



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 2, 2026 – 03:24 AM UTC

PDB ID : 1PJL / pdb_00001pjl
Title : Crystal structure of human m-NAD-ME in ternary complex with NAD and Lu3+
Authors : Yang, Z.; Batra, R.; Floyd, D.L.; Hung, H.-C.; Chang, G.-G.; Tong, L.
Deposited on : 2003-06-03
Resolution : 2.90 Å(reported)

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The 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:

MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	NOT EXECUTED
EDS	:	NOT EXECUTED
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.49

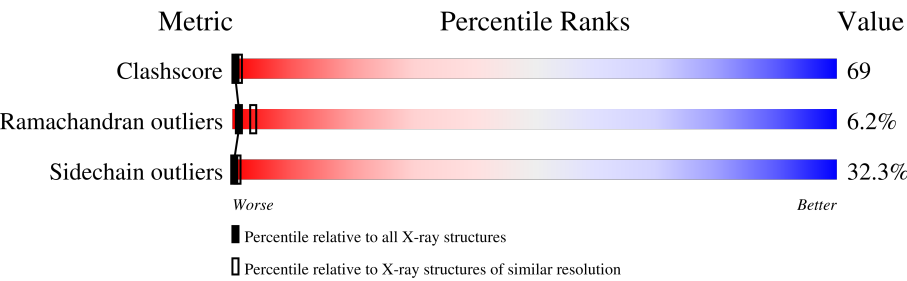
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.90 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
Clashscore	190562	2690 (2.90-2.90)
Ramachandran outliers	187476	2623 (2.90-2.90)
Sidechain outliers	187428	2625 (2.90-2.90)

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

Note EDS was not executed.

Mol	Chain	Length	Quality of chain
1	A	584	19%47%26%6%
1	B	584	17%47%27%6%
1	C	584	20%46%26%6%
1	D	584	17%48%26%6%
1	E	584	20%50%22%6%
1	F	584	21%49%23%6%
1	G	584	15%48%27%6%
1	H	584	19%48%26%6%

2 Entry composition

There are 4 unique types of molecules in this entry. The entry contains 35527 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called NAD-dependent malic enzyme, mitochondrial.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
1	A	551	Total	C	N	O	S	Se	0	0	0
			4344	2781	738	802	9	14			
1	B	551	Total	C	N	O	S	Se	0	0	0
			4344	2781	738	802	9	14			
1	C	551	Total	C	N	O	S	Se	0	0	0
			4344	2781	738	802	9	14			
1	D	551	Total	C	N	O	S	Se	0	0	0
			4344	2781	738	802	9	14			
1	E	551	Total	C	N	O	S	Se	0	0	0
			4344	2781	738	802	9	14			
1	F	551	Total	C	N	O	S	Se	0	0	0
			4344	2781	738	802	9	14			
1	G	551	Total	C	N	O	S	Se	0	0	0
			4344	2781	738	802	9	14			
1	H	551	Total	C	N	O	S	Se	0	0	0
			4344	2781	738	802	9	14			

There are 120 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	1	MSE	MET	modified residue	UNP P23368
A	29	MSE	MET	modified residue	UNP P23368
A	38	MSE	MET	modified residue	UNP P23368
A	47	MSE	MET	modified residue	UNP P23368
A	75	MSE	MET	modified residue	UNP P23368
A	86	MSE	MET	modified residue	UNP P23368
A	108	MSE	MET	modified residue	UNP P23368
A	177	MSE	MET	modified residue	UNP P23368
A	219	MSE	MET	modified residue	UNP P23368
A	239	MSE	MET	modified residue	UNP P23368
A	325	MSE	MET	modified residue	UNP P23368
A	327	MSE	MET	modified residue	UNP P23368
A	343	MSE	MET	modified residue	UNP P23368

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Chain	Residue	Modelled	Actual	Comment	Reference
A	407	MSE	MET	modified residue	UNP P23368
A	539	MSE	MET	modified residue	UNP P23368
B	1001	MSE	MET	modified residue	UNP P23368
B	1029	MSE	MET	modified residue	UNP P23368
B	1038	MSE	MET	modified residue	UNP P23368
B	1047	MSE	MET	modified residue	UNP P23368
B	1075	MSE	MET	modified residue	UNP P23368
B	1086	MSE	MET	modified residue	UNP P23368
B	1108	MSE	MET	modified residue	UNP P23368
B	1177	MSE	MET	modified residue	UNP P23368
B	1219	MSE	MET	modified residue	UNP P23368
B	1239	MSE	MET	modified residue	UNP P23368
B	1325	MSE	MET	modified residue	UNP P23368
B	1327	MSE	MET	modified residue	UNP P23368
B	1343	MSE	MET	modified residue	UNP P23368
B	1407	MSE	MET	modified residue	UNP P23368
B	1539	MSE	MET	modified residue	UNP P23368
C	2001	MSE	MET	modified residue	UNP P23368
C	2029	MSE	MET	modified residue	UNP P23368
C	2038	MSE	MET	modified residue	UNP P23368
C	2047	MSE	MET	modified residue	UNP P23368
C	2075	MSE	MET	modified residue	UNP P23368
C	2086	MSE	MET	modified residue	UNP P23368
C	2108	MSE	MET	modified residue	UNP P23368
C	2177	MSE	MET	modified residue	UNP P23368
C	2219	MSE	MET	modified residue	UNP P23368
C	2239	MSE	MET	modified residue	UNP P23368
C	2325	MSE	MET	modified residue	UNP P23368
C	2327	MSE	MET	modified residue	UNP P23368
C	2343	MSE	MET	modified residue	UNP P23368
C	2407	MSE	MET	modified residue	UNP P23368
C	2539	MSE	MET	modified residue	UNP P23368
D	3001	MSE	MET	modified residue	UNP P23368
D	3029	MSE	MET	modified residue	UNP P23368
D	3038	MSE	MET	modified residue	UNP P23368
D	3047	MSE	MET	modified residue	UNP P23368
D	3075	MSE	MET	modified residue	UNP P23368
D	3086	MSE	MET	modified residue	UNP P23368
D	3108	MSE	MET	modified residue	UNP P23368
D	3177	MSE	MET	modified residue	UNP P23368
D	3219	MSE	MET	modified residue	UNP P23368
D	3239	MSE	MET	modified residue	UNP P23368

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Chain	Residue	Modelled	Actual	Comment	Reference
D	3325	MSE	MET	modified residue	UNP P23368
D	3327	MSE	MET	modified residue	UNP P23368
D	3343	MSE	MET	modified residue	UNP P23368
D	3407	MSE	MET	modified residue	UNP P23368
D	3539	MSE	MET	modified residue	UNP P23368
E	4001	MSE	MET	modified residue	UNP P23368
E	4029	MSE	MET	modified residue	UNP P23368
E	4038	MSE	MET	modified residue	UNP P23368
E	4047	MSE	MET	modified residue	UNP P23368
E	4075	MSE	MET	modified residue	UNP P23368
E	4086	MSE	MET	modified residue	UNP P23368
E	4108	MSE	MET	modified residue	UNP P23368
E	4177	MSE	MET	modified residue	UNP P23368
E	4219	MSE	MET	modified residue	UNP P23368
E	4239	MSE	MET	modified residue	UNP P23368
E	4325	MSE	MET	modified residue	UNP P23368
E	4327	MSE	MET	modified residue	UNP P23368
E	4343	MSE	MET	modified residue	UNP P23368
E	4407	MSE	MET	modified residue	UNP P23368
E	4539	MSE	MET	modified residue	UNP P23368
F	5001	MSE	MET	modified residue	UNP P23368
F	5029	MSE	MET	modified residue	UNP P23368
F	5038	MSE	MET	modified residue	UNP P23368
F	5047	MSE	MET	modified residue	UNP P23368
F	5075	MSE	MET	modified residue	UNP P23368
F	5086	MSE	MET	modified residue	UNP P23368
F	5108	MSE	MET	modified residue	UNP P23368
F	5177	MSE	MET	modified residue	UNP P23368
F	5219	MSE	MET	modified residue	UNP P23368
F	5239	MSE	MET	modified residue	UNP P23368
F	5325	MSE	MET	modified residue	UNP P23368
F	5327	MSE	MET	modified residue	UNP P23368
F	5343	MSE	MET	modified residue	UNP P23368
F	5407	MSE	MET	modified residue	UNP P23368
F	5539	MSE	MET	modified residue	UNP P23368
G	6001	MSE	MET	modified residue	UNP P23368
G	6029	MSE	MET	modified residue	UNP P23368
G	6038	MSE	MET	modified residue	UNP P23368
G	6047	MSE	MET	modified residue	UNP P23368
G	6075	MSE	MET	modified residue	UNP P23368
G	6086	MSE	MET	modified residue	UNP P23368
G	6108	MSE	MET	modified residue	UNP P23368

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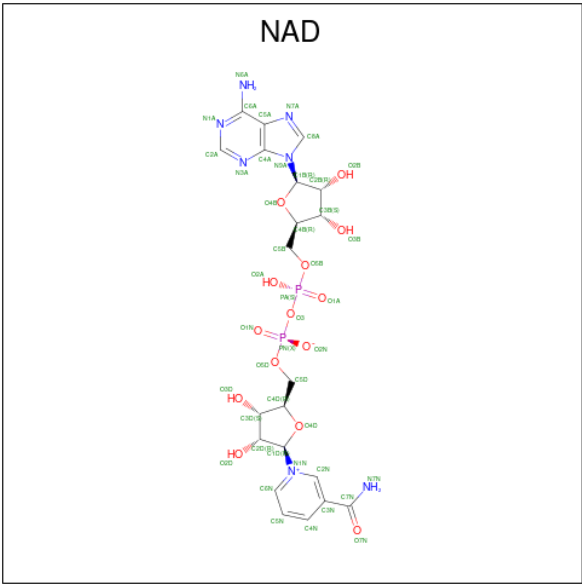
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Chain	Residue	Modelled	Actual	Comment	Reference
G	6177	MSE	MET	modified residue	UNP P23368
G	6219	MSE	MET	modified residue	UNP P23368
G	6239	MSE	MET	modified residue	UNP P23368
G	6325	MSE	MET	modified residue	UNP P23368
G	6327	MSE	MET	modified residue	UNP P23368
G	6343	MSE	MET	modified residue	UNP P23368
G	6407	MSE	MET	modified residue	UNP P23368
G	6539	MSE	MET	modified residue	UNP P23368
H	7001	MSE	MET	modified residue	UNP P23368
H	7029	MSE	MET	modified residue	UNP P23368
H	7038	MSE	MET	modified residue	UNP P23368
H	7047	MSE	MET	modified residue	UNP P23368
H	7075	MSE	MET	modified residue	UNP P23368
H	7086	MSE	MET	modified residue	UNP P23368
H	7108	MSE	MET	modified residue	UNP P23368
H	7177	MSE	MET	modified residue	UNP P23368
H	7219	MSE	MET	modified residue	UNP P23368
H	7239	MSE	MET	modified residue	UNP P23368
H	7325	MSE	MET	modified residue	UNP P23368
H	7327	MSE	MET	modified residue	UNP P23368
H	7343	MSE	MET	modified residue	UNP P23368
H	7407	MSE	MET	modified residue	UNP P23368
H	7539	MSE	MET	modified residue	UNP P23368

- Molecule 2 is LUTETIUM (III) ION (CCD ID: LU) (formula: Lu).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	A	1	Total Lu 1 1	0	0
2	B	1	Total Lu 1 1	0	0
2	C	1	Total Lu 1 1	0	0
2	D	1	Total Lu 1 1	0	0
2	E	1	Total Lu 1 1	0	0
2	F	1	Total Lu 1 1	0	0
2	G	1	Total Lu 1 1	0	0
2	H	1	Total Lu 1 1	0	0

- Molecule 3 is NICOTINAMIDE-ADENINE-DINUCLEOTIDE (CCD ID: NAD) (formula: $C_{21}H_{27}N_7O_{14}P_2$).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
3	A	1	Total	C	N	O	P	0	0
			44	21	7	14	2		
3	A	1	Total	C	N	O	P	17	0
			44	21	7	14	2		
3	B	1	Total	C	N	O	P	0	0
			44	21	7	14	2		
3	B	1	Total	C	N	O	P	18	0
			44	21	7	14	2		
3	C	1	Total	C	N	O	P	0	0
			44	21	7	14	2		
3	C	1	Total	C	N	O	P	18	0
			44	21	7	14	2		
3	D	1	Total	C	N	O	P	0	0
			44	21	7	14	2		
3	D	1	Total	C	N	O	P	18	0
			44	21	7	14	2		
3	E	1	Total	C	N	O	P	0	0
			44	21	7	14	2		
3	E	1	Total	C	N	O	P	18	0
			44	21	7	14	2		
3	F	1	Total	C	N	O	P	0	0
			44	21	7	14	2		
3	F	1	Total	C	N	O	P	18	0
			44	21	7	14	2		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
3	G	1	Total	C	N	O	P	0	0
			44	21	7	14	2		
3	G	1	Total	C	N	O	P	18	0
			44	21	7	14	2		
3	H	1	Total	C	N	O	P	0	0
			44	21	7	14	2		
3	H	1	Total	C	N	O	P	18	0
			44	21	7	14	2		

- Molecule 4 is water.

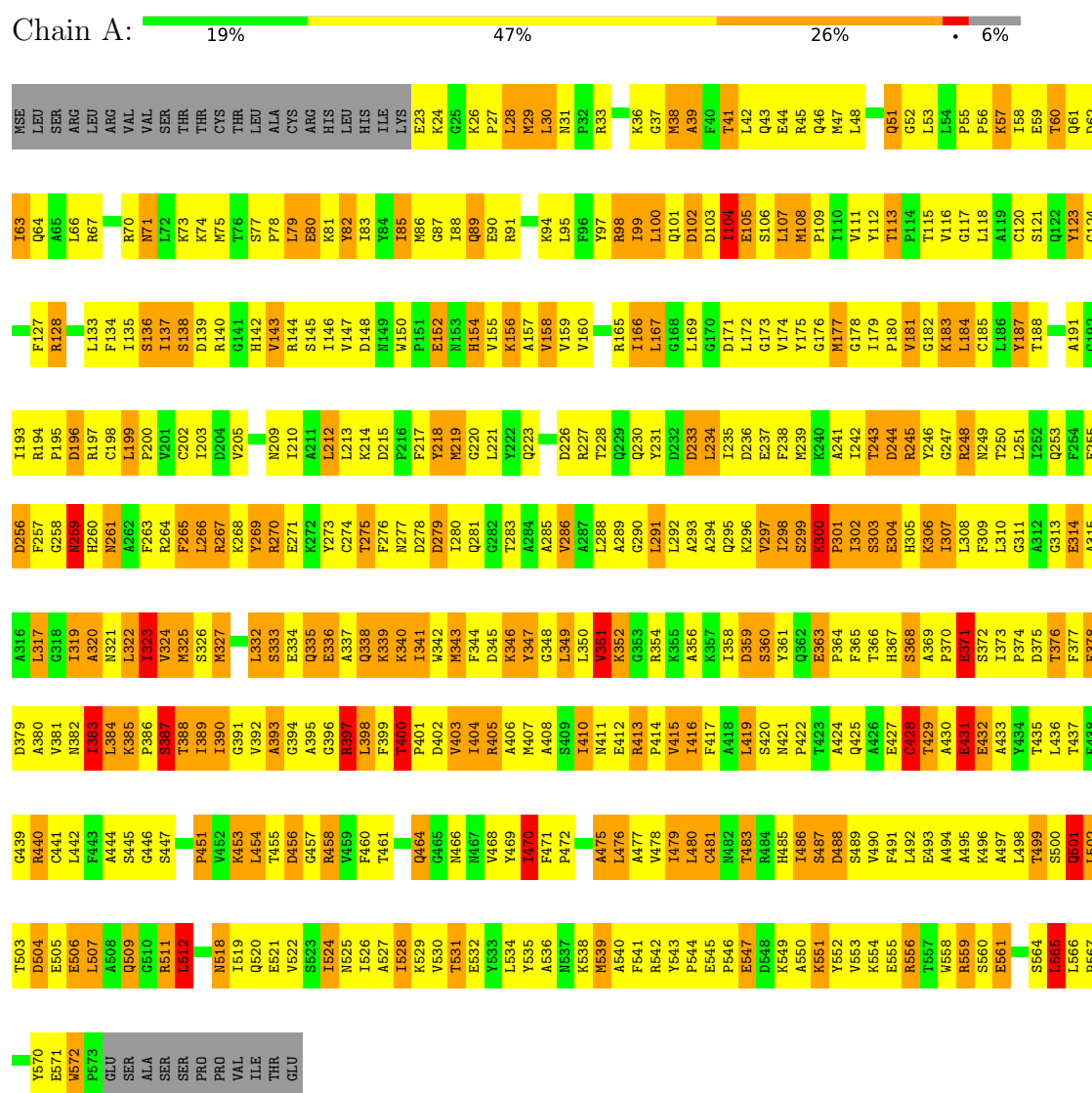
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
4	A	9	Total	O	0	0
			9	9		
4	B	6	Total	O	0	0
			6	6		
4	C	11	Total	O	0	0
			11	11		
4	D	6	Total	O	0	0
			6	6		
4	E	6	Total	O	0	0
			6	6		
4	F	10	Total	O	0	0
			10	10		
4	G	5	Total	O	0	0
			5	5		
4	H	10	Total	O	0	0
			10	10		

3 Residue-property plots

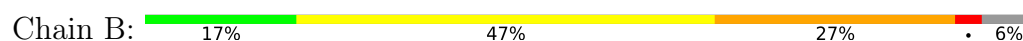
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry. Residues are color-coded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

Note EDS was not executed.

- Molecule 1: NAD-dependent malic enzyme, mitochondrial



- Molecule 1: NAD-dependent malic enzyme, mitochondrial

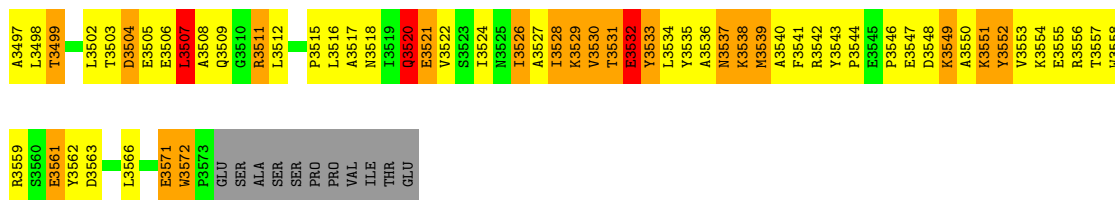


E2571	E2505	L2442	W2381	N2321	N2261
W2572	E2506	F2443	N2382	L2322	A2262
P2573	L2507	A2444	L2383	I2323	F2263
GLU	A2508	S2445	L2384	W2324	R2264
SER		G2446	K2385	M2325	F2265
ALA	R2511	S2447	F2386	S2326	L2266
SER	L2512	P2448	S2387	M2327	R2267
SER		F2449	T2388	W2328	K2268
PRO	L2516	G2450	L2389	E2329	F2269
PRO	A2517	P2451	I2390	N2330	R2270
VAL	W2518	L2452	E2391	G2331	E2271
ILE	L2519	K2453	W2392	L2332	K2272
THR	Q2520	L2454	A2393	S2333	Y2273
GLU	E2521	K2455	E2394	Q2334	G2274
	W2522	D2456	A2395	E2335	T2275
	S2523	G2457	Q2396	E2336	F2276
	L2524	R2458	R2397	A2337	N2277
	W2525	F2459	L2398	Q2338	D2278
	W2526	T2460	F2399	K2339	D2279
	A2527	T2461	T2400	K2340	I2280
	L2528	P2462	P2401	I2341	Q2281
	K2529	G2463	D2402	W2342	G2282
	W2530	Q2464	D2403	M2343	T2283
	T2531	G2465	L2404	F2344	A2284
	E2532	N2466	R2405	D2345	A2285
	Y2533	W2467	A2406	K2346	F2286
	L2534	V2468	N2407	Y2347	A2287
	W2535	Y2469	A2408	G2348	L2288
	A2536	I2470	S2409	L2349	E2289
	N2537	F2471	T2410	L2350	G2290
		P2472	N2411	V2351	G2291
			E2412	K2352	L2292
	L2476		R2413	G2353	A2293
	A2477		P2414	R2354	A2294
	V2478		W2415	W2355	Q2295
	L2479		L2416	A2356	K2296
	P2544		F2417	K2357	V2297
	E2545		A2418	L2358	I2298
	P2546		L2419	D2359	S2299
	D2547		S2420	K2360	K2300
	E2548		W2421	Y2361	P2301
	K2549		F2422	Q2362	I2302
	A2550		T2423	E2363	S2303
	L2486		A2424	P2364	E2304
	S2487		Q2425	F2365	H2305
			A2426	T2366	K2306
	W2490		E2427	H2367	I2307
	F2491		K2428	S2368	L2308
	L2492		T2429	A2369	F2309
	E2493		A2430	P2370	L2310
	A2494		E2431	E2371	G2311
	W2558		K2496	E2432	A2312
	D2559		A2497	S2372	G2313
	S2560			L2373	G2314
	E2561		A2498	P2374	E2314
	W2562		T2499	D2375	A2315
	D2563		S2500	T2376	A2316
	S2564		Q2501	F2377	L2317
			L2502	G2438	G2318
			P2503	D2379	I2319
	W2569		R2440	A2360	A2220
	P2570		K2441		

- Molecule 1: NAD-dependent malic enzyme, mitochondrial

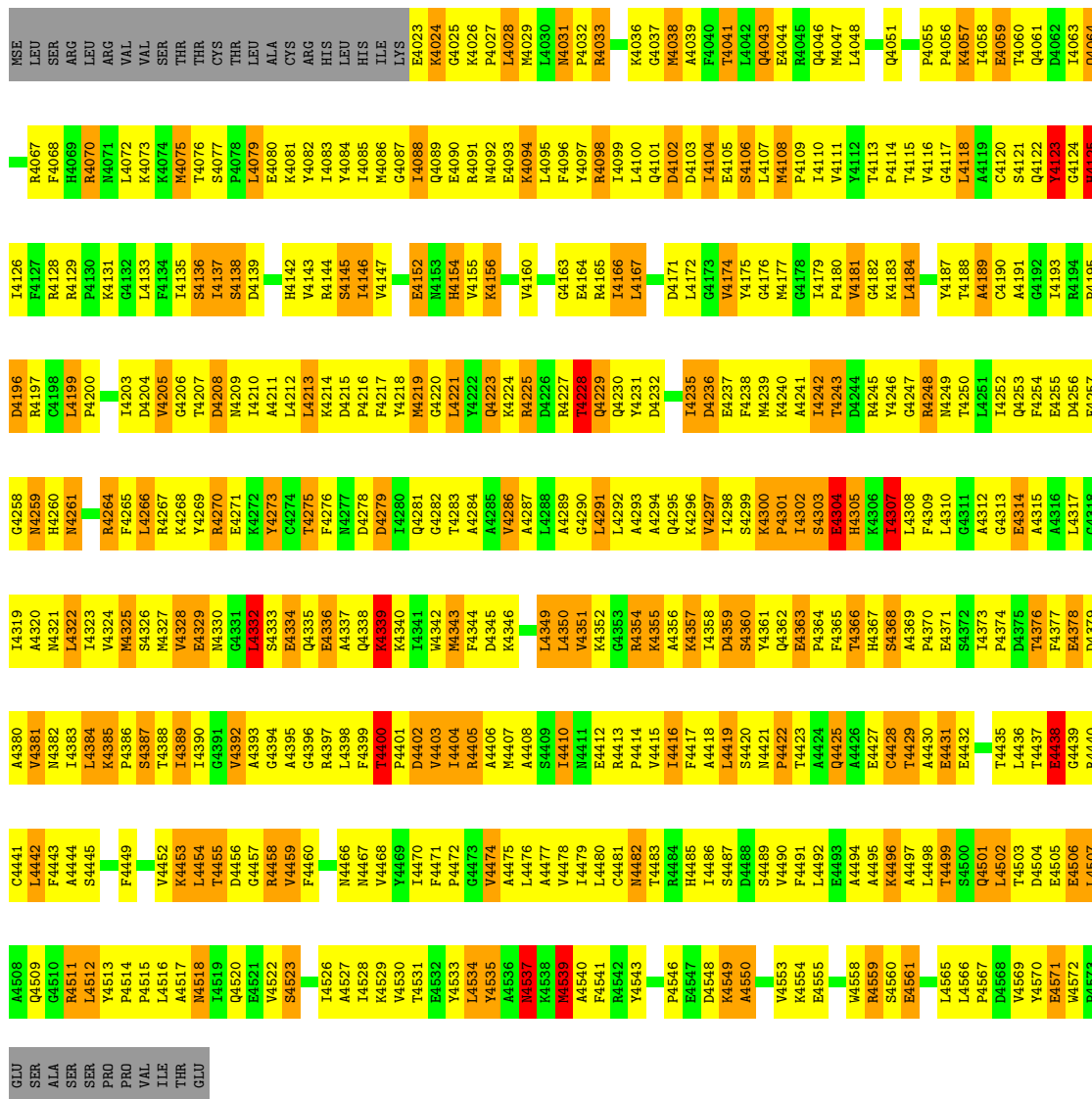
Chain D: 17% 48% 26% 6%

E3432	E3433	Y3434	T3435	L3436	T3437	E3438	E3439	R3440	C3441	C3442	F3443	A3444	S3445	G3446	S3447											V3452	K3453	L3454	T3455	D3456	G3457	K3458	V3459	F3460											Q3464	K3465	R3466	R3467	Y3468	Y3469	L3470	F3471	F3472	G3473	G3474	A3475	A3476											L3476	A3477	L3478	L3479	L3480	K3481	N3482	T3483	K3484	H3485											L3486	S3487	D3488	S3489	V3490	F3491	L3492	E3493	A3494	A3495	T3496
E3371	S3372	I3373	P3374	R3375	T3376	F3377	E3378	D3379	L3380	V3381	N3382	I3383	K3384	K3385	S3386	S3387	T3388	I3389	E3390	E3391	G3392	A3393	C3394	A3395	S3396	R3397	L3398	K3399	G3400	F3401	Y3402	Y3403	L3404	R3405	A3406	N3407	A3408											N3411	E3412	R3413	F3414	V3415	L3416	F3417	A3418	L3419	S3420	N3421	P3422	T3423	A3424	Q3425	A3426	E3427	K3428	C3429	L3430	A3431																														
F3309	L3310	G3313		E3314	A3315	A3316	L3317	G3318	L3319	A3320	N3321	L3322	I3323	V3324	K3325	S3326	M3327	V3328	E3329	N3330	G3331	L3332	S3333	E3334	G3335	E3336	L3337	G3338	K3339	K3340	L3341	M3342	F3343	D3344	L3345	K3346											L3349	L3350	V3351	K3352	G3353	L3354	R3355	A3356	K3357	L3358	D3359	S3360	F3361	Q3362	E3363	F3364	F3365	S3366	K3367	K3368	S3369	D3370																														
T3188	A3189	C3190	A3191	G3192	L3193	R3194	P3195	D3196	L3197	C3198	L3199	P3200	V3201	C3202	I3203	D3204	L3205	T3206	G3207	Y3208	N3209	I3210	A3211	L3212	L3213	K3214	D3215	F3216	F3217	Y3218	M3219	G3220	L3221	Y3222	Q3223	K3224	R3225	D3226	R3227	T3228	Q3229	Q3230	Y3231	D3232	D3233	L3234	I3235	D3236	E3237	F3238	M3239	K3240											T3243	R3244	K3245	Y3246	L3247	G3248	L3249																													
R3249	T3250	L3251	T3252	G3253	F3254	E3255	R3256	F3257	G3258	K3259	R3260	N3261	I3262	F3263	M3264	F3265	L3266	R3267	K3268	Y3269	R3270	E3271	K3272	Y3273	C3274	T3275	F3276	N3277	D3278	D3279	L3280	Q3281	G3282	T3283	A3284	Y3285	A3286	L3287	L3288	A3289	G3290	L3291	L3292	A3293	A3294	Q3295	T3296	V3297	L3298	S3299	K3300	P3301											L3302	S3303	E3304	H3305	K3306	T3307	L3308																													
F3065	L3066	R3067	F3068	H3069	R3070	N3071	L3072	L3073	K3074	M3075	T3076	S3077	F3078	L3079	E3080	E3081	Y3082	L3083	Y3084	L3085	N3086	G3087	L3088	Q3089	E3090	R3091											K3094	L3095	F3096	Y3097	R3098	L3099	L3100	Q3101	D3102	L3103	E3104	E3105	G3106	L3107	P3108	L3110	L3111	Y3112	T3113	P3114	L3115	T3116	G3117	L3118	A3119	C3120	S3121	Q3122	Y3123	G3124	L3125																															



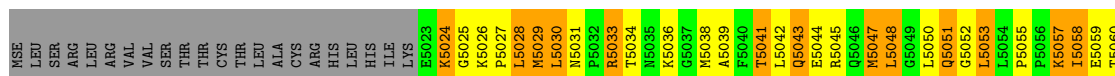
• Molecule 1: NAD-dependent malic enzyme, mitochondrial

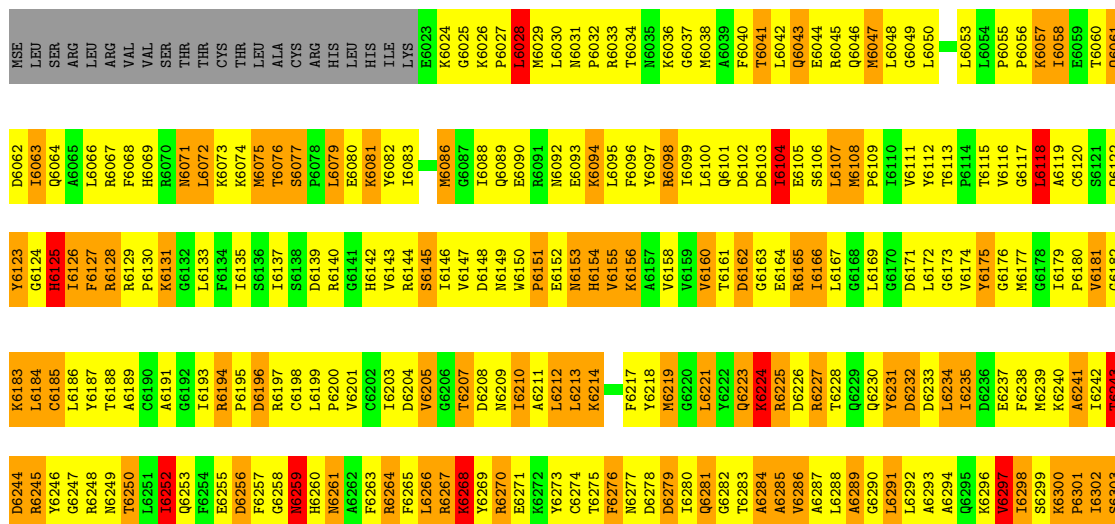
Chain E: 20% 50% 22% 6%



• Molecule 1: NAD-dependent malic enzyme, mitochondrial

Chain F: 21% 49% 23% 6%







L7566	Y7570	GLU
P7567	E7571	SER
	W7572	ALA
	P7573	SER
		SER
		PRO
		PRO
		VAL
		ILE
		THR
		GLU

4 Data and refinement statistics

Xtriage (Phenix) and EDS were not executed - this section is therefore incomplete.

Property	Value	Source
Space group	P 1	Depositor
Cell constants a, b, c, α , β , γ	113.30Å 119.00Å 125.90Å 116.50° 94.80° 102.80°	Depositor
Resolution (Å)	20.00 – 2.90	Depositor
% Data completeness (in resolution range)	(Not available) (20.00-2.90)	Depositor
R_{merge}	0.05	Depositor
R_{sym}	(Not available)	Depositor
Refinement program	X-PLOR	Depositor
R, R_{free}	0.204 , 0.263	Depositor
Estimated twinning fraction	No twinning to report.	Xtriage
Total number of atoms	35527	wwPDB-VP
Average B, all atoms (Å ²)	39.0	wwPDB-VP

5 Model quality

5.1 Standard geometry

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

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	0.56	0/4424	1.06	33/5969 (0.6%)
1	B	0.56	0/4424	1.04	30/5969 (0.5%)
1	C	0.56	0/4424	1.05	27/5969 (0.5%)
1	D	0.57	0/4424	1.06	33/5969 (0.6%)
1	E	0.59	0/4424	1.05	25/5969 (0.4%)
1	F	0.58	0/4424	1.06	33/5969 (0.6%)
1	G	0.56	0/4424	1.12	38/5969 (0.6%)
1	H	0.56	0/4424	1.06	33/5969 (0.6%)
All	All	0.57	0/35392	1.06	252/47752 (0.5%)

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

There are no bond length outliers.

All (252) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	6446	GLY	N-CA-C	-9.97	100.94	112.50
1	F	5125	HIS	N-CA-C	-9.65	101.27	113.43
1	G	6125	HIS	N-CA-C	-9.07	104.28	114.62
1	D	3438	GLU	N-CA-C	-8.82	101.82	112.58
1	D	3507	LEU	N-CA-C	-8.74	101.33	111.03
1	E	4125	HIS	N-CA-C	-8.73	102.55	113.55
1	G	6506	GLU	N-CA-C	-8.55	101.92	111.07
1	C	2506	GLU	N-CA-C	-8.49	102.03	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	5506	GLU	N-CA-C	-8.45	102.15	111.36
1	F	5187	TYR	N-CA-C	-8.29	101.17	111.11
1	A	565	LEU	N-CA-C	-8.24	102.44	114.39
1	A	327	MSE	N-CA-C	-8.19	102.30	111.14
1	A	393	ALA	N-CA-C	-8.06	104.59	114.75
1	G	6322	LEU	N-CA-C	-8.06	101.57	111.33
1	E	4539	MSE	N-CA-C	-7.99	103.54	113.28
1	B	1377	PHE	N-CA-C	-7.96	102.30	110.97
1	H	7215	ASP	CA-C-N	7.89	128.08	119.87
1	H	7215	ASP	C-N-CA	7.89	128.08	119.87
1	D	3102	ASP	N-CA-C	-7.70	104.49	114.04
1	C	2055	PRO	CA-C-N	7.63	129.38	119.84
1	C	2055	PRO	C-N-CA	7.63	129.38	119.84
1	D	3088	ILE	N-CA-C	-7.58	104.09	112.80
1	G	6076	THR	N-CA-C	7.56	120.63	111.40
1	G	6063	ILE	N-CA-C	-7.53	103.51	110.82
1	A	400	THR	N-CA-C	7.51	118.24	109.60
1	A	512	LEU	N-CA-C	-7.51	103.19	112.88
1	C	2300	LYS	CA-C-N	7.42	129.12	119.84
1	C	2300	LYS	C-N-CA	7.42	129.12	119.84
1	A	560	SER	N-CA-C	-7.37	104.82	113.88
1	G	6118	LEU	N-CA-C	-7.35	103.20	111.07
1	A	351	VAL	N-CA-C	7.15	119.86	108.85
1	H	7524	ILE	N-CA-C	-7.13	102.87	110.36
1	H	7501	GLN	N-CA-C	-7.09	104.50	113.72
1	C	2377	PHE	N-CA-C	-7.08	102.61	111.11
1	A	117	GLY	N-CA-C	-7.03	104.34	112.50
1	F	5566	LEU	CA-C-N	7.03	126.95	119.85
1	F	5566	LEU	C-N-CA	7.03	126.95	119.85
1	G	6028	LEU	N-CA-C	-6.96	103.62	111.07
1	E	4550	ALA	N-CA-C	-6.92	103.42	110.97
1	H	7375	ASP	N-CA-C	-6.87	104.89	113.55
1	D	3289	ALA	N-CA-C	-6.83	103.83	111.28
1	B	1505	GLU	N-CA-C	-6.79	103.34	111.69
1	D	3393	ALA	N-CA-C	-6.78	106.20	114.75
1	E	4088	ILE	N-CA-C	-6.76	104.21	113.00
1	B	1470	ILE	N-CA-C	6.76	123.39	109.34
1	E	4387	SER	N-CA-C	-6.73	103.19	111.40
1	A	387	SER	N-CA-C	-6.72	105.08	113.55
1	D	3424	ALA	N-CA-C	-6.72	103.47	112.94
1	B	1125	HIS	N-CA-C	-6.67	104.89	113.16
1	F	5162	ASP	N-CA-C	-6.64	102.70	113.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	2117	GLY	N-CA-C	-6.63	104.48	113.37
1	E	4249	ASN	N-CA-C	-6.62	105.20	113.28
1	F	5410	ILE	N-CA-C	6.62	117.40	110.72
1	C	2189	ALA	N-CA-C	6.60	118.48	111.28
1	D	3355	LYS	N-CA-C	6.59	120.19	111.75
1	A	265	PHE	N-CA-C	-6.56	104.13	111.28
1	C	2125	HIS	N-CA-C	-6.55	103.34	112.12
1	G	6047	MSE	N-CA-C	6.54	120.36	112.38
1	F	5289	ALA	N-CA-C	-6.54	104.40	112.38
1	E	4236	ASP	N-CA-C	-6.54	104.24	111.36
1	F	5440	ARG	N-CA-C	-6.52	105.86	113.88
1	A	138	SER	N-CA-C	-6.51	104.60	112.54
1	B	1506	GLU	N-CA-C	-6.50	104.24	111.71
1	G	6555	GLU	N-CA-C	6.48	120.40	112.23
1	C	2162	ASP	N-CA-C	-6.48	103.99	112.41
1	A	501	GLN	N-CA-C	-6.47	105.55	113.50
1	D	3470	ILE	N-CA-C	6.46	122.77	109.34
1	B	1450	GLY	CA-C-N	6.45	127.90	119.84
1	B	1450	GLY	C-N-CA	6.45	127.90	119.84
1	E	4537	ASN	N-CA-C	-6.43	104.68	113.30
1	A	404	ILE	N-CA-C	-6.41	104.39	110.42
1	E	4304	GLU	N-CA-C	6.38	118.24	111.28
1	H	7089	GLN	N-CA-C	-6.37	101.16	111.04
1	B	1175	TYR	N-CA-C	-6.37	104.99	112.89
1	C	2387	SER	N-CA-C	-6.36	104.44	111.82
1	B	1540	ALA	N-CA-C	-6.36	98.90	109.46
1	A	556	ARG	N-CA-C	6.35	118.65	110.65
1	C	2110	ILE	N-CA-C	-6.30	106.14	111.56
1	G	6390	ILE	N-CA-C	6.29	116.72	106.72
1	G	6104	ILE	N-CA-C	6.28	116.45	110.42
1	F	5194	ARG	CA-C-N	6.26	126.73	119.47
1	F	5194	ARG	C-N-CA	6.26	126.73	119.47
1	F	5278	ASP	N-CA-C	6.25	117.79	110.97
1	C	2373	ILE	N-CA-C	6.25	114.07	107.76
1	E	4079	LEU	N-CA-C	-6.25	105.15	112.89
1	C	2118	LEU	N-CA-C	-6.24	104.10	111.03
1	D	3104	ILE	N-CA-C	6.23	116.40	110.42
1	G	6175	TYR	N-CA-C	-6.23	105.51	113.23
1	H	7061	GLN	N-CA-C	-6.23	103.80	111.40
1	G	6560	SER	N-CA-C	-6.21	104.29	113.61
1	H	7125	HIS	N-CA-C	-6.19	105.38	113.12
1	C	2327	MSE	N-CA-C	-6.18	104.46	111.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	2352	LYS	N-CA-C	6.17	118.66	109.59
1	E	4400	THR	CA-C-N	6.16	127.55	119.84
1	E	4400	THR	C-N-CA	6.16	127.55	119.84
1	H	7058	ILE	N-CA-C	6.15	115.58	106.85
1	A	319	ILE	CB-CA-C	-6.12	103.86	111.94
1	D	3236	ASP	N-CA-C	-6.11	104.31	110.97
1	H	7387	SER	N-CA-C	-6.10	104.71	111.36
1	H	7369	ALA	N-CA-C	6.10	117.08	109.57
1	E	4031	ASN	CA-C-N	6.10	126.54	119.47
1	E	4031	ASN	C-N-CA	6.10	126.54	119.47
1	G	6252	ILE	N-CA-C	6.10	115.63	106.42
1	H	7390	ILE	N-CA-C	6.08	116.63	107.75
1	H	7028	LEU	N-CA-C	-6.08	104.73	111.36
1	G	6526	ILE	N-CA-C	-6.08	103.98	110.36
1	H	7516	LEU	N-CA-C	-6.06	105.60	112.87
1	G	6145	SER	N-CA-C	-6.03	104.62	111.07
1	C	2401	PRO	N-CA-C	-6.01	105.70	113.57
1	A	249	ASN	N-CA-C	-6.00	105.62	113.17
1	E	4189	ALA	N-CA-C	5.97	118.75	111.82
1	A	218	TYR	N-CA-C	-5.97	101.82	110.24
1	A	475	ALA	N-CA-C	-5.97	103.95	111.11
1	H	7399	PHE	N-CA-C	-5.96	100.64	109.11
1	F	5399	PHE	N-CA-C	-5.96	100.67	109.62
1	D	3339	LYS	N-CA-C	-5.96	105.19	112.88
1	F	5327	MSE	N-CA-C	-5.94	104.50	110.97
1	A	28	LEU	N-CA-C	-5.94	104.89	111.36
1	D	3286	VAL	N-CA-C	-5.93	104.95	110.53
1	H	7162	ASP	N-CA-C	-5.93	104.23	112.30
1	D	3139	ASP	N-CA-C	-5.92	104.72	112.41
1	B	1507	LEU	N-CA-C	-5.90	104.79	112.23
1	A	300	LYS	CA-C-N	5.90	127.21	119.84
1	A	300	LYS	C-N-CA	5.90	127.21	119.84
1	F	5461	THR	CA-C-N	5.89	125.84	119.78
1	F	5461	THR	C-N-CA	5.89	125.84	119.78
1	E	4442	LEU	N-CA-C	-5.87	98.95	108.52
1	B	1255	GLU	N-CA-C	5.85	117.30	108.46
1	D	3329	GLU	N-CA-C	-5.83	105.05	111.82
1	A	80	GLU	N-CA-C	-5.82	104.30	111.40
1	B	1373	ILE	CA-C-N	5.81	126.72	119.98
1	B	1373	ILE	C-N-CA	5.81	126.72	119.98
1	C	2440	ARG	N-CA-C	-5.79	106.26	113.38
1	H	7243	THR	N-CA-C	-5.78	105.06	111.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	470	ILE	N-CA-C	5.77	121.34	109.34
1	B	1194	ARG	CA-C-N	5.76	125.23	119.24
1	B	1194	ARG	C-N-CA	5.76	125.23	119.24
1	C	2539	MSE	N-CA-C	-5.75	106.12	114.12
1	F	5297	VAL	N-CA-C	-5.75	108.25	113.71
1	D	3162	ASP	N-CA-C	-5.75	104.81	113.89
1	E	4390	ILE	N-CA-C	5.75	116.39	108.12
1	H	7099	ILE	CB-CA-C	-5.74	104.36	111.70
1	H	7322	LEU	N-CA-C	-5.74	105.54	112.54
1	D	3327	MSE	N-CA-C	-5.71	105.13	111.36
1	D	3526	ILE	N-CA-C	-5.71	104.36	110.36
1	F	5248	ARG	N-CA-C	-5.67	106.13	113.16
1	B	1147	VAL	N-CA-C	-5.66	104.34	110.23
1	C	2322	LEU	N-CA-C	-5.66	105.48	112.38
1	D	3031	ASN	CA-C-N	5.65	126.03	119.47
1	D	3031	ASN	C-N-CA	5.65	126.03	119.47
1	F	5312	ALA	CA-C-N	-5.65	118.20	122.33
1	F	5312	ALA	C-N-CA	-5.65	118.20	122.33
1	D	3459	VAL	N-CA-C	5.65	116.95	107.18
1	H	7131	LYS	N-CA-C	5.64	122.82	110.80
1	G	6502	LEU	N-CA-C	5.64	118.63	110.28
1	H	7189	ALA	N-CA-C	5.64	118.16	111.33
1	H	7251	LEU	N-CA-C	5.64	117.87	109.25
1	B	1030	LEU	N-CA-C	-5.63	106.41	113.28
1	D	3081	LYS	N-CA-C	-5.63	105.29	111.82
1	C	2146	ILE	N-CA-C	-5.63	104.84	110.30
1	A	322	LEU	N-CA-C	-5.62	105.30	111.82
1	D	3160	VAL	N-CA-C	5.61	117.75	108.99
1	B	1399	PHE	N-CA-C	-5.60	103.59	110.65
1	B	1375	ASP	N-CA-C	-5.59	106.23	113.16
1	G	6522	VAL	N-CA-C	-5.57	104.94	110.62
1	E	4393	ALA	N-CA-C	-5.56	106.19	114.64
1	H	7514	PRO	N-CA-C	5.56	115.81	110.47
1	A	39	ALA	N-CA-C	-5.53	106.38	113.02
1	G	6505	GLU	N-CA-C	-5.53	104.89	111.69
1	B	1526	ILE	N-CA-C	-5.52	105.34	110.53
1	G	6494	ALA	N-CA-C	-5.49	105.21	111.14
1	G	6379	ASP	N-CA-C	-5.49	105.20	111.07
1	F	5366	THR	N-CA-C	-5.46	100.21	108.67
1	F	5457	GLY	N-CA-C	-5.43	105.46	114.48
1	G	6160	VAL	N-CA-C	5.42	117.19	108.85
1	C	2205	VAL	N-CA-C	-5.41	107.45	112.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	6537	ASN	N-CA-C	-5.41	106.53	113.02
1	A	60	THR	N-CA-C	-5.39	102.47	110.46
1	H	7146	ILE	N-CA-C	-5.38	105.08	110.30
1	B	1252	ILE	N-CA-C	5.38	114.54	106.42
1	B	1340	LYS	N-CA-C	-5.38	106.72	113.28
1	E	4139	ASP	N-CA-C	-5.37	106.03	112.59
1	H	7470	ILE	N-CA-C	5.37	120.50	109.34
1	G	6212	LEU	N-CA-C	-5.36	105.51	111.36
1	B	1141	GLY	N-CA-C	-5.36	107.71	115.27
1	D	3387	SER	N-CA-C	-5.34	105.50	112.23
1	B	1300	LYS	CA-C-N	5.33	126.50	119.84
1	B	1300	LYS	C-N-CA	5.33	126.50	119.84
1	A	275	THR	N-CA-C	5.33	117.78	109.52
1	D	3532	GLU	N-CA-C	-5.32	104.90	111.33
1	H	7439	GLY	N-CA-C	-5.32	107.88	115.64
1	D	3125	HIS	N-CA-C	-5.31	104.39	112.04
1	G	6098	ARG	N-CA-C	-5.28	105.17	111.03
1	F	5470	ILE	N-CA-C	5.28	120.31	109.34
1	F	5351	VAL	N-CA-C	5.26	116.72	109.46
1	H	7157	ALA	N-CA-C	5.25	117.47	108.90
1	B	1512	LEU	N-CA-C	-5.25	106.46	112.92
1	F	5334	GLU	N-CA-C	-5.25	104.81	111.11
1	C	2407	MSE	N-CA-C	-5.24	104.82	111.11
1	D	3172	LEU	N-CA-C	-5.24	107.26	113.97
1	H	7447	SER	CA-C-N	5.23	125.22	119.89
1	H	7447	SER	C-N-CA	5.23	125.22	119.89
1	G	6162	ASP	N-CA-C	-5.22	106.30	113.30
1	G	6304	GLU	N-CA-C	5.22	119.14	112.87
1	G	6406	ALA	N-CA-C	-5.22	105.48	111.07
1	B	1565	LEU	N-CA-C	-5.22	107.58	114.31
1	G	6243	THR	N-CA-C	-5.22	105.56	112.34
1	C	2446	GLY	N-CA-C	-5.21	106.39	113.37
1	E	4403	VAL	N-CA-C	-5.21	104.89	110.36
1	H	7550	ALA	N-CA-C	-5.20	105.51	111.07
1	G	6072	LEU	N-CA-C	-5.18	106.06	112.38
1	A	547	GLU	N-CA-C	-5.18	106.04	112.93
1	B	1187	TYR	N-CA-C	-5.18	102.83	111.37
1	F	5450	GLY	CA-C-N	5.18	126.31	119.84
1	F	5450	GLY	C-N-CA	5.18	126.31	119.84
1	D	3079	LEU	N-CA-C	-5.17	106.97	113.28
1	G	6445	SER	N-CA-C	5.17	117.32	108.90
1	H	7410	ILE	N-CA-C	5.17	120.09	109.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	212	LEU	N-CA-C	-5.15	104.73	111.02
1	H	7506	GLU	N-CA-C	-5.15	105.78	111.71
1	F	5424	ALA	N-CA-C	-5.14	107.06	113.38
1	F	5559	ARG	N-CA-C	5.13	117.92	109.72
1	F	5323	ILE	N-CA-C	-5.11	106.09	110.74
1	A	481	CYS	N-CA-C	-5.11	107.09	113.38
1	E	4307	ILE	N-CA-C	5.11	115.67	108.36
1	F	5387	SER	N-CA-C	-5.11	104.65	111.24
1	F	5565	LEU	N-CA-C	-5.11	107.02	114.12
1	D	3533	TYR	N-CA-C	-5.10	105.41	110.97
1	G	6492	LEU	N-CA-C	-5.09	103.01	111.37
1	E	4355	LYS	N-CA-C	5.08	116.82	111.28
1	G	6310	LEU	N-CA-C	-5.08	107.08	113.28
1	A	398	LEU	N-CA-C	-5.08	107.11	113.72
1	A	53	LEU	N-CA-C	-5.08	107.06	114.12
1	H	7202	CYS	N-CA-C	-5.08	102.68	110.14
1	B	1440	ARG	N-CA-C	-5.07	107.48	113.97
1	G	6194	ARG	CA-C-N	5.07	126.17	119.84
1	G	6194	ARG	C-N-CA	5.07	126.17	119.84
1	D	3443	PHE	N-CA-C	5.06	118.02	110.52
1	F	5123	TYR	N-CA-C	-5.06	103.36	110.50
1	C	2077	SER	CA-C-N	5.06	124.67	119.56
1	C	2077	SER	C-N-CA	5.06	124.67	119.56
1	B	1327	MSE	N-CA-C	-5.05	103.08	111.37
1	G	6297	VAL	N-CA-C	-5.05	107.22	111.56
1	E	4208	ASP	N-CA-C	-5.04	108.15	114.56
1	D	3539	MSE	N-CA-C	-5.03	107.53	113.97
1	D	3486	ILE	N-CA-C	5.03	115.00	107.51
1	G	6289	ALA	N-CA-C	-5.03	107.00	113.23
1	D	3226	ASP	N-CA-C	-5.02	101.57	109.25
1	E	4273	TYR	N-CA-C	5.02	114.66	108.19
1	A	506	GLU	N-CA-C	-5.01	105.94	111.71
1	C	2492	LEU	N-CA-C	-5.00	105.83	111.28
1	E	4339	LYS	N-CA-C	-5.00	106.87	113.17

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	187	TYR	Sidechain

5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	4344	0	4372	630	0
1	B	4344	0	4372	651	0
1	C	4344	0	4372	624	0
1	D	4344	0	4372	686	0
1	E	4344	0	4372	560	0
1	F	4344	0	4372	532	0
1	G	4344	0	4372	684	0
1	H	4344	0	4372	599	0
2	A	1	0	0	0	0
2	B	1	0	0	0	0
2	C	1	0	0	0	0
2	D	1	0	0	0	0
2	E	1	0	0	0	0
2	F	1	0	0	0	0
2	G	1	0	0	0	0
2	H	1	0	0	0	0
3	A	88	0	52	3	0
3	B	88	0	52	5	0
3	C	88	0	52	2	0
3	D	88	0	52	4	0
3	E	88	0	52	3	0
3	F	88	0	52	3	0
3	G	88	0	52	4	0
3	H	88	0	52	3	0
4	A	9	0	0	3	0
4	B	6	0	0	1	0
4	C	11	0	0	1	0
4	D	6	0	0	6	0
4	E	6	0	0	0	0
4	F	10	0	0	1	0
4	G	5	0	0	3	0
4	H	10	0	0	1	0
All	All	35527	0	35392	4886	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 69.

All (4886) close contacts within the same asymmetric unit are listed below, sorted by their clash

magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3061:GLN:HA	1:D:3064:GLN:HE21	1.04	1.18
1:D:3388:THR:HG23	1:D:3415:VAL:HB	1.27	1.15
1:H:7210:ILE:HG22	1:H:7214:LYS:HZ1	1.01	1.14
1:H:7388:THR:HG23	1:H:7415:VAL:HB	1.27	1.14
1:D:3253:GLN:HE22	1:D:3255:GLU:HG2	1.13	1.13
1:D:3263:PHE:HA	4:D:8022:HOH:O	1.48	1.13
1:A:61:GLN:HA	1:A:64:GLN:HE21	1.15	1.10
1:H:7210:ILE:HG22	1:H:7214:LYS:NZ	1.66	1.10
1:D:3041:THR:HG23	1:D:3044:GLU:HG3	1.33	1.09
1:D:3177:MSE:HE1	1:D:3200:PRO:HB2	1.34	1.09
1:A:243:THR:HB	1:A:248:ARG:HD2	1.17	1.09
1:C:2197:ARG:HG2	1:C:2197:ARG:HH11	1.09	1.08
1:D:3437:THR:HG21	1:D:3441:CYS:HB3	1.35	1.08
1:G:6240:LYS:HG3	1:G:6248:ARG:HH22	1.19	1.07
1:H:7415:VAL:HG13	1:H:7442:LEU:HB2	1.36	1.07
1:D:3144:ARG:NH1	1:D:3244:ASP:HB3	1.69	1.06
1:G:6205:VAL:HG12	1:G:6226:ASP:HB3	1.39	1.05
1:E:4177:MSE:HE1	1:E:4200:PRO:HB2	1.38	1.04
1:F:5177:MSE:HE1	1:F:5200:PRO:HB2	1.40	1.03
1:C:2227:ARG:HG2	1:C:2227:ARG:HH11	1.22	1.03
1:G:6317:LEU:H	1:G:6317:LEU:HD12	1.23	1.03
1:B:1177:MSE:O	1:B:1180:PRO:HD2	1.58	1.03
1:G:6160:VAL:HG12	1:G:6201:VAL:HB	1.42	1.01
1:H:7325:MSE:HE1	1:H:7489:SER:HA	1.41	1.01
1:G:6323:ILE:HG22	1:G:6327:MSE:HE2	1.40	1.01
1:H:7466:ASN:HB3	1:H:7468:VAL:HG12	1.40	1.01
1:C:2128:ARG:HG2	1:C:2128:ARG:HH11	1.23	1.01
1:B:1166:ILE:HD12	1:B:1179:ILE:HG13	1.41	1.01
1:D:3369:ALA:HB1	1:D:3373:ILE:HD11	1.43	1.01
1:B:1388:THR:HG23	1:B:1415:VAL:HB	1.43	1.00
1:F:5388:THR:HG23	1:F:5415:VAL:HB	1.42	1.00
1:H:7408:ALA:HB2	1:H:7437:THR:HG22	1.43	1.00
1:C:2104:ILE:HG13	1:C:2108:MSE:HE2	1.43	1.00
1:F:5453:LYS:HB2	1:F:5459:VAL:HG13	1.39	1.00
1:G:6177:MSE:HE1	1:G:6200:PRO:HB2	1.40	1.00
1:D:3421:ASN:HA	1:D:3422:PRO:O	1.61	1.00
1:G:6243:THR:HB	1:G:6248:ARG:HD2	1.43	0.99
1:H:7177:MSE:HE1	1:H:7200:PRO:HB2	1.44	0.99
1:B:1338:GLN:HG3	1:B:1364:PRO:O	1.62	0.98
1:F:5572:TRP:HB2	1:H:7042:LEU:HD21	1.46	0.98
1:E:4240:LYS:HG3	1:E:4248:ARG:HH22	1.27	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1317:LEU:H	1:B:1317:LEU:HD12	1.28	0.98
1:B:1210:ILE:HA	1:B:1213:LEU:HD12	1.46	0.98
1:D:3065:ALA:HA	1:D:3099:ILE:HD11	1.44	0.97
1:F:5269:TYR:HB3	1:F:5273:TYR:HD1	1.27	0.97
1:G:6327:MSE:HE1	1:G:6341:ILE:HD11	1.41	0.97
1:A:454:LEU:HD13	1:A:458:ARG:NH1	1.79	0.97
1:D:3374:PRO:HD3	1:D:3383:ILE:HD12	1.47	0.96
1:C:2306:LYS:HB3	1:C:2386:PRO:HA	1.46	0.96
1:H:7377:PHE:HZ	1:H:7389:ILE:HD11	1.30	0.96
1:B:1429:THR:HG23	1:B:1432:GLU:HG3	1.48	0.96
1:F:5128:ARG:HG2	1:F:5128:ARG:HH11	1.31	0.96
1:B:1298:ILE:HD11	1:B:1442:LEU:HD11	1.48	0.95
1:F:5109:PRO:HA	1:F:5113:THR:O	1.66	0.95
1:F:5317:LEU:H	1:F:5317:LEU:HD12	1.30	0.95
1:G:6103:ASP:HB3	1:G:6107:LEU:HD23	1.47	0.95
1:B:1227:ARG:HG2	1:B:1227:ARG:HH11	1.32	0.95
1:E:4174:VAL:HG23	1:E:4219:MSE:HE3	1.48	0.95
1:A:298:ILE:HD11	1:A:442:LEU:HD11	1.49	0.95
1:G:6454:LEU:HD12	1:G:6458:ARG:HB3	1.45	0.95
1:G:6144:ARG:NH1	1:G:6244:ASP:HB3	1.82	0.95
1:D:3218:TYR:HE2	4:D:8046:HOH:O	1.49	0.94
1:D:3027:PRO:HA	1:D:3030:LEU:HB2	1.47	0.94
1:C:2317:LEU:H	1:C:2317:LEU:HD12	1.30	0.94
1:E:4360:SER:HA	1:E:4363:GLU:OE1	1.67	0.94
1:A:419:LEU:HD22	1:A:419:LEU:H	1.31	0.94
1:D:3283:THR:O	1:D:3286:VAL:HG23	1.67	0.94
1:B:1306:LYS:HB3	1:B:1386:PRO:HA	1.50	0.94
1:D:3210:ILE:HA	1:D:3213:LEU:HD12	1.49	0.93
1:B:1466:ASN:HB3	1:B:1468:VAL:HG12	1.50	0.93
1:G:6421:ASN:HA	1:G:6422:PRO:O	1.67	0.93
1:B:1300:LYS:HZ1	1:B:1305:HIS:HA	1.31	0.93
1:E:4453:LYS:HG2	1:E:4459:VAL:HG13	1.50	0.93
1:A:327:MSE:HE3	1:A:337:ALA:HB1	1.49	0.93
1:A:317:LEU:H	1:A:317:LEU:HD12	1.30	0.93
1:B:1402:ASP:HA	1:B:1405:ARG:HD2	1.50	0.92
1:G:6360:SER:HA	1:G:6363:GLU:HG2	1.50	0.92
1:E:4421:ASN:HA	1:E:4422:PRO:O	1.69	0.92
1:B:1399:PHE:HA	1:B:1403:VAL:HG11	1.50	0.92
1:F:5453:LYS:HE3	1:F:5457:GLY:HA2	1.52	0.92
1:A:466:ASN:HB3	1:A:468:VAL:HG12	1.52	0.92
1:D:3075:MSE:HB3	1:D:3081:LYS:HD3	1.50	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4407:MSE:HA	1:E:4410:ILE:HD12	1.51	0.92
1:E:4454:LEU:HD12	1:E:4458:ARG:O	1.69	0.92
1:G:6038:MSE:HE3	1:G:6055:PRO:HG2	1.52	0.91
1:A:128:ARG:HG2	1:A:128:ARG:HH11	1.36	0.91
1:D:3156:LYS:HB3	1:D:3479:ILE:HD12	1.48	0.91
1:G:6388:THR:HG23	1:G:6415:VAL:HB	1.52	0.91
1:G:6489:SER:HG	1:G:6533:TYR:HH	1.17	0.91
1:G:6079:LEU:HD13	1:G:6118:LEU:HD22	1.53	0.91
1:H:7177:MSE:CE	1:H:7200:PRO:HB2	2.00	0.91
1:F:5559:ARG:HB3	1:F:5561:GLU:HG2	1.52	0.91
1:B:1240:LYS:HG3	1:B:1248:ARG:HH22	1.34	0.91
1:G:6416:ILE:HD13	1:G:6416:ILE:H	1.33	0.91
1:E:4061:GLN:HA	1:E:4064:GLN:HE21	1.35	0.90
1:F:5137:ILE:HA	1:F:5234:LEU:CD2	2.01	0.90
1:F:5179:ILE:HB	1:F:5180:PRO:HD3	1.52	0.90
1:D:3243:THR:HB	1:D:3248:ARG:HD2	1.51	0.90
1:G:6559:ARG:HB3	1:G:6561:GLU:HG2	1.53	0.90
1:E:4026:LYS:HA	1:E:4029:MSE:HE2	1.53	0.90
1:A:402:ASP:HA	1:A:405:ARG:HD2	1.54	0.90
1:A:527:ALA:O	1:A:531:THR:HG23	1.72	0.90
1:C:2210:ILE:HA	1:C:2213:LEU:HD12	1.54	0.90
1:C:2056:PRO:HG2	1:D:3220:GLY:HA2	1.53	0.90
1:G:6354:ARG:HE	1:G:6356:ALA:HB3	1.37	0.90
1:G:6404:ILE:HB	1:G:6436:LEU:HD23	1.54	0.90
1:C:2261:ASN:H	1:C:2261:ASN:HD22	1.15	0.89
1:H:7327:MSE:HE3	1:H:7337:ALA:HB1	1.55	0.89
1:D:3061:GLN:HA	1:D:3064:GLN:NE2	1.87	0.89
1:G:6253:GLN:NE2	1:G:6278:ASP:HB2	1.87	0.89
1:H:7243:THR:HB	1:H:7248:ARG:HD2	1.55	0.89
1:H:7369:ALA:HB1	1:H:7373:ILE:HD11	1.55	0.89
1:A:451:PRO:HA	1:A:460:PHE:O	1.71	0.89
1:E:4350:LEU:HD22	1:E:4354:ARG:NH1	1.87	0.89
1:F:5309:PHE:HB2	1:F:5343:MSE:HG2	1.55	0.89
1:A:401:PRO:HA	1:A:404:ILE:HD12	1.54	0.89
1:B:1261:ASN:H	1:B:1261:ASN:ND2	1.60	0.88
1:C:2453:LYS:HA	1:C:2458:ARG:O	1.73	0.88
1:D:3402:ASP:HA	1:D:3405:ARG:HD2	1.55	0.88
1:F:5137:ILE:HA	1:F:5234:LEU:HD21	1.55	0.88
1:C:2439:GLY:HA3	1:C:2460:PHE:HE2	1.34	0.88
1:G:6043:GLN:HG2	1:G:6566:LEU:HD11	1.56	0.88
1:C:2332:LEU:HD23	1:C:2336:GLU:HG3	1.53	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5303:SER:HA	1:F:5340:LYS:HZ2	1.37	0.88
1:B:1204:ASP:OD1	1:B:1221:LEU:HB2	1.73	0.88
1:A:399:PHE:HB2	1:A:427:GLU:O	1.74	0.88
1:D:3319:ILE:HG22	1:D:3323:ILE:HD11	1.54	0.88
1:A:243:THR:HB	1:A:248:ARG:CD	2.02	0.87
1:B:1253:GLN:HG3	1:B:1276:PHE:CZ	2.08	0.87
1:E:4113:THR:HA	1:E:4116:VAL:HG12	1.55	0.87
1:F:5251:LEU:HD12	1:F:5252:ILE:N	1.88	0.87
1:A:559:ARG:HG3	1:A:561:GLU:HG2	1.56	0.87
1:F:5360:SER:HA	1:F:5363:GLU:OE1	1.72	0.87
1:A:61:GLN:HA	1:A:64:GLN:NE2	1.90	0.87
1:C:2197:ARG:HG2	1:C:2197:ARG:NH1	1.85	0.86
1:C:2315:ALA:HB3	1:C:2392:VAL:HG11	1.57	0.86
1:C:2051:GLN:HA	1:C:2051:GLN:HE21	1.40	0.86
1:B:1394:GLY:O	1:B:1425:GLN:HG3	1.74	0.86
1:G:6123:TYR:HD2	1:G:6219:MSE:HE1	1.37	0.86
1:G:6177:MSE:CE	1:G:6200:PRO:HB2	2.05	0.86
1:H:7179:ILE:HB	1:H:7180:PRO:HD3	1.55	0.86
1:D:3300:LYS:HZ1	1:D:3305:HIS:HA	1.41	0.86
1:E:4072:LEU:HA	1:E:4075:MSE:HE3	1.57	0.86
1:C:2307:ILE:HG13	1:C:2388:THR:HB	1.57	0.86
1:G:6493:GLU:HA	1:G:6496:LYS:HD3	1.57	0.86
1:D:3097:TYR:O	1:D:3101:GLN:HG3	1.76	0.86
1:E:4531:THR:HA	1:E:4534:LEU:HD12	1.56	0.85
1:H:7043:GLN:HG2	1:H:7566:LEU:HD11	1.57	0.85
1:E:4164:GLU:HG3	1:E:4225:ARG:CZ	2.06	0.85
1:E:4298:ILE:HD11	1:E:4442:LEU:HD11	1.55	0.85
1:G:6354:ARG:NE	1:G:6356:ALA:HB3	1.91	0.85
1:G:6478:VAL:HG12	1:G:6479:ILE:HD13	1.57	0.85
1:G:6086:MSE:HE2	1:G:6086:MSE:HA	1.58	0.85
1:H:7109:PRO:HA	1:H:7113:THR:O	1.76	0.85
1:C:2219:MSE:HG2	1:D:3038:MSE:HE1	1.58	0.85
1:B:1401:PRO:HA	1:B:1404:ILE:HD12	1.59	0.85
1:C:2382:ASN:O	1:C:2385:LYS:HG3	1.77	0.85
1:H:7210:ILE:CG2	1:H:7214:LYS:HZ1	1.89	0.85
1:A:51:GLN:HE21	1:A:51:GLN:HA	1.40	0.85
1:F:5057:LYS:C	1:F:5058:ILE:HD13	2.00	0.85
1:A:428:CYS:SG	1:A:429:THR:N	2.50	0.85
1:H:7182:GLY:O	1:H:7185:CYS:HB2	1.76	0.85
1:C:2438:GLU:HB2	1:C:2440:ARG:HG3	1.59	0.85
1:E:4261:ASN:HD22	1:E:4261:ASN:H	1.23	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5354:ARG:HE	1:F:5356:ALA:HB3	1.42	0.85
1:G:6086:MSE:HA	1:G:6086:MSE:CE	2.07	0.85
1:D:3144:ARG:HH12	1:D:3244:ASP:HB3	1.41	0.84
1:C:2128:ARG:HH11	1:C:2128:ARG:CG	1.89	0.84
1:F:5456:ASP:HB2	1:F:5458:ARG:HD3	1.59	0.84
1:A:103:ASP:HB3	1:A:107:LEU:HD22	1.58	0.84
1:B:1351:VAL:HG21	1:B:1369:ALA:HA	1.58	0.84
1:A:454:LEU:H	1:A:454:LEU:HD12	1.39	0.84
1:D:3041:THR:HG23	1:D:3044:GLU:CG	2.06	0.84
1:A:408:ALA:HA	1:A:414:PRO:HG3	1.59	0.84
1:E:4116:VAL:HG21	1:E:4179:ILE:HD13	1.60	0.84
1:H:7266:LEU:O	1:H:7270:ARG:HB3	1.78	0.84
1:A:109:PRO:HA	1:A:113:THR:O	1.77	0.84
1:D:3043:GLN:HG2	1:D:3566:LEU:HD11	1.59	0.84
1:E:4261:ASN:H	1:E:4261:ASN:ND2	1.72	0.83
1:E:4400:THR:HG23	1:E:4403:VAL:HG23	1.57	0.83
1:B:1503:THR:HG23	1:B:1506:GLU:OE1	1.76	0.83
1:C:2351:VAL:HG21	1:C:2370:PRO:HD3	1.60	0.83
1:D:3253:GLN:NE2	1:D:3255:GLU:HG2	1.92	0.83
1:D:3466:ASN:HB3	1:D:3468:VAL:HG12	1.59	0.83
1:D:3471:PHE:CD2	1:D:3472:PRO:HD3	2.13	0.83
1:B:1335:GLN:NE2	1:B:1339:LYS:HG3	1.94	0.83
1:H:7394:GLY:HA2	1:H:7420:SER:HB3	1.61	0.83
1:B:1253:GLN:NE2	1:B:1255:GLU:HG2	1.94	0.83
1:C:2207:THR:O	1:C:2224:LYS:HA	1.79	0.83
1:F:5322:LEU:HD11	1:F:5492:LEU:HB2	1.61	0.83
1:C:2416:ILE:HD13	1:C:2416:ILE:H	1.43	0.83
1:H:7388:THR:CG2	1:H:7415:VAL:HB	2.08	0.83
1:A:276:PHE:HB2	1:A:281:GLN:NE2	1.94	0.82
1:A:343:MSE:O	1:A:350:LEU:HB2	1.79	0.82
1:B:1160:VAL:HG13	1:B:1201:VAL:HB	1.60	0.82
1:B:1503:THR:OG1	1:B:1506:GLU:HB2	1.78	0.82
1:C:2419:LEU:HD22	1:C:2419:LEU:N	1.94	0.82
1:D:3320:ALA:HA	1:D:3323:ILE:HD12	1.61	0.82
1:F:5487:SER:O	1:F:5490:VAL:HG23	1.78	0.82
1:G:6352:LYS:HG3	1:G:6368:SER:HA	1.60	0.82
1:G:6454:LEU:HD11	1:G:6460:PHE:CE2	2.14	0.82
1:B:1307:ILE:HG12	1:B:1388:THR:HB	1.62	0.82
1:E:4428:CYS:SG	1:E:4429:THR:N	2.51	0.82
1:F:5253:GLN:HG3	1:F:5276:PHE:CZ	2.14	0.82
1:G:6240:LYS:CG	1:G:6248:ARG:HH22	1.91	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:59:GLU:HG2	1:A:63:ILE:HG21	1.61	0.82
1:D:3177:MSE:O	1:D:3180:PRO:HD2	1.78	0.82
1:A:518:ASN:O	1:A:522:VAL:HG23	1.80	0.82
1:E:4122:GLN:O	1:E:4125:HIS:HB2	1.78	0.82
1:B:1389:ILE:HG22	1:B:1416:ILE:HA	1.59	0.82
1:D:3342:TRP:HZ3	1:D:3351:VAL:HG23	1.42	0.82
1:E:4359:ASP:OD2	1:E:4362:GLN:HG3	1.80	0.82
1:H:7060:THR:HG23	1:H:7063:ILE:HD11	1.59	0.82
1:C:2388:THR:HG23	1:C:2415:VAL:HB	1.61	0.82
1:D:3257:PHE:HB3	1:D:3262:ALA:HB2	1.60	0.82
1:H:7086:MSE:HE2	1:H:7086:MSE:HA	1.62	0.81
1:C:2413:ARG:HA	1:C:2440:ARG:O	1.81	0.81
1:F:5528:ILE:HD13	1:F:5550:ALA:HA	1.63	0.81
1:G:6267:ARG:HG3	1:G:6267:ARG:HH11	1.46	0.81
1:D:3468:VAL:HA	1:D:3471:PHE:CE2	2.15	0.81
1:D:3526:ILE:O	1:D:3530:VAL:HG23	1.80	0.81
1:F:5416:ILE:HD13	1:F:5442:LEU:O	1.79	0.81
1:D:3518:ASN:HB3	1:D:3521:GLU:OE2	1.80	0.81
1:E:4466:ASN:HB3	1:E:4468:VAL:HG12	1.62	0.81
1:A:402:ASP:O	1:A:405:ARG:HG2	1.80	0.81
1:A:419:LEU:HD22	1:A:419:LEU:N	1.96	0.81
1:D:3177:MSE:HE2	1:D:3181:VAL:HG22	1.63	0.81
1:D:3389:ILE:HG22	1:D:3416:ILE:HG22	1.61	0.81
1:F:5194:ARG:HB2	1:F:5197:ARG:HG2	1.62	0.81
1:H:7415:VAL:HG22	1:H:7442:LEU:HD12	1.62	0.81
1:G:6126:ILE:HG13	4:G:8062:HOH:O	1.80	0.81
1:C:2109:PRO:HA	1:C:2113:THR:O	1.81	0.80
1:C:2432:GLU:HA	1:C:2436:LEU:HD13	1.61	0.80
1:E:4166:ILE:HG21	1:E:4172:LEU:HD12	1.60	0.80
1:E:4308:LEU:HB3	1:E:4389:ILE:CD1	2.11	0.80
1:A:392:VAL:HG23	1:A:419:LEU:HD23	1.62	0.80
1:D:3072:LEU:HD11	1:D:3081:LYS:HB3	1.63	0.80
1:G:6408:ALA:HB2	1:G:6437:THR:HG22	1.63	0.80
1:H:7478:VAL:HG13	1:H:7483:THR:HB	1.63	0.80
1:B:1061:GLN:HA	1:B:1064:GLN:HE21	1.47	0.80
1:C:2487:SER:O	1:C:2490:VAL:HG23	1.82	0.80
1:C:2569:VAL:HG12	1:C:2570:TYR:N	1.97	0.80
1:G:6490:VAL:HG22	1:G:6533:TYR:HE2	1.47	0.80
1:D:3378:GLU:HG3	1:D:3379:ASP:N	1.95	0.80
1:G:6024:LYS:HA	1:G:6028:LEU:HD22	1.61	0.80
1:A:378:GLU:HB2	1:A:403:VAL:HG23	1.63	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1392:VAL:HG23	1:B:1419:LEU:HD23	1.64	0.80
1:B:1502:LEU:HD12	1:B:1506:GLU:HB3	1.64	0.80
1:C:2060:THR:O	1:C:2064:GLN:HG3	1.82	0.80
1:B:1413:ARG:HH21	1:B:1440:ARG:C	1.90	0.80
1:C:2038:MSE:CB	1:C:2059:GLU:HG3	2.12	0.80
1:C:2419:LEU:HD22	1:C:2419:LEU:H	1.47	0.80
1:B:1271:GLU:HA	1:B:1271:GLU:OE2	1.82	0.80
1:C:2422:PRO:C	1:C:2424:ALA:H	1.89	0.80
1:D:3471:PHE:CG	1:D:3472:PRO:HD3	2.17	0.80
1:G:6369:ALA:HB1	1:G:6373:ILE:HD11	1.62	0.79
1:H:7548:ASP:CG	1:H:7551:LYS:HB2	2.06	0.79
1:B:1452:VAL:O	1:B:1459:VAL:HA	1.82	0.79
1:C:2123:TYR:HD2	1:C:2219:MSE:HE1	1.47	0.79
1:G:6320:ALA:HB1	1:G:6365:PHE:CE2	2.17	0.79
1:C:2343:MSE:O	1:C:2350:LEU:HB2	1.82	0.79
1:E:4374:PRO:HG3	1:E:4380:ALA:HA	1.65	0.79
1:F:5354:ARG:HG2	1:F:5358:ILE:HD11	1.64	0.79
1:H:7526:ILE:O	1:H:7530:VAL:HG23	1.82	0.79
1:F:5166:ILE:HD12	1:F:5179:ILE:HG13	1.65	0.79
1:F:5315:ALA:O	1:F:5319:ILE:HD12	1.82	0.79
1:H:7412:GLU:HA	1:H:7440:ARG:NH1	1.98	0.79
1:A:128:ARG:HG3	1:B:1091:ARG:NH1	1.98	0.79
1:A:512:LEU:N	1:A:512:LEU:HD12	1.98	0.79
1:C:2569:VAL:HG12	1:C:2570:TYR:H	1.45	0.79
1:D:3239:MSE:HE3	1:D:3273:TYR:HD1	1.48	0.79
1:D:3531:THR:HA	1:D:3534:LEU:HD12	1.63	0.79
1:G:6253:GLN:HG3	1:G:6276:PHE:CZ	2.18	0.79
1:C:2466:ASN:HB3	1:C:2468:VAL:HG12	1.65	0.79
1:F:5128:ARG:HG2	1:F:5128:ARG:NH1	1.94	0.79
1:C:2227:ARG:HH11	1:C:2227:ARG:CG	1.95	0.79
1:F:5515:PRO:HG2	1:F:5518:ASN:OD1	1.83	0.79
1:G:6413:ARG:HH21	1:G:6440:ARG:C	1.91	0.78
1:F:5401:PRO:HA	1:F:5404:ILE:HD12	1.64	0.78
1:A:243:THR:HG22	1:A:248:ARG:HA	1.64	0.78
1:C:2041:THR:HG23	1:C:2044:GLU:OE2	1.84	0.78
1:D:3477:ALA:HB1	1:D:3531:THR:HG22	1.64	0.78
1:C:2298:ILE:HD11	1:C:2442:LEU:HD11	1.65	0.78
1:D:3372:SER:HB2	1:D:3383:ILE:HD13	1.64	0.78
1:D:3468:VAL:HA	1:D:3471:PHE:HE2	1.48	0.78
1:F:5120:CYS:O	1:F:5123:TYR:HB2	1.84	0.78
1:G:6401:PRO:HA	1:G:6436:LEU:HD21	1.65	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:7310:LEU:HD12	1:H:7310:LEU:O	1.83	0.78
1:H:7327:MSE:HE1	1:H:7337:ALA:O	1.83	0.78
1:A:288:LEU:HA	1:A:291:LEU:HB2	1.63	0.78
1:C:2210:ILE:HG22	1:C:2214:LYS:HD2	1.66	0.78
1:B:1421:ASN:HA	1:B:1422:PRO:O	1.83	0.78
1:D:3298:ILE:HD11	1:D:3442:LEU:HD11	1.66	0.78
1:F:5323:ILE:HG22	1:F:5327:MSE:HE2	1.64	0.78
1:B:1177:MSE:HE1	1:B:1200:PRO:HB2	1.66	0.78
1:C:2408:ALA:HB2	1:C:2437:THR:HG22	1.64	0.78
1:C:2499:THR:C	1:C:2501:GLN:H	1.92	0.78
1:D:3177:MSE:O	1:D:3181:VAL:HG23	1.84	0.78
1:E:4094:LYS:HD3	1:E:4560:SER:O	1.84	0.78
1:G:6103:ASP:HB3	1:G:6107:LEU:CD2	2.13	0.78
1:B:1109:PRO:HA	1:B:1113:THR:O	1.84	0.78
1:B:1166:ILE:HD13	1:B:1256:ASP:HB3	1.64	0.78
1:F:5122:GLN:O	1:F:5126:ILE:HG12	1.84	0.78
1:G:6268:LYS:HG2	1:G:6269:TYR:CE2	2.19	0.78
1:H:7498:LEU:O	1:H:7501:GLN:HB2	1.83	0.78
1:B:1283:THR:O	1:B:1286:VAL:HG23	1.84	0.78
1:C:2067:ARG:HB2	1:D:3217:PHE:HE1	1.49	0.78
1:F:5269:TYR:HB3	1:F:5273:TYR:CD1	2.18	0.78
1:A:350:LEU:HD22	1:A:354:ARG:NH1	1.99	0.78
1:B:1527:ALA:O	1:B:1531:THR:HG23	1.84	0.78
1:F:5320:ALA:O	1:F:5323:ILE:HB	1.84	0.78
1:B:1269:TYR:HB3	1:B:1273:TYR:HD1	1.49	0.77
1:C:2038:MSE:HB2	1:C:2059:GLU:HG3	1.64	0.77
1:F:5194:ARG:HH21	1:F:5197:ARG:HE	1.29	0.77
1:E:4061:GLN:HA	1:E:4064:GLN:NE2	1.98	0.77
1:E:4210:ILE:HG22	1:E:4214:LYS:HD2	1.66	0.77
1:G:6144:ARG:HH12	1:G:6244:ASP:HB3	1.44	0.77
1:A:454:LEU:HD13	1:A:458:ARG:HH11	1.46	0.77
1:B:1302:ILE:HA	1:B:1305:HIS:ND1	2.00	0.77
1:C:2339:LYS:HA	1:C:2367:HIS:CE1	2.19	0.77
1:D:3183:LYS:HG2	1:D:3187:TYR:HE1	1.49	0.77
1:H:7325:MSE:HE2	1:H:7492:LEU:HD13	1.66	0.77
1:B:1419:LEU:H	1:B:1419:LEU:HD22	1.50	0.77
1:C:2358:ILE:HG22	1:C:2362:GLN:HB3	1.65	0.77
1:E:4024:LYS:HA	1:E:4028:LEU:HD22	1.65	0.77
1:E:4354:ARG:HG3	1:E:4358:ILE:HD11	1.67	0.77
1:F:5432:GLU:O	1:F:5436:LEU:HB2	1.85	0.77
1:G:6205:VAL:CG1	1:G:6226:ASP:HB3	2.14	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:6210:ILE:HA	1:G:6213:LEU:HD12	1.64	0.77
1:G:6300:LYS:HD2	1:G:6304:GLU:CD	2.10	0.77
1:G:6351:VAL:HG21	1:G:6369:ALA:HA	1.67	0.77
1:H:7548:ASP:OD2	1:H:7551:LYS:HB2	1.85	0.77
1:B:1376:THR:HG22	1:B:1379:ASP:H	1.48	0.77
1:C:2376:THR:HG22	1:C:2378:GLU:H	1.49	0.77
1:E:4177:MSE:HE2	1:E:4181:VAL:HG22	1.67	0.77
1:B:1360:SER:O	1:B:1363:GLU:HG2	1.85	0.77
1:C:2030:LEU:HD13	1:D:3030:LEU:O	1.84	0.77
1:E:4382:ASN:O	1:E:4385:LYS:HD3	1.85	0.77
1:H:7325:MSE:HB3	1:H:7492:LEU:HD13	1.64	0.77
1:B:1166:ILE:HD13	1:B:1256:ASP:CB	2.15	0.77
1:C:2416:ILE:HD13	1:C:2442:LEU:O	1.85	0.77
1:C:2294:ALA:O	1:C:2297:VAL:HG22	1.85	0.76
1:D:3072:LEU:HA	1:D:3075:MSE:HE3	1.67	0.76
1:A:564:SER:C	1:A:565:LEU:HD23	2.10	0.76
1:C:2088:ILE:O	1:C:2096:PHE:HB2	1.85	0.76
1:D:3351:VAL:HG21	1:D:3369:ALA:HA	1.66	0.76
1:F:5453:LYS:HA	1:F:5458:ARG:O	1.86	0.76
1:G:6025:GLY:O	1:G:6028:LEU:HB2	1.86	0.76
1:B:1310:LEU:HD21	1:B:1398:LEU:HB2	1.66	0.76
1:D:3243:THR:HB	1:D:3248:ARG:CD	2.15	0.76
1:B:1138:SER:HB3	1:C:2572:TRP:CE2	2.21	0.76
1:D:3205:VAL:O	1:D:3225:ARG:HA	1.85	0.76
1:A:283:THR:O	1:A:286:VAL:HG23	1.86	0.76
1:D:3061:GLN:CA	1:D:3064:GLN:HE21	1.92	0.76
1:D:3378:GLU:HG3	1:D:3379:ASP:H	1.50	0.76
1:E:4225:ARG:HG2	1:E:4225:ARG:HH11	1.51	0.76
1:G:6379:ASP:O	1:G:6383:ILE:HG13	1.86	0.76
1:G:6488:ASP:HA	1:G:6491:PHE:HD1	1.50	0.76
1:H:7343:MSE:HB3	1:H:7350:LEU:HD23	1.66	0.76
1:A:210:ILE:HG22	1:A:214:LYS:HD2	1.67	0.76
1:D:3529:LYS:O	1:D:3532:GLU:HG3	1.86	0.76
1:F:5352:LYS:HG2	1:F:5367:HIS:C	2.10	0.76
1:G:6490:VAL:HG22	1:G:6533:TYR:CE2	2.19	0.76
1:F:5072:LEU:HD11	1:F:5081:LYS:HB3	1.65	0.76
1:H:7550:ALA:O	1:H:7554:LYS:HG3	1.86	0.76
1:A:267:ARG:HG3	1:A:267:ARG:HH11	1.49	0.76
1:A:370:PRO:O	1:A:371:GLU:C	2.27	0.76
1:C:2061:GLN:HA	1:C:2064:GLN:HE21	1.50	0.76
1:C:2123:TYR:CD2	1:C:2219:MSE:HE1	2.20	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3453:LYS:HD3	1:D:3457:GLY:HA2	1.68	0.76
1:F:5354:ARG:NE	1:F:5356:ALA:HB3	2.01	0.76
1:C:2453:LYS:HB2	1:C:2459:VAL:HG12	1.66	0.76
1:D:3253:GLN:HE22	1:D:3255:GLU:CG	1.96	0.76
1:G:6124:GLY:O	1:G:6217:PHE:HB3	1.86	0.76
1:H:7378:GLU:HB2	1:H:7403:VAL:HG23	1.68	0.76
1:C:2526:ILE:O	1:C:2530:VAL:HG23	1.85	0.75
1:H:7104:ILE:O	1:H:7108:MSE:HE2	1.86	0.75
1:D:3100:LEU:HD11	1:D:3111:VAL:HG21	1.66	0.75
1:E:4188:THR:HG21	1:E:4195:PRO:HG3	1.68	0.75
1:E:4349:LEU:HD21	1:E:4351:VAL:HG23	1.69	0.75
1:F:5057:LYS:HE3	1:F:5059:GLU:HG3	1.66	0.75
1:G:6324:VAL:HA	1:G:6327:MSE:HE3	1.69	0.75
1:B:1454:LEU:HD11	1:B:1460:PHE:CE2	2.21	0.75
1:H:7276:PHE:HB2	1:H:7281:GLN:OE1	1.85	0.75
1:A:261:ASN:H	1:A:261:ASN:HD22	1.30	0.75
1:B:1243:THR:HA	1:B:1247:GLY:O	1.87	0.75
1:H:7416:ILE:HD13	1:H:7416:ILE:H	1.51	0.75
1:A:188:THR:HG23	1:A:193:ILE:O	1.86	0.75
1:B:1376:THR:HB	1:B:1379:ASP:CG	2.12	0.75
1:E:4530:VAL:HG12	1:E:4534:LEU:HD11	1.67	0.75
1:F:5310:LEU:HG	1:F:5393:ALA:HB2	1.66	0.75
1:D:3376:THR:CG2	1:D:3378:GLU:HG2	2.17	0.75
1:F:5302:ILE:O	1:F:5304:GLU:N	2.20	0.75
1:F:5419:LEU:H	1:F:5419:LEU:HD22	1.52	0.75
1:H:7302:ILE:HA	1:H:7305:HIS:CE1	2.21	0.75
1:H:7559:ARG:HG3	1:H:7561:GLU:HG2	1.68	0.75
1:C:2041:THR:OG1	1:C:2044:GLU:HG3	1.87	0.75
1:D:3482:ASN:HD22	1:D:3482:ASN:N	1.84	0.75
1:F:5357:LYS:C	1:F:5358:ILE:HD12	2.12	0.75
1:E:4284:ALA:HB1	1:E:4322:LEU:HD13	1.68	0.74
1:G:6194:ARG:HB2	1:G:6197:ARG:HG3	1.67	0.74
1:G:6219:MSE:HG2	1:H:7038:MSE:HE1	1.68	0.74
1:A:526:ILE:O	1:A:530:VAL:HG23	1.87	0.74
1:B:1511:ARG:CB	1:B:1511:ARG:HH11	2.00	0.74
1:G:6240:LYS:HG3	1:G:6248:ARG:NH2	2.01	0.74
1:D:3150:TRP:NE1	1:D:3152:GLU:HB2	2.03	0.74
1:F:5378:GLU:O	1:F:5381:VAL:HB	1.86	0.74
1:H:7343:MSE:O	1:H:7350:LEU:HB2	1.87	0.74
1:A:60:THR:O	1:A:64:GLN:HG3	1.88	0.74
1:A:391:GLY:HA3	1:A:427:GLU:HG2	1.70	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2412:GLU:O	1:C:2413:ARG:HG2	1.86	0.74
1:E:4059:GLU:HG2	1:E:4063:ILE:HG21	1.70	0.74
1:F:5160:VAL:HG13	1:F:5201:VAL:HB	1.68	0.74
1:G:6128:ARG:HG2	1:G:6128:ARG:HH11	1.51	0.74
1:G:6314:GLU:HG3	1:G:6315:ALA:N	1.99	0.74
1:G:6467:ASN:C	1:G:6469:TYR:H	1.94	0.74
1:G:6471:PHE:CG	1:G:6472:PRO:HD3	2.22	0.74
1:D:3437:THR:O	1:D:3440:ARG:HB2	1.87	0.74
1:G:6376:THR:HB	1:G:6379:ASP:OD1	1.88	0.74
1:D:3210:ILE:HB	1:D:3214:LYS:HZ2	1.52	0.74
1:F:5377:PHE:CZ	1:F:5389:ILE:HD11	2.22	0.74
1:G:6288:LEU:O	1:G:6292:LEU:HG	1.88	0.74
1:G:6466:ASN:HB3	1:G:6468:VAL:HG12	1.69	0.74
1:C:2559:ARG:HG3	1:C:2561:GLU:OE2	1.88	0.74
1:D:3150:TRP:CD1	1:D:3152:GLU:HB2	2.22	0.74
1:F:5097:TYR:O	1:F:5101:GLN:HG3	1.87	0.74
1:H:7351:VAL:O	1:H:7354:ARG:HB3	1.88	0.74
1:D:3144:ARG:HH11	1:D:3244:ASP:HB3	1.53	0.74
1:E:4505:GLU:O	1:E:4509:GLN:HG3	1.87	0.74
1:G:6164:GLU:HG3	1:G:6225:ARG:NH1	2.03	0.74
1:A:325:MSE:HE2	1:A:492:LEU:HD13	1.70	0.73
1:B:1454:LEU:HD11	1:B:1460:PHE:HE2	1.53	0.73
1:E:4416:ILE:HG12	1:E:4443:PHE:HD1	1.51	0.73
1:F:5389:ILE:HG22	1:F:5416:ILE:HA	1.67	0.73
1:F:5437:THR:O	1:F:5440:ARG:HB2	1.87	0.73
1:H:7086:MSE:HE1	1:H:7111:VAL:HG22	1.69	0.73
1:A:128:ARG:HH11	1:A:128:ARG:CG	2.00	0.73
1:A:302:ILE:HA	1:A:305:HIS:ND1	2.03	0.73
1:B:1259:ASN:O	1:B:1262:ALA:N	2.21	0.73
1:E:4400:THR:HG23	1:E:4403:VAL:CG2	2.18	0.73
1:F:5392:VAL:HG12	1:F:5392:VAL:O	1.89	0.73
1:G:6480:LEU:CD2	1:G:6556:ARG:HD3	2.18	0.73
1:C:2270:ARG:HG3	1:C:2271:GLU:N	2.02	0.73
1:D:3297:VAL:HG22	1:D:3298:ILE:HD13	1.70	0.73
1:D:3327:MSE:HE3	1:D:3337:ALA:HB1	1.69	0.73
1:E:4266:LEU:O	1:E:4270:ARG:HB3	1.87	0.73
1:G:6095:LEU:HG	1:G:6099:ILE:HD13	1.70	0.73
1:H:7408:ALA:CB	1:H:7437:THR:HG22	2.18	0.73
1:B:1391:GLY:HA3	1:B:1427:GLU:HG2	1.69	0.73
1:E:4231:TYR:O	1:E:4235:ILE:HG12	1.89	0.73
1:F:5128:ARG:HH11	1:F:5128:ARG:CG	2.00	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5377:PHE:HZ	1:F:5389:ILE:HD11	1.52	0.73
1:F:5506:GLU:HA	1:F:5509:GLN:HG3	1.69	0.73
1:A:128:ARG:HG2	1:A:128:ARG:NH1	1.95	0.73
1:D:3188:THR:HG21	1:D:3195:PRO:HG3	1.70	0.73
1:D:3377:PHE:CZ	1:D:3389:ILE:HD11	2.24	0.73
1:B:1312:ALA:HB1	1:B:1343:MSE:HE3	1.71	0.73
1:H:7171:ASP:O	1:H:7172:LEU:HD23	1.89	0.73
1:H:7522:VAL:O	1:H:7526:ILE:HG12	1.88	0.73
1:B:1454:LEU:HD12	1:B:1458:ARG:HB2	1.69	0.73
1:D:3281:GLN:HB3	1:D:3491:PHE:CE2	2.23	0.73
1:E:4283:THR:O	1:E:4286:VAL:HG23	1.88	0.73
1:G:6481:CYS:SG	1:G:6531:THR:HB	2.27	0.73
1:A:512:LEU:HD12	1:A:512:LEU:H	1.52	0.73
1:B:1358:ILE:HD12	1:B:1358:ILE:N	2.04	0.73
1:E:4206:GLY:CA	1:E:4223:GLN:HE21	2.02	0.73
1:E:4258:GLY:O	1:E:4260:HIS:N	2.22	0.73
1:F:5306:LYS:HD2	1:F:5384:LEU:O	1.88	0.73
1:E:4315:ALA:HB3	1:E:4392:VAL:HG11	1.71	0.73
1:F:5298:ILE:HD11	1:F:5442:LEU:HD11	1.71	0.73
1:B:1380:ALA:O	1:B:1384:LEU:HB2	1.89	0.73
1:F:5266:LEU:O	1:F:5270:ARG:HB3	1.88	0.73
1:A:319:ILE:O	1:A:322:LEU:N	2.21	0.72
1:E:4177:MSE:CE	1:E:4200:PRO:HB2	2.15	0.72
1:G:6166:ILE:HD13	1:G:6256:ASP:CG	2.14	0.72
1:A:253:GLN:NE2	1:A:278:ASP:HB2	2.04	0.72
1:A:397:ARG:NH2	1:A:429:THR:HG22	2.04	0.72
1:D:3310:LEU:HD21	1:D:3398:LEU:HB3	1.72	0.72
1:G:6204:ASP:OD1	1:G:6221:LEU:HB2	1.89	0.72
1:G:6308:LEU:HD12	1:G:6309:PHE:N	2.04	0.72
1:H:7049:GLY:O	1:H:7050:LEU:HD23	1.88	0.72
1:A:89:GLN:C	1:A:91:ARG:H	1.96	0.72
1:A:404:ILE:HD13	1:A:432:GLU:O	1.90	0.72
1:A:453:LYS:HD3	1:A:457:GLY:HA2	1.71	0.72
1:C:2309:PHE:HB2	1:C:2343:MSE:HG3	1.70	0.72
1:D:3261:ASN:ND2	1:D:3261:ASN:H	1.84	0.72
1:D:3387:SER:HA	1:D:3411:ASN:OD1	1.89	0.72
1:H:7099:ILE:HA	1:H:7102:ASP:HB2	1.71	0.72
1:B:1295:GLN:HA	1:B:1298:ILE:HB	1.71	0.72
1:D:3352:LYS:HB2	1:D:3368:SER:HA	1.71	0.72
1:F:5196:ASP:OD1	1:F:5196:ASP:N	2.20	0.72
1:D:3041:THR:CG2	1:D:3044:GLU:HG3	2.18	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:7244:ASP:N	1:H:7248:ARG:NH1	2.37	0.72
1:E:4278:ASP:OD1	1:E:4282:GLY:HA3	1.89	0.72
1:H:7308:LEU:HD12	1:H:7309:PHE:H	1.54	0.72
1:B:1526:ILE:O	1:B:1530:VAL:HG23	1.88	0.72
1:C:2430:ALA:O	1:C:2433:ALA:HB3	1.88	0.72
1:D:3155:VAL:HB	1:D:3246:TYR:CD2	2.23	0.72
1:E:4396:GLY:O	1:E:4427:GLU:HA	1.90	0.72
1:F:5043:GLN:HG2	1:F:5566:LEU:HD11	1.72	0.72
1:F:5174:VAL:HG21	1:F:5219:MSE:C	2.15	0.72
1:G:6401:PRO:HA	1:G:6404:ILE:HD12	1.71	0.72
1:B:1177:MSE:HE2	1:B:1181:VAL:HG23	1.72	0.72
1:D:3402:ASP:O	1:D:3405:ARG:HG2	1.88	0.72
1:E:4437:THR:C	1:E:4439:GLY:H	1.98	0.72
1:F:5177:MSE:HE1	1:F:5200:PRO:CB	2.19	0.72
1:F:5528:ILE:O	1:F:5532:GLU:HG3	1.89	0.72
1:G:6479:ILE:HG22	1:G:6480:LEU:N	2.04	0.72
1:E:4312:ALA:HB1	1:E:4343:MSE:HE3	1.72	0.72
1:F:5437:THR:HG21	1:F:5441:CYS:HB3	1.70	0.71
1:E:4041:THR:HG23	1:E:4044:GLU:HG3	1.70	0.71
1:A:137:ILE:HD11	1:A:230:GLN:HE21	1.55	0.71
1:B:1281:GLN:HB3	1:B:1491:PHE:CE2	2.25	0.71
1:E:4498:LEU:O	1:E:4501:GLN:HB2	1.91	0.71
1:H:7229:GLN:O	1:H:7230:GLN:C	2.33	0.71
1:F:5376:THR:HG22	1:F:5378:GLU:H	1.55	0.71
1:F:5408:ALA:HB2	1:F:5437:THR:HG22	1.71	0.71
1:C:2261:ASN:HD22	1:C:2261:ASN:N	1.87	0.71
1:E:4174:VAL:HG21	1:E:4219:MSE:O	1.91	0.71
1:G:6376:THR:O	1:G:6379:ASP:HB2	1.91	0.71
1:F:5506:GLU:HG2	1:F:5511:ARG:HD2	1.72	0.71
1:F:5527:ALA:O	1:F:5531:THR:HG23	1.90	0.71
1:A:377:PHE:HZ	1:A:389:ILE:HD11	1.55	0.71
1:B:1177:MSE:CE	1:B:1200:PRO:HB2	2.20	0.71
1:B:1505:GLU:H	1:B:1505:GLU:CD	1.99	0.71
1:C:2155:VAL:O	1:C:2156:LYS:HE2	1.90	0.71
1:F:5469:TYR:C	1:F:5470:ILE:HD13	2.16	0.71
1:G:6454:LEU:HD11	1:G:6460:PHE:HE2	1.53	0.71
1:H:7354:ARG:NE	1:H:7356:ALA:HB3	2.06	0.71
1:A:290:GLY:HA2	4:A:8037:HOH:O	1.91	0.71
1:B:1042:LEU:HD21	1:D:3572:TRP:HB2	1.73	0.71
1:B:1394:GLY:HA2	1:B:1420:SER:HB3	1.73	0.71
1:G:6531:THR:HA	1:G:6534:LEU:HD12	1.73	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:7381:VAL:HG13	1:H:7407:MSE:HE1	1.73	0.71
1:B:1412:GLU:O	1:B:1440:ARG:HD2	1.91	0.71
1:C:2308:LEU:HB3	1:C:2389:ILE:CD1	2.21	0.71
1:C:2370:PRO:HD2	1:C:2373:ILE:HD11	1.73	0.71
1:D:3229:GLN:HG3	1:D:3233:ASP:OD1	1.90	0.71
1:G:6267:ARG:HG3	1:G:6267:ARG:NH1	2.02	0.71
1:G:6320:ALA:HA	1:G:6323:ILE:HD12	1.72	0.71
1:C:2030:LEU:HB3	1:D:3030:LEU:HD12	1.72	0.71
1:C:2128:ARG:HG2	1:C:2128:ARG:NH1	1.96	0.71
1:E:4059:GLU:HG2	1:E:4063:ILE:CG2	2.21	0.71
1:E:4086:MSE:O	1:E:4089:GLN:HB3	1.90	0.71
1:G:6271:GLU:O	1:G:6485:HIS:NE2	2.24	0.71
1:D:3143:VAL:HG11	1:D:3238:PHE:HA	1.72	0.70
1:F:5397:ARG:HA	1:F:5427:GLU:O	1.91	0.70
1:G:6207:THR:O	1:G:6224:LYS:HA	1.91	0.70
1:G:6416:ILE:HD13	1:G:6416:ILE:N	2.05	0.70
1:B:1326:SER:O	1:B:1329:GLU:HB3	1.90	0.70
1:C:2377:PHE:HZ	1:C:2389:ILE:CG1	2.04	0.70
1:D:3132:GLY:HA3	1:D:3200:PRO:HG2	1.72	0.70
1:E:4535:TYR:HE1	1:E:4546:PRO:HD2	1.54	0.70
1:H:7162:ASP:O	1:H:7225:ARG:NH2	2.24	0.70
1:H:7399:PHE:HB2	1:H:7428:CYS:HB3	1.73	0.70
1:A:51:GLN:HA	1:A:51:GLN:NE2	2.06	0.70
1:B:1207:THR:HG23	1:B:1213:LEU:HD21	1.71	0.70
1:E:4294:ALA:O	1:E:4297:VAL:HG13	1.92	0.70
1:F:5283:THR:O	1:F:5284:ALA:C	2.35	0.70
1:G:6308:LEU:HD12	1:G:6309:PHE:H	1.54	0.70
1:A:44:GLU:O	1:A:48:LEU:HB2	1.92	0.70
1:D:3310:LEU:HD21	1:D:3398:LEU:CB	2.22	0.70
1:E:4312:ALA:CB	1:E:4343:MSE:HE3	2.21	0.70
1:E:4317:LEU:H	1:E:4317:LEU:HD12	1.55	0.70
1:G:6143:VAL:O	1:G:6147:VAL:HG23	1.91	0.70
1:G:6413:ARG:HA	1:G:6440:ARG:O	1.91	0.70
1:H:7302:ILE:HA	1:H:7305:HIS:ND1	2.06	0.70
1:B:1480:LEU:HD23	1:B:1556:ARG:HD3	1.72	0.70
1:D:3137:ILE:HD11	1:D:3230:GLN:HB3	1.74	0.70
1:D:3268:LYS:O	4:D:8049:HOH:O	2.09	0.70
1:D:3520:GLN:C	1:D:3524:ILE:HD12	2.17	0.70
1:D:3535:TYR:CD2	1:D:3540:ALA:HB3	2.27	0.70
1:G:6182:GLY:HA2	1:G:6185:CYS:SG	2.32	0.70
1:B:1382:ASN:O	1:B:1385:LYS:HG3	1.91	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3239:MSE:HE3	1:D:3273:TYR:CD1	2.26	0.70
1:G:6122:GLN:O	1:G:6126:ILE:HG12	1.92	0.70
1:B:1266:LEU:O	1:B:1270:ARG:HB3	1.92	0.70
1:B:1414:PRO:HD2	1:B:1441:CYS:HA	1.74	0.70
1:C:2370:PRO:HD2	1:C:2373:ILE:CD1	2.22	0.70
1:D:3071:ASN:HA	1:D:3074:LYS:HE3	1.74	0.70
1:D:3397:ARG:HA	1:D:3427:GLU:O	1.91	0.70
1:E:4512:LEU:H	1:E:4512:LEU:HD12	1.57	0.70
1:F:5169:LEU:HD12	1:F:5169:LEU:N	2.07	0.70
1:F:5416:ILE:HD13	1:F:5416:ILE:H	1.56	0.70
1:G:6395:ALA:HB3	1:G:6398:LEU:HD22	1.74	0.70
1:B:1144:ARG:NH1	1:B:1244:ASP:HB3	2.06	0.70
1:D:3108:MSE:HB3	1:D:3109:PRO:HD3	1.74	0.70
1:D:3174:VAL:HG21	1:D:3219:MSE:O	1.92	0.70
1:E:4357:LYS:NZ	1:E:4357:LYS:H	1.90	0.70
1:G:6133:LEU:HD12	1:H:7052:GLY:O	1.91	0.70
1:A:295:GLN:HA	1:A:298:ILE:HB	1.74	0.70
1:A:332:LEU:HG	1:A:336:GLU:OE2	1.91	0.70
1:C:2505:GLU:H	1:C:2505:GLU:CD	1.99	0.70
1:D:3327:MSE:HE2	1:D:3341:ILE:HD11	1.74	0.70
1:E:4402:ASP:HA	1:E:4405:ARG:HG2	1.74	0.70
1:D:3127:PHE:O	1:D:3128:ARG:HD3	1.91	0.70
1:F:5210:ILE:O	1:F:5214:LYS:HG2	1.92	0.70
1:H:7470:ILE:N	1:H:7470:ILE:HD12	2.07	0.70
1:A:112:TYR:CD2	1:A:113:THR:HG23	2.27	0.69
1:F:5333:SER:HB3	1:F:5336:GLU:OE1	1.91	0.69
1:F:5454:LEU:HD13	1:F:5458:ARG:NH1	2.07	0.69
1:A:293:ALA:HB3	1:A:512:LEU:HB3	1.73	0.69
1:A:309:PHE:HD1	1:A:390:ILE:HB	1.57	0.69
1:C:2260:HIS:O	1:C:2264:ARG:HG2	1.91	0.69
1:C:2376:THR:H	1:C:2379:ASP:HB2	1.56	0.69
1:E:4394:GLY:HA2	1:E:4420:SER:HB3	1.74	0.69
1:A:397:ARG:HG2	1:A:397:ARG:HH11	1.58	0.69
1:C:2172:LEU:O	1:C:2175:TYR:HB2	1.92	0.69
1:D:3374:PRO:CD	1:D:3383:ILE:HD12	2.19	0.69
1:E:4338:GLN:NE2	1:E:4364:PRO:HB3	2.07	0.69
1:F:5503:THR:HG23	1:F:5506:GLU:CD	2.18	0.69
1:G:6238:PHE:O	1:G:6242:ILE:HG12	1.91	0.69
1:G:6389:ILE:HG22	1:G:6416:ILE:HG22	1.72	0.69
1:H:7215:ASP:OD1	1:H:7216:PRO:HD2	1.92	0.69
1:B:1045:ARG:CZ	1:B:1058:ILE:HD13	2.22	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5396:GLY:O	1:F:5427:GLU:HA	1.91	0.69
1:H:7261:ASN:HD22	1:H:7261:ASN:N	1.89	0.69
1:H:7378:GLU:O	1:H:7381:VAL:HB	1.91	0.69
1:A:488:ASP:HA	1:A:491:PHE:HD1	1.57	0.69
1:B:1379:ASP:O	1:B:1383:ILE:HG13	1.93	0.69
1:B:1476:LEU:O	1:B:1480:LEU:HD12	1.93	0.69
1:E:4240:LYS:HG3	1:E:4248:ARG:NH2	2.02	0.69
1:H:7269:TYR:HB3	1:H:7273:TYR:HD1	1.57	0.69
1:H:7377:PHE:CZ	1:H:7389:ILE:HD11	2.20	0.69
1:H:7422:PRO:O	1:H:7424:ALA:N	2.26	0.69
1:A:377:PHE:CZ	1:A:389:ILE:HD11	2.27	0.69
1:B:1232:ASP:HA	1:B:1235:ILE:HG12	1.74	0.69
1:E:4559:ARG:HG3	1:E:4561:GLU:OE2	1.92	0.69
1:F:5051:GLN:HA	1:F:5051:GLN:HE21	1.57	0.69
1:F:5357:LYS:N	1:F:5357:LYS:HD3	2.06	0.69
1:G:6298:ILE:HG22	1:G:6299:SER:N	2.06	0.69
1:B:1429:THR:HG23	1:B:1432:GLU:CG	2.21	0.69
1:C:2324:VAL:HA	1:C:2327:MSE:HE3	1.74	0.69
1:D:3394:GLY:O	1:D:3425:GLN:HG3	1.91	0.69
1:D:3518:ASN:O	1:D:3522:VAL:HG23	1.91	0.69
1:E:4339:LYS:HA	1:E:4367:HIS:NE2	2.07	0.69
1:E:4352:LYS:HG3	1:E:4368:SER:HA	1.74	0.69
1:F:5038:MSE:HE2	1:F:5055:PRO:HG2	1.73	0.69
1:F:5194:ARG:CB	1:F:5197:ARG:HG2	2.23	0.69
1:F:5414:PRO:HD2	1:F:5441:CYS:HA	1.74	0.69
1:G:6456:ASP:OD2	1:G:6458:ARG:HD3	1.92	0.69
1:H:7269:TYR:HA	1:H:7272:LYS:HB2	1.75	0.69
1:B:1335:GLN:HE21	1:B:1335:GLN:C	2.01	0.69
1:C:2137:ILE:O	1:C:2140:ARG:HG2	1.92	0.69
1:D:3162:ASP:O	1:D:3225:ARG:NH2	2.26	0.69
1:F:5194:ARG:HH21	1:F:5197:ARG:NE	1.91	0.69
1:F:5432:GLU:HA	1:F:5436:LEU:HD13	1.75	0.69
1:G:6381:VAL:HG13	1:G:6407:MSE:HE1	1.74	0.69
1:H:7466:ASN:HB3	1:H:7468:VAL:CG1	2.22	0.69
1:A:389:ILE:HG22	1:A:416:ILE:HA	1.73	0.69
1:B:1172:LEU:O	1:B:1175:TYR:HB2	1.92	0.69
1:D:3392:VAL:O	1:D:3392:VAL:HG12	1.91	0.69
1:E:4558:TRP:O	1:E:4559:ARG:HD3	1.93	0.69
1:F:5412:GLU:HA	1:F:5412:GLU:OE1	1.93	0.69
1:G:6075:MSE:HB3	1:G:6081:LYS:HE2	1.75	0.69
1:H:7407:MSE:HG3	1:H:7414:PRO:HB2	1.73	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1351:VAL:O	1:B:1354:ARG:HG2	1.93	0.69
1:D:3177:MSE:C	1:D:3180:PRO:HD2	2.17	0.69
1:H:7470:ILE:N	1:H:7470:ILE:CD1	2.56	0.69
1:B:1435:THR:HG22	1:B:1454:LEU:HD23	1.73	0.68
1:D:3133:LEU:HB3	1:D:3201:VAL:HG13	1.76	0.68
1:G:6169:LEU:N	1:G:6169:LEU:HD12	2.08	0.68
1:A:342:TRP:CH2	1:A:367:HIS:HB2	2.28	0.68
1:B:1350:LEU:O	1:B:1366:THR:HA	1.92	0.68
1:C:2253:GLN:HG3	1:C:2276:PHE:CZ	2.28	0.68
1:F:5324:VAL:HA	1:F:5327:MSE:HE3	1.76	0.68
1:A:522:VAL:O	1:A:526:ILE:HG13	1.93	0.68
1:C:2376:THR:HG21	1:C:2378:GLU:OE2	1.94	0.68
1:E:4275:THR:OG1	1:E:4276:PHE:N	2.26	0.68
1:E:4320:ALA:HA	1:E:4323:ILE:HD12	1.75	0.68
1:G:6207:THR:HG23	1:G:6213:LEU:HD21	1.74	0.68
1:G:6289:ALA:CB	1:G:6498:LEU:HD23	2.23	0.68
1:G:6312:ALA:HB1	1:G:6343:MSE:HE3	1.73	0.68
1:B:1376:THR:HG22	1:B:1378:GLU:N	2.07	0.68
1:F:5466:ASN:HB3	1:F:5468:VAL:HG12	1.74	0.68
1:A:414:PRO:HD2	1:A:440:ARG:O	1.93	0.68
1:B:1072:LEU:O	1:B:1075:MSE:HB2	1.94	0.68
1:B:1261:ASN:H	1:B:1261:ASN:HD22	1.36	0.68
1:C:2086:MSE:HE1	1:C:2111:VAL:HG13	1.76	0.68
1:C:2276:PHE:HB2	1:C:2281:GLN:OE1	1.93	0.68
1:C:2306:LYS:HD2	1:C:2385:LYS:O	1.92	0.68
1:D:3177:MSE:CE	1:D:3200:PRO:HB2	2.17	0.68
1:E:4350:LEU:HD13	1:E:4354:ARG:CZ	2.23	0.68
1:F:5477:ALA:HB1	1:F:5531:THR:HG22	1.76	0.68
1:G:6112:TYR:CD2	1:G:6113:THR:HG23	2.28	0.68
1:B:1174:VAL:HG23	1:B:1219:MSE:HE3	1.76	0.68
1:E:4075:MSE:HB3	1:E:4081:LYS:HD3	1.74	0.68
1:F:5188:THR:HG23	1:F:5193:ILE:O	1.94	0.68
1:G:6350:LEU:HD12	1:G:6366:THR:HG23	1.76	0.68
1:G:6480:LEU:HD22	1:G:6556:ARG:HD3	1.76	0.68
1:H:7243:THR:C	1:H:7248:ARG:HH11	2.02	0.68
1:H:7278:ASP:C	1:H:7280:ILE:H	2.01	0.68
1:H:7553:VAL:O	1:H:7555:GLU:N	2.26	0.68
1:A:351:VAL:HG11	1:A:369:ALA:HB2	1.75	0.68
1:B:1258:GLY:O	1:B:1259:ASN:C	2.36	0.68
1:D:3537:ASN:HD22	1:D:3537:ASN:N	1.91	0.68
1:E:4109:PRO:HA	1:E:4113:THR:O	1.94	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5177:MSE:CE	1:F:5200:PRO:HB2	2.22	0.68
1:G:6482:ASN:ND2	1:G:6542:ARG:HB2	2.07	0.68
1:A:276:PHE:HB3	1:A:486:ILE:HD12	1.76	0.68
1:B:1137:ILE:HA	1:B:1234:LEU:HD21	1.75	0.68
1:B:1184:LEU:HD23	1:B:1200:PRO:HG3	1.74	0.68
1:B:1437:THR:O	1:B:1440:ARG:HB2	1.94	0.68
1:C:2258:GLY:O	1:C:2259:ASN:C	2.36	0.68
1:D:3166:ILE:HG21	1:D:3172:LEU:HD12	1.76	0.68
1:F:5279:ASP:OD1	1:F:5279:ASP:N	2.23	0.68
1:B:1060:THR:O	1:B:1064:GLN:HG3	1.93	0.68
1:D:3199:LEU:HD12	1:D:3200:PRO:HD2	1.75	0.68
1:D:3308:LEU:HD13	1:D:3342:TRP:HB2	1.76	0.68
1:E:4527:ALA:O	1:E:4531:THR:HG23	1.93	0.68
1:G:6397:ARG:O	1:G:6398:LEU:HD12	1.94	0.68
1:G:6400:THR:HG23	1:G:6403:VAL:HG23	1.76	0.68
1:G:6456:ASP:OD1	1:G:6458:ARG:HB2	1.93	0.68
1:B:1300:LYS:HG2	1:B:1304:GLU:OE1	1.94	0.68
1:E:4026:LYS:HG3	1:E:4029:MSE:HE3	1.75	0.68
1:G:6429:THR:HG23	1:G:6432:GLU:CD	2.19	0.68
1:A:502:LEU:HA	1:A:506:GLU:OE1	1.94	0.67
1:B:1443:PHE:O	1:B:1512:LEU:HD11	1.92	0.67
1:E:4357:LYS:H	1:E:4357:LYS:HZ3	1.42	0.67
1:G:6243:THR:HG22	1:G:6248:ARG:HA	1.75	0.67
1:G:6352:LYS:CG	1:G:6368:SER:HA	2.24	0.67
1:H:7481:CYS:SG	1:H:7534:LEU:HD12	2.33	0.67
1:A:535:TYR:OH	1:A:545:GLU:HA	1.94	0.67
1:B:1310:LEU:HD22	1:B:1399:PHE:CE2	2.30	0.67
1:D:3194:ARG:HB2	1:D:3197:ARG:CG	2.23	0.67
1:F:5470:ILE:HG22	1:F:5474:VAL:HG21	1.77	0.67
1:H:7144:ARG:NH1	1:H:7244:ASP:HB3	2.08	0.67
1:A:244:ASP:N	1:A:248:ARG:HH11	1.92	0.67
1:B:1339:LYS:HA	1:B:1367:HIS:CE1	2.29	0.67
1:B:1506:GLU:O	1:B:1511:ARG:HG2	1.93	0.67
1:C:2038:MSE:SE	1:C:2055:PRO:HG2	2.44	0.67
1:E:4215:ASP:OD1	1:E:4216:PRO:HD2	1.94	0.67
1:E:4384:LEU:O	1:E:4385:LYS:HB2	1.92	0.67
1:F:5339:LYS:HA	1:F:5367:HIS:NE2	2.09	0.67
1:G:6302:ILE:HG22	1:G:6340:LYS:NZ	2.09	0.67
1:H:7083:ILE:HD11	1:H:7126:ILE:CG2	2.24	0.67
1:C:2160:VAL:HG12	1:C:2201:VAL:HB	1.75	0.67
1:C:2188:THR:HG23	1:C:2193:ILE:O	1.93	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2437:THR:O	1:C:2440:ARG:HB2	1.94	0.67
1:C:2480:LEU:HD22	1:C:2556:ARG:HD3	1.76	0.67
1:F:5306:LYS:HB3	1:F:5386:PRO:HA	1.76	0.67
1:G:6038:MSE:HE2	1:G:6057:LYS:O	1.94	0.67
1:G:6454:LEU:HD12	1:G:6458:ARG:CB	2.23	0.67
1:H:7422:PRO:C	1:H:7424:ALA:H	2.01	0.67
1:A:336:GLU:O	1:A:340:LYS:HD2	1.95	0.67
1:B:1350:LEU:HD22	1:B:1354:ARG:NH1	2.10	0.67
1:C:2030:LEU:HB3	1:D:3030:LEU:CD1	2.25	0.67
1:D:3377:PHE:HZ	1:D:3389:ILE:HD11	1.59	0.67
1:D:3429:THR:HG23	1:D:3432:GLU:OE1	1.93	0.67
1:E:4300:LYS:HE2	1:E:4304:GLU:CD	2.20	0.67
1:A:86:MSE:HA	1:A:86:MSE:HE2	1.77	0.67
1:B:1302:ILE:HA	1:B:1305:HIS:HD1	1.60	0.67
1:B:1388:THR:HG23	1:B:1415:VAL:CB	2.22	0.67
1:B:1451:PRO:HG3	1:B:1461:THR:OG1	1.95	0.67
1:E:4177:MSE:O	1:E:4177:MSE:HE3	1.94	0.67
1:G:6217:PHE:HE1	1:H:7067:ARG:HB2	1.59	0.67
1:G:6269:TYR:HB3	1:G:6273:TYR:HD1	1.60	0.67
1:H:7524:ILE:O	1:H:7527:ALA:HB3	1.95	0.67
1:C:2104:ILE:CG1	1:C:2108:MSE:HE2	2.22	0.67
1:E:4164:GLU:HG3	1:E:4225:ARG:NH1	2.09	0.67
1:F:5526:ILE:O	1:F:5530:VAL:HG23	1.95	0.67
1:G:6437:THR:HG21	1:G:6441:CYS:HB3	1.75	0.67
1:G:6504:ASP:HA	1:G:6507:LEU:HD23	1.77	0.67
1:H:7394:GLY:O	1:H:7425:GLN:HG3	1.94	0.67
1:B:1482:ASN:N	1:B:1482:ASN:HD22	1.92	0.67
1:G:6169:LEU:HD12	1:G:6169:LEU:H	1.60	0.67
1:E:4392:VAL:O	1:E:4392:VAL:HG12	1.95	0.67
1:F:5454:LEU:HD13	1:F:5458:ARG:HH11	1.60	0.67
1:G:6255:GLU:O	1:G:6257:PHE:N	2.27	0.67
1:B:1179:ILE:HB	1:B:1180:PRO:HD3	1.76	0.67
1:C:2428:CYS:SG	1:C:2429:THR:N	2.68	0.67
1:D:3177:MSE:CE	1:D:3181:VAL:HG22	2.24	0.67
1:E:4103:ASP:OD2	1:E:4106:SER:HB2	1.93	0.67
1:F:5479:ILE:HG22	1:F:5480:LEU:N	2.10	0.67
1:G:6024:LYS:HA	1:G:6028:LEU:CD2	2.25	0.67
1:G:6351:VAL:CG2	1:G:6369:ALA:HA	2.25	0.67
1:H:7194:ARG:CB	1:H:7197:ARG:HG3	2.24	0.67
1:B:1505:GLU:O	1:B:1508:ALA:HB3	1.95	0.66
1:B:1537:ASN:N	1:B:1537:ASN:HD22	1.93	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2307:ILE:HG13	1:C:2388:THR:CB	2.25	0.66
1:C:2407:MSE:HG3	1:C:2411:ASN:ND2	2.10	0.66
1:D:3045:ARG:NH1	1:D:3058:ILE:HD13	2.09	0.66
1:F:5377:PHE:O	1:F:5381:VAL:HG23	1.95	0.66
1:F:5431:GLU:O	1:F:5433:ALA:N	2.29	0.66
1:G:6177:MSE:O	1:G:6181:VAL:HG23	1.95	0.66
1:G:6302:ILE:HA	1:G:6305:HIS:CE1	2.30	0.66
1:H:7261:ASN:HD22	1:H:7261:ASN:H	1.40	0.66
1:H:7437:THR:O	1:H:7440:ARG:HB2	1.95	0.66
1:D:3402:ASP:HA	1:D:3405:ARG:CD	2.25	0.66
1:E:4402:ASP:N	1:E:4402:ASP:OD1	2.28	0.66
1:F:5194:ARG:HB2	1:F:5197:ARG:CG	2.25	0.66
1:G:6374:PRO:HG3	1:G:6380:ALA:HA	1.76	0.66
1:A:341:ILE:O	1:A:367:HIS:NE2	2.28	0.66
1:C:2179:ILE:HB	1:C:2180:PRO:HD3	1.77	0.66
1:C:2504:ASP:O	1:C:2507:LEU:HB2	1.94	0.66
1:E:4037:GLY:C	1:E:4039:ALA:H	2.04	0.66
1:G:6127:PHE:N	4:G:8062:HOH:O	2.24	0.66
1:G:6320:ALA:HB1	1:G:6365:PHE:CZ	2.29	0.66
1:A:300:LYS:HD2	1:A:304:GLU:OE1	1.95	0.66
1:B:1324:VAL:O	1:B:1328:VAL:HG23	1.95	0.66
1:B:1480:LEU:CD2	1:B:1556:ARG:HD3	2.25	0.66
1:C:2184:LEU:HD23	1:C:2200:PRO:HB3	1.75	0.66
1:D:3103:ASP:HB3	1:D:3107:LEU:HD22	1.76	0.66
1:E:4396:GLY:HA2	1:E:4425:GLN:HA	1.76	0.66
1:G:6041:THR:OG1	1:G:6044:GLU:HG3	1.95	0.66
1:G:6075:MSE:CG	1:G:6080:GLU:HG2	2.25	0.66
1:H:7120:CYS:O	1:H:7123:TYR:HB2	1.95	0.66
1:B:1466:ASN:O	1:B:1469:TYR:HD1	1.79	0.66
1:D:3452:VAL:O	1:D:3459:VAL:HA	1.96	0.66
1:F:5133:LEU:HB2	1:F:5199:LEU:HD11	1.77	0.66
1:F:5358:ILE:HG23	1:F:5362:GLN:HB3	1.78	0.66
1:G:6146:ILE:HG23	1:H:7052:GLY:HA3	1.76	0.66
1:G:6245:ARG:HG2	1:G:6246:TYR:CE1	2.30	0.66
1:H:7411:ASN:O	1:H:7414:PRO:HD3	1.96	0.66
1:A:196:ASP:N	1:A:196:ASP:OD1	2.24	0.66
1:F:5303:SER:CA	1:F:5340:LYS:HZ2	2.08	0.66
1:H:7407:MSE:HG3	1:H:7414:PRO:CB	2.25	0.66
1:E:4172:LEU:O	1:E:4175:TYR:HB2	1.96	0.66
1:F:5393:ALA:HA	3:F:5601:NAD:O4B	1.95	0.66
1:A:352:LYS:HB2	1:A:368:SER:HA	1.78	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:401:PRO:HB3	1:A:436:LEU:HD21	1.78	0.66
1:B:1227:ARG:HH11	1:B:1227:ARG:CG	2.07	0.66
1:C:2227:ARG:HG2	1:C:2227:ARG:NH1	2.04	0.66
1:F:5410:ILE:HG22	1:F:5411:ASN:OD1	1.95	0.66
1:G:6416:ILE:HG12	1:G:6443:PHE:HD1	1.60	0.66
1:H:7196:ASP:OD1	1:H:7196:ASP:N	2.20	0.66
1:H:7286:VAL:HG13	1:H:7470:ILE:HD13	1.77	0.66
1:H:7408:ALA:HA	1:H:7414:PRO:HG3	1.77	0.66
1:A:419:LEU:HA	1:A:446:GLY:H	1.58	0.66
1:F:5269:TYR:HA	1:F:5272:LYS:HB2	1.78	0.66
1:C:2376:THR:HG22	1:C:2378:GLU:N	2.11	0.66
1:D:3417:PHE:CD1	1:D:3444:ALA:HB3	2.30	0.66
1:D:3537:ASN:HB2	1:D:3539:MSE:HG3	1.76	0.66
1:E:4206:GLY:HA3	1:E:4223:GLN:HE21	1.61	0.66
1:F:5136:SER:OG	1:F:5221:LEU:HD21	1.96	0.66
1:H:7122:GLN:O	1:H:7125:HIS:HB2	1.96	0.66
1:B:1402:ASP:HA	1:B:1405:ARG:CD	2.24	0.65
1:D:3261:ASN:HA	1:D:3264:ARG:NE	2.10	0.65
1:E:4204:ASP:OD2	1:E:4221:LEU:HD22	1.96	0.65
1:E:4266:LEU:O	1:E:4266:LEU:HD12	1.96	0.65
1:F:5351:VAL:HG21	1:F:5369:ALA:HA	1.78	0.65
1:F:5381:VAL:HG13	1:F:5407:MSE:HE1	1.78	0.65
1:G:6123:TYR:CD2	1:G:6219:MSE:HE1	2.26	0.65
1:A:188:THR:HG21	1:A:195:PRO:HG3	1.77	0.65
1:B:1253:GLN:HE22	1:B:1255:GLU:HG2	1.62	0.65
1:D:3210:ILE:HB	1:D:3214:LYS:NZ	2.11	0.65
1:E:4470:ILE:C	1:E:4472:PRO:HD2	2.21	0.65
1:G:6079:LEU:HD11	1:G:6119:ALA:HA	1.79	0.65
1:G:6317:LEU:H	1:G:6317:LEU:CD1	2.01	0.65
1:H:7166:ILE:HG13	1:H:7172:LEU:HB2	1.78	0.65
1:H:7253:GLN:HG3	1:H:7276:PHE:CE2	2.32	0.65
1:A:253:GLN:HG3	1:A:276:PHE:CZ	2.32	0.65
1:B:1349:LEU:CD2	1:B:1351:VAL:HB	2.27	0.65
1:B:1392:VAL:CG1	1:B:1392:VAL:O	2.45	0.65
1:B:1535:TYR:CD2	1:B:1540:ALA:HB3	2.31	0.65
1:C:2392:VAL:O	1:C:2392:VAL:HG12	1.96	0.65
1:E:4261:ASN:HA	1:E:4264:ARG:HG2	1.77	0.65
1:E:4374:PRO:HB3	1:E:4383:ILE:HD12	1.77	0.65
1:C:2156:LYS:HB3	1:C:2479:ILE:HD13	1.78	0.65
1:D:3239:MSE:SE	1:D:3252:ILE:HD12	2.46	0.65
1:D:3378:GLU:HG3	1:D:3379:ASP:OD1	1.97	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3430:ALA:HB2	1:D:3443:PHE:CE2	2.31	0.65
1:E:4352:LYS:HB2	1:E:4368:SER:HA	1.78	0.65
1:H:7085:ILE:HG23	1:H:7086:MSE:HE3	1.78	0.65
1:C:2432:GLU:CA	1:C:2436:LEU:HD13	2.26	0.65
1:F:5505:GLU:N	1:F:5505:GLU:OE2	2.28	0.65
1:G:6031:ASN:HB3	1:G:6034:THR:OG1	1.96	0.65
1:G:6358:ILE:HG21	1:G:6366:THR:OG1	1.97	0.65
1:H:7163:GLY:HA2	1:H:7166:ILE:HD11	1.77	0.65
1:A:323:ILE:HG22	1:A:327:MSE:HE2	1.77	0.65
1:A:408:ALA:HB2	1:A:437:THR:HG22	1.78	0.65
1:A:432:GLU:HA	1:A:436:LEU:HD13	1.78	0.65
1:B:1137:ILE:O	1:B:1140:ARG:HG2	1.96	0.65
1:E:4077:SER:HB3	1:E:4080:GLU:HB2	1.77	0.65
1:E:4295:GLN:HE22	1:E:4305:HIS:HE1	1.45	0.65
1:F:5276:PHE:C	1:F:5276:PHE:CD1	2.74	0.65
1:F:5333:SER:OG	1:F:5336:GLU:HG3	1.97	0.65
1:G:6163:GLY:O	1:G:6171:ASP:HA	1.96	0.65
1:H:7041:THR:HG23	1:H:7044:GLU:HG3	1.78	0.65
1:A:375:ASP:OD2	1:A:379:ASP:OD2	2.14	0.65
1:B:1240:LYS:HG3	1:B:1248:ARG:NH2	2.08	0.65
1:B:1243:THR:HG22	1:B:1248:ARG:HA	1.77	0.65
1:B:1408:ALA:HB2	1:B:1437:THR:HG22	1.78	0.65
1:B:1511:ARG:HH11	1:B:1511:ARG:HB3	1.61	0.65
1:D:3113:THR:HA	1:D:3116:VAL:HG12	1.78	0.65
1:E:4352:LYS:HG3	1:E:4368:SER:CA	2.27	0.65
1:E:4413:ARG:HA	1:E:4440:ARG:O	1.96	0.65
1:F:5512:LEU:HD12	1:F:5512:LEU:N	2.11	0.65
1:B:1261:ASN:ND2	1:B:1261:ASN:N	2.36	0.65
1:D:3043:GLN:HG2	1:D:3566:LEU:CD1	2.27	0.65
1:E:4184:LEU:O	1:E:4187:TYR:HB2	1.96	0.65
1:E:4350:LEU:HA	1:E:4354:ARG:HD3	1.78	0.65
1:F:5143:VAL:HG11	1:F:5238:PHE:HA	1.78	0.65
1:G:6491:PHE:O	1:G:6492:LEU:C	2.40	0.65
1:A:411:ASN:O	1:A:414:PRO:HD3	1.97	0.65
1:F:5429:THR:HG23	1:F:5432:GLU:CG	2.27	0.65
1:F:5559:ARG:HB3	1:F:5561:GLU:CG	2.26	0.65
1:G:6402:ASP:OD1	1:G:6402:ASP:N	2.29	0.65
1:H:7060:THR:OG1	1:H:7063:ILE:HG13	1.97	0.65
1:A:564:SER:O	1:A:565:LEU:HD23	1.97	0.65
1:B:1339:LYS:HA	1:B:1367:HIS:NE2	2.12	0.65
1:D:3317:LEU:HD12	1:D:3317:LEU:H	1.61	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3360:SER:HA	1:D:3363:GLU:OE1	1.96	0.65
1:D:3386:PRO:HB2	1:D:3388:THR:O	1.97	0.65
1:E:4166:ILE:CG2	1:E:4172:LEU:HD12	2.27	0.65
1:E:4321:ASN:O	1:E:4324:VAL:HB	1.97	0.65
1:F:5351:VAL:CG2	1:F:5369:ALA:HA	2.27	0.65
1:D:3261:ASN:HA	1:D:3264:ARG:HG2	1.79	0.64
1:D:3350:LEU:HD22	1:D:3354:ARG:NH1	2.12	0.64
1:D:3531:THR:O	1:D:3534:LEU:HB2	1.97	0.64
1:F:5227:ARG:HG2	1:F:5227:ARG:HH11	1.62	0.64
1:F:5287:ALA:O	1:F:5290:GLY:N	2.29	0.64
1:F:5350:LEU:O	1:F:5366:THR:HA	1.97	0.64
1:F:5503:THR:HG23	1:F:5506:GLU:OE1	1.97	0.64
1:H:7106:SER:O	1:H:7109:PRO:HD2	1.96	0.64
1:A:264:ARG:HG3	1:A:265:PHE:N	2.12	0.64
1:A:471:PHE:CG	1:A:472:PRO:HD3	2.32	0.64
1:B:1487:SER:OG	1:B:1539:MSE:HE1	1.97	0.64
1:D:3374:PRO:HG3	1:D:3380:ALA:HA	1.79	0.64
1:E:4416:ILE:HD13	1:E:4442:LEU:O	1.98	0.64
1:F:5176:GLY:C	1:F:5178:GLY:H	2.06	0.64
1:F:5419:LEU:HA	1:F:5446:GLY:N	2.12	0.64
1:G:6191:ALA:HB1	1:G:6476:LEU:HD22	1.79	0.64
1:G:6268:LYS:HG2	1:G:6269:TYR:CD2	2.32	0.64
1:G:6482:ASN:HD22	1:G:6482:ASN:N	1.95	0.64
1:H:7150:TRP:CE3	1:H:7151:PRO:HD2	2.33	0.64
1:A:376:THR:HG22	1:A:378:GLU:N	2.11	0.64
1:B:1338:GLN:HA	1:B:1341:ILE:HG13	1.79	0.64
1:B:1352:LYS:N	1:B:1367:HIS:O	2.29	0.64
1:E:4191:ALA:HB2	1:E:4472:PRO:HB2	1.79	0.64
1:E:4303:SER:HA	1:E:4340:LYS:NZ	2.12	0.64
1:G:6327:MSE:CE	1:G:6341:ILE:HD11	2.21	0.64
1:H:7559:ARG:HG3	1:H:7561:GLU:CG	2.27	0.64
1:A:504:ASP:HA	1:A:507:LEU:HD23	1.80	0.64
1:C:2300:LYS:HG2	1:C:2304:GLU:OE2	1.98	0.64
1:C:2303:SER:C	1:C:2340:LYS:HZ3	2.05	0.64
1:C:2315:ALA:HB3	1:C:2392:VAL:CG1	2.27	0.64
1:C:2432:GLU:O	1:C:2436:LEU:HB2	1.97	0.64
1:C:2503:THR:OG1	1:C:2505:GLU:HG2	1.97	0.64
1:D:3264:ARG:HG3	1:D:3265:PHE:N	2.11	0.64
1:E:4261:ASN:HB3	1:E:4265:PHE:CE1	2.33	0.64
1:F:5113:THR:HA	1:F:5116:VAL:HG12	1.79	0.64
1:G:6352:LYS:HG2	1:G:6367:HIS:C	2.22	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:6492:LEU:HD23	1:G:6496:LYS:HD2	1.79	0.64
1:B:1406:ALA:O	1:B:1410:ILE:HG13	1.97	0.64
1:C:2098:ARG:HG3	1:C:2099:ILE:N	2.13	0.64
1:C:2136:SER:OG	1:C:2221:LEU:HD21	1.97	0.64
1:G:6126:ILE:O	1:G:6128:ARG:HD2	1.96	0.64
1:G:6160:VAL:CG1	1:G:6201:VAL:HB	2.24	0.64
1:H:7110:ILE:HG22	1:H:7111:VAL:N	2.12	0.64
1:H:7184:LEU:HG	1:H:7198:CYS:HB3	1.78	0.64
1:B:1291:LEU:HD23	1:B:1417:PHE:CZ	2.32	0.64
1:C:2569:VAL:CG1	1:C:2570:TYR:H	2.10	0.64
1:E:4535:TYR:CE1	1:E:4546:PRO:HD2	2.32	0.64
1:H:7345:ASP:CG	1:H:7347:TYR:H	2.06	0.64
1:B:1320:ALA:HB1	1:B:1365:PHE:CE2	2.33	0.64
1:B:1453:LYS:HD3	1:B:1457:GLY:HA2	1.80	0.64
1:C:2067:ARG:HB2	1:D:3217:PHE:CE1	2.31	0.64
1:C:2101:GLN:O	1:C:2104:ILE:HG22	1.97	0.64
1:C:2308:LEU:HD12	1:C:2309:PHE:H	1.63	0.64
1:C:2422:PRO:O	1:C:2424:ALA:N	2.31	0.64
1:F:5028:LEU:HD21	1:F:5048:LEU:HD12	1.79	0.64
1:F:5359:ASP:O	1:F:5362:GLN:HB2	1.98	0.64
1:F:5419:LEU:HD13	1:F:5419:LEU:N	2.11	0.64
1:G:6146:ILE:O	1:G:6149:ASN:HB2	1.97	0.64
1:H:7270:ARG:HG3	1:H:7271:GLU:N	2.13	0.64
1:H:7415:VAL:CG1	1:H:7442:LEU:HB2	2.22	0.64
1:A:42:LEU:O	1:A:46:GLN:HG3	1.98	0.64
1:C:2187:TYR:O	1:C:2191:ALA:HB3	1.98	0.64
1:F:5419:LEU:HA	1:F:5446:GLY:CA	2.27	0.64
1:G:6471:PHE:CD2	1:G:6472:PRO:HD3	2.33	0.64
1:B:1293:ALA:HB3	1:B:1512:LEU:HB3	1.78	0.64
1:C:2300:LYS:HG2	1:C:2304:GLU:CD	2.23	0.64
1:C:2303:SER:HA	1:C:2340:LYS:NZ	2.13	0.64
1:C:2399:PHE:HB2	1:C:2428:CYS:HB3	1.79	0.64
1:E:4225:ARG:HH11	1:E:4225:ARG:CG	2.11	0.64
1:F:5079:LEU:HD13	1:F:5118:LEU:HD22	1.79	0.64
1:F:5197:ARG:HG3	1:F:5197:ARG:HH11	1.63	0.64
1:G:6113:THR:HA	1:G:6116:VAL:HG12	1.79	0.64
1:G:6174:VAL:HG21	1:G:6219:MSE:C	2.23	0.64
1:G:6191:ALA:HB1	1:G:6476:LEU:CD2	2.28	0.64
1:G:6210:ILE:HG22	1:G:6214:LYS:HE3	1.78	0.64
1:G:6276:PHE:CD1	1:G:6276:PHE:C	2.76	0.64
1:G:6298:ILE:HD11	1:G:6442:LEU:HD11	1.79	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:6468:VAL:HA	1:G:6471:PHE:CE2	2.33	0.64
1:H:7247:GLY:O	1:H:7250:THR:HB	1.98	0.64
1:H:7402:ASP:HA	1:H:7405:ARG:HD2	1.79	0.64
1:D:3095:LEU:O	1:D:3098:ARG:N	2.30	0.64
1:E:4522:VAL:O	1:E:4526:ILE:HG13	1.98	0.64
1:F:5211:ALA:O	1:F:5214:LYS:HG3	1.98	0.64
1:F:5419:LEU:HA	1:F:5446:GLY:HA3	1.80	0.64
1:F:5423:THR:HG22	1:F:5423:THR:O	1.96	0.64
1:A:432:GLU:O	1:A:436:LEU:HB2	1.98	0.63
1:D:3194:ARG:CB	1:D:3197:ARG:HG2	2.28	0.63
1:D:3482:ASN:HD22	1:D:3482:ASN:H	1.46	0.63
1:F:5179:ILE:HB	1:F:5180:PRO:CD	2.28	0.63
1:G:6027:PRO:HA	1:G:6030:LEU:HB2	1.80	0.63
1:G:6177:MSE:O	1:G:6180:PRO:HD2	1.98	0.63
1:H:7390:ILE:HG23	1:H:7417:PHE:HB2	1.79	0.63
1:A:255:GLU:O	1:A:257:PHE:HD1	1.82	0.63
1:B:1251:LEU:HD12	1:B:1252:ILE:N	2.12	0.63
1:C:2354:ARG:NE	1:C:2356:ALA:HB3	2.13	0.63
1:D:3302:ILE:HG22	1:D:3303:SER:N	2.12	0.63
1:E:4264:ARG:HG3	1:E:4265:PHE:N	2.11	0.63
1:G:6158:VAL:HA	1:G:6199:LEU:O	1.98	0.63
1:H:7415:VAL:HG13	1:H:7442:LEU:CB	2.19	0.63
1:B:1135:ILE:HG23	1:B:1143:VAL:HG22	1.80	0.63
1:B:1338:GLN:HG2	1:B:1339:LYS:N	2.13	0.63
1:B:1453:LYS:HG3	1:B:1459:VAL:HG13	1.80	0.63
1:E:4531:THR:CA	1:E:4534:LEU:HD12	2.28	0.63
1:G:6311:GLY:HA3	1:G:6392:VAL:O	1.99	0.63
1:H:7086:MSE:HE2	1:H:7086:MSE:CA	2.29	0.63
1:H:7381:VAL:HG13	1:H:7407:MSE:CE	2.27	0.63
1:D:3315:ALA:HB3	1:D:3392:VAL:CG1	2.29	0.63
1:E:4293:ALA:O	1:E:4296:LYS:HB3	1.98	0.63
1:F:5100:LEU:HD11	1:F:5111:VAL:HG21	1.79	0.63
1:G:6342:TRP:CZ3	1:G:6349:LEU:HD21	2.33	0.63
1:B:1319:ILE:O	1:B:1323:ILE:HG13	1.99	0.63
1:B:1389:ILE:O	1:B:1390:ILE:HG13	1.98	0.63
1:B:1396:GLY:O	1:B:1427:GLU:HA	1.97	0.63
1:C:2398:LEU:N	1:C:2398:LEU:HD12	2.13	0.63
1:D:3400:THR:O	1:D:3404:ILE:HG13	1.99	0.63
1:E:4535:TYR:HD2	1:E:4540:ALA:HB3	1.61	0.63
1:F:5381:VAL:HG13	1:F:5407:MSE:CE	2.29	0.63
1:F:5471:PHE:CG	1:F:5472:PRO:HD3	2.34	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:7531:THR:O	1:H:7532:GLU:C	2.42	0.63
1:H:7533:TYR:CD2	1:H:7533:TYR:C	2.76	0.63
1:A:498:LEU:O	1:A:501:GLN:HB2	1.99	0.63
1:B:1408:ALA:O	1:B:1440:ARG:NH2	2.20	0.63
1:E:4177:MSE:O	1:E:4180:PRO:HD2	1.99	0.63
1:E:4350:LEU:HD22	1:E:4354:ARG:HH12	1.59	0.63
1:E:4351:VAL:O	1:E:4354:ARG:HG2	1.98	0.63
1:F:5261:ASN:H	1:F:5261:ASN:ND2	1.96	0.63
1:G:6090:GLU:HG3	1:G:6131:LYS:HE2	1.80	0.63
1:G:6283:THR:O	1:G:6286:VAL:HG23	1.98	0.63
1:H:7194:ARG:HB2	1:H:7197:ARG:HG3	1.79	0.63
1:H:7416:ILE:HD13	1:H:7416:ILE:N	2.14	0.63
1:A:259:ASN:H	1:A:259:ASN:HD22	1.47	0.63
1:A:310:LEU:O	1:A:344:PHE:O	2.17	0.63
1:A:543:TYR:HB2	1:A:544:PRO:HA	1.79	0.63
1:E:4357:LYS:NZ	1:E:4357:LYS:N	2.47	0.63
1:E:4505:GLU:H	1:E:4505:GLU:CD	2.06	0.63
1:F:5047:MSE:HE3	1:F:5566:LEU:HD22	1.80	0.63
1:G:6038:MSE:HE1	1:G:6057:LYS:HB3	1.81	0.63
1:G:6209:ASN:OD1	1:G:6211:ALA:HB3	1.98	0.63
1:H:7036:LYS:HE3	1:H:7039:ALA:O	1.98	0.63
1:H:7126:ILE:O	1:H:7128:ARG:HD2	1.98	0.63
1:H:7296:LYS:HE2	1:H:7507:LEU:HD21	1.79	0.63
1:H:7512:LEU:N	1:H:7512:LEU:HD12	2.14	0.63
1:A:535:TYR:CD1	1:A:549:LYS:HE3	2.33	0.63
1:B:1243:THR:HB	1:B:1248:ARG:HD2	1.79	0.63
1:B:1269:TYR:HB3	1:B:1273:TYR:CD1	2.31	0.63
1:C:2402:ASP:O	1:C:2405:ARG:HG2	1.99	0.63
1:C:2445:SER:O	1:C:2464:GLN:HA	1.98	0.63
1:F:5431:GLU:C	1:F:5433:ALA:H	2.04	0.63
1:F:5572:TRP:CB	1:H:7042:LEU:HD21	2.23	0.63
1:G:6314:GLU:CG	1:G:6315:ALA:N	2.62	0.63
1:G:6319:ILE:O	1:G:6323:ILE:HG13	1.98	0.63
1:G:6551:LYS:O	1:G:6555:GLU:HB2	1.99	0.63
1:A:550:ALA:O	1:A:554:LYS:HG3	1.99	0.63
1:B:1349:LEU:HD23	1:B:1351:VAL:HB	1.81	0.63
1:C:2072:LEU:HD11	1:C:2081:LYS:HB3	1.80	0.63
1:D:3293:ALA:O	1:D:3296:LYS:HB3	1.99	0.63
1:F:5041:THR:HG23	1:F:5044:GLU:HB2	1.80	0.63
1:G:6468:VAL:O	1:G:6519:ILE:HD11	1.98	0.63
1:G:6537:ASN:HB3	1:G:6539:MSE:SE	2.49	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:176:GLY:C	1:A:178:GLY:H	2.06	0.62
1:B:1347:TYR:HB3	1:B:1356:ALA:HB2	1.80	0.62
1:B:1392:VAL:O	1:B:1392:VAL:HG12	1.99	0.62
1:F:5521:GLU:HA	1:F:5524:ILE:HD12	1.79	0.62
1:F:5572:TRP:HB2	1:H:7042:LEU:CD2	2.27	0.62
1:G:6401:PRO:HG2	1:G:6402:ASP:OD1	1.98	0.62
1:H:7283:THR:O	1:H:7286:VAL:HG23	1.98	0.62
1:H:7325:MSE:HE1	1:H:7489:SER:CA	2.22	0.62
1:H:7470:ILE:HD11	1:H:7498:LEU:HD22	1.79	0.62
1:C:2308:LEU:HD12	1:C:2309:PHE:N	2.14	0.62
1:C:2352:LYS:CG	1:C:2368:SER:HA	2.29	0.62
1:D:3543:TYR:CD2	1:D:3543:TYR:C	2.77	0.62
1:F:5094:LYS:HD3	1:F:5560:SER:O	1.99	0.62
1:F:5303:SER:HA	1:F:5340:LYS:NZ	2.13	0.62
1:G:6153:ASN:O	1:G:6246:TYR:HE2	1.83	0.62
1:H:7116:VAL:HG13	1:H:7117:GLY:N	2.15	0.62
1:H:7261:ASN:HB3	1:H:7265:PHE:CE1	2.34	0.62
1:H:7396:GLY:O	1:H:7427:GLU:HA	1.99	0.62
1:H:7407:MSE:HA	1:H:7410:ILE:HD12	1.79	0.62
1:H:7493:GLU:HA	1:H:7496:LYS:HD2	1.81	0.62
1:A:392:VAL:O	1:A:392:VAL:HG12	1.99	0.62
1:B:1093:GLU:O	1:B:1094:LYS:C	2.41	0.62
1:B:1116:VAL:HG13	1:B:1117:GLY:N	2.14	0.62
1:B:1238:PHE:CE1	1:B:1242:ILE:HG13	2.34	0.62
1:C:2376:THR:O	1:C:2379:ASP:HB2	1.99	0.62
1:C:2408:ALA:CB	1:C:2437:THR:HG22	2.28	0.62
1:C:2531:THR:HA	1:C:2534:LEU:HD12	1.81	0.62
1:G:6300:LYS:HD2	1:G:6304:GLU:HB2	1.80	0.62
1:B:1135:ILE:O	1:B:1203:ILE:HG23	2.00	0.62
1:D:3106:SER:C	1:D:3109:PRO:HD2	2.24	0.62
1:D:3106:SER:O	1:D:3109:PRO:HD2	1.99	0.62
1:D:3204:ASP:OD1	1:D:3221:LEU:HB2	2.00	0.62
1:E:4569:VAL:HG21	1:G:6047:MSE:HE2	1.82	0.62
1:F:5456:ASP:CB	1:F:5458:ARG:HD3	2.29	0.62
1:G:6185:CYS:O	1:G:6189:ALA:N	2.30	0.62
1:G:6533:TYR:O	1:G:6537:ASN:HB2	2.00	0.62
1:H:7042:LEU:HD12	1:H:7042:LEU:O	2.00	0.62
1:H:7086:MSE:CA	1:H:7086:MSE:CE	2.78	0.62
1:A:146:ILE:N	1:A:146:ILE:HD12	2.14	0.62
1:B:1041:THR:HG23	1:B:1044:GLU:CD	2.25	0.62
1:B:1113:THR:HA	1:B:1116:VAL:HG12	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3179:ILE:HB	1:D:3180:PRO:HD3	1.81	0.62
1:D:3253:GLN:NE2	1:D:3254:PHE:O	2.32	0.62
1:D:3258:GLY:O	1:D:3259:ASN:C	2.42	0.62
1:G:6210:ILE:CA	1:G:6213:LEU:HD12	2.29	0.62
1:G:6492:LEU:O	1:G:6495:ALA:HB3	1.99	0.62
1:H:7271:GLU:O	1:H:7485:HIS:NE2	2.33	0.62
1:A:501:GLN:HA	1:A:501:GLN:NE2	2.15	0.62
1:D:3261:ASN:HB3	1:D:3265:PHE:CE1	2.35	0.62
1:D:3289:ALA:O	1:D:3499:THR:OG1	2.17	0.62
1:E:4123:TYR:HD2	1:E:4219:MSE:HE1	1.65	0.62
1:F:5551:LYS:O	1:F:5555:GLU:HB2	1.99	0.62
1:G:6140:ARG:NH1	1:G:6230:GLN:HG2	2.14	0.62
1:G:6177:MSE:HE1	1:G:6180:PRO:HB2	1.81	0.62
1:A:351:VAL:HG21	1:A:369:ALA:HA	1.82	0.62
1:A:566:LEU:CD2	1:A:567:PRO:HD2	2.29	0.62
1:C:2028:LEU:HD21	1:C:2048:LEU:HD12	1.81	0.62
1:D:3291:LEU:HD23	1:D:3417:PHE:CE2	2.35	0.62
1:D:3320:ALA:CA	1:D:3323:ILE:HD12	2.29	0.62
1:F:5176:GLY:C	1:F:5178:GLY:N	2.54	0.62
1:H:7179:ILE:HB	1:H:7180:PRO:CD	2.29	0.62
1:A:377:PHE:O	1:A:381:VAL:HG23	2.00	0.62
1:A:540:ALA:C	1:A:541:PHE:HD2	2.08	0.62
1:C:2303:SER:HA	1:C:2340:LYS:HZ1	1.63	0.62
1:C:2374:PRO:HD3	1:C:2383:ILE:HD12	1.81	0.62
1:D:3061:GLN:HG2	1:D:3098:ARG:HD3	1.81	0.62
1:D:3174:VAL:HG11	1:D:3220:GLY:HA3	1.80	0.62
1:E:4174:VAL:CG2	1:E:4219:MSE:HE3	2.26	0.62
1:E:4333:SER:H	1:E:4336:GLU:CD	2.07	0.62
1:G:6137:ILE:HG22	1:G:6221:LEU:CD2	2.29	0.62
1:G:6249:ASN:C	1:G:6249:ASN:OD1	2.42	0.62
1:G:6261:ASN:HB3	1:G:6265:PHE:CE1	2.35	0.62
1:G:6267:ARG:HH11	1:G:6267:ARG:CG	2.12	0.62
1:G:6288:LEU:O	1:G:6288:LEU:HG	1.98	0.62
1:G:6317:LEU:O	1:G:6320:ALA:HB3	1.99	0.62
1:H:7413:ARG:HA	1:H:7440:ARG:O	1.99	0.62
1:B:1137:ILE:HA	1:B:1234:LEU:CD2	2.29	0.62
1:C:2388:THR:HG23	1:C:2415:VAL:CB	2.30	0.62
1:D:3184:LEU:HA	1:D:3187:TYR:HB2	1.81	0.62
1:E:4099:ILE:O	1:E:4102:ASP:HB2	1.99	0.62
1:H:7396:GLY:HA2	1:H:7425:GLN:HA	1.80	0.62
1:H:7511:ARG:CB	1:H:7511:ARG:HH11	2.13	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:255:GLU:O	1:A:257:PHE:N	2.33	0.61
1:C:2259:ASN:O	1:C:2262:ALA:N	2.33	0.61
1:C:2261:ASN:H	1:C:2261:ASN:ND2	1.92	0.61
1:C:2432:GLU:O	1:C:2436:LEU:HD13	2.00	0.61
1:D:3137:ILE:C	1:D:3139:ASP:H	2.08	0.61
1:E:4350:LEU:HD13	1:E:4354:ARG:NE	2.15	0.61
1:F:5044:GLU:O	1:F:5048:LEU:HD23	2.00	0.61
1:F:5051:GLN:HA	1:F:5051:GLN:NE2	2.15	0.61
1:F:5453:LYS:CB	1:F:5459:VAL:HG13	2.24	0.61
1:F:5506:GLU:HG2	1:F:5511:ARG:CD	2.30	0.61
1:F:5537:ASN:HD22	1:F:5537:ASN:N	1.97	0.61
1:G:6294:ALA:O	1:G:6297:VAL:HG22	1.99	0.61
1:H:7168:GLY:C	1:H:7169:LEU:HD12	2.26	0.61
1:H:7308:LEU:HD12	1:H:7309:PHE:N	2.14	0.61
1:H:7487:SER:O	1:H:7490:VAL:HG23	2.00	0.61
1:A:157:ALA:O	1:A:198:CYS:HA	1.99	0.61
1:B:1027:PRO:HA	1:B:1030:LEU:HB2	1.81	0.61
1:C:2162:ASP:O	1:C:2225:ARG:NH2	2.28	0.61
1:C:2440:ARG:HB3	1:C:2440:ARG:HH11	1.65	0.61
1:E:4416:ILE:HD13	1:E:4416:ILE:H	1.64	0.61
1:B:1112:TYR:CD2	1:B:1113:THR:HG23	2.36	0.61
1:B:1405:ARG:O	1:B:1408:ALA:HB3	2.00	0.61
1:B:1525:ASN:HD22	1:B:1525:ASN:N	1.98	0.61
1:C:2469:TYR:CZ	1:C:2516:LEU:HD13	2.34	0.61
1:D:3120:CYS:SG	1:D:3179:ILE:HG12	2.40	0.61
1:E:4104:ILE:HG13	1:E:4108:MSE:HE2	1.81	0.61
1:E:4363:GLU:O	1:E:4366:THR:N	2.27	0.61
1:F:5451:PRO:HA	1:F:5460:PHE:O	2.01	0.61
1:G:6049:GLY:O	1:G:6050:LEU:HD23	1.99	0.61
1:G:6369:ALA:HB1	1:G:6373:ILE:CD1	2.30	0.61
1:G:6402:ASP:HA	1:G:6405:ARG:HD2	1.82	0.61
1:H:7184:LEU:HA	1:H:7187:TYR:HB2	1.82	0.61
1:H:7259:ASN:O	1:H:7260:HIS:C	2.43	0.61
1:A:137:ILE:HG13	1:A:137:ILE:O	2.00	0.61
1:B:1333:SER:OG	1:B:1336:GLU:HG3	2.01	0.61
1:D:3263:PHE:O	1:D:3266:LEU:HB3	2.01	0.61
1:H:7177:MSE:HE1	1:H:7200:PRO:CB	2.26	0.61
1:A:148:ASP:HA	1:A:245:ARG:HH11	1.64	0.61
1:B:1098:ARG:HG3	1:B:1099:ILE:N	2.14	0.61
1:E:4284:ALA:CB	1:E:4322:LEU:HD13	2.29	0.61
1:F:5253:GLN:HE22	1:F:5255:GLU:HG2	1.64	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:387:SER:O	1:A:415:VAL:HG23	2.00	0.61
1:B:1042:LEU:CD2	1:D:3572:TRP:HB2	2.30	0.61
1:C:2540:ALA:C	1:C:2541:PHE:HD2	2.09	0.61
1:D:3100:LEU:C	1:D:3102:ASP:H	2.09	0.61
1:F:5174:VAL:HG22	1:F:5218:TYR:CE2	2.36	0.61
1:G:6474:VAL:O	1:G:6475:ALA:C	2.42	0.61
1:H:7415:VAL:HG22	1:H:7442:LEU:CD1	2.30	0.61
1:B:1023:GLU:OE1	1:B:1023:GLU:HA	2.00	0.61
1:B:1275:THR:O	1:B:1486:ILE:HD12	2.01	0.61
1:B:1310:LEU:HD22	1:B:1399:PHE:HE2	1.62	0.61
1:B:1443:PHE:CZ	1:B:1445:SER:HB3	2.36	0.61
1:C:2093:GLU:OE1	1:C:2195:PRO:HB2	2.01	0.61
1:C:2376:THR:CG2	1:C:2378:GLU:HB3	2.30	0.61
1:D:3194:ARG:HB2	1:D:3197:ARG:HG2	1.83	0.61
1:D:3313:GLY:O	1:D:3315:ALA:N	2.34	0.61
1:E:4370:PRO:HD2	1:E:4373:ILE:HD11	1.82	0.61
1:F:5061:GLN:HG3	1:F:5562:TYR:CE1	2.35	0.61
1:G:6165:ARG:HB2	1:G:6257:PHE:O	2.00	0.61
1:H:7503:THR:O	1:H:7507:LEU:HD22	2.01	0.61
1:A:244:ASP:N	1:A:248:ARG:NH1	2.48	0.61
1:A:412:GLU:C	1:A:440:ARG:HH11	2.08	0.61
1:D:3183:LYS:HG2	1:D:3187:TYR:CE1	2.34	0.61
1:D:3266:LEU:C	1:D:3266:LEU:HD12	2.25	0.61
1:E:4174:VAL:HG11	1:E:4220:GLY:HA3	1.83	0.61
1:E:4332:LEU:HD21	1:E:4340:LYS:HD2	1.83	0.61
1:F:5124:GLY:O	1:F:5217:PHE:HB3	2.00	0.61
1:F:5376:THR:HG22	1:F:5378:GLU:N	2.16	0.61
1:F:5402:ASP:HA	1:F:5405:ARG:HG2	1.83	0.61
1:G:6401:PRO:HA	1:G:6436:LEU:CD2	2.31	0.61
1:G:6522:VAL:O	1:G:6526:ILE:HG12	2.01	0.61
1:H:7392:VAL:O	1:H:7392:VAL:HG12	2.01	0.61
1:A:79:LEU:HG	1:A:79:LEU:O	2.01	0.61
1:A:94:LYS:HD3	1:A:558:TRP:CZ2	2.35	0.61
1:B:1024:LYS:O	1:B:1027:PRO:HD2	2.01	0.61
1:C:2429:THR:HG23	1:C:2432:GLU:CD	2.26	0.61
1:F:5061:GLN:OE1	1:F:5098:ARG:HD3	2.01	0.61
1:F:5139:ASP:OD2	1:F:5146:ILE:HD11	2.01	0.61
1:G:6109:PRO:HA	1:G:6113:THR:O	2.01	0.61
1:G:6264:ARG:HG3	1:G:6265:PHE:N	2.15	0.61
1:H:7309:PHE:HB2	1:H:7343:MSE:HG3	1.82	0.61
1:A:43:GLN:HG2	1:A:47:MSE:HE3	1.81	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:407:MSE:HG3	1:A:414:PRO:CB	2.31	0.61
1:B:1334:GLU:O	1:B:1337:ALA:HB3	2.00	0.61
1:C:2065:ALA:O	1:C:2068:PHE:HB3	2.01	0.61
1:C:2130:PRO:C	1:C:2131:LYS:HG2	2.25	0.61
1:C:2352:LYS:HB2	1:C:2368:SER:HA	1.83	0.61
1:D:3199:LEU:HD12	1:D:3200:PRO:CD	2.30	0.61
1:E:4377:PHE:O	1:E:4381:VAL:HG23	2.01	0.61
1:F:5197:ARG:HG3	1:F:5197:ARG:NH1	2.16	0.61
1:G:6210:ILE:O	1:G:6214:LYS:HD2	2.01	0.61
1:H:7044:GLU:O	1:H:7048:LEU:HB2	2.01	0.61
1:A:261:ASN:HD22	1:A:261:ASN:N	1.98	0.60
1:A:300:LYS:HD2	1:A:304:GLU:CD	2.26	0.60
1:A:487:SER:O	1:A:490:VAL:HG23	2.00	0.60
1:B:1210:ILE:O	1:B:1213:LEU:N	2.34	0.60
1:E:4300:LYS:HG2	1:E:4304:GLU:OE1	2.01	0.60
1:E:4437:THR:C	1:E:4439:GLY:N	2.56	0.60
1:E:4512:LEU:HD12	1:E:4512:LEU:N	2.15	0.60
1:E:4571:GLU:HG3	1:E:4571:GLU:O	1.99	0.60
1:G:6219:MSE:CG	1:H:7038:MSE:HE1	2.31	0.60
1:G:6245:ARG:O	1:G:6245:ARG:HG3	2.00	0.60
1:G:6397:ARG:HA	1:G:6427:GLU:O	2.01	0.60
1:H:7082:TYR:C	1:H:7082:TYR:CD2	2.78	0.60
1:B:1354:ARG:HG3	1:B:1358:ILE:HD11	1.82	0.60
1:B:1359:ASP:OD2	1:B:1362:GLN:N	2.34	0.60
1:E:4307:ILE:HG13	1:E:4388:THR:HB	1.82	0.60
1:G:6100:LEU:HD23	1:G:6189:ALA:HB2	1.83	0.60
1:D:3169:LEU:N	1:D:3169:LEU:HD12	2.16	0.60
1:D:3188:THR:HG23	1:D:3193:ILE:O	2.00	0.60
1:F:5496:LYS:O	1:F:5500:SER:OG	2.18	0.60
1:H:7313:GLY:O	1:H:7314:GLU:C	2.44	0.60
1:H:7397:ARG:HA	1:H:7427:GLU:O	2.00	0.60
1:A:194:ARG:HB2	1:A:197:ARG:HG3	1.83	0.60
1:B:1104:ILE:HG13	1:B:1108:MSE:HE2	1.82	0.60
1:B:1232:ASP:OD2	1:B:1232:ASP:N	2.30	0.60
1:B:1297:VAL:O	1:B:1297:VAL:HG23	2.01	0.60
1:B:1354:ARG:NH2	1:B:1356:ALA:HB3	2.16	0.60
1:C:2498:LEU:O	1:C:2501:GLN:HB2	2.02	0.60
1:D:3047:MSE:C	1:D:3048:LEU:HD22	2.26	0.60
1:D:3345:ASP:HB2	3:D:3601:NAD:O2B	2.01	0.60
1:D:3419:LEU:O	1:D:3446:GLY:HA3	2.01	0.60
1:F:5543:TYR:HB2	1:F:5544:PRO:HA	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:6038:MSE:CE	1:G:6055:PRO:HG2	2.27	0.60
1:H:7108:MSE:HB3	1:H:7109:PRO:HD3	1.82	0.60
1:H:7374:PRO:HG3	1:H:7380:ALA:HA	1.83	0.60
1:A:101:GLN:HB2	1:A:520:GLN:HE22	1.66	0.60
1:A:323:ILE:O	1:A:324:VAL:C	2.43	0.60
1:B:1223:GLN:HG2	1:B:1224:LYS:N	2.16	0.60
1:B:1310:LEU:HD23	1:B:1427:GLU:HG3	1.84	0.60
1:C:2546:PRO:HG2	1:C:2549:LYS:HD2	1.83	0.60
1:D:3315:ALA:HB3	1:D:3392:VAL:HG11	1.83	0.60
1:D:3389:ILE:CG2	1:D:3416:ILE:HG22	2.32	0.60
1:E:4338:GLN:HE21	1:E:4364:PRO:HB3	1.64	0.60
1:E:4452:VAL:O	1:E:4459:VAL:HA	2.01	0.60
1:F:5448:PRO:HB3	1:F:5464:GLN:OE1	2.00	0.60
1:G:6154:HIS:CE1	1:G:6156:LYS:HE2	2.35	0.60
1:G:6314:GLU:N	1:G:6317:LEU:CD1	2.65	0.60
1:H:7412:GLU:HA	1:H:7440:ARG:HH11	1.65	0.60
1:A:308:LEU:O	1:A:389:ILE:HD12	2.02	0.60
1:A:323:ILE:HG21	1:A:341:ILE:HD11	1.82	0.60
1:C:2351:VAL:HG22	1:C:2367:HIS:O	2.02	0.60
1:D:3166:ILE:HG22	1:D:3166:ILE:O	2.01	0.60
1:F:5456:ASP:OD1	1:F:5456:ASP:N	2.33	0.60
1:H:7159:VAL:HG23	1:H:7184:LEU:HD11	1.82	0.60
1:H:7468:VAL:HG22	1:H:7468:VAL:O	2.01	0.60
1:A:392:VAL:CG2	1:A:419:LEU:HD23	2.29	0.60
1:E:4359:ASP:OD2	1:E:4362:GLN:N	2.34	0.60
1:E:4370:PRO:HD2	1:E:4373:ILE:CD1	2.31	0.60
1:E:4453:LYS:CE	1:E:4457:GLY:HA2	2.32	0.60
1:F:5412:GLU:O	1:F:5440:ARG:HD2	2.01	0.60
1:G:6351:VAL:O	1:G:6366:THR:HG22	2.01	0.60
1:H:7389:ILE:HD12	1:H:7390:ILE:N	2.17	0.60
1:H:7397:ARG:HA	1:H:7427:GLU:C	2.27	0.60
1:H:7416:ILE:O	1:H:7416:ILE:HG12	2.01	0.60
1:H:7535:TYR:O	1:H:7538:LYS:N	2.32	0.60
1:A:89:GLN:O	1:A:91:ARG:N	2.34	0.60
1:B:1261:ASN:HD22	1:B:1261:ASN:N	1.96	0.60
1:C:2399:PHE:HB2	1:C:2427:GLU:O	2.01	0.60
1:D:3215:ASP:OD1	1:D:3216:PRO:HD2	2.02	0.60
1:D:3243:THR:HA	1:D:3247:GLY:O	2.02	0.60
1:D:3453:LYS:HG2	1:D:3459:VAL:HG13	1.84	0.60
1:D:3505:GLU:OE2	1:D:3505:GLU:N	2.29	0.60
1:E:4123:TYR:CD2	1:E:4219:MSE:HE1	2.37	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4432:GLU:O	1:E:4436:LEU:HB2	2.02	0.60
1:G:6243:THR:HA	1:G:6247:GLY:O	2.00	0.60
1:H:7158:VAL:HG22	1:H:7199:LEU:HD23	1.82	0.60
1:A:259:ASN:H	1:A:259:ASN:ND2	2.00	0.60
1:B:1116:VAL:HG13	1:B:1117:GLY:H	1.67	0.60
1:B:1420:SER:HB3	1:B:1425:GLN:HB3	1.82	0.60
1:D:3066:LEU:O	1:D:3067:ARG:C	2.44	0.60
1:D:3122:GLN:HA	1:D:3122:GLN:HE21	1.66	0.60
1:D:3276:PHE:HB3	1:D:3486:ILE:HD12	1.83	0.60
1:D:3352:LYS:N	1:D:3367:HIS:O	2.33	0.60
1:E:4067:ARG:HB2	1:F:5217:PHE:CE1	2.37	0.60
1:E:4120:CYS:SG	1:E:4179:ILE:HG12	2.41	0.60
1:E:4212:LEU:C	1:E:4214:LYS:H	2.10	0.60
1:F:5212:LEU:C	1:F:5214:LYS:H	2.10	0.60
1:G:6075:MSE:HG2	1:G:6080:GLU:HG2	1.82	0.60
1:G:6083:ILE:O	1:G:6083:ILE:HG22	2.01	0.60
1:H:7302:ILE:O	1:H:7304:GLU:N	2.35	0.60
1:H:7493:GLU:HA	1:H:7496:LYS:CD	2.31	0.60
1:B:1164:GLU:HG3	1:B:1225:ARG:CZ	2.32	0.60
1:C:2238:PHE:CE1	1:C:2242:ILE:HG13	2.37	0.60
1:F:5068:PHE:CZ	1:F:5085:ILE:HD12	2.37	0.60
1:F:5310:LEU:O	1:F:5344:PHE:O	2.20	0.60
1:F:5376:THR:HG21	1:F:5378:GLU:OE2	2.02	0.60
1:G:6108:MSE:N	1:G:6109:PRO:HD2	2.17	0.60
1:H:7144:ARG:HH12	1:H:7244:ASP:HB3	1.66	0.60
1:A:26:LYS:O	1:A:29:MSE:N	2.34	0.59
1:A:273:TYR:HB3	4:A:8050:HOH:O	2.02	0.59
1:A:277:ASN:O	1:A:281:GLN:HB2	2.02	0.59
1:A:376:THR:CG2	1:A:378:GLU:H	2.14	0.59
1:B:1483:THR:HG21	1:B:1534:LEU:HD22	1.84	0.59
1:C:2182:GLY:O	1:C:2185:CYS:HB2	2.02	0.59
1:C:2317:LEU:HD23	1:C:2361:TYR:HB3	1.85	0.59
1:C:2338:GLN:HA	1:C:2341:ILE:HG13	1.84	0.59
1:F:5411:ASN:HD22	1:F:5414:PRO:HB3	1.66	0.59
1:F:5564:SER:C	1:F:5565:LEU:HD23	2.27	0.59
1:H:7286:VAL:HG13	1:H:7470:ILE:CD1	2.32	0.59
1:H:7310:LEU:O	1:H:7344:PHE:O	2.21	0.59
1:A:86:MSE:O	1:A:89:GLN:HB3	2.01	0.59
1:A:416:ILE:HD13	1:A:416:ILE:H	1.67	0.59
1:A:535:TYR:OH	1:A:546:PRO:HD2	2.02	0.59
1:B:1217:PHE:O	1:B:1218:TYR:C	2.45	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2377:PHE:CZ	1:C:2389:ILE:HD11	2.37	0.59
1:D:3162:ASP:OD1	1:D:3162:ASP:N	2.35	0.59
1:D:3295:GLN:NE2	1:D:3305:HIS:HE1	1.99	0.59
1:D:3521:GLU:HA	1:D:3524:ILE:HD12	1.84	0.59
1:E:4235:ILE:O	1:E:4239:MSE:HG2	2.03	0.59
1:E:4384:LEU:O	1:E:4385:LYS:HE2	2.02	0.59
1:E:4511:ARG:HH11	1:E:4511:ARG:HB2	1.65	0.59
1:G:6103:ASP:O	1:G:6107:LEU:HD23	2.01	0.59
1:G:6352:LYS:HG3	1:G:6368:SER:CA	2.30	0.59
1:H:7060:THR:H	1:H:7063:ILE:CD1	2.15	0.59
1:H:7266:LEU:O	1:H:7266:LEU:HD12	2.02	0.59
1:A:71:ASN:HD22	1:A:71:ASN:N	1.98	0.59
1:C:2422:PRO:C	1:C:2424:ALA:N	2.56	0.59
1:D:3402:ASP:HA	1:D:3405:ARG:HG2	1.84	0.59
1:E:4300:LYS:HZ3	1:E:4305:HIS:HA	1.66	0.59
1:G:6161:THR:HA	1:G:6257:PHE:CE1	2.37	0.59
1:G:6184:LEU:O	1:G:6187:TYR:HB2	2.01	0.59
1:H:7416:ILE:HD12	1:H:7441:CYS:HB2	1.85	0.59
1:A:294:ALA:O	1:A:295:GLN:C	2.46	0.59
1:C:2261:ASN:N	1:C:2261:ASN:ND2	2.49	0.59
1:C:2288:LEU:O	1:C:2289:ALA:C	2.46	0.59
1:E:4212:LEU:O	1:E:4214:LYS:N	2.35	0.59
1:E:4475:ALA:O	1:E:4479:ILE:HG12	2.02	0.59
1:F:5238:PHE:HE1	1:F:5242:ILE:HD11	1.67	0.59
1:F:5484:ARG:C	1:F:5485:HIS:ND1	2.61	0.59
1:A:269:TYR:HB3	1:A:273:TYR:HD1	1.66	0.59
1:A:477:ALA:CB	1:A:531:THR:HG22	2.32	0.59
1:B:1135:ILE:CG2	1:B:1143:VAL:HG22	2.32	0.59
1:B:1320:ALA:HA	1:B:1323:ILE:HD12	1.84	0.59
1:C:2210:ILE:CA	1:C:2213:LEU:HD12	2.32	0.59
1:C:2469:TYR:OH	1:C:2516:LEU:HD13	2.01	0.59
1:D:3207:THR:O	1:D:3224:LYS:HA	2.03	0.59
1:D:3376:THR:HG21	1:D:3378:GLU:HG2	1.83	0.59
1:F:5061:GLN:HA	1:F:5064:GLN:HG3	1.83	0.59
1:F:5431:GLU:C	1:F:5433:ALA:N	2.60	0.59
1:G:6062:ASP:OD1	1:G:6098:ARG:NH2	2.33	0.59
1:G:6498:LEU:O	1:G:6501:GLN:HB2	2.02	0.59
1:H:7026:LYS:N	1:H:7027:PRO:CD	2.65	0.59
1:H:7467:ASN:C	1:H:7469:TYR:H	2.10	0.59
1:B:1240:LYS:HA	1:B:1243:THR:OG1	2.02	0.59
1:C:2210:ILE:HG22	1:C:2214:LYS:CD	2.32	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3333:SER:HB3	1:D:3336:GLU:OE1	2.02	0.59
1:E:4116:VAL:HG13	1:E:4117:GLY:N	2.18	0.59
1:E:4239:MSE:HE3	1:E:4273:TYR:CD1	2.38	0.59
1:F:5283:THR:O	1:F:5286:VAL:HG23	2.03	0.59
1:G:6045:ARG:NH1	1:G:6058:ILE:HD13	2.17	0.59
1:G:6112:TYR:OH	1:G:6183:LYS:HE2	2.01	0.59
1:A:419:LEU:H	1:A:419:LEU:CD2	2.10	0.59
1:A:458:ARG:HB3	1:A:460:PHE:CE1	2.37	0.59
1:B:1401:PRO:CA	1:B:1404:ILE:HD12	2.32	0.59
1:B:1435:THR:C	1:B:1437:THR:H	2.10	0.59
1:C:2122:GLN:O	1:C:2123:TYR:C	2.45	0.59
1:C:2253:GLN:HG3	1:C:2276:PHE:CE2	2.38	0.59
1:C:2416:ILE:HD13	1:C:2416:ILE:N	2.15	0.59
1:F:5253:GLN:HG3	1:F:5276:PHE:CE2	2.38	0.59
1:F:5454:LEU:H	1:F:5454:LEU:HD12	1.66	0.59
1:B:1046:GLN:HG3	1:B:1051:GLN:HG3	1.85	0.59
1:B:1343:MSE:O	1:B:1350:LEU:HB2	2.03	0.59
1:B:1491:PHE:O	1:B:1494:ALA:HB3	2.02	0.59
1:C:2354:ARG:HE	1:C:2356:ALA:HB3	1.67	0.59
1:D:3165:ARG:HA	1:D:3170:GLY:HA2	1.84	0.59
1:D:3240:LYS:O	1:D:3244:ASP:HB2	2.03	0.59
1:D:3342:TRP:CZ3	1:D:3351:VAL:HG23	2.32	0.59
1:F:5332:LEU:HD23	1:F:5336:GLU:HB2	1.84	0.59
1:G:6310:LEU:HD21	1:G:6398:LEU:HB3	1.85	0.59
1:H:7207:THR:HG22	1:H:7213:LEU:HD21	1.83	0.59
1:H:7298:ILE:HD11	1:H:7442:LEU:HD21	1.85	0.59
1:H:7301:PRO:O	1:H:7302:ILE:C	2.46	0.59
1:A:301:PRO:O	1:A:302:ILE:C	2.46	0.59
1:A:309:PHE:CE1	1:A:390:ILE:HG13	2.38	0.59
1:A:388:THR:HG23	1:A:415:VAL:HB	1.83	0.59
1:B:1144:ARG:HH11	1:B:1244:ASP:HB3	1.67	0.59
1:C:2132:GLY:HA3	1:C:2177:MSE:CE	2.33	0.59
1:D:3184:LEU:O	1:D:3187:TYR:HB2	2.02	0.59
1:E:4301:PRO:HD2	1:E:4304:GLU:OE1	2.03	0.59
1:A:308:LEU:HD12	1:A:309:PHE:N	2.17	0.59
1:B:1440:ARG:HB3	1:B:1440:ARG:HH11	1.68	0.59
1:B:1502:LEU:HD21	1:B:1512:LEU:C	2.28	0.59
1:E:4266:LEU:O	1:E:4270:ARG:CB	2.50	0.59
1:G:6079:LEU:HD13	1:G:6118:LEU:CD2	2.29	0.59
1:G:6260:HIS:CE1	1:G:6264:ARG:HE	2.20	0.59
1:G:6402:ASP:HA	1:G:6405:ARG:HG2	1.85	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:6478:VAL:HG12	1:G:6479:ILE:N	2.17	0.59
1:A:451:PRO:CA	1:A:460:PHE:O	2.49	0.58
1:C:2238:PHE:CE1	1:C:2242:ILE:CG1	2.86	0.58
1:C:2261:ASN:HB3	1:C:2265:PHE:CE1	2.38	0.58
1:C:2469:TYR:C	1:C:2470:ILE:HD13	2.28	0.58
1:C:2499:THR:O	1:C:2501:GLN:N	2.34	0.58
1:D:3275:THR:C	1:D:3486:ILE:HD11	2.28	0.58
1:D:3343:MSE:O	1:D:3350:LEU:HB2	2.02	0.58
1:D:3359:ASP:OD2	1:D:3362:GLN:N	2.36	0.58
1:D:3391:GLY:HA3	1:D:3427:GLU:CD	2.28	0.58
1:D:3553:VAL:C	1:D:3555:GLU:H	2.11	0.58
1:F:5512:LEU:HD12	1:F:5512:LEU:H	1.67	0.58
1:G:6196:ASP:N	1:G:6196:ASP:OD1	2.34	0.58
1:C:2106:SER:O	1:C:2109:PRO:HD2	2.03	0.58
1:E:4416:ILE:HG12	1:E:4443:PHE:CD1	2.37	0.58
1:F:5239:MSE:HE2	1:F:5273:TYR:CD1	2.37	0.58
1:A:243:THR:CG2	1:A:248:ARG:HA	2.31	0.58
1:A:303:SER:HA	1:A:340:LYS:NZ	2.18	0.58
1:B:1419:LEU:HD22	1:B:1419:LEU:N	2.17	0.58
1:C:2313:GLY:O	1:C:2315:ALA:N	2.36	0.58
1:C:2333:SER:O	1:C:2334:GLU:C	2.47	0.58
1:D:3166:ILE:CG2	1:D:3172:LEU:HD12	2.33	0.58
1:F:5238:PHE:CE1	1:F:5242:ILE:HD11	2.39	0.58
1:H:7093:GLU:OE1	1:H:7195:PRO:HB2	2.02	0.58
1:H:7104:ILE:HG13	1:H:7108:MSE:CE	2.33	0.58
1:H:7177:MSE:O	1:H:7181:VAL:HG23	2.04	0.58
1:H:7194:ARG:HG3	1:H:7197:ARG:NH1	2.17	0.58
1:H:7209:ASN:O	1:H:7212:LEU:HB2	2.04	0.58
1:B:1402:ASP:O	1:B:1405:ARG:HG2	2.03	0.58
1:E:4456:ASP:OD1	1:E:4458:ARG:HB2	2.04	0.58
1:F:5261:ASN:HB3	1:F:5265:PHE:CE1	2.38	0.58
1:F:5352:LYS:N	1:F:5367:HIS:O	2.34	0.58
1:G:6536:ALA:HA	1:G:6538:LYS:NZ	2.18	0.58
1:A:412:GLU:O	1:A:413:ARG:HG2	2.03	0.58
1:B:1370:PRO:HD2	1:B:1373:ILE:HD11	1.85	0.58
1:B:1416:ILE:O	1:B:1416:ILE:HG12	2.01	0.58
1:C:2277:ASN:C	1:C:2277:ASN:OD1	2.47	0.58
1:C:2352:LYS:HG3	1:C:2368:SER:HA	1.85	0.58
1:C:2376:THR:HB	1:C:2379:ASP:H	1.68	0.58
1:D:3280:ILE:CD1	4:D:8022:HOH:O	2.51	0.58
1:E:4559:ARG:HB3	1:E:4561:GLU:HG2	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:6086:MSE:CE	1:G:6086:MSE:CA	2.79	0.58
1:H:7280:ILE:HG22	1:H:7281:GLN:N	2.19	0.58
1:H:7566:LEU:HD22	1:H:7567:PRO:HD2	1.84	0.58
1:A:194:ARG:O	1:A:197:ARG:HB2	2.03	0.58
1:A:402:ASP:HA	1:A:405:ARG:CD	2.29	0.58
1:A:481:CYS:SG	1:A:531:THR:HB	2.44	0.58
1:B:1133:LEU:HD13	1:B:1150:TRP:CE3	2.39	0.58
1:C:2387:SER:O	1:C:2415:VAL:HG23	2.03	0.58
1:C:2453:LYS:HE3	1:C:2457:GLY:HA2	1.83	0.58
1:E:4421:ASN:HB3	1:E:4422:PRO:HA	1.85	0.58
1:G:6122:GLN:O	1:G:6125:HIS:HB2	2.04	0.58
1:G:6279:ASP:N	1:G:6279:ASP:OD1	2.37	0.58
1:A:270:ARG:HG2	1:A:271:GLU:HG2	1.86	0.58
1:B:1041:THR:HG23	1:B:1044:GLU:CG	2.34	0.58
1:B:1186:LEU:O	1:B:1187:TYR:C	2.47	0.58
1:B:1346:LYS:HD2	1:B:1347:TYR:CE2	2.39	0.58
1:B:1483:THR:OG1	1:B:1534:LEU:HD13	2.04	0.58
1:C:2137:ILE:HA	1:C:2234:LEU:CD2	2.34	0.58
1:D:3337:ALA:C	1:D:3339:LYS:H	2.11	0.58
1:E:4332:LEU:HD11	1:E:4340:LYS:HZ1	1.68	0.58
1:G:6038:MSE:O	1:G:6045:ARG:NH2	2.37	0.58
1:H:7359:ASP:OD2	1:H:7362:GLN:N	2.37	0.58
1:A:255:GLU:O	1:A:256:ASP:C	2.47	0.58
1:C:2342:TRP:HZ3	1:C:2351:VAL:HG23	1.69	0.58
1:C:2523:SER:HA	1:C:2526:ILE:HD12	1.86	0.58
1:D:3082:TYR:O	1:D:3085:ILE:HG22	2.04	0.58
1:D:3094:LYS:HB3	1:D:3562:TYR:CE2	2.39	0.58
1:D:3404:ILE:HD12	1:D:3436:LEU:HD22	1.84	0.58
1:E:4293:ALA:HB3	1:E:4512:LEU:HB3	1.85	0.58
1:E:4317:LEU:HD12	1:E:4317:LEU:N	2.19	0.58
1:F:5065:ALA:O	1:F:5068:PHE:HB3	2.03	0.58
1:G:6307:ILE:HG22	1:G:6308:LEU:N	2.18	0.58
1:G:6314:GLU:N	1:G:6317:LEU:HD13	2.19	0.58
1:A:288:LEU:HD22	1:A:322:LEU:HD23	1.86	0.58
1:A:309:PHE:HD2	1:A:343:MSE:HG3	1.68	0.58
1:B:1137:ILE:HG22	1:B:1221:LEU:HD23	1.86	0.58
1:B:1458:ARG:HB3	1:B:1460:PHE:CZ	2.39	0.58
1:B:1525:ASN:HA	1:B:1528:ILE:HG13	1.84	0.58
1:C:2044:GLU:O	1:C:2048:LEU:HD23	2.03	0.58
1:C:2270:ARG:HG3	1:C:2271:GLU:H	1.69	0.58
1:C:2537:ASN:HD22	1:C:2537:ASN:N	2.02	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4315:ALA:CB	1:E:4392:VAL:HG11	2.33	0.58
1:E:4397:ARG:HA	1:E:4427:GLU:O	2.03	0.58
1:E:4526:ILE:O	1:E:4530:VAL:HG23	2.04	0.58
1:F:5085:ILE:HG23	1:F:5086:MSE:HE2	1.85	0.58
1:G:6300:LYS:O	1:G:6302:ILE:N	2.36	0.58
1:G:6352:LYS:HG2	1:G:6367:HIS:O	2.03	0.58
1:H:7046:GLN:HG3	1:H:7051:GLN:HG3	1.86	0.58
1:A:253:GLN:HG3	1:A:276:PHE:CE2	2.39	0.58
1:B:1283:THR:O	1:B:1284:ALA:C	2.47	0.58
1:C:2327:MSE:HE1	1:C:2337:ALA:O	2.03	0.58
1:C:2383:ILE:O	1:C:2385:LYS:NZ	2.35	0.58
1:E:4155:VAL:HB	1:E:4246:TYR:CD2	2.39	0.58
1:E:4374:PRO:CB	1:E:4383:ILE:HD12	2.34	0.58
1:E:4400:THR:O	1:E:4403:VAL:HB	2.04	0.58
1:E:4515:PRO:C	1:E:4517:ALA:H	2.11	0.58
1:F:5467:ASN:C	1:F:5469:TYR:N	2.61	0.58
1:F:5494:ALA:O	1:F:5497:ALA:HB3	2.04	0.58
1:H:7300:LYS:O	1:H:7302:ILE:N	2.36	0.58
1:H:7531:THR:OG1	1:H:7532:GLU:N	2.35	0.58
1:A:175:TYR:OH	1:A:218:TYR:HA	2.04	0.57
1:A:298:ILE:HD11	1:A:442:LEU:CD1	2.31	0.57
1:A:315:ALA:O	1:A:319:ILE:HD12	2.04	0.57
1:A:466:ASN:CB	1:A:468:VAL:HG12	2.31	0.57
1:A:528:ILE:O	1:A:532:GLU:HG3	2.04	0.57
1:B:1152:GLU:O	1:B:1246:TYR:OH	2.17	0.57
1:B:1167:LEU:C	1:B:1169:LEU:H	2.12	0.57
1:D:3351:VAL:HG21	1:D:3370:PRO:HD3	1.85	0.57
1:E:4133:LEU:HD12	1:F:5052:GLY:O	2.04	0.57
1:E:4289:ALA:HA	1:E:4499:THR:OG1	2.04	0.57
1:G:6289:ALA:O	1:G:6499:THR:OG1	2.21	0.57
1:G:6350:LEU:HD22	1:G:6354:ARG:NH1	2.19	0.57
1:G:6354:ARG:HG3	1:G:6356:ALA:H	1.68	0.57
1:G:6537:ASN:O	1:G:6539:MSE:HG3	2.04	0.57
1:H:7086:MSE:HA	1:H:7086:MSE:CE	2.33	0.57
1:H:7303:SER:O	1:H:7340:LYS:HE3	2.03	0.57
1:H:7354:ARG:HG2	1:H:7358:ILE:HD11	1.86	0.57
1:A:417:PHE:CE2	1:A:444:ALA:HB3	2.39	0.57
1:A:424:ALA:HB3	1:A:425:GLN:HE21	1.68	0.57
1:C:2227:ARG:CG	1:C:2227:ARG:NH1	2.61	0.57
1:C:2411:ASN:HD22	1:C:2414:PRO:HB3	1.69	0.57
1:D:3077:SER:OG	1:D:3080:GLU:HB2	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3335:GLN:O	1:D:3339:LYS:HB2	2.03	0.57
1:E:4163:GLY:O	1:E:4171:ASP:HA	2.04	0.57
1:G:6060:THR:H	1:G:6063:ILE:HD12	1.69	0.57
1:A:397:ARG:HD2	1:A:397:ARG:N	2.19	0.57
1:B:1470:ILE:C	1:B:1472:PRO:HD2	2.29	0.57
1:D:3301:PRO:O	1:D:3302:ILE:C	2.46	0.57
1:D:3553:VAL:O	1:D:3555:GLU:N	2.37	0.57
1:E:4309:PHE:HB2	1:E:4343:MSE:HG2	1.86	0.57
1:G:6205:VAL:HG21	1:G:6231:TYR:HE1	1.69	0.57
1:H:7508:ALA:O	1:H:7509:GLN:C	2.48	0.57
1:A:31:ASN:OD1	1:A:33:ARG:N	2.38	0.57
1:A:144:ARG:HH12	1:A:244:ASP:HB3	1.70	0.57
1:A:165:ARG:CZ	1:A:259:ASN:HD21	2.16	0.57
1:A:187:TYR:O	1:A:193:ILE:HD12	2.04	0.57
1:A:422:PRO:HD2	1:A:425:GLN:HG2	1.85	0.57
1:A:572:TRP:NE1	1:D:3138:SER:O	2.38	0.57
1:C:2257:PHE:CB	1:C:2262:ALA:HB2	2.34	0.57
1:E:4359:ASP:OD2	1:E:4359:ASP:C	2.46	0.57
1:E:4502:LEU:HD12	1:E:4507:LEU:HD22	1.86	0.57
1:E:4535:TYR:CD2	1:E:4540:ALA:HB3	2.39	0.57
1:F:5320:ALA:HB1	1:F:5365:PHE:CZ	2.40	0.57
1:A:324:VAL:O	1:A:327:MSE:N	2.34	0.57
1:C:2416:ILE:HG12	1:C:2443:PHE:HD1	1.67	0.57
1:D:3381:VAL:HG13	1:D:3407:MSE:HE1	1.85	0.57
1:E:4295:GLN:HE22	1:E:4305:HIS:CE1	2.23	0.57
1:E:4350:LEU:HD13	1:E:4354:ARG:HD3	1.87	0.57
1:F:5166:ILE:HG23	1:F:5179:ILE:HD11	1.86	0.57
1:G:6030:LEU:HD12	1:H:7030:LEU:HB3	1.85	0.57
1:G:6086:MSE:HE1	1:G:6111:VAL:HG22	1.87	0.57
1:G:6095:LEU:HG	1:G:6099:ILE:CD1	2.33	0.57
1:G:6247:GLY:O	1:G:6250:THR:HB	2.04	0.57
1:H:7159:VAL:HA	1:H:7253:GLN:O	2.05	0.57
1:H:7499:THR:C	1:H:7501:GLN:H	2.13	0.57
1:H:7511:ARG:HH11	1:H:7511:ARG:HB2	1.68	0.57
1:A:416:ILE:CD1	1:A:441:CYS:HB2	2.34	0.57
1:B:1122:GLN:HE21	1:B:1122:GLN:HA	1.68	0.57
1:C:2123:TYR:HD2	1:C:2219:MSE:CE	2.16	0.57
1:C:2300:LYS:HE2	1:C:2304:GLU:HB2	1.86	0.57
1:C:2323:ILE:HG22	1:C:2327:MSE:HE2	1.86	0.57
1:C:2351:VAL:HG13	1:C:2352:LYS:N	2.18	0.57
1:D:3372:SER:HB2	1:D:3383:ILE:CD1	2.34	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4179:ILE:HB	1:E:4180:PRO:HD3	1.85	0.57
1:G:6204:ASP:OD2	1:G:6221:LEU:N	2.36	0.57
1:H:7123:TYR:HB3	1:H:7175:TYR:CD2	2.38	0.57
1:A:41:THR:HG23	1:A:44:GLU:CD	2.29	0.57
1:C:2044:GLU:HA	1:C:2048:LEU:HD23	1.85	0.57
1:C:2144:ARG:NH1	1:C:2244:ASP:HB3	2.20	0.57
1:D:3400:THR:HG23	1:D:3403:VAL:HG23	1.87	0.57
1:F:5210:ILE:HG22	1:F:5214:LYS:HE2	1.86	0.57
1:G:6281:GLN:HG2	1:G:6491:PHE:CE1	2.38	0.57
1:G:6376:THR:HB	1:G:6379:ASP:CG	2.30	0.57
1:H:7258:GLY:O	1:H:7259:ASN:C	2.47	0.57
1:H:7292:LEU:HB3	1:H:7499:THR:HG21	1.86	0.57
1:H:7497:ALA:O	1:H:7501:GLN:HG2	2.04	0.57
1:A:26:LYS:N	1:A:27:PRO:CD	2.68	0.57
1:B:1123:TYR:C	1:B:1125:HIS:H	2.13	0.57
1:B:1505:GLU:N	1:B:1505:GLU:OE2	2.38	0.57
1:C:2286:VAL:HG11	1:C:2466:ASN:O	2.05	0.57
1:C:2402:ASP:HA	1:C:2405:ARG:HG2	1.87	0.57
1:E:4357:LYS:N	1:E:4357:LYS:HZ2	2.03	0.57
1:E:4549:LYS:O	1:E:4553:VAL:HG23	2.05	0.57
1:G:6466:ASN:CB	1:G:6468:VAL:HG12	2.35	0.57
1:H:7266:LEU:HD21	1:H:7281:GLN:NE2	2.19	0.57
1:C:2036:LYS:HG2	1:C:2562:TYR:CE2	2.39	0.57
1:C:2186:LEU:O	1:C:2187:TYR:C	2.47	0.57
1:C:2380:ALA:O	1:C:2381:VAL:C	2.48	0.57
1:D:3135:ILE:HD11	1:D:3143:VAL:HG13	1.87	0.57
1:D:3266:LEU:HD12	1:D:3266:LEU:O	2.05	0.57
1:F:5271:GLU:OE1	1:F:5271:GLU:HA	2.04	0.57
1:G:6162:ASP:O	1:G:6225:ARG:NH2	2.37	0.57
1:G:6166:ILE:HD13	1:G:6256:ASP:CB	2.34	0.57
1:A:86:MSE:HE2	1:A:86:MSE:CA	2.35	0.57
1:D:3255:GLU:OE1	1:D:3256:ASP:N	2.35	0.57
1:F:5308:LEU:HA	1:F:5342:TRP:O	2.05	0.57
1:F:5454:LEU:HD12	1:F:5458:ARG:O	2.04	0.57
1:G:6312:ALA:CB	1:G:6343:MSE:HE3	2.34	0.57
1:H:7255:GLU:O	1:H:7257:PHE:N	2.38	0.57
1:H:7553:VAL:C	1:H:7555:GLU:H	2.11	0.57
1:C:2414:PRO:HD2	1:C:2441:CYS:HA	1.86	0.56
1:D:3163:GLY:O	1:D:3171:ASP:HA	2.05	0.56
1:D:3199:LEU:HD12	1:D:3200:PRO:N	2.19	0.56
1:D:3396:GLY:O	1:D:3427:GLU:HA	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3437:THR:O	1:D:3438:GLU:HB2	2.05	0.56
1:E:4126:ILE:O	1:E:4128:ARG:HD2	2.05	0.56
1:E:4553:VAL:C	1:E:4555:GLU:H	2.13	0.56
1:F:5419:LEU:HD22	1:F:5419:LEU:N	2.18	0.56
1:F:5435:THR:OG1	1:F:5436:LEU:HD12	2.05	0.56
1:F:5470:ILE:HD11	1:F:5498:LEU:HD22	1.86	0.56
1:F:5559:ARG:HH11	1:F:5559:ARG:CG	2.18	0.56
1:F:5566:LEU:CD2	1:F:5567:PRO:HD2	2.34	0.56
1:G:6177:MSE:CE	1:G:6180:PRO:HB2	2.35	0.56
1:H:7130:PRO:C	1:H:7131:LYS:HG2	2.30	0.56
1:B:1253:GLN:HE22	1:B:1255:GLU:CG	2.18	0.56
1:B:1391:GLY:CA	1:B:1427:GLU:HG2	2.36	0.56
1:C:2099:ILE:HA	1:C:2102:ASP:HB2	1.88	0.56
1:D:3122:GLN:O	1:D:3125:HIS:HB2	2.05	0.56
1:D:3443:PHE:O	1:D:3512:LEU:HD13	2.05	0.56
1:E:4376:THR:O	1:E:4379:ASP:HB2	2.04	0.56
1:E:4502:LEU:HD21	1:E:4513:TYR:N	2.20	0.56
1:F:5060:THR:OG1	1:F:5063:ILE:HD12	2.05	0.56
1:F:5144:ARG:NH1	1:F:5244:ASP:HB3	2.20	0.56
1:F:5349:LEU:HD21	1:F:5351:VAL:HG23	1.87	0.56
1:G:6491:PHE:O	1:G:6494:ALA:N	2.38	0.56
1:H:7554:LYS:HB3	4:H:8039:HOH:O	2.04	0.56
1:A:78:PRO:HA	1:A:81:LYS:HG3	1.87	0.56
1:A:294:ALA:O	1:A:297:VAL:HG13	2.06	0.56
1:B:1161:THR:HA	1:B:1257:PHE:CE1	2.40	0.56
1:B:1374:PRO:HB3	1:B:1383:ILE:HD12	1.87	0.56
1:B:1388:THR:CG2	1:B:1415:VAL:HB	2.29	0.56
1:B:1397:ARG:HD3	1:B:1428:CYS:HA	1.86	0.56
1:B:1504:ASP:HA	1:B:1507:LEU:HB2	1.87	0.56
1:C:2101:GLN:HA	1:C:2104:ILE:HB	1.86	0.56
1:D:3079:LEU:HD11	1:D:3119:ALA:HA	1.87	0.56
1:D:3094:LYS:HB3	1:D:3562:TYR:HE2	1.69	0.56
1:D:3133:LEU:HD23	1:D:3199:LEU:HD21	1.88	0.56
1:E:4155:VAL:HB	1:E:4246:TYR:CG	2.39	0.56
1:E:4228:THR:OG1	1:E:4229:GLN:N	2.37	0.56
1:E:4474:VAL:HG12	1:E:4475:ALA:N	2.21	0.56
1:F:5142:HIS:O	1:F:5143:VAL:C	2.49	0.56
1:F:5157:ALA:O	1:F:5198:CYS:HA	2.05	0.56
1:F:5283:THR:HG22	1:F:5284:ALA:N	2.20	0.56
1:G:6207:THR:HG23	1:G:6213:LEU:CD2	2.34	0.56
1:G:6302:ILE:HG22	1:G:6340:LYS:HZ1	1.68	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:6320:ALA:O	1:G:6324:VAL:HG23	2.04	0.56
1:G:6524:ILE:O	1:G:6527:ALA:HB3	2.04	0.56
1:H:7319:ILE:O	1:H:7323:ILE:HG13	2.05	0.56
1:H:7412:GLU:C	1:H:7413:ARG:HG2	2.29	0.56
1:A:44:GLU:HG3	1:A:566:LEU:HG	1.86	0.56
1:A:143:VAL:O	1:A:147:VAL:HG23	2.05	0.56
1:A:572:TRP:NE1	1:D:3139:ASP:OD1	2.37	0.56
1:C:2234:LEU:HD12	1:C:2234:LEU:O	2.04	0.56
1:C:2518:ASN:HB3	1:C:2521:GLU:CD	2.31	0.56
1:D:3308:LEU:HB3	1:D:3389:ILE:CD1	2.35	0.56
1:D:3332:LEU:HD22	1:D:3337:ALA:HB2	1.88	0.56
1:E:4174:VAL:CG1	1:E:4220:GLY:HA3	2.36	0.56
1:E:4352:LYS:HG3	1:E:4368:SER:N	2.20	0.56
1:H:7108:MSE:HB3	1:H:7109:PRO:CD	2.35	0.56
1:H:7305:HIS:O	1:H:7340:LYS:HG2	2.05	0.56
1:A:91:ARG:HG3	1:B:1129:ARG:NH2	2.20	0.56
1:A:179:ILE:HB	1:A:180:PRO:HD3	1.88	0.56
1:B:1143:VAL:O	1:B:1147:VAL:HG23	2.04	0.56
1:B:1301:PRO:O	1:B:1302:ILE:C	2.48	0.56
1:C:2386:PRO:HB2	1:C:2388:THR:O	2.06	0.56
1:D:3494:ALA:O	1:D:3495:ALA:C	2.47	0.56
1:F:5363:GLU:HA	1:F:5366:THR:OG1	2.05	0.56
1:G:6314:GLU:CA	1:G:6317:LEU:HD13	2.36	0.56
1:G:6378:GLU:HA	1:G:6381:VAL:HB	1.87	0.56
1:G:6413:ARG:HB3	1:G:6442:LEU:HD11	1.87	0.56
1:B:1097:TYR:O	1:B:1100:LEU:HB3	2.06	0.56
1:B:1295:GLN:NE2	1:B:1305:HIS:NE2	2.54	0.56
1:B:1489:SER:HB2	1:B:1533:TYR:OH	2.06	0.56
1:C:2341:ILE:HB	1:C:2365:PHE:HD2	1.70	0.56
1:D:3389:ILE:C	1:D:3390:ILE:HG13	2.30	0.56
1:E:4108:MSE:HB3	1:E:4109:PRO:HD3	1.86	0.56
1:E:4300:LYS:NZ	1:E:4305:HIS:HA	2.20	0.56
1:E:4515:PRO:C	1:E:4517:ALA:N	2.62	0.56
1:F:5208:ASP:O	1:F:5210:ILE:HD13	2.05	0.56
1:F:5388:THR:HG23	1:F:5415:VAL:CB	2.27	0.56
1:G:6243:THR:CG2	1:G:6248:ARG:HA	2.35	0.56
1:G:6359:ASP:C	1:G:6359:ASP:OD2	2.48	0.56
1:G:6429:THR:O	1:G:6430:ALA:C	2.49	0.56
1:H:7258:GLY:O	1:H:7260:HIS:N	2.39	0.56
1:H:7266:LEU:CD2	1:H:7277:ASN:H	2.19	0.56
1:H:7416:ILE:CD1	1:H:7441:CYS:HB2	2.36	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:7430:ALA:O	1:H:7433:ALA:HB3	2.05	0.56
1:A:187:TYR:O	1:A:191:ALA:HB3	2.05	0.56
1:A:499:THR:C	1:A:501:GLN:H	2.14	0.56
1:B:1133:LEU:HB2	1:B:1199:LEU:HD11	1.87	0.56
1:B:1287:ALA:O	1:B:1290:GLY:N	2.37	0.56
1:B:1354:ARG:HE	1:B:1358:ILE:HD11	1.71	0.56
1:B:1451:PRO:HA	1:B:1460:PHE:O	2.05	0.56
1:B:1518:ASN:O	1:B:1522:VAL:HG23	2.04	0.56
1:D:3245:ARG:HD3	1:D:3246:TYR:CE1	2.39	0.56
1:D:3352:LYS:CB	1:D:3368:SER:HA	2.36	0.56
1:E:4328:VAL:HG12	1:E:4329:GLU:N	2.21	0.56
1:E:4381:VAL:O	1:E:4386:PRO:HD3	2.06	0.56
1:G:6526:ILE:O	1:G:6530:VAL:HG23	2.05	0.56
1:A:143:VAL:HB	1:A:237:GLU:HG2	1.87	0.56
1:A:407:MSE:HG3	1:A:414:PRO:HB3	1.87	0.56
1:A:413:ARG:NH2	1:A:440:ARG:C	2.64	0.56
1:B:1166:ILE:O	1:B:1166:ILE:HG22	2.05	0.56
1:B:1401:PRO:HB3	1:B:1436:LEU:HD21	1.87	0.56
1:B:1453:LYS:HA	1:B:1458:ARG:O	2.05	0.56
1:C:2123:TYR:HB3	1:C:2175:TYR:CD2	2.41	0.56
1:D:3156:LYS:HD2	3:D:3602:NAD:O2B	2.06	0.56
1:D:3412:GLU:HA	1:D:3440:ARG:NH1	2.20	0.56
1:G:6166:ILE:HG21	1:G:6172:LEU:HD12	1.87	0.56
1:G:6261:ASN:O	1:G:6264:ARG:HG2	2.06	0.56
1:G:6527:ALA:O	1:G:6531:THR:HG23	2.06	0.56
1:G:6549:LYS:O	1:G:6552:TYR:HB3	2.04	0.56
1:H:7302:ILE:O	1:H:7304:GLU:OE2	2.24	0.56
1:A:376:THR:HG22	1:A:378:GLU:H	1.68	0.56
1:C:2082:TYR:C	1:C:2082:TYR:CD2	2.84	0.56
1:C:2238:PHE:O	1:C:2242:ILE:HG12	2.06	0.56
1:D:3075:MSE:HG3	1:D:3080:GLU:OE1	2.05	0.56
1:D:3095:LEU:O	1:D:3096:PHE:C	2.47	0.56
1:D:3432:GLU:HG2	4:D:8007:HOH:O	2.06	0.56
1:E:4308:LEU:HB3	1:E:4389:ILE:HD11	1.87	0.56
1:G:6384:LEU:O	1:G:6385:LYS:HB2	2.06	0.56
1:H:7311:GLY:HA3	1:H:7392:VAL:O	2.06	0.56
1:B:1165:ARG:HD3	1:B:1258:GLY:HA2	1.88	0.56
1:B:1413:ARG:HA	1:B:1440:ARG:O	2.06	0.56
1:C:2569:VAL:O	1:C:2570:TYR:HB3	2.06	0.56
1:D:3150:TRP:HE1	1:D:3152:GLU:HB2	1.71	0.56
1:D:3298:ILE:HD11	1:D:3413:ARG:HB3	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5418:ALA:C	1:F:5419:LEU:HD13	2.31	0.56
1:G:6205:VAL:HG11	1:G:6231:TYR:HD1	1.71	0.56
1:G:6370:PRO:HD2	1:G:6373:ILE:CD1	2.36	0.56
1:G:6490:VAL:O	1:G:6493:GLU:HB3	2.05	0.56
1:H:7127:PHE:C	1:H:7127:PHE:CD2	2.84	0.56
1:H:7553:VAL:C	1:H:7555:GLU:N	2.62	0.56
1:A:399:PHE:HA	1:A:403:VAL:HG11	1.86	0.55
1:A:451:PRO:HG3	1:A:461:THR:OG1	2.06	0.55
1:A:559:ARG:HG3	1:A:561:GLU:CG	2.31	0.55
1:B:1351:VAL:CG2	1:B:1369:ALA:HA	2.33	0.55
1:B:1351:VAL:HG11	1:B:1369:ALA:HB2	1.87	0.55
1:D:3372:SER:O	1:D:3374:PRO:HD3	2.06	0.55
1:E:4363:GLU:CB	1:E:4364:PRO:HD3	2.35	0.55
1:E:4541:PHE:HE1	1:H:7543:TYR:CE2	2.24	0.55
1:G:6234:LEU:O	1:G:6237:GLU:HB3	2.07	0.55
1:G:6253:GLN:NE2	1:G:6278:ASP:CB	2.68	0.55
1:G:6401:PRO:CA	1:G:6436:LEU:HD21	2.35	0.55
1:A:89:GLN:C	1:A:91:ARG:N	2.64	0.55
1:A:431:GLU:OE2	1:A:435:THR:HG21	2.07	0.55
1:A:475:ALA:O	1:A:479:ILE:HG12	2.06	0.55
1:B:1235:ILE:HD13	1:B:1235:ILE:N	2.21	0.55
1:B:1239:MSE:O	1:B:1243:THR:OG1	2.24	0.55
1:B:1239:MSE:HE1	1:B:1252:ILE:HD12	1.87	0.55
1:B:1259:ASN:O	1:B:1260:HIS:C	2.49	0.55
1:C:2153:ASN:O	1:C:2246:TYR:HE2	1.88	0.55
1:C:2177:MSE:HE1	1:C:2200:PRO:HG2	1.88	0.55
1:C:2177:MSE:O	1:C:2181:VAL:HG23	2.06	0.55
1:D:3416:ILE:O	1:D:3416:ILE:HG12	2.05	0.55
1:F:5286:VAL:HG21	1:F:5467:ASN:OD1	2.06	0.55
1:F:5302:ILE:HA	1:F:5305:HIS:CE1	2.41	0.55
1:F:5351:VAL:HG13	1:F:5352:LYS:N	2.21	0.55
1:F:5452:VAL:O	1:F:5459:VAL:HA	2.06	0.55
1:F:5487:SER:OG	1:F:5539:MSE:HE1	2.05	0.55
1:H:7518:ASN:O	1:H:7522:VAL:HG23	2.05	0.55
1:B:1425:GLN:NE2	1:B:1425:GLN:N	2.54	0.55
1:B:1543:TYR:C	1:B:1543:TYR:CD2	2.84	0.55
1:C:2026:LYS:N	1:C:2027:PRO:CD	2.70	0.55
1:C:2103:ASP:OD2	1:C:2106:SER:HB2	2.05	0.55
1:C:2559:ARG:HB3	1:C:2561:GLU:HG2	1.88	0.55
1:D:3210:ILE:O	1:D:3214:LYS:HD2	2.06	0.55
1:D:3309:PHE:CD1	1:D:3390:ILE:HB	2.42	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3320:ALA:O	1:D:3324:VAL:HG23	2.07	0.55
1:D:3350:LEU:HD22	1:D:3354:ARG:HH12	1.70	0.55
1:D:3378:GLU:O	1:D:3381:VAL:HB	2.07	0.55
1:D:3521:GLU:N	1:D:3524:ILE:HD12	2.21	0.55
1:F:5033:ARG:NE	1:F:5093:GLU:OE1	2.39	0.55
1:F:5327:MSE:HE2	1:F:5341:ILE:HD11	1.87	0.55
1:F:5566:LEU:HD22	1:F:5567:PRO:HD2	1.87	0.55
1:G:6026:LYS:HD3	1:H:7151:PRO:HG3	1.87	0.55
1:G:6069:HIS:O	1:G:6073:LYS:HB2	2.06	0.55
1:G:6407:MSE:HA	1:G:6410:ILE:HD12	1.88	0.55
1:H:7437:THR:HG21	1:H:7441:CYS:HB3	1.89	0.55
1:A:27:PRO:HA	1:A:30:LEU:HB2	1.87	0.55
1:A:454:LEU:HD13	1:A:458:ARG:HB2	1.88	0.55
1:B:1097:TYR:O	1:B:1098:ARG:C	2.50	0.55
1:B:1344:PHE:HD1	1:B:1349:LEU:HB2	1.72	0.55
1:B:1502:LEU:CD1	1:B:1506:GLU:HB3	2.35	0.55
1:C:2174:VAL:HG23	1:C:2219:MSE:HE3	1.88	0.55
1:C:2358:ILE:HG22	1:C:2362:GLN:CB	2.35	0.55
1:D:3116:VAL:HG21	1:D:3179:ILE:HD13	1.87	0.55
1:D:3381:VAL:HG13	1:D:3407:MSE:CE	2.36	0.55
1:D:3543:TYR:HB2	1:D:3544:PRO:HA	1.87	0.55
1:F:5050:LEU:O	1:F:5053:LEU:HB2	2.07	0.55
1:F:5177:MSE:HE3	1:F:5181:VAL:HG23	1.88	0.55
1:G:6358:ILE:HA	1:G:6362:GLN:OE1	2.05	0.55
1:H:7317:LEU:HD12	1:H:7317:LEU:H	1.71	0.55
1:A:376:THR:HG22	1:A:379:ASP:H	1.71	0.55
1:B:1401:PRO:HA	1:B:1436:LEU:CD2	2.36	0.55
1:D:3376:THR:HG22	1:D:3378:GLU:H	1.72	0.55
1:E:4416:ILE:HD13	1:E:4416:ILE:N	2.21	0.55
1:F:5423:THR:O	1:F:5423:THR:CG2	2.54	0.55
1:G:6352:LYS:N	1:G:6367:HIS:O	2.39	0.55
1:H:7421:ASN:HB3	1:H:7422:PRO:HA	1.88	0.55
1:A:301:PRO:O	1:A:303:SER:N	2.40	0.55
1:C:2384:LEU:O	1:C:2385:LYS:HE2	2.07	0.55
1:C:2469:TYR:O	1:C:2470:ILE:HD13	2.07	0.55
1:F:5467:ASN:C	1:F:5469:TYR:H	2.14	0.55
1:H:7099:ILE:CA	1:H:7102:ASP:HB2	2.37	0.55
1:H:7255:GLU:OE2	1:H:7279:ASP:OD1	2.23	0.55
1:B:1535:TYR:CD1	1:B:1549:LYS:HE3	2.42	0.55
1:D:3264:ARG:HG3	1:D:3265:PHE:H	1.70	0.55
1:E:4295:GLN:NE2	1:E:4305:HIS:HE1	2.05	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4301:PRO:O	1:E:4303:SER:N	2.39	0.55
1:E:4315:ALA:O	1:E:4319:ILE:HD12	2.06	0.55
1:E:4535:TYR:CD2	1:E:4540:ALA:CB	2.89	0.55
1:F:5036:LYS:HB3	1:F:5039:ALA:HB3	1.89	0.55
1:F:5058:ILE:HD13	1:F:5058:ILE:N	2.20	0.55
1:F:5071:ASN:O	1:F:5075:MSE:HE3	2.07	0.55
1:G:6357:LYS:O	1:G:6358:ILE:HG13	2.07	0.55
1:G:6384:LEU:O	1:G:6385:LYS:HE3	2.07	0.55
1:G:6454:LEU:CD1	1:G:6458:ARG:HB3	2.29	0.55
1:H:7133:LEU:HD21	1:H:7146:ILE:HG22	1.89	0.55
1:H:7147:VAL:O	1:H:7245:ARG:NH1	2.37	0.55
1:A:172:LEU:O	1:A:175:TYR:HB2	2.07	0.55
1:A:210:ILE:HA	1:A:213:LEU:HB2	1.88	0.55
1:A:454:LEU:CD1	1:A:458:ARG:HB2	2.37	0.55
1:A:512:LEU:O	4:A:8037:HOH:O	2.18	0.55
1:B:1072:LEU:HD11	1:B:1081:LYS:HB3	1.89	0.55
1:B:1210:ILE:HD13	1:B:1210:ILE:N	2.21	0.55
1:D:3276:PHE:CD1	1:D:3276:PHE:C	2.85	0.55
1:D:3408:ALA:HA	1:D:3414:PRO:HG3	1.88	0.55
1:D:3507:LEU:O	1:D:3508:ALA:C	2.50	0.55
1:F:5293:ALA:O	1:F:5297:VAL:HG13	2.07	0.55
1:G:6024:LYS:CA	1:G:6028:LEU:HD22	2.33	0.55
1:G:6172:LEU:O	1:G:6175:TYR:HB2	2.07	0.55
1:G:6335:GLN:HA	1:G:6338:GLN:OE1	2.07	0.55
1:H:7172:LEU:O	1:H:7173:GLY:C	2.50	0.55
1:H:7176:GLY:O	1:H:7177:MSE:C	2.50	0.55
1:B:1240:LYS:O	1:B:1241:ALA:C	2.49	0.55
1:B:1427:GLU:OE1	1:B:1427:GLU:N	2.40	0.55
1:C:2089:GLN:HB2	1:C:2096:PHE:CE1	2.42	0.55
1:D:3210:ILE:O	1:D:3214:LYS:HG3	2.06	0.55
1:E:4253:GLN:HG3	1:E:4276:PHE:CZ	2.42	0.55
1:E:4453:LYS:HD3	1:E:4457:GLY:HA2	1.88	0.55
1:F:5477:ALA:CB	1:F:5531:THR:HG22	2.36	0.55
1:G:6338:GLN:HG2	1:G:6339:LYS:N	2.20	0.55
1:G:6408:ALA:HA	1:G:6414:PRO:HG3	1.89	0.55
1:H:7043:GLN:HG3	1:H:7047:MSE:HE3	1.88	0.55
1:H:7376:THR:HG22	1:H:7377:PHE:N	2.22	0.55
1:H:7512:LEU:N	1:H:7512:LEU:CD1	2.70	0.55
1:A:134:PHE:O	1:B:1052:GLY:HA2	2.07	0.55
1:A:195:PRO:C	1:A:197:ARG:H	2.13	0.55
1:A:476:LEU:HD12	1:A:476:LEU:O	2.07	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1082:TYR:O	1:B:1085:ILE:HG22	2.07	0.55
1:B:1196:ASP:N	1:B:1196:ASP:OD1	2.40	0.55
1:B:1295:GLN:NE2	1:B:1305:HIS:CE1	2.75	0.55
1:B:1302:ILE:O	1:B:1305:HIS:N	2.40	0.55
1:C:2549:LYS:HA	1:C:2552:TYR:HB3	1.89	0.55
1:D:3269:TYR:HB3	1:D:3273:TYR:CD1	2.42	0.55
1:E:4133:LEU:HB2	1:E:4199:LEU:HD11	1.88	0.55
1:E:4174:VAL:HG23	1:E:4174:VAL:O	2.06	0.55
1:E:4238:PHE:O	1:E:4239:MSE:C	2.49	0.55
1:E:4468:VAL:HA	1:E:4471:PHE:CE2	2.42	0.55
1:F:5300:LYS:HD3	1:F:5304:GLU:OE2	2.07	0.55
1:G:6086:MSE:HE2	1:G:6096:PHE:HE1	1.71	0.55
1:G:6165:ARG:NE	1:G:6259:ASN:HD21	2.05	0.55
1:G:6204:ASP:CG	1:G:6221:LEU:HB2	2.32	0.55
1:G:6357:LYS:HD2	1:G:6357:LYS:N	2.22	0.55
1:H:7313:GLY:HA3	3:H:7601:NAD:O5B	2.07	0.55
1:A:154:HIS:O	1:A:197:ARG:HA	2.07	0.54
1:A:437:THR:C	1:A:439:GLY:H	2.16	0.54
1:A:506:GLU:O	1:A:511:ARG:HG3	2.08	0.54
1:B:1127:PHE:CD2	1:B:1127:PHE:C	2.85	0.54
1:B:1394:GLY:HA2	1:B:1420:SER:CB	2.36	0.54
1:C:2259:ASN:O	1:C:2260:HIS:C	2.49	0.54
1:C:2388:THR:HG23	1:C:2415:VAL:CG2	2.37	0.54
1:D:3064:GLN:O	1:D:3067:ARG:HB3	2.06	0.54
1:D:3208:ASP:OD2	1:D:3227:ARG:NH2	2.40	0.54
1:F:5264:ARG:HG3	1:F:5265:PHE:N	2.22	0.54
1:G:6470:ILE:HG22	1:G:6474:VAL:HG21	1.90	0.54
1:H:7086:MSE:HE2	1:H:7096:PHE:HE1	1.72	0.54
1:B:1289:ALA:HA	1:B:1499:THR:OG1	2.06	0.54
1:B:1376:THR:CG2	1:B:1378:GLU:HB3	2.37	0.54
1:B:1381:VAL:HG13	1:B:1407:MSE:CE	2.37	0.54
1:C:2045:ARG:CZ	1:C:2058:ILE:HD13	2.37	0.54
1:C:2522:VAL:O	1:C:2526:ILE:HG13	2.08	0.54
1:G:6363:GLU:HB2	1:G:6364:PRO:CD	2.37	0.54
1:H:7376:THR:HB	1:H:7379:ASP:OD1	2.07	0.54
1:C:2096:PHE:CE2	1:C:2100:LEU:HD23	2.43	0.54
1:C:2376:THR:HG21	1:C:2378:GLU:HB3	1.88	0.54
1:C:2471:PHE:CG	1:C:2472:PRO:HD3	2.41	0.54
1:D:3381:VAL:O	1:D:3386:PRO:HD3	2.08	0.54
1:E:4315:ALA:HB3	1:E:4392:VAL:CG1	2.37	0.54
1:F:5300:LYS:O	1:F:5302:ILE:N	2.40	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5317:LEU:HD12	1:F:5317:LEU:N	2.13	0.54
1:F:5550:ALA:O	1:F:5554:LYS:HB2	2.07	0.54
1:G:6108:MSE:HE1	1:G:6519:ILE:HG21	1.88	0.54
1:G:6374:PRO:HB3	1:G:6383:ILE:HD12	1.88	0.54
1:G:6391:GLY:N	1:G:6417:PHE:O	2.37	0.54
1:H:7150:TRP:CD2	1:H:7151:PRO:HD2	2.42	0.54
1:H:7306:LYS:O	1:H:7386:PRO:HA	2.08	0.54
1:H:7309:PHE:HB2	1:H:7343:MSE:CG	2.38	0.54
1:A:270:ARG:CG	1:A:271:GLU:HG2	2.37	0.54
1:A:309:PHE:HD2	1:A:343:MSE:CG	2.20	0.54
1:B:1103:ASP:CG	1:B:1106:SER:HG	2.15	0.54
1:B:1104:ILE:HG13	1:B:1108:MSE:CE	2.38	0.54
1:B:1156:LYS:HB3	1:B:1479:ILE:HD12	1.89	0.54
1:B:1232:ASP:O	1:B:1235:ILE:N	2.40	0.54
1:C:2467:ASN:C	1:C:2469:TYR:N	2.64	0.54
1:D:3140:ARG:NH1	1:D:3230:GLN:HG2	2.22	0.54
1:D:3164:GLU:O	1:D:3171:ASP:N	2.41	0.54
1:D:3253:GLN:HG3	1:D:3276:PHE:CZ	2.42	0.54
1:H:7322:LEU:HD11	1:H:7492:LEU:HB2	1.90	0.54
1:A:176:GLY:C	1:A:178:GLY:N	2.59	0.54
1:A:313:GLY:O	1:A:315:ALA:N	2.41	0.54
1:B:1075:MSE:CG	1:B:1080:GLU:HG2	2.37	0.54
1:B:1342:TRP:HZ3	1:B:1351:VAL:HG23	1.72	0.54
1:B:1474:VAL:O	1:B:1475:ALA:C	2.49	0.54
1:C:2244:ASP:HA	1:C:2248:ARG:HH12	1.72	0.54
1:C:2551:LYS:O	1:C:2551:LYS:HG2	2.08	0.54
1:D:3133:LEU:HB2	1:D:3199:LEU:HD11	1.89	0.54
1:D:3174:VAL:HG13	1:D:3218:TYR:OH	2.06	0.54
1:D:3351:VAL:HG13	1:D:3352:LYS:N	2.22	0.54
1:E:4067:ARG:HB2	1:F:5217:PHE:HE1	1.72	0.54
1:E:4317:LEU:HD23	1:E:4361:TYR:HB3	1.90	0.54
1:B:1243:THR:CA	1:B:1247:GLY:O	2.56	0.54
1:B:1376:THR:O	1:B:1380:ALA:N	2.39	0.54
1:B:1385:LYS:HB2	1:B:1385:LYS:NZ	2.23	0.54
1:C:2044:GLU:CA	1:C:2048:LEU:HD23	2.37	0.54
1:C:2169:LEU:HD12	1:C:2169:LEU:N	2.23	0.54
1:C:2487:SER:O	1:C:2490:VAL:CG2	2.54	0.54
1:D:3177:MSE:O	1:D:3177:MSE:HE3	2.08	0.54
1:D:3285:ALA:HB1	1:D:3495:ALA:HB2	1.89	0.54
1:D:3494:ALA:O	1:D:3497:ALA:HB3	2.07	0.54
1:F:5103:ASP:HB3	1:F:5107:LEU:CD2	2.38	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5146:ILE:O	1:F:5149:ASN:HB2	2.08	0.54
1:F:5188:THR:HG23	1:F:5195:PRO:HD3	1.90	0.54
1:F:5251:LEU:HD12	1:F:5251:LEU:C	2.31	0.54
1:F:5559:ARG:HH11	1:F:5559:ARG:HG3	1.72	0.54
1:G:6086:MSE:HE2	1:G:6096:PHE:CE1	2.42	0.54
1:G:6154:HIS:HB3	1:G:6197:ARG:HD3	1.89	0.54
1:G:6223:GLN:HG2	1:G:6224:LYS:O	2.08	0.54
1:G:6313:GLY:O	3:G:6601:NAD:O2N	2.26	0.54
1:G:6376:THR:HG21	1:G:6378:GLU:OE2	2.07	0.54
1:G:6515:PRO:HG2	1:G:6518:ASN:OD1	2.08	0.54
1:H:7176:GLY:O	1:H:7178:GLY:N	2.41	0.54
1:H:7481:CYS:C	1:H:7483:THR:N	2.64	0.54
1:A:210:ILE:O	1:A:213:LEU:HB2	2.08	0.54
1:A:308:LEU:HD12	1:A:309:PHE:H	1.72	0.54
1:A:416:ILE:HD13	1:A:416:ILE:N	2.23	0.54
1:B:1281:GLN:HB3	1:B:1491:PHE:CD2	2.43	0.54
1:B:1312:ALA:CB	1:B:1343:MSE:HE3	2.38	0.54
1:B:1325:MSE:O	1:B:1328:VAL:HB	2.07	0.54
1:C:2177:MSE:HE1	1:C:2200:PRO:HB2	1.90	0.54
1:C:2269:TYR:HB3	1:C:2273:TYR:HD1	1.73	0.54
1:D:3184:LEU:HG	1:D:3198:CYS:HB3	1.90	0.54
1:E:4327:MSE:HE1	1:E:4337:ALA:O	2.07	0.54
1:G:6179:ILE:HB	1:G:6180:PRO:HD3	1.89	0.54
1:G:6340:LYS:C	1:G:6341:ILE:HG12	2.31	0.54
1:H:7439:GLY:HA2	1:H:7460:PHE:HE2	1.72	0.54
1:A:41:THR:O	1:A:45:ARG:HG3	2.07	0.54
1:A:339:LYS:HA	1:A:367:HIS:CE1	2.43	0.54
1:B:1302:ILE:HA	1:B:1305:HIS:CE1	2.43	0.54
1:C:2382:ASN:O	1:C:2383:ILE:C	2.51	0.54
1:D:3043:GLN:CG	1:D:3566:LEU:HD11	2.33	0.54
1:D:3351:VAL:CG2	1:D:3369:ALA:HA	2.35	0.54
1:G:6137:ILE:HG22	1:G:6221:LEU:HD23	1.88	0.54
1:G:6404:ILE:HD13	1:G:6436:LEU:HD22	1.90	0.54
1:A:194:ARG:CB	1:A:197:ARG:HG3	2.38	0.54
1:A:505:GLU:OE2	1:A:505:GLU:N	2.36	0.54
1:B:1184:LEU:HD23	1:B:1200:PRO:CG	2.38	0.54
1:B:1416:ILE:H	1:B:1416:ILE:HD13	1.72	0.54
1:C:2133:LEU:HB3	1:C:2201:VAL:HG22	1.90	0.54
1:C:2243:THR:HB	1:C:2248:ARG:CZ	2.38	0.54
1:C:2271:GLU:HA	1:C:2485:HIS:HD2	1.73	0.54
1:C:2546:PRO:HD2	1:C:2549:LYS:HE3	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4072:LEU:HD11	1:E:4081:LYS:HB3	1.90	0.54
1:E:4389:ILE:HG22	1:E:4416:ILE:HA	1.89	0.54
1:F:5147:VAL:O	1:F:5245:ARG:NH1	2.40	0.54
1:F:5416:ILE:HD11	1:F:5443:PHE:HB2	1.90	0.54
1:G:6232:ASP:OD2	1:G:6232:ASP:N	2.30	0.54
1:G:6494:ALA:O	1:G:6495:ALA:C	2.50	0.54
1:H:7085:ILE:C	1:H:7087:GLY:H	2.15	0.54
1:A:97:TYR:O	1:A:98:ARG:C	2.50	0.54
1:A:236:ASP:O	1:A:239:MSE:N	2.41	0.54
1:A:350:LEU:HD22	1:A:354:ARG:HH12	1.72	0.54
1:A:413:ARG:HH21	1:A:440:ARG:C	2.15	0.54
1:A:534:LEU:HA	1:A:539:MSE:HG3	1.89	0.54
1:C:2179:ILE:HB	1:C:2180:PRO:CD	2.37	0.54
1:C:2197:ARG:HH11	1:C:2197:ARG:CG	1.98	0.54
1:C:2418:ALA:HB1	1:C:2427:GLU:H	1.73	0.54
1:D:3227:ARG:HH11	1:D:3227:ARG:HG2	1.72	0.54
1:E:4046:GLN:HG3	1:E:4051:GLN:HG3	1.90	0.54
1:E:4206:GLY:N	1:E:4223:GLN:HE21	2.05	0.54
1:E:4429:THR:HG23	1:E:4432:GLU:CD	2.33	0.54
1:E:4437:THR:C	1:E:4438:GLU:HG2	2.32	0.54
1:F:5059:GLU:HG2	1:F:5063:ILE:HG21	1.90	0.54
1:F:5105:GLU:OE1	1:F:5517:ALA:HB2	2.08	0.54
1:F:5177:MSE:CE	1:F:5181:VAL:HG23	2.38	0.54
1:F:5253:GLN:NE2	1:F:5255:GLU:HG2	2.23	0.54
1:G:6359:ASP:O	1:G:6363:GLU:OE1	2.26	0.54
1:H:7025:GLY:C	1:H:7027:PRO:HD2	2.33	0.54
1:H:7104:ILE:O	1:H:7108:MSE:HB2	2.08	0.54
1:H:7308:LEU:O	1:H:7389:ILE:CD1	2.56	0.54
1:A:146:ILE:HD12	1:A:146:ILE:H	1.72	0.53
1:A:295:GLN:OE1	1:A:305:HIS:NE2	2.39	0.53
1:A:527:ALA:O	1:A:531:THR:CG2	2.52	0.53
1:A:566:LEU:HD23	1:A:567:PRO:HD2	1.89	0.53
1:B:1206:GLY:HA3	1:B:1223:GLN:NE2	2.23	0.53
1:B:1298:ILE:HD12	1:B:1413:ARG:HD3	1.90	0.53
1:B:1319:ILE:HG22	1:B:1323:ILE:HD11	1.89	0.53
1:C:2551:LYS:HG2	1:C:2555:GLU:CD	2.32	0.53
1:D:3300:LYS:O	1:D:3302:ILE:N	2.41	0.53
1:D:3421:ASN:HB2	3:D:3601:NAD:O2D	2.06	0.53
1:E:4137:ILE:O	1:E:4137:ILE:HG13	2.07	0.53
1:E:4332:LEU:HD23	1:E:4337:ALA:CA	2.38	0.53
1:E:4502:LEU:CD1	1:E:4506:GLU:HB3	2.37	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5048:LEU:N	1:F:5048:LEU:CD2	2.70	0.53
1:F:5349:LEU:HD23	1:F:5351:VAL:HB	1.90	0.53
1:A:177:MSE:SE	1:A:202:CYS:HB2	2.58	0.53
1:B:1101:GLN:HB3	1:B:1520:GLN:HE22	1.73	0.53
1:B:1322:LEU:HG	1:B:1492:LEU:HB2	1.90	0.53
1:B:1347:TYR:HB3	1:B:1356:ALA:CB	2.38	0.53
1:B:1533:TYR:O	1:B:1534:LEU:C	2.51	0.53
1:C:2499:THR:C	1:C:2501:GLN:N	2.60	0.53
1:C:2503:THR:O	1:C:2507:LEU:CD2	2.56	0.53
1:D:3300:LYS:HB3	1:D:3304:GLU:OE2	2.07	0.53
1:D:3319:ILE:O	1:D:3320:ALA:C	2.50	0.53
1:E:4225:ARG:NH1	1:E:4225:ARG:CG	2.69	0.53
1:E:4327:MSE:O	1:E:4330:ASN:HB2	2.08	0.53
1:F:5169:LEU:N	1:F:5169:LEU:CD1	2.71	0.53
1:G:6061:GLN:OE1	1:G:6098:ARG:HD3	2.07	0.53
1:H:7261:ASN:N	1:H:7261:ASN:ND2	2.56	0.53
1:H:7469:TYR:OH	1:H:7516:LEU:HD12	2.07	0.53
1:A:104:ILE:HG23	1:A:105:GLU:N	2.24	0.53
1:A:306:LYS:HB3	1:A:386:PRO:HA	1.89	0.53
1:C:2266:LEU:HD21	1:C:2281:GLN:NE2	2.22	0.53
1:C:2308:LEU:O	1:C:2389:ILE:HD12	2.08	0.53
1:C:2420:SER:HB3	1:C:2425:GLN:HB3	1.91	0.53
1:D:3527:ALA:O	1:D:3531:THR:HG23	2.09	0.53
1:E:4166:ILE:O	1:E:4167:LEU:C	2.52	0.53
1:E:4174:VAL:HG11	1:E:4220:GLY:CA	2.38	0.53
1:E:4359:ASP:CG	1:E:4362:GLN:HG3	2.32	0.53
1:F:5309:PHE:CD1	1:F:5390:ILE:HB	2.42	0.53
1:G:6089:GLN:OE1	1:G:6131:LYS:NZ	2.42	0.53
1:G:6306:LYS:HD2	1:G:6386:PRO:HA	1.91	0.53
1:H:7489:SER:HB2	1:H:7533:TYR:OH	2.07	0.53
1:D:3196:ASP:OD1	1:D:3196:ASP:N	2.40	0.53
1:E:4128:ARG:HG2	1:E:4128:ARG:HH11	1.74	0.53
1:E:4266:LEU:HD12	1:E:4266:LEU:C	2.33	0.53
1:E:4425:GLN:N	1:E:4425:GLN:NE2	2.56	0.53
1:E:4567:PRO:HG3	1:G:6047:MSE:HG3	1.89	0.53
1:F:5379:ASP:O	1:F:5383:ILE:HG13	2.08	0.53
1:G:6301:PRO:O	1:G:6303:SER:N	2.42	0.53
1:G:6332:LEU:HD23	1:G:6337:ALA:HA	1.90	0.53
1:G:6381:VAL:CG1	1:G:6407:MSE:HE1	2.38	0.53
1:H:7029:MSE:HE1	1:H:7053:LEU:HD13	1.90	0.53
1:A:66:LEU:HD23	1:B:1217:PHE:CZ	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:267:ARG:HD2	1:A:361:TYR:OH	2.08	0.53
1:B:1035:ASN:OD1	1:B:1036:LYS:N	2.41	0.53
1:B:1103:ASP:HB3	1:B:1107:LEU:HD23	1.91	0.53
1:C:2425:GLN:O	1:C:2426:ALA:C	2.51	0.53
1:D:3280:ILE:HG13	1:D:3314:GLU:OE2	2.08	0.53
1:E:4487:SER:O	1:E:4490:VAL:HG23	2.09	0.53
1:G:6332:LEU:HD23	1:G:6337:ALA:CA	2.38	0.53
1:G:6420:SER:HB3	1:G:6425:GLN:HB3	1.90	0.53
1:A:553:VAL:C	1:A:555:GLU:N	2.64	0.53
1:B:1397:ARG:NH1	1:B:1429:THR:HG22	2.24	0.53
1:B:1420:SER:HB2	1:B:1427:GLU:OE1	2.09	0.53
1:C:2154:HIS:O	1:C:2197:ARG:HD2	2.08	0.53
1:C:2417:PHE:CD2	1:C:2444:ALA:HB3	2.43	0.53
1:D:3352:LYS:CG	1:D:3368:SER:HA	2.39	0.53
1:E:4024:LYS:O	1:E:4027:PRO:HD2	2.08	0.53
1:G:6108:MSE:SE	1:G:6468:VAL:HG21	2.58	0.53
1:G:6208:ASP:CG	1:G:6227:ARG:HH21	2.17	0.53
1:H:7232:ASP:OD2	1:H:7232:ASP:N	2.41	0.53
1:A:302:ILE:HA	1:A:305:HIS:CE1	2.44	0.53
1:B:1416:ILE:HD12	1:B:1441:CYS:HB2	1.91	0.53
1:D:3183:LYS:NZ	1:D:3255:GLU:OE2	2.40	0.53
1:D:3239:MSE:SE	1:D:3252:ILE:HG21	2.57	0.53
1:D:3261:ASN:O	1:D:3262:ALA:C	2.52	0.53
1:D:3351:VAL:HG11	1:D:3369:ALA:HB2	1.90	0.53
1:D:3370:PRO:O	1:D:3371:GLU:C	2.52	0.53
1:E:4308:LEU:HD12	1:E:4309:PHE:H	1.74	0.53
1:F:5300:LYS:NZ	1:F:5304:GLU:HB2	2.24	0.53
1:G:6042:LEU:O	1:G:6045:ARG:HB2	2.08	0.53
1:G:6207:THR:OG1	1:G:6208:ASP:N	2.41	0.53
1:H:7245:ARG:HD3	1:H:7246:TYR:CE1	2.43	0.53
1:A:370:PRO:HG2	1:A:372:SER:O	2.09	0.53
1:B:1262:ALA:O	1:B:1266:LEU:HB2	2.09	0.53
1:B:1431:GLU:C	1:B:1433:ALA:H	2.15	0.53
1:B:1440:ARG:HB3	1:B:1440:ARG:NH1	2.24	0.53
1:C:2086:MSE:CE	1:C:2111:VAL:HG13	2.39	0.53
1:C:2175:TYR:CD2	1:C:2219:MSE:HE2	2.44	0.53
1:C:2439:GLY:CA	1:C:2460:PHE:HE2	2.13	0.53
1:D:3060:THR:O	1:D:3064:GLN:HG3	2.09	0.53
1:D:3389:ILE:HG23	1:D:3399:PHE:CE1	2.44	0.53
1:E:4363:GLU:HA	1:E:4366:THR:OG1	2.09	0.53
1:E:4437:THR:O	1:E:4439:GLY:N	2.42	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5026:LYS:N	1:F:5027:PRO:HD2	2.24	0.53
1:G:6245:ARG:HG2	1:G:6246:TYR:CD1	2.43	0.53
1:G:6390:ILE:HG23	1:G:6419:LEU:HD21	1.91	0.53
1:H:7127:PHE:CD2	1:H:7128:ARG:N	2.77	0.53
1:H:7244:ASP:N	1:H:7248:ARG:HH11	2.05	0.53
1:A:66:LEU:HD23	1:B:1217:PHE:HZ	1.74	0.53
1:B:1254:PHE:O	1:B:1255:GLU:HG2	2.08	0.53
1:C:2381:VAL:HG22	1:C:2407:MSE:HE1	1.90	0.53
1:C:2467:ASN:C	1:C:2469:TYR:H	2.15	0.53
1:D:3295:GLN:HG3	1:D:3295:GLN:O	2.09	0.53
1:E:4218:TYR:O	1:F:5057:LYS:NZ	2.40	0.53
1:E:4253:GLN:NE2	1:E:4278:ASP:HB2	2.23	0.53
1:F:5418:ALA:O	1:F:5445:SER:HA	2.09	0.53
1:H:7059:GLU:HA	1:H:7063:ILE:HD12	1.91	0.53
1:A:108:MSE:HB3	1:A:109:PRO:HD3	1.89	0.53
1:A:243:THR:C	1:A:248:ARG:HH11	2.16	0.53
1:A:261:ASN:HB3	1:A:265:PHE:CE1	2.44	0.53
1:B:1159:VAL:HG11	1:B:1180:PRO:HA	1.91	0.53
1:B:1288:LEU:CD1	1:B:1323:ILE:HA	2.39	0.53
1:C:2402:ASP:HA	1:C:2405:ARG:HD2	1.91	0.53
1:C:2528:ILE:O	1:C:2530:VAL:N	2.42	0.53
1:D:3193:ILE:HG22	1:D:3194:ARG:N	2.23	0.53
1:D:3302:ILE:O	1:D:3303:SER:C	2.52	0.53
1:D:3302:ILE:HA	1:D:3305:HIS:ND1	2.24	0.53
1:D:3454:LEU:HD13	1:D:3458:ARG:NH1	2.24	0.53
1:E:4166:ILE:HA	1:E:4256:ASP:OD1	2.09	0.53
1:G:6217:PHE:CE1	1:H:7067:ARG:HB2	2.42	0.53
1:G:6291:LEU:HD23	1:G:6417:PHE:CE2	2.44	0.53
1:G:6297:VAL:CG2	1:G:6298:ILE:N	2.71	0.53
1:G:6302:ILE:O	1:G:6303:SER:C	2.52	0.53
1:H:7295:GLN:HA	1:H:7298:ILE:HB	1.89	0.53
1:A:42:LEU:HD21	1:C:2572:TRP:HB2	1.91	0.52
1:A:319:ILE:O	1:A:321:ASN:N	2.43	0.52
1:B:1274:CYS:SG	1:B:1478:VAL:HG11	2.49	0.52
1:B:1416:ILE:HG12	1:B:1443:PHE:HD1	1.74	0.52
1:C:2045:ARG:HA	1:C:2050:LEU:HB2	1.91	0.52
1:C:2144:ARG:O	1:C:2148:ASP:OD2	2.27	0.52
1:C:2453:LYS:CE	1:C:2457:GLY:HA2	2.39	0.52
1:C:2458:ARG:CB	1:C:2458:ARG:HH11	2.22	0.52
1:D:3351:VAL:HA	1:D:3367:HIS:O	2.09	0.52
1:G:6227:ARG:HH11	1:G:6227:ARG:CG	2.22	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:7194:ARG:HB3	1:H:7197:ARG:HG3	1.90	0.52
1:H:7283:THR:HA	1:H:7467:ASN:ND2	2.24	0.52
1:H:7484:ARG:C	1:H:7485:HIS:ND1	2.67	0.52
1:A:156:LYS:N	1:A:197:ARG:O	2.42	0.52
1:A:166:ILE:O	1:A:167:LEU:C	2.52	0.52
1:A:286:VAL:O	1:A:289:ALA:HB3	2.09	0.52
1:B:1263:PHE:O	1:B:1266:LEU:HB3	2.09	0.52
1:B:1357:LYS:N	1:B:1357:LYS:HD3	2.24	0.52
1:C:2399:PHE:CG	1:C:2427:GLU:HB3	2.45	0.52
1:D:3041:THR:HG23	1:D:3044:GLU:CD	2.34	0.52
1:D:3204:ASP:OD1	1:D:3221:LEU:HD22	2.09	0.52
1:D:3376:THR:HG22	1:D:3378:GLU:HG2	1.88	0.52
1:D:3480:LEU:CD1	1:D:3553:VAL:HG13	2.38	0.52
1:E:4026:LYS:HG3	1:E:4029:MSE:CE	2.39	0.52
1:E:4108:MSE:HB3	1:E:4109:PRO:CD	2.39	0.52
1:E:4402:ASP:O	1:E:4406:ALA:N	2.33	0.52
1:E:4453:LYS:HE3	1:E:4457:GLY:HA2	1.92	0.52
1:F:5531:THR:HA	1:F:5534:LEU:HD12	1.91	0.52
1:G:6283:THR:O	1:G:6284:ALA:C	2.51	0.52
1:G:6351:VAL:HG11	1:G:6369:ALA:HB2	1.91	0.52
1:G:6390:ILE:HG22	1:G:6392:VAL:HG23	1.91	0.52
1:A:171:ASP:O	1:A:172:LEU:HD23	2.09	0.52
1:A:295:GLN:O	1:A:299:SER:N	2.36	0.52
1:B:1363:GLU:HB2	1:B:1364:PRO:HD3	1.91	0.52
1:D:3290:GLY:O	1:D:3291:LEU:C	2.51	0.52
1:D:3333:SER:HB3	1:D:3336:GLU:CD	2.34	0.52
1:D:3359:ASP:OD2	1:D:3359:ASP:C	2.52	0.52
1:D:3396:GLY:HA2	1:D:3425:GLN:HA	1.91	0.52
1:D:3437:THR:HG21	1:D:3441:CYS:CB	2.23	0.52
1:E:4104:ILE:HG13	1:E:4108:MSE:CE	2.39	0.52
1:F:5031:ASN:HB3	1:F:5034:THR:OG1	2.09	0.52
1:F:5137:ILE:HG23	1:F:5138:SER:N	2.23	0.52
1:F:5480:LEU:HD13	1:F:5553:VAL:HG22	1.92	0.52
1:G:6210:ILE:N	1:G:6213:LEU:HD12	2.23	0.52
1:G:6320:ALA:O	1:G:6323:ILE:HB	2.09	0.52
1:G:6357:LYS:C	1:G:6358:ILE:HG13	2.34	0.52
1:H:7412:GLU:C	1:H:7440:ARG:HH11	2.17	0.52
1:H:7498:LEU:O	1:H:7501:GLN:N	2.43	0.52
1:A:176:GLY:O	1:A:178:GLY:N	2.42	0.52
1:A:269:TYR:HB3	1:A:273:TYR:CD1	2.44	0.52
1:A:347:TYR:HB2	1:A:354:ARG:NH2	2.25	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:503:THR:O	1:A:507:LEU:HD22	2.09	0.52
1:A:518:ASN:O	1:A:521:GLU:HG2	2.10	0.52
1:B:1238:PHE:CE1	1:B:1242:ILE:CG1	2.92	0.52
1:B:1552:TYR:CE1	1:B:1556:ARG:NE	2.77	0.52
1:E:4038:MSE:SE	1:E:4055:PRO:HG2	2.59	0.52
1:F:5542:ARG:HD3	1:F:5542:ARG:C	2.34	0.52
1:A:325:MSE:HE1	1:A:489:SER:HA	1.91	0.52
1:A:531:THR:HA	1:A:534:LEU:HD12	1.91	0.52
1:B:1041:THR:HG23	1:B:1044:GLU:HG3	1.90	0.52
1:C:2209:ASN:HB3	1:C:2212:LEU:HB2	1.91	0.52
1:C:2302:ILE:HG22	1:C:2303:SER:N	2.23	0.52
1:E:4041:THR:HG23	1:E:4044:GLU:CG	2.38	0.52
1:E:4059:GLU:CD	1:E:4067:ARG:HH22	2.17	0.52
1:E:4335:GLN:HE21	1:E:4339:LYS:HG3	1.74	0.52
1:F:5094:LYS:HD2	1:F:5562:TYR:HA	1.90	0.52
1:F:5537:ASN:O	1:F:5538:LYS:C	2.52	0.52
1:G:6341:ILE:O	1:G:6367:HIS:NE2	2.43	0.52
1:G:6467:ASN:C	1:G:6469:TYR:N	2.58	0.52
1:G:6505:GLU:O	1:G:6508:ALA:HB3	2.09	0.52
1:H:7112:TYR:CE2	1:H:7113:THR:HG23	2.44	0.52
1:H:7302:ILE:HG22	1:H:7303:SER:N	2.24	0.52
1:H:7531:THR:O	1:H:7534:LEU:HB2	2.10	0.52
1:B:1298:ILE:HD11	1:B:1442:LEU:CD1	2.33	0.52
1:B:1352:LYS:HB2	1:B:1368:SER:HA	1.91	0.52
1:B:1444:ALA:HB2	1:B:1512:LEU:HD13	1.92	0.52
1:B:1447:SER:HB3	1:B:1448:PRO:HD2	1.91	0.52
1:B:1505:GLU:CD	1:B:1505:GLU:N	2.66	0.52
1:C:2175:TYR:HD2	1:C:2219:MSE:HE2	1.74	0.52
1:C:2257:PHE:HB2	1:C:2262:ALA:HB2	1.92	0.52
1:C:2569:VAL:CG1	1:C:2570:TYR:N	2.65	0.52
1:D:3108:MSE:N	1:D:3109:PRO:CD	2.72	0.52
1:D:3142:HIS:O	1:D:3143:VAL:C	2.52	0.52
1:D:3288:LEU:O	1:D:3292:LEU:N	2.42	0.52
1:E:4041:THR:HG23	1:E:4044:GLU:OE1	2.10	0.52
1:E:4212:LEU:C	1:E:4214:LYS:N	2.66	0.52
1:E:4350:LEU:HD13	1:E:4354:ARG:CD	2.39	0.52
1:E:4402:ASP:O	1:E:4406:ALA:CB	2.57	0.52
1:F:5081:LYS:O	1:F:5082:TYR:C	2.52	0.52
1:G:6133:LEU:HD13	1:G:6150:TRP:CE3	2.44	0.52
1:G:6493:GLU:HA	1:G:6496:LYS:CD	2.34	0.52
1:G:6508:ALA:C	1:G:6510:GLY:H	2.18	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:6511:ARG:HB2	1:G:6511:ARG:HH11	1.74	0.52
1:G:6525:ASN:O	1:G:6526:ILE:C	2.52	0.52
1:B:1029:MSE:SE	1:B:1050:LEU:HD22	2.59	0.52
1:B:1399:PHE:HA	1:B:1403:VAL:CG1	2.32	0.52
1:B:1542:ARG:HD2	1:B:1552:TYR:OH	2.09	0.52
1:C:2196:ASP:N	1:C:2196:ASP:OD1	2.41	0.52
1:C:2374:PRO:CD	1:C:2383:ILE:HD12	2.39	0.52
1:D:3261:ASN:H	1:D:3261:ASN:HD22	1.55	0.52
1:D:3477:ALA:CB	1:D:3531:THR:HG22	2.34	0.52
1:E:4085:ILE:HA	1:E:4088:ILE:HG12	1.92	0.52
1:E:4279:ASP:N	1:E:4279:ASP:OD1	2.32	0.52
1:F:5303:SER:N	1:F:5340:LYS:NZ	2.58	0.52
1:F:5570:TYR:CE1	1:H:7046:GLN:NE2	2.78	0.52
1:G:6290:GLY:O	1:G:6293:ALA:HB3	2.09	0.52
1:G:6492:LEU:CD2	1:G:6496:LYS:HD2	2.40	0.52
1:H:7047:MSE:O	1:H:7048:LEU:HD13	2.10	0.52
1:B:1531:THR:OG1	1:B:1532:GLU:N	2.41	0.52
1:B:1546:PRO:O	1:B:1549:LYS:NZ	2.43	0.52
1:D:3123:TYR:C	1:D:3125:HIS:H	2.18	0.52
1:D:3230:GLN:O	1:D:3233:ASP:HB2	2.10	0.52
1:D:3255:GLU:O	1:D:3256:ASP:C	2.53	0.52
1:D:3279:ASP:N	1:D:3279:ASP:OD1	2.42	0.52
1:D:3300:LYS:HB2	1:D:3305:HIS:HE2	1.75	0.52
1:D:3302:ILE:O	1:D:3304:GLU:N	2.42	0.52
1:D:3391:GLY:N	1:D:3417:PHE:O	2.42	0.52
1:D:3421:ASN:HA	1:D:3422:PRO:C	2.32	0.52
1:E:4271:GLU:O	1:E:4485:HIS:NE2	2.42	0.52
1:F:5209:ASN:OD1	1:F:5211:ALA:HB3	2.09	0.52
1:F:5300:LYS:O	1:F:5305:HIS:NE2	2.43	0.52
1:F:5327:MSE:CE	1:F:5341:ILE:HD11	2.40	0.52
1:G:6041:THR:HG23	1:G:6044:GLU:CD	2.34	0.52
1:G:6298:ILE:HD11	1:G:6413:ARG:HB3	1.92	0.52
1:G:6408:ALA:O	1:G:6411:ASN:O	2.28	0.52
1:H:7090:GLU:HG2	1:H:7131:LYS:NZ	2.25	0.52
1:H:7156:LYS:HA	1:H:7156:LYS:HE2	1.92	0.52
1:B:1293:ALA:O	1:B:1296:LYS:HB3	2.10	0.52
1:B:1453:LYS:HB2	1:B:1459:VAL:CG1	2.40	0.52
1:C:2357:LYS:C	1:C:2358:ILE:HG13	2.35	0.52
1:D:3194:ARG:HB3	1:D:3197:ARG:HG2	1.92	0.52
1:D:3243:THR:HG22	1:D:3248:ARG:HA	1.91	0.52
1:E:4113:THR:HB	1:E:4114:PRO:HA	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4313:GLY:O	1:E:4315:ALA:N	2.42	0.52
1:E:4379:ASP:O	1:E:4380:ALA:C	2.53	0.52
1:F:5144:ARG:NH1	1:F:5244:ASP:CB	2.73	0.52
1:F:5481:CYS:SG	1:F:5531:THR:HB	2.50	0.52
1:G:6143:VAL:O	1:G:6146:ILE:HB	2.09	0.52
1:G:6180:PRO:O	1:G:6184:LEU:HD22	2.10	0.52
1:H:7351:VAL:HG11	1:H:7369:ALA:HB2	1.92	0.52
1:A:57:LYS:HG3	1:B:1218:TYR:O	2.10	0.52
1:A:123:TYR:O	1:A:175:TYR:CZ	2.62	0.52
1:A:313:GLY:O	1:A:314:GLU:C	2.53	0.52
1:A:317:LEU:HD23	1:A:361:TYR:O	2.10	0.52
1:A:393:ALA:HA	3:A:601:NAD:O4B	2.10	0.52
1:A:394:GLY:HA2	1:A:420:SER:HB3	1.91	0.52
1:A:412:GLU:HA	1:A:440:ARG:NH1	2.24	0.52
1:B:1154:HIS:O	1:B:1197:ARG:HD3	2.09	0.52
1:B:1229:GLN:HG3	1:B:1233:ASP:OD2	2.10	0.52
1:B:1342:TRP:CZ3	1:B:1351:VAL:HG23	2.44	0.52
1:C:2439:GLY:HA3	1:C:2460:PHE:CE2	2.27	0.52
1:D:3418:ALA:HB1	1:D:3427:GLU:HB2	1.90	0.52
1:E:4108:MSE:N	1:E:4109:PRO:HD2	2.25	0.52
1:E:4252:ILE:O	1:E:4275:THR:HA	2.10	0.52
1:G:6210:ILE:C	1:G:6214:LYS:HD2	2.34	0.52
1:G:6278:ASP:C	1:G:6280:ILE:H	2.17	0.52
1:A:264:ARG:HG3	1:A:265:PHE:H	1.73	0.51
1:A:471:PHE:CD1	1:A:472:PRO:HD3	2.45	0.51
1:B:1075:MSE:HG3	1:B:1080:GLU:CD	2.35	0.51
1:B:1350:LEU:HD12	1:B:1366:THR:OG1	2.10	0.51
1:B:1470:ILE:C	1:B:1472:PRO:CD	2.83	0.51
1:D:3354:ARG:HG3	1:D:3358:ILE:HD11	1.92	0.51
1:D:3453:LYS:CD	1:D:3457:GLY:HA2	2.40	0.51
1:E:4037:GLY:O	1:E:4039:ALA:N	2.42	0.51
1:E:4310:LEU:HD23	1:E:4427:GLU:HG2	1.91	0.51
1:E:4344:PHE:HD1	1:E:4349:LEU:HB2	1.75	0.51
1:E:4418:ALA:O	1:E:4445:SER:HA	2.10	0.51
1:E:4570:TYR:H	1:G:6046:GLN:HE22	1.58	0.51
1:F:5352:LYS:HG2	1:F:5367:HIS:O	2.10	0.51
1:G:6075:MSE:SE	1:G:6081:LYS:HA	2.61	0.51
1:G:6166:ILE:HA	1:G:6256:ASP:OD1	2.10	0.51
1:G:6302:ILE:N	1:G:6302:ILE:HD12	2.25	0.51
1:G:6416:ILE:N	1:G:6416:ILE:CD1	2.73	0.51
1:G:6535:TYR:OH	1:G:6545:GLU:HA	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:7033:ARG:NH2	1:H:7196:ASP:HA	2.25	0.51
1:H:7143:VAL:O	1:H:7147:VAL:HG23	2.10	0.51
1:H:7453:LYS:HD3	1:H:7454:LEU:O	2.11	0.51
1:H:7519:ILE:HG13	1:H:7519:ILE:O	2.07	0.51
1:H:7551:LYS:O	1:H:7555:GLU:HB2	2.09	0.51
1:A:281:GLN:HE21	1:A:491:PHE:HE1	1.56	0.51
1:A:327:MSE:CE	1:A:337:ALA:HB1	2.31	0.51
1:B:1454:LEU:HB2	1:B:1456:ASP:OD1	2.11	0.51
1:B:1521:GLU:O	1:B:1522:VAL:C	2.51	0.51
1:C:2260:HIS:C	1:C:2260:HIS:ND1	2.67	0.51
1:C:2315:ALA:CB	1:C:2392:VAL:HG11	2.33	0.51
1:E:4229:GLN:OE1	1:E:4229:GLN:HA	2.10	0.51
1:E:4381:VAL:HG13	1:E:4407:MSE:CE	2.41	0.51
1:E:4487:SER:HB2	1:E:4489:SER:OG	2.10	0.51
1:E:4518:ASN:O	1:E:4522:VAL:HG23	2.10	0.51
1:F:5174:VAL:HG21	1:F:5219:MSE:O	2.10	0.51
1:F:5350:LEU:HD12	1:F:5366:THR:HG23	1.92	0.51
1:F:5392:VAL:O	1:F:5392:VAL:CG1	2.58	0.51
1:G:6097:TYR:O	1:G:6101:GLN:HG3	2.09	0.51
1:H:7116:VAL:HG13	1:H:7117:GLY:H	1.73	0.51
1:H:7243:THR:C	1:H:7248:ARG:NH1	2.66	0.51
1:H:7255:GLU:O	1:H:7256:ASP:C	2.52	0.51
1:A:378:GLU:O	1:A:381:VAL:HB	2.10	0.51
1:B:1482:ASN:N	1:B:1482:ASN:ND2	2.58	0.51
1:C:2541:PHE:N	1:C:2541:PHE:CD2	2.75	0.51
1:D:3086:MSE:HE2	1:D:3086:MSE:HA	1.92	0.51
1:D:3276:PHE:HB3	1:D:3486:ILE:CD1	2.39	0.51
1:D:3308:LEU:HB3	1:D:3389:ILE:HD12	1.92	0.51
1:D:3372:SER:O	1:D:3383:ILE:HG21	2.09	0.51
1:E:4123:TYR:HD2	1:E:4219:MSE:CE	2.23	0.51
1:E:4338:GLN:O	1:E:4367:HIS:CE1	2.64	0.51
1:E:4530:VAL:HG12	1:E:4534:LEU:CD1	2.37	0.51
1:F:5176:GLY:O	1:F:5178:GLY:N	2.43	0.51
1:F:5333:SER:HG	1:F:5336:GLU:HG3	1.75	0.51
1:G:6300:LYS:HZ2	1:G:6304:GLU:C	2.18	0.51
1:G:6321:ASN:O	1:G:6322:LEU:C	2.52	0.51
1:G:6453:LYS:HA	1:G:6458:ARG:O	2.09	0.51
1:H:7024:LYS:O	1:H:7027:PRO:HD2	2.08	0.51
1:H:7351:VAL:CG2	1:H:7369:ALA:HA	2.41	0.51
1:H:7376:THR:CG2	1:H:7377:PHE:N	2.73	0.51
1:H:7377:PHE:O	1:H:7378:GLU:C	2.53	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:142:HIS:O	1:A:143:VAL:C	2.53	0.51
1:A:285:ALA:HA	1:A:322:LEU:CD2	2.40	0.51
1:A:512:LEU:N	1:A:512:LEU:CD1	2.70	0.51
1:B:1325:MSE:HE2	1:B:1492:LEU:HD13	1.92	0.51
1:B:1351:VAL:HG13	1:B:1352:LYS:N	2.25	0.51
1:B:1471:PHE:CD1	1:B:1472:PRO:HD3	2.46	0.51
1:C:2024:LYS:HA	1:C:2028:LEU:HD22	1.92	0.51
1:C:2244:ASP:CA	1:C:2248:ARG:HH12	2.23	0.51
1:C:2419:LEU:H	1:C:2419:LEU:CD2	2.20	0.51
1:C:2432:GLU:HA	1:C:2436:LEU:CD1	2.35	0.51
1:C:2524:ILE:O	1:C:2528:ILE:HG12	2.11	0.51
1:D:3107:LEU:O	1:D:3111:VAL:HG23	2.11	0.51
1:D:3116:VAL:HG13	1:D:3117:GLY:N	2.24	0.51
1:E:4350:LEU:HD12	1:E:4366:THR:HG23	1.91	0.51
1:F:5082:TYR:O	1:F:5085:ILE:HG22	2.10	0.51
1:H:7156:LYS:O	1:H:7251:LEU:HB3	2.10	0.51
1:H:7243:THR:HB	1:H:7248:ARG:CD	2.32	0.51
1:A:82:TYR:C	1:A:82:TYR:CD2	2.89	0.51
1:B:1332:LEU:HG	1:B:1336:GLU:OE2	2.10	0.51
1:C:2051:GLN:HA	1:C:2051:GLN:NE2	2.19	0.51
1:D:3047:MSE:O	1:D:3048:LEU:HD22	2.10	0.51
1:D:3133:LEU:HD12	1:D:3134:PHE:H	1.75	0.51
1:E:4075:MSE:HG3	1:E:4080:GLU:CD	2.35	0.51
1:E:4128:ARG:HG2	1:E:4128:ARG:NH1	2.26	0.51
1:E:4359:ASP:OD2	1:E:4361:TYR:N	2.44	0.51
1:E:4416:ILE:O	1:E:4417:PHE:HD1	1.93	0.51
1:F:5408:ALA:CB	1:F:5437:THR:HG22	2.37	0.51
1:G:6342:TRP:CD2	1:G:6384:LEU:HD21	2.45	0.51
1:G:6453:LYS:HG3	1:G:6459:VAL:HG13	1.93	0.51
1:H:7389:ILE:CG2	1:H:7416:ILE:HG22	2.40	0.51
1:H:7407:MSE:CG	1:H:7414:PRO:HB2	2.38	0.51
1:A:120:CYS:O	1:A:175:TYR:HB3	2.11	0.51
1:A:407:MSE:HG3	1:A:414:PRO:HB2	1.92	0.51
1:B:1264:ARG:CG	1:B:1265:PHE:N	2.73	0.51
1:C:2518:ASN:HB3	1:C:2521:GLU:OE2	2.11	0.51
1:D:3424:ALA:C	1:D:3425:GLN:NE2	2.68	0.51
1:D:3454:LEU:HD11	1:D:3460:PHE:HE2	1.75	0.51
1:E:4416:ILE:C	1:E:4417:PHE:HD1	2.19	0.51
1:E:4511:ARG:HH11	1:E:4511:ARG:CB	2.24	0.51
1:G:6144:ARG:O	1:G:6148:ASP:OD2	2.28	0.51
1:G:6467:ASN:O	1:G:6469:TYR:N	2.44	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:7123:TYR:C	1:H:7125:HIS:H	2.19	0.51
1:H:7315:ALA:O	1:H:7319:ILE:HG13	2.09	0.51
1:H:7407:MSE:HA	1:H:7407:MSE:HE2	1.93	0.51
1:H:7531:THR:O	1:H:7534:LEU:N	2.43	0.51
1:A:326:SER:HB2	1:A:492:LEU:HD11	1.93	0.51
1:A:342:TRP:CE2	1:A:367:HIS:HD2	2.29	0.51
1:A:344:PHE:CZ	1:A:348:GLY:HA2	2.46	0.51
1:D:3063:ILE:O	1:D:3066:LEU:HB3	2.11	0.51
1:D:3109:PRO:O	1:D:3114:PRO:HD2	2.11	0.51
1:D:3135:ILE:O	1:D:3203:ILE:HA	2.10	0.51
1:D:3168:GLY:C	1:D:3169:LEU:HD12	2.35	0.51
1:D:3187:TYR:O	1:D:3191:ALA:HB3	2.10	0.51
1:D:3350:LEU:HD12	1:D:3366:THR:HG23	1.92	0.51
1:D:3389:ILE:HG23	1:D:3399:PHE:CZ	2.46	0.51
1:D:3512:LEU:N	1:D:3512:LEU:HD12	2.26	0.51
1:D:3528:ILE:O	1:D:3532:GLU:HG2	2.11	0.51
1:F:5099:ILE:O	1:F:5102:ASP:HB2	2.10	0.51
1:G:6092:ASN:ND2	1:G:6562:TYR:OH	2.36	0.51
1:H:7172:LEU:O	1:H:7175:TYR:HB2	2.11	0.51
1:H:7522:VAL:O	1:H:7526:ILE:CG1	2.59	0.51
1:A:39:ALA:HA	1:A:59:GLU:O	2.11	0.51
1:A:67:ARG:HB2	1:B:1217:PHE:CE1	2.46	0.51
1:A:399:PHE:CG	1:A:427:GLU:HB3	2.46	0.51
1:A:570:TYR:CE2	1:D:3142:HIS:CG	2.98	0.51
1:B:1232:ASP:CA	1:B:1235:ILE:HG12	2.40	0.51
1:C:2075:MSE:HB3	1:C:2081:LYS:HG2	1.91	0.51
1:C:2283:THR:O	1:C:2286:VAL:HG23	2.10	0.51
1:C:2484:ARG:C	1:C:2485:HIS:ND1	2.69	0.51
1:C:2512:LEU:N	1:C:2512:LEU:HD12	2.26	0.51
1:D:3103:ASP:O	1:D:3107:LEU:HB2	2.10	0.51
1:D:3167:LEU:HB2	1:D:3169:LEU:HD13	1.92	0.51
1:E:4026:LYS:C	1:E:4028:LEU:N	2.68	0.51
1:E:4294:ALA:O	1:E:4295:GLN:C	2.53	0.51
1:F:5186:LEU:O	1:F:5187:TYR:C	2.52	0.51
1:G:6209:ASN:C	1:G:6213:LEU:HD12	2.35	0.51
1:H:7028:LEU:CD2	1:H:7048:LEU:HG	2.41	0.51
1:A:139:ASP:O	1:A:140:ARG:C	2.51	0.51
1:A:310:LEU:C	1:A:344:PHE:O	2.54	0.51
1:B:1145:SER:HA	1:B:1148:ASP:OD2	2.11	0.51
1:B:1350:LEU:HA	1:B:1354:ARG:HD3	1.93	0.51
1:B:1454:LEU:HD12	1:B:1458:ARG:CB	2.39	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2057:LYS:CE	1:C:2059:GLU:HG2	2.41	0.51
1:C:2180:PRO:HB2	1:C:2200:PRO:HB2	1.93	0.51
1:C:2352:LYS:HG3	1:C:2368:SER:CA	2.41	0.51
1:D:3291:LEU:HD23	1:D:3291:LEU:N	2.26	0.51
1:D:3335:GLN:HA	1:D:3335:GLN:HE21	1.76	0.51
1:D:3420:SER:OG	1:D:3427:GLU:OE2	2.27	0.51
1:D:3529:LYS:O	1:D:3530:VAL:C	2.53	0.51
1:E:4389:ILE:HG23	1:E:4399:PHE:CE1	2.46	0.51
1:F:5047:MSE:HE3	1:F:5566:LEU:CD2	2.41	0.51
1:F:5324:VAL:HG13	1:F:5337:ALA:CB	2.41	0.51
1:G:6030:LEU:O	1:H:7030:LEU:HD13	2.11	0.51
1:G:6043:GLN:HG2	1:G:6566:LEU:CD1	2.35	0.51
1:G:6060:THR:O	1:G:6061:GLN:C	2.53	0.51
1:G:6104:ILE:HG23	1:G:6105:GLU:N	2.26	0.51
1:G:6242:ILE:C	1:G:6244:ASP:N	2.64	0.51
1:H:7402:ASP:O	1:H:7405:ARG:HG2	2.10	0.51
1:A:309:PHE:CD1	1:A:390:ILE:HB	2.41	0.51
1:A:553:VAL:O	1:A:556:ARG:N	2.43	0.51
1:C:2261:ASN:HA	1:C:2264:ARG:HG2	1.93	0.51
1:C:2275:THR:O	1:C:2486:ILE:HG13	2.11	0.51
1:C:2300:LYS:HG2	1:C:2304:GLU:OE1	2.10	0.51
1:C:2323:ILE:O	1:C:2324:VAL:C	2.53	0.51
1:C:2549:LYS:O	1:C:2552:TYR:HB3	2.10	0.51
1:D:3109:PRO:HA	1:D:3113:THR:O	2.11	0.51
1:D:3122:GLN:O	1:D:3123:TYR:O	2.28	0.51
1:D:3405:ARG:O	1:D:3408:ALA:HB3	2.11	0.51
1:D:3418:ALA:CB	1:D:3427:GLU:HB2	2.40	0.51
1:E:4515:PRO:O	1:E:4517:ALA:N	2.44	0.51
1:F:5533:TYR:C	1:F:5533:TYR:CD2	2.88	0.51
1:G:6124:GLY:N	4:G:8062:HOH:O	2.45	0.51
1:G:6263:PHE:O	1:G:6266:LEU:HB3	2.11	0.51
1:H:7026:LYS:O	1:H:7029:MSE:N	2.43	0.51
1:A:501:GLN:HE21	1:A:501:GLN:CA	2.24	0.50
1:B:1139:ASP:OD1	1:C:2572:TRP:NE1	2.44	0.50
1:B:1251:LEU:HD12	1:B:1252:ILE:H	1.75	0.50
1:B:1326:SER:O	1:B:1327:MSE:C	2.53	0.50
1:C:2045:ARG:NH1	1:C:2058:ILE:HD13	2.25	0.50
1:C:2124:GLY:O	1:C:2217:PHE:HB3	2.11	0.50
1:C:2298:ILE:CD1	1:C:2442:LEU:HD11	2.38	0.50
1:D:3341:ILE:HD12	1:D:3365:PHE:HE2	1.76	0.50
1:D:3389:ILE:O	1:D:3390:ILE:HG13	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3402:ASP:HA	1:D:3405:ARG:CG	2.40	0.50
1:D:3533:TYR:CD2	1:D:3533:TYR:C	2.89	0.50
1:D:3549:LYS:HA	1:D:3552:TYR:HB3	1.92	0.50
1:E:4138:SER:O	1:H:7572:TRP:NE1	2.44	0.50
1:E:4205:VAL:O	1:E:4225:ARG:HA	2.11	0.50
1:E:4352:LYS:CG	1:E:4368:SER:HA	2.39	0.50
1:E:4476:LEU:HG	1:E:4480:LEU:HD12	1.93	0.50
1:F:5089:GLN:HB2	1:F:5096:PHE:CE1	2.46	0.50
1:F:5103:ASP:HB3	1:F:5107:LEU:HD22	1.92	0.50
1:F:5358:ILE:HG12	1:F:5366:THR:HG21	1.93	0.50
1:F:5402:ASP:CA	1:F:5405:ARG:HG2	2.41	0.50
1:F:5532:GLU:HG2	1:F:5549:LYS:HG2	1.94	0.50
1:G:6024:LYS:C	1:G:6028:LEU:HD22	2.36	0.50
1:G:6024:LYS:O	1:G:6027:PRO:HD2	2.11	0.50
1:G:6153:ASN:O	1:G:6246:TYR:CE2	2.63	0.50
1:G:6183:LYS:O	1:G:6187:TYR:HD1	1.93	0.50
1:G:6205:VAL:HG12	1:G:6226:ASP:CB	2.26	0.50
1:G:6238:PHE:O	1:G:6239:MSE:C	2.53	0.50
1:G:6270:ARG:NH2	1:G:6486:ILE:O	2.42	0.50
1:G:6282:GLY:O	1:G:6283:THR:C	2.54	0.50
1:H:7040:PHE:HE2	1:H:7565:LEU:HD12	1.76	0.50
1:H:7389:ILE:HD12	1:H:7390:ILE:H	1.75	0.50
1:H:7481:CYS:C	1:H:7483:THR:H	2.18	0.50
1:A:217:PHE:HZ	1:B:1066:LEU:HG	1.75	0.50
1:A:408:ALA:O	1:A:440:ARG:NH2	2.40	0.50
1:B:1235:ILE:HG13	1:B:1265:PHE:CZ	2.46	0.50
1:C:2038:MSE:HE1	1:D:3219:MSE:HG2	1.94	0.50
1:C:2327:MSE:HE2	1:C:2341:ILE:HD11	1.93	0.50
1:C:2545:GLU:HG3	1:C:2546:PRO:HD2	1.92	0.50
1:E:4177:MSE:CE	1:E:4181:VAL:HG22	2.39	0.50
1:E:4321:ASN:C	1:E:4321:ASN:OD1	2.54	0.50
1:F:5172:LEU:O	1:F:5175:TYR:HB2	2.11	0.50
1:F:5228:THR:HG1	1:F:5230:GLN:H	1.56	0.50
1:F:5333:SER:HB3	1:F:5336:GLU:CD	2.36	0.50
1:G:6284:ALA:O	1:G:6287:ALA:N	2.44	0.50
1:G:6332:LEU:HG	1:G:6336:GLU:HG3	1.93	0.50
1:H:7135:ILE:HB	1:H:7203:ILE:HG12	1.93	0.50
1:A:100:LEU:HD11	1:A:111:VAL:HG21	1.92	0.50
1:A:144:ARG:NH1	1:A:244:ASP:HB3	2.25	0.50
1:A:236:ASP:O	1:A:237:GLU:C	2.53	0.50
1:A:245:ARG:O	1:A:245:ARG:HG3	2.09	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:379:ASP:O	1:A:383:ILE:HG13	2.12	0.50
1:C:2057:LYS:HE3	1:C:2059:GLU:HG2	1.93	0.50
1:C:2069:HIS:C	1:C:2071:ASN:N	2.67	0.50
1:C:2124:GLY:HA3	1:C:2175:TYR:CE2	2.45	0.50
1:C:2245:ARG:HG2	1:C:2246:TYR:CE1	2.47	0.50
1:C:2440:ARG:HB3	1:C:2440:ARG:NH1	2.27	0.50
1:D:3090:GLU:CG	1:D:3131:LYS:HE2	2.41	0.50
1:D:3154:HIS:O	1:D:3197:ARG:HD3	2.11	0.50
1:D:3186:LEU:O	1:D:3187:TYR:C	2.54	0.50
1:D:3432:GLU:O	1:D:3433:ALA:C	2.53	0.50
1:D:3482:ASN:O	1:D:3541:PHE:HB2	2.11	0.50
1:D:3535:TYR:O	1:D:3538:LYS:NZ	2.45	0.50
1:E:4099:ILE:O	1:E:4102:ASP:CB	2.60	0.50
1:E:4254:PHE:HD2	1:E:4257:PHE:CE1	2.28	0.50
1:F:5207:THR:O	1:F:5224:LYS:HA	2.12	0.50
1:G:6137:ILE:HA	1:G:6234:LEU:CD2	2.42	0.50
1:H:7278:ASP:O	1:H:7280:ILE:N	2.44	0.50
1:H:7308:LEU:O	1:H:7389:ILE:HD12	2.11	0.50
1:H:7551:LYS:HE3	1:H:7555:GLU:OE1	2.12	0.50
1:B:1061:GLN:OE1	1:B:1098:ARG:HD3	2.10	0.50
1:B:1108:MSE:HB3	1:B:1109:PRO:HD3	1.93	0.50
1:B:1164:GLU:O	1:B:1171:ASP:N	2.44	0.50
1:C:2295:GLN:HA	1:C:2298:ILE:HB	1.93	0.50
1:D:3350:LEU:HD21	1:D:3354:ARG:HH22	1.77	0.50
1:E:4154:HIS:HB3	1:E:4197:ARG:CD	2.42	0.50
1:E:4333:SER:O	1:E:4335:GLN:N	2.44	0.50
1:F:5258:GLY:O	1:F:5259:ASN:C	2.54	0.50
1:F:5381:VAL:O	1:F:5386:PRO:HD3	2.12	0.50
1:F:5401:PRO:O	1:F:5405:ARG:HG2	2.11	0.50
1:G:6298:ILE:CG2	1:G:6300:LYS:HB2	2.41	0.50
1:H:7072:LEU:HD11	1:H:7081:LYS:HB3	1.94	0.50
1:H:7104:ILE:HG13	1:H:7108:MSE:HE1	1.94	0.50
1:H:7481:CYS:HB3	1:H:7483:THR:OG1	2.12	0.50
1:A:144:ARG:O	1:A:147:VAL:HB	2.11	0.50
1:A:389:ILE:CG2	1:A:416:ILE:HA	2.40	0.50
1:B:1164:GLU:HG3	1:B:1225:ARG:NE	2.27	0.50
1:B:1342:TRP:CE3	1:B:1349:LEU:HD11	2.46	0.50
1:C:2153:ASN:O	1:C:2246:TYR:CE2	2.65	0.50
1:C:2396:GLY:HA2	1:C:2425:GLN:HA	1.94	0.50
1:C:2397:ARG:NH1	1:C:2429:THR:HG22	2.26	0.50
1:C:2412:GLU:C	1:C:2413:ARG:HG2	2.35	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3184:LEU:O	1:D:3185:CYS:C	2.53	0.50
1:D:3313:GLY:HA3	3:D:3601:NAD:O5B	2.12	0.50
1:D:3327:MSE:O	1:D:3332:LEU:HB2	2.12	0.50
1:D:3527:ALA:O	1:D:3528:ILE:C	2.52	0.50
1:E:4302:ILE:HD13	1:E:4330:ASN:HB3	1.93	0.50
1:E:4351:VAL:HG13	1:E:4352:LYS:N	2.25	0.50
1:E:4492:LEU:O	1:E:4496:LYS:HG3	2.11	0.50
1:E:4543:TYR:C	1:E:4543:TYR:CD2	2.89	0.50
1:F:5166:ILE:HG21	1:F:5172:LEU:HD12	1.94	0.50
1:F:5184:LEU:HG	1:F:5198:CYS:HB3	1.93	0.50
1:F:5240:LYS:HG2	1:F:5244:ASP:CG	2.36	0.50
1:G:6142:HIS:O	1:G:6145:SER:N	2.44	0.50
1:G:6155:VAL:HB	1:G:6246:TYR:CD2	2.46	0.50
1:G:6342:TRP:HZ3	1:G:6349:LEU:HD21	1.74	0.50
1:H:7266:LEU:HD22	1:H:7277:ASN:H	1.77	0.50
1:H:7412:GLU:CA	1:H:7440:ARG:NH1	2.74	0.50
1:A:258:GLY:O	1:A:259:ASN:C	2.55	0.50
1:A:279:ASP:HB3	1:A:314:GLU:OE1	2.12	0.50
1:A:295:GLN:O	1:A:298:ILE:N	2.45	0.50
1:A:295:GLN:HE22	1:A:305:HIS:CE1	2.28	0.50
1:A:324:VAL:O	1:A:325:MSE:C	2.53	0.50
1:B:1122:GLN:O	1:B:1126:ILE:HG12	2.11	0.50
1:B:1221:LEU:HB3	1:B:1223:GLN:OE1	2.12	0.50
1:B:1317:LEU:H	1:B:1317:LEU:CD1	2.02	0.50
1:B:1324:VAL:HA	1:B:1327:MSE:HE3	1.93	0.50
1:C:2179:ILE:O	1:C:2180:PRO:C	2.55	0.50
1:E:4036:LYS:HB3	1:E:4039:ALA:HB3	1.94	0.50
1:E:4308:LEU:HD12	1:E:4342:TRP:O	2.12	0.50
1:F:5094:LYS:NZ	1:F:5559:ARG:O	2.38	0.50
1:F:5251:LEU:HD12	1:F:5252:ILE:H	1.73	0.50
1:F:5419:LEU:O	1:F:5420:SER:C	2.54	0.50
1:F:5470:ILE:CD1	1:F:5498:LEU:HD22	2.42	0.50
1:F:5524:ILE:O	1:F:5528:ILE:HG13	2.11	0.50
1:H:7323:ILE:O	1:H:7325:MSE:N	2.45	0.50
1:H:7529:LYS:HD3	1:H:7532:GLU:OE1	2.11	0.50
1:A:152:GLU:OE1	1:A:152:GLU:CA	2.59	0.50
1:A:174:VAL:HG21	1:A:219:MSE:HG2	1.92	0.50
1:A:319:ILE:O	1:A:320:ALA:C	2.54	0.50
1:B:1371:GLU:OE1	1:B:1371:GLU:HA	2.10	0.50
1:B:1408:ALA:O	1:B:1411:ASN:O	2.28	0.50
1:B:1505:GLU:O	1:B:1509:GLN:HG2	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2056:PRO:HB2	1:D:3221:LEU:HD13	1.94	0.50
1:D:3239:MSE:O	1:D:3240:LYS:C	2.54	0.50
1:D:3416:ILE:HD13	1:D:3416:ILE:H	1.77	0.50
1:D:3420:SER:HB3	1:D:3425:GLN:HB3	1.94	0.50
1:D:3553:VAL:C	1:D:3555:GLU:N	2.69	0.50
1:E:4031:ASN:OD1	1:E:4033:ARG:N	2.44	0.50
1:E:4043:GLN:HG2	1:E:4566:LEU:HD11	1.93	0.50
1:E:4380:ALA:HB1	1:E:4384:LEU:HD23	1.94	0.50
1:E:4453:LYS:CD	1:E:4457:GLY:HA2	2.41	0.50
1:F:5026:LYS:O	1:F:5029:MSE:N	2.44	0.50
1:H:7324:VAL:HA	1:H:7327:MSE:HE3	1.93	0.50
1:H:7396:GLY:HA2	1:H:7425:GLN:C	2.37	0.50
1:H:7521:GLU:O	1:H:7522:VAL:C	2.53	0.50
1:A:184:LEU:HG	1:A:198:CYS:HB3	1.94	0.50
1:A:271:GLU:HA	1:A:485:HIS:CD2	2.46	0.50
1:A:480:LEU:O	1:A:542:ARG:HG3	2.11	0.50
1:C:2327:MSE:HE3	1:C:2337:ALA:HB1	1.94	0.50
1:C:2377:PHE:HZ	1:C:2389:ILE:HG12	1.77	0.50
1:D:3079:LEU:HG	1:D:3079:LEU:O	2.11	0.50
1:E:4142:HIS:CD2	1:H:7570:TYR:CE2	3.00	0.50
1:E:4264:ARG:CG	1:E:4265:PHE:N	2.75	0.50
1:E:4308:LEU:O	1:E:4389:ILE:HD12	2.11	0.50
1:E:4416:ILE:HD12	1:E:4441:CYS:HB2	1.94	0.50
1:F:5324:VAL:HG13	1:F:5337:ALA:HB3	1.94	0.50
1:G:6350:LEU:O	1:G:6366:THR:HA	2.12	0.50
1:G:6401:PRO:CA	1:G:6404:ILE:HD12	2.39	0.50
1:H:7194:ARG:CZ	1:H:7197:ARG:NH2	2.75	0.50
1:H:7319:ILE:O	1:H:7320:ALA:C	2.55	0.50
1:A:255:GLU:O	1:A:257:PHE:CD1	2.64	0.50
1:A:261:ASN:N	1:A:261:ASN:ND2	2.58	0.50
1:A:506:GLU:HG2	1:A:511:ARG:HD2	1.93	0.50
1:B:1487:SER:O	1:B:1490:VAL:HG23	2.12	0.50
1:B:1530:VAL:O	1:B:1533:TYR:HB3	2.12	0.50
1:B:1535:TYR:CE1	1:B:1546:PRO:HD2	2.46	0.50
1:C:2038:MSE:C	1:C:2040:PHE:H	2.20	0.50
1:C:2456:ASP:OD1	1:C:2458:ARG:HD3	2.12	0.50
1:D:3023:GLU:HG3	1:D:3024:LYS:N	2.27	0.50
1:E:4143:VAL:HG23	1:E:4237:GLU:OE2	2.11	0.50
1:F:5061:GLN:HA	1:F:5064:GLN:HE21	1.76	0.50
1:F:5288:LEU:O	1:F:5292:LEU:HG	2.12	0.50
1:F:5306:LYS:HB2	1:F:5306:LYS:NZ	2.27	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5313:GLY:HA3	3:F:5601:NAD:O5B	2.12	0.50
1:G:6240:LYS:HA	1:G:6243:THR:OG1	2.12	0.50
1:G:6258:GLY:O	1:G:6260:HIS:N	2.45	0.50
1:H:7133:LEU:HB3	1:H:7201:VAL:HG22	1.93	0.50
1:H:7223:GLN:HG2	1:H:7224:LYS:O	2.11	0.50
1:A:124:GLY:O	1:B:1067:ARG:NE	2.44	0.49
1:A:128:ARG:HG3	1:B:1091:ARG:HH12	1.76	0.49
1:A:311:GLY:HA2	1:A:345:ASP:HA	1.94	0.49
1:A:429:THR:OG1	1:A:432:GLU:HG2	2.12	0.49
1:A:502:LEU:HD21	1:A:512:LEU:O	2.12	0.49
1:A:525:ASN:HA	1:A:528:ILE:HD12	1.94	0.49
1:A:572:TRP:CD1	1:D:3138:SER:O	2.64	0.49
1:B:1147:VAL:O	1:B:1245:ARG:NH1	2.45	0.49
1:B:1417:PHE:HA	1:B:1444:ALA:O	2.12	0.49
1:B:1503:THR:O	1:B:1507:LEU:N	2.44	0.49
1:C:2300:LYS:O	1:C:2305:HIS:NE2	2.45	0.49
1:C:2484:ARG:O	1:C:2485:HIS:ND1	2.45	0.49
1:D:3521:GLU:CA	1:D:3524:ILE:HD12	2.42	0.49
1:E:4352:LYS:CB	1:E:4368:SER:HA	2.42	0.49
1:E:4430:ALA:HA	1:E:4443:PHE:CE2	2.47	0.49
1:F:5104:ILE:O	1:F:5108:MSE:HE2	2.12	0.49
1:F:5194:ARG:NH2	1:F:5197:ARG:HE	2.02	0.49
1:F:5456:ASP:HB2	1:F:5458:ARG:CD	2.38	0.49
1:F:5572:TRP:NE1	1:G:6139:ASP:OD1	2.45	0.49
1:G:6396:GLY:O	1:G:6427:GLU:HA	2.11	0.49
1:G:6487:SER:O	1:G:6489:SER:N	2.45	0.49
1:G:6518:ASN:HB3	1:G:6521:GLU:OE2	2.12	0.49
1:H:7099:ILE:O	1:H:7102:ASP:N	2.45	0.49
1:H:7172:LEU:O	1:H:7175:TYR:N	2.44	0.49
1:H:7179:ILE:O	1:H:7182:GLY:N	2.44	0.49
1:A:146:ILE:H	1:A:146:ILE:CD1	2.24	0.49
1:A:155:VAL:HB	1:A:246:TYR:CD2	2.47	0.49
1:A:388:THR:CG2	1:A:415:VAL:HB	2.42	0.49
1:B:1104:ILE:O	1:B:1108:MSE:HE2	2.11	0.49
1:B:1162:ASP:OD2	1:B:1164:GLU:OE1	2.30	0.49
1:B:1482:ASN:HD22	1:B:1482:ASN:H	1.60	0.49
1:B:1532:GLU:HG2	1:B:1549:LYS:HG3	1.94	0.49
1:C:2289:ALA:CB	1:C:2498:LEU:HD23	2.42	0.49
1:C:2301:PRO:O	1:C:2302:ILE:C	2.54	0.49
1:D:3229:GLN:O	1:D:3230:GLN:C	2.55	0.49
1:D:3491:PHE:O	1:D:3494:ALA:HB3	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4059:GLU:OE2	1:E:4067:ARG:NH2	2.45	0.49
1:F:5137:ILE:C	1:F:5139:ASP:H	2.20	0.49
1:F:5142:HIS:O	1:F:5144:ARG:N	2.45	0.49
1:F:5242:ILE:O	1:F:5243:THR:C	2.55	0.49
1:F:5528:ILE:HG21	1:F:5550:ALA:HA	1.94	0.49
1:G:6306:LYS:O	1:G:6386:PRO:HB3	2.12	0.49
1:G:6374:PRO:HG3	1:G:6380:ALA:CA	2.41	0.49
1:G:6452:VAL:O	1:G:6459:VAL:HA	2.13	0.49
1:H:7327:MSE:CE	1:H:7337:ALA:HB1	2.35	0.49
1:H:7396:GLY:HA2	1:H:7425:GLN:CA	2.42	0.49
1:H:7431:GLU:C	1:H:7433:ALA:N	2.67	0.49
1:A:67:ARG:O	1:A:71:ASN:ND2	2.44	0.49
1:A:396:GLY:O	1:A:398:LEU:HD13	2.12	0.49
1:A:458:ARG:HH11	1:A:458:ARG:HB2	1.76	0.49
1:B:1239:MSE:CE	1:B:1252:ILE:HD12	2.42	0.49
1:B:1258:GLY:O	1:B:1260:HIS:N	2.44	0.49
1:B:1298:ILE:CD1	1:B:1442:LEU:HD11	2.32	0.49
1:C:2403:VAL:O	1:C:2404:ILE:C	2.54	0.49
1:D:3375:ASP:OD2	1:D:3379:ASP:OD2	2.30	0.49
1:D:3487:SER:O	1:D:3490:VAL:HG23	2.12	0.49
1:E:4243:THR:HB	1:E:4248:ARG:NH1	2.27	0.49
1:F:5255:GLU:O	1:F:5256:ASP:C	2.54	0.49
1:F:5518:ASN:O	1:F:5522:VAL:HG23	2.12	0.49
1:H:7333:SER:HB3	1:H:7336:GLU:CD	2.37	0.49
1:H:7467:ASN:C	1:H:7469:TYR:N	2.67	0.49
1:A:288:LEU:O	1:A:289:ALA:C	2.55	0.49
1:B:1358:ILE:N	1:B:1358:ILE:CD1	2.74	0.49
1:C:2258:GLY:O	1:C:2260:HIS:N	2.46	0.49
1:C:2352:LYS:CB	1:C:2368:SER:HA	2.43	0.49
1:C:2392:VAL:HG23	1:C:2419:LEU:HD23	1.95	0.49
1:C:2419:LEU:N	1:C:2419:LEU:CD2	2.67	0.49
1:D:3036:LYS:O	1:D:3039:ALA:HB3	2.13	0.49
1:D:3488:ASP:HA	1:D:3491:PHE:HD1	1.77	0.49
1:D:3528:ILE:HG21	1:D:3550:ALA:HA	1.95	0.49
1:E:4044:GLU:HG2	1:E:4566:LEU:HG	1.93	0.49
1:E:4253:GLN:NE2	1:E:4255:GLU:HG2	2.26	0.49
1:E:4504:ASP:O	1:E:4507:LEU:N	2.44	0.49
1:F:5188:THR:CG2	1:F:5195:PRO:HD3	2.42	0.49
1:F:5308:LEU:HD12	1:F:5342:TRP:O	2.11	0.49
1:F:5352:LYS:CG	1:F:5368:SER:HA	2.41	0.49
1:F:5384:LEU:O	1:F:5385:LYS:C	2.55	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5419:LEU:HA	1:F:5446:GLY:H	1.76	0.49
1:G:6300:LYS:C	1:G:6304:GLU:OE1	2.56	0.49
1:G:6466:ASN:CG	1:G:6468:VAL:HG12	2.38	0.49
1:H:7069:HIS:HE1	1:H:7102:ASP:OD2	1.95	0.49
1:H:7302:ILE:HG22	1:H:7340:LYS:HZ1	1.78	0.49
1:A:86:MSE:HE2	1:A:86:MSE:N	2.27	0.49
1:C:2249:ASN:C	1:C:2249:ASN:OD1	2.55	0.49
1:D:3023:GLU:HG3	1:D:3024:LYS:H	1.78	0.49
1:D:3054:LEU:O	1:D:3055:PRO:C	2.56	0.49
1:F:5376:THR:O	1:F:5379:ASP:HB2	2.12	0.49
1:G:6093:GLU:OE1	1:G:6195:PRO:HB2	2.12	0.49
1:H:7358:ILE:HG22	1:H:7362:GLN:HB3	1.93	0.49
1:H:7380:ALA:O	1:H:7381:VAL:C	2.54	0.49
1:H:7409:SER:O	1:H:7411:ASN:N	2.46	0.49
1:H:7422:PRO:C	1:H:7424:ALA:N	2.66	0.49
1:A:104:ILE:O	1:A:108:MSE:HE2	2.13	0.49
1:B:1057:LYS:HD2	1:B:1059:GLU:OE2	2.12	0.49
1:B:1152:GLU:HG3	1:B:1196:ASP:O	2.13	0.49
1:B:1376:THR:HG21	1:B:1378:GLU:HB3	1.94	0.49
1:C:2220:GLY:HA2	1:D:3056:PRO:HG2	1.94	0.49
1:D:3108:MSE:N	1:D:3109:PRO:HD2	2.28	0.49
1:D:3494:ALA:O	1:D:3497:ALA:N	2.46	0.49
1:E:4028:LEU:HD21	1:E:4048:LEU:HD12	1.93	0.49
1:E:4261:ASN:HA	1:E:4264:ARG:NE	2.27	0.49
1:F:5315:ALA:C	1:F:5319:ILE:HD12	2.38	0.49
1:G:6038:MSE:CE	1:G:6057:LYS:HB3	2.42	0.49
1:G:6389:ILE:CG2	1:G:6416:ILE:HG22	2.40	0.49
1:G:6476:LEU:HD12	1:G:6476:LEU:O	2.13	0.49
1:G:6549:LYS:HA	1:G:6552:TYR:HB3	1.94	0.49
1:H:7351:VAL:HG21	1:H:7370:PRO:HD3	1.94	0.49
1:H:7449:PHE:O	1:H:7462:PRO:HG2	2.12	0.49
1:B:1431:GLU:C	1:B:1433:ALA:N	2.70	0.49
1:B:1488:ASP:HA	1:B:1491:PHE:HD1	1.77	0.49
1:B:1531:THR:O	1:B:1532:GLU:C	2.55	0.49
1:C:2048:LEU:N	1:C:2048:LEU:CD2	2.75	0.49
1:C:2504:ASP:O	1:C:2508:ALA:N	2.41	0.49
1:D:3288:LEU:HA	1:D:3291:LEU:HG	1.93	0.49
1:E:4412:GLU:O	1:E:4440:ARG:HB3	2.12	0.49
1:F:5565:LEU:HD23	1:F:5565:LEU:N	2.27	0.49
1:G:6466:ASN:ND2	1:G:6468:VAL:CG1	2.76	0.49
1:H:7253:GLN:HG3	1:H:7276:PHE:CZ	2.48	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:7288:LEU:C	1:H:7290:GLY:N	2.70	0.49
1:H:7412:GLU:CA	1:H:7440:ARG:HH11	2.24	0.49
1:A:136:SER:O	1:A:139:ASP:HB2	2.12	0.49
1:A:169:LEU:HD12	1:A:169:LEU:N	2.27	0.49
1:A:297:VAL:HG22	1:A:298:ILE:HD13	1.93	0.49
1:B:1079:LEU:O	1:B:1082:TYR:HB3	2.12	0.49
1:B:1093:GLU:OE1	1:B:1195:PRO:HB2	2.12	0.49
1:B:1428:CYS:SG	1:B:1429:THR:N	2.85	0.49
1:C:2400:THR:O	1:C:2404:ILE:HG13	2.13	0.49
1:C:2541:PHE:HD2	1:C:2541:PHE:N	2.10	0.49
1:D:3206:GLY:HA3	1:D:3223:GLN:HG2	1.94	0.49
1:D:3327:MSE:HE3	1:D:3337:ALA:CB	2.39	0.49
1:E:4095:LEU:HG	1:E:4099:ILE:HD12	1.95	0.49
1:E:4209:ASN:C	1:E:4209:ASN:OD1	2.55	0.49
1:F:5205:VAL:HG11	1:F:5231:TYR:HD1	1.78	0.49
1:F:5359:ASP:HB3	1:F:5362:GLN:OE1	2.12	0.49
1:G:6166:ILE:HG22	1:G:6166:ILE:O	2.12	0.49
1:H:7401:PRO:HA	1:H:7436:LEU:CD2	2.42	0.49
1:A:501:GLN:HA	1:A:501:GLN:HE21	1.75	0.49
1:B:1376:THR:H	1:B:1379:ASP:HB2	1.78	0.49
1:B:1540:ALA:C	1:B:1541:PHE:HD2	2.20	0.49
1:C:2057:LYS:HG3	1:D:3218:TYR:O	2.12	0.49
1:C:2384:LEU:O	1:C:2385:LYS:HB2	2.13	0.49
1:C:2520:GLN:O	1:C:2521:GLU:C	2.54	0.49
1:D:3123:TYR:HE1	1:D:3178:GLY:HA3	1.78	0.49
1:D:3297:VAL:HG22	1:D:3298:ILE:CD1	2.41	0.49
1:D:3343:MSE:CE	1:D:3365:PHE:HB2	2.43	0.49
1:D:3349:LEU:HD23	1:D:3351:VAL:HB	1.95	0.49
1:D:3439:GLY:HA3	1:D:3460:PHE:CE2	2.47	0.49
1:E:4332:LEU:CG	1:E:4336:GLU:OE2	2.61	0.49
1:E:4429:THR:HB	1:E:4449:PHE:CE2	2.48	0.49
1:E:4435:THR:OG1	1:E:4436:LEU:HD13	2.13	0.49
1:E:4540:ALA:O	1:E:4541:PHE:HD2	1.96	0.49
1:F:5298:ILE:HG22	4:F:8041:HOH:O	2.12	0.49
1:F:5399:PHE:HB2	1:F:5428:CYS:HB3	1.95	0.49
1:F:5429:THR:HG23	1:F:5432:GLU:HG2	1.94	0.49
1:G:6041:THR:CG2	1:G:6044:GLU:HG3	2.43	0.49
1:G:6240:LYS:O	1:G:6241:ALA:C	2.55	0.49
1:G:6351:VAL:HG13	1:G:6352:LYS:N	2.27	0.49
1:G:6419:LEU:HD13	1:G:6419:LEU:N	2.28	0.49
1:H:7481:CYS:SG	1:H:7534:LEU:CD1	3.00	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:476:LEU:HD12	1:A:476:LEU:C	2.37	0.49
1:A:566:LEU:HD22	1:A:567:PRO:HD2	1.93	0.49
1:C:2026:LYS:C	1:C:2028:LEU:N	2.71	0.49
1:C:2376:THR:HG22	1:C:2378:GLU:HB3	1.94	0.49
1:D:3123:TYR:CD2	1:D:3219:MSE:HE1	2.48	0.49
1:D:3287:ALA:O	1:D:3290:GLY:N	2.45	0.49
1:E:4095:LEU:O	1:E:4096:PHE:C	2.56	0.49
1:E:4240:LYS:O	1:E:4241:ALA:C	2.55	0.49
1:F:5144:ARG:HH12	1:F:5244:ASP:HB3	1.76	0.49
1:F:5303:SER:CA	1:F:5340:LYS:NZ	2.75	0.49
1:G:6310:LEU:HD21	1:G:6398:LEU:CB	2.42	0.49
1:G:6471:PHE:CD1	1:G:6472:PRO:HD3	2.47	0.49
1:H:7099:ILE:O	1:H:7102:ASP:HB2	2.12	0.49
1:H:7432:GLU:O	1:H:7436:LEU:HB2	2.12	0.49
1:H:7476:LEU:HD12	1:H:7476:LEU:O	2.12	0.49
1:A:270:ARG:CG	1:A:271:GLU:N	2.77	0.48
1:A:431:GLU:C	1:A:433:ALA:H	2.20	0.48
1:C:2160:VAL:HG11	1:C:2238:PHE:CZ	2.47	0.48
1:C:2244:ASP:N	1:C:2248:ARG:NH1	2.60	0.48
1:C:2324:VAL:HA	1:C:2327:MSE:CE	2.42	0.48
1:C:2502:LEU:HB3	1:C:2507:LEU:HD21	1.95	0.48
1:D:3150:TRP:HB3	1:D:3245:ARG:NH1	2.28	0.48
1:D:3275:THR:O	1:D:3486:ILE:HD11	2.13	0.48
1:E:4332:LEU:HD23	1:E:4337:ALA:N	2.27	0.48
1:E:4363:GLU:CB	1:E:4364:PRO:CD	2.90	0.48
1:F:5093:GLU:O	1:F:5094:LYS:C	2.55	0.48
1:F:5103:ASP:CG	1:F:5106:SER:HG	2.21	0.48
1:F:5302:ILE:N	1:F:5302:ILE:HD13	2.28	0.48
1:F:5374:PRO:HB3	1:F:5383:ILE:CD1	2.43	0.48
1:G:6213:LEU:C	1:G:6214:LYS:HG3	2.36	0.48
1:G:6413:ARG:NE	1:G:6440:ARG:O	2.45	0.48
1:G:6487:SER:O	1:G:6488:ASP:C	2.53	0.48
1:H:7401:PRO:HB3	1:H:7436:LEU:HD21	1.95	0.48
1:A:191:ALA:HB3	1:A:193:ILE:HD12	1.94	0.48
1:A:397:ARG:HD2	1:A:397:ARG:H	1.78	0.48
1:C:2328:VAL:C	1:C:2330:ASN:H	2.19	0.48
1:C:2400:THR:CB	1:C:2401:PRO:HD2	2.43	0.48
1:D:3337:ALA:C	1:D:3339:LYS:N	2.71	0.48
1:D:3359:ASP:OD2	1:D:3359:ASP:O	2.30	0.48
1:D:3479:ILE:O	1:D:3481:CYS:N	2.46	0.48
1:E:4025:GLY:O	1:E:4028:LEU:HB2	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4188:THR:HG23	1:E:4193:ILE:O	2.13	0.48
1:E:4287:ALA:O	1:E:4290:GLY:N	2.46	0.48
1:G:6233:ASP:O	1:G:6237:GLU:N	2.43	0.48
1:G:6503:THR:O	1:G:6507:LEU:HD22	2.13	0.48
1:H:7094:LYS:O	1:H:7095:LEU:C	2.57	0.48
1:H:7288:LEU:O	1:H:7289:ALA:C	2.56	0.48
1:H:7292:LEU:O	1:H:7293:ALA:C	2.56	0.48
1:H:7453:LYS:HA	1:H:7458:ARG:O	2.13	0.48
1:H:7483:THR:OG1	1:H:7534:LEU:HD13	2.14	0.48
1:A:191:ALA:HB1	1:A:476:LEU:HD22	1.95	0.48
1:A:245:ARG:HG2	1:A:246:TYR:CE1	2.48	0.48
1:A:430:ALA:O	1:A:433:ALA:HB3	2.13	0.48
1:B:1147:VAL:HG21	1:B:1241:ALA:HB1	1.95	0.48
1:B:1290:GLY:O	1:B:1293:ALA:HB3	2.13	0.48
1:B:1370:PRO:O	1:B:1371:GLU:C	2.55	0.48
1:C:2176:GLY:C	1:C:2178:GLY:N	2.69	0.48
1:C:2432:GLU:C	1:C:2436:LEU:HD13	2.38	0.48
1:D:3294:ALA:O	1:D:3297:VAL:HG13	2.13	0.48
1:F:5139:ASP:CG	1:F:5146:ILE:HD11	2.37	0.48
1:F:5356:ALA:C	1:F:5357:LYS:HD3	2.39	0.48
1:H:7556:ARG:HH11	1:H:7556:ARG:HG3	1.78	0.48
1:A:369:ALA:HB1	1:A:373:ILE:HD11	1.95	0.48
1:A:469:TYR:HB3	1:A:498:LEU:HD22	1.94	0.48
1:B:1054:LEU:O	1:B:1055:PRO:C	2.55	0.48
1:B:1099:ILE:O	1:B:1102:ASP:HB2	2.13	0.48
1:B:1264:ARG:HG3	1:B:1265:PHE:N	2.29	0.48
1:C:2300:LYS:NZ	1:C:2305:HIS:HA	2.28	0.48
1:C:2528:ILE:O	1:C:2531:THR:HG23	2.13	0.48
1:D:3028:LEU:HD12	1:D:3028:LEU:HA	1.66	0.48
1:D:3269:TYR:O	1:D:3270:ARG:C	2.56	0.48
1:D:3300:LYS:HZ1	1:D:3305:HIS:CA	2.19	0.48
1:D:3419:LEU:O	1:D:3420:SER:C	2.54	0.48
1:D:3505:GLU:O	1:D:3508:ALA:HB3	2.14	0.48
1:G:6307:ILE:CG2	1:G:6308:LEU:N	2.75	0.48
1:G:6402:ASP:HA	1:G:6405:ARG:CG	2.43	0.48
1:G:6541:PHE:N	1:G:6541:PHE:CD2	2.80	0.48
1:H:7309:PHE:CD2	1:H:7343:MSE:HG3	2.48	0.48
1:A:333:SER:H	1:A:336:GLU:CD	2.22	0.48
1:A:431:GLU:C	1:A:433:ALA:N	2.71	0.48
1:B:1043:GLN:HG3	1:B:1047:MSE:HE3	1.95	0.48
1:B:1471:PHE:CG	1:B:1472:PRO:HD3	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1503:THR:HG23	1:B:1506:GLU:CD	2.39	0.48
1:C:2284:ALA:HA	1:C:2319:ILE:HG12	1.96	0.48
1:C:2328:VAL:C	1:C:2330:ASN:N	2.70	0.48
1:C:2543:TYR:C	1:C:2543:TYR:CD2	2.91	0.48
1:D:3259:ASN:O	1:D:3260:HIS:C	2.56	0.48
1:D:3300:LYS:HE3	1:D:3305:HIS:HD2	1.78	0.48
1:D:3429:THR:C	1:D:3431:GLU:H	2.21	0.48
1:E:4300:LYS:HE2	1:E:4304:GLU:HB2	1.96	0.48
1:E:4320:ALA:HB1	1:E:4365:PHE:CE2	2.48	0.48
1:E:4363:GLU:HB3	1:E:4364:PRO:HD3	1.96	0.48
1:E:4470:ILE:HD11	1:E:4498:LEU:CD2	2.43	0.48
1:F:5559:ARG:HD3	1:F:5559:ARG:HA	1.49	0.48
1:G:6417:PHE:HB3	1:G:6419:LEU:HD11	1.95	0.48
1:H:7089:GLN:C	1:H:7091:ARG:H	2.21	0.48
1:H:7228:THR:OG1	1:H:7230:GLN:HG2	2.13	0.48
1:H:7287:ALA:O	1:H:7291:LEU:HG	2.13	0.48
1:H:7431:GLU:O	1:H:7433:ALA:N	2.45	0.48
1:A:23:GLU:OE1	1:A:23:GLU:HA	2.13	0.48
1:B:1559:ARG:HB3	1:B:1561:GLU:HG2	1.95	0.48
1:C:2454:LEU:HD12	1:C:2458:ARG:HB3	1.94	0.48
1:C:2471:PHE:CE1	1:C:2472:PRO:HG3	2.49	0.48
1:E:4104:ILE:HG23	1:E:4105:GLU:N	2.28	0.48
1:E:4152:GLU:HG2	1:E:4196:ASP:O	2.14	0.48
1:E:4333:SER:O	1:E:4334:GLU:C	2.56	0.48
1:E:4456:ASP:OD2	1:E:4458:ARG:HD3	2.14	0.48
1:G:6104:ILE:CG2	1:G:6105:GLU:N	2.77	0.48
1:G:6227:ARG:HH11	1:G:6227:ARG:HG2	1.79	0.48
1:G:6406:ALA:O	1:G:6410:ILE:HG13	2.13	0.48
1:H:7085:ILE:HG23	1:H:7086:MSE:H	1.79	0.48
1:A:155:VAL:HB	1:A:246:TYR:CE2	2.49	0.48
1:A:376:THR:HB	1:A:379:ASP:OD2	2.14	0.48
1:A:421:ASN:N	3:A:601:NAD:O2D	2.46	0.48
1:B:1036:LYS:O	1:B:1039:ALA:HB3	2.13	0.48
1:B:1194:ARG:HB3	1:B:1194:ARG:CZ	2.42	0.48
1:D:3150:TRP:HB3	1:D:3245:ARG:HH12	1.78	0.48
1:D:3210:ILE:CB	1:D:3214:LYS:HZ2	2.24	0.48
1:D:3261:ASN:CA	1:D:3264:ARG:HG2	2.43	0.48
1:D:3342:TRP:CH2	1:D:3367:HIS:HB2	2.49	0.48
1:D:3370:PRO:O	1:D:3373:ILE:HD12	2.13	0.48
1:D:3429:THR:OG1	1:D:3431:GLU:HB3	2.14	0.48
1:D:3530:VAL:O	1:D:3533:TYR:HB3	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4553:VAL:C	1:E:4555:GLU:N	2.70	0.48
1:F:5078:PRO:HA	1:F:5081:LYS:HG3	1.96	0.48
1:F:5148:ASP:HA	1:F:5245:ARG:NH1	2.29	0.48
1:G:6033:ARG:HG3	1:G:6033:ARG:HH11	1.79	0.48
1:G:6234:LEU:O	1:G:6234:LEU:HD12	2.13	0.48
1:G:6350:LEU:CD1	1:G:6366:THR:HG23	2.42	0.48
1:G:6392:VAL:O	1:G:6393:ALA:HB2	2.14	0.48
1:G:6396:GLY:HA2	1:G:6425:GLN:HA	1.96	0.48
1:G:6478:VAL:HG12	1:G:6479:ILE:CD1	2.37	0.48
1:H:7505:GLU:O	1:H:7508:ALA:HB3	2.13	0.48
1:A:267:ARG:HG3	1:A:267:ARG:NH1	2.24	0.48
1:A:310:LEU:HD22	1:A:399:PHE:CE2	2.48	0.48
1:A:479:ILE:HG22	1:A:480:LEU:N	2.27	0.48
1:B:1208:ASP:OD1	1:B:1224:LYS:HG3	2.13	0.48
1:B:1271:GLU:O	1:B:1485:HIS:NE2	2.46	0.48
1:B:1319:ILE:O	1:B:1320:ALA:C	2.56	0.48
1:C:2257:PHE:HB3	1:C:2262:ALA:HB2	1.96	0.48
1:C:2292:LEU:O	1:C:2294:ALA:N	2.47	0.48
1:C:2470:ILE:HD11	1:C:2498:LEU:HD22	1.95	0.48
1:C:2524:ILE:O	1:C:2527:ALA:HB3	2.14	0.48
1:D:3491:PHE:O	1:D:3494:ALA:N	2.46	0.48
1:E:4281:GLN:HB3	1:E:4491:PHE:CZ	2.49	0.48
1:E:4392:VAL:CG2	1:E:4419:LEU:HD23	2.44	0.48
1:F:5402:ASP:HA	1:F:5405:ARG:CG	2.43	0.48
1:G:6209:ASN:HB3	1:G:6212:LEU:HD12	1.95	0.48
1:G:6238:PHE:CE1	1:G:6242:ILE:HG13	2.49	0.48
1:G:6258:GLY:O	1:G:6259:ASN:C	2.57	0.48
1:G:6354:ARG:HE	1:G:6356:ALA:CB	2.18	0.48
1:A:145:SER:OG	1:A:146:ILE:HD12	2.13	0.48
1:B:1341:ILE:O	1:B:1367:HIS:NE2	2.47	0.48
1:B:1390:ILE:HG23	1:B:1419:LEU:CD2	2.44	0.48
1:B:1453:LYS:CG	1:B:1459:VAL:HG13	2.43	0.48
1:B:1495:ALA:O	1:B:1496:LYS:C	2.55	0.48
1:B:1527:ALA:O	1:B:1531:THR:CG2	2.58	0.48
1:C:2081:LYS:O	1:C:2085:ILE:HG22	2.14	0.48
1:C:2090:GLU:HG3	1:C:2131:LYS:HD3	1.94	0.48
1:C:2454:LEU:O	1:C:2456:ASP:N	2.47	0.48
1:D:3218:TYR:CE2	4:D:8046:HOH:O	2.36	0.48
1:D:3306:LYS:HD2	1:D:3384:LEU:O	2.14	0.48
1:D:3506:GLU:HB3	1:D:3511:ARG:HD2	1.96	0.48
1:E:4043:GLN:HG2	1:E:4566:LEU:CD1	2.44	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:6143:VAL:HG21	1:G:6237:GLU:HG2	1.96	0.48
1:G:6342:TRP:CE2	1:G:6384:LEU:HD11	2.48	0.48
1:H:7060:THR:HG23	1:H:7063:ILE:CD1	2.35	0.48
1:A:57:LYS:HB2	1:B:1219:MSE:C	2.39	0.48
1:A:385:LYS:HG3	1:A:410:ILE:HG21	1.95	0.48
1:A:429:THR:HG23	1:A:432:GLU:CD	2.39	0.48
1:A:494:ALA:O	1:A:497:ALA:HB3	2.14	0.48
1:B:1038:MSE:HB3	1:B:1057:LYS:O	2.14	0.48
1:B:1375:ASP:OD2	1:B:1379:ASP:OD2	2.32	0.48
1:B:1378:GLU:O	1:B:1381:VAL:HB	2.13	0.48
1:B:1392:VAL:HG12	4:B:8059:HOH:O	2.12	0.48
1:C:2268:LYS:HE2	1:C:2269:TYR:CZ	2.49	0.48
1:C:2270:ARG:NH2	1:C:2486:ILE:O	2.45	0.48
1:D:3082:TYR:HA	1:D:3110:ILE:CG2	2.44	0.48
1:D:3104:ILE:O	1:D:3108:MSE:HE2	2.13	0.48
1:D:3194:ARG:HB2	1:D:3197:ARG:HG3	1.94	0.48
1:D:3374:PRO:HD3	1:D:3383:ILE:HG21	1.95	0.48
1:E:4105:GLU:HA	1:E:4108:MSE:CE	2.44	0.48
1:E:4176:GLY:O	1:E:4177:MSE:C	2.56	0.48
1:E:4206:GLY:HA3	1:E:4223:GLN:NE2	2.27	0.48
1:E:4332:LEU:CD2	1:E:4337:ALA:HA	2.44	0.48
1:E:4398:LEU:HD12	1:E:4398:LEU:N	2.29	0.48
1:F:5144:ARG:HH12	1:F:5244:ASP:CB	2.27	0.48
1:G:6166:ILE:HA	1:G:6256:ASP:CG	2.38	0.48
1:G:6314:GLU:HG2	3:G:6601:NAD:O1N	2.14	0.48
1:G:6413:ARG:NH2	1:G:6440:ARG:C	2.67	0.48
1:H:7096:PHE:HA	1:H:7099:ILE:HD12	1.95	0.48
1:H:7559:ARG:HA	1:H:7559:ARG:HD3	1.60	0.48
1:A:445:SER:O	1:A:464:GLN:HA	2.13	0.47
1:B:1177:MSE:O	1:B:1177:MSE:HE3	2.13	0.47
1:B:1177:MSE:CE	1:B:1180:PRO:HB2	2.44	0.47
1:B:1272:LYS:O	1:B:1273:TYR:CD2	2.67	0.47
1:B:1300:LYS:HE2	1:B:1304:GLU:OE2	2.14	0.47
1:B:1349:LEU:HG	1:B:1350:LEU:N	2.29	0.47
1:C:2306:LYS:O	1:C:2387:SER:N	2.47	0.47
1:C:2370:PRO:O	1:C:2371:GLU:C	2.56	0.47
1:D:3137:ILE:C	1:D:3139:ASP:N	2.72	0.47
1:D:3194:ARG:CZ	1:D:3196:ASP:OD2	2.62	0.47
1:D:3351:VAL:HG22	1:D:3367:HIS:O	2.14	0.47
1:E:4425:GLN:N	1:E:4425:GLN:HE21	2.13	0.47
1:F:5382:ASN:O	1:F:5385:LYS:HD3	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:6389:ILE:HD12	1:G:6389:ILE:HA	1.68	0.47
1:G:6429:THR:HG23	1:G:6432:GLU:OE1	2.14	0.47
1:G:6559:ARG:HD3	1:G:6559:ARG:HA	1.62	0.47
1:H:7043:GLN:HG2	1:H:7566:LEU:CD1	2.39	0.47
1:H:7425:GLN:N	1:H:7425:GLN:NE2	2.62	0.47
1:A:266:LEU:O	1:A:270:ARG:HB3	2.15	0.47
1:A:524:ILE:HG22	1:A:525:ASN:N	2.29	0.47
1:B:1170:GLY:O	1:B:1171:ASP:C	2.57	0.47
1:B:1391:GLY:N	1:B:1417:PHE:O	2.41	0.47
1:B:1528:ILE:O	1:B:1532:GLU:HG3	2.14	0.47
1:C:2223:GLN:HG2	1:C:2224:LYS:O	2.14	0.47
1:C:2283:THR:O	1:C:2284:ALA:C	2.57	0.47
1:D:3119:ALA:O	1:D:3120:CYS:C	2.55	0.47
1:D:3147:VAL:O	1:D:3245:ARG:NH1	2.47	0.47
1:D:3288:LEU:CD2	1:D:3292:LEU:HG	2.44	0.47
1:D:3414:PRO:HD2	1:D:3440:ARG:O	2.14	0.47
1:F:5135:ILE:O	1:F:5203:ILE:HA	2.13	0.47
1:F:5266:LEU:O	1:F:5266:LEU:HD12	2.14	0.47
1:F:5277:ASN:OD1	1:F:5277:ASN:C	2.57	0.47
1:F:5535:TYR:CD2	1:F:5540:ALA:HB3	2.50	0.47
1:G:6317:LEU:HD12	1:G:6317:LEU:N	2.08	0.47
1:G:6431:GLU:O	1:G:6433:ALA:N	2.42	0.47
1:H:7417:PHE:HA	1:H:7444:ALA:O	2.14	0.47
1:A:143:VAL:O	1:A:146:ILE:HB	2.14	0.47
1:A:148:ASP:HA	1:A:245:ARG:NH1	2.28	0.47
1:A:308:LEU:HD13	1:A:342:TRP:HB2	1.96	0.47
1:D:3186:LEU:HA	1:D:3189:ALA:HB3	1.96	0.47
1:E:4031:ASN:OD1	1:E:4033:ARG:HB2	2.14	0.47
1:E:4291:LEU:HD23	1:E:4417:PHE:CE2	2.50	0.47
1:E:4389:ILE:HD12	1:E:4389:ILE:HA	1.69	0.47
1:G:6122:GLN:C	1:G:6126:ILE:HG12	2.38	0.47
1:G:6135:ILE:HD13	1:G:6143:VAL:HG13	1.96	0.47
1:G:6528:ILE:HD11	1:G:6554:LYS:HD2	1.94	0.47
1:H:7123:TYR:O	1:H:7175:TYR:CZ	2.67	0.47
1:H:7399:PHE:HA	1:H:7403:VAL:HG11	1.96	0.47
1:A:261:ASN:HA	1:A:264:ARG:HE	1.79	0.47
1:B:1227:ARG:HG2	1:B:1227:ARG:NH1	2.12	0.47
1:C:2232:ASP:O	1:C:2233:ASP:C	2.58	0.47
1:C:2416:ILE:N	1:C:2416:ILE:CD1	2.78	0.47
1:C:2454:LEU:HD12	1:C:2458:ARG:CB	2.44	0.47
1:C:2527:ALA:O	1:C:2528:ILE:C	2.57	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3094:LYS:HG2	1:D:3562:TYR:HD2	1.79	0.47
1:D:3116:VAL:CG2	1:D:3179:ILE:HD13	2.44	0.47
1:D:3281:GLN:HG2	1:D:3491:PHE:CE1	2.50	0.47
1:D:3286:VAL:O	1:D:3289:ALA:HB3	2.13	0.47
1:D:3484:ARG:C	1:D:3485:HIS:ND1	2.72	0.47
1:E:4261:ASN:HD22	1:E:4261:ASN:N	2.03	0.47
1:E:4506:GLU:O	1:E:4511:ARG:HG3	2.14	0.47
1:F:5127:PHE:O	1:F:5128:ARG:HD3	2.13	0.47
1:G:6306:LYS:O	1:G:6386:PRO:CB	2.63	0.47
1:G:6437:THR:C	1:G:6439:GLY:N	2.69	0.47
1:H:7304:GLU:CD	1:H:7304:GLU:H	2.21	0.47
1:H:7333:SER:O	1:H:7334:GLU:C	2.57	0.47
1:H:7351:VAL:CG1	1:H:7369:ALA:HB2	2.44	0.47
1:A:52:GLY:O	1:B:1133:LEU:HD12	2.14	0.47
1:A:143:VAL:HG11	1:A:238:PHE:HA	1.95	0.47
1:A:239:MSE:HE2	1:A:269:TYR:CD1	2.49	0.47
1:A:338:GLN:C	1:A:340:LYS:H	2.22	0.47
1:B:1137:ILE:HB	1:B:1205:VAL:HG12	1.95	0.47
1:B:1210:ILE:O	1:B:1211:ALA:C	2.56	0.47
1:B:1344:PHE:HA	1:B:1349:LEU:HA	1.97	0.47
1:B:1407:MSE:SE	1:B:1411:ASN:HD21	2.48	0.47
1:C:2429:THR:HA	1:C:2449:PHE:CZ	2.50	0.47
1:D:3068:PHE:CZ	1:D:3085:ILE:HD12	2.49	0.47
1:D:3243:THR:HB	1:D:3248:ARG:HH11	1.79	0.47
1:D:3304:GLU:H	1:D:3304:GLU:HG3	1.34	0.47
1:F:5559:ARG:CG	1:F:5559:ARG:NH1	2.76	0.47
1:G:6122:GLN:NE2	1:G:6122:GLN:HA	2.29	0.47
1:G:6243:THR:C	1:G:6248:ARG:HH11	2.23	0.47
1:G:6333:SER:OG	1:G:6335:GLN:HB3	2.14	0.47
1:G:6416:ILE:CD1	1:G:6441:CYS:HB2	2.44	0.47
1:H:7136:SER:O	1:H:7139:ASP:HB2	2.13	0.47
1:H:7166:ILE:O	1:H:7169:LEU:HB2	2.14	0.47
1:H:7297:VAL:HG22	1:H:7298:ILE:HD13	1.96	0.47
1:H:7374:PRO:HB3	1:H:7380:ALA:N	2.30	0.47
1:H:7459:VAL:O	1:H:7460:PHE:HD1	1.96	0.47
1:H:7468:VAL:HA	1:H:7471:PHE:CE2	2.49	0.47
1:H:7527:ALA:O	1:H:7531:THR:HG23	2.14	0.47
1:A:276:PHE:HB2	1:A:281:GLN:HE22	1.74	0.47
1:B:1050:LEU:O	1:B:1053:LEU:HB2	2.15	0.47
1:B:1273:TYR:O	1:B:1485:HIS:HD2	1.98	0.47
1:B:1389:ILE:HG23	1:B:1399:PHE:CE1	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2328:VAL:HG22	1:C:2332:LEU:O	2.13	0.47
1:C:2503:THR:HG23	1:C:2506:GLU:OE1	2.14	0.47
1:D:3046:GLN:HG2	1:D:3051:GLN:HG3	1.97	0.47
1:D:3088:ILE:HD12	1:D:3091:ARG:NH1	2.30	0.47
1:E:4037:GLY:C	1:E:4039:ALA:N	2.68	0.47
1:E:4300:LYS:CE	1:E:4304:GLU:HB2	2.44	0.47
1:E:4388:THR:HG23	1:E:4415:VAL:CG1	2.45	0.47
1:F:5278:ASP:C	1:F:5280:ILE:H	2.22	0.47
1:H:7359:ASP:OD2	1:H:7359:ASP:C	2.57	0.47
1:A:85:ILE:C	1:A:87:GLY:N	2.69	0.47
1:A:127:PHE:C	1:A:127:PHE:CD2	2.92	0.47
1:A:152:GLU:OE1	1:A:152:GLU:N	2.48	0.47
1:A:212:LEU:O	1:A:215:ASP:N	2.36	0.47
1:A:259:ASN:HD22	1:A:259:ASN:N	2.11	0.47
1:A:376:THR:CG2	1:A:378:GLU:HB3	2.45	0.47
1:A:381:VAL:HG13	1:A:407:MSE:CE	2.44	0.47
1:B:1045:ARG:NH2	1:B:1058:ILE:HD13	2.29	0.47
1:B:1302:ILE:O	1:B:1304:GLU:N	2.47	0.47
1:B:1381:VAL:HG13	1:B:1407:MSE:HE2	1.96	0.47
1:B:1411:ASN:O	1:B:1440:ARG:NH1	2.48	0.47
1:B:1474:VAL:O	1:B:1477:ALA:N	2.47	0.47
1:B:1561:GLU:HG2	1:B:1561:GLU:H	1.50	0.47
1:C:2028:LEU:CD2	1:C:2048:LEU:HD12	2.45	0.47
1:C:2075:MSE:HG3	1:C:2080:GLU:OE1	2.15	0.47
1:C:2150:TRP:NE1	1:C:2152:GLU:HB2	2.30	0.47
1:C:2300:LYS:HZ3	1:C:2305:HIS:HA	1.80	0.47
1:C:2329:GLU:O	1:C:2329:GLU:HG3	2.13	0.47
1:C:2341:ILE:O	1:C:2367:HIS:NE2	2.39	0.47
1:C:2376:THR:O	1:C:2377:PHE:C	2.57	0.47
1:C:2467:ASN:OD1	3:C:2601:NAD:N7N	2.47	0.47
1:C:2559:ARG:CG	1:C:2561:GLU:HG2	2.44	0.47
1:D:3122:GLN:O	1:D:3123:TYR:C	2.57	0.47
1:D:3284:ALA:O	1:D:3286:VAL:N	2.48	0.47
1:D:3303:SER:O	1:D:3340:LYS:HE2	2.13	0.47
1:D:3333:SER:OG	1:D:3335:GLN:HB3	2.14	0.47
1:D:3343:MSE:HE2	1:D:3365:PHE:HB2	1.96	0.47
1:D:3504:ASP:O	1:D:3507:LEU:HB2	2.14	0.47
1:D:3538:LYS:HD3	1:D:3538:LYS:HA	1.41	0.47
1:D:3561:GLU:H	1:D:3561:GLU:HG2	1.38	0.47
1:E:4068:PHE:CD2	1:E:4068:PHE:C	2.92	0.47
1:E:4147:VAL:O	1:E:4245:ARG:NH1	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4187:TYR:O	1:E:4191:ALA:HB3	2.14	0.47
1:E:4385:LYS:HB2	1:E:4385:LYS:HE2	1.45	0.47
1:F:5025:GLY:O	1:F:5050:LEU:HD21	2.15	0.47
1:F:5352:LYS:HG2	1:F:5368:SER:N	2.28	0.47
1:F:5470:ILE:HG22	1:F:5474:VAL:CG2	2.43	0.47
1:G:6165:ARG:CZ	1:G:6259:ASN:HD21	2.27	0.47
1:G:6323:ILE:HG22	1:G:6327:MSE:CE	2.27	0.47
1:G:6384:LEU:HB3	1:G:6386:PRO:HD3	1.97	0.47
1:G:6402:ASP:CA	1:G:6405:ARG:HG2	2.44	0.47
1:G:6416:ILE:HD11	1:G:6441:CYS:SG	2.55	0.47
1:G:6488:ASP:HA	1:G:6491:PHE:CD1	2.41	0.47
1:G:6492:LEU:O	1:G:6495:ALA:N	2.47	0.47
1:G:6498:LEU:HA	1:G:6526:ILE:HD11	1.96	0.47
1:H:7043:GLN:CG	1:H:7566:LEU:HD11	2.39	0.47
1:H:7112:TYR:CD2	1:H:7113:THR:HG23	2.50	0.47
1:H:7230:GLN:HG2	1:H:7230:GLN:H	1.55	0.47
1:H:7373:ILE:O	1:H:7373:ILE:HG22	2.14	0.47
1:H:7390:ILE:HG23	1:H:7417:PHE:CB	2.42	0.47
1:H:7434:TYR:CD2	1:H:7441:CYS:SG	3.08	0.47
1:A:182:GLY:O	1:A:185:CYS:HB2	2.15	0.47
1:A:397:ARG:HH11	1:A:397:ARG:CG	2.27	0.47
1:A:425:GLN:N	1:A:425:GLN:NE2	2.62	0.47
1:B:1108:MSE:HB3	1:B:1109:PRO:CD	2.44	0.47
1:B:1123:TYR:CD2	1:B:1219:MSE:HE1	2.50	0.47
1:B:1164:GLU:CD	1:B:1225:ARG:HD3	2.39	0.47
1:B:1253:GLN:HG3	1:B:1276:PHE:CE2	2.49	0.47
1:B:1300:LYS:O	1:B:1304:GLU:OE2	2.33	0.47
1:B:1347:TYR:CD1	1:B:1356:ALA:HB1	2.50	0.47
1:B:1451:PRO:HA	1:B:1461:THR:HA	1.97	0.47
1:C:2060:THR:OG1	1:C:2063:ILE:HG13	2.14	0.47
1:C:2377:PHE:CE1	1:C:2389:ILE:HD11	2.50	0.47
1:C:2386:PRO:HG2	1:C:2407:MSE:SE	2.65	0.47
1:C:2395:ALA:O	1:C:2398:LEU:HD11	2.15	0.47
1:D:3036:LYS:O	1:D:3037:GLY:C	2.55	0.47
1:D:3103:ASP:HB3	1:D:3107:LEU:CD2	2.43	0.47
1:D:3165:ARG:HB2	1:D:3257:PHE:O	2.14	0.47
1:D:3234:LEU:O	1:D:3238:PHE:HB3	2.14	0.47
1:D:3288:LEU:HG	1:D:3292:LEU:HD23	1.96	0.47
1:D:3342:TRP:CE2	1:D:3367:HIS:CD2	3.03	0.47
1:D:3491:PHE:O	1:D:3492:LEU:C	2.57	0.47
1:E:4089:GLN:C	1:E:4091:ARG:H	2.23	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5300:LYS:HZ3	1:F:5304:GLU:HB2	1.78	0.47
1:F:5303:SER:C	1:F:5340:LYS:HE3	2.40	0.47
1:F:5397:ARG:C	1:F:5398:LEU:HD12	2.40	0.47
1:G:6535:TYR:CZ	1:G:6545:GLU:HA	2.49	0.47
1:H:7243:THR:HG21	1:H:7273:TYR:CD2	2.50	0.47
1:A:180:PRO:HB2	1:A:200:PRO:HB2	1.97	0.47
1:A:349:LEU:HD21	1:A:351:VAL:CG2	2.45	0.47
1:A:389:ILE:CG2	1:A:416:ILE:HG22	2.45	0.47
1:A:512:LEU:H	1:A:512:LEU:CD1	2.25	0.47
1:B:1273:TYR:O	1:B:1485:HIS:CD2	2.68	0.47
1:C:2188:THR:HG21	1:C:2195:PRO:HG3	1.96	0.47
1:C:2291:LEU:O	1:C:2294:ALA:HB3	2.15	0.47
1:C:2310:LEU:O	1:C:2310:LEU:HG	2.14	0.47
1:C:2400:THR:HB	1:C:2401:PRO:HD2	1.95	0.47
1:C:2470:ILE:C	1:C:2472:PRO:CD	2.88	0.47
1:D:3273:TYR:HB2	1:D:3275:THR:HG22	1.96	0.47
1:D:3300:LYS:NZ	1:D:3305:HIS:N	2.63	0.47
1:D:3471:PHE:CG	1:D:3472:PRO:CD	2.95	0.47
1:D:3482:ASN:ND2	1:D:3542:ARG:HB2	2.30	0.47
1:E:4207:THR:OG1	1:E:4208:ASP:N	2.48	0.47
1:E:4405:ARG:CG	1:E:4406:ALA:N	2.77	0.47
1:E:4405:ARG:HG3	1:E:4406:ALA:N	2.30	0.47
1:G:6123:TYR:C	1:G:6125:HIS:N	2.69	0.47
1:G:6160:VAL:HG11	1:G:6238:PHE:CZ	2.50	0.47
1:H:7076:THR:HB	1:H:7077:SER:H	1.55	0.47
1:B:1174:VAL:HG23	1:B:1219:MSE:CE	2.45	0.47
1:B:1312:ALA:CB	1:B:1362:GLN:HE21	2.27	0.47
1:B:1552:TYR:CE1	1:B:1556:ARG:CZ	2.98	0.47
1:C:2072:LEU:O	1:C:2075:MSE:HB2	2.14	0.47
1:C:2313:GLY:O	1:C:2316:ALA:N	2.43	0.47
1:C:2317:LEU:H	1:C:2317:LEU:CD1	2.10	0.47
1:D:3144:ARG:HH12	1:D:3244:ASP:C	2.23	0.47
1:D:3416:ILE:HD13	1:D:3442:LEU:O	2.15	0.47
1:E:4077:SER:O	1:E:4080:GLU:HB3	2.15	0.47
1:E:4085:ILE:HG23	1:E:4086:MSE:N	2.30	0.47
1:E:4108:MSE:HE2	1:E:4108:MSE:HB2	1.74	0.47
1:E:4196:ASP:OD1	1:E:4196:ASP:N	2.48	0.47
1:E:4208:ASP:OD1	1:E:4224:LYS:HD2	2.15	0.47
1:G:6069:HIS:C	1:G:6071:ASN:H	2.22	0.47
1:G:6128:ARG:HH11	1:G:6128:ARG:CG	2.26	0.47
1:G:6302:ILE:HD12	1:G:6302:ILE:H	1.80	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:6428:CYS:SG	1:G:6429:THR:N	2.88	0.47
1:G:6541:PHE:N	1:G:6541:PHE:HD2	2.13	0.47
1:A:171:ASP:C	1:A:171:ASP:OD1	2.57	0.46
1:A:372:SER:OG	1:A:383:ILE:HD13	2.15	0.46
1:B:1068:PHE:CZ	1:B:1085:ILE:HD12	2.50	0.46
1:B:1210:ILE:O	1:B:1214:LYS:HG3	2.15	0.46
1:B:1232:ASP:O	1:B:1235:ILE:HG12	2.15	0.46
1:B:1281:GLN:HG2	1:B:1491:PHE:CE1	2.50	0.46
1:B:1302:ILE:O	1:B:1303:SER:C	2.58	0.46
1:B:1351:VAL:C	1:B:1366:THR:HG22	2.40	0.46
1:B:1369:ALA:HB1	1:B:1373:ILE:HD11	1.96	0.46
1:C:2253:GLN:NE2	1:C:2255:GLU:HG2	2.30	0.46
1:C:2269:TYR:O	1:C:2270:ARG:C	2.56	0.46
1:C:2413:ARG:HH21	1:C:2440:ARG:C	2.23	0.46
1:E:4060:THR:O	1:E:4064:GLN:HG2	2.15	0.46
1:E:4310:LEU:HG	1:E:4310:LEU:O	2.15	0.46
1:E:4402:ASP:CA	1:E:4405:ARG:HG2	2.42	0.46
1:E:4494:ALA:O	1:E:4497:ALA:HB3	2.15	0.46
1:E:4501:GLN:HB3	1:E:4514:PRO:HG3	1.97	0.46
1:F:5071:ASN:O	1:F:5075:MSE:CE	2.63	0.46
1:F:5108:MSE:N	1:F:5109:PRO:HD2	2.29	0.46
1:F:5358:ILE:HG21	1:F:5366:THR:OG1	2.15	0.46
1:F:5378:GLU:HA	1:F:5381:VAL:CG2	2.45	0.46
1:G:6146:ILE:O	1:G:6147:VAL:C	2.57	0.46
1:G:6287:ALA:O	1:G:6290:GLY:N	2.44	0.46
1:G:6394:GLY:HA2	1:G:6425:GLN:HG3	1.97	0.46
1:H:7289:ALA:HA	1:H:7499:THR:OG1	2.15	0.46
1:A:245:ARG:HG2	1:A:246:TYR:CD1	2.50	0.46
1:A:281:GLN:HG2	1:A:491:PHE:CE1	2.50	0.46
1:A:341:ILE:HB	1:A:365:PHE:CD2	2.50	0.46
1:B:1155:VAL:HB	1:B:1246:TYR:CD2	2.50	0.46
1:B:1512:LEU:H	1:B:1512:LEU:HD12	1.81	0.46
1:B:1556:ARG:HH11	1:B:1556:ARG:HG3	1.79	0.46
1:C:2140:ARG:NH1	1:C:2230:GLN:HG2	2.30	0.46
1:C:2150:TRP:CD1	1:C:2152:GLU:HB2	2.50	0.46
1:C:2278:ASP:C	1:C:2280:ILE:N	2.73	0.46
1:C:2278:ASP:O	1:C:2280:ILE:N	2.49	0.46
1:C:2308:LEU:HB3	1:C:2389:ILE:HD12	1.95	0.46
1:C:2374:PRO:CB	1:C:2379:ASP:HB3	2.46	0.46
1:C:2503:THR:O	1:C:2507:LEU:HD23	2.15	0.46
1:C:2520:GLN:O	1:C:2523:SER:N	2.47	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3104:ILE:HG23	1:D:3105:GLU:N	2.30	0.46
1:D:3123:TYR:CE1	1:D:3178:GLY:HA3	2.50	0.46
1:D:3156:LYS:HD3	1:D:3479:ILE:HG23	1.96	0.46
1:D:3402:ASP:CA	1:D:3405:ARG:HG2	2.45	0.46
1:D:3496:LYS:O	1:D:3497:ALA:C	2.57	0.46
1:E:4438:GLU:O	1:E:4458:ARG:NH1	2.49	0.46
1:E:4467:ASN:OD1	3:E:4601:NAD:N7N	2.48	0.46
1:F:5231:TYR:O	1:F:5235:ILE:HG12	2.16	0.46
1:F:5308:LEU:HD12	1:F:5309:PHE:H	1.80	0.46
1:G:6338:GLN:HA	1:G:6341:ILE:HG13	1.97	0.46
1:G:6397:ARG:CZ	1:G:6429:THR:HG22	2.45	0.46
1:H:7071:ASN:O	1:H:7075:MSE:HE3	2.15	0.46
1:A:38:MSE:SE	1:B:1219:MSE:HB3	2.65	0.46
1:A:41:THR:HG23	1:A:44:GLU:OE2	2.15	0.46
1:A:103:ASP:HB3	1:A:107:LEU:CD2	2.35	0.46
1:A:476:LEU:CD1	1:A:480:LEU:HD11	2.45	0.46
1:B:1321:ASN:O	1:B:1322:LEU:C	2.58	0.46
1:B:1400:THR:HB	1:B:1401:PRO:HD2	1.98	0.46
1:B:1466:ASN:HB3	1:B:1468:VAL:CG1	2.32	0.46
1:C:2183:LYS:NZ	1:C:2255:GLU:OE2	2.29	0.46
1:C:2197:ARG:NH1	1:C:2197:ARG:CG	2.65	0.46
1:D:3454:LEU:HD12	1:D:3458:ARG:HB2	1.97	0.46
1:D:3474:VAL:O	1:D:3475:ALA:C	2.58	0.46
1:D:3548:ASP:OD1	1:D:3550:ALA:HB3	2.15	0.46
1:E:4179:ILE:O	1:E:4180:PRO:C	2.58	0.46
1:E:4492:LEU:O	1:E:4495:ALA:HB3	2.15	0.46
1:E:4553:VAL:O	1:E:4555:GLU:N	2.48	0.46
1:F:5159:VAL:HG21	1:F:5184:LEU:HD13	1.96	0.46
1:G:6075:MSE:HG3	1:G:6080:GLU:HG2	1.95	0.46
1:G:6086:MSE:CE	1:G:6096:PHE:HE1	2.29	0.46
1:G:6086:MSE:CA	1:G:6086:MSE:HE3	2.46	0.46
1:G:6188:THR:HG23	1:G:6195:PRO:HD3	1.97	0.46
1:G:6402:ASP:HA	1:G:6405:ARG:CD	2.45	0.46
1:G:6413:ARG:HA	1:G:6413:ARG:HE	1.79	0.46
1:G:6430:ALA:HA	1:G:6443:PHE:CE2	2.49	0.46
1:H:7308:LEU:HB3	1:H:7389:ILE:HD13	1.97	0.46
1:H:7543:TYR:HB2	1:H:7544:PRO:HA	1.96	0.46
1:A:42:LEU:CD2	1:C:2572:TRP:HB2	2.45	0.46
1:A:271:GLU:O	1:A:485:HIS:NE2	2.48	0.46
1:A:277:ASN:N	1:A:281:GLN:OE1	2.41	0.46
1:A:431:GLU:O	1:A:433:ALA:N	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:454:LEU:HD12	1:A:458:ARG:O	2.16	0.46
1:B:1081:LYS:O	1:B:1082:TYR:C	2.58	0.46
1:B:1144:ARG:O	1:B:1148:ASP:CG	2.59	0.46
1:B:1171:ASP:OD2	1:B:1225:ARG:NE	2.49	0.46
1:B:1363:GLU:CB	1:B:1364:PRO:HD3	2.46	0.46
1:B:1376:THR:O	1:B:1379:ASP:HB2	2.16	0.46
1:C:2085:ILE:C	1:C:2087:GLY:N	2.71	0.46
1:C:2287:ALA:O	1:C:2288:LEU:C	2.58	0.46
1:C:2552:TYR:O	1:C:2555:GLU:HB2	2.14	0.46
1:D:3419:LEU:HA	1:D:3446:GLY:N	2.29	0.46
1:E:4094:LYS:O	1:E:4095:LEU:C	2.59	0.46
1:E:4261:ASN:HA	1:E:4264:ARG:HE	1.80	0.46
1:G:6182:GLY:O	1:G:6185:CYS:SG	2.73	0.46
1:G:6298:ILE:O	1:G:6299:SER:HB2	2.14	0.46
1:G:6351:VAL:C	1:G:6366:THR:HG22	2.41	0.46
1:H:7279:ASP:OD1	1:H:7279:ASP:N	2.46	0.46
1:H:7523:SER:O	1:H:7524:ILE:C	2.59	0.46
1:A:351:VAL:CG1	1:A:369:ALA:HB2	2.43	0.46
1:B:1349:LEU:O	1:B:1354:ARG:HD2	2.15	0.46
1:B:1360:SER:HA	1:B:1363:GLU:CD	2.41	0.46
1:B:1377:PHE:O	1:B:1378:GLU:C	2.57	0.46
1:C:2417:PHE:CE2	1:C:2444:ALA:HB3	2.50	0.46
1:C:2481:CYS:SG	1:C:2540:ALA:CB	3.04	0.46
1:D:3075:MSE:CB	1:D:3081:LYS:HD3	2.35	0.46
1:E:4043:GLN:HG3	1:E:4047:MSE:HE3	1.97	0.46
1:E:4079:LEU:O	1:E:4083:ILE:HG13	2.16	0.46
1:E:4344:PHE:CD2	1:E:4344:PHE:O	2.68	0.46
1:E:4439:GLY:HA3	1:E:4460:PHE:CE2	2.51	0.46
1:G:6349:LEU:CD2	1:G:6351:VAL:HG23	2.46	0.46
1:G:6528:ILE:HD13	1:G:6550:ALA:HA	1.97	0.46
1:H:7230:GLN:O	1:H:7233:ASP:HB2	2.14	0.46
1:H:7277:ASN:C	1:H:7277:ASN:OD1	2.57	0.46
1:H:7416:ILE:O	1:H:7443:PHE:HA	2.16	0.46
1:H:7445:SER:O	1:H:7464:GLN:HA	2.16	0.46
1:H:7503:THR:HG23	1:H:7506:GLU:OE1	2.16	0.46
1:H:7511:ARG:CB	1:H:7511:ARG:NH1	2.78	0.46
1:A:177:MSE:O	1:A:181:VAL:HG22	2.16	0.46
1:A:333:SER:O	1:A:334:GLU:C	2.57	0.46
1:A:413:ARG:HH21	1:A:441:CYS:N	2.14	0.46
1:B:1279:ASP:O	1:B:1280:ILE:HG13	2.16	0.46
1:B:1293:ALA:CB	1:B:1512:LEU:HB3	2.46	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1333:SER:O	1:B:1334:GLU:C	2.59	0.46
1:C:2156:LYS:O	1:C:2251:LEU:HB3	2.15	0.46
1:C:2161:THR:HG22	1:C:2180:PRO:HG3	1.97	0.46
1:C:2176:GLY:C	1:C:2178:GLY:H	2.24	0.46
1:C:2471:PHE:CD2	1:C:2472:PRO:HD3	2.50	0.46
1:D:3135:ILE:CD1	1:D:3143:VAL:HG13	2.46	0.46
1:D:3379:ASP:O	1:D:3383:ILE:HG13	2.15	0.46
1:D:3422:PRO:HD2	1:D:3425:GLN:HG2	1.96	0.46
1:E:4081:LYS:O	1:E:4085:ILE:HG22	2.15	0.46
1:E:4350:LEU:CD1	1:E:4354:ARG:CZ	2.92	0.46
1:E:4373:ILE:O	1:E:4373:ILE:HG22	2.15	0.46
1:E:4472:PRO:HG2	1:E:4523:SER:HB3	1.98	0.46
1:F:5310:LEU:HD21	1:F:5398:LEU:HD22	1.98	0.46
1:F:5508:ALA:C	1:F:5510:GLY:N	2.68	0.46
1:F:5511:ARG:HH11	1:F:5511:ARG:HB2	1.80	0.46
1:G:6396:GLY:HA2	1:G:6425:GLN:C	2.39	0.46
1:G:6528:ILE:HA	1:G:6553:VAL:HG21	1.98	0.46
1:H:7094:LYS:O	1:H:7097:TYR:N	2.48	0.46
1:H:7388:THR:HG22	1:H:7389:ILE:N	2.30	0.46
1:H:7402:ASP:C	1:H:7405:ARG:HG2	2.40	0.46
1:A:219:MSE:HB2	1:B:1038:MSE:SE	2.66	0.46
1:A:389:ILE:HG21	1:A:416:ILE:HG22	1.98	0.46
1:B:1133:LEU:HD12	1:B:1133:LEU:HA	1.68	0.46
1:B:1471:PHE:CD1	1:B:1472:PRO:CD	2.99	0.46
1:C:2191:ALA:O	1:C:2476:LEU:HD22	2.16	0.46
1:C:2210:ILE:HD11	1:C:2224:LYS:NZ	2.30	0.46
1:C:2327:MSE:CE	1:C:2341:ILE:HD11	2.45	0.46
1:C:2549:LYS:O	1:C:2553:VAL:HG23	2.15	0.46
1:D:3258:GLY:O	1:D:3260:HIS:N	2.49	0.46
1:D:3505:GLU:H	1:D:3505:GLU:CD	2.16	0.46
1:E:4156:LYS:HG3	1:E:4197:ARG:HB3	1.98	0.46
1:E:4376:THR:O	1:E:4377:PHE:C	2.58	0.46
1:F:5240:LYS:O	1:F:5241:ALA:C	2.58	0.46
1:G:6184:LEU:HG	1:G:6198:CYS:HB3	1.97	0.46
1:G:6300:LYS:NZ	1:G:6304:GLU:HB2	2.31	0.46
1:G:6314:GLU:CG	1:G:6315:ALA:H	2.29	0.46
1:G:6477:ALA:O	1:G:6481:CYS:HB2	2.16	0.46
1:G:6536:ALA:HA	1:G:6538:LYS:HZ3	1.79	0.46
1:H:7140:ARG:HG3	1:H:7140:ARG:O	2.15	0.46
1:H:7323:ILE:C	1:H:7325:MSE:N	2.71	0.46
1:H:7327:MSE:HE1	1:H:7337:ALA:C	2.40	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:7527:ALA:O	1:H:7528:ILE:C	2.57	0.46
1:A:137:ILE:HA	1:A:234:LEU:CD2	2.45	0.46
1:A:453:LYS:CD	1:A:457:GLY:HA2	2.43	0.46
1:B:1069:HIS:C	1:B:1071:ASN:N	2.74	0.46
1:B:1321:ASN:O	1:B:1324:VAL:N	2.49	0.46
1:C:2156:LYS:CB	1:C:2479:ILE:HD13	2.44	0.46
1:C:2232:ASP:O	1:C:2235:ILE:HG12	2.16	0.46
1:C:2300:LYS:HD3	1:C:2305:HIS:CD2	2.51	0.46
1:D:3243:THR:HB	1:D:3248:ARG:NH1	2.31	0.46
1:D:3376:THR:HG22	1:D:3377:PHE:N	2.29	0.46
1:E:4104:ILE:HG23	1:E:4105:GLU:H	1.81	0.46
1:E:4177:MSE:O	1:E:4181:VAL:HG23	2.15	0.46
1:F:5351:VAL:HG22	1:F:5369:ALA:HA	1.98	0.46
1:G:6176:GLY:O	1:G:6177:MSE:C	2.58	0.46
1:H:7266:LEU:HD12	1:H:7266:LEU:C	2.40	0.46
1:A:45:ARG:NH1	1:A:58:ILE:HD13	2.31	0.46
1:A:238:PHE:CD2	1:A:238:PHE:C	2.94	0.46
1:A:238:PHE:O	1:A:242:ILE:HG12	2.16	0.46
1:A:483:THR:HG23	1:A:539:MSE:O	2.16	0.46
1:B:1137:ILE:O	1:B:1137:ILE:HG13	2.15	0.46
1:B:1326:SER:O	1:B:1329:GLU:N	2.49	0.46
1:B:1363:GLU:C	1:B:1365:PHE:H	2.24	0.46
1:C:2025:GLY:O	1:C:2028:LEU:HB2	2.15	0.46
1:C:2132:GLY:HA3	1:C:2177:MSE:HE1	1.97	0.46
1:C:2261:ASN:HA	1:C:2264:ARG:NE	2.31	0.46
1:C:2302:ILE:H	1:C:2302:ILE:HD12	1.80	0.46
1:C:2313:GLY:O	1:C:2314:GLU:C	2.58	0.46
1:C:2360:SER:HA	1:C:2363:GLU:OE1	2.15	0.46
1:C:2458:ARG:HH11	1:C:2458:ARG:HB2	1.80	0.46
1:D:3176:GLY:O	1:D:3177:MSE:C	2.58	0.46
1:D:3194:ARG:HH21	1:D:3197:ARG:HE	1.64	0.46
1:D:3304:GLU:O	1:D:3305:HIS:C	2.58	0.46
1:D:3309:PHE:HD1	1:D:3390:ILE:HB	1.79	0.46
1:E:4470:ILE:HD11	1:E:4498:LEU:HD23	1.98	0.46
1:G:6230:GLN:O	1:G:6233:ASP:HB2	2.16	0.46
1:G:6401:PRO:O	1:G:6405:ARG:HG2	2.16	0.46
1:H:7358:ILE:HG21	1:H:7366:THR:OG1	2.16	0.46
1:H:7394:GLY:HA2	1:H:7420:SER:CB	2.41	0.46
1:H:7429:THR:HG23	1:H:7432:GLU:CG	2.46	0.46
1:H:7434:TYR:CG	1:H:7460:PHE:HD2	2.34	0.46
1:H:7498:LEU:O	1:H:7501:GLN:CB	2.57	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:7499:THR:O	1:H:7502:LEU:HB2	2.16	0.46
1:A:44:GLU:O	1:A:48:LEU:N	2.46	0.46
1:A:99:ILE:C	1:A:102:ASP:HB2	2.41	0.46
1:A:150:TRP:CE2	1:A:199:LEU:HD13	2.51	0.46
1:A:261:ASN:HA	1:A:264:ARG:HG2	1.98	0.46
1:B:1164:GLU:HG3	1:B:1171:ASP:OD2	2.16	0.46
1:C:2039:ALA:HA	1:C:2059:GLU:O	2.16	0.46
1:C:2310:LEU:C	1:C:2344:PHE:O	2.58	0.46
1:C:2320:ALA:HB1	1:C:2365:PHE:CE2	2.51	0.46
1:D:3082:TYR:HA	1:D:3085:ILE:HG22	1.98	0.46
1:D:3169:LEU:HD22	1:D:3172:LEU:HD11	1.98	0.46
1:D:3183:LYS:CD	1:D:3255:GLU:OE2	2.64	0.46
1:D:3321:ASN:O	1:D:3324:VAL:HB	2.15	0.46
1:E:4093:GLU:O	1:E:4096:PHE:HB3	2.16	0.46
1:E:4229:GLN:O	1:E:4232:ASP:N	2.49	0.46
1:E:4243:THR:HG22	1:E:4247:GLY:O	2.16	0.46
1:G:6112:TYR:CE2	1:G:6113:THR:HG23	2.51	0.46
1:H:7081:LYS:O	1:H:7085:ILE:HG22	2.16	0.46
1:H:7083:ILE:HD11	1:H:7126:ILE:HG21	1.96	0.46
1:H:7401:PRO:O	1:H:7405:ARG:HG2	2.16	0.46
1:A:184:LEU:HG	1:A:198:CYS:CB	2.47	0.45
1:A:255:GLU:OE2	1:A:278:ASP:HB3	2.15	0.45
1:A:285:ALA:HA	1:A:322:LEU:HD22	1.98	0.45
1:A:453:LYS:HG2	1:A:458:ARG:N	2.31	0.45
1:B:1108:MSE:N	1:B:1109:PRO:HD2	2.31	0.45
1:B:1307:ILE:HG12	1:B:1388:THR:CB	2.41	0.45
1:B:1390:ILE:HG23	1:B:1419:LEU:HD21	1.97	0.45
1:C:2177:MSE:O	1:C:2177:MSE:HG3	2.16	0.45
1:D:3529:LYS:HA	1:D:3532:GLU:CD	2.40	0.45
1:E:4115:THR:O	1:E:4118:LEU:N	2.49	0.45
1:E:4164:GLU:O	1:E:4171:ASP:N	2.49	0.45
1:E:4408:ALA:HA	1:E:4414:PRO:HG3	1.98	0.45
1:F:5363:GLU:O	1:F:5365:PHE:N	2.50	0.45
1:H:7243:THR:HG22	1:H:7248:ARG:HA	1.98	0.45
1:A:61:GLN:HG2	1:A:98:ARG:HD3	1.97	0.45
1:A:99:ILE:O	1:A:102:ASP:HB2	2.16	0.45
1:A:363:GLU:O	1:A:364:PRO:C	2.59	0.45
1:B:1300:LYS:C	1:B:1304:GLU:OE1	2.60	0.45
1:C:2431:GLU:O	1:C:2432:GLU:C	2.57	0.45
1:D:3166:ILE:O	1:D:3167:LEU:C	2.59	0.45
1:D:3464:GLN:O	1:D:3469:TYR:HE1	2.00	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4033:ARG:NE	1:E:4093:GLU:OE1	2.49	0.45
1:E:4124:GLY:O	1:E:4217:PHE:HB3	2.15	0.45
1:F:5319:ILE:O	1:F:5320:ALA:C	2.58	0.45
1:G:6219:MSE:HE3	1:G:6219:MSE:HB2	1.94	0.45
1:G:6478:VAL:HG21	1:G:6486:ILE:HD13	1.98	0.45
1:G:6504:ASP:HA	1:G:6507:LEU:HB2	1.99	0.45
1:H:7176:GLY:C	1:H:7178:GLY:N	2.74	0.45
1:A:267:ARG:HH11	1:A:267:ARG:CG	2.24	0.45
1:A:493:GLU:HG3	1:A:494:ALA:N	2.31	0.45
1:B:1306:LYS:CD	1:B:1384:LEU:O	2.64	0.45
1:B:1420:SER:CB	1:B:1427:GLU:OE1	2.64	0.45
1:B:1454:LEU:O	1:B:1457:GLY:N	2.49	0.45
1:C:2136:SER:O	1:C:2139:ASP:HB2	2.17	0.45
1:C:2174:VAL:CG2	1:C:2219:MSE:HE3	2.47	0.45
1:C:2210:ILE:O	1:C:2214:LYS:HG3	2.16	0.45
1:C:2240:LYS:HG3	1:C:2248:ARG:HH22	1.80	0.45
1:C:2470:ILE:C	1:C:2472:PRO:HD2	2.41	0.45
1:C:2520:GLN:HB2	1:C:2521:GLU:H	1.67	0.45
1:E:4026:LYS:C	1:E:4028:LEU:H	2.23	0.45
1:E:4143:VAL:O	1:E:4146:ILE:HB	2.15	0.45
1:E:4332:LEU:HD21	1:E:4340:LYS:NZ	2.31	0.45
1:E:4380:ALA:O	1:E:4381:VAL:C	2.59	0.45
1:F:5027:PRO:HA	1:F:5030:LEU:HB2	1.98	0.45
1:G:6033:ARG:NH2	1:G:6196:ASP:HA	2.30	0.45
1:G:6276:PHE:CD1	1:G:6277:ASN:N	2.85	0.45
1:G:6548:ASP:O	1:G:6552:TYR:HB2	2.16	0.45
1:H:7099:ILE:O	1:H:7100:LEU:C	2.60	0.45
1:H:7317:LEU:HD21	1:H:7362:GLN:HG3	1.98	0.45
1:H:7339:LYS:HA	1:H:7367:HIS:CE1	2.51	0.45
1:H:7504:ASP:HA	1:H:7507:LEU:HB2	1.97	0.45
1:A:281:GLN:HB3	1:A:491:PHE:CE2	2.52	0.45
1:A:469:TYR:HB3	1:A:498:LEU:CD2	2.47	0.45
1:B:1031:ASN:HB3	1:B:1034:THR:OG1	2.17	0.45
1:B:1429:THR:HG23	1:B:1432:GLU:CD	2.42	0.45
1:C:2105:GLU:HA	1:C:2108:MSE:HE3	1.98	0.45
1:C:2528:ILE:O	1:C:2531:THR:N	2.49	0.45
1:D:3143:VAL:O	1:D:3144:ARG:C	2.60	0.45
1:D:3146:ILE:O	1:D:3147:VAL:C	2.60	0.45
1:D:3310:LEU:HD21	1:D:3398:LEU:HB2	1.98	0.45
1:D:3419:LEU:HA	1:D:3446:GLY:H	1.81	0.45
1:E:4113:THR:CA	1:E:4116:VAL:HG12	2.38	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4303:SER:HA	1:E:4340:LYS:HZ3	1.82	0.45
1:E:4332:LEU:CD2	1:E:4340:LYS:HD2	2.46	0.45
1:E:4404:ILE:O	1:E:4407:MSE:N	2.50	0.45
1:G:6113:THR:CA	1:G:6116:VAL:HG12	2.46	0.45
1:G:6174:VAL:O	1:G:6174:VAL:HG23	2.15	0.45
1:G:6363:GLU:HB2	1:G:6364:PRO:HD3	1.97	0.45
1:G:6421:ASN:C	1:G:6425:GLN:HB2	2.41	0.45
1:H:7089:GLN:HB2	1:H:7096:PHE:CD1	2.51	0.45
1:H:7090:GLU:HG2	1:H:7131:LYS:HZ2	1.80	0.45
1:H:7270:ARG:HA	1:H:7275:THR:HG23	1.98	0.45
1:A:166:ILE:HD13	1:A:166:ILE:HA	1.77	0.45
1:A:502:LEU:HD12	1:A:506:GLU:HB3	1.98	0.45
1:A:549:LYS:O	1:A:552:TYR:HB3	2.17	0.45
1:B:1172:LEU:HD23	1:B:1172:LEU:HA	1.68	0.45
1:B:1188:THR:HG23	1:B:1193:ILE:O	2.17	0.45
1:B:1452:VAL:O	1:B:1452:VAL:HG12	2.16	0.45
1:B:1467:ASN:N	1:B:1467:ASN:OD1	2.49	0.45
1:C:2503:THR:O	1:C:2507:LEU:HD22	2.16	0.45
1:D:3065:ALA:O	1:D:3066:LEU:C	2.60	0.45
1:D:3108:MSE:CB	1:D:3109:PRO:HD3	2.46	0.45
1:D:3156:LYS:O	1:D:3251:LEU:HB3	2.17	0.45
1:D:3454:LEU:HD11	1:D:3460:PHE:CE2	2.51	0.45
1:E:4325:MSE:HE3	1:E:4325:MSE:HB3	1.92	0.45
1:E:4332:LEU:CB	1:E:4336:GLU:OE2	2.65	0.45
1:E:4395:ALA:HB3	1:E:4398:LEU:HD22	1.99	0.45
1:E:4482:ASN:HD22	1:E:4482:ASN:HA	1.56	0.45
1:E:4565:LEU:HD23	1:E:4565:LEU:HA	1.82	0.45
1:F:5342:TRP:CE3	1:F:5349:LEU:HD11	2.51	0.45
1:F:5374:PRO:HB3	1:F:5383:ILE:HD11	1.99	0.45
1:G:6056:PRO:HB2	1:H:7221:LEU:CD1	2.47	0.45
1:G:6128:ARG:HG2	1:G:6128:ARG:NH1	2.24	0.45
1:G:6543:TYR:HA	1:G:6544:PRO:C	2.41	0.45
1:H:7082:TYR:O	1:H:7086:MSE:HB2	2.16	0.45
1:H:7466:ASN:C	1:H:7468:VAL:H	2.25	0.45
1:A:26:LYS:N	1:A:27:PRO:HD2	2.31	0.45
1:A:135:ILE:O	1:A:203:ILE:HA	2.16	0.45
1:A:337:ALA:O	1:A:340:LYS:HB2	2.16	0.45
1:A:541:PHE:N	1:A:541:PHE:CD2	2.85	0.45
1:B:1434:TYR:CZ	1:B:1443:PHE:HB3	2.52	0.45
1:C:2311:GLY:HA2	1:C:2345:ASP:HA	1.99	0.45
1:C:2528:ILE:HB	1:C:2529:LYS:H	1.63	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3100:LEU:C	1:D:3102:ASP:N	2.73	0.45
1:D:3177:MSE:CE	1:D:3180:PRO:HB2	2.46	0.45
1:D:3270:ARG:CG	1:D:3271:GLU:N	2.78	0.45
1:D:3431:GLU:O	1:D:3435:THR:HG23	2.17	0.45
1:D:3487:SER:O	1:D:3490:VAL:HB	2.16	0.45
1:E:4404:ILE:O	1:E:4405:ARG:C	2.59	0.45
1:F:5026:LYS:O	1:F:5027:PRO:C	2.57	0.45
1:F:5093:GLU:O	1:F:5096:PHE:N	2.50	0.45
1:F:5108:MSE:HE2	1:F:5108:MSE:HB2	1.68	0.45
1:F:5458:ARG:HH11	1:F:5458:ARG:CB	2.30	0.45
1:H:7454:LEU:CD1	1:H:7458:ARG:HB2	2.47	0.45
1:A:504:ASP:O	1:A:507:LEU:HB2	2.17	0.45
1:B:1376:THR:HG22	1:B:1379:ASP:N	2.26	0.45
1:C:2044:GLU:C	1:C:2048:LEU:HD23	2.41	0.45
1:C:2045:ARG:O	1:C:2051:GLN:N	2.50	0.45
1:C:2085:ILE:HG23	1:C:2086:MSE:N	2.32	0.45
1:C:2390:ILE:CG2	1:C:2419:LEU:HD21	2.47	0.45
1:D:3194:ARG:NH2	1:D:3196:ASP:OD2	2.50	0.45
1:D:3199:LEU:HD12	1:D:3199:LEU:C	2.42	0.45
1:D:3264:ARG:CG	1:D:3265:PHE:N	2.80	0.45
1:D:3275:THR:OG1	1:D:3276:PHE:N	2.48	0.45
1:E:4041:THR:HG23	1:E:4044:GLU:CD	2.41	0.45
1:E:4082:TYR:O	1:E:4085:ILE:HG22	2.17	0.45
1:E:4122:GLN:O	1:E:4123:TYR:C	2.58	0.45
1:E:4300:LYS:O	1:E:4302:ILE:N	2.50	0.45
1:F:5266:LEU:HD12	1:F:5266:LEU:C	2.42	0.45
1:F:5393:ALA:HB1	3:F:5601:NAD:C4A	2.47	0.45
1:G:6146:ILE:O	1:G:6149:ASN:N	2.36	0.45
1:G:6419:LEU:HD22	1:G:6419:LEU:H	1.81	0.45
1:G:6430:ALA:O	1:G:6431:GLU:C	2.60	0.45
1:H:7166:ILE:CD1	1:H:7176:GLY:HA3	2.46	0.45
1:H:7417:PHE:CD2	1:H:7444:ALA:HB3	2.52	0.45
1:A:81:LYS:O	1:A:82:TYR:C	2.60	0.45
1:A:231:TYR:O	1:A:235:ILE:HG12	2.17	0.45
1:A:342:TRP:CZ3	1:A:367:HIS:HB2	2.52	0.45
1:A:419:LEU:HA	1:A:446:GLY:N	2.27	0.45
1:A:555:GLU:HB3	1:A:556:ARG:NH1	2.31	0.45
1:B:1090:GLU:HG2	1:B:1131:LYS:HZ2	1.81	0.45
1:B:1570:TYR:CD2	1:B:1570:TYR:N	2.84	0.45
1:C:2061:GLN:HA	1:C:2064:GLN:NE2	2.26	0.45
1:C:2394:GLY:HA2	1:C:2420:SER:OG	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3150:TRP:CE3	1:D:3151:PRO:HD2	2.50	0.45
1:D:3204:ASP:CG	1:D:3221:LEU:HB2	2.41	0.45
1:D:3300:LYS:O	1:D:3305:HIS:CE1	2.69	0.45
1:D:3511:ARG:HB2	1:D:3511:ARG:HH11	1.81	0.45
1:E:4530:VAL:O	1:E:4531:THR:C	2.60	0.45
1:F:5144:ARG:HH12	1:F:5245:ARG:N	2.15	0.45
1:F:5338:GLN:HE21	1:F:5338:GLN:HB3	1.54	0.45
1:F:5471:PHE:CD1	1:F:5472:PRO:HD3	2.51	0.45
1:F:5494:ALA:O	1:F:5498:LEU:N	2.35	0.45
1:G:6031:ASN:HA	1:G:6032:PRO:HD2	1.72	0.45
1:G:6063:ILE:O	1:G:6066:LEU:HB3	2.17	0.45
1:G:6173:GLY:HA3	1:G:6218:TYR:OH	2.16	0.45
1:G:6259:ASN:O	1:G:6260:HIS:C	2.59	0.45
1:H:7026:LYS:HD2	1:H:7029:MSE:CE	2.47	0.45
1:H:7143:VAL:HG11	1:H:7238:PHE:HA	1.98	0.45
1:H:7552:TYR:HE1	1:H:7556:ARG:CZ	2.30	0.45
1:A:100:LEU:C	1:A:102:ASP:H	2.24	0.45
1:A:210:ILE:HG22	1:A:214:LYS:CD	2.43	0.45
1:A:360:SER:HA	1:A:363:GLU:HG3	1.99	0.45
1:A:389:ILE:O	1:A:389:ILE:HG23	2.15	0.45
1:B:1085:ILE:O	1:B:1085:ILE:HG13	2.16	0.45
1:B:1103:ASP:HB3	1:B:1107:LEU:CD2	2.46	0.45
1:B:1359:ASP:OD2	1:B:1362:GLN:HB2	2.17	0.45
1:C:2164:GLU:HG3	1:C:2225:ARG:CZ	2.46	0.45
1:C:2243:THR:HG22	1:C:2248:ARG:HA	1.99	0.45
1:C:2390:ILE:HG23	1:C:2419:LEU:HD21	1.98	0.45
1:C:2416:ILE:HD11	1:C:2443:PHE:HB2	1.99	0.45
1:D:3377:PHE:HZ	1:D:3389:ILE:CD1	2.26	0.45
1:E:4291:LEU:HD23	1:E:4291:LEU:N	2.31	0.45
1:E:4317:LEU:H	1:E:4317:LEU:CD1	2.26	0.45
1:E:4402:ASP:HA	1:E:4405:ARG:CG	2.43	0.45
1:E:4435:THR:C	1:E:4437:THR:H	2.23	0.45
1:F:5057:LYS:O	1:F:5058:ILE:HD13	2.15	0.45
1:F:5470:ILE:C	1:F:5472:PRO:HD2	2.42	0.45
1:G:6061:GLN:HA	1:G:6064:GLN:HE21	1.82	0.45
1:G:6210:ILE:HG22	1:G:6214:LYS:CE	2.43	0.45
1:G:6240:LYS:O	1:G:6244:ASP:HB2	2.17	0.45
1:G:6300:LYS:HZ2	1:G:6304:GLU:HB2	1.82	0.45
1:G:6385:LYS:N	1:G:6386:PRO:CD	2.80	0.45
1:H:7035:ASN:OD1	1:H:7036:LYS:N	2.50	0.45
1:H:7108:MSE:HE3	1:H:7516:LEU:HD23	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:7183:LYS:NZ	1:H:7255:GLU:OE2	2.47	0.45
1:H:7224:LYS:HA	1:H:7224:LYS:HD2	1.77	0.45
1:H:7302:ILE:HG22	1:H:7340:LYS:NZ	2.31	0.45
1:H:7326:SER:HA	1:H:7329:GLU:HG2	1.99	0.45
1:H:7335:GLN:O	1:H:7335:GLN:NE2	2.50	0.45
1:A:55:PRO:O	1:A:57:LYS:N	2.50	0.45
1:A:291:LEU:HD23	1:A:417:PHE:CZ	2.52	0.45
1:A:406:ALA:O	1:A:407:MSE:C	2.59	0.45
1:A:417:PHE:CD2	1:A:444:ALA:HB3	2.51	0.45
1:B:1370:PRO:HD2	1:B:1373:ILE:CD1	2.47	0.45
1:B:1555:GLU:C	1:B:1557:THR:H	2.24	0.45
1:B:1559:ARG:HD3	1:B:1559:ARG:HA	1.40	0.45
1:C:2146:ILE:O	1:C:2149:ASN:HB2	2.16	0.45
1:C:2160:VAL:CG1	1:C:2201:VAL:HB	2.45	0.45
1:C:2301:PRO:O	1:C:2304:GLU:CD	2.60	0.45
1:C:2481:CYS:SG	1:C:2540:ALA:HB1	2.57	0.45
1:D:3414:PRO:O	1:D:3442:LEU:HD12	2.16	0.45
1:D:3511:ARG:HH11	1:D:3511:ARG:CB	2.29	0.45
1:E:4337:ALA:HA	1:E:4340:LYS:HD2	1.99	0.45
1:E:4405:ARG:O	1:E:4406:ALA:C	2.60	0.45
1:G:6155:VAL:C	1:G:6156:LYS:HG2	2.42	0.45
1:H:7085:ILE:HG23	1:H:7086:MSE:N	2.32	0.45
1:H:7109:PRO:O	1:H:7114:PRO:HD2	2.17	0.45
1:H:7268:LYS:HG2	1:H:7269:TYR:CZ	2.52	0.45
1:H:7389:ILE:HG23	1:H:7389:ILE:O	2.15	0.45
1:A:81:LYS:O	1:A:85:ILE:HG22	2.17	0.44
1:A:154:HIS:HB3	1:A:197:ARG:NE	2.32	0.44
1:A:158:VAL:CG1	1:A:159:VAL:N	2.80	0.44
1:A:363:GLU:H	1:A:363:GLU:HG2	1.51	0.44
1:B:1108:MSE:HE2	1:B:1108:MSE:HB2	1.69	0.44
1:B:1270:ARG:CG	1:B:1271:GLU:N	2.79	0.44
1:B:1274:CYS:O	1:B:1486:ILE:HD11	2.17	0.44
1:C:2283:THR:O	1:C:2285:ALA:N	2.50	0.44
1:C:2374:PRO:HG3	1:C:2380:ALA:HA	1.99	0.44
1:C:2377:PHE:HZ	1:C:2389:ILE:CD1	2.30	0.44
1:D:3302:ILE:HG22	1:D:3340:LYS:NZ	2.32	0.44
1:D:3400:THR:C	1:D:3402:ASP:N	2.71	0.44
1:D:3416:ILE:C	1:D:3417:PHE:HD1	2.25	0.44
1:E:4300:LYS:HB3	1:E:4305:HIS:NE2	2.32	0.44
1:E:4402:ASP:HA	1:E:4405:ARG:HD2	1.98	0.44
1:E:4530:VAL:O	1:E:4533:TYR:HB3	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5346:LYS:HB2	1:F:5346:LYS:HE3	1.34	0.44
1:F:5359:ASP:OD2	1:F:5361:TYR:HB2	2.16	0.44
1:F:5452:VAL:O	1:F:5460:PHE:N	2.43	0.44
1:F:5469:TYR:O	1:F:5470:ILE:HD13	2.16	0.44
1:F:5495:ALA:O	1:F:5498:LEU:HB3	2.16	0.44
1:G:6416:ILE:HD12	1:G:6441:CYS:HB2	1.98	0.44
1:G:6456:ASP:OD1	1:G:6456:ASP:C	2.58	0.44
1:H:7132:GLY:HA3	1:H:7177:MSE:CE	2.47	0.44
1:H:7142:HIS:O	1:H:7143:VAL:C	2.60	0.44
1:H:7239:MSE:HE2	1:H:7269:TYR:CD1	2.52	0.44
1:H:7412:GLU:O	1:H:7440:ARG:HD2	2.16	0.44
1:H:7414:PRO:HD2	1:H:7440:ARG:O	2.16	0.44
1:A:332:LEU:CD2	1:A:337:ALA:HA	2.46	0.44
1:A:416:ILE:HD12	1:A:441:CYS:HB2	1.99	0.44
1:A:534:LEU:HD23	1:A:539:MSE:HB2	1.99	0.44
1:B:1552:TYR:HE1	1:B:1556:ARG:CZ	2.30	0.44
1:C:2431:GLU:C	1:C:2433:ALA:N	2.72	0.44
1:C:2478:VAL:HG13	1:C:2483:THR:HB	1.99	0.44
1:D:3300:LYS:O	1:D:3301:PRO:C	2.60	0.44
1:D:3453:LYS:HA	1:D:3459:VAL:CG1	2.47	0.44
1:E:4075:MSE:HE3	1:E:4075:MSE:HB2	1.76	0.44
1:E:4259:ASN:O	1:E:4260:HIS:C	2.60	0.44
1:F:5148:ASP:HA	1:F:5245:ARG:HH11	1.82	0.44
1:G:6223:GLN:HG2	1:G:6224:LYS:N	2.30	0.44
1:G:6343:MSE:O	1:G:6350:LEU:HB2	2.17	0.44
1:H:7166:ILE:HD11	1:H:7176:GLY:HA3	1.99	0.44
1:H:7469:TYR:C	1:H:7470:ILE:HD12	2.41	0.44
1:A:38:MSE:O	1:A:58:ILE:HA	2.17	0.44
1:A:233:ASP:N	1:A:233:ASP:OD1	2.49	0.44
1:A:377:PHE:HZ	1:A:389:ILE:CD1	2.26	0.44
1:A:437:THR:C	1:A:439:GLY:N	2.74	0.44
1:B:1335:GLN:HG3	1:B:1336:GLU:N	2.31	0.44
1:B:1359:ASP:OD2	1:B:1359:ASP:C	2.60	0.44
1:B:1360:SER:HA	1:B:1363:GLU:OE1	2.18	0.44
1:C:2219:MSE:HE3	1:C:2219:MSE:HB2	1.89	0.44
1:D:3204:ASP:OD1	1:D:3221:LEU:CD2	2.66	0.44
1:D:3306:LYS:HB3	1:D:3386:PRO:HA	1.99	0.44
1:D:3376:THR:O	1:D:3379:ASP:HB2	2.17	0.44
1:D:3428:CYS:SG	1:D:3429:THR:N	2.91	0.44
1:D:3533:TYR:O	1:D:3536:ALA:HB3	2.18	0.44
1:F:5029:MSE:SE	1:F:5050:LEU:HD22	2.68	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5179:ILE:H	1:F:5179:ILE:HG12	1.57	0.44
1:F:5376:THR:CG2	1:F:5378:GLU:HB3	2.48	0.44
1:F:5537:ASN:N	1:F:5537:ASN:ND2	2.64	0.44
1:G:6133:LEU:HD13	1:G:6150:TRP:HE3	1.83	0.44
1:H:7143:VAL:O	1:H:7146:ILE:HB	2.18	0.44
1:H:7292:LEU:C	1:H:7294:ALA:N	2.75	0.44
1:H:7322:LEU:HD11	1:H:7492:LEU:CA	2.48	0.44
1:H:7419:LEU:HA	1:H:7446:GLY:N	2.32	0.44
1:H:7429:THR:HG23	1:H:7432:GLU:HG3	1.99	0.44
1:H:7541:PHE:O	1:H:7542:ARG:C	2.60	0.44
1:A:243:THR:HG21	1:A:273:TYR:HD2	1.82	0.44
1:A:396:GLY:HA2	1:A:425:GLN:C	2.43	0.44
1:A:476:LEU:HD12	1:A:480:LEU:HD11	1.98	0.44
1:B:1100:LEU:C	1:B:1102:ASP:N	2.76	0.44
1:B:1250:THR:O	1:B:1250:THR:HG23	2.18	0.44
1:B:1335:GLN:HE22	1:B:1339:LYS:HG3	1.78	0.44
1:B:1346:LYS:HB3	3:B:1601:NAD:C5A	2.48	0.44
1:B:1520:GLN:C	1:B:1524:ILE:HD12	2.42	0.44
1:C:2127:PHE:CD1	1:C:2219:MSE:SE	3.21	0.44
1:C:2266:LEU:HD21	1:C:2281:GLN:HE21	1.82	0.44
1:C:2419:LEU:HA	1:C:2446:GLY:HA3	1.99	0.44
1:C:2452:VAL:O	1:C:2460:PHE:N	2.40	0.44
1:D:3224:LYS:O	1:D:3225:ARG:C	2.58	0.44
1:E:4086:MSE:CE	1:E:4111:VAL:HG22	2.47	0.44
1:E:4281:GLN:HE21	1:E:4491:PHE:HE1	1.66	0.44
1:F:5104:ILE:HG13	1:F:5108:MSE:CE	2.48	0.44
1:F:5260:HIS:ND1	1:F:5260:HIS:C	2.74	0.44
1:F:5266:LEU:CD2	1:F:5281:GLN:OE1	2.65	0.44
1:F:5283:THR:O	1:F:5285:ALA:N	2.50	0.44
1:G:6404:ILE:HB	1:G:6436:LEU:CD2	2.36	0.44
1:H:7243:THR:CB	1:H:7248:ARG:NH1	2.81	0.44
1:A:393:ALA:HB1	3:A:601:NAD:C4A	2.48	0.44
1:A:503:THR:H	1:A:506:GLU:HB2	1.82	0.44
1:B:1516:LEU:HD12	1:B:1516:LEU:HA	1.81	0.44
1:B:1537:ASN:N	1:B:1537:ASN:ND2	2.64	0.44
1:C:2140:ARG:HE	1:C:2140:ARG:HB2	1.47	0.44
1:C:2295:GLN:HE22	1:C:2305:HIS:CE1	2.35	0.44
1:C:2300:LYS:HA	1:C:2301:PRO:HD2	1.81	0.44
1:C:2370:PRO:HD2	1:C:2373:ILE:HD12	1.95	0.44
1:C:2454:LEU:HD13	1:C:2458:ARG:NH1	2.31	0.44
1:D:3122:GLN:HA	1:D:3122:GLN:NE2	2.31	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3204:ASP:OD1	1:D:3204:ASP:C	2.61	0.44
1:D:3208:ASP:O	1:D:3209:ASN:C	2.60	0.44
1:D:3243:THR:CB	1:D:3248:ARG:NH1	2.80	0.44
1:D:3290:GLY:O	1:D:3293:ALA:HB3	2.18	0.44
1:D:3375:ASP:OD2	1:D:3376:THR:N	2.49	0.44
1:D:3481:CYS:SG	1:D:3540:ALA:HB1	2.57	0.44
1:D:3506:GLU:O	1:D:3511:ARG:HG3	2.17	0.44
1:E:4358:ILE:HG12	1:E:4366:THR:HG21	2.00	0.44
1:F:5029:MSE:HE2	1:F:5029:MSE:HB2	1.90	0.44
1:F:5055:PRO:O	1:F:5057:LYS:N	2.46	0.44
1:F:5295:GLN:C	1:F:5297:VAL:H	2.26	0.44
1:F:5501:GLN:OE1	1:F:5525:ASN:HB3	2.17	0.44
1:G:6478:VAL:HG22	1:G:6483:THR:HB	2.00	0.44
1:H:7024:LYS:HD3	1:H:7048:LEU:O	2.17	0.44
1:A:341:ILE:HB	1:A:365:PHE:HD2	1.83	0.44
1:A:471:PHE:CE1	1:A:472:PRO:HG3	2.53	0.44
1:A:503:THR:HG23	1:A:506:GLU:OE1	2.18	0.44
1:B:1193:ILE:HG22	1:B:1198:CYS:SG	2.58	0.44
1:B:1259:ASN:HB2	1:B:1260:HIS:H	1.44	0.44
1:B:1270:ARG:HH21	1:B:1487:SER:HA	1.83	0.44
1:B:1503:THR:HB	1:B:1505:GLU:OE1	2.18	0.44
1:C:2099:ILE:O	1:C:2102:ASP:HB2	2.17	0.44
1:C:2255:GLU:OE1	1:C:2256:ASP:N	2.49	0.44
1:C:2309:PHE:CE1	1:C:2390:ILE:HB	2.51	0.44
1:C:2392:VAL:CG2	1:C:2419:LEU:HD23	2.48	0.44
1:D:3159:VAL:HA	1:D:3253:GLN:O	2.17	0.44
1:D:3385:LYS:HE3	1:D:3385:LYS:HB2	1.67	0.44
1:D:3389:ILE:HD12	1:D:3389:ILE:HA	1.76	0.44
1:D:3506:GLU:CB	1:D:3511:ARG:HD2	2.47	0.44
1:E:4204:ASP:CG	1:E:4221:LEU:HD22	2.42	0.44
1:F:5092:ASN:C	1:F:5092:ASN:OD1	2.61	0.44
1:F:5197:ARG:CG	1:F:5197:ARG:HH11	2.30	0.44
1:F:5402:ASP:OD1	1:F:5402:ASP:N	2.51	0.44
1:F:5418:ALA:O	1:F:5446:GLY:N	2.48	0.44
1:F:5566:LEU:HD23	1:F:5566:LEU:HA	1.85	0.44
1:G:6370:PRO:HD2	1:G:6373:ILE:HD11	2.00	0.44
1:G:6525:ASN:HA	1:G:6528:ILE:HG13	2.00	0.44
1:H:7230:GLN:O	1:H:7231:TYR:C	2.61	0.44
1:H:7456:ASP:CG	1:H:7458:ARG:HD3	2.42	0.44
1:A:82:TYR:HA	1:A:85:ILE:CG2	2.48	0.44
1:A:147:VAL:HG21	1:A:241:ALA:HB1	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:209:ASN:O	1:A:213:LEU:HG	2.17	0.44
1:A:259:ASN:ND2	1:A:259:ASN:N	2.66	0.44
1:A:295:GLN:NE2	1:A:305:HIS:CE1	2.84	0.44
1:B:1068:PHE:CD2	1:B:1068:PHE:C	2.96	0.44
1:B:1207:THR:HG23	1:B:1213:LEU:CD2	2.45	0.44
1:B:1236:ASP:O	1:B:1237:GLU:C	2.61	0.44
1:B:1389:ILE:HD12	1:B:1389:ILE:HA	1.84	0.44
1:B:1401:PRO:CB	1:B:1436:LEU:HD21	2.48	0.44
1:C:2308:LEU:HD13	1:C:2342:TRP:CB	2.48	0.44
1:C:2403:VAL:HG12	1:C:2404:ILE:N	2.32	0.44
1:D:3277:ASN:OD1	1:D:3278:ASP:N	2.51	0.44
1:D:3295:GLN:CD	1:D:3305:HIS:HE1	2.25	0.44
1:D:3421:ASN:CA	1:D:3422:PRO:O	2.49	0.44
1:E:4146:ILE:HG23	1:F:5052:GLY:HA3	2.00	0.44
1:E:4496:LYS:HG3	1:E:4496:LYS:H	1.58	0.44
1:F:5302:ILE:HB	1:F:5303:SER:H	1.47	0.44
1:F:5314:GLU:O	1:F:5315:ALA:C	2.61	0.44
1:F:5402:ASP:HA	1:F:5405:ARG:HD2	1.99	0.44
1:F:5453:LYS:HE3	1:F:5457:GLY:CA	2.35	0.44
1:G:6182:GLY:CA	1:G:6185:CYS:SG	3.05	0.44
1:G:6253:GLN:HG3	1:G:6276:PHE:CE1	2.53	0.44
1:G:6363:GLU:CB	1:G:6364:PRO:CD	2.96	0.44
1:G:6437:THR:O	1:G:6440:ARG:HB2	2.17	0.44
1:G:6505:GLU:CD	1:G:6505:GLU:H	2.20	0.44
1:H:7228:THR:OG1	1:H:7230:GLN:CG	2.65	0.44
1:H:7382:ASN:O	1:H:7385:LYS:HE2	2.18	0.44
1:A:374:PRO:HG3	1:A:380:ALA:HA	1.99	0.44
1:A:542:ARG:NE	1:A:552:TYR:OH	2.51	0.44
1:B:1184:LEU:O	1:B:1187:TYR:HB2	2.17	0.44
1:B:1338:GLN:O	1:B:1341:ILE:N	2.43	0.44
1:B:1381:VAL:HG13	1:B:1407:MSE:HE1	2.00	0.44
1:B:1466:ASN:CB	1:B:1468:VAL:HG12	2.35	0.44
1:C:2068:PHE:CZ	1:C:2072:LEU:HD22	2.53	0.44
1:C:2278:ASP:C	1:C:2280:ILE:H	2.25	0.44
1:C:2350:LEU:HD12	1:C:2366:THR:HG23	1.98	0.44
1:C:2559:ARG:HG3	1:C:2561:GLU:HG2	1.99	0.44
1:D:3038:MSE:HA	1:D:3045:ARG:HH21	1.82	0.44
1:D:3058:ILE:H	1:D:3058:ILE:HG12	1.53	0.44
1:D:3143:VAL:O	1:D:3146:ILE:N	2.50	0.44
1:D:3217:PHE:O	1:D:3218:TYR:C	2.59	0.44
1:D:3258:GLY:O	1:D:3261:ASN:N	2.51	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4086:MSE:HE3	1:E:4111:VAL:HG22	2.00	0.44
1:E:4357:LYS:C	1:E:4358:ILE:HD12	2.43	0.44
1:F:5100:LEU:HD12	1:F:5100:LEU:HA	1.65	0.44
1:F:5284:ALA:HA	1:F:5319:ILE:HG13	2.00	0.44
1:F:5435:THR:OG1	1:F:5436:LEU:N	2.51	0.44
1:F:5451:PRO:HG3	1:F:5461:THR:OG1	2.18	0.44
1:G:6258:GLY:O	1:G:6261:ASN:N	2.50	0.44
1:G:6284:ALA:O	1:G:6285:ALA:C	2.61	0.44
1:G:6288:LEU:HG	1:G:6292:LEU:HG	2.00	0.44
1:G:6291:LEU:HD23	1:G:6291:LEU:N	2.33	0.44
1:G:6470:ILE:O	1:G:6471:PHE:C	2.59	0.44
1:H:7072:LEU:HG	1:H:7081:LYS:HD3	2.00	0.44
1:H:7168:GLY:O	1:H:7169:LEU:HD12	2.17	0.44
1:H:7292:LEU:O	1:H:7294:ALA:N	2.51	0.44
1:H:7421:ASN:HB2	3:H:7601:NAD:O2D	2.18	0.44
1:A:86:MSE:HA	1:A:86:MSE:CE	2.47	0.44
1:A:109:PRO:CA	1:A:113:THR:O	2.59	0.44
1:A:309:PHE:HB2	1:A:343:MSE:HG2	2.00	0.44
1:A:349:LEU:HD23	1:A:351:VAL:HB	2.00	0.44
1:A:389:ILE:HG22	1:A:415:VAL:O	2.18	0.44
1:A:421:ASN:HB3	1:A:422:PRO:HA	1.99	0.44
1:B:1350:LEU:C	1:B:1366:THR:HG23	2.43	0.44
1:B:1397:ARG:HA	1:B:1427:GLU:O	2.18	0.44
1:C:2055:PRO:C	1:C:2057:LYS:H	2.25	0.44
1:C:2114:PRO:HD2	1:C:2115:THR:H	1.83	0.44
1:C:2240:LYS:HA	1:C:2243:THR:OG1	2.18	0.44
1:C:2569:VAL:O	1:C:2570:TYR:CB	2.66	0.44
1:D:3223:GLN:CG	1:D:3224:LYS:N	2.80	0.44
1:E:4268:LYS:HE2	1:E:4269:TYR:CE2	2.52	0.44
1:E:4332:LEU:HG	1:E:4336:GLU:OE2	2.18	0.44
1:G:6026:LYS:N	1:G:6027:PRO:CD	2.81	0.44
1:G:6300:LYS:O	1:G:6305:HIS:NE2	2.50	0.44
1:G:6302:ILE:HA	1:G:6305:HIS:ND1	2.31	0.44
1:G:6349:LEU:HD23	1:G:6349:LEU:C	2.42	0.44
1:G:6377:PHE:O	1:G:6380:ALA:N	2.51	0.44
1:H:7104:ILE:HG13	1:H:7108:MSE:HE2	1.99	0.44
1:H:7323:ILE:O	1:H:7324:VAL:C	2.60	0.44
1:A:166:ILE:O	1:A:167:LEU:O	2.36	0.43
1:A:166:ILE:HD12	1:A:179:ILE:HG13	2.00	0.43
1:A:388:THR:HG23	1:A:415:VAL:CB	2.46	0.43
1:A:394:GLY:HA2	1:A:420:SER:CB	2.47	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:499:THR:C	1:A:501:GLN:N	2.76	0.43
1:A:539:MSE:HE2	1:A:539:MSE:HB3	1.84	0.43
1:A:552:TYR:CE1	1:A:556:ARG:CZ	3.01	0.43
1:B:1048:LEU:HD22	1:B:1048:LEU:N	2.32	0.43
1:B:1090:GLU:HG2	1:B:1131:LYS:NZ	2.33	0.43
1:B:1336:GLU:O	1:B:1340:LYS:HG3	2.17	0.43
1:B:1338:GLN:HE21	1:B:1338:GLN:HB3	1.63	0.43
1:B:1524:ILE:O	1:B:1527:ALA:HB3	2.18	0.43
1:B:1555:GLU:O	1:B:1557:THR:N	2.50	0.43
1:C:2132:GLY:HA3	1:C:2177:MSE:HE2	1.99	0.43
1:C:2155:VAL:HB	1:C:2246:TYR:CD2	2.53	0.43
1:C:2388:THR:HA	1:C:2415:VAL:HG23	2.00	0.43
1:D:3094:LYS:HG2	1:D:3562:TYR:CD2	2.52	0.43
1:D:3108:MSE:HE2	1:D:3108:MSE:HB2	1.68	0.43
1:D:3174:VAL:HG21	1:D:3219:MSE:C	2.43	0.43
1:D:3259:ASN:N	1:D:3259:ASN:ND2	2.66	0.43
1:E:4381:VAL:HG13	1:E:4407:MSE:HE2	2.00	0.43
1:E:4474:VAL:O	1:E:4475:ALA:C	2.61	0.43
1:G:6296:LYS:O	1:G:6296:LYS:HG2	2.17	0.43
1:G:6335:GLN:HG3	1:G:6336:GLU:N	2.32	0.43
1:G:6495:ALA:O	1:G:6496:LYS:C	2.60	0.43
1:H:7089:GLN:O	1:H:7091:ARG:N	2.51	0.43
1:H:7309:PHE:HD2	1:H:7343:MSE:HG3	1.82	0.43
1:H:7324:VAL:HA	1:H:7327:MSE:CE	2.48	0.43
1:H:7338:GLN:HA	1:H:7341:ILE:HG13	2.00	0.43
1:H:7515:PRO:C	1:H:7517:ALA:N	2.75	0.43
1:A:67:ARG:HA	1:B:1217:PHE:CE1	2.54	0.43
1:A:258:GLY:O	1:A:261:ASN:N	2.51	0.43
1:A:303:SER:HA	1:A:340:LYS:HZ1	1.83	0.43
1:A:359:ASP:O	1:A:363:GLU:HG2	2.19	0.43
1:A:458:ARG:NH1	1:A:458:ARG:HB2	2.33	0.43
1:A:471:PHE:CD1	1:A:472:PRO:CD	3.01	0.43
1:A:505:GLU:O	1:A:509:GLN:HG3	2.18	0.43
1:C:2085:ILE:C	1:C:2087:GLY:H	2.26	0.43
1:C:2553:VAL:O	1:C:2555:GLU:N	2.51	0.43
1:D:3045:ARG:HB3	1:D:3051:GLN:HG2	2.00	0.43
1:D:3402:ASP:C	1:D:3405:ARG:HG2	2.44	0.43
1:F:5026:LYS:C	1:F:5028:LEU:N	2.73	0.43
1:F:5036:LYS:O	1:F:5039:ALA:HB3	2.18	0.43
1:F:5083:ILE:HD11	1:F:5126:ILE:HB	1.99	0.43
1:F:5359:ASP:N	1:F:5362:GLN:OE1	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5458:ARG:HH11	1:F:5458:ARG:HB2	1.81	0.43
1:G:6025:GLY:C	1:G:6050:LEU:HD21	2.43	0.43
1:G:6151:PRO:HG3	1:H:7026:LYS:HD3	2.00	0.43
1:G:6317:LEU:HA	1:G:6320:ALA:HB3	2.00	0.43
1:H:7079:LEU:HG	1:H:7079:LEU:O	2.17	0.43
1:H:7345:ASP:CG	1:H:7346:LYS:N	2.76	0.43
1:H:7466:ASN:C	1:H:7468:VAL:N	2.76	0.43
1:H:7523:SER:HA	1:H:7526:ILE:HG13	1.99	0.43
1:A:234:LEU:O	1:A:235:ILE:C	2.61	0.43
1:A:295:GLN:NE2	1:A:305:HIS:HE1	2.15	0.43
1:A:354:ARG:HE	1:A:356:ALA:HB3	1.83	0.43
1:A:385:LYS:N	1:A:386:PRO:CD	2.81	0.43
1:A:477:ALA:HB1	1:A:531:THR:HG22	1.99	0.43
1:B:1218:TYR:HB3	1:B:1222:TYR:CZ	2.53	0.43
1:B:1270:ARG:HG3	1:B:1271:GLU:N	2.33	0.43
1:B:1286:VAL:O	1:B:1289:ALA:HB3	2.17	0.43
1:B:1376:THR:CG2	1:B:1379:ASP:H	2.26	0.43
1:C:2290:GLY:O	1:C:2291:LEU:C	2.61	0.43
1:C:2346:LYS:C	1:C:2348:GLY:H	2.26	0.43
1:C:2376:THR:N	1:C:2379:ASP:HB2	2.28	0.43
1:C:2397:ARG:C	1:C:2398:LEU:HD12	2.43	0.43
1:D:3261:ASN:HA	1:D:3264:ARG:CG	2.47	0.43
1:D:3349:LEU:HD11	1:D:3384:LEU:HD21	2.00	0.43
1:D:3503:THR:OG1	1:D:3506:GLU:HG3	2.18	0.43
1:D:3505:GLU:O	1:D:3509:GLN:HG3	2.18	0.43
1:E:4068:PHE:HE2	1:E:4072:LEU:HD22	1.83	0.43
1:F:5089:GLN:HB2	1:F:5096:PHE:CD1	2.52	0.43
1:F:5221:LEU:HB3	1:F:5223:GLN:NE2	2.33	0.43
1:F:5228:THR:OG1	1:F:5229:GLN:N	2.47	0.43
1:F:5303:SER:O	1:F:5340:LYS:HE3	2.18	0.43
1:G:6077:SER:O	1:G:6081:LYS:HG3	2.19	0.43
1:G:6094:LYS:HD2	1:G:6558:TRP:CZ2	2.53	0.43
1:G:6108:MSE:N	1:G:6109:PRO:CD	2.80	0.43
1:G:6300:LYS:HE3	1:G:6305:HIS:CD2	2.54	0.43
1:G:6494:ALA:O	1:G:6497:ALA:HB3	2.19	0.43
1:G:6506:GLU:HG3	1:G:6511:ARG:HD2	2.01	0.43
1:H:7269:TYR:HB2	1:H:7275:THR:HG21	2.01	0.43
1:A:195:PRO:C	1:A:197:ARG:N	2.76	0.43
1:A:456:ASP:OD1	1:A:458:ARG:NH1	2.51	0.43
1:B:1470:ILE:O	1:B:1471:PHE:C	2.61	0.43
1:B:1541:PHE:N	1:B:1541:PHE:CD2	2.86	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2184:LEU:O	1:C:2187:TYR:HB2	2.17	0.43
1:C:2232:ASP:HA	1:C:2235:ILE:HG12	2.00	0.43
1:D:3193:ILE:CG2	1:D:3194:ARG:N	2.81	0.43
1:E:4100:LEU:O	1:E:4101:GLN:C	2.60	0.43
1:E:4537:ASN:HB3	1:E:4539:MSE:CG	2.49	0.43
1:F:5227:ARG:HG2	1:F:5227:ARG:NH1	2.31	0.43
1:G:6130:PRO:HG2	1:H:7054:LEU:CD2	2.48	0.43
1:G:6179:ILE:O	1:G:6180:PRO:C	2.62	0.43
1:G:6205:VAL:HG21	1:G:6231:TYR:CE1	2.52	0.43
1:G:6385:LYS:HB2	1:G:6385:LYS:HE3	1.44	0.43
1:G:6535:TYR:CD1	1:G:6549:LYS:HE2	2.54	0.43
1:H:7066:LEU:HG	1:H:7070:ARG:HD3	1.99	0.43
1:H:7360:SER:C	1:H:7362:GLN:H	2.26	0.43
1:H:7556:ARG:NE	3:H:7602:NAD:O2A	2.52	0.43
1:A:397:ARG:NH2	1:A:429:THR:CG2	2.78	0.43
1:A:453:LYS:HA	1:A:458:ARG:O	2.17	0.43
1:A:501:GLN:NE2	1:A:501:GLN:CA	2.79	0.43
1:B:1082:TYR:CZ	1:B:1086:MSE:HG3	2.53	0.43
1:B:1207:THR:N	1:B:1223:GLN:O	2.45	0.43
1:B:1238:PHE:O	1:B:1239:MSE:C	2.60	0.43
1:B:1276:PHE:CD1	1:B:1277:ASN:N	2.86	0.43
1:B:1346:LYS:HB3	3:B:1601:NAD:C4A	2.49	0.43
1:B:1417:PHE:HZ	1:B:1512:LEU:HD22	1.83	0.43
1:D:3266:LEU:O	1:D:3270:ARG:HB3	2.19	0.43
1:D:3324:VAL:HG21	1:D:3365:PHE:HZ	1.83	0.43
1:D:3327:MSE:HE3	1:D:3337:ALA:CA	2.49	0.43
1:E:4235:ILE:HG12	1:E:4235:ILE:H	1.70	0.43
1:E:4261:ASN:OD1	1:E:4264:ARG:NH2	2.52	0.43
1:E:4335:GLN:NE2	1:E:4339:LYS:HG3	2.34	0.43
1:E:4351:VAL:HG11	1:E:4369:ALA:HB2	2.01	0.43
1:E:4377:PHE:HZ	1:E:4389:ILE:HD11	1.83	0.43
1:F:5085:ILE:HG23	1:F:5086:MSE:CE	2.49	0.43
1:F:5521:GLU:CG	1:F:5522:VAL:N	2.81	0.43
1:G:6300:LYS:O	1:G:6301:PRO:C	2.61	0.43
1:H:7046:GLN:CG	1:H:7051:GLN:HG3	2.48	0.43
1:H:7096:PHE:CD2	1:H:7096:PHE:C	2.97	0.43
1:H:7326:SER:HB2	1:H:7492:LEU:HD11	2.00	0.43
1:H:7351:VAL:HG21	1:H:7369:ALA:HA	2.00	0.43
1:H:7410:ILE:H	1:H:7410:ILE:HG13	1.58	0.43
1:A:243:THR:O	1:A:247:GLY:N	2.38	0.43
1:A:301:PRO:O	1:A:304:GLU:HG3	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:306:LYS:H	1:A:387:SER:HB3	1.83	0.43
1:A:391:GLY:CA	1:A:427:GLU:HG2	2.45	0.43
1:A:397:ARG:HG2	1:A:397:ARG:NH1	2.31	0.43
1:B:1104:ILE:O	1:B:1108:MSE:HB2	2.18	0.43
1:B:1159:VAL:CG1	1:B:1180:PRO:HB3	2.49	0.43
1:B:1319:ILE:H	1:B:1319:ILE:HG13	1.56	0.43
1:C:2023:GLU:N	4:C:8045:HOH:O	2.50	0.43
1:C:2244:ASP:N	1:C:2248:ARG:HH12	2.15	0.43
1:C:2298:ILE:HG22	1:C:2299:SER:N	2.32	0.43
1:C:2300:LYS:NZ	1:C:2305:HIS:HD2	2.16	0.43
1:D:3075:MSE:HE3	1:D:3075:MSE:HB2	1.71	0.43
1:D:3136:SER:O	1:D:3139:ASP:HB2	2.18	0.43
1:D:3333:SER:HB3	1:D:3336:GLU:HG3	1.99	0.43
1:D:3352:LYS:NZ	1:D:3366:THR:O	2.47	0.43
1:D:3537:ASN:N	1:D:3537:ASN:ND2	2.58	0.43
1:E:4023:GLU:OE1	1:E:4023:GLU:HA	2.19	0.43
1:E:4048:LEU:HD22	1:E:4048:LEU:N	2.34	0.43
1:E:4155:VAL:HG21	1:E:4246:TYR:CZ	2.53	0.43
1:F:5030:LEU:HD23	1:F:5030:LEU:N	2.34	0.43
1:F:5504:ASP:O	1:F:5507:LEU:HB2	2.18	0.43
1:G:6040:PHE:O	1:G:6045:ARG:NE	2.52	0.43
1:G:6137:ILE:HA	1:G:6234:LEU:HD21	1.99	0.43
1:G:6208:ASP:OD2	1:G:6227:ARG:NH2	2.43	0.43
1:G:6260:HIS:C	1:G:6260:HIS:ND1	2.76	0.43
1:G:6300:LYS:HE3	1:G:6305:HIS:HD2	1.84	0.43
1:G:6302:ILE:HG22	1:G:6340:LYS:HZ3	1.83	0.43
1:G:6308:LEU:HD22	1:G:6384:LEU:HD23	2.01	0.43
1:G:6333:SER:C	1:G:6335:GLN:N	2.76	0.43
1:G:6482:ASN:ND2	1:G:6482:ASN:N	2.63	0.43
1:G:6496:LYS:O	1:G:6497:ALA:C	2.61	0.43
1:H:7276:PHE:CB	1:H:7281:GLN:OE1	2.60	0.43
1:H:7393:ALA:O	1:H:7394:GLY:C	2.62	0.43
1:H:7493:GLU:HA	1:H:7496:LYS:HD3	2.01	0.43
1:A:226:ASP:C	1:A:226:ASP:OD1	2.60	0.43
1:A:308:LEU:HB3	1:A:389:ILE:HD13	2.00	0.43
1:A:382:ASN:O	1:A:383:ILE:C	2.61	0.43
1:B:1071:ASN:HA	1:B:1074:LYS:HE3	2.00	0.43
1:B:1288:LEU:HD11	1:B:1323:ILE:HA	2.00	0.43
1:B:1453:LYS:CB	1:B:1459:VAL:HG13	2.48	0.43
1:B:1454:LEU:HD13	1:B:1458:ARG:NH1	2.34	0.43
1:C:2146:ILE:C	1:C:2148:ASP:N	2.76	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2297:VAL:HG23	1:C:2298:ILE:HD13	1.99	0.43
1:C:2309:PHE:CD1	1:C:2390:ILE:HB	2.53	0.43
1:C:2385:LYS:HE2	1:C:2385:LYS:HB2	1.57	0.43
1:D:3122:GLN:C	1:D:3123:TYR:O	2.62	0.43
1:D:3174:VAL:HG22	1:D:3218:TYR:CE2	2.54	0.43
1:E:4031:ASN:HA	1:E:4032:PRO:HD2	1.75	0.43
1:E:4548:ASP:OD1	1:E:4550:ALA:HB3	2.19	0.43
1:F:5024:LYS:HA	1:F:5028:LEU:HD22	2.00	0.43
1:F:5252:ILE:O	1:F:5275:THR:HA	2.19	0.43
1:F:5333:SER:O	1:F:5334:GLU:C	2.60	0.43
1:G:6468:VAL:O	1:G:6468:VAL:HG22	2.18	0.43
1:H:7085:ILE:C	1:H:7087:GLY:N	2.77	0.43
1:H:7210:ILE:HD13	1:H:7210:ILE:N	2.33	0.43
1:H:7255:GLU:O	1:H:7257:PHE:HD1	2.00	0.43
1:A:30:LEU:HB3	1:B:1030:LEU:HD13	2.01	0.43
1:A:59:GLU:HG2	1:A:63:ILE:CG2	2.41	0.43
1:A:335:GLN:HE21	1:A:339:LYS:CG	2.31	0.43
1:A:529:LYS:HA	1:A:529:LYS:HD2	1.84	0.43
1:B:1184:LEU:HD12	1:B:1184:LEU:HA	1.90	0.43
1:B:1239:MSE:HE2	1:B:1273:TYR:CD1	2.54	0.43
1:B:1298:ILE:CD1	1:B:1413:ARG:HD3	2.49	0.43
1:B:1315:ALA:HB1	1:B:1319:ILE:HD11	2.00	0.43
1:B:1318:GLY:O	1:B:1319:ILE:C	2.62	0.43
1:C:2090:GLU:CG	1:C:2131:LYS:HD3	2.48	0.43
1:C:2177:MSE:CE	1:C:2200:PRO:HB2	2.49	0.43
1:C:2260:HIS:CE1	1:C:2264:ARG:NE	2.86	0.43
1:C:2453:LYS:NZ	1:C:2457:GLY:HA2	2.33	0.43
1:D:3076:THR:O	1:D:3077:SER:C	2.61	0.43
1:D:3416:ILE:HD13	1:D:3416:ILE:N	2.34	0.43
1:D:3416:ILE:HD12	1:D:3441:CYS:HB2	2.00	0.43
1:E:4363:GLU:O	1:E:4365:PHE:N	2.51	0.43
1:F:5085:ILE:O	1:F:5088:ILE:HG12	2.19	0.43
1:F:5144:ARG:O	1:F:5145:SER:C	2.62	0.43
1:F:5210:ILE:HD13	1:F:5210:ILE:N	2.34	0.43
1:F:5499:THR:C	1:F:5501:GLN:N	2.77	0.43
1:G:6224:LYS:HA	1:G:6224:LYS:HD2	1.73	0.43
1:H:7026:LYS:HA	1:H:7029:MSE:HE2	2.00	0.43
1:H:7047:MSE:O	1:H:7048:LEU:HD22	2.19	0.43
1:H:7469:TYR:HA	1:H:7519:ILE:HD11	2.00	0.43
1:A:146:ILE:N	1:A:146:ILE:CD1	2.78	0.43
1:A:395:ALA:O	1:A:398:LEU:HD11	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:559:ARG:HD3	1:A:559:ARG:HA	1.72	0.43
1:B:1100:LEU:C	1:B:1100:LEU:HD12	2.44	0.43
1:B:1164:GLU:OE1	1:B:1225:ARG:NH1	2.52	0.43
1:B:1194:ARG:HG3	3:B:1602:NAD:C6A	2.48	0.43
1:B:1315:ALA:O	1:B:1319:ILE:HG13	2.19	0.43
1:C:2103:ASP:HB3	1:C:2107:LEU:CD2	2.49	0.43
1:C:2309:PHE:CE1	1:C:2390:ILE:CD1	3.02	0.43
1:C:2400:THR:OG1	1:C:2402:ASP:HB2	2.19	0.43
1:D:3067:ARG:O	1:D:3068:PHE:C	2.61	0.43
1:D:3112:TYR:HA	1:D:3116:VAL:HB	2.01	0.43
1:D:3289:ALA:CB	1:D:3498:LEU:HD23	2.49	0.43
1:D:3369:ALA:HA	1:D:3370:PRO:HD3	1.89	0.43
1:E:4144:ARG:O	1:E:4145:SER:C	2.59	0.43
1:E:4344:PHE:HA	1:E:4349:LEU:HA	2.01	0.43
1:F:5168:GLY:C	1:F:5169:LEU:HD12	2.43	0.43
1:F:5338:GLN:O	1:F:5367:HIS:CE1	2.72	0.43
1:G:6116:VAL:HG13	1:G:6117:GLY:N	2.34	0.43
1:G:6227:ARG:CG	1:G:6227:ARG:NH1	2.82	0.43
1:G:6231:TYR:O	1:G:6235:ILE:HG12	2.18	0.43
1:G:6342:TRP:CE3	1:G:6349:LEU:HD21	2.52	0.43
1:G:6431:GLU:C	1:G:6433:ALA:H	2.27	0.43
1:H:7360:SER:C	1:H:7362:GLN:N	2.76	0.43
1:H:7384:LEU:O	1:H:7385:LYS:HB2	2.18	0.43
1:H:7533:TYR:C	1:H:7533:TYR:HD2	2.22	0.43
1:A:104:ILE:HG23	1:A:105:GLU:H	1.83	0.43
1:A:238:PHE:O	1:A:239:MSE:C	2.62	0.43
1:A:407:MSE:HA	1:A:410:ILE:HD12	2.01	0.43
1:A:411:ASN:O	1:A:440:ARG:NH1	2.43	0.43
1:A:472:PRO:O	1:A:475:ALA:HB3	2.18	0.43
1:B:1150:TRP:CD1	1:B:1152:GLU:HB2	2.54	0.43
1:B:1288:LEU:O	1:B:1292:LEU:HG	2.18	0.43
1:B:1421:ASN:N	3:B:1601:NAD:O2D	2.52	0.43
1:C:2089:GLN:HB2	1:C:2096:PHE:CD1	2.53	0.43
1:C:2292:LEU:C	1:C:2294:ALA:N	2.76	0.43
1:C:2308:LEU:HD13	1:C:2342:TRP:HB3	1.99	0.43
1:C:2383:ILE:H	1:C:2383:ILE:HG12	1.53	0.43
1:C:2414:PRO:HD2	1:C:2441:CYS:CA	2.47	0.43
1:C:2451:PRO:HA	1:C:2462:PRO:HD3	2.00	0.43
1:C:2482:ASN:N	1:C:2482:ASN:ND2	2.67	0.43
1:C:2528:ILE:C	1:C:2530:VAL:N	2.77	0.43
1:C:2553:VAL:C	1:C:2555:GLU:N	2.77	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3290:GLY:HA3	1:D:3417:PHE:CE2	2.54	0.43
1:D:3302:ILE:HD11	1:D:3330:ASN:HD22	1.84	0.43
1:D:3397:ARG:NH2	1:D:3429:THR:HG22	2.34	0.43
1:E:4082:TYR:HD1	1:E:4110:ILE:O	2.02	0.43
1:E:4309:PHE:HB2	1:E:4343:MSE:CG	2.49	0.43
1:F:5437:THR:O	1:F:5440:ARG:N	2.52	0.43
1:G:6068:PHE:CZ	1:G:6072:LEU:HD13	2.54	0.43
1:G:6071:ASN:C	1:G:6073:LYS:N	2.75	0.43
1:G:6130:PRO:HG2	1:H:7054:LEU:HD23	2.00	0.43
1:G:6399:PHE:CG	1:G:6427:GLU:HB3	2.54	0.43
1:G:6466:ASN:ND2	1:G:6468:VAL:HG12	2.34	0.43
1:H:7085:ILE:O	1:H:7087:GLY:N	2.52	0.43
1:H:7260:HIS:C	1:H:7260:HIS:ND1	2.76	0.43
1:H:7274:CYS:SG	1:H:7486:ILE:HD11	2.59	0.43
1:H:7343:MSE:CB	1:H:7350:LEU:HD23	2.41	0.43
1:H:7359:ASP:N	1:H:7362:GLN:OE1	2.50	0.43
1:H:7511:ARG:NH1	1:H:7513:TYR:O	2.52	0.43
1:A:123:TYR:O	1:A:175:TYR:CE1	2.71	0.42
1:A:156:LYS:HE2	1:A:156:LYS:HA	2.01	0.42
1:A:174:VAL:HG22	1:A:218:TYR:CE2	2.54	0.42
1:A:217:PHE:CZ	1:B:1066:LEU:HG	2.53	0.42
1:A:396:GLY:N	1:A:425:GLN:O	2.51	0.42
1:A:400:THR:HG23	1:A:403:VAL:HB	2.00	0.42
1:A:542:ARG:HD3	1:A:542:ARG:C	2.44	0.42
1:B:1037:GLY:C	1:B:1039:ALA:H	2.26	0.42
1:C:2176:GLY:O	1:C:2178:GLY:N	2.52	0.42
1:C:2240:LYS:O	1:C:2244:ASP:HB2	2.19	0.42
1:C:2495:ALA:O	1:C:2496:LYS:C	2.62	0.42
1:D:3085:ILE:C	1:D:3087:GLY:N	2.76	0.42
1:D:3248:ARG:HD2	1:D:3248:ARG:HA	1.74	0.42
1:D:3267:ARG:HH11	1:D:3267:ARG:CG	2.31	0.42
1:D:3558:TRP:CG	1:D:3559:ARG:N	2.86	0.42
1:E:4358:ILE:HG21	1:E:4366:THR:HG21	2.00	0.42
1:E:4378:GLU:O	1:E:4381:VAL:HB	2.18	0.42
1:F:5332:LEU:HD22	1:F:5337:ALA:HA	2.01	0.42
1:F:5345:ASP:CG	1:F:5354:ARG:HH22	2.27	0.42
1:F:5475:ALA:O	1:F:5476:LEU:C	2.62	0.42
1:F:5506:GLU:CG	1:F:5511:ARG:HD2	2.44	0.42
1:G:6120:CYS:O	1:G:6123:TYR:HB2	2.18	0.42
1:G:6271:GLU:HA	1:G:6485:HIS:CD2	2.54	0.42
1:G:6321:ASN:O	1:G:6324:VAL:HB	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:6342:TRP:CZ2	1:G:6384:LEU:HD11	2.54	0.42
1:G:6359:ASP:C	1:G:6363:GLU:OE1	2.62	0.42
1:H:7566:LEU:HD23	1:H:7566:LEU:HA	1.79	0.42
1:A:43:GLN:CG	1:A:47:MSE:HE3	2.49	0.42
1:A:251:LEU:HA	1:A:274:CYS:O	2.19	0.42
1:A:518:ASN:HB2	1:A:521:GLU:CD	2.44	0.42
1:A:551:LYS:O	1:A:555:GLU:HB2	2.19	0.42
1:C:2023:GLU:HA	1:C:2023:GLU:OE1	2.19	0.42
1:C:2338:GLN:HE21	1:C:2338:GLN:HB3	1.54	0.42
1:C:2345:ASP:HB2	3:C:2601:NAD:O2B	2.19	0.42
1:D:3081:LYS:O	1:D:3085:ILE:HG22	2.19	0.42
1:D:3155:VAL:H	1:D:3246:TYR:HD2	1.66	0.42
1:D:3352:LYS:HG2	1:D:3367:HIS:C	2.44	0.42
1:E:4211:ALA:HA	1:E:4214:LYS:HD3	2.01	0.42
1:E:4261:ASN:ND2	1:E:4261:ASN:N	2.50	0.42
1:E:4389:ILE:HG22	1:E:4416:ILE:HG22	2.01	0.42
1:E:4410:ILE:H	1:E:4410:ILE:HG13	1.55	0.42
1:F:5310:LEU:HG	1:F:5393:ALA:CB	2.43	0.42
1:F:5400:THR:CB	1:F:5401:PRO:HD2	2.48	0.42
1:F:5485:HIS:ND1	1:F:5485:HIS:N	2.67	0.42
1:G:6255:GLU:HB3	1:G:6256:ASP:H	1.62	0.42
1:G:6321:ASN:C	1:G:6323:ILE:N	2.74	0.42
1:G:6333:SER:O	1:G:6334:GLU:C	2.61	0.42
1:H:7288:LEU:O	1:H:7290:GLY:N	2.51	0.42
1:A:55:PRO:C	1:A:57:LYS:N	2.76	0.42
1:A:425:GLN:HE21	1:A:425:GLN:N	2.17	0.42
1:A:499:THR:O	1:A:501:GLN:N	2.51	0.42
1:A:553:VAL:C	1:A:555:GLU:H	2.27	0.42
1:B:1094:LYS:NZ	1:B:1561:GLU:O	2.47	0.42
1:B:1166:ILE:HA	1:B:1256:ASP:CG	2.44	0.42
1:B:1347:TYR:HB2	1:B:1354:ARG:HH22	1.84	0.42
1:C:2126:ILE:O	1:C:2128:ARG:HD3	2.19	0.42
1:C:2285:ALA:HB1	1:C:2470:ILE:HG13	2.01	0.42
1:C:2293:ALA:O	1:C:2297:VAL:HG13	2.19	0.42
1:C:2356:ALA:C	1:C:2357:LYS:HZ1	2.26	0.42
1:C:2480:LEU:HD21	1:C:2556:ARG:HB3	2.00	0.42
1:C:2498:LEU:O	1:C:2501:GLN:CB	2.66	0.42
1:D:3324:VAL:HG21	1:D:3365:PHE:CZ	2.55	0.42
1:D:3367:HIS:N	1:D:3367:HIS:ND1	2.67	0.42
1:D:3400:THR:HG23	1:D:3403:VAL:CG2	2.48	0.42
1:E:4293:ALA:O	1:E:4296:LYS:CB	2.67	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4294:ALA:C	1:E:4296:LYS:N	2.76	0.42
1:E:4304:GLU:H	1:E:4304:GLU:HG3	1.31	0.42
1:E:4401:PRO:O	1:E:4405:ARG:N	2.47	0.42
1:E:4506:GLU:HG2	1:E:4511:ARG:CD	2.49	0.42
1:G:6122:GLN:O	1:G:6125:HIS:CB	2.68	0.42
1:G:6137:ILE:HG22	1:G:6221:LEU:HD21	2.01	0.42
1:G:6345:ASP:CG	1:G:6346:LYS:N	2.78	0.42
1:G:6394:GLY:CA	1:G:6425:GLN:HG3	2.49	0.42
1:H:7202:CYS:SG	1:H:7203:ILE:N	2.92	0.42
1:H:7209:ASN:OD1	1:H:7209:ASN:C	2.62	0.42
1:H:7270:ARG:CG	1:H:7271:GLU:N	2.80	0.42
1:H:7482:ASN:O	1:H:7483:THR:C	2.62	0.42
1:H:7534:LEU:HA	1:H:7539:MSE:HG3	2.00	0.42
1:A:57:LYS:HB2	1:B:1219:MSE:HA	2.01	0.42
1:A:193:ILE:O	1:A:195:PRO:HD3	2.19	0.42
1:A:454:LEU:HD13	1:A:458:ARG:HH12	1.77	0.42
1:B:1069:HIS:O	1:B:1071:ASN:N	2.53	0.42
1:B:1085:ILE:HG23	1:B:1086:MSE:CE	2.49	0.42
1:B:1144:ARG:HH12	1:B:1245:ARG:N	2.16	0.42
1:C:2048:LEU:N	1:C:2048:LEU:HD22	2.33	0.42
1:C:2073:LYS:C	1:C:2075:MSE:H	2.28	0.42
1:C:2073:LYS:C	1:C:2075:MSE:N	2.77	0.42
1:C:2232:ASP:O	1:C:2235:ILE:N	2.52	0.42
1:C:2425:GLN:O	1:C:2426:ALA:O	2.36	0.42
1:C:2494:ALA:O	1:C:2497:ALA:HB3	2.18	0.42
1:D:3137:ILE:O	1:D:3139:ASP:N	2.51	0.42
1:D:3208:ASP:O	1:D:3210:ILE:HD13	2.19	0.42
1:D:3238:PHE:CD2	1:D:3239:MSE:HG2	2.54	0.42
1:D:3255:GLU:O	1:D:3257:PHE:N	2.53	0.42
1:D:3261:ASN:O	1:D:3264:ARG:HG2	2.19	0.42
1:D:3315:ALA:C	1:D:3319:ILE:HD12	2.44	0.42
1:D:3486:ILE:H	1:D:3486:ILE:HG12	1.44	0.42
1:E:4310:LEU:HD23	1:E:4427:GLU:CG	2.49	0.42
1:F:5243:THR:HA	1:F:5247:GLY:O	2.19	0.42
1:F:5295:GLN:HE22	1:F:5305:HIS:CE1	2.38	0.42
1:F:5487:SER:O	1:F:5490:VAL:CG2	2.61	0.42
1:G:6177:MSE:O	1:G:6177:MSE:HE3	2.19	0.42
1:G:6188:THR:HG23	1:G:6193:ILE:O	2.20	0.42
1:G:6306:LYS:O	1:G:6386:PRO:HA	2.19	0.42
1:H:7530:VAL:O	1:H:7531:THR:C	2.63	0.42
1:H:7536:ALA:C	1:H:7538:LYS:H	2.26	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:7571:GLU:O	1:H:7571:GLU:HG3	2.20	0.42
1:A:298:ILE:HD12	1:A:413:ARG:HD3	2.00	0.42
1:A:338:GLN:C	1:A:340:LYS:N	2.77	0.42
1:B:1137:ILE:N	1:B:1204:ASP:O	2.49	0.42
1:C:2154:HIS:HB3	1:C:2197:ARG:HD2	2.02	0.42
1:C:2416:ILE:H	1:C:2416:ILE:CD1	2.23	0.42
1:C:2437:THR:C	1:C:2438:GLU:HG2	2.44	0.42
1:C:2528:ILE:HD13	1:C:2553:VAL:HB	2.00	0.42
1:C:2536:ALA:C	1:C:2538:LYS:H	2.27	0.42
1:D:3182:GLY:O	1:D:3185:CYS:HB2	2.20	0.42
1:D:3507:LEU:HD13	1:D:3507:LEU:HA	1.83	0.42
1:E:4388:THR:HA	1:E:4415:VAL:HB	2.02	0.42
1:E:4419:LEU:HD13	1:E:4419:LEU:N	2.34	0.42
1:E:4549:LYS:HD3	1:E:4549:LYS:N	2.35	0.42
1:F:5116:VAL:HG13	1:F:5117:GLY:N	2.34	0.42
1:F:5271:GLU:O	1:F:5485:HIS:NE2	2.53	0.42
1:F:5358:ILE:HD12	1:F:5358:ILE:N	2.34	0.42
1:F:5363:GLU:C	1:F:5365:PHE:N	2.76	0.42
1:F:5416:ILE:H	1:F:5416:ILE:CD1	2.29	0.42
1:G:6026:LYS:HB3	1:G:6027:PRO:HD3	2.00	0.42
1:G:6194:ARG:HB2	1:G:6197:ARG:CG	2.42	0.42
1:G:6210:ILE:HA	1:G:6213:LEU:HB2	2.01	0.42
1:G:6276:PHE:HD1	1:G:6277:ASN:N	2.17	0.42
1:G:6335:GLN:HE21	1:G:6335:GLN:C	2.28	0.42
1:G:6351:VAL:HA	1:G:6367:HIS:O	2.20	0.42
1:H:7325:MSE:HE2	1:H:7325:MSE:HB3	1.95	0.42
1:H:7511:ARG:C	1:H:7512:LEU:HD12	2.45	0.42
1:H:7553:VAL:O	1:H:7556:ARG:N	2.47	0.42
1:A:215:ASP:HB3	1:A:218:TYR:HB2	2.01	0.42
1:A:270:ARG:HG3	1:A:271:GLU:N	2.34	0.42
1:A:325:MSE:HE2	1:A:492:LEU:CD1	2.46	0.42
1:A:397:ARG:HH22	1:A:429:THR:HG22	1.80	0.42
1:A:566:LEU:HD23	1:A:566:LEU:HA	1.75	0.42
1:B:1359:ASP:OD2	1:B:1362:GLN:CB	2.68	0.42
1:B:1376:THR:N	1:B:1379:ASP:HB2	2.35	0.42
1:C:2094:LYS:HD3	1:C:2558:TRP:HZ2	1.84	0.42
1:C:2169:LEU:N	1:C:2169:LEU:CD1	2.82	0.42
1:C:2382:ASN:O	1:C:2384:LEU:N	2.53	0.42
1:D:3072:LEU:HG	1:D:3081:LYS:HD2	2.01	0.42
1:D:3082:TYR:O	1:D:3085:ILE:CG2	2.66	0.42
1:D:3082:TYR:HB2	1:D:3110:ILE:HG23	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3144:ARG:O	1:D:3147:VAL:HB	2.20	0.42
1:D:3415:VAL:HG13	1:D:3442:LEU:HB2	2.02	0.42
1:D:3417:PHE:CZ	1:D:3512:LEU:HD22	2.53	0.42
1:E:4209:ASN:HB3	1:E:4212:LEU:HD12	2.01	0.42
1:E:4218:TYR:O	1:F:5057:LYS:CE	2.67	0.42
1:E:4359:ASP:HB3	1:E:4362:GLN:OE1	2.20	0.42
1:E:4421:ASN:HA	1:E:4422:PRO:C	2.40	0.42
1:F:5376:THR:CG2	1:F:5378:GLU:H	2.29	0.42
1:G:6079:LEU:HD11	1:G:6119:ALA:CA	2.49	0.42
1:G:6116:VAL:O	1:G:6120:CYS:N	2.48	0.42
1:G:6300:LYS:CD	1:G:6304:GLU:HB2	2.48	0.42
1:G:6402:ASP:O	1:G:6405:ARG:HG2	2.20	0.42
1:A:57:LYS:HG3	1:B:1219:MSE:HA	2.00	0.42
1:A:244:ASP:OD1	1:A:248:ARG:NH1	2.53	0.42
1:A:324:VAL:HG12	1:A:325:MSE:N	2.33	0.42
1:A:376:THR:CG2	1:A:377:PHE:N	2.82	0.42
1:A:397:ARG:C	1:A:398:LEU:HD12	2.45	0.42
1:A:546:PRO:HG2	1:A:549:LYS:HD2	2.00	0.42
1:B:1101:GLN:H	1:B:1101:GLN:HG3	1.54	0.42
1:B:1122:GLN:O	1:B:1125:HIS:HB2	2.19	0.42
1:B:1412:GLU:O	1:B:1440:ARG:NH1	2.49	0.42
1:B:1422:PRO:HB2	1:B:1423:THR:H	1.72	0.42
1:C:2072:LEU:HD11	1:C:2081:LYS:CB	2.47	0.42
1:C:2218:TYR:CD2	1:C:2219:MSE:N	2.88	0.42
1:C:2244:ASP:HA	1:C:2248:ARG:NH1	2.34	0.42
1:C:2482:ASN:N	1:C:2482:ASN:HD22	2.17	0.42
1:C:2496:LYS:O	1:C:2497:ALA:C	2.60	0.42
1:D:3119:ALA:O	1:D:3122:GLN:N	2.53	0.42
1:E:4068:PHE:CE1	1:E:4084:TYR:CE2	3.07	0.42
1:E:4397:ARG:NH1	1:E:4429:THR:HG22	2.34	0.42
1:F:5294:ALA:O	1:F:5297:VAL:HG22	2.19	0.42
1:F:5453:LYS:HB2	1:F:5459:VAL:CG1	2.29	0.42
1:F:5467:ASN:O	1:F:5469:TYR:N	2.52	0.42
1:F:5520:GLN:O	1:F:5523:SER:HB2	2.19	0.42
1:F:5521:GLU:O	1:F:5522:VAL:C	2.62	0.42
1:F:5532:GLU:O	1:F:5533:TYR:C	2.62	0.42
1:G:6100:LEU:CD2	1:G:6189:ALA:HB2	2.48	0.42
1:G:6180:PRO:O	1:G:6181:VAL:C	2.61	0.42
1:H:7107:LEU:O	1:H:7108:MSE:C	2.60	0.42
1:H:7362:GLN:C	1:H:7364:PRO:HD2	2.45	0.42
1:H:7386:PRO:HG2	1:H:7407:MSE:SE	2.69	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:7471:PHE:CE1	1:H:7472:PRO:HG3	2.54	0.42
1:H:7543:TYR:HA	1:H:7544:PRO:C	2.44	0.42
1:H:7550:ALA:O	1:H:7554:LYS:CG	2.64	0.42
1:A:235:ILE:O	1:A:239:MSE:HG2	2.20	0.42
1:A:258:GLY:O	1:A:260:HIS:N	2.53	0.42
1:A:277:ASN:OD1	1:A:280:ILE:HG13	2.19	0.42
1:A:307:ILE:HG13	1:A:388:THR:OG1	2.19	0.42
1:A:440:ARG:HB3	1:A:440:ARG:CZ	2.49	0.42
1:B:1169:LEU:HD12	1:B:1169:LEU:N	2.34	0.42
1:B:1243:THR:HB	1:B:1248:ARG:NH1	2.34	0.42
1:B:1335:GLN:HA	1:B:1338:GLN:OE1	2.19	0.42
1:C:2266:LEU:HD12	1:C:2270:ARG:HB3	2.02	0.42
1:C:2332:LEU:HG	1:C:2336:GLU:OE2	2.20	0.42
1:D:3166:ILE:HG21	1:D:3172:LEU:CD1	2.46	0.42
1:D:3174:VAL:CG1	1:D:3220:GLY:HA3	2.49	0.42
1:D:3480:LEU:HD21	1:D:3556:ARG:CB	2.50	0.42
1:D:3481:CYS:O	1:D:3482:ASN:C	2.62	0.42
1:F:5086:MSE:HE3	1:F:5111:VAL:HG22	2.02	0.42
1:F:5331:GLY:O	1:F:5332:LEU:O	2.37	0.42
1:G:6101:GLN:O	1:G:6102:ASP:C	2.63	0.42
1:G:6175:TYR:CE2	1:G:6218:TYR:HD2	2.38	0.42
1:H:7359:ASP:O	1:H:7362:GLN:HB2	2.20	0.42
1:H:7388:THR:OG1	1:H:7415:VAL:CG2	2.68	0.42
1:H:7410:ILE:HB	1:H:7411:ASN:ND2	2.35	0.42
1:H:7521:GLU:HG3	1:H:7522:VAL:N	2.35	0.42
1:A:247:GLY:O	1:A:250:THR:HG22	2.20	0.42
1:A:415:VAL:HG12	1:A:417:PHE:HE1	1.85	0.42
1:B:1167:LEU:C	1:B:1169:LEU:N	2.78	0.42
1:B:1232:ASP:O	1:B:1233:ASP:C	2.62	0.42
1:B:1407:MSE:HG3	1:B:1414:PRO:HB3	2.02	0.42
1:C:2522:VAL:HG12	1:C:2526:ILE:HD11	2.02	0.42
1:C:2532:GLU:O	1:C:2533:TYR:C	2.63	0.42
1:D:3088:ILE:N	1:D:3088:ILE:HD13	2.35	0.42
1:D:3243:THR:C	1:D:3248:ARG:HH11	2.27	0.42
1:D:3321:ASN:O	1:D:3324:VAL:N	2.53	0.42
1:D:3571:GLU:O	1:D:3571:GLU:HG3	2.20	0.42
1:E:4253:GLN:HG3	1:E:4276:PHE:CE2	2.54	0.42
1:E:4431:GLU:O	1:E:4435:THR:HG23	2.19	0.42
1:F:5137:ILE:CG2	1:F:5138:SER:N	2.82	0.42
1:F:5313:GLY:O	1:F:5314:GLU:C	2.62	0.42
1:F:5422:PRO:C	1:F:5424:ALA:H	2.28	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5432:GLU:HG2	1:F:5432:GLU:H	1.62	0.42
1:F:5451:PRO:HA	1:F:5462:PRO:HD2	2.01	0.42
1:F:5466:ASN:CB	1:F:5468:VAL:HG12	2.46	0.42
1:F:5570:TYR:CZ	1:H:7046:GLN:NE2	2.81	0.42
1:G:6165:ARG:NE	1:G:6259:ASN:ND2	2.67	0.42
1:G:6199:LEU:HD12	1:G:6200:PRO:HD2	2.02	0.42
1:G:6358:ILE:HG12	1:G:6366:THR:HG21	2.01	0.42
1:H:7132:GLY:HA3	1:H:7177:MSE:HE2	2.01	0.42
1:H:7159:VAL:HG21	1:H:7184:LEU:HD13	2.01	0.42
1:H:7161:THR:OG1	1:H:7162:ASP:N	2.53	0.42
1:H:7416:ILE:N	1:H:7416:ILE:CD1	2.83	0.42
1:H:7431:GLU:C	1:H:7433:ALA:H	2.28	0.42
1:H:7542:ARG:HD3	1:H:7543:TYR:N	2.33	0.42
1:A:55:PRO:C	1:A:57:LYS:H	2.27	0.42
1:A:217:PHE:O	1:A:218:TYR:C	2.63	0.42
1:A:320:ALA:HB1	1:A:365:PHE:CZ	2.54	0.42
1:A:335:GLN:HG3	1:A:336:GLU:N	2.34	0.42
1:A:416:ILE:O	1:A:416:ILE:HG12	2.19	0.42
1:B:1345:ASP:HB2	3:B:1601:NAD:O2B	2.19	0.42
1:B:1453:LYS:HB2	1:B:1459:VAL:HG13	2.00	0.42
1:C:2129:ARG:NH2	1:D:3129:ARG:NH2	2.67	0.42
1:C:2398:LEU:N	1:C:2398:LEU:CD1	2.80	0.42
1:C:2399:PHE:CB	1:C:2428:CYS:HB3	2.48	0.42
1:C:2401:PRO:HA	1:C:2436:LEU:CD2	2.50	0.42
1:C:2416:ILE:CD1	1:C:2442:LEU:O	2.63	0.42
1:C:2453:LYS:HZ2	1:C:2457:GLY:HA2	1.84	0.42
1:C:2518:ASN:O	1:C:2522:VAL:HG23	2.19	0.42
1:C:2552:TYR:CE1	1:C:2556:ARG:CZ	3.02	0.42
1:D:3212:LEU:C	1:D:3214:LYS:N	2.77	0.42
1:E:4070:ARG:O	1:E:4073:LYS:HB3	2.19	0.42
1:F:5254:PHE:HD2	1:F:5257:PHE:CE1	2.37	0.42
1:F:5324:VAL:O	1:F:5325:MSE:C	2.63	0.42
1:F:5401:PRO:O	1:F:5405:ARG:N	2.44	0.42
1:G:6038:MSE:HE2	1:G:6038:MSE:HB3	2.01	0.42
1:G:6191:ALA:HB1	1:G:6476:LEU:HD23	2.00	0.42
1:G:6238:PHE:HA	1:G:6241:ALA:HB3	2.02	0.42
1:H:7033:ARG:NH1	1:H:7152:GLU:OE1	2.53	0.42
1:H:7242:ILE:HG22	1:H:7243:THR:N	2.35	0.42
1:H:7298:ILE:HD11	1:H:7442:LEU:CD2	2.49	0.42
1:H:7411:ASN:C	1:H:7413:ARG:N	2.78	0.42
1:A:183:LYS:NZ	1:A:255:GLU:OE2	2.52	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:275:THR:O	1:A:486:ILE:HG13	2.20	0.41
1:A:521:GLU:CG	1:A:522:VAL:N	2.83	0.41
1:B:1044:GLU:O	1:B:1048:LEU:HB2	2.20	0.41
1:B:1095:LEU:O	1:B:1096:PHE:C	2.63	0.41
1:B:1162:ASP:OD2	1:B:1225:ARG:NH1	2.53	0.41
1:B:1194:ARG:HB2	1:B:1197:ARG:HG3	2.02	0.41
1:C:2376:THR:O	1:C:2379:ASP:N	2.53	0.41
1:D:3306:LYS:O	1:D:3386:PRO:HA	2.20	0.41
1:D:3321:ASN:O	1:D:3322:LEU:C	2.63	0.41
1:E:4104:ILE:O	1:E:4108:MSE:HE2	2.20	0.41
1:E:4120:CYS:O	1:E:4175:TYR:HB3	2.20	0.41
1:E:4312:ALA:HB2	1:E:4343:MSE:HE3	1.97	0.41
1:E:4351:VAL:CG1	1:E:4352:LYS:N	2.82	0.41
1:F:5219:MSE:HE3	1:F:5219:MSE:HB2	1.95	0.41
1:F:5254:PHE:CD2	1:F:5257:PHE:CE1	3.08	0.41
1:G:6060:THR:O	1:G:6062:ASP:N	2.53	0.41
1:G:6487:SER:C	1:G:6489:SER:N	2.78	0.41
1:G:6535:TYR:HA	1:G:6540:ALA:HB3	2.02	0.41
1:H:7075:MSE:HG3	1:H:7080:GLU:OE1	2.20	0.41
1:H:7271:GLU:HA	1:H:7485:HIS:HD2	1.85	0.41
1:H:7281:GLN:HB2	1:H:7491:PHE:CE2	2.55	0.41
1:H:7499:THR:C	1:H:7501:GLN:N	2.78	0.41
1:B:1026:LYS:N	1:B:1027:PRO:CD	2.83	0.41
1:B:1087:GLY:C	1:B:1089:GLN:N	2.78	0.41
1:B:1289:ALA:O	1:B:1499:THR:OG1	2.37	0.41
1:B:1291:LEU:HD23	1:B:1417:PHE:CE2	2.55	0.41
1:B:1341:ILE:HD12	1:B:1365:PHE:HE2	1.85	0.41
1:C:2175:TYR:CD1	1:C:2212:LEU:HD21	2.55	0.41
1:C:2344:PHE:CD1	1:C:2349:LEU:HA	2.55	0.41
1:C:2470:ILE:O	1:C:2471:PHE:C	2.62	0.41
1:D:3027:PRO:C	1:D:3030:LEU:H	2.27	0.41
1:D:3133:LEU:HD23	1:D:3199:LEU:HD11	2.02	0.41
1:D:3295:GLN:CD	1:D:3305:HIS:CE1	2.97	0.41
1:D:3333:SER:CB	1:D:3336:GLU:HG3	2.49	0.41
1:D:3384:LEU:C	1:D:3385:LYS:HE2	2.45	0.41
1:D:3407:MSE:SE	1:D:3411:ASN:HD21	2.52	0.41
1:D:3551:LYS:O	1:D:3552:TYR:C	2.63	0.41
1:E:4116:VAL:CG1	1:E:4117:GLY:N	2.84	0.41
1:E:4313:GLY:HA3	3:E:4601:NAD:O5B	2.20	0.41
1:E:4334:GLU:O	1:E:4338:GLN:OE1	2.38	0.41
1:E:4336:GLU:O	1:E:4340:LYS:HG3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4453:LYS:HD3	1:E:4457:GLY:CA	2.50	0.41
1:E:4498:LEU:C	1:E:4498:LEU:HD12	2.44	0.41
1:F:5309:PHE:HD2	1:F:5343:MSE:HG2	1.86	0.41
1:F:5335:GLN:NE2	1:F:5335:GLN:HA	2.35	0.41
1:F:5420:SER:HB2	1:F:5426:ALA:HA	2.02	0.41
1:F:5533:TYR:CD2	1:F:5534:LEU:N	2.88	0.41
1:G:6298:ILE:HG22	1:G:6300:LYS:N	2.35	0.41
1:G:6300:LYS:HD2	1:G:6304:GLU:CG	2.50	0.41
1:G:6336:GLU:O	1:G:6337:ALA:C	2.62	0.41
1:G:6377:PHE:CZ	1:G:6389:ILE:HD11	2.56	0.41
1:G:6511:ARG:NH1	1:G:6513:TYR:O	2.52	0.41
1:H:7116:VAL:CG1	1:H:7117:GLY:N	2.82	0.41
1:H:7158:VAL:CG2	1:H:7199:LEU:HD23	2.48	0.41
1:H:7264:ARG:HG3	1:H:7265:PHE:N	2.35	0.41
1:H:7374:PRO:HG3	1:H:7380:ALA:CA	2.49	0.41
1:A:133:LEU:HB2	1:A:199:LEU:HD11	2.02	0.41
1:B:1227:ARG:CG	1:B:1227:ARG:NH1	2.71	0.41
1:B:1345:ASP:C	1:B:1345:ASP:OD1	2.62	0.41
1:C:2144:ARG:HE	1:C:2148:ASP:CG	2.27	0.41
1:C:2381:VAL:HG13	1:C:2407:MSE:CE	2.50	0.41
1:D:3117:GLY:O	1:D:3118:LEU:C	2.64	0.41
1:D:3291:LEU:O	1:D:3292:LEU:C	2.62	0.41
1:D:3298:ILE:O	1:D:3299:SER:C	2.62	0.41
1:D:3456:ASP:CG	1:D:3458:ARG:HD3	2.45	0.41
1:E:4031:ASN:OD1	1:E:4031:ASN:C	2.62	0.41
1:E:4061:GLN:HA	1:E:4064:GLN:HG3	2.02	0.41
1:E:4179:ILE:O	1:E:4182:GLY:N	2.53	0.41
1:E:4302:ILE:HA	1:E:4305:HIS:CE1	2.55	0.41
1:F:5177:MSE:O	1:F:5177:MSE:HG3	2.20	0.41
1:F:5303:SER:N	1:F:5340:LYS:HZ2	2.15	0.41
1:F:5439:GLY:HA3	1:F:5460:PHE:HE2	1.85	0.41
1:G:6082:TYR:O	1:G:6086:MSE:HB2	2.20	0.41
1:G:6429:THR:HG23	1:G:6432:GLU:CG	2.50	0.41
1:G:6434:TYR:O	1:G:6439:GLY:N	2.53	0.41
1:H:7040:PHE:HE2	1:H:7565:LEU:CD1	2.33	0.41
1:H:7060:THR:H	1:H:7063:ILE:HD12	1.84	0.41
1:H:7092:ASN:OD1	1:H:7092:ASN:C	2.63	0.41
1:H:7244:ASP:N	1:H:7248:ARG:HH12	2.14	0.41
1:H:7276:PHE:HD1	1:H:7281:GLN:OE1	2.03	0.41
1:A:37:GLY:C	1:A:39:ALA:H	2.28	0.41
1:A:97:TYR:CE2	1:A:188:THR:HB	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:112:TYR:OH	1:A:183:LYS:HE3	2.20	0.41
1:A:421:ASN:HA	1:A:422:PRO:O	2.21	0.41
1:B:1401:PRO:HA	1:B:1436:LEU:HD23	2.01	0.41
1:B:1431:GLU:O	1:B:1433:ALA:N	2.53	0.41
1:C:2205:VAL:HG11	1:C:2231:TYR:CD1	2.55	0.41
1:C:2417:PHE:CE2	1:C:2444:ALA:CB	3.04	0.41
1:C:2507:LEU:HD13	1:C:2507:LEU:HA	1.88	0.41
1:D:3083:ILE:O	1:D:3084:TYR:C	2.62	0.41
1:D:3113:THR:HA	1:D:3114:PRO:HA	1.84	0.41
1:D:3120:CYS:O	1:D:3123:TYR:HB2	2.21	0.41
1:D:3184:LEU:HA	1:D:3184:LEU:HD12	1.90	0.41
1:D:3228:THR:O	1:D:3229:GLN:C	2.63	0.41
1:E:4100:LEU:HD23	1:E:4189:ALA:HB2	2.01	0.41
1:E:4218:TYR:O	1:F:5057:LYS:HE2	2.20	0.41
1:E:4392:VAL:HG13	3:E:4601:NAD:O4D	2.20	0.41
1:F:5172:LEU:HD23	1:F:5172:LEU:HA	1.79	0.41
1:F:5288:LEU:C	1:F:5290:GLY:N	2.70	0.41
1:F:5336:GLU:HG3	1:F:5336:GLU:H	1.51	0.41
1:G:6028:LEU:HD21	1:G:6048:LEU:HD12	2.01	0.41
1:G:6150:TRP:CE2	1:G:6199:LEU:HD13	2.55	0.41
1:G:6182:GLY:O	1:G:6185:CYS:N	2.52	0.41
1:G:6374:PRO:CG	1:G:6380:ALA:HB2	2.49	0.41
1:G:6422:PRO:HB2	1:G:6423:THR:H	1.63	0.41
1:G:6508:ALA:C	1:G:6510:GLY:N	2.78	0.41
1:H:7108:MSE:HE2	1:H:7108:MSE:HB2	1.77	0.41
1:H:7159:VAL:CG2	1:H:7184:LEU:HD11	2.48	0.41
1:H:7238:PHE:CE1	1:H:7242:ILE:HG13	2.56	0.41
1:H:7477:ALA:O	1:H:7478:VAL:C	2.64	0.41
1:H:7548:ASP:OD1	1:H:7550:ALA:HB3	2.20	0.41
1:A:183:LYS:HZ3	1:A:183:LYS:HG2	1.62	0.41
1:A:319:ILE:C	1:A:321:ASN:N	2.78	0.41
1:A:346:LYS:C	1:A:348:GLY:H	2.28	0.41
1:A:437:THR:HG21	1:A:441:CYS:HB3	2.03	0.41
1:A:519:ILE:HG13	1:A:519:ILE:O	2.20	0.41
1:A:552:TYR:CE1	1:A:556:ARG:NE	2.89	0.41
1:B:1133:LEU:HB3	1:B:1201:VAL:HG13	2.02	0.41
1:C:2259:ASN:ND2	1:C:2259:ASN:N	2.68	0.41
1:C:2292:LEU:O	1:C:2293:ALA:C	2.64	0.41
1:C:2338:GLN:O	1:C:2367:HIS:CE1	2.74	0.41
1:D:3243:THR:CB	1:D:3248:ARG:HD2	2.37	0.41
1:D:3271:GLU:O	1:D:3485:HIS:NE2	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3278:ASP:C	1:D:3280:ILE:H	2.27	0.41
1:D:3506:GLU:HB3	1:D:3511:ARG:CD	2.51	0.41
1:D:3546:PRO:HG3	1:D:3552:TYR:CD1	2.56	0.41
1:E:4089:GLN:O	1:E:4091:ARG:N	2.51	0.41
1:E:4454:LEU:HD11	1:E:4460:PHE:CE2	2.55	0.41
1:E:4535:TYR:HD2	1:E:4535:TYR:HA	1.73	0.41
1:F:5159:VAL:HG23	1:F:5184:LEU:HD11	2.01	0.41
1:F:5286:VAL:O	1:F:5513:TYR:OH	2.36	0.41
1:G:6253:GLN:HG3	1:G:6276:PHE:CE2	2.55	0.41
1:G:6306:LYS:NZ	1:G:6384:LEU:O	2.52	0.41
1:H:7112:TYR:CG	1:H:7113:THR:N	2.85	0.41
1:H:7302:ILE:O	1:H:7303:SER:C	2.63	0.41
1:H:7328:VAL:CG2	1:H:7334:GLU:N	2.83	0.41
1:H:7510:GLY:O	1:H:7512:LEU:CD1	2.68	0.41
1:A:108:MSE:HE2	1:A:108:MSE:HB2	1.84	0.41
1:A:166:ILE:HD13	1:A:256:ASP:CB	2.51	0.41
1:B:1218:TYR:HB3	1:B:1222:TYR:CE2	2.55	0.41
1:B:1265:PHE:HB3	1:B:1269:TYR:HE1	1.86	0.41
1:C:2171:ASP:O	1:C:2172:LEU:HD23	2.20	0.41
1:C:2234:LEU:HD12	1:C:2234:LEU:C	2.45	0.41
1:C:2419:LEU:O	1:C:2420:SER:C	2.63	0.41
1:C:2470:ILE:O	1:C:2472:PRO:N	2.53	0.41
1:C:2552:TYR:CD1	1:C:2556:ARG:NH1	2.89	0.41
1:D:3377:PHE:O	1:D:3381:VAL:HG23	2.21	0.41
1:E:4047:MSE:SE	1:E:4566:LEU:HD22	2.71	0.41
1:E:4165:ARG:CD	1:E:4259:ASN:HD21	2.33	0.41
1:E:4209:ASN:O	1:E:4213:LEU:HD12	2.21	0.41
1:E:4444:ALA:HB2	1:E:4512:LEU:HD13	2.02	0.41
1:F:5041:THR:OG1	1:F:5042:LEU:N	2.54	0.41
1:F:5142:HIS:C	1:F:5144:ARG:N	2.77	0.41
1:F:5295:GLN:C	1:F:5297:VAL:N	2.79	0.41
1:F:5474:VAL:O	1:F:5475:ALA:C	2.63	0.41
1:H:7037:GLY:O	1:H:7054:LEU:HD13	2.20	0.41
1:H:7044:GLU:O	1:H:7048:LEU:HD23	2.20	0.41
1:H:7292:LEU:O	1:H:7295:GLN:N	2.54	0.41
1:H:7298:ILE:HD12	1:H:7298:ILE:HA	1.84	0.41
1:A:128:ARG:HG3	1:B:1091:ARG:CZ	2.50	0.41
1:A:219:MSE:O	1:A:219:MSE:CG	2.65	0.41
1:A:373:ILE:HD12	1:A:373:ILE:N	2.34	0.41
1:A:535:TYR:O	1:A:538:LYS:HD3	2.20	0.41
1:B:1060:THR:O	1:B:1061:GLN:C	2.61	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1310:LEU:HD21	1:B:1398:LEU:CB	2.45	0.41
1:B:1491:PHE:O	1:B:1494:ALA:N	2.51	0.41
1:C:2095:LEU:O	1:C:2096:PHE:C	2.64	0.41
1:C:2380:ALA:O	1:C:2382:ASN:N	2.53	0.41
1:D:3094:LYS:NZ	1:D:3559:ARG:O	2.50	0.41
1:E:4055:PRO:O	1:E:4057:LYS:N	2.54	0.41
1:E:4107:LEU:HD13	1:E:4107:LEU:HA	1.78	0.41
1:F:5028:LEU:HD13	1:F:5028:LEU:HA	1.98	0.41
1:F:5278:ASP:O	1:F:5280:ILE:N	2.53	0.41
1:F:5416:ILE:O	1:F:5416:ILE:HG12	2.21	0.41
1:F:5531:THR:O	1:F:5534:LEU:HB2	2.20	0.41
1:G:6036:LYS:O	1:G:6037:GLY:C	2.62	0.41
1:G:6210:ILE:O	1:G:6214:LYS:HG3	2.21	0.41
1:G:6301:PRO:O	1:G:6302:ILE:C	2.63	0.41
1:G:6332:LEU:HD23	1:G:6337:ALA:N	2.36	0.41
1:G:6346:LYS:HB3	3:G:6601:NAD:C5A	2.50	0.41
1:H:7103:ASP:O	1:H:7104:ILE:C	2.64	0.41
1:H:7179:ILE:CB	1:H:7180:PRO:CD	2.97	0.41
1:A:98:ARG:HG3	1:A:99:ILE:N	2.32	0.41
1:A:212:LEU:C	1:A:214:LYS:N	2.78	0.41
1:A:220:GLY:HA2	1:B:1056:PRO:HG2	2.03	0.41
1:A:292:LEU:O	1:A:296:LYS:HB2	2.21	0.41
1:A:381:VAL:HG13	1:A:407:MSE:HE1	2.02	0.41
1:A:543:TYR:HA	1:A:544:PRO:C	2.46	0.41
1:B:1075:MSE:HG3	1:B:1080:GLU:HG2	2.02	0.41
1:B:1082:TYR:O	1:B:1083:ILE:C	2.62	0.41
1:B:1229:GLN:HA	1:B:1229:GLN:NE2	2.35	0.41
1:B:1229:GLN:HE22	1:B:1232:ASP:CG	2.28	0.41
1:B:1322:LEU:O	1:B:1325:MSE:HB2	2.20	0.41
1:C:2069:HIS:O	1:C:2071:ASN:N	2.54	0.41
1:D:3116:VAL:HG13	1:D:3117:GLY:H	1.84	0.41
1:D:3298:ILE:HD12	1:D:3413:ARG:HD3	2.03	0.41
1:D:3515:PRO:C	1:D:3517:ALA:N	2.77	0.41
1:E:4092:ASN:OD1	1:E:4092:ASN:C	2.63	0.41
1:E:4135:ILE:CD1	1:E:4238:PHE:HD1	2.34	0.41
1:E:4175:TYR:CE2	1:E:4218:TYR:HD2	2.39	0.41
1:E:4303:SER:O	1:E:4340:LYS:HE2	2.20	0.41
1:E:4336:GLU:H	1:E:4336:GLU:HG3	1.37	0.41
1:E:4357:LYS:HA	1:E:4357:LYS:HD3	1.78	0.41
1:E:4422:PRO:HB2	1:E:4423:THR:H	1.60	0.41
1:E:4481:CYS:SG	1:E:4531:THR:HB	2.60	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:5024:LYS:HA	1:F:5028:LEU:CD2	2.51	0.41
1:F:5137:ILE:C	1:F:5139:ASP:N	2.78	0.41
1:F:5470:ILE:C	1:F:5472:PRO:CD	2.93	0.41
1:F:5494:ALA:O	1:F:5495:ALA:C	2.63	0.41
1:F:5496:LYS:O	1:F:5497:ALA:C	2.63	0.41
1:G:6123:TYR:O	1:G:6125:HIS:N	2.54	0.41
1:G:6164:GLU:O	1:G:6171:ASP:N	2.54	0.41
1:G:6382:ASN:O	1:G:6385:LYS:HE2	2.20	0.41
1:G:6384:LEU:HD12	1:G:6384:LEU:HA	1.90	0.41
1:G:6471:PHE:CG	1:G:6472:PRO:CD	3.00	0.41
1:H:7144:ARG:HA	1:H:7144:ARG:HD2	1.86	0.41
1:H:7319:ILE:O	1:H:7321:ASN:N	2.54	0.41
1:H:7483:THR:HG1	1:H:7534:LEU:HD13	1.86	0.41
1:A:183:LYS:HD3	1:A:183:LYS:HA	1.63	0.41
1:A:243:THR:CB	1:A:248:ARG:HD2	2.12	0.41
1:A:298:ILE:CD1	1:A:413:ARG:HD3	2.51	0.41
1:A:325:MSE:HB3	1:A:492:LEU:HD13	2.02	0.41
1:A:363:GLU:HB2	1:A:364:PRO:HD3	2.03	0.41
1:A:384:LEU:O	1:A:385:LYS:HB2	2.21	0.41
1:A:478:VAL:HG13	1:A:483:THR:HB	2.02	0.41
1:A:492:LEU:O	1:A:495:ALA:HB3	2.21	0.41
1:A:535:TYR:CZ	1:A:545:GLU:HA	2.56	0.41
1:A:536:ALA:O	1:A:538:LYS:HE2	2.20	0.41
1:A:541:PHE:HD2	1:A:541:PHE:N	2.19	0.41
1:B:1066:LEU:HD11	1:B:1070:ARG:HH11	1.86	0.41
1:B:1103:ASP:OD1	1:B:1106:SER:OG	2.38	0.41
1:B:1140:ARG:NH1	1:B:1230:GLN:HG2	2.36	0.41
1:B:1298:ILE:HD12	1:B:1298:ILE:HA	1.90	0.41
1:B:1310:LEU:CD2	1:B:1399:PHE:CE2	3.03	0.41
1:B:1400:THR:O	1:B:1404:ILE:HG13	2.20	0.41
1:B:1409:SER:OG	1:B:1410:ILE:N	2.54	0.41
1:B:1420:SER:OG	1:B:1427:GLU:OE1	2.39	0.41
1:B:1469:TYR:CZ	1:B:1516:LEU:HD13	2.56	0.41
1:B:1472:PRO:O	1:B:1473:GLY:C	2.64	0.41
1:C:2054:LEU:HD23	1:D:3130:PRO:HG2	2.03	0.41
1:C:2160:VAL:HG12	1:C:2201:VAL:CB	2.47	0.41
1:C:2161:THR:HA	1:C:2257:PHE:CE1	2.55	0.41
1:C:2174:VAL:HG23	1:C:2174:VAL:O	2.21	0.41
1:C:2232:ASP:OD2	1:C:2232:ASP:N	2.37	0.41
1:C:2388:THR:CG2	1:C:2415:VAL:HB	2.41	0.41
1:C:2468:VAL:HA	1:C:2471:PHE:CE2	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3154:HIS:O	1:D:3197:ARG:CD	2.69	0.41
1:D:3183:LYS:HD2	1:D:3255:GLU:OE2	2.20	0.41
1:D:3302:ILE:CD1	1:D:3330:ASN:HD22	2.33	0.41
1:D:3307:ILE:HG22	1:D:3308:LEU:N	2.36	0.41
1:D:3308:LEU:CD1	1:D:3342:TRP:HB2	2.47	0.41
1:E:4087:GLY:C	1:E:4089:GLN:N	2.74	0.41
1:E:4116:VAL:CG2	1:E:4179:ILE:HD13	2.42	0.41
1:E:4212:LEU:O	1:E:4215:ASP:N	2.35	0.41
1:E:4239:MSE:HB3	1:E:4273:TYR:CE1	2.56	0.41
1:E:4291:LEU:O	1:E:4294:ALA:HB3	2.21	0.41
1:E:4303:SER:HA	1:E:4340:LYS:HZ1	1.84	0.41
1:E:4368:SER:O	1:E:4369:ALA:C	2.64	0.41
1:E:4429:THR:HB	1:E:4449:PHE:HE2	1.85	0.41
1:F:5103:ASP:CG	1:F:5106:SER:OG	2.64	0.41
1:F:5206:GLY:CA	1:F:5223:GLN:HE21	2.34	0.41
1:F:5255:GLU:O	1:F:5257:PHE:CD1	2.74	0.41
1:F:5568:ASP:OD1	1:F:5568:ASP:C	2.64	0.41
1:G:6140:ARG:HG3	1:G:6140:ARG:O	2.21	0.41
1:G:6217:PHE:CZ	1:H:7067:ARG:HA	2.56	0.41
1:G:6243:THR:HG22	1:G:6247:GLY:O	2.20	0.41
1:G:6252:ILE:O	1:G:6275:THR:OG1	2.37	0.41
1:G:6313:GLY:HA3	3:G:6601:NAD:O5B	2.20	0.41
1:G:6332:LEU:CD2	1:G:6337:ALA:HA	2.51	0.41
1:G:6374:PRO:HG3	1:G:6380:ALA:CB	2.51	0.41
1:G:6416:ILE:HG12	1:G:6416:ILE:O	2.20	0.41
1:H:7025:GLY:C	1:H:7027:PRO:CD	2.94	0.41
1:H:7031:ASN:HA	1:H:7032:PRO:HD2	1.85	0.41
1:H:7113:THR:HA	1:H:7116:VAL:HG12	2.03	0.41
1:H:7174:VAL:HG21	1:H:7219:MSE:HB2	2.03	0.41
1:H:7249:ASN:C	1:H:7249:ASN:OD1	2.64	0.41
1:H:7261:ASN:HA	1:H:7264:ARG:HG2	2.03	0.41
1:H:7276:PHE:O	1:H:7276:PHE:CG	2.74	0.41
1:H:7470:ILE:HG22	1:H:7471:PHE:N	2.35	0.41
1:H:7552:TYR:CE1	1:H:7556:ARG:HD2	2.56	0.41
1:A:105:GLU:HA	1:A:108:MSE:CE	2.51	0.41
1:A:159:VAL:HG21	1:A:184:LEU:HD13	2.03	0.41
1:A:503:THR:O	1:A:506:GLU:N	2.54	0.41
1:B:1140:ARG:HE	1:B:1140:ARG:HB2	1.42	0.41
1:B:1144:ARG:HH11	1:B:1244:ASP:CB	2.32	0.41
1:B:1215:ASP:HB3	1:B:1218:TYR:HB2	2.03	0.41
1:B:1253:GLN:NE2	1:B:1254:PHE:O	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1490:VAL:O	1:B:1494:ALA:N	2.54	0.41
1:C:2038:MSE:HB3	1:C:2059:GLU:HG3	2.00	0.41
1:C:2079:LEU:O	1:C:2082:TYR:HB3	2.21	0.41
1:C:2301:PRO:O	1:C:2304:GLU:OE2	2.39	0.41
1:C:2308:LEU:HD12	1:C:2342:TRP:O	2.21	0.41
1:C:2345:ASP:O	1:C:2346:LYS:C	2.64	0.41
1:C:2404:ILE:HD13	1:C:2433:ALA:HA	2.02	0.41
1:C:2544:PRO:O	1:C:2545:GLU:C	2.64	0.41
1:D:3079:LEU:HD11	1:D:3119:ALA:CA	2.49	0.41
1:D:3133:LEU:HD13	1:D:3133:LEU:HA	1.78	0.41
1:E:4097:TYR:O	1:E:4098:ARG:C	2.64	0.41
1:E:4165:ARG:HB2	1:E:4257:PHE:O	2.21	0.41
1:E:4166:ILE:HA	1:E:4166:ILE:HD13	1.74	0.41
1:E:4396:GLY:HA2	1:E:4425:GLN:CA	2.48	0.41
1:G:6061:GLN:HA	1:G:6064:GLN:NE2	2.36	0.41
1:G:6128:ARG:HG3	1:H:7091:ARG:NH1	2.36	0.41
1:G:6235:ILE:HG12	1:G:6235:ILE:H	1.64	0.41
1:G:6474:VAL:O	1:G:6477:ALA:N	2.54	0.41
1:H:7255:GLU:O	1:H:7257:PHE:CD1	2.74	0.41
1:A:28:LEU:HD12	1:A:28:LEU:HA	1.88	0.40
1:A:87:GLY:C	1:A:89:GLN:N	2.78	0.40
1:A:267:ARG:NH1	1:A:267:ARG:CG	2.84	0.40
1:A:291:LEU:HD12	1:A:323:ILE:HD11	2.03	0.40
1:A:389:ILE:CG2	1:A:389:ILE:O	2.69	0.40
1:B:1173:GLY:C	1:B:1175:TYR:H	2.29	0.40
1:B:1210:ILE:CA	1:B:1213:LEU:HD12	2.34	0.40
1:B:1252:ILE:O	1:B:1275:THR:HA	2.21	0.40
1:B:1356:ALA:C	1:B:1357:LYS:HD3	2.46	0.40
1:B:1376:THR:HB	1:B:1379:ASP:CB	2.50	0.40
1:B:1456:ASP:CG	1:B:1458:ARG:HD3	2.46	0.40
1:C:2036:LYS:O	1:C:2039:ALA:HB3	2.22	0.40
1:C:2097:TYR:HA	1:C:2100:LEU:HB2	2.02	0.40
1:C:2266:LEU:O	1:C:2267:ARG:C	2.62	0.40
1:C:2289:ALA:O	1:C:2499:THR:OG1	2.37	0.40
1:C:2321:ASN:C	1:C:2323:ILE:N	2.73	0.40
1:C:2402:ASP:CA	1:C:2405:ARG:HG2	2.49	0.40
1:C:2408:ALA:HA	1:C:2414:PRO:HG3	2.03	0.40
1:C:2429:THR:HA	1:C:2449:PHE:CE1	2.56	0.40
1:D:3183:LYS:CE	1:D:3255:GLU:OE2	2.70	0.40
1:D:3266:LEU:C	1:D:3266:LEU:CD1	2.94	0.40
1:D:3421:ASN:C	1:D:3425:GLN:HB2	2.46	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4059:GLU:CG	1:E:4063:ILE:HG21	2.46	0.40
1:E:4266:LEU:HD12	1:E:4270:ARG:HB2	2.03	0.40
1:E:4308:LEU:HD12	1:E:4309:PHE:N	2.34	0.40
1:F:5503:THR:O	1:F:5507:LEU:HD22	2.21	0.40
1:G:6182:GLY:O	1:G:6183:LYS:C	2.63	0.40
1:G:6300:LYS:HD2	1:G:6304:GLU:CB	2.49	0.40
1:G:6306:LYS:CE	1:G:6384:LEU:O	2.69	0.40
1:G:6359:ASP:OD2	1:G:6359:ASP:O	2.40	0.40
1:G:6374:PRO:CB	1:G:6383:ILE:HD12	2.50	0.40
1:G:6487:SER:OG	1:G:6539:MSE:HE1	2.20	0.40
1:H:7269:TYR:HB3	1:H:7273:TYR:CD1	2.48	0.40
1:H:7454:LEU:HD12	1:H:7454:LEU:H	1.86	0.40
1:H:7454:LEU:HD12	1:H:7458:ARG:HB2	2.03	0.40
1:A:104:ILE:C	1:A:108:MSE:HE2	2.46	0.40
1:A:354:ARG:NE	1:A:356:ALA:HB3	2.37	0.40
1:A:401:PRO:HB3	1:A:436:LEU:CD2	2.47	0.40
1:A:468:VAL:HA	1:A:471:PHE:CE2	2.56	0.40
1:B:1066:LEU:HD12	1:B:1066:LEU:O	2.21	0.40
1:B:1147:VAL:O	1:B:1149:ASN:N	2.54	0.40
1:B:1231:TYR:O	1:B:1232:ASP:C	2.62	0.40
1:B:1264:ARG:C	1:B:1266:LEU:N	2.79	0.40
1:B:1396:GLY:HA2	1:B:1425:GLN:HA	2.04	0.40
1:B:1469:TYR:C	1:B:1470:ILE:HD13	2.45	0.40
1:C:2142:HIS:O	1:C:2143:VAL:C	2.65	0.40
1:C:2210:ILE:O	1:C:2214:LYS:HD2	2.21	0.40
1:D:3333:SER:HB3	1:D:3336:GLU:CG	2.51	0.40
1:D:3376:THR:CG2	1:D:3377:PHE:N	2.84	0.40
1:E:4242:ILE:HG22	1:E:4243:THR:N	2.36	0.40
1:E:4362:GLN:O	1:E:4363:GLU:C	2.64	0.40
1:E:4401:PRO:HA	1:E:4404:ILE:HD12	2.03	0.40
1:F:5284:ALA:CB	1:F:5319:ILE:HA	2.50	0.40
1:F:5520:GLN:O	1:F:5523:SER:N	2.55	0.40
1:G:6079:LEU:HD13	1:G:6118:LEU:HB3	2.03	0.40
1:G:6240:LYS:O	1:G:6242:ILE:N	2.54	0.40
1:G:6319:ILE:HG22	1:G:6323:ILE:HD11	2.03	0.40
1:G:6394:GLY:C	1:G:6425:GLN:HG3	2.47	0.40
1:G:6447:SER:HB3	1:G:6448:PRO:HD2	2.02	0.40
1:H:7319:ILE:C	1:H:7321:ASN:N	2.77	0.40
1:H:7498:LEU:O	1:H:7499:THR:C	2.65	0.40
1:A:95:LEU:HG	1:A:99:ILE:HD12	2.03	0.40
1:A:155:VAL:HA	1:A:197:ARG:O	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:493:GLU:O	1:A:494:ALA:C	2.64	0.40
1:B:1292:LEU:HA	1:B:1292:LEU:HD23	1.81	0.40
1:B:1435:THR:C	1:B:1437:THR:N	2.76	0.40
1:C:2072:LEU:HD12	1:C:2072:LEU:HA	1.82	0.40
1:C:2119:ALA:O	1:C:2123:TYR:N	2.54	0.40
1:C:2289:ALA:O	1:C:2292:LEU:HB2	2.21	0.40
1:D:3137:ILE:HG22	1:D:3221:LEU:HD23	2.02	0.40
1:D:3169:LEU:CD2	1:D:3172:LEU:HD11	2.50	0.40
1:D:3394:GLY:O	1:D:3425:GLN:CG	2.65	0.40
1:D:3400:THR:OG1	1:D:3402:ASP:HB2	2.21	0.40
1:D:3477:ALA:HB1	1:D:3531:THR:CG2	2.44	0.40
1:E:4056:PRO:HD3	1:F:5134:PHE:HB3	2.03	0.40
1:E:4136:SER:HB2	1:E:4221:LEU:HD21	2.02	0.40
1:E:4166:ILE:O	1:E:4167:LEU:O	2.40	0.40
1:E:4356:ALA:HA	1:E:4357:LYS:HZ2	1.86	0.40
1:F:5112:TYR:C	1:F:5116:VAL:HG12	2.46	0.40
1:F:5240:LYS:HG2	1:F:5244:ASP:OD1	2.21	0.40
1:F:5412:GLU:HA	1:F:5440:ARG:NH1	2.36	0.40
1:F:5530:VAL:O	1:F:5531:THR:C	2.64	0.40
1:G:6123:TYR:C	1:G:6125:HIS:H	2.29	0.40
1:G:6165:ARG:CZ	1:G:6259:ASN:ND2	2.85	0.40
1:G:6186:LEU:O	1:G:6187:TYR:C	2.64	0.40
1:G:6419:LEU:O	1:G:6446:GLY:HA3	2.21	0.40
1:H:7104:ILE:HG23	1:H:7105:GLU:N	2.36	0.40
1:H:7262:ALA:HB1	1:H:7277:ASN:ND2	2.36	0.40
1:H:7425:GLN:O	1:H:7426:ALA:C	2.64	0.40
1:H:7429:THR:O	1:H:7430:ALA:C	2.64	0.40
1:H:7468:VAL:O	1:H:7468:VAL:CG2	2.67	0.40
1:A:532:GLU:HG2	1:A:549:LYS:HG2	2.03	0.40
1:A:553:VAL:O	1:A:554:LYS:C	2.63	0.40
1:B:1243:THR:O	1:B:1247:GLY:O	2.39	0.40
1:B:1300:LYS:NZ	1:B:1387:SER:CB	2.84	0.40
1:C:2129:ARG:NH2	1:D:3091:ARG:HG3	2.35	0.40
1:C:2546:PRO:O	1:C:2549:LYS:HE3	2.20	0.40
1:D:3060:THR:O	1:D:3061:GLN:C	2.62	0.40
1:D:3072:LEU:HA	1:D:3075:MSE:CE	2.44	0.40
1:D:3243:THR:CB	1:D:3248:ARG:HH11	2.35	0.40
1:D:3266:LEU:O	1:D:3270:ARG:CB	2.70	0.40
1:D:3300:LYS:C	1:D:3304:GLU:OE1	2.65	0.40
1:D:3370:PRO:O	1:D:3372:SER:N	2.55	0.40
1:D:3404:ILE:HG21	1:D:3436:LEU:CB	2.52	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3420:SER:HB3	1:D:3425:GLN:O	2.22	0.40
1:D:3511:ARG:HG3	1:D:3511:ARG:H	1.53	0.40
1:E:4068:PHE:CE2	1:E:4072:LEU:HD22	2.56	0.40
1:E:4174:VAL:HG21	1:E:4219:MSE:HB2	2.03	0.40
1:E:4217:PHE:O	1:E:4218:TYR:C	2.63	0.40
1:E:4281:GLN:HB3	1:E:4491:PHE:CE1	2.57	0.40
1:E:4416:ILE:HG12	1:E:4416:ILE:O	2.20	0.40
1:E:4477:ALA:HB2	1:E:4527:ALA:O	2.22	0.40
1:F:5107:LEU:HD13	1:F:5107:LEU:HA	1.85	0.40
1:F:5317:LEU:H	1:F:5317:LEU:CD1	2.05	0.40
1:F:5419:LEU:CA	1:F:5446:GLY:HA3	2.49	0.40
1:F:5425:GLN:O	1:F:5426:ALA:C	2.64	0.40
1:F:5522:VAL:O	1:F:5526:ILE:HG13	2.21	0.40
1:F:5568:ASP:OD1	1:F:5570:TYR:HD2	2.05	0.40
1:G:6205:VAL:HG11	1:G:6231:TYR:CD1	2.53	0.40
1:G:6308:LEU:HB3	1:G:6389:ILE:CD1	2.51	0.40
1:H:7193:ILE:O	1:H:7194:ARG:C	2.65	0.40
1:H:7377:PHE:O	1:H:7380:ALA:N	2.54	0.40
1:H:7400:THR:OG1	1:H:7402:ASP:HB2	2.20	0.40
1:H:7511:ARG:NH1	1:H:7511:ARG:HB3	2.37	0.40
1:A:172:LEU:O	1:A:173:GLY:C	2.65	0.40
1:A:323:ILE:HG22	1:A:324:VAL:N	2.37	0.40
1:A:432:GLU:HG2	1:A:432:GLU:H	1.76	0.40
1:A:453:LYS:HD3	1:A:454:LEU:O	2.21	0.40
1:A:470:ILE:HG22	1:A:471:PHE:N	2.36	0.40
1:B:1030:LEU:HD23	1:B:1030:LEU:HA	1.87	0.40
1:B:1266:LEU:C	1:B:1266:LEU:HD12	2.46	0.40
1:B:1339:LYS:CA	1:B:1367:HIS:NE2	2.81	0.40
1:B:1425:GLN:O	1:B:1426:ALA:C	2.64	0.40
1:B:1453:LYS:HA	1:B:1459:VAL:HA	2.03	0.40
1:C:2298:ILE:HG22	1:C:2300:LYS:N	2.37	0.40
1:C:2416:ILE:C	1:C:2417:PHE:HD1	2.30	0.40
1:C:2480:LEU:HD21	1:C:2556:ARG:CB	2.52	0.40
1:D:3112:TYR:CG	1:D:3113:THR:N	2.89	0.40
1:D:3127:PHE:CD2	1:D:3127:PHE:C	2.99	0.40
1:D:3282:GLY:O	1:D:3283:THR:C	2.64	0.40
1:D:3288:LEU:HG	1:D:3292:LEU:CD2	2.51	0.40
1:D:3307:ILE:CG2	1:D:3308:LEU:N	2.83	0.40
1:D:3429:THR:C	1:D:3431:GLU:N	2.79	0.40
1:D:3506:GLU:HA	1:D:3511:ARG:HD2	2.03	0.40
1:E:4137:ILE:HB	1:E:4205:VAL:HG12	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4336:GLU:HA	1:E:4339:LYS:HB2	2.03	0.40
1:E:4439:GLY:HA3	1:E:4460:PHE:HE2	1.86	0.40
1:E:4512:LEU:O	1:E:4513:TYR:CD2	2.74	0.40
1:G:6140:ARG:HE	1:G:6140:ARG:HB2	1.62	0.40
1:H:7159:VAL:CG2	1:H:7184:LEU:CD1	2.99	0.40
1:H:7210:ILE:O	1:H:7213:LEU:N	2.54	0.40
1:H:7553:VAL:O	1:H:7554:LYS:C	2.64	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	549/584 (94%)	415 (76%)	99 (18%)	35 (6%)	1	3
1	B	549/584 (94%)	406 (74%)	107 (20%)	36 (7%)	1	3
1	C	549/584 (94%)	407 (74%)	102 (19%)	40 (7%)	1	2
1	D	549/584 (94%)	394 (72%)	119 (22%)	36 (7%)	1	3
1	E	549/584 (94%)	429 (78%)	94 (17%)	26 (5%)	2	7
1	F	549/584 (94%)	437 (80%)	83 (15%)	29 (5%)	1	5
1	G	549/584 (94%)	398 (72%)	111 (20%)	40 (7%)	1	2
1	H	549/584 (94%)	398 (72%)	120 (22%)	31 (6%)	1	4
All	All	4392/4672 (94%)	3284 (75%)	835 (19%)	273 (6%)	1	3

All (273) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	104	ILE
1	A	167	LEU
1	A	256	ASP

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Mol	Chain	Res	Type
1	A	259	ASN
1	A	268	LYS
1	A	301	PRO
1	A	302	ILE
1	A	314	GLU
1	A	324	VAL
1	B	1093	GLU
1	B	1100	LEU
1	B	1127	PHE
1	B	1260	HIS
1	B	1268	LYS
1	B	1302	ILE
1	B	1303	SER
1	B	1451	PRO
1	B	1556	ARG
1	C	2259	ASN
1	C	2301	PRO
1	C	2302	ILE
1	C	2314	GLU
1	C	2423	THR
1	C	2455	THR
1	C	2520	GLN
1	C	2528	ILE
1	C	2570	TYR
1	D	3123	TYR
1	D	3229	GLN
1	D	3256	ASP
1	D	3259	ASN
1	D	3268	LYS
1	D	3284	ALA
1	D	3285	ALA
1	D	3301	PRO
1	D	3302	ILE
1	D	3303	SER
1	D	3314	GLU
1	D	3422	PRO
1	E	4167	LEU
1	E	4259	ASN
1	E	4302	ILE
1	E	4422	PRO
1	F	5242	ILE
1	F	5256	ASP

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Mol	Chain	Res	Type
1	F	5301	PRO
1	F	5302	ILE
1	F	5303	SER
1	F	5332	LEU
1	G	6256	ASP
1	G	6259	ASN
1	G	6301	PRO
1	G	6302	ILE
1	G	6303	SER
1	G	6393	ALA
1	G	6479	ILE
1	G	6562	TYR
1	H	7104	ILE
1	H	7256	ASP
1	H	7259	ASN
1	H	7301	PRO
1	H	7302	ILE
1	H	7303	SER
1	H	7314	GLU
1	H	7410	ILE
1	H	7423	THR
1	A	90	GLU
1	A	228	THR
1	A	244	ASP
1	A	320	ALA
1	A	347	TYR
1	A	371	GLU
1	A	383	ILE
1	A	479	ILE
1	A	500	SER
1	B	1094	LYS
1	B	1301	PRO
1	B	1314	GLU
1	B	1371	GLU
1	C	2293	ALA
1	C	2381	VAL
1	C	2382	ASN
1	C	2383	ILE
1	C	2500	SER
1	C	2529	LYS
1	D	3096	PHE
1	D	3171	ASP

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Mol	Chain	Res	Type
1	D	3305	HIS
1	D	3371	GLU
1	D	3420	SER
1	D	3433	ALA
1	D	3480	LEU
1	D	3554	LYS
1	E	4038	MSE
1	E	4090	GLU
1	E	4123	TYR
1	E	4213	LEU
1	E	4301	PRO
1	E	4305	HIS
1	E	4314	GLU
1	E	4334	GLU
1	E	4345	ASP
1	E	4354	ARG
1	E	4371	GLU
1	E	4404	ILE
1	E	4455	THR
1	F	5259	ASN
1	F	5283	THR
1	F	5314	GLU
1	F	5354	ARG
1	F	5432	GLU
1	F	5451	PRO
1	G	6231	TYR
1	G	6314	GLU
1	G	6363	GLU
1	G	6432	GLU
1	G	6509	GLN
1	H	7086	MSE
1	H	7090	GLU
1	H	7279	ASP
1	H	7409	SER
1	H	7554	LYS
1	A	397	ARG
1	A	432	GLU
1	B	1148	ASP
1	B	1222	TYR
1	B	1228	THR
1	B	1259	ASN
1	B	1280	ILE

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Mol	Chain	Res	Type
1	B	1284	ALA
1	B	1436	LEU
1	B	1554	LYS
1	C	2039	ALA
1	C	2225	ARG
1	C	2256	ASP
1	C	2260	HIS
1	C	2279	ASP
1	C	2292	LEU
1	C	2405	ARG
1	C	2426	ALA
1	C	2498	LEU
1	C	2527	ALA
1	C	2554	LYS
1	C	2562	TYR
1	D	3138	SER
1	D	3143	VAL
1	D	3230	GLN
1	D	3239	MSE
1	D	3552	TYR
1	E	4230	GLN
1	E	4520	GLN
1	E	4554	LYS
1	F	5093	GLU
1	F	5279	ASP
1	F	5423	THR
1	F	5498	LEU
1	F	5520	GLN
1	G	6067	ARG
1	G	6127	PHE
1	G	6213	LEU
1	G	6261	ASN
1	G	6284	ALA
1	G	6370	PRO
1	G	6488	ASP
1	G	6497	ALA
1	G	6520	GLN
1	H	7177	MSE
1	H	7228	THR
1	H	7230	GLN
1	H	7350	LEU
1	H	7532	GLU

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Mol	Chain	Res	Type
1	A	38	MSE
1	A	89	GLN
1	A	177	MSE
1	A	325	MSE
1	A	352	LYS
1	A	428	CYS
1	A	431	GLU
1	B	1070	ARG
1	B	1319	ILE
1	B	1364	PRO
1	B	1472	PRO
1	B	1550	ALA
1	C	2056	PRO
1	C	2284	ALA
1	C	2347	TYR
1	C	2404	ILE
1	D	3404	ILE
1	D	3432	GLU
1	D	3520	GLN
1	E	4332	LEU
1	E	4438	GLU
1	E	4516	LEU
1	F	5143	VAL
1	F	5228	THR
1	F	5280	ILE
1	F	5284	ALA
1	F	5316	ALA
1	F	5431	GLU
1	G	6061	GLN
1	G	6224	LYS
1	G	6241	ALA
1	G	6268	LYS
1	G	6285	ALA
1	G	6422	PRO
1	G	6431	GLU
1	G	6451	PRO
1	G	6468	VAL
1	G	6496	LYS
1	G	6550	ALA
1	H	7432	GLU
1	H	7500	SER
1	A	269	TYR

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Mol	Chain	Res	Type
1	B	1285	ALA
1	B	1299	SER
1	B	1335	GLN
1	B	1337	ALA
1	B	1428	CYS
1	B	1522	VAL
1	C	2076	THR
1	C	2303	SER
1	C	2334	GLU
1	C	2356	ALA
1	C	2552	TYR
1	D	3095	LEU
1	D	3166	ILE
1	E	4228	THR
1	F	5213	LEU
1	F	5243	THR
1	F	5268	LYS
1	F	5436	LEU
1	G	6167	LEU
1	G	6331	GLY
1	H	7231	TYR
1	H	7324	VAL
1	H	7381	VAL
1	A	56	PRO
1	A	279	ASP
1	A	470	ILE
1	A	528	ILE
1	B	1320	ALA
1	B	1479	ILE
1	C	2163	GLY
1	C	2451	PRO
1	C	2471	PHE
1	D	3074	LYS
1	D	3167	LEU
1	D	3205	VAL
1	D	3530	VAL
1	F	5138	SER
1	F	5404	ILE
1	G	6151	PRO
1	G	6153	ASN
1	G	6471	PHE
1	H	7244	ASP

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Mol	Chain	Res	Type
1	H	7280	ILE
1	A	323	ILE
1	E	4392	VAL
1	H	7478	VAL
1	A	451	PRO
1	D	3077	SER
1	H	7173	GLY
1	H	7553	VAL
1	G	6519	ILE
1	H	7522	VAL
1	B	1181	VAL
1	B	1404	ILE
1	D	3479	ILE
1	H	7143	VAL
1	A	143	VAL
1	C	2104	ILE
1	E	4381	VAL
1	G	6181	VAL

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	466/483 (96%)	313 (67%)	153 (33%)	0	1
1	B	466/483 (96%)	302 (65%)	164 (35%)	0	0
1	C	466/483 (96%)	323 (69%)	143 (31%)	0	1
1	D	466/483 (96%)	306 (66%)	160 (34%)	0	0
1	E	466/483 (96%)	324 (70%)	142 (30%)	0	1
1	F	466/483 (96%)	324 (70%)	142 (30%)	0	1
1	G	466/483 (96%)	309 (66%)	157 (34%)	0	0
1	H	466/483 (96%)	323 (69%)	143 (31%)	0	1
All	All	3728/3864 (96%)	2524 (68%)	1204 (32%)	0	1

All (1204) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	24	LYS
1	A	29	MSE
1	A	30	LEU
1	A	36	LYS
1	A	41	THR
1	A	51	GLN
1	A	57	LYS
1	A	62	ASP
1	A	63	ILE
1	A	70	ARG
1	A	71	ASN
1	A	73	LYS
1	A	74	LYS
1	A	75	MSE
1	A	77	SER
1	A	79	LEU
1	A	80	GLU
1	A	82	TYR
1	A	83	ILE
1	A	85	ILE
1	A	88	ILE
1	A	98	ARG
1	A	99	ILE
1	A	100	LEU
1	A	102	ASP
1	A	104	ILE
1	A	105	GLU
1	A	106	SER
1	A	107	LEU
1	A	108	MSE
1	A	113	THR
1	A	115	THR
1	A	116	VAL
1	A	118	LEU
1	A	121	SER
1	A	123	TYR
1	A	128	ARG
1	A	136	SER
1	A	137	ILE
1	A	138	SER
1	A	152	GLU
1	A	154	HIS
1	A	156	LYS

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Mol	Chain	Res	Type
1	A	158	VAL
1	A	160	VAL
1	A	166	ILE
1	A	181	VAL
1	A	183	LYS
1	A	184	LEU
1	A	196	ASP
1	A	199	LEU
1	A	205	VAL
1	A	219	MSE
1	A	221	LEU
1	A	223	GLN
1	A	227	ARG
1	A	233	ASP
1	A	234	LEU
1	A	243	THR
1	A	245	ARG
1	A	248	ARG
1	A	259	ASN
1	A	261	ASN
1	A	263	PHE
1	A	266	LEU
1	A	267	ARG
1	A	270	ARG
1	A	286	VAL
1	A	291	LEU
1	A	297	VAL
1	A	298	ILE
1	A	299	SER
1	A	300	LYS
1	A	303	SER
1	A	304	GLU
1	A	306	LYS
1	A	307	ILE
1	A	317	LEU
1	A	323	ILE
1	A	332	LEU
1	A	333	SER
1	A	335	GLN
1	A	336	GLU
1	A	338	GLN
1	A	339	LYS

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Mol	Chain	Res	Type
1	A	340	LYS
1	A	341	ILE
1	A	343	MSE
1	A	346	LYS
1	A	349	LEU
1	A	351	VAL
1	A	358	ILE
1	A	359	ASP
1	A	360	SER
1	A	363	GLU
1	A	366	THR
1	A	368	SER
1	A	371	GLU
1	A	376	THR
1	A	378	GLU
1	A	383	ILE
1	A	384	LEU
1	A	385	LYS
1	A	387	SER
1	A	388	THR
1	A	389	ILE
1	A	390	ILE
1	A	397	ARG
1	A	400	THR
1	A	403	VAL
1	A	405	ARG
1	A	410	ILE
1	A	413	ARG
1	A	415	VAL
1	A	416	ILE
1	A	419	LEU
1	A	428	CYS
1	A	429	THR
1	A	431	GLU
1	A	440	ARG
1	A	447	SER
1	A	453	LYS
1	A	454	LEU
1	A	455	THR
1	A	456	ASP
1	A	458	ARG
1	A	464	GLN

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Mol	Chain	Res	Type
1	A	476	LEU
1	A	480	LEU
1	A	483	THR
1	A	486	ILE
1	A	487	SER
1	A	488	ASP
1	A	496	LYS
1	A	499	THR
1	A	501	GLN
1	A	502	LEU
1	A	504	ASP
1	A	507	LEU
1	A	509	GLN
1	A	511	ARG
1	A	512	LEU
1	A	518	ASN
1	A	524	ILE
1	A	531	THR
1	A	539	MSE
1	A	547	GLU
1	A	551	LYS
1	A	559	ARG
1	A	561	GLU
1	A	565	LEU
1	A	571	GLU
1	A	572	TRP
1	B	1024	LYS
1	B	1030	LEU
1	B	1033	ARG
1	B	1041	THR
1	B	1045	ARG
1	B	1057	LYS
1	B	1059	GLU
1	B	1070	ARG
1	B	1071	ASN
1	B	1073	LYS
1	B	1075	MSE
1	B	1076	THR
1	B	1077	SER
1	B	1085	ILE
1	B	1093	GLU
1	B	1098	ARG

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Mol	Chain	Res	Type
1	B	1100	LEU
1	B	1101	GLN
1	B	1102	ASP
1	B	1106	SER
1	B	1107	LEU
1	B	1108	MSE
1	B	1118	LEU
1	B	1121	SER
1	B	1123	TYR
1	B	1125	HIS
1	B	1131	LYS
1	B	1136	SER
1	B	1137	ILE
1	B	1138	SER
1	B	1140	ARG
1	B	1146	ILE
1	B	1152	GLU
1	B	1155	VAL
1	B	1160	VAL
1	B	1171	ASP
1	B	1172	LEU
1	B	1183	LYS
1	B	1184	LEU
1	B	1188	THR
1	B	1194	ARG
1	B	1196	ASP
1	B	1199	LEU
1	B	1205	VAL
1	B	1210	ILE
1	B	1214	LYS
1	B	1219	MSE
1	B	1221	LEU
1	B	1223	GLN
1	B	1224	LYS
1	B	1226	ASP
1	B	1227	ARG
1	B	1228	THR
1	B	1232	ASP
1	B	1234	LEU
1	B	1235	ILE
1	B	1237	GLU
1	B	1243	THR

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Mol	Chain	Res	Type
1	B	1259	ASN
1	B	1261	ASN
1	B	1264	ARG
1	B	1266	LEU
1	B	1267	ARG
1	B	1270	ARG
1	B	1271	GLU
1	B	1272	LYS
1	B	1276	PHE
1	B	1278	ASP
1	B	1281	GLN
1	B	1286	VAL
1	B	1288	LEU
1	B	1297	VAL
1	B	1298	ILE
1	B	1299	SER
1	B	1303	SER
1	B	1304	GLU
1	B	1306	LYS
1	B	1317	LEU
1	B	1325	MSE
1	B	1326	SER
1	B	1332	LEU
1	B	1333	SER
1	B	1336	GLU
1	B	1338	GLN
1	B	1339	LYS
1	B	1340	LYS
1	B	1341	ILE
1	B	1343	MSE
1	B	1346	LYS
1	B	1349	LEU
1	B	1351	VAL
1	B	1355	LYS
1	B	1359	ASP
1	B	1360	SER
1	B	1363	GLU
1	B	1368	SER
1	B	1371	GLU
1	B	1373	ILE
1	B	1375	ASP
1	B	1378	GLU

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Mol	Chain	Res	Type
1	B	1384	LEU
1	B	1385	LYS
1	B	1388	THR
1	B	1389	ILE
1	B	1392	VAL
1	B	1397	ARG
1	B	1400	THR
1	B	1405	ARG
1	B	1409	SER
1	B	1411	ASN
1	B	1412	GLU
1	B	1415	VAL
1	B	1416	ILE
1	B	1419	LEU
1	B	1423	THR
1	B	1425	GLN
1	B	1427	GLU
1	B	1429	THR
1	B	1440	ARG
1	B	1452	VAL
1	B	1453	LYS
1	B	1454	LEU
1	B	1455	THR
1	B	1456	ASP
1	B	1459	VAL
1	B	1467	ASN
1	B	1482	ASN
1	B	1486	ILE
1	B	1487	SER
1	B	1489	SER
1	B	1490	VAL
1	B	1492	LEU
1	B	1496	LYS
1	B	1499	THR
1	B	1500	SER
1	B	1501	GLN
1	B	1502	LEU
1	B	1505	GLU
1	B	1506	GLU
1	B	1507	LEU
1	B	1509	GLN
1	B	1511	ARG

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Mol	Chain	Res	Type
1	B	1512	LEU
1	B	1516	LEU
1	B	1520	GLN
1	B	1521	GLU
1	B	1525	ASN
1	B	1526	ILE
1	B	1528	ILE
1	B	1529	LYS
1	B	1531	THR
1	B	1532	GLU
1	B	1535	TYR
1	B	1537	ASN
1	B	1539	MSE
1	B	1543	TYR
1	B	1547	GLU
1	B	1549	LYS
1	B	1551	LYS
1	B	1555	GLU
1	B	1559	ARG
1	B	1561	GLU
1	B	1571	GLU
1	B	1572	TRP
1	C	2024	LYS
1	C	2028	LEU
1	C	2030	LEU
1	C	2038	MSE
1	C	2041	THR
1	C	2048	LEU
1	C	2051	GLN
1	C	2057	LYS
1	C	2070	ARG
1	C	2071	ASN
1	C	2075	MSE
1	C	2077	SER
1	C	2079	LEU
1	C	2081	LYS
1	C	2082	TYR
1	C	2085	ILE
1	C	2086	MSE
1	C	2088	ILE
1	C	2093	GLU
1	C	2098	ARG

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Mol	Chain	Res	Type
1	C	2100	LEU
1	C	2102	ASP
1	C	2104	ILE
1	C	2107	LEU
1	C	2118	LEU
1	C	2121	SER
1	C	2128	ARG
1	C	2131	LYS
1	C	2133	LEU
1	C	2136	SER
1	C	2138	SER
1	C	2140	ARG
1	C	2154	HIS
1	C	2156	LYS
1	C	2172	LEU
1	C	2174	VAL
1	C	2183	LYS
1	C	2184	LEU
1	C	2190	CYS
1	C	2194	ARG
1	C	2196	ASP
1	C	2197	ARG
1	C	2199	LEU
1	C	2205	VAL
1	C	2212	LEU
1	C	2214	LYS
1	C	2221	LEU
1	C	2223	GLN
1	C	2224	LYS
1	C	2225	ARG
1	C	2227	ARG
1	C	2232	ASP
1	C	2234	LEU
1	C	2235	ILE
1	C	2243	THR
1	C	2250	THR
1	C	2253	GLN
1	C	2259	ASN
1	C	2261	ASN
1	C	2267	ARG
1	C	2270	ARG
1	C	2275	THR

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Mol	Chain	Res	Type
1	C	2286	VAL
1	C	2288	LEU
1	C	2292	LEU
1	C	2297	VAL
1	C	2298	ILE
1	C	2299	SER
1	C	2303	SER
1	C	2304	GLU
1	C	2306	LYS
1	C	2317	LEU
1	C	2325	MSE
1	C	2329	GLU
1	C	2332	LEU
1	C	2333	SER
1	C	2338	GLN
1	C	2339	LYS
1	C	2340	LYS
1	C	2341	ILE
1	C	2343	MSE
1	C	2349	LEU
1	C	2350	LEU
1	C	2351	VAL
1	C	2357	LYS
1	C	2358	ILE
1	C	2363	GLU
1	C	2366	THR
1	C	2368	SER
1	C	2372	SER
1	C	2373	ILE
1	C	2378	GLU
1	C	2379	ASP
1	C	2383	ILE
1	C	2384	LEU
1	C	2385	LYS
1	C	2388	THR
1	C	2397	ARG
1	C	2400	THR
1	C	2403	VAL
1	C	2405	ARG
1	C	2409	SER
1	C	2415	VAL
1	C	2416	ILE

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Mol	Chain	Res	Type
1	C	2419	LEU
1	C	2425	GLN
1	C	2428	CYS
1	C	2429	THR
1	C	2431	GLU
1	C	2432	GLU
1	C	2447	SER
1	C	2449	PHE
1	C	2453	LYS
1	C	2454	LEU
1	C	2455	THR
1	C	2456	ASP
1	C	2458	ARG
1	C	2464	GLN
1	C	2481	CYS
1	C	2486	ILE
1	C	2492	LEU
1	C	2499	THR
1	C	2502	LEU
1	C	2504	ASP
1	C	2505	GLU
1	C	2506	GLU
1	C	2507	LEU
1	C	2511	ARG
1	C	2516	LEU
1	C	2518	ASN
1	C	2519	ILE
1	C	2524	ILE
1	C	2529	LYS
1	C	2531	THR
1	C	2537	ASN
1	C	2547	GLU
1	C	2549	LYS
1	C	2551	LYS
1	C	2554	LYS
1	C	2556	ARG
1	C	2561	GLU
1	C	2564	SER
1	C	2572	TRP
1	D	3028	LEU
1	D	3030	LEU
1	D	3033	ARG

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Mol	Chain	Res	Type
1	D	3041	THR
1	D	3043	GLN
1	D	3057	LYS
1	D	3058	ILE
1	D	3070	ARG
1	D	3071	ASN
1	D	3072	LEU
1	D	3075	MSE
1	D	3077	SER
1	D	3081	LYS
1	D	3085	ILE
1	D	3091	ARG
1	D	3094	LYS
1	D	3098	ARG
1	D	3099	ILE
1	D	3101	GLN
1	D	3102	ASP
1	D	3104	ILE
1	D	3106	SER
1	D	3107	LEU
1	D	3108	MSE
1	D	3110	ILE
1	D	3118	LEU
1	D	3121	SER
1	D	3122	GLN
1	D	3123	TYR
1	D	3131	LYS
1	D	3133	LEU
1	D	3136	SER
1	D	3137	ILE
1	D	3140	ARG
1	D	3145	SER
1	D	3152	GLU
1	D	3154	HIS
1	D	3155	VAL
1	D	3156	LYS
1	D	3160	VAL
1	D	3162	ASP
1	D	3165	ARG
1	D	3166	ILE
1	D	3174	VAL
1	D	3181	VAL

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Mol	Chain	Res	Type
1	D	3183	LYS
1	D	3184	LEU
1	D	3196	ASP
1	D	3202	CYS
1	D	3204	ASP
1	D	3205	VAL
1	D	3210	ILE
1	D	3212	LEU
1	D	3214	LYS
1	D	3219	MSE
1	D	3221	LEU
1	D	3223	GLN
1	D	3225	ARG
1	D	3228	THR
1	D	3232	ASP
1	D	3235	ILE
1	D	3243	THR
1	D	3244	ASP
1	D	3248	ARG
1	D	3250	THR
1	D	3252	ILE
1	D	3257	PHE
1	D	3259	ASN
1	D	3261	ASN
1	D	3264	ARG
1	D	3266	LEU
1	D	3267	ARG
1	D	3268	LYS
1	D	3270	ARG
1	D	3275	THR
1	D	3278	ASP
1	D	3279	ASP
1	D	3286	VAL
1	D	3288	LEU
1	D	3292	LEU
1	D	3297	VAL
1	D	3298	ILE
1	D	3299	SER
1	D	3300	LYS
1	D	3302	ILE
1	D	3303	SER
1	D	3304	GLU

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Mol	Chain	Res	Type
1	D	3306	LYS
1	D	3325	MSE
1	D	3332	LEU
1	D	3333	SER
1	D	3335	GLN
1	D	3336	GLU
1	D	3339	LYS
1	D	3346	LYS
1	D	3349	LEU
1	D	3350	LEU
1	D	3351	VAL
1	D	3354	ARG
1	D	3355	LYS
1	D	3357	LYS
1	D	3360	SER
1	D	3363	GLU
1	D	3367	HIS
1	D	3368	SER
1	D	3371	GLU
1	D	3372	SER
1	D	3375	ASP
1	D	3382	ASN
1	D	3383	ILE
1	D	3384	LEU
1	D	3385	LYS
1	D	3387	SER
1	D	3397	ARG
1	D	3400	THR
1	D	3404	ILE
1	D	3405	ARG
1	D	3411	ASN
1	D	3413	ARG
1	D	3415	VAL
1	D	3416	ILE
1	D	3419	LEU
1	D	3425	GLN
1	D	3429	THR
1	D	3440	ARG
1	D	3447	SER
1	D	3453	LYS
1	D	3455	THR
1	D	3456	ASP

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Mol	Chain	Res	Type
1	D	3458	ARG
1	D	3459	VAL
1	D	3478	VAL
1	D	3481	CYS
1	D	3482	ASN
1	D	3483	THR
1	D	3486	ILE
1	D	3487	SER
1	D	3492	LEU
1	D	3499	THR
1	D	3502	LEU
1	D	3504	ASP
1	D	3507	LEU
1	D	3511	ARG
1	D	3516	LEU
1	D	3520	GLN
1	D	3521	GLU
1	D	3528	ILE
1	D	3529	LYS
1	D	3531	THR
1	D	3532	GLU
1	D	3537	ASN
1	D	3538	LYS
1	D	3547	GLU
1	D	3549	LYS
1	D	3551	LYS
1	D	3557	THR
1	D	3561	GLU
1	D	3563	ASP
1	D	3571	GLU
1	D	3572	TRP
1	E	4024	LYS
1	E	4028	LEU
1	E	4033	ARG
1	E	4041	THR
1	E	4043	GLN
1	E	4057	LYS
1	E	4058	ILE
1	E	4059	GLU
1	E	4064	GLN
1	E	4070	ARG
1	E	4075	MSE

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Mol	Chain	Res	Type
1	E	4076	THR
1	E	4094	LYS
1	E	4098	ARG
1	E	4102	ASP
1	E	4104	ILE
1	E	4106	SER
1	E	4108	MSE
1	E	4118	LEU
1	E	4121	SER
1	E	4123	TYR
1	E	4125	HIS
1	E	4129	ARG
1	E	4131	LYS
1	E	4136	SER
1	E	4137	ILE
1	E	4138	SER
1	E	4145	SER
1	E	4146	ILE
1	E	4152	GLU
1	E	4154	HIS
1	E	4156	LYS
1	E	4160	VAL
1	E	4166	ILE
1	E	4174	VAL
1	E	4181	VAL
1	E	4183	LYS
1	E	4184	LEU
1	E	4190	CYS
1	E	4196	ASP
1	E	4199	LEU
1	E	4203	ILE
1	E	4205	VAL
1	E	4219	MSE
1	E	4221	LEU
1	E	4223	GLN
1	E	4225	ARG
1	E	4227	ARG
1	E	4228	THR
1	E	4229	GLN
1	E	4235	ILE
1	E	4236	ASP
1	E	4242	ILE

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Mol	Chain	Res	Type
1	E	4243	THR
1	E	4248	ARG
1	E	4250	THR
1	E	4261	ASN
1	E	4264	ARG
1	E	4266	LEU
1	E	4267	ARG
1	E	4270	ARG
1	E	4275	THR
1	E	4279	ASP
1	E	4286	VAL
1	E	4291	LEU
1	E	4292	LEU
1	E	4297	VAL
1	E	4299	SER
1	E	4300	LYS
1	E	4303	SER
1	E	4304	GLU
1	E	4307	ILE
1	E	4314	GLU
1	E	4322	LEU
1	E	4325	MSE
1	E	4326	SER
1	E	4328	VAL
1	E	4329	GLU
1	E	4332	LEU
1	E	4336	GLU
1	E	4339	LYS
1	E	4343	MSE
1	E	4346	LYS
1	E	4349	LEU
1	E	4350	LEU
1	E	4351	VAL
1	E	4355	LYS
1	E	4357	LYS
1	E	4359	ASP
1	E	4360	SER
1	E	4363	GLU
1	E	4366	THR
1	E	4368	SER
1	E	4376	THR
1	E	4378	GLU

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Mol	Chain	Res	Type
1	E	4384	LEU
1	E	4385	LYS
1	E	4387	SER
1	E	4389	ILE
1	E	4400	THR
1	E	4402	ASP
1	E	4405	ARG
1	E	4410	ILE
1	E	4416	ILE
1	E	4419	LEU
1	E	4425	GLN
1	E	4428	CYS
1	E	4429	THR
1	E	4431	GLU
1	E	4438	GLU
1	E	4453	LYS
1	E	4454	LEU
1	E	4455	THR
1	E	4458	ARG
1	E	4459	VAL
1	E	4474	VAL
1	E	4478	VAL
1	E	4482	ASN
1	E	4483	THR
1	E	4486	ILE
1	E	4496	LYS
1	E	4499	THR
1	E	4501	GLN
1	E	4502	LEU
1	E	4503	THR
1	E	4506	GLU
1	E	4507	LEU
1	E	4511	ARG
1	E	4512	LEU
1	E	4518	ASN
1	E	4523	SER
1	E	4528	ILE
1	E	4529	LYS
1	E	4534	LEU
1	E	4535	TYR
1	E	4537	ASN
1	E	4539	MSE

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Mol	Chain	Res	Type
1	E	4549	LYS
1	E	4559	ARG
1	E	4561	GLU
1	E	4571	GLU
1	E	4572	TRP
1	F	5024	LYS
1	F	5028	LEU
1	F	5029	MSE
1	F	5030	LEU
1	F	5033	ARG
1	F	5041	THR
1	F	5043	GLN
1	F	5045	ARG
1	F	5047	MSE
1	F	5048	LEU
1	F	5051	GLN
1	F	5053	LEU
1	F	5057	LYS
1	F	5058	ILE
1	F	5064	GLN
1	F	5070	ARG
1	F	5073	LYS
1	F	5074	LYS
1	F	5075	MSE
1	F	5076	THR
1	F	5077	SER
1	F	5088	ILE
1	F	5091	ARG
1	F	5098	ARG
1	F	5099	ILE
1	F	5100	LEU
1	F	5106	SER
1	F	5107	LEU
1	F	5108	MSE
1	F	5115	THR
1	F	5121	SER
1	F	5123	TYR
1	F	5125	HIS
1	F	5128	ARG
1	F	5133	LEU
1	F	5136	SER
1	F	5137	ILE

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Mol	Chain	Res	Type
1	F	5140	ARG
1	F	5152	GLU
1	F	5154	HIS
1	F	5160	VAL
1	F	5179	ILE
1	F	5184	LEU
1	F	5193	ILE
1	F	5196	ASP
1	F	5197	ARG
1	F	5203	ILE
1	F	5205	VAL
1	F	5210	ILE
1	F	5214	LYS
1	F	5219	MSE
1	F	5221	LEU
1	F	5223	GLN
1	F	5224	LYS
1	F	5225	ARG
1	F	5228	THR
1	F	5234	LEU
1	F	5235	ILE
1	F	5248	ARG
1	F	5250	THR
1	F	5251	LEU
1	F	5253	GLN
1	F	5260	HIS
1	F	5261	ASN
1	F	5264	ARG
1	F	5266	LEU
1	F	5267	ARG
1	F	5275	THR
1	F	5276	PHE
1	F	5279	ASP
1	F	5286	VAL
1	F	5291	LEU
1	F	5297	VAL
1	F	5302	ILE
1	F	5303	SER
1	F	5304	GLU
1	F	5306	LYS
1	F	5307	ILE
1	F	5317	LEU

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Mol	Chain	Res	Type
1	F	5328	VAL
1	F	5329	GLU
1	F	5332	LEU
1	F	5336	GLU
1	F	5338	GLN
1	F	5339	LYS
1	F	5346	LYS
1	F	5349	LEU
1	F	5351	VAL
1	F	5354	ARG
1	F	5355	LYS
1	F	5357	LYS
1	F	5359	ASP
1	F	5366	THR
1	F	5368	SER
1	F	5371	GLU
1	F	5372	SER
1	F	5373	ILE
1	F	5376	THR
1	F	5378	GLU
1	F	5383	ILE
1	F	5385	LYS
1	F	5389	ILE
1	F	5397	ARG
1	F	5400	THR
1	F	5402	ASP
1	F	5409	SER
1	F	5412	GLU
1	F	5416	ILE
1	F	5419	LEU
1	F	5425	GLN
1	F	5429	THR
1	F	5431	GLU
1	F	5432	GLU
1	F	5454	LEU
1	F	5456	ASP
1	F	5458	ARG
1	F	5459	VAL
1	F	5479	ILE
1	F	5485	HIS
1	F	5486	ILE
1	F	5487	SER

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Mol	Chain	Res	Type
1	F	5490	VAL
1	F	5493	GLU
1	F	5496	LYS
1	F	5500	SER
1	F	5502	LEU
1	F	5503	THR
1	F	5504	ASP
1	F	5507	LEU
1	F	5509	GLN
1	F	5511	ARG
1	F	5512	LEU
1	F	5518	ASN
1	F	5528	ILE
1	F	5533	TYR
1	F	5537	ASN
1	F	5549	LYS
1	F	5551	LYS
1	F	5559	ARG
1	F	5561	GLU
1	F	5565	LEU
1	F	5572	TRP
1	G	6028	LEU
1	G	6029	MSE
1	G	6041	THR
1	G	6043	GLN
1	G	6053	LEU
1	G	6057	LYS
1	G	6058	ILE
1	G	6071	ASN
1	G	6074	LYS
1	G	6075	MSE
1	G	6076	THR
1	G	6077	SER
1	G	6079	LEU
1	G	6081	LYS
1	G	6086	MSE
1	G	6088	ILE
1	G	6094	LYS
1	G	6104	ILE
1	G	6106	SER
1	G	6107	LEU
1	G	6108	MSE

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Mol	Chain	Res	Type
1	G	6115	THR
1	G	6118	LEU
1	G	6123	TYR
1	G	6125	HIS
1	G	6126	ILE
1	G	6128	ARG
1	G	6129	ARG
1	G	6131	LYS
1	G	6152	GLU
1	G	6154	HIS
1	G	6155	VAL
1	G	6156	LYS
1	G	6165	ARG
1	G	6166	ILE
1	G	6183	LYS
1	G	6184	LEU
1	G	6185	CYS
1	G	6196	ASP
1	G	6203	ILE
1	G	6205	VAL
1	G	6207	THR
1	G	6210	ILE
1	G	6214	LYS
1	G	6219	MSE
1	G	6221	LEU
1	G	6223	GLN
1	G	6224	LYS
1	G	6225	ARG
1	G	6227	ARG
1	G	6228	THR
1	G	6232	ASP
1	G	6234	LEU
1	G	6235	ILE
1	G	6243	THR
1	G	6244	ASP
1	G	6245	ARG
1	G	6250	THR
1	G	6252	ILE
1	G	6259	ASN
1	G	6264	ARG
1	G	6266	LEU
1	G	6267	ARG

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Mol	Chain	Res	Type
1	G	6268	LYS
1	G	6270	ARG
1	G	6274	CYS
1	G	6276	PHE
1	G	6279	ASP
1	G	6281	GLN
1	G	6286	VAL
1	G	6291	LEU
1	G	6297	VAL
1	G	6298	ILE
1	G	6300	LYS
1	G	6304	GLU
1	G	6306	LYS
1	G	6314	GLU
1	G	6317	LEU
1	G	6325	MSE
1	G	6329	GLU
1	G	6332	LEU
1	G	6333	SER
1	G	6334	GLU
1	G	6335	GLN
1	G	6336	GLU
1	G	6338	GLN
1	G	6341	ILE
1	G	6343	MSE
1	G	6345	ASP
1	G	6350	LEU
1	G	6351	VAL
1	G	6355	LYS
1	G	6357	LYS
1	G	6358	ILE
1	G	6363	GLU
1	G	6366	THR
1	G	6371	GLU
1	G	6372	SER
1	G	6373	ILE
1	G	6378	GLU
1	G	6379	ASP
1	G	6384	LEU
1	G	6385	LYS
1	G	6389	ILE
1	G	6400	THR

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Mol	Chain	Res	Type
1	G	6402	ASP
1	G	6405	ARG
1	G	6410	ILE
1	G	6412	GLU
1	G	6413	ARG
1	G	6415	VAL
1	G	6416	ILE
1	G	6419	LEU
1	G	6425	GLN
1	G	6429	THR
1	G	6431	GLU
1	G	6432	GLU
1	G	6438	GLU
1	G	6447	SER
1	G	6454	LEU
1	G	6458	ARG
1	G	6459	VAL
1	G	6474	VAL
1	G	6476	LEU
1	G	6478	VAL
1	G	6479	ILE
1	G	6482	ASN
1	G	6483	THR
1	G	6486	ILE
1	G	6487	SER
1	G	6489	SER
1	G	6499	THR
1	G	6502	LEU
1	G	6503	THR
1	G	6504	ASP
1	G	6505	GLU
1	G	6506	GLU
1	G	6507	LEU
1	G	6509	GLN
1	G	6511	ARG
1	G	6512	LEU
1	G	6518	ASN
1	G	6520	GLN
1	G	6522	VAL
1	G	6528	ILE
1	G	6533	TYR
1	G	6535	TYR

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Mol	Chain	Res	Type
1	G	6537	ASN
1	G	6539	MSE
1	G	6549	LYS
1	G	6551	LYS
1	G	6554	LYS
1	G	6555	GLU
1	G	6557	THR
1	G	6559	ARG
1	G	6561	GLU
1	G	6571	GLU
1	H	7024	LYS
1	H	7029	MSE
1	H	7030	LEU
1	H	7040	PHE
1	H	7041	THR
1	H	7042	LEU
1	H	7047	MSE
1	H	7048	LEU
1	H	7057	LYS
1	H	7062	ASP
1	H	7063	ILE
1	H	7070	ARG
1	H	7075	MSE
1	H	7076	THR
1	H	7082	TYR
1	H	7085	ILE
1	H	7086	MSE
1	H	7088	ILE
1	H	7098	ARG
1	H	7102	ASP
1	H	7103	ASP
1	H	7108	MSE
1	H	7110	ILE
1	H	7118	LEU
1	H	7121	SER
1	H	7123	TYR
1	H	7125	HIS
1	H	7128	ARG
1	H	7136	SER
1	H	7137	ILE
1	H	7145	SER
1	H	7146	ILE

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Mol	Chain	Res	Type
1	H	7154	HIS
1	H	7155	VAL
1	H	7156	LYS
1	H	7160	VAL
1	H	7161	THR
1	H	7183	LYS
1	H	7184	LEU
1	H	7185	CYS
1	H	7196	ASP
1	H	7199	LEU
1	H	7205	VAL
1	H	7214	LYS
1	H	7223	GLN
1	H	7224	LYS
1	H	7225	ARG
1	H	7228	THR
1	H	7230	GLN
1	H	7232	ASP
1	H	7235	ILE
1	H	7242	ILE
1	H	7243	THR
1	H	7248	ARG
1	H	7250	THR
1	H	7253	GLN
1	H	7260	HIS
1	H	7261	ASN
1	H	7264	ARG
1	H	7266	LEU
1	H	7267	ARG
1	H	7270	ARG
1	H	7272	LYS
1	H	7279	ASP
1	H	7283	THR
1	H	7286	VAL
1	H	7292	LEU
1	H	7297	VAL
1	H	7298	ILE
1	H	7300	LYS
1	H	7304	GLU
1	H	7306	LYS
1	H	7307	ILE
1	H	7310	LEU

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Mol	Chain	Res	Type
1	H	7319	ILE
1	H	7328	VAL
1	H	7329	GLU
1	H	7332	LEU
1	H	7333	SER
1	H	7336	GLU
1	H	7340	LYS
1	H	7341	ILE
1	H	7343	MSE
1	H	7345	ASP
1	H	7346	LYS
1	H	7350	LEU
1	H	7351	VAL
1	H	7354	ARG
1	H	7359	ASP
1	H	7360	SER
1	H	7368	SER
1	H	7372	SER
1	H	7375	ASP
1	H	7385	LYS
1	H	7389	ILE
1	H	7397	ARG
1	H	7400	THR
1	H	7403	VAL
1	H	7405	ARG
1	H	7407	MSE
1	H	7409	SER
1	H	7411	ASN
1	H	7413	ARG
1	H	7415	VAL
1	H	7416	ILE
1	H	7419	LEU
1	H	7425	GLN
1	H	7429	THR
1	H	7431	GLU
1	H	7442	LEU
1	H	7447	SER
1	H	7453	LYS
1	H	7454	LEU
1	H	7455	THR
1	H	7459	VAL
1	H	7470	ILE

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Mol	Chain	Res	Type
1	H	7476	LEU
1	H	7479	ILE
1	H	7486	ILE
1	H	7487	SER
1	H	7489	SER
1	H	7492	LEU
1	H	7493	GLU
1	H	7502	LEU
1	H	7507	LEU
1	H	7511	ARG
1	H	7512	LEU
1	H	7516	LEU
1	H	7518	ASN
1	H	7520	GLN
1	H	7526	ILE
1	H	7528	ILE
1	H	7531	THR
1	H	7533	TYR
1	H	7539	MSE
1	H	7542	ARG
1	H	7543	TYR
1	H	7549	LYS
1	H	7551	LYS
1	H	7559	ARG
1	H	7561	GLU
1	H	7571	GLU
1	H	7572	TRP

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (118) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	51	GLN
1	A	64	GLN
1	A	71	ASN
1	A	154	HIS
1	A	230	GLN
1	A	259	ASN
1	A	261	ASN
1	A	295	GLN
1	A	330	ASN
1	A	335	GLN
1	A	338	GLN

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Mol	Chain	Res	Type
1	A	411	ASN
1	A	425	GLN
1	A	509	GLN
1	A	520	GLN
1	A	525	ASN
1	B	1064	GLN
1	B	1089	GLN
1	B	1122	GLN
1	B	1154	HIS
1	B	1229	GLN
1	B	1253	GLN
1	B	1259	ASN
1	B	1261	ASN
1	B	1295	GLN
1	B	1335	GLN
1	B	1411	ASN
1	B	1425	GLN
1	B	1482	ASN
1	B	1509	GLN
1	B	1520	GLN
1	B	1525	ASN
1	B	1537	ASN
1	C	2051	GLN
1	C	2064	GLN
1	C	2253	GLN
1	C	2261	ASN
1	C	2305	HIS
1	C	2338	GLN
1	C	2411	ASN
1	C	2482	ASN
1	C	2501	GLN
1	C	2537	ASN
1	D	3051	GLN
1	D	3064	GLN
1	D	3071	ASN
1	D	3122	GLN
1	D	3253	GLN
1	D	3261	ASN
1	D	3305	HIS
1	D	3330	ASN
1	D	3335	GLN
1	D	3367	HIS

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Mol	Chain	Res	Type
1	D	3411	ASN
1	D	3425	GLN
1	D	3482	ASN
1	D	3520	GLN
1	D	3525	ASN
1	D	3537	ASN
1	E	4051	GLN
1	E	4064	GLN
1	E	4071	ASN
1	E	4125	HIS
1	E	4154	HIS
1	E	4223	GLN
1	E	4230	GLN
1	E	4261	ASN
1	E	4295	GLN
1	E	4335	GLN
1	E	4382	ASN
1	E	4425	GLN
1	E	4482	ASN
1	E	4501	GLN
1	E	4509	GLN
1	E	4520	GLN
1	E	4525	ASN
1	F	5051	GLN
1	F	5064	GLN
1	F	5122	GLN
1	F	5223	GLN
1	F	5261	ASN
1	F	5321	ASN
1	F	5335	GLN
1	F	5338	GLN
1	F	5425	GLN
1	F	5466	ASN
1	F	5509	GLN
1	F	5525	ASN
1	F	5537	ASN
1	G	6046	GLN
1	G	6064	GLN
1	G	6122	GLN
1	G	6154	HIS
1	G	6261	ASN
1	G	6305	HIS

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Mol	Chain	Res	Type
1	G	6335	GLN
1	G	6338	GLN
1	G	6382	ASN
1	G	6421	ASN
1	G	6425	GLN
1	G	6482	ASN
1	G	6501	GLN
1	H	7064	GLN
1	H	7069	HIS
1	H	7142	HIS
1	H	7229	GLN
1	H	7259	ASN
1	H	7261	ASN
1	H	7335	GLN
1	H	7338	GLN
1	H	7411	ASN
1	H	7421	ASN
1	H	7425	GLN
1	H	7482	ASN
1	H	7501	GLN
1	H	7520	GLN
1	H	7525	ASN
1	H	7537	ASN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.6 Ligand geometry ⓘ

Of 24 ligands modelled in this entry, 8 are monoatomic - leaving 16 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$
3	NAD	G	6601	-	46,48,48	2.11	13 (28%)	64,73,73	1.91	12 (18%)
3	NAD	D	3602	-	46,48,48	2.14	12 (26%)	64,73,73	1.82	11 (17%)
3	NAD	B	1601	-	46,48,48	1.97	13 (28%)	64,73,73	1.89	10 (15%)
3	NAD	H	7601	-	46,48,48	2.19	12 (26%)	64,73,73	1.91	11 (17%)
3	NAD	A	601	-	46,48,48	2.11	10 (21%)	64,73,73	1.91	12 (18%)
3	NAD	C	2602	-	46,48,48	2.17	10 (21%)	64,73,73	1.85	11 (17%)
3	NAD	F	5602	-	46,48,48	2.05	12 (26%)	64,73,73	1.89	11 (17%)
3	NAD	C	2601	-	46,48,48	2.18	13 (28%)	64,73,73	1.88	11 (17%)
3	NAD	E	4602	-	46,48,48	2.04	10 (21%)	64,73,73	1.87	10 (15%)
3	NAD	D	3601	-	46,48,48	2.43	16 (34%)	64,73,73	1.93	12 (18%)
3	NAD	G	6602	-	46,48,48	2.06	12 (26%)	64,73,73	1.86	10 (15%)
3	NAD	H	7602	-	46,48,48	2.05	10 (21%)	64,73,73	1.89	13 (20%)
3	NAD	E	4601	-	46,48,48	2.11	13 (28%)	64,73,73	1.91	10 (15%)
3	NAD	F	5601	-	46,48,48	1.87	12 (26%)	64,73,73	1.87	11 (17%)
3	NAD	B	1602	-	46,48,48	2.12	10 (21%)	64,73,73	1.88	10 (15%)
3	NAD	A	602	-	46,48,48	2.11	13 (28%)	64,73,73	1.87	10 (15%)

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
3	NAD	G	6601	-	-	0/30/62/62	0/5/5/5
3	NAD	D	3602	-	-	8/30/62/62	0/5/5/5
3	NAD	B	1601	-	-	10/30/62/62	0/5/5/5
3	NAD	H	7601	-	-	1/30/62/62	0/5/5/5
3	NAD	A	601	-	-	0/30/62/62	0/5/5/5
3	NAD	C	2602	-	-	4/30/62/62	0/5/5/5
3	NAD	F	5602	-	-	5/30/62/62	0/5/5/5

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	NAD	C	2601	-	-	5/30/62/62	0/5/5/5
3	NAD	E	4602	-	-	6/30/62/62	0/5/5/5
3	NAD	D	3601	-	-	3/30/62/62	0/5/5/5
3	NAD	G	6602	-	-	7/30/62/62	0/5/5/5
3	NAD	H	7602	-	-	6/30/62/62	0/5/5/5
3	NAD	E	4601	-	-	2/30/62/62	0/5/5/5
3	NAD	F	5601	-	-	1/30/62/62	0/5/5/5
3	NAD	B	1602	-	-	7/30/62/62	0/5/5/5
3	NAD	A	602	-	-	5/30/62/62	0/5/5/5

All (191) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	B	1602	NAD	C2N-N1N	8.93	1.44	1.35
3	D	3601	NAD	C2N-N1N	8.43	1.44	1.35
3	C	2602	NAD	C2N-N1N	8.25	1.44	1.35
3	H	7601	NAD	C2N-N1N	8.02	1.43	1.35
3	D	3602	NAD	C2N-N1N	7.92	1.43	1.35
3	F	5602	NAD	C2N-N1N	7.76	1.43	1.35
3	A	602	NAD	C2N-N1N	7.75	1.43	1.35
3	G	6602	NAD	C2N-N1N	7.73	1.43	1.35
3	H	7602	NAD	C2N-N1N	7.64	1.43	1.35
3	A	601	NAD	C2N-N1N	7.49	1.43	1.35
3	E	4601	NAD	C2N-N1N	7.41	1.43	1.35
3	C	2601	NAD	C2N-N1N	7.39	1.43	1.35
3	E	4602	NAD	C2N-N1N	7.35	1.43	1.35
3	G	6601	NAD	C2N-N1N	6.83	1.42	1.35
3	D	3601	NAD	O4D-C1D	6.52	1.49	1.40
3	B	1601	NAD	C2N-N1N	6.43	1.42	1.35
3	F	5601	NAD	C2N-N1N	5.77	1.41	1.35
3	A	601	NAD	O4D-C1D	5.75	1.48	1.40
3	E	4601	NAD	O4D-C1D	5.66	1.48	1.40
3	C	2602	NAD	O4D-C1D	5.18	1.47	1.40
3	B	1601	NAD	O4D-C1D	5.12	1.47	1.40
3	D	3602	NAD	O4D-C1D	4.82	1.47	1.40
3	D	3601	NAD	C5A-N7A	-4.75	1.30	1.39
3	G	6601	NAD	C5A-N7A	-4.75	1.30	1.39
3	E	4602	NAD	C5A-N7A	-4.75	1.30	1.39
3	A	602	NAD	O4D-C1D	4.74	1.47	1.40
3	D	3601	NAD	C3N-C7N	4.71	1.57	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	H	7601	NAD	O4D-C1D	4.67	1.47	1.40
3	A	602	NAD	C5A-N7A	-4.66	1.30	1.39
3	A	601	NAD	C5A-N7A	-4.59	1.30	1.39
3	F	5602	NAD	O4D-C1D	4.56	1.46	1.40
3	E	4602	NAD	O4D-C1D	4.53	1.46	1.40
3	H	7602	NAD	O4D-C1D	4.47	1.46	1.40
3	G	6602	NAD	O4D-C1D	4.45	1.46	1.40
3	B	1602	NAD	O4D-C1D	4.40	1.46	1.40
3	C	2601	NAD	PN-O3	-4.36	1.54	1.59
3	C	2601	NAD	C5A-N7A	-4.36	1.31	1.39
3	F	5601	NAD	C5A-N7A	-4.36	1.31	1.39
3	D	3601	NAD	C6N-N1N	4.33	1.45	1.35
3	H	7601	NAD	C5A-N7A	-4.31	1.31	1.39
3	E	4602	NAD	C6N-N1N	4.31	1.45	1.35
3	C	2601	NAD	O4D-C1D	4.31	1.46	1.40
3	A	601	NAD	C6N-N1N	4.29	1.45	1.35
3	G	6601	NAD	C3N-C7N	4.24	1.56	1.50
3	C	2601	NAD	C6N-N1N	4.22	1.45	1.35
3	H	7602	NAD	C6N-N1N	4.19	1.44	1.35
3	A	602	NAD	C6N-N1N	4.15	1.44	1.35
3	C	2602	NAD	C5A-N7A	-4.14	1.31	1.39
3	F	5602	NAD	C6N-N1N	4.14	1.44	1.35
3	G	6602	NAD	C6N-N1N	4.13	1.44	1.35
3	B	1602	NAD	C6N-N1N	4.10	1.44	1.35
3	B	1602	NAD	C5A-N7A	-4.10	1.31	1.39
3	G	6602	NAD	C5A-N7A	-4.09	1.31	1.39
3	D	3602	NAD	C6N-N1N	4.08	1.44	1.35
3	H	7602	NAD	C5A-N7A	-4.07	1.31	1.39
3	F	5601	NAD	C6N-N1N	4.04	1.44	1.35
3	C	2602	NAD	C6N-N1N	4.04	1.44	1.35
3	E	4601	NAD	C5A-N7A	-4.00	1.31	1.39
3	B	1601	NAD	C5A-N7A	-3.97	1.31	1.39
3	E	4601	NAD	C6N-N1N	3.92	1.44	1.35
3	A	601	NAD	C3N-C7N	3.91	1.56	1.50
3	D	3602	NAD	C5A-N7A	-3.81	1.32	1.39
3	G	6601	NAD	C6N-N1N	3.76	1.43	1.35
3	F	5602	NAD	C5A-N7A	-3.75	1.32	1.39
3	C	2601	NAD	PA-O3	-3.75	1.55	1.59
3	G	6601	NAD	O4D-C1D	3.64	1.45	1.40
3	H	7601	NAD	C3N-C7N	3.55	1.55	1.50
3	H	7601	NAD	C6N-N1N	3.46	1.43	1.35
3	D	3602	NAD	PN-O3	3.45	1.63	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	2601	NAD	C5A-C4A	-3.45	1.32	1.39
3	C	2602	NAD	C3N-C7N	3.37	1.55	1.50
3	C	2601	NAD	C3N-C7N	3.31	1.55	1.50
3	A	602	NAD	C3N-C7N	3.29	1.55	1.50
3	F	5602	NAD	C3N-C7N	3.27	1.55	1.50
3	H	7601	NAD	O4B-C1B	3.24	1.49	1.42
3	B	1601	NAD	C6N-N1N	3.23	1.42	1.35
3	G	6602	NAD	C3N-C7N	3.23	1.55	1.50
3	D	3602	NAD	C3N-C7N	3.22	1.55	1.50
3	D	3601	NAD	C4N-C3N	3.22	1.44	1.39
3	B	1601	NAD	C3N-C7N	3.22	1.55	1.50
3	H	7602	NAD	C3N-C7N	3.19	1.55	1.50
3	F	5601	NAD	C5A-C4A	-3.19	1.33	1.39
3	A	601	NAD	C5A-C4A	-3.19	1.33	1.39
3	B	1602	NAD	C5A-C4A	-3.17	1.33	1.39
3	E	4601	NAD	C3N-C7N	3.16	1.55	1.50
3	F	5601	NAD	C4N-C3N	3.15	1.44	1.39
3	F	5601	NAD	C3N-C7N	3.10	1.55	1.50
3	E	4602	NAD	C5A-C4A	-3.07	1.33	1.39
3	E	4602	NAD	C3N-C7N	3.06	1.55	1.50
3	C	2602	NAD	C5A-C4A	-3.02	1.33	1.39
3	H	7601	NAD	C5A-C4A	-3.01	1.33	1.39
3	F	5602	NAD	C5A-C4A	-3.01	1.33	1.39
3	G	6602	NAD	C5A-C4A	-2.96	1.33	1.39
3	E	4601	NAD	C5A-C4A	-2.93	1.33	1.39
3	G	6601	NAD	C5A-C4A	-2.88	1.33	1.39
3	B	1602	NAD	C3N-C7N	2.86	1.54	1.50
3	D	3601	NAD	C5A-C4A	-2.83	1.34	1.39
3	D	3601	NAD	C2N-C3N	2.81	1.43	1.39
3	G	6601	NAD	PA-O3	2.76	1.62	1.59
3	H	7601	NAD	C2A-N3A	2.76	1.38	1.33
3	D	3602	NAD	C8A-N7A	2.74	1.36	1.31
3	A	602	NAD	C2A-N1A	2.71	1.38	1.33
3	H	7602	NAD	C5A-C4A	-2.69	1.34	1.39
3	G	6601	NAD	C4N-C3N	2.67	1.43	1.39
3	D	3601	NAD	C2A-N3A	2.66	1.38	1.33
3	A	602	NAD	O4B-C1B	2.64	1.48	1.42
3	G	6601	NAD	PN-O3	2.63	1.62	1.59
3	B	1601	NAD	C8A-N7A	2.63	1.36	1.31
3	F	5601	NAD	O4D-C1D	2.62	1.44	1.40
3	D	3601	NAD	C1B-N9A	2.59	1.53	1.46
3	C	2602	NAD	O4B-C1B	2.58	1.48	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	602	NAD	C5A-C4A	-2.57	1.34	1.39
3	C	2602	NAD	C8A-N7A	2.57	1.36	1.31
3	D	3602	NAD	C5A-C4A	-2.56	1.34	1.39
3	F	5602	NAD	C1B-N9A	2.56	1.53	1.46
3	E	4601	NAD	C4N-C3N	2.55	1.43	1.39
3	F	5601	NAD	C4A-N9A	-2.55	1.32	1.37
3	B	1601	NAD	C2A-N1A	2.54	1.38	1.33
3	H	7602	NAD	C8A-N7A	2.50	1.36	1.31
3	B	1601	NAD	C5A-C4A	-2.50	1.34	1.39
3	E	4601	NAD	C5N-C4N	2.49	1.43	1.38
3	E	4602	NAD	C4N-C3N	2.48	1.43	1.39
3	G	6601	NAD	C2A-N1A	2.48	1.38	1.33
3	G	6601	NAD	C2A-N3A	2.47	1.38	1.33
3	A	602	NAD	C8A-N7A	2.46	1.36	1.31
3	D	3602	NAD	C2A-N1A	2.46	1.38	1.33
3	B	1601	NAD	C4A-N3A	2.44	1.39	1.34
3	F	5602	NAD	PA-O3	-2.44	1.56	1.59
3	F	5602	NAD	C4N-C3N	2.40	1.43	1.39
3	G	6602	NAD	C4N-C3N	2.40	1.43	1.39
3	D	3601	NAD	PN-O5D	2.40	1.68	1.59
3	C	2602	NAD	C4N-C3N	2.39	1.43	1.39
3	A	601	NAD	C2A-N1A	2.38	1.38	1.33
3	H	7601	NAD	PN-O3	-2.38	1.56	1.59
3	H	7602	NAD	C4N-C3N	2.37	1.43	1.39
3	E	4601	NAD	C8A-N7A	2.37	1.36	1.31
3	F	5601	NAD	O4B-C1B	2.37	1.47	1.42
3	B	1602	NAD	C8A-N7A	2.37	1.36	1.31
3	D	3602	NAD	C4N-C3N	2.36	1.43	1.39
3	A	602	NAD	C4N-C3N	2.35	1.43	1.39
3	E	4601	NAD	O4B-C1B	2.35	1.47	1.42
3	B	1601	NAD	C2A-N3A	2.35	1.38	1.33
3	H	7602	NAD	C1B-N9A	2.34	1.52	1.46
3	F	5601	NAD	C5N-C4N	2.34	1.42	1.38
3	G	6602	NAD	C8A-N7A	2.32	1.36	1.31
3	C	2602	NAD	PA-O3	-2.32	1.57	1.59
3	H	7601	NAD	C5N-C4N	2.32	1.42	1.38
3	F	5602	NAD	C8A-N7A	2.32	1.36	1.31
3	C	2601	NAD	C4N-C3N	2.32	1.42	1.39
3	E	4601	NAD	C2A-N1A	2.31	1.38	1.33
3	D	3601	NAD	C8A-N7A	2.28	1.36	1.31
3	D	3601	NAD	O4B-C1B	2.28	1.47	1.42
3	B	1602	NAD	C2A-N3A	2.26	1.37	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	6601	NAD	C8A-N7A	2.25	1.36	1.31
3	G	6602	NAD	C4A-N9A	-2.24	1.33	1.37
3	H	7601	NAD	C2A-N1A	2.24	1.37	1.33
3	C	2601	NAD	C4A-N9A	-2.23	1.33	1.37
3	C	2601	NAD	C5N-C4N	2.23	1.42	1.38
3	B	1601	NAD	O4B-C1B	2.23	1.47	1.42
3	C	2601	NAD	C2A-N3A	2.23	1.37	1.33
3	D	3601	NAD	C5N-C4N	2.23	1.42	1.38
3	E	4602	NAD	C8A-N7A	2.22	1.36	1.31
3	F	5601	NAD	C2A-N3A	2.22	1.37	1.33
3	H	7601	NAD	PA-O3	-2.22	1.57	1.59
3	G	6602	NAD	C2A-N3A	2.22	1.37	1.33
3	G	6602	NAD	O4B-C1B	2.20	1.47	1.42
3	F	5602	NAD	O4B-C1B	2.19	1.47	1.42
3	F	5601	NAD	C2A-N1A	2.18	1.37	1.33
3	E	4601	NAD	C2A-N3A	2.17	1.37	1.33
3	D	3602	NAD	C1B-N9A	2.16	1.52	1.46
3	A	602	NAD	C2A-N3A	2.16	1.37	1.33
3	E	4602	NAD	C2A-N1A	2.15	1.37	1.33
3	F	5602	NAD	C2A-N1A	2.15	1.37	1.33
3	A	601	NAD	C4A-N9A	-2.14	1.33	1.37
3	D	3601	NAD	C2A-N1A	2.11	1.37	1.33
3	H	7602	NAD	O4B-C1B	2.11	1.46	1.42
3	D	3601	NAD	C5D-C4D	2.10	1.57	1.51
3	E	4601	NAD	C4A-N3A	2.10	1.38	1.34
3	B	1601	NAD	O4D-C4D	2.09	1.49	1.45
3	G	6601	NAD	C4A-N9A	-2.08	1.33	1.37
3	D	3602	NAD	O4B-C1B	2.08	1.46	1.42
3	B	1602	NAD	C2N-C3N	2.06	1.42	1.39
3	G	6602	NAD	C2A-N1A	2.05	1.37	1.33
3	A	602	NAD	C5N-C4N	2.04	1.42	1.38
3	A	601	NAD	C2N-C3N	2.04	1.42	1.39
3	B	1601	NAD	C5N-C4N	2.04	1.42	1.38
3	E	4602	NAD	C4A-N9A	-2.02	1.33	1.37
3	A	602	NAD	C4A-N9A	-2.02	1.33	1.37
3	C	2601	NAD	C2A-N1A	2.02	1.37	1.33
3	B	1602	NAD	C4A-N9A	-2.01	1.33	1.37
3	A	601	NAD	C2A-N3A	2.01	1.37	1.33

All (175) bond angle outliers are listed below:

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	D	3601	NAD	C5A-C4A-N3A	-6.28	118.08	126.72
3	B	1602	NAD	C5A-C4A-N3A	-6.18	118.21	126.72
3	H	7601	NAD	C5A-C4A-N3A	-6.13	118.28	126.72
3	H	7602	NAD	C5A-C4A-N3A	-6.08	118.35	126.72
3	F	5602	NAD	C5A-C4A-N3A	-6.08	118.35	126.72
3	G	6602	NAD	C5A-C4A-N3A	-6.04	118.40	126.72
3	E	4602	NAD	C5A-C4A-N3A	-6.03	118.41	126.72
3	B	1601	NAD	C5A-C4A-N3A	-6.00	118.46	126.72
3	C	2602	NAD	C5A-C4A-N3A	-5.93	118.55	126.72
3	C	2601	NAD	C5A-C4A-N3A	-5.92	118.57	126.72
3	A	602	NAD	C5A-C4A-N3A	-5.91	118.58	126.72
3	A	601	NAD	C5A-C4A-N3A	-5.88	118.62	126.72
3	E	4601	NAD	C5A-C4A-N3A	-5.86	118.65	126.72
3	G	6601	NAD	C5A-C4A-N3A	-5.84	118.68	126.72
3	F	5601	NAD	C5A-C4A-N3A	-5.71	118.86	126.72
3	D	3602	NAD	C5A-C4A-N3A	-5.57	119.05	126.72
3	F	5601	NAD	N3A-C2A-N1A	-5.56	120.17	128.58
3	D	3601	NAD	C6A-C5A-N7A	-5.51	121.46	132.09
3	D	3601	NAD	C6A-C5A-C4A	5.50	124.69	117.18
3	E	4601	NAD	N3A-C2A-N1A	-5.47	120.30	128.58
3	G	6601	NAD	N3A-C2A-N1A	-5.47	120.30	128.58
3	C	2601	NAD	N3A-C2A-N1A	-5.45	120.33	128.58
3	A	601	NAD	C6A-C5A-N7A	-5.45	121.58	132.09
3	G	6601	NAD	C6A-C5A-N7A	-5.45	121.59	132.09
3	A	601	NAD	N3A-C2A-N1A	-5.42	120.37	128.58
3	A	602	NAD	C6A-C5A-N7A	-5.40	121.67	132.09
3	A	602	NAD	C6A-C5A-C4A	5.40	124.55	117.18
3	B	1601	NAD	N3A-C2A-N1A	-5.40	120.41	128.58
3	E	4602	NAD	C6A-C5A-N7A	-5.36	121.77	132.09
3	E	4602	NAD	C6A-C5A-C4A	5.33	124.45	117.18
3	F	5601	NAD	C6A-C5A-N7A	-5.32	121.83	132.09
3	A	601	NAD	C6A-C5A-C4A	5.32	124.44	117.18
3	E	4601	NAD	C6A-C5A-N7A	-5.32	121.84	132.09
3	G	6601	NAD	C6A-C5A-C4A	5.31	124.43	117.18
3	H	7601	NAD	N3A-C4A-N9A	5.30	136.18	127.17
3	D	3601	NAD	N3A-C4A-N9A	5.28	136.15	127.17
3	H	7601	NAD	C6A-C5A-N7A	-5.27	121.94	132.09
3	B	1601	NAD	C6A-C5A-N7A	-5.26	121.96	132.09
3	F	5602	NAD	N3A-C2A-N1A	-5.25	120.64	128.58
3	B	1602	NAD	N3A-C2A-N1A	-5.25	120.64	128.58
3	H	7601	NAD	N3A-C2A-N1A	-5.24	120.65	128.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	2601	NAD	C6A-C5A-N7A	-5.23	122.00	132.09
3	B	1602	NAD	C6A-C5A-N7A	-5.20	122.06	132.09
3	H	7601	NAD	C6A-C5A-C4A	5.20	124.28	117.18
3	B	1602	NAD	C6A-C5A-C4A	5.19	124.26	117.18
3	C	2602	NAD	N3A-C2A-N1A	-5.16	120.77	128.58
3	E	4602	NAD	N3A-C2A-N1A	-5.16	120.78	128.58
3	C	2602	NAD	C6A-C5A-N7A	-5.15	122.17	132.09
3	A	602	NAD	N3A-C2A-N1A	-5.13	120.81	128.58
3	B	1601	NAD	N3A-C4A-N9A	5.12	135.88	127.17
3	F	5602	NAD	N3A-C4A-N9A	5.11	135.86	127.17
3	E	4601	NAD	C6A-C5A-C4A	5.11	124.16	117.18
3	F	5602	NAD	C6A-C5A-N7A	-5.11	122.25	132.09
3	A	601	NAD	N3A-C4A-N9A	5.10	135.85	127.17
3	D	3602	NAD	N3A-C2A-N1A	-5.10	120.86	128.58
3	H	7602	NAD	C6A-C5A-N7A	-5.10	122.26	132.09
3	D	3601	NAD	N3A-C2A-N1A	-5.10	120.86	128.58
3	G	6602	NAD	N3A-C2A-N1A	-5.10	120.86	128.58
3	E	4602	NAD	N3A-C4A-N9A	5.10	135.84	127.17
3	G	6602	NAD	C6A-C5A-N7A	-5.08	122.29	132.09
3	F	5601	NAD	C6A-C5A-C4A	5.08	124.11	117.18
3	B	1601	NAD	C6A-C5A-C4A	5.08	124.11	117.18
3	G	6602	NAD	C6A-C5A-C4A	5.07	124.11	117.18
3	C	2601	NAD	N3A-C4A-N9A	5.06	135.77	127.17
3	C	2602	NAD	C6A-C5A-C4A	5.05	124.08	117.18
3	C	2601	NAD	C6A-C5A-C4A	5.05	124.08	117.18
3	B	1602	NAD	N3A-C4A-N9A	5.03	135.72	127.17
3	E	4601	NAD	N3A-C4A-N9A	5.03	135.72	127.17
3	H	7602	NAD	N3A-C4A-N9A	5.01	135.69	127.17
3	A	602	NAD	N3A-C4A-N9A	5.00	135.68	127.17
3	H	7602	NAD	N3A-C2A-N1A	-4.99	121.02	128.58
3	F	5602	NAD	C6A-C5A-C4A	4.98	123.98	117.18
3	G	6602	NAD	N3A-C4A-N9A	4.96	135.60	127.17
3	H	7602	NAD	C6A-C5A-C4A	4.94	123.92	117.18
3	D	3602	NAD	C6A-C5A-N7A	-4.93	122.58	132.09
3	G	6601	NAD	N3A-C4A-N9A	4.91	135.52	127.17
3	F	5601	NAD	N3A-C4A-N9A	4.90	135.51	127.17
3	C	2602	NAD	N3A-C4A-N9A	4.81	135.35	127.17
3	D	3602	NAD	C6A-C5A-C4A	4.72	123.62	117.18
3	D	3602	NAD	N3A-C4A-N9A	4.59	134.97	127.17
3	E	4601	NAD	C4D-O4D-C1D	-4.25	106.03	109.92
3	C	2601	NAD	N9A-C8A-N7A	-3.86	108.45	113.94
3	G	6601	NAD	N9A-C8A-N7A	-3.71	108.67	113.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	2602	NAD	N9A-C8A-N7A	-3.68	108.72	113.94
3	F	5602	NAD	N9A-C8A-N7A	-3.68	108.72	113.94
3	G	6602	NAD	N9A-C8A-N7A	-3.66	108.74	113.94
3	B	1602	NAD	N9A-C8A-N7A	-3.66	108.74	113.94
3	A	601	NAD	N9A-C8A-N7A	-3.64	108.77	113.94
3	E	4601	NAD	N9A-C8A-N7A	-3.64	108.78	113.94
3	F	5601	NAD	N9A-C8A-N7A	-3.63	108.79	113.94
3	B	1601	NAD	N9A-C8A-N7A	-3.61	108.81	113.94
3	D	3602	NAD	N9A-C8A-N7A	-3.52	108.94	113.94
3	H	7602	NAD	N9A-C8A-N7A	-3.50	108.98	113.94
3	D	3601	NAD	N9A-C8A-N7A	-3.49	108.98	113.94
3	H	7601	NAD	N9A-C8A-N7A	-3.49	108.98	113.94
3	A	602	NAD	N9A-C8A-N7A	-3.49	108.99	113.94
3	E	4602	NAD	N9A-C8A-N7A	-3.45	109.04	113.94
3	G	6602	NAD	C2A-N3A-C4A	3.32	119.94	111.83
3	H	7601	NAD	C2A-N3A-C4A	3.31	119.91	111.83
3	C	2601	NAD	C2A-N3A-C4A	3.28	119.84	111.83
3	F	5602	NAD	C2A-N3A-C4A	3.27	119.82	111.83
3	E	4601	NAD	C2A-N3A-C4A	3.26	119.80	111.83
3	A	601	NAD	C2A-N3A-C4A	3.24	119.75	111.83
3	B	1602	NAD	C2A-N3A-C4A	3.24	119.74	111.83
3	F	5601	NAD	C2A-N3A-C4A	3.23	119.72	111.83
3	D	3602	NAD	C2A-N3A-C4A	3.22	119.70	111.83
3	B	1601	NAD	C2A-N3A-C4A	3.22	119.69	111.83
3	D	3601	NAD	C2A-N3A-C4A	3.20	119.65	111.83
3	H	7602	NAD	C2A-N3A-C4A	3.19	119.62	111.83
3	G	6601	NAD	C2A-N3A-C4A	3.18	119.61	111.83
3	C	2602	NAD	C2A-N3A-C4A	3.17	119.57	111.83
3	E	4602	NAD	C2A-N3A-C4A	3.13	119.47	111.83
3	A	602	NAD	C2A-N3A-C4A	3.07	119.33	111.83
3	F	5601	NAD	C4A-C5A-N7A	3.04	114.06	110.58
3	H	7601	NAD	C4D-O4D-C1D	-2.99	107.19	109.92
3	E	4601	NAD	C4A-C5A-N7A	2.99	114.00	110.58
3	A	601	NAD	C4A-C5A-N7A	2.97	113.98	110.58
3	G	6601	NAD	C4A-C5A-N7A	2.97	113.97	110.58
3	B	1601	NAD	C4A-C5A-N7A	2.93	113.93	110.58
3	C	2601	NAD	C4A-C5A-N7A	2.92	113.92	110.58
3	D	3601	NAD	C4A-C5A-N7A	2.85	113.84	110.58
3	H	7602	NAD	C4A-C5A-N7A	2.82	113.81	110.58
3	D	3602	NAD	C4A-C5A-N7A	2.81	113.79	110.58
3	E	4602	NAD	C4A-C5A-N7A	2.80	113.78	110.58
3	H	7601	NAD	C4A-C5A-N7A	2.80	113.78	110.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	5602	NAD	C4A-C5A-N7A	2.79	113.78	110.58
3	A	602	NAD	C4A-C5A-N7A	2.79	113.77	110.58
3	H	7602	NAD	C3B-C2B-C1B	2.77	106.71	101.46
3	C	2602	NAD	C4A-C5A-N7A	2.77	113.75	110.58
3	B	1602	NAD	C4A-C5A-N7A	2.70	113.67	110.58
3	G	6601	NAD	C4D-O4D-C1D	-2.70	107.45	109.92
3	A	601	NAD	C6N-N1N-C2N	-2.68	119.59	121.88
3	H	7602	NAD	O4B-C1B-N9A	2.65	113.18	108.09
3	G	6602	NAD	C4A-C5A-N7A	2.64	113.60	110.58
3	C	2602	NAD	C6N-N1N-C2N	-2.64	119.63	121.88
3	E	4602	NAD	C6N-N1N-C2N	-2.63	119.64	121.88
3	D	3602	NAD	C6N-N1N-C2N	-2.62	119.65	121.88
3	F	5602	NAD	C6N-N1N-C2N	-2.62	119.65	121.88
3	D	3601	NAD	C6N-N1N-C2N	-2.61	119.66	121.88
3	B	1602	NAD	C6N-N1N-C2N	-2.60	119.67	121.88
3	B	1602	NAD	C4D-O4D-C1D	-2.59	107.55	109.92
3	G	6601	NAD	C3B-C2B-C1B	2.58	106.33	101.46
3	D	3601	NAD	C3B-C2B-C1B	2.57	106.32	101.46
3	B	1601	NAD	C4D-O4D-C1D	-2.54	107.60	109.92
3	H	7602	NAD	C6N-N1N-C2N	-2.54	119.71	121.88
3	A	602	NAD	C6N-N1N-C2N	-2.53	119.73	121.88
3	G	6602	NAD	C6N-N1N-C2N	-2.52	119.73	121.88
3	G	6602	NAD	C4D-O4D-C1D	-2.52	107.62	109.92
3	D	3602	NAD	C3B-C2B-C1B	2.48	106.16	101.46
3	H	7601	NAD	C6N-N1N-C2N	-2.45	119.80	121.88
3	A	601	NAD	C4D-O4D-C1D	-2.43	107.70	109.92
3	A	602	NAD	C4D-O4D-C1D	-2.40	107.73	109.92
3	F	5601	NAD	C4D-O4D-C1D	-2.34	107.78	109.92
3	G	6601	NAD	C6N-N1N-C2N	-2.31	119.91	121.88
3	A	601	NAD	C3B-C2B-C1B	2.24	105.70	101.46
3	G	6601	NAD	C2B-C3B-C4B	2.23	106.92	102.61
3	C	2602	NAD	C4D-O4D-C1D	-2.20	107.91	109.92
3	D	3601	NAD	C2D-C3D-C4D	2.17	106.81	102.61
3	F	5601	NAD	O4B-C1B-N9A	2.14	112.21	108.09
3	F	5602	NAD	C4D-O4D-C1D	-2.14	107.96	109.92
3	C	2601	NAD	C2D-C3D-C4D	2.12	106.70	102.61
3	E	4602	NAD	C2D-C3D-C4D	2.08	106.63	102.61
3	F	5602	NAD	C3B-C2B-C1B	2.07	105.38	101.46
3	H	7602	NAD	C2B-C3B-C4B	2.06	106.59	102.61
3	H	7601	NAD	O4B-C1B-N9A	2.06	112.05	108.09
3	D	3602	NAD	C2D-C3D-C4D	2.06	106.59	102.61
3	C	2602	NAD	C2D-C3D-C4D	2.06	106.59	102.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	5601	NAD	C3N-C7N-N7N	-2.05	115.21	117.74
3	C	2601	NAD	C6N-N1N-C2N	-2.05	120.13	121.88
3	A	601	NAD	C3N-C7N-N7N	-2.04	115.22	117.74
3	C	2601	NAD	C3N-C7N-N7N	-2.03	115.24	117.74
3	H	7602	NAD	C2D-C3D-C4D	2.02	106.51	102.61
3	D	3601	NAD	C2B-C3B-C4B	2.02	106.51	102.61
3	B	1601	NAD	C6N-N1N-C2N	-2.01	120.17	121.88
3	E	4601	NAD	C6N-N1N-C2N	-2.00	120.17	121.88

There are no chirality outliers.

All (70) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	A	602	NAD	C5B-O5B-PA-O1A
3	A	602	NAD	C5B-O5B-PA-O3
3	B	1601	NAD	C5B-O5B-PA-O1A
3	B	1601	NAD	C5B-O5B-PA-O2A
3	B	1601	NAD	C5B-O5B-PA-O3
3	B	1602	NAD	C5B-O5B-PA-O1A
3	B	1602	NAD	C5B-O5B-PA-O3
3	B	1602	NAD	C5D-O5D-PN-O1N
3	C	2601	NAD	C5B-O5B-PA-O1A
3	C	2601	NAD	C5B-O5B-PA-O3
3	C	2601	NAD	O4B-C4B-C5B-O5B
3	C	2601	NAD	C3B-C4B-C5B-O5B
3	C	2602	NAD	C5B-O5B-PA-O2A
3	C	2602	NAD	C5B-O5B-PA-O3
3	C	2602	NAD	C5D-O5D-PN-O1N
3	D	3601	NAD	C5D-O5D-PN-O3
3	D	3602	NAD	C5B-O5B-PA-O1A
3	D	3602	NAD	C5B-O5B-PA-O2A
3	D	3602	NAD	C5B-O5B-PA-O3
3	E	4601	NAD	PN-O3-PA-O5B
3	E	4602	NAD	C5B-O5B-PA-O1A
3	E	4602	NAD	C5B-O5B-PA-O3
3	E	4602	NAD	C5D-O5D-PN-O1N
3	F	5601	NAD	PN-O3-PA-O5B
3	F	5602	NAD	C5B-O5B-PA-O1A
3	F	5602	NAD	C5B-O5B-PA-O3
3	F	5602	NAD	C5D-O5D-PN-O1N
3	G	6602	NAD	C5B-O5B-PA-O1A
3	G	6602	NAD	C5B-O5B-PA-O2A

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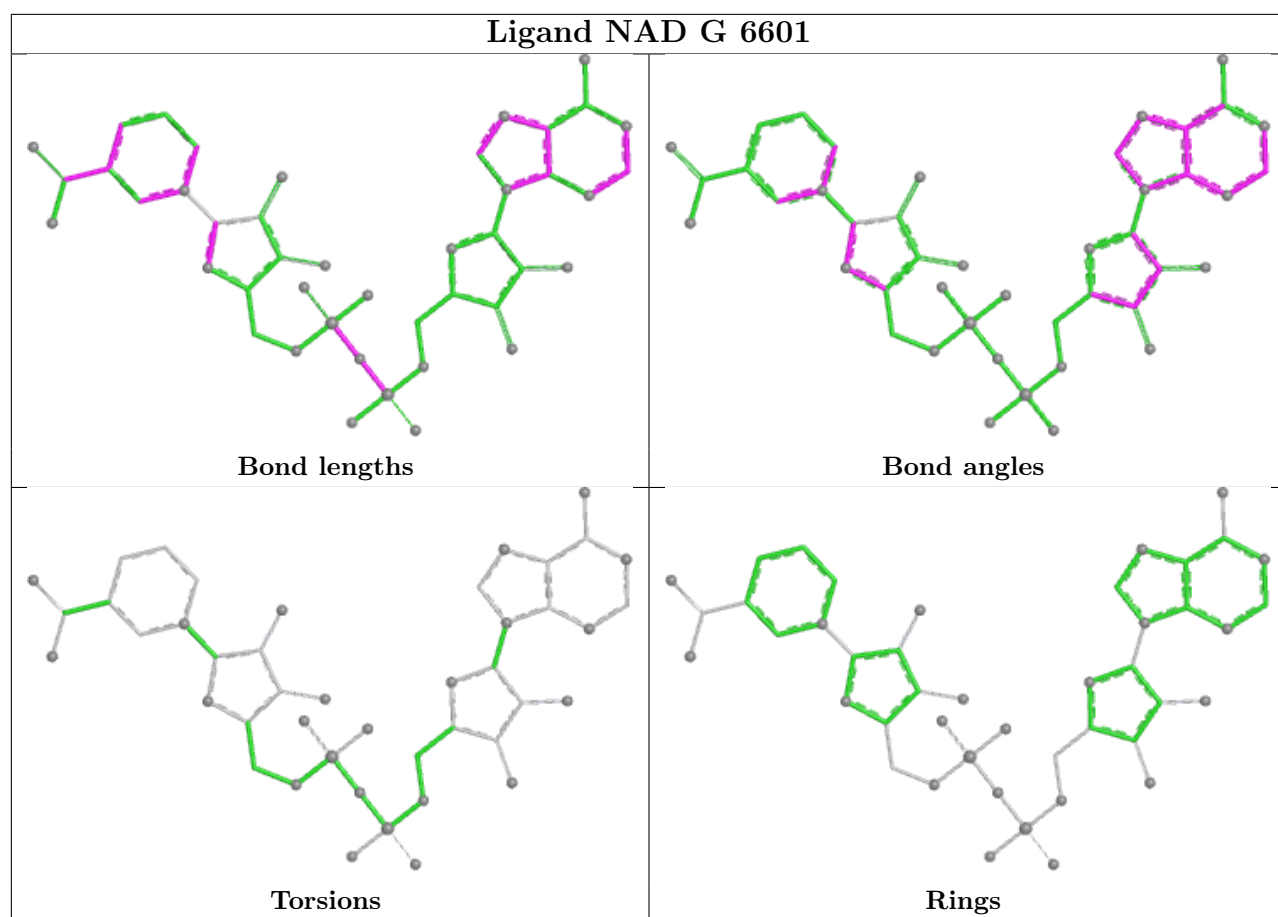
Mol	Chain	Res	Type	Atoms
3	G	6602	NAD	C5B-O5B-PA-O3
3	H	7602	NAD	C5B-O5B-PA-O1A
3	H	7602	NAD	C5B-O5B-PA-O2A
3	H	7602	NAD	C5B-O5B-PA-O3
3	B	1602	NAD	C3D-C4D-C5D-O5D
3	D	3601	NAD	O4D-C4D-C5D-O5D
3	D	3602	NAD	C3D-C4D-C5D-O5D
3	E	4602	NAD	C3D-C4D-C5D-O5D
3	G	6602	NAD	C3D-C4D-C5D-O5D
3	H	7602	NAD	C3D-C4D-C5D-O5D
3	B	1601	NAD	O4B-C4B-C5B-O5B
3	D	3602	NAD	O4D-C4D-C5D-O5D
3	B	1601	NAD	C3B-C4B-C5B-O5B
3	B	1602	NAD	O4D-C4D-C5D-O5D
3	D	3601	NAD	C3D-C4D-C5D-O5D
3	E	4602	NAD	O4D-C4D-C5D-O5D
3	G	6602	NAD	O4D-C4D-C5D-O5D
3	A	602	NAD	C3D-C4D-C5D-O5D
3	H	7602	NAD	O4D-C4D-C5D-O5D
3	B	1601	NAD	PN-O3-PA-O5B
3	C	2602	NAD	C3D-C4D-C5D-O5D
3	B	1601	NAD	O4D-C4D-C5D-O5D
3	A	602	NAD	C5B-O5B-PA-O2A
3	B	1602	NAD	C5B-O5B-PA-O2A
3	C	2601	NAD	C5B-O5B-PA-O2A
3	D	3602	NAD	C5D-O5D-PN-O3
3	D	3602	NAD	C5D-O5D-PN-O2N
3	E	4602	NAD	C5B-O5B-PA-O2A
3	F	5602	NAD	C5B-O5B-PA-O2A
3	G	6602	NAD	C5D-O5D-PN-O1N
3	G	6602	NAD	C4B-C5B-O5B-PA
3	F	5602	NAD	C3D-C4D-C5D-O5D
3	A	602	NAD	O4B-C4B-C5B-O5B
3	D	3602	NAD	O4B-C4B-C5B-O5B
3	B	1601	NAD	PA-O3-PN-O2N
3	H	7601	NAD	O4B-C4B-C5B-O5B
3	H	7602	NAD	PN-O3-PA-O2A
3	E	4601	NAD	C2B-C1B-N9A-C8A
3	B	1602	NAD	C4B-C5B-O5B-PA
3	B	1601	NAD	PN-O3-PA-O1A
3	B	1601	NAD	PA-O3-PN-O1N

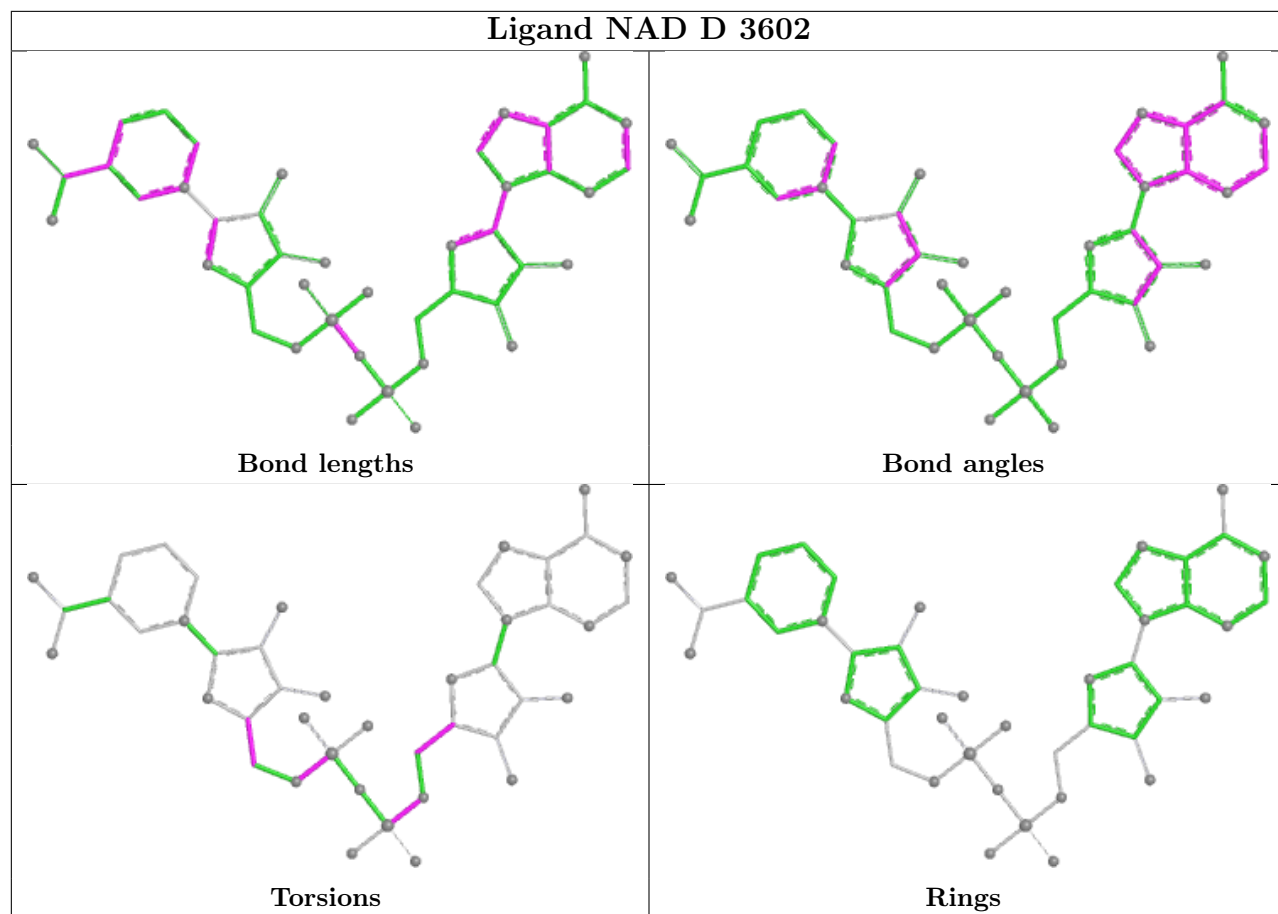
There are no ring outliers.

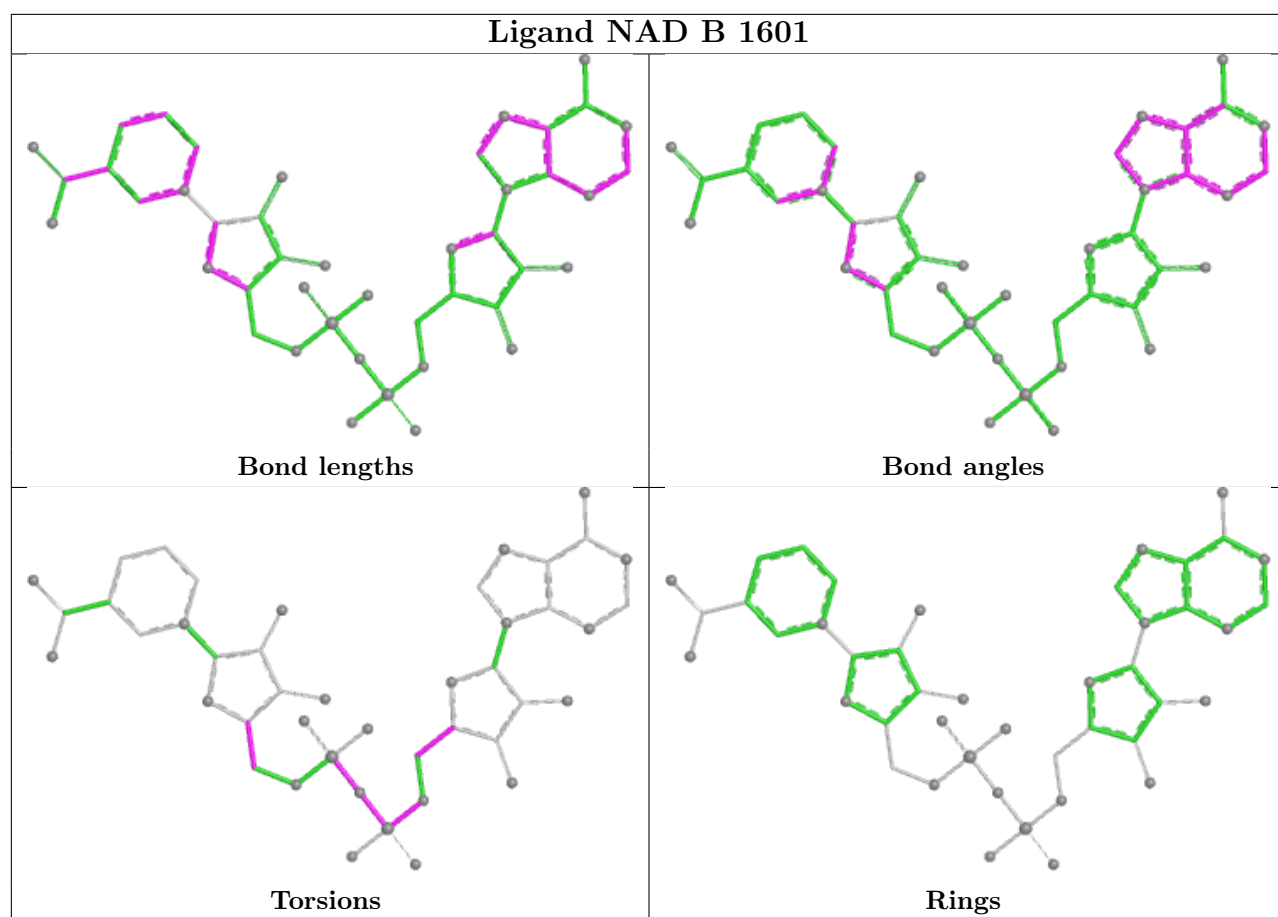
11 monomers are involved in 27 short contacts:

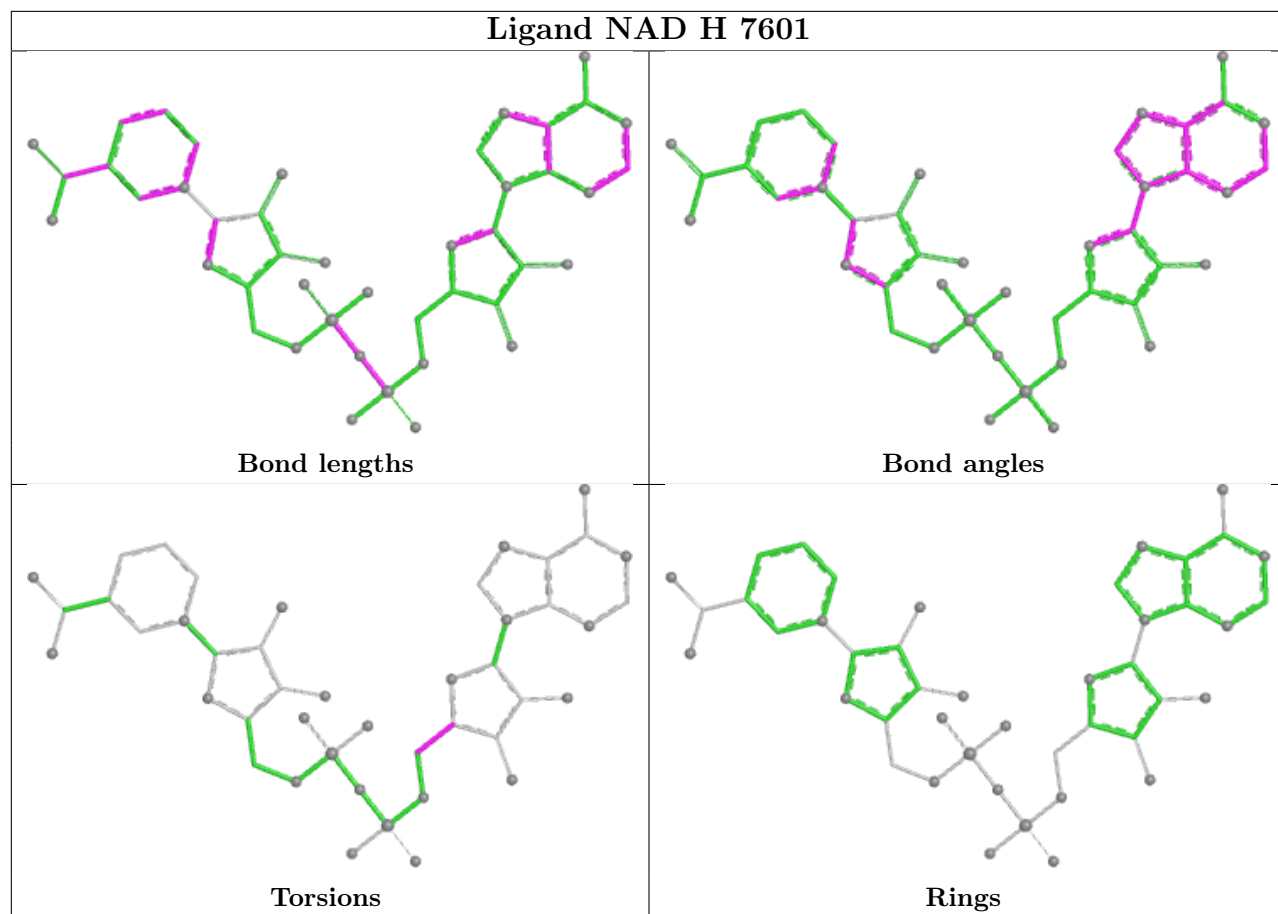
Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	G	6601	NAD	4	0
3	D	3602	NAD	1	0
3	B	1601	NAD	4	0
3	H	7601	NAD	2	0
3	A	601	NAD	3	0
3	C	2601	NAD	2	0
3	D	3601	NAD	3	0
3	H	7602	NAD	1	0
3	E	4601	NAD	3	0
3	F	5601	NAD	3	0
3	B	1602	NAD	1	0

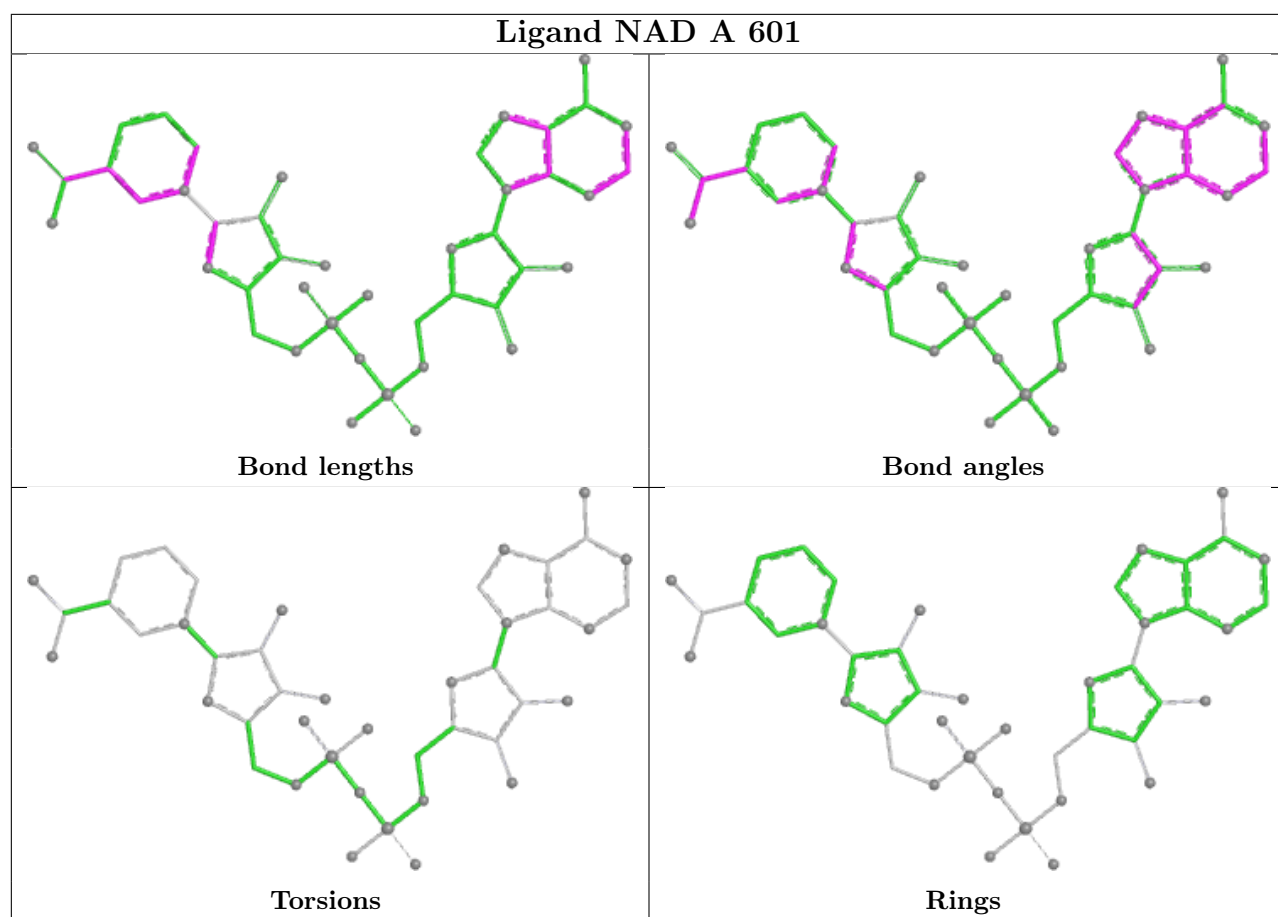
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. 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.

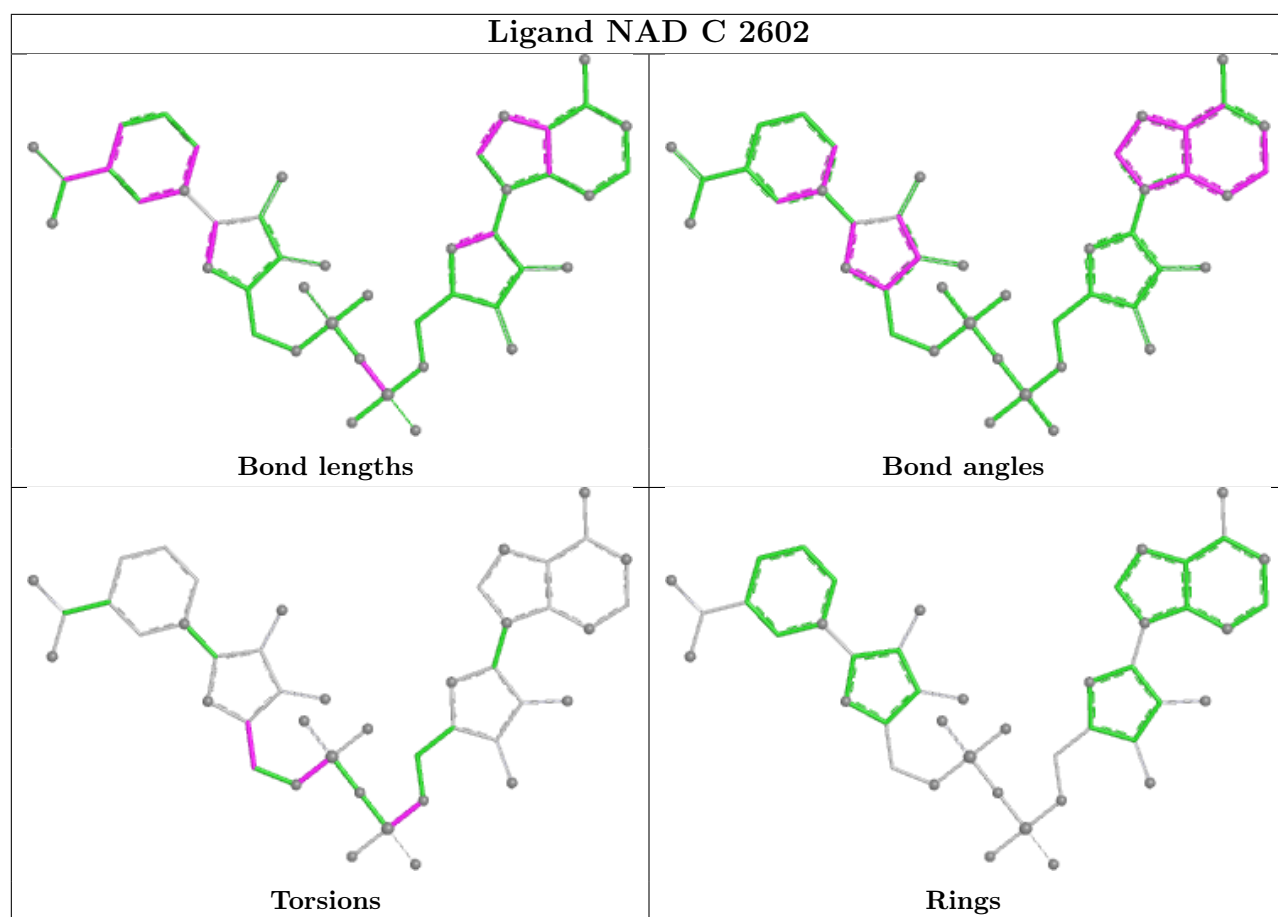


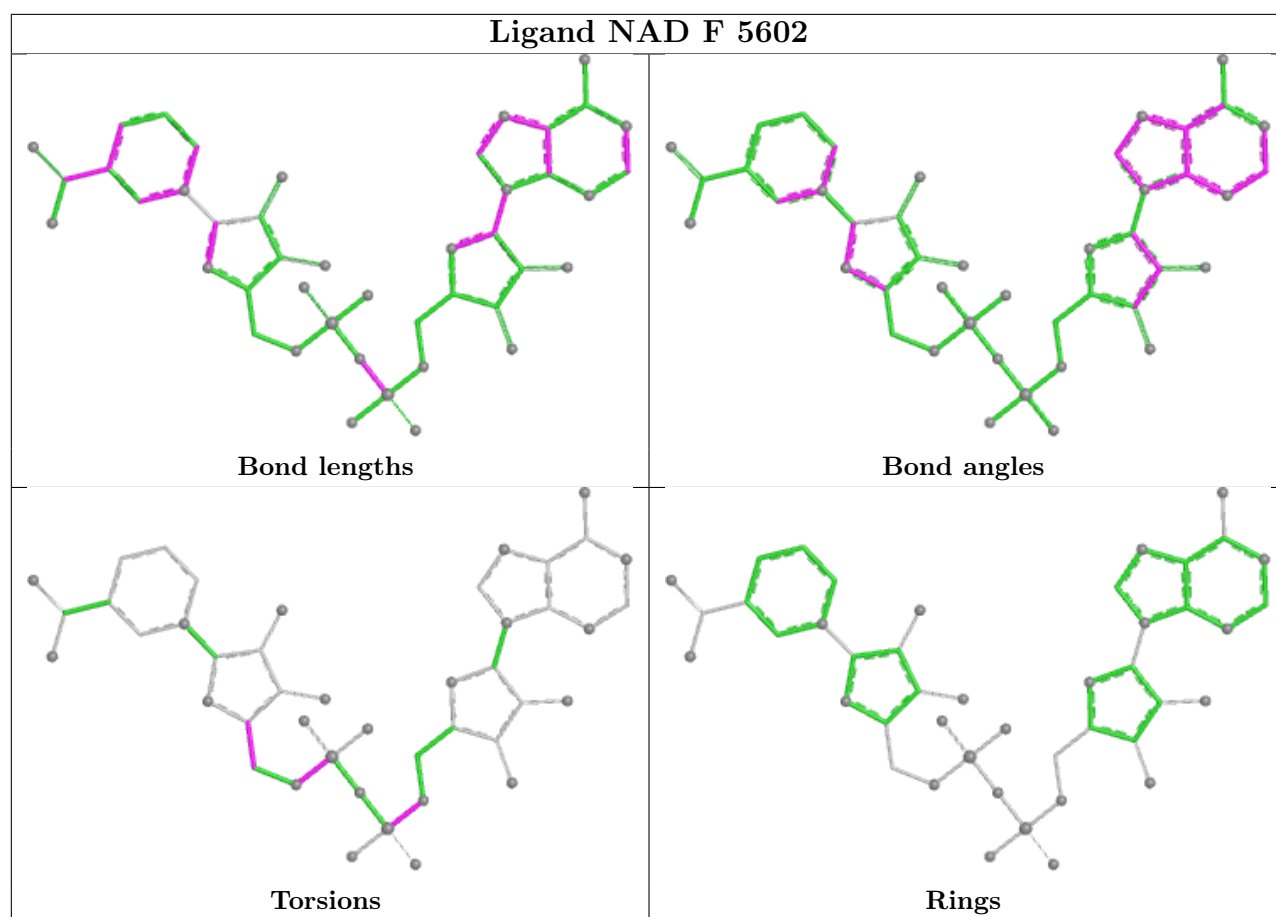


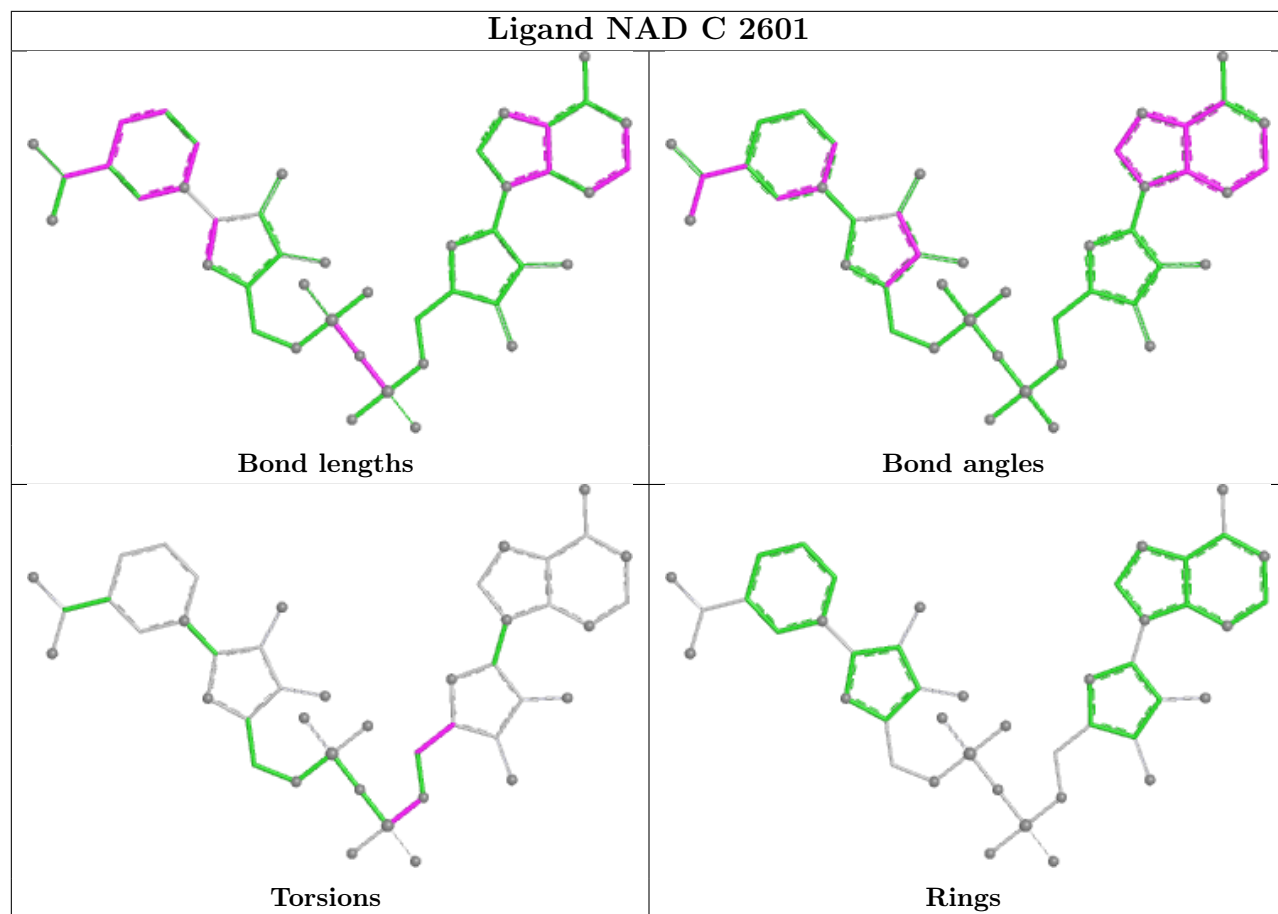


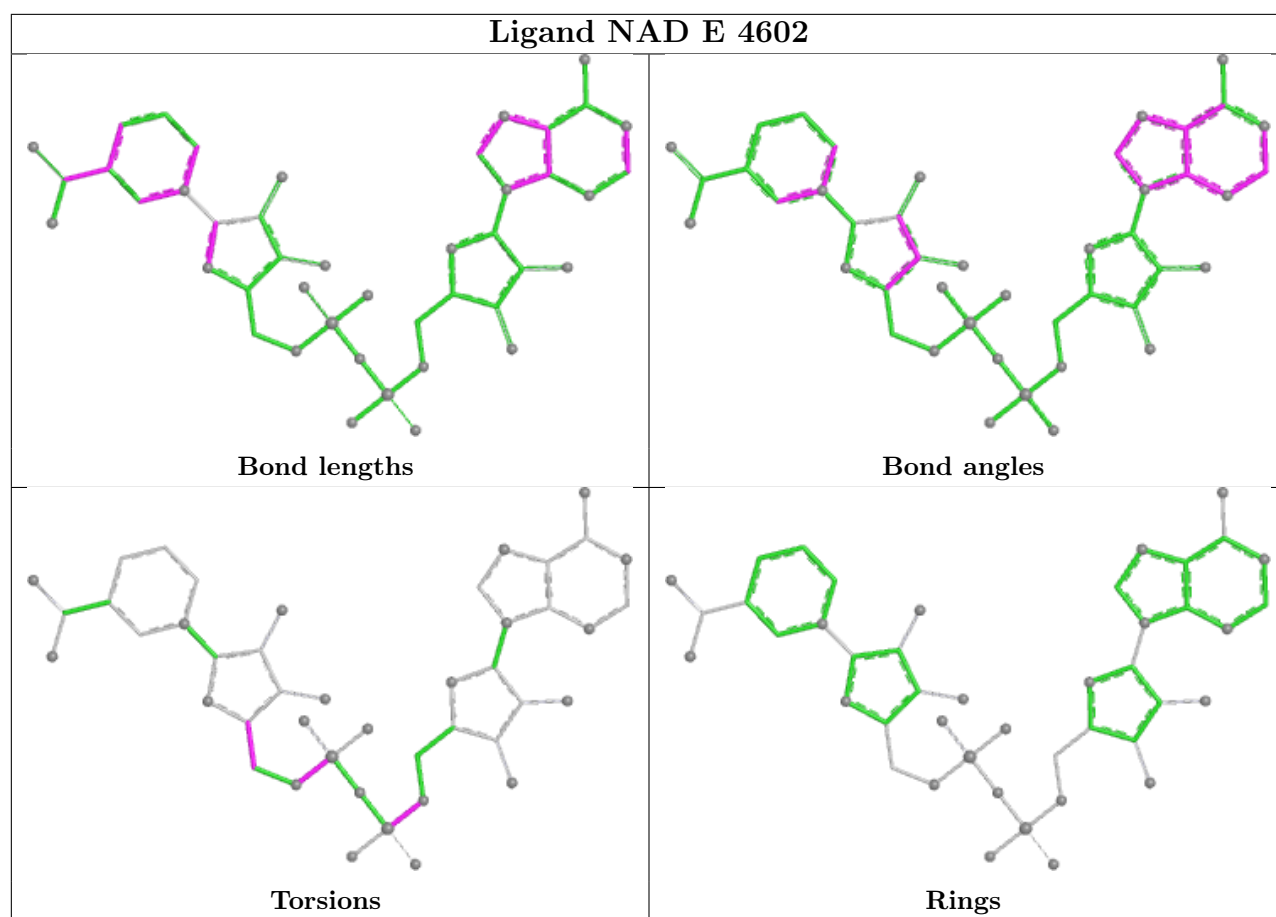


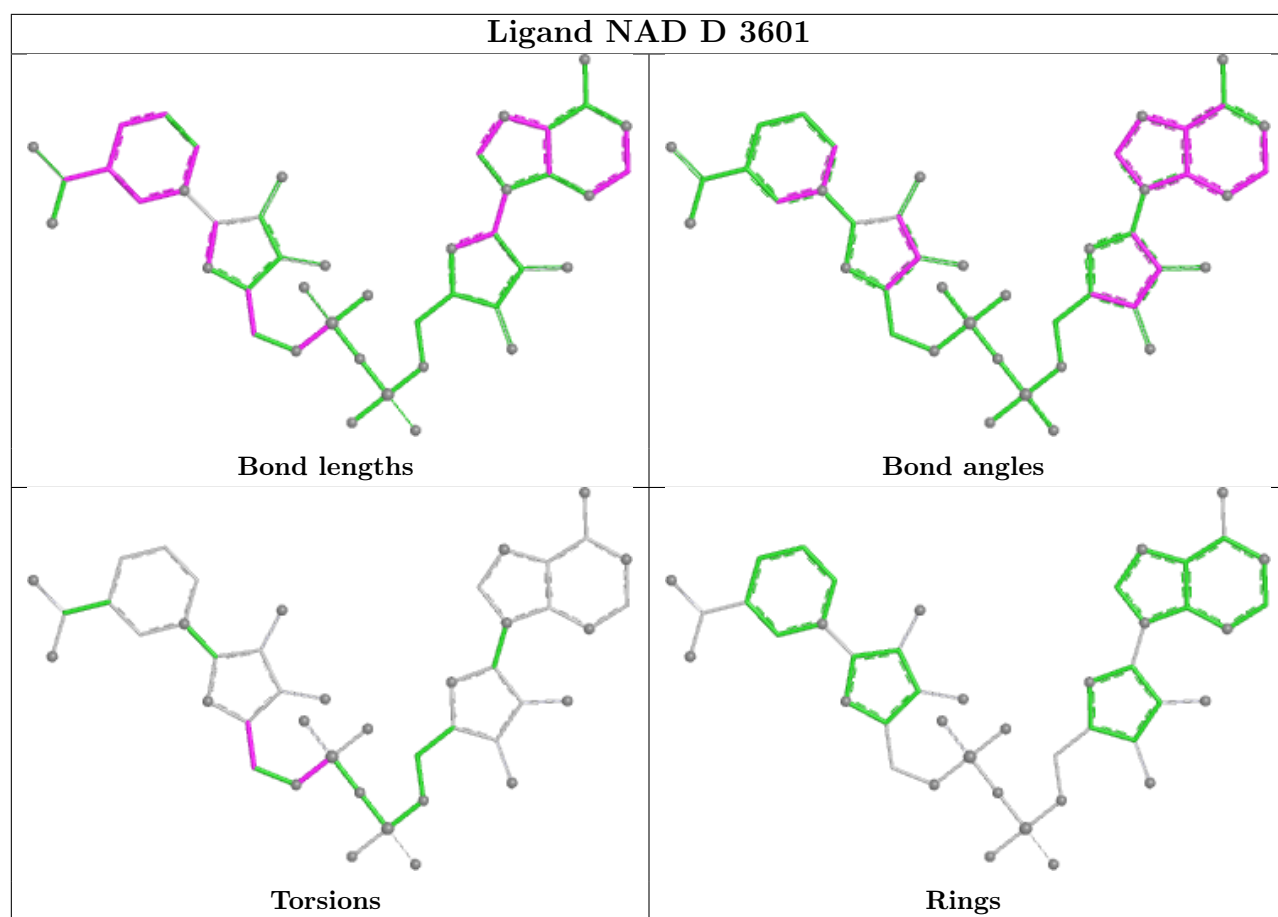


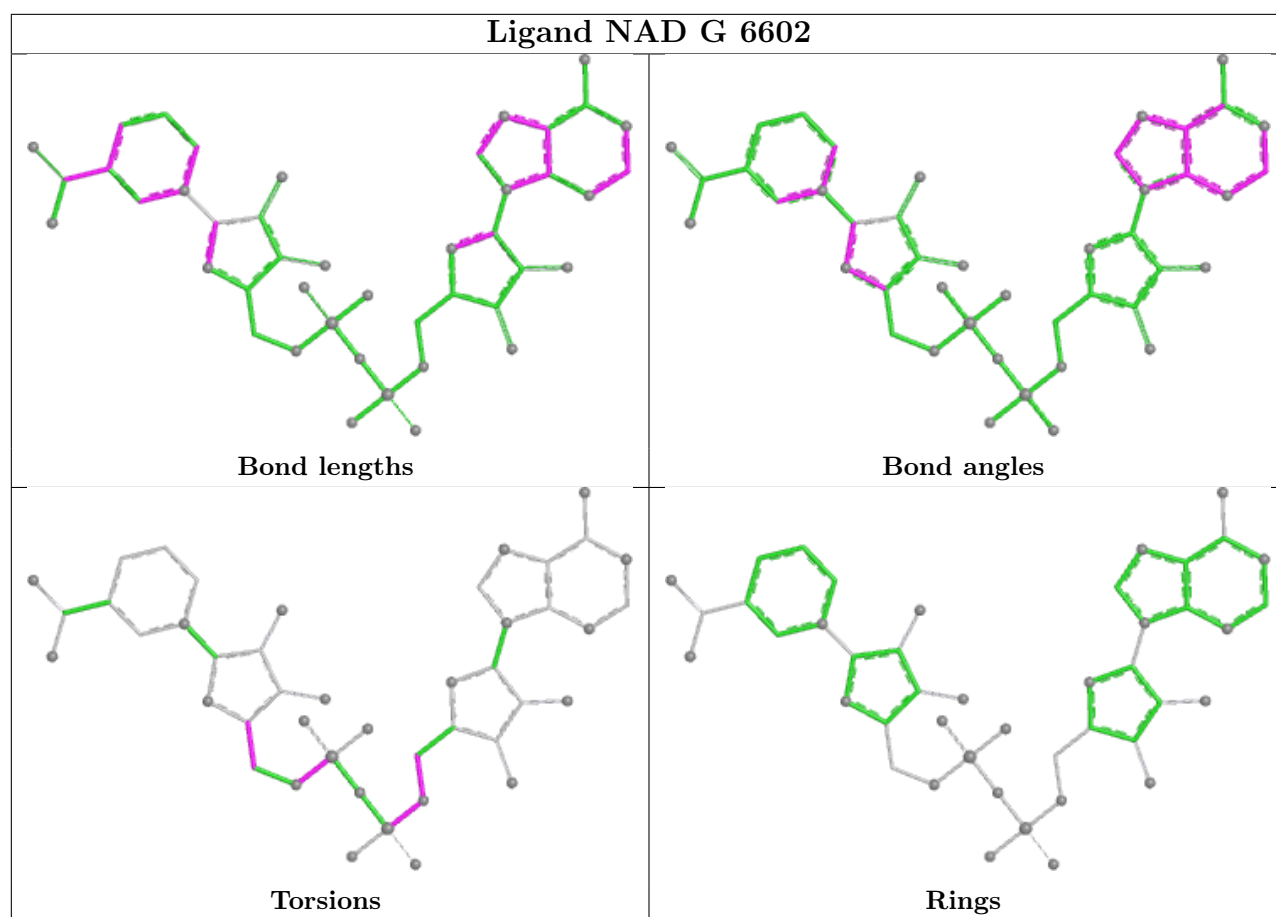




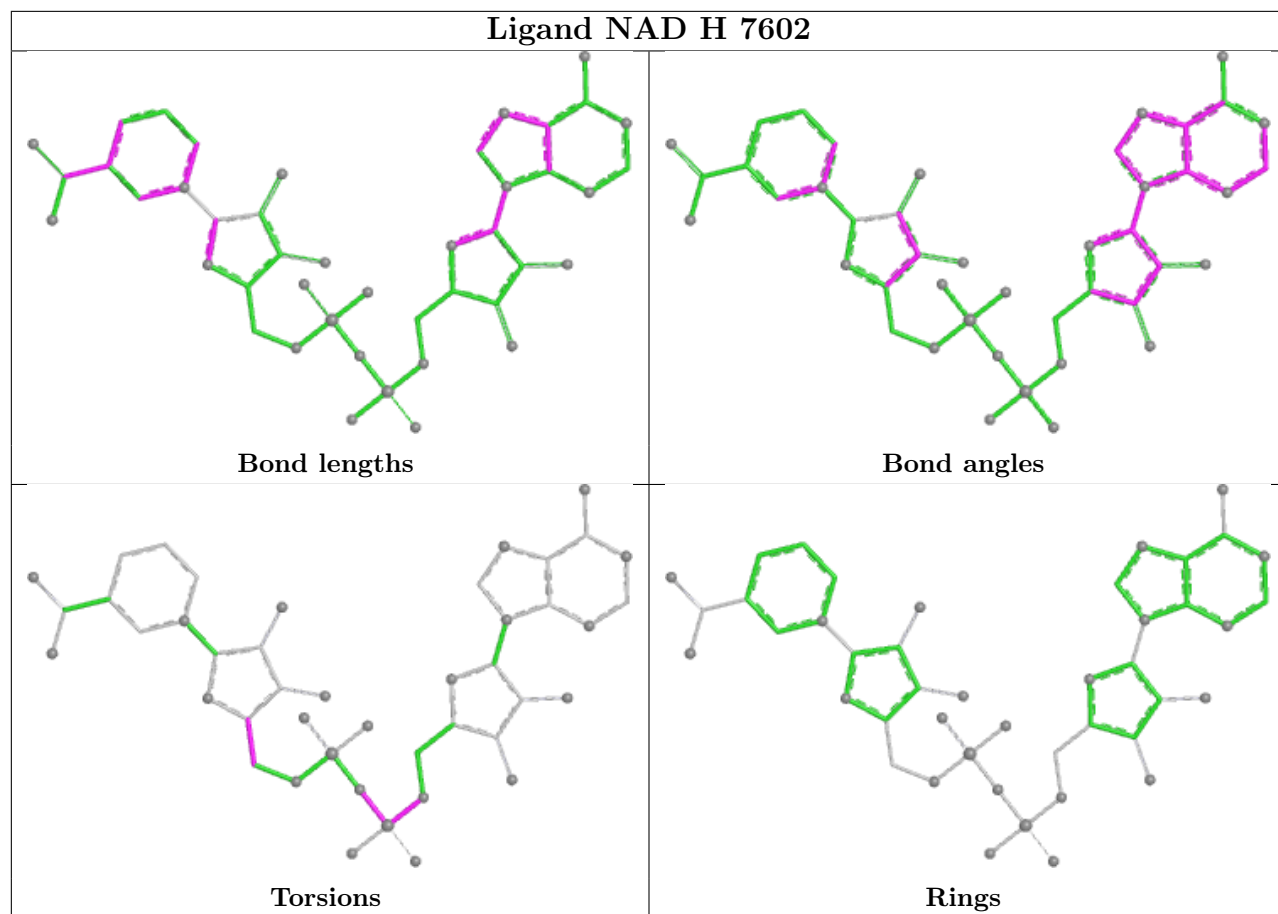


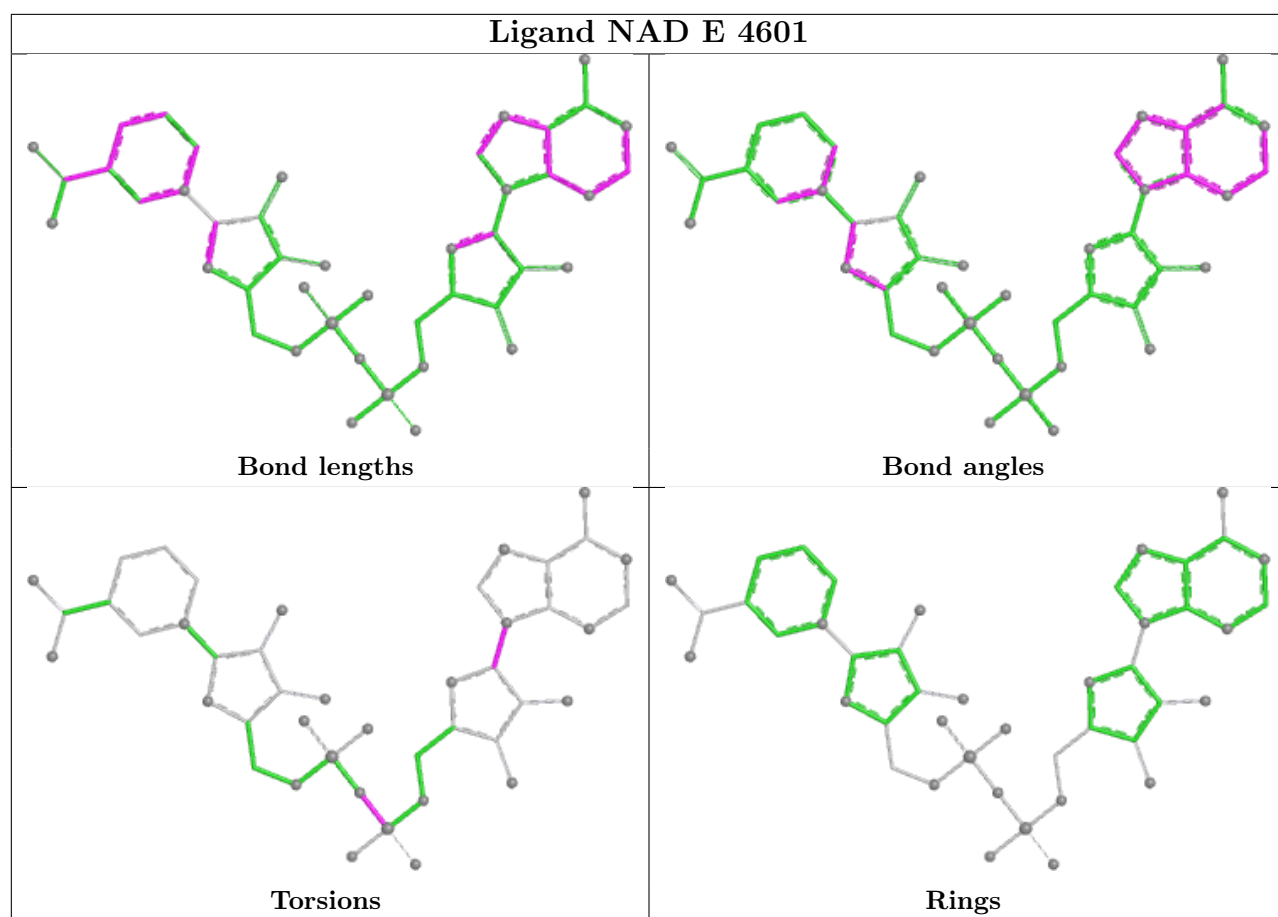


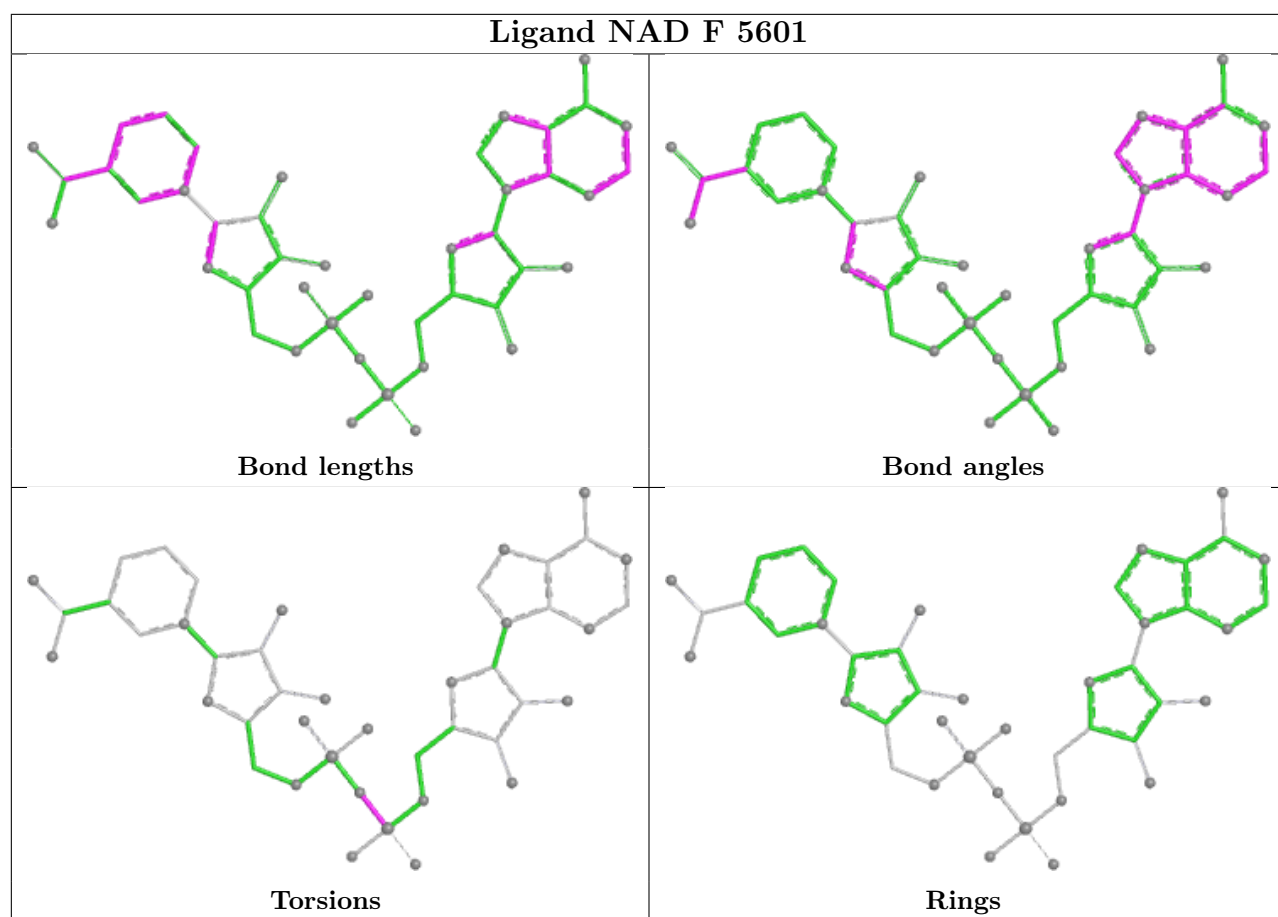


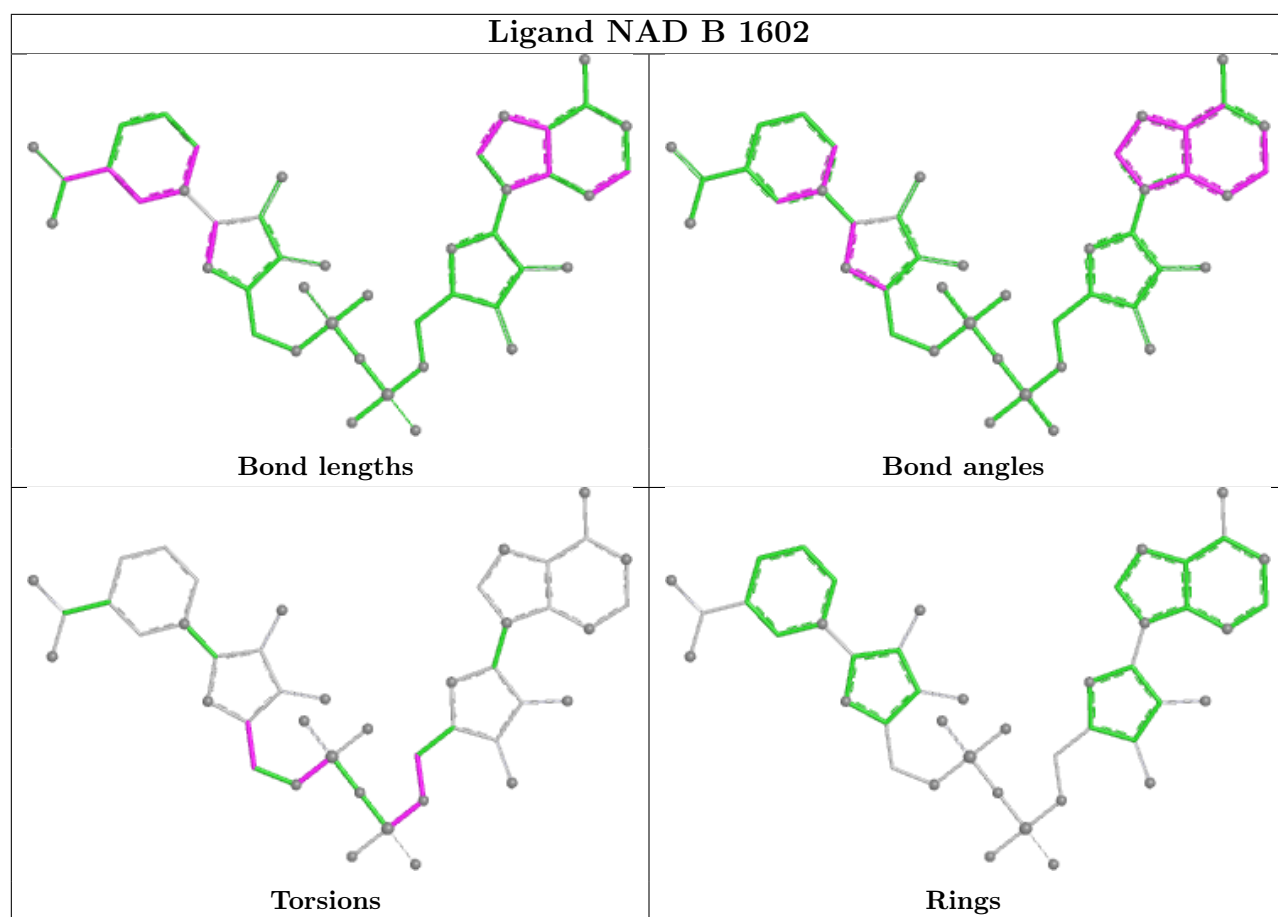


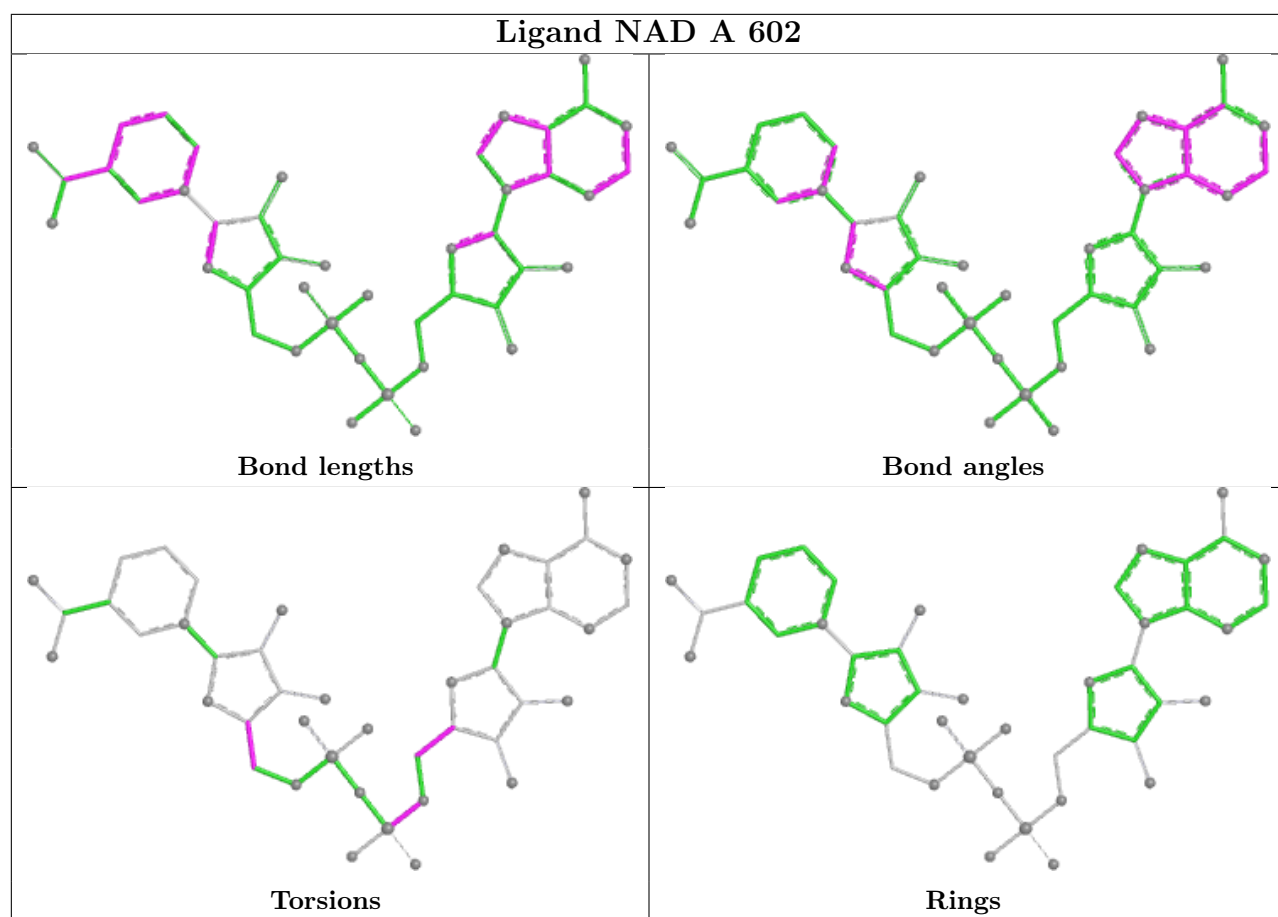
Ligand NAD H 7602











5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

EDS was not executed - this section is therefore empty.

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

EDS was not executed - this section is therefore empty.

6.3 Carbohydrates

EDS was not executed - this section is therefore empty.

6.4 Ligands

EDS was not executed - this section is therefore empty.

6.5 Other polymers

EDS was not executed - this section is therefore empty.