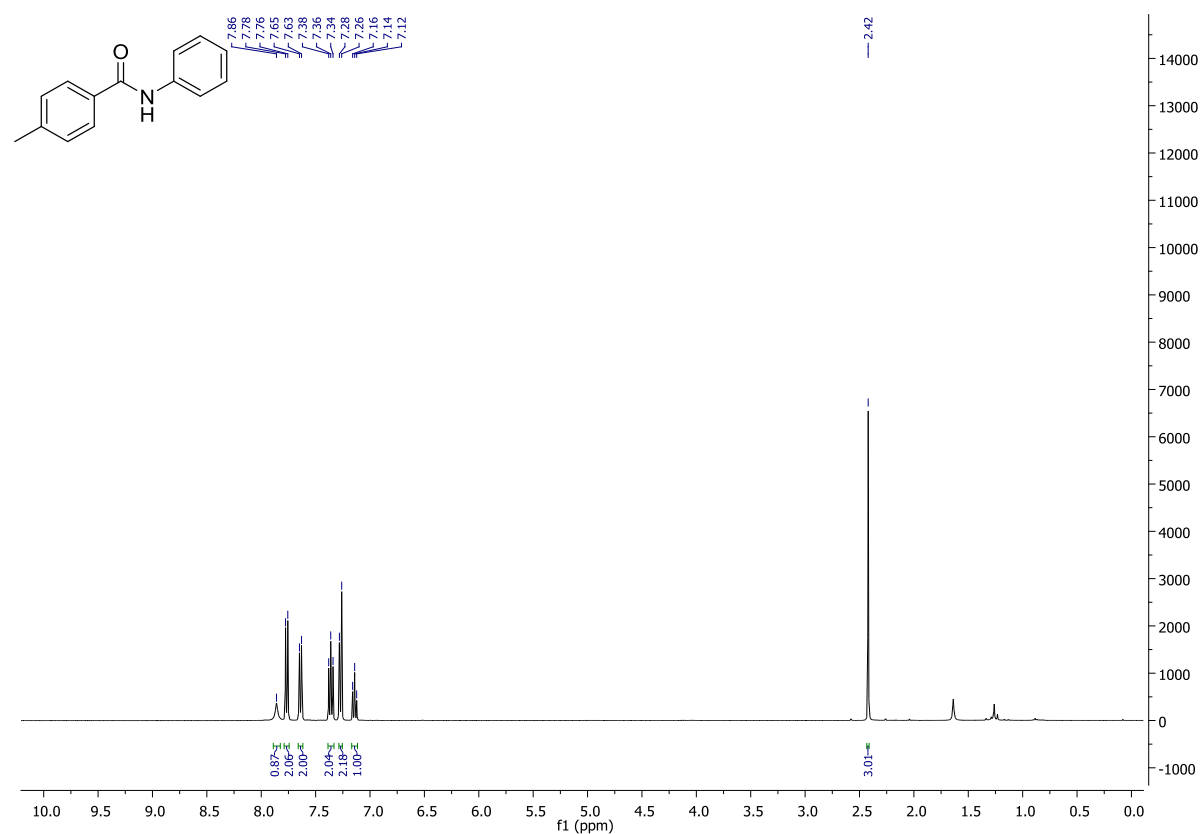
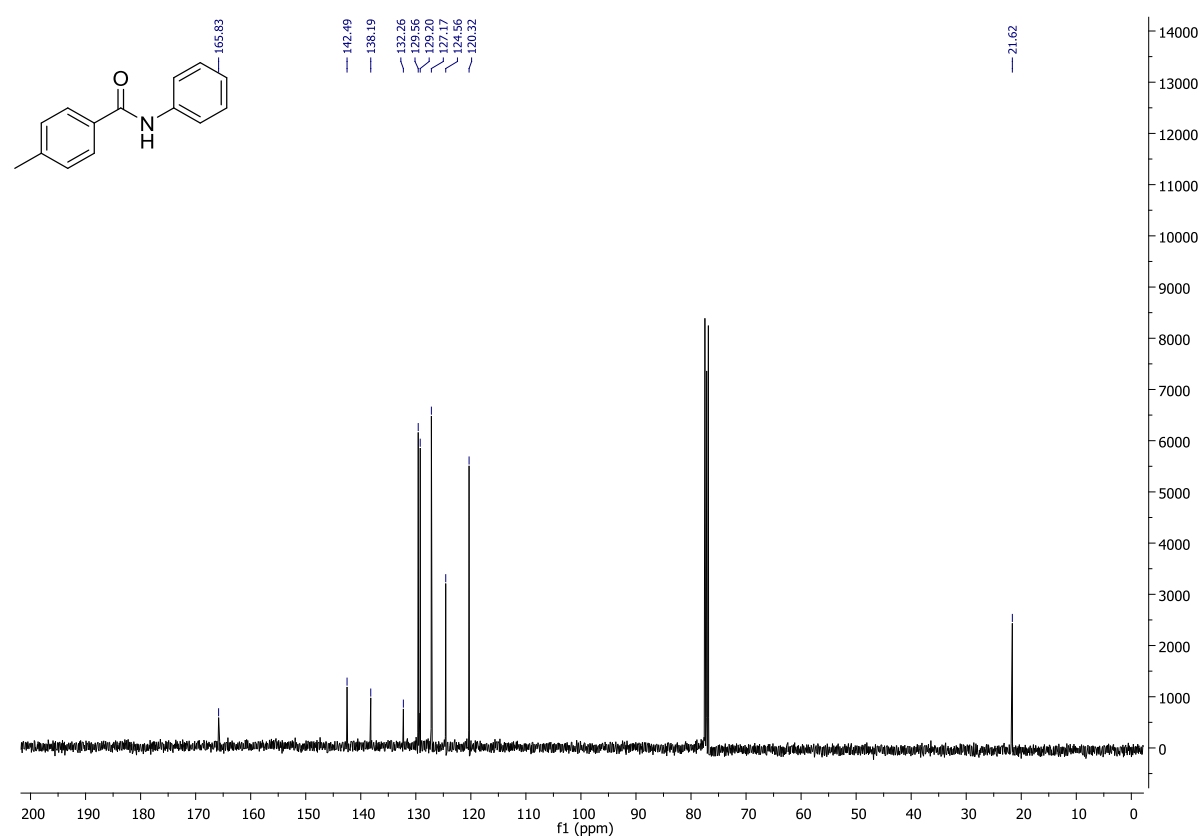


8. NMR spectra for Products from Schemes 1 and 2

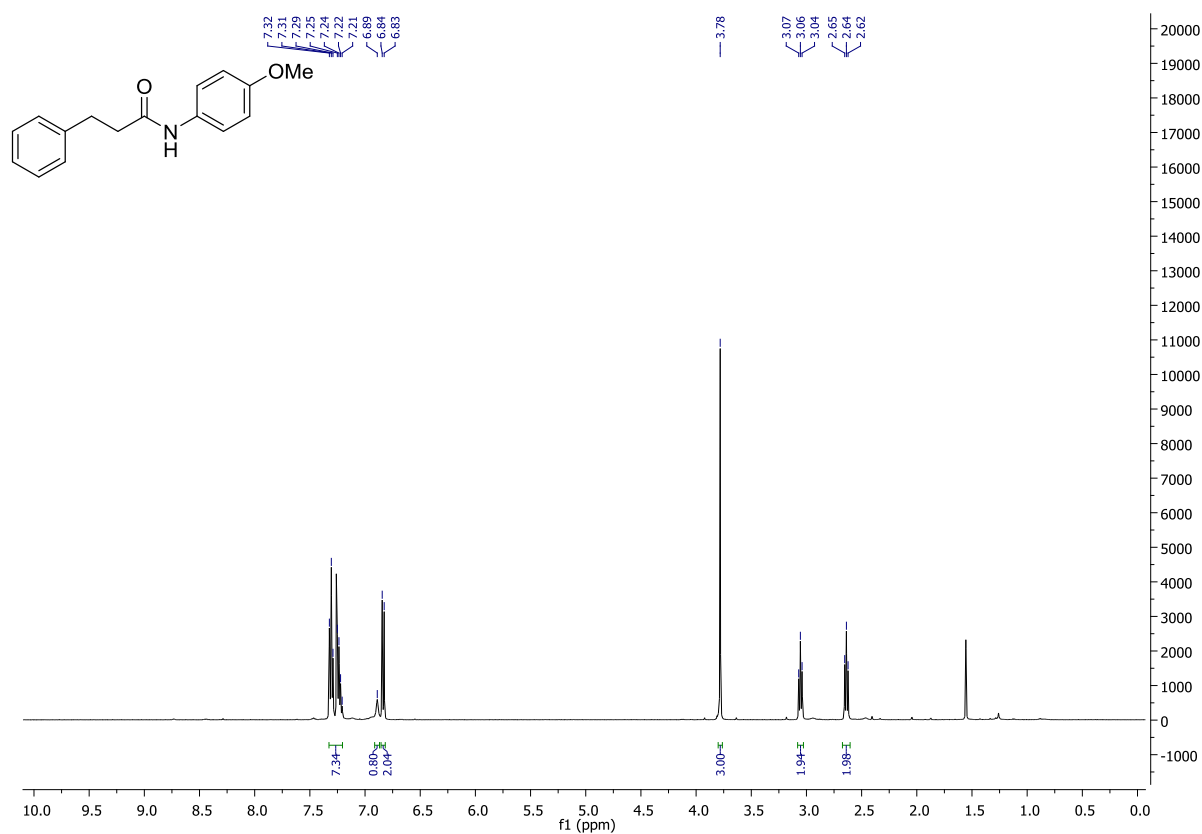
¹H NMR of 3a



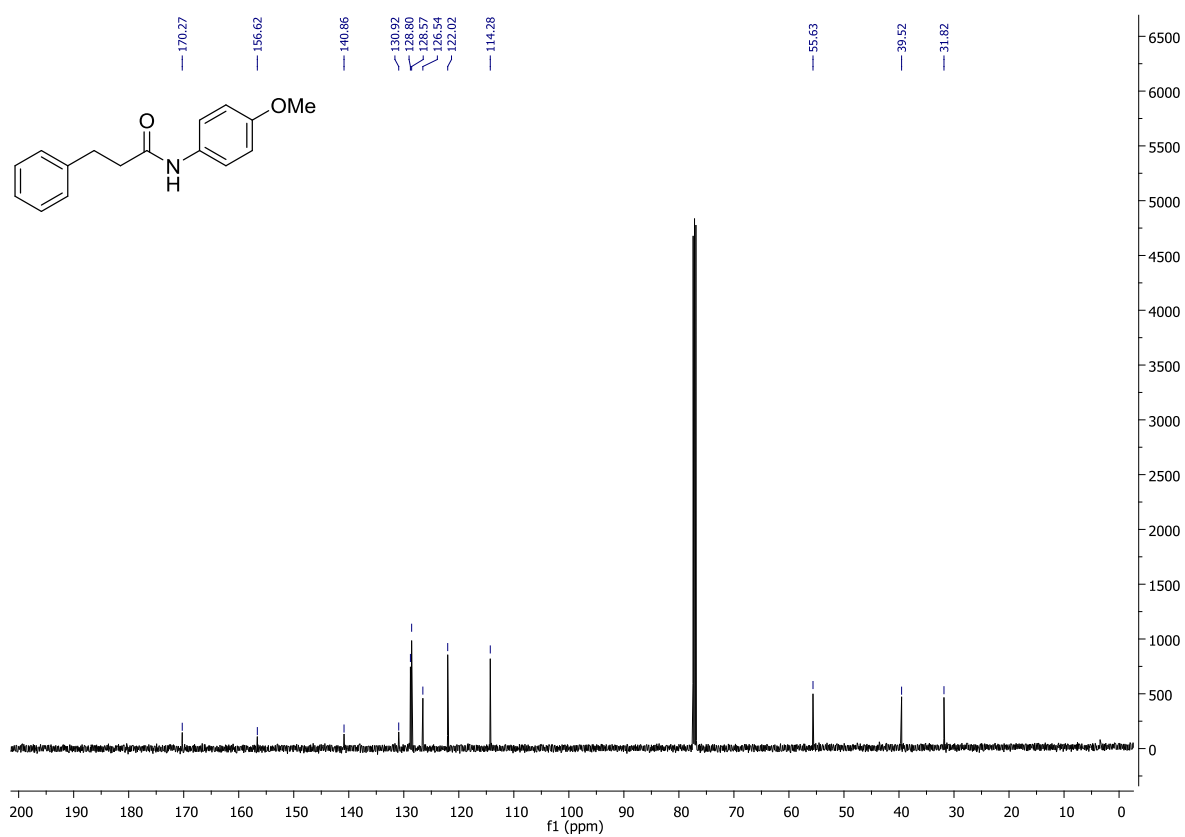
¹³C NMR of 3a



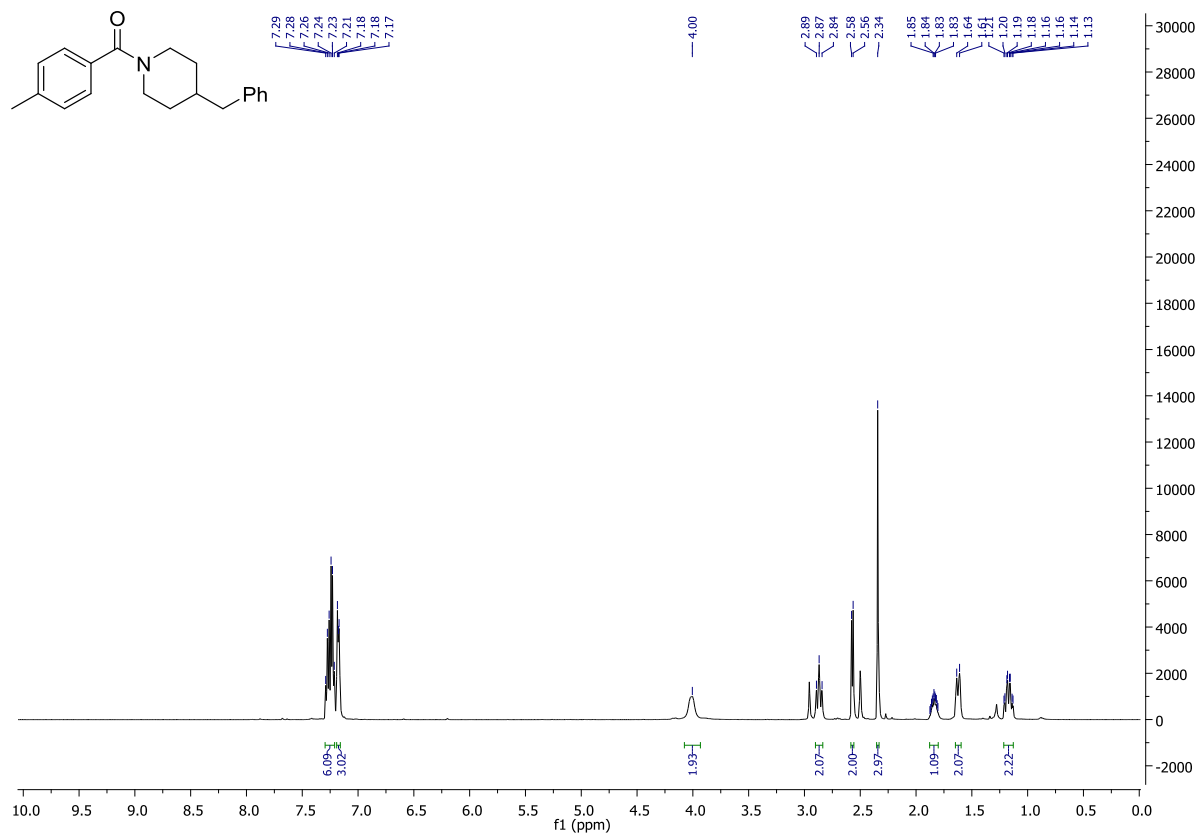
¹H NMR of 3b



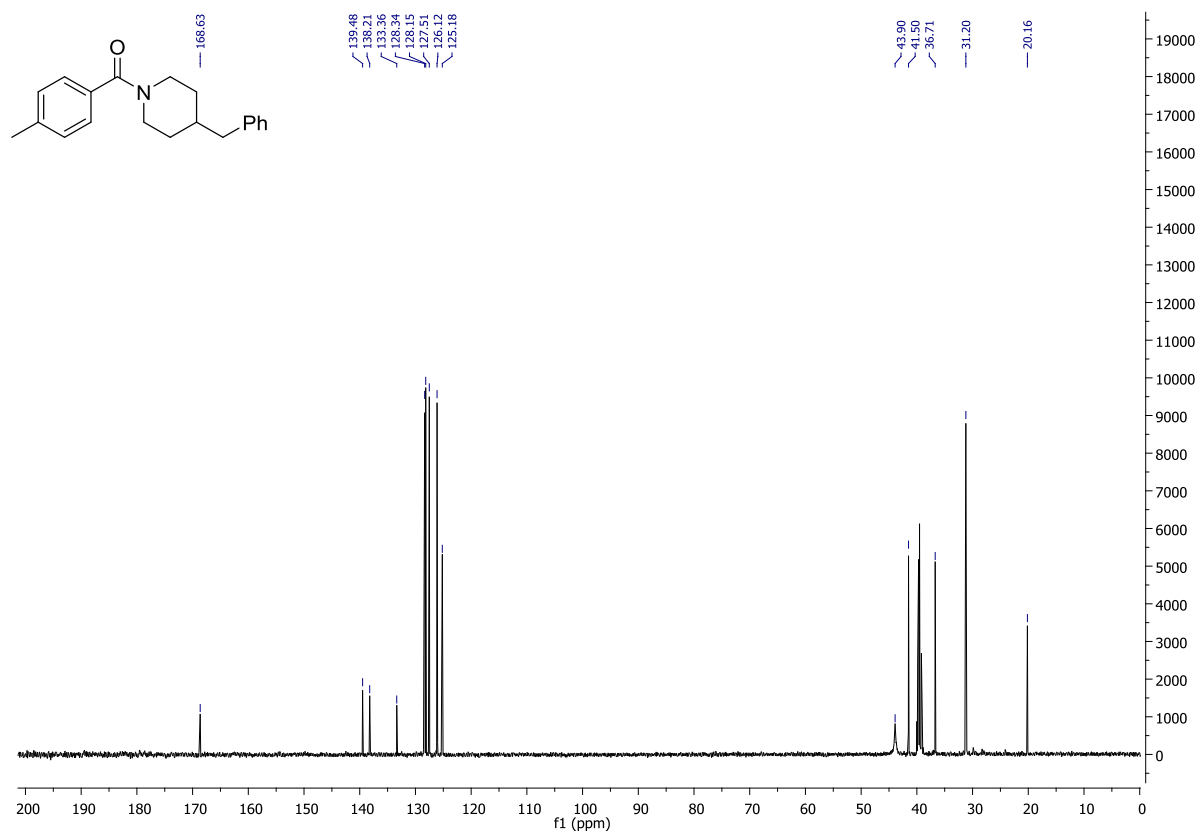
¹³C NMR of 3b



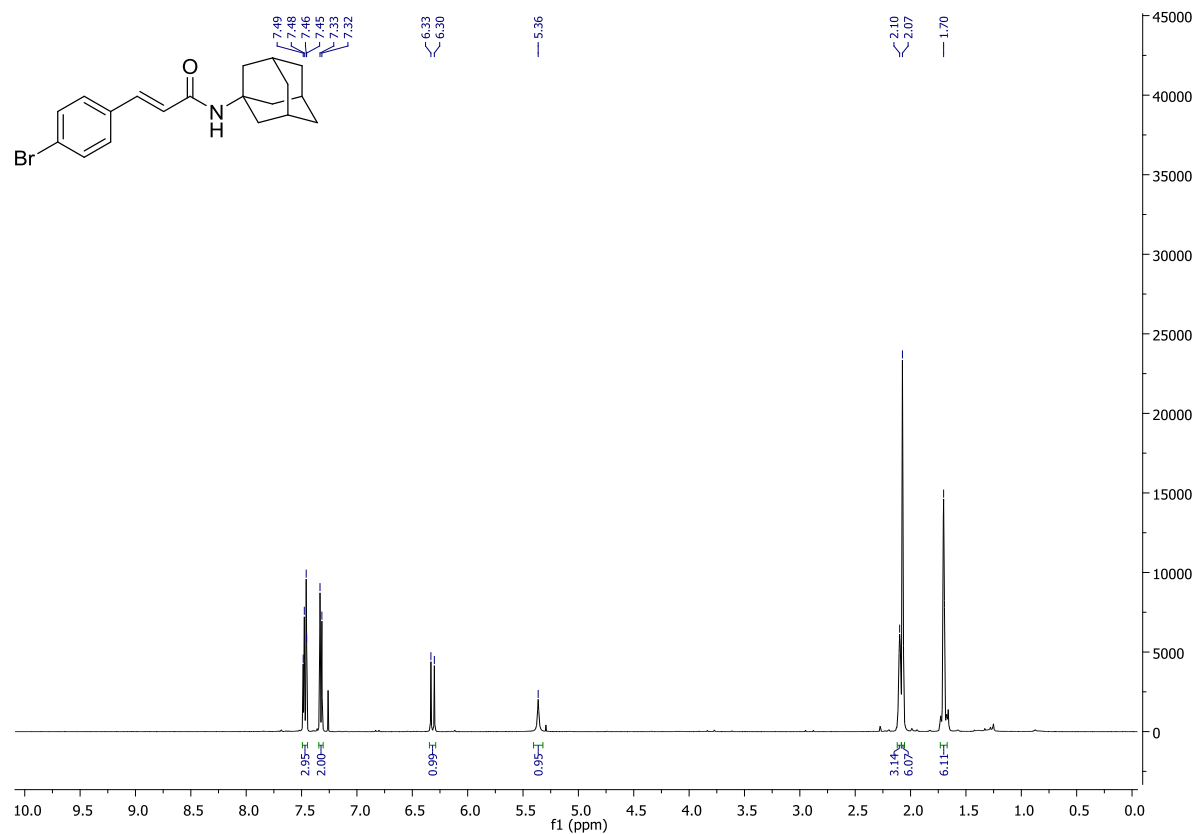
¹H NMR of 3c



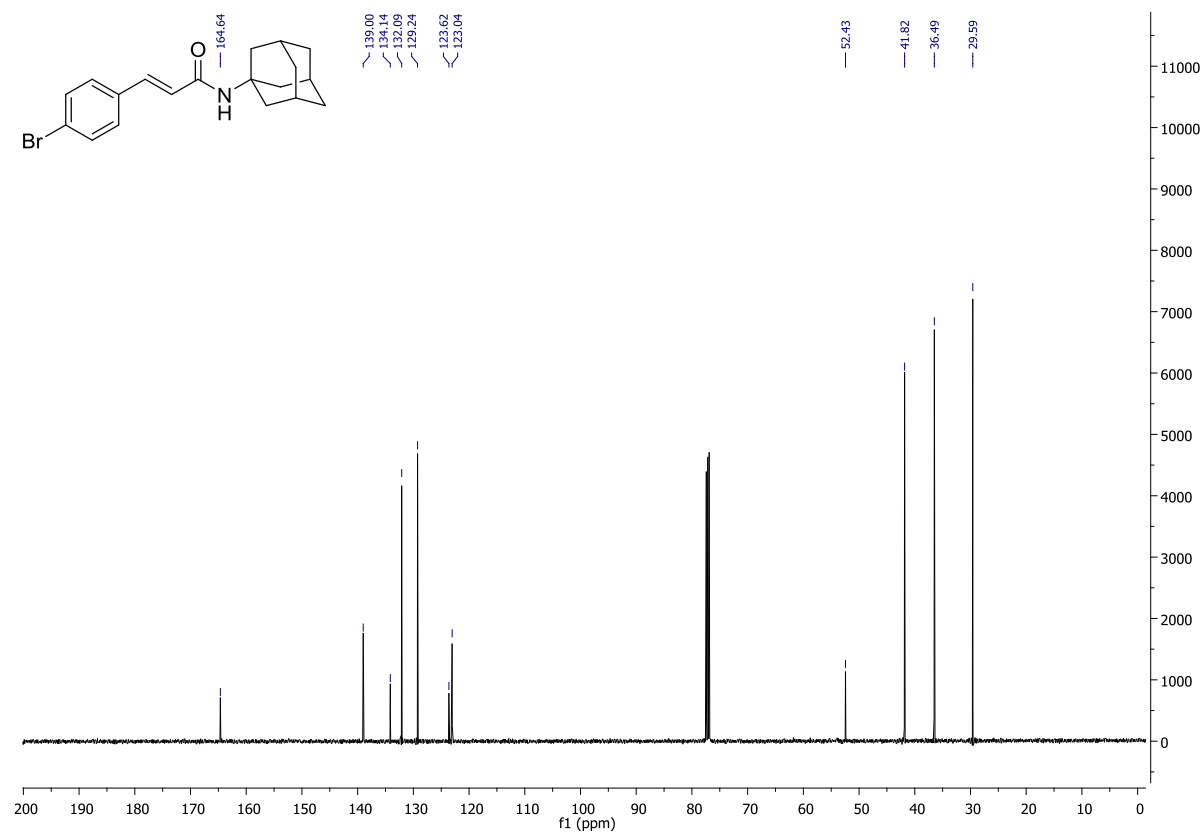
¹³C NMR of 3c



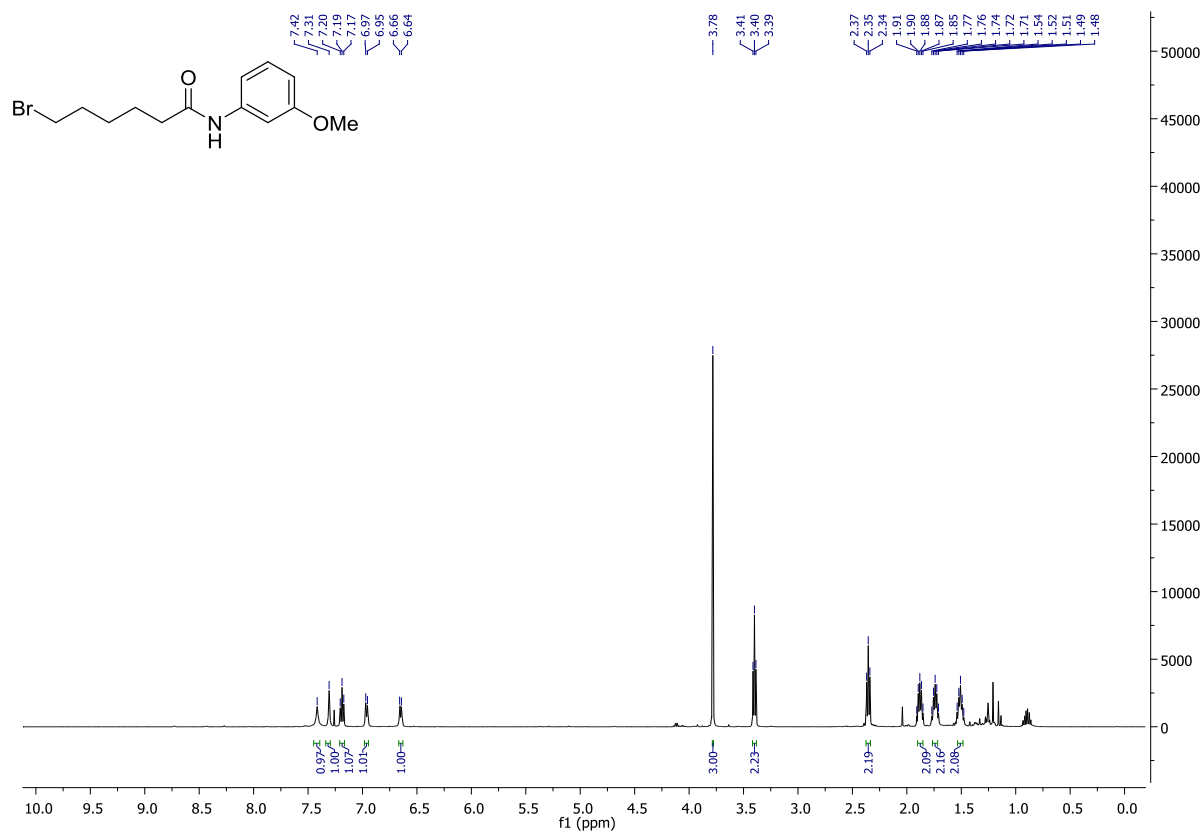
¹H NMR of 3d



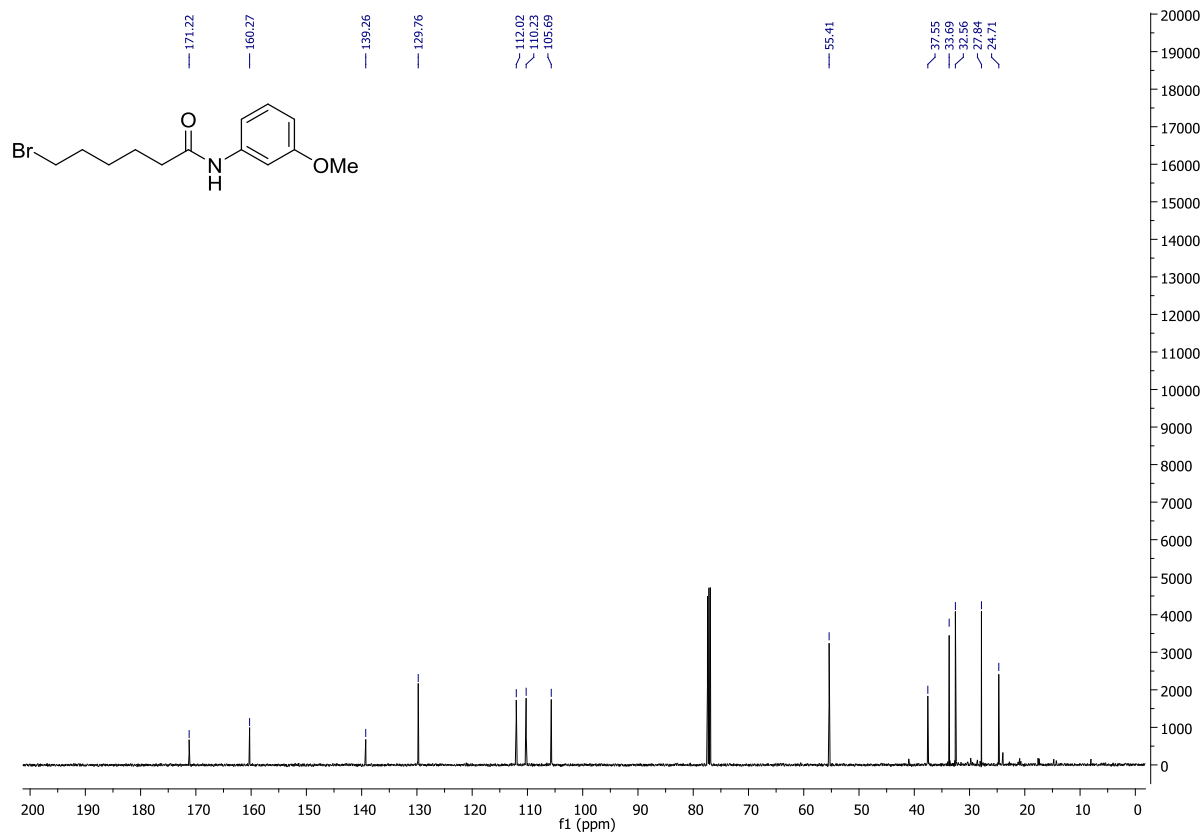
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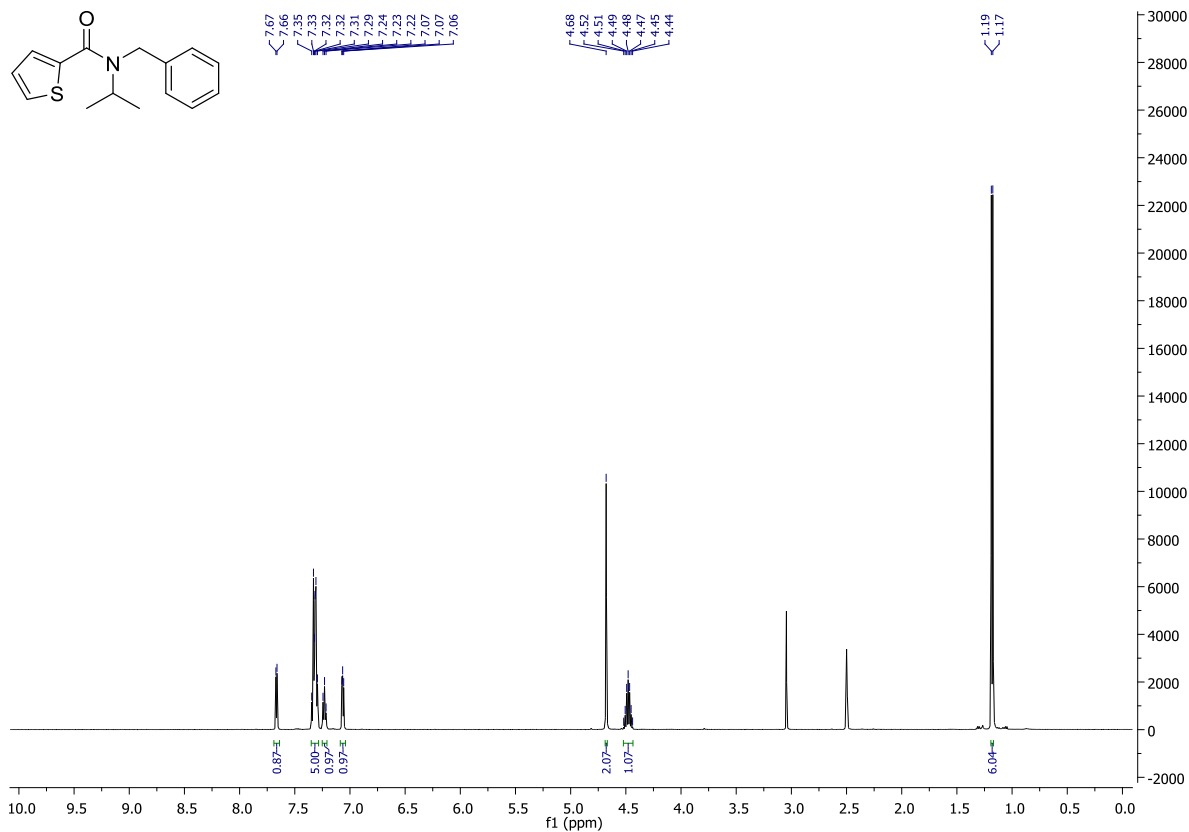
¹H NMR of 3e



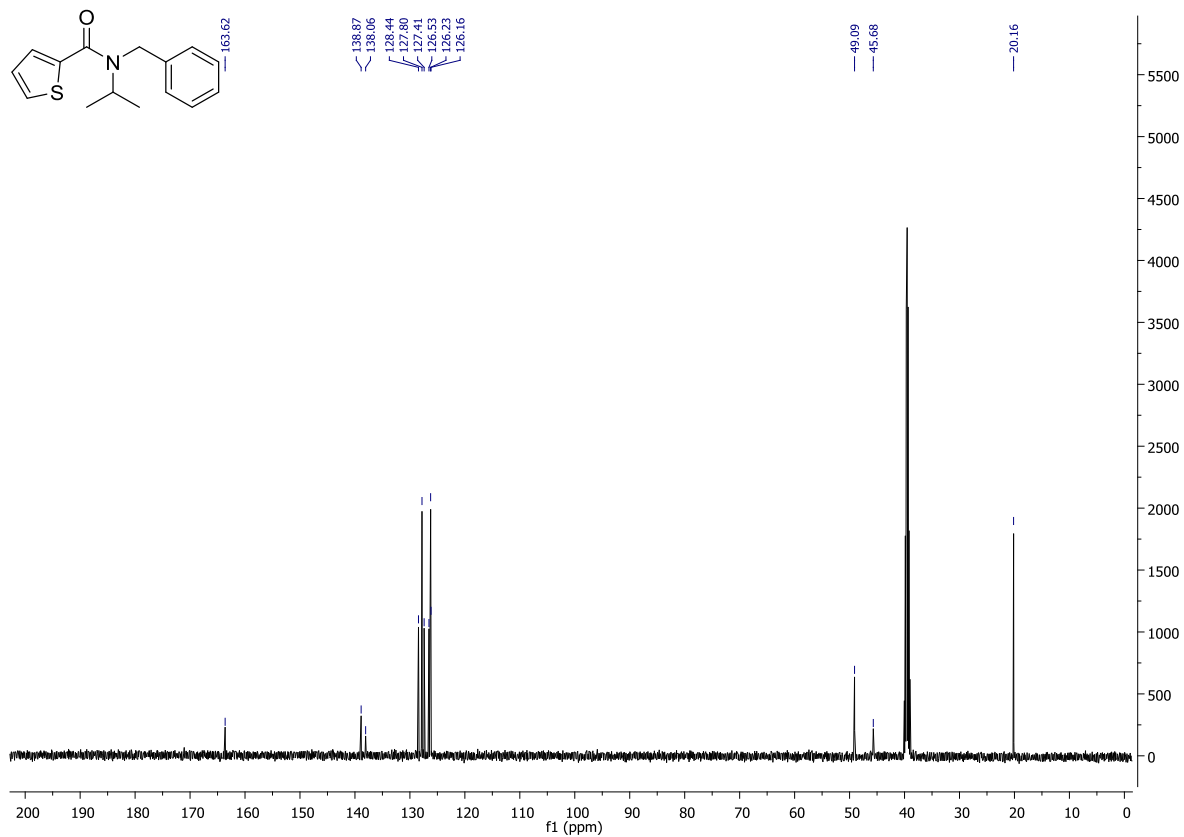
¹³C NMR of 3e



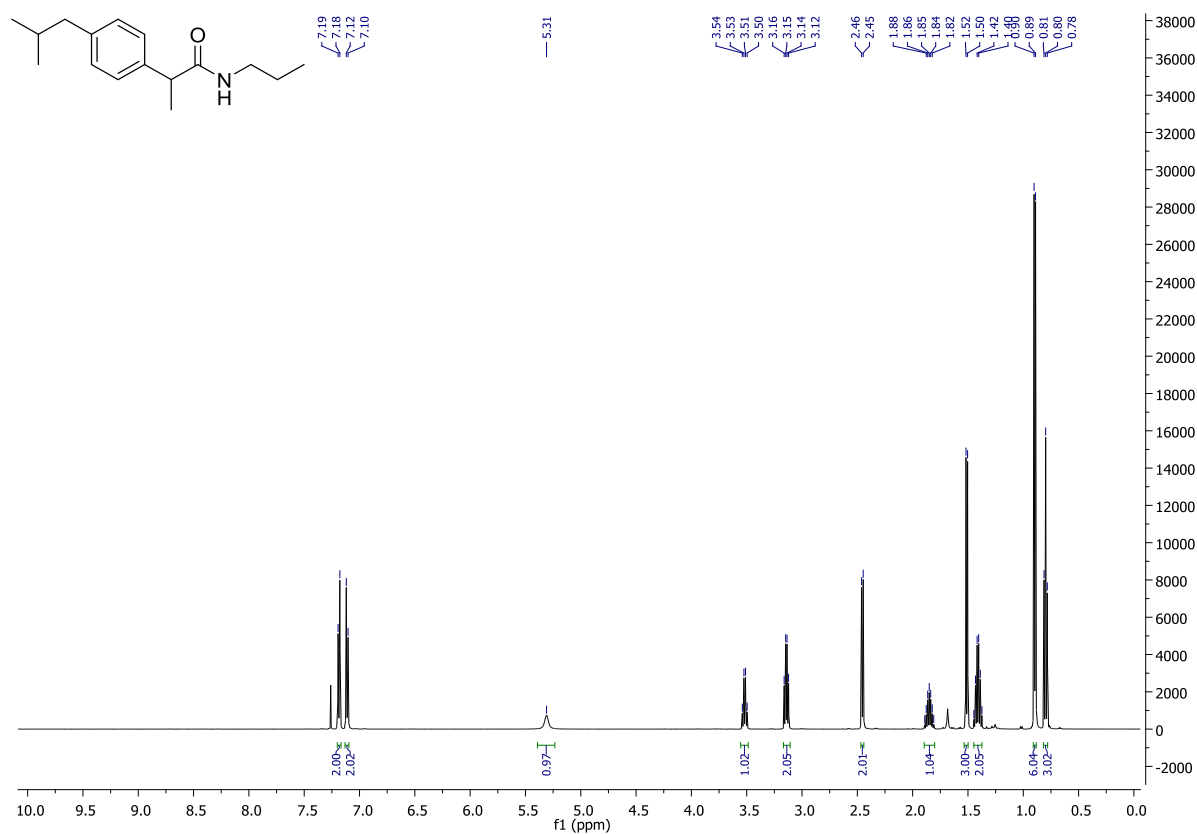
¹H NMR of 3f



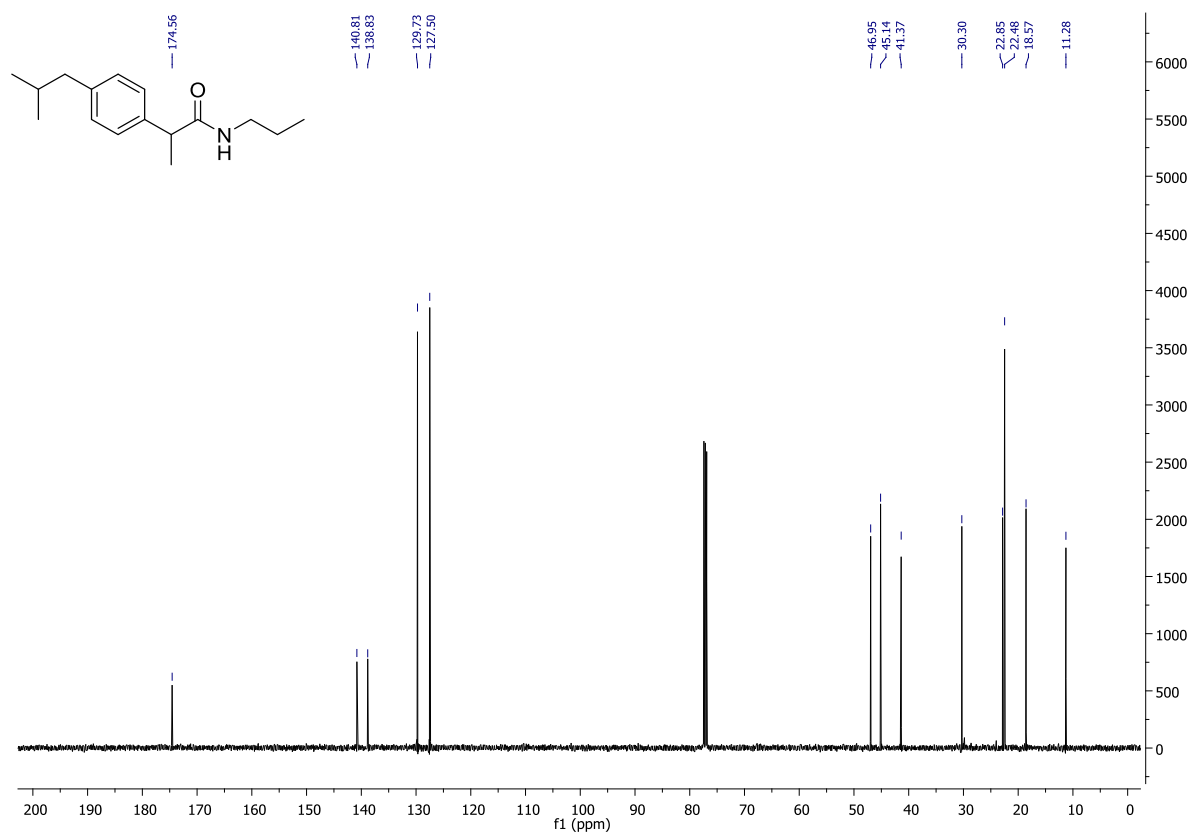
¹³C NMR of 3f



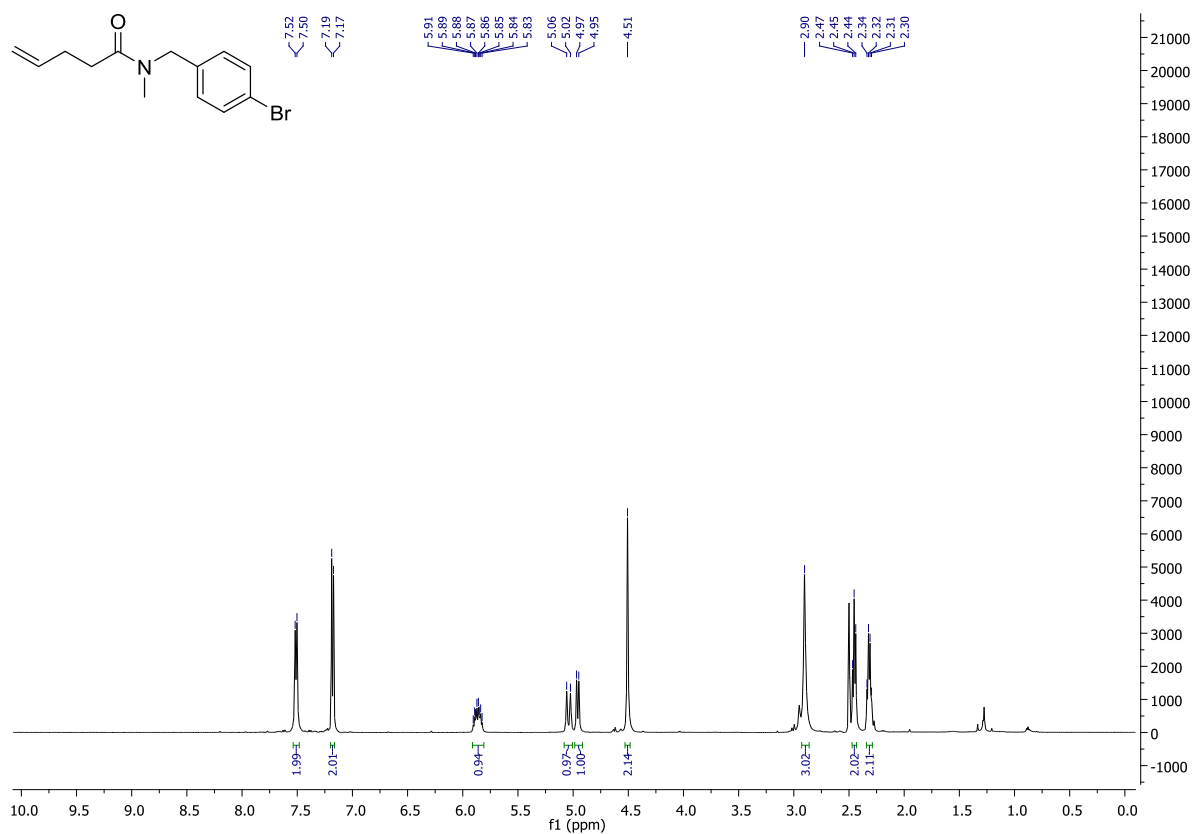
¹H NMR of 3g



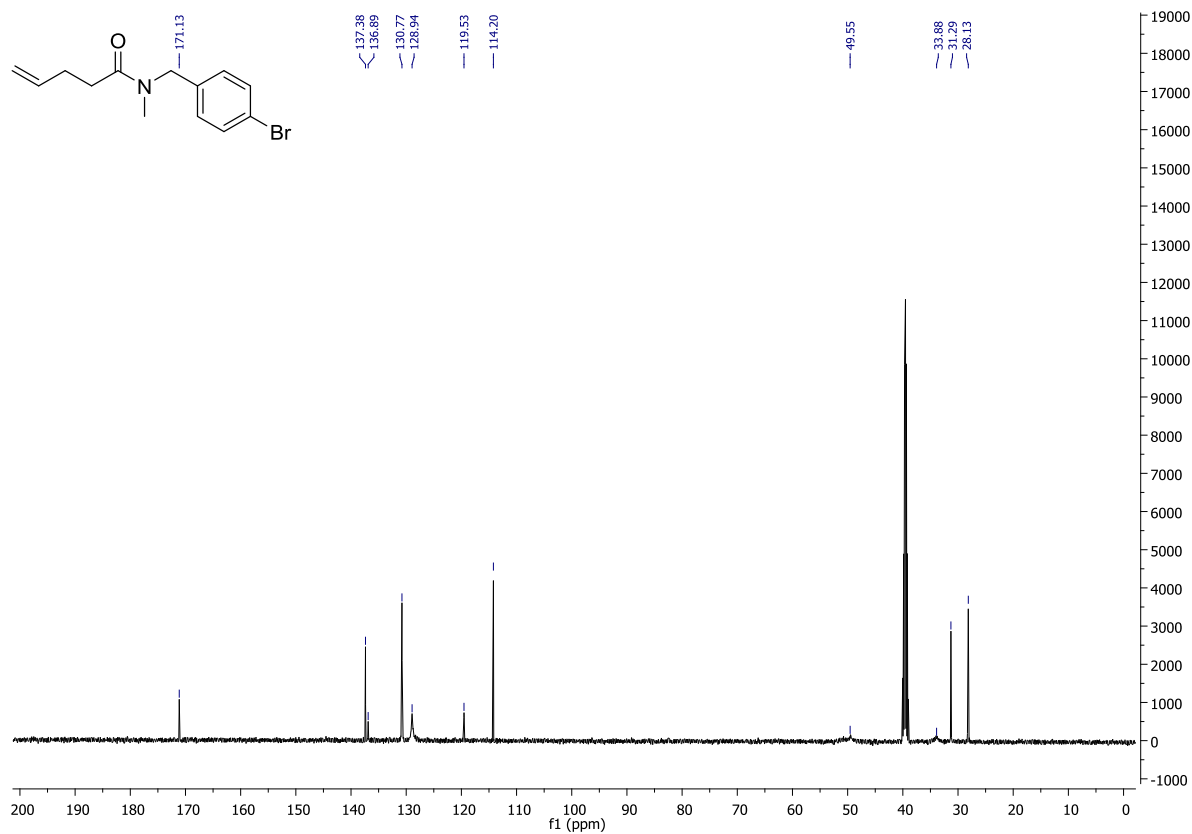
¹³C NMR of 3g



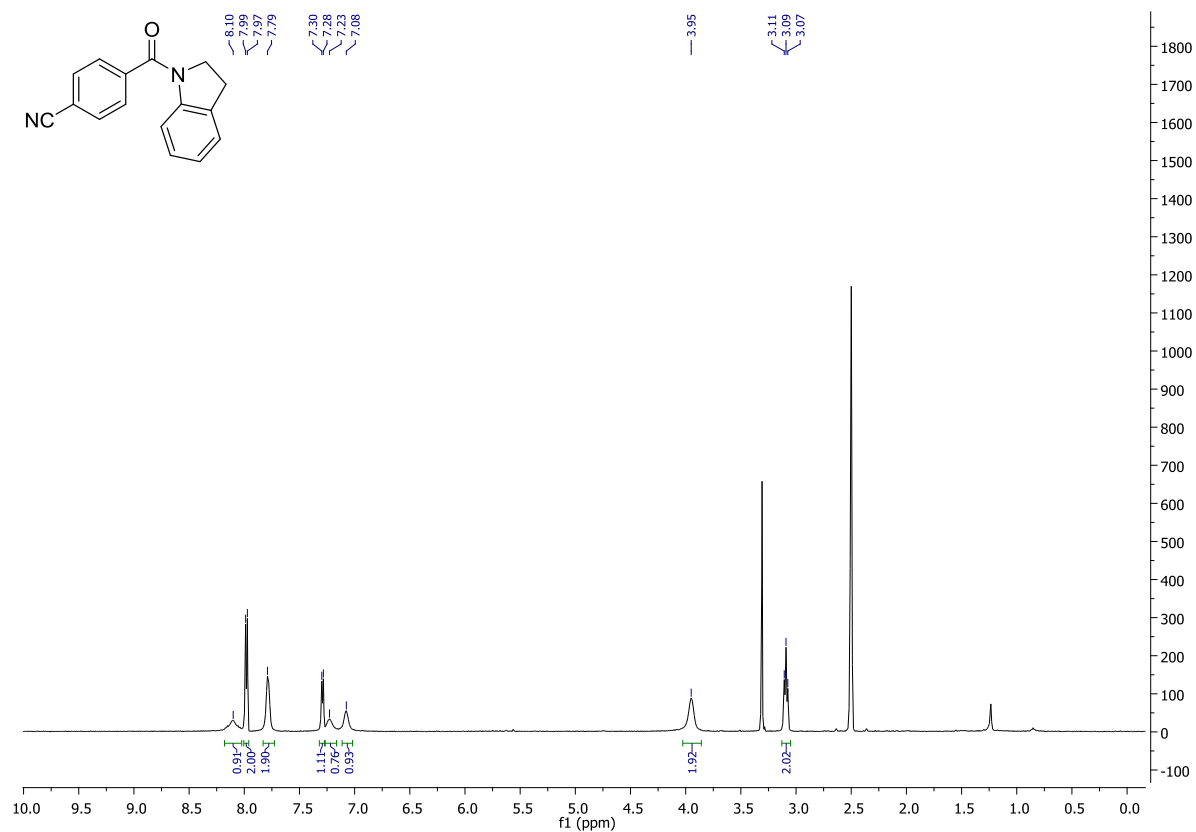
¹H NMR of 3h



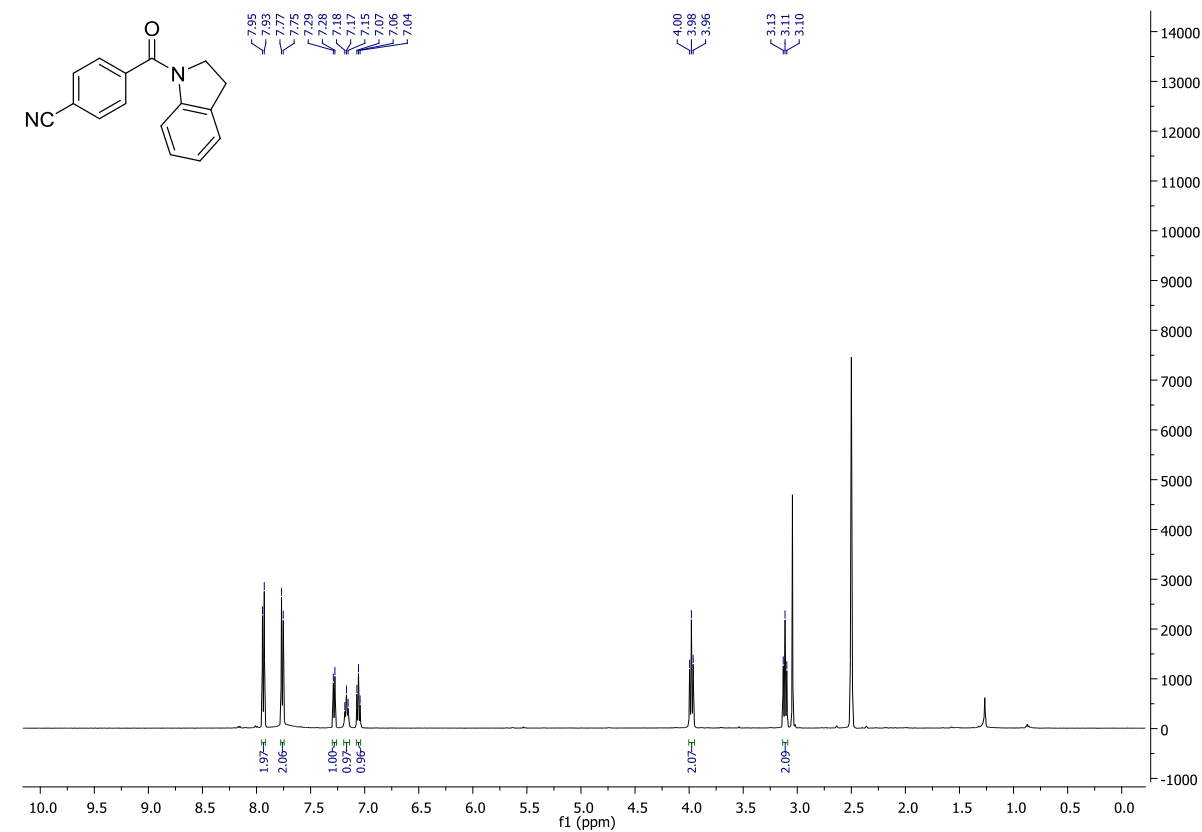
¹³C NMR of 3h



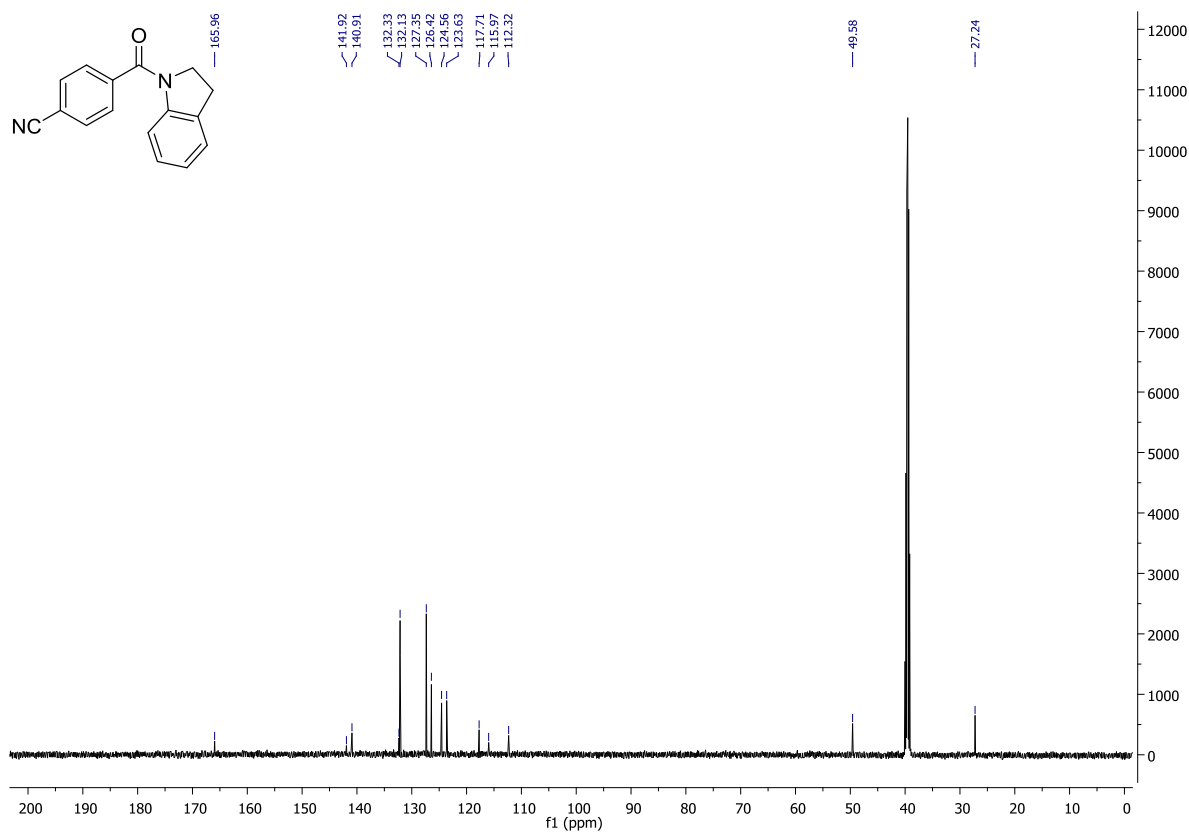
¹H NMR of 3i – 300 K



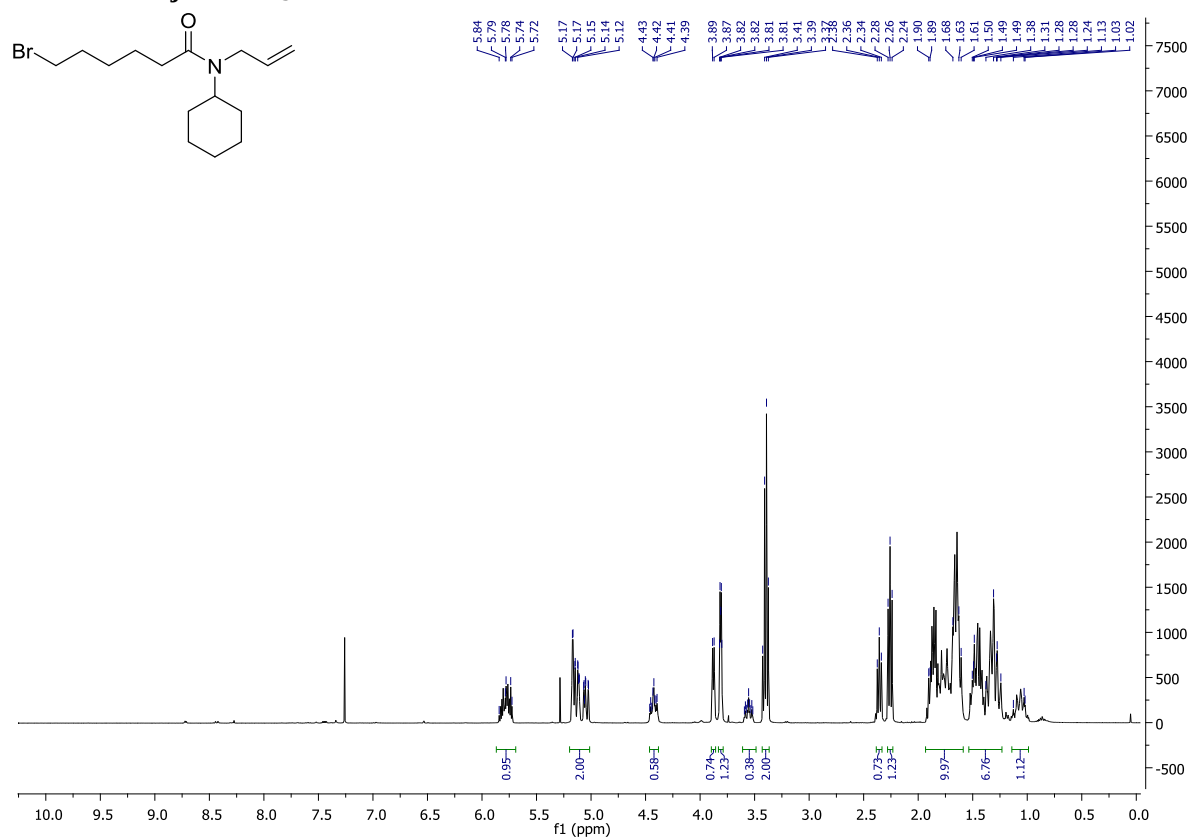
¹H NMR of 3i – 355 K



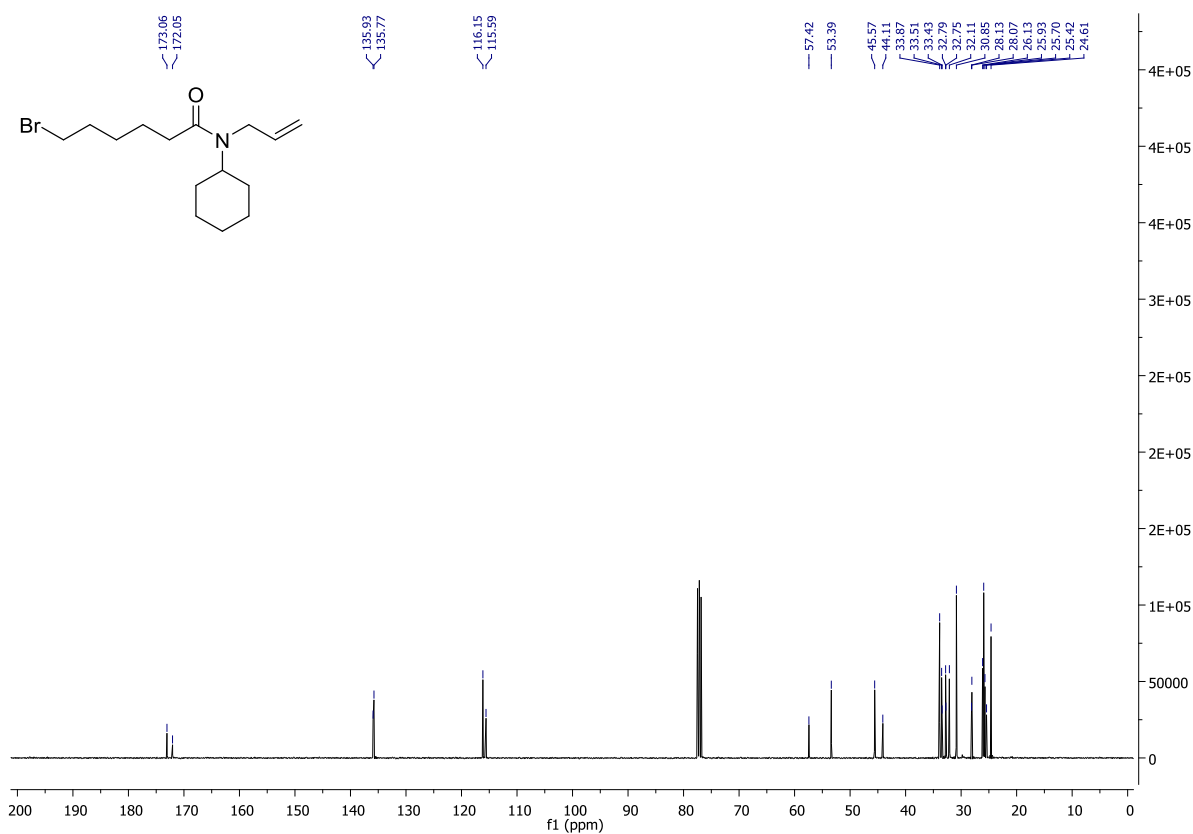
^{13}C NMR of 3i – 355 K



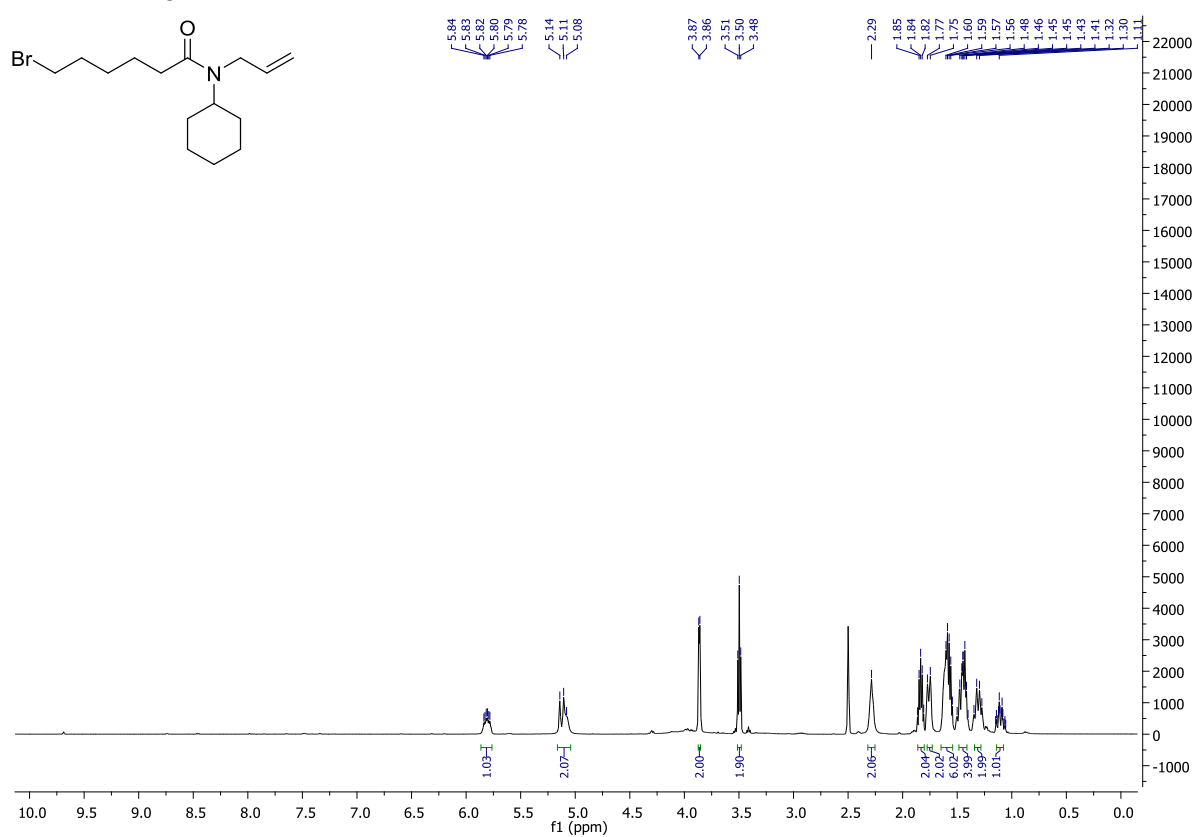
^1H NMR of 3j – CDCl_3



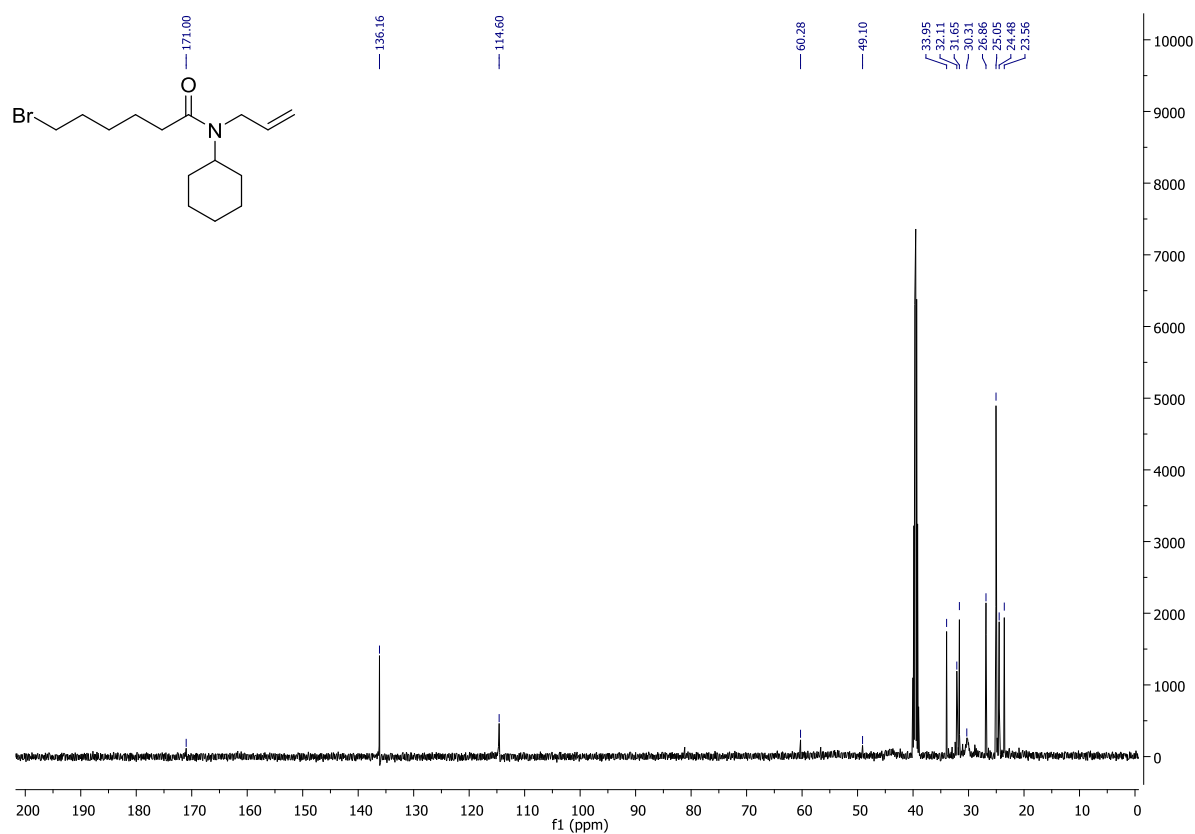
^{13}C NMR of 3j – CDCl_3



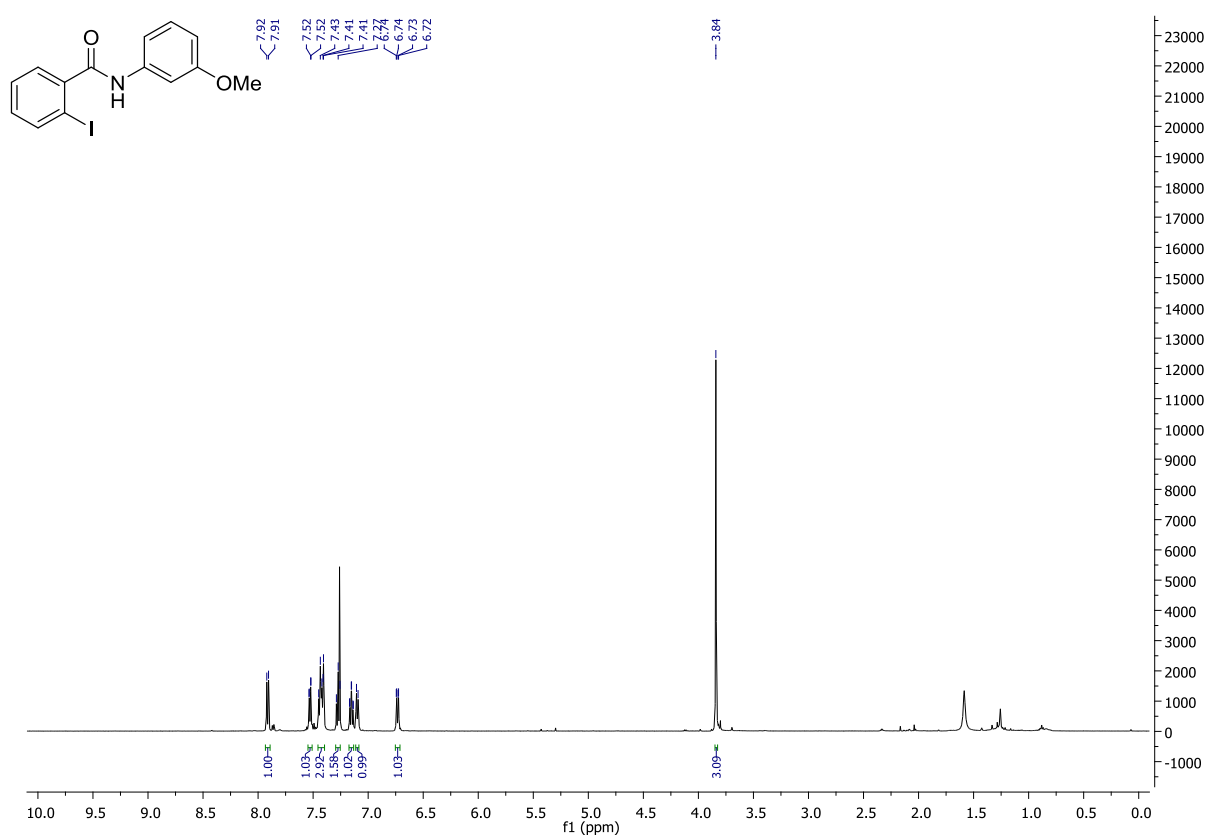
^1H NMR of 3j – $\text{DMSO}-d_6$ 373 K



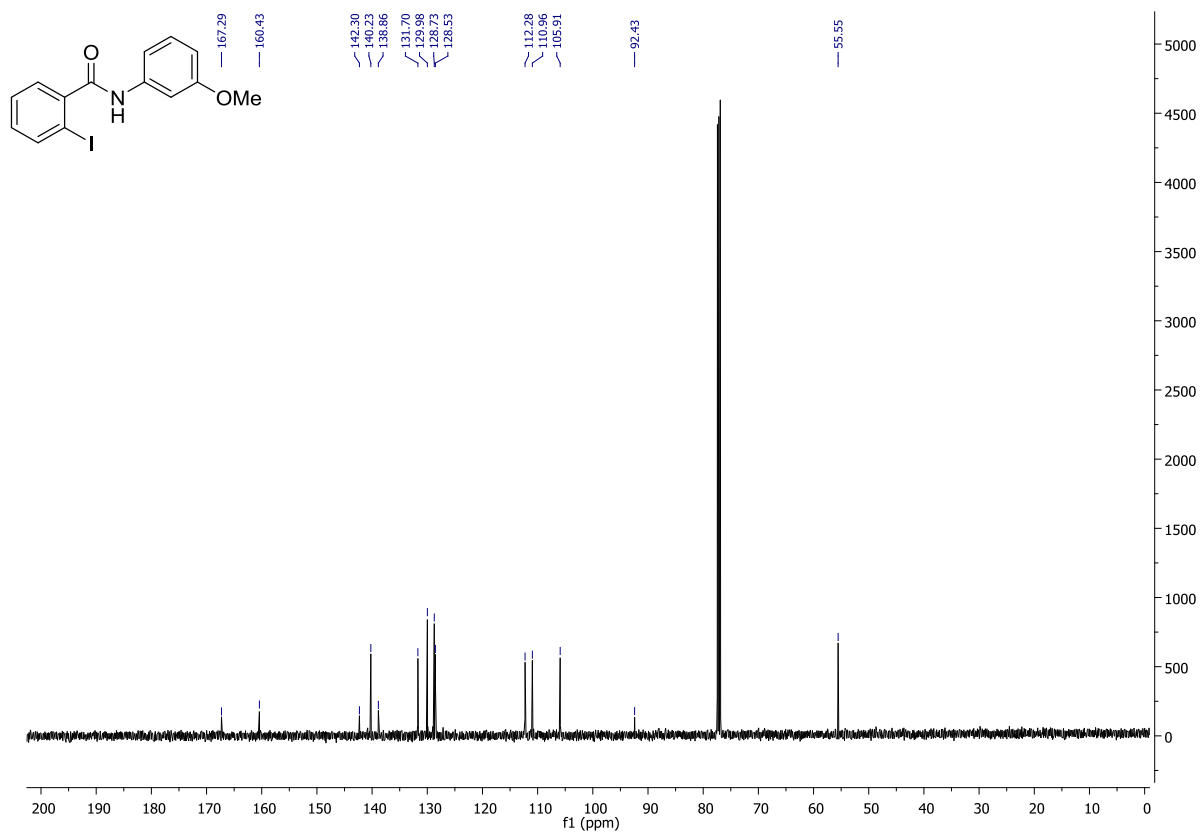
^{13}C NMR of 3j – DMSO- d_6 373K



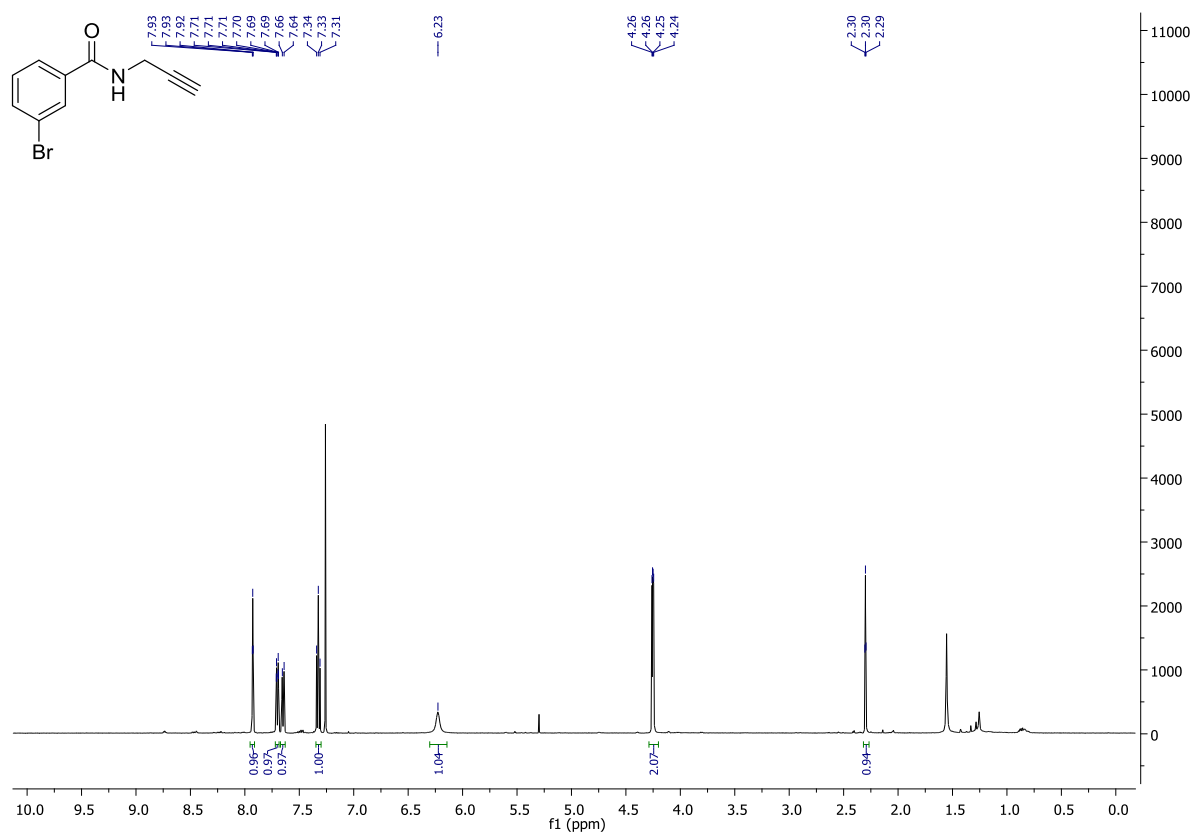
^1H NMR of 3k



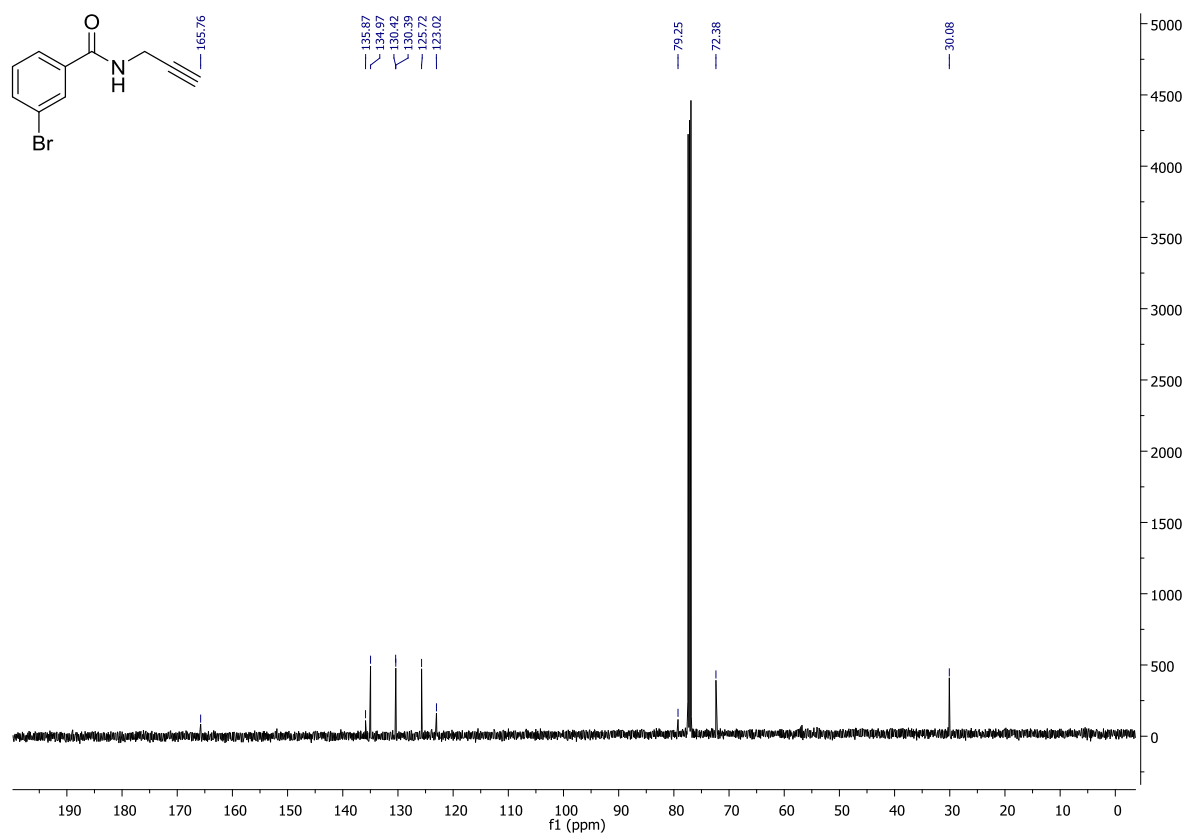
¹³C NMR of 3k



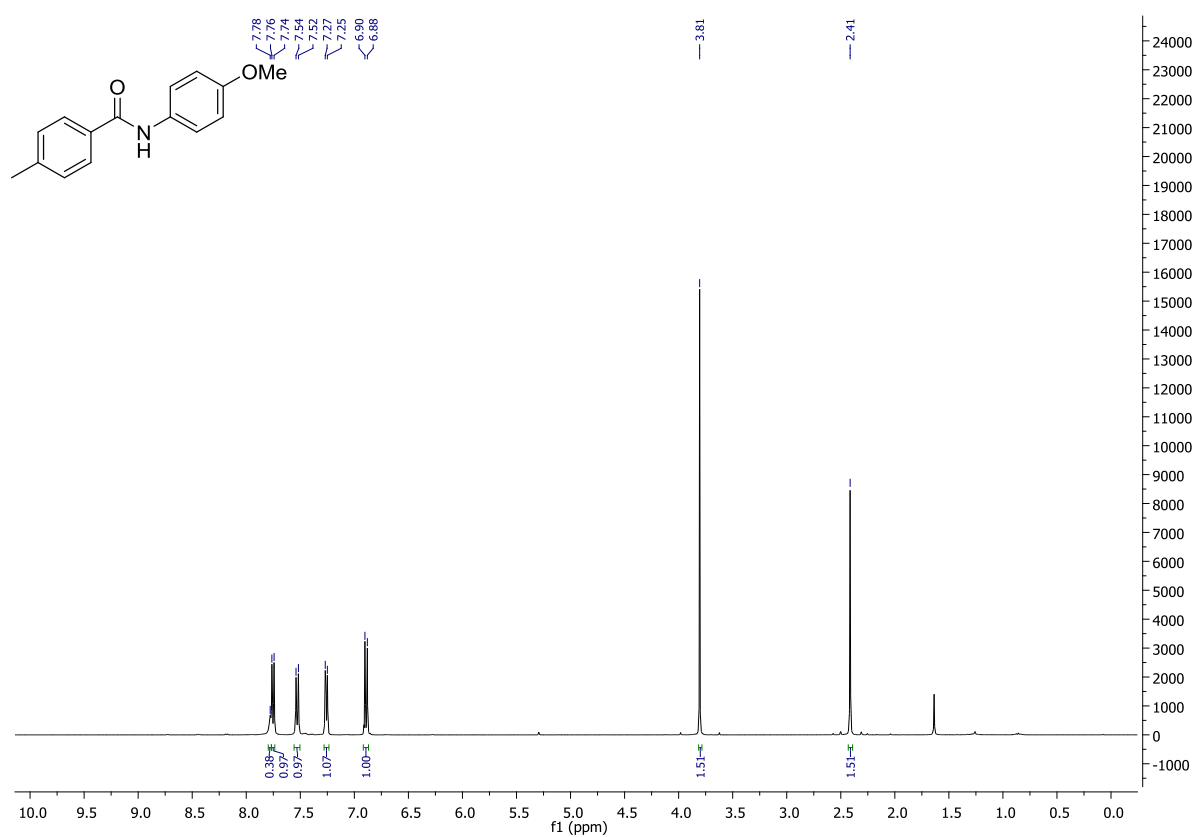
¹H NMR of 3l



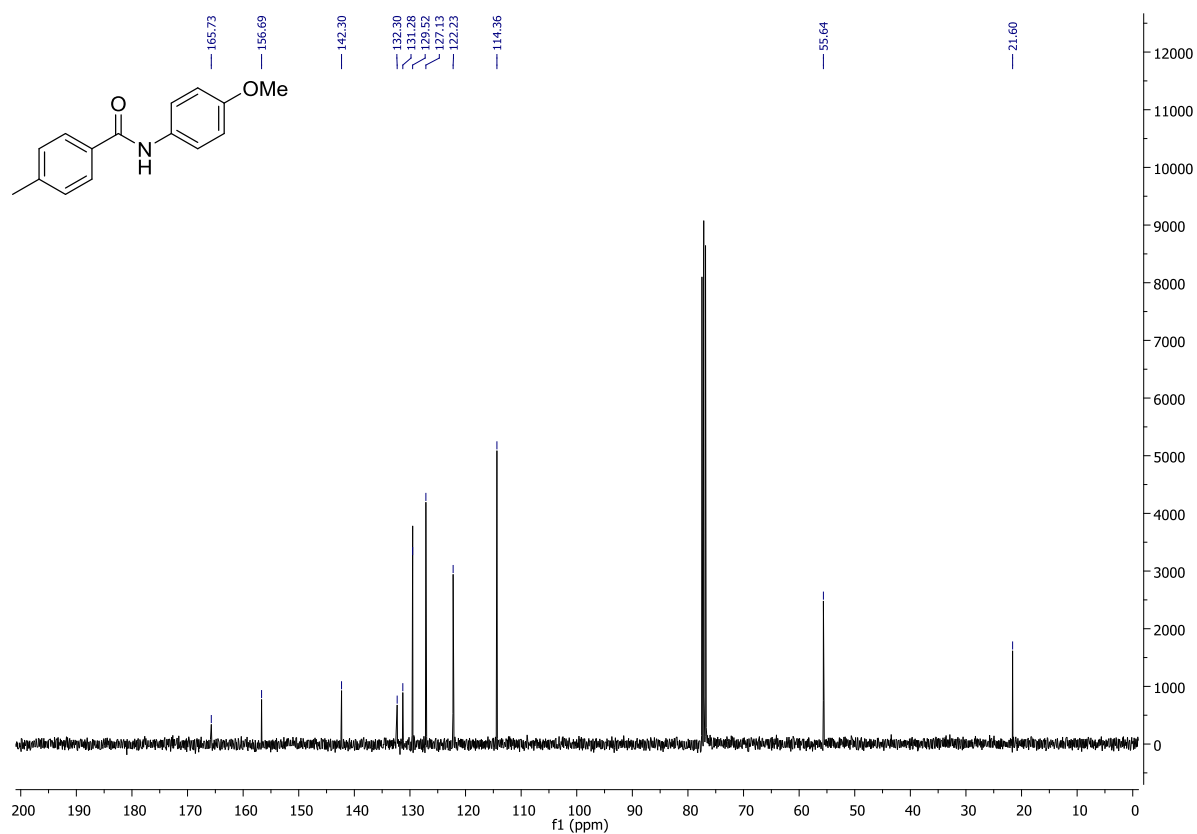
¹³C NMR of 3l



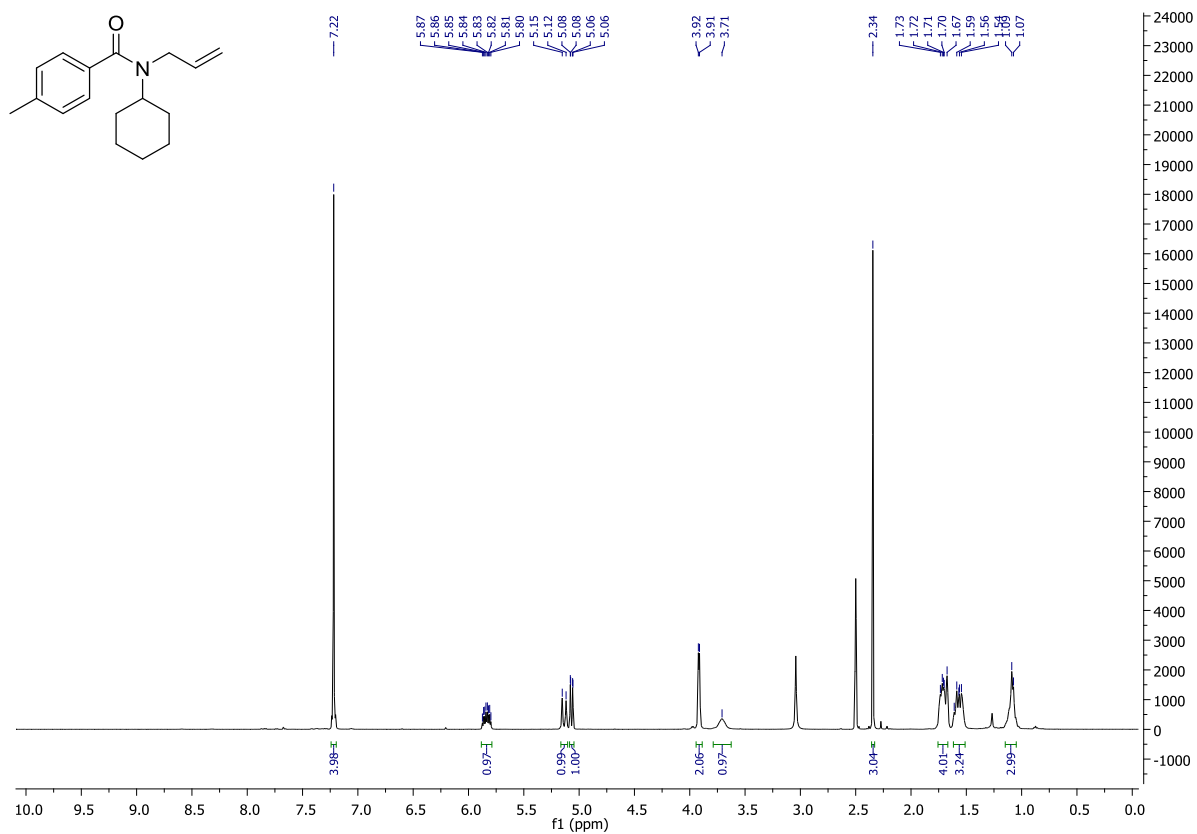
¹H NMR of 3m



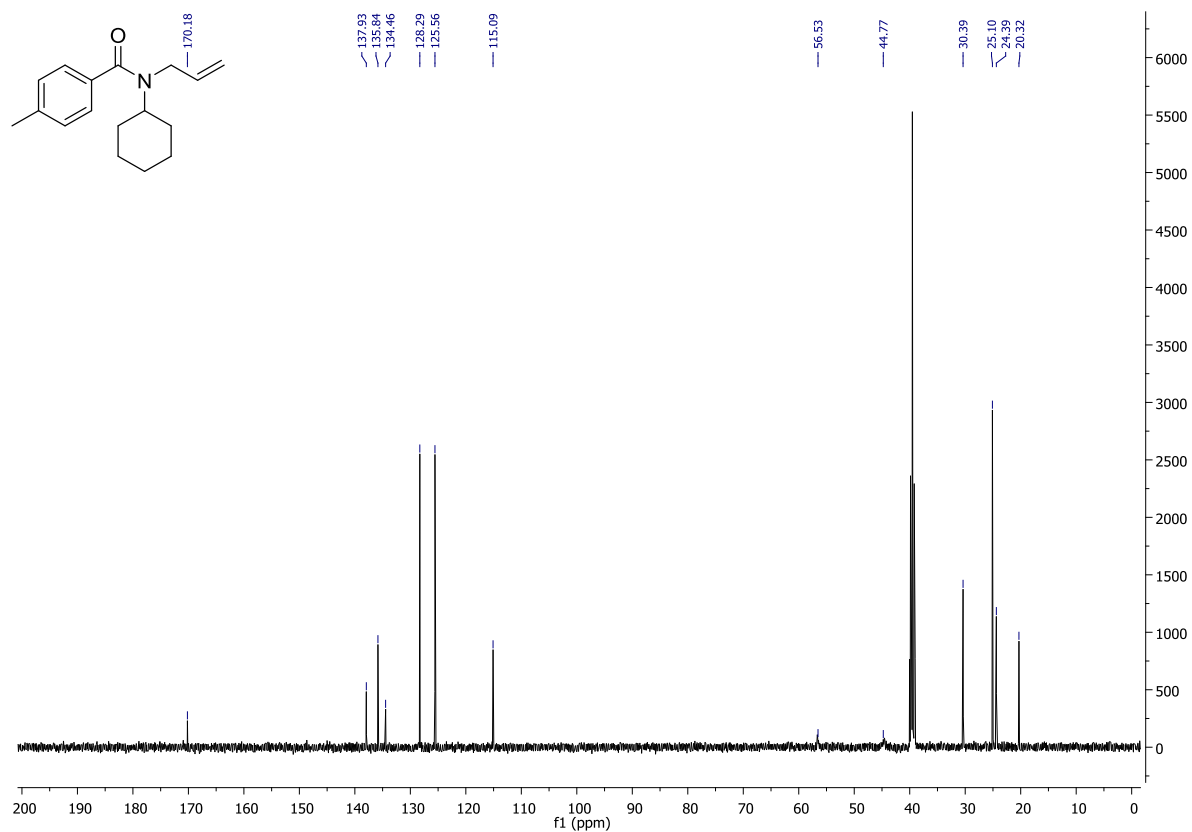
¹³C NMR of 3m



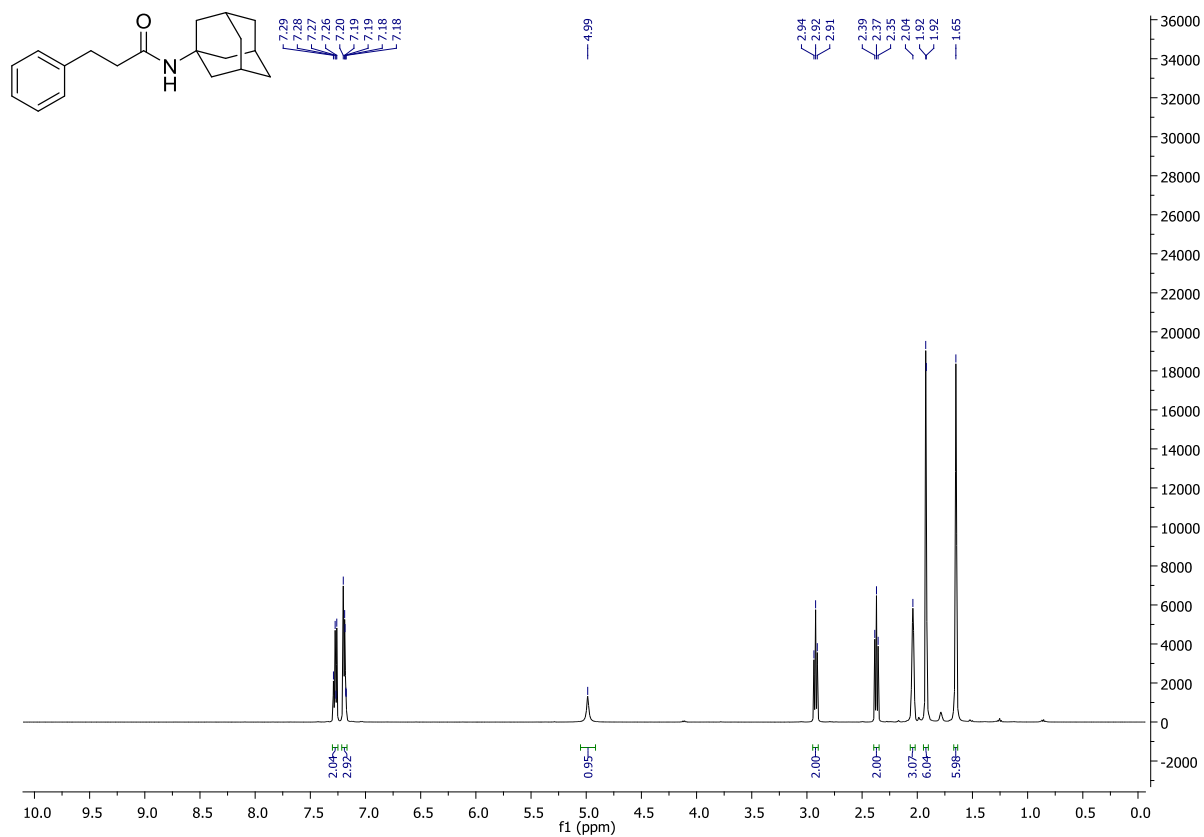
¹H NMR of 3n



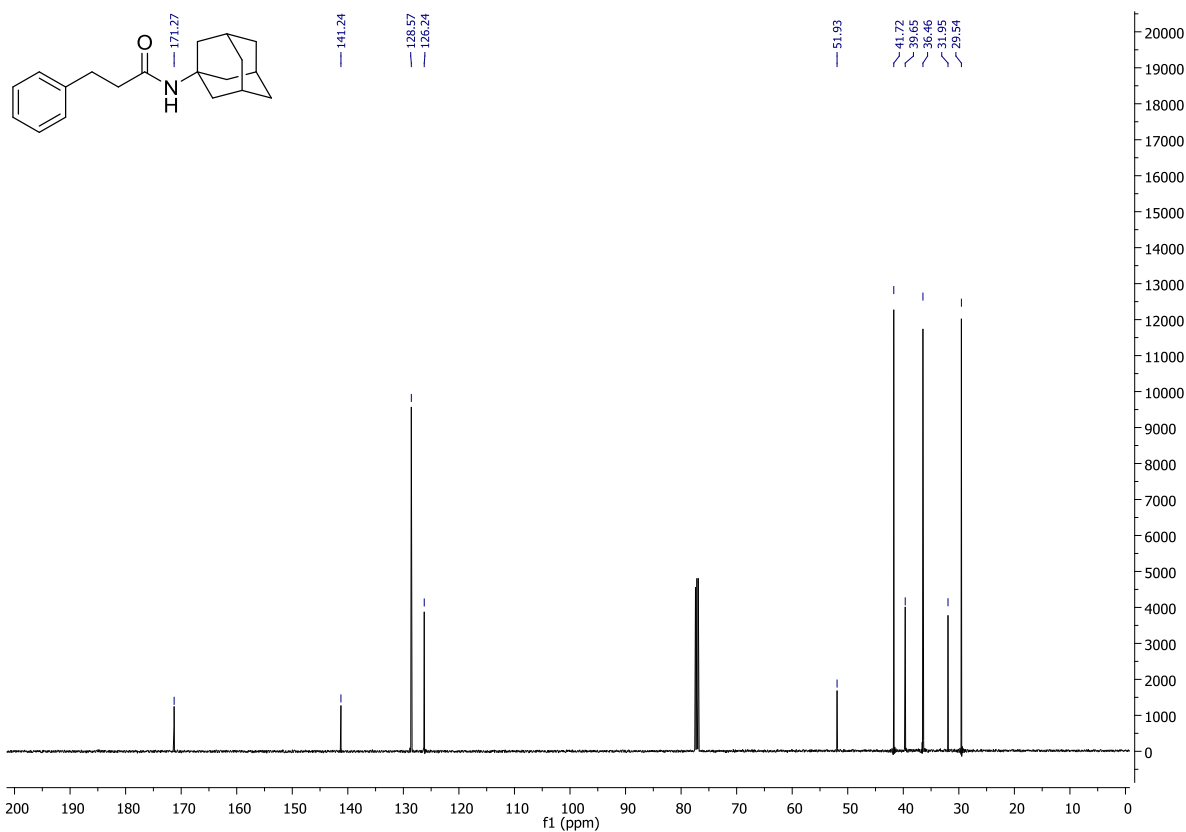
¹³C NMR of 3n



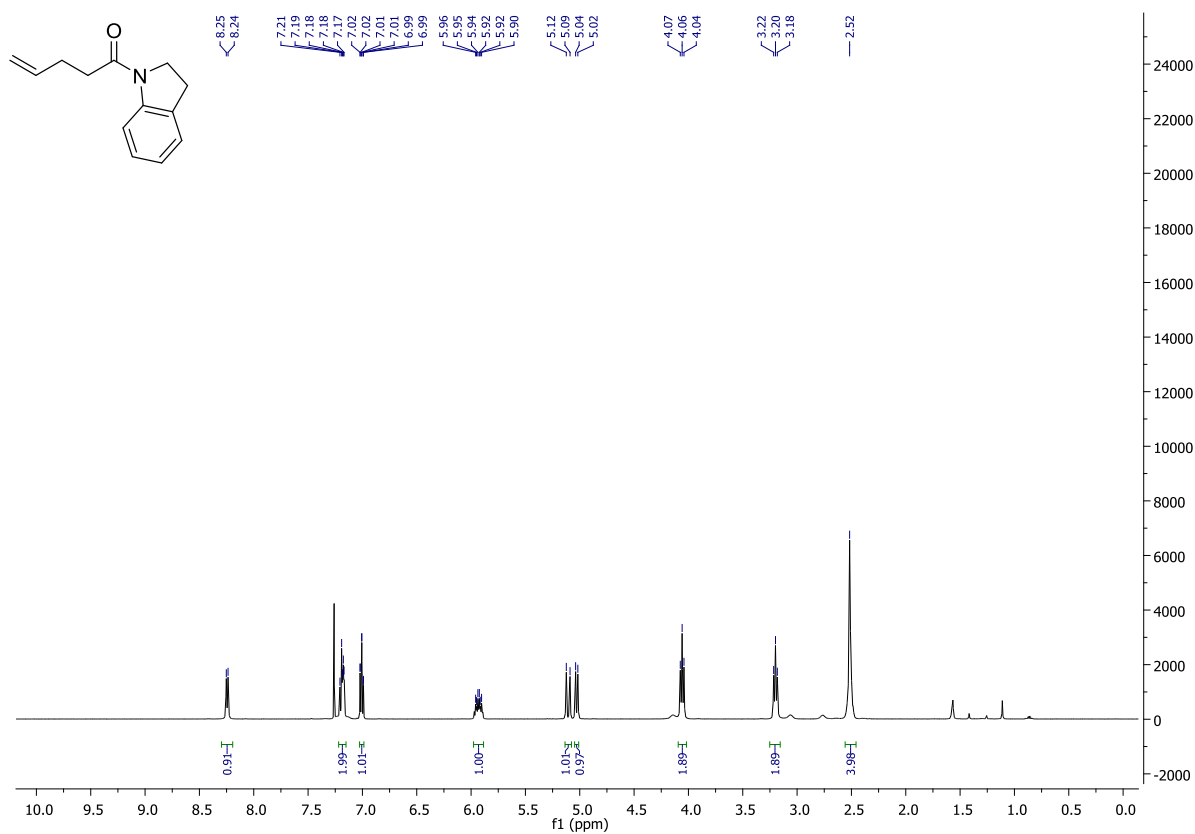
¹H NMR of 3o



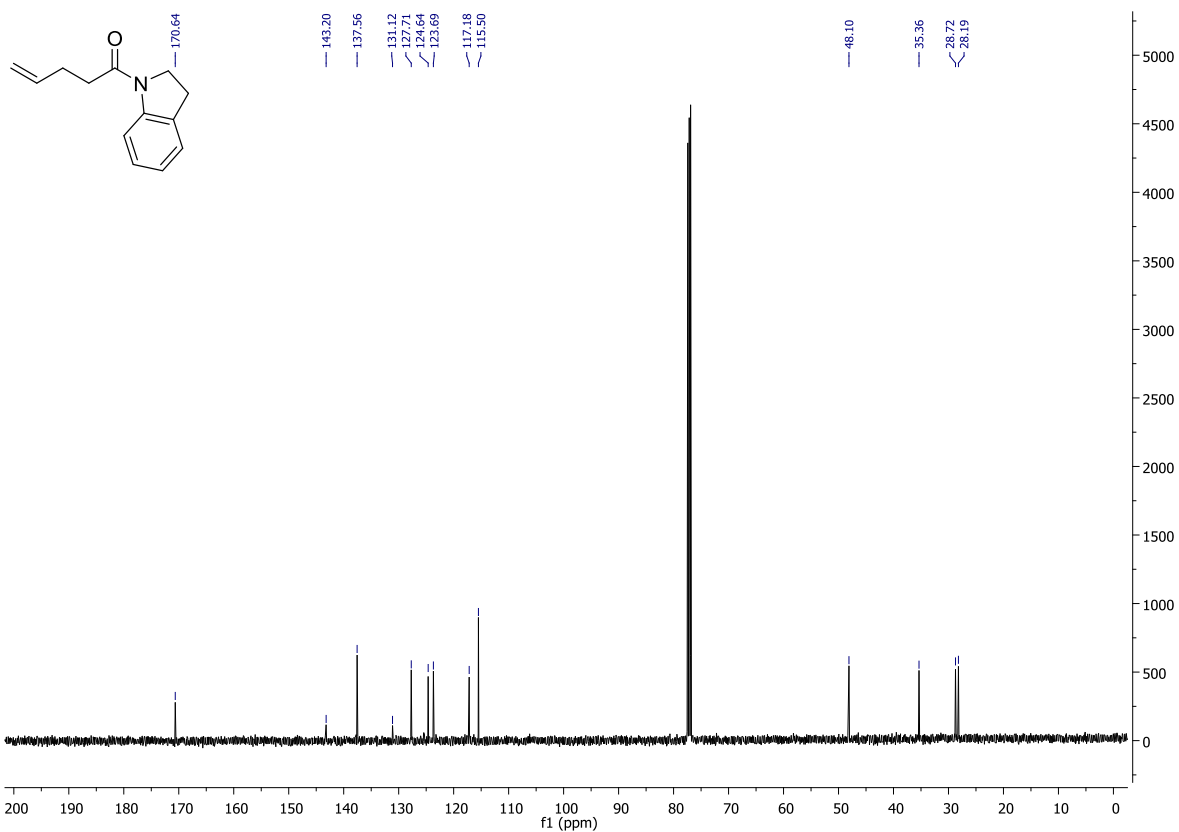
¹³C NMR of 3o



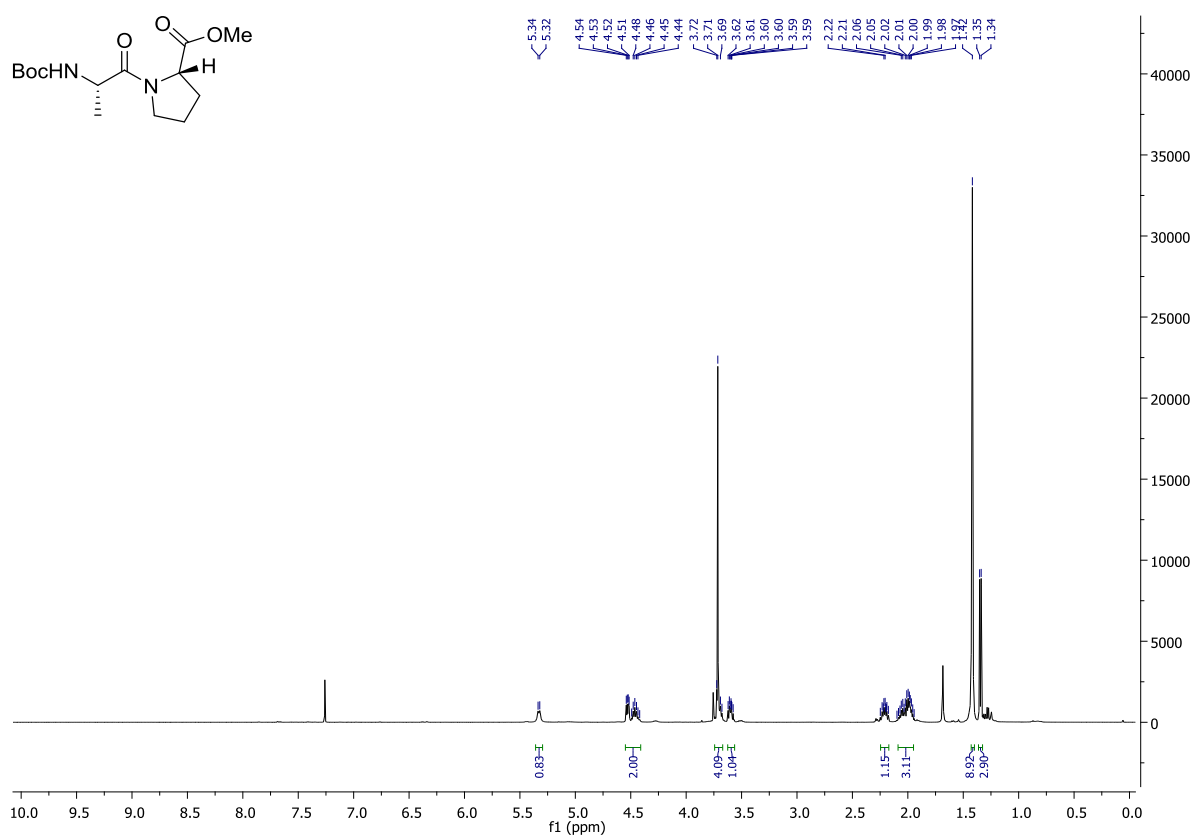
¹H NMR of 3p



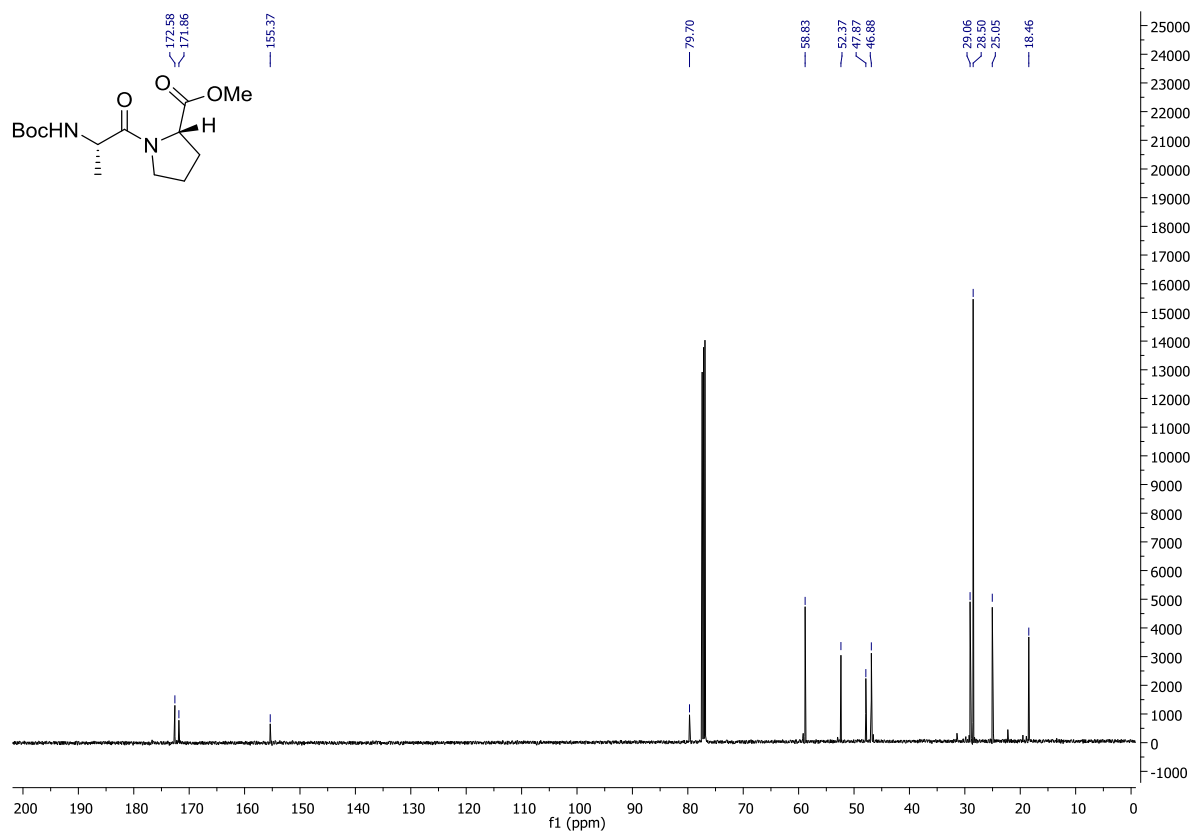
¹³C NMR of 3p



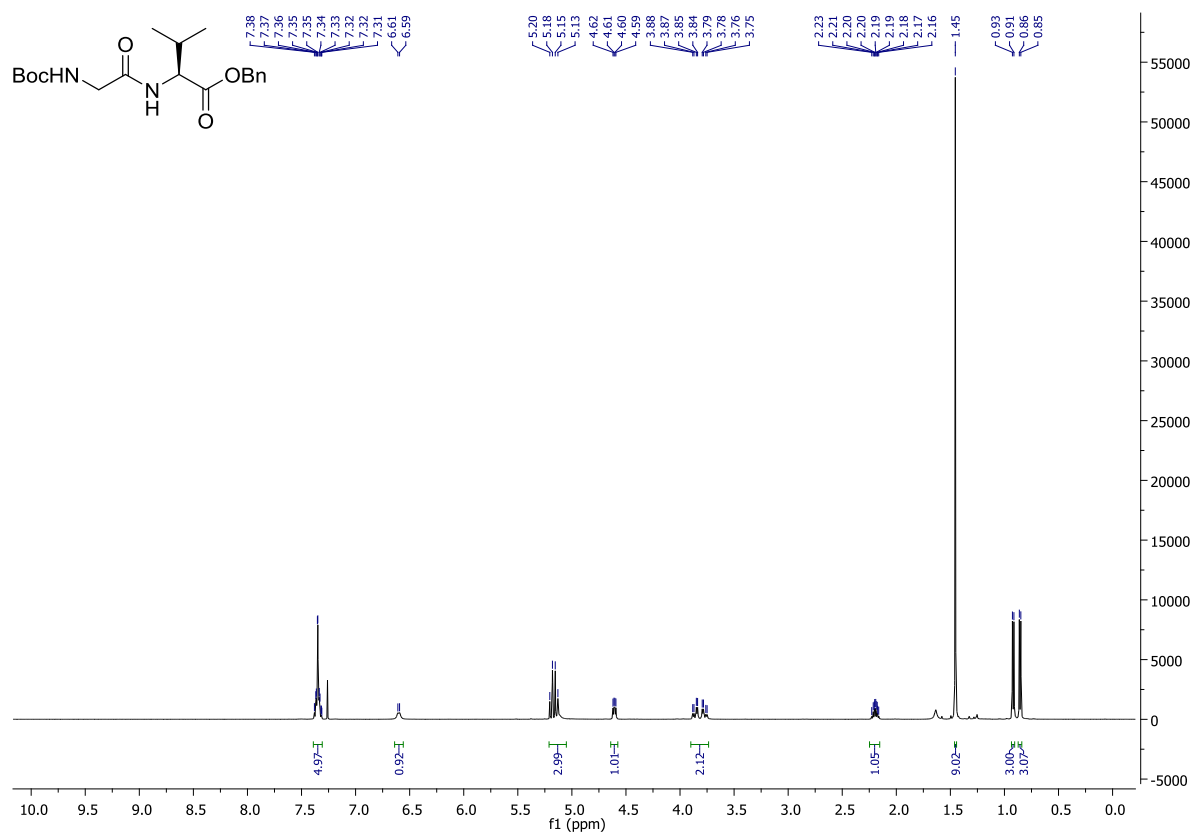
¹H NMR of 6a



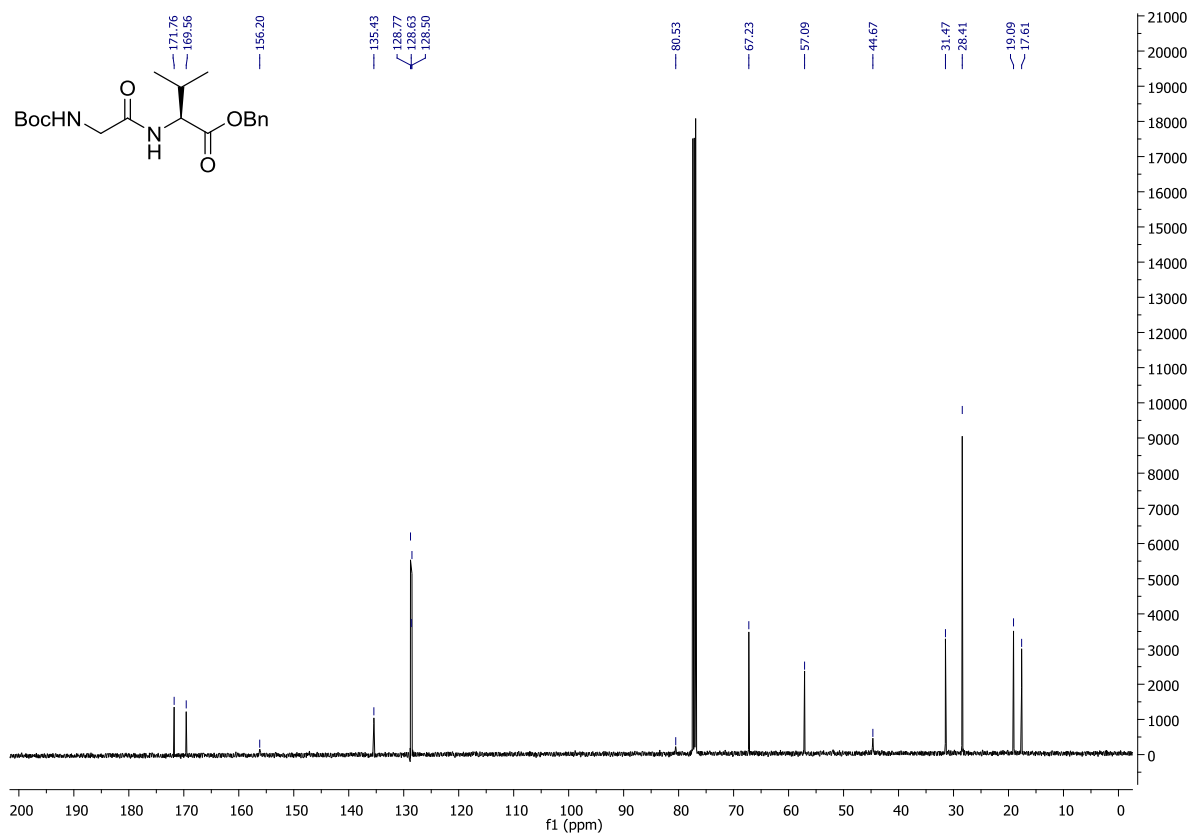
¹³C NMR of 6a



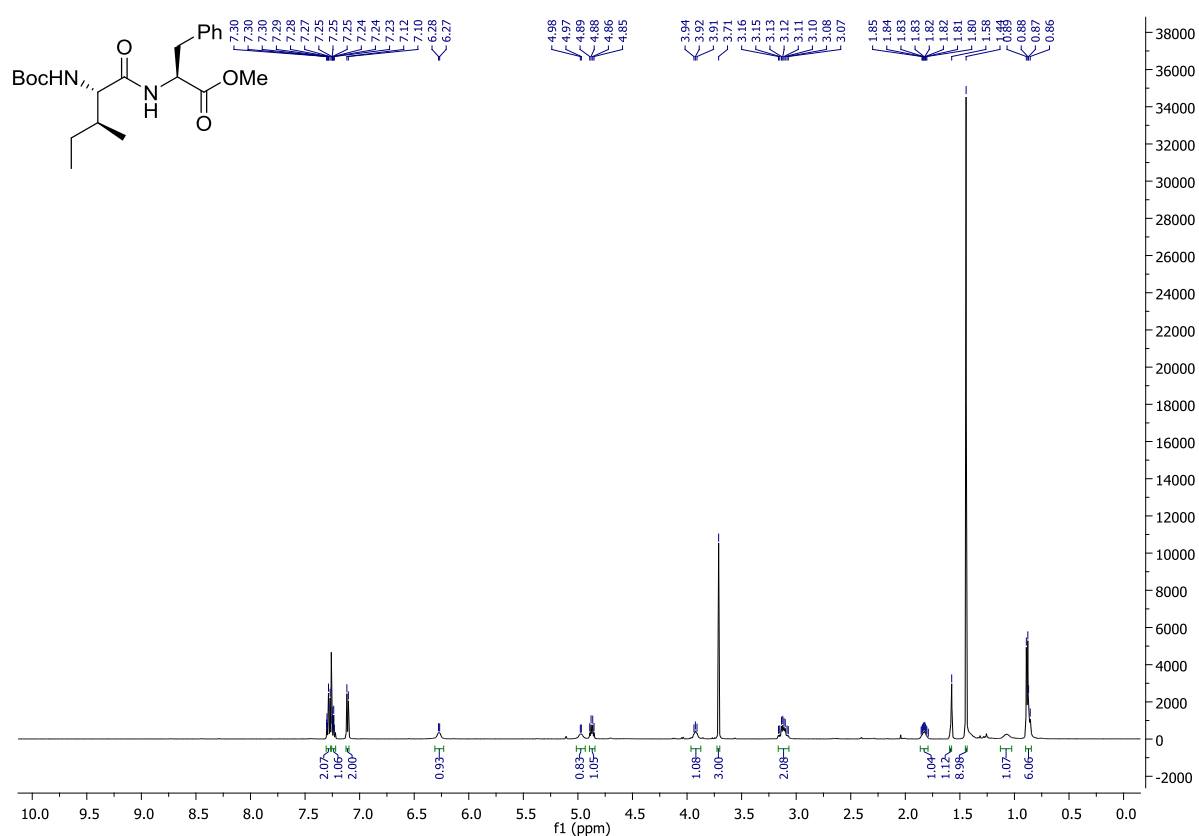
¹H NMR of 6b



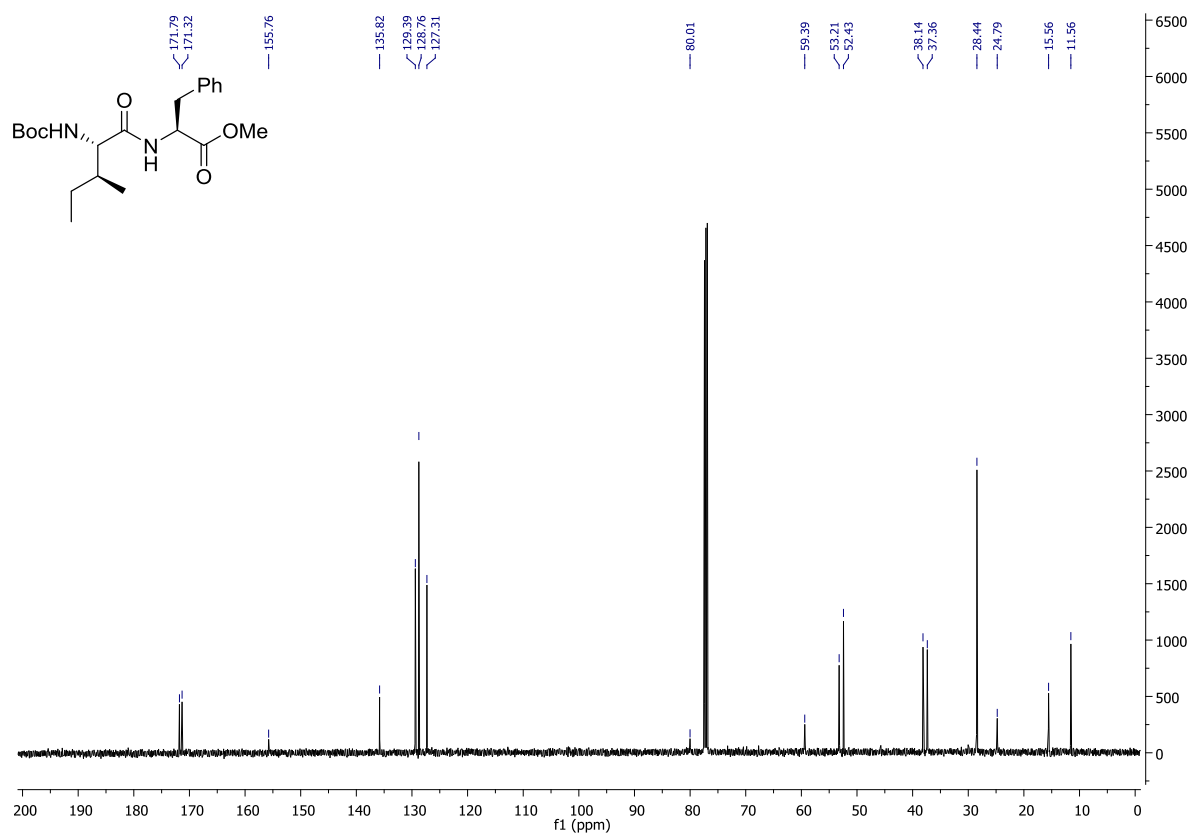
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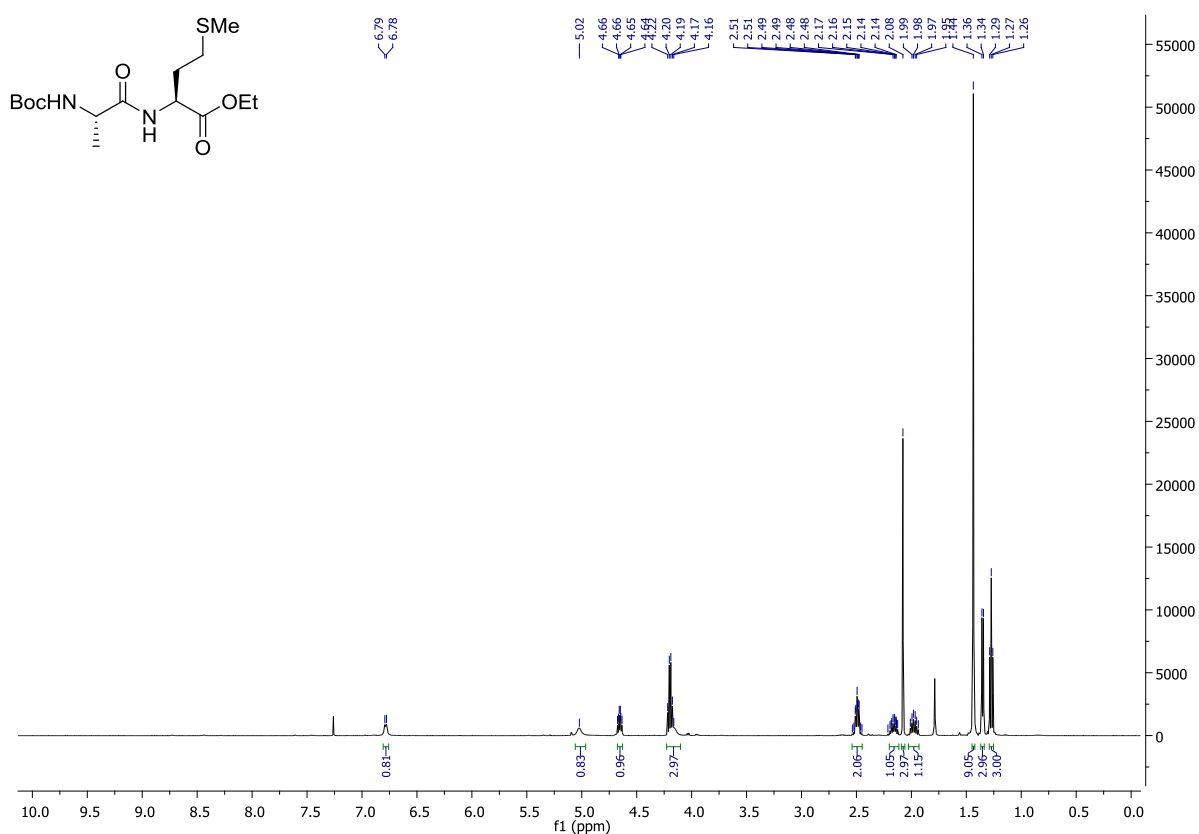
¹H NMR of 6c



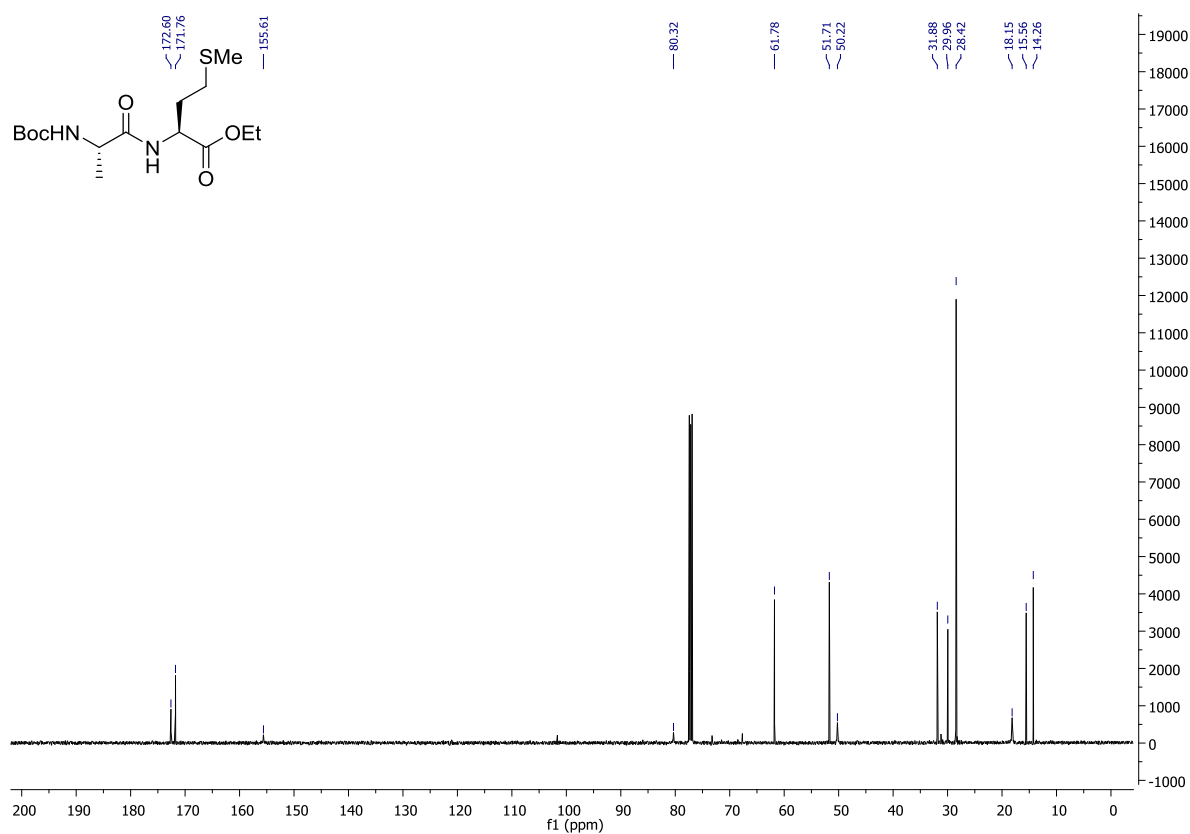
¹³C NMR of 6c



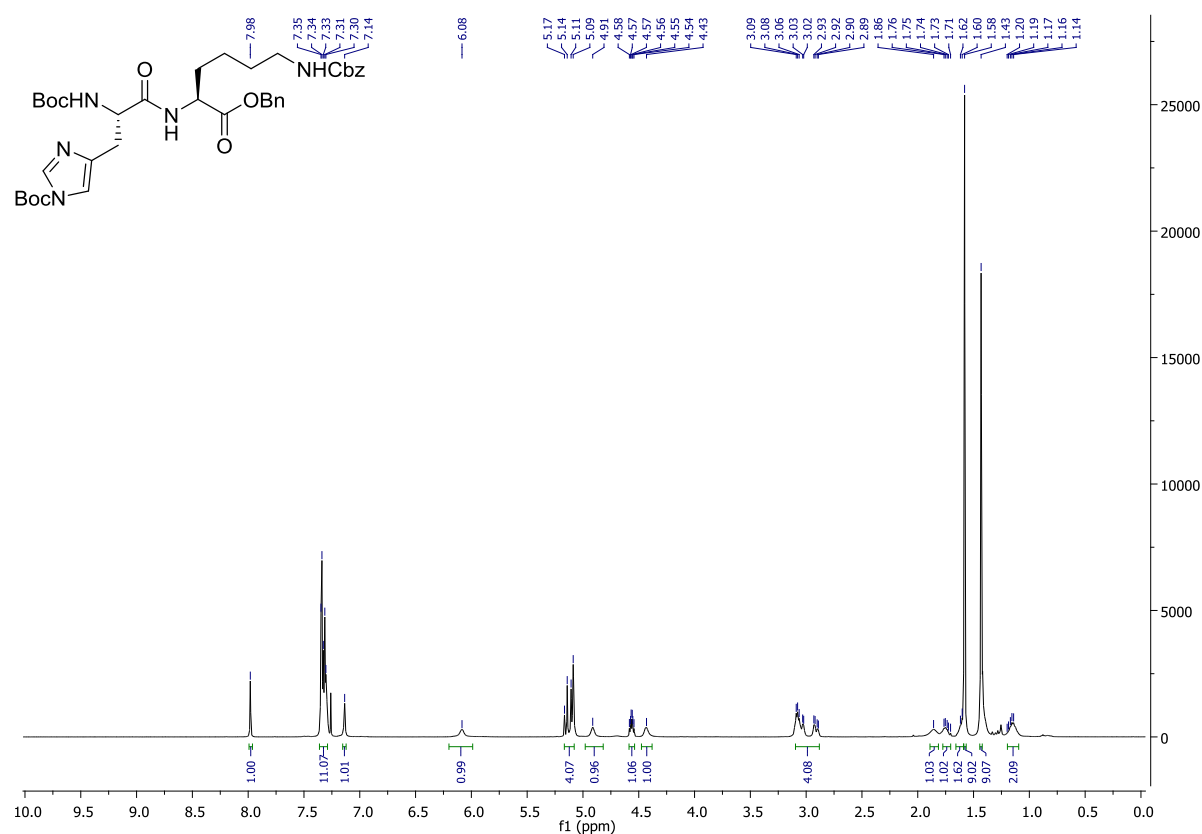
¹H NMR of 6d



¹³C NMR of 6d



¹H NMR of 6e



Chemical structure of the compound is shown above the spectrum. The structure is a complex molecule featuring a pyridine ring, a Boc-protected amine, a chiral center, a carbamate group, and a benzyl ester. The spectrum displays the ¹³C NMR peaks corresponding to the structure, with the following chemical shifts (ppm) labeled above the peaks:

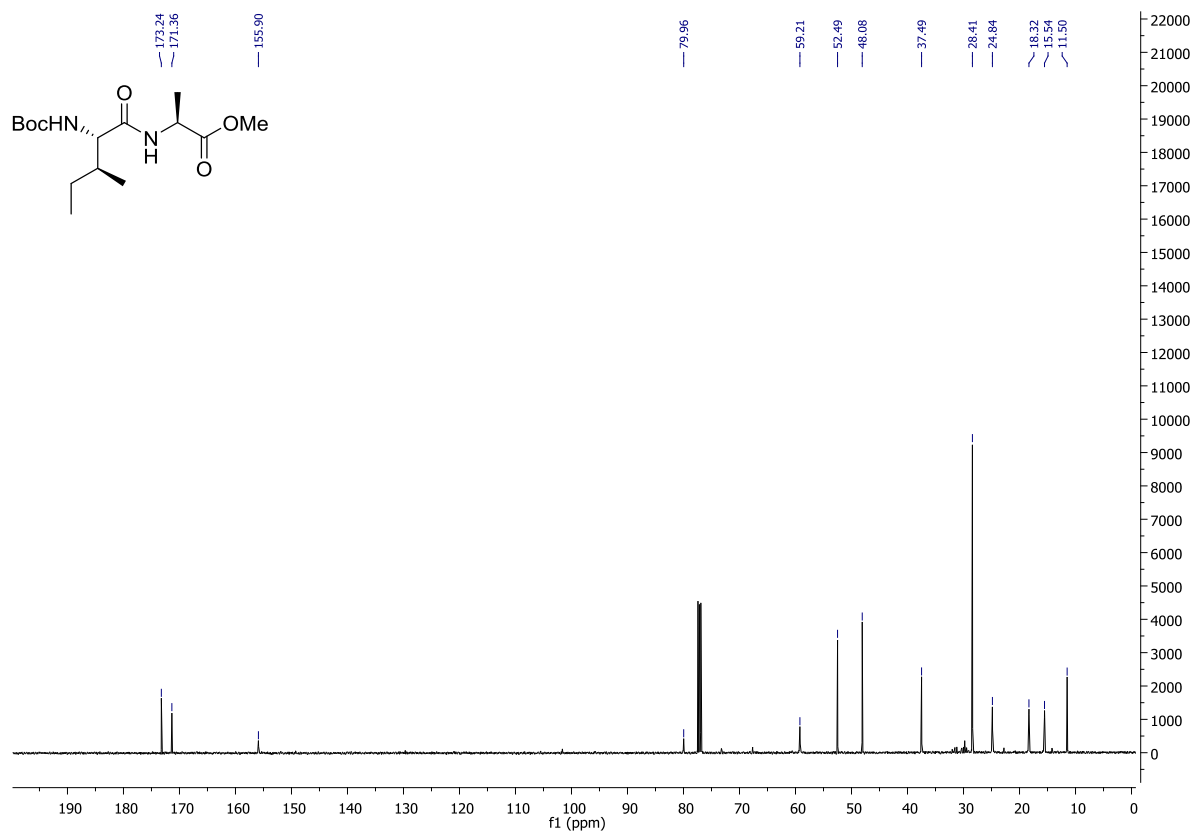
Chemical Shift (ppm)
171.89
171.49
156.55
155.76
147.06
139.32
138.85
138.59
135.44
128.74
128.62
128.46
128.25
128.18
114.92
85.85
80.21
67.18
66.71
54.30
52.02
40.70
32.10
30.22
29.24
28.43
27.99
22.10

Chemical Structure: CC[C@H](C)[C@@H](C(=O)N1CCCC1C(=O)N[C@@H](C)C(=O)OC)C(=O)O

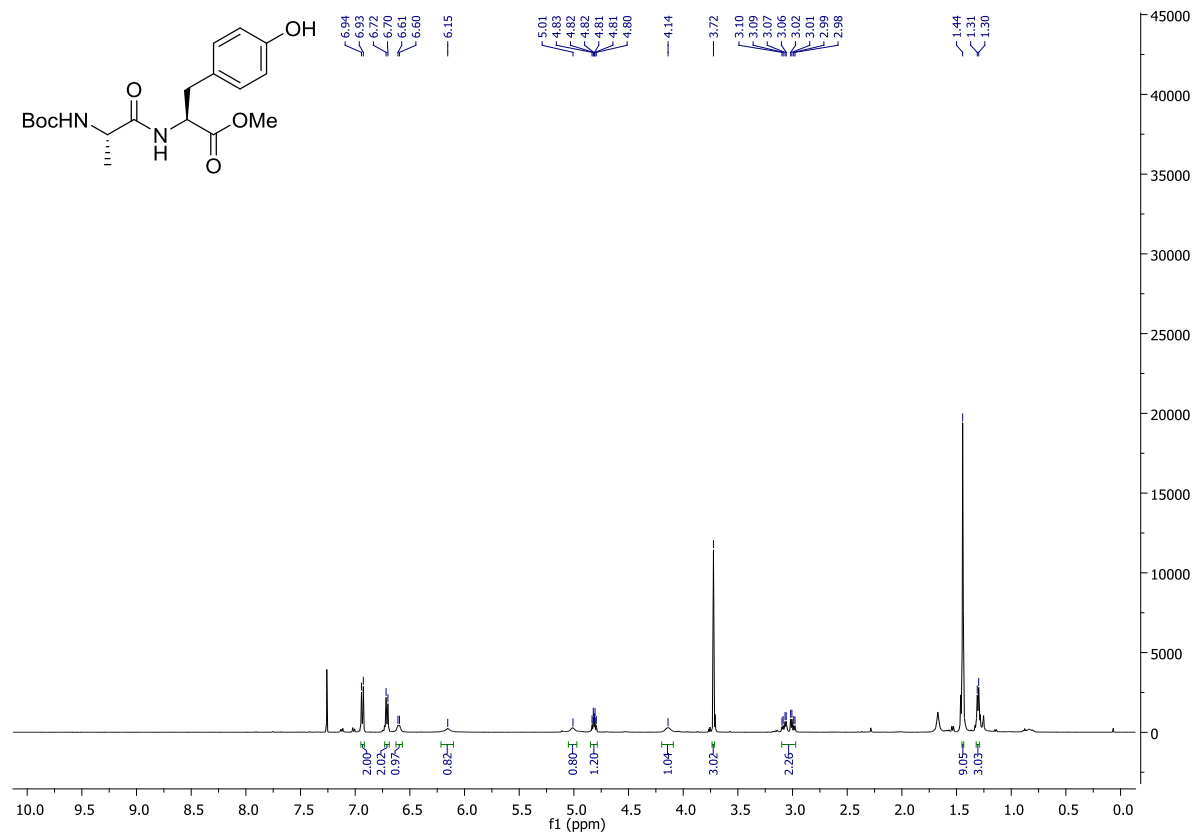
¹H NMR Spectrum (CDCl₃):

Chemical Shift (ppm)	Integration
6.59	1.00
4.57	0.79
3.96	1.04
3.72	1.02
3.60	3.16
1.84	1.06
1.42	1.17
1.39	0.92
1.37	1.16
1.14	3.04
1.13	3.30
1.12	
1.11	
1.10	
0.93	
0.92	
0.90	
0.89	
0.87	

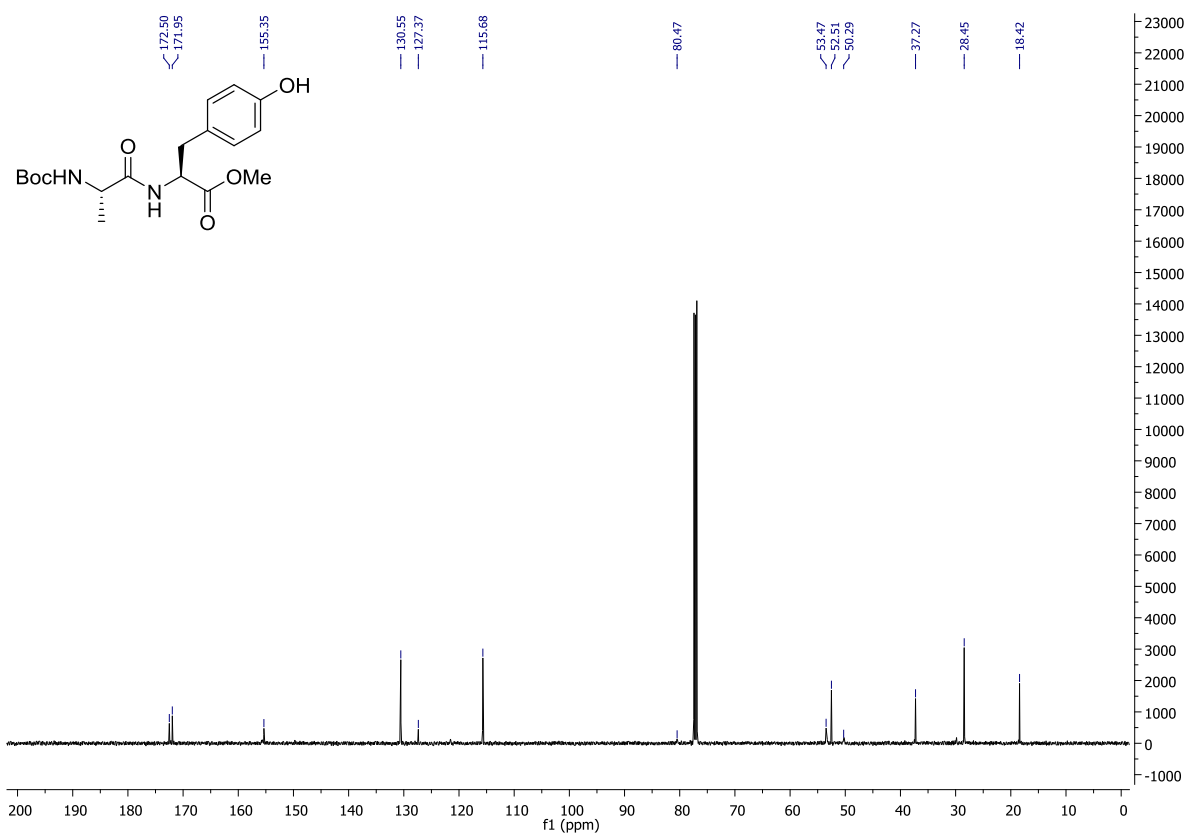
¹³C NMR of 6f



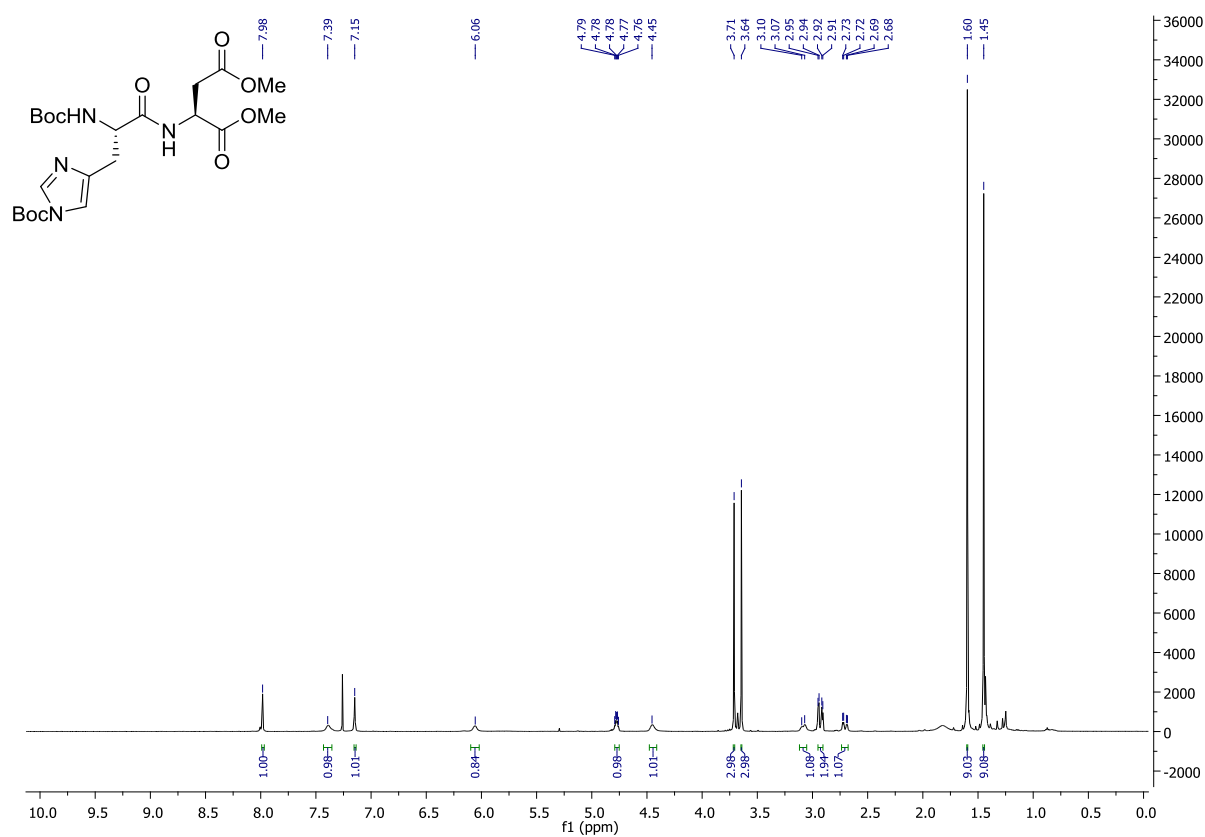
¹H NMR of 6g



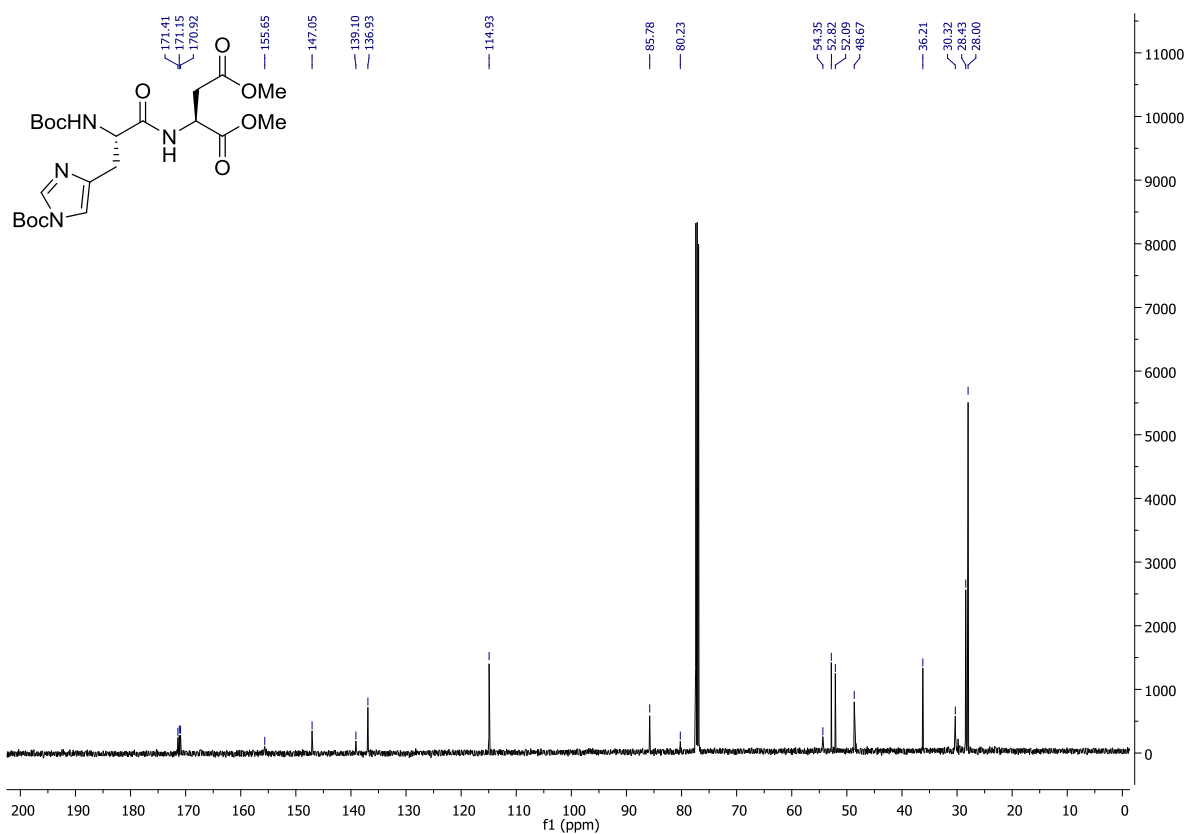
¹³C NMR of 6g



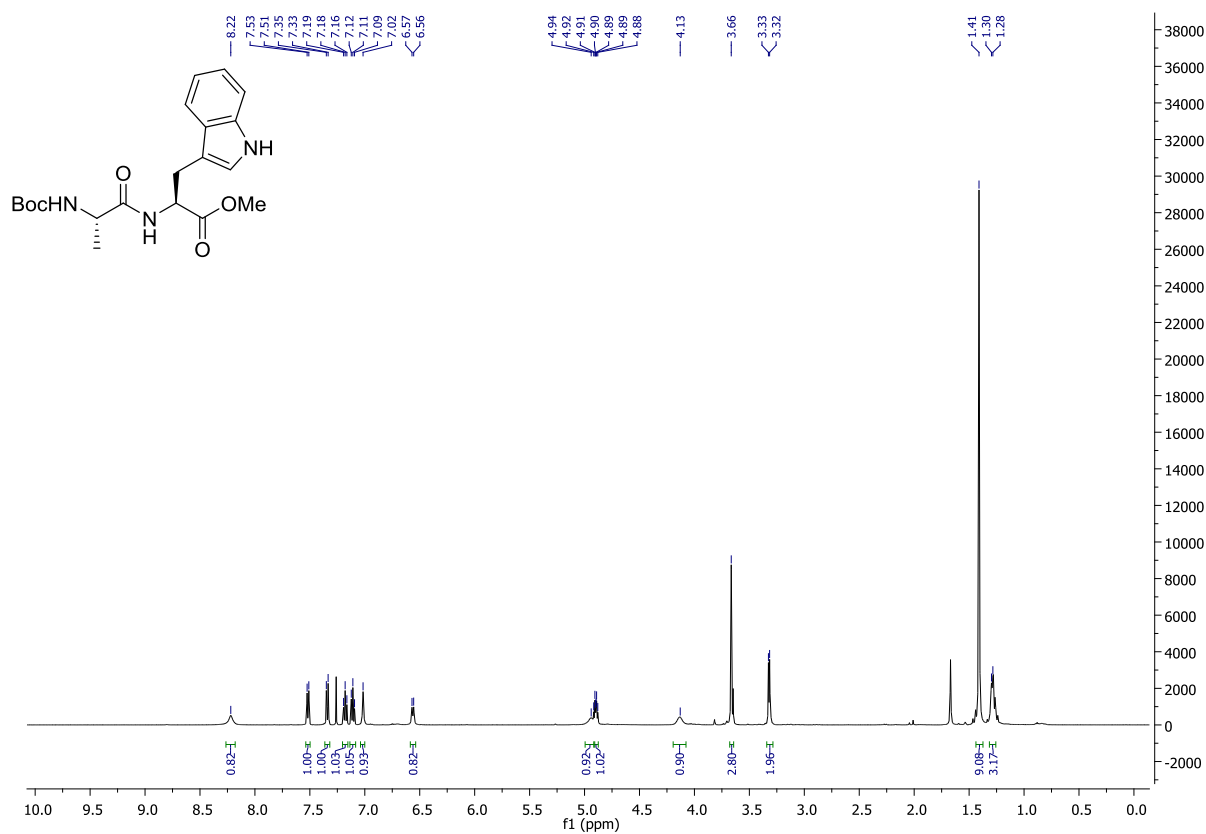
¹H NMR of 6h



¹³C NMR of 6h



¹H NMR of 6i



¹³C NMR of 6i

