Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Enantioselective Synthesis of Dihydroquinazolinone derivatives Catalyzed by Chiral Organocatalyst

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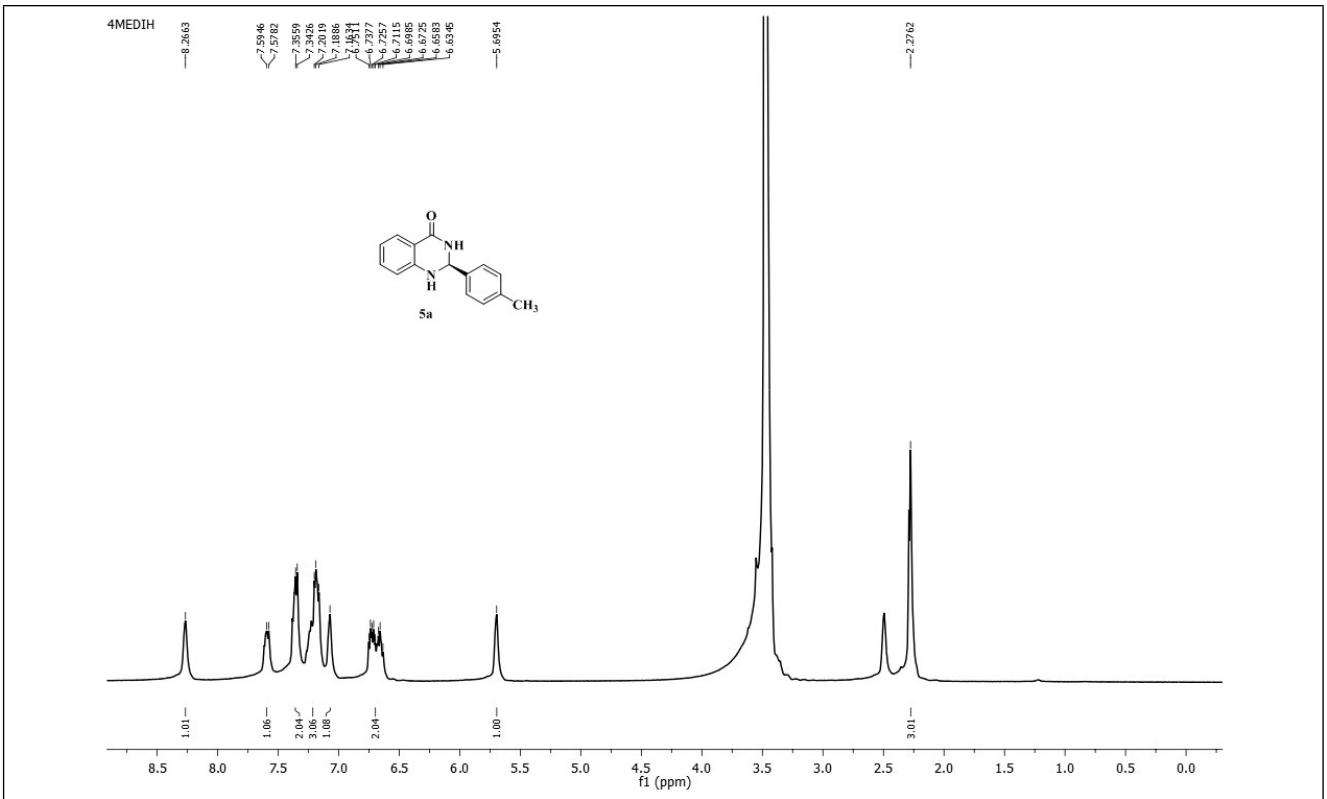
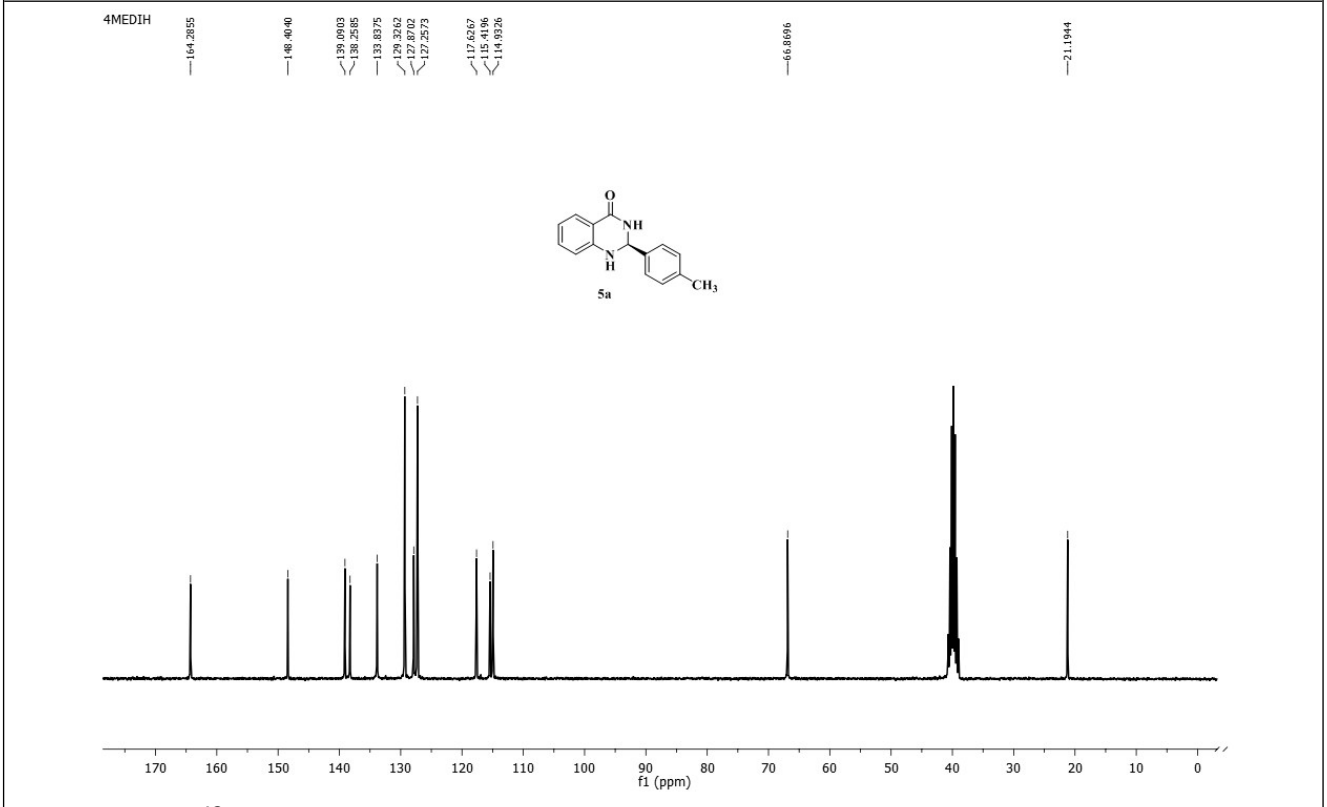
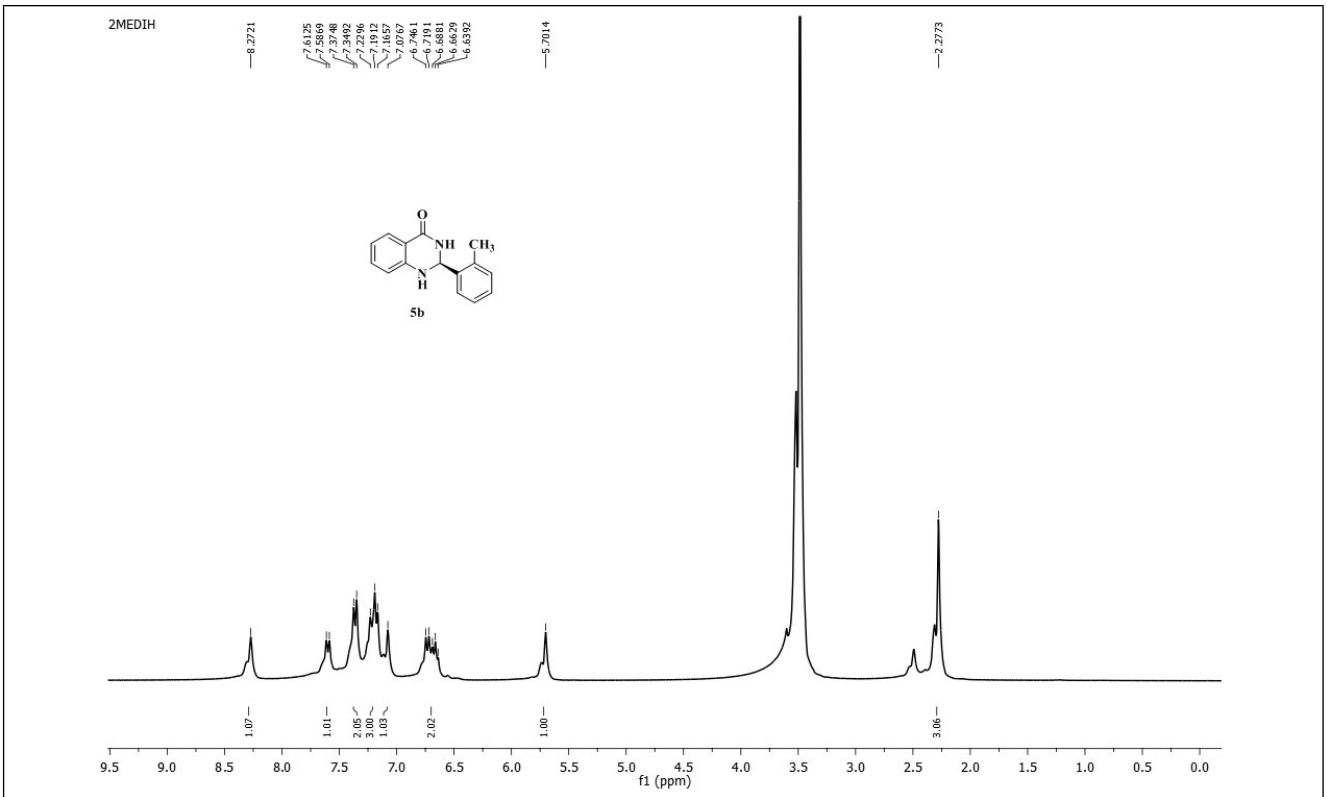


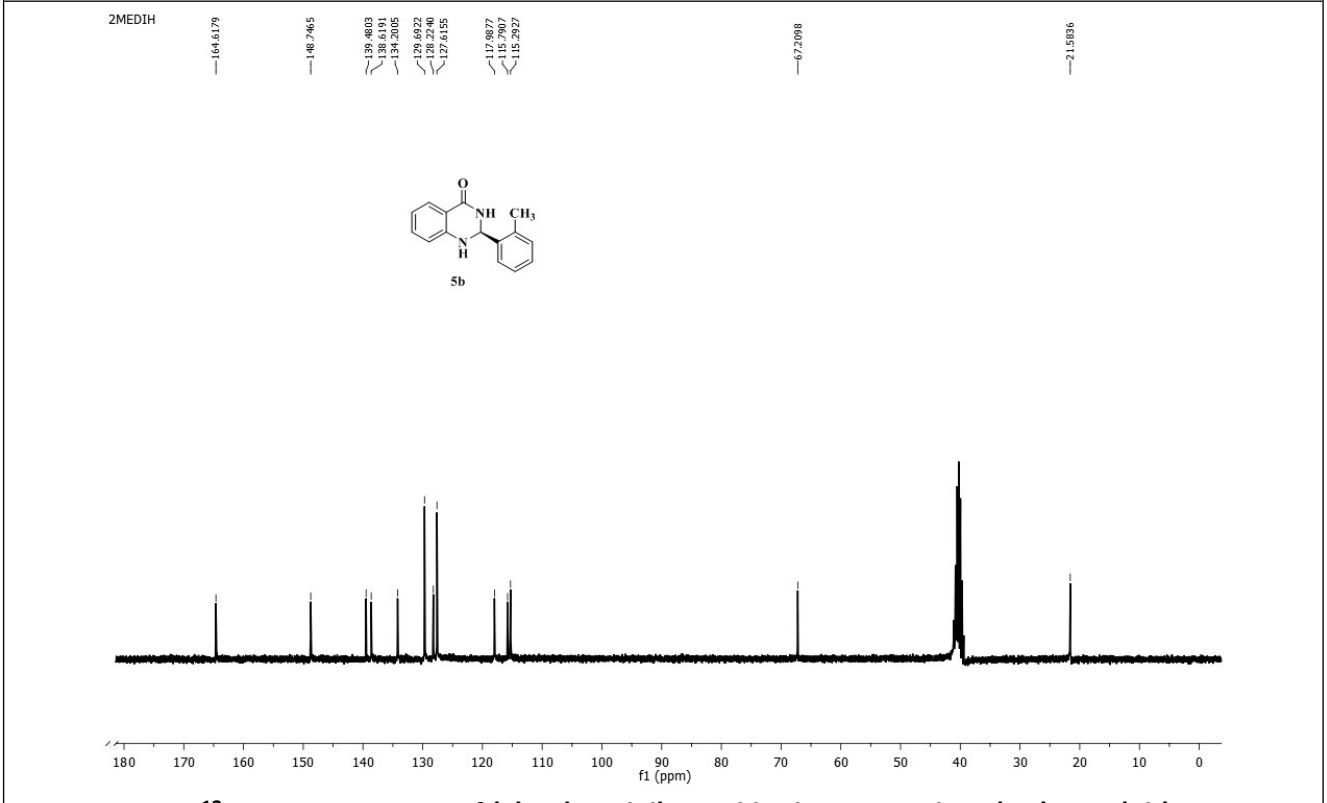
S 1: ^{1}H NMR Spectrum of (*S*)-2-(p-tolyl)-2,3-dihydroquinazolin-4(1H)-one (5a).



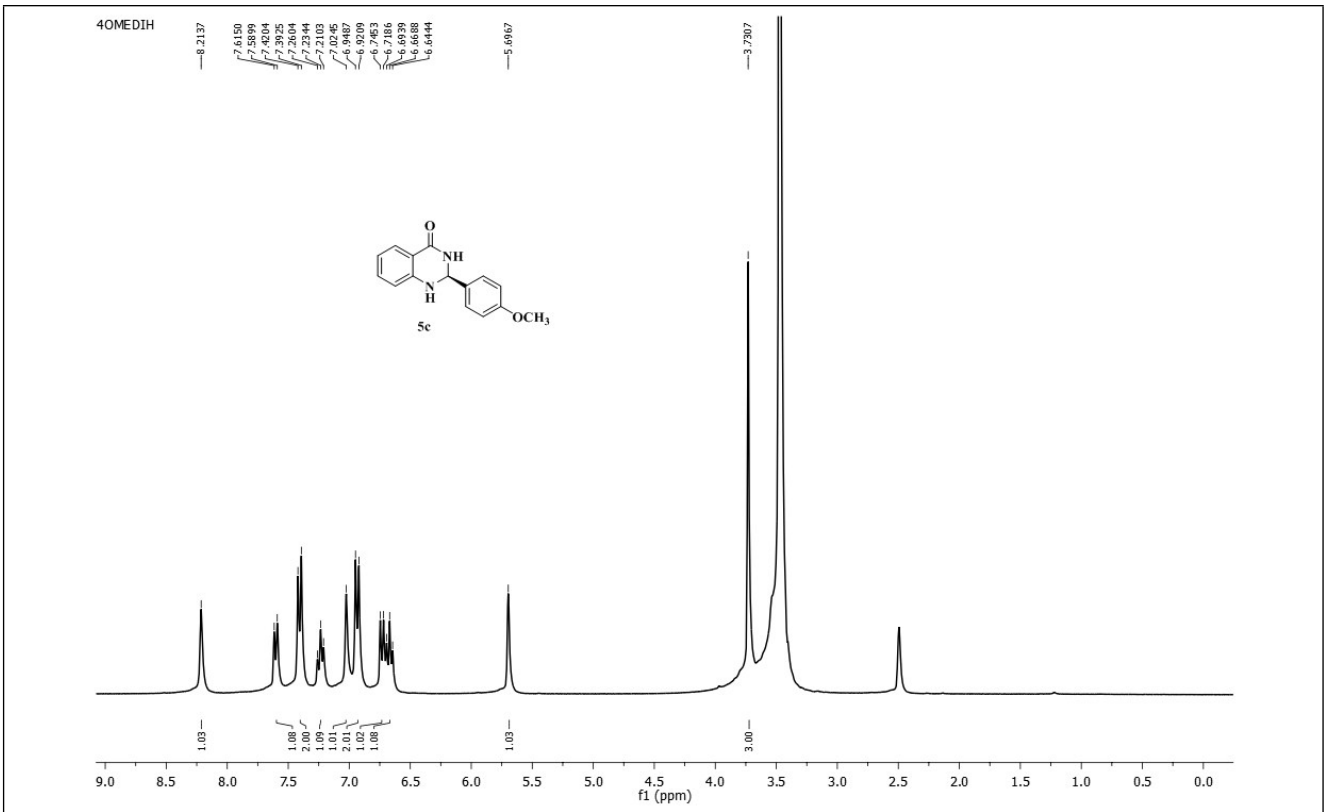
S 2: ^{13}C NMR Spectrum of (*S*)-2-(p-tolyl)-2,3-dihydroquinazolin-4(1H)-one (5a).



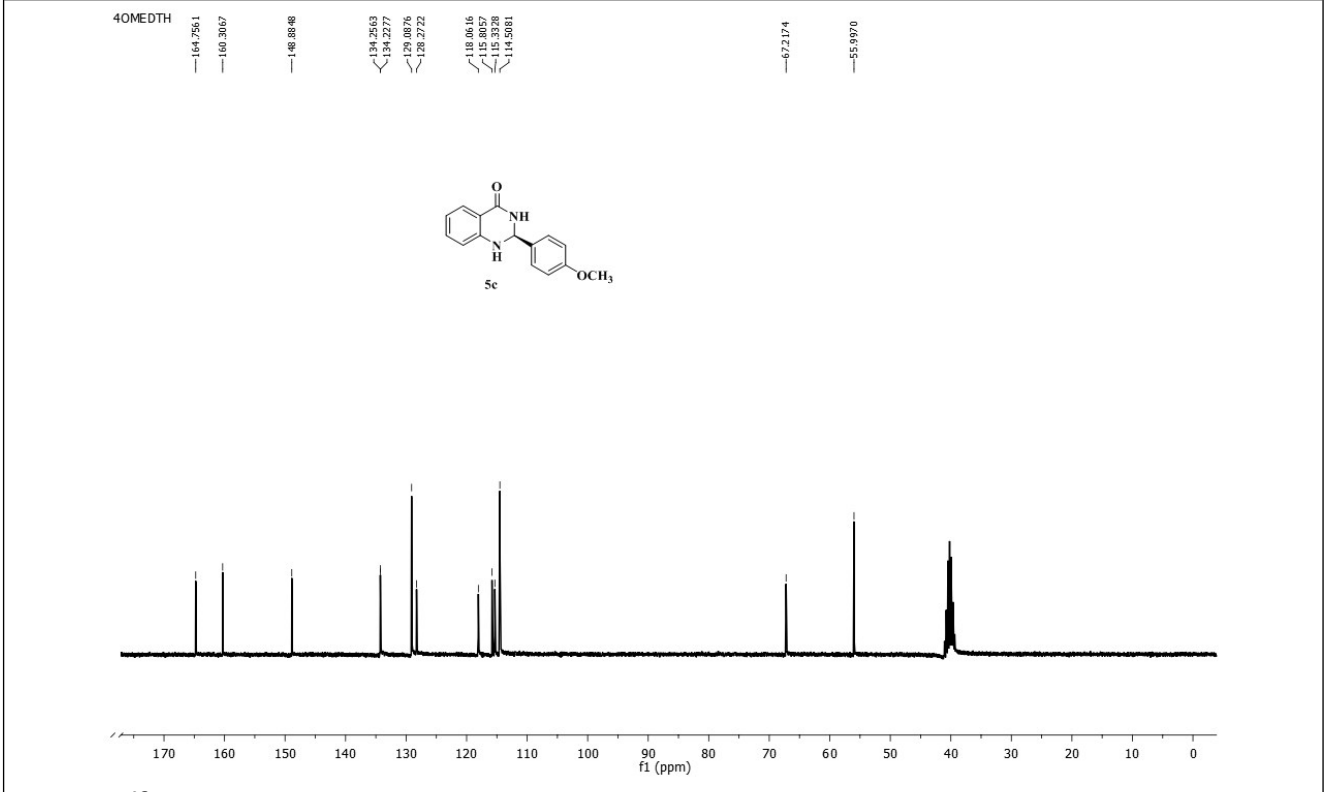
S 3: ^{1}H NMR Spectrum of (*S*)-2-(o-tolyl)-2,3-dihydroquinazolin-4(1H)-one (5b).



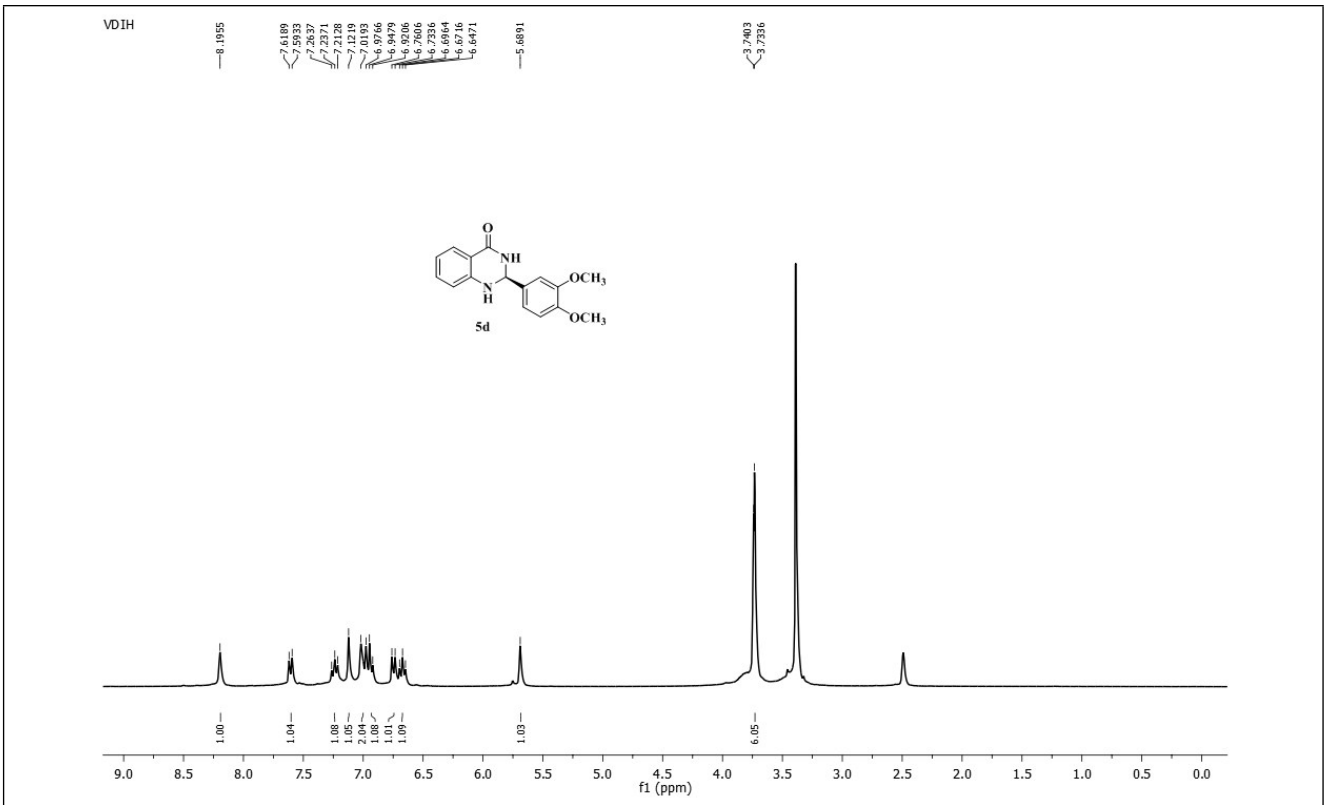
S 4: ^{13}C NMR Spectrum of (*S*)-2-(o-tolyl)-2,3-dihydroquinazolin-4(1H)-one (5b).



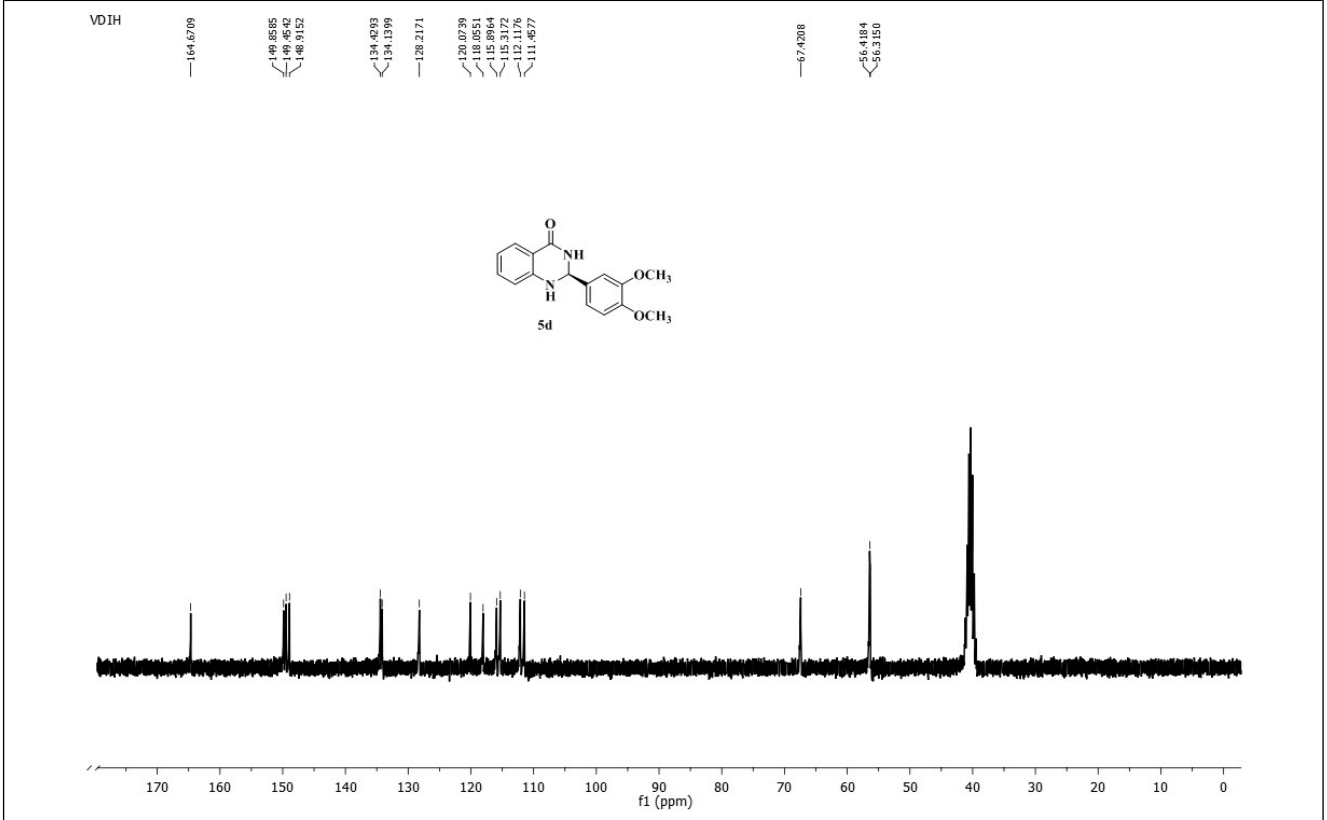
S 5: ^{1}H NMR Spectrum of (*S*)-2-(4-methoxyphenyl)-2,3-dihydroquinazolin-4(1H)-one (5c).



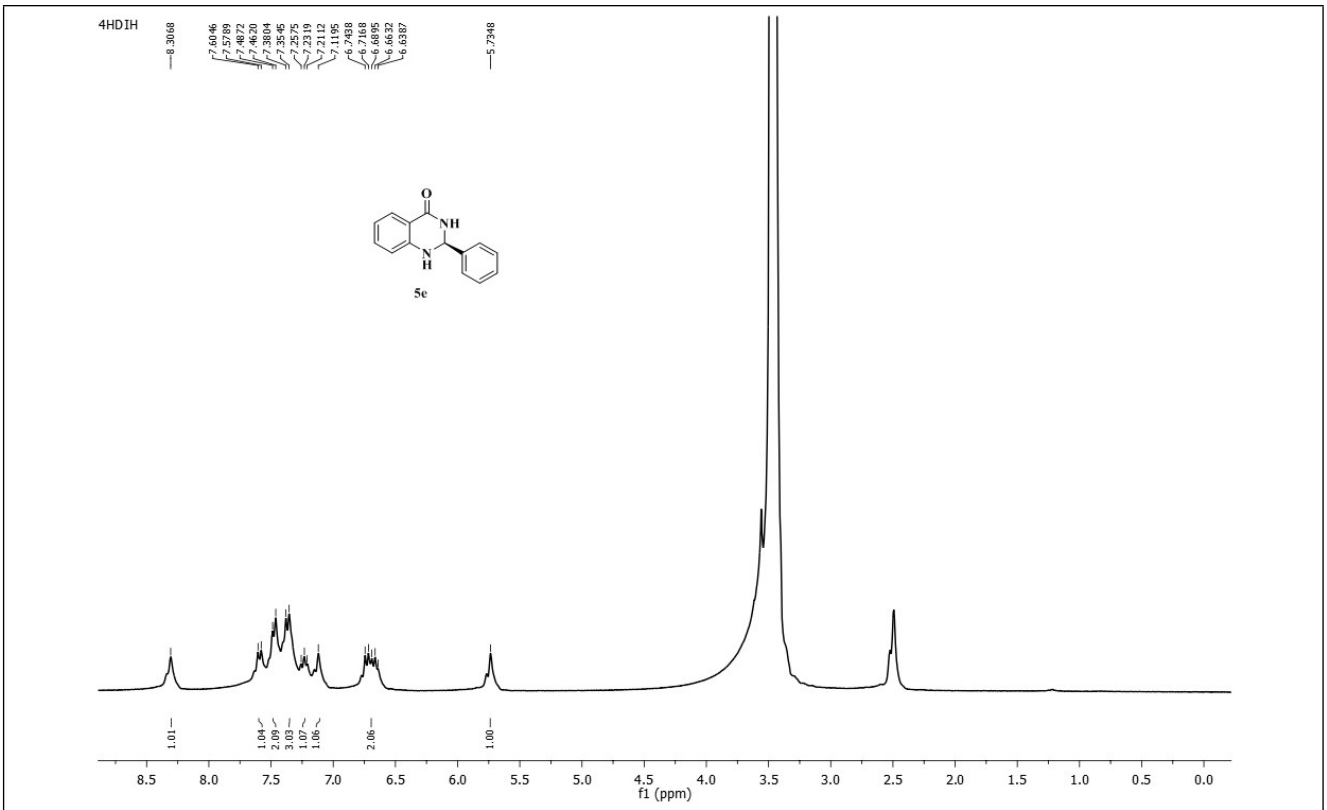
S 6: ^{13}C NMR Spectrum of (*S*)-2-(4-methoxyphenyl)-2,3-dihydroquinazolin-4(1H)-one (5c).



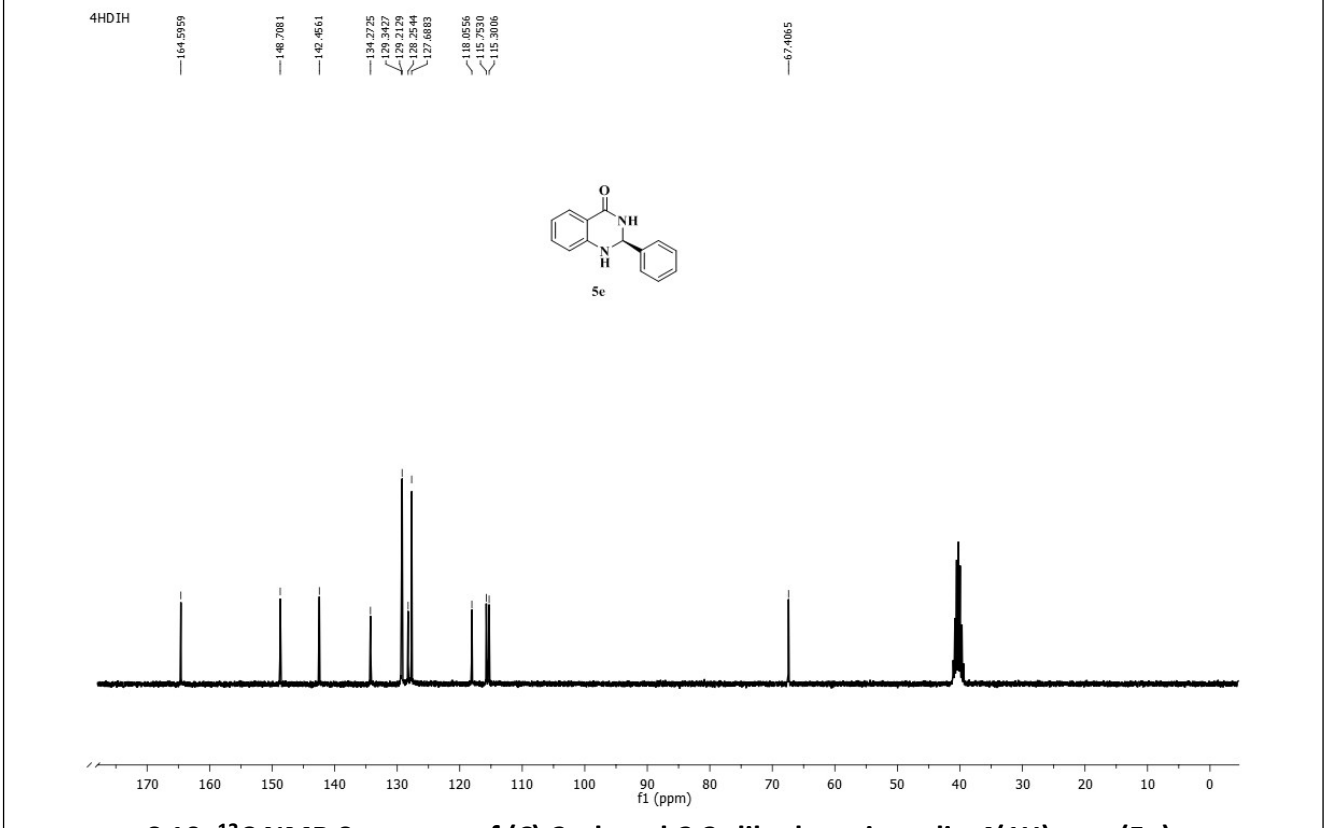
S 7: ^{1}H NMR Spectrum of (*S*)-2-(3,4-dimethoxyphenyl)-2,3-dihydroquinazolin-4(1H)-one (5d).



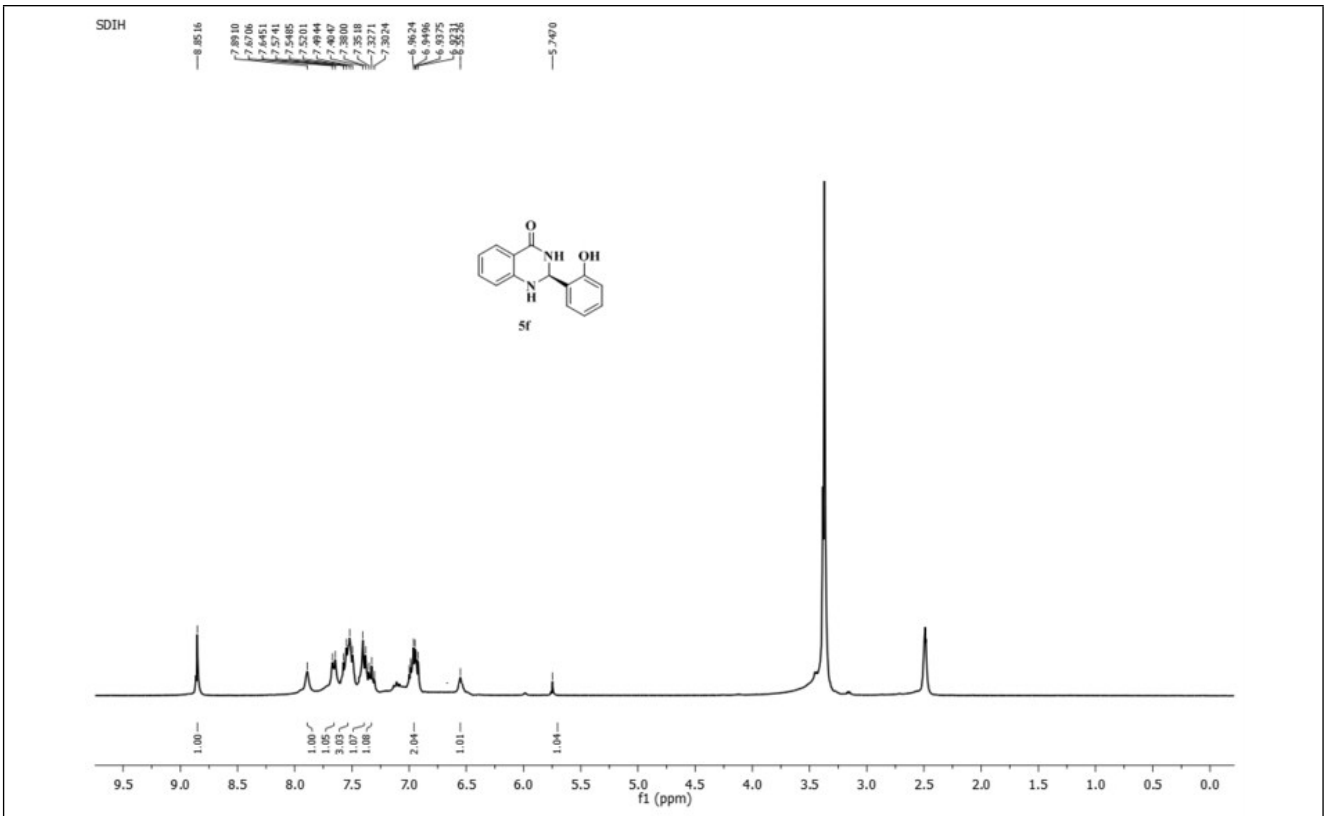
S 8: ^{13}C NMR Spectrum of (*S*)-2-(3,4-dimethoxyphenyl)-2,3-dihydroquinazolin-4(1H)-one (5d).



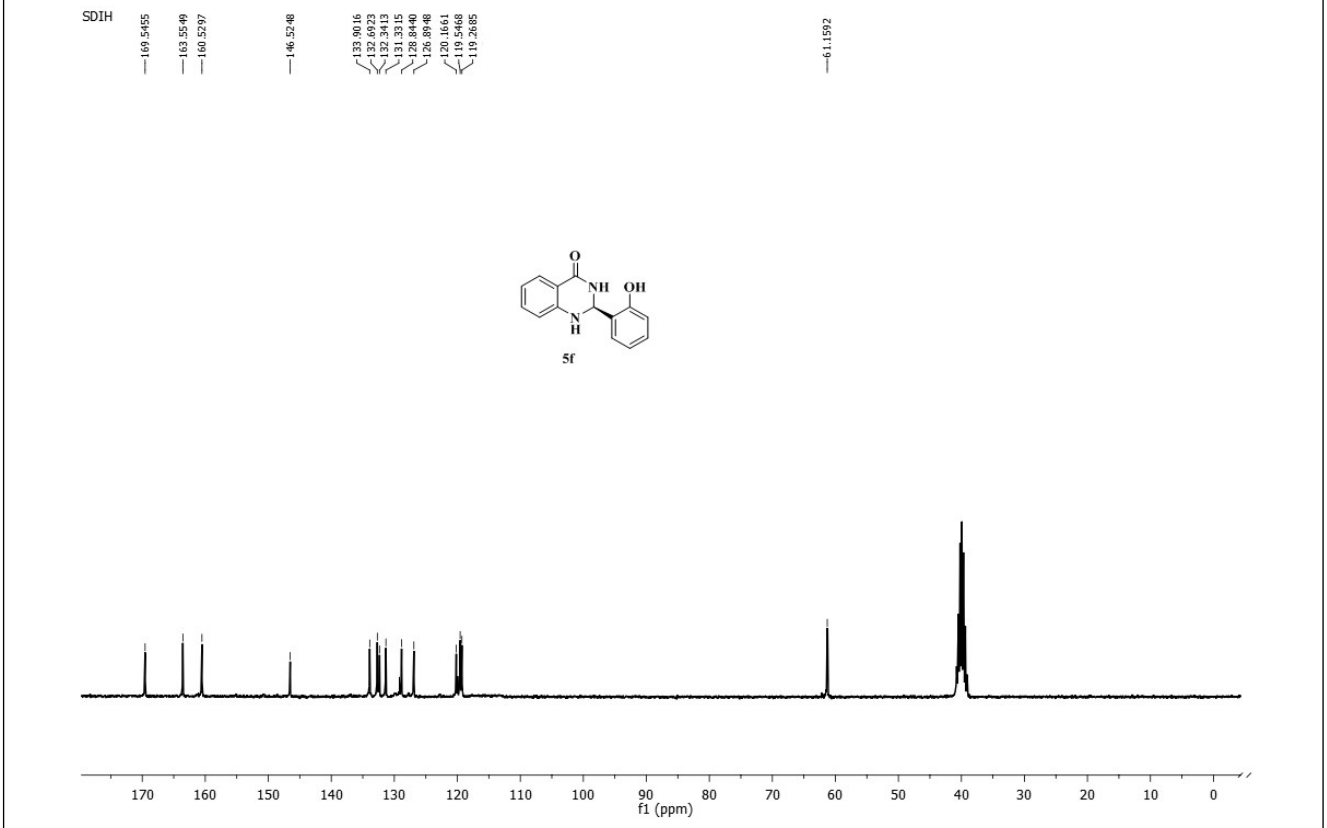
S 9: ^{1}H NMR Spectrum of (*S*)-2-phenyl-2,3-dihydroquinazolin-4(1H)-one (5e).



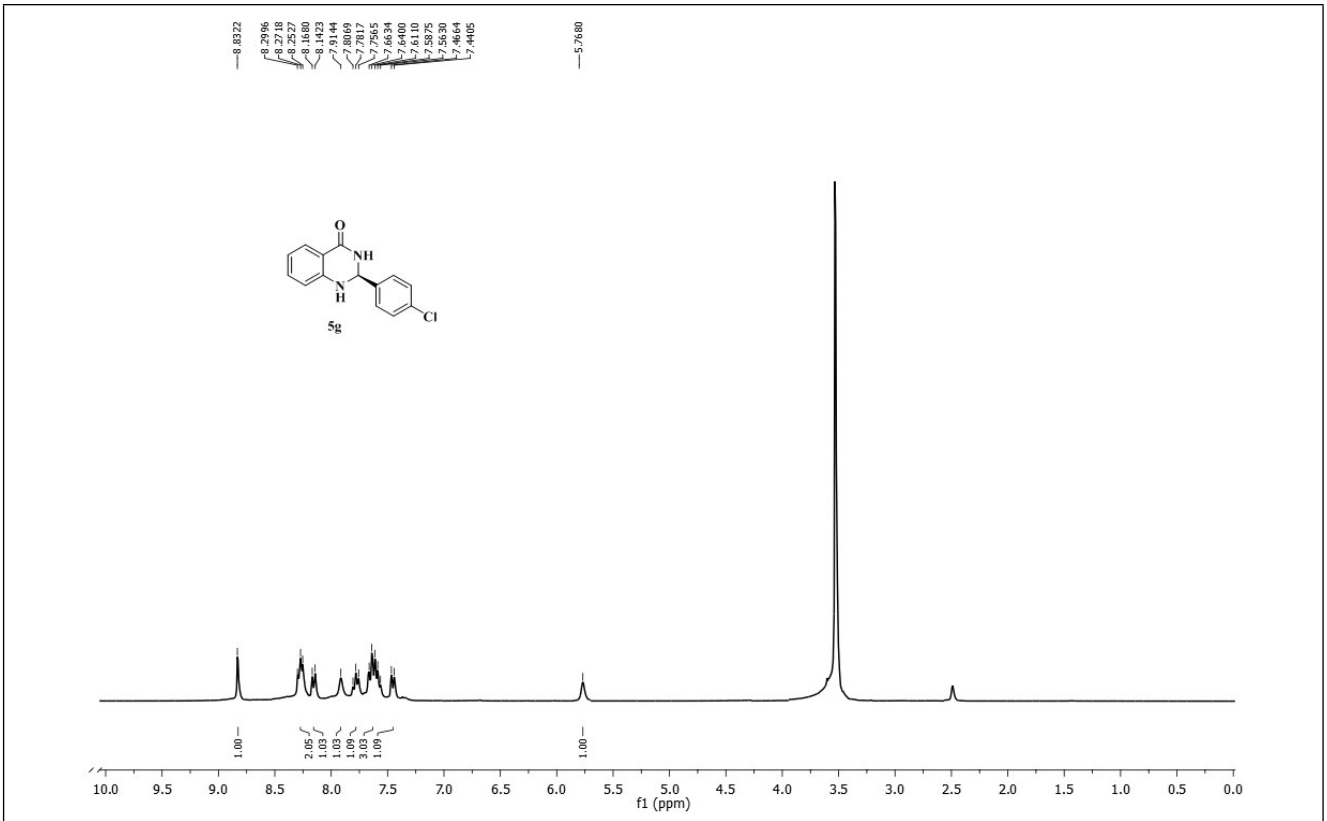
S 10: ^{13}C NMR Spectrum of (*S*)-2-phenyl-2,3-dihydroquinazolin-4(1H)-one (5e).



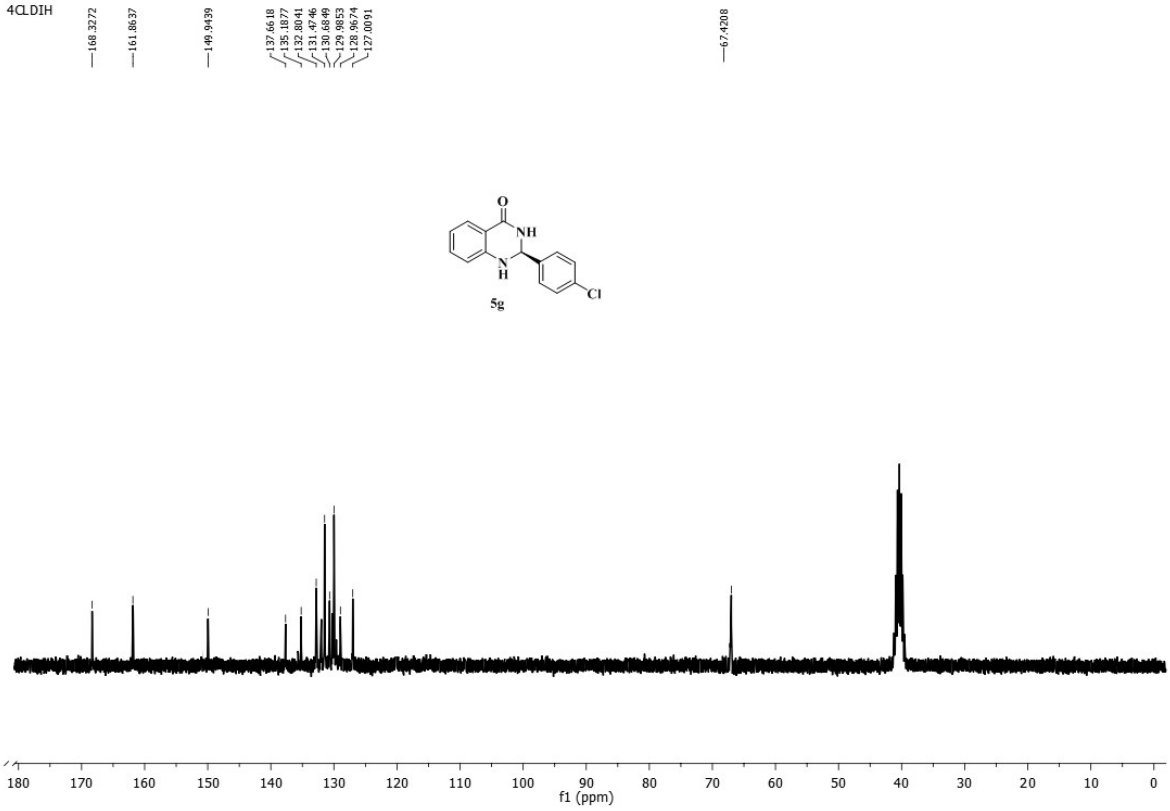
S 11: ^{1}H NMR Spectrum of (*S*)-2-(2-hydroxyphenyl)-2,3-dihydroquinazolin-4(1H)-one (5f).



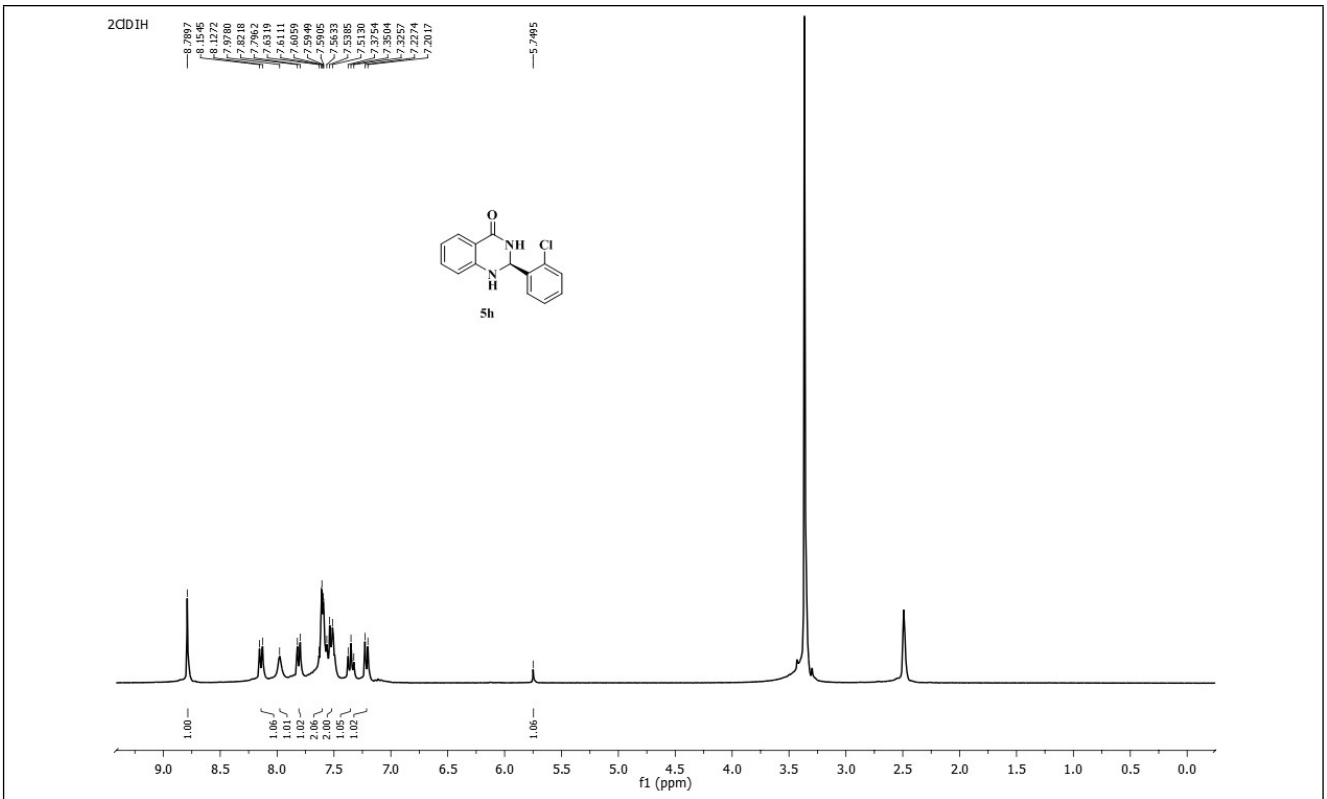
S 12: ^{13}C NMR Spectrum of (*S*)-2-(2-hydroxyphenyl)-2,3-dihydroquinazolin-4(1H)-one (5f).



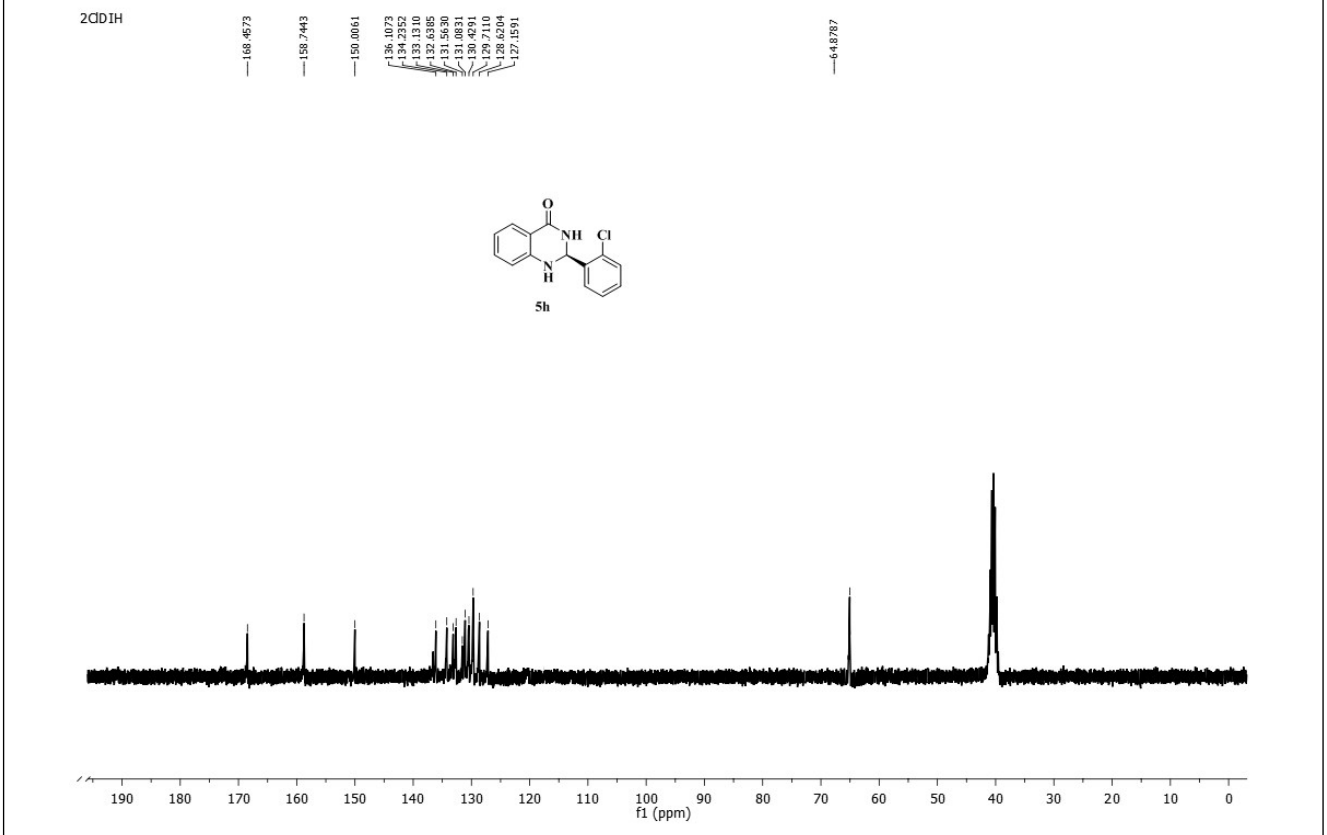
S 13: ^{1}H NMR Spectrum of (*S*)-2-(4-chlorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5g).



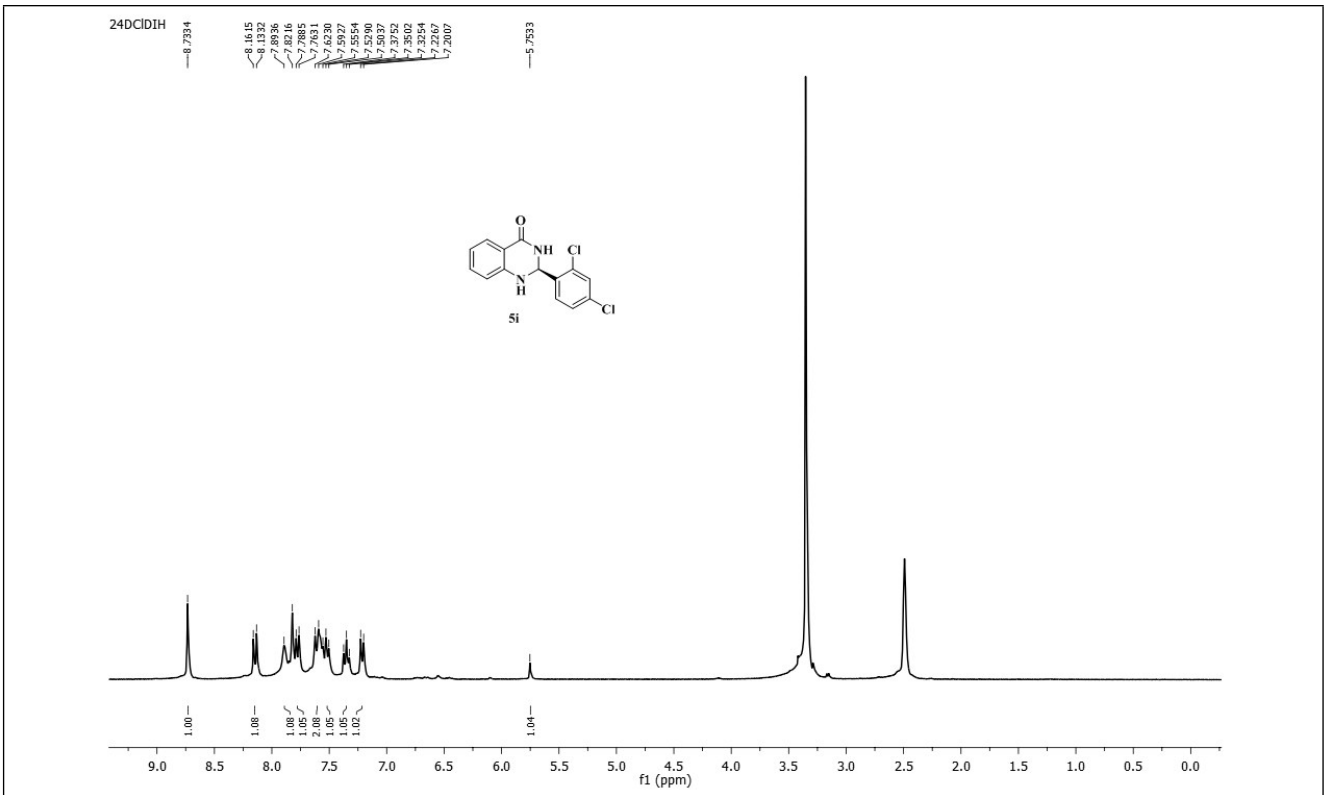
S 14: ^{13}C NMR Spectrum of (*S*)-2-(4-chlorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5g).



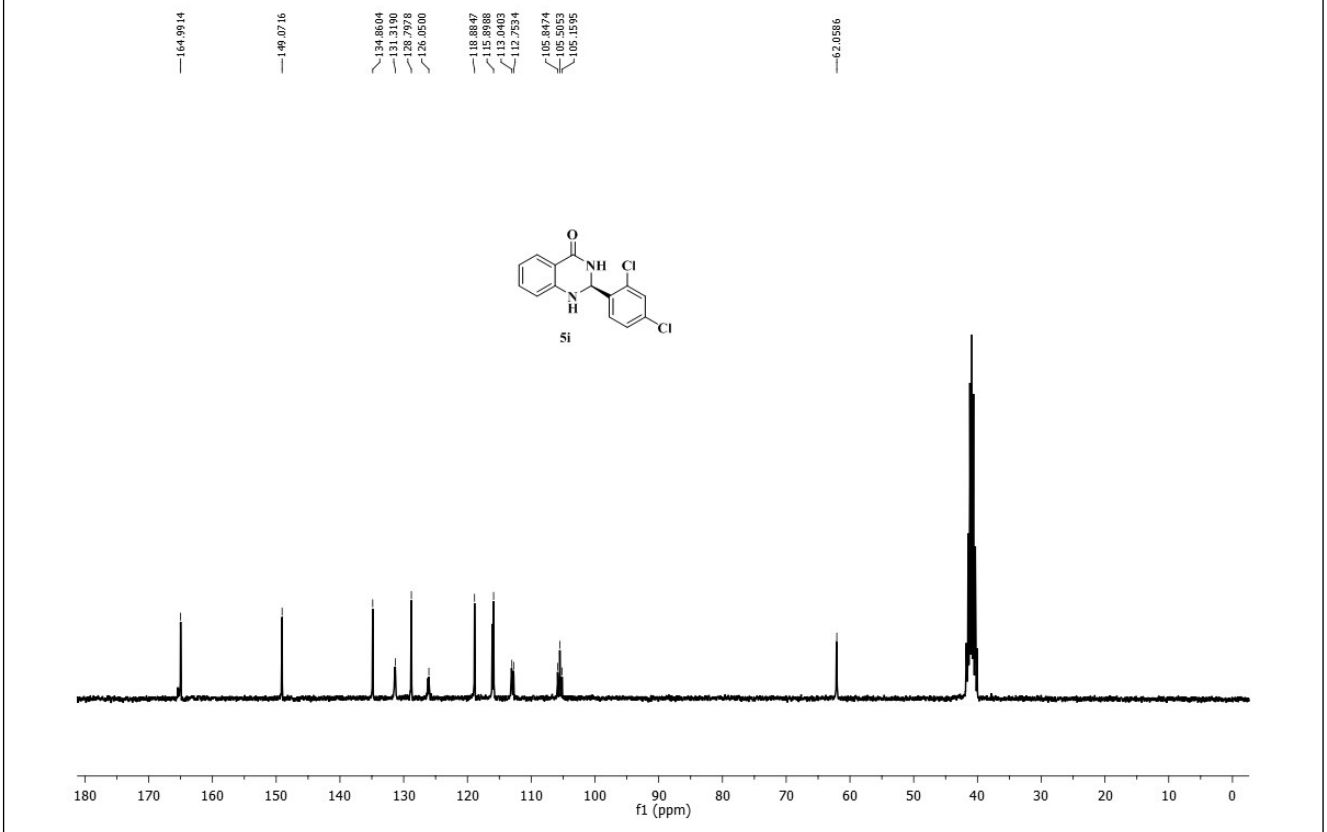
S 15: ^{1}H NMR Spectrum of (*S*)-2-(2-chlorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5h).



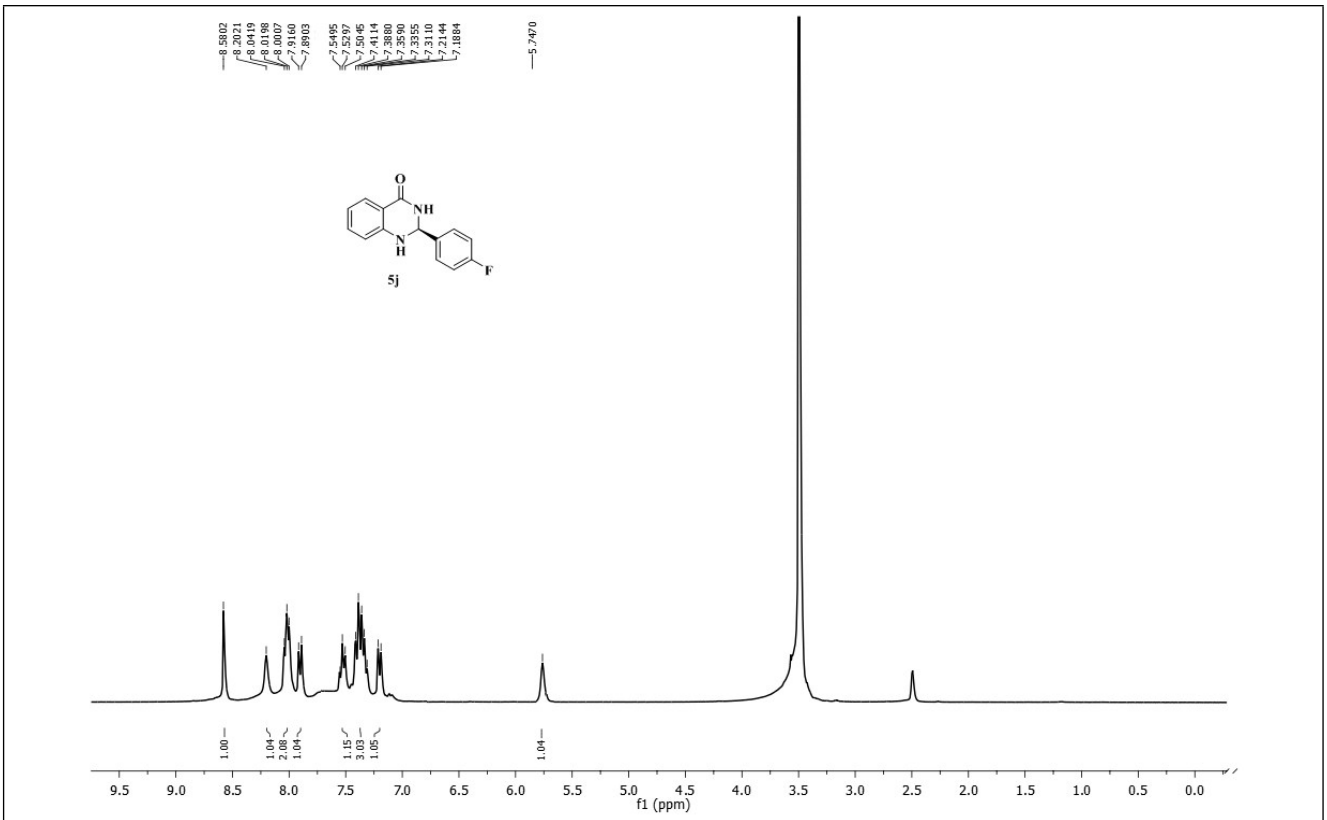
S 16: ^{13}C NMR Spectrum of (*S*)-2-(2-chlorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5h).



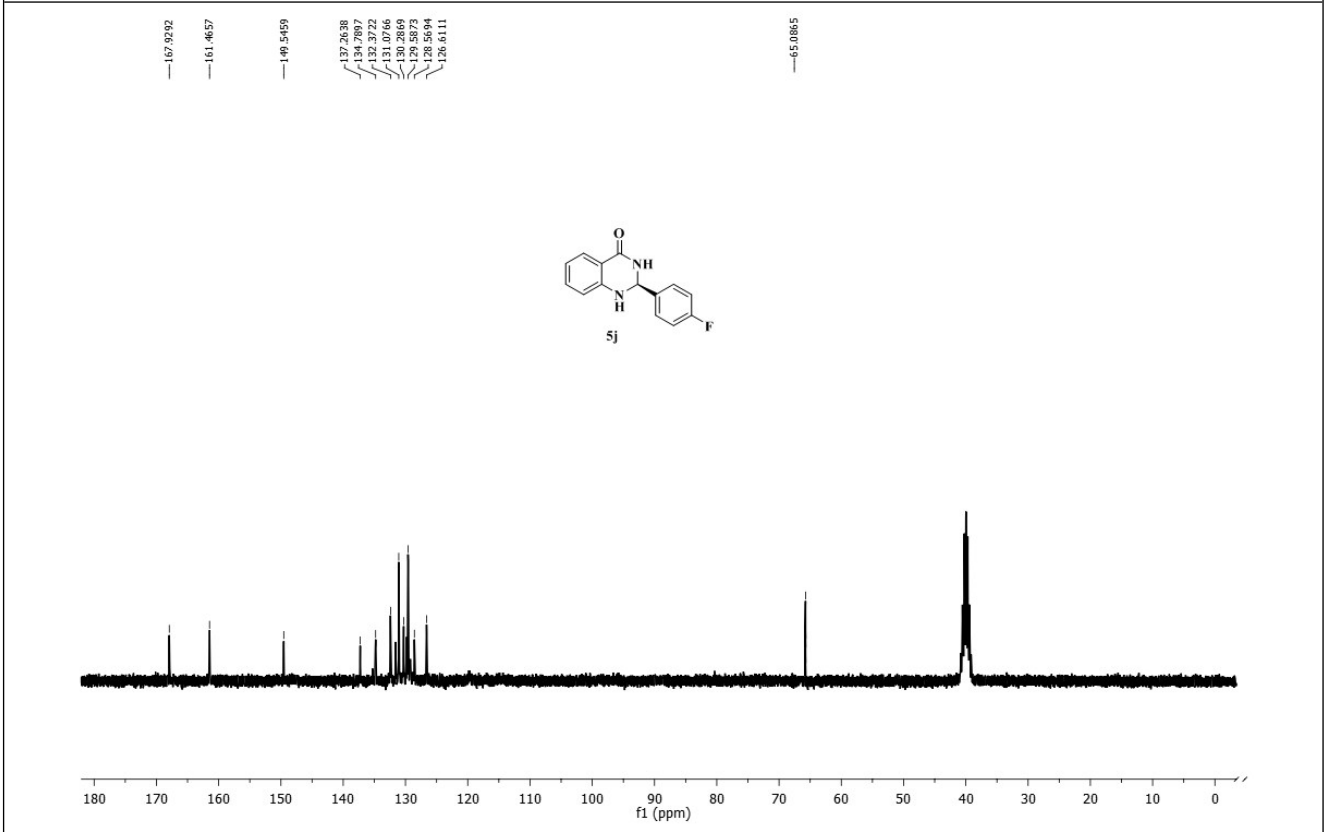
S 17: ^{1}H NMR Spectrum of (*S*)-2-(2,4-dichlorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5i).



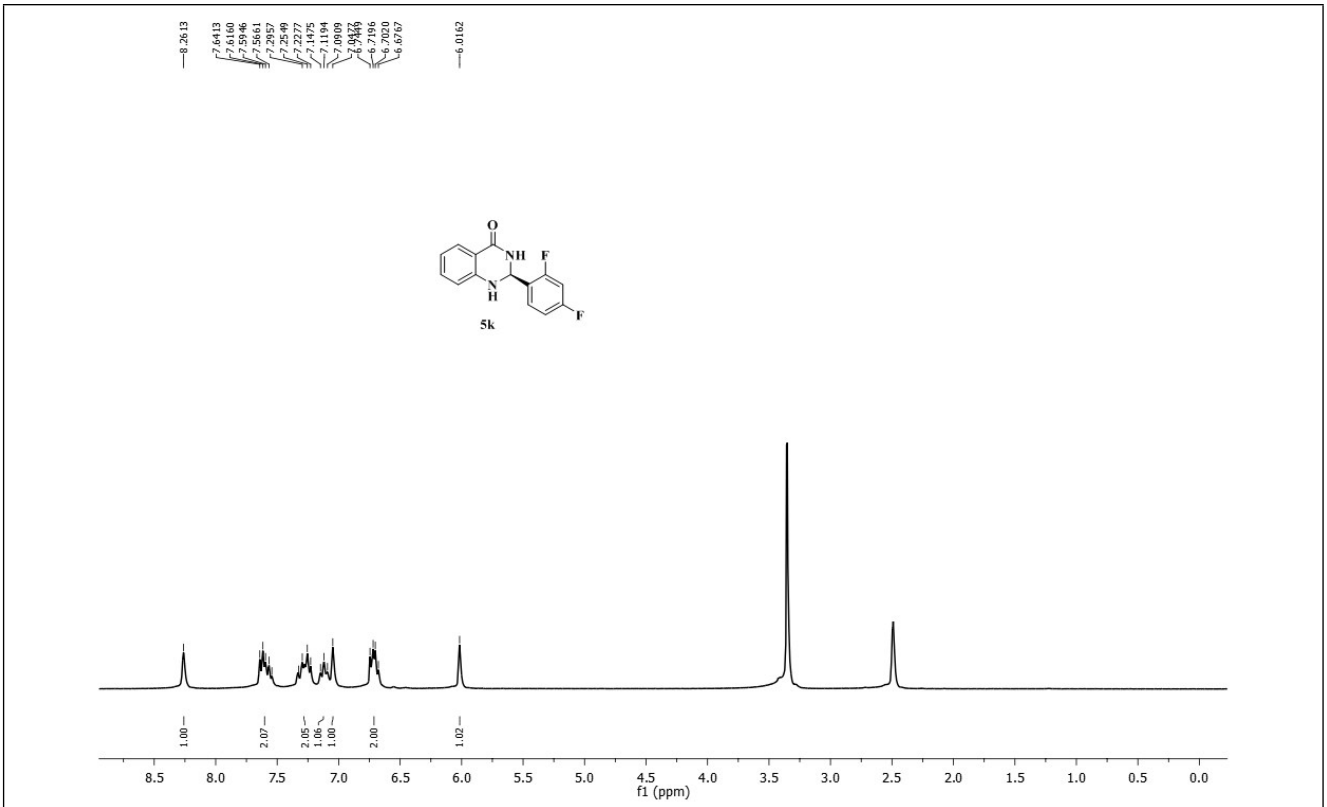
S 18: ^{13}C NMR Spectrum of (*S*)-2-(2,4-dichlorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5i).



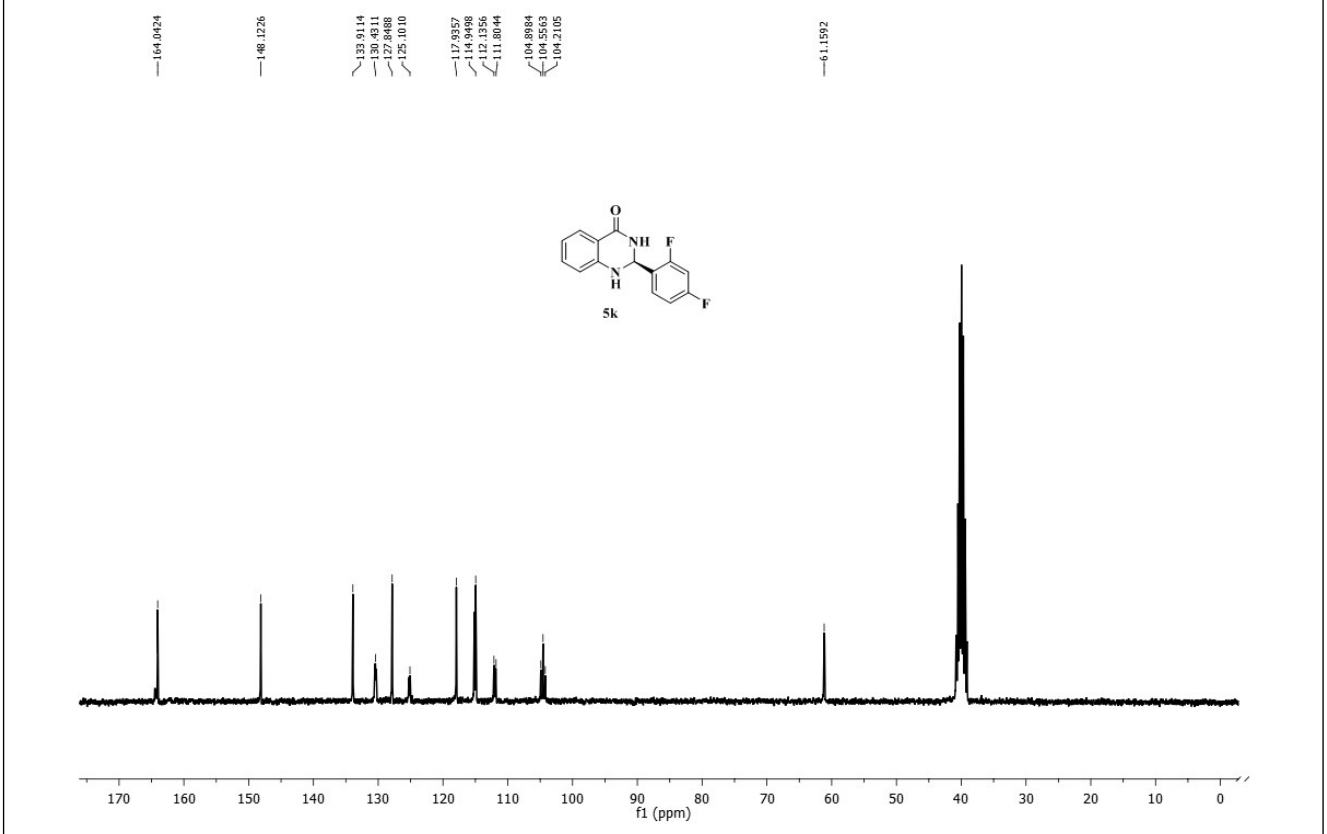
S 19: ^{1}H NMR Spectrum of (*S*)-2-(4-fluorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5j).



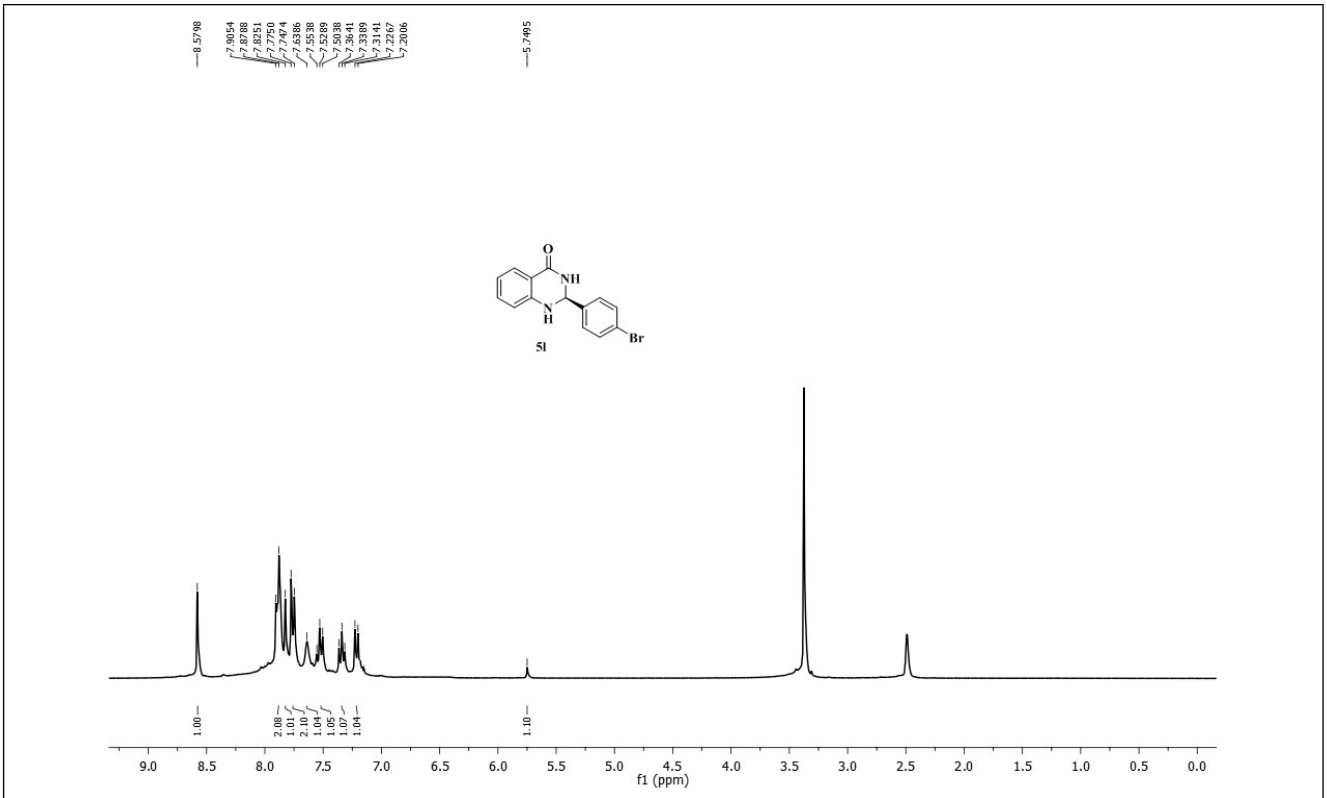
S 20: ^{13}C NMR Spectrum of (*S*)-2-(4-fluorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5j).



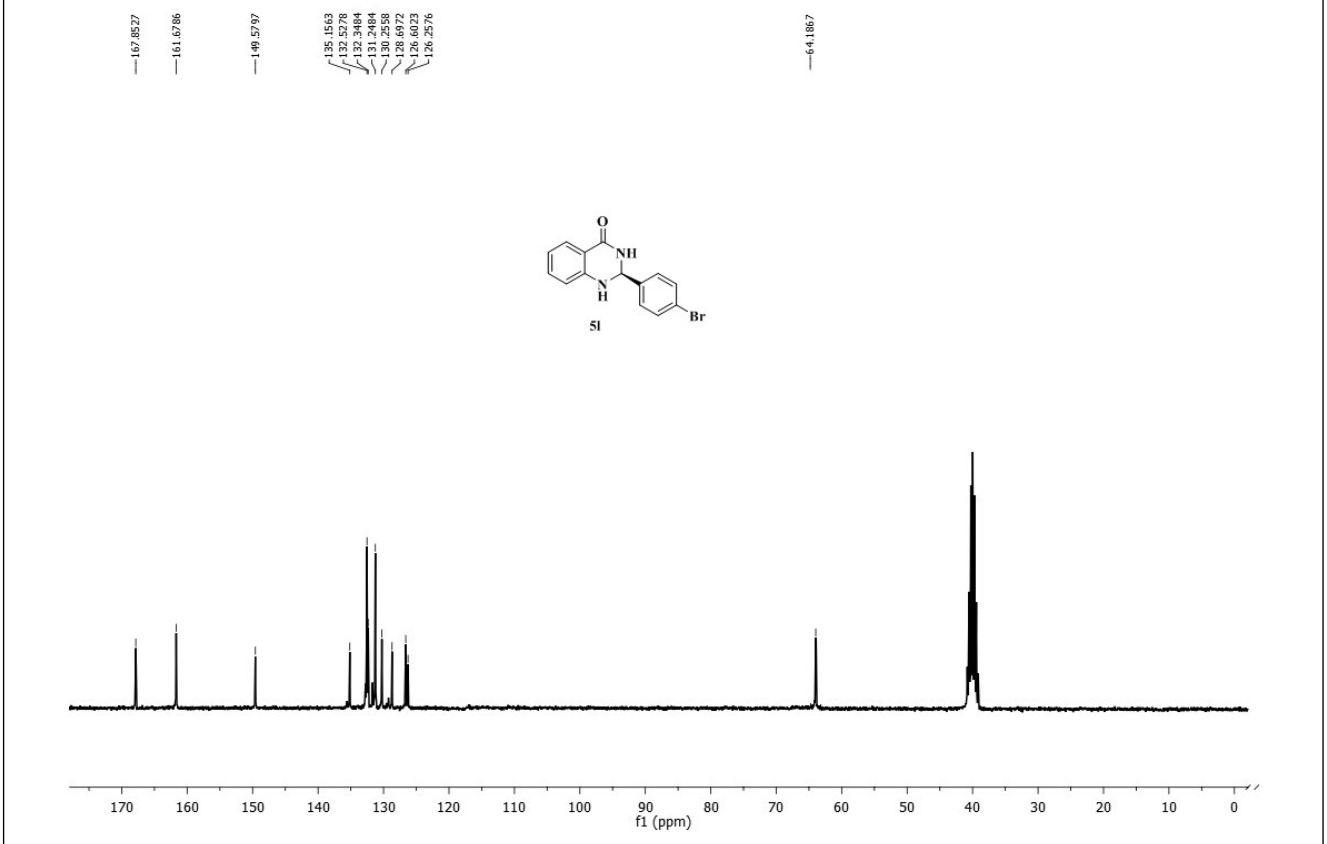
S 21: ^{1}H NMR Spectrum of (*S*)-2-(2,4-difluorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5k).



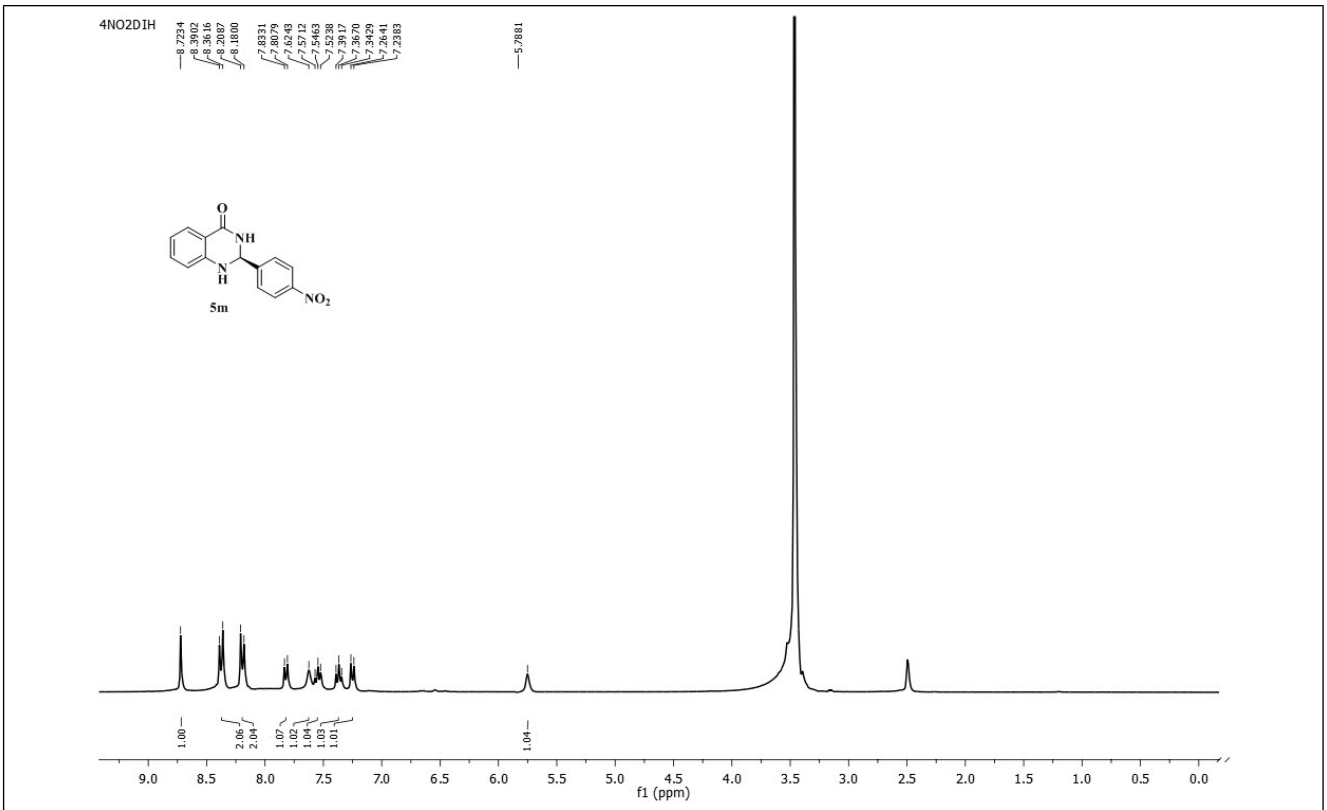
S 22: ^{13}C NMR Spectrum of (*S*)-2-(2,4-difluorophenyl)-2,3-dihydroquinazolin-4(1H)-one (5k).



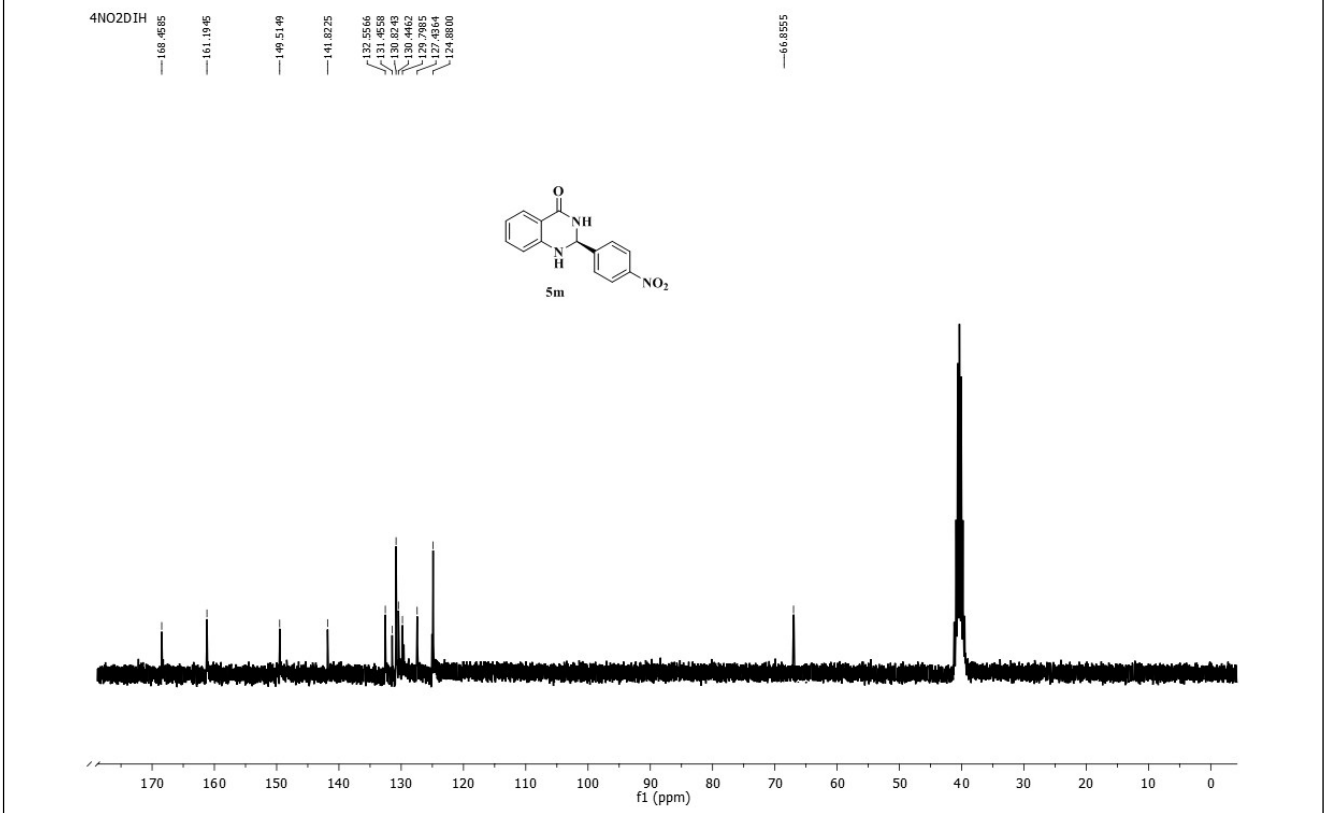
S 23: ^{1}H NMR Spectrum of (*S*)-2-(4-bromophenyl)-2,3-dihydroquinazolin-4(1H)-one (5l).



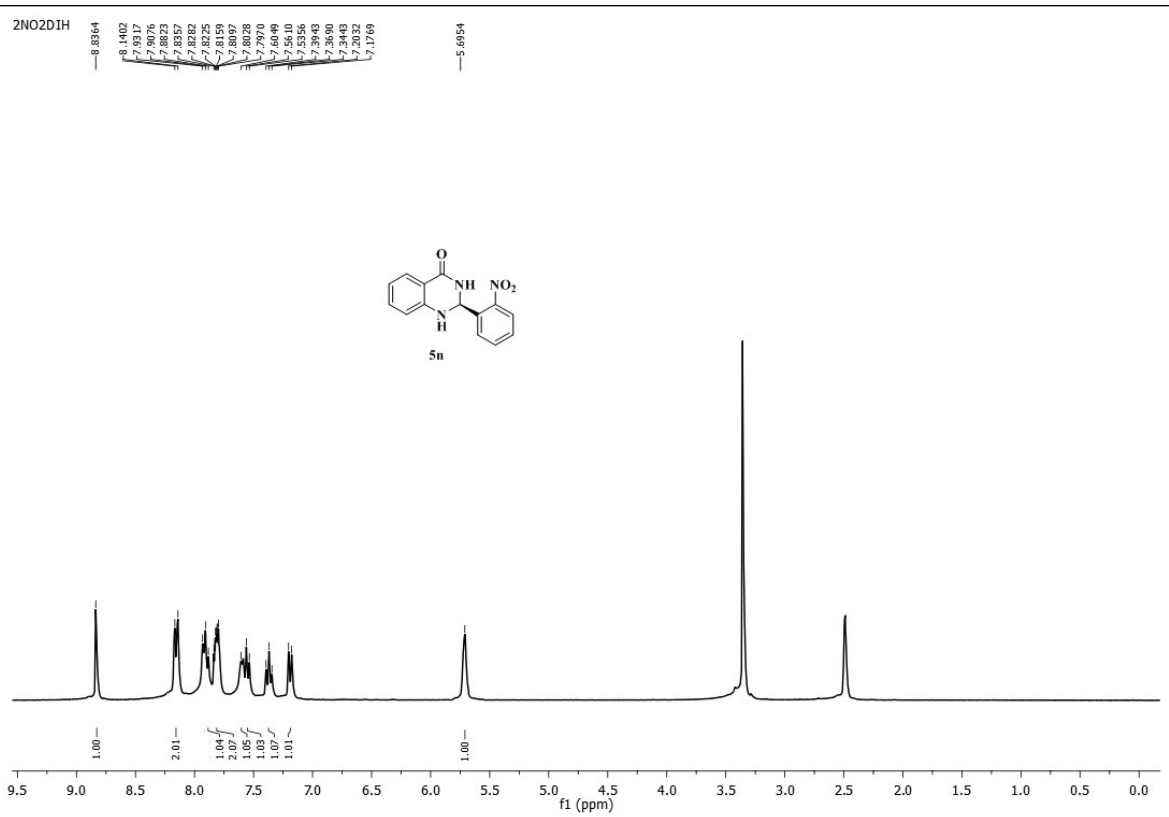
S 24: ^{13}C NMR Spectrum of (*S*)-2-(4-bromophenyl)-2,3-dihydroquinazolin-4(1H)-one (5l).



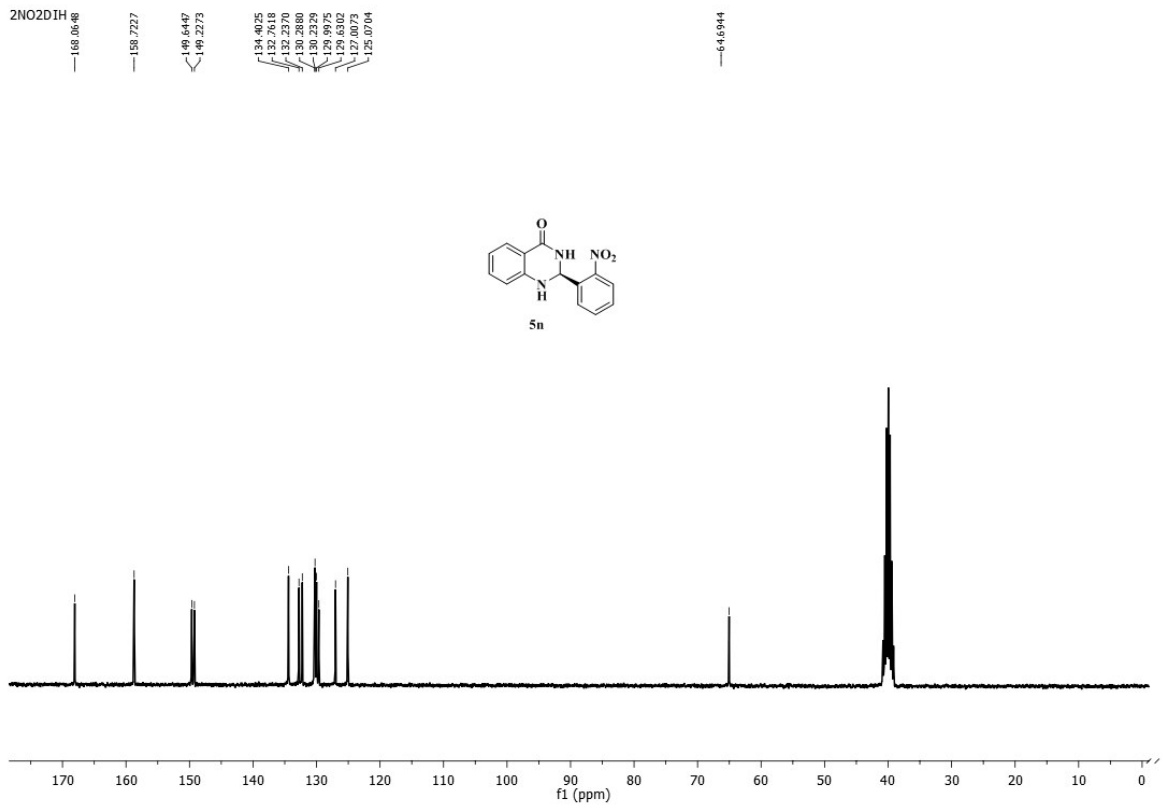
S 25: ^{1}H NMR Spectrum of (*S*)-2-(4-nitrophenyl)-2,3-dihydroquinazolin-4(1H)-one (5m).



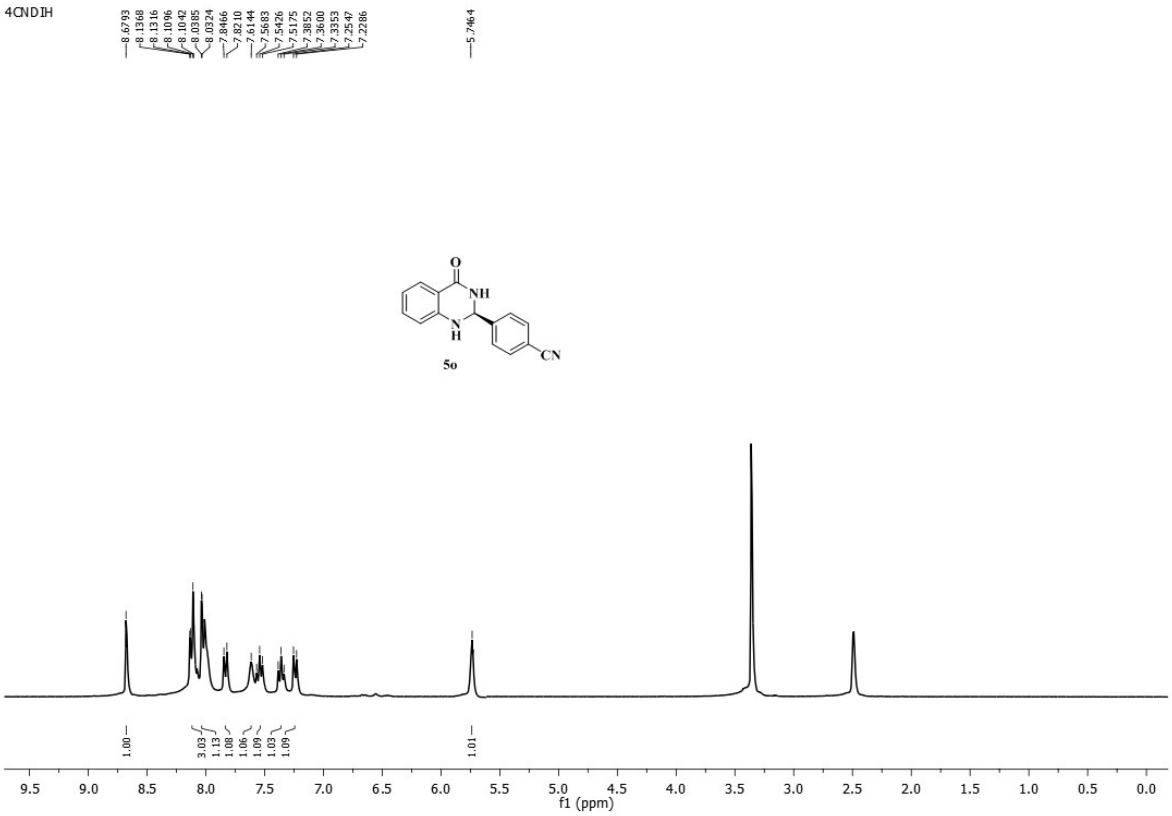
S 26: ^{13}C NMR Spectrum of (*S*)-2-(4-nitrophenyl)-2,3-dihydroquinazolin-4(1H)-one (5m).



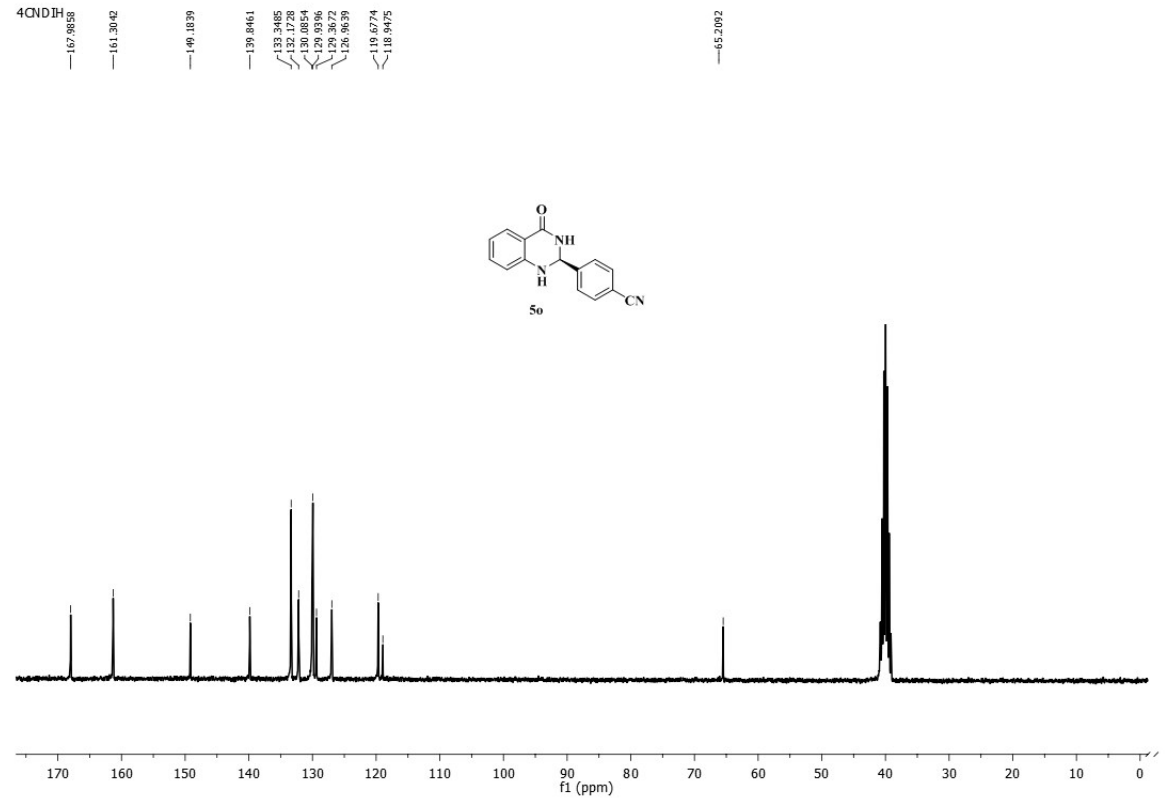
S 27: ^{1}H NMR Spectrum of (*S*)-2-(2-nitrophenyl)-2,3-dihydroquinazolin-4(1H)-one (5n).



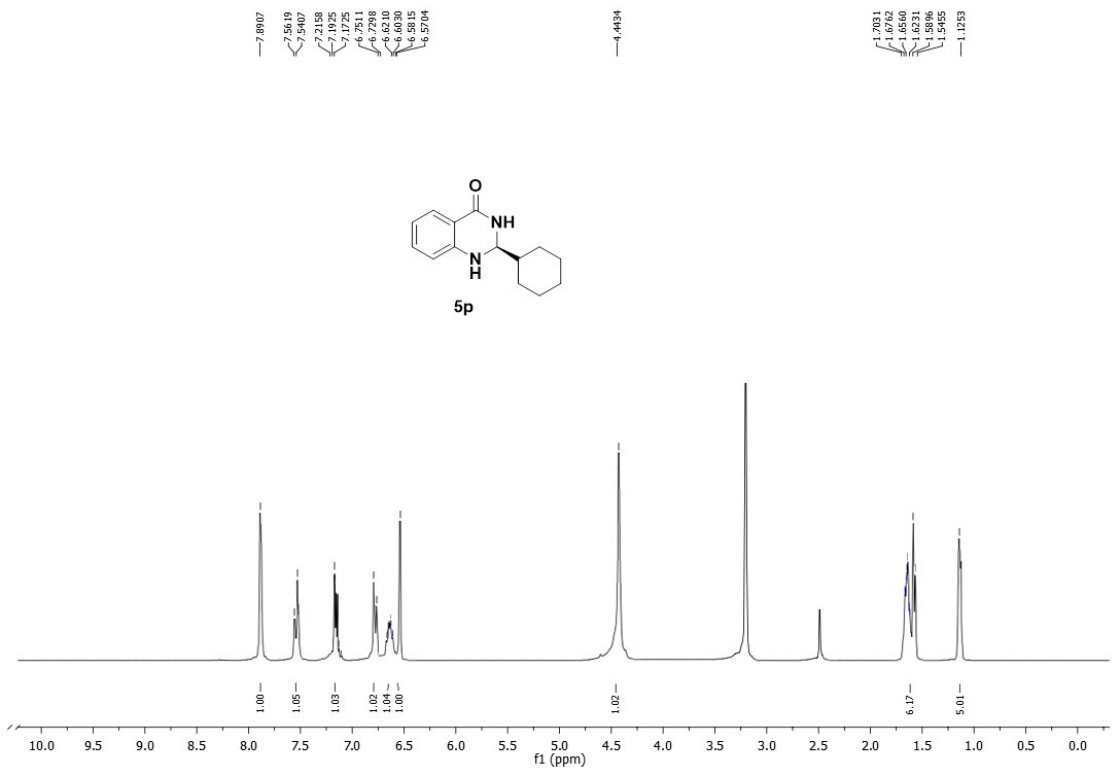
S 28: ^{13}C NMR Spectrum of (*S*)-2-(2-nitrophenyl)-2,3-dihydroquinazolin-4(1H)-one (5n).



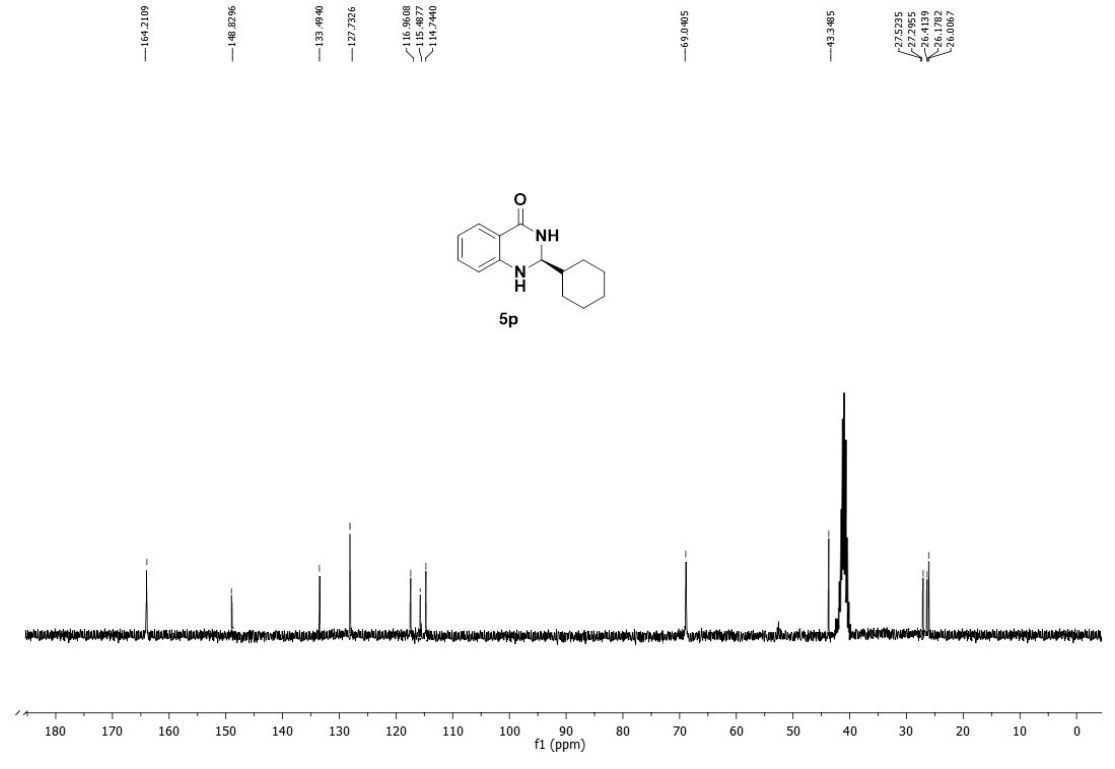
S 29: ^{1}H NMR Spectrum of (*S*)-4-(4-oxo-1,2,3,4-tetrahydroquinazolin-2-yl)benzonitrile (5o).



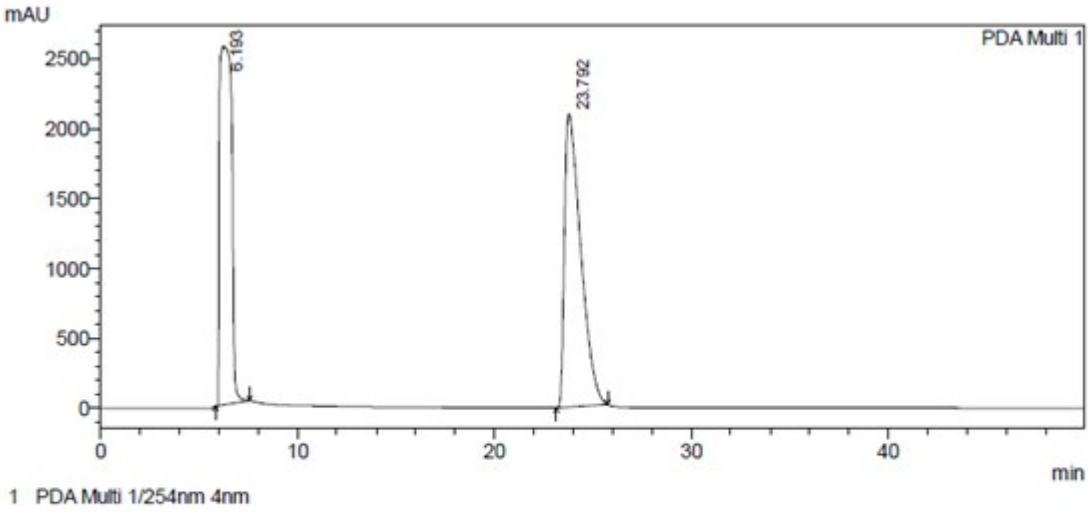
S 30: ^{13}C NMR Spectrum of (*S*)-4-(4-oxo-1,2,3,4-tetrahydroquinazolin-2-yl)benzonitrile (5o).



S 31: ^{1}H NMR Spectrum of (*S*)-2-cyclohexyl-2,3-dihydroquinazolin-4(1*H*)-one (5p).



S 32: ^{13}C NMR Spectrum of (*S*)-2-cyclohexyl-2,3-dihydroquinazolin-4(1*H*)-one (5p).

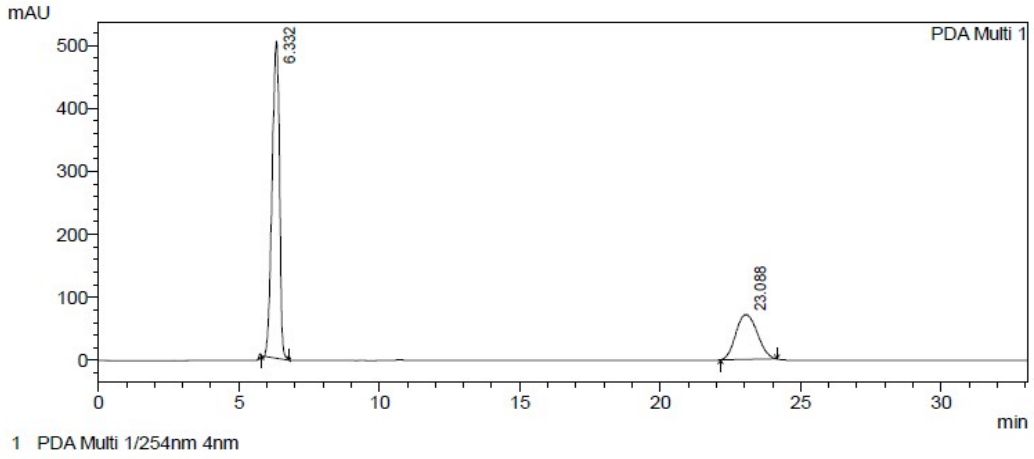


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.193	108356301	2567452	49.206	55.015
2	23.792	121180637	2099353	50.794	44.985
Total		229536938	4666805	100.000	100.000

S 33: HPLC spectrum of Racemic Mixture (5a)

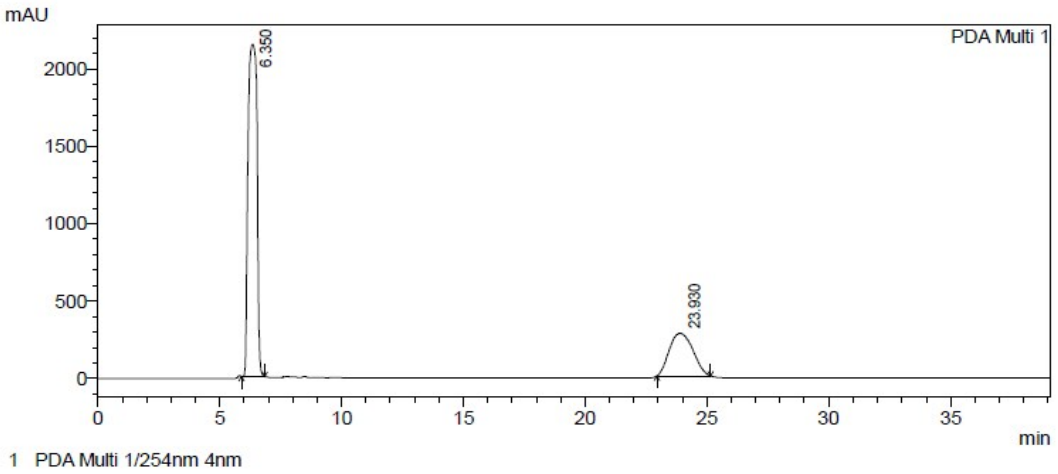


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.332	9170207	502604	70.835	87.598
2	23.088	3775601	71160	29.165	12.402
Total		12945808	573764	100.000	100.000

S 34: HPLC spectrum of Compound (5a) in presence of catalyst (1a) and Methanol in RT condition (Entry 1, Table 1).

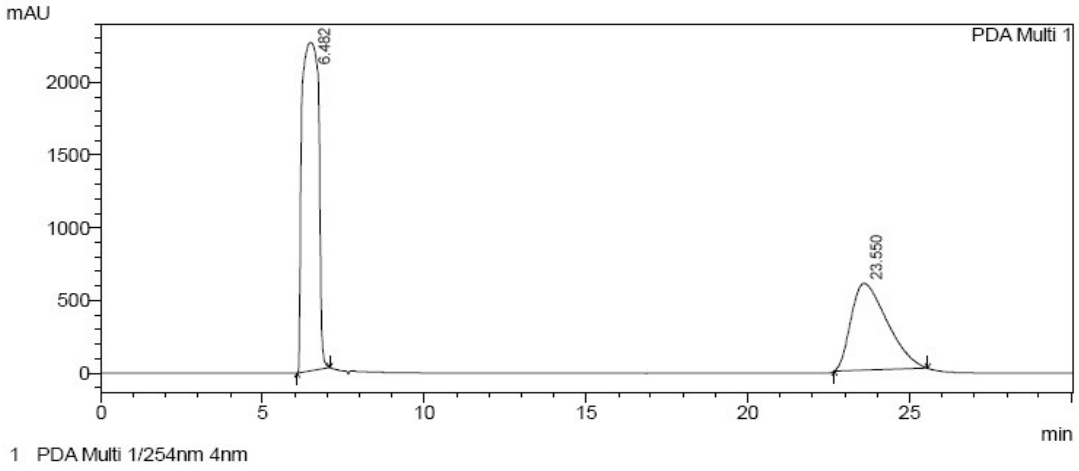


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.350	55097294	2147078	74.812	88.581
2	23.930	18549896	276789	25.188	11.419
Total		73647190	2423867	100.000	100.000

S 35: HPLC spectrum of Compound (5a) in presence of catalyst (1b) and Methanol in RT condition (Entry 2, Table 1).

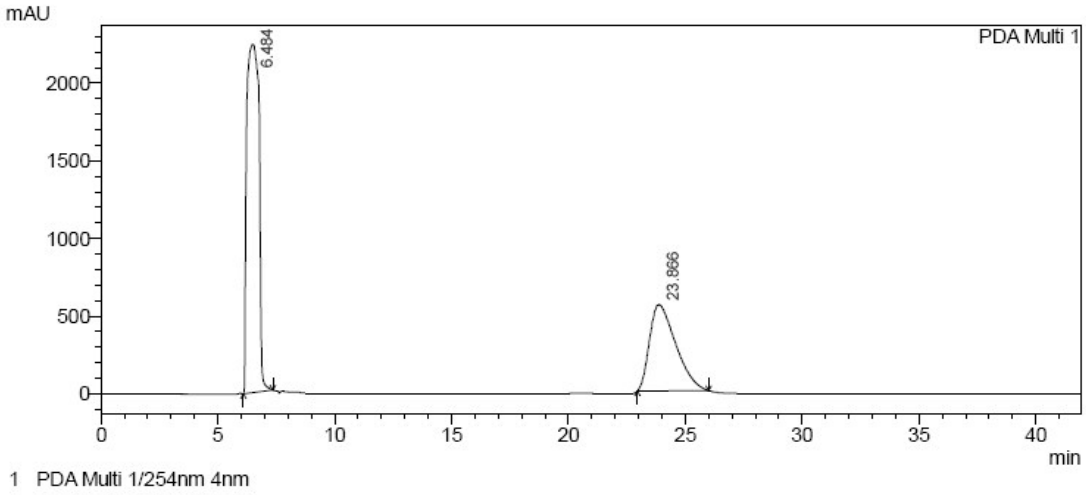


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.482	79729637	2260074	63.199	79.110
2	23.550	46426583	596805	36.801	20.890
Total		126156220	2856879	100.000	100.000

S 36: HPLC spectrum of Compound (5a) in presence of catalyst (1c) and Methanol in RT condition (Entry 3, Table 1).

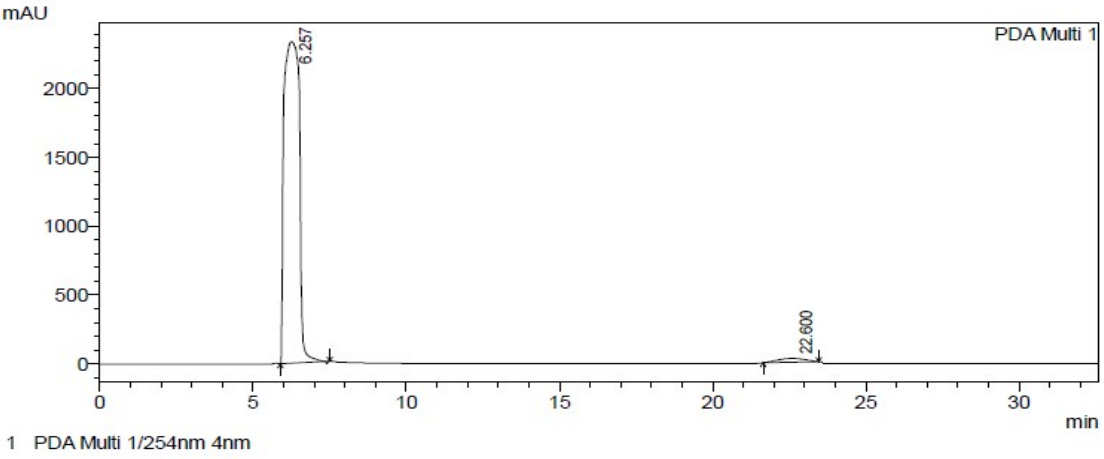


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.484	81332729	2240276	65.193	80.044
2	23.866	43424473	558526	34.807	19.956
Total		124757202	2798802	100.000	100.000

S 37: HPLC spectrum of Compound (5a) in presence of catalyst (1d) and Methanol in RT condition (Entry 4, Table 1).

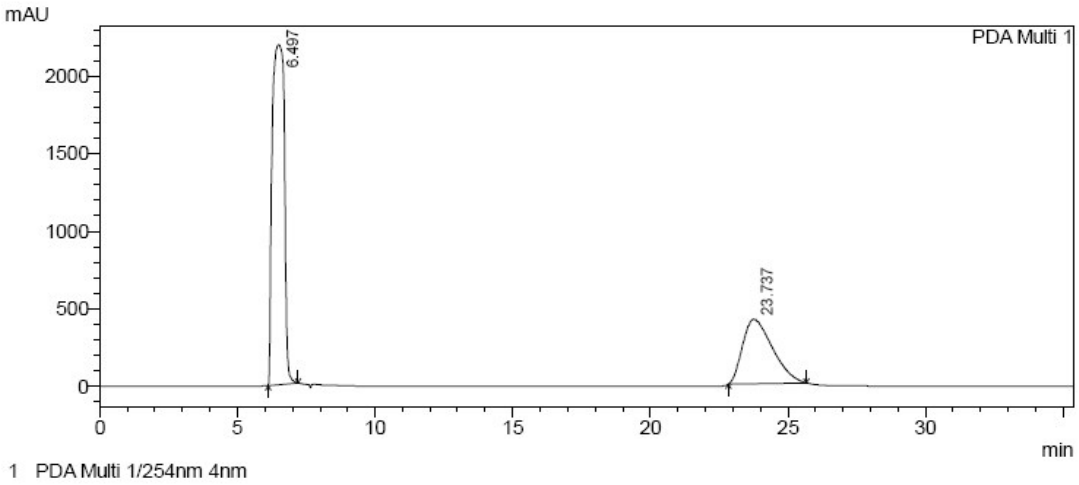


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.257	80437817	2336764	97.848	98.805
2	22.600	1769313	28261	2.152	1.195
Total		82207130	2365025	100.000	100.000

S 38: HPLC spectrum of Compound (5a) in presence of catalyst (2) and Methanol in RT condition (Entry 5, Table 1).

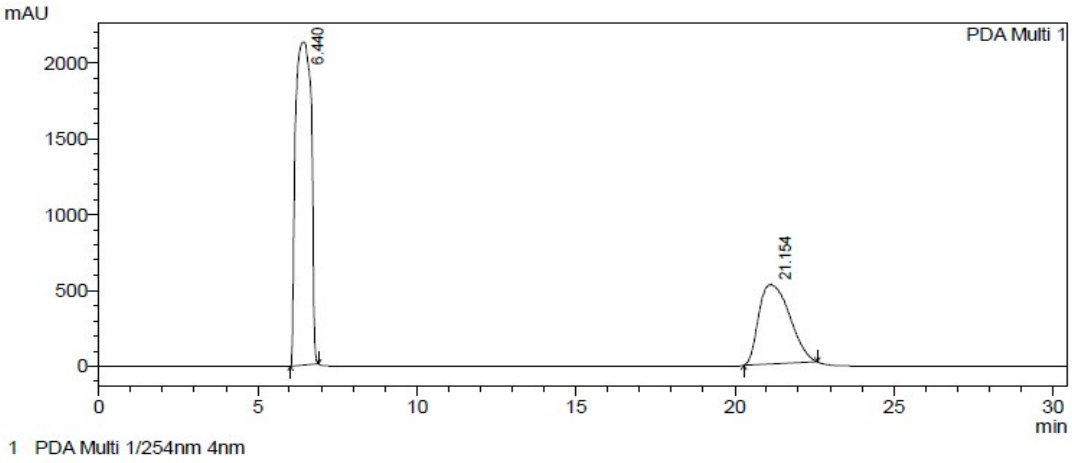


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.497	67090226	2193852	68.115	84.041
2	23.737	31404660	416602	31.885	15.959
Total		98494886	2610454	100.000	100.000

S 39: HPLC spectrum of Compound (5a) in presence of catalyst (2) and Chloroform in RT condition (Entry 1, Table 2).

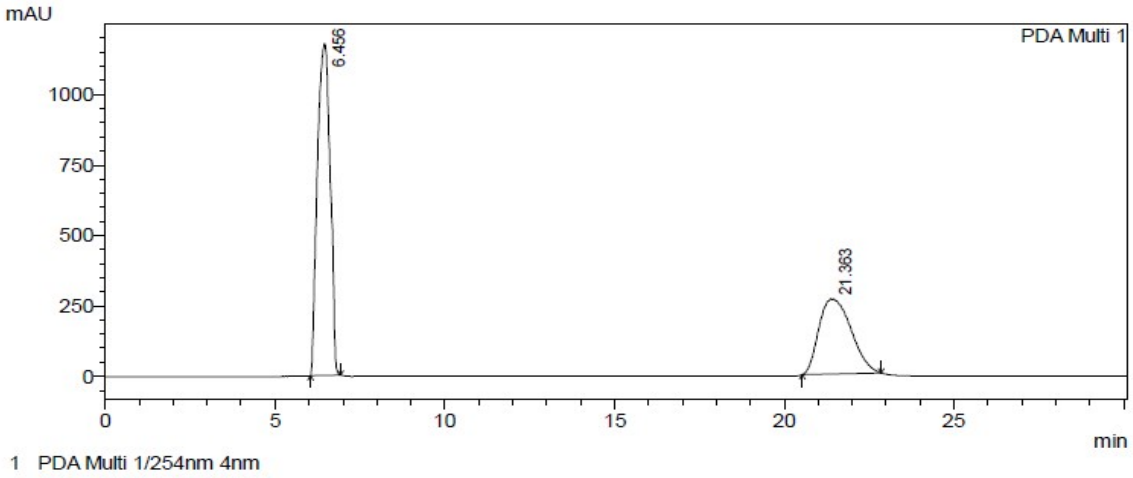


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.440	71931661	2129986	66.938	80.222
2	21.154	35529201	525117	33.062	19.778
Total		107460863	2655103	100.000	100.000

S 40: HPLC spectrum of Compound (5a) in presence of catalyst (2) and Acetone in RT condition (Entry 2, Table 2).

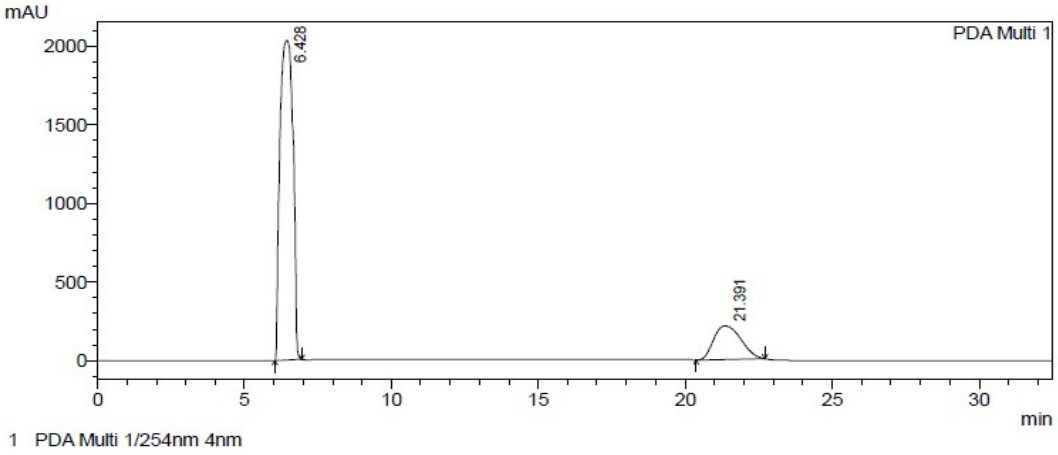


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.456	30824209	1177051	63.585	81.493
2	21.363	17652729	267308	36.415	18.507
Total		48476939	1444359	100.000	100.000

S 41: HPLC spectrum of Compound (5a) in presence of catalyst (2) and DCM in RT condition (Entry 3, Table 2).

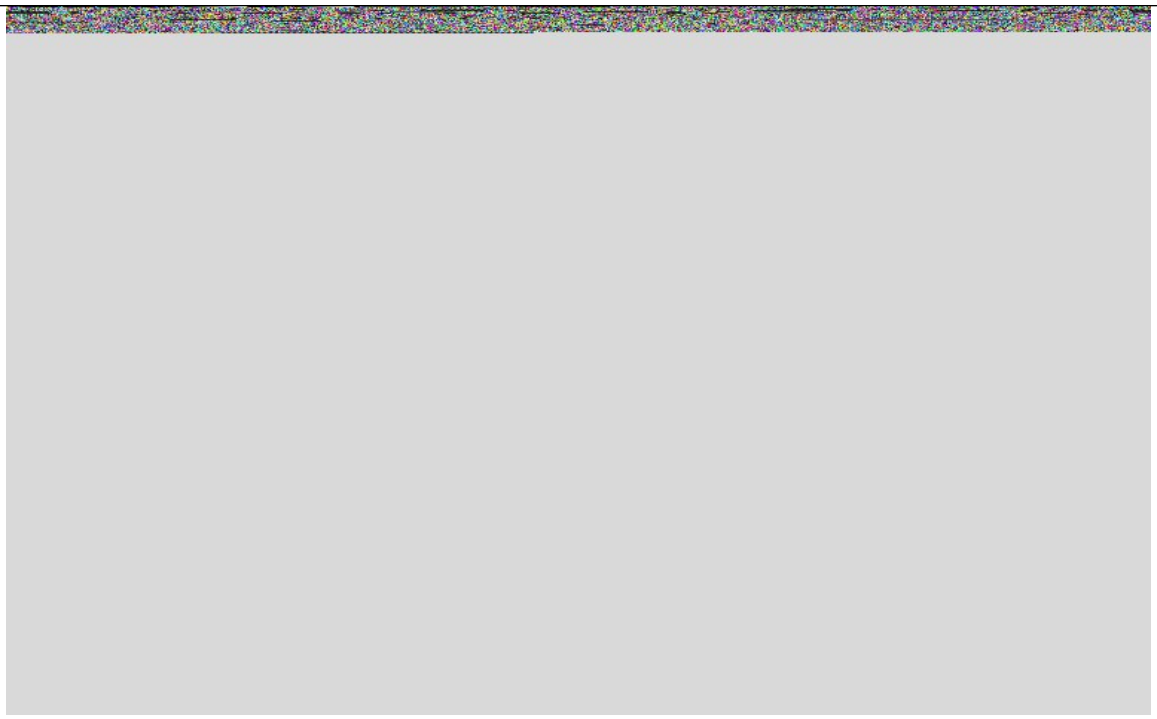


PeakTable

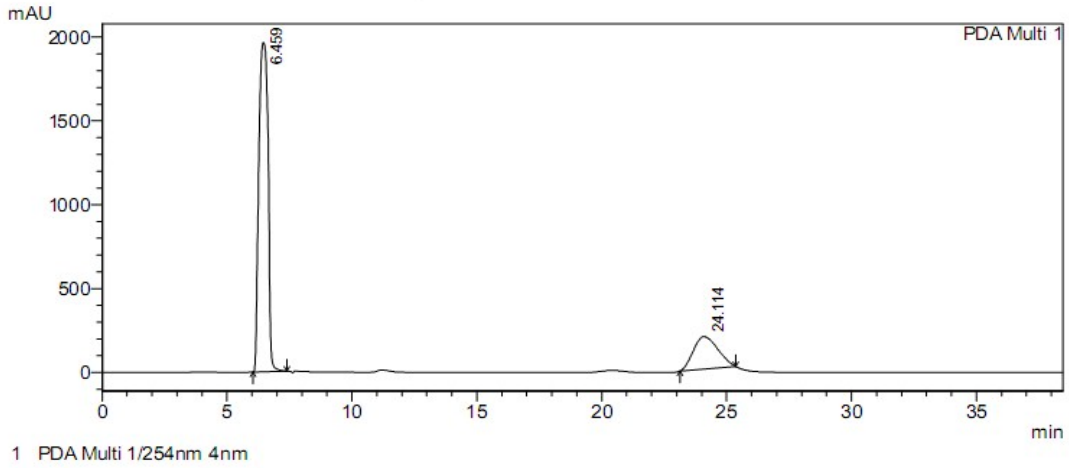
PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.428	62879476	2033093	81.778	90.363
2	21.391	14010710	216824	18.222	9.637
Total		76890186	2249917	100.000	100.000

S 42: HPLC spectrum of Compound (5a) in presence of catalyst (2) and Ethanol in RT condition (Entry 4, Table 2).



S 43: HPLC spectrum of Compound (5a) in presence of catalyst (2) and Methanol in RT condition (Entry 5, Table 2).

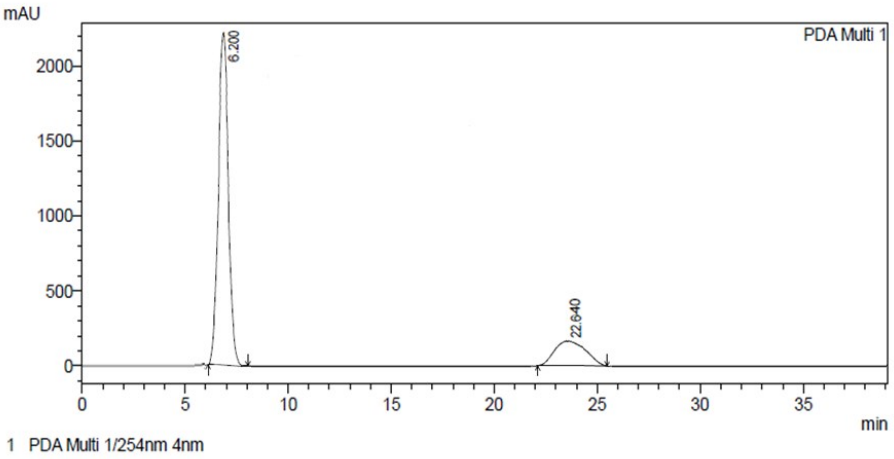


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.459	50223635	1965629	79.318	90.986
2	24.114	13095802	194738	20.682	9.014
Total		63319437	2160366	100.000	100.000

S 44: HPLC spectrum of Compound (5a) in presence of catalyst (2) and Methanol in Cold condition (0ºC) (Entry 6, Table 2).

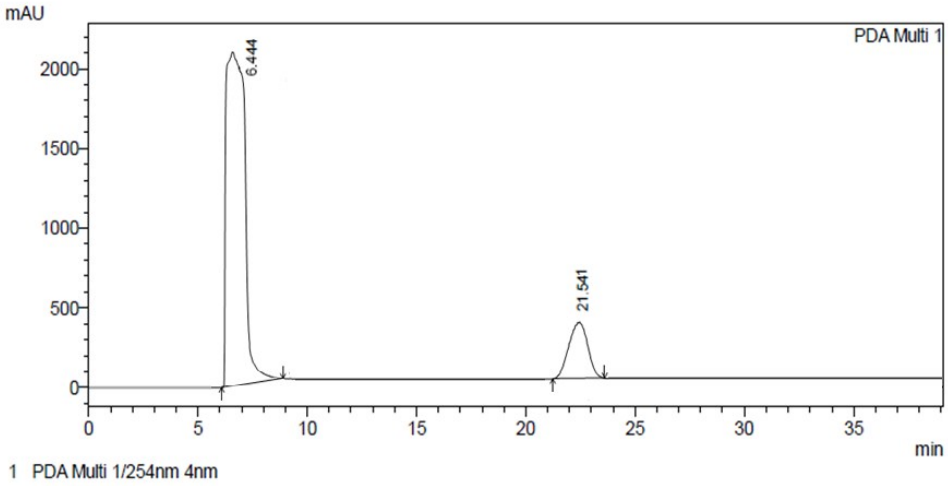


PeakTable

PDA Ch1 240nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.200	14690360	1273254	91.885	96.459
2	22.640	1297389	19932	8.115	3.541
Total		15987749	1293185	100.000	100.000

S 45: HPLC spectrum of Compound (5a) in presence of catalyst (2) and DMF in RT condition (Entry 7, Table 2).

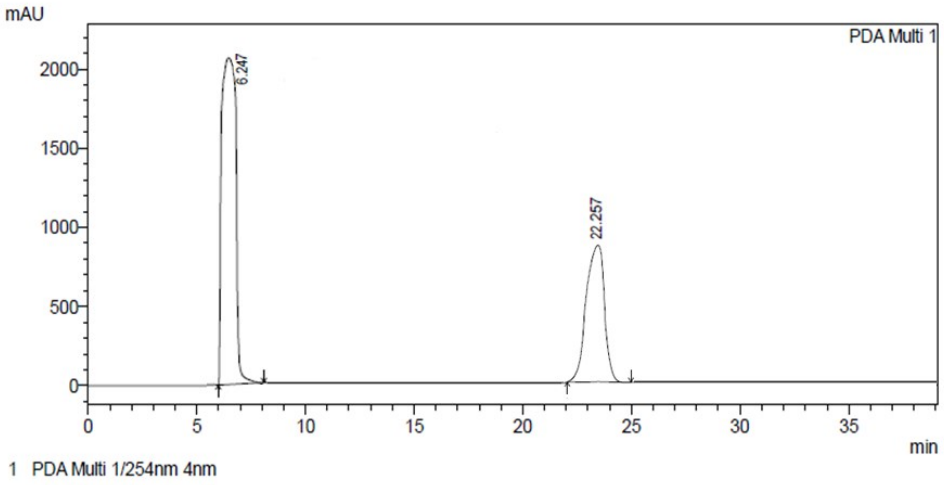


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.444	16288090	453694	93.044	88.009
2	21.541	1217689	61815	6.956	11.991
Total		17505779	515509	100.000	100.000

S 46: HPLC spectrum of Compound (5a) in presence of catalyst (2) and DMSO in RT condition (Entry 8, Table 2).

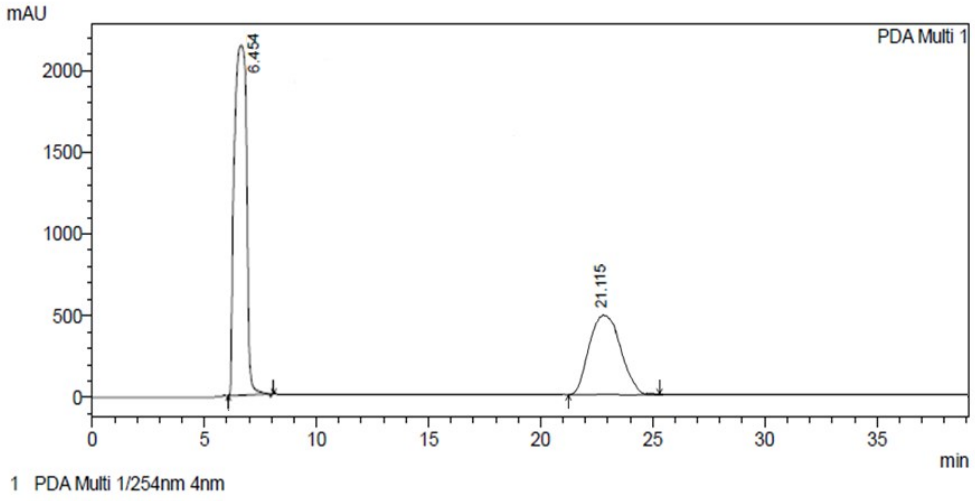


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.247	8473498	108659	83.721	74.717
2	22.257	1647576	36770	16.279	25.283
Total		10121074	145429	100.000	100.000

S 47: HPLC spectrum of Compound (5a) in presence of catalyst (2) and toluene in RT condition (Entry 9, Table 2).



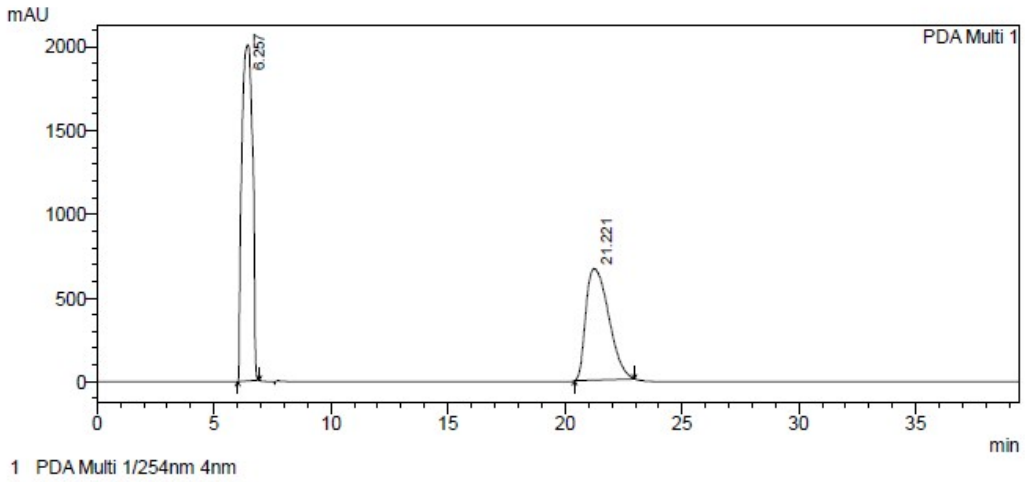
PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.454	59077266	753103	79.998	86.633
2	21.115	14771069	116201	20.002	13.367
Total		73848335	869304	100.000	100.000

S 48: HPLC spectrum of Compound (5a) in presence of catalyst (2) and cyclohexane in RT condition (Entry 10, Table 2).

S 49: HPLC spectrum of Compound (5a) in presence of catalyst (2) and Methanol in RT condition (Entry 1, Table 3).

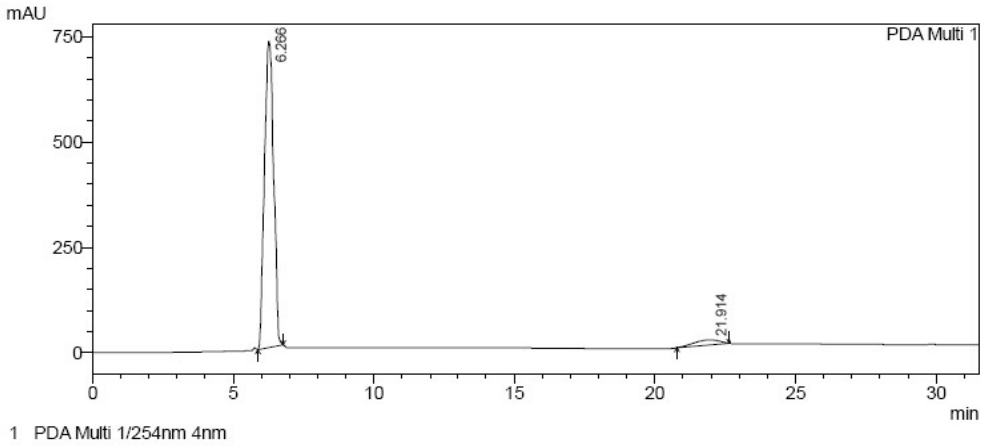


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.257	63325278	2007387	50.272	75.038
2	21.221	45346012	667764	49.728	24.962
Total		108671290	2675151	100.000	100.000

S 50: HPLC spectrum of Racemic Mixture 5b.

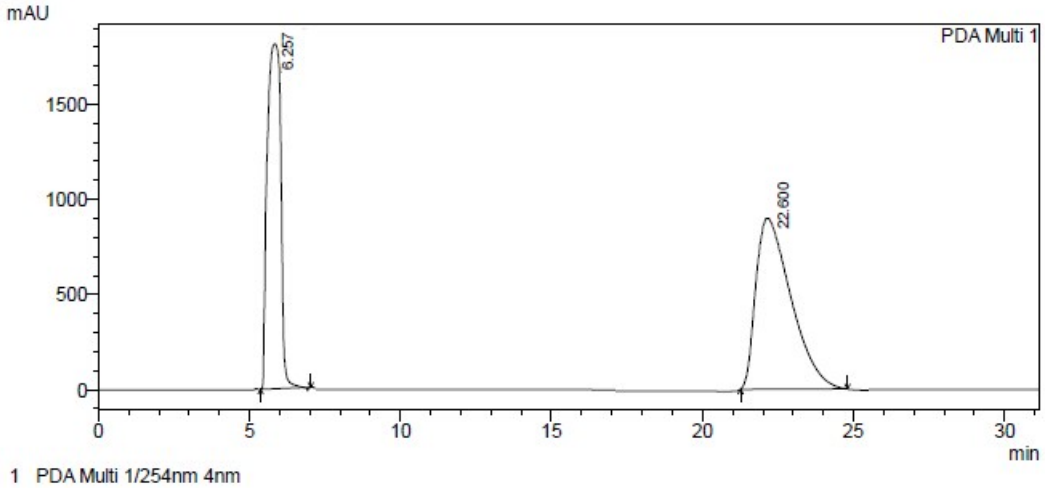


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.266	16549337	727187	95.540	98.337
2	21.914	772539	12294	4.460	1.663
Total		17321876	739481	100.000	100.000

S 51: HPLC spectrum of Compound (5b) in presence of catalyst (2) and Methanol in RT condition (Entry 2, Table 3).

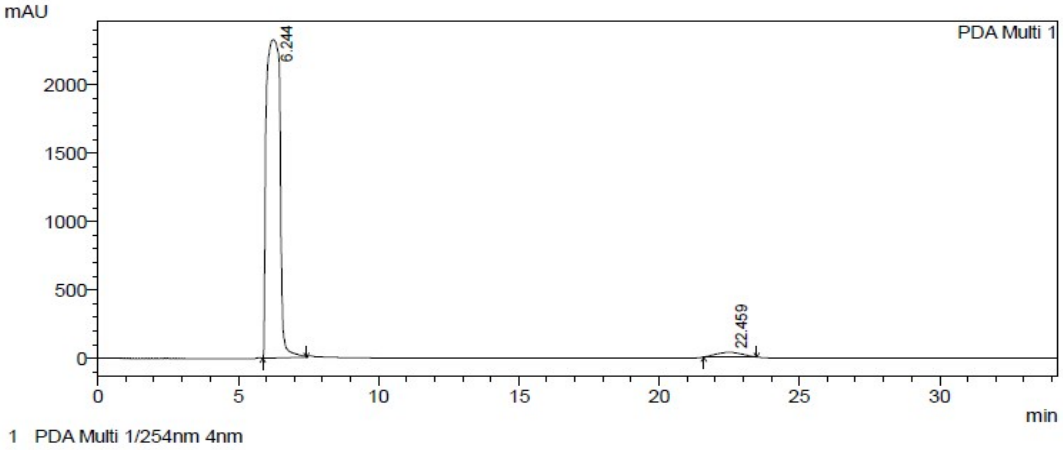


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.257	56498188	1810690	49.654	66.834
2	22.600	72923638	898537	50.346	33.166
Total		129421826	2709227	100.000	100.000

S 52: HPLC spectrum of Racemic Mixture 5c.



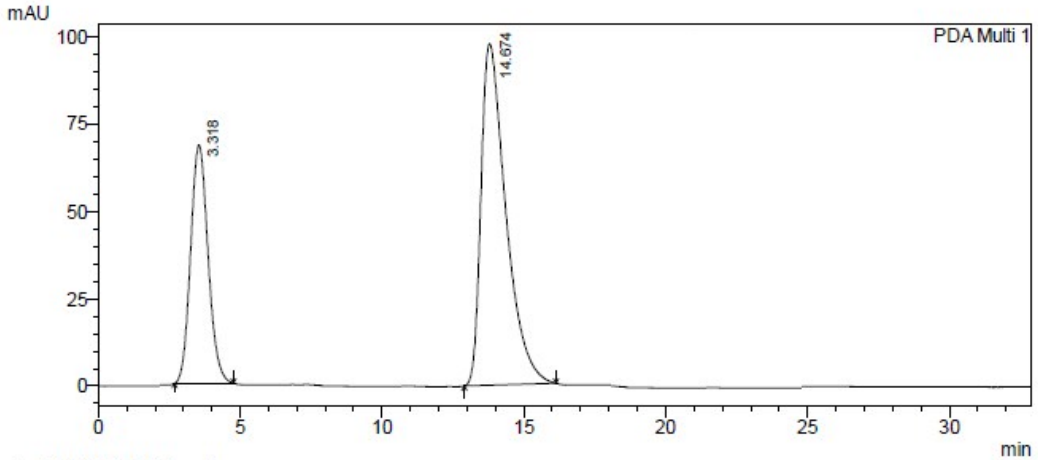
1 PDA Multi 1/254nm 4nm

PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.244	77940199	2326717	97.252	98.536
2	22.459	2201938	34577	2.748	1.464
Total		80142138	2361294	100.000	100.000

S 53: HPLC spectrum of Compound (5c) in presence of catalyst (2) and Methanol in RT condition (Entry 3, Table 3).



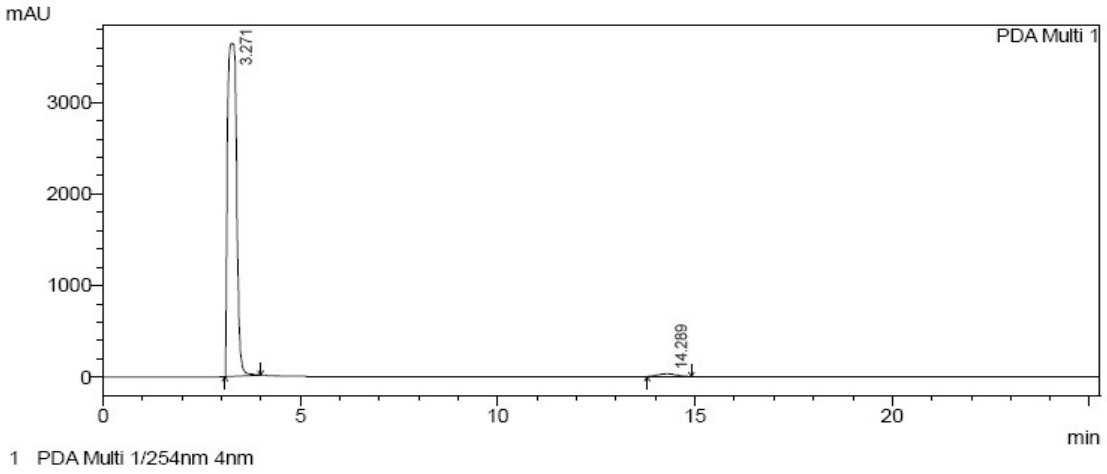
1 PDA Multi 1/254nm 4nm

PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	3.318	2921504	68179	49.200	41.114
2	14.674	5945230	97650	50.800	58.886
Total		8866734	165829	100.000	100.000

S 54: HPLC spectrum of Racemic Mixture 5d.

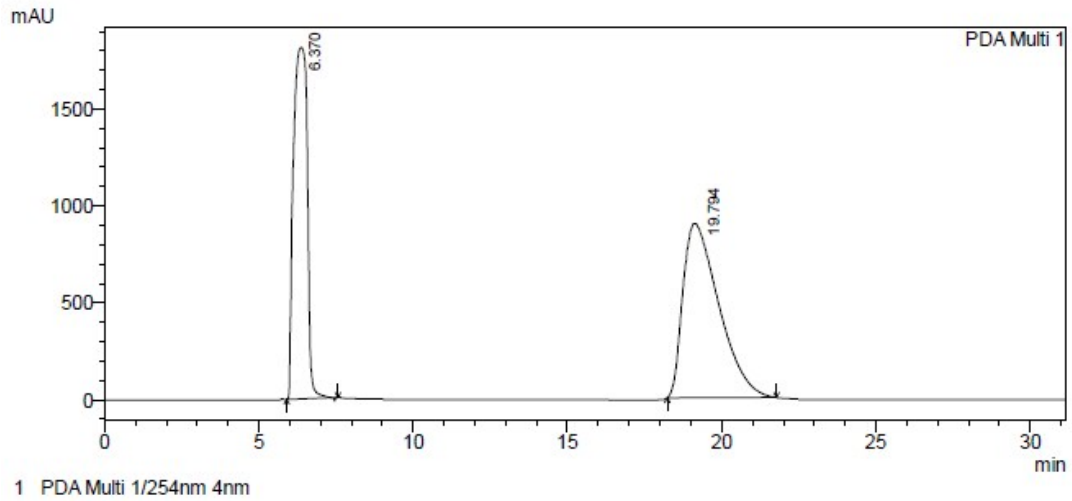


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	3.271	58152507	3645163	98.299	99.178
2	14.289	1006096	30221	1.701	0.822
Total		59158603	3675384	100.000	100.000

S 55: HPLC spectrum of Compound (5d) in presence of catalyst (2) and Methanol in RT condition (Entry 4, Table 3).

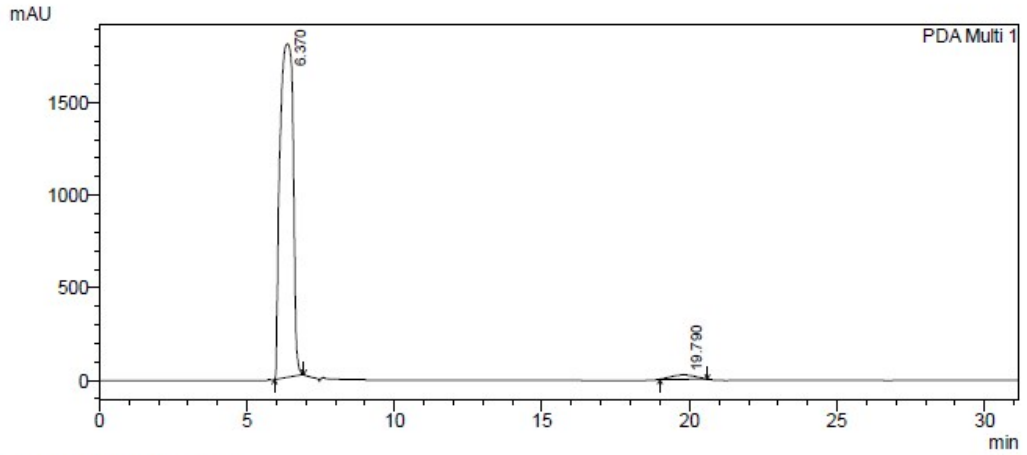


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.370	56498188	1810690	49.354	67.834
2	19.794	72923638	898537	50.646	32.166
Total		129421826	2709227	100.000	100.000

S 56: HPLC spectrum of Racemic Mixture 5e.



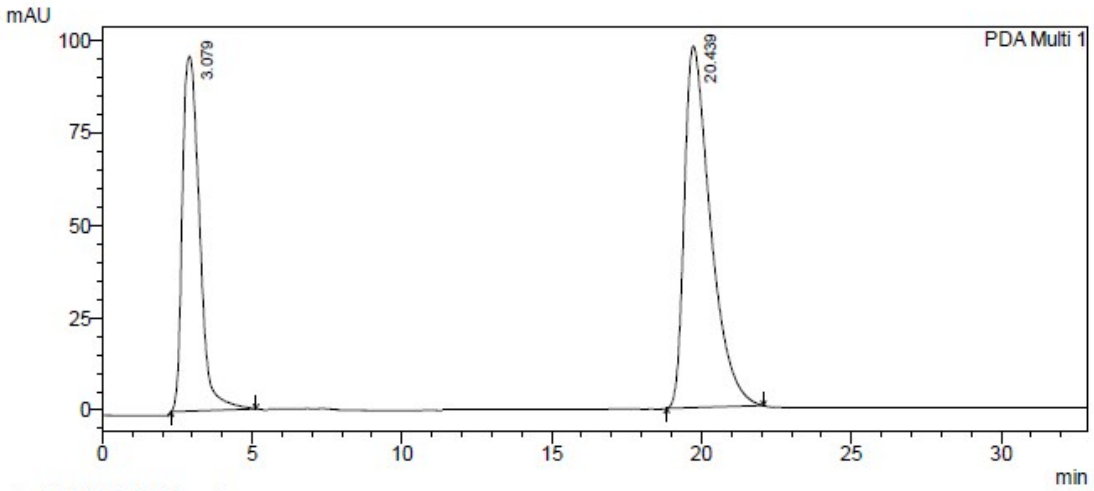
1 PDA Multi 1/254nm 4nm

PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.370	55537988	1799049	97.676	98.727
2	19.790	1321605	23206	2.324	1.273
Total		56859593	1822256	100.000	100.000

S 57: HPLC spectrum of Compound (5e) in presence of catalyst (2) and Methanol in RT condition (Entry 5, Table 3).



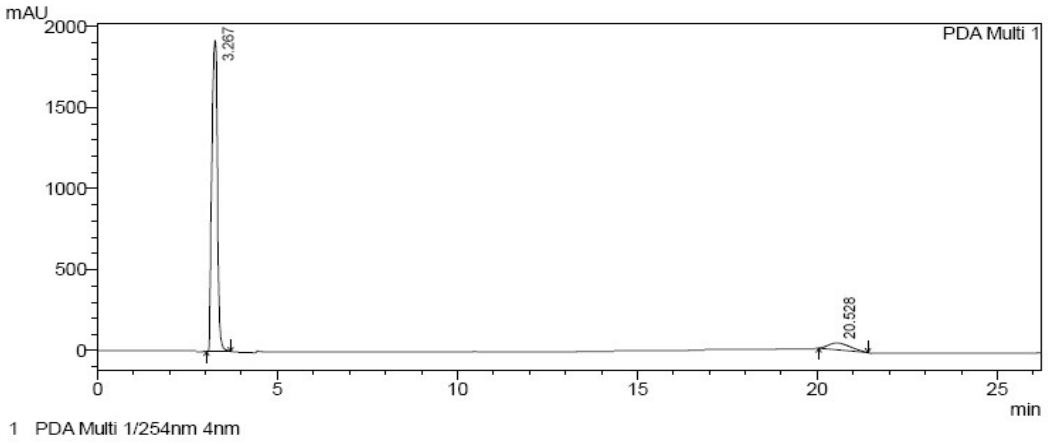
1 PDA Multi 1/254nm 4nm

PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	3.079	2921504	68179	49.200	49.114
2	20.439	5945230	97650	50.800	50.886
Total		8866734	165829	100.000	100.000

S 58: HPLC spectrum of Racemic Mixture 5f.

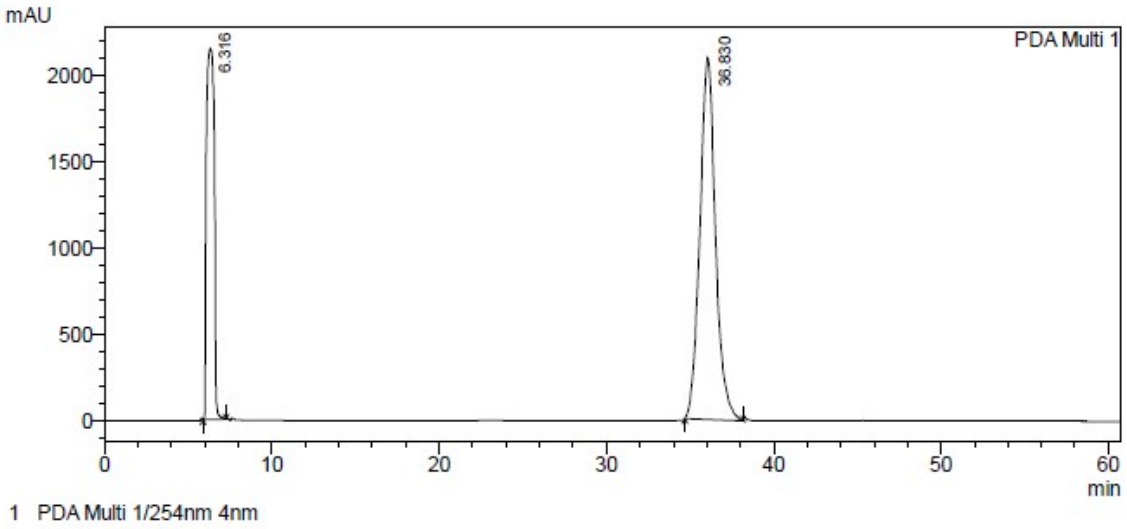


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	3.267	20654317	1918320	92.007	97.886
2	20.528	1794330	41429	7.993	2.114
Total		22448647	1959750	100.000	100.000

S 59: HPLC spectrum of Compound (5f) in presence of catalyst (2) and Methanol in RT condition (Entry 6, Table 3).

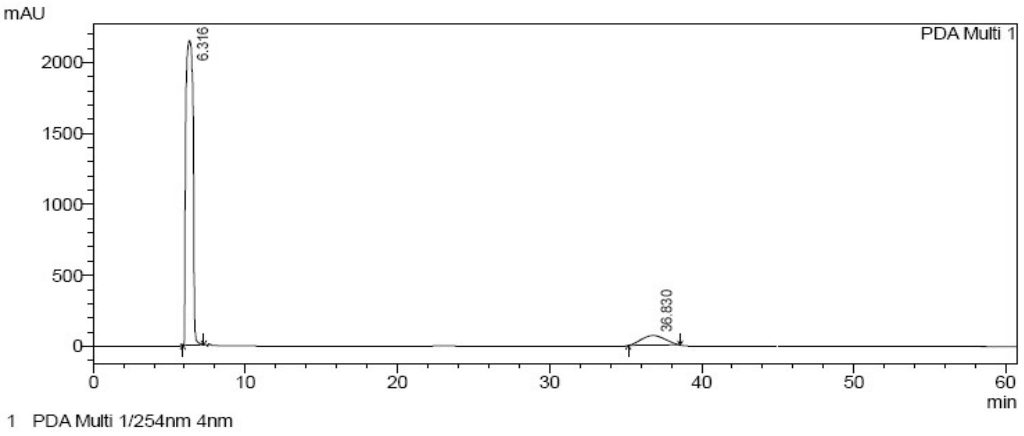


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.316	68898176	2146473	49.160	50.432
2	36.830	7519850	69181	50.840	49.568
Total		76418027	2215654	100.000	100.000

S 60: HPLC spectrum of Racemic Mixture 5g.

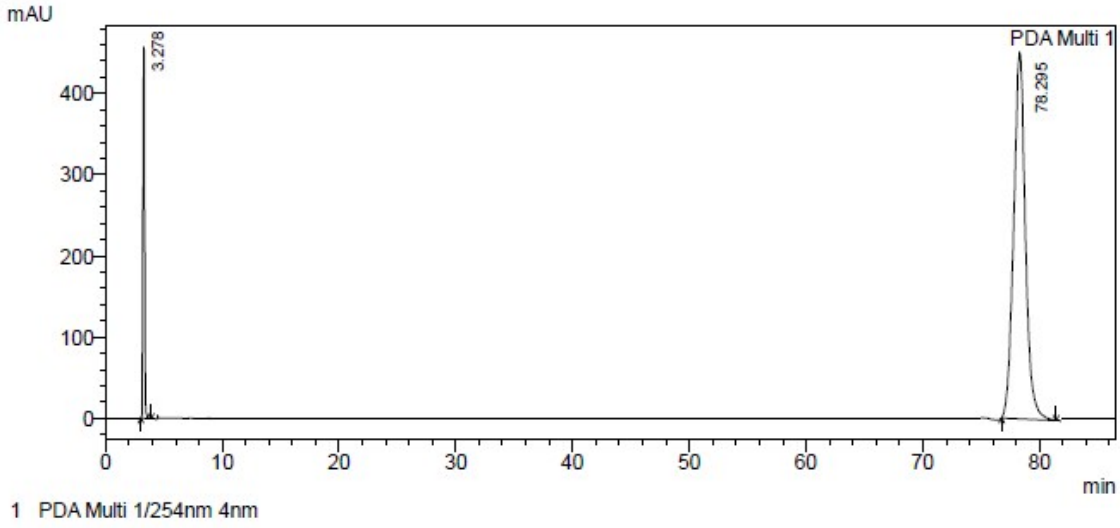


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.316	68898176	2146473	90.160	96.878
2	36.830	7519850	69181	9.840	3.122
Total		76418027	2215654	100.000	100.000

S 61: HPLC spectrum of Compound (5g) in presence of catalyst(2) and Methanol in RT condition (Entry 7, Table 3).

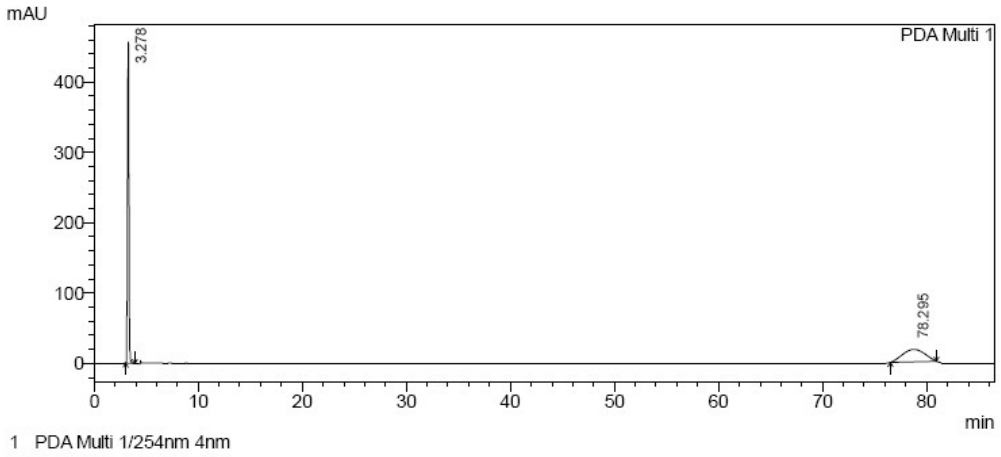


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	3.278	1038116	77030	49.200	49.432
2	78.295	1421893	132360	50.800	50.568
Total		2460009	209390	100.000	100.000

S 62: HPLC spectrum of Racemic Mixture 5h.

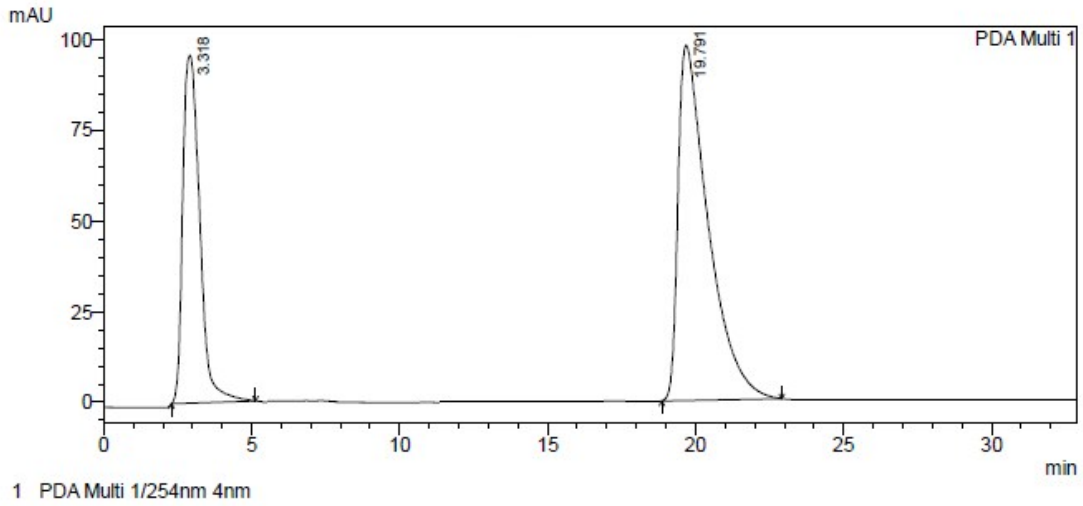


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	3.278	4572835	456401	97.406	99.782
2	78.295	121769	999	2.594	0.218
Total		4694604	457400	100.000	100.000

S 63: HPLC spectrum of Compound (5h) in presence of catalyst (2) and Methanol in RT condition (Entry 8, Table 3).

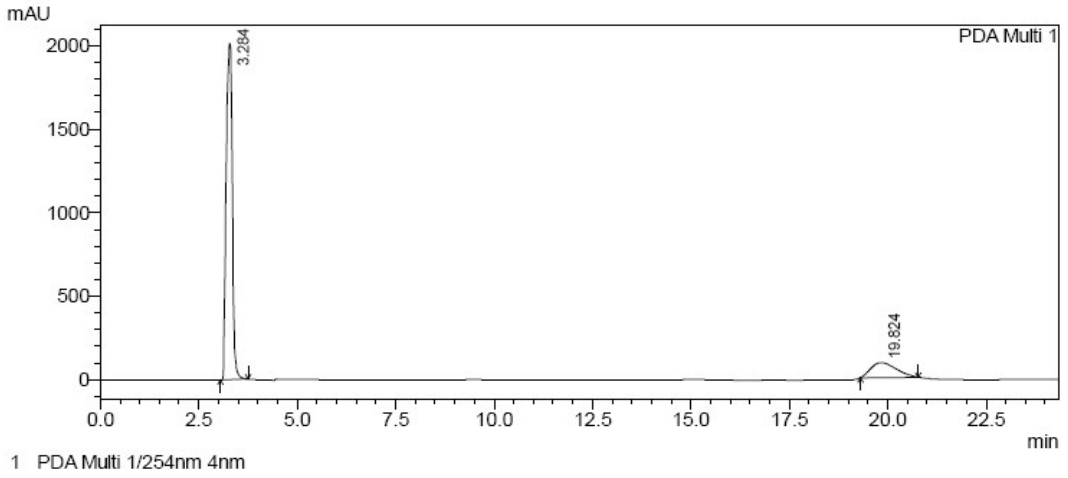


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	3.318	2921504	68179	49.800	49.114
2	19.791	5945230	97650	50.200	50.886
Total		8866734	165829	100.000	100.000

S 64: HPLC spectrum of Racemic Mixture 5i.

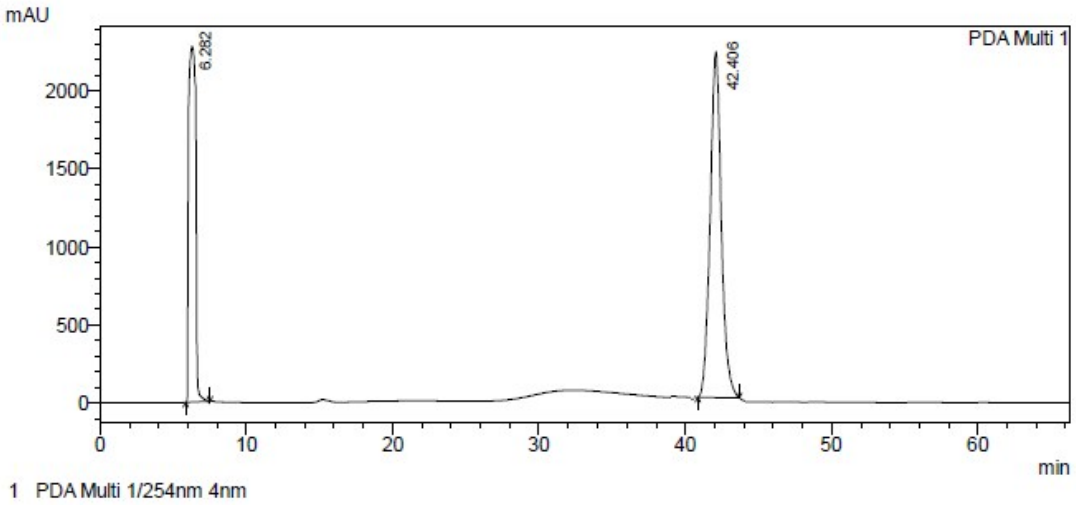


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	3.284	21650659	2010549	84.480	95.751
2	19.824	3977410	89212	15.520	4.249
Total		25628069	2099761	100.000	100.000

S 65: HPLC spectrum of Compound (5i) in presence of catalyst (2) and Methanol in RT condition (Entry 9, Table 3).

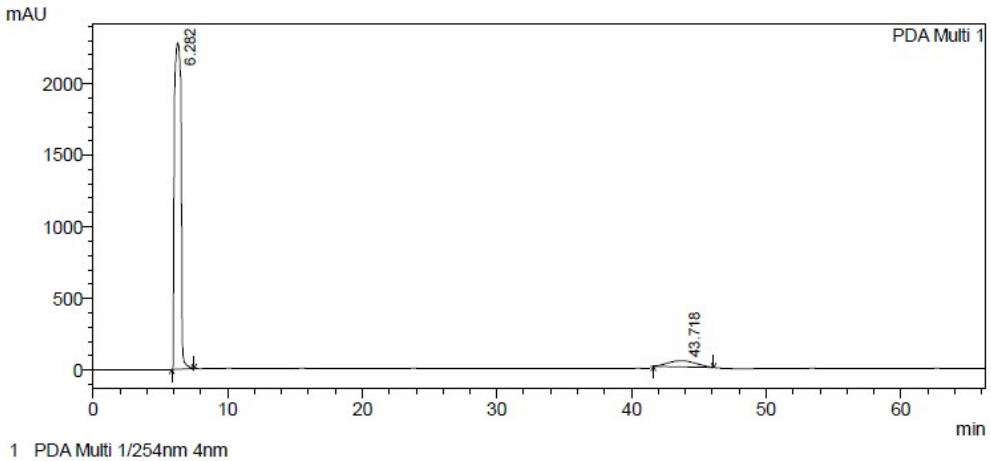


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.282	884709	62400	49.017	49.432
2	42.406	996988	94308	50.983	50.568
Total		1881697	156708	100.000	100.000

S 66: HPLC spectrum of Racemic Mixture 5j.



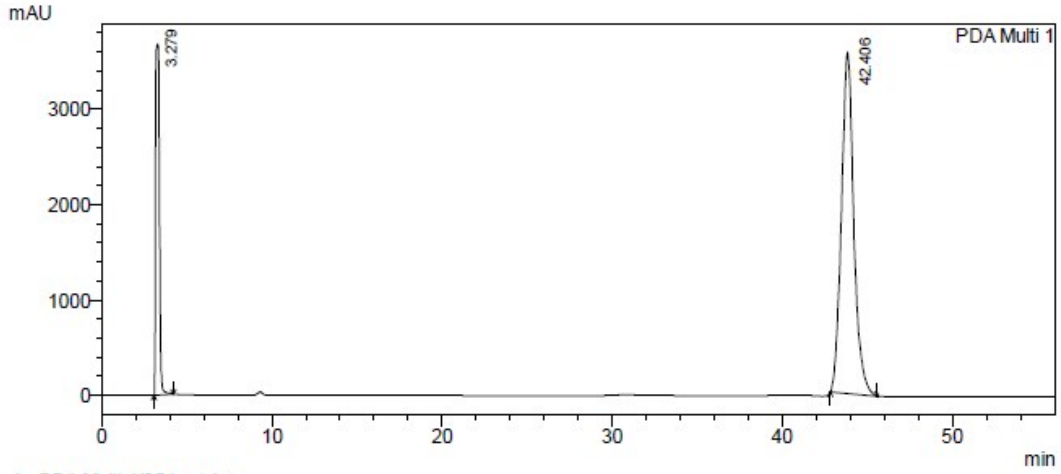
1 PDA Multi 1/254nm 4nm

PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.282	76421011	2277298	92.640	98.177
2	43.718	6071399	42288	7.360	1.823
Total		82492410	2319586	100.000	100.000

S 67: HPLC spectrum of Compound (5j) in presence of catalyst (2) and Methanol in RT condition (Entry 10, Table 3).



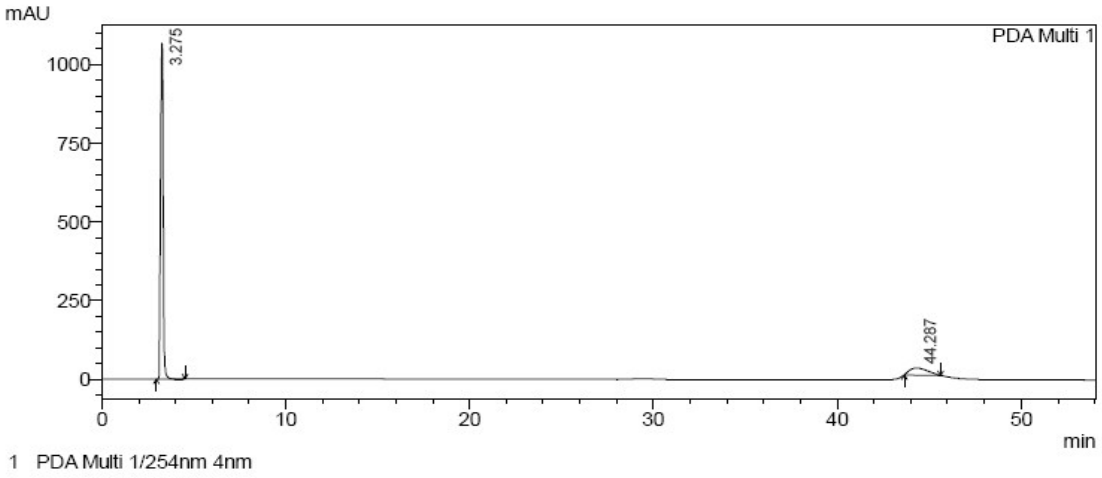
1 PDA Multi 1/254nm 4nm

PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	3.279	1038116	77030	49.432	50.200
2	42.406	1421893	132360	50.568	49.800
Total		2460009	209390	100.000	100.000

S 68: HPLC spectrum of Racemic Mixture 5k.



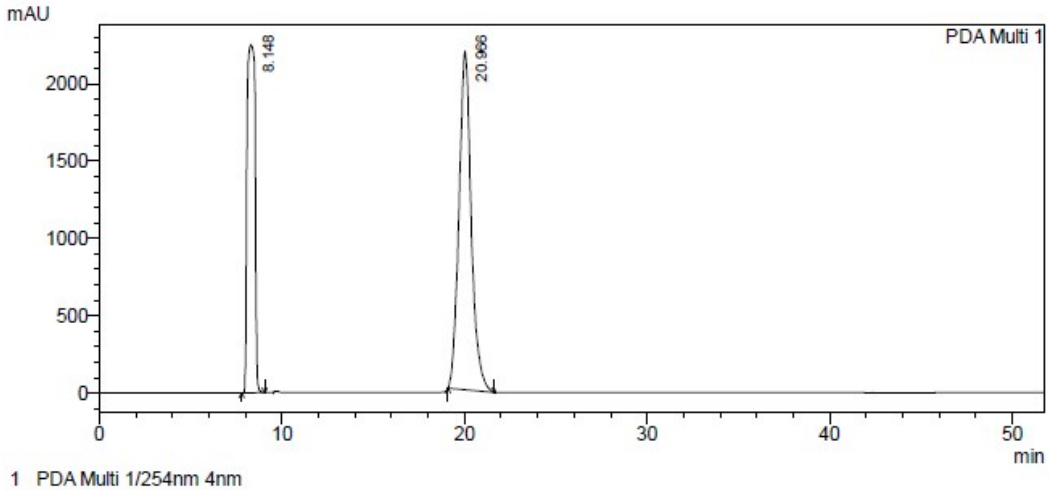
1 PDA Multi 1/254nm 4nm

PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	3.275	10615892	1067485	87.388	97.957
2	44.287	1532149	22262	12.612	2.043
Total		12148041	1089747	100.000	100.000

S 69: HPLC spectrum of Compound (5k) in presence of catalyst (2) and Methanol in RT condition (Entry 11, Table 3).



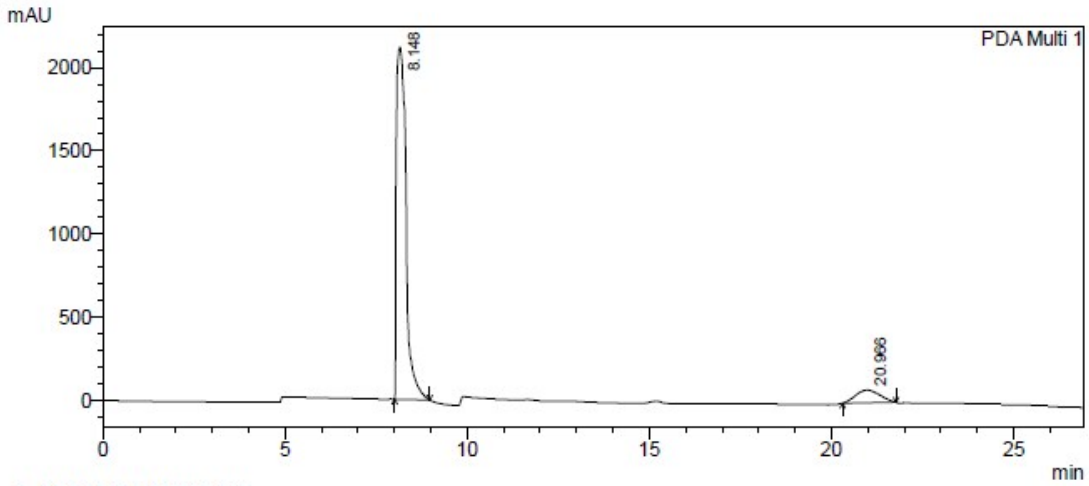
1 PDA Multi 1/254nm 4nm

PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	8.148	1038116	77030	49.200	52.200
2	20.966	1421893	132360	50.800	47.800
Total		2460009	209390	100.000	100.000

S 70: HPLC spectrum of Racemic Mixture 5l.



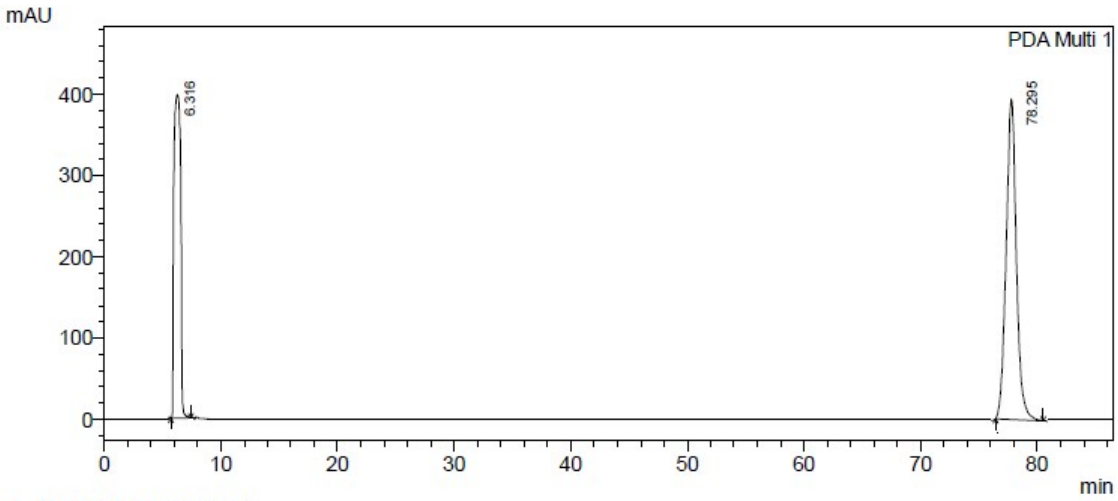
1 PDA Multi 1/260nm 4nm

PeakTable

PDA Ch1 260nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	8.148	38297910	2114859	91.489	96.497
2	20.966	3562699	76777	8.511	3.503
Total		41860609	2191635	100.000	100.000

S 71: HPLC spectrum of Compound (5l) in presence of catalyst (2) and Methanol in RT condition (Entry 12, Table 3).



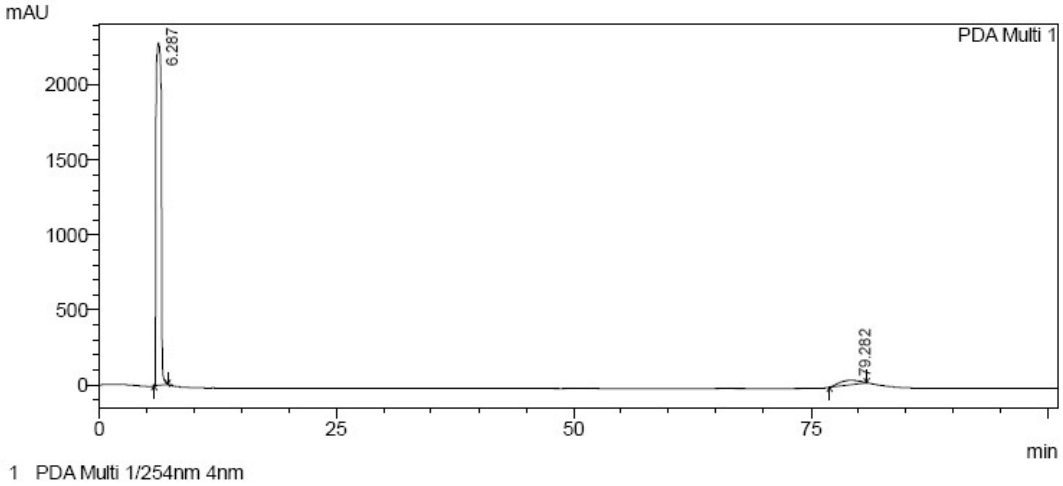
1 PDA Multi 1/254nm 4nm

PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.316	3004331	228818	49.625	49.432
2	78.295	3049796	274830	50.375	50.568
Total		6054127	503648	100.000	100.000

S 72: HPLC spectrum of Racemic Mixture 5m.

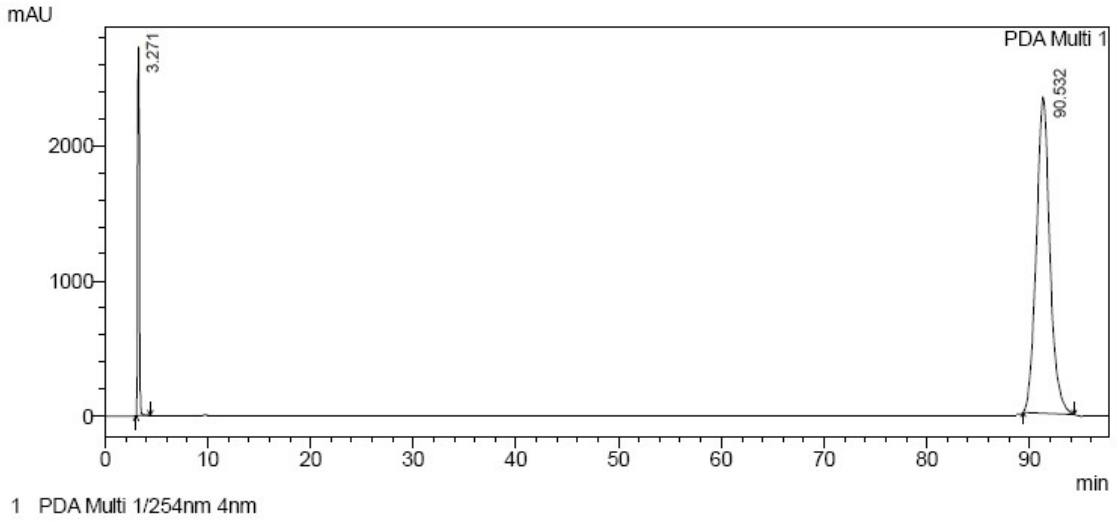


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.287	82285871	2281070	95.054	98.738
2	79.282	4281483	29165	4.946	1.262
Total		86567354	2310235	100.000	100.000

S 73: HPLC spectrum of Compound (5m) in presence of catalyst (2) and Methanol in RT condition (Entry 13, Table 3).

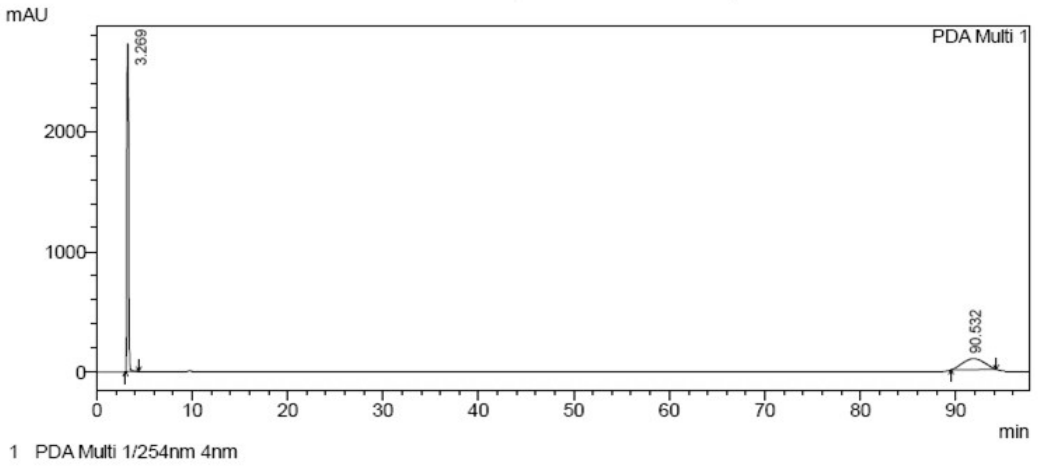


PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	3.271	3004331	228818	49.625	55.432
2	90.532	3049796	274830	50.375	44.568
Total		6054127	503648	100.000	100.000

S 74: HPLC spectrum of Racemic Mixture 5n.



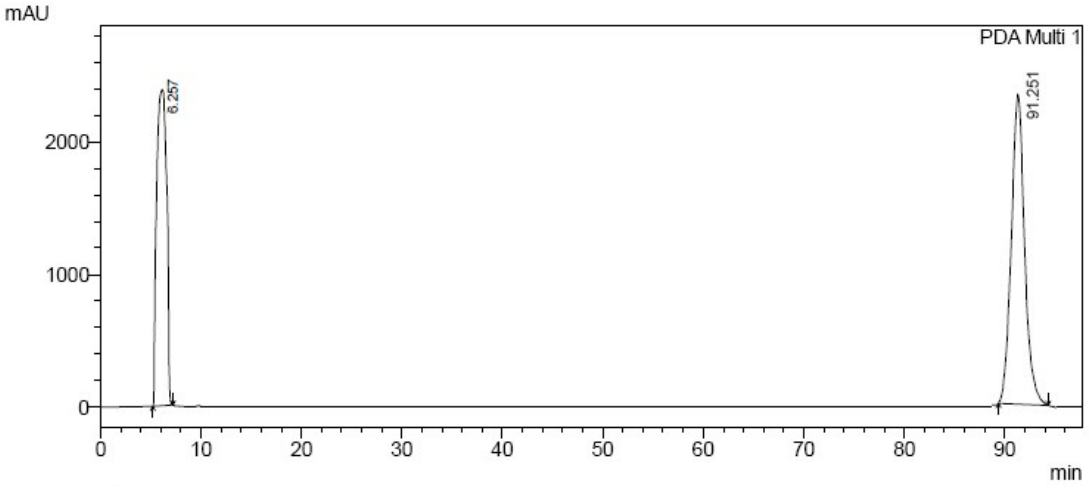
1 PDA Multi 1/254nm 4nm

PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	3.269	34845989	2728383	97.394	99.777
2	90.532	932415	6093	2.606	0.223
Total		35778404	2734476	100.000	100.000

S 75: HPLC spectrum of Compound (5n) in presence of catalyst (2) and Methanol in RT condition (Entry 14, Table 3).



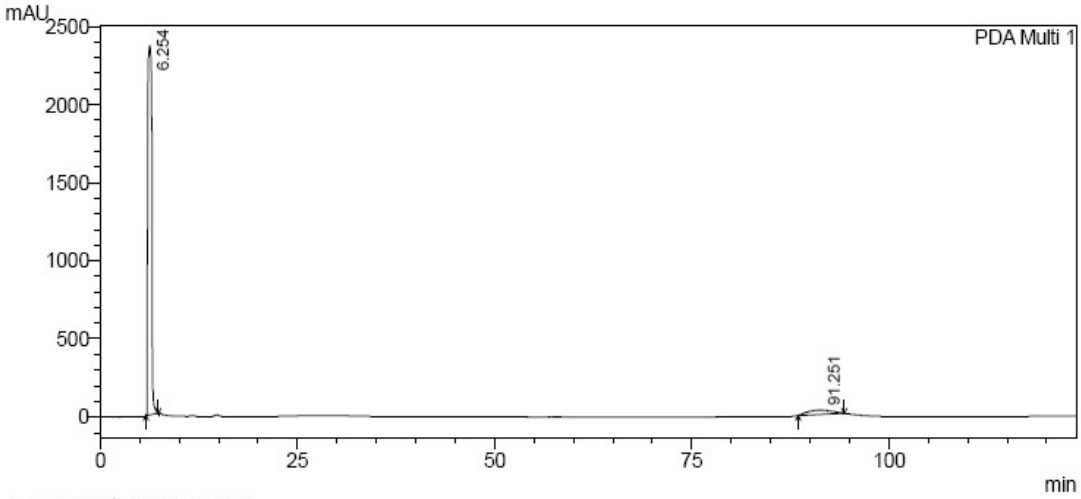
1 PDA Multi 1/254nm 4nm

PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.257	3004331	228818	49.625	49.432
2	91.251	3049796	274830	50.375	50.568
Total		6054127	503648	100.000	100.000

S 76: HPLC spectrum of Racemic Mixture 5o.



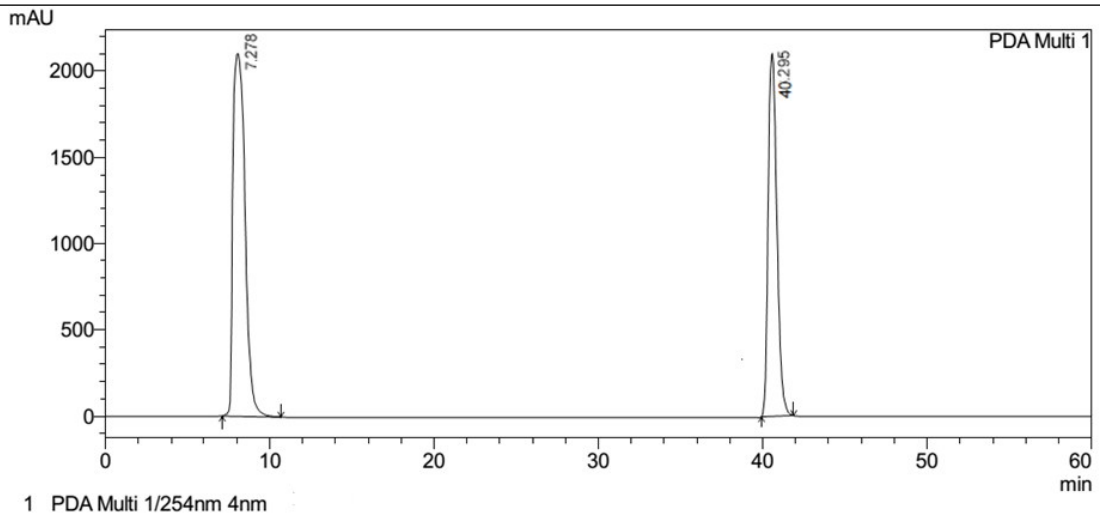
1 PDA Multi 1/254nm 4nm

PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	6.254	82498582	2361240	93.413	98.828
2	91.251	5817610	27995	6.587	1.172
Total		88316192	2389235	100.000	100.000

S 77: HPLC spectrum of Compound (5o) in presence of catalyst (2) and Methanol in RT condition (Entry 15, Table 3).



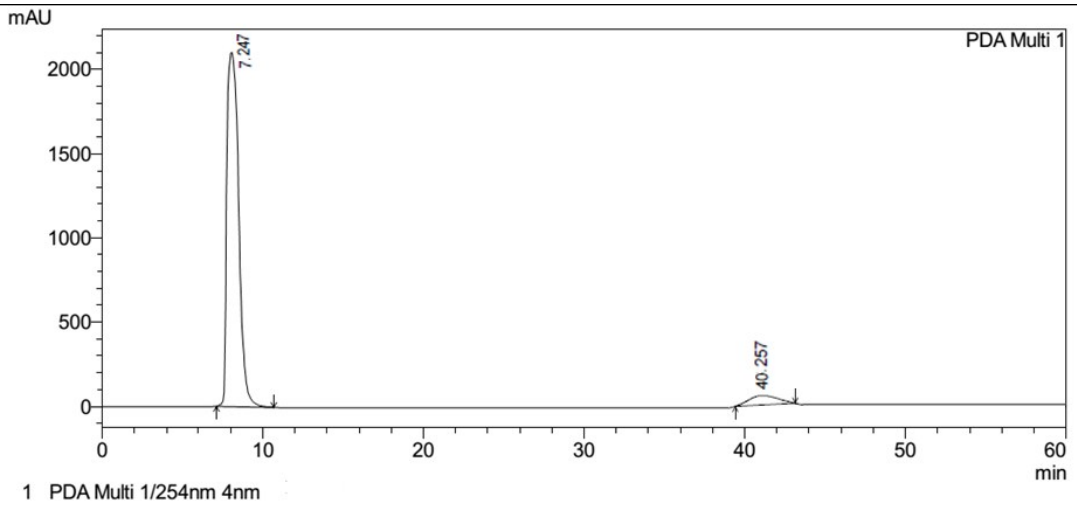
1 PDA Multi 1/254nm 4nm

PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	7.278	143622513	1483220	50.741	51.794
2	40.295	142638897	1365126	49.259	48.206
Total		286261409	2848346	100.000	100.000

S 78: HPLC spectrum of Racemic Mixture 5p.



PeakTable

PDA Ch1 254nm 4nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	7.247	76821577	1226754	93.021	95.364
2	40.257	5711609	146005	2.979	4.636
Total		82533186	1372758	100.000	100.000

S 79: HPLC spectrum of Compound (5p) in presence of catalyst (2) and Methanol in RT condition (Entry 16, Table 3).