



Full wwPDB EM Validation Report ⓘ

Mar 17, 2026 – 10:54 PM UTC

PDB ID : 7MOQ / pdb_00007moq
EMDB ID : EMD-23926
Title : The structure of the Tetrahymena thermophila outer dynein arm on doublet microtubule
Authors : Kubo, S.; Yang, S.K.; Ichikawa, M.; Bui, K.H.
Deposited on : 2021-05-03
Resolution : 8.00 Å(reported)

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

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

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

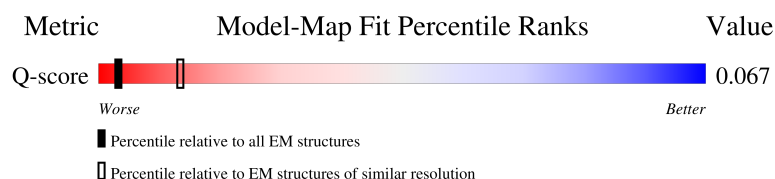
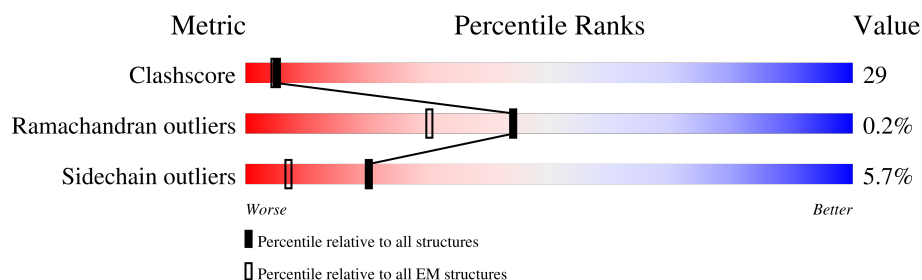
EMDB validation analysis : 0.0.1.dev132
Mogul : 2022.3.0, CSD as543be (2022)
MolProbity : 4-5-2 with Phenix2.0
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

1 Overall quality at a glance

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 8.00 Å.

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



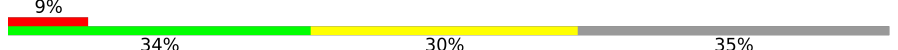
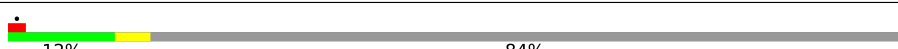
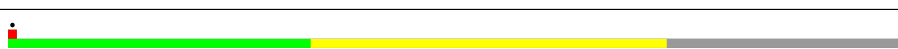
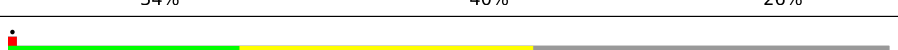
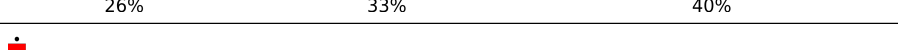
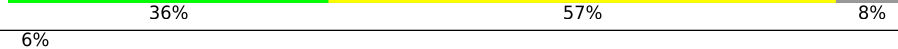
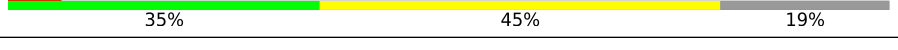
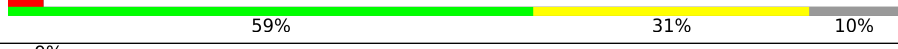
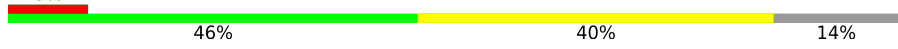
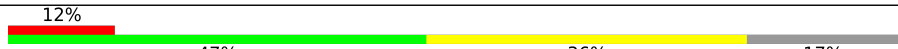
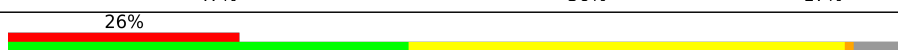
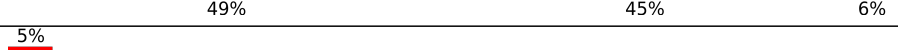
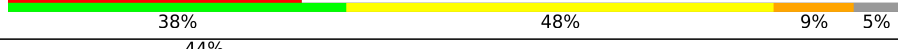
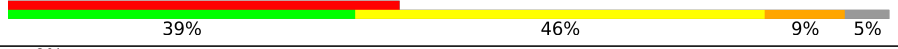
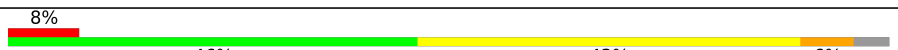
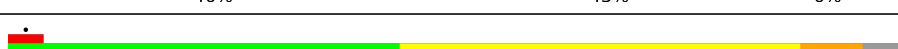
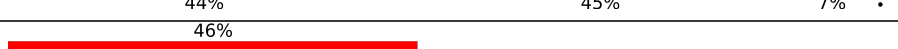
Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	361 (7.50 - 8.50)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	4168	
2	B	4594	
3	C	4620	
4	D	667	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
4	d	667	
5	E	670	
5	e	670	
6	F	133	
7	G	159	
8	H	92	
9	I	110	
10	J	93	
11	K	111	
12	L	111	
13	M	87	
14	N	132	
15	O	117	
16	P	110	
17	Q	443	
17	U	443	
17	Y	443	
17	q	443	
17	u	443	
17	y	443	
18	R	449	
18	S	449	
18	W	449	
18	r	449	
18	s	449	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
18	w	449	
19	T	309	
20	V	130	
20	x	130	
21	X	555	
22	Z	538	

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
23	ADP	C	4703	-	-	X	-

2 Entry composition [i](#)

There are 27 unique types of molecules in this entry. The entry contains 129847 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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 Dynein-1-alpha heavy chain, flagellar inner arm I1 complex protein, putative.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	340	Total	C	N	O	S	0	0
			2698	1720	458	508	12		

- Molecule 2 is a protein called Outer arm dynein beta heavy chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	4091	Total	C	N	O	S	0	0
			33080	21201	5547	6175	157		

- Molecule 3 is a protein called Dynein heavy chain, outer arm protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	C	4159	Total	C	N	O	S	0	0
			33529	21421	5645	6289	174		

- Molecule 4 is a protein called Dynein intermediate chain 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	D	331	Total	C	N	O	S	0	0
			2669	1719	439	493	18		
4	d	128	Total	C	N	O	S	0	0
			957	597	170	187	3		

- Molecule 5 is a protein called Flagellar outer dynein arm intermediate protein, putative.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	E	436	Total	C	N	O	S	0	0
			3264	2059	565	621	19		
5	e	109	Total	C	N	O		0	0
			684	414	132	138			

- Molecule 6 is a protein called Dynein light chain roadblock-type 2 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	F	98	Total	C	N	O	S	0	0
			781	493	137	149	2		

- Molecule 7 is a protein called Dynein light chain roadblock-type 2 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	G	95	Total	C	N	O	S	0	0
			744	468	128	147	1		

- Molecule 8 is a protein called Dynein light chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	H	85	Total	C	N	O	S	0	0
			702	453	115	130	4		

- Molecule 9 is a protein called Dynein light chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	I	89	Total	C	N	O	S	0	0
			694	443	111	136	4		

- Molecule 10 is a protein called Dynein light chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	J	84	Total	C	N	O	S	0	0
			702	459	114	125	4		

- Molecule 11 is a protein called Dynein light chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	K	95	Total	C	N	O	S	0	0
			803	525	134	139	5		

- Molecule 12 is a protein called Dynein light chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	L	97	Total	C	N	O	S	0	0
			773	506	131	133	3		

- Molecule 13 is a protein called Dynein light chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	M	86	Total	C	N	O	S	0	0
			726	472	122	128	4		

- Molecule 14 is a protein called Dynein light chain 2A.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	N	109	Total	C	N	O	S	0	0
			897	581	154	159	3		

- Molecule 15 is a protein called Dynein light chain tctex-type 1 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	O	111	Total	C	N	O	S	0	0
			878	558	143	174	3		

- Molecule 16 is a protein called Thioredoxin.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	P	103	Total	C	N	O	S	0	0
			847	549	134	161	3		

- Molecule 17 is a protein called Tubulin beta chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	Q	420	Total	C	N	O	S	0	0
			3287	2068	563	628	28		
17	U	420	Total	C	N	O	S	0	0
			3287	2068	563	628	28		
17	Y	420	Total	C	N	O	S	0	0
			3287	2068	563	628	28		
17	u	420	Total	C	N	O	S	0	0
			3287	2068	563	628	28		
17	q	420	Total	C	N	O	S	0	0
			3287	2068	563	628	28		
17	y	420	Total	C	N	O	S	0	0
			3287	2068	563	628	28		

- Molecule 18 is a protein called Tubulin alpha chain.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	R	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf	Trace
18	S	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		
18	W	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		
18	s	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		
18	r	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		
18	w	429	Total	C	N	O	S	0	0
			3342	2118	568	634	22		

- Molecule 19 is a protein called Outer dynein arm docking complex protein oda protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	T	131	Total	C	N	O	S	0	0
			1057	655	181	215	6		

- Molecule 20 is a protein called Docking complex 1/2 protein.

Mol	Chain	Residues	Atoms				AltConf	Trace
20	V	98	Total	C	N	O	0	0
			490	294	98	98		
20	x	101	Total	C	N	O	0	0
			505	303	101	101		

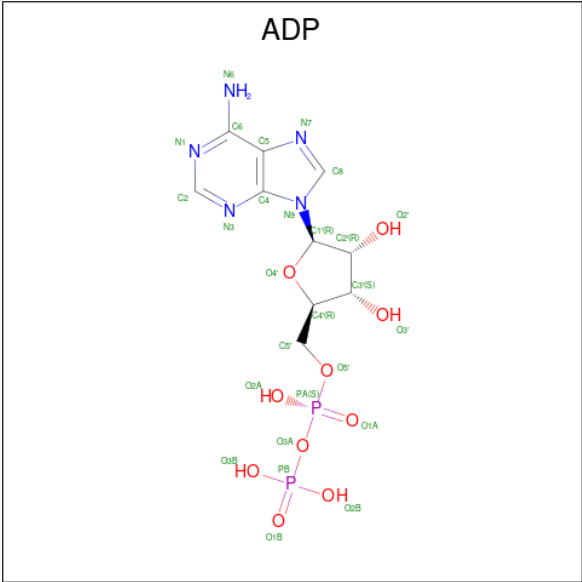
- Molecule 21 is a protein called Docking complex 1 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	X	140	Total	C	N	O	S	0	0
			1149	719	210	218	2		

- Molecule 22 is a protein called Outer dynein arm docking complex protein oda protein.

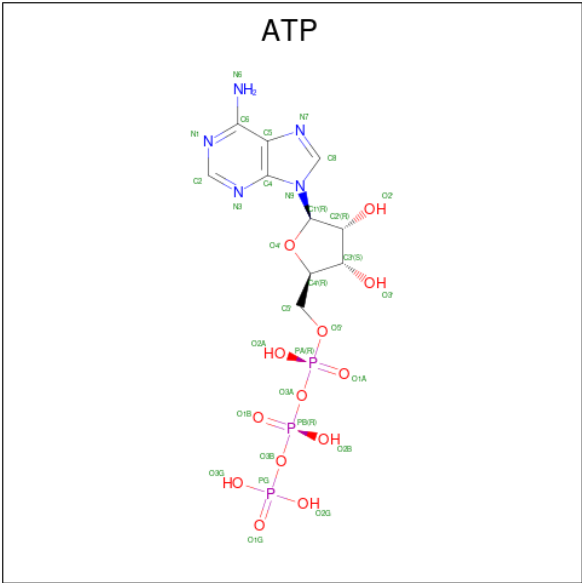
Mol	Chain	Residues	Atoms					AltConf	Trace
22	Z	117	Total	C	N	O	S	0	0
			993	614	191	186	2		

- Molecule 23 is ADENOSINE-5'-DIPHOSPHATE (CCD ID: ADP) (formula: C₁₀H₁₅N₅O₁₀P₂).



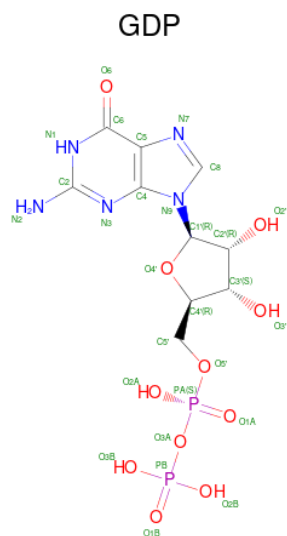
Mol	Chain	Residues	Atoms					AltConf
23	C	1	Total	C	N	O	P	0
			27	10	5	10	2	
23	C	1	Total	C	N	O	P	0
			27	10	5	10	2	

- Molecule 24 is ADENOSINE-5'-TRIPHOSPHATE (CCD ID: ATP) (formula: C₁₀H₁₆N₅O₁₃P₃).



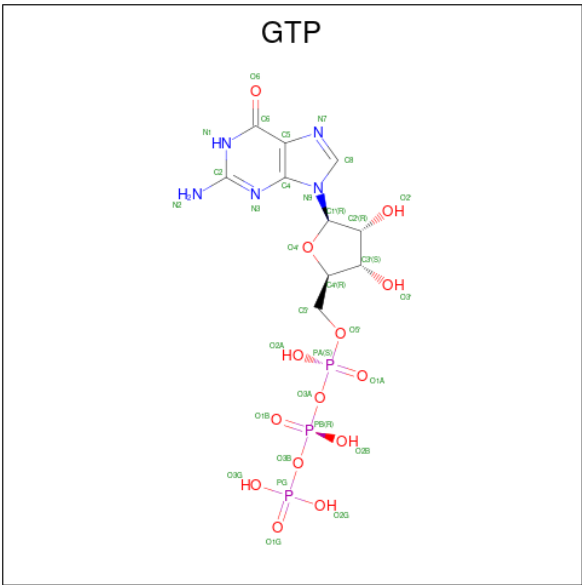
Mol	Chain	Residues	Atoms					AltConf
24	C	1	Total	C	N	O	P	0
			31	10	5	13	3	

- Molecule 25 is GUANOSINE-5'-DIPHOSPHATE (CCD ID: GDP) (formula: C₁₀H₁₅N₅O₁₁P₂).



Mol	Chain	Residues	Atoms					AltConf
25	Q	1	Total 28	C 10	N 5	O 11	P 2	0
25	U	1	Total 28	C 10	N 5	O 11	P 2	0
25	Y	1	Total 28	C 10	N 5	O 11	P 2	0
25	u	1	Total 28	C 10	N 5	O 11	P 2	0
25	q	1	Total 28	C 10	N 5	O 11	P 2	0
25	y	1	Total 28	C 10	N 5	O 11	P 2	0

- Molecule 26 is GUANOSINE-5'-TRIPHOSPHATE (CCD ID: GTP) (formula: $\text{C}_{10}\text{H}_{16}\text{N}_5\text{O}_{14}\text{P}_3$).



Mol	Chain	Residues	Atoms					AltConf
26	R	1	Total	C	N	O	P	0
			32	10	5	14	3	
26	S	1	Total	C	N	O	P	0
			32	10	5	14	3	
26	W	1	Total	C	N	O	P	0
			32	10	5	14	3	
26	s	1	Total	C	N	O	P	0
			32	10	5	14	3	
26	r	1	Total	C	N	O	P	0
			32	10	5	14	3	
26	w	1	Total	C	N	O	P	0
			32	10	5	14	3	

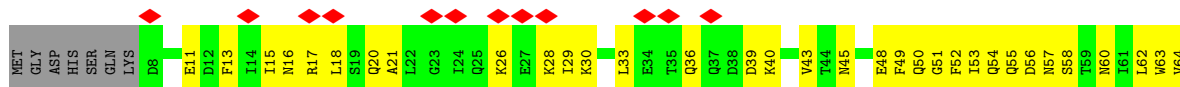
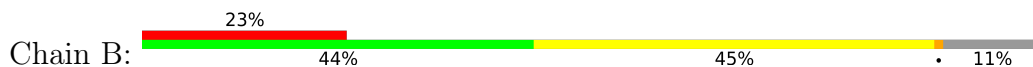
- Molecule 27 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		AltConf
27	R	1	Total	Mg	0
			1	1	
27	S	1	Total	Mg	0
			1	1	
27	W	1	Total	Mg	0
			1	1	
27	s	1	Total	Mg	0
			1	1	
27	r	1	Total	Mg	0
			1	1	
27	w	1	Total	Mg	0
			1	1	





- Molecule 2: Outer arm dynein beta heavy chain

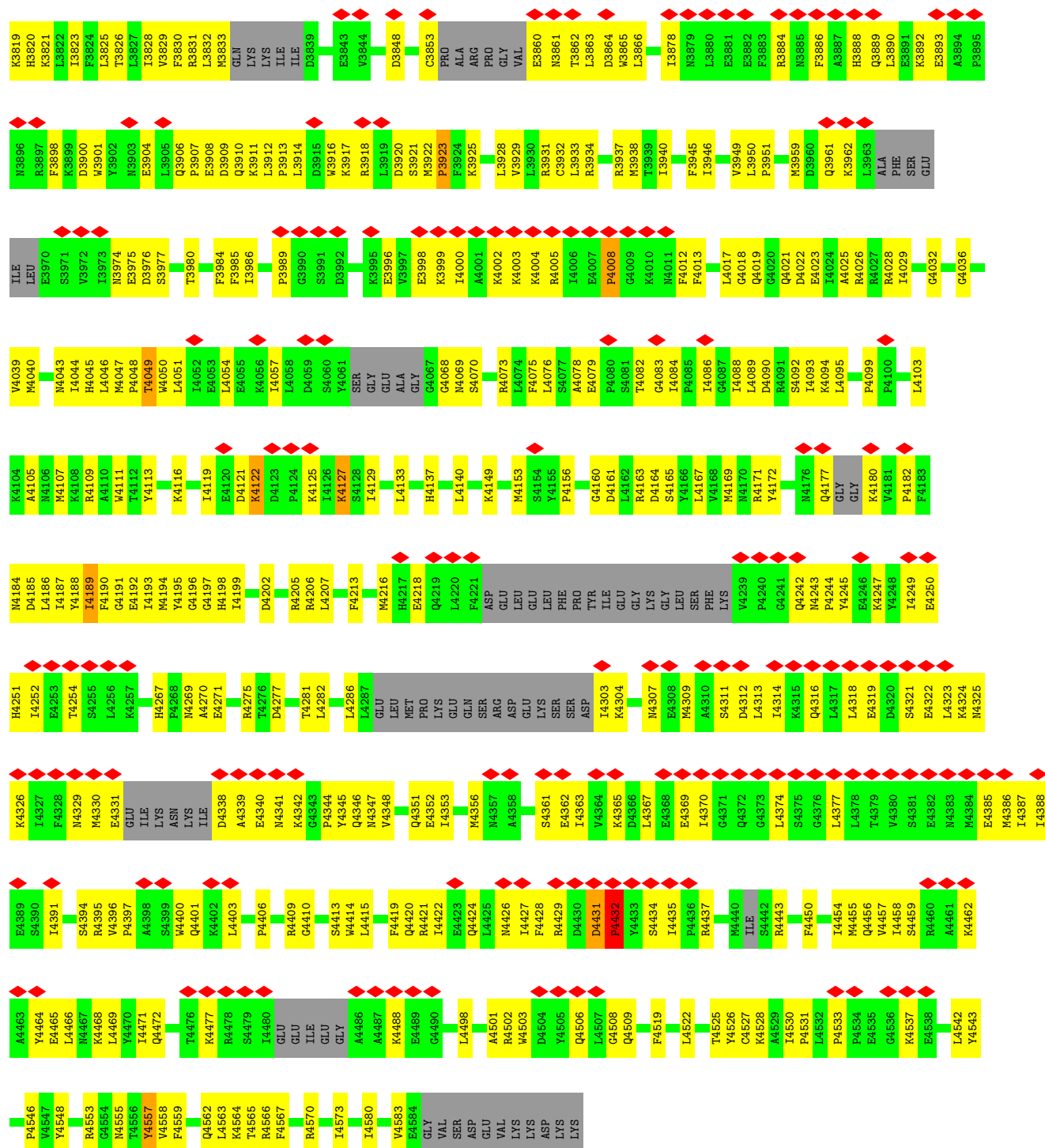


F955	L880	N796	N721	I561	I497	R422	P338	F271	K192	S130	S65
L966	H881	F797	H724	F562	E498	C423	R339	T272	A193	P131	G66
Q957	L882	N798	I725	L563	L499	Q424	L340	L273	H194	V132	Q67
E958	L799	N799	K726	E564	L999	D425	L341	L274	H195	M133	S68
L960	K800	K800	K727	G565	E500	L426	I344	Q275	F196	Q134	E69
S961	L801	L801	L728	K566	R501	L427	R345	A276	E197	M135	K70
F962	L802	L802	C728	Q567	R502	H428	E346	E277	G198	P136	C71
F963	L803	L803	L729	L503	L503	L429	I347	V278	S199	L137	T72
F964	L804	L804	L730	F568	A504	I433	C348	K279	I200	Q139	F73
K965	L805	L805	L731	D570	V506	V434	N349	A281	T201	N138	T72
Q966	L806	L806	P731	S571	I507	Q435	A350	K280	T202	Q140	Y74
Q967	L807	L807	E734	H572	F508	F436	I351	R282	W203	G141	TYR
C968	L808	L808	P735	H573	Q509	N437	S353	A285	T204	G142	GLY
L969	L809	L809	L736	G510	G509	K438	F358	E287	I207	T143	D92
A970	L810	L810	W737	F511	G510	L439	V359	N288	K208	D144	K83
N971	L811	L811	K738	D512	D512	E440	D360	L292	V210	L145	F84
N972	L812	L812	K739	T616	T616	K441	K361	L296	K212	V146	K85
N975	L813	L813	K740	L517	L517	L442	L367	L295	P215	L211	K86
C983	L814	L814	W741	L518	L518	L444	I368	K296	E216	K148	K87
F986	L815	L815	E745	F521	F521	G446	D369	F299	P217	M151	G88
R987	L816	L816	E746	L522	L522	T447	S370	S300	Q217	E152	I89
A988	L817	L817	K747	L523	L523	K448	K371	K301	L218	K153	A90
R989	L818	L818	W748	L524	L524	Q449	F372	L302	K220	F154	V91
F990	L819	L819	P750	D525	D525	L452	T373	Q303	Y221	M155	I92
D901	L820	L820	G751	R526	R526	L453	T374	E304	K221	M156	K93
N902	L821	L821	L752	D527	D527	T453	E375	S305	P227	Y157	L94
N903	L822	L822	L753	P602	P602	G454	A376	Q306	L228	V158	G95
L904	L823	L823	E754	L530	L530	L456	L380	P307	L229	A159	L96
Q907	L824	L824	I755	L531	L531	A457	D385	S308	E230	Q160	H97
Q908	L825	L825	W756	T532	T532	Q458	V386	D309	Y162	Y161	K98
S909	L826	L826	L606	R533	R533	L459	C387	F310	E232	L163	L99
F913	L827	L827	L609	P534	P534	E462	S388	P311	N236	L164	T100
D914	L828	L828	Q610	L535	L535	F463	K389	T312	E102	L165	N101
N915	L829	L829	Q611	L536	L536	F463	F390	L313	G166	N103	E102
E916	L830	L830	Q612	A537	A537	Q467	K391	L314	Q167	Y104	N103
E917	L831	L831	L613	D538	D538	V467	D392	L316	I168	A105	V108
E918	L832	L832	T614	L539	L539	Q468	Y394	F317	K169	E112	V109
E919	L833	L833	E615	L540	L540	A469	A393	I318	G170	L174	V110
E920	L834	L834	E616	L541	L541	F470	Y397	I319	K171	P175	V111
E921	L835	L835	E617	L542	L542	T471	N404	M321	THR	M173	E112
E922	L836	L836	Y619	H544	H544	V473	W405	H322	L174	L174	E112
E923	L837	L837	L622	L545	L545	L477	K406	T323	V253	L176	N115
E924	L838	L838	L625	L546	L546	L478	L412	I324	L256	L177	N116
E925	L839	L839	Q628	L549	L549	A481	V414	I327	L257	P177	N117
E926	L840	L840	L629	M550	M550	A482	R415	K330	S178	H179	L118
E927	L841	L841	Q630	L553	L553	K483	L416	K332	K180	H120	L118
E928	L842	L842	K631	L555	L555	K484	D417	L181	L181	L122	N122
E929	L843	L843	L633	L556	L556	D488	S418	T266	S184	S123	S123
E930	L844	L844	L634	L557	L557	F489	F419	T267	D185	V124	F124
E931	L845	L845	W636	L558	L558	Y490	L420	T269	T186	T186	F125
E932	L846	L846	D720	L559	L559	A493	E421	P270	T187	E127	N126
E933	L847	L847	L794	L560	L560				D189	P188	N127
E934	L848	L848	A795						K190	D191	M129



G2805	G2806	F2807	P2808	E2809	T2810	E2811	N2812	T2813	L2814	P2817	L2818	L2819	G2820	T2821	G2822	F2823	V2824	A2825	H2827	GLN	LEU	ASP	GLN	GLN	TYR	T2835	Q2836	C2837	T2838	T2839	V2841	L2842	K2843	R2844	V2845	L2846	D2847	D2848	K2849	E2851	E2852	E2855	V2863	L2864	F2865	Q2866	Q2867	A2868	M2869	K2874														
G2659	S2660	F2661	L2666	L2667	L2668	R2669	L2670	F2671	S2672	V2673	F2674	G2680	S2681	G2682	K2685	T2686	L2687	F2688	G2689	S2690	L2691	L2692	M2693	A2694	H2695	L2696	S2697	T2698	L2699	D2700	D2701	K2702	A2703	Q2704	K2705	M2706	A2707	F2708	K2709	L2710	V2711	A2712	E2713	T2714	V2715	F2716	D2719	K2720	K2723	N2724	THR	ALA	F2728											
P2730	S2731	A2732	K2733	R2734	Y2737	Q2738	F2739	N2740	E2743	V2747	C2748	E2749	G2750	L2751	C2752	P2756	G2757	Q2758	Y2759	S2760	G2761	G2762	D2763	ASP	GLN	Q2764	A2771	H2772	K2773	E2774	M2775	K2776	R2777	T2778	F2779	E2780	D2781	L2782	F2783	L2784	A2785	H2788	V2789	R2793	K2794	L2850	E2851	E2852	E2798	A2799	L2800	S2801	K2802	C2803	L2804									
K2578	N2579	I2580	E2581	S2582	K2583	V2584	E2585	K2586	K2587	N2588	G2589	R2590	N2591	Y2592	G2593	S2594	A2595	K2598	C2602	F2603	I2604	D2605	D2606	F2607	N2608	M2609	P2610	Y2611	Y2612	Y2615	Q2622	L2623	L2624	R2625	S2632	I2633	F2634	N2635	R2636	E2637	Q2638	R2642	K2643	F2644	L2645	D2646	D2647	F2651	K2657	S2658														
N2502	D2503	Q2504	L2505	L2506	F2507	T2510	Y2511	V2512	A2513	T2514	I2515	H2516	T2517	L2518	R2519	L2520	R2521	Y2522	N2523	T2524	D2525	L2526	H2527	L2528	Q2529	R2530	K2531	P2532	L2533	S2539	T2542	L2552	N2553	S2554	T2555	R2556	E2557	E2558	Q2559	V2560	S2561	H2562	K2563	N2566	F2567	F2570	T2571	D2572	S2573	Q2577														
A2439	G2440	L2441	L2444	G2445	F2447	V2448	Q2452	D2453	D2454	S2455	L2456	ASP	MET	L2457	F2461	N2462	T2463	V2464	V2465	K2466	Q2467	A2468	A2469	K2470	V2471	K2472	F2473	P2474	E2475	Q2476	Q2477	L2478	C2479	Y2480	D2481	Y2482	Y2483	Y2484	D2485	L2486	N2487	E2488	N2489	K2490	W2491	N2492	T2493	W2494	K2495	V2496	E2497	D2498	Y2499	L2500	P2501									
P2374	Q2375	S2376	F2377	F2378	E2379	Q2380	N2381	L2382	D2383	V2384	H2385	D2386	K2387	N2388	R2389	VAL	ARG	HIS	ILE	C2394	P2395	M2396	A2400	M2401	L2402	Q2403	L2404	L2405	C2406	T2407	L2408	L2413	L2414	Q2415	H2416	L2417	PRO	L2418	LEU	L2419	GLN	MET	L2420	GLU	ASP	GLU	L2421	L2422	L2423	L2424	L2425	L2426	L2427	L2428	L2429	L2430	L2431	L2432	L2433	L2434	L2435	L2436	L2437	F2438
L2295	T2296	Q2297	Q2298	L2299	K2300	L2301	E2304	N2310	A2311	T2312	F2313	A2314	T2315	V2316	S2317	R2318	Q2320	V2321	W2331	P2332	P2333	L2334	M2335	V2338	N2345	L2346	L2347	K2348	Q2349	Q2350	Q2351	E2352	E2353	E2354	ASN	MET	PRO	GLU	TYR	PRO	VAL	ILE	ASP	VAL	A2366	K2367	S2368	V2369	F2370	Y2371	C2372	C2373												
S2200	Y2201	I2202	N2203	S2204	G2205	E2206	D2207	A2208	E2209	T2212	L2213	N2214	P2215	K2216	T2219	D2220	D2221	E2222	T2228	K2229	T2230	K2231	K2234	V2246	K2247	ASN	GLU	L2248	L2249	L2250	L2251	L2252	L2253	H2256	M2257	V2262	L2263	D2266	I2267	D2268	P2269	E2270	W2271	S2274	K2283	V2284	S2289	N2290	F2294															
T2126	Q2127	D2128	F2131	K2132	L2133	D2134	P2135	P2136	T2137	K2138	Q2139	N2140	P2141	E2142	L2143	K2144	K2145	T2146	V2147	Q2148	D2149	T2150	T2151	K2152	K2153	D2154	V2158	A2159	E2160	L2162	F2163	V2164	T2165	K2166	V2167	V2168	V2176	R2177	H2178	C2179	C2180	F2181	P2186	G2189	K2190	T2191	C2192	V2193	W2194	T2196	K2199													
M2060	L2061	S2062	R2063	S2067	K2068	Q2069	Y2072	D2073	W2074	G2075	L2076	R2077	A2078	V2079	S2081	V2082	L2083	R2084	Q2085	A2086	G2087	K2088	L2089	K2090	S2094	R2091	G2092	D2093	P2094	M2096	L2097	E2098	D2099	P2100	K2102	L2103	R2104	R2107	N2110	T2113	T2114	V2115	D2116	D2117	R2118	T2119	K2119	V2120	T2121	F2122	R2123	L2124	L2125											
K1912	D1913	L1914	G1915	R1916	I1920	F1921	V1922	C1927	S1928	D1929	Q1930	M1931	N1932	K1933	M1936	M1941	G1942	L1943	S1944	Q1945	A1948	W1949	E1954	F1955	N1956	R1957	I1958	S1959	L1960	E1961	V1962	L1963	S1964	V1965	V1966	S1967	T1968	K1971	C1972	E1979	K1980	K1981	T1982	K1983	F1984	S1985	F1986	VAL	E1988	Q1993														

R3748	D3688	L3533	L3468	ILE	VAL	THR	MET	LEU	VAL	ARG	R3032	Q2962	W2881
V3749	K3689	D3536	R3469	VAL	THR	ASN	ASN	ARG	GLN	R3102	R3032	Q2962	F2882
V3750	L3690	P3537	L3470	GLN	PHE	ASN	PRO	SER	ASN	Y3103	K3035	L2953	G2883
A3751	E3691	Q3538	E3471	ASP	LYS	GLN	GLN	GLU	ARG	T3106	N3042	E2955	N2884
K3756	S3692	L3539	W3473	ALA	ILE	ALA	ALA	ALA	GLU	T3107	E2955	E2956	L2888
F3759	D3694	G3541	K3474	ARG	PHE	ILE	PHE	ALA	GLU	P3108	I3045	Q2957	G2893
V3761	L3695	S3542	N3475	CYS	GLN	ASP	ASP	VAL	THR	K3109	D3046	Q2957	G2893
I3762	Q3696	W3543	T3476	SER	VAL	LYS	LYS	LEU	ILE	S3110	W3047	F2958	Q2897
S3763	S3697	I3545	W3477	ARG	PRO	LYS	LYS	LYS	ILE	F3111	F3048	L2959	Q2897
L3764	L3698	R3546	L3478	LEU	LEU	SER	SER	LYS	ILE	E3113	H3049	I2960	R2901
S3765	S3699	Q3549	F3479	SER	GLN	PHE	PHE	PRO	GLU	L3114	W3051	D2964	L2902
V3766	E3700	G3550	D3480	ALA	ASP	ASP	ASP	HIS	VAL	L3115	P3052	D2964	S2903
K3767	A3701	E3551	I3481	GLU	GLN	GLU	GLY	THR	GLY	K3119	H3053	S2968	T2904
D3768	D3702	L3552	I3482	ASN	LYS	ASN	ILE	MET	SER	W2970	L3056	W2970	L2906
H3769	P3703	T3555	GLU	VAL	VAL	ASN	PRO	ASN	ALA	I3057	I3057	P2976	G2908
V3771	A3704	I3556	LYS	R3424	ILE	ASN	PRO	ASN	ALA	D3058	D3058	K2977	G2908
Q3772	T3705	S3557	ILE	G3425	ILE	ILE	ILE	GLY	ALA	E3124	V3059	E2978	F2909
E3776	I3706	L3558	ILE	L3426	LEU	LEU	LEU	SER	GLU	K3125	A3060	E2978	E2910
F3780	L3707	S3559	T3489	A3427	GLU	GLU	GLU	PRO	GLN	E3127	F3061	D2979	I2911
F3781	D3708	L3567	Q3490	G3428	LYS	LYS	GLN	ASN	THR	T3128	F3063	M2980	D2912
F3782	N3709	I3571	E3491	F3429	ASN	ASN	SER	ALA	THR	I3129	D2981	Q2913	Q2913
F3783	T3710	L3579	I3492	R3430	LYS	LYS	LYS	VAL	ILE	Q3130	E3065	S2982	L2914
K3784	E3711	E3580	E3493	K3431	GLU	GLU	ILE	ILE	ALA	R3131	E3066	L2983	V2916
A3785	L3712	G3581	P3494	R3432	ALA	ALA	GLN	THR	GLU	Q3132	ILE	V2984	T2917
I3786	L3713	S3582	L3495	T3434	VAL	ILE	ASP	ALA	GLU	I3133	PHE	S2985	T2917
K3787	Q3714	Q3583	K3496	G3435	VAL	PRO	PRO	ARG	GLU	Q3134	PRO	G2986	A2918
R3788	N3715	Q3584	I3497	R3436	LYS	SER	SER	VAL	LYS	R3135	THR	S2919	F2920
T3789	L3716	Q3585	T3499	V3437	ARG	LYS	LYS	VAL	THR	Y3136	GLU	R2988	F2920
V3791	D3717	E3586	T3500	K3438	VAL	PHE	PHE	ILE	ASN	E3137	GLU	N2989	T2921
R3792	K3718	L3587	T3500	F3439	ALA	ASN	ASN	LEU	ALA	M3138	ARG	E2990	T2922
D3793	T3719	L3594	E3501	L3440	GLU	GLU	GLU	PHE	ALA	G3139	Q3076	A2991	N2923
E3794	K3720	G3595	A3502	R3441	ASN	LYS	ASP	GLN	ALA	L3140	S3077	K2992	D2924
R3796	K3721	R3596	K3504	E3442	ALA	MET	ALA	GLY	ALA	N3141	I3078	E2994	L2925
F3798	T3722	L3599	K3504	N3443	VAL	GLY	GLY	THR	LYS	I3142	G2995	V2996	R2926
F3799	T3723	L3599	S3505	I3444	SER	GLN	GLN	LEU	ILE	L3143	V2996	D2997	N2927
L3800	E3725	G3595	W3507	K3445	LEU	SER	SER	ASP	LYS	E3145	N2999	V2998	E2931
I3801	I3726	R3596	K3508	S3446	ARG	ALA	ALA	ASP	ALA	Q3147	H3086	N3000	L2932
L3804	T3727	K3599	L3512	I3448	GLN	SER	SER	GLU	THR	N3148	L3089	L3001	K2934
K3805	E3728	K3600	A3513	Q3449	LEU	LYS	LYS	LYS	THR	K3149	ASP	L3004	K2935
Q3806	Q3729	N3601	A3514	D3450	GLU	GLU	CYS	TRP	VAL	V3150	THR	L3004	L2936
T3807	Q3730	G3602	D3515	S3451	ALA	ALA	ALA	ALA	LYS	Q3151	ALA	K3011	G2937
Q3810	K3731	R3603	P3516	L3452	GLU	GLU	TRP	LYS	LYS	GLY	ALA	K3011	K2938
I3811	L3732	Q3604	M3517	I3453	ALA	ALA	ALA	ALA	ALA	LEU	ASN	I3012	F2939
S3812	A3733	L3605	S3518	A3454	ARG	VAL	VAL	THR	PRO	GLN	GLU	R3013	K2939
S3813	K3734	Q3606	L3519	A3454	LYS	ASN	ASN	THR	ALA	GLU	PHE	K3014	N2940
R3814	E3682	L3607	E3520	S3455	LYS	LYS	LYS	LYS	GLU	LEU	LEU	K3017	S2941
F3817	V3735	E3608	N3521	S3459	GLU	GLU	GLU	LEU	LEU	GLU	LYS	C3021	T2942
E3818	E3737	A3522	A3522	F3460	VAL	VAL	VAL	VAL	VAL	GLU	GLU	C3021	A2943
	A3684	I3609	A3523	I3461	LYS	LYS	LYS	LYS	LYS	LEU	LEU	C3021	R2944
	V3685	G3610	I3524	G3462	VAL	VAL	VAL	VAL	VAL	GLU	GLU	C3021	V2945
	T3686	G3611	R3530	A3463	MET	ILE	ILE	PHE	PHE	GLU	GLU	C3021	F2946
	L3687	W3531	W3531	K3467	GLU	GLU	GLU	GLU	GLU	D3027	D3027	M3029	W2947
		P3532	P3532							T3028	T3028	M3029	T2948

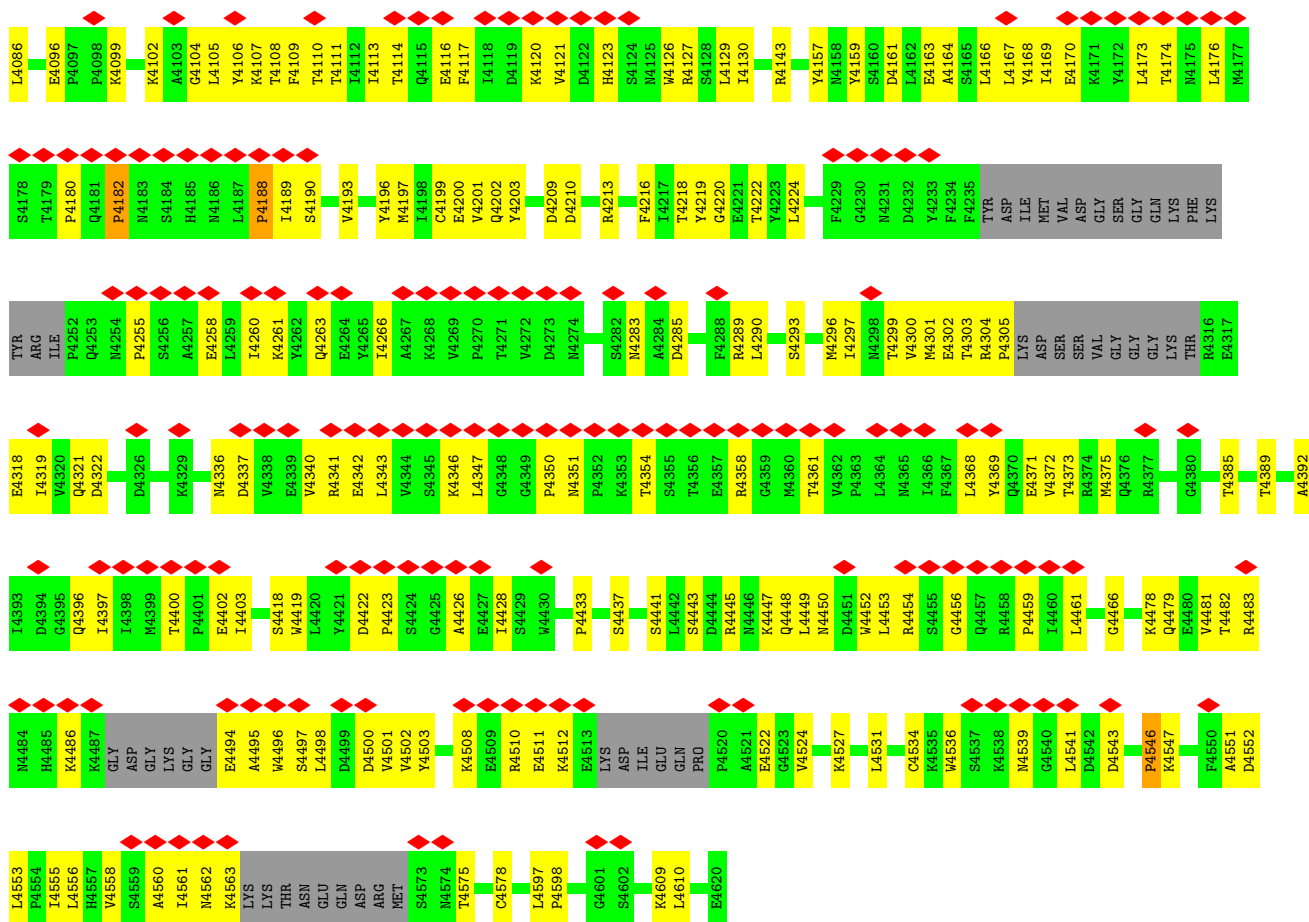




I2051	P1978	F1892	D1802	E1740	M1665	E1589	F1525	Q1446	H1379	F1310	R1228	D1164
L2052	G1979	S1899	V1803	R1741	I1667	L1592	T1526	F1447	W1380	K1311	D1229	M1165
S2053	Y1980	D1900	M1904	L1742	S1668	E1593	G1527	G1448	K1382	E1312	Y1230	Y1166
L2055	A1981	Q1901	D1805	S1743	L1669	K1594	G1528	I1449	I1383	K1313	K1232	P1168
R2056	R1982	H1902	Q1809	R1744	Y1672	R1596	D1529	K1452	E1385	S1314	G1169	G1169
T2057	R1983	R1903	K1810	R1745	Y1673	F1599	I1530	R1463	I1386	W1315	N1233	G1170
A2058	E1985	Y1904	L1811	E1746	V1674	P1600	A1531	D1464	T1387	Q1316	G1234	G1171
G2059	L1986	T1912	T1812	R1747	K1675	R1601	R1532	V1465	N1388	D1317	P1235	I1170
N2060	P1987	A1908	R1813	N1748	G1678	F1602	Q1533	P1456	T1389	V1318	E1238	T1172
T2061	K1991	K1909	W1816	A1749	I1679		M1534	L1459	K1390	S1319	G1239	D1173
Q2064	R1995	G1918	K1817	M1750	I1680	V1605	P1535		L1401	K1320	G1239	K1174
E2065	G1996	L1919	T1818	D1751	W1683	S1606	L1536	L1462	N1391	D1321	D1175	D1175
L2066	V1997	I1924	D1819	K1752	P1607	M1607	Q1537	L1463	N1392	D1321	E1176	E1176
K2067	S1998	E1925	I1820	I1753	P1608	P1608	A1538	V1464	Y1393	D1322	S1241	M1177
S2068	M1999	R1925	D1821	R1754	E1688	T1609	K1539	G1465	E1394	L1323	P1242	D1178
D2069	M2000	D1930	E1822	N1755	Q1689	L1610	Q1540	T1466	A1324	A1244	E1244	A1179
E2070		L1931	I1827	E1756	Q1692	K1612	F1541	I1467	K1325	M1326	L1249	S1181
E2071		E1932	T1828	K1758	L1695	L1613	G1543	E1469	E1403	E1327	F1252	L1182
M2072		S1935	W1830	E1759	K1696	L1614	I1544	R1470	I1404	E1328	E1253	L1183
L2073		V1936	Y1834	H1760	D1697	S1615	D1545	L1471	M1405	D1329	Y1256	R1184
L2074		M1939	R1844	M1761	I1698	Q1616	K1546	D1474	A1407	K1332	K1259	R1185
L2078		Q1940	L1845	L1764	A1699	G1617	W1547	Q1475	K1408	Y1333	Q1261	N1186
R2079		S1943	L1845	S1765	S1700	S1618	M1549	L1476	L1409	C1337	M1282	W1187
D2080		L1944	L1845	S1766	A1701	E1619	M1549	Q1477	L1410	R1339	Y1263	L1188
N2081		T1945	T1848	L1769	A1702	P1620	M1552	L1478	R1413	L1340	I1265	L1190
N2082		T1946	P1949	E1770	A1703	S1622	A1555	F1481	E1417	W1347	R1268	E1195
N2083		T1946	L1850	E1771	A1704	I1623	E1556	N1482	D1418		K1199	K1199
N2087		K1949	T1851	L1772	Q1704	I1623	W1557	H1486	I1419		E1200	E1200
D2088		Q1950	D1852	D1771	Q1705	E1625	I1561	V1487	T1420	R1351	Y1201	Y1201
Q2089		H1951	C1854	G1774	V1706	E1625	I1562	P1489	E1421	D1352	Q1202	Q1202
P2092		M1952	I1855	Q1774	F1707	D1626	I1562	K1423	S1422	L1283	H1203	H1203
N2095		K1953	T1857	A1775	Q1708	F1627	C1564	D1424	A1423	K1354	K1204	K1204
G2096		L1955	L1858	E1777	V1709	E1628	C1564	K1425	Q1426	M1355	Q1205	Q1205
L2097		A1956	A1859	R1778	G1710	K1629	D1568	I1498	L1427	Y1357	A1206	A1206
L2098		F1957	Q1860	L1779	L1711	T1635	M1569	F1501	K1428	D1358	I1207	I1207
D2100		M1862	M1861	K1780	K1712	K1636	M1569		I1429	S1359	Y1208	Y1208
L2101		S1863	M1864	V1781	E1713	V1637	L1570	V1504	K1429	L1291	L1209	L1209
F2102		P1870	L1784	E1782	F1714	T1638	K1571	M1505	R1430	N1292	K1210	K1210
F2103		A1871	V1785	T1783	V1715	F1639	D1572	D1506	E1431	R1361	E1211	E1211
K2104		A1874	Q1788	Q1788	S1716	K1651	L1574	L1508	D1434	Q1263	L1212	L1212
L2105		K1875	T1786	T1787	S1717	Q1652	P1575	D1509	E1435	L1364	K1213	K1213
K2106		T1876	Q1789	Q1789	Q1717	T1654	D1576	M1510	I1436	K1295	Q1214	Q1214
E2107		G1877	H1790	H1790	Q1721	L1654	L1577	W1511	N1437	Y1300	S1215	S1215
V2108		K1878	K1791	K1791	L1727	L1654	M1578	W1512	L1438	D1301	I1216	I1216
G2047		D1884	L1889	D1793	L1730	Q1657	K1580	K1513	Y1439	S1302	K1217	K1217
L2048		L1889		I1794	S1733	Q1658	L1581	Q1515	W1440	V1303	D1218	D1218
R2049				S1795	K1734	V1659	L1581	K1516	N1441	I1304	F1219	F1219
N2050				M1796	V1735	I1660	E1582	K1517	M1442	K1305	T1220	T1220
				D1797	M1736	G1661	D1583	M1443	Q1444	N1306	N1221	N1221
				K1799	E1737	R1662	C1584	M1443	Q1444	I1307	Q1222	Q1222
				C1800	G1738	M1663	Q1585	S1520	F1445	I1375	V1223	V1223
				L1801	L1739	E1664	K1586			M1376	S1224	S1224
							M1588			P1377	F1226	F1226
										R1378	R1227	R1227

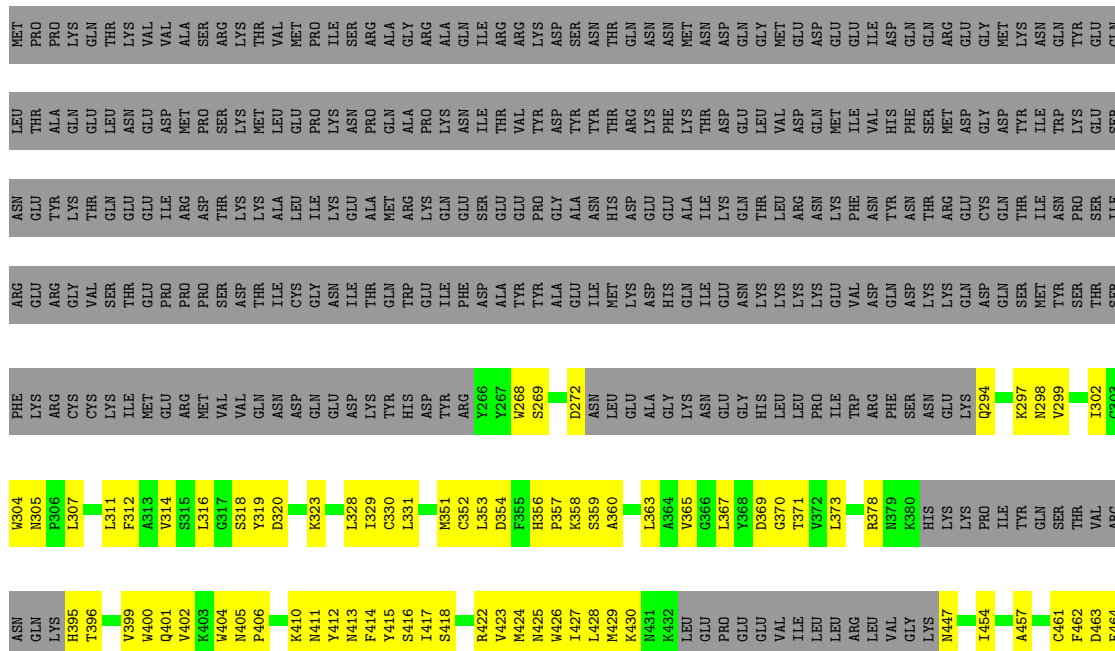
K2118	K2119	T2120	P2121	E2122	E2123	T2124	N2125	L2126	E2127	S2128	Y2129	L2130	T2131	N2132	T2133	F2134	Q2137	L2138	L2143	Y2144	E2145	T2146	L2148	V2149	R2150	H2151	G2152	N2154	G2157	F2158	T2159	T2165	T2166	K2167	K2168	L2169	L2170	T2171	E2172	V2173	L2174	T2175	K2176	L2177	G2178	S2179	F2180	N2181	K2182	N2187	F2188	K2189								
A2190	I2191	T2192	A2193	E2194	Q2195	Y2197	G2198	V2199	K2200	S2201	E2202	T2203	S2204	D2205	D2206	W2207	I2208	G2210	V2211	F2212	S2213	T2214	I2215	A2216	N2220	N2221	R2222	A2223	L2224	K2225	H2226	T2231	P2235	V2236	D2237	A2238	I2239	W2240	N2241	E2242	N2243	L2244	N2245	T2246	V2247	L2248	D2249	D2250	N2251	K2252	I2253	L2254	T2255							
L2256	A2257	N2258	G2259	E2260	R2261	T2262	A2263	M2264	T2265	E2266	N2267	F2272	F2273	V2274	E2275	N2276	L2277	N2278	N2279	A2280	S2281	P2282	T2283	N2284	V2285	S2286	R2287	Y2292	P2295	T2296	D2297	L2298	G2299	V2300	E2301	A2302	V2303	T2304	E2305	G2306	W2307	L2308	R2309	N2310	R2311	K2312	A2313	S2314	G2315	R2316	A2317	E2318	E2319	S2320	D2321	K2322				
L2323	Q2324	N2325	L2326	L2327	R2328	K2329	Y2330	L2331	T2332	M2333	N2334	R2335	F2336	L2337	E2338	L2339	Q2340	S2341	K2342	E2343	C2344	K2345	E2346	F2347	N2348	V2349	M2349	D2350	T2351	S2352	P2353	V2354	L2355	V2356	V2357	T2358	N2359	L2360	L2361	N2362	L2363	L2364	T2365	G2366	C2367	L2368	Q2369	Y2370	F2371	V2372	Q2373	T2374	Q2375	R2376	T2377	L2378	S2379	E2380	Q2381	E2382
Y2383	E2384	K2385	F2386	L2387	V2388	Y2389	S2390	M2391	A2392	T2393	Y2399	E2400	A2401	Q2402	D2403	R2404	V2405	R2406	F2407	H2408	E2409	L2410	L2411	L2412	A2413	K2414	N2415	A2416	P2417	I2418	P2419	Q2420	K2421	G2422	K2423	E2424	N2425	E2426	T2427	V2428	F2429	D2430	Y2431	Y2432	V2433	S2434	Q2435	D2436	Y2437	L2438	D2439	W2440	K2441	I2442	C2443	S2444	E2446			
E2447	W2448	V2449	T2450	Q2451	Q2452	Q2458	L2459	L2460	L2461	P2462	T2463	L2464	D2465	S2466	E2470	F2471	L2472	L2473	N2474	T2475	T2476	L2477	T2478	Q2479	T2480	K2481	S2482	L2483	T2484	C2485	S2486	W2487	S2488	A2489	L2490	G2493	K2499	L2505	Y2506	K2509	F2510	D2511	P2512	Q2513	K2514	M2515	L2516	F2517	T2520	W2521	F2522	S2523								
S2524	A2525	T2526	S2527	P2528	F2529	M2530	F2531	F2541	K2542	V2543	Q2544	K2545	E2546	A2548	K2553	M2554	M2555	T2556	I2557	F2558	L2559	D2560	D2561	M2562	S2563	M2564	P2565	F2566	V2567	N2568	K2569	W2570	G2571	D2572	Q2573	L2574	T2575	L2576	E2577	L2578	V2579	R2580	Q2581	L2582	I2583	E2584	G2587	F2588	Y2589	M2590	L2591	D2592	K2593	T2594	Q2595					
R2596	G2597	N2598	Q2599	R2600	K2601	N2602	K2603	L2605	Q2606	Y2607	L2608	G2609	A2610	N2611	H2613	P2614	G2615	G2616	G2617	R2618	N2619	D2620	L2621	P2622	N2623	R2624	L2625	K2626	R2627	F2628	F2629	F2630	L2631	L2635	L2636	P2637	L2638	S2639	L2640	E2641	G2642	P2646	H2650	M2651	F2652	K2653	Q2654	K2655	Y2656	F2657	S2658	D2659	S2660	T2661						
Y2662	K2663	V2664	L2665	E2666	S2667	S2670	L2673	A2674	W2676	L2675	N2677	K2678	V2679	K2680	S2681	Y2682	M2683	L2684	P2685	T2686	P2687	A2688	F2689	F2690	H2691	F2694	F2703	L2707	T2708	C2709	L2714	N2715	A2717	F2718	K2719	S2720	M2721	K2722	L2723	L2724	N2725	E2726	L2727	V2730	D2743	K2744	L2745	V2746	N2747	N2748										
K2749	D2750	K2751	D2752	T2753	V2754	M2755	Q2756	Y2757	L2758	Q2759	E2760	V2761	S2762	L2763	E2764	S2765	F2766	Q2768	L2769	E2770	N2771	E2772	L2773	L2774	E2775	K2776	Y2777	S2778	S2779	E2780	K2781	T2782	F2783	L2784	D2787	F2788	L2789	R2790	P2791	D2792	V2793	L2794	N2795	E2796	D2797	G2798	L2799	I2800	E2801	E2802	E2803	A2804	P2805	K2806	I2807	T2808	E2809			
L2810	L2811	D2812	T2815	E2816	L2817	R2818	K2819	R2820	L2824	F2827	R2831	S2834	M2837	P2838	L2839	V2840	L2841	F2842	D2843	D2844	A2845	L2846	A2848	H2848	L2849	L2852	S2853	R2854	L2855	T2856	R2857	Q2858	P2859	S2861	S2862	L2865	K2873	Q2874	S2875	L2876	L2877	R2878	L2879	A2880	L2883	N2886	L2887													
L2888	V2893	T2896	Y2897	S2898	D2899	K2900	D2901	L2902	K2903	E2904	D2905	L2906	K2907	D2912	A2913	G2914	K2918	V2919	T2920	T2921	F2922	L2923	M2924	T2925	D2926	S2927	E2928	V2929	K2930	K2931	E2932	F2933	F2934	L2935	E2936	L2938	N2939	M2940	S2943	E2946	I2947	P2948	N2949	L2950	L2951	A2952	K2953	D2954	E2955	S2956	Q2956									
K2965	Y2967	C2968	K2971	N2972	L2973	G2974	N2975	L2976	P2978	T2979	Q2980	S2981	E2982	L2983	V2984	T2985	Y2986	F2987	V2988	K2989	R2990	V2991	F2992	L2993	M2994	T2995	L2996	K2997	C3000	G3005	U3006	R3009	E3010	R3011	A3012	T3013	K3014	N3020	E3021	C3022	W3026	F3027	S3037	V3038	E3040	T3041	K3052	E3053	E3054											

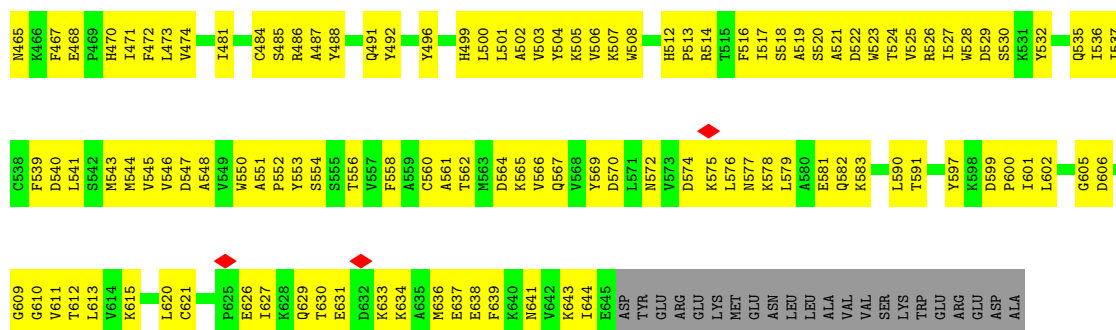
D4003	E4004	L4005	A4006	K4007	K4008	K4009	D3923	E3926	S3927	I3928	N3929	Q3930	E3931	K3932	E3933	I3934	G3935	R3947	N3948	R3949	R3950	T3951	L3952	T3955	Q3956	N3957	F3958	I3959	S3960	K3965	E3966	D3969	P3970	I3971	S3972	L3999	S4001	I4002																		
F3826	I3827	L3828	S3852	GLY	ASP	ALA	LEU	ILE	LYS	SER	GLU	ARG	K3863	K3864	Q3865	I3866	S3867	Y3868	L3869	E3870	W3874	T3877	L3878	A3879	K3882	HIS	THR	PHE	SER	GLY	GLN	THR	LEU	P3891	E3895	L3896	P3897	D3898	L3899	I3900	R3901	R3902	S3903	E3904	N3905	Q3906	W3907	N3908	N3909	W3910	I3911	D3912	K3913			
K3729	L3730	I3731	D3732	A3733	E3734	I3735	K3736	T3737	K3738	E3739	I3740	N3741	E3742	K3743	K3744	E3745	Y3747	K3748	P3749	E3763	V3764	L3765	L3766	V3767	N3768	F3769	M3770	L3775	L3779	E3784	D3787	L3788	S3789	E3790	K3791	A3792	Q3793	L3794	P3795	S3796	N3797	K3798	V3799	K3800	N3801	I3802	F3805	Y3811	I3824	T3825						
A3669	L3670	E3671	S3673	L3674	N3675	Q3676	L3677	L3678	A3679	D3680	V3681	N3682	Q3683	N3684	Q3685	K3686	D3687	L3688	Q3689	R3690	L3691	D3692	K3693	N3694	L3695	E3697	R3698	L3699	I3700	N3701	S3702	Q3703	G3704	N3705	L3706	L3707	D3708	D3709	T3710	E3711	L3712	M3713	D3714	V3715	L3716	N3717	N3718	T3719	K3720	T3721	Q3722	K3724	E3725	V3726	A3727	A3728
E3596	ARG	GLN	ILE	VAL	LYS	LYS	THR	THR	GLN	PHE	VAL	ASN	ALA	GLY	THR	GLU	MET	L3617	F3621	M3625	T3626	C3627	R3628	L3629	A3630	N3631	P3632	S3633	F3634	S3635	I3644	I3645	T3648	V3649	T3650	Q3651	S3652	G3653	L3654	E3655	Q3656	L3659	V3662	I3663	S3664	K3665	E3666	Q3667	K3668							
N3523	P3528	L3529	F3530	I3531	D3532	P3533	Q3534	G3535	Q3538	N3539	W3540	I3541	R3542	N3543	K3544	L3545	S3546	A3547	SER	ILE	PRO	GLU	ARG	CYS	I3555	T3556	T3557	L3558	H3560	P3561	K3562	K3563	K3564	M3566	K3569	Y3570	C3571	L3576	T3577	L3578	I3579	V3580	E3581	N3582	I3583	E3584	N3585	E3586	V3587	D3588	P3589	M3590				
I3436	S3437	D3438	Q3439	K3442	L3443	Y3447	T3451	T3454	F3460	N3461	E3462	E3463	Y3464	R3465	N3466	K3467	L3468	Q3471	R3472	F3473	V3474	V3475	D3476	K3477	K3478	K3479	R3480	G3481	V3482	P3483	V3484	T3485	P3486	G3487	L3488	E3489	L3490	D3496	D3497	E3502	L3505	Q3506	G3507	D3512	Q3516	M3520										
ASP	LEU	ALA	GLN	ILE	ALA	TYR	LYS	ASN	LYS	ASP	VAL	THR	LYS	GLN	MET	GLU	ASN	GLU	GLU	MET	LYS	ALA	LYS	LYS	THR	ASN	THR	ALA	ARG	LEU	ILE	THR	SER	THR	SER	G3424	E3425	K3426	D3427	R3428	W3429	G3430	K3431	G3432	A3433	Q3434	D3435									
THR	PHE	ASN	THR	PHE	ALA	THR	LYS	ALA	ALA	GLY	ILE	LYS	TRP	LYS	PHE	GLY	ILE	TYR	HIS	GLN	LYS	ALA	SER	LYS	ILE	GLN	VAL	ASP	ALA	THR	ALA	ARG	GLY	THR	SER	THR	Q3424	E3425	K3426	D3427	R3428	W3429	G3430	K3431	G3432	A3433	Q3434	D3435								
ARG	VAL	PHE	ASN	LYS	GLY	LYS	ALA	VAL	PHE	LEU	GLY	ALA	THR	LYS	GLY	ILE	TYR	HIS	GLN	LYS	ALA	SER	LYS	ILE	GLN	VAL	ASP	ALA	THR	ALA	ARG	GLY	THR	SER	THR	Q3424	E3425	K3426	D3427	R3428	W3429	G3430	K3431	G3432	A3433	Q3434	D3435									
ILE	SER	LEU	LYS	GLU	GLU	ILE	GLN	ASN	ALA	THR	GLY	LYS	THR	ASN	GLN	LEU	LEU	LYS	GLY	THR	LYS	VAL	ILE	GLY	ASN	ASN	LYS	VAL	ASP	ALA	THR	SER	THR	SER	THR	Q3424	E3425	K3426	D3427	R3428	W3429	G3430	K3431	G3432	A3433	Q3434	D3435									



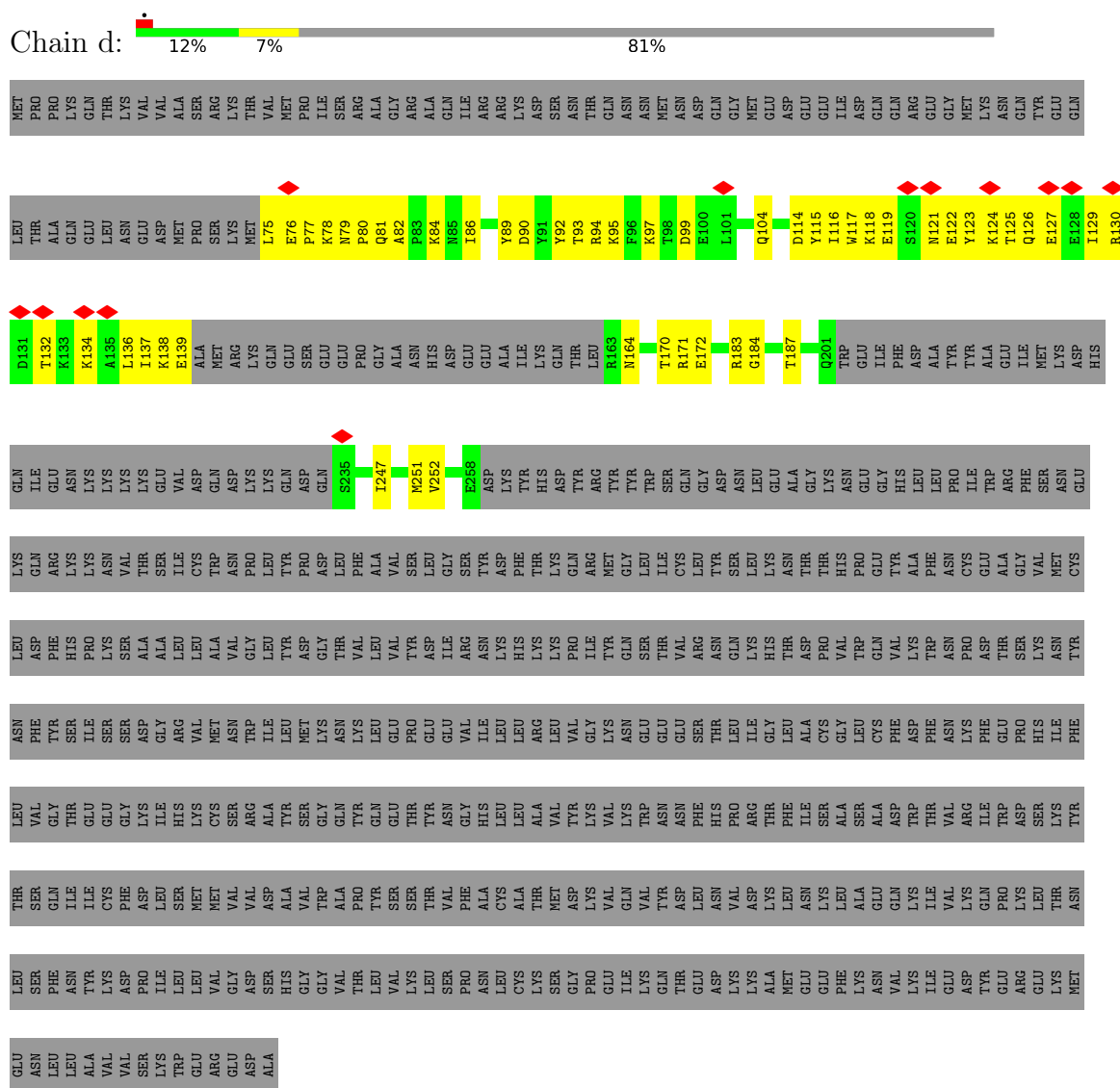
• Molecule 4: Dynein intermediate chain 2

Chain D: 21% 28% 50%

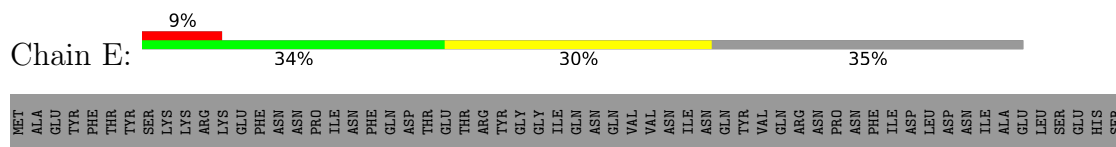




• Molecule 4: Dynein intermediate chain 2

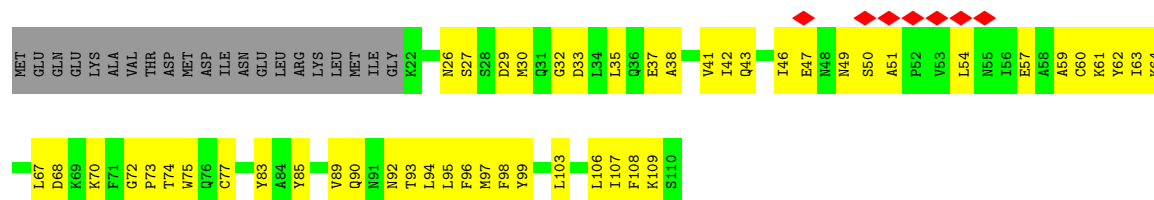


• Molecule 5: Flagellar outer dynein arm intermediate protein, putative



- Molecule 5: Flagellar outer dynein arm intermediate protein, putative

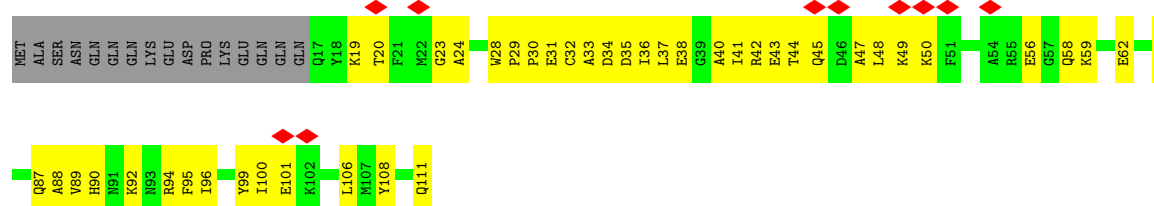
[illegible]



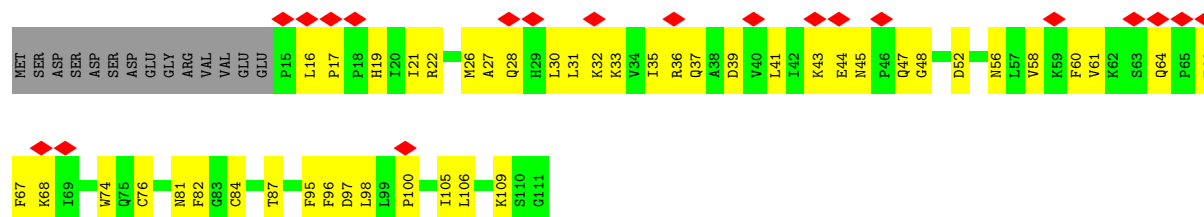
• Molecule 10: Dynein light chain



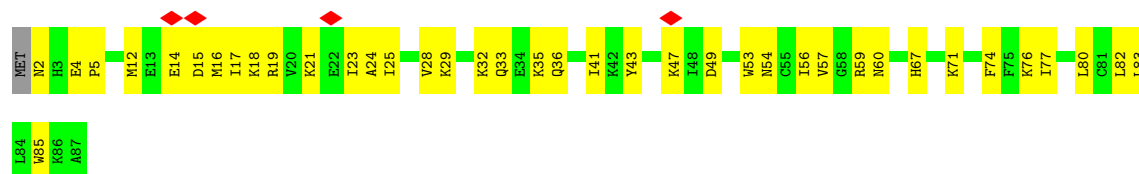
• Molecule 11: Dynein light chain



• Molecule 12: Dynein light chain

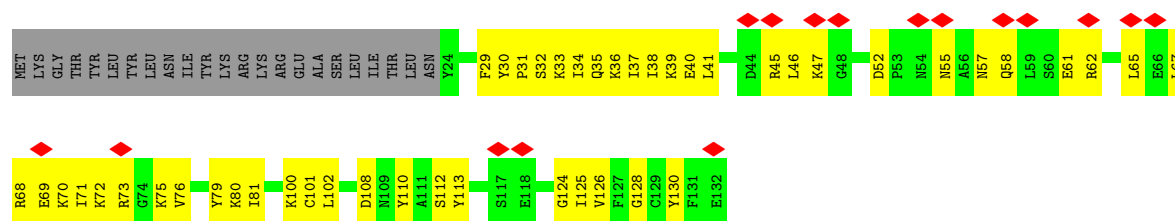


• Molecule 13: Dynein light chain

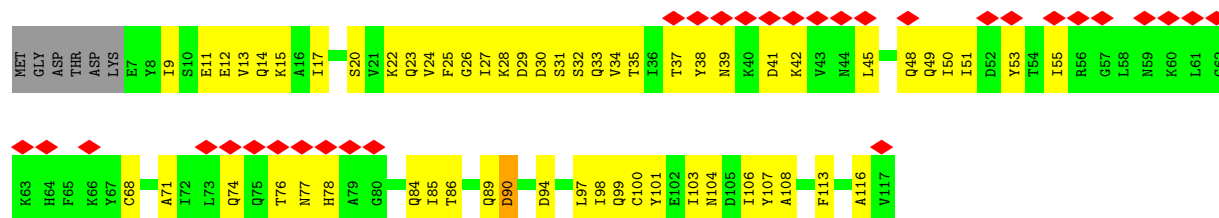


• Molecule 14: Dynein light chain 2A

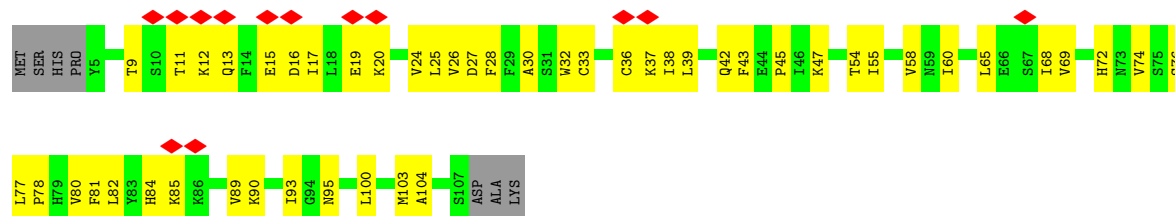




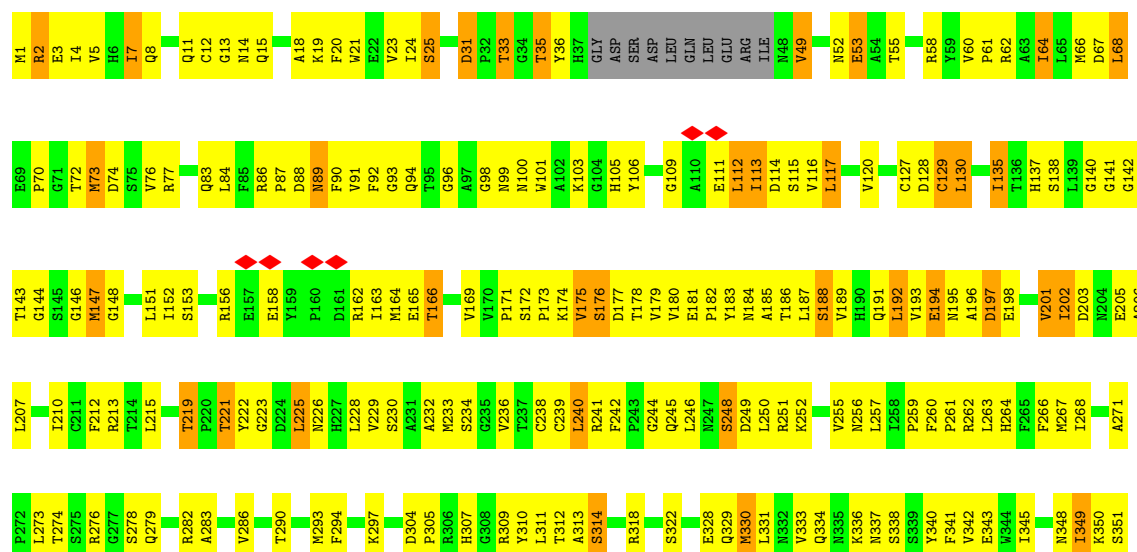
• Molecule 15: Dynein light chain tctex-type 1 protein

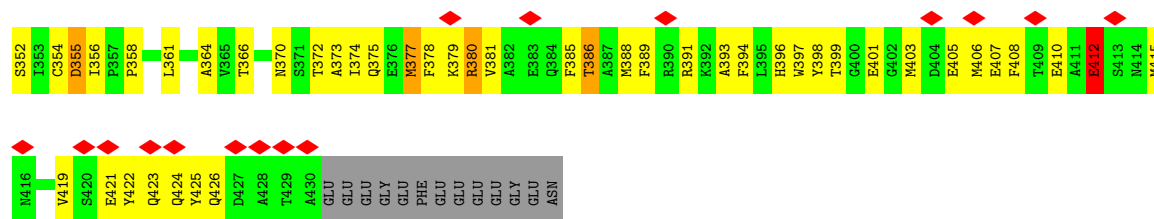


• Molecule 16: Thioredoxin

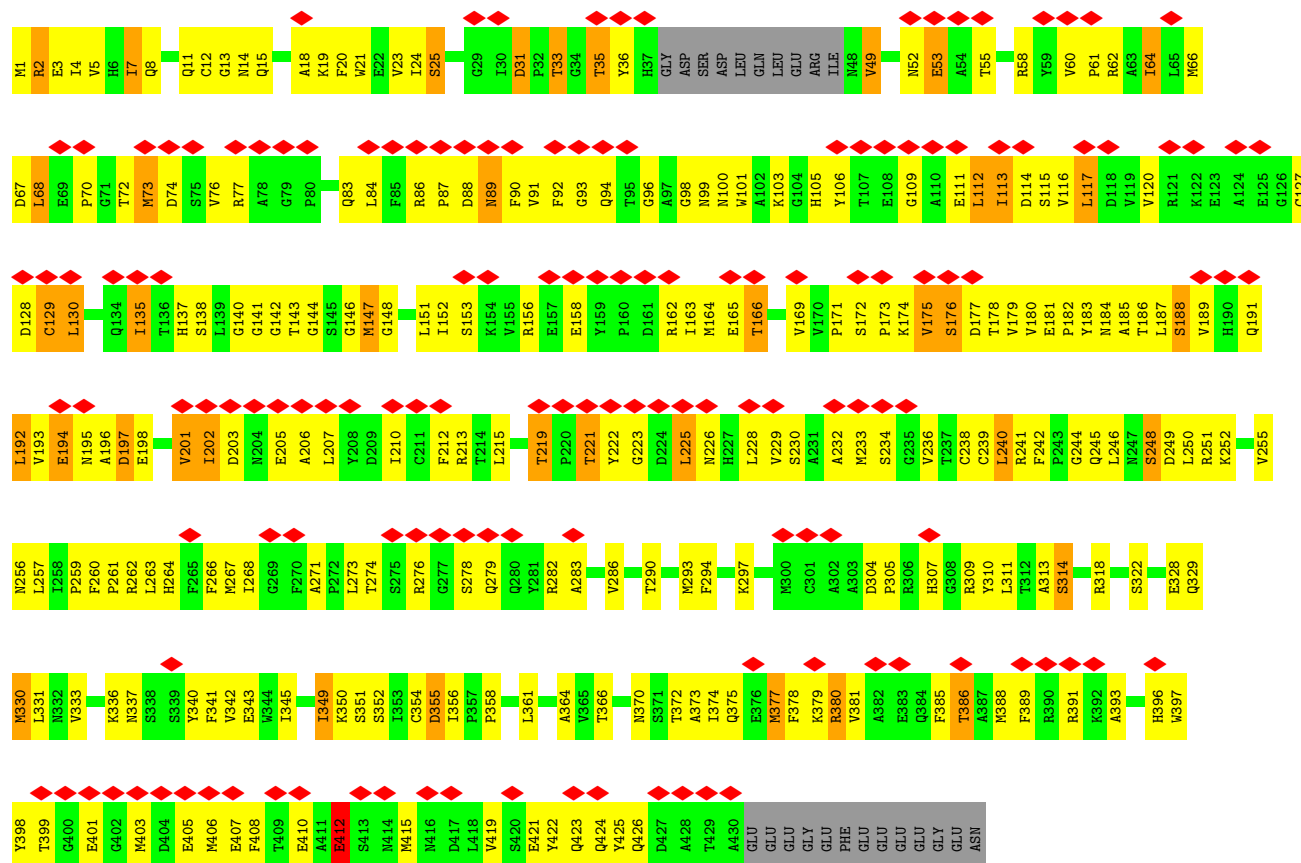


• Molecule 17: Tubulin beta chain

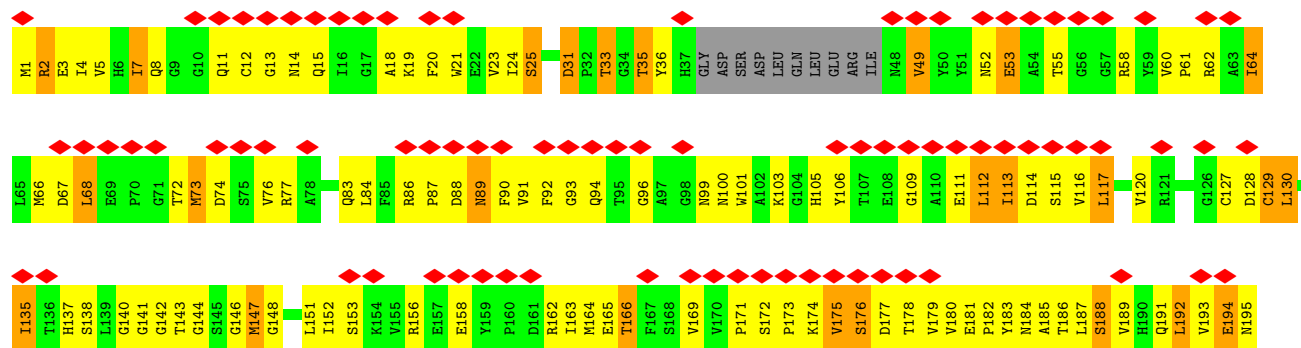
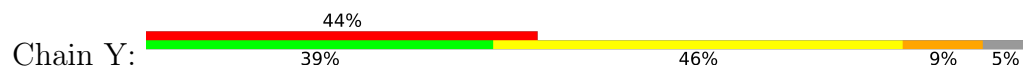


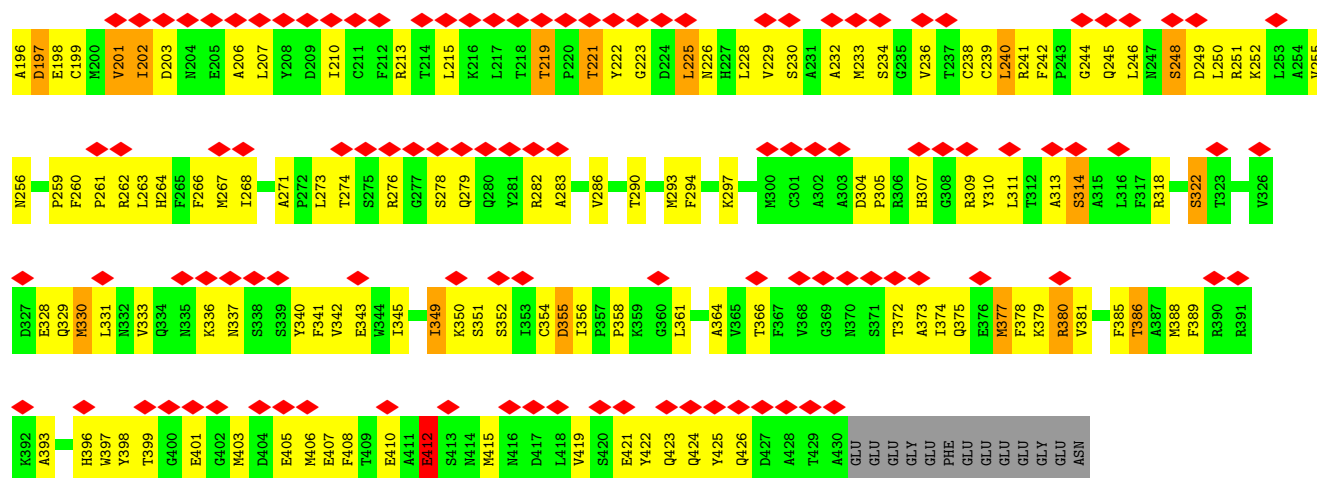


• Molecule 17: Tubulin beta chain

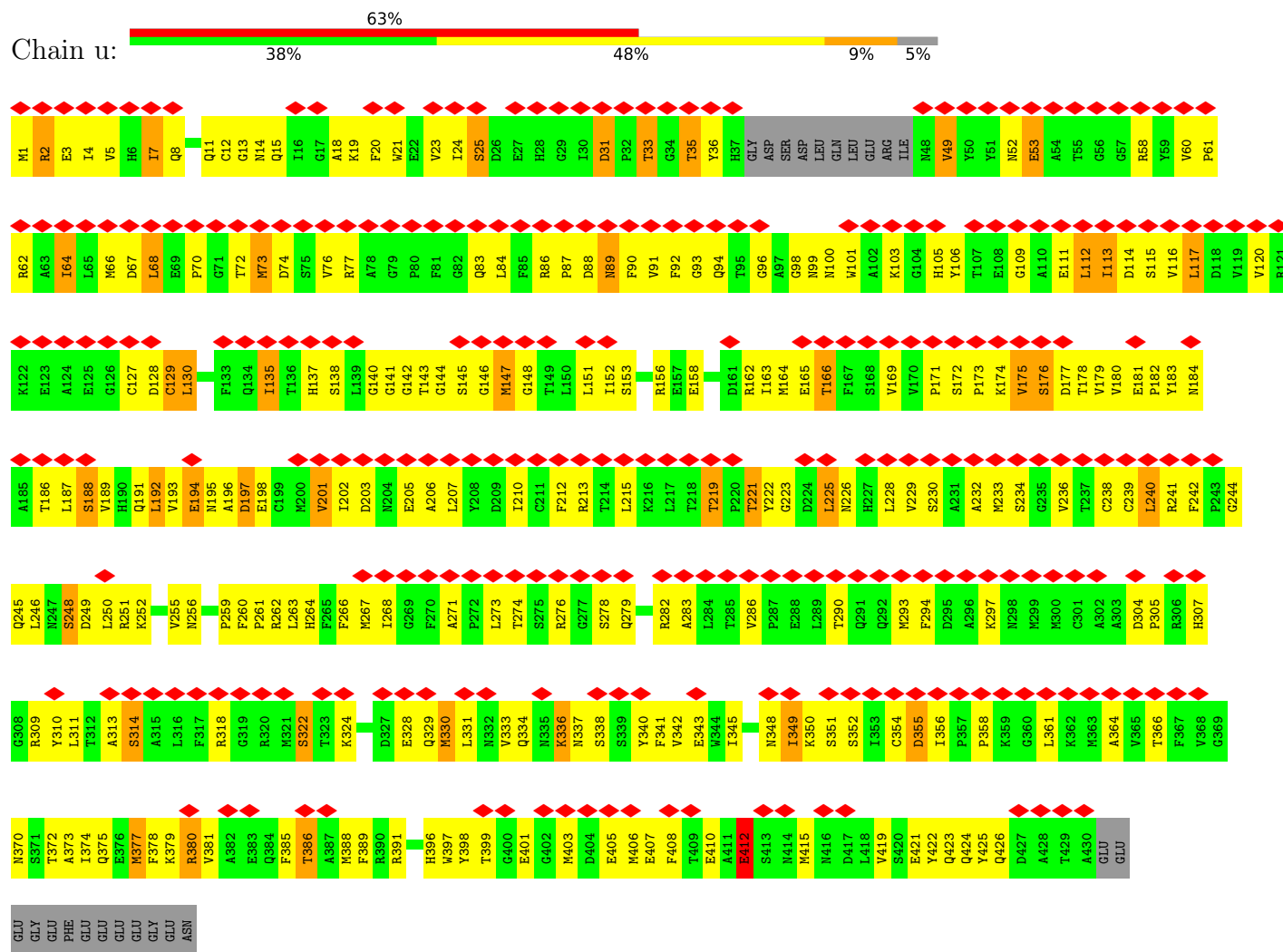


• Molecule 17: Tubulin beta chain



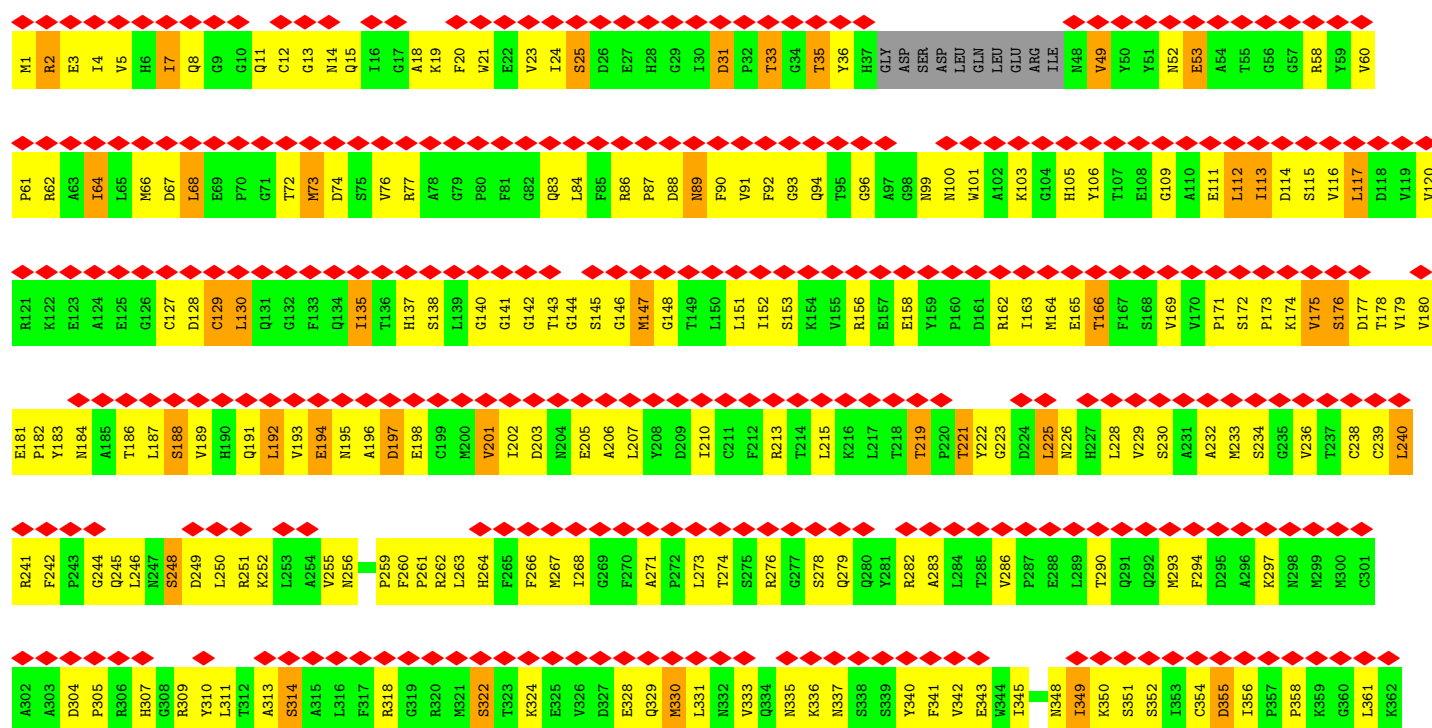


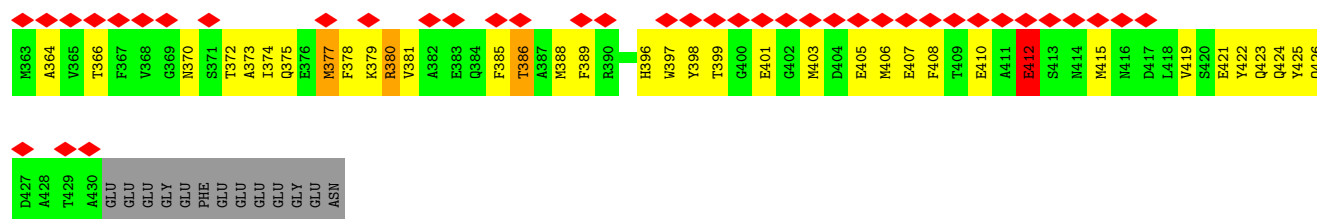
• Molecule 17: Tubulin beta chain



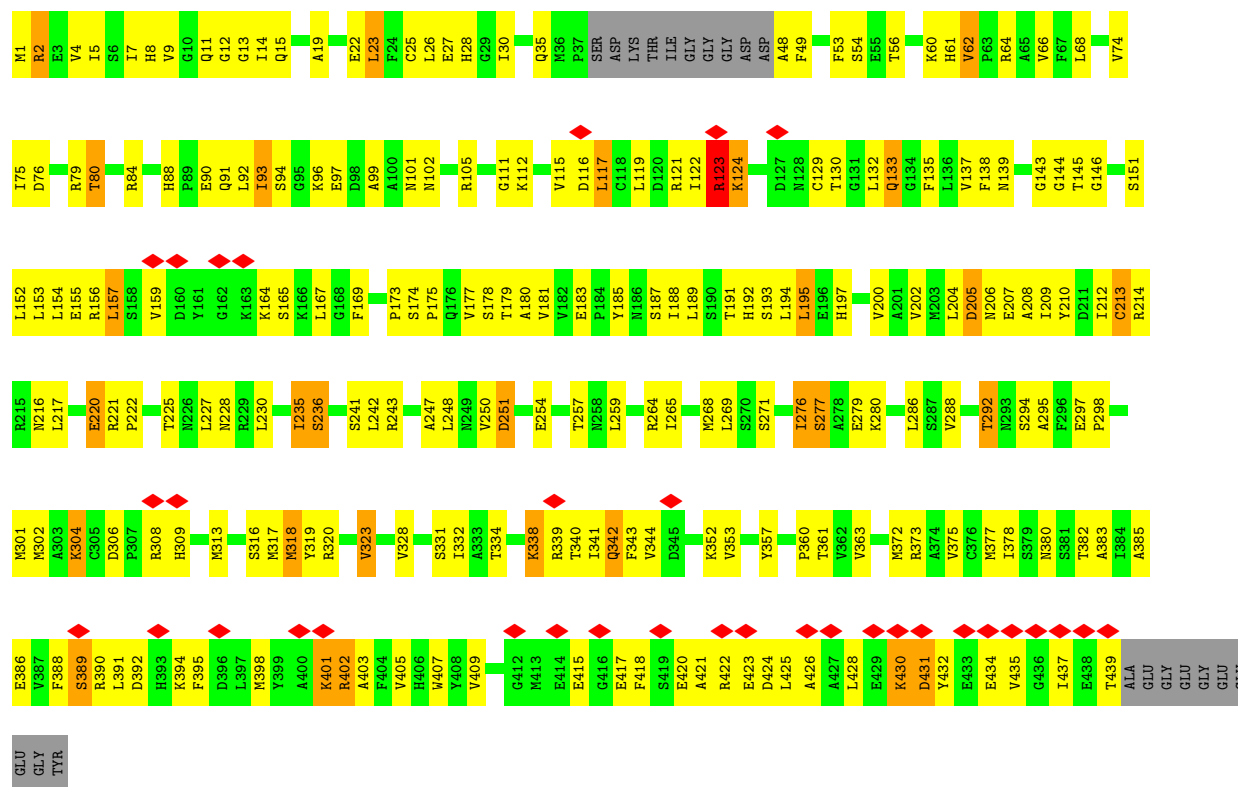
• Molecule 17: Tubulin beta chain



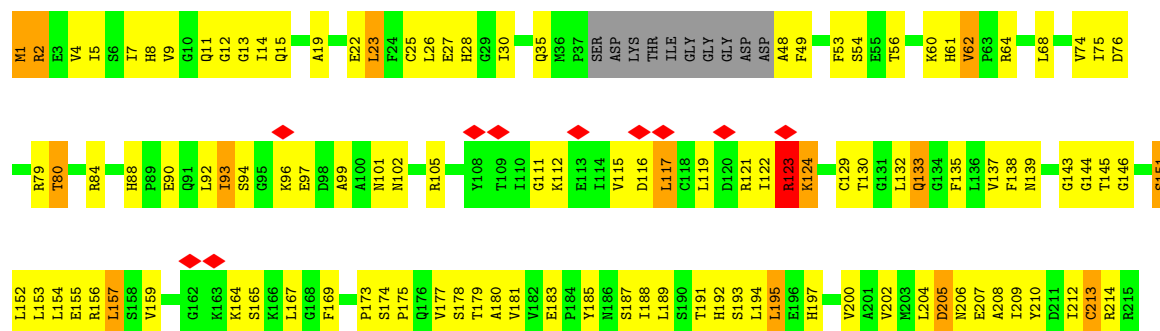


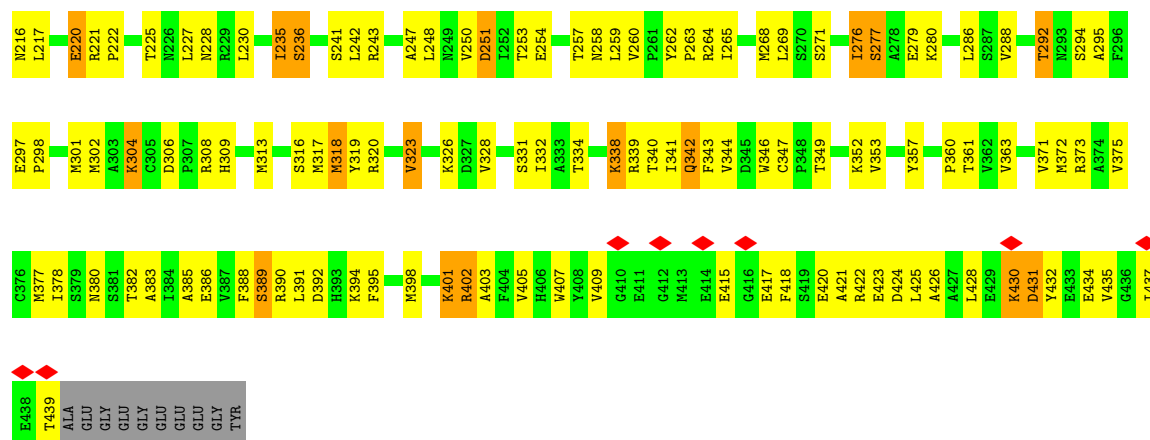


• Molecule 18: Tubulin alpha chain

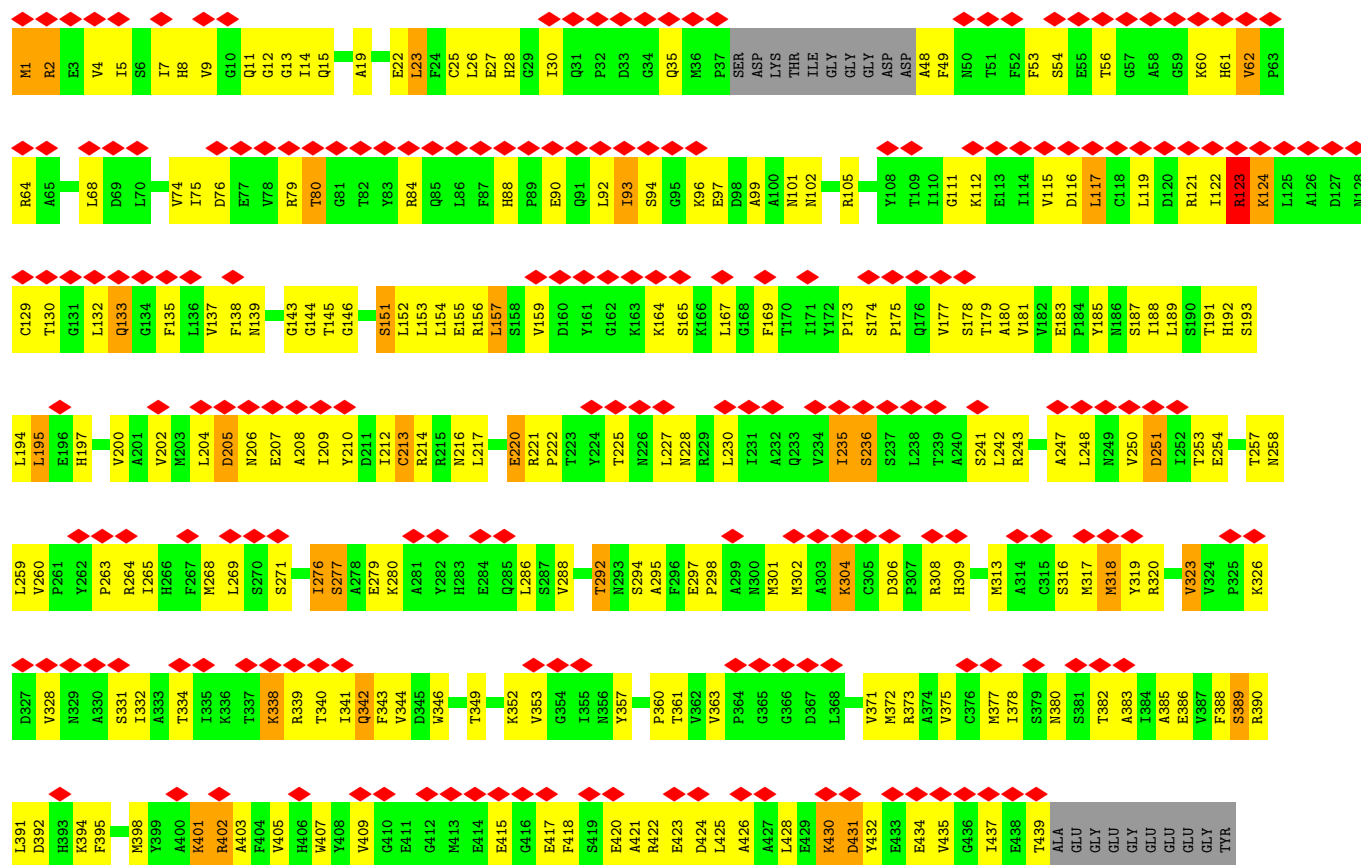


• Molecule 18: Tubulin alpha chain

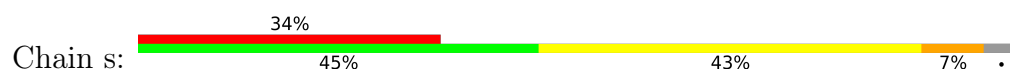


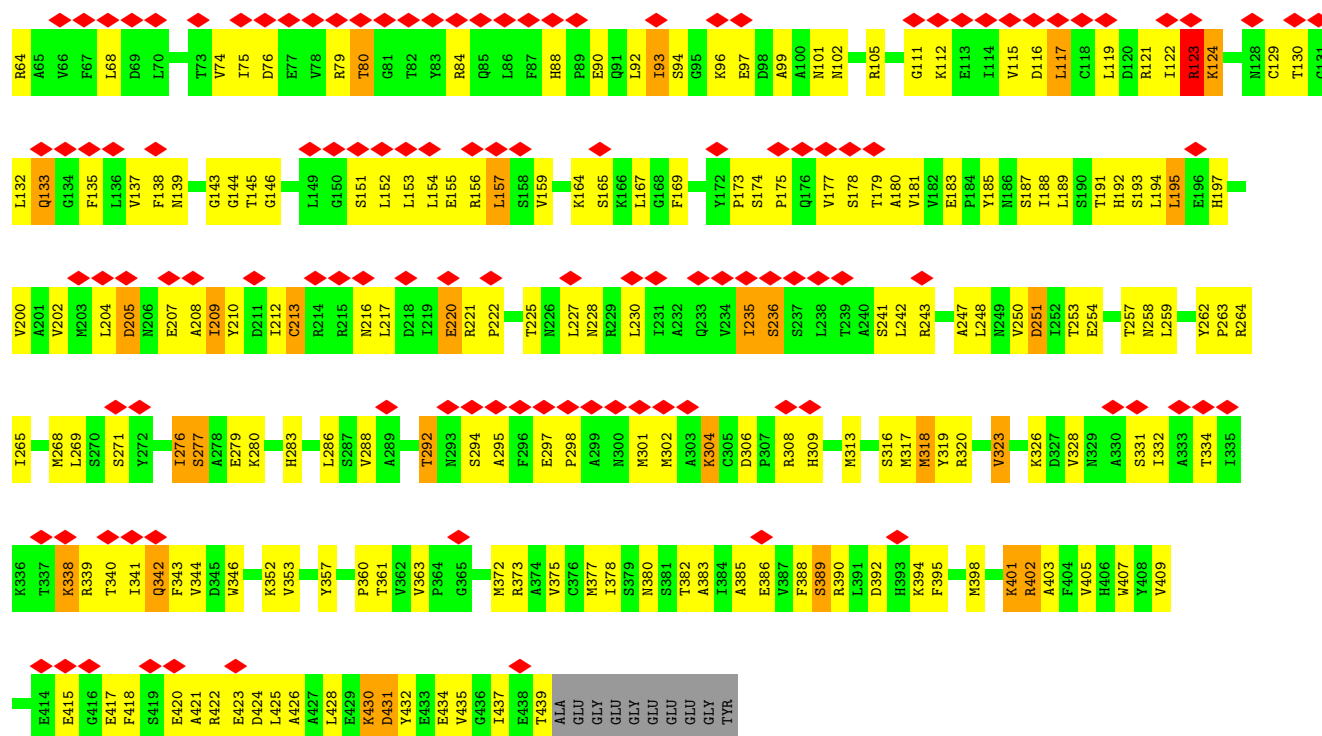


• Molecule 18: Tubulin alpha chain

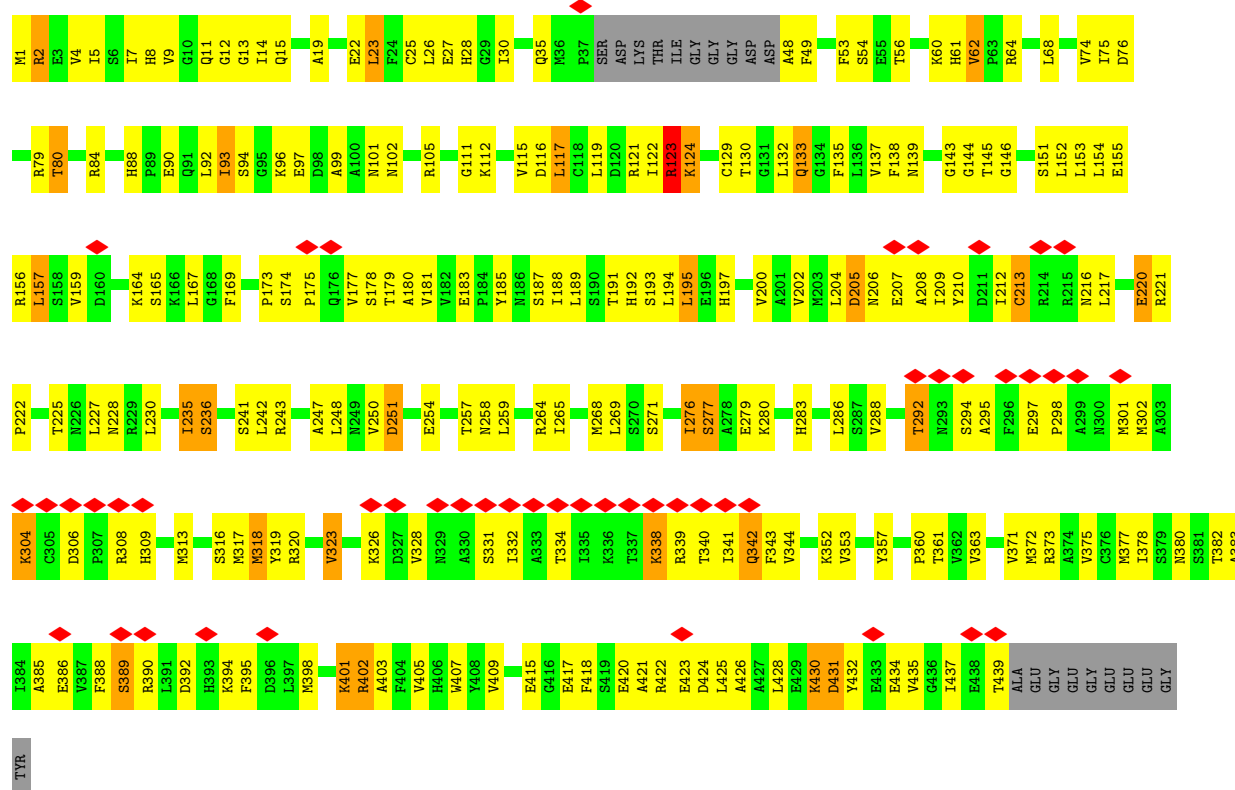


• Molecule 18: Tubulin alpha chain

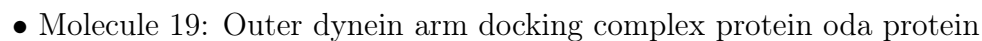


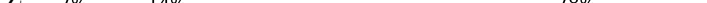


• Molecule 18: Tubulin alpha chain



• Molecule 18: Tubulin alpha chain



- Chain Z: 

[illegible]

4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	139548	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	45	Depositor
Minimum defocus (nm)	1200	Depositor
Maximum defocus (nm)	3000	Depositor
Magnification	59000	Depositor
Image detector	GATAN K2 QUANTUM (4k x 4k)	Depositor
Maximum map value	14.861	Depositor
Minimum map value	-5.362	Depositor
Average map value	0.626	Depositor
Map value standard deviation	2.312	Depositor
Recommended contour level	3.1	Depositor
Map size (Å)	313.95, 232.05, 461.37	wwPDB
Map dimensions	169, 85, 115	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	2.73, 2.73, 2.73	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: GTP, ATP, MG, GDP, ADP

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	0.22	0/2778	0.59	1/3776 (0.0%)
2	B	0.25	1/33725 (0.0%)	0.54	17/45530 (0.0%)
3	C	0.21	1/34189 (0.0%)	0.49	16/46162 (0.0%)
4	D	0.23	0/2737	0.51	0/3707
4	d	0.24	0/973	0.51	0/1319
5	E	0.24	0/3334	0.52	3/4523 (0.1%)
5	e	0.22	0/687	0.72	2/940 (0.2%)
6	F	0.22	0/793	0.54	0/1070
7	G	0.19	0/751	0.45	0/1014
8	H	0.16	0/718	0.37	0/965
9	I	0.19	0/705	0.45	0/954
10	J	0.15	0/723	0.41	0/966
11	K	0.24	0/828	0.59	0/1114
12	L	0.18	0/790	0.44	0/1063
13	M	0.19	0/743	0.42	0/996
14	N	0.26	0/915	0.58	0/1229
15	O	0.18	0/891	0.47	0/1209
16	P	0.22	0/866	0.46	0/1171
17	Q	0.26	0/3359	0.64	1/4546 (0.0%)
17	U	0.26	0/3359	0.64	1/4546 (0.0%)
17	Y	0.26	0/3359	0.64	1/4546 (0.0%)
17	q	0.26	0/3359	0.64	1/4546 (0.0%)
17	u	0.26	0/3359	0.64	1/4546 (0.0%)
17	y	0.26	0/3359	0.64	1/4546 (0.0%)
18	R	0.25	0/3413	0.58	1/4625 (0.0%)
18	S	0.25	0/3413	0.58	1/4625 (0.0%)
18	W	0.25	0/3413	0.58	1/4625 (0.0%)
18	r	0.25	0/3413	0.58	1/4625 (0.0%)
18	s	0.25	0/3413	0.58	1/4625 (0.0%)
18	w	0.24	0/3413	0.58	1/4625 (0.0%)
19	T	0.19	0/1070	0.44	0/1436
21	X	0.20	0/1164	0.49	0/1556

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
22	Z	0.21	0/998	0.53	0/1323
All	All	0.24	2/131010 (0.0%)	0.55	51/177049 (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
1	A	0	1
2	B	0	11
3	C	0	3
18	R	0	1
18	S	0	1
18	W	0	1
18	r	0	1
18	s	0	1
18	w	0	1
22	Z	0	1
All	All	0	22

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	77	GLN	N-CA	10.07	1.65	1.46
3	C	2876	LEU	C-N	5.23	1.41	1.33

All (51) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	e	106	PRO	N-CA-CB	13.37	110.41	102.92
2	B	3951	PRO	N-CA-CB	10.73	110.00	102.81
2	B	4432	PRO	N-CA-CB	10.36	114.13	103.25
2	B	1330	TRP	CA-CB-CG	9.31	131.29	113.60
2	B	2455	SER	N-CA-C	-8.34	100.15	110.41
3	C	2879	LEU	CA-C-N	-8.23	108.99	122.65
3	C	2879	LEU	C-N-CA	-8.23	108.99	122.65
3	C	2978	PRO	N-CA-CB	8.10	110.93	103.08
3	C	4182	PRO	N-CA-CB	7.92	111.56	103.25
2	B	4431	ASP	CA-C-N	7.89	129.71	119.84
2	B	4431	ASP	C-N-CA	7.89	129.71	119.84
3	C	4188	PRO	N-CA-CB	7.83	111.47	103.25

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	3703	PRO	N-CA-CB	7.66	111.29	103.25
2	B	4008	PRO	N-CA-CB	7.38	111.00	103.25
3	C	2979	PRO	N-CA-CB	7.24	110.85	103.25
3	C	2805	PRO	N-CA-CB	7.22	110.18	103.39
3	C	4180	PRO	N-CA-CB	7.08	110.68	103.25
3	C	4546	PRO	N-CA-CB	7.02	110.62	103.25
5	e	81	PRO	N-CA-CB	6.99	110.69	103.00
2	B	2557	PRO	N-CA-CB	6.91	110.51	103.25
3	C	3483	PRO	N-CA-CB	6.90	110.19	102.67
2	B	2583	MET	N-CA-C	6.71	119.17	107.49
2	B	1652	PRO	N-CA-CB	6.48	110.05	103.25
2	B	956	LEU	CA-CB-CG	-6.32	94.17	116.30
3	C	1878	LYS	CD-CE-NZ	-6.27	91.85	111.90
2	B	2499	TYR	N-CA-C	6.20	116.75	108.38
5	E	580	PRO	N-CA-CB	6.09	110.03	103.33
17	u	412	GLU	CA-CB-CG	5.98	126.05	114.10
17	q	412	GLU	CA-CB-CG	5.97	126.03	114.10
17	U	412	GLU	CA-CB-CG	5.95	126.00	114.10
17	Y	412	GLU	CA-CB-CG	5.95	126.00	114.10
17	Q	412	GLU	CA-CB-CG	5.94	125.97	114.10
17	y	412	GLU	CA-CB-CG	5.93	125.95	114.10
5	E	592	PRO	N-CA-CB	5.89	110.04	103.44
2	B	2461	PHE	CB-CA-C	5.86	122.08	110.42
3	C	3665	LYS	CA-C-N	-5.72	110.86	122.31
3	C	3665	LYS	C-N-CA	-5.72	110.86	122.31
2	B	2455	SER	CA-C-O	-5.66	115.53	121.99
2	B	1416	LEU	CA-CB-CG	-5.30	97.75	116.30
1	A	340	GLY	N-CA-C	5.29	118.20	111.85
5	E	152	LEU	CB-CG-CD1	-5.14	95.29	110.70
18	r	123	ARG	CA-CB-CG	5.12	124.34	114.10
3	C	3648	THR	CA-C-N	-5.11	112.76	121.97
3	C	3648	THR	C-N-CA	-5.11	112.76	121.97
18	R	123	ARG	CA-CB-CG	5.10	124.30	114.10
18	s	123	ARG	CA-CB-CG	5.10	124.30	114.10
18	w	123	ARG	CA-CB-CG	5.10	124.30	114.10
18	S	123	ARG	CA-CB-CG	5.09	124.29	114.10
3	C	3695	LEU	CA-CB-CG	5.09	134.11	116.30
18	W	123	ARG	CA-CB-CG	5.07	124.25	114.10
2	B	1782	LEU	N-CA-C	-5.04	101.11	108.07

There are no chirality outliers.

All (22) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	282	ARG	Peptide
2	B	1415	ILE	Peptide
2	B	2135	PRO	Peptide
2	B	2229	LYS	Peptide
2	B	2454	ASP	Peptide
2	B	2461	PHE	Peptide
2	B	2583	MET	Peptide
2	B	3048	PHE	Peptide
2	B	3538	GLN	Peptide
2	B	4049	THR	Peptide
2	B	4555	ASN	Peptide
2	B	966	LYS	Peptide
3	C	2876	LEU	Peptide
3	C	3666	GLU	Peptide
3	C	974	GLN	Peptide
18	R	401	LYS	Peptide
18	S	401	LYS	Peptide
18	W	401	LYS	Peptide
22	Z	195	ILE	Peptide
18	r	401	LYS	Peptide
18	s	401	LYS	Peptide
18	w	401	LYS	Peptide

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	2698	0	2574	196	0
2	B	33080	0	33110	2062	0
3	C	33529	0	33455	1646	0
4	D	2669	0	2619	189	0
4	d	957	0	836	72	0
5	E	3264	0	3004	253	0
5	e	684	0	481	40	0
6	F	781	0	791	48	0
7	G	744	0	771	43	0
8	H	702	0	686	57	0
9	I	694	0	684	47	0
10	J	702	0	671	27	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
11	K	803	0	766	83	0
12	L	773	0	806	50	0
13	M	726	0	726	35	0
14	N	897	0	911	75	0
15	O	878	0	868	55	0
16	P	847	0	836	48	0
17	Q	3287	0	3180	240	0
17	U	3287	0	3180	229	0
17	Y	3287	0	3180	212	0
17	q	3287	0	3180	224	0
17	u	3287	0	3180	223	0
17	y	3287	0	3180	214	0
18	R	3342	0	3289	176	0
18	S	3342	0	3289	208	0
18	W	3342	0	3289	198	0
18	r	3342	0	3289	179	0
18	s	3342	0	3289	197	0
18	w	3342	0	3289	191	0
19	T	1057	0	1032	35	0
20	V	490	0	102	4	0
20	x	505	0	105	7	0
21	X	1149	0	1162	241	0
22	Z	993	0	1031	228	0
23	C	54	0	19	31	0
24	C	31	0	9	3	0
25	Q	28	0	12	3	0
25	U	28	0	12	3	0
25	Y	28	0	12	3	0
25	q	28	0	12	3	0
25	u	28	0	12	3	0
25	y	28	0	12	3	0
26	R	32	0	12	5	0
26	S	32	0	12	5	0
26	W	32	0	12	5	0
26	r	32	0	12	5	0
26	s	32	0	12	5	0
26	w	32	0	12	5	0
27	R	1	0	0	0	0
27	S	1	0	0	0	0
27	W	1	0	0	0	0
27	r	1	0	0	0	0
27	s	1	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
27	w	1	0	0	0	0
All	All	129847	0	127013	7395	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 29.

All (7395) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:X:197:LYS:CD	22:Z:192:MET:HB2	1.28	1.58
21:X:201:PHE:CZ	22:Z:195:ILE:HD12	1.38	1.58
21:X:204:LEU:CD1	22:Z:199:ALA:HB2	1.26	1.54
21:X:180:ARG:CZ	22:Z:171:ARG:CD	1.83	1.51
21:X:180:ARG:NH2	22:Z:171:ARG:HD2	1.20	1.49
21:X:180:ARG:NH1	22:Z:171:ARG:HB3	1.29	1.44
21:X:201:PHE:CE2	22:Z:195:ILE:CD1	2.03	1.42
21:X:197:LYS:NZ	22:Z:189:ARG:CA	1.80	1.41
21:X:180:ARG:NH1	22:Z:171:ARG:CB	1.85	1.39
21:X:197:LYS:NZ	22:Z:189:ARG:HA	1.05	1.36
21:X:201:PHE:CZ	22:Z:191:GLN:O	1.76	1.36
21:X:204:LEU:HD13	22:Z:199:ALA:CB	1.54	1.36
21:X:201:PHE:CE2	22:Z:195:ILE:HD12	1.59	1.35
21:X:197:LYS:HZ3	22:Z:189:ARG:CA	1.39	1.31
21:X:180:ARG:NH1	22:Z:171:ARG:CG	1.97	1.27
21:X:201:PHE:HE1	22:Z:194:ASN:C	1.42	1.24
21:X:180:ARG:NE	22:Z:171:ARG:HD3	1.50	1.23
21:X:197:LYS:HG2	22:Z:192:MET:SD	1.79	1.23
21:X:197:LYS:CG	22:Z:192:MET:HB2	1.71	1.19
21:X:197:LYS:CD	22:Z:192:MET:CB	2.20	1.19
21:X:187:LEU:CD2	22:Z:181:LEU:HD22	1.75	1.17
21:X:180:ARG:CZ	22:Z:171:ARG:CG	2.19	1.17
21:X:201:PHE:CE1	22:Z:194:ASN:HB2	1.80	1.15
21:X:204:LEU:CD1	22:Z:199:ALA:CB	2.17	1.15
21:X:201:PHE:CE1	22:Z:194:ASN:C	2.26	1.14
21:X:198:GLU:HG3	22:Z:188:LYS:NZ	1.62	1.14
21:X:204:LEU:HD11	22:Z:199:ALA:HB2	1.19	1.13
3:C:2877:THR:HA	23:C:4703:ADP:C5	1.82	1.13
21:X:180:ARG:NH2	22:Z:171:ARG:CD	1.97	1.12
21:X:197:LYS:HD3	22:Z:192:MET:CB	1.79	1.12
21:X:180:ARG:CZ	22:Z:171:ARG:HD3	1.61	1.11
21:X:194:LEU:HD12	22:Z:185:LEU:HD22	1.25	1.11

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:X:201:PHE:CD2	22:Z:195:ILE:HD11	1.83	1.11
3:C:2873:LYS:O	3:C:2877:THR:HB	1.51	1.10
21:X:201:PHE:CE1	22:Z:195:ILE:N	2.20	1.10
21:X:187:LEU:HD22	22:Z:181:LEU:HD22	1.11	1.08
21:X:197:LYS:HD3	22:Z:192:MET:HB2	1.09	1.08
21:X:201:PHE:CZ	22:Z:195:ILE:CD1	2.30	1.06
21:X:197:LYS:NZ	22:Z:189:ARG:CB	2.20	1.05
21:X:204:LEU:HD13	22:Z:199:ALA:CA	1.87	1.04
22:Z:142:ARG:HA	22:Z:145:LYS:HE2	1.39	1.04
21:X:194:LEU:CD1	22:Z:185:LEU:HD22	1.87	1.03
21:X:197:LYS:CE	22:Z:192:MET:HB2	1.88	1.03
21:X:179:GLU:O	21:X:183:TYR:CD2	2.11	1.03
21:X:197:LYS:HE2	22:Z:192:MET:CB	1.88	1.03
21:X:201:PHE:CE1	22:Z:194:ASN:CB	2.42	1.02
21:X:209:HIS:O	21:X:213:HIS:CD2	2.12	1.02
21:X:201:PHE:CE2	22:Z:195:ILE:HD11	1.82	1.02
21:X:197:LYS:CE	22:Z:192:MET:CB	2.37	1.01
3:C:805:ARG:HB3	5:E:152:LEU:HB2	1.43	1.01
21:X:198:GLU:HG3	22:Z:188:LYS:CE	1.89	1.01
2:B:1961:GLU:HA	2:B:4047:MET:HE1	1.37	1.01
21:X:204:LEU:HD23	21:X:207:LEU:HD12	1.39	1.01
2:B:1330:TRP:CD1	2:B:1412:PHE:H	1.79	1.00
3:C:1860:GLN:HB2	3:C:4201:VAL:HG11	1.41	1.00
15:O:34:VAL:HB	4:d:117:TRP:HB2	1.42	1.00
2:B:4458:ILE:HG12	2:B:4488:LYS:HE3	1.45	0.98
2:B:1243:LYS:HG3	2:B:1264:ILE:HG12	1.46	0.98
18:w:212:ILE:O	18:w:216:ASN:HB2	1.64	0.97
18:s:212:ILE:O	18:s:216:ASN:HB2	1.64	0.97
18:r:212:ILE:O	18:r:216:ASN:HB2	1.64	0.97
18:S:212:ILE:O	18:S:216:ASN:HB2	1.64	0.97
18:W:212:ILE:O	18:W:216:ASN:HB2	1.64	0.96
21:X:180:ARG:CZ	22:Z:171:ARG:HD2	1.70	0.96
2:B:3138:MET:HE1	2:B:3695:LEU:HA	1.48	0.96
18:R:212:ILE:O	18:R:216:ASN:HB2	1.64	0.96
21:X:180:ARG:NH1	22:Z:171:ARG:HG3	1.74	0.96
21:X:201:PHE:HE1	22:Z:194:ASN:CA	1.78	0.96
21:X:201:PHE:HZ	22:Z:191:GLN:O	1.47	0.96
21:X:197:LYS:NZ	22:Z:189:ARG:CD	2.30	0.95
3:C:175:GLU:O	3:C:177:ARG:NH1	1.98	0.94
4:D:526:ARG:HG2	4:D:535:GLN:HG3	1.47	0.94
2:B:94:LEU:HD13	3:C:124:THR:HG23	1.49	0.94

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2936:ILE:HB	2:B:2944:ARG:HH22	1.31	0.94
5:E:154:LYS:HD2	5:E:484:THR:HB	1.48	0.93
21:X:180:ARG:HH21	22:Z:171:ARG:HD2	1.32	0.93
1:A:222:PHE:HB2	2:B:952:PRO:HB3	1.49	0.93
2:B:4043:ASN:HD21	2:B:4046:LEU:HD13	1.34	0.93
3:C:1857:THR:HA	3:C:4201:VAL:HG13	1.49	0.93
3:C:1514:VAL:HG22	3:C:1578:ASN:HD21	1.34	0.93
3:C:928:LYS:HD2	3:C:957:ARG:HH22	1.34	0.92
2:B:2632:SER:HB2	2:B:2642:ARG:HH12	1.34	0.92
21:X:101:ARG:NH1	17:y:340:TYR:OH	2.00	0.92
4:D:527:ILE:H	4:D:535:GLN:NE2	1.66	0.92
2:B:1214:LEU:HG	2:B:1215:GLN:HG3	1.48	0.92
1:A:60:LEU:HD11	1:A:67:CYS:HB3	1.53	0.91
4:d:116:ILE:HD13	5:e:43:ARG:HB3	1.52	0.91
3:C:2576:LEU:HD23	3:C:2622:PRO:HD2	1.51	0.90
21:X:204:LEU:HD13	22:Z:199:ALA:HB2	0.92	0.90
21:X:179:GLU:O	21:X:183:TYR:HD2	1.53	0.90
4:D:488:TYR:HB2	4:D:491:GLN:HB3	1.53	0.90
2:B:1346:GLY:HA3	2:B:1369:VAL:HG11	1.54	0.90
1:A:220:TRP:HE1	2:B:956:LEU:HD13	1.37	0.90
18:s:1:MET:HE2	17:q:70:PRO:HG3	1.54	0.89
17:u:70:PRO:HG3	18:w:1:MET:HE2	1.55	0.89
13:M:49:ASP:HB2	13:M:53:TRP:HE1	1.37	0.89
21:X:141:LEU:HD13	22:Z:136:ILE:HB	1.54	0.89
3:C:2724:LYS:HD2	3:C:2726:GLU:HG3	1.55	0.89
21:X:180:ARG:HH12	22:Z:171:ARG:HG3	1.37	0.89
21:X:180:ARG:HH11	22:Z:171:ARG:HB3	0.80	0.88
2:B:1964:SER:HB3	2:B:4047:MET:HE2	1.55	0.88
3:C:3439:GLN:HA	3:C:3442:LYS:HE2	1.55	0.88
2:B:2128:ASP:HB3	2:B:4465:GLU:HA	1.55	0.87
3:C:4508:LYS:HZ2	3:C:4555:ILE:HB	1.36	0.87
1:A:342:ALA:HB3	1:A:346:LEU:HD21	1.57	0.87
4:D:503:VAL:HA	4:D:520:SER:HA	1.56	0.87
2:B:1330:TRP:HB3	2:B:1410:PHE:C	2.00	0.87
2:B:3132:GLN:HG3	2:B:3440:LEU:HD11	1.56	0.87
4:D:527:ILE:H	4:D:535:GLN:HE21	0.91	0.87
6:F:67:LEU:HD11	7:G:95:GLU:HB3	1.55	0.87
2:B:435:GLN:HG3	2:B:533:ARG:HG3	1.55	0.87
2:B:1784:ARG:HD3	2:B:2042:SER:HB3	1.55	0.87
21:X:197:LYS:NZ	22:Z:189:ARG:HD2	1.89	0.87
13:M:35:LYS:HD3	5:e:51:ASP:HB3	1.57	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:535:ASN:HA	3:C:548:LEU:HD23	1.56	0.86
3:C:862:LEU:HD13	3:C:972:TRP:HE1	1.40	0.86
2:B:1484:LEU:HB3	2:B:1501:VAL:HG13	1.55	0.86
21:X:197:LYS:HZ2	22:Z:189:ARG:HA	1.04	0.86
15:O:12:GLU:HG2	5:e:26:ARG:HE	1.40	0.86
3:C:633:GLU:HA	3:C:636:ARG:HD3	1.58	0.85
3:C:805:ARG:NH2	5:E:154:LYS:HG2	1.90	0.85
4:D:316:LEU:HB2	4:D:328:LEU:HD13	1.58	0.85
3:C:2573:GLN:HE21	3:C:2622:PRO:HD3	1.40	0.85
2:B:483:LYS:HD3	2:B:484:LYS:HD3	1.56	0.85
2:B:1886:THR:HG22	2:B:4193:ILE:HA	1.59	0.85
3:C:89:GLN:HA	3:C:126:ASN:HD21	1.40	0.85
2:B:529:GLY:H	5:E:524:LYS:HB3	1.42	0.85
21:X:197:LYS:HG2	22:Z:192:MET:HB2	1.58	0.85
2:B:67:GLN:H	2:B:85:LYS:HZ3	1.23	0.85
3:C:667:LYS:HA	3:C:671:GLN:HB2	1.58	0.84
2:B:1396:LYS:HD3	2:B:1406:ASN:HB2	1.59	0.84
21:X:197:LYS:HZ2	22:Z:189:ARG:CA	1.61	0.84
2:B:4311:SER:HA	2:B:4314:ILE:HD12	1.58	0.84
5:E:162:ARG:NH1	5:E:198:TYR:OH	2.10	0.84
11:K:33:ALA:HA	14:N:36:LYS:HA	1.59	0.84
3:C:242:GLU:HG3	3:C:368:LYS:HE3	1.58	0.84
5:E:150:LEU:HG	5:E:488:LEU:HB3	1.58	0.84
2:B:175:PRO:HG2	2:B:210:VAL:HG12	1.60	0.84
5:E:172:GLU:HG2	5:E:228:PRO:HD3	1.59	0.84
11:K:34:ASP:HB2	14:N:36:LYS:C	2.02	0.84
2:B:1240:PHE:HA	2:B:1243:LYS:HZ2	1.41	0.83
11:K:36:ILE:HG22	11:K:96:ILE:HD11	1.59	0.83
2:B:1785:TRP:HA	2:B:1788:ILE:HG12	1.60	0.83
3:C:2723:ILE:HA	3:C:2727:LEU:HD23	1.60	0.83
3:C:3913:LYS:HD2	3:C:3920:PRO:HG3	1.60	0.83
2:B:2463:THR:HA	2:B:2466:LYS:HE2	1.61	0.83
11:K:34:ASP:HB3	14:N:40:GLU:HB2	1.59	0.83
2:B:902:ILE:HA	2:B:915:PRO:HG2	1.60	0.83
14:N:32:SER:HA	14:N:35:GLN:HB3	1.58	0.83
17:Q:70:PRO:HG3	18:S:1:MET:HE2	1.59	0.83
21:X:194:LEU:HD12	22:Z:185:LEU:CD2	2.07	0.82
21:X:215:LYS:NZ	22:Z:208:ARG:HD2	1.94	0.82
21:X:158:LYS:HZ2	22:Z:154:ILE:HD11	1.42	0.82
21:X:198:GLU:HG3	22:Z:188:LYS:HZ3	1.41	0.82
1:A:282:ARG:O	1:A:284:ASN:N	2.11	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:X:198:GLU:CG	22:Z:188:LYS:CE	2.58	0.82
3:C:1449:ILE:HG21	3:C:1452:LYS:HZ3	1.43	0.82
4:D:527:ILE:N	4:D:535:GLN:HE21	1.74	0.82
4:D:535:GLN:HE22	4:D:537:ILE:C	1.87	0.82
3:C:2787:ASP:H	3:C:2810:ALA:HB3	1.44	0.82
21:X:215:LYS:HZ2	22:Z:208:ARG:CD	1.92	0.82
2:B:1346:GLY:HA2	2:B:1349:ILE:HD12	1.62	0.82
21:X:197:LYS:HE2	22:Z:192:MET:CG	2.09	0.82
5:e:43:ARG:HG3	5:e:45:PRO:HD2	1.61	0.82
3:C:4561:ILE:HG22	3:C:4562:ASN:HD22	1.45	0.82
5:E:497:MET:HG2	5:E:499:PRO:HD2	1.62	0.82
21:X:197:LYS:HZ1	22:Z:189:ARG:CD	1.90	0.82
2:B:157:TYR:HA	2:B:178:SER:HB2	1.60	0.81
3:C:793:GLN:O	5:E:453:SER:OG	1.96	0.81
2:B:477:ILE:HG13	2:B:481:ALA:HA	1.61	0.81
2:B:1283:ASN:HA	2:B:1286:LYS:HD2	1.62	0.81
3:C:456:ARG:HA	3:C:459:LYS:HD2	1.62	0.81
4:d:126:GLN:HE21	5:e:45:PRO:HD3	1.45	0.81
1:A:250:LYS:HD3	1:A:251:TRP:HB2	1.62	0.81
2:B:2283:LYS:HE2	2:B:2295:LEU:HB2	1.63	0.81
17:u:377:MET:HA	17:u:380:ARG:HH11	1.46	0.81
17:q:377:MET:HA	17:q:380:ARG:HH11	1.46	0.81
17:y:377:MET:HA	17:y:380:ARG:HH11	1.46	0.81
3:C:31:SER:O	3:C:37:ASN:ND2	2.14	0.81
3:C:3425:GLU:HG2	3:C:3695:LEU:HD23	1.62	0.81
18:s:5:ILE:HG12	18:s:132:LEU:HD11	1.62	0.81
18:w:5:ILE:HG12	18:w:132:LEU:HD11	1.62	0.81
18:r:5:ILE:HG12	18:r:132:LEU:HD11	1.62	0.81
4:D:299:VAL:HA	4:D:316:LEU:HG	1.63	0.81
17:Q:391:ARG:HG2	18:S:346:TRP:HB3	1.63	0.81
17:Q:377:MET:HA	17:Q:380:ARG:HH11	1.46	0.80
1:A:220:TRP:NE1	2:B:956:LEU:HD13	1.94	0.80
2:B:296:LYS:HE2	5:E:558:ALA:HB1	1.63	0.80
17:U:377:MET:HA	17:U:380:ARG:HH11	1.46	0.80
17:u:62:ARG:HH12	17:u:127:CYS:HB3	1.46	0.80
17:u:267:MET:HE2	17:u:374:ILE:HG23	1.62	0.80
17:q:267:MET:HE2	17:q:374:ILE:HG23	1.62	0.80
17:y:267:MET:HE2	17:y:374:ILE:HG23	1.62	0.80
17:Q:267:MET:HE2	17:Q:374:ILE:HG23	1.62	0.80
17:Y:377:MET:HA	17:Y:380:ARG:HH11	1.46	0.80
18:r:308:ARG:HH21	18:r:340:THR:HA	1.46	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:y:62:ARG:HH12	17:y:127:CYS:HB3	1.46	0.80
3:C:2837:MET:HB2	3:C:2839:LEU:HD23	1.62	0.80
17:U:267:MET:HE2	17:U:374:ILE:HG23	1.62	0.80
2:B:3129:ILE:HA	2:B:3132:GLN:HE21	1.44	0.80
18:S:308:ARG:HH21	18:S:340:THR:HA	1.46	0.80
17:Y:267:MET:HE2	17:Y:374:ILE:HG23	1.62	0.80
17:q:62:ARG:HH12	17:q:127:CYS:HB3	1.46	0.80
18:w:308:ARG:HH21	18:w:340:THR:HA	1.46	0.80
3:C:502:LEU:HB2	3:C:509:LYS:HD2	1.64	0.80
5:E:498:GLN:HE21	5:E:502:LYS:HB3	1.46	0.80
17:Q:62:ARG:HH12	17:Q:127:CYS:HB3	1.46	0.80
18:R:308:ARG:HH21	18:R:340:THR:HA	1.46	0.80
17:Y:62:ARG:HH12	17:Y:127:CYS:HB3	1.46	0.80
18:s:2:ARG:NH2	18:s:251:ASP:OD2	2.15	0.80
18:s:308:ARG:HH21	18:s:340:THR:HA	1.46	0.80
18:w:2:ARG:NH2	18:w:251:ASP:OD2	2.15	0.80
2:B:509:GLN:HA	2:B:512:ASP:HB2	1.62	0.80
3:C:2873:LYS:O	23:C:4703:ADP:H2'	1.80	0.80
18:S:5:ILE:HG12	18:S:132:LEU:HD11	1.62	0.80
17:U:62:ARG:HH12	17:U:127:CYS:HB3	1.46	0.80
18:W:2:ARG:NH2	18:W:251:ASP:OD2	2.15	0.80
18:W:308:ARG:HH21	18:W:340:THR:HA	1.46	0.80
18:r:2:ARG:NH2	18:r:251:ASP:OD2	2.15	0.80
2:B:1490:GLN:HG3	2:B:3613:PRO:HB2	1.64	0.80
18:R:5:ILE:HG12	18:R:132:LEU:HD11	1.62	0.80
18:S:2:ARG:NH2	18:S:251:ASP:OD2	2.15	0.80
18:W:5:ILE:HG12	18:W:132:LEU:HD11	1.62	0.80
2:B:1960:ILE:HA	2:B:1963:LEU:HB2	1.63	0.80
2:B:1968:THR:HG21	2:B:4018:GLY:HA2	1.64	0.80
17:u:305:PRO:HB2	17:u:310:TYR:HE1	1.47	0.80
17:q:305:PRO:HB2	17:q:310:TYR:HE1	1.47	0.80
17:y:305:PRO:HB2	17:y:310:TYR:HE1	1.47	0.80
2:B:94:LEU:HD11	2:B:109:VAL:HG23	1.64	0.80
2:B:2015:PRO:HB3	2:B:4046:LEU:HA	1.64	0.80
3:C:1449:ILE:HD13	3:C:1452:LYS:HZ1	1.45	0.80
18:R:2:ARG:NH2	18:R:251:ASP:OD2	2.15	0.80
2:B:449:GLY:HA3	5:E:513:TYR:HB3	1.62	0.79
3:C:3741:ASN:O	3:C:3745:GLU:N	2.14	0.79
21:X:194:LEU:HD23	21:X:197:LYS:HE3	1.63	0.79
21:X:201:PHE:HE1	22:Z:194:ASN:CB	1.86	0.79
17:U:70:PRO:HG3	18:W:1:MET:HE2	1.62	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:w:375:VAL:HG23	18:w:377:MET:HE1	1.64	0.79
2:B:1945:GLN:HE22	2:B:1993:GLN:HB3	1.47	0.79
3:C:1071:ILE:HG13	3:C:1074:MET:HB2	1.64	0.79
18:s:375:VAL:HG23	18:s:377:MET:HE1	1.64	0.79
3:C:1302:SER:HA	3:C:1305:LYS:HE2	1.63	0.79
17:Q:305:PRO:HB2	17:Q:310:TYR:HE1	1.47	0.79
17:U:305:PRO:HB2	17:U:310:TYR:HE1	1.47	0.79
17:Y:305:PRO:HB2	17:Y:310:TYR:HE1	1.47	0.79
18:r:375:VAL:HG23	18:r:377:MET:HE1	1.64	0.79
15:O:22:LYS:HD2	15:O:26:GLY:HA3	1.64	0.79
21:X:194:LEU:HD23	21:X:197:LYS:CE	2.13	0.79
2:B:112:GLU:O	2:B:120:HIS:NE2	2.16	0.79
2:B:173:MET:HE1	2:B:218:LEU:HA	1.61	0.79
2:B:1330:TRP:HD1	2:B:1412:PHE:H	1.31	0.79
2:B:4017:LEU:HD22	2:B:4044:ILE:HA	1.64	0.79
21:X:197:LYS:HG2	22:Z:192:MET:CB	2.13	0.79
21:X:201:PHE:CD2	22:Z:195:ILE:CD1	2.51	0.79
3:C:805:ARG:NH2	5:E:152:LEU:HB3	1.97	0.79
5:E:240:LEU:HD21	5:E:281:THR:HG21	1.65	0.79
2:B:2380:GLN:HE22	2:B:2465:TRP:HZ3	1.31	0.79
2:B:3135:ARG:HG2	2:B:3138:MET:HE2	1.64	0.78
1:A:5:LEU:HB2	1:A:352:LEU:HD11	1.64	0.78
2:B:1600:GLU:HG2	2:B:1603:LYS:HE3	1.64	0.78
3:C:269:LYS:HD2	3:C:281:GLN:HA	1.65	0.78
3:C:804:ASN:HB3	5:E:151:MET:HA	1.65	0.78
17:y:53:GLU:OE1	17:y:53:GLU:N	2.15	0.78
17:u:53:GLU:OE1	17:u:53:GLU:N	2.15	0.78
18:w:175:PRO:O	18:w:394:LYS:NZ	2.16	0.78
2:B:3425:GLY:HA3	2:B:3720:LYS:HG3	1.65	0.78
2:B:4195:TYR:O	2:B:4199:ILE:N	2.12	0.78
21:X:197:LYS:CE	22:Z:189:ARG:HA	2.14	0.78
21:X:201:PHE:CE1	22:Z:195:ILE:HD12	2.14	0.78
17:Y:53:GLU:OE1	17:Y:53:GLU:N	2.15	0.78
2:B:1484:LEU:HD22	2:B:1501:VAL:HG22	1.65	0.78
3:C:1227:ARG:NH2	3:C:1286:THR:OG1	2.17	0.78
21:X:198:GLU:CG	22:Z:188:LYS:HE2	2.14	0.78
17:q:53:GLU:OE1	17:q:53:GLU:N	2.15	0.78
17:U:53:GLU:OE1	17:U:53:GLU:N	2.15	0.78
1:A:256:ILE:HD11	1:A:322:GLU:HB2	1.66	0.78
18:S:175:PRO:O	18:S:394:LYS:NZ	2.16	0.78
18:W:175:PRO:O	18:W:394:LYS:NZ	2.16	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:447:THR:O	5:E:517:LYS:NZ	2.15	0.78
3:C:381:ILE:O	3:C:396:MET:N	2.17	0.78
18:R:48:ALA:N	18:R:243:ARG:O	2.17	0.78
2:B:1889:GLN:HG2	2:B:4193:ILE:HD13	1.66	0.77
17:Q:53:GLU:N	17:Q:53:GLU:OE1	2.15	0.77
18:S:48:ALA:N	18:S:243:ARG:O	2.17	0.77
18:W:48:ALA:N	18:W:243:ARG:O	2.17	0.77
21:X:215:LYS:NZ	22:Z:208:ARG:CD	2.47	0.77
2:B:1113:LEU:HD22	2:B:1164:MET:HE1	1.67	0.77
2:B:1388:GLU:OE1	2:B:1390:ARG:NH2	2.18	0.77
5:E:189:MET:SD	5:E:192:LYS:NZ	2.53	0.77
18:W:375:VAL:HG23	18:W:377:MET:HE1	1.64	0.77
21:X:197:LYS:HE2	22:Z:192:MET:HG2	1.65	0.77
18:r:48:ALA:N	18:r:243:ARG:O	2.17	0.77
2:B:1330:TRP:CD1	2:B:1412:PHE:N	2.52	0.77
2:B:3931:ARG:NH1	2:B:3932:CYS:SG	2.58	0.77
3:C:477:ASN:HD22	3:C:528:LEU:HD23	1.49	0.77
18:S:375:VAL:HG23	18:S:377:MET:HE1	1.64	0.77
21:X:194:LEU:CD2	21:X:197:LYS:NZ	2.47	0.77
21:X:197:LYS:HG2	22:Z:192:MET:CG	2.15	0.77
2:B:137:LEU:HB3	2:B:142:TRP:HD1	1.49	0.77
3:C:60:GLN:HB3	3:C:62:GLN:HE22	1.47	0.77
18:s:48:ALA:N	18:s:243:ARG:O	2.17	0.77
18:w:48:ALA:N	18:w:243:ARG:O	2.17	0.77
2:B:1961:GLU:N	2:B:4049:THR:OG1	2.18	0.77
3:C:2173:VAL:HA	3:C:2176:LYS:HD2	1.65	0.77
15:O:30:ASP:O	4:d:117:TRP:NE1	2.18	0.77
21:X:197:LYS:HZ1	22:Z:189:ARG:HD3	1.49	0.77
2:B:215:PRO:HA	2:B:218:LEU:HD12	1.67	0.77
2:B:841:LYS:HA	2:B:844:LEU:HD12	1.66	0.77
18:R:375:VAL:HG23	18:R:377:MET:HE1	1.64	0.77
2:B:1176:VAL:HG13	2:B:1188:GLN:HG2	1.66	0.76
2:B:1968:THR:HA	2:B:1971:LYS:HG2	1.66	0.76
3:C:3708:ASP:O	3:C:3712:LEU:N	2.18	0.76
5:E:392:LYS:HG2	5:E:404:ARG:HD3	1.65	0.76
11:K:30:PRO:HD2	14:N:33:LYS:HB2	1.65	0.76
5:E:433:TRP:HA	5:E:451:LYS:HA	1.67	0.76
18:R:2:ARG:HD2	18:R:242:LEU:HD22	1.67	0.76
18:W:2:ARG:HD2	18:W:242:LEU:HD22	1.67	0.76
18:s:2:ARG:HD2	18:s:242:LEU:HD22	1.67	0.76
2:B:2295:LEU:HB3	2:B:2299:MET:HE2	1.68	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:481:ILE:HD11	4:D:503:VAL:HG21	1.67	0.76
18:S:2:ARG:HD2	18:S:242:LEU:HD22	1.67	0.76
3:C:2880:ALA:HB3	23:C:4703:ADP:C6	2.19	0.76
18:r:2:ARG:HD2	18:r:242:LEU:HD22	1.67	0.76
21:X:197:LYS:O	21:X:201:PHE:CD2	2.38	0.76
18:w:2:ARG:HD2	18:w:242:LEU:HD22	1.67	0.76
2:B:1333:ILE:HD12	2:B:1412:PHE:HA	1.66	0.76
21:X:190:ILE:HG22	22:Z:185:LEU:HD13	1.68	0.76
21:X:180:ARG:CZ	22:Z:171:ARG:HG3	2.11	0.76
2:B:1330:TRP:N	2:B:1412:PHE:HD1	1.83	0.76
2:B:1788:ILE:HD12	2:B:2038:ASN:HB3	1.68	0.76
13:M:2:ASN:N	4:d:92:TYR:O	2.19	0.76
21:X:201:PHE:CE2	22:Z:191:GLN:O	2.39	0.76
21:X:197:LYS:O	21:X:201:PHE:HD2	1.68	0.75
1:A:6:VAL:HB	1:A:353:ASN:HB3	1.68	0.75
2:B:3989:PRO:HD2	2:B:4099:PRO:HG3	1.66	0.75
2:B:2921:THR:HG23	2:B:2924:ASP:H	1.50	0.75
22:Z:208:ARG:HH21	22:Z:209:ALA:HB2	1.49	0.75
3:C:542:ILE:HD13	3:C:576:TYR:HA	1.68	0.75
3:C:1146:GLN:HB3	3:C:1187:TRP:CH2	2.22	0.75
2:B:4321:SER:OG	2:B:4325:ASN:ND2	2.20	0.75
3:C:2012:LEU:HD22	3:C:2055:LEU:HD11	1.69	0.75
3:C:2187:ASN:H	3:C:2589:TYR:HE2	1.34	0.75
21:X:197:LYS:CG	22:Z:192:MET:CB	2.56	0.75
2:B:2100:PRO:HG3	2:B:2133:LEU:HD11	1.68	0.75
2:B:3546:ARG:HH21	2:B:3549:GLN:HB3	1.50	0.75
3:C:805:ARG:HH22	5:E:154:LYS:HG2	1.52	0.75
2:B:2714:THR:HG22	2:B:2771:TRP:HZ2	1.52	0.75
3:C:101:PRO:HG2	3:C:104:ASP:HB3	1.67	0.75
3:C:4005:LEU:HA	3:C:4008:LYS:HE2	1.68	0.75
9:I:89:VAL:HG21	9:I:94:LEU:HB2	1.69	0.75
3:C:973:ASP:HB3	3:C:981:ASP:HB3	1.69	0.74
3:C:2873:LYS:C	23:C:4703:ADP:H2'	2.11	0.74
21:X:194:LEU:HD13	22:Z:188:LYS:HB3	1.68	0.74
2:B:1126:LYS:HZ2	2:B:1134:LEU:HD22	1.52	0.74
2:B:1967:SER:HB3	2:B:2018:LEU:HD22	1.68	0.74
1:A:221:SER:HB2	1:A:226:TYR:HE1	1.52	0.74
3:C:801:ILE:HD13	3:C:868:LEU:HD21	1.69	0.74
3:C:1105:ARG:NH2	3:C:1176:GLU:OE2	2.19	0.74
3:C:1384:LYS:HB3	3:C:1392:ASN:HB2	1.68	0.74
21:X:201:PHE:CE1	22:Z:194:ASN:CA	2.63	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:64:VAL:HA	2:B:83:LYS:HZ1	1.52	0.74
2:B:373:THR:HA	2:B:376:ALA:HB3	1.69	0.74
2:B:1325:TRP:HZ3	2:B:1416:LEU:HD22	1.51	0.74
2:B:2706:MET:HG2	2:B:2764:GLN:HG3	1.68	0.74
2:B:459:ILE:HG23	2:B:499:LEU:HD22	1.69	0.74
2:B:1440:ILE:HD13	2:B:1496:PHE:HB3	1.69	0.74
2:B:3989:PRO:HB2	2:B:4099:PRO:HB3	1.69	0.74
3:C:948:LEU:HA	3:C:951:ILE:HD12	1.68	0.74
14:N:102:LEU:HD23	15:O:90:ASP:O	1.88	0.74
17:y:89:ASN:OD1	17:y:89:ASN:N	2.19	0.74
2:B:708:TYR:HE1	2:B:756:ARG:HB3	1.51	0.74
2:B:2506:LEU:HD11	2:B:2882:PRO:HG2	1.70	0.74
3:C:3650:THR:HG23	3:C:3653:GLY:H	1.53	0.74
17:u:89:ASN:N	17:u:89:ASN:OD1	2.19	0.74
17:q:89:ASN:OD1	17:q:89:ASN:N	2.19	0.74
1:A:344:ASN:HD21	2:B:969:LEU:HB3	1.50	0.74
2:B:794:LEU:HD21	2:B:867:VAL:HA	1.68	0.74
2:B:802:ILE:HG12	2:B:877:THR:HG21	1.69	0.74
3:C:857:ARG:HG2	5:E:205:PRO:HB2	1.69	0.74
3:C:1141:GLN:HA	3:C:1144:LYS:HD2	1.70	0.74
3:C:1932:GLU:HB3	3:C:4021:GLU:HB3	1.69	0.74
17:Q:213:ARG:NH2	17:Q:297:LYS:O	2.21	0.74
2:B:301:LYS:HE3	2:B:320:ILE:HG21	1.70	0.73
3:C:534:ASN:HA	3:C:537:ASN:HB2	1.70	0.73
3:C:859:VAL:HA	3:C:975:GLN:HE22	1.53	0.73
3:C:880:PRO:HB2	3:C:883:THR:HB	1.70	0.73
17:U:213:ARG:NH2	17:U:297:LYS:O	2.21	0.73
17:Y:213:ARG:NH2	17:Y:297:LYS:O	2.21	0.73
1:A:22:SER:OG	1:A:321:ARG:NH1	2.20	0.73
5:E:158:GLU:O	5:E:162:ARG:NH1	2.21	0.73
11:K:37:LEU:HD13	14:N:36:LYS:HZ3	1.51	0.73
17:Q:89:ASN:OD1	17:Q:89:ASN:N	2.19	0.73
3:C:14:LYS:HG3	3:C:24:LYS:HE3	1.70	0.73
17:U:89:ASN:N	17:U:89:ASN:OD1	2.19	0.73
17:Y:89:ASN:OD1	17:Y:89:ASN:N	2.19	0.73
2:B:924:LEU:HD12	2:B:926:VAL:H	1.54	0.73
3:C:1379:HIS:HE2	3:C:1426:GLN:HG3	1.53	0.73
2:B:4424:GLN:HA	2:B:4427:ILE:HD12	1.69	0.73
3:C:1511:TRP:HE1	3:C:1552:MET:HE1	1.53	0.73
17:u:262:ARG:HE	17:u:421:GLU:HG2	1.54	0.73
17:y:262:ARG:HE	17:y:421:GLU:HG2	1.54	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:136:MET:O	7:G:146:ILE:HA	1.89	0.73
17:q:213:ARG:NH2	17:q:297:LYS:O	2.21	0.73
17:q:262:ARG:HE	17:q:421:GLU:HG2	1.54	0.73
2:B:1150:VAL:HA	2:B:1153:VAL:HG12	1.71	0.73
2:B:1535:SER:HB2	2:B:1622:SER:HA	1.71	0.73
2:B:3931:ARG:HA	2:B:3938:MET:HE1	1.70	0.73
3:C:1721:GLN:NE2	3:C:1834:TYR:OH	2.22	0.73
21:X:180:ARG:CZ	22:Z:171:ARG:CB	2.61	0.73
2:B:2570:PHE:HB2	2:B:2960:ILE:HD11	1.69	0.72
17:Q:262:ARG:HE	17:Q:421:GLU:HG2	1.54	0.72
21:X:180:ARG:CZ	22:Z:171:ARG:HB3	2.17	0.72
21:X:215:LYS:NZ	22:Z:208:ARG:NE	2.36	0.72
17:Y:262:ARG:HE	17:Y:421:GLU:HG2	1.54	0.72
17:u:213:ARG:NH2	17:u:297:LYS:O	2.21	0.72
3:C:2412:LEU:HD23	3:C:2418:ILE:HD11	1.71	0.72
17:U:262:ARG:HE	17:U:421:GLU:HG2	1.54	0.72
17:y:213:ARG:NH2	17:y:297:LYS:O	2.21	0.72
2:B:516:THR:HG21	5:E:406:LYS:H	1.54	0.72
3:C:1727:LEU:HG	3:C:1791:GLN:HE22	1.54	0.72
3:C:1892:PHE:HB3	3:C:1919:LEU:HD22	1.70	0.72
5:E:392:LYS:HE2	5:E:394:TRP:HE1	1.55	0.72
9:I:51:ALA:H	9:I:54:LEU:HD23	1.54	0.72
1:A:332:GLU:O	1:A:334:ARG:NH1	2.21	0.72
2:B:1815:PHE:CD2	2:B:4184:ASN:HB2	2.24	0.72
3:C:3107:TYR:O	3:C:3111:ASP:HB2	1.89	0.72
18:r:306:ASP:HB3	18:r:309:HIS:HB2	1.71	0.72
3:C:895:TYR:HA	3:C:898:LEU:HD12	1.72	0.72
18:w:306:ASP:HB3	18:w:309:HIS:HB2	1.71	0.72
2:B:3776:GLU:O	2:B:3780:THR:OG1	2.07	0.72
3:C:971:ASN:ND2	3:C:986:TYR:OH	2.23	0.72
11:K:32:CYS:SG	11:K:33:ALA:N	2.63	0.72
18:s:306:ASP:HB3	18:s:309:HIS:HB2	1.71	0.72
2:B:117:LEU:HD13	3:C:146:ILE:HG13	1.71	0.72
2:B:548:LEU:HD21	2:B:613:ILE:HD13	1.71	0.72
2:B:1330:TRP:HD1	2:B:1412:PHE:N	1.87	0.72
3:C:3700:ILE:HA	3:C:3703:GLN:HE21	1.53	0.72
3:C:3767:VAL:HG23	3:C:4302:GLU:HB3	1.70	0.72
4:D:496:TYR:CZ	4:D:528:TRP:HD1	2.07	0.72
21:X:197:LYS:CE	22:Z:192:MET:HB3	2.20	0.72
2:B:3878:ILE:HG23	2:B:3884:ARG:HD2	1.71	0.72
5:E:467:GLY:H	5:E:471:ASN:HD22	1.37	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1964:SER:CB	2:B:4047:MET:HE2	2.19	0.72
2:B:3658:ILE:HG21	2:B:3744:ARG:HG3	1.72	0.72
6:F:14:LEU:HA	6:F:17:LEU:HD23	1.71	0.72
17:Q:397:TRP:CE2	18:S:257:THR:HA	2.25	0.72
17:U:391:ARG:HG2	18:W:346:TRP:HB3	1.70	0.72
3:C:853:VAL:O	3:C:857:ARG:HD3	1.90	0.71
5:E:162:ARG:HD3	5:E:181:TYR:HB3	1.71	0.71
11:K:20:THR:O	14:N:75:LYS:NZ	2.22	0.71
16:P:58:VAL:HG22	16:P:65:LEU:HD21	1.70	0.71
18:R:306:ASP:HB3	18:R:309:HIS:HB2	1.71	0.71
2:B:1120:THR:OG1	2:B:1157:ARG:NH1	2.23	0.71
2:B:1328:LYS:HG2	2:B:1332:GLN:HE21	1.55	0.71
3:C:210:GLU:OE1	3:C:277:ASN:ND2	2.23	0.71
18:S:306:ASP:HB3	18:S:309:HIS:HB2	1.71	0.71
18:W:306:ASP:HB3	18:W:309:HIS:HB2	1.71	0.71
21:X:194:LEU:CD2	21:X:197:LYS:CE	2.68	0.71
18:w:342:GLN:OE1	18:w:343:PHE:N	2.23	0.71
2:B:1107:ARG:HD3	2:B:1190:ILE:HG12	1.72	0.71
2:B:1359:PHE:HB2	2:B:1362:TYR:HD2	1.55	0.71
5:E:461:LYS:HE2	5:E:477:ALA:HB3	1.71	0.71
18:s:342:GLN:OE1	18:s:343:PHE:N	2.23	0.71
2:B:1524:ASN:HA	2:B:1527:ILE:HD12	1.71	0.71
3:C:2116:VAL:HA	3:C:2119:LYS:HE3	1.72	0.71
18:r:342:GLN:OE1	18:r:343:PHE:N	2.23	0.71
17:y:172:SER:OG	17:y:175:VAL:O	2.07	0.71
3:C:1850:LEU:HD21	3:C:2000:MET:H	1.54	0.71
3:C:1860:GLN:NE2	3:C:4197:MET:SD	2.63	0.71
21:X:197:LYS:HE2	22:Z:192:MET:HB3	1.71	0.71
1:A:22:SER:HB3	1:A:340:GLY:HA2	1.72	0.71
1:A:208:MET:HG3	1:A:296:ILE:HD13	1.73	0.71
18:s:175:PRO:O	18:s:394:LYS:NZ	2.16	0.71
17:u:172:SER:OG	17:u:175:VAL:O	2.07	0.71
18:r:292:THR:HG23	18:r:317:MET:HE1	1.72	0.71
1:A:322:GLU:HG3	1:A:340:GLY:HA3	1.71	0.71
2:B:1772:ILE:HG13	2:B:2041:MET:HG3	1.71	0.71
3:C:3116:SER:HA	3:C:3119:ILE:HD12	1.72	0.71
17:Q:238:CYS:SG	17:Q:318:ARG:NH1	2.63	0.71
18:r:175:PRO:O	18:r:394:LYS:NZ	2.16	0.71
2:B:1243:LYS:HE2	2:B:1264:ILE:HA	1.73	0.71
2:B:4458:ILE:HD12	2:B:4528:LYS:HD2	1.73	0.71
3:C:2490:LEU:HB2	3:C:2629:PHE:HD1	1.55	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N:41:LEU:HD11	14:N:70:LYS:HG3	1.73	0.71
17:U:238:CYS:SG	17:U:318:ARG:NH1	2.63	0.71
18:W:292:THR:HG23	18:W:317:MET:HE1	1.72	0.71
18:s:292:THR:HG23	18:s:317:MET:HE1	1.72	0.71
18:w:292:THR:HG23	18:w:317:MET:HE1	1.72	0.71
18:R:292:THR:HG23	18:R:317:MET:HE1	1.72	0.71
18:S:292:THR:HG23	18:S:317:MET:HE1	1.72	0.71
21:X:194:LEU:CD2	21:X:197:LYS:HZ2	2.03	0.71
21:X:197:LYS:HZ1	22:Z:189:ARG:CB	2.03	0.71
17:Y:238:CYS:SG	17:Y:318:ARG:NH1	2.63	0.71
17:q:172:SER:OG	17:q:175:VAL:O	2.07	0.71
17:q:238:CYS:SG	17:q:318:ARG:NH1	2.63	0.71
3:C:1853:ARG:HA	3:C:1856:ILE:HD12	1.72	0.71
4:D:536:ILE:HG22	4:D:537:ILE:HG13	1.72	0.71
5:E:417:TRP:HE1	5:E:423:GLY:HA2	1.56	0.71
21:X:215:LYS:HZ2	22:Z:208:ARG:NE	1.89	0.71
17:u:238:CYS:SG	17:u:318:ARG:NH1	2.63	0.71
17:q:304:ASP:HB3	17:q:307:HIS:CD2	2.26	0.71
17:y:238:CYS:SG	17:y:318:ARG:NH1	2.63	0.71
17:y:304:ASP:HB3	17:y:307:HIS:CD2	2.26	0.71
2:B:64:VAL:HG13	2:B:86:LYS:HD3	1.72	0.70
3:C:4347:LEU:HD11	3:C:4456:GLY:HA3	1.73	0.70
21:X:215:LYS:HD2	22:Z:209:ALA:HA	1.72	0.70
17:u:304:ASP:HB3	17:u:307:HIS:CD2	2.27	0.70
2:B:62:LEU:O	2:B:77:GLN:NE2	2.24	0.70
2:B:1964:SER:HA	2:B:4046:LEU:HD21	1.72	0.70
2:B:4216:MET:HG3	2:B:4218:GLU:HG2	1.73	0.70
22:Z:136:ILE:HG13	22:Z:137:LYS:HD3	1.71	0.70
17:u:31:ASP:OD1	17:u:31:ASP:N	2.22	0.70
17:q:31:ASP:OD1	17:q:31:ASP:N	2.22	0.70
17:y:31:ASP:OD1	17:y:31:ASP:N	2.22	0.70
2:B:518:TYR:OH	5:E:361:LEU:O	2.07	0.70
2:B:1411:TYR:HE1	2:B:1415:ILE:H	1.36	0.70
4:D:357:PRO:HD3	4:D:404:TRP:CE3	2.26	0.70
16:P:24:VAL:HG22	16:P:54:THR:HB	1.73	0.70
17:u:52:ASN:OD1	17:u:62:ARG:NH2	2.24	0.70
17:y:52:ASN:OD1	17:y:62:ARG:NH2	2.24	0.70
1:A:319:ARG:HB2	1:A:322:GLU:OE2	1.92	0.70
3:C:2431:TYR:HB3	3:C:2440:TRP:HB3	1.71	0.70
17:U:52:ASN:OD1	17:U:62:ARG:NH2	2.24	0.70
17:Y:52:ASN:OD1	17:Y:62:ARG:NH2	2.24	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:q:52:ASN:OD1	17:q:62:ARG:NH2	2.24	0.70
2:B:380:LEU:HD11	2:B:427:LEU:HB2	1.74	0.70
7:G:76:TYR:H	7:G:89:ALA:HB3	1.56	0.70
17:Q:52:ASN:OD1	17:Q:62:ARG:NH2	2.24	0.70
2:B:2846:LEU:HD23	2:B:2864:LEU:HD12	1.71	0.70
17:Y:31:ASP:OD1	17:Y:31:ASP:N	2.22	0.70
17:Y:172:SER:OG	17:Y:175:VAL:O	2.07	0.70
17:y:67:ASP:HA	17:y:147:MET:HE1	1.73	0.70
1:A:343:ASN:HD21	2:B:931:ARG:HE	1.38	0.70
3:C:2358:ILE:HD11	3:C:2484:THR:HB	1.74	0.70
3:C:2579:VAL:O	3:C:2583:ILE:HG12	1.92	0.70
7:G:125:PHE:CE1	4:d:247:ILE:HA	2.26	0.70
12:L:28:GLN:HG3	12:L:32:LYS:HE3	1.72	0.70
17:Q:31:ASP:OD1	17:Q:31:ASP:N	2.22	0.70
17:U:31:ASP:OD1	17:U:31:ASP:N	2.22	0.70
17:U:172:SER:OG	17:U:175:VAL:O	2.07	0.70
21:X:205:LEU:O	21:X:209:HIS:CD2	2.44	0.70
17:u:67:ASP:HA	17:u:147:MET:HE1	1.73	0.70
2:B:442:ILE:HD12	5:E:524:LYS:HG2	1.72	0.70
2:B:510:GLY:HA2	2:B:523:LEU:HD23	1.74	0.70
2:B:1246:PHE:CG	2:B:1360:LYS:HB3	2.26	0.70
2:B:1510:ARG:NH2	2:B:1573:CYS:O	2.25	0.70
18:W:342:GLN:OE1	18:W:343:PHE:N	2.23	0.70
3:C:809:ASN:HD21	5:E:206:ASN:HD21	1.40	0.70
17:Q:304:ASP:HB3	17:Q:307:HIS:CD2	2.27	0.70
18:R:342:GLN:OE1	18:R:343:PHE:N	2.23	0.70
18:S:342:GLN:OE1	18:S:343:PHE:N	2.23	0.70
17:U:304:ASP:HB3	17:U:307:HIS:CD2	2.26	0.70
2:B:422:ARG:HD3	2:B:478:MET:HG3	1.74	0.69
2:B:3904:GLU:O	2:B:3934:ARG:NH2	2.25	0.69
5:E:200:TRP:HB3	5:E:208:PRO:HA	1.73	0.69
17:Q:391:ARG:HH22	18:S:435:VAL:HA	1.56	0.69
21:X:163:GLN:O	21:X:166:ARG:HG3	1.92	0.69
17:Y:304:ASP:HB3	17:Y:307:HIS:CD2	2.27	0.69
17:q:67:ASP:HA	17:q:147:MET:HE1	1.73	0.69
2:B:2933:TYR:OH	2:B:2969:GLY:O	2.09	0.69
3:C:2191:ILE:HA	3:C:2591:LEU:HD21	1.74	0.69
3:C:2852:ILE:HD11	3:C:3027:PHE:HZ	1.57	0.69
3:C:3123:LYS:HE2	3:C:3712:LEU:HD22	1.74	0.69
17:Q:172:SER:OG	17:Q:175:VAL:O	2.07	0.69
18:s:111:GLY:O	18:s:115:VAL:HG23	1.92	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:w:111:GLY:O	18:w:115:VAL:HG23	1.92	0.69
4:D:521:ALA:HA	4:D:545:VAL:HG22	1.73	0.69
11:K:90:HIS:HB3	5:e:59:HIS:ND1	2.07	0.69
18:r:111:GLY:O	18:r:115:VAL:HG23	1.92	0.69
2:B:533:ARG:HE	2:B:535:ILE:HD11	1.57	0.69
3:C:784:VAL:O	3:C:788:LEU:HG	1.92	0.69
2:B:20:GLN:HG2	3:C:16:THR:HG22	1.75	0.69
2:B:208:LYS:HB3	2:B:212:LYS:HE2	1.73	0.69
2:B:526:ASN:HA	5:E:521:THR:HB	1.73	0.69
2:B:734:GLU:HB2	2:B:737:VAL:HG22	1.73	0.69
2:B:1070:PRO:HB3	2:B:1079:ASN:HA	1.74	0.69
2:B:1250:GLU:OE2	2:B:1256:ASN:ND2	2.24	0.69
3:C:4422:ASP:HB3	3:C:4423:PRO:HD2	1.75	0.69
4:D:484:CYS:SG	4:D:485:SER:N	2.63	0.69
17:y:267:MET:HE1	17:y:373:ALA:HB3	1.75	0.69
1:A:339:GLY:C	1:A:346:LEU:HB2	2.17	0.69
4:D:561:ALA:HB1	4:D:590:LEU:HD11	1.72	0.69
17:U:67:ASP:HA	17:U:147:MET:HE1	1.73	0.69
21:X:129:SER:HB2	21:X:132:LYS:HB2	1.74	0.69
17:Y:67:ASP:HA	17:Y:147:MET:HE1	1.73	0.69
17:u:267:MET:HE1	17:u:373:ALA:HB3	1.75	0.69
17:q:267:MET:HE1	17:q:373:ALA:HB3	1.75	0.69
2:B:493:ARG:NH2	2:B:500:GLU:OE2	2.26	0.69
2:B:536:ILE:HG22	2:B:540:LEU:HG	1.74	0.69
3:C:3426:LYS:HG3	3:C:3698:ARG:HH12	1.58	0.69
2:B:1525:TRP:NE1	2:B:1553:ASP:OD1	2.26	0.69
2:B:4565:THR:OG1	2:B:4567:PHE:O	2.10	0.69
3:C:1758:LYS:HZ2	3:C:1792:LYS:HG2	1.57	0.69
3:C:1858:LEU:HD22	3:C:1973:PHE:HE1	1.58	0.69
4:D:499:HIS:H	4:D:526:ARG:HD2	1.58	0.69
12:L:22:ARG:HD3	5:e:52:ASN:HA	1.74	0.69
17:Q:67:ASP:HA	17:Q:147:MET:HE1	1.73	0.69
21:X:191:GLU:HG2	22:Z:185:LEU:HD11	1.75	0.69
17:u:248:SER:OG	17:u:350:LYS:NZ	2.23	0.69
17:q:248:SER:OG	17:q:350:LYS:NZ	2.23	0.69
17:y:248:SER:OG	17:y:350:LYS:NZ	2.23	0.69
4:D:399:VAL:HA	4:D:418:SER:HA	1.74	0.69
12:L:87:THR:OG1	13:M:54:ASN:ND2	2.20	0.69
17:Q:358:PRO:HG3	17:Q:364:ALA:HB2	1.75	0.69
21:X:197:LYS:HZ3	22:Z:189:ARG:HD2	1.54	0.69
2:B:1245:PRO:HA	2:B:1360:LYS:HB2	1.74	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1343:LYS:HA	2:B:1369:VAL:HG13	1.74	0.68
2:B:1360:LYS:HA	2:B:1363:ASN:HB3	1.75	0.68
3:C:79:PHE:O	3:C:82:THR:OG1	2.11	0.68
3:C:871:LEU:HD22	3:C:875:VAL:HG23	1.76	0.68
18:S:189:LEU:HD22	18:S:417:GLU:HG2	1.75	0.68
17:U:397:TRP:CE2	18:W:257:THR:HA	2.27	0.68
2:B:3805:ARG:NH1	2:B:3806:GLN:HB2	2.08	0.68
18:R:175:PRO:O	18:R:394:LYS:NZ	2.16	0.68
18:R:189:LEU:HD22	18:R:417:GLU:HG2	1.75	0.68
17:U:358:PRO:HG3	17:U:364:ALA:HB2	1.75	0.68
18:W:189:LEU:HD22	18:W:417:GLU:HG2	1.75	0.68
1:A:124:PRO:HB3	1:A:185:PHE:HE2	1.57	0.68
2:B:420:LEU:O	2:B:424:GLN:HG2	1.93	0.68
2:B:445:GLY:HA2	2:B:506:VAL:HG21	1.73	0.68
2:B:596:ARG:NH1	2:B:597:ASP:OD1	2.27	0.68
3:C:2887:LEU:H	3:C:2920:VAL:HA	1.56	0.68
17:Y:358:PRO:HG3	17:Y:364:ALA:HB2	1.75	0.68
2:B:1284:LEU:HD23	2:B:1287:LEU:HD12	1.75	0.68
2:B:1360:LYS:O	2:B:1364:VAL:HB	1.92	0.68
3:C:2652:PHE:HE1	3:C:2658:SER:HB2	1.58	0.68
18:R:111:GLY:O	18:R:115:VAL:HG23	1.92	0.68
3:C:1734:LYS:HE2	3:C:1753:LYS:HB3	1.75	0.68
10:J:26:PHE:O	10:J:30:LYS:HG2	1.93	0.68
17:Q:267:MET:HE1	17:Q:373:ALA:HB3	1.75	0.68
18:S:111:GLY:O	18:S:115:VAL:HG23	1.92	0.68
17:Y:267:MET:HE1	17:Y:373:ALA:HB3	1.75	0.68
17:y:407:GLU:HA	17:y:410:GLU:HG2	1.76	0.68
2:B:1178:ILE:HA	2:B:1181:LYS:HE2	1.75	0.68
2:B:2016:GLU:HB3	2:B:4045:HIS:CD2	2.29	0.68
2:B:2573:SER:HB2	2:B:2577:GLN:HE22	1.58	0.68
3:C:2784:LEU:H	3:C:2812:ASP:HB2	1.57	0.68
3:C:3488:LEU:HG	3:C:3490:LEU:HG	1.76	0.68
17:U:267:MET:HE1	17:U:373:ALA:HB3	1.75	0.68
18:W:111:GLY:O	18:W:115:VAL:HG23	1.92	0.68
18:r:189:LEU:HD22	18:r:417:GLU:HG2	1.75	0.68
3:C:2222:ARG:HH12	3:C:2267:ASN:HB2	1.58	0.68
3:C:3117:PHE:HA	3:C:3429:TRP:CE3	2.28	0.68
4:D:517:ILE:HD13	4:D:527:ILE:HA	1.76	0.68
18:s:189:LEU:HD22	18:s:417:GLU:HG2	1.75	0.68
17:u:407:GLU:HA	17:u:410:GLU:HG2	1.76	0.68
17:q:407:GLU:HA	17:q:410:GLU:HG2	1.76	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:w:189:LEU:HD22	18:w:417:GLU:HG2	1.75	0.68
3:C:2687:PRO:HB2	3:C:4396:GLN:HB2	1.74	0.68
17:q:358:PRO:HG3	17:q:364:ALA:HB2	1.75	0.68
2:B:1964:SER:OG	2:B:4018:GLY:O	2.11	0.68
2:B:2502:ASN:HB3	2:B:2510:ILE:HB	1.76	0.68
2:B:3140:LEU:HD11	2:B:3437:VAL:HG11	1.75	0.68
3:C:282:ARG:NH2	20:x:125:UNK:O	2.27	0.68
3:C:3425:GLU:HB3	3:C:3719:THR:HG23	1.76	0.68
9:I:73:PRO:O	9:I:109:LYS:NZ	2.27	0.68
17:u:358:PRO:HG3	17:u:364:ALA:HB2	1.75	0.68
1:A:189:ARG:NH1	1:A:190:LEU:O	2.27	0.68
2:B:470:PHE:CE1	2:B:488:ASP:HB3	2.29	0.68
2:B:4340:GLU:OE2	2:B:4347:ASN:ND2	2.27	0.68
3:C:350:HIS:HB2	20:x:151:UNK:HA	1.74	0.68
3:C:857:ARG:HE	5:E:205:PRO:HB2	1.59	0.68
4:D:294:GLN:HB3	4:D:297:LYS:HB2	1.75	0.68
17:Q:248:SER:OG	17:Q:350:LYS:NZ	2.23	0.68
17:Q:407:GLU:HA	17:Q:410:GLU:HG2	1.76	0.68
17:Y:248:SER:OG	17:Y:350:LYS:NZ	2.23	0.68
17:y:173:PRO:HB3	17:y:380:ARG:HH21	1.58	0.68
17:y:358:PRO:HG3	17:y:364:ALA:HB2	1.75	0.68
2:B:1310:THR:HA	16:P:93:ILE:HG21	1.76	0.67
2:B:1317:LEU:HD13	16:P:77:LEU:HB2	1.75	0.67
3:C:248:SER:O	3:C:252:LYS:HB2	1.92	0.67
5:E:428:VAL:HG22	5:E:434:MET:HG3	1.74	0.67
8:H:16:MET:HE1	8:H:77:ILE:HB	1.75	0.67
17:Y:407:GLU:HA	17:Y:410:GLU:HG2	1.76	0.67
17:u:130:LEU:H	17:u:162:ARG:HH21	1.41	0.67
17:u:173:PRO:HB3	17:u:380:ARG:HH21	1.58	0.67
1:A:274:GLY:O	1:A:282:ARG:NH1	2.27	0.67
2:B:2863:VAL:HG13	2:B:2865:PHE:HD1	1.60	0.67
17:Q:2:ARG:HD2	18:R:96:LYS:O	1.94	0.67
17:U:248:SER:OG	17:U:350:LYS:NZ	2.23	0.67
17:y:130:LEU:H	17:y:162:ARG:HH21	1.41	0.67
2:B:1961:GLU:HG2	2:B:4050:TRP:CD1	2.29	0.67
2:B:2377:TYR:HA	2:B:2380:GLN:HE21	1.57	0.67
3:C:24:LYS:HZ1	3:C:29:GLU:HB2	1.59	0.67
5:E:439:TYR:OH	5:E:514:ARG:NH1	2.26	0.67
17:U:407:GLU:HA	17:U:410:GLU:HG2	1.76	0.67
1:A:329:ASP:O	1:A:334:ARG:NH1	2.27	0.67
2:B:1466:THR:HB	2:B:1522:GLN:NE2	2.09	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4048:PRO:HG3	2:B:4084:ILE:HD13	1.74	0.67
3:C:1367:ILE:HA	3:C:1370:LEU:HB3	1.76	0.67
6:F:20:ALA:HA	6:F:101:GLN:HA	1.74	0.67
17:q:173:PRO:HB3	17:q:380:ARG:HH21	1.58	0.67
3:C:3474:VAL:HB	3:C:3478:LYS:HE2	1.76	0.67
21:X:158:LYS:NZ	22:Z:154:ILE:HD11	2.09	0.67
17:Y:130:LEU:H	17:Y:162:ARG:HH21	1.41	0.67
17:u:11:GLN:HA	17:u:72:THR:HG21	1.76	0.67
17:q:130:LEU:H	17:q:162:ARG:HH21	1.41	0.67
18:w:213:CYS:HB3	18:w:222:PRO:HB3	1.75	0.67
3:C:935:VAL:HG21	3:C:1076:LEU:HB2	1.75	0.67
3:C:2342:LYS:HD3	3:C:2406:ARG:HG3	1.76	0.67
3:C:2418:ILE:HB	3:C:2419:PRO:HD2	1.75	0.67
21:X:180:ARG:NE	22:Z:171:ARG:CD	2.27	0.67
5:e:37:ILE:N	5:e:39:GLN:OE1	2.27	0.67
17:y:11:GLN:HA	17:y:72:THR:HG21	1.76	0.67
2:B:752:ILE:HD13	2:B:765:PHE:HB3	1.77	0.67
2:B:2632:SER:HB2	2:B:2642:ARG:NH1	2.09	0.67
3:C:177:ARG:HE	3:C:259:GLN:HA	1.59	0.67
17:U:130:LEU:H	17:U:162:ARG:HH21	1.41	0.67
18:s:213:CYS:HB3	18:s:222:PRO:HB3	1.75	0.67
17:q:11:GLN:HA	17:q:72:THR:HG21	1.76	0.67
2:B:55:GLN:O	2:B:93:LYS:NZ	2.25	0.67
2:B:3658:ILE:HG13	2:B:3747:TYR:HD2	1.59	0.67
3:C:1782:GLU:O	3:C:1786:THR:HG23	1.94	0.67
3:C:3712:LEU:O	3:C:3716:LEU:N	2.23	0.67
18:R:213:CYS:HB3	18:R:222:PRO:HB3	1.75	0.67
4:D:422:ARG:HD3	4:D:454:ILE:HG23	1.76	0.67
18:W:96:LYS:O	17:Y:2:ARG:HD2	1.95	0.67
18:W:213:CYS:HB3	18:W:222:PRO:HB3	1.75	0.67
21:X:141:LEU:HD22	22:Z:136:ILE:HG22	1.77	0.67
17:u:130:LEU:O	17:u:162:ARG:NE	2.28	0.67
17:q:130:LEU:O	17:q:162:ARG:NE	2.28	0.67
17:y:130:LEU:O	17:y:162:ARG:NE	2.28	0.67
2:B:1331:ARG:HG3	2:B:1410:PHE:CB	2.25	0.67
2:B:3797:ILE:HD13	2:B:3800:LEU:HD12	1.75	0.67
3:C:57:TYR:HB2	3:C:91:LYS:HB2	1.77	0.67
5:E:440:TYR:CZ	5:E:504:ILE:HG12	2.29	0.67
17:Y:11:GLN:HA	17:Y:72:THR:HG21	1.76	0.67
18:r:213:CYS:HB3	18:r:222:PRO:HB3	1.74	0.67
2:B:527:PHE:HA	5:E:524:LYS:HZ2	1.60	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4051:LEU:HA	2:B:4054:LEU:HB2	1.76	0.66
2:B:4082:THR:HG22	2:B:4083:GLY:H	1.61	0.66
3:C:1310:PHE:CE2	3:C:1326:MET:HG3	2.30	0.66
3:C:2355:ILE:HD13	3:C:2627:ARG:HA	1.77	0.66
3:C:2849:LEU:HD21	3:C:2876:LEU:HB3	1.77	0.66
17:Q:130:LEU:H	17:Q:162:ARG:HH21	1.41	0.66
18:S:213:CYS:HB3	18:S:222:PRO:HB3	1.75	0.66
17:U:130:LEU:O	17:U:162:ARG:NE	2.28	0.66
18:r:96:LYS:O	17:q:2:ARG:HD2	1.95	0.66
2:B:1893:LEU:HD23	2:B:4167:LEU:HB2	1.76	0.66
12:L:26:MET:HB2	12:L:30:LEU:HD22	1.75	0.66
17:U:11:GLN:HA	17:U:72:THR:HG21	1.76	0.66
17:U:173:PRO:HB3	17:U:380:ARG:HH21	1.58	0.66
17:Y:130:LEU:O	17:Y:162:ARG:NE	2.28	0.66
18:r:93:ILE:HD12	18:r:117:LEU:HD22	1.76	0.66
18:w:96:LYS:O	17:y:2:ARG:HD2	1.95	0.66
1:A:166:GLY:HA2	1:A:171:ARG:H	1.60	0.66
3:C:903:GLN:NE2	3:C:994:GLU:OE2	2.28	0.66
3:C:1850:LEU:HA	3:C:1853:ARG:HD3	1.78	0.66
17:Q:130:LEU:O	17:Q:162:ARG:NE	2.28	0.66
17:Q:173:PRO:HB3	17:Q:380:ARG:HH21	1.58	0.66
17:Y:173:PRO:HB3	17:Y:380:ARG:HH21	1.58	0.66
18:s:93:ILE:HD12	18:s:117:LEU:HD22	1.76	0.66
18:w:93:ILE:HD12	18:w:117:LEU:HD22	1.76	0.66
2:B:1240:PHE:HE1	2:B:1267:TYR:HB3	1.60	0.66
2:B:1889:GLN:HG2	2:B:4193:ILE:HG21	1.77	0.66
3:C:531:PHE:HA	3:C:534:ASN:HB2	1.76	0.66
17:Q:11:GLN:HA	17:Q:72:THR:HG21	1.76	0.66
18:S:93:ILE:HD12	18:S:117:LEU:HD22	1.76	0.66
18:W:93:ILE:HD12	18:W:117:LEU:HD22	1.76	0.66
17:u:240:LEU:HD21	17:u:249:ASP:HA	1.78	0.66
2:B:3130:GLN:HA	2:B:3133:ILE:HD12	1.77	0.66
2:B:4047:MET:SD	2:B:4050:TRP:N	2.69	0.66
2:B:4361:SER:O	2:B:4365:LYS:HG3	1.96	0.66
3:C:4385:THR:HG21	3:C:4419:TRP:HE1	1.59	0.66
19:T:33:VAL:O	19:T:37:THR:HG23	1.94	0.66
17:y:140:GLY:O	17:y:184:ASN:ND2	2.28	0.66
17:y:240:LEU:HD21	17:y:249:ASP:HA	1.78	0.66
2:B:663:LYS:HG2	2:B:664:ASP:H	1.61	0.66
3:C:624:PHE:HB3	3:C:634:ILE:HG23	1.77	0.66
3:C:1979:GLY:N	23:C:4701:ADP:O1B	2.28	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:s:96:LYS:O	17:u:2:ARG:HD2	1.96	0.66
17:u:140:GLY:O	17:u:184:ASN:ND2	2.28	0.66
2:B:656:LEU:HD22	2:B:756:ARG:HD2	1.78	0.66
2:B:1933:LYS:HB2	2:B:1965:VAL:HG11	1.76	0.66
3:C:561:LEU:O	3:C:565:LEU:N	2.23	0.66
18:R:93:ILE:HD12	18:R:117:LEU:HD22	1.76	0.66
21:X:201:PHE:CE2	22:Z:192:MET:HA	2.31	0.66
17:q:140:GLY:O	17:q:184:ASN:ND2	2.28	0.66
17:q:240:LEU:HD21	17:q:249:ASP:HA	1.78	0.66
2:B:169:LYS:HZ1	3:C:150:LYS:HB2	1.59	0.66
2:B:1219:THR:HA	2:B:1222:ILE:HD12	1.76	0.66
3:C:96:LEU:HB3	3:C:119:ILE:HB	1.77	0.66
3:C:2499:LYS:NZ	3:C:2611:MET:O	2.27	0.66
15:O:86:THR:HG21	4:d:76:GLU:H	1.61	0.66
2:B:439:LEU:HB3	2:B:533:ARG:HH11	1.59	0.66
2:B:674:ASP:HB3	2:B:675:PRO:HD3	1.76	0.66
2:B:4362:GLU:HA	2:B:4365:LYS:HE2	1.78	0.66
3:C:1878:LYS:HB2	23:C:4701:ADP:C2	2.31	0.66
3:C:2385:LYS:HD2	3:C:2440:TRP:NE1	2.10	0.66
3:C:4005:LEU:HD23	3:C:4009:LYS:HZ3	1.61	0.66
9:I:30:MET:HG3	9:I:35:LEU:HD22	1.78	0.66
17:Y:140:GLY:O	17:Y:184:ASN:ND2	2.28	0.66
2:B:1048:ASP:OD1	2:B:1173:LYS:NZ	2.28	0.66
2:B:1790:ILE:HD12	2:B:1793:ILE:HD11	1.76	0.66
2:B:2580:ILE:O	2:B:2592:TYR:OH	2.11	0.66
3:C:819:VAL:HG12	3:C:909:MET:HG2	1.78	0.66
3:C:1952:MET:HE3	3:C:1955:PHE:HB2	1.78	0.66
8:H:10:VAL:N	8:H:80:TYR:O	2.29	0.66
18:R:137:VAL:HG11	18:R:154:LEU:HD11	1.78	0.66
18:S:137:VAL:HG11	18:S:154:LEU:HD11	1.78	0.66
3:C:884:LYS:HG3	3:C:885:ARG:HD2	1.78	0.65
3:C:3689:GLN:HE21	3:C:3693:LYS:HG2	1.60	0.65
17:Q:140:GLY:O	17:Q:184:ASN:ND2	2.28	0.65
17:U:140:GLY:O	17:U:184:ASN:ND2	2.28	0.65
18:W:137:VAL:HG11	18:W:154:LEU:HD11	1.78	0.65
17:u:49:VAL:HG21	17:u:241:ARG:HB3	1.78	0.65
17:q:49:VAL:HG21	17:q:241:ARG:HB3	1.78	0.65
18:w:132:LEU:HD23	18:w:164:LYS:HE3	1.77	0.65
17:y:49:VAL:HG21	17:y:241:ARG:HB3	1.78	0.65
2:B:1054:ILE:HD13	2:B:1057:LEU:HD12	1.77	0.65
2:B:2709:LYS:HD3	2:B:2803:CYS:HB3	1.78	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2170:LEU:O	3:C:2174:LEU:HG	1.95	0.65
3:C:3037:SER:O	3:C:3041:THR:HG23	1.96	0.65
17:U:240:LEU:HD21	17:U:249:ASP:HA	1.78	0.65
17:Y:240:LEU:HD21	17:Y:249:ASP:HA	1.78	0.65
18:s:132:LEU:HD23	18:s:164:LYS:HE3	1.77	0.65
2:B:449:GLY:HA3	5:E:513:TYR:CG	2.31	0.65
2:B:801:ILE:HG21	2:B:874:ALA:HB1	1.79	0.65
3:C:1065:ILE:HD13	3:C:1082:CYS:HB2	1.76	0.65
3:C:1702:ALA:HA	3:C:1705:GLN:HG3	1.77	0.65
5:E:213:MET:HG3	5:E:249:GLU:HG3	1.76	0.65
15:O:51:ILE:O	15:O:55:ILE:HG12	1.95	0.65
17:Y:49:VAL:HG21	17:Y:241:ARG:HB3	1.78	0.65
2:B:530:LEU:HD21	2:B:536:ILE:HG21	1.78	0.65
2:B:1971:LYS:HE3	2:B:2021:LEU:HD11	1.79	0.65
2:B:4188:TYR:O	2:B:4192:GLU:N	2.28	0.65
2:B:4454:ILE:HA	2:B:4457:VAL:HG22	1.79	0.65
3:C:336:ILE:O	3:C:340:PRO:HD2	1.97	0.65
3:C:608:ILE:HD13	3:C:705:GLN:HG2	1.77	0.65
3:C:1112:THR:HG21	3:C:1179:ALA:HA	1.78	0.65
3:C:2015:VAL:HG13	3:C:2059:GLY:HA2	1.78	0.65
3:C:3520:MET:HG2	3:C:3645:ILE:HD11	1.76	0.65
4:D:414:PHE:O	4:D:425:ASN:HA	1.96	0.65
4:D:606:ASP:OD1	4:D:610:GLY:N	2.29	0.65
7:G:62:ASP:HB3	7:G:66:ARG:HH21	1.61	0.65
7:G:103:ILE:HD13	7:G:106:LEU:HD12	1.79	0.65
17:Q:49:VAL:HG21	17:Q:241:ARG:HB3	1.78	0.65
17:Q:99:ASN:ND2	18:S:258:ASN:OD1	2.29	0.65
17:Q:240:LEU:HD21	17:Q:249:ASP:HA	1.78	0.65
17:U:49:VAL:HG21	17:U:241:ARG:HB3	1.78	0.65
2:B:677:LEU:HD11	2:B:712:ILE:HD12	1.79	0.65
2:B:851:LYS:HD2	2:B:851:LYS:O	1.97	0.65
2:B:1285:GLU:HG3	2:B:1290:LEU:HB2	1.78	0.65
2:B:1317:LEU:HB3	16:P:32:TRP:HH2	1.60	0.65
2:B:2216:LYS:HZ3	2:B:2266:ASP:C	2.04	0.65
2:B:3436:ASN:OD1	2:B:3437:VAL:N	2.29	0.65
3:C:313:ASN:HD21	3:C:355:PHE:HB3	1.62	0.65
22:Z:98:GLU:O	22:Z:102:VAL:HG23	1.97	0.65
18:s:75:ILE:HG23	18:s:92:LEU:HD22	1.79	0.65
18:r:132:LEU:HD23	18:r:164:LYS:HE3	1.77	0.65
2:B:132:VAL:HG11	3:C:77:VAL:HG22	1.78	0.65
2:B:2799:ALA:HA	2:B:2802:LYS:HG2	1.78	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3122:LEU:HD23	2:B:3125:LYS:HE3	1.77	0.65
2:B:4318:LEU:O	2:B:4322:GLU:N	2.30	0.65
3:C:621:ILE:HA	3:C:624:PHE:CD2	2.31	0.65
3:C:1182:LEU:HD12	3:C:1185:ARG:HE	1.61	0.65
3:C:1954:LYS:HD3	3:C:1965:GLU:HG3	1.78	0.65
3:C:2852:ILE:HD11	3:C:3027:PHE:CZ	2.31	0.65
17:Q:192:LEU:HD23	17:Q:196:ALA:HB3	1.78	0.65
17:U:192:LEU:HD23	17:U:196:ALA:HB3	1.78	0.65
21:X:183:TYR:O	21:X:187:LEU:HG	1.97	0.65
17:Y:192:LEU:HD23	17:Y:196:ALA:HB3	1.78	0.65
2:B:806:ASN:OD1	2:B:881:HIS:NE2	2.30	0.65
2:B:1319:HIS:HA	2:B:1322:TYR:CD2	2.31	0.65
11:K:30:PRO:O	14:N:32:SER:HB3	1.97	0.65
16:P:36:CYS:HB2	16:P:95:ASN:HD21	1.61	0.65
18:r:75:ILE:HG23	18:r:92:LEU:HD22	1.79	0.65
18:w:75:ILE:HG23	18:w:92:LEU:HD22	1.79	0.65
17:y:330:MET:HA	17:y:333:VAL:HG12	1.79	0.65
2:B:2113:LYS:HD3	2:B:2321:VAL:HG11	1.79	0.65
3:C:210:GLU:HG3	3:C:280:ASN:ND2	2.11	0.65
3:C:2575:THR:HA	24:C:4702:ATP:H1'	1.78	0.65
11:K:37:LEU:HD13	14:N:36:LYS:NZ	2.12	0.65
18:R:132:LEU:HD23	18:R:164:LYS:HE3	1.77	0.65
22:Z:105:GLN:O	22:Z:109:ILE:HG12	1.96	0.65
18:s:137:VAL:HG11	18:s:154:LEU:HD11	1.78	0.65
17:u:330:MET:HA	17:u:333:VAL:HG12	1.79	0.65
18:r:137:VAL:HG11	18:r:154:LEU:HD11	1.78	0.65
18:w:137:VAL:HG11	18:w:154:LEU:HD11	1.78	0.65
2:B:1330:TRP:HB2	2:B:1410:PHE:CD2	2.32	0.65
2:B:1475:GLU:O	2:B:1479:GLN:HG2	1.97	0.65
2:B:2914:LEU:HD23	2:B:2946:PHE:HZ	1.60	0.65
2:B:4044:ILE:HB	2:B:4078:ALA:HB2	1.79	0.65
18:W:75:ILE:HG23	18:W:92:LEU:HD22	1.79	0.65
17:q:192:LEU:HD23	17:q:196:ALA:HB3	1.78	0.65
17:q:330:MET:HA	17:q:333:VAL:HG12	1.79	0.65
2:B:217:GLN:HA	2:B:220:LYS:HD3	1.77	0.65
2:B:2625:ARG:HH22	2:B:2667:LEU:HD23	1.61	0.65
3:C:3825:THR:HB	3:C:4300:VAL:HB	1.79	0.65
17:Q:330:MET:HA	17:Q:333:VAL:HG12	1.79	0.65
18:R:75:ILE:HG23	18:R:92:LEU:HD22	1.79	0.65
21:X:197:LYS:CE	22:Z:189:ARG:HD2	2.27	0.65
17:Y:330:MET:HA	17:Y:333:VAL:HG12	1.79	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:283:THR:HG21	2:B:939:ASN:HB3	1.78	0.64
2:B:688:LEU:O	2:B:691:ARG:NH1	2.30	0.64
2:B:1502:GLU:OE1	2:B:1505:ARG:NH2	2.30	0.64
2:B:3696:GLN:HA	2:B:3699:SER:HB3	1.78	0.64
5:E:158:GLU:O	5:E:198:TYR:OH	2.10	0.64
18:S:75:ILE:HG23	18:S:92:LEU:HD22	1.79	0.64
18:S:96:LYS:O	17:U:2:ARG:HD2	1.97	0.64
17:U:330:MET:HA	17:U:333:VAL:HG12	1.79	0.64
18:s:425:LEU:HA	18:s:428:LEU:HD13	1.79	0.64
17:u:184:ASN:OD1	17:u:398:TYR:OH	2.13	0.64
17:u:192:LEU:HD23	17:u:196:ALA:HB3	1.78	0.64
18:w:425:LEU:HA	18:w:428:LEU:HD13	1.79	0.64
17:y:184:ASN:OD1	17:y:398:TYR:OH	2.13	0.64
17:y:192:LEU:HD23	17:y:196:ALA:HB3	1.78	0.64
2:B:2030:PRO:O	2:B:2031:ASP:HB3	1.97	0.64
2:B:2121:ILE:O	2:B:2125:LEU:HG	1.97	0.64
2:B:2455:SER:O	2:B:2461:PHE:HB3	1.96	0.64
3:C:601:PRO:HD2	3:C:701:CYS:SG	2.37	0.64
3:C:696:ILE:HG23	3:C:700:LYS:HE2	1.79	0.64
3:C:1986:LEU:O	3:C:1991:LYS:NZ	2.30	0.64
3:C:2589:TYR:CE1	3:C:2599:GLN:HB3	2.32	0.64
4:D:496:TYR:HD2	4:D:526:ARG:HH21	1.45	0.64
10:J:52:GLU:OE2	4:d:95:LYS:NZ	2.29	0.64
19:T:43:ASN:HA	19:T:46:LYS:HE3	1.79	0.64
21:X:194:LEU:CD1	22:Z:185:LEU:CD2	2.72	0.64
18:r:425:LEU:HA	18:r:428:LEU:HD13	1.79	0.64
2:B:4580:ILE:HG21	2:B:4583:VAL:HG23	1.78	0.64
3:C:1260:TYR:HD1	3:C:1283:LEU:HD21	1.62	0.64
3:C:2449:VAL:HG21	3:C:2458:GLN:HG3	1.80	0.64
3:C:3506:GLN:NE2	3:C:3544:LYS:O	2.31	0.64
4:D:508:TRP:HA	4:D:516:PHE:HA	1.78	0.64
18:R:101:ASN:ND2	26:R:501:GTP:O1G	2.30	0.64
18:S:132:LEU:HD23	18:S:164:LYS:HE3	1.77	0.64
18:W:132:LEU:HD23	18:W:164:LYS:HE3	1.77	0.64
17:q:184:ASN:OD1	17:q:398:TYR:OH	2.13	0.64
1:A:42:ASP:HB2	1:A:48:ASP:HB3	1.80	0.64
2:B:165:LEU:HA	2:B:168:ILE:HB	1.78	0.64
2:B:1359:PHE:HB2	2:B:1362:TYR:CD2	2.32	0.64
3:C:546:LEU:HD12	3:C:549:LEU:HD23	1.79	0.64
3:C:2806:LYS:NZ	3:C:2809:GLU:O	2.30	0.64
6:F:75:GLU:OE2	7:G:131:LYS:NZ	2.31	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:59:ALA:O	9:I:63:ILE:HG12	1.97	0.64
9:I:99:TYR:HD2	9:I:103:LEU:HB2	1.60	0.64
11:K:111:GLN:OE1	11:K:111:GLN:N	2.30	0.64
18:w:101:ASN:ND2	26:w:501:GTP:O1G	2.30	0.64
2:B:454:GLU:O	2:B:458:GLN:CB	2.45	0.64
2:B:2143:LEU:HA	2:B:2146:ILE:HD12	1.79	0.64
2:B:2496:VAL:HA	2:B:2513:ALA:HB3	1.80	0.64
2:B:3929:VAL:HG13	2:B:3933:LEU:HD12	1.79	0.64
3:C:243:LEU:HD22	3:C:320:LEU:HD13	1.78	0.64
3:C:542:ILE:HG23	3:C:575:ASN:HB2	1.79	0.64
18:S:101:ASN:ND2	26:S:501:GTP:O1G	2.30	0.64
18:W:101:ASN:ND2	26:W:501:GTP:O1G	2.30	0.64
18:s:101:ASN:ND2	26:s:501:GTP:O1G	2.30	0.64
18:r:101:ASN:ND2	26:r:501:GTP:O1G	2.30	0.64
2:B:2517:THR:HA	2:B:2520:LEU:HB2	1.80	0.64
3:C:52:LYS:NZ	3:C:75:ASP:OD2	2.30	0.64
18:S:425:LEU:HA	18:S:428:LEU:HD13	1.79	0.64
18:W:425:LEU:HA	18:W:428:LEU:HD13	1.79	0.64
21:X:197:LYS:NZ	22:Z:189:ARG:HB2	2.12	0.64
2:B:449:GLY:HA3	5:E:513:TYR:CB	2.28	0.64
2:B:572:MET:HG3	2:B:575:ASN:H	1.61	0.64
2:B:652:SER:O	2:B:672:ASN:ND2	2.30	0.64
2:B:1733:THR:HA	2:B:1736:ILE:HD12	1.80	0.64
2:B:4019:GLN:O	2:B:4021:GLN:NE2	2.31	0.64
17:Q:7:ILE:HB	17:Q:135:ILE:HD12	1.79	0.64
2:B:1047:LEU:HD22	2:B:1106:PHE:CE2	2.33	0.64
2:B:1047:LEU:HD22	2:B:1106:PHE:HE2	1.63	0.64
2:B:2933:TYR:HA	2:B:2936:ILE:HG22	1.80	0.64
3:C:2149:VAL:HG13	3:C:2150:ARG:HG3	1.79	0.64
3:C:3667:GLN:HB2	3:C:3670:LEU:HG	1.78	0.64
5:E:153:PHE:CE1	5:E:205:PRO:HA	2.32	0.64
16:P:37:LYS:O	16:P:95:ASN:ND2	2.30	0.64
18:R:425:LEU:HA	18:R:428:LEU:HD13	1.79	0.64
17:U:7:ILE:HB	17:U:135:ILE:HD12	1.79	0.64
17:U:21:TRP:O	17:U:25:SER:OG	2.16	0.64
17:Y:7:ILE:HB	17:Y:135:ILE:HD12	1.79	0.64
17:u:318:ARG:HB2	17:u:364:ALA:HB3	1.79	0.64
2:B:228:LEU:O	2:B:232:GLU:HG2	1.98	0.64
3:C:343:MET:HG2	3:C:422:CYS:HB2	1.80	0.64
3:C:3542:ARG:NH2	3:C:3579:ILE:HG13	2.13	0.64
17:Q:21:TRP:O	17:Q:25:SER:OG	2.16	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Y:7:ILE:HA	17:Y:64:ILE:HG13	1.79	0.64
17:q:21:TRP:O	17:q:25:SER:OG	2.16	0.64
17:y:318:ARG:HB2	17:y:364:ALA:HB3	1.79	0.64
1:A:256:ILE:HG23	1:A:324:ALA:HB2	1.78	0.64
2:B:3829:VAL:HG13	2:B:3950:LEU:HD11	1.78	0.64
3:C:2873:LYS:HB2	23:C:4703:ADP:O2A	1.98	0.64
3:C:2888:ILE:HG23	3:C:2923:LEU:HD13	1.79	0.64
21:X:209:HIS:C	21:X:213:HIS:CD2	2.76	0.64
17:Y:21:TRP:O	17:Y:25:SER:OG	2.16	0.64
2:B:528:GLU:HB3	5:E:528:LEU:HD22	1.80	0.63
2:B:1260:ALA:O	2:B:1264:ILE:HG13	1.96	0.63
2:B:1882:ARG:O	2:B:1886:THR:HG23	1.97	0.63
2:B:2146:ILE:O	2:B:2150:THR:HG23	1.98	0.63
3:C:862:LEU:HB2	3:C:972:TRP:CD1	2.33	0.63
3:C:942:VAL:HB	3:C:1017:LEU:HD11	1.80	0.63
3:C:1026:LEU:HD13	3:C:1088:TRP:CG	2.33	0.63
12:L:21:ILE:HG12	12:L:31:LEU:HD21	1.80	0.63
17:U:7:ILE:HA	17:U:64:ILE:HG13	1.79	0.63
17:u:21:TRP:O	17:u:25:SER:OG	2.16	0.63
17:q:318:ARG:HB2	17:q:364:ALA:HB3	1.79	0.63
17:y:21:TRP:O	17:y:25:SER:OG	2.16	0.63
2:B:716:ASP:HA	2:B:719:VAL:HG12	1.78	0.63
2:B:2577:GLN:OE1	2:B:2636:ARG:NH1	2.30	0.63
2:B:2608:ASN:ND2	2:B:2661:PHE:O	2.31	0.63
3:C:1381:GLU:O	3:C:1384:LYS:HG2	1.98	0.63
3:C:2382:GLU:HA	3:C:2438:LEU:HD11	1.80	0.63
17:Q:7:ILE:HA	17:Q:64:ILE:HG13	1.79	0.63
2:B:1325:TRP:CH2	2:B:1416:LEU:HD13	2.33	0.63
2:B:1399:THR:HB	2:B:1418:LEU:HD22	1.80	0.63
2:B:1885:ILE:HG21	2:B:4189:ILE:HA	1.79	0.63
3:C:1144:LYS:NZ	4:d:170:THR:O	2.31	0.63
5:E:175:THR:HA	5:E:202:LEU:HD12	1.79	0.63
2:B:161:VAL:O	2:B:164:LEU:HB3	1.98	0.63
2:B:1340:ASP:O	2:B:1344:THR:OG1	2.13	0.63
2:B:1775:VAL:HA	2:B:1784:ARG:HH22	1.62	0.63
2:B:1783:GLU:HG3	2:B:1786:LYS:HD3	1.81	0.63
2:B:2498:ASP:HA	2:B:2510:ILE:HD13	1.80	0.63
2:B:3513:PRO:HD3	2:B:3540:GLN:HE22	1.62	0.63
2:B:3937:ARG:HG3	2:B:3940:ILE:HD11	1.80	0.63
3:C:934:GLU:O	3:C:945:ASN:N	2.24	0.63
3:C:1227:ARG:HG3	3:C:1228:ARG:HH22	1.62	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:67:ASN:HB2	11:K:58:GLN:HB2	1.80	0.63
17:q:7:ILE:HB	17:q:135:ILE:HD12	1.79	0.63
2:B:156:ASN:HB2	2:B:180:LYS:HE2	1.81	0.63
3:C:77:VAL:HG11	3:C:94:TRP:HZ2	1.63	0.63
3:C:562:LYS:HA	3:C:565:LEU:HB2	1.81	0.63
3:C:1830:TRP:CD1	3:C:1863:SER:HG	2.17	0.63
14:N:76:VAL:HB	14:N:79:TYR:HB2	1.79	0.63
18:R:220:GLU:H	18:R:220:GLU:CD	2.06	0.63
2:B:507:ILE:HD11	2:B:536:ILE:HG23	1.80	0.63
2:B:3780:THR:HG22	2:B:3784:LYS:NZ	2.13	0.63
3:C:85:LEU:HG	3:C:87:LYS:H	1.63	0.63
3:C:317:LEU:HA	3:C:352:ILE:HG23	1.80	0.63
3:C:1144:LYS:HE2	4:d:171:ARG:HG2	1.79	0.63
3:C:1300:TYR:HA	3:C:1353:LEU:HD22	1.81	0.63
3:C:1801:LYS:N	3:C:1805:ASP:OD2	2.27	0.63
3:C:4047:HIS:HB3	3:C:4077:GLU:H	1.64	0.63
17:Q:263:LEU:HD21	17:Q:422:TYR:HA	1.81	0.63
17:Y:263:LEU:HD21	17:Y:422:TYR:HA	1.81	0.63
17:u:7:ILE:HB	17:u:135:ILE:HD12	1.79	0.63
2:B:2441:LEU:HD21	2:B:2462:ASN:HD21	1.62	0.63
2:B:4086:ILE:HD12	2:B:4089:LEU:HB2	1.80	0.63
3:C:2049:ARG:NH2	3:C:2249:ASP:OD2	2.29	0.63
3:C:2053:SER:O	3:C:2057:THR:HG23	1.99	0.63
3:C:2887:LEU:O	3:C:2921:THR:N	2.31	0.63
13:M:5:PRO:HA	13:M:77:ILE:HG22	1.81	0.63
17:U:263:LEU:HD21	17:U:422:TYR:HA	1.81	0.63
18:s:326:LYS:HE3	17:q:212:PHE:CE2	2.33	0.63
17:y:7:ILE:HB	17:y:135:ILE:HD12	1.79	0.63
3:C:618:THR:HA	3:C:621:ILE:HG12	1.81	0.63
3:C:1401:ILE:HA	3:C:1404:ILE:HG22	1.81	0.63
3:C:2304:ILE:O	3:C:2308:ILE:HG12	1.99	0.63
12:L:82:PHE:HB3	13:M:60:ASN:O	1.99	0.63
1:A:220:TRP:HB2	1:A:253:LEU:HD13	1.81	0.63
3:C:1431:THR:O	3:C:1435:GLU:HG3	1.98	0.63
5:E:257:VAL:HG23	5:E:258:GLU:H	1.62	0.63
18:S:220:GLU:CD	18:S:220:GLU:H	2.06	0.63
18:s:189:LEU:HD11	18:s:418:PHE:HE1	1.63	0.63
17:q:263:LEU:HD21	17:q:422:TYR:HA	1.81	0.63
1:A:124:PRO:HB3	1:A:185:PHE:CE2	2.34	0.62
1:A:223:THR:HA	2:B:956:LEU:HD11	1.81	0.62
1:A:345:TRP:CD1	2:B:970:ALA:HB1	2.34	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:833:GLY:HA2	2:B:836:ILE:HG12	1.81	0.62
2:B:1244:LEU:HB3	2:B:1245:PRO:HD3	1.81	0.62
3:C:872:ASP:O	3:C:888:ARG:NH2	2.31	0.62
3:C:1853:ARG:NH2	3:C:1998:SER:OG	2.28	0.62
3:C:2023:LEU:HD22	3:C:2074:LEU:HD23	1.81	0.62
18:W:220:GLU:H	18:W:220:GLU:CD	2.06	0.62
17:q:7:ILE:HA	17:q:64:ILE:HG13	1.79	0.62
18:w:189:LEU:HD11	18:w:418:PHE:HE1	1.63	0.62
17:y:263:LEU:HD21	17:y:422:TYR:HA	1.81	0.62
2:B:65:SER:HB2	2:B:87:LYS:H	1.62	0.62
2:B:1815:PHE:HD2	2:B:4184:ASN:HB2	1.64	0.62
2:B:4177:GLN:HE21	2:B:4180:LYS:HB2	1.64	0.62
3:C:56:TYR:OH	3:C:74:GLN:NE2	2.32	0.62
3:C:2925:THR:HG22	3:C:3000:CYS:HB2	1.80	0.62
5:E:393:ILE:HD13	5:E:403:ILE:HB	1.81	0.62
17:U:318:ARG:HB2	17:U:364:ALA:HB3	1.79	0.62
21:X:141:LEU:O	21:X:145:ILE:HG13	2.00	0.62
17:Y:318:ARG:HB2	17:Y:364:ALA:HB3	1.79	0.62
22:Z:149:LYS:HZ3	22:Z:153:ALA:HB2	1.64	0.62
17:u:263:LEU:HD21	17:u:422:TYR:HA	1.81	0.62
18:r:189:LEU:HD11	18:r:418:PHE:HE1	1.63	0.62
18:w:220:GLU:H	18:w:220:GLU:CD	2.06	0.62
17:y:7:ILE:HA	17:y:64:ILE:HG13	1.79	0.62
1:A:222:PHE:O	1:A:223:THR:OG1	2.14	0.62
1:A:341:TRP:CE2	1:A:344:ASN:HA	2.34	0.62
2:B:1325:TRP:HH2	2:B:1416:LEU:HD13	1.64	0.62
2:B:2747:VAL:HG22	2:B:2778:THR:HG21	1.81	0.62
2:B:2935:LYS:HD2	2:B:2944:ARG:HD2	1.80	0.62
3:C:601:PRO:HG3	3:C:697:ARG:HD3	1.80	0.62
3:C:1426:GLN:NE2	3:C:1486:HIS:O	2.32	0.62
3:C:2576:LEU:HD12	3:C:2579:VAL:HB	1.81	0.62
3:C:2940:MET:HE1	3:C:2947:ILE:HA	1.81	0.62
3:C:4358:ARG:HE	3:C:4361:THR:HB	1.64	0.62
1:A:96:LEU:HD23	1:A:113:ILE:HG22	1.81	0.62
2:B:92:ILE:HB	2:B:109:VAL:HB	1.81	0.62
2:B:425:ASP:OD1	2:B:426:ILE:N	2.32	0.62
2:B:1246:PHE:CE2	2:B:1257:ILE:HG12	2.35	0.62
2:B:1319:HIS:HA	2:B:1322:TYR:HD2	1.65	0.62
3:C:951:ILE:HD13	3:C:1074:MET:HE2	1.80	0.62
3:C:2727:LEU:HD21	3:C:2776:LYS:HD2	1.81	0.62
3:C:3721:THR:HA	3:C:3724:LYS:HG2	1.81	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:s:220:GLU:CD	18:s:220:GLU:H	2.06	0.62
18:s:326:LYS:HE3	17:q:212:PHE:HE2	1.64	0.62
17:u:7:ILE:HA	17:u:64:ILE:HG13	1.79	0.62
2:B:497:LYS:O	4:D:488:TYR:OH	2.14	0.62
2:B:701:ILE:HA	2:B:704:LYS:HD2	1.80	0.62
2:B:1368:LYS:HB3	2:B:1372:MET:HE2	1.82	0.62
2:B:2017:ASN:OD1	2:B:4046:LEU:HD12	1.99	0.62
2:B:2500:LEU:O	2:B:2503:ASP:N	2.31	0.62
2:B:4172:TYR:OH	2:B:4189:ILE:HG21	2.00	0.62
3:C:28:VAL:HG22	3:C:69:LYS:HD3	1.81	0.62
3:C:244:ILE:HG23	3:C:247:ARG:HH21	1.64	0.62
3:C:1399:PHE:HE2	3:C:1404:ILE:HB	1.65	0.62
3:C:2357:VAL:O	3:C:2360:ILE:HG12	1.99	0.62
21:X:110:ALA:O	21:X:114:LYS:HD3	1.99	0.62
17:u:66:MET:HG3	17:u:147:MET:HE3	1.80	0.62
17:y:66:MET:HG3	17:y:147:MET:HE3	1.80	0.62
2:B:196:PHE:O	2:B:200:ILE:HG12	2.00	0.62
2:B:345:ARG:HG3	2:B:414:VAL:HG12	1.79	0.62
2:B:1301:CYS:SG	2:B:1302:MET:N	2.73	0.62
2:B:1381:ALA:N	2:B:1384:SER:HG	1.98	0.62
2:B:1886:THR:HA	2:B:4193:ILE:HG23	1.82	0.62
3:C:177:ARG:NH2	3:C:258:GLU:HB2	2.15	0.62
3:C:1769:LEU:HB3	3:C:2016:GLY:HA2	1.80	0.62
8:H:40:GLU:OE1	8:H:40:GLU:N	2.32	0.62
17:Q:318:ARG:HB2	17:Q:364:ALA:HB3	1.79	0.62
21:X:121:LEU:HD13	22:Z:108:ILE:HD12	1.80	0.62
21:X:191:GLU:CG	22:Z:185:LEU:HD11	2.29	0.62
21:X:194:LEU:HD11	22:Z:185:LEU:HB3	1.81	0.62
22:Z:106:LYS:O	22:Z:110:GLU:HG3	2.00	0.62
18:r:220:GLU:H	18:r:220:GLU:CD	2.06	0.62
17:q:66:MET:HG3	17:q:147:MET:HE3	1.80	0.62
18:w:294:SER:HA	18:w:297:GLU:HB2	1.82	0.62
1:A:3:GLN:N	1:A:305:ASN:O	2.23	0.62
2:B:1961:GLU:HA	2:B:4047:MET:CE	2.22	0.62
3:C:700:LYS:HE3	4:D:396:THR:HB	1.80	0.62
3:C:2784:LEU:N	3:C:2812:ASP:HB2	2.15	0.62
4:D:481:ILE:HD12	4:D:526:ARG:CZ	2.29	0.62
9:I:99:TYR:CD2	9:I:103:LEU:HB2	2.34	0.62
16:P:60:ILE:HG23	16:P:69:VAL:HG21	1.80	0.62
18:s:294:SER:HA	18:s:297:GLU:HB2	1.82	0.62
2:B:439:LEU:HD22	2:B:530:LEU:HA	1.82	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:658:GLN:NE2	2:B:746:GLU:OE1	2.32	0.62
2:B:4188:TYR:O	2:B:4192:GLU:HG2	2.00	0.62
3:C:1324:ALA:HB3	3:C:1327:GLU:HB3	1.81	0.62
3:C:2589:TYR:CD1	3:C:2599:GLN:HB3	2.34	0.62
4:D:507:LYS:HD2	4:D:550:TRP:CD1	2.35	0.62
18:S:189:LEU:HD11	18:S:418:PHE:HE1	1.63	0.62
21:X:180:ARG:NH2	22:Z:171:ARG:CG	2.52	0.62
18:r:294:SER:HA	18:r:297:GLU:HB2	1.82	0.62
2:B:1582:VAL:HG12	2:B:1586:GLN:HE22	1.65	0.62
2:B:2176:VAL:HG12	2:B:2177:ARG:HG2	1.82	0.62
3:C:797:ASN:ND2	5:E:453:SER:HB2	2.14	0.62
3:C:1749:ALA:HA	3:C:1752:ILE:HD12	1.81	0.62
3:C:2818:ARG:HG3	3:C:2846:LEU:HD11	1.82	0.62
4:D:536:ILE:HG23	4:D:641:ASN:HD21	1.64	0.62
8:H:9:PRO:HA	8:H:81:VAL:HA	1.80	0.62
17:Q:391:ARG:O	18:S:262:TYR:OH	2.18	0.62
17:Q:421:GLU:OE1	17:Q:424:GLN:NE2	2.33	0.62
18:R:189:LEU:HD11	18:R:418:PHE:HE1	1.63	0.62
18:W:189:LEU:HD11	18:W:418:PHE:HE1	1.63	0.62
21:X:197:LYS:CG	22:Z:192:MET:SD	2.74	0.62
17:Y:66:MET:HG3	17:Y:147:MET:HE3	1.80	0.62
18:s:76:ASP:O	18:s:80:THR:HG23	2.00	0.62
18:w:76:ASP:O	18:w:80:THR:HG23	2.00	0.62
17:y:421:GLU:OE1	17:y:424:GLN:NE2	2.33	0.62
2:B:875:ILE:HB	2:B:962:PHE:CZ	2.35	0.62
2:B:1522:GLN:HG2	2:B:1526:LYS:HE3	1.81	0.62
2:B:3086:HIS:HA	2:B:3089:ILE:HD12	1.81	0.62
3:C:667:LYS:HD2	3:C:716:ILE:HD12	1.81	0.62
4:D:641:ASN:HA	4:D:644:ILE:HD12	1.82	0.62
17:Q:66:MET:HG3	17:Q:147:MET:HE3	1.80	0.62
17:Q:176:SER:OG	17:Q:178:THR:O	2.18	0.62
17:U:66:MET:HG3	17:U:147:MET:HE3	1.80	0.62
17:U:176:SER:OG	17:U:178:THR:O	2.18	0.62
17:U:421:GLU:OE1	17:U:424:GLN:NE2	2.33	0.62
17:Y:176:SER:OG	17:Y:178:THR:O	2.18	0.62
17:Y:421:GLU:OE1	17:Y:424:GLN:NE2	2.33	0.62
2:B:315:GLU:O	2:B:319:PRO:HD2	2.00	0.61
2:B:565:GLY:HA2	2:B:571:SER:H	1.63	0.61
2:B:1282:ASN:HA	2:B:1285:GLU:OE1	2.00	0.61
2:B:1629:LYS:HG2	2:B:1633:TYR:HE1	1.64	0.61
2:B:3848:ASP:O	2:B:3853:CYS:N	2.33	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:952:GLN:HG2	3:C:1006:ILE:HD13	1.82	0.61
3:C:2880:ALA:HA	3:C:2883:ILE:HG12	1.81	0.61
3:C:3692:ASP:O	3:C:3695:LEU:HB2	2.00	0.61
3:C:4102:LYS:HE2	3:C:4266:ILE:HG22	1.81	0.61
3:C:4500:ASP:O	3:C:4561:ILE:HG13	2.00	0.61
4:D:400:TRP:N	4:D:417:ILE:O	2.20	0.61
19:T:104:ALA:O	19:T:177:ARG:HD3	2.00	0.61
18:W:23:LEU:HD11	18:W:363:VAL:HB	1.83	0.61
18:s:346:TRP:HB3	17:q:391:ARG:HG2	1.82	0.61
17:u:421:GLU:OE1	17:u:424:GLN:NE2	2.33	0.61
18:r:76:ASP:O	18:r:80:THR:HG23	2.00	0.61
17:q:421:GLU:OE1	17:q:424:GLN:NE2	2.33	0.61
2:B:66:GLY:HA2	2:B:86:LYS:HG2	1.81	0.61
2:B:1315:ILE:HG23	2:B:1365:ILE:HG13	1.82	0.61
3:C:321:GLU:HB2	3:C:345:ALA:HB1	1.82	0.61
3:C:475:LYS:O	4:D:643:LYS:NZ	2.23	0.61
3:C:535:ASN:HB3	3:C:568:ARG:HH12	1.66	0.61
3:C:805:ARG:HG3	3:C:806:ILE:HG13	1.81	0.61
11:K:37:LEU:HB2	14:N:36:LYS:HD2	1.81	0.61
12:L:22:ARG:NH1	12:L:97:ASP:OD2	2.33	0.61
18:S:23:LEU:HD11	18:S:363:VAL:HB	1.83	0.61
1:A:334:ARG:HD3	1:A:351:ALA:HB1	1.82	0.61
2:B:797:PHE:CE1	2:B:829:VAL:HA	2.34	0.61
2:B:1892:ASN:HB3	2:B:4171:ARG:HG3	1.82	0.61
5:E:271:LEU:HD13	5:E:280:VAL:HG21	1.83	0.61
12:L:37:GLN:HE22	12:L:41:LEU:HD12	1.65	0.61
19:T:45:LYS:O	19:T:49:LYS:HG2	2.01	0.61
18:W:294:SER:HA	18:W:297:GLU:HB2	1.82	0.61
17:u:176:SER:OG	17:u:178:THR:O	2.18	0.61
17:q:176:SER:OG	17:q:178:THR:O	2.18	0.61
2:B:452:LEU:HD21	5:E:517:LYS:HZ3	1.66	0.61
2:B:1943:LEU:HG	2:B:1948:ALA:HB3	1.82	0.61
2:B:2529:GLN:O	2:B:2531:ARG:NH1	2.33	0.61
5:E:197:ALA:HB3	5:E:212:LEU:HB3	1.82	0.61
15:O:74:GLN:HB3	15:O:107:TYR:HB2	1.82	0.61
18:R:23:LEU:HD11	18:R:363:VAL:HB	1.83	0.61
18:R:265:ILE:HG21	18:R:435:VAL:HG11	1.82	0.61
18:S:294:SER:HA	18:S:297:GLU:HB2	1.82	0.61
4:d:116:ILE:O	5:e:41:VAL:HG11	2.01	0.61
18:s:23:LEU:HD11	18:s:363:VAL:HB	1.83	0.61
18:s:265:ILE:HG21	18:s:435:VAL:HG11	1.82	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:u:391:ARG:HG2	18:w:346:TRP:HB3	1.81	0.61
18:r:265:ILE:HG21	18:r:435:VAL:HG11	1.82	0.61
17:q:72:THR:O	17:q:76:VAL:HG12	2.00	0.61
18:w:23:LEU:HD11	18:w:363:VAL:HB	1.83	0.61
17:y:72:THR:O	17:y:76:VAL:HG12	2.00	0.61
17:y:176:SER:OG	17:y:178:THR:O	2.18	0.61
2:B:30:LYS:HA	2:B:33:LEU:HD23	1.81	0.61
2:B:454:GLU:O	2:B:458:GLN:HB2	2.01	0.61
2:B:2462:ASN:HA	2:B:2465:TRP:HB3	1.83	0.61
2:B:2473:PHE:HD2	2:B:2479:CYS:HB2	1.64	0.61
3:C:1930:ASP:HB3	3:C:1933:VAL:HG23	1.80	0.61
3:C:1932:GLU:CB	3:C:4021:GLU:HB3	2.30	0.61
3:C:3985:MET:HE1	3:C:4066:ILE:HD12	1.82	0.61
5:E:427:LEU:HG	5:E:429:ARG:NH1	2.15	0.61
8:H:77:ILE:HG12	8:H:79:LEU:HD22	1.82	0.61
16:P:30:ALA:HB2	16:P:77:LEU:HD12	1.82	0.61
18:S:265:ILE:HG21	18:S:435:VAL:HG11	1.82	0.61
18:r:23:LEU:HD11	18:r:363:VAL:HB	1.83	0.61
18:w:265:ILE:HG21	18:w:435:VAL:HG11	1.82	0.61
2:B:273:LYS:HB3	2:B:282:ARG:HH12	1.66	0.61
2:B:1113:LEU:HD21	2:B:1160:ILE:HB	1.82	0.61
3:C:2335:ARG:CZ	3:C:2339:LEU:HD21	2.30	0.61
7:G:81:SER:N	7:G:142:GLU:O	2.33	0.61
15:O:12:GLU:HG2	5:e:26:ARG:NE	2.13	0.61
18:R:294:SER:HA	18:R:297:GLU:HB2	1.82	0.61
18:W:265:ILE:HG21	18:W:435:VAL:HG11	1.82	0.61
21:X:204:LEU:HD11	22:Z:199:ALA:CB	2.09	0.61
18:s:435:VAL:HA	17:q:391:ARG:HH22	1.65	0.61
17:u:72:THR:O	17:u:76:VAL:HG12	2.00	0.61
2:B:2089:LEU:HG	2:B:2101:LEU:HD13	1.83	0.61
2:B:2125:LEU:HD22	2:B:4466:LEU:HD11	1.83	0.61
2:B:2481:ASP:HA	2:B:2494:TRP:CZ2	2.36	0.61
3:C:596:LEU:HD11	3:C:598:ARG:HE	1.65	0.61
3:C:2101:ILE:HG12	3:C:4498:LEU:HB3	1.81	0.61
3:C:2876:LEU:O	3:C:2879:LEU:N	2.34	0.61
10:J:52:GLU:HG2	4:d:95:LYS:HG2	1.83	0.61
11:K:29:PRO:HG2	14:N:30:TYR:H	1.65	0.61
15:O:28:LYS:HE2	5:e:33:GLN:H	1.66	0.61
21:X:92:GLY:HA2	21:X:95:LYS:HD2	1.82	0.61
21:X:180:ARG:HH12	22:Z:171:ARG:CG	1.96	0.61
2:B:518:TYR:HE2	5:E:361:LEU:HB3	1.65	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:531:LEU:HD13	2:B:609:LEU:HB3	1.83	0.61
2:B:1775:VAL:HG11	2:B:2041:MET:O	2.00	0.61
2:B:2709:LYS:HD3	2:B:2803:CYS:CB	2.31	0.61
2:B:3658:ILE:HG13	2:B:3747:TYR:CD2	2.35	0.61
4:D:503:VAL:HG11	4:D:518:SER:HB2	1.83	0.61
7:G:138:ALA:HB3	7:G:145:LEU:HB2	1.82	0.61
19:T:166:LYS:HE3	19:T:168:ASN:HD21	1.65	0.61
1:A:199:PRO:O	1:A:221:SER:OG	2.16	0.61
2:B:3912:LEU:HD21	2:B:3917:LYS:HD3	1.82	0.61
2:B:4047:MET:HE3	2:B:4050:TRP:CD2	2.35	0.61
3:C:2299:GLY:H	3:C:2302:ALA:HB3	1.65	0.61
3:C:2419:PRO:HD3	3:C:2440:TRP:CD2	2.35	0.61
5:E:154:LYS:HB3	5:E:485:VAL:H	1.66	0.61
8:H:14:SER:HA	8:H:77:ILE:HA	1.83	0.61
17:U:72:THR:O	17:U:76:VAL:HG12	2.00	0.61
18:W:76:ASP:O	18:W:80:THR:HG23	2.00	0.61
17:Y:72:THR:O	17:Y:76:VAL:HG12	2.00	0.61
2:B:665:GLU:HB3	2:B:726:LYS:HG3	1.82	0.61
2:B:1485:MET:HE1	2:B:1505:ARG:HD3	1.82	0.61
2:B:1893:LEU:HD11	2:B:4164:ASP:HA	1.81	0.61
2:B:2209:GLU:HG2	2:B:2257:MET:HG2	1.83	0.61
2:B:3652:GLY:O	2:B:3655:GLU:HG3	2.01	0.61
3:C:4536:TRP:CD1	3:C:4552:ASP:H	2.19	0.61
17:Q:72:THR:O	17:Q:76:VAL:HG12	2.00	0.61
18:S:76:ASP:O	18:S:80:THR:HG23	2.00	0.61
22:Z:144:ASP:HA	22:Z:147:ASN:HD21	1.66	0.61
17:u:61:PRO:HG2	17:u:84:LEU:HB3	1.82	0.61
17:y:61:PRO:HG2	17:y:84:LEU:HB3	1.83	0.61
2:B:422:ARG:HG2	2:B:477:ILE:HG23	1.83	0.60
3:C:678:HIS:CD2	3:C:686:VAL:HA	2.36	0.60
4:D:305:ASN:HD22	4:D:311:LEU:HD23	1.66	0.60
1:A:288:VAL:HG12	1:A:290:ASP:H	1.66	0.60
2:B:1330:TRP:HA	2:B:1411:TYR:C	2.26	0.60
2:B:1445:LYS:O	2:B:1449:GLN:HG2	2.01	0.60
2:B:2089:LEU:HD21	2:B:2101:LEU:HD22	1.83	0.60
2:B:3590:LEU:O	2:B:3594:LEU:N	2.30	0.60
3:C:561:LEU:HG	3:C:565:LEU:HG	1.84	0.60
3:C:1746:GLU:O	3:C:1747:ARG:NE	2.34	0.60
3:C:1860:GLN:HG3	3:C:4201:VAL:HG21	1.83	0.60
3:C:3429:TRP:CE2	3:C:3695:LEU:HD22	2.36	0.60
18:R:76:ASP:O	18:R:80:THR:HG23	2.00	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:Z:209:ALA:O	22:Z:213:ILE:HG13	2.01	0.60
4:d:123:TYR:O	4:d:127:GLU:HG2	2.01	0.60
1:A:264:TRP:HB3	1:A:296:ILE:HD12	1.81	0.60
2:B:555:LEU:HD21	2:B:602:PRO:HG2	1.84	0.60
2:B:1330:TRP:O	2:B:1411:TYR:N	2.34	0.60
2:B:2577:GLN:HE21	2:B:2623:LEU:HD13	1.65	0.60
3:C:3650:THR:CG2	3:C:3653:GLY:H	2.14	0.60
3:C:4283:ASN:ND2	3:C:4543:ASP:O	2.34	0.60
21:X:215:LYS:HB2	22:Z:209:ALA:HB1	1.84	0.60
17:q:61:PRO:HG2	17:q:84:LEU:HB3	1.83	0.60
2:B:503:LEU:O	2:B:507:ILE:HG13	2.01	0.60
2:B:677:LEU:HD11	2:B:712:ILE:CD1	2.31	0.60
2:B:1176:VAL:O	2:B:1179:THR:OG1	2.16	0.60
2:B:1340:ASP:OD2	2:B:1343:LYS:HB3	2.01	0.60
2:B:2015:PRO:HB3	2:B:4046:LEU:HG	1.82	0.60
2:B:2400:ALA:H	2:B:2403:GLN:HE22	1.48	0.60
2:B:2512:VAL:O	2:B:2514:THR:N	2.33	0.60
2:B:2865:PHE:HE2	2:B:2867:GLN:HB3	1.67	0.60
2:B:3109:LYS:NZ	2:B:3113:GLU:OE2	2.33	0.60
3:C:511:ASP:O	3:C:515:VAL:HG23	2.01	0.60
4:D:481:ILE:HD12	4:D:526:ARG:NH2	2.15	0.60
5:E:167:ILE:HG13	5:E:459:CYS:HB3	1.84	0.60
6:F:88:ILE:O	6:F:98:LEU:HA	2.01	0.60
16:P:82:LEU:HG	16:P:89:VAL:HB	1.83	0.60
22:Z:196:ILE:O	22:Z:200:ASN:HB2	2.01	0.60
1:A:341:TRP:NE1	1:A:343:ASN:O	2.34	0.60
2:B:161:VAL:HG13	2:B:164:LEU:HD13	1.83	0.60
2:B:439:LEU:HB3	2:B:533:ARG:NH1	2.15	0.60
2:B:1283:ASN:O	2:B:1287:LEU:HG	2.02	0.60
2:B:1387:MET:HE1	2:B:1430:ILE:HG22	1.83	0.60
3:C:316:TYR:HB2	3:C:353:ALA:HB2	1.84	0.60
3:C:317:LEU:HD23	3:C:356:TYR:HD2	1.64	0.60
3:C:398:TRP:CD1	3:C:496:LYS:HB2	2.36	0.60
3:C:1390:LYS:HA	3:C:1393:TYR:CD2	2.37	0.60
4:D:513:PRO:HG3	4:D:634:LYS:HD3	1.82	0.60
9:I:67:LEU:HB3	9:I:75:TRP:CD1	2.37	0.60
21:X:103:LYS:HD2	22:Z:91:ARG:HB2	1.83	0.60
21:X:187:LEU:CD2	22:Z:181:LEU:CD2	2.67	0.60
21:X:194:LEU:HD22	21:X:197:LYS:HZ2	1.65	0.60
1:A:144:GLN:HE21	1:A:171:ARG:HH11	1.48	0.60
2:B:429:LEU:O	2:B:433:ILE:HG13	2.01	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2781:ASP:O	2:B:3047:TRP:N	2.34	0.60
2:B:4309:MET:HA	2:B:4312:ASP:HB3	1.83	0.60
3:C:1652:GLN:HB3	3:C:1675:LYS:HG3	1.83	0.60
3:C:2874:GLN:O	3:C:2878:ARG:NH1	2.34	0.60
4:D:574:ASP:HB2	4:D:579:LEU:HD11	1.84	0.60
21:X:222:LEU:CD1	22:Z:212:GLN:O	2.49	0.60
2:B:473:VAL:HG23	2:B:488:ASP:OD1	2.02	0.60
2:B:1138:LYS:HE3	2:B:1145:LYS:HD3	1.83	0.60
2:B:2714:THR:HG22	2:B:2771:TRP:CZ2	2.36	0.60
3:C:243:LEU:HB3	3:C:322:LYS:HD2	1.82	0.60
3:C:3870:GLU:O	3:C:3874:TRP:N	2.32	0.60
4:D:424:MET:HE1	4:D:426:TRP:HE1	1.67	0.60
5:E:463:ASN:HB2	5:E:475:LEU:HD11	1.82	0.60
7:G:126:LEU:O	7:G:137:VAL:HB	2.01	0.60
7:G:127:ARG:HG2	7:G:129:GLN:HE22	1.67	0.60
18:R:298:PRO:HA	18:R:301:MET:HG2	1.84	0.60
17:U:397:TRP:CG	18:W:257:THR:HG1	2.19	0.60
18:W:298:PRO:HA	18:W:301:MET:HG2	1.84	0.60
4:d:136:LEU:HD23	4:d:164:ASN:HD22	1.66	0.60
2:B:115:ASN:HD21	3:C:98:ILE:HG23	1.66	0.60
2:B:1330:TRP:HE3	2:B:1410:PHE:CD1	2.19	0.60
2:B:3059:VAL:HA	2:B:3062:ARG:HE	1.66	0.60
2:B:3655:GLU:OE2	2:B:3656:GLN:NE2	2.34	0.60
2:B:3690:LEU:HD11	2:B:3719:THR:HG23	1.83	0.60
3:C:678:HIS:HD2	3:C:686:VAL:HA	1.65	0.60
3:C:1081:ILE:O	3:C:1085:LEU:HG	2.01	0.60
3:C:1310:PHE:CZ	3:C:1326:MET:HG3	2.37	0.60
3:C:2722:LYS:HG2	3:C:2776:LYS:NZ	2.16	0.60
5:E:157:LYS:HE3	5:E:208:PRO:HD2	1.84	0.60
8:H:16:MET:HB3	8:H:20:MET:HB2	1.82	0.60
17:Q:184:ASN:OD1	17:Q:398:TYR:OH	2.13	0.60
18:S:298:PRO:HA	18:S:301:MET:HG2	1.84	0.60
17:Y:61:PRO:HG2	17:Y:84:LEU:HB3	1.83	0.60
17:Y:184:ASN:OD1	17:Y:398:TYR:OH	2.13	0.60
22:Z:154:ILE:O	22:Z:158:LYS:HG3	2.01	0.60
1:A:192:PRO:HA	1:A:239:TRP:HE1	1.65	0.60
2:B:367:LEU:HD11	2:B:375:GLU:HB2	1.84	0.60
2:B:433:ILE:HG23	2:B:463:PHE:HE2	1.67	0.60
2:B:1491:GLY:HA3	2:B:1493:TYR:CE1	2.37	0.60
2:B:2212:THR:HA	2:B:2262:VAL:HG12	1.84	0.60
17:U:61:PRO:HG2	17:U:84:LEU:HB3	1.83	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:U:184:ASN:OD1	17:U:398:TYR:OH	2.13	0.60
22:Z:181:LEU:HD13	18:s:339:ARG:NH1	2.16	0.60
17:u:271:ALA:HB3	17:u:293:MET:HE2	1.84	0.60
2:B:433:ILE:HA	2:B:463:PHE:CZ	2.36	0.60
2:B:435:GLN:HA	2:B:438:LYS:HE2	1.84	0.60
2:B:1161:ILE:HG13	2:B:1197:PHE:CZ	2.37	0.60
2:B:1331:ARG:N	2:B:1410:PHE:HD2	2.00	0.60
3:C:1899:SER:OG	3:C:1901:GLN:NE2	2.35	0.60
3:C:2877:THR:N	23:C:4703:ADP:O2'	2.29	0.60
4:D:406:PRO:HA	4:D:412:TYR:HD2	1.67	0.60
5:E:201:ASP:HB2	5:E:204:ASN:HB2	1.83	0.60
7:G:136:MET:HB3	7:G:147:VAL:HG12	1.84	0.60
21:X:183:TYR:CZ	22:Z:175:ASP:OD1	2.55	0.60
17:y:271:ALA:HB3	17:y:293:MET:HE2	1.84	0.60
2:B:2937:ALA:HB3	2:B:2938:LYS:HZ2	1.67	0.59
2:B:4314:ILE:HD11	2:B:4367:LEU:HB3	1.83	0.59
3:C:405:LEU:HD21	3:C:464:PHE:HB3	1.83	0.59
11:K:33:ALA:C	14:N:36:LYS:HD3	2.27	0.59
17:q:271:ALA:HB3	17:q:293:MET:HE2	1.84	0.59
2:B:55:GLN:HE21	2:B:57:ASN:HB3	1.67	0.59
2:B:1463:GLU:O	2:B:1557:LYS:NZ	2.33	0.59
3:C:807:GLU:O	3:C:811:LYS:NZ	2.35	0.59
3:C:2012:LEU:HD21	3:C:2027:PHE:CE2	2.37	0.59
3:C:3949:ASP:HA	3:C:4290:LEU:HD11	1.83	0.59
6:F:76:VAL:HG22	6:F:90:THR:HG23	1.84	0.59
17:Q:61:PRO:HG2	17:Q:84:LEU:HB3	1.82	0.59
17:Q:255:VAL:HG22	18:R:407:TRP:CD2	2.37	0.59
22:Z:107:LYS:HG3	22:Z:111:LYS:HE2	1.83	0.59
17:q:177:ASP:OD2	25:q:501:GDP:O2'	2.19	0.59
2:B:299:PHE:HD1	2:B:302:LEU:HD12	1.67	0.59
2:B:2780:GLU:OE1	2:B:2780:GLU:N	2.35	0.59
3:C:577:ALA:HA	3:C:641:TYR:OH	2.02	0.59
3:C:1852:ASP:O	3:C:1856:ILE:HG13	2.02	0.59
3:C:1950:GLN:HE21	3:C:1952:MET:HE2	1.67	0.59
3:C:3695:LEU:O	3:C:3699:LEU:HD23	2.01	0.59
4:D:512:HIS:ND1	4:D:631:GLU:OE2	2.35	0.59
17:Q:8:GLN:NE2	17:Q:14:ASN:HA	2.17	0.59
18:R:254:GLU:HA	18:R:257:THR:HG22	1.83	0.59
17:Y:194:GLU:H	17:Y:194:GLU:CD	2.10	0.59
17:u:177:ASP:OD2	25:u:501:GDP:O2'	2.19	0.59
17:y:177:ASP:OD2	25:y:501:GDP:O2'	2.19	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:5:LEU:H	1:A:306:LEU:HD22	1.66	0.59
2:B:4043:ASN:ND2	2:B:4046:LEU:HD13	2.12	0.59
3:C:1039:SER:HB3	3:C:1103:ARG:NH2	2.18	0.59
14:N:108:ASP:OD1	14:N:130:TYR:N	2.28	0.59
17:Q:194:GLU:H	17:Q:194:GLU:CD	2.10	0.59
18:S:407:TRP:CD2	17:U:255:VAL:HG22	2.38	0.59
17:U:194:GLU:CD	17:U:194:GLU:H	2.10	0.59
21:X:176:LEU:O	21:X:180:ARG:HG3	2.02	0.59
17:u:194:GLU:CD	17:u:194:GLU:H	2.10	0.59
17:q:194:GLU:H	17:q:194:GLU:CD	2.10	0.59
17:y:194:GLU:H	17:y:194:GLU:CD	2.10	0.59
2:B:123:SER:O	2:B:127:GLU:HB2	2.01	0.59
2:B:452:LEU:HD11	5:E:517:LYS:HG3	1.82	0.59
2:B:1797:SER:O	2:B:1801:VAL:HG23	2.02	0.59
2:B:4314:ILE:HG23	2:B:4318:LEU:HD12	1.84	0.59
3:C:143:ILE:HG21	3:C:162:VAL:HG21	1.83	0.59
3:C:2004:ARG:O	3:C:2008:ILE:HG12	2.02	0.59
3:C:4166:LEU:HD13	3:C:4169:ILE:HD11	1.84	0.59
18:R:9:VAL:HG13	18:R:139:ASN:HB3	1.83	0.59
18:S:254:GLU:HA	18:S:257:THR:HG22	1.83	0.59
17:U:8:GLN:NE2	17:U:14:ASN:HA	2.17	0.59
17:Y:8:GLN:NE2	17:Y:14:ASN:HA	2.17	0.59
18:s:254:GLU:HA	18:s:257:THR:HG22	1.83	0.59
18:s:259:LEU:HD13	18:s:268:MET:HE1	1.85	0.59
18:w:254:GLU:HA	18:w:257:THR:HG22	1.84	0.59
2:B:2067:SER:HB2	2:B:2069:GLN:HE22	1.66	0.59
3:C:812:THR:HA	3:C:815:LYS:HE3	1.84	0.59
3:C:970:TYR:CE1	3:C:977:LYS:HD2	2.38	0.59
3:C:2048:LEU:O	3:C:2052:LEU:HG	2.01	0.59
3:C:3121:LEU:HA	3:C:3124:ILE:HD12	1.85	0.59
4:D:481:ILE:O	4:D:496:TYR:N	2.34	0.59
8:H:13:ASN:O	8:H:78:TYR:N	2.33	0.59
11:K:30:PRO:HG3	14:N:36:LYS:HZ2	1.67	0.59
18:S:9:VAL:HG13	18:S:139:ASN:HB3	1.83	0.59
18:W:254:GLU:HA	18:W:257:THR:HG22	1.83	0.59
18:s:155:GLU:HB3	18:s:156:ARG:HH21	1.67	0.59
18:r:9:VAL:HG13	18:r:139:ASN:HB3	1.83	0.59
18:r:259:LEU:HD13	18:r:268:MET:HE1	1.85	0.59
18:w:155:GLU:HB3	18:w:156:ARG:HH21	1.67	0.59
18:w:259:LEU:HD13	18:w:268:MET:HE1	1.85	0.59
1:A:200:ARG:HH22	1:A:228:ASN:ND2	2.01	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1249:THR:OG1	2:B:1259:ASN:ND2	2.36	0.59
2:B:1421:TYR:HD2	2:B:1422:LYS:HD2	1.66	0.59
3:C:861:ASP:OD1	5:E:206:ASN:ND2	2.36	0.59
3:C:1095:GLN:O	3:C:1098:GLN:HG3	2.03	0.59
3:C:2127:GLU:HB2	3:C:2130:LEU:HD12	1.84	0.59
7:G:111:ARG:HA	7:G:114:VAL:HG12	1.84	0.59
12:L:33:LYS:HD3	12:L:60:PHE:CZ	2.36	0.59
17:Y:271:ALA:HB3	17:Y:293:MET:HE2	1.84	0.59
22:Z:198:THR:HA	22:Z:201:THR:HG23	1.83	0.59
5:e:35:VAL:HG12	5:e:37:ILE:HG12	1.85	0.59
18:s:173:PRO:HB3	18:s:183:GLU:HB3	1.84	0.59
18:r:155:GLU:HB3	18:r:156:ARG:HH21	1.67	0.59
18:w:173:PRO:HB3	18:w:183:GLU:HB3	1.84	0.59
2:B:134:GLN:HE21	3:C:79:PHE:HZ	1.51	0.59
2:B:929:THR:HG22	2:B:930:ILE:H	1.68	0.59
2:B:1079:ASN:OD1	2:B:1080:LEU:N	2.35	0.59
2:B:1487:MET:HE2	2:B:1501:VAL:HG21	1.85	0.59
2:B:1490:GLN:HG2	2:B:3606:GLN:HB2	1.85	0.59
2:B:1748:ASP:O	2:B:1752:GLY:N	2.29	0.59
2:B:1968:THR:OG1	2:B:4019:GLN:HB3	2.03	0.59
2:B:4564:LYS:HE3	2:B:4566:ARG:HH12	1.67	0.59
3:C:2144:TYR:O	3:C:2148:LEU:HG	2.02	0.59
3:C:2947:ILE:HG21	3:C:2950:LEU:HD22	1.84	0.59
9:I:93:THR:HB	9:I:109:LYS:HB2	1.85	0.59
12:L:31:LEU:O	12:L:35:ILE:HG12	2.03	0.59
18:S:173:PRO:HB3	18:S:183:GLU:HB3	1.84	0.59
17:U:271:ALA:HB3	17:U:293:MET:HE2	1.84	0.59
18:W:9:VAL:HG13	18:W:139:ASN:HB3	1.83	0.59
21:X:97:GLU:OE1	21:X:101:ARG:NH1	2.36	0.59
18:s:9:VAL:HG13	18:s:139:ASN:HB3	1.83	0.59
18:r:254:GLU:HA	18:r:257:THR:HG22	1.84	0.59
17:q:8:GLN:NE2	17:q:14:ASN:HA	2.17	0.59
18:w:9:VAL:HG13	18:w:139:ASN:HB3	1.83	0.59
18:w:90:GLU:OE2	18:w:121:ARG:NH1	2.35	0.59
2:B:391:LYS:HZ3	2:B:420:LEU:HD22	1.67	0.59
2:B:1981:LYS:HE3	2:B:1984:PHE:HB3	1.83	0.59
3:C:77:VAL:HG11	3:C:94:TRP:CZ2	2.38	0.59
3:C:4005:LEU:HD23	3:C:4009:LYS:NZ	2.18	0.59
6:F:9:ASP:OD1	6:F:10:GLN:N	2.33	0.59
14:N:33:LYS:HD3	14:N:36:LYS:HG3	1.84	0.59
18:R:173:PRO:HB3	18:R:183:GLU:HB3	1.85	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:173:PRO:HB3	18:W:183:GLU:HB3	1.85	0.59
21:X:104:PHE:CE2	17:y:340:TYR:CZ	2.91	0.59
21:X:198:GLU:CG	22:Z:188:LYS:HZ3	2.14	0.59
18:s:90:GLU:OE2	18:s:121:ARG:NH1	2.35	0.59
18:s:298:PRO:HA	18:s:301:MET:HG2	1.84	0.59
18:r:298:PRO:HA	18:r:301:MET:HG2	1.84	0.59
1:A:284:ASN:HA	2:B:935:ASN:HD21	1.68	0.59
2:B:64:VAL:O	2:B:74:TYR:HA	2.03	0.59
2:B:1552:VAL:HG22	2:B:1584:TRP:CZ3	2.37	0.59
3:C:495:PHE:CE1	3:C:513:ASP:HB3	2.38	0.59
3:C:755:HIS:CE1	3:C:794:LEU:HD13	2.37	0.59
3:C:2474:ASN:O	3:C:2478:THR:HG23	2.03	0.59
4:D:601:ILE:HD13	4:D:615:LYS:HB2	1.85	0.59
18:S:97:GLU:OE2	18:S:105:ARG:NH2	2.36	0.59
18:S:259:LEU:HD13	18:S:268:MET:HE1	1.85	0.59
18:W:64:ARG:NE	18:W:129:CYS:HB3	2.18	0.59
18:W:259:LEU:HD13	18:W:268:MET:HE1	1.85	0.59
18:r:173:PRO:HB3	18:r:183:GLU:HB3	1.85	0.59
17:y:8:GLN:NE2	17:y:14:ASN:HA	2.17	0.59
2:B:26:LYS:H	2:B:29:ILE:HD12	1.67	0.58
2:B:359:VAL:HG21	2:B:419:PHE:HZ	1.67	0.58
2:B:1051:ASP:OD1	2:B:1174:HIS:NE2	2.36	0.58
2:B:4133:LEU:O	2:B:4137:HIS:ND1	2.33	0.58
3:C:1695:LEU:HD13	3:C:1698:ILE:HD11	1.85	0.58
3:C:3439:GLN:O	3:C:3443:LEU:N	2.31	0.58
3:C:3467:LYS:O	3:C:3471:GLN:HG2	2.03	0.58
3:C:3719:THR:HG22	3:C:3720:LYS:HD3	1.84	0.58
8:H:16:MET:O	8:H:21:GLN:NE2	2.36	0.58
17:Q:271:ALA:HB3	17:Q:293:MET:HE2	1.84	0.58
18:R:64:ARG:NE	18:R:129:CYS:HB3	2.18	0.58
18:S:64:ARG:NE	18:S:129:CYS:HB3	2.18	0.58
18:W:97:GLU:OE2	18:W:105:ARG:NH2	2.36	0.58
21:X:151:ARG:HH22	22:Z:147:ASN:HB3	1.68	0.58
21:X:197:LYS:HZ3	22:Z:189:ARG:HA	0.78	0.58
17:u:8:GLN:NE2	17:u:14:ASN:HA	2.17	0.58
17:u:109:GLY:O	17:u:113:ILE:HG12	2.03	0.58
18:w:298:PRO:HA	18:w:301:MET:HG2	1.84	0.58
2:B:433:ILE:HA	2:B:463:PHE:HZ	1.67	0.58
2:B:1889:GLN:O	2:B:1893:LEU:HG	2.02	0.58
2:B:3102:ARG:HG3	2:B:3106:THR:HG21	1.85	0.58
2:B:4415:LEU:O	2:B:4419:PHE:N	2.33	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:544:TYR:CG	4:D:540:ASP:HB3	2.38	0.58
3:C:801:ILE:HA	5:E:152:LEU:HD11	1.85	0.58
3:C:1144:LYS:HB3	4:d:172:GLU:O	2.03	0.58
3:C:1758:LYS:HD3	3:C:1792:LYS:HD2	1.84	0.58
4:D:485:SER:HB3	4:D:491:GLN:NE2	2.17	0.58
17:Q:147:MET:HG2	17:Q:148:GLY:N	2.19	0.58
17:Q:396:HIS:CD2	18:S:263:PRO:HD3	2.38	0.58
18:R:90:GLU:OE2	18:R:121:ARG:NH1	2.35	0.58
18:R:97:GLU:OE2	18:R:105:ARG:NH2	2.36	0.58
18:R:259:LEU:HD13	18:R:268:MET:HE1	1.85	0.58
17:U:147:MET:HG2	17:U:148:GLY:N	2.19	0.58
21:X:197:LYS:HZ3	22:Z:189:ARG:CB	1.95	0.58
17:Y:147:MET:HG2	17:Y:148:GLY:N	2.19	0.58
18:s:167:LEU:HD11	18:s:202:VAL:HG23	1.84	0.58
18:r:64:ARG:NE	18:r:129:CYS:HB3	2.18	0.58
18:r:90:GLU:OE2	18:r:121:ARG:NH1	2.35	0.58
17:q:109:GLY:O	17:q:113:ILE:HG12	2.03	0.58
18:w:64:ARG:NE	18:w:129:CYS:HB3	2.18	0.58
18:w:167:LEU:HD11	18:w:202:VAL:HG23	1.84	0.58
17:y:109:GLY:O	17:y:113:ILE:HG12	2.03	0.58
1:A:320:PRO:HD2	1:A:341:TRP:O	2.03	0.58
2:B:1107:ARG:HG3	2:B:1111:LYS:HE3	1.84	0.58
2:B:4047:MET:HE3	2:B:4050:TRP:CE2	2.38	0.58
3:C:1374:SER:HB2	3:C:1423:ALA:O	2.03	0.58
3:C:2843:ASP:OD2	3:C:2847:LYS:NZ	2.36	0.58
3:C:3119:ILE:HG21	3:C:3700:ILE:HG13	1.84	0.58
3:C:3429:TRP:CZ2	3:C:3695:LEU:HB3	2.38	0.58
7:G:71:LYS:HD3	7:G:72:THR:HG23	1.85	0.58
16:P:43:PHE:HD1	16:P:100:LEU:HD21	1.68	0.58
18:S:155:GLU:HB3	18:S:156:ARG:HH21	1.67	0.58
18:W:90:GLU:OE2	18:W:121:ARG:NH1	2.36	0.58
22:Z:160:LEU:HD12	22:Z:161:ARG:N	2.18	0.58
5:e:38:ASN:N	5:e:39:GLN:OE1	2.37	0.58
18:s:64:ARG:NE	18:s:129:CYS:HB3	2.18	0.58
17:u:212:PHE:CE2	18:w:326:LYS:HE3	2.38	0.58
18:r:167:LEU:HD11	18:r:202:VAL:HG23	1.84	0.58
2:B:200:ILE:HG21	2:B:257:LEU:HD21	1.85	0.58
2:B:1884:TYR:CD1	2:B:1914:LEU:HD11	2.38	0.58
3:C:750:ASN:HB2	3:C:887:LYS:HD3	1.85	0.58
3:C:931:PHE:CD1	3:C:1074:MET:HE1	2.38	0.58
3:C:1009:THR:HA	3:C:1012:LYS:HE2	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1057:GLN:NE2	3:C:1061:GLU:OE2	2.36	0.58
4:D:298:ASN:OD1	4:D:591:THR:HG21	2.03	0.58
4:D:556:THR:N	4:D:572:ASN:OD1	2.36	0.58
5:E:183:ILE:HB	5:E:194:PRO:HA	1.84	0.58
11:K:38:GLU:O	11:K:42:ARG:HG2	2.04	0.58
18:R:155:GLU:HB3	18:R:156:ARG:HH21	1.67	0.58
18:S:90:GLU:OE2	18:S:121:ARG:NH1	2.35	0.58
18:W:155:GLU:HB3	18:W:156:ARG:HH21	1.67	0.58
17:u:262:ARG:NE	17:u:421:GLU:HG2	2.18	0.58
17:y:262:ARG:NE	17:y:421:GLU:HG2	2.18	0.58
1:A:232:TYR:OH	1:A:237:ASP:OD2	2.21	0.58
2:B:336:GLN:OE1	2:B:406:LYS:NZ	2.36	0.58
2:B:429:LEU:HB2	2:B:470:PHE:CE2	2.39	0.58
2:B:586:ALA:HB1	2:B:686:TYR:CZ	2.38	0.58
2:B:1964:SER:HB3	2:B:4047:MET:CE	2.32	0.58
2:B:3593:LEU:O	2:B:3596:ARG:NH2	2.36	0.58
3:C:931:PHE:HD1	3:C:1074:MET:HE1	1.68	0.58
17:U:12:CYS:SG	17:U:138:SER:HB3	2.44	0.58
21:X:107:ALA:O	21:X:111:THR:HG23	2.04	0.58
2:B:671:VAL:HG11	2:B:673:PHE:CE2	2.38	0.58
2:B:1061:GLN:HA	2:B:1064:ILE:HD12	1.85	0.58
2:B:1372:MET:CG	2:B:1416:LEU:HD11	2.34	0.58
2:B:1487:MET:SD	2:B:1494:VAL:HA	2.43	0.58
2:B:1647:GLU:HG3	2:B:1658:VAL:HG22	1.86	0.58
2:B:3900:ASP:OD1	2:B:3901:TRP:N	2.37	0.58
2:B:4400:TRP:HD1	2:B:4414:TRP:HH2	1.52	0.58
3:C:580:LEU:HD22	3:C:641:TYR:CE1	2.39	0.58
3:C:797:ASN:CG	5:E:453:SER:HB2	2.29	0.58
3:C:1095:GLN:OE1	3:C:1098:GLN:NE2	2.37	0.58
3:C:1620:PRO:O	3:C:1624:GLN:HG2	2.03	0.58
3:C:1860:GLN:CB	3:C:4201:VAL:HG11	2.25	0.58
3:C:3124:ILE:HG12	3:C:3426:LYS:HZ2	1.67	0.58
9:I:38:ALA:O	9:I:42:ILE:HG13	2.04	0.58
17:Y:12:CYS:SG	17:Y:138:SER:HB3	2.44	0.58
17:Y:156:ARG:HH22	17:Y:162:ARG:HB3	1.67	0.58
17:q:147:MET:HG2	17:q:148:GLY:N	2.19	0.58
17:q:262:ARG:NE	17:q:421:GLU:HG2	2.18	0.58
17:q:378:PHE:HB3	17:q:415:MET:SD	2.44	0.58
2:B:336:GLN:HG3	2:B:338:PRO:HG2	1.85	0.58
2:B:2396:MET:H	2:B:2447:PRO:HB2	1.68	0.58
2:B:2773:HIS:O	2:B:2777:ARG:HG2	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:3921:ILE:HD12	3:C:3922:PRO:HD2	1.86	0.58
8:H:73:ARG:HH11	5:e:72:GLY:HA2	1.68	0.58
12:L:96:PHE:CE2	12:L:105:ILE:HD11	2.39	0.58
17:Q:12:CYS:SG	17:Q:138:SER:HB3	2.44	0.58
17:Q:156:ARG:HH22	17:Q:162:ARG:HB3	1.67	0.58
17:U:156:ARG:HH22	17:U:162:ARG:HB3	1.68	0.58
18:W:407:TRP:CD2	17:Y:255:VAL:HG22	2.39	0.58
18:s:97:GLU:OE2	18:s:105:ARG:NH2	2.36	0.58
17:u:147:MET:HG2	17:u:148:GLY:N	2.19	0.58
17:u:378:PHE:HB3	17:u:415:MET:SD	2.44	0.58
18:w:97:GLU:OE2	18:w:105:ARG:NH2	2.36	0.58
1:A:38:GLY:O	1:A:53:PRO:HB3	2.03	0.58
2:B:1931:MET:HB3	2:B:1936:MET:HE3	1.86	0.58
2:B:2179:CYS:HB3	2:B:2301:LEU:HB2	1.85	0.58
2:B:2785:ALA:H	2:B:2788:HIS:HD2	1.52	0.58
2:B:3127:GLU:O	2:B:3131:ARG:HG3	2.03	0.58
2:B:3696:GLN:O	2:B:3700:GLU:HG2	2.02	0.58
3:C:2912:ASP:O	3:C:2918:LYS:N	2.35	0.58
10:J:56:PRO:HA	4:d:89:TYR:CE2	2.39	0.58
18:R:167:LEU:HD11	18:R:202:VAL:HG23	1.84	0.58
18:W:167:LEU:HD11	18:W:202:VAL:HG23	1.84	0.58
17:q:156:ARG:HH22	17:q:162:ARG:HB3	1.68	0.58
17:y:147:MET:HG2	17:y:148:GLY:N	2.19	0.58
17:y:156:ARG:HH22	17:y:162:ARG:HB3	1.68	0.58
17:y:378:PHE:HB3	17:y:415:MET:SD	2.44	0.58
1:A:69:TRP:O	1:A:70:ARG:NE	2.30	0.58
2:B:227:PRO:HD3	2:B:346:GLU:HB3	1.86	0.58
2:B:609:LEU:HD13	2:B:614:THR:HG23	1.86	0.58
2:B:1240:PHE:O	2:B:1244:LEU:HB2	2.03	0.58
2:B:1815:PHE:CE2	2:B:4182:PRO:HB2	2.39	0.58
2:B:1886:THR:O	2:B:1889:GLN:HG3	2.04	0.58
2:B:2167:VAL:HG22	2:B:2193:VAL:HG13	1.85	0.58
3:C:1511:TRP:NE1	3:C:1552:MET:HE1	2.19	0.58
4:D:558:PHE:HB3	4:D:569:TYR:HB2	1.85	0.58
5:E:512:GLU:HA	5:E:515:LYS:HD2	1.86	0.58
11:K:23:GLY:HA3	11:K:41:ILE:HG23	1.85	0.58
18:S:167:LEU:HD11	18:S:202:VAL:HG23	1.84	0.58
17:Y:109:GLY:O	17:Y:113:ILE:HG12	2.03	0.58
22:Z:195:ILE:O	22:Z:197:GLU:N	2.33	0.58
17:u:156:ARG:HH22	17:u:162:ARG:HB3	1.68	0.58
18:r:97:GLU:OE2	18:r:105:ARG:NH2	2.36	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:q:232:ALA:O	17:q:236:VAL:HG13	2.04	0.58
17:y:232:ALA:O	17:y:236:VAL:HG13	2.04	0.58
1:A:51:ILE:HA	1:A:82:ARG:HG3	1.86	0.58
1:A:144:GLN:HE21	1:A:171:ARG:NH1	2.01	0.58
1:A:195:ASN:N	1:A:196:PRO:HD2	2.19	0.58
2:B:1490:GLN:HG2	2:B:3606:GLN:CB	2.34	0.58
2:B:4190:PHE:HD1	2:B:4194:MET:HE1	1.69	0.58
3:C:44:PHE:HE1	3:C:51:ASN:C	2.12	0.58
3:C:1744:ARG:HD3	3:C:1745:ASN:HB2	1.85	0.58
3:C:2146:THR:HA	3:C:2149:VAL:HG12	1.85	0.58
3:C:2724:LYS:HD3	3:C:2726:GLU:H	1.68	0.58
5:E:420:THR:HG22	5:E:494:LEU:HD12	1.84	0.58
11:K:19:LYS:HG2	11:K:28:TRP:HB2	1.86	0.58
17:Q:189:VAL:O	17:Q:193:VAL:HG23	2.04	0.58
18:R:254:GLU:HB3	18:R:352:LYS:HE2	1.86	0.58
18:S:254:GLU:HB3	18:S:352:LYS:HE2	1.86	0.58
19:T:176:TYR:OH	19:T:199:MET:SD	2.60	0.58
17:U:62:ARG:NH1	17:U:127:CYS:HB3	2.18	0.58
17:U:109:GLY:O	17:U:113:ILE:HG12	2.03	0.58
18:W:254:GLU:HB3	18:W:352:LYS:HE2	1.86	0.58
21:X:90:TRP:O	21:X:94:ILE:HG12	2.03	0.58
17:Y:62:ARG:NH1	17:Y:127:CYS:HB3	2.18	0.58
17:u:232:ALA:O	17:u:236:VAL:HG13	2.04	0.58
18:w:189:LEU:HD11	18:w:418:PHE:CE1	2.38	0.58
2:B:1437:GLU:O	2:B:1440:ILE:HG22	2.04	0.57
2:B:1480:HIS:O	2:B:1484:LEU:HG	2.04	0.57
2:B:2866:GLN:HA	2:B:2869:MET:HE2	1.84	0.57
2:B:2867:GLN:HG2	2:B:3052:PRO:HG3	1.85	0.57
2:B:2920:PHE:CD2	2:B:2955:GLU:HG2	2.39	0.57
2:B:3977:SER:OG	2:B:4073:ARG:NH1	2.37	0.57
3:C:346:ILE:O	3:C:349:ILE:HG13	2.03	0.57
5:E:411:TYR:HB2	5:E:430:ARG:HG3	1.85	0.57
17:Q:68:LEU:HA	17:Q:93:GLY:HA3	1.86	0.57
18:S:151:SER:OG	18:S:193:SER:OG	2.15	0.57
17:U:189:VAL:O	17:U:193:VAL:HG23	2.04	0.57
18:s:189:LEU:HD11	18:s:418:PHE:CE1	2.38	0.57
18:s:254:GLU:HB3	18:s:352:LYS:HE2	1.86	0.57
17:u:212:PHE:HE2	18:w:326:LYS:HE3	1.69	0.57
18:w:254:GLU:HB3	18:w:352:LYS:HE2	1.86	0.57
1:A:203:HIS:HB3	1:A:219:GLY:HA3	1.86	0.57
2:B:653:GLN:HG3	2:B:655:LYS:H	1.69	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1138:LYS:HG2	2:B:1145:LYS:O	2.04	0.57
3:C:1864:MET:HE1	3:C:4202:GLN:NE2	2.18	0.57
8:H:9:PRO:HG3	8:H:81:VAL:HG13	1.86	0.57
11:K:45:GLN:O	11:K:49:LYS:HG2	2.04	0.57
17:Q:109:GLY:O	17:Q:113:ILE:HG12	2.03	0.57
17:Q:378:PHE:HB3	17:Q:415:MET:SD	2.44	0.57
17:U:68:LEU:HA	17:U:93:GLY:HA3	1.86	0.57
17:U:378:PHE:HB3	17:U:415:MET:SD	2.44	0.57
17:Y:189:VAL:O	17:Y:193:VAL:HG23	2.04	0.57
17:Y:378:PHE:HB3	17:Y:415:MET:SD	2.44	0.57
18:r:254:GLU:HB3	18:r:352:LYS:HE2	1.86	0.57
17:q:68:LEU:HA	17:q:93:GLY:HA3	1.86	0.57
17:q:242:PHE:HB3	17:q:356:ILE:HD13	1.86	0.57
2:B:1330:TRP:CD1	2:B:1412:PHE:CG	2.91	0.57
2:B:1461:TYR:CD2	2:B:1526:LYS:HE2	2.40	0.57
2:B:2191:THR:HA	2:B:2194:TRP:CD1	2.39	0.57
3:C:1405:MET:HA	3:C:1409:LEU:HD21	1.86	0.57
3:C:1935:SER:OG	3:C:4020:GLY:HA3	2.03	0.57
17:Q:62:ARG:NH1	17:Q:127:CYS:HB3	2.18	0.57
17:U:242:PHE:HB3	17:U:356:ILE:HD13	1.86	0.57
18:W:151:SER:OG	18:W:193:SER:OG	2.15	0.57
17:Y:68:LEU:HA	17:Y:93:GLY:HA3	1.86	0.57
17:u:68:LEU:HA	17:u:93:GLY:HA3	1.86	0.57
2:B:203:TRP:HZ3	2:B:253:VAL:HG13	1.68	0.57
2:B:1317:LEU:HB3	16:P:32:TRP:CH2	2.38	0.57
2:B:1855:ARG:NH1	2:B:1858:ASP:O	2.38	0.57
2:B:3913:PRO:HB2	2:B:3916:TRP:HB3	1.86	0.57
5:E:184:MET:HB3	5:E:185:ARG:CZ	2.35	0.57
6:F:34:LYS:HE3	6:F:36:HIS:CE1	2.39	0.57
17:Q:242:PHE:HB3	17:Q:356:ILE:HD13	1.86	0.57
17:u:242:PHE:HB3	17:u:356:ILE:HD13	1.86	0.57
18:r:189:LEU:HD11	18:r:418:PHE:CE1	2.38	0.57
17:y:68:LEU:HA	17:y:93:GLY:HA3	1.86	0.57
17:y:242:PHE:HB3	17:y:356:ILE:HD13	1.86	0.57
1:A:225:GLN:HB2	1:A:251:TRP:CD1	2.40	0.57
2:B:2377:TYR:HE1	2:B:2470:LYS:HE3	1.69	0.57
2:B:3086:HIS:O	2:B:3102:ARG:NH1	2.38	0.57
2:B:3817:PHE:HB2	2:B:3820:HIS:HD2	1.69	0.57
3:C:857:ARG:HG3	5:E:206:ASN:N	2.19	0.57
3:C:933:VAL:HG21	3:C:944:LEU:HB3	1.86	0.57
3:C:1459:LEU:O	3:C:1515:GLN:NE2	2.23	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:3426:LYS:HG3	3:C:3698:ARG:NH1	2.19	0.57
3:C:4497:SER:HB3	3:C:4500:ASP:OD1	2.03	0.57
4:D:268:TRP:CD1	4:D:612:THR:HA	2.39	0.57
7:G:78:ILE:HG23	7:G:86:VAL:HB	1.87	0.57
14:N:32:SER:O	14:N:36:LYS:HG2	2.05	0.57
16:P:39:LEU:HG	16:P:95:ASN:HB2	1.87	0.57
21:X:147:ILE:HG13	21:X:148:LEU:HD22	1.86	0.57
21:X:197:LYS:HZ1	22:Z:189:ARG:HB2	1.68	0.57
17:Y:242:PHE:HB3	17:Y:356:ILE:HD13	1.86	0.57
2:B:1072:ASP:HB3	2:B:1077:ARG:HA	1.86	0.57
2:B:1106:PHE:HD2	2:B:1171:LEU:HB2	1.68	0.57
2:B:1330:TRP:CD1	2:B:1412:PHE:CD1	2.92	0.57
2:B:1961:GLU:CA	2:B:4047:MET:HE1	2.24	0.57
2:B:2920:PHE:HD2	2:B:2955:GLU:HG2	1.69	0.57
2:B:3690:LEU:HD13	2:B:3722:THR:HG21	1.87	0.57
2:B:4045:HIS:CG	2:B:4079:GLU:HG3	2.39	0.57
3:C:21:LEU:HD22	3:C:91:LYS:HG3	1.85	0.57
3:C:1112:THR:OG1	3:C:1179:ALA:O	2.20	0.57
3:C:2590:MET:HE1	3:C:2598:ASN:HB3	1.87	0.57
3:C:2660:SER:O	3:C:2663:LYS:HG3	2.04	0.57
3:C:2887:LEU:N	3:C:2920:VAL:HA	2.20	0.57
15:O:22:LYS:HG3	5:e:30:ILE:HG12	1.87	0.57
4:d:117:TRP:HH2	5:e:40:TYR:N	2.02	0.57
4:d:247:ILE:O	4:d:251:MET:CB	2.52	0.57
18:s:210:TYR:HE1	18:s:227:LEU:HD11	1.69	0.57
18:w:210:TYR:HE1	18:w:227:LEU:HD11	1.70	0.57
1:A:276:PHE:HE2	1:A:284:ASN:HB2	1.70	0.57
2:B:1330:TRP:HB2	2:B:1410:PHE:CG	2.40	0.57
2:B:1487:MET:HE1	2:B:1494:VAL:HG23	1.87	0.57
2:B:1765:GLU:CD	2:B:1798:ARG:HH12	2.12	0.57
2:B:2413:LEU:HA	2:B:2416:HIS:ND1	2.19	0.57
3:C:2721:MET:O	3:C:2776:LYS:NZ	2.37	0.57
3:C:2873:LYS:HB3	3:C:3000:CYS:SG	2.44	0.57
3:C:4200:GLU:HA	3:C:4213:ARG:NH1	2.19	0.57
4:D:472:PHE:CE1	4:D:484:CYS:HB3	2.39	0.57
11:K:41:ILE:O	11:K:45:GLN:NE2	2.37	0.57
17:U:262:ARG:NE	17:U:421:GLU:HG2	2.18	0.57
18:W:402:ARG:NH2	17:Y:425:TYR:OH	2.38	0.57
21:X:180:ARG:HH11	22:Z:171:ARG:CB	1.70	0.57
21:X:201:PHE:CZ	22:Z:194:ASN:HB2	2.36	0.57
17:u:12:CYS:SG	17:u:138:SER:HB3	2.44	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:u:397:TRP:CE2	18:w:257:THR:HA	2.40	0.57
17:q:143:THR:OG1	17:q:144:GLY:N	2.37	0.57
17:y:87:PRO:HA	17:y:90:PHE:CE2	2.40	0.57
1:A:10:LEU:HG	1:A:65:ASN:HB3	1.86	0.57
1:A:161:PHE:HD1	1:A:177:LEU:HB3	1.70	0.57
1:A:232:TYR:HB2	1:A:239:TRP:CZ3	2.40	0.57
2:B:425:ASP:OD1	2:B:426:ILE:HG13	2.05	0.57
2:B:1372:MET:O	2:B:1421:TYR:N	2.38	0.57
2:B:3829:VAL:HG22	2:B:3950:LEU:HG	1.87	0.57
2:B:4191:GLY:O	2:B:4196:GLY:N	2.38	0.57
3:C:805:ARG:CZ	5:E:152:LEU:HB3	2.34	0.57
3:C:972:TRP:HA	3:C:975:GLN:HE21	1.70	0.57
3:C:1223:VAL:HG22	3:C:1259:LYS:HE2	1.87	0.57
5:E:148:LYS:NZ	5:E:448:PHE:HD2	2.03	0.57
6:F:74:ILE:HD12	6:F:77:ILE:HD11	1.87	0.57
8:H:22:LYS:NZ	8:H:23:GLU:OE2	2.38	0.57
16:P:84:HIS:CE1	16:P:85:LYS:HG2	2.39	0.57
17:Q:262:ARG:NE	17:Q:421:GLU:HG2	2.18	0.57
17:Q:397:TRP:HZ2	18:S:260:VAL:HB	1.69	0.57
17:U:114:ASP:CG	22:Z:145:LYS:HD2	2.30	0.57
21:X:142:MET:HE1	22:Z:135:GLN:HE22	1.69	0.57
17:Y:262:ARG:NE	17:Y:421:GLU:HG2	2.18	0.57
17:u:87:PRO:HA	17:u:90:PHE:CE2	2.40	0.57
17:u:143:THR:OG1	17:u:144:GLY:N	2.36	0.57
18:r:210:TYR:HE1	18:r:227:LEU:HD11	1.70	0.57
17:q:12:CYS:SG	17:q:138:SER:HB3	2.44	0.57
17:q:87:PRO:HA	17:q:90:PHE:CE2	2.40	0.57
17:y:12:CYS:SG	17:y:138:SER:HB3	2.44	0.57
1:A:225:GLN:HG3	1:A:282:ARG:HH11	1.69	0.57
2:B:988:ALA:O	2:B:992:THR:HG23	2.04	0.57
2:B:1694:ARG:NH2	2:B:1850:ASN:O	2.37	0.57
2:B:2015:PRO:HG2	2:B:2018:LEU:HD23	1.86	0.57
2:B:2706:MET:HE3	2:B:2764:GLN:HB3	1.87	0.57
2:B:2937:ALA:HB3	2:B:2938:LYS:NZ	2.20	0.57
2:B:3662:VAL:HG13	2:B:3669:LEU:HB3	1.85	0.57
2:B:4435:ILE:O	2:B:4437:ARG:NH1	2.38	0.57
3:C:1579:ARG:NH1	3:C:1583:ASP:OD2	2.37	0.57
3:C:2848:HIS:O	3:C:2852:ILE:HD12	2.05	0.57
5:E:273:SER:HB2	5:E:278:GLU:H	1.70	0.57
13:M:76:LYS:HA	13:M:80:LEU:O	2.05	0.57
17:Q:255:VAL:HA	18:R:407:TRP:NE1	2.20	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:S:189:LEU:HD11	18:S:418:PHE:CE1	2.38	0.57
17:Y:232:ALA:O	17:Y:236:VAL:HG13	2.04	0.57
22:Z:158:LYS:O	22:Z:162:GLN:NE2	2.38	0.57
1:A:341:TRP:HH2	2:B:967:GLN:HE22	1.53	0.57
2:B:503:LEU:HD11	2:B:533:ARG:HH21	1.68	0.57
2:B:956:LEU:O	2:B:960:ARG:HD3	2.05	0.57
2:B:1471:ASP:O	2:B:1475:GLU:HG2	2.03	0.57
2:B:1507:LYS:HE2	2:B:1573:CYS:SG	2.44	0.57
2:B:2216:LYS:HZ1	2:B:2271:TRP:HE1	1.51	0.57
2:B:2584:VAL:HG21	2:B:2593:GLY:H	1.70	0.57
3:C:529:GLN:HA	3:C:532:ILE:HD12	1.86	0.57
3:C:789:LYS:O	5:E:451:LYS:NZ	2.37	0.57
3:C:3565:ASP:O	3:C:3569:LYS:HG2	2.04	0.57
3:C:3910:TRP:HD1	3:C:3920:PRO:HG2	1.69	0.57
4:D:499:HIS:N	4:D:526:ARG:HD2	2.19	0.57
15:O:45:LEU:HA	15:O:48:GLN:HE21	1.70	0.57
17:U:99:ASN:ND2	18:W:258:ASN:OD1	2.38	0.57
18:W:189:LEU:HD11	18:W:418:PHE:CE1	2.39	0.57
22:Z:155:ALA:HA	22:Z:158:LYS:NZ	2.20	0.57
17:y:143:THR:OG1	17:y:144:GLY:N	2.37	0.57
2:B:1311:MET:SD	2:B:1356:ILE:HG13	2.45	0.56
2:B:1403:PHE:HB3	2:B:1405:HIS:CD2	2.40	0.56
2:B:1650:ALA:N	2:B:1653:ALA:O	2.37	0.56
2:B:4206:ARG:HH12	2:B:4546:PRO:HD3	1.70	0.56
3:C:542:ILE:HD12	3:C:576:TYR:CD1	2.40	0.56
3:C:793:GLN:C	5:E:453:SER:HG	2.11	0.56
3:C:899:LEU:HD13	3:C:989:ILE:HD11	1.85	0.56
3:C:1810:LYS:HG3	3:C:4196:TYR:CZ	2.39	0.56
3:C:2357:VAL:O	3:C:2361:LEU:HG	2.04	0.56
3:C:2490:LEU:HD22	3:C:2631:ILE:HG22	1.87	0.56
3:C:4319:ILE:HD12	3:C:4322:ASP:HB2	1.86	0.56
5:E:342:ILE:HD11	5:E:370:VAL:HG21	1.85	0.56
17:U:232:ALA:O	17:U:236:VAL:HG13	2.04	0.56
17:U:294:PHE:CZ	17:U:333:VAL:HG21	2.40	0.56
21:X:104:PHE:O	21:X:108:ARG:HG2	2.05	0.56
17:Y:294:PHE:CZ	17:Y:333:VAL:HG21	2.41	0.56
2:B:344:ILE:HD11	2:B:397:TYR:HE2	1.70	0.56
2:B:1449:GLN:HA	2:B:1453:LYS:HZ1	1.69	0.56
2:B:1542:LEU:HD21	2:B:1545:ASP:HB2	1.85	0.56
2:B:1762:LYS:O	2:B:1766:VAL:HG23	2.05	0.56
2:B:2608:ASN:OD1	2:B:2660:SER:HB3	2.04	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:796:ILE:HG21	5:E:451:LYS:O	2.05	0.56
3:C:1116:LYS:O	3:C:1120:THR:HG23	2.05	0.56
3:C:2116:VAL:O	3:C:2120:ILE:HG13	2.05	0.56
3:C:2419:PRO:HD3	3:C:2440:TRP:CE2	2.39	0.56
3:C:3702:SER:O	3:C:3706:LEU:N	2.39	0.56
4:D:404:TRP:HE3	4:D:412:TYR:HB2	1.70	0.56
13:M:23:ILE:HG22	13:M:41:ILE:HG12	1.87	0.56
15:O:32:SER:HA	15:O:35:THR:OG1	2.05	0.56
17:Q:232:ALA:O	17:Q:236:VAL:HG13	2.04	0.56
17:Q:294:PHE:CZ	17:Q:333:VAL:HG21	2.41	0.56
18:R:189:LEU:HD11	18:R:418:PHE:CE1	2.39	0.56
17:u:189:VAL:O	17:u:193:VAL:HG23	2.04	0.56
18:r:405:VAL:O	18:r:409:VAL:HG22	2.06	0.56
17:q:189:VAL:O	17:q:193:VAL:HG23	2.04	0.56
2:B:110:VAL:HG12	3:C:122:GLU:HG2	1.86	0.56
2:B:158:VAL:HA	2:B:161:VAL:HB	1.87	0.56
2:B:721:ASN:OD1	2:B:770:LYS:NZ	2.39	0.56
2:B:738:LYS:O	2:B:741:ILE:HG22	2.05	0.56
2:B:810:SER:HB3	2:B:815:ASP:HA	1.87	0.56
2:B:902:ILE:HD11	2:B:1076:LEU:HD13	1.87	0.56
2:B:1057:LEU:HD13	2:B:1094:TRP:HB3	1.87	0.56
2:B:1215:GLN:HB3	2:B:1218:GLU:HB2	1.88	0.56
2:B:1758:LYS:NZ	2:B:1805:VAL:HG21	2.21	0.56
2:B:1960:ILE:HG12	2:B:1963:LEU:HD12	1.86	0.56
2:B:2884:ASN:ND2	2:B:3042:ASN:O	2.38	0.56
2:B:3909:ASP:OD1	2:B:3910:GLN:N	2.38	0.56
3:C:1337:CYS:HA	3:C:1340:LEU:HB2	1.88	0.56
3:C:1364:LEU:HB3	3:C:1365:PRO:HD3	1.87	0.56
3:C:1809:GLN:O	3:C:1828:THR:HG22	2.04	0.56
3:C:2027:PHE:CE2	3:C:2074:LEU:HD21	2.40	0.56
3:C:4369:TYR:O	3:C:4373:THR:HG23	2.05	0.56
5:E:238:GLY:HA2	5:E:265:VAL:HG13	1.86	0.56
5:E:405:THR:HG21	5:E:444:ASN:HB2	1.87	0.56
5:E:420:THR:HG22	5:E:494:LEU:HA	1.87	0.56
9:I:57:GLU:O	9:I:61:LYS:HG2	2.05	0.56
18:S:320:ARG:HD3	18:S:360:PRO:HG3	1.87	0.56
18:s:1:MET:CE	17:q:70:PRO:HG3	2.30	0.56
18:s:193:SER:HB2	18:s:197:HIS:CD2	2.40	0.56
18:s:405:VAL:O	18:s:409:VAL:HG22	2.06	0.56
18:r:193:SER:HB2	18:r:197:HIS:CD2	2.40	0.56
18:w:193:SER:HB2	18:w:197:HIS:CD2	2.40	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:w:405:VAL:O	18:w:409:VAL:HG22	2.06	0.56
17:y:189:VAL:O	17:y:193:VAL:HG23	2.04	0.56
1:A:44:ASN:HB2	1:A:48:ASP:OD2	2.05	0.56
1:A:99:GLY:HA3	1:A:149:HIS:HE1	1.69	0.56
2:B:1109:THR:HG23	2:B:1164:MET:HG3	1.87	0.56
2:B:1639:ASP:O	2:B:1665:LYS:HE2	2.05	0.56
2:B:2125:LEU:HB3	2:B:4466:LEU:HD11	1.87	0.56
2:B:2849:LYS:HD3	2:B:2906:ILE:HG21	1.87	0.56
2:B:2865:PHE:CE2	2:B:2867:GLN:HB3	2.40	0.56
2:B:3654:GLU:OE2	2:B:3748:ARG:HG2	2.05	0.56
3:C:874:HIS:HB3	3:C:884:LYS:HD2	1.88	0.56
3:C:1055:PHE:HE2	3:C:1093:LYS:HE3	1.70	0.56
3:C:1705:GLN:HE22	3:C:1714:PHE:HB2	1.69	0.56
3:C:2506:TYR:HA	3:C:2509:LYS:HD2	1.87	0.56
11:K:92:LYS:HE2	4:d:84:LYS:HE3	1.87	0.56
17:Q:171:PRO:HB3	17:Q:181:GLU:HB3	1.88	0.56
18:W:320:ARG:HD3	18:W:360:PRO:HG3	1.87	0.56
18:W:405:VAL:O	18:W:409:VAL:HG22	2.06	0.56
21:X:197:LYS:HZ2	22:Z:189:ARG:N	2.04	0.56
22:Z:194:ASN:O	22:Z:198:THR:OG1	2.15	0.56
18:r:320:ARG:HD3	18:r:360:PRO:HG3	1.87	0.56
17:q:171:PRO:HB3	17:q:181:GLU:HB3	1.88	0.56
17:q:271:ALA:CB	17:q:293:MET:HE2	2.35	0.56
2:B:327:ILE:HD11	2:B:397:TYR:CE1	2.40	0.56
2:B:839:LEU:O	2:B:842:GLU:HG2	2.06	0.56
2:B:2246:VAL:HG12	2:B:2299:MET:HE3	1.86	0.56
2:B:3884:ARG:HH21	2:B:3888:HIS:N	2.03	0.56
2:B:3884:ARG:HH22	2:B:3892:LYS:HZ1	1.54	0.56
3:C:857:ARG:HH21	5:E:205:PRO:HD2	1.71	0.56
3:C:1195:GLU:O	3:C:1199:LYS:HD3	2.04	0.56
3:C:2011:LYS:HB3	3:C:2055:LEU:HG	1.86	0.56
3:C:3425:GLU:OE1	3:C:3698:ARG:HD3	2.04	0.56
3:C:3712:LEU:HD12	3:C:3715:VAL:HB	1.88	0.56
4:D:539:PHE:CG	4:D:540:ASP:N	2.73	0.56
5:E:193:MET:HB2	5:E:196:GLN:HE21	1.71	0.56
5:E:254:ILE:HG22	5:E:255:SER:N	2.20	0.56
17:Q:252:LYS:O	17:Q:256:ASN:ND2	2.39	0.56
18:R:320:ARG:HD3	18:R:360:PRO:HG3	1.87	0.56
17:U:171:PRO:HB3	17:U:181:GLU:HB3	1.88	0.56
21:X:194:LEU:CD1	22:Z:185:LEU:HB3	2.35	0.56
17:Y:101:TRP:CE2	17:Y:187:LEU:HB3	2.41	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Y:171:PRO:HB3	17:Y:181:GLU:HB3	1.88	0.56
18:s:320:ARG:HD3	18:s:360:PRO:HG3	1.87	0.56
2:B:16:ASN:HB2	2:B:17:ARG:HH11	1.71	0.56
2:B:1068:LYS:HD3	2:B:1069:THR:O	2.05	0.56
2:B:1452:SER:HA	2:B:1570:VAL:HG21	1.88	0.56
2:B:1688:ASN:O	2:B:1692:ARG:HG2	2.05	0.56
2:B:2396:MET:N	2:B:2447:PRO:O	2.38	0.56
2:B:2925:LEU:HD12	2:B:2958:PHE:CD2	2.41	0.56
3:C:104:ASP:OD2	3:C:107:LYS:HE3	2.05	0.56
3:C:210:GLU:HG3	3:C:280:ASN:HD21	1.69	0.56
3:C:1383:ILE:HA	3:C:1419:ILE:HD13	1.88	0.56
3:C:2383:TYR:O	3:C:2387:ILE:HG12	2.06	0.56
3:C:3688:LEU:HD21	3:C:3726:VAL:HG13	1.86	0.56
3:C:4351:ASN:HB2	3:C:4354:THR:HG22	1.87	0.56
12:L:74:TRP:CD2	12:L:109:LYS:HD3	2.41	0.56
17:Q:101:TRP:CE2	17:Q:187:LEU:HB3	2.41	0.56
18:R:210:TYR:HE1	18:R:227:LEU:HD11	1.69	0.56
18:S:405:VAL:O	18:S:409:VAL:HG22	2.06	0.56
17:U:101:TRP:CE2	17:U:187:LEU:HB3	2.41	0.56
17:U:252:LYS:O	17:U:256:ASN:ND2	2.39	0.56
18:W:2:ARG:HB3	18:W:133:GLN:HG3	1.88	0.56
18:W:210:TYR:HE1	18:W:227:LEU:HD11	1.69	0.56
21:X:180:ARG:NH2	22:Z:171:ARG:HG3	2.18	0.56
17:u:171:PRO:HB3	17:u:181:GLU:HB3	1.88	0.56
17:u:271:ALA:CB	17:u:293:MET:HE2	2.35	0.56
18:w:320:ARG:HD3	18:w:360:PRO:HG3	1.87	0.56
17:y:171:PRO:HB3	17:y:181:GLU:HB3	1.88	0.56
2:B:176:LEU:HD22	2:B:243:LEU:HD21	1.87	0.56
2:B:344:ILE:HD13	2:B:394:TYR:OH	2.05	0.56
2:B:1330:TRP:CZ2	2:B:1405:HIS:HA	2.41	0.56
2:B:1858:ASP:HB3	2:B:4172:TYR:CD1	2.40	0.56
2:B:4245:TYR:CZ	2:B:4249:ILE:HD11	2.41	0.56
3:C:1766:SER:HA	3:C:2018:LEU:HD21	1.88	0.56
3:C:2903:LYS:HB3	3:C:2950:LEU:HD21	1.87	0.56
6:F:87:TYR:HH	6:F:98:LEU:HD13	1.70	0.56
17:Q:271:ALA:CB	17:Q:293:MET:HE2	2.35	0.56
18:R:405:VAL:O	18:R:409:VAL:HG22	2.06	0.56
18:S:2:ARG:HB3	18:S:133:GLN:HG3	1.88	0.56
18:S:210:TYR:HE1	18:S:227:LEU:HD11	1.70	0.56
17:U:271:ALA:CB	17:U:293:MET:HE2	2.35	0.56
17:Y:252:LYS:O	17:Y:256:ASN:ND2	2.39	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:Z:196:ILE:O	22:Z:200:ASN:CB	2.53	0.56
17:u:101:TRP:CE2	17:u:187:LEU:HB3	2.41	0.56
18:w:2:ARG:HB3	18:w:133:GLN:HG3	1.88	0.56
17:y:271:ALA:CB	17:y:293:MET:HE2	2.35	0.56
2:B:133:MET:HB3	2:B:137:LEU:HD11	1.86	0.56
2:B:541:GLU:HA	2:B:616:ARG:HH12	1.71	0.56
2:B:544:HIS:CG	2:B:613:ILE:HG22	2.41	0.56
2:B:928:ASN:OD1	2:B:932:ASN:ND2	2.39	0.56
2:B:1137:LYS:HD3	2:B:1144:MET:HG2	1.88	0.56
2:B:1889:GLN:HA	2:B:1892:ASN:HD22	1.71	0.56
2:B:2141:PRO:HA	2:B:2144:LYS:HB2	1.88	0.56
2:B:3506:LYS:HE2	2:B:3685:VAL:HG22	1.87	0.56
4:D:575:LYS:HE2	4:D:576:LEU:HB2	1.88	0.56
7:G:125:PHE:HA	7:G:139:PRO:HD2	1.88	0.56
12:L:33:LYS:HD3	12:L:60:PHE:HZ	1.70	0.56
17:Q:87:PRO:HA	17:Q:90:PHE:CE2	2.40	0.56
21:X:197:LYS:HZ3	22:Z:189:ARG:CD	2.08	0.56
18:s:2:ARG:HB3	18:s:133:GLN:HG3	1.88	0.56
18:r:2:ARG:HB3	18:r:133:GLN:HG3	1.88	0.56
17:q:101:TRP:CE2	17:q:187:LEU:HB3	2.41	0.56
17:q:252:LYS:O	17:q:256:ASN:ND2	2.39	0.56
2:B:310:PHE:HA	2:B:313:LEU:HD12	1.86	0.56
2:B:1226:LEU:HD11	2:B:1285:GLU:OE2	2.06	0.56
2:B:1271:LEU:HD21	2:B:1301:CYS:HB2	1.88	0.56
2:B:1455:VAL:HG22	2:B:1568:SER:HA	1.88	0.56
2:B:1478:ASP:O	2:B:1482:LEU:HG	2.06	0.56
2:B:1768:LEU:HD21	2:B:1794:ASP:HB3	1.88	0.56
2:B:1789:ASN:O	2:B:1792:THR:OG1	2.20	0.56
2:B:2400:ALA:N	2:B:2403:GLN:HE22	2.04	0.56
2:B:2709:LYS:O	2:B:2712:GLU:HG3	2.05	0.56
2:B:4250:GLU:O	2:B:4254:THR:HG23	2.06	0.56
3:C:793:GLN:C	5:E:453:SER:OG	2.49	0.56
3:C:910:LYS:HB3	3:C:998:VAL:HG11	1.87	0.56
3:C:1506:ASP:OD1	3:C:1507:THR:N	2.39	0.56
3:C:1781:VAL:O	3:C:1785:VAL:HG23	2.06	0.56
3:C:2061:THR:HB	3:C:2073:LEU:HD11	1.87	0.56
3:C:2210:GLY:O	3:C:2214:THR:HG23	2.06	0.56
3:C:2360:ILE:HB	3:C:2391:MET:HG2	1.88	0.56
3:C:2419:PRO:HG2	3:C:2423:LYS:HZ2	1.70	0.56
3:C:2421:LYS:HG2	3:C:2422:GLY:H	1.71	0.56
3:C:3693:LYS:O	3:C:3697:GLU:HG2	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:501:LEU:HD13	4:D:522:ASP:HB2	1.86	0.56
4:D:529:ASP:HB3	4:D:532:TYR:HD2	1.70	0.56
5:E:343:LEU:HD21	5:E:365:ARG:HH22	1.71	0.56
5:E:511:ARG:O	5:E:515:LYS:HG3	2.05	0.56
11:K:31:GLU:HA	14:N:32:SER:HB3	1.87	0.56
14:N:80:LYS:O	14:N:128:GLY:HA2	2.05	0.56
17:Q:244:GLY:HA2	17:Q:355:ASP:HB2	1.88	0.56
18:R:2:ARG:HB3	18:R:133:GLN:HG3	1.88	0.56
17:u:252:LYS:O	17:u:256:ASN:ND2	2.39	0.56
17:y:101:TRP:CE2	17:y:187:LEU:HB3	2.41	0.56
17:y:252:LYS:O	17:y:256:ASN:ND2	2.38	0.56
2:B:899:LEU:HD23	2:B:1075:TRP:O	2.06	0.56
2:B:1120:THR:O	2:B:1124:ILE:HG13	2.05	0.56
2:B:1310:THR:O	16:P:76:SER:HB3	2.06	0.56
2:B:1415:ILE:HA	2:B:1418:LEU:HB3	1.88	0.56
2:B:1972:CYS:HB2	2:B:1986:PHE:CZ	2.41	0.56
2:B:3080:LEU:O	2:B:3084:LYS:HG2	2.05	0.56
2:B:3996:GLU:HA	2:B:3999:LYS:HD2	1.88	0.56
2:B:4189:ILE:HG23	2:B:4193:ILE:HD11	1.88	0.56
3:C:78:LEU:HD12	3:C:131:LEU:HD12	1.88	0.56
3:C:478:LEU:HD23	3:C:484:LEU:HB2	1.88	0.56
3:C:807:GLU:N	3:C:807:GLU:OE2	2.39	0.56
3:C:1111:LEU:HB3	3:C:1183:LEU:HD21	1.87	0.56
3:C:1654:THR:HG23	3:C:1673:TYR:HE1	1.70	0.56
3:C:3571:CYS:SG	3:C:3576:LEU:HB3	2.46	0.56
5:E:386:VAL:HG11	5:E:412:LEU:HD13	1.88	0.56
17:Q:98:GLY:HA3	18:S:253:THR:HG23	1.88	0.56
17:U:87:PRO:HA	17:U:90:PHE:CE2	2.40	0.56
18:W:407:TRP:NE1	17:Y:255:VAL:HA	2.21	0.56
21:X:195:LYS:O	21:X:199:HIS:CD2	2.59	0.56
17:Y:271:ALA:CB	17:Y:293:MET:HE2	2.35	0.56
18:s:262:TYR:OH	17:q:391:ARG:O	2.24	0.56
17:u:70:PRO:HG3	18:w:1:MET:CE	2.32	0.56
1:A:194:GLY:H	1:A:239:TRP:HD1	1.54	0.55
2:B:134:GLN:HB2	3:C:79:PHE:CZ	2.41	0.55
2:B:1775:VAL:HA	2:B:1784:ARG:NH2	2.20	0.55
2:B:1960:ILE:HG21	2:B:4048:PRO:HD2	1.87	0.55
2:B:3126:ARG:HE	2:B:3130:GLN:HE22	1.55	0.55
2:B:3530:ARG:HG2	2:B:3641:CYS:HA	1.89	0.55
2:B:3600:LYS:NZ	2:B:3602:GLY:O	2.30	0.55
3:C:1413:ARG:O	3:C:1417:GLU:HB3	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1850:LEU:HD21	3:C:2000:MET:N	2.19	0.55
4:D:465:ASN:HB3	4:D:468:GLU:O	2.06	0.55
5:E:193:MET:HB2	5:E:196:GLN:NE2	2.21	0.55
17:Q:226:ASN:O	17:Q:230:SER:OG	2.19	0.55
17:U:244:GLY:HA2	17:U:355:ASP:HB2	1.88	0.55
18:W:193:SER:HB2	18:W:197:HIS:CD2	2.40	0.55
21:X:148:LEU:HG	22:Z:143:LEU:HD21	1.88	0.55
17:Y:87:PRO:HA	17:Y:90:PHE:CE2	2.40	0.55
22:Z:104:PHE:O	22:Z:108:ILE:HG12	2.06	0.55
4:d:117:TRP:N	4:d:119:GLU:OE1	2.39	0.55
17:u:153:SER:HA	17:u:195:ASN:HD22	1.71	0.55
17:y:153:SER:HA	17:y:195:ASN:HD22	1.71	0.55
17:y:198:GLU:HG2	17:y:266:PHE:HE2	1.69	0.55
2:B:52:PHE:O	2:B:93:LYS:NZ	2.40	0.55
2:B:658:GLN:HB3	2:B:667:ASP:HB3	1.87	0.55
2:B:1469:SER:HB2	2:B:1472:ASN:HD21	1.70	0.55
2:B:3032:ARG:HA	2:B:3035:LYS:HB3	1.88	0.55
3:C:40:LEU:HD11	3:C:73:ALA:HB2	1.88	0.55
3:C:457:LEU:HD23	3:C:460:LEU:HD12	1.89	0.55
3:C:541:ASN:HB2	3:C:544:TYR:CD2	2.41	0.55
3:C:2195:GLN:HB3	3:C:2596:ARG:HD2	1.89	0.55
12:L:21:ILE:HA	12:L:96:PHE:HB3	1.88	0.55
18:R:188:ILE:O	18:R:421:ALA:HB1	2.06	0.55
18:S:202:VAL:HA	18:S:268:MET:O	2.06	0.55
18:W:202:VAL:HA	18:W:268:MET:O	2.06	0.55
21:X:148:LEU:O	21:X:152:LEU:HG	2.06	0.55
17:Y:198:GLU:HG2	17:Y:266:PHE:HE2	1.69	0.55
22:Z:181:LEU:HD21	22:Z:185:LEU:HD12	1.87	0.55
17:u:294:PHE:CZ	17:u:333:VAL:HG21	2.41	0.55
17:q:294:PHE:CZ	17:q:333:VAL:HG21	2.41	0.55
17:y:294:PHE:CZ	17:y:333:VAL:HG21	2.40	0.55
2:B:160:GLN:HB3	2:B:178:SER:OG	2.06	0.55
2:B:987:ARG:HA	2:B:990:PHE:CD2	2.41	0.55
2:B:995:TYR:OH	2:B:1094:TRP:NE1	2.39	0.55
2:B:1246:PHE:CZ	2:B:1257:ILE:HA	2.41	0.55
2:B:1972:CYS:HB2	2:B:1986:PHE:HZ	1.70	0.55
3:C:410:GLY:O	3:C:414:LYS:HG2	2.06	0.55
3:C:1422:SER:O	3:C:1426:GLN:HG2	2.07	0.55
3:C:1654:THR:HG23	3:C:1673:TYR:CE1	2.42	0.55
3:C:2860:ARG:HH21	3:C:2992:ARG:HD2	1.71	0.55
3:C:3811:TYR:HE1	3:C:3827:ILE:HG22	1.71	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Q:135:ILE:HG22	17:Q:166:THR:HA	1.89	0.55
17:Q:198:GLU:HG2	17:Q:266:PHE:HE2	1.70	0.55
18:R:193:SER:HB2	18:R:197:HIS:CD2	2.40	0.55
18:R:202:VAL:HA	18:R:268:MET:O	2.06	0.55
18:R:221:ARG:HD2	18:R:221:ARG:O	2.06	0.55
18:S:188:ILE:O	18:S:421:ALA:HB1	2.06	0.55
18:S:193:SER:HB2	18:S:197:HIS:CD2	2.40	0.55
18:S:407:TRP:NE1	17:U:255:VAL:HA	2.21	0.55
17:U:135:ILE:HG22	17:U:166:THR:HA	1.89	0.55
17:U:198:GLU:HG2	17:U:266:PHE:HE2	1.70	0.55
18:W:188:ILE:O	18:W:421:ALA:HB1	2.06	0.55
21:X:197:LYS:NZ	22:Z:189:ARG:CG	2.69	0.55
17:Y:135:ILE:HG22	17:Y:166:THR:HA	1.89	0.55
17:Y:244:GLY:HA2	17:Y:355:ASP:HB2	1.88	0.55
17:u:198:GLU:HG2	17:u:266:PHE:HE2	1.70	0.55
18:r:202:VAL:HA	18:r:268:MET:O	2.06	0.55
17:q:153:SER:HA	17:q:195:ASN:HD22	1.71	0.55
18:w:221:ARG:O	18:w:221:ARG:HD2	2.06	0.55
2:B:380:LEU:HD21	2:B:427:LEU:HA	1.86	0.55
2:B:422:ARG:NE	2:B:478:MET:HA	2.20	0.55
2:B:615:GLU:HA	2:B:619:TYR:CD2	2.42	0.55
2:B:707:THR:O	2:B:710:THR:OG1	2.18	0.55
2:B:1145:LYS:HZ1	2:B:1150:VAL:HG11	1.71	0.55
2:B:1360:LYS:HD2	2:B:1363:ASN:HB3	1.88	0.55
2:B:2385:HIS:CE1	2:B:2395:PRO:HD3	2.41	0.55
2:B:4530:ILE:O	2:B:4533:PRO:HD3	2.06	0.55
3:C:1636:LYS:NZ	3:C:1665:GLU:OE1	2.39	0.55
3:C:1974:ILE:HD12	3:C:1976:MET:HB3	1.89	0.55
15:O:13:VAL:O	15:O:17:ILE:HG12	2.07	0.55
21:X:180:ARG:HD3	22:Z:171:ARG:HB3	1.87	0.55
17:Y:143:THR:OG1	17:Y:144:GLY:N	2.37	0.55
22:Z:84:LYS:O	22:Z:87:ILE:HG12	2.07	0.55
18:s:202:VAL:HA	18:s:268:MET:O	2.06	0.55
18:s:221:ARG:HD2	18:s:221:ARG:O	2.06	0.55
17:u:135:ILE:HG22	17:u:166:THR:HA	1.89	0.55
17:q:198:GLU:HG2	17:q:266:PHE:HE2	1.70	0.55
17:y:135:ILE:HG22	17:y:166:THR:HA	1.89	0.55
2:B:51:GLY:HA2	2:B:54:GLN:HE21	1.71	0.55
2:B:326:LEU:HD22	2:B:330:LYS:HG3	1.89	0.55
2:B:429:LEU:HD13	2:B:470:PHE:CG	2.42	0.55
2:B:900:PHE:HB3	2:B:1076:LEU:HD22	1.87	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1040:CYS:O	2:B:1045:PRO:HD3	2.06	0.55
2:B:1277:ARG:HH11	2:B:1277:ARG:HA	1.72	0.55
2:B:2331:TRP:HB3	2:B:2335:MET:HE1	1.89	0.55
2:B:2455:SER:O	2:B:2461:PHE:CB	2.53	0.55
2:B:3001:LEU:HA	2:B:3004:LEU:HD12	1.89	0.55
2:B:3533:LEU:HG	2:B:3641:CYS:SG	2.46	0.55
2:B:3801:ILE:HA	2:B:3804:ILE:HD12	1.89	0.55
2:B:4160:GLY:O	2:B:4164:ASP:N	2.38	0.55
3:C:278:HIS:HD2	3:C:282:ARG:NH1	2.03	0.55
3:C:1376:MET:O	3:C:1379:HIS:N	2.39	0.55
3:C:2008:ILE:HD11	3:C:2051:ILE:HD13	1.87	0.55
3:C:2371:PHE:HA	3:C:2376:ARG:HE	1.71	0.55
3:C:2768:GLN:NE2	3:C:2769:ILE:HG12	2.22	0.55
5:E:254:ILE:HG22	5:E:255:SER:H	1.71	0.55
18:S:221:ARG:HD2	18:S:221:ARG:O	2.06	0.55
21:X:142:MET:HA	21:X:145:ILE:HD12	1.89	0.55
21:X:194:LEU:HD13	22:Z:185:LEU:HD22	1.82	0.55
18:r:221:ARG:HD2	18:r:221:ARG:O	2.06	0.55
17:q:135:ILE:HG22	17:q:166:THR:HA	1.89	0.55
18:w:202:VAL:HA	18:w:268:MET:O	2.07	0.55
1:A:255:GLY:HA3	1:A:268:ILE:HD11	1.87	0.55
1:A:257:MET:HE3	1:A:258:ALA:H	1.70	0.55
2:B:118:LEU:HD12	2:B:162:TYR:HD1	1.72	0.55
2:B:718:ILE:HD11	2:B:766:ILE:O	2.07	0.55
2:B:876:GLN:CD	2:B:966:LYS:HB3	2.31	0.55
2:B:1796:HIS:CE1	2:B:1876:ILE:HG12	2.42	0.55
2:B:2910:GLU:OE2	2:B:2944:ARG:HD3	2.06	0.55
3:C:2408:HIS:O	3:C:2412:LEU:HG	2.07	0.55
3:C:3424:GLY:HA3	3:C:3723:ALA:HB2	1.87	0.55
3:C:3789:SER:O	3:C:3798:ARG:NH2	2.40	0.55
17:U:143:THR:OG1	17:U:144:GLY:N	2.37	0.55
18:W:221:ARG:HD2	18:W:221:ARG:O	2.06	0.55
17:u:62:ARG:NH1	17:u:127:CYS:HB3	2.18	0.55
18:r:407:TRP:CD2	17:q:255:VAL:HG22	2.42	0.55
17:y:62:ARG:NH1	17:y:127:CYS:HB3	2.18	0.55
1:A:62:LEU:HD13	1:A:327:PHE:CE2	2.40	0.55
2:B:198:GLY:O	2:B:202:THR:HG23	2.07	0.55
2:B:656:LEU:HD12	2:B:752:ILE:O	2.05	0.55
2:B:862:TYR:O	2:B:866:ILE:HG12	2.07	0.55
2:B:1229:PHE:O	2:B:1233:VAL:HG23	2.07	0.55
2:B:1490:GLN:CG	2:B:3613:PRO:HB2	2.35	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1855:ARG:HD3	2:B:1860:PHE:HB3	1.89	0.55
2:B:2932:ILE:HG23	2:B:2944:ARG:HH21	1.71	0.55
2:B:3823:ILE:HB	2:B:4286:LEU:HD22	1.89	0.55
2:B:3925:LYS:HG3	2:B:3928:LEU:HD12	1.88	0.55
3:C:1144:LYS:HD3	4:d:171:ARG:HA	1.89	0.55
3:C:2353:PRO:O	3:C:2357:VAL:HG23	2.06	0.55
3:C:3689:GLN:HG2	3:C:3693:LYS:HE2	1.88	0.55
5:E:500:LYS:O	5:E:504:ILE:HG13	2.07	0.55
8:H:73:ARG:NH1	5:e:72:GLY:HA2	2.22	0.55
1:A:169:TYR:HB2	1:A:171:ARG:NE	2.22	0.55
1:A:272:SER:HA	1:A:287:PHE:CD1	2.42	0.55
2:B:64:VAL:HG22	2:B:83:LYS:HZ2	1.71	0.55
2:B:123:SER:HB3	3:C:96:LEU:HD21	1.88	0.55
2:B:812:ASP:HB2	2:B:900:PHE:CE2	2.42	0.55
2:B:2513:ALA:HB1	2:B:2521:ARG:NH2	2.22	0.55
2:B:3053:HIS:O	2:B:3057:ILE:HG12	2.06	0.55
2:B:3138:MET:HB2	2:B:3698:LEU:HD13	1.88	0.55
3:C:135:MET:HG3	3:C:165:PHE:HE2	1.71	0.55
3:C:1253:GLU:HA	3:C:1256:TYR:CE1	2.42	0.55
3:C:1476:LEU:HD11	3:C:3566:MET:SD	2.47	0.55
4:D:467:PHE:HB2	4:D:514:ARG:HH12	1.72	0.55
17:Q:425:TYR:OH	18:R:402:ARG:NH2	2.40	0.55
17:U:177:ASP:OD2	25:U:501:GDP:O2'	2.19	0.55
21:X:194:LEU:HD21	21:X:197:LYS:NZ	2.22	0.55
17:q:244:GLY:HA2	17:q:355:ASP:HB2	1.88	0.55
18:w:407:TRP:CD2	17:y:255:VAL:HG22	2.42	0.55
2:B:179:HIS:HB3	2:B:203:TRP:CE2	2.42	0.55
2:B:190:LYS:O	2:B:194:HIS:HB2	2.07	0.55
2:B:269:THR:HB	2:B:270:PRO:HD3	1.89	0.55
2:B:918:GLY:HA2	2:B:921:SER:HB2	1.87	0.55
2:B:939:ASN:OD1	2:B:940:ILE:N	2.40	0.55
2:B:1099:THR:O	2:B:1103:VAL:HG23	2.07	0.55
2:B:1415:ILE:O	2:B:1420:LEU:HG	2.07	0.55
2:B:3086:HIS:CE1	2:B:3108:PRO:HA	2.42	0.55
3:C:1184:ARG:HA	3:C:1187:TRP:HD1	1.72	0.55
17:Q:143:THR:OG1	17:Q:144:GLY:N	2.37	0.55
17:Q:177:ASP:OD2	25:Q:501:GDP:O2'	2.19	0.55
19:T:179:CYS:HB3	19:T:192:TYR:CZ	2.42	0.55
18:W:123:ARG:HA	18:W:123:ARG:HE	1.71	0.55
17:Y:177:ASP:OD2	25:Y:501:GDP:O2'	2.19	0.55
18:r:188:ILE:O	18:r:421:ALA:HB1	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1037:LEU:O	2:B:1041:ARG:HG2	2.06	0.55
2:B:1252:MET:HB3	2:B:1255:GLU:OE1	2.07	0.55
2:B:1359:PHE:O	2:B:1363:ASN:N	2.37	0.55
2:B:2417:LEU:HD11	2:B:2526:ILE:HD13	1.88	0.55
2:B:2494:TRP:HB3	2:B:2515:ILE:HD11	1.88	0.55
2:B:2688:PHE:HA	2:B:2691:ILE:HD12	1.88	0.55
2:B:2949:THR:HG23	2:B:2952:GLN:H	1.71	0.55
2:B:3819:LYS:HZ2	2:B:3820:HIS:CE1	2.25	0.55
2:B:3863:LEU:HD12	2:B:3866:LEU:HD12	1.89	0.55
2:B:4046:LEU:HD23	2:B:4046:LEU:C	2.31	0.55
3:C:352:ILE:HB	3:C:357:ASN:HD22	1.72	0.55
3:C:430:VAL:O	3:C:434:PRO:HD3	2.06	0.55
3:C:2311:ARG:HE	3:C:2319:GLU:CD	2.15	0.55
3:C:3955:THR:HA	3:C:3958:PHE:CE1	2.42	0.55
5:E:477:ALA:HA	5:E:487:ILE:HA	1.89	0.55
12:L:84:CYS:HA	13:M:56:ILE:HG23	1.88	0.55
17:q:62:ARG:NH1	17:q:127:CYS:HB3	2.18	0.55
17:y:244:GLY:HA2	17:y:355:ASP:HB2	1.88	0.55
1:A:170:GLN:HB2	2:B:861:ASP:HB3	1.88	0.54
2:B:173:MET:HE3	2:B:221:TYR:HD2	1.72	0.54
2:B:240:ASN:O	2:B:243:LEU:HG	2.07	0.54
2:B:1285:GLU:CG	2:B:1290:LEU:HB2	2.37	0.54
2:B:2234:LYS:HB3	2:B:2638:GLN:HG2	1.88	0.54
3:C:405:LEU:HD23	3:C:468:GLN:HE21	1.72	0.54
3:C:580:LEU:HD13	3:C:641:TYR:CD2	2.43	0.54
3:C:716:ILE:O	3:C:720:GLU:HG2	2.08	0.54
3:C:1303:VAL:HB	3:C:1353:LEU:HD11	1.89	0.54
3:C:1443:MET:HE3	3:C:1444:GLN:HE22	1.72	0.54
3:C:1787:ILE:O	3:C:1791:GLN:HG3	2.06	0.54
5:E:402:ILE:HD11	5:E:515:LYS:HE2	1.88	0.54
5:E:407:TYR:HD2	5:E:410:SER:HB3	1.72	0.54
14:N:33:LYS:O	14:N:36:LYS:HB2	2.08	0.54
18:R:12:GLY:HA2	26:R:501:GTP:C5	2.42	0.54
18:S:12:GLY:HA2	26:S:501:GTP:C5	2.42	0.54
18:S:123:ARG:HA	18:S:123:ARG:HE	1.72	0.54
18:W:12:GLY:HA2	26:W:501:GTP:C5	2.42	0.54
2:B:45:ASN:HD21	2:B:48:GLU:CD	2.15	0.54
2:B:449:GLY:HA2	2:B:452:LEU:HG	1.89	0.54
2:B:1222:ILE:HG12	2:B:1284:LEU:HD13	1.89	0.54
2:B:1285:GLU:HG3	2:B:1290:LEU:HD12	1.89	0.54
2:B:1539:ARG:HB3	2:B:1546:THR:HG21	1.88	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1629:LYS:HG2	2:B:1633:TYR:CE1	2.42	0.54
2:B:2448:VAL:HG21	2:B:2461:PHE:CE2	2.43	0.54
2:B:2865:PHE:O	2:B:2869:MET:HG3	2.06	0.54
2:B:3447:MET:HE1	2:B:3497:ILE:HD11	1.90	0.54
2:B:3521:ASN:HA	2:B:3524:ILE:HG22	1.88	0.54
3:C:562:LYS:HA	3:C:565:LEU:HD12	1.88	0.54
3:C:2800:ILE:HG13	3:C:2801:GLU:N	2.20	0.54
3:C:3070:VAL:HA	3:C:3073:ILE:HD12	1.89	0.54
5:E:290:TRP:HB3	5:E:347:LYS:HZ1	1.73	0.54
5:E:410:SER:HB2	5:E:429:ARG:HD2	1.89	0.54
5:E:418:SER:O	5:E:420:THR:N	2.39	0.54
11:K:100:ILE:HG12	11:K:101:GLU:OE1	2.05	0.54
18:s:123:ARG:HA	18:s:123:ARG:HE	1.71	0.54
18:s:188:ILE:O	18:s:421:ALA:HB1	2.06	0.54
17:u:244:GLY:HA2	17:u:355:ASP:HB2	1.88	0.54
18:w:123:ARG:HA	18:w:123:ARG:HE	1.71	0.54
2:B:2385:HIS:HA	2:B:2388:ASN:HB2	1.88	0.54
3:C:544:TYR:CD2	4:D:540:ASP:HB3	2.42	0.54
3:C:928:LYS:HD2	3:C:957:ARG:NH2	2.15	0.54
3:C:2686:THR:HG23	3:C:2689:LYS:H	1.72	0.54
4:D:413:ASN:HA	4:D:427:ILE:HB	1.89	0.54
4:D:537:ILE:HG21	4:D:576:LEU:HD21	1.89	0.54
5:E:202:LEU:HD13	5:E:475:LEU:HD21	1.88	0.54
5:E:252:ILE:HG13	5:E:253:MET:H	1.71	0.54
6:F:25:ILE:HD11	6:F:95:PHE:HB3	1.88	0.54
18:R:123:ARG:HA	18:R:123:ARG:HE	1.72	0.54
18:s:1:MET:HE2	17:q:70:PRO:CG	2.34	0.54
18:s:407:TRP:CD2	17:u:255:VAL:HG22	2.43	0.54
18:w:188:ILE:O	18:w:421:ALA:HB1	2.06	0.54
2:B:1456:PHE:N	2:B:1567:PRO:O	2.32	0.54
2:B:2913:GLN:HB2	2:B:2947:MET:HE2	1.89	0.54
2:B:4023:GLU:HA	2:B:4026:ARG:HH21	1.71	0.54
2:B:4107:MET:SD	2:B:4111:TRP:NE1	2.81	0.54
3:C:1032:GLN:HG3	3:C:1036:LYS:HG2	1.89	0.54
3:C:1351:ARG:O	3:C:1355:ASN:ND2	2.39	0.54
3:C:3533:PRO:HG2	3:C:3648:THR:HG22	1.89	0.54
3:C:3952:LEU:HD11	3:C:4296:MET:HE2	1.88	0.54
12:L:81:ASN:HB3	13:M:60:ASN:HD21	1.71	0.54
17:q:7:ILE:HB	17:q:135:ILE:CD1	2.37	0.54
2:B:118:LEU:HD13	2:B:158:VAL:HG12	1.88	0.54
2:B:893:ARG:NH1	2:B:895:ASP:O	2.40	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4046:LEU:HD23	2:B:4046:LEU:O	2.08	0.54
2:B:4558:VAL:HG13	2:B:4559:PHE:HD2	1.71	0.54
3:C:2879:LEU:O	3:C:2883:ILE:HG23	2.08	0.54
3:C:4486:LYS:HD2	3:C:4496:TRP:CE2	2.42	0.54
4:D:422:ARG:NH1	4:D:424:MET:HB3	2.22	0.54
5:E:162:ARG:HH11	5:E:198:TYR:HH	1.56	0.54
5:E:164:VAL:H	5:E:483:GLY:HA2	1.71	0.54
13:M:17:ILE:O	13:M:21:LYS:HG2	2.06	0.54
15:O:38:TYR:HD1	15:O:106:ILE:HG22	1.73	0.54
18:r:123:ARG:HA	18:r:123:ARG:HE	1.72	0.54
2:B:1175:ASN:HA	2:B:1178:ILE:HD12	1.90	0.54
2:B:1311:MET:C	2:B:1362:TYR:HE1	2.15	0.54
2:B:1529:TYR:O	2:B:1533:LEU:HG	2.07	0.54
2:B:1592:GLU:HA	2:B:1595:LEU:HD12	1.88	0.54
2:B:2016:GLU:HA	2:B:2019:LYS:HZ2	1.72	0.54
2:B:2043:GLU:HG3	2:B:2087:GLY:HA2	1.89	0.54
2:B:2121:ILE:HD11	2:B:4344:PRO:HB3	1.90	0.54
2:B:2472:LYS:HD2	2:B:2473:PHE:N	2.21	0.54
3:C:3824:ILE:HG12	3:C:3956:GLN:NE2	2.23	0.54
3:C:4283:ASN:O	3:C:4547:LYS:NZ	2.35	0.54
4:D:457:ALA:HB1	4:D:462:PHE:CZ	2.42	0.54
4:D:570:ASP:H	4:D:579:LEU:HD23	1.71	0.54
8:H:57:TRP:CE2	8:H:90:LYS:HD2	2.43	0.54
11:K:92:LYS:HG2	4:d:82:ALA:O	2.08	0.54
18:R:191:THR:O	18:R:195:LEU:HD23	2.08	0.54
18:S:191:THR:O	18:S:195:LEU:HD23	2.08	0.54
17:u:7:ILE:HB	17:u:135:ILE:CD1	2.37	0.54
2:B:335:ASN:HD21	2:B:340:LEU:HD13	1.73	0.54
2:B:730:LEU:HG	2:B:731:PRO:HD3	1.89	0.54
2:B:1770:ASN:ND2	2:B:1774:LYS:HE3	2.22	0.54
2:B:2206:GLU:HG2	2:B:2207:ASP:N	2.22	0.54
2:B:3662:VAL:HG22	2:B:3669:LEU:HD23	1.88	0.54
2:B:3826:THR:HA	2:B:3829:VAL:HB	1.89	0.54
3:C:1211:GLU:HG3	3:C:1214:GLN:HE21	1.72	0.54
3:C:1384:LYS:HD2	3:C:1393:TYR:HA	1.90	0.54
3:C:1820:ILE:O	3:C:1820:ILE:HG13	2.08	0.54
3:C:2840:VAL:HG21	3:C:3041:THR:HB	1.88	0.54
3:C:3424:GLY:HA2	3:C:3427:ASP:HB3	1.88	0.54
3:C:3663:ILE:HD11	3:C:3744:ARG:HG2	1.88	0.54
3:C:3744:ARG:O	3:C:3748:ARG:N	2.34	0.54
7:G:71:LYS:O	7:G:72:THR:OG1	2.21	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:U:153:SER:HA	17:U:195:ASN:HD22	1.71	0.54
18:W:191:THR:O	18:W:195:LEU:HD23	2.08	0.54
21:X:209:HIS:O	21:X:213:HIS:HD2	1.84	0.54
17:Y:55:THR:HG23	17:y:283:ALA:HA	1.90	0.54
17:Y:153:SER:HA	17:Y:195:ASN:HD22	1.71	0.54
1:A:75:GLN:O	1:A:121:TRP:N	2.39	0.54
2:B:137:LEU:HG	2:B:145:LEU:HB2	1.90	0.54
2:B:843:VAL:HG11	2:B:859:TYR:CE2	2.43	0.54
2:B:1315:ILE:HG12	2:B:1362:TYR:HD1	1.73	0.54
2:B:2929:LEU:HA	2:B:2932:ILE:HD12	1.89	0.54
2:B:2934:LYS:HA	2:B:2938:LYS:NZ	2.23	0.54
2:B:4000:ILE:HA	2:B:4003:LYS:HE3	1.90	0.54
2:B:4105:ALA:HB1	2:B:4109:ARG:HH21	1.73	0.54
2:B:4330:MET:O	2:B:4338:ASP:N	2.40	0.54
3:C:127:THR:HB	3:C:130:MET:HB3	1.90	0.54
3:C:818:LEU:H	3:C:909:MET:HE3	1.73	0.54
3:C:1037:LYS:HA	3:C:1040:LYS:HE2	1.90	0.54
3:C:3560:HIS:CE1	3:C:3562:LYS:HB3	2.42	0.54
3:C:3784:GLU:O	3:C:3788:LEU:HG	2.08	0.54
4:D:378:ARG:HD2	5:e:141:VAL:H	1.73	0.54
4:D:505:LYS:HZ3	4:D:507:LYS:HB3	1.72	0.54
12:L:39:ASP:O	12:L:43:LYS:HG2	2.08	0.54
15:O:99:GLN:NE2	15:O:100:CYS:O	2.39	0.54
17:Q:153:SER:HA	17:Q:195:ASN:HD22	1.71	0.54
19:T:186:LEU:HA	19:T:189:ARG:HG2	1.90	0.54
17:U:19:LYS:O	17:U:23:VAL:HG23	2.08	0.54
21:X:180:ARG:CD	22:Z:171:ARG:HD3	2.36	0.54
4:d:79:ASN:HB2	4:d:104:GLN:HB3	1.89	0.54
18:s:263:PRO:HD3	17:q:396:HIS:CD2	2.43	0.54
18:s:332:ILE:HD11	18:s:353:VAL:HG11	1.90	0.54
18:w:332:ILE:HD11	18:w:353:VAL:HG11	1.90	0.54
17:y:7:ILE:HB	17:y:135:ILE:CD1	2.37	0.54
1:A:169:TYR:HB2	1:A:171:ARG:HE	1.72	0.54
2:B:527:PHE:HB3	2:B:530:LEU:HD13	1.90	0.54
2:B:589:LEU:HD21	2:B:640:LYS:HB2	1.89	0.54
2:B:936:ASP:HA	2:B:939:ASN:ND2	2.23	0.54
2:B:1225:ASP:HB3	2:B:1281:TYR:CZ	2.43	0.54
3:C:134:LEU:O	3:C:138:VAL:HG12	2.08	0.54
3:C:2887:LEU:HB2	3:C:2920:VAL:HG12	1.90	0.54
3:C:4433:PRO:HG2	3:C:4437:SER:H	1.72	0.54
3:C:4560:ALA:HB3	3:C:4563:LYS:HD2	1.90	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N:37:ILE:HG23	14:N:70:LYS:HZ3	1.73	0.54
17:Q:19:LYS:O	17:Q:23:VAL:HG23	2.08	0.54
17:Y:19:LYS:O	17:Y:23:VAL:HG23	2.08	0.54
18:r:187:SER:O	18:r:191:THR:HG23	2.08	0.54
18:r:200:VAL:HG11	18:r:268:MET:HE2	1.90	0.54
18:r:332:ILE:HD11	18:r:353:VAL:HG11	1.90	0.54
18:w:200:VAL:HG11	18:w:268:MET:HE2	1.89	0.54
1:A:99:GLY:HA3	1:A:149:HIS:CE1	2.42	0.54
1:A:194:GLY:N	1:A:239:TRP:HD1	2.06	0.54
2:B:84:PHE:HZ	3:C:150:LYS:HD3	1.72	0.54
2:B:904:LEU:HG	2:B:913:PHE:CE1	2.43	0.54
2:B:962:PHE:O	2:B:967:GLN:N	2.40	0.54
2:B:1330:TRP:HB3	2:B:1411:TYR:N	2.22	0.54
2:B:2081:SER:HB2	2:B:2085:GLN:HE22	1.73	0.54
2:B:4029:ILE:HD12	2:B:4039:VAL:HG11	1.89	0.54
2:B:4503:TRP:HE1	2:B:4522:LEU:HD22	1.71	0.54
3:C:867:MET:HB2	5:E:156:GLU:OE2	2.07	0.54
3:C:1124:LYS:HB3	3:C:1125:PRO:HD3	1.90	0.54
3:C:1855:TYR:OH	3:C:1884:ASP:OD2	2.21	0.54
3:C:2419:PRO:HG2	3:C:2423:LYS:NZ	2.23	0.54
15:O:9:ILE:HG23	15:O:12:GLU:HB3	1.90	0.54
18:s:187:SER:O	18:s:191:THR:HG23	2.08	0.54
18:s:200:VAL:HG11	18:s:268:MET:HE2	1.90	0.54
17:q:239:CYS:HA	17:q:354:CYS:HB2	1.90	0.54
18:w:187:SER:O	18:w:191:THR:HG23	2.08	0.54
2:B:1229:PHE:HE2	2:B:1277:ARG:HG3	1.73	0.53
2:B:1510:ARG:NH1	2:B:1575:ILE:O	2.40	0.53
2:B:1545:ASP:HB3	2:B:1591:CYS:HB2	1.90	0.53
2:B:2014:LEU:HD12	2:B:2015:PRO:HD2	1.89	0.53
2:B:3832:LEU:HG	2:B:3833:MET:HG2	1.90	0.53
3:C:596:LEU:HD21	3:C:598:ARG:HD2	1.90	0.53
3:C:1370:LEU:O	3:C:1375:ILE:HG13	2.07	0.53
3:C:1504:VAL:HG23	3:C:1565:CYS:HB2	1.90	0.53
3:C:2019:GLN:HE21	3:C:2022:LEU:HD23	1.73	0.53
11:K:95:PHE:CZ	11:K:106:LEU:HD11	2.43	0.53
12:L:52:ASP:OD1	12:L:56:ASN:ND2	2.41	0.53
15:O:23:GLN:N	5:e:30:ILE:HD11	2.23	0.53
16:P:32:TRP:CH2	16:P:77:LEU:HG	2.43	0.53
18:R:187:SER:O	18:R:191:THR:HG23	2.08	0.53
18:S:187:SER:O	18:S:191:THR:HG23	2.08	0.53
19:T:131:PHE:CD1	19:T:172:PHE:HE2	2.26	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:187:SER:O	18:W:191:THR:HG23	2.08	0.53
17:Y:239:CYS:HA	17:Y:354:CYS:HB2	1.90	0.53
18:s:257:THR:HA	17:q:397:TRP:CE2	2.43	0.53
17:u:239:CYS:HA	17:u:354:CYS:HB2	1.90	0.53
18:r:12:GLY:HA2	26:r:501:GTP:C5	2.42	0.53
18:w:12:GLY:HA2	26:w:501:GTP:C5	2.42	0.53
17:y:239:CYS:HA	17:y:354:CYS:HB2	1.90	0.53
2:B:203:TRP:CZ3	2:B:253:VAL:HG13	2.44	0.53
2:B:656:LEU:O	2:B:756:ARG:NH2	2.42	0.53
2:B:836:ILE:HD13	2:B:839:LEU:HD21	1.90	0.53
2:B:1189:GLN:HE21	2:B:1190:ILE:HG13	1.73	0.53
2:B:1330:TRP:CB	2:B:1410:PHE:CG	2.91	0.53
2:B:1451:TRP:CE2	2:B:1570:VAL:HA	2.43	0.53
2:B:2692:LEU:HD11	2:B:2707:ALA:HB1	1.91	0.53
3:C:9:ARG:NH2	3:C:117:ASP:OD2	2.39	0.53
3:C:478:LEU:HB3	3:C:484:LEU:HD22	1.90	0.53
3:C:896:GLN:O	3:C:900:ASN:ND2	2.38	0.53
3:C:936:GLN:HB3	3:C:1080:ASN:ND2	2.23	0.53
3:C:2949:ASN:O	3:C:2953:LYS:HE3	2.08	0.53
3:C:3790:GLU:O	3:C:3798:ARG:NE	2.32	0.53
4:D:299:VAL:HG21	4:D:605:GLY:HA3	1.90	0.53
11:K:28:TRP:CE2	14:N:33:LYS:HE3	2.43	0.53
15:O:22:LYS:CG	5:e:30:ILE:HG12	2.38	0.53
17:Q:7:ILE:HB	17:Q:135:ILE:CD1	2.37	0.53
17:Q:239:CYS:HA	17:Q:354:CYS:HB2	1.90	0.53
18:R:332:ILE:HD11	18:R:353:VAL:HG11	1.90	0.53
18:W:332:ILE:HD11	18:W:353:VAL:HG11	1.90	0.53
17:Y:372:THR:HG21	17:Y:426:GLN:HB2	1.90	0.53
22:Z:107:LYS:HE3	22:Z:111:LYS:HE2	1.90	0.53
4:d:86:ILE:O	4:d:99:ASP:N	2.41	0.53
18:s:12:GLY:HA2	26:s:501:GTP:C5	2.42	0.53
1:A:18:PRO:HB2	1:A:338:PHE:CE2	2.43	0.53
1:A:256:ILE:O	1:A:268:ILE:HA	2.08	0.53
2:B:470:PHE:CZ	2:B:488:ASP:HB3	2.44	0.53
2:B:1372:MET:HG2	2:B:1416:LEU:HD11	1.89	0.53
2:B:1627:ALA:HB2	2:B:1656:SER:HA	1.90	0.53
2:B:4454:ILE:HG22	2:B:4528:LYS:HE2	1.90	0.53
3:C:715:ILE:HD11	20:V:222:UNK:HA	1.90	0.53
3:C:1235:PRO:HB3	3:C:1249:LEU:HD11	1.90	0.53
3:C:1828:THR:HG21	3:C:4197:MET:HE3	1.89	0.53
3:C:2245:ASN:O	3:C:2249:ASP:HB2	2.09	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:24:VAL:HA	8:H:49:PHE:HZ	1.73	0.53
13:M:71:LYS:O	13:M:85:TRP:HA	2.07	0.53
17:Q:55:THR:HG23	17:q:283:ALA:HA	1.91	0.53
17:Q:372:THR:HG21	17:Q:426:GLN:HB2	1.90	0.53
18:S:213:CYS:HA	18:S:217:LEU:HD12	1.91	0.53
18:S:332:ILE:HD11	18:S:353:VAL:HG11	1.90	0.53
17:U:7:ILE:HB	17:U:135:ILE:CD1	2.37	0.53
17:U:239:CYS:HA	17:U:354:CYS:HB2	1.90	0.53
17:U:372:THR:HG21	17:U:426:GLN:HB2	1.90	0.53
17:Y:7:ILE:HB	17:Y:135:ILE:CD1	2.37	0.53
17:Y:385:PHE:HZ	17:Y:408:PHE:HB3	1.73	0.53
18:s:213:CYS:HA	18:s:217:LEU:HD12	1.91	0.53
18:r:213:CYS:HA	18:r:217:LEU:HD12	1.91	0.53
18:w:213:CYS:HA	18:w:217:LEU:HD12	1.91	0.53
1:A:5:LEU:HD23	1:A:304:ILE:O	2.09	0.53
1:A:272:SER:HA	1:A:287:PHE:HD1	1.72	0.53
2:B:275:GLN:OE1	2:B:275:GLN:N	2.40	0.53
2:B:1448:GLU:HA	2:B:1504:TRP:HH2	1.73	0.53
2:B:3051:TRP:CD1	2:B:3056:LEU:HG	2.43	0.53
2:B:3914:LEU:O	2:B:3918:ARG:HG2	2.08	0.53
3:C:2988:VAL:HA	3:C:2991:VAL:HG22	1.89	0.53
3:C:3529:LEU:HD13	3:C:3625:MET:HG3	1.91	0.53
4:D:633:LYS:O	4:D:637:GLU:HG3	2.08	0.53
5:E:476:CYS:O	5:E:488:LEU:HD23	2.09	0.53
18:R:213:CYS:HA	18:R:217:LEU:HD12	1.91	0.53
17:U:385:PHE:HZ	17:U:408:PHE:HB3	1.73	0.53
18:W:213:CYS:HA	18:W:217:LEU:HD12	1.91	0.53
22:Z:148:GLN:HA	22:Z:151:ASN:ND2	2.24	0.53
18:w:191:THR:O	18:w:195:LEU:HD23	2.08	0.53
2:B:137:LEU:HB3	2:B:142:TRP:CD1	2.38	0.53
2:B:197:GLU:O	2:B:201:ILE:HG12	2.09	0.53
2:B:653:GLN:HG2	2:B:671:VAL:HA	1.90	0.53
2:B:671:VAL:HG11	2:B:673:PHE:CZ	2.43	0.53
2:B:1065:SER:HA	2:B:1084:LYS:HE3	1.90	0.53
2:B:2059:TYR:O	2:B:2063:ARG:HD3	2.08	0.53
2:B:2377:TYR:CE1	2:B:2470:LYS:HE3	2.44	0.53
2:B:2533:PRO:HB2	2:B:2671:PHE:CE1	2.43	0.53
2:B:3121:LEU:HD13	2:B:3455:SER:HB2	1.91	0.53
2:B:3756:MET:HE1	2:B:3831:ARG:HG3	1.89	0.53
2:B:3785:ALA:O	2:B:3789:THR:OG1	2.27	0.53
2:B:4169:MET:HA	2:B:4172:TYR:CD2	2.43	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4195:TYR:HB3	2:B:4199:ILE:HG12	1.90	0.53
2:B:4409:ARG:O	2:B:4414:TRP:HB2	2.09	0.53
3:C:624:PHE:HB3	3:C:634:ILE:CG2	2.37	0.53
4:D:546:VAL:HG22	4:D:547:ASP:H	1.74	0.53
5:E:418:SER:HB2	5:E:426:PHE:HE2	1.71	0.53
7:G:93:GLU:O	7:G:97:LYS:HG2	2.08	0.53
11:K:88:ALA:HB3	5:e:59:HIS:CE1	2.43	0.53
17:Q:66:MET:HG3	17:Q:147:MET:CE	2.38	0.53
17:Q:385:PHE:HZ	17:Q:408:PHE:HB3	1.73	0.53
17:Y:66:MET:HG3	17:Y:147:MET:CE	2.38	0.53
17:Y:309:ARG:HD3	17:Y:342:VAL:HG12	1.89	0.53
4:d:116:ILE:HG23	4:d:119:GLU:CD	2.34	0.53
18:s:191:THR:O	18:s:195:LEU:HD23	2.08	0.53
18:r:35:GLN:HG2	18:r:60:LYS:HZ2	1.74	0.53
1:A:60:LEU:HD13	1:A:69:TRP:CE2	2.44	0.53
1:A:219:GLY:O	1:A:226:TYR:N	2.41	0.53
1:A:221:SER:HB2	1:A:226:TYR:CE1	2.40	0.53
2:B:21:ALA:C	3:C:115:ASP:HB3	2.34	0.53
2:B:596:ARG:HB3	2:B:633:ILE:HG21	1.91	0.53
2:B:3722:THR:HA	2:B:3725:GLU:HB2	1.91	0.53
2:B:3789:THR:HG22	2:B:3791:VAL:HG22	1.91	0.53
2:B:4282:LEU:O	2:B:4286:LEU:HG	2.09	0.53
3:C:1730:LEU:O	3:C:1734:LYS:HG2	2.08	0.53
3:C:2727:LEU:HD21	3:C:2776:LYS:CD	2.39	0.53
3:C:2841:LEU:HD12	3:C:2846:LEU:HD23	1.90	0.53
4:D:527:ILE:O	4:D:535:GLN:HG2	2.07	0.53
6:F:34:LYS:HG2	6:F:35:ARG:H	1.73	0.53
6:F:44:LYS:HE3	6:F:48:ILE:HD11	1.91	0.53
11:K:42:ARG:NH2	11:K:67:TYR:OH	2.42	0.53
19:T:152:ILE:O	19:T:156:ILE:HG12	2.09	0.53
17:U:66:MET:HG3	17:U:147:MET:CE	2.38	0.53
18:W:101:ASN:HD21	17:Y:252:LYS:HE3	1.73	0.53
17:y:201:VAL:HG21	17:y:374:ILE:HG21	1.90	0.53
1:A:143:PRO:HD3	1:A:187:TRP:CD1	2.44	0.53
2:B:164:LEU:O	2:B:168:ILE:HG12	2.08	0.53
2:B:545:ILE:O	2:B:549:GLU:HG2	2.09	0.53
2:B:1224:ARG:O	2:B:1228:ILE:HG12	2.09	0.53
2:B:2897:GLN:O	2:B:2901:ARG:HG2	2.08	0.53
2:B:3736:THR:O	2:B:3740:ILE:HG12	2.08	0.53
2:B:3811:TRP:HZ2	2:B:4093:ILE:HD12	1.74	0.53
3:C:123:ILE:HD11	3:C:134:LEU:HD12	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:793:GLN:HB3	5:E:453:SER:HA	1.91	0.53
3:C:857:ARG:HG3	5:E:206:ASN:H	1.73	0.53
3:C:1769:LEU:HD23	3:C:2013:ALA:O	2.09	0.53
3:C:1932:GLU:HB3	3:C:4021:GLU:CB	2.38	0.53
3:C:2323:LEU:HD11	3:C:2387:ILE:HD11	1.91	0.53
14:N:81:ILE:HG23	14:N:126:VAL:HG13	1.91	0.53
17:U:309:ARG:HD3	17:U:342:VAL:HG12	1.90	0.53
21:X:101:ARG:HA	21:X:104:PHE:HD2	1.73	0.53
17:u:66:MET:HG3	17:u:147:MET:CE	2.38	0.53
17:q:372:THR:HG21	17:q:426:GLN:HB2	1.90	0.53
17:y:309:ARG:HD3	17:y:342:VAL:HG12	1.89	0.53
2:B:84:PHE:CZ	3:C:150:LYS:HD3	2.44	0.53
2:B:1123:GLY:O	2:B:1138:LYS:NZ	2.42	0.53
2:B:1196:ASN:O	2:B:1200:ILE:HG12	2.08	0.53
2:B:1256:ASN:OD1	2:B:1257:ILE:N	2.41	0.53
2:B:1276:GLY:O	2:B:1280:GLU:HG2	2.09	0.53
2:B:1418:LEU:HD11	2:B:1423:TYR:CD2	2.44	0.53
2:B:2030:PRO:O	2:B:2031:ASP:CB	2.57	0.53
2:B:2296:THR:HG22	2:B:2299:MET:HE1	1.91	0.53
2:B:2813:PRO:HG2	2:B:2814:ILE:HG12	1.91	0.53
2:B:3747:TYR:CE2	2:B:3751:ALA:HB2	2.44	0.53
2:B:3907:PRO:HG3	2:B:3934:ARG:HE	1.74	0.53
2:B:4319:GLU:HA	2:B:4322:GLU:HG2	1.91	0.53
3:C:325:GLU:HB3	3:C:338:THR:OG1	2.08	0.53
3:C:1366:LEU:HD12	3:C:1413:ARG:CZ	2.39	0.53
3:C:1878:LYS:HD2	3:C:1975:THR:HB	1.91	0.53
3:C:2875:SER:N	23:C:4703:ADP:H3'	2.24	0.53
3:C:2877:THR:HA	23:C:4703:ADP:N7	2.04	0.53
3:C:4340:VAL:HG11	3:C:4372:VAL:HG11	1.90	0.53
9:I:64:LYS:HE2	9:I:75:TRP:O	2.09	0.53
11:K:24:ALA:HB2	11:K:100:ILE:HD12	1.91	0.53
12:L:28:GLN:O	12:L:32:LYS:HG2	2.09	0.53
14:N:34:ILE:HD12	14:N:71:ILE:HG13	1.90	0.53
17:Q:309:ARG:HD3	17:Q:342:VAL:HG12	1.90	0.53
21:X:197:LYS:HE2	22:Z:189:ARG:HD2	1.90	0.53
22:Z:155:ALA:HA	22:Z:158:LYS:HZ2	1.71	0.53
17:u:201:VAL:HG21	17:u:374:ILE:HG21	1.91	0.53
17:u:309:ARG:HD3	17:u:342:VAL:HG12	1.89	0.53
18:r:191:THR:O	18:r:195:LEU:HD23	2.08	0.53
17:q:201:VAL:HG21	17:q:374:ILE:HG21	1.91	0.53
17:y:66:MET:HG3	17:y:147:MET:CE	2.38	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:266:TYR:O	1:A:293:VAL:HA	2.09	0.53
1:A:283:THR:HA	2:B:955:PHE:CZ	2.44	0.53
1:A:316:CYS:HB3	1:A:350:TRP:CD2	2.44	0.53
1:A:322:GLU:OE2	1:A:341:TRP:N	2.42	0.53
2:B:16:ASN:HB2	2:B:17:ARG:NH1	2.24	0.53
2:B:437:ASN:HA	2:B:441:LYS:HZ3	1.74	0.53
2:B:904:LEU:HB3	2:B:1080:LEU:HA	1.90	0.53
2:B:2142:GLU:HG2	2:B:2143:LEU:H	1.73	0.53
2:B:3593:LEU:HA	2:B:3607:LEU:HD21	1.90	0.53
2:B:4307:ASN:HB3	2:B:4374:LEU:HD21	1.89	0.53
3:C:4448:GLN:HE22	3:C:4466:GLY:HA3	1.74	0.53
8:H:16:MET:SD	8:H:76:TYR:N	2.82	0.53
17:Q:255:VAL:HG22	18:R:407:TRP:CG	2.44	0.53
17:q:66:MET:HG3	17:q:147:MET:CE	2.38	0.53
17:y:196:ALA:O	17:y:264:HIS:NE2	2.42	0.53
2:B:1175:ASN:O	2:B:1179:THR:HG23	2.09	0.53
2:B:1245:PRO:CA	2:B:1360:LYS:HB2	2.39	0.53
2:B:2228:THR:O	2:B:2231:LYS:N	2.42	0.53
2:B:2749:GLU:HA	2:B:2752:CYS:SG	2.49	0.53
2:B:3772:GLN:HB2	2:B:4090:ASP:HA	1.91	0.53
2:B:3811:TRP:CZ2	2:B:4093:ILE:HD12	2.44	0.53
2:B:4537:LYS:HE3	2:B:4542:LEU:HD11	1.91	0.53
3:C:200:LEU:HB3	3:C:275:HIS:NE2	2.24	0.53
3:C:544:TYR:CD1	4:D:540:ASP:HB3	2.44	0.53
3:C:1140:GLU:HA	3:C:1143:ARG:HD2	1.90	0.53
3:C:2203:ILE:HG13	3:C:2204:SER:N	2.24	0.53
3:C:3512:ASP:OD1	3:C:3516:GLN:NE2	2.42	0.53
4:D:500:LEU:H	4:D:526:ARG:NH1	2.07	0.53
5:E:359:TYR:HB3	5:E:362:ASP:HB2	1.91	0.53
5:E:498:GLN:HG3	5:E:502:LYS:HE2	1.89	0.53
17:u:196:ALA:O	17:u:264:HIS:NE2	2.42	0.53
17:u:372:THR:HG21	17:u:426:GLN:HB2	1.90	0.53
17:q:309:ARG:HD3	17:q:342:VAL:HG12	1.89	0.53
17:y:372:THR:HG21	17:y:426:GLN:HB2	1.90	0.53
2:B:1427:VAL:O	2:B:1431:VAL:HG23	2.09	0.52
2:B:1856:ILE:HG13	2:B:1857:VAL:H	1.74	0.52
2:B:2461:PHE:CG	2:B:2462:ASN:N	2.74	0.52
2:B:2463:THR:O	2:B:2466:LYS:HG2	2.09	0.52
2:B:2901:ARG:NH2	2:B:2947:MET:SD	2.82	0.52
3:C:548:LEU:HD12	3:C:551:LYS:HG3	1.91	0.52
3:C:903:GLN:HE21	3:C:994:GLU:CD	2.18	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1076:LEU:HD23	3:C:1076:LEU:H	1.74	0.52
3:C:1091:GLU:O	3:C:1094:LEU:HG	2.08	0.52
3:C:1509:ASP:OD2	3:C:1513:LYS:NZ	2.37	0.52
3:C:1864:MET:SD	3:C:4164:ALA:HB1	2.49	0.52
3:C:2359:ASN:HA	3:C:2362:ASN:HD21	1.73	0.52
3:C:2393:TRP:CE3	3:C:2472:LEU:HD21	2.44	0.52
3:C:2403:ASP:HA	3:C:2406:ARG:NE	2.24	0.52
3:C:2408:HIS:CE1	3:C:2427:THR:HA	2.44	0.52
3:C:3732:ASP:HA	3:C:3735:ILE:HD12	1.90	0.52
4:D:508:TRP:HB3	4:D:516:PHE:CD2	2.43	0.52
5:E:410:SER:HB2	5:E:429:ARG:CD	2.39	0.52
5:E:465:THR:HG23	5:E:475:LEU:HD23	1.91	0.52
6:F:61:LYS:HB2	8:H:36:ASN:ND2	2.24	0.52
11:K:44:THR:O	11:K:48:LEU:HG	2.09	0.52
12:L:67:PHE:HB3	12:L:74:TRP:HZ2	1.74	0.52
13:M:74:PHE:HD2	13:M:83:LEU:HB2	1.74	0.52
15:O:14:GLN:HB2	15:O:97:LEU:HD11	1.91	0.52
17:Q:397:TRP:NE1	18:S:257:THR:HA	2.23	0.52
22:Z:102:VAL:O	22:Z:106:LYS:HG2	2.10	0.52
17:q:196:ALA:O	17:q:264:HIS:NE2	2.42	0.52
2:B:418:SER:O	2:B:422:ARG:HG3	2.10	0.52
2:B:1317:LEU:CD1	16:P:77:LEU:H	2.23	0.52
2:B:2535:LEU:HB2	2:B:2673:VAL:HG12	1.91	0.52
2:B:2707:ALA:O	2:B:2711:VAL:HG23	2.09	0.52
3:C:349:ILE:HG23	3:C:357:ASN:HD21	1.73	0.52
3:C:2079:ARG:O	3:C:2083:LEU:HG	2.09	0.52
3:C:2169:ILE:O	3:C:2173:VAL:HG13	2.09	0.52
3:C:2368:LEU:O	3:C:2372:VAL:HG23	2.10	0.52
3:C:3735:ILE:O	3:C:3739:GLU:HG2	2.09	0.52
3:C:4534:CYS:HB2	3:C:4539:ASN:HB3	1.90	0.52
5:E:183:ILE:HG23	5:E:186:PHE:H	1.74	0.52
5:E:442:ARG:NH1	5:E:445:GLU:HG3	2.24	0.52
8:H:71:PHE:O	8:H:73:ARG:NH2	2.41	0.52
9:I:43:GLN:NE2	9:I:47:GLU:OE2	2.33	0.52
16:P:74:VAL:HG22	16:P:81:PHE:CZ	2.44	0.52
18:R:193:SER:HB2	18:R:197:HIS:HD2	1.75	0.52
19:T:107:LYS:HB2	19:T:177:ARG:HG2	1.90	0.52
18:W:193:SER:HB2	18:W:197:HIS:HD2	1.75	0.52
21:X:198:GLU:CG	22:Z:188:LYS:NZ	2.55	0.52
17:Y:201:VAL:HG21	17:Y:374:ILE:HG21	1.90	0.52
17:q:385:PHE:HZ	17:q:408:PHE:HB3	1.73	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:y:19:LYS:O	17:y:23:VAL:HG23	2.08	0.52
2:B:1124:ILE:HG22	2:B:1207:VAL:HG12	1.90	0.52
2:B:1243:LYS:HZ3	2:B:1264:ILE:HG23	1.74	0.52
2:B:2017:ASN:OD1	2:B:2018:LEU:N	2.42	0.52
3:C:135:MET:HG2	3:C:139:TYR:HD2	1.73	0.52
3:C:750:ASN:HD21	3:C:886:ILE:HG22	1.74	0.52
3:C:857:ARG:CG	5:E:205:PRO:HB2	2.38	0.52
3:C:969:LEU:HB2	3:C:974:GLN:HE22	1.75	0.52
3:C:1139:LEU:O	3:C:1143:ARG:HG3	2.09	0.52
3:C:1321:ASP:OD1	3:C:1371:LYS:HB3	2.08	0.52
3:C:2709:CYS:SG	3:C:2808:TYR:HB3	2.49	0.52
3:C:3910:TRP:CD1	3:C:3920:PRO:HG2	2.44	0.52
3:C:4105:LEU:O	3:C:4108:THR:OG1	2.23	0.52
5:E:517:LYS:O	5:E:521:THR:HG23	2.08	0.52
18:R:200:VAL:HG11	18:R:268:MET:HE2	1.90	0.52
18:S:200:VAL:HG11	18:S:268:MET:HE2	1.90	0.52
17:U:201:VAL:HG21	17:U:374:ILE:HG21	1.90	0.52
18:W:200:VAL:HG11	18:W:268:MET:HE2	1.90	0.52
18:W:407:TRP:CG	17:Y:255:VAL:HG22	2.45	0.52
21:X:114:LYS:HD2	22:Z:101:VAL:HG11	1.92	0.52
21:X:153:ASP:O	21:X:157:ILE:HG12	2.09	0.52
18:s:286:LEU:O	18:s:373:ARG:NH2	2.42	0.52
17:u:19:LYS:O	17:u:23:VAL:HG23	2.08	0.52
17:u:385:PHE:HZ	17:u:408:PHE:HB3	1.73	0.52
18:r:189:LEU:HD21	18:r:418:PHE:HD1	1.74	0.52
18:r:193:SER:HB2	18:r:197:HIS:HD2	1.75	0.52
18:w:189:LEU:HD21	18:w:418:PHE:HD1	1.74	0.52
18:w:286:LEU:O	18:w:373:ARG:NH2	2.42	0.52
17:y:68:LEU:HB3	17:y:96:GLY:HA2	1.92	0.52
17:y:385:PHE:HZ	17:y:408:PHE:HB3	1.73	0.52
2:B:88:GLY:O	2:B:89:ILE:HD13	2.10	0.52
2:B:436:PHE:O	2:B:533:ARG:NH1	2.42	0.52
2:B:537:ALA:HA	2:B:540:LEU:HB2	1.91	0.52
2:B:1107:ARG:NH1	2:B:1111:LYS:HB3	2.25	0.52
2:B:1368:LYS:O	2:B:1372:MET:HG3	2.10	0.52
2:B:1441:GLU:HB2	2:B:1442:LYS:HD3	1.90	0.52
2:B:2186:PRO:O	2:B:2669:ARG:NH1	2.43	0.52
2:B:2437:ILE:HG23	2:B:2465:TRP:HZ2	1.75	0.52
2:B:2709:LYS:CD	2:B:2803:CYS:HB3	2.39	0.52
2:B:2818:LEU:N	2:B:2835:THR:O	2.43	0.52
2:B:2904:THR:HG21	2:B:2945:VAL:HG21	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:98:ILE:HG13	3:C:116:ASN:O	2.09	0.52
3:C:624:PHE:HE2	3:C:641:TYR:CD2	2.26	0.52
3:C:970:TYR:HE1	3:C:977:LYS:HD2	1.73	0.52
3:C:2187:ASN:N	3:C:2589:TYR:HE2	2.04	0.52
3:C:3659:LEU:HD11	3:C:3744:ARG:HB3	1.91	0.52
3:C:4508:LYS:NZ	3:C:4555:ILE:HB	2.18	0.52
5:E:418:SER:HA	5:E:462:ILE:HD12	1.91	0.52
7:G:79:VAL:HG11	7:G:100:ALA:HB1	1.91	0.52
18:R:101:ASN:HA	18:R:144:GLY:H	1.75	0.52
18:S:193:SER:HB2	18:S:197:HIS:HD2	1.75	0.52
18:W:101:ASN:HA	18:W:144:GLY:H	1.75	0.52
17:u:68:LEU:HB3	17:u:96:GLY:HA2	1.92	0.52
17:y:305:PRO:HB2	17:y:310:TYR:CE1	2.37	0.52
2:B:133:MET:HG3	2:B:148:LYS:HG3	1.90	0.52
2:B:260:LEU:HD13	2:B:268:THR:HG21	1.91	0.52
2:B:503:LEU:O	2:B:506:VAL:HG12	2.10	0.52
2:B:1130:ASP:OD1	2:B:1135:HIS:NE2	2.41	0.52
2:B:1145:LYS:HE2	2:B:1150:VAL:HG21	1.91	0.52
2:B:1222:ILE:HG23	2:B:1284:LEU:HD13	1.92	0.52
2:B:1451:TRP:CE3	2:B:1570:VAL:HG23	2.45	0.52
2:B:1548:VAL:O	2:B:1552:VAL:HG23	2.10	0.52
2:B:1961:GLU:HG2	2:B:4050:TRP:HD1	1.71	0.52
2:B:2247:LYS:O	2:B:2253:LYS:N	2.43	0.52
2:B:2789:VAL:HG12	2:B:2793:ARG:HE	1.74	0.52
2:B:4000:ILE:HG13	2:B:4003:LYS:HE3	1.90	0.52
2:B:4119:ILE:HD13	2:B:4245:TYR:CD1	2.45	0.52
2:B:4267:HIS:HE1	2:B:4270:ALA:CB	2.22	0.52
3:C:48:GLU:HG3	3:C:100:ASN:O	2.08	0.52
3:C:81:THR:HA	3:C:126:ASN:HA	1.91	0.52
3:C:902:THR:O	3:C:905:SER:OG	2.27	0.52
3:C:2399:TYR:HB3	3:C:2403:ASP:HB3	1.92	0.52
3:C:3118:LYS:HA	3:C:3121:LEU:HD13	1.90	0.52
3:C:3425:GLU:HA	3:C:3691:LEU:HD21	1.91	0.52
3:C:3581:GLU:HB2	3:C:3628:ARG:NH2	2.24	0.52
3:C:3788:LEU:HB2	3:C:3805:PHE:HE1	1.75	0.52
5:E:499:PRO:HA	5:E:502:LYS:HG2	1.92	0.52
11:K:35:ASP:OD2	14:N:39:LYS:HE2	2.10	0.52
13:M:67:HIS:HB3	13:M:85:TRP:HB2	1.90	0.52
15:O:34:VAL:HG11	4:d:119:GLU:CD	2.34	0.52
15:O:94:ASP:OD1	15:O:116:ALA:N	2.43	0.52
17:Q:94:GLN:OE1	18:S:1:MET:HE1	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:S:101:ASN:HA	18:S:144:GLY:H	1.75	0.52
18:s:189:LEU:HD21	18:s:418:PHE:HD1	1.74	0.52
18:s:193:SER:HB2	18:s:197:HIS:HD2	1.75	0.52
17:u:305:PRO:HB2	17:u:310:TYR:CE1	2.37	0.52
18:r:101:ASN:HD21	17:q:252:LYS:HE3	1.75	0.52
18:r:286:LEU:O	18:r:373:ARG:NH2	2.42	0.52
17:q:19:LYS:O	17:q:23:VAL:HG23	2.08	0.52
17:q:68:LEU:HB3	17:q:96:GLY:HA2	1.92	0.52
18:w:101:ASN:HD21	17:y:252:LYS:HE3	1.75	0.52
2:B:1240:PHE:CE2	2:B:1271:LEU:HD22	2.45	0.52
2:B:1328:LYS:HG2	2:B:1332:GLN:NE2	2.24	0.52
2:B:1489:SER:OG	2:B:3612:ASP:OD2	2.19	0.52
2:B:1792:THR:O	2:B:1796:HIS:ND1	2.42	0.52
2:B:1893:LEU:CD1	2:B:4164:ASP:HA	2.39	0.52
2:B:2494:TRP:CG	2:B:2515:ILE:HD11	2.45	0.52
2:B:2773:HIS:O	2:B:2776:LYS:HG2	2.09	0.52
2:B:3494:PRO:HA	2:B:3497:ILE:HG22	1.91	0.52
2:B:3961:GLN:NE2	2:B:3962:LYS:H	2.07	0.52
3:C:17:ILE:O	3:C:20:SER:OG	2.26	0.52
3:C:674:LEU:HB2	20:V:232:UNK:CB	2.38	0.52
3:C:945:ASN:HB3	3:C:946:PRO:HD3	1.91	0.52
3:C:1427:LEU:O	3:C:1431:THR:HG23	2.09	0.52
3:C:1711:LEU:HA	3:C:1714:PHE:CE1	2.44	0.52
3:C:3114:GLU:HA	3:C:3117:PHE:CD2	2.45	0.52
3:C:4173:LEU:HA	3:C:4176:LEU:HD12	1.91	0.52
3:C:4199:CYS:HA	3:C:4216:PHE:CE2	2.44	0.52
3:C:4448:GLN:NE2	3:C:4466:GLY:HA3	2.24	0.52
5:E:155:ASP:HB3	5:E:208:PRO:HD3	1.91	0.52
5:E:220:ASN:ND2	5:E:266:THR:O	2.43	0.52
5:E:438:ASP:H	5:E:447:ALA:HB2	1.75	0.52
17:Q:201:VAL:HG21	17:Q:374:ILE:HG21	1.91	0.52
17:Q:252:LYS:HE3	18:R:101:ASN:HD21	1.74	0.52
18:R:392:ASP:OD2	18:R:422:ARG:NH1	2.43	0.52
18:S:392:ASP:OD2	18:S:422:ARG:NH1	2.43	0.52
17:U:68:LEU:HB3	17:U:96:GLY:HA2	1.92	0.52
18:W:392:ASP:OD2	18:W:422:ARG:NH1	2.43	0.52
21:X:201:PHE:HE2	22:Z:192:MET:HA	1.73	0.52
17:Y:68:LEU:HB3	17:Y:96:GLY:HA2	1.92	0.52
17:u:206:ALA:O	17:u:210:ILE:HG23	2.09	0.52
17:q:61:PRO:HD2	17:q:84:LEU:O	2.10	0.52
17:q:92:PHE:HB3	17:q:94:GLN:HE22	1.75	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:q:206:ALA:O	17:q:210:ILE:HG23	2.09	0.52
17:q:405:GLU:HA	17:q:408:PHE:HD2	1.75	0.52
18:w:193:SER:HB2	18:w:197:HIS:HD2	1.75	0.52
17:y:61:PRO:HD2	17:y:84:LEU:O	2.10	0.52
17:y:206:ALA:O	17:y:210:ILE:HG23	2.09	0.52
2:B:105:ALA:HA	2:B:108:VAL:HG22	1.91	0.52
2:B:523:LEU:O	2:B:526:ASN:HB2	2.10	0.52
2:B:1117:ILE:HG22	2:B:1200:ILE:HG22	1.91	0.52
2:B:1307:ASN:O	2:B:1308:LEU:HB2	2.10	0.52
2:B:1308:LEU:HD21	2:B:1359:PHE:CE2	2.44	0.52
2:B:1931:MET:N	2:B:1931:MET:SD	2.82	0.52
2:B:2178:HIS:HE1	2:B:2297:PRO:HA	1.75	0.52
2:B:4348:VAL:O	2:B:4351:GLN:HG3	2.09	0.52
2:B:4455:MET:O	2:B:4459:SER:OG	2.24	0.52
3:C:853:VAL:HG23	3:C:854:GLU:H	1.74	0.52
3:C:1026:LEU:HD12	3:C:1027:CYS:N	2.25	0.52
3:C:1379:HIS:NE2	3:C:1426:GLN:HG3	2.22	0.52
3:C:1449:ILE:HD13	3:C:1452:LYS:NZ	2.21	0.52
3:C:3718:ASN:HA	3:C:3721:THR:HG22	1.91	0.52
4:D:569:TYR:HE1	4:D:576:LEU:O	1.92	0.52
5:E:162:ARG:NH2	5:E:183:ILE:HD11	2.25	0.52
5:E:422:SER:N	5:E:500:LYS:HD3	2.25	0.52
6:F:86:GLU:O	6:F:100:ILE:HA	2.10	0.52
14:N:29:PHE:HD1	14:N:76:VAL:HG11	1.74	0.52
18:S:279:GLU:OE1	18:S:280:LYS:HG3	2.10	0.52
17:U:405:GLU:HA	17:U:408:PHE:HD2	1.74	0.52
18:W:279:GLU:OE1	18:W:280:LYS:HG3	2.10	0.52
18:s:9:VAL:HA	18:s:68:LEU:O	2.10	0.52
18:s:431:ASP:HA	18:s:434:GLU:HG3	1.91	0.52
17:u:61:PRO:HD2	17:u:84:LEU:O	2.10	0.52
17:u:405:GLU:HA	17:u:408:PHE:HD2	1.75	0.52
18:r:392:ASP:OD2	18:r:422:ARG:NH1	2.43	0.52
18:w:9:VAL:HA	18:w:68:LEU:O	2.10	0.52
17:y:92:PHE:HB3	17:y:94:GLN:HE22	1.75	0.52
2:B:91:VAL:HA	2:B:109:VAL:O	2.10	0.52
2:B:462:GLU:HG2	2:B:499:LEU:HD21	1.92	0.52
2:B:625:LEU:O	2:B:628:SER:OG	2.23	0.52
2:B:1323:ASN:O	2:B:1327:THR:HG23	2.09	0.52
2:B:1328:LYS:HB2	2:B:1333:ILE:HG12	1.92	0.52
2:B:1454:GLN:HE22	2:B:1476:VAL:HG21	1.75	0.52
2:B:1815:PHE:HE2	2:B:4182:PRO:HB2	1.75	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2219:THR:OG1	2:B:2221:ASP:OD1	2.16	0.52
2:B:3985:PHE:N	2:B:4076:LEU:O	2.40	0.52
2:B:4455:MET:HE1	2:B:4471:ILE:HB	1.91	0.52
3:C:1055:PHE:CE2	3:C:1093:LYS:HE3	2.44	0.52
3:C:1417:GLU:O	3:C:1421:GLU:HG3	2.09	0.52
3:C:2873:LYS:CA	23:C:4703:ADP:O4'	2.52	0.52
5:E:200:TRP:HZ2	5:E:485:VAL:HG11	1.74	0.52
5:E:240:LEU:HG	5:E:268:PHE:CE2	2.45	0.52
6:F:73:ASP:OD1	6:F:74:ILE:N	2.43	0.52
16:P:65:LEU:O	16:P:69:VAL:HG23	2.10	0.52
17:Q:68:LEU:HB3	17:Q:96:GLY:HA2	1.92	0.52
17:Q:405:GLU:HA	17:Q:408:PHE:HD2	1.75	0.52
18:R:279:GLU:OE1	18:R:280:LYS:HG3	2.10	0.52
18:S:189:LEU:HD21	18:S:418:PHE:HD1	1.74	0.52
19:T:103:SER:O	19:T:107:LYS:HG3	2.10	0.52
18:W:318:MET:O	18:W:375:VAL:HA	2.10	0.52
22:Z:151:ASN:OD1	22:Z:152:GLU:N	2.43	0.52
18:s:279:GLU:OE1	18:s:280:LYS:HG3	2.10	0.52
18:s:392:ASP:OD2	18:s:422:ARG:NH1	2.43	0.52
17:u:92:PHE:HB3	17:u:94:GLN:HE22	1.75	0.52
18:r:9:VAL:HA	18:r:68:LEU:O	2.10	0.52
18:r:431:ASP:HA	18:r:434:GLU:HG3	1.91	0.52
17:q:305:PRO:HB2	17:q:310:TYR:CE1	2.37	0.52
18:w:279:GLU:OE1	18:w:280:LYS:HG3	2.10	0.52
18:w:392:ASP:OD2	18:w:422:ARG:NH1	2.43	0.52
18:w:431:ASP:HA	18:w:434:GLU:HG3	1.91	0.52
17:y:405:GLU:HA	17:y:408:PHE:HD2	1.74	0.52
1:A:345:TRP:CZ2	2:B:967:GLN:HG2	2.45	0.52
2:B:653:GLN:HE21	2:B:655:LYS:H	1.57	0.52
2:B:671:VAL:HG12	2:B:673:PHE:H	1.75	0.52
2:B:2096:MET:HB3	2:B:2097:PRO:HD3	1.92	0.52
2:B:2472:LYS:HD2	2:B:2473:PHE:H	1.75	0.52
2:B:2699:ILE:HD13	2:B:2756:PRO:O	2.10	0.52
2:B:3433:TRP:HZ2	2:B:3719:THR:HG21	1.75	0.52
2:B:3817:PHE:O	2:B:3821:LYS:HG2	2.10	0.52
3:C:696:ILE:O	3:C:700:LYS:HD3	2.10	0.52
3:C:1164:ASP:HA	3:C:1167:LEU:O	2.10	0.52
3:C:2158:PRO:HG3	3:C:2295:PRO:HG3	1.90	0.52
3:C:2827:PHE:O	3:C:2831:ARG:HD3	2.10	0.52
3:C:3114:GLU:HA	3:C:3117:PHE:HD2	1.74	0.52
3:C:3119:ILE:O	3:C:3699:LEU:HD12	2.10	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:3770:MET:HE1	3:C:4079:HIS:H	1.74	0.52
5:E:162:ARG:HD3	5:E:181:TYR:CB	2.38	0.52
9:I:99:TYR:HB2	9:I:103:LEU:H	1.75	0.52
17:Q:196:ALA:O	17:Q:264:HIS:NE2	2.42	0.52
17:Q:206:ALA:O	17:Q:210:ILE:HG23	2.09	0.52
18:R:189:LEU:HD21	18:R:418:PHE:HD1	1.74	0.52
18:R:308:ARG:NH2	18:R:340:THR:HA	2.22	0.52
18:R:318:MET:O	18:R:375:VAL:HA	2.10	0.52
19:T:186:LEU:H	19:T:189:ARG:HH11	1.58	0.52
17:U:196:ALA:O	17:U:264:HIS:NE2	2.42	0.52
17:U:206:ALA:O	17:U:210:ILE:HG23	2.09	0.52
18:W:189:LEU:HD21	18:W:418:PHE:HD1	1.74	0.52
17:Y:196:ALA:O	17:Y:264:HIS:NE2	2.42	0.52
17:Y:405:GLU:HA	17:Y:408:PHE:HD2	1.74	0.52
17:u:333:VAL:HG23	17:u:337:ASN:HD21	1.75	0.52
18:r:279:GLU:OE1	18:r:280:LYS:HG3	2.10	0.52
18:r:318:MET:O	18:r:375:VAL:HA	2.10	0.52
18:w:318:MET:O	18:w:375:VAL:HA	2.10	0.52
2:B:28:LYS:HD3	2:B:73:PHE:HD1	1.75	0.52
2:B:67:GLN:HA	2:B:71:CYS:O	2.09	0.52
2:B:296:LYS:HE2	5:E:558:ALA:CB	2.38	0.52
2:B:563:LEU:HB2	2:B:564:GLU:OE1	2.09	0.52
2:B:1135:HIS:O	2:B:1215:GLN:HG2	2.09	0.52
2:B:1444:LEU:HD22	2:B:1447:ILE:HD13	1.92	0.52
2:B:3789:THR:HG21	2:B:3800:LEU:HD23	1.91	0.52
2:B:4017:LEU:H	2:B:4043:ASN:HB3	1.75	0.52
3:C:488:PHE:HA	3:C:491:ILE:HD12	1.91	0.52
3:C:547:LYS:O	3:C:551:LYS:HG2	2.09	0.52
3:C:800:ASP:O	5:E:152:LEU:HD11	2.10	0.52
3:C:809:ASN:ND2	5:E:206:ASN:HD21	2.06	0.52
3:C:982:LYS:HG3	3:C:984:THR:HG22	1.91	0.52
3:C:1109:ASP:O	3:C:1113:GLU:HG2	2.10	0.52
3:C:1259:LYS:HD2	3:C:1283:LEU:HD13	1.91	0.52
3:C:4007:LYS:HE2	3:C:4013:PRO:HG3	1.92	0.52
4:D:468:GLU:OE2	4:D:470:HIS:HB2	2.10	0.52
5:E:357:THR:HB	5:E:394:TRP:CE3	2.45	0.52
9:I:29:ASP:OD2	9:I:92:ASN:N	2.42	0.52
11:K:47:ALA:HA	11:K:50:LYS:HE2	1.91	0.52
16:P:28:PHE:CZ	16:P:74:VAL:HG21	2.45	0.52
17:Q:333:VAL:HG23	17:Q:337:ASN:HD21	1.75	0.52
18:S:308:ARG:NH2	18:S:340:THR:HA	2.22	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:S:318:MET:O	18:S:375:VAL:HA	2.10	0.52
18:S:402:ARG:NH2	17:U:425:TYR:OH	2.44	0.52
17:U:55:THR:HG23	17:u:283:ALA:HA	1.92	0.52
17:U:333:VAL:HG23	17:U:337:ASN:HD21	1.75	0.52
17:Y:206:ALA:O	17:Y:210:ILE:HG23	2.09	0.52
4:d:116:ILE:HG12	5:e:43:ARG:HE	1.75	0.52
4:d:126:GLN:HE21	5:e:45:PRO:CD	2.18	0.52
18:s:35:GLN:HG2	18:s:60:LYS:HZ2	1.75	0.52
18:s:318:MET:O	18:s:375:VAL:HA	2.10	0.52
17:q:116:VAL:HG11	17:q:151:LEU:HD12	1.91	0.52
17:q:156:ARG:HE	17:q:164:MET:HB2	1.74	0.52
17:q:333:VAL:HG23	17:q:337:ASN:HD21	1.75	0.52
17:y:333:VAL:HG23	17:y:337:ASN:HD21	1.75	0.52
2:B:1110:GLN:HA	2:B:1164:MET:SD	2.49	0.51
2:B:1246:PHE:HE2	2:B:1257:ILE:HG12	1.72	0.51
2:B:1252:MET:HG2	2:B:1253:GLY:H	1.75	0.51
2:B:1457:GLU:N	2:B:1457:GLU:OE1	2.42	0.51
2:B:1499:ASP:OD1	2:B:1500:ARG:N	2.42	0.51
2:B:1522:GLN:O	2:B:1526:LYS:HG3	2.10	0.51
2:B:1882:ARG:HA	2:B:4192:GLU:HB3	1.92	0.51
2:B:3998:GLU:O	2:B:4002:LYS:HG2	2.11	0.51
3:C:44:PHE:HB2	3:C:53:ILE:HD11	1.92	0.51
3:C:53:ILE:HB	3:C:95:PHE:HB2	1.92	0.51
3:C:203:SER:O	3:C:207:GLN:HG2	2.10	0.51
3:C:470:PHE:CZ	3:C:524:LEU:HD13	2.44	0.51
3:C:1771:ASP:OD1	3:C:1771:ASP:N	2.43	0.51
3:C:1944:ILE:HD11	3:C:1957:PHE:HE1	1.73	0.51
3:C:2722:LYS:HE2	3:C:2776:LYS:HG3	1.92	0.51
3:C:2886:ASN:ND2	3:C:2919:GLN:HB3	2.25	0.51
5:E:399:LYS:HG3	5:E:400:THR:HG23	1.93	0.51
18:R:8:HIS:HA	18:R:138:PHE:HB2	1.91	0.51
18:R:286:LEU:O	18:R:373:ARG:NH2	2.42	0.51
17:Y:333:VAL:HG23	17:Y:337:ASN:HD21	1.75	0.51
18:s:101:ASN:HD21	17:u:252:LYS:HE3	1.75	0.51
18:s:177:VAL:HG23	17:u:330:MET:HE1	1.91	0.51
17:u:156:ARG:HE	17:u:164:MET:HB2	1.74	0.51
17:y:156:ARG:HE	17:y:164:MET:HB2	1.74	0.51
2:B:67:GLN:H	2:B:85:LYS:NZ	2.02	0.51
2:B:319:PRO:HA	2:B:322:HIS:HB2	1.91	0.51
2:B:449:GLY:HA2	2:B:452:LEU:CG	2.41	0.51
2:B:569:VAL:HB	5:E:430:ARG:HD3	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:885:GLN:HA	2:B:894:ASN:ND2	2.25	0.51
2:B:1489:SER:HB3	2:B:3613:PRO:O	2.10	0.51
2:B:3788:ARG:NH1	2:B:3807:THR:OG1	2.43	0.51
2:B:3906:GLN:HA	2:B:3937:ARG:HE	1.75	0.51
2:B:4047:MET:HE3	2:B:4050:TRP:CG	2.46	0.51
2:B:4324:LYS:HD3	2:B:4426:ASN:CG	2.35	0.51
3:C:582:THR:O	3:C:585:ARG:HG3	2.11	0.51
3:C:1674:VAL:HG21	3:C:1687:LEU:HA	1.92	0.51
3:C:2751:LYS:HB3	3:C:2755:MET:HE1	1.93	0.51
4:D:548:ALA:HB1	4:D:558:PHE:CE1	2.45	0.51
4:D:630:THR:O	4:D:634:LYS:HG3	2.10	0.51
7:G:65:ASN:O	7:G:69:THR:HG23	2.10	0.51
18:S:8:HIS:HA	18:S:138:PHE:HB2	1.91	0.51
17:U:397:TRP:HZ2	18:W:260:VAL:HB	1.75	0.51
18:W:308:ARG:NH2	18:W:340:THR:HA	2.22	0.51
18:s:382:THR:OG1	18:s:432:TYR:O	2.28	0.51
17:u:116:VAL:HG11	17:u:151:LEU:HD12	1.91	0.51
18:r:382:THR:OG1	18:r:432:TYR:O	2.28	0.51
18:r:407:TRP:NE1	17:q:255:VAL:HA	2.25	0.51
17:y:106:TYR:HE2	17:y:403:MET:HE3	1.74	0.51
1:A:10:LEU:HD22	1:A:349:LEU:HD22	1.91	0.51
2:B:110:VAL:H	3:C:122:GLU:HG2	1.75	0.51
2:B:709:ARG:O	2:B:713:VAL:HG23	2.10	0.51
2:B:1271:LEU:HA	2:B:1274:ILE:HB	1.91	0.51
2:B:1694:ARG:NH1	2:B:1695:GLU:OE1	2.42	0.51
2:B:1765:GLU:HA	2:B:1798:ARG:HH22	1.76	0.51
2:B:2581:GLU:HA	2:B:2592:TYR:OH	2.10	0.51
2:B:2681:SER:O	2:B:2685:LYS:HG2	2.09	0.51
2:B:2893:GLY:HA3	2:B:3109:LYS:HE3	1.92	0.51
3:C:1322:ASP:OD1	3:C:1372:LYS:HG2	2.09	0.51
3:C:1856:ILE:HG22	3:C:4201:VAL:CG2	2.40	0.51
3:C:1995:ARG:NH2	3:C:4161:ASP:OD1	2.34	0.51
3:C:2406:ARG:HA	3:C:2409:GLU:HG3	1.93	0.51
3:C:3438:ASP:OD1	3:C:3439:GLN:HG3	2.10	0.51
3:C:4107:LYS:O	3:C:4111:THR:HG23	2.10	0.51
4:D:410:LYS:HG2	4:D:411:ASN:H	1.75	0.51
5:E:178:ALA:HB2	5:E:223:TYR:OH	2.10	0.51
11:K:37:LEU:HB2	14:N:36:LYS:CD	2.41	0.51
17:Q:156:ARG:HE	17:Q:164:MET:HB2	1.74	0.51
18:S:286:LEU:O	18:S:373:ARG:NH2	2.42	0.51
18:S:431:ASP:HA	18:S:434:GLU:HG3	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:8:HIS:HA	18:W:138:PHE:HB2	1.91	0.51
18:W:286:LEU:O	18:W:373:ARG:NH2	2.42	0.51
21:X:124:LYS:O	21:X:128:VAL:HG22	2.10	0.51
21:X:142:MET:HE1	22:Z:135:GLN:NE2	2.25	0.51
17:u:106:TYR:HE2	17:u:403:MET:HE3	1.74	0.51
17:y:116:VAL:HG11	17:y:151:LEU:HD12	1.91	0.51
17:y:219:THR:O	17:y:219:THR:OG1	2.27	0.51
1:A:162:GLY:HA2	1:A:174:PHE:O	2.10	0.51
2:B:60:ASN:ND2	3:C:137:SER:O	2.42	0.51
2:B:135:ASN:HB3	3:C:82:THR:HG21	1.93	0.51
2:B:525:ASP:O	2:B:528:GLU:HG3	2.10	0.51
2:B:862:TYR:O	2:B:865:VAL:HG12	2.10	0.51
2:B:3121:LEU:HD23	2:B:3125:LYS:HD3	1.92	0.51
2:B:3440:LEU:O	2:B:3444:ILE:HD12	2.10	0.51
2:B:3509:ASN:ND2	2:B:3681:ASN:HD22	2.08	0.51
2:B:3675:ASP:O	2:B:3679:LYS:HD3	2.10	0.51
2:B:3693:ASP:HA	2:B:3696:GLN:HG2	1.92	0.51
2:B:3784:LYS:HE3	2:B:3976:ASP:HB3	1.93	0.51
3:C:12:TRP:O	3:C:16:THR:HG23	2.10	0.51
3:C:1540:GLN:HG2	3:C:1580:LYS:HD3	1.91	0.51
3:C:1758:LYS:HZ2	3:C:1792:LYS:CG	2.23	0.51
3:C:2119:LYS:HA	3:C:2122:GLU:CD	2.35	0.51
3:C:2187:ASN:HB3	3:C:2589:TYR:CE2	2.46	0.51
3:C:2448:TRP:CD1	3:C:2448:TRP:H	2.28	0.51
4:D:523:TRP:CD1	4:D:545:VAL:HG23	2.45	0.51
5:E:403:ILE:HD11	5:E:514:ARG:CZ	2.41	0.51
5:E:440:TYR:CE2	5:E:504:ILE:HG12	2.45	0.51
11:K:29:PRO:HD2	14:N:30:TYR:HD2	1.74	0.51
17:Q:92:PHE:HB3	17:Q:94:GLN:HE22	1.75	0.51
17:Q:397:TRP:CG	18:S:257:THR:HG1	2.27	0.51
18:R:9:VAL:HA	18:R:68:LEU:O	2.10	0.51
18:R:431:ASP:HA	18:R:434:GLU:HG3	1.92	0.51
17:U:92:PHE:HB3	17:U:94:GLN:HE22	1.75	0.51
17:U:114:ASP:OD1	22:Z:145:LYS:HD2	2.09	0.51
17:U:156:ARG:HE	17:U:164:MET:HB2	1.74	0.51
18:W:431:ASP:HA	18:W:434:GLU:HG3	1.92	0.51
21:X:156:MET:HE1	22:Z:149:LYS:HZ2	1.75	0.51
21:X:222:LEU:HD11	22:Z:212:GLN:O	2.10	0.51
17:Y:92:PHE:HB3	17:Y:94:GLN:HE22	1.75	0.51
17:Y:116:VAL:HG11	17:Y:151:LEU:HD12	1.91	0.51
17:Y:156:ARG:HE	17:Y:164:MET:HB2	1.74	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:Z:93:GLN:HE21	22:Z:97:ILE:HG13	1.76	0.51
17:u:219:THR:O	17:u:219:THR:OG1	2.27	0.51
1:A:60:LEU:HD13	1:A:69:TRP:CD2	2.45	0.51
2:B:387:CYS:O	2:B:391:LYS:HD2	2.10	0.51
2:B:1154:GLU:HB3	2:B:1155:PRO:HD3	1.91	0.51
2:B:2207:ASP:HB3	2:B:2257:MET:HG3	1.92	0.51
2:B:2590:ARG:HB3	2:B:2643:LYS:HE2	1.93	0.51
2:B:4172:TYR:CZ	2:B:4186:LEU:HD22	2.46	0.51
3:C:331:THR:HB	3:C:334:GLN:HG3	1.92	0.51
3:C:944:LEU:HD11	3:C:1071:ILE:HD11	1.92	0.51
3:C:1099:ASP:O	3:C:1103:ARG:HG2	2.10	0.51
3:C:1772:LEU:HD23	3:C:1778:ARG:HA	1.93	0.51
3:C:2188:PRO:HG3	3:C:2240:TRP:CZ2	2.45	0.51
3:C:3736:LYS:HE2	3:C:3740:ILE:HG21	1.91	0.51
3:C:3824:ILE:HG12	3:C:3956:GLN:HE22	1.76	0.51
3:C:4047:HIS:HB3	3:C:4077:GLU:N	2.24	0.51
5:E:377:ASN:HB3	5:E:417:TRP:CZ3	2.46	0.51
7:G:80:ASN:HA	7:G:143:PHE:HA	1.92	0.51
13:M:2:ASN:HB2	4:d:94:ARG:HG2	1.93	0.51
15:O:15:LYS:HE2	5:e:28:GLY:H	1.76	0.51
15:O:27:ILE:HG21	15:O:32:SER:OG	2.10	0.51
17:Q:21:TRP:HA	17:Q:24:ILE:HG22	1.92	0.51
17:Q:116:VAL:HG11	17:Q:151:LEU:HD12	1.91	0.51
17:U:183:TYR:CE2	17:U:388:MET:HE2	2.46	0.51
17:U:188:SER:O	17:U:192:LEU:HB2	2.10	0.51
21:X:104:PHE:HE2	17:y:340:TYR:HH	1.56	0.51
17:Y:106:TYR:HE2	17:Y:403:MET:HE3	1.74	0.51
17:Y:183:TYR:CE2	17:Y:388:MET:HE2	2.46	0.51
22:Z:195:ILE:HG22	22:Z:196:ILE:H	1.75	0.51
18:r:308:ARG:NH2	18:r:340:THR:HA	2.22	0.51
18:w:407:TRP:NE1	17:y:255:VAL:HA	2.26	0.51
2:B:454:GLU:O	2:B:458:GLN:HB3	2.10	0.51
2:B:1615:GLN:O	2:B:1619:THR:HG23	2.11	0.51
2:B:3546:ARG:NH2	2:B:3549:GLN:HB3	2.23	0.51
3:C:36:LYS:NZ	3:C:71:THR:O	2.29	0.51
3:C:350:HIS:CB	20:x:151:UNK:HA	2.41	0.51
3:C:892:TRP:O	3:C:896:GLN:HG2	2.11	0.51
3:C:1120:THR:O	3:C:1124:LYS:HB2	2.11	0.51
3:C:1514:VAL:HG21	3:C:1574:LEU:HD12	1.91	0.51
3:C:2006:ILE:O	3:C:2010:VAL:HG13	2.09	0.51
3:C:3124:ILE:HG23	3:C:3426:LYS:HE3	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:4200:GLU:HA	3:C:4213:ARG:HH12	1.75	0.51
6:F:83:HIS:N	6:F:103:CYS:SG	2.83	0.51
12:L:28:GLN:HE22	12:L:31:LEU:HD23	1.75	0.51
16:P:15:GLU:O	16:P:19:GLU:HG2	2.11	0.51
17:Q:188:SER:O	17:Q:192:LEU:HB2	2.10	0.51
18:S:9:VAL:HA	18:S:68:LEU:O	2.10	0.51
17:U:116:VAL:HG11	17:U:151:LEU:HD12	1.91	0.51
18:W:9:VAL:HA	18:W:68:LEU:O	2.10	0.51
2:B:165:LEU:O	2:B:169:LYS:N	2.27	0.51
2:B:720:ASP:HB3	2:B:724:HIS:CE1	2.45	0.51
2:B:915:PRO:HA	2:B:927:ARG:HH21	1.74	0.51
2:B:1154:GLU:CD	2:B:1204:VAL:HG11	2.36	0.51
2:B:1773:LYS:C	2:B:1775:VAL:H	2.19	0.51
2:B:2385:HIS:HE1	2:B:2395:PRO:HD3	1.76	0.51
2:B:2935:LYS:HG3	2:B:2944:ARG:CZ	2.41	0.51
2:B:3673:LYS:HZ2	2:B:3744:ARG:HH12	1.59	0.51
2:B:3784:LYS:HA	2:B:3787:ASN:HB3	1.92	0.51
3:C:542:ILE:HD11	3:C:579:GLU:OE1	2.10	0.51
3:C:566:THR:HA	3:C:569:TYR:CD2	2.45	0.51
3:C:576:TYR:CD1	3:C:624:PHE:HE1	2.29	0.51
3:C:2115:ASP:O	3:C:2119:LYS:HG2	2.10	0.51
3:C:2641:GLU:OE1	3:C:2673:ILE:HG13	2.10	0.51
3:C:2659:ASP:OD1	3:C:2660:SER:N	2.42	0.51
3:C:3429:TRP:CD2	3:C:3695:LEU:HD22	2.44	0.51
3:C:3560:HIS:HD2	3:C:3561:PRO:HD2	1.76	0.51
3:C:3733:ALA:O	3:C:3737:THR:HG22	2.10	0.51
4:D:311:LEU:HD11	4:D:331:LEU:HG	1.92	0.51
4:D:504:TYR:CE2	4:D:521:ALA:HB2	2.45	0.51
5:E:273:SER:HB2	5:E:278:GLU:N	2.26	0.51
6:F:85:TYR:HE2	6:F:87:TYR:HB2	1.76	0.51
11:K:30:PRO:HG3	14:N:36:LYS:NZ	2.25	0.51
17:Q:183:TYR:CE2	17:Q:388:MET:HE2	2.46	0.51
17:U:21:TRP:HA	17:U:24:ILE:HG22	1.92	0.51
17:U:106:TYR:HE2	17:U:403:MET:HE3	1.74	0.51
21:X:166:ARG:HB3	22:Z:160:LEU:HD13	1.93	0.51
17:Y:188:SER:O	17:Y:192:LEU:HB2	2.10	0.51
18:r:101:ASN:HA	18:r:144:GLY:H	1.75	0.51
18:r:177:VAL:HG23	17:q:330:MET:HE1	1.91	0.51
17:q:106:TYR:HE2	17:q:403:MET:HE3	1.74	0.51
17:q:188:SER:O	17:q:192:LEU:HB2	2.10	0.51
17:q:219:THR:O	17:q:219:THR:OG1	2.27	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:789:LYS:HE2	2:B:839:LEU:HB3	1.92	0.51
2:B:1645:THR:OG1	2:B:1660:ILE:HB	2.11	0.51
2:B:1664:SER:OG	2:B:1665:LYS:N	2.44	0.51
2:B:1889:GLN:CG	2:B:4193:ILE:HD13	2.40	0.51
2:B:3493:GLU:CD	2:B:3494:PRO:HD2	2.36	0.51
2:B:3655:GLU:O	2:B:3744:ARG:NH2	2.44	0.51
2:B:4365:LYS:O	2:B:4369:GLU:HG3	2.11	0.51
2:B:4385:GLU:HA	2:B:4388:ILE:HG22	1.93	0.51
3:C:193:ASP:OD1	3:C:267:ILE:HG21	2.10	0.51
3:C:1692:GLN:HB3	3:C:1696:LYS:HZ3	1.76	0.51
3:C:2726:GLU:O	3:C:2730:VAL:HG13	2.11	0.51
3:C:2943:SER:O	3:C:2992:ARG:NH2	2.44	0.51
3:C:3037:SER:O	3:C:3040:GLU:HG3	2.10	0.51
4:D:297:LYS:HG3	4:D:318:SER:HB2	1.93	0.51
12:L:33:LYS:HZ1	12:L:67:PHE:HE2	1.57	0.51
14:N:101:CYS:C	14:N:102:LEU:HD12	2.36	0.51
17:Q:106:TYR:HE2	17:Q:403:MET:HE3	1.74	0.51
19:T:41:SER:O	19:T:45:LYS:HG2	2.11	0.51
17:U:112:LEU:O	17:U:116:VAL:HG23	2.11	0.51
17:Y:21:TRP:HA	17:Y:24:ILE:HG22	1.92	0.51
17:Y:112:LEU:O	17:Y:116:VAL:HG23	2.11	0.51
18:s:8:HIS:HA	18:s:138:PHE:HB2	1.91	0.51
18:s:101:ASN:HA	18:s:144:GLY:H	1.75	0.51
18:s:308:ARG:NH2	18:s:340:THR:HA	2.22	0.51
18:r:8:HIS:HA	18:r:138:PHE:HB2	1.91	0.51
18:w:8:HIS:HA	18:w:138:PHE:HB2	1.91	0.51
18:w:101:ASN:HA	18:w:144:GLY:H	1.75	0.51
18:w:308:ARG:NH2	18:w:340:THR:HA	2.22	0.51
1:A:22:SER:HB3	1:A:340:GLY:CA	2.39	0.51
1:A:175:ASN:HB3	1:A:198:ASP:C	2.36	0.51
2:B:1436:LYS:HZ1	2:B:1492:LYS:HG3	1.75	0.51
2:B:1769:GLU:HA	2:B:1772:ILE:HG22	1.92	0.51
2:B:1802:GLU:HA	2:B:1805:VAL:HG22	1.93	0.51
2:B:4242:GLN:HG2	2:B:4244:PRO:HD2	1.92	0.51
3:C:234:GLU:O	3:C:368:LYS:NZ	2.43	0.51
3:C:269:LYS:CD	3:C:281:GLN:HA	2.38	0.51
3:C:336:ILE:O	3:C:339:LEU:N	2.44	0.51
3:C:790:LYS:O	3:C:793:GLN:HB2	2.11	0.51
3:C:1295:LYS:HG3	3:C:1296:LEU:N	2.26	0.51
3:C:1702:ALA:HA	3:C:1705:GLN:CG	2.40	0.51
3:C:1765:SER:HA	3:C:1769:LEU:HD13	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1864:MET:HB3	3:C:4167:LEU:HD12	1.93	0.51
3:C:1995:ARG:HH22	3:C:4202:GLN:HA	1.76	0.51
3:C:2023:LEU:HD13	3:C:2074:LEU:HD22	1.93	0.51
3:C:2378:LEU:HD13	3:C:2383:TYR:HE2	1.75	0.51
3:C:3585:ASN:HD21	3:C:3633:SER:C	2.19	0.51
3:C:4479:GLN:O	3:C:4483:ARG:HG3	2.11	0.51
8:H:73:ARG:HH11	8:H:73:ARG:HG2	1.76	0.51
17:Q:112:LEU:O	17:Q:116:VAL:HG23	2.11	0.51
18:s:181:VAL:O	18:s:398:MET:HE1	2.11	0.51
18:w:177:VAL:HG23	17:y:330:MET:HE1	1.91	0.51
1:A:257:MET:HE1	1:A:266:TYR:HB3	1.93	0.51
2:B:151:MET:O	2:B:151:MET:HE3	2.11	0.51
2:B:337:PRO:HD3	2:B:404:ASN:HB2	1.93	0.51
2:B:1982:THR:HG23	2:B:1983:LYS:HG3	1.92	0.51
2:B:2216:LYS:HE3	2:B:2268:ASP:HB2	1.92	0.51
2:B:3917:LYS:HE3	2:B:3918:ARG:HH12	1.76	0.51
3:C:89:GLN:HE22	3:C:91:LYS:NZ	2.09	0.51
3:C:269:LYS:HE3	3:C:284:ARG:HD3	1.92	0.51
3:C:633:GLU:HA	3:C:636:ARG:HH11	1.76	0.51
3:C:1391:LEU:O	3:C:1394:GLU:HG2	2.10	0.51
3:C:1425:LYS:O	3:C:1429:ILE:HG12	2.10	0.51
3:C:1508:LEU:HD21	3:C:1561:VAL:HG21	1.93	0.51
3:C:2452:GLN:O	3:C:2458:GLN:NE2	2.43	0.51
4:D:305:ASN:HD21	4:D:360:ALA:HB2	1.76	0.51
4:D:404:TRP:CE2	4:D:414:PHE:HE1	2.28	0.51
5:E:433:TRP:HD1	5:E:451:LYS:N	2.09	0.51
5:E:519:LEU:O	5:E:523:LYS:HG3	2.11	0.51
6:F:97:MET:N	6:F:97:MET:SD	2.85	0.51
21:X:114:LYS:HZ2	22:Z:98:GLU:HA	1.76	0.51
17:u:188:SER:O	17:u:192:LEU:HB2	2.10	0.51
17:y:188:SER:O	17:y:192:LEU:HB2	2.10	0.51
2:B:544:HIS:O	2:B:548:LEU:HD13	2.10	0.50
2:B:876:GLN:HG3	2:B:966:LYS:HD2	1.93	0.50
2:B:1331:ARG:HG3	2:B:1410:PHE:HB2	1.93	0.50
2:B:1637:CYS:SG	2:B:1638:PHE:N	2.84	0.50
2:B:1921:PRO:O	2:B:1949:TRP:HB2	2.10	0.50
2:B:2081:SER:OG	2:B:2082:VAL:N	2.44	0.50
2:B:2584:VAL:O	2:B:2590:ARG:NH1	2.44	0.50
2:B:4472:GLN:NE2	2:B:4527:CYS:SG	2.84	0.50
3:C:27:ILE:HG12	3:C:68:ILE:HA	1.93	0.50
3:C:44:PHE:CZ	3:C:97:ARG:HB3	2.46	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:596:LEU:HG	3:C:598:ARG:HG2	1.92	0.50
3:C:752:LEU:HD13	3:C:795:ILE:HG12	1.93	0.50
3:C:1099:ASP:HA	3:C:1102:LYS:HZ3	1.76	0.50
3:C:1133:GLY:HA3	3:C:1268:ARG:HD3	1.92	0.50
3:C:1707:PHE:CZ	3:C:1730:LEU:HA	2.46	0.50
3:C:2877:THR:HG23	3:C:2878:ARG:HD3	1.92	0.50
3:C:3520:MET:HG2	3:C:3645:ILE:CD1	2.41	0.50
3:C:3538:GLN:HE22	3:C:3626:THR:HG21	1.75	0.50
3:C:4510:ARG:HH12	3:C:4553:LEU:HG	1.76	0.50
5:E:225:GLN:NE2	5:E:270:TRP:O	2.43	0.50
8:H:49:PHE:HA	8:H:52:ARG:HG2	1.92	0.50
15:O:20:SER:HA	15:O:53:TYR:HE2	1.76	0.50
17:Q:61:PRO:HD2	17:Q:84:LEU:O	2.10	0.50
17:Y:61:PRO:HD2	17:Y:84:LEU:O	2.10	0.50
22:Z:149:LYS:NZ	22:Z:153:ALA:HB2	2.24	0.50
18:s:145:THR:HG22	26:s:501:GTP:O3B	2.11	0.50
18:s:407:TRP:NE1	17:u:255:VAL:HA	2.26	0.50
17:u:21:TRP:HA	17:u:24:ILE:HG22	1.92	0.50
17:q:21:TRP:HA	17:q:24:ILE:HG22	1.92	0.50
17:q:337:ASN:HB2	17:q:340:TYR:HB2	1.93	0.50
18:w:145:THR:HG22	26:w:501:GTP:O3B	2.11	0.50
18:w:181:VAL:O	18:w:398:MET:HE1	2.11	0.50
1:A:7:TRP:CZ3	1:A:350:TRP:HB3	2.45	0.50
1:A:287:PHE:C	1:A:318:PRO:HB3	2.36	0.50
1:A:310:GLU:HG3	1:A:311:THR:H	1.76	0.50
2:B:524:LEU:HB3	2:B:611:GLN:HG3	1.93	0.50
2:B:1466:THR:HA	2:B:1560:MET:HE2	1.93	0.50
2:B:1815:PHE:CD1	2:B:4185:ASP:HB2	2.46	0.50
2:B:2685:LYS:NZ	2:B:2711:VAL:HG12	2.26	0.50
2:B:3086:HIS:CE1	2:B:3102:ARG:HH12	2.29	0.50
2:B:4165:SER:HB3	2:B:4194:MET:HE3	1.93	0.50
3:C:78:LEU:HD23	3:C:78:LEU:O	2.11	0.50
3:C:1636:LYS:HG3	3:C:1657:GLN:HB2	1.93	0.50
3:C:1918:GLY:HA2	3:C:1970:VAL:HG12	1.93	0.50
3:C:4296:MET:O	3:C:4299:THR:OG1	2.29	0.50
4:D:526:ARG:HG2	4:D:535:GLN:CG	2.32	0.50
6:F:78:ARG:HB2	6:F:88:ILE:HG22	1.92	0.50
8:H:15:ASP:N	8:H:76:TYR:O	2.36	0.50
11:K:94:ARG:O	11:K:108:TYR:HA	2.11	0.50
12:L:16:LEU:HD22	12:L:17:PRO:HD2	1.93	0.50
16:P:25:LEU:HB2	16:P:55:ILE:HD13	1.92	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Q:309:ARG:HB2	17:Q:426:GLN:HG3	1.92	0.50
17:u:337:ASN:HB2	17:u:340:TYR:HB2	1.92	0.50
18:r:145:THR:HG22	26:r:501:GTP:O3B	2.11	0.50
18:r:181:VAL:O	18:r:398:MET:HE1	2.11	0.50
17:y:337:ASN:HB2	17:y:340:TYR:HB2	1.92	0.50
1:A:276:PHE:HB2	1:A:282:ARG:CG	2.41	0.50
2:B:155:ASN:OD1	2:B:180:LYS:NZ	2.44	0.50
2:B:309:ASP:HA	2:B:358:PHE:CE2	2.47	0.50
2:B:1034:ASN:O	2:B:1038:LYS:HG2	2.11	0.50
2:B:1255:GLU:OE1	2:B:1255:GLU:N	2.45	0.50
2:B:1331:ARG:N	2:B:1410:PHE:CD2	2.79	0.50
2:B:2590:ARG:HH22	2:B:2592:TYR:HE1	1.59	0.50
2:B:3440:LEU:O	2:B:3443:ASN:N	2.44	0.50
2:B:4013:PHE:CZ	2:B:4028:ARG:HB3	2.47	0.50
2:B:4271:GLU:HG2	2:B:4275:ARG:HH21	1.76	0.50
3:C:254:THR:O	3:C:258:GLU:HG3	2.12	0.50
3:C:374:ILE:HD11	3:C:453:PHE:CE2	2.46	0.50
3:C:1107:LEU:HB3	3:C:1156:VAL:HG21	1.93	0.50
3:C:3763:GLU:HG3	3:C:4303:THR:HB	1.93	0.50
4:D:638:GLU:HA	4:D:641:ASN:ND2	2.27	0.50
16:P:26:VAL:O	16:P:80:VAL:HA	2.12	0.50
17:U:61:PRO:HD2	17:U:84:LEU:O	2.10	0.50
18:W:145:THR:HG22	26:W:501:GTP:O3B	2.11	0.50
17:Y:309:ARG:HB2	17:Y:426:GLN:HG3	1.92	0.50
22:Z:181:LEU:O	22:Z:184:GLU:N	2.44	0.50
17:u:31:ASP:HB2	17:u:33:THR:H	1.76	0.50
17:y:31:ASP:HB2	17:y:33:THR:H	1.76	0.50
17:y:309:ARG:HB2	17:y:426:GLN:HG3	1.92	0.50
1:A:209:ALA:HB3	1:A:264:TRP:CD1	2.46	0.50
2:B:26:LYS:HD3	2:B:74:TYR:HE1	1.77	0.50
2:B:301:LYS:HA	2:B:316:LEU:HD23	1.93	0.50
2:B:533:ARG:HB3	2:B:535:ILE:HG12	1.94	0.50
2:B:927:ARG:NH1	2:B:929:THR:OG1	2.44	0.50
2:B:1214:LEU:HG	2:B:1215:GLN:H	1.76	0.50
2:B:1240:PHE:HD1	2:B:1243:LYS:NZ	2.09	0.50
2:B:1317:LEU:HD13	16:P:77:LEU:H	1.76	0.50
2:B:1723:GLU:OE1	2:B:1723:GLU:N	2.45	0.50
2:B:1888:THR:O	2:B:1892:ASN:ND2	2.44	0.50
2:B:1982:THR:OG1	2:B:1993:GLN:NE2	2.40	0.50
2:B:2494:TRP:CD2	2:B:2515:ILE:HD11	2.46	0.50
2:B:2738:GLN:HE22	2:B:3045:ILE:HD11	1.76	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2781:ASP:HB3	2:B:2874:ARG:HH12	1.77	0.50
2:B:2998:VAL:HA	2:B:3004:LEU:HD11	1.94	0.50
2:B:3655:GLU:HB2	2:B:3744:ARG:HH21	1.77	0.50
2:B:3886:PHE:HA	2:B:3889:GLN:HB3	1.94	0.50
2:B:4026:ARG:HG3	2:B:4057:ILE:HD12	1.93	0.50
2:B:4111:TRP:HD1	2:B:4252:ILE:HD11	1.77	0.50
3:C:499:GLY:HA2	3:C:509:LYS:HG3	1.93	0.50
3:C:1980:TYR:HB2	3:C:1983:ARG:HG3	1.92	0.50
3:C:4524:VAL:HG22	3:C:4556:LEU:HD22	1.93	0.50
5:E:159:ILE:HD12	5:E:483:GLY:O	2.11	0.50
5:E:457:LEU:HD23	5:E:480:ASP:OD1	2.12	0.50
15:O:31:SER:OG	5:e:39:GLN:HG3	2.12	0.50
17:Q:337:ASN:HB2	17:Q:340:TYR:HB2	1.92	0.50
18:R:295:ALA:HB1	18:R:377:MET:HE3	1.93	0.50
18:S:407:TRP:CG	17:U:255:VAL:HG22	2.47	0.50
17:U:309:ARG:HB2	17:U:426:GLN:HG3	1.92	0.50
17:Y:148:GLY:O	17:Y:152:ILE:HG12	2.12	0.50
18:s:295:ALA:HB1	18:s:377:MET:HE3	1.92	0.50
17:u:238:CYS:HB3	17:u:318:ARG:HD2	1.92	0.50
17:u:309:ARG:HB2	17:u:426:GLN:HG3	1.92	0.50
17:q:148:GLY:O	17:q:152:ILE:HG12	2.12	0.50
17:q:226:ASN:O	17:q:230:SER:OG	2.19	0.50
17:q:238:CYS:HB3	17:q:318:ARG:HD2	1.92	0.50
17:q:309:ARG:HB2	17:q:426:GLN:HG3	1.92	0.50
17:y:21:TRP:HA	17:y:24:ILE:HG22	1.92	0.50
17:y:148:GLY:O	17:y:152:ILE:HG12	2.12	0.50
17:y:238:CYS:HB3	17:y:318:ARG:HD2	1.92	0.50
1:A:158:VAL:HB	1:A:180:LEU:HB3	1.93	0.50
2:B:119:GLU:O	2:B:122:ASN:HB3	2.12	0.50
2:B:688:LEU:HD12	2:B:691:ARG:HH22	1.77	0.50
2:B:2490:LYS:HE2	2:B:2493:THR:HG22	1.94	0.50
2:B:2720:LYS:HD2	2:B:2795:TYR:CG	2.47	0.50
2:B:2776:LYS:HA	2:B:2780:GLU:OE1	2.11	0.50
2:B:3696:GLN:NE2	2:B:3700:GLU:OE1	2.43	0.50
3:C:250:MET:HA	3:C:314:VAL:HG11	1.93	0.50
3:C:2011:LYS:NZ	3:C:2052:LEU:HD22	2.27	0.50
6:F:25:ILE:HD13	6:F:97:MET:HG3	1.93	0.50
17:Q:114:ASP:HA	17:Q:117:LEU:HB2	1.93	0.50
17:Q:148:GLY:O	17:Q:152:ILE:HG12	2.12	0.50
17:Q:310:TYR:HB2	17:Q:341:PHE:HA	1.93	0.50
18:S:145:THR:HG22	26:S:501:GTP:O3B	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:S:295:ALA:HB1	18:S:377:MET:HE3	1.93	0.50
17:U:148:GLY:O	17:U:152:ILE:HG12	2.12	0.50
17:U:337:ASN:HB2	17:U:340:TYR:HB2	1.92	0.50
17:Y:238:CYS:HB3	17:Y:318:ARG:HD2	1.92	0.50
17:u:148:GLY:O	17:u:152:ILE:HG12	2.12	0.50
17:u:221:THR:HG23	17:u:223:GLY:H	1.77	0.50
18:w:295:ALA:HB1	18:w:377:MET:HE3	1.93	0.50
2:B:606:LEU:HD13	2:B:612:GLY:HA2	1.94	0.50
2:B:1852:CYS:N	2:B:1865:TYR:OH	2.40	0.50
2:B:2710:LEU:O	2:B:2714:THR:HG23	2.11	0.50
3:C:260:LEU:HD22	3:C:307:LEU:HD22	1.93	0.50
3:C:263:LYS:HG3	3:C:264:ASP:N	2.26	0.50
3:C:409:LEU:HD11	3:C:461:ILE:HG12	1.93	0.50
3:C:1213:LYS:HD3	3:C:1217:LYS:HZ1	1.75	0.50
3:C:1874:ALA:HA	23:C:4701:ADP:H1'	1.94	0.50
3:C:2003:ASP:OD1	3:C:2004:ARG:N	2.44	0.50
3:C:2516:LEU:HD11	3:C:2553:LYS:HE3	1.94	0.50
3:C:2875:SER:H	23:C:4703:ADP:H3'	1.75	0.50
3:C:2922:PHE:HD2	3:C:2997:ILE:HG23	1.77	0.50
3:C:2981:SER:O	3:C:2985:THR:HG23	2.11	0.50
4:D:516:PHE:HB2	4:D:528:TRP:HE3	1.77	0.50
8:H:63:ARG:HH21	8:H:85:ALA:N	2.09	0.50
11:K:92:LYS:HG3	4:d:82:ALA:H	1.77	0.50
18:R:145:THR:HG22	26:R:501:GTP:O3B	2.11	0.50
17:U:103:LYS:HD2	17:U:401:GLU:OE2	2.12	0.50
17:U:238:CYS:HB3	17:U:318:ARG:HD2	1.92	0.50
18:W:295:ALA:HB1	18:W:377:MET:HE3	1.93	0.50
21:X:194:LEU:HD22	21:X:197:LYS:HD2	1.92	0.50
17:Y:219:THR:O	17:Y:219:THR:OG1	2.27	0.50
17:Y:337:ASN:HB2	17:Y:340:TYR:HB2	1.92	0.50
17:u:112:LEU:O	17:u:116:VAL:HG23	2.11	0.50
17:q:221:THR:HG23	17:q:223:GLY:H	1.77	0.50
17:y:112:LEU:O	17:y:116:VAL:HG23	2.11	0.50
17:y:183:TYR:CE2	17:y:388:MET:HE2	2.46	0.50
17:y:221:THR:HG23	17:y:223:GLY:H	1.77	0.50
1:A:329:ASP:H	1:A:334:ARG:NH1	2.08	0.50
2:B:736:LEU:HA	2:B:739:LYS:HD2	1.94	0.50
2:B:1349:ILE:HA	2:B:1352:LEU:HD12	1.94	0.50
2:B:2523:MET:O	2:B:2527:HIS:ND1	2.44	0.50
2:B:3508:LYS:HE3	2:B:3514:ALA:HA	1.92	0.50
2:B:4127:LYS:HB2	2:B:4243:ASN:HD22	1.76	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:58:GLN:HA	3:C:90:ASP:CG	2.36	0.50
3:C:135:MET:HA	3:C:139:TYR:CD2	2.47	0.50
3:C:136:GLU:OE2	3:C:166:GLN:NE2	2.45	0.50
3:C:370:THR:HG21	3:C:450:PHE:HB2	1.93	0.50
3:C:1211:GLU:HG3	3:C:1214:GLN:NE2	2.27	0.50
3:C:1858:LEU:HD21	3:C:1997:VAL:HG21	1.93	0.50
3:C:2254:LEU:O	3:C:2261:ARG:HA	2.11	0.50
3:C:2661:THR:HA	3:C:2664:VAL:HB	1.93	0.50
3:C:3677:LEU:O	3:C:3681:VAL:HG13	2.12	0.50
3:C:4199:CYS:HA	3:C:4216:PHE:HE2	1.76	0.50
8:H:60:ILE:HG21	8:H:65:PHE:CE2	2.47	0.50
17:Q:103:LYS:HD2	17:Q:401:GLU:OE2	2.12	0.50
17:Q:238:CYS:HB3	17:Q:318:ARG:HD2	1.92	0.50
18:R:145:THR:HG23	18:R:146:GLY:H	1.77	0.50
17:U:94:GLN:OE1	18:W:1:MET:HE1	2.11	0.50
17:U:305:PRO:HB2	17:U:310:TYR:CE1	2.37	0.50
17:U:310:TYR:HB2	17:U:341:PHE:HA	1.93	0.50
18:W:181:VAL:O	18:W:398:MET:HE1	2.11	0.50
17:Y:103:LYS:HD2	17:Y:401:GLU:OE2	2.12	0.50
17:Y:222:TYR:CD1	17:Y:225:LEU:HD11	2.47	0.50
17:Y:305:PRO:HB2	17:Y:310:TYR:CE1	2.37	0.50
18:s:28:HIS:HE2	18:s:243:ARG:HD2	1.77	0.50
17:u:183:TYR:CE2	17:u:388:MET:HE2	2.46	0.50
18:r:295:ALA:HB1	18:r:377:MET:HE3	1.93	0.50
17:q:21:TRP:CZ3	17:q:61:PRO:HB3	2.47	0.50
17:q:31:ASP:HB2	17:q:33:THR:H	1.76	0.50
17:q:112:LEU:O	17:q:116:VAL:HG23	2.11	0.50
17:q:183:TYR:CE2	17:q:388:MET:HE2	2.46	0.50
18:w:313:MET:HG2	18:w:344:VAL:HG11	1.93	0.50
1:A:53:PRO:O	1:A:82:ARG:HB3	2.12	0.50
2:B:663:LYS:HD3	2:B:666:ASN:HB3	1.94	0.50
2:B:811:PRO:HB3	2:B:900:PHE:HA	1.94	0.50
2:B:1172:LYS:HA	2:B:1176:VAL:HB	1.92	0.50
2:B:1318:ILE:HG12	2:B:1345:LEU:HD13	1.94	0.50
2:B:1401:THR:HB	2:B:1403:PHE:HD2	1.77	0.50
2:B:1610:TYR:HD2	2:B:1942:GLY:HA2	1.77	0.50
2:B:1758:LYS:HZ3	2:B:1805:VAL:HG21	1.77	0.50
2:B:2698:THR:C	2:B:2699:ILE:HG13	2.37	0.50
3:C:1854:CYS:SG	3:C:1999:MET:HG3	2.51	0.50
3:C:3794:LEU:HD22	3:C:3797:ASN:H	1.77	0.50
4:D:302:ILE:HG12	4:D:314:VAL:HG13	1.92	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:162:ARG:NH1	5:E:198:TYR:HH	2.10	0.50
17:Q:98:GLY:HA2	18:S:254:GLU:HG3	1.93	0.50
18:S:145:THR:HG23	18:S:146:GLY:H	1.77	0.50
18:S:181:VAL:O	18:S:398:MET:HE1	2.11	0.50
17:U:114:ASP:HA	17:U:117:LEU:HB2	1.93	0.50
17:U:219:THR:O	17:U:219:THR:OG1	2.27	0.50
18:W:145:THR:HG23	18:W:146:GLY:H	1.77	0.50
21:X:198:GLU:HG3	22:Z:188:LYS:HZ1	1.67	0.50
17:Y:114:ASP:HA	17:Y:117:LEU:HB2	1.92	0.50
18:s:313:MET:HG2	18:s:344:VAL:HG11	1.93	0.50
17:u:21:TRP:CZ3	17:u:61:PRO:HB3	2.47	0.50
18:w:28:HIS:HE2	18:w:243:ARG:HD2	1.77	0.50
2:B:332:LYS:HB3	2:B:405:TRP:CD1	2.46	0.50
2:B:737:VAL:HG12	2:B:740:LYS:HD2	1.92	0.50
2:B:1117:ILE:HG13	2:B:1197:PHE:CE2	2.46	0.50
2:B:2056:VAL:O	2:B:2060:MET:HG3	2.12	0.50
2:B:2968:SER:OG	2:B:2970:TRP:O	2.30	0.50
2:B:3722:THR:O	2:B:3726:ILE:HG13	2.12	0.50
2:B:3731:GLN:O	2:B:3735:VAL:HG12	2.12	0.50
2:B:3920:ASP:OD1	2:B:3921:SER:N	2.45	0.50
2:B:4548:TYR:CE2	2:B:4557:TYR:HB3	2.47	0.50
3:C:317:LEU:HD23	3:C:356:TYR:CD2	2.46	0.50
3:C:818:LEU:HB3	3:C:962:VAL:HG11	1.93	0.50
3:C:2216:TRP:CD2	3:C:2254:LEU:HD11	2.47	0.50
3:C:3571:CYS:HB3	3:C:3621:PHE:CE1	2.47	0.50
16:P:11:THR:O	16:P:15:GLU:HG2	2.11	0.50
17:Q:76:VAL:HG13	17:Q:77:ARG:NH1	2.27	0.50
17:Q:222:TYR:CD1	17:Q:225:LEU:HD11	2.47	0.50
17:Q:342:VAL:HG23	17:Q:345:ILE:HG22	1.94	0.50
17:U:222:TYR:CD1	17:U:225:LEU:HD11	2.47	0.50
17:Y:310:TYR:HB2	17:Y:341:PHE:HA	1.93	0.50
18:s:80:THR:O	18:s:80:THR:OG1	2.29	0.50
17:u:189:VAL:HG11	17:u:415:MET:HE2	1.94	0.50
17:u:226:ASN:O	17:u:230:SER:OG	2.19	0.50
17:u:342:VAL:HG23	17:u:345:ILE:HG22	1.94	0.50
18:r:28:HIS:HE2	18:r:243:ARG:HD2	1.77	0.50
17:q:222:TYR:CD1	17:q:225:LEU:HD11	2.47	0.50
17:q:342:VAL:HG23	17:q:345:ILE:HG22	1.94	0.50
18:w:80:THR:O	18:w:80:THR:OG1	2.29	0.50
17:y:76:VAL:HG13	17:y:77:ARG:NH1	2.27	0.50
17:y:189:VAL:HG11	17:y:415:MET:HE2	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:y:342:VAL:HG23	17:y:345:ILE:HG22	1.94	0.50
1:A:256:ILE:CD1	1:A:322:GLU:HB2	2.41	0.49
2:B:96:LEU:HD23	2:B:99:LEU:HD23	1.94	0.49
2:B:839:LEU:O	2:B:843:VAL:HG23	2.12	0.49
2:B:1073:ILE:HG13	2:B:1076:LEU:H	1.77	0.49
2:B:1277:ARG:HH12	2:B:1280:GLU:HB2	1.77	0.49
2:B:1392:TRP:HE3	2:B:1406:ASN:HB3	1.76	0.49
2:B:2512:VAL:HG22	2:B:2687:ILE:HG13	1.94	0.49
2:B:2897:GLN:O	2:B:2901:ARG:NH1	2.45	0.49
2:B:3908:GLU:HA	2:B:3912:LEU:HD22	1.92	0.49
2:B:4363:ILE:HD12	2:B:4400:TRP:NE1	2.27	0.49
3:C:91:LYS:HD3	3:C:125:PRO:HD3	1.93	0.49
3:C:532:ILE:HG21	3:C:564:ASN:HB3	1.94	0.49
3:C:948:LEU:HD13	3:C:1010:LYS:HG2	1.94	0.49
3:C:1228:ARG:HA	3:C:1228:ARG:NE	2.27	0.49
3:C:1870:PRO:HB3	3:C:1997:VAL:HB	1.94	0.49
3:C:2272:PHE:HB3	3:C:2274:VAL:HG13	1.94	0.49
3:C:2516:LEU:HB2	3:C:2555:MET:HG3	1.94	0.49
3:C:2689:LYS:NZ	3:C:2746:VAL:HG11	2.27	0.49
3:C:3077:TYR:HD1	3:C:3464:TYR:CD2	2.30	0.49
4:D:519:ALA:HB1	4:D:544:MET:HG3	1.93	0.49
5:E:252:ILE:O	5:E:254:ILE:HD12	2.12	0.49
6:F:77:ILE:O	6:F:89:ILE:HB	2.11	0.49
9:I:33:ASP:N	9:I:33:ASP:OD1	2.44	0.49
17:Q:35:THR:HG22	17:Q:36:TYR:H	1.77	0.49
18:R:181:VAL:O	18:R:398:MET:HE1	2.11	0.49
18:S:101:ASN:HD21	17:U:252:LYS:HE3	1.77	0.49
17:U:76:VAL:HG13	17:U:77:ARG:NH1	2.27	0.49
17:U:342:VAL:HG23	17:U:345:ILE:HG22	1.94	0.49
17:Y:35:THR:HG22	17:Y:36:TYR:H	1.77	0.49
17:Y:342:VAL:HG23	17:Y:345:ILE:HG22	1.94	0.49
17:u:76:VAL:HG13	17:u:77:ARG:NH1	2.27	0.49
17:u:213:ARG:NH1	17:u:297:LYS:HB2	2.27	0.49
17:q:76:VAL:HG13	17:q:77:ARG:NH1	2.27	0.49
17:q:189:VAL:HG11	17:q:415:MET:HE2	1.94	0.49
17:y:21:TRP:CZ3	17:y:61:PRO:HB3	2.47	0.49
17:y:213:ARG:NH1	17:y:297:LYS:HB2	2.27	0.49
17:y:226:ASN:O	17:y:230:SER:OG	2.18	0.49
2:B:1240:PHE:HA	2:B:1243:LYS:NZ	2.19	0.49
2:B:2221:ASP:OD1	2:B:2222:GLU:N	2.44	0.49
2:B:3461:ILE:HG12	2:B:3469:ARG:HG2	1.93	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4396:VAL:HG22	2:B:4410:GLY:HA3	1.93	0.49
3:C:789:LYS:O	3:C:793:GLN:HG2	2.11	0.49
3:C:805:ARG:HG3	3:C:806:ILE:N	2.27	0.49
3:C:1184:ARG:HA	3:C:1187:TRP:CD1	2.47	0.49
3:C:2385:LYS:HD2	3:C:2440:TRP:HE1	1.75	0.49
3:C:2875:SER:N	23:C:4703:ADP:C3'	2.75	0.49
3:C:2935:LEU:HA	3:C:2938:ILE:HG22	1.94	0.49
9:I:90:GLN:O	9:I:93:THR:OG1	2.26	0.49
11:K:37:LEU:HD22	14:N:33:LYS:HZ2	1.76	0.49
17:Q:219:THR:O	17:Q:219:THR:OG1	2.27	0.49
21:X:194:LEU:CD2	21:X:197:LYS:HD2	2.41	0.49
17:Y:31:ASP:HB2	17:Y:33:THR:H	1.76	0.49
17:Y:76:VAL:HG13	17:Y:77:ARG:NH1	2.27	0.49
17:q:213:ARG:NH1	17:q:297:LYS:HB2	2.27	0.49
1:A:190:LEU:HD13	1:A:232:TYR:CZ	2.47	0.49
1:A:220:TRP:HE1	2:B:956:LEU:CD1	2.15	0.49
2:B:92:ILE:HD13	2:B:109:VAL:HG12	1.94	0.49
2:B:187:THR:HB	2:B:188:PRO:HD3	1.95	0.49
2:B:859:TYR:CE2	2:B:863:VAL:HG21	2.47	0.49
2:B:877:THR:HG22	2:B:881:HIS:CE1	2.47	0.49
2:B:1773:LYS:HD2	2:B:2046:THR:HB	1.93	0.49
2:B:1889:GLN:HG2	2:B:4193:ILE:CD1	2.41	0.49
2:B:3122:LEU:HA	2:B:3125:LYS:HE3	1.93	0.49
2:B:4019:GLN:H	2:B:4021:GLN:HE21	1.60	0.49
3:C:52:LYS:HA	3:C:95:PHE:O	2.11	0.49
3:C:282:ARG:NH2	20:x:125:UNK:C	2.75	0.49
3:C:482:ASP:OD1	3:C:483:VAL:N	2.45	0.49
3:C:1227:ARG:HG3	3:C:1228:ARG:NH2	2.27	0.49
3:C:1904:TYR:HB3	3:C:4021:GLU:OE2	2.12	0.49
3:C:1980:TYR:H	3:C:1983:ARG:HB2	1.76	0.49
3:C:2166:ILE:HD13	3:C:2169:ILE:HD11	1.93	0.49
3:C:2587:GLY:HA3	3:C:2600:ARG:O	2.11	0.49
3:C:2744:LYS:HA	3:C:3026:TRP:HB2	1.94	0.49
3:C:3742:GLU:HA	3:C:3745:GLU:HB2	1.95	0.49
4:D:401:GLN:OE1	4:D:462:PHE:N	2.44	0.49
5:E:418:SER:HB2	5:E:426:PHE:CE2	2.46	0.49
9:I:68:ASP:HA	9:I:72:GLY:O	2.12	0.49
17:Q:305:PRO:HB2	17:Q:310:TYR:CE1	2.37	0.49
18:S:247:ALA:HB2	18:S:357:TYR:CZ	2.48	0.49
17:U:31:ASP:HB2	17:U:33:THR:H	1.76	0.49
17:U:35:THR:HG22	17:U:36:TYR:H	1.77	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:X:197:LYS:HD3	22:Z:192:MET:CA	2.40	0.49
17:Y:184:ASN:O	17:Y:188:SER:OG	2.30	0.49
17:u:222:TYR:CD1	17:u:225:LEU:HD11	2.47	0.49
18:r:313:MET:HG2	18:r:344:VAL:HG11	1.93	0.49
1:A:144:GLN:NE2	1:A:145:PRO:O	2.46	0.49
2:B:1403:PHE:HB3	2:B:1405:HIS:CG	2.48	0.49
2:B:2181:PHE:CE2	2:B:2319:ALA:HB3	2.47	0.49
2:B:4113:TYR:HE2	2:B:4163:ARG:HD2	1.77	0.49
3:C:45:LEU:O	3:C:106:LYS:NZ	2.45	0.49
3:C:358:THR:HB	3:C:361:LYS:HG3	1.94	0.49
3:C:1035:ILE:HG21	3:C:1095:GLN:HG2	1.94	0.49
3:C:1146:GLN:HA	3:C:1149:ILE:HD12	1.94	0.49
3:C:1180:ARG:HA	3:C:1183:LEU:HD12	1.94	0.49
3:C:1761:MET:HE2	3:C:1789:VAL:HG22	1.93	0.49
3:C:2103:PRO:O	3:C:4494:GLU:N	2.45	0.49
6:F:87:TYR:OH	6:F:98:LEU:HD13	2.11	0.49
17:U:184:ASN:O	17:U:188:SER:OG	2.30	0.49
18:W:247:ALA:HB2	18:W:357:TYR:CZ	2.48	0.49
18:W:402:ARG:NH1	18:W:402:ARG:HB2	2.27	0.49
21:X:151:ARG:O	21:X:154:LYS:HG3	2.12	0.49
21:X:197:LYS:HZ3	22:Z:189:ARG:CG	2.25	0.49
17:u:103:LYS:HD2	17:u:401:GLU:OE2	2.12	0.49
17:u:163:ILE:HB	17:u:250:LEU:HD23	1.95	0.49
18:r:80:THR:O	18:r:80:THR:OG1	2.29	0.49
17:q:163:ILE:HB	17:q:250:LEU:HD23	1.95	0.49
17:q:310:TYR:HB2	17:q:341:PHE:HA	1.93	0.49
17:y:103:LYS:HD2	17:y:401:GLU:OE2	2.12	0.49
17:y:163:ILE:HB	17:y:250:LEU:HD23	1.95	0.49
17:y:222:TYR:CD1	17:y:225:LEU:HD11	2.47	0.49
1:A:213:GLN:HB2	1:A:232:TYR:O	2.12	0.49
1:A:334:ARG:CB	1:A:353:ASN:HA	2.42	0.49
2:B:500:GLU:HA	2:B:503:LEU:HD12	1.94	0.49
2:B:854:ASN:HA	2:B:857:LYS:HE2	1.95	0.49
2:B:892:LYS:HG2	2:B:893:ARG:H	1.78	0.49
2:B:1325:TRP:HE1	2:B:1333:ILE:HG23	1.77	0.49
2:B:1889:GLN:NE2	2:B:2023:ARG:HE	2.10	0.49
2:B:2988:ARG:HB3	2:B:2992:LYS:NZ	2.28	0.49
2:B:4044:ILE:O	2:B:4047:MET:N	2.41	0.49
3:C:56:TYR:HE1	3:C:76:PRO:HD2	1.78	0.49
3:C:102:ALA:O	3:C:106:LYS:HE2	2.13	0.49
3:C:1259:LYS:HZ2	3:C:1283:LEU:HB2	1.77	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1287:ASP:O	3:C:1291:LYS:HB2	2.13	0.49
3:C:2175:THR:HG22	3:C:2180:PRO:HA	1.93	0.49
3:C:2427:THR:HG23	3:C:2429:PHE:H	1.76	0.49
3:C:2854:ARG:NH1	3:C:2858:GLN:HG3	2.27	0.49
3:C:3767:VAL:HA	3:C:4302:GLU:HG3	1.94	0.49
4:D:554:SER:OG	4:D:627:ILE:HA	2.13	0.49
5:E:242:VAL:O	5:E:252:ILE:HG12	2.12	0.49
6:F:87:TYR:HA	6:F:99:ALA:O	2.12	0.49
15:O:101:TYR:HB3	15:O:108:ALA:HB3	1.93	0.49
17:Q:21:TRP:CZ3	17:Q:61:PRO:HB3	2.47	0.49
18:R:313:MET:HG2	18:R:344:VAL:HG11	1.93	0.49
18:R:402:ARG:NH1	18:R:402:ARG:HB2	2.27	0.49
18:S:402:ARG:NH1	18:S:402:ARG:HB2	2.27	0.49
17:U:189:VAL:HG11	17:U:415:MET:HE2	1.94	0.49
21:X:201:PHE:HZ	22:Z:192:MET:C	2.21	0.49
21:X:215:LYS:HZ3	22:Z:208:ARG:NE	2.11	0.49
17:Y:189:VAL:HG11	17:Y:415:MET:HE2	1.94	0.49
18:s:145:THR:HG23	18:s:146:GLY:H	1.77	0.49
17:u:35:THR:HG22	17:u:36:TYR:H	1.77	0.49
18:r:145:THR:HG23	18:r:146:GLY:H	1.77	0.49
17:q:35:THR:HG22	17:q:36:TYR:H	1.77	0.49
17:q:103:LYS:HD2	17:q:401:GLU:OE2	2.12	0.49
17:y:35:THR:HG22	17:y:36:TYR:H	1.78	0.49
2:B:789:LYS:NZ	2:B:835:GLN:OE1	2.46	0.49
2:B:876:GLN:CG	2:B:966:LYS:HD2	2.42	0.49
2:B:1634:LEU:HD21	2:B:1641:LEU:HB3	1.94	0.49
2:B:1955:PHE:O	2:B:1958:ILE:HG22	2.12	0.49
2:B:2114:ILE:HG22	2:B:2119:LYS:HG2	1.95	0.49
2:B:3138:MET:HA	2:B:3141:ASN:ND2	2.28	0.49
2:B:4161:ASP:HA	2:B:4164:ASP:HB2	1.95	0.49
3:C:745:LYS:HZ1	3:C:756:ILE:HD13	1.78	0.49
3:C:1054:LYS:O	3:C:1058:ILE:HG12	2.12	0.49
3:C:1101:HIS:O	3:C:1105:ARG:HG2	2.12	0.49
3:C:1235:PRO:HD3	3:C:1252:PHE:CE2	2.47	0.49
3:C:4168:TYR:CE2	3:C:4197:MET:HG3	2.47	0.49
3:C:4255:PRO:HA	3:C:4261:LYS:HZ2	1.77	0.49
3:C:4392:ALA:HA	3:C:4397:ILE:HG22	1.95	0.49
5:E:154:LYS:CD	5:E:484:THR:HB	2.32	0.49
5:E:200:TRP:CZ2	5:E:485:VAL:HG11	2.47	0.49
5:E:240:LEU:O	5:E:254:ILE:HA	2.13	0.49
7:G:124:VAL:HG12	7:G:125:PHE:CE1	2.48	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:34:ASP:HB3	14:N:40:GLU:CB	2.38	0.49
12:L:81:ASN:HD21	13:M:59:ARG:NE	2.11	0.49
17:Q:31:ASP:HB2	17:Q:33:THR:H	1.76	0.49
17:Q:184:ASN:O	17:Q:188:SER:OG	2.30	0.49
17:Q:189:VAL:HG11	17:Q:415:MET:HE2	1.94	0.49
18:R:247:ALA:HB2	18:R:357:TYR:CZ	2.48	0.49
18:S:313:MET:HG2	18:S:344:VAL:HG11	1.93	0.49
17:U:21:TRP:CZ3	17:U:61:PRO:HB3	2.47	0.49
18:W:313:MET:HG2	18:W:344:VAL:HG11	1.93	0.49
22:Z:195:ILE:HG22	22:Z:196:ILE:N	2.27	0.49
17:q:114:ASP:HA	17:q:117:LEU:HB2	1.92	0.49
18:w:402:ARG:NH1	18:w:402:ARG:HB2	2.27	0.49
2:B:13:PHE:O	2:B:17:ARG:HG2	2.13	0.49
2:B:127:GLU:OE1	2:B:127:GLU:N	2.45	0.49
2:B:873:THR:O	2:B:876:GLN:HB2	2.13	0.49
2:B:2050:VAL:O	2:B:2054:LYS:HG2	2.13	0.49
3:C:1314:SER:O	3:C:1318:VAL:N	2.37	0.49
3:C:3866:ILE:HD12	3:C:3877:ILE:HD13	1.94	0.49
3:C:4023:GLN:HA	3:C:4026:VAL:HB	1.94	0.49
4:D:564:ASP:O	4:D:583:LYS:HA	2.13	0.49
5:E:422:SER:OG	5:E:438:ASP:OD1	2.30	0.49
8:H:58:HIS:HB2	8:H:89:PHE:CZ	2.48	0.49
12:L:41:LEU:HA	12:L:44:GLU:HG3	1.94	0.49
12:L:68:LYS:H	12:L:68:LYS:HD2	1.77	0.49
16:P:17:ILE:HD13	16:P:20:LYS:HE3	1.95	0.49
16:P:27:ASP:HB2	16:P:43:PHE:CZ	2.48	0.49
17:Q:137:HIS:ND1	17:Q:138:SER:O	2.45	0.49
18:R:88:HIS:CD2	18:r:283:HIS:HB3	2.48	0.49
18:W:388:PHE:HB3	18:W:425:LEU:HD21	1.95	0.49
21:X:198:GLU:O	21:X:202:GLU:HG3	2.13	0.49
21:X:209:HIS:C	21:X:213:HIS:HD2	2.19	0.49
17:Y:137:HIS:ND1	17:Y:138:SER:O	2.45	0.49
17:Y:198:GLU:HG2	17:Y:266:PHE:CE2	2.47	0.49
22:Z:177:LEU:HG	18:s:308:ARG:NH1	2.28	0.49
18:s:402:ARG:NH1	18:s:402:ARG:HB2	2.27	0.49
17:u:111:GLU:OE1	17:u:112:LEU:HD12	2.13	0.49
18:r:247:ALA:HB2	18:r:357:TYR:CZ	2.48	0.49
18:r:430:LYS:C	18:r:430:LYS:HD2	2.37	0.49
18:w:145:THR:HG23	18:w:146:GLY:H	1.77	0.49
17:y:111:GLU:OE1	17:y:112:LEU:HD12	2.13	0.49
17:y:114:ASP:HA	17:y:117:LEU:HB2	1.92	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:285:ALA:O	2:B:288:ASN:HB2	2.13	0.49
2:B:500:GLU:HG2	2:B:535:ILE:HB	1.95	0.49
2:B:1462:LYS:HE3	2:B:1530:ASN:HD21	1.78	0.49
2:B:1796:HIS:O	2:B:1800:VAL:HG23	2.13	0.49
2:B:2017:ASN:CG	2:B:4046:LEU:HD12	2.38	0.49
2:B:3590:LEU:HD12	2:B:3593:LEU:HD22	1.93	0.49
2:B:3608:GLU:OE2	2:B:3613:PRO:HB3	2.11	0.49
2:B:3946:ILE:O	2:B:3950:LEU:HB2	2.13	0.49
3:C:278:HIS:HB2	3:C:282:ARG:HD3	1.94	0.49
3:C:805:ARG:HB3	5:E:152:LEU:HD12	1.95	0.49
3:C:2238:ALA:O	3:C:2242:GLU:HG2	2.13	0.49
3:C:2788:PHE:CE1	3:C:2853:SER:HB2	2.48	0.49
3:C:3562:LYS:HG3	3:C:3566:MET:HB3	1.95	0.49
3:C:3709:ASP:HA	3:C:3712:LEU:CB	2.43	0.49
3:C:4502:VAL:HG22	3:C:4503:TYR:H	1.78	0.49
5:E:375:ARG:NH2	5:E:381:LYS:HA	2.27	0.49
6:F:94:ASP:OD1	6:F:94:ASP:N	2.46	0.49
17:Q:198:GLU:HG2	17:Q:266:PHE:CE2	2.47	0.49
18:S:388:PHE:HB3	18:S:425:LEU:HD21	1.95	0.49
17:U:137:HIS:ND1	17:U:138:SER:O	2.45	0.49
17:U:198:GLU:HG2	17:U:266:PHE:CE2	2.47	0.49
18:W:80:THR:O	18:W:80:THR:OG1	2.29	0.49
21:X:145:ILE:O	21:X:149:GLU:HG2	2.13	0.49
17:Y:21:TRP:CZ3	17:Y:61:PRO:HB3	2.47	0.49
22:Z:95:MET:O	22:Z:98:GLU:HG3	2.12	0.49
18:s:247:ALA:HB2	18:s:357:TYR:CZ	2.48	0.49
18:s:388:PHE:HB3	18:s:425:LEU:HD21	1.95	0.49
17:u:310:TYR:HB2	17:u:341:PHE:HA	1.93	0.49
18:r:388:PHE:HB3	18:r:425:LEU:HD21	1.95	0.49
18:r:402:ARG:NH1	18:r:402:ARG:HB2	2.27	0.49
18:r:402:ARG:NH2	17:q:425:TYR:OH	2.45	0.49
17:q:111:GLU:OE1	17:q:112:LEU:HD12	2.13	0.49
18:w:247:ALA:HB2	18:w:357:TYR:CZ	2.48	0.49
18:w:388:PHE:HB3	18:w:425:LEU:HD21	1.95	0.49
18:w:402:ARG:NH2	17:y:425:TYR:OH	2.45	0.49
2:B:144:ASP:O	2:B:148:LYS:HG2	2.13	0.49
2:B:788:GLN:HA	2:B:791:HIS:CD2	2.47	0.49
2:B:1392:TRP:HA	2:B:1395:LEU:HD12	1.94	0.49
2:B:1445:LYS:HB3	2:B:1449:GLN:HE21	1.78	0.49
2:B:1449:GLN:O	2:B:1453:LYS:HG2	2.13	0.49
2:B:1455:VAL:HA	2:B:1569:VAL:H	1.78	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1762:LYS:O	2:B:1762:LYS:HD3	2.12	0.49
2:B:2122:PHE:O	2:B:2126:ILE:HG12	2.13	0.49
2:B:3542:SER:OG	2:B:3625:MET:HG3	2.13	0.49
2:B:4196:GLY:HA2	2:B:4205:ARG:NH2	2.28	0.49
3:C:177:ARG:NE	3:C:259:GLN:HA	2.25	0.49
3:C:210:GLU:HG3	3:C:280:ASN:CG	2.37	0.49
3:C:456:ARG:HG2	3:C:502:LEU:HD11	1.95	0.49
3:C:493:ASP:O	3:C:496:LYS:HG2	2.13	0.49
3:C:820:HIS:HB3	3:C:920:GLY:O	2.12	0.49
3:C:1512:VAL:HG22	3:C:1516:LYS:HE2	1.95	0.49
3:C:1789:VAL:HB	3:C:2009:LYS:NZ	2.27	0.49
3:C:1987:PRO:HB3	3:C:4048:LEU:HD21	1.95	0.49
3:C:2541:PHE:HB2	3:C:2548:ALA:HB2	1.95	0.49
3:C:2626:LYS:HD2	3:C:2631:ILE:HD13	1.94	0.49
3:C:2774:LEU:HA	3:C:2778:SER:HB2	1.95	0.49
3:C:3669:ALA:HA	3:C:3672:ASP:HB2	1.95	0.49
3:C:4531:LEU:HD21	3:C:4534:CYS:SG	2.52	0.49
4:D:314:VAL:HB	4:D:330:CYS:SG	2.53	0.49
4:D:600:PRO:HD3	4:D:620:LEU:HD21	1.94	0.49
7:G:77:LEU:HD22	7:G:146:ILE:HB	1.95	0.49
9:I:83:TYR:HE2	9:I:85:TYR:HD1	1.61	0.49
14:N:39:LYS:HA	14:N:113:TYR:CE2	2.47	0.49
16:P:65:LEU:HG	16:P:68:ILE:HD12	1.95	0.49
18:R:27:GLU:OE1	18:R:243:ARG:NH1	2.46	0.49
18:R:388:PHE:HB3	18:R:425:LEU:HD21	1.95	0.49
18:R:430:LYS:HD2	18:R:430:LYS:C	2.37	0.49
18:S:80:THR:O	18:S:80:THR:OG1	2.29	0.49
21:X:204:LEU:HD13	22:Z:199:ALA:N	2.26	0.49
18:s:402:ARG:NH2	17:u:425:TYR:OH	2.45	0.49
17:y:310:TYR:HB2	17:y:341:PHE:HA	1.93	0.49
2:B:211:LEU:HD12	2:B:277:GLU:HB3	1.95	0.49
2:B:436:PHE:HA	2:B:533:ARG:NH1	2.28	0.49
2:B:1052:GLU:O	2:B:1056:HIS:ND1	2.46	0.49
2:B:1280:GLU:HA	2:B:1283:ASN:OD1	2.13	0.49
2:B:1568:SER:O	2:B:1572:ALA:N	2.46	0.49
2:B:1641:LEU:HD11	2:B:1662:MET:HE2	1.94	0.49
2:B:1663:ILE:CD1	2:B:1669:LYS:HD3	2.43	0.49
2:B:1788:ILE:O	2:B:1792:THR:HG23	2.13	0.49
2:B:2846:LEU:HG	2:B:2849:LYS:HE2	1.95	0.49
2:B:2934:LYS:HA	2:B:2938:LYS:HZ1	1.78	0.49
2:B:3673:LYS:HG3	2:B:3740:ILE:HD12	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3813:SER:HA	2:B:3821:LYS:HE3	1.94	0.49
3:C:241:THR:HA	3:C:244:ILE:HD12	1.95	0.49
3:C:572:ILE:O	3:C:576:TYR:HD2	1.96	0.49
3:C:580:LEU:HD13	3:C:641:TYR:CE2	2.48	0.49
3:C:674:LEU:HD21	3:C:769:THR:HG21	1.95	0.49
3:C:1436:ILE:HD11	3:C:1474:ASP:CG	2.37	0.49
3:C:1769:LEU:CB	3:C:2016:GLY:HA2	2.43	0.49
3:C:2027:PHE:CE1	3:C:2078:LEU:HD21	2.48	0.49
3:C:2371:PHE:HD2	3:C:2376:ARG:NE	2.11	0.49
3:C:4343:LEU:HD13	3:C:4453:LEU:HG	1.94	0.49
7:G:72:THR:HB	7:G:150:THR:OG1	2.12	0.49
9:I:83:TYR:CE2	9:I:85:TYR:HD1	2.30	0.49
11:K:29:PRO:HD2	14:N:30:TYR:CD2	2.48	0.49
11:K:90:HIS:HE2	11:K:95:PHE:HB2	1.77	0.49
13:M:5:PRO:HD3	13:M:25:ILE:HD11	1.94	0.49
14:N:52:ASP:HB3	14:N:55:ASN:OD1	2.13	0.49
17:Q:213:ARG:NH1	17:Q:297:LYS:HB2	2.27	0.49
18:S:430:LYS:HD2	18:S:430:LYS:C	2.37	0.49
21:X:187:LEU:O	21:X:191:GLU:HG3	2.13	0.49
4:d:137:ILE:HG23	4:d:138:LYS:HD2	1.94	0.49
18:s:430:LYS:HD2	18:s:430:LYS:C	2.37	0.49
17:u:114:ASP:HA	17:u:117:LEU:HB2	1.93	0.49
1:A:205:ALA:HA	1:A:215:MET:O	2.13	0.48
2:B:872:SER:HB3	2:B:966:LYS:HE3	1.94	0.48
2:B:1587:ALA:O	2:B:1590:LYS:HG3	2.13	0.48
2:B:3810:GLN:OE1	2:B:3959:MET:HG3	2.12	0.48
2:B:3884:ARG:HH22	2:B:3892:LYS:NZ	2.10	0.48
2:B:4017:LEU:HD23	2:B:4047:MET:HB3	1.95	0.48
3:C:21:LEU:HD21	3:C:57:TYR:CD1	2.48	0.48
3:C:257:SER:O	3:C:261:LYS:HG2	2.13	0.48
3:C:276:LYS:O	3:C:278:HIS:N	2.46	0.48
3:C:339:LEU:O	3:C:343:MET:HG3	2.13	0.48
3:C:971:ASN:H	3:C:974:GLN:HE21	1.60	0.48
3:C:2874:GLN:HG3	23:C:4703:ADP:O2A	2.13	0.48
8:H:16:MET:HG3	8:H:74:SER:O	2.13	0.48
11:K:48:LEU:HB2	11:K:49:LYS:NZ	2.28	0.48
17:Q:99:ASN:CB	18:S:254:GLU:HG2	2.43	0.48
18:S:27:GLU:OE1	18:S:243:ARG:NH1	2.46	0.48
18:W:27:GLU:OE1	18:W:243:ARG:NH1	2.46	0.48
1:A:48:ASP:HA	1:A:51:ILE:HG12	1.94	0.48
1:A:225:GLN:HG3	1:A:282:ARG:NH1	2.27	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:126:ASN:HB2	2:B:156:ASN:HD21	1.78	0.48
2:B:351:ILE:HG21	2:B:416:LEU:HD22	1.95	0.48
2:B:447:THR:OG1	2:B:448:LYS:N	2.46	0.48
2:B:467:VAL:O	2:B:471:THR:HG23	2.13	0.48
2:B:1102:LEU:HA	2:B:1105:GLN:HG2	1.95	0.48
2:B:1121:LYS:HD3	2:B:1203:ARG:HG2	1.95	0.48
2:B:2186:PRO:HD3	2:B:2666:ARG:NE	2.28	0.48
2:B:2404:THR:O	2:B:2408:ILE:HG12	2.12	0.48
2:B:2921:THR:HG23	2:B:2924:ASP:N	2.23	0.48
2:B:2945:VAL:HG12	2:B:3017:LYS:HB2	1.94	0.48
3:C:46:SER:HA	3:C:106:LYS:NZ	2.28	0.48
3:C:314:VAL:HA	3:C:317:LEU:HG	1.94	0.48
3:C:805:ARG:O	3:C:809:ASN:ND2	2.46	0.48
3:C:1200:GLU:HA	3:C:1203:HIS:CD2	2.48	0.48
3:C:1362:GLU:CD	3:C:1410:LEU:HB3	2.38	0.48
3:C:1384:LYS:HB3	3:C:1392:ASN:CB	2.41	0.48
3:C:2466:SER:O	3:C:2470:GLU:HG2	2.13	0.48
3:C:2865:LEU:HB3	3:C:2873:LYS:HE3	1.94	0.48
3:C:2876:LEU:HB2	23:C:4703:ADP:H1'	1.95	0.48
3:C:2971:LYS:HD3	3:C:2986:TYR:CE1	2.47	0.48
4:D:496:TYR:CZ	4:D:528:TRP:CD1	2.96	0.48
17:Q:337:ASN:HB2	17:Q:340:TYR:HD2	1.78	0.48
18:R:35:GLN:HG2	18:R:60:LYS:HZ2	1.79	0.48
18:S:35:GLN:HG2	18:S:60:LYS:HZ2	1.79	0.48
17:U:163:ILE:HB	17:U:250:LEU:HD23	1.94	0.48
18:W:430:LYS:C	18:W:430:LYS:HD2	2.37	0.48
21:X:208:ALA:O	21:X:212:THR:HG23	2.13	0.48
17:Y:163:ILE:HB	17:Y:250:LEU:HD23	1.95	0.48
17:u:290:THR:OG1	17:u:329:GLN:NE2	2.46	0.48
17:q:290:THR:OG1	17:q:329:GLN:NE2	2.46	0.48
17:q:337:ASN:HB2	17:q:340:TYR:HD2	1.78	0.48
18:w:62:VAL:HG21	18:w:88:HIS:HB2	1.95	0.48
18:w:430:LYS:HD2	18:w:430:LYS:C	2.37	0.48
17:y:128:ASP:OD1	17:y:129:CYS:N	2.44	0.48
2:B:132:VAL:HG22	3:C:75:ASP:O	2.12	0.48
2:B:137:LEU:HD21	2:B:145:LEU:HD22	1.94	0.48
2:B:228:LEU:HD13	2:B:302:LEU:HD13	1.96	0.48
2:B:1452:SER:HA	2:B:1570:VAL:HG11	1.96	0.48
2:B:2685:LYS:HZ2	2:B:2711:VAL:HG12	1.76	0.48
2:B:3477:TRP:O	2:B:3481:ILE:HG22	2.14	0.48
2:B:4184:ASN:OD1	2:B:4218:GLU:HB3	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:446:ILE:HG23	3:C:450:PHE:HZ	1.78	0.48
3:C:2192:THR:HG23	3:C:2591:LEU:HD22	1.95	0.48
3:C:4260:ILE:HA	3:C:4263:GLN:HG2	1.95	0.48
4:D:307:LEU:HD22	4:D:359:SER:HB2	1.96	0.48
5:E:146:SER:N	5:E:492:ASP:HB3	2.28	0.48
5:E:412:LEU:HA	5:E:429:ARG:NH1	2.28	0.48
5:E:515:LYS:O	5:E:519:LEU:HG	2.13	0.48
7:G:79:VAL:HG23	7:G:144:SER:HB2	1.95	0.48
15:O:68:CYS:SG	15:O:113:PHE:HB2	2.53	0.48
16:P:13:GLN:HA	16:P:16:ASP:OD1	2.13	0.48
17:Q:86:ARG:HG3	17:Q:89:ASN:OD1	2.13	0.48
18:R:80:THR:O	18:R:80:THR:OG1	2.29	0.48
18:R:155:GLU:O	18:R:159:VAL:HG22	2.13	0.48
18:S:155:GLU:O	18:S:159:VAL:HG22	2.13	0.48
19:T:163:LEU:HD22	19:T:166:LYS:HB2	1.94	0.48
17:U:213:ARG:NH1	17:U:297:LYS:HB2	2.28	0.48
18:W:35:GLN:HG2	18:W:60:LYS:HZ2	1.79	0.48
18:W:155:GLU:O	18:W:159:VAL:HG22	2.13	0.48
18:W:319:TYR:CZ	18:W:328:VAL:HG13	2.48	0.48
17:Y:213:ARG:NH1	17:Y:297:LYS:HB2	2.27	0.48
18:s:62:VAL:HG21	18:s:88:HIS:HB2	1.95	0.48
18:s:435:VAL:HA	17:q:391:ARG:NH2	2.28	0.48
17:u:128:ASP:OD1	17:u:129:CYS:N	2.44	0.48
17:u:337:ASN:HB2	17:u:340:TYR:HD2	1.78	0.48
17:y:290:THR:OG1	17:y:329:GLN:NE2	2.46	0.48
17:y:337:ASN:HB2	17:y:340:TYR:HD2	1.78	0.48
2:B:56:ASP:HA	2:B:97:HIS:NE2	2.28	0.48
2:B:105:ALA:HB3	3:C:20:SER:O	2.13	0.48
2:B:120:HIS:CE1	3:C:119:ILE:HD13	2.48	0.48
2:B:725:ILE:HD12	2:B:728:CYS:HB3	1.95	0.48
2:B:729:LEU:HB3	2:B:737:VAL:HG23	1.95	0.48
2:B:1330:TRP:HD1	2:B:1412:PHE:CG	2.30	0.48
2:B:2403:GLN:O	2:B:2407:THR:HG23	2.13	0.48
2:B:3681:ASN:O	2:B:3685:VAL:HG23	2.13	0.48
2:B:3819:LYS:HZ2	2:B:3820:HIS:CD2	2.31	0.48
2:B:3825:LEU:O	2:B:3829:VAL:HG23	2.14	0.48
2:B:4025:ALA:O	2:B:4029:ILE:HG12	2.14	0.48
2:B:4213:PHE:O	2:B:4570:ARG:NH2	2.46	0.48
2:B:4329:ASN:ND2	2:B:4429:ARG:HD3	2.29	0.48
3:C:135:MET:HE2	3:C:165:PHE:CD2	2.49	0.48
3:C:876:ASP:HB2	3:C:877:PRO:HD3	1.94	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1143:ARG:O	3:C:1146:GLN:HB2	2.13	0.48
3:C:2324:GLY:O	3:C:2328:ARG:HG2	2.12	0.48
3:C:3109:GLU:HA	3:C:3112:GLN:OE1	2.12	0.48
3:C:3117:PHE:HD1	3:C:3429:TRP:HE3	1.61	0.48
3:C:4508:LYS:NZ	3:C:4553:LEU:HB3	2.28	0.48
4:D:499:HIS:CE1	4:D:501:LEU:HB2	2.49	0.48
7:G:74:LEU:HD11	7:G:150:THR:HG23	1.95	0.48
13:M:32:LYS:HD3	4:d:97:LYS:HE2	1.96	0.48
17:Q:163:ILE:HB	17:Q:250:LEU:HD23	1.95	0.48
18:R:319:TYR:CZ	18:R:328:VAL:HG13	2.49	0.48
18:S:319:TYR:CZ	18:S:328:VAL:HG13	2.49	0.48
19:T:186:LEU:H	19:T:189:ARG:HD3	1.79	0.48
17:U:86:ARG:HG3	17:U:89:ASN:OD1	2.13	0.48
17:U:337:ASN:HB2	17:U:340:TYR:HD2	1.78	0.48
1:A:154:PHE:CE1	1:A:234:ILE:HD11	2.49	0.48
2:B:1749:LEU:HB3	2:B:1755:THR:H	1.78	0.48
2:B:2107:ARG:HA	2:B:2110:ASN:HB3	1.96	0.48
2:B:3918:ARG:HE	2:B:3922:MET:HE1	1.79	0.48
2:B:4172:TYR:CD2	2:B:4186:LEU:HD13	2.49	0.48
3:C:626:GLU:H	3:C:629:ILE:HG13	1.78	0.48
3:C:663:ILE:HG21	3:C:698:GLU:OE1	2.14	0.48
3:C:663:ILE:HG22	3:C:667:LYS:NZ	2.28	0.48
3:C:1185:ARG:HA	3:C:1188:ASP:OD2	2.13	0.48
3:C:1541:PHE:HA	3:C:1544:ILE:HG22	1.95	0.48
3:C:1845:LEU:H	3:C:1845:LEU:HD23	1.78	0.48
3:C:2359:ASN:HA	3:C:2362:ASN:ND2	2.28	0.48
3:C:2411:LEU:HG	3:C:2415:ASN:HD22	1.79	0.48
3:C:3425:GLU:CB	3:C:3719:THR:HG23	2.42	0.48
3:C:3727:ALA:O	3:C:3731:ILE:HG12	2.14	0.48
3:C:3811:TYR:CE1	3:C:3827:ILE:HG22	2.47	0.48
4:D:516:PHE:HB2	4:D:528:TRP:CE3	2.49	0.48
5:E:195:THR:HG21	5:E:218:VAL:H	1.78	0.48
11:K:29:PRO:HB2	14:N:30:TYR:HB2	1.95	0.48
17:Q:111:GLU:OE1	17:Q:112:LEU:HD12	2.13	0.48
17:Q:128:ASP:OD1	17:Q:129:CYS:N	2.44	0.48
17:Y:86:ARG:HG3	17:Y:89:ASN:OD1	2.13	0.48
17:Y:337:ASN:HB2	17:Y:340:TYR:HD2	1.78	0.48
22:Z:91:ARG:HD3	22:Z:92:ARG:HH11	1.78	0.48
18:s:313:MET:HE3	18:s:382:THR:HB	1.95	0.48
17:u:334:GLN:O	17:u:338:SER:OG	2.21	0.48
18:r:27:GLU:OE1	18:r:243:ARG:NH1	2.46	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:154:PHE:CE1	1:A:207:MET:HE2	2.49	0.48
1:A:154:PHE:C	1:A:156:GLY:H	2.21	0.48
1:A:174:PHE:C	1:A:199:PRO:HA	2.38	0.48
2:B:335:ASN:ND2	2:B:340:LEU:HD13	2.28	0.48
2:B:1343:LYS:HB2	2:B:1373:GLY:HA2	1.95	0.48
2:B:1390:ARG:HH12	2:B:1496:PHE:HD1	1.61	0.48
2:B:2740:ASN:HB2	2:B:2743:GLU:HG3	1.95	0.48
2:B:2863:VAL:HG11	2:B:3059:VAL:HG12	1.94	0.48
2:B:3114:LEU:HD13	2:B:3459:SER:OG	2.13	0.48
2:B:3474:LYS:HD3	2:B:3474:LYS:N	2.29	0.48
2:B:3949:VAL:HG13	2:B:3950:LEU:HD22	1.94	0.48
2:B:4462:LYS:HG3	2:B:4464:TYR:HB2	1.95	0.48
2:B:4503:TRP:HB3	2:B:4519:PHE:CE2	2.49	0.48
3:C:331:THR:HG22	3:C:333:GLN:H	1.78	0.48
3:C:1595:LYS:HE3	3:C:1614:LEU:HD13	1.94	0.48
3:C:1707:PHE:HB2	3:C:1708:GLN:NE2	2.29	0.48
3:C:2027:PHE:HZ	3:C:2074:LEU:HD11	1.78	0.48
3:C:2124:ILE:HD13	3:C:2130:LEU:HD13	1.95	0.48
3:C:2514:LYS:NZ	3:C:2553:LYS:HA	2.28	0.48
3:C:2879:LEU:HB3	23:C:4703:ADP:C2	2.49	0.48
3:C:3790:GLU:OE1	3:C:3802:ILE:HG12	2.14	0.48
3:C:4157:TYR:HE1	3:C:4203:TYR:HB3	1.79	0.48
4:D:629:GLN:OE1	4:D:629:GLN:N	2.45	0.48
16:P:36:CYS:CB	16:P:95:ASN:HD21	2.27	0.48
19:T:44:LEU:O	19:T:48:GLU:HG2	2.13	0.48
17:U:111:GLU:OE1	17:U:112:LEU:HD12	2.13	0.48
17:U:128:ASP:OD1	17:U:129:CYS:N	2.44	0.48
21:X:194:LEU:HB3	22:Z:188:LYS:CG	2.43	0.48
18:r:62:VAL:HG21	18:r:88:HIS:HB2	1.95	0.48
18:r:313:MET:HE3	18:r:382:THR:HB	1.95	0.48
17:q:128:ASP:OD1	17:q:129:CYS:N	2.44	0.48
18:w:313:MET:HE3	18:w:382:THR:HB	1.95	0.48
1:A:282:ARG:C	1:A:284:ASN:H	2.14	0.48
1:A:322:GLU:HG3	1:A:339:GLY:O	2.14	0.48
2:B:248:LEU:HA	2:B:253:VAL:HG11	1.94	0.48
2:B:721:ASN:HB3	2:B:777:PHE:HE2	1.79	0.48
2:B:1324:ASP:O	2:B:1328:LYS:HG3	2.14	0.48
2:B:1487:MET:CE	2:B:1501:VAL:HG21	2.43	0.48
2:B:1815:PHE:HB3	2:B:4185:ASP:N	2.28	0.48
2:B:2690:SER:HA	2:B:2693:ASN:HD22	1.77	0.48
2:B:4045:HIS:H	2:B:4078:ALA:HB1	1.79	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4351:GLN:NE2	2:B:4352:GLU:OE2	2.46	0.48
2:B:4388:ILE:HA	2:B:4391:ILE:HG22	1.95	0.48
2:B:4530:ILE:H	2:B:4530:ILE:HD12	1.79	0.48
3:C:1116:LYS:HG2	3:C:1182:LEU:HD21	1.95	0.48
3:C:1354:LYS:O	3:C:1358:ASP:HB2	2.13	0.48
3:C:2525:ALA:HA	3:C:2566:PHE:CE1	2.49	0.48
3:C:2722:LYS:HG2	3:C:2776:LYS:HZ3	1.77	0.48
3:C:2788:PHE:HE1	3:C:2853:SER:HB2	1.79	0.48
3:C:2991:VAL:O	3:C:2995:PHE:HB2	2.13	0.48
3:C:3828:LEU:HD23	3:C:4300:VAL:HG11	1.95	0.48
3:C:4343:LEU:HA	3:C:4346:LYS:HD2	1.95	0.48
5:E:263:GLU:HG2	5:E:285:ASP:H	1.79	0.48
17:Q:175:VAL:HG21	18:S:332:ILE:HG21	1.96	0.48
17:Q:221:THR:HG23	17:Q:223:GLY:H	1.77	0.48
17:Q:290:THR:OG1	17:Q:329:GLN:NE2	2.46	0.48
17:Q:391:ARG:NH2	18:S:435:VAL:HA	2.27	0.48
17:U:189:VAL:HG11	17:U:415:MET:CE	2.43	0.48
17:U:396:HIS:CD2	18:W:263:PRO:HD3	2.47	0.48
21:X:194:LEU:CD1	22:Z:185:LEU:CB	2.92	0.48
17:Y:189:VAL:HG11	17:Y:415:MET:CE	2.43	0.48
17:Y:221:THR:HG23	17:Y:223:GLY:H	1.77	0.48
18:s:27:GLU:OE1	18:s:243:ARG:NH1	2.46	0.48
18:s:105:ARG:NH1	17:u:251:ARG:HD2	2.29	0.48
17:u:189:VAL:HG11	17:u:415:MET:CE	2.43	0.48
17:y:189:VAL:HG11	17:y:415:MET:CE	2.43	0.48
2:B:524:LEU:HD13	2:B:611:GLN:HG3	1.96	0.48
2:B:790:ILE:HG13	2:B:859:TYR:OH	2.14	0.48
2:B:1447:ILE:HA	2:B:1480:HIS:CE1	2.48	0.48
2:B:1787:ILE:HA	2:B:1790:ILE:HG22	1.95	0.48
2:B:2776:LYS:HE3	2:B:2777:ARG:HH22	1.78	0.48
2:B:3058:ASP:HA	2:B:3061:PHE:CE1	2.48	0.48
2:B:4530:ILE:HG23	2:B:4531:PRO:HD2	1.96	0.48
3:C:29:GLU:OE2	3:C:33:GLN:NE2	2.46	0.48
3:C:464:PHE:O	3:C:468:GLN:HG2	2.14	0.48
3:C:973:ASP:O	3:C:981:ASP:N	2.47	0.48
3:C:1430:ARG:NH1	3:C:1434:ASP:OD1	2.46	0.48
3:C:2873:LYS:N	23:C:4703:ADP:O5'	2.36	0.48
3:C:3701:ASN:O	3:C:3705:ASN:HB2	2.13	0.48
3:C:4418:SER:HG	3:C:4419:TRP:CD1	2.31	0.48
3:C:4450:ASN:O	3:C:4454:ARG:N	2.26	0.48
5:E:177:VAL:HG21	5:E:461:LYS:HZ3	1.77	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:474:LYS:HD2	5:E:494:LEU:HD13	1.94	0.48
6:F:87:TYR:HD1	6:F:100:ILE:HG13	1.79	0.48
10:J:13:PRO:HG2	10:J:79:PHE:HB3	1.96	0.48
15:O:76:THR:HG22	15:O:78:HIS:H	1.79	0.48
17:Q:189:VAL:HG11	17:Q:415:MET:CE	2.43	0.48
18:R:99:ALA:HB3	18:R:144:GLY:HA3	1.95	0.48
17:U:290:THR:OG1	17:U:329:GLN:NE2	2.46	0.48
18:W:62:VAL:HG21	18:W:88:HIS:HB2	1.95	0.48
17:Y:111:GLU:OE1	17:Y:112:LEU:HD12	2.13	0.48
17:Y:128:ASP:OD1	17:Y:129:CYS:N	2.44	0.48
18:r:319:TYR:CZ	18:r:328:VAL:HG13	2.49	0.48
18:w:27:GLU:OE1	18:w:243:ARG:NH1	2.46	0.48
18:w:105:ARG:NH1	17:y:251:ARG:HD2	2.29	0.48
18:w:319:TYR:CZ	18:w:328:VAL:HG13	2.49	0.48
1:A:18:PRO:HB2	1:A:338:PHE:HE2	1.77	0.48
1:A:32:THR:HG22	1:A:34:ILE:HG12	1.96	0.48
1:A:200:ARG:HA	1:A:220:TRP:O	2.13	0.48
2:B:118:LEU:HD12	2:B:162:TYR:CD1	2.49	0.48
2:B:605:LYS:HB3	2:B:611:GLN:HB3	1.96	0.48
2:B:615:GLU:HA	2:B:619:TYR:HD2	1.78	0.48
2:B:1001:GLU:OE2	2:B:1090:ARG:NH1	2.45	0.48
2:B:1436:LYS:NZ	2:B:1492:LYS:HG3	2.28	0.48
2:B:1607:PRO:HG3	2:B:1945:GLN:CG	2.44	0.48
2:B:1858:ASP:HB3	2:B:4172:TYR:HD1	1.79	0.48
2:B:1960:ILE:CG2	2:B:4048:PRO:HD2	2.44	0.48
2:B:2440:GLY:O	2:B:2444:ILE:HG12	2.13	0.48
2:B:2934:LYS:N	2:B:2934:LYS:HD3	2.28	0.48
2:B:3507:TRP:CZ3	2:B:3522:ALA:HB1	2.49	0.48
2:B:3890:LEU:HB3	2:B:3898:PHE:CZ	2.48	0.48
2:B:3922:MET:HB3	2:B:3923:PRO:HD3	1.95	0.48
3:C:51:ASN:HA	3:C:97:ARG:HD2	1.96	0.48
3:C:314:VAL:O	3:C:317:LEU:HG	2.13	0.48
3:C:591:LYS:HE3	3:C:596:LEU:HD22	1.95	0.48
3:C:1108:LEU:HD21	3:C:1180:ARG:HB2	1.95	0.48
3:C:1367:ILE:HG22	3:C:1371:LYS:HG2	1.95	0.48
3:C:2057:THR:HG21	3:C:2081:MET:HE1	1.95	0.48
3:C:2344:CYS:HA	3:C:2403:ASP:OD1	2.13	0.48
3:C:2675:LEU:HA	3:C:2678:LYS:NZ	2.28	0.48
3:C:4108:THR:HG22	3:C:4159:TYR:CE1	2.49	0.48
3:C:4578:CYS:HB2	3:C:4597:LEU:HD23	1.95	0.48
4:D:269:SER:H	4:D:611:VAL:HB	1.79	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:369:ASP:OD1	4:D:371:THR:OG1	2.30	0.48
4:D:485:SER:OG	4:D:486:ARG:N	2.44	0.48
7:G:82:GLU:OE1	7:G:82:GLU:N	2.46	0.48
9:I:37:GLU:O	9:I:41:VAL:HG23	2.14	0.48
9:I:97:MET:HE1	9:I:99:TYR:CE1	2.49	0.48
11:K:28:TRP:HA	11:K:29:PRO:HA	1.68	0.48
16:P:72:HIS:HB2	16:P:74:VAL:HG23	1.96	0.48
18:S:88:HIS:CD2	18:s:283:HIS:HB3	2.49	0.48
18:S:99:ALA:HB3	18:S:144:GLY:HA3	1.95	0.48
19:T:154:GLN:O	19:T:158:GLU:HG2	2.13	0.48
17:U:221:THR:HG23	17:U:223:GLY:H	1.77	0.48
17:Y:290:THR:OG1	17:Y:329:GLN:NE2	2.46	0.48
17:u:86:ARG:HG3	17:u:89:ASN:OD1	2.13	0.48
17:u:377:MET:HB3	17:u:377:MET:HE3	1.73	0.48
18:r:35:GLN:HA	18:r:60:LYS:HE2	1.96	0.48
17:q:189:VAL:HG11	17:q:415:MET:CE	2.43	0.48
18:w:35:GLN:HA	18:w:60:LYS:HE2	1.96	0.48
18:w:105:ARG:CZ	17:y:251:ARG:HD2	2.43	0.48
18:w:331:SER:HA	18:w:334:THR:HG22	1.96	0.48
17:y:86:ARG:HG3	17:y:89:ASN:OD1	2.13	0.48
1:A:192:PRO:CA	1:A:239:TRP:HE1	2.25	0.48
1:A:248:ILE:HG22	1:A:301:TRP:HD1	1.79	0.48
1:A:317:LYS:HG3	1:A:342:ALA:HB1	1.96	0.48
2:B:477:ILE:HB	2:B:484:LYS:HB2	1.96	0.48
2:B:613:ILE:HD11	2:B:619:TYR:HB2	1.96	0.48
2:B:1237:ARG:HA	2:B:1240:PHE:CD2	2.49	0.48
2:B:1355:GLU:HB3	2:B:1359:PHE:CE2	2.48	0.48
2:B:1856:ILE:HG21	2:B:1888:THR:OG1	2.14	0.48
2:B:1889:GLN:CG	2:B:4193:ILE:HG21	2.43	0.48
2:B:1996:ASP:OD1	2:B:1997:THR:N	2.47	0.48
2:B:3061:PHE:HA	2:B:3064:LEU:HD23	1.95	0.48
2:B:3904:GLU:HB2	2:B:3911:LYS:NZ	2.29	0.48
2:B:4304:LYS:H	2:B:4307:ASN:HD22	1.62	0.48
3:C:443:ASP:OD2	3:C:443:ASP:N	2.45	0.48
3:C:751:LEU:HD13	3:C:869:TYR:O	2.14	0.48
3:C:1115:THR:HG21	3:C:1183:LEU:HD23	1.95	0.48
3:C:1173:ASP:HB2	3:C:1177:MET:HE3	1.96	0.48
3:C:2011:LYS:HZ2	3:C:2052:LEU:HD22	1.78	0.48
3:C:2426:GLU:OE1	3:C:2430:ASP:HB2	2.14	0.48
3:C:2640:ILE:HD12	3:C:2673:ILE:HD12	1.96	0.48
3:C:2877:THR:CG2	3:C:2878:ARG:HH11	2.27	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:3538:GLN:O	3:C:3542:ARG:HG2	2.14	0.48
3:C:4170:GLU:O	3:C:4174:THR:HG23	2.13	0.48
3:C:4341:ARG:CZ	3:C:4341:ARG:HA	2.44	0.48
5:E:412:LEU:HD12	5:E:429:ARG:HH12	1.78	0.48
10:J:66:PHE:O	4:d:187:THR:OG1	2.30	0.48
14:N:102:LEU:HG	15:O:89:GLN:HE21	1.79	0.48
15:O:28:LYS:HE2	5:e:33:GLN:N	2.28	0.48
17:Q:98:GLY:O	18:S:257:THR:HG21	2.13	0.48
18:R:35:GLN:HA	18:R:60:LYS:HE2	1.96	0.48
18:S:62:VAL:HG21	18:S:88:HIS:HB2	1.95	0.48
18:W:99:ALA:HB3	18:W:144:GLY:HA3	1.95	0.48
18:W:313:MET:HE3	18:W:382:THR:HB	1.95	0.48
5:e:39:GLN:OE1	5:e:39:GLN:N	2.46	0.48
18:s:35:GLN:HA	18:s:60:LYS:HE2	1.96	0.48
18:s:105:ARG:CZ	17:u:251:ARG:HD2	2.44	0.48
18:s:319:TYR:CZ	18:s:328:VAL:HG13	2.49	0.48
18:w:11:GLN:NE2	17:y:245:GLN:O	2.46	0.48
18:w:319:TYR:HD2	18:w:323:VAL:HG11	1.79	0.48
17:y:225:LEU:O	17:y:229:VAL:HG12	2.14	0.48
17:y:377:MET:HE3	17:y:377:MET:HB3	1.73	0.48
1:A:342:ALA:HB2	1:A:346:LEU:HD11	1.96	0.47
2:B:1126:LYS:NZ	2:B:1138:LYS:HB3	2.28	0.47
2:B:1606:PHE:HB3	2:B:1609:PHE:CD2	2.49	0.47
2:B:2017:ASN:ND2	2:B:4046:LEU:HD12	2.28	0.47
2:B:2148:GLN:CD	2:B:2164:VAL:HG21	2.39	0.47
2:B:2720:LYS:HD2	2:B:2795:TYR:HB3	1.95	0.47
2:B:2903:SER:O	2:B:2906:ILE:HG12	2.14	0.47
2:B:3138:MET:HE1	2:B:3695:LEU:HD23	1.96	0.47
2:B:3567:LEU:O	2:B:3571:ILE:HG22	2.14	0.47
2:B:3765:SER:OG	2:B:3772:GLN:HG3	2.13	0.47
3:C:172:PHE:HA	3:C:175:GLU:HB2	1.95	0.47
3:C:321:GLU:OE2	3:C:321:GLU:N	2.47	0.47
3:C:426:THR:O	3:C:430:VAL:HG23	2.14	0.47
3:C:2252:LYS:HD2	3:C:2264:MET:SD	2.54	0.47
3:C:4057:GLU:OE2	3:C:4086:LEU:N	2.47	0.47
3:C:4126:TRP:HA	3:C:4129:LEU:HB2	1.96	0.47
4:D:546:VAL:HG11	4:D:562:THR:HG23	1.95	0.47
7:G:63:THR:O	7:G:66:ARG:HG2	2.14	0.47
12:L:47:GLN:CD	12:L:48:GLY:H	2.22	0.47
16:P:60:ILE:HB	16:P:77:LEU:HD13	1.96	0.47
18:W:35:GLN:HA	18:W:60:LYS:HE2	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:d:134:LYS:HA	4:d:134:LYS:HE3	1.96	0.47
18:s:319:TYR:HD2	18:s:323:VAL:HG11	1.79	0.47
18:s:331:SER:HA	18:s:334:THR:HG22	1.96	0.47
17:u:225:LEU:O	17:u:229:VAL:HG12	2.14	0.47
18:r:11:GLN:NE2	17:q:245:GLN:O	2.46	0.47
18:r:105:ARG:NH1	17:q:251:ARG:HD2	2.29	0.47
17:q:137:HIS:ND1	17:q:138:SER:O	2.45	0.47
17:q:225:LEU:O	17:q:229:VAL:HG12	2.14	0.47
18:w:19:ALA:HA	18:w:22:GLU:HG2	1.96	0.47
17:y:198:GLU:HG2	17:y:266:PHE:CE2	2.47	0.47
2:B:247:GLN:O	2:B:250:SER:OG	2.24	0.47
2:B:653:GLN:H	2:B:757:TRP:HE1	1.62	0.47
2:B:885:GLN:HA	2:B:894:ASN:HD21	1.79	0.47
2:B:1395:LEU:HG	2:B:1430:ILE:HG21	1.96	0.47
2:B:2017:ASN:HD21	2:B:4046:LEU:HD12	1.80	0.47
2:B:2097:PRO:C	2:B:2100:PRO:HD2	2.40	0.47
2:B:2113:LYS:HB3	2:B:2114:ILE:HD12	1.96	0.47
3:C:507:ASN:O	3:C:511:ASP:HB2	2.14	0.47
3:C:1235:PRO:HB2	3:C:1293:LEU:HD13	1.96	0.47
3:C:2389:TYR:CG	3:C:2433:VAL:HG12	2.49	0.47
3:C:2655:LYS:HB3	3:C:2714:ILE:HD11	1.96	0.47
3:C:2842:PHE:HE2	3:C:2844:ASP:HB2	1.79	0.47
3:C:3799:VAL:HA	3:C:3802:ILE:HG13	1.97	0.47
3:C:4258:GLU:HB3	3:C:4261:LYS:HB2	1.96	0.47
3:C:4350:PRO:O	3:C:4351:ASN:ND2	2.46	0.47
4:D:471:ILE:HG12	4:D:485:SER:HB2	1.96	0.47
13:M:14:GLU:OE2	13:M:18:LYS:HD3	2.13	0.47
17:Q:99:ASN:HD22	18:S:258:ASN:ND2	2.12	0.47
18:R:62:VAL:HG21	18:R:88:HIS:HB2	1.95	0.47
18:R:319:TYR:HD2	18:R:323:VAL:HG11	1.79	0.47
18:S:35:GLN:HA	18:S:60:LYS:HE2	1.96	0.47
18:S:313:MET:HE3	18:S:382:THR:HB	1.95	0.47
18:S:331:SER:HA	18:S:334:THR:HG22	1.96	0.47
19:T:49:LYS:HA	19:T:52:GLU:CD	2.39	0.47
17:U:156:ARG:HD3	17:U:156:ARG:HA	1.41	0.47
18:W:88:HIS:CD2	18:w:283:HIS:HB3	2.49	0.47
21:X:204:LEU:HD13	22:Z:199:ALA:HA	1.87	0.47
18:s:19:ALA:HA	18:s:22:GLU:HG2	1.96	0.47
17:u:198:GLU:HG2	17:u:266:PHE:CE2	2.47	0.47
18:r:19:ALA:HA	18:r:22:GLU:HG2	1.96	0.47
18:r:105:ARG:CZ	17:q:251:ARG:HD2	2.44	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:r:319:TYR:HD2	18:r:323:VAL:HG11	1.79	0.47
18:r:331:SER:HA	18:r:334:THR:HG22	1.96	0.47
17:q:86:ARG:HG3	17:q:89:ASN:OD1	2.13	0.47
17:q:198:GLU:HG2	17:q:266:PHE:CE2	2.47	0.47
18:w:155:GLU:O	18:w:159:VAL:HG22	2.13	0.47
17:y:137:HIS:ND1	17:y:138:SER:O	2.44	0.47
2:B:17:ARG:NH1	3:C:19:ASP:OD2	2.46	0.47
2:B:26:LYS:HE2	2:B:72:THR:HG21	1.96	0.47
2:B:1214:LEU:HG	2:B:1215:GLN:N	2.30	0.47
2:B:1325:TRP:NE1	2:B:1333:ILE:HG23	2.29	0.47
2:B:1523:LYS:HA	2:B:1526:LYS:HD2	1.95	0.47
2:B:2310:ASN:HB3	2:B:2615:TYR:CZ	2.49	0.47
2:B:3805:ARG:HH11	2:B:3806:GLN:HB2	1.79	0.47
3:C:603:GLU:HA	3:C:606:LYS:HE2	1.96	0.47
3:C:1107:LEU:HD13	3:C:1156:VAL:HG22	1.97	0.47
3:C:1440:TRP:O	3:C:1443:MET:HG2	2.14	0.47
3:C:1562:ILE:HB	3:C:1563:PRO:HD3	1.96	0.47
3:C:1931:LEU:HG	3:C:4048:LEU:HB2	1.96	0.47
3:C:1953:LYS:NZ	3:C:1966:LEU:H	2.12	0.47
3:C:2592:ASP:H	3:C:2596:ARG:NH2	2.11	0.47
3:C:2886:ASN:HB3	3:C:2920:VAL:C	2.39	0.47
3:C:3113:GLN:O	3:C:3116:SER:HB3	2.14	0.47
4:D:505:LYS:HD2	4:D:548:ALA:HB3	1.96	0.47
17:Q:156:ARG:HD3	17:Q:156:ARG:HA	1.41	0.47
18:R:11:GLN:HE21	18:R:74:VAL:HG11	1.78	0.47
18:R:331:SER:HA	18:R:334:THR:HG22	1.96	0.47
22:Z:170:GLU:HG2	22:Z:171:ARG:HH21	1.79	0.47
22:Z:205:GLU:HG2	22:Z:208:ARG:CZ	2.45	0.47
18:s:304:LYS:HG3	18:s:390:ARG:NH1	2.30	0.47
17:u:137:HIS:ND1	17:u:138:SER:O	2.45	0.47
18:r:304:LYS:HG3	18:r:390:ARG:NH1	2.30	0.47
18:w:99:ALA:HB3	18:w:144:GLY:HA3	1.95	0.47
18:w:304:LYS:HG3	18:w:390:ARG:NH1	2.30	0.47
1:A:329:ASP:H	1:A:334:ARG:HH11	1.62	0.47
2:B:128:ILE:O	2:B:132:VAL:HG23	2.14	0.47
2:B:157:TYR:H	2:B:180:LYS:HE2	1.80	0.47
2:B:433:ILE:HG23	2:B:463:PHE:CE2	2.47	0.47
2:B:851:LYS:NZ	2:B:854:ASN:OD1	2.47	0.47
2:B:930:ILE:O	2:B:934:ILE:HG12	2.14	0.47
2:B:2709:LYS:HZ3	2:B:2804:ILE:HG12	1.79	0.47
2:B:2802:LYS:NZ	2:B:2803:CYS:SG	2.88	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3133:ILE:HG13	2:B:3440:LEU:HD13	1.96	0.47
2:B:4032:GLY:O	2:B:4036:GLY:N	2.47	0.47
2:B:4420:GLN:NE2	2:B:4421:ARG:HG3	2.29	0.47
3:C:213:PHE:O	3:C:217:ILE:HG12	2.15	0.47
3:C:256:TRP:HA	3:C:259:GLN:HG3	1.97	0.47
3:C:446:ILE:HG23	3:C:450:PHE:CZ	2.48	0.47
3:C:715:ILE:HG12	20:V:221:UNK:O	2.13	0.47
3:C:864:GLN:NE2	5:E:154:LYS:HG3	2.30	0.47
3:C:864:GLN:NE2	5:E:156:GLU:HG3	2.30	0.47
3:C:1263:TYR:OH	3:C:1279:LYS:NZ	2.37	0.47
3:C:1664:GLU:HG2	3:C:1776:VAL:H	1.78	0.47
3:C:2151:HIS:CG	3:C:2252:LYS:HE2	2.49	0.47
3:C:3709:ASP:HA	3:C:3712:LEU:HB3	1.96	0.47
3:C:4120:LYS:NZ	3:C:4127:ARG:HA	2.29	0.47
4:D:329:ILE:HD11	4:D:365:VAL:HG11	1.95	0.47
4:D:523:TRP:HB3	4:D:541:LEU:O	2.14	0.47
4:D:551:ALA:HB1	4:D:553:TYR:HD1	1.79	0.47
5:E:178:ALA:HB2	5:E:199:VAL:HG22	1.95	0.47
5:E:384:LEU:HD22	5:E:425:PHE:CE2	2.49	0.47
5:E:417:TRP:CZ3	5:E:419:PRO:HA	2.49	0.47
6:F:60:LYS:NZ	6:F:64:GLN:OE1	2.47	0.47
14:N:41:LEU:HB3	14:N:45:ARG:CZ	2.44	0.47
15:O:27:ILE:HD13	15:O:32:SER:OG	2.15	0.47
18:R:156:ARG:HA	18:R:159:VAL:HG22	1.96	0.47
18:R:304:LYS:HG3	18:R:390:ARG:NH1	2.30	0.47
18:R:313:MET:HE3	18:R:382:THR:HB	1.95	0.47
18:S:11:GLN:HE21	18:S:74:VAL:HG11	1.78	0.47
18:S:304:LYS:HG3	18:S:390:ARG:NH1	2.30	0.47
18:S:319:TYR:HD2	18:S:323:VAL:HG11	1.79	0.47
18:W:177:VAL:HG23	17:Y:330:MET:HE1	1.95	0.47
18:W:185:TYR:HE2	18:W:403:ALA:O	1.97	0.47
18:W:304:LYS:HG3	18:W:390:ARG:NH1	2.30	0.47
18:W:319:TYR:HD2	18:W:323:VAL:HG11	1.78	0.47
18:W:331:SER:HA	18:W:334:THR:HG22	1.96	0.47
17:Y:156:ARG:HD3	17:Y:156:ARG:HA	1.41	0.47
18:s:96:LYS:HD2	17:u:129:CYS:HB2	1.95	0.47
18:s:155:GLU:O	18:s:159:VAL:HG22	2.13	0.47
18:r:155:GLU:O	18:r:159:VAL:HG22	2.13	0.47
18:r:185:TYR:HE2	18:r:403:ALA:O	1.98	0.47
17:q:341:PHE:CE2	17:q:349:ILE:HD11	2.50	0.47
17:q:377:MET:HE3	17:q:377:MET:HB3	1.73	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:w:11:GLN:HE21	18:w:74:VAL:HG11	1.77	0.47
1:A:344:ASN:ND2	2:B:969:LEU:HB3	2.23	0.47
2:B:156:ASN:HA	2:B:159:ALA:CB	2.44	0.47
2:B:156:ASN:HA	2:B:159:ALA:HB3	1.96	0.47
2:B:191:ASP:O	2:B:195:VAL:HG13	2.14	0.47
2:B:968:CYS:O	2:B:972:ILE:HG12	2.14	0.47
2:B:1330:TRP:HD1	2:B:1412:PHE:CA	2.28	0.47
2:B:1761:GLN:HE22	2:B:1801:VAL:HB	1.79	0.47
2:B:2200:SER:HA	2:B:2203:ASN:HD22	1.79	0.47
2:B:2268:ASP:HB3	2:B:2271:TRP:CD1	2.50	0.47
2:B:2865:PHE:CE1	2:B:2868:ALA:HB2	2.49	0.47
2:B:2980:MET:O	2:B:2984:VAL:HG22	2.14	0.47
2:B:3447:MET:HE3	2:B:3451:SER:HB2	1.96	0.47
2:B:3786:ILE:HD12	2:B:3800:LEU:HD13	1.95	0.47
2:B:3984:PHE:HE2	2:B:3986:ILE:HG13	1.79	0.47
2:B:4450:PHE:O	2:B:4454:ILE:HG13	2.14	0.47
3:C:160:GLU:O	3:C:164:GLU:HG2	2.14	0.47
3:C:688:PHE:O	3:C:692:ILE:HG13	2.15	0.47
3:C:786:GLN:HA	3:C:789:LYS:HG2	1.97	0.47
3:C:951:ILE:HG21	3:C:1074:MET:SD	2.55	0.47
3:C:1488:THR:HG23	3:C:1489:PRO:HD3	1.95	0.47
3:C:2839:LEU:HG	3:C:2876:LEU:HG	1.95	0.47
3:C:3095:TYR:HE1	3:C:3451:THR:HG23	1.79	0.47
3:C:3698:ARG:HD2	3:C:3712:LEU:HD11	1.97	0.47
5:E:351:LYS:HE3	5:E:354:GLU:HA	1.96	0.47
14:N:38:ILE:HD11	14:N:124:GLY:HA3	1.96	0.47
15:O:30:ASP:C	15:O:33:GLN:HE21	2.22	0.47
18:R:102:ASN:HD22	18:R:407:TRP:HB3	1.79	0.47
18:S:185:TYR:HE2	18:S:403:ALA:O	1.98	0.47
18:W:11:GLN:HE21	18:W:74:VAL:HG11	1.78	0.47
5:e:142:VAL:O	5:e:144:ASN:N	2.47	0.47
18:s:11:GLN:NE2	17:u:245:GLN:O	2.46	0.47
17:u:106:TYR:CE2	17:u:403:MET:HE3	2.49	0.47
17:u:341:PHE:CE2	17:u:349:ILE:HD11	2.50	0.47
18:r:96:LYS:HD2	17:q:129:CYS:HB2	1.95	0.47
18:w:185:TYR:HE2	18:w:403:ALA:O	1.98	0.47
1:A:334:ARG:HB3	1:A:353:ASN:HA	1.95	0.47
2:B:528:GLU:OE1	5:E:525:GLN:HA	2.14	0.47
2:B:1057:LEU:HD22	2:B:1091:VAL:HG13	1.96	0.47
2:B:1277:ARG:NH1	2:B:1280:GLU:HB2	2.30	0.47
2:B:1788:ILE:HG23	2:B:2038:ASN:CG	2.40	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1884:TYR:HE1	2:B:1914:LEU:HD21	1.80	0.47
2:B:2059:TYR:HD2	2:B:2063:ARG:HH22	1.62	0.47
2:B:2781:ASP:N	2:B:2781:ASP:OD1	2.47	0.47
2:B:3770:MET:HG3	2:B:4089:LEU:HD23	1.97	0.47
3:C:2853:SER:HA	3:C:2856:ILE:HG22	1.97	0.47
3:C:3477:MET:HG3	3:C:3482:VAL:O	2.15	0.47
3:C:3827:ILE:HD12	3:C:3959:ILE:HG21	1.95	0.47
3:C:4031:ILE:HG22	3:C:4032:MET:HE2	1.96	0.47
3:C:4056:ILE:O	3:C:4060:VAL:HG22	2.14	0.47
4:D:506:VAL:HA	4:D:517:ILE:O	2.14	0.47
8:H:31:ALA:HB2	8:H:44:PHE:CD2	2.50	0.47
10:J:21:MET:HG2	10:J:54:TYR:CZ	2.50	0.47
18:R:135:PHE:CG	18:R:157:LEU:HD21	2.50	0.47
18:R:185:TYR:HE2	18:R:403:ALA:O	1.98	0.47
18:S:156:ARG:HA	18:S:159:VAL:HG22	1.96	0.47
18:W:102:ASN:HD22	18:W:407:TRP:HB3	1.79	0.47
18:W:135:PHE:CG	18:W:157:LEU:HD21	2.50	0.47
18:W:156:ARG:HA	18:W:159:VAL:HG22	1.96	0.47
18:s:11:GLN:HE21	18:s:74:VAL:HG11	1.78	0.47
18:s:99:ALA:HB3	18:s:144:GLY:HA3	1.95	0.47
18:s:185:TYR:HE2	18:s:403:ALA:O	1.98	0.47
17:y:106:TYR:CE2	17:y:403:MET:HE3	2.49	0.47
17:y:341:PHE:CE2	17:y:349:ILE:HD11	2.50	0.47
1:A:157:LYS:HB2	1:A:159:TYR:HE1	1.79	0.47
1:A:196:PRO:N	1:A:197:PRO:HD2	2.30	0.47
2:B:157:TYR:H	2:B:180:LYS:CE	2.27	0.47
2:B:164:LEU:HD22	2:B:165:LEU:HD22	1.96	0.47
2:B:271:PHE:HA	2:B:275:GLN:OE1	2.15	0.47
2:B:368:ILE:HG12	2:B:371:LYS:HB2	1.96	0.47
2:B:469:ALA:O	2:B:473:VAL:HG22	2.14	0.47
2:B:507:ILE:HG22	2:B:543:LYS:HD2	1.96	0.47
2:B:663:LYS:HE3	2:B:666:ASN:HD22	1.79	0.47
2:B:1317:LEU:HD22	16:P:32:TRP:HZ3	1.79	0.47
2:B:1382:LEU:HA	2:B:1387:MET:HG3	1.97	0.47
2:B:1448:GLU:HA	2:B:1504:TRP:CH2	2.49	0.47
2:B:1451:TRP:HH2	2:B:1507:LYS:HZ3	1.63	0.47
2:B:1470:LEU:HD13	2:B:1519:LEU:HD11	1.97	0.47
2:B:1609:PHE:HD1	2:B:1617:LEU:HD22	1.80	0.47
2:B:1749:LEU:HB2	2:B:1754:GLU:N	2.30	0.47
2:B:1928:SER:N	2:B:1931:MET:SD	2.88	0.47
2:B:1968:THR:HG21	2:B:4018:GLY:CA	2.39	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2015:PRO:CB	2:B:4046:LEU:HG	2.45	0.47
2:B:2612:VAL:HB	2:B:2616:GLY:HA2	1.96	0.47
2:B:2719:ASP:O	2:B:2723:LYS:HG2	2.15	0.47
2:B:3053:HIS:CE1	2:B:3057:ILE:HD11	2.49	0.47
2:B:3609:ILE:HB	2:B:3614:ILE:HD12	1.97	0.47
2:B:3814:ARG:HG2	2:B:4094:LYS:O	2.14	0.47
2:B:4088:ILE:O	2:B:4092:SER:HB3	2.14	0.47
2:B:4116:LYS:HA	2:B:4119:ILE:HD12	1.96	0.47
2:B:4352:GLU:HB3	2:B:4356:MET:HE1	1.97	0.47
2:B:4409:ARG:O	2:B:4409:ARG:HG2	2.15	0.47
2:B:4409:ARG:NH2	2:B:4413:SER:OG	2.48	0.47
2:B:4477:LYS:HD3	2:B:4477:LYS:HA	1.69	0.47
3:C:80:PHE:CD2	3:C:90:ASP:HB2	2.49	0.47
3:C:100:ASN:OD1	3:C:101:PRO:HD3	2.14	0.47
3:C:818:LEU:HB3	3:C:962:VAL:CG1	2.44	0.47
3:C:935:VAL:H	3:C:1077:MET:HB2	1.78	0.47
3:C:1336:GLN:O	3:C:1339:ARG:HG2	2.14	0.47
3:C:1386:ILE:HD12	3:C:1419:ILE:HD11	1.96	0.47
3:C:2521:ASN:HD22	3:C:2560:ASP:CG	2.23	0.47
3:C:2727:LEU:O	3:C:2777:TYR:HE2	1.97	0.47
3:C:2967:TYR:CE1	3:C:2971:LYS:HG3	2.50	0.47
3:C:4161:ASP:HB3	3:C:4202:GLN:HB3	1.97	0.47
3:C:4209:ASP:OD1	3:C:4210:ASP:N	2.47	0.47
3:C:4441:SER:HB2	3:C:4445:ARG:HH21	1.79	0.47
3:C:4486:LYS:HB3	3:C:4495:ALA:HB3	1.95	0.47
6:F:60:LYS:HA	6:F:63:ILE:HG22	1.96	0.47
8:H:24:VAL:HG11	8:H:77:ILE:HD13	1.97	0.47
8:H:35:CYS:SG	8:H:40:GLU:HB3	2.55	0.47
9:I:73:PRO:O	9:I:74:THR:HG22	2.15	0.47
11:K:37:LEU:HD22	14:N:36:LYS:HZ3	1.80	0.47
11:K:92:LYS:CG	4:d:82:ALA:H	2.27	0.47
11:K:108:TYR:CZ	5:e:59:HIS:CD2	3.02	0.47
13:M:33:GLN:OE1	13:M:36:GLN:NE2	2.38	0.47
13:M:57:VAL:HG22	13:M:82:LEU:HD22	1.97	0.47
17:Q:140:GLY:HA3	17:Q:181:GLU:OE2	2.15	0.47
17:Q:310:TYR:O	17:Q:342:VAL:HG22	2.15	0.47
18:S:19:ALA:HA	18:S:22:GLU:HG2	1.96	0.47
18:S:102:ASN:HD22	18:S:407:TRP:HB3	1.79	0.47
18:S:135:PHE:CG	18:S:157:LEU:HD21	2.50	0.47
17:U:140:GLY:HA3	17:U:181:GLU:OE2	2.15	0.47
17:U:310:TYR:O	17:U:342:VAL:HG22	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:19:ALA:HA	18:W:22:GLU:HG2	1.96	0.47
21:X:127:GLU:HB3	22:Z:112:ARG:HH12	1.79	0.47
21:X:198:GLU:OE2	22:Z:188:LYS:HE2	2.15	0.47
17:Y:140:GLY:HA3	17:Y:181:GLU:OE2	2.15	0.47
17:Y:310:TYR:O	17:Y:342:VAL:HG22	2.15	0.47
17:Y:341:PHE:CE2	17:Y:349:ILE:HD11	2.50	0.47
4:d:137:ILE:HA	4:d:164:ASN:ND2	2.29	0.47
18:r:11:GLN:HE21	18:r:74:VAL:HG11	1.78	0.47
18:r:99:ALA:HB3	18:r:144:GLY:HA3	1.95	0.47
17:q:106:TYR:CE2	17:q:403:MET:HE3	2.50	0.47
18:w:96:LYS:HD2	17:y:129:CYS:HB2	1.95	0.47
17:y:186:THR:HG21	17:y:385:PHE:CD1	2.50	0.47
2:B:117:LEU:CD1	3:C:146:ILE:HG13	2.43	0.47
2:B:160:GLN:HE22	2:B:243:LEU:HD13	1.80	0.47
2:B:207:ILE:HG23	2:B:211:LEU:HD23	1.97	0.47
2:B:505:SER:O	2:B:509:GLN:HG3	2.15	0.47
2:B:516:THR:HG21	5:E:406:LYS:HB3	1.97	0.47
2:B:656:LEU:HB3	2:B:756:ARG:CZ	2.44	0.47
2:B:969:LEU:O	2:B:972:ILE:HB	2.15	0.47
2:B:3605:LEU:O	2:B:3616:TYR:HB2	2.14	0.47
2:B:4267:HIS:ND1	2:B:4269:ASN:OD1	2.48	0.47
3:C:597:VAL:HG22	4:D:319:TYR:HE2	1.80	0.47
3:C:601:PRO:HG3	3:C:697:ARG:HB3	1.96	0.47
3:C:896:GLN:O	3:C:900:ASN:HB2	2.15	0.47
3:C:940:ASP:O	3:C:941:LYS:HE2	2.15	0.47
3:C:981:ASP:OD1	3:C:982:LYS:N	2.48	0.47
3:C:1187:TRP:O	3:C:1190:LEU:HB3	2.15	0.47
3:C:1828:THR:HG21	3:C:4196:TYR:HD2	1.79	0.47
3:C:2113:TYR:O	3:C:2117:GLU:HG2	2.14	0.47
3:C:2393:TRP:CE2	3:C:2472:LEU:HD11	2.50	0.47
3:C:2402:GLN:HG2	3:C:2406:ARG:NH2	2.30	0.47
3:C:2678:LYS:HZ2	3:C:2761:VAL:HB	1.79	0.47
3:C:2807:ILE:HG23	3:C:2857:ARG:NH1	2.30	0.47
3:C:3737:THR:HG23	3:C:3738:LYS:HD3	1.97	0.47
5:E:407:TYR:CD2	5:E:410:SER:HB3	2.49	0.47
11:K:35:ASP:OD1	11:K:36:ILE:N	2.48	0.47
14:N:35:GLN:O	14:N:38:ILE:HG22	2.15	0.47
14:N:101:CYS:SG	4:d:75:LEU:HD13	2.54	0.47
15:O:20:SER:HA	15:O:53:TYR:CE2	2.49	0.47
17:Q:99:ASN:HD22	18:S:258:ASN:HD21	1.62	0.47
17:Q:341:PHE:CE2	17:Q:349:ILE:HD11	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:U:341:PHE:CE2	17:U:349:ILE:HD11	2.50	0.47
17:Y:261:PRO:O	17:Y:264:HIS:ND1	2.48	0.47
17:u:186:THR:HG21	17:u:385:PHE:CD1	2.50	0.47
1:A:153:PHE:O	1:A:207:MET:HE1	2.14	0.47
2:B:26:LYS:HB2	2:B:29:ILE:HG13	1.95	0.47
2:B:99:LEU:HD12	2:B:99:LEU:HA	1.75	0.47
2:B:136:PRO:HG3	3:C:78:LEU:HD13	1.96	0.47
2:B:279:LYS:HB3	2:B:286:ASN:HB2	1.97	0.47
2:B:1047:LEU:HG	2:B:1047:LEU:O	2.14	0.47
2:B:1172:LYS:HA	2:B:1177:PRO:HD3	1.96	0.47
2:B:1623:ASN:HD21	2:B:1626:ASN:CG	2.22	0.47
2:B:3469:ARG:CZ	2:B:3517:MET:HE1	2.45	0.47
2:B:3975:GLU:OE1	2:B:4004:LYS:NZ	2.39	0.47
3:C:420:LYS:HD3	3:C:421:LYS:HZ2	1.79	0.47
3:C:822:PRO:HG3	3:C:920:GLY:HA3	1.97	0.47
3:C:854:GLU:HA	3:C:857:ARG:HB2	1.97	0.47
3:C:1096:TYR:HA	3:C:1099:ASP:OD2	2.15	0.47
3:C:1326:MET:HE1	3:C:1401:ILE:CG1	2.45	0.47
3:C:1974:ILE:HG13	3:C:1974:ILE:O	2.14	0.47
3:C:2686:THR:O	3:C:2689:LYS:N	2.48	0.47
3:C:2824:LEU:HD11	3:C:2883:ILE:HG22	1.97	0.47
3:C:2928:GLU:N	3:C:2928:GLU:OE1	2.48	0.47
3:C:3701:ASN:C	3:C:3705:ASN:HB2	2.40	0.47
3:C:3960:SER:HB2	3:C:3965:LYS:HG3	1.96	0.47
4:D:401:GLN:O	4:D:416:SER:HA	2.15	0.47
4:D:523:TRP:HD1	4:D:545:VAL:HG23	1.80	0.47
4:D:550:TRP:CZ3	4:D:556:THR:HB	2.49	0.47
5:E:506:ASN:HA	5:E:509:PHE:CD2	2.50	0.47
7:G:76:TYR:CE2	7:G:78:ILE:HB	2.50	0.47
7:G:99:ILE:HG23	7:G:103:ILE:HG13	1.97	0.47
8:H:50:ARG:HH22	8:H:56:THR:HG23	1.78	0.47
9:I:26:ASN:HD21	9:I:98:PHE:HB2	1.79	0.47
12:L:74:TRP:CE2	12:L:109:LYS:HD3	2.50	0.47
17:Q:76:VAL:HG22	17:Q:77:ARG:NH2	2.30	0.47
17:Q:261:PRO:O	17:Q:264:HIS:ND1	2.48	0.47
19:T:51:SER:O	19:T:55:ILE:HG12	2.14	0.47
17:U:261:PRO:O	17:U:264:HIS:ND1	2.48	0.47
17:Y:76:VAL:HG22	17:Y:77:ARG:NH2	2.30	0.47
18:s:102:ASN:HD22	18:s:407:TRP:HB3	1.79	0.47
18:s:253:THR:HG23	17:q:98:GLY:HA3	1.97	0.47
17:u:20:PHE:HA	17:u:230:SER:HB2	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:u:186:THR:HA	17:u:189:VAL:HG12	1.96	0.47
18:r:156:ARG:HA	18:r:159:VAL:HG22	1.96	0.47
17:q:186:THR:HG21	17:q:385:PHE:CD1	2.50	0.47
17:y:186:THR:HA	17:y:189:VAL:HG12	1.96	0.47
2:B:473:VAL:O	2:B:484:LYS:HD2	2.15	0.47
2:B:706:GLU:O	2:B:710:THR:HG23	2.14	0.47
2:B:786:SER:O	2:B:790:ILE:HG12	2.15	0.47
2:B:801:ILE:HD13	2:B:874:ALA:C	2.40	0.47
2:B:1151:LYS:HG3	2:B:1208:LYS:HE3	1.96	0.47
2:B:2178:HIS:CE1	2:B:2297:PRO:HA	2.50	0.47
2:B:4353:ILE:HG13	2:B:4429:ARG:HH11	1.79	0.47
3:C:25:ASP:HB2	3:C:28:VAL:HG23	1.97	0.47
3:C:864:GLN:HA	5:E:156:GLU:OE2	2.15	0.47
3:C:874:HIS:CD2	3:C:881:GLU:HG3	2.50	0.47
3:C:1127:LYS:HZ1	3:C:1265:ILE:HD13	1.80	0.47
3:C:1143:ARG:HG2	3:C:1190:LEU:HD11	1.96	0.47
3:C:1145:GLU:O	3:C:1148:GLU:N	2.49	0.47
3:C:1209:LEU:O	3:C:1213:LYS:HG2	2.14	0.47
3:C:1314:SER:O	3:C:1318:VAL:HG12	2.15	0.47
3:C:1581:LEU:O	3:C:1585:GLN:NE2	2.44	0.47
3:C:1624:GLN:NE2	3:C:1639:PHE:HE2	2.13	0.47
3:C:1899:SER:HG	3:C:1901:GLN:HE21	1.62	0.47
3:C:1904:TYR:HB3	3:C:1936:VAL:HG11	1.97	0.47
3:C:1925:GLU:OE2	23:C:4701:ADP:H5'2	2.15	0.47
3:C:2337:ILE:O	3:C:2337:ILE:HG12	2.15	0.47
3:C:2374:THR:OG1	3:C:2376:ARG:NE	2.48	0.47
3:C:2448:TRP:HB2	3:C:2650:HIS:HE2	1.81	0.47
3:C:2751:LYS:O	3:C:2754:VAL:HG22	2.15	0.47
3:C:3013:ARG:HA	3:C:3013:ARG:HD3	1.70	0.47
3:C:3927:SER:HA	3:C:3930:GLN:HG2	1.97	0.47
4:D:272:ASP:H	4:D:294:GLN:N	2.13	0.47
4:D:473:LEU:HD22	4:D:528:TRP:CZ3	2.50	0.47
5:E:223:TYR:CE2	5:E:231:ILE:HD12	2.50	0.47
10:J:15:ASN:HD21	10:J:22:LYS:HB2	1.80	0.47
16:P:9:THR:HA	16:P:65:LEU:HD12	1.97	0.47
16:P:25:LEU:HD11	16:P:104:ALA:HA	1.97	0.47
16:P:47:LYS:HD3	16:P:55:ILE:CG1	2.45	0.47
17:Q:186:THR:HA	17:Q:189:VAL:HG12	1.96	0.47
17:Q:225:LEU:O	17:Q:229:VAL:HG12	2.14	0.47
18:R:19:ALA:HA	18:R:22:GLU:HG2	1.97	0.47
17:U:76:VAL:HG22	17:U:77:ARG:NH2	2.30	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:U:397:TRP:NE1	18:W:257:THR:HA	2.29	0.47
17:Y:225:LEU:O	17:Y:229:VAL:HG12	2.14	0.47
18:s:156:ARG:HA	18:s:159:VAL:HG22	1.96	0.47
18:w:102:ASN:HD22	18:w:407:TRP:HB3	1.79	0.47
17:y:20:PHE:HA	17:y:230:SER:HB2	1.97	0.47
1:A:146:ARG:HH22	1:A:176:ASP:CG	2.22	0.46
2:B:903:ARG:NE	2:B:1079:ASN:HB3	2.31	0.46
2:B:1432:ASP:HA	2:B:1435:GLN:HE21	1.79	0.46
2:B:2445:GLY:HA2	2:B:2461:PHE:HZ	1.81	0.46
2:B:2807:PHE:N	2:B:2808:PRO:HD3	2.30	0.46
2:B:4119:ILE:HG23	2:B:4127:LYS:HE3	1.97	0.46
2:B:4431:ASP:HB3	2:B:4434:SER:H	1.79	0.46
3:C:535:ASN:CB	3:C:568:ARG:HH12	2.28	0.46
3:C:2057:THR:O	3:C:2060:ASN:ND2	2.48	0.46
3:C:2449:VAL:HG13	3:C:2450:PRO:O	2.15	0.46
3:C:3663:ILE:HG22	3:C:3671:GLU:HG3	1.96	0.46
3:C:4104:GLY:O	3:C:4108:THR:HG23	2.15	0.46
5:E:164:VAL:N	5:E:483:GLY:HA2	2.30	0.46
12:L:58:VAL:HG23	12:L:76:CYS:SG	2.55	0.46
16:P:60:ILE:HA	16:P:65:LEU:HD22	1.97	0.46
17:Q:20:PHE:HA	17:Q:230:SER:HB2	1.97	0.46
18:R:26:LEU:HD12	18:R:363:VAL:HG23	1.97	0.46
17:U:114:ASP:OD2	22:Z:145:LYS:CB	2.63	0.46
17:U:186:THR:HA	17:U:189:VAL:HG12	1.96	0.46
17:U:225:LEU:O	17:U:229:VAL:HG12	2.14	0.46
18:W:26:LEU:HD12	18:W:363:VAL:HG23	1.97	0.46
21:X:123:ASP:HA	21:X:126:ASN:OD1	2.14	0.46
4:d:122:GLU:HA	4:d:125:THR:HG22	1.97	0.46
18:s:23:LEU:HD12	18:s:23:LEU:HA	1.73	0.46
17:u:261:PRO:O	17:u:264:HIS:ND1	2.48	0.46
17:u:276:ARG:HA	17:u:279:GLN:HB2	1.96	0.46
18:r:102:ASN:HD22	18:r:407:TRP:HB3	1.79	0.46
17:q:20:PHE:HA	17:q:230:SER:HB2	1.97	0.46
17:q:182:PRO:O	17:q:186:THR:HG22	2.15	0.46
17:q:261:PRO:O	17:q:264:HIS:ND1	2.48	0.46
17:y:261:PRO:O	17:y:264:HIS:ND1	2.48	0.46
1:A:10:LEU:HD21	1:A:329:ASP:OD2	2.16	0.46
1:A:95:MET:O	1:A:113:ILE:HA	2.14	0.46
2:B:137:LEU:HD21	2:B:145:LEU:HD13	1.97	0.46
2:B:516:THR:HG21	5:E:406:LYS:N	2.28	0.46
2:B:593:LYS:HA	2:B:596:ARG:HG2	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:917:ILE:HG12	2:B:983:CYS:HB3	1.97	0.46
2:B:979:ILE:HG21	2:B:1075:TRP:CD1	2.51	0.46
2:B:1152:ASP:O	2:B:1155:PRO:HD2	2.14	0.46
2:B:1320:PHE:HA	2:B:1323:ASN:HB2	1.97	0.46
2:B:1511:VAL:HG21	2:B:1573:CYS:SG	2.55	0.46
3:C:568:ARG:HD2	3:C:572:ILE:HG13	1.97	0.46
3:C:869:TYR:O	3:C:869:TYR:CG	2.68	0.46
3:C:937:LEU:HD12	3:C:940:ASP:O	2.15	0.46
3:C:1542:GLN:O	3:C:1546:LYS:HE2	2.15	0.46
3:C:2391:MET:HE2	3:C:2391:MET:HB3	1.69	0.46
3:C:2567:VAL:HA	3:C:2573:GLN:HB3	1.97	0.46
3:C:3010:GLU:O	3:C:3014:LYS:HG3	2.14	0.46
3:C:3863:GLN:OE1	3:C:3864:LYS:N	2.48	0.46
3:C:4120:LYS:NZ	3:C:4130:ILE:HD12	2.30	0.46
3:C:4220:GLY:O	3:C:4224:LEU:HB2	2.14	0.46
3:C:4285:ASP:O	3:C:4289:ARG:HG2	2.15	0.46
5:E:280:VAL:HG13	5:E:347:LYS:HZ1	1.81	0.46
8:H:59:CYS:HB2	8:H:88:LEU:HD13	1.96	0.46
11:K:92:LYS:HG3	4:d:81:GLN:N	2.30	0.46
12:L:95:PHE:HD1	12:L:106:LEU:HB2	1.78	0.46
17:Q:135:ILE:HG23	17:Q:137:HIS:HD2	1.80	0.46
17:Q:394:PHE:HE2	18:S:347:CYS:HG	1.59	0.46
18:S:26:LEU:HD12	18:S:363:VAL:HG23	1.97	0.46
18:S:177:VAL:HG23	17:U:330:MET:HE1	1.96	0.46
17:U:98:GLY:O	18:W:257:THR:HG21	2.15	0.46
17:U:106:TYR:CE2	17:U:403:MET:HE3	2.49	0.46
21:X:201:PHE:CZ	22:Z:192:MET:HA	2.50	0.46
17:Y:106:TYR:CE2	17:Y:403:MET:HE3	2.49	0.46
17:Y:186:THR:HA	17:Y:189:VAL:HG12	1.96	0.46
17:u:310:TYR:O	17:u:342:VAL:HG22	2.15	0.46
17:u:396:HIS:CD2	18:w:263:PRO:HD3	2.51	0.46
18:r:188:ILE:O	18:r:191:THR:OG1	2.31	0.46
17:y:276:ARG:HA	17:y:279:GLN:HB2	1.97	0.46
17:y:310:TYR:O	17:y:342:VAL:HG22	2.15	0.46
1:A:277:GLU:HG2	1:A:280:GLY:H	1.79	0.46
2:B:134:GLN:HB2	3:C:79:PHE:HZ	1.81	0.46
2:B:156:ASN:C	2:B:159:ALA:H	2.23	0.46
2:B:248:LEU:HD23	2:B:280:LYS:HZ3	1.80	0.46
2:B:613:ILE:HD12	2:B:616:ARG:HB2	1.96	0.46
2:B:697:THR:O	2:B:701:ILE:HG13	2.15	0.46
2:B:836:ILE:HA	2:B:839:LEU:HG	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2152:LYS:C	2:B:2153:LYS:HD2	2.40	0.46
2:B:2505:PRO:HG2	2:B:2507:PHE:O	2.16	0.46
2:B:2552:LEU:HD21	2:B:2562:HIS:CE1	2.50	0.46
2:B:2785:ALA:HB3	2:B:2788:HIS:CD2	2.50	0.46
2:B:3789:THR:HG23	2:B:3799:THR:HG22	1.98	0.46
2:B:3985:PHE:HD1	2:B:4095:LEU:HD11	1.80	0.46
2:B:4017:LEU:O	2:B:4043:ASN:ND2	2.48	0.46
2:B:4045:HIS:ND1	2:B:4079:GLU:HG3	2.30	0.46
3:C:459:LYS:HD3	3:C:510:PHE:CG	2.50	0.46
3:C:743:LYS:HZ2	3:C:795:ILE:HD13	1.80	0.46
3:C:1111:LEU:HG	3:C:1153:PHE:CD1	2.51	0.46
3:C:1366:LEU:CD2	3:C:1409:LEU:HD22	2.45	0.46
3:C:1734:LYS:HD3	3:C:1757:ILE:HD11	1.95	0.46
3:C:2322:LYS:HA	3:C:2325:ASN:ND2	2.30	0.46
3:C:2460:LEU:HD13	3:C:2505:LEU:HG	1.96	0.46
3:C:3071:ASN:ND2	3:C:3087:VAL:HG11	2.30	0.46
3:C:3949:ASP:OD1	3:C:3950:ARG:N	2.48	0.46
5:E:189:MET:HG3	5:E:190:PRO:HD2	1.97	0.46
17:Q:182:PRO:O	17:Q:186:THR:HG22	2.15	0.46
17:U:20:PHE:HA	17:U:230:SER:HB2	1.98	0.46
17:U:135:ILE:HG23	17:U:137:HIS:HD2	1.80	0.46
17:U:182:PRO:O	17:U:186:THR:HG22	2.15	0.46
18:W:395:PHE:CE1	18:W:422:ARG:HB2	2.50	0.46
17:Y:20:PHE:HA	17:Y:230:SER:HB2	1.97	0.46
18:s:26:LEU:HD12	18:s:363:VAL:HG23	1.97	0.46
18:s:188:ILE:O	18:s:191:THR:OG1	2.31	0.46
17:u:182:PRO:O	17:u:186:THR:HG22	2.15	0.46
18:r:407:TRP:CG	17:q:255:VAL:HG22	2.49	0.46
17:q:140:GLY:HA3	17:q:181:GLU:OE2	2.15	0.46
17:q:186:THR:HA	17:q:189:VAL:HG12	1.96	0.46
17:q:276:ARG:HA	17:q:279:GLN:HB2	1.97	0.46
17:q:310:TYR:O	17:q:342:VAL:HG22	2.15	0.46
18:w:23:LEU:HD12	18:w:23:LEU:HA	1.73	0.46
18:w:156:ARG:HA	18:w:159:VAL:HG22	1.96	0.46
18:w:188:ILE:O	18:w:191:THR:OG1	2.31	0.46
17:y:182:PRO:O	17:y:186:THR:HG22	2.15	0.46
2:B:91:VAL:HG13	2:B:108:VAL:HB	1.98	0.46
2:B:292:LEU:O	2:B:295:LEU:HG	2.16	0.46
2:B:633:ILE:HA	2:B:636:TYR:HD2	1.81	0.46
2:B:1356:ILE:HA	2:B:1359:PHE:HD2	1.79	0.46
2:B:1552:VAL:HG22	2:B:1584:TRP:HZ3	1.78	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1643:THR:OG1	2:B:1644:LEU:N	2.49	0.46
2:B:2142:GLU:HG2	2:B:2143:LEU:N	2.29	0.46
2:B:2606:ASP:OD2	2:B:2606:ASP:N	2.43	0.46
2:B:2888:LEU:O	2:B:3021:CYS:HA	2.16	0.46
2:B:3791:VAL:CG2	2:B:3796:ARG:HA	2.46	0.46
2:B:4353:ILE:HG13	2:B:4429:ARG:HD2	1.97	0.46
2:B:4386:MET:HE1	2:B:4397:PRO:HG3	1.98	0.46
2:B:4525:THR:HG22	2:B:4526:TYR:H	1.81	0.46
3:C:434:PRO:O	3:C:438:THR:N	2.49	0.46
3:C:1115:THR:HB	3:C:1186:ASN:HD22	1.80	0.46
3:C:1383:ILE:HG13	3:C:1419:ILE:HG21	1.96	0.46
3:C:1858:LEU:O	3:C:1862:MET:HG2	2.15	0.46
4:D:463:ASP:OD1	4:D:464:PHE:N	2.49	0.46
5:E:455:SER:O	5:E:456:PRO:C	2.58	0.46
10:J:20:SER:O	10:J:54:TYR:OH	2.28	0.46
14:N:31:PRO:HB3	14:N:110:TYR:O	2.16	0.46
14:N:112:SER:HB2	14:N:125:ILE:HG22	1.97	0.46
17:Q:106:TYR:CE2	17:Q:403:MET:HE3	2.49	0.46
17:Q:377:MET:O	17:Q:381:VAL:HG23	2.16	0.46
18:R:395:PHE:CE1	18:R:422:ARG:HB2	2.50	0.46
18:S:395:PHE:CE1	18:S:422:ARG:HB2	2.50	0.46
19:T:103:SER:OG	19:T:107:LYS:HE3	2.15	0.46
17:U:276:ARG:HA	17:U:279:GLN:HB2	1.97	0.46
21:X:108:ARG:NE	17:y:335:ASN:O	2.48	0.46
17:Y:377:MET:O	17:Y:381:VAL:HG23	2.15	0.46
17:u:70:PRO:CG	18:w:1:MET:HE2	2.36	0.46
17:u:140:GLY:HA3	17:u:181:GLU:OE2	2.15	0.46
18:r:26:LEU:HD12	18:r:363:VAL:HG23	1.97	0.46
18:w:26:LEU:HD12	18:w:363:VAL:HG23	1.97	0.46
17:y:140:GLY:HA3	17:y:181:GLU:OE2	2.15	0.46
2:B:443:GLU:O	2:B:444:LEU:HD23	2.16	0.46
2:B:913:PHE:HB2	2:B:916:GLU:HA	1.97	0.46
2:B:1106:PHE:CE1	2:B:1167:MET:HB3	2.51	0.46
2:B:1955:PHE:HE2	2:B:2003:THR:H	1.64	0.46
2:B:2271:TRP:O	2:B:2274:SER:OG	2.31	0.46
2:B:2632:SER:HA	2:B:2644:PHE:HA	1.97	0.46
2:B:2782:ARG:NH2	2:B:2783:PHE:HA	2.30	0.46
2:B:3890:LEU:HB3	2:B:3898:PHE:HZ	1.81	0.46
2:B:4247:LYS:HE3	2:B:4251:HIS:HE1	1.80	0.46
3:C:177:ARG:HH21	3:C:259:GLN:HG2	1.80	0.46
3:C:420:LYS:HB3	3:C:421:LYS:HZ2	1.79	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2408:HIS:HE1	3:C:2423:LYS:HE3	1.80	0.46
3:C:3059:LEU:O	3:C:3063:MET:HG2	2.15	0.46
3:C:3694:ASN:HA	3:C:3697:GLU:HG2	1.98	0.46
3:C:4113:ILE:C	3:C:4114:THR:HG1	2.22	0.46
3:C:4113:ILE:HG22	3:C:4117:PHE:CE2	2.50	0.46
3:C:4478:LYS:O	3:C:4482:THR:HG23	2.16	0.46
5:E:151:MET:HG3	5:E:487:ILE:HG23	1.97	0.46
11:K:30:PRO:HG3	14:N:33:LYS:HZ3	1.80	0.46
11:K:90:HIS:O	4:d:84:LYS:NZ	2.38	0.46
17:Q:12:CYS:SG	17:Q:13:GLY:N	2.88	0.46
18:S:105:ARG:CZ	17:U:251:ARG:HD2	2.46	0.46
17:U:377:MET:O	17:U:381:VAL:HG23	2.16	0.46
21:X:112:LYS:NZ	21:X:116:SER:HB3	2.30	0.46
17:Y:135:ILE:HG23	17:Y:137:HIS:HD2	1.80	0.46
17:Y:182:PRO:O	17:Y:186:THR:HG22	2.15	0.46
17:Y:276:ARG:HA	17:Y:279:GLN:HB2	1.97	0.46
22:Z:181:LEU:O	22:Z:182:GLU:C	2.57	0.46
4:d:117:TRP:CZ2	5:e:41:VAL:HG12	2.49	0.46
4:d:134:LYS:O	4:d:138:LYS:HG2	2.15	0.46
18:w:124:LYS:O	18:w:124:LYS:HD3	2.16	0.46
2:B:309:ASP:HA	2:B:358:PHE:HE2	1.81	0.46
2:B:521:PHE:HA	2:B:524:LEU:HB2	1.97	0.46
2:B:856:TRP:O	2:B:860:ASN:ND2	2.48	0.46
2:B:1054:ILE:HD11	2:B:1098:TYR:HB2	1.96	0.46
2:B:1057:LEU:O	2:B:1091:VAL:HG11	2.16	0.46
2:B:1783:GLU:HG3	2:B:1786:LYS:HB3	1.97	0.46
2:B:2314:ALA:O	2:B:2318:ARG:HG2	2.14	0.46
2:B:2345:ASN:ND2	2:B:2347:LEU:O	2.48	0.46
2:B:2414:ILE:HG13	2:B:2417:LEU:HD12	1.98	0.46
2:B:2782:ARG:HH21	2:B:2783:PHE:HD1	1.62	0.46
3:C:535:ASN:O	3:C:545:SER:HA	2.15	0.46
3:C:789:LYS:HE3	3:C:789:LYS:HB3	1.78	0.46
3:C:1902:HIS:O	3:C:1903:ARG:NE	2.49	0.46
3:C:1979:GLY:O	3:C:1980:TYR:HD1	1.99	0.46
3:C:2600:ARG:HH12	3:C:2602:MET:HE1	1.81	0.46
3:C:3117:PHE:HA	3:C:3429:TRP:CZ3	2.51	0.46
3:C:3748:ARG:HG2	3:C:3749:PRO:HD3	1.97	0.46
6:F:67:LEU:HG	7:G:99:ILE:HG12	1.97	0.46
6:F:85:TYR:CE2	6:F:87:TYR:HB2	2.50	0.46
11:K:89:VAL:HB	4:d:84:LYS:CG	2.45	0.46
11:K:92:LYS:CE	4:d:84:LYS:HE3	2.46	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Q:276:ARG:HA	17:Q:279:GLN:HB2	1.96	0.46
17:Q:330:MET:HA	17:Q:333:VAL:CG1	2.45	0.46
17:U:12:CYS:SG	17:U:13:GLY:N	2.88	0.46
21:X:180:ARG:HA	21:X:183:TYR:HD2	1.80	0.46
17:Y:12:CYS:SG	17:Y:13:GLY:N	2.88	0.46
4:d:121:ASN:OD1	4:d:122:GLU:HG2	2.16	0.46
18:s:124:LYS:O	18:s:124:LYS:HD3	2.16	0.46
18:w:407:TRP:CG	17:y:255:VAL:HG22	2.50	0.46
1:A:345:TRP:O	1:A:346:LEU:HD23	2.16	0.46
2:B:159:ALA:O	2:B:162:TYR:HB3	2.16	0.46
2:B:439:LEU:CD2	2:B:530:LEU:HA	2.45	0.46
2:B:1138:LYS:HE3	2:B:1145:LYS:CD	2.45	0.46
2:B:1218:GLU:O	2:B:1222:ILE:HG13	2.15	0.46
2:B:1311:MET:HG2	2:B:1352:LEU:HD13	1.97	0.46
2:B:1322:TYR:HE1	2:B:1342:ASN:CG	2.23	0.46
2:B:1445:LYS:NZ	2:B:1500:ARG:HH22	2.13	0.46
2:B:1551:GLY:O	2:B:1555:GLU:HG2	2.16	0.46
2:B:1668:GLU:OE1	2:B:1867:TYR:OH	2.20	0.46
2:B:1769:GLU:O	2:B:1772:ILE:HG22	2.15	0.46
2:B:2158:VAL:HG21	2:B:2333:PRO:HB2	1.98	0.46
2:B:2414:ILE:HA	2:B:2417:LEU:HG	1.96	0.46
2:B:4331:GLU:OE1	2:B:4339:ALA:HA	2.16	0.46
3:C:477:ASN:ND2	3:C:528:LEU:HA	2.30	0.46
3:C:814:SER:CA	3:C:901:SER:HB3	2.45	0.46
3:C:871:LEU:HD12	3:C:871:LEU:O	2.16	0.46
3:C:1940:GLN:O	3:C:1943:SER:OG	2.30	0.46
3:C:2426:GLU:OE1	3:C:2427:THR:N	2.46	0.46
3:C:3716:LEU:O	3:C:3719:THR:HB	2.16	0.46
5:E:503:ASP:O	5:E:507:GLU:HB2	2.16	0.46
11:K:34:ASP:N	14:N:36:LYS:HA	2.31	0.46
12:L:33:LYS:O	12:L:36:ARG:HG3	2.16	0.46
14:N:57:ASN:HD22	14:N:58:GLN:NE2	2.13	0.46
15:O:24:VAL:HG22	15:O:49:GLN:HE22	1.81	0.46
16:P:33:CYS:SG	16:P:38:ILE:HG23	2.56	0.46
17:Q:251:ARG:HD2	18:R:105:ARG:CZ	2.46	0.46
17:U:98:GLY:HA3	18:W:253:THR:HG23	1.98	0.46
17:U:212:PHE:CE2	18:W:326:LYS:HE3	2.51	0.46
17:Y:330:MET:HA	17:Y:333:VAL:CG1	2.45	0.46
4:d:90:ASP:HB2	4:d:93:THR:O	2.15	0.46
4:d:124:LYS:HD2	4:d:125:THR:N	2.30	0.46
18:s:221:ARG:HD3	17:u:322:SER:HB2	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:u:174:LYS:HD2	17:u:175:VAL:HB	1.97	0.46
17:u:337:ASN:CB	17:u:340:TYR:HD2	2.29	0.46
18:r:124:LYS:O	18:r:124:LYS:HD3	2.16	0.46
18:r:135:PHE:CG	18:r:157:LEU:HD21	2.50	0.46
17:q:337:ASN:CB	17:q:340:TYR:HD2	2.29	0.46
17:y:174:LYS:HD2	17:y:175:VAL:HB	1.98	0.46
17:y:337:ASN:CB	17:y:340:TYR:HD2	2.29	0.46
1:A:114:LEU:HA	1:A:120:GLN:O	2.16	0.46
2:B:756:ARG:HA	2:B:762:ILE:HD13	1.98	0.46
2:B:883:ASN:ND2	2:B:972:ILE:HD13	2.31	0.46
2:B:1064:ILE:HG22	2:B:1084:LYS:HG3	1.97	0.46
2:B:1107:ARG:HG3	2:B:1111:LYS:CE	2.45	0.46
2:B:1236:PHE:HA	2:B:1239:GLU:OE1	2.16	0.46
2:B:2922:ILE:O	2:B:2926:ARG:HG3	2.15	0.46
2:B:3135:ARG:HA	2:B:3138:MET:HE2	1.98	0.46
2:B:3505:SER:HB3	2:B:3681:ASN:HA	1.98	0.46
2:B:4133:LEU:C	2:B:4137:HIS:HD1	2.20	0.46
2:B:4185:ASP:O	2:B:4189:ILE:HD12	2.16	0.46
2:B:4307:ASN:HB3	2:B:4374:LEU:CD2	2.46	0.46
2:B:4462:LYS:HD3	2:B:4469:LEU:HD21	1.98	0.46
3:C:786:GLN:HB3	3:C:790:LYS:NZ	2.31	0.46
3:C:864:GLN:CG	5:E:154:LYS:HE3	2.46	0.46
3:C:944:LEU:HD11	3:C:948:LEU:HD12	1.97	0.46
3:C:1055:PHE:CE1	3:C:1089:ALA:HB1	2.51	0.46
3:C:1112:THR:HG23	3:C:1182:LEU:HB3	1.97	0.46
3:C:1537:GLN:CG	3:C:1587:MET:HE2	2.46	0.46
3:C:4193:VAL:O	3:C:4197:MET:HG2	2.16	0.46
5:E:230:GLN:HB2	5:E:242:VAL:CG1	2.46	0.46
5:E:523:LYS:HA	5:E:526:GLN:OE1	2.16	0.46
8:H:22:LYS:HE3	8:H:22:LYS:HB3	1.81	0.46
9:I:46:ILE:O	9:I:50:SER:HB3	2.16	0.46
12:L:36:ARG:HD2	12:L:37:GLN:N	2.31	0.46
14:N:70:LYS:O	14:N:73:ARG:HG3	2.16	0.46
18:R:178:SER:OG	18:R:183:GLU:HG3	2.16	0.46
18:S:124:LYS:O	18:S:124:LYS:HD3	2.16	0.46
17:U:330:MET:HA	17:U:333:VAL:CG1	2.45	0.46
18:W:178:SER:OG	18:W:183:GLU:HG3	2.15	0.46
18:W:180:ALA:HA	17:Y:350:LYS:HG2	1.98	0.46
18:s:9:VAL:CG1	18:s:139:ASN:HB3	2.46	0.46
18:s:135:PHE:CG	18:s:157:LEU:HD21	2.50	0.46
18:s:407:TRP:CG	17:u:255:VAL:HG22	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:u:76:VAL:HG22	17:u:77:ARG:NH2	2.30	0.46
17:q:76:VAL:HG22	17:q:77:ARG:NH2	2.30	0.46
17:q:184:ASN:O	17:q:188:SER:OG	2.30	0.46
17:q:377:MET:O	17:q:381:VAL:HG23	2.15	0.46
18:w:9:VAL:CG1	18:w:139:ASN:HB3	2.46	0.46
17:y:76:VAL:HG22	17:y:77:ARG:NH2	2.30	0.46
1:A:152:THR:OG1	1:A:207:MET:HE3	2.16	0.46
1:A:334:ARG:HA	1:A:354:VAL:HG23	1.97	0.46
2:B:104:VAL:O	2:B:108:VAL:HG22	2.16	0.46
2:B:116:ASN:ND2	2:B:162:TYR:OH	2.41	0.46
2:B:164:LEU:HD23	2:B:168:ILE:CG1	2.45	0.46
2:B:1118:GLU:OE2	2:B:1200:ILE:HG13	2.16	0.46
2:B:1811:GLU:HG3	2:B:1813:GLU:OE2	2.16	0.46
2:B:2040:LEU:HB2	2:B:2048:ALA:HB1	1.97	0.46
2:B:4153:MET:N	2:B:4153:MET:SD	2.88	0.46
2:B:4271:GLU:HG2	2:B:4275:ARG:NH2	2.30	0.46
3:C:57:TYR:HD1	3:C:69:LYS:HE2	1.81	0.46
3:C:269:LYS:CE	3:C:284:ARG:HD3	2.46	0.46
3:C:793:GLN:O	3:C:796:ILE:N	2.49	0.46
3:C:1058:ILE:O	3:C:1062:ILE:HG13	2.16	0.46
3:C:1125:PRO:HG2	3:C:1128:ASP:HB2	1.98	0.46
3:C:1326:MET:HE1	3:C:1401:ILE:HG13	1.97	0.46
3:C:1935:SER:CB	3:C:4020:GLY:HA3	2.46	0.46
3:C:2194:GLU:HB2	3:C:2199:VAL:HG11	1.98	0.46
3:C:2220:ASN:ND2	3:C:2264:MET:HA	2.31	0.46
3:C:4502:VAL:HB	3:C:4561:ILE:HG12	1.98	0.46
6:F:26:PHE:CE1	6:F:98:LEU:HD11	2.50	0.46
12:L:22:ARG:HD2	12:L:95:PHE:CE2	2.51	0.46
17:Q:186:THR:HG21	17:Q:385:PHE:CD1	2.50	0.46
18:R:124:LYS:O	18:R:124:LYS:HD3	2.16	0.46
18:S:178:SER:OG	18:S:183:GLU:HG3	2.16	0.46
18:W:124:LYS:O	18:W:124:LYS:HD3	2.16	0.46
18:W:423:GLU:HA	18:W:426:ALA:HB3	1.97	0.46
17:Y:186:THR:HG21	17:Y:385:PHE:CD1	2.50	0.46
18:s:423:GLU:HA	18:s:426:ALA:HB3	1.97	0.46
17:u:184:ASN:O	17:u:188:SER:OG	2.30	0.46
17:u:377:MET:O	17:u:381:VAL:HG23	2.15	0.46
18:w:423:GLU:HA	18:w:426:ALA:HB3	1.97	0.46
17:y:184:ASN:O	17:y:188:SER:OG	2.30	0.46
1:A:230:MET:HE1	1:A:241:ASP:HB2	1.98	0.46
2:B:66:GLY:O	2:B:72:THR:HA	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:103:ASN:ND2	3:C:21:LEU:O	2.49	0.46
2:B:1372:MET:SD	2:B:1416:LEU:HD21	2.56	0.46
2:B:1853:ILE:HD11	2:B:1860:PHE:HD2	1.81	0.46
2:B:1858:ASP:OD1	2:B:1858:ASP:N	2.48	0.46
2:B:2580:ILE:C	2:B:2592:TYR:OH	2.58	0.46
2:B:2743:GLU:O	2:B:2747:VAL:HG23	2.16	0.46
3:C:326:PRO:HG2	3:C:372:GLN:OE1	2.15	0.46
3:C:801:ILE:CA	5:E:152:LEU:HD11	2.46	0.46
3:C:972:TRP:O	3:C:975:GLN:HG2	2.16	0.46
3:C:1006:ILE:O	3:C:1009:THR:OG1	2.26	0.46
3:C:1060:GLU:O	3:C:1063:GLU:HG3	2.15	0.46
3:C:1105:ARG:NH1	3:C:1175:ASP:HB2	2.30	0.46
3:C:1182:LEU:CD1	3:C:1185:ARG:HE	2.28	0.46
3:C:1443:MET:HE3	3:C:1444:GLN:NE2	2.31	0.46
3:C:2067:LYS:HA	3:C:2067:LYS:HD3	1.74	0.46
3:C:2087:VAL:HG12	3:C:2292:TYR:CZ	2.50	0.46
3:C:2327:LEU:HD23	3:C:2328:ARG:NH2	2.30	0.46
3:C:2414:LYS:HD2	3:C:2414:LYS:O	2.16	0.46
3:C:2724:LYS:CD	3:C:2726:GLU:HG3	2.36	0.46
3:C:2919:GLN:N	3:C:2919:GLN:OE1	2.49	0.46
4:D:633:LYS:O	4:D:636:MET:HE3	2.15	0.46
5:E:421:ARG:HH21	5:E:501:GLU:HG3	1.81	0.46
12:L:81:ASN:O	13:M:60:ASN:N	2.48	0.46
13:M:33:GLN:HE21	5:e:53:ILE:HG13	1.80	0.46
17:Q:330:MET:HE1	18:R:177:VAL:HG23	1.97	0.46
18:R:423:GLU:HA	18:R:426:ALA:HB3	1.97	0.46
18:S:423:GLU:HA	18:S:426:ALA:HB3	1.97	0.46
19:T:115:LYS:HG3	19:T:176:TYR:CZ	2.51	0.46
17:U:186:THR:HG21	17:U:385:PHE:CD1	2.50	0.46
18:W:9:VAL:CG1	18:W:139:ASN:HB3	2.46	0.46
17:Y:166:THR:HG1	17:Y:199:CYS:HG	1.64	0.46
18:r:395:PHE:CE1	18:r:422:ARG:HB2	2.50	0.46
18:r:423:GLU:HA	18:r:426:ALA:HB3	1.97	0.46
17:q:135:ILE:HG23	17:q:137:HIS:HD2	1.80	0.46
17:q:174:LYS:HD2	17:q:175:VAL:HB	1.98	0.46
18:w:135:PHE:CG	18:w:157:LEU:HD21	2.50	0.46
18:w:221:ARG:HD3	17:y:322:SER:HB2	1.97	0.46
1:A:26:ILE:HG13	1:A:323:SER:OG	2.16	0.45
1:A:39:LEU:HD11	2:B:964:GLU:O	2.15	0.45
2:B:28:LYS:HD3	2:B:73:PHE:CD1	2.51	0.45
2:B:155:ASN:N	2:B:180:LYS:HZ1	2.14	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:419:PHE:HA	2:B:422:ARG:CD	2.46	0.45
2:B:591:TRP:CZ2	2:B:595:LEU:HD11	2.51	0.45
2:B:1416:LEU:HD12	2:B:1416:LEU:HA	1.76	0.45
2:B:1443:LYS:NZ	2:B:1487:MET:HB2	2.31	0.45
2:B:1473:MET:O	2:B:1477:LEU:HG	2.16	0.45
2:B:2635:ASN:ND2	2:B:2637:GLU:OE2	2.49	0.45
3:C:488:PHE:O	3:C:492:ILE:HG12	2.15	0.45
3:C:821:LEU:HD23	3:C:922:ASN:HB3	1.98	0.45
3:C:936:GLN:O	3:C:942:VAL:HA	2.15	0.45
3:C:1332:LYS:O	3:C:1336:GLN:HG2	2.16	0.45
5:E:154:LYS:CB	5:E:485:VAL:H	2.26	0.45
5:E:407:TYR:HH	5:E:433:TRP:HZ3	1.64	0.45
18:R:9:VAL:CG1	18:R:139:ASN:HB3	2.46	0.45
18:R:53:PHE:HB3	18:R:61:HIS:CD2	2.52	0.45
18:S:9:VAL:CG1	18:S:139:ASN:HB3	2.46	0.45
17:U:337:ASN:CB	17:U:340:TYR:HD2	2.29	0.45
17:Y:337:ASN:CB	17:Y:340:TYR:HD2	2.29	0.45
18:s:395:PHE:CE1	18:s:422:ARG:HB2	2.50	0.45
18:r:271:SER:HB3	18:r:377:MET:HB2	1.98	0.45
18:w:271:SER:HB3	18:w:377:MET:HB2	1.98	0.45
17:y:135:ILE:HG23	17:y:137:HIS:HD2	1.80	0.45
17:y:377:MET:O	17:y:381:VAL:HG23	2.16	0.45
1:A:53:PRO:C	1:A:82:ARG:HB3	2.41	0.45
2:B:392:ASP:OD1	2:B:393:ALA:N	2.49	0.45
2:B:501:ARG:HB2	4:D:488:TYR:CE1	2.51	0.45
2:B:797:PHE:HE1	2:B:829:VAL:HA	1.77	0.45
2:B:1170:LYS:O	2:B:1173:LYS:HE2	2.16	0.45
2:B:1447:ILE:HG22	2:B:1480:HIS:HA	1.98	0.45
2:B:1490:GLN:HA	2:B:3606:GLN:OE1	2.16	0.45
2:B:1883:CYS:O	2:B:1887:LEU:HG	2.15	0.45
2:B:2059:TYR:HE2	2:B:2079:VAL:HG22	1.80	0.45
2:B:3059:VAL:HA	2:B:3062:ARG:NE	2.29	0.45
2:B:3738:ALA:O	2:B:3742:ILE:HG12	2.17	0.45
3:C:51:ASN:O	3:C:96:LEU:HD12	2.16	0.45
3:C:151:ILE:O	3:C:152:GLN:NE2	2.50	0.45
3:C:1372:LYS:HZ3	3:C:1424:ASP:HA	1.80	0.45
3:C:1639:PHE:HB3	3:C:1651:LYS:HE3	1.99	0.45
3:C:1860:GLN:CG	3:C:4201:VAL:HG21	2.45	0.45
3:C:1950:GLN:NE2	3:C:1952:MET:HE2	2.30	0.45
3:C:2573:GLN:NE2	3:C:2622:PRO:HD3	2.21	0.45
3:C:2763:LEU:HD22	3:C:2774:LEU:HD21	1.97	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:505:ILE:HG22	5:E:509:PHE:CZ	2.51	0.45
8:H:50:ARG:NH1	8:H:56:THR:HA	2.31	0.45
10:J:59:HIS:CD2	10:J:92:LYS:HB3	2.52	0.45
11:K:40:ALA:O	11:K:44:THR:HG22	2.16	0.45
14:N:68:ARG:O	14:N:72:LYS:HG2	2.16	0.45
15:O:31:SER:HA	4:d:117:TRP:CG	2.51	0.45
16:P:80:VAL:HG12	16:P:103:MET:SD	2.57	0.45
17:Q:183:TYR:HE2	17:Q:388:MET:HE2	1.81	0.45
18:S:53:PHE:HB3	18:S:61:HIS:CD2	2.52	0.45
17:U:183:TYR:HE2	17:U:388:MET:HE2	1.80	0.45
18:W:53:PHE:HB3	18:W:61:HIS:CD2	2.52	0.45
18:W:105:ARG:CZ	17:Y:251:ARG:HD2	2.47	0.45
22:Z:141:ASN:HA	22:Z:144:ASP:OD2	2.16	0.45
22:Z:143:LEU:O	22:Z:147:ASN:ND2	2.49	0.45
18:s:178:SER:OG	18:s:183:GLU:HG3	2.15	0.45
17:u:135:ILE:HG23	17:u:137:HIS:HD2	1.80	0.45
18:r:178:SER:OG	18:r:183:GLU:HG3	2.15	0.45
18:w:395:PHE:CE1	18:w:422:ARG:HB2	2.50	0.45
1:A:51:ILE:HA	1:A:82:ARG:CG	2.47	0.45
2:B:1145:LYS:CE	2:B:1150:VAL:HG21	2.46	0.45
2:B:1396:LYS:HE2	2:B:1403:PHE:O	2.17	0.45
2:B:2081:SER:O	2:B:2084:ARG:HD3	2.16	0.45
2:B:2191:THR:HA	2:B:2194:TRP:NE1	2.31	0.45
2:B:2517:THR:O	2:B:2521:ARG:HG3	2.16	0.45
2:B:2658:SER:HA	2:B:2659:GLY:HA2	1.58	0.45
2:B:2773:HIS:HD1	2:B:2817:PRO:HD3	1.81	0.45
2:B:2781:ASP:HB3	2:B:2874:ARG:NH1	2.31	0.45
2:B:3463:ALA:HB3	2:B:3643:ILE:HD12	1.98	0.45
2:B:3796:ARG:O	2:B:3800:LEU:N	2.34	0.45
3:C:55:ALA:O	3:C:93:VAL:HG12	2.16	0.45
3:C:1446:GLN:NE2	3:C:1463:ILE:HG21	2.31	0.45
3:C:1953:LYS:HA	3:C:1953:LYS:HD2	1.87	0.45
3:C:2352:SER:O	3:C:2355:ILE:HG22	2.15	0.45
3:C:3077:TYR:HD1	3:C:3464:TYR:HD2	1.64	0.45
3:C:3852:SER:OG	3:C:3879:ALA:HB1	2.17	0.45
3:C:4511:GLU:C	3:C:4512:LYS:HD2	2.41	0.45
5:E:375:ARG:HA	5:E:383:PHE:HA	1.98	0.45
9:I:49:ASN:HB3	9:I:54:LEU:HB2	1.99	0.45
21:X:212:THR:HG22	22:Z:205:GLU:OE1	2.15	0.45
17:Y:183:TYR:HE2	17:Y:388:MET:HE2	1.80	0.45
18:s:258:ASN:OD1	17:q:99:ASN:ND2	2.49	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:s:271:SER:HB3	18:s:377:MET:HB2	1.98	0.45
18:r:221:ARG:HD3	17:q:322:SER:HB2	1.97	0.45
17:q:12:CYS:SG	17:q:13:GLY:N	2.88	0.45
18:w:178:SER:OG	18:w:183:GLU:HG3	2.16	0.45
18:w:268:MET:SD	18:w:380:ASN:HB2	2.57	0.45
1:A:283:THR:HG23	2:B:955:PHE:HE1	1.80	0.45
2:B:52:PHE:HD1	2:B:58:SER:HB2	1.82	0.45
2:B:419:PHE:CD2	2:B:422:ARG:HD2	2.51	0.45
2:B:1090:ARG:HA	2:B:1093:ARG:HE	1.81	0.45
2:B:1331:ARG:H	2:B:1410:PHE:HD2	1.64	0.45
2:B:1443:LYS:HZ1	2:B:1487:MET:HB2	1.81	0.45
2:B:1784:ARG:NH1	2:B:2042:SER:O	2.50	0.45
2:B:1877:THR:O	2:B:1880:THR:OG1	2.31	0.45
2:B:2052:SER:HA	2:B:2055:PHE:HD2	1.81	0.45
2:B:2387:LYS:C	2:B:2387:LYS:HD3	2.41	0.45
2:B:2401:MET:O	2:B:2404:THR:OG1	2.34	0.45
2:B:2583:MET:O	2:B:2584:VAL:HG13	2.17	0.45
2:B:2690:SER:HA	2:B:2693:ASN:ND2	2.31	0.45
2:B:2709:LYS:HE2	2:B:2804:ILE:HG23	1.98	0.45
2:B:2773:HIS:ND1	2:B:2817:PRO:HD3	2.31	0.45
2:B:3608:GLU:CD	2:B:3613:PRO:HB3	2.40	0.45
2:B:4321:SER:HG	2:B:4324:LYS:HB3	1.81	0.45
3:C:1018:SER:HA	3:C:1021:THR:HG23	1.99	0.45
3:C:1178:ASP:O	3:C:1182:LEU:HB2	2.17	0.45
3:C:2026:LYS:NZ	3:C:2101:ILE:O	2.45	0.45
3:C:4143:ARG:NH1	3:C:4219:TYR:OH	2.49	0.45
3:C:4318:GLU:O	3:C:4321:GLN:HG3	2.17	0.45
3:C:4443:SER:O	3:C:4447:LYS:HG2	2.16	0.45
5:E:385:SER:HG	5:E:394:TRP:CD1	2.34	0.45
10:J:28:GLN:HG3	10:J:49:PHE:CE2	2.51	0.45
11:K:37:LEU:CD1	14:N:36:LYS:HZ3	2.25	0.45
11:K:89:VAL:HB	4:d:84:LYS:HG3	1.98	0.45
11:K:96:ILE:O	11:K:106:LEU:HD12	2.17	0.45
13:M:4:GLU:N	13:M:4:GLU:OE1	2.48	0.45
18:S:271:SER:HB3	18:S:377:MET:HB2	1.98	0.45
17:U:73:MET:O	17:U:77:ARG:HG2	2.17	0.45
17:U:98:GLY:HA2	18:W:254:GLU:HG3	1.98	0.45
17:U:391:ARG:HH22	18:W:435:VAL:HA	1.82	0.45
18:W:11:GLN:NE2	17:Y:245:GLN:O	2.48	0.45
21:X:148:LEU:HG	22:Z:143:LEU:CD2	2.46	0.45
17:Y:174:LYS:HD2	17:Y:175:VAL:HB	1.97	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:d:115:TYR:C	4:d:116:ILE:HD12	2.41	0.45
18:r:23:LEU:HD12	18:r:23:LEU:HA	1.73	0.45
17:q:396:HIS:HA	17:q:399:THR:OG1	2.17	0.45
17:y:396:HIS:HA	17:y:399:THR:OG1	2.17	0.45
1:A:63:THR:C	1:A:64:GLN:HG3	2.42	0.45
1:A:223:THR:HG22	2:B:955:PHE:HB3	1.98	0.45
2:B:184:SER:HA	2:B:192:LYS:HE2	1.98	0.45
2:B:332:LYS:C	2:B:405:TRP:HD1	2.25	0.45
2:B:850:ASP:OD1	2:B:850:ASP:N	2.45	0.45
2:B:1455:VAL:HG12	2:B:1456:PHE:O	2.17	0.45
2:B:2036:CYS:O	2:B:2040:LEU:HG	2.16	0.45
2:B:4022:ASP:OD2	2:B:4050:TRP:NE1	2.50	0.45
2:B:4277:ASP:O	2:B:4281:THR:HG23	2.16	0.45
3:C:80:PHE:CD1	3:C:87:LYS:HB3	2.50	0.45
3:C:81:THR:HG22	3:C:126:ASN:H	1.81	0.45
3:C:1877:GLY:N	23:C:4701:ADP:H2	2.15	0.45
3:C:3095:TYR:CE1	3:C:3451:THR:HG23	2.52	0.45
3:C:4389:THR:HA	3:C:4403:ILE:HG23	1.98	0.45
4:D:502:ALA:C	4:D:520:SER:HG	2.22	0.45
4:D:525:VAL:HB	4:D:544:MET:SD	2.57	0.45
6:F:11:LEU:HD21	6:F:34:LYS:HE2	1.98	0.45
8:H:50:ARG:HH12	8:H:56:THR:HG23	1.82	0.45
8:H:61:VAL:HG12	8:H:86:ILE:HG13	1.99	0.45
10:J:42:ILE:O	10:J:46:ILE:HG13	2.17	0.45
11:K:34:ASP:HB2	14:N:36:LYS:HB3	1.98	0.45
15:O:34:VAL:HG22	15:O:104:ASN:CG	2.42	0.45
17:Q:73:MET:O	17:Q:77:ARG:HG2	2.17	0.45
18:R:271:SER:HB3	18:R:377:MET:HB2	1.98	0.45
18:S:79:ARG:HH11	18:S:84:ARG:HD2	1.82	0.45
18:W:79:ARG:HH11	18:W:84:ARG:HD2	1.82	0.45
18:W:271:SER:HB3	18:W:377:MET:HB2	1.98	0.45
18:s:268:MET:SD	18:s:380:ASN:HB2	2.57	0.45
17:u:396:HIS:HA	17:u:399:THR:OG1	2.17	0.45
18:r:268:MET:SD	18:r:380:ASN:HB2	2.57	0.45
18:w:35:GLN:HG2	18:w:60:LYS:HZ2	1.81	0.45
1:A:177:LEU:HD13	1:A:239:TRP:HH2	1.81	0.45
1:A:222:PHE:O	1:A:222:PHE:CD1	2.70	0.45
1:A:276:PHE:CE2	1:A:284:ASN:HB2	2.51	0.45
1:A:290:ASP:OD1	1:A:291:SER:N	2.49	0.45
2:B:154:PHE:CZ	3:C:161:GLN:HB3	2.52	0.45
2:B:749:LYS:NZ	2:B:768:LYS:HE2	2.32	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1325:TRP:CD1	2:B:1328:LYS:HZ2	2.35	0.45
2:B:1424:GLU:HG2	2:B:1428:ASN:HD21	1.81	0.45
2:B:1426:THR:O	2:B:1429:GLU:HG3	2.16	0.45
2:B:2711:VAL:HA	2:B:2714:THR:HG23	1.98	0.45
2:B:3085:VAL:HA	2:B:3477:TRP:CZ2	2.51	0.45
2:B:3819:LYS:C	2:B:4286:LEU:HD21	2.41	0.45
3:C:231:ARG:HA	3:C:249:ARG:HH21	1.81	0.45
3:C:548:LEU:HD12	3:C:548:LEU:HA	1.82	0.45
3:C:576:TYR:CG	3:C:624:PHE:HE1	2.35	0.45
3:C:860:ASP:HB3	5:E:155:ASP:HA	1.99	0.45
3:C:2033:LEU:O	3:C:2037:GLN:HG3	2.16	0.45
3:C:2216:TRP:CG	3:C:2254:LEU:HD11	2.52	0.45
3:C:2308:ILE:HD11	3:C:2328:ARG:HH22	1.82	0.45
3:C:3731:ILE:HG22	3:C:3735:ILE:HD11	1.99	0.45
3:C:4009:LYS:HE3	3:C:4040:TRP:HH2	1.82	0.45
3:C:4375:MET:HE3	3:C:4375:MET:HB3	1.79	0.45
3:C:4461:LEU:HG	3:C:4527:LYS:HB2	1.98	0.45
4:D:354:ASP:N	4:D:354:ASP:OD1	2.50	0.45
4:D:536:ILE:HG23	4:D:641:ASN:ND2	2.31	0.45
5:E:164:VAL:O	5:E:458:THR:HG21	2.15	0.45
5:E:411:TYR:CB	5:E:430:ARG:HG3	2.47	0.45
5:E:465:THR:O	5:E:471:ASN:ND2	2.50	0.45
8:H:71:PHE:CD1	8:H:76:TYR:HB2	2.51	0.45
9:I:75:TRP:CD1	9:I:109:LYS:HZ2	2.34	0.45
17:Q:176:SER:HB3	18:S:349:THR:CB	2.46	0.45
17:Q:245:GLN:O	18:R:11:GLN:NE2	2.48	0.45
18:R:79:ARG:HH11	18:R:84:ARG:HD2	1.82	0.45
18:R:174:SER:HA	18:R:205:ASP:OD2	2.17	0.45
18:S:174:SER:HA	18:S:205:ASP:OD2	2.17	0.45
17:U:174:LYS:HD2	17:U:175:VAL:HB	1.98	0.45
18:W:174:SER:HA	18:W:205:ASP:OD2	2.17	0.45
17:Y:73:MET:O	17:Y:77:ARG:HG2	2.17	0.45
17:u:12:CYS:SG	17:u:13:GLY:N	2.88	0.45
2:B:394:TYR:HE2	2:B:412:LEU:HD13	1.81	0.45
2:B:914:ASP:HB2	2:B:915:PRO:HD3	1.98	0.45
2:B:1208:LYS:O	2:B:1212:ILE:HG13	2.16	0.45
2:B:1330:TRP:HA	2:B:1412:PHE:HB3	1.99	0.45
2:B:1440:ILE:HB	2:B:1493:TYR:CE2	2.51	0.45
2:B:1627:ALA:HB1	2:B:1646:PHE:CZ	2.52	0.45
2:B:1906:GLY:O	2:B:1910:THR:HG23	2.16	0.45
2:B:2496:VAL:HG12	2:B:2497:GLU:N	2.31	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3865:TRP:CD1	2:B:3865:TRP:H	2.34	0.45
2:B:4047:MET:HE3	2:B:4050:TRP:CD1	2.52	0.45
2:B:4432:PRO:HA	2:B:4435:ILE:HD12	1.99	0.45
3:C:274:ARG:HH11	3:C:275:HIS:CD2	2.35	0.45
3:C:807:GLU:O	3:C:811:LYS:HG2	2.17	0.45
3:C:1105:ARG:NH2	3:C:1176:GLU:HB2	2.31	0.45
3:C:1142:ILE:O	3:C:1146:GLN:HG3	2.17	0.45
3:C:1292:ASN:HA	3:C:1295:LYS:HG2	1.98	0.45
3:C:1448:GLY:HA3	3:C:1462:LEU:HD11	1.98	0.45
3:C:1544:ILE:HG13	3:C:1577:LEU:HG	1.99	0.45
3:C:2341:SER:OG	3:C:2342:LYS:N	2.50	0.45
3:C:2743:ASP:O	3:C:3026:TRP:HB3	2.16	0.45
3:C:2771:ASN:OD1	3:C:2772:GLU:N	2.50	0.45
3:C:2903:LYS:HE3	3:C:2950:LEU:HD21	1.99	0.45
3:C:3123:LYS:HD2	3:C:3698:ARG:O	2.16	0.45
3:C:3869:LEU:O	3:C:3874:TRP:NE1	2.50	0.45
3:C:4068:GLU:CD	3:C:4069:ASP:H	2.24	0.45
4:D:405:ASN:HB2	4:D:413:ASN:HB2	1.98	0.45
5:E:412:LEU:HA	5:E:429:ARG:HH11	1.81	0.45
12:L:81:ASN:HD21	13:M:59:ARG:HE	1.62	0.45
14:N:46:LEU:O	14:N:47:LYS:HG2	2.17	0.45
15:O:33:GLN:HB2	15:O:103:ILE:HG21	1.99	0.45
15:O:77:ASN:HB3	15:O:107:TYR:CZ	2.52	0.45
17:Q:174:LYS:HD2	17:Q:175:VAL:HB	1.97	0.45
17:Q:312:THR:OG1	17:Q:348:ASN:O	2.30	0.45
18:S:11:GLN:NE2	17:U:245:GLN:O	2.48	0.45
19:T:31:PRO:HA	19:T:197:PHE:CZ	2.51	0.45
18:W:49:PHE:HB2	18:W:53:PHE:HD2	1.81	0.45
17:y:12:CYS:SG	17:y:13:GLY:N	2.88	0.45
17:y:386:THR:HA	17:y:389:PHE:HB3	1.98	0.45
2:B:517:ILE:HG13	2:B:518:TYR:N	2.32	0.45
2:B:853:GLN:HA	2:B:856:TRP:HD1	1.82	0.45
2:B:1330:TRP:N	2:B:1412:PHE:CD1	2.74	0.45
2:B:1396:LYS:NZ	2:B:1403:PHE:HB2	2.32	0.45
2:B:1398:ILE:HD13	2:B:1429:GLU:OE2	2.16	0.45
2:B:1886:THR:HG21	2:B:2025:CYS:SG	2.56	0.45
2:B:2097:PRO:O	2:B:2101:LEU:HG	2.17	0.45
2:B:2461:PHE:C	2:B:2463:THR:N	2.73	0.45
2:B:3119:LYS:O	2:B:3123:THR:HG23	2.16	0.45
2:B:4472:GLN:HA	2:B:4562:GLN:HE22	1.82	0.45
3:C:21:LEU:HD12	3:C:22:GLN:HB2	1.97	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:21:LEU:HD12	3:C:22:GLN:N	2.32	0.45
3:C:2222:ARG:HD3	3:C:2265:THR:HG21	1.97	0.45
3:C:4342:GLU:O	3:C:4346:LYS:HG3	2.16	0.45
4:D:370:GLY:HA2	4:D:399:VAL:HG13	1.97	0.45
5:E:150:LEU:HA	5:E:488:LEU:HA	1.99	0.45
5:E:401:PRO:CG	5:E:404:ARG:HE	2.29	0.45
5:E:429:ARG:HB2	5:E:431:ASP:OD1	2.17	0.45
6:F:23:TYR:O	6:F:35:ARG:HA	2.17	0.45
8:H:24:VAL:HG11	8:H:77:ILE:HG21	1.99	0.45
9:I:32:GLY:O	9:I:35:LEU:HB2	2.17	0.45
9:I:97:MET:HE2	9:I:97:MET:HB2	1.71	0.45
16:P:42:GLN:C	16:P:45:PRO:HD2	2.42	0.45
16:P:47:LYS:HA	16:P:55:ILE:HG13	1.99	0.45
17:Q:212:PHE:CE2	18:S:326:LYS:HE3	2.51	0.45
17:Q:386:THR:HA	17:Q:389:PHE:HB3	1.97	0.45
18:R:49:PHE:HB2	18:R:53:PHE:HD2	1.81	0.45
18:S:417:GLU:HA	18:S:420:GLU:HG3	1.99	0.45
17:u:386:THR:HA	17:u:389:PHE:HB3	1.98	0.45
18:w:326:LYS:HD3	18:w:326:LYS:HA	1.74	0.45
1:A:80:LEU:H	1:A:80:LEU:HD12	1.82	0.45
2:B:122:ASN:HB2	2:B:159:ALA:HB2	1.98	0.45
2:B:367:LEU:HB2	2:B:372:GLU:HA	1.99	0.45
2:B:440:GLU:OE1	2:B:441:LYS:NZ	2.50	0.45
2:B:901:ASP:HB2	2:B:903:ARG:NH1	2.32	0.45
2:B:1153:VAL:HG13	2:B:1157:ARG:NH1	2.31	0.45
2:B:1912:LYS:O	2:B:1916:ARG:HG3	2.16	0.45
2:B:2075:GLY:O	2:B:2079:VAL:HG23	2.17	0.45
2:B:2163:PHE:O	2:B:2167:VAL:HG23	2.17	0.45
2:B:2212:THR:C	2:B:2213:LEU:HD12	2.42	0.45
2:B:2373:CYS:SG	2:B:2470:LYS:NZ	2.90	0.45
2:B:2563:LYS:O	2:B:2602:CYS:HA	2.17	0.45
2:B:4113:TYR:CE2	2:B:4163:ARG:HD2	2.52	0.45
2:B:4313:LEU:HA	2:B:4316:GLN:HB3	1.97	0.45
3:C:177:ARG:HE	3:C:259:GLN:CA	2.27	0.45
3:C:572:ILE:HG23	3:C:576:TYR:CE2	2.52	0.45
3:C:933:VAL:HG11	3:C:944:LEU:HD13	1.99	0.45
3:C:1858:LEU:HD22	3:C:1973:PHE:CE1	2.45	0.45
3:C:1939:MET:HE3	3:C:1943:SER:HB3	1.99	0.45
3:C:1979:GLY:C	3:C:1980:TYR:HD1	2.24	0.45
3:C:2567:VAL:HG12	3:C:2573:GLN:HB3	1.98	0.45
3:C:2595:GLN:N	3:C:2595:GLN:OE1	2.50	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2790:ARG:HH11	3:C:2820:ARG:HG3	1.81	0.45
3:C:3540:TRP:O	3:C:3544:LYS:N	2.47	0.45
3:C:3666:GLU:O	3:C:3667:GLN:HG2	2.17	0.45
3:C:3784:GLU:O	3:C:3787:ASP:N	2.50	0.45
3:C:4084:LEU:HD23	3:C:4084:LEU:H	1.82	0.45
4:D:517:ILE:HA	4:D:526:ARG:O	2.17	0.45
5:E:501:GLU:OE2	5:E:501:GLU:N	2.47	0.45
18:S:49:PHE:HB2	18:S:53:PHE:HD2	1.81	0.45
21:X:106:GLU:HB3	22:Z:94:GLN:CD	2.42	0.45
21:X:127:GLU:OE2	22:Z:112:ARG:NH1	2.50	0.45
5:e:50:LEU:H	5:e:50:LEU:HD23	1.82	0.45
18:r:49:PHE:HB2	18:r:53:PHE:HD2	1.81	0.45
17:q:233:MET:O	17:q:236:VAL:HG22	2.17	0.45
17:y:73:MET:O	17:y:77:ARG:HG2	2.17	0.45
1:A:7:TRP:CD1	1:A:315:VAL:HG13	2.51	0.45
1:A:79:PRO:HD2	1:A:121:TRP:CZ3	2.52	0.45
1:A:166:GLY:HA2	1:A:171:ARG:N	2.28	0.45
2:B:15:ILE:HD11	2:B:33:LEU:HD21	1.99	0.45
2:B:437:ASN:O	2:B:441:LYS:HG2	2.16	0.45
2:B:442:ILE:HA	5:E:520:GLU:HB3	1.98	0.45
2:B:789:LYS:HD3	2:B:842:GLU:OE1	2.17	0.45
2:B:1001:GLU:HB3	2:B:1097:VAL:HG11	1.98	0.45
2:B:1069:THR:OG1	2:B:1070:PRO:HD2	2.16	0.45
2:B:1114:LEU:O	2:B:1118:GLU:HG2	2.17	0.45
2:B:1325:TRP:HA	2:B:1328:LYS:HG3	1.98	0.45
2:B:1454:GLN:NE2	2:B:1476:VAL:HG21	2.32	0.45
2:B:3469:ARG:NH2	2:B:3517:MET:HE1	2.32	0.45
2:B:4428:PHE:HZ	2:B:4443:ARG:HH21	1.64	0.45
3:C:1466:THR:HB	3:C:1470:ARG:NH1	2.32	0.45
3:C:1471:LEU:HD13	3:C:1505:ASN:OD1	2.17	0.45
3:C:1789:VAL:HB	3:C:2009:LYS:HZ2	1.82	0.45
3:C:2691:HIS:HE1	3:C:2744:LYS:HB2	1.81	0.45
3:C:3542:ARG:HH22	3:C:3579:ILE:HG13	1.81	0.45
3:C:4255:PRO:HA	3:C:4261:LYS:NZ	2.32	0.45
3:C:4304:ARG:NH2	3:C:4305:PRO:O	2.49	0.45
5:E:412:LEU:H	5:E:429:ARG:HD2	1.81	0.45
5:E:459:CYS:SG	5:E:460:ILE:N	2.90	0.45
6:F:60:LYS:O	6:F:63:ILE:HG22	2.17	0.45
8:H:42:ALA:HB2	8:H:61:VAL:HG22	1.98	0.45
12:L:61:VAL:HG13	12:L:67:PHE:CD2	2.52	0.45
17:Q:18:ALA:HB2	17:Q:76:VAL:HG23	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Q:129:CYS:HB2	18:R:96:LYS:HD2	1.99	0.45
17:Q:350:LYS:HG2	18:R:180:ALA:HA	2.00	0.45
17:Q:379:LYS:CG	17:Q:419:VAL:HG11	2.47	0.45
17:Q:396:HIS:HA	17:Q:399:THR:OG1	2.17	0.45
18:R:417:GLU:HA	18:R:420:GLU:HG3	1.99	0.45
17:U:379:LYS:CG	17:U:419:VAL:HG11	2.47	0.45
17:U:396:HIS:HA	17:U:399:THR:OG1	2.17	0.45
18:W:417:GLU:HA	18:W:420:GLU:HG3	1.99	0.45
21:X:159:PHE:CD1	22:Z:153:ALA:HB1	2.52	0.45
17:Y:18:ALA:HB2	17:Y:76:VAL:HG23	1.99	0.45
18:s:49:PHE:HB2	18:s:53:PHE:HD2	1.81	0.45
17:u:73:MET:O	17:u:77:ARG:HG2	2.17	0.45
17:u:141:GLY:HA3	25:u:501:GDP:PA	2.57	0.45
17:u:233:MET:O	17:u:236:VAL:HG22	2.17	0.45
17:q:73:MET:O	17:q:77:ARG:HG2	2.17	0.45
17:q:141:GLY:HA3	25:q:501:GDP:PA	2.57	0.45
18:w:49:PHE:HB2	18:w:53:PHE:HD2	1.81	0.45
18:w:53:PHE:HB3	18:w:61:HIS:CD2	2.52	0.45
17:y:233:MET:O	17:y:236:VAL:HG22	2.17	0.45
2:B:40:LYS:HA	2:B:43:VAL:HG22	1.98	0.44
2:B:326:LEU:HD12	5:E:558:ALA:HB3	1.99	0.44
2:B:718:ILE:HD13	2:B:769:SER:HB3	1.97	0.44
2:B:1115:ASP:HA	2:B:1118:GLU:HG2	1.98	0.44
2:B:1243:LYS:NZ	2:B:1264:ILE:HG23	2.32	0.44
2:B:1477:LEU:HB3	2:B:1508:LEU:HD22	1.98	0.44
2:B:1635:GLY:HA3	2:B:1642:LYS:HZ2	1.82	0.44
2:B:2385:HIS:CE1	2:B:2389:ARG:HD3	2.52	0.44
2:B:2584:VAL:H	2:B:2590:ARG:CZ	2.29	0.44
2:B:3481:ILE:O	2:B:3482:ILE:HD13	2.17	0.44
2:B:3784:LYS:HB3	2:B:3788:ARG:HH21	1.82	0.44
3:C:177:ARG:HD3	3:C:177:ARG:HA	1.72	0.44
3:C:264:ASP:HA	3:C:267:ILE:HD12	1.99	0.44
3:C:339:LEU:HA	3:C:339:LEU:HD23	1.85	0.44
3:C:429:LYS:HA	3:C:432:ASP:OD2	2.17	0.44
3:C:656:TYR:O	3:C:660:VAL:HG22	2.17	0.44
3:C:1361:ARG:HA	3:C:1361:ARG:HD3	1.62	0.44
3:C:1456:PRO:HG3	3:C:1549:MET:SD	2.58	0.44
3:C:2569:LYS:HD2	3:C:2569:LYS:HA	1.77	0.44
3:C:2936:GLU:OE1	3:C:2936:GLU:N	2.48	0.44
3:C:3697:GLU:HA	3:C:3701:ASN:OD1	2.18	0.44
4:D:486:ARG:HD3	4:D:486:ARG:HA	1.60	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:127:ARG:CG	7:G:129:GLN:HE22	2.29	0.44
14:N:32:SER:CA	14:N:35:GLN:HB3	2.38	0.44
17:U:18:ALA:HB2	17:U:76:VAL:HG23	1.99	0.44
17:U:67:ASP:OD1	17:U:68:LEU:N	2.49	0.44
17:U:233:MET:O	17:U:236:VAL:HG22	2.17	0.44
17:U:386:THR:HA	17:U:389:PHE:HB3	1.98	0.44
18:W:152:LEU:HA	18:W:155:GLU:OE1	2.18	0.44
17:Y:379:LYS:CG	17:Y:419:VAL:HG11	2.47	0.44
17:Y:396:HIS:HA	17:Y:399:THR:OG1	2.17	0.44
18:s:53:PHE:HB3	18:s:61:HIS:CD2	2.52	0.44
18:s:326:LYS:HD3	18:s:326:LYS:HA	1.74	0.44
17:q:379:LYS:CG	17:q:419:VAL:HG11	2.47	0.44
18:w:79:ARG:HH11	18:w:84:ARG:HD2	1.82	0.44
1:A:18:PRO:O	1:A:21:ARG:HB2	2.17	0.44
2:B:340:LEU:HD11	2:B:397:TYR:OH	2.18	0.44
2:B:1656:SER:H	2:B:1657:LYS:HD2	1.82	0.44
2:B:2394:CYS:N	2:B:2452:GLN:OE1	2.51	0.44
2:B:4206:ARG:HD3	2:B:4543:TYR:OH	2.17	0.44
2:B:4321:SER:OG	2:B:4324:LYS:HB3	2.17	0.44
3:C:253:ILE:HG22	3:C:311:LYS:HE2	1.99	0.44
3:C:434:PRO:O	3:C:438:THR:HG23	2.17	0.44
3:C:744:ILE:HG21	3:C:756:ILE:HD11	2.00	0.44
3:C:864:GLN:HE22	5:E:156:GLU:HG3	1.83	0.44
3:C:1481:PHE:O	3:C:1487:VAL:HG11	2.16	0.44
3:C:1510:MET:O	3:C:1513:LYS:HG2	2.17	0.44
3:C:1712:LYS:NZ	3:C:1764:LEU:HA	2.32	0.44
3:C:1848:THR:HG23	3:C:1851:THR:H	1.82	0.44
3:C:2749:LYS:HA	3:C:2749:LYS:HD3	1.73	0.44
3:C:4157:TYR:CE1	3:C:4203:TYR:HB3	2.53	0.44
5:E:433:TRP:NE1	5:E:449:SER:HB3	2.32	0.44
7:G:63:THR:O	7:G:67:ILE:HG12	2.17	0.44
8:H:15:ASP:HB2	8:H:76:TYR:HB3	1.99	0.44
11:K:24:ALA:HB1	11:K:99:TYR:O	2.17	0.44
16:P:60:ILE:HB	16:P:77:LEU:CD1	2.47	0.44
17:Q:67:ASP:OD1	17:Q:68:LEU:N	2.49	0.44
17:Q:233:MET:O	17:Q:236:VAL:HG22	2.17	0.44
18:R:152:LEU:HA	18:R:155:GLU:OE1	2.18	0.44
18:R:268:MET:SD	18:R:380:ASN:HB2	2.57	0.44
18:S:268:MET:SD	18:S:380:ASN:HB2	2.57	0.44
18:W:268:MET:SD	18:W:380:ASN:HB2	2.57	0.44
21:X:174:LYS:O	21:X:178:GLU:HG2	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:X:194:LEU:HD12	22:Z:185:LEU:CG	2.46	0.44
17:Y:67:ASP:OD1	17:Y:68:LEU:N	2.50	0.44
17:Y:233:MET:O	17:Y:236:VAL:HG22	2.17	0.44
17:Y:386:THR:HA	17:Y:389:PHE:HB3	1.98	0.44
22:Z:167:LEU:O	22:Z:171:ARG:HG2	2.16	0.44
18:s:417:GLU:HA	18:s:420:GLU:HG3	1.99	0.44
17:u:18:ALA:HB2	17:u:76:VAL:HG23	1.99	0.44
17:u:58:ARG:NH2	17:u:83:GLN:HB3	2.32	0.44
17:u:67:ASP:OD1	17:u:68:LEU:N	2.50	0.44
17:u:379:LYS:CG	17:u:419:VAL:HG11	2.47	0.44
18:r:101:ASN:HD22	18:r:143:GLY:HA2	1.82	0.44
18:r:417:GLU:HA	18:r:420:GLU:HG3	1.99	0.44
17:q:18:ALA:HB2	17:q:76:VAL:HG23	1.99	0.44
17:q:67:ASP:OD1	17:q:68:LEU:N	2.50	0.44
17:q:386:THR:HA	17:q:389:PHE:HB3	1.98	0.44
18:w:417:GLU:HA	18:w:420:GLU:HG3	1.99	0.44
17:y:141:GLY:HA3	25:y:501:GDP:PA	2.57	0.44
20:x:125:UNK:O	20:x:126:UNK:C	2.63	0.44
2:B:349:ASN:HA	2:B:352:ILE:HG22	1.99	0.44
2:B:553:GLN:NE2	2:B:557:GLN:HB2	2.32	0.44
2:B:1679:GLU:N	2:B:1679:GLU:OE2	2.51	0.44
2:B:1886:THR:HA	2:B:4193:ILE:HG12	1.99	0.44
2:B:2025:CYS:HA	2:B:4197:GLY:HA3	2.00	0.44
2:B:2696:LEU:HB3	2:B:2704:GLN:NE2	2.31	0.44
2:B:2730:PRO:HD2	2:B:2733:LYS:HE3	1.98	0.44
2:B:2926:ARG:O	2:B:2930:GLN:NE2	2.51	0.44
2:B:4127:LYS:HD2	2:B:4127:LYS:HA	1.56	0.44
3:C:1111:LEU:HG	3:C:1153:PHE:HB2	1.99	0.44
3:C:1616:GLN:HG2	3:C:1617:GLY:N	2.32	0.44
3:C:2154:MET:HG2	3:C:2272:PHE:HB2	2.00	0.44
3:C:2675:LEU:HA	3:C:2678:LYS:HZ3	1.82	0.44
3:C:3111:ASP:O	3:C:3115:GLU:HG2	2.16	0.44
3:C:3824:ILE:HB	3:C:4296:MET:SD	2.58	0.44
4:D:353:LEU:HD11	4:D:363:LEU:HD11	1.99	0.44
4:D:461:CYS:O	4:D:474:VAL:HG23	2.18	0.44
5:E:166:GLU:OE2	5:E:219:THR:HA	2.18	0.44
5:E:257:VAL:HG23	5:E:258:GLU:N	2.31	0.44
5:E:324:TYR:CD2	5:E:333:PHE:HB3	2.53	0.44
8:H:64:ASN:OD1	8:H:64:ASN:N	2.51	0.44
10:J:72:TYR:CD2	10:J:77:PHE:HB2	2.52	0.44
11:K:34:ASP:HA	11:K:37:LEU:HB3	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:37:LEU:CB	14:N:36:LYS:HD2	2.45	0.44
11:K:47:ALA:HA	11:K:50:LYS:CE	2.47	0.44
15:O:11:GLU:O	15:O:15:LYS:HG3	2.18	0.44
17:Q:396:HIS:CE1	17:Q:397:TRP:CE2	3.05	0.44
18:S:152:LEU:HA	18:S:155:GLU:OE1	2.18	0.44
17:U:141:GLY:HA3	25:U:501:GDP:PA	2.57	0.44
17:U:396:HIS:CE1	17:U:397:TRP:CE2	3.05	0.44
18:s:101:ASN:HD22	18:s:143:GLY:HA2	1.82	0.44
17:u:183:TYR:HE2	17:u:388:MET:HE2	1.81	0.44
18:r:79:ARG:HH11	18:r:84:ARG:HD2	1.82	0.44
17:q:183:TYR:HE2	17:q:388:MET:HE2	1.81	0.44
17:y:18:ALA:HB2	17:y:76:VAL:HG23	1.99	0.44
17:y:58:ARG:NH2	17:y:83:GLN:HB3	2.32	0.44
17:y:67:ASP:OD1	17:y:68:LEU:N	2.49	0.44
17:y:183:TYR:HE2	17:y:388:MET:HE2	1.81	0.44
17:y:379:LYS:CG	17:y:419:VAL:HG11	2.47	0.44
2:B:174:LEU:CD2	2:B:236:ASN:HB3	2.47	0.44
2:B:744:MET:HE2	2:B:776:LEU:HD22	2.00	0.44
2:B:890:PHE:CE2	2:B:891:ILE:HG12	2.53	0.44
2:B:1808:LYS:N	2:B:1808:LYS:HD2	2.33	0.44
2:B:2124:ARG:HH22	2:B:4456:GLN:HG2	1.83	0.44
2:B:2441:LEU:HD12	2:B:2465:TRP:CD1	2.52	0.44
2:B:2461:PHE:O	2:B:2464:VAL:HG12	2.18	0.44
2:B:2539:SER:OG	2:B:2542:THR:OG1	2.27	0.44
2:B:2709:LYS:NZ	2:B:2804:ILE:HG12	2.32	0.44
3:C:948:LEU:HD22	3:C:1010:LYS:HD3	1.97	0.44
3:C:1517:LEU:O	3:C:1520:SER:OG	2.32	0.44
3:C:1705:GLN:O	3:C:1709:VAL:HG22	2.17	0.44
3:C:1779:THR:HA	3:C:1782:GLU:OE2	2.18	0.44
3:C:2202:GLU:CD	3:C:2202:GLU:H	2.26	0.44
3:C:2423:LYS:HD2	3:C:2423:LYS:HA	1.84	0.44
3:C:3037:SER:OG	3:C:3038:VAL:N	2.49	0.44
3:C:3108:ASP:O	3:C:3112:GLN:HG3	2.17	0.44
3:C:3764:VAL:O	3:C:3767:VAL:HG12	2.17	0.44
4:D:352:CYS:SG	4:D:399:VAL:HG23	2.58	0.44
4:D:504:TYR:HE2	4:D:521:ALA:HB2	1.81	0.44
4:D:505:LYS:NZ	4:D:548:ALA:HB3	2.32	0.44
5:E:164:VAL:HG23	5:E:483:GLY:HA2	1.99	0.44
8:H:50:ARG:NH2	8:H:57:TRP:O	2.50	0.44
11:K:31:GLU:HA	14:N:32:SER:CB	2.47	0.44
17:Q:15:GLN:HB3	17:Q:226:ASN:ND2	2.32	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:U:15:GLN:HB3	17:U:226:ASN:ND2	2.32	0.44
17:Y:15:GLN:HB3	17:Y:226:ASN:ND2	2.32	0.44
17:Y:141:GLY:HA3	25:Y:501:GDP:PA	2.57	0.44
17:Y:377:MET:HE3	17:Y:377:MET:HB3	1.73	0.44
17:Y:396:HIS:CE1	17:Y:397:TRP:CE2	3.05	0.44
18:s:79:ARG:HH11	18:s:84:ARG:HD2	1.82	0.44
18:s:119:LEU:O	18:s:123:ARG:HB2	2.17	0.44
18:s:264:ARG:HB3	18:s:431:ASP:OD2	2.18	0.44
18:r:53:PHE:HB3	18:r:61:HIS:CD2	2.52	0.44
18:r:264:ARG:HB3	18:r:431:ASP:OD2	2.18	0.44
18:r:326:LYS:HD3	18:r:326:LYS:HA	1.74	0.44
17:q:58:ARG:NH2	17:q:83:GLN:HB3	2.32	0.44
18:w:101:ASN:HD22	18:w:143:GLY:HA2	1.82	0.44
18:w:119:LEU:O	18:w:123:ARG:HB2	2.17	0.44
18:w:264:ARG:HB3	18:w:431:ASP:OD2	2.18	0.44
2:B:63:TRP:O	2:B:88:GLY:HA2	2.17	0.44
2:B:504:ALA:CB	2:B:539:GLU:HG3	2.47	0.44
2:B:1229:PHE:CE2	2:B:1277:ARG:HG3	2.51	0.44
2:B:1240:PHE:HZ	2:B:1271:LEU:HB2	1.81	0.44
2:B:1361:GLY:O	2:B:1364:VAL:HG12	2.18	0.44
2:B:1623:ASN:O	2:B:1629:LYS:HD3	2.16	0.44
2:B:2567:PHE:CE2	2:B:2604:ILE:HG23	2.52	0.44
2:B:2936:ILE:HB	2:B:2944:ARG:NH2	2.14	0.44
2:B:3110:SER:O	2:B:3114:LEU:N	2.46	0.44
2:B:3504:LYS:HE3	2:B:3522:ALA:HB3	1.98	0.44
2:B:4069:ASN:OD1	2:B:4070:SER:N	2.50	0.44
2:B:4465:GLU:HB2	2:B:4468:LYS:HB2	2.00	0.44
3:C:675:ILE:HD12	3:C:772:TRP:CH2	2.52	0.44
3:C:1382:LYS:O	3:C:1386:ILE:HG13	2.17	0.44
3:C:1501:PHE:O	3:C:1504:VAL:HG12	2.18	0.44
3:C:1555:ALA:HA	3:C:1564:CYS:SG	2.57	0.44
3:C:2006:ILE:O	3:C:2009:LYS:HG3	2.16	0.44
3:C:2527:SER:HB2	3:C:2528:PRO:HD2	2.00	0.44
3:C:2562:MET:HB2	3:C:2611:MET:HE1	1.98	0.44
3:C:2646:PRO:O	3:C:2650:HIS:ND1	2.51	0.44
3:C:3115:GLU:HA	3:C:3118:LYS:HE2	1.99	0.44
3:C:4109:PHE:O	3:C:4113:ILE:HG21	2.17	0.44
3:C:4116:GLU:OE2	3:C:4166:LEU:HG	2.18	0.44
3:C:4296:MET:HE3	3:C:4297:ILE:HG12	1.99	0.44
4:D:575:LYS:HD3	4:D:577:ASN:H	1.82	0.44
7:G:118:ASP:HB3	7:G:120:THR:HG23	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:89:VAL:HG11	9:I:94:LEU:HD22	1.98	0.44
9:I:89:VAL:CG2	9:I:108:PHE:HB2	2.47	0.44
17:Q:94:GLN:HA	18:S:1:MET:HE3	1.99	0.44
17:Q:141:GLY:HA3	25:Q:501:GDP:PA	2.57	0.44
17:Q:337:ASN:CB	17:Q:340:TYR:HD2	2.29	0.44
17:U:377:MET:HE3	17:U:377:MET:HB3	1.73	0.44
21:X:93:ASP:HA	21:X:96:ASP:OD1	2.17	0.44
4:d:116:ILE:HG21	4:d:122:GLU:HB2	1.99	0.44
18:r:119:LEU:O	18:r:123:ARG:HB2	2.17	0.44
2:B:186:THR:HG22	2:B:188:PRO:HD2	1.99	0.44
2:B:1126:LYS:NZ	2:B:1134:LEU:HD22	2.28	0.44
2:B:1291:GLN:CD	2:B:1291:GLN:H	2.25	0.44
2:B:1318:ILE:HG22	2:B:1322:TYR:CE2	2.53	0.44
2:B:1325:TRP:CZ3	2:B:1416:LEU:HD22	2.40	0.44
2:B:1424:GLU:HG2	2:B:1428:ASN:ND2	2.32	0.44
2:B:1607:PRO:HG3	2:B:1945:GLN:HG2	1.99	0.44
2:B:1638:PHE:CE2	2:B:1641:LEU:HD23	2.52	0.44
2:B:1723:GLU:OE2	2:B:1774:LYS:NZ	2.46	0.44
2:B:1956:ASN:HD21	2:B:2004:MET:HE2	1.82	0.44
2:B:2698:THR:HG22	2:B:2699:ILE:HG13	1.99	0.44
2:B:3467:LYS:HA	2:B:3470:LEU:HG	1.99	0.44
2:B:3888:HIS:ND1	2:B:3893:GLU:OE2	2.50	0.44
2:B:3984:PHE:CE2	2:B:3986:ILE:HG13	2.52	0.44
2:B:4396:VAL:HG23	2:B:4401:GLN:OE1	2.18	0.44
2:B:4553:ARG:HD3	2:B:4553:ARG:HA	1.74	0.44
3:C:32:PHE:O	3:C:38:LYS:HE2	2.17	0.44
3:C:800:ASP:CG	5:E:150:LEU:HD22	2.42	0.44
3:C:1147:ALA:O	3:C:1151:MET:HG2	2.18	0.44
3:C:1234:GLY:HA3	3:C:1252:PHE:HE2	1.83	0.44
3:C:1391:LEU:HD12	3:C:1407:ALA:HB2	1.99	0.44
3:C:2381:GLN:HE22	3:C:2438:LEU:HD12	1.81	0.44
3:C:2523:SER:OG	3:C:2939:ASN:ND2	2.50	0.44
3:C:3650:THR:OG1	3:C:3651:GLN:N	2.51	0.44
3:C:3734:GLU:O	3:C:3738:LYS:HG2	2.17	0.44
3:C:4575:THR:HG23	3:C:4598:PRO:HG3	1.98	0.44
4:D:487:ALA:HB3	4:D:491:GLN:OE1	2.17	0.44
11:K:48:LEU:HB2	11:K:49:LYS:HZ2	1.83	0.44
12:L:27:ALA:HB3	12:L:30:LEU:HD13	2.00	0.44
12:L:98:LEU:HG	12:L:100:PRO:HD2	2.00	0.44
17:Q:58:ARG:NH2	17:Q:83:GLN:HB3	2.32	0.44
17:Q:164:MET:H	17:Q:197:ASP:HB2	1.83	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:R:145:THR:HG23	18:R:146:GLY:N	2.32	0.44
19:T:132:THR:OG1	19:T:133:ALA:N	2.50	0.44
17:U:58:ARG:NH2	17:U:83:GLN:HB3	2.32	0.44
18:W:96:LYS:HD2	17:Y:129:CYS:HB2	1.99	0.44
21:X:122:GLN:HA	21:X:125:LEU:HG	1.99	0.44
17:Y:58:ARG:NH2	17:Y:83:GLN:HB3	2.32	0.44
18:w:192:HIS:ND1	18:w:424:ASP:OD2	2.51	0.44
17:y:15:GLN:HB3	17:y:226:ASN:ND2	2.32	0.44
2:B:200:ILE:HD11	2:B:256:ILE:HG21	2.00	0.44
2:B:583:PRO:HD3	2:B:682:LYS:NZ	2.32	0.44
2:B:1116:PHE:HB3	2:B:1157:ARG:NE	2.33	0.44
2:B:2039:MET:SD	2:B:2083:LEU:HB3	2.58	0.44
2:B:2522:TYR:HD1	2:B:2523:MET:HE2	1.82	0.44
2:B:2709:LYS:HE3	2:B:2709:LYS:HB3	1.67	0.44
2:B:3801:ILE:HD12	2:B:3804:ILE:HB	1.99	0.44
2:B:3865:TRP:CZ3	2:B:3866:LEU:HG	2.53	0.44
3:C:55:ALA:HB3	3:C:93:VAL:CG1	2.48	0.44
3:C:56:TYR:CD1	3:C:80:PHE:HZ	2.36	0.44
3:C:679:ASP:OD1	3:C:679:ASP:N	2.51	0.44
3:C:864:GLN:NE2	5:E:154:LYS:O	2.48	0.44
3:C:1463:ILE:O	3:C:1466:THR:OG1	2.26	0.44
3:C:1537:GLN:HG2	3:C:1587:MET:HE2	2.00	0.44
3:C:2914:GLY:O	3:C:2990:ARG:NH1	2.50	0.44
3:C:3117:PHE:HA	3:C:3429:TRP:HE3	1.81	0.44
3:C:3533:PRO:HG3	3:C:3630:ALA:HB2	2.00	0.44
3:C:3736:LYS:O	3:C:3740:ILE:HG22	2.17	0.44
3:C:4020:GLY:O	3:C:4023:GLN:HB2	2.18	0.44
3:C:4159:TYR:O	3:C:4163:GLU:HG3	2.18	0.44
4:D:299:VAL:HB	4:D:591:THR:OG1	2.17	0.44
4:D:572:ASN:HB3	4:D:633:LYS:NZ	2.33	0.44
5:E:164:VAL:HG11	5:E:479:GLY:HA3	1.99	0.44
11:K:29:PRO:CG	14:N:30:TYR:H	2.29	0.44
12:L:95:PHE:CD1	12:L:106:LEU:HB2	2.52	0.44
16:P:25:LEU:HB2	16:P:55:ILE:CD1	2.47	0.44
18:R:101:ASN:HA	18:R:144:GLY:N	2.33	0.44
18:S:101:ASN:HD22	18:S:143:GLY:HA2	1.82	0.44
18:S:145:THR:HG23	18:S:146:GLY:N	2.32	0.44
18:W:101:ASN:HA	18:W:144:GLY:N	2.33	0.44
18:W:101:ASN:HD22	18:W:143:GLY:HA2	1.82	0.44
18:W:145:THR:HG23	18:W:146:GLY:N	2.32	0.44
17:Y:164:MET:H	17:Y:197:ASP:HB2	1.83	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:d:114:ASP:OD1	4:d:114:ASP:N	2.50	0.44
18:s:192:HIS:ND1	18:s:424:ASP:OD2	2.51	0.44
17:u:15:GLN:HB3	17:u:226:ASN:ND2	2.32	0.44
18:r:152:LEU:HA	18:r:155:GLU:OE1	2.18	0.44
18:r:192:HIS:ND1	18:r:424:ASP:OD2	2.51	0.44
18:r:402:ARG:HG3	18:r:402:ARG:HH11	1.83	0.44
17:q:15:GLN:HB3	17:q:226:ASN:ND2	2.32	0.44
17:q:330:MET:HA	17:q:333:VAL:CG1	2.45	0.44
18:w:402:ARG:HH11	18:w:402:ARG:HG3	1.83	0.44
26:w:501:GTP:O3G	17:y:252:LYS:HD2	2.18	0.44
1:A:288:VAL:CG1	1:A:290:ASP:H	2.31	0.44
2:B:499:LEU:O	2:B:503:LEU:HG	2.18	0.44
2:B:790:ILE:HD11	2:B:839:LEU:HB2	2.00	0.44
2:B:886:ILE:HG13	2:B:975:ASN:CG	2.42	0.44
2:B:904:LEU:HD11	2:B:990:PHE:CE2	2.52	0.44
2:B:1494:VAL:HG22	2:B:1498:TYR:HD1	1.83	0.44
2:B:1532:PHE:HB3	2:B:1539:ARG:HE	1.82	0.44
2:B:2072:TYR:HA	2:B:2113:LYS:HE2	1.99	0.44
2:B:2104:ARG:HD3	2:B:2104:ARG:HA	1.69	0.44
2:B:2160:GLU:HG3	2:B:2162:LEU:H	1.83	0.44
2:B:2164:VAL:O	2:B:2168:VAL:HG23	2.18	0.44
2:B:3760:LEU:HD22	2:B:3828:ILE:HD11	1.99	0.44
2:B:3781:PHE:HA	2:B:3784:LYS:HE2	1.99	0.44
2:B:3878:ILE:O	2:B:3878:ILE:HG22	2.18	0.44
2:B:4537:LYS:HB2	2:B:4542:LEU:HG	1.99	0.44
2:B:4543:TYR:N	2:B:4563:LEU:O	2.51	0.44
3:C:26:MET:O	3:C:26:MET:HE3	2.17	0.44
3:C:992:ASP:O	3:C:996:VAL:HG22	2.17	0.44
3:C:1129:ILE:O	3:C:1201:TYR:OH	2.31	0.44
3:C:1541:PHE:O	3:C:1544:ILE:HG22	2.17	0.44
3:C:1660:ILE:HD11	3:C:1776:VAL:HB	2.00	0.44
3:C:1811:GLN:O	3:C:1813:ARG:NH1	2.50	0.44
3:C:2901:ASP:N	3:C:2901:ASP:OD1	2.49	0.44
3:C:3425:GLU:CG	3:C:3695:LEU:HD23	2.39	0.44
3:C:4297:ILE:O	3:C:4301:MET:HG2	2.17	0.44
3:C:4336:ASN:O	3:C:4340:VAL:HG23	2.18	0.44
4:D:499:HIS:CD2	4:D:526:ARG:HD3	2.53	0.44
5:E:200:TRP:HA	5:E:209:GLU:HG2	2.00	0.44
5:E:522:ILE:HA	5:E:525:GLN:CD	2.43	0.44
6:F:38:LYS:HA	6:F:41:SER:O	2.18	0.44
8:H:81:VAL:HG23	8:H:86:ILE:HD13	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:90:HIS:NE2	11:K:95:PHE:HB2	2.33	0.44
18:R:8:HIS:HB3	18:R:13:GLY:O	2.18	0.44
18:R:192:HIS:ND1	18:R:424:ASP:OD2	2.51	0.44
18:S:101:ASN:HA	18:S:144:GLY:N	2.33	0.44
19:T:107:LYS:CB	19:T:177:ARG:HG2	2.48	0.44
17:U:164:MET:H	17:U:197:ASP:HB2	1.83	0.44
18:W:119:LEU:O	18:W:123:ARG:HB2	2.17	0.44
17:Y:76:VAL:HG22	17:Y:77:ARG:HH22	1.83	0.44
18:s:402:ARG:HH11	18:s:402:ARG:HG3	1.83	0.44
17:u:330:MET:HA	17:u:333:VAL:CG1	2.45	0.44
18:r:174:SER:HA	18:r:205:ASP:OD2	2.17	0.44
17:q:15:GLN:HB3	17:q:226:ASN:HD21	1.82	0.44
1:A:220:TRP:CE2	2:B:956:LEU:HD13	2.50	0.44
2:B:55:GLN:NE2	2:B:57:ASN:HB3	2.32	0.44
2:B:60:ASN:HD21	3:C:141:ARG:HE	1.64	0.44
2:B:64:VAL:HG23	2:B:77:GLN:NE2	2.33	0.44
2:B:236:ASN:HA	2:B:239:ASP:OD2	2.17	0.44
2:B:801:ILE:HG21	2:B:874:ALA:CB	2.46	0.44
2:B:1330:TRP:CB	2:B:1410:PHE:CD2	3.01	0.44
2:B:2014:LEU:HA	2:B:2015:PRO:HD2	1.87	0.44
2:B:2267:ILE:HG23	2:B:2310:ASN:HB2	2.00	0.44
2:B:2283:LYS:NZ	2:B:2296:THR:O	2.50	0.44
2:B:2515:ILE:HD12	2:B:2515:ILE:HA	1.59	0.44
2:B:2771:TRP:NE1	2:B:2775:MET:HE3	2.33	0.44
2:B:3515:ASP:O	2:B:3519:LEU:HG	2.17	0.44
2:B:3980:THR:HG23	2:B:4068:GLY:HA3	1.99	0.44
3:C:58:GLN:HB3	3:C:68:ILE:HG23	1.99	0.44
3:C:85:LEU:HG	3:C:87:LYS:N	2.32	0.44
3:C:282:ARG:NE	20:x:126:UNK:HA	2.33	0.44
3:C:543:GLU:OE1	3:C:576:TYR:OH	2.21	0.44
3:C:794:LEU:O	3:C:798:VAL:HG23	2.18	0.44
3:C:1381:GLU:HA	3:C:1384:LYS:HZ3	1.83	0.44
3:C:1753:LYS:HD3	3:C:1753:LYS:HA	1.89	0.44
3:C:2112:LEU:HG	3:C:2117:GLU:HG3	2.00	0.44
3:C:2444:SER:OG	3:C:2462:PRO:O	2.31	0.44
3:C:2448:TRP:CE3	3:C:2449:VAL:HG12	2.52	0.44
3:C:2483:HIS:O	3:C:2484:THR:OG1	2.35	0.44
3:C:3558:LEU:HD12	3:C:3564:LYS:HE2	2.00	0.44
3:C:3571:CYS:SG	3:C:3578:LEU:HB2	2.57	0.44
3:C:3737:THR:O	3:C:3741:ASN:HB2	2.17	0.44
5:E:469:TYR:C	5:E:471:ASN:H	2.25	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:17:GLU:CD	10:J:18:MET:H	2.25	0.44
17:Q:76:VAL:HG22	17:Q:77:ARG:HH22	1.83	0.44
18:R:385:ALA:O	18:R:389:SER:OG	2.35	0.44
18:S:15:GLN:HB3	18:S:228:ASN:ND2	2.33	0.44
18:S:119:LEU:O	18:S:123:ARG:HB2	2.17	0.44
18:S:192:HIS:ND1	18:S:424:ASP:OD2	2.51	0.44
19:T:140:LEU:HB3	19:T:145:TYR:HD2	1.83	0.44
18:W:15:GLN:HB3	18:W:228:ASN:ND2	2.33	0.44
18:s:174:SER:HA	18:s:205:ASP:OD2	2.17	0.44
18:s:236:SER:O	18:s:243:ARG:NH2	2.50	0.44
17:u:15:GLN:HB3	17:u:226:ASN:HD21	1.82	0.44
17:u:391:ARG:HH22	18:w:435:VAL:HA	1.82	0.44
18:r:101:ASN:HA	18:r:144:GLY:N	2.33	0.44
18:r:145:THR:HG23	18:r:146:GLY:N	2.32	0.44
26:r:501:GTP:O3G	17:q:252:LYS:HD2	2.18	0.44
17:q:396:HIS:CE1	17:q:397:TRP:CE2	3.05	0.44
18:w:174:SER:HA	18:w:205:ASP:OD2	2.17	0.44
18:w:236:SER:O	18:w:243:ARG:NH2	2.50	0.44
17:y:156:ARG:HH12	17:y:162:ARG:HB2	1.83	0.44
17:y:330:MET:HA	17:y:333:VAL:CG1	2.45	0.44
1:A:222:PHE:HB2	2:B:952:PRO:CB	2.33	0.43
2:B:49:PHE:O	2:B:53:ILE:HG13	2.17	0.43
2:B:64:VAL:HG22	2:B:83:LYS:NZ	2.33	0.43
2:B:127:GLU:HG3	3:C:51:ASN:HB2	1.99	0.43
2:B:152:GLU:C	2:B:180:LYS:HD2	2.42	0.43
2:B:230:GLU:OE2	2:B:346:GLU:HG3	2.17	0.43
2:B:428:HIS:CD2	2:B:428:HIS:N	2.86	0.43
2:B:434:VAL:O	2:B:438:LYS:HE2	2.18	0.43
2:B:1101:PHE:O	2:B:1105:GLN:HG2	2.18	0.43
2:B:1365:ILE:HD13	2:B:1368:LYS:HD2	1.99	0.43
2:B:1408:LEU:HG	2:B:1409:SER:H	1.82	0.43
2:B:1448:GLU:OE1	2:B:1500:ARG:NH2	2.51	0.43
2:B:2077:ARG:NH2	2:B:2318:ARG:HH22	2.15	0.43
2:B:2096:MET:O	2:B:2096:MET:HE3	2.19	0.43
2:B:2162:LEU:HB3	2:B:2166:LYS:NZ	2.32	0.43
2:B:2215:PRO:HD3	2:B:2263:LEU:HD12	2.00	0.43
2:B:4017:LEU:HD23	2:B:4047:MET:CG	2.48	0.43
3:C:686:VAL:HG11	3:C:689:ASP:HB2	2.00	0.43
3:C:1367:ILE:HG22	3:C:1371:LYS:CG	2.48	0.43
3:C:2143:LEU:HD11	3:C:2153:PHE:CE2	2.53	0.43
3:C:2418:ILE:HG13	3:C:2420:GLN:HE22	1.83	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2842:PHE:O	3:C:2846:LEU:HG	2.18	0.43
3:C:3560:HIS:HB3	3:C:3563:PHE:HB3	1.99	0.43
3:C:3644:ILE:O	3:C:3645:ILE:HD13	2.18	0.43
3:C:3870:GLU:OE2	3:C:3870:GLU:N	2.43	0.43
3:C:4108:THR:HG22	3:C:4159:TYR:HE1	1.81	0.43
3:C:4461:LEU:CD1	3:C:4553:LEU:HD11	2.48	0.43
4:D:358:LYS:HB2	4:D:358:LYS:HE2	1.77	0.43
5:E:148:LYS:HZ2	5:E:448:PHE:HD2	1.66	0.43
5:E:475:LEU:HD13	5:E:487:ILE:HD11	2.00	0.43
6:F:15:SER:HA	6:F:23:TYR:CE1	2.53	0.43
9:I:46:ILE:HD11	9:I:99:TYR:CE2	2.52	0.43
18:R:15:GLN:HB3	18:R:228:ASN:ND2	2.33	0.43
18:R:101:ASN:HD22	18:R:143:GLY:HA2	1.82	0.43
18:R:119:LEU:O	18:R:123:ARG:HB2	2.17	0.43
18:S:8:HIS:HB3	18:S:13:GLY:O	2.18	0.43
17:U:76:VAL:HG22	17:U:77:ARG:HH22	1.83	0.43
18:W:8:HIS:HB3	18:W:13:GLY:O	2.18	0.43
18:W:101:ASN:ND2	17:Y:252:LYS:HE3	2.32	0.43
18:W:179:THR:HG21	17:Y:246:LEU:HD21	2.00	0.43
18:W:192:HIS:ND1	18:W:424:ASP:OD2	2.51	0.43
18:W:264:ARG:HB3	18:W:431:ASP:OD2	2.18	0.43
21:X:155:VAL:HG11	22:Z:150:PHE:HB2	1.99	0.43
22:Z:86:LYS:HG3	22:Z:87:ILE:HG23	2.00	0.43
18:s:145:THR:HG23	18:s:146:GLY:N	2.32	0.43
18:s:152:LEU:HA	18:s:155:GLU:OE1	2.18	0.43
17:u:210:ILE:HG22	17:u:213:ARG:NH2	2.33	0.43
17:u:396:HIS:CE1	17:u:397:TRP:CE2	3.05	0.43
17:q:210:ILE:HG22	17:q:213:ARG:NH2	2.33	0.43
17:q:259:PRO:HG2	17:q:260:PHE:CD2	2.53	0.43
17:q:294:PHE:CE1	17:q:333:VAL:HG21	2.53	0.43
18:w:152:LEU:HA	18:w:155:GLU:OE1	2.18	0.43
18:w:195:LEU:HD21	18:w:428:LEU:HD11	2.00	0.43
17:y:377:MET:HA	17:y:380:ARG:HD2	2.01	0.43
1:A:12:GLN:HE22	1:A:338:PHE:HE1	1.66	0.43
1:A:89:ALA:N	1:A:96:LEU:O	2.47	0.43
1:A:164:HIS:CE1	1:A:201:GLY:HA3	2.53	0.43
1:A:341:TRP:CZ2	2:B:963:PHE:CG	3.06	0.43
2:B:135:ASN:HA	2:B:138:ASN:HD22	1.82	0.43
2:B:161:VAL:HG22	2:B:164:LEU:HD13	2.00	0.43
2:B:368:ILE:O	2:B:372:GLU:N	2.51	0.43
2:B:436:PHE:CZ	2:B:499:LEU:HD13	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1106:PHE:CD2	2:B:1171:LEU:HB2	2.52	0.43
2:B:1315:ILE:HD13	2:B:1318:ILE:HD12	1.99	0.43
2:B:1325:TRP:CH2	2:B:1416:LEU:HB2	2.53	0.43
2:B:1451:TRP:O	2:B:1570:VAL:HB	2.18	0.43
2:B:1623:ASN:OD1	2:B:1626:ASN:HB2	2.17	0.43
2:B:1764:ILE:O	2:B:1768:LEU:HD23	2.17	0.43
2:B:3136:TYR:O	2:B:3140:LEU:HG	2.19	0.43
2:B:3657:PHE:HB3	2:B:3747:TYR:HE2	1.83	0.43
2:B:4363:ILE:HD11	2:B:4403:LEU:HD21	2.00	0.43
2:B:4370:ILE:CD1	2:B:4387:ILE:HG21	2.48	0.43
3:C:183:MET:HB3	3:C:216:TRP:CE2	2.54	0.43
3:C:745:LYS:HA	3:C:745:LYS:HD3	1.72	0.43
3:C:1478:LEU:HB3	3:C:1498:ILE:HD11	2.00	0.43
3:C:2102:PHE:HB3	3:C:2105:LEU:HD13	1.99	0.43
3:C:2216:TRP:HD1	3:C:2262:ILE:HD13	1.82	0.43
3:C:3478:LYS:HD3	3:C:3478:LYS:N	2.32	0.43
3:C:4536:TRP:HE1	3:C:4551:ALA:HA	1.83	0.43
4:D:304:TRP:HB3	4:D:312:PHE:CE2	2.53	0.43
4:D:406:PRO:HA	4:D:412:TYR:CD2	2.49	0.43
4:D:566:VAL:O	4:D:581:GLU:HA	2.19	0.43
5:E:249:GLU:HG2	5:E:249:GLU:O	2.17	0.43
9:I:30:MET:HE1	9:I:75:TRP:CH2	2.52	0.43
10:J:92:LYS:HA	10:J:92:LYS:HD2	1.88	0.43
12:L:45:ASN:HD21	12:L:52:ASP:HB3	1.82	0.43
17:Q:259:PRO:HG2	17:Q:260:PHE:CD2	2.54	0.43
18:R:28:HIS:NE2	18:R:243:ARG:HD2	2.33	0.43
18:R:264:ARG:HB3	18:R:431:ASP:OD2	2.18	0.43
18:S:264:ARG:HB3	18:S:431:ASP:OD2	2.18	0.43
18:S:385:ALA:O	18:S:389:SER:OG	2.35	0.43
18:W:385:ALA:O	18:W:389:SER:OG	2.35	0.43
18:s:101:ASN:HA	18:s:144:GLY:N	2.33	0.43
18:s:213:CYS:HA	18:s:217:LEU:CD1	2.48	0.43
18:s:405:VAL:HG13	18:s:415:GLU:OE1	2.19	0.43
26:s:501:GTP:O3G	17:u:252:LYS:HD2	2.18	0.43
17:u:259:PRO:HG2	17:u:260:PHE:CD2	2.54	0.43
17:u:294:PHE:CE1	17:u:333:VAL:HG21	2.53	0.43
18:r:195:LEU:HD21	18:r:428:LEU:HD11	2.00	0.43
17:q:164:MET:H	17:q:197:ASP:HB2	1.83	0.43
18:w:101:ASN:HA	18:w:144:GLY:N	2.33	0.43
18:w:145:THR:HG23	18:w:146:GLY:N	2.32	0.43
18:w:213:CYS:HA	18:w:217:LEU:CD1	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:y:15:GLN:HB3	17:y:226:ASN:HD21	1.82	0.43
17:y:259:PRO:HG2	17:y:260:PHE:CD2	2.54	0.43
17:y:294:PHE:CE1	17:y:333:VAL:HG21	2.53	0.43
17:y:396:HIS:CE1	17:y:397:TRP:CE2	3.05	0.43
2:B:128:ILE:O	2:B:131:PRO:HD2	2.18	0.43
2:B:561:ILE:HG12	2:B:566:LYS:HD3	2.00	0.43
2:B:1215:GLN:HB3	2:B:1218:GLU:CG	2.48	0.43
2:B:1450:TRP:HZ3	2:B:1479:GLN:HB2	1.83	0.43
2:B:1885:ILE:HA	2:B:1888:THR:HG22	2.01	0.43
2:B:1931:MET:O	2:B:1962:VAL:HG21	2.18	0.43
2:B:2059:TYR:O	2:B:2062:SER:OG	2.32	0.43
2:B:2160:GLU:HB3	2:B:2163:PHE:CD1	2.53	0.43
2:B:2881:MET:SD	2:B:2884:ASN:HB3	2.58	0.43
2:B:3129:ILE:HG21	2:B:3444:ILE:HG13	1.99	0.43
2:B:3536:ASP:HB3	2:B:3625:MET:SD	2.58	0.43
2:B:3607:LEU:HB2	2:B:3616:TYR:CZ	2.54	0.43
2:B:4119:ILE:HD13	2:B:4245:TYR:CG	2.53	0.43
2:B:4202:ASP:HA	2:B:4205:ARG:HB3	2.00	0.43
2:B:4207:LEU:HD12	2:B:4573:ILE:HG22	1.99	0.43
2:B:4340:GLU:HG2	2:B:4347:ASN:OD1	2.18	0.43
3:C:2448:TRP:CG	3:C:2449:VAL:H	2.36	0.43
3:C:2576:LEU:HD11	3:C:2625:LEU:HD22	1.99	0.43
3:C:2815:THR:O	3:C:2819:LYS:HG2	2.17	0.43
3:C:2877:THR:CB	23:C:4703:ADP:C8	2.99	0.43
3:C:3705:ASN:CB	3:C:3708:ASP:HB3	2.48	0.43
3:C:3825:THR:OG1	3:C:3826:PHE:N	2.51	0.43
3:C:4337:ASP:O	3:C:4341:ARG:HG2	2.18	0.43
6:F:26:PHE:CD1	6:F:98:LEU:HD11	2.54	0.43
6:F:36:HIS:O	6:F:39:SER:OG	2.36	0.43
8:H:73:ARG:CZ	5:e:73:MET:H	2.31	0.43
9:I:43:GLN:HA	9:I:46:ILE:HD12	2.00	0.43
11:K:42:ARG:HG3	11:K:43:GLU:N	2.33	0.43
13:M:43:TYR:O	13:M:47:LYS:HD3	2.19	0.43
16:P:24:VAL:HA	16:P:54:THR:O	2.19	0.43
17:Q:99:ASN:HD22	18:S:258:ASN:CG	2.26	0.43
18:S:28:HIS:NE2	18:S:243:ARG:HD2	2.33	0.43
17:U:114:ASP:OD2	22:Z:145:LYS:HB2	2.18	0.43
17:U:259:PRO:HG2	17:U:260:PHE:CD2	2.53	0.43
18:W:28:HIS:NE2	18:W:243:ARG:HD2	2.33	0.43
18:W:105:ARG:NH1	17:Y:251:ARG:HD2	2.33	0.43
21:X:177:LYS:HA	21:X:180:ARG:CZ	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:X:194:LEU:HB3	22:Z:188:LYS:HG2	2.00	0.43
17:Y:412:GLU:C	17:Y:412:GLU:CD	2.87	0.43
18:s:179:THR:O	17:u:350:LYS:HG2	2.18	0.43
18:s:195:LEU:HD21	18:s:428:LEU:HD11	2.00	0.43
18:s:385:ALA:O	18:s:389:SER:OG	2.35	0.43
17:u:156:ARG:HH12	17:u:162:ARG:HB2	1.83	0.43
17:u:313:ALA:O	17:u:349:ILE:HA	2.19	0.43
17:u:412:GLU:CD	17:u:412:GLU:C	2.87	0.43
18:r:213:CYS:HA	18:r:217:LEU:CD1	2.48	0.43
18:r:236:SER:O	18:r:243:ARG:NH2	2.50	0.43
18:r:405:VAL:HG13	18:r:415:GLU:OE1	2.19	0.43
17:q:156:ARG:HH12	17:q:162:ARG:HB2	1.83	0.43
17:q:313:ALA:O	17:q:349:ILE:HA	2.19	0.43
17:q:377:MET:HA	17:q:380:ARG:HD2	2.01	0.43
18:w:8:HIS:HB3	18:w:13:GLY:O	2.18	0.43
18:w:222:PRO:HD2	17:y:324:LYS:HD2	1.99	0.43
18:w:385:ALA:O	18:w:389:SER:OG	2.35	0.43
18:w:405:VAL:HG13	18:w:415:GLU:OE1	2.19	0.43
17:y:210:ILE:HG22	17:y:213:ARG:NH2	2.33	0.43
17:y:313:ALA:O	17:y:349:ILE:HA	2.19	0.43
2:B:204:THR:HG22	2:B:208:LYS:HE3	2.00	0.43
2:B:452:LEU:HD21	5:E:517:LYS:NZ	2.33	0.43
2:B:566:LYS:HG3	2:B:567:GLN:H	1.83	0.43
2:B:1148:SER:H	2:B:1214:LEU:HD22	1.82	0.43
2:B:1416:LEU:O	2:B:1416:LEU:HG	2.18	0.43
2:B:1440:ILE:HG23	2:B:1496:PHE:HD2	1.84	0.43
2:B:1452:SER:HB2	2:B:1453:LYS:NZ	2.34	0.43
2:B:1530:ASN:O	2:B:1534:LEU:HG	2.18	0.43
2:B:1657:LYS:HD2	2:B:1657:LYS:N	2.34	0.43
2:B:1775:VAL:HG12	2:B:2044:GLY:HA2	2.00	0.43
2:B:2200:SER:HA	2:B:2203:ASN:ND2	2.33	0.43
2:B:2709:LYS:HD2	2:B:2709:LYS:C	2.44	0.43
2:B:2945:VAL:HA	2:B:3017:LYS:O	2.19	0.43
2:B:3657:PHE:HB3	2:B:3747:TYR:CE2	2.53	0.43
2:B:3660:MET:O	2:B:3664:ILE:HG12	2.18	0.43
2:B:4377:LEU:HD23	2:B:4377:LEU:HA	1.85	0.43
3:C:80:PHE:O	3:C:88:ILE:HG13	2.18	0.43
3:C:542:ILE:H	3:C:542:ILE:HG12	1.54	0.43
3:C:591:LYS:HB2	3:C:609:TRP:CE3	2.53	0.43
3:C:1378:ARG:CZ	3:C:1489:PRO:HG3	2.49	0.43
3:C:2009:LYS:HB2	3:C:2020:ILE:HG22	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2027:PHE:CZ	3:C:2074:LEU:HD21	2.53	0.43
3:C:4478:LYS:HD3	3:C:4558:VAL:HG11	2.01	0.43
6:F:14:LEU:O	6:F:17:LEU:HB2	2.18	0.43
7:G:63:THR:HA	7:G:66:ARG:NE	2.33	0.43
8:H:24:VAL:HA	8:H:49:PHE:CZ	2.51	0.43
8:H:56:THR:N	8:H:92:GLY:O	2.49	0.43
11:K:33:ALA:CB	14:N:39:LYS:HD3	2.49	0.43
14:N:29:PHE:HE1	14:N:34:ILE:HG12	1.82	0.43
17:Q:15:GLN:HB3	17:Q:226:ASN:HD21	1.82	0.43
17:Q:210:ILE:HG22	17:Q:213:ARG:NH2	2.33	0.43
18:R:383:ALA:O	18:R:386:GLU:HG2	2.18	0.43
18:S:402:ARG:HH11	18:S:402:ARG:HG3	1.83	0.43
17:U:15:GLN:HB3	17:U:226:ASN:HD21	1.82	0.43
17:U:210:ILE:HG22	17:U:213:ARG:NH2	2.33	0.43
17:U:412:GLU:C	17:U:412:GLU:CD	2.87	0.43
17:Y:156:ARG:HH12	17:Y:162:ARG:HB2	1.83	0.43
17:Y:210:ILE:HG22	17:Y:213:ARG:NH2	2.33	0.43
17:Y:259:PRO:HG2	17:Y:260:PHE:CD2	2.54	0.43
18:s:8:HIS:HB3	18:s:13:GLY:O	2.18	0.43
17:u:164:MET:H	17:u:197:ASP:HB2	1.83	0.43
17:u:343:GLU:OE1	17:u:343:GLU:HA	2.18	0.43
17:u:377:MET:HA	17:u:380:ARG:HD2	2.01	0.43
17:q:343:GLU:OE1	17:q:343:GLU:HA	2.18	0.43
17:q:412:GLU:C	17:q:412:GLU:CD	2.87	0.43
17:y:343:GLU:OE1	17:y:343:GLU:HA	2.18	0.43
17:y:412:GLU:C	17:y:412:GLU:CD	2.87	0.43
1:A:208:MET:CG	1:A:296:ILE:HG21	2.49	0.43
1:A:270:GLY:HA2	1:A:288:VAL:O	2.19	0.43
2:B:352:ILE:HD12	2:B:352:ILE:HA	1.78	0.43
2:B:380:LEU:CD2	2:B:427:LEU:HA	2.48	0.43
2:B:729:LEU:HD22	2:B:737:VAL:HB	2.00	0.43
2:B:853:GLN:H	2:B:853:GLN:CD	2.27	0.43
2:B:872:SER:O	2:B:876:GLN:HG2	2.18	0.43
2:B:1301:CYS:O	2:B:1305:LEU:HG	2.19	0.43
2:B:1330:TRP:HA	2:B:1412:PHE:N	2.33	0.43
2:B:1885:ILE:O	2:B:1888:THR:HG22	2.19	0.43
2:B:2039:MET:HE2	2:B:2039:MET:HB2	1.78	0.43
2:B:2312:THR:O	2:B:2315:THR:OG1	2.33	0.43
2:B:2560:VAL:HG23	2:B:2598:LYS:HE2	1.99	0.43
2:B:3728:GLU:HG3	2:B:3731:GLN:HE21	1.83	0.43
2:B:3750:VAL:HG13	2:B:3801:ILE:HD13	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3862:THR:HG23	2:B:3863:LEU:HG	1.99	0.43
2:B:4458:ILE:HD12	2:B:4528:LYS:CD	2.47	0.43
2:B:4498:LEU:N	2:B:4519:PHE:O	2.51	0.43
3:C:239:PRO:O	3:C:243:LEU:HG	2.18	0.43
3:C:278:HIS:HB2	3:C:282:ARG:CD	2.49	0.43
3:C:528:LEU:O	3:C:532:ILE:HG13	2.18	0.43
3:C:622:ASN:O	3:C:625:PRO:HD2	2.18	0.43
3:C:857:ARG:NE	5:E:205:PRO:HB2	2.30	0.43
3:C:1933:VAL:HA	3:C:4021:GLU:OE2	2.18	0.43
3:C:1940:GLN:O	3:C:1944:ILE:HG13	2.19	0.43
3:C:1995:ARG:NH2	3:C:4202:GLN:HA	2.34	0.43
3:C:2527:SER:OG	3:C:2530:MET:HG2	2.18	0.43
3:C:2726:GLU:OE2	3:C:2769:ILE:HD13	2.18	0.43
3:C:3119:ILE:O	3:C:3122:ASN:HB3	2.18	0.43
3:C:4561:ILE:HG22	3:C:4562:ASN:ND2	2.23	0.43
4:D:465:ASN:HA	4:D:516:PHE:CZ	2.53	0.43
11:K:32:CYS:HB3	14:N:36:LYS:HE2	2.00	0.43
17:Q:257:LEU:O	17:Q:370:ASN:ND2	2.52	0.43
17:Q:412:GLU:C	17:Q:412:GLU:CD	2.87	0.43
18:S:213:CYS:HA	18:S:217:LEU:CD1	2.48	0.43
18:S:383:ALA:O	18:S:386:GLU:HG2	2.18	0.43
17:U:156:ARG:HH12	17:U:162:ARG:HB2	1.83	0.43
17:U:257:LEU:O	17:U:370:ASN:ND2	2.52	0.43
18:W:383:ALA:O	18:W:386:GLU:HG2	2.18	0.43
18:W:402:ARG:HG3	18:W:402:ARG:HH11	1.83	0.43
21:X:179:GLU:C	21:X:183:TYR:CD2	2.94	0.43
17:Y:15:GLN:HB3	17:Y:226:ASN:HD21	1.82	0.43
18:s:208:ALA:HB3	18:s:302:MET:O	2.19	0.43
18:r:8:HIS:HB3	18:r:13:GLY:O	2.18	0.43
18:r:179:THR:O	17:q:350:LYS:HG2	2.18	0.43
18:w:179:THR:O	17:y:350:LYS:HG2	2.18	0.43
18:w:180:ALA:HB3	18:w:183:GLU:HG2	2.00	0.43
18:w:383:ALA:O	18:w:386:GLU:HG2	2.18	0.43
17:y:164:MET:H	17:y:197:ASP:HB2	1.83	0.43
1:A:212:PRO:HG2	1:A:235:GLU:OE2	2.18	0.43
1:A:276:PHE:HB2	1:A:282:ARG:CB	2.49	0.43
2:B:305:SER:OG	2:B:307:PRO:HD2	2.19	0.43
2:B:661:LEU:H	2:B:661:LEU:HD12	1.84	0.43
2:B:1418:LEU:HD11	2:B:1423:TYR:HD2	1.83	0.43
2:B:2377:TYR:HA	2:B:2380:GLN:NE2	2.30	0.43
2:B:3860:GLU:O	2:B:3861:ASN:ND2	2.52	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4013:PHE:O	2:B:4039:VAL:HA	2.19	0.43
3:C:17:ILE:HD12	3:C:32:PHE:HZ	1.83	0.43
3:C:80:PHE:CE1	3:C:87:LYS:HB3	2.54	0.43
3:C:431:ALA:O	3:C:434:PRO:HD2	2.19	0.43
3:C:531:PHE:HE2	3:C:538:ARG:HE	1.66	0.43
3:C:550:HIS:O	3:C:553:GLN:HG3	2.18	0.43
3:C:805:ARG:HH21	5:E:152:LEU:HB3	1.82	0.43
3:C:853:VAL:HG23	3:C:854:GLU:N	2.33	0.43
3:C:960:THR:O	3:C:964:ARG:HG2	2.19	0.43
3:C:2211:VAL:O	3:C:2215:ILE:HG12	2.18	0.43
3:C:3067:HIS:O	3:C:3070:VAL:HG12	2.18	0.43
3:C:3558:LEU:HB3	3:C:3582:ASN:OD1	2.18	0.43
3:C:3702:SER:C	3:C:3705:ASN:H	2.27	0.43
4:D:496:TYR:CE1	4:D:528:TRP:CD1	3.07	0.43
5:E:358:ARG:HH11	5:E:399:LYS:HD2	1.84	0.43
5:E:422:SER:HB2	5:E:500:LYS:NZ	2.34	0.43
15:O:37:THR:HG22	15:O:38:TYR:H	1.84	0.43
15:O:37:THR:HG22	15:O:38:TYR:N	2.34	0.43
15:O:86:THR:OG1	4:d:77:PRO:HD3	2.19	0.43
17:Q:313:ALA:O	17:Q:349:ILE:HA	2.19	0.43
17:Q:358:PRO:CG	17:Q:364:ALA:HB2	2.47	0.43
18:R:236:SER:O	18:R:243:ARG:NH2	2.50	0.43
18:R:402:ARG:HG3	18:R:402:ARG:HH11	1.83	0.43
18:S:195:LEU:HD21	18:S:428:LEU:HD11	2.00	0.43
17:U:313:ALA:O	17:U:349:ILE:HA	2.19	0.43
18:W:213:CYS:HA	18:W:217:LEU:CD1	2.48	0.43
21:X:141:LEU:HD11	22:Z:140:GLU:OE2	2.19	0.43
21:X:166:ARG:CB	22:Z:160:LEU:HD13	2.48	0.43
17:Y:226:ASN:O	17:Y:230:SER:OG	2.18	0.43
17:Y:313:ALA:O	17:Y:349:ILE:HA	2.19	0.43
18:s:178:SER:OG	18:s:180:ALA:O	2.34	0.43
18:s:383:ALA:O	18:s:386:GLU:HG2	2.18	0.43
17:u:164:MET:HB3	17:u:197:ASP:H	1.84	0.43
18:r:15:GLN:HB3	18:r:228:ASN:ND2	2.33	0.43
18:r:208:ALA:HB3	18:r:302:MET:O	2.19	0.43
18:r:222:PRO:HD2	17:q:324:LYS:HD2	1.99	0.43
18:r:254:GLU:O	18:r:258:ASN:ND2	2.46	0.43
18:r:265:ILE:O	18:r:265:ILE:HG13	2.19	0.43
18:r:385:ALA:O	18:r:389:SER:OG	2.35	0.43
17:q:164:MET:HB3	17:q:197:ASP:H	1.84	0.43
18:w:15:GLN:HB3	18:w:228:ASN:ND2	2.33	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:w:208:ALA:HB3	18:w:302:MET:O	2.19	0.43
17:y:164:MET:HB3	17:y:197:ASP:H	1.84	0.43
1:A:60:LEU:HD22	1:A:69:TRP:CZ2	2.53	0.43
1:A:276:PHE:HB2	1:A:282:ARG:HB2	2.00	0.43
2:B:837:GLN:O	2:B:840:VAL:HG22	2.19	0.43
2:B:841:LYS:O	2:B:844:LEU:HB2	2.18	0.43
2:B:852:LYS:HB3	2:B:856:TRP:NE1	2.34	0.43
2:B:958:GLU:HB3	2:B:962:PHE:HE2	1.82	0.43
2:B:962:PHE:HA	2:B:966:LYS:HE2	2.00	0.43
2:B:986:PHE:HD1	2:B:989:ARG:HH21	1.67	0.43
2:B:1485:MET:CE	2:B:1505:ARG:HD3	2.48	0.43
2:B:1814:SER:O	2:B:1817:TRP:HE3	2.01	0.43
2:B:2445:GLY:CA	2:B:2461:PHE:HZ	2.31	0.43
2:B:2705:LYS:C	2:B:2705:LYS:HD3	2.44	0.43
2:B:2987:VAL:O	2:B:2990:GLU:HG3	2.18	0.43
3:C:1289:GLU:HG3	3:C:1293:LEU:HD12	2.01	0.43
3:C:1333:TYR:HA	3:C:1336:GLN:HB2	2.01	0.43
3:C:1570:LEU:O	3:C:1574:LEU:HD23	2.19	0.43
3:C:1664:GLU:CG	3:C:1776:VAL:H	2.30	0.43
3:C:1811:GLN:OE1	3:C:1811:GLN:N	2.50	0.43
3:C:1827:ILE:O	3:C:1828:THR:C	2.60	0.43
3:C:2031:TYR:CD1	3:C:2046:PHE:HB3	2.53	0.43
3:C:2493:GLY:O	3:C:2612:ASN:HA	2.19	0.43
3:C:2652:PHE:CE1	3:C:2658:SER:HB2	2.45	0.43
3:C:2852:ILE:HG21	23:C:4703:ADP:N7	2.33	0.43
3:C:2874:GLN:HE21	3:C:2925:THR:HG21	1.84	0.43
3:C:4046:CYS:HB2	3:C:4076:CYS:HB3	2.00	0.43
3:C:4173:LEU:HD21	3:C:4189:ILE:HD12	2.00	0.43
4:D:496:TYR:CE1	4:D:528:TRP:HD1	2.36	0.43
4:D:528:TRP:CE2	4:D:530:SER:HA	2.54	0.43
4:D:541:LEU:HD13	4:D:569:TYR:OH	2.19	0.43
4:D:602:LEU:O	4:D:613:LEU:HA	2.19	0.43
12:L:35:ILE:HD13	12:L:96:PHE:CE2	2.54	0.43
12:L:61:VAL:HG13	12:L:67:PHE:CE2	2.53	0.43
14:N:67:LEU:O	14:N:71:ILE:HD12	2.18	0.43
17:Q:156:ARG:HH12	17:Q:162:ARG:HB2	1.83	0.43
18:R:167:LEU:HA	18:R:200:VAL:O	2.19	0.43
18:R:180:ALA:HB3	18:R:183:GLU:HG2	2.00	0.43
18:R:195:LEU:HD21	18:R:428:LEU:HD11	2.00	0.43
18:S:105:ARG:NH1	17:U:251:ARG:HD2	2.33	0.43
18:S:178:SER:OG	18:S:180:ALA:O	2.34	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:S:236:SER:O	18:S:243:ARG:NH2	2.50	0.43
17:U:226:ASN:O	17:U:230:SER:OG	2.19	0.43
17:U:358:PRO:CG	17:U:364:ALA:HB2	2.47	0.43
18:W:195:LEU:HD21	18:W:428:LEU:HD11	2.00	0.43
18:W:236:SER:O	18:W:243:ARG:NH2	2.50	0.43
4:d:138:LYS:HA	4:d:138:LYS:HE3	2.01	0.43
18:s:15:GLN:HB3	18:s:228:ASN:ND2	2.33	0.43
18:s:222:PRO:HD2	17:u:324:LYS:HD2	1.99	0.43
18:r:180:ALA:HB3	18:r:183:GLU:HG2	1.99	0.43
18:w:265:ILE:O	18:w:265:ILE:HG13	2.19	0.43
2:B:50:GLN:OE1	2:B:50:GLN:N	2.41	0.43
2:B:156:ASN:O	2:B:159:ALA:N	2.52	0.43
2:B:631:LYS:HE3	2:B:631:LYS:HB3	1.81	0.43
2:B:657:LYS:CB	2:B:748:VAL:HB	2.48	0.43
2:B:875:ILE:HB	2:B:962:PHE:HZ	1.81	0.43
2:B:1261:TYR:O	2:B:1265:MET:N	2.49	0.43
2:B:1505:ARG:NH2	2:B:1506:GLU:OE2	2.50	0.43
2:B:1728:GLN:O	2:B:1731:LEU:HG	2.19	0.43
2:B:1773:LYS:CD	2:B:2046:THR:HB	2.48	0.43
2:B:1893:LEU:HD21	2:B:4164:ASP:O	2.18	0.43
2:B:2027:MET:HE3	2:B:2027:MET:HB2	1.82	0.43
2:B:2514:THR:CG2	2:B:2687:ILE:HD11	2.48	0.43
2:B:3085:VAL:HG12	2:B:3089:ILE:HD11	2.01	0.43
2:B:3650:GLU:HA	2:B:3759:PHE:HE2	1.83	0.43
2:B:3806:GLN:HG3	2:B:3959:MET:HE1	2.00	0.43
2:B:4324:LYS:HG3	2:B:4422:ILE:HG13	2.00	0.43
3:C:123:ILE:HD11	3:C:134:LEU:CD1	2.48	0.43
3:C:1464:VAL:HA	3:C:1467:ILE:HB	2.00	0.43
3:C:1514:VAL:CG2	3:C:1578:ASN:HD21	2.18	0.43
3:C:2531:PHE:HB3	3:C:2578:LEU:HD23	2.01	0.43
3:C:2625:LEU:O	3:C:2625:LEU:HG	2.19	0.43
3:C:2680:LYS:HE3	3:C:2694:PHE:HB2	1.99	0.43
3:C:3011:ARG:HA	3:C:3014:LYS:NZ	2.34	0.43
3:C:3471:GLN:HA	3:C:3474:VAL:HG22	2.01	0.43
3:C:3699:LEU:HA	3:C:3699:LEU:HD13	1.55	0.43
17:Q:251:ARG:HD2	18:R:105:ARG:NH1	2.33	0.43
18:R:213:CYS:HA	18:R:217:LEU:CD1	2.48	0.43
18:R:313:MET:HE1	18:R:435:VAL:HG13	2.00	0.43
18:R:382:THR:OG1	18:R:432:TYR:O	2.28	0.43
18:S:96:LYS:HD2	17:U:129:CYS:HB2	2.01	0.43
18:S:167:LEU:HA	18:S:200:VAL:O	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:S:382:THR:OG1	18:S:432:TYR:O	2.28	0.43
19:T:107:LYS:HD2	19:T:177:ARG:HG2	2.00	0.43
18:W:167:LEU:HA	18:W:200:VAL:O	2.19	0.43
18:W:402:ARG:HB3	17:Y:260:PHE:HE1	1.83	0.43
18:s:180:ALA:HB3	18:s:183:GLU:HG2	2.00	0.43
18:s:265:ILE:HG13	18:s:265:ILE:O	2.19	0.43
18:r:383:ALA:O	18:r:386:GLU:HG2	2.18	0.43
1:A:79:PRO:HD3	1:A:112:TYR:CZ	2.54	0.43
2:B:26:LYS:HB3	2:B:28:LYS:HG2	2.00	0.43
2:B:115:ASN:HB2	2:B:120:HIS:HB2	2.01	0.43
2:B:154:PHE:CE1	3:C:161:GLN:HB3	2.54	0.43
2:B:389:LYS:HA	2:B:392:ASP:OD2	2.19	0.43
2:B:459:ILE:HG12	2:B:502:ARG:HD2	2.01	0.43
2:B:540:LEU:HB3	2:B:544:HIS:NE2	2.34	0.43
2:B:559:GLN:NE2	2:B:629:ILE:HG23	2.33	0.43
2:B:1701:LEU:HD23	2:B:1729:ILE:HG23	2.01	0.43
2:B:1801:VAL:O	2:B:1805:VAL:HG13	2.19	0.43
2:B:2445:GLY:HA2	2:B:2461:PHE:CZ	2.54	0.43
2:B:2587:LYS:HD2	2:B:2588:ASN:HB2	2.01	0.43
2:B:3438:LYS:C	2:B:3438:LYS:HD3	2.43	0.43
2:B:4177:GLN:HG2	2:B:4180:LYS:HB2	2.01	0.43
3:C:24:LYS:NZ	3:C:29:GLU:HB2	2.30	0.43
3:C:89:GLN:OE1	3:C:126:ASN:ND2	2.52	0.43
3:C:132:ASN:ND2	3:C:169:SER:O	2.52	0.43
3:C:177:ARG:NH2	3:C:255:ASN:O	2.50	0.43
3:C:409:LEU:HD11	3:C:461:ILE:HA	2.00	0.43
3:C:763:LEU:HD22	3:C:767:MET:HE3	2.01	0.43
3:C:1408:LYS:HD3	3:C:1408:LYS:HA	1.86	0.43
3:C:1425:LYS:HG2	3:C:1486:HIS:NE2	2.34	0.43
3:C:1789:VAL:HG11	3:C:2009:LYS:HD3	2.01	0.43
3:C:2724:LYS:HG2	3:C:2725:PRO:HD2	2.01	0.43
3:C:2746:VAL:HA	3:C:3026:TRP:CH2	2.53	0.43
3:C:4190:SER:O	3:C:4190:SER:OG	2.34	0.43
3:C:4498:LEU:O	3:C:4501:VAL:HG12	2.19	0.43
4:D:294:GLN:O	4:D:609:GLY:HA3	2.19	0.43
4:D:527:ILE:HD12	4:D:537:ILE:HB	2.01	0.43
4:D:560:CYS:SG	4:D:567:GLN:HB2	2.58	0.43
15:O:84:GLN:NE2	4:d:104:GLN:HB2	2.34	0.43
17:Q:163:ILE:HD11	17:Q:251:ARG:NE	2.34	0.43
17:Q:252:LYS:HE3	18:R:101:ASN:ND2	2.33	0.43
18:R:169:PHE:CE1	18:R:202:VAL:HB	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:R:265:ILE:HG13	18:R:265:ILE:O	2.19	0.43
18:R:405:VAL:HG13	18:R:415:GLU:OE1	2.19	0.43
18:S:169:PHE:CE1	18:S:202:VAL:HB	2.53	0.43
18:S:180:ALA:HB3	18:S:183:GLU:HG2	2.00	0.43
19:T:31:PRO:HA	19:T:197:PHE:HZ	1.83	0.43
18:W:169:PHE:CE1	18:W:202:VAL:HB	2.54	0.43
18:W:382:THR:OG1	18:W:432:TYR:O	2.28	0.43
17:Y:66:MET:HA	17:Y:91:VAL:HB	2.01	0.43
17:Y:358:PRO:CG	17:Y:364:ALA:HB2	2.47	0.43
22:Z:152:GLU:O	22:Z:156:VAL:HG13	2.19	0.43
17:u:391:ARG:O	18:w:262:TYR:OH	2.36	0.43
17:y:66:MET:HA	17:y:91:VAL:HB	2.01	0.43
2:B:358:PHE:HA	2:B:361:LYS:NZ	2.33	0.43
2:B:380:LEU:HD21	2:B:427:LEU:HD12	2.00	0.43
2:B:606:LEU:HD13	2:B:606:LEU:HA	1.84	0.43
2:B:1606:PHE:HB3	2:B:1609:PHE:CE2	2.54	0.43
2:B:2377:TYR:OH	2:B:2433:GLU:OE1	2.36	0.43
2:B:2466:LYS:HB3	2:B:2473:PHE:CD2	2.54	0.43
2:B:2473:PHE:HA	2:B:2482:TYR:OH	2.19	0.43
2:B:2849:LYS:HB2	2:B:2906:ILE:HG22	2.01	0.43
2:B:3129:ILE:HD11	2:B:3447:MET:HG2	2.01	0.43
2:B:3512:LEU:HD13	2:B:3544:TRP:CZ2	2.54	0.43
2:B:3693:ASP:HA	2:B:3696:GLN:CG	2.49	0.43
3:C:1391:LEU:HA	3:C:1394:GLU:OE1	2.19	0.43
3:C:2211:VAL:HB	3:C:2596:ARG:HB2	2.01	0.43
3:C:2554:MET:SD	3:C:2604:ASN:ND2	2.92	0.43
3:C:3690:ARG:NE	3:C:3690:ARG:HA	2.34	0.43
3:C:3698:ARG:O	3:C:3702:SER:HB2	2.19	0.43
4:D:536:ILE:HA	4:D:641:ASN:ND2	2.34	0.43
5:E:183:ILE:HD12	5:E:193:MET:O	2.19	0.43
6:F:8:ASP:O	6:F:12:LYS:HG2	2.18	0.43
7:G:125:PHE:HE1	4:d:247:ILE:HA	1.78	0.43
9:I:85:TYR:CE1	9:I:106:LEU:HD22	2.53	0.43
10:J:28:GLN:HG3	10:J:49:PHE:CD2	2.54	0.43
11:K:33:ALA:CA	14:N:36:LYS:HD3	2.49	0.43
13:M:12:MET:SD	13:M:16:MET:HG3	2.59	0.43
13:M:77:ILE:HG13	13:M:80:LEU:HB2	2.01	0.43
14:N:32:SER:HA	14:N:35:GLN:CB	2.39	0.43
16:P:12:LYS:HD2	16:P:13:GLN:N	2.34	0.43
17:Q:66:MET:HA	17:Q:91:VAL:HB	2.01	0.43
17:Q:343:GLU:OE1	17:Q:343:GLU:HA	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:S:177:VAL:HB	17:U:331:LEU:HD11	2.00	0.43
18:S:265:ILE:HG13	18:S:265:ILE:O	2.19	0.43
18:S:405:VAL:HG13	18:S:415:GLU:OE1	2.19	0.43
17:U:66:MET:HA	17:U:91:VAL:HB	2.01	0.43
17:U:163:ILE:HD11	17:U:251:ARG:NE	2.34	0.43
18:W:180:ALA:HB3	18:W:183:GLU:HG2	2.00	0.43
18:W:405:VAL:HG13	18:W:415:GLU:OE1	2.19	0.43
21:X:101:ARG:HA	21:X:104:PHE:CD2	2.53	0.43
17:Y:202:ILE:HD13	17:Y:202:ILE:HG21	1.89	0.43
18:s:254:GLU:O	18:s:258:ASN:ND2	2.46	0.43
17:u:66:MET:HA	17:u:91:VAL:HB	2.01	0.43
17:u:397:TRP:NE1	18:w:257:THR:HA	2.34	0.43
18:r:9:VAL:CG1	18:r:139:ASN:HB3	2.46	0.43
17:q:66:MET:HA	17:q:91:VAL:HB	2.01	0.43
2:B:670:LYS:HD3	2:B:670:LYS:HA	1.69	0.42
2:B:1131:HIS:HB2	2:B:1134:LEU:HG	2.00	0.42
2:B:1174:HIS:O	2:B:1178:ILE:HG13	2.19	0.42
2:B:1331:ARG:HG3	2:B:1410:PHE:HB3	2.01	0.42
2:B:2032:LEU:HD22	2:B:2032:LEU:HA	1.79	0.42
2:B:2073:ASP:OD2	2:B:2074:TRP:N	2.52	0.42
2:B:2151:THR:HG22	2:B:2196:THR:HG21	2.01	0.42
3:C:252:LYS:HG2	3:C:256:TRP:CZ2	2.54	0.42
3:C:570:ASN:O	3:C:573:LEU:HG	2.17	0.42
3:C:677:ARG:HA	3:C:723:PHE:HE1	1.83	0.42
3:C:792:GLU:HA	3:C:795:ILE:HD12	1.99	0.42
3:C:1116:LYS:HD2	3:C:1116:LYS:HA	1.64	0.42
3:C:1777:GLU:O	3:C:1781:VAL:HG23	2.19	0.42
3:C:1931:LEU:HB3	3:C:4048:LEU:HD13	2.01	0.42
3:C:1977:ASN:HB3	23:C:4701:ADP:O3A	2.19	0.42
3:C:2168:LYS:O	3:C:2172:GLU:HG2	2.18	0.42
3:C:2335:ARG:O	3:C:2338:GLU:HG2	2.19	0.42
3:C:2470:GLU:O	3:C:2474:ASN:ND2	2.52	0.42
3:C:2761:VAL:HA	3:C:2764:GLU:HG3	2.00	0.42
3:C:2876:LEU:CB	23:C:4703:ADP:H1'	2.48	0.42
3:C:3447:VAL:O	3:C:3451:THR:HG22	2.18	0.42
3:C:3911:ILE:O	3:C:3947:ARG:NH2	2.51	0.42
4:D:404:TRP:CE3	4:D:412:TYR:HB2	2.52	0.42
9:I:27:SER:OG	9:I:96:PHE:HB3	2.18	0.42
9:I:41:VAL:O	9:I:62:TYR:HE2	2.03	0.42
9:I:93:THR:CB	9:I:109:LYS:HB2	2.48	0.42
11:K:30:PRO:HD3	14:N:33:LYS:HE2	2.00	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:22:ARG:HD3	5:e:52:ASN:HD22	1.82	0.42
12:L:22:ARG:HD2	12:L:95:PHE:HE2	1.84	0.42
18:S:180:ALA:HA	17:U:350:LYS:HG2	2.01	0.42
18:S:313:MET:HE1	18:S:435:VAL:HG13	2.00	0.42
18:W:178:SER:OG	18:W:180:ALA:O	2.34	0.42
18:W:265:ILE:O	18:W:265:ILE:HG13	2.19	0.42
21:X:101:ARG:HD3	17:y:340:TYR:OH	2.17	0.42
21:X:143:ARG:HA	21:X:143:ARG:NE	2.34	0.42
21:X:176:LEU:O	21:X:179:GLU:HG3	2.19	0.42
18:s:257:THR:HA	17:q:397:TRP:NE1	2.34	0.42
18:r:313:MET:HE1	18:r:435:VAL:HG13	2.00	0.42
18:w:382:THR:OG1	18:w:432:TYR:O	2.28	0.42
17:y:213:ARG:HE	17:y:213:ARG:HB2	1.71	0.42
17:y:314:SER:OG	17:y:350:LYS:HB3	2.18	0.42
1:A:48:ASP:OD1	1:A:51:ILE:HD11	2.19	0.42
1:A:225:GLN:OE1	1:A:253:LEU:HG	2.19	0.42
2:B:299:PHE:CD1	2:B:302:LEU:HD12	2.50	0.42
2:B:344:ILE:HD11	2:B:397:TYR:CE2	2.53	0.42
2:B:348:CYS:HA	2:B:351:ILE:HD12	2.01	0.42
2:B:875:ILE:HB	2:B:962:PHE:CE1	2.54	0.42
2:B:876:GLN:OE1	2:B:966:LYS:HB3	2.18	0.42
2:B:904:LEU:HB2	2:B:1079:ASN:O	2.18	0.42
2:B:1172:LYS:C	2:B:1177:PRO:HD3	2.44	0.42
2:B:1329:PRO:C	2:B:1412:PHE:HB3	2.44	0.42
2:B:1492:LYS:C	2:B:1494:VAL:H	2.27	0.42
2:B:1883:CYS:SG	2:B:1884:TYR:N	2.92	0.42
2:B:1949:TRP:HE1	2:B:1997:THR:HG22	1.85	0.42
2:B:3505:SER:O	2:B:3681:ASN:ND2	2.52	0.42
2:B:3819:LYS:HG3	2:B:3820:HIS:H	1.83	0.42
2:B:4468:LYS:CA	2:B:4531:PRO:HD3	2.49	0.42
3:C:135:MET:HG3	3:C:165:PHE:CE2	2.53	0.42
3:C:568:ARG:HD2	3:C:568:ARG:O	2.19	0.42
3:C:591:LYS:HG2	3:C:606:LYS:HA	2.00	0.42
3:C:933:VAL:CG2	3:C:944:LEU:HB3	2.49	0.42
3:C:1474:ASP:O	3:C:1478:LEU:HD13	2.19	0.42
3:C:1596:ARG:NH2	3:C:1909:LYS:HD2	2.33	0.42
3:C:1783:THR:HG23	3:C:1844:ARG:HG2	2.01	0.42
3:C:1931:LEU:HD21	3:C:1984:GLN:HG2	2.01	0.42
3:C:2106:LYS:HA	3:C:2106:LYS:HE3	2.00	0.42
3:C:2800:ILE:HG13	3:C:2801:GLU:H	1.83	0.42
3:C:3700:ILE:HA	3:C:3703:GLN:NE2	2.28	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:514:ARG:O	5:E:517:LYS:HB2	2.19	0.42
9:I:37:GLU:HB3	9:I:70:LYS:NZ	2.34	0.42
16:P:16:ASP:OD2	16:P:17:ILE:N	2.52	0.42
17:Q:246:LEU:HD21	18:R:179:THR:HG21	2.01	0.42
17:Q:377:MET:HA	17:Q:380:ARG:HD2	2.01	0.42
19:T:186:LEU:HA	19:T:189:ARG:CG	2.49	0.42
17:U:343:GLU:OE1	17:U:343:GLU:HA	2.18	0.42
18:W:313:MET:HE1	18:W:435:VAL:HG13	2.00	0.42
21:X:106:GLU:HB3	22:Z:94:GLN:OE1	2.18	0.42
17:Y:163:ILE:HD11	17:Y:251:ARG:NE	2.34	0.42
22:Z:82:GLU:HB2	22:Z:83:LEU:H	1.67	0.42
22:Z:136:ILE:O	22:Z:140:GLU:HG2	2.20	0.42
18:s:167:LEU:HA	18:s:200:VAL:O	2.19	0.42
17:u:314:SER:OG	17:u:350:LYS:HB3	2.18	0.42
18:r:180:ALA:HA	17:q:350:LYS:HG2	2.02	0.42
18:w:167:LEU:HA	18:w:200:VAL:O	2.19	0.42
18:w:254:GLU:O	18:w:258:ASN:ND2	2.46	0.42
2:B:36:GLN:HB3	2:B:39:ASP:HB2	2.02	0.42
2:B:752:ILE:CD1	2:B:765:PHE:HB3	2.45	0.42
2:B:1000:ASP:O	2:B:1035:PRO:HD2	2.19	0.42
2:B:1330:TRP:H	2:B:1412:PHE:HD1	1.64	0.42
2:B:1859:TRP:CZ2	2:B:1861:ARG:HG3	2.54	0.42
2:B:1879:LEU:HD21	2:B:2027:MET:HG2	2.01	0.42
2:B:2216:LYS:NZ	2:B:2271:TRP:HE1	2.16	0.42
2:B:2514:THR:O	2:B:2518:THR:N	2.52	0.42
2:B:2734:ARG:HB2	2:B:2737:TYR:CE1	2.54	0.42
2:B:3580:GLU:OE1	2:B:3580:GLU:N	2.52	0.42
2:B:3658:ILE:HD12	2:B:3658:ILE:H	1.84	0.42
2:B:3727:THR:O	2:B:3730:GLN:HG2	2.19	0.42
3:C:86:GLU:OE2	3:C:87:LYS:HG2	2.19	0.42
3:C:609:TRP:CZ2	3:C:613:LEU:HD11	2.54	0.42
3:C:675:ILE:HD12	3:C:772:TRP:HH2	1.84	0.42
3:C:819:VAL:CG1	3:C:909:MET:HG2	2.47	0.42
3:C:910:LYS:HE3	3:C:998:VAL:HB	2.01	0.42
3:C:1374:SER:HB2	3:C:1423:ALA:C	2.44	0.42
3:C:2170:LEU:O	3:C:2173:VAL:HG22	2.20	0.42
3:C:2688:ALA:C	3:C:2689:LYS:HE2	2.44	0.42
3:C:3461:ASN:O	3:C:3465:ARG:HG2	2.19	0.42
3:C:4445:ARG:HG2	3:C:4466:GLY:HA2	2.01	0.42
3:C:4508:LYS:HE2	3:C:4553:LEU:HB3	2.01	0.42
5:E:191:GLU:O	5:E:192:LYS:HG3	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N:61:GLU:O	14:N:65:LEU:HD23	2.19	0.42
17:Q:202:ILE:HD13	17:Q:202:ILE:HG21	1.89	0.42
17:Q:294:PHE:CE1	17:Q:333:VAL:HG21	2.53	0.42
17:U:202:ILE:HD13	17:U:202:ILE:HG21	1.89	0.42
17:U:377:MET:HA	17:U:380:ARG:HD2	2.01	0.42
21:X:97:GLU:O	21:X:101:ARG:HG2	2.19	0.42
17:Y:294:PHE:CE1	17:Y:333:VAL:HG21	2.53	0.42
17:Y:314:SER:OG	17:Y:350:LYS:HB3	2.18	0.42
17:Y:343:GLU:OE1	17:Y:343:GLU:HA	2.18	0.42
18:s:169:PHE:HE2	18:s:235:ILE:HD11	1.84	0.42
18:s:313:MET:HE1	18:s:435:VAL:HG13	2.00	0.42
17:u:98:GLY:HA3	18:w:253:THR:HG23	2.01	0.42
18:r:167:LEU:HA	18:r:200:VAL:O	2.18	0.42
18:r:169:PHE:CE1	18:r:202:VAL:HB	2.53	0.42
18:r:169:PHE:HE2	18:r:235:ILE:HD11	1.84	0.42
17:q:314:SER:OG	17:q:350:LYS:HB3	2.18	0.42
18:w:35:GLN:HG2	18:w:60:LYS:NZ	2.34	0.42
18:w:169:PHE:HE2	18:w:235:ILE:HD11	1.84	0.42
18:w:177:VAL:HB	17:y:331:LEU:HD11	2.01	0.42
1:A:46:TYR:OH	1:A:104:SER:HB3	2.20	0.42
2:B:11:GLU:HB3	2:B:33:LEU:HD13	2.00	0.42
2:B:134:GLN:O	2:B:137:LEU:HB2	2.18	0.42
2:B:154:PHE:O	2:B:158:VAL:HG23	2.18	0.42
2:B:664:ASP:OD1	2:B:664:ASP:N	2.50	0.42
2:B:1319:HIS:O	2:B:1322:TYR:HB2	2.19	0.42
2:B:1660:ILE:O	2:B:1672:PHE:N	2.44	0.42
2:B:2190:LYS:HE2	2:B:2304:GLU:OE2	2.19	0.42
2:B:2747:VAL:O	2:B:2751:ILE:HG12	2.20	0.42
2:B:2771:TRP:HA	2:B:2774:GLU:OE1	2.19	0.42
2:B:2923:ASN:O	2:B:2927:ASN:ND2	2.53	0.42
2:B:3676:LEU:O	2:B:3680:GLN:HG2	2.19	0.42
2:B:3784:LYS:HE2	2:B:3784:LYS:HB2	1.76	0.42
2:B:3922:MET:HE2	2:B:3922:MET:HB2	1.90	0.42
2:B:3996:GLU:O	2:B:4000:ILE:HG22	2.18	0.42
3:C:102:ALA:O	3:C:106:LYS:HG2	2.19	0.42
3:C:715:ILE:HA	3:C:715:ILE:HD12	1.75	0.42
3:C:804:ASN:OD1	3:C:808:ASN:ND2	2.52	0.42
3:C:1160:TYR:CZ	3:C:1176:GLU:HG2	2.55	0.42
3:C:1183:LEU:O	3:C:1187:TRP:HD1	2.01	0.42
3:C:1320:LYS:HD2	3:C:1324:ALA:HB1	2.01	0.42
3:C:1586:LYS:HE3	3:C:1586:LYS:HB3	1.89	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1907:MET:H	3:C:1907:MET:HG2	1.69	0.42
3:C:2072:MET:HG2	3:C:2108:VAL:HG11	2.01	0.42
3:C:2490:LEU:HA	3:C:2609:GLY:O	2.19	0.42
3:C:2719:LYS:HD2	3:C:2811:ILE:HD13	2.01	0.42
3:C:2876:LEU:O	3:C:2877:THR:C	2.62	0.42
3:C:3653:GLY:HA2	3:C:3656:GLN:OE1	2.19	0.42
3:C:3691:LEU:O	3:C:3695:LEU:N	2.44	0.42
3:C:4163:GLU:O	3:C:4167:LEU:HG	2.18	0.42
5:E:162:ARG:NH2	5:E:196:GLN:HG3	2.34	0.42
7:G:76:TYR:O	7:G:88:GLY:HA2	2.20	0.42
7:G:127:ARG:HH12	4:d:252:VAL:C	2.27	0.42
9:I:60:CYS:HA	9:I:77:CYS:SG	2.59	0.42
10:J:13:PRO:HD2	10:J:79:PHE:O	2.20	0.42
15:O:29:ASP:OD2	5:e:39:GLN:NE2	2.52	0.42
18:R:316:SER:HA	18:R:352:LYS:O	2.19	0.42
17:U:294:PHE:CE1	17:U:333:VAL:HG21	2.53	0.42
17:u:105:HIS:HD2	17:u:146:GLY:O	2.02	0.42
18:r:177:VAL:HB	17:q:331:LEU:HD11	2.01	0.42
17:q:12:CYS:HB3	25:q:501:GDP:N9	2.34	0.42
17:q:100:ASN:H	17:q:142:GLY:HA3	1.84	0.42
18:w:180:ALA:HA	17:y:350:LYS:HG2	2.02	0.42
18:w:313:MET:HE1	18:w:435:VAL:HG13	2.00	0.42
18:w:316:SER:HA	18:w:352:LYS:O	2.19	0.42
17:y:105:HIS:HD2	17:y:146:GLY:O	2.03	0.42
1:A:35:MET:HB3	1:A:58:PHE:HB2	2.01	0.42
1:A:63:THR:O	1:A:66:ASN:HB2	2.20	0.42
1:A:320:PRO:HG2	1:A:341:TRP:HB3	2.01	0.42
2:B:1296:LYS:HE3	2:B:1296:LYS:HB3	1.93	0.42
2:B:1411:TYR:CE1	2:B:1415:ILE:HG12	2.55	0.42
2:B:1881:ASP:O	2:B:1885:ILE:HG12	2.19	0.42
2:B:2647:ASP:OD1	2:B:2647:ASP:N	2.52	0.42
2:B:3676:LEU:HD23	2:B:3736:THR:HB	2.01	0.42
3:C:139:TYR:HA	3:C:142:GLN:HG2	1.99	0.42
3:C:1037:LYS:HB3	3:C:1037:LYS:HE3	1.77	0.42
3:C:1105:ARG:HH22	3:C:1176:GLU:HB2	1.84	0.42
3:C:1601:ARG:HD2	3:C:1688:GLU:OE2	2.20	0.42
3:C:1692:GLN:HB3	3:C:1696:LYS:NZ	2.34	0.42
3:C:1934:LEU:HD13	3:C:1986:LEU:HD23	2.00	0.42
3:C:2008:ILE:HG21	3:C:2027:PHE:HB2	2.01	0.42
3:C:2334:MET:HG2	3:C:2414:LYS:NZ	2.35	0.42
3:C:2874:GLN:O	3:C:2877:THR:HG22	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:2930:LYS:HZ1	3:C:2934:PHE:HE2	1.68	0.42
4:D:320:ASP:OD2	4:D:323:LYS:HE2	2.20	0.42
4:D:505:LYS:HZ3	4:D:507:LYS:CB	2.33	0.42
4:D:552:PRO:O	4:D:597:TYR:HD1	2.03	0.42
4:D:630:THR:OG1	4:D:634:LYS:NZ	2.44	0.42
5:E:244:ASP:HB3	5:E:247:LYS:HE2	2.01	0.42
5:E:411:TYR:HB2	5:E:430:ARG:NE	2.34	0.42
5:E:430:ARG:O	5:E:456:PRO:HB3	2.19	0.42
9:I:30:MET:HE1	9:I:75:TRP:HH2	1.84	0.42
9:I:95:LEU:HD12	9:I:107:ILE:HD11	2.01	0.42
11:K:32:CYS:O	14:N:32:SER:OG	2.36	0.42
14:N:45:ARG:HE	14:N:45:ARG:HB2	1.65	0.42
17:Q:100:ASN:H	17:Q:142:GLY:HA3	1.84	0.42
17:Q:314:SER:OG	17:Q:350:LYS:HB3	2.19	0.42
18:S:208:ALA:HB3	18:S:302:MET:O	2.19	0.42
19:T:102:SER:HA	19:T:105:GLN:OE1	2.19	0.42
17:U:314:SER:OG	17:U:350:LYS:HB3	2.18	0.42
18:W:208:ALA:HB3	18:W:302:MET:O	2.19	0.42
17:Y:377:MET:HA	17:Y:380:ARG:HD2	2.01	0.42
5:e:56:LEU:HA	5:e:56:LEU:HD23	1.87	0.42
18:s:169:PHE:CE1	18:s:202:VAL:HB	2.53	0.42
18:s:316:SER:HA	18:s:352:LYS:O	2.19	0.42
17:u:12:CYS:HB3	25:u:501:GDP:N9	2.34	0.42
18:r:28:HIS:NE2	18:r:243:ARG:HD2	2.33	0.42
17:q:76:VAL:HG22	17:q:77:ARG:HH22	1.83	0.42
17:q:105:HIS:HD2	17:q:146:GLY:O	2.02	0.42
18:w:169:PHE:CE1	18:w:202:VAL:HB	2.53	0.42
17:y:12:CYS:HB3	25:y:501:GDP:N9	2.34	0.42
17:y:100:ASN:H	17:y:142:GLY:HA3	1.84	0.42
2:B:160:GLN:NE2	2:B:243:LEU:HD13	2.35	0.42
2:B:266:THR:O	2:B:270:PRO:HD2	2.19	0.42
2:B:651:SER:OG	2:B:673:PHE:HB3	2.20	0.42
2:B:999:GLU:HG3	2:B:1036:LEU:HD13	2.01	0.42
2:B:1311:MET:O	2:B:1314:ALA:HB3	2.19	0.42
2:B:2099:ASP:OD1	2:B:2103:MET:HE1	2.19	0.42
2:B:2452:GLN:HE21	2:B:2455:SER:HB2	1.85	0.42
2:B:3125:LYS:HD2	2:B:3447:MET:CE	2.49	0.42
2:B:3901:TRP:HD1	2:B:3913:PRO:HD3	1.85	0.42
3:C:621:ILE:HG22	3:C:641:TYR:HD2	1.85	0.42
3:C:1314:SER:C	3:C:1318:VAL:HG12	2.44	0.42
3:C:1390:LYS:HA	3:C:1393:TYR:HB2	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1827:ILE:HG22	3:C:1828:THR:H	1.85	0.42
3:C:2115:ASP:O	3:C:2118:LYS:HG3	2.19	0.42
3:C:2842:PHE:CE2	3:C:2844:ASP:HB2	2.54	0.42
3:C:3689:GLN:HE21	3:C:3693:LYS:HE2	1.85	0.42
3:C:4003:ASP:O	3:C:4007:LYS:HG2	2.19	0.42
4:D:305:ASN:HD21	4:D:360:ALA:CB	2.32	0.42
4:D:600:PRO:O	4:D:615:LYS:HA	2.19	0.42
5:E:407:TYR:O	5:E:410:SER:OG	2.33	0.42
10:J:47:LYS:NZ	10:J:58:TRP:O	2.53	0.42
10:J:69:TYR:HB3	11:K:62:GLU:CD	2.45	0.42
10:J:72:TYR:OH	4:d:183:ARG:NH2	2.33	0.42
10:J:77:PHE:CZ	10:J:88:LEU:HD11	2.54	0.42
12:L:64:GLN:HB3	12:L:66:GLU:HG2	2.02	0.42
15:O:25:PHE:CD2	15:O:50:ILE:HD11	2.54	0.42
18:R:208:ALA:HB3	18:R:302:MET:O	2.19	0.42
18:S:316:SER:HA	18:S:352:LYS:O	2.19	0.42
17:U:67:ASP:HA	17:U:147:MET:CE	2.48	0.42
17:U:100:ASN:H	17:U:142:GLY:HA3	1.84	0.42
18:W:316:SER:HA	18:W:352:LYS:O	2.19	0.42
17:Y:100:ASN:H	17:Y:142:GLY:HA3	1.85	0.42
4:d:118:LYS:HD2	4:d:118:LYS:HA	1.84	0.42
18:s:28:HIS:NE2	18:s:243:ARG:HD2	2.33	0.42
18:s:328:VAL:O	18:s:332:ILE:HG13	2.20	0.42
17:u:100:ASN:H	17:u:142:GLY:HA3	1.85	0.42
17:u:423:GLN:O	17:u:426:GLN:HB3	2.20	0.42
18:r:316:SER:HA	18:r:352:LYS:O	2.19	0.42
17:q:423:GLN:O	17:q:426:GLN:HB3	2.20	0.42
18:w:28:HIS:NE2	18:w:243:ARG:HD2	2.33	0.42
18:w:328:VAL:O	18:w:332:ILE:HG13	2.20	0.42
2:B:89:ILE:HD12	2:B:112:GLU:HG2	2.02	0.42
2:B:110:VAL:HG12	3:C:122:GLU:CG	2.49	0.42
2:B:337:PRO:N	2:B:338:PRO:HD2	2.34	0.42
2:B:349:ASN:O	2:B:352:ILE:HG22	2.20	0.42
2:B:796:ASN:HA	2:B:799:VAL:HG22	2.01	0.42
2:B:875:ILE:HD12	2:B:962:PHE:HZ	1.84	0.42
2:B:880:LEU:HA	2:B:883:ASN:HB2	2.02	0.42
2:B:1225:ASP:HB3	2:B:1281:TYR:OH	2.20	0.42
2:B:1238:LYS:N	2:B:1238:LYS:HD3	2.33	0.42
2:B:1252:MET:HG2	2:B:1253:GLY:N	2.34	0.42
2:B:1331:ARG:HG3	2:B:1410:PHE:CD2	2.54	0.42
2:B:1411:TYR:CZ	2:B:1415:ILE:HG12	2.54	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1588:ILE:HD13	2:B:1588:ILE:HA	1.91	0.42
2:B:1889:GLN:CD	2:B:4193:ILE:HG21	2.45	0.42
2:B:3011:LYS:HA	2:B:3014:LYS:HE2	2.02	0.42
2:B:3468:LEU:O	2:B:3471:GLU:HG2	2.19	0.42
2:B:4044:ILE:HG23	2:B:4051:LEU:HD21	2.01	0.42
2:B:4156:PRO:HG2	2:B:4198:HIS:HE1	1.84	0.42
2:B:4303:ILE:O	2:B:4303:ILE:HG13	2.20	0.42
3:C:132:ASN:CB	3:C:169:SER:HB2	2.50	0.42
3:C:628:VAL:O	3:C:628:VAL:HG12	2.20	0.42
3:C:854:GLU:OE2	5:E:205:PRO:HG2	2.19	0.42
3:C:2575:THR:HA	24:C:4702:ATP:C1'	2.47	0.42
3:C:2594:THR:H	3:C:2596:ARG:HH22	1.66	0.42
3:C:2855:ILE:HG22	3:C:2998:MET:HE1	2.02	0.42
3:C:3088:THR:HG23	3:C:3091:SER:H	1.85	0.42
5:E:242:VAL:C	5:E:252:ILE:HG21	2.44	0.42
5:E:334:LEU:HG	5:E:342:ILE:CG2	2.49	0.42
7:G:73:VAL:HA	7:G:149:GLN:HA	2.02	0.42
8:H:73:ARG:O	8:H:75:TYR:HD1	2.02	0.42
17:Q:12:CYS:HB3	25:Q:501:GDP:N9	2.34	0.42
17:Q:105:HIS:HD2	17:Q:146:GLY:O	2.02	0.42
17:Q:212:PHE:HE2	18:S:326:LYS:HE3	1.85	0.42
17:Q:423:GLN:O	17:Q:426:GLN:HB3	2.20	0.42
19:T:107:LYS:HD3	19:T:178:ARG:HA	2.01	0.42
17:U:164:MET:HB3	17:U:197:ASP:H	1.84	0.42
17:U:423:GLN:O	17:U:426:GLN:HB3	2.20	0.42
18:W:269:LEU:HD23	18:W:269:LEU:H	1.84	0.42
21:X:114:LYS:O	21:X:118:LEU:HD23	2.20	0.42
21:X:158:LYS:HB3	21:X:158:LYS:HE3	1.80	0.42
17:Y:423:GLN:O	17:Y:426:GLN:HB3	2.20	0.42
22:Z:177:LEU:HG	18:s:308:ARG:HH12	1.84	0.42
4:d:75:LEU:HD23	4:d:77:PRO:HA	2.02	0.42
17:u:76:VAL:HG22	17:u:77:ARG:HH22	1.83	0.42
17:u:99:ASN:ND2	18:w:258:ASN:OD1	2.52	0.42
17:y:76:VAL:HG22	17:y:77:ARG:HH22	1.83	0.42
17:y:423:GLN:O	17:y:426:GLN:HB3	2.20	0.42
1:A:48:ASP:HA	1:A:51:ILE:CG1	2.49	0.42
2:B:385:ASP:O	2:B:389:LYS:HG2	2.19	0.42
2:B:802:ILE:HG12	2:B:877:THR:CG2	2.45	0.42
2:B:853:GLN:HA	2:B:856:TRP:HB2	2.02	0.42
2:B:1418:LEU:HD21	2:B:1423:TYR:HD2	1.85	0.42
2:B:1856:ILE:HD12	2:B:1856:ILE:HA	1.91	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1877:THR:N	2:B:1880:THR:OG1	2.43	0.42
2:B:2144:LYS:NZ	2:B:2164:VAL:HG12	2.35	0.42
2:B:2270:GLU:OE2	2:B:2270:GLU:N	2.48	0.42
2:B:2483:TYR:O	2:B:2490:LYS:NZ	2.53	0.42
2:B:2931:GLU:OE1	2:B:2935:LYS:HE3	2.19	0.42
2:B:3517:MET:HE2	2:B:3646:PHE:HA	2.02	0.42
2:B:3784:LYS:O	2:B:3788:ARG:N	2.29	0.42
2:B:4140:LEU:HD12	2:B:4195:TYR:CZ	2.55	0.42
2:B:4149:LYS:HE2	2:B:4149:LYS:HB2	1.89	0.42
2:B:4242:GLN:CG	2:B:4244:PRO:HD2	2.50	0.42
2:B:4548:TYR:HB2	2:B:4553:ARG:HH21	1.84	0.42
3:C:23:LEU:HD23	3:C:24:LYS:O	2.19	0.42
3:C:214:ASN:O	3:C:218:ASN:ND2	2.53	0.42
3:C:451:ASP:O	3:C:455:ARG:HG2	2.20	0.42
3:C:881:GLU:O	3:C:884:LYS:HG2	2.20	0.42
3:C:989:ILE:HG23	3:C:994:GLU:OE2	2.20	0.42
3:C:1183:LEU:O	3:C:1187:TRP:CD1	2.72	0.42
3:C:1548:TRP:O	3:C:1552:MET:HG2	2.20	0.42
3:C:1931:LEU:HD13	3:C:1934:LEU:HD12	2.01	0.42
3:C:2304:ILE:HD11	3:C:2357:VAL:CG1	2.50	0.42
3:C:2319:GLU:HA	3:C:2322:LYS:HG2	2.01	0.42
3:C:2402:GLN:HA	3:C:2405:VAL:HG22	2.01	0.42
3:C:2590:MET:N	3:C:2590:MET:SD	2.93	0.42
3:C:4371:GLU:HG3	3:C:4449:LEU:HD22	2.02	0.42
3:C:4481:VAL:HG21	3:C:4558:VAL:HG21	2.01	0.42
3:C:4511:GLU:HG3	3:C:4512:LYS:HD2	2.01	0.42
4:D:601:ILE:HG23	4:D:613:LEU:HD13	2.02	0.42
8:H:68:PHE:HD2	9:I:64:LYS:HE3	1.84	0.42
17:Q:116:VAL:O	17:Q:120:VAL:HG22	2.20	0.42
17:Q:164:MET:HB3	17:Q:197:ASP:H	1.84	0.42
18:R:169:PHE:HE2	18:R:235:ILE:HD11	1.84	0.42
18:R:269:LEU:H	18:R:269:LEU:HD23	1.85	0.42
18:S:169:PHE:HE2	18:S:235:ILE:HD11	1.84	0.42
18:S:269:LEU:HD23	18:S:269:LEU:H	1.85	0.42
17:U:12:CYS:HB3	25:U:501:GDP:N9	2.34	0.42
17:U:105:HIS:HD2	17:U:146:GLY:O	2.02	0.42
17:Y:67:ASP:HA	17:Y:147:MET:CE	2.48	0.42
17:Y:105:HIS:HD2	17:Y:146:GLY:O	2.03	0.42
17:Y:164:MET:HB3	17:Y:197:ASP:H	1.84	0.42
18:s:338:LYS:HG3	18:s:339:ARG:N	2.35	0.42
18:r:35:GLN:HG2	18:r:60:LYS:NZ	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:r:328:VAL:O	18:r:332:ILE:HG13	2.20	0.42
17:q:375:GLN:HB2	17:q:419:VAL:HG13	2.02	0.42
17:y:156:ARG:HH21	17:y:164:MET:HE2	1.85	0.42
17:y:375:GLN:HB2	17:y:419:VAL:HG13	2.02	0.42
2:B:109:VAL:HG13	3:C:122:GLU:O	2.19	0.42
2:B:217:GLN:O	2:B:220:LYS:HG2	2.20	0.42
2:B:422:ARG:CD	2:B:478:MET:HA	2.50	0.42
2:B:835:GLN:OE1	2:B:838:LYS:HB3	2.20	0.42
2:B:951:MET:HE2	2:B:951:MET:HB3	1.91	0.42
2:B:1113:LEU:HA	2:B:1116:PHE:CD1	2.54	0.42
2:B:1120:THR:HG21	2:B:1154:GLU:OE1	2.20	0.42
2:B:1330:TRP:CZ2	2:B:1405:HIS:CG	3.08	0.42
2:B:1682:VAL:HG23	2:B:1683:GLU:N	2.35	0.42
2:B:1703:GLY:O	2:B:1707:THR:HG22	2.20	0.42
2:B:1791:ILE:HG13	2:B:2041:MET:HE1	2.01	0.42
2:B:2036:CYS:O	2:B:2039:MET:HG3	2.20	0.42
2:B:2608:ASN:HB3	2:B:2661:PHE:H	1.84	0.42
2:B:3136:TYR:CD2	2:B:3440:LEU:HD12	2.55	0.42
2:B:3783:PHE:CD2	2:B:3784:LYS:HD3	2.54	0.42
2:B:4267:HIS:HE1	2:B:4270:ALA:HB3	1.83	0.42
3:C:37:ASN:CG	3:C:71:THR:HB	2.45	0.42
3:C:871:LEU:HB2	3:C:873:PRO:O	2.19	0.42
3:C:1099:ASP:HA	3:C:1102:LYS:HG2	2.02	0.42
3:C:1185:ARG:HH12	3:C:1189:ILE:HD13	1.85	0.42
3:C:1264:LYS:HA	3:C:1264:LYS:HD3	1.66	0.42
3:C:1383:ILE:O	3:C:1387:THR:OG1	2.32	0.42
3:C:2328:ARG:O	3:C:2332:ILE:HG13	2.20	0.42
3:C:2329:LYS:C	3:C:2329:LYS:HD3	2.45	0.42
3:C:2559:ILE:O	3:C:2609:GLY:HA2	2.20	0.42
3:C:2590:MET:SD	3:C:2600:ARG:HG3	2.59	0.42
3:C:2758:ILE:HA	3:C:2761:VAL:HG12	2.01	0.42
3:C:2873:LYS:HD2	23:C:4703:ADP:O3B	2.19	0.42
3:C:2875:SER:N	23:C:4703:ADP:C2'	2.82	0.42
3:C:4426:ALA:O	3:C:4428:ILE:HG12	2.19	0.42
4:D:378:ARG:HD2	5:e:141:VAL:N	2.34	0.42
5:E:349:LEU:HD12	5:E:349:LEU:HA	1.93	0.42
7:G:132:LEU:H	7:G:132:LEU:HD23	1.85	0.42
9:I:89:VAL:HG23	9:I:108:PHE:HB2	2.00	0.42
12:L:81:ASN:HB3	13:M:60:ASN:ND2	2.33	0.42
15:O:41:ASP:OD2	15:O:42:LYS:N	2.52	0.42
17:Q:156:ARG:HH21	17:Q:164:MET:HE2	1.85	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:R:35:GLN:HG2	18:R:60:LYS:NZ	2.34	0.42
17:U:116:VAL:O	17:U:120:VAL:HG22	2.20	0.42
21:X:138:GLU:HG2	22:Z:136:ILE:HG21	2.01	0.42
17:Y:12:CYS:HB3	25:Y:501:GDP:N9	2.34	0.42
17:Y:116:VAL:O	17:Y:120:VAL:HG22	2.20	0.42
18:s:35:GLN:HG2	18:s:60:LYS:NZ	2.34	0.42
18:r:276:ILE:HG23	18:r:277:SER:O	2.20	0.42
17:q:156:ARG:HH21	17:q:164:MET:HE2	1.85	0.42
17:q:163:ILE:HD11	17:q:251:ARG:NE	2.34	0.42
18:w:338:LYS:HG3	18:w:339:ARG:N	2.35	0.42
17:y:294:PHE:CE2	17:y:333:VAL:HG21	2.55	0.42
2:B:376:ALA:O	2:B:380:LEU:CB	2.68	0.42
2:B:504:ALA:HB1	2:B:539:GLU:HG3	2.02	0.42
2:B:929:THR:HG22	2:B:930:ILE:N	2.34	0.42
2:B:931:ARG:O	2:B:931:ARG:NH1	2.52	0.42
2:B:1040:CYS:HA	2:B:1043:LYS:HD2	2.00	0.42
2:B:1436:LYS:HB3	2:B:1436:LYS:HE3	1.87	0.42
2:B:1450:TRP:CZ2	2:B:1476:VAL:HG22	2.55	0.42
2:B:1628:PRO:HD3	2:B:1655:THR:O	2.20	0.42
2:B:2202:ILE:HG13	2:B:2207:ASP:HA	2.02	0.42
2:B:2334:TYR:HB3	2:B:2338:TRP:CZ3	2.54	0.42
2:B:2381:ASN:HA	2:B:2384:VAL:HB	2.01	0.42
2:B:2534:ILE:HG12	2:B:2651:PHE:CE1	2.55	0.42
2:B:2566:ASN:OD1	2:B:2567:PHE:N	2.48	0.42
2:B:2863:VAL:HG13	2:B:2865:PHE:CD1	2.48	0.42
2:B:2863:VAL:HG21	2:B:3062:ARG:CD	2.50	0.42
2:B:2902:LEU:O	2:B:2906:ILE:HG23	2.20	0.42
2:B:4082:THR:HG22	2:B:4083:GLY:N	2.31	0.42
2:B:4501:ALA:HB1	2:B:4509:GLN:O	2.19	0.42
3:C:801:ILE:HA	5:E:152:LEU:CD1	2.49	0.42
3:C:2436:ASP:OD1	3:C:2437:TYR:N	2.52	0.42
3:C:3468:LEU:HG	3:C:3472:ARG:HE	1.85	0.42
3:C:3528:PRO:HB2	3:C:3530:PHE:CE1	2.55	0.42
5:E:475:LEU:HA	5:E:488:LEU:O	2.20	0.42
13:M:24:ALA:HA	13:M:41:ILE:HD11	2.02	0.42
14:N:69:GLU:O	14:N:72:LYS:HB2	2.20	0.42
15:O:28:LYS:HD3	5:e:32:ASN:HA	2.02	0.42
16:P:77:LEU:HB2	16:P:78:PRO:HD3	2.01	0.42
17:Q:178:THR:H	17:Q:181:GLU:HG2	1.85	0.42
17:Q:260:PHE:HE1	18:R:402:ARG:HB3	1.84	0.42
17:U:156:ARG:HH21	17:U:164:MET:HE2	1.85	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:169:PHE:HE2	18:W:235:ILE:HD11	1.84	0.42
18:W:177:VAL:HB	17:Y:331:LEU:HD11	2.01	0.42
21:X:198:GLU:CD	22:Z:188:LYS:CE	2.93	0.42
17:Y:178:THR:H	17:Y:181:GLU:HG2	1.85	0.42
17:Y:294:PHE:CE2	17:Y:333:VAL:HG21	2.55	0.42
18:s:180:ALA:HA	17:u:350:LYS:HG2	2.02	0.42
17:u:116:VAL:O	17:u:120:VAL:HG22	2.20	0.42
17:u:178:THR:H	17:u:181:GLU:HG2	1.85	0.42
17:u:294:PHE:CE2	17:u:333:VAL:HG21	2.55	0.42
18:r:338:LYS:HG3	18:r:339:ARG:N	2.35	0.42
17:q:116:VAL:O	17:q:120:VAL:HG22	2.20	0.42
17:q:178:THR:H	17:q:181:GLU:HG2	1.85	0.42
17:q:294:PHE:CE2	17:q:333:VAL:HG21	2.55	0.42
17:y:116:VAL:O	17:y:120:VAL:HG22	2.20	0.42
1:A:277:GLU:H	1:A:277:GLU:CD	2.28	0.41
2:B:550:MET:HE3	2:B:550:MET:HB3	1.87	0.41
2:B:1164:MET:HB2	2:B:1164:MET:HE3	1.71	0.41
2:B:1547:LYS:HA	2:B:1550:GLU:HG3	2.00	0.41
2:B:1812:ALA:C	2:B:1814:SER:H	2.27	0.41
2:B:2757:GLY:O	2:B:2758:GLN:C	2.63	0.41
2:B:2901:ARG:HE	2:B:2911:ILE:HG21	1.84	0.41
2:B:3027:ASP:OD1	2:B:3028:THR:N	2.52	0.41
2:B:3138:MET:HB2	2:B:3698:LEU:HD22	2.01	0.41
2:B:3441:LYS:HA	2:B:3441:LYS:HE3	2.01	0.41
2:B:3673:LYS:NZ	2:B:3744:ARG:HH12	2.18	0.41
2:B:3781:PHE:CE2	2:B:3811:TRP:CE2	3.08	0.41
2:B:4508:GLY:H	2:B:4566:ARG:HH11	1.67	0.41
3:C:695:LEU:HA	3:C:698:GLU:CD	2.45	0.41
3:C:1074:MET:HE3	3:C:1074:MET:HB3	1.83	0.41
3:C:1262:MET:HE3	3:C:1265:ILE:HG13	2.02	0.41
3:C:1605:VAL:HG13	3:C:1629:LYS:NZ	2.35	0.41
3:C:1610:LEU:HA	3:C:1613:ILE:HD12	2.02	0.41
3:C:1700:SER:O	3:C:1704:GLN:NE2	2.53	0.41
3:C:2103:PRO:HD3	3:C:4497:SER:HB2	2.02	0.41
3:C:2172:GLU:O	3:C:2176:LYS:HG3	2.20	0.41
3:C:2403:ASP:O	3:C:2406:ARG:HG2	2.20	0.41
3:C:2679:VAL:HA	3:C:2682:THR:HG22	2.01	0.41
3:C:3662:VAL:HG11	3:C:3747:TYR:HB3	2.02	0.41
3:C:4106:TYR:O	3:C:4110:THR:HG23	2.20	0.41
3:C:4452:TRP:CE3	3:C:4459:PRO:HD2	2.55	0.41
4:D:294:GLN:HA	4:D:297:LYS:HD3	2.01	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:491:GLN:HG3	4:D:492:TYR:N	2.34	0.41
5:E:195:THR:HB	5:E:214:SER:OG	2.19	0.41
6:F:85:TYR:CD2	6:F:100:ILE:HG23	2.55	0.41
13:M:15:ASP:OD1	13:M:16:MET:N	2.52	0.41
14:N:29:PHE:CE1	14:N:34:ILE:HG12	2.54	0.41
17:Q:176:SER:HB3	18:S:349:THR:HB	2.02	0.41
17:Q:294:PHE:CE2	17:Q:333:VAL:HG21	2.55	0.41
18:R:401:LYS:O	18:R:403:ALA:N	2.52	0.41
17:U:178:THR:H	17:U:181:GLU:HG2	1.85	0.41
17:U:294:PHE:CE2	17:U:333:VAL:HG21	2.55	0.41
18:W:401:LYS:O	18:W:403:ALA:N	2.52	0.41
18:W:402:ARG:HH11	18:W:402:ARG:CG	2.33	0.41
17:Y:156:ARG:HH21	17:Y:164:MET:HE2	1.85	0.41
17:Y:290:THR:OG1	17:Y:329:GLN:OE1	2.33	0.41
22:Z:85:GLN:O	22:Z:89:VAL:HG13	2.20	0.41
18:s:276:ILE:HG23	18:s:277:SER:O	2.20	0.41
17:u:140:GLY:HA3	17:u:181:GLU:CD	2.45	0.41
17:u:156:ARG:HH21	17:u:164:MET:HE2	1.85	0.41
17:u:375:GLN:HB2	17:u:419:VAL:HG13	2.02	0.41
17:q:99:ASN:ND2	17:q:180:VAL:HG22	2.35	0.41
17:q:140:GLY:HA3	17:q:181:GLU:CD	2.45	0.41
18:w:276:ILE:HG23	18:w:277:SER:O	2.20	0.41
17:y:117:LEU:HA	17:y:120:VAL:HG22	2.02	0.41
17:y:140:GLY:HA3	17:y:181:GLU:CD	2.45	0.41
17:y:178:THR:H	17:y:181:GLU:HG2	1.85	0.41
2:B:503:LEU:HD11	2:B:533:ARG:NH2	2.32	0.41
2:B:524:LEU:HA	2:B:524:LEU:HD23	1.68	0.41
2:B:999:GLU:O	2:B:1090:ARG:NH2	2.52	0.41
2:B:1401:THR:HB	2:B:1403:PHE:CD2	2.55	0.41
2:B:1941:MET:HE3	2:B:1941:MET:HB3	1.92	0.41
2:B:2016:GLU:O	2:B:2019:LYS:HG2	2.20	0.41
2:B:2312:THR:O	2:B:2316:VAL:HG23	2.19	0.41
2:B:2396:MET:HG2	2:B:2447:PRO:O	2.19	0.41
2:B:2493:THR:OG1	2:B:2494:TRP:N	2.53	0.41
2:B:2572:ASP:OD1	2:B:2572:ASP:N	2.53	0.41
2:B:2987:VAL:HA	2:B:2990:GLU:HG3	2.02	0.41
2:B:3764:LEU:O	2:B:3767:MET:HG3	2.21	0.41
2:B:3829:VAL:HG12	2:B:3830:PHE:CD1	2.56	0.41
2:B:4156:PRO:HG2	2:B:4198:HIS:CE1	2.55	0.41
2:B:4323:LEU:HD11	2:B:4426:ASN:HD21	1.85	0.41
2:B:4502:ARG:HB2	2:B:4509:GLN:OE1	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4506:GLN:HA	2:B:4564:LYS:HZ1	1.85	0.41
3:C:80:PHE:CD1	3:C:80:PHE:N	2.87	0.41
3:C:315:LYS:HA	3:C:318:THR:HG23	2.02	0.41
3:C:324:ILE:O	3:C:328:TYR:HD2	2.03	0.41
3:C:694:GLN:O	3:C:698:GLU:HG3	2.20	0.41
3:C:867:MET:HE1	5:E:482:ASP:O	2.20	0.41
3:C:916:LYS:HB2	3:C:1073:ALA:HB1	2.01	0.41
3:C:1226:PHE:HZ	3:C:1256:TYR:HB3	1.84	0.41
3:C:1599:PHE:HB3	3:C:1602:PHE:CD2	2.55	0.41
3:C:2283:ALA:O	3:C:2287:ARG:NE	2.53	0.41
3:C:2528:PRO:HD2	24:C:4702:ATP:H5'2	1.60	0.41
3:C:3454:ILE:HD13	3:C:3523:ASN:HD21	1.84	0.41
3:C:3722:GLN:O	3:C:3726:VAL:HG23	2.21	0.41
4:D:356:HIS:HE1	4:D:358:LYS:HB3	1.85	0.41
4:D:556:THR:H	4:D:572:ASN:CG	2.24	0.41
4:D:565:LYS:HA	4:D:582:GLN:O	2.20	0.41
10:J:79:PHE:HZ	4:d:187:THR:HG23	1.85	0.41
17:Q:252:LYS:HD2	26:R:501:GTP:O3G	2.20	0.41
17:Q:334:GLN:O	17:Q:338:SER:OG	2.21	0.41
18:R:402:ARG:HH11	18:R:402:ARG:CG	2.33	0.41
18:S:35:GLN:HG2	18:S:60:LYS:NZ	2.34	0.41
18:S:401:LYS:O	18:S:403:ALA:N	2.52	0.41
18:S:402:ARG:HH11	18:S:402:ARG:CG	2.33	0.41
17:U:290:THR:OG1	17:U:329:GLN:OE1	2.33	0.41
26:W:501:GTP:O3G	17:Y:252:LYS:HD2	2.20	0.41
21:X:180:ARG:HD2	22:Z:174:PHE:CB	2.50	0.41
17:Y:375:GLN:HB2	17:Y:419:VAL:HG13	2.02	0.41
22:Z:155:ALA:HB1	17:u:336:LYS:HB3	2.02	0.41
4:d:126:GLN:OE1	4:d:130:ARG:HD2	2.20	0.41
17:u:99:ASN:ND2	17:u:180:VAL:HG22	2.35	0.41
17:u:117:LEU:HA	17:u:120:VAL:HG22	2.02	0.41
17:u:163:ILE:HD11	17:u:251:ARG:NE	2.34	0.41
18:r:402:ARG:HH11	18:r:402:ARG:CG	2.33	0.41
17:q:117:LEU:HA	17:q:120:VAL:HG22	2.02	0.41
17:y:99:ASN:ND2	17:y:180:VAL:HG22	2.35	0.41
17:y:163:ILE:HD11	17:y:251:ARG:NE	2.34	0.41
1:A:7:TRP:HD1	1:A:315:VAL:HG22	1.85	0.41
1:A:343:ASN:HD21	2:B:931:ARG:NE	2.11	0.41
2:B:435:GLN:HA	2:B:438:LYS:CE	2.50	0.41
2:B:687:PHE:HD1	2:B:692:LEU:HB2	1.85	0.41
2:B:1302:MET:HA	2:B:1305:LEU:HD12	2.00	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1354:LYS:HG2	2:B:1357:ARG:NH1	2.35	0.41
2:B:1437:GLU:HG2	2:B:1493:TYR:HB3	2.03	0.41
2:B:1439:LYS:HE3	2:B:1493:TYR:HE1	1.85	0.41
2:B:1742:VAL:HG21	2:B:1817:TRP:HE1	1.85	0.41
2:B:1956:ASN:ND2	2:B:2004:MET:HE2	2.34	0.41
2:B:2579:ASN:OD1	2:B:2580:ILE:N	2.52	0.41
2:B:2584:VAL:HG23	2:B:2591:ASN:O	2.20	0.41
2:B:2938:LYS:HB2	2:B:2939:PRO:HD3	2.02	0.41
2:B:3579:ILE:O	2:B:3625:MET:N	2.54	0.41
2:B:3678:LYS:O	2:B:3682:GLU:HG2	2.19	0.41
2:B:3945:PHE:O	2:B:3949:VAL:HG12	2.21	0.41
2:B:4022:ASP:O	2:B:4026:ARG:HB3	2.20	0.41
3:C:1434:ASP:O	3:C:1438:LEU:HD23	2.21	0.41
3:C:1456:PRO:HG3	3:C:1549:MET:HG2	2.03	0.41
3:C:1507:THR:OG1	3:C:1565:CYS:HB3	2.21	0.41
3:C:2236:VAL:HG21	3:C:2277:LEU:HG	2.01	0.41
3:C:2393:TRP:CD2	3:C:2472:LEU:HD21	2.56	0.41
3:C:2722:LYS:CE	3:C:2776:LYS:HG3	2.51	0.41
3:C:2761:VAL:O	3:C:2764:GLU:HG3	2.20	0.41
3:C:2876:LEU:CA	23:C:4703:ADP:C1'	2.98	0.41
3:C:2940:MET:HE1	3:C:2947:ILE:HD13	2.01	0.41
3:C:4031:ILE:HD13	3:C:4041:VAL:HG21	2.02	0.41
3:C:4222:THR:HG21	3:C:4610:LEU:HD11	2.02	0.41
5:E:183:ILE:HD13	5:E:186:PHE:HB2	2.01	0.41
7:G:140:ASP:HB3	7:G:143:PHE:C	2.45	0.41
8:H:63:ARG:HA	8:H:63:ARG:NE	2.35	0.41
12:L:41:LEU:HD11	12:L:56:ASN:CB	2.51	0.41
18:R:14:ILE:HG21	18:R:74:VAL:HG21	2.02	0.41
18:R:206:ASN:HB3	18:R:210:TYR:CE2	2.55	0.41
18:S:14:ILE:HG21	18:S:74:VAL:HG21	2.02	0.41
18:S:206:ASN:HB3	18:S:210:TYR:CE2	2.55	0.41
17:U:140:GLY:HA3	17:U:181:GLU:CD	2.45	0.41
18:W:35:GLN:HG2	18:W:60:LYS:NZ	2.35	0.41
21:X:194:LEU:CD2	21:X:197:LYS:CD	2.98	0.41
18:s:177:VAL:HB	17:u:331:LEU:HD11	2.02	0.41
17:u:101:TRP:CE3	17:u:187:LEU:HD13	2.56	0.41
18:r:12:GLY:HA2	26:r:501:GTP:N7	2.35	0.41
17:q:67:ASP:HA	17:q:147:MET:CE	2.48	0.41
18:w:12:GLY:HA2	26:w:501:GTP:N7	2.35	0.41
2:B:902:ILE:O	2:B:1078:ILE:HA	2.21	0.41
2:B:1046:ASN:HB2	2:B:1170:LYS:NZ	2.36	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1877:THR:HG23	2:B:1880:THR:H	1.84	0.41
2:B:2560:VAL:CG2	2:B:2598:LYS:HB2	2.51	0.41
2:B:2586:LYS:HZ1	2:B:2595:ALA:HB2	1.85	0.41
2:B:2846:LEU:O	2:B:2849:LYS:HG3	2.20	0.41
2:B:4341:ASN:HB3	2:B:4346:GLN:OE1	2.20	0.41
2:B:4530:ILE:HB	2:B:4533:PRO:HG3	2.01	0.41
3:C:491:ILE:O	3:C:495:PHE:HB2	2.20	0.41
3:C:562:LYS:O	3:C:566:THR:N	2.53	0.41
3:C:1536:LEU:HD22	3:C:1537:GLN:NE2	2.35	0.41
3:C:1588:LEU:O	3:C:1592:LEU:HG	2.20	0.41
3:C:2689:LYS:HZ2	3:C:2746:VAL:HG11	1.84	0.41
3:C:2781:LYS:HA	3:C:2781:LYS:HD2	1.84	0.41
3:C:3061:LYS:HE3	3:C:3061:LYS:HB3	1.94	0.41
3:C:3952:LEU:HD13	3:C:3952:LEU:HA	1.70	0.41
3:C:4218:THR:HG21	3:C:4609:LYS:HG2	2.02	0.41
4:D:621:CYS:HB3	4:D:626:GLU:OE1	2.20	0.41
5:E:243:TRP:HZ3	5:E:249:GLU:HA	1.86	0.41
6:F:23:TYR:HD1	6:F:36:HIS:CG	2.38	0.41
11:K:34:ASP:OD1	11:K:38:GLU:HG2	2.20	0.41
13:M:28:VAL:HG21	13:M:77:ILE:CD1	2.51	0.41
17:Q:152:ILE:HG23	17:Q:164:MET:HG2	2.02	0.41
17:Q:375:GLN:HB2	17:Q:419:VAL:HG13	2.02	0.41
18:S:313:MET:HA	18:S:344:VAL:HG22	2.03	0.41
26:S:501:GTP:O3G	17:U:252:LYS:HD2	2.20	0.41
17:U:375:GLN:HB2	17:U:419:VAL:HG13	2.02	0.41
18:W:206:ASN:HB3	18:W:210:TYR:CE2	2.55	0.41
18:W:313:MET:HA	18:W:344:VAL:HG22	2.03	0.41
17:Y:117:LEU:HA	17:Y:120:VAL:HG22	2.02	0.41
17:Y:140:GLY:HA3	17:Y:181:GLU:CD	2.45	0.41
22:Z:204:GLU:HA	22:Z:207:ASP:OD1	2.21	0.41
22:Z:208:ARG:NH2	22:Z:209:ALA:HB2	2.27	0.41
4:d:138:LYS:O	4:d:139:GLU:HG3	2.20	0.41
18:s:12:GLY:HA2	26:s:501:GTP:N7	2.36	0.41
18:s:402:ARG:HH11	18:s:402:ARG:CG	2.33	0.41
17:q:101:TRP:CE3	17:q:187:LEU:HD13	2.56	0.41
18:w:402:ARG:HH11	18:w:402:ARG:CG	2.33	0.41
17:y:101:TRP:CE3	17:y:187:LEU:HD13	2.56	0.41
17:y:221:THR:HG23	17:y:223:GLY:N	2.36	0.41
1:A:288:VAL:N	1:A:318:PRO:HB3	2.36	0.41
2:B:28:LYS:HE2	2:B:28:LYS:HB3	1.88	0.41
2:B:164:LEU:HD23	2:B:168:ILE:HG13	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:164:LEU:HG	2:B:175:PRO:HA	2.02	0.41
2:B:324:ILE:HG23	2:B:397:TYR:CE1	2.55	0.41
2:B:539:GLU:OE1	2:B:542:LYS:HD3	2.20	0.41
2:B:888:PRO:HG3	2:B:1074:SER:HB3	2.02	0.41
2:B:1106:PHE:CD1	2:B:1167:MET:HB3	2.55	0.41
2:B:1240:PHE:CE1	2:B:1267:TYR:HB3	2.49	0.41
2:B:1329:PRO:HA	2:B:1412:PHE:CD1	2.56	0.41
2:B:1330:TRP:HB3	2:B:1410:PHE:CG	2.55	0.41
2:B:1360:LYS:HA	2:B:1363:ASN:CB	2.48	0.41
2:B:1559:MET:HE1	2:B:1584:TRP:HE1	1.86	0.41
2:B:1902:PRO:O	2:B:1905:THR:OG1	2.37	0.41
2:B:4005:ARG:HH12	2:B:4012:PHE:HB3	1.86	0.41
2:B:4111:TRP:HB3	2:B:4245:TYR:CE1	2.55	0.41
3:C:327:LEU:HA	3:C:376:ASN:OD1	2.20	0.41
3:C:812:THR:O	3:C:816:VAL:HG23	2.20	0.41
3:C:1213:LYS:O	3:C:1217:LYS:HG2	2.20	0.41
3:C:1589:GLU:OE2	3:C:1593:GLU:HG2	2.20	0.41
3:C:1709:VAL:HG21	3:C:1713:GLU:OE1	2.20	0.41
3:C:2048:LEU:HD23	3:C:2048:LEU:HA	1.92	0.41
3:C:2356:SER:O	3:C:2360:ILE:HG23	2.21	0.41
3:C:3460:PHE:HB2	3:C:3465:ARG:HD2	2.03	0.41
5:E:394:TRP:CH2	5:E:401:PRO:HD3	2.55	0.41
5:E:403:ILE:HD11	5:E:514:ARG:HD3	2.02	0.41
6:F:7:ALA:HB3	6:F:9:ASP:OD1	2.21	0.41
12:L:16:LEU:HD13	12:L:19:HIS:CE1	2.55	0.41
17:Q:140:GLY:HA3	17:Q:181:GLU:CD	2.45	0.41
17:Q:282:ARG:HG3	17:Q:283:ALA:O	2.21	0.41
17:Q:391:ARG:CG	18:S:346:TRP:HB3	2.41	0.41
18:R:23:LEU:HD12	18:R:23:LEU:HA	1.73	0.41
18:R:175:PRO:HD3	18:R:205:ASP:OD2	2.21	0.41
18:R:313:MET:HA	18:R:344:VAL:HG22	2.03	0.41
18:S:175:PRO:HD3	18:S:205:ASP:OD2	2.21	0.41
18:W:14:ILE:HG21	18:W:74:VAL:HG21	2.02	0.41
21:X:176:LEU:HA	21:X:179:GLU:HG3	2.02	0.41
22:Z:177:LEU:HD13	22:Z:177:LEU:HA	1.59	0.41
4:d:117:TRP:CH2	5:e:39:GLN:HA	2.55	0.41
17:u:187:LEU:HD21	17:u:407:GLU:OE1	2.20	0.41
17:u:221:THR:HG23	17:u:223:GLY:N	2.36	0.41
17:q:221:THR:HG23	17:q:223:GLY:N	2.36	0.41
18:w:269:LEU:HD23	18:w:269:LEU:H	1.84	0.41
17:y:67:ASP:HA	17:y:147:MET:CE	2.48	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:y:187:LEU:HD21	17:y:407:GLU:OE1	2.20	0.41
20:x:125:UNK:O	20:x:128:UNK:N	2.54	0.41
1:A:154:PHE:O	1:A:156:GLY:N	2.53	0.41
1:A:263:SER:O	1:A:263:SER:OG	2.36	0.41
2:B:123:SER:CB	3:C:96:LEU:HD21	2.49	0.41
2:B:173:MET:HG2	2:B:173:MET:O	2.20	0.41
2:B:444:LEU:HB2	2:B:452:LEU:HD22	2.03	0.41
2:B:618:GLU:O	2:B:622:VAL:HG23	2.20	0.41
2:B:1171:LEU:HG	2:B:1176:VAL:HG23	2.02	0.41
2:B:1390:ARG:NH1	2:B:1496:PHE:HA	2.36	0.41
2:B:1584:TRP:O	2:B:1588:ILE:HG12	2.20	0.41
2:B:1920:ILE:HD12	2:B:1949:TRP:CD2	2.55	0.41
2:B:2199:LYS:O	2:B:2202:ILE:HG22	2.21	0.41
2:B:3502:ALA:O	2:B:3505:SER:HB2	2.20	0.41
2:B:3558:LEU:HD13	2:B:3581:GLY:O	2.21	0.41
2:B:3662:VAL:HG11	2:B:3673:LYS:HE2	2.02	0.41
2:B:3677:VAL:HA	2:B:3680:GLN:HE21	1.85	0.41
2:B:3974:ASN:O	2:B:3977:SER:OG	2.27	0.41
3:C:139:TYR:O	3:C:142:GLN:HG2	2.21	0.41
3:C:140:SER:HA	3:C:162:VAL:HG11	2.03	0.41
3:C:183:MET:HG3	3:C:216:TRP:CG	2.56	0.41
3:C:857:ARG:HE	5:E:205:PRO:CB	2.30	0.41
3:C:1381:GLU:HG3	3:C:1384:LYS:HZ1	1.85	0.41
3:C:1599:PHE:HA	3:C:1600:PRO:HD2	1.96	0.41
3:C:1871:ALA:HA	3:C:1878:LYS:NZ	2.35	0.41
3:C:2703:PHE:O	3:C:2707:LEU:HG	2.20	0.41
3:C:3442:LYS:HG3	3:C:3483:PRO:C	2.46	0.41
3:C:3969:ASP:OD2	3:C:3969:ASP:N	2.52	0.41
3:C:4541:LEU:HD23	3:C:4541:LEU:HA	1.86	0.41
4:D:351:MET:N	4:D:351:MET:SD	2.94	0.41
5:E:153:PHE:CD1	5:E:205:PRO:HA	2.55	0.41
6:F:66:ASP:O	6:F:67:LEU:HD22	2.19	0.41
7:G:77:LEU:HD12	7:G:90:PHE:CE2	2.56	0.41
8:H:11:ILE:HA	8:H:79:LEU:HB2	2.02	0.41
8:H:48:ASP:O	8:H:52:ARG:HG2	2.21	0.41
9:I:41:VAL:HG12	9:I:63:ILE:HD12	2.02	0.41
17:Q:99:ASN:ND2	17:Q:180:VAL:HG22	2.35	0.41
18:R:417:GLU:O	18:R:420:GLU:HG3	2.21	0.41
18:S:338:LYS:HG3	18:S:339:ARG:N	2.35	0.41
17:U:117:LEU:HA	17:U:120:VAL:HG22	2.02	0.41
17:U:152:ILE:HG23	17:U:164:MET:HG2	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:U:212:PHE:HE2	18:W:326:LYS:HE3	1.86	0.41
17:U:282:ARG:HG3	17:U:283:ALA:O	2.21	0.41
18:W:99:ALA:HA	18:W:105:ARG:HD3	2.01	0.41
18:W:175:PRO:HD3	18:W:205:ASP:OD2	2.21	0.41
18:W:338:LYS:HG3	18:W:339:ARG:N	2.35	0.41
17:Y:99:ASN:ND2	17:Y:180:VAL:HG22	2.35	0.41
17:Y:282:ARG:HG3	17:Y:283:ALA:O	2.21	0.41
17:Y:341:PHE:CZ	17:Y:349:ILE:HD11	2.56	0.41
18:s:269:LEU:HD23	18:s:269:LEU:H	1.84	0.41
18:s:319:TYR:CE2	18:s:328:VAL:HG22	2.56	0.41
17:u:67:ASP:HA	17:u:147:MET:CE	2.48	0.41
18:w:101:ASN:ND2	17:y:252:LYS:HE3	2.35	0.41
1:A:53:PRO:HD2	1:A:82:ARG:HB2	2.01	0.41
1:A:145:PRO:HD2	1:A:171:ARG:HH12	1.85	0.41
1:A:154:PHE:CZ	1:A:234:ILE:HD11	2.56	0.41
1:A:196:PRO:HG2	1:A:230:MET:HE2	2.03	0.41
1:A:283:THR:CG2	2:B:939:ASN:HB3	2.47	0.41
2:B:963:PHE:N	2:B:963:PHE:CD1	2.87	0.41
2:B:1189:GLN:H	2:B:1189:GLN:CD	2.29	0.41
2:B:1365:ILE:O	2:B:1369:VAL:HG23	2.19	0.41
2:B:1772:ILE:HA	2:B:2041:MET:HG3	2.01	0.41
2:B:1889:GLN:OE1	2:B:1893:LEU:HD11	2.20	0.41
2:B:2128:ASP:O	2:B:4465:GLU:HG2	2.20	0.41
2:B:2145:LYS:HE3	2:B:2145:LYS:HA	2.02	0.41
2:B:2153:LYS:HA	2:B:2153:LYS:HE3	2.01	0.41
2:B:2580:ILE:HG23	2:B:2592:TYR:HE2	1.85	0.41
2:B:2609:MET:N	2:B:2610:PRO:HD2	2.36	0.41
2:B:3696:GLN:O	2:B:3699:SER:N	2.54	0.41
2:B:3784:LYS:HE3	2:B:3976:ASP:CB	2.50	0.41
2:B:4045:HIS:CD2	2:B:4046:LEU:N	2.89	0.41
3:C:56:TYR:HD1	3:C:80:PHE:CZ	2.39	0.41
3:C:81:THR:HG22	3:C:126:ASN:N	2.35	0.41
3:C:501:ASN:OD1	3:C:512:ARG:NH2	2.51	0.41
3:C:744:ILE:HD11	3:C:795:ILE:HD11	2.02	0.41
3:C:1116:LYS:HD3	3:C:1182:LEU:HD11	2.03	0.41
3:C:1311:LYS:HD3	3:C:1311:LYS:HA	1.89	0.41
3:C:2116:VAL:HA	3:C:2119:LYS:HG2	2.03	0.41
3:C:2167:MET:HE1	3:C:2231:THR:HG21	2.02	0.41
3:C:2237:ASP:H	3:C:2240:TRP:HE1	1.68	0.41
3:C:2304:ILE:HD13	3:C:2361:LEU:HD11	2.03	0.41
3:C:2421:LYS:HG2	3:C:2422:GLY:N	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:3533:PRO:CG	3:C:3648:THR:HG22	2.51	0.41
3:C:3692:ASP:C	3:C:3695:LEU:HB2	2.46	0.41
3:C:4123:HIS:O	3:C:4127:ARG:NE	2.30	0.41
4:D:402:VAL:HA	4:D:415:TYR:O	2.20	0.41
4:D:513:PRO:HG3	4:D:634:LYS:CD	2.50	0.41
5:E:169:TRP:CG	5:E:463:ASN:HD21	2.38	0.41
8:H:31:ALA:HB1	8:H:41:ILE:HG23	2.03	0.41
11:K:34:ASP:OD1	11:K:37:LEU:HB3	2.20	0.41
14:N:62:ARG:HE	14:N:62:ARG:HB3	1.75	0.41
14:N:100:LYS:HD3	15:O:89:GLN:HE22	1.86	0.41
17:Q:117:LEU:HA	17:Q:120:VAL:HG22	2.02	0.41
17:Q:290:THR:OG1	17:Q:329:GLN:OE1	2.33	0.41
17:Q:331:LEU:HD11	18:R:177:VAL:HB	2.02	0.41
17:Q:341:PHE:CZ	17:Q:349:ILE:HD11	2.56	0.41
17:Q:397:TRP:CD1	18:S:257:THR:HG1	2.38	0.41
18:R:25:CYS:O	18:R:30:ILE:N	2.54	0.41
18:R:99:ALA:HA	18:R:105:ARG:HD3	2.02	0.41
18:R:195:LEU:HD21	18:R:428:LEU:HD21	2.03	0.41
18:S:25:CYS:HB2	18:S:30:ILE:O	2.21	0.41
18:S:25:CYS:O	18:S:30:ILE:N	2.54	0.41
18:S:417:GLU:O	18:S:420:GLU:HG3	2.21	0.41
17:U:99:ASN:ND2	17:U:180:VAL:HG22	2.35	0.41
17:U:341:PHE:CZ	17:U:349:ILE:HD11	2.56	0.41
18:W:25:CYS:HB2	18:W:30:ILE:O	2.21	0.41
18:W:417:GLU:O	18:W:420:GLU:HG3	2.21	0.41
21:X:142:MET:HB2	21:X:143:ARG:NH1	2.36	0.41
17:Y:152:ILE:HG23	17:Y:164:MET:HG2	2.02	0.41
4:d:129:ILE:HA	4:d:132:THR:HG22	2.03	0.41
18:s:401:LYS:O	18:s:403:ALA:N	2.52	0.41
18:r:99:ALA:HA	18:r:105:ARG:HD3	2.02	0.41
18:r:101:ASN:ND2	17:q:252:LYS:HE3	2.35	0.41
18:r:269:LEU:HD23	18:r:269:LEU:H	1.84	0.41
18:r:288:VAL:HG22	18:r:373:ARG:HG2	2.02	0.41
18:r:319:TYR:CE2	18:r:328:VAL:HG22	2.56	0.41
18:r:417:GLU:O	18:r:420:GLU:HG3	2.21	0.41
17:q:152:ILE:HG23	17:q:164:MET:HG2	2.02	0.41
17:q:187:LEU:HD21	17:q:407:GLU:OE1	2.20	0.41
18:w:319:TYR:CE2	18:w:328:VAL:HG22	2.56	0.41
18:w:401:LYS:O	18:w:403:ALA:N	2.52	0.41
17:y:263:LEU:O	17:y:370:ASN:ND2	2.42	0.41
1:A:170:GLN:OE1	2:B:861:ASP:HB3	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:63:TRP:HE3	2:B:89:ILE:O	2.04	0.41
2:B:368:ILE:O	2:B:372:GLU:HG2	2.21	0.41
2:B:832:ASN:O	2:B:836:ILE:HG12	2.21	0.41
2:B:968:CYS:HA	2:B:971:MET:HE2	2.01	0.41
2:B:1308:LEU:HD21	2:B:1359:PHE:CD2	2.56	0.41
2:B:1389:ASP:HA	2:B:1392:TRP:HD1	1.84	0.41
2:B:1627:ALA:HB3	2:B:1655:THR:O	2.20	0.41
2:B:1666:ASP:OD1	2:B:1666:ASP:N	2.49	0.41
2:B:1854:ILE:HG22	2:B:1855:ARG:N	2.36	0.41
2:B:2403:GLN:HA	2:B:2406:CYS:HB3	2.02	0.41
2:B:2413:LEU:HG	2:B:2530:ARG:HD3	2.02	0.41
2:B:2573:SER:HB2	2:B:2577:GLN:NE2	2.29	0.41
2:B:2577:GLN:HG2	2:B:2633:ILE:HD11	2.02	0.41
2:B:2728:PHE:N	2:B:2733:LYS:HG3	2.36	0.41
2:B:2882:PRO:HA	2:B:3017:LYS:HE3	2.02	0.41
2:B:3148:ASN:HA	2:B:3151:GLN:NE2	2.35	0.41
2:B:3786:ILE:HD11	2:B:3804:ILE:HD11	2.03	0.41
2:B:3811:TRP:CH2	2:B:4093:ILE:HG23	2.56	0.41
2:B:4187:ILE:HG13	2:B:4188:TYR:N	2.36	0.41
2:B:4394:SER:OG	2:B:4395:ARG:NH2	2.53	0.41
3:C:467:ILE:HG12	3:C:488:PHE:HZ	1.86	0.41
3:C:663:ILE:HG22	3:C:667:LYS:HZ3	1.86	0.41
3:C:791:LEU:HG	3:C:795:ILE:HD11	2.03	0.41
3:C:928:LYS:N	3:C:929:PRO:HD2	2.35	0.41
3:C:1382:LYS:HB3	3:C:1419:ILE:HG12	2.03	0.41
3:C:1391:LEU:HB3	3:C:1403:GLU:OE2	2.21	0.41
3:C:1426:GLN:HE22	3:C:1486:HIS:C	2.28	0.41
3:C:1705:GLN:NE2	3:C:1714:PHE:HB2	2.35	0.41
3:C:1766:SER:CA	3:C:2018:LEU:HD21	2.50	0.41
3:C:2873:LYS:HB2	23:C:4703:ADP:PA	2.61	0.41
3:C:3439:GLN:HB3	3:C:3442:LYS:HB2	2.02	0.41
3:C:3708:ASP:CG	3:C:3711:GLU:HB3	2.46	0.41
4:D:429:MET:SD	4:D:430:LYS:N	2.94	0.41
4:D:519:ALA:HA	4:D:524:THR:O	2.20	0.41
4:D:541:LEU:HD22	4:D:569:TYR:OH	2.20	0.41
4:D:575:LYS:HG2	4:D:576:LEU:H	1.85	0.41
5:E:177:VAL:HG21	5:E:461:LYS:NZ	2.36	0.41
8:H:52:ARG:HG3	8:H:53:TYR:CD2	2.56	0.41
8:H:73:ARG:HA	8:H:73:ARG:NE	2.35	0.41
11:K:87:GLN:O	11:K:88:ALA:HB2	2.20	0.41
12:L:60:PHE:O	12:L:64:GLN:NE2	2.51	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M:16:MET:SD	13:M:19:ARG:NH2	2.94	0.41
15:O:30:ASP:O	4:d:117:TRP:CE2	2.74	0.41
17:Q:101:TRP:CE3	17:Q:187:LEU:HD13	2.56	0.41
17:Q:379:LYS:HD3	17:Q:419:VAL:HG11	2.02	0.41
18:R:25:CYS:HB2	18:R:30:ILE:O	2.21	0.41
18:R:288:VAL:HG22	18:R:373:ARG:HG2	2.02	0.41
18:S:195:LEU:HD21	18:S:428:LEU:HD21	2.03	0.41
18:W:25:CYS:O	18:W:30:ILE:N	2.54	0.41
21:X:204:LEU:HD23	21:X:207:LEU:CD1	2.29	0.41
17:Y:101:TRP:CE3	17:Y:187:LEU:HD13	2.56	0.41
18:s:14:ILE:HG21	18:s:74:VAL:HG21	2.02	0.41
18:s:121:ARG:HD2	18:s:121:ARG:HA	1.86	0.41
17:u:282:ARG:HG3	17:u:283:ALA:O	2.21	0.41
17:u:341:PHE:CZ	17:u:349:ILE:HD11	2.56	0.41
18:r:14:ILE:HG21	18:r:74:VAL:HG21	2.02	0.41
17:q:341:PHE:CZ	17:q:349:ILE:HD11	2.56	0.41
18:w:417:GLU:O	18:w:420:GLU:HG3	2.21	0.41
17:y:341:PHE:CZ	17:y:349:ILE:HD11	2.56	0.41
2:B:136:PRO:O	2:B:140:GLN:HB2	2.20	0.41
2:B:394:TYR:CE2	2:B:412:LEU:HD13	2.55	0.41
2:B:418:SER:HA	2:B:421:GLU:OE1	2.20	0.41
2:B:533:ARG:NE	2:B:535:ILE:HD11	2.31	0.41
2:B:715:LEU:HB2	2:B:766:ILE:HD11	2.02	0.41
2:B:765:PHE:CE2	2:B:766:ILE:HG13	2.56	0.41
2:B:800:LYS:O	2:B:803:GLU:HG3	2.21	0.41
2:B:877:THR:HG22	2:B:881:HIS:NE2	2.36	0.41
2:B:931:ARG:HH11	2:B:934:ILE:HB	1.86	0.41
2:B:1036:LEU:HD22	2:B:1094:TRP:CH2	2.55	0.41
2:B:1047:LEU:HD21	2:B:1102:LEU:HD22	2.03	0.41
2:B:1107:ARG:CD	2:B:1190:ILE:HG12	2.47	0.41
2:B:1311:MET:C	2:B:1362:TYR:CE1	2.98	0.41
2:B:1316:ALA:O	2:B:1320:PHE:CG	2.73	0.41
2:B:1510:ARG:NH1	2:B:1514:VAL:HG21	2.35	0.41
2:B:1663:ILE:HD13	2:B:1669:LYS:HD3	2.02	0.41
2:B:1716:LYS:N	2:B:1716:LYS:HD3	2.36	0.41
2:B:1915:GLY:HA3	2:B:1922:VAL:HG21	2.03	0.41
2:B:1943:LEU:HD22	2:B:2000:PHE:CZ	2.56	0.41
2:B:2145:LYS:NZ	2:B:2148:GLN:HG3	2.36	0.41
2:B:2413:LEU:O	2:B:2417:LEU:HG	2.20	0.41
2:B:2657:LYS:HA	2:B:2660:SER:O	2.21	0.41
2:B:2964:ASP:OD1	2:B:2968:SER:OG	2.37	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2968:SER:HA	2:B:3013:ARG:HH21	1.85	0.41
2:B:3507:TRP:CE3	2:B:3522:ALA:HB1	2.56	0.41
2:B:3532:PRO:HB3	2:B:3644:ILE:HD13	2.02	0.41
2:B:4127:LYS:HB2	2:B:4243:ASN:ND2	2.35	0.41
2:B:4322:GLU:O	2:B:4326:LYS:HD3	2.21	0.41
2:B:4345:TYR:HA	2:B:4348:VAL:HB	2.03	0.41
2:B:4459:SER:OG	2:B:4466:LEU:HD23	2.20	0.41
3:C:9:ARG:HE	3:C:45:LEU:HD13	1.85	0.41
3:C:315:LYS:HA	3:C:315:LYS:HD3	1.74	0.41
3:C:335:ILE:O	3:C:338:THR:HB	2.21	0.41
3:C:542:ILE:CG2	3:C:575:ASN:HB2	2.46	0.41
3:C:557:LYS:HE3	3:C:557:LYS:HB2	1.77	0.41
3:C:663:ILE:O	3:C:667:LYS:HG3	2.21	0.41
3:C:811:LYS:HA	3:C:811:LYS:HD3	1.95	0.41
3:C:864:GLN:HG2	5:E:154:LYS:HG3	2.02	0.41
3:C:1062:ILE:O	3:C:1065:ILE:HG23	2.21	0.41
3:C:1482:ASN:HA	3:C:1487:VAL:HG21	2.02	0.41
3:C:1856:ILE:C	3:C:4201:VAL:HG22	2.46	0.41
3:C:1935:SER:OG	3:C:1936:VAL:N	2.53	0.41
3:C:2100:ASP:OD1	3:C:4483:ARG:HG2	2.21	0.41
3:C:2112:LEU:HD12	3:C:2112:LEU:HA	1.78	0.41
3:C:2254:LEU:HB2	3:C:2262:ILE:HG22	2.03	0.41
3:C:2650:HIS:HD2	3:C:2653:LYS:NZ	2.18	0.41
3:C:2837:MET:HG3	3:C:2837:MET:O	2.21	0.41
3:C:3679:ALA:O	3:C:3683:GLN:HG2	2.21	0.41
3:C:3691:LEU:HD12	3:C:3722:GLN:HG3	2.03	0.41
3:C:3779:LEU:HD23	3:C:3779:LEU:HA	1.93	0.41
3:C:3825:THR:HG22	3:C:4296:MET:SD	2.60	0.41
3:C:3955:THR:HA	3:C:3958:PHE:HE1	1.86	0.41
3:C:3957:ASN:O	3:C:3960:SER:OG	2.35	0.41
3:C:4109:PHE:C	3:C:4113:ILE:HG21	2.45	0.41
4:D:426:TRP:HH2	4:D:447:ASN:HB3	1.86	0.41
4:D:539:PHE:CD1	4:D:576:LEU:HB3	2.56	0.41
4:D:543:MET:HG2	4:D:562:THR:OG1	2.20	0.41
4:D:551:ALA:HB1	4:D:553:TYR:CD1	2.56	0.41
4:D:556:THR:HG23	4:D:572:ASN:HD21	1.86	0.41
4:D:579:LEU:HD13	4:D:579:LEU:HA	1.85	0.41
4:D:626:GLU:HG3	4:D:627:ILE:HG13	2.03	0.41
5:E:204:ASN:HD22	5:E:209:GLU:HG3	1.86	0.41
5:E:213:MET:HE2	5:E:249:GLU:HG2	2.03	0.41
5:E:344:THR:O	5:E:351:LYS:NZ	2.33	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:414:ASP:O	5:E:427:LEU:HD12	2.21	0.41
10:J:77:PHE:CE1	10:J:88:LEU:HD11	2.56	0.41
11:K:56:GLU:HB2	11:K:59:LYS:HD3	2.02	0.41
12:L:37:GLN:HG3	12:L:60:PHE:CE2	2.56	0.41
14:N:100:LYS:HD3	15:O:89:GLN:NE2	2.36	0.41
15:O:51:ILE:HD11	15:O:71:ALA:HB2	2.03	0.41
15:O:85:ILE:HG13	15:O:98:ILE:CG2	2.50	0.41
17:Q:98:GLY:HA3	18:S:253:THR:CG2	2.49	0.41
17:Q:101:TRP:CD2	17:Q:187:LEU:HD13	2.56	0.41
17:Q:388:MET:O	17:Q:393:ALA:N	2.47	0.41
17:Q:391:ARG:NH2	18:S:435:VAL:O	2.53	0.41
18:R:5:ILE:HD13	18:R:5:ILE:HA	1.96	0.41
18:R:12:GLY:HA2	26:R:501:GTP:N7	2.35	0.41
18:R:138:PHE:CE2	18:R:169:PHE:HD2	2.39	0.41
18:R:338:LYS:HG3	18:R:339:ARG:N	2.35	0.41
18:R:372:MET:HB2	18:R:373:ARG:HD3	2.03	0.41
18:S:12:GLY:HA2	26:S:501:GTP:N7	2.36	0.41
18:S:23:LEU:HD12	18:S:23:LEU:HA	1.73	0.41
18:S:99:ALA:HA	18:S:105:ARG:HD3	2.02	0.41
18:S:138:PHE:CE2	18:S:169:PHE:HD2	2.39	0.41
18:S:259:LEU:HB3	18:S:268:MET:SD	2.61	0.41
18:S:288:VAL:HG22	18:S:373:ARG:HG2	2.02	0.41
18:S:319:TYR:CE2	18:S:328:VAL:HG22	2.56	0.41
18:S:328:VAL:O	18:S:332:ILE:HG13	2.20	0.41
19:T:49:LYS:NZ	19:T:184:THR:HG23	2.36	0.41
19:T:161:GLU:O	22:Z:172:VAL:HG13	2.21	0.41
17:U:101:TRP:CE3	17:U:187:LEU:HD13	2.56	0.41
17:U:101:TRP:CD2	17:U:187:LEU:HD13	2.56	0.41
17:U:187:LEU:HD21	17:U:407:GLU:OE1	2.20	0.41
17:U:379:LYS:HD3	17:U:419:VAL:HG11	2.02	0.41
18:W:5:ILE:HD13	18:W:5:ILE:HA	1.96	0.41
18:W:12:GLY:HA2	26:W:501:GTP:N7	2.35	0.41
18:W:138:PHE:CE2	18:W:169:PHE:HD2	2.39	0.41
18:W:195:LEU:HD21	18:W:428:LEU:HD21	2.03	0.41
18:W:259:LEU:HB3	18:W:268:MET:SD	2.61	0.41
18:W:288:VAL:HG22	18:W:373:ARG:HG2	2.02	0.41
18:W:319:TYR:CE2	18:W:328:VAL:HG22	2.56	0.41
21:X:111:THR:O	21:X:115:LYS:HG2	2.21	0.41
21:X:194:LEU:HD23	21:X:197:LYS:CD	2.50	0.41
21:X:197:LYS:NZ	22:Z:189:ARG:HD3	2.17	0.41
17:Y:101:TRP:CD2	17:Y:187:LEU:HD13	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Y:187:LEU:HD21	17:Y:407:GLU:OE1	2.20	0.41
17:Y:379:LYS:HD3	17:Y:419:VAL:HG11	2.02	0.41
4:d:126:GLN:O	4:d:129:ILE:HG22	2.21	0.41
18:s:99:ALA:HA	18:s:105:ARG:HD3	2.02	0.41
18:s:175:PRO:HD3	18:s:205:ASP:OD2	2.21	0.41
18:s:191:THR:HA	18:s:194:LEU:HB3	2.03	0.41
18:s:195:LEU:HD21	18:s:428:LEU:HD21	2.03	0.41
18:s:288:VAL:HG22	18:s:373:ARG:HG2	2.02	0.41
18:s:395:PHE:HZ	18:s:418:PHE:HB3	1.86	0.41
18:s:417:GLU:O	18:s:420:GLU:HG3	2.21	0.41
17:u:127:CYS:SG	17:u:130:LEU:HB2	2.61	0.41
17:u:152:ILE:HG23	17:u:164:MET:HG2	2.02	0.41
17:u:263:LEU:O	17:u:370:ASN:ND2	2.42	0.41
18:r:25:CYS:O	18:r:30:ILE:N	2.54	0.41
18:r:179:THR:HG21	17:q:246:LEU:HD21	2.02	0.41
18:r:191:THR:HA	18:r:194:LEU:HB3	2.03	0.41
18:r:195:LEU:HD21	18:r:428:LEU:HD21	2.03	0.41
18:r:401:LYS:O	18:r:403:ALA:N	2.52	0.41
17:q:101:TRP:CD2	17:q:187:LEU:HD13	2.56	0.41
17:q:127:CYS:SG	17:q:130:LEU:HB2	2.61	0.41
17:q:282:ARG:HG3	17:q:283:ALA:O	2.21	0.41
18:w:14:ILE:HG21	18:w:74:VAL:HG21	2.02	0.41
18:w:25:CYS:HB2	18:w:30:ILE:O	2.21	0.41
18:w:99:ALA:HA	18:w:105:ARG:HD3	2.02	0.41
18:w:121:ARG:HD2	18:w:121:ARG:HA	1.86	0.41
18:w:138:PHE:CE2	18:w:169:PHE:HD2	2.39	0.41
18:w:179:THR:HG21	17:y:246:LEU:HD21	2.03	0.41
18:w:191:THR:HA	18:w:194:LEU:HB3	2.03	0.41
18:w:209:ILE:H	18:w:209:ILE:HG12	1.54	0.41
18:w:288:VAL:HG22	18:w:373:ARG:HG2	2.02	0.41
18:w:395:PHE:HZ	18:w:418:PHE:HB3	1.86	0.41
17:y:282:ARG:HG3	17:y:283:ALA:O	2.21	0.41
17:y:425:TYR:HD1	17:y:425:TYR:HA	1.78	0.41
1:A:213:GLN:HB2	1:A:232:TYR:C	2.46	0.41
2:B:11:GLU:HB3	2:B:33:LEU:CD1	2.51	0.41
2:B:444:LEU:CD2	2:B:456:ILE:HG12	2.50	0.41
2:B:540:LEU:O	2:B:544:HIS:N	2.45	0.41
2:B:585:ILE:HG21	2:B:644:TRP:HB2	2.02	0.41
2:B:1270:LYS:HD2	2:B:1270:LYS:HA	1.81	0.41
2:B:1315:ILE:CG2	2:B:1365:ILE:HG13	2.50	0.41
2:B:1510:ARG:NE	2:B:1576:GLU:HG3	2.36	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2454:ASP:C	2:B:2455:SER:O	2.61	0.41
2:B:2734:ARG:NE	2:B:2734:ARG:HA	2.36	0.41
2:B:4040:MET:HA	2:B:4075:PHE:O	2.21	0.41
2:B:4122:LYS:H	2:B:4122:LYS:HG2	1.49	0.41
3:C:10:ILE:O	3:C:13:MET:HG2	2.21	0.41
3:C:354:ARG:HD2	3:C:355:PHE:N	2.36	0.41
3:C:572:ILE:HG23	3:C:576:TYR:HE2	1.85	0.41
3:C:1185:ARG:HH12	3:C:1189:ILE:CD1	2.34	0.41
3:C:1662:ARG:HD2	3:C:1663:ASN:HB2	2.03	0.41
3:C:1662:ARG:HD2	3:C:1663:ASN:N	2.36	0.41
3:C:1754:ARG:HH21	3:C:1758:LYS:HE2	1.85	0.41
3:C:2349:MET:O	3:C:2351:THR:HG23	2.20	0.41
3:C:2759:GLN:O	3:C:2763:LEU:HG	2.21	0.41
3:C:2790:ARG:N	3:C:2791:PRO:HD2	2.35	0.41
3:C:2862:SER:OG	3:C:3022:CYS:SG	2.56	0.41
3:C:3038:VAL:O	3:C:3041:THR:OG1	2.31	0.41
3:C:3952:LEU:HD11	3:C:4296:MET:CE	2.51	0.41
3:C:4203:TYR:HD1	3:C:4216:PHE:CZ	2.39	0.41
4:D:423:VAL:HG21	4:D:486:ARG:HH22	1.85	0.41
11:K:101:GLU:O	11:K:101:GLU:HG2	2.21	0.41
13:M:29:LYS:HE2	4:d:92:TYR:CD2	2.56	0.41
18:R:259:LEU:HB3	18:R:268:MET:SD	2.61	0.41
18:R:319:TYR:CE2	18:R:328:VAL:HG22	2.56	0.41
18:S:276:ILE:HG23	18:S:277:SER:O	2.20	0.41
18:S:372:MET:HB2	18:S:373:ARG:HD3	2.03	0.41
19:T:175:MET:SD	19:T:176:TYR:N	2.94	0.41
20:V:221:UNK:O	20:V:222:UNK:C	2.68	0.41
18:W:328:VAL:O	18:W:332:ILE:HG13	2.20	0.41
18:W:372:MET:HB2	18:W:373:ARG:HD3	2.03	0.41
21:X:136:VAL:O	21:X:136:VAL:HG13	2.20	0.41
21:X:197:LYS:HD3	22:Z:192:MET:N	2.36	0.41
21:X:198:GLU:CD	22:Z:188:LYS:HE2	2.46	0.41
21:X:205:LEU:C	21:X:209:HIS:CD2	2.99	0.41
4:d:130:ARG:O	4:d:134:LYS:HG2	2.21	0.41
18:s:25:CYS:O	18:s:30:ILE:N	2.54	0.41
18:s:25:CYS:HB2	18:s:30:ILE:O	2.21	0.41
18:s:138:PHE:CE2	18:s:169:PHE:HD2	2.39	0.41
17:u:101:TRP:CD2	17:u:187:LEU:HD13	2.56	0.41
17:u:379:LYS:HD3	17:u:419:VAL:HG11	2.02	0.41
18:r:138:PHE:CE2	18:r:169:PHE:HD2	2.39	0.41
18:r:175:PRO:HD3	18:r:205:ASP:OD2	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:q:141:GLY:O	17:q:145:SER:OG	2.37	0.41
18:w:175:PRO:HD3	18:w:205:ASP:OD2	2.21	0.41
18:w:195:LEU:HD21	18:w:428:LEU:HD21	2.03	0.41
17:y:127:CYS:SG	17:y:130:LEU:HB2	2.61	0.41
17:y:152:ILE:HG23	17:y:164:MET:HG2	2.02	0.41
2:B:40:LYS:HB3	2:B:45:ASN:O	2.21	0.40
2:B:277:GLU:HG2	2:B:285:ALA:HB3	2.04	0.40
2:B:452:LEU:CD1	5:E:517:LYS:HG3	2.49	0.40
2:B:788:GLN:HA	2:B:791:HIS:NE2	2.36	0.40
2:B:1156:ARG:O	2:B:1160:ILE:HG13	2.21	0.40
2:B:1487:MET:HE3	2:B:1487:MET:HB3	1.93	0.40
2:B:1927:CYS:HB2	2:B:1954:GLU:O	2.20	0.40
2:B:2016:GLU:HG2	2:B:4079:GLU:HG2	2.03	0.40
2:B:2189:GLY:O	2:B:2193:VAL:HG23	2.22	0.40
2:B:2284:VAL:HG23	2:B:2294:PHE:HB3	2.03	0.40
2:B:2503:ASP:CG	2:B:2510:ILE:HG22	2.46	0.40
2:B:3567:LEU:HD11	2:B:3590:LEU:HD11	2.02	0.40
2:B:3654:GLU:O	2:B:3657:PHE:HB2	2.22	0.40
2:B:4194:MET:O	2:B:4198:HIS:HD2	2.04	0.40
2:B:4406:PRO:HG2	2:B:4414:TRP:CZ2	2.55	0.40
3:C:78:LEU:HD23	3:C:82:THR:HG23	2.03	0.40
3:C:132:ASN:HB3	3:C:169:SER:HB2	2.02	0.40
3:C:327:LEU:HD21	3:C:372:GLN:HG3	2.04	0.40
3:C:1347:TRP:O	3:C:1351:ARG:HG2	2.21	0.40
3:C:1478:LEU:HD23	3:C:1498:ILE:HG13	2.03	0.40
3:C:1889:LEU:HA	3:C:1889:LEU:HD12	1.84	0.40
3:C:1932:GLU:HA	3:C:4020:GLY:HA2	2.03	0.40
3:C:2794:ILE:HD12	3:C:2794:ILE:H	1.86	0.40
3:C:2817:LEU:HD22	3:C:2846:LEU:HD13	2.01	0.40
3:C:2874:GLN:N	23:C:4703:ADP:H2'	2.29	0.40
3:C:3454:ILE:HA	3:C:3520:MET:HE1	2.02	0.40
3:C:3654:LEU:HD11	3:C:3775:LEU:HD11	2.02	0.40
3:C:3910:TRP:CZ2	3:C:3922:PRO:HG3	2.57	0.40
5:E:199:VAL:HB	5:E:210:ILE:CG1	2.51	0.40
5:E:268:PHE:CE1	5:E:281:THR:HB	2.57	0.40
8:H:16:MET:HE2	8:H:16:MET:HB2	1.88	0.40
8:H:73:ARG:NH1	8:H:73:ARG:HG2	2.36	0.40
17:Q:187:LEU:HD21	17:Q:407:GLU:OE1	2.20	0.40
17:Q:221:THR:HG23	17:Q:223:GLY:N	2.36	0.40
18:R:276:ILE:HG23	18:R:277:SER:O	2.20	0.40
18:R:328:VAL:O	18:R:332:ILE:HG13	2.20	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:S:5:ILE:HD13	18:S:5:ILE:HA	1.96	0.40
17:U:176:SER:HB3	18:W:349:THR:CB	2.51	0.40
17:U:221:THR:HG23	17:U:223:GLY:N	2.36	0.40
17:U:388:MET:O	17:U:393:ALA:N	2.47	0.40
17:Y:388:MET:O	17:Y:393:ALA:N	2.47	0.40
18:s:101:ASN:ND2	17:u:252:LYS:HE3	2.36	0.40
17:u:172:SER:HB2	17:u:205:GLU:HG2	2.02	0.40
17:u:425:TYR:HD1	17:u:425:TYR:HA	1.78	0.40
18:r:25:CYS:HB2	18:r:30:ILE:O	2.21	0.40
18:r:395:PHE:HZ	18:r:418:PHE:HB3	1.86	0.40
18:w:25:CYS:O	18:w:30:ILE:N	2.54	0.40
17:y:101:TRP:CD2	17:y:187:LEU:HD13	2.56	0.40
17:y:172:SER:HB2	17:y:205:GLU:HG2	2.02	0.40
17:y:379:LYS:HD3	17:y:419:VAL:HG11	2.02	0.40
1:A:195:ASN:N	1:A:196:PRO:CD	2.85	0.40
1:A:252:ASN:HA	1:A:272:SER:O	2.22	0.40
2:B:15:ILE:O	2:B:18:LEU:HG	2.21	0.40
2:B:152:GLU:O	2:B:180:LYS:HD2	2.21	0.40
2:B:164:LEU:O	2:B:168:ILE:N	2.47	0.40
2:B:317:PHE:CE1	2:B:351:ILE:HG12	2.56	0.40
2:B:350:ALA:O	2:B:353:SER:OG	2.34	0.40
2:B:1129:ALA:O	2:B:1134:LEU:HD12	2.21	0.40
2:B:1215:GLN:HB3	2:B:1218:GLU:CB	2.51	0.40
2:B:1232:GLU:HB2	2:B:1236:PHE:CZ	2.57	0.40
2:B:1449:GLN:HA	2:B:1453:LYS:NZ	2.36	0.40
2:B:1815:PHE:CB	2:B:4185:ASP:HB2	2.51	0.40
2:B:1957:ARG:NH2	2:B:1958:ILE:HA	2.36	0.40
2:B:1962:VAL:O	2:B:1966:VAL:HG22	2.21	0.40
2:B:1963:LEU:HD23	2:B:1963:LEU:HA	1.84	0.40
2:B:2372:ARG:HH12	2:B:2376:SER:CB	2.34	0.40
2:B:2532:LYS:NZ	2:B:2672:SER:H	2.20	0.40
2:B:2556:ARG:O	2:B:2559:GLN:HG3	2.20	0.40
2:B:2709:LYS:HA	2:B:2712:GLU:HG3	2.03	0.40
2:B:3028:THR:HG23	2:B:3029:MET:HE2	2.03	0.40
2:B:3130:GLN:O	2:B:3134:GLN:HG2	2.21	0.40
2:B:3672:ALA:O	2:B:3676:LEU:HB2	2.21	0.40
2:B:4129:ILE:HG23	2:B:4169:MET:HE1	2.04	0.40
2:B:4530:ILE:CG2	2:B:4531:PRO:HD2	2.50	0.40
3:C:984:THR:HA	3:C:987:ASP:OD2	2.21	0.40
3:C:1035:ILE:HD13	3:C:1095:GLN:HG2	2.03	0.40
3:C:1376:MET:SD	3:C:1377:PRO:HD2	2.61	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1770:GLU:HG2	3:C:2016:GLY:HA3	2.03	0.40
3:C:2252:LYS:HD3	3:C:2252:LYS:HA	1.88	0.40
3:C:2880:ALA:C	23:C:4703:ADP:HN62	2.28	0.40
3:C:3866:ILE:HG21	3:C:3869:LEU:HD12	2.03	0.40
3:C:4341:ARG:HA	3:C:4341:ARG:NH1	2.36	0.40
3:C:4400:THR:HG22	3:C:4402:GLU:H	1.86	0.40
4:D:367:LEU:HD11	4:D:373:LEU:HD11	2.03	0.40
4:D:570:ASP:H	4:D:579:LEU:CD2	2.34	0.40
4:D:578:LYS:HD2	4:D:581:GLU:HB2	2.03	0.40
5:E:402:ILE:HG22	5:E:403:ILE:HG12	2.02	0.40
9:I:37:GLU:HB3	9:I:70:LYS:HZ2	1.85	0.40
13:M:18:LYS:N	13:M:18:LYS:HD2	2.36	0.40
14:N:33:LYS:HA	14:N:36:LYS:HG3	2.03	0.40
15:O:101:TYR:CZ	15:O:103:ILE:HD11	2.56	0.40
18:S:187:SER:HB2	18:S:391:LEU:HD11	2.04	0.40
19:T:187:GLU:HB2	19:T:188:PRO:CD	2.51	0.40
21:X:139:SER:N	21:X:140:PRO:HD2	2.36	0.40
17:Y:221:THR:HG23	17:Y:223:GLY:N	2.36	0.40
18:s:179:THR:HG21	17:u:246:LEU:HD21	2.03	0.40
18:r:121:ARG:HD2	18:r:121:ARG:HA	1.86	0.40
18:r:372:MET:HB2	18:r:373:ARG:HD3	2.03	0.40
17:q:379:LYS:HD3	17:q:419:VAL:HG11	2.02	0.40
2:B:586:ALA:HB1	2:B:686:TYR:CE2	2.56	0.40
2:B:955:PHE:C	2:B:956:LEU:HG	2.42	0.40
2:B:1568:SER:O	2:B:1571:GLU:N	2.48	0.40
2:B:1813:GLU:OE1	2:B:1815:PHE:CZ	2.74	0.40
2:B:1818:LEU:O	2:B:1857:VAL:HG22	2.20	0.40
2:B:1885:ILE:HG22	2:B:4193:ILE:CG1	2.51	0.40
2:B:1959:SER:OG	2:B:1962:VAL:HG23	2.22	0.40
2:B:2110:ASN:HA	2:B:2114:ILE:HD13	2.03	0.40
2:B:2138:LYS:HE3	2:B:2138:LYS:HB3	1.95	0.40
2:B:2591:ASN:ND2	2:B:2646:GLN:OE1	2.55	0.40
2:B:2988:ARG:HB3	2:B:2992:LYS:HZ3	1.85	0.40
2:B:3111:PHE:O	2:B:3115:ILE:HG12	2.21	0.40
2:B:3864:ASP:OD2	2:B:3864:ASP:N	2.52	0.40
2:B:3878:ILE:HD13	2:B:3884:ARG:NH1	2.36	0.40
3:C:425:ASP:O	3:C:429:LYS:HG2	2.21	0.40
3:C:475:LYS:O	3:C:481:MET:HE1	2.21	0.40
3:C:695:LEU:HD23	3:C:698:GLU:OE1	2.22	0.40
3:C:948:LEU:HD21	3:C:1006:ILE:HG23	2.02	0.40
3:C:1144:LYS:CE	4:d:171:ARG:HA	2.50	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:1688:GLU:O	3:C:1692:GLN:HG2	2.22	0.40
3:C:1765:SER:HA	3:C:1769:LEU:HD22	2.02	0.40
3:C:2688:ALA:O	3:C:2689:LYS:HE2	2.22	0.40
3:C:2824:LEU:HD21	3:C:2883:ILE:HG21	2.02	0.40
3:C:4368:LEU:HD21	3:C:4453:LEU:HD13	2.02	0.40
4:D:371:THR:HG23	4:D:395:HIS:CE1	2.57	0.40
4:D:428:LEU:HB3	4:D:447:ASN:OD1	2.21	0.40
4:D:599:ASP:OD2	4:D:601:ILE:HG12	2.20	0.40
5:E:403:ILE:HD13	5:E:403:ILE:HA	1.85	0.40
6:F:68:LYS:HD2	6:F:72:ASN:HD22	1.87	0.40
6:F:74:ILE:HG22	6:F:91:GLN:HG2	2.03	0.40
7:G:79:VAL:HG12	7:G:85:VAL:HA	2.04	0.40
8:H:11:ILE:HA	8:H:79:LEU:CB	2.51	0.40
9:I:29:ASP:O	9:I:92:ASN:HA	2.20	0.40
10:J:17:GLU:HB3	10:J:18:MET:SD	2.61	0.40
10:J:69:TYR:HD1	4:d:184:GLY:HA3	1.86	0.40
15:O:37:THR:O	15:O:39:ASN:ND2	2.55	0.40
17:Q:127:CYS:SG	17:Q:130:LEU:HB2	2.61	0.40
17:Q:172:SER:HB2	17:Q:205:GLU:HG2	2.03	0.40
18:R:187:SER:HB2	18:R:391:LEU:HD11	2.04	0.40
18:S:179:THR:HG21	17:U:246:LEU:HD21	2.03	0.40
18:W:23:LEU:HD12	18:W:23:LEU:HA	1.73	0.40
18:W:187:SER:HB2	18:W:391:LEU:HD11	2.04	0.40
18:W:191:THR:HA	18:W:194:LEU:HB3	2.03	0.40
18:W:276:ILE:HG23	18:W:277:SER:O	2.20	0.40
18:W:395:PHE:HZ	18:W:418:PHE:HB3	1.86	0.40
21:X:103:LYS:N	21:X:103:LYS:HD3	2.36	0.40
22:Z:83:LEU:HG	22:Z:86:LYS:NZ	2.37	0.40
22:Z:177:LEU:O	22:Z:180:LYS:HG3	2.21	0.40
18:s:209:ILE:H	18:s:209:ILE:HG12	1.54	0.40
18:s:254:GLU:HG2	17:q:99:ASN:CB	2.51	0.40
18:s:372:MET:HB2	18:s:373:ARG:HD3	2.03	0.40
17:u:141:GLY:O	17:u:145:SER:OG	2.37	0.40
18:r:259:LEU:HB3	18:r:268:MET:SD	2.61	0.40
17:q:263:LEU:O	17:q:370:ASN:ND2	2.42	0.40
17:q:425:TYR:HD1	17:q:425:TYR:HA	1.78	0.40
18:w:372:MET:HB2	18:w:373:ARG:HD3	2.03	0.40
1:A:61:LYS:HB2	1:A:61:LYS:HE2	1.84	0.40
1:A:235:GLU:CD	1:A:235:GLU:H	2.30	0.40
2:B:17:ARG:HH21	2:B:105:ALA:HB2	1.86	0.40
2:B:312:THR:HG22	2:B:316:LEU:HD13	2.04	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:501:ARG:HG2	4:D:487:ALA:O	2.22	0.40
2:B:558:VAL:HG13	2:B:595:LEU:HD22	2.03	0.40
2:B:721:ASN:HB3	2:B:777:PHE:CE2	2.56	0.40
2:B:843:VAL:O	2:B:847:VAL:HG22	2.22	0.40
2:B:956:LEU:HD23	2:B:959:ILE:HD12	2.02	0.40
2:B:1073:ILE:HG23	2:B:1078:ILE:HD12	2.04	0.40
2:B:1627:ALA:CB	2:B:1656:SER:HA	2.51	0.40
2:B:1930:GLN:HE22	2:B:1959:SER:CB	2.33	0.40
2:B:2214:ASN:HD21	2:B:2622:GLN:HB3	1.86	0.40
2:B:2584:VAL:CG2	2:B:2592:TYR:HA	2.52	0.40
2:B:2789:VAL:HG12	2:B:2793:ARG:NE	2.34	0.40
2:B:3135:ARG:HG2	2:B:3138:MET:CE	2.42	0.40
2:B:3533:LEU:HA	2:B:3624:LEU:HD11	2.03	0.40
2:B:3693:ASP:O	2:B:3697:SER:OG	2.39	0.40
2:B:3746:HIS:CE1	2:B:3797:ILE:HD11	2.57	0.40
3:C:151:ILE:HD12	3:C:151:ILE:H	1.85	0.40
3:C:1005:SER:O	3:C:1009:THR:HG23	2.22	0.40
3:C:1028:LYS:HD3	3:C:1028:LYS:HA	1.88	0.40
3:C:1680:ILE:HA	3:C:1683:TRP:CZ2	2.57	0.40
3:C:1924:ASP:HA	3:C:1975:THR:OG1	2.21	0.40
3:C:2019:GLN:HE21	3:C:2022:LEU:CD2	2.33	0.40
3:C:2151:HIS:HB3	3:C:2252:LYS:NZ	2.37	0.40
3:C:2483:HIS:CD2	3:C:2484:THR:HG23	2.57	0.40
3:C:3114:GLU:O	3:C:3117:PHE:HB2	2.22	0.40
3:C:4481:VAL:HG22	3:C:4522:GLU:CD	2.47	0.40
5:E:427:LEU:HG	5:E:429:ARG:HH12	1.84	0.40
6:F:77:ILE:HG22	6:F:79:LEU:CD2	2.51	0.40
6:F:82:LYS:O	6:F:83:HIS:HB3	2.22	0.40
8:H:27:VAL:HG21	8:H:52:ARG:HH12	1.85	0.40
10:J:19:LYS:HB3	10:J:23:ASN:CG	2.46	0.40
11:K:33:ALA:HB1	14:N:39:LYS:CB	2.52	0.40
17:Q:185:ALA:O	17:Q:189:VAL:HG12	2.22	0.40
18:R:292:THR:HG21	18:R:331:SER:HB2	2.03	0.40
18:S:191:THR:HA	18:S:194:LEU:HB3	2.03	0.40
18:S:214:ARG:NH1	18:S:220:GLU:HA	2.37	0.40
18:S:395:PHE:HZ	18:S:418:PHE:HB3	1.86	0.40
17:U:127:CYS:SG	17:U:130:LEU:HB2	2.61	0.40
17:U:185:ALA:O	17:U:189:VAL:HG12	2.22	0.40
18:W:304:LYS:HA	18:W:304:LYS:HD3	1.85	0.40
18:W:371:VAL:HG22	18:W:372:MET:H	1.87	0.40
21:X:115:LYS:N	21:X:115:LYS:HD3	2.36	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Y:64:ILE:H	17:Y:64:ILE:HG12	1.61	0.40
17:Y:127:CYS:SG	17:Y:130:LEU:HB2	2.61	0.40
17:Y:185:ALA:O	17:Y:189:VAL:HG12	2.22	0.40
18:s:292:THR:HG21	18:s:331:SER:HB2	2.03	0.40
17:u:341:PHE:HB3	17:u:348:ASN:HD21	1.86	0.40
18:r:206:ASN:HB3	18:r:210:TYR:CE2	2.55	0.40
17:q:172:SER:HB2	17:q:205:GLU:HG2	2.03	0.40
17:y:141:GLY:O	17:y:145:SER:OG	2.37	0.40
1:A:21:ARG:HA	1:A:39:LEU:O	2.21	0.40
1:A:52:ALA:HB3	1:A:53:PRO:HD3	2.02	0.40
1:A:220:TRP:CG	1:A:221:SER:N	2.89	0.40
1:A:287:PHE:CG	1:A:320:PRO:HD3	2.56	0.40
2:B:314:TYR:CE1	2:B:389:LYS:HB3	2.57	0.40
2:B:1744:ARG:HA	2:B:1747:GLU:CD	2.46	0.40
2:B:1949:TRP:CD2	2:B:1999:GLY:HA3	2.55	0.40
2:B:2078:ALA:O	2:B:2081:SER:OG	2.25	0.40
2:B:2446:GLY:HA2	2:B:2674:PHE:HB2	2.03	0.40
2:B:2448:VAL:HG11	2:B:2461:PHE:CD1	2.56	0.40
2:B:2925:LEU:HD23	2:B:2925:LEU:O	2.22	0.40
2:B:3066:GLU:OE1	2:B:3119:LYS:HE3	2.21	0.40
2:B:3611:GLY:O	2:B:3613:PRO:HD3	2.21	0.40
2:B:4341:ASN:CG	2:B:4342:LYS:H	2.29	0.40
3:C:255:ASN:O	3:C:259:GLN:HG2	2.22	0.40
3:C:798:VAL:HG13	3:C:802:ILE:HD12	2.03	0.40
3:C:864:GLN:CD	5:E:154:LYS:HE3	2.46	0.40
3:C:971:ASN:H	3:C:974:GLN:NE2	2.17	0.40
3:C:1008:GLY:O	3:C:1012:LYS:HG3	2.21	0.40
3:C:1104:ALA:N	3:C:1159:MET:HE1	2.36	0.40
3:C:1325:LYS:HA	3:C:1325:LYS:HD2	1.92	0.40
3:C:1875:GLY:H	23:C:4701:ADP:H1'	1.86	0.40
3:C:2189:LYS:HA	3:C:2189:LYS:HD2	1.95	0.40
3:C:2256:LEU:HD13	3:C:2258:ASN:ND2	2.36	0.40
3:C:2470:GLU:OE1	3:C:2506:TYR:HB2	2.22	0.40
3:C:3101:THR:O	3:C:3104:ILE:HG22	2.22	0.40
3:C:3557:THR:OG1	3:C:3582:ASN:ND2	2.55	0.40
3:C:3693:LYS:N	3:C:3693:LYS:HD3	2.36	0.40
3:C:3700:ILE:O	3:C:3703:GLN:HG2	2.21	0.40
4:D:465:ASN:HA	4:D:516:PHE:HZ	1.86	0.40
4:D:639:PHE:O	4:D:643:LYS:HG3	2.21	0.40
8:H:46:LYS:HE3	8:H:50:ARG:HH21	1.86	0.40
11:K:49:LYS:HA	11:K:49:LYS:HD3	1.91	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:P:90:LYS:HB3	16:P:103:MET:HE2	2.02	0.40
17:Q:377:MET:HE3	17:Q:377:MET:HB3	1.73	0.40
18:R:66:VAL:HG22	18:R:91:GLN:HB3	2.03	0.40
18:R:191:THR:HA	18:R:194:LEU:HB3	2.03	0.40
18:R:214:ARG:NH1	18:R:220:GLU:HA	2.37	0.40
18:S:101:ASN:ND2	17:U:252:LYS:HE3	2.36	0.40
18:S:292:THR:HG21	18:S:331:SER:HB2	2.03	0.40
18:S:371:VAL:HG22	18:S:372:MET:H	1.87	0.40
17:U:172:SER:HB2	17:U:205:GLU:HG2	2.02	0.40
17:U:290:THR:OG1	17:U:329:GLN:CD	2.65	0.40
18:W:179:THR:O	17:Y:350:LYS:HG2	2.21	0.40
18:W:214:ARG:NH1	18:W:220:GLU:HA	2.37	0.40
18:W:222:PRO:O	17:Y:322:SER:OG	2.39	0.40
18:W:292:THR:HG21	18:W:331:SER:HB2	2.03	0.40
21:X:114:LYS:NZ	22:Z:98:GLU:HA	2.35	0.40
21:X:197:LYS:CE	22:Z:189:ARG:CD	2.95	0.40
17:Y:290:THR:OG1	17:Y:329:GLN:CD	2.65	0.40
4:d:78:LYS:O	4:d:80:PRO:HD3	2.21	0.40
5:e:51:ASP:O	5:e:52:ASN:ND2	2.55	0.40
18:r:371:VAL:HG22	18:r:372:MET:H	1.87	0.40
17:q:341:PHE:HB3	17:q:348:ASN:HD21	1.86	0.40
17:q:388:MET:O	17:q:393:ALA:N	2.47	0.40
18:w:371:VAL:HG22	18:w:372:MET:H	1.87	0.40
17:y:341:PHE:HB3	17:y:348:ASN:HD21	1.86	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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	336/4168 (8%)	292 (87%)	43 (13%)	1 (0%)	36 72

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	B	4037/4594 (88%)	3637 (90%)	384 (10%)	16 (0%)	30	67
3	C	4127/4620 (89%)	3813 (92%)	305 (7%)	9 (0%)	43	78
4	D	323/667 (48%)	286 (88%)	37 (12%)	0	100	100
4	d	122/667 (18%)	114 (93%)	8 (7%)	0	100	100
5	E	426/670 (64%)	370 (87%)	56 (13%)	0	100	100
5	e	103/670 (15%)	88 (85%)	14 (14%)	1 (1%)	12	49
6	F	96/133 (72%)	83 (86%)	13 (14%)	0	100	100
7	G	93/159 (58%)	80 (86%)	13 (14%)	0	100	100
8	H	83/92 (90%)	81 (98%)	2 (2%)	0	100	100
9	I	87/110 (79%)	79 (91%)	8 (9%)	0	100	100
10	J	82/93 (88%)	77 (94%)	5 (6%)	0	100	100
11	K	93/111 (84%)	81 (87%)	12 (13%)	0	100	100
12	L	95/111 (86%)	90 (95%)	5 (5%)	0	100	100
13	M	84/87 (97%)	82 (98%)	2 (2%)	0	100	100
14	N	107/132 (81%)	99 (92%)	8 (8%)	0	100	100
15	O	109/117 (93%)	103 (94%)	6 (6%)	0	100	100
16	P	101/110 (92%)	97 (96%)	4 (4%)	0	100	100
17	Q	416/443 (94%)	389 (94%)	27 (6%)	0	100	100
17	U	416/443 (94%)	389 (94%)	27 (6%)	0	100	100
17	Y	416/443 (94%)	389 (94%)	27 (6%)	0	100	100
17	q	416/443 (94%)	389 (94%)	27 (6%)	0	100	100
17	u	416/443 (94%)	389 (94%)	27 (6%)	0	100	100
17	y	416/443 (94%)	389 (94%)	27 (6%)	0	100	100
18	R	425/449 (95%)	408 (96%)	17 (4%)	0	100	100
18	S	425/449 (95%)	408 (96%)	17 (4%)	0	100	100
18	W	425/449 (95%)	408 (96%)	17 (4%)	0	100	100
18	r	425/449 (95%)	408 (96%)	17 (4%)	0	100	100
18	s	425/449 (95%)	408 (96%)	17 (4%)	0	100	100
18	w	425/449 (95%)	408 (96%)	17 (4%)	0	100	100
19	T	127/309 (41%)	109 (86%)	16 (13%)	2 (2%)	7	38
21	X	138/555 (25%)	133 (96%)	5 (4%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
22	Z	113/538 (21%)	110 (97%)	1 (1%)	2 (2%)	6	34
All	All	15928/24065 (66%)	14686 (92%)	1211 (8%)	31 (0%)	44	78

All (31) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	283	THR
2	B	1651	ASN
2	B	1652	PRO
2	B	2030	PRO
2	B	2461	PHE
2	B	2462	ASN
2	B	2557	PRO
2	B	3703	PRO
2	B	4008	PRO
2	B	4432	PRO
3	C	2978	PRO
3	C	2979	PRO
3	C	3650	THR
3	C	4182	PRO
3	C	4188	PRO
3	C	4546	PRO
22	Z	196	ILE
5	e	142	VAL
2	B	2031	ASP
3	C	2877	THR
19	T	188	PRO
2	B	2006	PRO
2	B	4557	TYR
3	C	3649	VAL
3	C	4121	VAL
19	T	129	ASP
2	B	1774	LYS
2	B	3923	PRO
2	B	3049	HIS
22	Z	195	ILE
2	B	2584	VAL

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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	291/3691 (8%)	291 (100%)	0	100	100
2	B	3646/4145 (88%)	3629 (100%)	17 (0%)	81	83
3	C	3699/4196 (88%)	3689 (100%)	10 (0%)	86	86
4	D	297/609 (49%)	297 (100%)	0	100	100
4	d	89/609 (15%)	89 (100%)	0	100	100
5	E	322/597 (54%)	321 (100%)	1 (0%)	86	86
5	e	42/597 (7%)	42 (100%)	0	100	100
6	F	87/109 (80%)	87 (100%)	0	100	100
7	G	86/149 (58%)	86 (100%)	0	100	100
8	H	76/83 (92%)	76 (100%)	0	100	100
9	I	76/95 (80%)	76 (100%)	0	100	100
10	J	74/82 (90%)	74 (100%)	0	100	100
11	K	81/97 (84%)	81 (100%)	0	100	100
12	L	86/99 (87%)	86 (100%)	0	100	100
13	M	77/78 (99%)	77 (100%)	0	100	100
14	N	96/119 (81%)	96 (100%)	0	100	100
15	O	98/104 (94%)	97 (99%)	1 (1%)	68	78
16	P	97/104 (93%)	97 (100%)	0	100	100
17	Q	356/376 (95%)	283 (80%)	73 (20%)	1	7
17	U	356/376 (95%)	283 (80%)	73 (20%)	1	7
17	Y	356/376 (95%)	283 (80%)	73 (20%)	1	7
17	q	356/376 (95%)	283 (80%)	73 (20%)	1	7
17	u	356/376 (95%)	283 (80%)	73 (20%)	1	7
17	y	356/376 (95%)	283 (80%)	73 (20%)	1	7
18	R	363/376 (96%)	308 (85%)	55 (15%)	3	12
18	S	363/376 (96%)	308 (85%)	55 (15%)	3	12

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
18	W	363/376 (96%)	308 (85%)	55 (15%)	3	12
18	r	363/376 (96%)	308 (85%)	55 (15%)	3	12
18	s	363/376 (96%)	308 (85%)	55 (15%)	3	12
18	w	363/376 (96%)	308 (85%)	55 (15%)	3	12
19	T	118/271 (44%)	118 (100%)	0	100	100
21	X	122/502 (24%)	122 (100%)	0	100	100
22	Z	108/491 (22%)	108 (100%)	0	100	100
All	All	13982/21339 (66%)	13185 (94%)	797 (6%)	20	40

All (797) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	B	1333	ILE
2	B	1410	PHE
2	B	2029	VAL
2	B	2032	LEU
2	B	2384	VAL
2	B	2515	ILE
2	B	3049	HIS
2	B	3549	GLN
2	B	3551	GLU
2	B	3552	ASN
2	B	3669	LEU
2	B	4103	LEU
2	B	4121	ASP
2	B	4122	LYS
2	B	4125	LYS
2	B	4127	LYS
2	B	4189	ILE
3	C	1357	ILE
3	C	1358	ASP
3	C	1360	LEU
3	C	1361	ARG
3	C	2298	LEU
3	C	2877	THR
3	C	3020	ASN
3	C	4096	GLU
3	C	4099	LYS
3	C	4293	SER
5	E	453	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	O	90	ASP
17	Q	1	MET
17	Q	2	ARG
17	Q	3	GLU
17	Q	4	ILE
17	Q	5	VAL
17	Q	7	ILE
17	Q	25	SER
17	Q	31	ASP
17	Q	33	THR
17	Q	35	THR
17	Q	49	VAL
17	Q	53	GLU
17	Q	60	VAL
17	Q	64	ILE
17	Q	68	LEU
17	Q	73	MET
17	Q	74	ASP
17	Q	88	ASP
17	Q	89	ASN
17	Q	112	LEU
17	Q	113	ILE
17	Q	115	SER
17	Q	117	LEU
17	Q	129	CYS
17	Q	130	LEU
17	Q	135	ILE
17	Q	147	MET
17	Q	158	GLU
17	Q	165	GLU
17	Q	166	THR
17	Q	169	VAL
17	Q	175	VAL
17	Q	176	SER
17	Q	179	VAL
17	Q	188	SER
17	Q	191	GLN
17	Q	192	LEU
17	Q	194	GLU
17	Q	197	ASP
17	Q	201	VAL
17	Q	202	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	Q	203	ASP
17	Q	207	LEU
17	Q	215	LEU
17	Q	219	THR
17	Q	221	THR
17	Q	225	LEU
17	Q	228	LEU
17	Q	234	SER
17	Q	240	LEU
17	Q	248	SER
17	Q	268	ILE
17	Q	273	LEU
17	Q	274	THR
17	Q	278	SER
17	Q	286	VAL
17	Q	311	LEU
17	Q	314	SER
17	Q	322	SER
17	Q	328	GLU
17	Q	330	MET
17	Q	336	LYS
17	Q	349	ILE
17	Q	351	SER
17	Q	352	SER
17	Q	355	ASP
17	Q	361	LEU
17	Q	366	THR
17	Q	377	MET
17	Q	380	ARG
17	Q	386	THR
17	Q	406	MET
17	Q	412	GLU
18	R	1	MET
18	R	2	ARG
18	R	4	VAL
18	R	7	ILE
18	R	23	LEU
18	R	54	SER
18	R	56	THR
18	R	62	VAL
18	R	80	THR
18	R	93	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	R	94	SER
18	R	112	LYS
18	R	116	ASP
18	R	117	LEU
18	R	122	ILE
18	R	123	ARG
18	R	124	LYS
18	R	130	THR
18	R	133	GLN
18	R	151	SER
18	R	153	LEU
18	R	157	LEU
18	R	165	SER
18	R	195	LEU
18	R	204	LEU
18	R	205	ASP
18	R	207	GLU
18	R	209	ILE
18	R	213	CYS
18	R	220	GLU
18	R	225	THR
18	R	230	LEU
18	R	235	ILE
18	R	236	SER
18	R	241	SER
18	R	248	LEU
18	R	250	VAL
18	R	251	ASP
18	R	276	ILE
18	R	277	SER
18	R	292	THR
18	R	304	LYS
18	R	318	MET
18	R	323	VAL
18	R	338	LYS
18	R	341	ILE
18	R	342	GLN
18	R	361	THR
18	R	378	ILE
18	R	389	SER
18	R	402	ARG
18	R	430	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	R	431	ASP
18	R	437	ILE
18	R	439	THR
18	S	1	MET
18	S	2	ARG
18	S	4	VAL
18	S	7	ILE
18	S	23	LEU
18	S	54	SER
18	S	56	THR
18	S	62	VAL
18	S	80	THR
18	S	93	ILE
18	S	94	SER
18	S	112	LYS
18	S	116	ASP
18	S	117	LEU
18	S	122	ILE
18	S	123	ARG
18	S	124	LYS
18	S	130	THR
18	S	133	GLN
18	S	151	SER
18	S	153	LEU
18	S	157	LEU
18	S	165	SER
18	S	195	LEU
18	S	204	LEU
18	S	205	ASP
18	S	207	GLU
18	S	209	ILE
18	S	213	CYS
18	S	220	GLU
18	S	225	THR
18	S	230	LEU
18	S	235	ILE
18	S	236	SER
18	S	241	SER
18	S	248	LEU
18	S	250	VAL
18	S	251	ASP
18	S	276	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	S	277	SER
18	S	292	THR
18	S	304	LYS
18	S	318	MET
18	S	323	VAL
18	S	338	LYS
18	S	341	ILE
18	S	342	GLN
18	S	361	THR
18	S	378	ILE
18	S	389	SER
18	S	402	ARG
18	S	430	LYS
18	S	431	ASP
18	S	437	ILE
18	S	439	THR
17	U	1	MET
17	U	2	ARG
17	U	3	GLU
17	U	4	ILE
17	U	5	VAL
17	U	7	ILE
17	U	25	SER
17	U	31	ASP
17	U	33	THR
17	U	35	THR
17	U	49	VAL
17	U	53	GLU
17	U	60	VAL
17	U	64	ILE
17	U	68	LEU
17	U	73	MET
17	U	74	ASP
17	U	88	ASP
17	U	89	ASN
17	U	112	LEU
17	U	113	ILE
17	U	115	SER
17	U	117	LEU
17	U	129	CYS
17	U	130	LEU
17	U	135	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	U	147	MET
17	U	158	GLU
17	U	165	GLU
17	U	166	THR
17	U	169	VAL
17	U	175	VAL
17	U	176	SER
17	U	179	VAL
17	U	188	SER
17	U	191	GLN
17	U	192	LEU
17	U	194	GLU
17	U	197	ASP
17	U	201	VAL
17	U	202	ILE
17	U	203	ASP
17	U	207	LEU
17	U	215	LEU
17	U	219	THR
17	U	221	THR
17	U	225	LEU
17	U	228	LEU
17	U	234	SER
17	U	240	LEU
17	U	248	SER
17	U	268	ILE
17	U	273	LEU
17	U	274	THR
17	U	278	SER
17	U	286	VAL
17	U	311	LEU
17	U	314	SER
17	U	322	SER
17	U	328	GLU
17	U	330	MET
17	U	336	LYS
17	U	349	ILE
17	U	351	SER
17	U	352	SER
17	U	355	ASP
17	U	361	LEU
17	U	366	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	U	377	MET
17	U	380	ARG
17	U	386	THR
17	U	406	MET
17	U	412	GLU
18	W	1	MET
18	W	2	ARG
18	W	4	VAL
18	W	7	ILE
18	W	23	LEU
18	W	54	SER
18	W	56	THR
18	W	62	VAL
18	W	80	THR
18	W	93	ILE
18	W	94	SER
18	W	112	LYS
18	W	116	ASP
18	W	117	LEU
18	W	122	ILE
18	W	123	ARG
18	W	124	LYS
18	W	130	THR
18	W	133	GLN
18	W	151	SER
18	W	153	LEU
18	W	157	LEU
18	W	165	SER
18	W	195	LEU
18	W	204	LEU
18	W	205	ASP
18	W	207	GLU
18	W	209	ILE
18	W	213	CYS
18	W	220	GLU
18	W	225	THR
18	W	230	LEU
18	W	235	ILE
18	W	236	SER
18	W	241	SER
18	W	248	LEU
18	W	250	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	W	251	ASP
18	W	276	ILE
18	W	277	SER
18	W	292	THR
18	W	304	LYS
18	W	318	MET
18	W	323	VAL
18	W	338	LYS
18	W	341	ILE
18	W	342	GLN
18	W	361	THR
18	W	378	ILE
18	W	389	SER
18	W	402	ARG
18	W	430	LYS
18	W	431	ASP
18	W	437	ILE
18	W	439	THR
17	Y	1	MET
17	Y	2	ARG
17	Y	3	GLU
17	Y	4	ILE
17	Y	5	VAL
17	Y	7	ILE
17	Y	25	SER
17	Y	31	ASP
17	Y	33	THR
17	Y	35	THR
17	Y	49	VAL
17	Y	53	GLU
17	Y	60	VAL
17	Y	64	ILE
17	Y	68	LEU
17	Y	73	MET
17	Y	74	ASP
17	Y	88	ASP
17	Y	89	ASN
17	Y	112	LEU
17	Y	113	ILE
17	Y	115	SER
17	Y	117	LEU
17	Y	129	CYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	Y	130	LEU
17	Y	135	ILE
17	Y	147	MET
17	Y	158	GLU
17	Y	165	GLU
17	Y	166	THR
17	Y	169	VAL
17	Y	175	VAL
17	Y	176	SER
17	Y	179	VAL
17	Y	188	SER
17	Y	191	GLN
17	Y	192	LEU
17	Y	194	GLU
17	Y	197	ASP
17	Y	201	VAL
17	Y	202	ILE
17	Y	203	ASP
17	Y	207	LEU
17	Y	215	LEU
17	Y	219	THR
17	Y	221	THR
17	Y	225	LEU
17	Y	228	LEU
17	Y	234	SER
17	Y	240	LEU
17	Y	248	SER
17	Y	268	ILE
17	Y	273	LEU
17	Y	274	THR
17	Y	278	SER
17	Y	286	VAL
17	Y	311	LEU
17	Y	314	SER
17	Y	322	SER
17	Y	328	GLU
17	Y	330	MET
17	Y	336	LYS
17	Y	349	ILE
17	Y	351	SER
17	Y	352	SER
17	Y	355	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	Y	361	LEU
17	Y	366	THR
17	Y	377	MET
17	Y	380	ARG
17	Y	386	THR
17	Y	406	MET
17	Y	412	GLU
18	s	1	MET
18	s	2	ARG
18	s	4	VAL
18	s	7	ILE
18	s	23	LEU
18	s	54	SER
18	s	56	THR
18	s	62	VAL
18	s	80	THR
18	s	93	ILE
18	s	94	SER
18	s	112	LYS
18	s	116	ASP
18	s	117	LEU
18	s	122	ILE
18	s	123	ARG
18	s	124	LYS
18	s	130	THR
18	s	133	GLN
18	s	151	SER
18	s	153	LEU
18	s	157	LEU
18	s	165	SER
18	s	195	LEU
18	s	204	LEU
18	s	205	ASP
18	s	207	GLU
18	s	209	ILE
18	s	213	CYS
18	s	220	GLU
18	s	225	THR
18	s	230	LEU
18	s	235	ILE
18	s	236	SER
18	s	241	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	s	248	LEU
18	s	250	VAL
18	s	251	ASP
18	s	276	ILE
18	s	277	SER
18	s	292	THR
18	s	304	LYS
18	s	318	MET
18	s	323	VAL
18	s	338	LYS
18	s	341	ILE
18	s	342	GLN
18	s	361	THR
18	s	378	ILE
18	s	389	SER
18	s	402	ARG
18	s	430	LYS
18	s	431	ASP
18	s	437	ILE
18	s	439	THR
17	u	1	MET
17	u	2	ARG
17	u	3	GLU
17	u	4	ILE
17	u	5	VAL
17	u	7	ILE
17	u	25	SER
17	u	31	ASP
17	u	33	THR
17	u	35	THR
17	u	49	VAL
17	u	53	GLU
17	u	60	VAL
17	u	64	ILE
17	u	68	LEU
17	u	73	MET
17	u	74	ASP
17	u	88	ASP
17	u	89	ASN
17	u	112	LEU
17	u	113	ILE
17	u	115	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	u	117	LEU
17	u	129	CYS
17	u	130	LEU
17	u	135	ILE
17	u	147	MET
17	u	158	GLU
17	u	165	GLU
17	u	166	THR
17	u	169	VAL
17	u	175	VAL
17	u	176	SER
17	u	179	VAL
17	u	188	SER
17	u	191	GLN
17	u	192	LEU
17	u	194	GLU
17	u	197	ASP
17	u	201	VAL
17	u	202	ILE
17	u	203	ASP
17	u	207	LEU
17	u	215	LEU
17	u	219	THR
17	u	221	THR
17	u	225	LEU
17	u	228	LEU
17	u	234	SER
17	u	240	LEU
17	u	248	SER
17	u	268	ILE
17	u	273	LEU
17	u	274	THR
17	u	278	SER
17	u	286	VAL
17	u	311	LEU
17	u	314	SER
17	u	322	SER
17	u	328	GLU
17	u	330	MET
17	u	336	LYS
17	u	349	ILE
17	u	351	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	u	352	SER
17	u	355	ASP
17	u	361	LEU
17	u	366	THR
17	u	377	MET
17	u	380	ARG
17	u	386	THR
17	u	406	MET
17	u	412	GLU
18	r	1	MET
18	r	2	ARG
18	r	4	VAL
18	r	7	ILE
18	r	23	LEU
18	r	54	SER
18	r	56	THR
18	r	62	VAL
18	r	80	THR
18	r	93	ILE
18	r	94	SER
18	r	112	LYS
18	r	116	ASP
18	r	117	LEU
18	r	122	ILE
18	r	123	ARG
18	r	124	LYS
18	r	130	THR
18	r	133	GLN
18	r	151	SER
18	r	153	LEU
18	r	157	LEU
18	r	165	SER
18	r	195	LEU
18	r	204	LEU
18	r	205	ASP
18	r	207	GLU
18	r	209	ILE
18	r	213	CYS
18	r	220	GLU
18	r	225	THR
18	r	230	LEU
18	r	235	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	r	236	SER
18	r	241	SER
18	r	248	LEU
18	r	250	VAL
18	r	251	ASP
18	r	276	ILE
18	r	277	SER
18	r	292	THR
18	r	304	LYS
18	r	318	MET
18	r	323	VAL
18	r	338	LYS
18	r	341	ILE
18	r	342	GLN
18	r	361	THR
18	r	378	ILE
18	r	389	SER
18	r	402	ARG
18	r	430	LYS
18	r	431	ASP
18	r	437	ILE
18	r	439	THR
17	q	1	MET
17	q	2	ARG
17	q	3	GLU
17	q	4	ILE
17	q	5	VAL
17	q	7	ILE
17	q	25	SER
17	q	31	ASP
17	q	33	THR
17	q	35	THR
17	q	49	VAL
17	q	53	GLU
17	q	60	VAL
17	q	64	ILE
17	q	68	LEU
17	q	73	MET
17	q	74	ASP
17	q	88	ASP
17	q	89	ASN
17	q	112	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	q	113	ILE
17	q	115	SER
17	q	117	LEU
17	q	129	CYS
17	q	130	LEU
17	q	135	ILE
17	q	147	MET
17	q	158	GLU
17	q	165	GLU
17	q	166	THR
17	q	169	VAL
17	q	175	VAL
17	q	176	SER
17	q	179	VAL
17	q	188	SER
17	q	191	GLN
17	q	192	LEU
17	q	194	GLU
17	q	197	ASP
17	q	201	VAL
17	q	202	ILE
17	q	203	ASP
17	q	207	LEU
17	q	215	LEU
17	q	219	THR
17	q	221	THR
17	q	225	LEU
17	q	228	LEU
17	q	234	SER
17	q	240	LEU
17	q	248	SER
17	q	268	ILE
17	q	273	LEU
17	q	274	THR
17	q	278	SER
17	q	286	VAL
17	q	311	LEU
17	q	314	SER
17	q	322	SER
17	q	328	GLU
17	q	330	MET
17	q	336	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	q	349	ILE
17	q	351	SER
17	q	352	SER
17	q	355	ASP
17	q	361	LEU
17	q	366	THR
17	q	377	MET
17	q	380	ARG
17	q	386	THR
17	q	406	MET
17	q	412	GLU
18	w	1	MET
18	w	2	ARG
18	w	4	VAL
18	w	7	ILE
18	w	23	LEU
18	w	54	SER
18	w	56	THR
18	w	62	VAL
18	w	80	THR
18	w	93	ILE
18	w	94	SER
18	w	112	LYS
18	w	116	ASP
18	w	117	LEU
18	w	122	ILE
18	w	123	ARG
18	w	124	LYS
18	w	130	THR
18	w	133	GLN
18	w	151	SER
18	w	153	LEU
18	w	157	LEU
18	w	165	SER
18	w	195	LEU
18	w	204	LEU
18	w	205	ASP
18	w	207	GLU
18	w	209	ILE
18	w	213	CYS
18	w	220	GLU
18	w	225	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	w	230	LEU
18	w	235	ILE
18	w	236	SER
18	w	241	SER
18	w	248	LEU
18	w	250	VAL
18	w	251	ASP
18	w	276	ILE
18	w	277	SER
18	w	292	THR
18	w	304	LYS
18	w	318	MET
18	w	323	VAL
18	w	338	LYS
18	w	341	ILE
18	w	342	GLN
18	w	361	THR
18	w	378	ILE
18	w	389	SER
18	w	402	ARG
18	w	430	LYS
18	w	431	ASP
18	w	437	ILE
18	w	439	THR
17	y	1	MET
17	y	2	ARG
17	y	3	GLU
17	y	4	ILE
17	y	5	VAL
17	y	7	ILE
17	y	25	SER
17	y	31	ASP
17	y	33	THR
17	y	35	THR
17	y	49	VAL
17	y	53	GLU
17	y	60	VAL
17	y	64	ILE
17	y	68	LEU
17	y	73	MET
17	y	74	ASP
17	y	88	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	y	89	ASN
17	y	112	LEU
17	y	113	ILE
17	y	115	SER
17	y	117	LEU
17	y	129	CYS
17	y	130	LEU
17	y	135	ILE
17	y	147	MET
17	y	158	GLU
17	y	165	GLU
17	y	166	THR
17	y	169	VAL
17	y	175	VAL
17	y	176	SER
17	y	179	VAL
17	y	188	SER
17	y	191	GLN
17	y	192	LEU
17	y	194	GLU
17	y	197	ASP
17	y	201	VAL
17	y	202	ILE
17	y	203	ASP
17	y	207	LEU
17	y	215	LEU
17	y	219	THR
17	y	221	THR
17	y	225	LEU
17	y	228	LEU
17	y	234	SER
17	y	240	LEU
17	y	248	SER
17	y	268	ILE
17	y	273	LEU
17	y	274	THR
17	y	278	SER
17	y	286	VAL
17	y	311	LEU
17	y	314	SER
17	y	322	SER
17	y	328	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	y	330	MET
17	y	336	LYS
17	y	349	ILE
17	y	351	SER
17	y	352	SER
17	y	355	ASP
17	y	361	LEU
17	y	366	THR
17	y	377	MET
17	y	380	ARG
17	y	386	THR
17	y	406	MET
17	y	412	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (375) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	12	GLN
1	A	44	ASN
1	A	55	ASN
1	A	56	GLN
1	A	184	ASN
1	A	284	ASN
1	A	343	ASN
2	B	36	GLN
2	B	45	ASN
2	B	54	GLN
2	B	60	ASN
2	B	77	GLN
2	B	134	GLN
2	B	138	ASN
2	B	156	ASN
2	B	160	GLN
2	B	167	GLN
2	B	179	HIS
2	B	209	ASN
2	B	223	ASN
2	B	236	ASN
2	B	322	HIS
2	B	335	ASN
2	B	404	ASN
2	B	437	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	B	553	GLN
2	B	666	ASN
2	B	724	HIS
2	B	788	GLN
2	B	864	ASN
2	B	894	ASN
2	B	922	ASN
2	B	935	ASN
2	B	1034	ASN
2	B	1061	GLN
2	B	1104	ASN
2	B	1105	GLN
2	B	1189	GLN
2	B	1258	ASN
2	B	1283	ASN
2	B	1323	ASN
2	B	1383	HIS
2	B	1428	ASN
2	B	1435	GLN
2	B	1449	GLN
2	B	1516	ASN
2	B	1530	ASN
2	B	1586	GLN
2	B	1615	GLN
2	B	1706	ASN
2	B	1770	ASN
2	B	1892	ASN
2	B	1945	GLN
2	B	1956	ASN
2	B	1993	GLN
2	B	2038	ASN
2	B	2069	GLN
2	B	2178	HIS
2	B	2203	ASN
2	B	2345	ASN
2	B	2380	GLN
2	B	2462	ASN
2	B	2553	ASN
2	B	2622	GLN
2	B	2638	GLN
2	B	2693	ASN
2	B	2695	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	B	2704	GLN
2	B	2758	GLN
2	B	2764	GLN
2	B	2788	HIS
2	B	2867	GLN
2	B	2907	ASN
2	B	2923	ASN
2	B	2927	ASN
2	B	3015	ASN
2	B	3053	HIS
2	B	3130	GLN
2	B	3132	GLN
2	B	3148	ASN
2	B	3540	GLN
2	B	3552	ASN
2	B	3601	ASN
2	B	3680	GLN
2	B	3681	ASN
2	B	3714	GLN
2	B	3820	HIS
2	B	3861	ASN
2	B	3903	ASN
2	B	3944	ASN
2	B	3961	GLN
2	B	3974	ASN
2	B	4011	ASN
2	B	4021	GLN
2	B	4097	ASN
2	B	4177	GLN
2	B	4198	HIS
2	B	4243	ASN
2	B	4325	ASN
2	B	4341	ASN
2	B	4357	ASN
2	B	4472	GLN
3	C	33	GLN
3	C	39	ASN
3	C	51	ASN
3	C	62	GLN
3	C	89	GLN
3	C	111	GLN
3	C	116	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	C	126	ASN
3	C	166	GLN
3	C	218	ASN
3	C	278	HIS
3	C	329	ASN
3	C	357	ASN
3	C	424	ASN
3	C	477	ASN
3	C	575	ASN
3	C	678	HIS
3	C	741	ASN
3	C	786	GLN
3	C	808	ASN
3	C	809	ASN
3	C	864	GLN
3	C	896	GLN
3	C	945	ASN
3	C	971	ASN
3	C	974	GLN
3	C	975	GLN
3	C	1098	GLN
3	C	1114	GLN
3	C	1186	ASN
3	C	1203	HIS
3	C	1214	GLN
3	C	1306	ASN
3	C	1348	GLN
3	C	1392	ASN
3	C	1395	ASN
3	C	1426	GLN
3	C	1444	GLN
3	C	1567	ASN
3	C	1578	ASN
3	C	1624	GLN
3	C	1718	GLN
3	C	1721	GLN
3	C	1736	ASN
3	C	1755	ASN
3	C	1762	ASN
3	C	1791	GLN
3	C	1860	GLN
3	C	1916	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	C	2019	GLN
3	C	2028	ASN
3	C	2060	ASN
3	C	2221	ASN
3	C	2333	ASN
3	C	2408	HIS
3	C	2420	GLN
3	C	2483	HIS
3	C	2487	ASN
3	C	2573	GLN
3	C	2606	GLN
3	C	2628	GLN
3	C	2677	ASN
3	C	2691	HIS
3	C	2886	ASN
3	C	2915	HIS
3	C	2939	ASN
3	C	2980	GLN
3	C	3006	GLN
3	C	3434	GLN
3	C	3504	ASN
3	C	3517	ASN
3	C	3523	ASN
3	C	3536	GLN
3	C	3539	ASN
3	C	3560	HIS
3	C	3585	ASN
3	C	3689	GLN
3	C	3694	ASN
3	C	3703	GLN
3	C	3717	ASN
3	C	3722	GLN
3	C	3876	ASN
3	C	4023	GLN
3	C	4045	ASN
3	C	4065	GLN
3	C	4115	GLN
3	C	4125	ASN
3	C	4298	ASN
3	C	4351	ASN
3	C	4457	GLN
3	C	4471	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	C	4479	GLN
3	C	4562	ASN
3	C	4574	ASN
4	D	336	ASN
4	D	345	ASN
4	D	411	ASN
4	D	465	ASN
4	D	491	GLN
4	D	535	GLN
4	D	587	GLN
5	E	206	ASN
5	E	471	ASN
5	E	498	GLN
5	E	518	ASN
6	F	72	ASN
7	G	70	HIS
7	G	80	ASN
7	G	129	GLN
8	H	36	ASN
9	I	26	ASN
9	I	48	ASN
9	I	49	ASN
9	I	76	GLN
9	I	91	ASN
10	J	23	ASN
10	J	40	ASN
10	J	45	HIS
10	J	59	HIS
10	J	65	HIS
10	J	76	ASN
11	K	93	ASN
11	K	109	GLN
12	L	28	GLN
12	L	29	HIS
12	L	37	GLN
12	L	81	ASN
13	M	26	ASN
13	M	33	GLN
13	M	36	GLN
13	M	54	ASN
13	M	60	ASN
14	N	57	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	O	33	GLN
15	O	39	ASN
15	O	44	ASN
15	O	48	GLN
15	O	78	HIS
16	P	59	ASN
16	P	79	HIS
17	Q	6	HIS
17	Q	8	GLN
17	Q	99	ASN
17	Q	105	HIS
17	Q	191	GLN
17	Q	226	ASN
17	Q	227	HIS
17	Q	307	HIS
17	Q	396	HIS
18	R	31	GLN
18	R	35	GLN
18	R	133	GLN
18	R	197	HIS
18	R	216	ASN
18	R	256	GLN
18	R	283	HIS
18	R	309	HIS
18	R	406	HIS
18	S	8	HIS
18	S	31	GLN
18	S	35	GLN
18	S	133	GLN
18	S	197	HIS
18	S	216	ASN
18	S	256	GLN
18	S	283	HIS
18	S	309	HIS
18	S	406	HIS
19	T	165	ASN
17	U	6	HIS
17	U	8	GLN
17	U	99	ASN
17	U	105	HIS
17	U	191	GLN
17	U	226	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	U	227	HIS
17	U	307	HIS
17	U	334	GLN
17	U	348	ASN
17	U	396	HIS
18	W	31	GLN
18	W	35	GLN
18	W	133	GLN
18	W	197	HIS
18	W	216	ASN
18	W	256	GLN
18	W	283	HIS
18	W	309	HIS
18	W	406	HIS
21	X	150	ASN
21	X	199	HIS
21	X	209	HIS
21	X	213	HIS
17	Y	6	HIS
17	Y	8	GLN
17	Y	94	GLN
17	Y	99	ASN
17	Y	105	HIS
17	Y	191	GLN
17	Y	226	ASN
17	Y	227	HIS
17	Y	307	HIS
17	Y	396	HIS
22	Z	93	GLN
22	Z	135	GLN
22	Z	147	ASN
22	Z	157	ASN
22	Z	162	GLN
22	Z	176	ASN
22	Z	186	HIS
4	d	164	ASN
5	e	44	ASN
5	e	52	ASN
5	e	59	HIS
18	s	31	GLN
18	s	35	GLN
18	s	133	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	s	197	HIS
18	s	216	ASN
18	s	256	GLN
18	s	283	HIS
18	s	309	HIS
18	s	406	HIS
17	u	6	HIS
17	u	8	GLN
17	u	99	ASN
17	u	105	HIS
17	u	191	GLN
17	u	226	ASN
17	u	227	HIS
17	u	307	HIS
17	u	334	GLN
17	u	348	ASN
17	u	396	HIS
18	r	8	HIS
18	r	31	GLN
18	r	35	GLN
18	r	133	GLN
18	r	197	HIS
18	r	216	ASN
18	r	256	GLN
18	r	283	HIS
18	r	309	HIS
18	r	406	HIS
17	q	6	HIS
17	q	8	GLN
17	q	99	ASN
17	q	105	HIS
17	q	191	GLN
17	q	226	ASN
17	q	227	HIS
17	q	307	HIS
17	q	396	HIS
18	w	8	HIS
18	w	31	GLN
18	w	35	GLN
18	w	133	GLN
18	w	216	ASN
18	w	256	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	w	283	HIS
18	w	309	HIS
18	w	406	HIS
17	y	6	HIS
17	y	8	GLN
17	y	94	GLN
17	y	99	ASN
17	y	105	HIS
17	y	191	GLN
17	y	226	ASN
17	y	227	HIS
17	y	307	HIS
17	y	335	ASN
17	y	396	HIS

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 21 ligands modelled in this entry, 6 are monoatomic - leaving 15 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
26	GTP	W	501	27	33,34,34	0.96	1 (3%)	50,54,54	1.54	8 (16%)
26	GTP	r	501	27	33,34,34	0.97	1 (3%)	50,54,54	1.54	8 (16%)
26	GTP	S	501	27	33,34,34	0.96	1 (3%)	50,54,54	1.54	8 (16%)
24	ATP	C	4702	-	32,33,33	1.40	4 (12%)	48,52,52	1.78	9 (18%)
25	GDP	u	501	-	29,30,30	1.16	3 (10%)	45,47,47	1.76	7 (15%)
26	GTP	s	501	27	33,34,34	0.96	1 (3%)	50,54,54	1.55	8 (16%)
26	GTP	w	501	27	33,34,34	0.96	2 (6%)	50,54,54	1.54	8 (16%)
25	GDP	Q	501	-	29,30,30	1.16	3 (10%)	45,47,47	1.77	7 (15%)
23	ADP	C	4701	-	28,29,29	1.49	6 (21%)	43,45,45	3.20	16 (37%)
25	GDP	U	501	-	29,30,30	1.16	3 (10%)	45,47,47	1.76	7 (15%)
25	GDP	Y	501	-	29,30,30	1.15	3 (10%)	45,47,47	1.76	7 (15%)
25	GDP	y	501	-	29,30,30	1.16	3 (10%)	45,47,47	1.76	7 (15%)
23	ADP	C	4703	-	28,29,29	2.09	9 (32%)	43,45,45	3.78	22 (51%)
25	GDP	q	501	-	29,30,30	1.16	3 (10%)	45,47,47	1.76	7 (15%)
26	GTP	R	501	27	33,34,34	0.96	1 (3%)	50,54,54	1.54	8 (16%)

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
26	GTP	W	501	27	-	3/22/38/38	0/3/3/3
26	GTP	r	501	27	-	3/22/38/38	0/3/3/3
26	GTP	S	501	27	-	3/22/38/38	0/3/3/3
24	ATP	C	4702	-	-	0/22/38/38	0/3/3/3
25	GDP	u	501	-	-	2/16/32/32	0/3/3/3
26	GTP	s	501	27	-	3/22/38/38	0/3/3/3
26	GTP	w	501	27	-	3/22/38/38	0/3/3/3
25	GDP	Q	501	-	-	2/16/32/32	0/3/3/3
23	ADP	C	4701	-	-	5/16/32/32	0/3/3/3
25	GDP	U	501	-	-	2/16/32/32	0/3/3/3
25	GDP	Y	501	-	-	2/16/32/32	0/3/3/3
25	GDP	y	501	-	-	2/16/32/32	0/3/3/3
23	ADP	C	4703	-	-	5/16/32/32	0/3/3/3
25	GDP	q	501	-	-	2/16/32/32	0/3/3/3

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
26	GTP	R	501	27	-	3/22/38/38	0/3/3/3

All (44) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	C	4703	ADP	C5-C4	6.69	1.51	1.39
23	C	4701	ADP	C5-C4	5.07	1.48	1.39
24	C	4702	ATP	C5-C4	4.66	1.47	1.39
23	C	4703	ADP	O4'-C4'	3.86	1.53	1.45
23	C	4703	ADP	C8-N7	3.19	1.37	1.31
25	Q	501	GDP	C5-C4	3.17	1.47	1.38
25	u	501	GDP	C5-C4	3.15	1.47	1.38
25	Y	501	GDP	C5-C4	3.15	1.47	1.38
25	q	501	GDP	C5-C4	3.15	1.47	1.38
25	y	501	GDP	C5-C4	3.15	1.47	1.38
25	U	501	GDP	C5-C4	3.13	1.47	1.38
23	C	4703	ADP	C5-C6	2.98	1.49	1.41
23	C	4703	ADP	C1'-N9	2.93	1.54	1.46
23	C	4701	ADP	C5-C6	2.88	1.49	1.41
24	C	4702	ATP	C5-C6	2.72	1.48	1.41
23	C	4701	ADP	C8-N7	2.54	1.36	1.31
23	C	4703	ADP	C6-N1	2.53	1.42	1.35
25	y	501	GDP	C6-N1	-2.39	1.34	1.38
25	Q	501	GDP	C6-N1	-2.35	1.34	1.38
25	u	501	GDP	C6-N1	-2.35	1.34	1.38
25	q	501	GDP	C6-N1	-2.35	1.34	1.38
24	C	4702	ATP	C8-N7	2.35	1.36	1.31
25	U	501	GDP	C6-N1	-2.33	1.34	1.38
25	Y	501	GDP	C6-N1	-2.31	1.34	1.38
24	C	4702	ATP	C5-N7	-2.29	1.34	1.39
23	C	4703	ADP	C5'-C4'	2.22	1.58	1.51
23	C	4701	ADP	C5-N7	-2.19	1.35	1.39
26	S	501	GTP	C2-N3	2.18	1.38	1.33
26	s	501	GTP	C2-N3	2.17	1.38	1.33
23	C	4701	ADP	C4-N9	-2.17	1.33	1.37
23	C	4701	ADP	C8-N9	-2.16	1.33	1.37
26	R	501	GTP	C2-N3	2.16	1.38	1.33
26	r	501	GTP	C2-N3	2.16	1.38	1.33
26	w	501	GTP	C2-N3	2.16	1.38	1.33
26	W	501	GTP	C2-N3	2.15	1.38	1.33
25	y	501	GDP	C5-N7	-2.12	1.34	1.39
25	q	501	GDP	C5-N7	-2.12	1.34	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	U	501	GDP	C5-N7	-2.11	1.34	1.39
25	Q	501	GDP	C5-N7	-2.10	1.34	1.39
25	Y	501	GDP	C5-N7	-2.09	1.34	1.39
23	C	4703	ADP	PA-O3A	2.09	1.61	1.59
23	C	4703	ADP	C3'-C4'	-2.08	1.47	1.53
25	u	501	GDP	C5-N7	-2.06	1.35	1.39
26	w	501	GTP	PA-O3A	2.01	1.61	1.59

All (137) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	4703	ADP	O4'-C1'-C2'	-9.55	86.18	106.62
23	C	4701	ADP	O3A-PA-O1A	-9.11	83.30	110.70
23	C	4703	ADP	O4'-C1'-N9	9.00	125.37	108.09
23	C	4701	ADP	O5'-PA-O1A	-8.44	75.47	108.94
23	C	4703	ADP	C2'-C3'-C4'	-8.43	86.32	102.61
23	C	4703	ADP	C5-C4-N3	-8.18	115.46	126.72
23	C	4701	ADP	O2A-PA-O1A	7.46	147.16	112.44
23	C	4701	ADP	O2A-PA-O3A	-6.75	89.02	107.27
25	u	501	GDP	C5-C4-N3	-6.18	118.55	128.39
25	Y	501	GDP	C5-C4-N3	-6.18	118.56	128.39
25	Q	501	GDP	C5-C4-N3	-6.16	118.58	128.39
25	U	501	GDP	C5-C4-N3	-6.16	118.58	128.39
25	q	501	GDP	C5-C4-N3	-6.15	118.61	128.39
25	y	501	GDP	C5-C4-N3	-6.14	118.62	128.39
23	C	4701	ADP	O2A-PA-O5'	-6.10	79.94	107.57
24	C	4702	ATP	C5-C4-N3	-5.83	118.69	126.72
23	C	4703	ADP	C4-C5-N7	-5.80	103.95	110.58
23	C	4701	ADP	C4-C5-N7	-5.37	104.44	110.58
23	C	4703	ADP	C4-N9-C8	-5.11	100.37	105.74
26	s	501	GTP	C5-C4-N3	-5.08	120.31	128.39
23	C	4703	ADP	C4-N9-C1'	5.07	138.49	126.63
26	W	501	GTP	C5-C4-N3	-5.03	120.38	128.39
26	r	501	GTP	C5-C4-N3	-5.03	120.38	128.39
26	R	501	GTP	C5-C4-N3	-5.03	120.39	128.39
26	w	501	GTP	C5-C4-N3	-5.03	120.39	128.39
26	S	501	GTP	C5-C4-N3	-5.02	120.41	128.39
23	C	4703	ADP	C5-C4-N9	5.01	111.28	105.81
25	Y	501	GDP	C2-N3-C4	4.98	120.88	112.30
25	Q	501	GDP	C2-N3-C4	4.95	120.83	112.30
25	u	501	GDP	C2-N3-C4	4.95	120.83	112.30
25	U	501	GDP	C2-N3-C4	4.95	120.83	112.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	q	501	GDP	C2-N3-C4	4.94	120.81	112.30
25	y	501	GDP	C2-N3-C4	4.93	120.80	112.30
23	C	4701	ADP	C5-C4-N3	-4.76	120.17	126.72
23	C	4703	ADP	C2'-C1'-N9	4.72	125.02	113.30
26	R	501	GTP	C2-N3-C4	4.57	120.17	112.30
26	s	501	GTP	C2-N3-C4	4.57	120.17	112.30
26	W	501	GTP	C2-N3-C4	4.57	120.16	112.30
26	r	501	GTP	C2-N3-C4	4.56	120.16	112.30
26	S	501	GTP	C2-N3-C4	4.56	120.16	112.30
26	w	501	GTP	C2-N3-C4	4.55	120.14	112.30
25	Q	501	GDP	N9-C4-N3	4.51	134.96	125.95
25	Y	501	GDP	N9-C4-N3	4.51	134.96	125.95
25	u	501	GDP	N9-C4-N3	4.50	134.96	125.95
23	C	4703	ADP	C1'-N9-C8	-4.50	117.11	127.09
25	y	501	GDP	N9-C4-N3	4.49	134.94	125.95
25	q	501	GDP	N9-C4-N3	4.49	134.93	125.95
25	U	501	GDP	N9-C4-N3	4.48	134.91	125.95
24	C	4702	ATP	N3-C4-N9	4.43	134.71	127.17
23	C	4703	ADP	C2-N3-C4	4.35	122.45	111.83
23	C	4703	ADP	O5'-C5'-C4'	4.35	123.80	108.99
24	C	4702	ATP	C2-N3-C4	3.82	121.17	111.83
24	C	4702	ATP	N3-C2-N1	-3.67	123.03	128.58
24	C	4702	ATP	C4-C5-N7	-3.64	106.42	110.58
23	C	4703	ADP	O4'-C4'-C5'	3.59	120.82	109.33
23	C	4701	ADP	C6-C5-N7	3.57	138.97	132.09
23	C	4703	ADP	C3'-C2'-C1'	3.47	108.03	101.46
23	C	4701	ADP	C5-N7-C8	3.46	108.89	103.45
23	C	4703	ADP	O2'-C2'-C1'	3.35	121.63	110.10
23	C	4701	ADP	C2-N3-C4	3.34	119.98	111.83
23	C	4703	ADP	O4'-C4'-C3'	-3.29	98.63	105.15
23	C	4703	ADP	N3-C4-N9	3.25	132.69	127.17
26	s	501	GTP	N9-C4-N3	3.14	132.24	125.95
23	C	4703	ADP	C4'-O4'-C1'	3.13	116.38	109.47
26	S	501	GTP	N9-C4-N3	3.12	132.19	125.95
26	W	501	GTP	N9-C4-N3	3.12	132.19	125.95
26	R	501	GTP	N9-C4-N3	3.12	132.19	125.95
26	r	501	GTP	N9-C4-N3	3.12	132.19	125.95
26	w	501	GTP	N9-C4-N3	3.10	132.16	125.95
25	y	501	GDP	C6-C5-N7	3.09	135.91	130.29
25	Q	501	GDP	C6-C5-N7	3.09	135.91	130.29
25	u	501	GDP	C6-C5-N7	3.08	135.90	130.29
25	U	501	GDP	C6-C5-N7	3.08	135.89	130.29

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	Y	501	GDP	C6-C5-N7	3.08	135.89	130.29
25	q	501	GDP	C6-C5-N7	3.07	135.88	130.29
23	C	4701	ADP	N3-C4-N9	3.04	132.33	127.17
26	W	501	GTP	C2-N1-C6	-3.00	119.67	125.11
26	w	501	GTP	C2-N1-C6	-2.99	119.68	125.11
23	C	4701	ADP	N3-C2-N1	-2.98	124.07	128.58
26	r	501	GTP	C2-N1-C6	-2.98	119.71	125.11
26	S	501	GTP	C2-N1-C6	-2.98	119.71	125.11
26	s	501	GTP	C2-N1-C6	-2.97	119.73	125.11
26	R	501	GTP	C2-N1-C6	-2.97	119.73	125.11
23	C	4701	ADP	C4-N9-C8	2.76	108.63	105.74
23	C	4703	ADP	C6-C5-N7	2.73	137.35	132.09
25	u	501	GDP	C4-C5-N7	-2.63	106.50	110.67
25	Y	501	GDP	C4-C5-N7	-2.61	106.53	110.67
25	U	501	GDP	C4-C5-N7	-2.61	106.53	110.67
25	Q	501	GDP	C4-C5-N7	-2.61	106.54	110.67
25	q	501	GDP	C4-C5-N7	-2.59	106.56	110.67
25	y	501	GDP	C4-C5-N7	-2.59	106.57	110.67
23	C	4703	ADP	C5-C6-N6	-2.58	116.90	123.29
24	C	4702	ATP	C5-N7-C8	2.57	107.49	103.45
26	S	501	GTP	N9-C8-N7	-2.55	108.68	113.40
26	w	501	GTP	N9-C8-N7	-2.55	108.68	113.40
26	W	501	GTP	N9-C8-N7	-2.53	108.70	113.40
26	R	501	GTP	N9-C8-N7	-2.53	108.70	113.40
26	r	501	GTP	N9-C8-N7	-2.53	108.70	113.40
26	s	501	GTP	N9-C8-N7	-2.51	108.74	113.40
23	C	4703	ADP	N6-C6-N1	2.51	123.96	118.38
23	C	4701	ADP	N9-C8-N7	-2.50	110.40	113.94
26	W	501	GTP	C5-C6-N1	2.49	119.58	113.25
26	w	501	GTP	C8-N7-C5	2.48	108.68	104.26
26	w	501	GTP	C5-C6-N1	2.48	119.56	113.25
26	r	501	GTP	C5-C6-N1	2.48	119.56	113.25
26	S	501	GTP	C5-C6-N1	2.47	119.54	113.25
26	W	501	GTP	C8-N7-C5	2.47	108.66	104.26
26	s	501	GTP	C5-C6-N1	2.47	119.54	113.25
26	R	501	GTP	C8-N7-C5	2.47	108.65	104.26
26	R	501	GTP	C5-C6-N1	2.46	119.52	113.25
26	S	501	GTP	C8-N7-C5	2.45	108.63	104.26
26	r	501	GTP	C8-N7-C5	2.45	108.63	104.26
26	s	501	GTP	C8-N7-C5	2.45	108.62	104.26
26	W	501	GTP	O6-C6-C5	-2.42	120.16	126.53
26	r	501	GTP	O6-C6-C5	-2.41	120.18	126.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	w	501	GTP	O6-C6-C5	-2.41	120.18	126.53
26	s	501	GTP	O6-C6-C5	-2.40	120.20	126.53
24	C	4702	ATP	C4-N9-C8	2.40	108.25	105.74
26	R	501	GTP	O6-C6-C5	-2.39	120.22	126.53
26	S	501	GTP	O6-C6-C5	-2.39	120.22	126.53
24	C	4702	ATP	O4'-C1'-N9	2.37	112.65	108.09
25	y	501	GDP	C3'-C2'-C1'	2.33	105.88	101.46
25	u	501	GDP	C3'-C2'-C1'	2.33	105.87	101.46
25	Q	501	GDP	C3'-C2'-C1'	2.33	105.86	101.46
25	q	501	GDP	C3'-C2'-C1'	2.31	105.84	101.46
25	Y	501	GDP	C3'-C2'-C1'	2.31	105.83	101.46
25	U	501	GDP	C3'-C2'-C1'	2.29	105.80	101.46
25	y	501	GDP	O6-C6-C5	-2.23	120.66	126.53
25	Q	501	GDP	O6-C6-C5	-2.22	120.67	126.53
25	u	501	GDP	O6-C6-C5	-2.21	120.69	126.53
25	q	501	GDP	O6-C6-C5	-2.21	120.70	126.53
25	U	501	GDP	O6-C6-C5	-2.21	120.71	126.53
25	Y	501	GDP	O6-C6-C5	-2.20	120.72	126.53
24	C	4702	ATP	C6-C5-N7	2.16	136.25	132.09
23	C	4701	ADP	C2-N1-C6	2.11	122.20	118.73
23	C	4703	ADP	C2-N1-C6	-2.07	115.33	118.73
23	C	4701	ADP	O3B-PB-O2B	2.02	115.38	107.80

There are no chirality outliers.

All (40) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
23	C	4701	ADP	C5'-O5'-PA-O3A
23	C	4701	ADP	O4'-C4'-C5'-O5'
23	C	4701	ADP	C3'-C4'-C5'-O5'
23	C	4703	ADP	O4'-C4'-C5'-O5'
23	C	4703	ADP	C3'-C4'-C5'-O5'
25	Q	501	GDP	C3'-C4'-C5'-O5'
25	U	501	GDP	C3'-C4'-C5'-O5'
25	Y	501	GDP	C3'-C4'-C5'-O5'
25	u	501	GDP	C3'-C4'-C5'-O5'
25	q	501	GDP	C3'-C4'-C5'-O5'
25	y	501	GDP	C3'-C4'-C5'-O5'
23	C	4701	ADP	C5'-O5'-PA-O1A
23	C	4703	ADP	C5'-O5'-PA-O1A
26	R	501	GTP	C5'-O5'-PA-O3A
26	R	501	GTP	C5'-O5'-PA-O1A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
26	R	501	GTP	C5'-O5'-PA-O2A
26	S	501	GTP	C5'-O5'-PA-O3A
26	S	501	GTP	C5'-O5'-PA-O1A
26	S	501	GTP	C5'-O5'-PA-O2A
26	W	501	GTP	C5'-O5'-PA-O3A
26	W	501	GTP	C5'-O5'-PA-O1A
26	W	501	GTP	C5'-O5'-PA-O2A
26	s	501	GTP	C5'-O5'-PA-O3A
26	s	501	GTP	C5'-O5'-PA-O1A
26	s	501	GTP	C5'-O5'-PA-O2A
26	r	501	GTP	C5'-O5'-PA-O3A
26	r	501	GTP	C5'-O5'-PA-O1A
26	r	501	GTP	C5'-O5'-PA-O2A
26	w	501	GTP	C5'-O5'-PA-O3A
26	w	501	GTP	C5'-O5'-PA-O1A
26	w	501	GTP	C5'-O5'-PA-O2A
23	C	4703	ADP	PB-O3A-PA-O2A
23	C	4701	ADP	PB-O3A-PA-O1A
25	Q	501	GDP	O4'-C4'-C5'-O5'
25	U	501	GDP	O4'-C4'-C5'-O5'
25	Y	501	GDP	O4'-C4'-C5'-O5'
25	u	501	GDP	O4'-C4'-C5'-O5'
25	q	501	GDP	O4'-C4'-C5'-O5'
25	y	501	GDP	O4'-C4'-C5'-O5'
23	C	4703	ADP	PB-O3A-PA-O1A

There are no ring outliers.

15 monomers are involved in 82 short contacts:

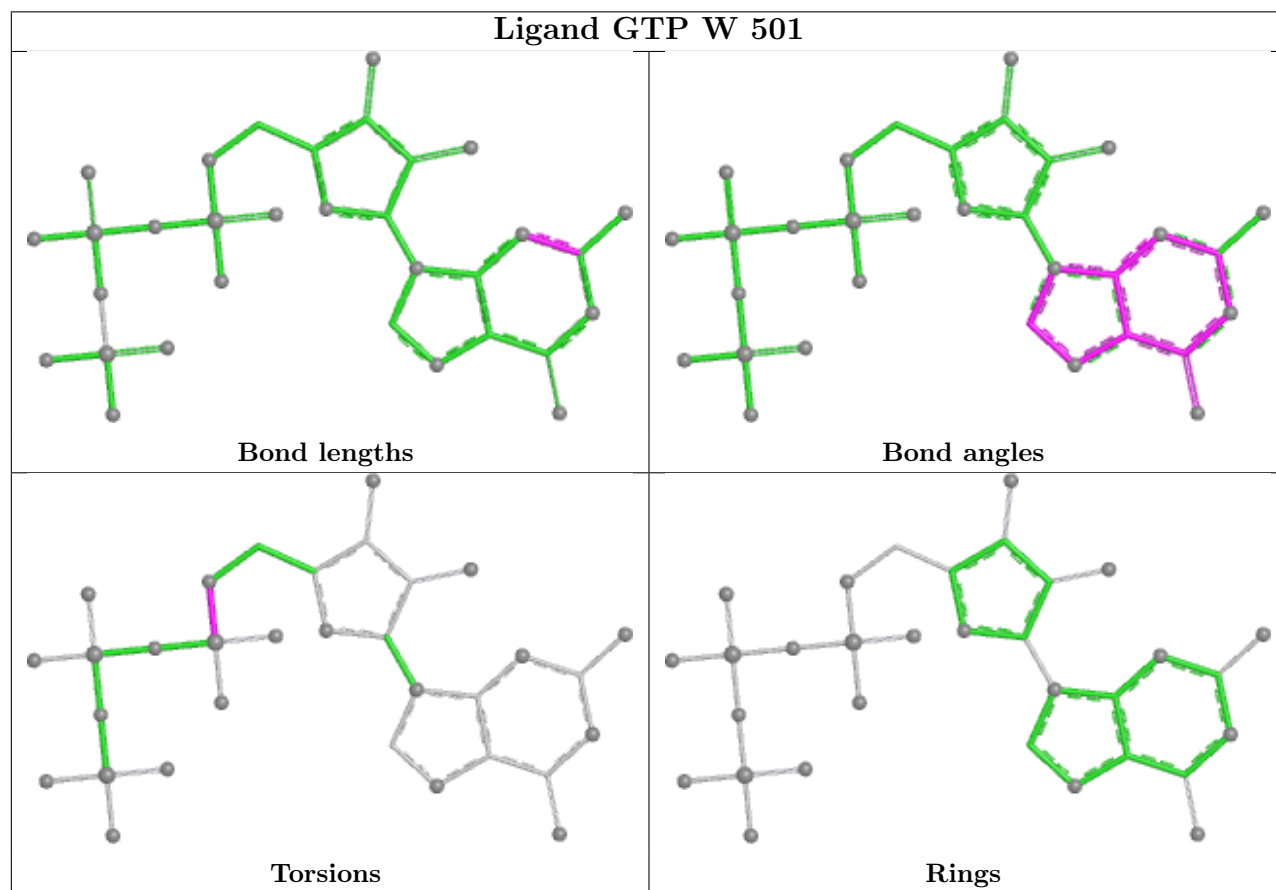
Mol	Chain	Res	Type	Clashes	Symm-Clashes
26	W	501	GTP	5	0
26	r	501	GTP	5	0
26	S	501	GTP	5	0
24	C	4702	ATP	3	0
25	u	501	GDP	3	0
26	s	501	GTP	5	0
26	w	501	GTP	5	0
25	Q	501	GDP	3	0
23	C	4701	ADP	7	0
25	U	501	GDP	3	0
25	Y	501	GDP	3	0
25	y	501	GDP	3	0

Continued on next page...

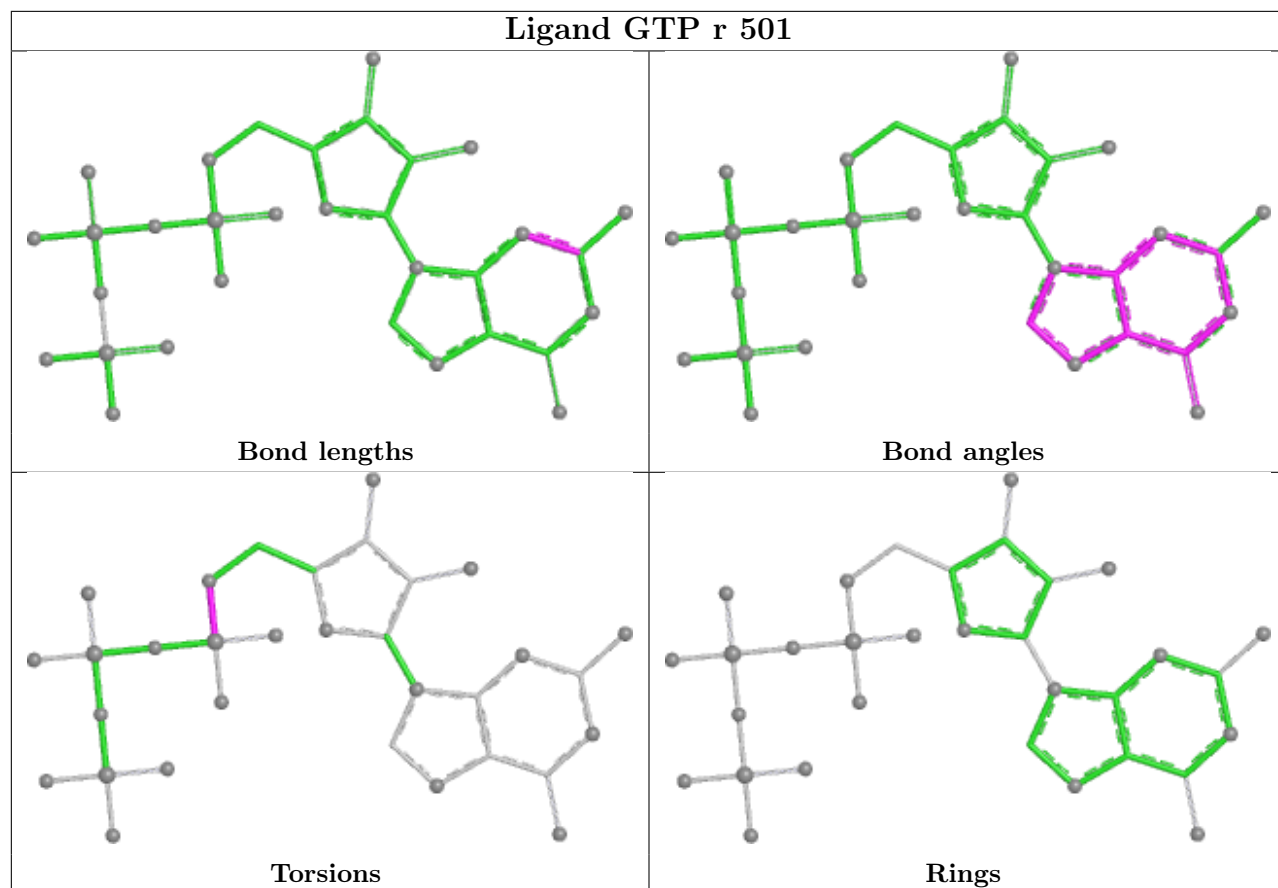
Continued from previous page...

Mol	Chain	Res	Type	Clashes	Symm-Clashes
23	C	4703	ADP	24	0
25	q	501	GDP	3	0
26	R	501	GTP	5	0

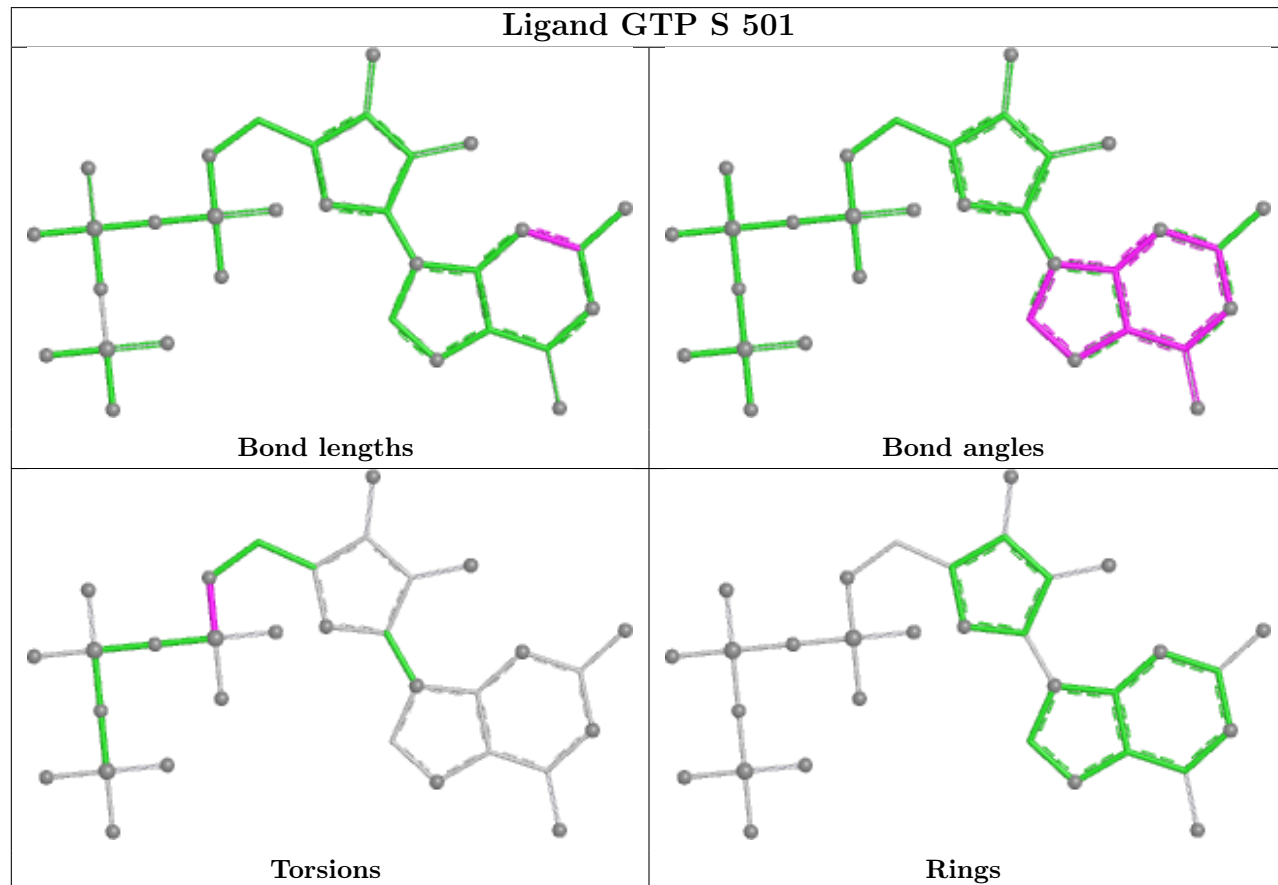
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

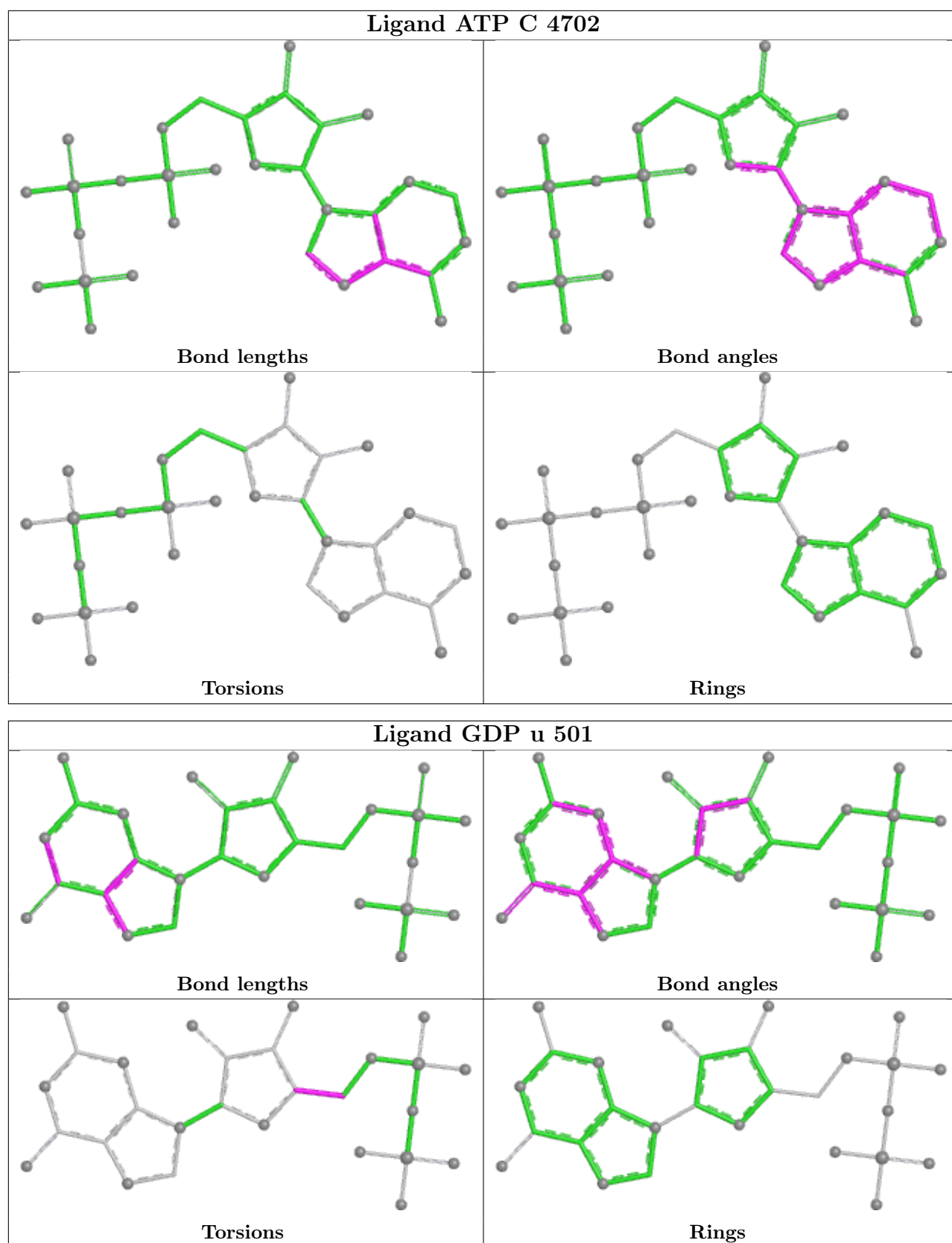


Ligand GTP r 501

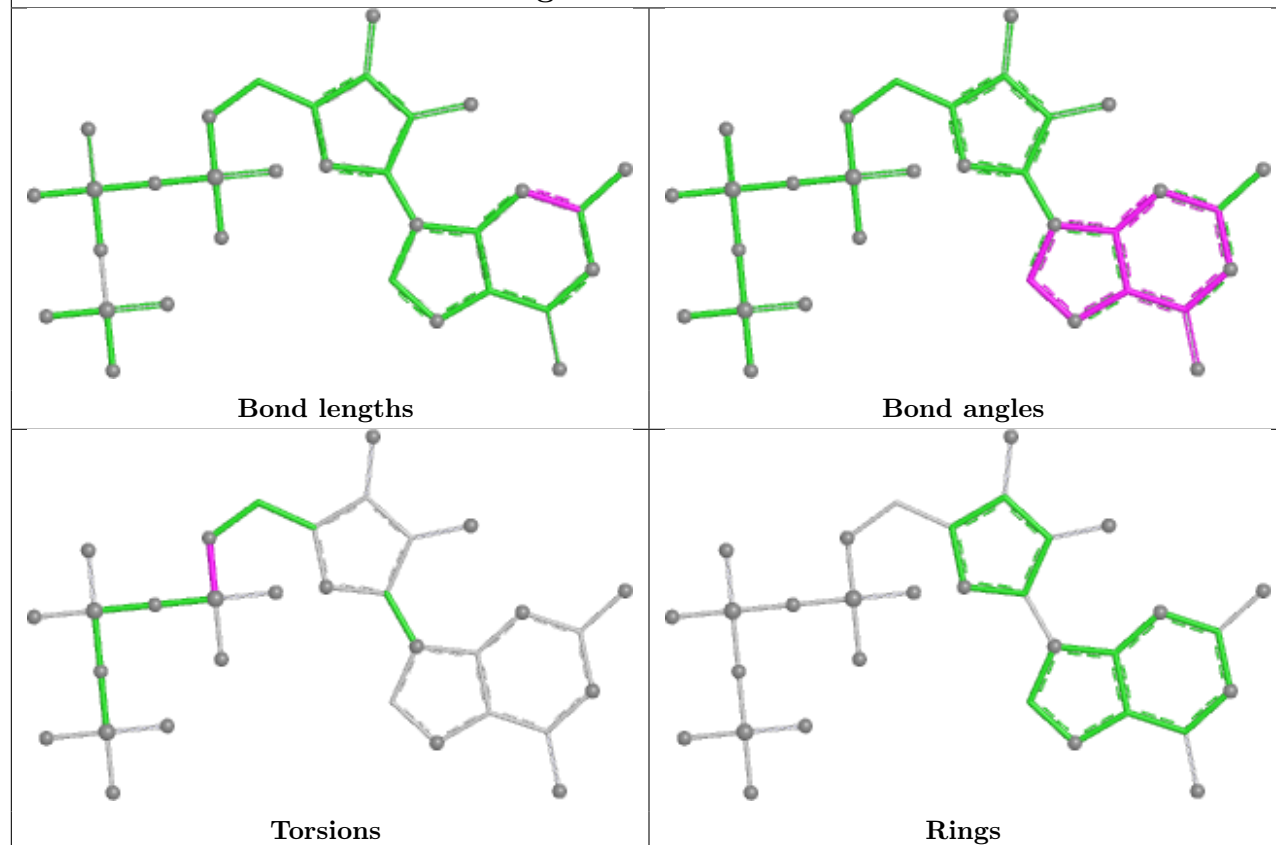


Ligand GTP S 501

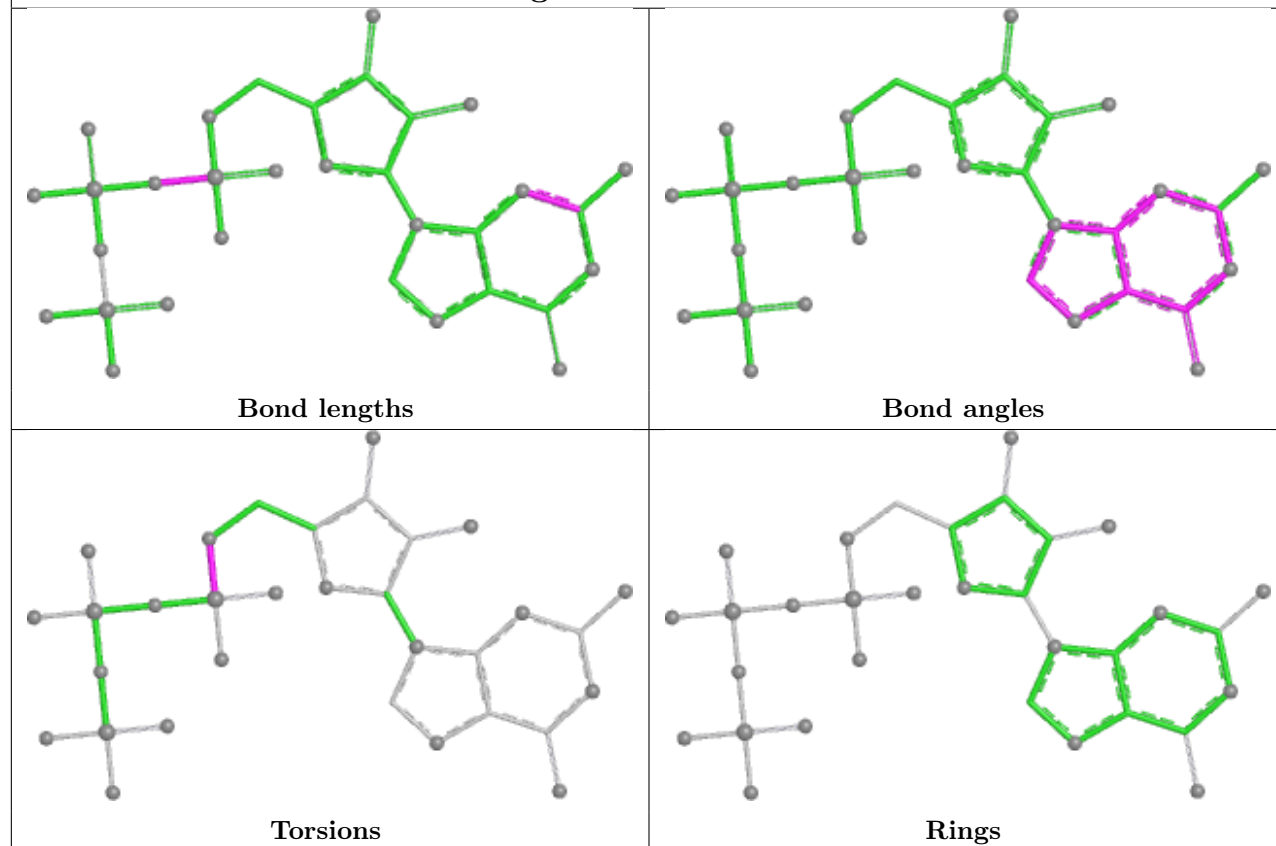


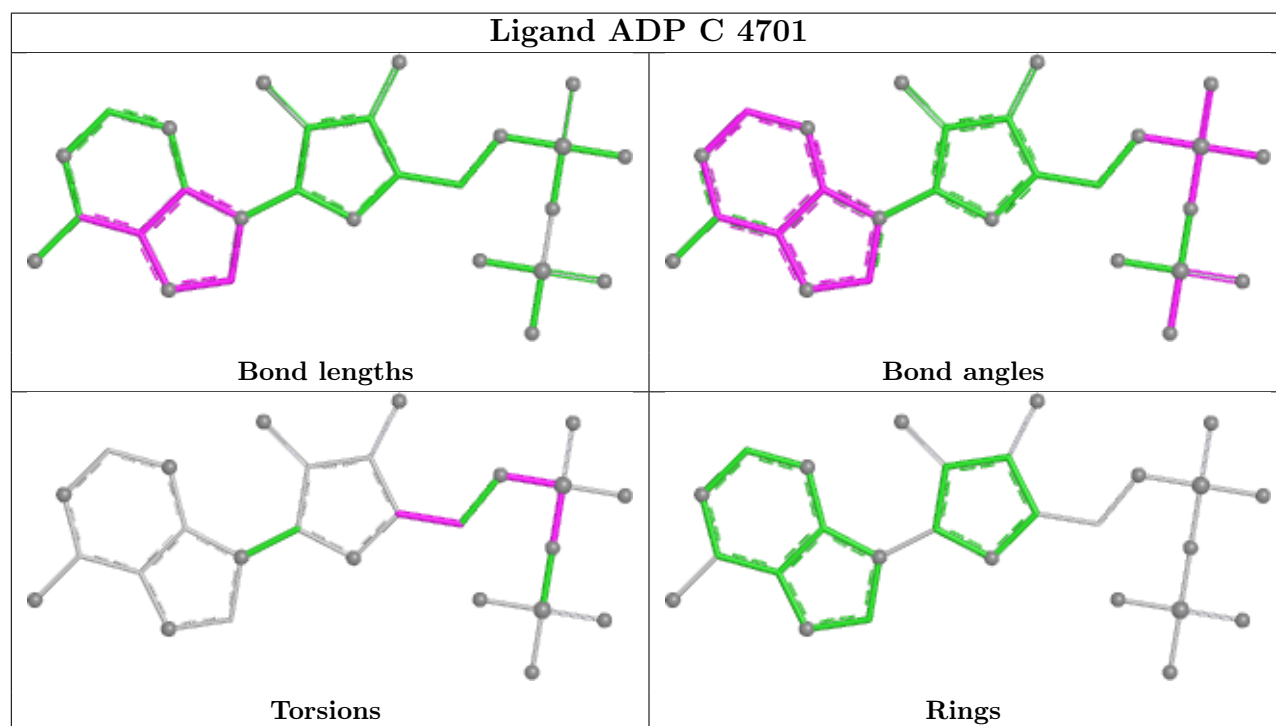
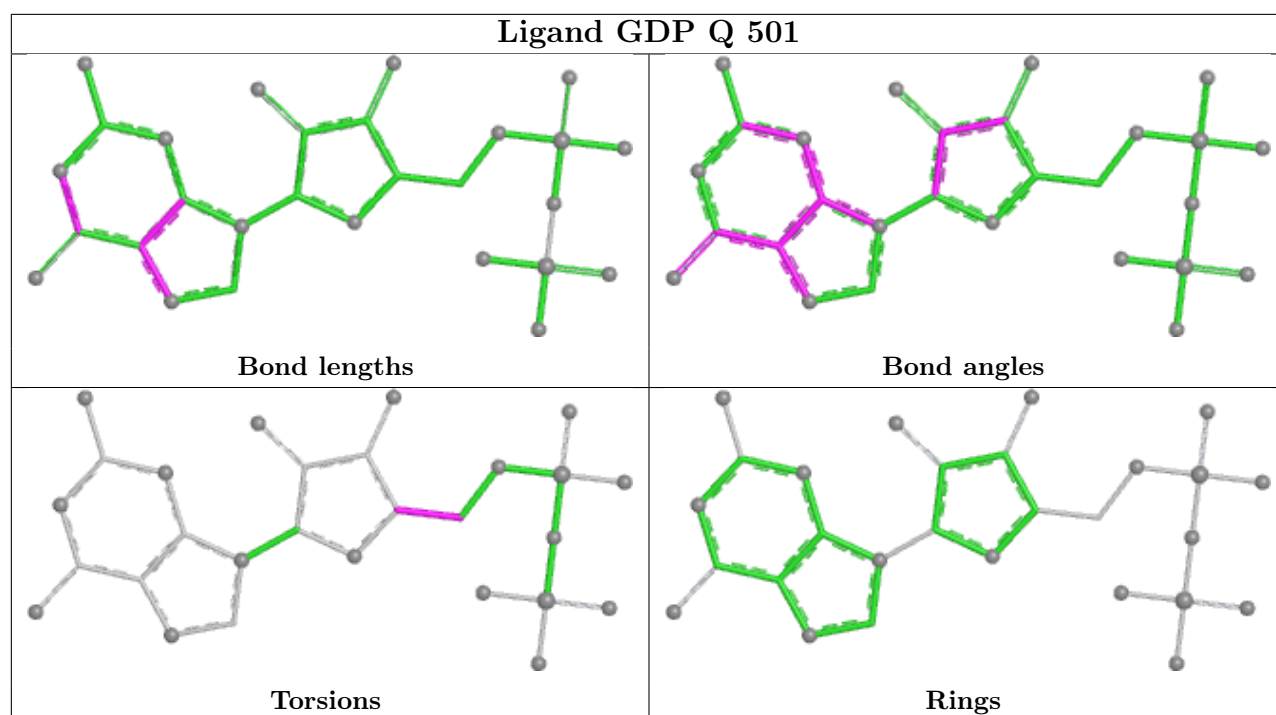


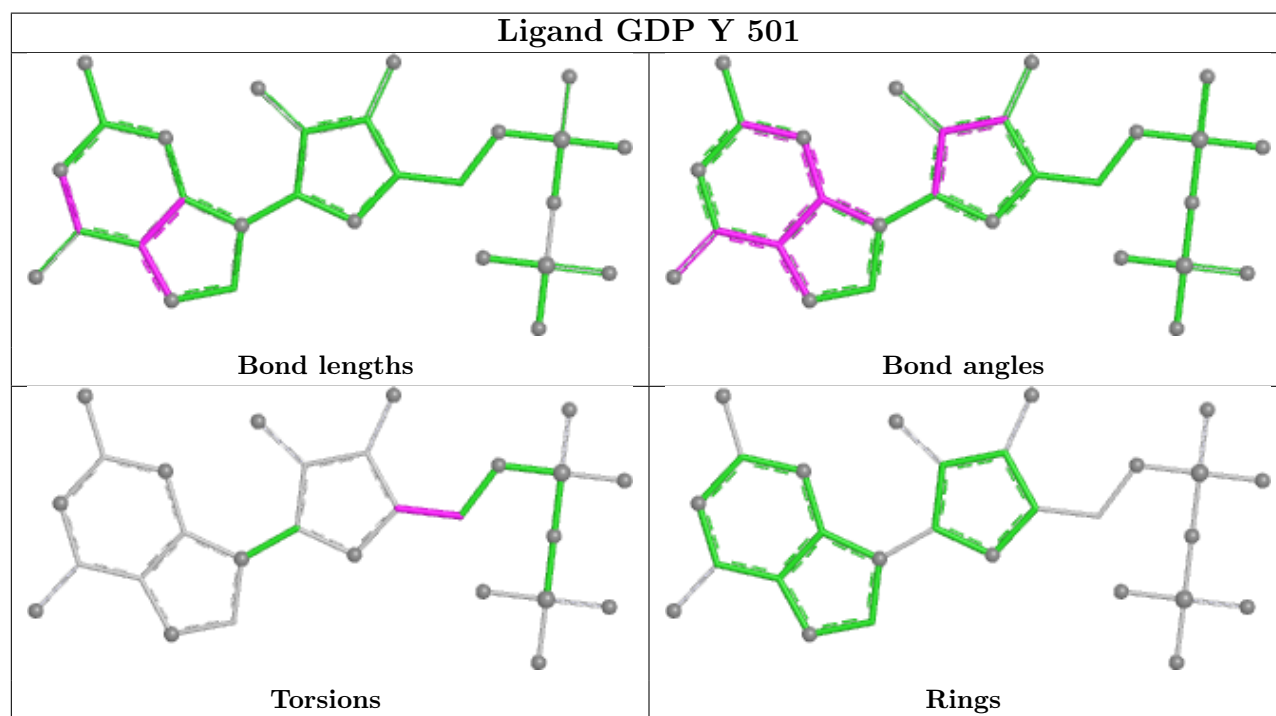
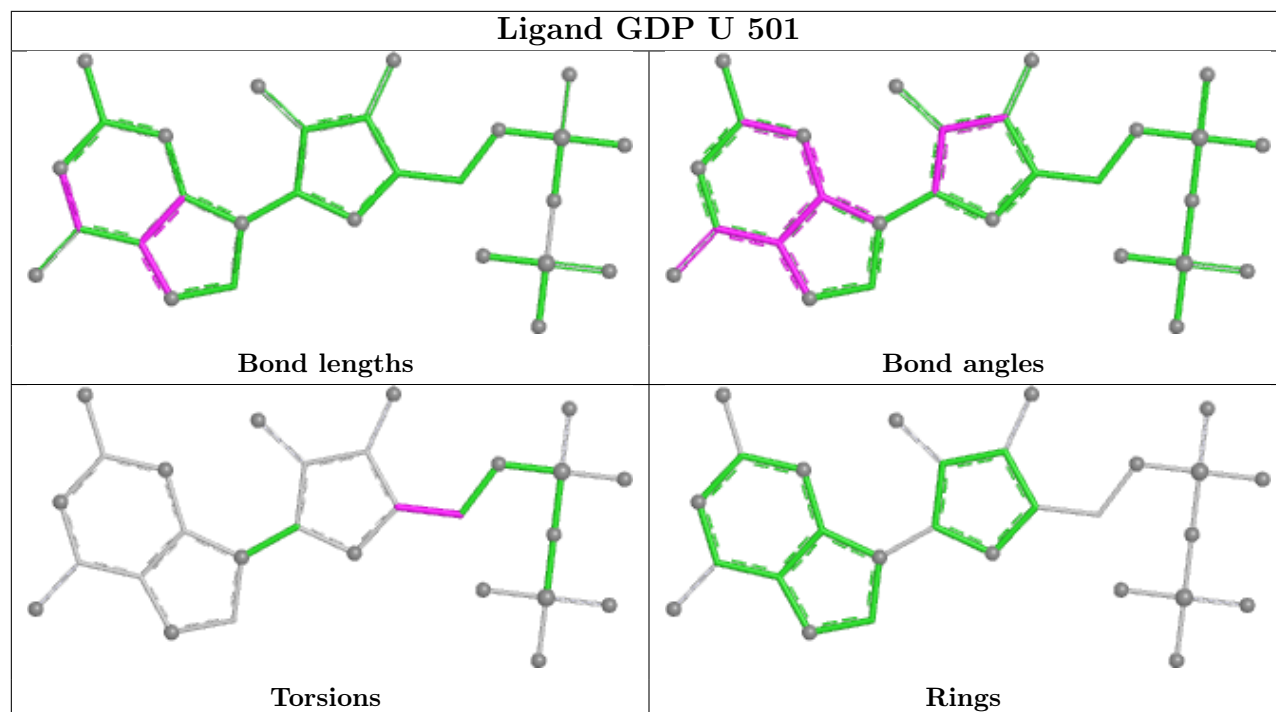
Ligand GTP s 501

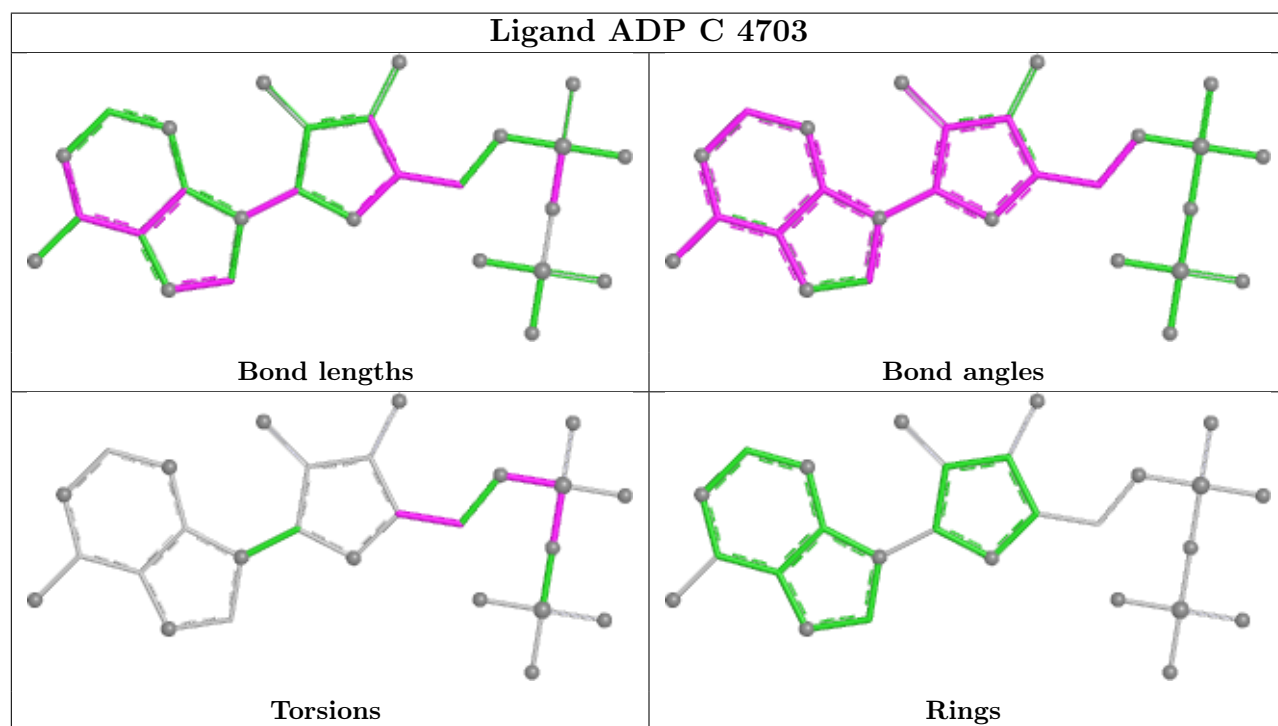
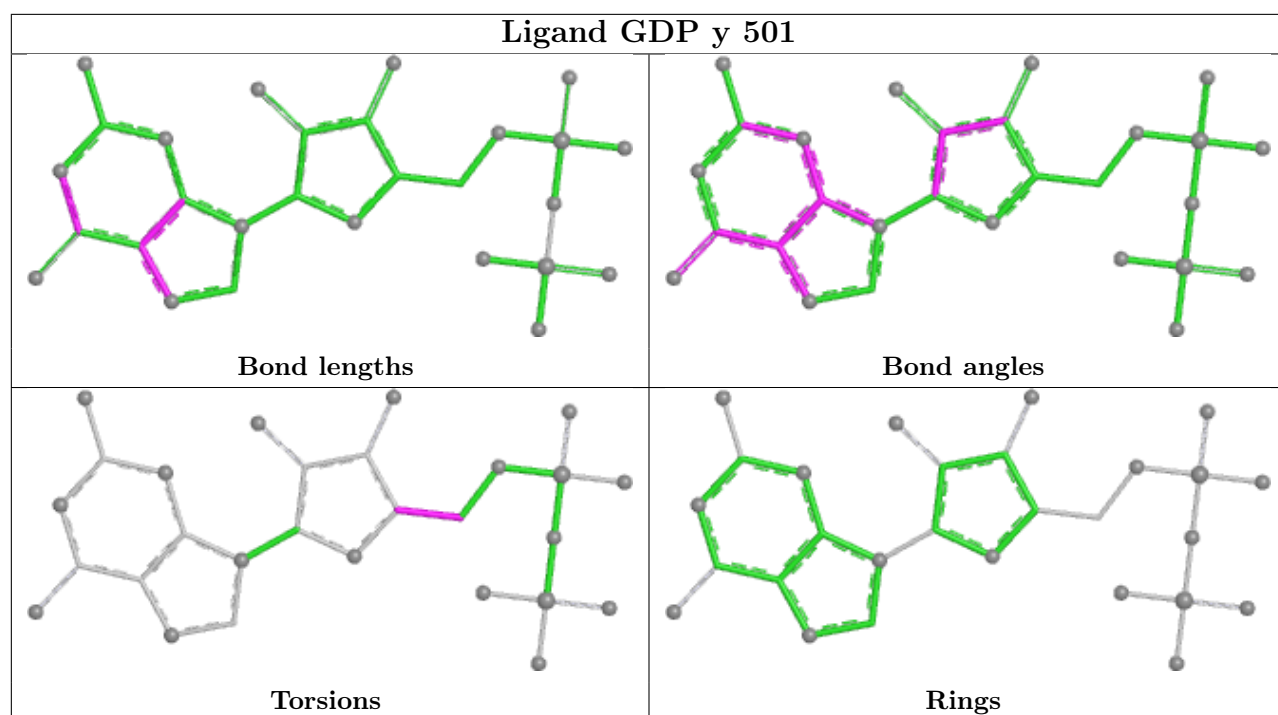


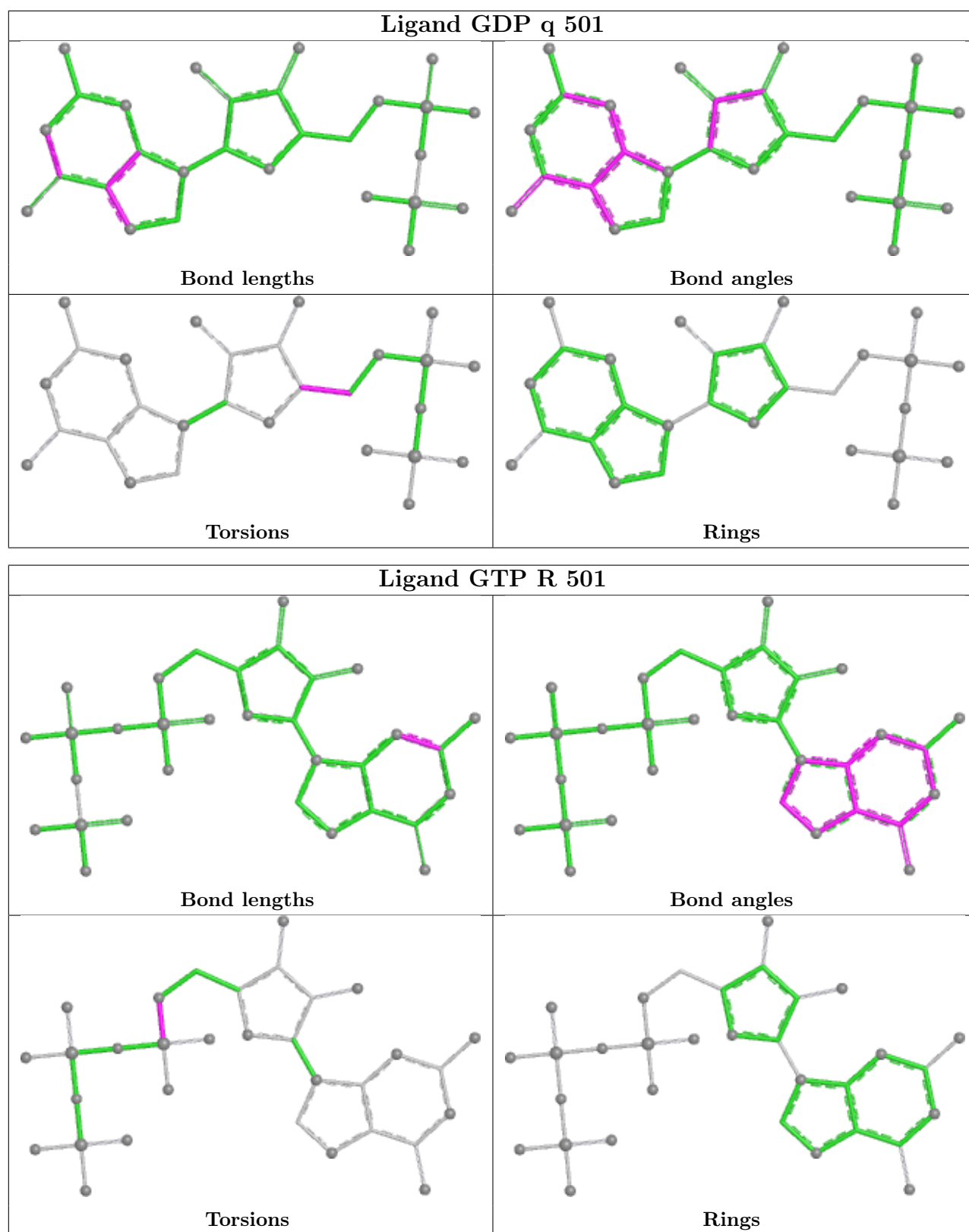
Ligand GTP w 501











5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues

The following chains have linkage breaks:

Mol	Chain	Number of breaks
5	E	3
20	V	1
20	x	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	V	161:UNK	C	202:UNK	N	59.24
1	x	161:UNK	C	202:UNK	N	58.84
1	E	566:LEU	C	577:ALA	N	29.14
1	E	531:ARG	C	535:GLN	N	19.87
1	E	594:GLU	C	605:LYS	N	15.83

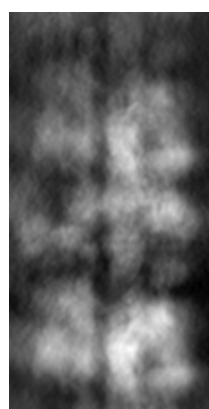
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-23926. These allow visual inspection of the internal detail of the map and identification of artifacts.

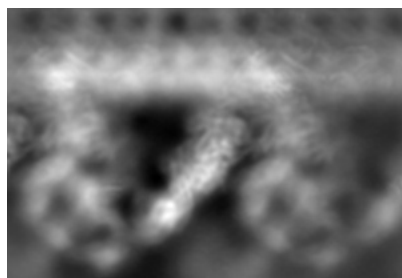
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

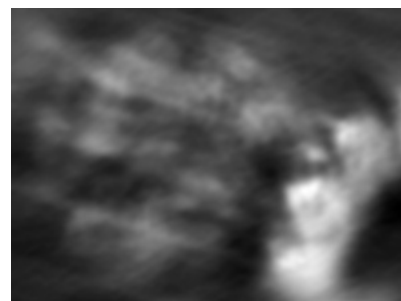
6.1.1 Primary map



X



Y

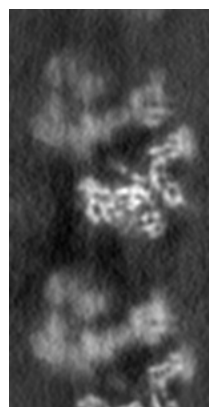


Z

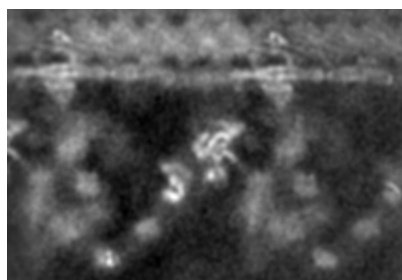
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

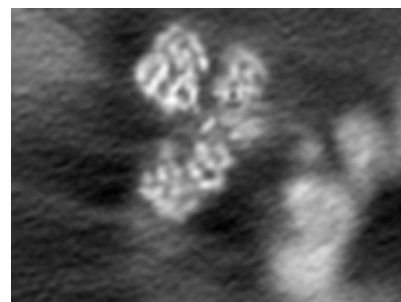
6.2.1 Primary map



X Index: 57



Y Index: 42



Z Index: 84

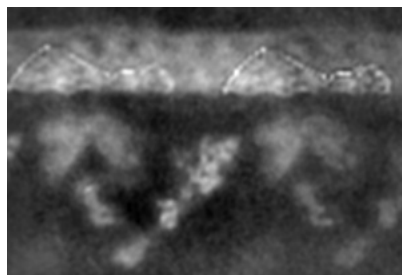
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

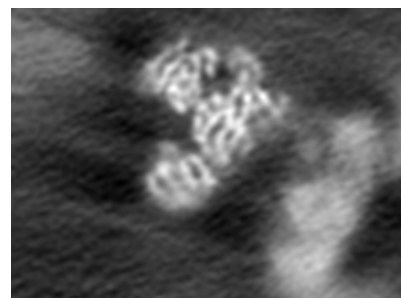
6.3.1 Primary map



X Index: 86



Y Index: 32

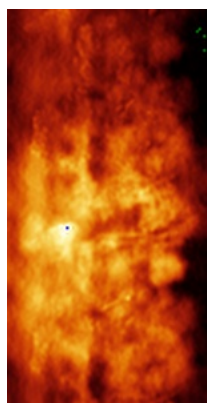


Z Index: 88

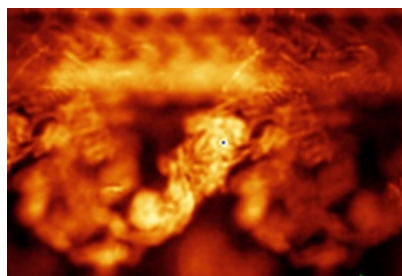
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

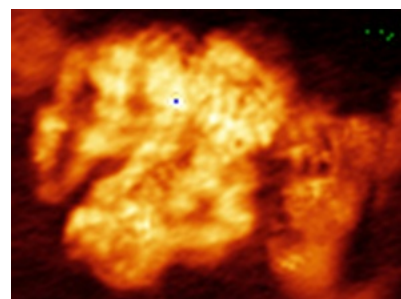
6.4.1 Primary map



X



Y

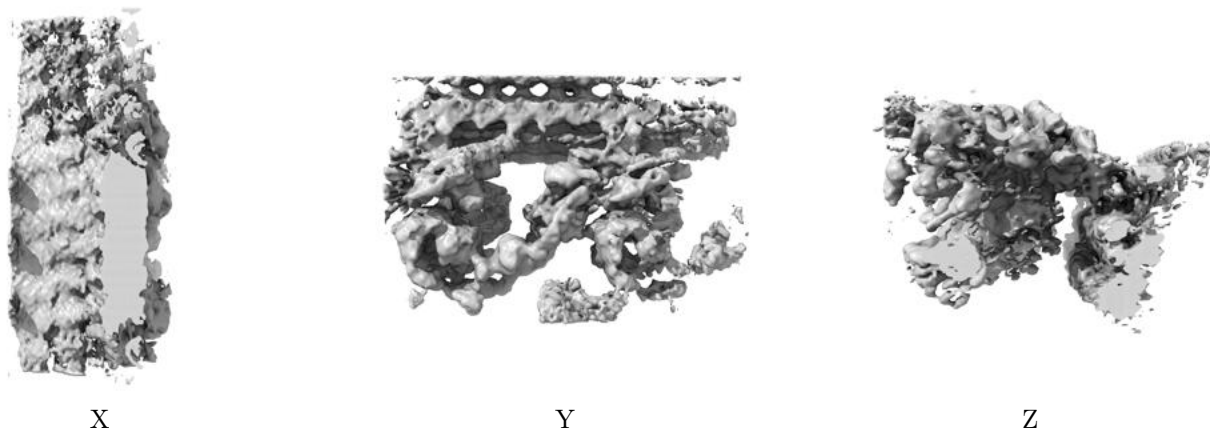


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 3.1. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

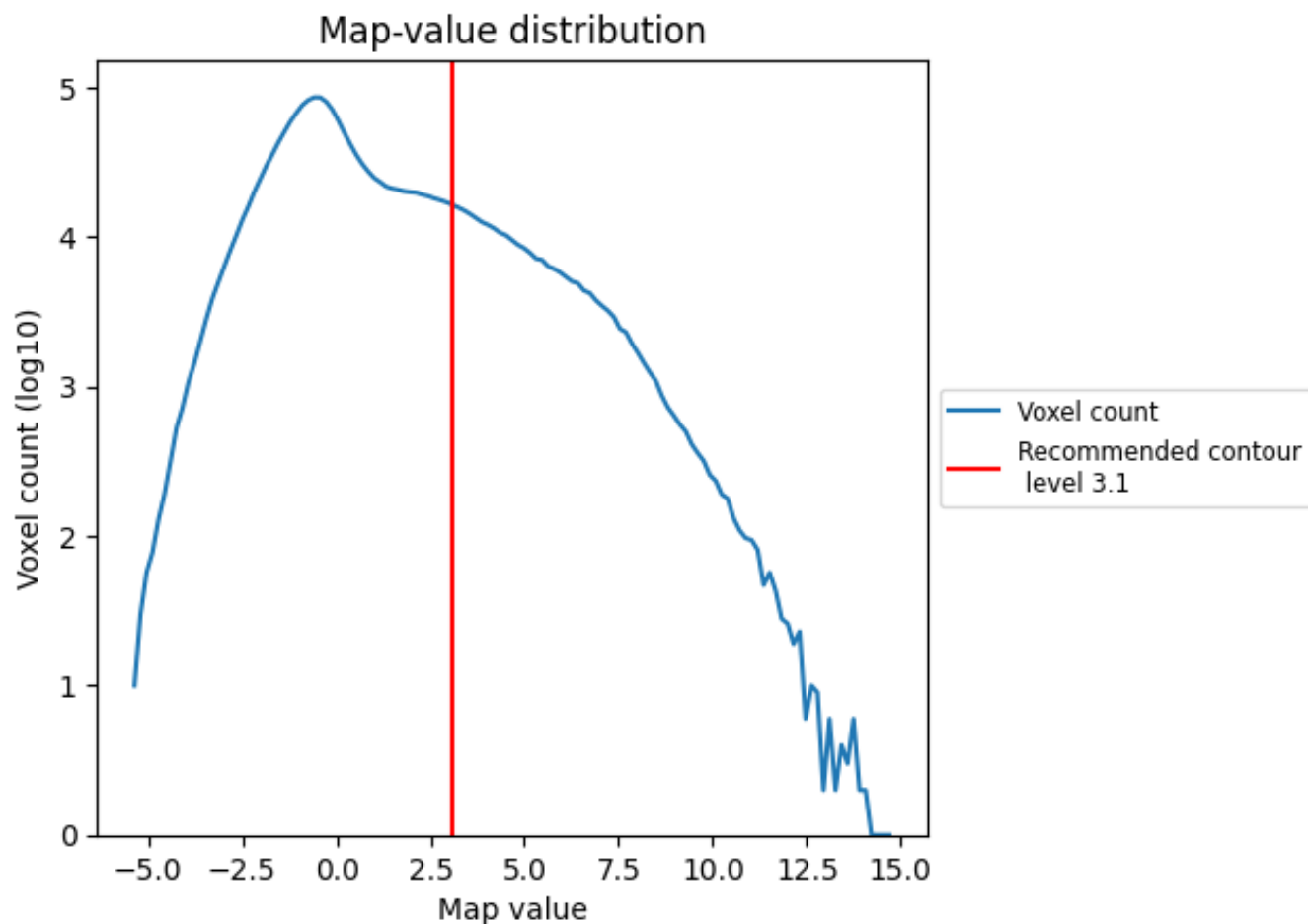
6.6 Mask visualisation [i](#)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis [i](#)

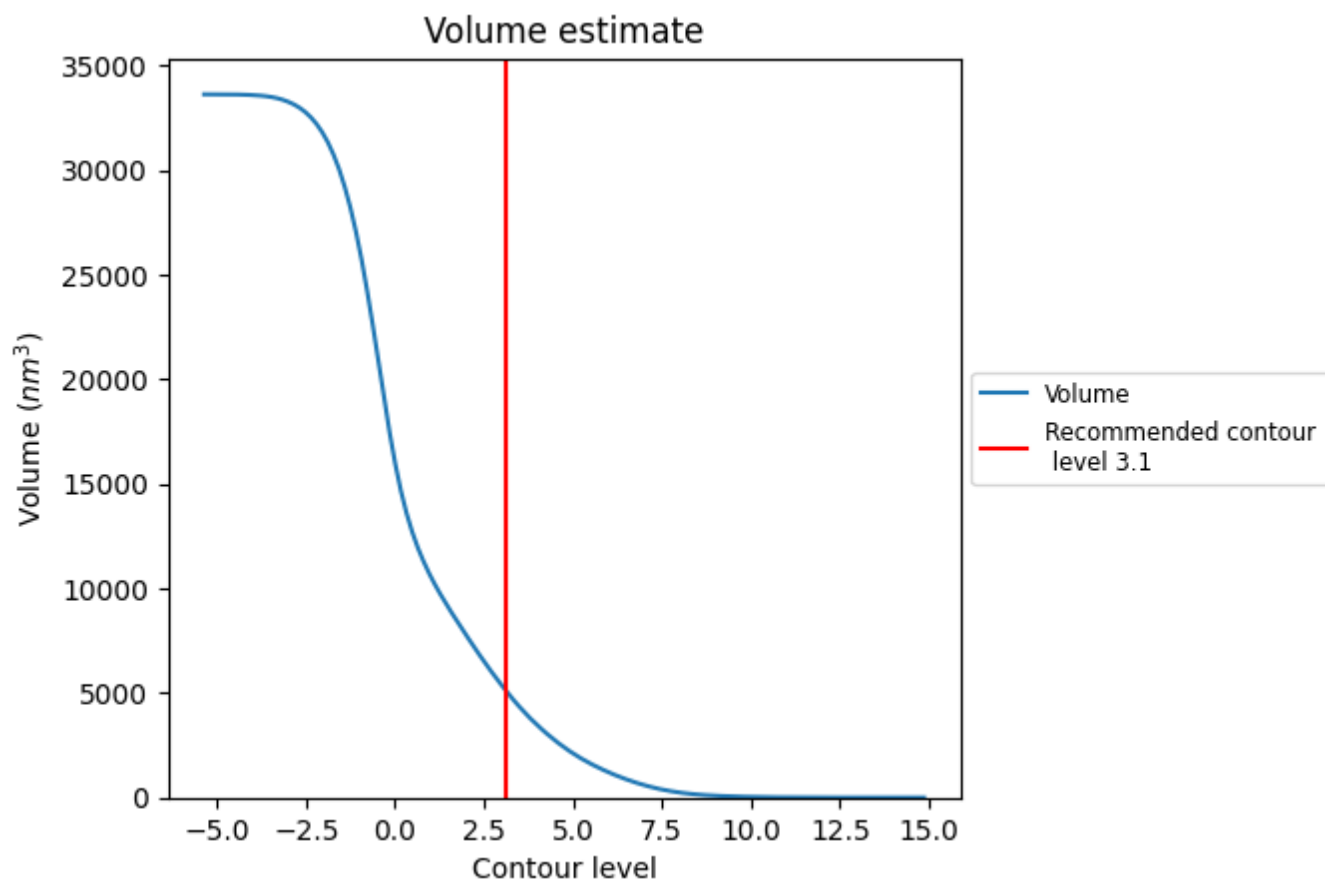
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

7.2 Volume estimate [i](#)



The volume at the recommended contour level is 5148 nm³; this corresponds to an approximate mass of 4650 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum [i](#)

This section was not generated. The rotationally averaged power spectrum is only generated for cubic maps.

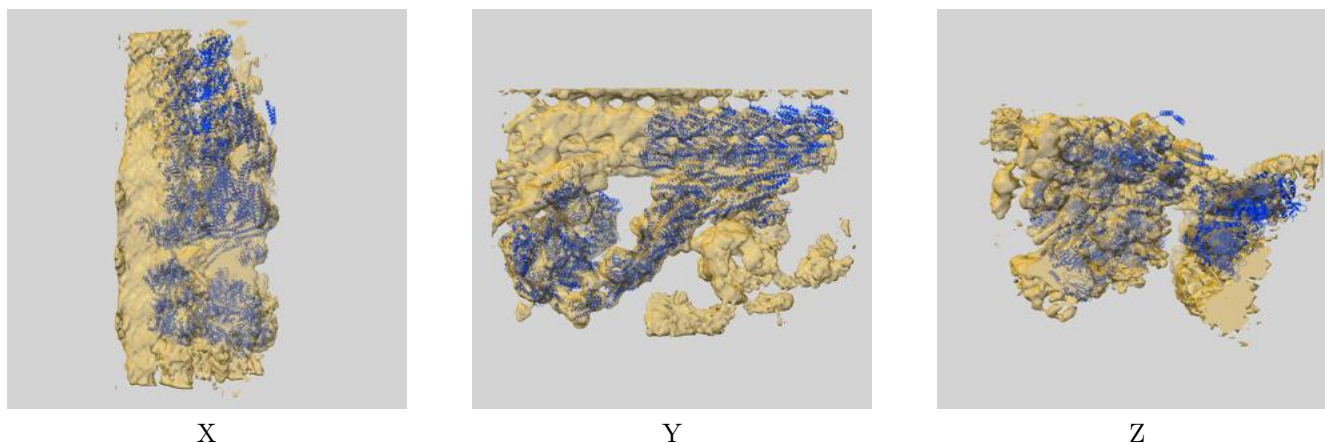
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

9 Map-model fit [i](#)

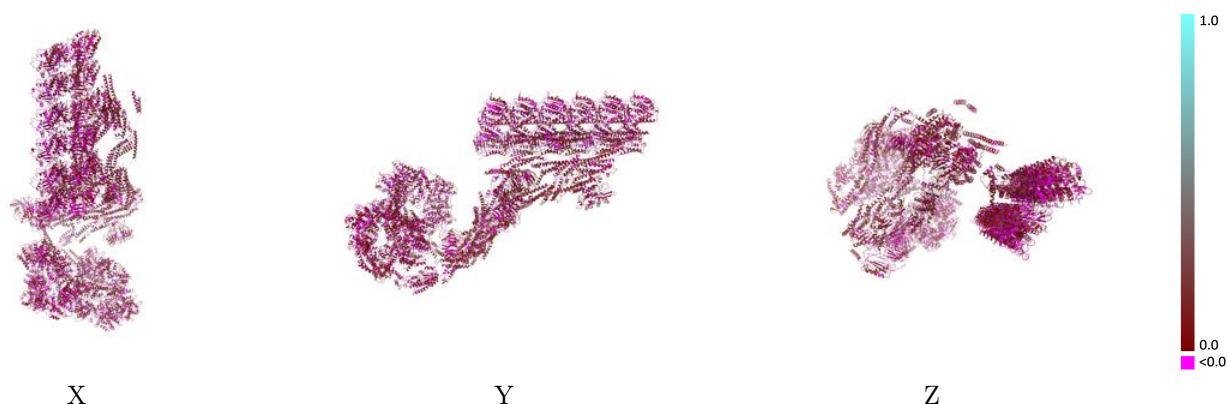
This section contains information regarding the fit between EMDB map EMD-23926 and PDB model 7MOQ. Per-residue inclusion information can be found in section [3](#) on page [12](#).

9.1 Map-model overlay [i](#)



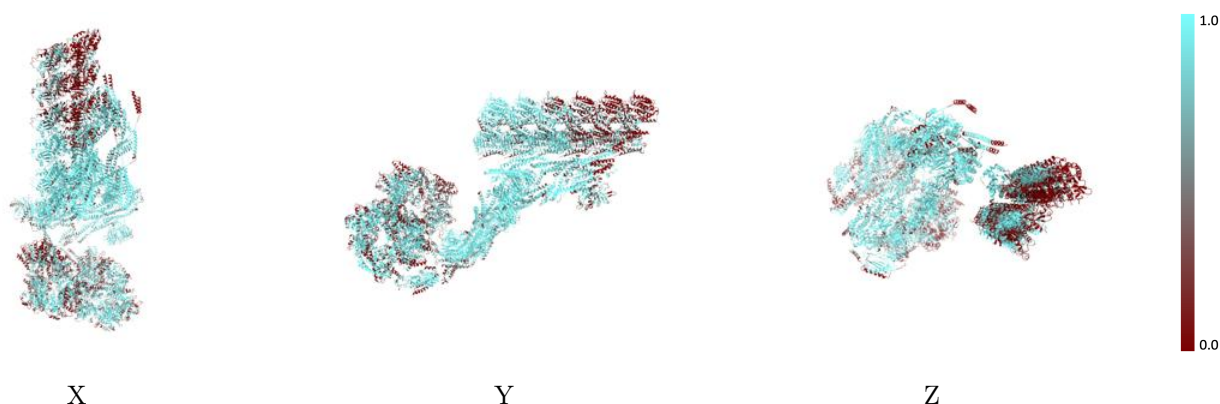
The images above show the 3D surface view of the map at the recommended contour level 3.1 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



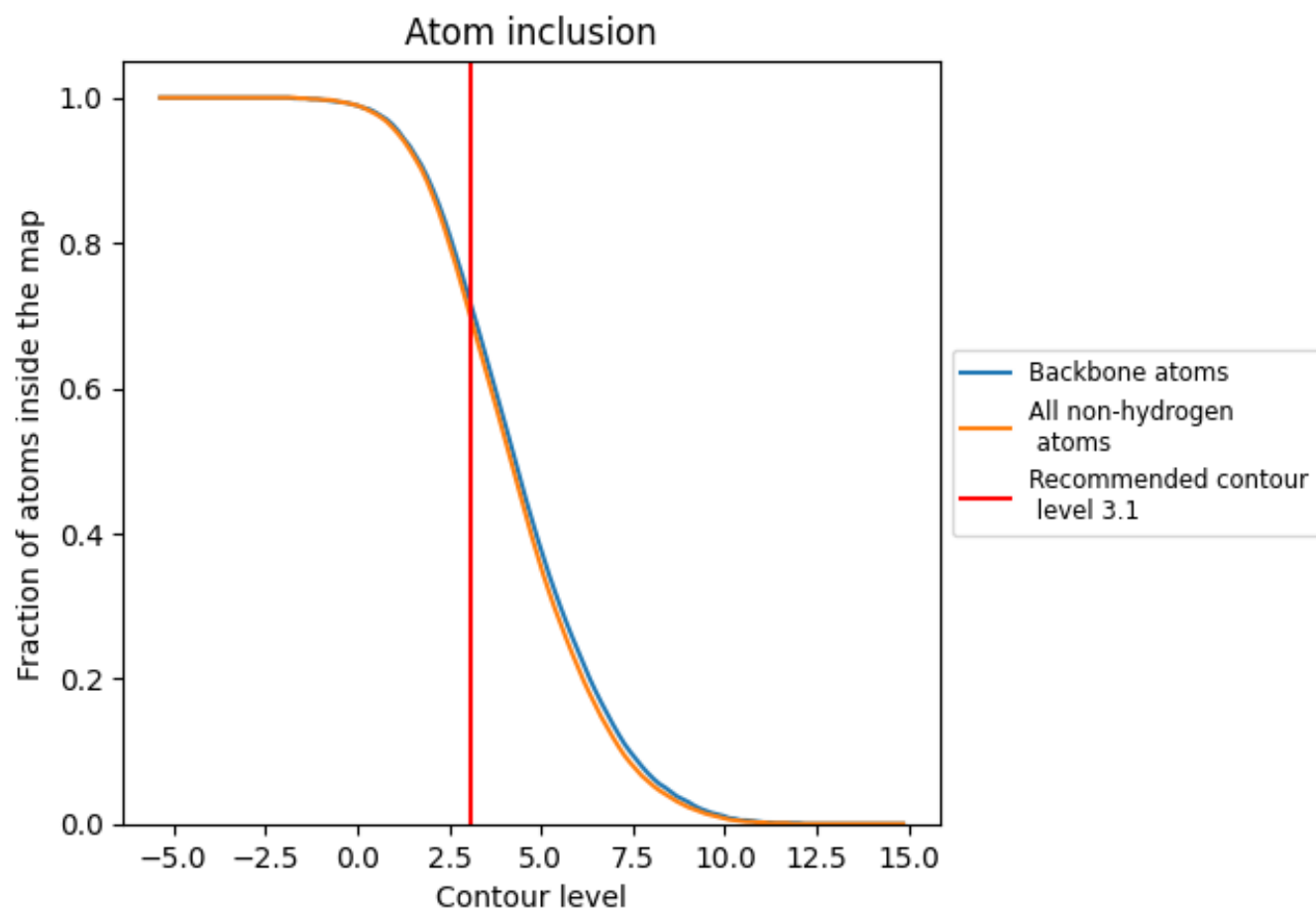
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (3.1).

9.4 Atom inclusion [i](#)



At the recommended contour level, 71% of all backbone atoms, 70% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (3.1) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.6960	 0.0670
A	 0.9340	 0.0870
B	 0.7120	 0.0750
C	 0.6660	 0.0700
D	 0.9630	 0.1060
E	 0.8600	 0.0950
F	 0.9780	 0.1290
G	 0.9440	 0.1420
H	 0.9360	 0.1260
I	 0.9010	 0.1210
J	 0.8900	 0.0960
K	 0.8680	 0.0410
L	 0.7710	 0.0560
M	 0.9290	 0.0870
N	 0.8140	 0.0540
O	 0.6940	 0.0750
P	 0.8550	 0.0730
Q	 0.9430	 0.0300
R	 0.9130	 0.0270
S	 0.9420	 0.0250
T	 0.8720	 0.0870
U	 0.6190	 0.0270
V	 0.8160	 0.1200
W	 0.4650	 0.0350
X	 0.4590	 0.1170
Y	 0.4900	 0.0460
Z	 0.4940	 0.1210
d	 0.8630	 0.0940
e	 0.8420	 0.1200
q	 0.8910	 0.0480
r	 0.8680	 0.0360
s	 0.6110	 0.0400
u	 0.3230	 0.0620
w	 0.2130	 0.0700
x	 0.8180	 0.1580
y	 0.1660	 0.0460

