

Effect of Substitution on the Aniline Moiety of the GPR88 Agonist 2-PCCA: Synthesis, Structure-Activity Relationships and Molecular Modeling Studies

Chunyang Jin, Ann M. Decker, Danni L. Harris, and Bruce E. Blough*

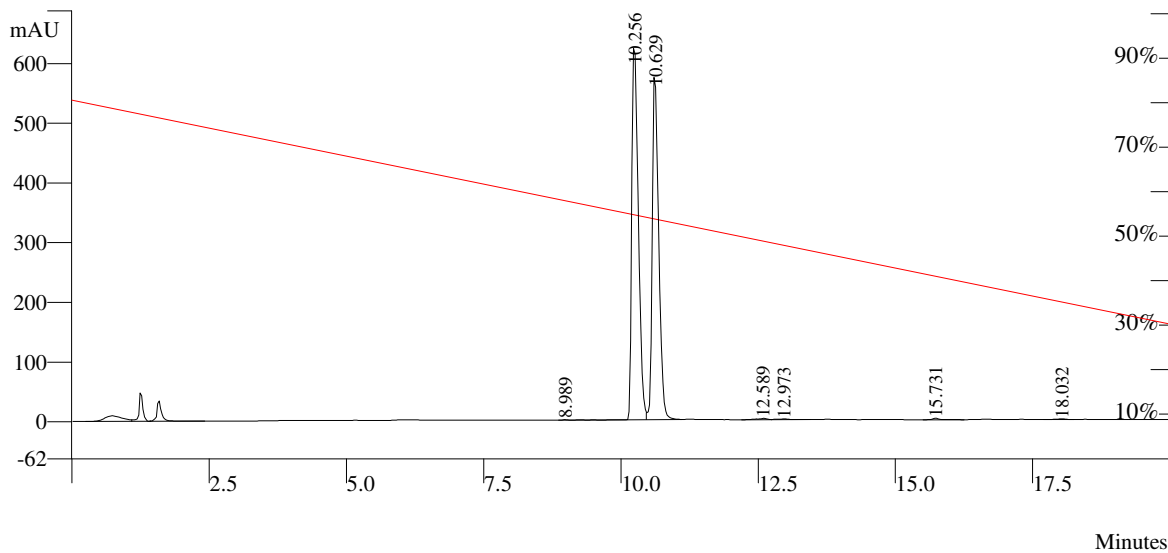
Center for Drug Discovery, Research Triangle Institute, Research Triangle Park, North Carolina 27709

Supporting Information

- I. HPLC results of **4a–g** and **5a–aa**.
- II. QSAR models A and B description (Table 1).
- III. ANOVA evaluations testing the relative statistical merit of model B relative to model A and model C relative to model B (Table 2).
- IV. Sequence alignment of GPR88 with selected GPCR templates (Figure 1).
- V. Sequence alignment of GPR88 with β 1-adrenergic receptor template (Figure 2).
- VI. PDB coordinates for GPR88 homology model.

Method Notes

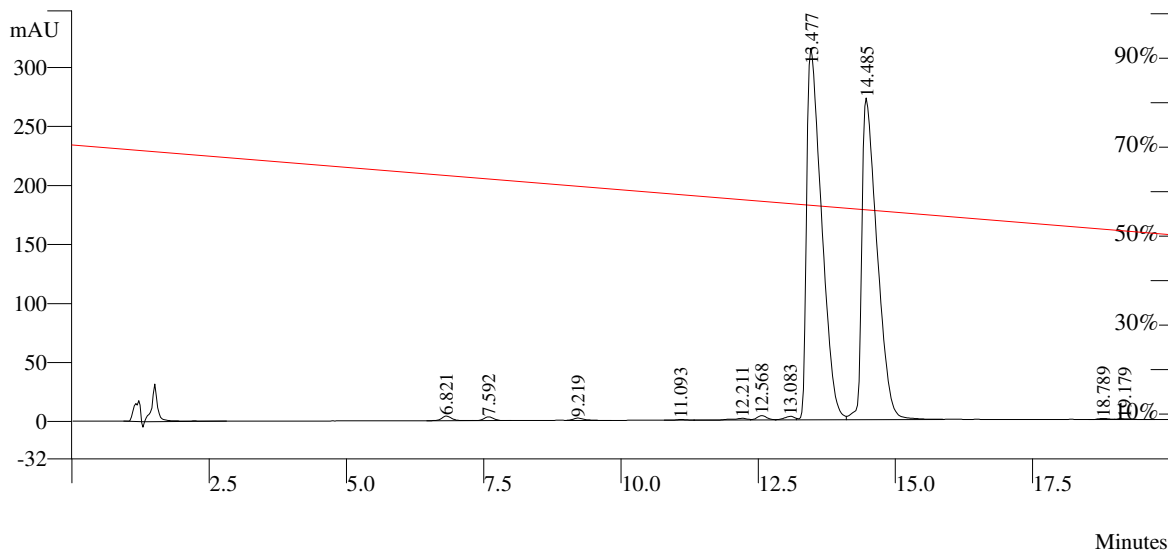
XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound 4a
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.0466	8.989	0.00	BP	6.1	23830	3971
2	51.8148	10.256	0.00	PV	8.0	26508896	3134198
3	47.2975	10.629	0.00	VB	7.8	24197796	2851500
4	0.2964	12.589	0.00	BV	8.6	151648	12521
5	0.2007	12.973	0.00	VB	0.0	102700	6918
6	0.2108	15.731	0.00	BB	6.9	107861	13082
7	0.1331	18.032	0.00	BB	7.7	68110	6821
	99.9999					51160840	6029011

Method Notes

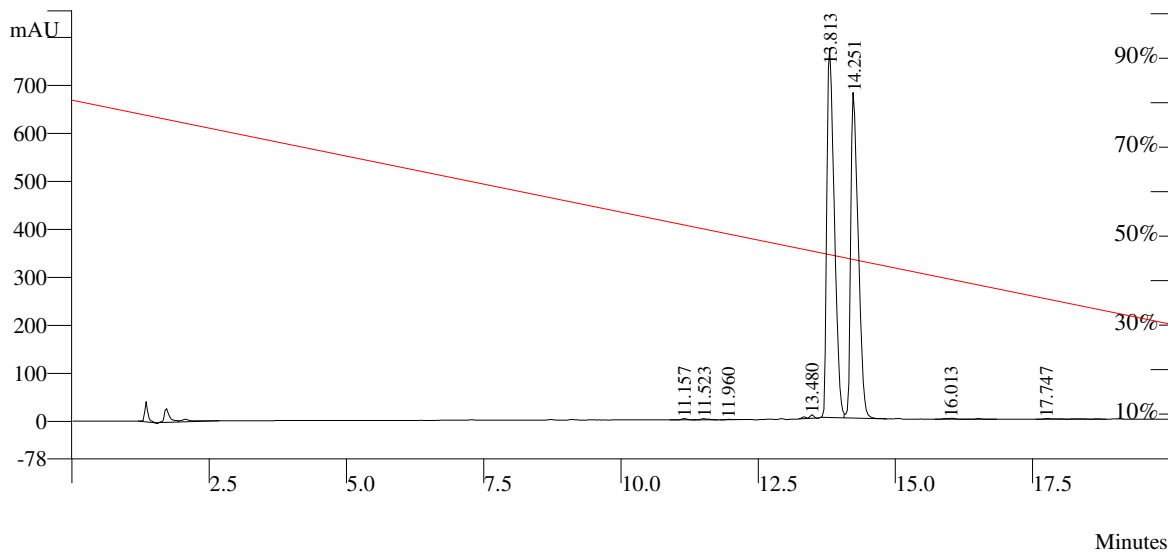
XTerra MS C-18, 5um, 3.9x150 mm column Compound **4b**
30-50% Acetonitrile with 0.1% TFA- Water with 0.1% TFA, 1 mL/min



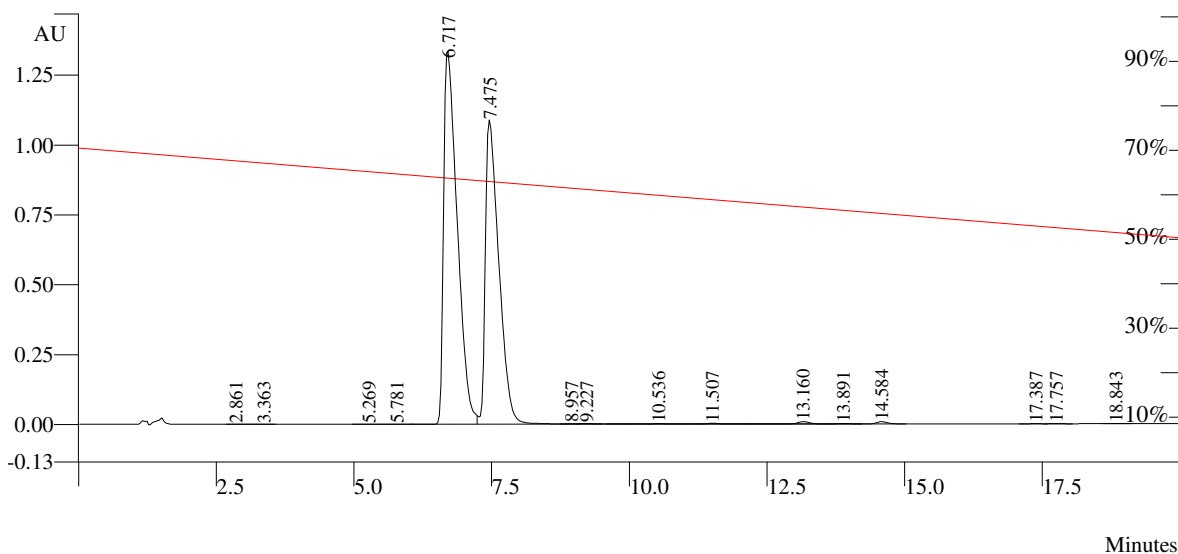
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.4344	6.821	0.00	BV	11.5	255640	19976
2	0.3346	7.592	0.00	VB	11.5	196876	16131
3	0.2195	9.219	0.00	BB	11.0	129179	10180
4	0.0683	11.093	0.00	BV	11.4	40205	3478
5	0.2437	12.211	0.00	VV	33.6	143402	7394
6	0.4014	12.568	0.00	VV	12.0	236193	18886
7	0.3323	13.083	0.00	VV	15.4	195557	15346
8	51.7365	13.477	0.00	VV	17.9	30443684	1613560
9	46.0244	14.485	0.00	VB	17.9	27082486	1396922
10	0.1102	18.789	0.00	BV	13.8	64856	4550
11	0.0946	19.179	0.00	VB	15.0	55685	3275
	99.9999					58843764	3109698

Method Notes

XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **4c**
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



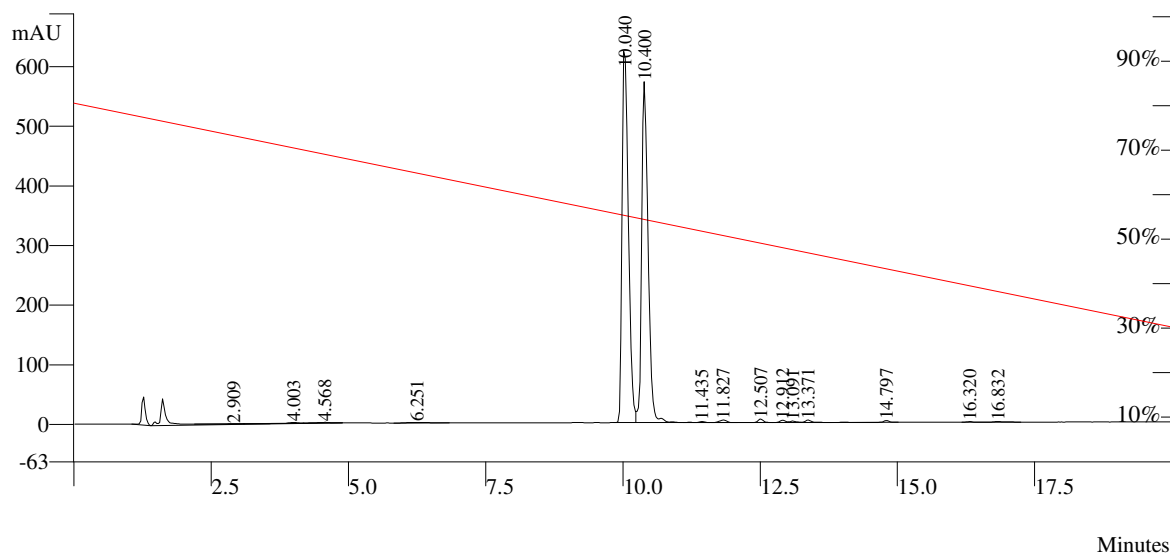
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.1299	11.157	0.00	BV	5.6	93122	14856
2	0.1462	11.523	0.00	VB	10.2	104835	12133
3	0.0207	11.960	0.00	BB	10.3	14862	3205
4	0.3827	13.480	0.00	BB	5.5	274446	36394
5	52.4284	13.813	0.00	BV	9.1	37593520	3941338
6	46.5007	14.251	0.00	VB	9.0	33343112	3473717
7	0.2429	16.013	0.00	BB	13.7	174190	9622
8	0.1484	17.747	0.00	BB	7.8	106443	7562
	99.9999					71704528	7498827

Method NotesXTerra MS C-18, 5um, 3.9x150 mm column Compound **4d**
30-50% Acetonitrile with 0.1% TFA- Water with 0.1% TFA, 1 mL/min

Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.0056	2.861	0.00	BP	12.2	12097	1073
2	0.0051	3.363	0.00	PB	0.0	10995	960
3	0.0075	5.269	0.00	BP	11.5	16181	1478
4	0.0096	5.781	0.00	PV	16.3	20615	1564
5	54.7631	6.717	0.00	VV	16.2	117690464	6832873
6	44.3492	7.475	0.00	VP	15.8	95310032	5574384
7	0.0149	8.957	0.00	TF	0.0	31921	3074
8	0.0545	9.227	0.00	TF	0.0	117062	9107
9	0.0464	10.536	0.00	TS	0.0	99811	7874
10	0.0921	11.507	0.00	TF	0.0	198002	13038
11	0.2922	13.160	0.00	TF	0.0	628011	43463
12	0.0585	13.891	0.00	TF	0.0	125764	8650
13	0.2543	14.584	0.00	PB	0.0	546470	41334
14	0.0174	17.387	0.00	BV	14.9	37482	2861
15	0.0181	17.757	0.00	VB	20.2	38895	2557
16	0.0114	18.843	0.00	BB	14.1	24489	1725
99.9999						214908288	12546015

Method Notes

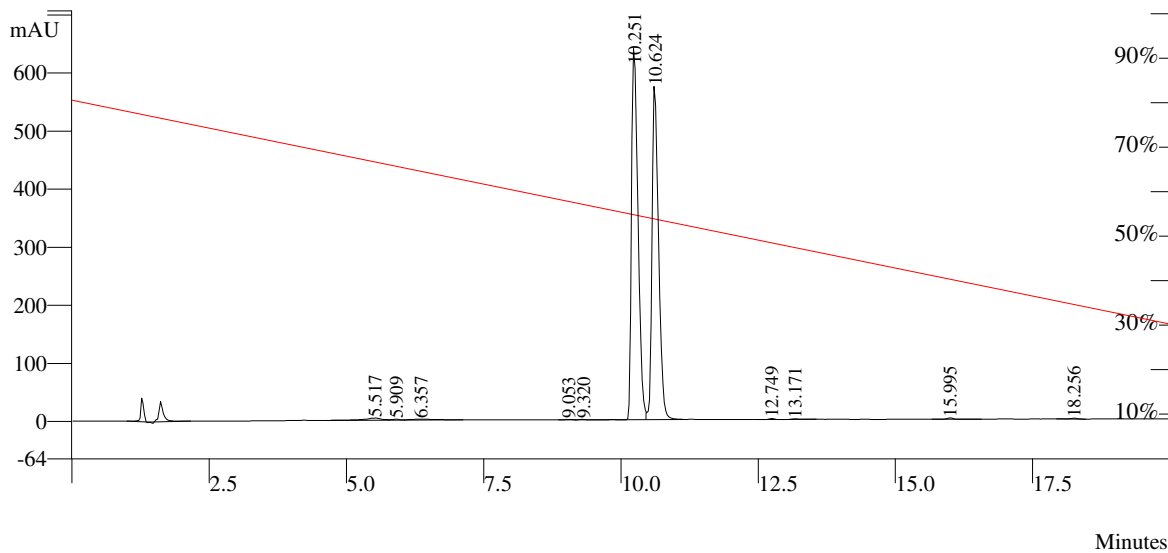
XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **4e**
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.0321	2.909	0.00	TF	0.0	16291	1038
2	0.1535	4.003	0.00	TF	0.0	78001	7577
3	0.2432	4.568	0.00	TF	0.0	123595	6313
4	0.2706	6.251	0.00	BB	0.0	137524	4627
5	50.3593	10.040	0.00	BV	7.5	25595768	3190548
6	46.7721	10.400	0.00	VP	7.4	23772538	2929404
7	0.1526	11.435	0.00	TS	0.0	77570	9492
8	0.4219	11.827	0.00	TS	0.0	214443	22779
9	0.3925	12.507	0.00	PV	0.0	199512	29559
10	0.2832	12.912	0.00	VV	0.0	143938	20308
11	0.1804	13.091	0.00	VV	0.0	91692	12219
12	0.3159	13.371	0.00	VP	0.0	160582	20648
13	0.1899	14.797	0.00	PB	0.0	96532	15476
14	0.0784	16.320	0.00	BP	6.6	39852	5695
15	0.1544	16.832	0.00	PB	11.4	78486	6241
	100.0000					50826328	6281924

Method Notes

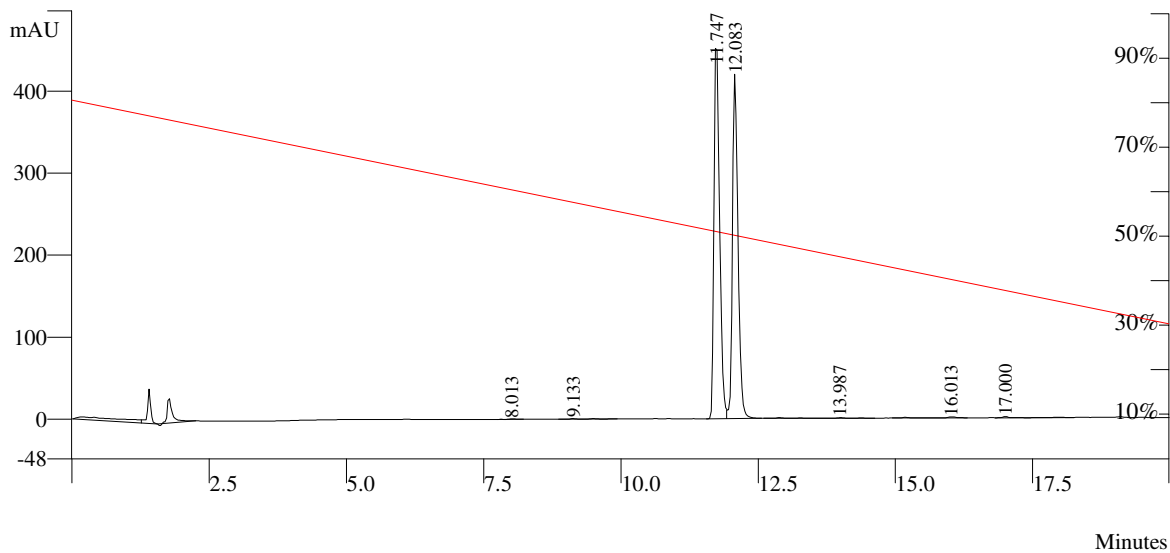
XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **4f**
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.7523	5.517	0.00	BV	17.0	394966	18805
2	0.1599	5.909	0.00	VV	14.7	83973	8630
3	0.4467	6.357	0.00	VB	0.0	234515	7977
4	0.0553	9.053	0.00	BV	6.2	29056	4417
5	0.0542	9.320	0.00	VP	6.7	28436	3657
6	51.1678	10.251	0.00	PV	7.8	26864188	3276966
7	46.7652	10.624	0.00	VB	7.7	24552740	2940130
8	0.1276	12.749	0.00	BP	6.4	66992	8992
9	0.1266	13.171	0.00	PB	9.6	66487	6402
10	0.2113	15.995	0.00	BB	6.9	110945	13073
11	0.1330	18.256	0.00	BB	8.2	69810	7123
	99.9999					52502104	6296172

Method Notes

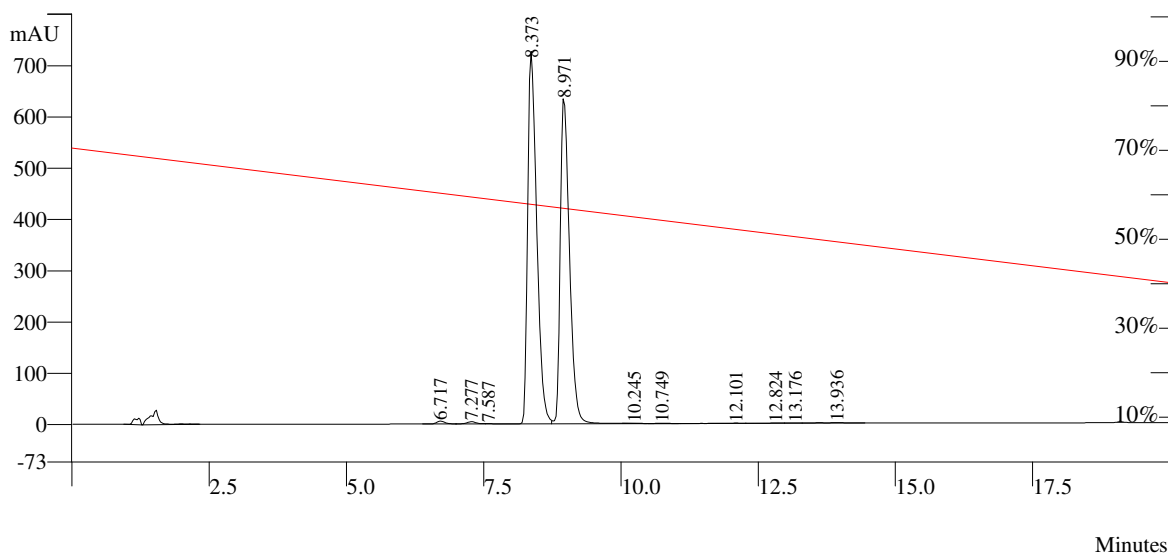
XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **4g**
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



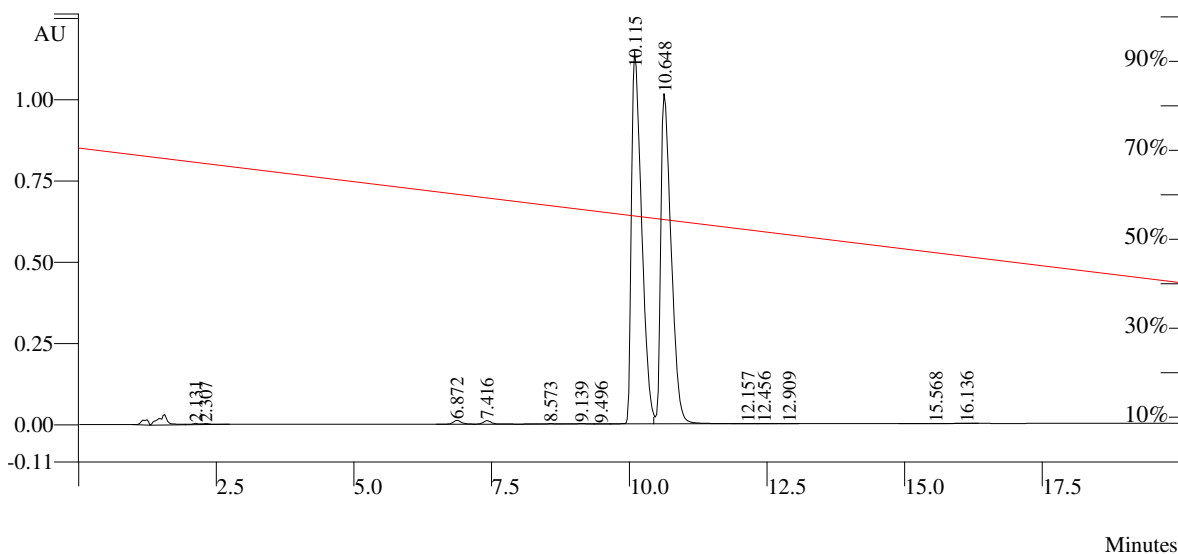
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.0765	8.013	0.00	BB	7.9	24677	3252
2	0.1097	9.133	0.00	BB	5.7	35402	3608
3	52.0175	11.747	0.00	BV	6.7	16788882	2314297
4	47.3675	12.083	0.00	VB	6.6	15288089	2151137
5	0.0729	13.987	0.00	BB	5.7	23525	4419
6	0.2185	16.013	0.00	BB	9.7	70507	6426
7	0.1375	17.000	0.00	BB	6.1	44390	7632
100.0001						32275470	4490771

Method Notes

XTerra MS C-18, 5um, 3.9x150 mm column Compound **5a**
30-60% Acetonitrile with 0.1% TFA- Water with 0.1% TFA, 1 mL/min



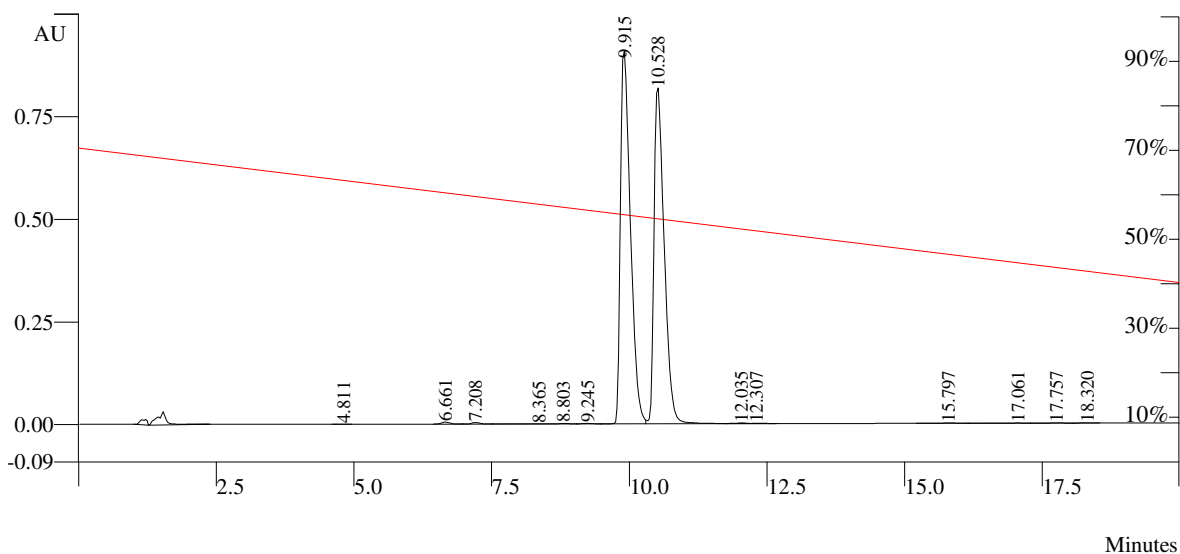
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.3688	6.717	0.00	BV	9.6	300588	29082
2	0.3142	7.277	0.00	VV	9.8	256043	23141
3	0.0205	7.587	0.00	VP	9.6	16745	1910
4	52.1697	8.373	0.00	PV	10.7	42515264	3721851
5	46.7194	8.971	0.00	VP	10.9	38073636	3246045
6	0.0369	10.245	0.00	TS	0.0	30058	2713
7	0.0325	10.749	0.00	TS	0.0	26507	2044
8	0.0254	12.101	0.00	PV	0.0	20687	2759
9	0.0627	12.824	0.00	VV	0.0	51095	3235
10	0.0567	13.176	0.00	VV	0.0	46204	3588
11	0.1932	13.936	0.00	VB	0.0	157426	3583
	100.0000					81494240	7039951

Method NotesXTerra MS C-18, 5um, 3.9x150 mm column Compound **5b**
30-60% Acetonitrile with 0.1% TFA- Water with 0.1% TFA, 1 mL/min

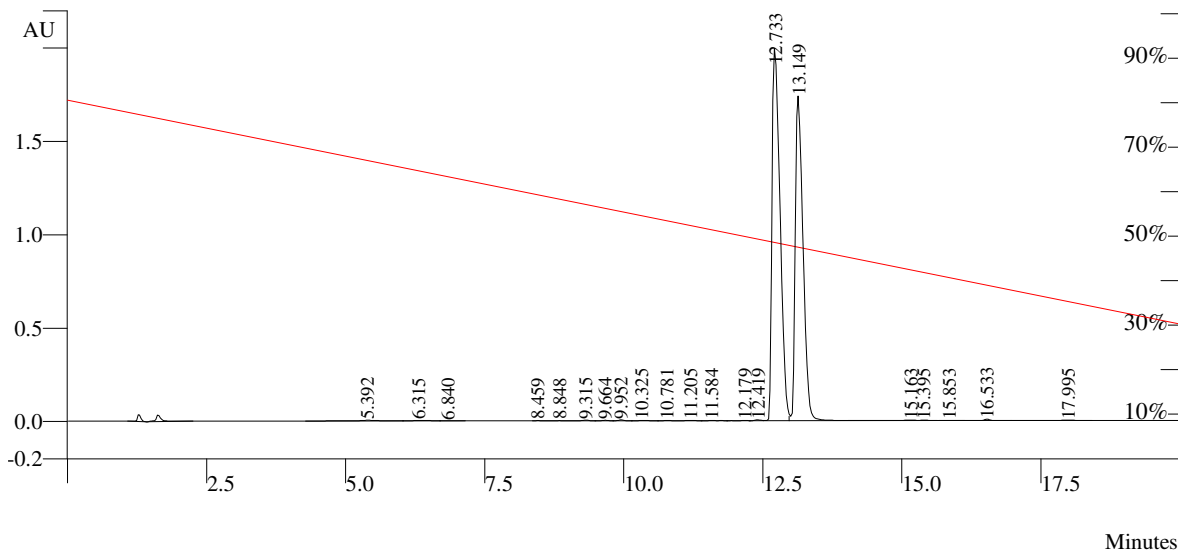
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.1448	2.131	0.00	VV	7.7	210849	20457
2	0.1307	2.307	0.00	VB	9.0	190351	17444
3	0.3995	6.872	0.00	BV	9.1	581566	58628
4	0.3667	7.416	0.00	VP	9.3	533835	52671
5	0.0411	8.573	0.00	PP	11.5	59784	5965
6	0.0524	9.139	0.00	PV	13.9	76301	6667
7	0.0163	9.496	0.00	VV	0.0	23717	2264
8	51.6030	10.115	0.00	VV	12.0	75129176	5876753
9	47.1527	10.648	0.00	VB	12.2	68650064	5206575
10	0.0345	12.157	0.00	TF	0.0	50256	3734
11	0.0184	12.456	0.00	TF	0.0	26741	2308
12	0.0044	12.909	0.00	TS	0.0	6442	696
13	0.0168	15.568	0.00	BP	18.9	24475	1167
14	0.0187	16.136	0.00	PB	0.0	27264	1230
						145590832	11256559

Method Notes

XTerra MS C-18, 5um, 3.9x150 mm column Compound **5c**
30-60% Acetonitrile with 0.1% TFA- Water with 0.1% TFA, 1 mL/min



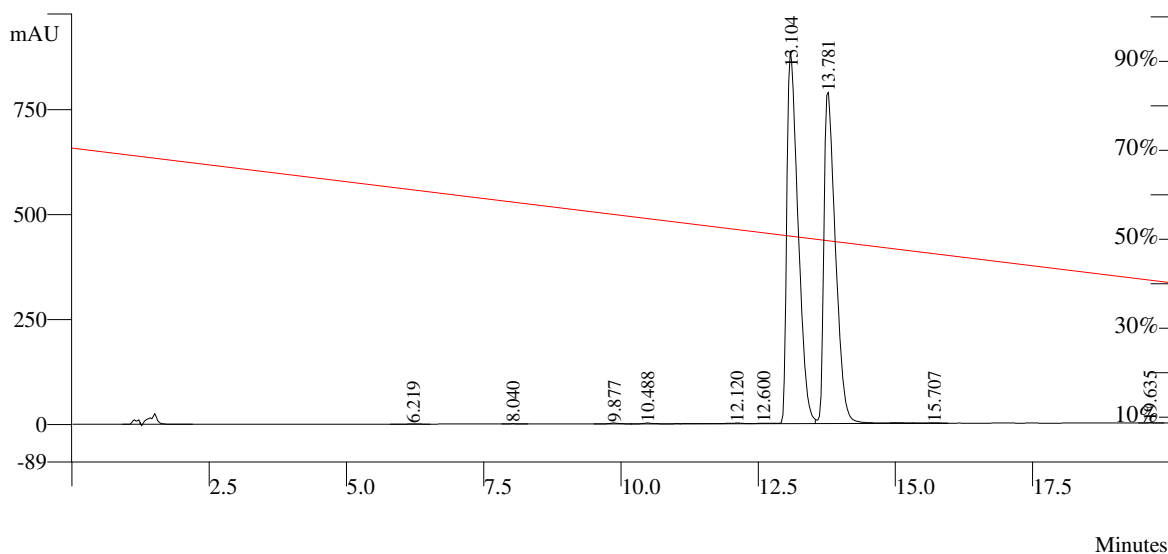
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.0057	4.811	0.00	BB	0.0	6507	687
2	0.2204	6.661	0.00	BV	9.3	250811	24745
3	0.1699	7.208	0.00	VV	9.4	193299	19124
4	0.0137	8.365	0.00	VP	19.5	15570	1366
5	0.0446	8.803	0.00	PV	17.8	50786	4420
6	0.0488	9.245	0.00	VV	13.8	55495	5343
7	51.6434	9.915	0.00	VV	11.8	58761424	4650629
8	47.5653	10.528	0.00	VB	11.8	54121300	4193585
9	0.0781	12.035	0.00	TF	0.0	88863	7387
10	0.0245	12.307	0.00	TF	0.0	27849	1615
11	0.0857	15.797	0.00	BV	15.0	97559	5443
12	0.0544	17.061	0.00	VV	0.0	61851	1675
13	0.0299	17.757	0.00	VV	0.0	34063	1682
14	0.0156	18.320	0.00	VB	0.0	17763	1320
100.0000						113783136	8919021

Method NotesXTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **5d**
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min

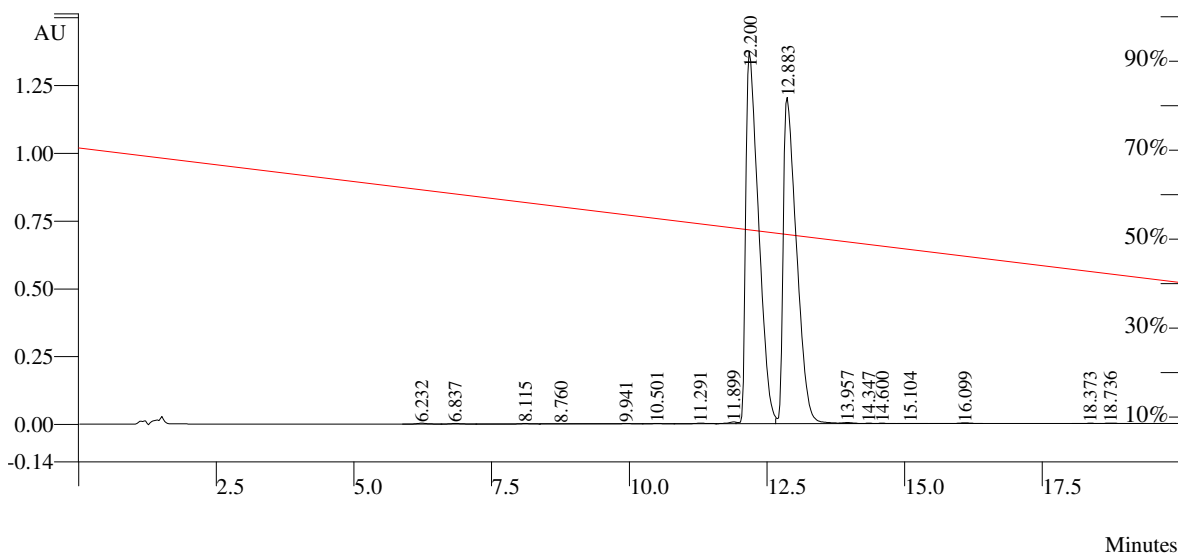
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.2721	5.392	0.00	BV	20.0	521510	18955
2	0.1179	6.315	0.00	VV	0.0	226009	8542
3	0.0309	6.840	0.00	VB	58.1	59155	4384
4	0.0122	8.459	0.00	BP	4.8	23431	4307
5	0.0229	8.848	0.00	PP	6.7	43947	4300
6	0.0703	9.315	0.00	PV	6.2	134701	18499
7	0.0518	9.664	0.00	VV	5.8	99324	14552
8	0.0740	9.952	0.00	VV	5.8	141859	21961
9	0.0451	10.325	0.00	VV	6.4	86368	9282
10	0.0366	10.781	0.00	VP	6.1	70154	11035
11	0.0476	11.205	0.00	PV	12.2	91159	7415
12	0.0378	11.584	0.00	VV	6.7	72395	6893
13	0.0276	12.179	0.00	VV	8.5	52980	4952
14	0.0818	12.419	0.00	VV	6.9	156806	23122
15	53.3255	12.733	0.00	VV	9.6	102209296	10222125
16	45.2921	13.149	0.00	VP	9.3	86811608	8906684
17	0.0499	15.163	0.00	TF	0.0	95697	10082
18	0.0520	15.395	0.00	TF	0.0	99662	9177
19	0.0293	15.853	0.00	TS	0.0	56152	7523
20	0.1982	16.533	0.00	PV	0.0	379886	36456
21	0.1244	17.995	0.00	VB	0.0	238384	10009
100.0000						191670496	19360256

Method Notes

XTerra MS C-18, 5um, 3.9x150 mm column Compound **5e**
30-60% Acetonitrile with 0.1% TFA- Water with 0.1% TFA, 1 mL/min



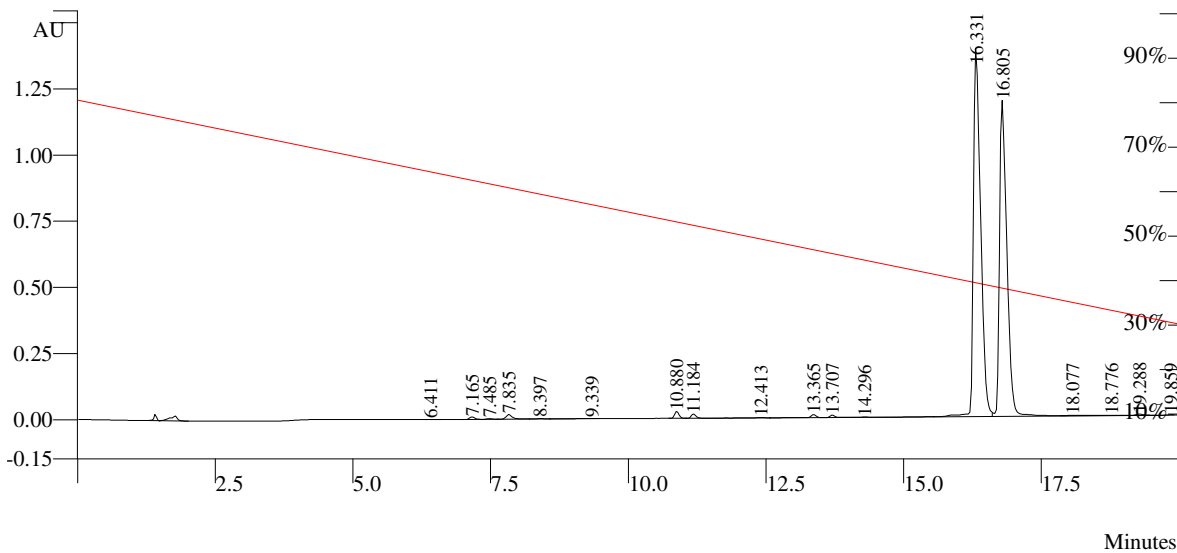
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.0212	6.219	0.00	BB	14.7	26374	1995
2	0.0266	8.040	0.00	BB	10.9	33030	3052
3	0.0844	9.877	0.00	BV	10.2	104947	9515
4	0.0746	10.488	0.00	VP	10.4	92777	8790
5	0.0847	12.120	0.00	PV	23.4	105332	6883
6	0.0583	12.600	0.00	VV	17.6	72556	5488
7	51.8248	13.104	0.00	VV	13.3	64454060	4540041
8	47.7843	13.781	0.00	VB	13.6	59428928	4040021
9	0.0184	15.707	0.00	TS	0.0	22831	3044
10	0.0228	19.635	0.00	BB	11.2	28295	2442
						124369128	8621271
100.0001							

Method NotesXTerra MS C-18, 5um, 3.9x150 mm column Compound **5f**
30-60% Acetonitrile with 0.1% TFA- Water with 0.1% TFA, 1 mL/min

Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.0958	6.232	0.00	BV	11.5	210189	17108
2	0.0586	6.837	0.00	VV	11.4	128597	10994
3	0.0390	8.115	0.00	VV	12.2	85449	8031
4	0.0331	8.760	0.00	VP	24.8	72619	4877
5	0.0539	9.941	0.00	PV	25.8	118129	7497
6	0.0407	10.501	0.00	VV	15.0	89313	8398
7	0.0854	11.291	0.00	VV	24.5	187364	11418
8	0.1488	11.899	0.00	VV	13.4	326333	34256
9	51.7633	12.200	0.00	VV	15.4	113542904	7039422
10	47.4813	12.883	0.00	VB	15.8	104150296	6166047
11	0.0467	13.957	0.00	TS	0.0	102369	10663
12	0.0099	14.347	0.00	TF	0.0	21808	2004
13	0.0163	14.600	0.00	TF	0.0	35802	2712
14	0.0118	15.104	0.00	TS	0.0	25861	1986
15	0.0744	16.099	0.00	TS	0.0	163104	13318
16	0.0156	18.373	0.00	BV	13.4	34175	2569
17	0.0255	18.736	0.00	VB	13.9	55897	3554
						219350224	13344854
100.0001							

Method Notes

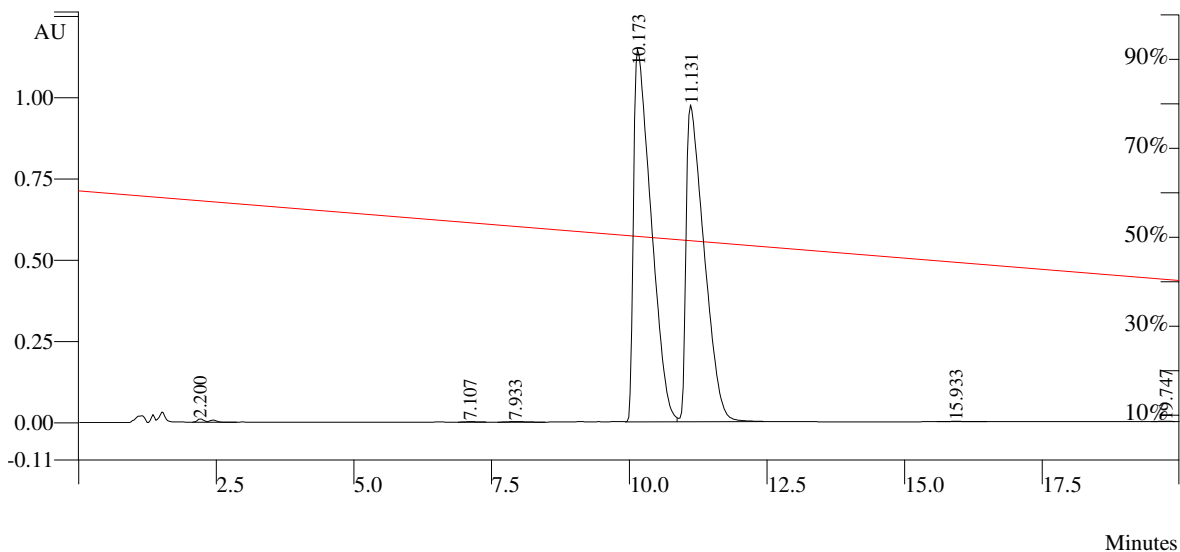
XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **5g**
 20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.0176	6.411	0.00	BB	5.9	22390	3418
2	0.2823	7.165	0.00	BV	6.6	359006	51731
3	0.0834	7.485	0.00	VV	7.7	106086	15136
4	0.6150	7.835	0.00	VV	7.0	782221	92410
5	0.0887	8.397	0.00	VV	0.0	112874	10061
6	0.0943	9.339	0.00	VB	0.0	119992	2756
7	0.6037	10.880	0.00	BV	5.4	767827	133541
8	0.3778	11.184	0.00	VP	5.4	480479	81295
9	0.0462	12.413	0.00	PV	32.0	58749	4887
10	0.3041	13.365	0.00	VP	7.4	386794	54961
11	0.2166	13.707	0.00	PV	7.4	275539	45395
12	0.0685	14.296	0.00	VP	0.0	87103	5007
13	51.7056	16.331	0.00	VV	8.5	65766360	7131405
14	45.2050	16.805	0.00	VP	8.6	57498092	6112522
15	0.0426	18.077	0.00	TF	0.0	54218	4289
16	0.0386	18.776	0.00	TF	0.0	49152	3040
17	0.2004	19.288	0.00	TF	0.0	254848	24524
18	0.0096	19.859	0.00	PB	0.0	12261	3351
	100.0000					127194000	13779729

Method Notes

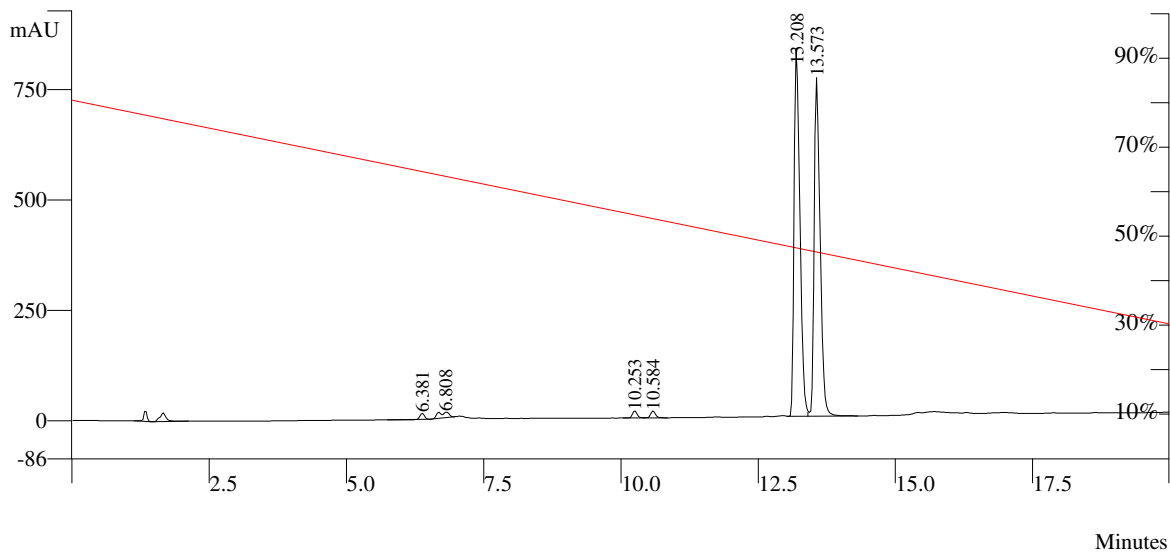
XTerra MS C-18, 5um, 3.9x150 mm column Compound **5h**
40-60% Acetonitrile with 0.1% TFA- Water with 0.1% TFA, 1 mL/min



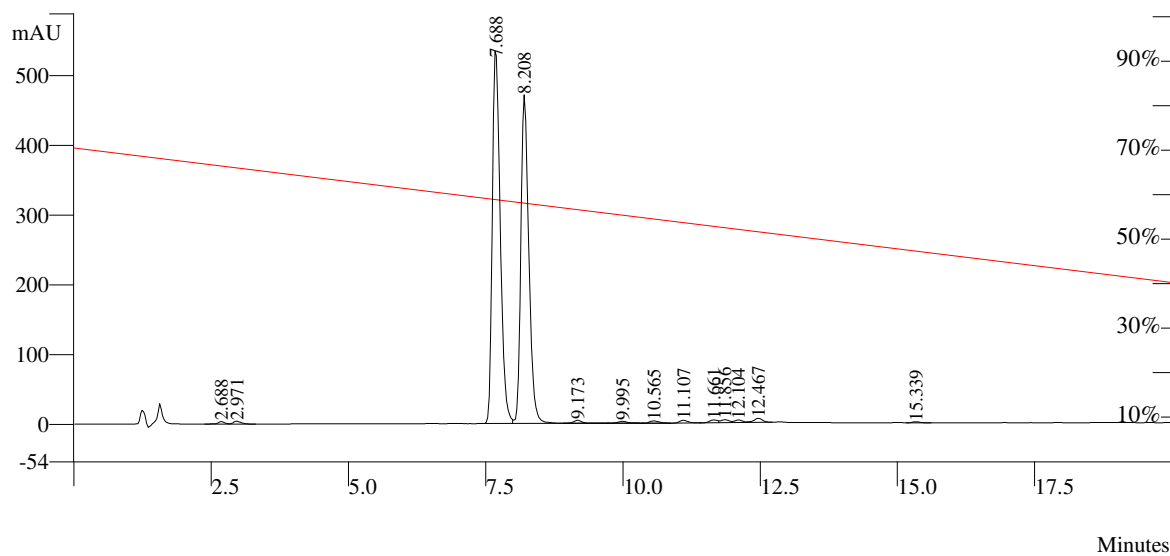
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.2816	2.200	0.00	BB	7.5	690213	50673
2	0.0454	7.107	0.00	BB	13.6	111358	7961
3	0.0765	7.933	0.00	BB	21.2	187414	8911
4	53.0973	10.173	0.00	BV	21.1	130160784	5872025
5	46.4307	11.131	0.00	VB	21.6	113818368	4995556
6	0.0529	15.933	0.00	BB	21.9	129601	5538
7	0.0157	19.747	0.00	BB	15.5	38433	2781
	100.0001					245136160	10943445

Method Notes

XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **5i**
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



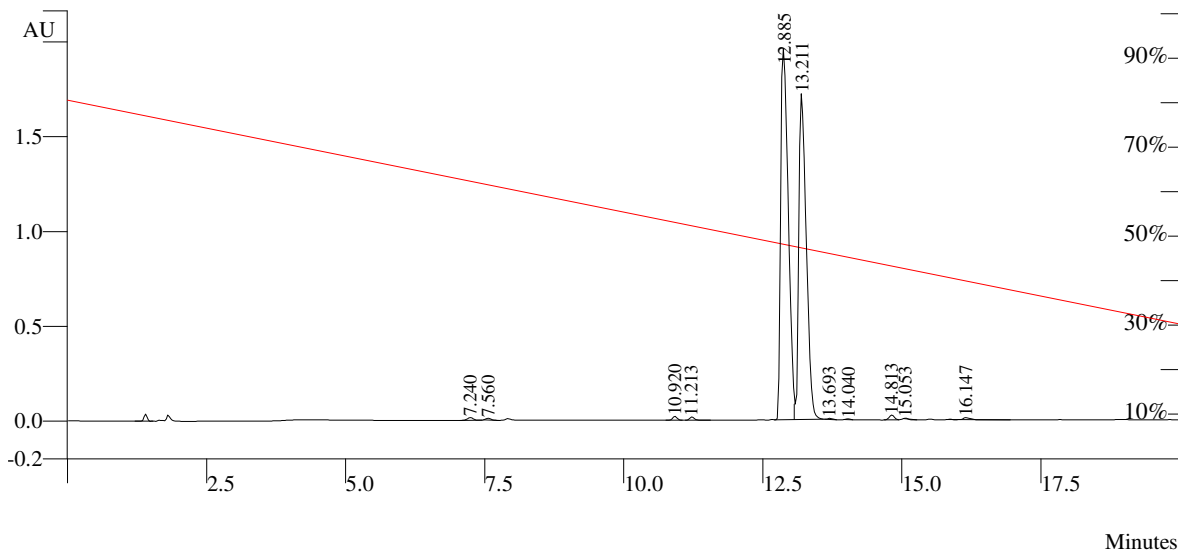
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.5569	6.381	0.00	BP	5.9	354263	68133
2	1.4074	6.808	0.00	PB	16.6	895342	66271
3	0.7721	10.253	0.00	BV	5.4	491165	83034
4	0.7650	10.584	0.00	VB	5.6	486648	79846
5	49.7041	13.208	0.00	BV	6.9	31619608	4273018
6	46.7946	13.573	0.00	VB	6.9	29768726	3928184
100.0001						63615752	8498486

Method NotesXTerra MS C-18, 5um, 3.9x150 mm column Compound **5j**
30-60% Acetonitrile with 0.1% TFA- Water with 0.1% TFA, 1 mL/min

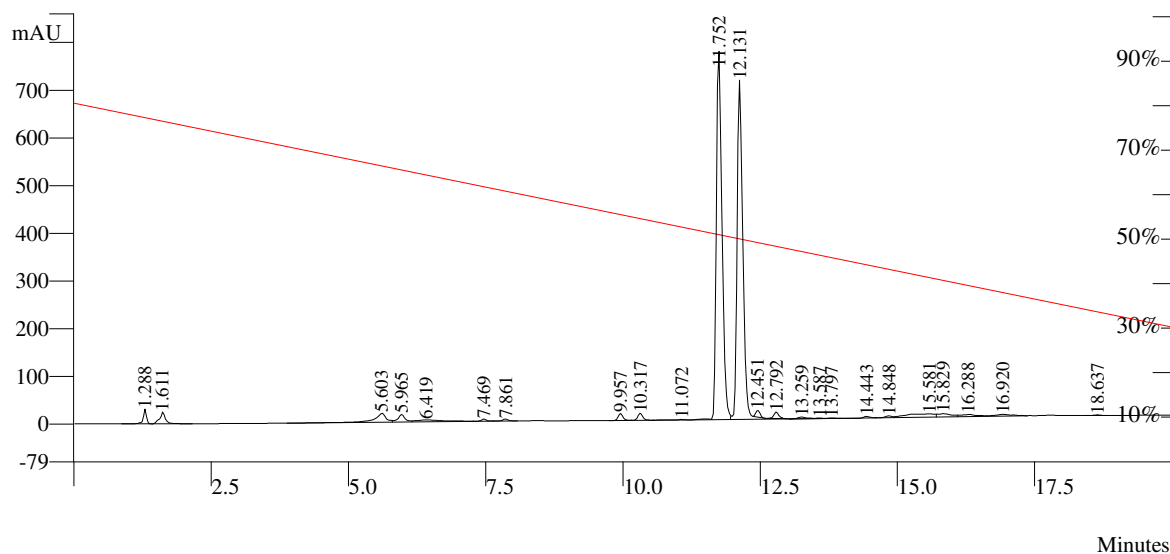
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.3054	2.688	0.00	BV	8.0	165891	18251
2	0.3841	2.971	0.00	VB	9.6	208676	20072
3	50.8097	7.688	0.00	BV	9.3	27601178	2733965
4	45.1284	8.208	0.00	VP	9.3	24514964	2412045
5	0.3979	9.173	0.00	TF	0.0	216155	20940
6	0.3150	9.995	0.00	TF	0.0	171105	12763
7	0.3396	10.565	0.00	TF	0.0	184487	16685
8	0.3779	11.107	0.00	PV	0.0	205278	19996
9	0.3776	11.661	0.00	VV	0.0	205112	20888
10	0.4294	11.856	0.00	VV	0.0	233270	21596
11	0.3601	12.104	0.00	VV	0.0	195600	18891
12	0.6278	12.467	0.00	VB	0.0	341038	30648
13	0.1470	15.339	0.00	BB	9.8	79877	7539
	99.9999					54322636	5354279

Method Notes

XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **5k**
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



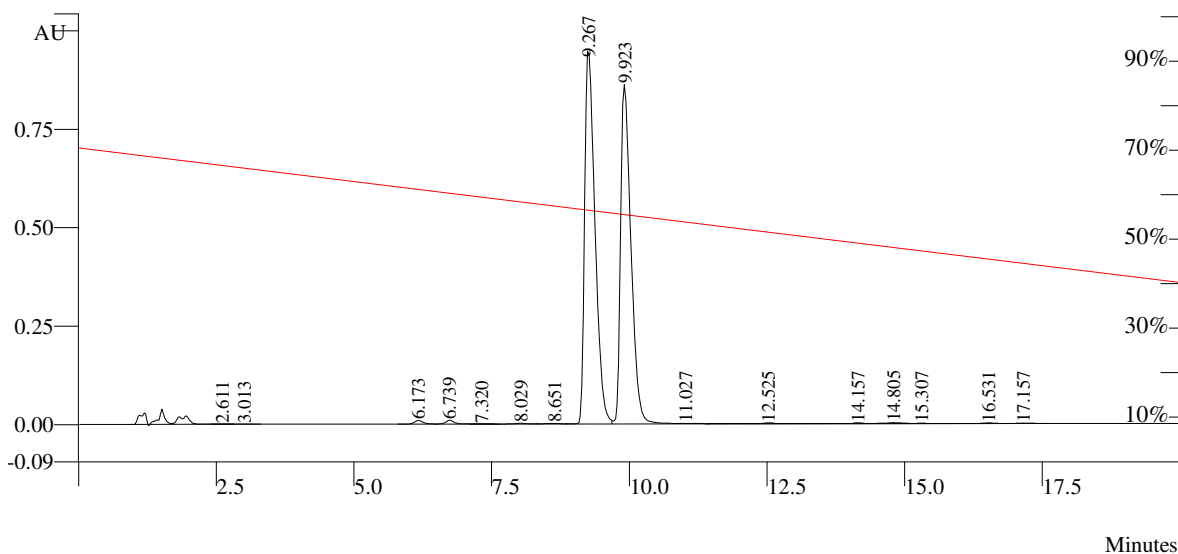
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.2920	7.240	0.00	BB	7.1	530883	76349
2	0.1422	7.560	0.00	BB	5.6	258432	44371
3	0.3140	10.920	0.00	BB	5.3	570850	101500
4	0.2736	11.213	0.00	BB	5.3	497363	85203
5	52.3992	12.885	0.00	BV	9.4	95252728	10034806
6	45.7698	13.211	0.00	VB	8.8	83201568	8799541
7	0.0921	13.693	0.00	BB	4.7	167426	28680
8	0.0658	14.040	0.00	BB	4.8	119617	23529
9	0.4555	14.813	0.00	BB	6.2	828068	129177
10	0.0131	15.053	0.00	BB	2.9	23878	17122
11	0.1826	16.147	0.00	BB	8.4	331987	56808
	99.9999					181782784	19397086

Method NotesXTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **51**
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min

Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	1.0401	5.613	0.00	BV	7.4	923552	104287
2	0.7519	5.968	0.00	VB	6.6	667621	96080
3	0.2200	7.467	0.00	BV	5.9	195351	30388
4	0.2037	7.861	0.00	VB	5.8	180902	29138
5	0.3212	9.957	0.00	BV	5.8	285165	45290
6	0.3329	10.317	0.00	VV	5.8	295596	45683
7	0.0947	11.069	0.00	VV	7.2	84056	8499
8	0.0776	11.387	0.00	VV	10.9	68890	6342
9	49.7080	11.752	0.00	VV	6.6	44137616	6163506
10	46.0126	12.133	0.00	VP	6.6	40856252	5598505
11	0.3170	12.792	0.00	TS	0.0	281481	42294
12	0.1527	13.232	0.00	TF	0.0	135567	16339
13	0.0956	13.587	0.00	TF	0.0	84863	12267
14	0.0896	13.797	0.00	TF	0.0	79527	10618
15	0.1017	14.445	0.00	TF	0.0	90329	13279
16	0.1449	14.821	0.00	TF	0.0	128649	11906
17	0.1310	15.227	0.00	TF	0.0	116311	13280
18	0.0882	15.851	0.00	PP	0.0	78297	9063
19	0.1168	16.296	0.00	PB	0.0	103692	9876
	100.0002					88793712	12266640

Method NotesXTerra MS C-18, 5um, 3.9x150 mm column Compound **5m**

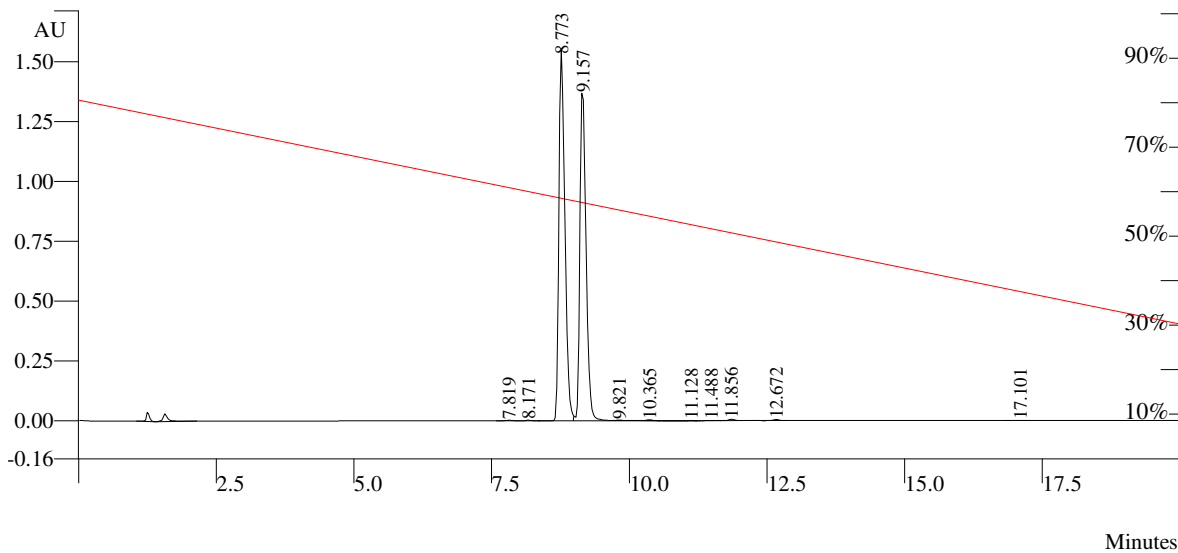
30-60% Acetonitrile with 0.1% TFA- Water with 0.1% TFA, 1 mL/min



Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.0207	2.611	0.00	TS	0.0	25753	2753
2	0.0158	3.013	0.00	PB	0.0	19685	1910
3	0.3863	6.173	0.00	BV	9.6	480097	45169
4	0.4046	6.739	0.00	VP	9.6	502855	46897
5	0.0217	7.320	0.00	TS	0.0	26970	2595
6	0.0927	8.029	0.00	PV	13.0	115259	8495
7	0.1001	8.651	0.00	VV	28.8	124421	5735
8	51.2168	9.267	0.00	VV	12.2	63658336	4849031
9	46.9516	9.923	0.00	VB	12.2	58357048	4414676
10	0.0119	11.027	0.00	TS	0.0	14797	1646
11	0.1748	12.525	0.00	TF	0.0	217296	10085
12	0.1219	14.157	0.00	TF	0.0	151556	11249
13	0.2270	14.805	0.00	TF	0.0	282187	12051
14	0.0595	15.307	0.00	TF	0.0	73950	5082
15	0.1037	16.531	0.00	TF	0.0	128887	7567
16	0.0907	17.157	0.00	TF	0.0	112793	5213
	99.9998					124291896	9430154

Method Notes

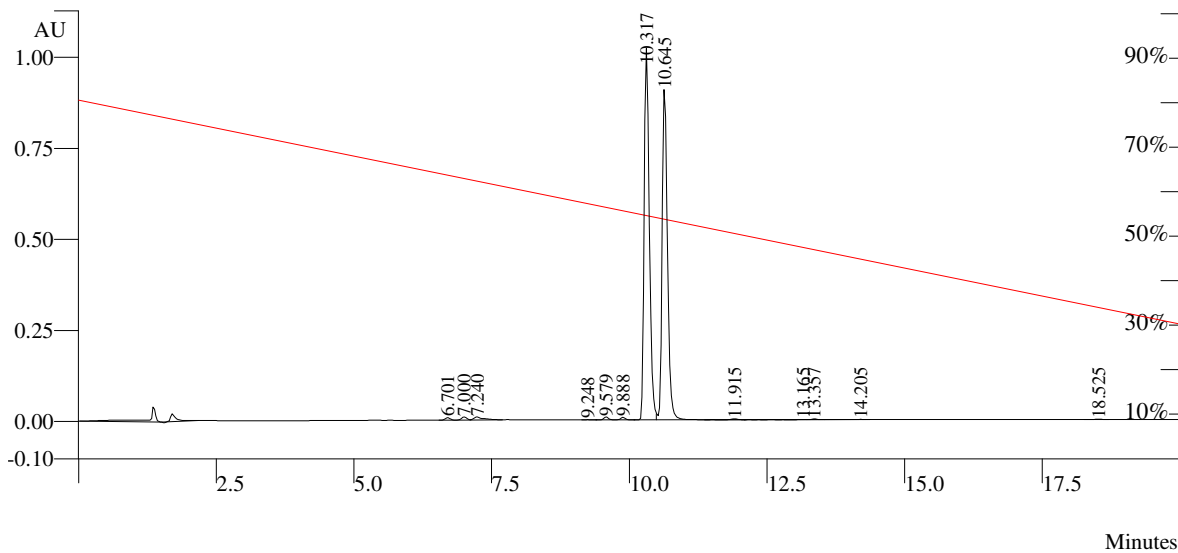
XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **5n**
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



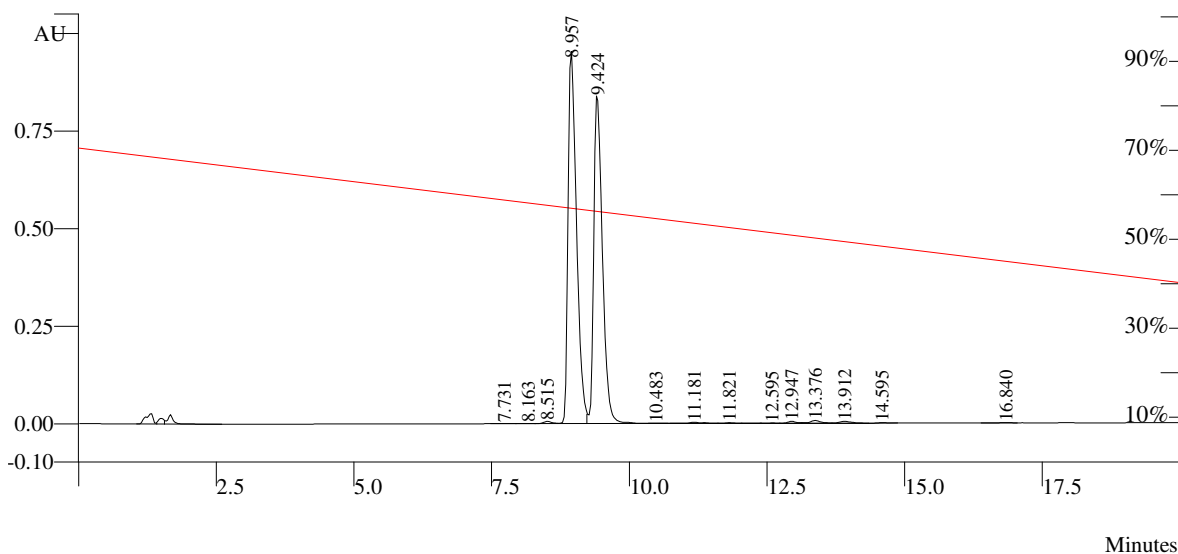
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.0874	7.819	0.00	BP	8.6	101718	11103
2	0.0642	8.171	0.00	PV	6.1	74652	11071
3	51.8717	8.773	0.00	VV	7.2	60360768	7981299
4	47.3328	9.157	0.00	VP	7.2	55079088	7019504
5	0.0536	9.821	0.00	TS	0.0	62315	6616
6	0.1441	10.365	0.00	TS	0.0	167639	18761
7	0.0155	11.128	0.00	TS	0.0	18079	3065
8	0.0393	11.488	0.00	PV	0.0	45726	3823
9	0.2161	11.856	0.00	VP	0.0	251449	29939
10	0.1456	12.672	0.00	PB	0.0	169485	21880
11	0.0298	17.101	0.00	BB	0.0	34695	3050
100.0001						116365616	15110111

Method Notes

XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **5o**
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



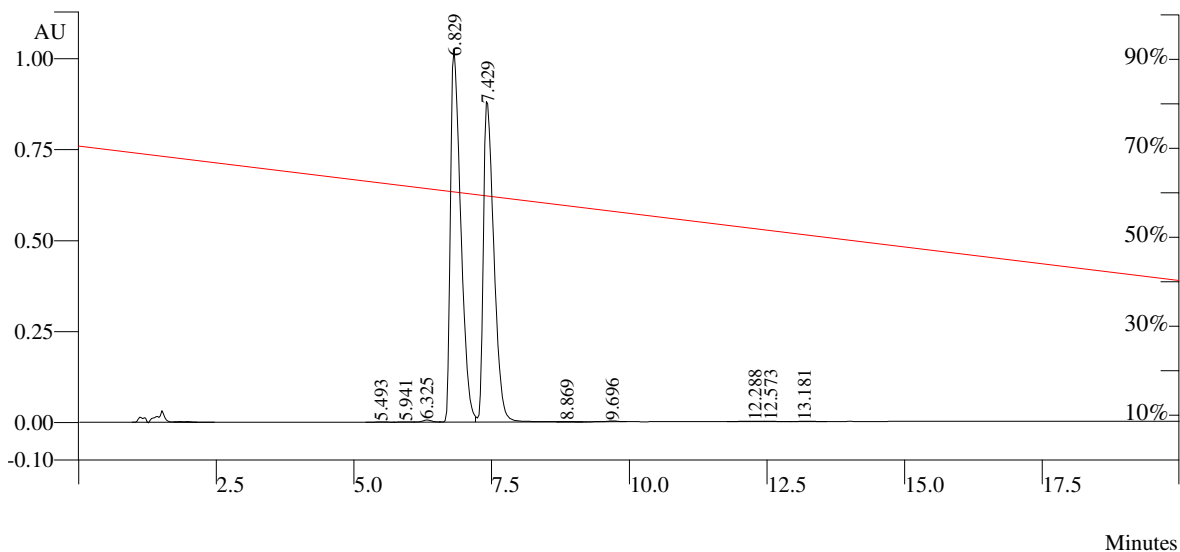
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.3251	6.701	0.00	BP	6.1	217487	34036
2	0.4309	7.000	0.00	PV	6.2	288235	45163
3	0.7345	7.240	0.00	VB	9.9	491302	42462
4	0.0399	9.248	0.00	BV	6.2	26721	3893
5	0.3642	9.579	0.00	VP	5.6	243639	39903
6	0.3229	9.888	0.00	PV	5.6	216000	35388
7	50.7085	10.317	0.00	VV	6.1	33919400	5228876
8	46.6294	10.645	0.00	VB	6.2	31190826	4644766
9	0.1758	11.915	0.00	TF	0.0	117609	13524
10	0.0409	13.165	0.00	TF	0.0	27355	2102
11	0.1206	13.357	0.00	TF	0.0	80662	12052
12	0.0527	14.205	0.00	TF	0.0	35219	3718
13	0.0546	18.525	0.00	BB	7.0	36493	4830
100.0000						66890944	10110713

Method NotesXTerra MS C-18, 5um, 3.9x150 mm column Compound **5p**
30-60% Acetonitrile with 0.1% TFA- Water with 0.1% TFA, 1 mL/min

Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.0296	7.731	0.00	BV	12.0	30186	2532
2	0.0352	8.163	0.00	VV	13.1	35964	3076
3	0.3168	8.515	0.00	VV	10.7	323383	28299
4	51.4618	8.957	0.00	VV	10.1	52537620	4887166
5	46.5940	9.424	0.00	VP	9.9	47568104	4301179
6	0.0213	10.483	0.00	TS	0.0	21796	2294
7	0.2199	11.181	0.00	TF	0.0	224545	14146
8	0.0689	11.821	0.00	TF	0.0	70293	7722
9	0.0505	12.595	0.00	TF	0.0	51545	2507
10	0.2583	12.947	0.00	TF	0.0	263718	25849
11	0.4733	13.376	0.00	TF	0.0	483228	36203
12	0.3663	13.912	0.00	TF	0.0	373962	25940
13	0.0764	14.595	0.00	PB	0.0	77965	7650
14	0.0277	16.840	0.00	BB	0.0	28291	1485
100.0000						102090600	9346048

Method Notes

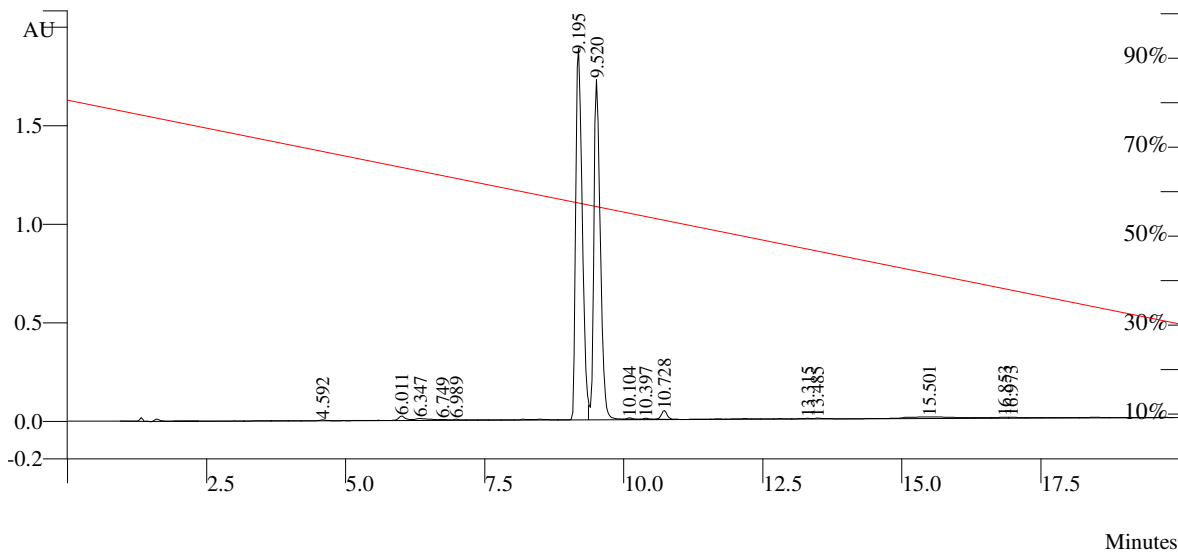
XTerra MS C-18, 5um, 3.9x150 mm column Compound **5q**
30-60% Acetonitrile with 0.1% TFA- Water with 0.1% TFA, 1 mL/min



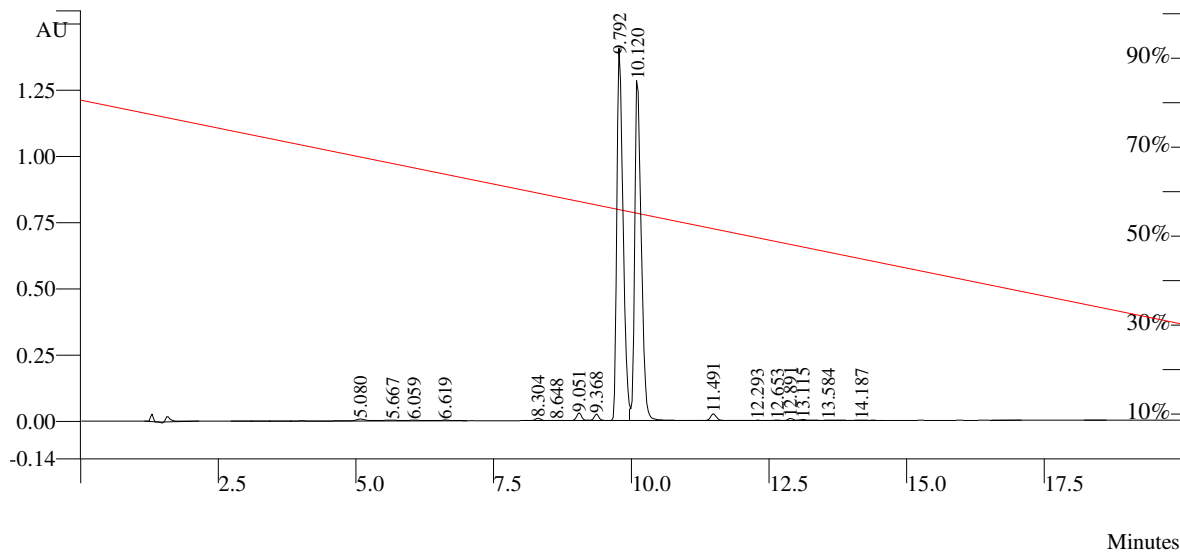
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.0305	5.493	0.00	BV	11.5	39459	3291
2	0.0284	5.941	0.00	VV	13.3	36801	3326
3	0.2453	6.325	0.00	VV	10.1	317349	29444
4	52.6871	6.829	0.00	VV	12.2	68157272	5246506
5	46.5998	7.429	0.00	VP	12.5	60282552	4480238
6	0.0257	8.869	0.00	TS	0.0	33258	3428
7	0.1374	9.696	0.00	PB	0.0	177749	12489
8	0.1278	12.288	0.00	BV	37.8	165279	6665
9	0.0569	12.573	0.00	VV	40.5	73569	5038
10	0.0611	13.181	0.00	VB	22.2	79067	4343
100.0000						129362352	9794768

Method Notes

XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **5r**
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



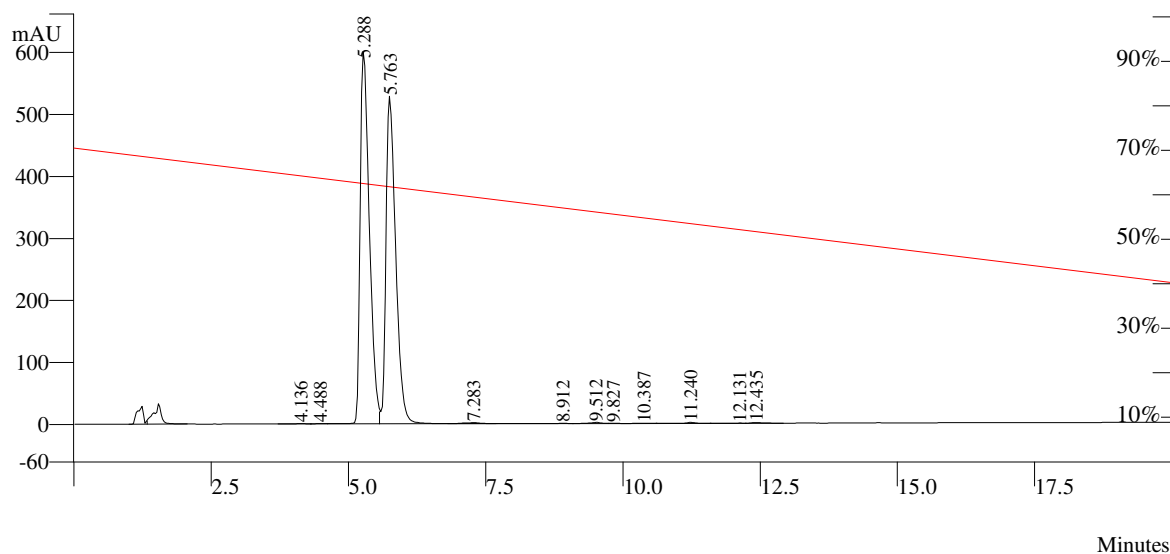
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.1323	4.592	0.00	VP	9.9	210314	25851
2	0.6452	6.011	0.00	VV	8.8	1025447	111683
3	0.5786	6.347	0.00	VV	0.0	919580	47139
4	0.1220	6.749	0.00	VV	0.0	193913	18267
5	0.1621	6.989	0.00	VV	0.0	257565	23873
6	49.4987	9.195	0.00	VV	7.8	78668664	9656671
7	45.3956	9.520	0.00	VP	7.5	72147648	8836462
8	0.1209	10.104	0.00	TS	0.0	192197	34953
9	0.0877	10.397	0.00	TS	0.0	139310	24646
10	1.0419	10.728	0.00	TS	0.0	1655955	227150
11	0.1000	13.315	0.00	VV	0.0	158948	14917
12	0.1684	13.485	0.00	VP	0.0	267651	20941
13	1.5293	15.501	0.00	PV	0.0	2430553	40424
14	0.2267	16.853	0.00	VV	0.0	360336	25305
15	0.1905	16.973	0.00	VV	0.0	302813	23515
	99.9999					158930896	19131796

Method NotesXTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **5s**
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min

Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.3844	5.080	0.00	PV	11.2	448881	36754
2	0.2792	5.667	0.00	VV	10.9	326003	12096
3	0.2316	6.059	0.00	VV	0.0	270415	10155
4	0.1296	6.619	0.00	VB	15.4	151344	16749
5	0.2876	8.304	0.00	BP	6.2	335917	47543
6	0.0130	8.648	0.00	TS	0.0	15217	2694
7	0.8307	9.051	0.00	PV	5.8	970112	151718
8	0.6951	9.368	0.00	VV	5.8	811794	123657
9	48.8645	9.792	0.00	VV	7.5	57064840	7198850
10	46.9362	10.120	0.00	VB	7.7	54812976	6568893
11	0.8070	11.491	0.00	TF	0.0	942483	128863
12	0.0114	12.293	0.00	TF	0.0	13344	2529
13	0.0242	12.653	0.00	TF	0.0	28310	4414
14	0.2211	12.891	0.00	TF	0.0	258221	38212
15	0.1372	13.115	0.00	TF	0.0	160265	17434
16	0.0732	13.584	0.00	TF	0.0	85459	5013
17	0.0738	14.187	0.00	TF	0.0	86182	7322
	99.9998					116781768	14372896

Method Notes

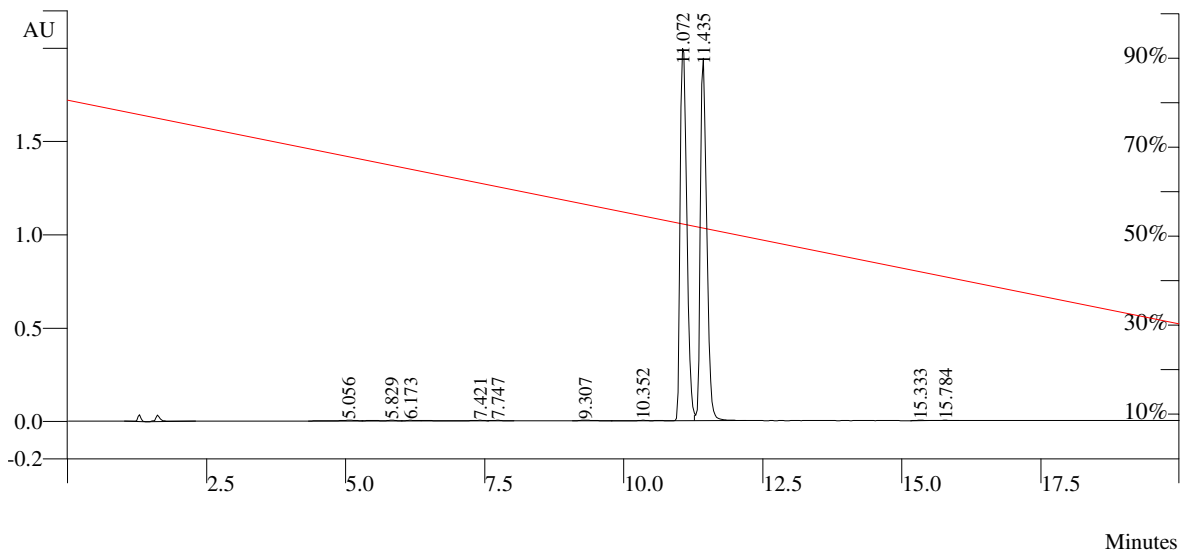
XTerra MS C-18, 5um, 3.9x150 mm column Compound **5t**
30-60% Acetonitrile with 0.1% TFA- Water with 0.1% TFA, 1 mL/min



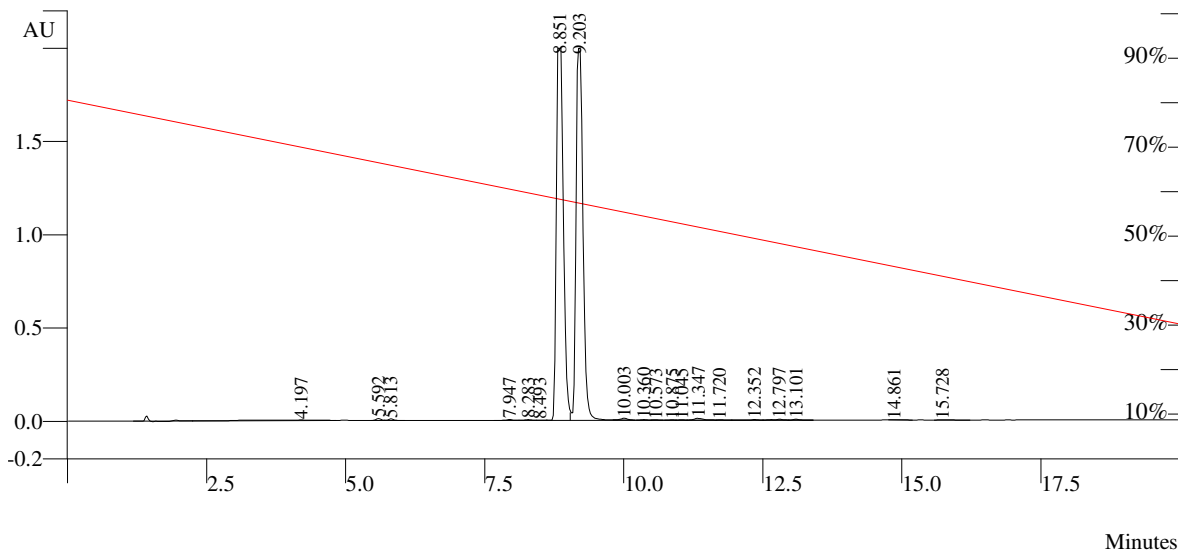
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.0585	4.136	0.00	BV	13.1	40806	2914
2	0.0493	4.488	0.00	VV	13.8	34370	2711
3	51.0487	5.288	0.00	VV	10.9	35620840	3076206
4	47.9881	5.763	0.00	VP	11.4	33485210	2706122
5	0.2469	7.283	0.00	TS	0.0	172315	9025
6	0.0548	8.912	0.00	PV	0.0	38242	2497
7	0.2011	9.512	0.00	VV	0.0	140343	9221
8	0.0290	9.827	0.00	VP	0.0	20269	2074
9	0.0414	10.387	0.00	PV	0.0	28880	2072
10	0.1378	11.240	0.00	VV	0.0	96163	8028
11	0.0236	12.131	0.00	VV	0.0	16436	1459
12	0.1207	12.435	0.00	VB	0.0	84228	6069
	99.9999					69778096	5828398

Method Notes

XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **5u**
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



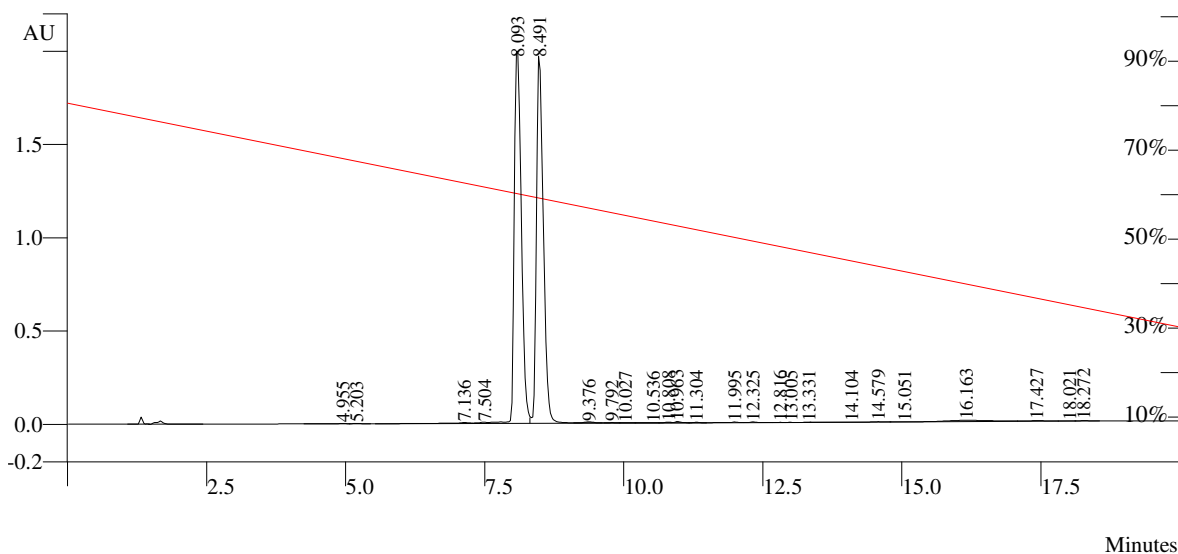
Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.2433	5.056	0.00	BV	18.4	405919	19316
2	0.2334	5.829	0.00	VV	8.5	389363	20770
3	0.1142	6.173	0.00	VV	9.3	190571	16976
4	0.2328	7.421	0.00	VV	8.8	388357	17553
5	0.0928	7.747	0.00	VB	0.0	154784	14305
6	0.1523	9.307	0.00	BV	13.0	254004	17156
7	0.0690	10.352	0.00	VP	7.5	115111	13433
8	50.9453	11.072	0.00	PV	7.7	84992776	10223341
9	47.7896	11.435	0.00	VB	7.4	79728216	9949035
10	0.0666	15.333	0.00	BP	6.6	111105	16071
11	0.0607	15.784	0.00	PB	6.9	101348	13451
						166831552	20321408

Method NotesXTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **5v**
10-60% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min

Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.7772	4.197	0.00	VB	0.0	1418264	16226
2	0.1756	5.592	0.00	BV	5.4	320363	54607
3	0.1591	5.813	0.00	VB	5.9	290421	43650
4	0.0963	7.947	0.00	BV	6.6	175676	24095
5	0.0815	8.283	0.00	VV	6.1	148655	21395
6	0.0213	8.493	0.00	VV	6.4	38942	5014
7	49.0247	8.851	0.00	VV	8.3	89462896	10216704
8	48.6606	9.203	0.00	VB	7.8	88798496	10216251
9	0.1938	10.003	0.00	TS	0.0	353566	46678
10	0.0435	10.360	0.00	TF	0.0	79386	12928
11	0.0223	10.573	0.00	TF	0.0	40706	5397
12	0.0189	10.875	0.00	TF	0.0	34534	5677
13	0.0312	11.045	0.00	TF	0.0	56855	8133
14	0.3242	11.347	0.00	TF	0.0	591614	52273
15	0.0257	11.720	0.00	TF	0.0	46977	7316
16	0.0529	12.352	0.00	TF	0.0	96546	12379
17	0.1478	12.797	0.00	TF	0.0	269640	27793
18	0.1046	13.101	0.00	TF	0.0	190898	28150
19	0.0159	14.861	0.00	BB	5.4	28978	4368
20	0.0231	15.728	0.00	BB	7.5	42078	3845
100.0002						182485472	20812876

Method Notes

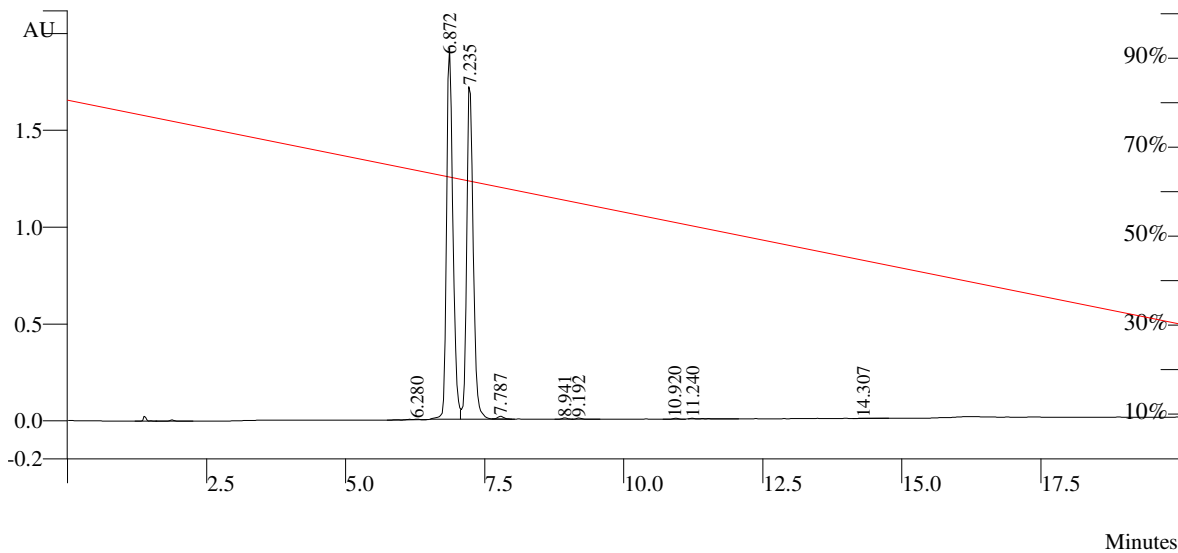
XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **5w**
 10-60% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.0359	4.955	0.00	BV	8.0	65900	8396
2	0.0458	5.203	0.00	VB	9.0	84041	10271
3	0.2724	7.136	0.00	BV	16.3	499712	23935
4	0.1978	7.504	0.00	VV	21.8	362872	30908
5	49.2890	8.093	0.00	VV	8.3	90422992	10216282
6	47.8527	8.491	0.00	VP	8.0	87788064	10079022
7	0.1764	9.376	0.00	TS	0.0	323562	29612
8	0.0397	9.792	0.00	TF	0.0	72823	10801
9	0.0207	10.027	0.00	TF	0.0	38039	4848
10	0.0345	10.536	0.00	TF	0.0	63253	4218
11	0.0767	10.808	0.00	TF	0.0	140737	21401
12	0.1408	10.963	0.00	TF	0.0	258273	31697
13	0.0491	11.304	0.00	TF	0.0	90081	14963
14	0.0633	11.995	0.00	PV	0.0	116069	17665
15	0.0824	12.325	0.00	VV	0.0	151132	15555
16	0.0103	12.816	0.00	VV	0.0	18830	2756
17	0.0076	13.005	0.00	VP	0.0	13894	1851
18	0.0035	13.331	0.00	PV	0.0	6360	699
19	0.0190	14.104	0.00	VP	0.0	34791	2492
20	0.0553	14.579	0.00	PV	0.0	101531	8989
21	0.0177	15.051	0.00	VP	0.0	32436	2782
22	1.1588	16.163	0.00	PV	0.0	2125895	37753
23	0.2476	17.427	0.00	VV	0.0	454160	19852
24	0.0499	18.021	0.00	VV	0.0	91623	7310
25	0.0532	18.272	0.00	VB	0.0	97624	6079
	100.0001					183454656	20610140

Method Notes

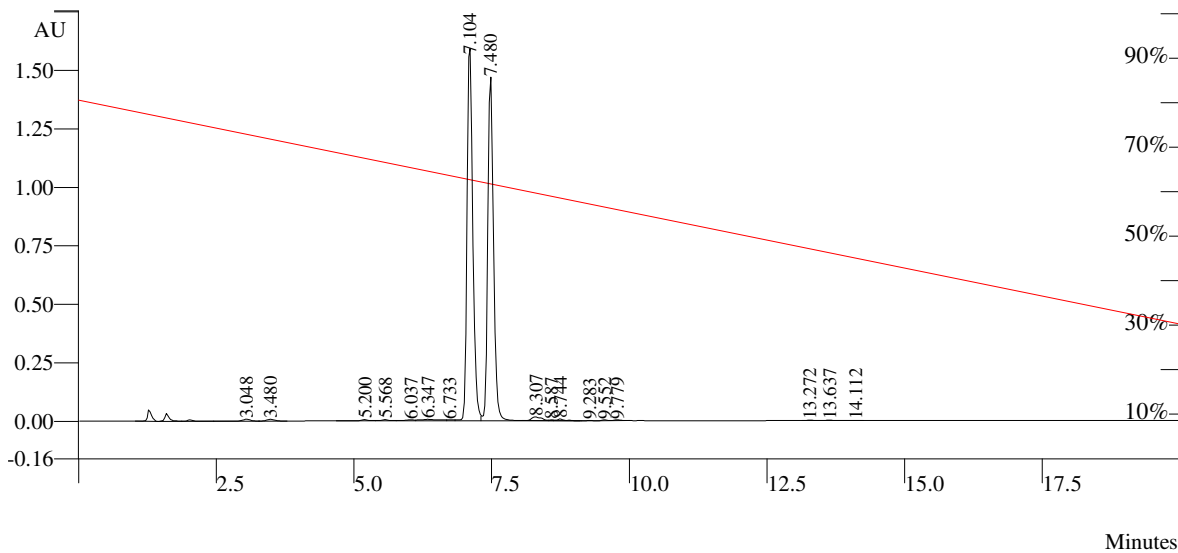
XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound 5x
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.0660	6.280	0.00	BB	16.5	99739	11309
2	51.3499	6.872	0.00	BV	7.4	77551536	9813007
3	47.6334	7.235	0.00	VB	7.4	71938752	8792520
4	0.3805	7.787	0.00	TS	0.0	574682	74913
5	0.1642	8.941	0.00	BV	6.4	248007	35235
6	0.1743	9.192	0.00	VB	5.9	263239	36423
7	0.0935	10.920	0.00	BB	5.6	141234	25696
8	0.0986	11.240	0.00	BB	4.9	148970	21391
9	0.0395	14.307	0.00	BB	9.7	59618	5716
	99.9999					151025760	18816212

Method Notes

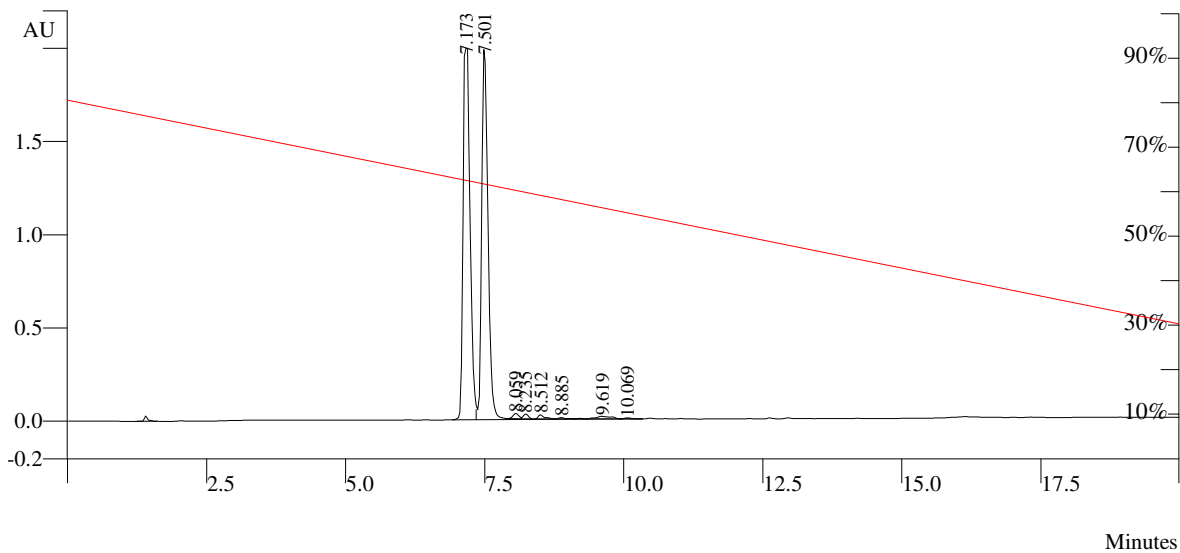
XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **5y**
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.3863	3.048	0.00	VV	9.4	460477	42021
2	0.3162	3.480	0.00	VB	9.6	376845	38129
3	0.2117	5.200	0.00	BV	7.0	252309	25665
4	0.2110	5.568	0.00	VV	7.5	251483	25183
5	0.2365	6.037	0.00	VV	14.7	281836	21141
6	0.6660	6.347	0.00	VV	0.0	793763	31889
7	0.1511	6.733	0.00	VV	0.0	180157	20599
8	50.3695	7.104	0.00	VV	6.7	60036604	8156786
9	45.8353	7.480	0.00	VP	6.6	54632200	7522079
10	0.8693	8.307	0.00	TF	0.0	1036115	83835
11	0.0664	8.587	0.00	TF	0.0	79184	19640
12	0.2947	8.744	0.00	TF	0.0	351268	37908
13	0.0391	9.283	0.00	PP	0.0	46577	7784
14	0.0916	9.552	0.00	PV	0.0	109193	16495
15	0.1108	9.779	0.00	VB	0.0	132057	15179
16	0.0633	13.272	0.00	BP	6.7	75478	10577
17	0.0723	13.637	0.00	PP	6.4	86190	11492
18	0.0090	14.112	0.00	PB	0.0	10732	1556
100.0001						119192464	16087958

Method Notes

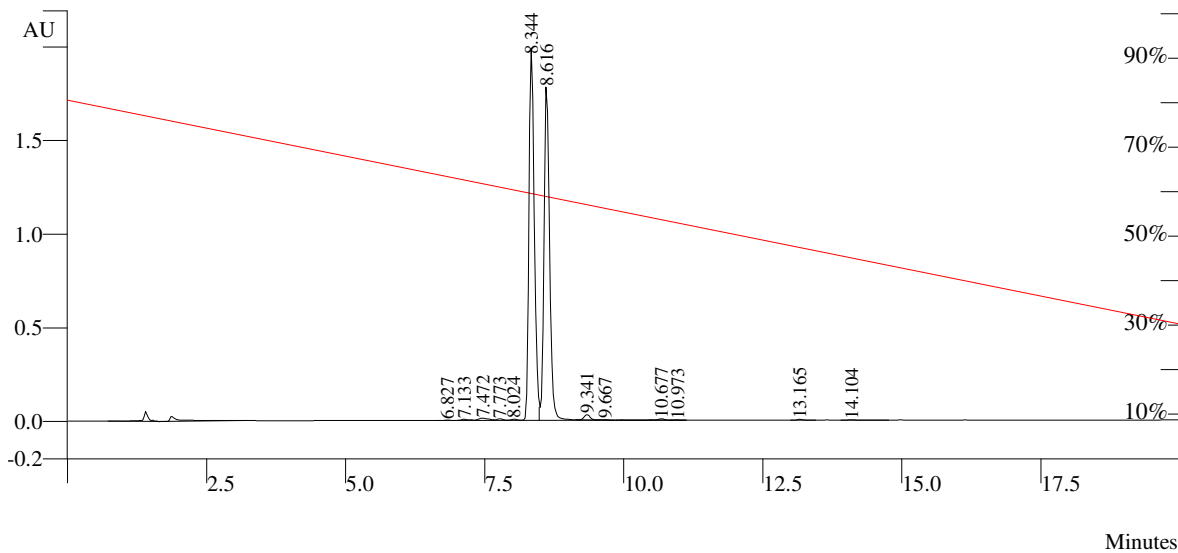
XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **5z**
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	50.6831	7.173	0.00	BV	8.0	88635136	10207425
2	46.5527	7.501	0.00	VB	7.2	81411888	10165637
3	0.5949	8.059	0.00	TF	0.0	1040417	145957
4	0.4563	8.235	0.00	TF	0.0	797978	130091
5	0.5172	8.512	0.00	TF	0.0	904444	114564
6	0.1913	8.885	0.00	TF	0.0	334508	35552
7	0.8554	9.619	0.00	TF	0.0	1496013	69892
8	0.1491	10.069	0.00	TF	0.0	260768	30853
100.0000						174881168	20899972

Method Notes

XTerra MS C-18, 5um, 3.9 mm x 150 mm Compound **5aa**
20-70% Acetonitrile with 0.1 % TFA - Water with 0.1% TFA, 1 mL/min



Peak No	Result (%)	Ret Time (min)	Rel Ret Time	Sep. Code	Width 1/2 (sec)	Peak Area (counts)	Peak Height (counts)
1	0.0459	6.827	0.00	BV	6.6	62262	8638
2	0.2063	7.133	0.00	VV	7.2	279782	31393
3	0.5972	7.472	0.00	VV	12.8	809796	61982
4	0.2729	7.773	0.00	VV	7.5	370087	45488
5	0.1903	8.024	0.00	VV	7.5	258068	33077
6	49.8517	8.344	0.00	VV	6.2	67593352	10180037
7	47.3622	8.616	0.00	VB	6.4	64217788	9117663
8	0.8332	9.341	0.00	TF	0.0	1129712	144906
9	0.0764	9.667	0.00	TF	0.0	103614	13090
10	0.3140	10.677	0.00	TF	0.0	425792	37889
11	0.0466	10.973	0.00	TF	0.0	63128	8557
12	0.1269	13.165	0.00	BB	6.4	172018	23544
13	0.0762	14.104	0.00	BB	7.7	103320	10769
99.9998						135588704	19717032

Table 1. QSAR models A and B description. Models A and B buildup to final model C presented in the body of the manuscript.

(a) Model A: $\ln EC_{50} \sim L + TotalHyd + V_S + PSA$

Descriptor	Estimate coefficients	Std. error	t-value	Pr (> t)
Intercept	11.27560	1.57864	7.143	6.04e-08
L	-1.01510	0.24946	-4.069	0.000316
TotalHyd	1.02512	0.48184	2.128	0.041710
V_S	0.03624	0.01132	3.202	0.003221
PSA	0.12540	0.03047	4.115	0.000278

Residual standard error = 0.9213 on 30 degrees of freedom, multiple $R^2 = 0.5186$, adjusted $R^2 = 0.4544$, F-statistic = 8.08 on 4 and 30 degrees of freedom, p-value = 0.0001516.

(b) Model B: $\ln EC_{50} \sim L + TotalHyd + V_S + PSA + \log P$

Descriptor	Estimate coefficients	Std. error	t-value	Pr (> t)
Intercept	10.83080	1.48314	7.303	4.82e-08
L	-0.88445	0.23898	-3.701	0.000895
TotalHyd	1.56983	0.50506	3.108	0.004191
V_S	0.03727	0.01055	3.531	0.001406
PSA	0.13352	0.02860	4.668	6.38e-05
logP	-0.96054	0.40781	-2.355	0.025481

Residual standard error = 0.8585 on 29 degrees of freedom, multiple $R^2 = 0.5959$, adjusted $R^2 = 0.5262$, F-statistic = 8.554 on 5 and 29 degrees of freedom, p-value = 4.538e-05.

Table 2. ANOVA evaluations testing the relative statistical merit of model B relative to model A and model C relative to model B.

(a) Models A and B comparison

Model	Res. Df	RSS	Df	Sum of Sq	F	Pr (>F)
A	30	25.462				
B	29	21.373	1	4.0888	5.5478	0.02548

Res. Df = degrees of freedom in residuals (number of points minus constraints). RSS = sums of squares of deviations for all points. Df = degrees of freedom. F = F-statistic. Pr (>F) = p-value.

(b) Models B and C comparison

Model	Res. Df	RSS	Df	Sum of Sq	F	Pr (>F)
B	29	21.373				
C	28	16.942	1	4.4311	7.3231	0.01146

Res. Df = degrees of freedom in residuals = (number of points minus constraints). RSS = sums of squares of deviations for all points. Df = degrees of freedom. F = F-statistic. Pr (>F) = p-value.

Figure 1. Sequence identities of selected GPCR templates to GPR88. The PDB code of selected GPCRs is indicated. Note: ‘without’ is an indication that the chimera proteins were removed in instances of structures crystallized in a chimeric form.

IDENTITY RESULTS										
2R4Rwithout.pdb	100%									
3SN6without.pdb	94.44%	100%								
5A8E	63.42%	62.32%	100%							
3PBLwithout.pdb	30.52%	34.21%	33.15%	100%						
3MBLwithout.pdb	36.57%	29.57%	30.87%	23.15%	100%					
4DJHwithout.pdb	25.92%	22.53%	20.35%	20%	20.2%	100%				
4EA3without.pdb	24.53%	22.3%	21.58%	22.1%	20.14%	60.43%	100%			
3OE6without.pdb	17.18%	20.83%	21.87%	19.47%	18.75%	28.12%	30.72%	100%		
3RZEwithout.pdb	26.2%	29.94%	29.94%	26.73%	28.87%	25.13%	21.39%		100%	
GR88	18.98%	16.9%	20.35%	18.94%	18.4%	14.98%	17.98%	15.1%	20.32%	100%
	2R4Rwithout.pdb	3SN6without.pdb	5A8E	3PBLwithout.pdb	3MBLwithout.pdb	4DJHwithout.pdb	4EA3without.pdb	3OE6without.pdb	3RZEwithout.pdb	GR88

Multiple Sequence Alignment employed to build GPR88 model

CLUSTAL 2.1 multiple sequence alignment

```

2R4R      -----GIVMSLIVLAIIVFGNVLVITAI--FE 25
3SN6      -----EVVVVGMGIVMSLIVLAIIVFGNVLVITAIKFE 33
5A8E      -----LSQQWEAGMSLLMALVLLIVAGNVLVIAAIGSTQ 35
3PBL      -----YALSYCALILAIVFGNGLVCMAVLKER 27
3MBL      -----IMGSSVYITVELAIAVLAAILGNVLCVAVWLNS 33
4DJH      -----SPAIPVLIITAVYSVVFVGLVGNLSVMFVIIRYT 34
4EA3      -----PLGLKVTIVGLYLAVCVGGLLGNCLVMYVILRHT 34
3OE6      -----NFNKIFLPTIYSIIFLTGIVGNGLVILVMGYQK 33
3RZE      -----MPLVVVLSTICLVTVGLNLLVLYAVRSER 29
GPR88     MTNSSSTSTSSTTGGSLLLLCEEEESWAGRRIIPVSLLYSGLAIGGTLANGMVLYLVSSFR 60
          : : * : * :

2R4R      RLQTVTNYFITSLACADLVMLGLAVVPPFG-----FWTSID 59
3SN6      RLQTVTNYFITSLACADLVMLGLAVVPPFGAAHLLTK-----TWTFGNFWECEFWTSID 84
5A8E      RLQTLTNLFITSLACADLVVGLLVVPPFGATLVVRG-----TWLWGSFLCELWTSID 86
3PBL      ALQTTTNYLVVSLAVADLLVATLVMPVWVYLEVTGG-----VWNFSRICCDVFTLD 79
3MBL      NLQVNTNYFVVSLLAAADIAVGLAIPFAITISTG-----FCAACHGCLFIACFV 82
4DJH      KMKATATNIYIFNLALADALVTTTTPFQSTVYLMNS-----WPFQDVLCKIVLSID 84
4EA3      KMKATATNIYIFNLALADTLVLLTLPFQGTDLILGF-----WPFGNALCKTVIAID 84
3OE6      KLRSMTDKYRHLHLSVADLLFVITLFPWAVDAVAN-----WYFGNFLCKAVHVIY 82
3RZE      KLHTVGNLYIVLSVADLIVGAVVMPMNIYLMS-----KWSLGRPLCLFWLSMD 80
GPR88     KLQTTSNAFIVNGCAADLSVCLWMPQEAVLGLLPTGSAEPPADWDGAGGSYRLLRGGLL 120
          : : . : . * * . :

2R4R      VLCVTASIE TLCVIAVDRYFAI-TSPFKYQSLLTKNKARVILMVVIVSGLT----- 110
3SN6      VLCVTASIE TLCVIAVDRYFAI-TSPFKYQSLLTKNKARVILMVVIVSGLTSLFLPIQM 143
5A8E      VLCVTASVWTL CVIAIDRYLAI-TSPFRYQSLMTRARAKVIICTVWAI SALVSFLPIMM 145
3PBL      VMMCTASIWNLCAISIDRYTAV-VMPVHYQHGTGQSSCRRVALMITAVVWLAFVSCPLL 138
3MBL      LVLTQSSIFSLLAIAIDRYIAI-RIPLRYNGLVTGTRAKGIIAICWVLSFAIGLTPMLG 141
4DJH      YYNMFTSTFTLTAMSVDRIYAI-CHP-----TSSKAQAVNVAIWALASVVGVPVIM 136
4EA3      TVNLYSSVWILAFISLDRYLAI-VHATNSQRPRKLLAEKVYVGVWIPALLLTPDFIFA 141
3OE6      YVASTASIFSVFILCIDRYRSV-QQPLRYLKYRTKTRASATILGAWFLSFLVWVPIILGW 139
3RZE      GLGLTVSLLSHCLVALNRYLLITRAPATYQALYQRRHTAGMLALS SWALALGLVLLPPWA 180
          * : : : * * :

2R4R      -----SSIVSFYVPLVIMVFVYSRVFQEAQRQLQK 140
3SN6      WYRQE---AINCYAEETCCDFFTNQAYAIASSIVSFYVPLVIMVFVYSRVFQEAQRQLQ 200
5A8E      WWRDEDPQALKCYQDPGCCDFVTNRAYAIASSIISFYIPLLLIMIFVALRVYREAEQIRK 205
3PBL      FGFNTTG-----DPTVCSISNPDFVIYSSVVSFYLPFGVTVLVYARIYVVLKQRRRK 190
3MBL      NNCGQSQCQEGEVACLFEVDVPMNYMVFYFNFFACVLPVLLMLGVLVLRIFLAARRQLRS 201
4DJH      GTKVRED--VDVIECSLQFPDDDYSDWDLFMKICVFI FAFVIVPVLIIIVCYTLMILRLKS 201
4EA3      SAQVED---EEIECLVEIPTP-QDYWGPVFAICIFLFSFIVPVLVISVCYSLMIRRLRG 191
3OE6      NVSEAD---DRYICDRFPND---LWVVVFQFQHIMVGLILPGIVILSCYCIISKL-- 192
3RZE      HRREDK-----CETDFYDVTWFKVMTAIINFYLPVLLMLWYAKIYKAVRQHC-- 187

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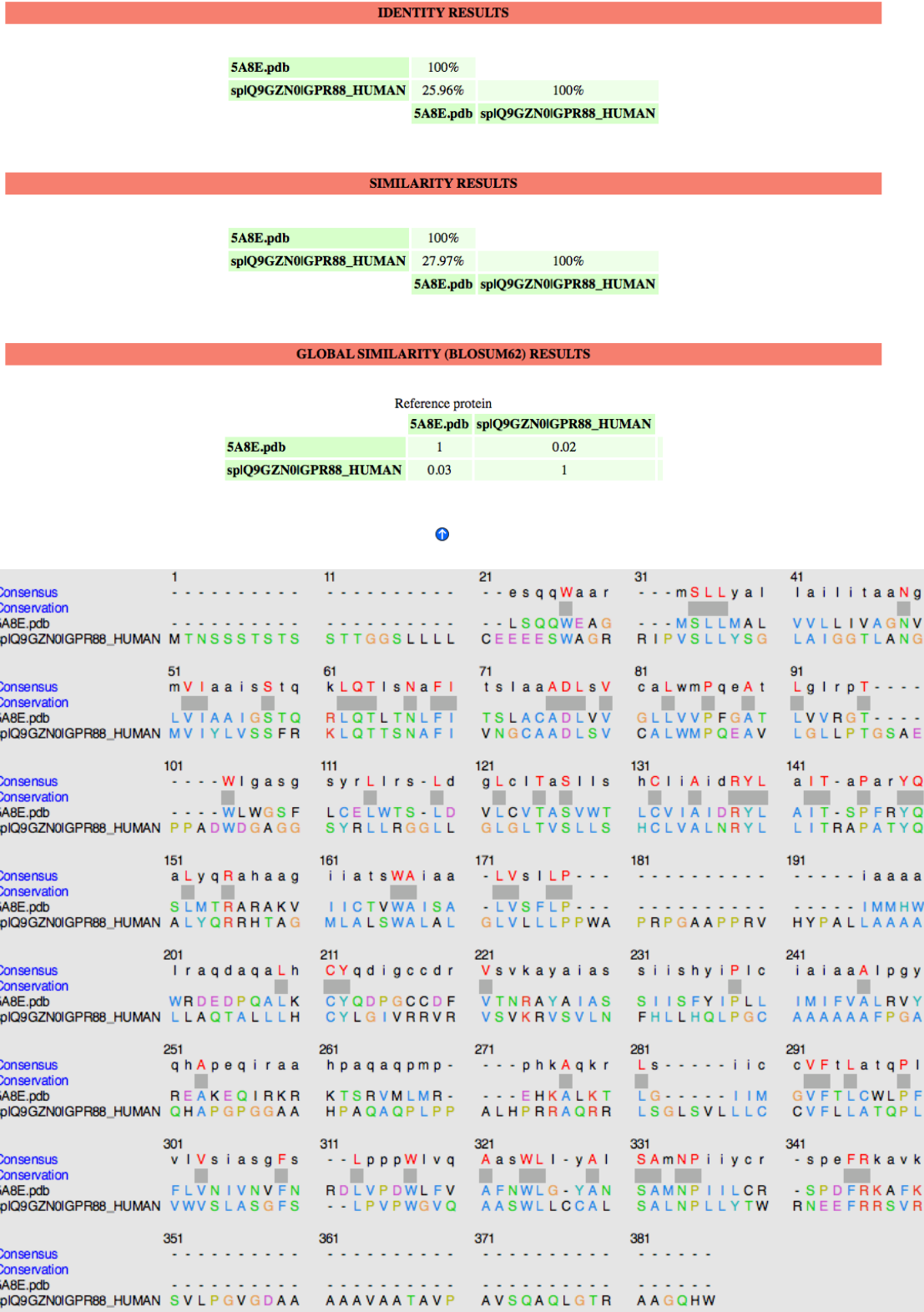
GPR88 PRGAAPPRVHYPALLAAALLAQTALLLHCYLGIVRRVRVSVKRVSVLNFHLLHQLPGC 240

2R4R IDKSEGRF-----HVFCLKEHKALKTLGIIMGTFTLCWLPFFIL- 179
3SN6 IDKSEGR-----CLKEHKALKTLGIIMGTFTLCWLPFFIVN 236
5A8E RKTSRVM-----LMREHKALKTLGIIMGVFTLCWLPFFLVN 241
3PBL -----
3MBL T-----LQKEVHAAKSLAIIVGLFALCWLPPLHIIN 231
4DJH VRLLSG-----REKDRNLRRITRLVLVVAVFVVCWTPPIHIFI 239
4EA3 VRLLSGS-----REKDRNLRRITRLVLVVAVFVGCWTPVQVQFV 230
3OE6 -----
3RZE -----
GPR88 AAAAAFPGAQHAPGPGGAHPAQAPLPPALHPRRAQRRLSGLSVLLCCVFLLATQPL 300

2R4R -----NWIGYVNSGFNPLIYCRSP-DFRIAFQELLCRRSSLK- 216
3SN6 IVHVIQDNL---IRKEVYILLNWIGYVNSGFNPLIYCRSP-DFRIAFQELLC----- 284
5A8E IVNVFNRL---VPDWLFVAFNWLGYANSAMNP IILCRSP-DFRKAFK----- 285
3PBL -----
3MBL CFTFFCPDCS-HAPLWLMYLAIVLSHTNSVVPFIYAYRIREFRQTFRKIIIRSHVLRQ-- 288
4DJH LVEALGS----AALSSYYFCIALGYTNSSLNP ILYAFDENFKRCFRDFCFP----- 287
4EA3 LAQQLGVQPSETAVAILRFCTALGYVNSCLNP ILYAFDENFKACFR----- 278
3OE6 -----
3RZE -----
GPR88 VVWSLASGFSLPVPGVQAASWLLCCALSALNPLLYTWRNEEFRRSVRSVLPVGVGDAAAA 360

2R4R -----
3SN6 -----
5A8E -----
3PBL -----
3MBL -----
4DJH -----
4EA3 -----
3OE6 -----
3RZE -----
GPR88 AVAATAVPAVSQAQLGTRAAGQHW 384

Figure 2. Sequence identity of the β 1-adrenergic template (PDB: 5A8E) to human GPR88.



PDB coordinates for GPR88 homology model.

The initial GPR88 homology model was based on sequence alignment/MODELLER backbone annealing with topological constrains and SCWRL rotamer exploration for non-conserved residues. Note: PDB coordinates are of the initial AMBER-PDB format. The initial model is N- and C-terminal end truncated and does not incorporate loop annealing or equilibration in a membrane/water/ion environment. The latter facets are work in progress and beyond the scope of this work to examine probable binding site characteristics for comparison with our QSAR. This initial model was used in docking and MMGBSA rescoring of docking poses to assess the degree to which the unrefined model was consistent with QSAR/SAR conjectures.

ATOM	1	N	SER	26	30.610	41.379	37.421
ATOM	2	H1	SER	26	30.858	40.800	38.210
ATOM	3	H2	SER	26	31.242	42.166	37.385
ATOM	4	H3	SER	26	30.491	40.789	36.610
ATOM	5	CA	SER	26	29.274	41.962	37.680
ATOM	6	HA	SER	26	29.340	43.050	37.684
ATOM	7	CB	SER	26	28.284	41.536	36.594
ATOM	8	HB2	SER	26	27.361	42.101	36.722
ATOM	9	HB3	SER	26	28.716	41.763	35.619
ATOM	10	OG	SER	26	28.004	40.149	36.675
ATOM	11	HG	SER	26	27.466	39.941	36.078
ATOM	12	C	SER	26	28.779	41.554	39.024
ATOM	13	O	SER	26	29.454	40.834	39.754
ATOM	14	N	TRP	27	27.593	42.066	39.398
ATOM	15	H	TRP	27	27.198	42.654	38.843
ATOM	16	CA	TRP	27	26.958	41.707	40.629
ATOM	17	HA	TRP	27	26.482	40.732	40.528
ATOM	18	CB	TRP	27	27.985	41.635	41.761
ATOM	19	HB2	TRP	27	28.777	40.931	41.507
ATOM	20	HB3	TRP	27	28.418	42.619	41.938
ATOM	21	CG	TRP	27	27.409	41.179	43.066
ATOM	22	CD1	TRP	27	26.960	41.968	44.085
ATOM	23	HD1	TRP	27	27.027	43.046	43.938
ATOM	24	NE1	TRP	27	26.502	41.191	45.121
ATOM	25	HE1	TRP	27	26.147	41.518	45.924
ATOM	26	CE2	TRP	27	26.651	39.870	44.779
ATOM	27	CZ2	TRP	27	26.333	38.717	45.497
ATOM	28	HZ2	TRP	27	25.896	38.827	46.489
ATOM	29	CH2	TRP	27	26.592	37.513	44.906
ATOM	30	HH2	TRP	27	26.356	36.589	45.435
ATOM	31	CZ3	TRP	27	27.157	37.438	43.628
ATOM	32	HZ3	TRP	27	27.361	36.472	43.167
ATOM	33	CE3	TRP	27	27.473	38.578	42.913
ATOM	34	HE3	TRP	27	27.909	38.463	41.921
ATOM	35	CD2	TRP	27	27.219	39.824	43.493
ATOM	36	C	TRP	27	25.914	42.751	40.846

ATOM	37	O	TRP	27	25.745	43.650	40.024
ATOM	38	N	ALA	28	25.166	42.643	41.954
ATOM	39	H	ALA	28	25.272	41.929	42.492
ATOM	40	CA	ALA	28	24.209	43.647	42.283
ATOM	41	HA	ALA	28	23.505	43.864	41.480
ATOM	42	CB	ALA	28	23.424	43.245	43.522
ATOM	43	HB1	ALA	28	24.115	43.033	44.338
ATOM	44	HB2	ALA	28	22.760	44.059	43.812
ATOM	45	HB3	ALA	28	22.834	42.355	43.306
ATOM	46	C	ALA	28	25.016	44.886	42.464
ATOM	47	O	ALA	28	24.601	45.981	42.092
ATOM	48	N	GLY	29	26.229	44.720	43.021
ATOM	49	H	GLY	29	26.495	43.885	43.227
ATOM	50	CA	GLY	29	27.090	45.831	43.287
ATOM	51	HA2	GLY	29	26.618	46.526	43.981
ATOM	52	HA3	GLY	29	28.039	45.492	43.703
ATOM	53	C	GLY	29	27.349	46.534	41.997
ATOM	54	O	GLY	29	27.473	47.753	41.962
ATOM	55	N	ARG	30	27.504	45.799	40.889
ATOM	56	H	ARG	30	27.492	44.899	40.882
ATOM	57	CA	ARG	30	27.696	46.521	39.669
ATOM	58	HA	ARG	30	28.498	47.249	39.793
ATOM	59	CB	ARG	30	28.074	45.566	38.535
ATOM	60	HB2	ARG	30	28.981	45.045	38.842
ATOM	61	HB3	ARG	30	27.260	44.848	38.435
ATOM	62	CG	ARG	30	28.312	46.252	37.199
ATOM	63	HG2	ARG	30	28.517	45.489	36.448
ATOM	64	HG3	ARG	30	27.410	46.799	36.924
ATOM	65	CD	ARG	30	29.485	47.215	37.275
ATOM	66	HD2	ARG	30	29.260	47.989	38.008
ATOM	67	HD3	ARG	30	30.375	46.669	37.586
ATOM	68	NE	ARG	30	29.753	47.853	35.988
ATOM	69	HE	ARG	30	29.375	47.511	35.294
ATOM	70	CZ	ARG	30	30.534	48.917	35.830
ATOM	71	NH1	ARG	30	30.719	49.430	34.621
ATOM	72	HH11	ARG	30	30.334	49.074	33.939
ATOM	73	HH12	ARG	30	31.224	50.118	34.519
ATOM	74	NH2	ARG	30	31.128	49.465	36.881
ATOM	75	HH21	ARG	30	31.008	49.133	37.665
ATOM	76	HH22	ARG	30	31.633	50.154	36.778
ATOM	77	C	ARG	30	26.429	47.265	39.373
ATOM	78	O	ARG	30	26.451	48.434	38.987
ATOM	79	N	ARG	31	25.279	46.594	39.578
ATOM	80	H	ARG	31	25.331	45.776	39.951
ATOM	81	CA	ARG	31	24.000	47.142	39.223
ATOM	82	HA	ARG	31	24.005	47.442	38.175
ATOM	83	CB	ARG	31	22.896	46.103	39.429
ATOM	84	HB2	ARG	31	23.156	45.234	38.824
ATOM	85	HB3	ARG	31	22.907	45.827	40.484
ATOM	86	CG	ARG	31	21.507	46.589	39.047
ATOM	87	HG2	ARG	31	21.298	47.509	39.594
ATOM	88	HG3	ARG	31	21.492	46.792	37.976

ATOM	89	CD	ARG	31	20.448	45.550	39.380
ATOM	90	HD2	ARG	31	19.479	45.905	39.027
ATOM	91	HD3	ARG	31	20.697	44.616	38.877
ATOM	92	NE	ARG	31	20.360	45.299	40.816
ATOM	93	HE	ARG	31	20.730	44.580	41.112
ATOM	94	CZ	ARG	31	19.750	46.105	41.679
ATOM	95	NH1	ARG	31	19.720	45.795	42.968
ATOM	96	HH11	ARG	31	20.095	45.072	43.246
ATOM	97	HH12	ARG	31	19.325	46.316	43.527
ATOM	98	NH2	ARG	31	19.172	47.219	41.252
ATOM	99	HH21	ARG	31	19.192	47.420	40.416
ATOM	100	HH22	ARG	31	18.778	47.741	41.810
ATOM	101	C	ARG	31	23.663	48.379	39.999
ATOM	102	O	ARG	31	23.247	49.377	39.411
ATOM	103	N	ILE	32	23.823	48.376	41.336
ATOM	104	H	ILE	32	24.188	47.695	41.798
ATOM	105	CA	ILE	32	23.370	49.551	42.027
ATOM	106	HA	ILE	32	22.371	49.849	41.709
ATOM	107	CB	ILE	32	23.384	49.349	43.554
ATOM	108	HB	ILE	32	24.347	48.931	43.847
ATOM	109	CG2	ILE	32	23.168	50.674	44.269
ATOM	110	HG21	ILE	32	22.205	51.093	43.976
ATOM	111	HG22	ILE	32	23.181	50.512	45.347
ATOM	112	HG23	ILE	32	23.963	51.368	43.997
ATOM	113	CG1	ILE	32	22.344	48.304	43.963
ATOM	114	HG12	ILE	32	21.361	48.750	43.814
ATOM	115	HG13	ILE	32	22.461	47.452	43.294
ATOM	116	CD1	ILE	32	22.475	47.840	45.397
ATOM	117	HD11	ILE	32	22.358	48.692	46.067
ATOM	118	HD12	ILE	32	21.704	47.100	45.612
ATOM	119	HD13	ILE	32	23.458	47.393	45.546
ATOM	120	C	ILE	32	24.207	50.743	41.659
ATOM	121	O	ILE	32	23.647	51.787	41.331
ATOM	122	N	PRO	33	25.512	50.665	41.690
ATOM	123	CD	PRO	33	26.386	49.622	42.361
ATOM	124	HD2	PRO	33	26.588	48.795	41.680
ATOM	125	HD3	PRO	33	25.906	49.241	43.262
ATOM	126	CG	PRO	33	27.615	50.433	42.665
ATOM	127	HG2	PRO	33	28.489	49.781	42.668
ATOM	128	HG3	PRO	33	27.508	50.901	43.644
ATOM	129	CB	PRO	33	27.707	51.463	41.589
ATOM	130	HB2	PRO	33	28.196	51.089	40.689
ATOM	131	HB3	PRO	33	28.239	52.342	41.952
ATOM	132	CA	PRO	33	26.253	51.824	41.279
ATOM	133	HA	PRO	33	25.898	52.645	41.901
ATOM	134	C	PRO	33	26.136	52.205	39.837
ATOM	135	O	PRO	33	26.298	53.386	39.537
ATOM	136	N	VAL	34	25.891	51.250	38.921
ATOM	137	H	VAL	34	25.807	50.389	39.169
ATOM	138	CA	VAL	34	25.763	51.615	37.539
ATOM	139	HA	VAL	34	26.585	52.254	37.216
ATOM	140	CB	VAL	34	25.718	50.373	36.629

ATOM	141	HB	VAL	34	24.946	49.695	36.993
ATOM	142	CG1	VAL	34	25.405	50.774	35.196
ATOM	143	HG11	VAL	34	26.176	51.452	34.831
ATOM	144	HG12	VAL	34	25.377	49.884	34.567
ATOM	145	HG13	VAL	34	24.437	51.273	35.161
ATOM	146	CG2	VAL	34	27.033	49.614	36.699
ATOM	147	HG21	VAL	34	27.214	49.294	37.725
ATOM	148	HG22	VAL	34	26.983	48.740	36.050
ATOM	149	HG23	VAL	34	27.845	50.263	36.372
ATOM	150	C	VAL	34	24.529	52.445	37.397
ATOM	151	O	VAL	34	24.501	53.426	36.655
ATOM	152	N	SER	35	23.470	52.068	38.135
ATOM	153	H	SER	35	23.563	51.371	38.697
ATOM	154	CA	SER	35	22.216	52.749	38.041
ATOM	155	HA	SER	35	21.860	52.727	37.011
ATOM	156	CB	SER	35	21.172	52.075	38.934
ATOM	157	HB2	SER	35	21.566	52.017	39.949
ATOM	158	HB3	SER	35	20.266	52.681	38.931
ATOM	159	OG	SER	35	20.869	50.771	38.470
ATOM	160	HG	SER	35	21.559	50.310	38.473
ATOM	161	C	SER	35	22.402	54.183	38.421
ATOM	162	O	SER	35	21.840	55.073	37.785
ATOM	163	N	LEU	36	23.202	54.448	39.468
ATOM	164	H	LEU	36	23.624	53.767	39.878
ATOM	165	CA	LEU	36	23.389	55.794	39.934
ATOM	166	HA	LEU	36	22.420	56.260	40.114
ATOM	167	CB	LEU	36	24.186	55.803	41.240
ATOM	168	HB2	LEU	36	25.070	55.208	41.012
ATOM	169	HB3	LEU	36	24.484	56.831	41.447
ATOM	170	CG	LEU	36	23.482	55.220	42.467
ATOM	171	HG	LEU	36	23.114	54.224	42.222
ATOM	172	CD1	LEU	36	24.441	55.131	43.645
ATOM	173	HD11	LEU	36	24.809	56.127	43.890
ATOM	174	HD12	LEU	36	23.921	54.714	44.507
ATOM	175	HD13	LEU	36	25.281	54.488	43.382
ATOM	176	CD2	LEU	36	22.266	56.055	42.837
ATOM	177	HD21	LEU	36	21.565	56.067	42.002
ATOM	178	HD22	LEU	36	21.780	55.623	43.712
ATOM	179	HD23	LEU	36	22.579	57.074	43.063
ATOM	180	C	LEU	36	24.084	56.575	38.862
ATOM	181	O	LEU	36	23.735	57.723	38.590
ATOM	182	N	LEU	37	25.089	55.965	38.207
ATOM	183	H	LEU	37	25.281	55.105	38.390
ATOM	184	CA	LEU	37	25.853	56.676	37.222
ATOM	185	HA	LEU	37	26.270	57.582	37.662
ATOM	186	CB	LEU	37	27.003	55.808	36.707
ATOM	187	HB2	LEU	37	26.520	54.872	36.427
ATOM	188	HB3	LEU	37	27.413	56.285	35.817
ATOM	189	CG	LEU	37	28.133	55.521	37.698
ATOM	190	HG	LEU	37	27.703	55.127	38.619
ATOM	191	CD1	LEU	37	29.109	54.508	37.121
ATOM	192	HD11	LEU	37	29.540	54.901	36.200

ATOM	193	HD12	LEU	37	29.905	54.318	37.841
ATOM	194	HD13	LEU	37	28.583	53.577	36.907
ATOM	195	CD2	LEU	37	28.860	56.804	38.070
ATOM	196	HD21	LEU	37	28.158	57.500	38.529
ATOM	197	HD22	LEU	37	29.660	56.578	38.775
ATOM	198	HD23	LEU	37	29.284	57.255	37.173
ATOM	199	C	LEU	37	24.948	57.090	36.108
ATOM	200	O	LEU	37	25.024	58.217	35.618
ATOM	201	N	TYR	38	24.052	56.183	35.682
ATOM	202	H	TYR	38	24.018	55.380	36.087
ATOM	203	CA	TYR	38	23.159	56.479	34.600
ATOM	204	HA	TYR	38	23.728	56.819	33.735
ATOM	205	CB	TYR	38	22.365	55.233	34.204
ATOM	206	HB2	TYR	38	21.969	54.797	35.121
ATOM	207	HB3	TYR	38	21.539	55.563	33.573
ATOM	208	CG	TYR	38	23.180	54.196	33.465
ATOM	209	CD1	TYR	38	23.349	52.920	33.987
ATOM	210	HD1	TYR	38	22.882	52.678	34.942
ATOM	211	CE1	TYR	38	24.093	51.965	33.319
ATOM	212	HE1	TYR	38	24.218	50.968	33.740
ATOM	213	CZ	TYR	38	24.679	52.282	32.112
ATOM	214	OH	TYR	38	25.419	51.333	31.445
ATOM	215	HH	TYR	38	25.711	51.658	30.738
ATOM	216	CE2	TYR	38	24.525	53.555	31.566
ATOM	217	HE2	TYR	38	24.986	53.812	30.612
ATOM	218	CD2	TYR	38	23.778	54.496	32.248
ATOM	219	HD2	TYR	38	23.649	55.495	31.832
ATOM	220	C	TYR	38	22.231	57.590	34.972
ATOM	221	O	TYR	38	21.926	58.444	34.140
ATOM	222	N	SER	39	21.744	57.612	36.226
ATOM	223	H	SER	39	21.984	56.987	36.828
ATOM	224	CA	SER	39	20.829	58.653	36.598
ATOM	225	HA	SER	39	19.967	58.643	35.931
ATOM	226	CB	SER	39	20.339	58.448	38.033
ATOM	227	HB2	SER	39	21.205	58.368	38.690
ATOM	228	HB3	SER	39	19.741	59.311	38.324
ATOM	229	OG	SER	39	19.555	57.272	38.141
ATOM	230	HG	SER	39	20.011	56.615	37.919
ATOM	231	C	SER	39	21.522	59.971	36.437
ATOM	232	O	SER	39	20.920	60.949	35.994
ATOM	233	N	GLY	40	22.819	60.030	36.791
ATOM	234	H	GLY	40	23.220	59.284	37.096
ATOM	235	CA	GLY	40	23.562	61.254	36.690
ATOM	236	HA2	GLY	40	23.058	62.038	37.255
ATOM	237	HA3	GLY	40	24.566	61.109	37.088
ATOM	238	C	GLY	40	23.662	61.674	35.256
ATOM	239	O	GLY	40	23.593	62.861	34.949
ATOM	240	N	LEU	41	23.879	60.715	34.338
ATOM	241	H	LEU	41	23.945	59.857	34.601
ATOM	242	CA	LEU	41	24.005	61.052	32.947
ATOM	243	HA	LEU	41	24.730	61.857	32.827
ATOM	244	CB	LEU	41	24.482	59.841	32.143

ATOM	245	HB2	LEU	41	23.785	59.051	32.421
ATOM	246	HB3	LEU	41	24.365	60.072	31.084
ATOM	247	CG	LEU	41	25.914	59.373	32.407
ATOM	248	HG	LEU	41	26.045	59.226	33.479
ATOM	249	CD1	LEU	41	26.197	58.068	31.679
ATOM	250	HD11	LEU	41	26.067	58.214	30.607
ATOM	251	HD12	LEU	41	27.221	57.753	31.881
ATOM	252	HD13	LEU	41	25.506	57.300	32.027
ATOM	253	CD2	LEU	41	26.914	60.440	31.988
ATOM	254	HD21	LEU	41	26.732	61.353	32.556
ATOM	255	HD22	LEU	41	27.926	60.087	32.184
ATOM	256	HD23	LEU	41	26.802	60.646	30.924
ATOM	257	C	LEU	41	22.679	61.551	32.449
ATOM	258	O	LEU	41	22.621	62.510	31.680
ATOM	259	N	ALA	42	21.573	60.902	32.868
ATOM	260	H	ALA	42	21.655	60.215	33.444
ATOM	261	CA	ALA	42	20.272	61.298	32.403
ATOM	262	HA	ALA	42	20.226	61.313	31.314
ATOM	263	CB	ALA	42	19.210	60.341	32.921
ATOM	264	HB1	ALA	42	19.237	60.322	34.010
ATOM	265	HB2	ALA	42	18.227	60.674	32.588
ATOM	266	HB3	ALA	42	19.403	59.340	32.536
ATOM	267	C	ALA	42	20.032	62.694	32.860
ATOM	268	O	ALA	42	19.617	63.553	32.083
ATOM	269	N	ILE	43	20.310	62.964	34.145
ATOM	270	H	ILE	43	20.554	62.312	34.716
ATOM	271	CA	ILE	43	20.213	64.312	34.601
ATOM	272	HA	ILE	43	19.309	64.800	34.237
ATOM	273	CB	ILE	43	20.255	64.392	36.138
ATOM	274	HB	ILE	43	20.213	65.439	36.440
ATOM	275	CG2	ILE	43	19.078	63.642	36.743
ATOM	276	HG21	ILE	43	19.120	62.595	36.442
ATOM	277	HG22	ILE	43	19.124	63.709	37.830
ATOM	278	HG23	ILE	43	18.146	64.083	36.391
ATOM	279	CG1	ILE	43	21.594	63.870	36.663
ATOM	280	HG12	ILE	43	21.619	62.796	36.476
ATOM	281	HG13	ILE	43	22.380	64.357	36.086
ATOM	282	CD1	ILE	43	21.815	64.130	38.137
ATOM	283	HD11	ILE	43	21.029	63.643	38.714
ATOM	284	HD12	ILE	43	22.785	63.732	38.435
ATOM	285	HD13	ILE	43	21.790	65.203	38.325
ATOM	286	C	ILE	43	21.360	64.961	33.918
ATOM	287	O	ILE	43	22.248	64.319	33.394
ATOM	288	N	GLY	44	21.372	66.251	33.706
ATOM	289	H	GLY	44	20.745	66.866	33.901
ATOM	290	CA	GLY	44	22.591	66.648	33.072
ATOM	291	HA2	GLY	44	22.897	67.644	33.393
ATOM	292	HA3	GLY	44	23.392	65.938	33.277
ATOM	293	C	GLY	44	22.327	66.671	31.604
ATOM	294	O	GLY	44	22.417	67.722	30.980
ATOM	295	N	GLY	45	22.007	65.509	30.996
ATOM	296	H	GLY	45	22.008	64.723	31.435

ATOM	297	CA	GLY	45	21.658	65.553	29.609
ATOM	298	HA2	GLY	45	22.392	66.111	29.027
ATOM	299	HA3	GLY	45	21.547	64.553	29.190
ATOM	300	C	GLY	45	20.346	66.257	29.538
ATOM	301	O	GLY	45	20.153	67.175	28.744
ATOM	302	N	THR	46	19.399	65.821	30.392
ATOM	303	H	THR	46	19.602	65.161	30.969
ATOM	304	CA	THR	46	18.085	66.392	30.391
ATOM	305	HA	THR	46	17.715	66.433	29.366
ATOM	306	CB	THR	46	17.105	65.555	31.235
ATOM	307	HB	THR	46	17.480	65.493	32.257
ATOM	308	CG2	THR	46	15.726	66.196	31.240
ATOM	309	HG21	THR	46	15.350	66.258	30.219
ATOM	310	HG22	THR	46	15.046	65.592	31.841
ATOM	311	HG23	THR	46	15.792	67.198	31.664
ATOM	312	OG1	THR	46	16.997	64.238	30.681
ATOM	313	HG1	THR	46	17.744	63.876	30.684
ATOM	314	C	THR	46	18.130	67.795	30.907
ATOM	315	O	THR	46	17.556	68.701	30.303
ATOM	316	N	LEU	47	18.836	68.012	32.035
ATOM	317	H	LEU	47	19.302	67.335	32.401
ATOM	318	CA	LEU	47	18.849	69.310	32.653
ATOM	319	HA	LEU	47	17.827	69.662	32.794
ATOM	320	CB	LEU	47	19.537	69.247	34.018
ATOM	321	HB2	LEU	47	18.931	68.540	34.584
ATOM	322	HB3	LEU	47	20.535	68.834	33.873
ATOM	323	CG	LEU	47	19.637	70.565	34.789
ATOM	324	HG	LEU	47	20.205	71.280	34.193
ATOM	325	CD1	LEU	47	18.253	71.128	35.073
ATOM	326	HD11	LEU	47	17.685	70.414	35.669
ATOM	327	HD12	LEU	47	18.347	72.065	35.622
ATOM	328	HD13	LEU	47	17.734	71.309	34.132
ATOM	329	CD2	LEU	47	20.406	70.372	36.087
ATOM	330	HD21	LEU	47	21.412	70.017	35.864
ATOM	331	HD22	LEU	47	20.465	71.321	36.619
ATOM	332	HD23	LEU	47	19.892	69.639	36.709
ATOM	333	C	LEU	47	19.540	70.271	31.741
ATOM	334	O	LEU	47	19.059	71.382	31.512
ATOM	335	N	ALA	48	20.691	69.858	31.181
ATOM	336	H	ALA	48	20.988	69.017	31.301
ATOM	337	CA	ALA	48	21.449	70.779	30.383
ATOM	338	HA	ALA	48	21.646	71.680	30.964
ATOM	339	CB	ALA	48	22.779	70.161	29.979
ATOM	340	HB1	ALA	48	22.598	69.263	29.389
ATOM	341	HB2	ALA	48	23.348	70.877	29.386
ATOM	342	HB3	ALA	48	23.345	69.900	30.873
ATOM	343	C	ALA	48	20.674	71.189	29.168
ATOM	344	O	ALA	48	20.658	72.366	28.810
ATOM	345	N	ASN	49	20.005	70.229	28.503
ATOM	346	H	ASN	49	20.016	69.388	28.824
ATOM	347	CA	ASN	49	19.280	70.529	27.298
ATOM	348	HA	ASN	49	19.912	71.102	26.620

ATOM	349	CB	ASN	49	18.852	69.239	26.595
ATOM	350	HB2	ASN	49	18.468	68.545	27.342
ATOM	351	HB3	ASN	49	18.064	69.474	25.879
ATOM	352	CG	ASN	49	19.994	68.572	25.856
ATOM	353	OD1	ASN	49	20.635	69.183	25.001
ATOM	354	ND2	ASN	49	20.253	67.311	26.183
ATOM	355	HD21	ASN	49	20.921	66.868	25.774
ATOM	356	HD22	ASN	49	19.760	66.900	26.814
ATOM	357	C	ASN	49	18.096	71.392	27.595
ATOM	358	O	ASN	49	17.683	72.190	26.755
ATOM	359	N	GLY	50	17.472	71.210	28.773
ATOM	360	H	GLY	50	17.760	70.572	29.339
ATOM	361	CA	GLY	50	16.349	72.031	29.128
ATOM	362	HA2	GLY	50	15.594	71.997	28.342
ATOM	363	HA3	GLY	50	15.912	71.687	30.065
ATOM	364	C	GLY	50	16.813	73.446	29.297
ATOM	365	O	GLY	50	16.130	74.386	28.896
ATOM	366	N	MET	51	17.993	73.641	29.914
ATOM	367	H	MET	51	18.492	72.938	30.173
ATOM	368	CA	MET	51	18.455	74.979	30.158
ATOM	369	HA	MET	51	17.692	75.540	30.698
ATOM	370	CB	MET	51	19.734	74.960	30.998
ATOM	371	HB2	MET	51	20.433	74.286	30.503
ATOM	372	HB3	MET	51	20.139	75.972	30.990
ATOM	373	CG	MET	51	19.526	74.509	32.435
ATOM	374	HG2	MET	51	18.894	75.244	32.933
ATOM	375	HG3	MET	51	19.017	73.545	32.418
ATOM	376	SD	MET	51	21.074	74.346	33.344
ATOM	377	CE	MET	51	21.566	76.062	33.487
ATOM	378	HE1	MET	51	20.799	76.616	34.028
ATOM	379	HE2	MET	51	22.510	76.126	34.028
ATOM	380	HE3	MET	51	21.688	76.490	32.492
ATOM	381	C	MET	51	18.687	75.687	28.862
ATOM	382	O	MET	51	18.314	76.849	28.721
ATOM	383	N	VAL	52	19.298	75.009	27.870
ATOM	384	H	VAL	52	19.523	74.144	27.973
ATOM	385	CA	VAL	52	19.589	75.685	26.637
ATOM	386	HA	VAL	52	20.159	76.599	26.806
ATOM	387	CB	VAL	52	20.381	74.783	25.672
ATOM	388	HB	VAL	52	20.482	75.292	24.713
ATOM	389	CG1	VAL	52	21.762	74.484	26.235
ATOM	390	HG11	VAL	52	21.662	73.975	27.193
ATOM	391	HG12	VAL	52	22.308	73.846	25.540
ATOM	392	HG13	VAL	52	22.308	75.417	26.375
ATOM	393	CG2	VAL	52	19.621	73.494	25.403
ATOM	394	HG21	VAL	52	18.655	73.728	24.956
ATOM	395	HG22	VAL	52	20.195	72.869	24.719
ATOM	396	HG23	VAL	52	19.467	72.960	26.341
ATOM	397	C	VAL	52	18.311	76.139	26.009
ATOM	398	O	VAL	52	18.220	77.268	25.531
ATOM	399	N	ILE	53	17.285	75.270	25.999
ATOM	400	H	ILE	53	17.397	74.467	26.390

ATOM	401	CA	ILE	53	16.032	75.599	25.384
ATOM	402	HA	ILE	53	16.166	76.020	24.388
ATOM	403	CB	ILE	53	15.104	74.373	25.302
ATOM	404	HB	ILE	53	15.079	73.882	26.275
ATOM	405	CG2	ILE	53	13.696	74.795	24.912
ATOM	406	HG21	ILE	53	13.720	75.286	23.939
ATOM	407	HG22	ILE	53	13.054	73.916	24.859
ATOM	408	HG23	ILE	53	13.304	75.486	25.658
ATOM	409	CG1	ILE	53	15.676	73.334	24.336
ATOM	410	HG12	ILE	53	15.591	73.746	23.330
ATOM	411	HG13	ILE	53	16.729	73.204	24.587
ATOM	412	CD1	ILE	53	14.975	71.995	24.393
ATOM	413	HD11	ILE	53	13.922	72.124	24.142
ATOM	414	HD12	ILE	53	15.437	71.312	23.680
ATOM	415	HD13	ILE	53	15.060	71.582	25.398
ATOM	416	C	ILE	53	15.381	76.712	26.152
ATOM	417	O	ILE	53	14.787	77.619	25.572
ATOM	418	N	TYR	54	15.470	76.661	27.492
ATOM	419	H	TYR	54	15.917	75.966	27.848
ATOM	420	CA	TYR	54	14.888	77.656	28.349
ATOM	421	HA	TYR	54	13.834	77.785	28.103
ATOM	422	CB	TYR	54	14.999	77.232	29.815
ATOM	423	HB2	TYR	54	14.486	76.275	29.913
ATOM	424	HB3	TYR	54	16.058	77.100	30.035
ATOM	425	CG	TYR	54	14.403	78.225	30.787
ATOM	426	CD1	TYR	54	13.030	78.294	30.982
ATOM	427	HD1	TYR	54	12.386	77.618	30.420
ATOM	428	CE1	TYR	54	12.477	79.198	31.868
ATOM	429	HE1	TYR	54	11.397	79.240	32.011
ATOM	430	CZ	TYR	54	13.299	80.050	32.573
ATOM	431	OH	TYR	54	12.751	80.952	33.456
ATOM	432	HH	TYR	54	11.925	80.868	33.458
ATOM	433	CE2	TYR	54	14.682	80.003	32.396
ATOM	434	HE2	TYR	54	15.339	80.674	32.950
ATOM	435	CD2	TYR	54	15.217	79.092	31.506
ATOM	436	HD2	TYR	54	16.296	79.044	31.358
ATOM	437	C	TYR	54	15.577	78.961	28.106
ATOM	438	O	TYR	54	14.952	80.020	28.096
ATOM	439	N	LEU	55	16.904	78.902	27.910
ATOM	440	H	LEU	55	17.254	78.074	27.875
ATOM	441	CA	LEU	55	17.752	80.044	27.761
ATOM	442	HA	LEU	55	17.634	80.706	28.619
ATOM	443	CB	LEU	55	19.218	79.615	27.672
ATOM	444	HB2	LEU	55	19.219	78.843	26.902
ATOM	445	HB3	LEU	55	19.800	80.470	27.329
ATOM	446	CG	LEU	55	19.840	79.057	28.954
ATOM	447	HG	LEU	55	19.194	78.272	29.347
ATOM	448	CD1	LEU	55	21.221	78.485	28.677
ATOM	449	HD11	LEU	55	21.868	79.270	28.285
ATOM	450	HD12	LEU	55	21.645	78.094	29.602
ATOM	451	HD13	LEU	55	21.142	77.681	27.946
ATOM	452	CD2	LEU	55	19.918	80.133	30.026

ATOM	453	HD21	LEU	55	18.915	80.496	30.250
ATOM	454	HD22	LEU	55	20.363	79.715	30.929
ATOM	455	HD23	LEU	55	20.532	80.960	29.668
ATOM	456	C	LEU	55	17.299	80.774	26.529
ATOM	457	O	LEU	55	17.147	81.995	26.537
ATOM	458	N	VAL	56	17.066	80.029	25.429
ATOM	459	H	VAL	56	17.149	79.135	25.490
ATOM	460	CA	VAL	56	16.693	80.633	24.179
ATOM	461	HA	VAL	56	17.345	81.470	23.928
ATOM	462	CB	VAL	56	16.733	79.614	23.025
ATOM	463	HB	VAL	56	16.142	78.741	23.302
ATOM	464	CG1	VAL	56	16.167	80.226	21.753
ATOM	465	HG11	VAL	56	16.758	81.099	21.475
ATOM	466	HG12	VAL	56	16.203	79.492	20.948
ATOM	467	HG13	VAL	56	15.133	80.527	21.923
ATOM	468	CG2	VAL	56	18.154	79.122	22.798
ATOM	469	HG21	VAL	56	18.523	78.644	23.705
ATOM	470	HG22	VAL	56	18.164	78.403	21.979
ATOM	471	HG23	VAL	56	18.796	79.967	22.547
ATOM	472	C	VAL	56	15.329	81.252	24.259
ATOM	473	O	VAL	56	15.113	82.351	23.752
ATOM	474	N	SER	57	14.363	80.556	24.889
ATOM	475	H	SER	57	14.579	79.773	25.276
ATOM	476	CA	SER	57	13.011	81.040	24.951
ATOM	477	HA	SER	57	12.682	81.344	23.957
ATOM	478	CB	SER	57	12.073	79.945	25.463
ATOM	479	HB2	SER	57	11.046	80.304	25.393
ATOM	480	HB3	SER	57	12.192	79.062	24.836
ATOM	481	OG	SER	57	12.365	79.611	26.809
ATOM	482	HG	SER	57	13.147	79.338	26.862
ATOM	483	C	SER	57	12.916	82.254	25.827
ATOM	484	O	SER	57	12.101	83.142	25.584
ATOM	485	N	SER	58	13.733	82.297	26.894
ATOM	486	H	SER	58	14.331	81.628	26.964
ATOM	487	CA	SER	58	13.691	83.330	27.891
ATOM	488	HA	SER	58	12.655	83.558	28.143
ATOM	489	CB	SER	58	14.415	82.879	29.161
ATOM	490	HB2	SER	58	15.428	82.575	28.896
ATOM	491	HB3	SER	58	14.458	83.718	29.855
ATOM	492	OG	SER	58	13.741	81.794	29.774
ATOM	493	HG	SER	58	13.708	81.155	29.245
ATOM	494	C	SER	58	14.282	84.641	27.451
ATOM	495	O	SER	58	13.897	85.676	27.990
ATOM	496	N	PHE	59	15.225	84.677	26.486
ATOM	497	H	PHE	59	15.471	83.968	25.990
ATOM	498	CA	PHE	59	15.851	85.956	26.273
ATOM	499	HA	PHE	59	15.346	86.718	26.867
ATOM	500	CB	PHE	59	17.323	85.908	26.688
ATOM	501	HB2	PHE	59	17.834	85.102	26.162
ATOM	502	HB3	PHE	59	17.809	86.856	26.458
ATOM	503	CG	PHE	59	17.531	85.663	28.156
ATOM	504	CD1	PHE	59	17.572	84.375	28.658

ATOM	505	HD1	PHE	59	17.452	83.533	27.977
ATOM	506	CE1	PHE	59	17.763	84.150	30.008
ATOM	507	HE1	PHE	59	17.793	83.130	30.391
ATOM	508	CZ	PHE	59	17.916	85.218	30.872
ATOM	509	HZ	PHE	59	18.068	85.046	31.938
ATOM	510	CE2	PHE	59	17.876	86.497	30.384
ATOM	511	HE2	PHE	59	17.995	87.339	31.065
ATOM	512	CD2	PHE	59	17.685	86.722	29.033
ATOM	513	HD2	PHE	59	17.655	87.742	28.649
ATOM	514	C	PHE	59	15.737	86.389	24.838
ATOM	515	O	PHE	59	15.687	85.572	23.919
ATOM	516	N	ARG	60	15.673	87.725	24.633
ATOM	517	H	ARG	60	15.734	88.223	25.380
ATOM	518	CA	ARG	60	15.521	88.364	23.352
ATOM	519	HA	ARG	60	14.687	87.915	22.812
ATOM	520	CB	ARG	60	15.242	89.858	23.528
ATOM	521	HB2	ARG	60	16.012	90.253	24.191
ATOM	522	HB3	ARG	60	15.337	90.321	22.546
ATOM	523	CG	ARG	60	13.870	90.169	24.104
ATOM	524	HG2	ARG	60	13.112	89.796	23.416
ATOM	525	HG3	ARG	60	13.772	89.659	25.062
ATOM	526	CD	ARG	60	13.681	91.664	24.304
ATOM	527	HD2	ARG	60	14.436	92.028	25.001
ATOM	528	HD3	ARG	60	13.800	92.167	23.344
ATOM	529	NE	ARG	60	12.359	91.982	24.838
ATOM	530	HE	ARG	60	11.795	91.334	24.902
ATOM	531	CZ	ARG	60	11.981	93.196	25.224
ATOM	532	NH1	ARG	60	10.758	93.391	25.697
ATOM	533	HH11	ARG	60	10.209	92.732	25.754
ATOM	534	HH12	ARG	60	10.514	94.177	25.947
ATOM	535	NH2	ARG	60	12.828	94.213	25.137
ATOM	536	HH21	ARG	60	13.622	94.086	24.830
ATOM	537	HH22	ARG	60	12.584	94.999	25.387
ATOM	538	C	ARG	60	16.734	88.177	22.480
ATOM	539	O	ARG	60	16.603	87.931	21.283
ATOM	540	N	LYS	61	17.946	88.284	23.060
ATOM	541	H	LYS	61	17.958	88.395	23.953
ATOM	542	CA	LYS	61	19.184	88.228	22.324
ATOM	543	HA	LYS	61	19.179	88.981	21.536
ATOM	544	CB	LYS	61	20.371	88.498	23.251
ATOM	545	HB2	LYS	61	20.264	87.836	24.111
ATOM	546	HB3	LYS	61	21.274	88.235	22.701
ATOM	547	CG	LYS	61	20.471	89.937	23.729
ATOM	548	HG2	LYS	61	20.583	90.585	22.859
ATOM	549	HG3	LYS	61	19.552	90.192	24.256
ATOM	550	CD	LYS	61	21.658	90.129	24.659
ATOM	551	HD2	LYS	61	21.542	89.462	25.513
ATOM	552	HD3	LYS	61	22.569	89.871	24.118
ATOM	553	CE	LYS	61	21.749	91.566	25.148
ATOM	554	HE2	LYS	61	20.813	91.817	25.647
ATOM	555	HE3	LYS	61	21.720	90.526	24.823
ATOM	556	NZ	LYS	61	22.882	91.759	26.094

ATOM	557	HZ1	LYS	61	22.906	92.608	26.360
ATOM	558	HZ2	LYS	61	23.647	91.555	25.687
ATOM	559	HZ3	LYS	61	22.772	91.230	26.802
ATOM	560	C	LYS	61	19.330	86.893	21.656
ATOM	561	O	LYS	61	19.854	86.801	20.548
ATOM	562	N	LEU	62	18.879	85.832	22.344
ATOM	563	H	LEU	62	18.515	86.072	23.131
ATOM	564	CA	LEU	62	18.922	84.443	21.964
ATOM	565	HA	LEU	62	19.915	84.193	21.589
ATOM	566	CB	LEU	62	18.614	83.549	23.167
ATOM	567	HB2	LEU	62	17.865	84.110	23.726
ATOM	568	HB3	LEU	62	18.172	82.624	22.795
ATOM	569	CG	LEU	62	19.792	83.218	24.085
ATOM	570	HG	LEU	62	19.422	82.663	24.947
ATOM	571	CD1	LEU	62	20.828	82.381	23.350
ATOM	572	HD11	LEU	62	21.199	82.936	22.488
ATOM	573	HD12	LEU	62	21.657	82.157	24.021
ATOM	574	HD13	LEU	62	20.372	81.450	23.014
ATOM	575	CD2	LEU	62	20.427	84.490	24.625
ATOM	576	HD21	LEU	62	19.686	85.054	25.192
ATOM	577	HD22	LEU	62	21.263	84.232	25.275
ATOM	578	HD23	LEU	62	20.788	85.097	23.795
ATOM	579	C	LEU	62	17.964	84.125	20.845
ATOM	580	O	LEU	62	17.945	83.006	20.341
ATOM	581	N	GLN	63	17.113	85.092	20.473
ATOM	582	H	GLN	63	17.303	85.869	20.885
ATOM	583	CA	GLN	63	16.009	85.018	19.550
ATOM	584	HA	GLN	63	15.291	84.273	19.892
ATOM	585	CB	GLN	63	15.301	86.371	19.452
ATOM	586	HB2	GLN	63	15.038	86.671	20.467
ATOM	587	HB3	GLN	63	16.018	87.080	19.039
ATOM	588	CG	GLN	63	14.050	86.355	18.589
ATOM	589	HG2	GLN	63	13.669	87.373	18.506
ATOM	590	HG3	GLN	63	14.313	85.984	17.598
ATOM	591	CD	GLN	63	12.957	85.474	19.162
ATOM	592	OE1	GLN	63	12.602	85.593	20.334
ATOM	593	NE2	GLN	63	12.421	84.586	18.334
ATOM	594	HE21	GLN	63	11.768	84.038	18.623
ATOM	595	HE22	GLN	63	12.710	84.531	17.483
ATOM	596	C	GLN	63	16.399	84.580	18.159
ATOM	597	O	GLN	63	15.513	84.317	17.349
ATOM	598	N	THR	64	17.703	84.581	17.821
ATOM	599	H	THR	64	18.245	84.792	18.508
ATOM	600	CA	THR	64	18.264	84.288	16.521
ATOM	601	HA	THR	64	18.036	85.108	15.841
ATOM	602	CB	THR	64	19.793	84.118	16.591
ATOM	603	HB	THR	64	20.028	83.297	17.268
ATOM	604	CG2	THR	64	20.359	83.815	15.213
ATOM	605	HG21	THR	64	20.125	84.636	14.535
ATOM	606	HG22	THR	64	21.441	83.698	15.282
ATOM	607	HG23	THR	64	19.918	82.894	14.833
ATOM	608	OG1	THR	64	20.390	85.327	17.077

ATOM	609	HG1	THR	64	21.213	85.232	17.114
ATOM	610	C	THR	64	17.684	83.049	15.880
ATOM	611	O	THR	64	17.183	82.139	16.539
ATOM	612	N	THR	65	17.737	83.025	14.526
ATOM	613	H	THR	65	18.098	83.763	14.159
ATOM	614	CA	THR	65	17.279	81.955	13.684
ATOM	615	HA	THR	65	16.258	81.695	13.963
ATOM	616	CB	THR	65	17.296	82.359	12.198
ATOM	617	HB	THR	65	16.951	81.517	11.598
ATOM	618	CG2	THR	65	16.388	83.556	11.961
ATOM	619	HG21	THR	65	16.733	84.398	12.561
ATOM	620	HG22	THR	65	16.412	83.828	10.906
ATOM	621	HG23	THR	65	15.368	83.301	12.247
ATOM	622	OG1	THR	65	18.630	82.712	11.811
ATOM	623	HG1	THR	65	19.132	82.061	11.926
ATOM	624	C	THR	65	18.133	80.744	13.900
ATOM	625	O	THR	65	17.632	79.621	13.936
ATOM	626	N	SER	66	19.458	80.936	14.044
ATOM	627	H	SER	66	19.798	81.769	14.033
ATOM	628	CA	SER	66	20.326	79.811	14.215
ATOM	629	HA	SER	66	20.181	79.105	13.397
ATOM	630	CB	SER	66	21.789	80.259	14.221
ATOM	631	HB2	SER	66	22.005	80.758	13.276
ATOM	632	HB3	SER	66	21.936	80.959	15.043
ATOM	633	OG	SER	66	22.660	79.153	14.381
ATOM	634	HG	SER	66	23.447	79.419	14.381
ATOM	635	C	SER	66	19.978	79.102	15.485
ATOM	636	O	SER	66	20.004	77.874	15.535
ATOM	637	N	ASN	67	19.588	79.851	16.531
ATOM	638	H	ASN	67	19.533	80.741	16.412
ATOM	639	CA	ASN	67	19.264	79.276	17.807
ATOM	640	HA	ASN	67	20.088	78.651	18.150
ATOM	641	CB	ASN	67	19.020	80.375	18.843
ATOM	642	HB2	ASN	67	18.360	81.126	18.408
ATOM	643	HB3	ASN	67	18.541	79.933	19.717
ATOM	644	CG	ASN	67	20.302	81.054	19.285
ATOM	645	OD1	ASN	67	21.309	80.394	19.539
ATOM	646	ND2	ASN	67	20.266	82.378	19.378
ATOM	647	HD21	ASN	67	21.000	82.831	19.636
ATOM	648	HD22	ASN	67	19.509	82.823	19.183
ATOM	649	C	ASN	67	18.073	78.381	17.672
ATOM	650	O	ASN	67	17.915	77.446	18.454
ATOM	651	N	ALA	68	17.176	78.675	16.711
ATOM	652	H	ALA	68	17.301	79.418	16.219
ATOM	653	CA	ALA	68	16.039	77.832	16.463
ATOM	654	HA	ALA	68	15.466	77.652	17.373
ATOM	655	CB	ALA	68	15.123	78.468	15.429
ATOM	656	HB1	ALA	68	15.680	78.646	14.509
ATOM	657	HB2	ALA	68	14.287	77.800	15.223
ATOM	658	HB3	ALA	68	14.744	79.415	15.812
ATOM	659	C	ALA	68	16.557	76.500	16.013
ATOM	660	O	ALA	68	16.010	75.459	16.371

ATOM	661	N	PHE	69	17.623	76.509	15.185
ATOM	662	H	PHE	69	17.944	77.311	14.933
ATOM	663	CA	PHE	69	18.243	75.306	14.708
ATOM	664	HA	PHE	69	17.488	74.645	14.284
ATOM	665	CB	PHE	69	19.275	75.628	13.625
ATOM	666	HB2	PHE	69	19.903	76.461	13.943
ATOM	667	HB3	PHE	69	19.900	74.756	13.430
ATOM	668	CG	PHE	69	18.669	76.025	12.309
ATOM	669	CD1	PHE	69	18.663	77.349	11.905
ATOM	670	HD1	PHE	69	19.104	78.107	12.553
ATOM	671	CE1	PHE	69	18.106	77.714	10.694
ATOM	672	HE1	PHE	69	18.109	78.760	10.386
ATOM	673	CZ	PHE	69	17.545	76.754	9.874
ATOM	674	HZ	PHE	69	17.103	77.037	8.919
ATOM	675	CE2	PHE	69	17.546	75.441	10.266
ATOM	676	HE2	PHE	69	17.105	74.683	9.619
ATOM	677	CD2	PHE	69	18.104	75.076	11.477
ATOM	678	HD2	PHE	69	18.102	74.030	11.785
ATOM	679	C	PHE	69	18.875	74.593	15.868
ATOM	680	O	PHE	69	18.837	73.366	15.941
ATOM	681	N	ILE	70	19.484	75.351	16.804
ATOM	682	H	ILE	70	19.512	76.241	16.676
ATOM	683	CA	ILE	70	20.078	74.774	17.981
ATOM	684	HA	ILE	70	20.794	73.991	17.732
ATOM	685	CB	ILE	70	20.768	75.844	18.847
ATOM	686	HB	ILE	70	20.094	76.692	18.967
ATOM	687	CG2	ILE	70	21.118	75.278	20.215
ATOM	688	HG21	ILE	70	21.793	74.430	20.096
ATOM	689	HG22	ILE	70	21.605	76.048	20.814
ATOM	690	HG23	ILE	70	20.208	74.950	20.717
ATOM	691	CG1	ILE	70	21.999	76.399	18.129
ATOM	692	HG12	ILE	70	22.753	75.612	18.124
ATOM	693	HG13	ILE	70	21.702	76.624	17.105
ATOM	694	CD1	ILE	70	22.573	77.643	18.772
ATOM	695	HD11	ILE	70	22.870	77.419	19.796
ATOM	696	HD12	ILE	70	23.443	77.977	18.206
ATOM	697	HD13	ILE	70	21.820	78.431	18.777
ATOM	698	C	ILE	70	19.019	74.054	18.759
ATOM	699	O	ILE	70	19.282	73.005	19.343
ATOM	700	N	VAL	71	17.790	74.601	18.791
ATOM	701	H	VAL	71	17.654	75.360	18.327
ATOM	702	CA	VAL	71	16.712	74.011	19.536
ATOM	703	HA	VAL	71	16.975	73.879	20.585
ATOM	704	CB	VAL	71	15.434	74.866	19.453
ATOM	705	HB	VAL	71	15.221	75.085	18.407
ATOM	706	CG1	VAL	71	14.256	74.124	20.065
ATOM	707	HG11	VAL	71	14.468	73.905	21.112
ATOM	708	HG12	VAL	71	13.361	74.743	19.998
ATOM	709	HG13	VAL	71	14.093	73.191	19.525
ATOM	710	CG2	VAL	71	15.643	76.205	20.144
ATOM	711	HG21	VAL	71	16.459	76.741	19.660
ATOM	712	HG22	VAL	71	14.730	76.796	20.076

ATOM	713	HG23	VAL	71	15.890	76.039	21.193
ATOM	714	C	VAL	71	16.455	72.621	19.027
ATOM	715	O	VAL	71	16.129	71.722	19.799
ATOM	716	N	ASN	72	16.573	72.401	17.706
ATOM	717	H	ASN	72	16.814	73.084	17.172
ATOM	718	CA	ASN	72	16.322	71.102	17.143
ATOM	719	HA	ASN	72	15.327	70.762	17.429
ATOM	720	CB	ASN	72	16.401	71.155	15.616
ATOM	721	HB2	ASN	72	15.735	71.940	15.257
ATOM	722	HB3	ASN	72	17.426	71.388	15.327
ATOM	723	CG	ASN	72	16.000	69.846	14.966
ATOM	724	OD1	ASN	72	14.858	69.404	15.091
ATOM	725	ND2	ASN	72	16.941	69.221	14.267
ATOM	726	HD21	ASN	72	16.755	68.440	13.861
ATOM	727	HD22	ASN	72	17.764	69.578	14.201
ATOM	728	C	ASN	72	17.304	70.126	17.719
ATOM	729	O	ASN	72	16.937	69.010	18.087
ATOM	730	N	GLY	73	18.588	70.520	17.804
ATOM	731	H	GLY	73	18.810	71.345	17.522
ATOM	732	CA	GLY	73	19.595	69.649	18.333
ATOM	733	HA2	GLY	73	19.605	68.708	17.783
ATOM	734	HA3	GLY	73	20.575	70.121	18.264
ATOM	735	C	GLY	73	19.290	69.370	19.770
ATOM	736	O	GLY	73	19.426	68.236	20.228
ATOM	737	N	CYS	74	18.861	70.404	20.523
ATOM	738	H	CYS	74	18.729	71.209	20.143
ATOM	739	CA	CYS	74	18.615	70.224	21.926
ATOM	740	HA	CYS	74	19.496	69.794	22.403
ATOM	741	CB	CYS	74	18.305	71.566	22.592
ATOM	742	HB2	CYS	74	17.544	72.103	22.025
ATOM	743	HB3	CYS	74	17.954	71.410	23.612
ATOM	744	SG	CYS	74	19.721	72.684	22.714
ATOM	745	HG	CYS	74	19.066	73.673	23.315
ATOM	746	C	CYS	74	17.486	69.258	22.087
ATOM	747	O	CYS	74	17.468	68.477	23.036
ATOM	748	N	ALA	75	16.498	69.306	21.172
ATOM	749	H	ALA	75	16.553	69.914	20.511
ATOM	750	CA	ALA	75	15.375	68.413	21.235
ATOM	751	HA	ALA	75	14.906	68.464	22.218
ATOM	752	CB	ALA	75	14.342	68.786	20.183
ATOM	753	HB1	ALA	75	14.794	68.730	19.193
ATOM	754	HB2	ALA	75	13.501	68.094	20.237
ATOM	755	HB3	ALA	75	13.989	69.801	20.364
ATOM	756	C	ALA	75	15.852	67.003	21.048
ATOM	757	O	ALA	75	15.412	66.096	21.751
ATOM	758	N	ALA	76	16.771	66.785	20.086
ATOM	759	H	ALA	76	17.071	67.490	19.614
ATOM	760	CA	ALA	76	17.272	65.467	19.805
ATOM	761	HA	ALA	76	16.450	64.777	19.617
ATOM	762	CB	ALA	76	18.175	65.493	18.581
ATOM	763	HB1	ALA	76	19.008	66.173	18.758
ATOM	764	HB2	ALA	76	18.559	64.491	18.391

ATOM	765	HB3	ALA	76	17.606	65.834	17.716
ATOM	766	C	ALA	76	18.002	64.959	21.009
ATOM	767	O	ALA	76	17.876	63.793	21.376
ATOM	768	N	ASP	77	18.794	65.833	21.656
ATOM	769	H	ASP	77	18.835	66.676	21.343
ATOM	770	CA	ASP	77	19.560	65.458	22.812
ATOM	771	HA	ASP	77	20.153	64.571	22.590
ATOM	772	CB	ASP	77	20.506	66.590	23.218
ATOM	773	HB2	ASP	77	19.916	67.502	23.310
ATOM	774	HB3	ASP	77	20.937	66.337	24.187
ATOM	775	CG	ASP	77	21.619	66.808	22.212
ATOM	776	OD1	ASP	77	22.502	65.932	22.103
ATOM	777	OD2	ASP	77	21.608	67.856	21.533
ATOM	778	C	ASP	77	18.619	65.110	23.925
ATOM	779	O	ASP	77	18.882	64.203	24.714
ATOM	780	N	LEU	78	17.497	65.847	24.025
ATOM	781	H	LEU	78	17.367	66.486	23.405
ATOM	782	CA	LEU	78	16.528	65.648	25.065
ATOM	783	HA	LEU	78	17.020	65.669	26.037
ATOM	784	CB	LEU	78	15.469	66.752	25.029
ATOM	785	HB2	LEU	78	16.045	67.670	25.144
ATOM	786	HB3	LEU	78	15.000	66.738	24.045
ATOM	787	CG	LEU	78	14.388	66.690	26.110
ATOM	788	HG	LEU	78	13.838	65.755	26.005
ATOM	789	CD1	LEU	78	15.009	66.760	27.497
ATOM	790	HD11	LEU	78	15.559	67.695	27.603
ATOM	791	HD12	LEU	78	14.223	66.714	28.250
ATOM	792	HD13	LEU	78	15.691	65.921	27.633
ATOM	793	CD2	LEU	78	13.378	67.811	25.925
ATOM	794	HD21	LEU	78	12.904	67.716	24.948
ATOM	795	HD22	LEU	78	12.618	67.748	26.704
ATOM	796	HD23	LEU	78	13.886	68.773	25.990
ATOM	797	C	LEU	78	15.897	64.297	24.912
ATOM	798	O	LEU	78	15.687	63.592	25.898
ATOM	799	N	SER	79	15.573	63.896	23.666
ATOM	800	H	SER	79	15.765	64.436	22.972
ATOM	801	CA	SER	79	14.932	62.631	23.435
ATOM	802	HA	SER	79	14.034	62.555	24.048
ATOM	803	CB	SER	79	14.533	62.493	21.964
ATOM	804	HB2	SER	79	13.960	61.574	21.842
ATOM	805	HB3	SER	79	13.913	63.346	21.689
ATOM	806	OG	SER	79	15.676	62.451	21.128
ATOM	807	HG	SER	79	16.112	63.152	21.221
ATOM	808	C	SER	79	15.869	61.544	23.854
ATOM	809	O	SER	79	15.450	60.531	24.412
ATOM	810	N	VAL	80	17.173	61.734	23.590
ATOM	811	H	VAL	80	17.425	62.497	23.186
ATOM	812	CA	VAL	80	18.154	60.750	23.939
ATOM	813	HA	VAL	80	17.896	59.769	23.539
ATOM	814	CB	VAL	80	19.552	61.139	23.423
ATOM	815	HB	VAL	80	19.773	62.160	23.733
ATOM	816	CG1	VAL	80	20.608	60.199	23.985

ATOM	817	HG11	VAL	80	20.388	59.177	23.675
ATOM	818	HG12	VAL	80	21.590	60.489	23.610
ATOM	819	HG13	VAL	80	20.604	60.256	25.073
ATOM	820	CG2	VAL	80	19.580	61.128	21.902
ATOM	821	HG21	VAL	80	18.850	61.842	21.519
ATOM	822	HG22	VAL	80	20.575	61.405	21.554
ATOM	823	HG23	VAL	80	19.335	60.129	21.541
ATOM	824	C	VAL	80	18.152	60.586	25.425
ATOM	825	O	VAL	80	18.160	59.469	25.940
ATOM	826	N	CYS	81	18.137	61.712	26.157
ATOM	827	H	CYS	81	18.074	62.506	25.738
ATOM	828	CA	CYS	81	18.219	61.660	27.585
ATOM	829	HA	CYS	81	19.092	61.080	27.884
ATOM	830	CB	CYS	81	18.347	63.070	28.166
ATOM	831	HB2	CYS	81	17.583	63.723	27.744
ATOM	832	HB3	CYS	81	18.243	63.043	29.251
ATOM	833	SG	CYS	81	19.932	63.873	27.835
ATOM	834	HG	CYS	81	19.649	65.006	28.471
ATOM	835	C	CYS	81	17.025	60.969	28.167
ATOM	836	O	CYS	81	17.179	60.126	29.048
ATOM	837	N	ALA	82	15.799	61.360	27.759
ATOM	838	H	ALA	82	15.703	62.006	27.140
ATOM	839	CA	ALA	82	14.638	60.731	28.327
ATOM	840	HA	ALA	82	14.798	60.700	29.405
ATOM	841	CB	ALA	82	13.394	61.559	28.044
ATOM	842	HB1	ALA	82	13.216	61.592	26.969
ATOM	843	HB2	ALA	82	12.535	61.107	28.540
ATOM	844	HB3	ALA	82	13.538	62.572	28.419
ATOM	845	C	ALA	82	14.393	59.326	27.842
ATOM	846	O	ALA	82	14.280	58.402	28.644
ATOM	847	N	LEU	83	14.246	59.149	26.509
ATOM	848	H	LEU	83	14.383	59.859	25.974
ATOM	849	CA	LEU	83	13.883	57.875	25.938
ATOM	850	HA	LEU	83	13.171	57.368	26.589
ATOM	851	CB	LEU	83	13.237	58.068	24.565
ATOM	852	HB2	LEU	83	13.951	58.690	24.024
ATOM	853	HB3	LEU	83	13.169	57.092	24.084
ATOM	854	CG	LEU	83	11.862	58.740	24.551
ATOM	855	HG	LEU	83	11.921	59.677	25.105
ATOM	856	CD1	LEU	83	11.417	59.023	23.124
ATOM	857	HD11	LEU	83	11.357	58.087	22.569
ATOM	858	HD12	LEU	83	10.437	59.501	23.136
ATOM	859	HD13	LEU	83	12.137	59.685	22.643
ATOM	860	CD2	LEU	83	10.834	57.875	25.264
ATOM	861	HD21	LEU	83	11.141	57.723	26.299
ATOM	862	HD22	LEU	83	9.864	58.371	25.243
ATOM	863	HD23	LEU	83	10.760	56.910	24.762
ATOM	864	C	LEU	83	14.994	56.878	25.769
ATOM	865	O	LEU	83	14.908	55.750	26.255
ATOM	866	N	TRP	84	16.065	57.273	25.050
ATOM	867	H	TRP	84	16.126	58.135	24.800
ATOM	868	CA	TRP	84	17.099	56.343	24.683

ATOM	869	HA	TRP	84	16.653	55.439	24.269
ATOM	870	CB	TRP	84	18.024	56.958	23.631
ATOM	871	HB2	TRP	84	17.456	57.223	22.739
ATOM	872	HB3	TRP	84	18.508	57.849	24.030
ATOM	873	CG	TRP	84	19.119	56.039	23.184
ATOM	874	CD1	TRP	84	20.398	56.385	22.858
ATOM	875	HD1	TRP	84	20.654	57.442	22.930
ATOM	876	NE1	TRP	84	21.114	55.270	22.494
ATOM	877	HE1	TRP	84	22.013	55.269	22.231
ATOM	878	CE2	TRP	84	20.293	54.172	22.582
ATOM	879	CZ2	TRP	84	20.561	52.830	22.319
ATOM	880	HZ2	TRP	84	21.563	52.556	21.989
ATOM	881	CH2	TRP	84	19.542	51.936	22.493
ATOM	882	HH2	TRP	84	19.712	50.877	22.297
ATOM	883	CZ3	TRP	84	18.277	52.352	22.920
ATOM	884	HZ3	TRP	84	17.472	51.630	23.055
ATOM	885	CE3	TRP	84	18.007	53.682	23.183
ATOM	886	HE3	TRP	84	17.004	53.953	23.514
ATOM	887	CD2	TRP	84	19.031	54.618	23.013
ATOM	888	C	TRP	84	17.936	55.871	25.826
ATOM	889	O	TRP	84	18.104	54.669	26.019
ATOM	890	N	MET	85	18.481	56.808	26.620
ATOM	891	H	MET	85	18.245	57.668	26.497
ATOM	892	CA	MET	85	19.421	56.462	27.648
ATOM	893	HA	MET	85	20.241	55.886	27.220
ATOM	894	CB	MET	85	19.996	57.724	28.295
ATOM	895	HB2	MET	85	19.151	58.344	28.595
ATOM	896	HB3	MET	85	20.547	57.408	29.181
ATOM	897	CG	MET	85	20.914	58.524	27.387
ATOM	898	HG2	MET	85	21.792	57.915	27.171
ATOM	899	HG3	MET	85	20.378	58.731	26.460
ATOM	900	SD	MET	85	21.441	60.081	28.127
ATOM	901	CE	MET	85	22.518	59.489	29.430
ATOM	902	HE1	MET	85	23.336	58.915	28.994
ATOM	903	HE2	MET	85	22.924	60.338	29.980
ATOM	904	HE3	MET	85	21.951	58.853	30.110
ATOM	905	C	MET	85	18.804	55.592	28.701
ATOM	906	O	MET	85	19.435	54.637	29.149
ATOM	907	N	PRO	86	17.616	55.867	29.146
ATOM	908	CD	PRO	86	16.775	57.149	28.921
ATOM	909	HD2	PRO	86	16.182	57.069	28.010
ATOM	910	HD3	PRO	86	17.416	58.028	28.861
ATOM	911	CG	PRO	86	15.928	57.141	30.163
ATOM	912	HG2	PRO	86	14.977	57.632	29.957
ATOM	913	HG3	PRO	86	16.447	57.675	30.960
ATOM	914	CB	PRO	86	15.734	55.706	30.522
ATOM	915	HB2	PRO	86	14.941	55.266	29.918
ATOM	916	HB3	PRO	86	15.505	55.567	31.579
ATOM	917	CA	PRO	86	17.071	55.043	30.187
ATOM	918	HA	PRO	86	17.763	55.076	31.028
ATOM	919	C	PRO	86	16.862	53.623	29.771
ATOM	920	O	PRO	86	17.063	52.731	30.593

ATOM	921	N	GLN	87	16.442	53.390	28.516
ATOM	922	H	GLN	87	16.297	54.094	27.975
ATOM	923	CA	GLN	87	16.225	52.060	28.033
ATOM	924	HA	GLN	87	15.617	51.503	28.746
ATOM	925	CB	GLN	87	15.496	52.091	26.688
ATOM	926	HB2	GLN	87	14.595	52.688	26.825
ATOM	927	HB3	GLN	87	16.156	52.587	25.976
ATOM	928	CG	GLN	87	15.118	50.718	26.156
ATOM	929	HG2	GLN	87	14.671	50.837	25.169
ATOM	930	HG3	GLN	87	16.021	50.113	26.075
ATOM	931	CD	GLN	87	14.130	49.997	27.051
ATOM	932	OE1	GLN	87	13.066	50.527	27.370
ATOM	933	NE2	GLN	87	14.480	48.783	27.460
ATOM	934	HE21	GLN	87	13.929	48.312	27.993
ATOM	935	HE22	GLN	87	15.268	48.432	27.203
ATOM	936	C	GLN	87	17.550	51.372	27.922
ATOM	937	O	GLN	87	17.678	50.196	28.260
ATOM	938	N	GLU	88	18.575	52.104	27.439
ATOM	939	H	GLU	88	18.417	52.968	27.240
ATOM	940	CA	GLU	88	19.883	51.549	27.239
ATOM	941	HA	GLU	88	19.809	50.627	26.662
ATOM	942	CB	GLU	88	20.772	52.533	26.476
ATOM	943	HB2	GLU	88	20.261	52.771	25.543
ATOM	944	HB3	GLU	88	20.852	53.433	27.086
ATOM	945	CG	GLU	88	22.164	52.004	26.170
ATOM	946	HG2	GLU	88	22.737	52.812	25.716
ATOM	947	HG3	GLU	88	22.628	51.715	27.113
ATOM	948	CD	GLU	88	22.141	50.813	25.233
ATOM	949	OE1	GLU	88	21.125	50.628	24.532
ATOM	950	OE2	GLU	88	23.141	50.064	25.201
ATOM	951	C	GLU	88	20.506	51.192	28.553
ATOM	952	O	GLU	88	21.175	50.167	28.666
ATOM	953	N	ALA	89	20.294	52.024	29.590
ATOM	954	H	ALA	89	19.754	52.735	29.476
ATOM	955	CA	ALA	89	20.915	51.791	30.864
ATOM	956	HA	ALA	89	21.999	51.735	30.760
ATOM	957	CB	ALA	89	20.577	52.914	31.832
ATOM	958	HB1	ALA	89	19.496	52.976	31.954
ATOM	959	HB2	ALA	89	21.040	52.713	32.798
ATOM	960	HB3	ALA	89	20.953	53.859	31.439
ATOM	961	C	ALA	89	20.459	50.466	31.385
ATOM	962	O	ALA	89	21.252	49.691	31.920
ATOM	963	N	VAL	90	19.160	50.164	31.227
ATOM	964	H	VAL	90	18.619	50.749	30.809
ATOM	965	CA	VAL	90	18.634	48.925	31.716
ATOM	966	HA	VAL	90	18.847	48.791	32.776
ATOM	967	CB	VAL	90	17.111	48.836	31.505
ATOM	968	HB	VAL	90	16.883	49.068	30.465
ATOM	969	CG1	VAL	90	16.609	47.439	31.834
ATOM	970	HG11	VAL	90	16.836	47.206	32.874
ATOM	971	HG12	VAL	90	15.531	47.394	31.679
ATOM	972	HG13	VAL	90	17.099	46.714	31.184

ATOM	973	CG2	VAL	90	16.395	49.877	32.352
ATOM	974	HG21	VAL	90	16.734	50.873	32.068
ATOM	975	HG22	VAL	90	15.320	49.800	32.191
ATOM	976	HG23	VAL	90	16.617	49.705	33.405
ATOM	977	C	VAL	90	19.354	47.820	31.014
ATOM	978	O	VAL	90	19.729	46.825	31.627
ATOM	979	N	LEU	91	19.565	47.963	29.696
ATOM	980	H	LEU	91	19.278	48.708	29.281
ATOM	981	CA	LEU	91	20.240	46.942	28.951
ATOM	982	HA	LEU	91	19.764	45.978	29.130
ATOM	983	CB	LEU	91	20.182	47.245	27.452
ATOM	984	HB2	LEU	91	20.551	48.268	27.377
ATOM	985	HB3	LEU	91	20.873	46.572	26.945
ATOM	986	CG	LEU	91	18.804	47.151	26.794
ATOM	987	HG	LEU	91	18.100	47.762	27.359
ATOM	988	CD1	LEU	91	18.861	47.643	25.356
ATOM	989	HD11	LEU	91	19.564	47.032	24.790
ATOM	990	HD12	LEU	91	17.871	47.568	24.906
ATOM	991	HD13	LEU	91	19.189	48.682	25.340
ATOM	992	CD2	LEU	91	18.281	45.724	26.845
ATOM	993	HD21	LEU	91	18.198	45.404	27.884
ATOM	994	HD22	LEU	91	17.300	45.679	26.372
ATOM	995	HD23	LEU	91	18.970	45.065	26.316
ATOM	996	C	LEU	91	21.656	46.834	29.420
ATOM	997	O	LEU	91	22.214	45.746	29.509
ATOM	998	N	GLY	92	22.324	47.955	29.710
ATOM	999	H	GLY	92	21.978	48.785	29.671
ATOM	1000	CA	GLY	92	23.686	47.766	30.106
ATOM	1001	HA2	GLY	92	24.213	47.205	29.334
ATOM	1002	HA3	GLY	92	24.163	48.737	30.239
ATOM	1003	C	GLY	92	23.758	47.006	31.397
ATOM	1004	O	GLY	92	24.471	46.009	31.491
ATOM	1005	N	LEU	93	23.020	47.451	32.434
ATOM	1006	H	LEU	93	22.445	48.138	32.347
ATOM	1007	CA	LEU	93	23.171	46.797	33.704
ATOM	1008	HA	LEU	93	24.230	46.691	33.941
ATOM	1009	CB	LEU	93	22.502	47.615	34.811
ATOM	1010	HB2	LEU	93	22.984	48.590	34.744
ATOM	1011	HB3	LEU	93	21.445	47.715	34.565
ATOM	1012	CG	LEU	93	22.645	47.073	36.234
ATOM	1013	HG	LEU	93	22.364	47.855	36.939
ATOM	1014	CD1	LEU	93	21.751	45.860	36.440
ATOM	1015	HD11	LEU	93	22.032	45.077	35.735
ATOM	1016	HD12	LEU	93	21.868	45.490	37.459
ATOM	1017	HD13	LEU	93	20.711	46.142	36.274
ATOM	1018	CD2	LEU	93	24.094	46.719	36.532
ATOM	1019	HD21	LEU	93	24.714	47.610	36.431
ATOM	1020	HD22	LEU	93	24.173	46.335	37.549
ATOM	1021	HD23	LEU	93	24.434	45.958	35.830
ATOM	1022	C	LEU	93	22.625	45.397	33.771
ATOM	1023	O	LEU	93	23.372	44.479	34.106
ATOM	1024	N	LEU	94	21.331	45.157	33.460

ATOM	1025	H	LEU	94	20.758	45.789	33.173
ATOM	1026	CA	LEU	94	20.885	43.794	33.612
ATOM	1027	HA	LEU	94	21.250	43.389	34.556
ATOM	1028	CB	LEU	94	19.356	43.727	33.610
ATOM	1029	HB2	LEU	94	19.071	44.265	32.706
ATOM	1030	HB3	LEU	94	19.065	42.681	33.517
ATOM	1031	CG	LEU	94	18.649	44.347	34.816
ATOM	1032	HG	LEU	94	19.011	45.366	34.951
ATOM	1033	CD1	LEU	94	17.143	44.368	34.604
ATOM	1034	HD11	LEU	94	16.780	43.349	34.469
ATOM	1035	HD12	LEU	94	16.659	44.813	35.474
ATOM	1036	HD13	LEU	94	16.909	44.957	33.717
ATOM	1037	CD2	LEU	94	18.993	43.589	36.089
ATOM	1038	HD21	LEU	94	20.070	43.626	36.255
ATOM	1039	HD22	LEU	94	18.480	44.046	36.935
ATOM	1040	HD23	LEU	94	18.676	42.551	35.991
ATOM	1041	C	LEU	94	21.418	42.882	32.546
ATOM	1042	O	LEU	94	21.838	41.762	32.834
ATOM	1043	N	PRO	95	21.422	43.324	31.325
ATOM	1044	CD	PRO	95	20.736	44.566	30.837
ATOM	1045	HD2	PRO	95	21.412	45.420	30.875
ATOM	1046	HD3	PRO	95	19.850	44.777	31.435
ATOM	1047	CG	PRO	95	20.395	44.162	29.429
ATOM	1048	HG2	PRO	95	20.346	45.050	28.798
ATOM	1049	HG3	PRO	95	19.429	43.657	29.420
ATOM	1050	CB	PRO	95	21.482	43.240	28.989
ATOM	1051	HB2	PRO	95	22.345	43.779	28.598
ATOM	1052	HB3	PRO	95	21.117	42.543	28.234
ATOM	1053	CA	PRO	95	21.875	42.478	30.256
ATOM	1054	HA	PRO	95	21.327	41.541	30.351
ATOM	1055	C	PRO	95	23.330	42.199	30.237
ATOM	1056	O	PRO	95	23.737	41.379	29.414
ATOM	1057	N	THR	96	24.120	42.868	31.098
ATOM	1058	H	THR	96	23.746	43.436	31.688
ATOM	1059	CA	THR	96	25.540	42.685	31.083
ATOM	1060	HA	THR	96	25.922	42.949	30.097
ATOM	1061	CB	THR	96	26.234	43.572	32.133
ATOM	1062	HB	THR	96	25.901	44.602	32.004
ATOM	1063	CG2	THR	96	25.891	43.101	33.538
ATOM	1064	HG21	THR	96	26.225	42.071	33.668
ATOM	1065	HG22	THR	96	26.390	43.739	34.268
ATOM	1066	HG23	THR	96	24.812	43.155	33.687
ATOM	1067	OG1	THR	96	27.655	43.499	31.960
ATOM	1068	HG1	THR	96	27.905	42.713	32.054
ATOM	1069	C	THR	96	25.828	41.244	31.329
ATOM	1070	O	THR	96	25.008	40.514	31.883
ATOM	1071	N	GLY	97	27.021	40.799	30.890
ATOM	1072	H	GLY	97	27.589	41.385	30.509
ATOM	1073	CA	GLY	97	27.393	39.423	31.020
ATOM	1074	HA2	GLY	97	26.550	38.777	30.773
ATOM	1075	HA3	GLY	97	28.231	39.193	30.362
ATOM	1076	C	GLY	97	27.800	39.170	32.431

ATOM	1077	O	GLY	97	27.979	40.093	33.224
ATOM	1078	N	SER	98	27.955	37.876	32.766
ATOM	1079	H	SER	98	27.813	37.262	32.124
ATOM	1080	CA	SER	98	28.330	37.461	34.082
ATOM	1081	HA	SER	98	28.946	38.229	34.550
ATOM	1082	CB	SER	98	27.088	37.237	34.947
ATOM	1083	HB2	SER	98	27.405	37.074	35.977
ATOM	1084	HB3	SER	98	26.462	38.128	34.897
ATOM	1085	OG	SER	98	26.349	36.115	34.497
ATOM	1086	HG	SER	98	26.825	35.437	34.535
ATOM	1087	C	SER	98	29.144	36.220	33.889
ATOM	1088	O	SER	98	29.488	35.869	32.762
ATOM	1089	N	ALA	99	29.503	35.535	34.990
ATOM	1090	H	ALA	99	29.269	35.835	35.806
ATOM	1091	CA	ALA	99	30.259	34.325	34.862
ATOM	1092	HA	ALA	99	31.179	34.457	34.292
ATOM	1093	CB	ALA	99	30.613	33.774	36.235
ATOM	1094	HB1	ALA	99	29.701	33.628	36.814
ATOM	1095	HB2	ALA	99	31.128	32.820	36.122
ATOM	1096	HB3	ALA	99	31.263	34.479	36.753
ATOM	1097	C	ALA	99	29.406	33.398	34.065
ATOM	1098	O	ALA	99	29.880	32.710	33.162
ATOM	1099	N	GLU	100	28.099	33.387	34.377
ATOM	1100	H	GLU	100	27.816	33.901	35.059
ATOM	1101	CA	GLU	100	27.165	32.582	33.652
ATOM	1102	HA	GLU	100	27.480	31.539	33.676
ATOM	1103	CB	GLU	100	25.771	32.686	34.275
ATOM	1104	HB2	GLU	100	25.521	33.746	34.329
ATOM	1105	HB3	GLU	100	25.079	32.184	33.599
ATOM	1106	CG	GLU	100	25.663	32.069	35.660
ATOM	1107	HG2	GLU	100	25.959	31.023	35.585
ATOM	1108	HG3	GLU	100	26.356	32.596	36.316
ATOM	1109	CD	GLU	100	24.261	32.158	36.230
ATOM	1110	OE1	GLU	100	23.393	32.774	35.577
ATOM	1111	OE2	GLU	100	24.031	31.611	37.329
ATOM	1112	C	GLU	100	27.263	33.129	32.264
ATOM	1113	O	GLU	100	27.585	34.309	32.133
ATOM	1114	N	PRO	101	27.050	32.334	31.234
ATOM	1115	CD	PRO	101	26.613	30.837	31.293
ATOM	1116	HD2	PRO	101	25.564	30.750	31.577
ATOM	1117	HD3	PRO	101	27.228	30.281	32.001
ATOM	1118	CG	PRO	101	26.862	30.424	29.869
ATOM	1119	HG2	PRO	101	26.179	29.619	29.600
ATOM	1120	HG3	PRO	101	27.890	30.077	29.766
ATOM	1121	CB	PRO	101	26.625	31.640	29.038
ATOM	1122	HB2	PRO	101	25.545	31.749	28.938
ATOM	1123	HB3	PRO	101	27.083	31.640	28.049
ATOM	1124	CA	PRO	101	27.188	32.791	29.874
ATOM	1125	HA	PRO	101	28.239	32.981	29.655
ATOM	1126	C	PRO	101	26.410	34.051	29.702
ATOM	1127	O	PRO	101	25.305	34.160	30.231
ATOM	1128	N	PRO	102	26.984	34.989	29.012

ATOM	1129	CD	PRO	102	28.283	34.924	28.267
ATOM	1130	HD2	PRO	102	28.314	34.029	27.645
ATOM	1131	HD3	PRO	102	29.117	34.907	28.969
ATOM	1132	CG	PRO	102	28.243	36.189	27.456
ATOM	1133	HG2	PRO	102	27.819	35.977	26.474
ATOM	1134	HG3	PRO	102	29.255	36.577	27.338
ATOM	1135	CB	PRO	102	27.392	37.145	28.222
ATOM	1136	HB2	PRO	102	26.901	37.847	27.548
ATOM	1137	HB3	PRO	102	27.960	37.698	28.970
ATOM	1138	CA	PRO	102	26.346	36.263	28.907
ATOM	1139	HA	PRO	102	26.128	36.603	29.919
ATOM	1140	C	PRO	102	25.091	36.236	28.114
ATOM	1141	O	PRO	102	25.027	35.552	27.094
ATOM	1142	N	ALA	103	24.079	36.977	28.592
ATOM	1143	H	ALA	103	24.199	37.392	29.381
ATOM	1144	CA	ALA	103	22.845	37.118	27.892
ATOM	1145	HA	ALA	103	22.940	37.042	26.809
ATOM	1146	CB	ALA	103	21.845	36.075	28.366
ATOM	1147	HB1	ALA	103	21.732	36.144	29.448
ATOM	1148	HB2	ALA	103	20.881	36.252	27.889
ATOM	1149	HB3	ALA	103	22.204	35.080	28.102
ATOM	1150	C	ALA	103	22.423	38.517	28.166
ATOM	1151	O	ALA	103	22.629	39.030	29.264
ATOM	1152	N	ASP	104	21.836	39.191	27.165
ATOM	1153	H	ASP	104	21.704	38.828	26.352
ATOM	1154	CA	ASP	104	21.415	40.529	27.426
ATOM	1155	HA	ASP	104	21.897	40.898	28.331
ATOM	1156	CB	ASP	104	21.793	41.447	26.262
ATOM	1157	HB2	ASP	104	21.414	40.998	25.344
ATOM	1158	HB3	ASP	104	21.307	42.409	26.423
ATOM	1159	CG	ASP	104	23.291	41.651	26.143
ATOM	1160	OD1	ASP	104	24.011	41.344	27.117
ATOM	1161	OD2	ASP	104	23.744	42.117	25.077
ATOM	1162	C	ASP	104	19.946	40.484	27.655
ATOM	1163	O	ASP	104	19.197	39.994	26.811
ATOM	1164	N	TRP	105	19.468	40.961	28.822
ATOM	1165	H	TRP	105	19.936	41.319	29.503
ATOM	1166	CA	TRP	105	18.050	40.851	28.912
ATOM	1167	HA	TRP	105	17.673	40.249	28.085
ATOM	1168	CB	TRP	105	17.647	40.182	30.228
ATOM	1169	HB2	TRP	105	18.099	39.193	30.300
ATOM	1170	HB3	TRP	105	17.968	40.790	31.074
ATOM	1171	CG	TRP	105	16.169	39.990	30.374
ATOM	1172	CD1	TRP	105	15.260	40.916	30.801
ATOM	1173	HD1	TRP	105	15.647	41.900	31.063
ATOM	1174	NE1	TRP	105	13.997	40.374	30.805
ATOM	1175	HE1	TRP	105	13.218	40.827	31.061
ATOM	1176	CE2	TRP	105	14.075	39.073	30.375
ATOM	1177	CZ2	TRP	105	13.069	38.122	30.210
ATOM	1178	HZ2	TRP	105	12.043	38.406	30.446
ATOM	1179	CH2	TRP	105	13.435	36.885	29.760
ATOM	1180	HH2	TRP	105	12.677	36.114	29.619

ATOM	1181	CZ3	TRP	105	14.771	36.583	29.474
ATOM	1182	HZ3	TRP	105	15.052	35.593	29.115
ATOM	1183	CE3	TRP	105	15.772	37.523	29.636
ATOM	1184	HE3	TRP	105	16.796	37.235	29.399
ATOM	1185	CD2	TRP	105	15.426	38.797	30.095
ATOM	1186	C	TRP	105	17.365	42.170	28.801
ATOM	1187	O	TRP	105	17.434	43.028	29.682
ATOM	1188	N	ASP	106	16.667	42.333	27.659
ATOM	1189	H	ASP	106	16.712	41.663	27.060
ATOM	1190	CA	ASP	106	15.884	43.494	27.375
ATOM	1191	HA	ASP	106	16.300	44.356	27.895
ATOM	1192	CB	ASP	106	15.881	43.784	25.873
ATOM	1193	HB2	ASP	106	16.917	43.880	25.548
ATOM	1194	HB3	ASP	106	15.420	42.935	25.369
ATOM	1195	CG	ASP	106	15.123	45.050	25.525
ATOM	1196	OD1	ASP	106	14.462	45.612	26.424
ATOM	1197	OD2	ASP	106	15.190	45.480	24.355
ATOM	1198	C	ASP	106	14.524	43.199	27.916
ATOM	1199	O	ASP	106	13.829	42.303	27.440
ATOM	1200	N	GLY	107	14.152	43.929	28.979
ATOM	1201	H	GLY	107	14.757	44.537	29.250
ATOM	1202	CA	GLY	107	12.903	43.800	29.674
ATOM	1203	HA2	GLY	107	12.742	42.749	29.916
ATOM	1204	HA3	GLY	107	12.952	44.381	30.595
ATOM	1205	C	GLY	107	11.753	44.292	28.847
ATOM	1206	O	GLY	107	10.633	43.798	28.972
ATOM	1207	N	ALA	108	12.011	45.295	27.988
ATOM	1208	H	ALA	108	12.882	45.490	27.872
ATOM	1209	CA	ALA	108	11.007	46.039	27.277
ATOM	1210	HA	ALA	108	10.369	46.517	28.020
ATOM	1211	CB	ALA	108	11.653	47.120	26.424
ATOM	1212	HB1	ALA	108	12.288	46.657	25.669
ATOM	1213	HB2	ALA	108	10.878	47.709	25.934
ATOM	1214	HB3	ALA	108	12.257	47.771	27.057
ATOM	1215	C	ALA	108	10.144	45.182	26.405
ATOM	1216	O	ALA	108	8.951	45.449	26.275
ATOM	1217	N	GLY	109	10.695	44.144	25.757
ATOM	1218	H	GLY	109	11.563	43.925	25.846
ATOM	1219	CA	GLY	109	9.845	43.372	24.898
ATOM	1220	HA2	GLY	109	10.017	42.304	25.033
ATOM	1221	HA3	GLY	109	8.794	43.597	25.081
ATOM	1222	C	GLY	109	10.184	43.745	23.492
ATOM	1223	O	GLY	109	10.914	44.704	23.250
ATOM	1224	N	GLY	110	9.651	42.977	22.523
ATOM	1225	H	GLY	110	9.064	42.338	22.761
ATOM	1226	CA	GLY	110	9.995	43.156	21.144
ATOM	1227	HA2	GLY	110	11.076	43.065	21.042
ATOM	1228	HA3	GLY	110	9.509	42.374	20.561
ATOM	1229	C	GLY	110	9.566	44.493	20.621
ATOM	1230	O	GLY	110	10.326	45.148	19.913
ATOM	1231	N	SER	111	8.340	44.941	20.948
ATOM	1232	H	SER	111	7.836	44.473	21.529

ATOM	1233	CA	SER	111	7.833	46.160	20.376
ATOM	1234	HA	SER	111	7.873	46.102	19.288
ATOM	1235	CB	SER	111	6.381	46.388	20.801
ATOM	1236	HB2	SER	111	5.778	45.553	20.445
ATOM	1237	HB3	SER	111	6.338	46.429	21.889
ATOM	1238	OG	SER	111	5.876	47.597	20.263
ATOM	1239	HG	SER	111	5.909	47.565	19.434
ATOM	1240	C	SER	111	8.679	47.328	20.777
ATOM	1241	O	SER	111	9.095	48.123	19.936
ATOM	1242	N	TYR	112	8.970	47.444	22.083
ATOM	1243	H	TYR	112	8.676	46.793	22.630
ATOM	1244	CA	TYR	112	9.716	48.547	22.617
ATOM	1245	HA	TYR	112	9.256	49.487	22.311
ATOM	1246	CB	TYR	112	9.738	48.489	24.146
ATOM	1247	HB2	TYR	112	10.012	47.472	24.428
ATOM	1248	HB3	TYR	112	10.511	49.179	24.483
ATOM	1249	CG	TYR	112	8.421	48.853	24.792
ATOM	1250	CD1	TYR	112	8.037	48.279	25.997
ATOM	1251	HD1	TYR	112	8.703	47.559	26.471
ATOM	1252	CE1	TYR	112	6.835	48.606	26.595
ATOM	1253	HE1	TYR	112	6.547	48.147	27.541
ATOM	1254	CZ	TYR	112	5.999	49.518	25.989
ATOM	1255	OH	TYR	112	4.802	49.846	26.582
ATOM	1256	HH	TYR	112	4.720	49.421	27.291
ATOM	1257	CE2	TYR	112	6.360	50.110	24.779
ATOM	1258	HE2	TYR	112	5.704	50.832	24.294
ATOM	1259	CD2	TYR	112	7.566	49.771	24.195
ATOM	1260	HD2	TYR	112	7.861	50.226	23.249
ATOM	1261	C	TYR	112	11.101	48.527	22.062
ATOM	1262	O	TYR	112	11.702	49.577	21.845
ATOM	1263	N	ARG	113	11.657	47.324	21.844
ATOM	1264	H	ARG	113	11.178	46.581	22.014
ATOM	1265	CA	ARG	113	12.998	47.214	21.346
ATOM	1266	HA	ARG	113	13.687	47.714	22.027
ATOM	1267	CB	ARG	113	13.407	45.744	21.229
ATOM	1268	HB2	ARG	113	13.296	45.300	22.218
ATOM	1269	HB3	ARG	113	12.710	45.270	20.538
ATOM	1270	CG	ARG	113	14.830	45.534	20.736
ATOM	1271	HG2	ARG	113	14.951	46.059	19.788
ATOM	1272	HG3	ARG	113	15.518	45.950	21.472
ATOM	1273	CD	ARG	113	15.132	44.057	20.539
ATOM	1274	HD2	ARG	113	16.179	43.945	20.256
ATOM	1275	HD3	ARG	113	14.951	43.529	21.475
ATOM	1276	NE	ARG	113	14.299	43.462	19.497
ATOM	1277	HE	ARG	113	13.631	42.984	19.755
ATOM	1278	CZ	ARG	113	14.509	43.615	18.194
ATOM	1279	NH1	ARG	113	13.698	43.036	17.319
ATOM	1280	HH11	ARG	113	13.036	42.562	17.595
ATOM	1281	HH12	ARG	113	13.834	43.135	16.475
ATOM	1282	NH2	ARG	113	15.530	44.347	17.768
ATOM	1283	HH21	ARG	113	16.056	44.722	18.336
ATOM	1284	HH22	ARG	113	15.666	44.446	16.925

ATOM	1285	C	ARG	113	13.068	47.912	20.023
ATOM	1286	O	ARG	113	14.000	48.674	19.771
ATOM	1287	N	LEU	114	12.081	47.661	19.139
ATOM	1288	H	LEU	114	11.413	47.107	19.378
ATOM	1289	CA	LEU	114	12.083	48.261	17.835
ATOM	1290	HA	LEU	114	13.049	48.101	17.356
ATOM	1291	CB	LEU	114	10.994	47.640	16.958
ATOM	1292	HB2	LEU	114	10.091	47.722	17.564
ATOM	1293	HB3	LEU	114	10.888	48.255	16.064
ATOM	1294	CG	LEU	114	11.203	46.180	16.550
ATOM	1295	HG	LEU	114	11.391	45.587	17.445
ATOM	1296	CD1	LEU	114	9.974	45.641	15.834
ATOM	1297	HD11	LEU	114	9.786	46.233	14.939
ATOM	1298	HD12	LEU	114	10.143	44.602	15.553
ATOM	1299	HD13	LEU	114	9.111	45.701	16.497
ATOM	1300	CD2	LEU	114	12.434	46.039	15.668
ATOM	1301	HD21	LEU	114	13.313	46.381	16.213
ATOM	1302	HD22	LEU	114	12.564	44.993	15.389
ATOM	1303	HD23	LEU	114	12.308	46.641	14.768
ATOM	1304	C	LEU	114	11.889	49.742	17.928
ATOM	1305	O	LEU	114	12.550	50.497	17.219
ATOM	1306	N	LEU	115	10.968	50.199	18.796
ATOM	1307	H	LEU	115	10.525	49.614	19.317
ATOM	1308	CA	LEU	115	10.690	51.603	18.896
ATOM	1309	HA	LEU	115	10.477	52.009	17.907
ATOM	1310	CB	LEU	115	9.477	51.846	19.796
ATOM	1311	HB2	LEU	115	9.715	51.301	20.709
ATOM	1312	HB3	LEU	115	9.427	52.913	20.013
ATOM	1313	CG	LEU	115	8.126	51.372	19.256
ATOM	1314	HG	LEU	115	8.210	50.325	18.963
ATOM	1315	CD1	LEU	115	7.044	51.516	20.315
ATOM	1316	HD11	LEU	115	6.959	52.562	20.608
ATOM	1317	HD12	LEU	115	6.091	51.174	19.911
ATOM	1318	HD13	LEU	115	7.305	50.915	21.186
ATOM	1319	CD2	LEU	115	7.747	52.147	18.003
ATOM	1320	HD21	LEU	115	8.506	51.993	17.236
ATOM	1321	HD22	LEU	115	6.783	51.795	17.635
ATOM	1322	HD23	LEU	115	7.679	53.209	18.239
ATOM	1323	C	LEU	115	11.912	52.292	19.423
ATOM	1324	O	LEU	115	12.283	53.363	18.945
ATOM	1325	N	ARG	116	12.575	51.689	20.426
ATOM	1326	H	ARG	116	12.293	50.887	20.720
ATOM	1327	CA	ARG	116	13.719	52.311	21.025
ATOM	1328	HA	ARG	116	13.452	53.305	21.386
ATOM	1329	CB	ARG	116	14.223	51.481	22.207
ATOM	1330	HB2	ARG	116	14.375	50.464	21.844
ATOM	1331	HB3	ARG	116	15.180	51.904	22.512
ATOM	1332	CG	ARG	116	13.277	51.458	23.397
ATOM	1333	HG2	ARG	116	12.280	51.197	23.043
ATOM	1334	HG3	ARG	116	13.622	50.700	24.101
ATOM	1335	CD	ARG	116	13.230	52.810	24.091
ATOM	1336	HD2	ARG	116	14.241	53.093	24.384

ATOM	1337	HD3	ARG	116	12.832	53.552	23.399
ATOM	1338	NE	ARG	116	12.387	52.783	25.284
ATOM	1339	HE	ARG	116	12.097	52.015	25.543
ATOM	1340	CZ	ARG	116	12.048	53.862	25.983
ATOM	1341	NH1	ARG	116	11.277	53.741	27.055
ATOM	1342	HH11	ARG	116	10.996	52.965	27.298
ATOM	1343	HH12	ARG	116	11.057	54.439	27.507
ATOM	1344	NH2	ARG	116	12.480	55.058	25.608
ATOM	1345	HH21	ARG	116	12.980	55.136	24.913
ATOM	1346	HH22	ARG	116	12.261	55.755	26.061
ATOM	1347	C	ARG	116	14.782	52.475	19.987
ATOM	1348	O	ARG	116	15.415	53.526	19.898
ATOM	1349	N	GLY	117	14.999	51.435	19.162
ATOM	1350	H	GLY	117	14.483	50.703	19.247
ATOM	1351	CA	GLY	117	16.027	51.476	18.163
ATOM	1352	HA2	GLY	117	16.990	51.679	18.632
ATOM	1353	HA3	GLY	117	16.072	50.521	17.640
ATOM	1354	C	GLY	117	15.729	52.560	17.173
ATOM	1355	O	GLY	117	16.630	53.278	16.744
ATOM	1356	N	GLY	118	14.449	52.697	16.774
ATOM	1357	H	GLY	118	13.826	52.165	17.146
ATOM	1358	CA	GLY	118	14.069	53.662	15.781
ATOM	1359	HA2	GLY	118	14.646	53.496	14.872
ATOM	1360	HA3	GLY	118	13.007	53.559	15.560
ATOM	1361	C	GLY	118	14.331	55.052	16.278
ATOM	1362	O	GLY	118	14.782	55.908	15.519
ATOM	1363	N	LEU	119	14.020	55.318	17.562
ATOM	1364	H	LEU	119	13.693	54.641	18.057
ATOM	1365	CA	LEU	119	14.191	56.620	18.148
ATOM	1366	HA	LEU	119	13.724	57.374	17.514
ATOM	1367	CB	LEU	119	13.541	56.674	19.532
ATOM	1368	HB2	LEU	119	13.962	55.814	20.052
ATOM	1369	HB3	LEU	119	13.868	57.591	20.023
ATOM	1370	CG	LEU	119	12.014	56.594	19.568
ATOM	1371	HG	LEU	119	11.693	55.719	19.003
ATOM	1372	CD1	LEU	119	11.515	56.483	21.000
ATOM	1373	HD11	LEU	119	11.835	57.358	21.566
ATOM	1374	HD12	LEU	119	10.426	56.427	21.003
ATOM	1375	HD13	LEU	119	11.925	55.584	21.460
ATOM	1376	CD2	LEU	119	11.396	57.804	18.884
ATOM	1377	HD21	LEU	119	11.722	57.840	17.845
ATOM	1378	HD22	LEU	119	10.309	57.727	18.921
ATOM	1379	HD23	LEU	119	11.713	58.713	19.396
ATOM	1380	C	LEU	119	15.646	56.953	18.233
ATOM	1381	O	LEU	119	16.042	58.100	18.031
ATOM	1382	N	LEU	120	16.485	55.955	18.565
ATOM	1383	H	LEU	120	16.157	55.129	18.707
ATOM	1384	CA	LEU	120	17.891	56.199	18.693
ATOM	1385	HA	LEU	120	18.062	57.014	19.397
ATOM	1386	CB	LEU	120	18.607	54.949	19.209
ATOM	1387	HB2	LEU	120	18.161	54.777	20.188
ATOM	1388	HB3	LEU	120	18.358	54.120	18.546

ATOM	1389	CG	LEU	120	20.127	55.049	19.352
ATOM	1390	HG	LEU	120	20.558	55.289	18.380
ATOM	1391	CD1	LEU	120	20.502	56.131	20.354
ATOM	1392	HD11	LEU	120	20.072	55.891	21.326
ATOM	1393	HD12	LEU	120	21.587	56.186	20.441
ATOM	1394	HD13	LEU	120	20.116	57.092	20.013
ATOM	1395	CD2	LEU	120	20.717	53.712	19.772
ATOM	1396	HD21	LEU	120	20.483	52.959	19.020
ATOM	1397	HD22	LEU	120	21.799	53.806	19.868
ATOM	1398	HD23	LEU	120	20.293	53.412	20.730
ATOM	1399	C	LEU	120	18.398	56.622	17.350
ATOM	1400	O	LEU	120	19.130	57.603	17.236
ATOM	1401	N	GLY	121	18.003	55.895	16.290
ATOM	1402	H	GLY	121	17.428	55.217	16.430
ATOM	1403	CA	GLY	121	18.474	56.175	14.961
ATOM	1404	HA2	GLY	121	19.564	56.153	14.942
ATOM	1405	HA3	GLY	121	18.084	55.431	14.266
ATOM	1406	C	GLY	121	18.006	57.533	14.535
ATOM	1407	O	GLY	121	18.732	58.266	13.866
ATOM	1408	N	LEU	122	16.761	57.888	14.902
ATOM	1409	H	LEU	122	16.308	57.312	15.424
ATOM	1410	CA	LEU	122	16.151	59.123	14.497
ATOM	1411	HA	LEU	122	16.183	59.212	13.411
ATOM	1412	CB	LEU	122	14.690	59.172	14.949
ATOM	1413	HB2	LEU	122	14.238	58.304	14.470
ATOM	1414	HB3	LEU	122	14.667	59.042	16.031
ATOM	1415	CG	LEU	122	13.906	60.430	14.570
ATOM	1416	HG	LEU	122	14.395	61.297	15.013
ATOM	1417	CD1	LEU	122	13.852	60.596	13.059
ATOM	1418	HD11	LEU	122	13.362	59.729	12.615
ATOM	1419	HD12	LEU	122	13.290	61.497	12.812
ATOM	1420	HD13	LEU	122	14.865	60.681	12.666
ATOM	1421	CD2	LEU	122	12.499	60.381	15.147
ATOM	1422	HD21	LEU	122	12.553	60.314	16.234
ATOM	1423	HD22	LEU	122	11.959	61.285	14.866
ATOM	1424	HD23	LEU	122	11.975	59.509	14.756
ATOM	1425	C	LEU	122	16.922	60.284	15.061
ATOM	1426	O	LEU	122	17.184	61.258	14.357
ATOM	1427	N	GLY	123	17.317	60.205	16.348
ATOM	1428	H	GLY	123	17.156	59.442	16.797
ATOM	1429	CA	GLY	123	17.980	61.300	17.006
ATOM	1430	HA2	GLY	123	17.348	62.187	16.958
ATOM	1431	HA3	GLY	123	18.161	61.039	18.049
ATOM	1432	C	GLY	123	19.290	61.599	16.344
ATOM	1433	O	GLY	123	19.643	62.764	16.167
ATOM	1434	N	LEU	124	20.065	60.557	15.991
ATOM	1435	H	LEU	124	19.788	59.717	16.155
ATOM	1436	CA	LEU	124	21.333	60.784	15.354
ATOM	1437	HA	LEU	124	21.921	61.488	15.942
ATOM	1438	CB	LEU	124	22.115	59.474	15.235
ATOM	1439	HB2	LEU	124	21.413	58.792	14.757
ATOM	1440	HB3	LEU	124	22.962	59.647	14.571

ATOM	1441	CG	LEU	124	22.611	58.859	16.545
ATOM	1442	HG	LEU	124	21.770	58.769	17.233
ATOM	1443	CD1	LEU	124	23.214	57.485	16.299
ATOM	1444	HD11	LEU	124	24.055	57.575	15.611
ATOM	1445	HD12	LEU	124	23.561	57.065	17.243
ATOM	1446	HD13	LEU	124	22.459	56.829	15.866
ATOM	1447	CD2	LEU	124	23.628	59.771	17.215
ATOM	1448	HD21	LEU	124	23.166	60.734	17.431
ATOM	1449	HD22	LEU	124	23.968	59.315	18.145
ATOM	1450	HD23	LEU	124	24.479	59.917	16.550
ATOM	1451	C	LEU	124	21.103	61.401	14.007
ATOM	1452	O	LEU	124	21.810	62.323	13.607
ATOM	1453	N	THR	125	20.087	60.902	13.282
ATOM	1454	H	THR	125	19.621	60.245	13.684
ATOM	1455	CA	THR	125	19.720	61.339	11.961
ATOM	1456	HA	THR	125	20.573	61.213	11.294
ATOM	1457	CB	THR	125	18.536	60.526	11.406
ATOM	1458	HB	THR	125	17.690	60.622	12.087
ATOM	1459	CG2	THR	125	18.138	61.035	10.029
ATOM	1460	HG21	THR	125	18.983	60.939	9.347
ATOM	1461	HG22	THR	125	17.300	60.449	9.653
ATOM	1462	HG23	THR	125	17.845	62.083	10.099
ATOM	1463	OG1	THR	125	18.909	59.147	11.295
ATOM	1464	HG1	THR	125	19.117	58.856	12.044
ATOM	1465	C	THR	125	19.373	62.794	11.963
ATOM	1466	O	THR	125	19.929	63.579	11.195
ATOM	1467	N	VAL	126	18.449	63.188	12.853
ATOM	1468	H	VAL	126	18.135	62.578	13.436
ATOM	1469	CA	VAL	126	17.962	64.535	12.893
ATOM	1470	HA	VAL	126	17.636	64.872	11.909
ATOM	1471	CB	VAL	126	16.787	64.681	13.878
ATOM	1472	HB	VAL	126	17.074	64.254	14.839
ATOM	1473	CG1	VAL	126	16.427	66.147	14.063
ATOM	1474	HG11	VAL	126	16.139	66.575	13.103
ATOM	1475	HG12	VAL	126	15.595	66.232	14.762
ATOM	1476	HG13	VAL	126	17.288	66.686	14.457
ATOM	1477	CG2	VAL	126	15.583	63.890	13.392
ATOM	1478	HG21	VAL	126	15.848	62.836	13.312
ATOM	1479	HG22	VAL	126	14.762	64.005	14.100
ATOM	1480	HG23	VAL	126	15.274	64.262	12.415
ATOM	1481	C	VAL	126	19.072	65.466	13.262
ATOM	1482	O	VAL	126	19.147	66.580	12.747
ATOM	1483	N	SER	127	19.951	65.046	14.191
ATOM	1484	H	SER	127	19.876	64.213	14.524
ATOM	1485	CA	SER	127	21.001	65.911	14.651
ATOM	1486	HA	SER	127	20.579	66.861	14.979
ATOM	1487	CB	SER	127	21.744	65.274	15.827
ATOM	1488	HB2	SER	127	22.500	65.974	16.183
ATOM	1489	HB3	SER	127	21.029	65.075	16.625
ATOM	1490	OG	SER	127	22.368	64.062	15.440
ATOM	1491	HG	SER	127	21.791	63.529	15.169
ATOM	1492	C	SER	127	21.974	66.238	13.553

ATOM	1493	O	SER	127	22.267	67.409	13.318
ATOM	1494	N	LEU	128	22.491	65.219	12.837
ATOM	1495	H	LEU	128	22.201	64.383	13.003
ATOM	1496	CA	LEU	128	23.488	65.447	11.823
ATOM	1497	HA	LEU	128	24.315	66.022	12.241
ATOM	1498	CB	LEU	128	24.033	64.117	11.299
ATOM	1499	HB2	LEU	128	23.138	63.550	11.043
ATOM	1500	HB3	LEU	128	24.605	64.320	10.394
ATOM	1501	CG	LEU	128	24.890	63.305	12.272
ATOM	1502	HG	LEU	128	24.343	63.184	13.207
ATOM	1503	CD1	LEU	128	25.211	61.936	11.692
ATOM	1504	HD11	LEU	128	25.758	62.056	10.757
ATOM	1505	HD12	LEU	128	25.821	61.375	12.400
ATOM	1506	HD13	LEU	128	24.284	61.394	11.503
ATOM	1507	CD2	LEU	128	26.172	64.050	12.611
ATOM	1508	HD21	LEU	128	25.926	65.006	13.073
ATOM	1509	HD22	LEU	128	26.766	63.455	13.304
ATOM	1510	HD23	LEU	128	26.744	64.224	11.699
ATOM	1511	C	LEU	128	22.930	66.257	10.692
ATOM	1512	O	LEU	128	23.628	67.096	10.125
ATOM	1513	N	LEU	129	21.664	66.005	10.313
ATOM	1514	H	LEU	129	21.209	65.367	10.755
ATOM	1515	CA	LEU	129	21.035	66.722	9.236
ATOM	1516	HA	LEU	129	21.672	66.694	8.352
ATOM	1517	CB	LEU	129	19.686	66.089	8.887
ATOM	1518	HB2	LEU	129	19.936	65.059	8.633
ATOM	1519	HB3	LEU	129	19.066	66.101	9.784
ATOM	1520	CG	LEU	129	18.918	66.728	7.728
ATOM	1521	HG	LEU	129	18.699	67.766	7.980
ATOM	1522	CD1	LEU	129	19.738	66.680	6.448
ATOM	1523	HD11	LEU	129	19.957	65.643	6.195
ATOM	1524	HD12	LEU	129	19.173	67.140	5.637
ATOM	1525	HD13	LEU	129	20.672	67.223	6.593
ATOM	1526	CD2	LEU	129	17.579	66.035	7.524
ATOM	1527	HD21	LEU	129	16.982	66.122	8.432
ATOM	1528	HD22	LEU	129	17.049	66.504	6.695
ATOM	1529	HD23	LEU	129	17.745	64.982	7.298
ATOM	1530	C	LEU	129	20.875	68.160	9.639
ATOM	1531	O	LEU	129	21.023	69.063	8.816
ATOM	1532	N	SER	130	20.540	68.407	10.920
ATOM	1533	H	SER	130	20.457	67.706	11.478
ATOM	1534	CA	SER	130	20.317	69.741	11.404
ATOM	1535	HA	SER	130	19.603	70.253	10.759
ATOM	1536	CB	SER	130	19.755	69.708	12.826
ATOM	1537	HB2	SER	130	18.816	69.155	12.817
ATOM	1538	HB3	SER	130	20.470	69.198	13.472
ATOM	1539	OG	SER	130	19.527	71.018	13.316
ATOM	1540	HG	SER	130	20.243	71.438	13.323
ATOM	1541	C	SER	130	21.601	70.515	11.354
ATOM	1542	O	SER	130	21.598	71.704	11.038
ATOM	1543	N	HIE	131	22.736	69.861	11.676
ATOM	1544	H	HIE	131	22.679	68.999	11.928

ATOM	1545	CA	HIE	131	24.013	70.510	11.623
ATOM	1546	HA	HIE	131	23.981	71.434	12.200
ATOM	1547	CB	HIE	131	25.099	69.605	12.209
ATOM	1548	HB2	HIE	131	25.024	68.604	11.784
ATOM	1549	HB3	HIE	131	26.085	70.017	11.995
ATOM	1550	CG	HIE	131	25.015	69.446	13.695
ATOM	1551	ND1	HIE	131	24.174	68.537	14.300
ATOM	1552	CE1	HIE	131	24.320	68.626	15.634
ATOM	1553	HE1	HIE	131	23.713	67.961	16.248
ATOM	1554	NE2	HIE	131	25.210	69.541	15.968
ATOM	1555	HE2	HIE	131	25.470	69.771	16.830
ATOM	1556	CD2	HIE	131	25.659	70.066	14.844
ATOM	1557	HD2	HIE	131	26.412	70.854	14.873
ATOM	1558	C	HIE	131	24.294	70.860	10.197
ATOM	1559	O	HIE	131	24.861	71.909	9.898
ATOM	1560	N	CYS	132	23.908	69.973	9.267
ATOM	1561	H	CYS	132	23.505	69.212	9.529
ATOM	1562	CA	CYS	132	24.130	70.224	7.873
ATOM	1563	HA	CYS	132	25.190	70.401	7.694
ATOM	1564	CB	CYS	132	23.687	69.023	7.035
ATOM	1565	HB2	CYS	132	24.197	68.120	7.370
ATOM	1566	HB3	CYS	132	22.609	68.882	7.116
ATOM	1567	SG	CYS	132	24.041	69.173	5.268
ATOM	1568	HG	CYS	132	23.530	67.994	4.923
ATOM	1569	C	CYS	132	23.386	71.464	7.488
ATOM	1570	O	CYS	132	23.890	72.301	6.740
ATOM	1571	N	LEU	133	22.150	71.608	7.995
ATOM	1572	H	LEU	133	21.849	70.979	8.564
ATOM	1573	CA	LEU	133	21.317	72.723	7.654
ATOM	1574	HA	LEU	133	21.270	72.831	6.570
ATOM	1575	CB	LEU	133	19.898	72.514	8.187
ATOM	1576	HB2	LEU	133	20.046	72.282	9.242
ATOM	1577	HB3	LEU	133	19.360	73.458	8.095
ATOM	1578	CG	LEU	133	19.085	71.398	7.529
ATOM	1579	HG	LEU	133	19.667	70.477	7.552
ATOM	1580	CD1	LEU	133	17.770	71.185	8.265
ATOM	1581	HD11	LEU	133	17.187	72.106	8.242
ATOM	1582	HD12	LEU	133	17.207	70.387	7.781
ATOM	1583	HD13	LEU	133	17.973	70.910	9.300
ATOM	1584	CD2	LEU	133	18.826	71.712	6.064
ATOM	1585	HD21	LEU	133	19.776	71.811	5.539
ATOM	1586	HD22	LEU	133	18.246	70.905	5.616
ATOM	1587	HD23	LEU	133	18.269	72.646	5.985
ATOM	1588	C	LEU	133	21.905	73.993	8.199
ATOM	1589	O	LEU	133	21.874	75.028	7.534
ATOM	1590	N	VAL	134	22.460	73.956	9.428
ATOM	1591	H	VAL	134	22.495	73.180	9.882
ATOM	1592	CA	VAL	134	22.994	75.152	10.011
ATOM	1593	HA	VAL	134	22.268	75.965	9.992
ATOM	1594	CB	VAL	134	23.436	74.921	11.468
ATOM	1595	HB	VAL	134	24.085	74.046	11.507
ATOM	1596	CG1	VAL	134	24.188	76.133	11.995

ATOM	1597	HG11	VAL	134	23.540	77.008	11.957
ATOM	1598	HG12	VAL	134	24.493	75.952	13.026
ATOM	1599	HG13	VAL	134	25.071	76.308	11.381
ATOM	1600	CG2	VAL	134	22.234	74.612	12.347
ATOM	1601	HG21	VAL	134	21.737	73.713	11.981
ATOM	1602	HG22	VAL	134	22.565	74.452	13.373
ATOM	1603	HG23	VAL	134	21.537	75.449	12.317
ATOM	1604	C	VAL	134	24.142	75.643	9.181
ATOM	1605	O	VAL	134	24.288	76.845	8.968
ATOM	1606	N	ALA	135	24.990	74.722	8.684
ATOM	1607	H	ALA	135	24.820	73.851	8.837
ATOM	1608	CA	ALA	135	26.145	75.105	7.924
ATOM	1609	HA	ALA	135	26.759	75.790	8.509
ATOM	1610	CB	ALA	135	26.980	73.882	7.575
ATOM	1611	HB1	ALA	135	26.382	73.190	6.982
ATOM	1612	HB2	ALA	135	27.854	74.190	7.001
ATOM	1613	HB3	ALA	135	27.303	73.388	8.492
ATOM	1614	C	ALA	135	25.726	75.831	6.683
ATOM	1615	O	ALA	135	26.297	76.871	6.356
ATOM	1616	N	LEU	136	24.718	75.309	5.957
ATOM	1617	H	LEU	136	24.309	74.556	6.232
ATOM	1618	CA	LEU	136	24.295	75.954	4.743
ATOM	1619	HA	LEU	136	25.159	76.147	4.107
ATOM	1620	CB	LEU	136	23.313	75.064	3.978
ATOM	1621	HB2	LEU	136	22.557	74.811	4.721
ATOM	1622	HB3	LEU	136	22.860	75.663	3.188
ATOM	1623	CG	LEU	136	23.888	73.779	3.378
ATOM	1624	HG	LEU	136	24.411	73.228	4.160
ATOM	1625	CD1	LEU	136	22.780	72.912	2.802
ATOM	1626	HD11	LEU	136	22.257	73.462	2.020
ATOM	1627	HD12	LEU	136	23.211	72.004	2.381
ATOM	1628	HD13	LEU	136	22.077	72.648	3.592
ATOM	1629	CD2	LEU	136	24.920	74.100	2.308
ATOM	1630	HD21	LEU	136	25.733	74.677	2.748
ATOM	1631	HD22	LEU	136	25.316	73.172	1.895
ATOM	1632	HD23	LEU	136	24.452	74.681	1.513
ATOM	1633	C	LEU	136	23.667	77.288	5.035
ATOM	1634	O	LEU	136	23.896	78.258	4.314
ATOM	1635	N	ASN	137	22.866	77.389	6.111
ATOM	1636	H	ASN	137	22.752	76.668	6.638
ATOM	1637	CA	ASN	137	22.197	78.622	6.426
ATOM	1638	HA	ASN	137	21.603	78.948	5.572
ATOM	1639	CB	ASN	137	21.267	78.435	7.626
ATOM	1640	HB2	ASN	137	20.578	77.618	7.412
ATOM	1641	HB3	ASN	137	21.869	78.183	8.499
ATOM	1642	CG	ASN	137	20.460	79.681	7.937
ATOM	1643	OD1	ASN	137	19.659	80.133	7.119
ATOM	1644	ND2	ASN	137	20.669	80.239	9.124
ATOM	1645	HD21	ASN	137	20.216	80.980	9.359
ATOM	1646	HD22	ASN	137	21.264	79.876	9.693
ATOM	1647	C	ASN	137	23.207	79.705	6.684
ATOM	1648	O	ASN	137	23.096	80.818	6.171

ATOM	1649	N	ARG	138	24.230	79.385	7.491
ATOM	1650	H	ARG	138	24.285	78.533	7.776
ATOM	1651	CA	ARG	138	25.215	80.343	7.902
ATOM	1652	HA	ARG	138	24.723	81.231	8.299
ATOM	1653	CB	ARG	138	26.114	79.754	8.991
ATOM	1654	HB2	ARG	138	25.548	78.961	9.480
ATOM	1655	HB3	ARG	138	26.983	79.325	8.493
ATOM	1656	CG	ARG	138	26.573	80.764	10.030
ATOM	1657	HG2	ARG	138	27.316	80.289	10.671
ATOM	1658	HG3	ARG	138	27.027	81.611	9.515
ATOM	1659	CD	ARG	138	25.409	81.252	10.878
ATOM	1660	HD2	ARG	138	24.801	80.396	11.173
ATOM	1661	HD3	ARG	138	25.800	81.743	11.769
ATOM	1662	NE	ARG	138	24.564	82.199	10.154
ATOM	1663	HE	ARG	138	24.948	82.695	9.564
ATOM	1664	CZ	ARG	138	23.257	82.336	10.351
ATOM	1665	NH1	ARG	138	22.570	83.224	9.646
ATOM	1666	HH11	ARG	138	22.970	83.711	9.061
ATOM	1667	HH12	ARG	138	21.724	83.313	9.774
ATOM	1668	NH2	ARG	138	22.640	81.586	11.254
ATOM	1669	HH21	ARG	138	23.086	81.010	11.711
ATOM	1670	HH22	ARG	138	21.795	81.675	11.382
ATOM	1671	C	ARG	138	25.997	80.743	6.691
ATOM	1672	O	ARG	138	26.494	81.863	6.581
ATOM	1673	N	TYR	139	26.117	79.803	5.742
ATOM	1674	H	TYR	139	25.716	79.021	5.937
ATOM	1675	CA	TYR	139	26.811	79.962	4.499
ATOM	1676	HA	TYR	139	27.861	80.185	4.688
ATOM	1677	CB	TYR	139	26.726	78.679	3.670
ATOM	1678	HB2	TYR	139	27.119	77.870	4.286
ATOM	1679	HB3	TYR	139	25.671	78.497	3.463
ATOM	1680	CG	TYR	139	27.492	78.739	2.368
ATOM	1681	CD1	TYR	139	27.146	79.654	1.381
ATOM	1682	HD1	TYR	139	26.310	80.330	1.561
ATOM	1683	CE1	TYR	139	27.841	79.716	0.188
ATOM	1684	HE1	TYR	139	27.558	80.439	-0.577
ATOM	1685	CZ	TYR	139	28.895	78.857	-0.032
ATOM	1686	OH	TYR	139	29.588	78.917	-1.219
ATOM	1687	HH	TYR	139	29.262	79.511	-1.699
ATOM	1688	CE2	TYR	139	29.263	77.929	0.942
ATOM	1689	HE2	TYR	139	30.096	77.246	0.775
ATOM	1690	CD2	TYR	139	28.558	77.881	2.129
ATOM	1691	HD2	TYR	139	28.835	77.161	2.899
ATOM	1692	C	TYR	139	26.164	81.141	3.829
ATOM	1693	O	TYR	139	26.828	82.024	3.289
ATOM	1694	N	LEU	140	24.822	81.186	3.842
ATOM	1695	H	LEU	140	24.355	80.523	4.232
ATOM	1696	CA	LEU	140	24.131	82.290	3.234
ATOM	1697	HA	LEU	140	24.489	82.433	2.214
ATOM	1698	CB	LEU	140	22.625	82.022	3.191
ATOM	1699	HB2	LEU	140	22.376	81.760	4.219
ATOM	1700	HB3	LEU	140	22.124	82.952	2.922

ATOM	1701	CG	LEU	140	22.162	80.904	2.254
ATOM	1702	HG	LEU	140	22.730	80.000	2.475
ATOM	1703	CD1	LEU	140	20.678	80.628	2.439
ATOM	1704	HD11	LEU	140	20.110	81.531	2.217
ATOM	1705	HD12	LEU	140	20.369	79.830	1.764
ATOM	1706	HD13	LEU	140	20.490	80.325	3.469
ATOM	1707	CD2	LEU	140	22.458	81.260	0.805
ATOM	1708	HD21	LEU	140	23.531	81.404	0.678
ATOM	1709	HD22	LEU	140	22.121	80.452	0.156
ATOM	1710	HD23	LEU	140	21.935	82.179	0.542
ATOM	1711	C	LEU	140	24.424	83.553	3.988
ATOM	1712	O	LEU	140	24.702	84.600	3.403
ATOM	1713	N	LEU	141	24.367	83.467	5.328
ATOM	1714	H	LEU	141	24.302	82.644	5.686
ATOM	1715	CA	LEU	141	24.406	84.621	6.182
ATOM	1716	HA	LEU	141	23.623	85.322	5.892
ATOM	1717	CB	LEU	141	24.184	84.216	7.641
ATOM	1718	HB2	LEU	141	23.207	83.733	7.633
ATOM	1719	HB3	LEU	141	24.948	83.486	7.908
ATOM	1720	CG	LEU	141	24.183	85.351	8.667
ATOM	1721	HG	LEU	141	25.147	85.859	8.632
ATOM	1722	CD1	LEU	141	23.074	86.347	8.365
ATOM	1723	HD11	LEU	141	22.110	85.840	8.400
ATOM	1724	HD12	LEU	141	23.091	87.146	9.106
ATOM	1725	HD13	LEU	141	23.225	86.770	7.372
ATOM	1726	CD2	LEU	141	24.031	84.801	10.077
ATOM	1727	HD21	LEU	141	24.860	84.129	10.297
ATOM	1728	HD22	LEU	141	24.033	85.625	10.791
ATOM	1729	HD23	LEU	141	23.091	84.255	10.155
ATOM	1730	C	LEU	141	25.666	85.417	6.115
ATOM	1731	O	LEU	141	25.601	86.641	6.020
ATOM	1732	N	ILE	142	26.840	84.764	6.117
ATOM	1733	H	ILE	142	26.908	83.876	5.987
ATOM	1734	CA	ILE	142	28.021	85.549	6.339
ATOM	1735	HA	ILE	142	27.942	86.156	7.241
ATOM	1736	CB	ILE	142	29.279	84.664	6.425
ATOM	1737	HB	ILE	142	29.273	83.957	5.596
ATOM	1738	CG2	ILE	142	30.536	85.518	6.353
ATOM	1739	HG21	ILE	142	30.543	86.225	7.182
ATOM	1740	HG22	ILE	142	31.415	84.877	6.415
ATOM	1741	HG23	ILE	142	30.551	86.064	5.410
ATOM	1742	CG1	ILE	142	29.242	83.808	7.693
ATOM	1743	HG12	ILE	142	29.395	84.476	8.540
ATOM	1744	HG13	ILE	142	28.248	83.364	7.756
ATOM	1745	CD1	ILE	142	30.286	82.713	7.720
ATOM	1746	HD11	ILE	142	31.280	83.156	7.658
ATOM	1747	HD12	ILE	142	30.198	82.149	8.649
ATOM	1748	HD13	ILE	142	30.133	82.044	6.873
ATOM	1749	C	ILE	142	28.242	86.585	5.301
ATOM	1750	O	ILE	142	28.664	87.691	5.633
ATOM	1751	N	THR	143	28.009	86.290	4.014
ATOM	1752	H	THR	143	27.636	85.549	3.666

ATOM	1753	CA	THR	143	28.440	87.345	3.153
ATOM	1754	HA	THR	143	28.188	88.302	3.609
ATOM	1755	CB	THR	143	29.961	87.297	2.919
ATOM	1756	HB	THR	143	30.467	87.257	3.884
ATOM	1757	CG2	THR	143	30.336	86.072	2.099
ATOM	1758	HG21	THR	143	29.831	86.112	1.134
ATOM	1759	HG22	THR	143	31.415	86.055	1.943
ATOM	1760	HG23	THR	143	30.032	85.171	2.631
ATOM	1761	OG1	THR	143	30.376	88.469	2.207
ATOM	1762	HG1	THR	143	30.186	89.144	2.652
ATOM	1763	C	THR	143	27.701	87.193	1.926
ATOM	1764	O	THR	143	27.535	88.175	1.201
ATOM	1765	N	ARG	144	27.365	85.911	1.653
ATOM	1766	H	ARG	144	27.513	85.231	2.224
ATOM	1767	CA	ARG	144	26.754	85.663	0.401
ATOM	1768	HA	ARG	144	27.437	85.936	-0.404
ATOM	1769	CB	ARG	144	26.402	84.181	0.261
ATOM	1770	HB2	ARG	144	27.329	83.619	0.375
ATOM	1771	HB3	ARG	144	25.725	83.933	1.078
ATOM	1772	CG	ARG	144	25.750	83.820	-1.064
ATOM	1773	HG2	ARG	144	24.809	84.363	-1.147
ATOM	1774	HG3	ARG	144	26.416	84.122	-1.872
ATOM	1775	CD	ARG	144	25.483	82.327	-1.160
ATOM	1776	HD2	ARG	144	26.432	81.792	-1.124
ATOM	1777	HD3	ARG	144	24.864	82.024	-0.316
ATOM	1778	NE	ARG	144	24.793	81.973	-2.398
ATOM	1779	HE	ARG	144	24.615	82.613	-2.945
ATOM	1780	CZ	ARG	144	24.428	80.736	-2.722
ATOM	1781	NH1	ARG	144	23.804	80.509	-3.870
ATOM	1782	HH11	ARG	144	23.635	81.161	-4.404
ATOM	1783	HH12	ARG	144	23.568	79.709	-4.080
ATOM	1784	NH2	ARG	144	24.688	79.731	-1.898
ATOM	1785	HH21	ARG	144	25.093	79.878	-1.154
ATOM	1786	HH22	ARG	144	24.452	78.931	-2.108
ATOM	1787	C	ARG	144	25.566	86.558	0.375
ATOM	1788	O	ARG	144	25.397	87.325	-0.570
ATOM	1789	N	ALA	145	24.751	86.553	1.442
ATOM	1790	H	ALA	145	24.778	85.944	2.104
ATOM	1791	CA	ALA	145	23.791	87.611	1.483
ATOM	1792	HA	ALA	145	24.176	88.520	1.022
ATOM	1793	CB	ALA	145	22.518	87.200	0.759
ATOM	1794	HB1	ALA	145	22.116	86.296	1.216
ATOM	1795	HB2	ALA	145	21.783	88.001	0.832
ATOM	1796	HB3	ALA	145	22.742	87.008	-0.290
ATOM	1797	C	ALA	145	23.540	87.934	2.920
ATOM	1798	O	ALA	145	22.657	87.347	3.542
ATOM	1799	N	PRO	146	24.284	88.836	3.491
ATOM	1800	CD	PRO	146	25.712	89.243	3.038
ATOM	1801	HD2	PRO	146	25.678	90.102	2.368
ATOM	1802	HD3	PRO	146	26.213	88.414	2.539
ATOM	1803	CG	PRO	146	26.333	89.571	4.366
ATOM	1804	HG2	PRO	146	27.109	90.324	4.228

ATOM	1805	HG3	PRO	146	26.774	88.670	4.793
ATOM	1806	CB	PRO	146	25.226	90.081	5.226
ATOM	1807	HB2	PRO	146	25.042	91.122	4.962
ATOM	1808	HB3	PRO	146	25.410	90.005	6.298
ATOM	1809	CA	PRO	146	24.017	89.226	4.842
ATOM	1810	HA	PRO	146	23.938	88.331	5.459
ATOM	1811	C	PRO	146	22.745	90.000	4.925
ATOM	1812	O	PRO	146	21.914	89.711	5.785
ATOM	1813	N	ALA	147	22.586	90.998	4.036
ATOM	1814	H	ALA	147	23.245	91.140	3.440
ATOM	1815	CA	ALA	147	21.416	91.822	4.018
ATOM	1816	HA	ALA	147	21.181	92.162	5.026
ATOM	1817	CB	ALA	147	21.639	93.040	3.134
ATOM	1818	HB1	ALA	147	21.867	92.716	2.119
ATOM	1819	HB2	ALA	147	20.738	93.653	3.125
ATOM	1820	HB3	ALA	147	22.472	93.625	3.524
ATOM	1821	C	ALA	147	20.250	91.020	3.541
ATOM	1822	O	ALA	147	19.163	91.072	4.115
ATOM	1823	N	THR	148	20.476	90.233	2.473
ATOM	1824	H	THR	148	21.321	90.188	2.167
ATOM	1825	CA	THR	148	19.439	89.485	1.827
ATOM	1826	HA	THR	148	18.615	90.156	1.585
ATOM	1827	CB	THR	148	19.941	88.833	0.525
ATOM	1828	HB	THR	148	20.777	88.173	0.758
ATOM	1829	CG2	THR	148	18.828	88.029	-0.131
ATOM	1830	HG21	THR	148	17.992	88.688	-0.365
ATOM	1831	HG22	THR	148	19.200	87.575	-1.050
ATOM	1832	HG23	THR	148	18.494	87.247	0.551
ATOM	1833	OG1	THR	148	20.370	89.851	-0.388
ATOM	1834	HG1	THR	148	20.986	90.288	-0.043
ATOM	1835	C	THR	148	18.930	88.447	2.770
ATOM	1836	O	THR	148	17.728	88.199	2.856
ATOM	1837	N	TYR	149	19.850	87.830	3.528
ATOM	1838	H	TYR	149	20.705	88.103	3.464
ATOM	1839	CA	TYR	149	19.503	86.766	4.420
ATOM	1840	HA	TYR	149	19.037	85.954	3.862
ATOM	1841	CB	TYR	149	20.751	86.225	5.120
ATOM	1842	HB2	TYR	149	21.416	85.843	4.345
ATOM	1843	HB3	TYR	149	21.228	87.065	5.625
ATOM	1844	CG	TYR	149	20.465	85.130	6.123
ATOM	1845	CD1	TYR	149	20.646	83.794	5.787
ATOM	1846	HD1	TYR	149	20.999	83.547	4.786
ATOM	1847	CE1	TYR	149	20.387	82.786	6.697
ATOM	1848	HE1	TYR	149	20.534	81.742	6.420
ATOM	1849	CZ	TYR	149	19.942	83.108	7.961
ATOM	1850	OH	TYR	149	19.683	82.106	8.868
ATOM	1851	HH	TYR	149	19.424	82.441	9.582
ATOM	1852	CE2	TYR	149	19.752	84.441	8.323
ATOM	1853	HE2	TYR	149	19.400	84.703	9.321
ATOM	1854	CD2	TYR	149	20.015	85.435	7.401
ATOM	1855	HD2	TYR	149	19.870	86.481	7.671
ATOM	1856	C	TYR	149	18.505	87.283	5.400

ATOM	1857	O	TYR	149	17.485	86.644	5.653
ATOM	1858	N	GLN	150	18.757	88.481	5.953
ATOM	1859	H	GLN	150	19.480	88.951	5.696
ATOM	1860	CA	GLN	150	17.877	89.010	6.949
ATOM	1861	HA	GLN	150	17.786	88.304	7.774
ATOM	1862	CB	GLN	150	18.419	90.333	7.495
ATOM	1863	HB2	GLN	150	18.638	90.969	6.637
ATOM	1864	HB3	GLN	150	17.624	90.785	8.088
ATOM	1865	CG	GLN	150	19.667	90.187	8.349
ATOM	1866	HG2	GLN	150	19.417	89.613	9.241
ATOM	1867	HG3	GLN	150	20.423	89.652	7.774
ATOM	1868	CD	GLN	150	20.240	91.523	8.777
ATOM	1869	OE1	GLN	150	19.909	92.563	8.206
ATOM	1870	NE2	GLN	150	21.102	91.500	9.787
ATOM	1871	HE21	GLN	150	21.472	92.267	10.081
ATOM	1872	HE22	GLN	150	21.317	90.718	10.177
ATOM	1873	C	GLN	150	16.512	89.194	6.371
ATOM	1874	O	GLN	150	15.517	88.830	6.994
ATOM	1875	N	ALA	151	16.421	89.771	5.161
ATOM	1876	H	ALA	151	17.158	89.982	4.690
ATOM	1877	CA	ALA	151	15.122	90.050	4.623
ATOM	1878	HA	ALA	151	14.561	90.620	5.363
ATOM	1879	CB	ALA	151	15.241	90.883	3.356
ATOM	1880	HB1	ALA	151	15.793	90.322	2.602
ATOM	1881	HB2	ALA	151	14.245	91.115	2.978
ATOM	1882	HB3	ALA	151	15.770	91.810	3.578
ATOM	1883	C	ALA	151	14.352	88.794	4.332
ATOM	1884	O	ALA	151	13.186	88.684	4.707
ATOM	1885	N	LEU	152	14.982	87.817	3.647
ATOM	1886	H	LEU	152	15.860	87.910	3.474
ATOM	1887	CA	LEU	152	14.279	86.643	3.195
ATOM	1888	HA	LEU	152	13.336	86.933	2.732
ATOM	1889	CB	LEU	152	15.115	85.881	2.165
ATOM	1890	HB2	LEU	152	15.255	86.600	1.357
ATOM	1891	HB3	LEU	152	16.080	85.652	2.617
ATOM	1892	CG	LEU	152	14.497	84.599	1.605
ATOM	1893	HG	LEU	152	14.318	83.906	2.427
ATOM	1894	CD1	LEU	152	13.183	84.898	0.899
ATOM	1895	HD11	LEU	152	13.361	85.591	0.077
ATOM	1896	HD12	LEU	152	12.761	83.972	0.508
ATOM	1897	HD13	LEU	152	12.484	85.346	1.605
ATOM	1898	CD2	LEU	152	15.462	83.907	0.654
ATOM	1899	HD21	LEU	152	16.378	83.652	1.187
ATOM	1900	HD22	LEU	152	15.002	82.997	0.267
ATOM	1901	HD23	LEU	152	15.698	84.575	-0.175
ATOM	1902	C	LEU	152	13.900	85.693	4.294
ATOM	1903	O	LEU	152	12.751	85.258	4.367
ATOM	1904	N	TYR	153	14.844	85.360	5.196
ATOM	1905	H	TYR	153	15.635	85.789	5.191
ATOM	1906	CA	TYR	153	14.593	84.327	6.163
ATOM	1907	HA	TYR	153	14.007	83.529	5.707
ATOM	1908	CB	TYR	153	15.910	83.737	6.671

ATOM	1909	HB2	TYR	153	16.531	84.571	6.999
ATOM	1910	HB3	TYR	153	15.672	83.103	7.525
ATOM	1911	CG	TYR	153	16.659	82.928	5.637
ATOM	1912	CD1	TYR	153	17.235	83.544	4.533
ATOM	1913	HD1	TYR	153	17.139	84.624	4.424
ATOM	1914	CE1	TYR	153	17.921	82.812	3.582
ATOM	1915	HE1	TYR	153	18.368	83.308	2.721
ATOM	1916	CZ	TYR	153	18.038	81.447	3.728
ATOM	1917	OH	TYR	153	18.721	80.716	2.782
ATOM	1918	HH	TYR	153	19.002	81.226	2.191
ATOM	1919	CE2	TYR	153	17.469	80.803	4.826
ATOM	1920	HE2	TYR	153	17.557	79.723	4.947
ATOM	1921	CD2	TYR	153	16.787	81.551	5.767
ATOM	1922	HD2	TYR	153	16.337	81.061	6.631
ATOM	1923	C	TYR	153	13.789	84.830	7.315
ATOM	1924	O	TYR	153	13.992	85.943	7.799
ATOM	1925	N	GLN	154	12.814	84.004	7.757
ATOM	1926	H	GLN	154	12.703	83.213	7.343
ATOM	1927	CA	GLN	154	11.968	84.363	8.857
ATOM	1928	HA	GLN	154	12.376	85.235	9.368
ATOM	1929	CB	GLN	154	10.560	84.701	8.362
ATOM	1930	HB2	GLN	154	10.170	83.810	7.870
ATOM	1931	HB3	GLN	154	9.955	84.924	9.241
ATOM	1932	CG	GLN	154	10.507	85.876	7.399
ATOM	1933	HG2	GLN	154	11.236	85.711	6.605
ATOM	1934	HG3	GLN	154	9.507	85.931	6.968
ATOM	1935	CD	GLN	154	10.817	87.198	8.075
ATOM	1936	OE1	GLN	154	10.592	87.360	9.274
ATOM	1937	NE2	GLN	154	11.335	88.147	7.305
ATOM	1938	HE21	GLN	154	11.537	88.951	7.656
ATOM	1939	HE22	GLN	154	11.483	87.987	6.432
ATOM	1940	C	GLN	154	11.945	83.230	9.834
ATOM	1941	O	GLN	154	12.425	82.132	9.557
ATOM	1942	N	ARG	155	11.375	83.498	11.026
ATOM	1943	H	ARG	155	11.024	84.321	11.124
ATOM	1944	CA	ARG	155	11.308	82.558	12.105
ATOM	1945	HA	ARG	155	12.308	82.193	12.339
ATOM	1946	CB	ARG	155	10.723	83.218	13.355
ATOM	1947	HB2	ARG	155	9.803	83.718	13.053
ATOM	1948	HB3	ARG	155	10.488	82.420	14.059
ATOM	1949	CG	ARG	155	11.651	84.222	14.019
ATOM	1950	HG2	ARG	155	12.641	83.775	14.105
ATOM	1951	HG3	ARG	155	11.708	85.111	13.391
ATOM	1952	CD	ARG	155	11.148	84.609	15.400
ATOM	1953	HD2	ARG	155	11.047	83.709	16.007
ATOM	1954	HD3	ARG	155	11.871	85.280	15.864
ATOM	1955	NE	ARG	155	9.853	85.283	15.342
ATOM	1956	HE	ARG	155	9.151	84.790	15.415
ATOM	1957	CZ	ARG	155	9.699	86.593	15.184
ATOM	1958	NH1	ARG	155	8.482	87.118	15.142
ATOM	1959	HH11	ARG	155	7.792	86.610	15.217
ATOM	1960	HH12	ARG	155	8.382	87.966	15.041

ATOM	1961	NH2	ARG	155	10.763	87.377	15.069
ATOM	1962	HH21	ARG	155	11.552	87.037	15.097
ATOM	1963	HH22	ARG	155	10.663	88.225	14.968
ATOM	1964	C	ARG	155	10.486	81.385	11.677
ATOM	1965	O	ARG	155	10.820	80.243	11.988
ATOM	1966	N	ARG	156	9.380	81.649	10.957
ATOM	1967	H	ARG	156	9.214	82.509	10.749
ATOM	1968	CA	ARG	156	8.479	80.619	10.522
ATOM	1969	HA	ARG	156	8.171	80.013	11.374
ATOM	1970	CB	ARG	156	7.232	81.233	9.883
ATOM	1971	HB2	ARG	156	7.574	81.960	9.147
ATOM	1972	HB3	ARG	156	6.701	80.427	9.377
ATOM	1973	CG	ARG	156	6.298	81.913	10.871
ATOM	1974	HG2	ARG	156	6.149	81.248	11.722
ATOM	1975	HG3	ARG	156	6.765	82.837	11.211
ATOM	1976	CD	ARG	156	4.955	82.229	10.234
ATOM	1977	HD2	ARG	156	4.518	81.306	9.853
ATOM	1978	HD3	ARG	156	4.296	82.658	10.988
ATOM	1979	NE	ARG	156	5.083	83.177	9.130
ATOM	1980	HE	ARG	156	5.184	82.849	8.341
ATOM	1981	CZ	ARG	156	5.052	84.498	9.272
ATOM	1982	NH1	ARG	156	5.175	85.282	8.210
ATOM	1983	HH11	ARG	156	5.276	84.936	7.430
ATOM	1984	HH12	ARG	156	5.155	86.137	8.303
ATOM	1985	NH2	ARG	156	4.897	85.032	10.476
ATOM	1986	HH21	ARG	156	4.817	84.523	11.165
ATOM	1987	HH22	ARG	156	4.877	85.887	10.568
ATOM	1988	C	ARG	156	9.169	79.706	9.560
ATOM	1989	O	ARG	156	9.009	78.488	9.627
ATOM	1990	N	HIE	157	9.968	80.277	8.641
ATOM	1991	H	HIE	157	10.102	81.166	8.674
ATOM	1992	CA	HIE	157	10.601	79.494	7.621
ATOM	1993	HA	HIE	157	9.850	78.926	7.072
ATOM	1994	CB	HIE	157	11.346	80.398	6.636
ATOM	1995	HB2	HIE	157	10.654	81.106	6.181
ATOM	1996	HB3	HIE	157	12.136	80.944	7.152
ATOM	1997	CG	HIE	157	12.001	79.657	5.513
ATOM	1998	ND1	HIE	157	11.286	79.071	4.491
ATOM	1999	CE1	HIE	157	12.143	78.484	3.637
ATOM	2000	HE1	HIE	157	11.717	77.976	2.772
ATOM	2001	NE2	HIE	157	13.396	78.637	4.021
ATOM	2002	HE2	HIE	157	14.151	78.316	3.585
ATOM	2003	CD2	HIE	157	13.371	79.334	5.141
ATOM	2004	HD2	HIE	157	14.303	79.585	5.648
ATOM	2005	C	HIE	157	11.529	78.515	8.261
ATOM	2006	O	HIE	157	11.625	77.368	7.828
ATOM	2007	N	THR	158	12.244	78.946	9.315
ATOM	2008	H	THR	158	12.129	79.785	9.620
ATOM	2009	CA	THR	158	13.186	78.075	9.953
ATOM	2010	HA	THR	158	13.898	77.715	9.210
ATOM	2011	CB	THR	158	13.963	78.802	11.067
ATOM	2012	HB	THR	158	13.254	79.189	11.799

ATOM	2013	CG2	THR	158	14.929	77.848	11.752
ATOM	2014	HG21	THR	158	15.638	77.461	11.020
ATOM	2015	HG22	THR	158	15.469	78.378	12.536
ATOM	2016	HG23	THR	158	14.373	77.020	12.191
ATOM	2017	OG1	THR	158	14.712	79.885	10.502
ATOM	2018	HG1	THR	158	14.192	80.418	10.134
ATOM	2019	C	THR	158	12.463	76.888	10.511
ATOM	2020	O	THR	158	12.904	75.753	10.338
ATOM	2021	N	ALA	159	11.311	77.115	11.168
ATOM	2022	H	ALA	159	10.996	77.958	11.194
ATOM	2023	CA	ALA	159	10.588	76.057	11.817
ATOM	2024	HA	ALA	159	11.235	75.557	12.537
ATOM	2025	CB	ALA	159	9.380	76.615	12.554
ATOM	2026	HB1	ALA	159	8.718	77.111	11.844
ATOM	2027	HB2	ALA	159	8.844	75.801	13.042
ATOM	2028	HB3	ALA	159	9.711	77.333	13.304
ATOM	2029	C	ALA	159	10.168	75.033	10.812
ATOM	2030	O	ALA	159	10.243	73.833	11.072
ATOM	2031	N	GLY	160	9.719	75.479	9.627
ATOM	2032	H	GLY	160	9.710	76.362	9.451
ATOM	2033	CA	GLY	160	9.254	74.547	8.643
ATOM	2034	HA2	GLY	160	8.440	73.945	9.047
ATOM	2035	HA3	GLY	160	8.909	75.076	7.754
ATOM	2036	C	GLY	160	10.383	73.645	8.264
ATOM	2037	O	GLY	160	10.195	72.444	8.077
ATOM	2038	N	MET	161	11.593	74.214	8.133
ATOM	2039	H	MET	161	11.674	75.092	8.315
ATOM	2040	CA	MET	161	12.737	73.460	7.716
ATOM	2041	HA	MET	161	12.517	72.940	6.784
ATOM	2042	CB	MET	161	13.934	74.385	7.488
ATOM	2043	HB2	MET	161	14.049	74.989	8.388
ATOM	2044	HB3	MET	161	14.811	73.750	7.362
ATOM	2045	CG	MET	161	13.793	75.298	6.281
ATOM	2046	HG2	MET	161	13.766	74.676	5.386
ATOM	2047	HG3	MET	161	12.852	75.840	6.374
ATOM	2048	SD	MET	161	15.147	76.480	6.140
ATOM	2049	CE	MET	161	16.504	75.392	5.713
ATOM	2050	HE1	MET	161	16.277	74.876	4.780
ATOM	2051	HE2	MET	161	17.415	75.977	5.592
ATOM	2052	HE3	MET	161	16.647	74.659	6.507
ATOM	2053	C	MET	161	13.046	72.421	8.752
ATOM	2054	O	MET	161	13.382	71.286	8.417
ATOM	2055	N	LEU	162	12.925	72.775	10.047
ATOM	2056	H	LEU	162	12.672	73.611	10.266
ATOM	2057	CA	LEU	162	13.201	71.815	11.079
ATOM	2058	HA	LEU	162	14.203	71.408	10.946
ATOM	2059	CB	LEU	162	13.119	72.472	12.458
ATOM	2060	HB2	LEU	162	12.153	72.977	12.451
ATOM	2061	HB3	LEU	162	13.109	71.681	13.208
ATOM	2062	CG	LEU	162	14.219	73.481	12.795
ATOM	2063	HG	LEU	162	14.280	74.217	11.993
ATOM	2064	CD1	LEU	162	13.918	74.187	14.108

ATOM	2065	HD11	LEU	162	13.857	73.452	14.911
ATOM	2066	HD12	LEU	162	14.713	74.900	14.328
ATOM	2067	HD13	LEU	162	12.968	74.716	14.027
ATOM	2068	CD2	LEU	162	15.575	72.795	12.862
ATOM	2069	HD21	LEU	162	15.800	72.338	11.898
ATOM	2070	HD22	LEU	162	16.343	73.530	13.103
ATOM	2071	HD23	LEU	162	15.555	72.025	13.633
ATOM	2072	C	LEU	162	12.233	70.684	10.960
ATOM	2073	O	LEU	162	12.606	69.523	11.117
ATOM	2074	N	ALA	163	10.956	70.997	10.675
ATOM	2075	H	ALA	163	10.741	71.860	10.535
ATOM	2076	CA	ALA	163	9.944	69.983	10.593
ATOM	2077	HA	ALA	163	9.915	69.402	11.515
ATOM	2078	CB	ALA	163	8.578	70.614	10.374
ATOM	2079	HB1	ALA	163	8.588	71.192	9.450
ATOM	2080	HB2	ALA	163	7.823	69.831	10.304
ATOM	2081	HB3	ALA	163	8.343	71.271	11.211
ATOM	2082	C	ALA	163	10.284	69.036	9.487
ATOM	2083	O	ALA	163	10.140	67.823	9.633
ATOM	2084	N	LEU	164	10.756	69.569	8.346
ATOM	2085	H	LEU	164	10.882	70.459	8.297
ATOM	2086	CA	LEU	164	11.058	68.739	7.217
ATOM	2087	HA	LEU	164	10.185	68.141	6.955
ATOM	2088	CB	LEU	164	11.444	69.596	6.010
ATOM	2089	HB2	LEU	164	12.215	70.262	6.398
ATOM	2090	HB3	LEU	164	11.878	68.940	5.255
ATOM	2091	CG	LEU	164	10.323	70.425	5.381
ATOM	2092	HG	LEU	164	9.837	71.010	6.162
ATOM	2093	CD1	LEU	164	10.877	71.360	4.317
ATOM	2094	HD11	LEU	164	11.363	70.775	3.536
ATOM	2095	HD12	LEU	164	10.063	71.940	3.883
ATOM	2096	HD13	LEU	164	11.603	72.036	4.769
ATOM	2097	CD2	LEU	164	9.254	69.521	4.786
ATOM	2098	HD21	LEU	164	8.830	68.894	5.570
ATOM	2099	HD22	LEU	164	8.466	70.131	4.344
ATOM	2100	HD23	LEU	164	9.698	68.889	4.017
ATOM	2101	C	LEU	164	12.158	67.796	7.582
ATOM	2102	O	LEU	164	12.111	66.615	7.239
ATOM	2103	N	SER	165	13.180	68.293	8.301
ATOM	2104	H	SER	165	13.158	69.152	8.568
ATOM	2105	CA	SER	165	14.301	67.464	8.643
ATOM	2106	HA	SER	165	14.751	67.059	7.737
ATOM	2107	CB	SER	165	15.359	68.276	9.393
ATOM	2108	HB2	SER	165	15.701	69.085	8.747
ATOM	2109	HB3	SER	165	14.905	68.696	10.291
ATOM	2110	OG	SER	165	16.462	67.464	9.757
ATOM	2111	HG	SER	165	17.021	67.925	10.162
ATOM	2112	C	SER	165	13.814	66.312	9.465
ATOM	2113	O	SER	165	14.146	65.160	9.192
ATOM	2114	N	TRP	166	12.990	66.596	10.491
ATOM	2115	H	TRP	166	12.748	67.452	10.628
ATOM	2116	CA	TRP	166	12.499	65.563	11.359

ATOM	2117	HA	TRP	166	13.334	64.982	11.751
ATOM	2118	CB	TRP	166	11.731	66.171	12.535
ATOM	2119	HB2	TRP	166	12.380	66.835	13.107
ATOM	2120	HB3	TRP	166	10.869	66.731	12.172
ATOM	2121	CG	TRP	166	11.205	65.152	13.498
ATOM	2122	CD1	TRP	166	11.859	64.628	14.576
ATOM	2123	HD1	TRP	166	12.872	64.987	14.758
ATOM	2124	NE1	TRP	166	11.056	63.721	15.224
ATOM	2125	HE1	TRP	166	11.298	63.238	15.989
ATOM	2126	CE2	TRP	166	9.855	63.646	14.563
ATOM	2127	CZ2	TRP	166	8.728	62.872	14.837
ATOM	2128	HZ2	TRP	166	8.753	62.206	15.699
ATOM	2129	CH2	TRP	166	7.655	62.999	14.001
ATOM	2130	HH2	TRP	166	6.755	62.412	14.182
ATOM	2131	CZ3	TRP	166	7.686	63.873	12.909
ATOM	2132	HZ3	TRP	166	6.824	63.965	12.248
ATOM	2133	CE3	TRP	166	8.800	64.642	12.633
ATOM	2134	HE3	TRP	166	8.770	65.307	11.770
ATOM	2135	CD2	TRP	166	9.913	64.533	13.472
ATOM	2136	C	TRP	166	11.627	64.618	10.591
ATOM	2137	O	TRP	166	11.688	63.408	10.800
ATOM	2138	N	ALA	167	10.772	65.141	9.693
ATOM	2139	H	ALA	167	10.763	66.029	9.546
ATOM	2140	CA	ALA	167	9.874	64.284	8.969
ATOM	2141	HA	ALA	167	9.290	63.687	9.669
ATOM	2142	CB	ALA	167	8.919	65.111	8.122
ATOM	2143	HB1	ALA	167	9.488	65.708	7.410
ATOM	2144	HB2	ALA	167	8.244	64.447	7.582
ATOM	2145	HB3	ALA	167	8.339	65.771	8.767
ATOM	2146	C	ALA	167	10.653	63.331	8.113
ATOM	2147	O	ALA	167	10.363	62.136	8.084
ATOM	2148	N	LEU	168	11.671	63.841	7.394
ATOM	2149	H	LEU	168	11.849	64.719	7.483
ATOM	2150	CA	LEU	168	12.463	63.034	6.508
ATOM	2151	HA	LEU	168	11.812	62.480	5.832
ATOM	2152	CB	LEU	168	13.398	63.913	5.675
ATOM	2153	HB2	LEU	168	13.912	64.524	6.417
ATOM	2154	HB3	LEU	168	14.118	63.263	5.178
ATOM	2155	CG	LEU	168	12.732	64.821	4.640
ATOM	2156	HG	LEU	168	11.956	65.407	5.132
ATOM	2157	CD1	LEU	168	13.751	65.758	4.011
ATOM	2158	HD11	LEU	168	14.527	65.173	3.518
ATOM	2159	HD12	LEU	168	13.256	66.395	3.278
ATOM	2160	HD13	LEU	168	14.201	66.379	4.786
ATOM	2161	CD2	LEU	168	12.039	63.996	3.567
ATOM	2162	HD21	LEU	168	11.276	63.368	4.027
ATOM	2163	HD22	LEU	168	11.572	64.662	2.841
ATOM	2164	HD23	LEU	168	12.772	63.366	3.063
ATOM	2165	C	LEU	168	13.225	62.044	7.332
ATOM	2166	O	LEU	168	13.307	60.865	6.991
ATOM	2167	N	ALA	169	13.777	62.502	8.469
ATOM	2168	H	ALA	169	13.631	63.360	8.700

ATOM	2169	CA	ALA	169	14.581	61.662	9.306
ATOM	2170	HA	ALA	169	15.419	61.244	8.748
ATOM	2171	CB	ALA	169	15.128	62.455	10.483
ATOM	2172	HB1	ALA	169	14.300	62.873	11.056
ATOM	2173	HB2	ALA	169	15.717	61.798	11.122
ATOM	2174	HB3	ALA	169	15.759	63.264	10.115
ATOM	2175	C	ALA	169	13.745	60.510	9.760
ATOM	2176	O	ALA	169	14.210	59.372	9.800
ATOM	2177	N	LEU	170	12.480	60.787	10.114
ATOM	2178	H	LEU	170	12.199	61.638	10.035
ATOM	2179	CA	LEU	170	11.585	59.779	10.604
ATOM	2180	HA	LEU	170	12.037	59.265	11.452
ATOM	2181	CB	LEU	170	10.267	60.408	11.059
ATOM	2182	HB2	LEU	170	10.567	61.114	11.833
ATOM	2183	HB3	LEU	170	9.845	60.953	10.215
ATOM	2184	CG	LEU	170	9.217	59.449	11.623
ATOM	2185	HG	LEU	170	8.961	58.716	10.858
ATOM	2186	CD1	LEU	170	9.751	58.731	12.853
ATOM	2187	HD11	LEU	170	10.007	59.463	13.619
ATOM	2188	HD12	LEU	170	8.989	58.054	13.239
ATOM	2189	HD13	LEU	170	10.640	58.161	12.584
ATOM	2190	CD2	LEU	170	7.934	60.194	11.961
ATOM	2191	HD21	LEU	170	7.536	60.661	11.060
ATOM	2192	HD22	LEU	170	7.201	59.493	12.361
ATOM	2193	HD23	LEU	170	8.145	60.962	12.705
ATOM	2194	C	LEU	170	11.353	58.760	9.533
ATOM	2195	O	LEU	170	11.365	57.559	9.802
ATOM	2196	N	GLY	171	11.133	59.201	8.282
ATOM	2197	H	GLY	171	11.175	60.077	8.080
ATOM	2198	CA	GLY	171	10.827	58.244	7.261
ATOM	2199	HA2	GLY	171	9.953	57.661	7.553
ATOM	2200	HA3	GLY	171	10.623	58.759	6.322
ATOM	2201	C	GLY	171	11.987	57.319	7.066
ATOM	2202	O	GLY	171	11.826	56.100	7.045
ATOM	2203	N	LEU	172	13.199	57.884	6.935
ATOM	2204	H	LEU	172	13.268	58.779	7.004
ATOM	2205	CA	LEU	172	14.367	57.093	6.690
ATOM	2206	HA	LEU	172	14.192	56.428	5.844
ATOM	2207	CB	LEU	172	15.564	57.990	6.367
ATOM	2208	HB2	LEU	172	15.588	58.703	7.191
ATOM	2209	HB3	LEU	172	16.463	57.375	6.394
ATOM	2210	CG	LEU	172	15.504	58.748	5.039
ATOM	2211	HG	LEU	172	14.562	59.293	4.986
ATOM	2212	CD1	LEU	172	16.663	59.727	4.927
ATOM	2213	HD11	LEU	172	17.606	59.182	4.980
ATOM	2214	HD12	LEU	172	16.602	60.256	3.976
ATOM	2215	HD13	LEU	172	16.613	60.445	5.745
ATOM	2216	CD2	LEU	172	15.514	57.779	3.867
ATOM	2217	HD21	LEU	172	14.650	57.118	3.934
ATOM	2218	HD22	LEU	172	15.471	58.338	2.932
ATOM	2219	HD23	LEU	172	16.428	57.186	3.893
ATOM	2220	C	LEU	172	14.661	56.231	7.871

ATOM	2221	O	LEU	172	15.145	55.119	7.701
ATOM	2222	N	VAL	173	14.469	56.746	9.099
ATOM	2223	H	VAL	173	14.165	57.589	9.178
ATOM	2224	CA	VAL	173	14.743	55.968	10.276
ATOM	2225	HA	VAL	173	15.676	55.413	10.180
ATOM	2226	CB	VAL	173	14.825	56.855	11.532
ATOM	2227	HB	VAL	173	13.928	57.472	11.590
ATOM	2228	CG1	VAL	173	14.931	55.997	12.784
ATOM	2229	HG11	VAL	173	15.828	55.380	12.727
ATOM	2230	HG12	VAL	173	14.988	56.640	13.662
ATOM	2231	HG13	VAL	173	14.053	55.355	12.861
ATOM	2232	CG2	VAL	173	16.006	57.809	11.435
ATOM	2233	HG21	VAL	173	15.888	58.447	10.559
ATOM	2234	HG22	VAL	173	16.048	58.428	12.331
ATOM	2235	HG23	VAL	173	16.929	57.237	11.345
ATOM	2236	C	VAL	173	13.728	54.892	10.510
ATOM	2237	O	VAL	173	14.088	53.739	10.726
ATOM	2238	N	LEU	174	12.429	55.241	10.498
ATOM	2239	H	LEU	174	12.221	56.088	10.277
ATOM	2240	CA	LEU	174	11.387	54.308	10.824
ATOM	2241	HA	LEU	174	11.657	53.752	11.722
ATOM	2242	CB	LEU	174	10.070	55.044	11.082
ATOM	2243	HB2	LEU	174	10.307	55.729	11.896
ATOM	2244	HB3	LEU	174	9.822	55.615	10.187
ATOM	2245	CG	LEU	174	8.875	54.175	11.479
ATOM	2246	HG	LEU	174	8.665	53.473	10.672
ATOM	2247	CD1	LEU	174	9.172	53.404	12.756
ATOM	2248	HD11	LEU	174	9.381	54.105	13.564
ATOM	2249	HD12	LEU	174	8.309	52.792	13.021
ATOM	2250	HD13	LEU	174	10.038	52.761	12.600
ATOM	2251	CD2	LEU	174	7.626	55.026	11.653
ATOM	2252	HD21	LEU	174	7.397	55.532	10.715
ATOM	2253	HD22	LEU	174	6.788	54.389	11.935
ATOM	2254	HD23	LEU	174	7.797	55.768	12.433
ATOM	2255	C	LEU	174	11.166	53.277	9.767
ATOM	2256	O	LEU	174	10.967	52.115	10.090
ATOM	2257	N	LEU	175	11.209	53.633	8.474
ATOM	2258	H	LEU	175	11.504	54.439	8.204
ATOM	2259	CA	LEU	175	10.761	52.670	7.506
ATOM	2260	HA	LEU	175	9.737	52.370	7.730
ATOM	2261	CB	LEU	175	10.798	53.268	6.098
ATOM	2262	HB2	LEU	175	11.803	53.682	6.015
ATOM	2263	HB3	LEU	175	10.681	52.454	5.382
ATOM	2264	CG	LEU	175	9.770	54.361	5.799
ATOM	2265	HG	LEU	175	9.823	55.119	6.581
ATOM	2266	CD1	LEU	175	10.047	55.005	4.449
ATOM	2267	HD11	LEU	175	9.993	54.248	3.667
ATOM	2268	HD12	LEU	175	9.305	55.779	4.256
ATOM	2269	HD13	LEU	175	11.042	55.450	4.455
ATOM	2270	CD2	LEU	175	8.358	53.796	5.836
ATOM	2271	HD21	LEU	175	8.157	53.384	6.825
ATOM	2272	HD22	LEU	175	7.643	54.590	5.621

ATOM	2273	HD23	LEU	175	8.262	53.008	5.089
ATOM	2274	C	LEU	175	11.566	51.403	7.520
ATOM	2275	O	LEU	175	10.991	50.318	7.570
ATOM	2276	N	LEU	176	12.907	51.457	7.530
ATOM	2277	H	LEU	176	13.395	52.211	7.583
ATOM	2278	CA	LEU	176	13.561	50.184	7.448
ATOM	2279	HA	LEU	176	13.143	49.607	6.623
ATOM	2280	CB	LEU	176	15.061	50.367	7.206
ATOM	2281	HB2	LEU	176	15.371	51.058	7.990
ATOM	2282	HB3	LEU	176	15.547	49.403	7.358
ATOM	2283	CG	LEU	176	15.463	50.931	5.842
ATOM	2284	HG	LEU	176	14.908	51.852	5.663
ATOM	2285	CD1	LEU	176	16.955	51.223	5.800
ATOM	2286	HD11	LEU	176	17.511	50.303	5.978
ATOM	2287	HD12	LEU	176	17.220	51.623	4.821
ATOM	2288	HD13	LEU	176	17.205	51.953	6.570
ATOM	2289	CD2	LEU	176	15.081	49.969	4.728
ATOM	2290	HD21	LEU	176	14.003	49.810	4.739
ATOM	2291	HD22	LEU	176	15.376	50.390	3.767
ATOM	2292	HD23	LEU	176	15.590	49.017	4.879
ATOM	2293	C	LEU	176	13.349	49.357	8.686
ATOM	2294	O	LEU	176	13.259	48.137	8.564
ATOM	2295	N	PRO	177	13.295	49.900	9.876
ATOM	2296	CD	PRO	177	13.692	51.348	10.320
ATOM	2297	HD2	PRO	177	12.865	52.042	10.171
ATOM	2298	HD3	PRO	177	14.565	51.699	9.769
ATOM	2299	CG	PRO	177	13.990	51.109	11.774
ATOM	2300	HG2	PRO	177	13.793	52.020	12.340
ATOM	2301	HG3	PRO	177	15.037	50.830	11.889
ATOM	2302	CB	PRO	177	13.092	49.997	12.202
ATOM	2303	HB2	PRO	177	12.081	50.334	12.432
ATOM	2304	HB3	PRO	177	13.512	49.490	13.071
ATOM	2305	CA	PRO	177	13.063	49.045	11.005
ATOM	2306	HA	PRO	177	13.896	48.343	11.025
ATOM	2307	C	PRO	177	11.767	48.284	11.011
ATOM	2308	O	PRO	177	11.837	47.075	11.216
ATOM	2309	N	PRO	178	10.617	48.879	10.832
ATOM	2310	CD	PRO	178	10.251	50.353	10.975
ATOM	2311	HD2	PRO	178	10.429	50.885	10.040
ATOM	2312	HD3	PRO	178	10.831	50.817	11.773
ATOM	2313	CG	PRO	178	8.789	50.253	11.313
ATOM	2314	HG2	PRO	178	8.271	51.142	10.952
ATOM	2315	HG3	PRO	178	8.670	50.177	12.394
ATOM	2316	CB	PRO	178	8.292	49.020	10.635
ATOM	2317	HB2	PRO	178	8.027	49.187	9.591
ATOM	2318	HB3	PRO	178	7.429	48.622	11.170
ATOM	2319	CA	PRO	178	9.460	48.036	10.724
ATOM	2320	HA	PRO	178	9.429	47.452	11.644
ATOM	2321	C	PRO	178	9.414	47.113	9.547
ATOM	2322	O	PRO	178	8.840	46.035	9.676
ATOM	2323	N	TRP	179	9.987	47.503	8.396
ATOM	2324	H	TRP	179	10.349	48.326	8.357

ATOM	2325	CA	TRP	179	10.031	46.644	7.245
ATOM	2326	HA	TRP	179	9.043	46.222	7.061
ATOM	2327	CB	TRP	179	10.465	47.430	6.006
ATOM	2328	HB2	TRP	179	11.374	47.994	6.218
ATOM	2329	HB3	TRP	179	10.646	46.751	5.173
ATOM	2330	CG	TRP	179	9.445	48.422	5.537
ATOM	2331	CD1	TRP	179	9.492	49.778	5.685
ATOM	2332	HD1	TRP	179	10.362	50.187	6.198
ATOM	2333	NE1	TRP	179	8.376	50.355	5.127
ATOM	2334	HE1	TRP	179	8.196	51.274	5.111
ATOM	2335	CE2	TRP	179	7.583	49.364	4.604
ATOM	2336	CZ2	TRP	179	6.359	49.451	3.943
ATOM	2337	HZ2	TRP	179	5.920	50.437	3.793
ATOM	2338	CH2	TRP	179	5.782	48.286	3.522
ATOM	2339	HH2	TRP	179	4.825	48.312	3.000
ATOM	2340	CZ3	TRP	179	6.398	47.050	3.748
ATOM	2341	HZ3	TRP	179	5.928	46.127	3.408
ATOM	2342	CE3	TRP	179	7.611	46.958	4.403
ATOM	2343	HE3	TRP	179	8.047	45.970	4.552
ATOM	2344	CD2	TRP	179	8.224	48.135	4.844
ATOM	2345	C	TRP	179	10.960	45.495	7.490
ATOM	2346	O	TRP	179	10.840	44.446	6.859
ATOM	2347	N	ALA	180	11.911	45.657	8.427
ATOM	2348	H	ALA	180	11.900	46.416	8.910
ATOM	2349	CA	ALA	180	12.921	44.667	8.668
ATOM	2350	HA	ALA	180	13.486	44.989	9.543
ATOM	2351	CB	ALA	180	12.282	43.320	8.970
ATOM	2352	HB1	ALA	180	11.720	42.980	8.100
ATOM	2353	HB2	ALA	180	13.059	42.593	9.206
ATOM	2354	HB3	ALA	180	11.608	43.420	9.821
ATOM	2355	C	ALA	180	13.891	44.502	7.515
ATOM	2356	O	ALA	180	14.320	43.368	7.301
ATOM	2357	N	PRO	181	14.303	45.488	6.731
ATOM	2358	CD	PRO	181	13.599	46.780	6.435
ATOM	2359	HD2	PRO	181	13.943	47.567	7.106
ATOM	2360	HD3	PRO	181	12.520	46.661	6.537
ATOM	2361	CG	PRO	181	14.018	47.013	5.010
ATOM	2362	HG2	PRO	181	14.032	48.084	4.806
ATOM	2363	HG3	PRO	181	13.310	46.525	4.339
ATOM	2364	CB	PRO	181	15.378	46.415	4.875
ATOM	2365	HB2	PRO	181	16.101	47.144	5.240
ATOM	2366	HB3	PRO	181	15.649	46.109	3.865
ATOM	2367	CA	PRO	181	15.355	45.197	5.800
ATOM	2368	HA	PRO	181	15.112	44.281	5.262
ATOM	2369	C	PRO	181	16.654	45.021	6.524
ATOM	2370	O	PRO	181	17.604	44.519	5.926
ATOM	2371	N	ARG	182	16.717	45.461	7.794
ATOM	2372	H	ARG	182	15.954	45.818	8.111
ATOM	2373	CA	ARG	182	17.884	45.394	8.634
ATOM	2374	HA	ARG	182	18.746	45.796	8.101
ATOM	2375	CB	ARG	182	17.673	46.211	9.910
ATOM	2376	HB2	ARG	182	17.412	47.224	9.603

ATOM	2377	HB3	ARG	182	16.832	45.765	10.442
ATOM	2378	CG	ARG	182	18.885	46.256	10.826
ATOM	2379	HG2	ARG	182	19.116	45.240	11.146
ATOM	2380	HG3	ARG	182	19.728	46.661	10.266
ATOM	2381	CD	ARG	182	18.624	47.124	12.046
ATOM	2382	HD2	ARG	182	19.541	47.200	12.631
ATOM	2383	HD3	ARG	182	18.321	48.118	11.716
ATOM	2384	NE	ARG	182	17.571	46.572	12.895
ATOM	2385	HE	ARG	182	16.783	46.907	12.811
ATOM	2386	CZ	ARG	182	17.758	45.596	13.778
ATOM	2387	NH1	ARG	182	16.741	45.157	14.506
ATOM	2388	HH11	ARG	182	15.960	45.505	14.408
ATOM	2389	HH12	ARG	182	16.861	44.526	15.077
ATOM	2390	NH2	ARG	182	18.961	45.060	13.929
ATOM	2391	HH21	ARG	182	19.621	45.344	13.456
ATOM	2392	HH22	ARG	182	19.082	44.428	14.500
ATOM	2393	C	ARG	182	18.278	43.992	9.022
ATOM	2394	O	ARG	182	19.474	43.760	9.198
ATOM	2395	N	PRO	183	17.400	43.027	9.165
ATOM	2396	CD	PRO	183	15.898	43.094	9.023
ATOM	2397	HD2	PRO	183	15.606	42.971	7.980
ATOM	2398	HD3	PRO	183	15.520	44.046	9.396
ATOM	2399	CG	PRO	183	15.477	41.934	9.881
ATOM	2400	HG2	PRO	183	14.532	41.534	9.513
ATOM	2401	HG3	PRO	183	15.352	42.270	10.910
ATOM	2402	CB	PRO	183	16.572	40.926	9.779
ATOM	2403	HB2	PRO	183	16.485	40.269	8.914
ATOM	2404	HB3	PRO	183	16.592	40.326	10.689
ATOM	2405	CA	PRO	183	17.851	41.758	9.674
ATOM	2406	HA	PRO	183	18.275	41.975	10.655
ATOM	2407	C	PRO	183	18.846	41.002	8.859
ATOM	2408	O	PRO	183	18.887	41.159	7.640
ATOM	2409	N	GLY	184	19.663	40.177	9.553
ATOM	2410	H	GLY	184	19.536	40.142	10.443
ATOM	2411	CA	GLY	184	20.690	39.382	8.943
ATOM	2412	HA2	GLY	184	20.815	39.656	7.895
ATOM	2413	HA3	GLY	184	21.637	39.512	9.467
ATOM	2414	C	GLY	184	20.281	37.942	9.025
ATOM	2415	O	GLY	184	19.455	37.559	9.850
ATOM	2416	N	ALA	185	20.844	37.128	8.109
ATOM	2417	H	ALA	185	21.417	37.568	7.572
ATOM	2418	CA	ALA	185	20.626	35.717	7.927
ATOM	2419	HA	ALA	185	19.547	35.567	7.896
ATOM	2420	CB	ALA	185	21.219	35.255	6.605
ATOM	2421	HB1	ALA	185	22.300	35.391	6.624
ATOM	2422	HB2	ALA	185	20.988	34.201	6.451
ATOM	2423	HB3	ALA	185	20.794	35.842	5.791
ATOM	2424	C	ALA	185	21.190	34.863	9.028
ATOM	2425	O	ALA	185	20.604	33.836	9.367
ATOM	2426	N	ALA	186	22.347	35.248	9.604
ATOM	2427	H	ALA	186	22.664	36.064	9.397
ATOM	2428	CA	ALA	186	23.072	34.405	10.522

ATOM	2429	HA	ALA	186	23.455	33.543	9.976
ATOM	2430	CB	ALA	186	24.247	35.162	11.122
ATOM	2431	HB1	ALA	186	23.879	36.023	11.680
ATOM	2432	HB2	ALA	186	24.799	34.504	11.793
ATOM	2433	HB3	ALA	186	24.907	35.502	10.324
ATOM	2434	C	ALA	186	22.185	33.893	11.611
ATOM	2435	O	ALA	186	21.250	34.548	12.068
ATOM	2436	N	PRO	187	22.472	32.673	11.994
ATOM	2437	CD	PRO	187	23.408	31.688	11.250
ATOM	2438	HD2	PRO	187	24.445	31.837	11.550
ATOM	2439	HD3	PRO	187	23.321	31.811	10.170
ATOM	2440	CG	PRO	187	22.854	30.373	11.723
ATOM	2441	HG2	PRO	187	23.647	29.625	11.728
ATOM	2442	HG3	PRO	187	22.057	30.052	11.052
ATOM	2443	CB	PRO	187	22.327	30.617	13.097
ATOM	2444	HB2	PRO	187	23.143	30.596	13.820
ATOM	2445	HB3	PRO	187	21.563	29.898	13.392
ATOM	2446	CA	PRO	187	21.725	32.022	13.033
ATOM	2447	HA	PRO	187	20.679	32.002	12.728
ATOM	2448	C	PRO	187	21.845	32.709	14.353
ATOM	2449	O	PRO	187	20.857	32.731	15.086
ATOM	2450	N	PRO	188	22.987	33.234	14.701
ATOM	2451	CD	PRO	188	24.348	32.957	14.086
ATOM	2452	HD2	PRO	188	24.544	33.642	13.261
ATOM	2453	HD3	PRO	188	24.406	31.930	13.727
ATOM	2454	CG	PRO	188	25.245	33.203	15.266
ATOM	2455	HG2	PRO	188	26.219	33.545	14.916
ATOM	2456	HG3	PRO	188	25.367	32.277	15.828
ATOM	2457	CB	PRO	188	24.567	34.243	16.093
ATOM	2458	HB2	PRO	188	24.797	35.198	15.620
ATOM	2459	HB3	PRO	188	24.835	34.287	17.149
ATOM	2460	CA	PRO	188	23.075	33.936	15.946
ATOM	2461	HA	PRO	188	22.702	33.312	16.758
ATOM	2462	C	PRO	188	22.243	35.159	15.841
ATOM	2463	O	PRO	188	21.632	35.571	16.827
ATOM	2464	N	ARG	189	22.206	35.751	14.636
ATOM	2465	H	ARG	189	22.672	35.415	13.943
ATOM	2466	CA	ARG	189	21.420	36.920	14.462
ATOM	2467	HA	ARG	189	21.695	37.665	15.209
ATOM	2468	CB	ARG	189	21.647	37.516	13.071
ATOM	2469	HB2	ARG	189	21.521	36.708	12.351
ATOM	2470	HB3	ARG	189	20.873	38.267	12.913
ATOM	2471	CG	ARG	189	23.014	38.152	12.884
ATOM	2472	HG2	ARG	189	23.103	38.993	13.572
ATOM	2473	HG3	ARG	189	23.777	37.410	13.118
ATOM	2474	CD	ARG	189	23.205	38.642	11.457
ATOM	2475	HD2	ARG	189	23.112	37.796	10.776
ATOM	2476	HD3	ARG	189	22.434	39.378	11.228
ATOM	2477	NE	ARG	189	24.514	39.259	11.261
ATOM	2478	HE	ARG	189	24.988	39.406	11.965
ATOM	2479	CZ	ARG	189	25.008	39.601	10.076
ATOM	2480	NH1	ARG	189	26.209	40.158	9.994

ATOM	2481	HH11	ARG	189	26.668	40.297	10.707
ATOM	2482	HH12	ARG	189	26.529	40.379	9.227
ATOM	2483	NH2	ARG	189	24.301	39.386	8.975
ATOM	2484	HH21	ARG	189	23.522	39.026	9.028
ATOM	2485	HH22	ARG	189	24.621	39.608	8.208
ATOM	2486	C	ARG	189	20.022	36.500	14.687
ATOM	2487	O	ARG	189	19.356	37.106	15.506
ATOM	2488	N	VAL	190	19.595	35.380	14.066
ATOM	2489	H	VAL	190	20.233	34.921	13.628
ATOM	2490	CA	VAL	190	18.235	34.901	14.067
ATOM	2491	HA	VAL	190	17.545	35.657	13.692
ATOM	2492	CB	VAL	190	18.084	33.629	13.212
ATOM	2493	HB	VAL	190	18.840	32.905	13.517
ATOM	2494	CG1	VAL	190	16.700	33.025	13.396
ATOM	2495	HG11	VAL	190	15.944	33.748	13.091
ATOM	2496	HG12	VAL	190	16.611	32.127	12.785
ATOM	2497	HG13	VAL	190	16.552	32.766	14.445
ATOM	2498	CG2	VAL	190	18.343	33.940	11.745
ATOM	2499	HG21	VAL	190	19.355	34.327	11.628
ATOM	2500	HG22	VAL	190	18.232	33.030	11.155
ATOM	2501	HG23	VAL	190	17.627	34.686	11.399
ATOM	2502	C	VAL	190	17.778	34.640	15.464
ATOM	2503	O	VAL	190	16.609	34.848	15.788
ATOM	2504	N	HIE	191	18.684	34.165	16.333
ATOM	2505	H	HIE	191	19.532	34.027	16.065
ATOM	2506	CA	HIE	191	18.304	33.879	17.682
ATOM	2507	HA	HIE	191	17.490	33.154	17.690
ATOM	2508	CB	HIE	191	19.486	33.296	18.460
ATOM	2509	HB2	HIE	191	20.374	33.908	18.304
ATOM	2510	HB3	HIE	191	19.254	33.259	19.524
ATOM	2511	CG	HIE	191	19.849	31.902	18.052
ATOM	2512	ND1	HIE	191	20.950	31.243	18.553
ATOM	2513	CE1	HIE	191	21.014	30.017	18.004
ATOM	2514	HE1	HIE	191	21.841	29.376	18.309
ATOM	2515	NE2	HIE	191	20.021	29.807	17.162
ATOM	2516	HE2	HIE	191	19.866	29.033	16.670
ATOM	2517	CD2	HIE	191	19.289	30.905	17.150
ATOM	2518	HD2	HIE	191	18.403	30.962	16.518
ATOM	2519	C	HIE	191	17.811	35.166	18.268
ATOM	2520	O	HIE	191	16.865	35.180	19.054
ATOM	2521	N	TYR	192	18.445	36.287	17.876
ATOM	2522	H	TYR	192	19.117	36.174	17.289
ATOM	2523	CA	TYR	192	18.107	37.608	18.338
ATOM	2524	HA	TYR	192	18.190	37.652	19.424
ATOM	2525	CB	TYR	192	19.055	38.646	17.733
ATOM	2526	HB2	TYR	192	19.110	38.450	16.662
ATOM	2527	HB3	TYR	192	18.608	39.626	17.900
ATOM	2528	CG	TYR	192	20.447	38.620	18.322
ATOM	2529	CD1	TYR	192	21.437	37.817	17.770
ATOM	2530	HD1	TYR	192	21.193	37.203	16.903
ATOM	2531	CE1	TYR	192	22.713	37.787	18.301
ATOM	2532	HE1	TYR	192	23.480	37.151	17.859

ATOM	2533	CZ	TYR	192	23.012	38.566	19.398
ATOM	2534	OH	TYR	192	24.282	38.538	19.928
ATOM	2535	HH	TYR	192	24.320	39.051	20.579
ATOM	2536	CE2	TYR	192	22.037	39.382	19.971
ATOM	2537	HE2	TYR	192	22.266	40.001	20.838
ATOM	2538	CD2	TYR	192	20.767	39.399	19.426
ATOM	2539	HD2	TYR	192	19.995	40.032	19.863
ATOM	2540	C	TYR	192	16.681	37.952	18.001
ATOM	2541	O	TYR	192	15.999	38.439	18.902
ATOM	2542	N	PRO	193	16.142	37.768	16.810
ATOM	2543	CD	PRO	193	16.851	37.640	15.470
ATOM	2544	HD2	PRO	193	17.015	36.592	15.218
ATOM	2545	HD3	PRO	193	17.807	38.163	15.487
ATOM	2546	CG	PRO	193	15.851	38.302	14.564
ATOM	2547	HG2	PRO	193	15.925	37.872	13.565
ATOM	2548	HG3	PRO	193	16.058	39.371	14.514
ATOM	2549	CB	PRO	193	14.511	38.046	15.170
ATOM	2550	HB2	PRO	193	14.156	37.058	14.879
ATOM	2551	HB3	PRO	193	13.768	38.794	14.895
ATOM	2552	CA	PRO	193	14.759	38.086	16.679
ATOM	2553	HA	PRO	193	14.604	39.084	17.090
ATOM	2554	C	PRO	193	13.882	37.121	17.383
ATOM	2555	O	PRO	193	12.768	37.494	17.743
ATOM	2556	N	ALA	194	14.345	35.875	17.564
ATOM	2557	H	ALA	194	15.167	35.655	17.271
ATOM	2558	CA	ALA	194	13.535	34.898	18.220
ATOM	2559	HA	ALA	194	12.550	34.828	17.759
ATOM	2560	CB	ALA	194	14.199	33.531	18.158
ATOM	2561	HB1	ALA	194	15.183	33.583	18.624
ATOM	2562	HB2	ALA	194	13.584	32.803	18.688
ATOM	2563	HB3	ALA	194	14.307	33.226	17.117
ATOM	2564	C	ALA	194	13.320	35.346	19.626
ATOM	2565	O	ALA	194	12.221	35.222	20.165
ATOM	2566	N	LEU	195	14.375	35.901	20.252
ATOM	2567	H	LEU	195	15.140	36.044	19.800
ATOM	2568	CA	LEU	195	14.281	36.264	21.634
ATOM	2569	HA	LEU	195	13.529	35.648	22.127
ATOM	2570	CB	LEU	195	15.624	36.052	22.336
ATOM	2571	HB2	LEU	195	16.313	36.689	21.781
ATOM	2572	HB3	LEU	195	15.533	36.420	23.358
ATOM	2573	CG	LEU	195	16.159	34.619	22.356
ATOM	2574	HG	LEU	195	16.221	34.251	21.332
ATOM	2575	CD1	LEU	195	17.538	34.569	22.997
ATOM	2576	HD11	LEU	195	17.477	34.936	24.021
ATOM	2577	HD12	LEU	195	17.900	33.541	23.001
ATOM	2578	HD13	LEU	195	18.226	35.194	22.428
ATOM	2579	CD2	LEU	195	15.200	33.696	23.092
ATOM	2580	HD21	LEU	195	14.232	33.703	22.591
ATOM	2581	HD22	LEU	195	15.600	32.682	23.094
ATOM	2582	HD23	LEU	195	15.080	34.041	24.119
ATOM	2583	C	LEU	195	13.839	37.685	21.782
ATOM	2584	O	LEU	195	14.385	38.603	21.173

ATOM	2585	N	LEU	196	12.804	37.881	22.619
ATOM	2586	H	LEU	196	12.422	37.143	22.965
ATOM	2587	CA	LEU	196	12.304	39.178	22.969
ATOM	2588	HA	LEU	196	12.139	39.766	22.066
ATOM	2589	CB	LEU	196	10.978	39.056	23.722
ATOM	2590	HB2	LEU	196	11.199	38.358	24.530
ATOM	2591	HB3	LEU	196	10.737	40.033	24.142
ATOM	2592	CG	LEU	196	9.785	38.540	22.915
ATOM	2593	HG	LEU	196	10.060	37.596	22.444
ATOM	2594	CD1	LEU	196	8.579	38.324	23.816
ATOM	2595	HD11	LEU	196	8.303	39.267	24.287
ATOM	2596	HD12	LEU	196	7.742	37.957	23.222
ATOM	2597	HD13	LEU	196	8.826	37.593	24.585
ATOM	2598	CD2	LEU	196	9.439	39.504	21.790
ATOM	2599	HD21	LEU	196	10.296	39.608	21.124
ATOM	2600	HD22	LEU	196	8.588	39.118	21.229
ATOM	2601	HD23	LEU	196	9.185	40.477	22.210
ATOM	2602	C	LEU	196	13.372	39.834	23.787
ATOM	2603	O	LEU	196	13.521	41.055	23.787
ATOM	2604	N	ALA	197	14.120	39.001	24.535
ATOM	2605	H	ALA	197	13.926	38.128	24.435
ATOM	2606	CA	ALA	197	15.157	39.405	25.437
ATOM	2607	HA	ALA	197	14.742	40.119	26.148
ATOM	2608	CB	ALA	197	15.687	38.205	26.207
ATOM	2609	HB1	ALA	197	16.114	37.485	25.509
ATOM	2610	HB2	ALA	197	16.456	38.532	26.907
ATOM	2611	HB3	ALA	197	14.871	37.737	26.758
ATOM	2612	C	ALA	197	16.283	40.086	24.712
ATOM	2613	O	ALA	197	16.875	41.021	25.247
ATOM	2614	N	ALA	198	16.633	39.636	23.491
ATOM	2615	H	ALA	198	16.149	38.990	23.092
ATOM	2616	CA	ALA	198	17.783	40.190	22.824
ATOM	2617	HA	ALA	198	18.514	40.484	23.577
ATOM	2618	CB	ALA	198	18.417	39.153	21.910
ATOM	2619	HB1	ALA	198	17.700	38.856	21.145
ATOM	2620	HB2	ALA	198	19.300	39.579	21.434
ATOM	2621	HB3	ALA	198	18.706	38.280	22.495
ATOM	2622	C	ALA	198	17.425	41.416	22.035
ATOM	2623	O	ALA	198	16.577	41.386	21.146
ATOM	2624	N	ALA	199	18.005	42.547	22.483
ATOM	2625	H	ALA	199	18.438	42.338	23.244
ATOM	2626	CA	ALA	199	18.036	43.899	21.985
ATOM	2627	HA	ALA	199	17.038	44.075	21.583
ATOM	2628	CB	ALA	199	18.282	44.878	23.123
ATOM	2629	HB1	ALA	199	19.281	44.720	23.529
ATOM	2630	HB2	ALA	199	18.200	45.899	22.749
ATOM	2631	HB3	ALA	199	17.542	44.718	23.907
ATOM	2632	C	ALA	199	19.051	44.196	20.916
ATOM	2633	O	ALA	199	18.941	45.233	20.269
ATOM	2634	N	ALA	200	20.136	43.401	20.794
ATOM	2635	H	ALA	200	20.157	42.628	21.254
ATOM	2636	CA	ALA	200	21.249	43.769	19.946

ATOM	2637	HA	ALA	200	21.714	44.656	20.375
ATOM	2638	CB	ALA	200	22.279	42.650	19.908
ATOM	2639	HB1	ALA	200	21.830	41.757	19.473
ATOM	2640	HB2	ALA	200	23.131	42.960	19.303
ATOM	2641	HB3	ALA	200	22.615	42.430	20.921
ATOM	2642	C	ALA	200	20.827	44.099	18.549
ATOM	2643	O	ALA	200	20.062	43.376	17.915
ATOM	2644	N	LEU	201	21.364	45.219	18.017
ATOM	2645	H	LEU	201	21.944	45.699	18.510
ATOM	2646	CA	LEU	201	21.025	45.647	16.692
ATOM	2647	HA	LEU	201	20.009	45.334	16.452
ATOM	2648	CB	LEU	201	21.106	47.171	16.584
ATOM	2649	HB2	LEU	201	22.148	47.395	16.813
ATOM	2650	HB3	LEU	201	20.894	47.447	15.551
ATOM	2651	CG	LEU	201	20.195	47.967	17.521
ATOM	2652	HG	LEU	201	20.404	47.673	18.550
ATOM	2653	CD1	LEU	201	20.434	49.460	17.363
ATOM	2654	HD11	LEU	201	20.225	49.755	16.335
ATOM	2655	HD12	LEU	201	19.776	50.007	18.038
ATOM	2656	HD13	LEU	201	21.472	49.690	17.603
ATOM	2657	CD2	LEU	201	18.734	47.635	17.259
ATOM	2658	HD21	LEU	201	18.567	46.571	17.426
ATOM	2659	HD22	LEU	201	18.103	48.211	17.935
ATOM	2660	HD23	LEU	201	18.483	47.885	16.228
ATOM	2661	C	LEU	201	21.966	44.964	15.754
ATOM	2662	O	LEU	201	22.956	45.546	15.314
ATOM	2663	N	LEU	202	21.662	43.700	15.405
ATOM	2664	H	LEU	202	20.929	43.307	15.749
ATOM	2665	CA	LEU	202	22.497	42.981	14.492
ATOM	2666	HA	LEU	202	23.516	43.365	14.542
ATOM	2667	CB	LEU	202	22.518	41.492	14.844
ATOM	2668	HB2	LEU	202	21.489	41.276	15.132
ATOM	2669	HB3	LEU	202	22.766	40.936	13.940
ATOM	2670	CG	LEU	202	23.462	41.076	15.974
ATOM	2671	HG	LEU	202	24.476	41.383	15.718
ATOM	2672	CD1	LEU	202	23.051	41.728	17.285
ATOM	2673	HD11	LEU	202	22.037	41.421	17.542
ATOM	2674	HD12	LEU	202	23.735	41.419	18.075
ATOM	2675	HD13	LEU	202	23.086	42.812	17.179
ATOM	2676	CD2	LEU	202	23.489	39.562	16.122
ATOM	2677	HD21	LEU	202	23.834	39.112	15.191
ATOM	2678	HD22	LEU	202	24.166	39.287	16.931
ATOM	2679	HD23	LEU	202	22.486	39.201	16.350
ATOM	2680	C	LEU	202	21.929	43.257	13.144
ATOM	2681	O	LEU	202	20.737	43.056	12.919
ATOM	2682	N	ALA	203	22.767	43.722	12.200
ATOM	2683	H	ALA	203	23.651	43.812	12.342
ATOM	2684	CA	ALA	203	22.207	44.079	10.934
ATOM	2685	HA	ALA	203	21.207	43.656	10.837
ATOM	2686	CB	ALA	203	22.109	45.591	10.805
ATOM	2687	HB1	ALA	203	23.104	46.029	10.891
ATOM	2688	HB2	ALA	203	21.683	45.847	9.835

ATOM	2689	HB3	ALA	203	21.470	45.983	11.597
ATOM	2690	C	ALA	203	23.036	43.505	9.838
ATOM	2691	O	ALA	203	24.186	43.114	10.038
ATOM	2692	N	GLN	204	22.425	43.407	8.641
ATOM	2693	H	GLN	204	21.558	43.641	8.582
ATOM	2694	CA	GLN	204	23.122	42.943	7.480
ATOM	2695	HA	GLN	204	23.786	42.122	7.752
ATOM	2696	CB	GLN	204	22.133	42.443	6.425
ATOM	2697	HB2	GLN	204	22.711	41.911	5.669
ATOM	2698	HB3	GLN	204	21.458	41.746	6.922
ATOM	2699	CG	GLN	204	21.324	43.545	5.761
ATOM	2700	HG2	GLN	204	20.743	44.062	6.525
ATOM	2701	HG3	GLN	204	22.010	44.248	5.289
ATOM	2702	CD	GLN	204	20.373	43.014	4.706
ATOM	2703	OE1	GLN	204	19.975	41.850	4.745
ATOM	2704	NE2	GLN	204	20.006	43.869	3.758
ATOM	2705	HE21	GLN	204	19.443	43.605	3.108
ATOM	2706	HE22	GLN	204	20.320	44.712	3.767
ATOM	2707	C	GLN	204	23.946	44.088	6.992
ATOM	2708	O	GLN	204	23.683	45.244	7.319
ATOM	2709	N	THR	205	24.981	43.773	6.191
ATOM	2710	H	THR	205	25.076	42.906	5.970
ATOM	2711	CA	THR	205	25.909	44.745	5.693
ATOM	2712	HA	THR	205	26.320	45.308	6.531
ATOM	2713	CB	THR	205	27.070	44.079	4.931
ATOM	2714	HB	THR	205	26.663	43.492	4.108
ATOM	2715	CG2	THR	205	28.020	45.131	4.381
ATOM	2716	HG21	THR	205	28.428	45.718	5.204
ATOM	2717	HG22	THR	205	28.834	44.642	3.846
ATOM	2718	HG23	THR	205	27.480	45.788	3.699
ATOM	2719	OG1	THR	205	27.799	43.222	5.819
ATOM	2720	HG1	THR	205	28.102	43.671	6.448
ATOM	2721	C	THR	205	25.219	45.725	4.799
ATOM	2722	O	THR	205	25.535	46.914	4.823
ATOM	2723	N	ALA	206	24.258	45.264	3.979
ATOM	2724	H	ALA	206	23.991	44.405	4.014
ATOM	2725	CA	ALA	206	23.657	46.164	3.039
ATOM	2726	HA	ALA	206	24.428	46.599	2.403
ATOM	2727	CB	ALA	206	22.661	45.424	2.159
ATOM	2728	HB1	ALA	206	21.878	44.990	2.781
ATOM	2729	HB2	ALA	206	22.216	46.120	1.448
ATOM	2730	HB3	ALA	206	23.174	44.630	1.616
ATOM	2731	C	ALA	206	22.988	47.292	3.762
ATOM	2732	O	ALA	206	23.177	48.454	3.404
ATOM	2733	N	LEU	207	22.191	46.993	4.806
ATOM	2734	H	LEU	207	22.085	46.144	5.084
ATOM	2735	CA	LEU	207	21.505	48.059	5.477
ATOM	2736	HA	LEU	207	21.021	48.705	4.745
ATOM	2737	CB	LEU	207	20.436	47.500	6.418
ATOM	2738	HB2	LEU	207	19.790	46.915	5.763
ATOM	2739	HB3	LEU	207	20.927	46.837	7.130
ATOM	2740	CG	LEU	207	19.595	48.529	7.176

ATOM	2741	HG	LEU	207	20.254	49.129	7.804
ATOM	2742	CD1	LEU	207	18.854	49.437	6.207
ATOM	2743	HD11	LEU	207	18.195	48.838	5.579
ATOM	2744	HD12	LEU	207	18.262	50.161	6.767
ATOM	2745	HD13	LEU	207	19.573	49.964	5.580
ATOM	2746	CD2	LEU	207	18.613	47.837	8.110
ATOM	2747	HD21	LEU	207	19.162	47.231	8.831
ATOM	2748	HD22	LEU	207	18.025	48.586	8.639
ATOM	2749	HD23	LEU	207	17.948	47.197	7.530
ATOM	2750	C	LEU	207	22.488	48.901	6.230
ATOM	2751	O	LEU	207	22.367	50.124	6.252
ATOM	2752	N	LEU	208	23.495	48.272	6.863
ATOM	2753	H	LEU	208	23.603	47.385	6.755
ATOM	2754	CA	LEU	208	24.395	49.007	7.707
ATOM	2755	HA	LEU	208	23.832	49.533	8.477
ATOM	2756	CB	LEU	208	25.386	48.060	8.387
ATOM	2757	HB2	LEU	208	25.787	47.466	7.566
ATOM	2758	HB3	LEU	208	26.183	48.662	8.823
ATOM	2759	CG	LEU	208	24.809	47.129	9.455
ATOM	2760	HG	LEU	208	23.945	46.609	9.040
ATOM	2761	CD1	LEU	208	25.848	46.111	9.899
ATOM	2762	HD11	LEU	208	26.712	46.630	10.314
ATOM	2763	HD12	LEU	208	25.417	45.459	10.659
ATOM	2764	HD13	LEU	208	26.161	45.513	9.043
ATOM	2765	CD2	LEU	208	24.306	47.926	10.649
ATOM	2766	HD21	LEU	208	23.526	48.615	10.324
ATOM	2767	HD22	LEU	208	23.900	47.244	11.396
ATOM	2768	HD23	LEU	208	25.131	48.491	11.083
ATOM	2769	C	LEU	208	25.110	50.037	6.887
ATOM	2770	O	LEU	208	25.234	51.187	7.307
ATOM	2771	N	LEU	209	25.619	49.655	5.701
ATOM	2772	H	LEU	209	25.508	48.809	5.415
ATOM	2773	CA	LEU	209	26.339	50.597	4.892
ATOM	2774	HA	LEU	209	27.101	51.093	5.493
ATOM	2775	CB	LEU	209	27.024	49.886	3.723
ATOM	2776	HB2	LEU	209	27.697	49.177	4.205
ATOM	2777	HB3	LEU	209	26.261	49.342	3.167
ATOM	2778	CG	LEU	209	27.820	50.772	2.763
ATOM	2779	HG	LEU	209	27.148	51.508	2.323
ATOM	2780	CD1	LEU	209	28.943	51.487	3.499
ATOM	2781	HD11	LEU	209	29.616	50.751	3.939
ATOM	2782	HD12	LEU	209	29.497	52.112	2.799
ATOM	2783	HD13	LEU	209	28.522	52.111	4.287
ATOM	2784	CD2	LEU	209	28.381	49.951	1.613
ATOM	2785	HD21	LEU	209	27.562	49.486	1.065
ATOM	2786	HD22	LEU	209	28.943	50.601	0.942
ATOM	2787	HD23	LEU	209	29.040	49.177	2.006
ATOM	2788	C	LEU	209	25.413	51.662	4.391
ATOM	2789	O	LEU	209	25.730	52.849	4.456
ATOM	2790	N	HIE	210	24.230	51.260	3.887
ATOM	2791	H	HIE	210	24.021	50.386	3.934
ATOM	2792	CA	HIE	210	23.311	52.187	3.286

ATOM	2793	HA	HIE	210	23.823	52.770	2.521
ATOM	2794	CB	HIE	210	22.146	51.440	2.634
ATOM	2795	HB2	HIE	210	22.520	50.753	1.875
ATOM	2796	HB3	HIE	210	21.590	50.882	3.387
ATOM	2797	CG	HIE	210	21.160	52.336	1.951
ATOM	2798	ND1	HIE	210	21.444	52.994	0.774
ATOM	2799	CE1	HIE	210	20.371	53.718	0.407
ATOM	2800	HE1	HIE	210	20.449	54.296	-0.514
ATOM	2801	NE2	HIE	210	19.379	53.588	1.266
ATOM	2802	HE2	HIE	210	18.545	53.996	1.214
ATOM	2803	CD2	HIE	210	19.796	52.770	2.213
ATOM	2804	HD2	HIE	210	19.135	52.512	3.040
ATOM	2805	C	HIE	210	22.793	53.167	4.295
ATOM	2806	O	HIE	210	22.767	54.370	4.039
ATOM	2807	N	CYS	211	22.367	52.680	5.475
ATOM	2808	H	CYS	211	22.449	51.797	5.630
ATOM	2809	CA	CYS	211	21.791	53.536	6.477
ATOM	2810	HA	CYS	211	20.963	54.101	6.049
ATOM	2811	CB	CYS	211	21.263	52.708	7.650
ATOM	2812	HB2	CYS	211	20.550	51.963	7.296
ATOM	2813	HB3	CYS	211	22.086	52.209	8.161
ATOM	2814	SG	CYS	211	20.398	53.669	8.913
ATOM	2815	HG	CYS	211	20.117	52.638	9.704
ATOM	2816	C	CYS	211	22.813	54.524	6.939
ATOM	2817	O	CYS	211	22.520	55.708	7.103
ATOM	2818	N	TYR	212	24.052	54.051	7.144
ATOM	2819	H	TYR	212	24.207	53.184	6.959
ATOM	2820	CA	TYR	212	25.110	54.877	7.639
ATOM	2821	HA	TYR	212	24.810	55.337	8.581
ATOM	2822	CB	TYR	212	26.371	54.045	7.881
ATOM	2823	HB2	TYR	212	26.536	53.441	6.989
ATOM	2824	HB3	TYR	212	27.199	54.743	8.005
ATOM	2825	CG	TYR	212	26.287	53.143	9.091
ATOM	2826	CD1	TYR	212	26.960	51.928	9.121
ATOM	2827	HD1	TYR	212	27.552	51.633	8.254
ATOM	2828	CE1	TYR	212	26.889	51.098	10.224
ATOM	2829	HE1	TYR	212	27.423	50.148	10.234
ATOM	2830	CZ	TYR	212	26.138	51.477	11.315
ATOM	2831	OH	TYR	212	26.066	50.651	12.413
ATOM	2832	HH	TYR	212	25.583	51.002	12.990
ATOM	2833	CE2	TYR	212	25.452	52.691	11.311
ATOM	2834	HE2	TYR	212	24.856	52.998	12.170
ATOM	2835	CD2	TYR	212	25.535	53.509	10.200
ATOM	2836	HD2	TYR	212	25.004	54.461	10.183
ATOM	2837	C	TYR	212	25.386	55.985	6.677
ATOM	2838	O	TYR	212	25.584	57.128	7.086
ATOM	2839	N	LEU	213	25.430	55.670	5.371
ATOM	2840	H	LEU	213	25.270	54.824	5.109
ATOM	2841	CA	LEU	213	25.730	56.677	4.398
ATOM	2842	HA	LEU	213	26.648	57.196	4.674
ATOM	2843	CB	LEU	213	25.921	56.047	3.017
ATOM	2844	HB2	LEU	213	26.757	55.362	3.154

ATOM	2845	HB3	LEU	213	25.022	55.479	2.779
ATOM	2846	CG	LEU	213	26.234	57.011	1.870
ATOM	2847	HG	LEU	213	25.414	57.722	1.773
ATOM	2848	CD1	LEU	213	27.528	57.764	2.139
ATOM	2849	HD11	LEU	213	28.349	57.054	2.236
ATOM	2850	HD12	LEU	213	27.732	58.444	1.312
ATOM	2851	HD13	LEU	213	27.431	58.335	3.062
ATOM	2852	CD2	LEU	213	26.323	56.263	0.549
ATOM	2853	HD21	LEU	213	25.372	55.770	0.345
ATOM	2854	HD22	LEU	213	26.546	56.966	-0.253
ATOM	2855	HD23	LEU	213	27.114	55.516	0.607
ATOM	2856	C	LEU	213	24.635	57.699	4.369
ATOM	2857	O	LEU	213	24.895	58.901	4.397
ATOM	2858	N	GLY	214	23.370	57.238	4.328
ATOM	2859	H	GLY	214	23.234	56.350	4.386
ATOM	2860	CA	GLY	214	22.254	58.127	4.195
ATOM	2861	HA2	GLY	214	22.404	58.745	3.310
ATOM	2862	HA3	GLY	214	21.348	57.534	4.074
ATOM	2863	C	GLY	214	22.099	59.014	5.386
ATOM	2864	O	GLY	214	21.860	60.211	5.230
ATOM	2865	N	ILE	215	22.197	58.483	6.621
ATOM	2866	H	ILE	215	22.399	57.635	6.846
ATOM	2867	CA	ILE	215	21.933	59.449	7.641
ATOM	2868	HA	ILE	215	21.710	60.431	7.224
ATOM	2869	CB	ILE	215	20.775	59.004	8.553
ATOM	2870	HB	ILE	215	20.671	59.719	9.369
ATOM	2871	CG2	ILE	215	19.474	58.938	7.768
ATOM	2872	HG21	ILE	215	19.577	58.222	6.952
ATOM	2873	HG22	ILE	215	18.666	58.622	8.428
ATOM	2874	HG23	ILE	215	19.245	59.922	7.360
ATOM	2875	CG1	ILE	215	21.106	57.669	9.223
ATOM	2876	HG12	ILE	215	21.080	56.903	8.448
ATOM	2877	HG13	ILE	215	22.118	57.748	9.621
ATOM	2878	CD1	ILE	215	20.154	57.292	10.337
ATOM	2879	HD11	ILE	215	19.142	57.212	9.939
ATOM	2880	HD12	ILE	215	20.453	56.334	10.763
ATOM	2881	HD13	ILE	215	20.180	58.058	11.112
ATOM	2882	C	ILE	215	23.141	59.733	8.482
ATOM	2883	O	ILE	215	23.029	60.047	9.668
ATOM	2884	N	VAL	216	24.338	59.749	7.875
ATOM	2885	H	VAL	216	24.434	59.619	6.990
ATOM	2886	CA	VAL	216	25.489	59.984	8.693
ATOM	2887	HA	VAL	216	25.292	60.740	9.453
ATOM	2888	CB	VAL	216	25.958	58.694	9.392
ATOM	2889	HB	VAL	216	26.111	57.919	8.641
ATOM	2890	CG1	VAL	216	27.259	58.937	10.141
ATOM	2891	HG11	VAL	216	27.107	59.711	10.893
ATOM	2892	HG12	VAL	216	27.576	58.015	10.629
ATOM	2893	HG13	VAL	216	28.028	59.259	9.439
ATOM	2894	CG2	VAL	216	24.883	58.180	10.337
ATOM	2895	HG21	VAL	216	23.975	57.967	9.773
ATOM	2896	HG22	VAL	216	25.231	57.268	10.822

ATOM	2897	HG23	VAL	216	24.672	58.936	11.093
ATOM	2898	C	VAL	216	26.573	60.558	7.841
ATOM	2899	O	VAL	216	26.821	61.762	7.848
ATOM	2900	N	ARG	217	27.258	59.684	7.082
ATOM	2901	H	ARG	217	26.970	58.832	7.050
ATOM	2902	CA	ARG	217	28.417	60.077	6.336
ATOM	2903	HA	ARG	217	29.177	60.467	7.013
ATOM	2904	CB	ARG	217	29.001	58.880	5.583
ATOM	2905	HB2	ARG	217	28.180	58.408	5.044
ATOM	2906	HB3	ARG	217	29.726	59.272	4.869
ATOM	2907	CG	ARG	217	29.676	57.853	6.478
ATOM	2908	HG2	ARG	217	30.333	58.376	7.173
ATOM	2909	HG3	ARG	217	28.907	57.320	7.037
ATOM	2910	CD	ARG	217	30.489	56.860	5.663
ATOM	2911	HD2	ARG	217	31.223	57.405	5.070
ATOM	2912	HD3	ARG	217	31.004	56.180	6.342
ATOM	2913	NE	ARG	217	29.649	56.074	4.762
ATOM	2914	HE	ARG	217	29.541	56.376	3.963
ATOM	2915	CZ	ARG	217	29.051	54.936	5.100
ATOM	2916	NH1	ARG	217	28.306	54.290	4.214
ATOM	2917	HH11	ARG	217	28.210	54.607	3.421
ATOM	2918	HH12	ARG	217	27.920	53.554	4.433
ATOM	2919	NH2	ARG	217	29.200	54.447	6.324
ATOM	2920	HH21	ARG	217	29.684	54.867	6.899
ATOM	2921	HH22	ARG	217	28.814	53.711	6.543
ATOM	2922	C	ARG	217	28.107	61.180	5.371
ATOM	2923	O	ARG	217	28.875	62.135	5.273
ATOM	2924	N	ARG	218	26.990	61.093	4.626
ATOM	2925	H	ARG	218	26.418	60.408	4.743
ATOM	2926	CA	ARG	218	26.712	62.102	3.639
ATOM	2927	HA	ARG	218	27.570	62.216	2.976
ATOM	2928	CB	ARG	218	25.494	61.710	2.800
ATOM	2929	HB2	ARG	218	25.712	60.741	2.350
ATOM	2930	HB3	ARG	218	24.651	61.611	3.484
ATOM	2931	CG	ARG	218	25.145	62.708	1.708
ATOM	2932	HG2	ARG	218	25.018	63.690	2.163
ATOM	2933	HG3	ARG	218	25.968	62.743	0.994
ATOM	2934	CD	ARG	218	23.866	62.314	0.988
ATOM	2935	HD2	ARG	218	23.689	63.011	0.169
ATOM	2936	HD3	ARG	218	23.981	61.306	0.589
ATOM	2937	NE	ARG	218	22.708	62.336	1.879
ATOM	2938	HE	ARG	218	22.423	61.577	2.170
ATOM	2939	CZ	ARG	218	22.078	63.443	2.259
ATOM	2940	NH1	ARG	218	21.034	63.365	3.072
ATOM	2941	HH11	ARG	218	20.763	62.599	3.353
ATOM	2942	HH12	ARG	218	20.626	64.082	3.318
ATOM	2943	NH2	ARG	218	22.495	64.624	1.826
ATOM	2944	HH21	ARG	218	23.173	64.674	1.299
ATOM	2945	HH22	ARG	218	22.088	65.341	2.072
ATOM	2946	C	ARG	218	26.486	63.441	4.279
ATOM	2947	O	ARG	218	27.061	64.438	3.847
ATOM	2948	N	VAL	219	25.656	63.503	5.339

ATOM	2949	H	VAL	219	25.278	62.747	5.649
ATOM	2950	CA	VAL	219	25.372	64.760	5.973
ATOM	2951	HA	VAL	219	25.070	65.516	5.248
ATOM	2952	CB	VAL	219	24.261	64.621	7.030
ATOM	2953	HB	VAL	219	24.511	63.799	7.701
ATOM	2954	CG1	VAL	219	24.125	65.906	7.832
ATOM	2955	HG11	VAL	219	23.875	66.728	7.162
ATOM	2956	HG12	VAL	219	23.335	65.790	8.574
ATOM	2957	HG13	VAL	219	25.067	66.122	8.336
ATOM	2958	CG2	VAL	219	22.940	64.257	6.370
ATOM	2959	HG21	VAL	219	23.046	63.309	5.842
ATOM	2960	HG22	VAL	219	22.166	64.163	7.132
ATOM	2961	HG23	VAL	219	22.659	65.037	5.663
ATOM	2962	C	VAL	219	26.630	65.287	6.583
ATOM	2963	O	VAL	219	26.900	66.486	6.527
ATOM	2964	N	ARG	220	27.436	64.393	7.187
ATOM	2965	H	ARG	220	27.209	63.522	7.182
ATOM	2966	CA	ARG	220	28.645	64.816	7.833
ATOM	2967	HA	ARG	220	28.418	65.580	8.577
ATOM	2968	CB	ARG	220	29.319	63.635	8.535
ATOM	2969	HB2	ARG	220	28.583	63.200	9.211
ATOM	2970	HB3	ARG	220	29.578	62.908	7.765
ATOM	2971	CG	ARG	220	30.567	64.009	9.318
ATOM	2972	HG2	ARG	220	31.302	64.419	8.625
ATOM	2973	HG3	ARG	220	30.301	64.767	10.055
ATOM	2974	CD	ARG	220	31.157	62.800	10.026
ATOM	2975	HD2	ARG	220	30.401	62.370	10.683
ATOM	2976	HD3	ARG	220	31.452	62.062	9.281
ATOM	2977	NE	ARG	220	32.328	63.152	10.826
ATOM	2978	HE	ARG	220	32.197	63.319	11.660
ATOM	2979	CZ	ARG	220	33.565	63.228	10.346
ATOM	2980	NH1	ARG	220	34.568	63.555	11.148
ATOM	2981	HH11	ARG	220	34.419	63.719	11.979
ATOM	2982	HH12	ARG	220	35.369	63.605	10.838
ATOM	2983	NH2	ARG	220	33.795	62.976	9.065
ATOM	2984	HH21	ARG	220	33.145	62.764	8.544
ATOM	2985	HH22	ARG	220	34.596	63.026	8.754
ATOM	2986	C	ARG	220	29.568	65.434	6.829
ATOM	2987	O	ARG	220	30.181	66.464	7.103
ATOM	2988	N	VAL	221	29.695	64.816	5.640
ATOM	2989	H	VAL	221	29.201	64.080	5.484
ATOM	2990	CA	VAL	221	30.593	65.305	4.632
ATOM	2991	HA	VAL	221	31.594	65.467	5.032
ATOM	2992	CB	VAL	221	30.690	64.332	3.442
ATOM	2993	HB	VAL	221	29.684	64.088	3.101
ATOM	2994	CG1	VAL	221	31.473	64.962	2.301
ATOM	2995	HG11	VAL	221	32.479	65.206	2.641
ATOM	2996	HG12	VAL	221	31.531	64.260	1.469
ATOM	2997	HG13	VAL	221	30.970	65.872	1.974
ATOM	2998	CG2	VAL	221	31.332	63.023	3.875
ATOM	2999	HG21	VAL	221	30.730	62.564	4.659
ATOM	3000	HG22	VAL	221	31.392	62.348	3.022

ATOM	3001	HG23	VAL	221	32.335	63.218	4.255
ATOM	3002	C	VAL	221	30.146	66.657	4.170
ATOM	3003	O	VAL	221	30.961	67.566	4.013
ATOM	3004	N	SER	222	28.831	66.823	3.937
ATOM	3005	H	SER	222	28.277	66.133	4.101
ATOM	3006	CA	SER	222	28.306	68.062	3.439
ATOM	3007	HA	SER	222	28.846	68.357	2.539
ATOM	3008	CB	SER	222	26.823	67.915	3.093
ATOM	3009	HB2	SER	222	26.297	67.535	3.968
ATOM	3010	HB3	SER	222	26.427	68.896	2.829
ATOM	3011	OG	SER	222	26.638	67.024	2.007
ATOM	3012	HG	SER	222	26.940	66.277	2.208
ATOM	3013	C	SER	222	28.516	69.133	4.461
ATOM	3014	O	SER	222	28.880	70.258	4.122
ATOM	3015	N	VAL	223	28.298	68.804	5.748
ATOM	3016	H	VAL	223	28.064	67.959	5.950
ATOM	3017	CA	VAL	223	28.433	69.778	6.790
ATOM	3018	HA	VAL	223	27.842	70.670	6.582
ATOM	3019	CB	VAL	223	28.001	69.209	8.154
ATOM	3020	HB	VAL	223	28.513	68.261	8.321
ATOM	3021	CG1	VAL	223	28.353	70.178	9.272
ATOM	3022	HG11	VAL	223	27.841	71.126	9.106
ATOM	3023	HG12	VAL	223	28.040	69.759	10.228
ATOM	3024	HG13	VAL	223	29.430	70.344	9.284
ATOM	3025	CG2	VAL	223	26.510	68.907	8.157
ATOM	3026	HG21	VAL	223	26.285	68.175	7.381
ATOM	3027	HG22	VAL	223	26.222	68.506	9.129
ATOM	3028	HG23	VAL	223	25.953	69.824	7.963
ATOM	3029	C	VAL	223	29.852	70.246	6.828
ATOM	3030	O	VAL	223	30.112	71.443	6.917
ATOM	3031	N	LYS	224	30.810	69.304	6.755
ATOM	3032	H	LYS	224	30.554	68.447	6.654
ATOM	3033	CA	LYS	224	32.205	69.631	6.834
ATOM	3034	HA	LYS	224	32.398	70.207	7.739
ATOM	3035	CB	LYS	224	33.052	68.358	6.875
ATOM	3036	HB2	LYS	224	32.722	67.781	7.739
ATOM	3037	HB3	LYS	224	32.838	67.801	5.963
ATOM	3038	CG	LYS	224	34.548	68.610	6.976
ATOM	3039	HG2	LYS	224	34.867	69.165	6.094
ATOM	3040	HG3	LYS	224	34.740	69.206	7.868
ATOM	3041	CD	LYS	224	35.324	67.306	7.061
ATOM	3042	HD2	LYS	224	35.006	66.770	7.956
ATOM	3043	HD3	LYS	224	35.095	66.708	6.179
ATOM	3044	CE	LYS	224	36.821	67.558	7.127
ATOM	3045	HE2	LYS	224	37.026	68.166	8.008
ATOM	3046	HE3	LYS	224	35.756	67.332	7.081
ATOM	3047	NZ	LYS	224	37.594	66.288	7.211
ATOM	3048	HZ1	LYS	224	38.464	66.472	7.249
ATOM	3049	HZ2	LYS	224	37.427	65.790	6.492
ATOM	3050	HZ3	LYS	224	37.354	65.841	7.943
ATOM	3051	C	LYS	224	32.601	70.492	5.670
ATOM	3052	O	LYS	224	33.277	71.504	5.849

ATOM	3053	N	ARG	225	32.181	70.130	4.441
ATOM	3054	H	ARG	225	31.638	69.420	4.339
ATOM	3055	CA	ARG	225	32.604	70.883	3.292
ATOM	3056	HA	ARG	225	33.692	70.941	3.269
ATOM	3057	CB	ARG	225	32.123	70.211	2.004
ATOM	3058	HB2	ARG	225	32.522	69.196	2.003
ATOM	3059	HB3	ARG	225	31.035	70.173	2.049
ATOM	3060	CG	ARG	225	32.553	70.925	0.733
ATOM	3061	HG2	ARG	225	32.224	71.963	0.790
ATOM	3062	HG3	ARG	225	33.641	70.892	0.668
ATOM	3063	CD	ARG	225	31.952	70.270	-0.499
ATOM	3064	HD2	ARG	225	32.340	70.767	-1.388
ATOM	3065	HD3	ARG	225	32.236	69.218	-0.518
ATOM	3066	NE	ARG	225	30.493	70.361	-0.511
ATOM	3067	HE	ARG	225	30.055	69.654	-0.288
ATOM	3068	CZ	ARG	225	29.816	71.456	-0.839
ATOM	3069	NH1	ARG	225	28.490	71.446	-0.821
ATOM	3070	HH11	ARG	225	28.069	70.731	-0.597
ATOM	3071	HH12	ARG	225	28.052	72.154	-1.034
ATOM	3072	NH2	ARG	225	30.466	72.559	-1.186
ATOM	3073	HH21	ARG	225	31.326	72.566	-1.197
ATOM	3074	HH22	ARG	225	30.027	73.268	-1.398
ATOM	3075	C	ARG	225	32.098	72.289	3.363
ATOM	3076	O	ARG	225	32.855	73.235	3.155
ATOM	3077	N	VAL	226	30.798	72.461	3.662
ATOM	3078	H	VAL	226	30.307	71.727	3.836
ATOM	3079	CA	VAL	226	30.187	73.762	3.709
ATOM	3080	HA	VAL	226	30.400	74.337	2.808
ATOM	3081	CB	VAL	226	28.660	73.662	3.880
ATOM	3082	HB	VAL	226	28.440	73.026	4.737
ATOM	3083	CG1	VAL	226	28.058	75.041	4.105
ATOM	3084	HG11	VAL	226	28.277	75.678	3.248
ATOM	3085	HG12	VAL	226	26.978	74.952	4.224
ATOM	3086	HG13	VAL	226	28.487	75.483	5.005
ATOM	3087	CG2	VAL	226	28.030	72.993	2.668
ATOM	3088	HG21	VAL	226	28.439	71.989	2.553
ATOM	3089	HG22	VAL	226	26.951	72.931	2.807
ATOM	3090	HG23	VAL	226	28.248	73.579	1.775
ATOM	3091	C	VAL	226	30.781	74.572	4.817
ATOM	3092	O	VAL	226	31.043	75.764	4.651
ATOM	3093	N	SER	227	31.009	73.937	5.981
ATOM	3094	H	SER	227	30.830	73.056	6.029
ATOM	3095	CA	SER	227	31.524	74.627	7.126
ATOM	3096	HA	SER	227	30.882	75.474	7.366
ATOM	3097	CB	SER	227	31.574	73.693	8.337
ATOM	3098	HB2	SER	227	31.871	74.271	9.212
ATOM	3099	HB3	SER	227	30.580	73.277	8.498
ATOM	3100	OG	SER	227	32.499	72.640	8.131
ATOM	3101	HG	SER	227	32.272	72.200	7.465
ATOM	3102	C	SER	227	32.879	75.158	6.788
ATOM	3103	O	SER	227	33.250	76.241	7.236
ATOM	3104	N	VAL	228	33.652	74.403	5.983

ATOM	3105	H	VAL	228	33.316	73.628	5.673
ATOM	3106	CA	VAL	228	34.979	74.807	5.618
ATOM	3107	HA	VAL	228	35.579	75.048	6.495
ATOM	3108	CB	VAL	228	35.702	73.711	4.813
ATOM	3109	HB	VAL	228	35.061	73.395	3.990
ATOM	3110	CG1	VAL	228	37.017	74.236	4.259
ATOM	3111	HG11	VAL	228	37.658	74.551	5.082
ATOM	3112	HG12	VAL	228	37.514	73.448	3.693
ATOM	3113	HG13	VAL	228	36.823	75.085	3.604
ATOM	3114	CG2	VAL	228	35.937	72.482	5.679
ATOM	3115	HG21	VAL	228	34.980	72.093	6.026
ATOM	3116	HG22	VAL	228	36.449	71.717	5.094
ATOM	3117	HG23	VAL	228	36.551	72.754	6.538
ATOM	3118	C	VAL	228	34.908	76.080	4.837
ATOM	3119	O	VAL	228	35.705	76.986	5.066
ATOM	3120	N	LEU	229	33.958	76.186	3.884
ATOM	3121	H	LEU	229	33.390	75.503	3.739
ATOM	3122	CA	LEU	229	33.852	77.388	3.100
ATOM	3123	HA	LEU	229	34.814	77.615	2.640
ATOM	3124	CB	LEU	229	32.809	77.216	1.994
ATOM	3125	HB2	LEU	229	31.928	76.848	2.520
ATOM	3126	HB3	LEU	229	32.597	78.199	1.575
ATOM	3127	CG	LEU	229	33.170	76.248	0.866
ATOM	3128	HG	LEU	229	33.467	75.294	1.302
ATOM	3129	CD1	LEU	229	31.983	76.034	-0.060
ATOM	3130	HD11	LEU	229	31.686	76.987	-0.496
ATOM	3131	HD12	LEU	229	32.262	75.342	-0.855
ATOM	3132	HD13	LEU	229	31.150	75.619	0.507
ATOM	3133	CD2	LEU	229	34.368	76.760	0.081
ATOM	3134	HD21	LEU	229	35.225	76.859	0.748
ATOM	3135	HD22	LEU	229	34.608	76.057	-0.716
ATOM	3136	HD23	LEU	229	34.131	77.732	-0.352
ATOM	3137	C	LEU	229	33.503	78.520	4.002
ATOM	3138	O	LEU	229	34.068	79.606	3.894
ATOM	3139	N	ASN	230	32.562	78.292	4.932
ATOM	3140	H	ASN	230	32.181	77.481	5.016
ATOM	3141	CA	ASN	230	32.167	79.360	5.796
ATOM	3142	HA	ASN	230	31.876	80.227	5.202
ATOM	3143	CB	ASN	230	30.977	78.938	6.660
ATOM	3144	HB2	ASN	230	31.184	77.956	7.086
ATOM	3145	HB3	ASN	230	30.854	79.664	7.464
ATOM	3146	CG	ASN	230	29.684	78.862	5.874
ATOM	3147	OD1	ASN	230	29.566	79.446	4.796
ATOM	3148	ND2	ASN	230	28.707	78.139	6.411
ATOM	3149	HD21	ASN	230	27.918	78.061	5.985
ATOM	3150	HD22	ASN	230	28.835	77.728	7.201
ATOM	3151	C	ASN	230	33.355	79.751	6.615
ATOM	3152	O	ASN	230	33.633	80.934	6.812
ATOM	3153	N	PHE	231	34.099	78.742	7.098
ATOM	3154	H	PHE	231	33.865	77.907	6.857
ATOM	3155	CA	PHE	231	35.222	78.949	7.961
ATOM	3156	HA	PHE	231	34.919	79.540	8.826

ATOM	3157	CB	PHE	231	35.774	77.609	8.453
ATOM	3158	HB2	PHE	231	35.022	77.089	9.047
ATOM	3159	HB3	PHE	231	36.060	76.988	7.604
ATOM	3160	CG	PHE	231	36.993	77.738	9.321
ATOM	3161	CD1	PHE	231	36.876	78.087	10.655
ATOM	3162	HD1	PHE	231	35.886	78.269	11.074
ATOM	3163	CE1	PHE	231	37.998	78.206	11.454
ATOM	3164	HE1	PHE	231	37.893	78.482	12.503
ATOM	3165	CZ	PHE	231	39.252	77.975	10.923
ATOM	3166	HZ	PHE	231	40.140	78.068	11.549
ATOM	3167	CE2	PHE	231	39.377	77.628	9.603
ATOM	3168	HE2	PHE	231	40.366	77.445	9.184
ATOM	3169	CD2	PHE	231	38.255	77.510	8.804
ATOM	3170	HD2	PHE	231	38.360	77.235	7.755
ATOM	3171	C	PHE	231	36.279	79.725	7.244
ATOM	3172	O	PHE	231	36.779	80.720	7.767
ATOM	3173	N	HIE	232	36.642	79.301	6.018
ATOM	3174	H	HIE	232	36.228	78.611	5.615
ATOM	3175	CA	HIE	232	37.716	79.977	5.355
ATOM	3176	HA	HIE	232	38.597	79.988	5.997
ATOM	3177	CB	HIE	232	38.072	79.265	4.048
ATOM	3178	HB2	HIE	232	38.384	78.241	4.252
ATOM	3179	HB3	HIE	232	37.211	79.256	3.380
ATOM	3180	CG	HIE	232	39.192	79.911	3.294
ATOM	3181	ND1	HIE	232	40.506	79.832	3.700
ATOM	3182	CE1	HIE	232	41.276	80.506	2.827
ATOM	3183	HE1	HIE	232	42.348	80.530	3.021
ATOM	3184	NE2	HIE	232	40.560	81.036	1.854
ATOM	3185	HE2	HIE	232	40.881	81.542	1.143
ATOM	3186	CD2	HIE	232	39.302	80.712	2.083
ATOM	3187	HD2	HIE	232	38.520	81.045	1.400
ATOM	3188	C	HIE	232	37.375	81.396	5.082
ATOM	3189	O	HIE	232	38.130	82.290	5.458
ATOM	3190	N	LEU	233	36.229	81.670	4.435
ATOM	3191	H	LEU	233	35.612	81.074	4.164
ATOM	3192	CA	LEU	233	36.035	83.058	4.186
ATOM	3193	HA	LEU	233	36.950	83.493	3.784
ATOM	3194	CB	LEU	233	34.908	83.268	3.172
ATOM	3195	HB2	LEU	233	34.074	82.702	3.586
ATOM	3196	HB3	LEU	233	34.657	84.329	3.162
ATOM	3197	CG	LEU	233	35.185	82.796	1.744
ATOM	3198	HG	LEU	233	35.501	81.753	1.772
ATOM	3199	CD1	LEU	233	33.937	82.924	0.884
ATOM	3200	HD11	LEU	233	33.620	83.967	0.855
ATOM	3201	HD12	LEU	233	34.156	82.583	-0.128
ATOM	3202	HD13	LEU	233	33.139	82.314	1.308
ATOM	3203	CD2	LEU	233	36.333	83.583	1.130
ATOM	3204	HD21	LEU	233	37.233	83.440	1.728
ATOM	3205	HD22	LEU	233	36.513	83.231	0.114
ATOM	3206	HD23	LEU	233	36.077	84.642	1.107
ATOM	3207	C	LEU	233	35.732	83.816	5.423
ATOM	3208	O	LEU	233	36.005	85.011	5.501

ATOM	3209	N	LEU	234	35.132	83.166	6.427
ATOM	3210	H	LEU	234	34.873	82.305	6.390
ATOM	3211	CA	LEU	234	34.910	83.926	7.609
ATOM	3212	HA	LEU	234	34.363	84.837	7.365
ATOM	3213	CB	LEU	234	34.091	83.119	8.619
ATOM	3214	HB2	LEU	234	33.236	82.766	8.042
ATOM	3215	HB3	LEU	234	34.692	82.267	8.935
ATOM	3216	CG	LEU	234	33.596	83.879	9.851
ATOM	3217	HG	LEU	234	33.251	84.865	9.542
ATOM	3218	CD1	LEU	234	32.455	83.130	10.522
ATOM	3219	HD11	LEU	234	32.800	82.144	10.832
ATOM	3220	HD12	LEU	234	32.118	83.688	11.396
ATOM	3221	HD13	LEU	234	31.628	83.021	9.820
ATOM	3222	CD2	LEU	234	34.733	84.103	10.837
ATOM	3223	HD21	LEU	234	35.521	84.684	10.358
ATOM	3224	HD22	LEU	234	34.360	84.645	11.706
ATOM	3225	HD23	LEU	234	35.134	83.141	11.155
ATOM	3226	C	LEU	234	36.250	84.306	8.145
ATOM	3227	O	LEU	234	36.455	85.445	8.532
ATOM	3228	N	HIE	235	37.239	83.401	8.116
ATOM	3229	H	HIE	235	37.110	82.608	7.711
ATOM	3230	CA	HIE	235	38.502	83.696	8.729
ATOM	3231	HA	HIE	235	38.350	83.978	9.771
ATOM	3232	CB	HIE	235	39.419	82.472	8.683
ATOM	3233	HB2	HIE	235	38.948	81.632	9.194
ATOM	3234	HB3	HIE	235	39.626	82.197	7.649
ATOM	3235	CG	HIE	235	40.745	82.686	9.343
ATOM	3236	ND1	HIE	235	40.889	82.788	10.710
ATOM	3237	CE1	HIE	235	42.189	82.975	11.000
ATOM	3238	HE1	HIE	235	42.457	83.074	12.052
ATOM	3239	NE2	HIE	235	42.933	83.007	9.911
ATOM	3240	HE2	HIE	235	43.854	83.125	9.874
ATOM	3241	CD2	HIE	235	42.120	82.838	8.887
ATOM	3242	HD2	HIE	235	42.517	82.829	7.872
ATOM	3243	C	HIE	235	39.147	84.865	8.045
ATOM	3244	O	HIE	235	39.712	85.743	8.698
ATOM	3245	N	GLN	236	39.070	84.908	6.704
ATOM	3246	H	GLN	236	38.604	84.262	6.285
ATOM	3247	CA	GLN	236	39.705	85.944	5.942
ATOM	3248	HA	GLN	236	40.754	86.022	6.227
ATOM	3249	CB	GLN	236	39.627	85.633	4.446
ATOM	3250	HB2	GLN	236	38.576	85.469	4.207
ATOM	3251	HB3	GLN	236	39.986	86.515	3.916
ATOM	3252	CG	GLN	236	40.438	84.421	4.020
ATOM	3253	HG2	GLN	236	40.086	83.551	4.575
ATOM	3254	HG3	GLN	236	40.287	84.256	2.953
ATOM	3255	CD	GLN	236	41.922	84.593	4.279
ATOM	3256	OE1	GLN	236	42.505	85.623	3.942
ATOM	3257	NE2	GLN	236	42.538	83.582	4.880
ATOM	3258	HE21	GLN	236	43.419	83.633	5.057
ATOM	3259	HE22	GLN	236	42.075	82.846	5.111
ATOM	3260	C	GLN	236	39.076	87.269	6.233

ATOM	3261	O	GLN	236	39.761	88.291	6.253
ATOM	3262	N	LEU	237	37.752	87.283	6.472
ATOM	3263	H	LEU	237	37.331	86.490	6.535
ATOM	3264	CA	LEU	237	37.011	88.504	6.626
ATOM	3265	HA	LEU	237	37.186	89.152	5.767
ATOM	3266	CB	LEU	237	35.512	88.213	6.722
ATOM	3267	HB2	LEU	237	35.463	87.253	7.236
ATOM	3268	HB3	LEU	237	35.059	88.983	7.347
ATOM	3269	CG	LEU	237	34.753	88.120	5.396
ATOM	3270	HG	LEU	237	33.717	87.852	5.601
ATOM	3271	CD1	LEU	237	34.796	89.449	4.658
ATOM	3272	HD11	LEU	237	35.832	89.718	4.452
ATOM	3273	HD12	LEU	237	34.251	89.361	3.718
ATOM	3274	HD13	LEU	237	34.336	90.222	5.274
ATOM	3275	CD2	LEU	237	35.327	87.012	4.525
ATOM	3276	HD21	LEU	237	35.243	86.059	5.047
ATOM	3277	HD22	LEU	237	34.773	86.963	3.587
ATOM	3278	HD23	LEU	237	36.376	87.220	4.316
ATOM	3279	C	LEU	237	37.380	89.353	7.809
ATOM	3280	O	LEU	237	37.229	90.565	7.678
ATOM	3281	N	PRO	238	37.829	88.922	8.957
ATOM	3282	CD	PRO	238	37.756	87.543	9.593
ATOM	3283	HD2	PRO	238	38.607	86.932	9.291
ATOM	3284	HD3	PRO	238	36.830	87.038	9.316
ATOM	3285	CG	PRO	238	37.796	87.908	11.050
ATOM	3286	HG2	PRO	238	38.251	87.095	11.616
ATOM	3287	HG3	PRO	238	36.781	88.077	11.410
ATOM	3288	CB	PRO	238	38.608	89.157	11.141
ATOM	3289	HB2	PRO	238	39.652	88.845	11.115
ATOM	3290	HB3	PRO	238	38.439	89.786	12.015
ATOM	3291	CA	PRO	238	38.265	89.931	9.867
ATOM	3292	HA	PRO	238	37.468	90.657	10.030
ATOM	3293	C	PRO	238	39.449	90.618	9.275
ATOM	3294	O	PRO	238	39.820	91.676	9.777
ATOM	3295	N	GLY	239	40.069	90.019	8.237
ATOM	3296	H	GLY	239	39.812	89.197	7.974
ATOM	3297	CA	GLY	239	41.131	90.687	7.556
ATOM	3298	HA2	GLY	239	41.925	90.954	8.253
ATOM	3299	HA3	GLY	239	41.539	90.054	6.768
ATOM	3300	C	GLY	239	40.576	91.948	6.936
ATOM	3301	O	GLY	239	41.196	93.000	7.090
ATOM	3302	N	CYS	240	39.409	91.898	6.224
ATOM	3303	H	CYS	240	38.968	91.123	6.102
ATOM	3304	CA	CYS	240	38.883	93.131	5.659
ATOM	3305	HA	CYS	240	38.598	93.812	6.461
ATOM	3306	CB	CYS	240	39.939	93.815	4.789
ATOM	3307	HB2	CYS	240	40.842	94.004	5.369
ATOM	3308	HB3	CYS	240	40.184	93.190	3.930
ATOM	3309	SG	CYS	240	39.431	95.415	4.116
ATOM	3310	HG	CYS	240	40.563	95.656	3.462
ATOM	3311	C	CYS	240	37.611	92.955	4.820
ATOM	3312	O	CYS	240	37.501	92.018	4.032

ATOM	3313	N	ALA	241	36.629	93.903	4.944
ATOM	3314	H	ALA	241	36.850	94.559	5.519
ATOM	3315	CA	ALA	241	35.346	93.933	4.268
ATOM	3316	HA	ALA	241	35.428	93.733	3.200
ATOM	3317	CB	ALA	241	34.399	92.914	4.882
ATOM	3318	HB1	ALA	241	34.300	93.107	5.950
ATOM	3319	HB2	ALA	241	33.421	92.993	4.407
ATOM	3320	HB3	ALA	241	34.796	91.910	4.730
ATOM	3321	C	ALA	241	34.847	95.342	4.394
ATOM	3322	O	ALA	241	35.417	96.146	5.131
ATOM	3323	N	ALA	242	33.791	95.695	3.634
ATOM	3324	H	ALA	242	33.436	95.085	3.075
ATOM	3325	CA	ALA	242	33.232	97.016	3.704
ATOM	3326	HA	ALA	242	34.017	97.761	3.574
ATOM	3327	CB	ALA	242	32.192	97.210	2.611
ATOM	3328	HB1	ALA	242	31.395	96.477	2.733
ATOM	3329	HB2	ALA	242	31.775	98.215	2.680
ATOM	3330	HB3	ALA	242	32.660	97.078	1.636
ATOM	3331	C	ALA	242	32.631	97.238	5.062
ATOM	3332	O	ALA	242	32.794	98.302	5.656
ATOM	3333	N	ALA	243	31.935	96.218	5.599
ATOM	3334	H	ALA	243	31.921	95.438	5.150
ATOM	3335	CA	ALA	243	31.229	96.342	6.846
ATOM	3336	HA	ALA	243	30.636	97.256	6.829
ATOM	3337	CB	ALA	243	30.294	95.159	7.046
ATOM	3338	HB1	ALA	243	30.875	94.237	7.074
ATOM	3339	HB2	ALA	243	29.754	95.277	7.986
ATOM	3340	HB3	ALA	243	29.582	95.115	6.222
ATOM	3341	C	ALA	243	32.182	96.446	7.991
ATOM	3342	O	ALA	243	33.345	96.058	7.899
ATOM	3343	N	ALA	244	31.685	97.003	9.113
ATOM	3344	H	ALA	244	30.831	97.287	9.097
ATOM	3345	CA	ALA	244	32.467	97.151	10.304
ATOM	3346	HA	ALA	244	33.441	97.594	10.097
ATOM	3347	CB	ALA	244	31.738	98.027	11.312
ATOM	3348	HB1	ALA	244	30.764	97.591	11.536
ATOM	3349	HB2	ALA	244	32.325	98.093	12.228
ATOM	3350	HB3	ALA	244	31.602	99.025	10.895
ATOM	3351	C	ALA	244	32.728	95.779	10.832
ATOM	3352	O	ALA	244	31.967	94.850	10.584
ATOM	3353	N	ALA	245	33.861	95.615	11.541
ATOM	3354	H	ALA	245	34.389	96.333	11.664
ATOM	3355	CA	ALA	245	34.237	94.345	12.093
ATOM	3356	HA	ALA	245	34.219	93.580	11.316
ATOM	3357	CB	ALA	245	35.641	94.414	12.675
ATOM	3358	HB1	ALA	245	35.673	95.169	13.460
ATOM	3359	HB2	ALA	245	35.910	93.444	13.093
ATOM	3360	HB3	ALA	245	36.348	94.678	11.889
ATOM	3361	C	ALA	245	33.245	93.938	13.136
ATOM	3362	O	ALA	245	32.940	92.756	13.287
ATOM	3363	N	ALA	246	32.741	94.911	13.915
ATOM	3364	H	ALA	246	32.971	95.767	13.760

ATOM	3365	CA	ALA	246	31.843	94.592	14.986
ATOM	3366	HA	ALA	246	32.319	93.856	15.634
ATOM	3367	CB	ALA	246	31.534	95.835	15.807
ATOM	3368	HB1	ALA	246	31.049	96.578	15.174
ATOM	3369	HB2	ALA	246	30.870	95.571	16.631
ATOM	3370	HB3	ALA	246	32.461	96.247	16.206
ATOM	3371	C	ALA	246	30.568	93.987	14.470
ATOM	3372	O	ALA	246	30.118	92.965	14.988
ATOM	3373	N	PHE	247	29.956	94.567	13.416
ATOM	3374	H	PHE	247	30.316	95.260	12.968
ATOM	3375	CA	PHE	247	28.680	94.036	13.016
ATOM	3376	HA	PHE	247	28.540	93.046	13.449
ATOM	3377	CB	PHE	247	27.547	94.945	13.497
ATOM	3378	HB2	PHE	247	27.671	95.947	13.087
ATOM	3379	HB3	PHE	247	26.585	94.541	13.183
ATOM	3380	CG	PHE	247	27.483	95.096	14.990
ATOM	3381	CD1	PHE	247	28.133	96.141	15.623
ATOM	3382	HD1	PHE	247	28.696	96.859	15.026
ATOM	3383	CE1	PHE	247	28.074	96.280	16.996
ATOM	3384	HE1	PHE	247	28.590	97.108	17.483
ATOM	3385	CZ	PHE	247	27.360	95.369	17.753
ATOM	3386	HZ	PHE	247	27.311	95.474	18.837
ATOM	3387	CE2	PHE	247	26.713	94.332	17.135
ATOM	3388	HE2	PHE	247	26.150	93.614	17.732
ATOM	3389	CD2	PHE	247	26.772	94.193	15.761
ATOM	3390	HD2	PHE	247	26.255	93.366	15.274
ATOM	3391	C	PHE	247	28.619	93.871	11.532
ATOM	3392	O	PHE	247	29.504	94.301	10.802
ATOM	3393	N	PRO	248	27.591	93.213	11.074
ATOM	3394	CD	PRO	248	26.403	92.588	11.847
ATOM	3395	HD2	PRO	248	25.920	93.345	12.465
ATOM	3396	HD3	PRO	248	26.756	91.774	12.480
ATOM	3397	CG	PRO	248	25.520	92.104	10.731
ATOM	3398	HG2	PRO	248	24.777	92.867	10.499
ATOM	3399	HG3	PRO	248	25.016	91.188	11.038
ATOM	3400	CB	PRO	248	26.423	91.852	9.570
ATOM	3401	HB2	PRO	248	25.896	91.924	8.619
ATOM	3402	HB3	PRO	248	26.896	90.873	9.650
ATOM	3403	CA	PRO	248	27.482	92.952	9.662
ATOM	3404	HA	PRO	248	28.461	92.600	9.336
ATOM	3405	C	PRO	248	27.068	94.121	8.825
ATOM	3406	O	PRO	248	26.487	95.072	9.346
ATOM	3407	N	GLY	249	27.382	94.051	7.515
ATOM	3408	H	GLY	249	27.850	93.326	7.259
ATOM	3409	CA	GLY	249	27.015	95.045	6.549
ATOM	3410	HA2	GLY	249	25.934	95.122	6.434
ATOM	3411	HA3	GLY	249	27.424	96.024	6.797
ATOM	3412	C	GLY	249	27.609	94.582	5.259
ATOM	3413	O	GLY	249	28.695	94.005	5.249
ATOM	3414	N	ALA	250	26.927	94.807	4.119
ATOM	3415	H	ALA	250	26.131	95.224	4.060
ATOM	3416	CA	ALA	250	27.570	94.321	2.936

ATOM	3417	HA	ALA	250	28.647	94.471	3.017
ATOM	3418	CB	ALA	250	27.298	92.835	2.757
ATOM	3419	HB1	ALA	250	26.224	92.670	2.665
ATOM	3420	HB2	ALA	250	27.798	92.479	1.856
ATOM	3421	HB3	ALA	250	27.676	92.289	3.621
ATOM	3422	C	ALA	250	27.104	95.088	1.744
ATOM	3423	O	ALA	250	25.972	95.566	1.688
ATOM	3424	N	GLN	251	28.013	95.237	0.761
ATOM	3425	H	GLN	251	28.843	94.919	0.906
ATOM	3426	CA	GLN	251	27.698	95.874	-0.481
ATOM	3427	HA	GLN	251	26.753	95.488	-0.864
ATOM	3428	CB	GLN	251	27.567	97.386	-0.290
ATOM	3429	HB2	GLN	251	26.854	97.547	0.519
ATOM	3430	HB3	GLN	251	28.547	97.757	0.011
ATOM	3431	CG	GLN	251	27.102	98.131	-1.530
ATOM	3432	HG2	GLN	251	27.848	98.005	-2.315
ATOM	3433	HG3	GLN	251	26.154	97.705	-1.859
ATOM	3434	CD	GLN	251	26.907	99.614	-1.281
ATOM	3435	OE1	GLN	251	27.472	100.174	-0.342
ATOM	3436	NE2	GLN	251	26.105	100.254	-2.124
ATOM	3437	HE21	GLN	251	25.956	101.136	-2.021
ATOM	3438	HE22	GLN	251	25.712	99.806	-2.798
ATOM	3439	C	GLN	251	28.795	95.503	-1.423
ATOM	3440	O	GLN	251	29.947	95.359	-1.016
ATOM	3441	N	HIE	252	28.472	95.320	-2.716
ATOM	3442	H	HIE	252	27.627	95.414	-3.012
ATOM	3443	CA	HIE	252	29.516	94.966	-3.630
ATOM	3444	HA	HIE	252	30.487	95.111	-3.156
ATOM	3445	CB	HIE	252	29.390	93.499	-4.046
ATOM	3446	HB2	HIE	252	28.417	93.322	-4.504
ATOM	3447	HB3	HIE	252	30.177	93.242	-4.755
ATOM	3448	CG	HIE	252	29.509	92.536	-2.906
ATOM	3449	ND1	HIE	252	30.723	92.082	-2.438
ATOM	3450	CE1	HIE	252	30.510	91.234	-1.416
ATOM	3451	HE1	HIE	252	31.386	90.792	-0.942
ATOM	3452	NE2	HIE	252	29.223	91.088	-1.164
ATOM	3453	HE2	HIE	252	28.846	90.552	-0.504
ATOM	3454	CD2	HIE	252	28.575	91.846	-2.028
ATOM	3455	HD2	HIE	252	27.486	91.886	-2.008
ATOM	3456	C	HIE	252	29.434	95.880	-4.805
ATOM	3457	O	HIE	252	28.354	96.149	-5.326
ATOM	3458	N	ALA	253	30.594	96.405	-5.236
ATOM	3459	H	ALA	253	31.359	96.237	-4.793
ATOM	3460	CA	ALA	253	30.610	97.232	-6.402
ATOM	3461	HA	ALA	253	29.690	97.159	-6.982
ATOM	3462	CB	ALA	253	30.828	98.687	-6.017
ATOM	3463	HB1	ALA	253	31.751	98.777	-5.444
ATOM	3464	HB2	ALA	253	30.900	99.295	-6.919
ATOM	3465	HB3	ALA	253	29.990	99.033	-5.412
ATOM	3466	C	ALA	253	31.695	96.696	-7.272
ATOM	3467	O	ALA	253	32.780	96.360	-6.802
ATOM	3468	N	PRO	254	31.410	96.583	-8.534

ATOM	3469	CD	PRO	254	30.053	96.786	-9.259
ATOM	3470	HD2	PRO	254	29.680	97.795	-9.082
ATOM	3471	HD3	PRO	254	29.323	96.060	-8.900
ATOM	3472	CG	PRO	254	30.432	96.555	-10.695
ATOM	3473	HG2	PRO	254	30.660	97.510	-11.168
ATOM	3474	HG3	PRO	254	29.602	96.080	-11.218
ATOM	3475	CB	PRO	254	31.626	95.661	-10.669
ATOM	3476	HB2	PRO	254	32.199	95.866	-11.573
ATOM	3477	HB3	PRO	254	31.418	94.593	-10.606
ATOM	3478	CA	PRO	254	32.416	96.112	-9.439
ATOM	3479	HA	PRO	254	32.964	95.289	-8.980
ATOM	3480	C	PRO	254	33.359	97.223	-9.750
ATOM	3481	O	PRO	254	32.985	98.385	-9.598
ATOM	3482	N	GLY	255	34.589	96.886	-10.172
ATOM	3483	H	GLY	255	34.805	96.015	-10.246
ATOM	3484	CA	GLY	255	35.550	97.891	-10.502
ATOM	3485	HA2	GLY	255	35.306	98.845	-10.035
ATOM	3486	HA3	GLY	255	36.556	97.591	-10.210
ATOM	3487	C	GLY	255	35.502	98.050	-11.982
ATOM	3488	O	GLY	255	34.444	97.985	-12.607
ATOM	3489	N	PRO	256	36.651	98.285	-12.540
ATOM	3490	CD	PRO	256	37.967	98.556	-11.819
ATOM	3491	HD2	PRO	256	38.176	97.760	-11.104
ATOM	3492	HD3	PRO	256	37.921	99.511	-11.296
ATOM	3493	CG	PRO	256	38.942	98.576	-12.962
ATOM	3494	HG2	PRO	256	39.359	97.579	-13.101
ATOM	3495	HG3	PRO	256	39.746	99.278	-12.741
ATOM	3496	CB	PRO	256	38.167	99.014	-14.160
ATOM	3497	HB2	PRO	256	38.664	98.539	-15.005
ATOM	3498	HB3	PRO	256	38.078	100.084	-14.346
ATOM	3499	CA	PRO	256	36.779	98.402	-13.962
ATOM	3500	HA	PRO	256	35.989	99.032	-14.372
ATOM	3501	C	PRO	256	36.656	97.026	-14.520
ATOM	3502	O	PRO	256	36.813	96.068	-13.765
ATOM	3503	N	GLY	257	36.370	96.895	-15.828
ATOM	3504	H	GLY	257	36.287	97.609	-16.370
ATOM	3505	CA	GLY	257	36.197	95.575	-16.352
ATOM	3506	HA2	GLY	257	36.035	95.585	-17.430
ATOM	3507	HA3	GLY	257	37.046	94.932	-16.119
ATOM	3508	C	GLY	257	34.980	95.033	-15.683
ATOM	3509	O	GLY	257	33.861	95.452	-15.975
ATOM	3510	N	GLY	258	35.172	94.073	-14.762
ATOM	3511	H	GLY	258	36.003	93.772	-14.591
ATOM	3512	CA	GLY	258	34.054	93.529	-14.053
ATOM	3513	HA2	GLY	258	34.301	93.385	-13.001
ATOM	3514	HA3	GLY	258	33.191	94.189	-14.136
ATOM	3515	C	GLY	258	33.715	92.209	-14.656
ATOM	3516	O	GLY	258	32.985	91.418	-14.061
ATOM	3517	N	ALA	259	34.233	91.931	-15.865
ATOM	3518	H	ALA	259	34.738	92.526	-16.313
ATOM	3519	CA	ALA	259	33.962	90.649	-16.438
ATOM	3520	HA	ALA	259	33.273	90.059	-15.834

ATOM	3521	CB	ALA	259	33.375	90.805	-17.832
ATOM	3522	HB1	ALA	259	34.058	91.386	-18.452
ATOM	3523	HB2	ALA	259	33.229	89.821	-18.278
ATOM	3524	HB3	ALA	259	32.416	91.320	-17.768
ATOM	3525	C	ALA	259	35.255	89.911	-16.438
ATOM	3526	O	ALA	259	36.269	90.419	-16.913
ATOM	3527	N	ALA	260	35.258	88.685	-15.884
ATOM	3528	H	ALA	260	34.519	88.320	-15.522
ATOM	3529	CA	ALA	260	36.488	87.958	-15.882
ATOM	3530	HA	ALA	260	37.337	88.576	-15.591
ATOM	3531	CB	ALA	260	36.402	86.772	-14.933
ATOM	3532	HB1	ALA	260	35.562	86.139	-15.218
ATOM	3533	HB2	ALA	260	37.326	86.195	-14.986
ATOM	3534	HB3	ALA	260	36.257	87.131	-13.914
ATOM	3535	C	ALA	260	36.733	87.548	-17.292
ATOM	3536	O	ALA	260	35.865	86.966	-17.939
ATOM	3537	N	HIE	261	37.930	87.862	-17.814
ATOM	3538	H	HIE	261	38.543	88.308	-17.329
ATOM	3539	CA	HIE	261	38.225	87.477	-19.160
ATOM	3540	HA	HIE	261	37.418	87.795	-19.820
ATOM	3541	CB	HIE	261	39.527	88.128	-19.630
ATOM	3542	HB2	HIE	261	40.313	87.966	-18.893
ATOM	3543	HB3	HIE	261	39.834	87.705	-20.586
ATOM	3544	CG	HIE	261	39.425	89.608	-19.830
ATOM	3545	ND1	HIE	261	38.601	90.176	-20.778
ATOM	3546	CE1	HIE	261	38.724	91.514	-20.719
ATOM	3547	HE1	HIE	261	38.126	92.102	-21.416
ATOM	3548	NE2	HIE	261	39.582	91.885	-19.788
ATOM	3549	HE2	HIE	261	39.822	92.757	-19.573
ATOM	3550	CD2	HIE	261	40.034	90.782	-19.222
ATOM	3551	HD2	HIE	261	40.764	90.843	-18.415
ATOM	3552	C	HIE	261	38.304	85.983	-19.210
ATOM	3553	O	HIE	261	37.757	85.365	-20.122
ATOM	3554	N	PRO	262	38.958	85.369	-18.259
ATOM	3555	CD	PRO	262	39.832	85.965	-17.124
ATOM	3556	HD2	PRO	262	39.233	86.625	-16.496
ATOM	3557	HD3	PRO	262	40.666	86.525	-17.547
ATOM	3558	CG	PRO	262	40.282	84.729	-16.397
ATOM	3559	HG2	PRO	262	39.603	84.528	-15.569
ATOM	3560	HG3	PRO	262	41.290	84.882	-16.011
ATOM	3561	CB	PRO	262	40.258	83.626	-17.402
ATOM	3562	HB2	PRO	262	40.099	82.688	-16.871
ATOM	3563	HB3	PRO	262	41.154	83.547	-18.017
ATOM	3564	CA	PRO	262	39.046	83.937	-18.283
ATOM	3565	HA	PRO	262	39.194	83.608	-19.312
ATOM	3566	C	PRO	262	37.800	83.329	-17.743
ATOM	3567	O	PRO	262	37.081	84.000	-17.005
ATOM	3568	N	ALA	263	37.517	82.066	-18.108
ATOM	3569	H	ALA	263	38.039	81.629	-18.697
ATOM	3570	CA	ALA	263	36.372	81.417	-17.550
ATOM	3571	HA	ALA	263	35.486	82.052	-17.518
ATOM	3572	CB	ALA	263	36.040	80.158	-18.337

ATOM	3573	HB1	ALA	263	36.914	79.508	-18.370
ATOM	3574	HB2	ALA	263	35.216	79.633	-17.853
ATOM	3575	HB3	ALA	263	35.751	80.429	-19.352
ATOM	3576	C	ALA	263	36.735	81.147	-16.130
ATOM	3577	O	ALA	263	37.905	80.943	-15.816
ATOM	3578	N	GLN	264	35.743	81.174	-15.221
ATOM	3579	H	GLN	264	34.891	81.337	-15.459
ATOM	3580	CA	GLN	264	36.069	80.935	-13.847
ATOM	3581	HA	GLN	264	36.890	80.221	-13.781
ATOM	3582	CB	GLN	264	36.496	82.236	-13.163
ATOM	3583	HB2	GLN	264	36.806	81.980	-12.150
ATOM	3584	HB3	GLN	264	37.351	82.624	-13.716
ATOM	3585	CG	GLN	264	35.406	83.294	-13.107
ATOM	3586	HG2	GLN	264	35.066	83.501	-14.122
ATOM	3587	HG3	GLN	264	34.574	82.910	-12.517
ATOM	3588	CD	GLN	264	35.884	84.590	-12.483
ATOM	3589	OE1	GLN	264	37.061	84.937	-12.575
ATOM	3590	NE2	GLN	264	34.969	85.310	-11.844
ATOM	3591	HE21	GLN	264	35.200	86.088	-11.455
ATOM	3592	HE22	GLN	264	34.118	85.020	-11.800
ATOM	3593	C	GLN	264	34.876	80.331	-13.188
ATOM	3594	O	GLN	264	33.832	80.137	-13.810
ATOM	3595	N	ALA	265	35.027	80.001	-11.891
ATOM	3596	H	ALA	265	35.827	80.150	-11.507
ATOM	3597	CA	ALA	265	33.962	79.429	-11.125
ATOM	3598	HA	ALA	265	33.043	79.332	-11.702
ATOM	3599	CB	ALA	265	34.359	78.054	-10.609
ATOM	3600	HB1	ALA	265	35.273	78.136	-10.021
ATOM	3601	HB2	ALA	265	33.560	77.655	-9.984
ATOM	3602	HB3	ALA	265	34.529	77.384	-11.452
ATOM	3603	C	ALA	265	33.667	80.393	-10.021
ATOM	3604	O	ALA	265	34.484	81.254	-9.701
ATOM	3605	N	GLN	266	32.464	80.287	-9.425
ATOM	3606	H	GLN	266	31.899	79.634	-9.679
ATOM	3607	CA	GLN	266	32.081	81.205	-8.392
ATOM	3608	HA	GLN	266	32.225	82.229	-8.736
ATOM	3609	CB	GLN	266	30.608	81.015	-8.025
ATOM	3610	HB2	GLN	266	30.484	79.975	-7.723
ATOM	3611	HB3	GLN	266	30.402	81.666	-7.176
ATOM	3612	CG	GLN	266	29.641	81.334	-9.154
ATOM	3613	HG2	GLN	266	29.916	80.744	-10.028
ATOM	3614	HG3	GLN	266	28.633	81.066	-8.838
ATOM	3615	CD	GLN	266	29.655	82.801	-9.536
ATOM	3616	OE1	GLN	266	29.399	83.671	-8.704
ATOM	3617	NE2	GLN	266	29.955	83.079	-10.799
ATOM	3618	HE21	GLN	266	29.978	83.934	-11.078
ATOM	3619	HE22	GLN	266	30.136	82.413	-11.376
ATOM	3620	C	GLN	266	32.944	81.032	-7.179
ATOM	3621	O	GLN	266	33.277	79.934	-6.736
ATOM	3622	N	PRO	267	33.314	82.186	-6.684
ATOM	3623	CD	PRO	267	32.956	83.551	-7.261
ATOM	3624	HD2	PRO	267	31.875	83.635	-7.374

ATOM	3625	HD3	PRO	267	33.433	83.681	-8.232
ATOM	3626	CG	PRO	267	33.503	84.490	-6.224
ATOM	3627	HG2	PRO	267	32.720	84.733	-5.506
ATOM	3628	HG3	PRO	267	33.848	85.404	-6.708
ATOM	3629	CB	PRO	267	34.637	83.771	-5.572
ATOM	3630	HB2	PRO	267	34.836	84.116	-4.557
ATOM	3631	HB3	PRO	267	35.539	83.878	-6.175
ATOM	3632	CA	PRO	267	34.197	82.306	-5.546
ATOM	3633	HA	PRO	267	35.029	81.630	-5.743
ATOM	3634	C	PRO	267	33.609	81.995	-4.202
ATOM	3635	O	PRO	267	32.389	81.891	-4.077
ATOM	3636	N	LEU	268	34.495	81.856	-3.186
ATOM	3637	H	LEU	268	35.356	81.992	-3.412
ATOM	3638	CA	LEU	268	34.152	81.519	-1.831
ATOM	3639	HA	LEU	268	33.504	80.643	-1.821
ATOM	3640	CB	LEU	268	35.412	81.204	-1.022
ATOM	3641	HB2	LEU	268	36.166	81.870	-1.441
ATOM	3642	HB3	LEU	268	35.223	81.478	0.016
ATOM	3643	CG	LEU	268	35.915	79.760	-1.085
ATOM	3644	HG	LEU	268	35.145	79.100	-0.685
ATOM	3645	CD1	LEU	268	36.228	79.362	-2.519
ATOM	3646	HD11	LEU	268	36.998	80.021	-2.920
ATOM	3647	HD12	LEU	268	36.584	78.332	-2.541
ATOM	3648	HD13	LEU	268	35.326	79.447	-3.125
ATOM	3649	CD2	LEU	268	37.143	79.580	-0.206
ATOM	3650	HD21	LEU	268	36.890	79.820	0.827
ATOM	3651	HD22	LEU	268	37.484	78.547	-0.265
ATOM	3652	HD23	LEU	268	37.936	80.244	-0.549
ATOM	3653	C	LEU	268	33.388	82.671	-1.243
ATOM	3654	O	LEU	268	33.644	83.839	-1.531
ATOM	3655	N	PRO	269	32.345	82.323	-0.538
ATOM	3656	CD	PRO	269	31.705	80.966	-0.563
ATOM	3657	HD2	PRO	269	32.415	80.211	-0.226
ATOM	3658	HD3	PRO	269	31.375	80.727	-1.574
ATOM	3659	CG	PRO	269	30.555	81.143	0.389
ATOM	3660	HG2	PRO	269	30.870	80.865	1.395
ATOM	3661	HG3	PRO	269	29.726	80.507	0.079
ATOM	3662	CB	PRO	269	30.176	82.584	0.316
ATOM	3663	HB2	PRO	269	29.638	83.044	1.145
ATOM	3664	HB3	PRO	269	29.563	82.629	-0.584
ATOM	3665	CA	PRO	269	31.499	83.317	0.084
ATOM	3666	HA	PRO	269	31.422	84.055	-0.715
ATOM	3667	C	PRO	269	31.788	84.022	1.397
ATOM	3668	O	PRO	269	31.343	85.161	1.432
ATOM	3669	N	PRO	270	32.478	83.554	2.423
ATOM	3670	CD	PRO	270	33.242	82.310	2.487
ATOM	3671	HD2	PRO	270	34.256	82.478	2.123
ATOM	3672	HD3	PRO	270	32.759	81.546	1.877
ATOM	3673	CG	PRO	270	33.202	81.982	3.953
ATOM	3674	HG2	PRO	270	34.086	81.402	4.219
ATOM	3675	HG3	PRO	270	32.307	81.399	4.170
ATOM	3676	CB	PRO	270	33.172	83.290	4.670

ATOM	3677	HB2	PRO	270	34.106	83.761	4.975
ATOM	3678	HB3	PRO	270	32.572	83.070	5.553
ATOM	3679	CA	PRO	270	32.401	84.222	3.733
ATOM	3680	HA	PRO	270	31.328	84.191	3.921
ATOM	3681	C	PRO	270	32.930	85.614	4.045
ATOM	3682	O	PRO	270	33.784	86.121	3.318
ATOM	3683	N	ALA	271	32.363	86.228	5.144
ATOM	3684	H	ALA	271	31.934	85.654	5.688
ATOM	3685	CA	ALA	271	32.404	87.646	5.469
ATOM	3686	HA	ALA	271	33.316	88.059	5.038
ATOM	3687	CB	ALA	271	31.210	88.364	4.859
ATOM	3688	HB1	ALA	271	30.289	87.968	5.288
ATOM	3689	HB2	ALA	271	31.280	89.431	5.071
ATOM	3690	HB3	ALA	271	31.204	88.209	3.780
ATOM	3691	C	ALA	271	32.433	87.904	6.951
ATOM	3692	O	ALA	271	32.823	87.029	7.724
ATOM	3693	N	LEU	272	32.031	89.147	7.368
ATOM	3694	H	LEU	272	31.600	89.699	6.802
ATOM	3695	CA	LEU	272	32.302	89.569	8.722
ATOM	3696	HA	LEU	272	33.377	89.571	8.900
ATOM	3697	CB	LEU	272	31.764	90.981	8.961
ATOM	3698	HB2	LEU	272	32.229	91.575	8.175
ATOM	3699	HB3	LEU	272	30.685	90.960	8.810
ATOM	3700	CG	LEU	272	32.076	91.604	10.323
ATOM	3701	HG	LEU	272	31.879	92.675	10.275
ATOM	3702	CD1	LEU	272	31.215	90.979	11.410
ATOM	3703	HD11	LEU	272	31.412	89.908	11.459
ATOM	3704	HD12	LEU	272	31.453	91.436	12.370
ATOM	3705	HD13	LEU	272	30.162	91.144	11.180
ATOM	3706	CD2	LEU	272	33.551	91.447	10.661
ATOM	3707	HD21	LEU	272	34.153	91.944	9.900
ATOM	3708	HD22	LEU	272	33.751	91.897	11.633
ATOM	3709	HD23	LEU	272	33.807	90.388	10.692
ATOM	3710	C	LEU	272	31.733	88.660	9.755
ATOM	3711	O	LEU	272	32.409	87.706	10.126
ATOM	3712	N	HIE	273	30.446	88.852	10.138
ATOM	3713	H	HIE	273	29.965	89.485	9.716
ATOM	3714	CA	HIE	273	29.845	88.073	11.192
ATOM	3715	HA	HIE	273	29.152	87.348	10.766
ATOM	3716	CB	HIE	273	30.918	87.319	11.980
ATOM	3717	HB2	HIE	273	31.669	88.015	12.352
ATOM	3718	HB3	HIE	273	30.465	86.792	12.819
ATOM	3719	CG	HIE	273	31.649	86.291	11.173
ATOM	3720	ND1	HIE	273	31.078	85.095	10.798
ATOM	3721	CE1	HIE	273	31.972	84.386	10.087
ATOM	3722	HE1	HIE	273	31.658	83.409	9.720
ATOM	3723	NE2	HIE	273	33.115	85.032	9.959
ATOM	3724	HE2	HIE	273	33.872	84.733	9.509
ATOM	3725	CD2	HIE	273	32.979	86.181	10.591
ATOM	3726	HD2	HIE	273	33.807	86.889	10.619
ATOM	3727	C	HIE	273	29.064	88.951	12.083
ATOM	3728	O	HIE	273	29.502	90.033	12.459

ATOM	3729	N	PRO	274	27.918	88.501	12.474
ATOM	3730	CD	PRO	274	27.056	87.457	11.856
ATOM	3731	HD2	PRO	274	27.631	86.549	11.674
ATOM	3732	HD3	PRO	274	26.639	87.817	10.916
ATOM	3733	CG	PRO	274	26.006	87.272	12.915
ATOM	3734	HG2	PRO	274	26.315	86.481	13.599
ATOM	3735	HG3	PRO	274	25.062	86.997	12.446
ATOM	3736	CB	PRO	274	25.890	88.584	13.616
ATOM	3737	HB2	PRO	274	25.668	88.224	14.620
ATOM	3738	HB3	PRO	274	25.164	89.348	13.336
ATOM	3739	CA	PRO	274	27.304	89.167	13.573
ATOM	3740	HA	PRO	274	27.309	90.254	13.490
ATOM	3741	C	PRO	274	28.210	88.751	14.675
ATOM	3742	O	PRO	274	28.342	89.440	15.681
ATOM	3743	N	ARG	275	28.824	87.574	14.517
ATOM	3744	H	ARG	275	28.607	87.029	13.835
ATOM	3745	CA	ARG	275	29.828	87.188	15.440
ATOM	3746	HA	ARG	275	30.516	88.017	15.605
ATOM	3747	CB	ARG	275	29.202	86.798	16.781
ATOM	3748	HB2	ARG	275	28.493	85.995	16.583
ATOM	3749	HB3	ARG	275	30.006	86.424	17.414
ATOM	3750	CG	ARG	275	28.490	87.939	17.488
ATOM	3751	HG2	ARG	275	27.805	88.411	16.783
ATOM	3752	HG3	ARG	275	27.924	87.530	18.325
ATOM	3753	CD	ARG	275	29.479	88.973	18.003
ATOM	3754	HD2	ARG	275	30.203	88.480	18.652
ATOM	3755	HD3	ARG	275	29.998	89.420	17.155
ATOM	3756	NE	ARG	275	28.818	90.034	18.759
ATOM	3757	HE	ARG	275	28.771	89.936	19.613
ATOM	3758	CZ	ARG	275	28.292	91.125	18.212
ATOM	3759	NH1	ARG	275	27.710	92.037	18.979
ATOM	3760	HH11	ARG	275	27.673	91.922	19.830
ATOM	3761	HH12	ARG	275	27.370	92.743	18.625
ATOM	3762	NH2	ARG	275	28.349	91.301	16.899
ATOM	3763	HH21	ARG	275	28.726	90.710	16.402
ATOM	3764	HH22	ARG	275	28.009	92.007	16.545
ATOM	3765	C	ARG	275	30.564	86.074	14.814
ATOM	3766	O	ARG	275	29.980	85.076	14.394
ATOM	3767	N	ARG	276	31.888	86.240	14.693
ATOM	3768	H	ARG	276	32.298	87.021	14.873
ATOM	3769	CA	ARG	276	32.649	85.122	14.261
ATOM	3770	HA	ARG	276	32.207	84.701	13.358
ATOM	3771	CB	ARG	276	34.088	85.540	13.952
ATOM	3772	HB2	ARG	276	34.585	84.678	13.508
ATOM	3773	HB3	ARG	276	34.038	86.347	13.221
ATOM	3774	CG	ARG	276	34.873	86.006	15.168
ATOM	3775	HG2	ARG	276	34.314	86.803	15.658
ATOM	3776	HG3	ARG	276	34.983	85.166	15.854
ATOM	3777	CD	ARG	276	36.248	86.520	14.773
ATOM	3778	HD2	ARG	276	36.789	85.728	14.255
ATOM	3779	HD3	ARG	276	36.129	87.374	14.106
ATOM	3780	NE	ARG	276	37.030	86.939	15.934

ATOM	3781	HE	ARG	276	36.673	86.824	16.709
ATOM	3782	CZ	ARG	276	38.242	87.480	15.863
ATOM	3783	NH1	ARG	276	38.878	87.830	16.972
ATOM	3784	HH11	ARG	276	38.506	87.707	17.738
ATOM	3785	HH12	ARG	276	39.662	88.180	16.926
ATOM	3786	NH2	ARG	276	38.815	87.669	14.682
ATOM	3787	HH21	ARG	276	38.403	87.441	13.963
ATOM	3788	HH22	ARG	276	39.599	88.019	14.636
ATOM	3789	C	ARG	276	32.484	84.224	15.412
ATOM	3790	O	ARG	276	32.450	83.005	15.278
ATOM	3791	N	ALA	277	32.376	84.862	16.592
ATOM	3792	H	ALA	277	32.387	85.762	16.599
ATOM	3793	CA	ALA	277	32.246	84.143	17.812
ATOM	3794	HA	ALA	277	33.079	83.452	17.943
ATOM	3795	CB	ALA	277	32.220	85.102	18.992
ATOM	3796	HB1	ALA	277	31.386	85.795	18.880
ATOM	3797	HB2	ALA	277	32.101	84.538	19.917
ATOM	3798	HB3	ALA	277	33.155	85.662	19.026
ATOM	3799	C	ALA	277	31.005	83.320	17.751
ATOM	3800	O	ALA	277	31.037	82.142	18.097
ATOM	3801	N	GLN	278	29.876	83.883	17.281
ATOM	3802	H	GLN	278	29.821	84.719	16.953
ATOM	3803	CA	GLN	278	28.706	83.051	17.327
ATOM	3804	HA	GLN	278	28.573	82.656	18.334
ATOM	3805	CB	GLN	278	27.461	83.856	16.950
ATOM	3806	HB2	GLN	278	27.435	84.730	17.601
ATOM	3807	HB3	GLN	278	27.587	84.177	15.916
ATOM	3808	CG	GLN	278	26.158	83.085	17.085
ATOM	3809	HG2	GLN	278	25.340	83.711	16.728
ATOM	3810	HG3	GLN	278	26.219	82.185	16.473
ATOM	3811	CD	GLN	278	25.868	82.679	18.517
ATOM	3812	OE1	GLN	278	25.845	83.517	19.417
ATOM	3813	NE2	GLN	278	25.644	81.387	18.731
ATOM	3814	HE21	GLN	278	25.467	81.093	19.562
ATOM	3815	HE22	GLN	278	25.670	80.806	18.044
ATOM	3816	C	GLN	278	28.889	81.883	16.407
ATOM	3817	O	GLN	278	28.538	80.753	16.746
ATOM	3818	N	ARG	279	29.468	82.126	15.218
ATOM	3819	H	ARG	279	29.715	82.968	15.018
ATOM	3820	CA	ARG	279	29.694	81.066	14.272
ATOM	3821	HA	ARG	279	28.766	80.520	14.101
ATOM	3822	CB	ARG	279	30.180	81.634	12.937
ATOM	3823	HB2	ARG	279	29.421	82.336	12.591
ATOM	3824	HB3	ARG	279	31.108	82.171	13.135
ATOM	3825	CG	ARG	279	30.422	80.582	11.867
ATOM	3826	HG2	ARG	279	30.834	81.072	10.985
ATOM	3827	HG3	ARG	279	31.142	79.858	12.249
ATOM	3828	CD	ARG	279	29.134	79.867	11.494
ATOM	3829	HD2	ARG	279	28.740	79.363	12.376
ATOM	3830	HD3	ARG	279	28.410	80.602	11.142
ATOM	3831	NE	ARG	279	29.343	78.875	10.442
ATOM	3832	HE	ARG	279	30.100	78.893	10.031

ATOM	3833	CZ	ARG	279	28.446	77.961	10.088
ATOM	3834	NH1	ARG	279	28.725	77.099	9.120
ATOM	3835	HH11	ARG	279	29.486	77.131	8.720
ATOM	3836	HH12	ARG	279	28.144	76.507	8.891
ATOM	3837	NH2	ARG	279	27.273	77.910	10.703
ATOM	3838	HH21	ARG	279	27.092	78.469	11.331
ATOM	3839	HH22	ARG	279	26.692	77.319	10.474
ATOM	3840	C	ARG	279	30.688	80.083	14.819
ATOM	3841	O	ARG	279	30.640	78.893	14.497
ATOM	3842	N	ARG	280	31.617	80.560	15.666
ATOM	3843	H	ARG	280	31.606	81.439	15.857
ATOM	3844	CA	ARG	280	32.608	79.708	16.261
ATOM	3845	HA	ARG	280	33.149	79.171	15.482
ATOM	3846	CB	ARG	280	33.609	80.535	17.071
ATOM	3847	HB2	ARG	280	34.038	81.274	16.394
ATOM	3848	HB3	ARG	280	33.047	81.043	17.854
ATOM	3849	CG	ARG	280	34.725	79.716	17.699
ATOM	3850	HG2	ARG	280	34.288	79.034	18.429
ATOM	3851	HG3	ARG	280	35.218	79.141	16.915
ATOM	3852	CD	ARG	280	35.744	80.610	18.388
ATOM	3853	HD2	ARG	280	36.206	81.261	17.646
ATOM	3854	HD3	ARG	280	35.233	81.217	19.136
ATOM	3855	NE	ARG	280	36.792	79.836	19.049
ATOM	3856	HE	ARG	280	36.741	78.978	18.993
ATOM	3857	CZ	ARG	280	37.804	80.372	19.724
ATOM	3858	NH1	ARG	280	38.710	79.589	20.293
ATOM	3859	HH11	ARG	280	38.643	78.734	20.225
ATOM	3860	HH12	ARG	280	39.365	79.936	20.729
ATOM	3861	NH2	ARG	280	37.907	81.690	19.827
ATOM	3862	HH21	ARG	280	37.319	82.197	19.458
ATOM	3863	HH22	ARG	280	38.562	82.037	20.264
ATOM	3864	C	ARG	280	31.930	78.685	17.125
ATOM	3865	O	ARG	280	32.365	77.536	17.180
ATOM	3866	N	LEU	281	30.852	79.067	17.841
ATOM	3867	H	LEU	281	30.534	79.908	17.801
ATOM	3868	CA	LEU	281	30.209	78.094	18.682
ATOM	3869	HA	LEU	281	30.932	77.675	19.382
ATOM	3870	CB	LEU	281	29.075	78.741	19.480
ATOM	3871	HB2	LEU	281	29.578	79.494	20.086
ATOM	3872	HB3	LEU	281	28.404	79.231	18.775
ATOM	3873	CG	LEU	281	28.269	77.811	20.389
ATOM	3874	HG	LEU	281	27.825	77.022	19.782
ATOM	3875	CD1	LEU	281	29.163	77.190	21.452
ATOM	3876	HD11	LEU	281	29.607	77.978	22.060
ATOM	3877	HD12	LEU	281	28.570	76.532	22.087
ATOM	3878	HD13	LEU	281	29.954	76.614	20.971
ATOM	3879	CD2	LEU	281	27.116	78.561	21.039
ATOM	3880	HD21	LEU	281	26.457	78.956	20.266
ATOM	3881	HD22	LEU	281	26.556	77.881	21.681
ATOM	3882	HD23	LEU	281	27.508	79.384	21.636
ATOM	3883	C	LEU	281	29.697	76.969	17.838
ATOM	3884	O	LEU	281	29.882	75.803	18.183

ATOM	3885	N	SER	282	29.044	77.273	16.700
ATOM	3886	H	SER	282	28.860	78.123	16.468
ATOM	3887	CA	SER	282	28.638	76.191	15.845
ATOM	3888	HA	SER	282	28.143	75.420	16.435
ATOM	3889	CB	SER	282	27.663	76.689	14.776
ATOM	3890	HB2	SER	282	27.251	75.828	14.250
ATOM	3891	HB3	SER	282	26.856	77.235	15.266
ATOM	3892	OG	SER	282	28.315	77.541	13.849
ATOM	3893	HG	SER	282	28.628	78.196	14.250
ATOM	3894	C	SER	282	29.933	75.690	15.311
ATOM	3895	O	SER	282	30.954	76.298	15.495
ATOM	3896	N	GLY	283	30.081	74.544	14.694
ATOM	3897	H	GLY	283	29.486	73.891	14.520
ATOM	3898	CA	GLY	283	31.450	74.404	14.265
ATOM	3899	HA2	GLY	283	31.505	73.796	13.362
ATOM	3900	HA3	GLY	283	31.890	75.382	14.072
ATOM	3901	C	GLY	283	32.226	73.727	15.357
ATOM	3902	O	GLY	283	32.885	72.716	15.128
ATOM	3903	N	LEU	284	32.222	74.304	16.576
ATOM	3904	H	LEU	284	31.841	75.111	16.692
ATOM	3905	CA	LEU	284	32.822	73.634	17.682
ATOM	3906	HA	LEU	284	33.791	73.231	17.388
ATOM	3907	CB	LEU	284	33.029	74.603	18.847
ATOM	3908	HB2	LEU	284	32.048	75.056	18.987
ATOM	3909	HB3	LEU	284	33.288	74.019	19.730
ATOM	3910	CG	LEU	284	34.073	75.702	18.638
ATOM	3911	HG	LEU	284	33.852	76.226	17.708
ATOM	3912	CD1	LEU	284	34.053	76.691	19.793
ATOM	3913	HD11	LEU	284	34.274	76.168	20.723
ATOM	3914	HD12	LEU	284	34.803	77.464	19.624
ATOM	3915	HD13	LEU	284	33.067	77.151	19.861
ATOM	3916	CD2	LEU	284	35.462	75.101	18.479
ATOM	3917	HD21	LEU	284	35.474	74.435	17.616
ATOM	3918	HD22	LEU	284	36.189	75.899	18.332
ATOM	3919	HD23	LEU	284	35.719	74.537	19.376
ATOM	3920	C	LEU	284	31.866	72.531	17.968
ATOM	3921	O	LEU	284	32.251	71.389	18.215
ATOM	3922	N	SER	285	30.561	72.868	17.904
ATOM	3923	H	SER	285	30.328	73.719	17.729
ATOM	3924	CA	SER	285	29.549	71.877	18.113
ATOM	3925	HA	SER	285	29.739	71.346	19.046
ATOM	3926	CB	SER	285	28.168	72.530	18.195
ATOM	3927	HB2	SER	285	28.167	73.240	19.022
ATOM	3928	HB3	SER	285	27.977	73.059	17.262
ATOM	3929	OG	SER	285	27.156	71.561	18.404
ATOM	3930	HG	SER	285	27.303	71.158	19.115
ATOM	3931	C	SER	285	29.664	70.917	16.977
ATOM	3932	O	SER	285	29.515	69.709	17.168
ATOM	3933	N	VAL	286	29.939	71.427	15.753
ATOM	3934	H	VAL	286	30.081	72.302	15.597
ATOM	3935	CA	VAL	286	29.998	70.483	14.667
ATOM	3936	HA	VAL	286	29.140	69.811	14.675

ATOM	3937	CB	VAL	286	30.053	71.195	13.303
ATOM	3938	HB	VAL	286	30.863	71.924	13.316
ATOM	3939	CG1	VAL	286	30.293	70.190	12.186
ATOM	3940	HG11	VAL	286	29.483	69.461	12.172
ATOM	3941	HG12	VAL	286	30.329	70.711	11.229
ATOM	3942	HG13	VAL	286	31.240	69.677	12.355
ATOM	3943	CG2	VAL	286	28.770	71.974	13.056
ATOM	3944	HG21	VAL	286	28.641	72.721	13.840
ATOM	3945	HG22	VAL	286	28.827	72.471	12.087
ATOM	3946	HG23	VAL	286	27.922	71.290	13.064
ATOM	3947	C	VAL	286	31.187	69.588	14.843
ATOM	3948	O	VAL	286	31.113	68.386	14.591
ATOM	3949	N	LEU	287	32.324	70.159	15.283
ATOM	3950	H	LEU	287	32.313	71.034	15.492
ATOM	3951	CA	LEU	287	33.538	69.402	15.422
ATOM	3952	HA	LEU	287	33.765	68.893	14.485
ATOM	3953	CB	LEU	287	34.707	70.324	15.774
ATOM	3954	HB2	LEU	287	34.745	71.028	14.943
ATOM	3955	HB3	LEU	287	34.452	70.857	16.690
ATOM	3956	CG	LEU	287	36.073	69.655	15.938
ATOM	3957	HG	LEU	287	36.011	68.918	16.738
ATOM	3958	CD1	LEU	287	36.493	68.968	14.647
ATOM	3959	HD11	LEU	287	36.556	69.705	13.846
ATOM	3960	HD12	LEU	287	37.467	68.499	14.785
ATOM	3961	HD13	LEU	287	35.758	68.208	14.384
ATOM	3962	CD2	LEU	287	37.122	70.670	16.362
ATOM	3963	HD21	LEU	287	36.833	71.116	17.313
ATOM	3964	HD22	LEU	287	38.086	70.173	16.473
ATOM	3965	HD23	LEU	287	37.201	71.450	15.604
ATOM	3966	C	LEU	287	33.360	68.343	16.471
ATOM	3967	O	LEU	287	33.767	67.198	16.278
ATOM	3968	N	LEU	288	32.736	68.698	17.611
ATOM	3969	H	LEU	288	32.402	69.531	17.675
ATOM	3970	CA	LEU	288	32.598	67.781	18.710
ATOM	3971	HA	LEU	288	33.572	67.365	18.968
ATOM	3972	CB	LEU	288	32.032	68.497	19.938
ATOM	3973	HB2	LEU	288	31.136	68.991	19.563
ATOM	3974	HB3	LEU	288	31.750	67.740	20.669
ATOM	3975	CG	LEU	288	32.944	69.531	20.601
ATOM	3976	HG	LEU	288	33.288	70.235	19.843
ATOM	3977	CD1	LEU	288	32.199	70.285	21.691
ATOM	3978	HD11	LEU	288	31.855	69.582	22.449
ATOM	3979	HD12	LEU	288	32.866	71.015	22.149
ATOM	3980	HD13	LEU	288	31.342	70.799	21.257
ATOM	3981	CD2	LEU	288	34.186	68.863	21.173
ATOM	3982	HD21	LEU	288	34.736	68.370	20.371
ATOM	3983	HD22	LEU	288	34.821	69.615	21.640
ATOM	3984	HD23	LEU	288	33.891	68.124	21.918
ATOM	3985	C	LEU	288	31.716	66.647	18.288
ATOM	3986	O	LEU	288	31.953	65.497	18.657
ATOM	3987	N	LEU	289	30.666	66.945	17.502
ATOM	3988	H	LEU	289	30.545	67.796	17.235

ATOM	3989	CA	LEU	289	29.743	65.925	17.088
ATOM	3990	HA	LEU	289	29.346	65.409	17.963
ATOM	3991	CB	LEU	289	28.577	66.540	16.312
ATOM	3992	HB2	LEU	289	28.135	67.244	17.017
ATOM	3993	HB3	LEU	289	28.988	67.087	15.463
ATOM	3994	CG	LEU	289	27.502	65.569	15.820
ATOM	3995	HG	LEU	289	27.963	64.839	15.155
ATOM	3996	CD1	LEU	289	26.853	64.848	16.992
ATOM	3997	HD11	LEU	289	26.391	65.577	17.657
ATOM	3998	HD12	LEU	289	26.091	64.162	16.621
ATOM	3999	HD13	LEU	289	27.611	64.287	17.539
ATOM	4000	CD2	LEU	289	26.450	66.301	15.001
ATOM	4001	HD21	LEU	289	26.922	66.770	14.138
ATOM	4002	HD22	LEU	289	25.695	65.592	14.661
ATOM	4003	HD23	LEU	289	25.978	67.067	15.616
ATOM	4004	C	LEU	289	30.495	64.929	16.262
ATOM	4005	O	LEU	289	30.238	63.728	16.332
ATOM	4006	N	CYS	290	31.437	65.402	15.430
ATOM	4007	H	CYS	290	31.609	66.284	15.388
ATOM	4008	CA	CYS	290	32.171	64.488	14.604
ATOM	4009	HA	CYS	290	31.479	63.879	14.022
ATOM	4010	CB	CYS	290	33.082	65.250	13.640
ATOM	4011	HB2	CYS	290	33.665	65.995	14.181
ATOM	4012	HB3	CYS	290	33.756	64.560	13.132
ATOM	4013	SG	CYS	290	32.207	66.147	12.336
ATOM	4014	HG	CYS	290	33.295	66.642	11.753
ATOM	4015	C	CYS	290	32.965	63.559	15.470
ATOM	4016	O	CYS	290	32.967	62.348	15.255
ATOM	4017	N	CYS	291	33.645	64.103	16.494
ATOM	4018	H	CYS	291	33.561	64.984	16.657
ATOM	4019	CA	CYS	291	34.497	63.298	17.322
ATOM	4020	HA	CYS	291	35.224	62.772	16.703
ATOM	4021	CB	CYS	291	35.251	64.173	18.325
ATOM	4022	HB2	CYS	291	34.560	64.843	18.836
ATOM	4023	HB3	CYS	291	35.763	63.551	19.059
ATOM	4024	SG	CYS	291	36.521	65.229	17.589
ATOM	4025	HG	CYS	291	36.913	65.790	18.729
ATOM	4026	C	CYS	291	33.684	62.260	18.029
ATOM	4027	O	CYS	291	34.083	61.102	18.115
ATOM	4028	N	VAL	292	32.519	62.654	18.568
ATOM	4029	H	VAL	292	32.250	63.504	18.446
ATOM	4030	CA	VAL	292	31.708	61.748	19.326
ATOM	4031	HA	VAL	292	32.290	61.236	20.092
ATOM	4032	CB	VAL	292	30.533	62.476	20.005
ATOM	4033	HB	VAL	292	29.994	63.056	19.255
ATOM	4034	CG1	VAL	292	29.586	61.474	20.648
ATOM	4035	HG11	VAL	292	30.124	60.894	21.398
ATOM	4036	HG12	VAL	292	28.762	62.006	21.123
ATOM	4037	HG13	VAL	292	29.193	60.803	19.884
ATOM	4038	CG2	VAL	292	31.046	63.468	21.038
ATOM	4039	HG21	VAL	292	31.684	64.205	20.550
ATOM	4040	HG22	VAL	292	30.202	63.973	21.508

ATOM	4041	HG23	VAL	292	31.620	62.938	21.798
ATOM	4042	C	VAL	292	31.158	60.611	18.502
ATOM	4043	O	VAL	292	31.231	59.457	18.922
ATOM	4044	N	PHE	293	30.546	60.930	17.344
ATOM	4045	H	PHE	293	30.592	61.808	17.154
ATOM	4046	CA	PHE	293	29.865	60.030	16.441
ATOM	4047	HA	PHE	293	29.310	59.285	17.011
ATOM	4048	CB	PHE	293	28.883	60.800	15.556
ATOM	4049	HB2	PHE	293	29.371	61.679	15.134
ATOM	4050	HB3	PHE	293	28.524	60.161	14.749
ATOM	4051	CG	PHE	293	27.666	61.293	16.287
ATOM	4052	CD1	PHE	293	27.287	60.724	17.490
ATOM	4053	HD1	PHE	293	27.881	59.910	17.906
ATOM	4054	CE1	PHE	293	26.168	61.177	18.163
ATOM	4055	HE1	PHE	293	25.880	60.722	19.111
ATOM	4056	CZ	PHE	293	25.414	62.208	17.634
ATOM	4057	HZ	PHE	293	24.530	62.569	18.160
ATOM	4058	CE2	PHE	293	25.782	62.776	16.443
ATOM	4059	HE2	PHE	293	25.188	63.589	16.026
ATOM	4060	CD2	PHE	293	26.901	62.323	15.771
ATOM	4061	HD2	PHE	293	27.189	62.778	14.823
ATOM	4062	C	PHE	293	30.746	59.211	15.527
ATOM	4063	O	PHE	293	30.468	58.037	15.280
ATOM	4064	N	LEU	294	31.835	59.804	15.002
ATOM	4065	H	LEU	294	32.069	60.605	15.338
ATOM	4066	CA	LEU	294	32.616	59.209	13.946
ATOM	4067	HA	LEU	294	31.983	59.025	13.078
ATOM	4068	CB	LEU	294	33.756	60.142	13.532
ATOM	4069	HB2	LEU	294	33.249	61.053	13.216
ATOM	4070	HB3	LEU	294	34.359	60.350	14.416
ATOM	4071	CG	LEU	294	34.662	59.645	12.403
ATOM	4072	HG	LEU	294	35.126	58.708	12.710
ATOM	4073	CD1	LEU	294	33.860	59.420	11.130
ATOM	4074	HD11	LEU	294	33.396	60.357	10.822
ATOM	4075	HD12	LEU	294	34.523	59.067	10.340
ATOM	4076	HD13	LEU	294	33.086	58.675	11.314
ATOM	4077	CD2	LEU	294	35.792	60.631	12.149
ATOM	4078	HD21	LEU	294	36.387	60.743	13.055
ATOM	4079	HD22	LEU	294	36.425	60.259	11.343
ATOM	4080	HD23	LEU	294	35.375	61.598	11.867
ATOM	4081	C	LEU	294	33.156	57.884	14.382
ATOM	4082	O	LEU	294	33.172	56.934	13.600
ATOM	4083	N	LEU	295	33.622	57.768	15.634
ATOM	4084	H	LEU	295	33.577	58.456	16.213
ATOM	4085	CA	LEU	295	34.199	56.524	16.045
ATOM	4086	HA	LEU	295	35.015	56.256	15.374
ATOM	4087	CB	LEU	295	34.751	56.633	17.468
ATOM	4088	HB2	LEU	295	33.920	57.044	18.042
ATOM	4089	HB3	LEU	295	34.973	55.626	17.821
ATOM	4090	CG	LEU	295	35.984	57.520	17.650
ATOM	4091	HG	LEU	295	35.783	58.498	17.212
ATOM	4092	CD1	LEU	295	36.315	57.684	19.126

ATOM	4093	HD11	LEU	295	36.517	56.707	19.564
ATOM	4094	HD12	LEU	295	37.195	58.318	19.233
ATOM	4095	HD13	LEU	295	35.471	58.145	19.639
ATOM	4096	CD2	LEU	295	37.176	56.943	16.902
ATOM	4097	HD21	LEU	295	36.942	56.879	15.839
ATOM	4098	HD22	LEU	295	38.042	57.589	17.044
ATOM	4099	HD23	LEU	295	37.399	55.947	17.285
ATOM	4100	C	LEU	295	33.169	55.444	15.951
ATOM	4101	O	LEU	295	33.450	54.374	15.435
ATOM	4102	N	ALA	296	31.930	55.670	16.406
ATOM	4103	H	ALA	296	31.677	56.472	16.726
ATOM	4104	CA	ALA	296	30.993	54.582	16.372
ATOM	4105	HA	ALA	296	31.404	53.727	16.908
ATOM	4106	CB	ALA	296	29.685	54.988	17.034
ATOM	4107	HB1	ALA	296	29.257	55.838	16.503
ATOM	4108	HB2	ALA	296	28.987	54.152	17.003
ATOM	4109	HB3	ALA	296	29.873	55.266	18.071
ATOM	4110	C	ALA	296	30.758	54.149	14.956
ATOM	4111	O	ALA	296	30.703	52.955	14.664
ATOM	4112	N	THR	297	30.633	55.115	14.031
ATOM	4113	H	THR	297	30.758	55.970	14.283
ATOM	4114	CA	THR	297	30.309	54.810	12.668
ATOM	4115	HA	THR	297	29.391	54.223	12.643
ATOM	4116	CB	THR	297	30.097	56.090	11.838
ATOM	4117	HB	THR	297	31.000	56.698	11.887
ATOM	4118	CG2	THR	297	29.799	55.741	10.388
ATOM	4119	HG21	THR	297	28.895	55.133	10.338
ATOM	4120	HG22	THR	297	29.652	56.657	9.816
ATOM	4121	HG23	THR	297	30.636	55.182	9.969
ATOM	4122	OG1	THR	297	28.990	56.829	12.369
ATOM	4123	HG1	THR	297	29.148	57.034	13.158
ATOM	4124	C	THR	297	31.373	53.979	12.027
ATOM	4125	O	THR	297	31.050	53.031	11.313
ATOM	4126	N	GLN	298	32.664	54.325	12.212
ATOM	4127	H	GLN	298	32.898	55.026	12.726
ATOM	4128	CA	GLN	298	33.676	53.541	11.563
ATOM	4129	HA	GLN	298	33.435	53.429	10.506
ATOM	4130	CB	GLN	298	35.041	54.222	11.683
ATOM	4131	HB2	GLN	298	34.930	55.234	11.294
ATOM	4132	HB3	GLN	298	35.286	54.266	12.744
ATOM	4133	CG	GLN	298	36.157	53.512	10.935
ATOM	4134	HG2	GLN	298	37.100	54.011	11.156
ATOM	4135	HG3	GLN	298	36.205	52.478	11.277
ATOM	4136	CD	GLN	298	35.946	53.517	9.433
ATOM	4137	OE1	GLN	298	35.784	54.573	8.823
ATOM	4138	NE2	GLN	298	35.948	52.332	8.833
ATOM	4139	HE21	GLN	298	35.827	52.279	7.943
ATOM	4140	HE22	GLN	298	36.071	51.583	9.317
ATOM	4141	C	GLN	298	33.760	52.138	12.125
ATOM	4142	O	GLN	298	33.754	51.201	11.329
ATOM	4143	N	PRO	299	33.820	51.882	13.411
ATOM	4144	CD	PRO	299	34.191	52.778	14.557

ATOM	4145	HD2	PRO	299	33.315	53.312	14.926
ATOM	4146	HD3	PRO	299	34.952	53.496	14.252
ATOM	4147	CG	PRO	299	34.714	51.775	15.546
ATOM	4148	HG2	PRO	299	34.555	52.147	16.558
ATOM	4149	HG3	PRO	299	35.780	51.622	15.379
ATOM	4150	CB	PRO	299	33.951	50.516	15.302
ATOM	4151	HB2	PRO	299	33.000	50.483	15.834
ATOM	4152	HB3	PRO	299	34.556	49.655	15.586
ATOM	4153	CA	PRO	299	33.703	50.505	13.792
ATOM	4154	HA	PRO	299	34.493	49.980	13.256
ATOM	4155	C	PRO	299	32.393	49.844	13.518
ATOM	4156	O	PRO	299	32.351	48.616	13.518
ATOM	4157	N	LEU	300	31.309	50.601	13.298
ATOM	4158	H	LEU	300	31.355	51.499	13.331
ATOM	4159	CA	LEU	300	30.062	49.957	13.007
ATOM	4160	HA	LEU	300	29.819	49.249	13.799
ATOM	4161	CB	LEU	300	28.936	50.988	12.910
ATOM	4162	HB2	LEU	300	29.320	51.732	12.212
ATOM	4163	HB3	LEU	300	28.067	50.497	12.473
ATOM	4164	CG	LEU	300	28.531	51.675	14.216
ATOM	4165	HG	LEU	300	29.423	52.085	14.690
ATOM	4166	CD1	LEU	300	27.538	52.796	13.949
ATOM	4167	HD11	LEU	300	26.646	52.387	13.476
ATOM	4168	HD12	LEU	300	27.263	53.271	14.891
ATOM	4169	HD13	LEU	300	27.992	53.535	13.289
ATOM	4170	CD2	LEU	300	27.941	50.668	15.192
ATOM	4171	HD21	LEU	300	28.681	49.899	15.413
ATOM	4172	HD22	LEU	300	27.660	51.177	16.114
ATOM	4173	HD23	LEU	300	27.059	50.206	14.749
ATOM	4174	C	LEU	300	30.241	49.195	11.728
ATOM	4175	O	LEU	300	29.756	48.073	11.592
ATOM	4176	N	VAL	301	30.933	49.803	10.741
ATOM	4177	H	VAL	301	31.263	50.629	10.881
ATOM	4178	CA	VAL	301	31.145	49.149	9.481
ATOM	4179	HA	VAL	301	30.222	48.718	9.093
ATOM	4180	CB	VAL	301	31.714	50.120	8.430
ATOM	4181	HB	VAL	301	32.596	50.611	8.841
ATOM	4182	CG1	VAL	301	32.096	49.370	7.163
ATOM	4183	HG11	VAL	301	31.214	48.880	6.751
ATOM	4184	HG12	VAL	301	32.496	50.072	6.431
ATOM	4185	HG13	VAL	301	32.852	48.620	7.398
ATOM	4186	CG2	VAL	301	30.709	51.219	8.120
ATOM	4187	HG21	VAL	301	30.485	51.775	9.031
ATOM	4188	HG22	VAL	301	31.128	51.896	7.375
ATOM	4189	HG23	VAL	301	29.792	50.775	7.732
ATOM	4190	C	VAL	301	32.062	47.976	9.657
ATOM	4191	O	VAL	301	31.837	46.911	9.087
ATOM	4192	N	TRP	302	33.123	48.132	10.471
ATOM	4193	H	TRP	302	33.218	48.904	10.924
ATOM	4194	CA	TRP	302	34.095	47.087	10.621
ATOM	4195	HA	TRP	302	34.473	46.791	9.642
ATOM	4196	CB	TRP	302	35.270	47.567	11.475

ATOM	4197	HB2	TRP	302	34.904	48.086	12.361
ATOM	4198	HB3	TRP	302	35.885	46.720	11.779
ATOM	4199	CG	TRP	302	36.178	48.522	10.763
ATOM	4200	CD1	TRP	302	36.376	49.840	11.059
ATOM	4201	HD1	TRP	302	35.816	50.244	11.902
ATOM	4202	NE1	TRP	302	37.282	50.392	10.185
ATOM	4203	HE1	TRP	302	37.569	51.284	10.199
ATOM	4204	CE2	TRP	302	37.687	49.423	9.301
ATOM	4205	CZ2	TRP	302	38.588	49.498	8.240
ATOM	4206	HZ2	TRP	302	39.074	50.452	8.039
ATOM	4207	CH2	TRP	302	38.806	48.361	7.514
ATOM	4208	HH2	TRP	302	39.504	48.380	6.677
ATOM	4209	CZ3	TRP	302	38.150	47.165	7.823
ATOM	4210	HZ3	TRP	302	38.332	46.264	7.237
ATOM	4211	CE3	TRP	302	37.256	47.086	8.874
ATOM	4212	HE3	TRP	302	36.773	46.129	9.073
ATOM	4213	CD2	TRP	302	37.013	48.234	9.634
ATOM	4214	C	TRP	302	33.428	45.893	11.233
ATOM	4215	O	TRP	302	33.695	44.755	10.849
ATOM	4216	N	VAL	303	32.537	46.130	12.211
ATOM	4217	H	VAL	303	32.364	46.987	12.422
ATOM	4218	CA	VAL	303	31.870	45.069	12.911
ATOM	4219	HA	VAL	303	32.580	44.347	13.314
ATOM	4220	CB	VAL	303	31.008	45.610	14.067
ATOM	4221	HB	VAL	303	30.365	46.404	13.688
ATOM	4222	CG1	VAL	303	30.150	44.500	14.656
ATOM	4223	HG11	VAL	303	30.793	43.706	15.035
ATOM	4224	HG12	VAL	303	29.547	44.900	15.472
ATOM	4225	HG13	VAL	303	29.494	44.098	13.884
ATOM	4226	CG2	VAL	303	31.886	46.236	15.139
ATOM	4227	HG21	VAL	303	32.456	47.059	14.708
ATOM	4228	HG22	VAL	303	31.260	46.613	15.948
ATOM	4229	HG23	VAL	303	32.572	45.486	15.531
ATOM	4230	C	VAL	303	31.025	44.270	11.967
ATOM	4231	O	VAL	303	30.987	43.044	12.053
ATOM	4232	N	SER	304	30.314	44.940	11.042
ATOM	4233	H	SER	304	30.388	45.836	10.997
ATOM	4234	CA	SER	304	29.446	44.245	10.134
ATOM	4235	HA	SER	304	28.746	43.625	10.694
ATOM	4236	CB	SER	304	28.649	45.240	9.287
ATOM	4237	HB2	SER	304	28.064	45.875	9.952
ATOM	4238	HB3	SER	304	29.348	45.855	8.721
ATOM	4239	OG	SER	304	27.781	44.567	8.392
ATOM	4240	HG	SER	304	27.249	44.099	8.824
ATOM	4241	C	SER	304	30.264	43.337	9.273
ATOM	4242	O	SER	304	29.838	42.223	8.970
ATOM	4243	N	LEU	305	31.462	43.790	8.848
ATOM	4244	H	LEU	305	31.746	44.607	9.096
ATOM	4245	CA	LEU	305	32.283	42.972	8.002
ATOM	4246	HA	LEU	305	31.719	42.672	7.119
ATOM	4247	CB	LEU	305	33.524	43.745	7.550
ATOM	4248	HB2	LEU	305	33.119	44.587	6.988

ATOM	4249	HB3	LEU	305	34.033	44.115	8.440
ATOM	4250	CG	LEU	305	34.518	42.979	6.675
ATOM	4251	HG	LEU	305	34.866	42.102	7.221
ATOM	4252	CD1	LEU	305	33.862	42.539	5.375
ATOM	4253	HD11	LEU	305	33.514	43.415	4.828
ATOM	4254	HD12	LEU	305	34.586	41.996	4.768
ATOM	4255	HD13	LEU	305	33.015	41.890	5.596
ATOM	4256	CD2	LEU	305	35.746	43.829	6.386
ATOM	4257	HD21	LEU	305	36.234	44.094	7.324
ATOM	4258	HD22	LEU	305	36.440	43.265	5.762
ATOM	4259	HD23	LEU	305	35.445	44.738	5.864
ATOM	4260	C	LEU	305	32.639	41.746	8.771
ATOM	4261	O	LEU	305	32.471	40.627	8.290
ATOM	4262	N	ALA	306	33.139	41.921	10.007
ATOM	4263	H	ALA	306	33.301	42.741	10.341
ATOM	4264	CA	ALA	306	33.413	40.762	10.794
ATOM	4265	HA	ALA	306	32.647	39.997	10.667
ATOM	4266	CB	ALA	306	34.760	40.168	10.412
ATOM	4267	HB1	ALA	306	35.539	40.919	10.543
ATOM	4268	HB2	ALA	306	34.973	39.310	11.049
ATOM	4269	HB3	ALA	306	34.735	39.849	9.370
ATOM	4270	C	ALA	306	33.367	41.176	12.223
ATOM	4271	O	ALA	306	33.873	42.234	12.597
ATOM	4272	N	SER	307	32.734	40.343	13.065
ATOM	4273	H	SER	307	32.327	39.604	12.752
ATOM	4274	CA	SER	307	32.709	40.634	14.463
ATOM	4275	HA	SER	307	32.711	41.713	14.616
ATOM	4276	CB	SER	307	31.451	40.051	15.109
ATOM	4277	HB2	SER	307	31.377	40.426	16.130
ATOM	4278	HB3	SER	307	30.582	40.378	14.539
ATOM	4279	OG	SER	307	31.497	38.635	15.128
ATOM	4280	HG	SER	307	32.159	38.386	15.562
ATOM	4281	C	SER	307	33.978	40.045	14.980
ATOM	4282	O	SER	307	34.742	39.466	14.217
ATOM	4283	N	GLY	308	34.289	40.227	16.271
ATOM	4284	H	GLY	308	33.782	40.751	16.799
ATOM	4285	CA	GLY	308	35.444	39.575	16.807
ATOM	4286	HA2	GLY	308	35.396	39.603	17.896
ATOM	4287	HA3	GLY	308	35.455	38.538	16.471
ATOM	4288	C	GLY	308	36.705	40.247	16.357
ATOM	4289	O	GLY	308	37.793	39.749	16.639
ATOM	4290	N	PHE	309	36.629	41.394	15.655
ATOM	4291	H	PHE	309	35.856	41.786	15.413
ATOM	4292	CA	PHE	309	37.882	41.994	15.292
ATOM	4293	HA	PHE	309	38.620	41.217	15.093
ATOM	4294	CB	PHE	309	37.722	42.850	14.034
ATOM	4295	HB2	PHE	309	36.865	43.515	14.139
ATOM	4296	HB3	PHE	309	38.622	43.442	13.867
ATOM	4297	CG	PHE	309	37.495	42.051	12.782
ATOM	4298	CD1	PHE	309	37.238	40.693	12.848
ATOM	4299	HD1	PHE	309	37.200	40.203	13.821
ATOM	4300	CE1	PHE	309	37.030	39.958	11.696

ATOM	4301	HE1	PHE	309	36.830	38.889	11.761
ATOM	4302	CZ	PHE	309	37.076	40.578	10.462
ATOM	4303	HZ	PHE	309	36.912	40.003	9.550
ATOM	4304	CE2	PHE	309	37.329	41.923	10.388
ATOM	4305	HE2	PHE	309	37.365	42.413	9.415
ATOM	4306	CD2	PHE	309	37.538	42.658	11.540
ATOM	4307	HD2	PHE	309	37.739	43.727	11.475
ATOM	4308	C	PHE	309	38.371	42.801	16.437
ATOM	4309	O	PHE	309	37.595	43.514	17.066
ATOM	4310	N	SER	310	39.684	42.677	16.743
ATOM	4311	H	SER	310	40.202	42.143	16.237
ATOM	4312	CA	SER	310	40.251	43.381	17.855
ATOM	4313	HA	SER	310	39.616	43.258	18.732
ATOM	4314	CB	SER	310	41.644	42.837	18.180
ATOM	4315	HB2	SER	310	42.259	42.894	17.282
ATOM	4316	HB3	SER	310	42.086	43.454	18.963
ATOM	4317	OG	SER	310	41.576	41.492	18.621
ATOM	4318	HG	SER	310	41.239	41.023	18.025
ATOM	4319	C	SER	310	40.276	44.819	17.479
ATOM	4320	O	SER	310	41.254	45.338	16.942
ATOM	4321	N	LEU	311	39.151	45.480	17.775
ATOM	4322	H	LEU	311	38.542	44.963	18.191
ATOM	4323	CA	LEU	311	38.858	46.847	17.503
ATOM	4324	HA	LEU	311	39.699	47.472	17.804
ATOM	4325	CB	LEU	311	38.606	47.054	16.008
ATOM	4326	HB2	LEU	311	37.782	46.377	15.784
ATOM	4327	HB3	LEU	311	38.280	48.084	15.861
ATOM	4328	CG	LEU	311	39.780	46.753	15.075
ATOM	4329	HG	LEU	311	40.135	45.741	15.270
ATOM	4330	CD1	LEU	311	39.353	46.869	13.619
ATOM	4331	HD11	LEU	311	38.998	47.881	13.423
ATOM	4332	HD12	LEU	311	40.203	46.651	12.972
ATOM	4333	HD13	LEU	311	38.552	46.158	13.417
ATOM	4334	CD2	LEU	311	40.946	47.687	15.360
ATOM	4335	HD21	LEU	311	41.273	47.556	16.391
ATOM	4336	HD22	LEU	311	41.770	47.456	14.685
ATOM	4337	HD23	LEU	311	40.631	48.719	15.208
ATOM	4338	C	LEU	311	37.673	47.081	18.381
ATOM	4339	O	LEU	311	37.510	46.388	19.384
ATOM	4340	N	PRO	312	36.835	48.026	18.069
ATOM	4341	CD	PRO	312	37.085	49.221	17.196
ATOM	4342	HD2	PRO	312	36.811	49.008	16.163
ATOM	4343	HD3	PRO	312	38.133	49.519	17.240
ATOM	4344	CG	PRO	312	36.175	50.230	17.838
ATOM	4345	HG2	PRO	312	35.859	50.960	17.092
ATOM	4346	HG3	PRO	312	36.707	50.739	18.641
ATOM	4347	CB	PRO	312	35.014	49.460	18.373
ATOM	4348	HB2	PRO	312	34.316	49.299	17.551
ATOM	4349	HB3	PRO	312	34.491	49.928	19.207
ATOM	4350	CA	PRO	312	35.613	48.124	18.816
ATOM	4351	HA	PRO	312	35.842	48.112	19.882
ATOM	4352	C	PRO	312	34.715	46.970	18.486

ATOM	4353	O	PRO	312	33.608	46.909	19.019
ATOM	4354	N	VAL	313	35.174	46.038	17.626
ATOM	4355	H	VAL	313	36.026	46.113	17.345
ATOM	4356	CA	VAL	313	34.362	44.962	17.162
ATOM	4357	HA	VAL	313	33.452	45.324	16.684
ATOM	4358	CB	VAL	313	35.122	44.072	16.162
ATOM	4359	HB	VAL	313	36.076	43.781	16.601
ATOM	4360	CG1	VAL	313	34.313	42.826	15.835
ATOM	4361	HG11	VAL	313	33.359	43.117	15.395
ATOM	4362	HG12	VAL	313	34.866	42.209	15.127
ATOM	4363	HG13	VAL	313	34.134	42.258	16.748
ATOM	4364	CG2	VAL	313	35.446	44.849	14.895
ATOM	4365	HG21	VAL	313	36.067	45.710	15.145
ATOM	4366	HG22	VAL	313	35.983	44.204	14.200
ATOM	4367	HG23	VAL	313	34.521	45.191	14.431
ATOM	4368	C	VAL	313	33.879	44.148	18.325
ATOM	4369	O	VAL	313	32.779	43.603	18.243
ATOM	4370	N	PRO	314	34.603	44.009	19.406
ATOM	4371	CD	PRO	314	36.052	44.382	19.635
ATOM	4372	HD2	PRO	314	36.140	45.431	19.919
ATOM	4373	HD3	PRO	314	36.644	44.198	18.738
ATOM	4374	CG	PRO	314	36.407	43.448	20.757
ATOM	4375	HG2	PRO	314	37.193	43.895	21.366
ATOM	4376	HG3	PRO	314	36.761	42.503	20.344
ATOM	4377	CB	PRO	314	35.155	43.250	21.544
ATOM	4378	HB2	PRO	314	35.080	44.126	22.189
ATOM	4379	HB3	PRO	314	35.077	42.346	22.148
ATOM	4380	CA	PRO	314	34.038	43.277	20.499
ATOM	4381	HA	PRO	314	33.748	42.275	20.182
ATOM	4382	C	PRO	314	32.828	44.025	20.952
ATOM	4383	O	PRO	314	32.802	45.248	20.827
ATOM	4384	N	TRP	315	31.818	43.309	21.473
ATOM	4385	H	TRP	315	31.946	42.429	21.611
ATOM	4386	CA	TRP	315	30.561	43.912	21.807
ATOM	4387	HA	TRP	315	30.140	44.399	20.928
ATOM	4388	CB	TRP	315	29.573	42.853	22.299
ATOM	4389	HB2	TRP	315	29.411	42.102	21.526
ATOM	4390	HB3	TRP	315	29.955	42.371	23.199
ATOM	4391	CG	TRP	315	28.225	43.406	22.648
ATOM	4392	CD1	TRP	315	27.167	43.580	21.804
ATOM	4393	HD1	TRP	315	27.314	43.286	20.765
ATOM	4394	NE1	TRP	315	26.099	44.113	22.485
ATOM	4395	HE1	TRP	315	25.266	44.317	22.107
ATOM	4396	CE2	TRP	315	26.459	44.293	23.798
ATOM	4397	CZ2	TRP	315	25.724	44.800	24.868
ATOM	4398	HZ2	TRP	315	24.697	45.118	24.687
ATOM	4399	CH2	TRP	315	26.341	44.867	26.085
ATOM	4400	HH2	TRP	315	25.799	45.257	26.947
ATOM	4401	CZ3	TRP	315	27.664	44.442	26.251
ATOM	4402	HZ3	TRP	315	28.147	44.500	27.226
ATOM	4403	CE3	TRP	315	28.397	43.939	25.193
ATOM	4404	HE3	TRP	315	29.424	43.622	25.377

ATOM	4405	CD2	TRP	315	27.790	43.859	23.937
ATOM	4406	C	TRP	315	30.755	44.968	22.841
ATOM	4407	O	TRP	315	30.206	46.063	22.723
ATOM	4408	N	GLY	316	31.555	44.682	23.881
ATOM	4409	H	GLY	316	32.001	43.901	23.925
ATOM	4410	CA	GLY	316	31.692	45.645	24.931
ATOM	4411	HA2	GLY	316	30.717	45.863	25.367
ATOM	4412	HA3	GLY	316	32.358	45.262	25.704
ATOM	4413	C	GLY	316	32.268	46.905	24.373
ATOM	4414	O	GLY	316	31.827	48.000	24.719
ATOM	4415	N	VAL	317	33.283	46.785	23.498
ATOM	4416	H	VAL	317	33.562	45.969	23.241
ATOM	4417	CA	VAL	317	33.920	47.958	22.975
ATOM	4418	HA	VAL	317	34.183	48.658	23.768
ATOM	4419	CB	VAL	317	35.195	47.604	22.188
ATOM	4420	HB	VAL	317	34.952	46.848	21.442
ATOM	4421	CG1	VAL	317	35.754	48.838	21.496
ATOM	4422	HG11	VAL	317	35.997	49.595	22.242
ATOM	4423	HG12	VAL	317	36.655	48.569	20.945
ATOM	4424	HG13	VAL	317	35.011	49.236	20.805
ATOM	4425	CG2	VAL	317	36.237	46.988	23.110
ATOM	4426	HG21	VAL	317	35.835	46.080	23.558
ATOM	4427	HG22	VAL	317	37.131	46.744	22.537
ATOM	4428	HG23	VAL	317	36.493	47.698	23.896
ATOM	4429	C	VAL	317	32.952	48.704	22.109
ATOM	4430	O	VAL	317	32.911	49.932	22.133
ATOM	4431	N	GLN	318	32.137	47.977	21.323
ATOM	4432	H	GLN	318	32.169	47.078	21.349
ATOM	4433	CA	GLN	318	31.218	48.636	20.445
ATOM	4434	HA	GLN	318	31.760	49.310	19.781
ATOM	4435	CB	GLN	318	30.463	47.613	19.593
ATOM	4436	HB2	GLN	318	31.211	46.996	19.095
ATOM	4437	HB3	GLN	318	29.879	46.995	20.275
ATOM	4438	CG	GLN	318	29.542	48.230	18.554
ATOM	4439	HG2	GLN	318	28.981	47.433	18.066
ATOM	4440	HG3	GLN	318	28.850	48.906	19.056
ATOM	4441	CD	GLN	318	30.297	49.009	17.495
ATOM	4442	OE1	GLN	318	31.208	48.484	16.856
ATOM	4443	NE2	GLN	318	29.919	50.268	17.307
ATOM	4444	HE21	GLN	318	30.334	50.775	16.690
ATOM	4445	HE22	GLN	318	29.247	50.614	17.795
ATOM	4446	C	GLN	318	30.288	49.455	21.281
ATOM	4447	O	GLN	318	29.939	50.579	20.921
ATOM	4448	N	ALA	319	29.870	48.907	22.435
ATOM	4449	H	ALA	319	30.154	48.082	22.655
ATOM	4450	CA	ALA	319	28.984	49.618	23.311
ATOM	4451	HA	ALA	319	28.086	49.938	22.783
ATOM	4452	CB	ALA	319	28.572	48.735	24.479
ATOM	4453	HB1	ALA	319	29.460	48.414	25.023
ATOM	4454	HB2	ALA	319	27.920	49.297	25.148
ATOM	4455	HB3	ALA	319	28.040	47.861	24.104
ATOM	4456	C	ALA	319	29.679	50.859	23.776

ATOM	4457	O	ALA	319	29.067	51.923	23.863
ATOM	4458	N	ALA	320	30.992	50.757	24.064
ATOM	4459	H	ALA	320	31.405	49.970	23.921
ATOM	4460	CA	ALA	320	31.730	51.870	24.589
ATOM	4461	HA	ALA	320	31.271	52.226	25.511
ATOM	4462	CB	ALA	320	33.165	51.462	24.886
ATOM	4463	HB1	ALA	320	33.641	51.112	23.970
ATOM	4464	HB2	ALA	320	33.714	52.320	25.275
ATOM	4465	HB3	ALA	320	33.170	50.662	25.626
ATOM	4466	C	ALA	320	31.683	52.999	23.611
ATOM	4467	O	ALA	320	31.449	54.148	23.985
ATOM	4468	N	SER	321	31.882	52.697	22.318
ATOM	4469	H	SER	321	32.017	51.840	22.078
ATOM	4470	CA	SER	321	31.881	53.728	21.324
ATOM	4471	HA	SER	321	32.570	54.521	21.614
ATOM	4472	CB	SER	321	32.323	53.168	19.970
ATOM	4473	HB2	SER	321	32.420	53.994	19.265
ATOM	4474	HB3	SER	321	33.290	52.680	20.093
ATOM	4475	OG	SER	321	31.382	52.232	19.474
ATOM	4476	HG	SER	321	31.309	51.603	20.011
ATOM	4477	C	SER	321	30.506	54.308	21.260
ATOM	4478	O	SER	321	30.332	55.495	20.991
ATOM	4479	N	TRP	322	29.489	53.466	21.512
ATOM	4480	H	TRP	322	29.699	52.623	21.746
ATOM	4481	CA	TRP	322	28.115	53.863	21.421
ATOM	4482	HA	TRP	322	27.924	54.311	20.446
ATOM	4483	CB	TRP	322	27.195	52.652	21.591
ATOM	4484	HB2	TRP	322	27.531	52.039	22.427
ATOM	4485	HB3	TRP	322	26.171	52.979	21.770
ATOM	4486	CG	TRP	322	27.155	51.756	20.391
ATOM	4487	CD1	TRP	322	27.425	52.104	19.099
ATOM	4488	HD1	TRP	322	27.698	53.143	18.917
ATOM	4489	NE1	TRP	322	27.284	51.014	18.275
ATOM	4490	HE1	TRP	322	27.420	51.018	17.348
ATOM	4491	CE2	TRP	322	26.916	49.932	19.035
ATOM	4492	CZ2	TRP	322	26.656	48.616	18.655
ATOM	4493	HZ2	TRP	322	26.745	48.353	17.601
ATOM	4494	CH2	TRP	322	26.303	47.732	19.636
ATOM	4495	HH2	TRP	322	26.093	46.694	19.379
ATOM	4496	CZ3	TRP	322	26.205	48.133	20.972
ATOM	4497	HZ3	TRP	322	25.922	47.419	21.746
ATOM	4498	CE3	TRP	322	26.461	49.436	21.354
ATOM	4499	HE3	TRP	322	26.369	49.695	22.409
ATOM	4500	CD2	TRP	322	26.825	50.362	20.372
ATOM	4501	C	TRP	322	27.829	54.907	22.461
ATOM	4502	O	TRP	322	27.210	55.928	22.162
ATOM	4503	N	LEU	323	28.275	54.688	23.717
ATOM	4504	H	LEU	323	28.750	53.951	23.919
ATOM	4505	CA	LEU	323	27.980	55.655	24.739
ATOM	4506	HA	LEU	323	26.916	55.892	24.727
ATOM	4507	CB	LEU	323	28.343	55.103	26.119
ATOM	4508	HB2	LEU	323	29.377	54.776	26.007

ATOM	4509	HB3	LEU	323	28.298	55.925	26.834
ATOM	4510	CG	LEU	323	27.493	53.938	26.628
ATOM	4511	HG	LEU	323	27.490	53.149	25.876
ATOM	4512	CD1	LEU	323	28.054	53.392	27.933
ATOM	4513	HD11	LEU	323	28.057	54.180	28.686
ATOM	4514	HD12	LEU	323	27.434	52.564	28.277
ATOM	4515	HD13	LEU	323	29.073	53.040	27.772
ATOM	4516	CD2	LEU	323	26.046	54.368	26.814
ATOM	4517	HD21	LEU	323	25.642	54.708	25.860
ATOM	4518	HD22	LEU	323	25.459	53.524	27.177
ATOM	4519	HD23	LEU	323	25.998	55.181	27.539
ATOM	4520	C	LEU	323	28.711	56.925	24.477
ATOM	4521	O	LEU	323	28.274	57.992	24.905
ATOM	4522	N	LEU	324	29.864	56.845	23.792
ATOM	4523	H	LEU	324	30.168	56.044	23.515
ATOM	4524	CA	LEU	324	30.609	58.032	23.503
ATOM	4525	HA	LEU	324	30.868	58.541	24.432
ATOM	4526	CB	LEU	324	31.900	57.686	22.758
ATOM	4527	HB2	LEU	324	31.566	57.057	21.933
ATOM	4528	HB3	LEU	324	32.320	58.611	22.362
ATOM	4529	CG	LEU	324	32.969	56.945	23.564
ATOM	4530	HG	LEU	324	32.517	56.069	24.029
ATOM	4531	CD1	LEU	324	34.113	56.506	22.662
ATOM	4532	HD11	LEU	324	34.566	57.381	22.197
ATOM	4533	HD12	LEU	324	34.862	55.981	23.254
ATOM	4534	HD13	LEU	324	33.731	55.841	21.888
ATOM	4535	CD2	LEU	324	33.492	57.817	24.695
ATOM	4536	HD21	LEU	324	32.670	58.081	25.361
ATOM	4537	HD22	LEU	324	34.251	57.270	25.255
ATOM	4538	HD23	LEU	324	33.930	58.725	24.281
ATOM	4539	C	LEU	324	29.693	58.905	22.704
ATOM	4540	O	LEU	324	29.658	60.116	22.911
ATOM	4541	N	CYS	325	28.920	58.295	21.777
ATOM	4542	H	CYS	325	29.010	57.402	21.706
ATOM	4543	CA	CYS	325	27.991	58.994	20.929
ATOM	4544	HA	CYS	325	28.507	59.794	20.397
ATOM	4545	CB	CYS	325	27.379	58.039	19.902
ATOM	4546	HB2	CYS	325	27.011	57.139	20.395
ATOM	4547	HB3	CYS	325	26.558	58.526	19.375
ATOM	4548	SG	CYS	325	28.530	57.477	18.626
ATOM	4549	HG	CYS	325	27.656	56.714	17.976
ATOM	4550	C	CYS	325	26.917	59.637	21.758
ATOM	4551	O	CYS	325	26.567	60.797	21.544
ATOM	4552	N	CYS	326	26.381	58.899	22.746
ATOM	4553	H	CYS	326	26.716	58.072	22.865
ATOM	4554	CA	CYS	326	25.321	59.374	23.594
ATOM	4555	HA	CYS	326	24.486	59.718	22.984
ATOM	4556	CB	CYS	326	24.827	58.254	24.512
ATOM	4557	HB2	CYS	326	25.668	57.786	25.023
ATOM	4558	HB3	CYS	326	24.129	58.650	25.250
ATOM	4559	SG	CYS	326	23.953	56.921	23.660
ATOM	4560	HG	CYS	326	23.707	56.198	24.749

ATOM	4561	C	CYS	326	25.824	60.545	24.383
ATOM	4562	O	CYS	326	25.071	61.464	24.702
ATOM	4563	N	ALA	327	27.131	60.533	24.702
ATOM	4564	H	ALA	327	27.594	59.834	24.374
ATOM	4565	CA	ALA	327	27.798	61.526	25.500
ATOM	4566	HA	ALA	327	27.326	61.597	26.480
ATOM	4567	CB	ALA	327	29.261	61.158	25.691
ATOM	4568	HB1	ALA	327	29.750	61.092	24.719
ATOM	4569	HB2	ALA	327	29.753	61.922	26.293
ATOM	4570	HB3	ALA	327	29.331	60.196	26.198
ATOM	4571	C	ALA	327	27.664	62.868	24.847
ATOM	4572	O	ALA	327	27.632	63.891	25.529
ATOM	4573	N	LEU	328	27.586	62.901	23.504
ATOM	4574	H	LEU	328	27.588	62.114	23.067
ATOM	4575	CA	LEU	328	27.502	64.131	22.767
ATOM	4576	HA	LEU	328	28.394	64.731	22.947
ATOM	4577	CB	LEU	328	27.396	63.850	21.267
ATOM	4578	HB2	LEU	328	28.302	63.287	21.042
ATOM	4579	HB3	LEU	328	26.525	63.216	21.103
ATOM	4580	CG	LEU	328	27.316	65.074	20.352
ATOM	4581	HG	LEU	328	26.434	65.656	20.619
ATOM	4582	CD1	LEU	328	28.558	65.939	20.500
ATOM	4583	HD11	LEU	328	29.440	65.357	20.233
ATOM	4584	HD12	LEU	328	28.480	66.803	19.841
ATOM	4585	HD13	LEU	328	28.645	66.277	21.533
ATOM	4586	CD2	LEU	328	27.135	64.652	18.902
ATOM	4587	HD21	LEU	328	26.214	64.078	18.802
ATOM	4588	HD22	LEU	328	27.081	65.538	18.269
ATOM	4589	HD23	LEU	328	27.981	64.037	18.594
ATOM	4590	C	LEU	328	26.321	64.907	23.262
ATOM	4591	O	LEU	328	26.360	66.135	23.310
ATOM	4592	N	SER	329	25.233	64.213	23.638
ATOM	4593	H	SER	329	25.257	63.314	23.605
ATOM	4594	CA	SER	329	24.045	64.883	24.087
ATOM	4595	HA	SER	329	23.686	65.559	23.311
ATOM	4596	CB	SER	329	22.943	63.868	24.399
ATOM	4597	HB2	SER	329	23.330	63.141	25.113
ATOM	4598	HB3	SER	329	22.097	64.395	24.840
ATOM	4599	OG	SER	329	22.521	63.197	23.225
ATOM	4600	HG	SER	329	22.226	63.751	22.681
ATOM	4601	C	SER	329	24.357	65.720	25.297
ATOM	4602	O	SER	329	23.732	66.757	25.512
ATOM	4603	N	ALA	330	25.283	65.255	26.156
ATOM	4604	H	ALA	330	25.645	64.455	25.960
ATOM	4605	CA	ALA	330	25.703	65.966	27.339
ATOM	4606	HA	ALA	330	24.808	66.291	27.870
ATOM	4607	CB	ALA	330	26.504	65.050	28.251
ATOM	4608	HB1	ALA	330	27.408	64.724	27.736
ATOM	4609	HB2	ALA	330	26.778	65.589	29.158
ATOM	4610	HB3	ALA	330	25.902	64.180	28.513
ATOM	4611	C	ALA	330	26.522	67.193	27.016
ATOM	4612	O	ALA	330	26.415	68.211	27.696

ATOM	4613	N	LEU	331	27.393	67.107	25.989
ATOM	4614	H	LEU	331	27.330	66.361	25.490
ATOM	4615	CA	LEU	331	28.379	68.111	25.666
ATOM	4616	HA	LEU	331	28.946	68.373	26.560
ATOM	4617	CB	LEU	331	29.351	67.586	24.607
ATOM	4618	HB2	LEU	331	28.701	67.225	23.810
ATOM	4619	HB3	LEU	331	29.939	68.428	24.242
ATOM	4620	CG	LEU	331	30.290	66.461	25.047
ATOM	4621	HG	LEU	331	29.698	65.659	25.487
ATOM	4622	CD1	LEU	331	31.073	65.920	23.861
ATOM	4623	HD11	LEU	331	31.666	66.721	23.420
ATOM	4624	HD12	LEU	331	31.735	65.121	24.196
ATOM	4625	HD13	LEU	331	30.380	65.529	23.116
ATOM	4626	CD2	LEU	331	31.240	66.947	26.131
ATOM	4627	HD21	LEU	331	30.666	67.284	26.994
ATOM	4628	HD22	LEU	331	31.899	66.132	26.430
ATOM	4629	HD23	LEU	331	31.837	67.774	25.747
ATOM	4630	C	LEU	331	27.841	69.428	25.171
ATOM	4631	O	LEU	331	28.371	70.477	25.535
ATOM	4632	N	ASN	332	26.786	69.433	24.336
ATOM	4633	H	ASN	332	26.342	68.665	24.182
ATOM	4634	CA	ASN	332	26.365	70.648	23.692
ATOM	4635	HA	ASN	332	27.185	71.057	23.102
ATOM	4636	CB	ASN	332	25.181	70.378	22.761
ATOM	4637	HB2	ASN	332	24.446	69.776	23.295
ATOM	4638	HB3	ASN	332	24.733	71.330	22.477
ATOM	4639	CG	ASN	332	25.588	69.639	21.501
ATOM	4640	OD1	ASN	332	26.764	69.610	21.139
ATOM	4641	ND2	ASN	332	24.613	69.039	20.828
ATOM	4642	HD21	ASN	332	24.800	68.586	20.073
ATOM	4643	HD22	ASN	332	23.766	69.085	21.127
ATOM	4644	C	ASN	332	26.006	71.724	24.670
ATOM	4645	O	ASN	332	26.457	72.855	24.503
ATOM	4646	N	PRO	333	25.237	71.462	25.685
ATOM	4647	CD	PRO	333	24.433	70.190	25.937
ATOM	4648	HD2	PRO	333	25.046	69.442	26.440
ATOM	4649	HD3	PRO	333	24.058	69.781	24.999
ATOM	4650	CG	PRO	333	23.331	70.717	26.813
ATOM	4651	HG2	PRO	333	22.989	69.927	27.481
ATOM	4652	HG3	PRO	333	22.501	71.051	26.191
ATOM	4653	CB	PRO	333	23.919	71.858	27.574
ATOM	4654	HB2	PRO	333	24.471	71.475	28.432
ATOM	4655	HB3	PRO	333	23.178	72.582	27.913
ATOM	4656	CA	PRO	333	24.884	72.520	26.589
ATOM	4657	HA	PRO	333	24.401	73.310	26.015
ATOM	4658	C	PRO	333	26.078	73.078	27.298
ATOM	4659	O	PRO	333	26.067	74.260	27.639
ATOM	4660	N	LEU	334	27.112	72.251	27.539
ATOM	4661	H	LEU	334	27.045	71.388	27.292
ATOM	4662	CA	LEU	334	28.306	72.723	28.177
ATOM	4663	HA	LEU	334	28.050	73.250	29.096
ATOM	4664	CB	LEU	334	29.226	71.551	28.525

ATOM	4665	HB2	LEU	334	29.322	71.006	27.586
ATOM	4666	HB3	LEU	334	30.197	71.957	28.809
ATOM	4667	CG	LEU	334	28.731	70.601	29.617
ATOM	4668	HG	LEU	334	27.725	70.266	29.364
ATOM	4669	CD1	LEU	334	29.651	69.396	29.739
ATOM	4670	HD11	LEU	334	30.657	69.730	29.993
ATOM	4671	HD12	LEU	334	29.281	68.733	30.521
ATOM	4672	HD13	LEU	334	29.676	68.860	28.790
ATOM	4673	CD2	LEU	334	28.625	71.324	30.951
ATOM	4674	HD21	LEU	334	27.923	72.153	30.861
ATOM	4675	HD22	LEU	334	28.271	70.630	31.714
ATOM	4676	HD23	LEU	334	29.605	71.708	31.236
ATOM	4677	C	LEU	334	28.947	73.691	27.230
ATOM	4678	O	LEU	334	29.424	74.750	27.634
ATOM	4679	N	LEU	335	28.958	73.342	25.930
ATOM	4680	H	LEU	335	28.554	72.568	25.710
ATOM	4681	CA	LEU	335	29.577	74.143	24.912
ATOM	4682	HA	LEU	335	30.612	74.351	25.184
ATOM	4683	CB	LEU	335	29.562	73.409	23.570
ATOM	4684	HB2	LEU	335	30.110	72.488	23.769
ATOM	4685	HB3	LEU	335	28.526	73.170	23.328
ATOM	4686	CG	LEU	335	30.206	74.140	22.390
ATOM	4687	HG	LEU	335	29.683	75.083	22.231
ATOM	4688	CD1	LEU	335	31.676	74.416	22.667
ATOM	4689	HD11	LEU	335	32.200	73.473	22.826
ATOM	4690	HD12	LEU	335	32.115	74.936	21.816
ATOM	4691	HD13	LEU	335	31.768	75.037	23.558
ATOM	4692	CD2	LEU	335	30.051	73.335	21.109
ATOM	4693	HD21	LEU	335	28.992	73.189	20.897
ATOM	4694	HD22	LEU	335	30.516	73.873	20.283
ATOM	4695	HD23	LEU	335	30.534	72.365	21.228
ATOM	4696	C	LEU	335	28.863	75.455	24.818
ATOM	4697	O	LEU	335	29.493	76.504	24.699
ATOM	4698	N	TYR	336	27.519	75.428	24.882
ATOM	4699	H	TYR	336	27.106	74.637	24.996
ATOM	4700	CA	TYR	336	26.745	76.633	24.772
ATOM	4701	HA	TYR	336	27.002	77.154	23.850
ATOM	4702	CB	TYR	336	25.250	76.309	24.750
ATOM	4703	HB2	TYR	336	25.058	75.621	25.573
ATOM	4704	HB3	TYR	336	24.714	77.242	24.925
ATOM	4705	CG	TYR	336	24.775	75.691	23.455
ATOM	4706	CD1	TYR	336	23.723	74.784	23.443
ATOM	4707	HD1	TYR	336	23.243	74.524	24.386
ATOM	4708	CE1	TYR	336	23.283	74.214	22.264
ATOM	4709	HE1	TYR	336	22.455	73.505	22.270
ATOM	4710	CZ	TYR	336	23.896	74.548	21.075
ATOM	4711	OH	TYR	336	23.460	73.981	19.900
ATOM	4712	HH	TYR	336	22.829	73.466	20.060
ATOM	4713	CE2	TYR	336	24.955	75.455	21.059
ATOM	4714	HE2	TYR	336	25.446	75.723	20.123
ATOM	4715	CD2	TYR	336	25.381	76.016	22.248
ATOM	4716	HD2	TYR	336	26.207	76.728	22.250

ATOM	4717	C	TYR	336	27.082	77.542	25.911
ATOM	4718	O	TYR	336	27.116	78.760	25.749
ATOM	4719	N	THR	337	27.329	76.971	27.102
ATOM	4720	H	THR	337	27.313	76.073	27.165
ATOM	4721	CA	THR	337	27.615	77.766	28.262
ATOM	4722	HA	THR	337	26.780	78.442	28.446
ATOM	4723	CB	THR	337	27.822	76.889	29.510
ATOM	4724	HB	THR	337	28.638	76.192	29.322
ATOM	4725	CG2	THR	337	28.160	77.751	30.717
ATOM	4726	HG21	THR	337	27.344	78.448	30.906
ATOM	4727	HG22	THR	337	28.303	77.114	31.590
ATOM	4728	HG23	THR	337	29.076	78.309	30.521
ATOM	4729	OG1	THR	337	26.621	76.159	29.790
ATOM	4730	HG1	THR	337	26.434	75.676	29.141
ATOM	4731	C	THR	337	28.834	78.591	27.981
ATOM	4732	O	THR	337	28.917	79.750	28.383
ATOM	4733	N	TRP	338	29.802	78.008	27.253
ATOM	4734	H	TRP	338	29.634	77.173	26.961
ATOM	4735	CA	TRP	338	31.048	78.642	26.935
ATOM	4736	HA	TRP	338	31.548	78.954	27.852
ATOM	4737	CB	TRP	338	31.965	77.675	26.183
ATOM	4738	HB2	TRP	338	31.421	77.197	25.368
ATOM	4739	HB3	TRP	338	32.826	78.209	25.781
ATOM	4740	CG	TRP	338	32.507	76.573	27.041
ATOM	4741	CD1	TRP	338	32.159	75.254	26.997
ATOM	4742	HD1	TRP	338	31.407	74.968	26.262
ATOM	4743	NE1	TRP	338	32.868	74.545	27.936
ATOM	4744	HE1	TRP	338	32.793	73.623	28.085
ATOM	4745	CE2	TRP	338	33.696	75.410	28.609
ATOM	4746	CZ2	TRP	338	34.599	75.165	29.641
ATOM	4747	HZ2	TRP	338	34.703	74.144	30.009
ATOM	4748	CH2	TRP	338	35.303	76.229	30.131
ATOM	4749	HH2	TRP	338	36.020	76.078	30.938
ATOM	4750	CZ3	TRP	338	35.123	77.517	29.616
ATOM	4751	HZ3	TRP	338	35.690	78.358	30.015
ATOM	4752	CE3	TRP	338	34.228	77.765	28.593
ATOM	4753	HE3	TRP	338	34.125	78.787	28.230
ATOM	4754	CD2	TRP	338	33.495	76.694	28.072
ATOM	4755	C	TRP	338	30.771	79.868	26.127
ATOM	4756	O	TRP	338	31.546	80.823	26.168
ATOM	4757	N	ARG	339	29.653	79.872	25.372
ATOM	4758	H	ARG	339	29.135	79.136	25.394
ATOM	4759	CA	ARG	339	29.276	80.991	24.555
ATOM	4760	HA	ARG	339	29.991	81.111	23.741
ATOM	4761	CB	ARG	339	27.885	80.772	23.956
ATOM	4762	HB2	ARG	339	27.920	79.839	23.394
ATOM	4763	HB3	ARG	339	27.189	80.668	24.788
ATOM	4764	CG	ARG	339	27.419	81.896	23.044
ATOM	4765	HG2	ARG	339	26.360	81.753	22.831
ATOM	4766	HG3	ARG	339	27.560	82.844	23.562
ATOM	4767	CD	ARG	339	28.200	81.910	21.741
ATOM	4768	HD2	ARG	339	29.216	82.250	21.940

ATOM	4769	HD3	ARG	339	28.229	80.899	21.334
ATOM	4770	NE	ARG	339	27.596	82.797	20.750
ATOM	4771	HE	ARG	339	27.005	82.455	20.225
ATOM	4772	CZ	ARG	339	27.902	84.084	20.614
ATOM	4773	NH1	ARG	339	27.300	84.814	19.685
ATOM	4774	HH11	ARG	339	26.713	84.454	19.169
ATOM	4775	HH12	ARG	339	27.498	85.646	19.597
ATOM	4776	NH2	ARG	339	28.808	84.637	21.409
ATOM	4777	HH21	ARG	339	29.197	84.164	22.012
ATOM	4778	HH22	ARG	339	29.005	85.470	21.321
ATOM	4779	C	ARG	339	29.325	82.220	25.399
ATOM	4780	O	ARG	339	29.359	82.154	26.627
ATOM	4781	N	ASN	340	29.343	83.385	24.729
ATOM	4782	H	ASN	340	29.236	83.352	23.836
ATOM	4783	CA	ASN	340	29.523	84.643	25.380
ATOM	4784	HA	ASN	340	30.452	84.634	25.950
ATOM	4785	CB	ASN	340	29.592	85.774	24.351
ATOM	4786	HB2	ASN	340	30.249	85.468	23.537
ATOM	4787	HB3	ASN	340	28.590	85.954	23.960
ATOM	4788	CG	ASN	340	30.121	87.066	24.941
ATOM	4789	OD1	ASN	340	31.147	87.075	25.622
ATOM	4790	ND2	ASN	340	29.421	88.164	24.681
ATOM	4791	HD21	ASN	340	29.691	88.958	25.007
ATOM	4792	HD22	ASN	340	28.676	88.114	24.178
ATOM	4793	C	ASN	340	28.433	84.884	26.361
ATOM	4794	O	ASN	340	27.647	84.003	26.705
ATOM	4795	N	GLU	341	28.363	86.142	26.814
ATOM	4796	H	GLU	341	28.906	86.749	26.431
ATOM	4797	CA	GLU	341	27.477	86.536	27.857
ATOM	4798	HA	GLU	341	27.730	86.008	28.776
ATOM	4799	CB	GLU	341	27.586	88.041	28.112
ATOM	4800	HB2	GLU	341	27.460	88.539	27.151
ATOM	4801	HB3	GLU	341	26.764	88.315	28.774
ATOM	4802	CG	GLU	341	28.903	88.471	28.736
ATOM	4803	HG2	GLU	341	29.708	88.141	28.079
ATOM	4804	HG3	GLU	341	28.907	89.559	28.795
ATOM	4805	CD	GLU	341	29.110	87.889	30.121
ATOM	4806	OE1	GLU	341	28.193	88.013	30.960
ATOM	4807	OE2	GLU	341	30.189	87.310	30.367
ATOM	4808	C	GLU	341	26.106	86.140	27.455
ATOM	4809	O	GLU	341	25.247	85.949	28.314
ATOM	4810	N	GLU	342	25.852	86.024	26.139
ATOM	4811	H	GLU	342	26.489	86.136	25.514
ATOM	4812	CA	GLU	342	24.513	85.711	25.747
ATOM	4813	HA	GLU	342	23.835	86.492	26.091
ATOM	4814	CB	GLU	342	24.410	85.611	24.224
ATOM	4815	HB2	GLU	342	25.165	84.895	23.898
ATOM	4816	HB3	GLU	342	23.418	85.222	23.994
ATOM	4817	CG	GLU	342	24.617	86.931	23.499
ATOM	4818	HG2	GLU	342	24.153	86.851	22.516
ATOM	4819	HG3	GLU	342	24.116	87.710	24.073
ATOM	4820	CD	GLU	342	26.083	87.284	23.339

ATOM	4821	OE1	GLU	342	26.938	86.483	23.773
ATOM	4822	OE2	GLU	342	26.376	88.361	22.779
ATOM	4823	C	GLU	342	24.058	84.427	26.387
ATOM	4824	O	GLU	342	23.161	84.445	27.226
ATOM	4825	N	PHE	343	24.690	83.283	26.061
ATOM	4826	H	PHE	343	25.376	83.296	25.478
ATOM	4827	CA	PHE	343	24.267	82.038	26.647
ATOM	4828	HA	PHE	343	23.181	81.958	26.601
ATOM	4829	CB	PHE	343	24.876	80.856	25.891
ATOM	4830	HB2	PHE	343	25.939	81.029	25.720
ATOM	4831	HB3	PHE	343	24.745	79.938	26.463
ATOM	4832	CG	PHE	343	24.258	80.614	24.544
ATOM	4833	CD1	PHE	343	24.601	81.400	23.457
ATOM	4834	HD1	PHE	343	25.328	82.202	23.586
ATOM	4835	CE1	PHE	343	24.032	81.177	22.218
ATOM	4836	HE1	PHE	343	24.312	81.802	21.370
ATOM	4837	CZ	PHE	343	23.109	80.162	22.053
ATOM	4838	HZ	PHE	343	22.657	79.983	21.078
ATOM	4839	CE2	PHE	343	22.763	79.379	23.123
ATOM	4840	HE2	PHE	343	22.035	78.578	22.993
ATOM	4841	CD2	PHE	343	23.333	79.601	24.363
ATOM	4842	HD2	PHE	343	23.055	78.975	25.211
ATOM	4843	C	PHE	343	24.641	81.972	28.094
ATOM	4844	O	PHE	343	23.848	81.538	28.929
ATOM	4845	N	ARG	344	25.870	82.408	28.424
ATOM	4846	H	ARG	344	26.383	82.785	27.788
ATOM	4847	CA	ARG	344	26.366	82.280	29.764
ATOM	4848	HA	ARG	344	26.311	81.238	30.080
ATOM	4849	CB	ARG	344	27.824	82.738	29.842
ATOM	4850	HB2	ARG	344	28.391	82.126	29.140
ATOM	4851	HB3	ARG	344	27.851	83.779	29.520
ATOM	4852	CG	ARG	344	28.438	82.620	31.227
ATOM	4853	HG2	ARG	344	27.805	83.156	31.934
ATOM	4854	HG3	ARG	344	28.477	81.566	31.501
ATOM	4855	CD	ARG	344	29.841	83.204	31.260
ATOM	4856	HD2	ARG	344	30.281	83.016	32.240
ATOM	4857	HD3	ARG	344	30.445	82.719	30.493
ATOM	4858	NE	ARG	344	29.841	84.644	31.015
ATOM	4859	HE	ARG	344	29.089	85.055	31.093
ATOM	4860	CZ	ARG	344	30.920	85.345	30.683
ATOM	4861	NH1	ARG	344	30.825	86.652	30.480
ATOM	4862	HH11	ARG	344	30.065	87.046	30.562
ATOM	4863	HH12	ARG	344	31.523	87.106	30.265
ATOM	4864	NH2	ARG	344	32.092	84.738	30.555
ATOM	4865	HH21	ARG	344	32.154	83.891	30.687
ATOM	4866	HH22	ARG	344	32.791	85.192	30.341
ATOM	4867	C	ARG	344	25.519	83.069	30.712
ATOM	4868	O	ARG	344	25.088	82.554	31.743
ATOM	4869	N	ARG	345	25.240	84.343	30.382
ATOM	4870	H	ARG	345	25.534	84.672	29.597
ATOM	4871	CA	ARG	345	24.480	85.177	31.270
ATOM	4872	HA	ARG	345	24.927	85.162	32.264

ATOM	4873	CB	ARG	345	24.461	86.621	30.764
ATOM	4874	HB2	ARG	345	25.498	86.927	30.627
ATOM	4875	HB3	ARG	345	23.954	86.617	29.799
ATOM	4876	CG	ARG	345	23.764	87.597	31.698
ATOM	4877	HG2	ARG	345	22.723	87.293	31.804
ATOM	4878	HG3	ARG	345	24.255	87.558	32.671
ATOM	4879	CD	ARG	345	23.824	89.016	31.158
ATOM	4880	HD2	ARG	345	23.399	89.031	30.154
ATOM	4881	HD3	ARG	345	23.242	89.669	31.809
ATOM	4882	NE	ARG	345	25.194	89.520	31.094
ATOM	4883	HE	ARG	345	25.771	89.156	31.621
ATOM	4884	CZ	ARG	345	25.596	90.492	30.282
ATOM	4885	NH1	ARG	345	26.862	90.884	30.293
ATOM	4886	HH11	ARG	345	27.424	90.509	30.826
ATOM	4887	HH12	ARG	345	27.122	91.513	29.767
ATOM	4888	NH2	ARG	345	24.730	91.069	29.460
ATOM	4889	HH21	ARG	345	23.908	90.815	29.453
ATOM	4890	HH22	ARG	345	24.990	91.698	28.935
ATOM	4891	C	ARG	345	23.092	84.655	31.410
ATOM	4892	O	ARG	345	22.547	84.624	32.513
ATOM	4893	N	SER	346	22.482	84.207	30.301
ATOM	4894	H	SER	346	22.908	84.189	29.509
ATOM	4895	CA	SER	346	21.130	83.754	30.396
ATOM	4896	HA	SER	346	20.503	84.545	30.808
ATOM	4897	CB	SER	346	20.594	83.375	29.014
ATOM	4898	HB2	SER	346	19.535	83.134	29.104
ATOM	4899	HB3	SER	346	20.716	84.228	28.346
ATOM	4900	OG	SER	346	21.289	82.259	28.486
ATOM	4901	HG	SER	346	22.095	82.443	28.417
ATOM	4902	C	SER	346	21.112	82.596	31.343
ATOM	4903	O	SER	346	20.163	82.419	32.105
ATOM	4904	N	VAL	347	22.176	81.773	31.319
ATOM	4905	H	VAL	347	22.836	81.930	30.728
ATOM	4906	CA	VAL	347	22.268	80.660	32.217
ATOM	4907	HA	VAL	347	21.368	80.045	32.186
ATOM	4908	CB	VAL	347	23.483	79.771	31.892
ATOM	4909	HB	VAL	347	24.372	80.397	31.823
ATOM	4910	CG1	VAL	347	23.683	78.725	32.977
ATOM	4911	HG11	VAL	347	22.794	78.098	33.046
ATOM	4912	HG12	VAL	347	24.546	78.106	32.731
ATOM	4913	HG13	VAL	347	23.853	79.220	33.933
ATOM	4914	CG2	VAL	347	23.310	79.109	30.533
ATOM	4915	HG21	VAL	347	23.217	79.876	29.764
ATOM	4916	HG22	VAL	347	24.178	78.485	30.319
ATOM	4917	HG23	VAL	347	22.412	78.492	30.541
ATOM	4918	C	VAL	347	22.339	81.200	33.609
ATOM	4919	O	VAL	347	21.684	80.693	34.518
ATOM	4920	N	ARG	348	23.138	82.265	33.811
ATOM	4921	H	ARG	348	23.588	82.632	33.124
ATOM	4922	CA	ARG	348	23.269	82.813	35.128
ATOM	4923	HA	ARG	348	23.664	82.056	35.805
ATOM	4924	CB	ARG	348	24.225	84.007	35.119

ATOM	4925	HB2	ARG	348	23.868	84.698	34.356
ATOM	4926	HB3	ARG	348	24.156	84.481	36.098
ATOM	4927	CG	ARG	348	25.673	83.642	34.834
ATOM	4928	HG2	ARG	348	25.963	82.828	35.498
ATOM	4929	HG3	ARG	348	25.750	83.310	33.799
ATOM	4930	CD	ARG	348	26.596	84.829	35.055
ATOM	4931	HD2	ARG	348	26.466	85.193	36.074
ATOM	4932	HD3	ARG	348	27.628	84.509	34.913
ATOM	4933	NE	ARG	348	26.313	85.922	34.128
ATOM	4934	HE	ARG	348	25.774	86.536	34.399
ATOM	4935	CZ	ARG	348	26.834	86.021	32.909
ATOM	4936	NH1	ARG	348	26.519	87.052	32.136
ATOM	4937	HH11	ARG	348	25.979	87.656	32.423
ATOM	4938	HH12	ARG	348	26.856	87.116	31.347
ATOM	4939	NH2	ARG	348	27.667	85.090	32.466
ATOM	4940	HH21	ARG	348	27.871	84.422	32.968
ATOM	4941	HH22	ARG	348	28.003	85.154	31.677
ATOM	4942	C	ARG	348	21.878	83.204	35.610
ATOM	4943	O	ARG	348	21.297	84.165	35.039
ATOM	4944	OXT	ARG	348	21.369	82.549	36.559