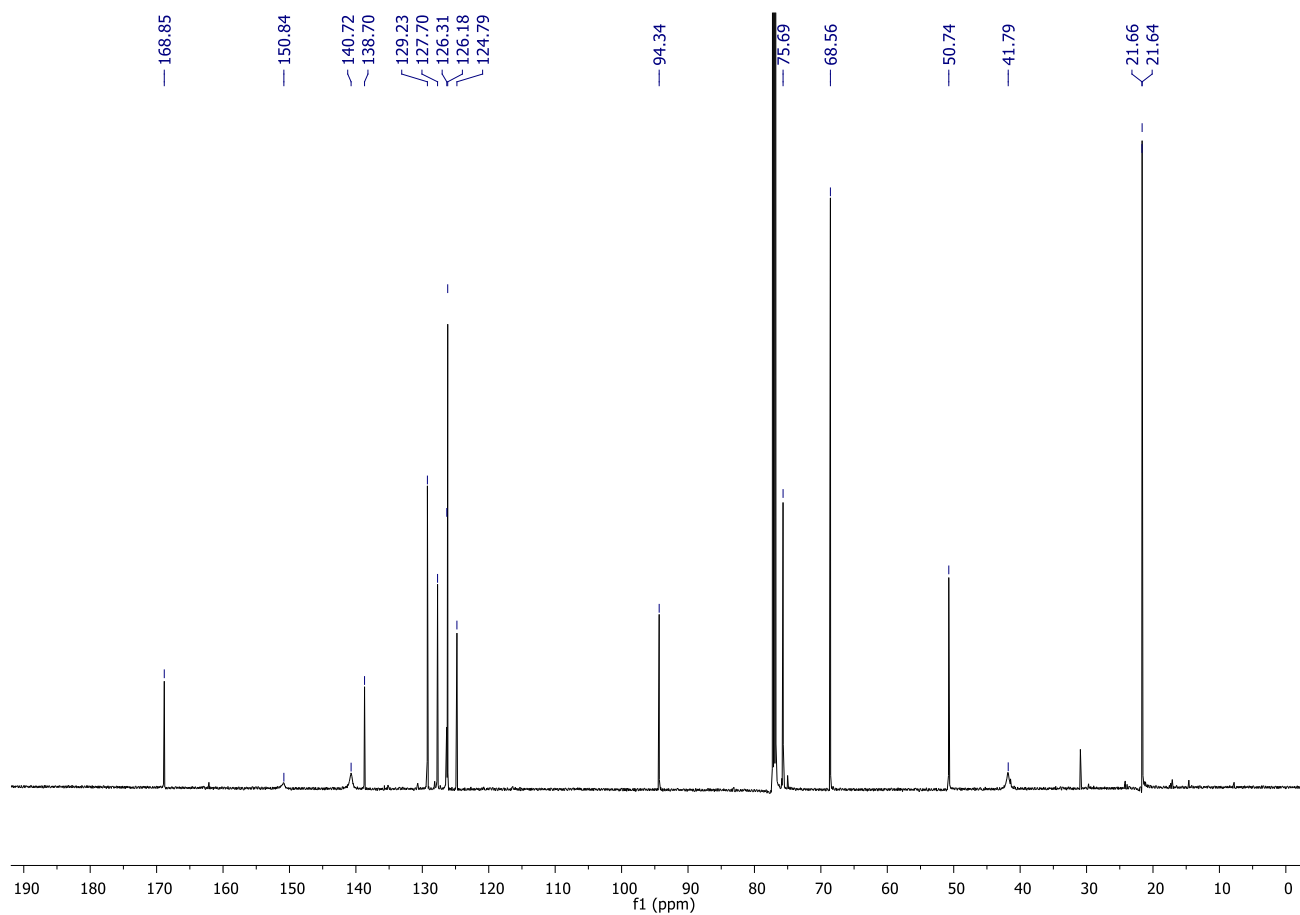
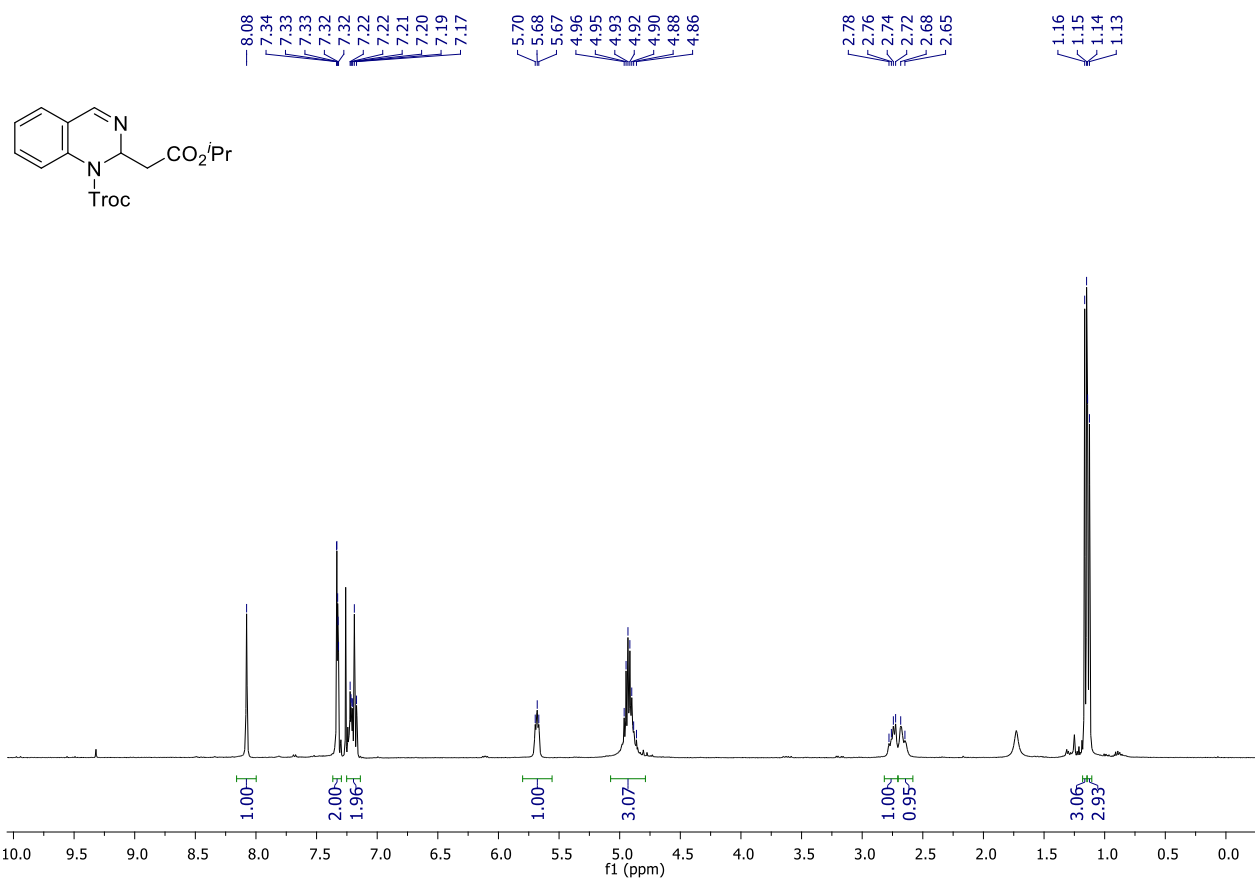
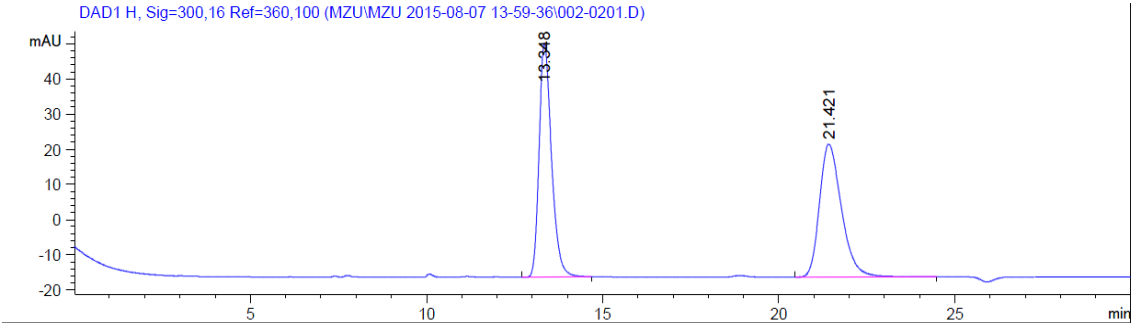


NMR Collection



Chiral-phase HPLC: OJ-H; Hex/*i*PrOH 98:2 (λ = 300 nm)

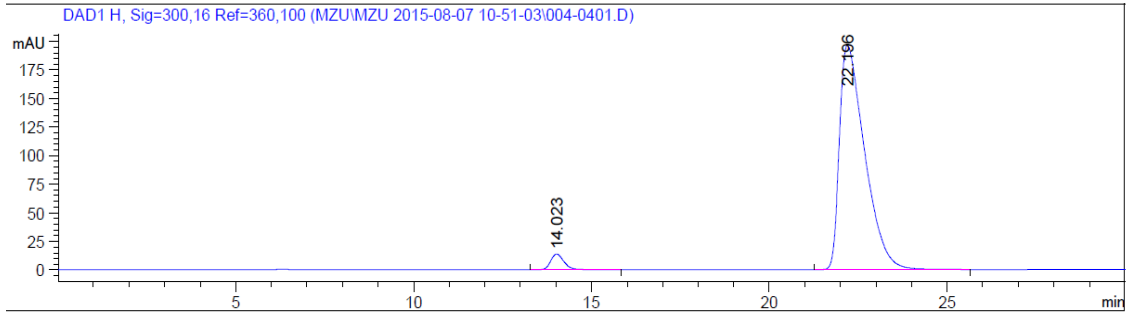
racemic:



Signal 5: DAD1 H, Sig=300,16 Ref=360,100

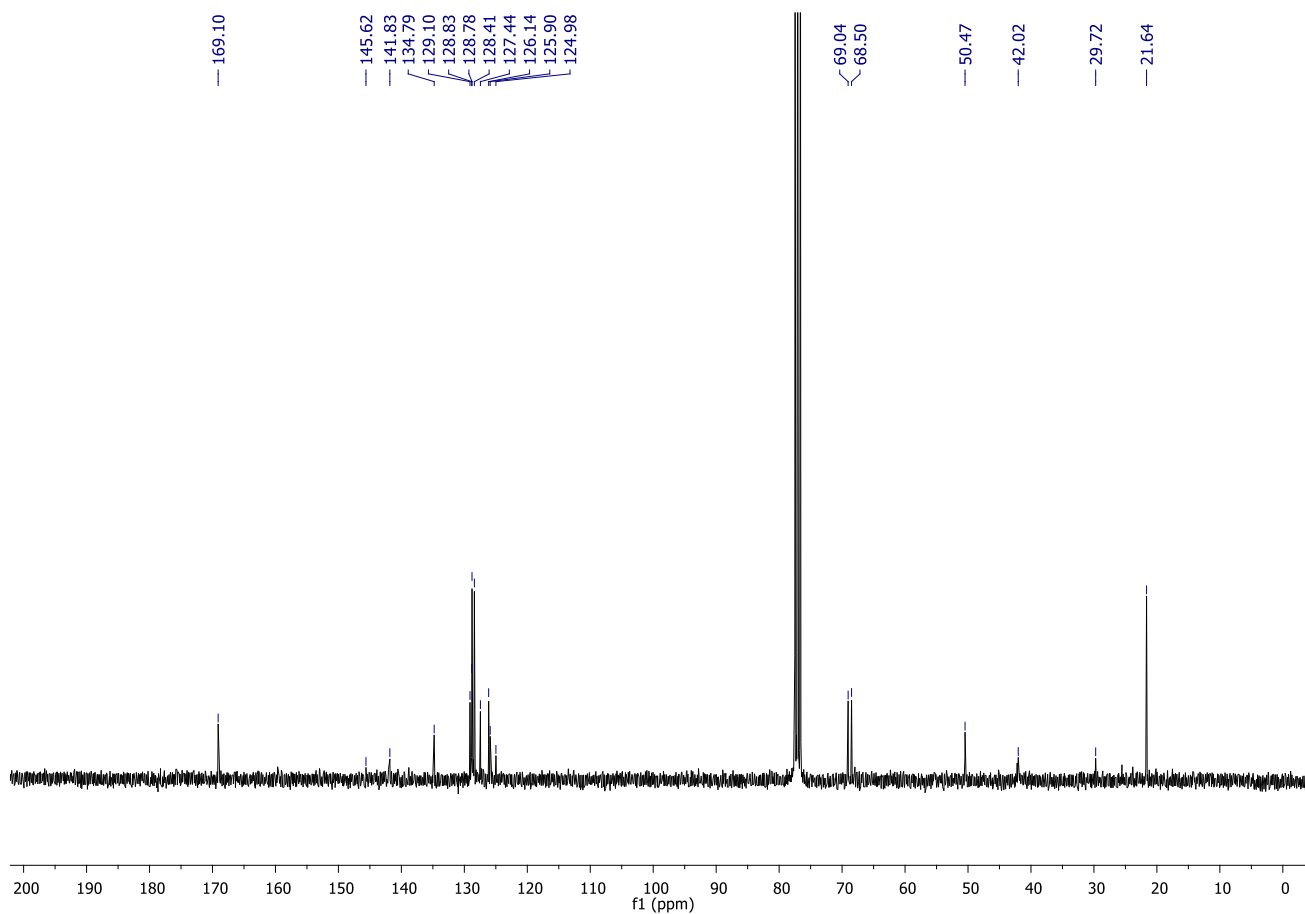
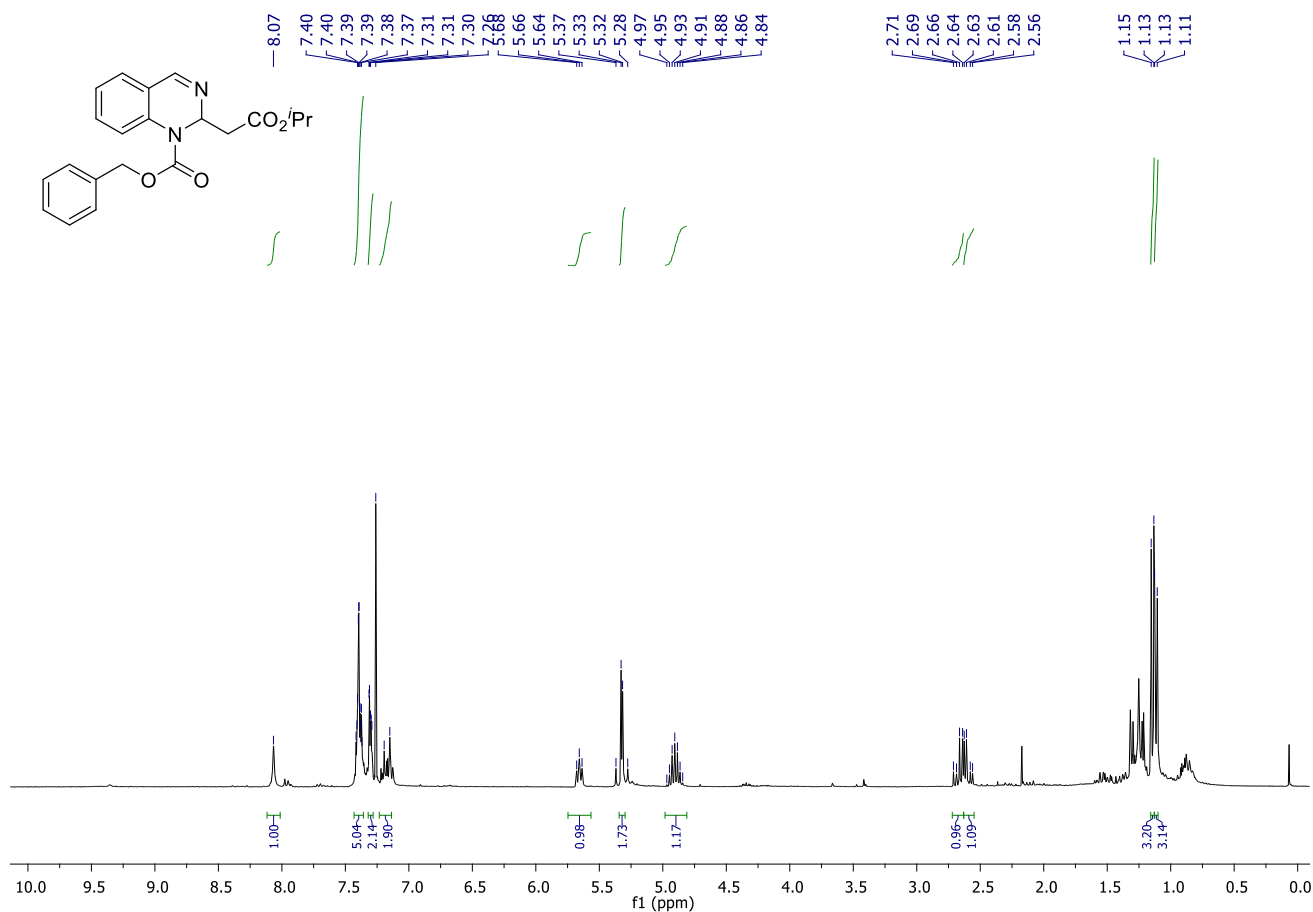
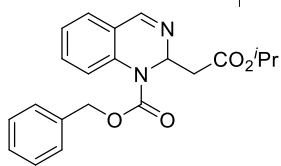
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	13.348	BB	0.3737	1628.41760	66.50849	49.8369
2	21.421	BB	0.6597	1639.07910	37.81224	50.1631

enantioselective:



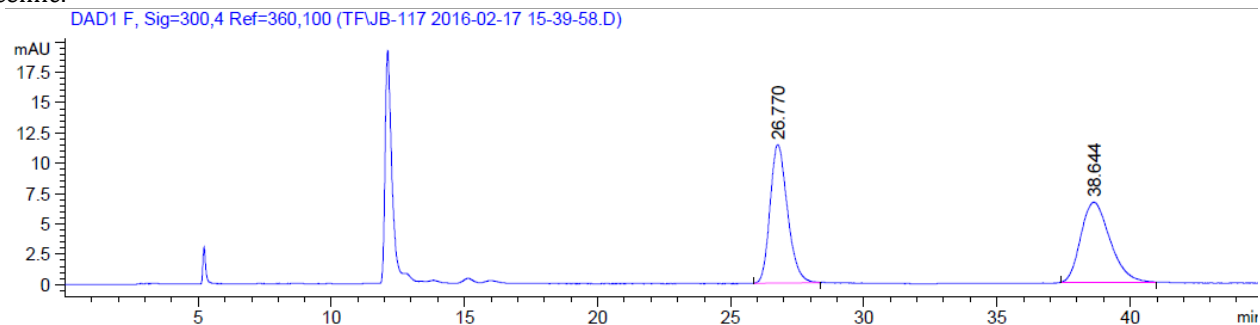
Signal 4: DAD1 H, Sig=300,16 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	14.023	BB	0.3966	362.53653	13.97744	3.6026
2	22.196	BB	0.7472	9700.76172	196.74654	96.3974



Chiral-phase HPLC: OJ-H; Hex/*i*PrOH 98:2 ($\lambda = 300\text{ nm}$)

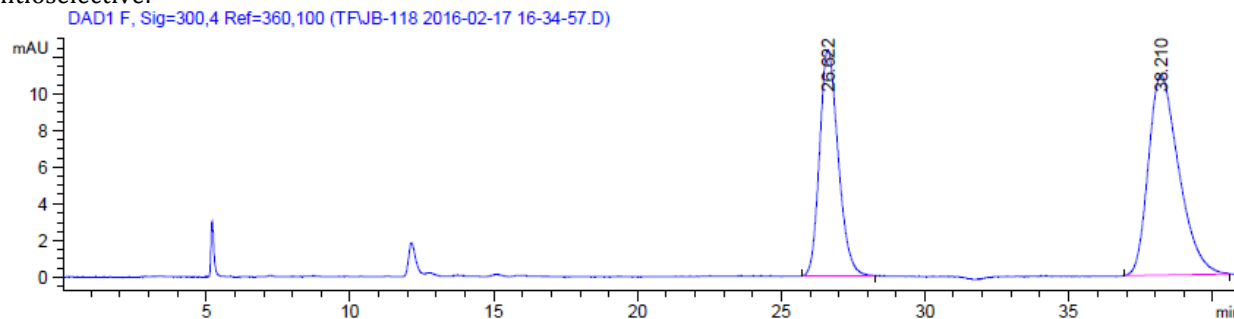
racemic:



Signal 6: DAD1 F, Sig=300,4 Ref=360,100

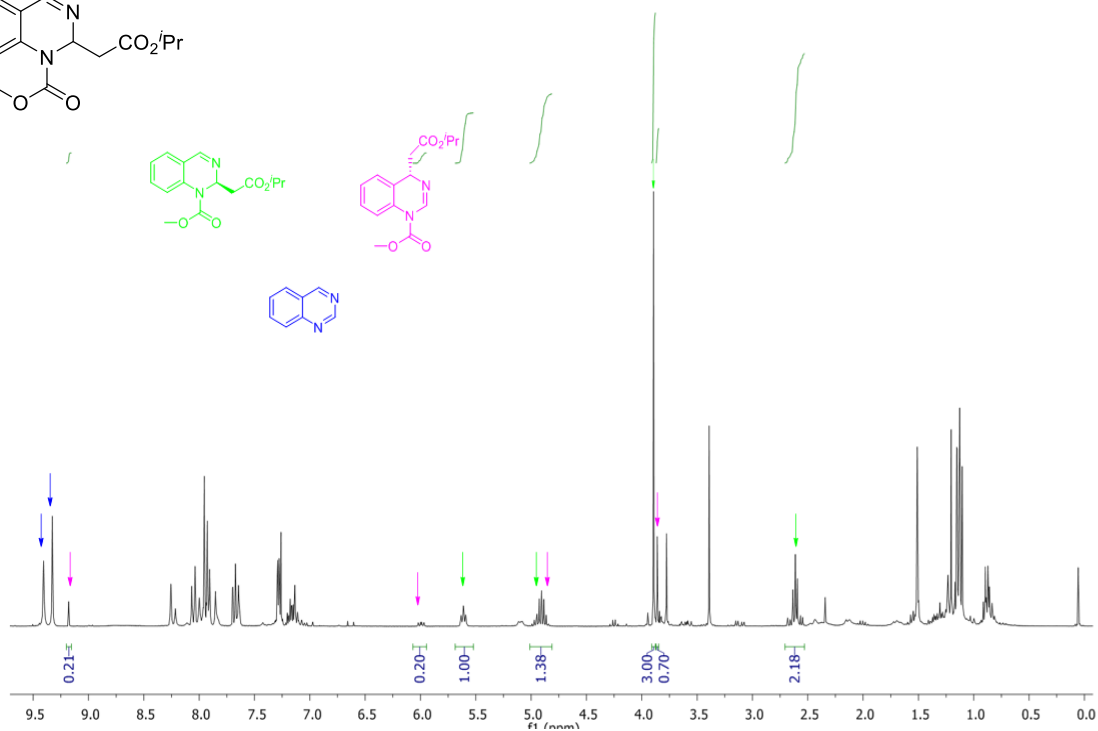
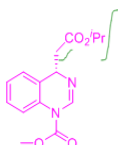
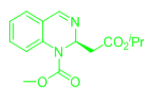
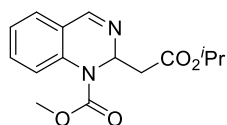
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	26.770	BB	0.6719	520.96533	11.42744	50.8193
2	38.644	BB	0.9053	504.16809	6.59945	49.1807

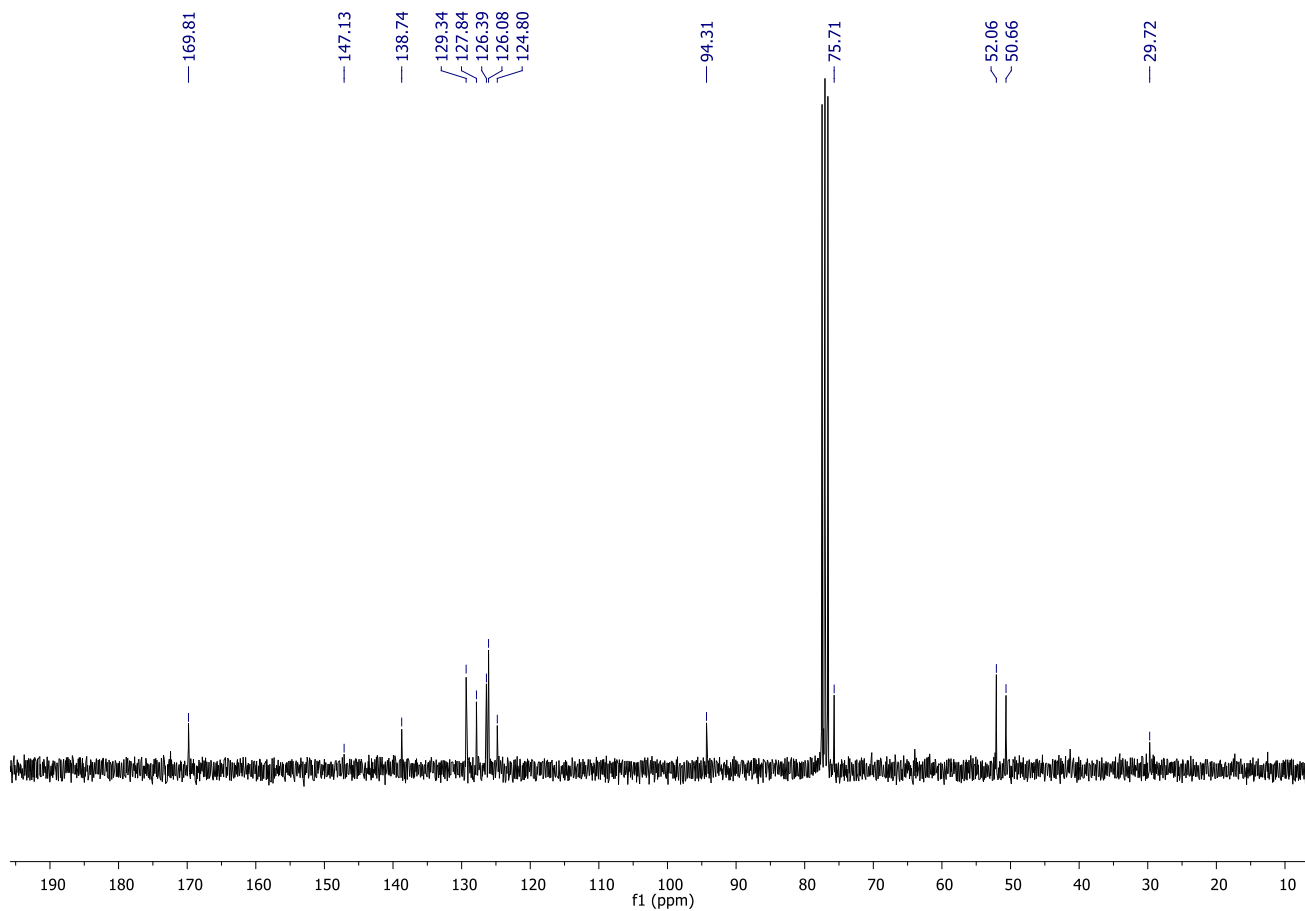
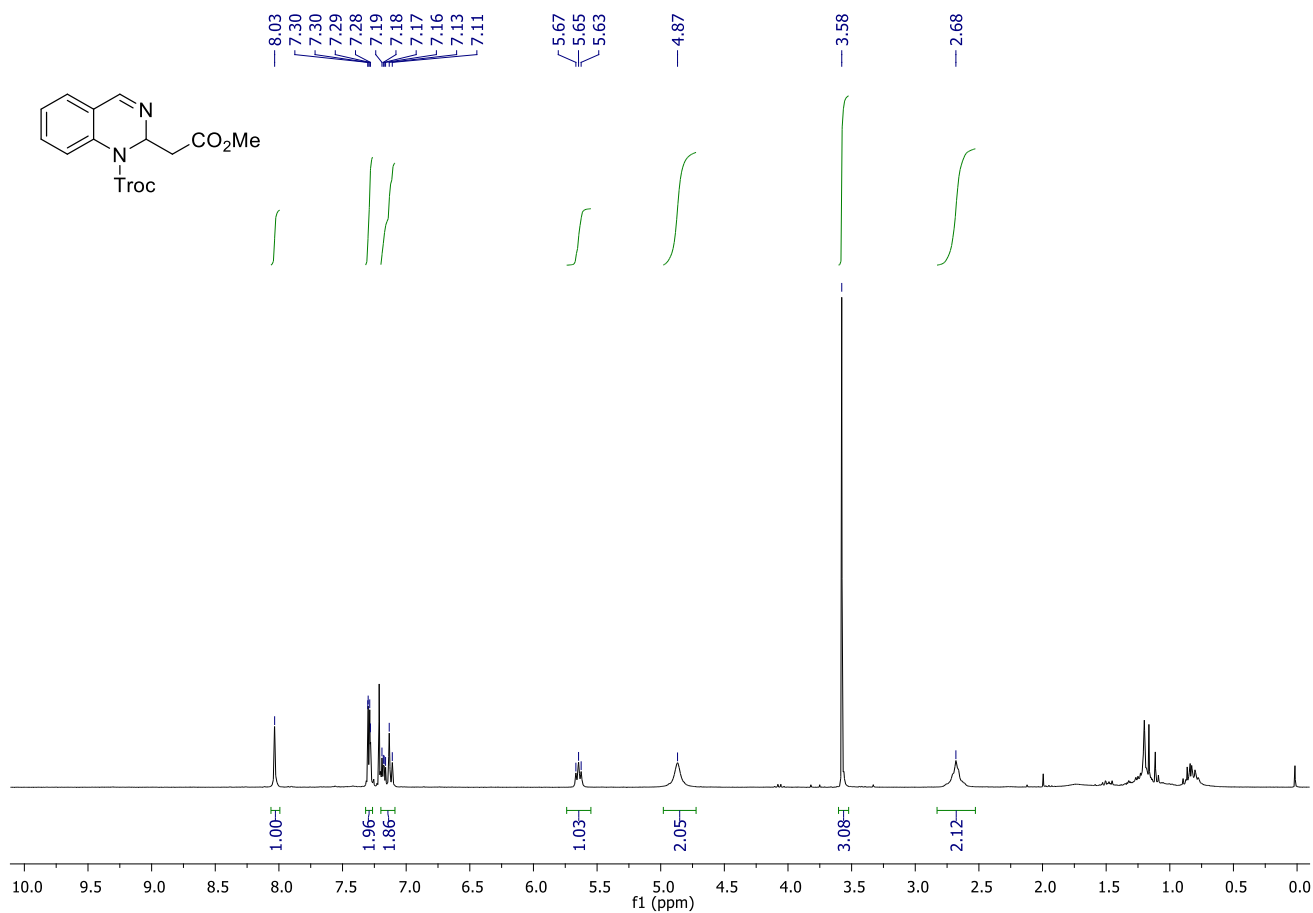
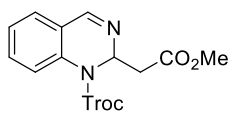
enantioselective:



Signal 6: DAD1 F, Sig=300,4 Ref=360,100

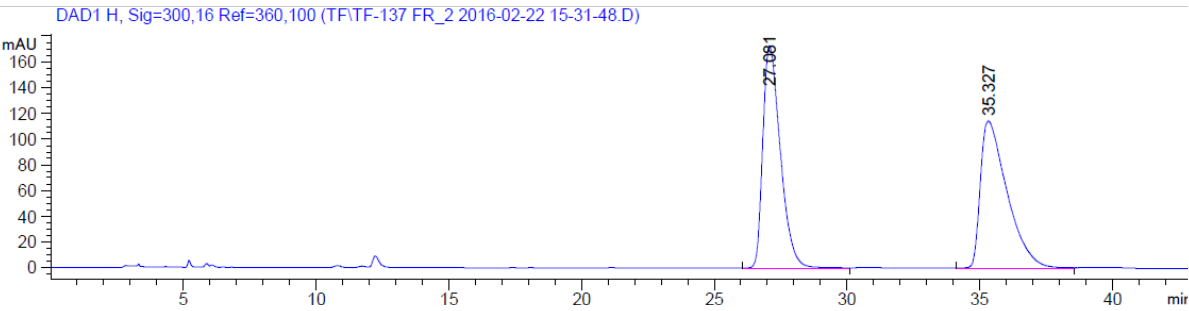
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	26.622	BB	0.6600	557.72150	12.36942	40.8825
2	38.210	BB	0.9195	806.48291	10.94640	59.1175





Chiral-phase HPLC: OJ-H; Hex/*i*PrOH 98:2 (λ = 300 nm)

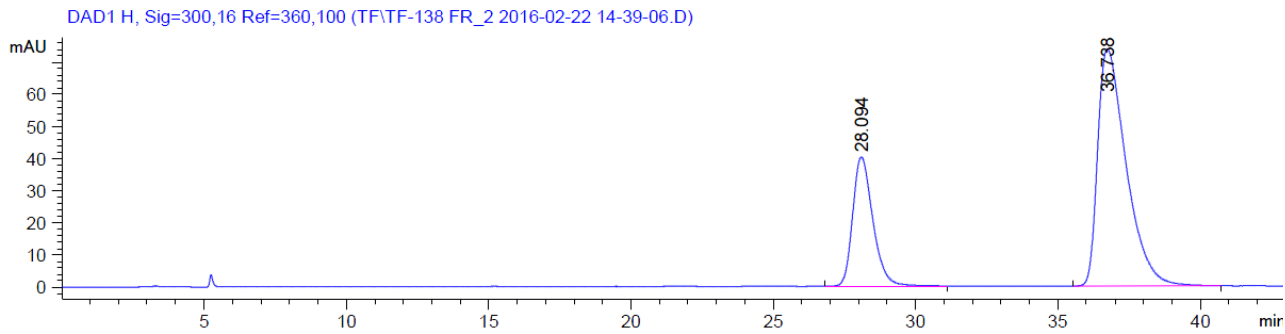
racemic:



Signal 8: DAD1 H, Sig=300,16 Ref=360,100

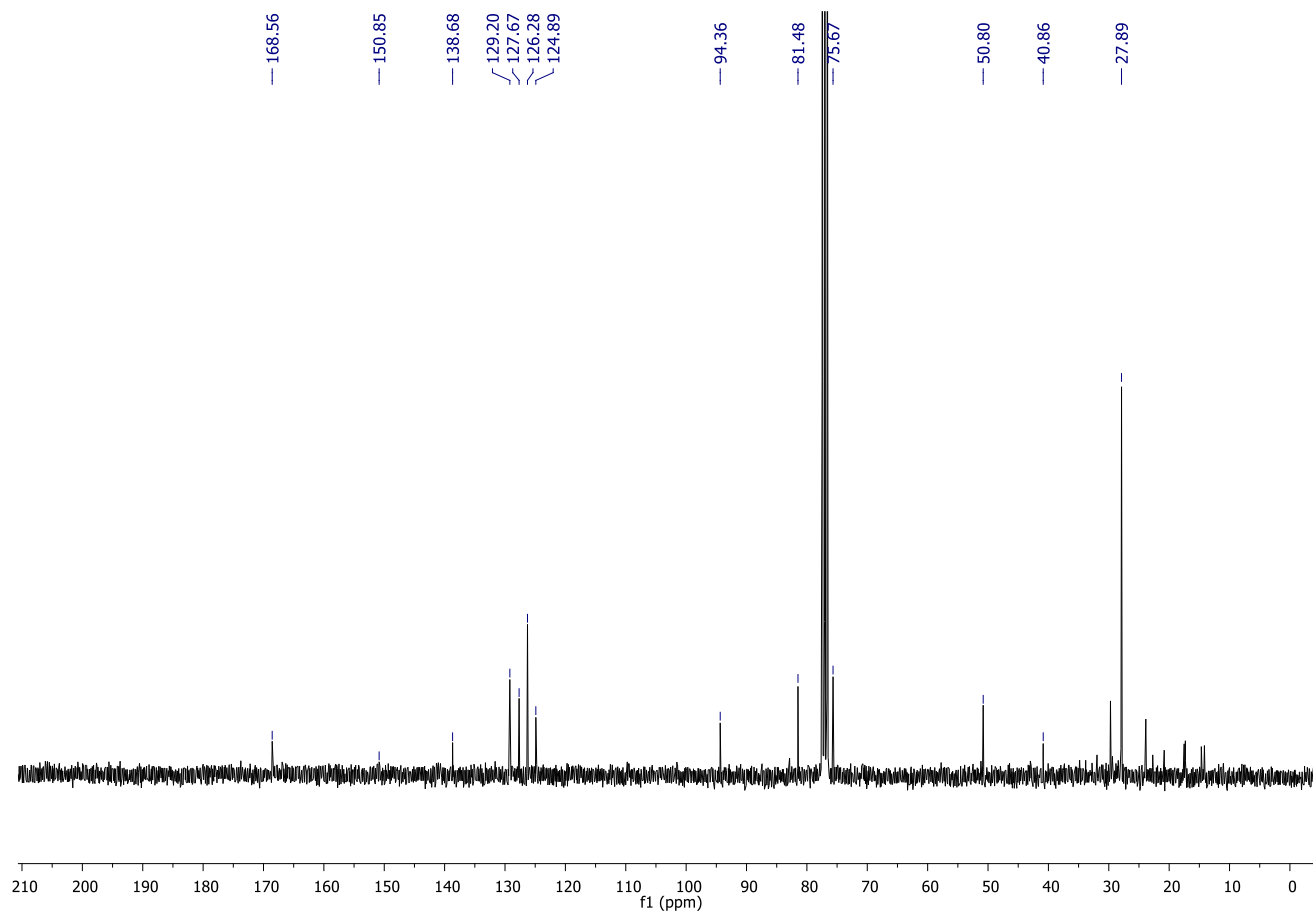
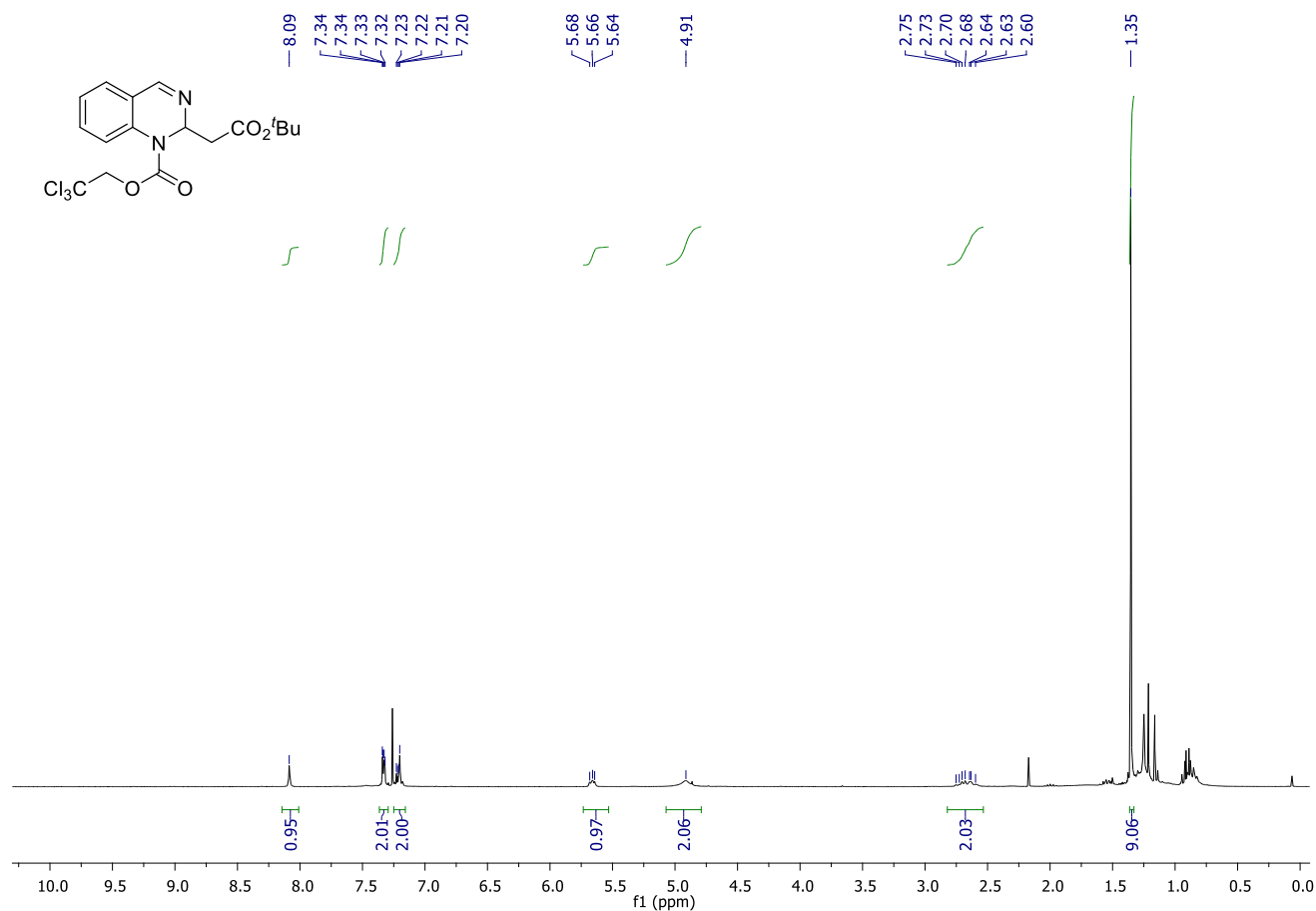
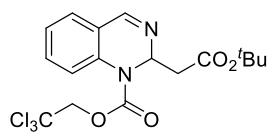
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	27.081	BB	0.7040	7906.59375	172.73003	49.8870
2	35.327	BB	1.0335	7942.42676	114.17950	50.1130

enantioselective:



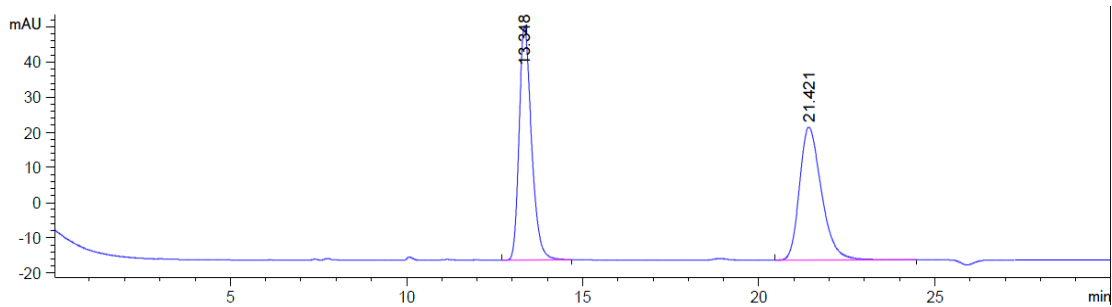
Signal 8: DAD1 H, Sig=300,16 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	28.094	BB	0.7552	1980.06250	40.16295	27.8852
2	36.738	BB	1.0503	5120.71436	73.72822	72.1148



Chiral-phase HPLC: OJ-H; Hex/*i*PrOH 98:2 ($\lambda = 300\text{ nm}$)

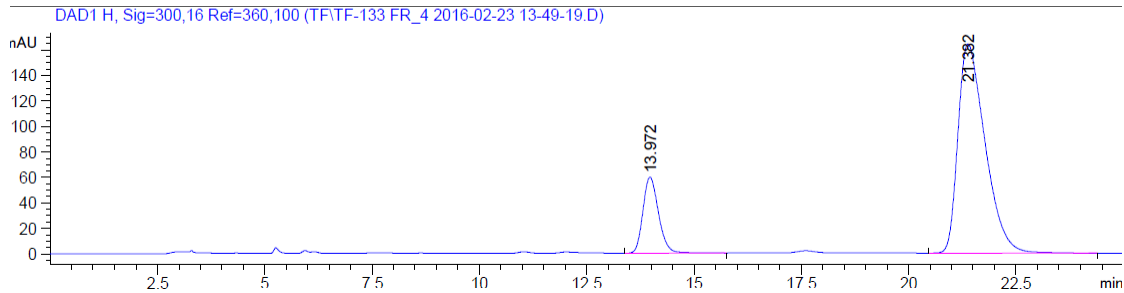
racemic:



Signal 5: DAD1 H, Sig=300,16 Ref=360,100

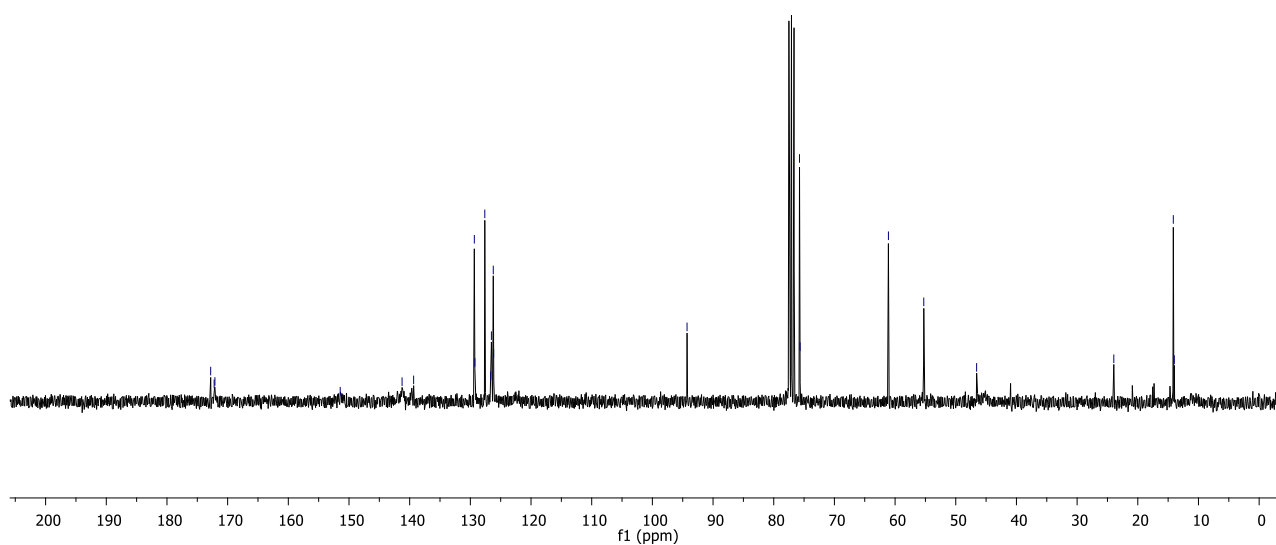
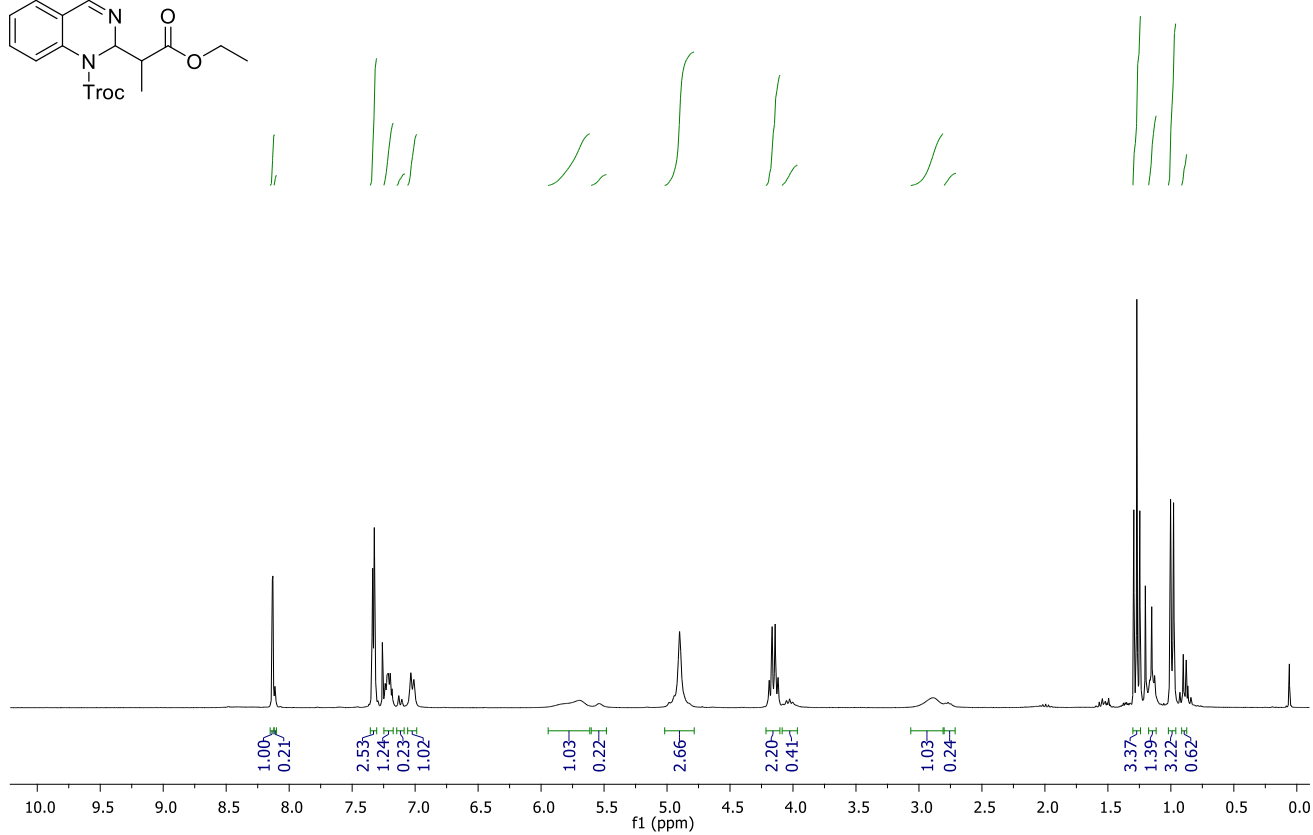
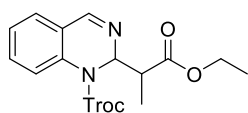
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	13.348	BB	0.3737	1628.41760	66.50849	49.8369
2	21.421	BB	0.6597	1639.07910	37.81224	50.1631

enantioselective:



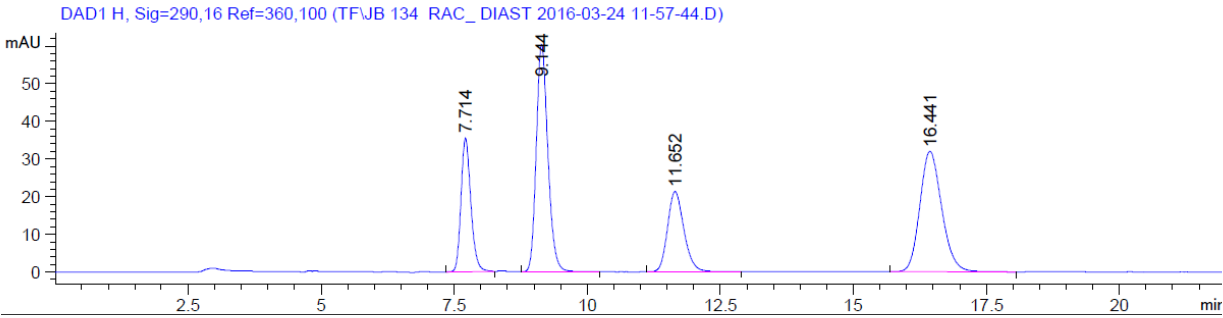
Signal 8: DAD1 H, Sig=300,16 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	13.972	BB	0.3902	1516.54871	59.72477	17.4110
2	21.382	BB	0.6759	7193.72461	163.94337	82.5890



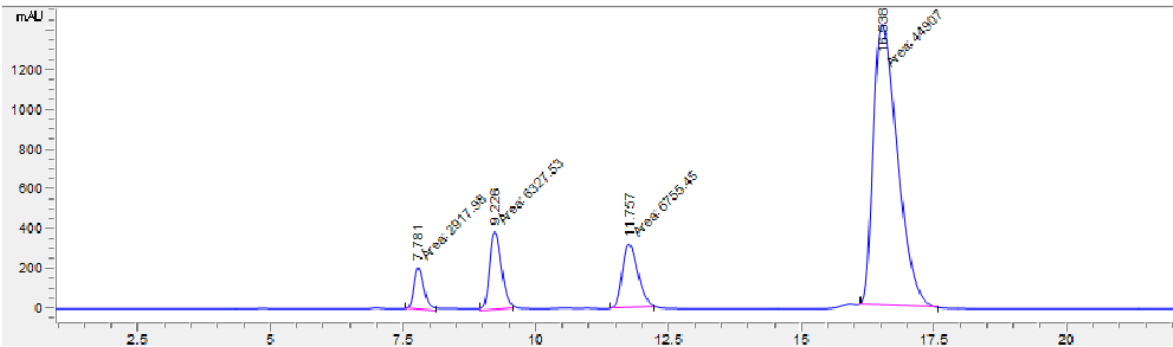
Chiral-phase HPLC: OD-H, Hex/ⁱPrOH 95:5 (λ =290 nm).

Racemic:

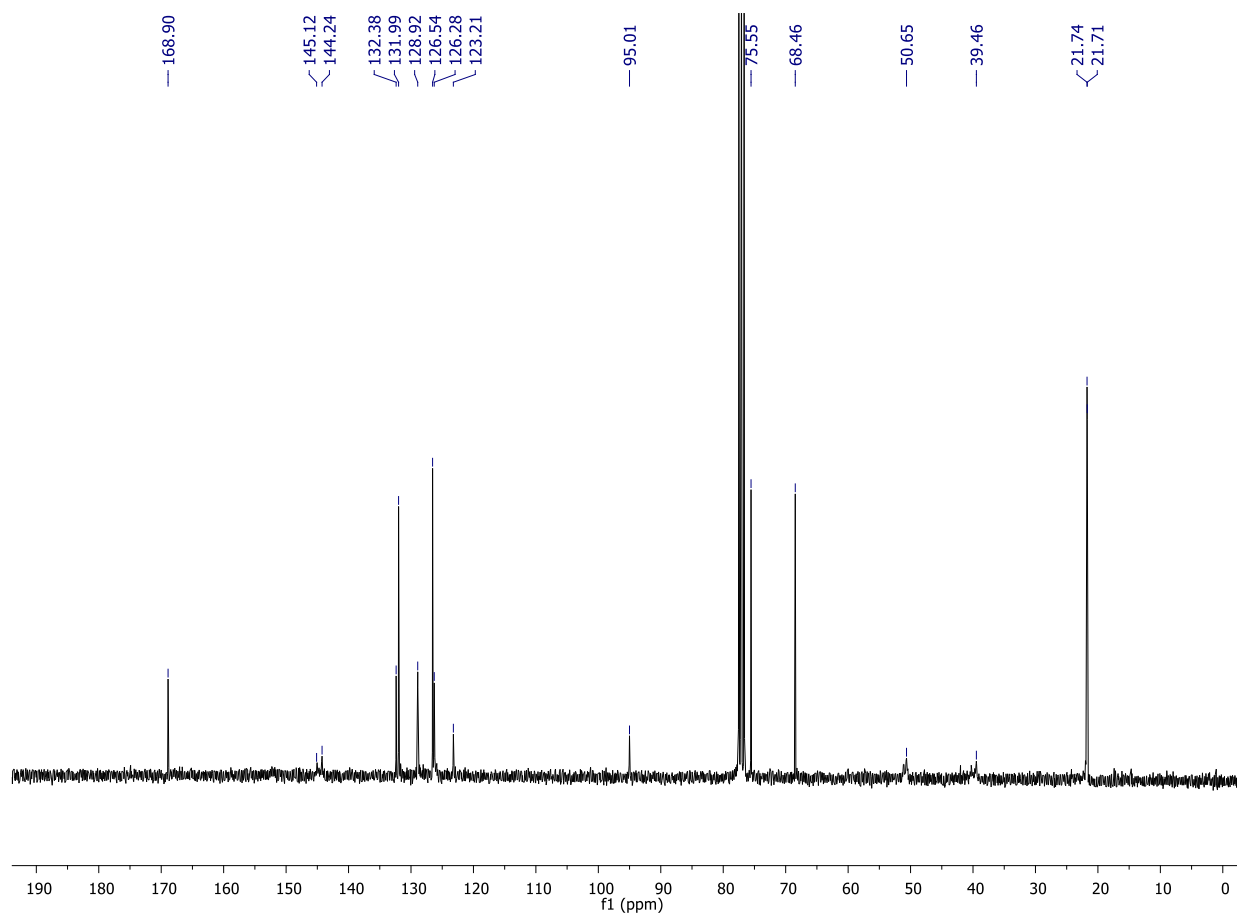
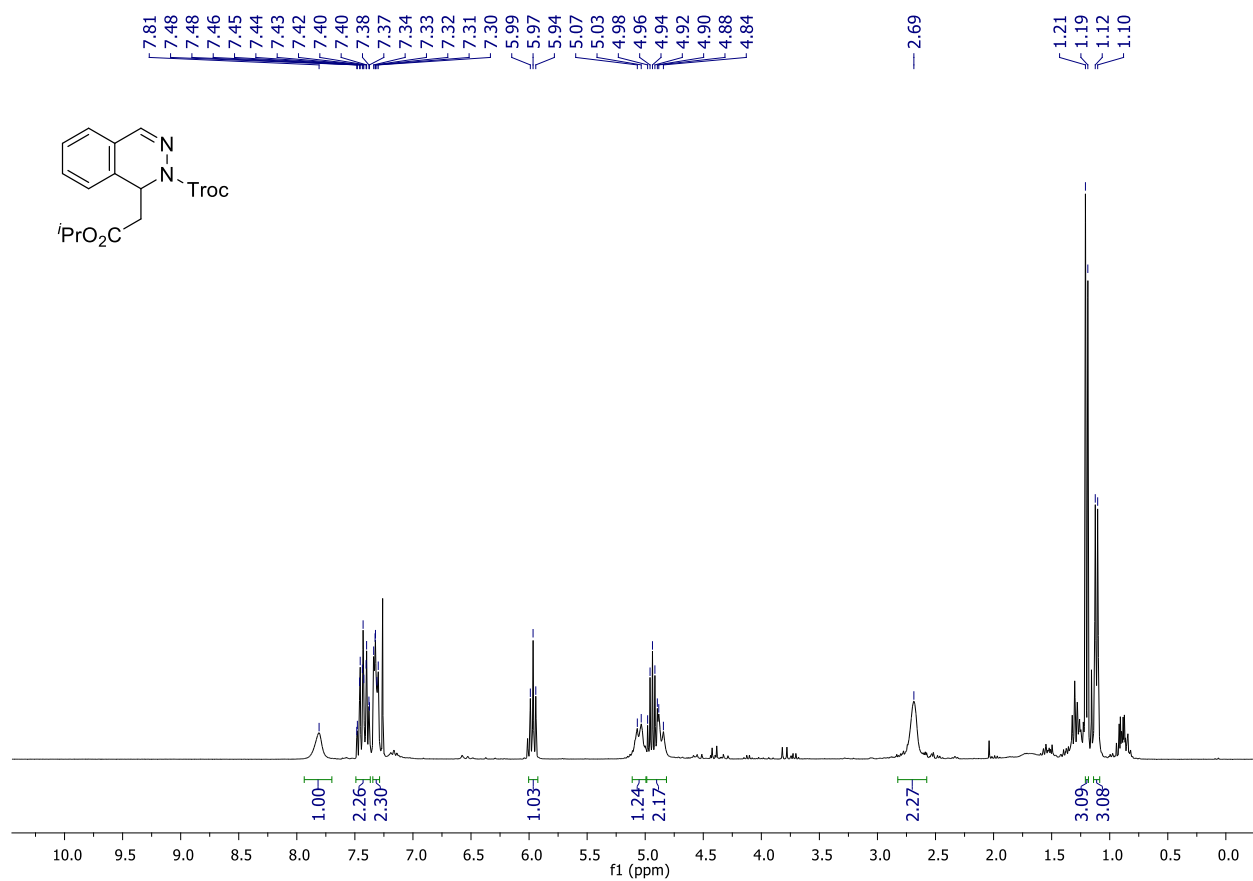


Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	7.714	BB	0.1952	453.09933	35.43096	16.5535
2	9.144	BB	0.2323	912.30469	60.35888	33.3301
3	11.652	BB	0.3269	454.82941	21.32121	16.6167
4	16.441	BB	0.4424	916.94806	31.99209	33.4997

Enantioselective:

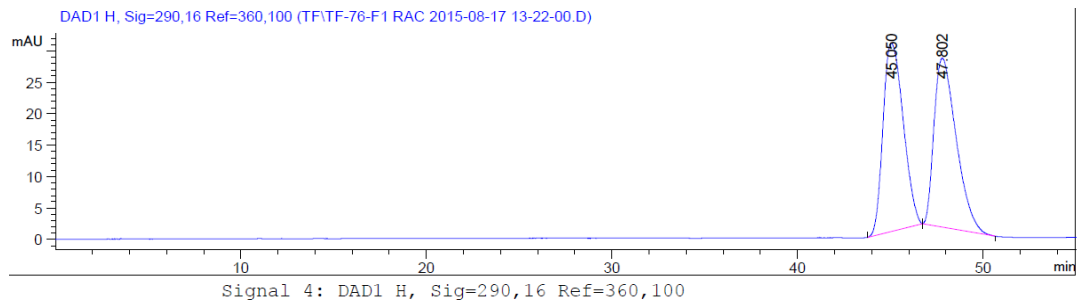


Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	7.781	MM	0.2265	2917.97778	214.72878	4.7908
2	9.226	MM	0.2673	6327.52686	394.53363	10.3887
3	11.757	MM	0.3473	6755.45068	324.19641	11.0912
4	16.538	MM	0.5282	4.49070e4	1416.84937	73.7293



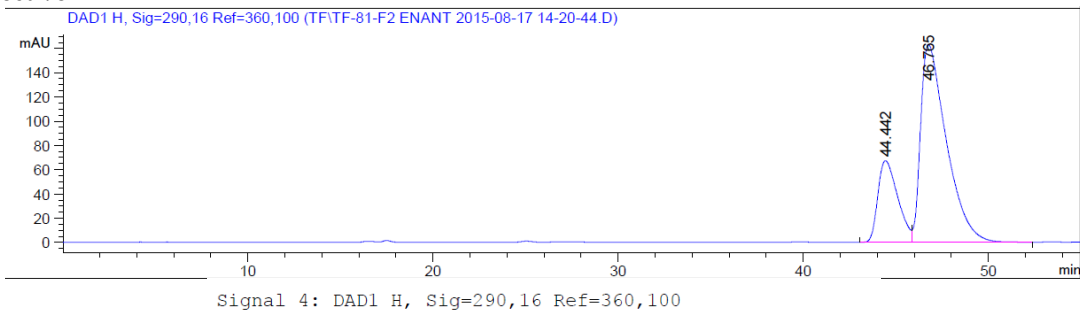
Chiral-phase HPLC: OD-H, Hex/ⁱPrOH 99:1 (λ=290 nm).

racemic:

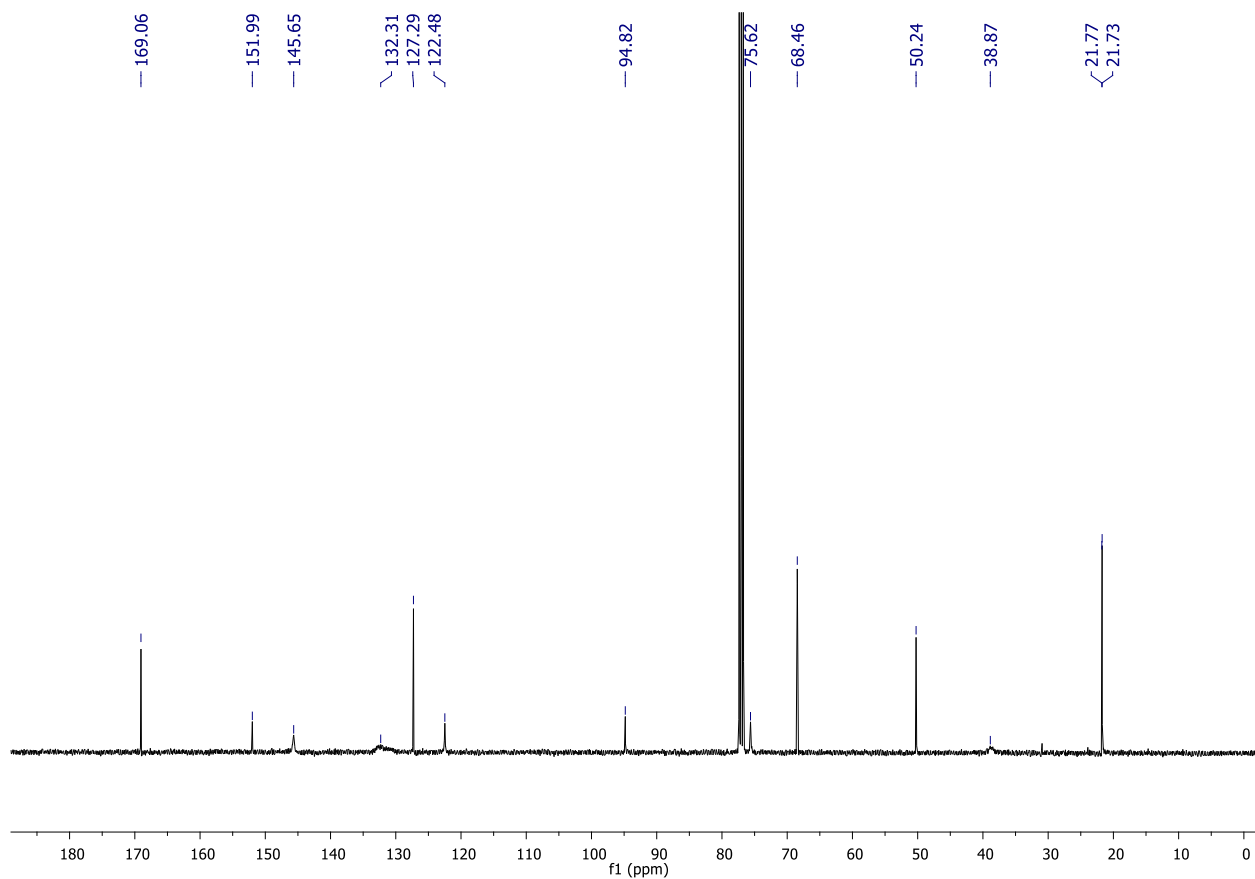
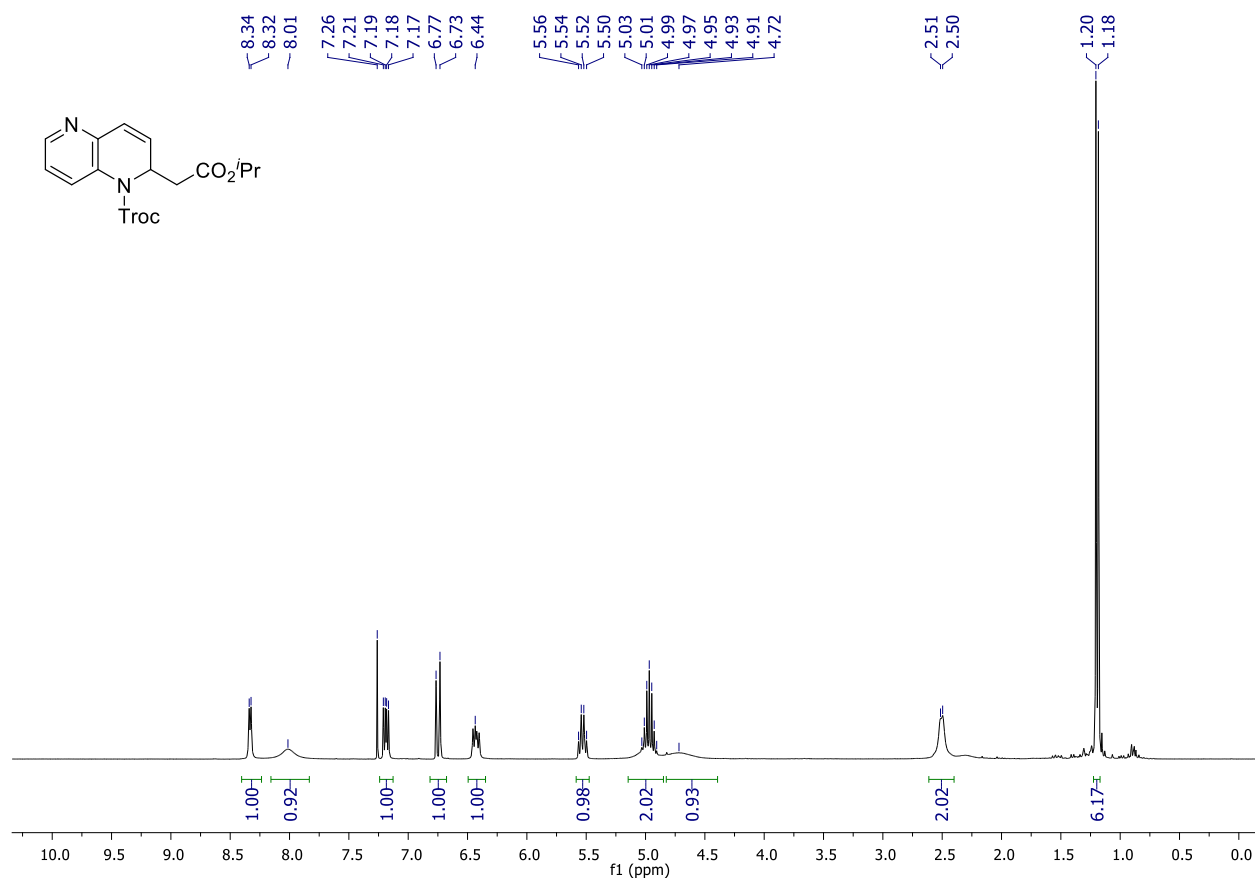


Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	45.050	BB	1.1647	2268.76050	30.05403	50.3000
2	47.802	BB	1.1918	2241.70093	26.91229	49.7000

enantioselective:

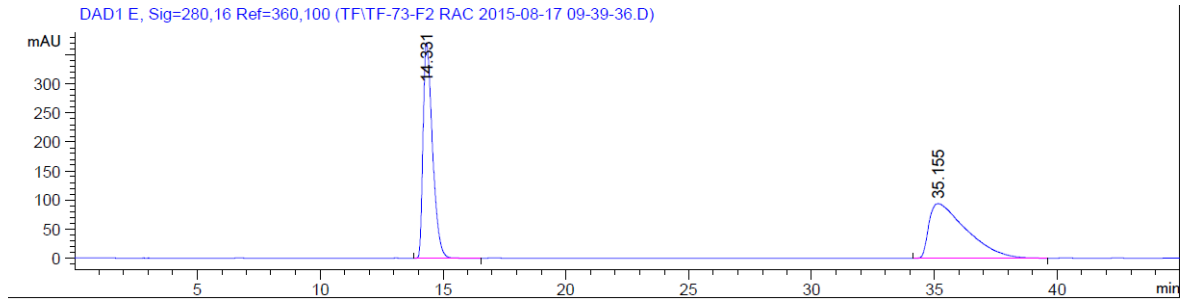


Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	44.442	BV	1.1303	5016.25391	67.39710	24.0948
2	46.765	VB	1.4188	1.58025e4	163.32829	75.9052



Chiral-phase HPLC: OD-H, Hex/ⁱPrOH 98:2 (λ = 280 nm).

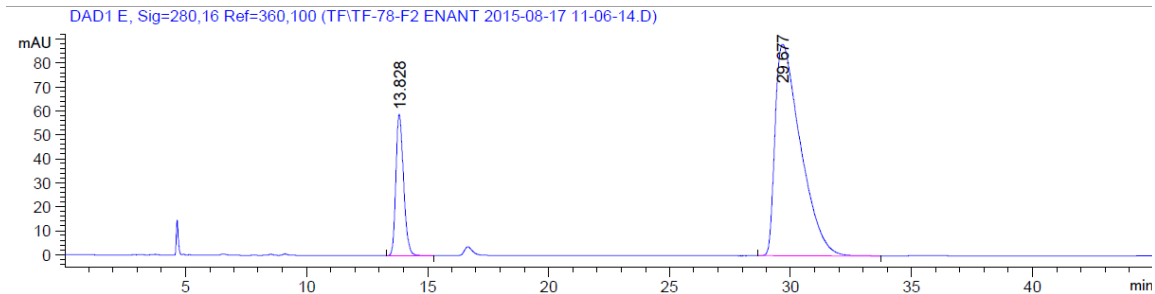
racemic:



Signal 4: DAD1 E, Sig=280,16 Ref=360,100

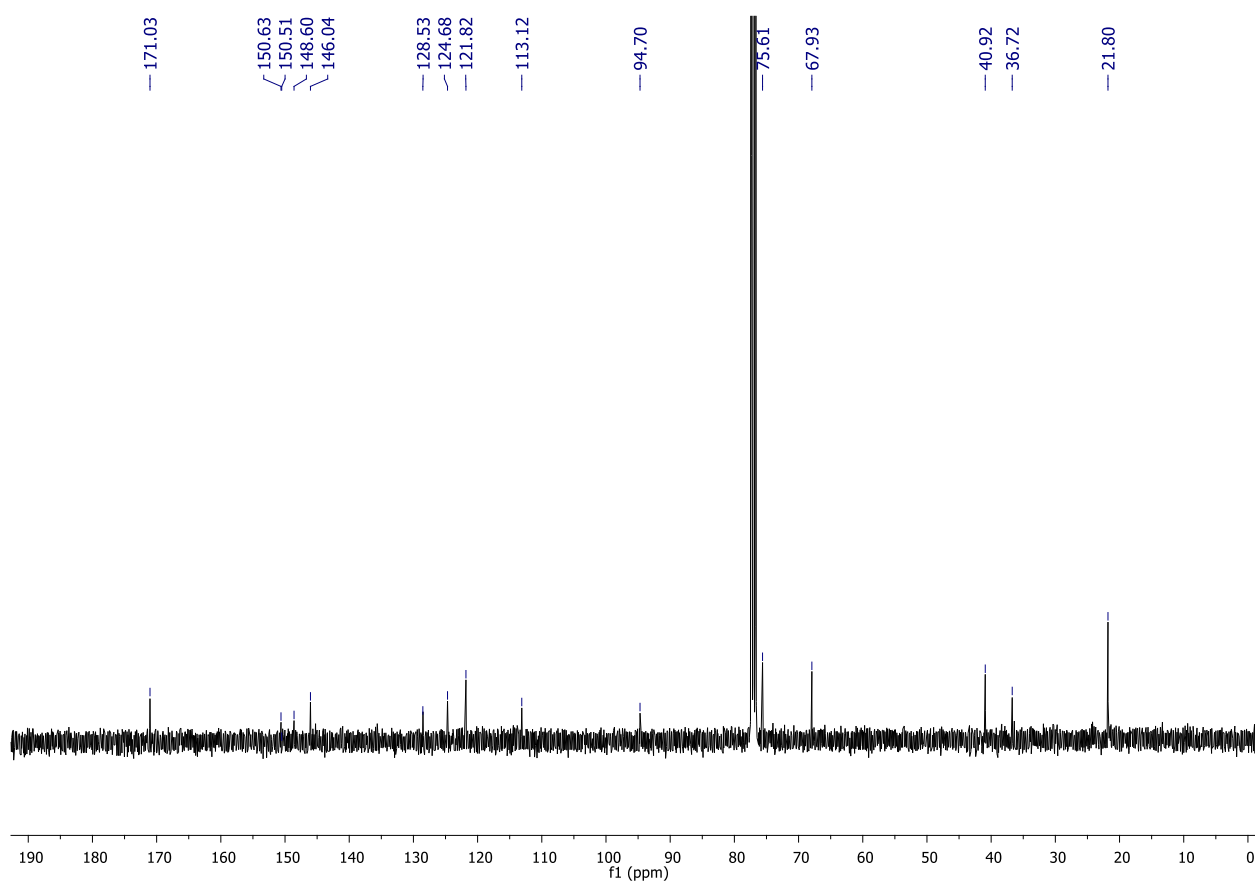
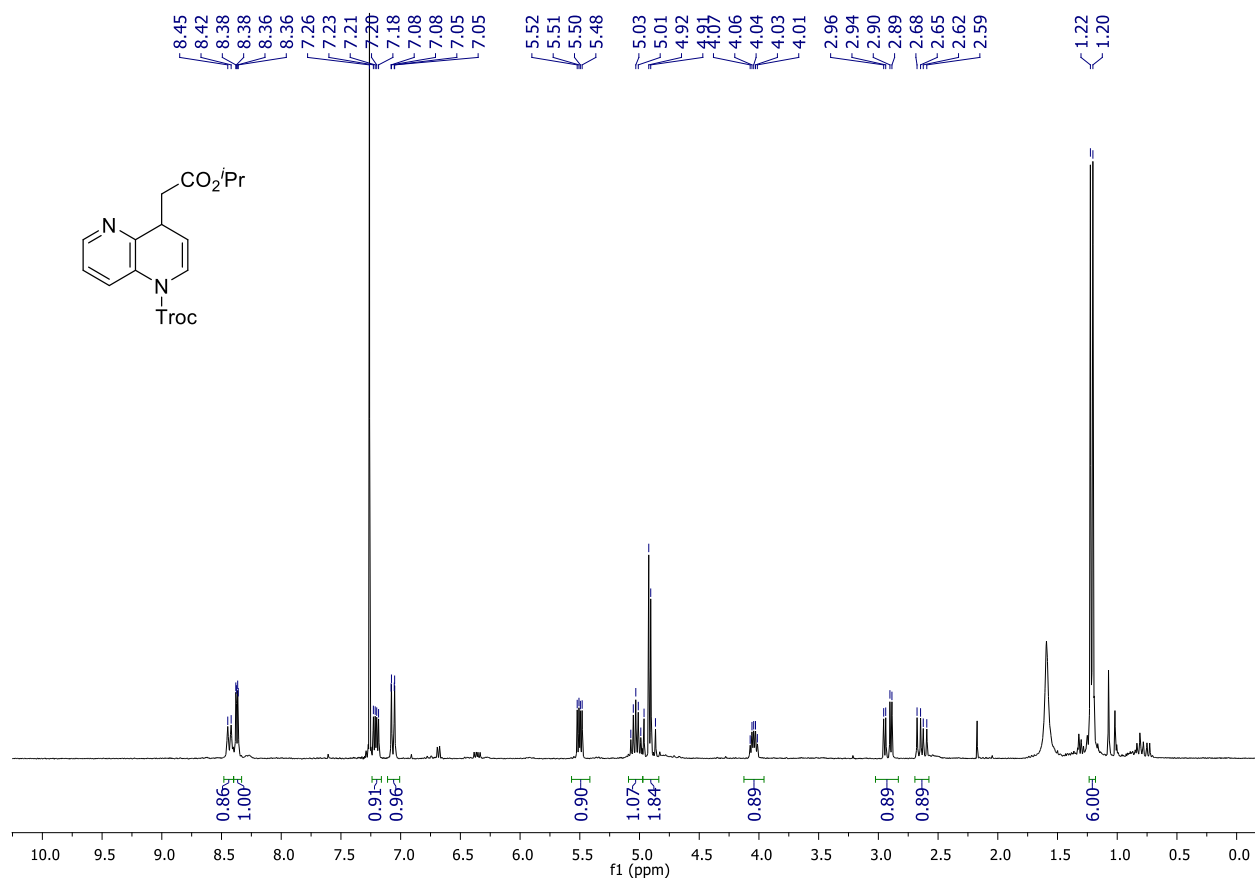
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	14.331	BB	0.4067	9892.53906	371.44724	49.8547
2	35.155	BB	1.5276	9950.18652	94.25668	50.1453

enantiomeric:



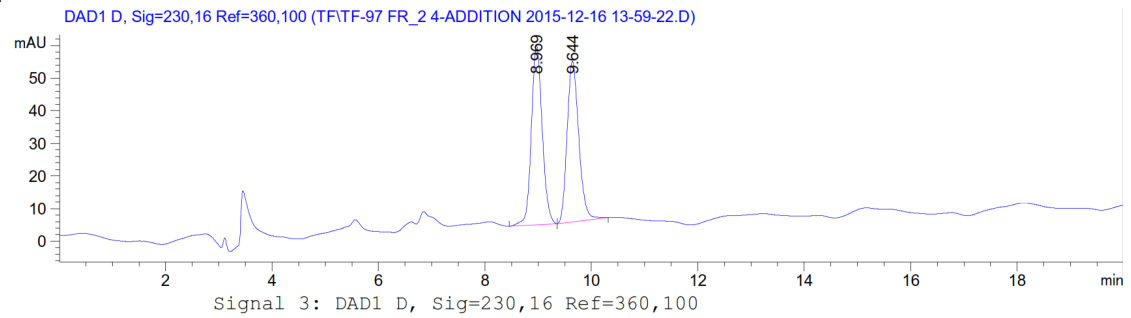
Signal 4: DAD1 E, Sig=280,16 Ref=360,100

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	13.828	BB	0.3395	1300.96191	58.94300	16.7861
2	29.677	BB	1.0867	6449.26025	88.23627	83.2139

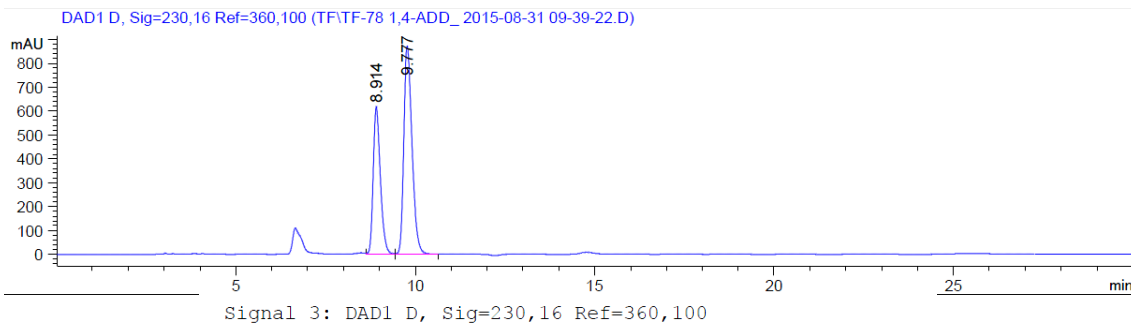


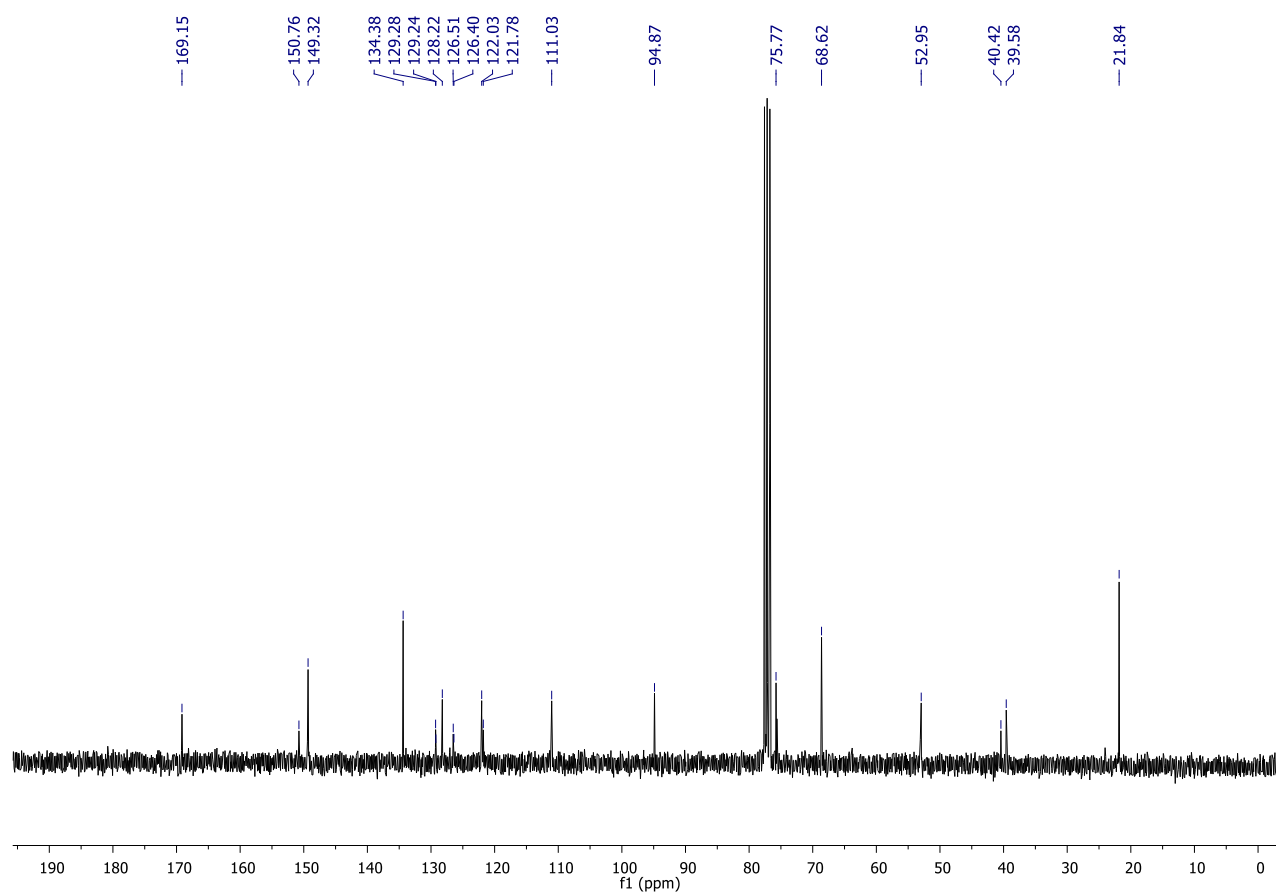
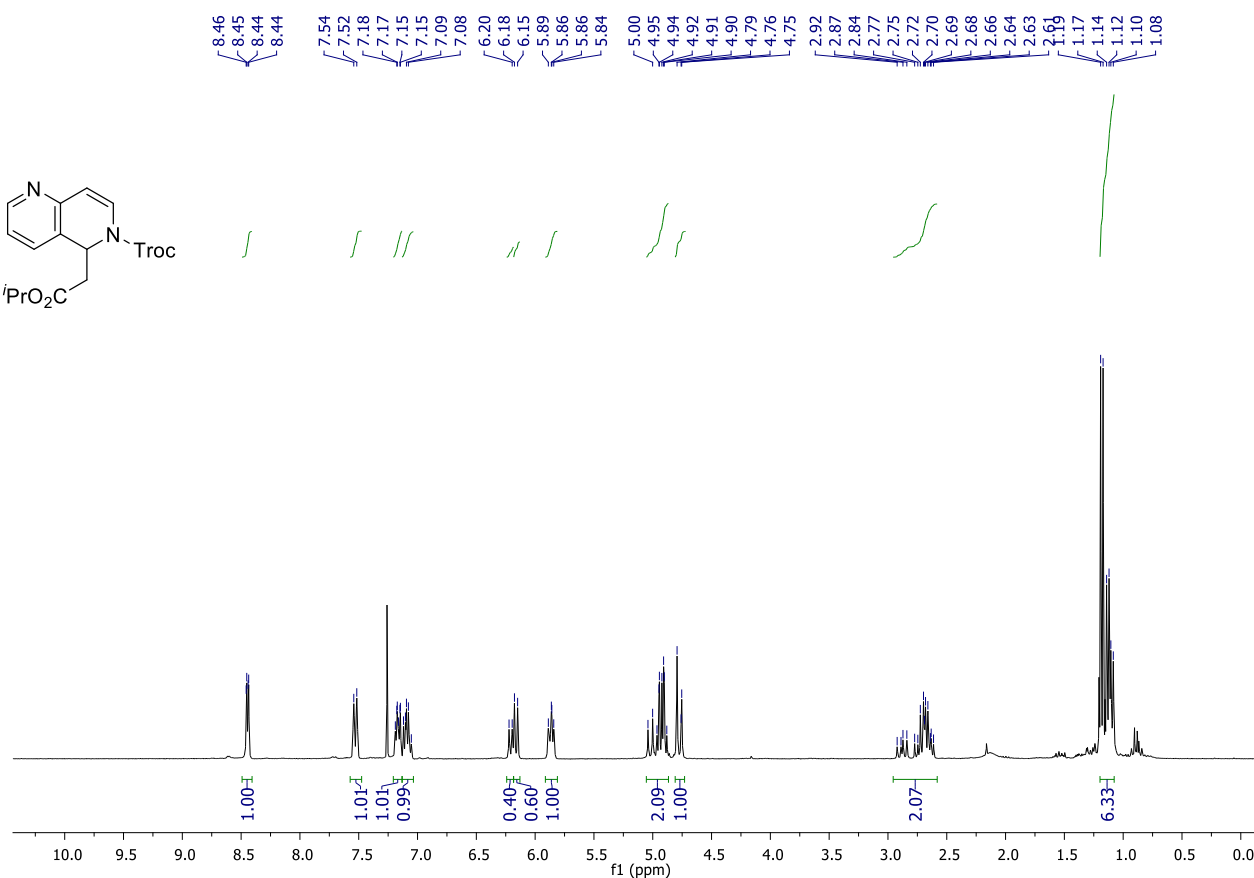
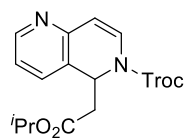
Chiral-phase HPLC: OD-H, Hex/ⁱPrOH 98:2 (λ = 230 nm).

racemic:



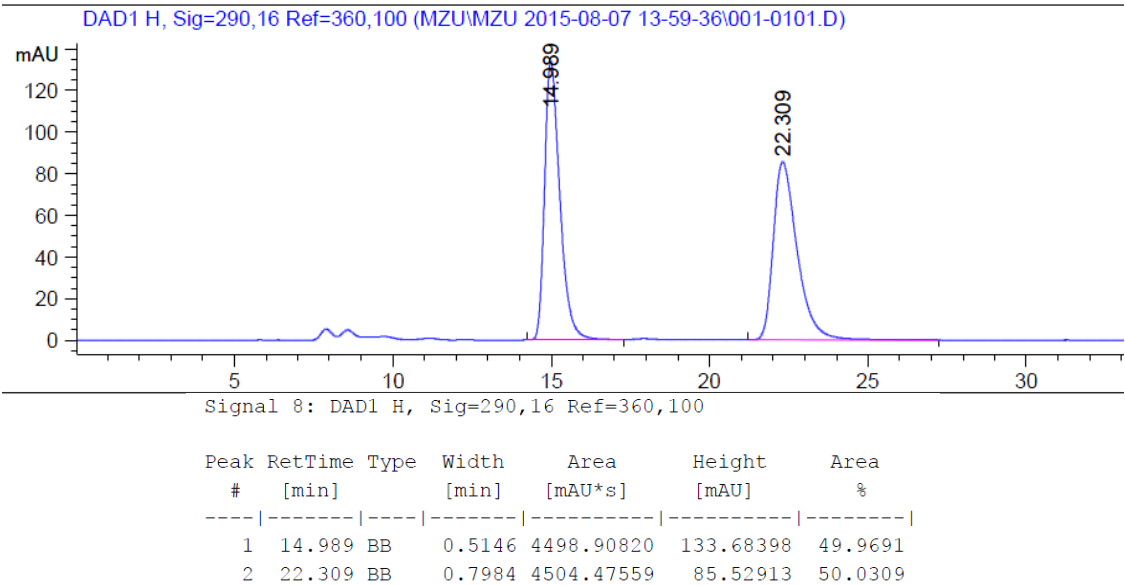
enantiomeric:



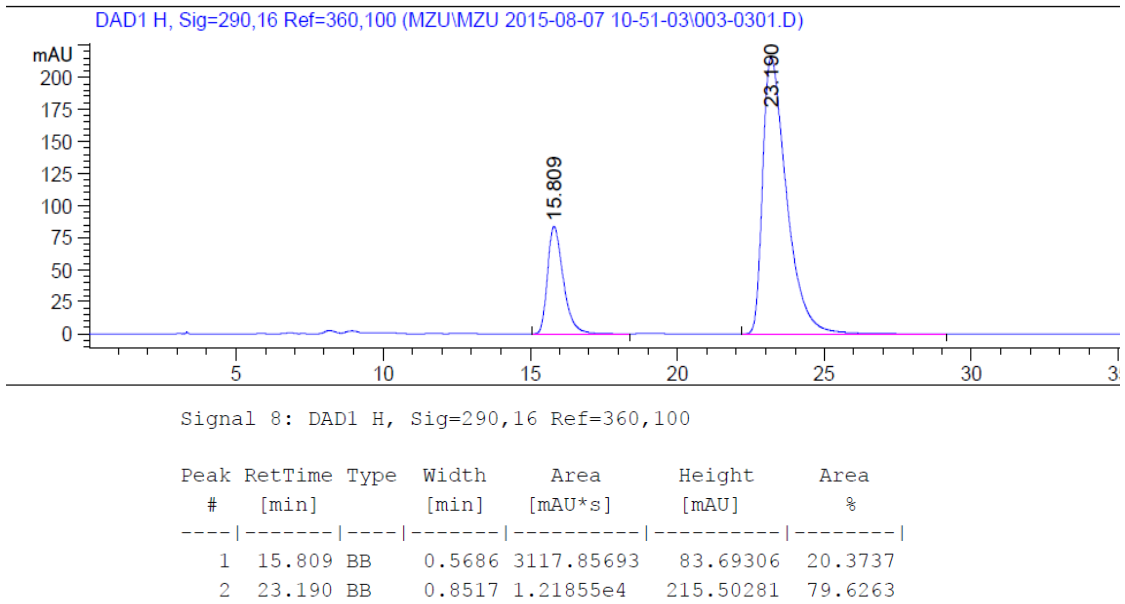


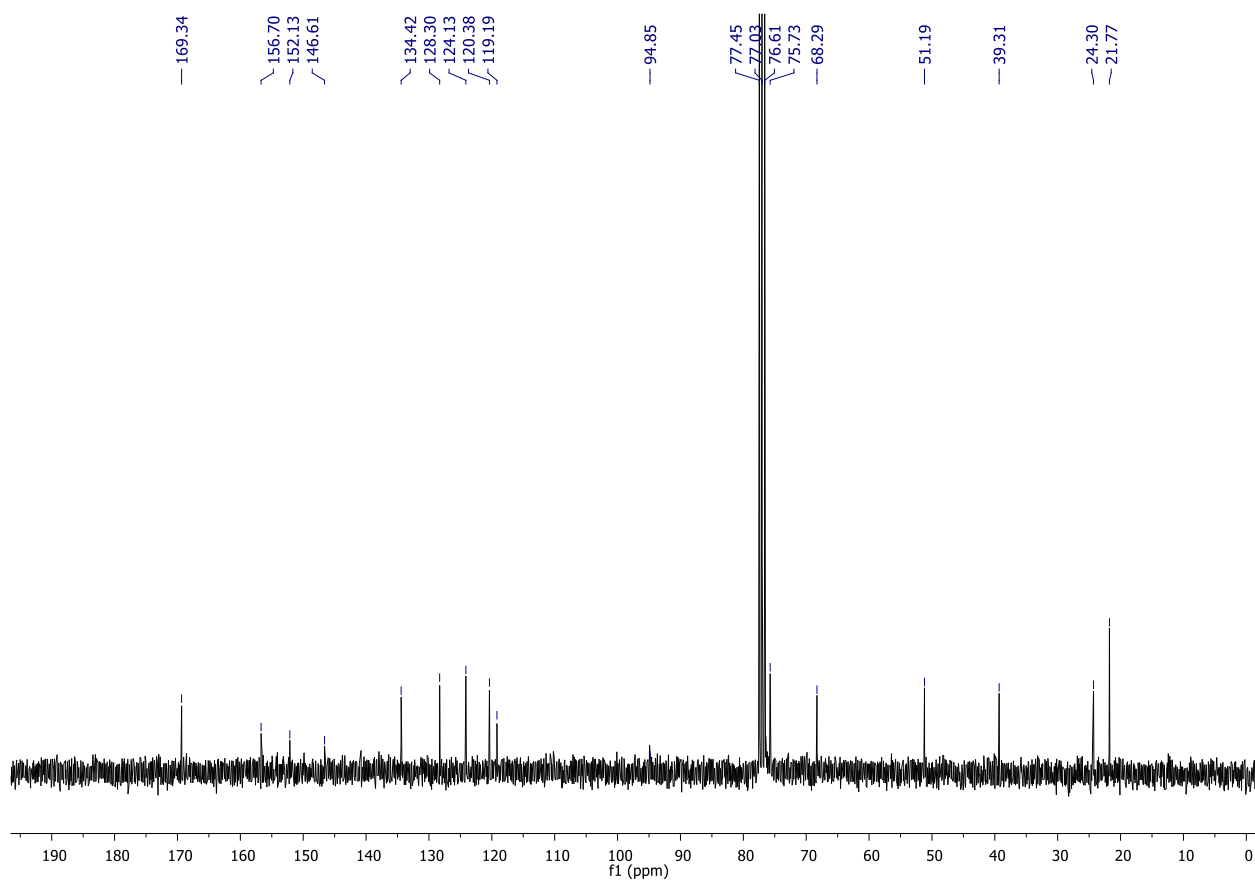
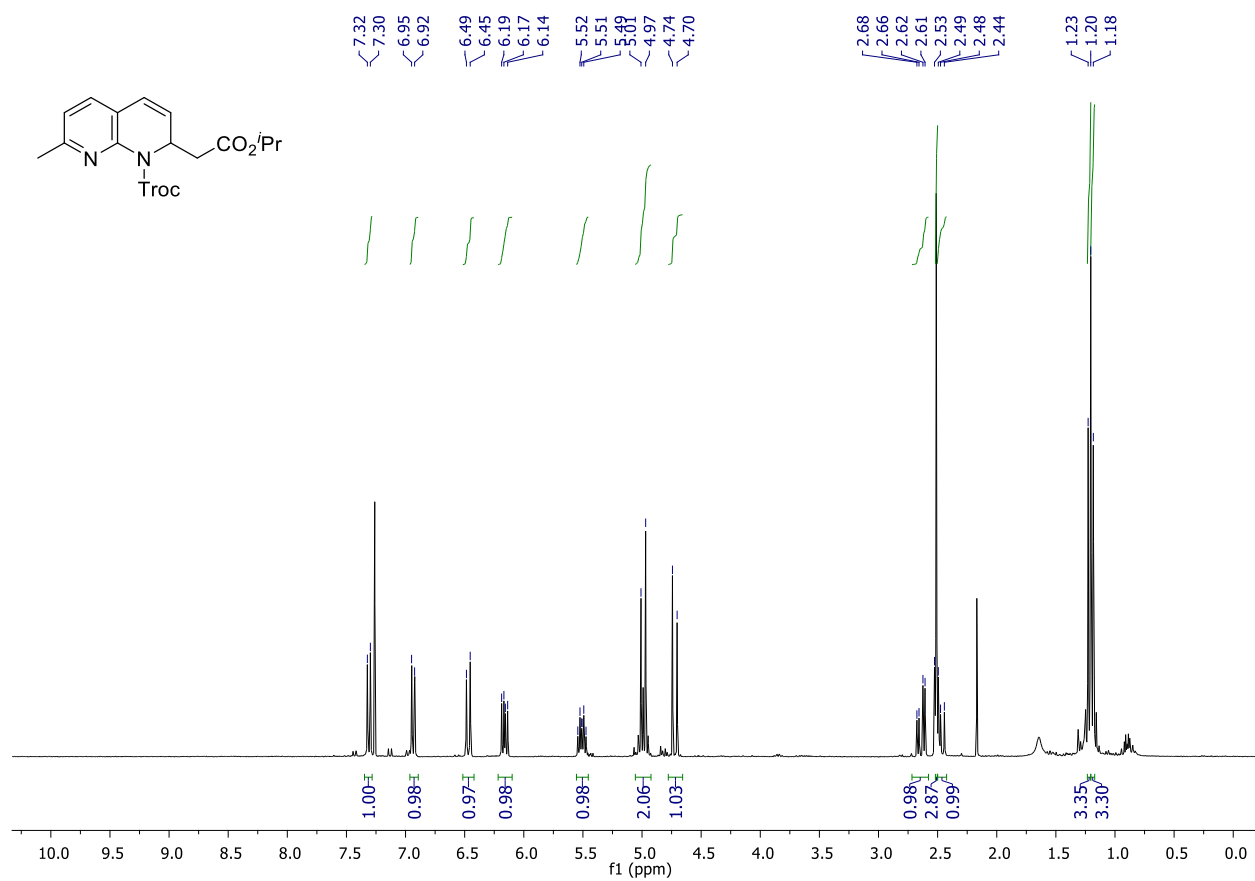
Chiral-phase HPLC: OJ-H; Hex/*i*PrOH 98:2 (λ = 290 nm).

racemic:



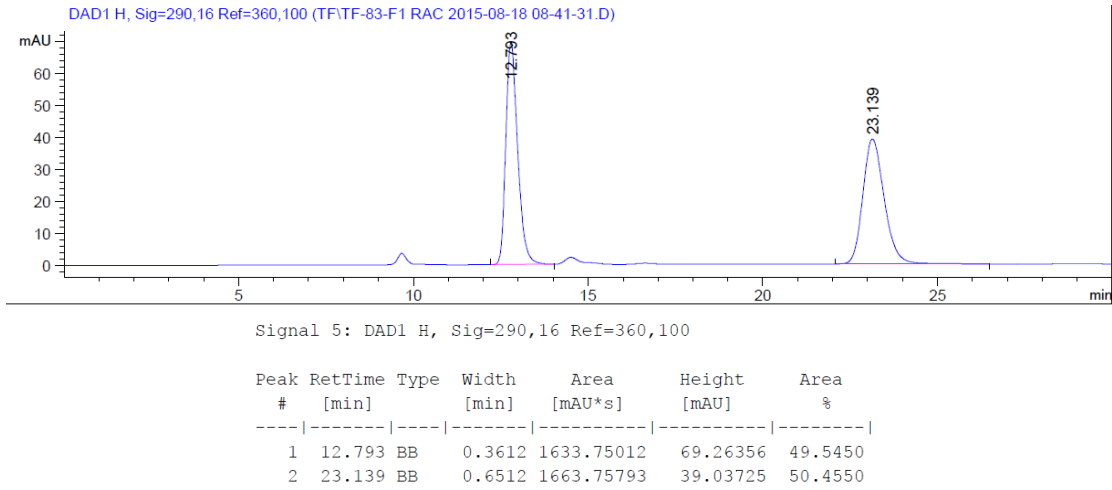
enantioselective:



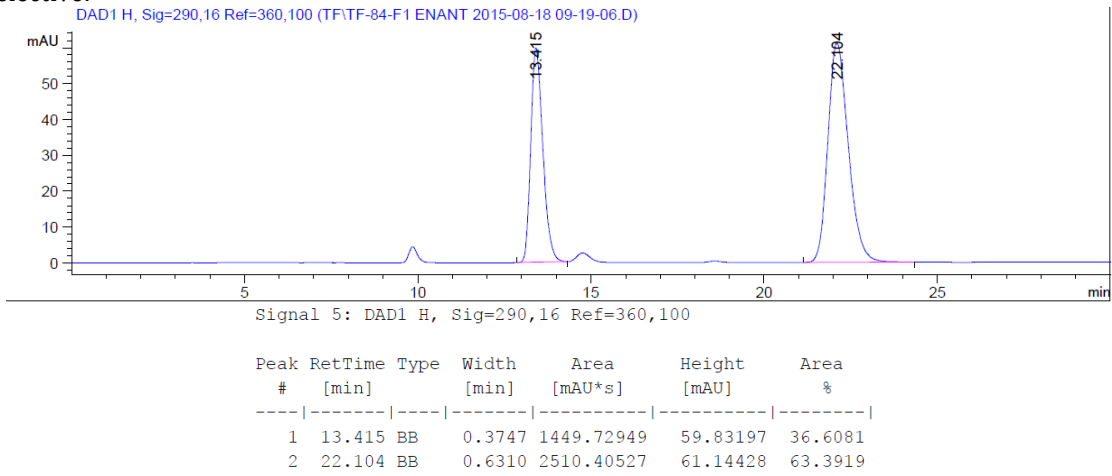


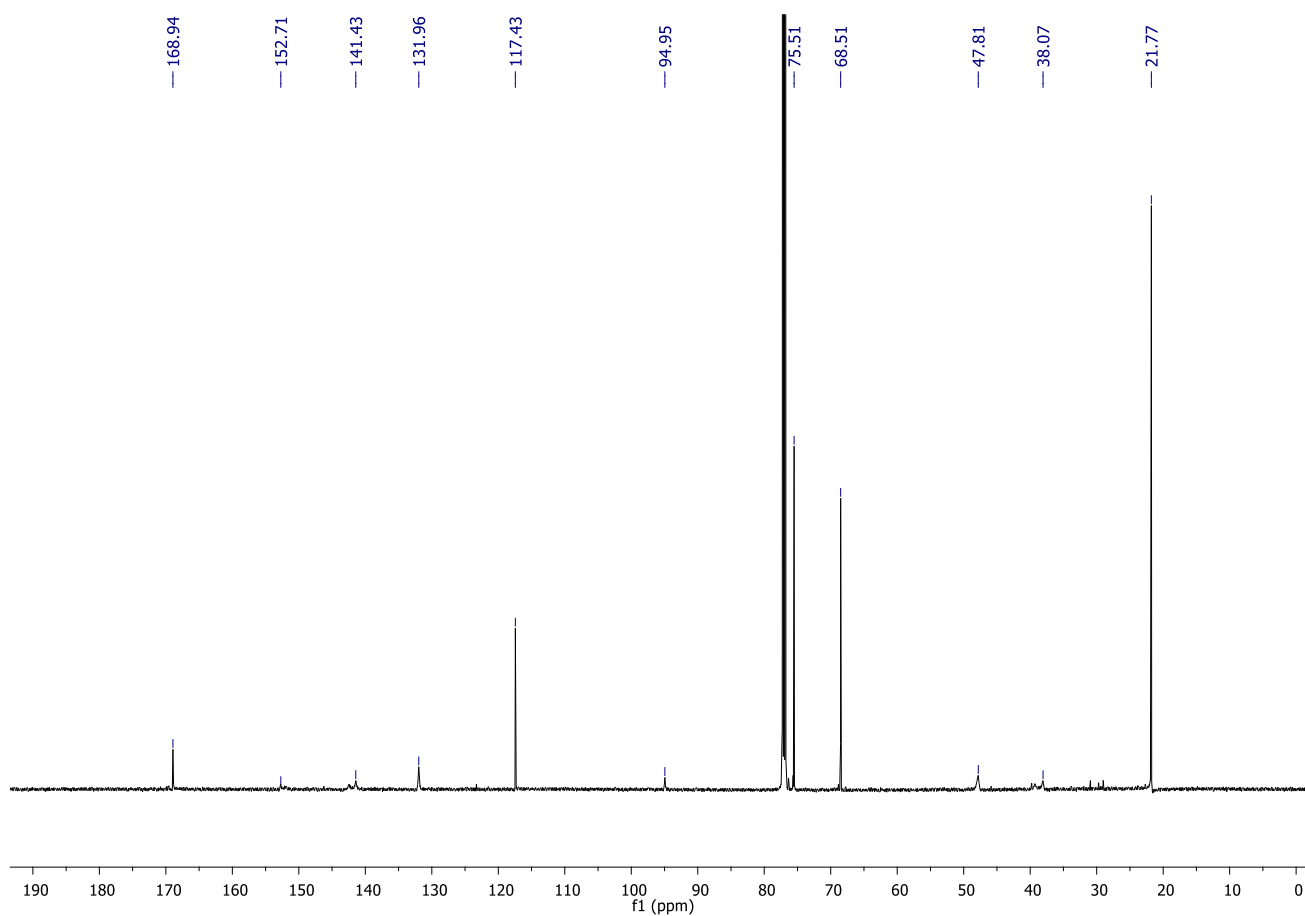
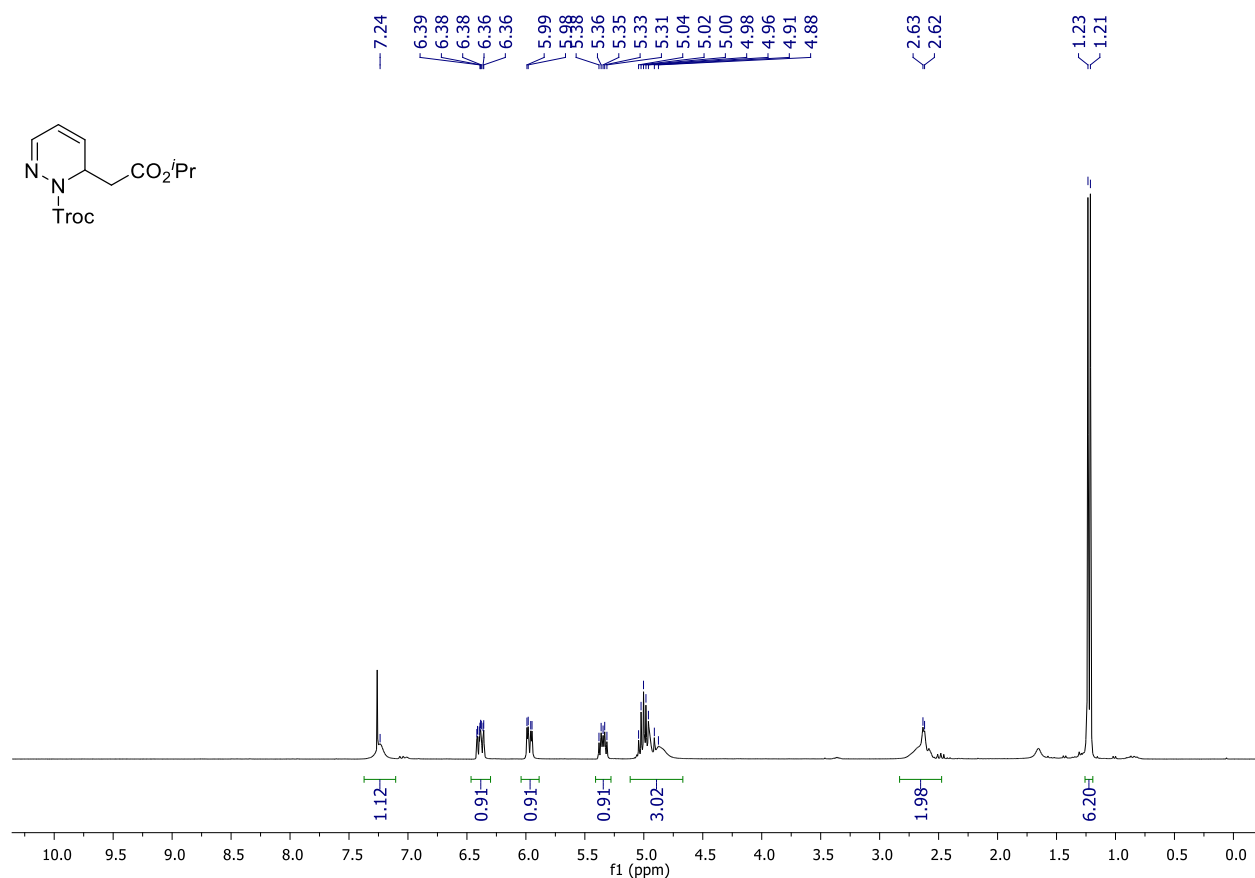
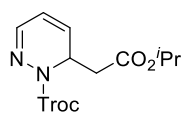
Chiral-phase HPLC: OD-H, Hex/ⁱPrOH 98:2 (λ =290 nm).

racemic:



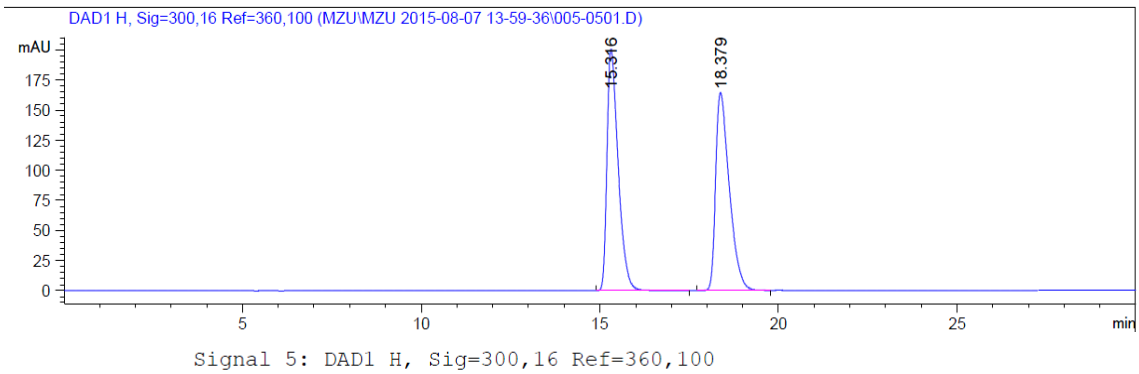
enantioselective:





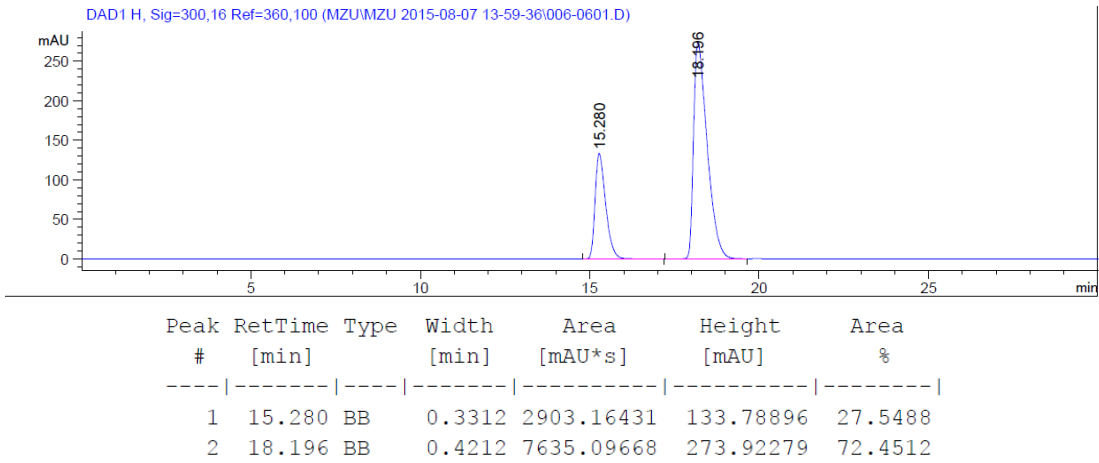
Chiral-phase HPLC: OJ-H; Hex/*i*PrOH 98:2 (λ = 300 nm).

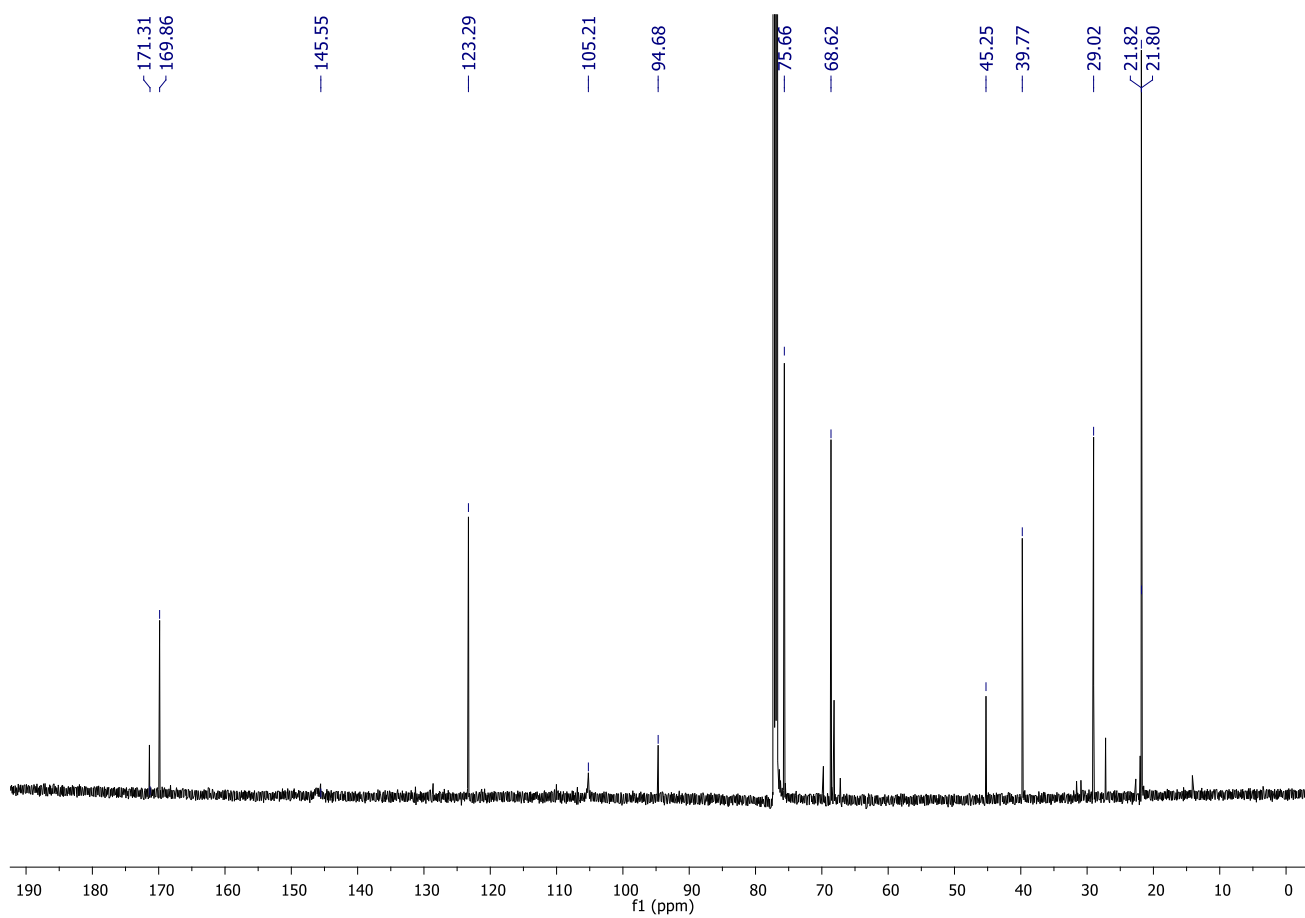
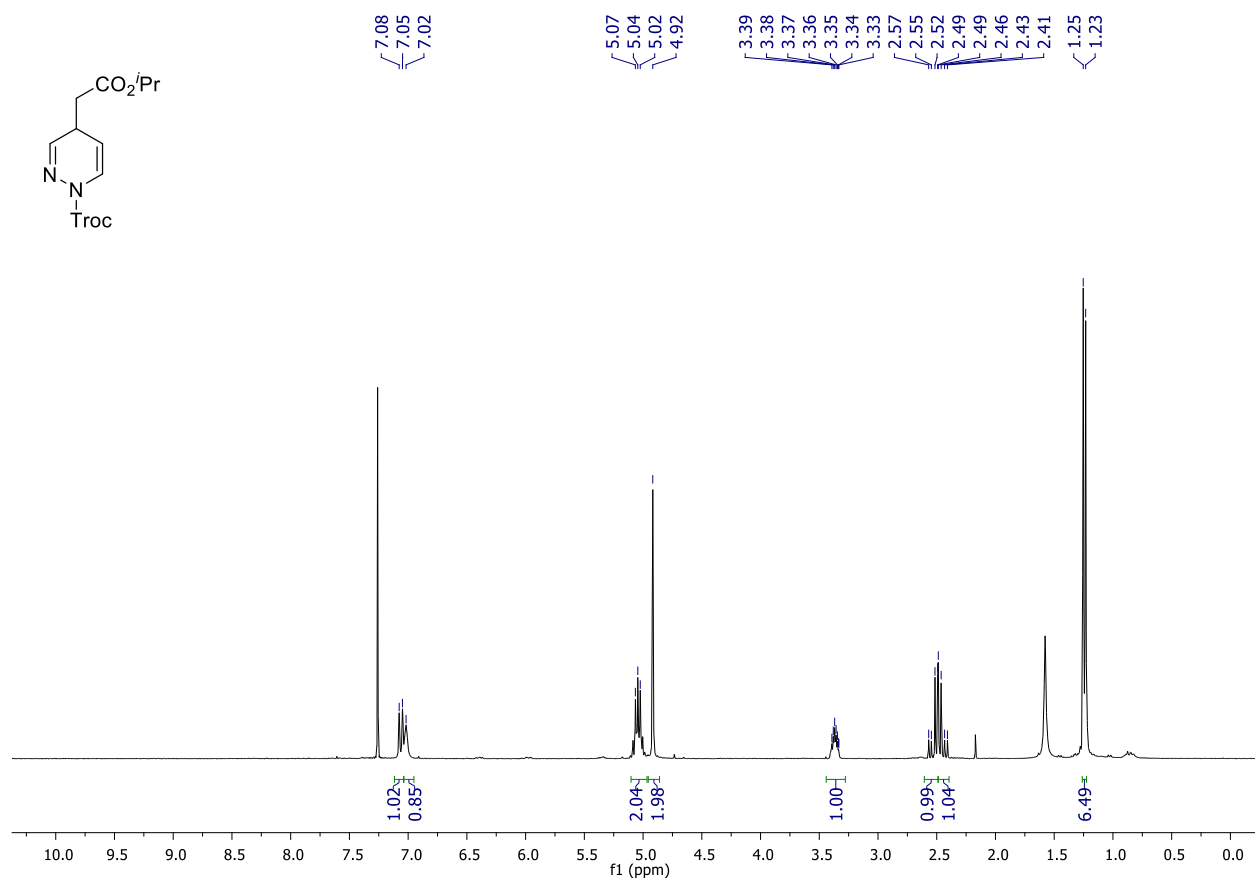
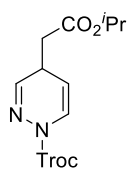
racemic:

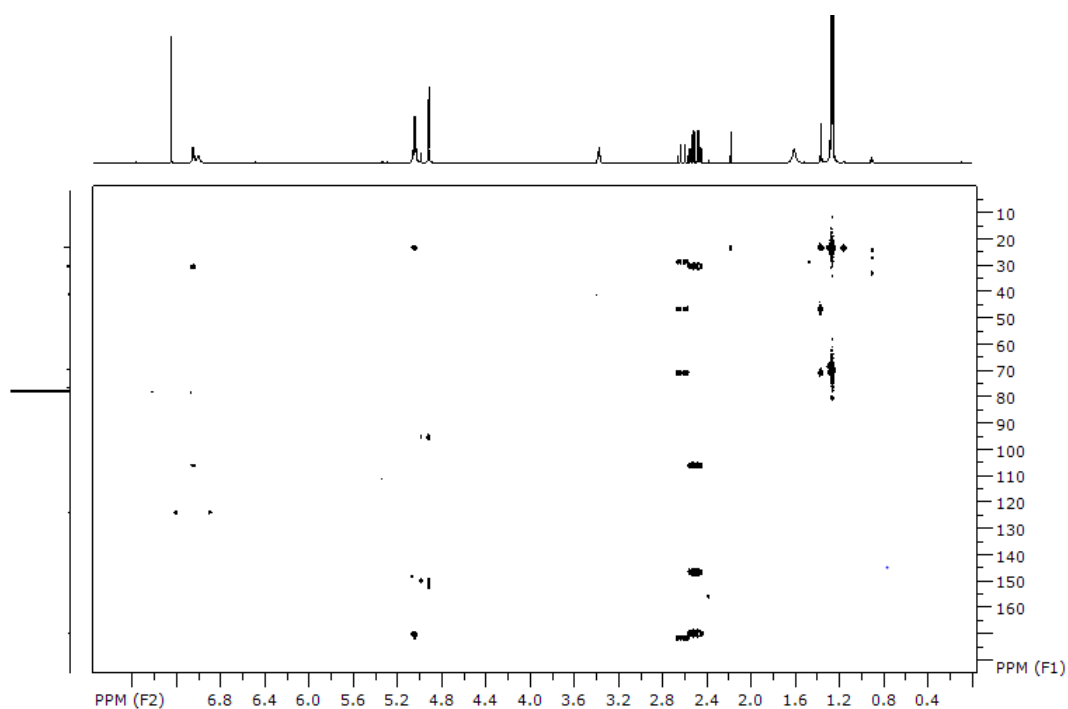


Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	15.316	BB	0.3298	4358.12500	200.29671	49.9665
2	18.379	BB	0.4019	4363.96191	164.29149	50.0335

enantioselective:

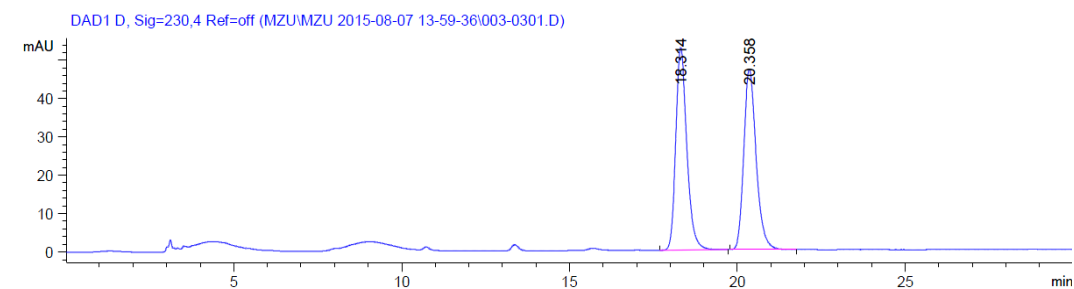






Chiral-phase HPLC: OJ-H; Hex/*i*PrOH 98:2 ($\lambda = 230$ nm).

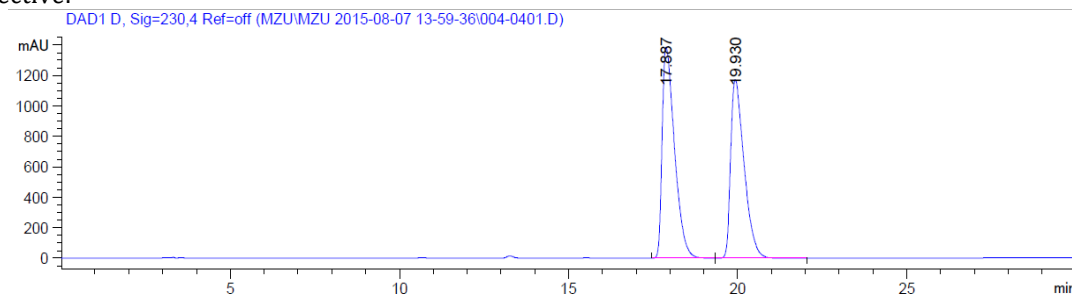
racemic:



Signal 3: DAD1 D, Sig=230,4 Ref=off

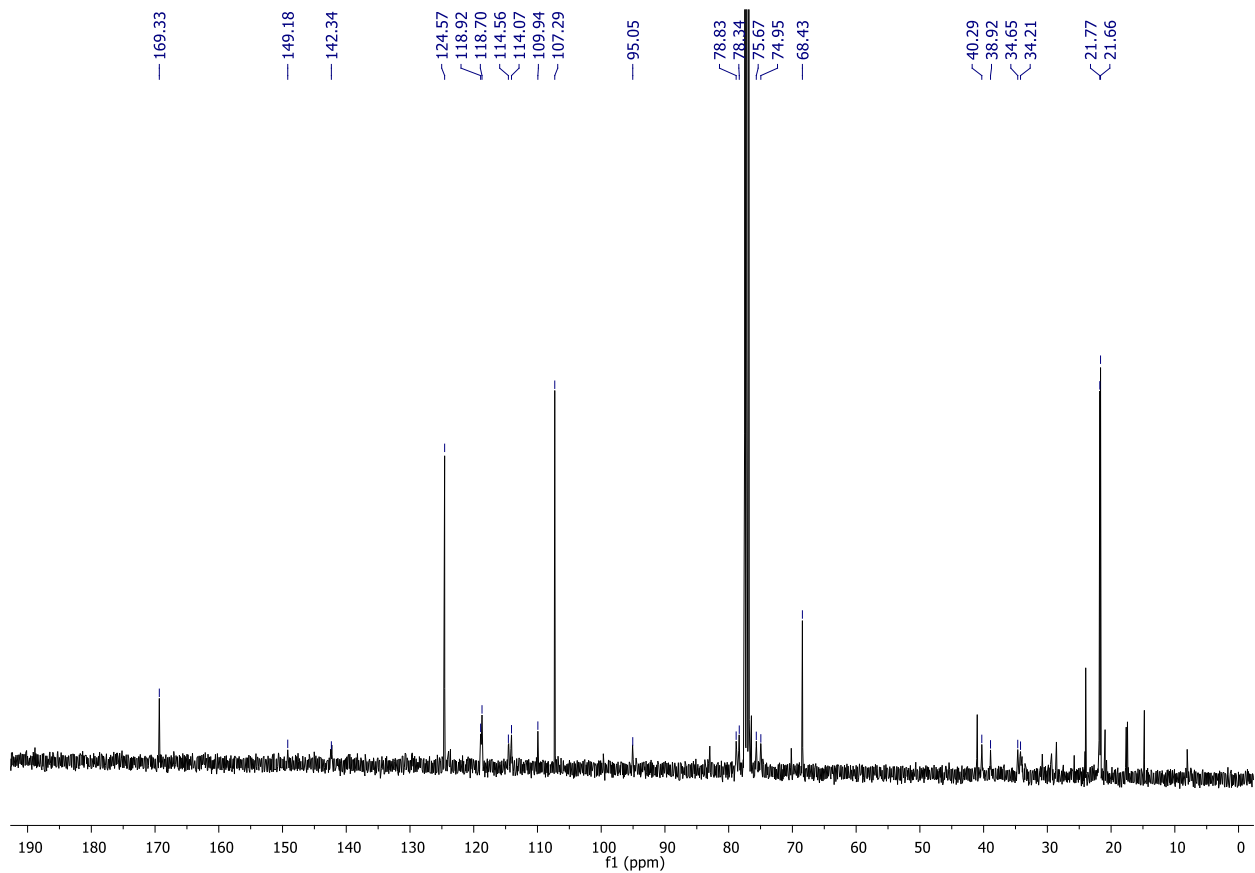
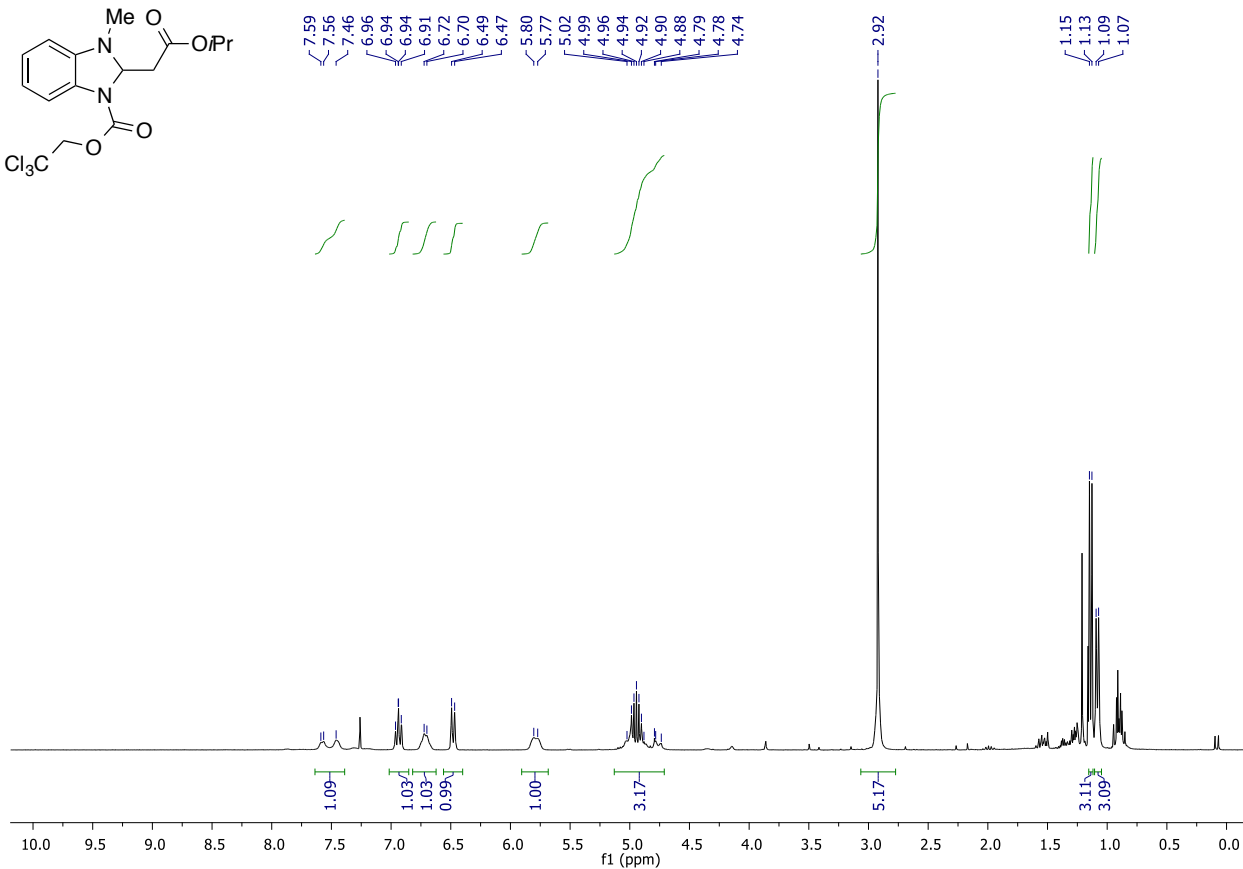
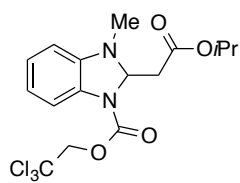
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	18.314	BB	0.3492	1207.65662	52.73742	50.1148
2	20.358	BB	0.3901	1202.12378	47.04582	49.8852

enantioselective:



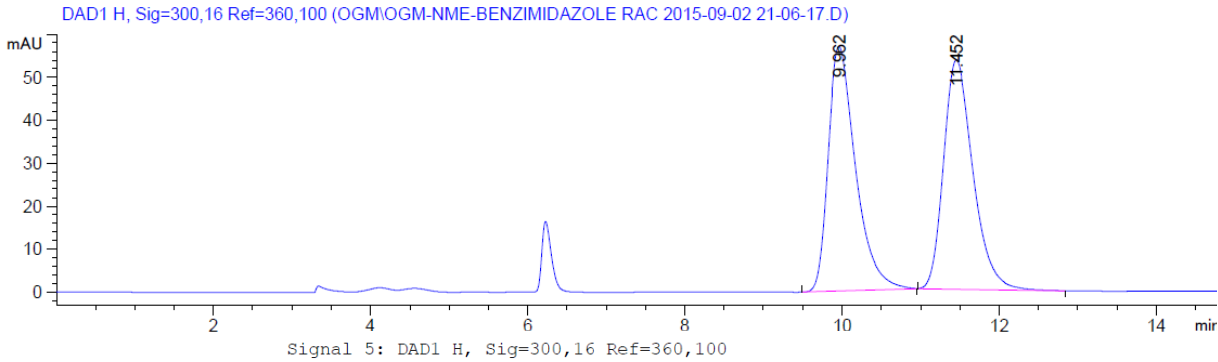
Signal 3: DAD1 D, Sig=230,4 Ref=off

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	17.887	BB	0.3887	3.52079e4	1384.61475	52.2133
2	19.930	BB	0.4170	3.22229e4	1170.96094	47.7867



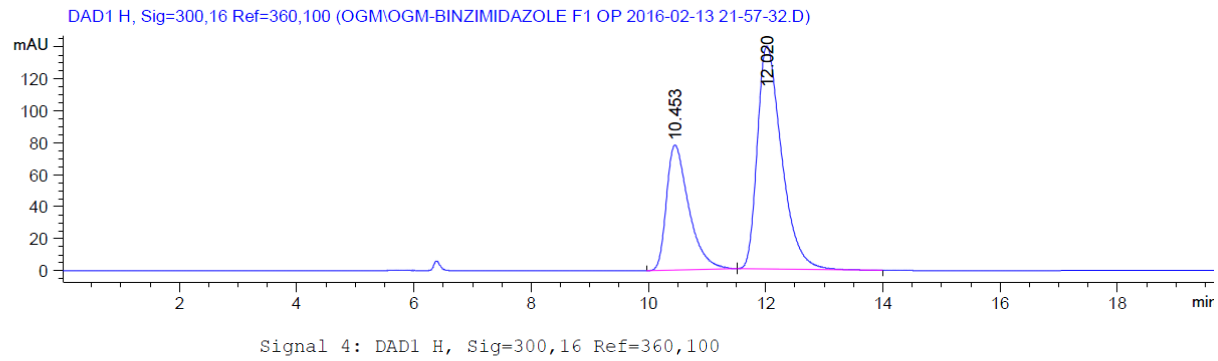
Chiral-phase HPLC: OJ-H, Hex/*i*PrOH 98:2 (λ =300 nm).

racemic:

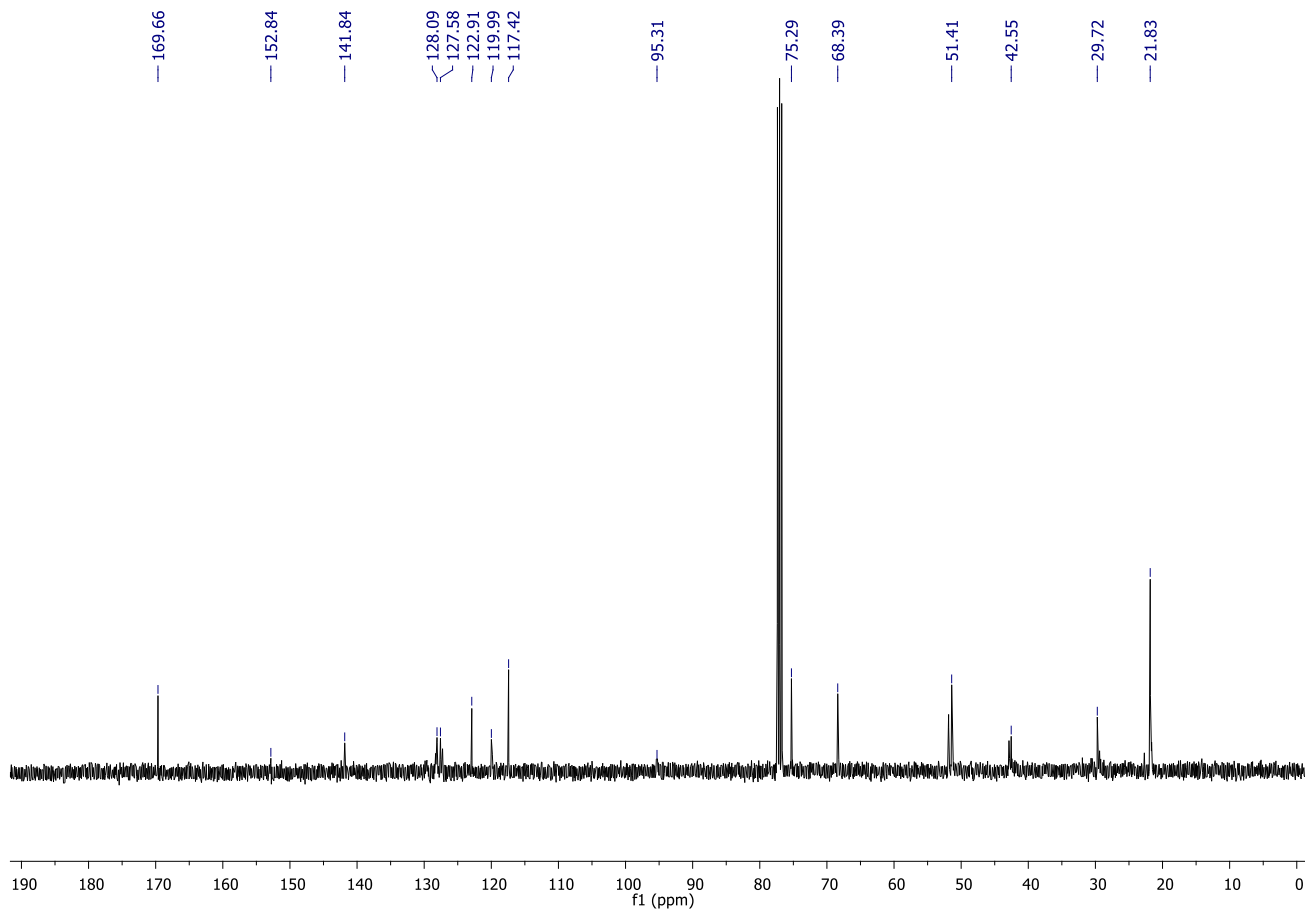
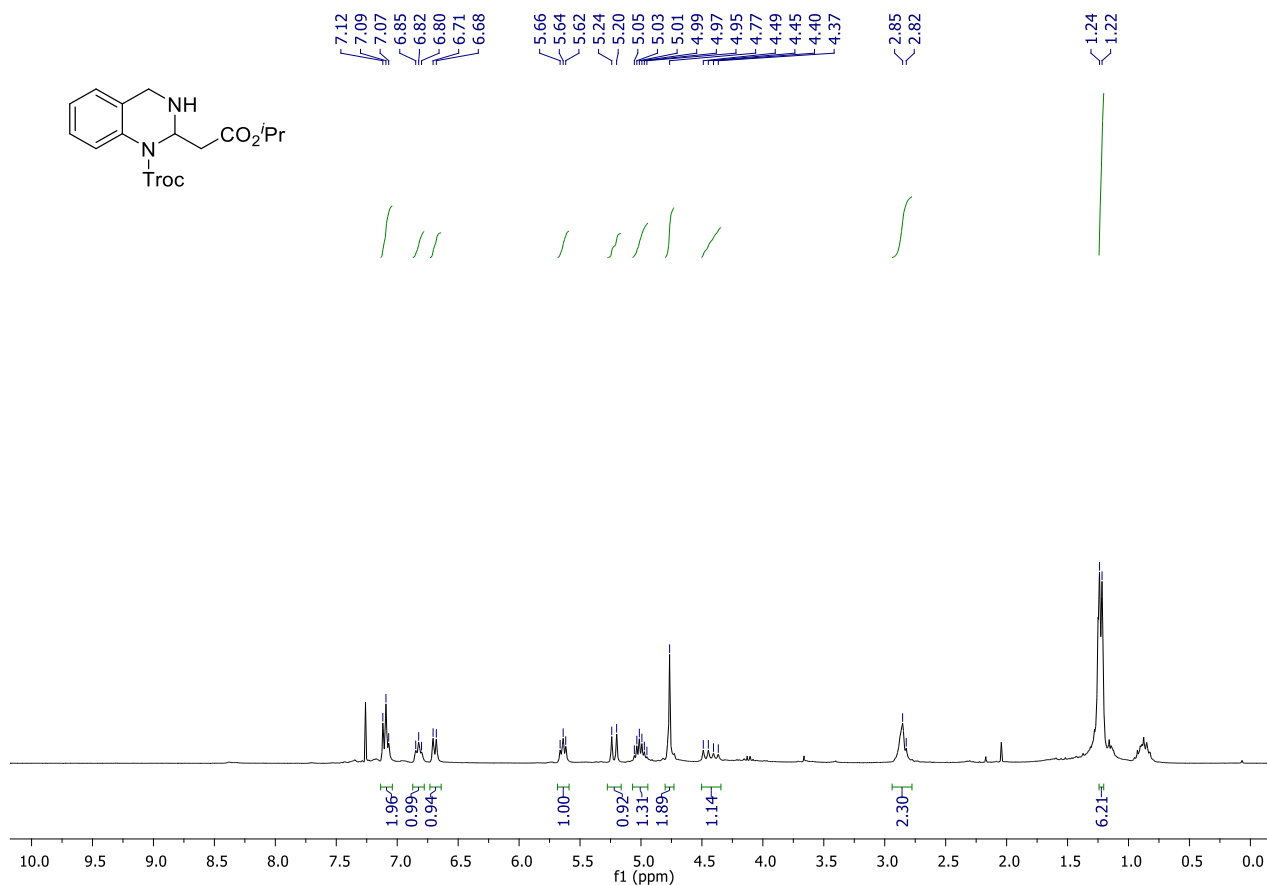
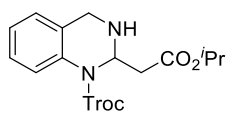


Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	9.962	BB	0.3684	1379.27026	56.98314	49.8346
2	11.452	BB	0.3973	1388.42603	53.41105	50.1654

enantioselective:

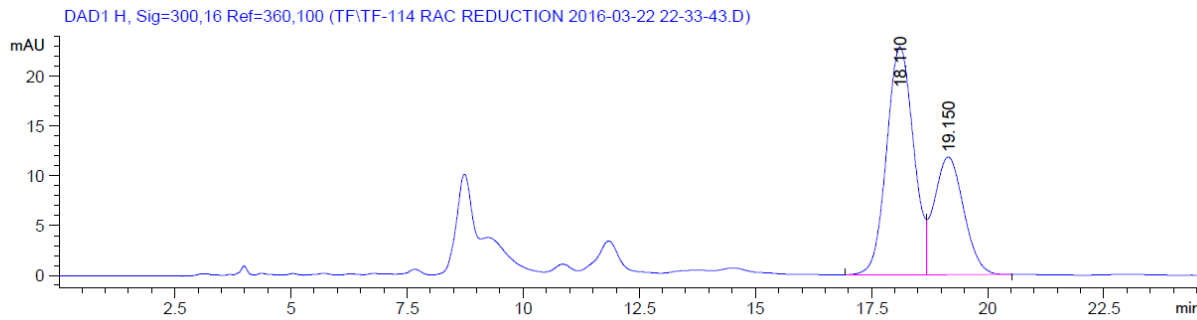


Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	10.453	BB	0.3989	2068.15869	78.10235	33.9177
2	12.020	BB	0.4391	4029.42041	139.44032	66.0823



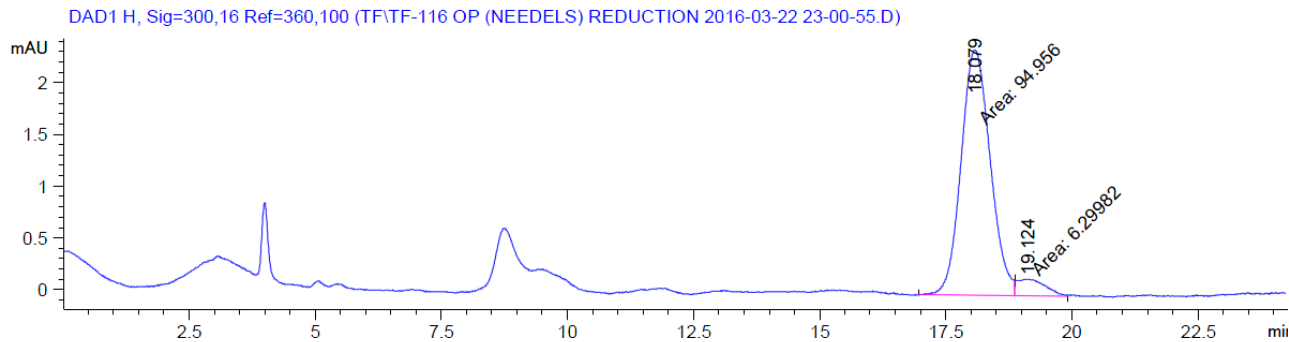
Chiral-phase HPLC: AD, Hex/*i*PrOH 90:10 (λ =300 nm).

racemic:

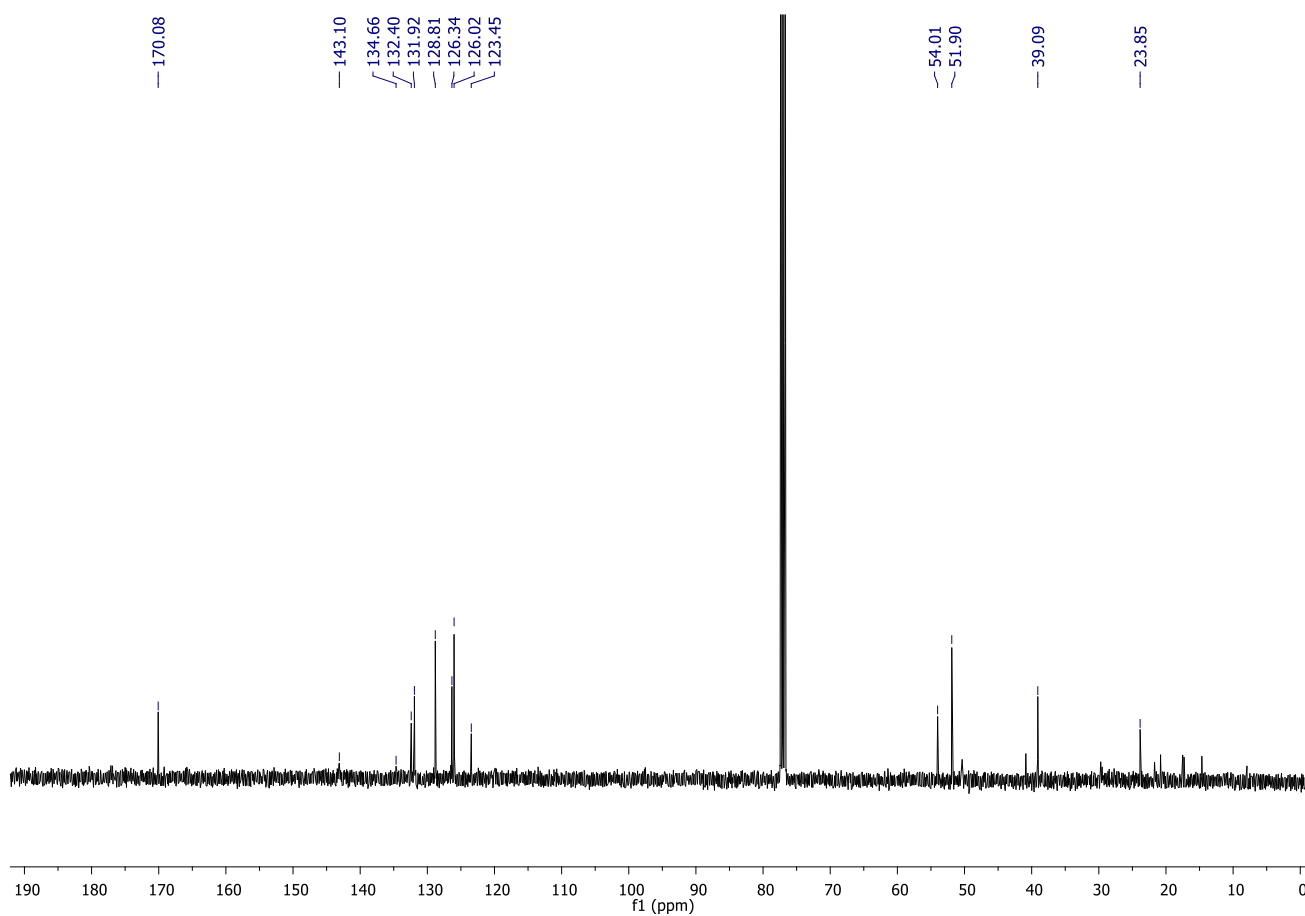
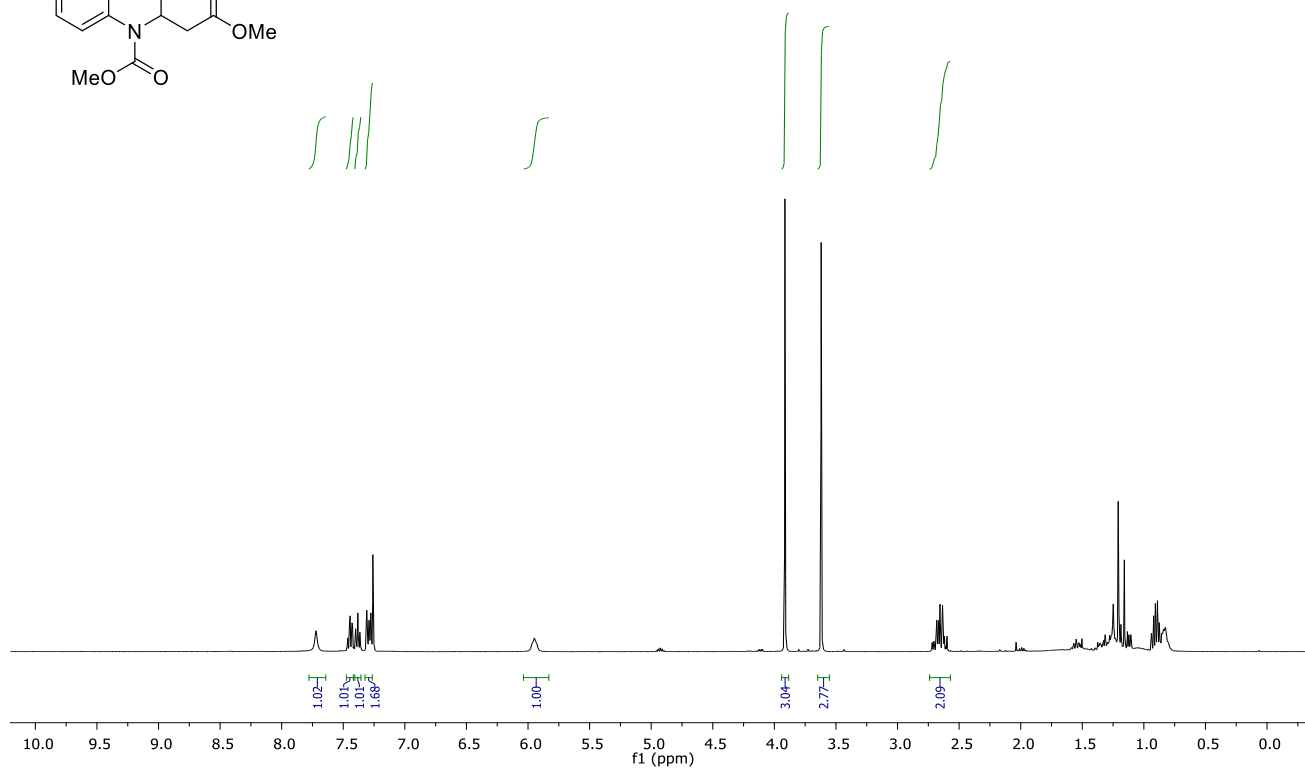
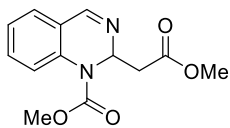


Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	18.110	BV	0.6320	927.31714	22.82478	64.0247
2	19.150	VB	0.6676	521.05640	11.78998	35.9753

enantioselective:

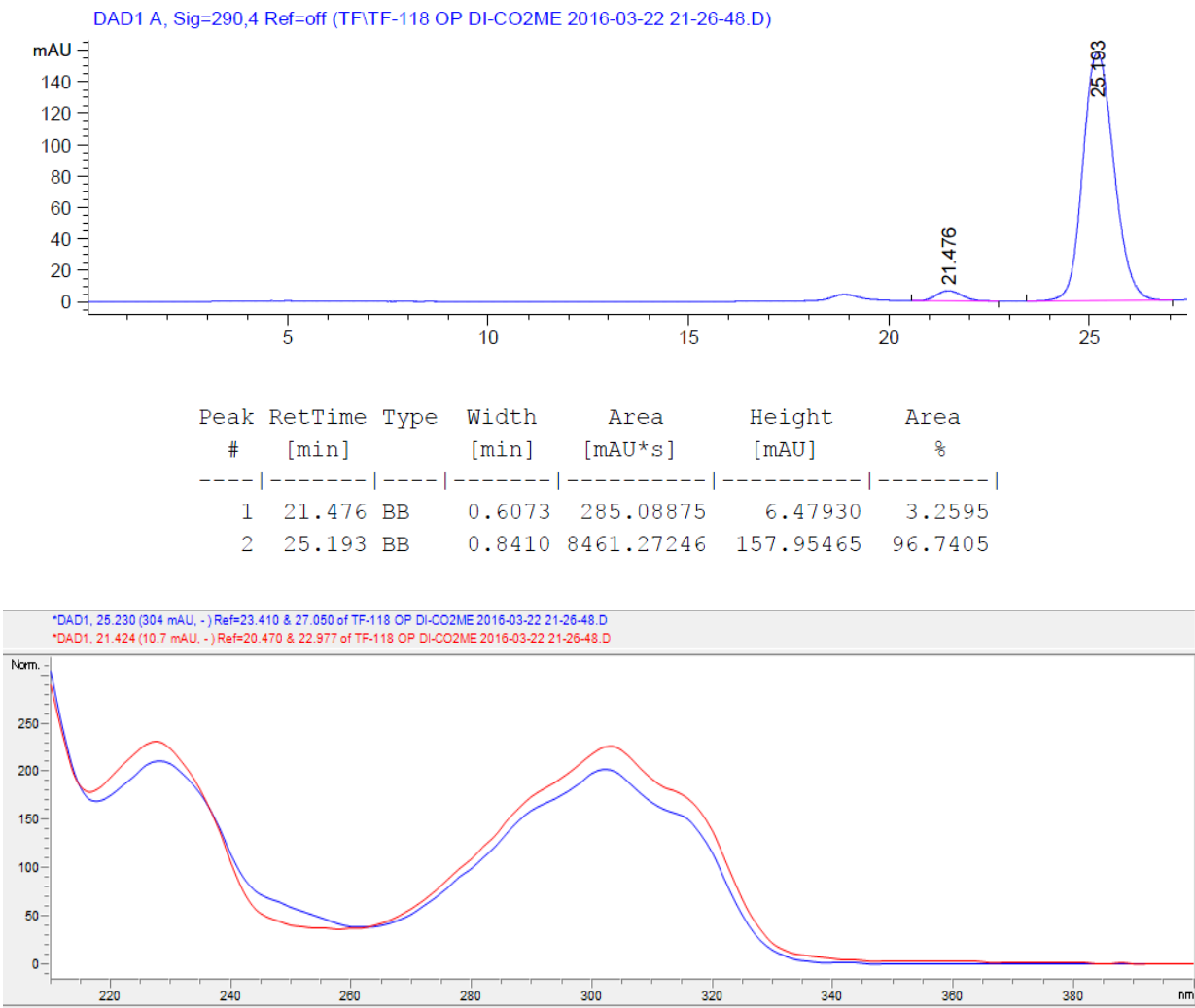


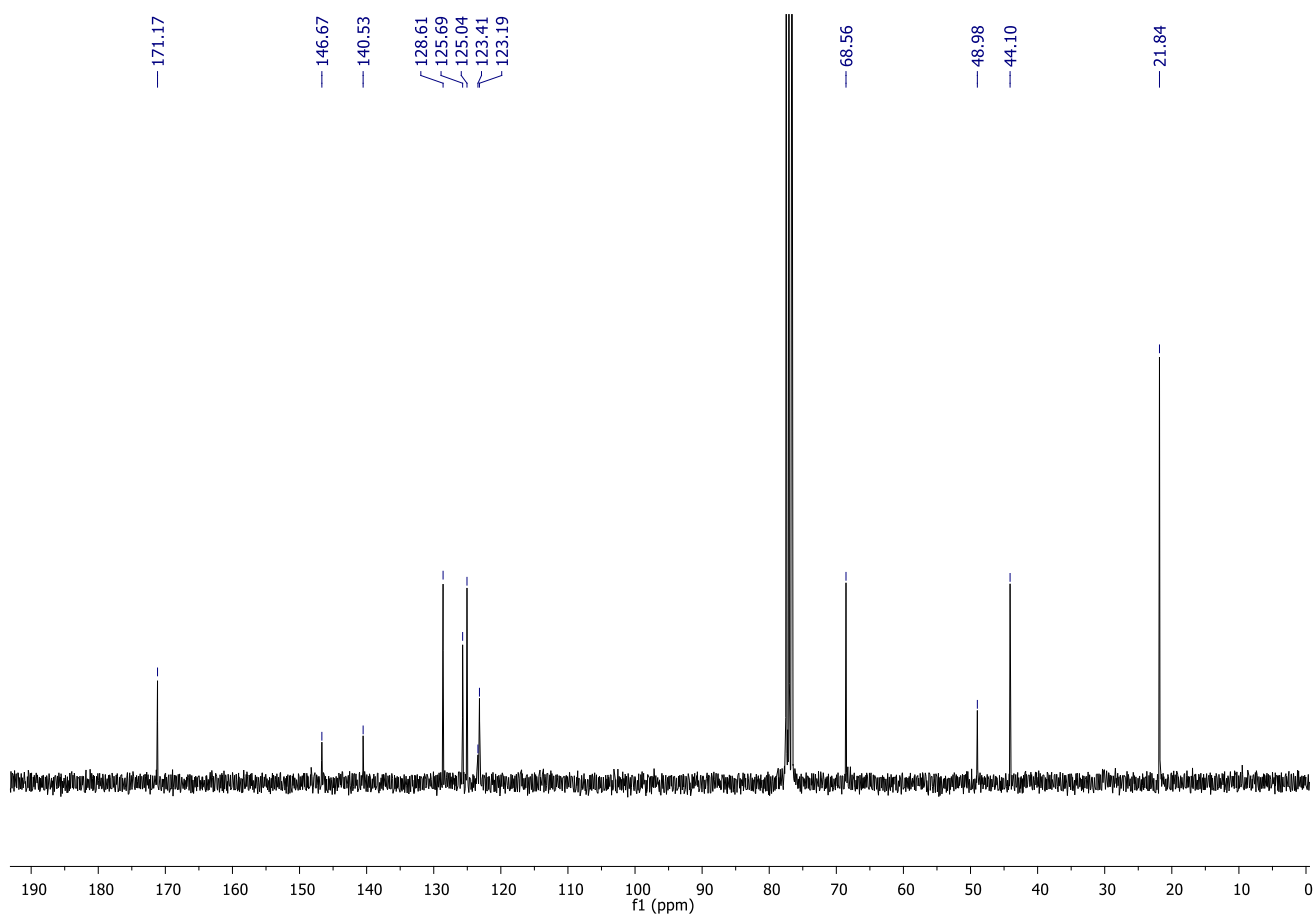
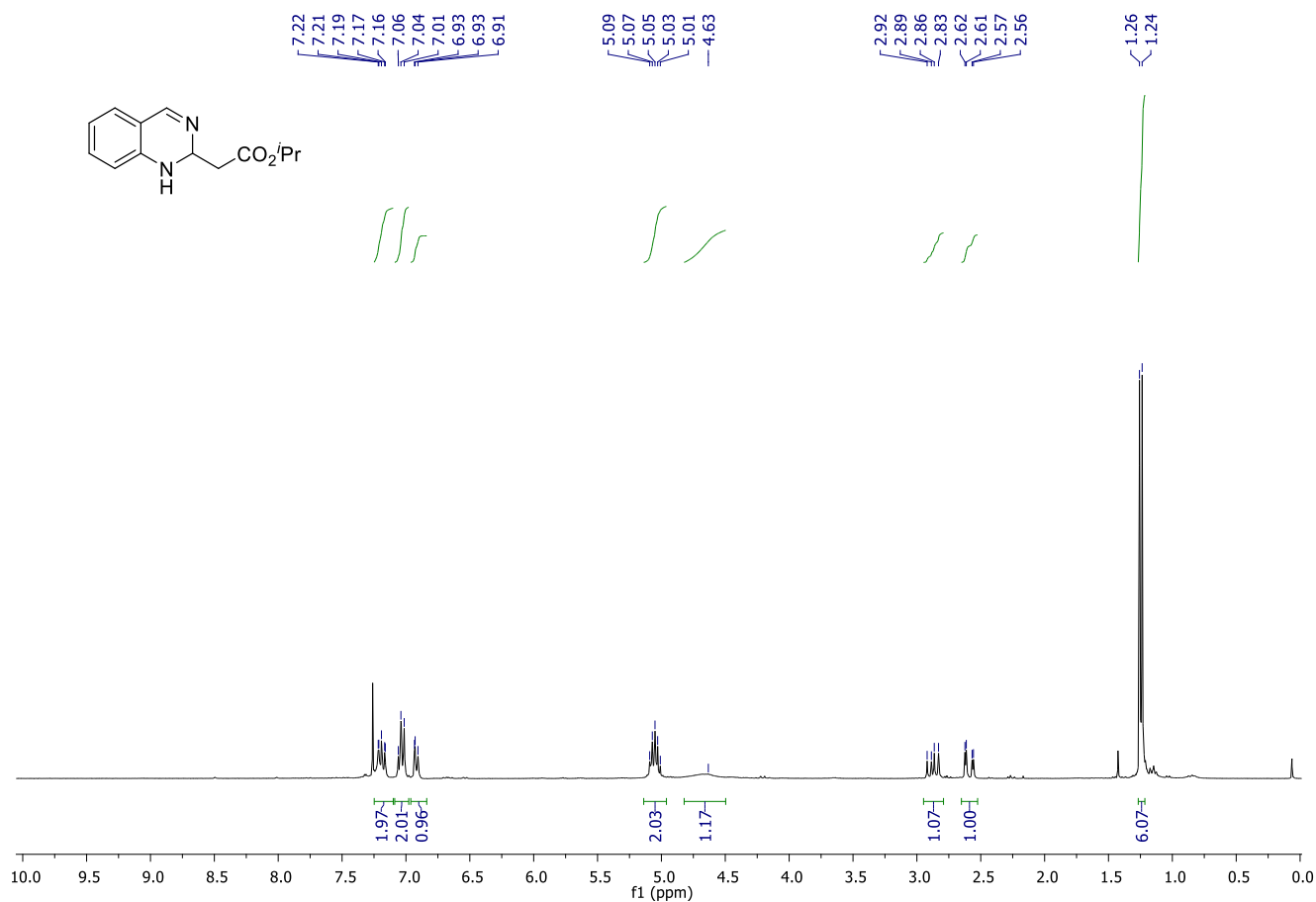
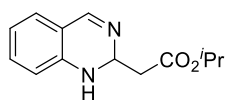
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	18.079	MF	0.6683	94.95602	2.36805	93.7783
2	19.124	FM	0.6626	6.29982	1.58474e-1	6.2217



Chiral-phase HPLC: AD, Hex/*i*PrOH 90:10 (λ =290 nm).

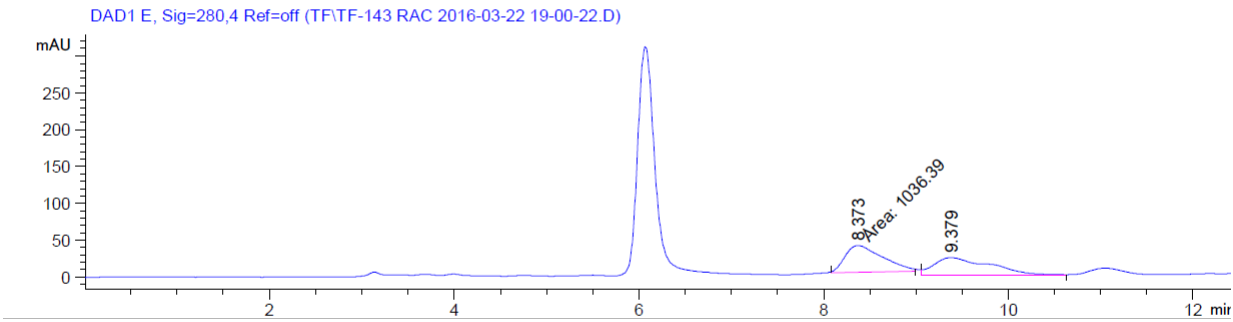
enantioselective:





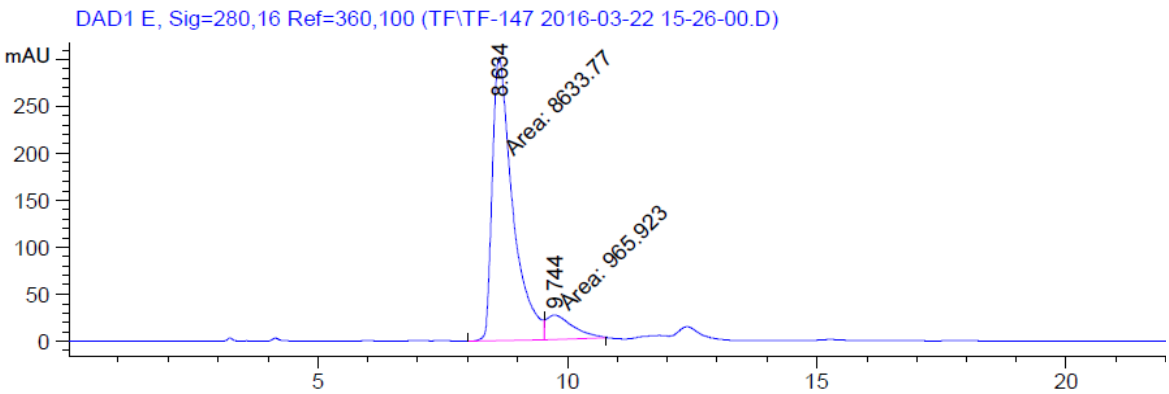
Chiral-phase HPLC: AD, Hex/*i*PrOH 90:10 (λ =280 nm).

racemic:



Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	8.373	MM	0.4732	1036.38586	36.50622	52.0128
2	9.379	VB	0.5782	956.17218	23.13473	47.9872

enantioselective:



Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	8.634	MF	0.4771	8633.77051	301.59045	89.9380
2	9.744	FM	0.6232	965.92273	25.83170	10.0620