARG:HH21	2.33	0.41
5:T:27:LEU:HB2	5:T:51:VAL:HG21	2.02	0.41
3:R:64:ARG:CG	3:R:64:ARG:NH1	2.81	0.41
1:A:558:LYS:HG3	3:R:104:GLU:CB	2.39	0.41
1:Q:440:GLY:HA3	1:Q:444:ARG:NH2	2.34	0.41
8:W:53:ILE:O	8:W:54:ASN:HB2	2.20	0.41
2:C:250:ILE:CG2	2:C:251:ILE:H	2.30	0.41
1:Q:286:PRO:O	1:Q:287:SER:CB	2.66	0.41
2:G:129:GLU:O	2:G:131:LYS:N	2.53	0.41
3:R:453:MET:CG	3:R:468:LYS:HD2	2.39	0.41
1:Q:667:ARG:NH1	1:Q:667:ARG:HG2	2.34	0.41
4:D:64:LEU:HB3	10:N:6:ARG:HD2	2.01	0.41
5:T:30:LEU:HD11	5:T:72:PHE:CE2	2.55	0.41
3:B:485:VAL:C	3:B:487:LYS:H	2.23	0.41
3:B:1069:TRP:NE1	3:B:1088:LEU:CB	2.79	0.41
3:B:1097:PHE:O	3:B:1098:LYS:C	2.57	0.41
3:B:234:THR:HB	3:B:237:ASP:OD2	2.20	0.41
3:B:247:GLU:N	3:B:249:GLN:HG2	2.35	0.41
1:A:334:ILE:CG2	1:A:482:VAL:HG11	2.47	0.41
6:U:46:LYS:HD2	6:U:74:SER:O	2.20	0.41
6:U:59:LEU:HD23	6:U:59:LEU:C	2.41	0.41
1:A:827:LEU:CD1	2:C:315:LEU:HD13	2.44	0.41
2:G:64:ILE:O	2:G:65:ALA:HB2	2.20	0.41
1:Q:727:VAL:O	1:Q:728:MET:C	2.57	0.41
4:S:18:GLU:HA	4:S:225:LYS:HG2	2.01	0.41
4:S:253:ILE:CG2	4:S:254:GLU:N	2.83	0.41
1:Q:357:ASN:HD22	1:Q:361:LEU:HD22	1.85	0.41
1:Q:394:ARG:O	1:Q:395:LYS:C	2.58	0.41
1:A:51:VAL:HG23	1:A:58:CYS:HB3	2.01	0.41
1:A:569:SER:HB2	1:A:584:SER:HG	1.85	0.41
3:R:228:ARG:NH1	3:R:262:ILE:O	2.52	0.41
3:B:740:MET:HE1	3:B:888:ILE:HD11	2.02	0.41
3:R:627:ALA:O	3:R:628:LEU:C	2.58	0.41
3:R:557:HIS:N	3:R:623:ASN:ND2	2.47	0.41
1:A:558:LYS:NZ	3:R:108:GLU:HG2	2.34	0.41
3:B:83:MET:O	3:B:87:LEU:HD12	2.20	0.41
3:B:759:SER:CB	3:B:862:VAL:O	2.57	0.41
8:K:39:ARG:NE	8:K:68:GLU:OE1	2.53	0.41
4:D:123:PRO:C	4:D:125:SER:H	2.23	0.41
9:L:69:LEU:CD2	9:L:73:ILE:HG12	2.50	0.41
1:A:428:ILE:HG21	1:A:495:ILE:HD13	2.01	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:490:TYR:CE1	3:R:527:ILE:CG2	2.99	0.41
8:K:78:ILE:CD1	8:K:92:LEU:HD12	2.50	0.41
3:B:53:ILE:HB	3:B:54:PRO:CD	2.50	0.41
4:D:253:ILE:HG23	4:D:254:GLU:N	2.34	0.41
1:A:668:ALA:CB	1:A:707:LEU:HD13	2.49	0.41
3:R:992:LYS:CE	3:R:996:MET:SD	3.08	0.41
2:G:40:GLU:O	2:G:45:ARG:CG	2.64	0.41
1:Q:512:LYS:HE3	1:Q:583:ASP:HA	2.02	0.41
3:R:31:TYR:O	3:R:34:PHE:HB3	2.20	0.41
11:P:13:PHE:CD1	11:P:13:PHE:N	2.88	0.41
1:Q:715:ALA:C	1:Q:717:LYS:H	2.23	0.41
9:L:25:GLY:O	9:L:43:TYR:CG	2.74	0.41
3:R:774:VAL:O	3:R:775:MET:C	2.57	0.41
3:R:234:THR:HG21	3:R:236:ARG:HB2	2.02	0.41
3:R:321:LYS:HE3	3:R:321:LYS:HB3	1.79	0.41
3:R:321:LYS:HA	3:R:324:GLU:HB3	2.01	0.41
3:R:125:SER:O	3:R:128:ASP:N	2.53	0.41
3:B:227:MET:CE	3:B:312:ALA:O	2.68	0.41
3:B:338:TYR:OH	3:B:468:LYS:HE3	2.20	0.41
7:H:32:LEU:HD22	7:H:39:PRO:HD3	2.02	0.41
1:Q:432:ALA:HB3	1:Q:480:MET:O	2.20	0.41
3:R:139:ILE:HD12	10:Y:61:HIS:NE2	2.35	0.41
3:R:745:VAL:C	3:R:747:ARG:H	2.24	0.41
4:S:111:SER:OG	4:S:125:SER:O	2.37	0.41
4:S:78:TRP:HD1	4:S:78:TRP:N	2.16	0.41
3:B:14:ILE:HG12	3:B:18:PHE:CE2	2.55	0.41
3:B:477:ALA:HB2	3:B:576:ARG:NE	2.34	0.41
3:B:591:ILE:CD1	3:B:612:LYS:HZ3	2.32	0.41
3:R:119:LEU:HD11	3:R:350:PHE:HE2	1.85	0.41
3:B:902:LYS:CB	10:N:42:ARG:NH1	2.79	0.41
3:B:933:ALA:CB	10:N:47:ARG:HH12	2.22	0.41
10:N:7:CYS:SG	10:N:45:CYS:SG	3.18	0.41
4:S:11:THR:HA	4:S:238:PRO:HD3	2.02	0.41
5:E:92:VAL:HG11	5:E:127:ILE:HG12	2.01	0.41
3:R:756:ARG:CG	3:R:757:LEU:N	2.82	0.41
3:R:810:LEU:HD13	3:R:864:VAL:HG11	2.02	0.41
5:E:51:VAL:O	5:E:53:THR:N	2.48	0.41
1:A:550:GLN:O	1:A:553:SER:HB3	2.21	0.41
3:R:97:TRP:CZ3	3:R:113:GLU:HB3	2.55	0.41
3:R:373:LYS:HG3	3:R:375:ARG:CB	2.47	0.41
2:C:391:ARG:HH11	2:C:391:ARG:CG	2.14	0.41
9:L:66:LYS:H	9:L:66:LYS:HG3	1.60	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:497:VAL:O	3:R:498:GLU:C	2.58	0.41
2:G:125:TYR:HA	2:G:250:ILE:HG23	2.02	0.41
3:B:82:PRO:CG	3:B:143:GLU:OE1	2.67	0.41
4:D:107:ARG:O	4:D:133:LEU:N	2.48	0.41
11:Z:22:PRO:HG2	11:Z:23:GLY:N	2.34	0.41
5:E:112:GLN:HB3	5:E:112:GLN:HE21	1.67	0.41
1:A:308:ARG:O	1:A:308:ARG:HG2	2.20	0.41
1:A:71:HIS:ND1	3:B:1070:TYR:CE2	2.89	0.41
3:R:558:ILE:HG21	3:R:563:ILE:HG21	2.02	0.41
3:R:82:PRO:C	3:R:84:GLU:H	2.24	0.41
3:B:183:ILE:CG1	3:B:206:LYS:HB3	2.49	0.41
6:U:59:LEU:C	6:U:61:ASN:H	2.23	0.41
2:C:284:PHE:N	2:C:284:PHE:CD1	2.87	0.41
2:C:86:THR:O	2:C:104:LEU:CD1	2.68	0.41
3:R:648:LEU:HD22	3:R:652:ALA:HB1	2.02	0.41
2:G:286:ILE:HG13	7:V:49:ASP:OD2	2.19	0.41
2:G:289:ALA:O	2:G:290:ARG:C	2.56	0.41
3:R:703:VAL:HG21	3:R:930:GLY:N	2.35	0.41
1:Q:607:GLN:N	1:Q:608:PRO:HD2	2.35	0.41
1:Q:532:ILE:O	1:Q:533:ASP:C	2.59	0.41
4:S:165:ARG:HH11	4:S:165:ARG:HG2	1.85	0.41
4:S:187:VAL:HG21	4:S:203:CYS:HB2	2.00	0.41
3:R:119:LEU:HD11	3:R:350:PHE:CE2	2.55	0.41
3:R:21:LYS:CA	3:R:25:ARG:NH1	2.82	0.41
5:T:179:LYS:HZ2	6:U:79:THR:CB	2.26	0.41
1:A:363:GLN:O	1:A:367:ASN:OD1	2.39	0.41
5:T:114:THR:HG22	5:T:115:ASP:N	2.36	0.41
3:B:388:ASP:O	3:B:389:ILE:C	2.58	0.41
3:B:978:LYS:HZ1	4:D:205:LEU:CD1	2.31	0.41
3:R:83:MET:O	3:R:87:LEU:HD12	2.20	0.41
3:R:87:LEU:HD22	3:R:851:LEU:HD11	2.02	0.41
3:R:536:LEU:O	3:R:536:LEU:HD22	2.20	0.41
1:A:589:LYS:O	1:A:592:ILE:CG1	2.68	0.41
1:A:589:LYS:O	1:A:592:ILE:HG13	2.19	0.41
3:B:756:ARG:CG	3:B:757:LEU:N	2.83	0.41
3:B:1046:LYS:HG2	3:B:1050:LEU:HD21	2.02	0.41
3:R:668:TYR:O	3:R:671:ALA:HB3	2.20	0.41
3:B:797:VAL:CB	11:P:36:MET:HE1	2.40	0.41
4:S:38:ILE:HD12	4:S:38:ILE:C	2.41	0.41
4:D:64:LEU:HB3	10:N:5:ILE:HG13	2.02	0.41
1:A:396:GLU:C	1:A:398:ALA:N	2.73	0.41
3:B:790:ARG:HG3	3:B:791:LEU:N	2.36	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:269:LEU:HD13	3:R:286:ILE:HG23	2.02	0.41
4:D:260:LEU:CD2	4:D:264:VAL:HG21	2.51	0.41
4:S:252:LYS:O	4:S:256:LEU:N	2.47	0.41
1:Q:424:SER:HB3	3:R:1032:GLU:OE2	2.20	0.41
1:A:720:ASP:C	1:A:722:PHE:N	2.73	0.41
1:A:301:ARG:NH1	1:A:308:ARG:HH12	2.18	0.41
3:B:1089:PHE:HA	3:B:1090:PRO:HD3	1.80	0.41
3:R:244:LEU:CD1	3:R:500:VAL:HB	2.50	0.41
11:Z:33:ILE:O	11:Z:34:ILE:C	2.59	0.41
3:B:232:ILE:HG23	3:B:237:ASP:HB3	2.03	0.41
1:A:485:ASN:ND2	3:B:1039:PHE:CE2	2.88	0.41
2:C:309:ASP:OD2	2:C:310:ILE:N	2.53	0.41
6:U:13:PRO:HG2	6:U:16:VAL:HG23	2.02	0.41
6:F:13:PRO:HG2	6:F:16:VAL:HG23	2.02	0.41
2:G:117:PRO:CD	2:G:276:ASN:OD1	2.69	0.41
1:Q:823:LEU:HD12	1:Q:824:ILE:H	1.84	0.41
3:R:696:HIS:NE2	3:R:752:SER:O	2.53	0.41
4:S:61:ARG:HH11	4:S:61:ARG:HG2	1.86	0.41
1:Q:426:HIS:O	1:Q:429:SER:HB2	2.19	0.41
2:C:21:SER:O	2:C:33:LYS:CE	2.69	0.41
4:S:18:GLU:OE1	4:S:225:LYS:HD2	2.21	0.41
4:S:253:ILE:HG23	4:S:254:GLU:N	2.35	0.41
9:X:77:ARG:CZ	9:X:77:ARG:HB2	2.50	0.41
3:R:346:ALA:O	3:R:347:GLY:C	2.59	0.41
3:B:875:GLY:HA2	3:B:887:VAL:HG11	2.03	0.41
3:B:668:TYR:O	3:B:671:ALA:HB3	2.20	0.41
4:D:18:GLU:CG	4:D:225:LYS:HG2	2.50	0.41
1:Q:739:ASN:O	3:R:919:MET:HE3	2.20	0.41
3:R:358:PHE:O	3:R:360:ALA:N	2.53	0.41
3:B:83:MET:HG2	3:B:86:ARG:NH2	2.35	0.41
1:Q:444:ARG:N	1:Q:444:ARG:HD3	2.36	0.41
2:C:391:ARG:O	2:C:391:ARG:HG2	2.20	0.41
1:A:532:ILE:HG23	9:L:40:PHE:CD1	2.55	0.41
1:A:555:PHE:CD2	1:A:631:LEU:HD13	2.56	0.41
3:B:840:ARG:NH1	3:B:1021:ALA:HB2	2.35	0.41
1:Q:747:LEU:HD12	1:Q:790:LEU:HD11	2.01	0.41
1:A:364:PHE:HA	1:A:373:PRO:O	2.21	0.41
1:A:375:ALA:HB2	1:A:409:ARG:HA	2.02	0.41
3:B:50:PRO:CG	3:B:51:THR:N	2.84	0.41
2:C:299:LYS:O	2:C:302:ALA:HB3	2.21	0.41
1:Q:708:ARG:HG3	1:Q:709:SER:H	1.84	0.41
1:Q:512:LYS:N	1:Q:583:ASP:OD2	2.54	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:438:LEU:C	1:A:438:LEU:HD23	2.40	0.41
3:B:211:HIS:HD1	3:B:222:PRO:HG3	1.86	0.41
3:B:369:LEU:HD21	3:B:379:LEU:CD2	2.49	0.41
6:F:71:ILE:O	6:F:71:ILE:HG22	2.20	0.41
1:Q:313:LEU:HA	1:Q:313:LEU:HD12	1.86	0.41
2:G:373:ILE:O	3:R:1049:LEU:HD21	2.21	0.41
3:R:183:ILE:CG1	3:R:206:LYS:HB3	2.50	0.41
3:R:247:GLU:N	3:R:249:GLN:HG2	2.34	0.41
3:B:223:PHE:CD2	3:B:256:LEU:HD22	2.55	0.41
3:B:81:SER:HB3	3:B:84:GLU:CG	2.43	0.41
4:D:129:PRO:HD2	10:N:16:ASP:N	2.36	0.41
1:Q:293:ARG:HA	1:Q:294:PRO:HD3	1.87	0.41
1:A:842:TYR:O	7:H:41:GLN:NE2	2.53	0.41
7:H:42:LEU:O	7:H:43:PRO:C	2.58	0.41
6:F:13:PRO:O	6:F:14:TYR:C	2.59	0.41
7:V:49:ASP:CG	7:V:50:PRO:HD2	2.41	0.41
2:G:391:ARG:HH21	8:W:42:GLN:NE2	2.19	0.41
3:R:958:LEU:HA	3:R:962:TYR:O	2.21	0.41
10:Y:21:PHE:CE2	10:Y:49:LEU:HD13	2.56	0.41
1:A:759:ARG:HB3	1:A:759:ARG:HE	1.58	0.41
3:B:617:ASP:OD2	3:B:617:ASP:C	2.59	0.41
3:B:5:LEU:CD1	3:B:5:LEU:N	2.84	0.41
3:B:578:PRO:HB3	3:B:615:TYR:CE1	2.55	0.41
3:B:5:LEU:HD23	3:B:630:PRO:HG2	2.02	0.41
3:B:633:LEU:O	3:B:635:PRO:CD	2.68	0.41
3:B:228:ARG:NH2	3:B:233:LEU:O	2.54	0.41
6:U:79:THR:CG2	6:U:80:SER:N	2.82	0.41
3:R:226:LEU:HD13	3:R:297:PHE:CE1	2.56	0.41
3:R:291:GLN:O	3:R:295:LYS:HE2	2.20	0.41
1:A:262:ILE:CD1	1:A:266:TRP:HE1	2.33	0.41
3:R:55:GLY:O	3:R:105:ASN:N	2.53	0.41
2:C:390:MET:HE1	5:E:58:ILE:O	2.21	0.41
9:L:67:ASP:C	9:L:69:LEU:N	2.73	0.41
8:K:54:ASN:ND2	8:K:58:SER:N	2.68	0.41
2:C:131:LYS:HG2	2:C:248:GLU:C	2.41	0.41
2:C:249:TYR:HD1	2:C:249:TYR:H	1.67	0.41
3:R:145:PRO:O	3:R:147:ASP:N	2.53	0.41
3:B:707:ALA:HA	3:B:710:ILE:HD12	2.03	0.41
4:S:63:ALA:CB	4:S:155:LYS:HZ3	2.30	0.41
1:Q:25:THR:HG22	1:Q:26:ALA:N	2.36	0.41
5:T:23:ASN:O	5:T:26:ALA:N	2.53	0.41
1:A:687:ILE:HD11	1:A:695:SER:HB3	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:31:TYR:O	3:R:35:VAL:HG12	2.21	0.41
3:R:1012:LEU:C	3:R:1012:LEU:CD1	2.89	0.41
3:R:1062:ASP:OD1	3:R:1062:ASP:N	2.54	0.41
1:A:216:PRO:O	1:A:219:ILE:HD11	2.20	0.41
3:B:1069:TRP:HH2	3:B:1072:LYS:HE3	1.85	0.41
1:Q:759:ARG:H	1:Q:779:ARG:NH2	2.19	0.41
3:R:253:PHE:HA	3:R:256:LEU:HD12	2.02	0.41
3:R:560:THR:CG2	3:R:561:ASP:H	2.32	0.41
3:B:121:ILE:CG2	3:B:128:ASP:HB2	2.51	0.41
3:B:128:ASP:OD1	3:B:130:ILE:N	2.53	0.41
3:B:1036:LEU:HB3	3:B:1041:THR:HG23	2.02	0.41
6:U:48:ASP:O	6:U:52:ALA:N	2.37	0.41
4:D:176:CYS:N	4:D:195:LEU:CD2	2.83	0.41
1:A:839:ARG:NH1	7:H:37:ILE:HG23	2.36	0.41
1:Q:827:LEU:HD11	2:G:315:LEU:CD1	2.43	0.41
4:S:108:MET:SD	4:S:131:VAL:O	2.79	0.41
1:Q:853:ASP:OD2	2:G:311:ARG:NH1	2.54	0.41
2:G:63:LEU:HD11	8:W:25:ASN:HD22	1.85	0.41
1:A:874:ARG:HD3	1:A:874:ARG:HA	1.73	0.41
7:H:12:ARG:O	7:H:13:ILE:CB	2.69	0.41
1:Q:447:LEU:HA	1:Q:450:CYS:SG	2.61	0.41
4:S:22:LEU:HD13	4:S:226:TYR:CE1	2.55	0.41
4:S:27:ALA:HB1	9:X:23:THR:CG2	2.51	0.41
1:Q:361:LEU:HA	1:Q:361:LEU:HD12	1.93	0.41
1:A:764:ARG:NH2	3:B:624:ALA:O	2.53	0.41
3:B:6:THR:O	3:B:7:ILE:HD13	2.21	0.41
3:R:343:LEU:HB3	3:R:344:ARG:H	1.71	0.41
3:R:578:PRO:HB3	3:R:615:TYR:CE1	2.56	0.41
3:R:676:ALA:HB2	3:R:991:GLN:NE2	2.35	0.41
3:B:291:GLN:C	3:B:293:ILE:N	2.74	0.41
3:B:536:LEU:O	3:B:536:LEU:HD22	2.20	0.41
5:E:127:ILE:HB	5:E:136:ILE:CG1	2.49	0.41
1:A:647:ARG:HD2	3:B:965:ASP:CB	2.51	0.41
1:Q:82:ILE:HD11	1:Q:90:ILE:CD1	2.51	0.41
1:Q:841:LEU:HD23	2:G:367:LYS:HB2	2.03	0.41
3:R:1017:THR:O	3:R:1024:GLY:HA3	2.20	0.41
8:K:25:ASN:O	8:K:26:ARG:O	2.38	0.41
6:F:79:THR:CG2	6:F:80:SER:H	2.32	0.41
1:Q:551:VAL:O	1:Q:554:ALA:HB3	2.21	0.41
4:S:178:LYS:HA	4:S:181:ASN:ND2	2.35	0.41
3:B:162:VAL:HG23	3:B:428:ARG:O	2.20	0.41
1:Q:601:LYS:HA	1:Q:601:LYS:HD3	1.89	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:792:LEU:HD11	3:R:809:VAL:HG11	1.99	0.41
1:A:712:GLY:C	1:A:714:ILE:H	2.23	0.41
3:R:941:ASP:C	3:R:941:ASP:OD1	2.59	0.41
1:Q:315:GLY:HA2	3:R:1029:GLY:HA2	2.02	0.41
3:R:92:TYR:CD2	3:R:92:TYR:O	2.73	0.41
4:D:175:ASN:C	4:D:195:LEU:HD21	2.40	0.41
1:A:822:ARG:O	1:A:823:LEU:C	2.58	0.41
2:C:106:ARG:HH11	2:C:106:ARG:CG	2.33	0.41
2:G:117:PRO:O	2:G:120:PRO:HG3	2.20	0.41
2:G:267:VAL:O	2:G:267:VAL:HG12	2.21	0.41
7:V:45:ILE:HB	7:V:79:ARG:CD	2.50	0.41
8:W:51:ILE:HG22	8:W:51:ILE:O	2.19	0.41
10:Y:42:ARG:CG	10:Y:43:TYR:N	2.76	0.41
10:Y:8:PHE:CD2	10:Y:8:PHE:N	2.87	0.41
1:Q:482:VAL:O	1:Q:484:LYS:N	2.53	0.41
1:Q:495:ILE:HG23	1:Q:496:ILE:HG13	2.02	0.41
1:Q:507:TYR:O	1:Q:507:TYR:CD2	2.74	0.41
1:Q:649:GLU:HG3	3:R:965:ASP:OD2	2.20	0.41
3:R:899:TYR:CE2	4:S:29:ARG:CZ	3.03	0.41
4:S:35:TYR:O	4:S:37:PRO:HD3	2.21	0.41
3:R:119:LEU:HD12	3:R:120:PRO:N	2.35	0.41
1:A:674:ASN:OD1	1:A:675:LEU:N	2.54	0.41
3:R:59:ARG:CZ	3:R:107:ILE:HD12	2.51	0.41
3:B:758:TYR:HB3	3:B:837:ILE:HG21	2.02	0.41
1:Q:331:ASN:C	1:Q:332:ILE:CD1	2.89	0.41
1:A:495:ILE:O	1:A:495:ILE:HG12	2.21	0.41
1:Q:285:PRO:HA	1:Q:286:PRO:HD3	1.80	0.41
2:C:131:LYS:HD3	2:C:248:GLU:CG	2.51	0.41
3:R:795:ASN:ND2	11:Z:36:MET:CE	2.82	0.41
4:D:67:PHE:CD2	4:D:121:VAL:HG12	2.46	0.41
4:D:39:MET:HG3	4:D:145:LEU:HD23	2.02	0.41
4:D:39:MET:O	4:D:67:PHE:HB2	2.21	0.41
1:A:258:PRO:CB	1:A:261:ILE:HD12	2.51	0.41
5:T:36:GLU:HG2	6:U:34:LEU:HG	2.03	0.41
11:Z:11:LYS:O	11:Z:12:THR:HG23	2.21	0.41
5:T:17:GLU:CD	5:T:25:ILE:HD12	2.41	0.41
4:S:48:GLU:N	4:S:140:SER:HB3	2.35	0.41
2:G:18:LYS:HB2	2:G:19:GLN:H	1.67	0.41
1:Q:422:GLN:HA	1:Q:423:PRO:C	2.41	0.41
1:A:321:SER:O	1:A:322:SER:HB2	2.20	0.41
1:Q:317:ARG:HB2	3:R:1016:PRO:HB2	2.03	0.41
3:R:1062:ASP:OD1	3:R:1087:ASN:O	2.39	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:Q:269:LEU:O	1:Q:273:VAL:HG23	2.21	0.41
1:Q:70:GLY:HA3	1:Q:216:PRO:HG3	2.03	0.41
1:Q:752:VAL:HG22	1:Q:757:ILE:HD13	2.03	0.41
3:R:183:ILE:HB	3:R:207:ASP:O	2.20	0.41
3:R:237:ASP:O	3:R:241:ALA:N	2.54	0.41
3:R:555:VAL:HG21	3:R:568:VAL:HG22	2.03	0.41
3:R:128:ASP:OD1	3:R:130:ILE:CB	2.68	0.41
3:B:234:THR:CG2	3:B:236:ARG:HB2	2.51	0.41
4:D:131:VAL:CG2	4:D:132:LEU:N	2.61	0.41
10:N:53:VAL:HG23	10:N:54:ASP:N	2.36	0.41
2:C:63:LEU:HD23	2:C:63:LEU:C	2.41	0.41
8:K:21:SER:C	8:K:23:TRP:N	2.73	0.41
6:U:60:SER:HA	6:U:69:ARG:NH2	2.36	0.41
1:A:826:ALA:HB1	2:C:334:VAL:CG1	2.45	0.41
2:C:288:ALA:HA	7:H:16:LEU:O	2.21	0.41
7:V:17:VAL:O	7:V:17:VAL:HG13	2.20	0.41
5:T:58:ILE:HG22	5:T:59:LEU:N	2.35	0.41
2:G:384:GLY:HA2	5:T:61:PHE:CE1	2.56	0.41
3:R:904:VAL:HG21	10:Y:42:ARG:NE	2.29	0.41
4:S:68:MET:CE	4:S:124:ILE:HG22	2.51	0.41
3:R:935:LEU:HD21	10:Y:43:TYR:HD2	1.85	0.41
1:Q:855:VAL:O	1:Q:855:VAL:HG12	2.21	0.41
3:R:702:LEU:O	3:R:703:VAL:HB	2.21	0.41
8:W:15:PHE:HD1	8:W:16:ASN:OD1	2.04	0.41
8:W:79:ARG:NH1	8:W:79:ARG:CG	2.84	0.41
2:C:270:ALA:HA	7:H:14:HIS:CE1	2.52	0.41
4:S:31:ALA:HA	4:S:35:TYR:HD2	1.85	0.41
3:R:895:VAL:HG21	4:S:34:LEU:HD21	2.03	0.41
9:X:74:GLU:O	9:X:77:ARG:N	2.54	0.41
1:A:8:GLY:H	2:C:366:PHE:HE1	1.68	0.41
2:C:375:ILE:HG23	2:C:377:HIS:H	1.86	0.41
1:Q:866:VAL:CG1	1:Q:869:ASN:H	2.09	0.41
3:B:472:LEU:O	3:B:473:MET:O	2.39	0.41
3:R:725:ALA:O	3:R:909:ILE:HG23	2.20	0.41
3:R:725:ALA:CB	3:R:985:PHE:CE1	3.04	0.41
3:B:19:LYS:HD3	3:B:603:THR:CG2	2.51	0.41
1:A:678:LYS:HD2	1:A:684:LEU:HG	2.02	0.41
1:Q:58:CYS:O	1:Q:60:THR:N	2.52	0.41
1:A:651:VAL:CG2	1:A:743:MET:HB3	2.51	0.41
1:A:380:ARG:HB3	1:A:381:PRO:HD2	2.03	0.41
5:T:97:ILE:CD1	5:T:136:ILE:HG21	2.51	0.41
5:T:92:VAL:CG1	5:T:127:ILE:HG12	2.49	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:B:34:PHE:HA	3:B:38:LYS:HB3	2.02	0.41
4:D:151:LYS:O	4:D:152:GLU:C	2.59	0.41
4:D:35:TYR:O	4:D:149:TYR:HD2	2.04	0.41
4:D:27:ALA:HA	9:L:23:THR:HG23	2.03	0.41
1:Q:672:VAL:CG1	1:Q:700:ILE:HD12	2.36	0.41
5:T:51:VAL:O	5:T:53:THR:N	2.49	0.41
1:Q:841:LEU:C	1:Q:843:GLY:H	2.24	0.41
3:R:762:GLU:OE2	3:R:773:ILE:HG13	2.21	0.41
3:R:535:GLU:O	3:R:536:LEU:C	2.58	0.41
3:R:38:LYS:O	3:R:39:LEU:HB3	2.21	0.41
3:R:53:ILE:HB	3:R:54:PRO:CD	2.51	0.41
3:R:104:GLU:OE2	3:R:379:LEU:HD12	2.20	0.41
3:B:800:PRO:HG2	11:P:38:ARG:N	2.36	0.41
3:B:278:ILE:HG22	3:B:279:GLY:H	1.82	0.41
2:C:135:ASP:O	2:C:137:ALA:N	2.53	0.41
2:G:144:LEU:O	2:G:145:GLU:C	2.59	0.41
1:A:490:ARG:HD2	1:A:491:TYR:CE2	2.56	0.41
3:R:920:THR:C	3:R:921:LEU:O	2.57	0.41
3:R:1046:LYS:C	3:R:1048:ARG:N	2.74	0.41
1:Q:786:PHE:CE2	1:Q:790:LEU:HD21	2.55	0.41
5:T:75:ILE:HD12	6:U:20:LEU:HD12	2.03	0.41
4:D:21:PRO:O	4:D:24:PHE:HB3	2.21	0.41
3:B:145:PRO:O	3:B:147:ASP:N	2.54	0.41
2:C:13:LEU:HD22	2:C:16:LYS:HZ2	1.85	0.41
1:Q:618:GLU:HG3	2:G:61:GLU:OE2	2.21	0.41
8:K:66:GLU:O	8:K:70:ARG:HG3	2.21	0.41
1:A:615:LEU:O	1:A:619:TYR:HD1	2.03	0.41
1:Q:30:PRO:HB2	1:Q:244:ARG:HA	2.02	0.41
1:Q:23:SER:C	1:Q:24:VAL:HG13	2.40	0.41
1:A:92:GLU:O	1:A:95:LYS:HB2	2.21	0.41
4:D:133:LEU:HD21	4:D:139:ILE:CG1	2.50	0.41
1:Q:80:PRO:HD2	1:Q:178:SER:HB3	2.03	0.41
1:A:832:ALA:CB	2:C:66:PRO:HB2	2.51	0.41
2:G:341:VAL:HG13	2:G:364:GLU:HG2	2.02	0.41
1:Q:297:THR:O	1:Q:300:GLN:HB3	2.20	0.41
3:B:1100:LEU:O	3:B:1101:ILE:C	2.59	0.41
3:R:183:ILE:O	3:R:184:THR:O	2.39	0.41
3:R:624:ALA:CB	3:R:639:HIS:CD2	3.04	0.41
1:Q:826:ALA:CB	2:G:334:VAL:HG13	2.44	0.41
1:Q:469:SER:HB2	1:Q:472:ALA:H	1.85	0.41
2:G:390:MET:SD	5:T:67:TYR:O	2.79	0.41
2:G:80:GLU:OE1	2:G:80:GLU:C	2.59	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:C:25:PRO:O	2:C:28:ILE:HA	2.21	0.41
7:H:13:ILE:HG13	7:H:14:HIS:N	2.36	0.41
1:Q:500:GLN:HB2	3:R:913:HIS:CD2	2.56	0.41
1:Q:529:ASP:HB3	1:Q:626:TRP:CD1	2.55	0.41
1:Q:649:GLU:HG3	3:R:965:ASP:CG	2.42	0.41
9:X:87:ILE:HG23	9:X:88:LYS:N	2.35	0.41
3:R:740:MET:HB3	3:R:891:LEU:CD1	2.51	0.41
3:R:9:GLU:O	3:R:10:ARG:C	2.59	0.41
1:A:697:GLU:CD	1:A:756:ARG:HD3	2.41	0.41
3:B:59:ARG:CZ	3:B:107:ILE:HD12	2.51	0.41
4:D:30:ARG:O	4:D:34:LEU:HG	2.20	0.41
4:D:31:ALA:HB3	4:D:245:ALA:HB1	2.03	0.41
1:Q:674:ASN:CG	1:Q:675:LEU:N	2.75	0.41
1:A:563:HIS:HD2	1:A:587:VAL:HG13	1.85	0.41
3:R:368:GLN:O	3:R:372:SER:N	2.54	0.41
3:B:849:LEU:HD12	3:B:850:VAL:H	1.86	0.41
4:D:66:PRO:CD	10:N:13:LEU:HD21	2.51	0.41
1:Q:517:THR:CG2	1:Q:518:LYS:H	2.34	0.41
2:C:125:TYR:HA	2:C:250:ILE:HG23	2.03	0.41
2:C:140:VAL:O	2:C:144:LEU:HG	2.20	0.41
1:A:426:HIS:CE1	1:A:490:ARG:HH22	2.39	0.41
9:L:76:ILE:O	9:L:79:MET:HB3	2.21	0.41
8:K:78:ILE:HD11	8:K:92:LEU:HD12	2.03	0.41
5:E:90:LEU:HD12	5:E:100:ASN:HB2	2.03	0.41
2:G:68:GLU:HB3	8:W:30:TYR:OH	2.21	0.41
3:R:729:PHE:C	3:R:731:GLY:N	2.72	0.41
1:Q:329:ASP:OD2	3:R:732:TYR:CE2	2.74	0.41
3:R:412:GLN:NE2	3:R:425:HIS:CE1	2.89	0.41
1:A:422:GLN:HA	1:A:423:PRO:C	2.41	0.41
1:A:70:GLY:O	3:B:1067:ILE:HD11	2.21	0.41
1:Q:620:SER:C	1:Q:622:GLU:N	2.74	0.41
1:Q:344:ALA:O	1:Q:411:LEU:HB2	2.21	0.41
1:A:778:ALA:O	1:A:780:GLY:N	2.54	0.41
1:Q:215:PRO:O	1:Q:216:PRO:O	2.39	0.40
3:R:323:ILE:HG13	3:R:324:GLU:N	2.36	0.40
2:C:32:LEU:O	2:C:36:ILE:HG13	2.21	0.40
4:D:180:VAL:HG22	4:D:190:LEU:HG	2.00	0.40
2:G:393:ILE:HB	5:T:19:GLY:HA2	2.03	0.40
2:G:65:ALA:HA	2:G:66:PRO:HD3	1.84	0.40
3:R:898:PRO:HB2	3:R:970:VAL:CG2	2.51	0.40
3:R:726:VAL:HG23	3:R:984:TYR:HD1	1.86	0.40
4:S:35:TYR:O	4:S:149:TYR:HD2	2.04	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:X:6:LEU:HB2	9:X:14:GLU:O	2.21	0.40
3:B:624:ALA:CB	3:B:639:HIS:CD2	3.04	0.40
1:A:58:CYS:O	1:A:60:THR:N	2.50	0.40
3:B:6:THR:CB	3:B:9:GLU:HB3	2.50	0.40
5:T:175:ILE:HA	5:T:178:THR:OG1	2.21	0.40
3:R:483:ARG:HA	3:R:486:GLU:HG2	2.03	0.40
1:A:361:LEU:HD12	1:A:361:LEU:HA	1.96	0.40
3:B:654:ILE:O	3:B:654:ILE:HG22	2.20	0.40
1:Q:16:PRO:HD3	1:Q:203:ARG:HH22	1.86	0.40
5:E:42:LEU:HD23	5:E:42:LEU:N	2.36	0.40
3:B:334:ASP:OD1	3:B:446:HIS:CE1	2.73	0.40
3:B:1046:LYS:O	3:B:1050:LEU:HD23	2.22	0.40
1:A:495:ILE:HG23	1:A:496:ILE:HG13	2.02	0.40
3:B:497:VAL:HG12	3:B:498:GLU:H	1.74	0.40
2:C:131:LYS:HD3	2:C:248:GLU:HB3	2.01	0.40
2:C:247:ASP:O	2:C:248:GLU:HG3	2.21	0.40
3:B:808:ASP:O	3:B:838:VAL:HG13	2.20	0.40
1:A:750:GLN:OE1	1:A:801:GLY:HA3	2.21	0.40
3:R:1051:ASP:HA	3:R:1055:ARG:HG2	2.02	0.40
1:Q:562:PHE:CD2	1:Q:611:ILE:HG12	2.56	0.40
1:Q:615:LEU:O	1:Q:619:TYR:HD1	2.04	0.40
5:T:31:ARG:HG2	5:T:35:GLN:CD	2.41	0.40
11:Z:13:PHE:HD1	11:Z:13:PHE:N	2.19	0.40
1:A:92:GLU:HA	1:A:95:LYS:HG3	2.03	0.40
4:D:58:LEU:O	4:D:59:ALA:C	2.59	0.40
3:B:439:ASN:C	3:B:440:PHE:HD1	2.24	0.40
4:S:45:TYR:HD1	11:Z:44:ILE:HG12	1.86	0.40
2:G:352:LYS:O	2:G:353:HIS:C	2.59	0.40
3:R:1069:TRP:HE3	3:R:1070:TYR:O	2.04	0.40
3:R:1069:TRP:NE1	3:R:1088:LEU:CB	2.80	0.40
3:R:1066:TYR:HB3	3:R:1105:MET:CE	2.51	0.40
3:B:1098:LYS:HD3	3:B:1098:LYS:C	2.41	0.40
3:R:92:TYR:HD2	3:R:92:TYR:O	2.05	0.40
3:B:254:PRO:HG2	3:B:255:SER:H	1.86	0.40
1:A:474:ALA:C	1:A:476:ALA:H	2.24	0.40
3:B:452:ARG:NH1	3:B:452:ARG:HG3	2.36	0.40
2:G:106:ARG:CG	2:G:106:ARG:HH11	2.35	0.40
2:G:118:SER:O	2:G:119:THR:CB	2.69	0.40
2:G:269:VAL:O	7:V:14:HIS:CG	2.75	0.40
2:G:286:ILE:O	2:G:289:ALA:N	2.50	0.40
2:G:379:ILE:CD1	2:G:379:ILE:H	2.31	0.40
1:Q:470:GLU:O	1:Q:473:ILE:HD11	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:G:25:PRO:HG3	2:G:33:LYS:NZ	2.37	0.40
2:G:65:ALA:CB	8:W:19:PHE:HE1	2.35	0.40
4:S:78:TRP:O	4:S:80:GLU:N	2.54	0.40
3:B:474:ALA:HB3	3:B:578:PRO:HD3	2.04	0.40
3:R:738:ILE:CG1	3:R:739:ILE:N	2.84	0.40
3:B:191:SER:CB	3:B:298:LEU:HA	2.52	0.40
1:A:672:VAL:O	1:A:675:LEU:N	2.54	0.40
1:A:388:LEU:O	1:A:389:ARG:C	2.59	0.40
3:B:935:LEU:HD21	10:N:43:TYR:HD2	1.85	0.40
1:A:176:THR:HA	1:A:177:PRO:HD3	1.88	0.40
3:B:402:ASN:O	3:B:403:TRP:CB	2.70	0.40
5:T:70:VAL:HG12	5:T:71:GLU:N	2.35	0.40
3:R:771:ASP:OD1	3:R:816:PRO:HG3	2.20	0.40
3:B:87:LEU:HD22	3:B:851:LEU:HD11	2.03	0.40
8:W:54:ASN:ND2	8:W:58:SER:HB2	2.36	0.40
2:G:131:LYS:HD3	2:G:248:GLU:HB3	2.02	0.40
1:A:782:ILE:HG13	1:A:794:GLU:HB3	2.02	0.40
1:A:540:LEU:HA	1:A:540:LEU:HD23	1.77	0.40
6:F:31:SER:HA	6:F:35:GLN:NE2	2.30	0.40
1:A:740:ILE:HA	1:A:740:ILE:HD13	1.95	0.40
3:R:707:ALA:HA	3:R:710:ILE:HD12	2.03	0.40
3:B:91:THR:HA	3:B:155:ASN:N	2.35	0.40
1:A:656:ASP:HA	1:A:659:LYS:CG	2.51	0.40
1:Q:24:VAL:HG22	1:Q:72:PHE:O	2.20	0.40
1:Q:84:VAL:HG11	1:Q:281:ILE:HD12	2.03	0.40
2:G:135:ASP:O	2:G:137:ALA:N	2.54	0.40
3:B:462:PRO:C	3:B:464:SER:N	2.75	0.40
1:Q:380:ARG:C	1:Q:382:ASP:H	2.23	0.40
6:U:3:SER:O	6:U:4:VAL:CG2	2.69	0.40
1:Q:273:VAL:O	1:Q:276:TYR:HB3	2.22	0.40
1:A:4:LYS:NZ	3:B:1060:VAL:HB	2.36	0.40
3:B:1061:CYS:HA	3:B:1088:LEU:CD2	2.50	0.40
10:N:30:ASN:O	10:N:31:PRO:C	2.60	0.40
1:A:856:PHE:H	2:C:64:ILE:CG2	2.34	0.40
1:A:859:TYR:CD1	2:C:64:ILE:HG23	2.56	0.40
7:H:39:PRO:HB3	7:H:80:TYR:CE2	2.57	0.40
5:E:135:VAL:N	5:E:174:TRP:HZ2	2.08	0.40
2:G:317:ALA:C	2:G:319:VAL:N	2.74	0.40
10:Y:22:ILE:CD1	10:Y:23:THR:H	2.34	0.40
10:Y:54:ASP:C	10:Y:54:ASP:OD2	2.60	0.40
8:W:25:ASN:O	8:W:26:ARG:O	2.39	0.40
3:R:726:VAL:HG23	3:R:984:TYR:CD1	2.56	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:S:171:GLU:C	4:S:172:ILE:HD12	2.40	0.40
4:S:217:ILE:CD1	4:S:217:ILE:N	2.81	0.40
3:B:9:GLU:O	3:B:10:ARG:C	2.59	0.40
1:A:249:LEU:HD23	1:A:249:LEU:HA	1.92	0.40
1:A:15:SER:CA	1:A:203:ARG:NH2	2.80	0.40
1:A:82:ILE:HD11	1:A:90:ILE:CD1	2.52	0.40
3:B:97:TRP:HZ3	3:B:113:GLU:CB	2.34	0.40
3:B:657:TYR:N	3:B:658:PRO:CD	2.84	0.40
1:Q:13:ILE:HD12	1:Q:207:MET:HG2	2.03	0.40
3:R:375:ARG:H	3:R:375:ARG:HG3	1.70	0.40
3:R:369:LEU:HD21	3:R:379:LEU:CD2	2.51	0.40
3:B:83:MET:HE3	3:B:686:LEU:HB2	2.02	0.40
1:Q:326:ILE:HG21	1:Q:462:MET:CG	2.51	0.40
1:Q:589:LYS:O	1:Q:592:ILE:CB	2.70	0.40
1:A:567:ASN:ND2	1:A:731:THR:CA	2.84	0.40
3:R:795:ASN:ND2	11:Z:36:MET:HE1	2.36	0.40
1:A:782:ILE:N	1:A:782:ILE:CD1	2.83	0.40
3:R:579:LEU:CD1	3:R:616:LEU:HD12	2.41	0.40
3:R:145:PRO:C	3:R:147:ASP:N	2.74	0.40
1:A:796:PHE:CE1	3:B:445:LEU:HD13	2.56	0.40
1:Q:668:ALA:O	1:Q:671:GLU:N	2.55	0.40
1:Q:681:ASN:O	1:Q:683:GLU:N	2.54	0.40
5:E:90:LEU:CD1	5:E:100:ASN:HB2	2.52	0.40
3:B:154:VAL:O	3:B:155:ASN:C	2.60	0.40
1:Q:247:GLU:O	1:Q:251:GLU:HG3	2.20	0.40
1:A:30:PRO:HG3	1:A:247:GLU:OE1	2.22	0.40
4:D:86:THR:O	4:D:87:GLU:CB	2.69	0.40
3:B:71:ARG:HG2	3:B:74:ASP:HB3	2.03	0.40
1:Q:710:THR:HG22	1:Q:710:THR:O	2.20	0.40
1:Q:795:LEU:HD23	1:Q:795:LEU:O	2.21	0.40
3:R:1013:THR:HA	3:R:1099:LEU:HD11	2.03	0.40
3:B:183:ILE:HB	3:B:208:GLY:N	2.35	0.40
3:B:325:LEU:CD1	3:B:331:GLU:H	2.34	0.40
10:N:20:SER:H	10:N:22:ILE:CD1	2.34	0.40
1:A:432:ALA:HB3	1:A:481:LEU:HA	2.04	0.40
1:A:853:ASP:OD2	2:C:311:ARG:NH1	2.54	0.40
6:U:72:LEU:HD21	6:U:86:ILE:HG21	2.03	0.40
2:C:103:GLY:O	2:C:104:LEU:CB	2.69	0.40
3:B:450:TRP:CE3	3:B:450:TRP:O	2.75	0.40
2:C:286:ILE:O	2:C:289:ALA:N	2.54	0.40
7:H:35:LEU:HD23	7:H:35:LEU:HA	1.94	0.40
3:R:162:VAL:HG23	3:R:428:ARG:O	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:R:433:LEU:HD12	3:R:435:ARG:NH2	2.37	0.40
2:G:104:LEU:HD23	2:G:104:LEU:C	2.41	0.40
7:V:15:TYR:HD2	7:V:16:LEU:HD11	1.84	0.40
7:V:79:ARG:O	7:V:80:TYR:HB2	2.21	0.40
1:Q:432:ALA:HB3	1:Q:480:MET:C	2.41	0.40
8:W:49:ALA:O	8:W:50:LEU:C	2.59	0.40
3:R:700:ARG:HE	3:R:939:ILE:CD1	2.34	0.40
3:R:721:ASN:HD22	10:Y:51:SER:CB	2.34	0.40
1:Q:491:TYR:OH	2:G:81:PRO:HG3	2.21	0.40
5:T:124:ARG:NH2	5:T:137:GLN:OE1	2.53	0.40
10:N:43:TYR:CD1	10:N:43:TYR:C	2.94	0.40
3:B:63:ILE:HG13	3:B:98:LEU:CD2	2.47	0.40
3:R:536:LEU:HD21	3:R:540:ILE:HD11	2.03	0.40
3:R:24:VAL:HG21	3:R:426:LEU:CD1	2.50	0.40
5:E:14:PRO:HA	5:E:15:PRO:HD3	1.89	0.40
5:E:64:GLY:O	8:K:42:GLN:HG3	2.21	0.40
3:B:1050:LEU:CD2	3:B:1051:ASP:N	2.81	0.40
1:Q:548:GLY:O	1:Q:550:GLN:N	2.54	0.40
1:Q:552:ILE:HD12	1:Q:553:SER:N	2.37	0.40
8:K:54:ASN:ND2	8:K:58:SER:CB	2.84	0.40
1:A:488:THR:HG22	1:A:490:ARG:N	2.35	0.40
2:C:126:LEU:HD11	2:C:249:TYR:CB	2.50	0.40
2:G:131:LYS:HD3	2:G:248:GLU:CG	2.51	0.40
2:G:249:TYR:HD1	2:G:249:TYR:H	1.68	0.40
3:R:644:SER:HB2	3:R:645:PRO:HD3	2.03	0.40
8:W:91:SER:O	8:W:92:LEU:HB3	2.20	0.40
5:E:17:GLU:CD	5:E:25:ILE:HD12	2.42	0.40
2:G:386:VAL:CG1	8:W:34:ARG:HB2	2.51	0.40
1:Q:618:GLU:O	1:Q:619:TYR:CG	2.75	0.40
1:Q:656:ASP:HA	1:Q:659:LYS:CG	2.51	0.40
4:D:260:LEU:HD23	4:D:260:LEU:C	2.41	0.40
3:R:182:ASN:N	3:R:182:ASN:ND2	2.67	0.40
1:Q:463:ASN:ND2	3:R:1026:LEU:HD13	2.37	0.40
3:R:91:THR:HA	3:R:155:ASN:N	2.36	0.40
1:Q:715:ALA:C	1:Q:717:LYS:N	2.75	0.40
3:R:994:HIS:H	3:R:994:HIS:CD2	2.39	0.40
5:E:67:TYR:CD1	5:E:67:TYR:N	2.88	0.40
1:A:75:ILE:HD13	1:A:214:VAL:CG2	2.51	0.40
3:B:1064:CYS:O	3:B:1066:TYR:N	2.55	0.40
3:R:223:PHE:CE2	3:R:256:LEU:HD13	2.56	0.40
2:C:317:ALA:C	2:C:319:VAL:N	2.75	0.40
3:B:165:GLU:OE2	3:B:338:TYR:OH	2.34	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:V:15:TYR:HB3	7:V:16:LEU:H	1.65	0.40
2:G:379:ILE:CD1	3:R:1042:ALA:HA	2.43	0.40
3:R:932:TYR:CE1	3:R:936:SER:CB	3.04	0.40
3:R:952:GLN:O	3:R:955:ASN:N	2.53	0.40
1:Q:864:LYS:O	2:G:32:LEU:CD1	2.69	0.40
1:Q:490:ARG:NH1	2:G:80:GLU:HG3	2.36	0.40
3:R:983:ILE:O	3:R:984:TYR:C	2.59	0.40
4:S:22:LEU:HD22	4:S:166:TYR:HE1	1.87	0.40
4:S:18:GLU:CG	4:S:225:LYS:HG2	2.51	0.40
1:A:763:THR:HG22	1:A:772:TYR:HA	2.03	0.40
1:A:290:ARG:C	1:A:292:GLY:N	2.74	0.40
3:R:94:ALA:HB2	3:R:121:ILE:CG1	2.51	0.40
3:R:9:GLU:HA	3:R:592:GLU:OE1	2.21	0.40
3:R:1033:ARG:O	3:R:1037:ILE:HG13	2.21	0.40
1:A:503:ILE:O	1:A:503:ILE:HG13	2.21	0.40
4:D:13:ILE:CD1	4:D:239:GLU:N	2.84	0.40
5:T:53:THR:CG2	5:T:70:VAL:HA	2.51	0.40
11:P:27:PRO:O	11:P:28:TYR:HB2	2.20	0.40
1:A:590:ASN:HD21	3:R:377:ARG:HB2	1.76	0.40
4:D:116:SER:O	4:D:118:ASP:N	2.55	0.40
5:E:179:LYS:CE	6:F:82:GLU:HG3	2.51	0.40
1:A:530:VAL:O	1:A:532:ILE:N	2.55	0.40
1:A:426:HIS:O	1:A:429:SER:HB2	2.21	0.40
6:F:21:LEU:HA	6:F:24:VAL:CG2	2.51	0.40
1:A:352:ARG:HB3	1:A:406:ILE:HD13	2.03	0.40
3:B:839:THR:O	3:B:840:ARG:C	2.59	0.40
3:B:855:THR:HB	3:B:857:GLU:CB	2.52	0.40
3:B:50:PRO:HG2	3:B:51:THR:N	2.29	0.40
3:R:855:THR:O	3:R:858:GLY:N	2.55	0.40
1:Q:738:LEU:H	1:Q:738:LEU:CD2	2.35	0.40
1:A:47:PRO:CG	1:A:48:ARG:HD3	2.47	0.40
1:A:199:PRO:C	1:A:201:THR:H	2.25	0.40
1:Q:831:ARG:NH2	2:G:385:MET:SD	2.95	0.40
3:B:146:LYS:HD2	10:N:58:GLU:OE2	2.21	0.40
3:B:729:PHE:C	3:B:731:GLY:N	2.73	0.40
11:P:13:PHE:HD1	11:P:13:PHE:N	2.19	0.40
3:B:461:GLY:HA3	3:B:462:PRO:HD3	1.95	0.40
3:R:37:ASN:O	3:R:41:GLU:HG3	2.22	0.40
9:L:60:ASP:CG	9:L:60:ASP:O	2.60	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	768/880 (87%)	513 (67%)	136 (18%)	119 (16%)	0	4
1	Q	768/880 (87%)	509 (66%)	141 (18%)	118 (15%)	0	4
2	C	273/392 (70%)	158 (58%)	66 (24%)	49 (18%)	0	3
2	G	273/392 (70%)	161 (59%)	61 (22%)	51 (19%)	0	2
3	B	1084/1124 (96%)	698 (64%)	238 (22%)	148 (14%)	0	6
3	R	1084/1124 (96%)	698 (64%)	237 (22%)	149 (14%)	0	6
4	D	262/265 (99%)	166 (63%)	69 (26%)	27 (10%)	1	11
4	S	262/265 (99%)	167 (64%)	66 (25%)	29 (11%)	1	10
5	E	172/180 (96%)	123 (72%)	31 (18%)	18 (10%)	1	11
5	T	172/180 (96%)	122 (71%)	32 (19%)	18 (10%)	1	11
6	F	87/113 (77%)	56 (64%)	22 (25%)	9 (10%)	1	11
6	U	87/113 (77%)	56 (64%)	23 (26%)	8 (9%)	1	15
7	H	72/84 (86%)	46 (64%)	13 (18%)	13 (18%)	0	3
7	V	72/84 (86%)	44 (61%)	15 (21%)	13 (18%)	0	3
8	K	80/95 (84%)	44 (55%)	19 (24%)	17 (21%)	0	2
8	W	80/95 (84%)	44 (55%)	20 (25%)	16 (20%)	0	2
9	L	90/92 (98%)	64 (71%)	19 (21%)	7 (8%)	1	20
9	X	90/92 (98%)	66 (73%)	17 (19%)	7 (8%)	1	20
10	N	62/66 (94%)	30 (48%)	18 (29%)	14 (23%)	0	1
10	Y	62/66 (94%)	31 (50%)	18 (29%)	13 (21%)	0	2
11	P	41/48 (85%)	24 (58%)	10 (24%)	7 (17%)	0	3
11	Z	41/48 (85%)	23 (56%)	11 (27%)	7 (17%)	0	3
All	All	5982/6678 (90%)	3843 (64%)	1282 (21%)	857 (14%)	0	5

All (857) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	56	GLN
1	A	58	CYS
1	A	64	THR
1	A	65	LEU
1	A	194	ILE
1	A	207	MET
1	A	216	PRO
1	A	259	GLN
1	A	287	SER
1	A	295	LEU
1	A	298	LEU
1	A	303	LYS
1	A	377	TYR
1	A	387	ASP
1	A	392	LYS
1	A	403	PRO
1	A	447	LEU
1	A	454	ASN
1	A	506	ALA
1	A	514	THR
1	A	528	ALA
1	A	529	ASP
1	A	530	VAL
1	A	532	ILE
1	A	534	LEU
1	A	541	ALA
1	A	584	SER
1	A	595	GLU
1	A	608	PRO
1	A	733	ALA
1	A	746	MET
1	A	759	ARG
1	A	764	ARG
1	A	826	ALA
1	A	842	TYR
1	A	864	LYS
1	A	876	VAL
2	C	38	ASN
2	C	42	ILE
2	C	48	ILE
2	C	60	SER
2	C	66	PRO
2	C	104	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	C	113	ALA
2	C	126	LEU
2	C	128	ASP
2	C	130	TYR
2	C	145	GLU
2	C	248	GLU
2	C	281	GLU
2	C	306	LEU
2	C	353	HIS
2	C	362	ASP
2	C	365	GLU
2	C	390	MET
2	C	391	ARG
2	C	393	ILE
3	B	47	GLY
3	B	50	PRO
3	B	97	TRP
3	B	110	GLU
3	B	111	PRO
3	B	112	GLU
3	B	158	GLU
3	B	171	ARG
3	B	184	THR
3	B	210	PHE
3	B	242	VAL
3	B	297	PHE
3	B	303	THR
3	B	325	LEU
3	B	331	GLU
3	B	372	SER
3	B	378	LYS
3	B	402	ASN
3	B	403	TRP
3	B	448	THR
3	B	473	MET
3	B	482	GLU
3	B	483	ARG
3	B	530	TYR
3	B	534	GLY
3	B	571	ASP
3	B	587	PRO
3	B	590	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	B	602	ILE
3	B	618	ALA
3	B	635	PRO
3	B	691	ARG
3	B	769	GLN
3	B	770	GLU
3	B	790	ARG
3	B	800	PRO
3	B	801	GLU
3	B	814	VAL
3	B	933	ALA
3	B	945	PHE
3	B	946	TYR
3	B	966	ALA
3	B	983	ILE
3	B	1030	GLU
3	B	1056	THR
3	B	1071	ASP
3	B	1077	TYR
3	B	1081	ILE
3	B	1082	HIS
3	B	1111	PRO
3	B	1114	VAL
4	D	35	TYR
4	D	72	ALA
4	D	103	PRO
4	D	125	SER
4	D	135	THR
4	D	152	GLU
4	D	154	ALA
4	D	162	SER
4	D	177	GLU
4	D	195	LEU
4	D	196	SER
4	D	203	CYS
4	D	205	LEU
5	E	22	LEU
5	E	39	LEU
5	E	81	VAL
5	E	82	GLN
5	E	123	VAL
5	E	146	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	E	148	SER
5	E	151	SER
7	H	13	ILE
7	H	25	ILE
7	H	28	ALA
7	H	56	ASN
8	K	26	ARG
8	K	27	LEU
8	K	47	ALA
8	K	50	LEU
8	K	51	ILE
8	K	58	SER
8	K	60	ASP
8	K	61	VAL
9	L	28	ILE
9	L	39	SER
10	N	19	GLN
10	N	20	SER
10	N	29	GLU
10	N	48	MET
10	N	60	ILE
10	N	61	HIS
11	P	25	ARG
1	Q	56	GLN
1	Q	58	CYS
1	Q	64	THR
1	Q	65	LEU
1	Q	194	ILE
1	Q	207	MET
1	Q	216	PRO
1	Q	259	GLN
1	Q	287	SER
1	Q	295	LEU
1	Q	298	LEU
1	Q	303	LYS
1	Q	356	TRP
1	Q	377	TYR
1	Q	387	ASP
1	Q	392	LYS
1	Q	403	PRO
1	Q	447	LEU
1	Q	454	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	Q	506	ALA
1	Q	514	THR
1	Q	528	ALA
1	Q	529	ASP
1	Q	530	VAL
1	Q	532	ILE
1	Q	534	LEU
1	Q	541	ALA
1	Q	584	SER
1	Q	595	GLU
1	Q	608	PRO
1	Q	645	THR
1	Q	733	ALA
1	Q	746	MET
1	Q	759	ARG
1	Q	764	ARG
1	Q	826	ALA
1	Q	842	TYR
1	Q	864	LYS
1	Q	876	VAL
2	G	38	ASN
2	G	42	ILE
2	G	48	ILE
2	G	60	SER
2	G	66	PRO
2	G	104	LEU
2	G	113	ALA
2	G	126	LEU
2	G	128	ASP
2	G	145	GLU
2	G	248	GLU
2	G	281	GLU
2	G	306	LEU
2	G	353	HIS
2	G	362	ASP
2	G	365	GLU
2	G	390	MET
2	G	391	ARG
2	G	393	ILE
3	R	47	GLY
3	R	50	PRO
3	R	97	TRP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	R	109	ALA
3	R	110	GLU
3	R	111	PRO
3	R	112	GLU
3	R	158	GLU
3	R	171	ARG
3	R	184	THR
3	R	210	PHE
3	R	242	VAL
3	R	297	PHE
3	R	303	THR
3	R	325	LEU
3	R	331	GLU
3	R	372	SER
3	R	378	LYS
3	R	402	ASN
3	R	403	TRP
3	R	473	MET
3	R	482	GLU
3	R	483	ARG
3	R	530	TYR
3	R	571	ASP
3	R	587	PRO
3	R	590	THR
3	R	602	ILE
3	R	618	ALA
3	R	635	PRO
3	R	691	ARG
3	R	769	GLN
3	R	770	GLU
3	R	789	TYR
3	R	790	ARG
3	R	800	PRO
3	R	801	GLU
3	R	814	VAL
3	R	933	ALA
3	R	945	PHE
3	R	946	TYR
3	R	966	ALA
3	R	983	ILE
3	R	1030	GLU
3	R	1056	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	R	1071	ASP
3	R	1077	TYR
3	R	1081	ILE
3	R	1082	HIS
3	R	1111	PRO
3	R	1114	VAL
4	S	35	TYR
4	S	72	ALA
4	S	103	PRO
4	S	125	SER
4	S	135	THR
4	S	152	GLU
4	S	154	ALA
4	S	162	SER
4	S	177	GLU
4	S	195	LEU
4	S	196	SER
4	S	203	CYS
4	S	205	LEU
5	T	22	LEU
5	T	23	ASN
5	T	39	LEU
5	T	81	VAL
5	T	82	GLN
5	T	123	VAL
5	T	146	VAL
5	T	148	SER
5	T	151	SER
7	V	13	ILE
7	V	25	ILE
7	V	28	ALA
8	W	26	ARG
8	W	27	LEU
8	W	47	ALA
8	W	50	LEU
8	W	51	ILE
8	W	58	SER
8	W	60	ASP
8	W	61	VAL
9	X	28	ILE
9	X	39	SER
10	Y	19	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	Y	20	SER
10	Y	29	GLU
10	Y	48	MET
10	Y	60	ILE
10	Y	61	HIS
1	A	23	SER
1	A	24	VAL
1	A	27	ILE
1	A	47	PRO
1	A	66	GLY
1	A	255	ALA
1	A	282	PRO
1	A	283	GLY
1	A	307	GLY
1	A	355	PRO
1	A	356	TRP
1	A	358	ILE
1	A	376	ASN
1	A	391	VAL
1	A	426	HIS
1	A	482	VAL
1	A	508	LEU
1	A	537	PRO
1	A	543	ARG
1	A	558	LYS
1	A	585	TYR
1	A	605	ASN
1	A	645	THR
1	A	682	GLY
1	A	684	LEU
1	A	691	THR
1	A	724	PHE
1	A	731	THR
1	A	786	PHE
1	A	805	GLY
1	A	829	ASP
1	A	841	LEU
1	A	852	ASP
1	A	877	GLY
2	C	28	ILE
2	C	30	ASP
2	C	44	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	C	45	ARG
2	C	50	LYS
2	C	249	TYR
2	C	264	VAL
2	C	330	GLY
2	C	337	GLU
2	C	360	ARG
2	C	364	GLU
2	C	367	LYS
2	C	368	GLY
3	B	21	LYS
3	B	23	LEU
3	B	55	GLY
3	B	71	ARG
3	B	105	ASN
3	B	109	ALA
3	B	166	ASP
3	B	179	THR
3	B	185	HIS
3	B	223	PHE
3	B	231	GLY
3	B	251	GLU
3	B	281	LYS
3	B	292	ILE
3	B	328	GLY
3	B	332	PRO
3	B	338	TYR
3	B	347	GLY
3	B	373	LYS
3	B	445	LEU
3	B	462	PRO
3	B	463	ASN
3	B	479	GLY
3	B	497	VAL
3	B	574	ARG
3	B	617	ASP
3	B	659	GLU
3	B	663	SER
3	B	684	TYR
3	B	730	THR
3	B	736	ASP
3	B	767	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	B	785	GLY
3	B	789	TYR
3	B	793	GLU
3	B	806	GLY
3	B	840	ARG
3	B	919	MET
3	B	921	LEU
3	B	951	GLU
3	B	1095	TYR
3	B	1118	LYS
4	D	8	LYS
4	D	17	PHE
4	D	174	ALA
4	D	178	LYS
4	D	223	GLU
5	E	23	ASN
5	E	32	GLN
5	E	52	LYS
6	F	42	ASN
7	H	48	SER
7	H	55	ILE
7	H	80	TYR
7	H	81	VAL
8	K	13	LEU
9	L	44	TYR
9	L	62	SER
10	N	15	ALA
10	N	63	THR
11	P	18	LEU
11	P	20	VAL
11	P	34	ILE
1	Q	23	SER
1	Q	24	VAL
1	Q	27	ILE
1	Q	47	PRO
1	Q	66	GLY
1	Q	255	ALA
1	Q	282	PRO
1	Q	283	GLY
1	Q	307	GLY
1	Q	355	PRO
1	Q	358	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	Q	376	ASN
1	Q	391	VAL
1	Q	426	HIS
1	Q	482	VAL
1	Q	483	HIS
1	Q	508	LEU
1	Q	537	PRO
1	Q	543	ARG
1	Q	558	LYS
1	Q	585	TYR
1	Q	605	ASN
1	Q	610	SER
1	Q	682	GLY
1	Q	684	LEU
1	Q	724	PHE
1	Q	731	THR
1	Q	742	GLN
1	Q	786	PHE
1	Q	805	GLY
1	Q	841	LEU
1	Q	877	GLY
2	G	28	ILE
2	G	30	ASP
2	G	44	THR
2	G	50	LYS
2	G	130	TYR
2	G	249	TYR
2	G	330	GLY
2	G	337	GLU
2	G	360	ARG
2	G	364	GLU
2	G	367	LYS
2	G	368	GLY
3	R	21	LYS
3	R	23	LEU
3	R	55	GLY
3	R	71	ARG
3	R	105	ASN
3	R	179	THR
3	R	185	HIS
3	R	223	PHE
3	R	231	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	R	251	GLU
3	R	281	LYS
3	R	292	ILE
3	R	328	GLY
3	R	332	PRO
3	R	338	TYR
3	R	347	GLY
3	R	448	THR
3	R	462	PRO
3	R	463	ASN
3	R	479	GLY
3	R	497	VAL
3	R	534	GLY
3	R	574	ARG
3	R	598	GLU
3	R	617	ASP
3	R	663	SER
3	R	684	TYR
3	R	730	THR
3	R	736	ASP
3	R	767	GLY
3	R	785	GLY
3	R	793	GLU
3	R	806	GLY
3	R	840	ARG
3	R	919	MET
3	R	921	LEU
3	R	1065	GLY
3	R	1095	TYR
3	R	1118	LYS
4	S	17	PHE
4	S	174	ALA
4	S	178	LYS
4	S	223	GLU
5	T	32	GLN
5	T	52	LYS
6	U	42	ASN
7	V	55	ILE
7	V	56	ASN
7	V	80	TYR
7	V	81	VAL
8	W	13	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	W	15	PHE
8	W	29	ARG
8	W	71	ARG
9	X	44	TYR
9	X	48	PRO
9	X	62	SER
10	Y	15	ALA
10	Y	63	THR
11	Z	18	LEU
11	Z	20	VAL
11	Z	25	ARG
11	Z	34	ILE
1	A	76	GLU
1	A	95	LYS
1	A	483	HIS
1	A	531	LYS
1	A	551	VAL
1	A	610	SER
1	A	614	TRP
1	A	688	PRO
1	A	742	GLN
1	A	749	GLN
1	A	779	ARG
1	A	862	HIS
1	A	865	THR
2	C	115	LYS
2	C	117	PRO
2	C	136	LYS
2	C	274	THR
2	C	275	ASN
3	B	30	SER
3	B	103	VAL
3	B	146	LYS
3	B	182	ASN
3	B	246	PRO
3	B	264	ASN
3	B	310	LYS
3	B	346	ALA
3	B	355	ARG
3	B	449	GLN
3	B	598	GLU
3	B	605	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	B	634	THR
3	B	670	SER
3	B	708	LEU
3	B	779	GLY
3	B	798	VAL
3	B	950	ILE
3	B	972	ASP
3	B	973	GLY
3	B	1065	GLY
3	B	1080	PRO
3	B	1084	ASP
4	D	55	ASP
4	D	79	PRO
4	D	91	LYS
4	D	124	ILE
4	D	206	CYS
5	E	116	ASP
6	F	7	VAL
6	F	17	ALA
6	F	58	GLU
6	F	64	SER
7	H	29	TYR
8	K	15	PHE
8	K	29	ARG
8	K	71	ARG
9	L	48	PRO
9	L	50	SER
10	N	40	VAL
1	Q	76	GLU
1	Q	388	LEU
1	Q	531	LYS
1	Q	688	PRO
1	Q	691	THR
1	Q	749	GLN
1	Q	765	THR
1	Q	779	ARG
1	Q	829	ASP
1	Q	852	ASP
1	Q	865	THR
2	G	45	ARG
2	G	61	GLU
2	G	115	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	G	117	PRO
2	G	264	VAL
2	G	275	ASN
3	R	30	SER
3	R	103	VAL
3	R	146	LYS
3	R	166	ASP
3	R	182	ASN
3	R	246	PRO
3	R	264	ASN
3	R	310	LYS
3	R	346	ALA
3	R	373	LYS
3	R	445	LEU
3	R	449	GLN
3	R	605	ASP
3	R	634	THR
3	R	659	GLU
3	R	670	SER
3	R	708	LEU
3	R	779	GLY
3	R	903	GLY
3	R	950	ILE
3	R	951	GLU
3	R	972	ASP
3	R	973	GLY
3	R	1080	PRO
4	S	8	LYS
4	S	91	LYS
4	S	124	ILE
4	S	206	CYS
5	T	116	ASP
6	U	7	VAL
6	U	17	ALA
6	U	64	SER
7	V	29	TYR
7	V	74	GLU
8	W	16	ASN
9	X	50	SER
10	Y	40	VAL
1	A	235	LEU
1	A	333	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	388	LEU
1	A	394	ARG
1	A	423	PRO
1	A	524	ILE
1	A	609	GLU
1	A	626	TRP
1	A	721	PRO
1	A	760	GLY
1	A	765	THR
2	C	61	GLU
2	C	67	GLY
2	C	239	ARG
2	C	324	GLY
2	C	392	PRO
3	B	34	PHE
3	B	74	ASP
3	B	299	PRO
3	B	418	ASN
3	B	433	LEU
3	B	550	SER
3	B	560	THR
3	B	759	SER
3	B	781	ARG
3	B	915	LEU
3	B	979	ILE
3	B	1053	SER
4	D	117	GLU
4	D	207	GLU
5	E	88	GLU
5	E	133	LYS
6	F	4	VAL
7	H	74	GLU
8	K	16	ASN
8	K	34	ARG
8	K	62	ILE
10	N	32	GLY
1	Q	95	LYS
1	Q	220	ARG
1	Q	235	LEU
1	Q	333	SER
1	Q	394	ARG
1	Q	551	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	Q	609	GLU
1	Q	626	TRP
1	Q	721	PRO
1	Q	760	GLY
2	G	136	LYS
2	G	239	ARG
2	G	274	THR
2	G	282	GLU
2	G	298	SER
2	G	392	PRO
3	R	74	ASP
3	R	299	PRO
3	R	306	GLU
3	R	355	ARG
3	R	418	ASN
3	R	433	LEU
3	R	457	GLU
3	R	560	THR
3	R	759	SER
3	R	781	ARG
3	R	798	VAL
3	R	915	LEU
3	R	1084	ASP
4	S	55	ASP
4	S	79	PRO
4	S	117	GLU
4	S	207	GLU
5	T	133	LYS
5	T	137	GLN
6	U	4	VAL
6	U	58	GLU
7	V	48	SER
10	Y	18	TRP
10	Y	23	THR
10	Y	32	GLY
1	A	80	PRO
1	A	196	GLY
1	A	220	ARG
1	A	332	ILE
1	A	369	PRO
1	A	533	ASP
1	A	599	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	607	GLN
1	A	617	LYS
1	A	644	PHE
1	A	788	THR
1	A	822	ARG
1	A	875	VAL
2	C	129	GLU
2	C	282	GLU
2	C	298	SER
3	B	98	LEU
3	B	124	LYS
3	B	306	GLU
3	B	868	ASP
3	B	912	PRO
3	B	944	PRO
5	E	124	ARG
5	E	137	GLN
5	E	142	VAL
6	F	43	SER
6	F	76	CYS
7	H	15	TYR
8	K	20	ILE
10	N	6	ARG
10	N	23	THR
10	N	41	LYS
1	Q	80	PRO
1	Q	196	GLY
1	Q	332	ILE
1	Q	423	PRO
1	Q	524	ILE
1	Q	533	ASP
1	Q	583	ASP
1	Q	599	ASP
1	Q	607	GLN
1	Q	614	TRP
1	Q	617	LYS
1	Q	644	PHE
1	Q	788	THR
1	Q	862	HIS
2	G	14	GLU
2	G	67	GLY
2	G	129	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	G	279	GLU
3	R	868	ASP
3	R	912	PRO
3	R	944	PRO
3	R	979	ILE
3	R	1001	LEU
3	R	1053	SER
5	T	88	GLU
5	T	124	ARG
5	T	142	VAL
6	U	76	CYS
7	V	15	TYR
8	W	20	ILE
8	W	34	ARG
10	Y	6	ARG
1	A	209	LEU
1	A	583	ASP
1	A	686	PRO
2	C	300	VAL
3	B	404	VAL
5	E	125	GLY
6	F	34	LEU
7	H	11	PRO
8	K	54	ASN
9	L	38	VAL
10	N	18	TRP
1	Q	209	LEU
1	Q	369	PRO
1	Q	686	PRO
1	Q	781	PHE
1	Q	875	VAL
2	G	324	GLY
3	R	404	VAL
3	R	477	ALA
3	R	1048	ARG
4	S	73	LEU
4	S	87	GLU
5	T	125	GLY
6	U	60	SER
7	V	11	PRO
1	A	404	GLY
2	C	119	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	B	406	GLY
7	H	10	ASP
11	P	26	CYS
1	Q	404	GLY
2	G	119	THR
2	G	300	VAL
3	R	401	GLY
3	R	780	VAL
3	R	916	PRO
7	V	10	ASP
8	W	62	ILE
1	A	53	GLU
3	B	589	VAL
3	B	657	TYR
3	B	780	VAL
3	B	916	PRO
4	D	238	PRO
1	Q	16	PRO
1	Q	54	PRO
3	R	589	VAL
3	R	657	TYR
3	R	1016	PRO
11	Z	26	CYS
1	A	54	PRO
1	A	372	TRP
1	A	767	PRO
2	C	116	VAL
3	B	76	GLY
3	B	401	GLY
3	B	703	VAL
4	D	119	PRO
1	Q	177	PRO
2	G	116	VAL
3	R	76	GLY
3	R	437	GLN
3	R	703	VAL
3	R	763	VAL
4	S	238	PRO
9	X	38	VAL
1	A	16	PRO
1	A	177	PRO
3	B	578	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	B	701	PRO
3	B	763	VAL
11	P	40	PRO
1	Q	50	GLY
1	Q	53	GLU
3	R	578	PRO
3	R	775	MET
11	Z	40	PRO
1	A	437	VAL
3	B	43	ILE
3	B	775	MET
1	Q	437	VAL
3	R	406	GLY
4	S	119	PRO
11	P	22	PRO
11	Z	22	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	675/766 (88%)	580 (86%)	95 (14%)	5	28
1	Q	675/766 (88%)	583 (86%)	92 (14%)	5	29
2	C	237/338 (70%)	201 (85%)	36 (15%)	4	24
2	G	237/338 (70%)	199 (84%)	38 (16%)	3	21
3	B	937/965 (97%)	807 (86%)	130 (14%)	5	28
3	R	937/965 (97%)	810 (86%)	127 (14%)	5	29
4	D	241/242 (100%)	224 (93%)	17 (7%)	21	67
4	S	241/242 (100%)	223 (92%)	18 (8%)	19	64
5	E	156/159 (98%)	142 (91%)	14 (9%)	14	54
5	T	156/159 (98%)	142 (91%)	14 (9%)	14	54
6	F	82/106 (77%)	79 (96%)	3 (4%)	45	85
6	U	82/106 (77%)	79 (96%)	3 (4%)	45	85
7	H	67/75 (89%)	54 (81%)	13 (19%)	2	11

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
7	V	67/75 (89%)	55 (82%)	12 (18%)	2	14
8	K	72/84 (86%)	57 (79%)	15 (21%)	2	8
8	W	72/84 (86%)	57 (79%)	15 (21%)	2	8
9	L	81/81 (100%)	75 (93%)	6 (7%)	20	65
9	X	81/81 (100%)	75 (93%)	6 (7%)	20	65
10	N	58/60 (97%)	50 (86%)	8 (14%)	5	28
10	Y	58/60 (97%)	49 (84%)	9 (16%)	4	23
11	P	39/43 (91%)	31 (80%)	8 (20%)	2	9
11	Z	39/43 (91%)	31 (80%)	8 (20%)	2	9
All	All	5290/5838 (91%)	4603 (87%)	687 (13%)	6	31

All (687) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	30	PRO
1	A	45	MET
1	A	48	ARG
1	A	52	ILE
1	A	56	GLN
1	A	71	HIS
1	A	75	ILE
1	A	84	VAL
1	A	175	LEU
1	A	176	THR
1	A	179	ASP
1	A	203	ARG
1	A	219	ILE
1	A	232	GLU
1	A	238	LYS
1	A	239	LEU
1	A	253	ILE
1	A	278	ASP
1	A	282	PRO
1	A	287	SER
1	A	297	THR
1	A	298	LEU
1	A	301	ARG
1	A	306	GLU
1	A	308	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	312	ASN
1	A	313	LEU
1	A	314	SER
1	A	346	THR
1	A	349	VAL
1	A	356	TRP
1	A	366	ILE
1	A	369	PRO
1	A	376	ASN
1	A	377	TYR
1	A	378	VAL
1	A	410	HIS
1	A	421	ARG
1	A	425	LEU
1	A	427	ARG
1	A	428	ILE
1	A	434	ARG
1	A	438	LEU
1	A	439	LYS
1	A	446	ASN
1	A	464	LEU
1	A	471	GLU
1	A	481	LEU
1	A	487	ILE
1	A	500	GLN
1	A	503	ILE
1	A	507	TYR
1	A	518	LYS
1	A	525	LEU
1	A	537	PRO
1	A	546	TYR
1	A	550	GLN
1	A	558	LYS
1	A	559	ASP
1	A	573	ARG
1	A	574	LEU
1	A	593	LEU
1	A	597	VAL
1	A	608	PRO
1	A	612	LEU
1	A	622	GLU
1	A	633	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	637	ARG
1	A	641	LEU
1	A	642	GLN
1	A	656	ASP
1	A	662	TYR
1	A	675	LEU
1	A	684	LEU
1	A	687	ILE
1	A	692	LEU
1	A	702	ASP
1	A	705	ASP
1	A	708	ARG
1	A	714	ILE
1	A	723	ASN
1	A	755	GLU
1	A	759	ARG
1	A	764	ARG
1	A	777	GLU
1	A	781	PHE
1	A	787	ARG
1	A	797	PHE
1	A	803	ARG
1	A	821	ARG
1	A	823	LEU
1	A	828	SER
1	A	858	MET
1	A	859	TYR
1	A	871	ILE
2	C	36	ILE
2	C	37	LEU
2	C	38	ASN
2	C	43	VAL
2	C	45	ARG
2	C	57	LYS
2	C	70	ILE
2	C	83	THR
2	C	85	MET
2	C	104	LEU
2	C	107	LEU
2	C	116	VAL
2	C	132	ARG
2	C	133	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	C	146	TYR
2	C	239	ARG
2	C	275	ASN
2	C	276	ASN
2	C	310	ILE
2	C	311	ARG
2	C	315	LEU
2	C	318	ASP
2	C	320	MET
2	C	331	ARG
2	C	335	THR
2	C	337	GLU
2	C	344	ARG
2	C	351	VAL
2	C	360	ARG
2	C	364	GLU
2	C	370	VAL
2	C	379	ILE
2	C	380	LYS
2	C	381	LEU
2	C	390	MET
2	C	391	ARG
3	B	5	LEU
3	B	6	THR
3	B	33	ASP
3	B	64	ARG
3	B	65	ILE
3	B	83	MET
3	B	105	ASN
3	B	108	GLU
3	B	118	ASP
3	B	128	ASP
3	B	162	VAL
3	B	163	THR
3	B	171	ARG
3	B	183	ILE
3	B	193	THR
3	B	227	MET
3	B	245	ASP
3	B	296	TYR
3	B	313	TYR
3	B	322	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	B	327	LEU
3	B	332	PRO
3	B	348	ASP
3	B	355	ARG
3	B	361	PHE
3	B	367	TYR
3	B	368	GLN
3	B	382	LYS
3	B	391	THR
3	B	394	ILE
3	B	404	VAL
3	B	407	ARG
3	B	416	ARG
3	B	418	ASN
3	B	429	VAL
3	B	453	MET
3	B	457	GLU
3	B	469	ASN
3	B	476	ILE
3	B	478	VAL
3	B	484	ILE
3	B	501	ILE
3	B	529	TYR
3	B	530	TYR
3	B	536	LEU
3	B	544	ARG
3	B	551	ASP
3	B	561	ASP
3	B	562	PHE
3	B	570	CYS
3	B	577	ARG
3	B	588	LEU
3	B	603	THR
3	B	606	ASP
3	B	608	VAL
3	B	625	TYR
3	B	628	LEU
3	B	634	THR
3	B	638	THR
3	B	643	TRP
3	B	644	SER
3	B	650	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	B	655	ILE
3	B	659	GLU
3	B	667	THR
3	B	669	GLN
3	B	672	MET
3	B	685	GLN
3	B	686	LEU
3	B	687	ARG
3	B	691	ARG
3	B	702	LEU
3	B	708	LEU
3	B	710	ILE
3	B	714	THR
3	B	715	ASN
3	B	770	GLU
3	B	781	ARG
3	B	783	TYR
3	B	787	GLU
3	B	788	TYR
3	B	789	TYR
3	B	794	ASP
3	B	800	PRO
3	B	850	VAL
3	B	867	ARG
3	B	874	ILE
3	B	890	MET
3	B	895	VAL
3	B	896	ASP
3	B	910	LEU
3	B	915	LEU
3	B	926	GLU
3	B	941	ASP
3	B	945	PHE
3	B	946	TYR
3	B	950	ILE
3	B	951	GLU
3	B	957	ILE
3	B	958	LEU
3	B	959	ARG
3	B	967	THR
3	B	975	THR
3	B	982	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	B	985	PHE
3	B	988	VAL
3	B	990	TYR
3	B	991	GLN
3	B	992	LYS
3	B	994	HIS
3	B	1000	LYS
3	B	1002	HIS
3	B	1004	ARG
3	B	1018	GLU
3	B	1026	LEU
3	B	1030	GLU
3	B	1031	MET
3	B	1033	ARG
3	B	1035	CYS
3	B	1039	PHE
3	B	1045	LEU
3	B	1049	LEU
3	B	1054	ASP
3	B	1057	MET
3	B	1062	ASP
3	B	1080	PRO
3	B	1097	PHE
3	B	1111	PRO
3	B	1113	LEU
3	B	1115	LEU
4	D	55	ASP
4	D	56	GLU
4	D	57	ILE
4	D	80	GLU
4	D	89	CYS
4	D	113	ASP
4	D	132	LEU
4	D	155	LYS
4	D	162	SER
4	D	165	ARG
4	D	167	TYR
4	D	190	LEU
4	D	192	ASP
4	D	195	LEU
4	D	214	ASN
4	D	250	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	D	251	ARG
5	E	4	LEU
5	E	12	ARG
5	E	18	PHE
5	E	22	LEU
5	E	30	LEU
5	E	38	ILE
5	E	41	ASP
5	E	42	LEU
5	E	51	VAL
5	E	58	ILE
5	E	60	VAL
5	E	101	LEU
5	E	112	GLN
5	E	174	TRP
6	F	5	TYR
6	F	12	ILE
6	F	39	ASP
7	H	12	ARG
7	H	13	ILE
7	H	15	TYR
7	H	24	ASN
7	H	26	ASP
7	H	38	ARG
7	H	42	LEU
7	H	44	TRP
7	H	46	ARG
7	H	62	ILE
7	H	64	ARG
7	H	72	TYR
7	H	76	VAL
8	K	12	ASP
8	K	15	PHE
8	K	23	TRP
8	K	39	ARG
8	K	41	LEU
8	K	42	GLN
8	K	52	ASP
8	K	60	ASP
8	K	67	GLU
8	K	71	ARG
8	K	73	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	K	74	LEU
8	K	82	LEU
8	K	89	LEU
8	K	90	LEU
9	L	5	ILE
9	L	24	LEU
9	L	44	TYR
9	L	45	GLN
9	L	48	PRO
9	L	57	ILE
10	N	3	ILE
10	N	5	ILE
10	N	10	CYS
10	N	20	SER
10	N	22	ILE
10	N	48	MET
10	N	55	ILE
10	N	64	ARG
11	P	10	TRP
11	P	15	ASP
11	P	21	LEU
11	P	24	VAL
11	P	31	TYR
11	P	35	PHE
11	P	41	THR
11	P	46	LYS
1	Q	30	PRO
1	Q	45	MET
1	Q	48	ARG
1	Q	52	ILE
1	Q	56	GLN
1	Q	71	HIS
1	Q	75	ILE
1	Q	84	VAL
1	Q	175	LEU
1	Q	176	THR
1	Q	179	ASP
1	Q	191	ASP
1	Q	203	ARG
1	Q	219	ILE
1	Q	232	GLU
1	Q	238	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	Q	239	LEU
1	Q	253	ILE
1	Q	278	ASP
1	Q	282	PRO
1	Q	287	SER
1	Q	297	THR
1	Q	298	LEU
1	Q	301	ARG
1	Q	306	GLU
1	Q	308	ARG
1	Q	312	ASN
1	Q	313	LEU
1	Q	314	SER
1	Q	346	THR
1	Q	349	VAL
1	Q	356	TRP
1	Q	366	ILE
1	Q	369	PRO
1	Q	376	ASN
1	Q	377	TYR
1	Q	378	VAL
1	Q	410	HIS
1	Q	421	ARG
1	Q	425	LEU
1	Q	427	ARG
1	Q	428	ILE
1	Q	438	LEU
1	Q	439	LYS
1	Q	446	ASN
1	Q	464	LEU
1	Q	471	GLU
1	Q	481	LEU
1	Q	487	ILE
1	Q	500	GLN
1	Q	503	ILE
1	Q	507	TYR
1	Q	518	LYS
1	Q	525	LEU
1	Q	537	PRO
1	Q	546	TYR
1	Q	550	GLN
1	Q	558	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	Q	559	ASP
1	Q	573	ARG
1	Q	574	LEU
1	Q	593	LEU
1	Q	597	VAL
1	Q	608	PRO
1	Q	612	LEU
1	Q	622	GLU
1	Q	633	ARG
1	Q	637	ARG
1	Q	641	LEU
1	Q	642	GLN
1	Q	656	ASP
1	Q	662	TYR
1	Q	675	LEU
1	Q	684	LEU
1	Q	687	ILE
1	Q	692	LEU
1	Q	702	ASP
1	Q	705	ASP
1	Q	708	ARG
1	Q	723	ASN
1	Q	755	GLU
1	Q	759	ARG
1	Q	764	ARG
1	Q	777	GLU
1	Q	781	PHE
1	Q	787	ARG
1	Q	797	PHE
1	Q	821	ARG
1	Q	823	LEU
1	Q	828	SER
1	Q	858	MET
1	Q	871	ILE
2	G	36	ILE
2	G	37	LEU
2	G	38	ASN
2	G	43	VAL
2	G	45	ARG
2	G	57	LYS
2	G	70	ILE
2	G	83	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	G	85	MET
2	G	104	LEU
2	G	107	LEU
2	G	116	VAL
2	G	132	ARG
2	G	133	ASP
2	G	146	TYR
2	G	239	ARG
2	G	267	VAL
2	G	275	ASN
2	G	276	ASN
2	G	284	PHE
2	G	310	ILE
2	G	311	ARG
2	G	315	LEU
2	G	318	ASP
2	G	320	MET
2	G	331	ARG
2	G	335	THR
2	G	337	GLU
2	G	344	ARG
2	G	351	VAL
2	G	360	ARG
2	G	364	GLU
2	G	370	VAL
2	G	379	ILE
2	G	380	LYS
2	G	381	LEU
2	G	390	MET
2	G	391	ARG
3	R	5	LEU
3	R	6	THR
3	R	33	ASP
3	R	64	ARG
3	R	65	ILE
3	R	83	MET
3	R	105	ASN
3	R	108	GLU
3	R	118	ASP
3	R	128	ASP
3	R	163	THR
3	R	171	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	R	182	ASN
3	R	183	ILE
3	R	193	THR
3	R	227	MET
3	R	245	ASP
3	R	296	TYR
3	R	313	TYR
3	R	322	VAL
3	R	327	LEU
3	R	332	PRO
3	R	348	ASP
3	R	355	ARG
3	R	361	PHE
3	R	367	TYR
3	R	382	LYS
3	R	391	THR
3	R	394	ILE
3	R	404	VAL
3	R	407	ARG
3	R	416	ARG
3	R	418	ASN
3	R	419	TRP
3	R	429	VAL
3	R	453	MET
3	R	457	GLU
3	R	476	ILE
3	R	478	VAL
3	R	484	ILE
3	R	501	ILE
3	R	529	TYR
3	R	530	TYR
3	R	536	LEU
3	R	544	ARG
3	R	551	ASP
3	R	561	ASP
3	R	562	PHE
3	R	570	CYS
3	R	577	ARG
3	R	588	LEU
3	R	603	THR
3	R	606	ASP
3	R	625	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	R	628	LEU
3	R	634	THR
3	R	638	THR
3	R	643	TRP
3	R	644	SER
3	R	650	ILE
3	R	655	ILE
3	R	659	GLU
3	R	669	GLN
3	R	672	MET
3	R	685	GLN
3	R	686	LEU
3	R	687	ARG
3	R	691	ARG
3	R	702	LEU
3	R	708	LEU
3	R	710	ILE
3	R	714	THR
3	R	715	ASN
3	R	739	ILE
3	R	770	GLU
3	R	781	ARG
3	R	783	TYR
3	R	787	GLU
3	R	788	TYR
3	R	789	TYR
3	R	794	ASP
3	R	800	PRO
3	R	850	VAL
3	R	867	ARG
3	R	874	ILE
3	R	890	MET
3	R	895	VAL
3	R	896	ASP
3	R	910	LEU
3	R	915	LEU
3	R	926	GLU
3	R	941	ASP
3	R	945	PHE
3	R	946	TYR
3	R	950	ILE
3	R	951	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	R	957	ILE
3	R	958	LEU
3	R	959	ARG
3	R	967	THR
3	R	975	THR
3	R	982	ARG
3	R	985	PHE
3	R	990	TYR
3	R	991	GLN
3	R	992	LYS
3	R	994	HIS
3	R	1000	LYS
3	R	1002	HIS
3	R	1004	ARG
3	R	1018	GLU
3	R	1026	LEU
3	R	1030	GLU
3	R	1031	MET
3	R	1033	ARG
3	R	1035	CYS
3	R	1039	PHE
3	R	1045	LEU
3	R	1049	LEU
3	R	1054	ASP
3	R	1057	MET
3	R	1062	ASP
3	R	1080	PRO
3	R	1097	PHE
3	R	1111	PRO
3	R	1113	LEU
3	R	1115	LEU
4	S	54	TYR
4	S	55	ASP
4	S	56	GLU
4	S	57	ILE
4	S	80	GLU
4	S	89	CYS
4	S	113	ASP
4	S	132	LEU
4	S	155	LYS
4	S	162	SER
4	S	165	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	S	167	TYR
4	S	190	LEU
4	S	192	ASP
4	S	195	LEU
4	S	214	ASN
4	S	250	ILE
4	S	251	ARG
5	T	4	LEU
5	T	12	ARG
5	T	18	PHE
5	T	22	LEU
5	T	30	LEU
5	T	38	ILE
5	T	41	ASP
5	T	42	LEU
5	T	51	VAL
5	T	58	ILE
5	T	60	VAL
5	T	101	LEU
5	T	112	GLN
5	T	174	TRP
6	U	5	TYR
6	U	12	ILE
6	U	39	ASP
7	V	12	ARG
7	V	13	ILE
7	V	15	TYR
7	V	24	ASN
7	V	26	ASP
7	V	38	ARG
7	V	42	LEU
7	V	44	TRP
7	V	46	ARG
7	V	62	ILE
7	V	64	ARG
7	V	72	TYR
8	W	12	ASP
8	W	15	PHE
8	W	23	TRP
8	W	39	ARG
8	W	41	LEU
8	W	42	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	W	52	ASP
8	W	60	ASP
8	W	67	GLU
8	W	71	ARG
8	W	73	VAL
8	W	74	LEU
8	W	82	LEU
8	W	89	LEU
8	W	90	LEU
9	X	5	ILE
9	X	24	LEU
9	X	44	TYR
9	X	45	GLN
9	X	48	PRO
9	X	57	ILE
10	Y	3	ILE
10	Y	5	ILE
10	Y	7	CYS
10	Y	10	CYS
10	Y	20	SER
10	Y	22	ILE
10	Y	48	MET
10	Y	55	ILE
10	Y	64	ARG
11	Z	10	TRP
11	Z	15	ASP
11	Z	21	LEU
11	Z	24	VAL
11	Z	31	TYR
11	Z	35	PHE
11	Z	41	THR
11	Z	46	LYS

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (175) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	5	ASN
1	A	56	GLN
1	A	67	ASN
1	A	237	HIS
1	A	259	GLN
1	A	270	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	272	HIS
1	A	312	ASN
1	A	331	ASN
1	A	367	ASN
1	A	376	ASN
1	A	410	HIS
1	A	420	ASN
1	A	422	GLN
1	A	446	ASN
1	A	468	GLN
1	A	483	HIS
1	A	485	ASN
1	A	522	GLN
1	A	561	ASN
1	A	563	HIS
1	A	567	ASN
1	A	582	HIS
1	A	606	GLN
1	A	677	GLN
1	A	723	ASN
2	C	22	ASN
2	C	38	ASN
2	C	76	GLN
2	C	275	ASN
2	C	312	HIS
2	C	328	GLN
3	B	40	GLN
3	B	89	ASN
3	B	182	ASN
3	B	249	GLN
3	B	250	ASN
3	B	337	HIS
3	B	340	ASN
3	B	368	GLN
3	B	396	HIS
3	B	412	GLN
3	B	418	ASN
3	B	425	HIS
3	B	439	ASN
3	B	446	HIS
3	B	554	ASN
3	B	564	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	B	623	ASN
3	B	639	HIS
3	B	660	HIS
3	B	661	ASN
3	B	669	GLN
3	B	685	GLN
3	B	715	ASN
3	B	721	ASN
3	B	882	HIS
3	B	884	GLN
3	B	911	ASN
3	B	913	HIS
3	B	977	GLN
3	B	991	GLN
3	B	994	HIS
3	B	995	HIS
3	B	1063	GLN
3	B	1087	ASN
3	B	1102	GLN
4	D	4	ASN
4	D	50	ASN
4	D	181	ASN
4	D	214	ASN
5	E	33	GLN
5	E	35	GLN
5	E	109	HIS
5	E	112	GLN
5	E	166	GLN
5	E	177	GLN
6	F	35	GLN
7	H	20	HIS
7	H	41	GLN
8	K	24	GLN
8	K	42	GLN
8	K	54	ASN
9	L	75	ASN
10	N	19	GLN
10	N	26	ASN
10	N	57	ASN
1	Q	5	ASN
1	Q	56	GLN
1	Q	67	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	Q	237	HIS
1	Q	259	GLN
1	Q	270	GLN
1	Q	272	HIS
1	Q	312	ASN
1	Q	331	ASN
1	Q	367	ASN
1	Q	376	ASN
1	Q	410	HIS
1	Q	420	ASN
1	Q	422	GLN
1	Q	446	ASN
1	Q	468	GLN
1	Q	483	HIS
1	Q	485	ASN
1	Q	522	GLN
1	Q	561	ASN
1	Q	567	ASN
1	Q	582	HIS
1	Q	606	GLN
1	Q	677	GLN
1	Q	723	ASN
2	G	22	ASN
2	G	38	ASN
2	G	76	GLN
2	G	275	ASN
2	G	312	HIS
2	G	328	GLN
3	R	40	GLN
3	R	89	ASN
3	R	182	ASN
3	R	249	GLN
3	R	250	ASN
3	R	337	HIS
3	R	340	ASN
3	R	368	GLN
3	R	396	HIS
3	R	412	GLN
3	R	418	ASN
3	R	425	HIS
3	R	439	ASN
3	R	446	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	R	469	ASN
3	R	523	ASN
3	R	554	ASN
3	R	564	ASN
3	R	623	ASN
3	R	639	HIS
3	R	660	HIS
3	R	661	ASN
3	R	669	GLN
3	R	685	GLN
3	R	715	ASN
3	R	721	ASN
3	R	882	HIS
3	R	884	GLN
3	R	911	ASN
3	R	913	HIS
3	R	977	GLN
3	R	991	GLN
3	R	994	HIS
3	R	995	HIS
3	R	1010	GLN
3	R	1063	GLN
3	R	1087	ASN
3	R	1102	GLN
4	S	4	ASN
4	S	50	ASN
4	S	181	ASN
4	S	214	ASN
5	T	33	GLN
5	T	109	HIS
5	T	112	GLN
5	T	166	GLN
5	T	177	GLN
6	U	35	GLN
7	V	20	HIS
8	W	24	GLN
8	W	25	ASN
8	W	42	GLN
8	W	54	ASN
9	X	75	ASN
10	Y	19	GLN
10	Y	26	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	Y	57	ASN

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 12 ligands modelled in this entry, 10 are monoatomic - leaving 2 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# $ Z > 2$	Counts	RMSZ	# $ Z > 2$
14	F3S	D	1001	4	3,9,9	20.33	2 (66%)	0,15,15	0.00	-
14	F3S	S	1001	4	3,9,9	20.57	1 (33%)	0,15,15	0.00	-

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	F3S	D	1001	4	-	0/0/24/24	0/0/3/3
14	F3S	S	1001	4	-	0/0/24/24	0/0/3/3

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	S	1001	F3S	S3-FE4	-35.58	2.09	2.33
14	D	1001	F3S	S3-FE4	-35.13	2.09	2.33
14	D	1001	F3S	S3-FE1	-2.44	2.31	2.33

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	776/880 (88%)	-0.19	2 (0%) 91 73	23, 75, 132, 186	0
1	Q	776/880 (88%)	-0.09	3 (0%) 90 68	29, 87, 145, 202	0
2	C	279/392 (71%)	-0.12	2 (0%) 84 52	29, 81, 153, 190	0
2	G	279/392 (71%)	-0.09	1 (0%) 90 68	42, 97, 153, 181	0
3	B	1090/1124 (96%)	-0.18	4 (0%) 90 68	24, 78, 145, 196	0
3	R	1090/1124 (96%)	-0.13	9 (0%) 83 49	36, 84, 149, 196	0
4	D	264/265 (99%)	-0.05	2 (0%) 83 49	44, 94, 144, 179	0
4	S	264/265 (99%)	0.03	1 (0%) 90 68	61, 111, 157, 192	0
5	E	176/180 (97%)	0.13	7 (3%) 36 14	39, 112, 189, 202	0
5	T	176/180 (97%)	0.13	8 (4%) 32 12	57, 113, 176, 202	0
6	F	89/113 (78%)	0.17	3 (3%) 43 17	73, 142, 182, 196	0
6	U	89/113 (78%)	0.26	5 (5%) 24 9	93, 141, 184, 201	0
7	H	74/84 (88%)	0.02	0 100 100	46, 90, 137, 165	0
7	V	74/84 (88%)	0.05	3 (4%) 35 14	70, 101, 159, 198	0
8	K	82/95 (86%)	-0.23	1 (1%) 75 39	30, 72, 118, 154	0
8	W	82/95 (86%)	-0.06	0 100 100	47, 82, 139, 189	0
9	L	92/92 (100%)	-0.11	0 100 100	42, 81, 125, 200	0
9	X	92/92 (100%)	0.11	0 100 100	52, 102, 140, 159	0
10	N	64/66 (96%)	-0.19	0 100 100	60, 90, 124, 174	0
10	Y	64/66 (96%)	-0.08	0 100 100	61, 98, 145, 185	0
11	P	43/48 (89%)	-0.10	0 100 100	48, 101, 137, 155	0
11	Z	43/48 (89%)	-0.14	0 100 100	64, 100, 144, 180	0
All	All	6058/6678 (90%)	-0.10	51 (0%) 83 49	23, 88, 153, 202	0

All (51) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
3	R	434	ALA	5.1
6	U	33	LEU	3.9
5	E	131	LYS	3.8
6	U	89	MET	3.5
3	R	596	LYS	3.5
6	U	5	TYR	3.4
5	T	135	VAL	3.4
4	D	217	ILE	3.3
1	A	255	ALA	3.1
7	V	57	ALA	3.0
3	R	765	TYR	2.8
1	Q	255	ALA	2.8
5	T	179	LYS	2.8
2	G	395	ARG	2.8
4	D	190	LEU	2.8
3	R	781	ARG	2.7
3	B	625	TYR	2.7
6	F	5	TYR	2.7
3	R	277	ALA	2.7
4	S	172	ILE	2.6
7	V	82	ILE	2.6
5	T	177	GLN	2.5
5	T	117	THR	2.5
3	R	245	ASP	2.5
5	E	135	VAL	2.5
6	F	77	PRO	2.5
5	E	153	VAL	2.5
3	B	1078	VAL	2.5
5	E	130	GLU	2.5
7	V	58	LYS	2.4
8	K	51	ILE	2.4
3	R	597	LEU	2.4
3	B	434	ALA	2.4
6	U	4	VAL	2.3
5	E	127	ILE	2.3
5	T	180	LYS	2.3
3	B	1069	TRP	2.3
5	T	130	GLU	2.3
6	U	2	SER	2.3
2	C	137	ALA	2.2
3	R	831	ALA	2.2
6	F	32	ASN	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
5	E	180	LYS	2.2
5	E	128	PHE	2.2
2	C	395	ARG	2.1
1	Q	183	ARG	2.1
1	Q	48	ARG	2.1
3	R	433	LEU	2.1
1	A	48	ARG	2.1
5	T	178	THR	2.0
5	T	118	LEU	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
13	MG	Q	1003	1/1	0.26	7.60	60,60,60,60	0
13	MG	A	1003	1/1	0.15	1.21	57,57,57,57	0
12	ZN	Z	1001	1/1	0.13	-0.56	106,106,106,106	0
12	ZN	N	1001	1/1	0.17	-0.57	93,93,93,93	0
12	ZN	B	2001	1/1	0.11	-0.74	91,91,91,91	0
12	ZN	P	1001	1/1	0.10	-0.86	103,103,103,103	0
14	F3S	D	1001	7/7	0.13	-1.23	79,80,80,80	0
14	F3S	S	1001	7/7	0.12	-1.25	111,111,112,113	0
12	ZN	A	1002	1/1	0.06	-1.77	87,87,87,87	0
12	ZN	R	2001	1/1	0.06	-1.88	101,101,101,101	0
12	ZN	Q	1002	1/1	0.03	-2.38	89,89,89,89	0
12	ZN	Y	1001	1/1	0.18	-3.71	93,93,93,93	0

6.5 Other polymers ⓘ

There are no such residues in this entry.