

Anticancer and Anti-neuroinflammatory Constituents Isolated from the Roots of *Wasabia japonica*

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Figure S1. HRESIMS spectrum of **1**

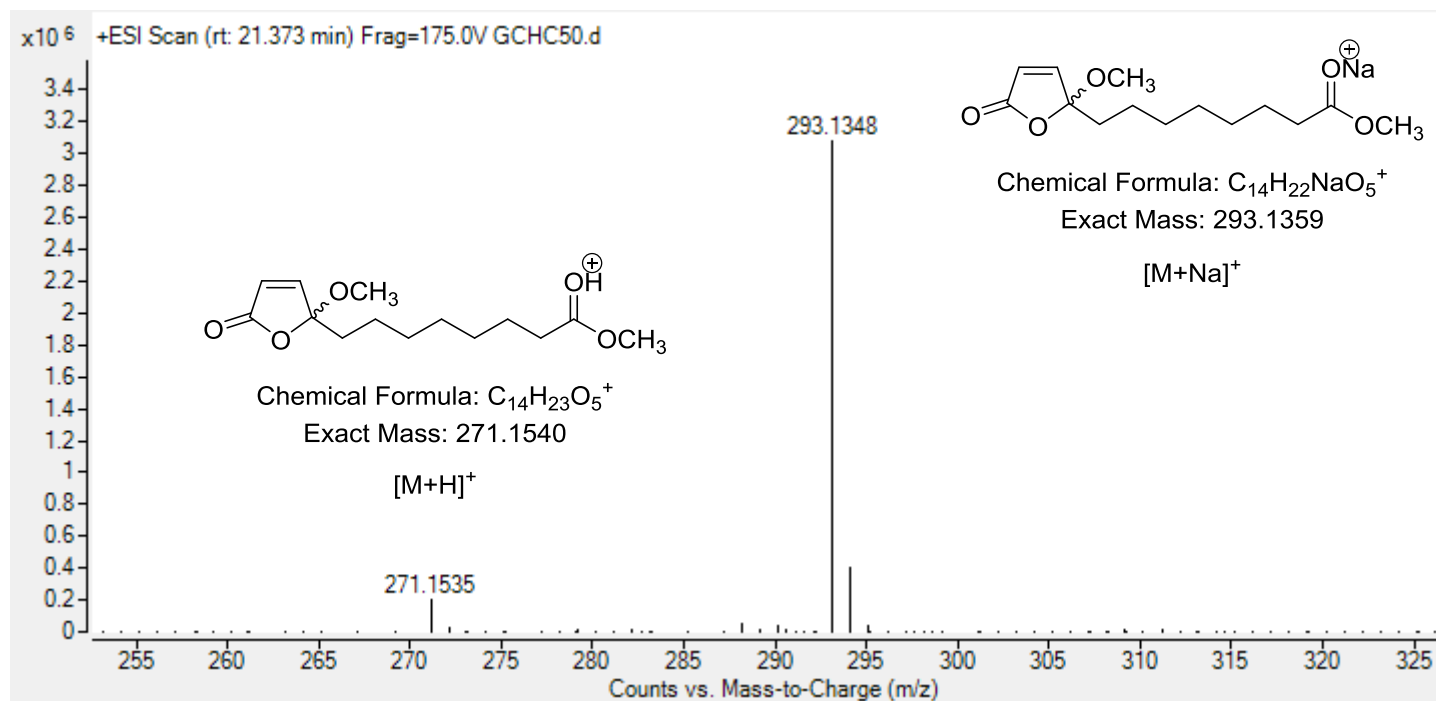


Figure S2. ^1H NMR spectrum of **1** in chloroform- d (700 MHz)

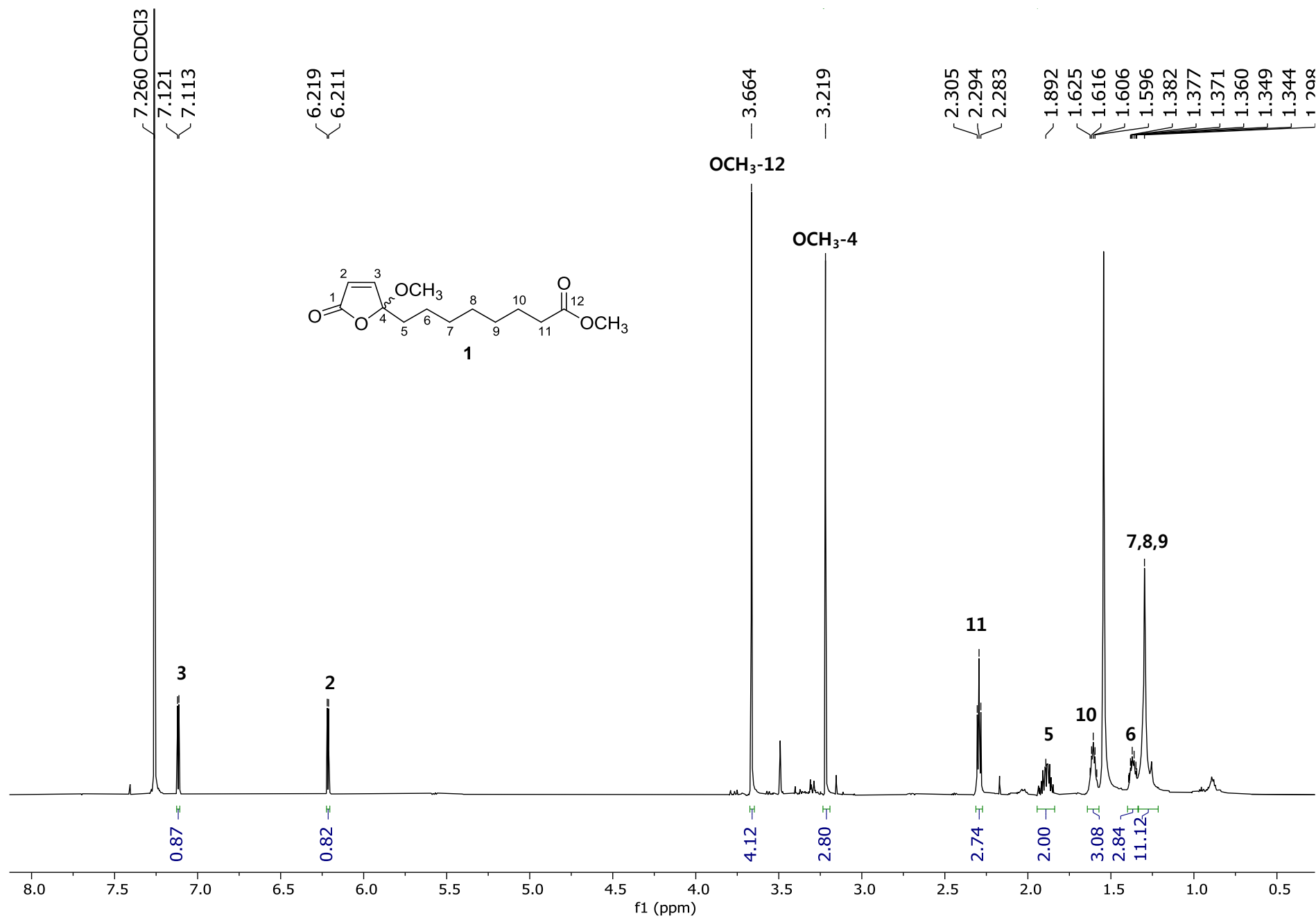


Figure S3. ^{13}C NMR spectrum of **1** in chloroform-*d* (175 MHz)

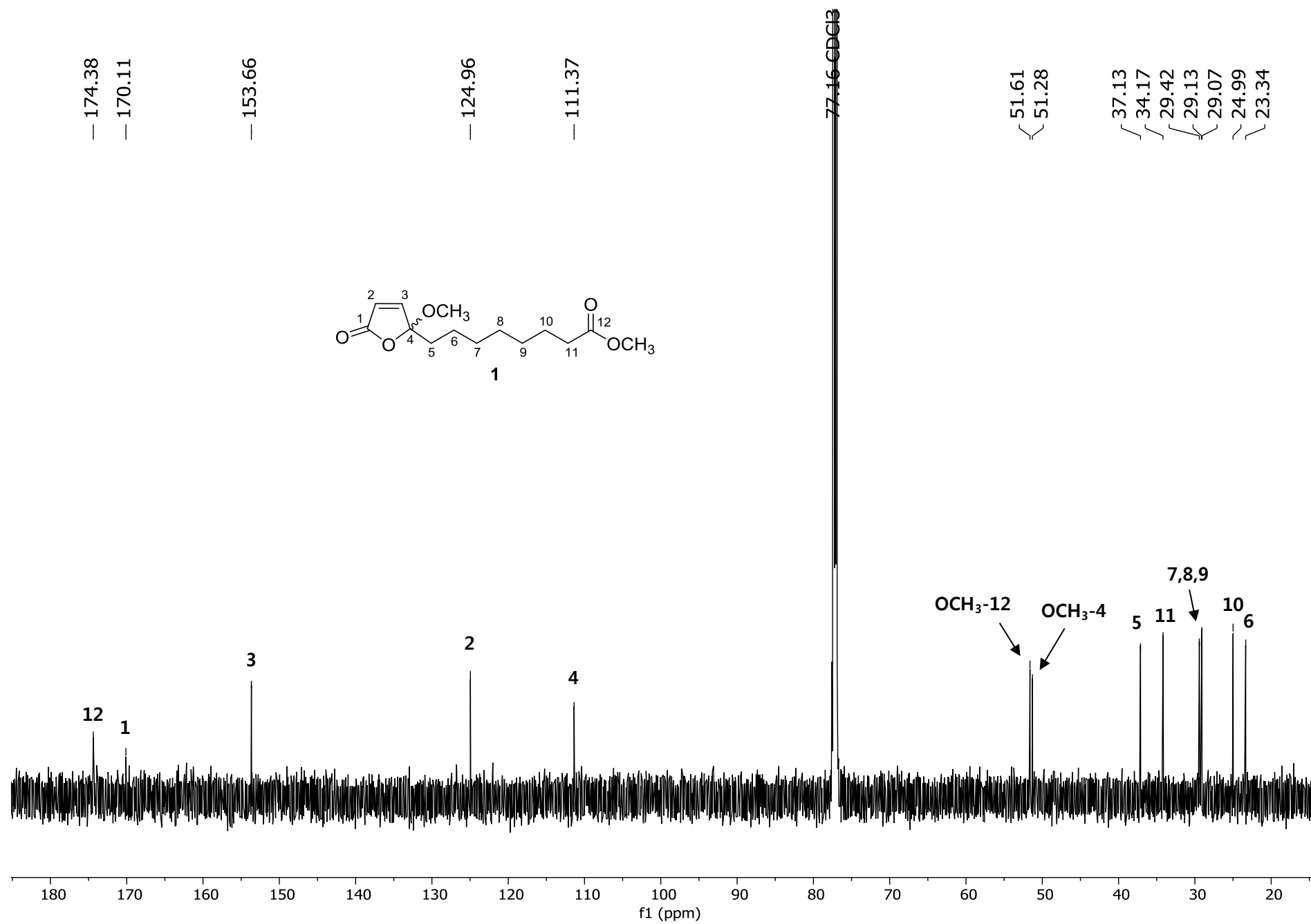


Figure S4. COSY spectrum of **1** in chloroform-*d*

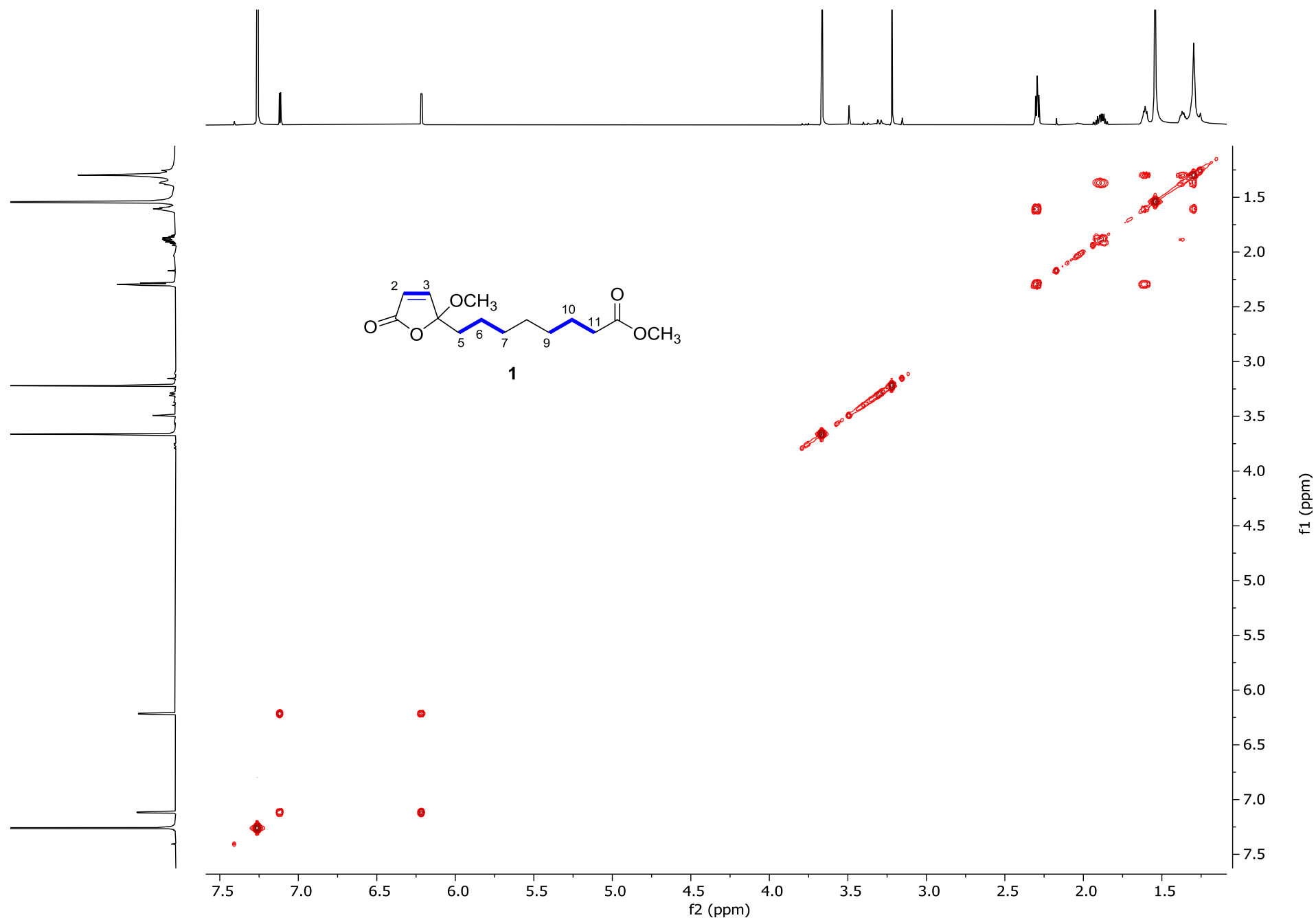


Figure S5. HSQC spectrum of **1** in chloroform-*d*

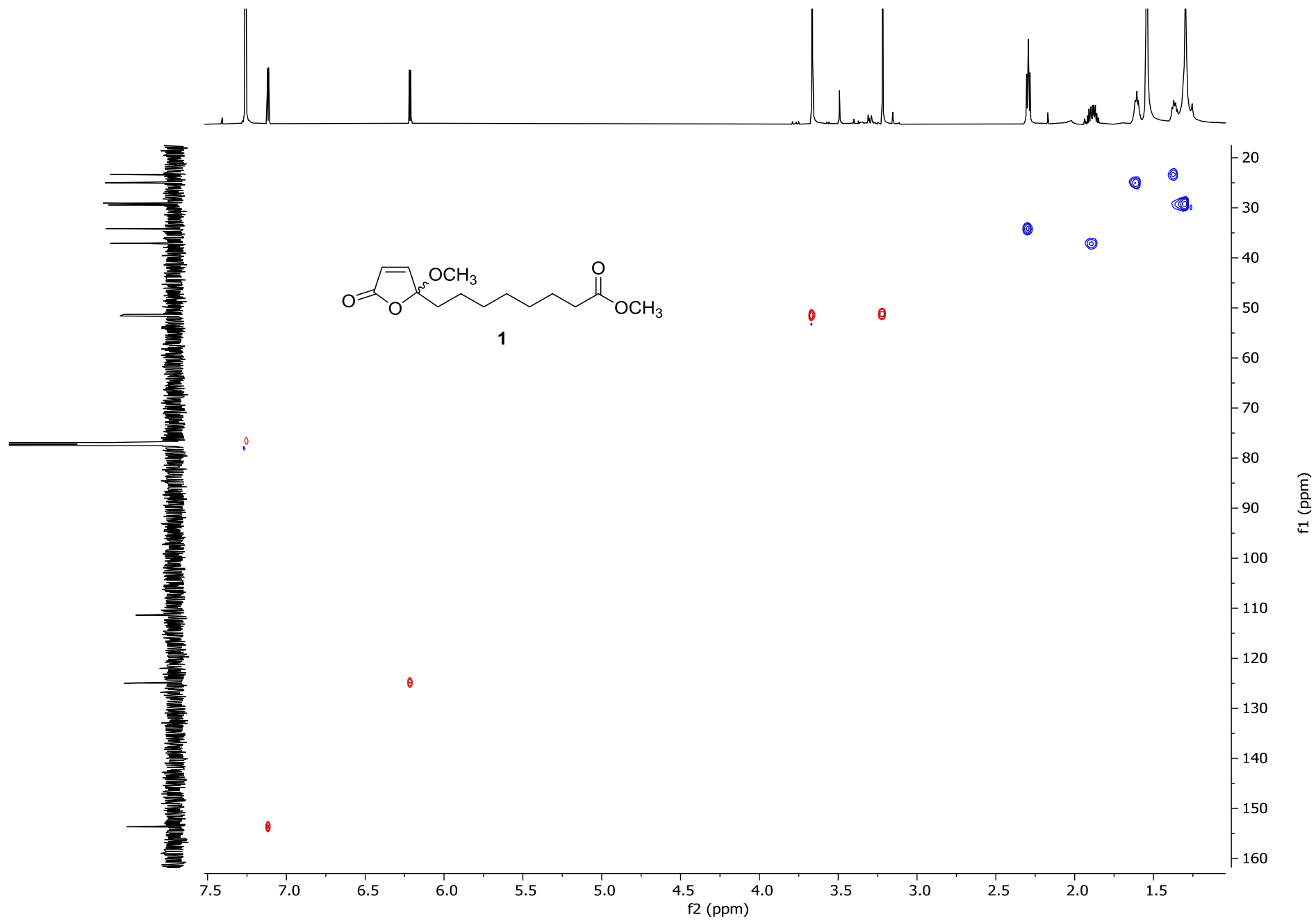
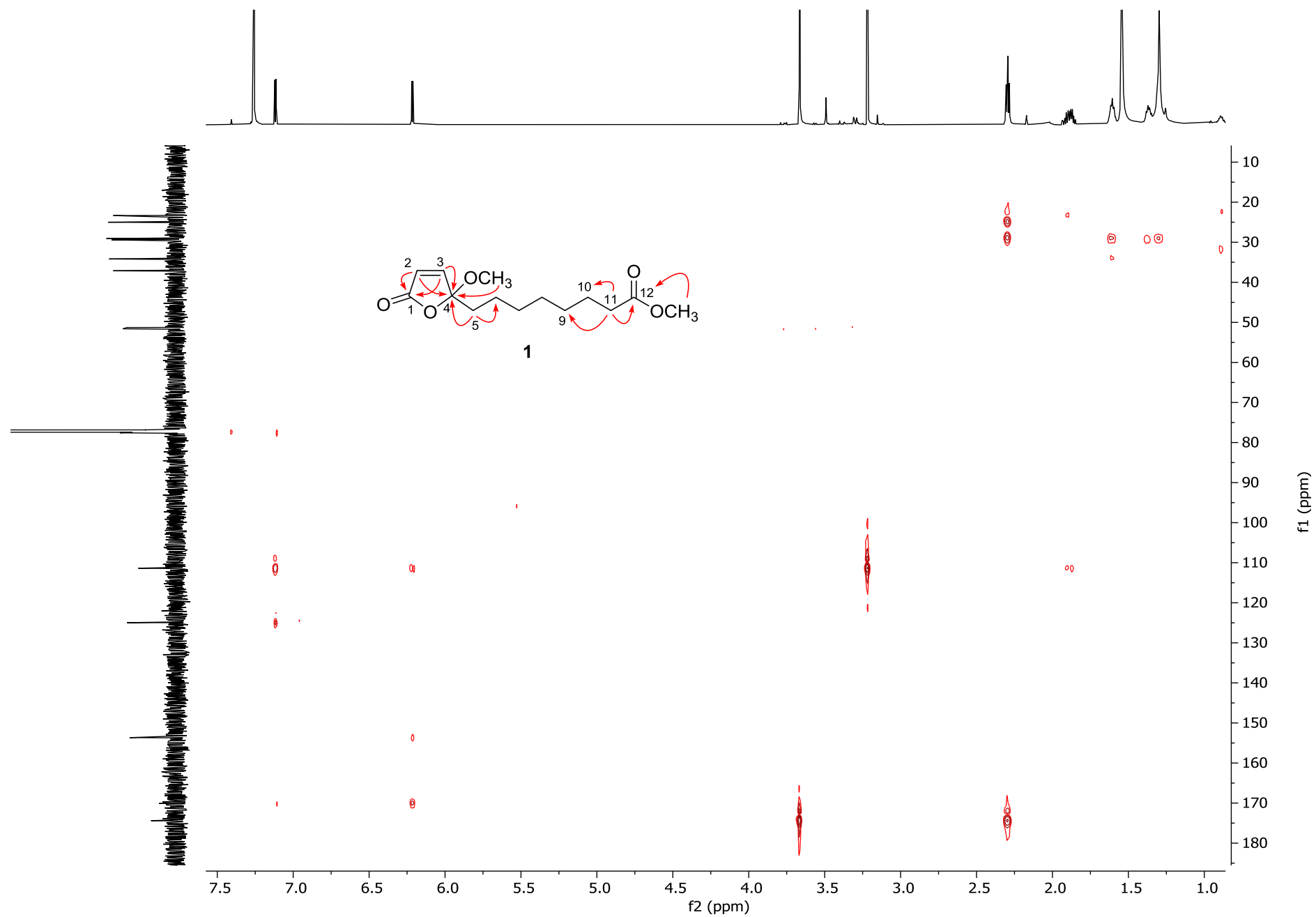
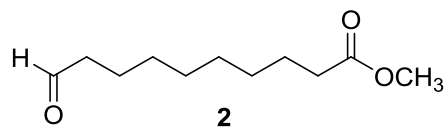
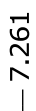


Figure S6. HMBC spectrum of **1** in chloroform-*d*



9.767
9.763
9.759



Age Group	Number of People
13-17	3,668
18-24	3,493
25-34	3,491
35-44	3,488
45-54	3,487
55-64	3,312
65-74	2,435
75-84	2,431
85-94	2,420
95-104	2,416
105-114	2,405
115-124	2,402
125-134	2,318
135-144	2,303
145-154	2,288
155-164	1,628
165-174	1,622
175-184	1,614
185-194	1,448
195-204	1,328

Figure S8. ^{13}C NMR spectrum of **2** in chloroform-*d* (175 MHz)

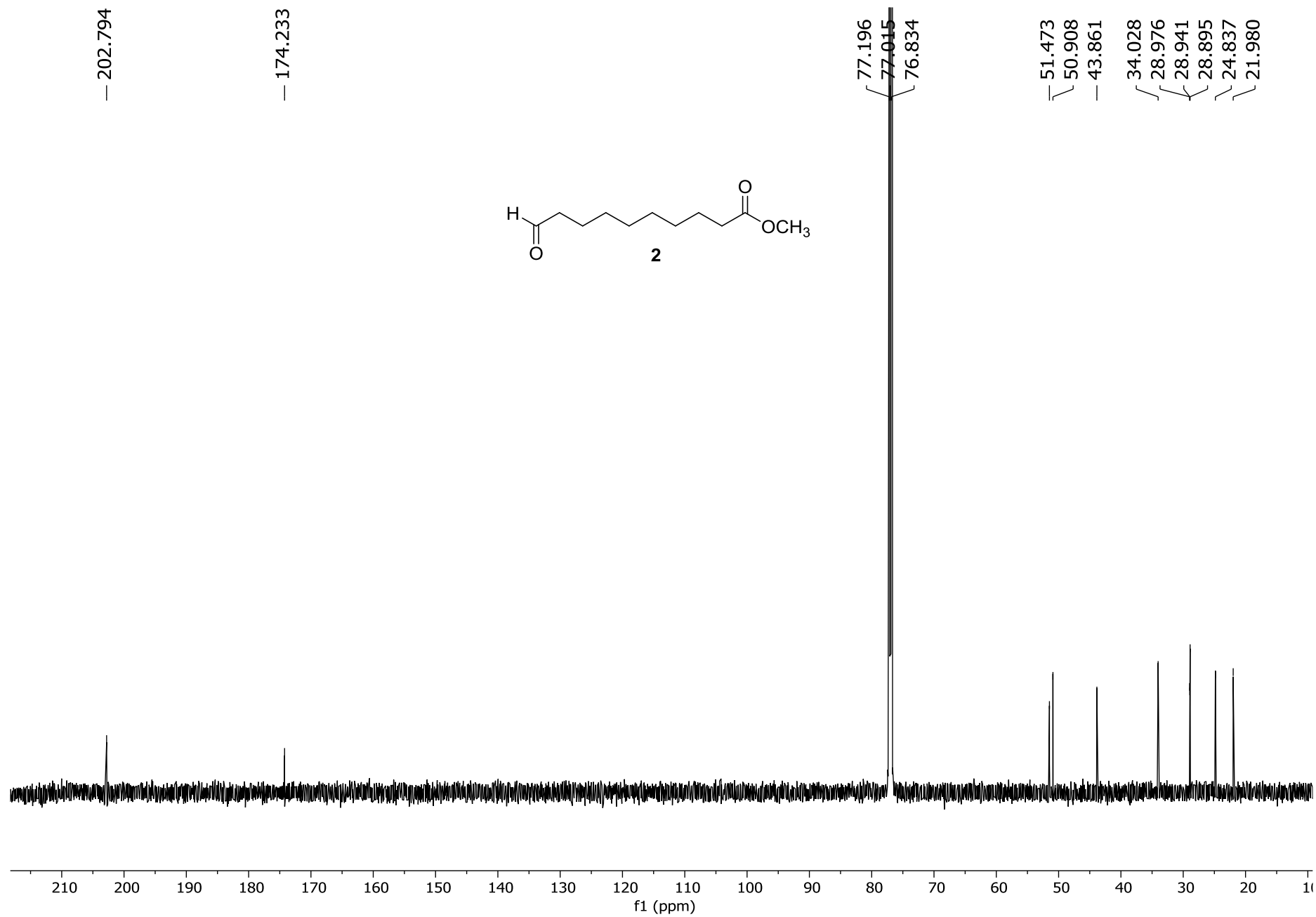


Figure S9. ^1H NMR spectrum of **3** in chloroform-*d* (700 MHz)

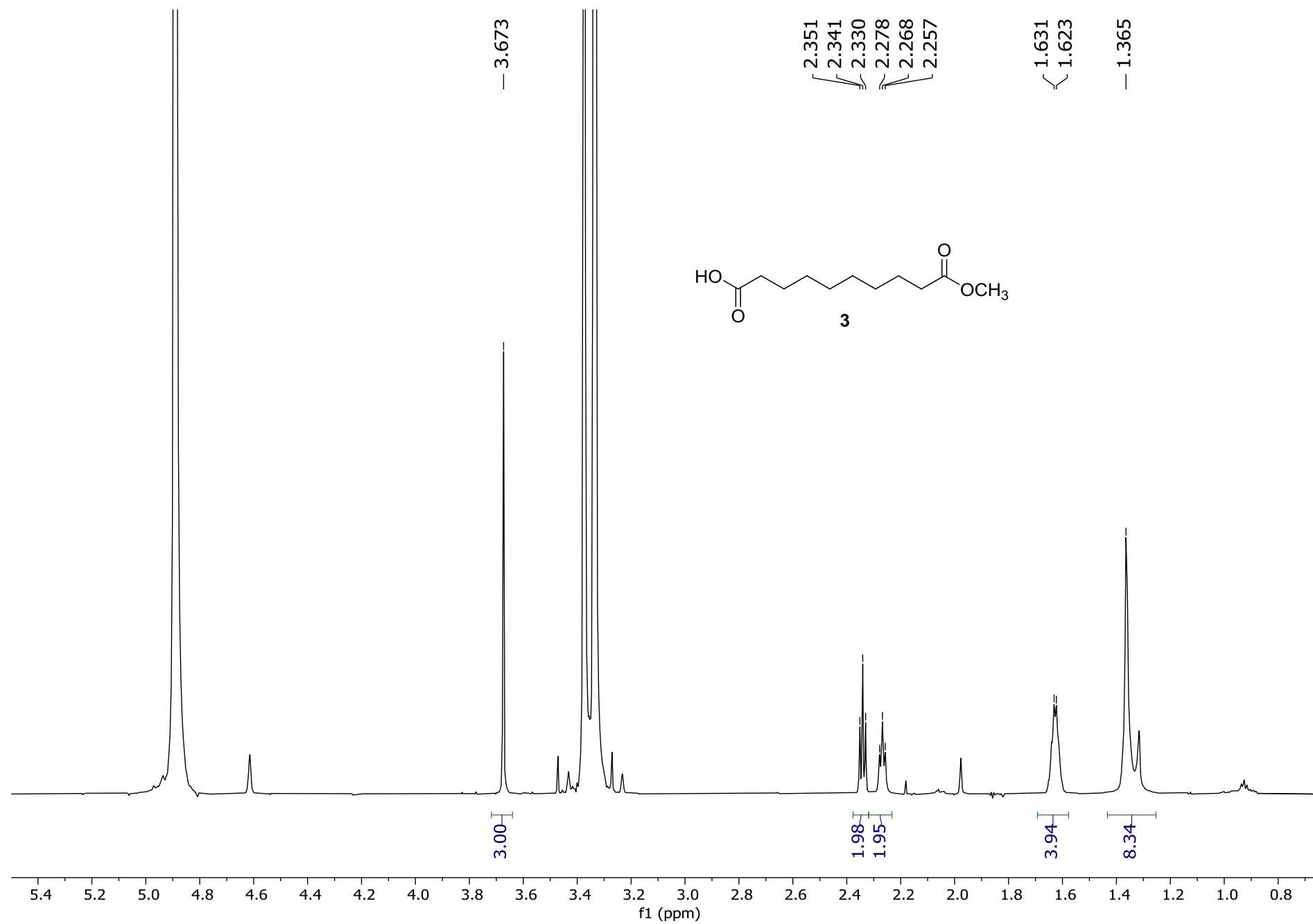


Figure S10. ^1H NMR spectrum of **4** in methanol- d_4 (700 MHz)

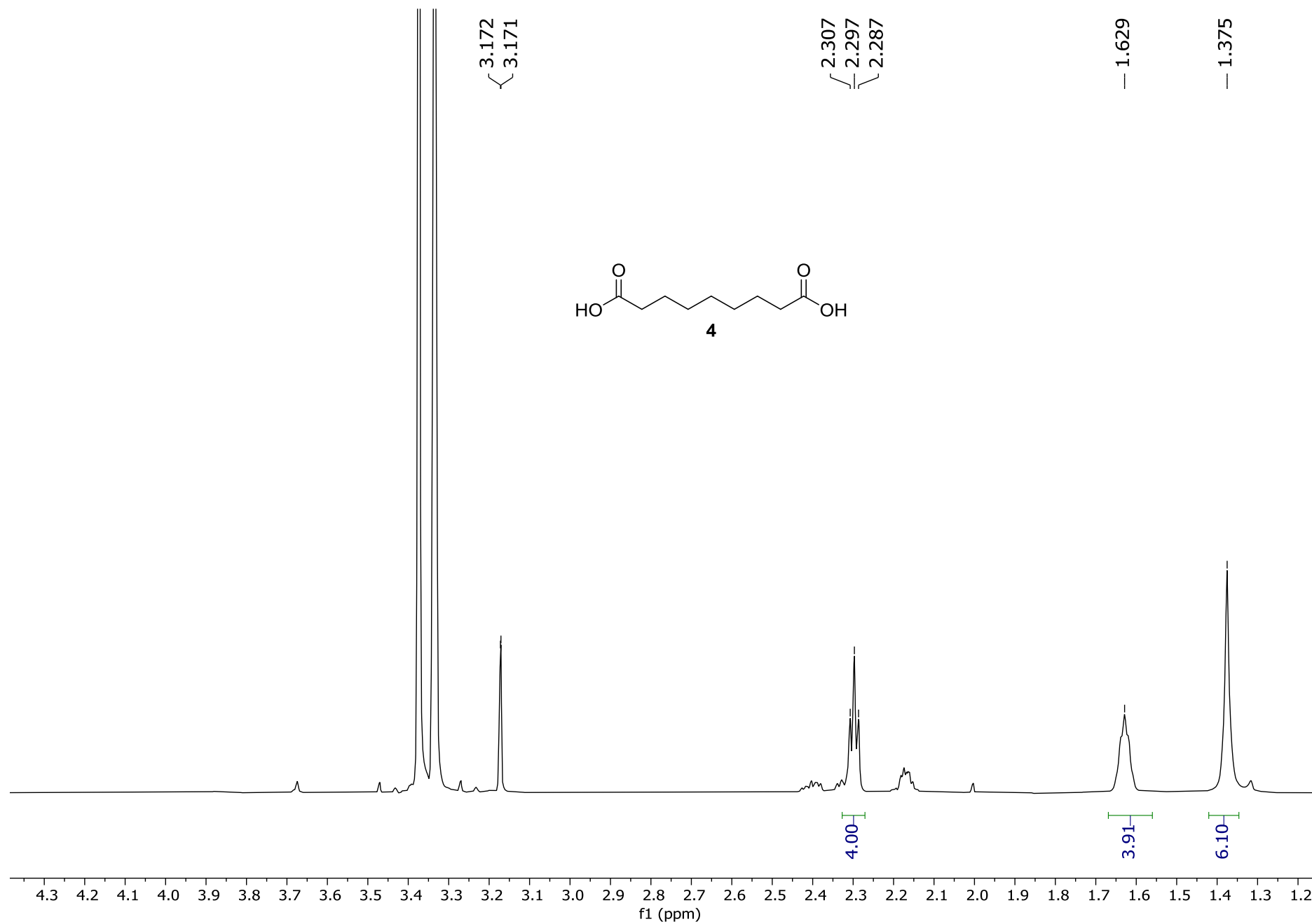


Figure S11. ^1H NMR spectrum of **5** in chloroform-*d* (700 MHz)

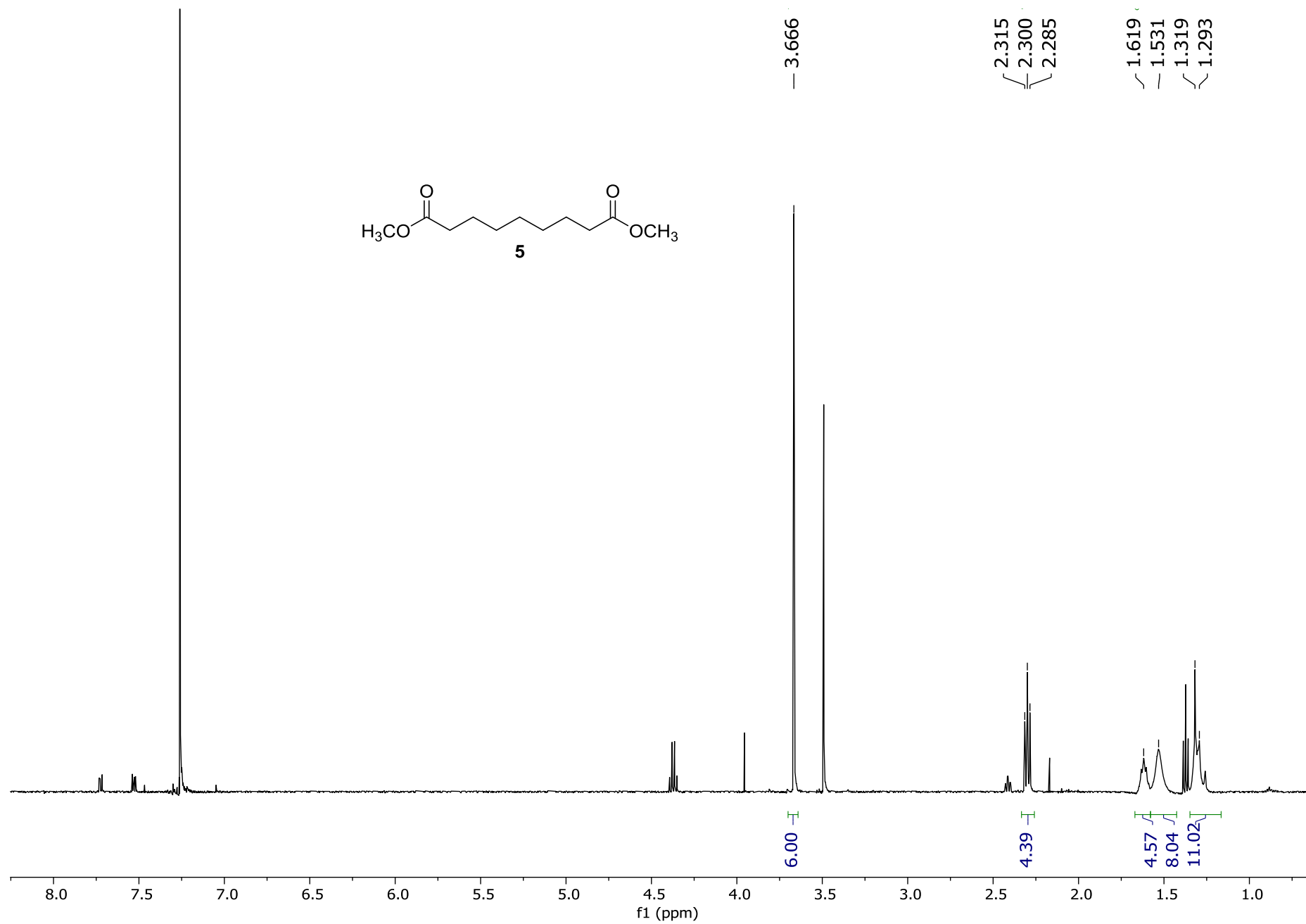


Figure S12. ^{13}C NMR spectrum of **5** in chloroform-*d* (175 MHz)

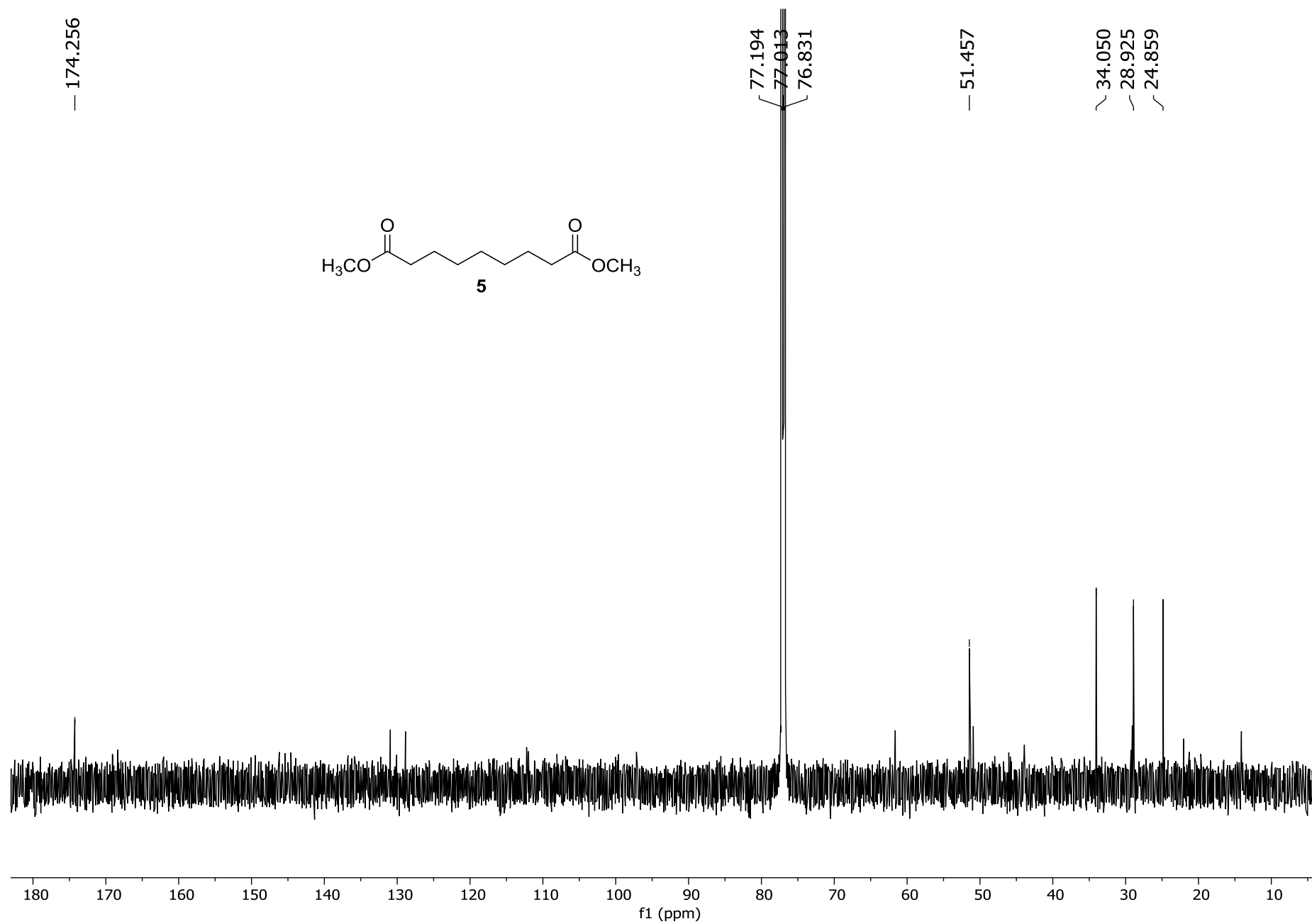


Figure S13. ^1H NMR spectrum of **6** in methanol- d_4 (700 MHz)

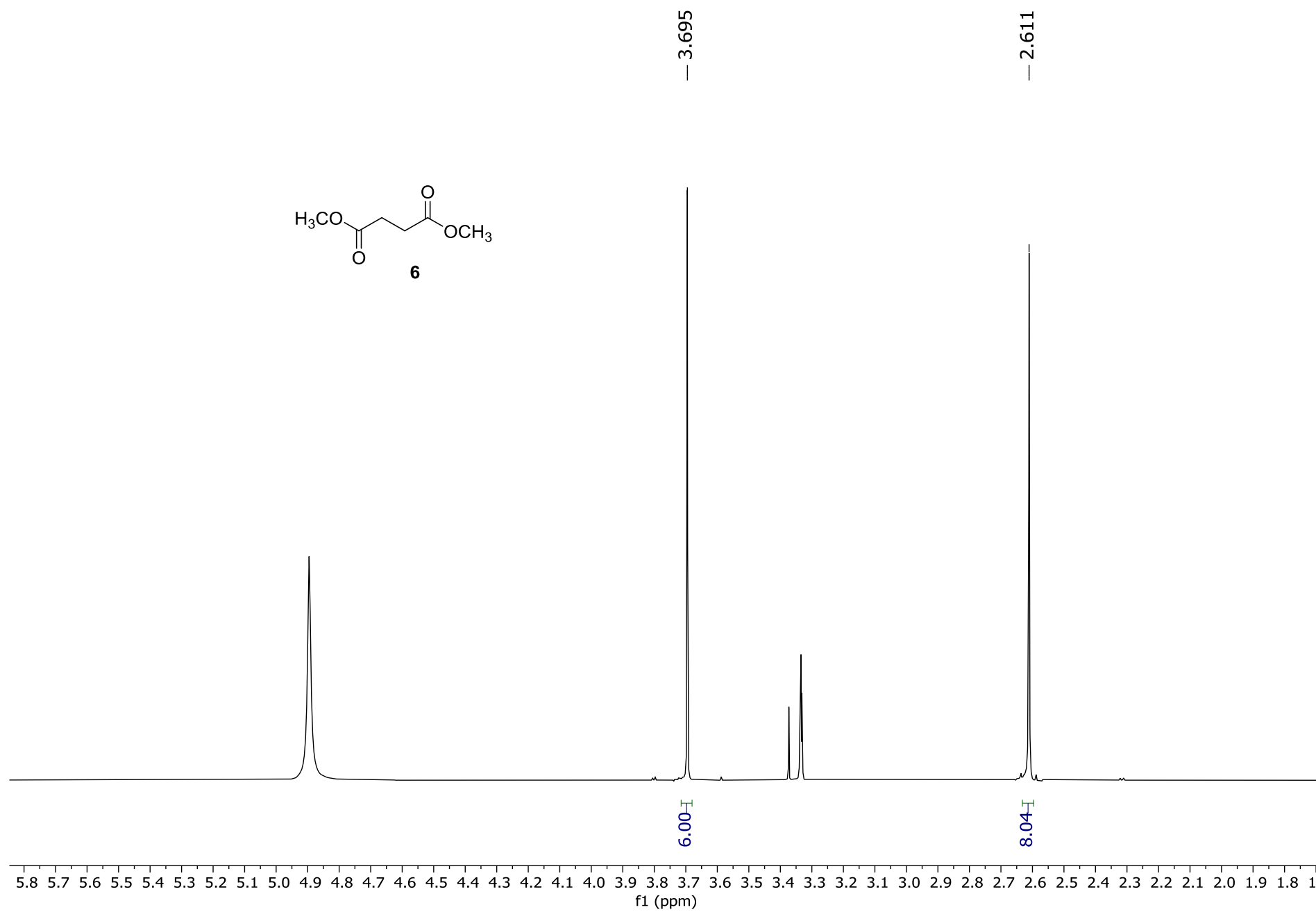


Figure S14. ^{13}C NMR spectrum of **6** in methanol- d_4 (175 MHz)

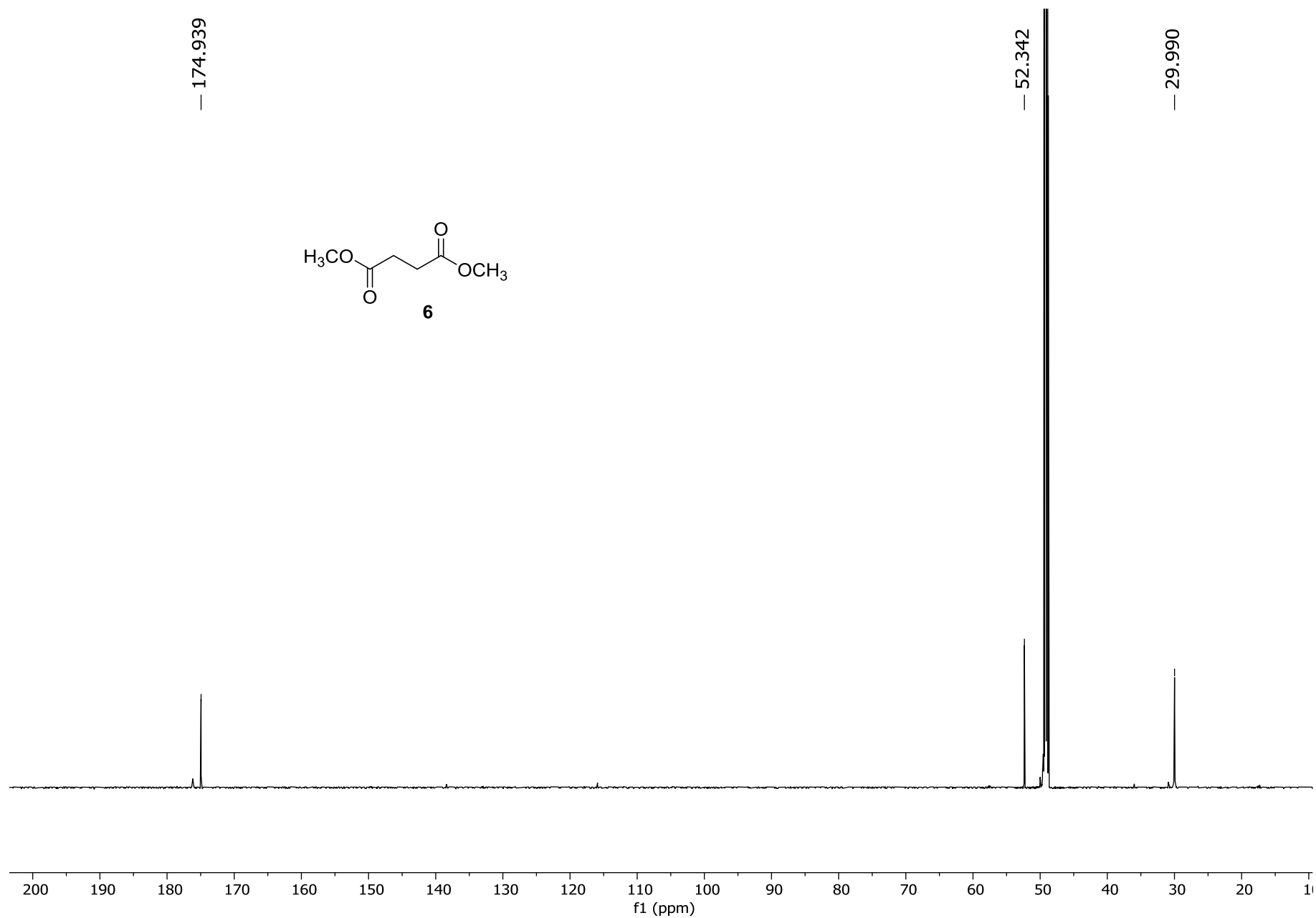


Figure S15. ^1H NMR spectrum of **7** in methanol- d_4 (700 MHz)

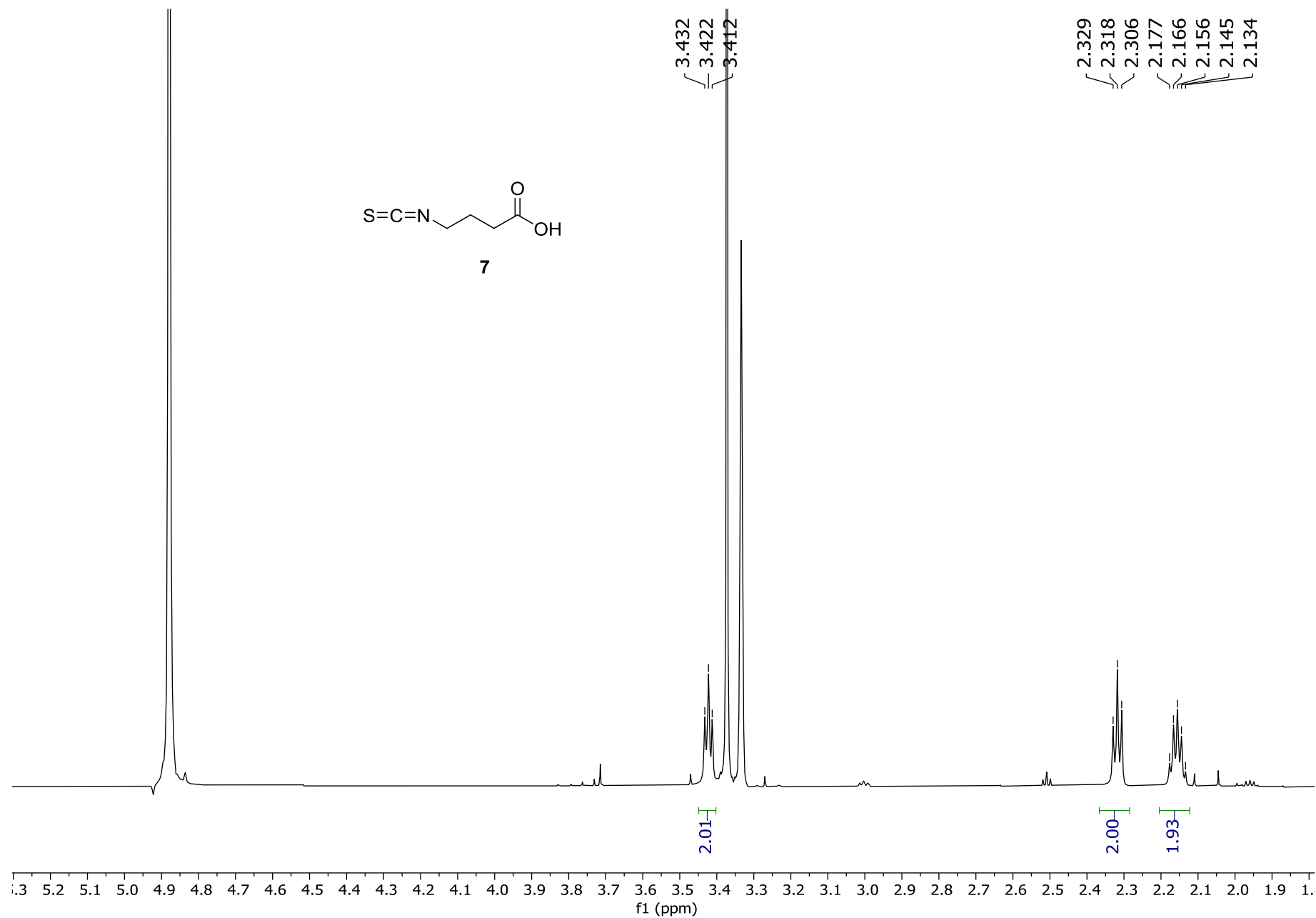


Figure S16. ^{13}C NMR spectrum of **7** in methanol- d_4 (175 MHz)

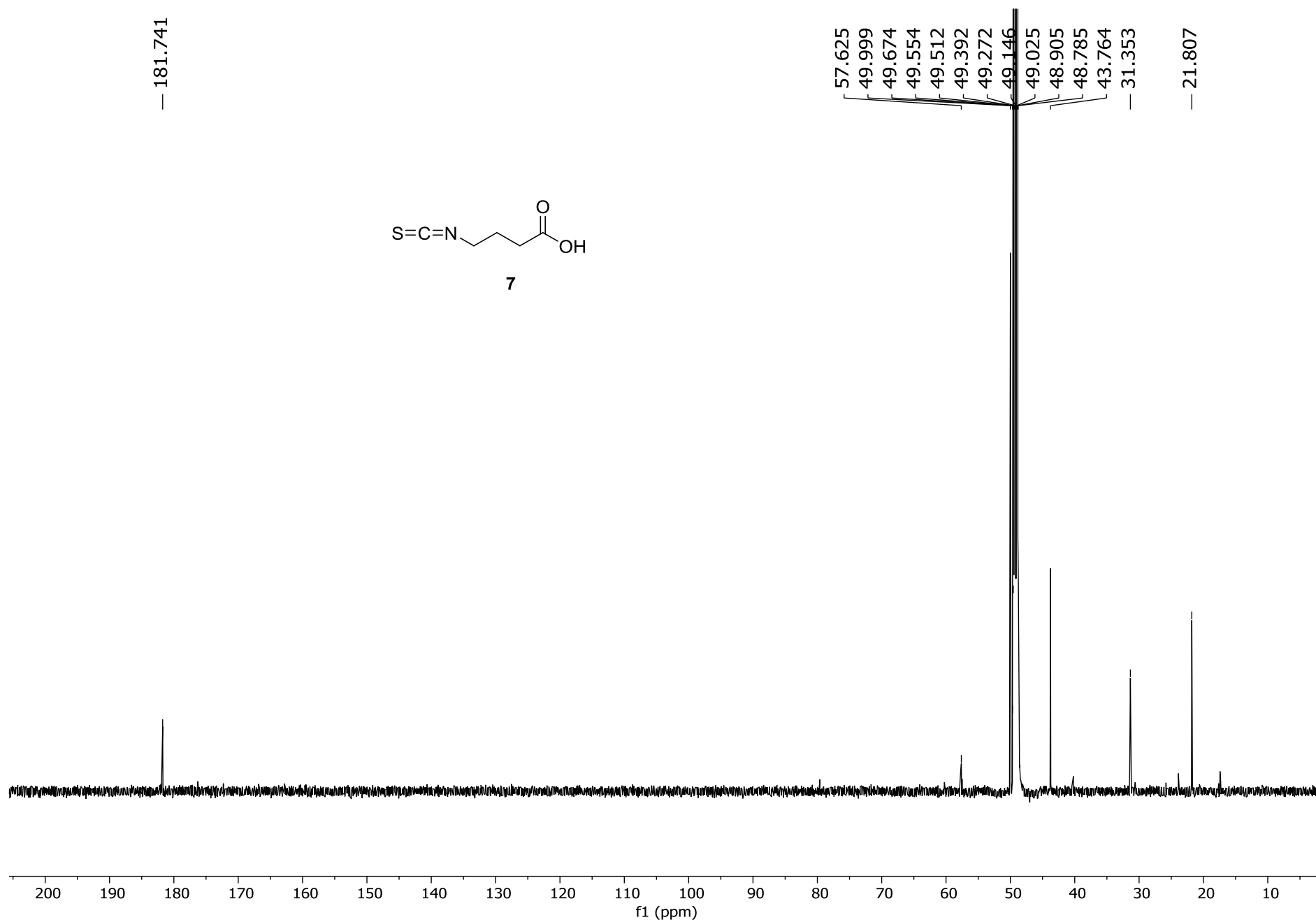
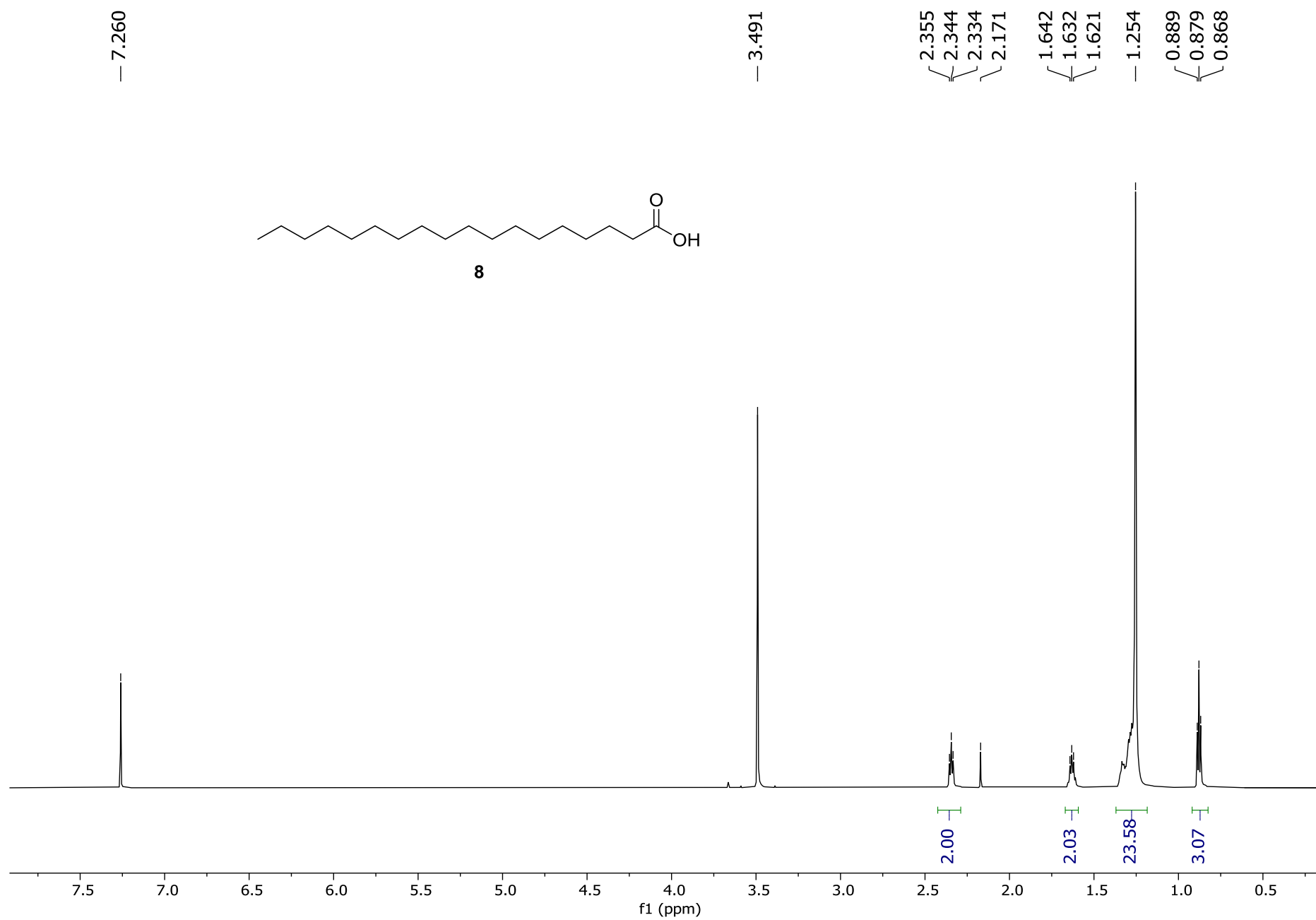


Figure S17. ^1H NMR spectrum of **8** in chloroform-*d* (700 MHz)



Chemical structure of methyl octadecanoate (**9**): CCCCCCCCCCCCCCCCCC(=O)OC

¹H NMR spectrum (CDCl₃) showing peaks and integrations:

Chemical Shift (ppm)	Integration
3.665	3.00
2.315, 2.300, 2.285	2.22
1.619, 1.603, 1.534, 1.288, 1.256	35.57
0.896, 0.882, 0.868	30.64
0.868	3.54

Figure S19. ^1H NMR spectrum of **10** in chloroform-*d* (700 MHz)

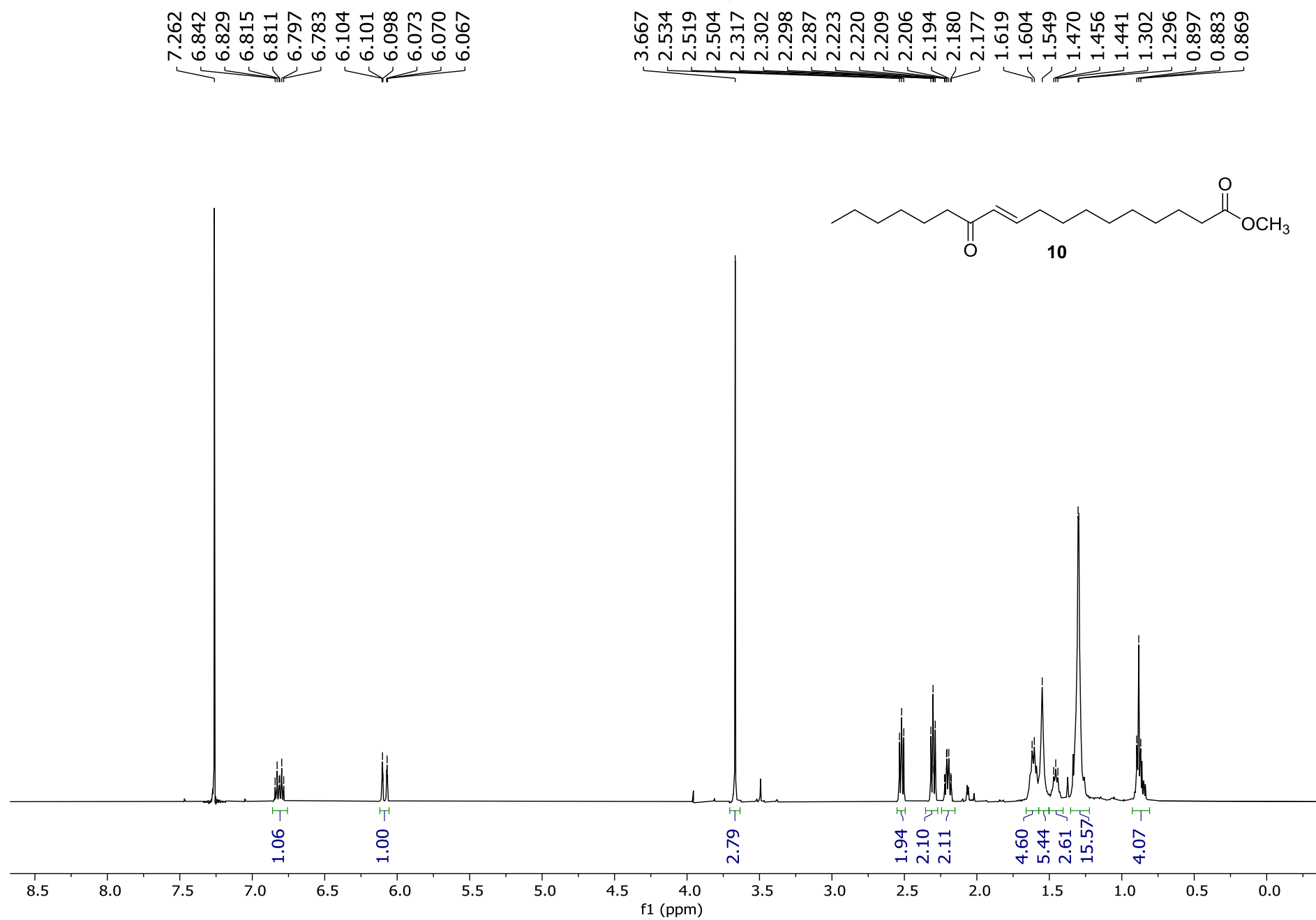


Figure S20. ^{13}C NMR spectrum of **10** in chloroform-*d* (175 MHz)

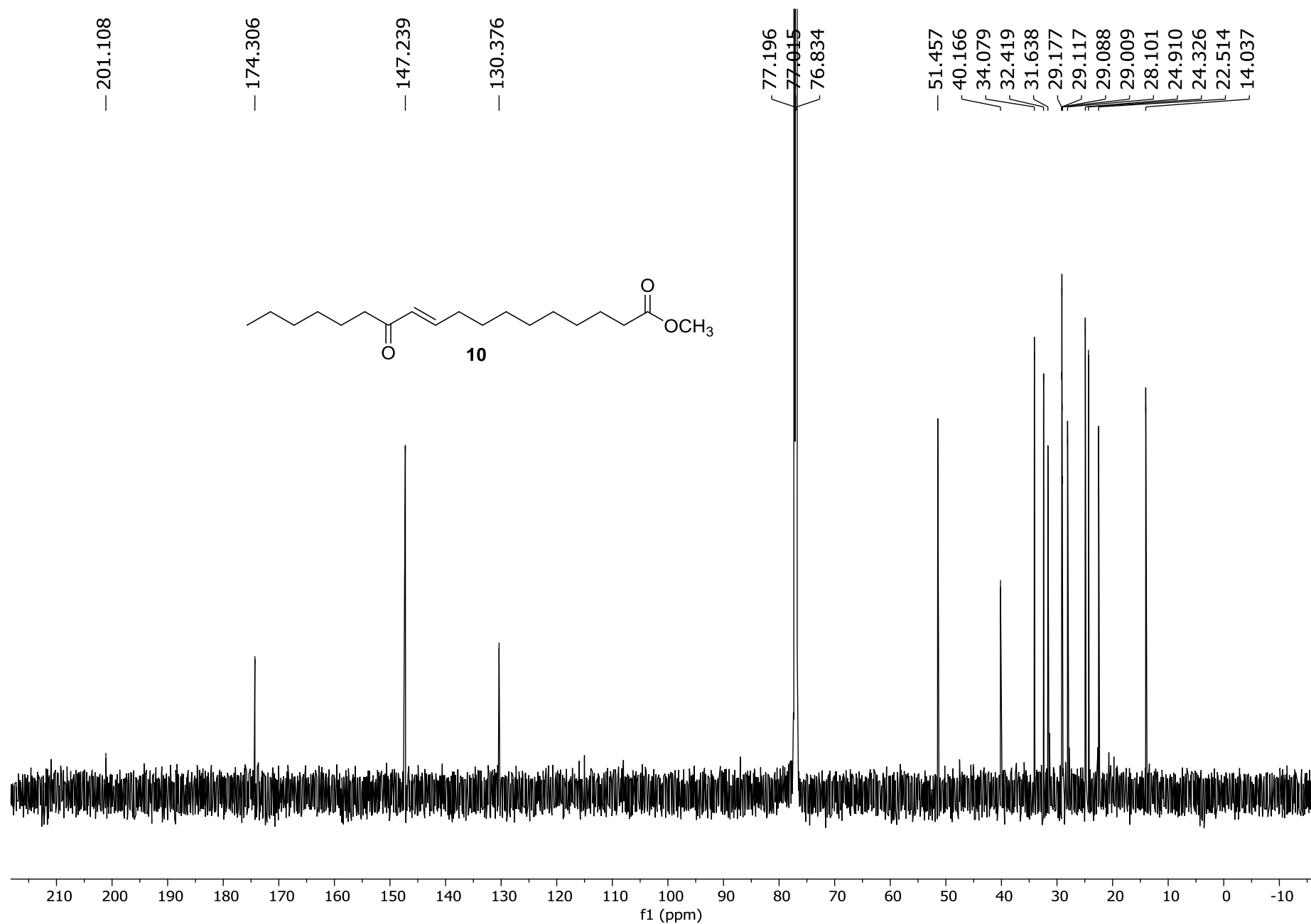


Figure S21. ^1H NMR spectrum of **11** in chloroform-*d* (700 MHz)

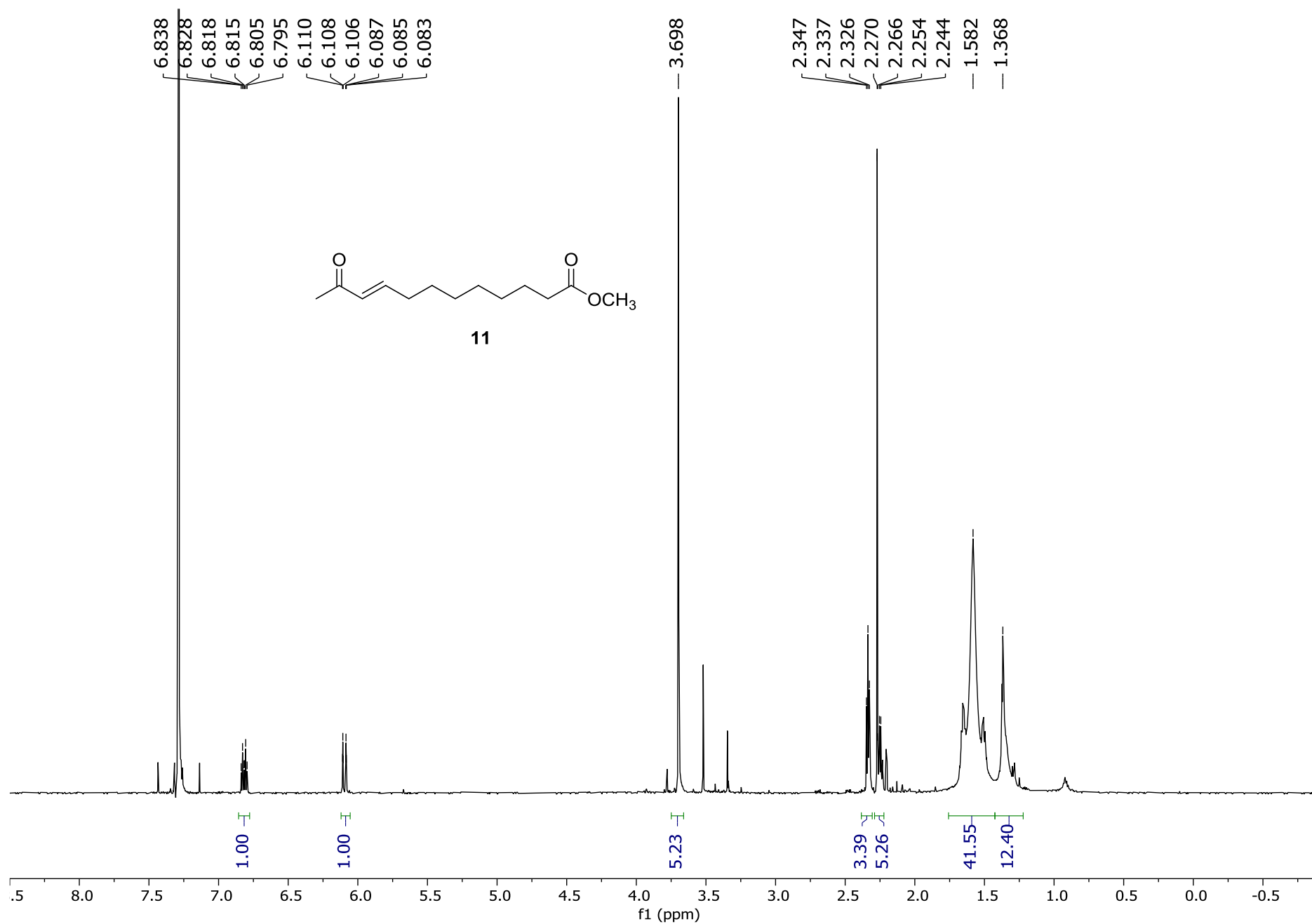


Figure S22. ^{13}C NMR spectrum of **11** in chloroform-*d* (175 MHz)

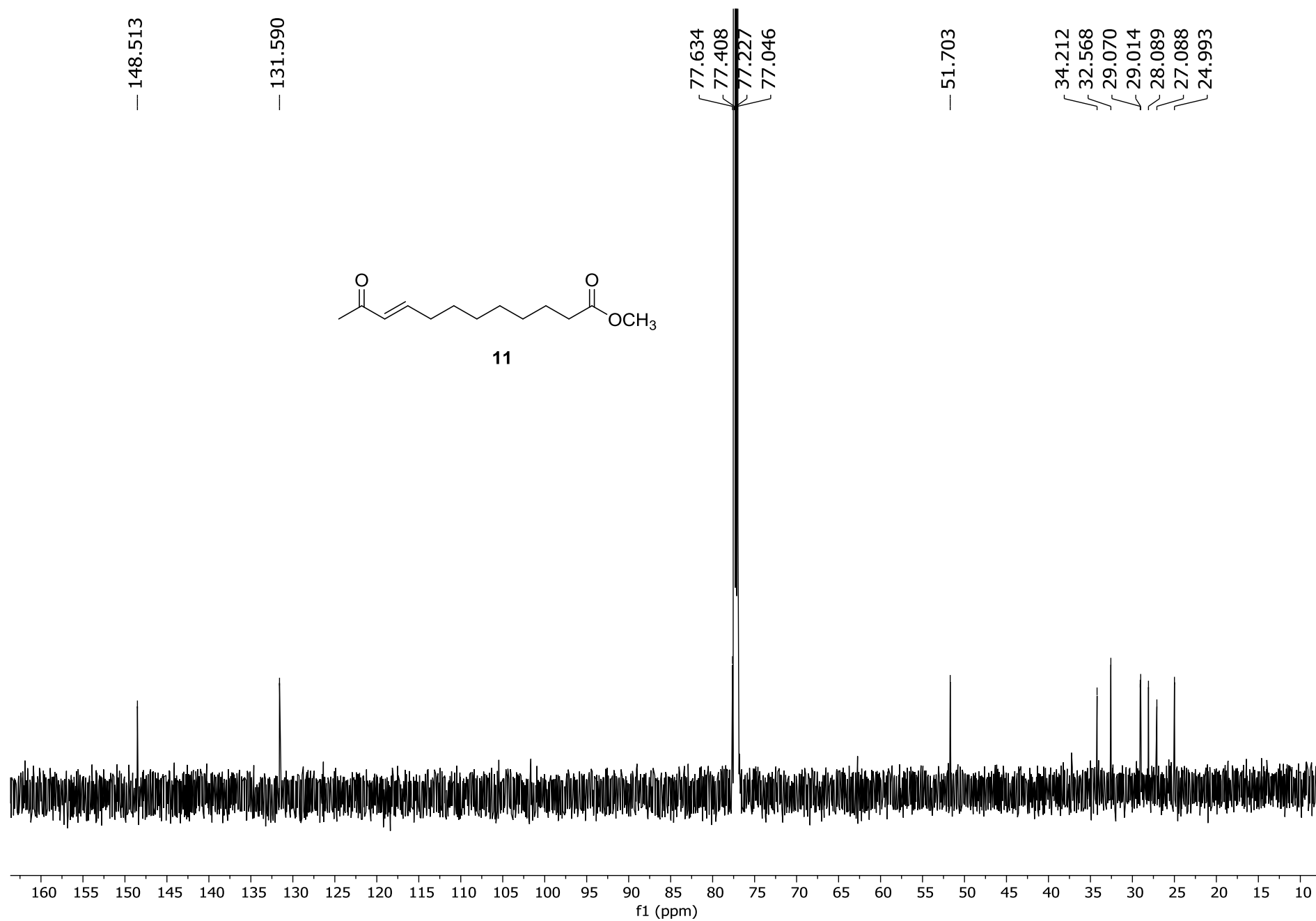


Figure S23. ^1H NMR spectrum of **12** in chloroform-*d* (700 MHz)

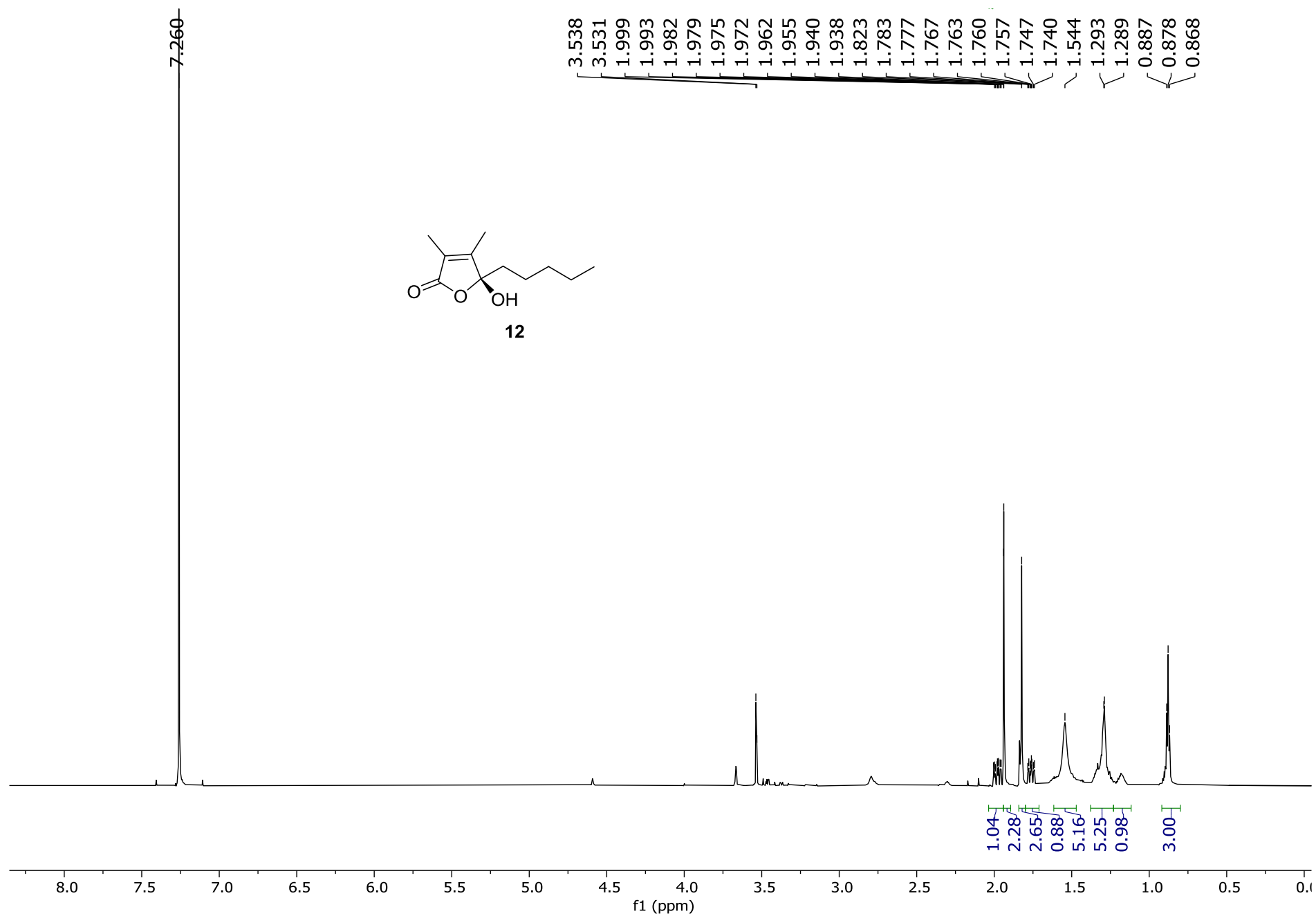


Figure S24. ^{13}C NMR spectrum of **12** in chloroform-*d* (175 MHz)

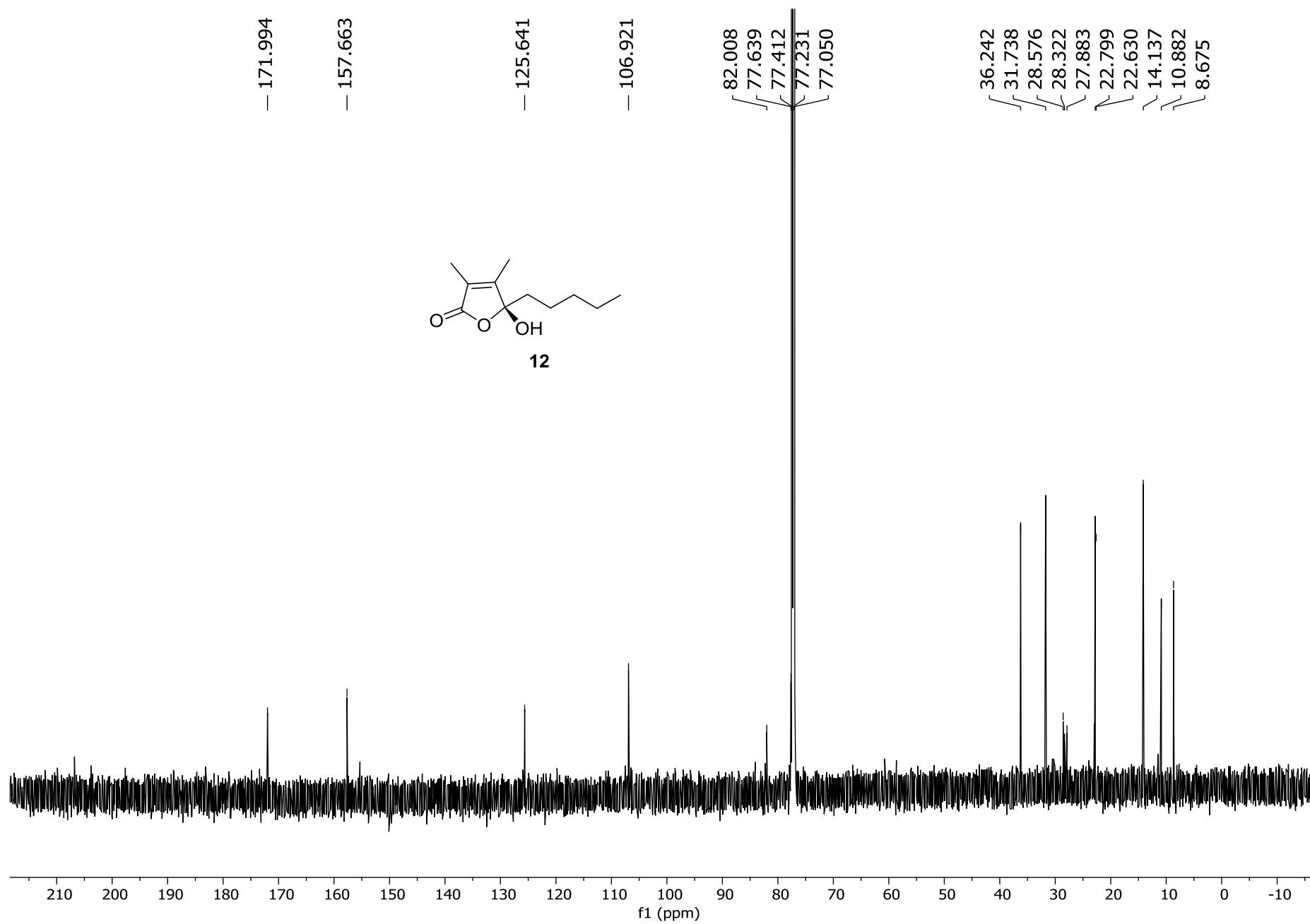


Figure S25. ^1H NMR spectrum of **13** in chloroform-*d* (700 MHz)

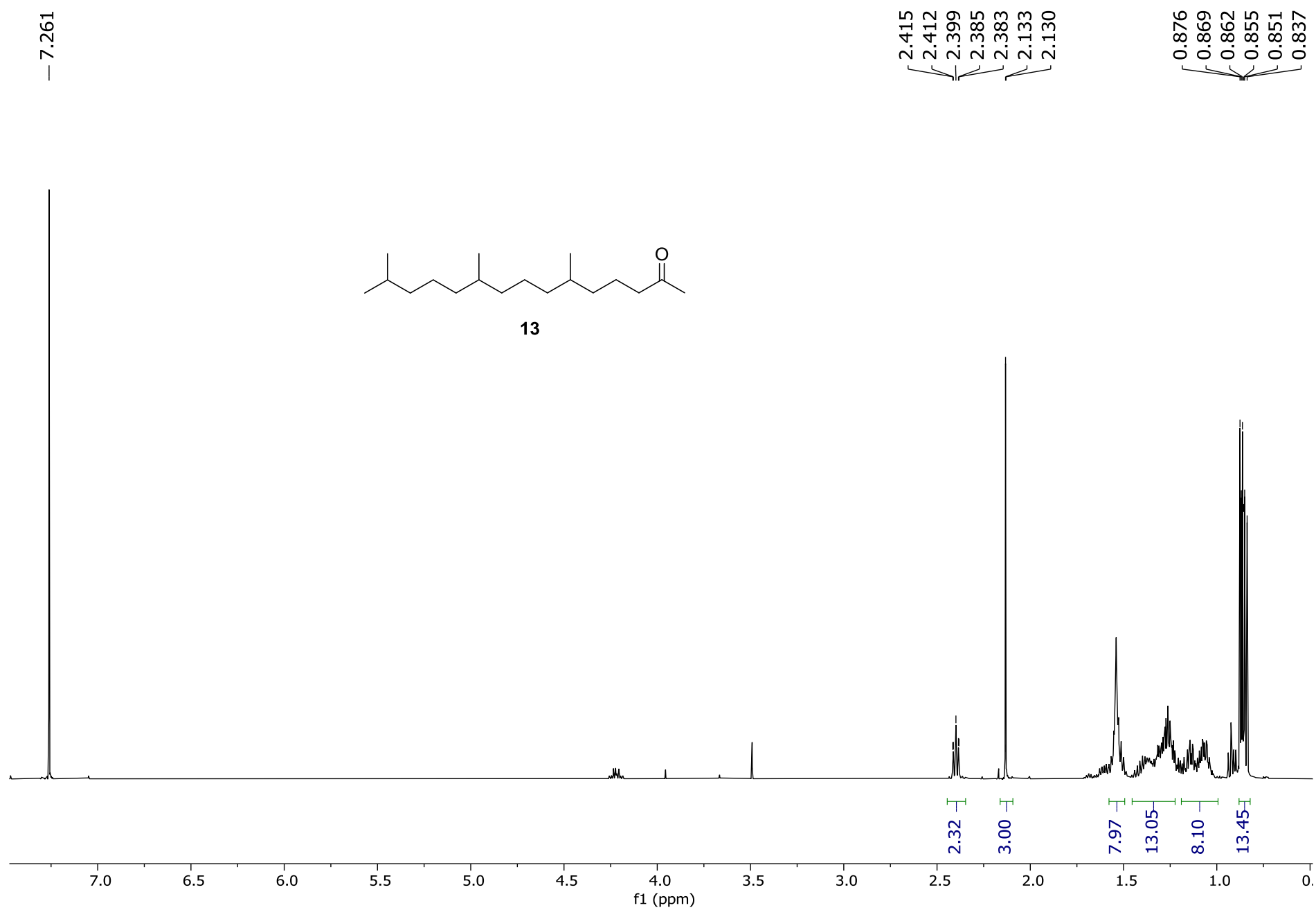


Figure S26. ^1H NMR spectrum of **14** in methanol- d_4 (700 MHz)

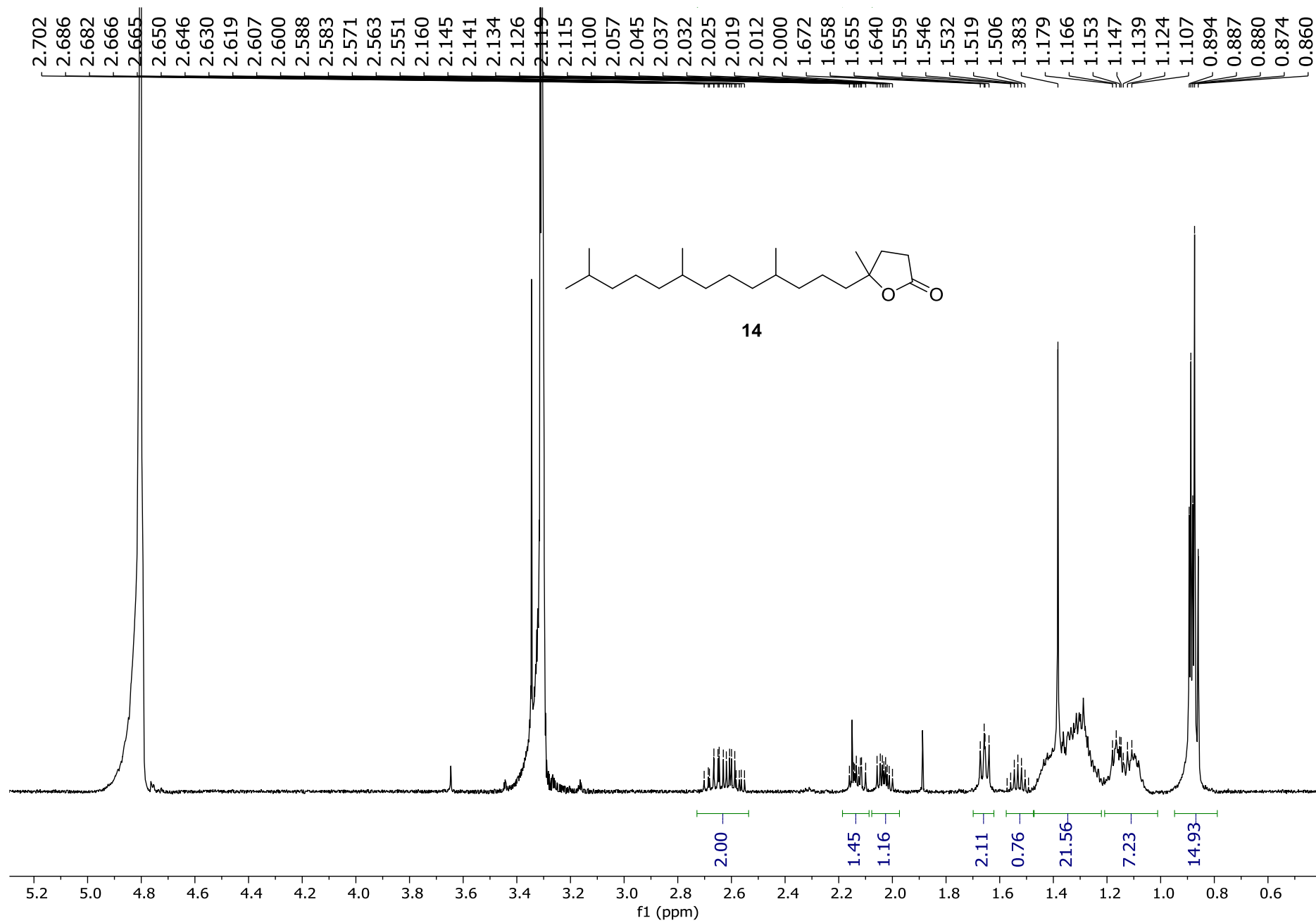


Figure S27. ^{13}C NMR spectrum of **14** in methanol- d_4 (175 MHz)

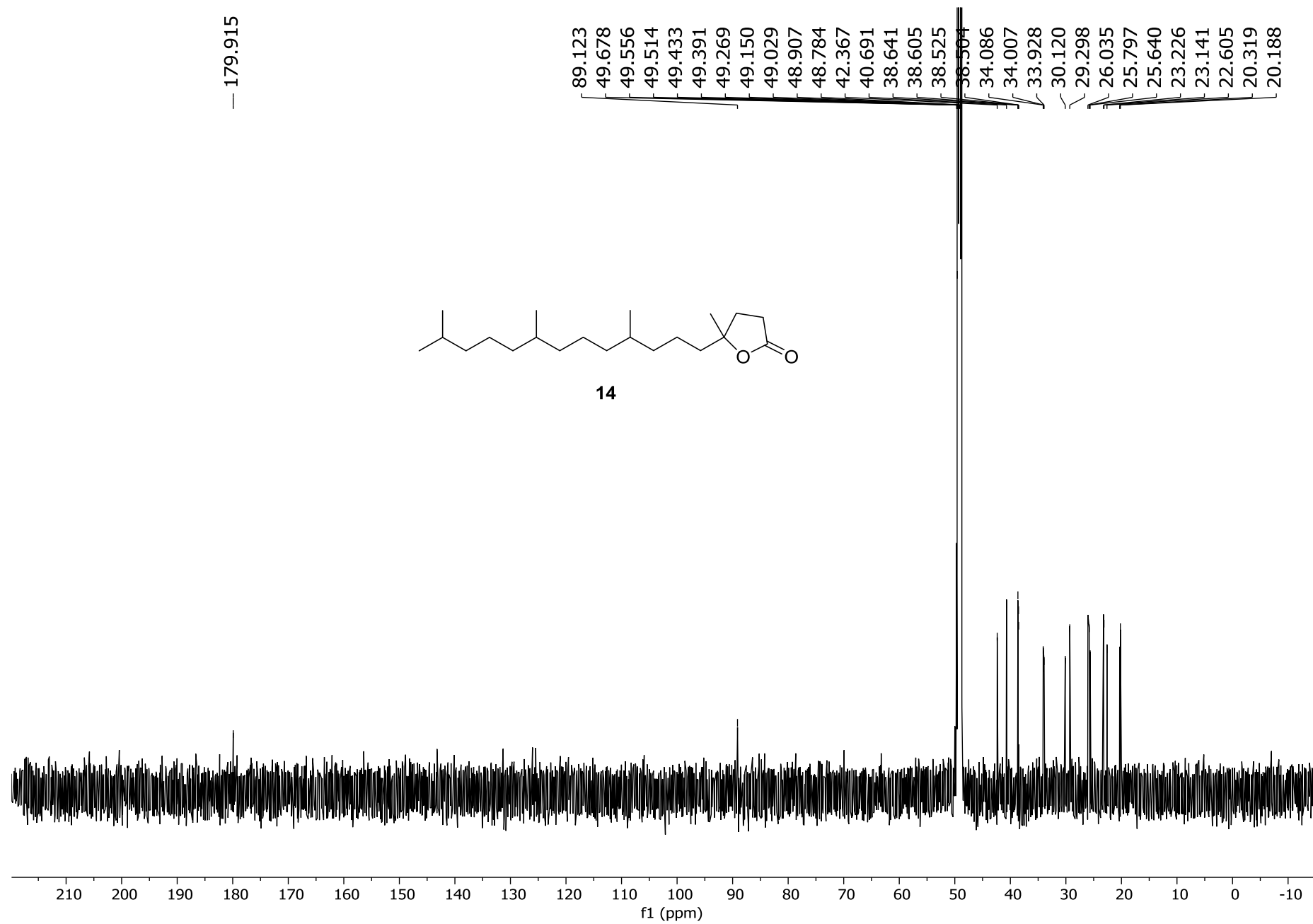


Figure S28. ^1H NMR spectrum of **15** in chloroform-*d* (700 MHz)

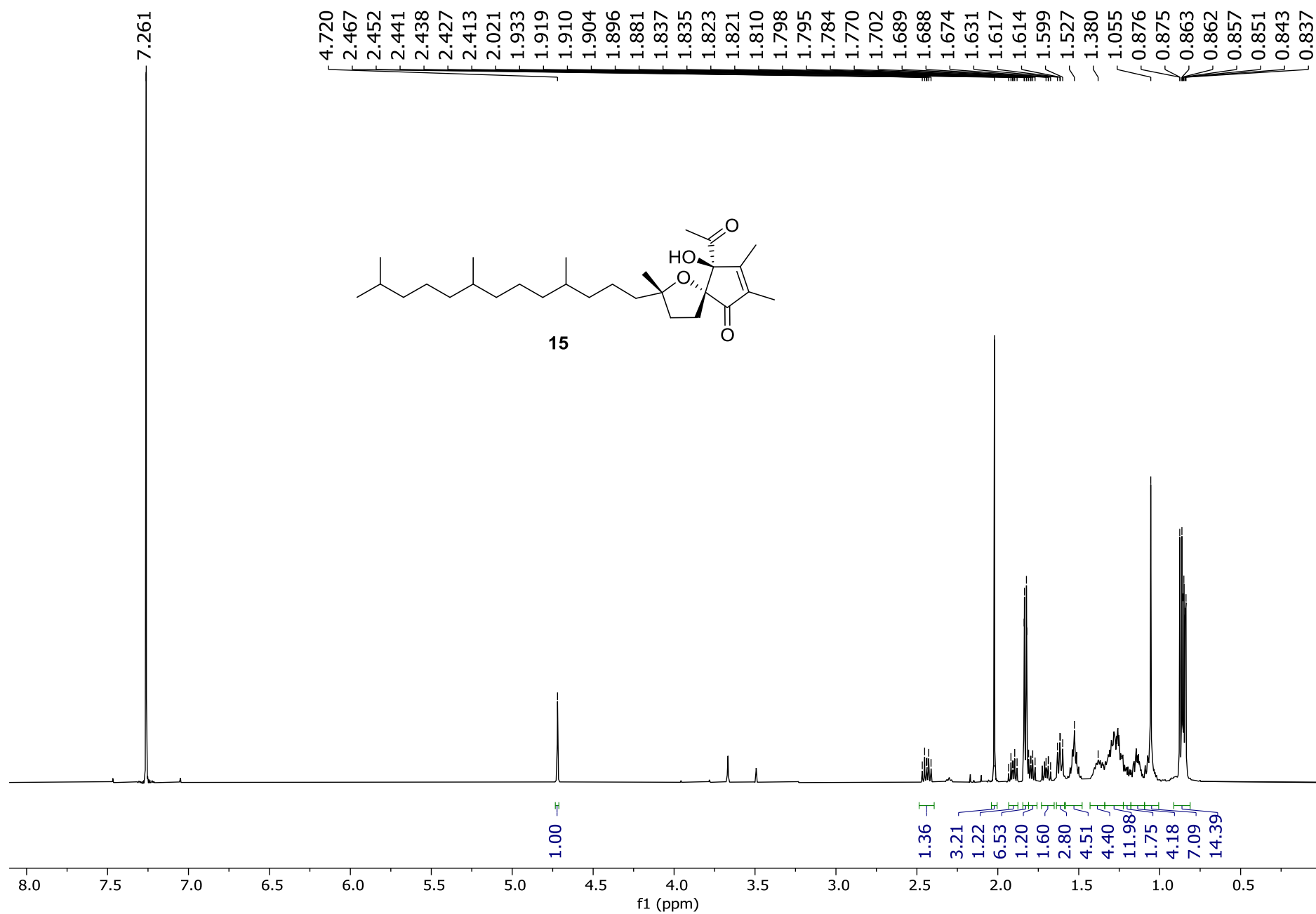


Figure S29. ^{13}C NMR spectrum of **15** in chloroform-*d* (175 MHz)

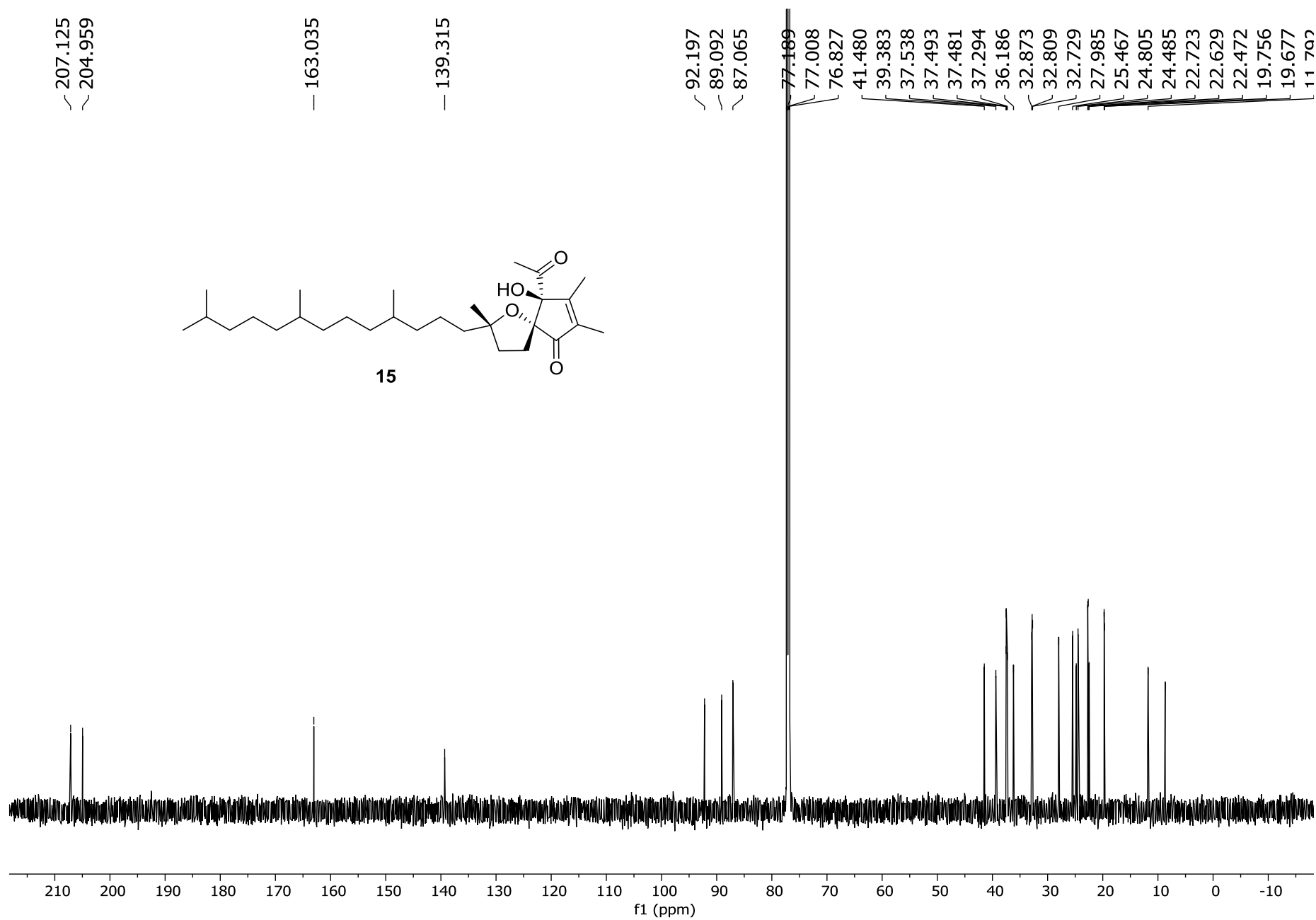


Figure S30. ^1H NMR spectrum of **16** in chloroform- d (700 MHz)

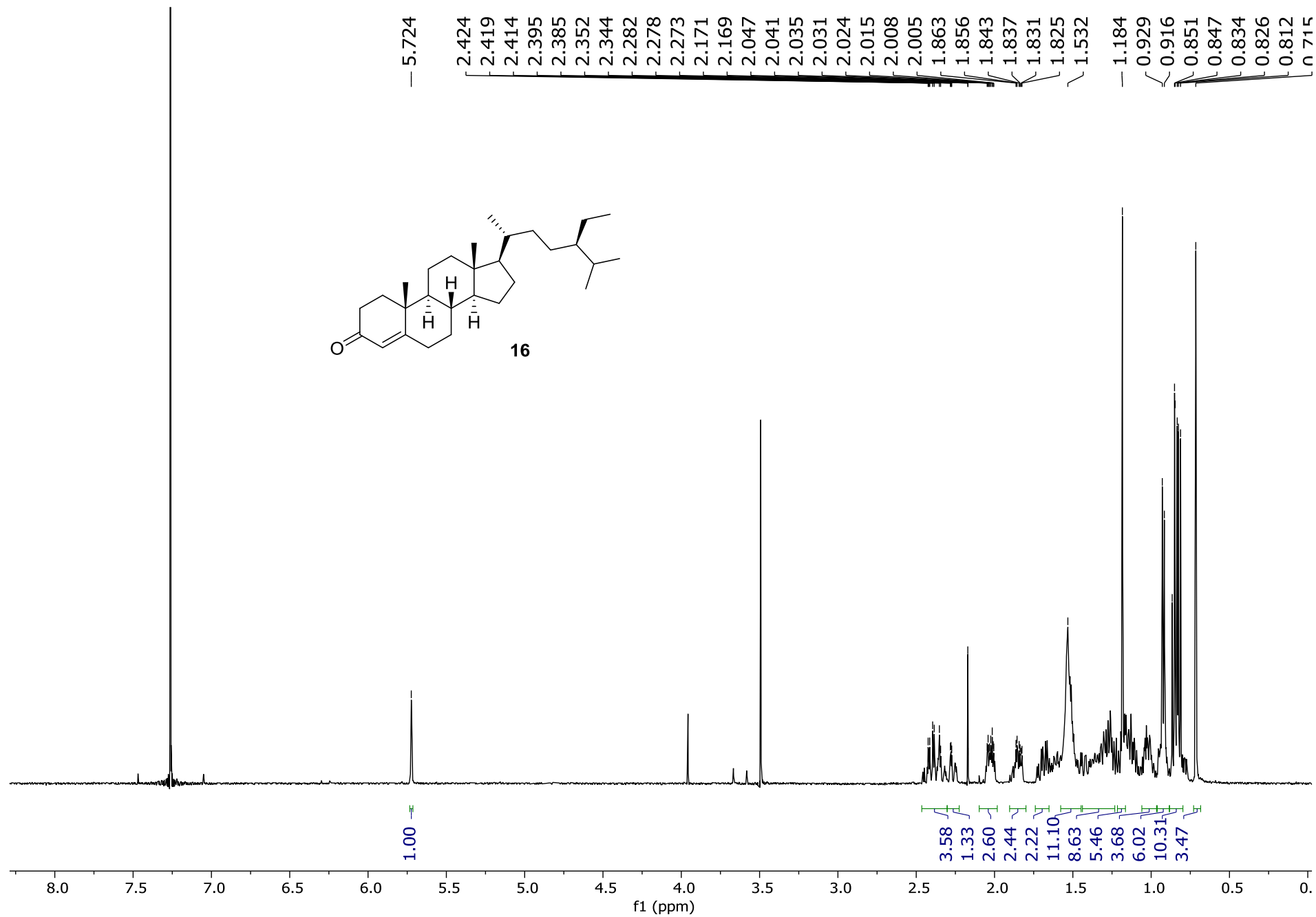


Figure S31. ^{13}C NMR spectrum of **16** in chloroform-*d* (175 MHz)

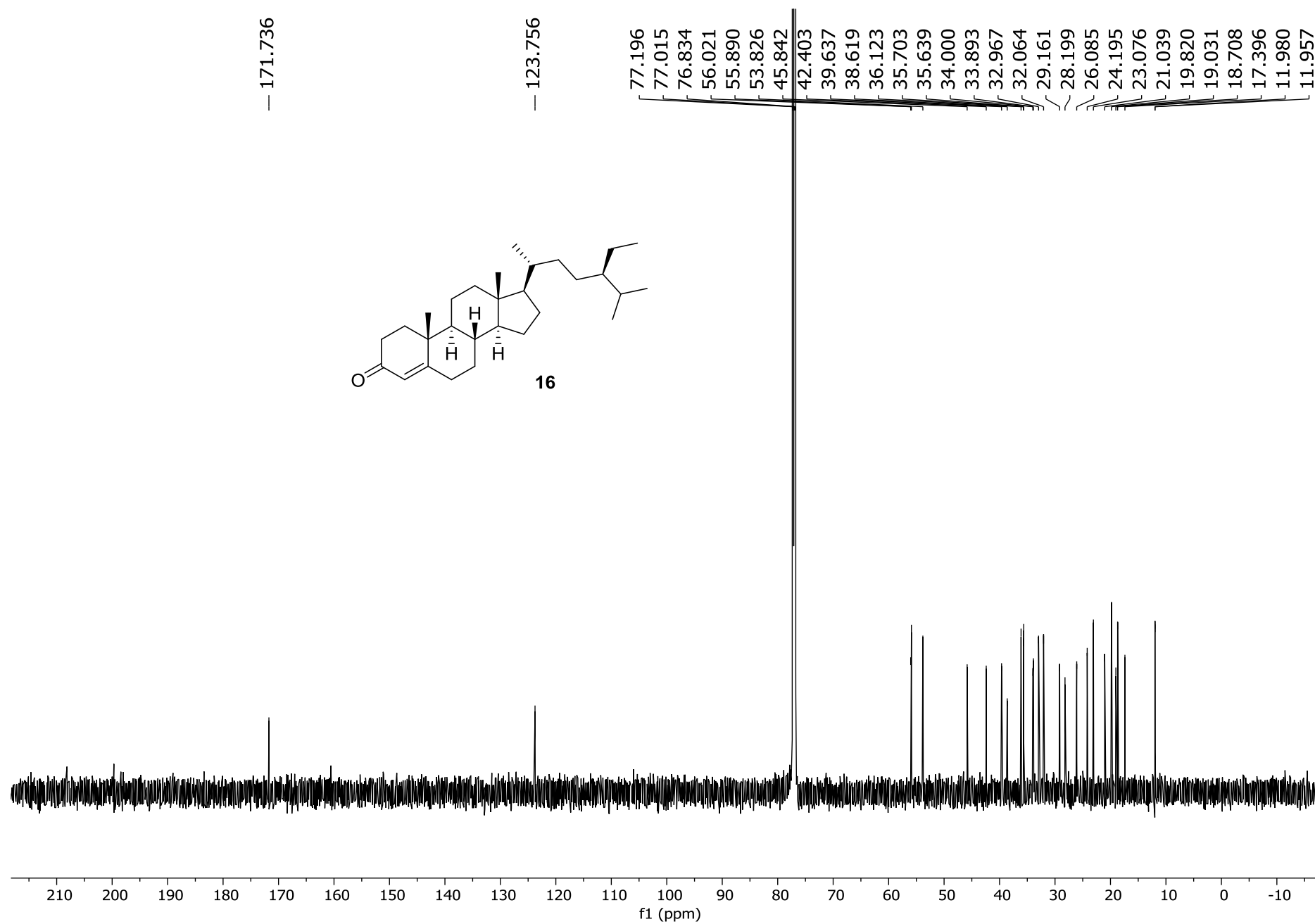


Figure S32. ^1H NMR spectrum of **17** in chloroform- d (700 MHz)

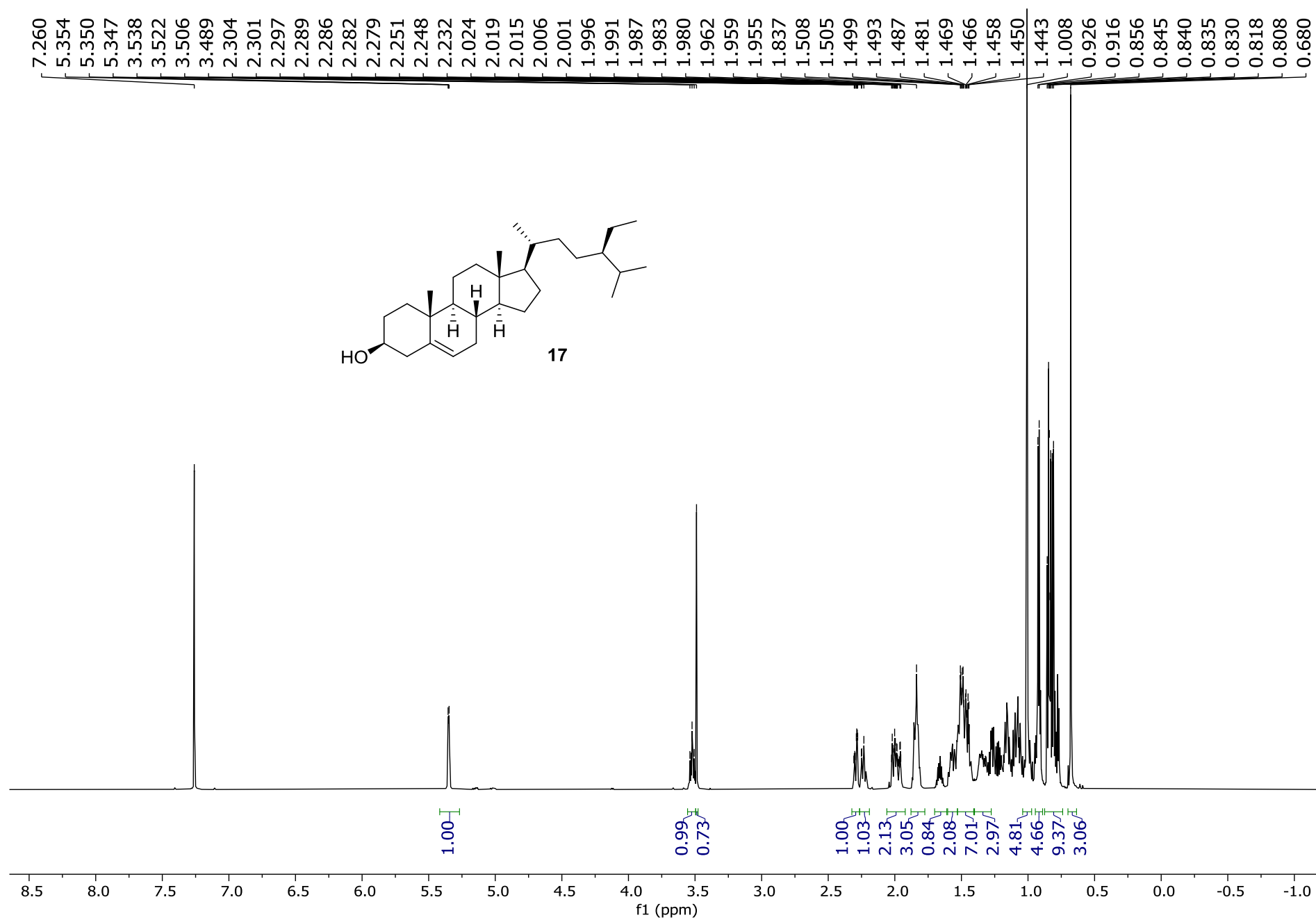


Figure S33. ^{13}C NMR spectrum of **17** in chloroform-*d* (175 MHz)

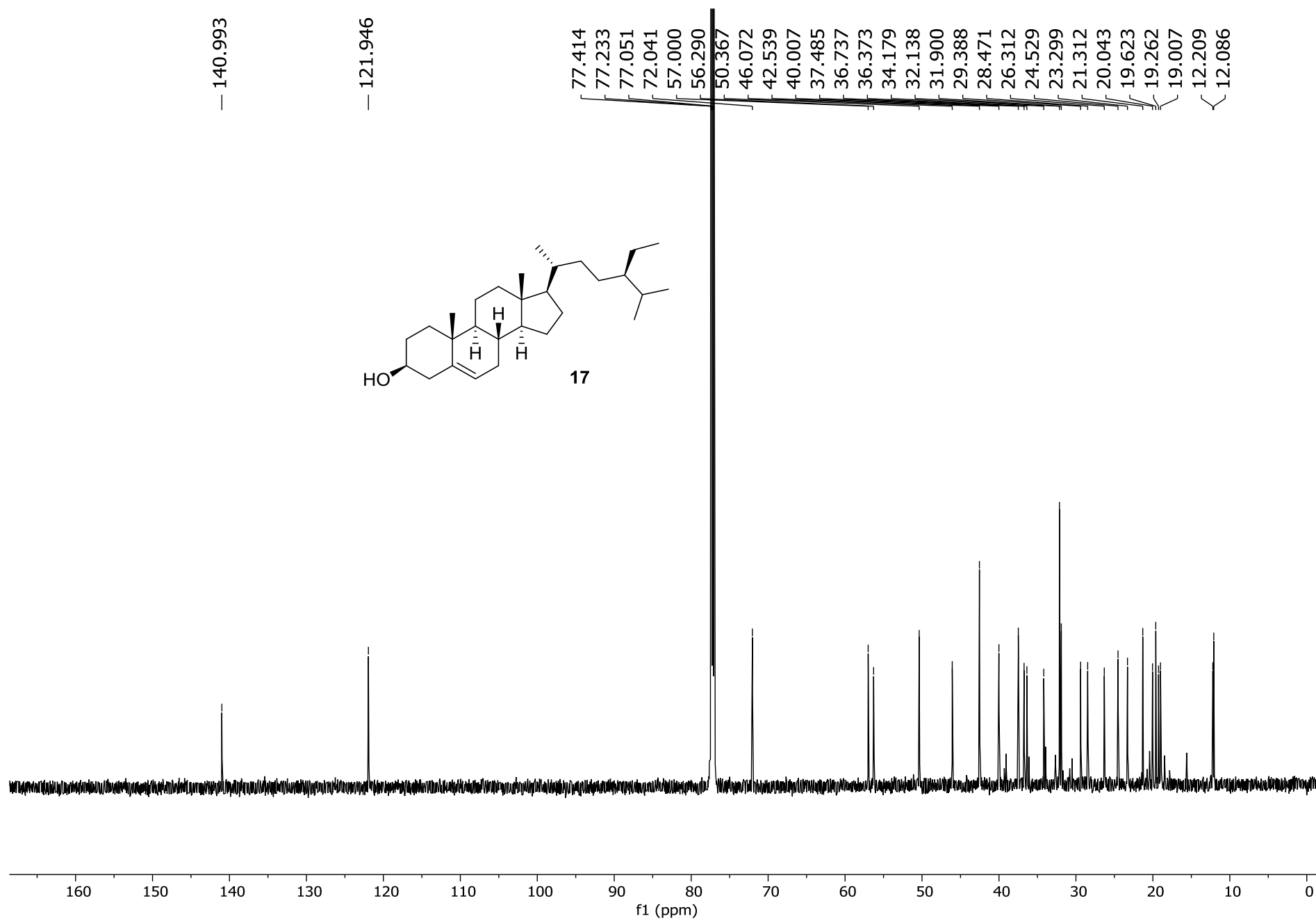


Figure S34. ^1H NMR spectrum of **18** in chloroform- d (700 MHz)

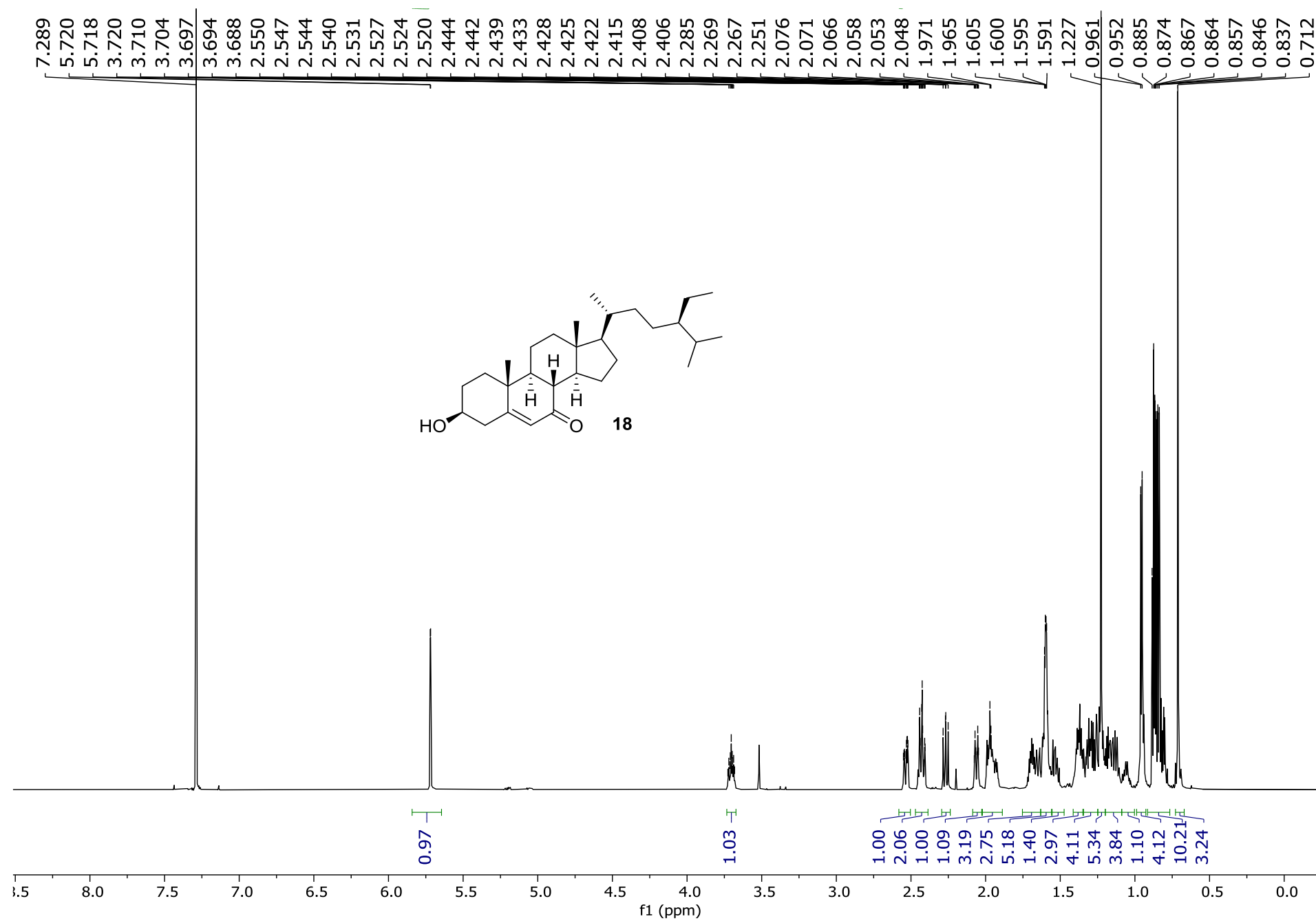


Figure S35. ^{13}C NMR spectrum of **18** in chloroform-*d* (175 MHz)

