

Figure 1

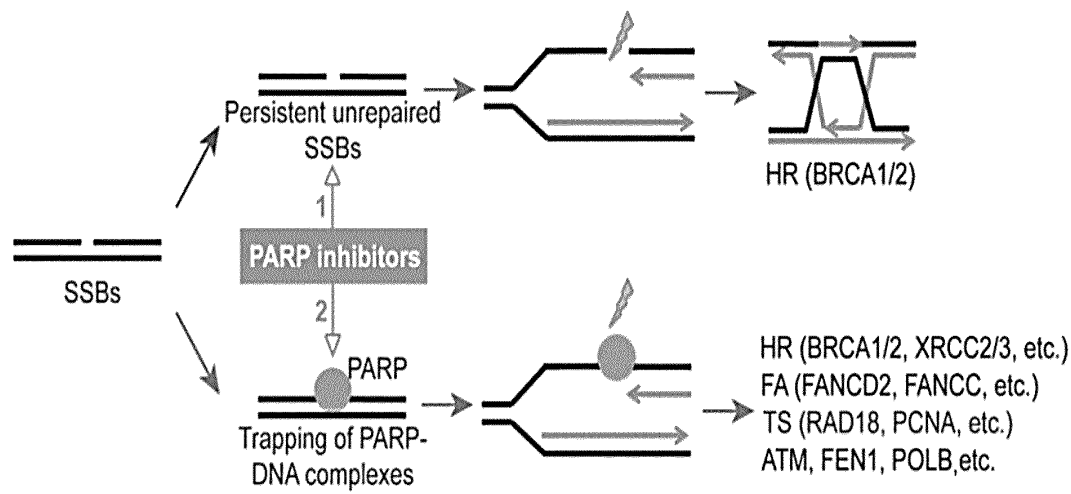


Figure 2

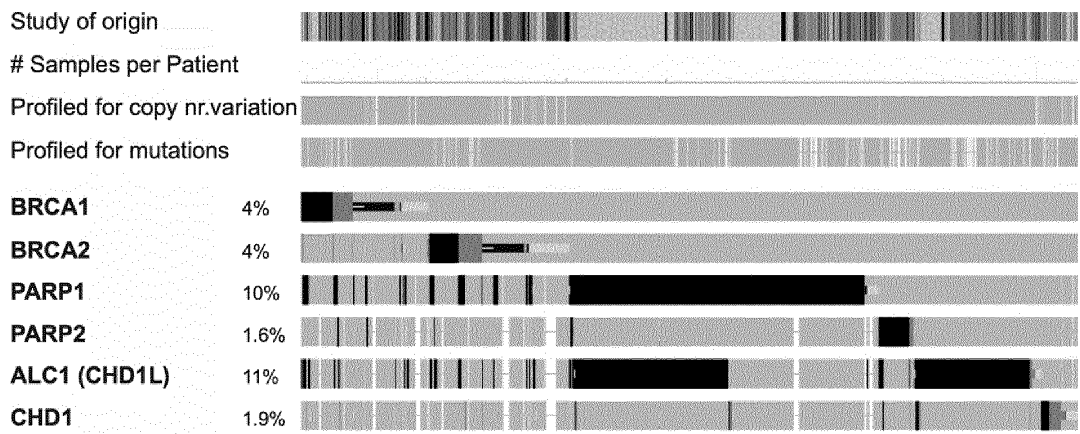


Figure 3

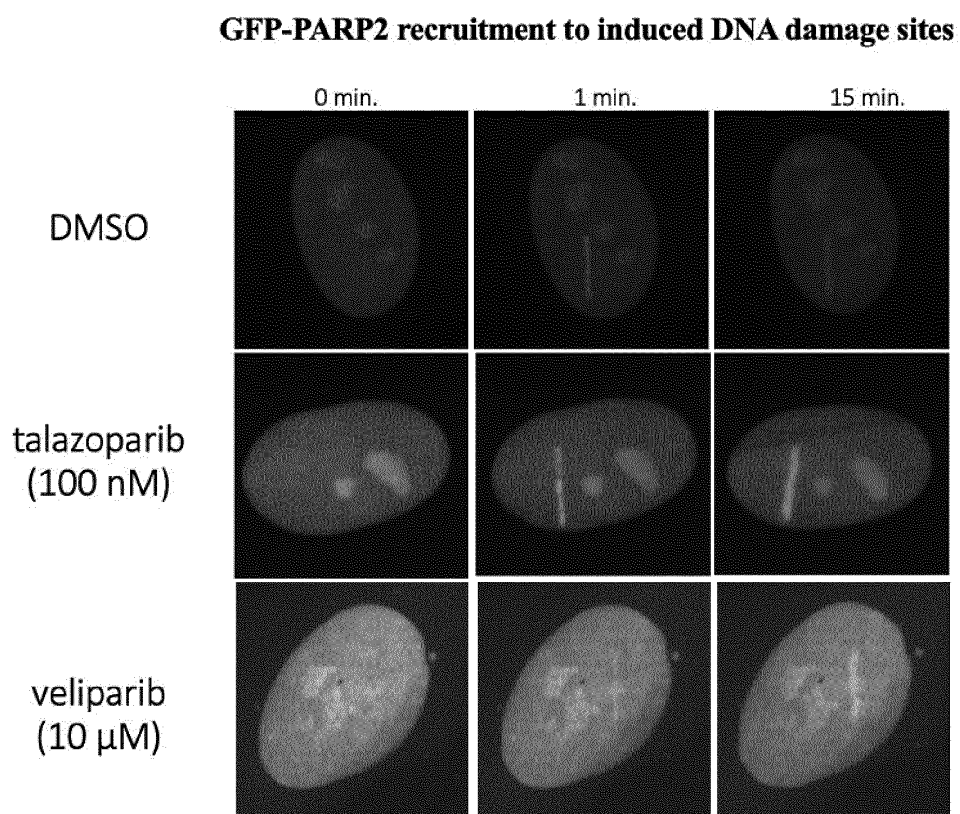


Figure 4

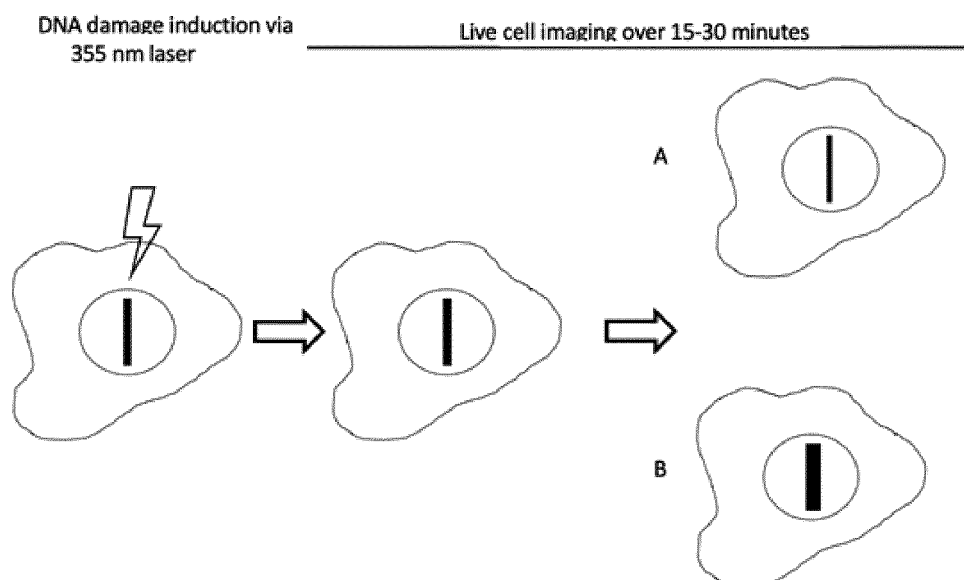


Figure 5

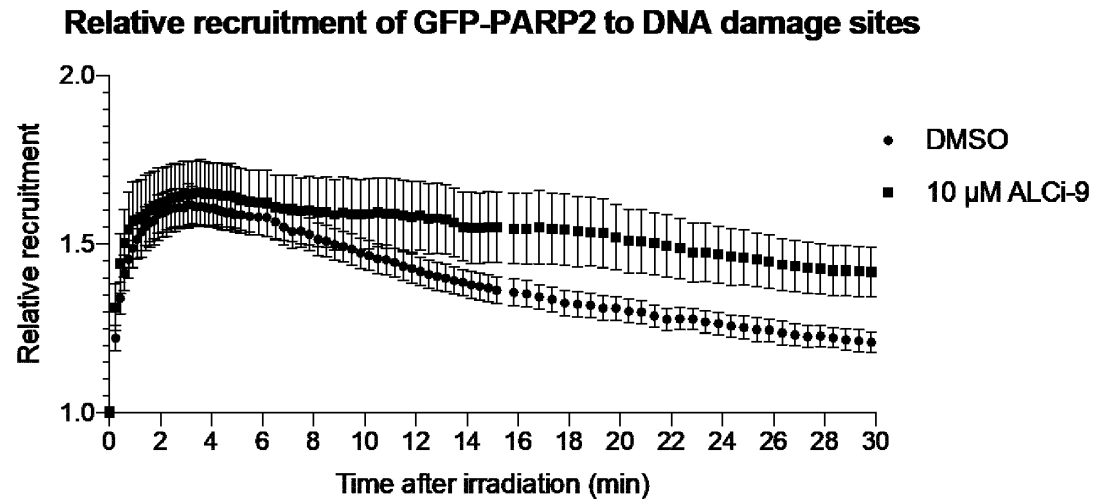


Figure 6

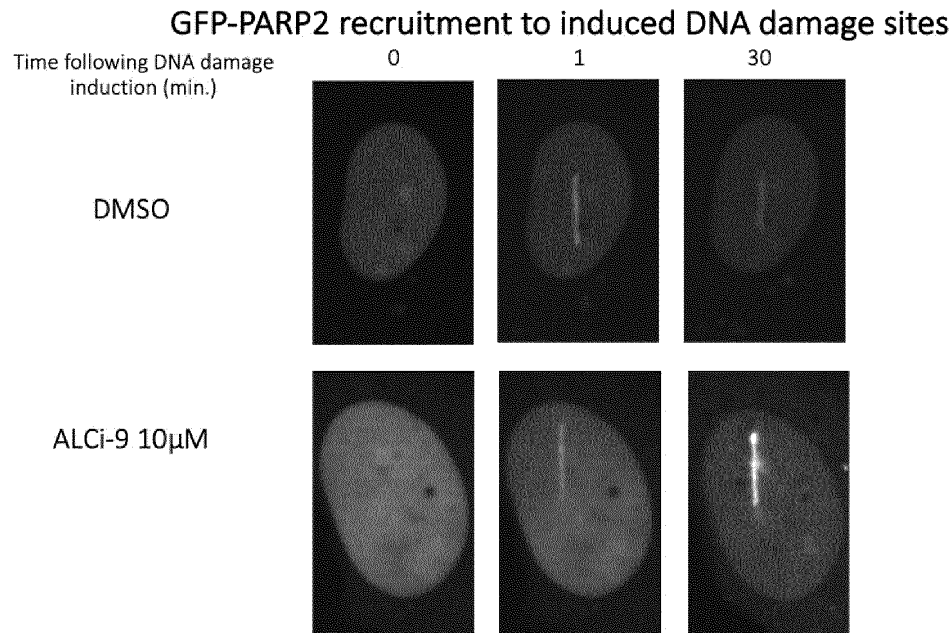


Figure 7

Relative recruitment of GFP-PARP2 to DNA damage sites after co-treatment of PARPi with ALCi

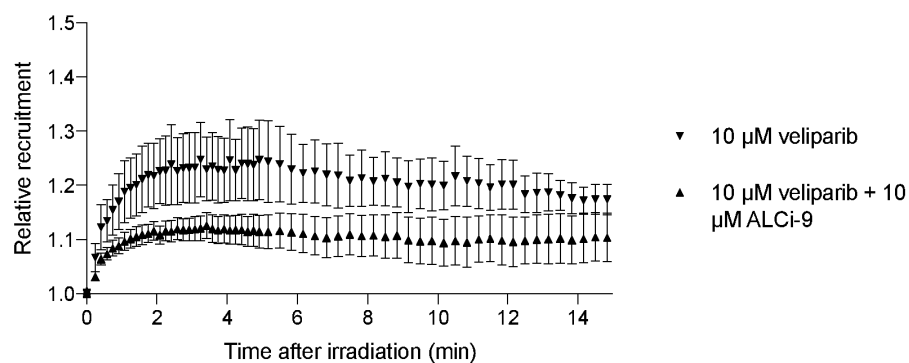


Figure 8

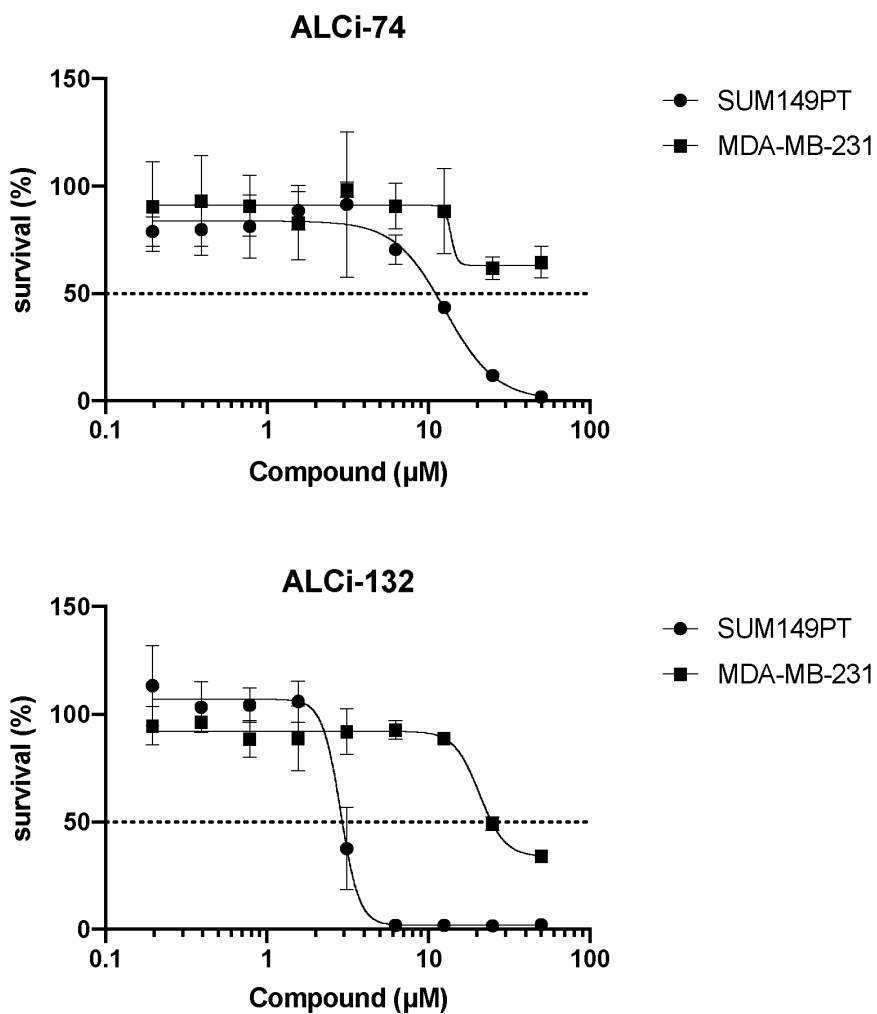


Figure 9, part 1

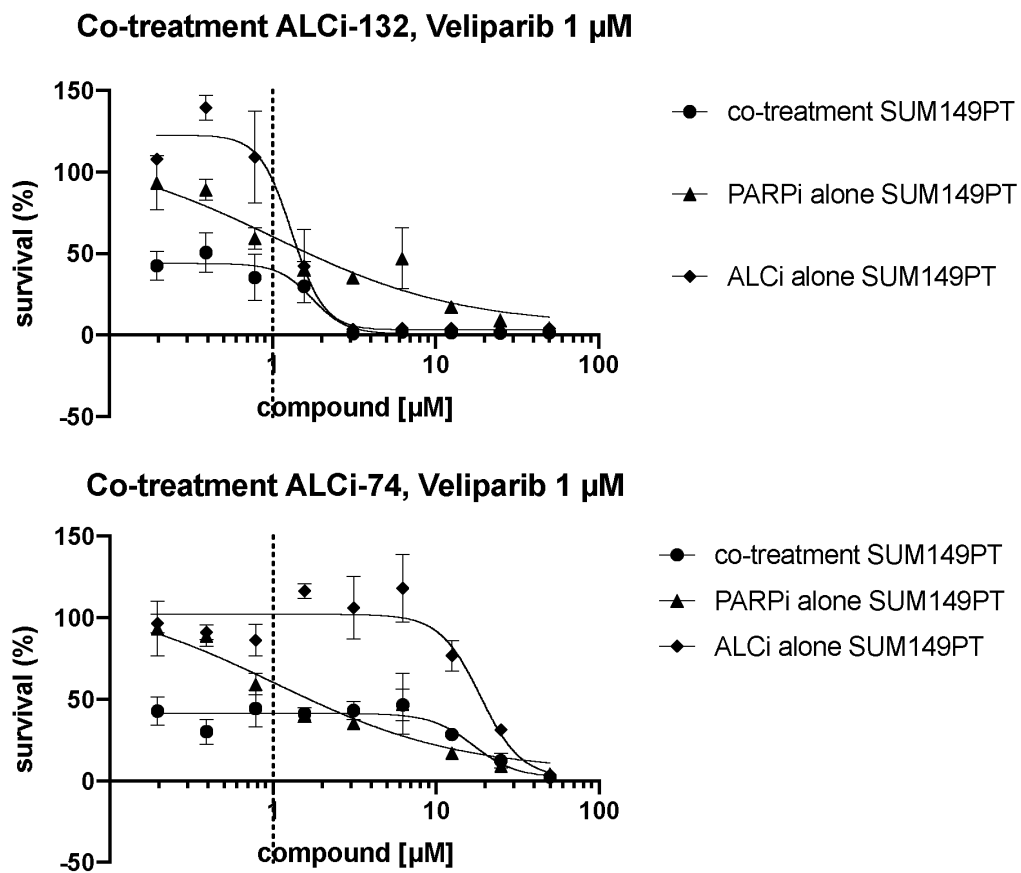


Figure 9, part 2

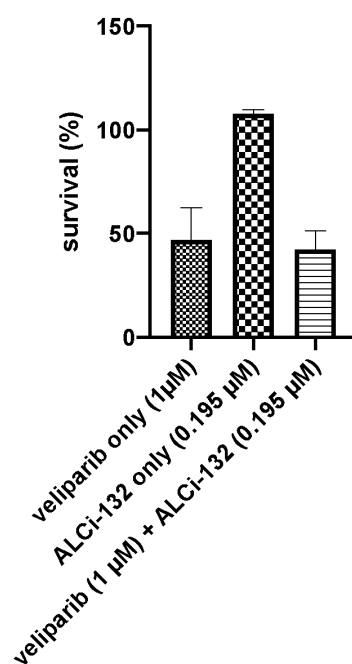
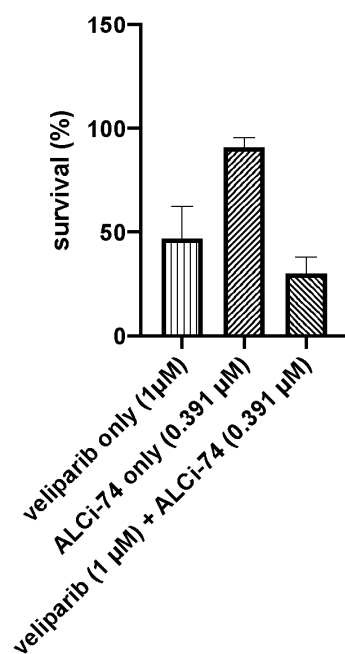
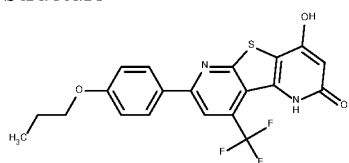
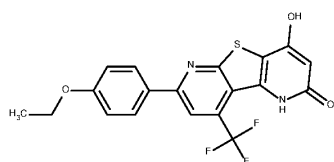
Co-treatment veliparib (1 μ M) + ALCi-132 (0.195 μ M)**Co-treatment veliparib (1 μ M) + ALCi-74 (0.391 μ M)**

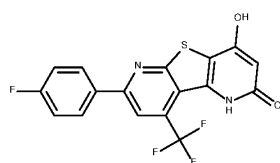
Figure 10
Structure



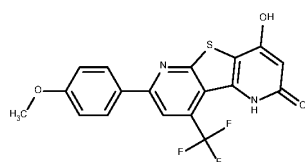
Molecule Name
ALCi-1



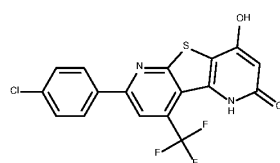
ALCi-2



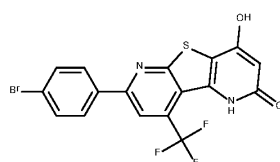
ALCi-3



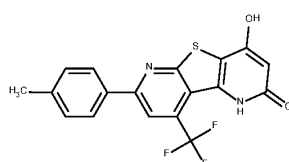
ALCi-4



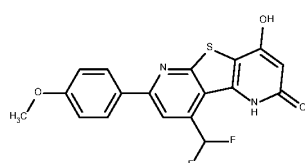
ALCi-5



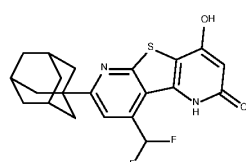
ALCi-6



ALCi-7



ALCi-8



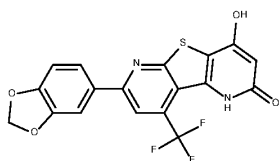
ALCi-9

Figure 10 (continued)

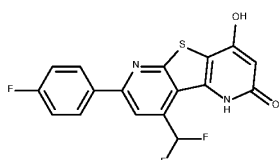
Structure

Molecule Name

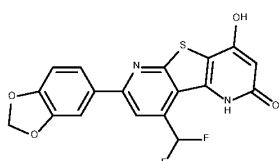
ALCi-10



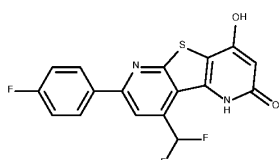
ALCi-11



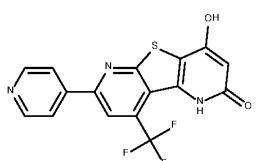
ALCi-14



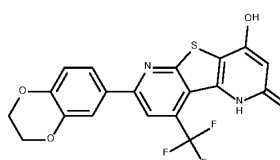
ALCi-15



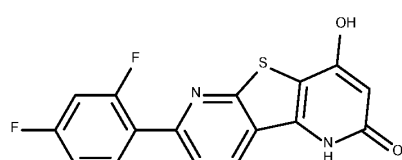
ALCi-17



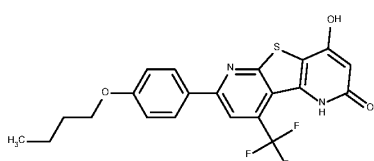
ALCi-18



ALCi-19



ALCi-22



ALCi-23

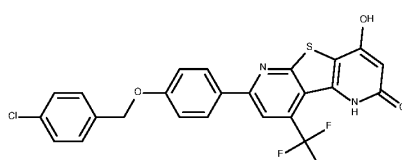
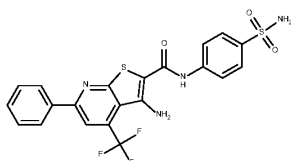


Figure 10 (continued)

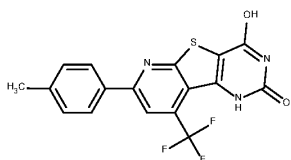
Structure

Molecule Name

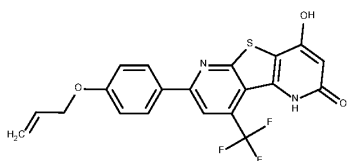
ALCi-24



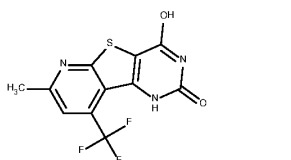
ALCi-29



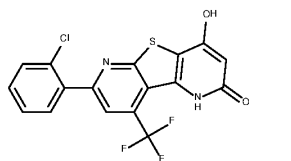
ALCi-30



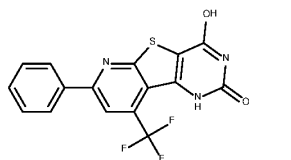
ALCi-36



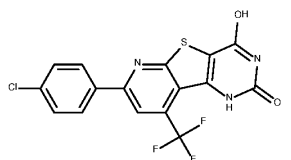
ALCi-37



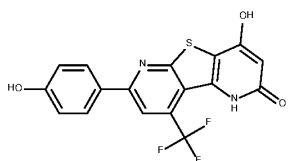
ALCi-39



ALCi-40



ALCi-43



ALCi-44

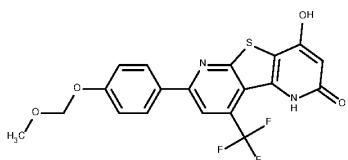
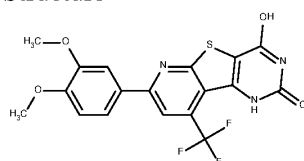


Figure 10 (continued)

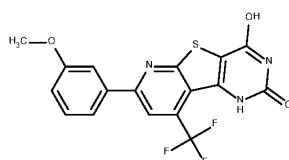
Structure

Molecule Name

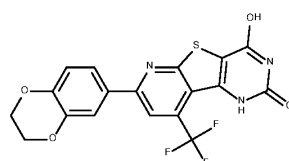
ALCi-46



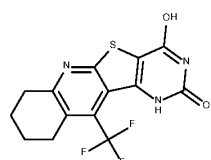
ALCi-47



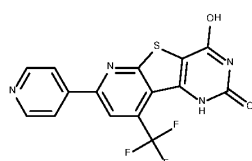
ALCi-48



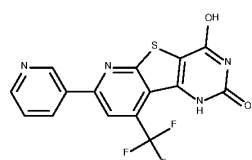
ALCi-50



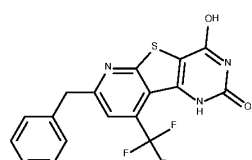
ALCi-51



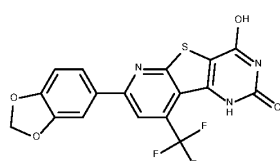
ALCi-52



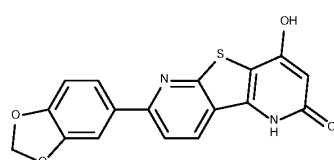
ALCi-53



ALCi-54



ALCi-55



Structure

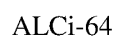
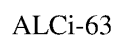
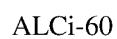
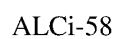
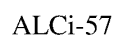
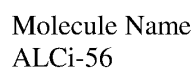
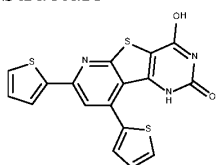


Figure 10 (continued)

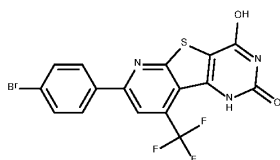
Structure

Molecule Name

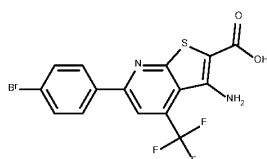
ALCi-70



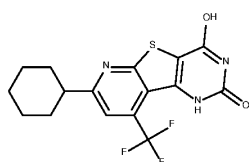
ALCi-72



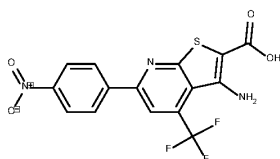
ALCi-74



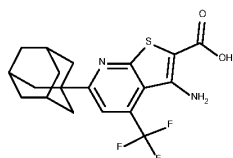
ALCi-75



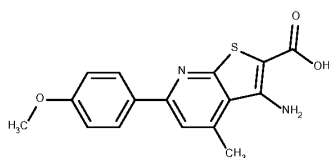
ALCi-77



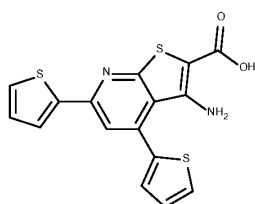
ALCi-79



ALCi-81



ALCi-82



ALCi-87

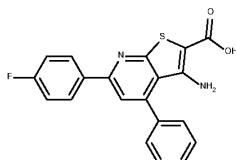
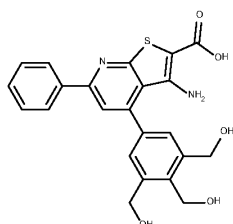


Figure 10 (continued)

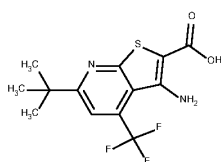
Structure

Molecule Name

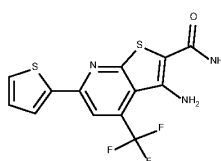
ALCi-90



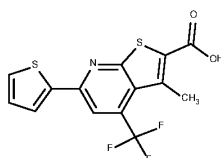
ALCi-93



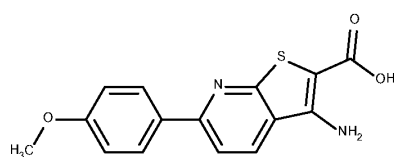
ALCi-94



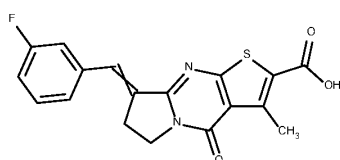
ALCi-97



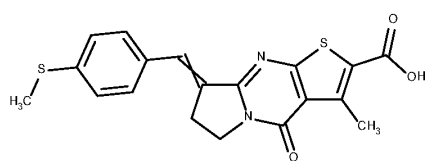
ALCi-101



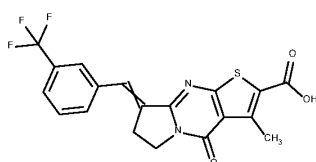
ALCi-120



ALCi-123



ALCi-124



ALCi-125

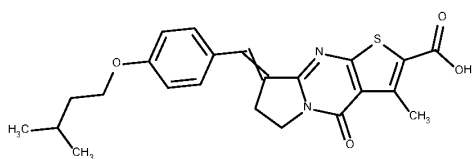
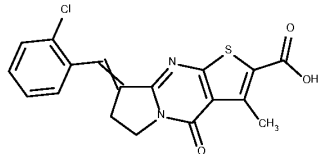


Figure 10 (continued)

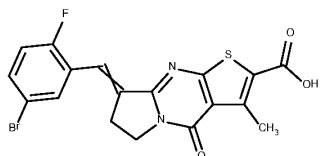
Structure

Molecule Name

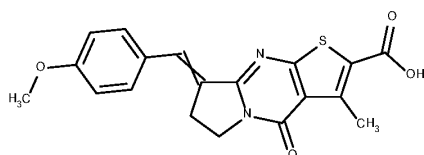
ALCi-127



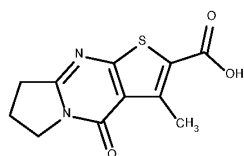
ALCi-128



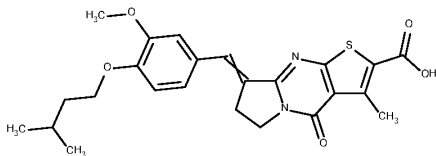
ALCi-129



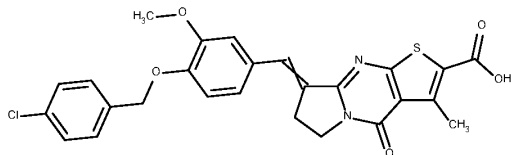
ALCi-130



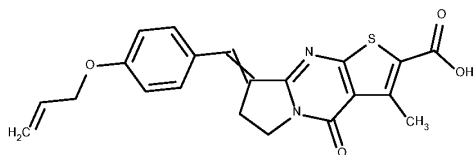
ALCi-131



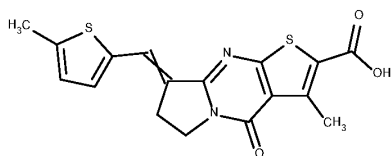
ALCi-132



ALCi-133



ALCi-134



ALCi-135

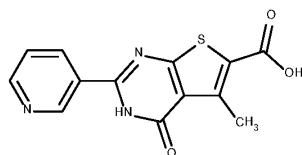
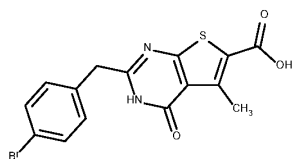


Figure 10 (continued)

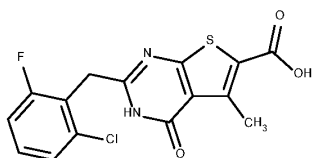
Structure

Molecule Name

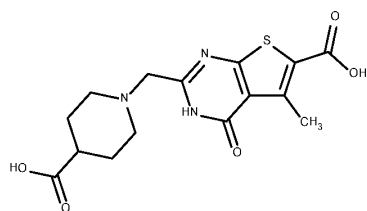
ALCi-136



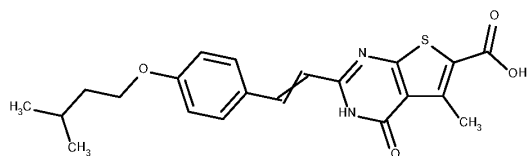
ALCi-137



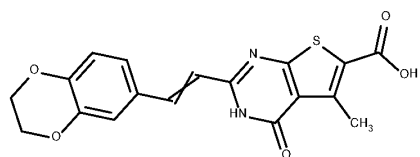
ALCi-138



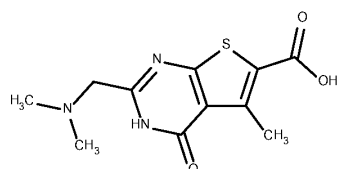
ALCi-146



ALCi-147



ALCi-150



ALCi-151

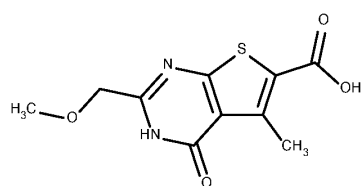
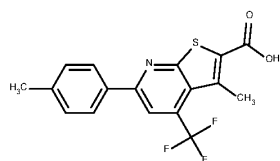


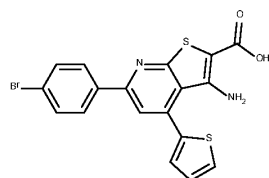
Figure 10 (continued)

Structure

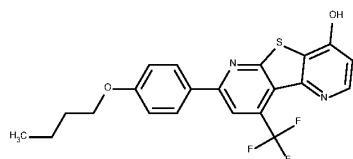


Molecule Name

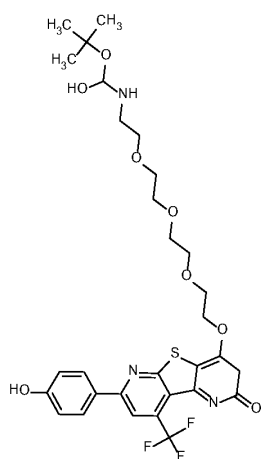
ALCi-152



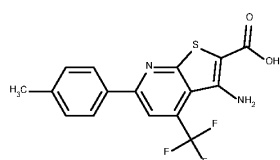
ALCi-157



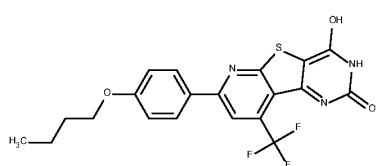
ALCi-158



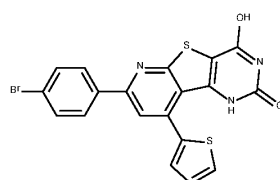
ALCi-160



ALCi-162



ALCi-163



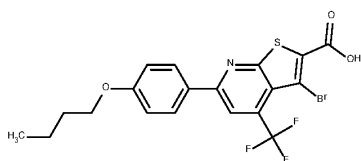
ALCi-164

Figure 10 (continued)

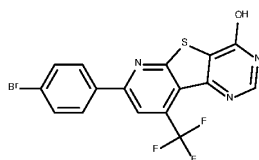
Structure

Molecule Name

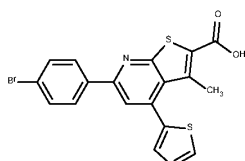
ALCi-166



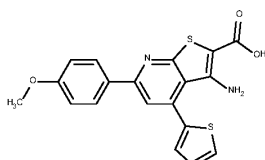
ALCi-167



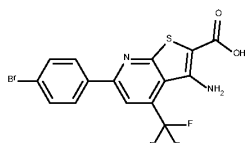
ALCi-171



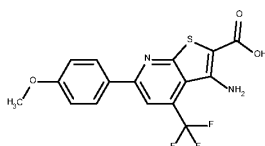
ALCi-172



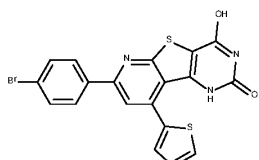
ALCi-177



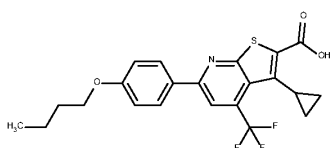
ALCi-178



ALCi-179



ALCi-180



ALCi-183

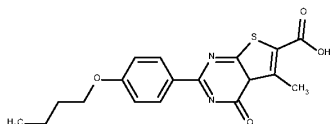
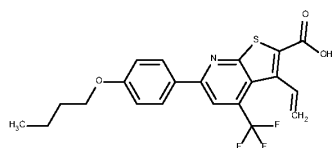


Figure 10 (continued)

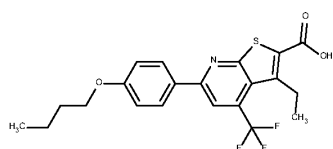
Structure

Molecule Name

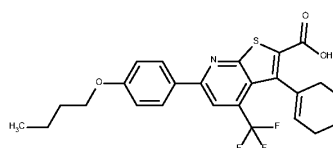
ALCi-184



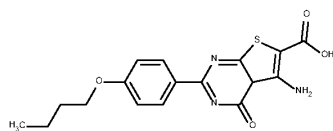
ALCi-185



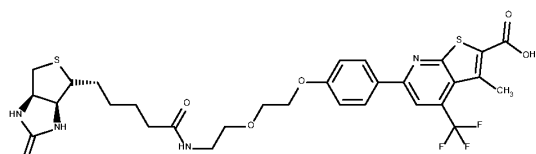
ALCi-186



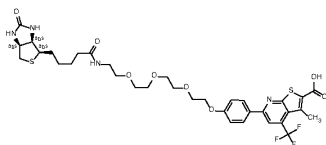
ALCi-187



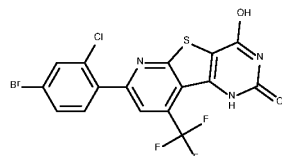
ALCi-188



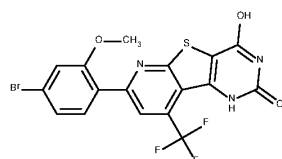
ALCi-189



ALCi-190



ALCi-191



ALCi-192

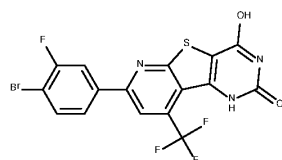
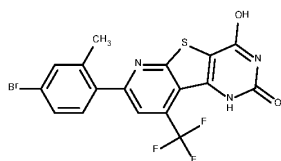


Figure 10 (continued)

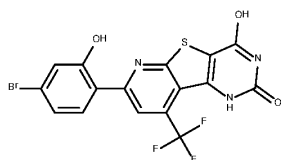
Structure

Molecule Name

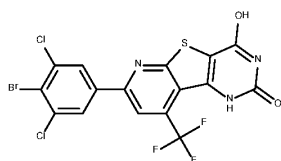
ALCi-193



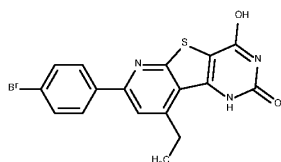
ALCi-194



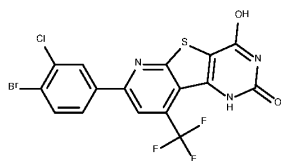
ALCi-195



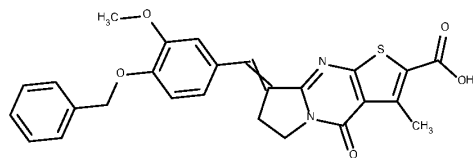
ALCi-196



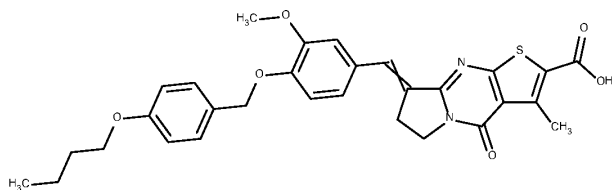
ALCi-197



ALCi-198



ALCi-199



ALCi-200

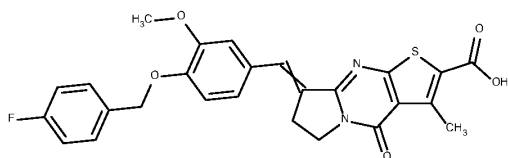
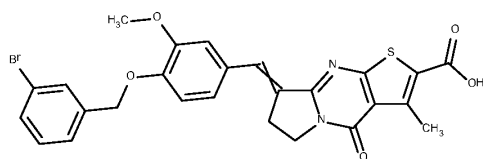


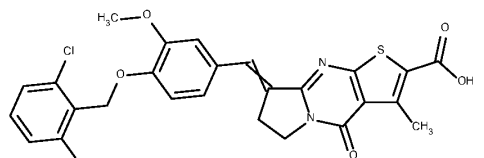
Figure 10 (continued)

Structure

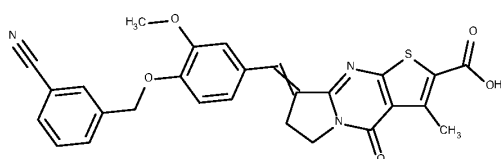
Molecule Name



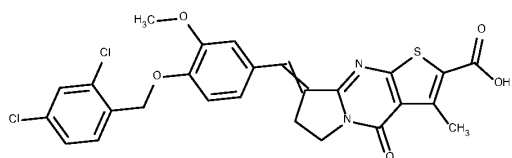
ALCi-201



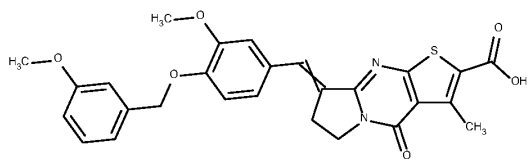
ALCi-202



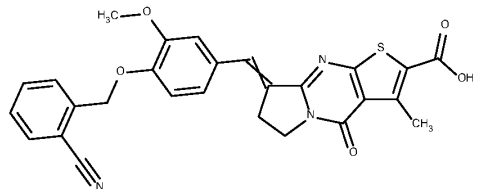
ALCi-203



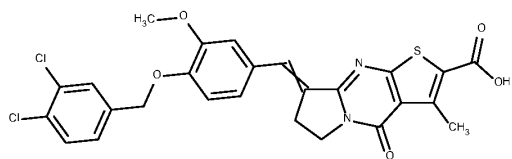
ALCi-204



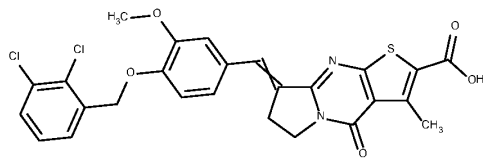
ALCi-205



ALCi-206



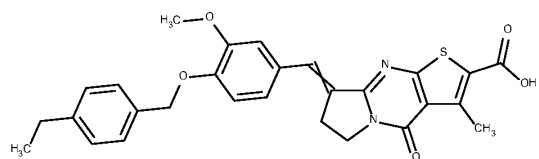
ALCi-207



ALCi-208

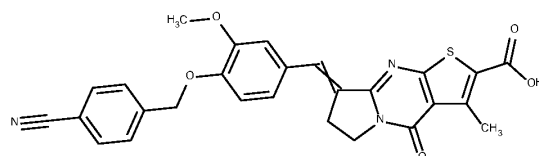
Figure 10 (continued)

Structure

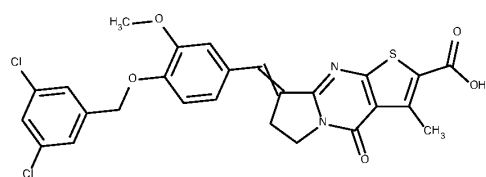


Molecule Name

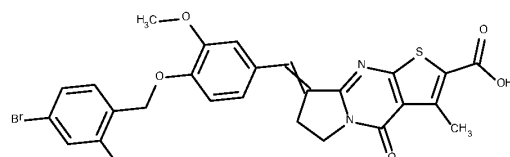
ALCi-209



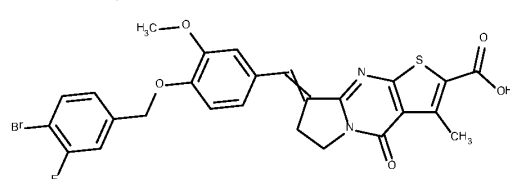
ALCi-210



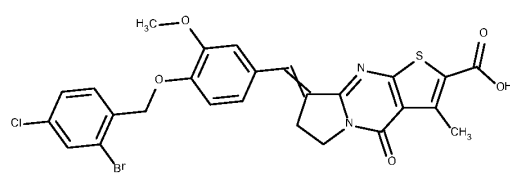
ALCi-211



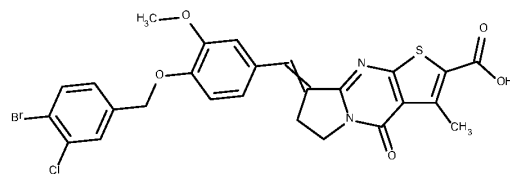
ALCi-212



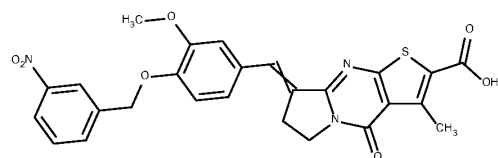
ALCi-213



ALCi-214



ALCi-215

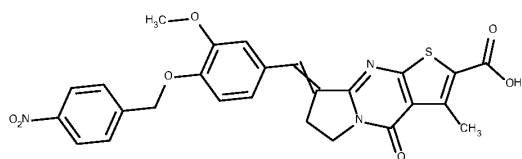


ALCi-216

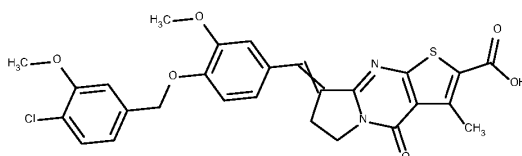
Figure 10 (continued)

Structure

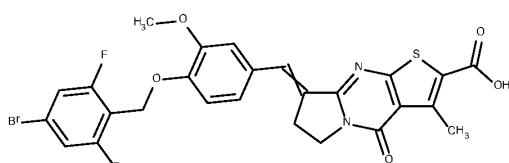
Molecule Name



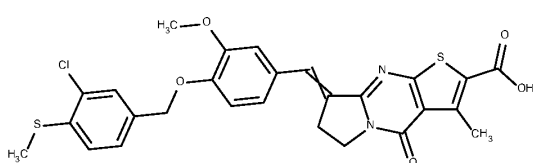
ALCi-217



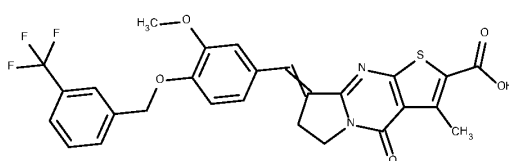
ALCi-218



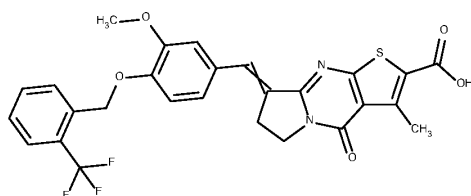
ALCi-219



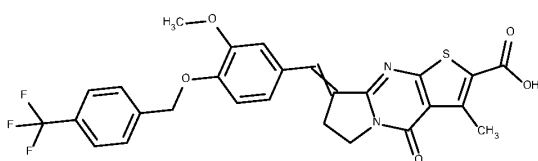
ALCi-220



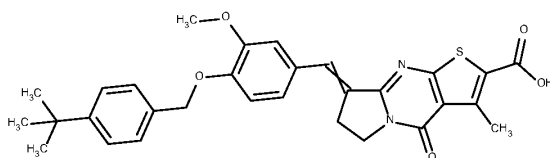
ALCi-221



ALCi-222



ALCi-223



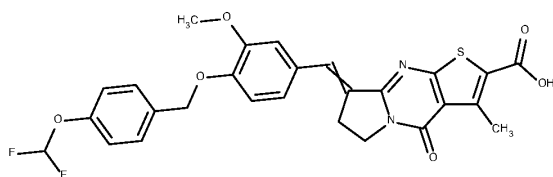
ALCi-224

Figure 10 (continued)

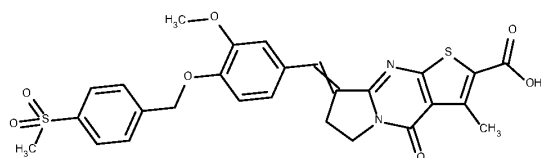
Structure

Molecule Name

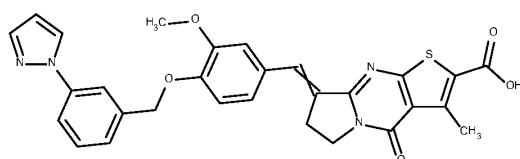
ALCi-225



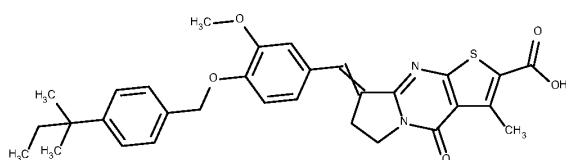
ALCi-226



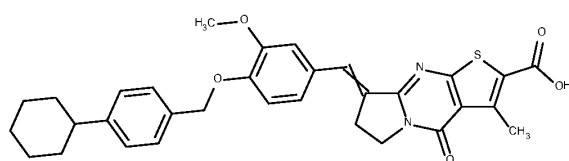
ALCi-227



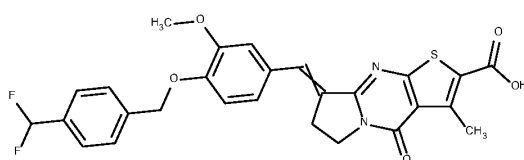
ALCi-228



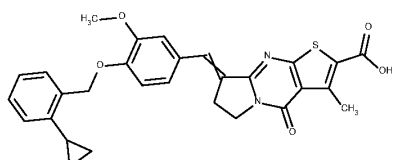
ALCi-229



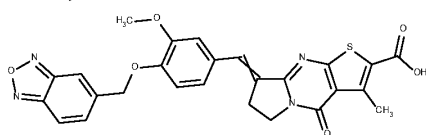
ALCi-230



ALCi-231



ALCi-232



ALCi-233

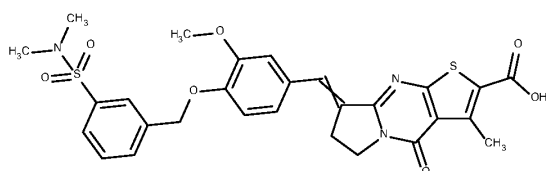
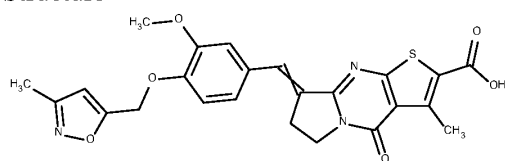


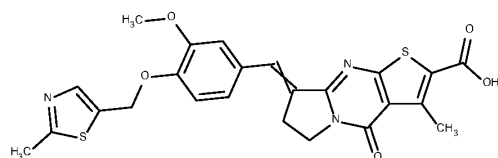
Figure 10 (continued)

Structure

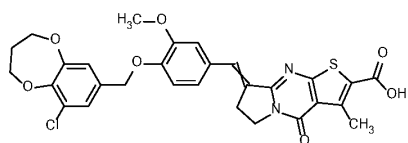
Molecule Name



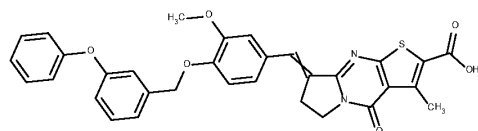
ALCi-234



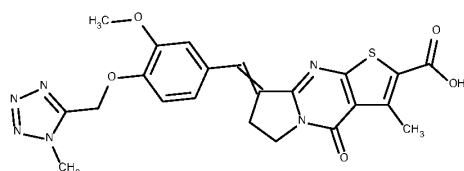
ALCi-235



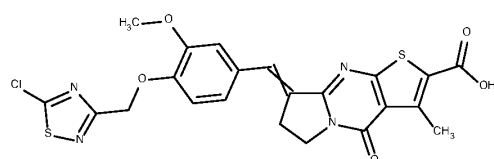
ALCi-236



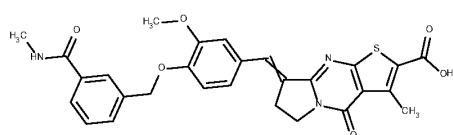
ALCi-237



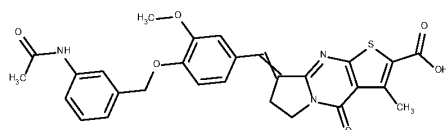
ALCi-238



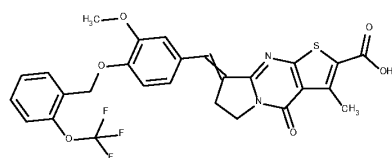
ALCi-239



ALCi-240



ALCi-241

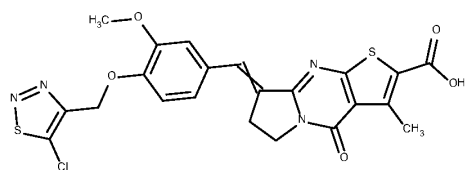


ALCi-242

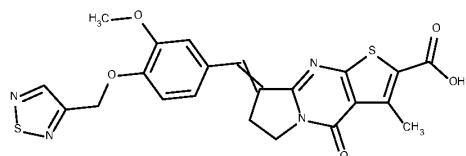
Figure 10 (continued)

Structure

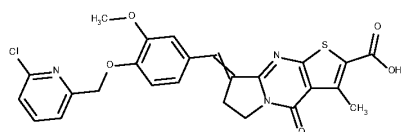
Molecule Name



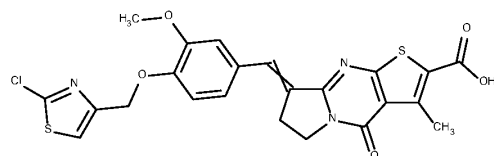
ALCi-245



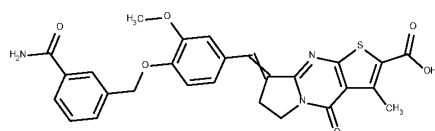
ALCi-246



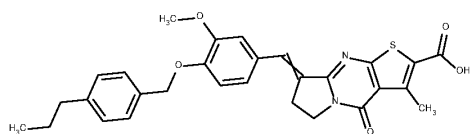
ALCi-247



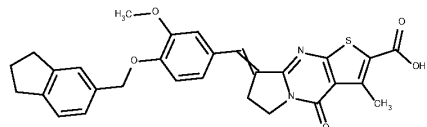
ALCi-248



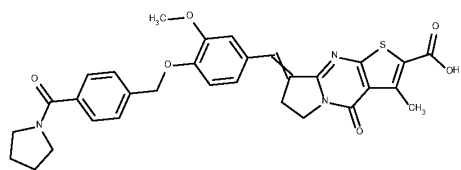
ALCi-250



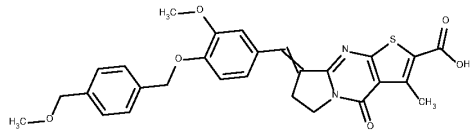
ALCi-251



ALCi-252



ALCi-253

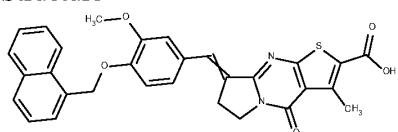


ALCi-254

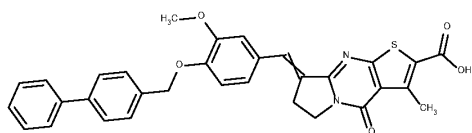
Figure 10 (continued)

Structure

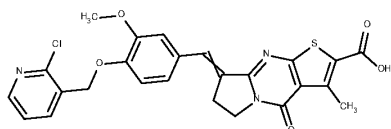
Molecule Name



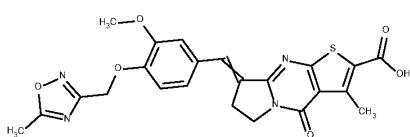
ALCi-255



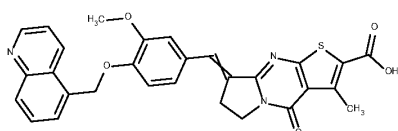
ALCi-256



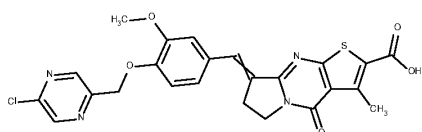
ALCi-257



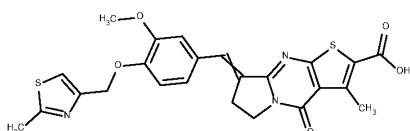
ALCi-258



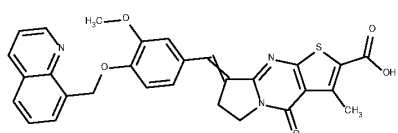
ALCi-259



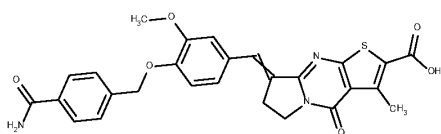
ALCi-260



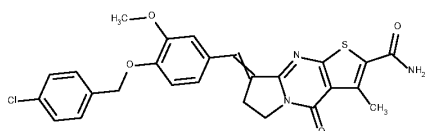
ALCi-261



ALCi-262



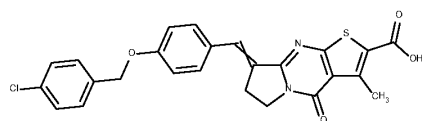
ALCi-263



ALCi-264

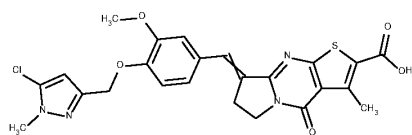
Figure 10 (continued)

Structure

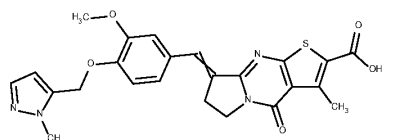


Molecule Name

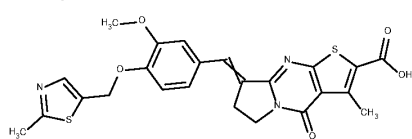
ALCi-265



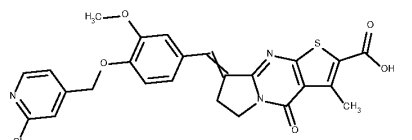
ALCi-266



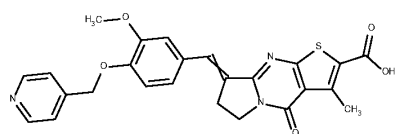
ALCi-267



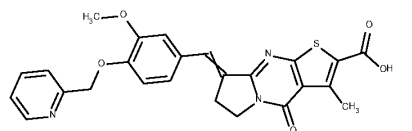
ALCi-268



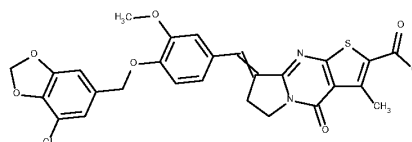
ALCi-269



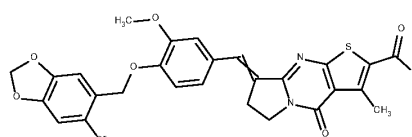
ALCi-270



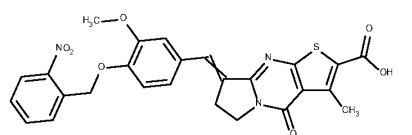
ALCi-271



ALCi-272



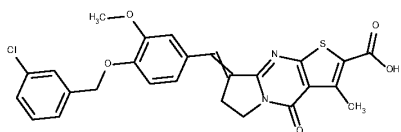
ALCi-273



ALCi-274

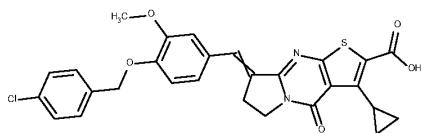
Figure 10 (continued)

Structure



Molecule Name

ALCi-275



ALCi-278

Figure 11

Compound Code	Nucleosome Remodeling Inhibition IC ₅₀	Compound Code	Nucleosome Remodeling Inhibition IC ₅₀
ALCi-1	+++	ALCi-65	++
ALCi-2	++	ALCi-70	+++
ALCi-3	++	ALCi-72	++
ALCi-4	++	ALCi-74	++
ALCi-5	++	ALCi-75	++
ALCi-6	+++	ALCi-77	+++
ALCi-7	++	ALCi-79	+++
ALCi-8	++	ALCi-81	++
ALCi-9	++	ALCi-82	++
ALCi-10	+++	ALCi-87	++
ALCi-11	++	ALCi-90	+
ALCi-14	++	ALCi-93	++
ALCi-15	++	ALCi-94	++
ALCi-17	++	ALCi-97	+
ALCi-18	++	ALCi-101	++
ALCi-19	+	ALCi-120	++
ALCi-22	+++	ALCi-123	+++
ALCi-23	+++	ALCi-124	++
ALCi-24	++	ALCi-125	+++
ALCi-29	+++	ALCi-127	++
ALCi-30	+++	ALCi-128	+++
ALCi-36	+	ALCi-129	+
ALCi-37	++	ALCi-130	+++
ALCi-39	+++	ALCi-131	++
ALCi-40	++	ALCi-132	+++
ALCi-43	++	ALCi-133	++
ALCi-44	++	ALCi-134	++
ALCi-46	+	ALCi-135	+
ALCi-47	++	ALCi-136	++
ALCi-48	+	ALCi-137	+
ALCi-50	+	ALCi-146	+++
ALCi-51	+	ALCi-147	++
ALCi-52	+	ALCi-149	+++
ALCi-53	+	ALCi-150	+++
ALCi-54	++	ALCi-151	+
ALCi-55	++	ALCi-152	++
ALCi-56	+++	ALCi-157	++
ALCi-57	++	ALCi-158	+++
ALCi-58	++	ALCi-160	++
ALCi-60	++	ALCi-162	+
ALCi-61	+	ALCi-163	+++
ALCi-62	++	ALCi-164	+++
ALCi-63	++	ALCi-166	+++
ALCi-64	++	ALCi-167	++

Figure 11 (continued)

Compound Code	Nucleosome Remodeling Inhibition IC ₅₀	Compound Code	Nucleosome Remodeling Inhibition IC ₅₀
ALCi-171	+++	ALCi-222	+++
ALCi-172	++	ALCi-223	+++
ALCi-177	++	ALCi-224	+++
ALCi-178	+	ALCi-225	+++
ALCi-179	++	ALCi-226	++
ALCi-180	+++	ALCi-227	+++
ALCi-183	++	ALCi-228	+++
ALCi-184	+++	ALCi-229	+++
ALCi-185	+++	ALCi-230	+++
ALCi-186	+++	ALCi-231	+++
ALCi-187	++	ALCi-232	+++
ALCi-188	++	ALCi-233	+++
ALCi-189	+	ALCi-234	++
ALCi-190	+++	ALCi-235	+++
ALCi-191	++	ALCi-236	+++
ALCi-192	+++	ALCi-237	+++
ALCi-193	++	ALCi-238	++
ALCi-194	+++	ALCi-239	+++
ALCi-195	+++	ALCi-240	++
ALCi-196	++	ALCi-241	+++
ALCi-197	+++	ALCi-242	+++
ALCi-198	+++	ALCi-245	++
ALCi-199	+++	ALCi-246	++
ALCi-200	+++	ALCi-247	+++
ALCi-201	+++	ALCi-248	++
ALCi-202	+++	ALCi-250	++
ALCi-203	+++	ALCi-251	+++
ALCi-204	+++	ALCi-252	+++
ALCi-205	+++	ALCi-253	++
ALCi-206	+++	ALCi-254	+++
ALCi-207	+++	ALCi-255	+++
ALCi-208	+++	ALCi-256	+++
ALCi-209	+++	ALCi-257	+++
ALCi-210	+++	ALCi-258	++
ALCi-211	+++	ALCi-259	+++
ALCi-212	+++	ALCi-260	+++
ALCi-213	+++	ALCi-261	+++
ALCi-214	+++	ALCi-262	+++
ALCi-215	+++	ALCi-263	+
ALCi-216	+++	ALCi-264	+++
ALCi-217	+++	ALCi-265	+++
ALCi-218	+++	ALCi-266	++
ALCi-219	+++	ALCi-267	++
ALCi-220	+++	ALCi-268	+++
ALCi-221	+++	ALCi-269	++

Figure 11 (continued)

Compound Code	Nucleosome Remodeling
	Inhibition IC50
ALCi-270	+++
ALCi-271	+
ALCi-272	+++
ALCi-273	+++
ALCi-274	+++
ALCi-275	+++
ALCi-278	+++

Figure 12

Compound Code	MDA-MB-231 (WT)	SUM-149PT (-)	Compound Code	MDA-MB-231 (WT)	SUM-149PT (-)
ALCi-1	+	++	ALCi-131	-	+++
ALCi-3	-	+	ALCi-132	-	+++
ALCi-4	+	++	ALCi-133	-	+++
ALCi-5	+	++	ALCi-146	-	++
ALCi-6	+	++	ALCi-149	-	+++
ALCi-7	-	++	ALCi-151	n.d.	n.d.
ALCi-9	+	++	ALCi-152	-	++
ALCi-10	+	++	ALCi-157	-	+
ALCi-14	+	+++	ALCi-160	+	+
ALCi-15	+	++	ALCi-162	-	+
ALCi-18	+	++	ALCi-164	+	+
ALCi-22	+	++	ALCi-166	+	+++
ALCi-29	+	+	ALCi-167	++	+++
ALCi-39	+	+	ALCi-171	+	++
ALCi-40	-	++	ALCi-177	-	++
ALCi-43	-	+	ALCi-178	n.d.	n.d.
ALCi-44	-	+	ALCi-179	+	+
ALCi-46	-	+	ALCi-180	-	++
ALCi-48	++	+++	ALCi-184	-	++
ALCi-50	-	+	ALCi-185	-	++
ALCi-52	-	+	ALCi-186	-	+++
ALCi-54	+++	+++	ALCi-187	-	+
ALCi-56	-	++	ALCi-189	-	+
ALCi-58	-	++	ALCi-190	-	+
ALCi-65	-	++	ALCi-192	+	+++
ALCi-72	++	+++	ALCi-193	-	+
ALCi-74	-	++	ALCi-194	+++	+++
ALCi-75	-	++	ALCi-195	+	+++
ALCi-77	+	++	ALCi-196	-	+
ALCi-79	-	++	ALCi-197	n.d.	n.d.
ALCi-82	-	+	ALCi-198	-	++
ALCi-87	-	+	ALCi-199	+++	+++
ALCi-90	+	++	ALCi-200	++	+++
ALCi-97	-	+	ALCi-201	++	+++
ALCi-101	-	+	ALCi-202	-	+++
ALCi-120	-	++	ALCi-204	+	+++
ALCi-123	-	++	ALCi-205	-	+
ALCi-124	-	++	ALCi-206	+	+++
ALCi-125	+	++	ALCi-207	-	+++
ALCi-127	-	++	ALCi-208	-	+++
ALCi-128	-	+	ALCi-209	+	++

Figure 12 (continued)

Compound Code	MDA-MB- 231 (WT)	SUM- 149PT (-)	Compound Code	MDA-MB- 231 (WT)	SUM- 149PT (-)
ALCi-210	+	++	ALCi-237	+++	+++
ALCi-211	-	+++	ALCi-239	+++	+++
ALCi-212	-	+++	ALCi-241	-	+
ALCi-213	-	++	ALCi-242	++	+++
ALCi-214	-	+++	ALCi-245	-	+
ALCi-215	-	+++	ALCi-246	-	++
ALCi-216	+++	+++	ALCi-247	-	+++
ALCi-217	-	+++	ALCi-248	+	++
ALCi-218	-	+++	ALCi-251	+	+++
ALCi-219	+	+++	ALCi-252	++	+++
ALCi-220	-	+++	ALCi-253	-	++
ALCi-221	+++	+++	ALCi-254	++	+++
ALCi-222	++	+++	ALCi-255	-	+++
ALCi-223	+++	+++	ALCi-256	+++	+++
ALCi-224	-	+++	ALCi-259	-	+++
ALCi-225	+	+++	ALCi-260	-	++
ALCi-227	-	+++	ALCi-261	-	++
ALCi-228	+	+++	ALCi-262	-	+++
ALCi-229	-	+++	ALCi-265	-	+++
ALCi-230	+	+++	ALCi-266	+	+
ALCi-231	+	+++	ALCi-272	-	+++
ALCi-233	-	++	ALCi-273	-	+++
ALCi-234	-	+	ALCi-274	-	+++
ALCi-235	-	+++	ALCi-275	-	+++
ALCi-236	+++	+++	ALCi-278	n.d.	n.d.

Figure 13

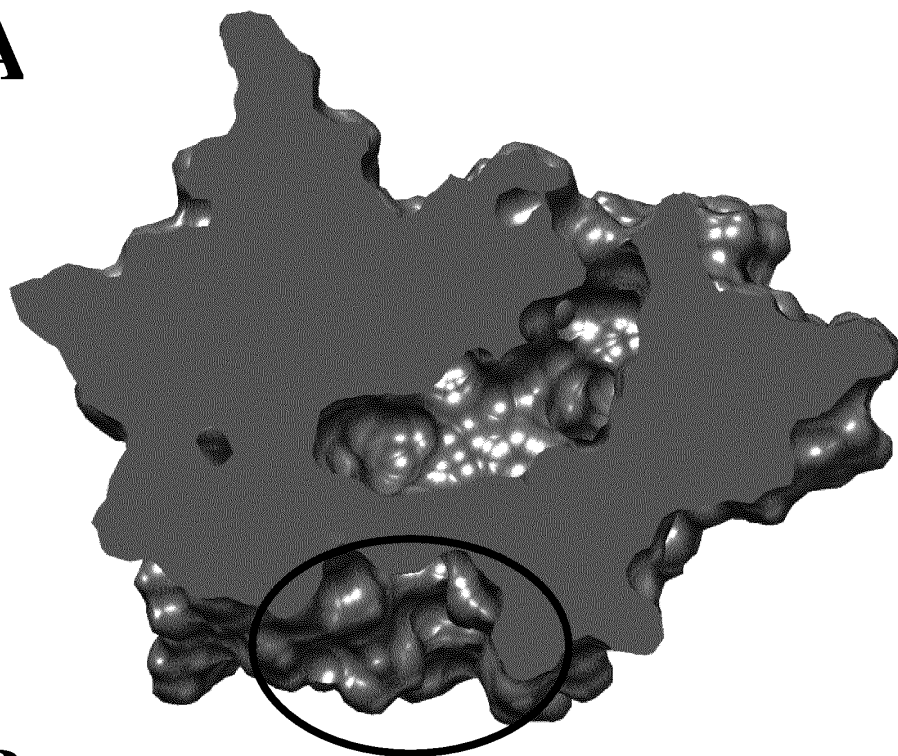
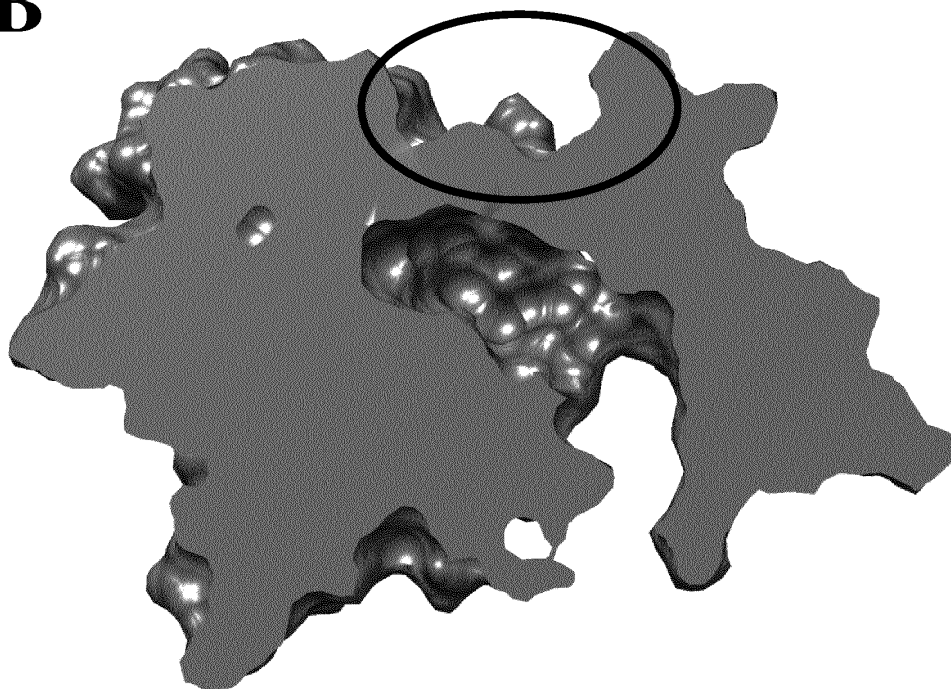
A**B**

Figure 14

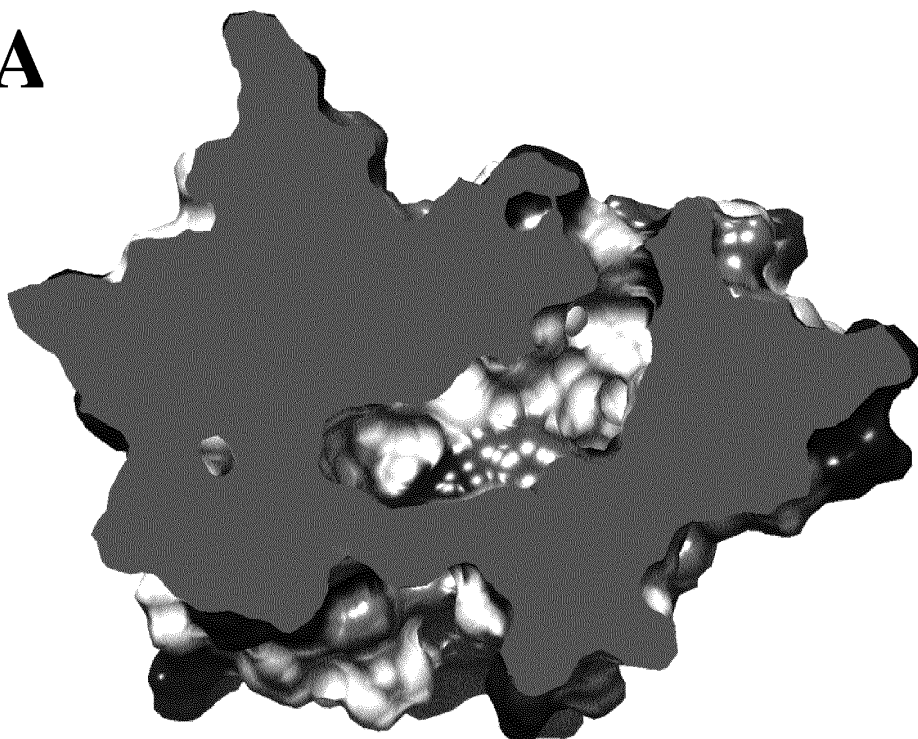
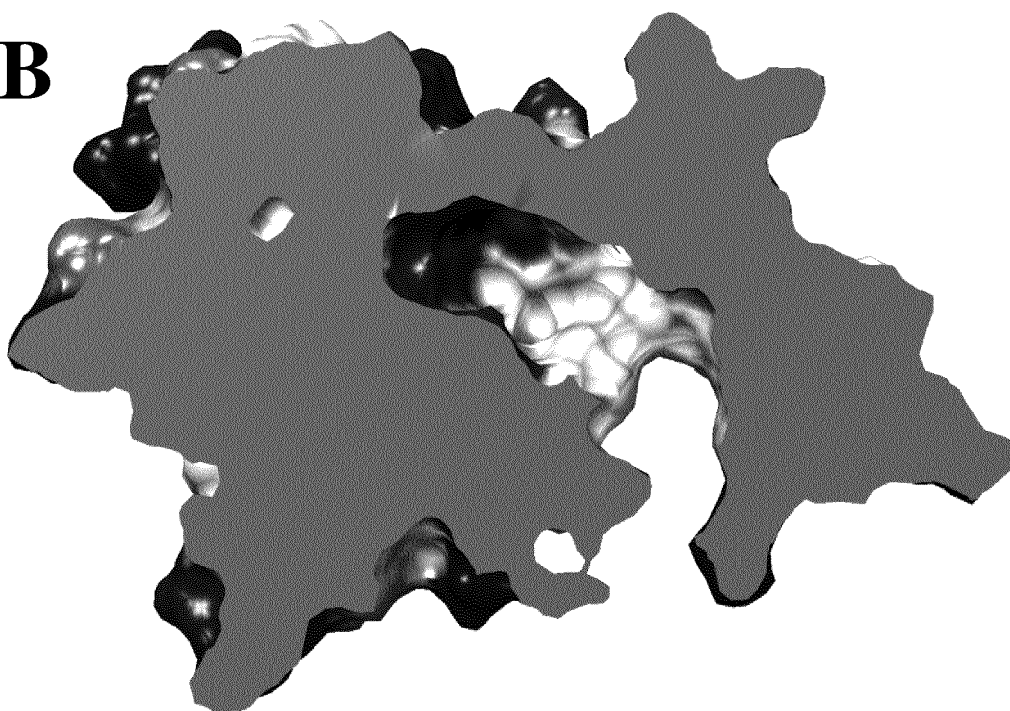
A**B**

Figure 15

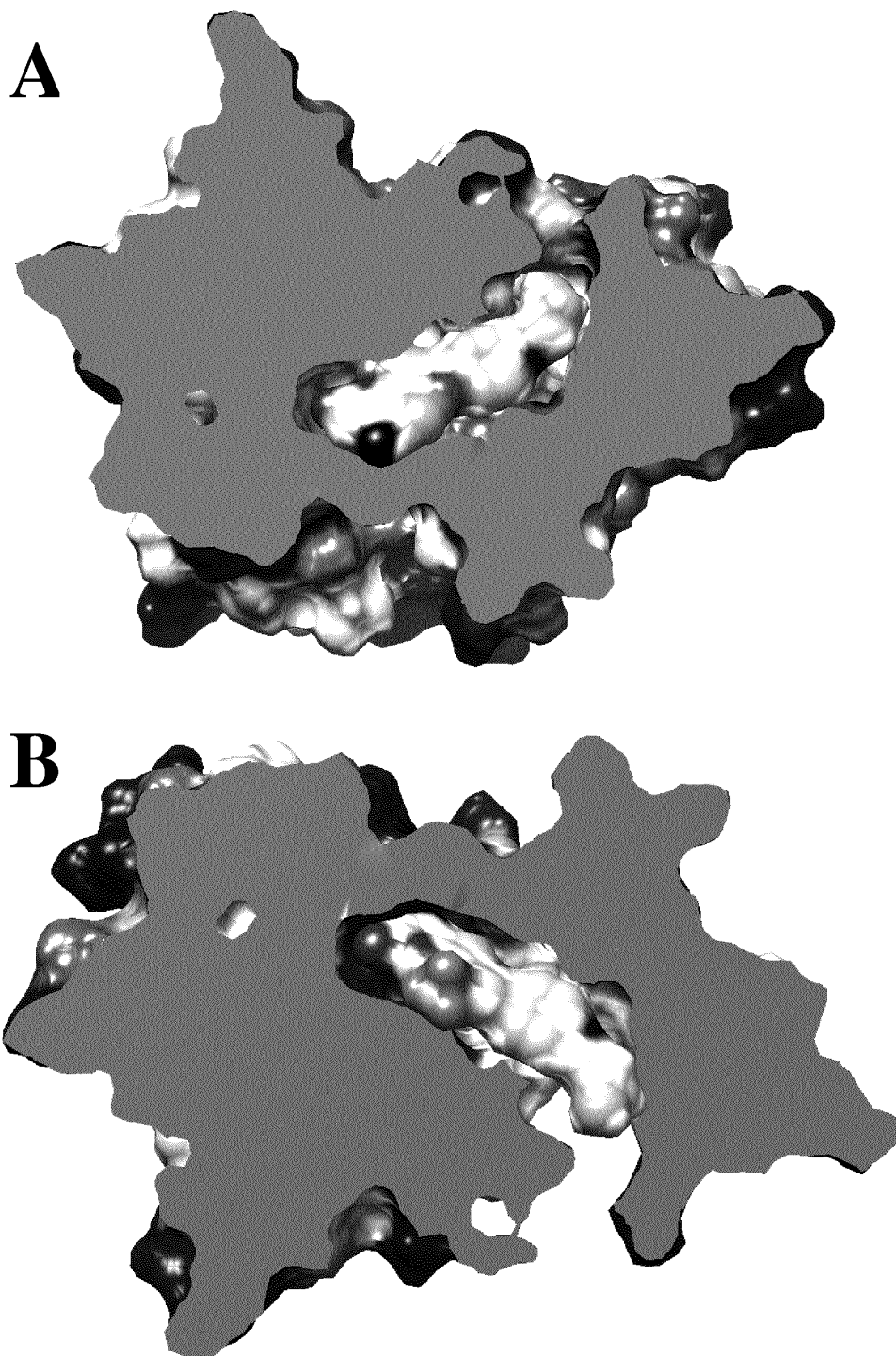


Figure 16

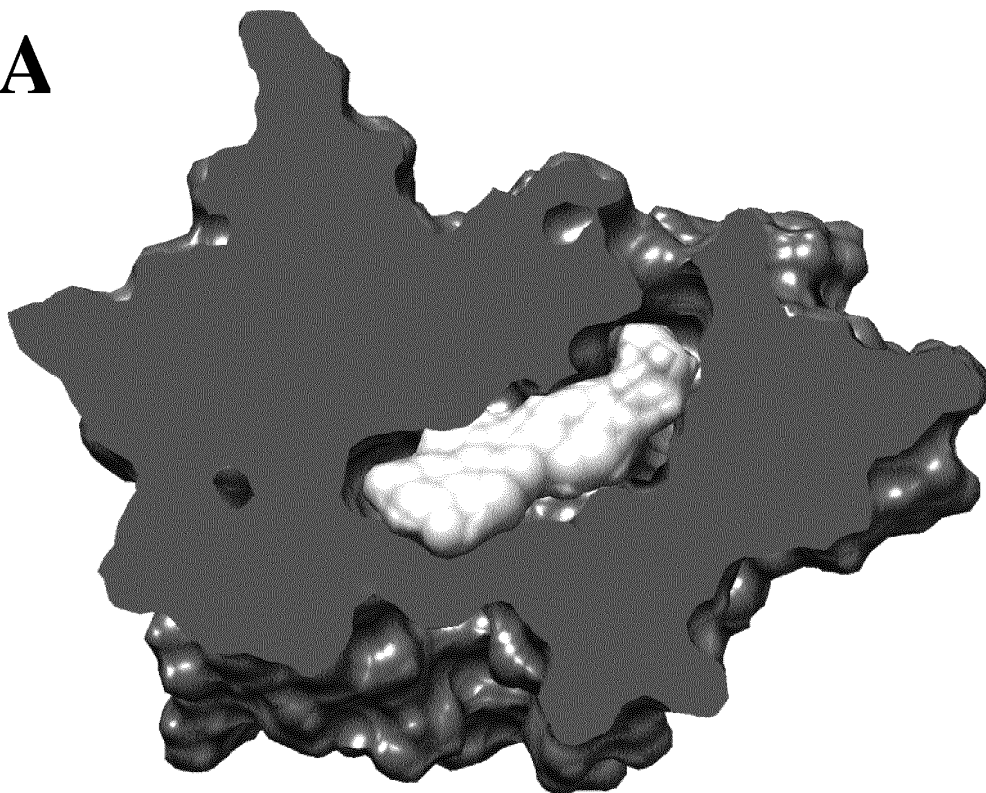
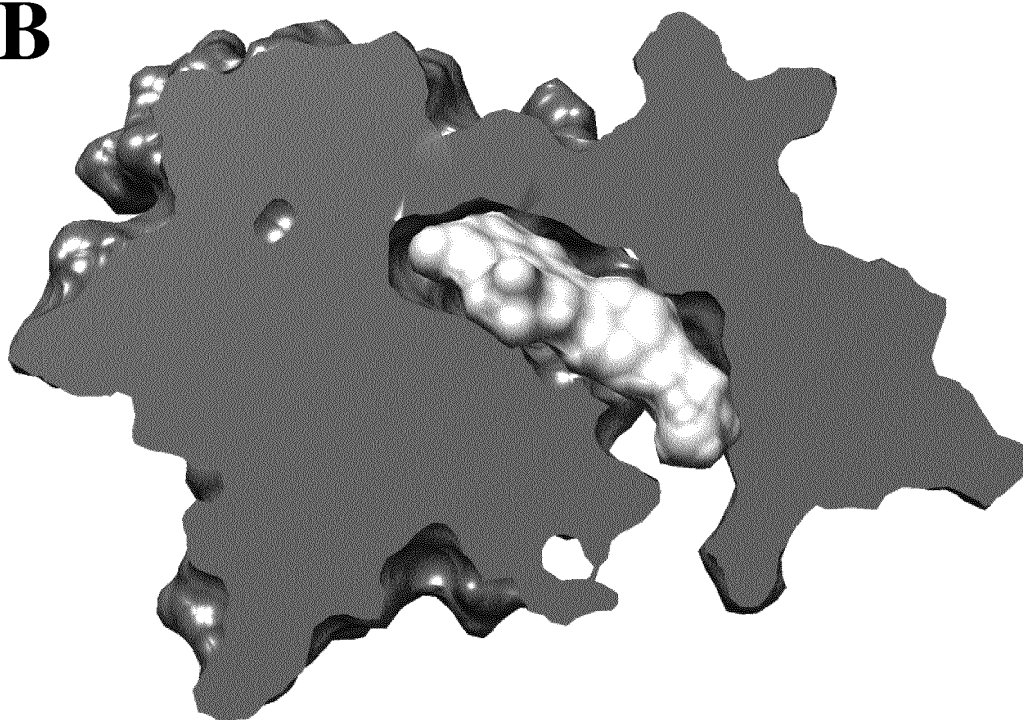
A**B**

Figure 17

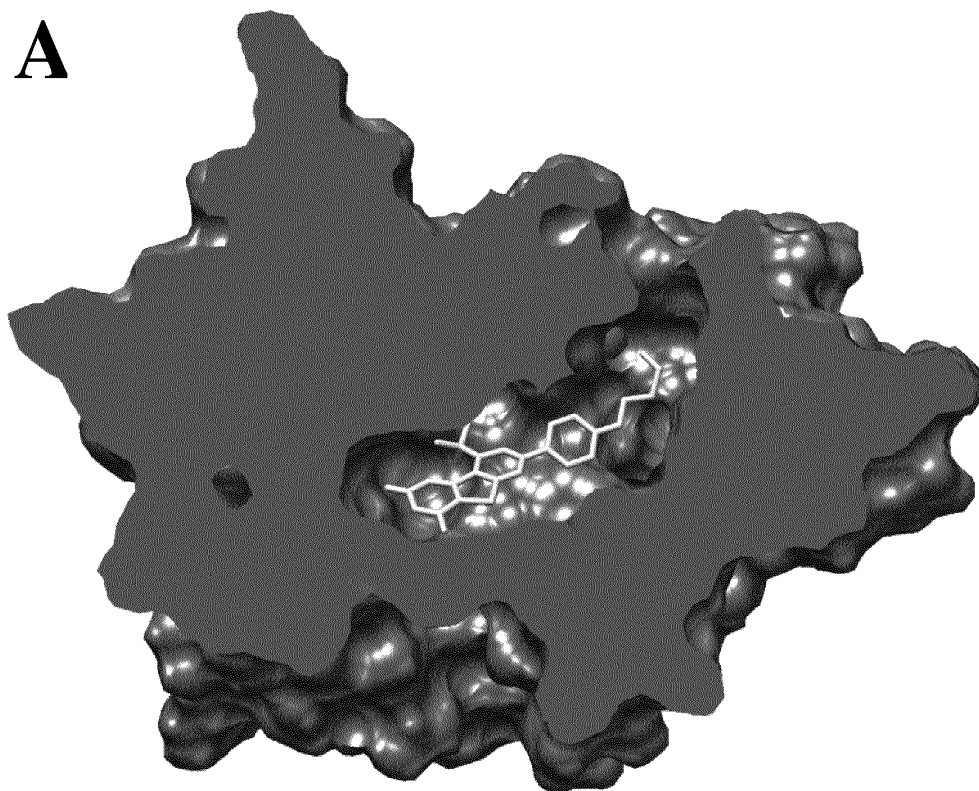
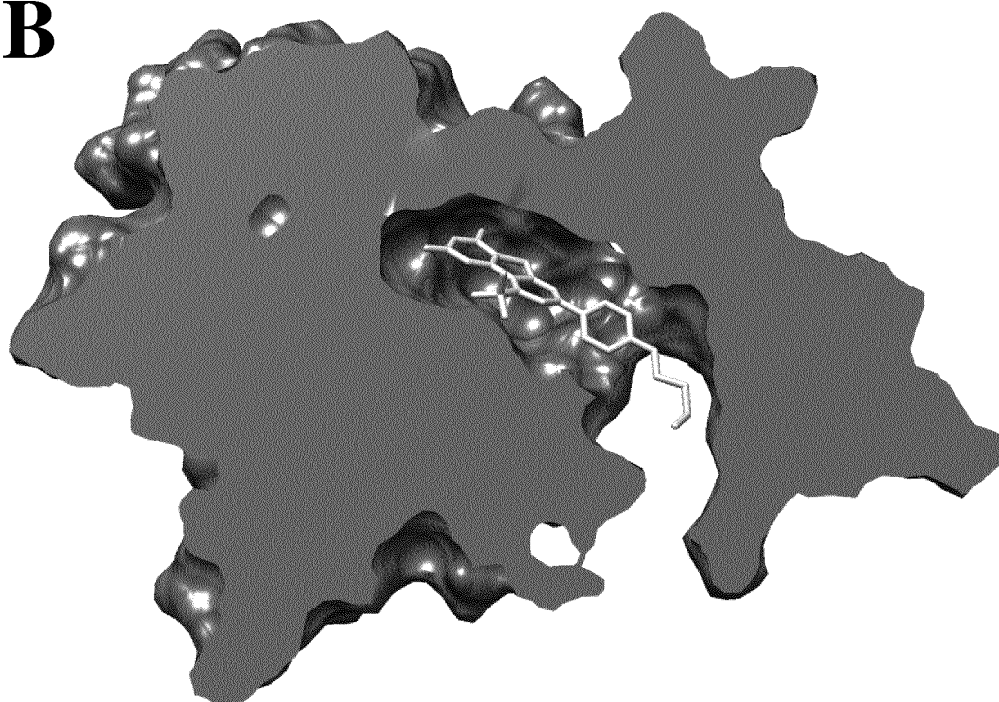
A**B**

Figure 18

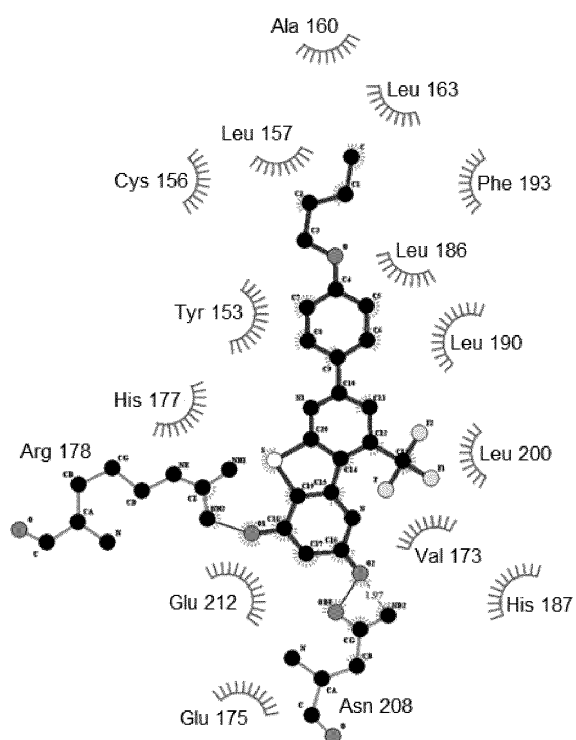


Figure 19

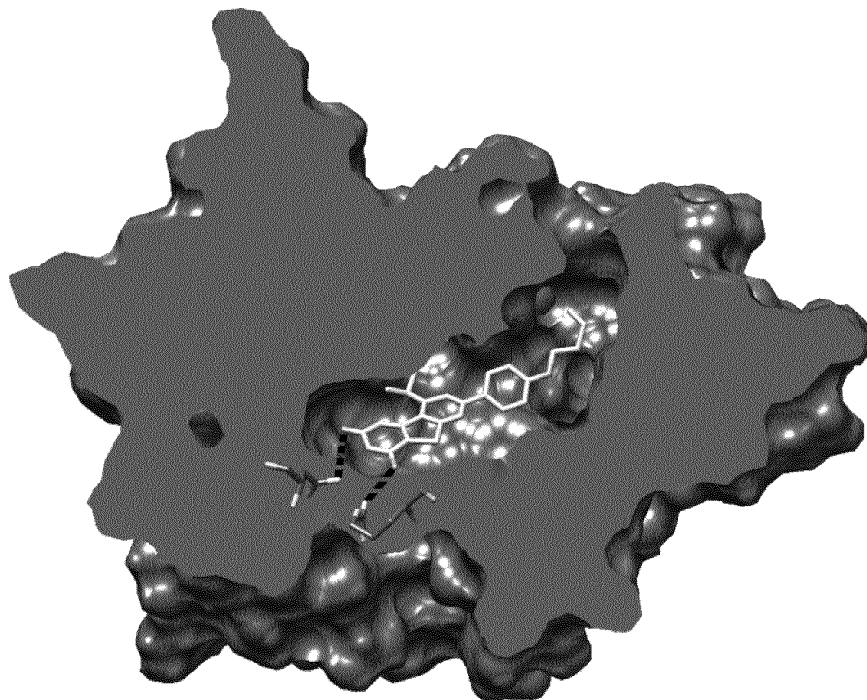


Fig. 20

ATOM	1	N	PHE A 98	169.877	143.882	29.856	1.00	0.00	N
ATOM	2	CA	PHE A 98	169.117	143.348	30.987	1.00	0.00	C
ATOM	3	CB	PHE A 98	168.906	144.429	32.063	1.00	0.00	C
ATOM	4	CG	PHE A 98	170.155	144.850	32.830	1.00	0.00	C
ATOM	5	CD1	PHE A 98	170.352	144.442	34.165	1.00	0.00	C
ATOM	6	CE1	PHE A 98	171.487	144.867	34.882	1.00	0.00	C
ATOM	7	CZ	PHE A 98	172.440	145.696	34.265	1.00	0.00	C
ATOM	8	CE2	PHE A 98	172.257	146.097	32.932	1.00	0.00	C
ATOM	9	CD2	PHE A 98	171.117	145.677	32.221	1.00	0.00	C
ATOM	10	C	PHE A 98	167.789	142.746	30.504	1.00	0.00	C
ATOM	11	O	PHE A 98	166.896	143.459	30.030	1.00	0.00	O
ATOM	12	N	LEU A 99	167.639	141.428	30.673	1.00	0.00	N
ATOM	13	CA	LEU A 99	166.407	140.700	30.356	1.00	0.00	C
ATOM	14	CB	LEU A 99	166.775	139.359	29.689	1.00	0.00	C
ATOM	15	CG	LEU A 99	165.646	138.655	28.908	1.00	0.00	C
ATOM	16	CD1	LEU A 99	166.229	137.483	28.114	1.00	0.00	C
ATOM	17	CD2	LEU A 99	164.533	138.105	29.798	1.00	0.00	C
ATOM	18	C	LEU A 99	165.520	140.595	31.600	1.00	0.00	C
ATOM	19	O	LEU A 99	165.929	140.038	32.617	1.00	0.00	O
ATOM	20	N	ILE A 100	164.341	141.216	31.536	1.00	0.00	N
ATOM	21	CA	ILE A 100	163.363	141.283	32.624	1.00	0.00	C
ATOM	22	CB	ILE A 100	162.714	142.682	32.673	1.00	0.00	C
ATOM	23	CG2	ILE A 100	161.541	142.747	33.670	1.00	0.00	C
ATOM	24	CG1	ILE A 100	163.749	143.768	33.047	1.00	0.00	C
ATOM	25	CD1	ILE A 100	163.388	145.107	32.409	1.00	0.00	C
ATOM	26	C	ILE A 100	162.326	140.174	32.459	1.00	0.00	C
ATOM	27	O	ILE A 100	161.547	140.170	31.501	1.00	0.00	O
ATOM	28	N	LEU A 101	162.267	139.301	33.462	1.00	0.00	N
ATOM	29	CA	LEU A 101	161.210	138.323	33.672	1.00	0.00	C
ATOM	30	CB	LEU A 101	161.825	137.030	34.240	1.00	0.00	C
ATOM	31	CG	LEU A 101	163.051	136.452	33.516	1.00	0.00	C
ATOM	32	CD1	LEU A 101	163.469	135.156	34.215	1.00	0.00	C
ATOM	33	CD2	LEU A 101	162.749	136.127	32.053	1.00	0.00	C
ATOM	34	C	LEU A 101	160.169	138.902	34.642	1.00	0.00	C
ATOM	35	O	LEU A 101	160.473	139.104	35.818	1.00	0.00	O
ATOM	36	N	CYS A 102	158.956	139.184	34.162	1.00	0.00	N
ATOM	37	CA	CYS A 102	157.863	139.705	34.992	1.00	0.00	C
ATOM	38	CB	CYS A 102	158.054	141.224	35.191	1.00	0.00	C
ATOM	39	SG	CYS A 102	157.910	142.170	33.649	1.00	0.00	S
ATOM	40	C	CYS A 102	156.473	139.320	34.436	1.00	0.00	C
ATOM	41	O	CYS A 102	156.358	138.944	33.261	1.00	0.00	O
ATOM	42	N	PRO A 103	155.418	139.289	35.276	1.00	0.00	N
ATOM	43	CD	PRO A 103	155.421	139.595	36.705	1.00	0.00	C
ATOM	44	CG	PRO A 103	153.960	139.586	37.151	1.00	0.00	C
ATOM	45	CB	PRO A 103	153.281	138.680	36.124	1.00	0.00	C
ATOM	46	CA	PRO A 103	154.064	138.958	34.837	1.00	0.00	C
ATOM	47	C	PRO A 103	153.455	140.104	34.016	1.00	0.00	C
ATOM	48	O	PRO A 103	153.757	141.278	34.240	1.00	0.00	O
TER	49		PRO A 103						
ATOM	50	N	HIS A 147	168.604	147.438	24.842	1.00	0.00	N
ATOM	51	CA	HIS A 147	169.154	147.494	26.207	1.00	0.00	C
ATOM	52	CB	HIS A 147	169.369	148.969	26.580	1.00	0.00	C
ATOM	53	CG	HIS A 147	170.308	149.721	25.673	1.00	0.00	C
ATOM	54	ND1	HIS A 147	170.153	151.058	25.293	1.00	0.00	N
ATOM	55	CE1	HIS A 147	171.259	151.356	24.586	1.00	0.00	C
ATOM	56	NE2	HIS A 147	172.078	150.293	24.501	1.00	0.00	N
ATOM	57	CD2	HIS A 147	171.496	149.253	25.187	1.00	0.00	C
ATOM	58	C	HIS A 147	168.270	146.826	27.267	1.00	0.00	C
ATOM	59	O	HIS A 147	168.774	146.395	28.304	1.00	0.00	O
TER	60		HIS A 147						
ATOM	61	N	THR A 152	157.279	138.380	29.184	1.00	0.00	N
ATOM	62	CA	THR A 152	156.210	137.778	30.000	1.00	0.00	C
ATOM	63	CB	THR A 152	154.946	137.556	29.149	1.00	0.00	C
ATOM	64	CG2	THR A 152	154.191	138.842	28.827	1.00	0.00	C
ATOM	65	OG1	THR A 152	155.298	136.934	27.931	1.00	0.00	O
ATOM	66	C	THR A 152	156.635	136.423	30.569	1.00	0.00	C
ATOM	67	O	THR A 152	156.889	135.496	29.789	1.00	0.00	O

ATOM	68	N	TYR	A	153	156.419	136.219	31.871	1.00	0.00	N
ATOM	69	CA	TYR	A	153	156.452	134.891	32.500	1.00	0.00	C
ATOM	70	CB	TYR	A	153	156.105	135.029	33.999	1.00	0.00	C
ATOM	71	CG	TYR	A	153	157.205	135.470	34.959	1.00	0.00	C
ATOM	72	CD1	TYR	A	153	158.503	134.933	34.856	1.00	0.00	C
ATOM	73	CE1	TYR	A	153	159.453	135.177	35.865	1.00	0.00	C
ATOM	74	CZ	TYR	A	153	159.138	135.993	36.966	1.00	0.00	C
ATOM	75	OH	TYR	A	153	160.071	136.157	37.938	1.00	0.00	O
ATOM	76	CE2	TYR	A	153	157.853	136.566	37.059	1.00	0.00	C
ATOM	77	CD2	TYR	A	153	156.885	136.282	36.069	1.00	0.00	C
ATOM	78	C	TYR	A	153	155.469	133.901	31.837	1.00	0.00	C
ATOM	79	O	TYR	A	153	155.785	132.723	31.659	1.00	0.00	O
ATOM	80	N	GLU	A	154	154.325	134.393	31.361	1.00	0.00	N
ATOM	81	CA	GLU	A	154	153.181	133.607	30.888	1.00	0.00	C
ATOM	82	CB	GLU	A	154	152.018	134.557	30.549	1.00	0.00	C
ATOM	83	CG	GLU	A	154	151.364	135.250	31.759	1.00	0.00	C
ATOM	84	CD	GLU	A	154	152.094	136.488	32.315	1.00	0.00	C
ATOM	85	OE1	GLU	A	154	153.182	136.851	31.814	1.00	0.00	O
ATOM	86	OE2	GLU	A	154	151.511	137.150	33.199	1.00	0.00	O
ATOM	87	C	GLU	A	154	153.467	132.730	29.659	1.00	0.00	C
ATOM	88	O	GLU	A	154	152.942	131.618	29.573	1.00	0.00	O
ATOM	89	N	ILE	A	155	154.285	133.196	28.705	1.00	0.00	N
ATOM	90	CA	ILE	A	155	154.668	132.361	27.552	1.00	0.00	C
ATOM	91	CB	ILE	A	155	155.156	133.216	26.353	1.00	0.00	C
ATOM	92	CG2	ILE	A	155	156.536	133.859	26.585	1.00	0.00	C
ATOM	93	CG1	ILE	A	155	155.249	132.410	25.035	1.00	0.00	C
ATOM	94	CD1	ILE	A	155	153.901	131.884	24.526	1.00	0.00	C
ATOM	95	C	ILE	A	155	155.686	131.287	27.962	1.00	0.00	C
ATOM	96	O	ILE	A	155	155.610	130.153	27.495	1.00	0.00	O
ATOM	97	N	CYS	A	156	156.579	131.604	28.901	1.00	0.00	N
ATOM	98	CA	CYS	A	156	157.781	130.818	29.171	1.00	0.00	C
ATOM	99	CB	CYS	A	156	158.913	131.806	29.471	1.00	0.00	C
ATOM	100	SG	CYS	A	156	160.501	131.068	29.008	1.00	0.00	S
ATOM	101	C	CYS	A	156	157.595	129.755	30.273	1.00	0.00	C
ATOM	102	O	CYS	A	156	158.172	128.676	30.164	1.00	0.00	O
ATOM	103	N	LEU	A	157	156.592	129.935	31.147	1.00	0.00	N
ATOM	104	CA	LEU	A	157	155.997	128.880	31.991	1.00	0.00	C
ATOM	105	CB	LEU	A	157	154.981	129.531	32.959	1.00	0.00	C
ATOM	106	CG	LEU	A	157	155.606	130.365	34.095	1.00	0.00	C
ATOM	107	CD1	LEU	A	157	154.527	131.215	34.769	1.00	0.00	C
ATOM	108	CD2	LEU	A	157	156.243	129.475	35.166	1.00	0.00	C
ATOM	109	C	LEU	A	157	155.298	127.767	31.179	1.00	0.00	C
ATOM	110	O	LEU	A	157	154.934	126.730	31.733	1.00	0.00	O
ATOM	111	N	LYS	A	158	155.054	128.003	29.883	1.00	0.00	N
ATOM	112	CA	LYS	A	158	154.371	127.101	28.940	1.00	0.00	C
ATOM	113	CB	LYS	A	158	153.148	127.873	28.415	1.00	0.00	C
ATOM	114	CG	LYS	A	158	152.479	127.247	27.188	1.00	0.00	C
ATOM	115	CD	LYS	A	158	151.228	128.053	26.832	1.00	0.00	C
ATOM	116	CE	LYS	A	158	150.667	127.565	25.496	1.00	0.00	C
ATOM	117	NZ	LYS	A	158	149.373	128.221	25.197	1.00	0.00	N
ATOM	118	C	LYS	A	158	155.288	126.584	27.824	1.00	0.00	C
ATOM	119	O	LYS	A	158	155.108	125.456	27.373	1.00	0.00	O
ATOM	120	N	ASP	A	159	156.245	127.390	27.372	1.00	0.00	N
ATOM	121	CA	ASP	A	159	157.195	127.085	26.310	1.00	0.00	C
ATOM	122	CB	ASP	A	159	156.625	127.521	24.953	1.00	0.00	C
ATOM	123	CG	ASP	A	159	157.645	127.388	23.819	1.00	0.00	C
ATOM	124	OD1	ASP	A	159	157.582	128.234	22.894	1.00	0.00	O
ATOM	125	OD2	ASP	A	159	158.594	126.577	23.941	1.00	0.00	O
ATOM	126	C	ASP	A	159	158.552	127.753	26.587	1.00	0.00	C
ATOM	127	O	ASP	A	159	158.806	128.905	26.229	1.00	0.00	O
ATOM	128	N	ALA	A	160	159.425	127.014	27.265	1.00	0.00	N
ATOM	129	CA	ALA	A	160	160.735	127.482	27.697	1.00	0.00	C
ATOM	130	CB	ALA	A	160	161.141	126.627	28.911	1.00	0.00	C
ATOM	131	C	ALA	A	160	161.819	127.497	26.594	1.00	0.00	C
ATOM	132	O	ALA	A	160	162.973	127.774	26.919	1.00	0.00	O
ATOM	133	N	SER	A	161	161.529	127.093	25.344	1.00	0.00	N
ATOM	134	CA	SER	A	161	162.559	126.656	24.375	1.00	0.00	C
ATOM	135	CB	SER	A	161	161.923	126.331	23.015	1.00	0.00	C
ATOM	136	OG	SER	A	161	161.550	127.519	22.350	1.00	0.00	O

ATOM	137	C	SER A 161	163.703	127.660	24.170	1.00	0.00	C
ATOM	138	O	SER A 161	164.863	127.292	24.302	1.00	0.00	O
ATOM	139	N	PHE A 162	163.377	128.940	23.993	1.00	0.00	N
ATOM	140	CA	PHE A 162	164.311	130.010	23.641	1.00	0.00	C
ATOM	141	CB	PHE A 162	163.507	131.275	23.295	1.00	0.00	C
ATOM	142	CG	PHE A 162	162.727	131.923	24.430	1.00	0.00	C
ATOM	143	CD1	PHE A 162	163.130	133.176	24.931	1.00	0.00	C
ATOM	144	CE1	PHE A 162	162.417	133.789	25.976	1.00	0.00	C
ATOM	145	CZ	PHE A 162	161.279	133.162	26.508	1.00	0.00	C
ATOM	146	CE2	PHE A 162	160.854	131.926	25.988	1.00	0.00	C
ATOM	147	CD2	PHE A 162	161.589	131.296	24.974	1.00	0.00	C
ATOM	148	C	PHE A 162	165.390	130.249	24.711	1.00	0.00	C
ATOM	149	O	PHE A 162	166.563	129.982	24.455	1.00	0.00	O
ATOM	150	N	LEU A 163	165.004	130.563	25.953	1.00	0.00	N
ATOM	151	CA	LEU A 163	165.948	130.771	27.063	1.00	0.00	C
ATOM	152	CB	LEU A 163	165.242	131.635	28.130	1.00	0.00	C
ATOM	153	CG	LEU A 163	166.032	131.985	29.406	1.00	0.00	C
ATOM	154	CD1	LEU A 163	167.336	132.758	29.187	1.00	0.00	C
ATOM	155	CD2	LEU A 163	165.133	132.835	30.316	1.00	0.00	C
ATOM	156	C	LEU A 163	166.542	129.445	27.595	1.00	0.00	C
ATOM	157	O	LEU A 163	167.653	129.449	28.118	1.00	0.00	O
ATOM	158	N	LYS A 164	165.915	128.292	27.305	1.00	0.00	N
ATOM	159	CA	LYS A 164	166.480	126.939	27.507	1.00	0.00	C
ATOM	160	CB	LYS A 164	165.306	125.945	27.600	1.00	0.00	C
ATOM	161	CG	LYS A 164	165.685	124.519	28.020	1.00	0.00	C
ATOM	162	CD	LYS A 164	164.431	123.643	28.173	1.00	0.00	C
ATOM	163	CE	LYS A 164	164.755	122.262	28.761	1.00	0.00	C
ATOM	164	NZ	LYS A 164	165.775	121.537	27.961	1.00	0.00	N
ATOM	165	C	LYS A 164	167.515	126.523	26.445	1.00	0.00	C
ATOM	166	O	LYS A 164	168.297	125.611	26.705	1.00	0.00	O
ATOM	167	N	SER A 165	167.508	127.133	25.258	1.00	0.00	N
ATOM	168	CA	SER A 165	168.527	126.954	24.208	1.00	0.00	C
ATOM	169	CB	SER A 165	167.879	127.010	22.819	1.00	0.00	C
ATOM	170	OG	SER A 165	167.207	125.794	22.543	1.00	0.00	O
ATOM	171	C	SER A 165	169.641	128.000	24.284	1.00	0.00	C
ATOM	172	O	SER A 165	170.803	127.660	24.080	1.00	0.00	O
ATOM	173	N	PHE A 166	169.317	129.219	24.722	1.00	0.00	N
ATOM	174	CA	PHE A 166	170.266	130.308	24.957	1.00	0.00	C
ATOM	175	CB	PHE A 166	170.145	131.328	23.813	1.00	0.00	C
ATOM	176	CG	PHE A 166	170.741	130.874	22.494	1.00	0.00	C
ATOM	177	CD1	PHE A 166	169.925	130.289	21.507	1.00	0.00	C
ATOM	178	CE1	PHE A 166	170.483	129.888	20.280	1.00	0.00	C
ATOM	179	CZ	PHE A 166	171.855	130.076	20.035	1.00	0.00	C
ATOM	180	CE2	PHE A 166	172.670	130.667	21.015	1.00	0.00	C
ATOM	181	CD2	PHE A 166	172.113	131.065	22.243	1.00	0.00	C
ATOM	182	C	PHE A 166	170.050	130.928	26.355	1.00	0.00	C
ATOM	183	O	PHE A 166	169.438	131.997	26.463	1.00	0.00	O
ATOM	184	N	PRO A 167	170.622	130.309	27.413	1.00	0.00	N
ATOM	185	CD	PRO A 167	171.195	128.966	27.410	1.00	0.00	C
ATOM	186	CG	PRO A 167	171.166	128.501	28.862	1.00	0.00	C
ATOM	187	CB	PRO A 167	171.400	129.805	29.613	1.00	0.00	C
ATOM	188	CA	PRO A 167	170.643	130.843	28.780	1.00	0.00	C
ATOM	189	C	PRO A 167	171.297	132.229	28.872	1.00	0.00	C
ATOM	190	O	PRO A 167	172.137	132.569	28.033	1.00	0.00	O
ATOM	191	N	TRP A 168	170.896	133.057	29.839	1.00	0.00	N
ATOM	192	CA	TRP A 168	171.262	134.482	29.870	1.00	0.00	C
ATOM	193	CB	TRP A 168	170.039	135.337	30.235	1.00	0.00	C
ATOM	194	CG	TRP A 168	170.074	136.684	29.587	1.00	0.00	C
ATOM	195	CD1	TRP A 168	170.155	137.880	30.208	1.00	0.00	C
ATOM	196	NE1	TRP A 168	170.235	138.890	29.265	1.00	0.00	N
ATOM	197	CE2	TRP A 168	170.138	138.389	27.985	1.00	0.00	C
ATOM	198	CZ2	TRP A 168	170.132	138.982	26.718	1.00	0.00	C
ATOM	199	CH2	TRP A 168	169.999	138.173	25.578	1.00	0.00	C
ATOM	200	CZ3	TRP A 168	169.895	136.778	25.720	1.00	0.00	C
ATOM	201	CE3	TRP A 168	169.934	136.186	26.995	1.00	0.00	C
ATOM	202	CD2	TRP A 168	170.035	136.979	28.159	1.00	0.00	C
ATOM	203	C	TRP A 168	172.497	134.818	30.727	1.00	0.00	C
ATOM	204	O	TRP A 168	173.013	133.988	31.470	1.00	0.00	O
ATOM	205	N	SER A 169	173.038	136.025	30.545	1.00	0.00	N

ATOM	206	CA	SER A 169	174.154	136.558	31.341	1.00	0.00	C
ATOM	207	CB	SER A 169	175.145	137.278	30.416	1.00	0.00	C
ATOM	208	OG	SER A 169	174.481	138.251	29.629	1.00	0.00	O
ATOM	209	C	SER A 169	173.684	137.493	32.463	1.00	0.00	C
ATOM	210	O	SER A 169	174.107	137.319	33.605	1.00	0.00	O
ATOM	211	N	VAL A 170	172.810	138.457	32.143	1.00	0.00	N
ATOM	212	CA	VAL A 170	172.474	139.613	32.996	1.00	0.00	C
ATOM	213	CB	VAL A 170	173.142	140.889	32.430	1.00	0.00	C
ATOM	214	CG1	VAL A 170	172.799	142.127	33.260	1.00	0.00	C
ATOM	215	CG2	VAL A 170	174.674	140.771	32.412	1.00	0.00	C
ATOM	216	C	VAL A 170	170.951	139.760	33.141	1.00	0.00	C
ATOM	217	O	VAL A 170	170.265	140.260	32.247	1.00	0.00	O
ATOM	218	N	LEU A 171	170.400	139.142	34.187	1.00	0.00	N
ATOM	219	CA	LEU A 171	168.977	138.820	34.338	1.00	0.00	C
ATOM	220	CB	LEU A 171	168.894	137.300	34.598	1.00	0.00	C
ATOM	221	CG	LEU A 171	167.494	136.673	34.478	1.00	0.00	C
ATOM	222	CD1	LEU A 171	167.019	136.640	33.023	1.00	0.00	C
ATOM	223	CD2	LEU A 171	167.529	135.233	34.996	1.00	0.00	C
ATOM	224	C	LEU A 171	168.294	139.651	35.445	1.00	0.00	C
ATOM	225	O	LEU A 171	168.869	139.896	36.507	1.00	0.00	O
ATOM	226	N	VAL A 172	167.011	139.971	35.256	1.00	0.00	N
ATOM	227	CA	VAL A 172	166.122	140.595	36.253	1.00	0.00	C
ATOM	228	CB	VAL A 172	165.755	142.035	35.837	1.00	0.00	C
ATOM	229	CG1	VAL A 172	164.729	142.673	36.782	1.00	0.00	C
ATOM	230	CG2	VAL A 172	166.987	142.947	35.768	1.00	0.00	C
ATOM	231	C	VAL A 172	164.876	139.727	36.449	1.00	0.00	C
ATOM	232	O	VAL A 172	164.305	139.250	35.469	1.00	0.00	O
ATOM	233	N	VAL A 173	164.466	139.498	37.701	1.00	0.00	N
ATOM	234	CA	VAL A 173	163.497	138.452	38.069	1.00	0.00	C
ATOM	235	CB	VAL A 173	164.235	137.206	38.610	1.00	0.00	C
ATOM	236	CG1	VAL A 173	163.283	136.014	38.724	1.00	0.00	C
ATOM	237	CG2	VAL A 173	165.425	136.763	37.745	1.00	0.00	C
ATOM	238	C	VAL A 173	162.492	138.980	39.100	1.00	0.00	C
ATOM	239	O	VAL A 173	162.861	139.264	40.239	1.00	0.00	O
ATOM	240	N	ASP A 174	161.245	139.190	38.676	1.00	0.00	N
ATOM	241	CA	ASP A 174	160.155	139.754	39.488	1.00	0.00	C
ATOM	242	CB	ASP A 174	159.162	140.444	38.537	1.00	0.00	C
ATOM	243	CG	ASP A 174	158.191	141.433	39.196	1.00	0.00	C
ATOM	244	OD1	ASP A 174	158.449	141.842	40.355	1.00	0.00	O
ATOM	245	OD2	ASP A 174	157.351	141.963	38.438	1.00	0.00	O
ATOM	246	C	ASP A 174	159.448	138.718	40.393	1.00	0.00	C
ATOM	247	O	ASP A 174	159.493	137.509	40.143	1.00	0.00	O
ATOM	248	N	GLU A 175	158.632	139.204	41.331	1.00	0.00	N
ATOM	249	CA	GLU A 175	157.536	138.438	41.944	1.00	0.00	C
ATOM	250	CB	GLU A 175	156.877	139.310	43.038	1.00	0.00	C
ATOM	251	CG	GLU A 175	155.457	138.962	43.539	1.00	0.00	C
ATOM	252	CD	GLU A 175	155.296	137.612	44.261	1.00	0.00	C
ATOM	253	OE1	GLU A 175	156.184	136.735	44.166	1.00	0.00	O
ATOM	254	OE2	GLU A 175	154.313	137.440	45.018	1.00	0.00	O
ATOM	255	C	GLU A 175	156.533	137.939	40.884	1.00	0.00	C
ATOM	256	O	GLU A 175	156.358	138.539	39.823	1.00	0.00	O
ATOM	257	N	ALA A 176	155.837	136.839	41.185	1.00	0.00	N
ATOM	258	CA	ALA A 176	154.807	136.286	40.303	1.00	0.00	C
ATOM	259	CB	ALA A 176	155.399	135.120	39.492	1.00	0.00	C
ATOM	260	C	ALA A 176	153.509	135.967	41.060	1.00	0.00	C
ATOM	261	O	ALA A 176	152.617	136.809	41.157	1.00	0.00	O
ATOM	262	N	HIS A 177	153.360	134.730	41.537	1.00	0.00	N
ATOM	263	CA	HIS A 177	152.235	134.280	42.359	1.00	0.00	C
ATOM	264	CB	HIS A 177	150.979	134.091	41.488	1.00	0.00	C
ATOM	265	CG	HIS A 177	149.731	134.431	42.255	1.00	0.00	C
ATOM	266	ND1	HIS A 177	149.155	133.650	43.256	1.00	0.00	N
ATOM	267	CE1	HIS A 177	148.179	134.396	43.790	1.00	0.00	C
ATOM	268	NE2	HIS A 177	148.128	135.601	43.195	1.00	0.00	N
ATOM	269	CD2	HIS A 177	149.111	135.646	42.232	1.00	0.00	C
ATOM	270	C	HIS A 177	152.622	132.992	43.100	1.00	0.00	C
ATOM	271	O	HIS A 177	153.610	132.358	42.715	1.00	0.00	O
ATOM	272	N	ARG A 178	151.886	132.622	44.152	1.00	0.00	N
ATOM	273	CA	ARG A 178	152.169	131.476	45.040	1.00	0.00	C
ATOM	274	CB	ARG A 178	151.146	131.416	46.194	1.00	0.00	C

ATOM	275	CG	ARG A 178	150.945	132.705	47.016	1.00	0.00	C
ATOM	276	CD	ARG A 178	152.115	133.101	47.927	1.00	0.00	C
ATOM	277	NE	ARG A 178	153.314	133.558	47.214	1.00	0.00	N
ATOM	278	CZ	ARG A 178	153.536	134.718	46.630	1.00	0.00	C
ATOM	279	NH1	ARG A 178	152.673	135.675	46.484	1.00	0.00	N
ATOM	280	NH2	ARG A 178	154.690	134.929	46.099	1.00	0.00	N
ATOM	281	C	ARG A 178	152.220	130.145	44.267	1.00	0.00	C
ATOM	282	O	ARG A 178	151.201	129.496	44.032	1.00	0.00	O
ATOM	283	N	LEU A 179	153.423	129.735	43.874	1.00	0.00	N
ATOM	284	CA	LEU A 179	153.735	128.571	43.030	1.00	0.00	C
ATOM	285	CB	LEU A 179	154.247	129.049	41.652	1.00	0.00	C
ATOM	286	CG	LEU A 179	153.190	129.758	40.774	1.00	0.00	C
ATOM	287	CD1	LEU A 179	153.883	130.591	39.696	1.00	0.00	C
ATOM	288	CD2	LEU A 179	152.253	128.778	40.060	1.00	0.00	C
ATOM	289	C	LEU A 179	154.707	127.640	43.779	1.00	0.00	C
ATOM	290	O	LEU A 179	155.731	127.207	43.244	1.00	0.00	O
ATOM	291	N	LYS A 180	154.402	127.424	45.067	1.00	0.00	N
ATOM	292	CA	LYS A 180	155.267	126.871	46.120	1.00	0.00	C
ATOM	293	CB	LYS A 180	154.359	126.465	47.300	1.00	0.00	C
ATOM	294	CG	LYS A 180	155.143	125.843	48.460	1.00	0.00	C
ATOM	295	CD	LYS A 180	154.253	125.513	49.665	1.00	0.00	C
ATOM	296	CE	LYS A 180	155.069	124.951	50.839	1.00	0.00	C
ATOM	297	NZ	LYS A 180	155.693	123.644	50.542	1.00	0.00	N
ATOM	298	C	LYS A 180	156.186	125.740	45.653	1.00	0.00	C
ATOM	299	O	LYS A 180	157.402	125.917	45.624	1.00	0.00	O
ATOM	300	N	ASN A 181	155.610	124.652	45.144	1.00	0.00	N
ATOM	301	CA	ASN A 181	156.347	123.450	44.743	1.00	0.00	C
ATOM	302	CB	ASN A 181	155.341	122.331	44.407	1.00	0.00	C
ATOM	303	CG	ASN A 181	154.413	121.914	45.539	1.00	0.00	C
ATOM	304	OD1	ASN A 181	154.089	122.651	46.456	1.00	0.00	O
ATOM	305	ND2	ASN A 181	153.860	120.727	45.453	1.00	0.00	N
ATOM	306	C	ASN A 181	157.278	123.684	43.538	1.00	0.00	C
ATOM	307	O	ASN A 181	158.266	122.972	43.378	1.00	0.00	O
ATOM	308	N	GLN A 182	156.930	124.614	42.646	1.00	0.00	N
ATOM	309	CA	GLN A 182	157.714	124.928	41.451	1.00	0.00	C
ATOM	310	CB	GLN A 182	156.820	125.543	40.363	1.00	0.00	C
ATOM	311	CG	GLN A 182	155.638	124.646	39.960	1.00	0.00	C
ATOM	312	CD	GLN A 182	154.340	125.038	40.660	1.00	0.00	C
ATOM	313	OE1	GLN A 182	154.116	124.774	41.829	1.00	0.00	O
ATOM	314	NE2	GLN A 182	153.411	125.642	39.955	1.00	0.00	N
ATOM	315	C	GLN A 182	158.893	125.862	41.739	1.00	0.00	C
ATOM	316	O	GLN A 182	159.859	125.836	40.979	1.00	0.00	O
ATOM	317	N	SER A 183	158.849	126.643	42.826	1.00	0.00	N
ATOM	318	CA	SER A 183	159.892	127.624	43.171	1.00	0.00	C
ATOM	319	CB	SER A 183	159.534	128.339	44.481	1.00	0.00	C
ATOM	320	OG	SER A 183	159.544	127.460	45.588	1.00	0.00	O
ATOM	321	C	SER A 183	161.293	126.996	43.244	1.00	0.00	C
ATOM	322	O	SER A 183	162.130	127.315	42.404	1.00	0.00	O
ATOM	323	N	SER A 184	161.427	125.878	43.961	1.00	0.00	N
ATOM	324	CA	SER A 184	162.689	125.136	44.105	1.00	0.00	C
ATOM	325	CB	SER A 184	162.485	123.971	45.081	1.00	0.00	C
ATOM	326	OG	SER A 184	161.843	124.421	46.260	1.00	0.00	O
ATOM	327	C	SER A 184	163.257	124.598	42.787	1.00	0.00	C
ATOM	328	O	SER A 184	164.473	124.565	42.612	1.00	0.00	O
ATOM	329	N	LEU A 185	162.404	124.239	41.823	1.00	0.00	N
ATOM	330	CA	LEU A 185	162.853	123.835	40.488	1.00	0.00	C
ATOM	331	CB	LEU A 185	161.766	122.958	39.839	1.00	0.00	C
ATOM	332	CG	LEU A 185	162.078	122.513	38.397	1.00	0.00	C
ATOM	333	CD1	LEU A 185	163.390	121.731	38.286	1.00	0.00	C
ATOM	334	CD2	LEU A 185	160.950	121.609	37.897	1.00	0.00	C
ATOM	335	C	LEU A 185	163.235	125.043	39.620	1.00	0.00	C
ATOM	336	O	LEU A 185	164.313	125.061	39.033	1.00	0.00	O
ATOM	337	N	LEU A 186	162.393	126.078	39.587	1.00	0.00	N
ATOM	338	CA	LEU A 186	162.605	127.270	38.763	1.00	0.00	C
ATOM	339	CB	LEU A 186	161.329	128.134	38.795	1.00	0.00	C
ATOM	340	CG	LEU A 186	160.117	127.507	38.078	1.00	0.00	C
ATOM	341	CD1	LEU A 186	158.846	128.298	38.395	1.00	0.00	C
ATOM	342	CD2	LEU A 186	160.293	127.488	36.557	1.00	0.00	C
ATOM	343	C	LEU A 186	163.832	128.082	39.203	1.00	0.00	C

ATOM	344	O	LEU A 186	164.551	128.598	38.351	1.00	0.00	O
ATOM	345	N	HIS A 187	164.114	128.146	40.507	1.00	0.00	N
ATOM	346	CA	HIS A 187	165.266	128.874	41.062	1.00	0.00	C
ATOM	347	CB	HIS A 187	165.077	129.127	42.563	1.00	0.00	C
ATOM	348	CG	HIS A 187	163.851	129.897	43.001	1.00	0.00	C
ATOM	349	ND1	HIS A 187	163.633	130.295	44.308	1.00	0.00	N
ATOM	350	CE1	HIS A 187	162.419	130.848	44.346	1.00	0.00	C
ATOM	351	NE2	HIS A 187	161.858	130.814	43.133	1.00	0.00	N
ATOM	352	CD2	HIS A 187	162.746	130.241	42.257	1.00	0.00	C
ATOM	353	C	HIS A 187	166.574	128.115	40.817	1.00	0.00	C
ATOM	354	O	HIS A 187	167.526	128.699	40.298	1.00	0.00	O
ATOM	355	N	LYS A 188	166.540	126.779	40.938	1.00	0.00	N
ATOM	356	CA	LYS A 188	167.638	125.896	40.530	1.00	0.00	C
ATOM	357	CB	LYS A 188	167.288	124.451	40.911	1.00	0.00	C
ATOM	358	CG	LYS A 188	168.458	123.504	40.618	1.00	0.00	C
ATOM	359	CD	LYS A 188	168.122	122.067	41.018	1.00	0.00	C
ATOM	360	CE	LYS A 188	169.359	121.205	40.755	1.00	0.00	C
ATOM	361	NZ	LYS A 188	169.158	119.814	41.223	1.00	0.00	N
ATOM	362	C	LYS A 188	167.952	126.035	39.040	1.00	0.00	C
ATOM	363	O	LYS A 188	169.097	126.309	38.701	1.00	0.00	O
ATOM	364	N	THR A 189	166.934	126.010	38.177	1.00	0.00	N
ATOM	365	CA	THR A 189	167.105	126.194	36.728	1.00	0.00	C
ATOM	366	CB	THR A 189	165.796	125.878	35.987	1.00	0.00	C
ATOM	367	CG2	THR A 189	165.836	126.153	34.484	1.00	0.00	C
ATOM	368	OG1	THR A 189	165.514	124.502	36.110	1.00	0.00	O
ATOM	369	C	THR A 189	167.623	127.587	36.363	1.00	0.00	C
ATOM	370	O	THR A 189	168.496	127.686	35.510	1.00	0.00	O
ATOM	371	N	LEU A 190	167.182	128.664	37.022	1.00	0.00	N
ATOM	372	CA	LEU A 190	167.706	130.010	36.737	1.00	0.00	C
ATOM	373	CB	LEU A 190	166.717	131.085	37.213	1.00	0.00	C
ATOM	374	CG	LEU A 190	165.834	131.603	36.069	1.00	0.00	C
ATOM	375	CD1	LEU A 190	165.112	130.496	35.297	1.00	0.00	C
ATOM	376	CD2	LEU A 190	164.799	132.572	36.638	1.00	0.00	C
ATOM	377	C	LEU A 190	169.118	130.246	37.277	1.00	0.00	C
ATOM	378	O	LEU A 190	169.890	130.911	36.597	1.00	0.00	O
ATOM	379	N	SER A 191	169.507	129.598	38.374	1.00	0.00	N
ATOM	380	CA	SER A 191	170.900	129.571	38.835	1.00	0.00	C
ATOM	381	CB	SER A 191	170.925	128.979	40.243	1.00	0.00	C
ATOM	382	OG	SER A 191	172.243	128.931	40.737	1.00	0.00	O
ATOM	383	C	SER A 191	171.812	128.781	37.882	1.00	0.00	C
ATOM	384	O	SER A 191	172.781	129.323	37.358	1.00	0.00	O
ATOM	385	N	GLU A 192	171.337	127.620	37.421	1.00	0.00	N
ATOM	386	CA	GLU A 192	171.975	126.776	36.398	1.00	0.00	C
ATOM	387	CB	GLU A 192	171.180	125.452	36.381	1.00	0.00	C
ATOM	388	CG	GLU A 192	171.648	124.337	35.437	1.00	0.00	C
ATOM	389	CD	GLU A 192	170.725	123.104	35.561	1.00	0.00	C
ATOM	390	OE1	GLU A 192	170.701	122.476	36.649	1.00	0.00	O
ATOM	391	OE2	GLU A 192	169.950	122.851	34.606	1.00	0.00	O
ATOM	392	C	GLU A 192	172.067	127.456	35.012	1.00	0.00	C
ATOM	393	O	GLU A 192	172.923	127.101	34.202	1.00	0.00	O
ATOM	394	N	PHE A 193	171.222	128.461	34.737	1.00	0.00	N
ATOM	395	CA	PHE A 193	171.185	129.202	33.467	1.00	0.00	C
ATOM	396	CB	PHE A 193	169.719	129.427	33.048	1.00	0.00	C
ATOM	397	CG	PHE A 193	168.996	128.247	32.411	1.00	0.00	C
ATOM	398	CD1	PHE A 193	167.824	128.510	31.672	1.00	0.00	C
ATOM	399	CE1	PHE A 193	167.115	127.441	31.091	1.00	0.00	C
ATOM	400	CZ	PHE A 193	167.566	126.126	31.240	1.00	0.00	C
ATOM	401	CE2	PHE A 193	168.722	125.855	31.981	1.00	0.00	C
ATOM	402	CD2	PHE A 193	169.445	126.913	32.547	1.00	0.00	C
ATOM	403	C	PHE A 193	171.934	130.548	33.488	1.00	0.00	C
ATOM	404	O	PHE A 193	172.361	130.997	32.422	1.00	0.00	O
ATOM	405	N	SER A 194	171.913	131.284	34.603	1.00	0.00	N
ATOM	406	CA	SER A 194	172.258	132.714	34.650	1.00	0.00	C
ATOM	407	CB	SER A 194	171.282	133.444	35.571	1.00	0.00	C
ATOM	408	OG	SER A 194	171.459	134.840	35.457	1.00	0.00	O
ATOM	409	C	SER A 194	173.703	132.947	35.096	1.00	0.00	C
ATOM	410	O	SER A 194	174.030	132.781	36.269	1.00	0.00	O
ATOM	411	N	VAL A 195	174.600	133.278	34.160	1.00	0.00	N
ATOM	412	CA	VAL A 195	176.057	133.190	34.405	1.00	0.00	C

ATOM	413	CB	VAL A 195	176.829	133.057	33.074	1.00	0.00	C
ATOM	414	CG1	VAL A 195	178.357	133.047	33.240	1.00	0.00	C
ATOM	415	CG2	VAL A 195	176.453	131.748	32.364	1.00	0.00	C
ATOM	416	C	VAL A 195	176.633	134.322	35.271	1.00	0.00	C
ATOM	417	O	VAL A 195	177.561	134.065	36.035	1.00	0.00	O
ATOM	418	N	VAL A 196	176.202	135.578	35.083	1.00	0.00	N
ATOM	419	CA	VAL A 196	176.874	136.755	35.684	1.00	0.00	C
ATOM	420	CB	VAL A 196	177.300	137.776	34.601	1.00	0.00	C
ATOM	421	CG1	VAL A 196	177.916	139.057	35.181	1.00	0.00	C
ATOM	422	CG2	VAL A 196	178.336	137.162	33.649	1.00	0.00	C
ATOM	423	C	VAL A 196	176.043	137.416	36.783	1.00	0.00	C
ATOM	424	O	VAL A 196	176.601	137.817	37.804	1.00	0.00	O
ATOM	425	N	PHE A 197	174.742	137.612	36.562	1.00	0.00	N
ATOM	426	CA	PHE A 197	173.912	138.446	37.432	1.00	0.00	C
ATOM	427	CB	PHE A 197	174.122	139.911	37.031	1.00	0.00	C
ATOM	428	CG	PHE A 197	173.263	140.911	37.775	1.00	0.00	C
ATOM	429	CD1	PHE A 197	172.145	141.492	37.148	1.00	0.00	C
ATOM	430	CE1	PHE A 197	171.396	142.473	37.818	1.00	0.00	C
ATOM	431	CZ	PHE A 197	171.759	142.870	39.117	1.00	0.00	C
ATOM	432	CE2	PHE A 197	172.850	142.260	39.760	1.00	0.00	C
ATOM	433	CD2	PHE A 197	173.598	141.275	39.091	1.00	0.00	C
ATOM	434	C	PHE A 197	172.432	138.062	37.376	1.00	0.00	C
ATOM	435	O	PHE A 197	171.867	137.937	36.291	1.00	0.00	O
ATOM	436	N	SER A 198	171.778	138.066	38.539	1.00	0.00	N
ATOM	437	CA	SER A 198	170.371	137.708	38.726	1.00	0.00	C
ATOM	438	CB	SER A 198	170.253	136.222	39.105	1.00	0.00	C
ATOM	439	OG	SER A 198	170.935	135.397	38.178	1.00	0.00	O
ATOM	440	C	SER A 198	169.744	138.593	39.811	1.00	0.00	C
ATOM	441	O	SER A 198	169.952	138.376	41.005	1.00	0.00	O
ATOM	442	N	LEU A 199	169.020	139.640	39.409	1.00	0.00	N
ATOM	443	CA	LEU A 199	168.344	140.566	40.328	1.00	0.00	C
ATOM	444	CB	LEU A 199	168.187	141.922	39.617	1.00	0.00	C
ATOM	445	CG	LEU A 199	167.589	143.056	40.466	1.00	0.00	C
ATOM	446	CD1	LEU A 199	168.500	143.472	41.620	1.00	0.00	C
ATOM	447	CD2	LEU A 199	167.387	144.289	39.583	1.00	0.00	C
ATOM	448	C	LEU A 199	167.000	139.985	40.804	1.00	0.00	C
ATOM	449	O	LEU A 199	166.014	140.044	40.071	1.00	0.00	O
ATOM	450	N	LEU A 200	166.969	139.407	42.009	1.00	0.00	N
ATOM	451	CA	LEU A 200	165.793	138.746	42.600	1.00	0.00	C
ATOM	452	CB	LEU A 200	166.260	137.569	43.494	1.00	0.00	C
ATOM	453	CG	LEU A 200	166.485	136.202	42.819	1.00	0.00	C
ATOM	454	CD1	LEU A 200	165.180	135.607	42.301	1.00	0.00	C
ATOM	455	CD2	LEU A 200	167.500	136.229	41.680	1.00	0.00	C
ATOM	456	C	LEU A 200	164.919	139.757	43.371	1.00	0.00	C
ATOM	457	O	LEU A 200	165.130	140.011	44.562	1.00	0.00	O
ATOM	458	N	LEU A 201	163.921	140.332	42.697	1.00	0.00	N
ATOM	459	CA	LEU A 201	163.032	141.394	43.193	1.00	0.00	C
ATOM	460	CB	LEU A 201	162.482	142.182	41.983	1.00	0.00	C
ATOM	461	CG	LEU A 201	163.534	142.877	41.102	1.00	0.00	C
ATOM	462	CD1	LEU A 201	162.853	143.547	39.910	1.00	0.00	C
ATOM	463	CD2	LEU A 201	164.291	143.956	41.879	1.00	0.00	C
ATOM	464	C	LEU A 201	161.907	140.865	44.113	1.00	0.00	C
ATOM	465	O	LEU A 201	160.721	141.029	43.833	1.00	0.00	O
ATOM	466	N	THR A 202	162.280	140.254	45.242	1.00	0.00	N
ATOM	467	CA	THR A 202	161.363	139.579	46.189	1.00	0.00	C
ATOM	468	CB	THR A 202	162.118	139.156	47.459	1.00	0.00	C
ATOM	469	CG2	THR A 202	161.232	138.519	48.532	1.00	0.00	C
ATOM	470	OG1	THR A 202	163.086	138.191	47.122	1.00	0.00	O
ATOM	471	C	THR A 202	160.146	140.443	46.559	1.00	0.00	C
ATOM	472	O	THR A 202	160.300	141.584	46.998	1.00	0.00	O
ATOM	473	N	GLY A 203	158.936	139.890	46.412	1.00	0.00	N
ATOM	474	CA	GLY A 203	157.651	140.602	46.478	1.00	0.00	C
ATOM	475	C	GLY A 203	157.389	141.323	47.804	1.00	0.00	C
ATOM	476	O	GLY A 203	157.474	142.548	47.861	1.00	0.00	O
ATOM	477	N	THR A 204	157.047	140.562	48.841	1.00	0.00	N
ATOM	478	CA	THR A 204	157.019	140.951	50.260	1.00	0.00	C
ATOM	479	CB	THR A 204	155.823	141.864	50.594	1.00	0.00	C
ATOM	480	CG2	THR A 204	154.438	141.288	50.288	1.00	0.00	C
ATOM	481	OG1	THR A 204	155.827	142.144	51.969	1.00	0.00	O

ATOM	482	C	THR A 204	156.993	139.667	51.110	1.00	0.00	C
ATOM	483	O	THR A 204	156.233	138.748	50.785	1.00	0.00	O
ATOM	484	N	PRO A 205	157.800	139.535	52.182	1.00	0.00	N
ATOM	485	CD	PRO A 205	158.711	140.534	52.726	1.00	0.00	C
ATOM	486	CG	PRO A 205	159.208	139.964	54.055	1.00	0.00	C
ATOM	487	CB	PRO A 205	159.154	138.455	53.823	1.00	0.00	C
ATOM	488	CA	PRO A 205	157.921	138.278	52.933	1.00	0.00	C
ATOM	489	C	PRO A 205	156.664	137.882	53.732	1.00	0.00	C
ATOM	490	O	PRO A 205	156.601	136.766	54.231	1.00	0.00	O
ATOM	491	N	ILE A 206	155.617	138.716	53.742	1.00	0.00	N
ATOM	492	CA	ILE A 206	154.264	138.371	54.221	1.00	0.00	C
ATOM	493	CB	ILE A 206	153.506	139.693	54.539	1.00	0.00	C
ATOM	494	CG2	ILE A 206	151.983	139.509	54.688	1.00	0.00	C
ATOM	495	CG1	ILE A 206	154.002	140.371	55.842	1.00	0.00	C
ATOM	496	CD1	ILE A 206	155.381	141.042	55.768	1.00	0.00	C
ATOM	497	C	ILE A 206	153.510	137.474	53.204	1.00	0.00	C
ATOM	498	O	ILE A 206	152.522	136.826	53.547	1.00	0.00	O
ATOM	499	N	GLN A 207	153.908	137.503	51.926	1.00	0.00	N
ATOM	500	CA	GLN A 207	153.336	136.698	50.837	1.00	0.00	C
ATOM	501	CB	GLN A 207	153.028	137.610	49.634	1.00	0.00	C
ATOM	502	CG	GLN A 207	151.600	138.176	49.660	1.00	0.00	C
ATOM	503	CD	GLN A 207	150.528	137.178	49.208	1.00	0.00	C
ATOM	504	OE1	GLN A 207	150.720	136.321	48.359	1.00	0.00	O
ATOM	505	NE2	GLN A 207	149.297	137.337	49.637	1.00	0.00	N
ATOM	506	C	GLN A 207	154.259	135.556	50.397	1.00	0.00	C
ATOM	507	O	GLN A 207	153.770	134.456	50.147	1.00	0.00	O
ATOM	508	N	ASN A 208	155.536	135.853	50.136	1.00	0.00	N
ATOM	509	CA	ASN A 208	156.504	134.882	49.619	1.00	0.00	C
ATOM	510	CB	ASN A 208	157.777	135.639	49.182	1.00	0.00	C
ATOM	511	CG	ASN A 208	157.535	136.670	48.088	1.00	0.00	C
ATOM	512	OD1	ASN A 208	157.540	137.867	48.303	1.00	0.00	O
ATOM	513	ND2	ASN A 208	157.359	136.248	46.863	1.00	0.00	N
ATOM	514	C	ASN A 208	156.788	133.801	50.683	1.00	0.00	C
ATOM	515	O	ASN A 208	157.390	134.099	51.711	1.00	0.00	O
ATOM	516	N	SER A 209	156.296	132.575	50.465	1.00	0.00	N
ATOM	517	CA	SER A 209	156.232	131.534	51.507	1.00	0.00	C
ATOM	518	CB	SER A 209	155.236	130.440	51.086	1.00	0.00	C
ATOM	519	OG	SER A 209	155.825	129.427	50.288	1.00	0.00	O
ATOM	520	C	SER A 209	157.611	130.962	51.890	1.00	0.00	C
ATOM	521	O	SER A 209	158.581	131.128	51.152	1.00	0.00	O
ATOM	522	N	LEU A 210	157.681	130.103	52.918	1.00	0.00	N
ATOM	523	CA	LEU A 210	158.946	129.538	53.427	1.00	0.00	C
ATOM	524	CB	LEU A 210	158.676	128.595	54.612	1.00	0.00	C
ATOM	525	CG	LEU A 210	158.030	129.253	55.843	1.00	0.00	C
ATOM	526	CD1	LEU A 210	157.639	128.148	56.817	1.00	0.00	C
ATOM	527	CD2	LEU A 210	158.961	130.237	56.551	1.00	0.00	C
ATOM	528	C	LEU A 210	159.768	128.801	52.356	1.00	0.00	C
ATOM	529	O	LEU A 210	160.897	129.204	52.091	1.00	0.00	O
ATOM	530	N	GLN A 211	159.156	127.869	51.613	1.00	0.00	N
ATOM	531	CA	GLN A 211	159.824	127.189	50.491	1.00	0.00	C
ATOM	532	CB	GLN A 211	158.912	126.082	49.924	1.00	0.00	C
ATOM	533	CG	GLN A 211	159.555	125.360	48.722	1.00	0.00	C
ATOM	534	CD	GLN A 211	158.842	124.083	48.288	1.00	0.00	C
ATOM	535	OE1	GLN A 211	157.705	123.799	48.638	1.00	0.00	O
ATOM	536	NE2	GLN A 211	159.450	123.298	47.431	1.00	0.00	N
ATOM	537	C	GLN A 211	160.231	128.163	49.372	1.00	0.00	C
ATOM	538	O	GLN A 211	161.294	128.000	48.772	1.00	0.00	O
ATOM	539	N	GLU A 212	159.385	129.153	49.076	1.00	0.00	N
ATOM	540	CA	GLU A 212	159.617	130.131	48.012	1.00	0.00	C
ATOM	541	CB	GLU A 212	158.332	130.941	47.745	1.00	0.00	C
ATOM	542	CG	GLU A 212	157.157	130.104	47.199	1.00	0.00	C
ATOM	543	CD	GLU A 212	155.810	130.851	47.064	1.00	0.00	C
ATOM	544	OE1	GLU A 212	155.669	132.011	47.531	1.00	0.00	O
ATOM	545	OE2	GLU A 212	154.925	130.291	46.372	1.00	0.00	O
ATOM	546	C	GLU A 212	160.797	131.063	48.335	1.00	0.00	C
ATOM	547	O	GLU A 212	161.623	131.303	47.462	1.00	0.00	O
ATOM	548	N	LEU A 213	160.991	131.439	49.602	1.00	0.00	N
ATOM	549	CA	LEU A 213	162.168	132.188	50.056	1.00	0.00	C
ATOM	550	CB	LEU A 213	161.819	132.925	51.358	1.00	0.00	C

ATOM	551	CG	LEU A 213	160.800	134.069	51.214	1.00	0.00	C
ATOM	552	CD1	LEU A 213	160.492	134.626	52.605	1.00	0.00	C
ATOM	553	CD2	LEU A 213	161.328	135.220	50.353	1.00	0.00	C
ATOM	554	C	LEU A 213	163.411	131.303	50.254	1.00	0.00	C
ATOM	555	O	LEU A 213	164.506	131.702	49.867	1.00	0.00	O
ATOM	556	N	TYR A 214	163.265	130.090	50.795	1.00	0.00	N
ATOM	557	CA	TYR A 214	164.374	129.147	51.012	1.00	0.00	C
ATOM	558	CB	TYR A 214	163.836	127.926	51.777	1.00	0.00	C
ATOM	559	CG	TYR A 214	164.816	126.780	51.975	1.00	0.00	C
ATOM	560	CD1	TYR A 214	164.433	125.464	51.643	1.00	0.00	C
ATOM	561	CE1	TYR A 214	165.331	124.396	51.833	1.00	0.00	C
ATOM	562	CZ	TYR A 214	166.617	124.640	52.351	1.00	0.00	C
ATOM	563	OH	TYR A 214	167.474	123.604	52.528	1.00	0.00	O
ATOM	564	CE2	TYR A 214	167.003	125.954	52.690	1.00	0.00	C
ATOM	565	CD2	TYR A 214	166.102	127.021	52.504	1.00	0.00	C
ATOM	566	C	TYR A 214	165.048	128.714	49.703	1.00	0.00	C
ATOM	567	O	TYR A 214	166.275	128.684	49.610	1.00	0.00	O
ATOM	568	N	SER A 215	164.256	128.579	48.639	1.00	0.00	N
ATOM	569	CA	SER A 215	164.742	128.242	47.299	1.00	0.00	C
ATOM	570	CB	SER A 215	163.552	127.949	46.386	1.00	0.00	C
ATOM	571	OG	SER A 215	162.790	126.868	46.899	1.00	0.00	O
ATOM	572	C	SER A 215	165.643	129.317	46.670	1.00	0.00	C
ATOM	573	O	SER A 215	166.533	128.958	45.902	1.00	0.00	O
ATOM	574	N	LEU A 216	165.606	130.570	47.154	1.00	0.00	N
ATOM	575	CA	LEU A 216	166.518	131.639	46.714	1.00	0.00	C
ATOM	576	CB	LEU A 216	166.117	132.987	47.345	1.00	0.00	C
ATOM	577	CG	LEU A 216	164.683	133.468	47.059	1.00	0.00	C
ATOM	578	CD1	LEU A 216	164.397	134.737	47.866	1.00	0.00	C
ATOM	579	CD2	LEU A 216	164.478	133.798	45.581	1.00	0.00	C
ATOM	580	C	LEU A 216	167.995	131.353	47.041	1.00	0.00	C
ATOM	581	O	LEU A 216	168.882	131.874	46.363	1.00	0.00	O
ATOM	582	N	LEU A 217	168.281	130.467	48.003	1.00	0.00	N
ATOM	583	CA	LEU A 217	169.650	130.035	48.296	1.00	0.00	C
ATOM	584	CB	LEU A 217	169.685	129.225	49.605	1.00	0.00	C
ATOM	585	CG	LEU A 217	169.211	129.983	50.862	1.00	0.00	C
ATOM	586	CD1	LEU A 217	169.323	129.063	52.078	1.00	0.00	C
ATOM	587	CD2	LEU A 217	170.037	131.241	51.150	1.00	0.00	C
ATOM	588	C	LEU A 217	170.297	129.252	47.139	1.00	0.00	C
ATOM	589	O	LEU A 217	171.520	129.279	47.022	1.00	0.00	O
ATOM	590	N	SER A 218	169.529	128.739	46.165	1.00	0.00	N
ATOM	591	CA	SER A 218	170.099	128.077	44.980	1.00	0.00	C
ATOM	592	CB	SER A 218	169.000	127.432	44.125	1.00	0.00	C
ATOM	593	OG	SER A 218	168.259	128.383	43.383	1.00	0.00	O
ATOM	594	C	SER A 218	170.948	129.004	44.102	1.00	0.00	C
ATOM	595	O	SER A 218	171.737	128.505	43.303	1.00	0.00	O
ATOM	596	N	PHE A 219	170.767	130.328	44.189	1.00	0.00	N
ATOM	597	CA	PHE A 219	171.553	131.325	43.448	1.00	0.00	C
ATOM	598	CB	PHE A 219	170.726	132.612	43.302	1.00	0.00	C
ATOM	599	CG	PHE A 219	169.491	132.480	42.434	1.00	0.00	C
ATOM	600	CD1	PHE A 219	169.626	132.536	41.036	1.00	0.00	C
ATOM	601	CE1	PHE A 219	168.491	132.457	40.215	1.00	0.00	C
ATOM	602	CZ	PHE A 219	167.213	132.308	40.785	1.00	0.00	C
ATOM	603	CE2	PHE A 219	167.074	132.251	42.184	1.00	0.00	C
ATOM	604	CD2	PHE A 219	168.212	132.344	43.005	1.00	0.00	C
ATOM	605	C	PHE A 219	172.927	131.644	44.070	1.00	0.00	C
ATOM	606	O	PHE A 219	173.669	132.432	43.487	1.00	0.00	O

END

Figure 21

Compound Code	Supplier	Compound Code	Supplier
ALCi-1	Enamine	ALCi-53	Vitas M
ALCi-2	Enamine	ALCi-54	timtec
ALCi-3	Enamine	ALCi-55	timtec
ALCi-4	Enamine	ALCi-56	timtec
ALCi-5	Enamine	ALCi-57	TimTec
ALCi-6	Chemdiv	ALCi-58	TimTec
ALCi-7	ChemBridge	ALCi-60	TimTec
ALCi-8	ChemBridge	ALCi-61	TimTec
ALCi-9	ChemBridge	ALCi-62	TimTec
ALCi-10	ChemBridge	ALCi-63	TimTec
ALCi-11	ChemBridge	ALCi-64	TimTec
ALCi-14	ChemBridge	ALCi-65	Mcule
ALCi-15	ChemBridge	ALCi-70	Mcule
ALCi-17	Key Organics	ALCi-72	Intonation Research Laboratories
ALCi-18	Key Organics	ALCi-74	Intonation Research Laboratories
ALCi-19	Vitas M	ALCi-75	Intonation Research Laboratories
ALCi-22	Vitas M	ALCi-77	Mcule
ALCi-23	Vitas M	ALCi-79	Mcule
ALCi-24	Alinda	ALCi-81	Mcule
ALCi-29	ChemBridge	ALCi-82	Mcule
ALCi-30	Enamine	ALCi-87	Mcule
ALCi-36	ChemDiv	ALCi-90	Mcule
ALCi-37	ChemDiv	ALCi-93	Mcule
ALCi-39	ChemDiv	ALCi-94	Mcule
ALCi-40	ChemDiv	ALCi-97	Mcule
ALCi-43	Bicoll	ALCi-101	Mcule
ALCi-44	Bicoll	ALCi-120	Otava
ALCi-46	Key Organics	ALCi-123	Enamine
ALCi-47	Vitas M	ALCi-124	Enamine
ALCi-48	Vitas M	ALCi-125	Enamine
ALCi-50	Vitas M	ALCi-127	Ukrorgsyntez
ALCi-51	Vitas M	ALCi-128	Chemdiv
ALCi-52	Vitas M	ALCi-129	Chemdiv

Figure 21 (continued)

Compound Code	Supplier	Compound Code	Supplier
ALCi-130	Chemdiv	ALCi-180	Intonation Research Laboratories
ALCi-131	Chemdiv	ALCi-183	Intonation Research Laboratories
ALCi-132	Chemdiv	ALCi-184	Intonation Research Laboratories
ALCi-133	Enamine	ALCi-185	Intonation Research Laboratories
ALCi-134	Enamine	ALCi-186	Intonation Research Laboratories
ALCi-135	Enamine	ALCi-187	Intonation Research Laboratories
ALCi-136	Enamine	ALCi-188	Intonation Research Laboratories
ALCi-137	Enamine	ALCi-189	Intonation Research Laboratories
ALCi-146	Mcule	ALCi-190	Intonation Research Laboratories
ALCi-147	Mcule	ALCi-191	Intonation Research Laboratories
ALCi-149	Mcule	ALCi-192	Intonation Research Laboratories
ALCi-150	Mcule	ALCi-193	Intonation Research Laboratories
ALCi-151	Mcule	ALCi-194	Intonation Research Laboratories
ALCi-152	Intonation Research Laboratories	ALCi-195	Intonation Research Laboratories
ALCi-157	Bicoll	ALCi-196	Intonation Research Laboratories
ALCi-158	Bicoll	ALCi-197	Intonation Research Laboratories
ALCi-160	Bicoll	ALCi-198	Intonation Research Laboratories
ALCi-162	Intonation Research Laboratories	ALCi-199	Intonation Research Laboratories
ALCi-163	Intonation Research Laboratories	ALCi-200	Intonation Research Laboratories
ALCi-164	Intonation Research Laboratories	ALCi-201	ChemSpace
ALCi-166	Intonation Research Laboratories	ALCi-202	ChemSpace
ALCi-167	Bicoll	ALCi-203	ChemSpace
ALCi-171	Bicoll	ALCi-204	ChemSpace
ALCi-172	Bicoll	ALCi-205	ChemSpace
ALCi-177	Bicoll	ALCi-206	ChemSpace
ALCi-178	Bicoll	ALCi-207	ChemSpace

Figure 21 (continued)

Compound Code	Supplier	Compound Code	Supplier
ALCi-208	ChemSpace	ALCi-241	ChemSpace
ALCi-209	ChemSpace	ALCi-242	ChemSpace
ALCi-210	ChemSpace	ALCi-245	ChemSpace
ALCi-211	ChemSpace	ALCi-246	ChemSpace
ALCi-212	ChemSpace	ALCi-247	ChemSpace
ALCi-213	ChemSpace	ALCi-248	ChemSpace
ALCi-214	ChemSpace	ALCi-250	ChemSpace
ALCi-215	ChemSpace	ALCi-251	ChemSpace
ALCi-216	ChemSpace	ALCi-252	ChemSpace
ALCi-217	ChemSpace	ALCi-253	ChemSpace
ALCi-218	ChemSpace	ALCi-254	ChemSpace
ALCi-219	ChemSpace	ALCi-255	ChemSpace
ALCi-220	ChemSpace	ALCi-256	ChemSpace
ALCi-221	ChemSpace	ALCi-257	ChemSpace
ALCi-222	ChemSpace	ALCi-258	ChemSpace
ALCi-223	ChemSpace	ALCi-259	ChemSpace
ALCi-224	ChemSpace	ALCi-260	ChemSpace
ALCi-225	ChemSpace	ALCi-261	ChemSpace
ALCi-226	ChemSpace	ALCi-262	ChemSpace
ALCi-227	ChemSpace	ALCi-263	ChemSpace
ALCi-228	ChemSpace	ALCi-264	Intonation Research Laboratories
ALCi-229	ChemSpace	ALCi-265	Intonation Research Laboratories
ALCi-230	ChemSpace	ALCi-266	ChemSpace
ALCi-231	ChemSpace	ALCi-267	ChemSpace
ALCi-232	ChemSpace	ALCi-268	ChemSpace
ALCi-233	ChemSpace	ALCi-269	ChemSpace
ALCi-234	ChemSpace	ALCi-270	ChemSpace
ALCi-235	ChemSpace	ALCi-271	ChemSpace
ALCi-236	ChemSpace	ALCi-272	ChemSpace
ALCi-237	ChemSpace	ALCi-273	ChemSpace
ALCi-238	ChemSpace	ALCi-274	ChemSpace
ALCi-239	ChemSpace	ALCi-275	ChemSpace
ALCi-240	ChemSpace	ALCi-278	Chemspace

52/55

Figure 22

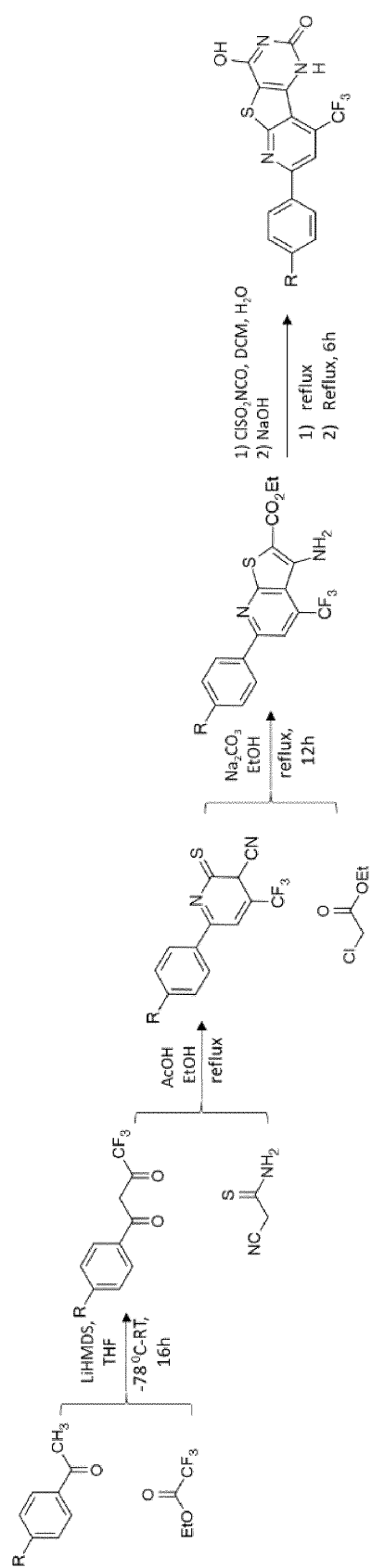


Figure 23

Compound Code	% Inhibition at 250μM	Compound Code	% Inhibition at 250μM
ALCi-1	100	ALCi-70	82.52
ALCi-2	100	ALCi-72	96.29
ALCi-3	87.27	ALCi-74	93.22
ALCi-4	100	ALCi-75	100
ALCi-5	81.37 ^a	ALCi-77	100
ALCi-6	82.58	ALCi-79	100
ALCi-7	90.7	ALCi-81	100
ALCi-8	100	ALCi-82	100
ALCi-9	100	ALCi-87	94.15
ALCi-10	77.72	ALCi-90	83.33
ALCi-11	73.16	ALCi-93	79.8
ALCi-14	50.31 ^a	ALCi-94	100
ALCi-15	92.25	ALCi-97	71.88
ALCi-17	88.69	ALCi-101	100
ALCi-18	100	ALCi-120	98.88 ^a
ALCi-19	79.35	ALCi-123	100
ALCi-22	100	ALCi-124	89.81
ALCi-23	99.48	ALCi-125	99.34
ALCi-24	82.65	ALCi-127	100
ALCi-29	100	ALCi-128	94.04
ALCi-30	100	ALCi-129	58.38
ALCi-36	81.44	ALCi-130	100
ALCi-37	90	ALCi-131	100
ALCi-39	72.29	ALCi-132	86.96
ALCi-40	92.45	ALCi-133	90.06
ALCi-43	73.6	ALCi-134	100
ALCi-44	100	ALCi-135	100
ALCi-46	100	ALCi-136	56.65
ALCi-47	81.38	ALCi-137	56.77
ALCi-48	61.03	ALCi-146	100
ALCi-50	100	ALCi-147	100
ALCi-51	106.17 ^h	ALCi-149	96.52
ALCi-52	64.52	ALCi-150	100
ALCi-53	84.87 ^h	ALCi-151	56.26
ALCi-54	100	ALCi-152	100
ALCi-55	71.75	ALCi-157	100
ALCi-56	100	ALCi-158	96.18
ALCi-57	100	ALCi-160	100
ALCi-58	100	ALCi-162	100
ALCi-60	100	ALCi-163	100
ALCi-61	62.92	ALCi-164	95.26
ALCi-62	100	ALCi-166	100
ALCi-63	51.455	ALCi-167	91.75
ALCi-64	100	ALCi-171	100
ALCi-65	63.98	ALCi-172	100

Figure 23 (continued)

Compound Code	% Inhibition at 250μM	Compound Code	% Inhibition at 250μM
ALCi-177	100	ALCi-224	72.38
ALCi-178	67.55	ALCi-225	100
ALCi-179	70.15	ALCi-226	100
ALCi-180	100	ALCi-227	78.88
ALCi-183	95.40	ALCi-228	79.26
ALCi-184	92.95	ALCi-229	100
ALCi-185	98.49	ALCi-230	100
ALCi-186	86.49	ALCi-231	100
ALCi-187	100	ALCi-232	83.69
ALCi-188	100	ALCi-233	100
ALCi-189	63.27	ALCi-234	100
ALCi-190	100	ALCi-235	100
ALCi-191	95.11	ALCi-236	100
ALCi-192	100	ALCi-237	100
ALCi-193	100	ALCi-238	98.50
ALCi-194	85.20	ALCi-239	100
ALCi-195	81.41	ALCi-240	100
ALCi-196	100	ALCi-241	94.60
ALCi-197	100^e	ALCi-242	100
ALCi-198	100	ALCi-245	100
ALCi-199	77.49	ALCi-246	100
ALCi-200	100	ALCi-247	74.79
ALCi-201	100	ALCi-248	100
ALCi-202	100	ALCi-250	99.18
ALCi-203	100	ALCi-251	100
ALCi-204	93.12	ALCi-252	100
ALCi-205	100	ALCi-253	100
ALCi-206	100^a	ALCi-254	75.07 ^a
ALCi-207	100^e	ALCi-255	97.7 ^a
ALCi-208	98.86 ^h	ALCi-256	100^a
ALCi-209	100	ALCi-257	100^d
ALCi-210	100	ALCi-258	96.04 ^a
ALCi-211	100	ALCi-259	89.74 ^a
ALCi-212	100	ALCi-260	100^b
ALCi-213	78.01 ^a	ALCi-261	100^c
ALCi-214	100	ALCi-262	83.21 ^f
ALCi-215	77.13	ALCi-263	88.73 ^g
ALCi-216	100	ALCi-264	100^a
ALCi-217	100	ALCi-265	100
ALCi-218	81.16	ALCi-266	100
ALCi-219	76.69	ALCi-267	100
ALCi-220	100	ALCi-268	100
ALCi-221	100	ALCi-269	100
ALCi-222	100	ALCi-270	100
ALCi-223	100	ALCi-271	100

Figure 23 (continued)

Compound Code	% Inhibition at 250µM
ALCi-272	100
ALCi-273	100
ALCi-274	100
ALCi-275	100
ALCi-278	100

- a) solubility problems at 250µM, measurement made at 125 µM.
b) solubility problems at 250µM, measurement made at 135.4µM.
5 c) solubility problems at 250µM, measurement made at 84.65µM.
d) solubility problems at 250µM, measurement made at 76.25µM.
e) solubility problems at 250µM, measurement made at 62.5µM.
f) solubility problems at 250µM, measurement made at 37.66µM.
g) solubility problems at 250µM, measurement made at 25µM.
10 h) solubility problems at 250µM, measurement made at 3.91µM.
- The assay produced inhibition percentages above 100% in some experiments. Percentages >100% have been set to exactly 100% (in bold type).