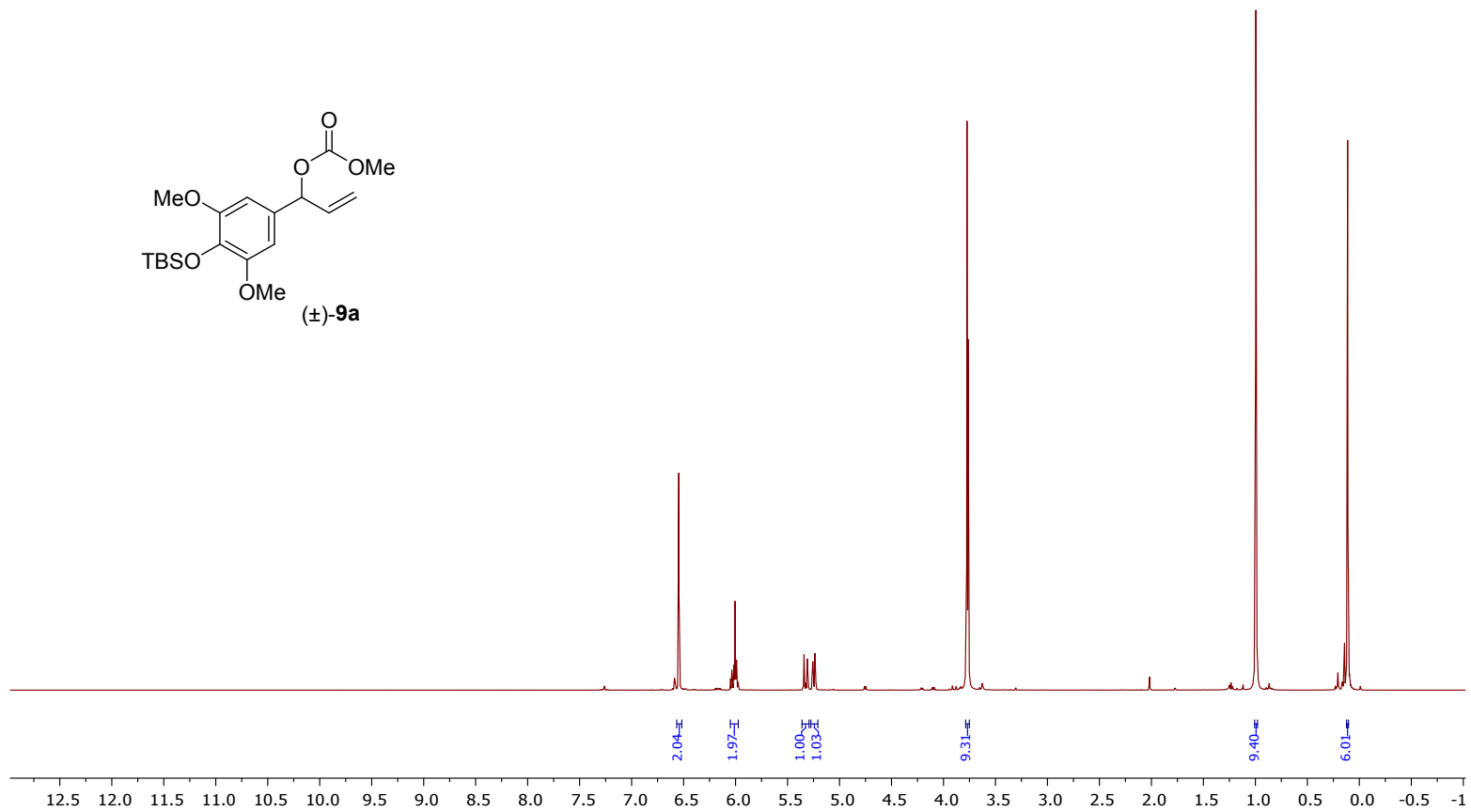
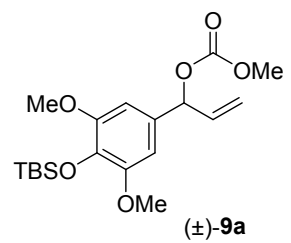


¹H Observe
Solvent: CDCl₃
500.13 MHz



13C DEPTQ
Solvent: CDCl3
125.77 MHz

155.1
151.6

135.9
134.5
130.4

117.1

104.4

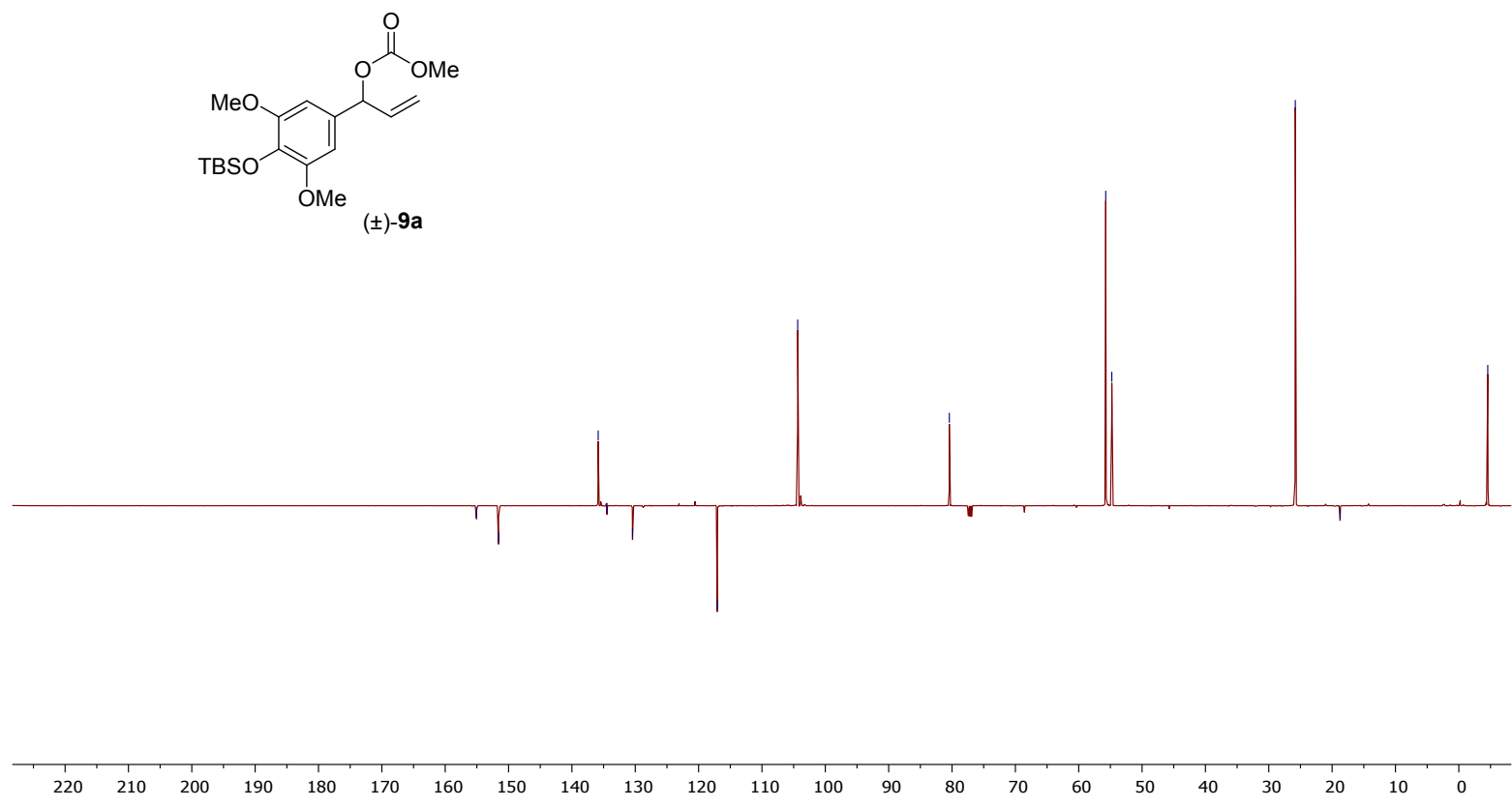
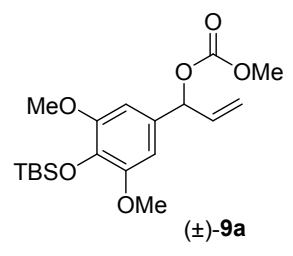
80.4

55.7
54.8

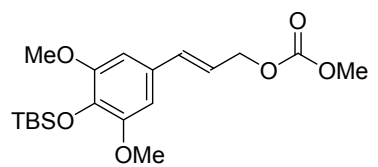
25.8

18.7

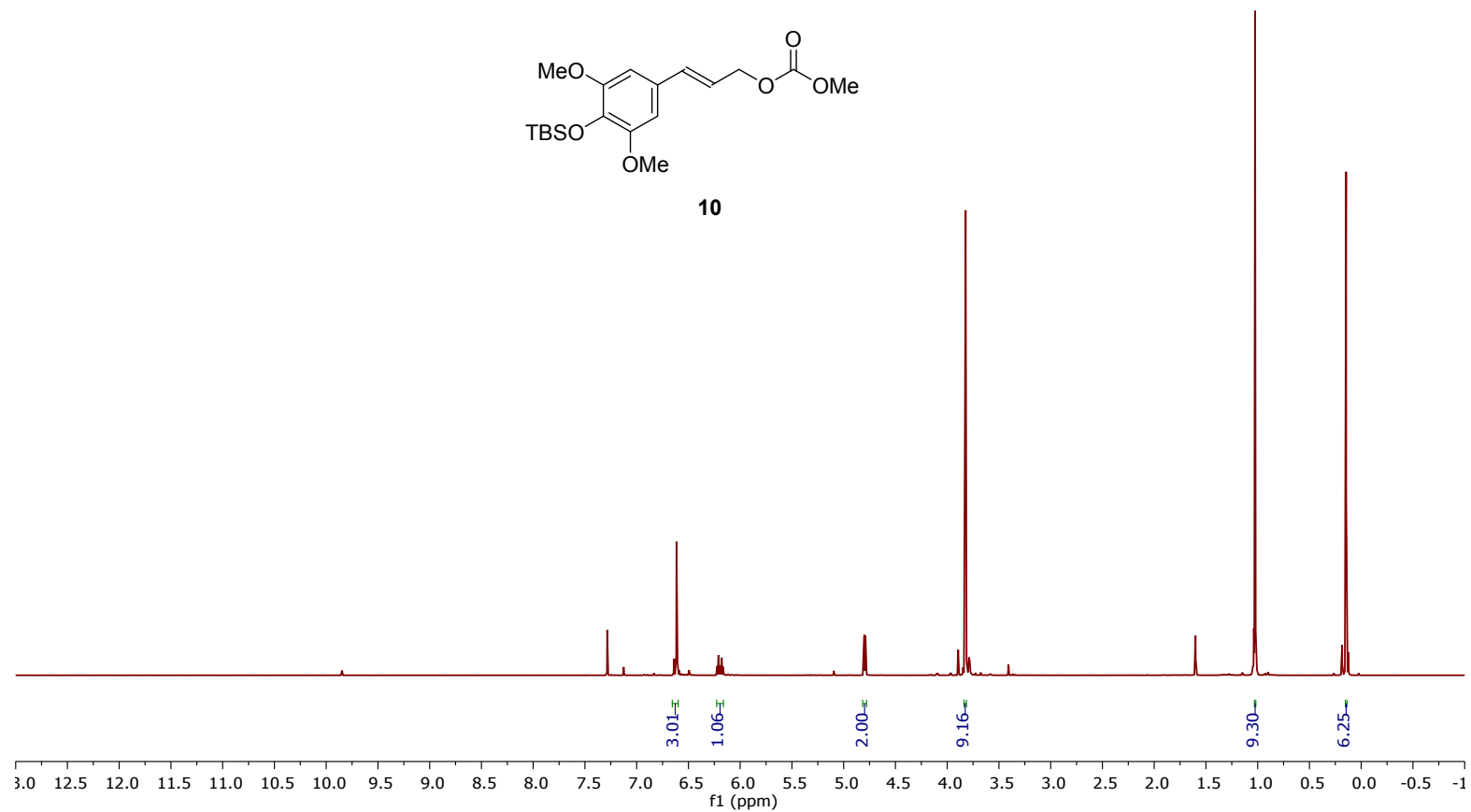
-4.6



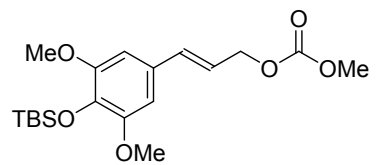
1H Observe
Solvent: CDCl3
500.13 MHz



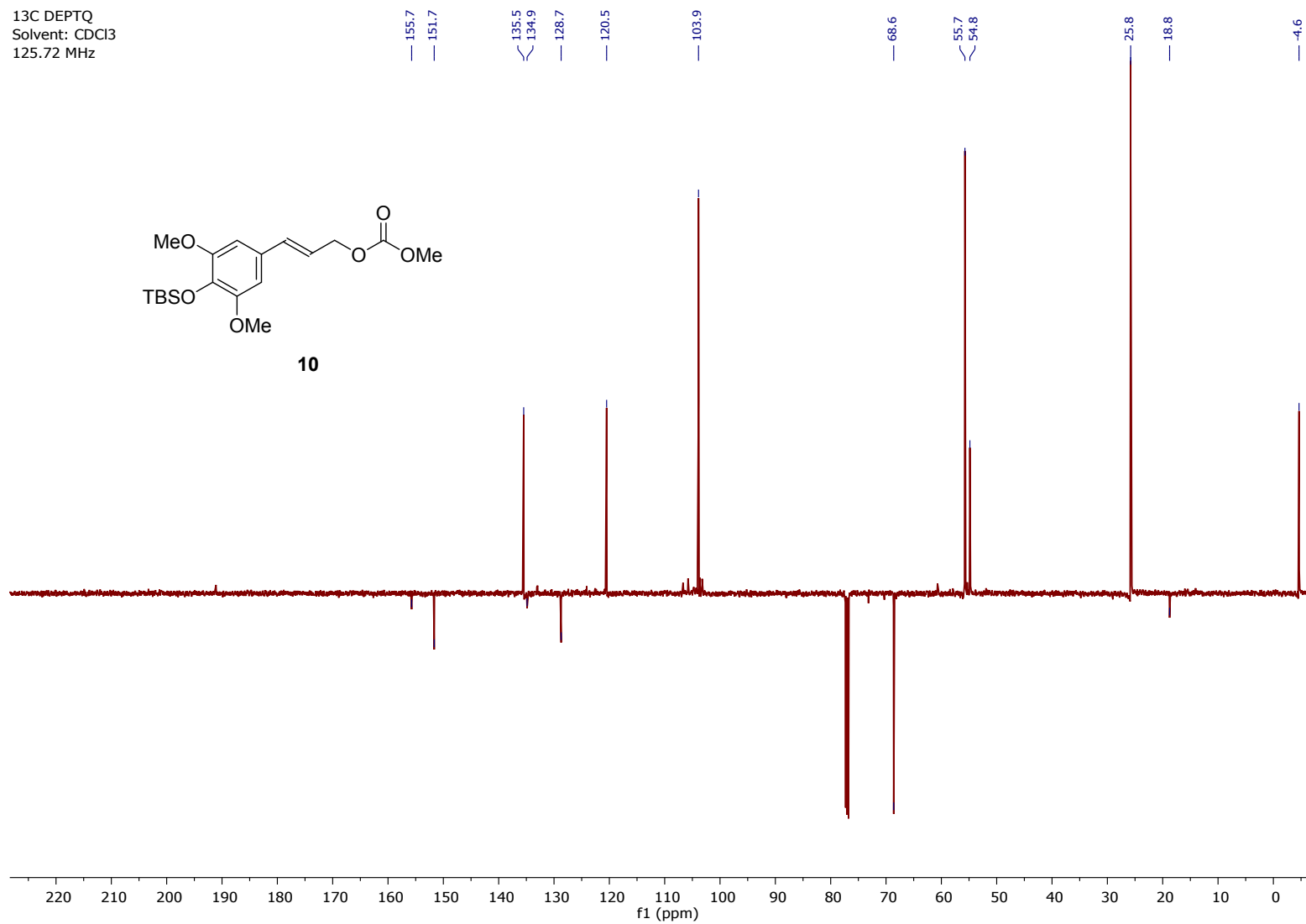
10



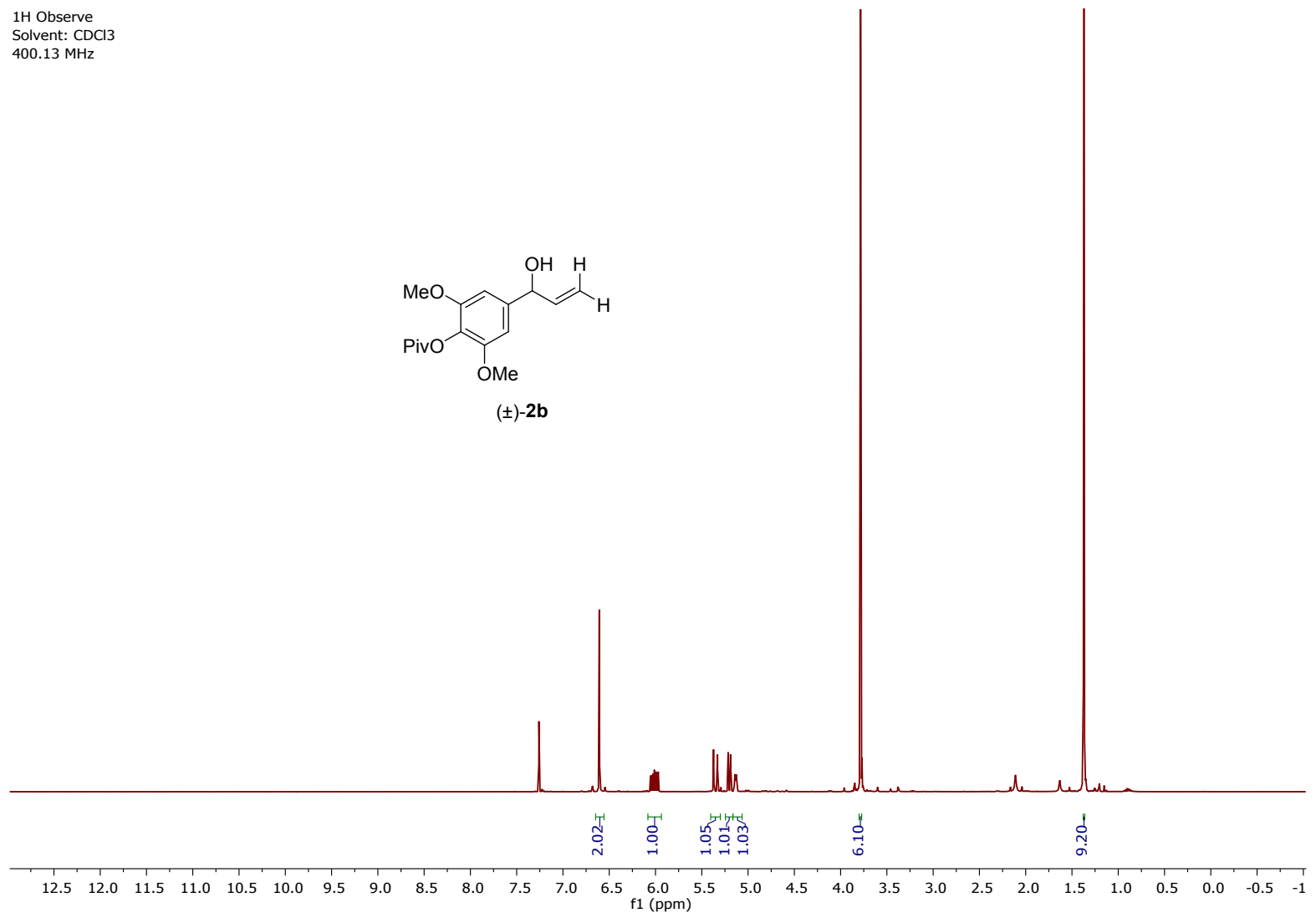
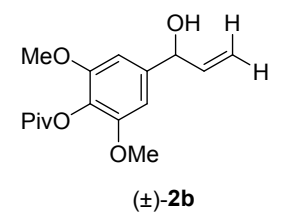
13C DEPTQ
Solvent: CDCl3
125.72 MHz



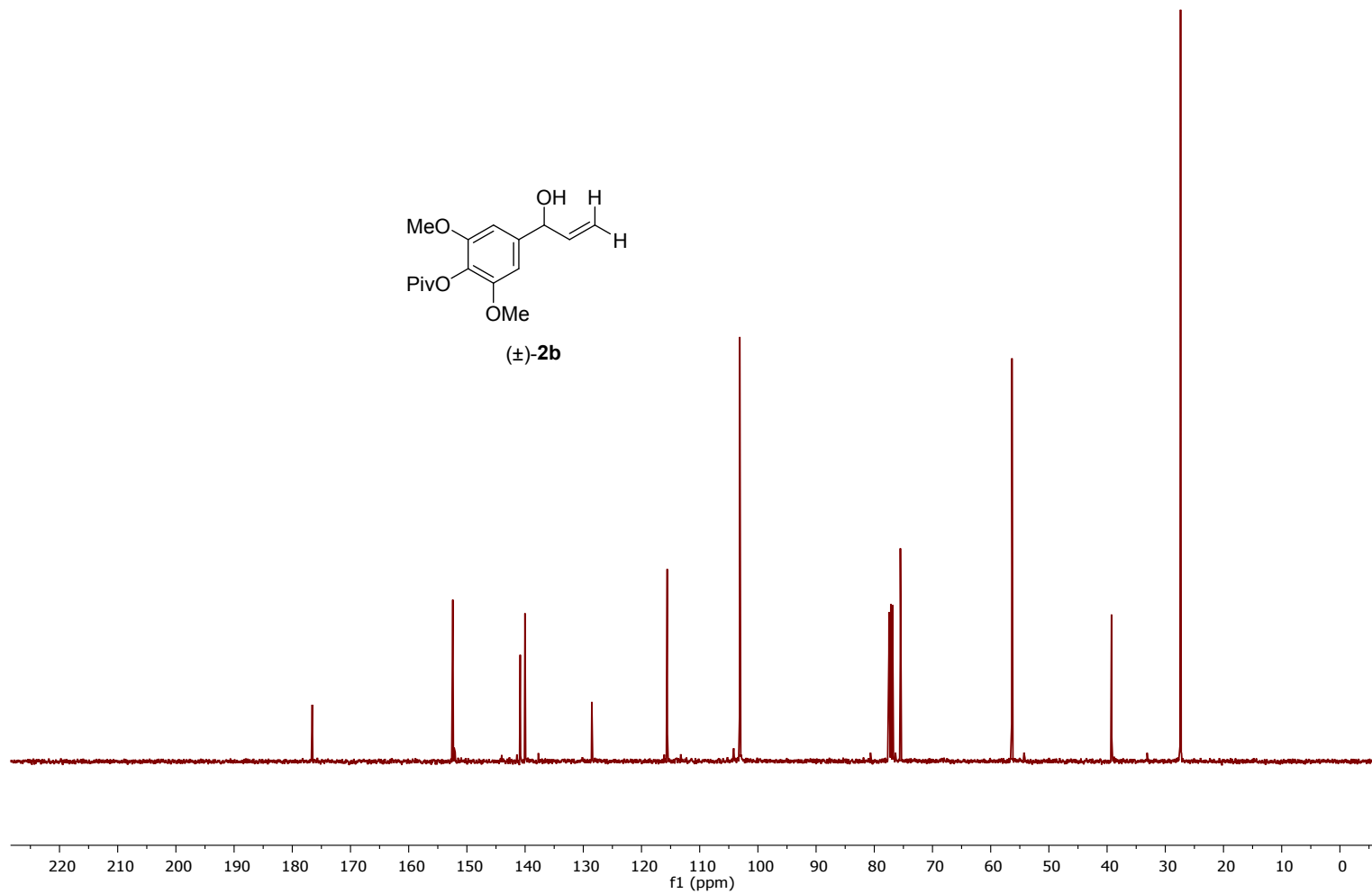
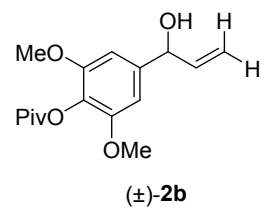
10



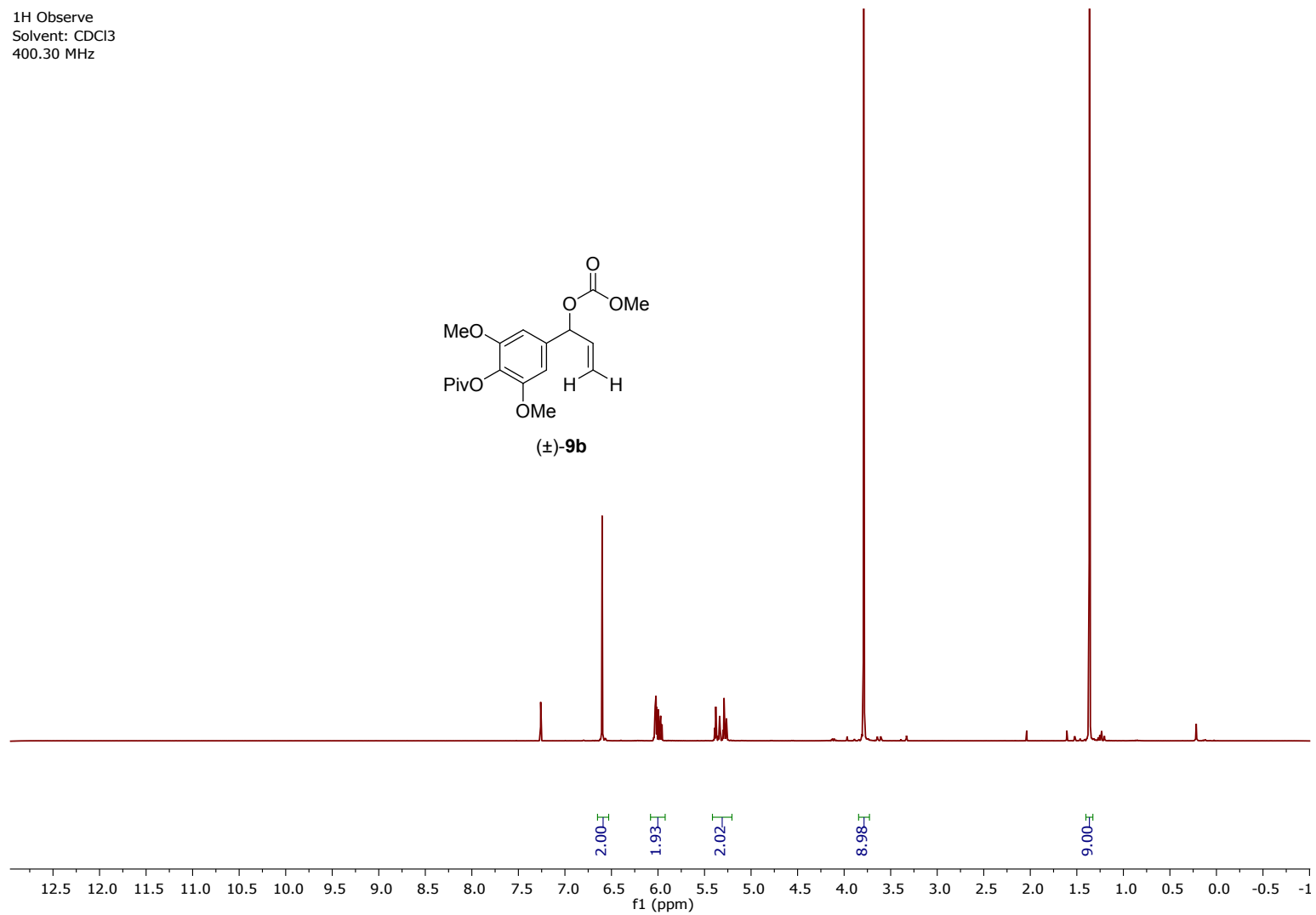
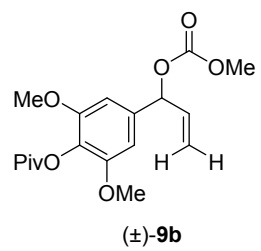
1H Observe
Solvent: CDCl3
400.13 MHz



13C Observe
Solvent: CDCl3
100.62 MHz

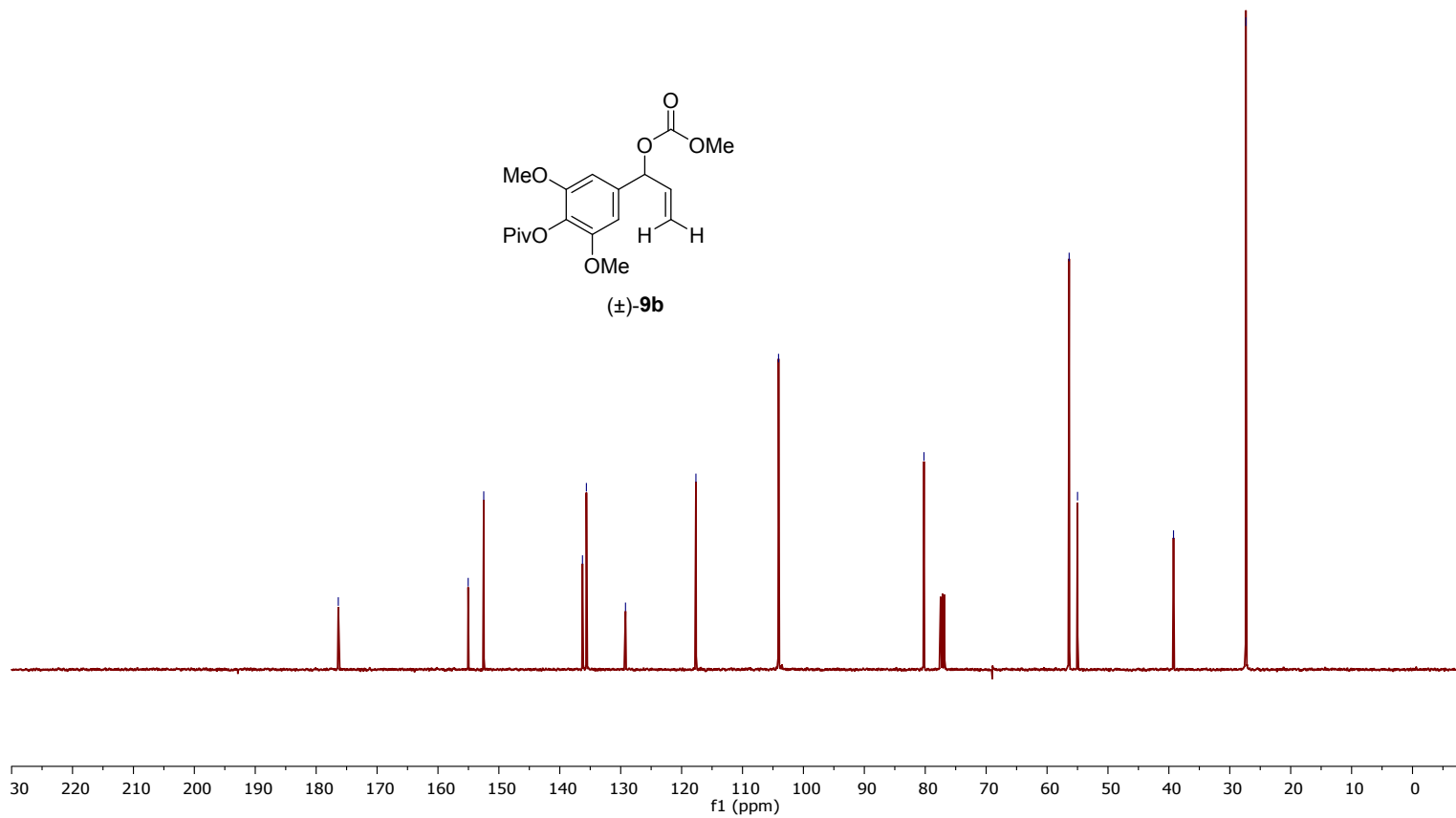
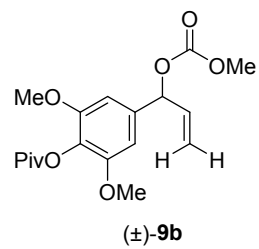


1H Observe
Solvent: CDCl3
400.30 MHz

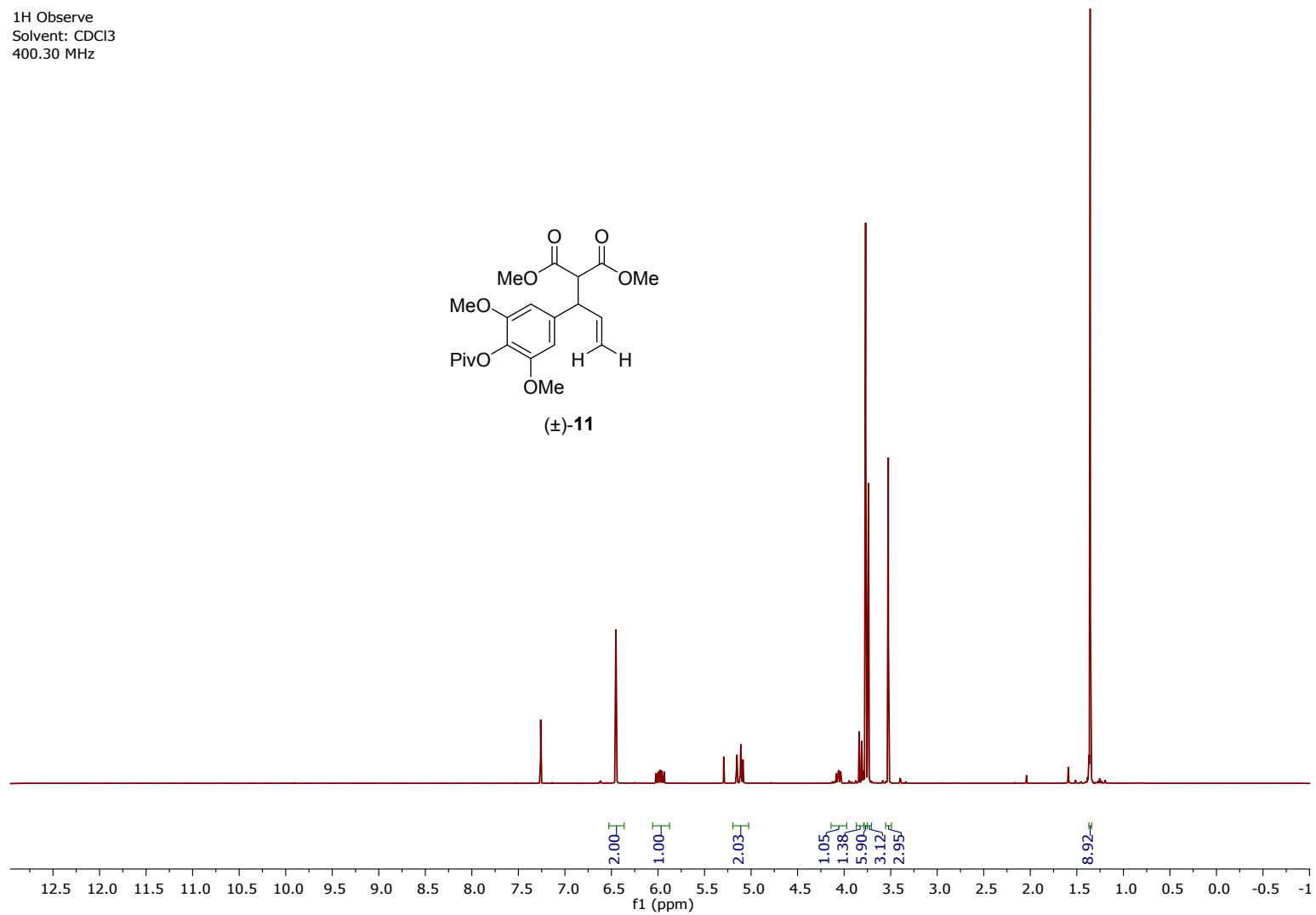
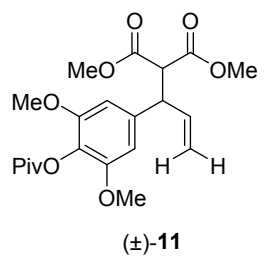


13C Observe
Solvent: CDCl3
100.67 MHz

176.4
155.0
152.5
136.3
135.6
129.2
117.6
104.1
80.2
56.4
55.0
39.2
27.4



1H Observe
Solvent: CDCl3
400.30 MHz



13C Observe
Solvent: CDCl3
100.67 MHz

— 176.5

168.2
167.9

— 152.4

138.0
137.5

— 128.3

— 116.9

— 104.9

57.5

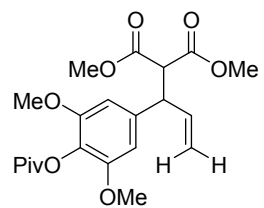
56.4

52.8

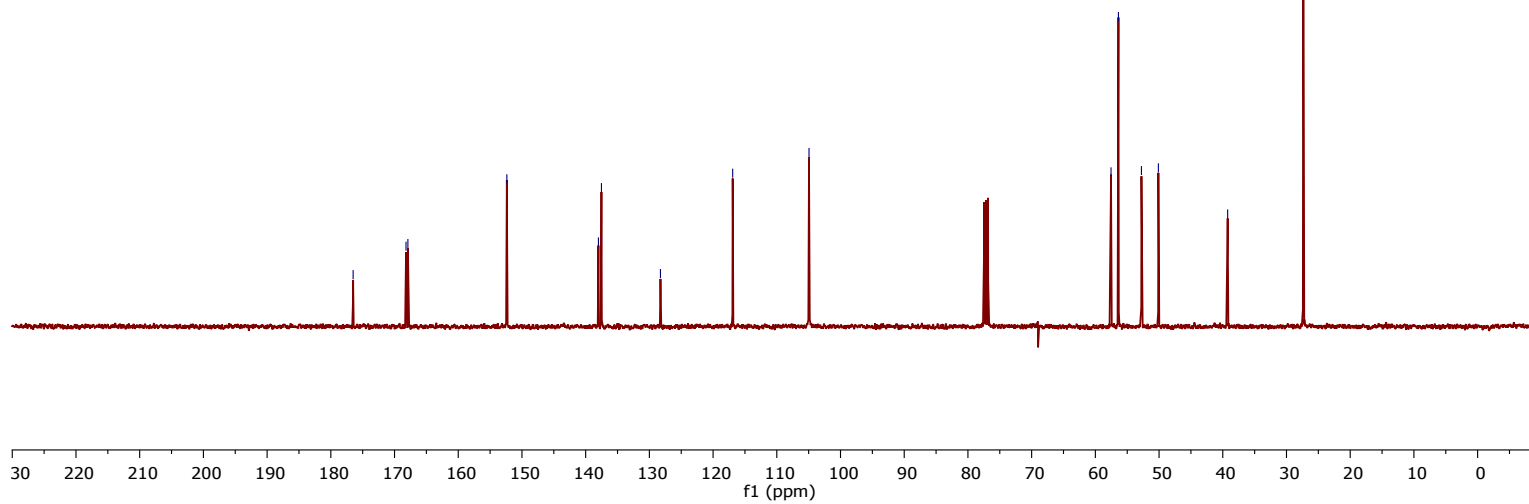
50.1

— 39.2

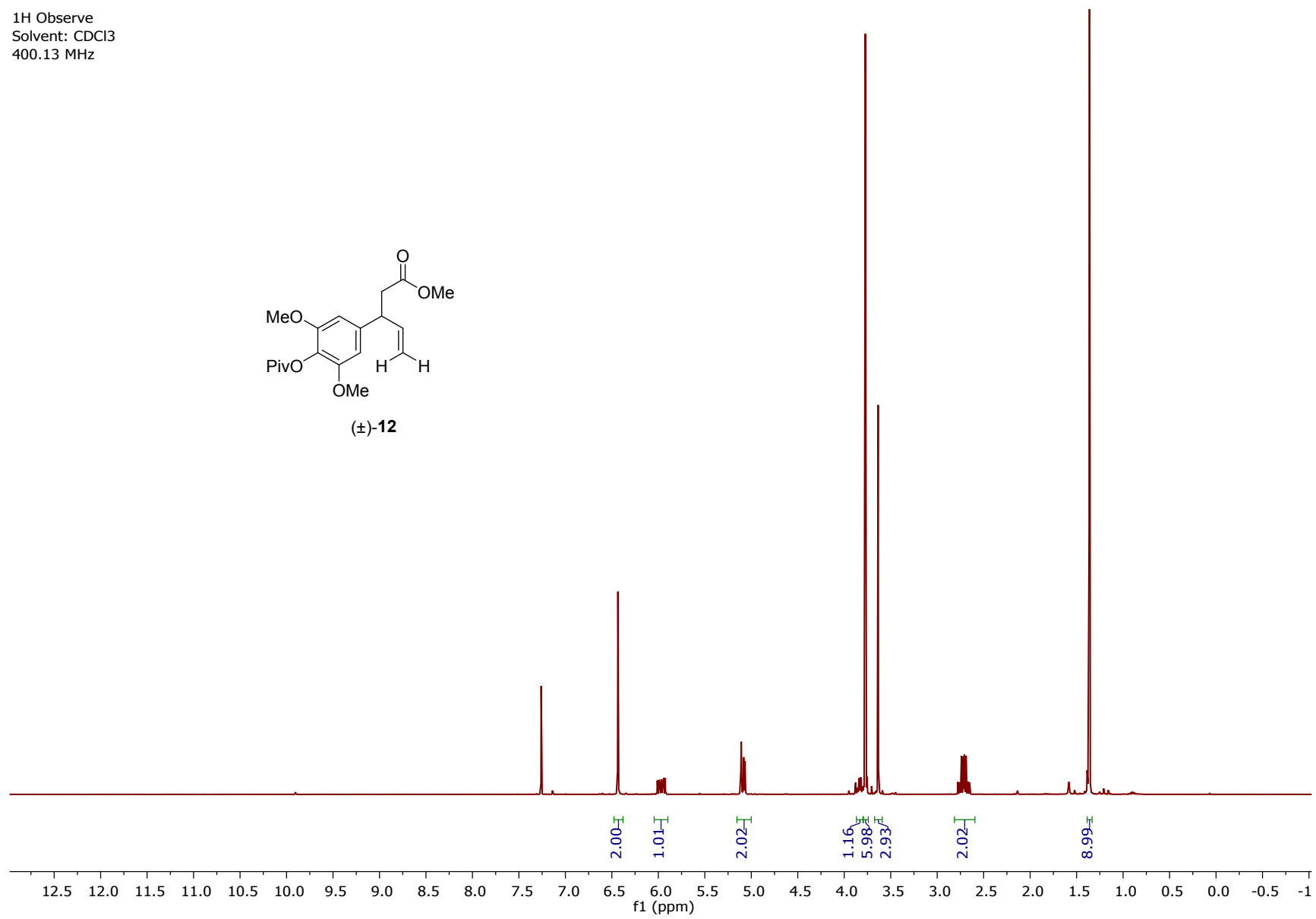
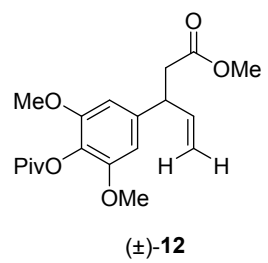
— 27.4



(±)-11



1H Observe
Solvent: CDCl3
400.13 MHz



13C Observe
Solvent: CDCl3
100.62 MHz

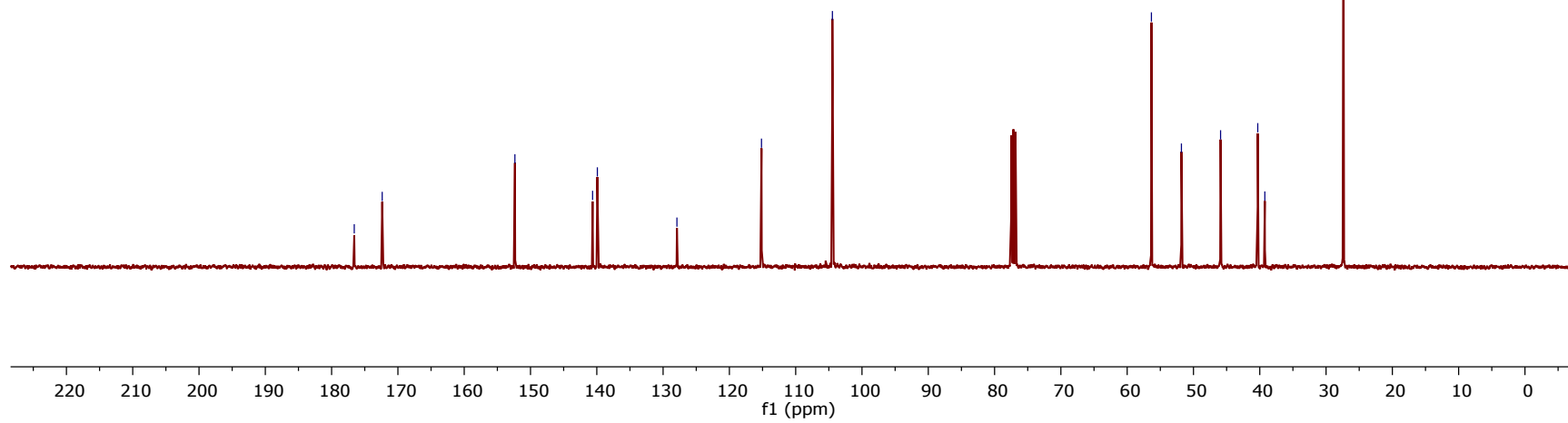
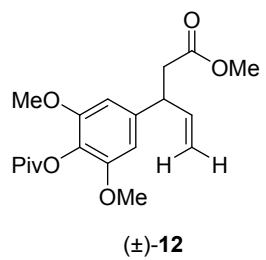
— 176.6
— 172.4

— 152.4
— 140.6
— 139.9

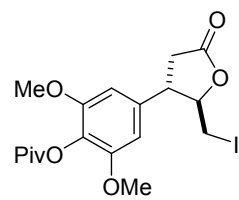
— 127.9
— 115.2
— 104.5

— 56.3
— 51.8
— 45.9
— 40.3
— 39.2

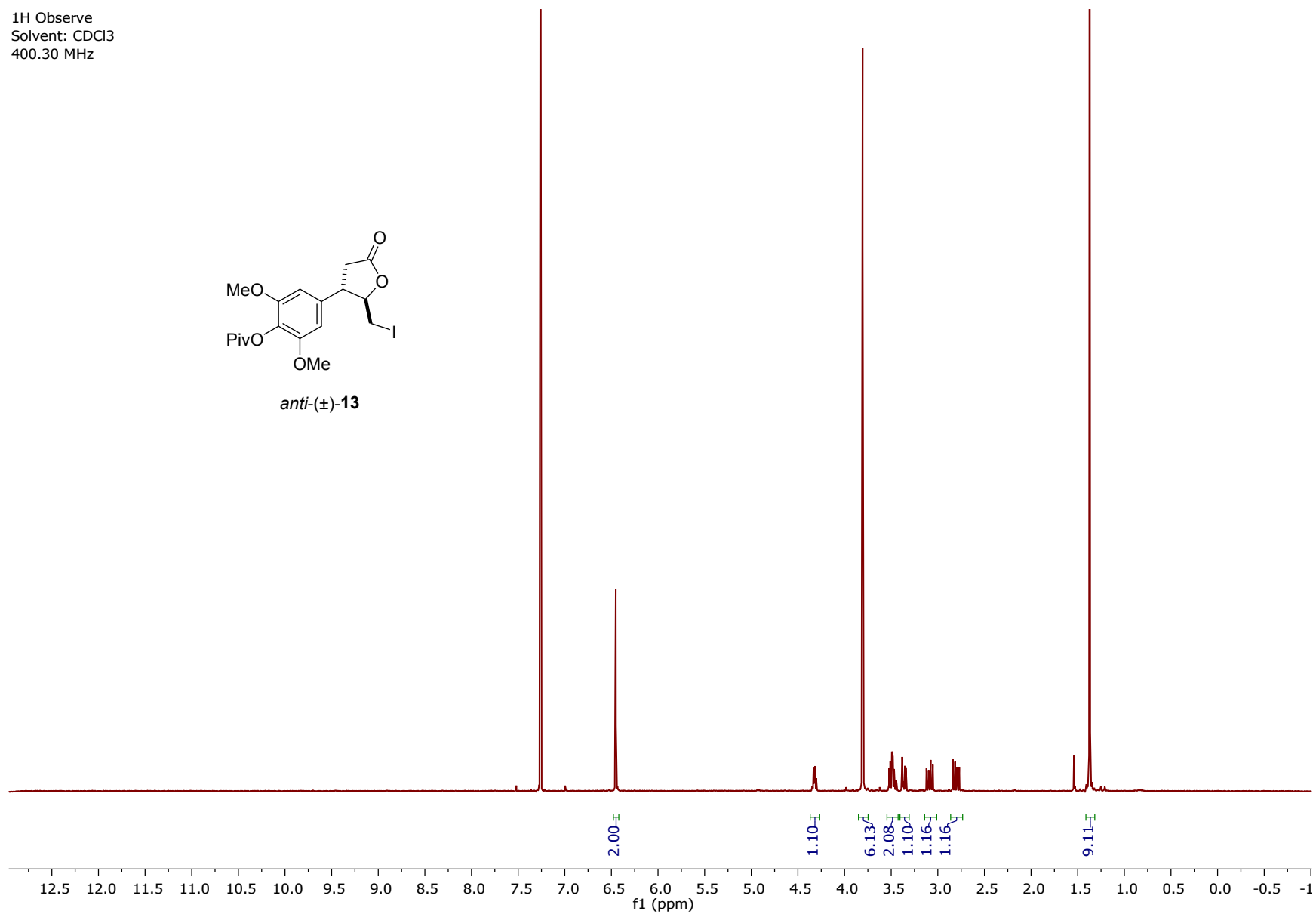
— 27.4



1H Observe
Solvent: CDCl3
400.30 MHz

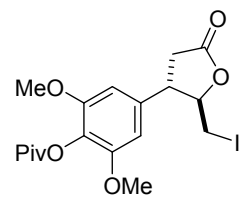


anti-(±)-13

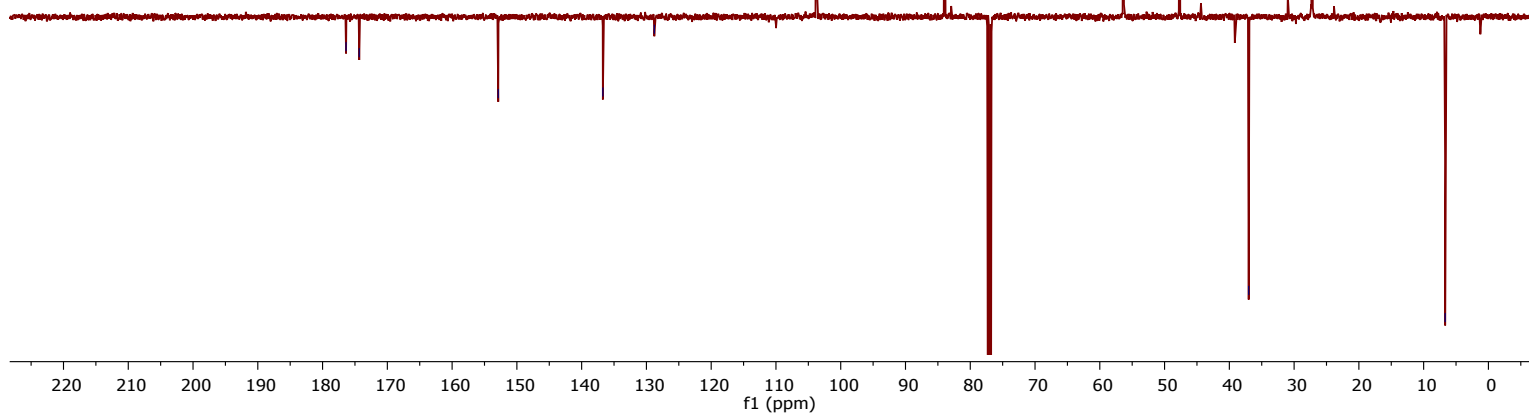


13C DEPTQ
Solvent: CDCl3
125.77 MHz

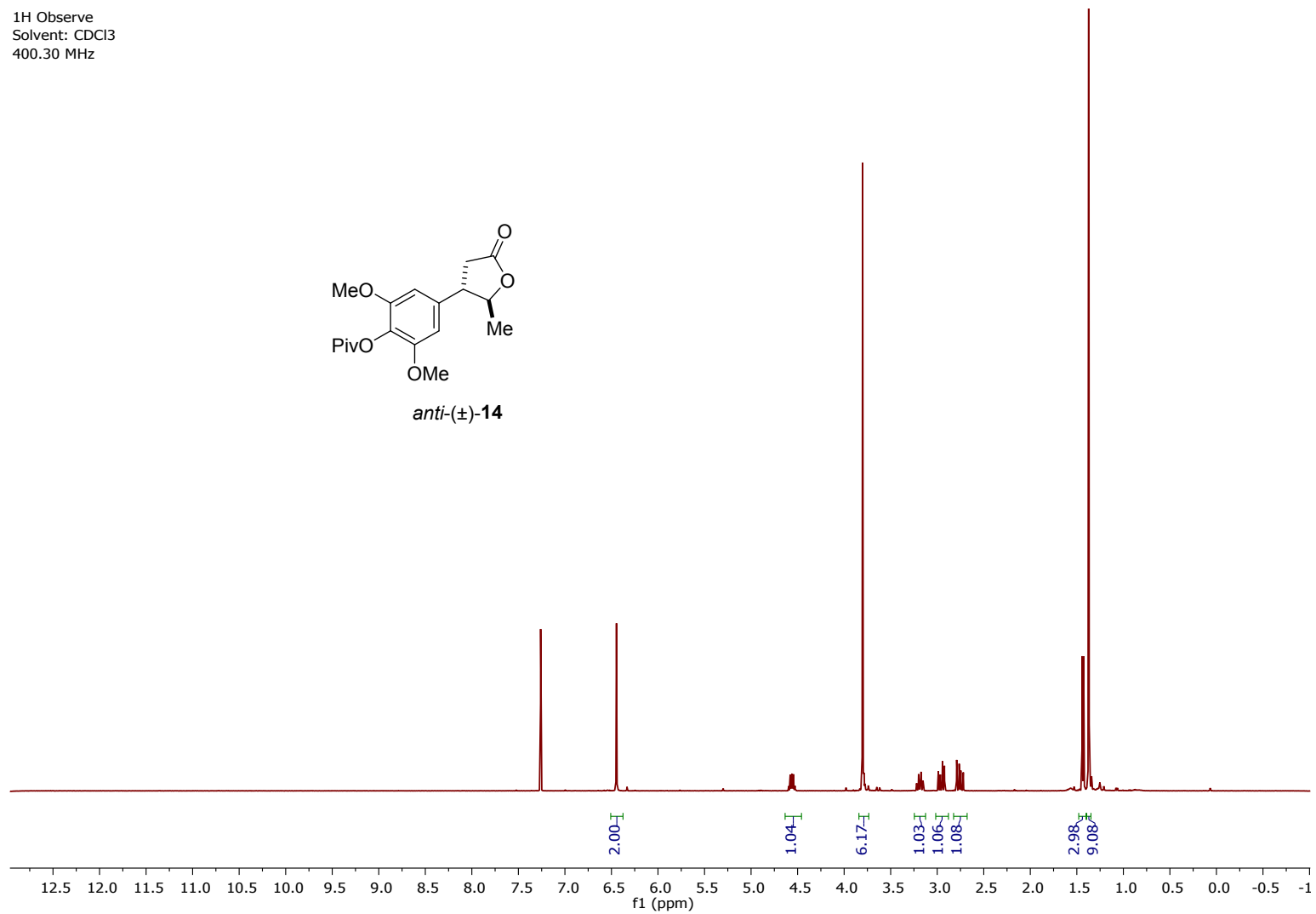
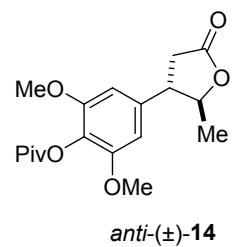
176.4
174.3
152.9
136.7
128.8
103.7
84.0
56.4
47.7
37.0
27.2
6.7



anti-(±)-13

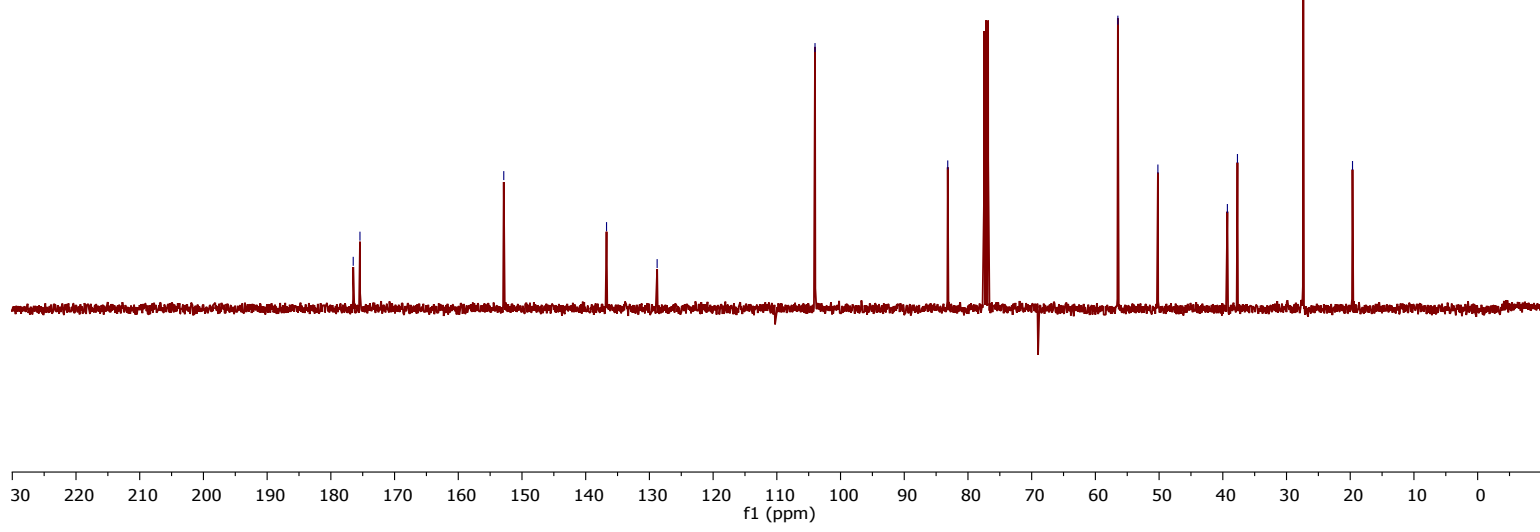
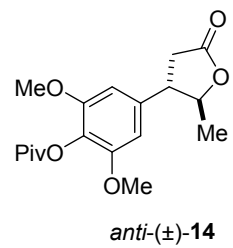


1H Observe
Solvent: CDCl3
400.30 MHz

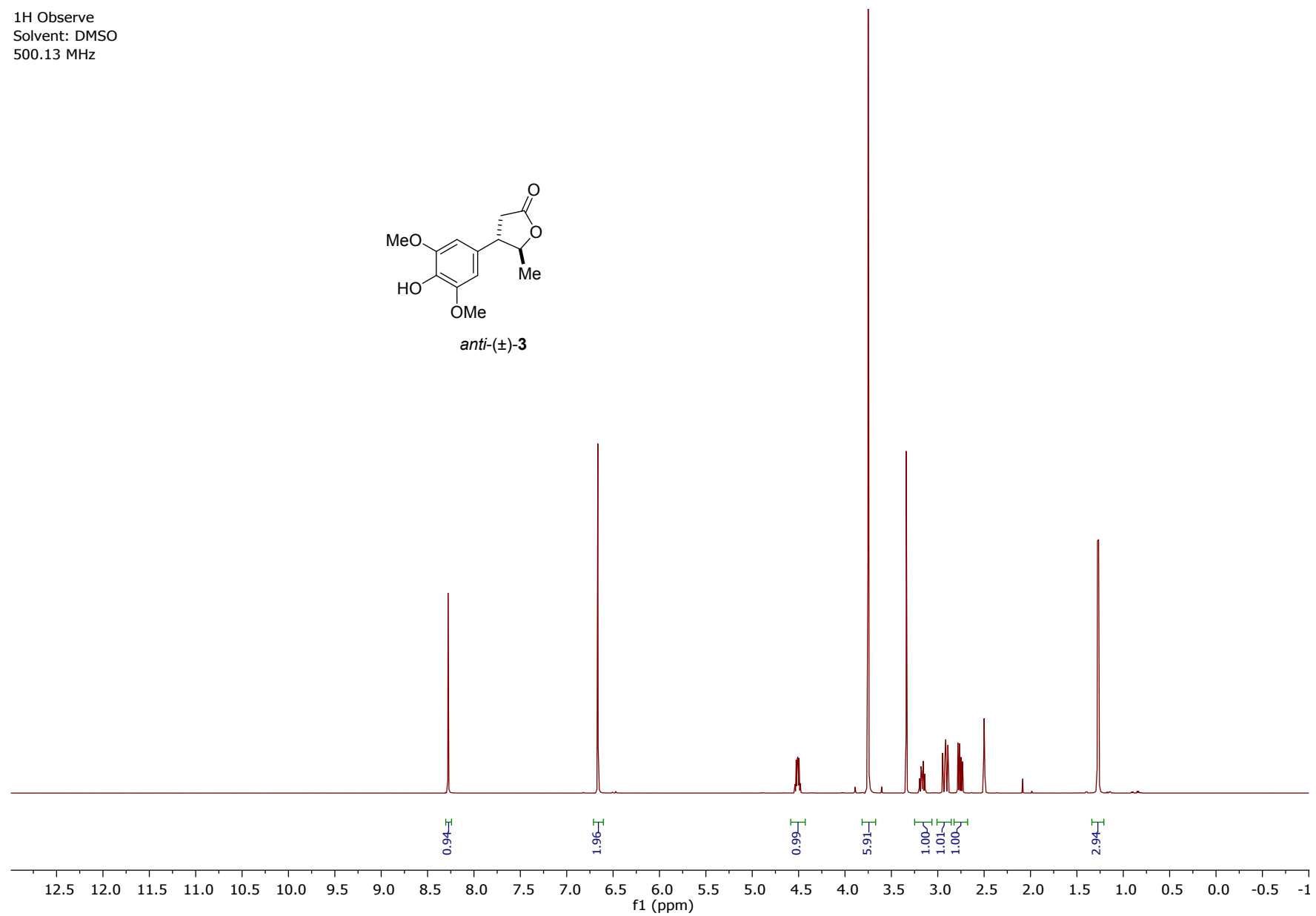
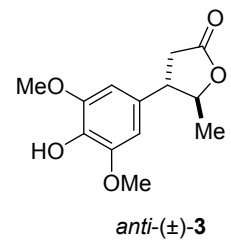


13C Observe
Solvent: CDCl3
100.67 MHz

176.5
175.4
152.9
136.7
128.8
104.0
83.2
56.5
50.2
39.3
37.7
27.4
19.6



1H Observe
Solvent: DMSO
500.13 MHz



13C Observe
Solvent: DMSO
125.77 MHz

175.7

148.0

134.6

128.6

128.5

105.3

105.1

82.5

56.0

49.1

40.1 DMSO

40.0 DMSO

39.9 DMSO

39.8 DMSO

39.7 DMSO

39.6 DMSO

39.5 DMSO

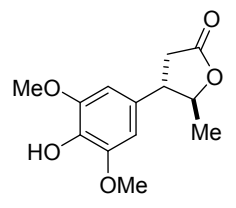
39.4 DMSO

39.2 DMSO

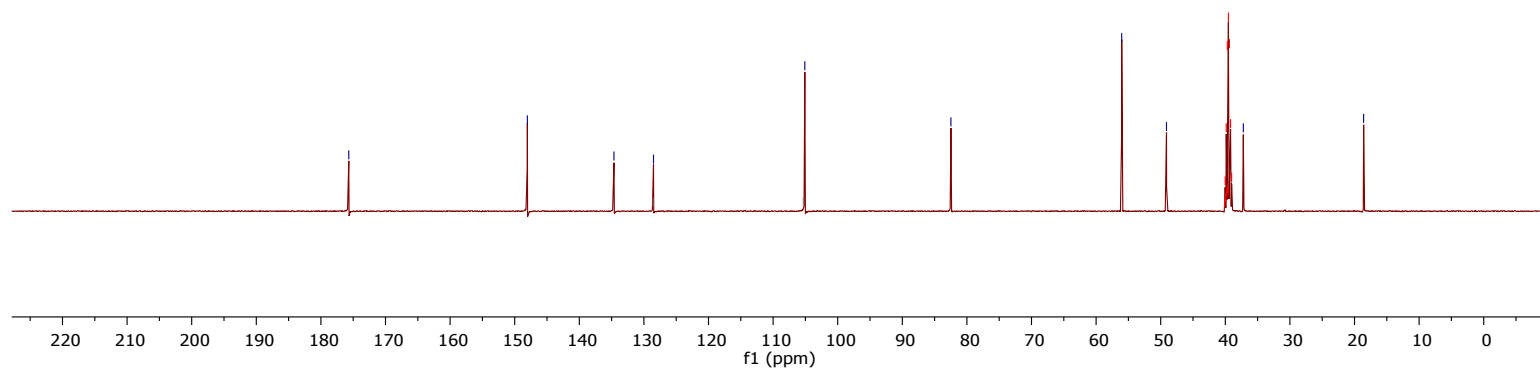
39.0 DMSO

37.2

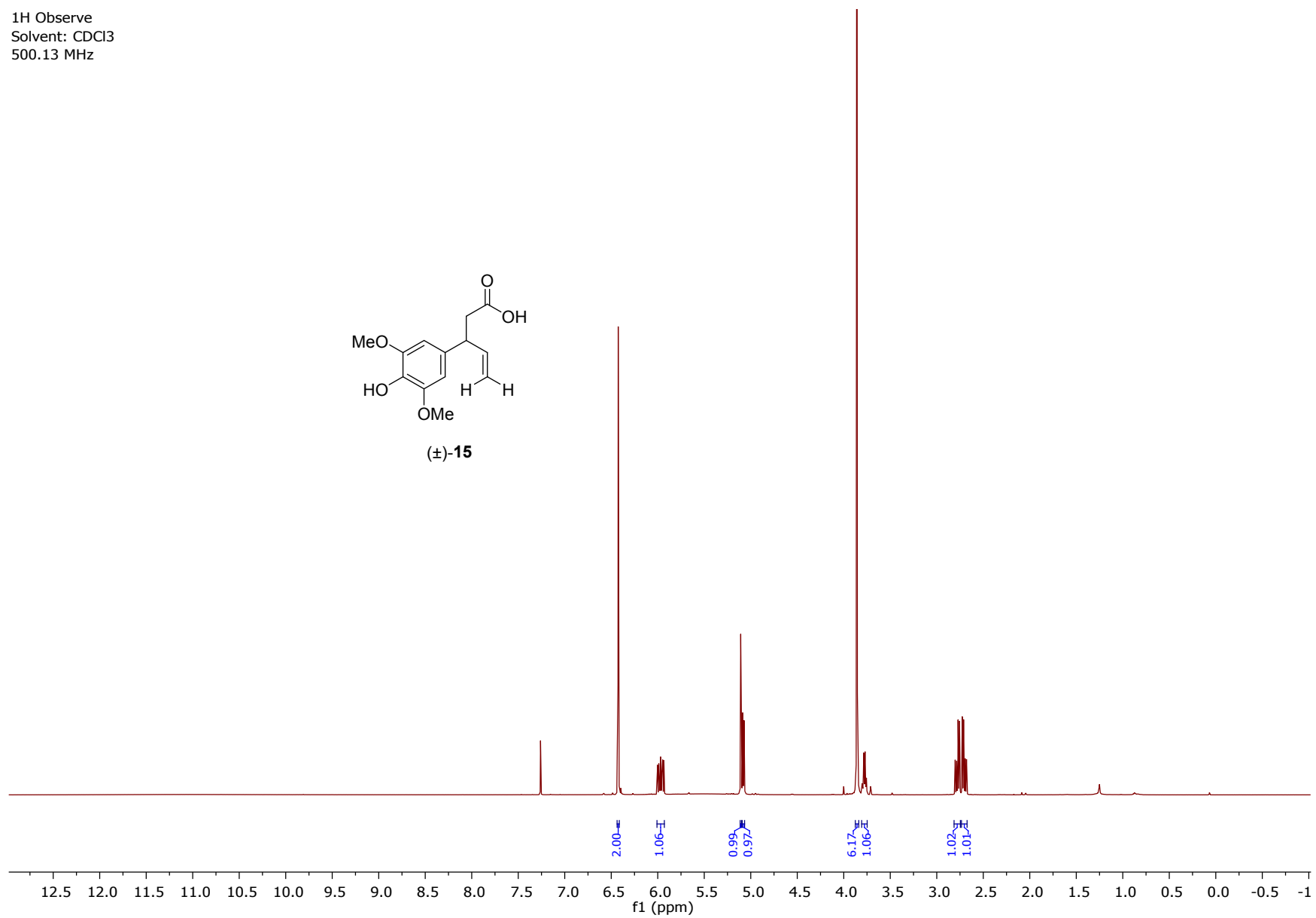
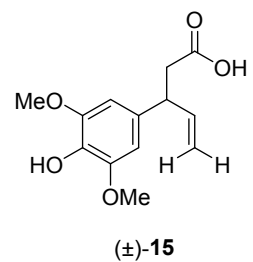
18.6



anti-(±)-**3**



1H Observe
Solvent: CDCl3
500.13 MHz



13C DEPTQ
Solvent: CDCl3
125.77 MHz

178.1

147.1

140.0

133.6

133.3

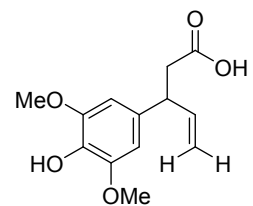
115.0

104.2

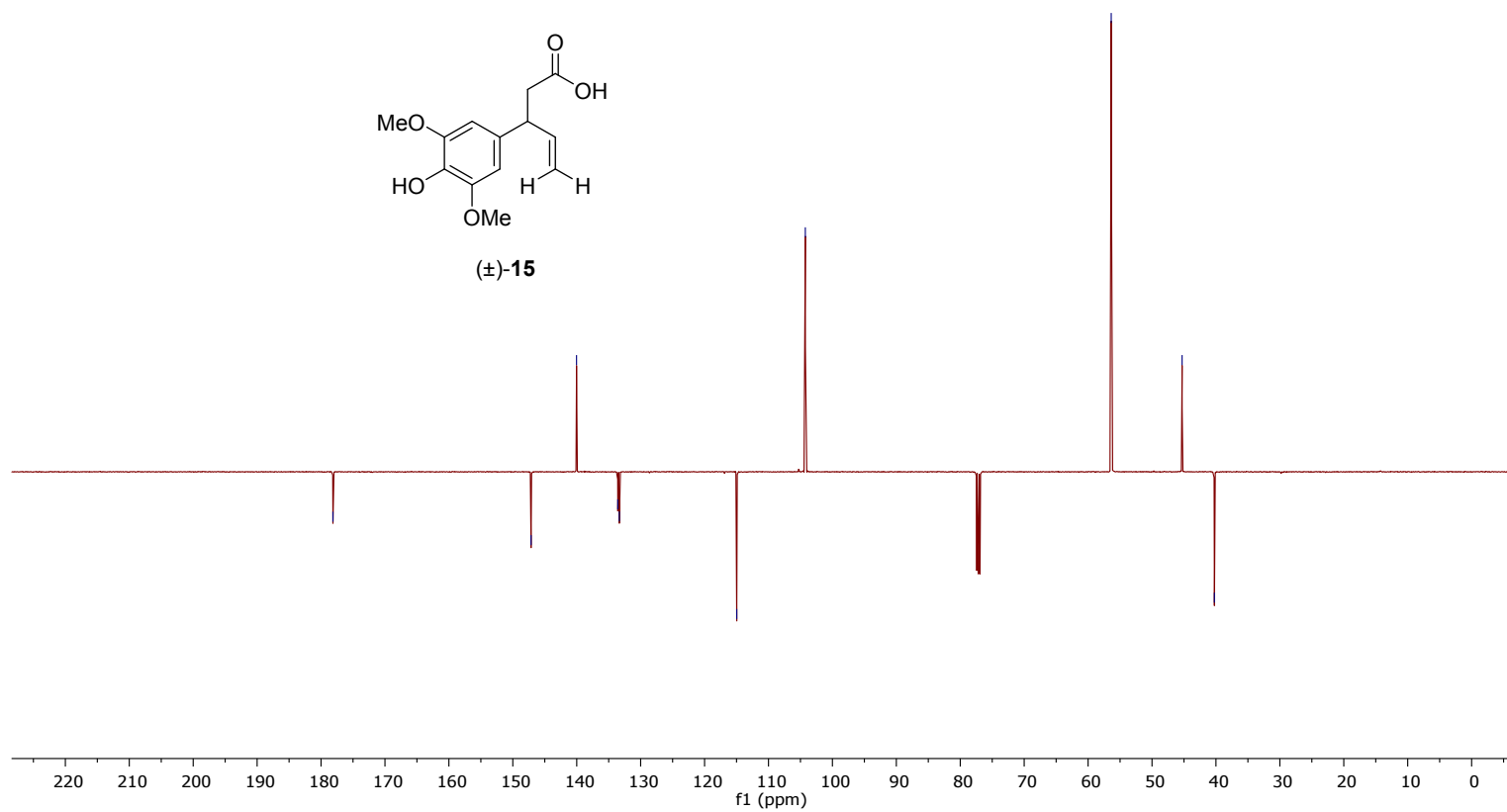
56.4

45.3

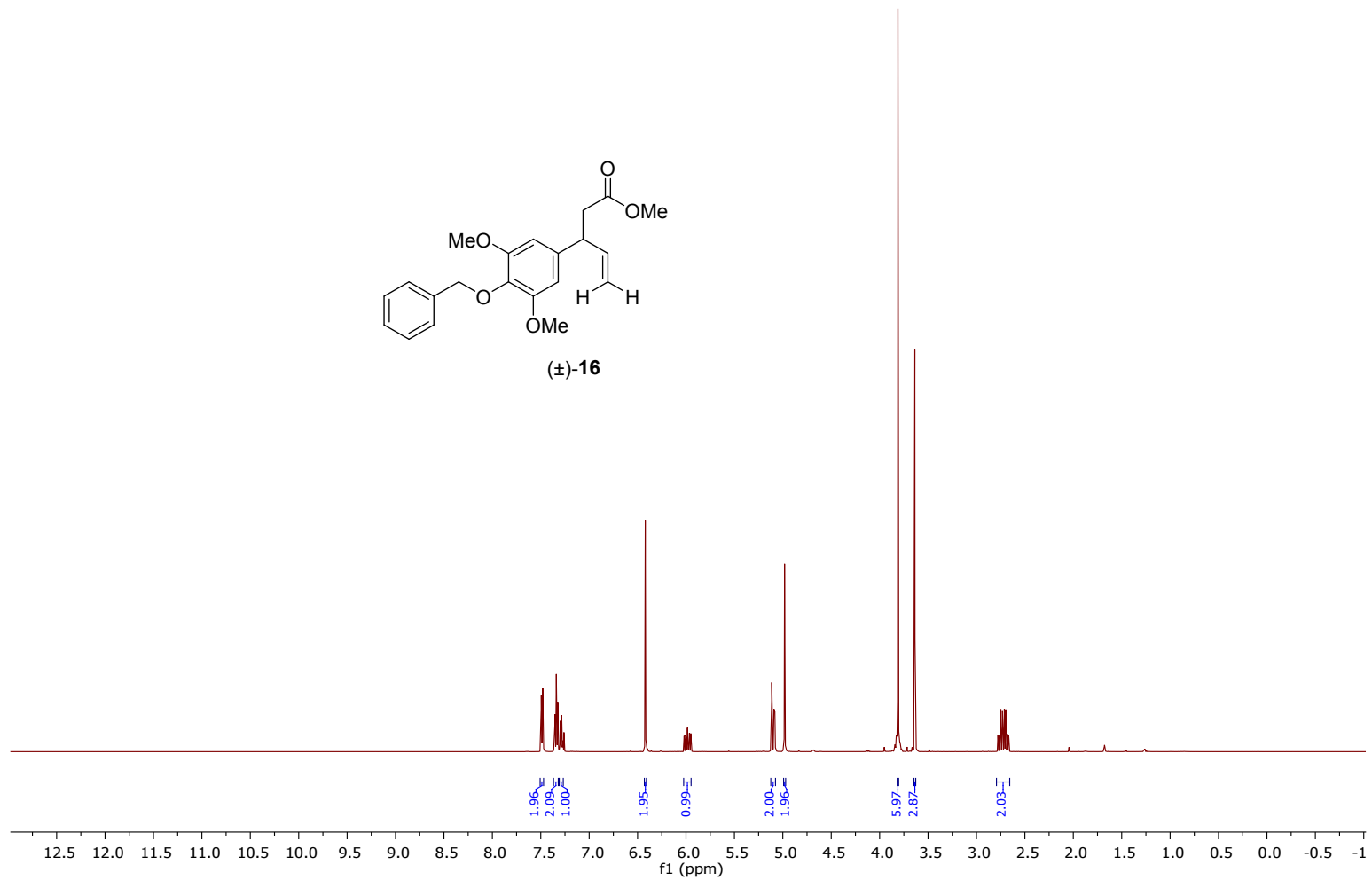
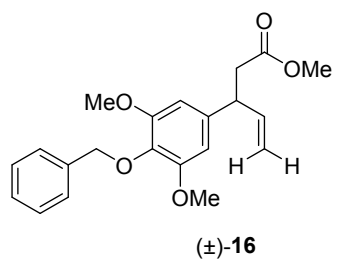
40.2



(±)-15



1H Observe
Solvent: CDCl3
500.13 MHz



13C DEPTQ
Solvent: CDCl3
125.77 MHz

— 172.4

— 153.6

— 140.0

— 138.3

— 138.0

— 135.7

— 128.5

— 128.2

— 127.8

— 115.0

— 104.6

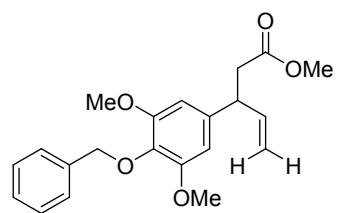
— 75.1

— 56.2

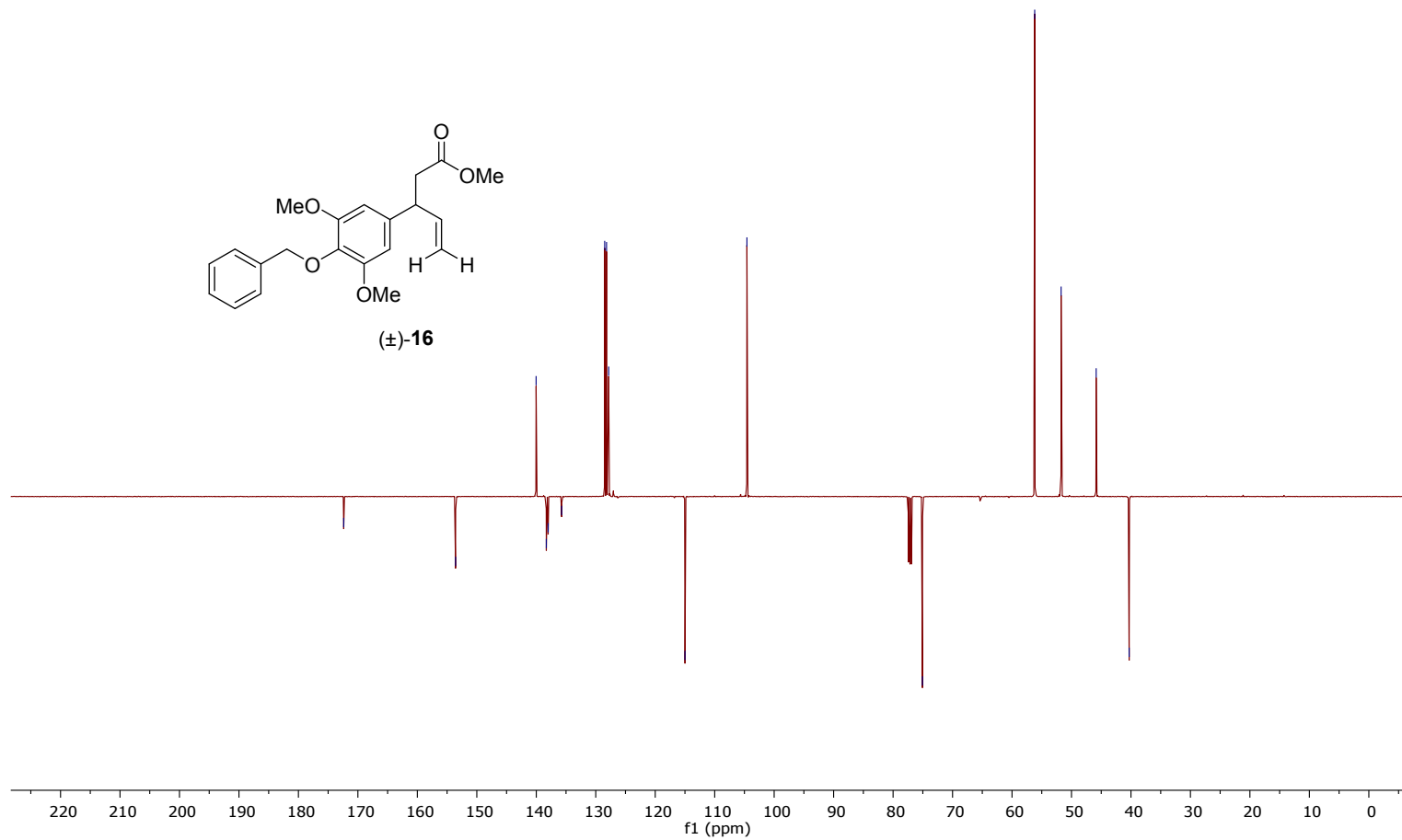
— 51.7

— 45.8

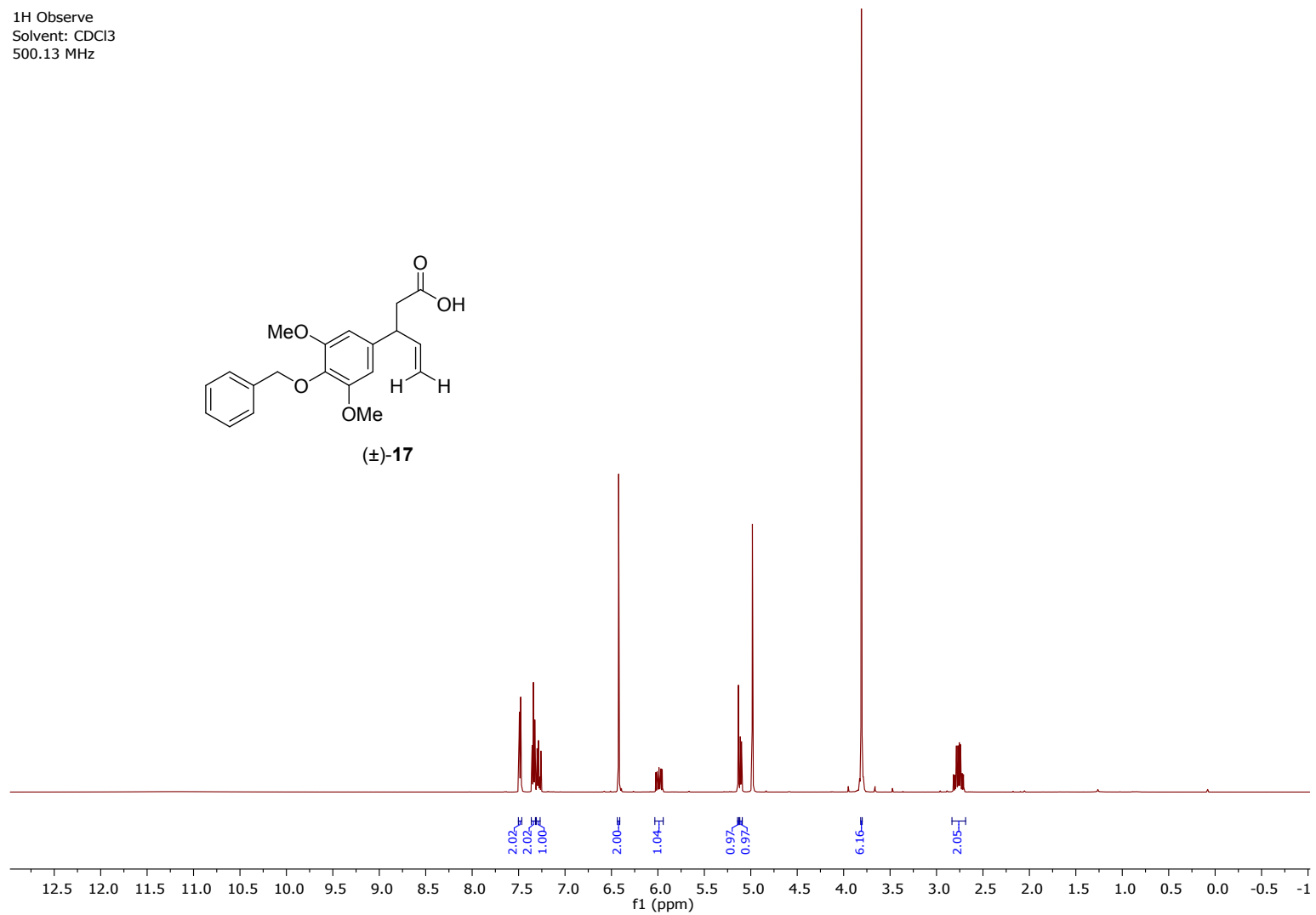
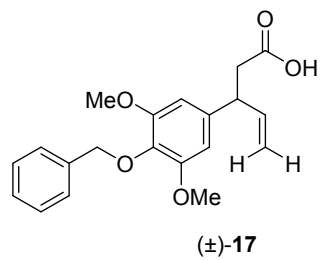
— 40.3



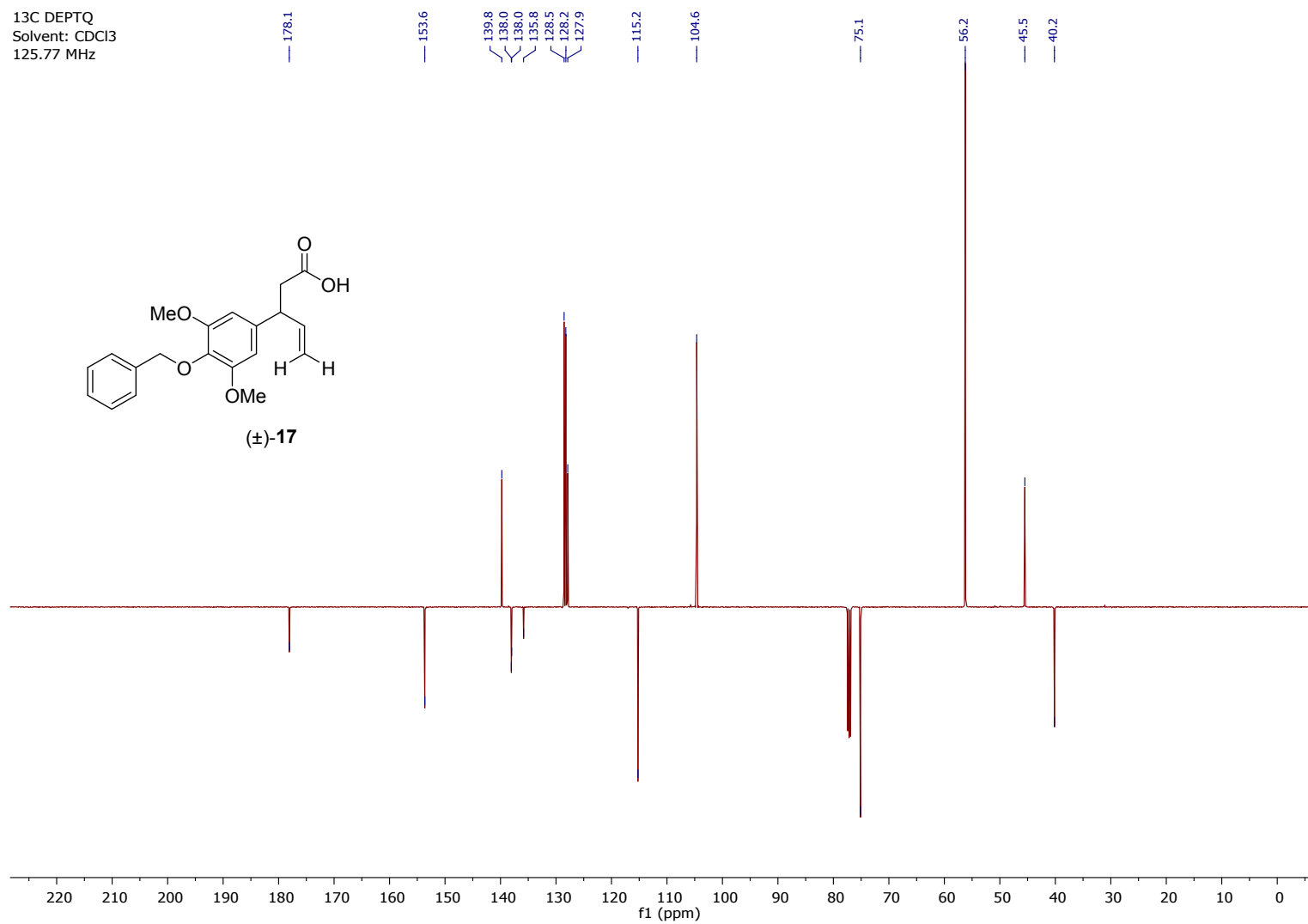
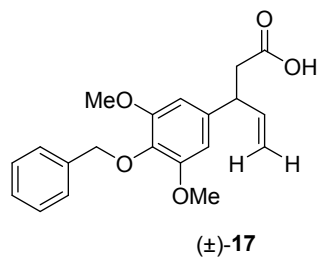
(±)-16



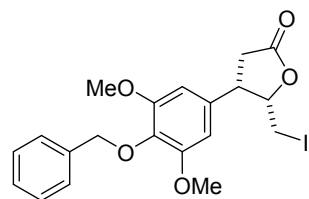
1H Observe
Solvent: CDCl3
500.13 MHz



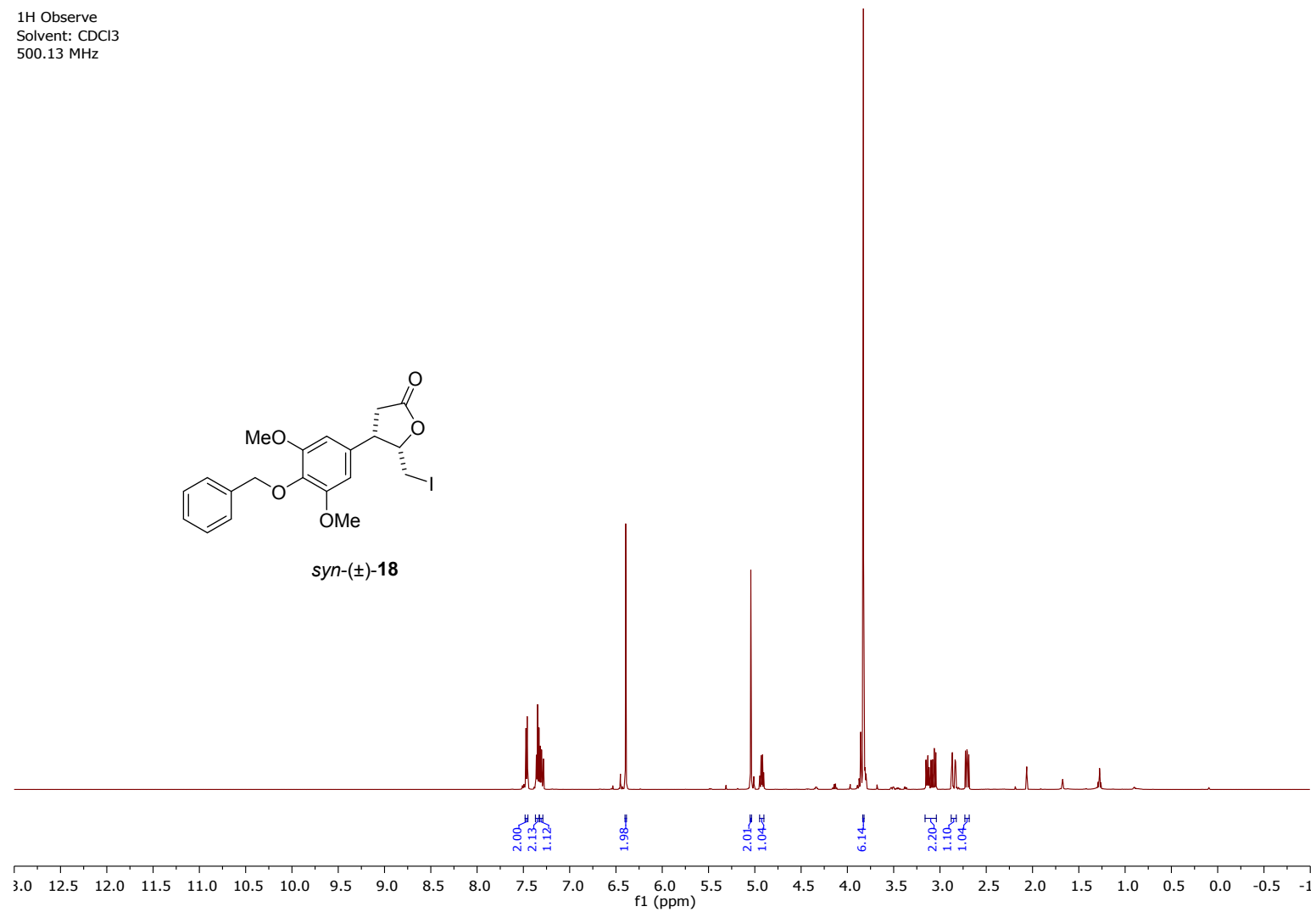
13C DEPTQ
Solvent: CDCl3
125.77 MHz



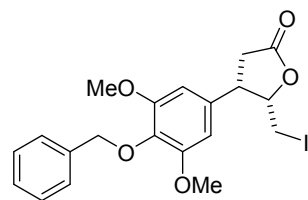
1H Observe
Solvent: CDCl3
500.13 MHz



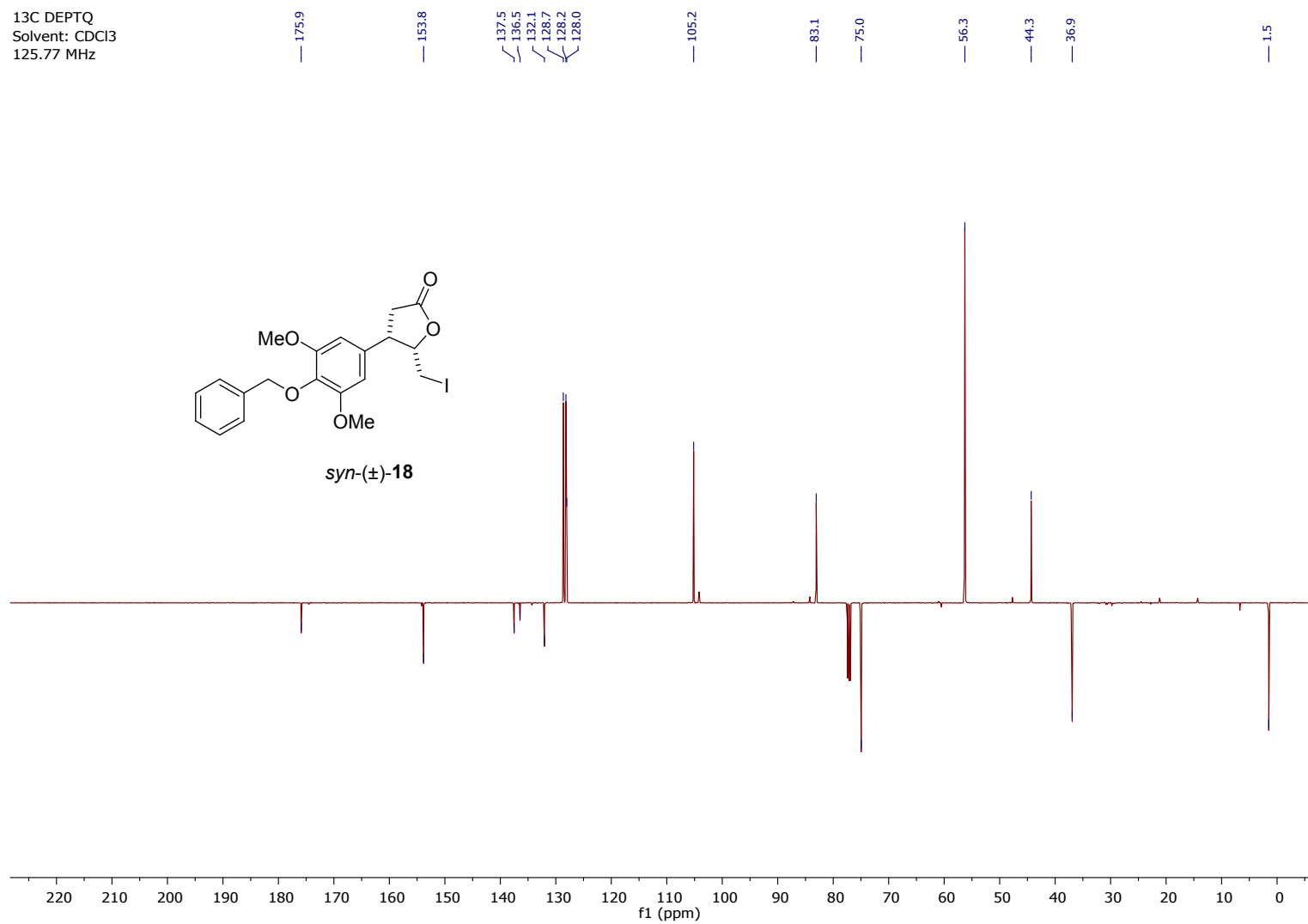
syn-(±)-**18**



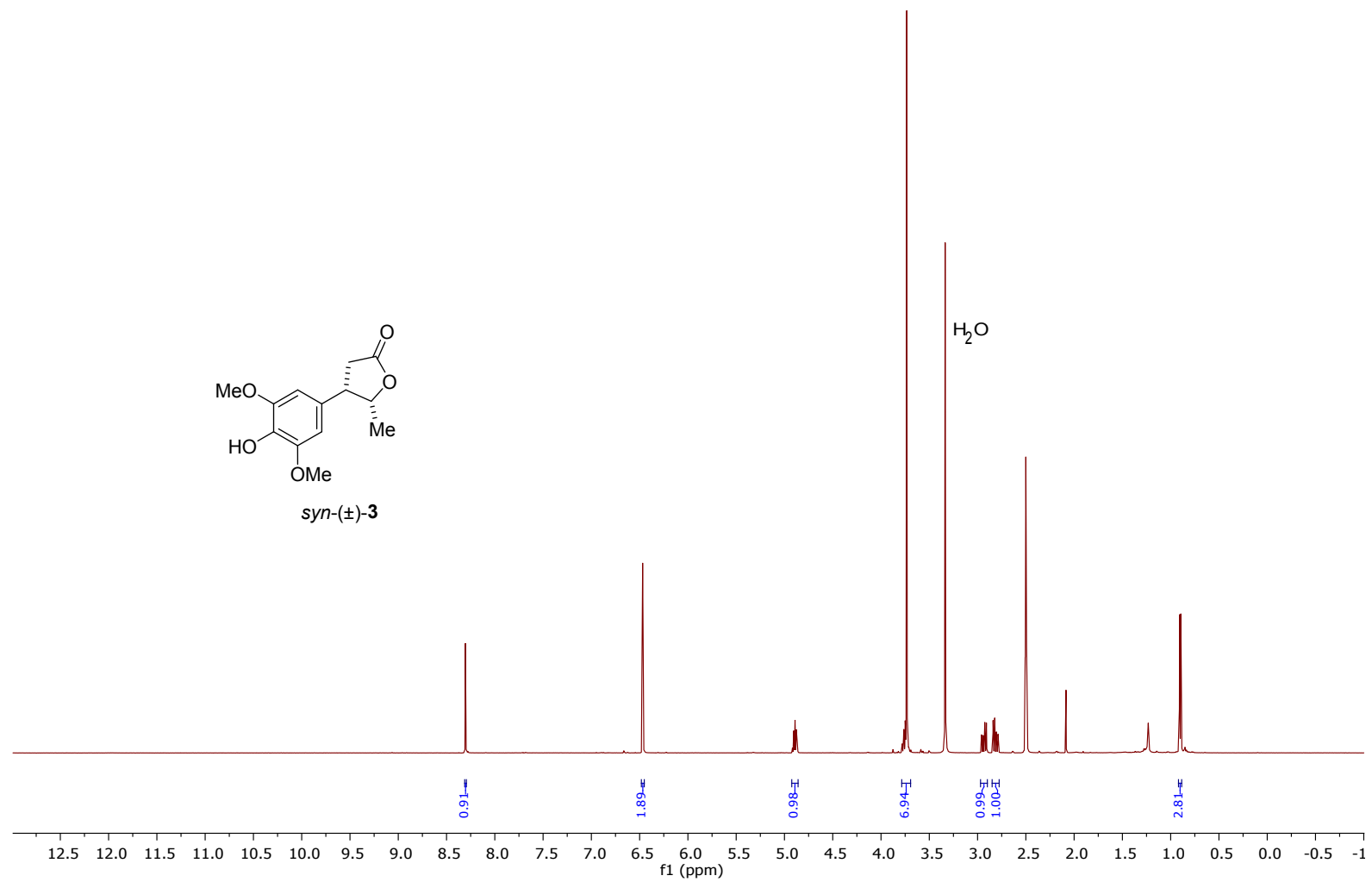
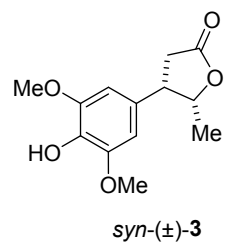
13C DEPTQ
Solvent: CDCl3
125.77 MHz



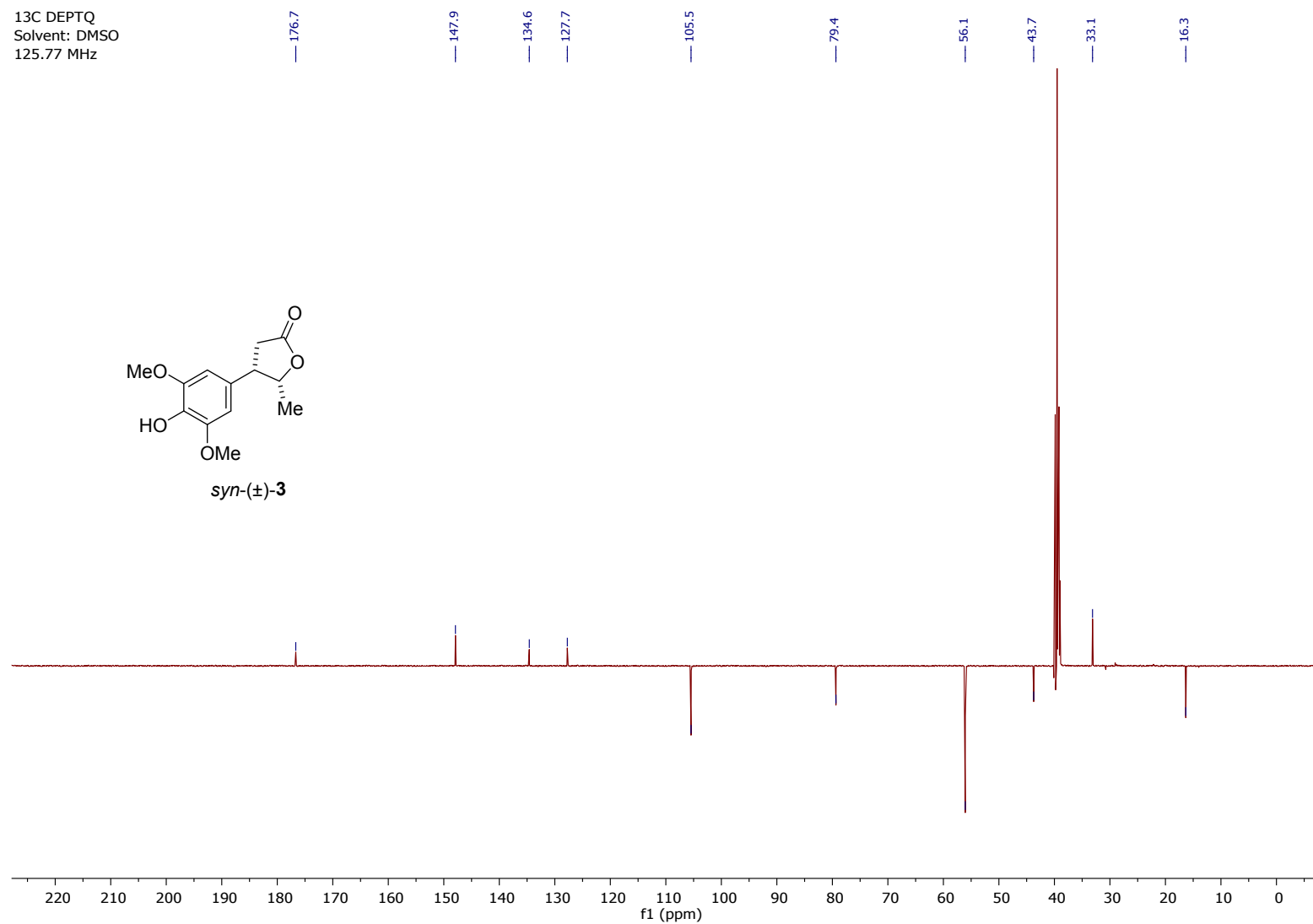
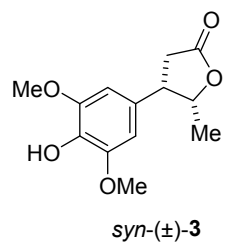
syn-(±)-18



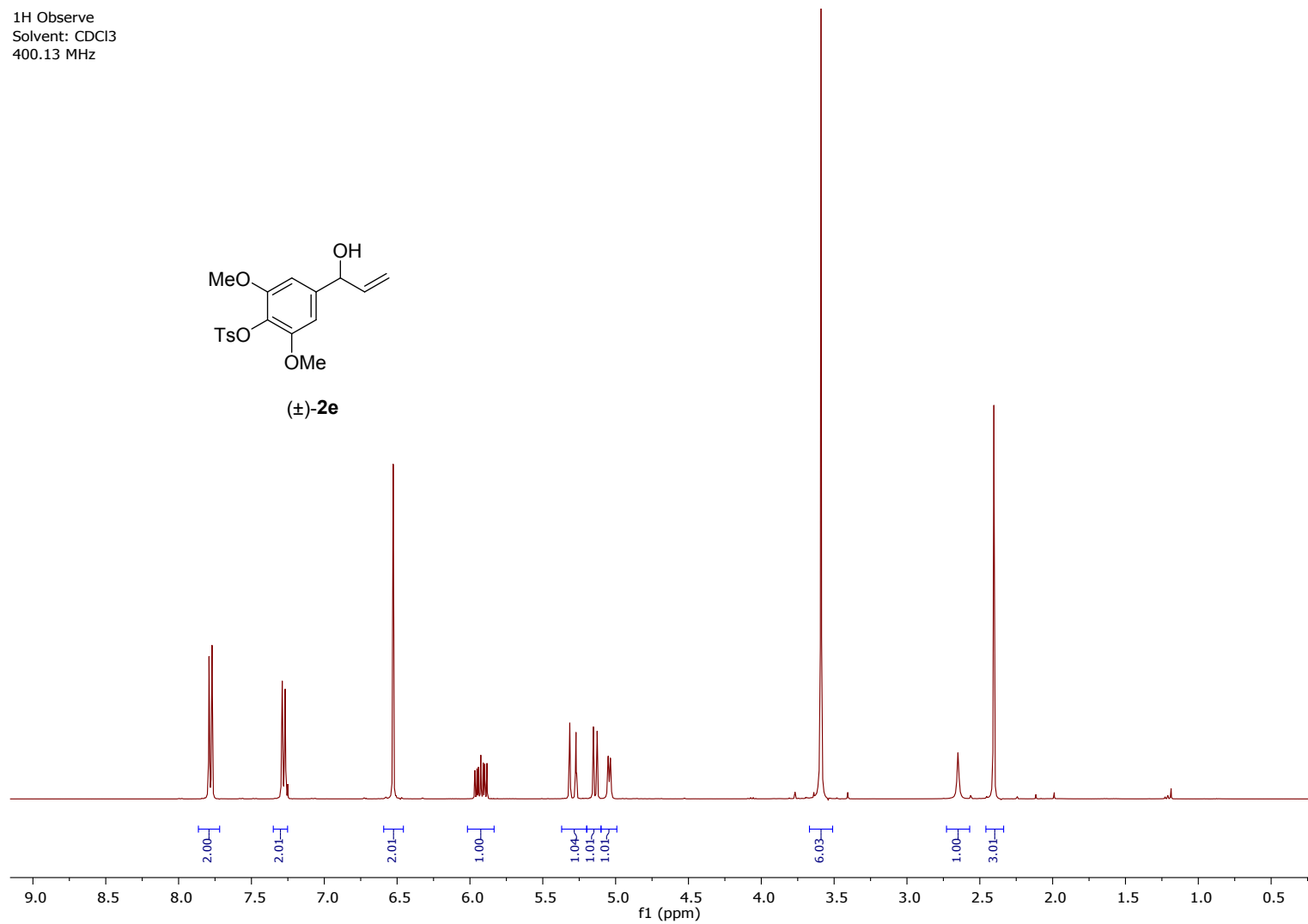
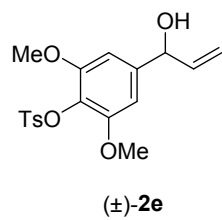
1H NMR
Solvent: DMSO
500.13 MHz



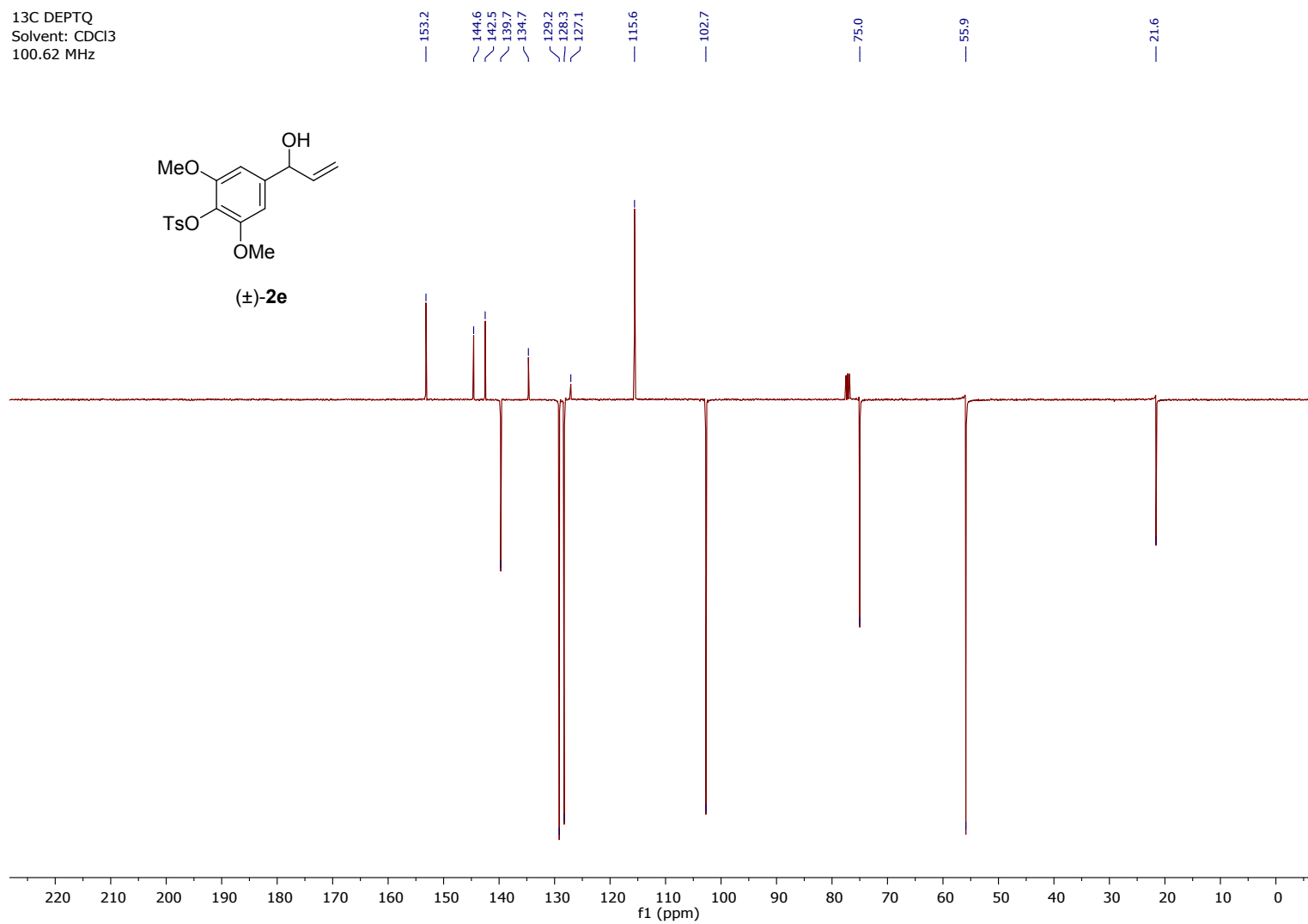
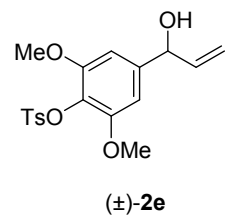
13C DEPTQ
Solvent: DMSO
125.77 MHz



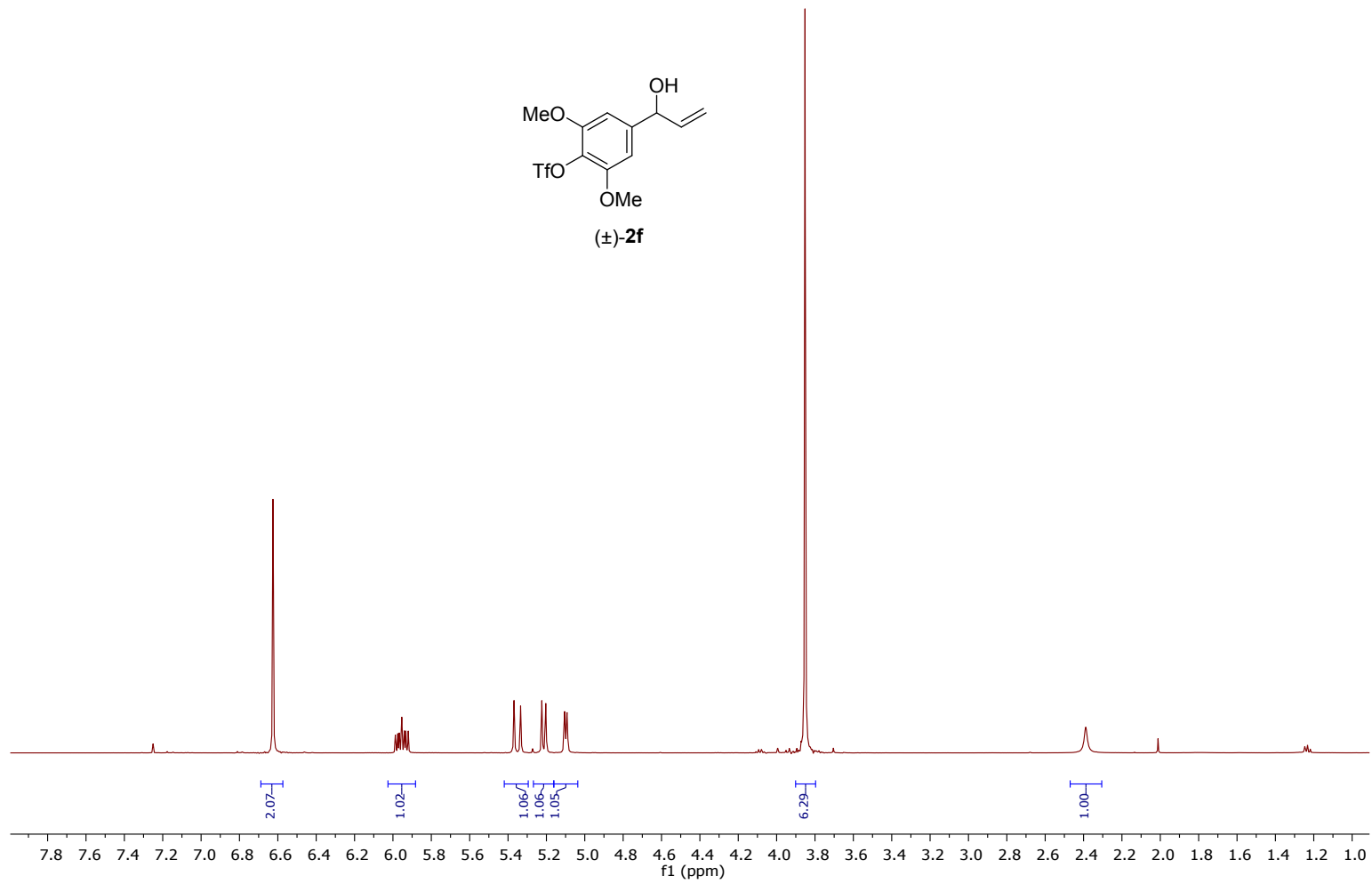
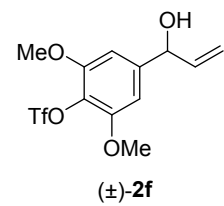
1H Observe
Solvent: CDCl3
400.13 MHz



13C DEPTQ
Solvent: CDCl3
100.62 MHz

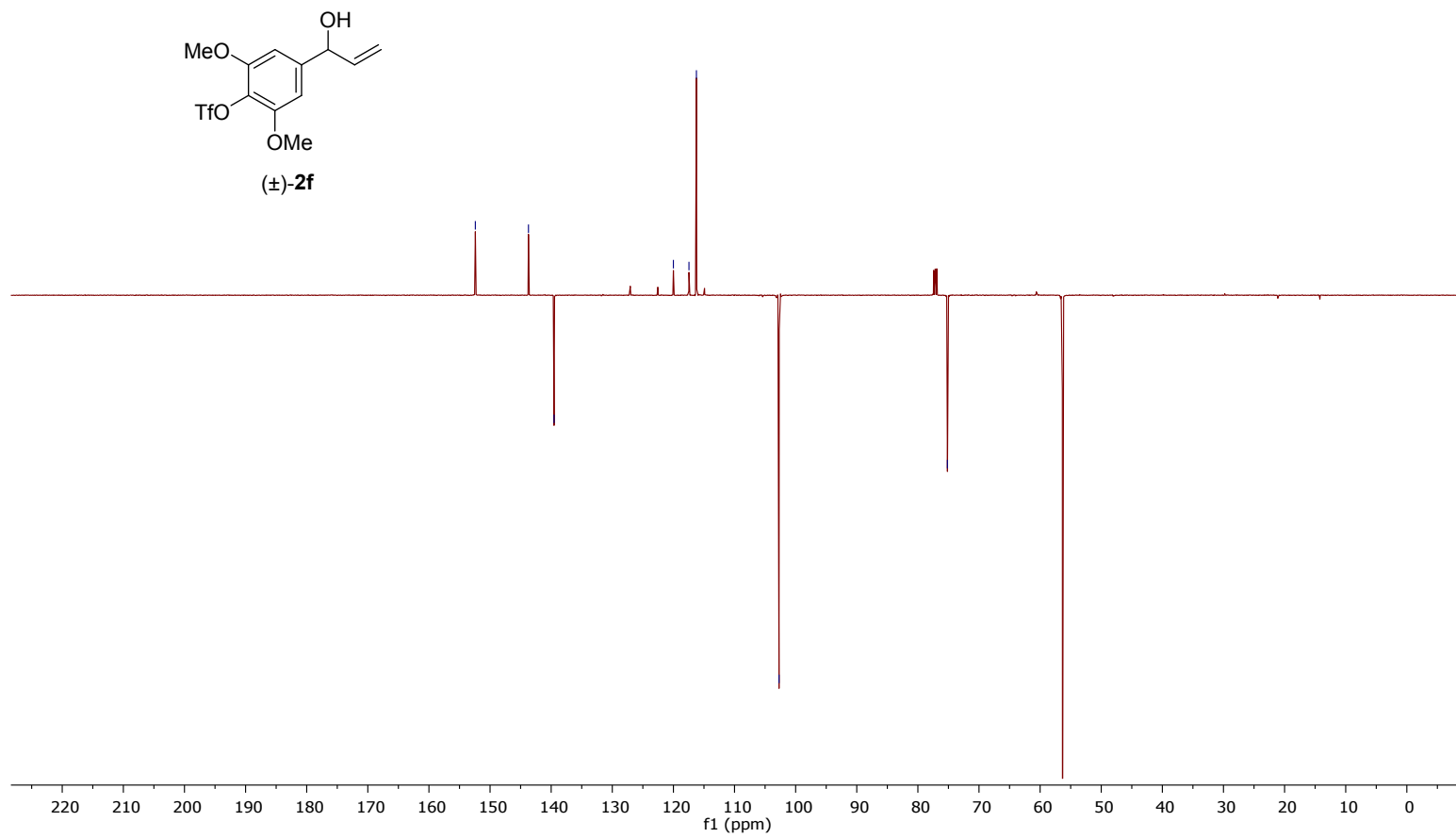
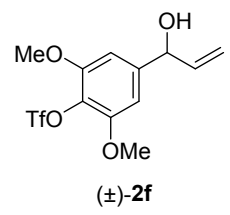


1H Observe
Solvent: CDCl3
500.13 MHz



13C Observe
Solvent: CDCl3
125.77 MHz

152.4
143.7
139.5
120.0
117.5
116.2
102.7
75.2
56.3



19F (1H decoupled)
Solvent: CDCl3
376.47 MHz

-73.8

