

# **List-Barbas-Mannich Reaction Catalyzed by Modularly Designed Organocatalysts**

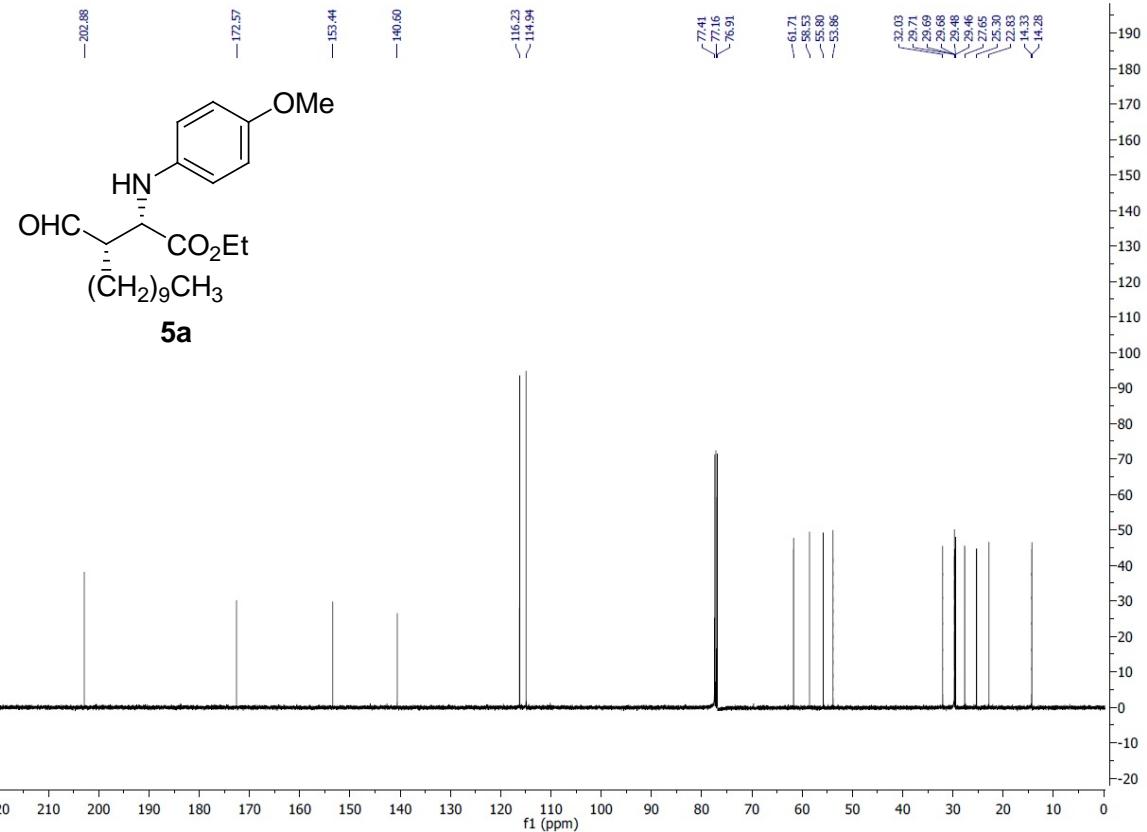
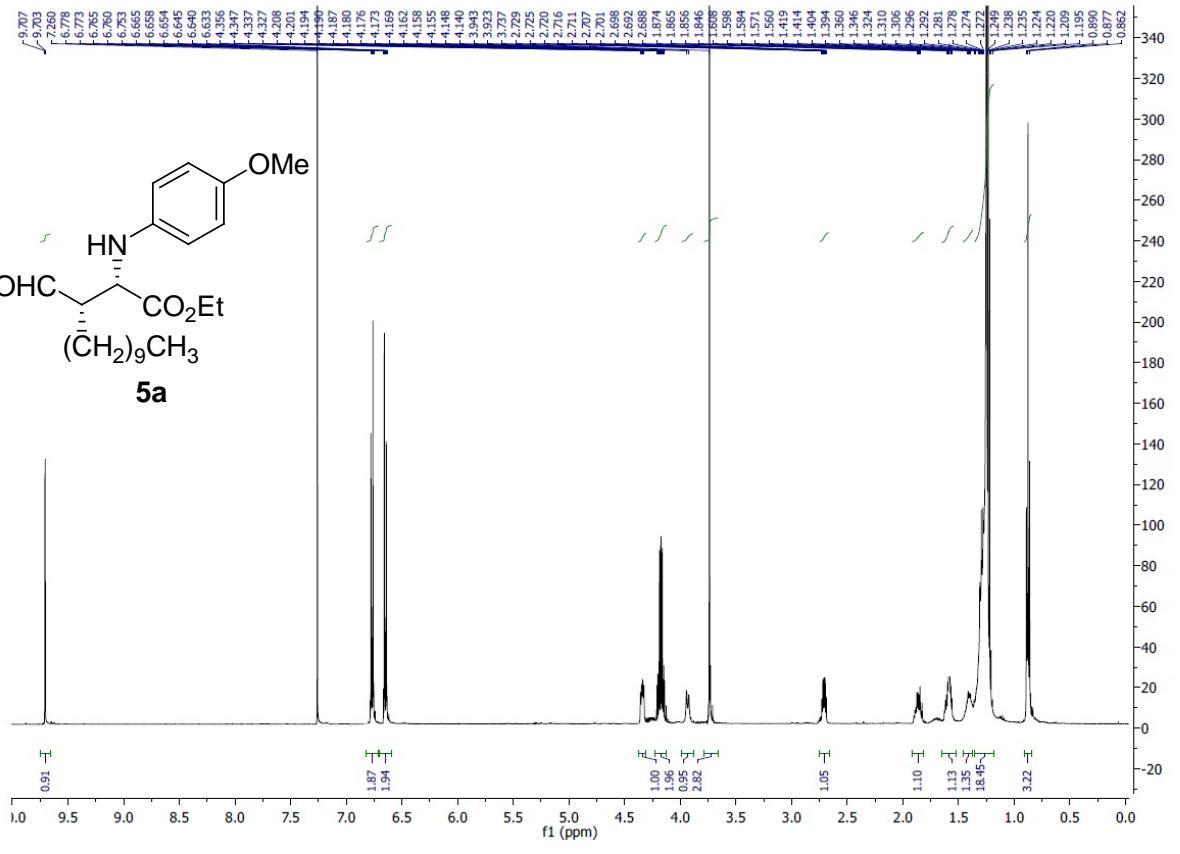
**Sandun Perera, Debarshi Sinha, Nirmal K. Rana, Trieu Van, and John Cong-Gui Zhao\***

**Department of Chemistry, University of Texas at San Antonio**

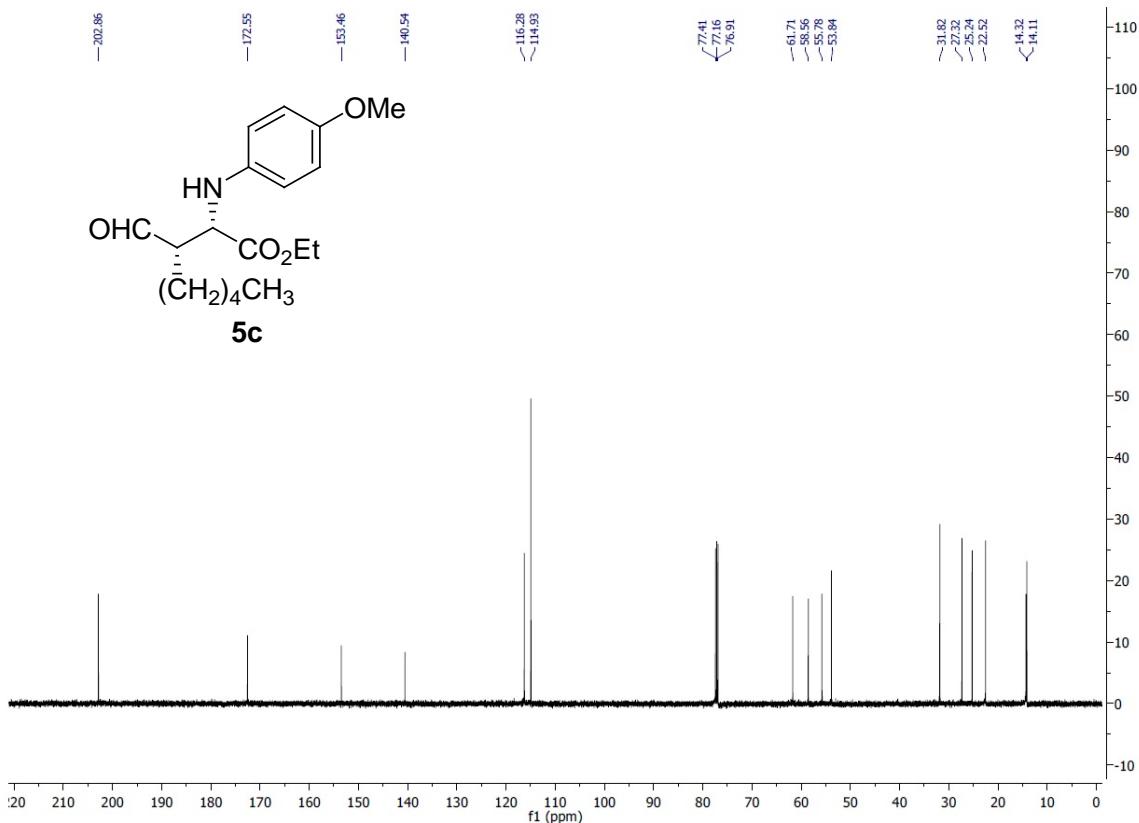
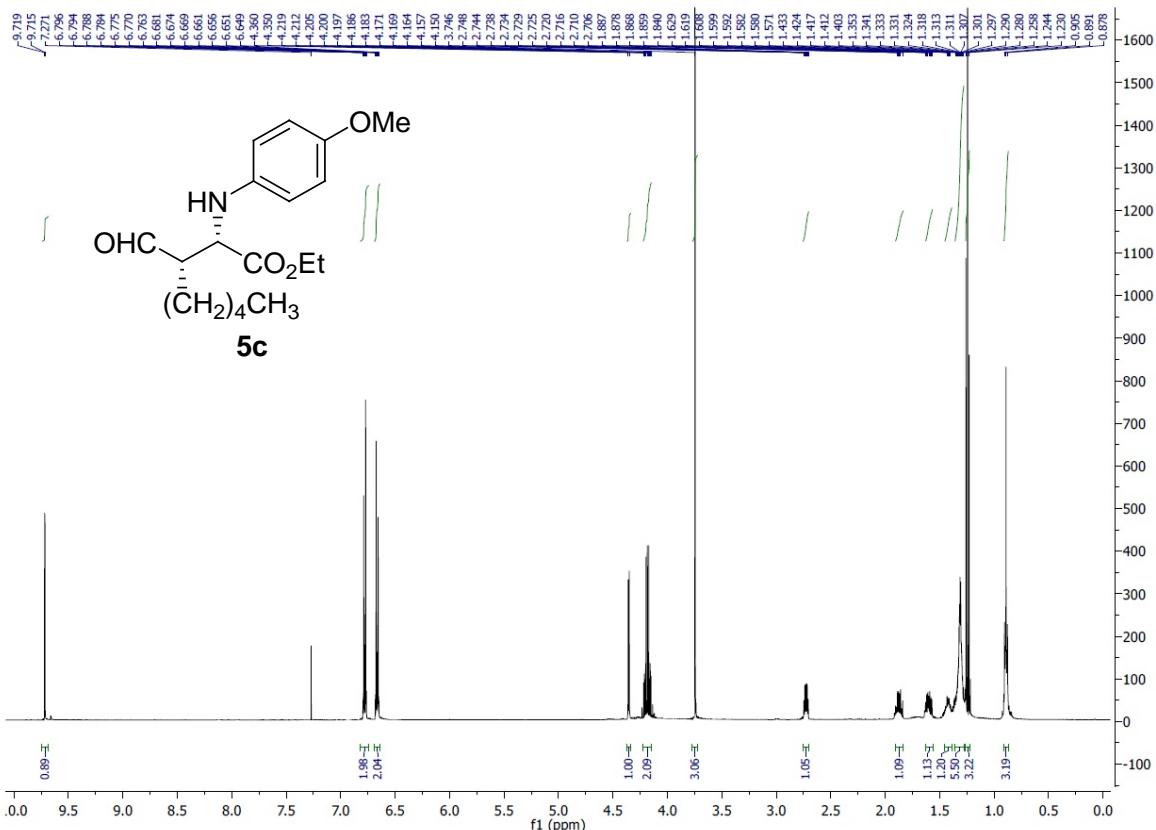
## **Supporting Information**

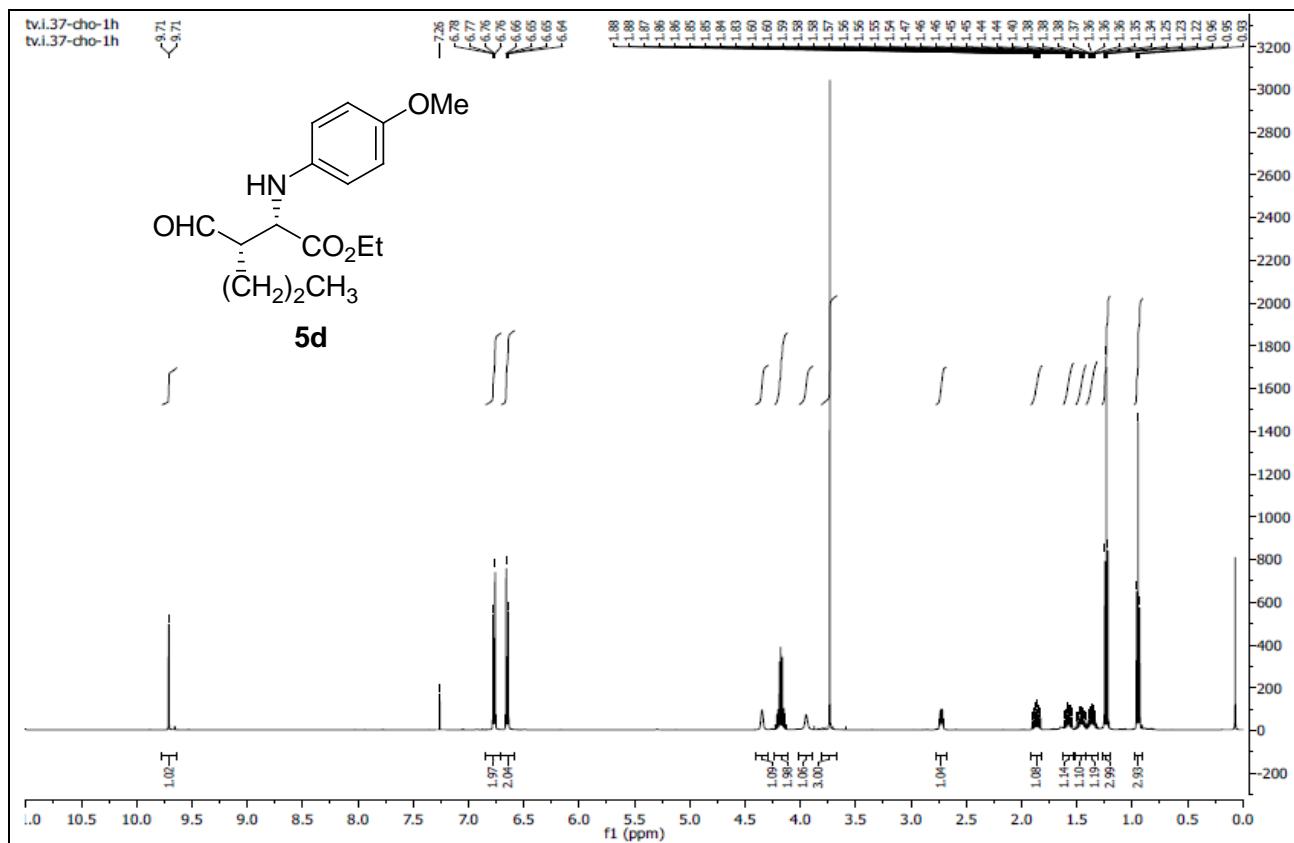
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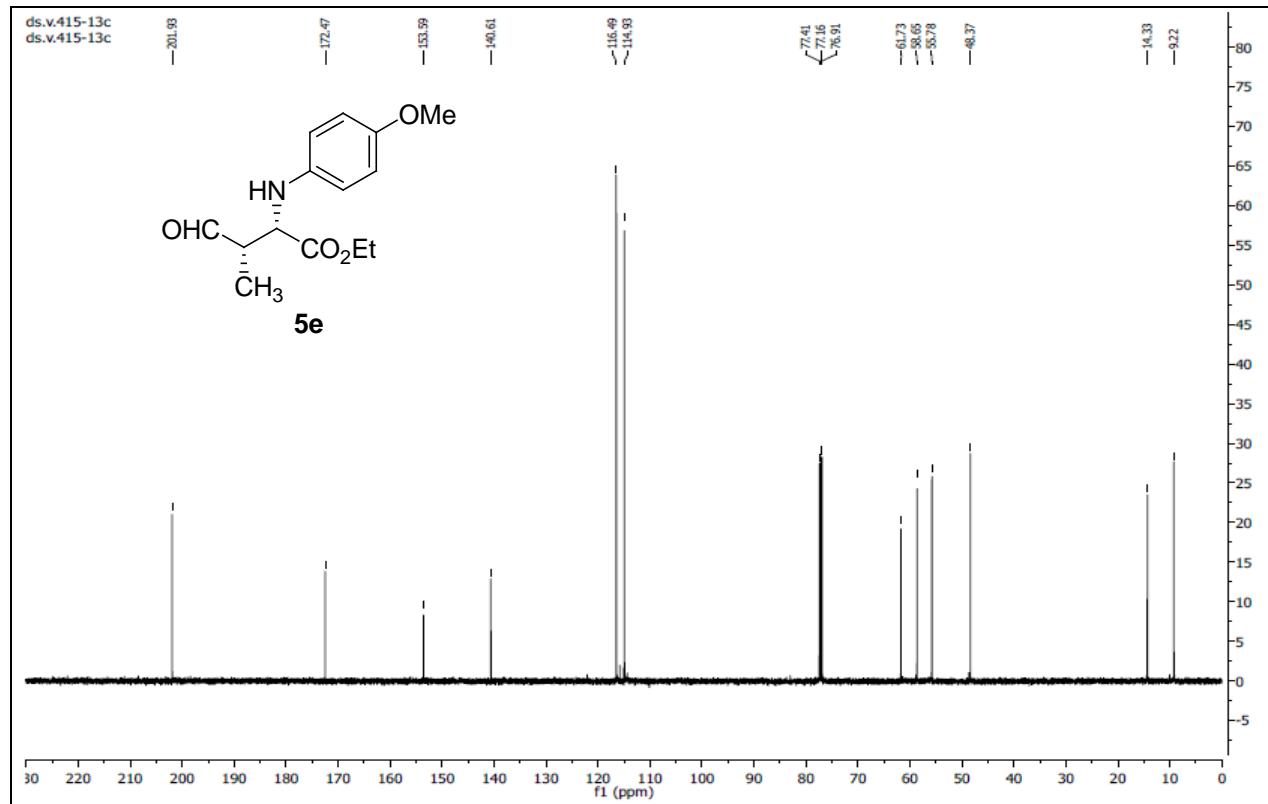
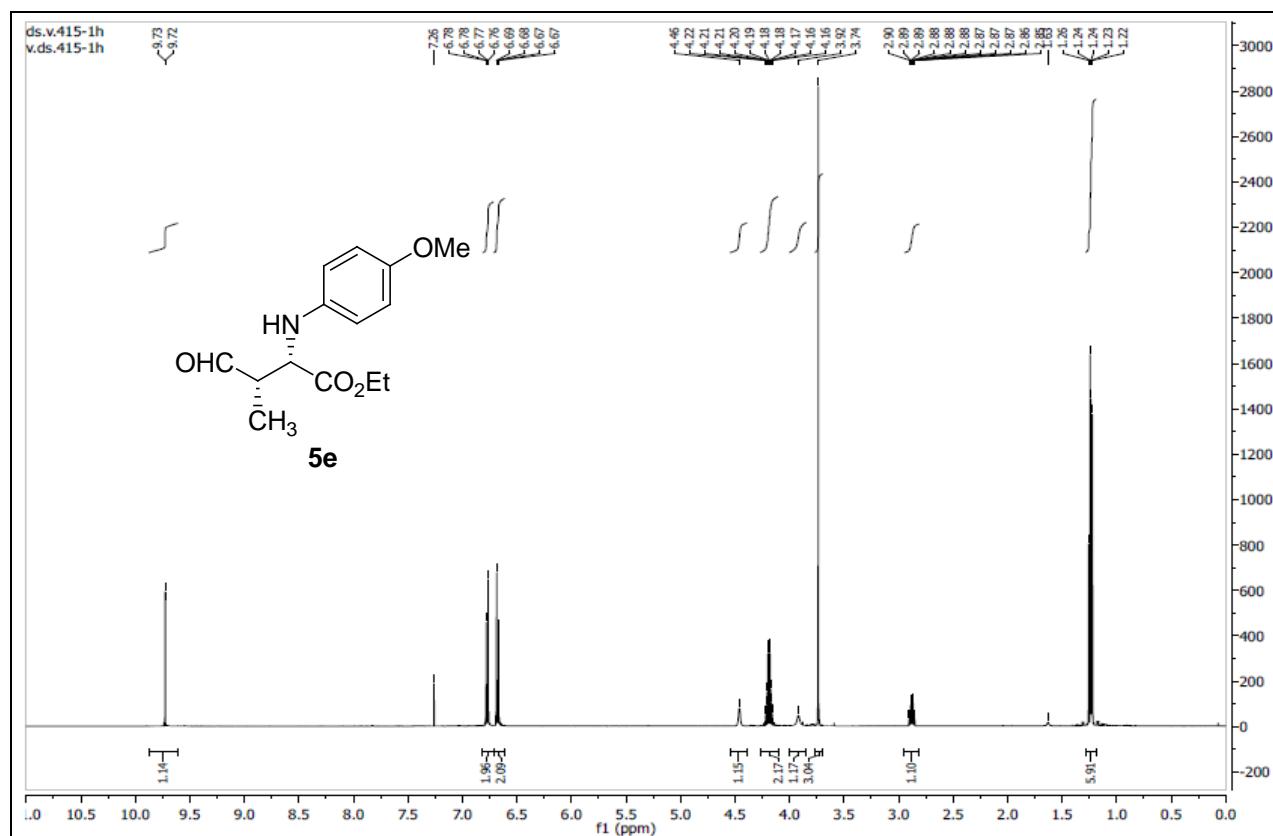
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<b>Copies of HPLC Chromatograms.....</b>	<b>S-13</b>

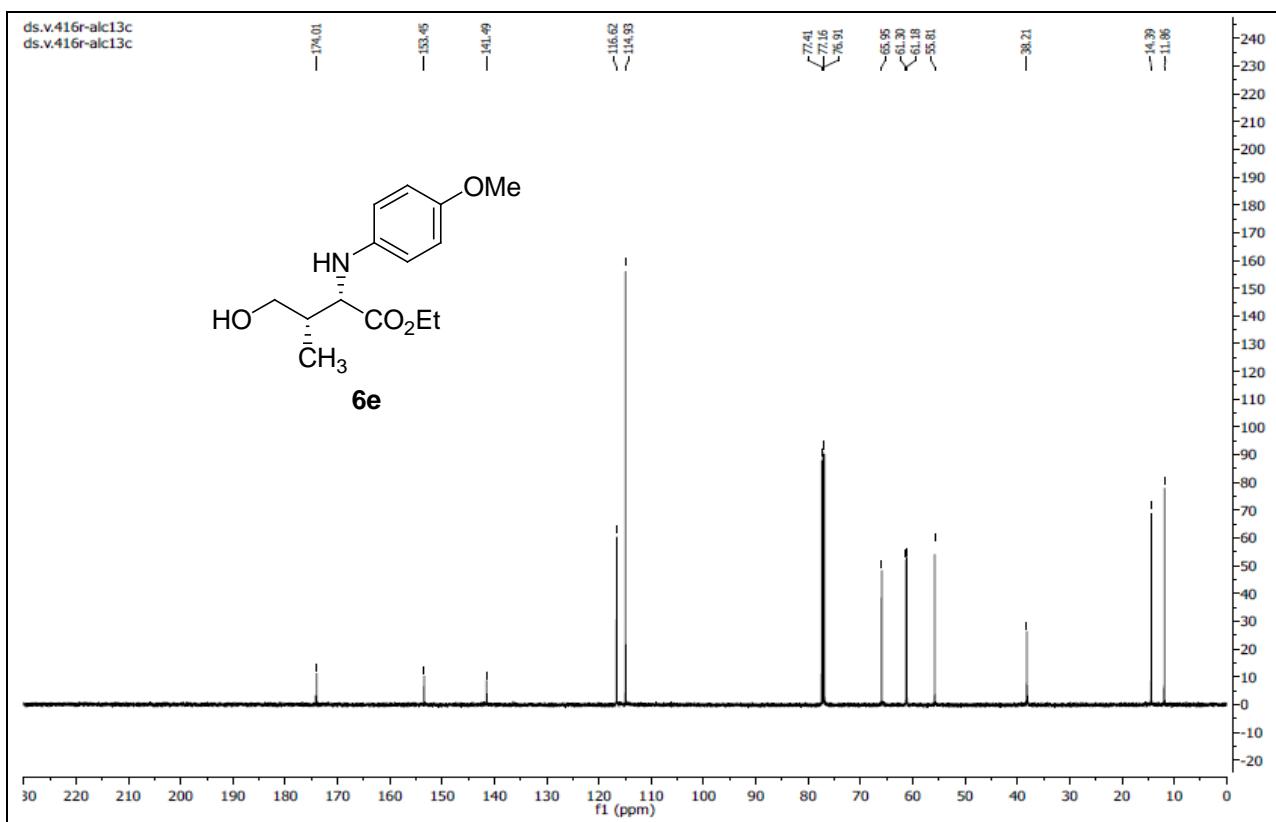
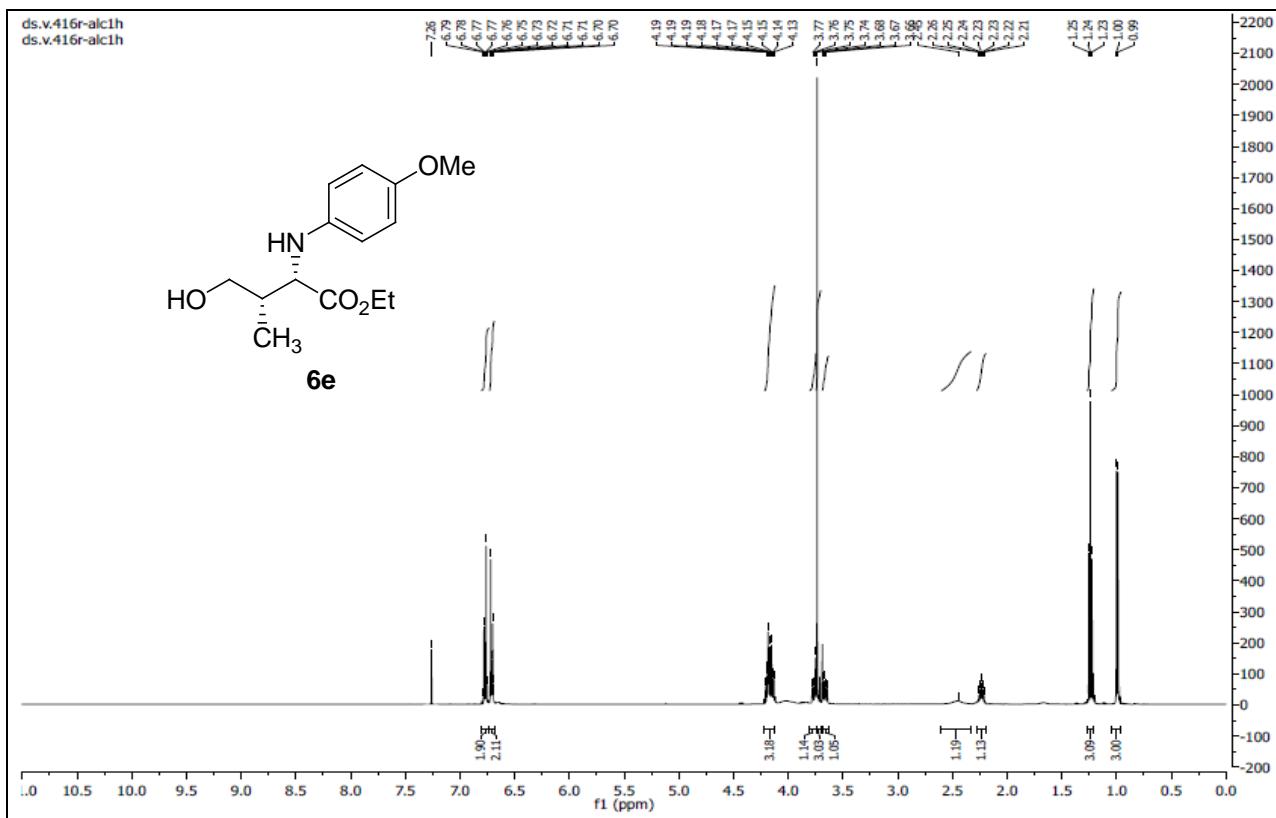


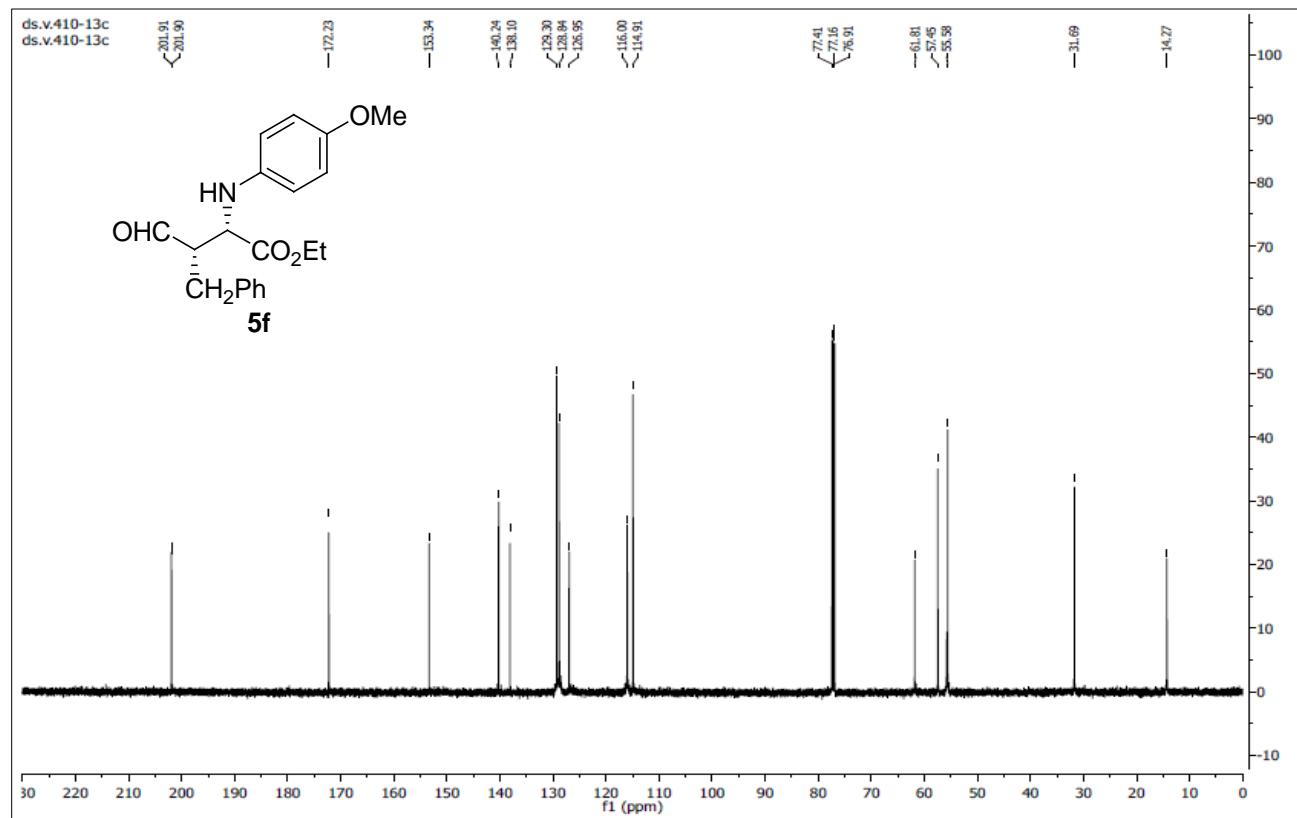
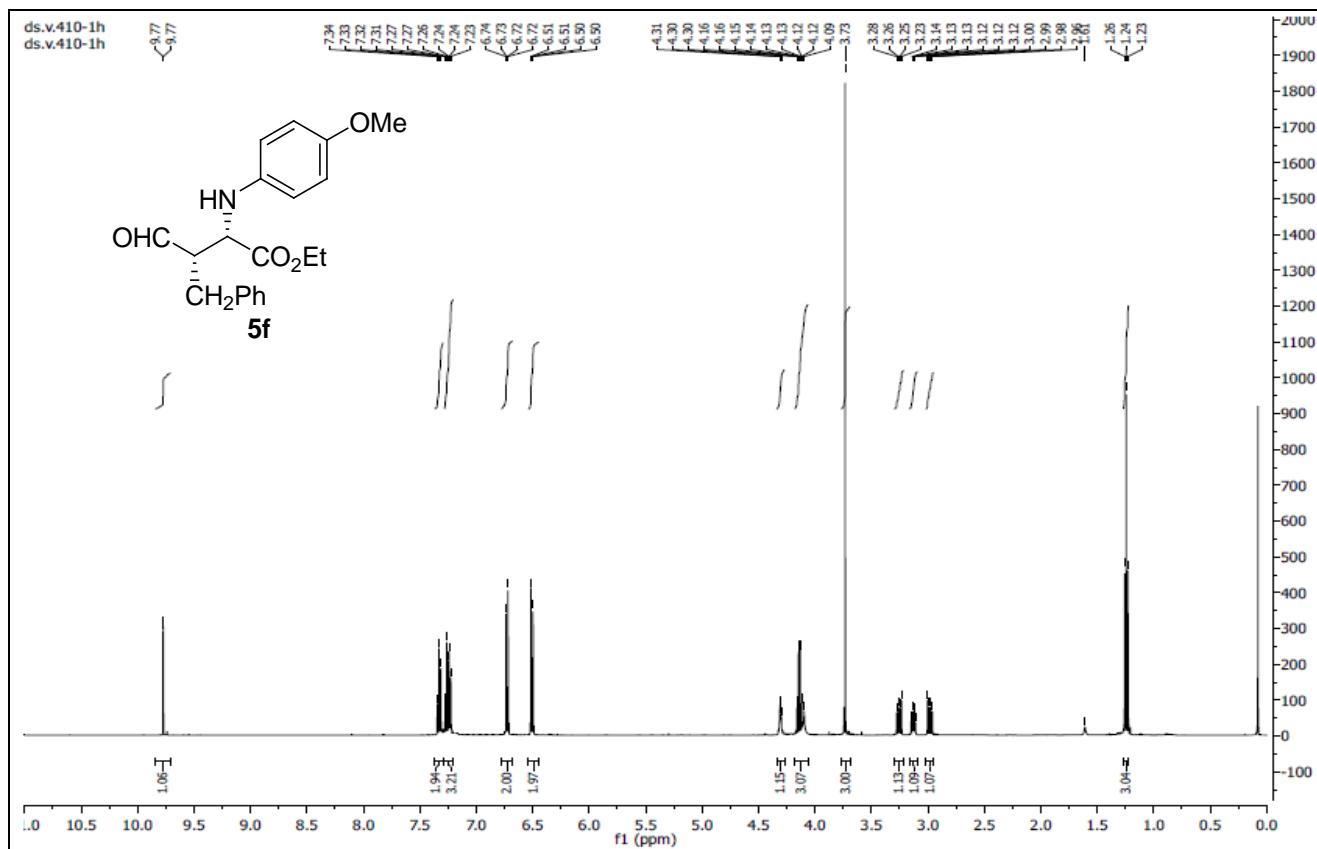


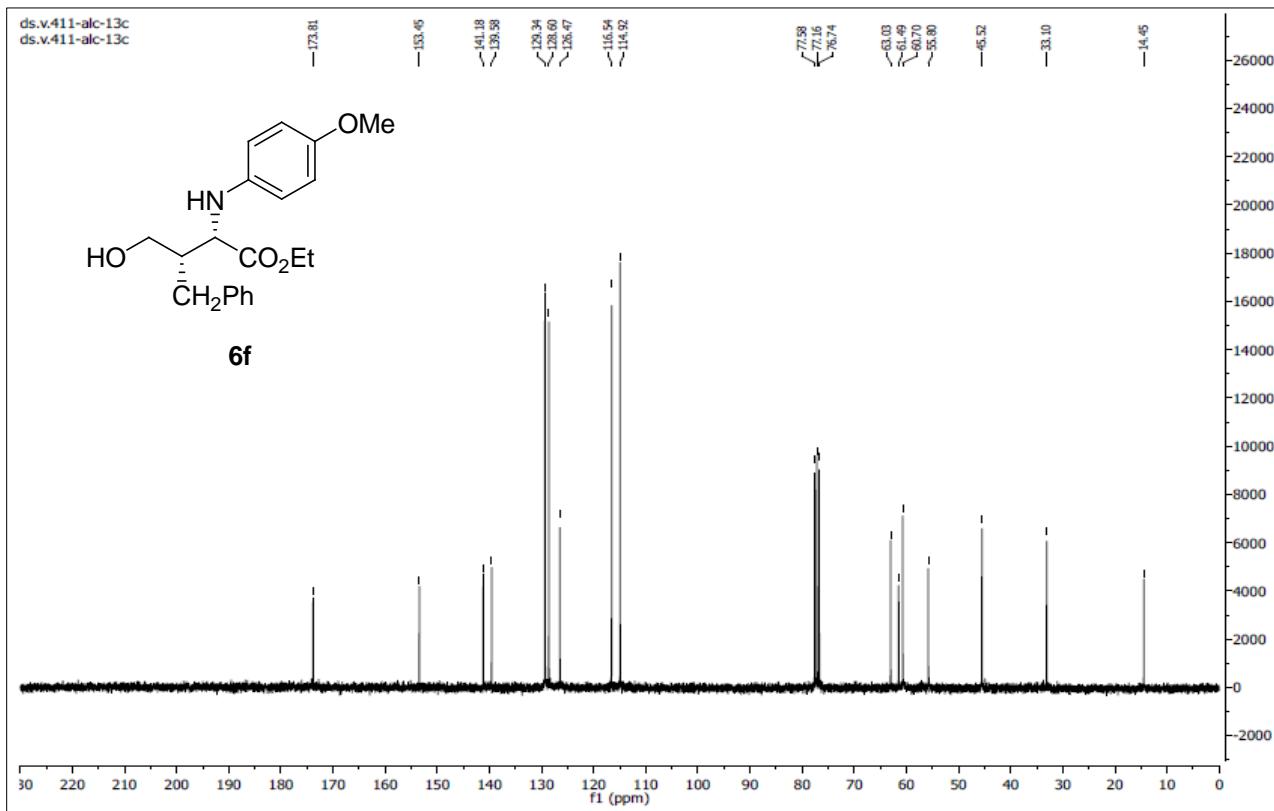
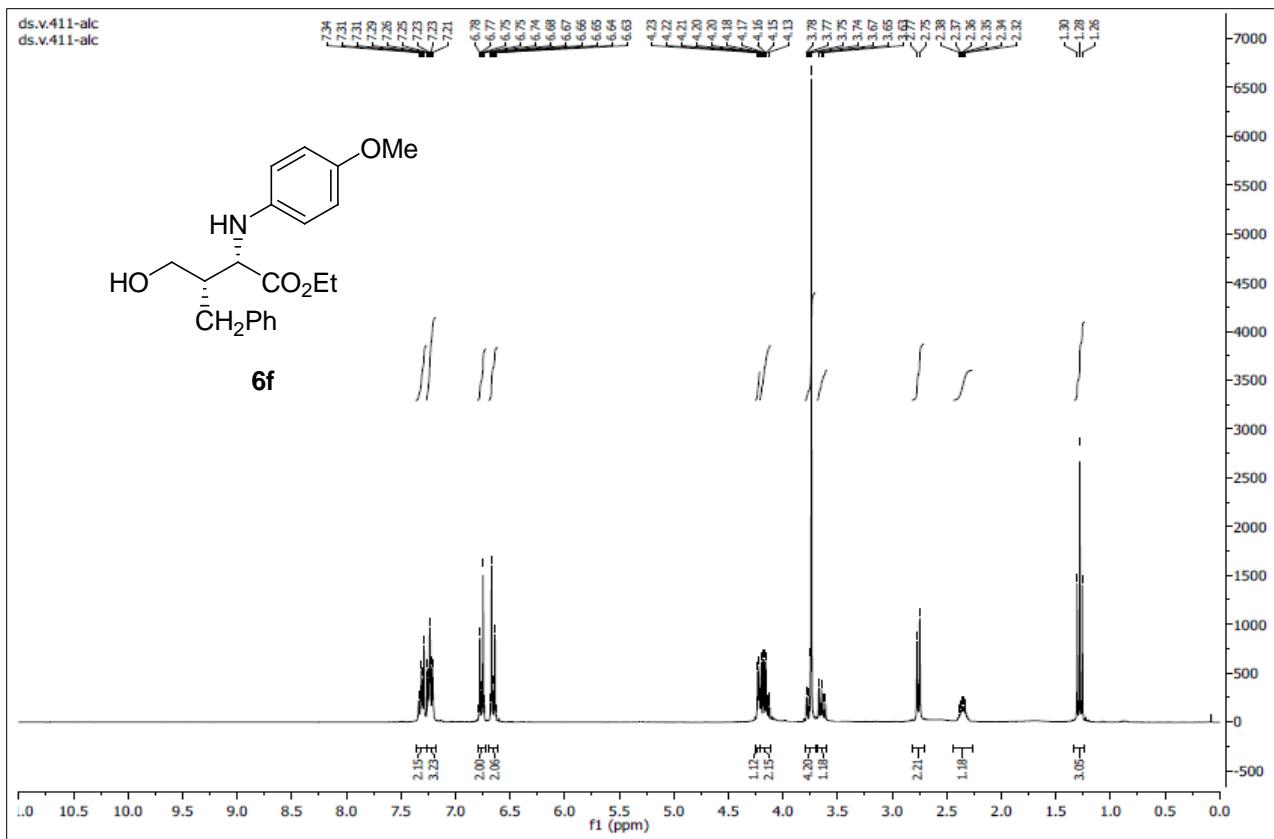


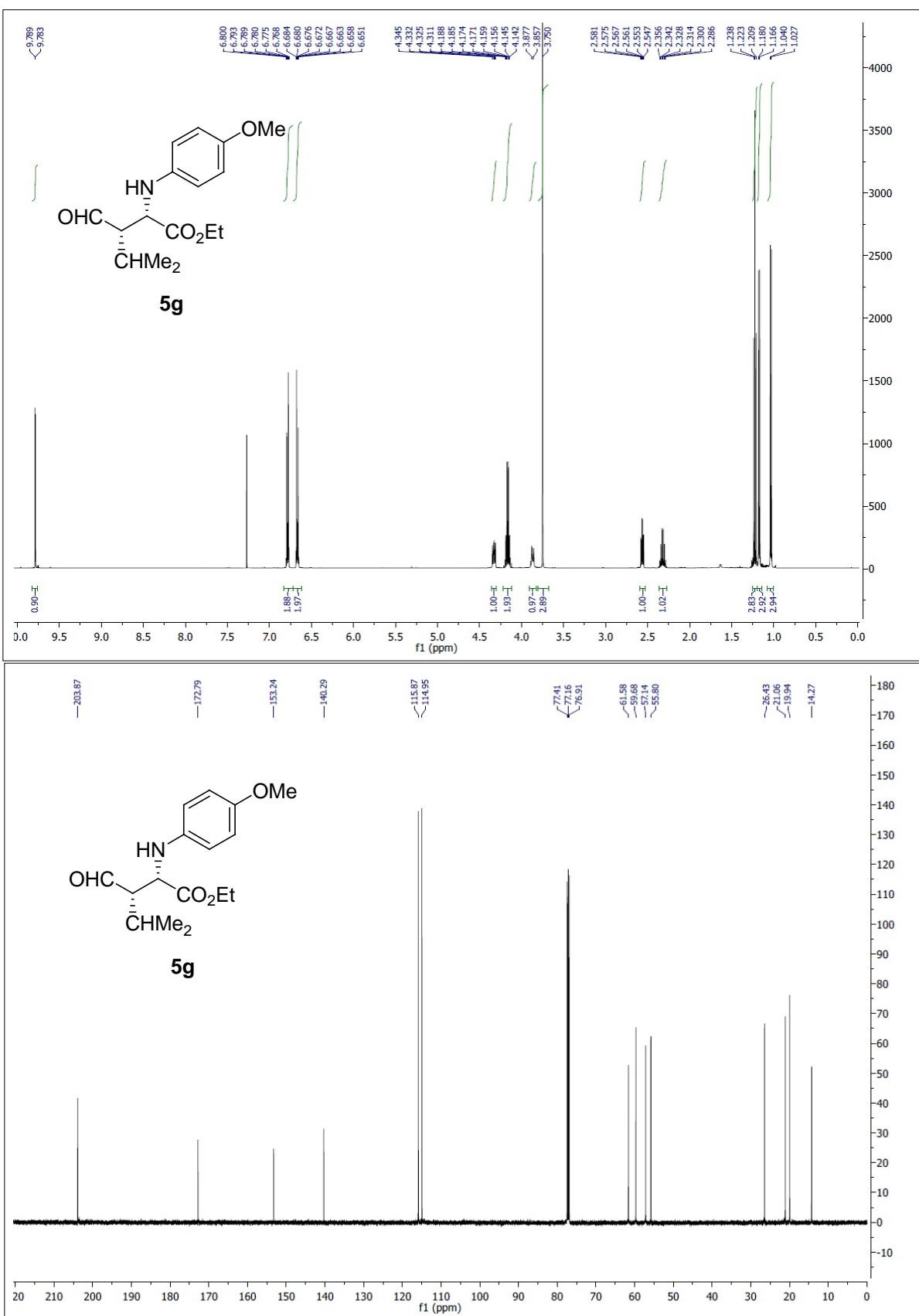


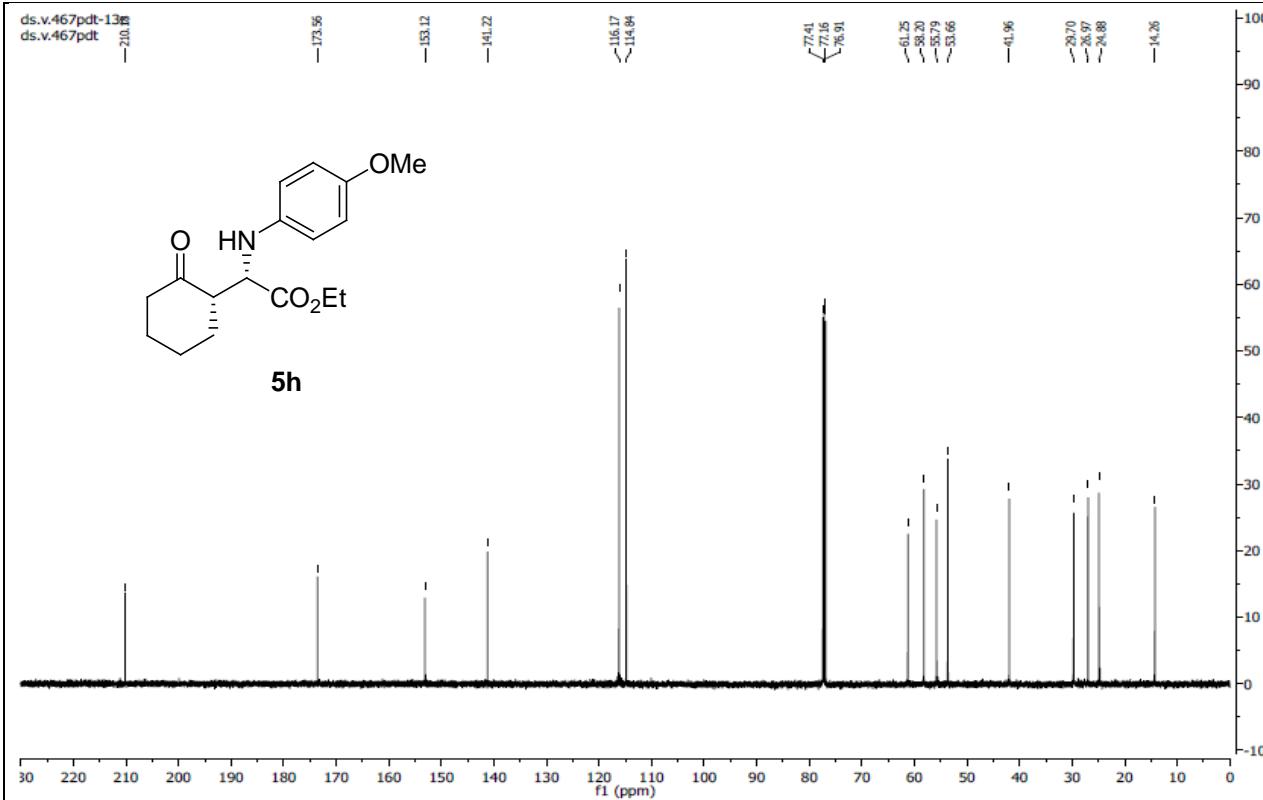
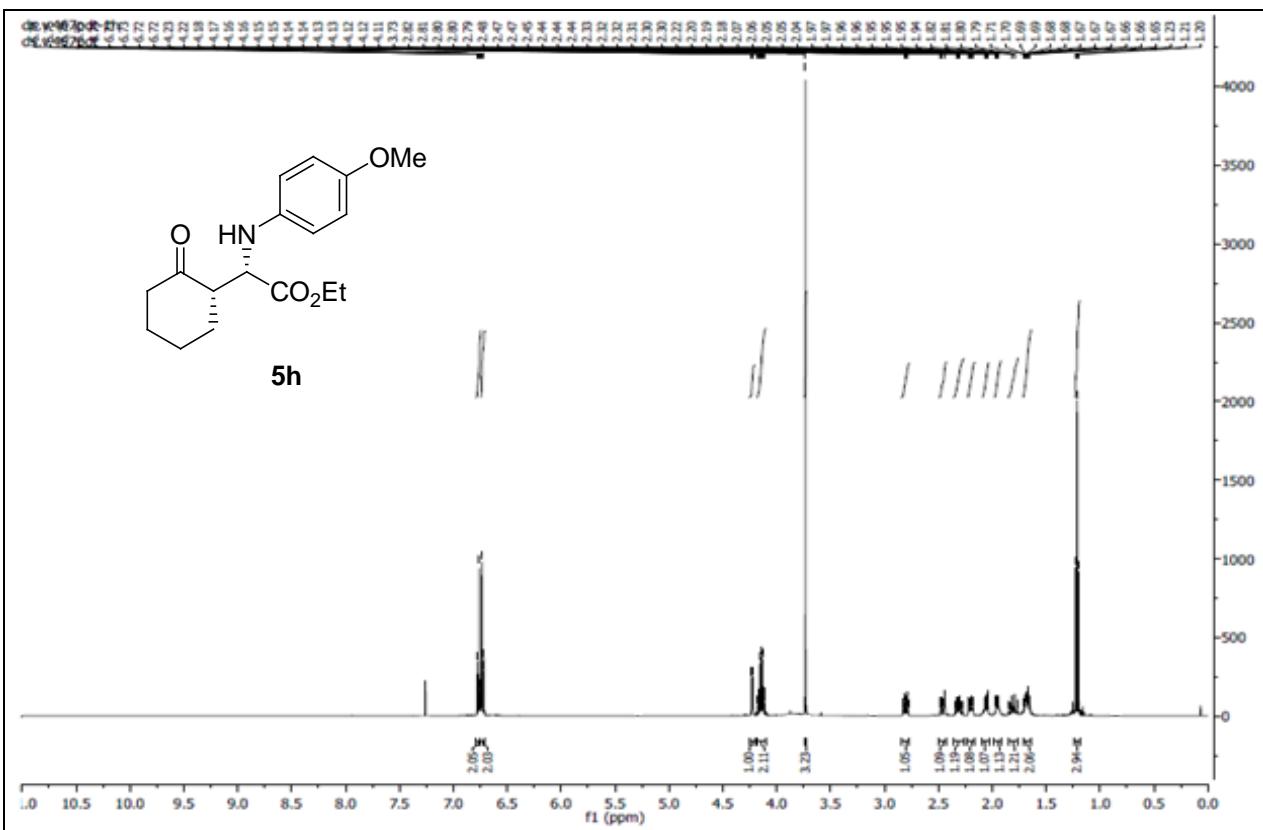


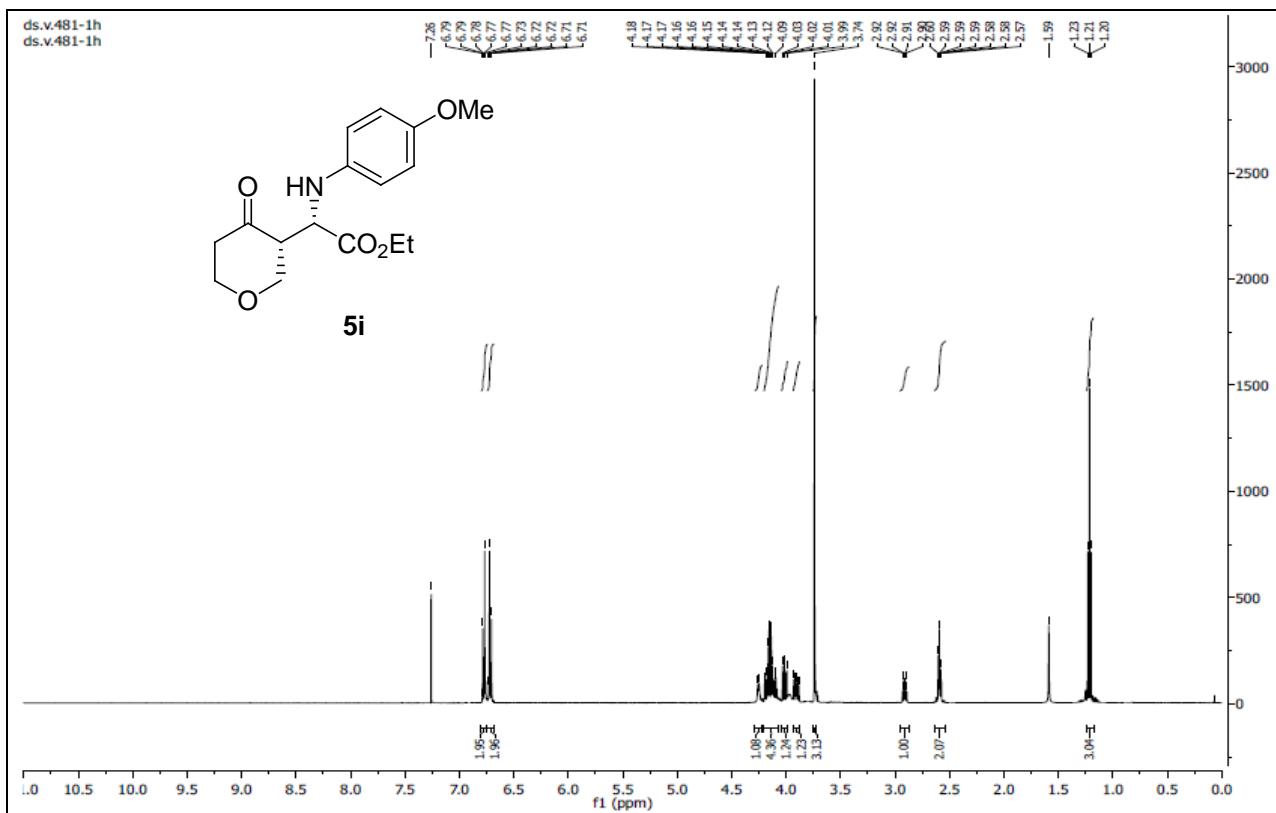


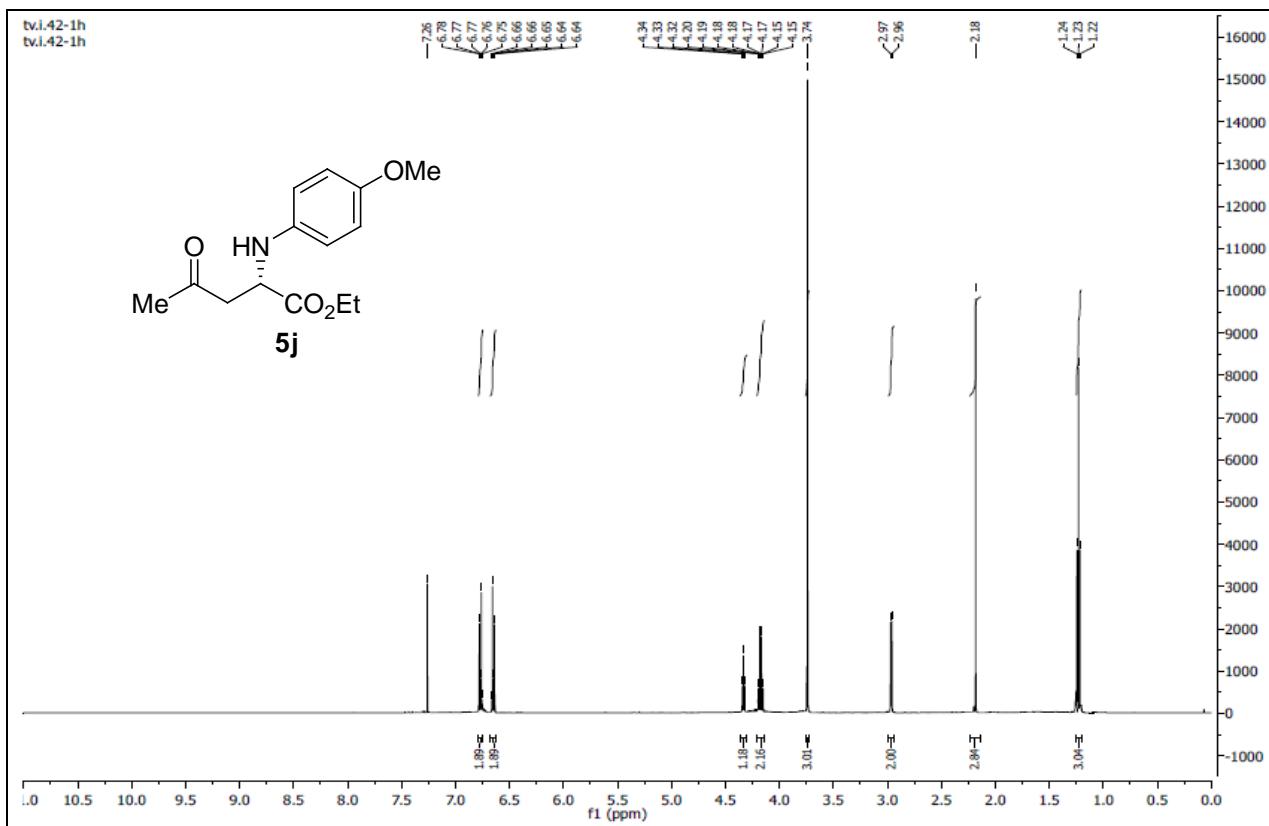






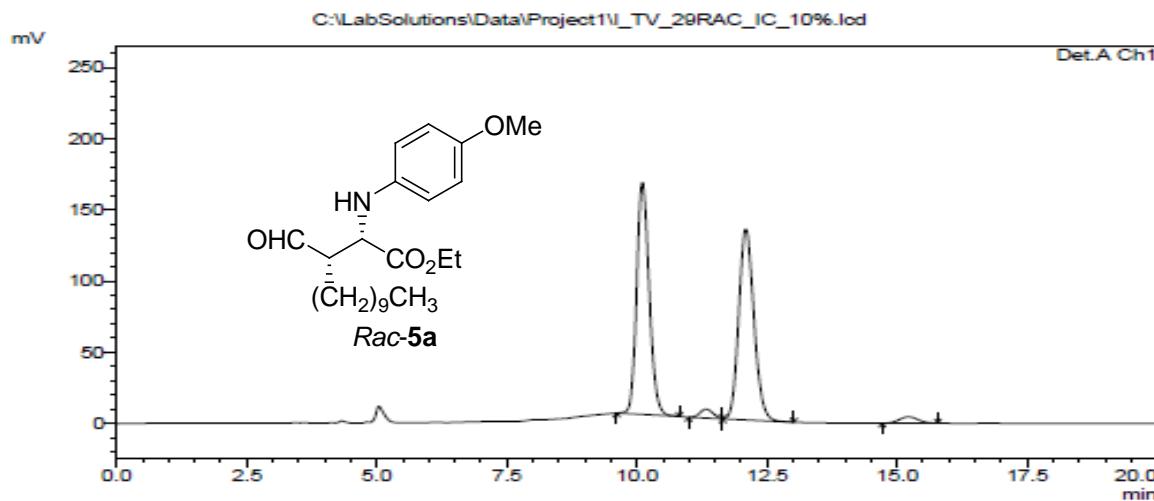






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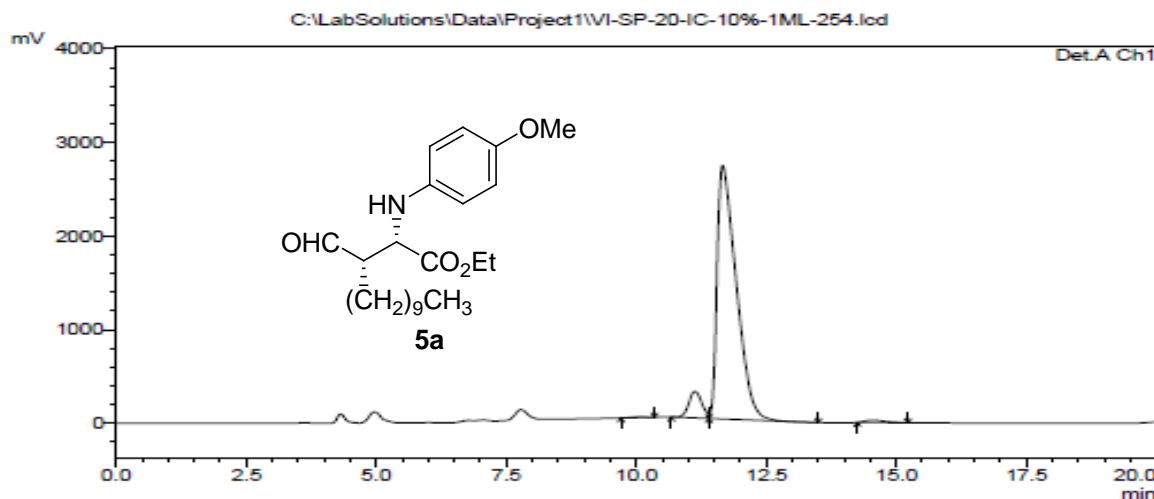


PeakTable

Detector A Ch1 254nm					
Peak#	Ret. Time	Area	Height	Area %	Height %
1	10.101	2729159	162851	48.097	52.924
2	11.326	109808	6238	1.935	2.027
3	12.089	2724179	134134	48.009	43.591
4	15.215	1111110	4485	1.958	1.458
Total		5674256	307708	100.000	100.000

===== Shimadzu LCsolution LC Data Image =====

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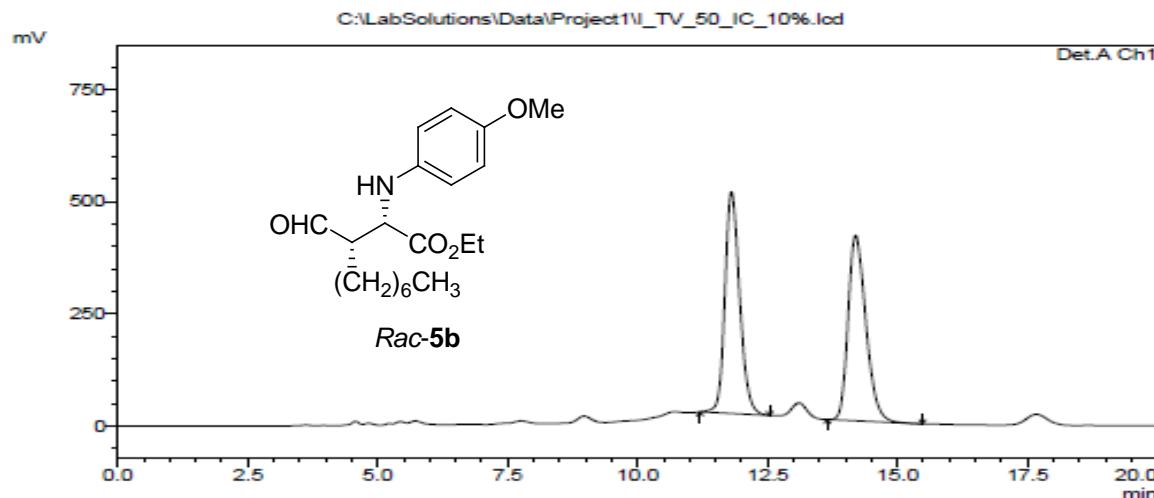


PeakTable

Detector A Ch1 254nm					
Peak#	Ret. Time	Area	Height	Area %	Height %
1	10.049	122626	7464	0.164	0.247
2	11.126	4956019	283035	6.620	9.362
3	11.658	69109151	2708852	92.318	89.599
4	14.547	671826	23940	0.897	0.792
Total		74859622	3023291	100.000	100.000

===== Shimadzu LCsolution LC Data Image =====

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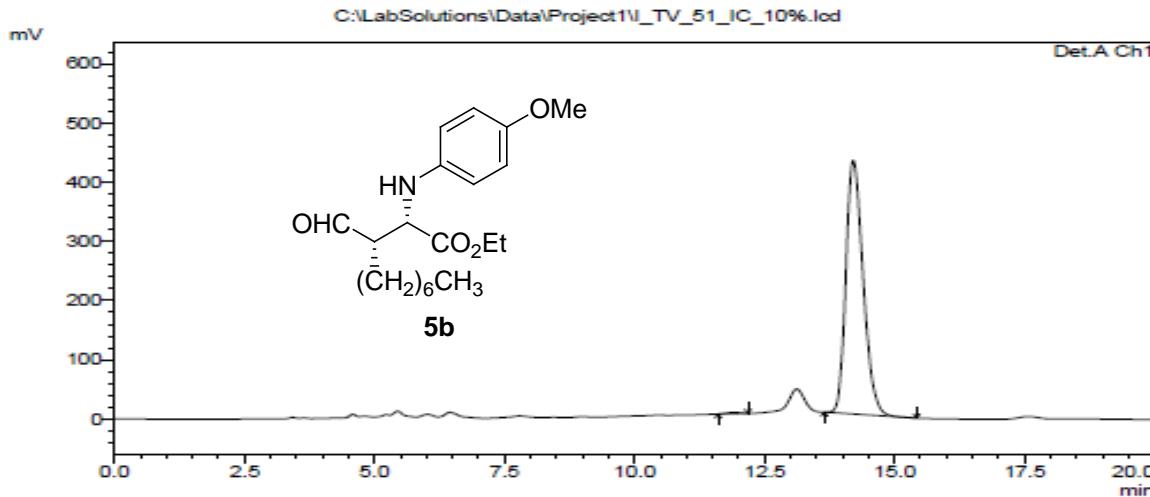
PeakTable

Detector A Ch1 254nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	11.803	9767625	493923	49.725	54.460
2	14.193	9875637	413032	50.275	45.540
Total		19643262	906955	100.000	100.000

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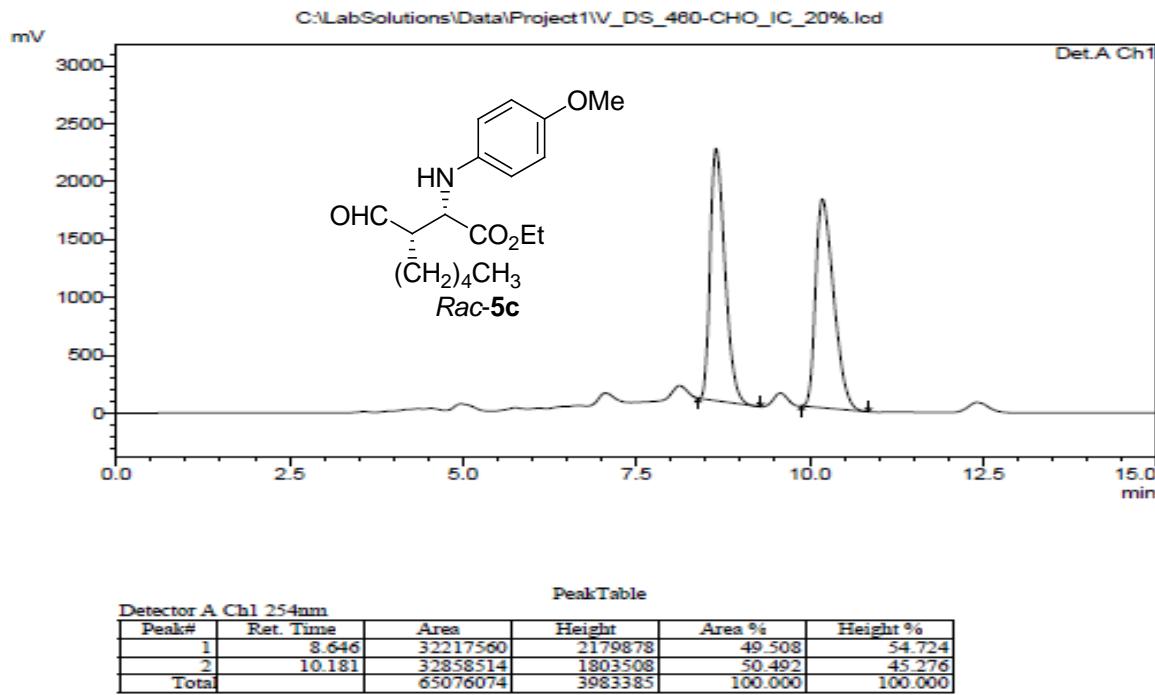
PeakTable

Detector A Ch1 254nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	11.901	34972	2118	0.352	0.492
2	14.204	9904647	428396	99.648	99.508
Total		9939619	430514	100.000	100.000

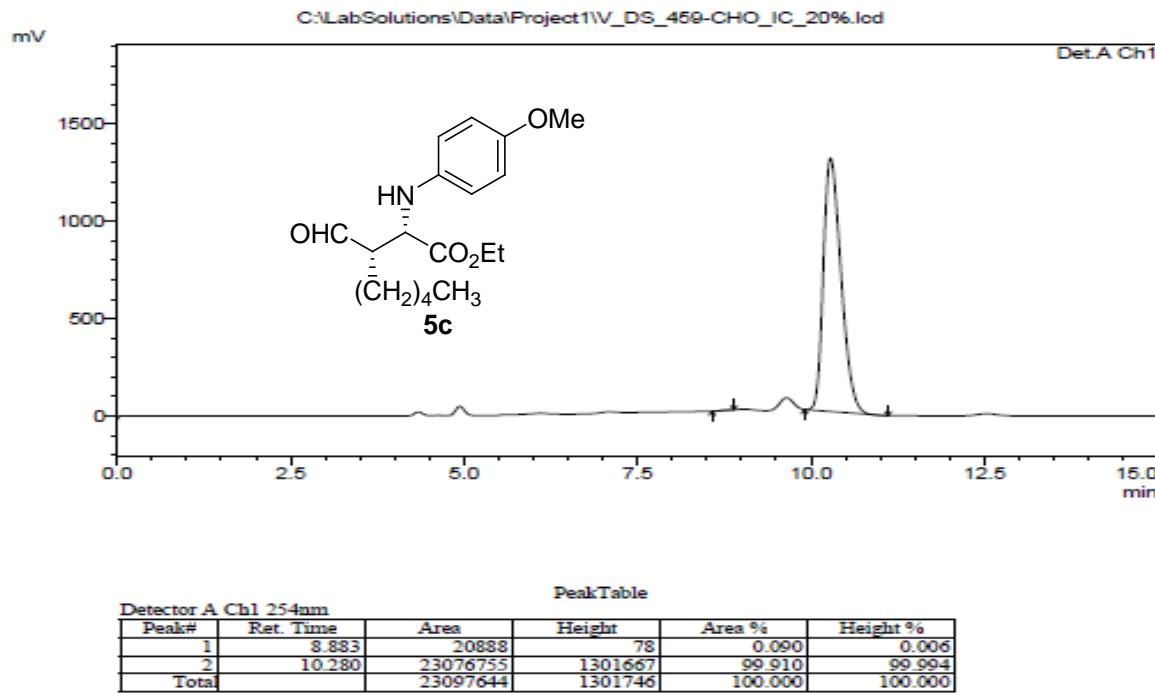
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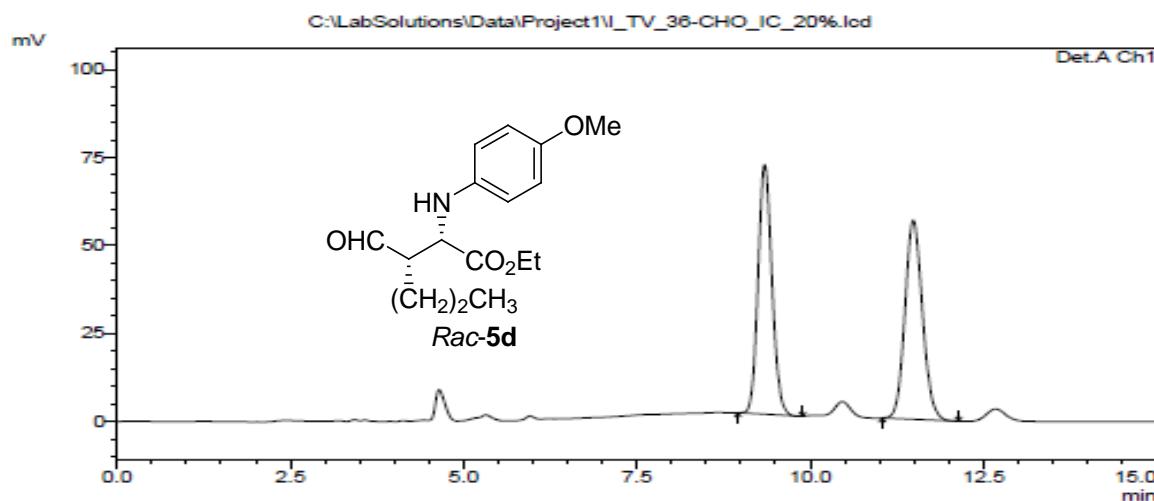
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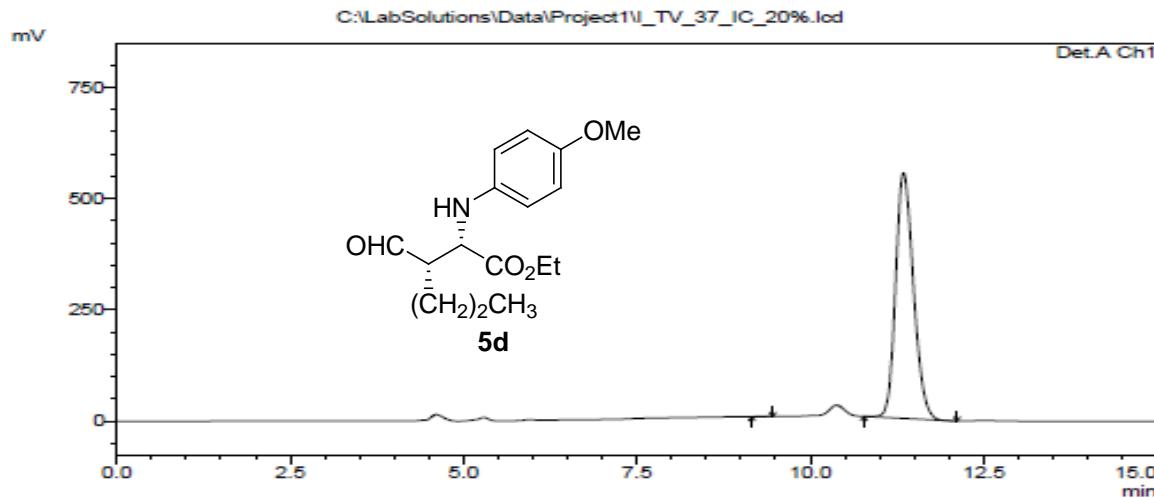


PeakTable

Detector A Ch1 254nm					
Peak#	Ret. Time	Area	Height	Area %	Height %
1	9.340	987038	70864	49.749	55.615
2	11.485	996982	56556	50.251	44.385
Total		1984020	127420	100.000	100.000

===== Shimadzu LCsolution LC Data Image =====

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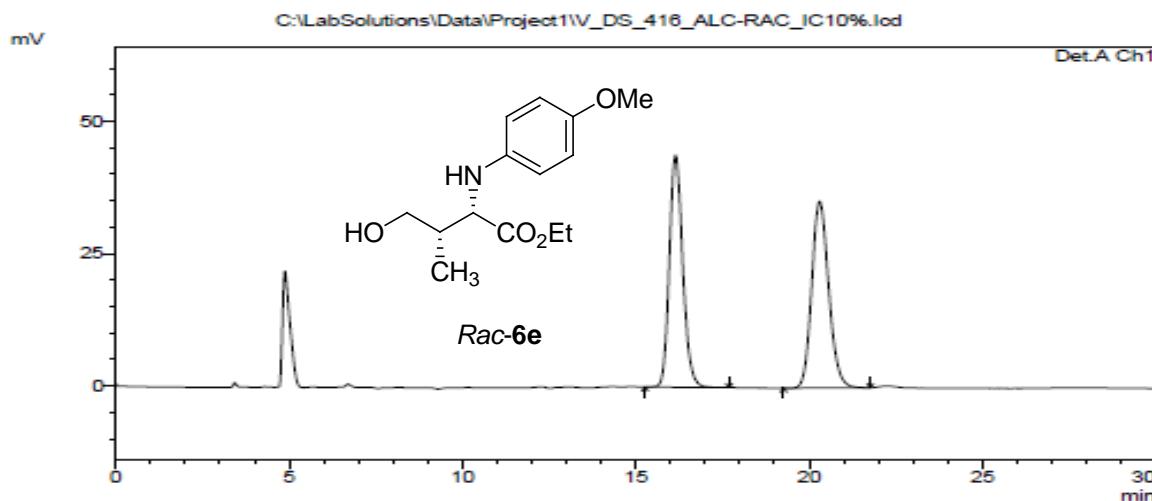


PeakTable

Detector A Ch1 254nm					
Peak#	Ret. Time	Area	Height	Area %	Height %
1	9.317	5828	538	0.059	0.097
2	11.342	9869828	551055	99.941	99.903
Total		9875657	551592	100.000	100.000

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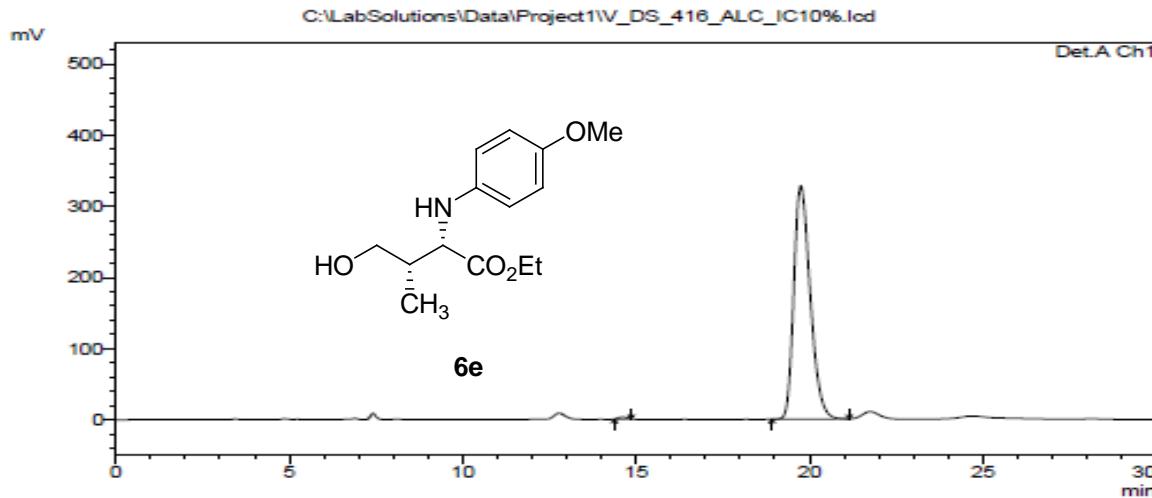
PeakTable

Detector A Ch1 254nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	16.143	1178158	43807	49.507	55.414
2	20.300	1201643	35247	50.493	44.586
Total		2379801	79054	100.000	100.000

===== Shimadzu LCsolution LC Data Image =====

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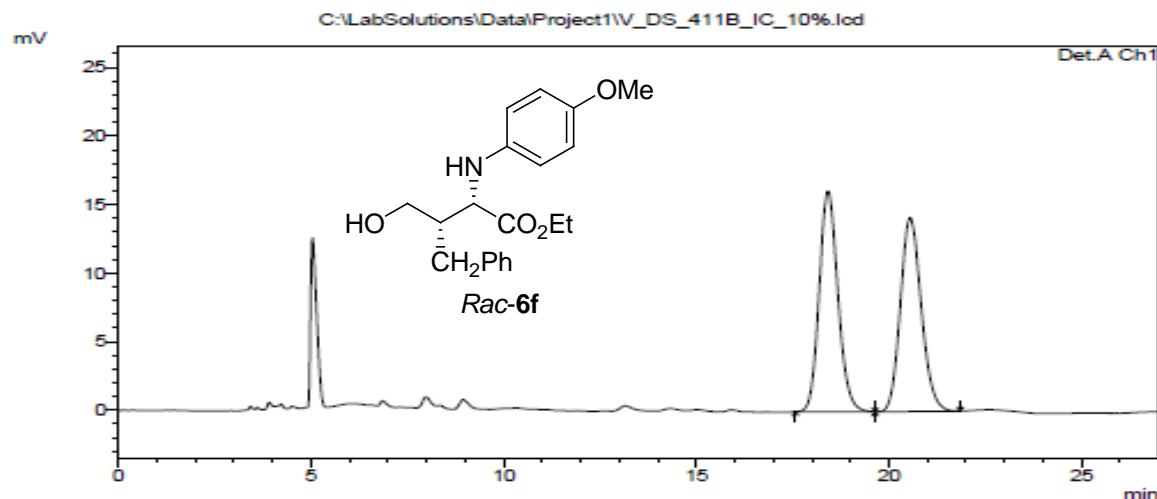
PeakTable

Detector A Ch1 254nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	14.610	45511	2868	0.420	0.867
2	19.746	10794070	328024	99.580	99.133
Total		10839581	330892	100.000	100.000

===== Shimadzu LCsolution LC Data Image =====

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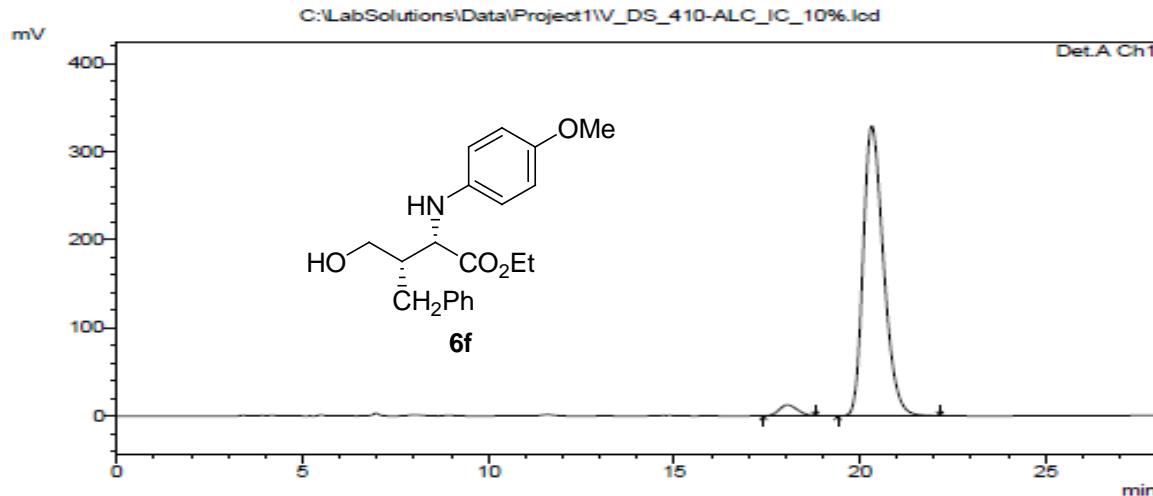
Detector A Ch1 254nm

PeakTable

Peak#	Ret. Time	Area	Height	Area %	Height %
1	18.413	545708	16103	50.530	53.234
2	20.548	534265	14147	49.470	46.766
Total		1079973	30250	100.000	100.000

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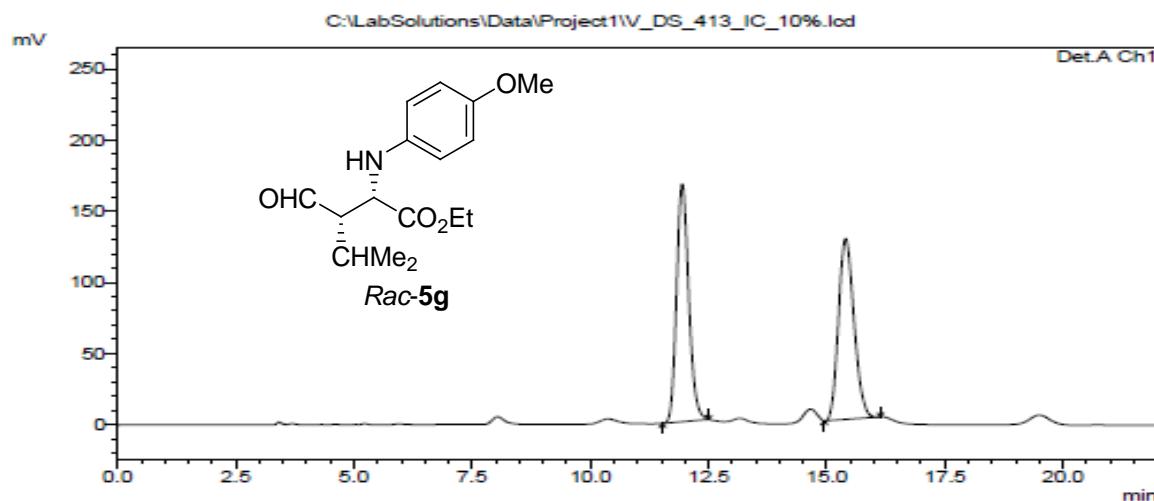
Detector A Ch1 254nm

PeakTable

Peak#	Ret. Time	Area	Height	Area %	Height %
1	18.057	419977	12384	3.251	3.629
2	20.322	12498981	328868	96.749	96.371
Total		12918958	341252	100.000	100.000

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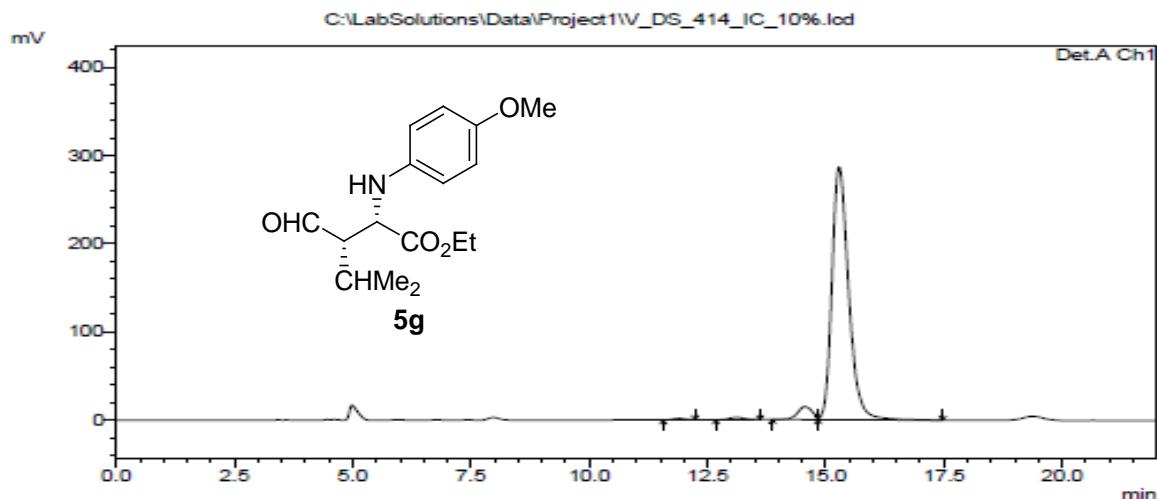


PeakTable

Detector A Ch1 254nm					
Peak#	Ret. Time	Area	Height	Area %	Height %
1	11.941	2992644	167181	50.757	56.806
2	15.398	2903418	127119	49.243	43.194
Total		5896062	294300	100.000	100.000

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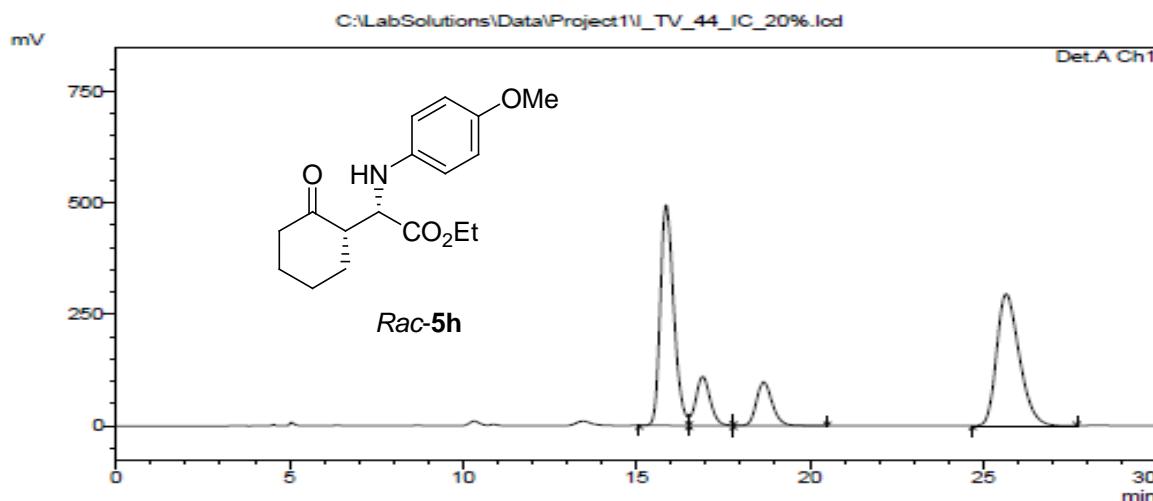


PeakTable

Detector A Ch1 254nm					
Peak#	Ret. Time	Area	Height	Area %	Height %
1	11.889	29582	1706	0.395	0.557
2	13.115	58974	2716	0.788	0.887
3	14.566	324137	15017	4.331	4.905
4	15.282	7072012	286714	94.486	93.651
Total		7484704	306153	100.000	100.000

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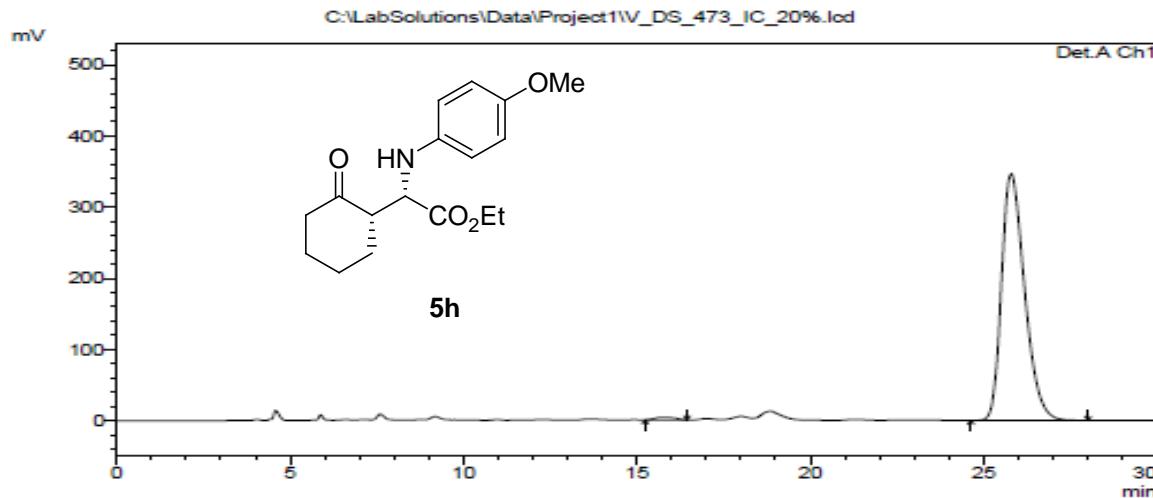


PeakTable

Detector A Ch1 254nm					
Peak#	Ret. Time	Area	Height	Area %	Height %
1	15.854	13361371	493599	40.342	49.502
2	16.907	3154730	109760	9.525	11.008
3	18.664	3136283	98246	9.469	9.853
4	25.660	13468142	295521	40.664	29.637
Total		33120526	9971271	100.000	100.000

===== Shimadzu LCsolution LC Data Image =====

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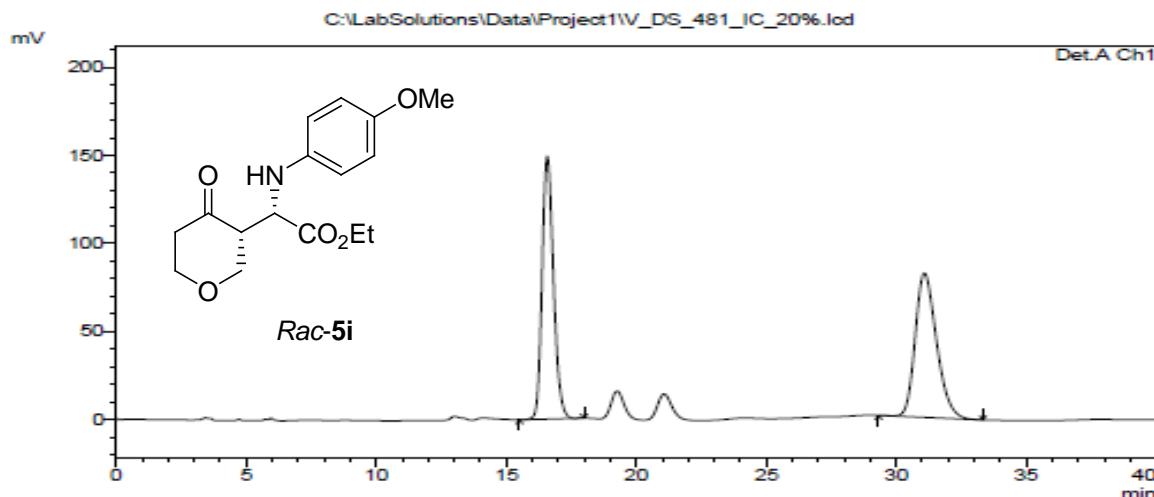


PeakTable

Detector A Ch1 254nm					
Peak#	Ret. Time	Area	Height	Area %	Height %
1	15.689	138594	3336	0.856	0.952
2	25.792	16042876	346992	99.144	99.048
Total		16181470	350328	100.000	100.000

===== Shimadzu LCsolution LC Data Image =====

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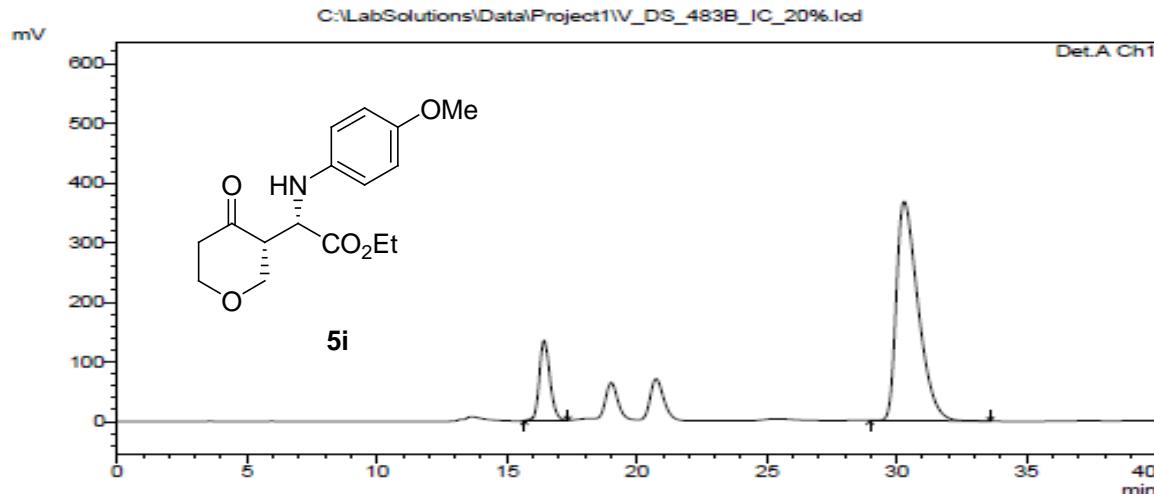
PeakTable

Detector A Ch1 254nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	16.572	4550574	149236	49.338	64.576
2	31.080	4672700	81865	50.662	35.424
Total		9223274	231101	100.000	100.000

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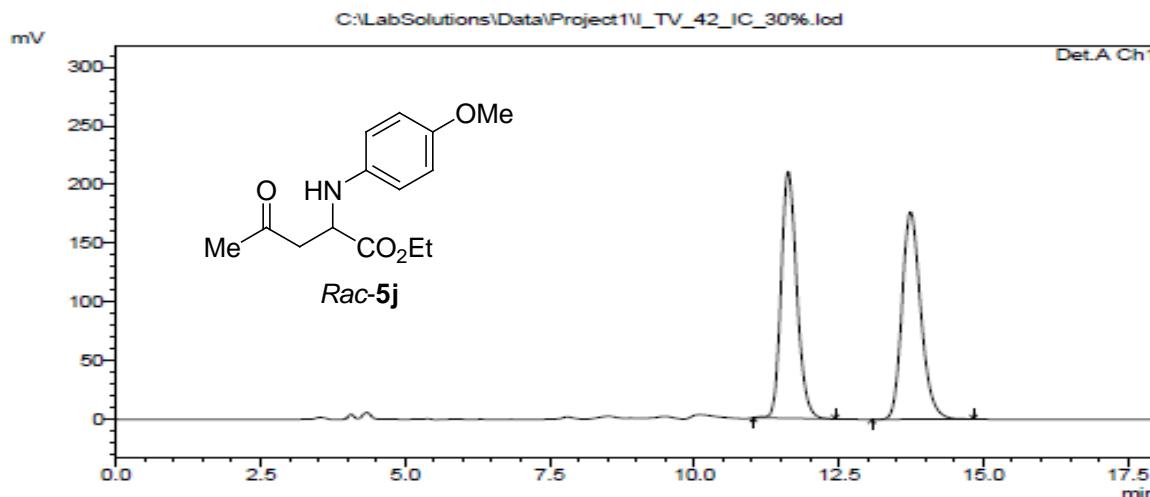
PeakTable

Detector A Ch1 254nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	16.427	3814543	134181	15.139	26.750
2	30.285	21382980	367420	84.861	73.250
Total		25197523	501601	100.000	100.000

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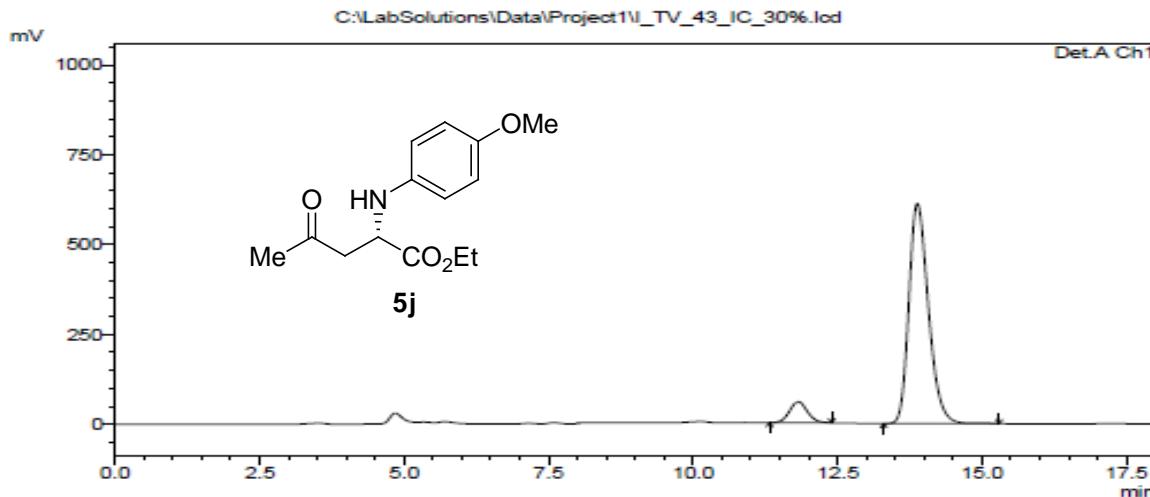
PeakTable

Detector A Ch1 254nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	11.624	3969255	210208	49.721	54.324
2	13.739	4013844	176745	50.279	45.676
Total		7983099	386953	100.000	100.000

===== Shimadzu LCsolution LC Data Image =====

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PeakTable

Detector A Ch1 254nm

Peak#	Ret. Time	Area	Height	Area %	Height %
1	11.818	1262118	58761	8.042	8.748
2	13.880	14432680	612940	91.958	91.252
Total		15694798	671701	100.000	100.000