

**Cytosporone B as a biological preservative: purification, structure identification  
and mechanism of action against *Geotrichum citri-aurantii***

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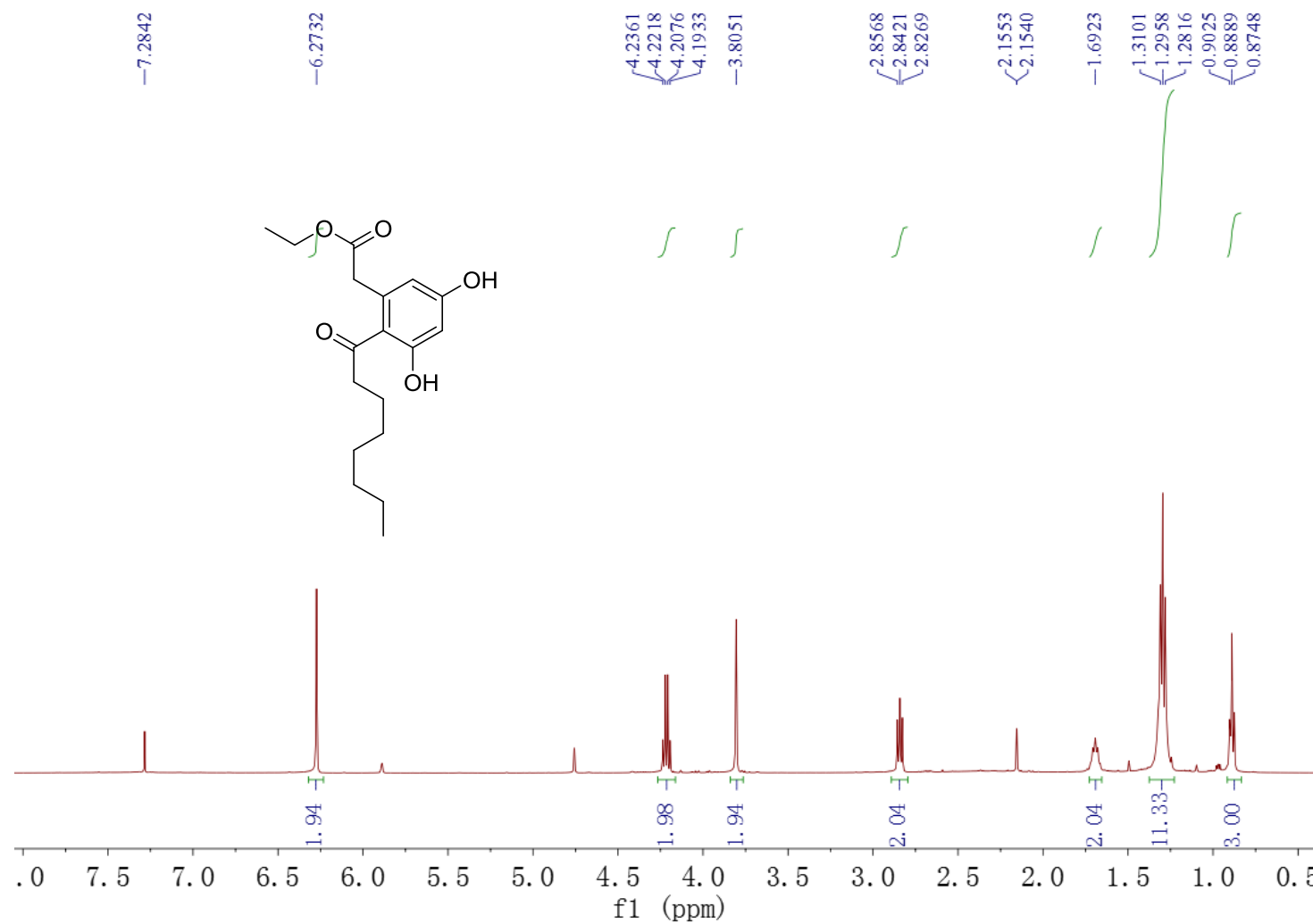


Figure S1. <sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of **1**.

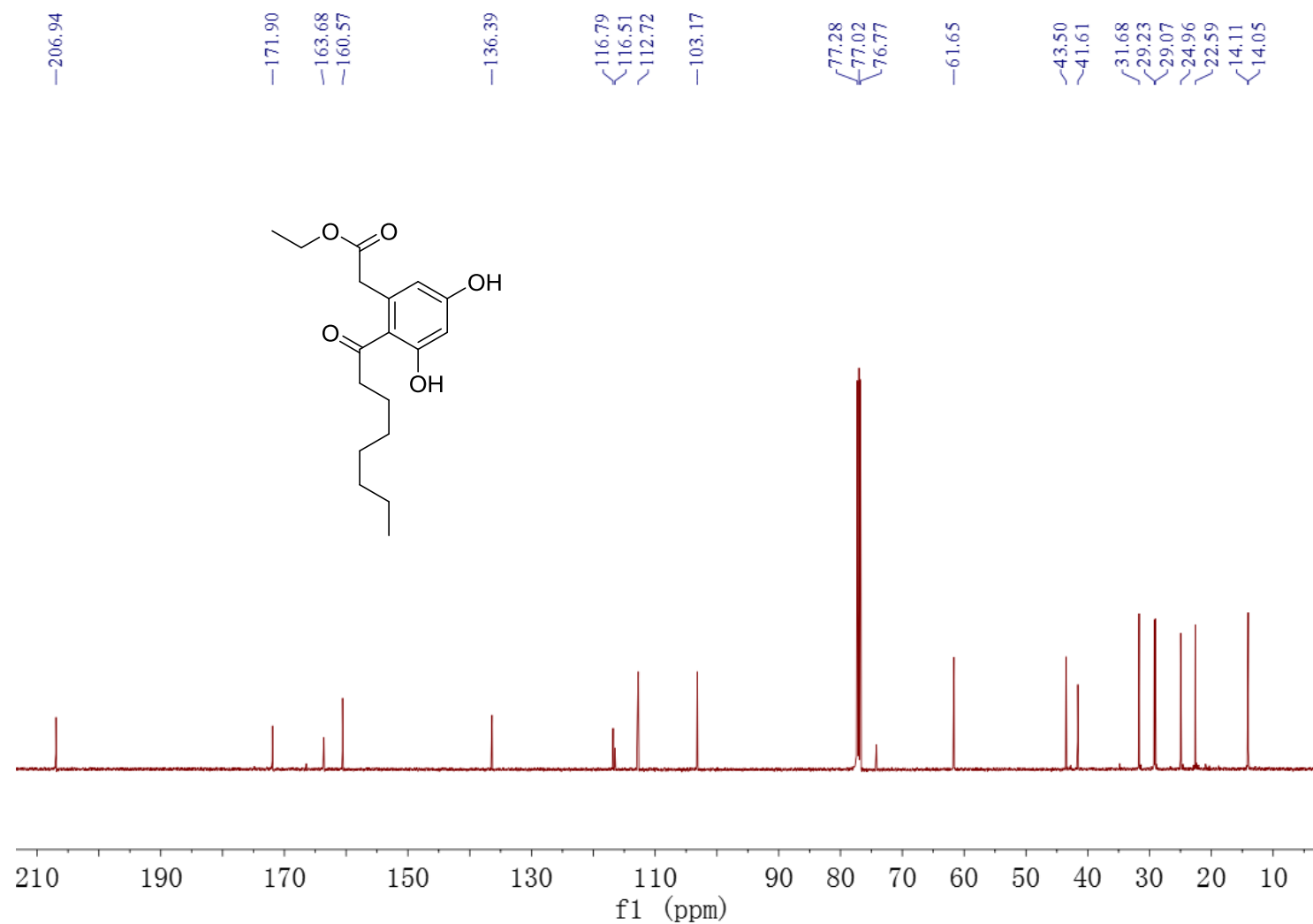


Figure S2. <sup>13</sup>C NMR spectrum (125 MHz, CDCl<sub>3</sub>) of **1**.

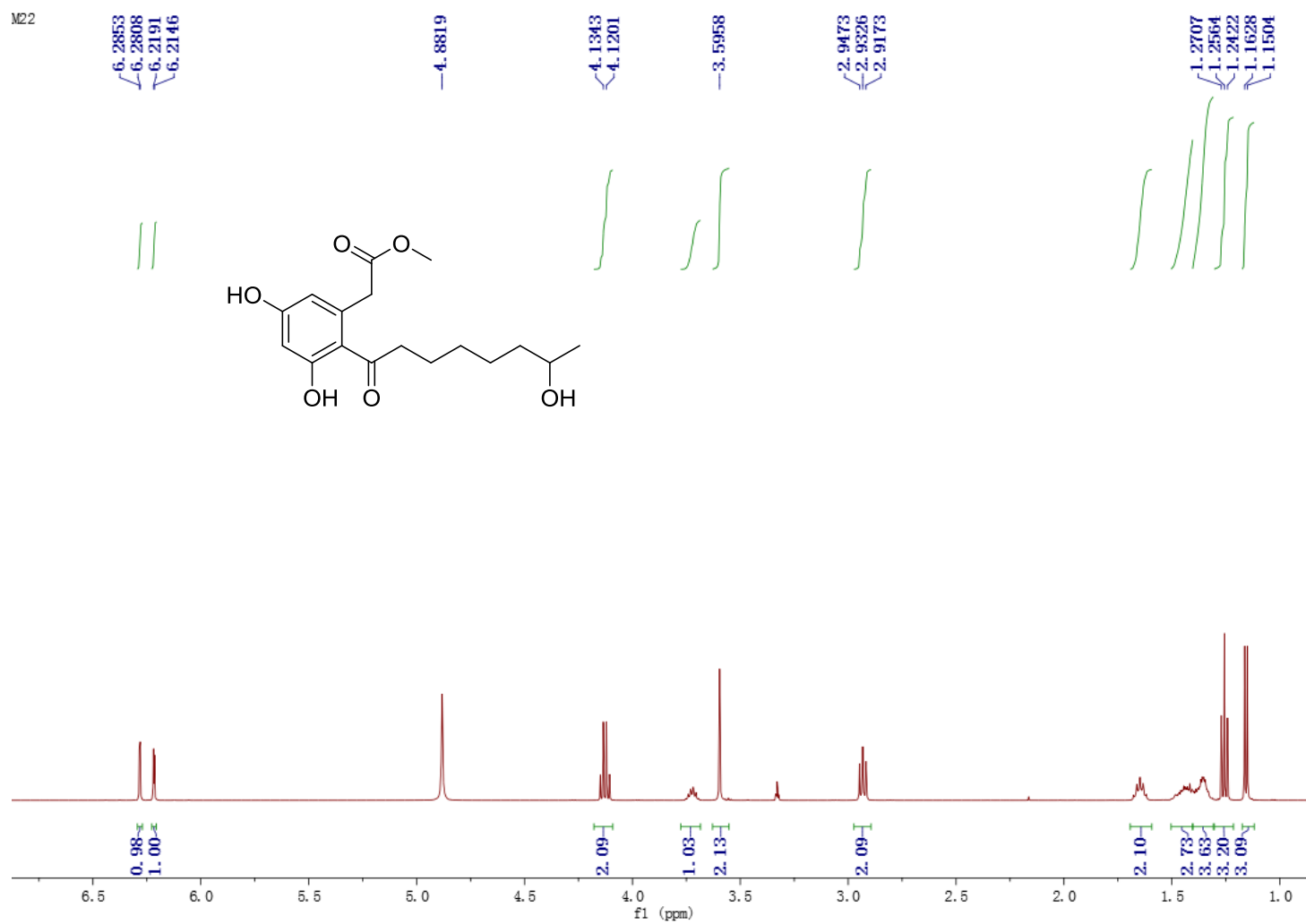


Figure S3. <sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of **2**.

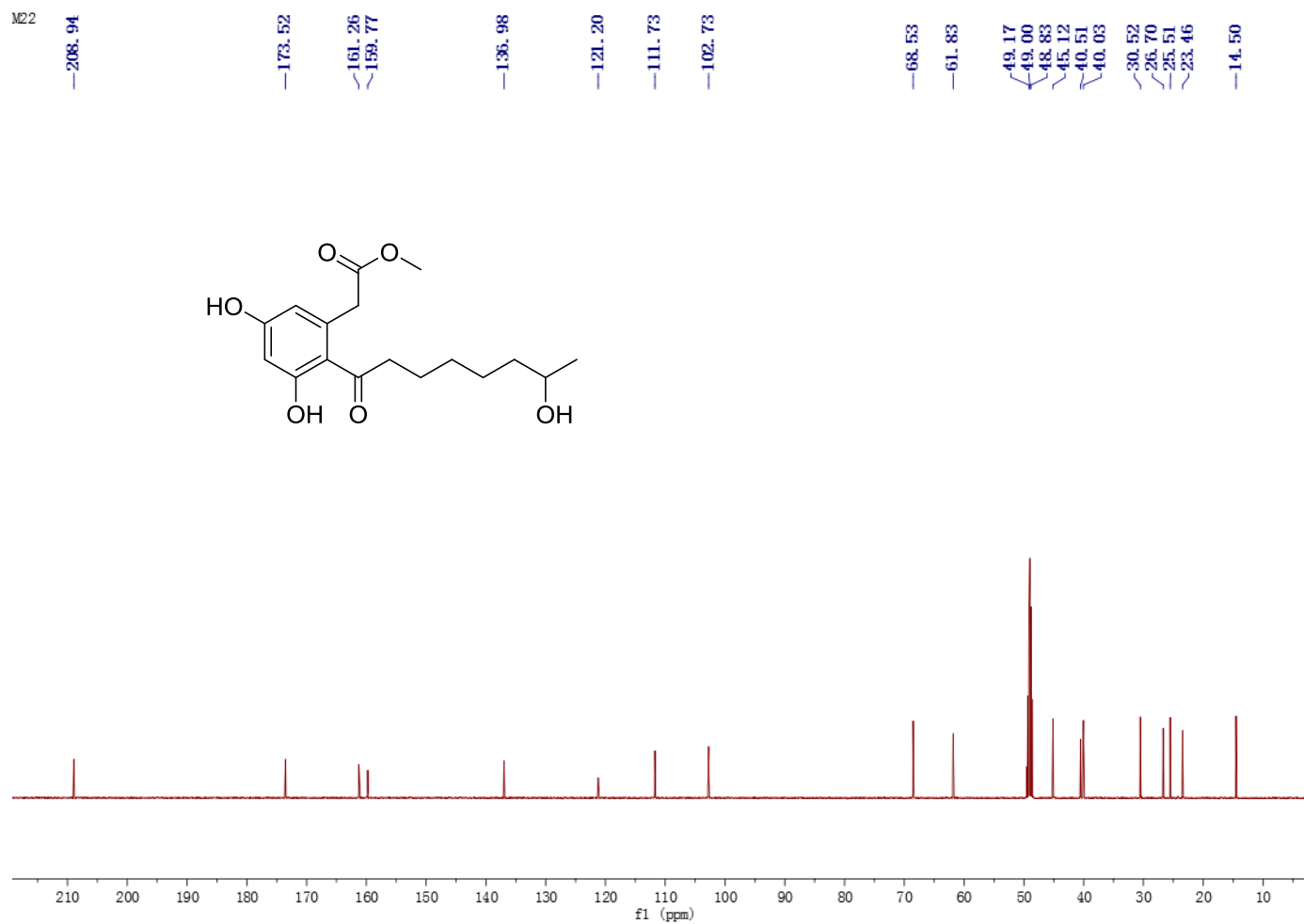


Figure S4. <sup>13</sup>C NMR spectrum (125 MHz, CDCl<sub>3</sub>) of **2**.

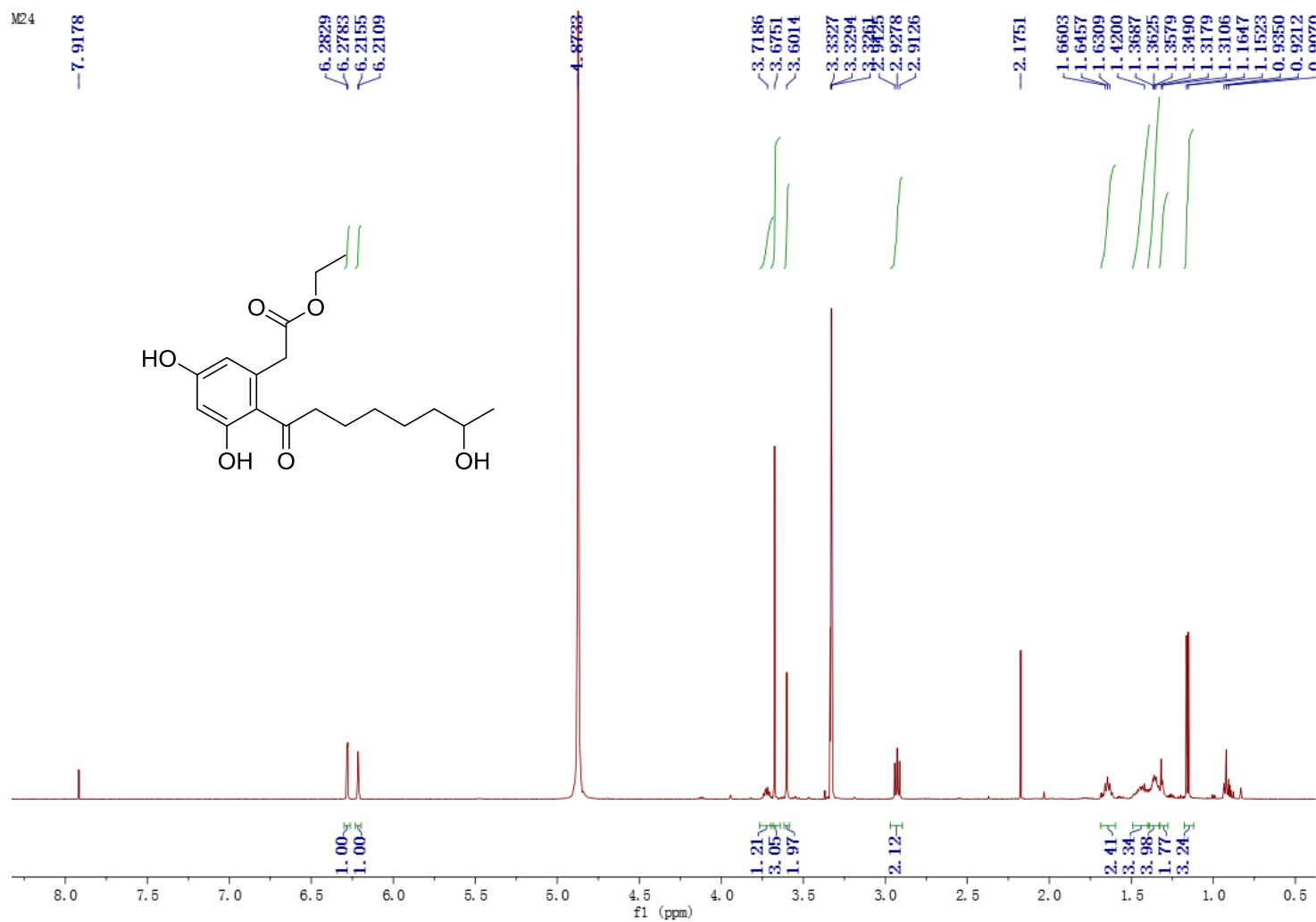


Figure S5. <sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of **3**.

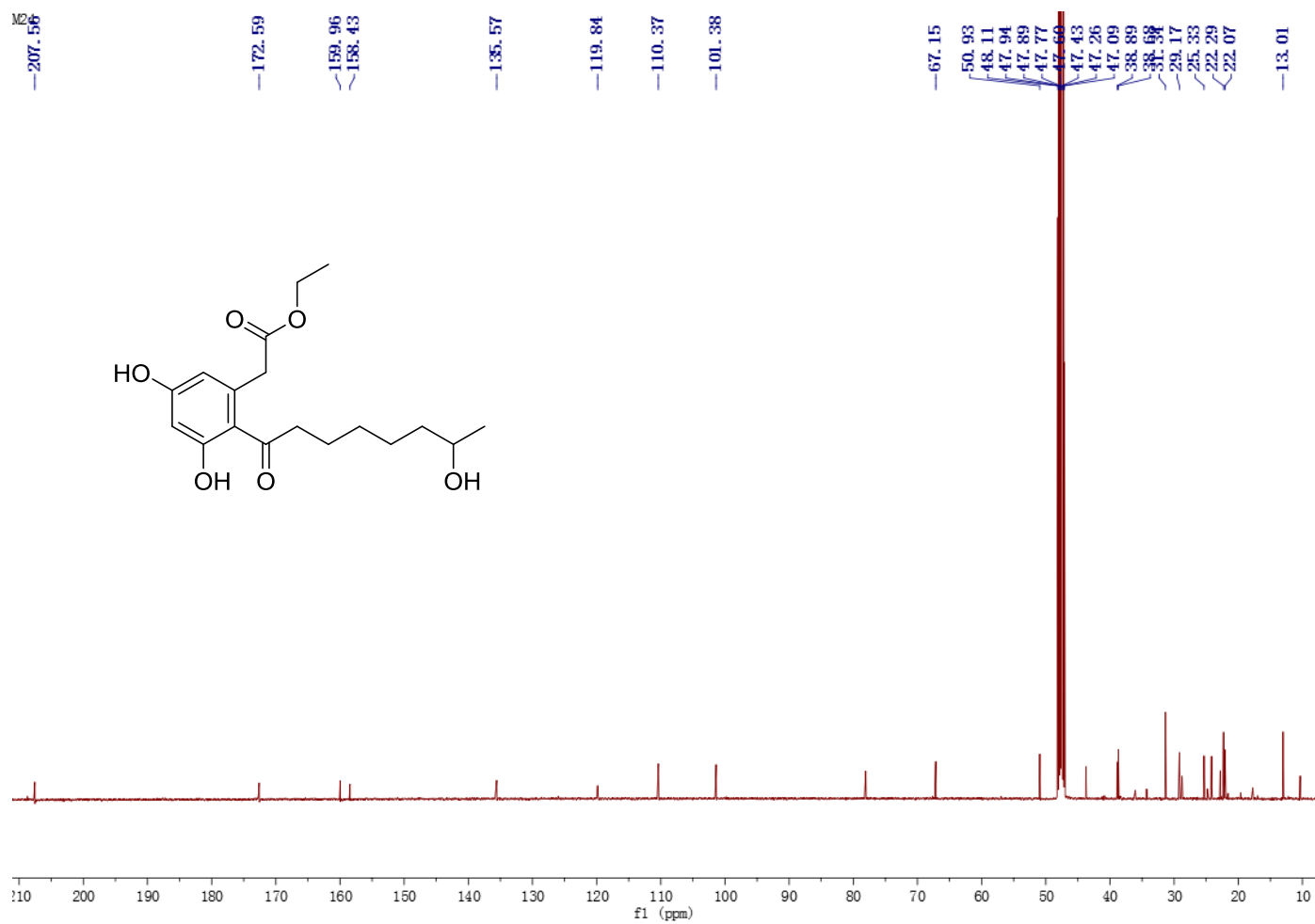


Figure S6. <sup>13</sup>C NMR spectrum (125 MHz, CDCl<sub>3</sub>) of **3**.



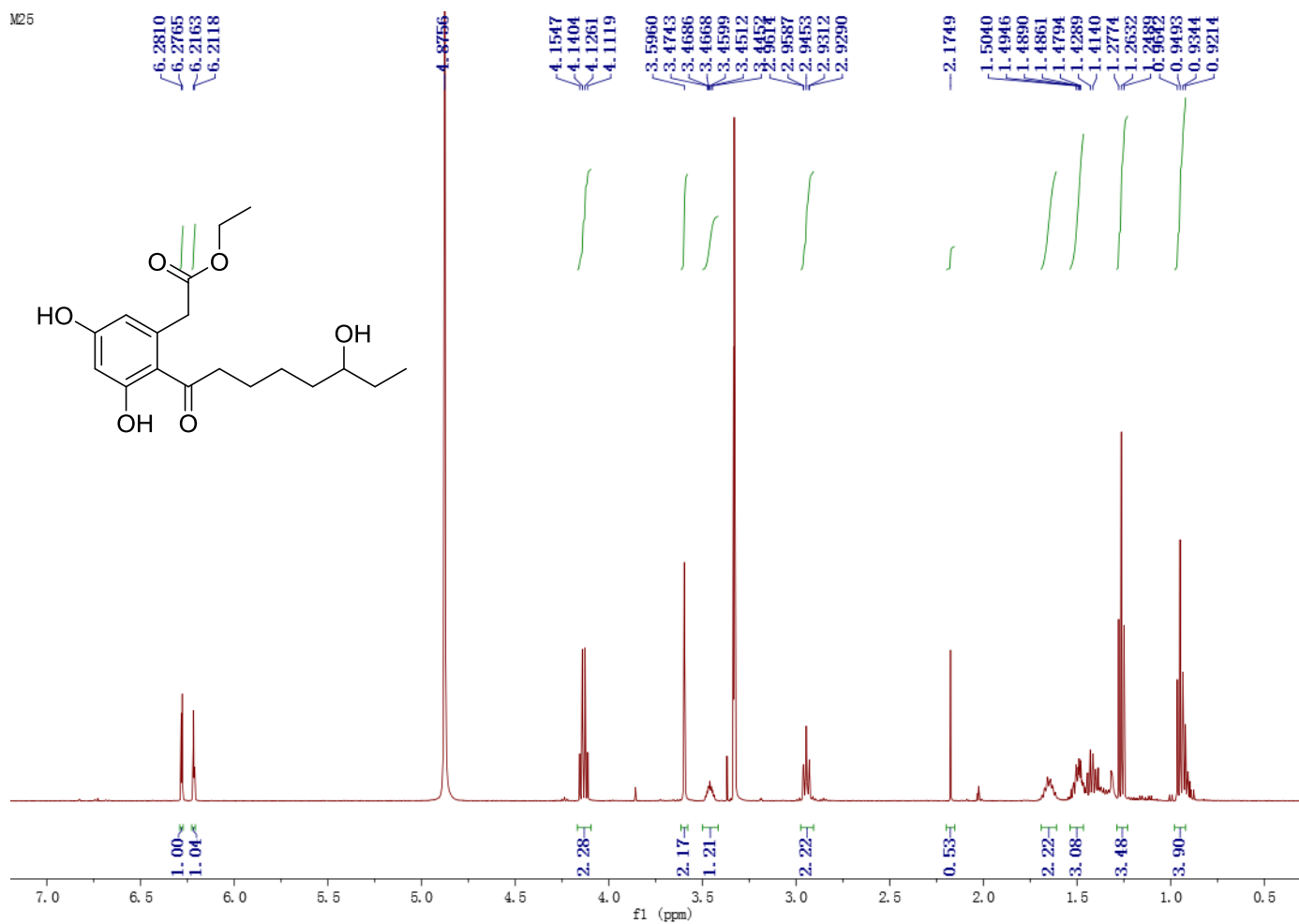


Figure S7. <sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of 4.

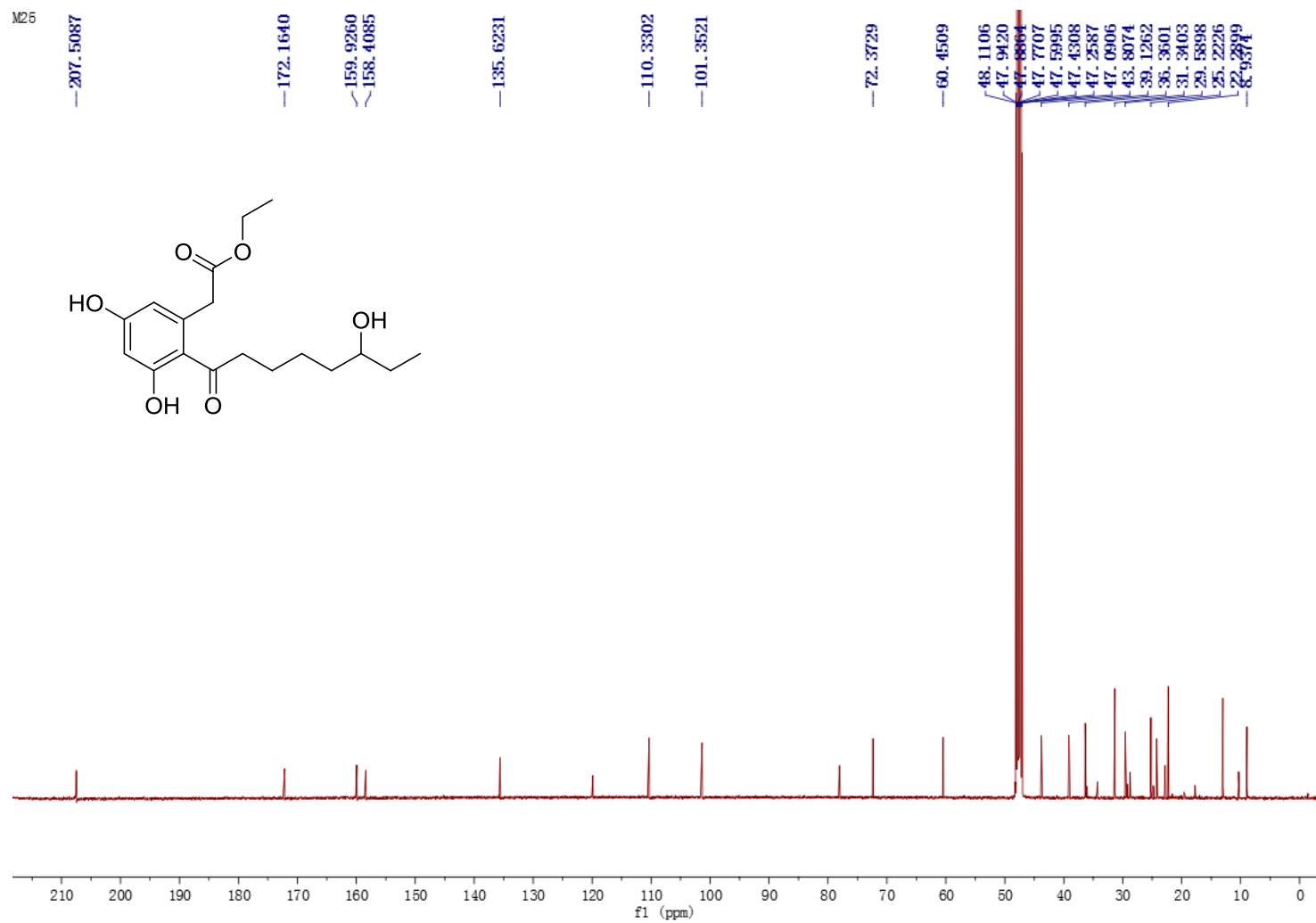


Figure S8.  $^{13}\text{C}$  NMR spectrum (125 MHz,  $\text{CDCl}_3$ ) of **4**.

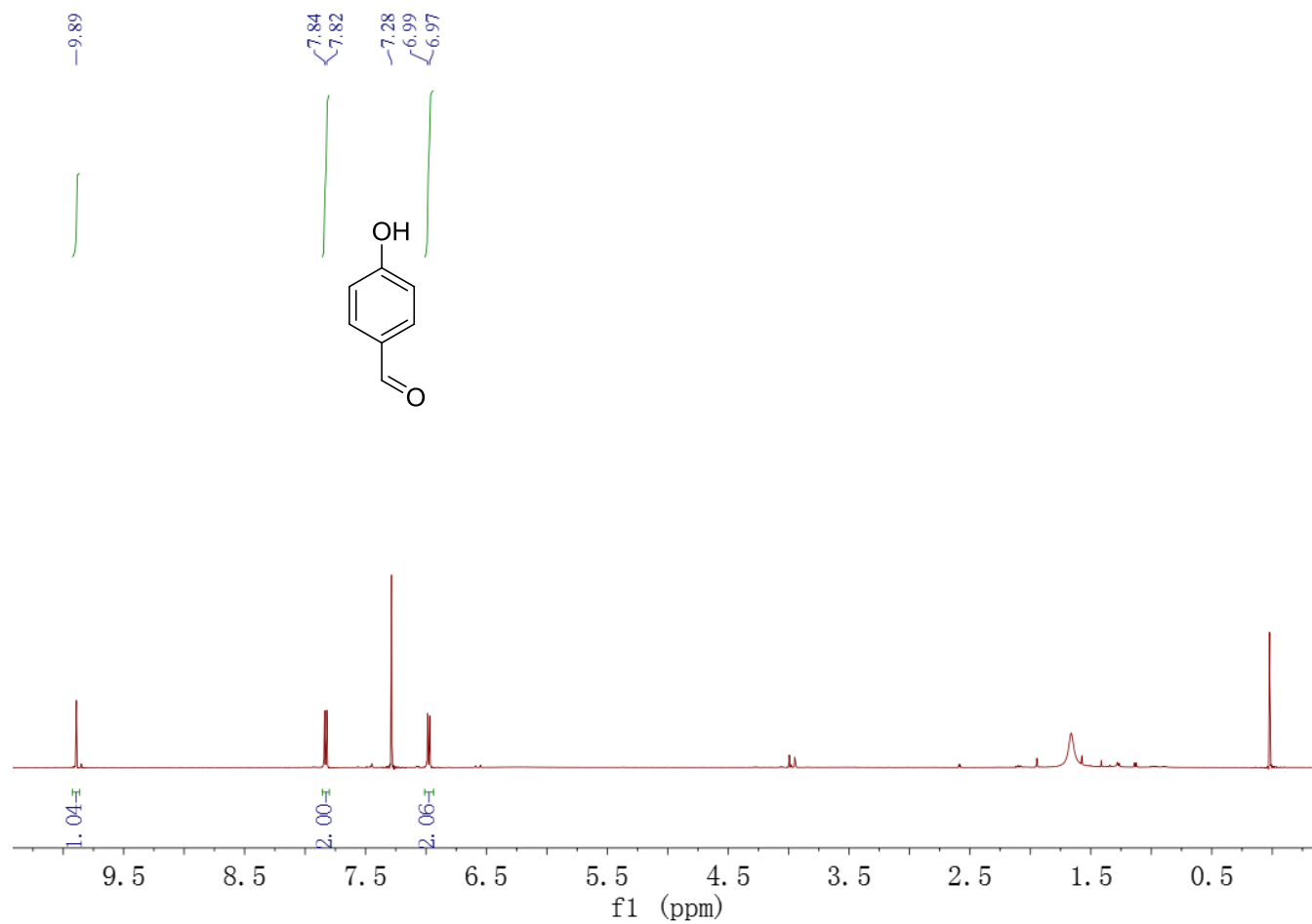


Figure S9. <sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of **5**.

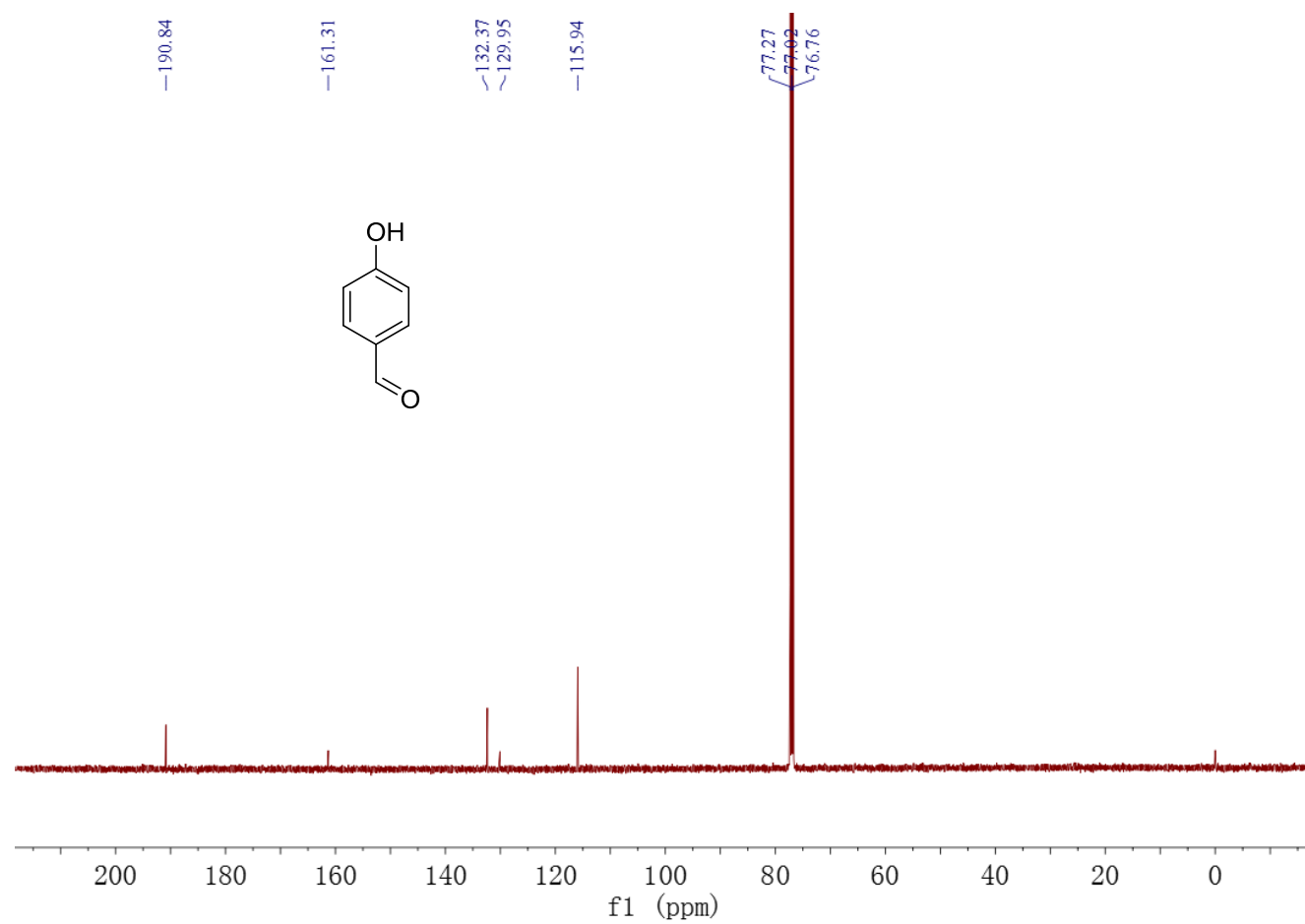


Figure S10. <sup>13</sup>C NMR spectrum (125 MHz, CDCl<sub>3</sub>) of **5**.

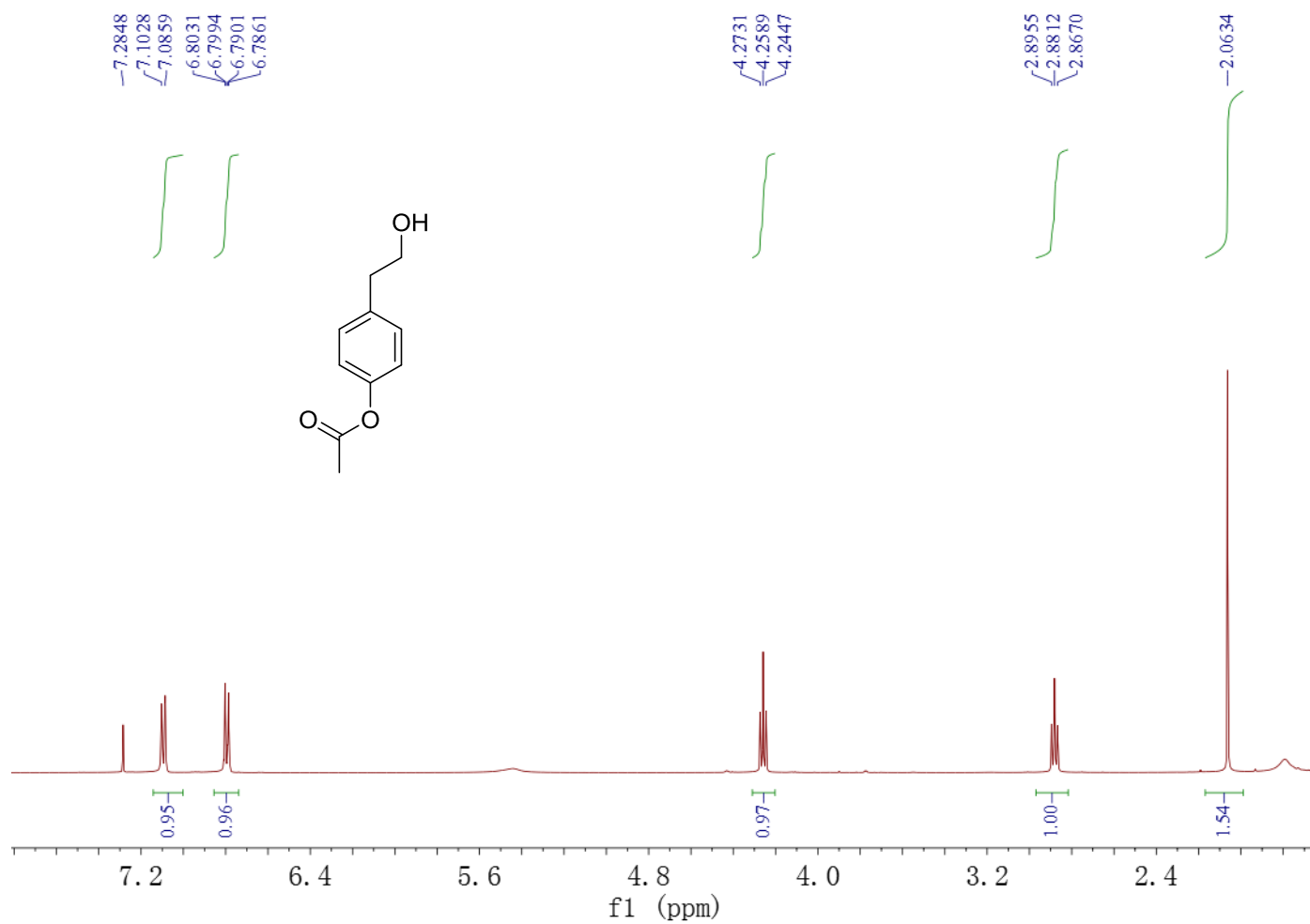


Figure S11. <sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of **6**.

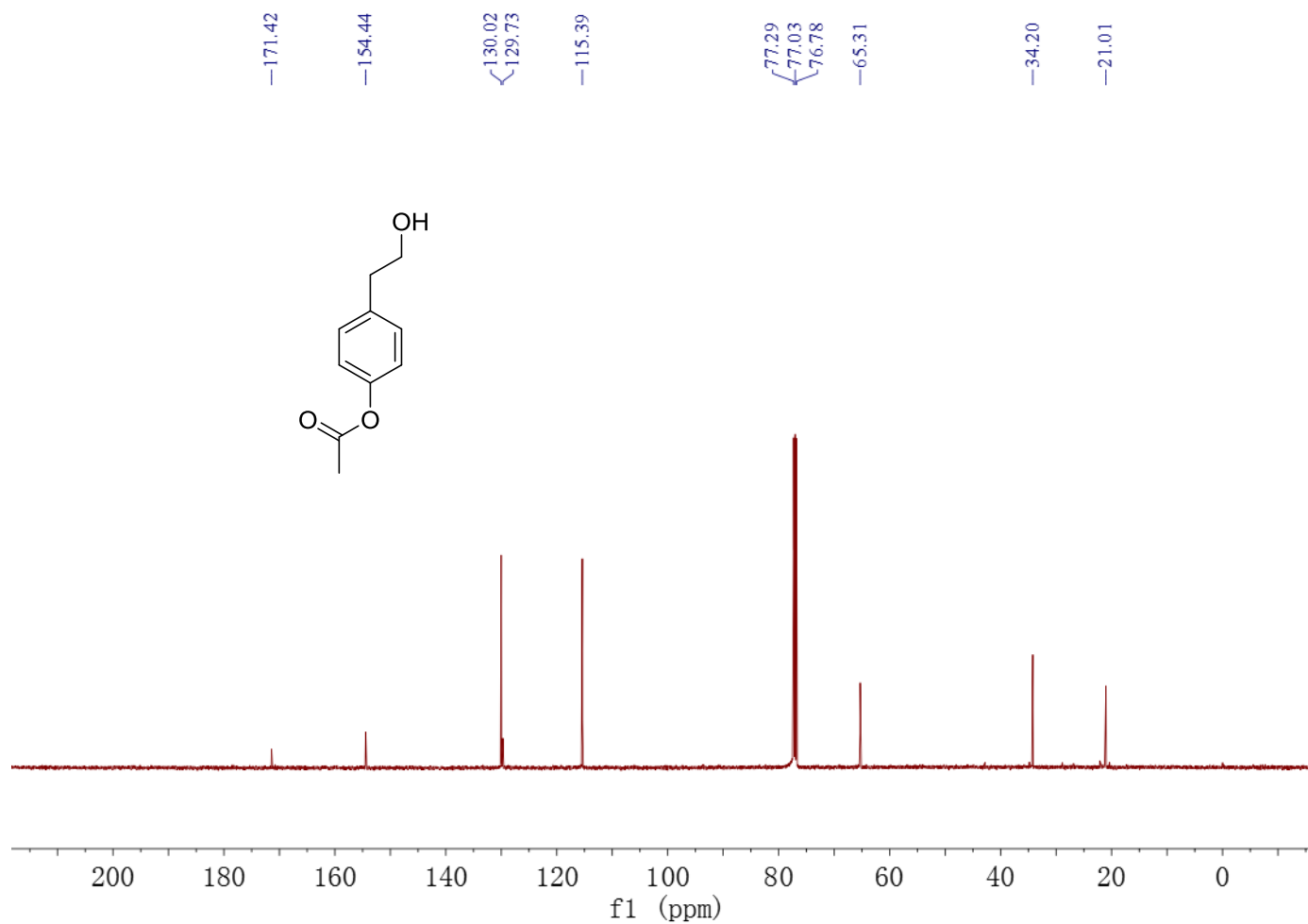


Figure S12. <sup>13</sup>C NMR spectrum (125 MHz, CDCl<sub>3</sub>) of **6**.

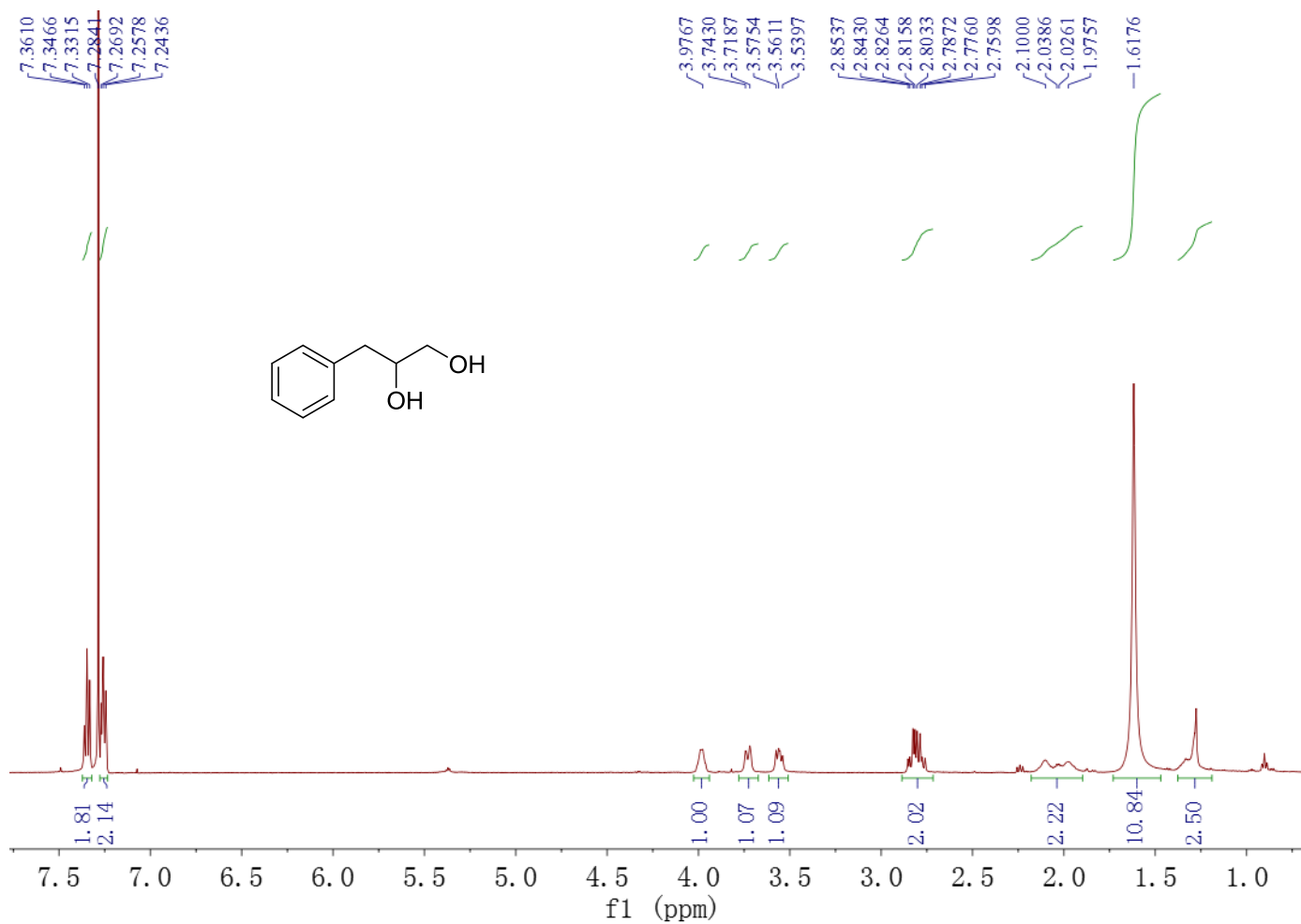


Figure S13.  $^1\text{H}$  NMR spectrum (500 MHz,  $\text{CDCl}_3$ ) of 7.

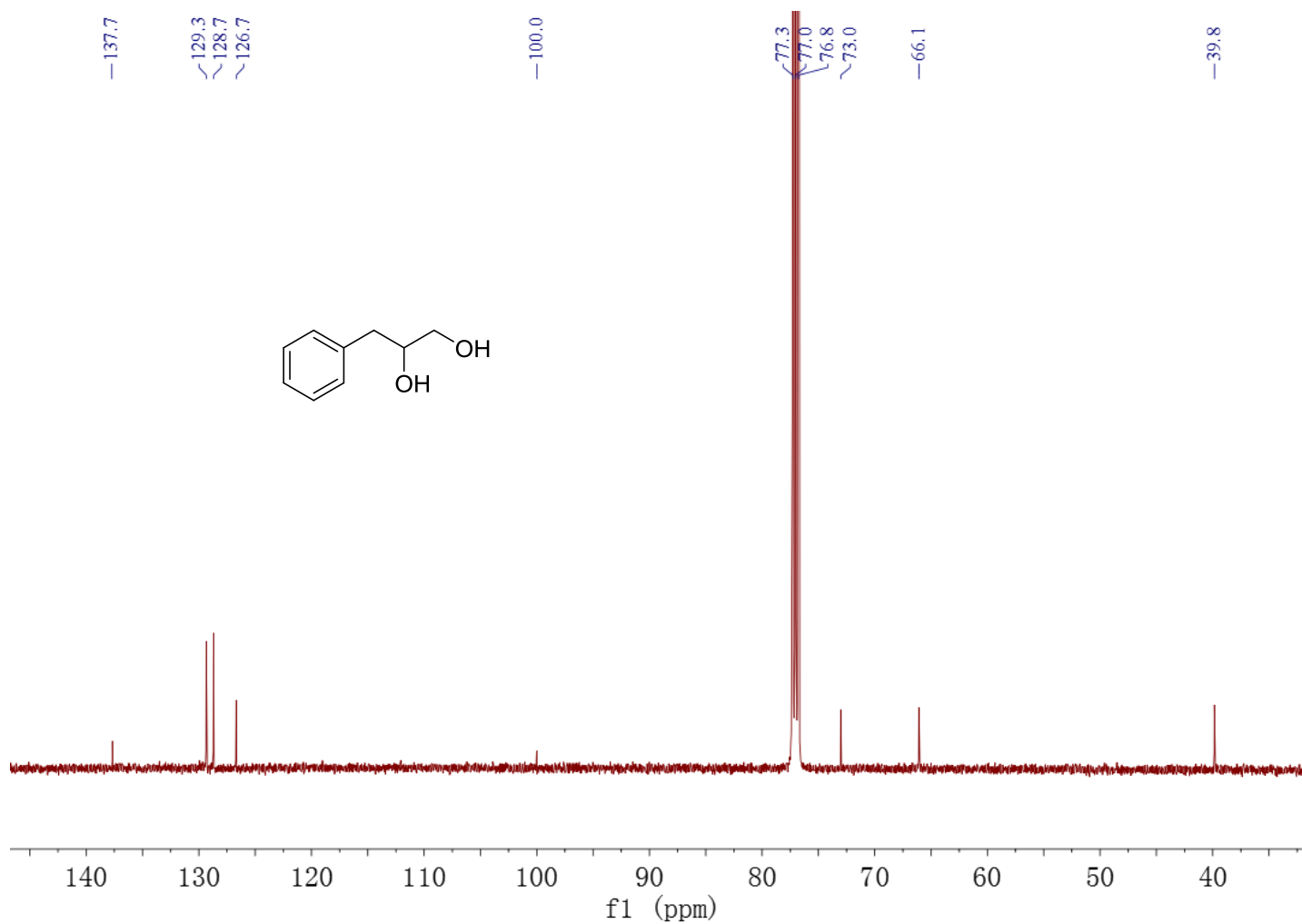


Figure S14. <sup>13</sup>C NMR spectrum (125 MHz, CDCl<sub>3</sub>) of 7.



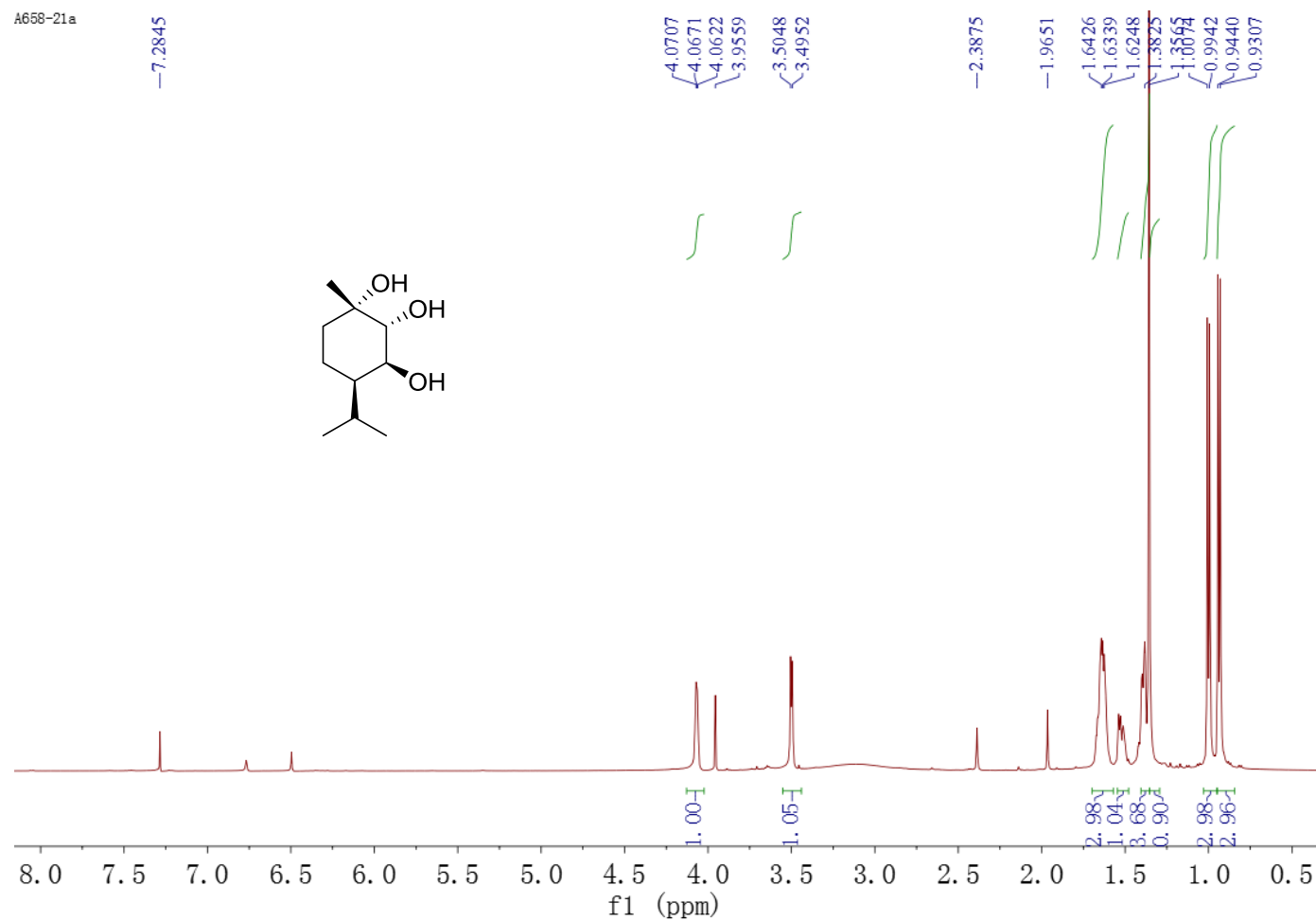


Figure S15. <sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of **8**.

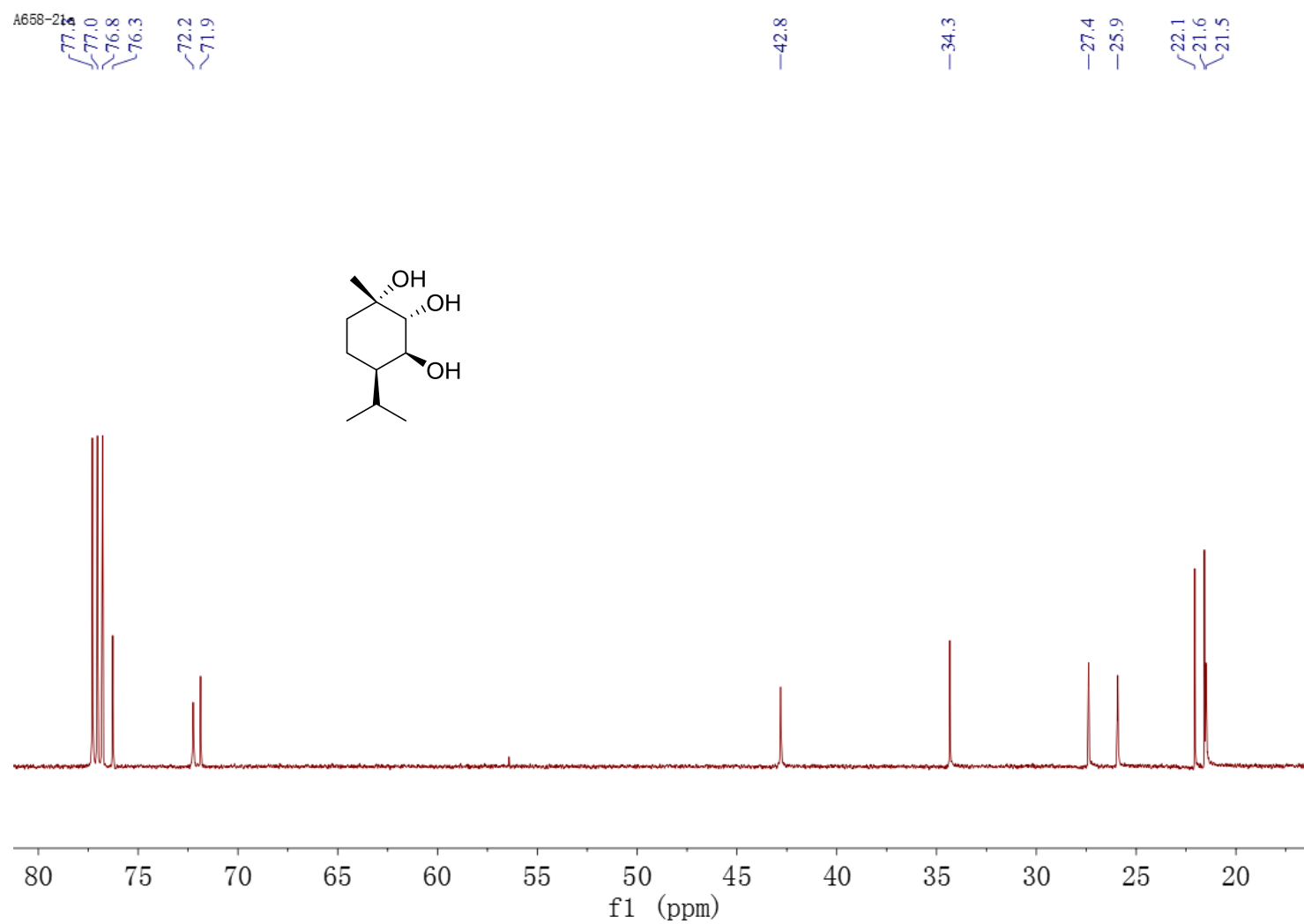


Figure S16. <sup>13</sup>C NMR spectrum (125 MHz, CDCl<sub>3</sub>) of **8**.

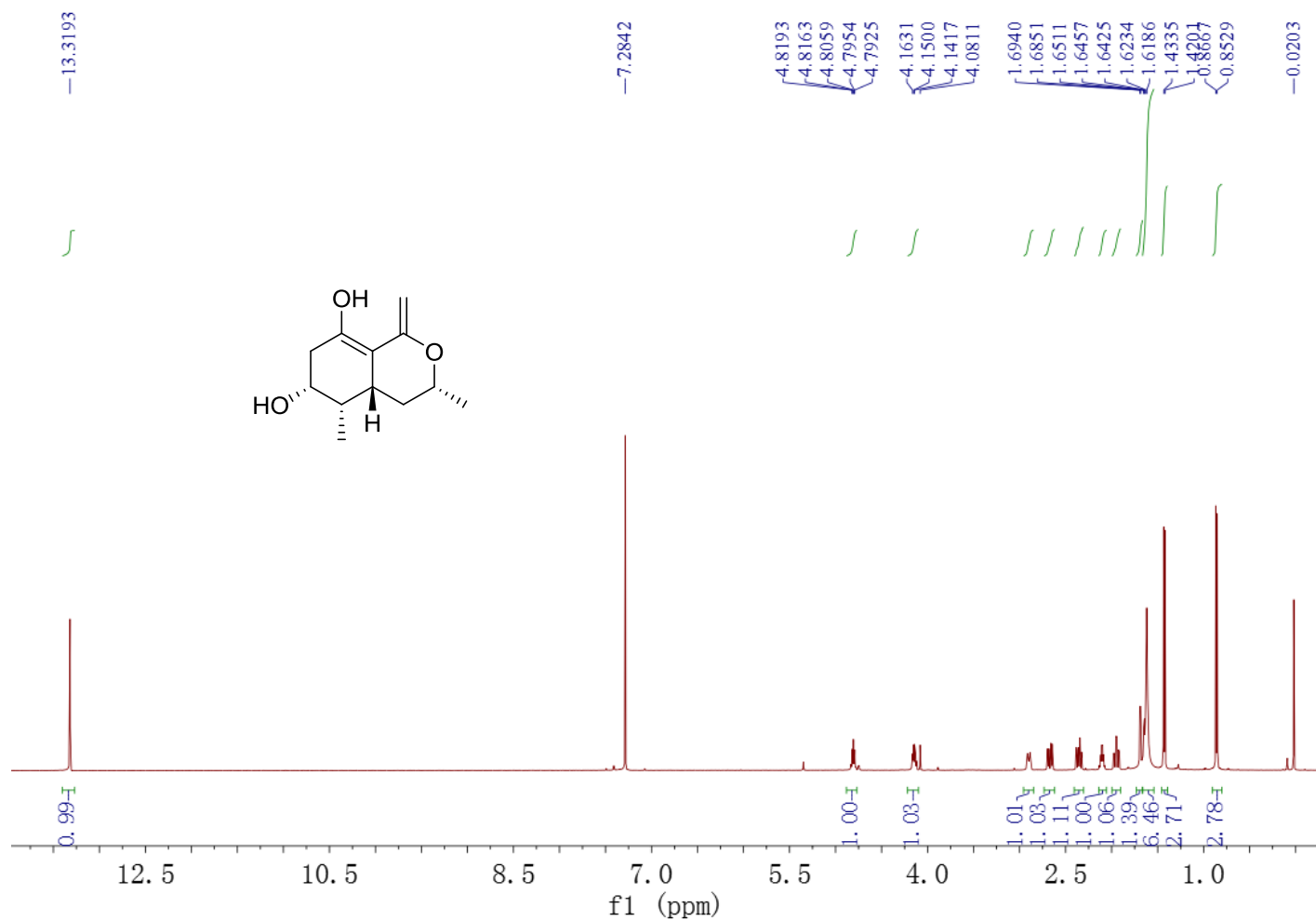


Figure S17. <sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of **9**.

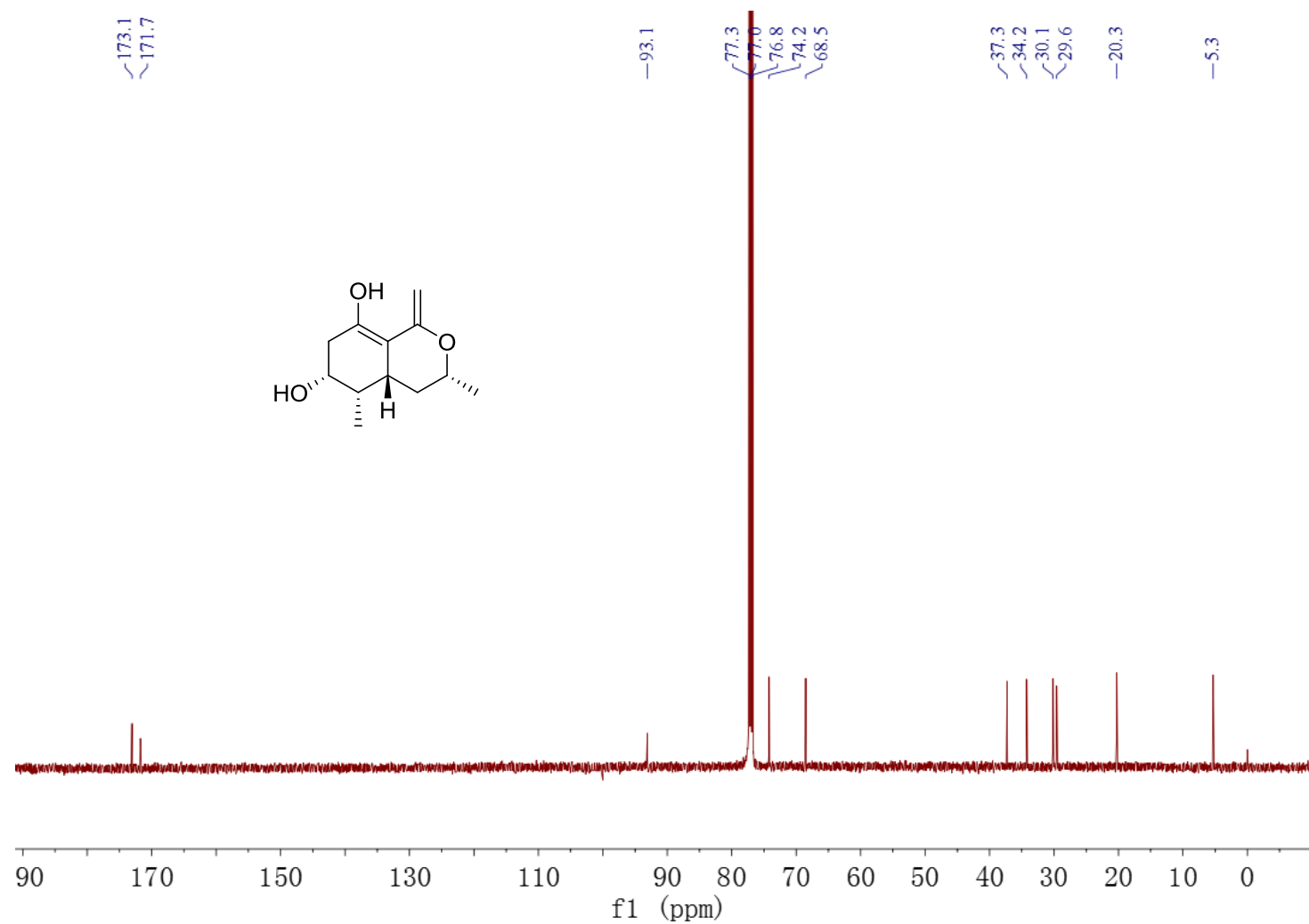


Figure S18. <sup>13</sup>C NMR spectrum (125 MHz, CDCl<sub>3</sub>) of **9**.

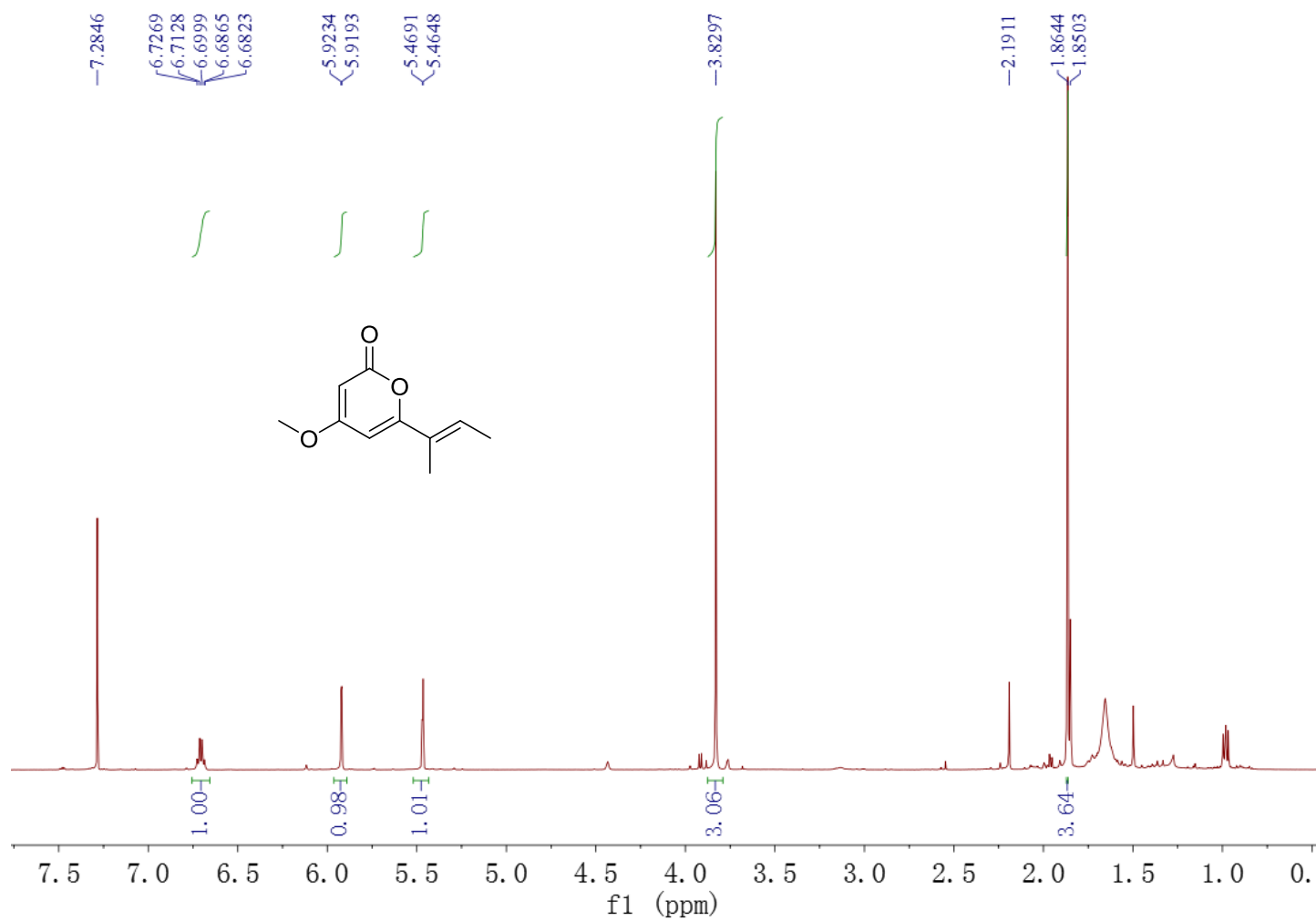


Figure S19. <sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of **10**.

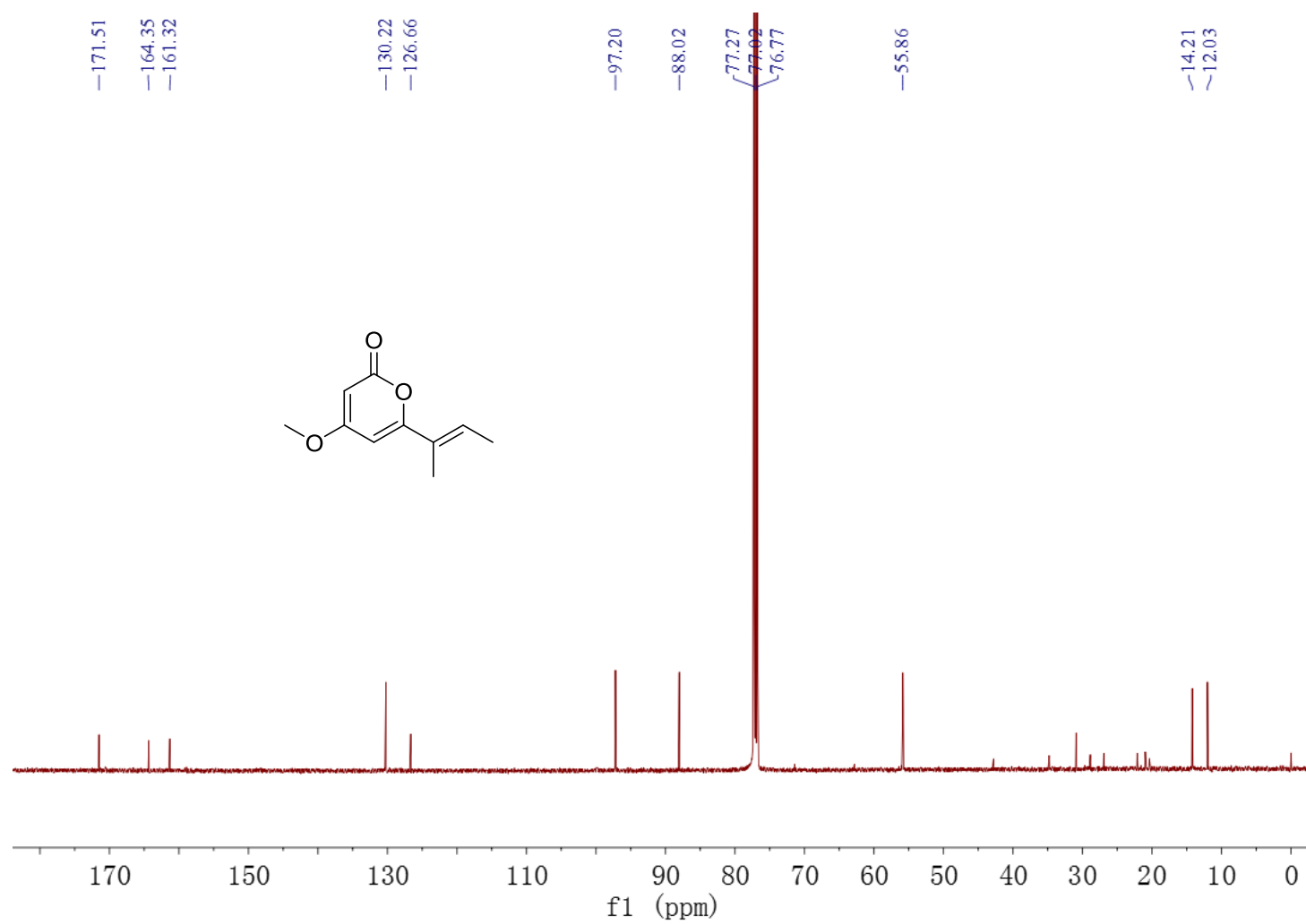


Figure S20. <sup>13</sup>C NMR spectrum (125 MHz, CDCl<sub>3</sub>) of **10**.

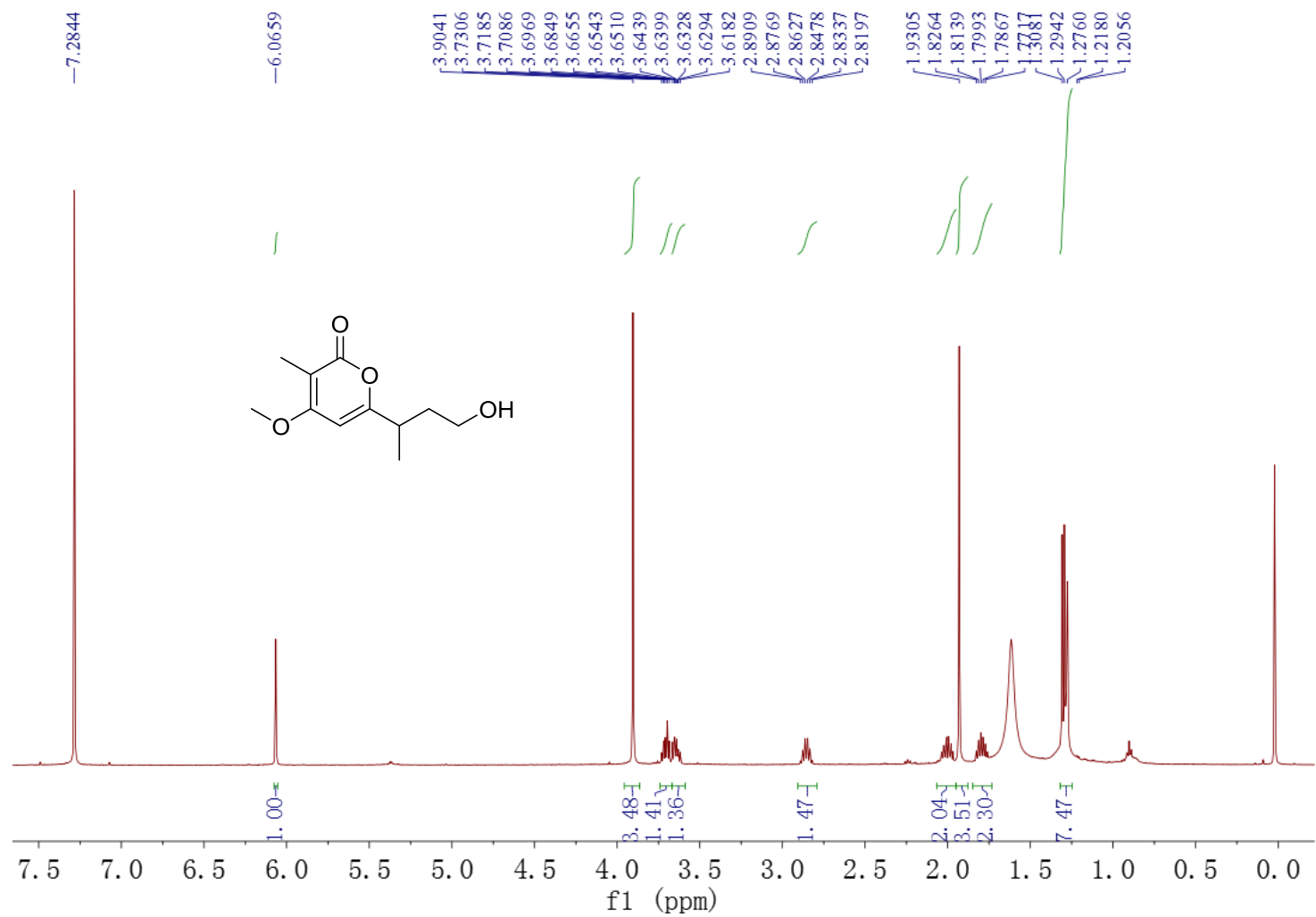


Figure S21. <sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of **11**.

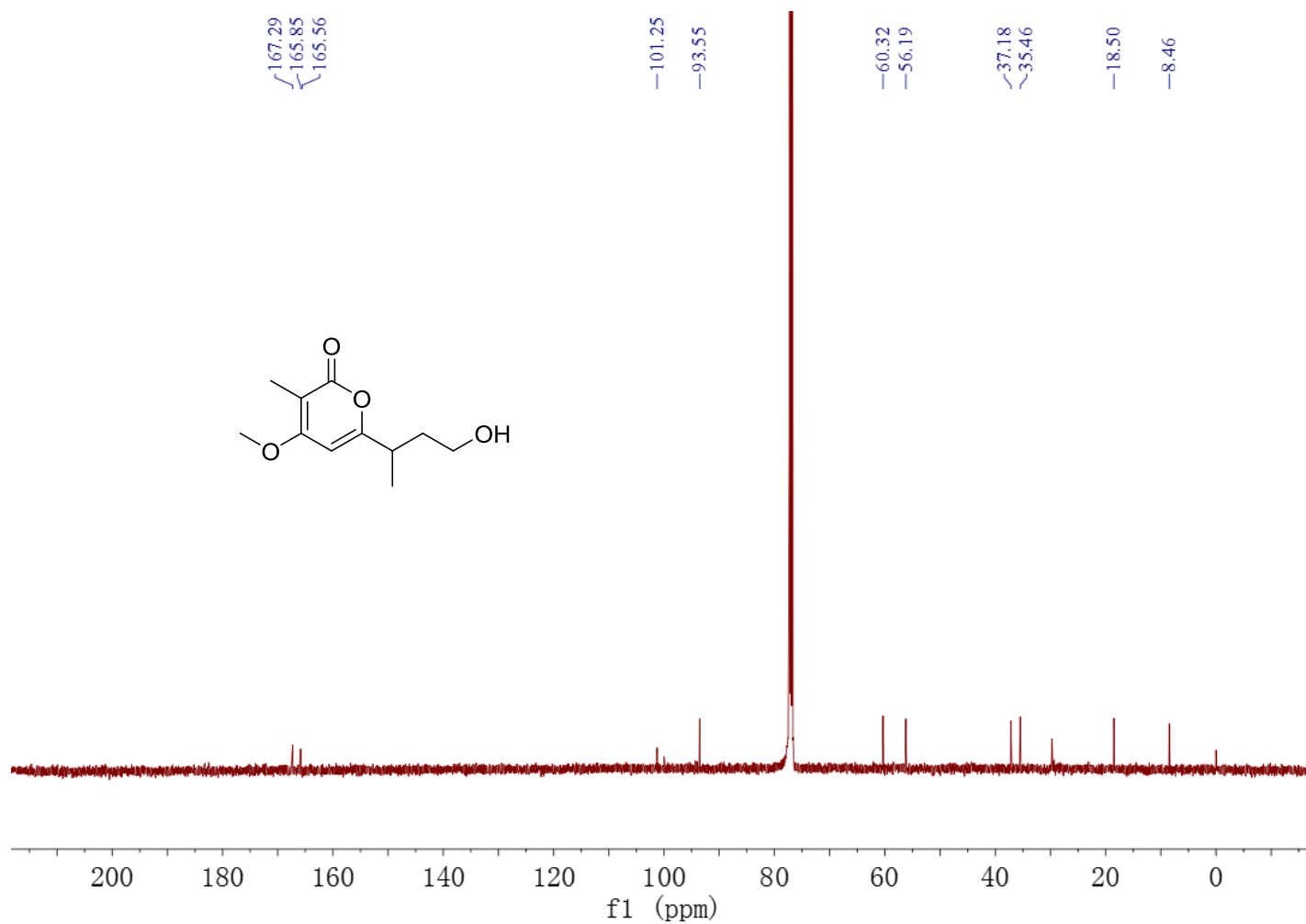


Figure S22. <sup>13</sup>C NMR spectrum (125 MHz, CDCl<sub>3</sub>) of **11**.



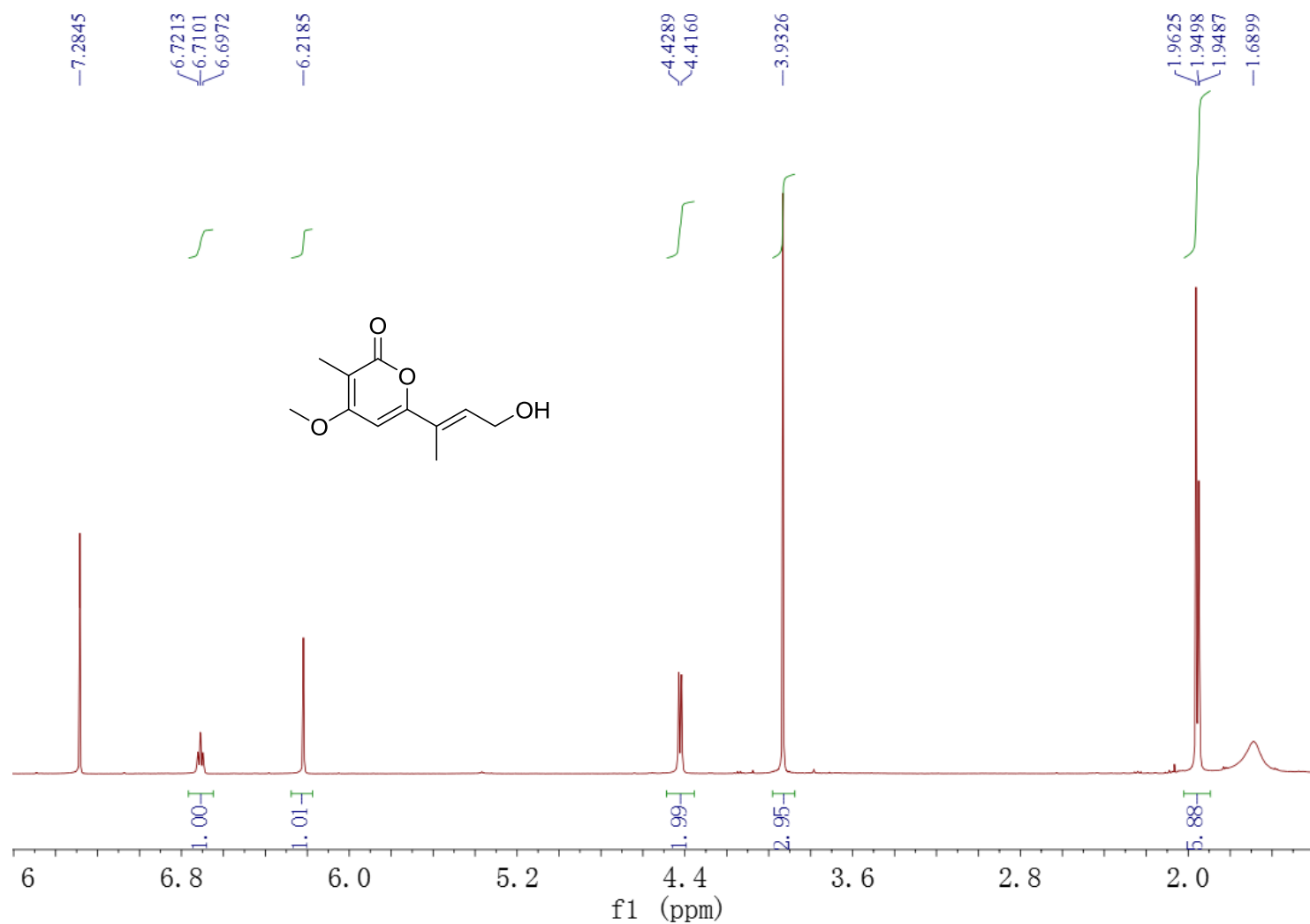


Figure S23.  $^1\text{H}$  NMR spectrum (500 MHz,  $\text{CDCl}_3$ ) of **12**.

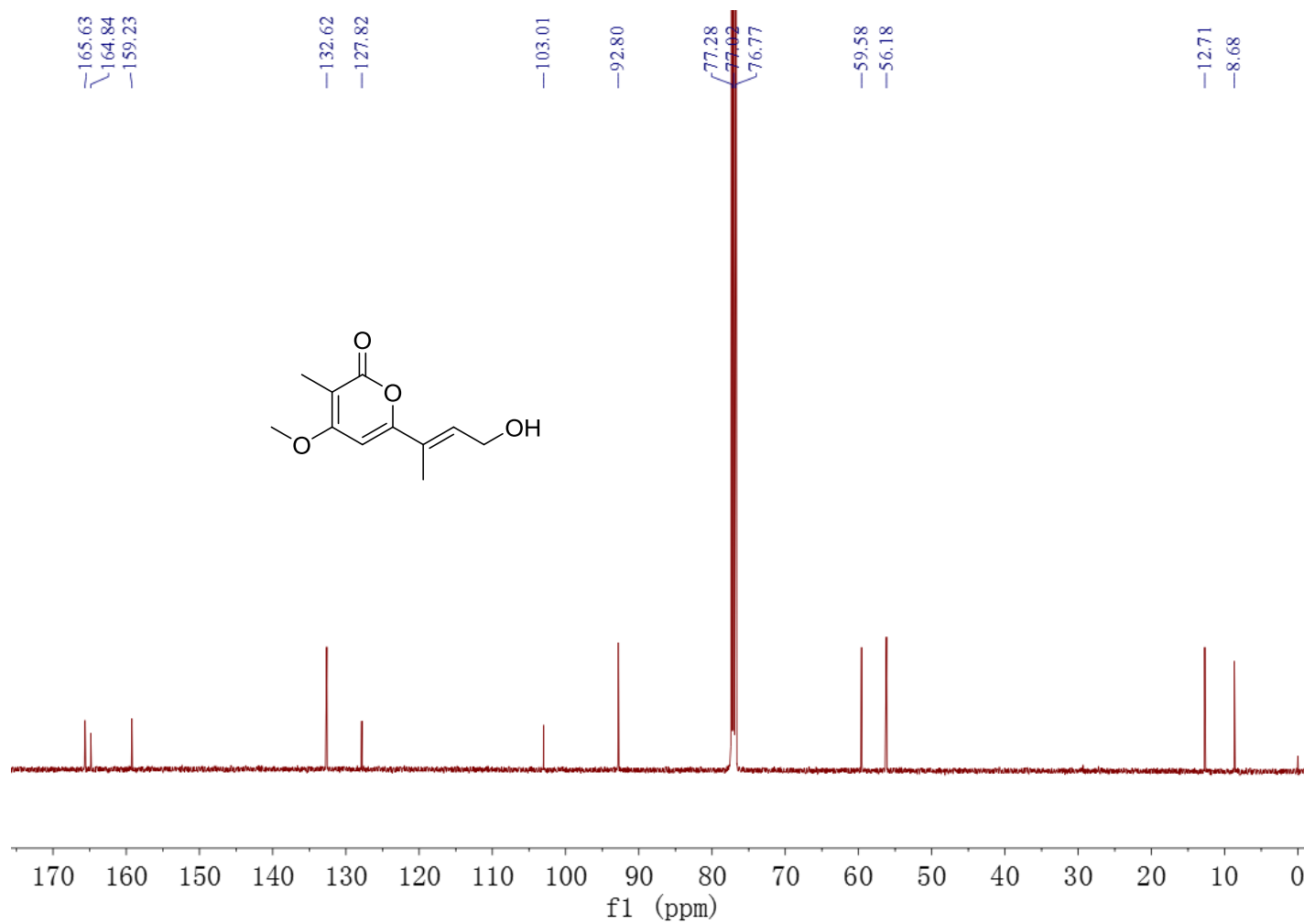


Figure S24. <sup>13</sup>C NMR spectrum (125 MHz, CDCl<sub>3</sub>) of **12**.