

Supplementary Information

Figure S1. ^1H NMR Spectrum (500 MHz) of compound **1** in CDCl_3 .

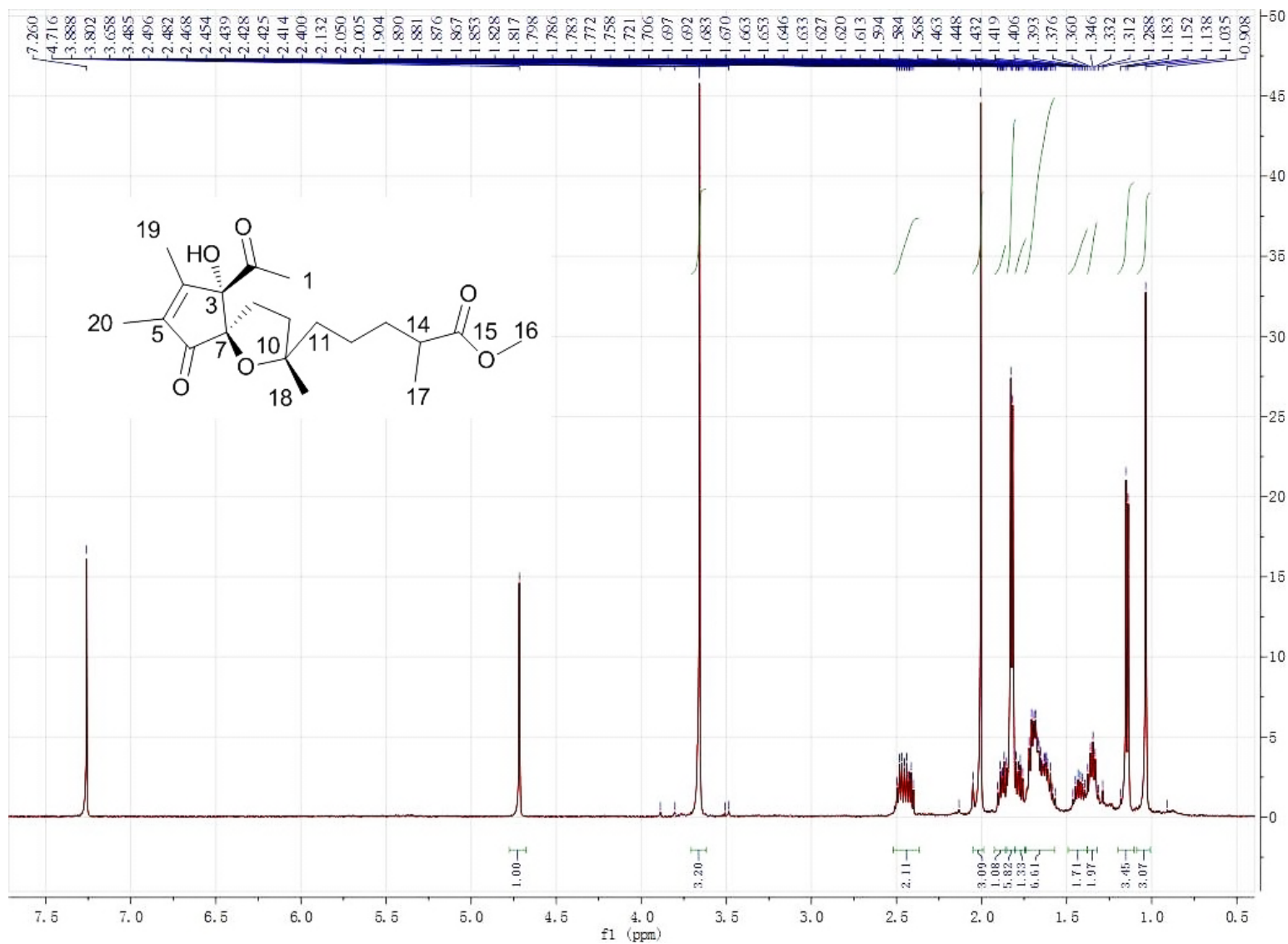


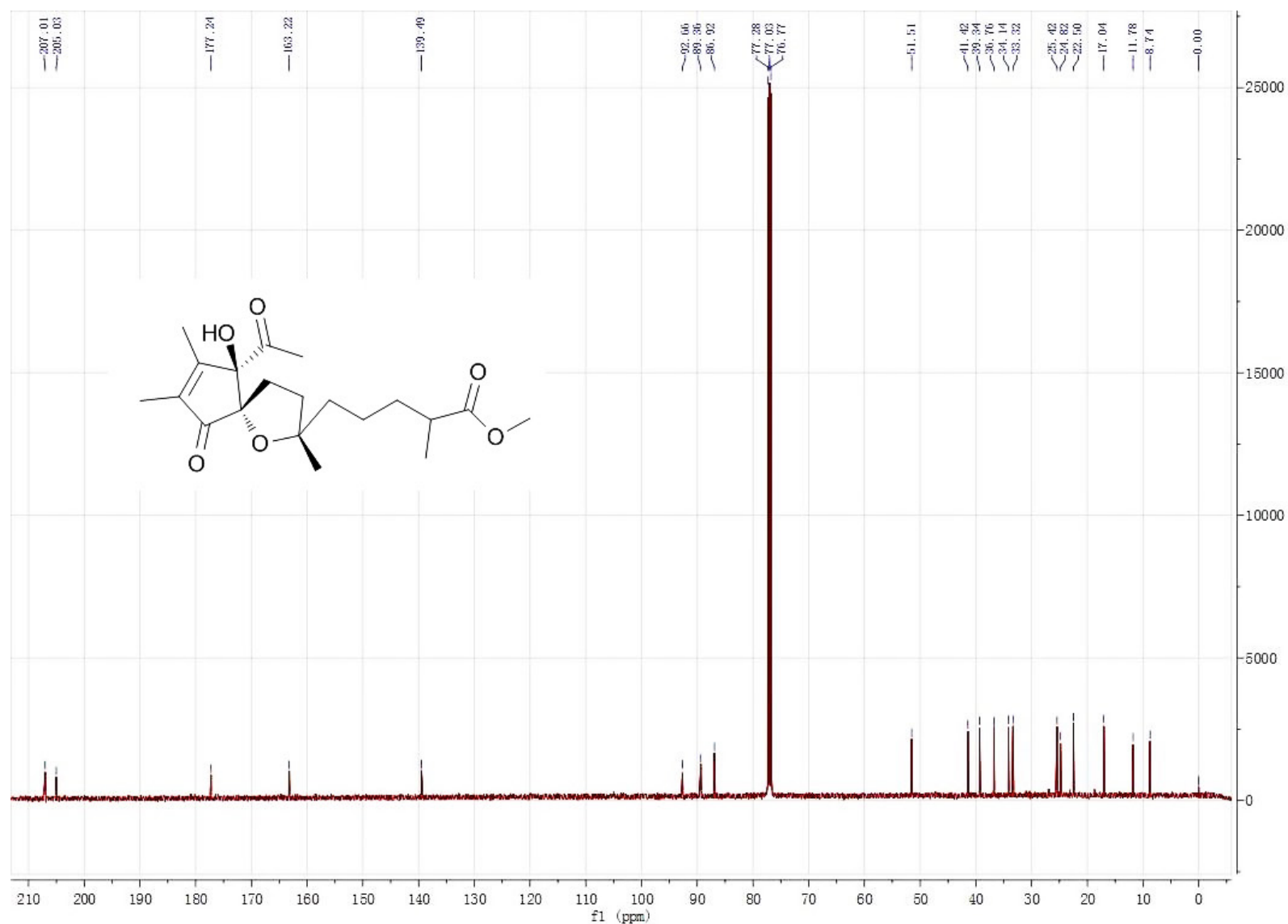
Figure S2. ^{13}C NMR Spectrum (125 MHz) of compound **1** in CDCl_3 .

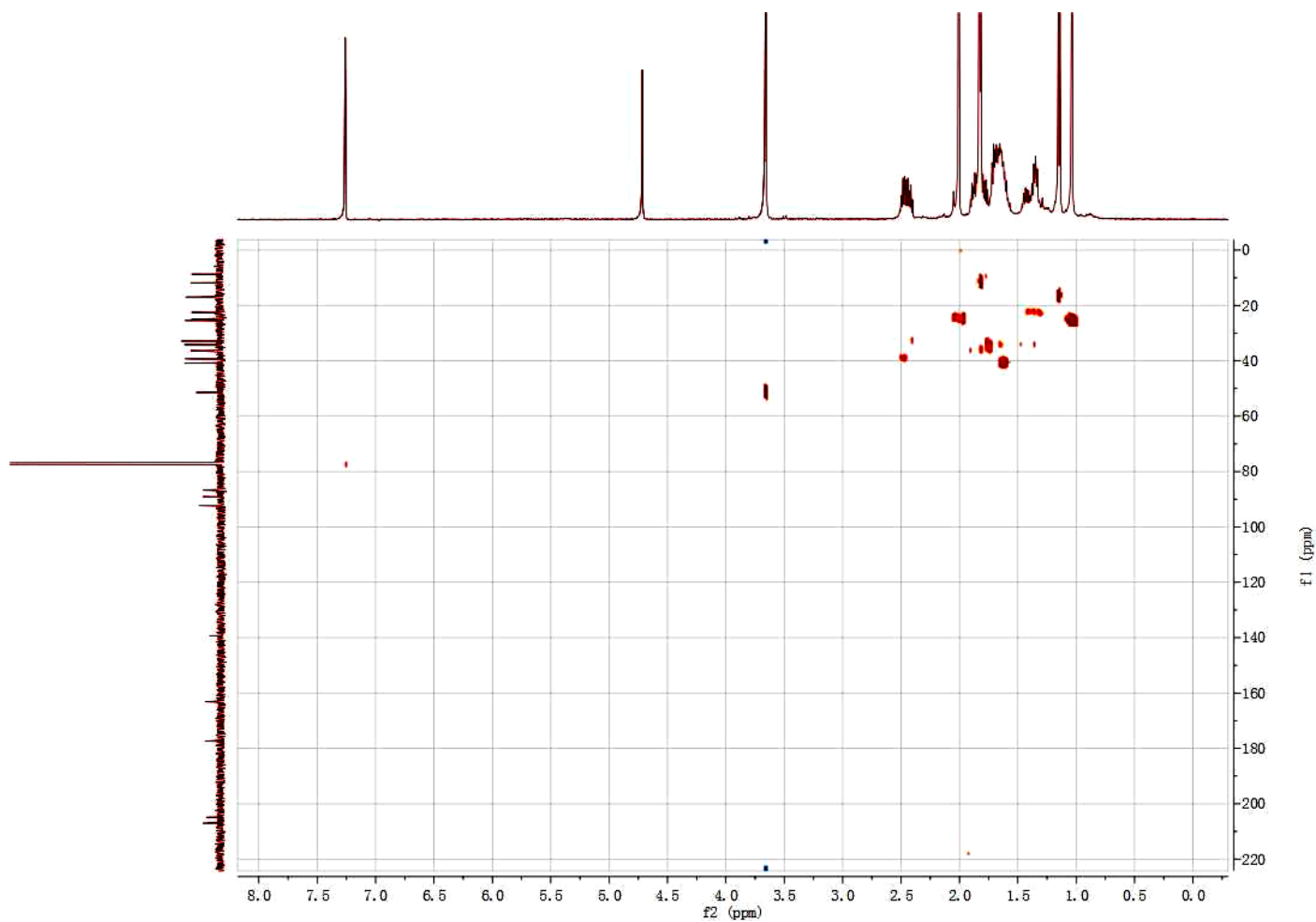
Figure S3.HSQC Spectrum of compound1 in CDCl₃.

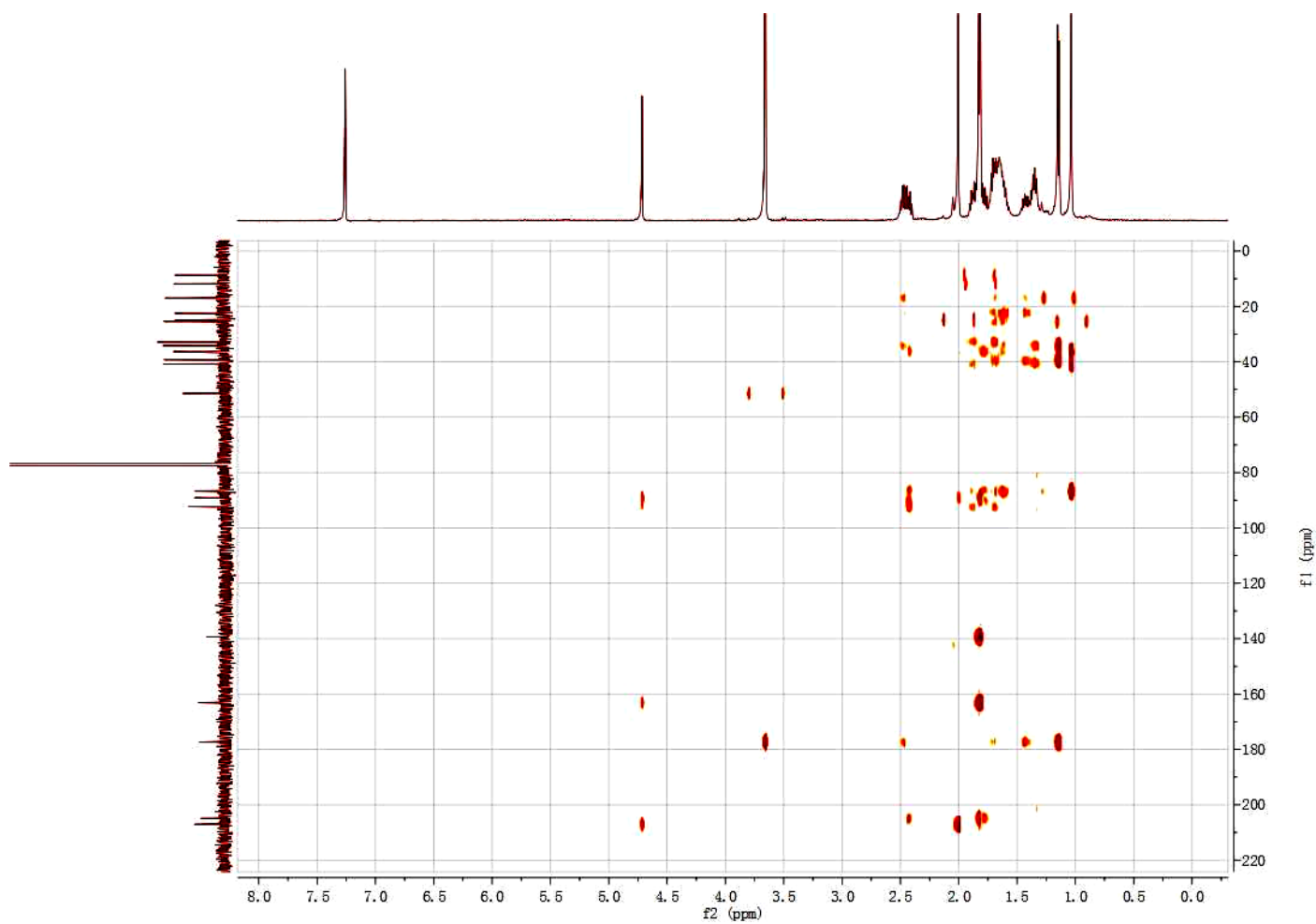
Figure S4. HMBC Spectrum of compound **1** in CDCl₃.

Figure S5.NOESY Spectrum of compound **1** in CDCl₃.

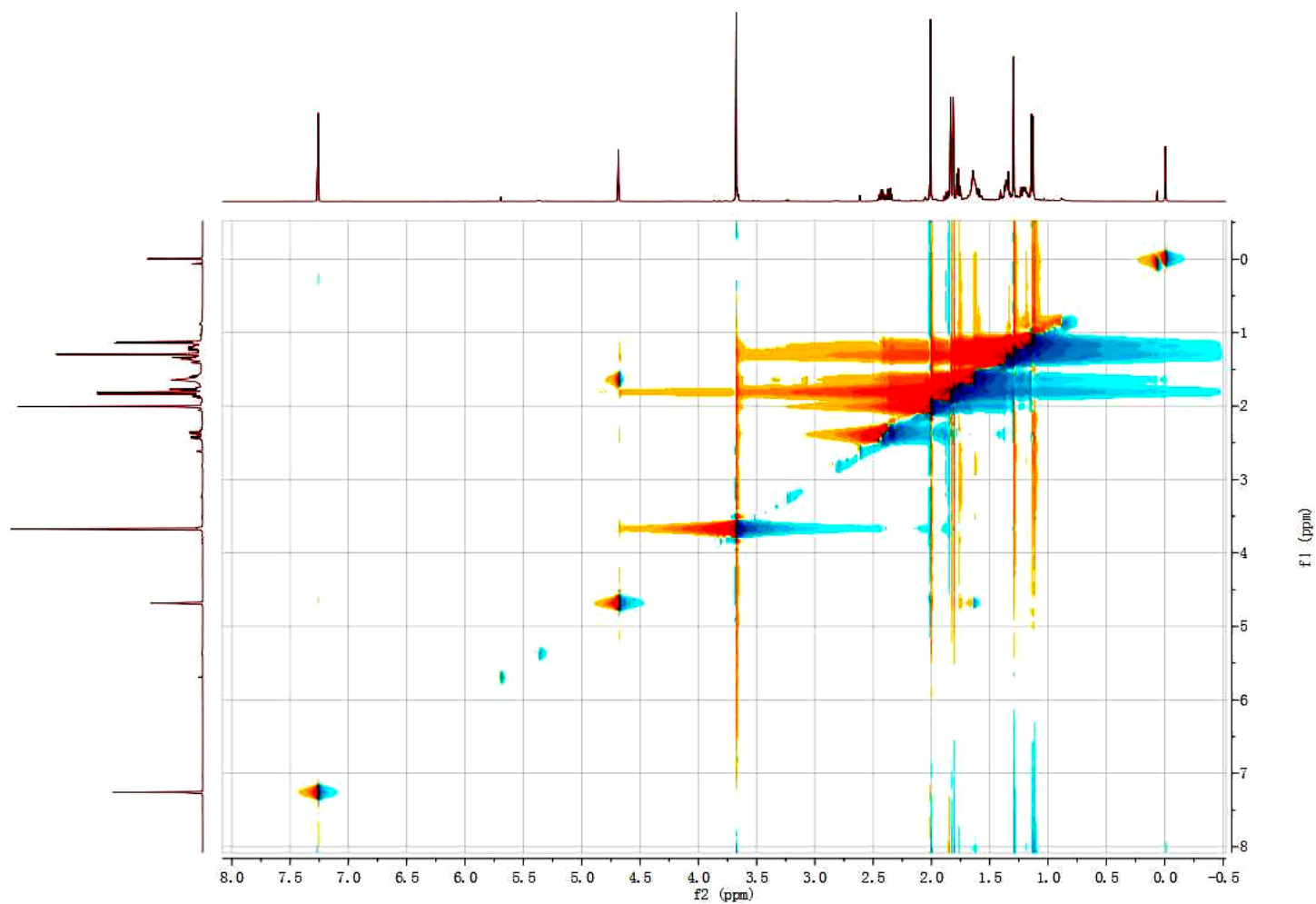


Figure S6. HRESIMS spectrum of compound 1.

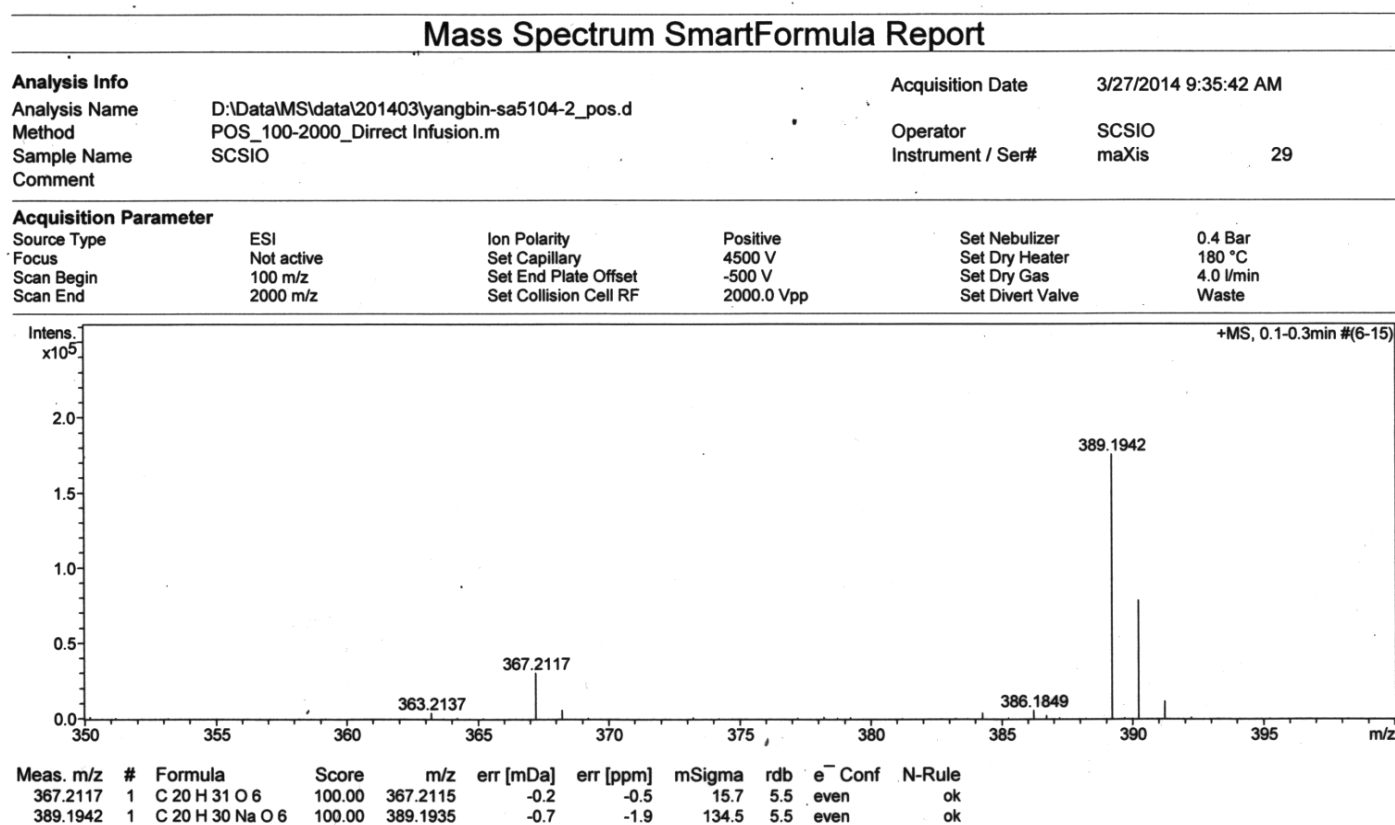


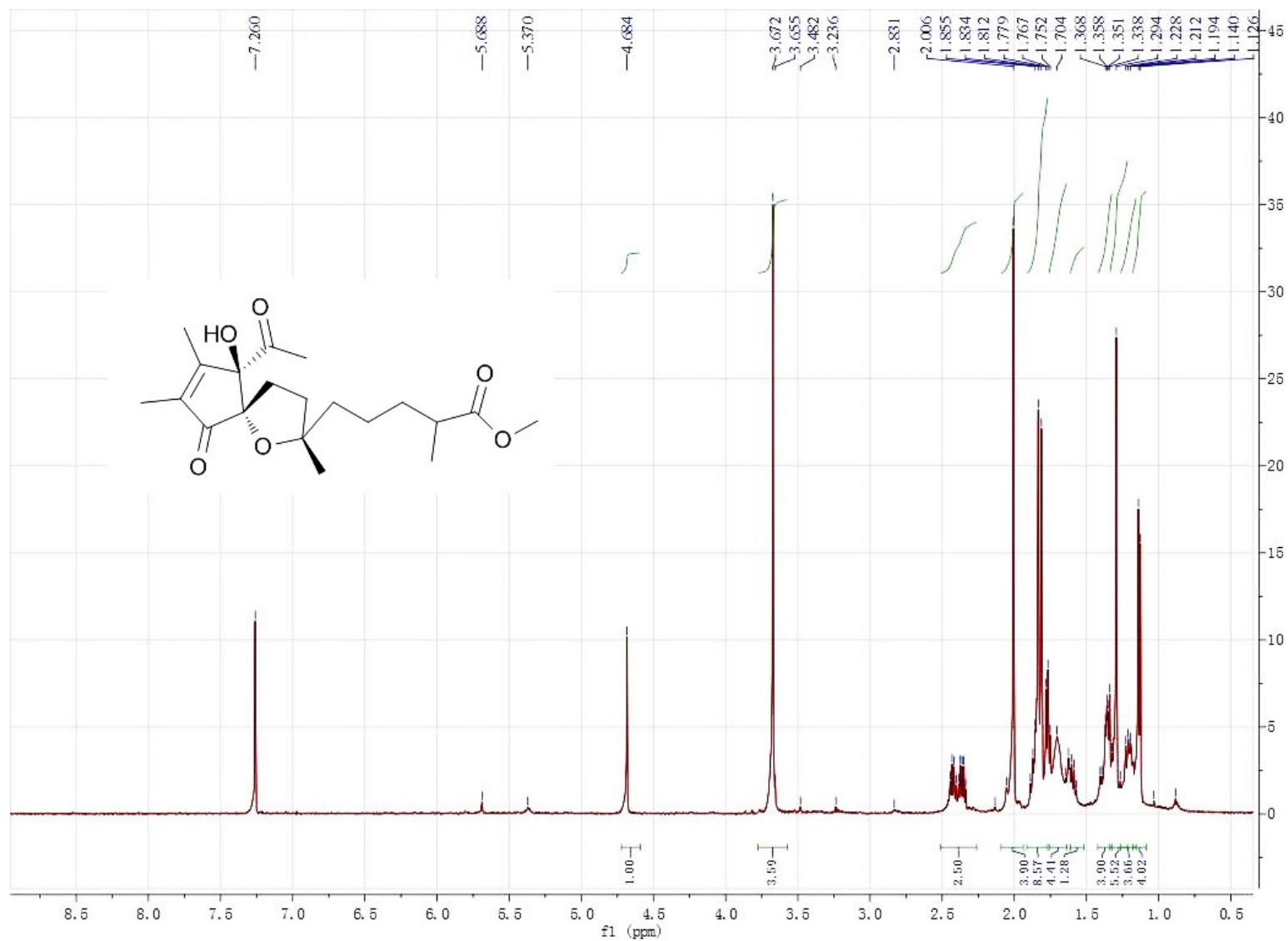
Figure S7. ^1H NMR Spectrum (500 MHz) of compound **2** in CDCl_3 .

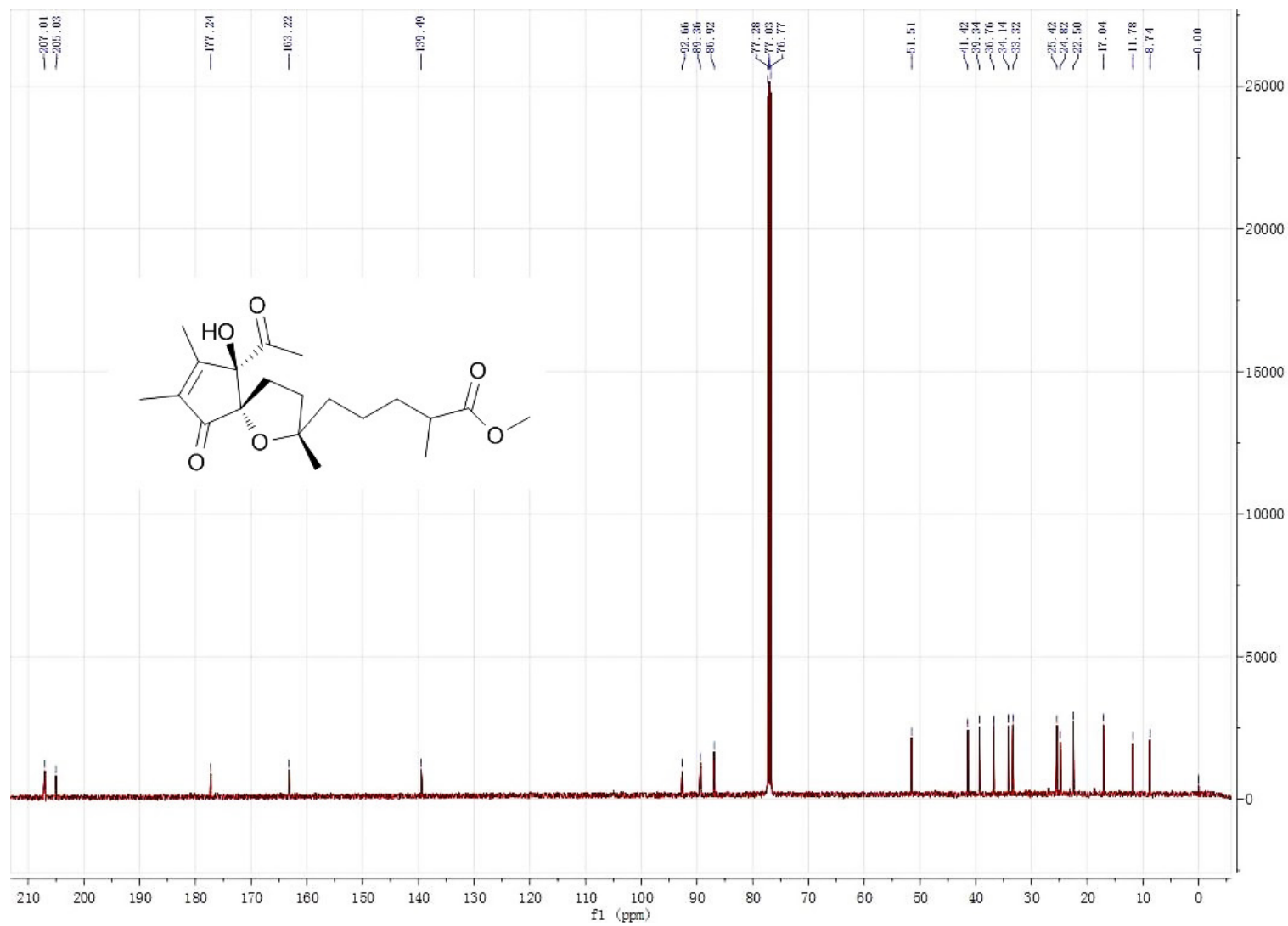
Figure S8. ^{13}C NMR Spectrum (125 MHz) of compound **2** in CDCl_3 .

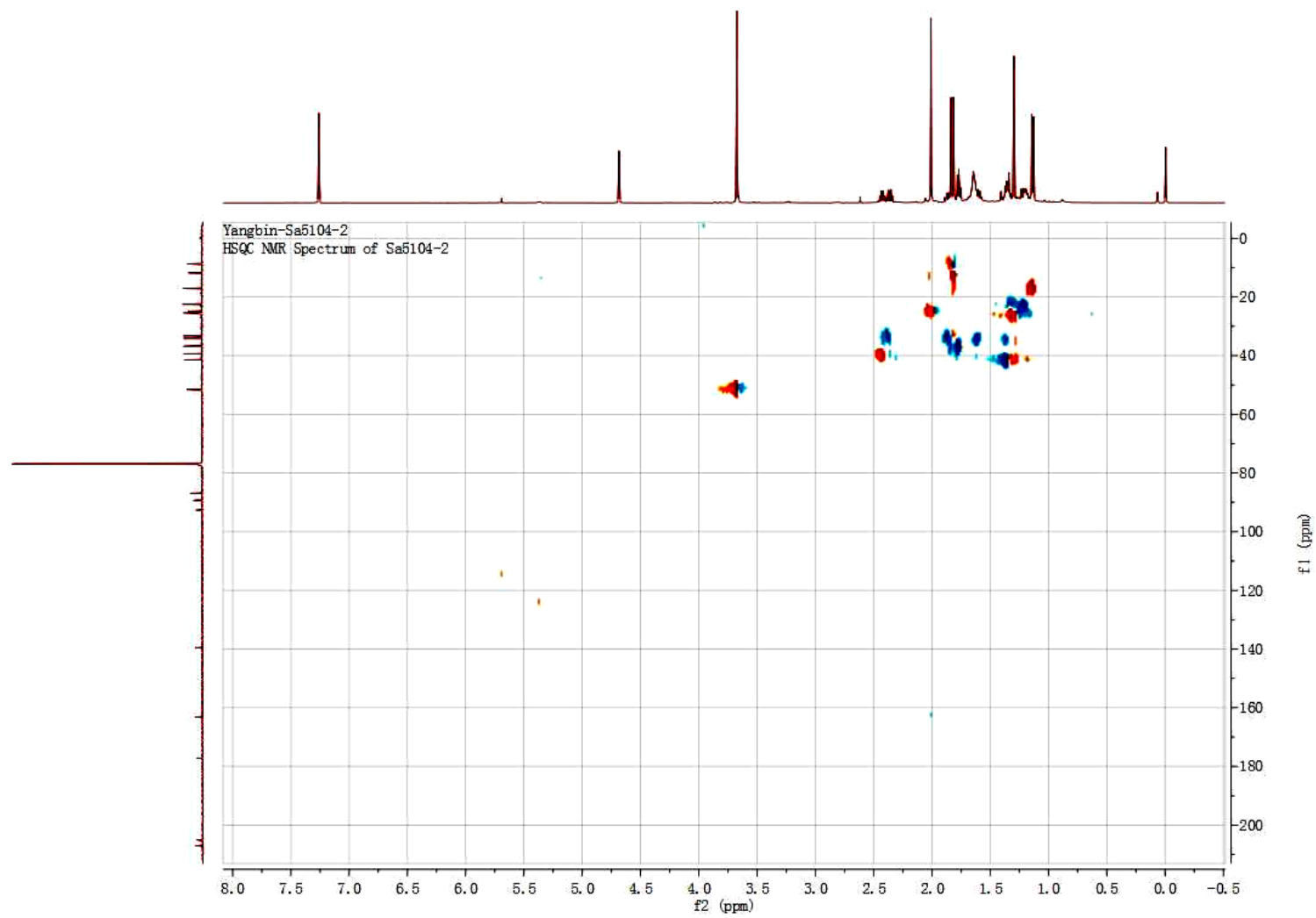
Figure S9. HSQC Spectrum of compound **2** in CDCl₃.

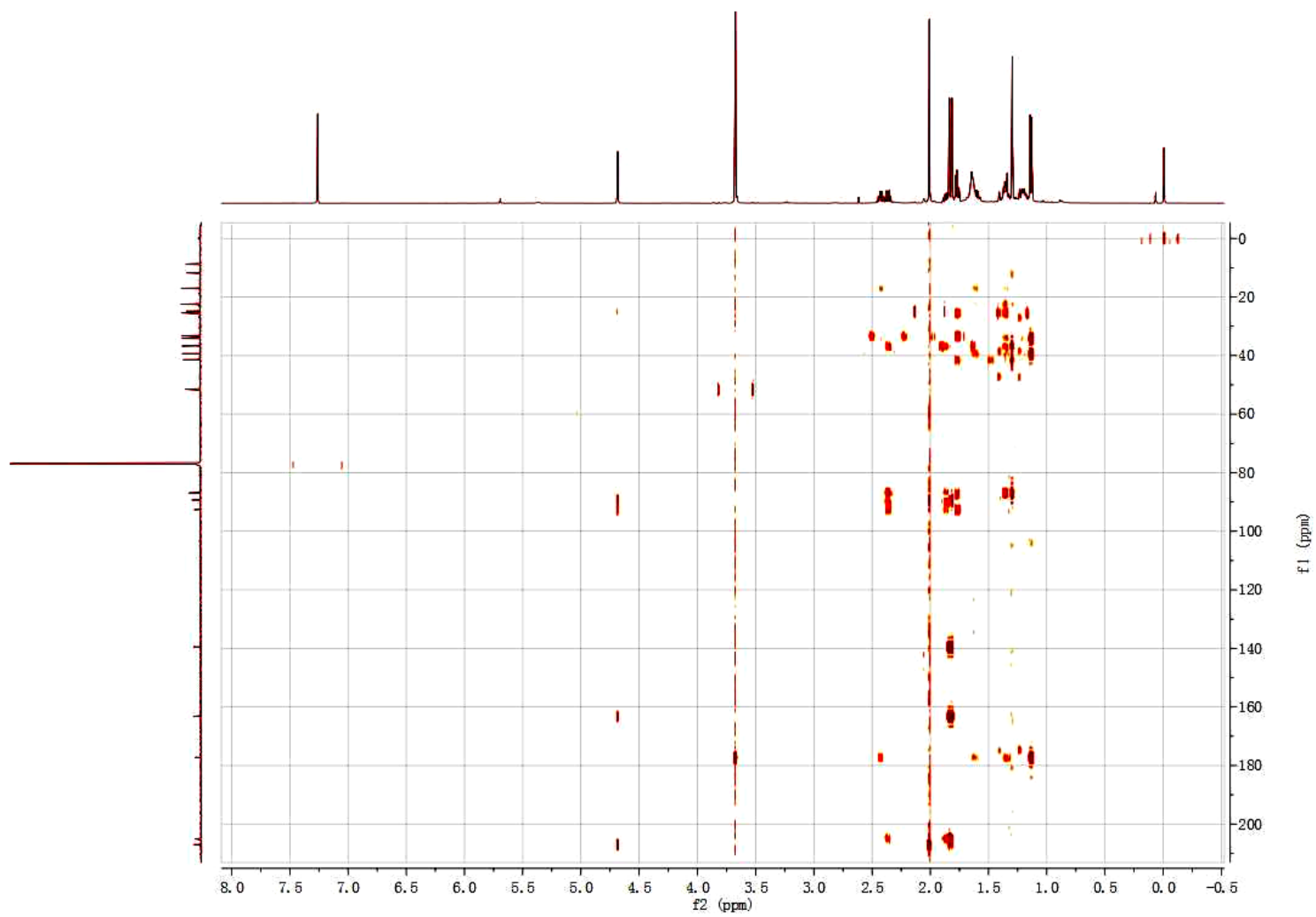
Figure S10. HMBC Spectrum of compound **2** in CDCl₃.

Figure S11. ESIMS Spectrum of compound 2.

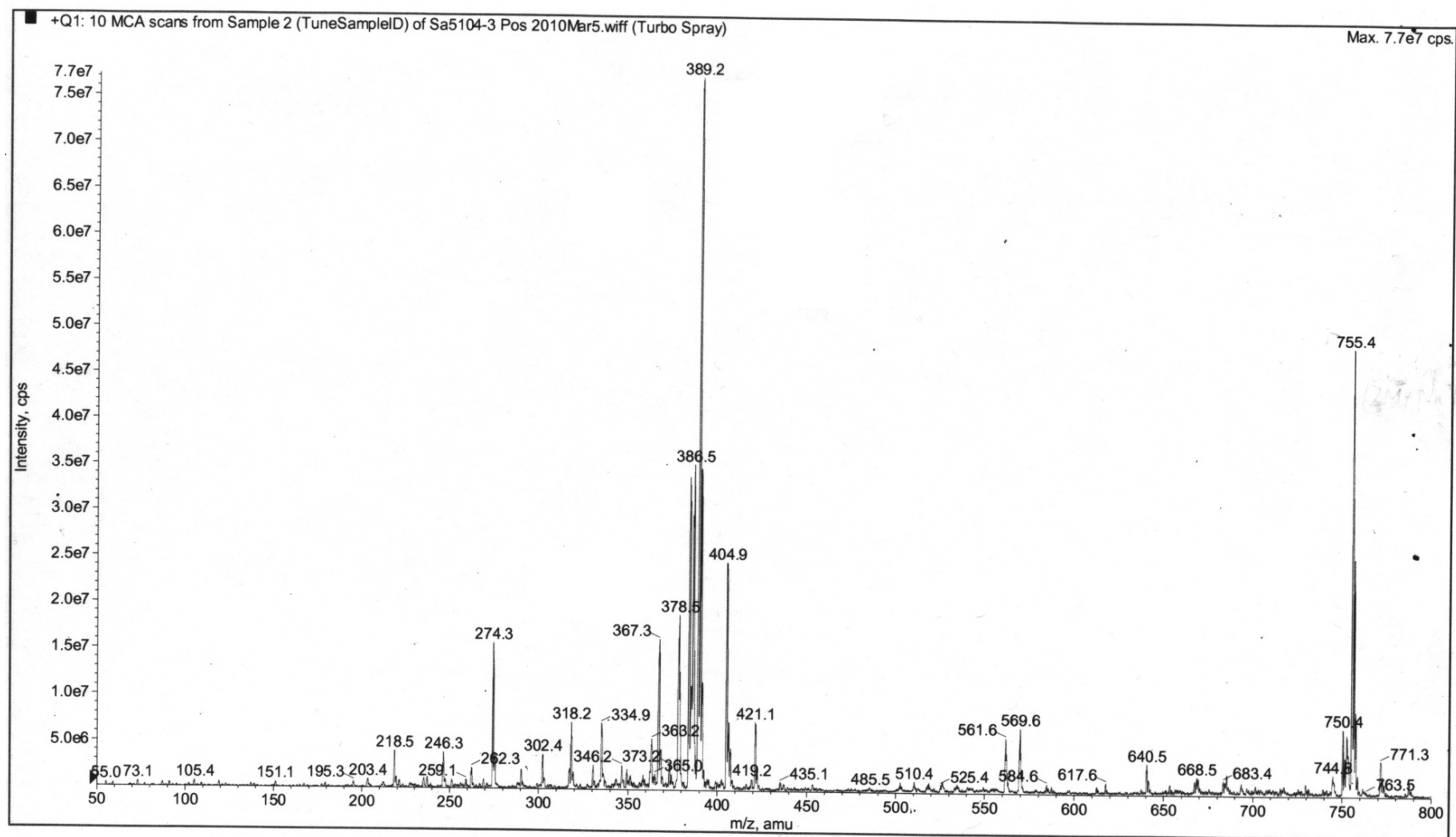


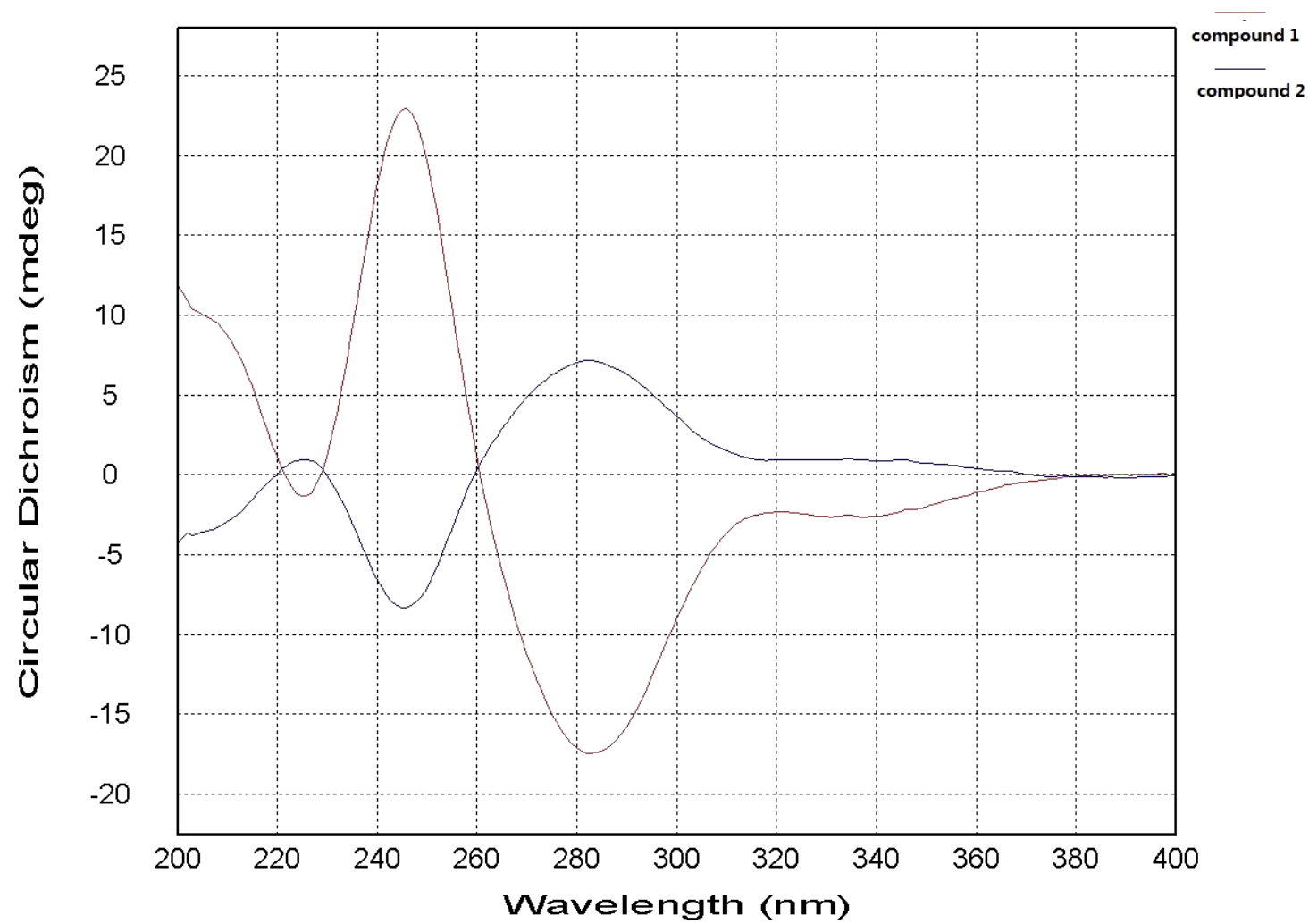
Figure S12. CD Spectrum of compound 1 and 2.

Table S1. Relative and free energies ^a and equilibrium populations ^b of low-energy conformers of **1** and **2** in MeOH.

Conformer	ΔE	ΔG	P (%)
Compound 1 (3 <i>S</i> ,7 <i>R</i> ,10 <i>S</i>)			
1a	0.0	0.0	32.8
1b	0.017	0.170	24.5
1c	0.021	0.332	18.6
1d	0.170	0.397	16.6
1e	1.046	0.966	6.2
1f ^c	1.064	1.908	1.2
Compound 2 (3 <i>S</i> ,7 <i>R</i> ,10 <i>R</i>)			
2a	0.00	0.00	32.6
2b	0.118	0.165	24.6
2c	0.411	0.196	23.3
2d	0.573	0.439	15.3
2e	0.938	1.192	4.2

^a B3LYP/6-311+G(d,p), in kcal/mol; ^b From ΔG values at 298.15 K; ^c Conformer not used for ECD/TDDFT calculations.

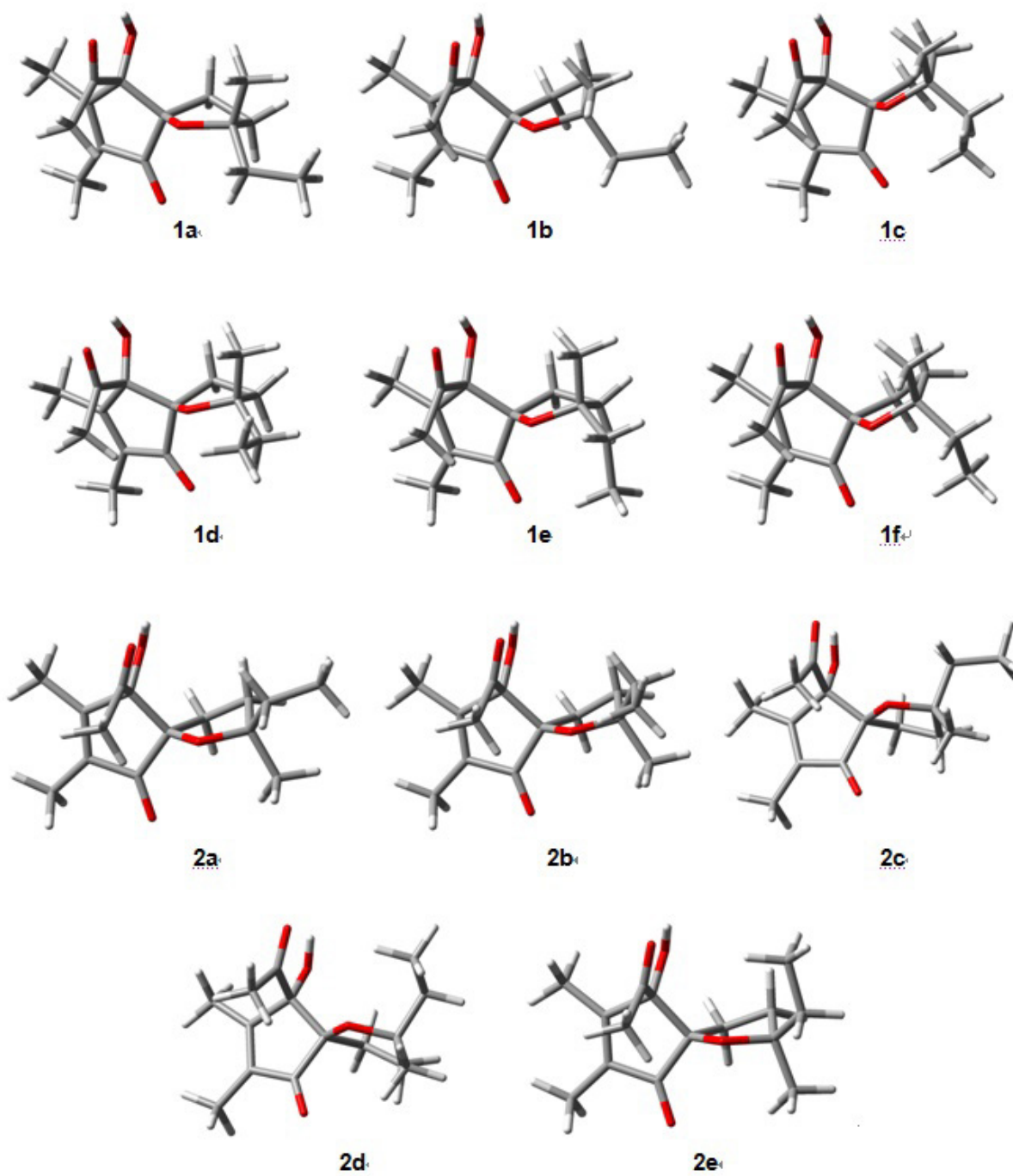
Figure S13. Conformations of low-energy conformers of **1** and **2**.

Figure S14. Calculated ECD Spectrum for the low-energy conformers of **1**. Vertical bars represent rotational strengths R . $\sigma = 0.30$ eV, shift = ± 0 nm.

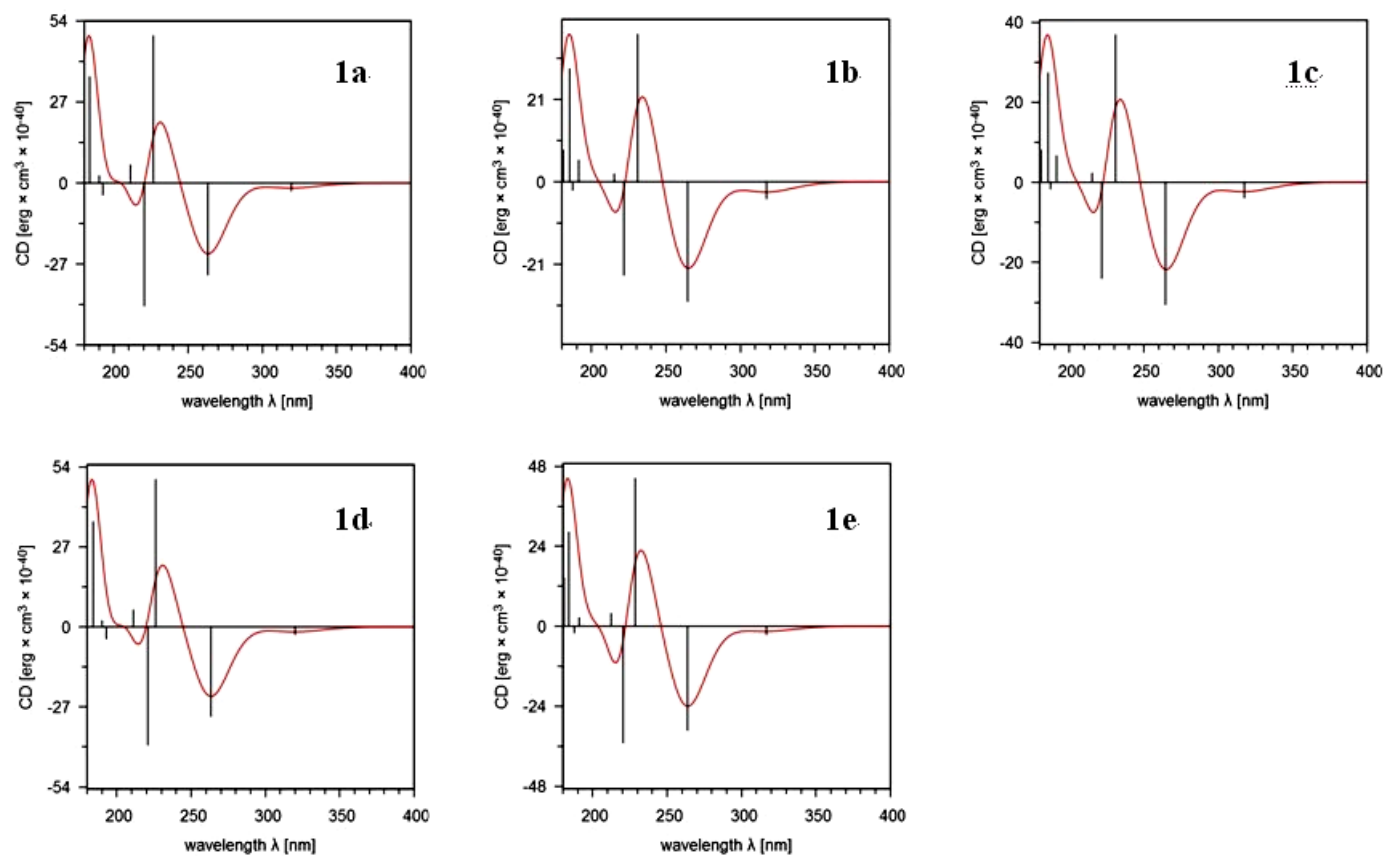


Figure S15. Calculated ECD Spectrum for the low-energy conformers of **2**. Vertical bars represent rotational strengths R . $\sigma = 0.30$ eV, shift = ± 0 nm.

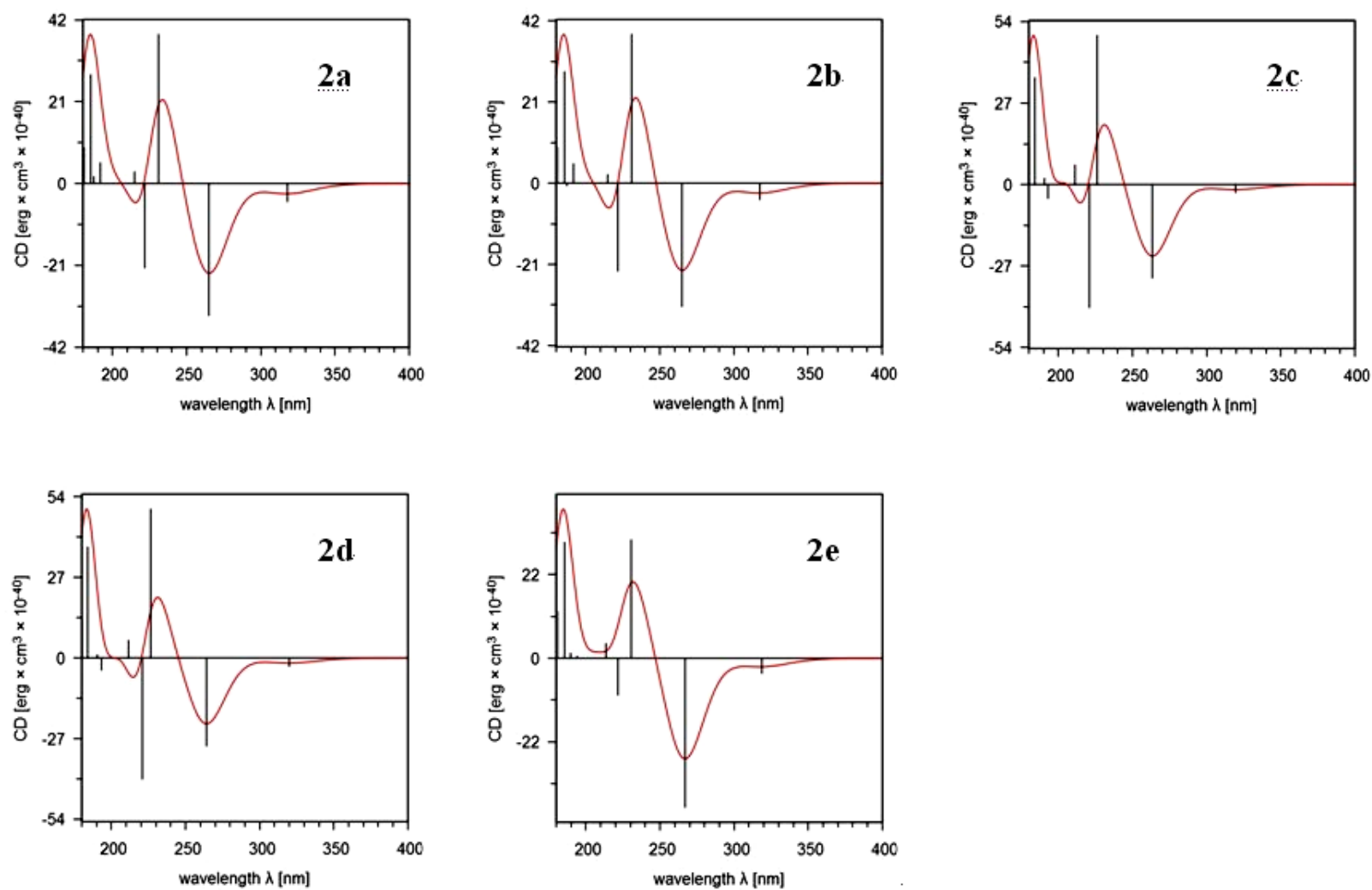


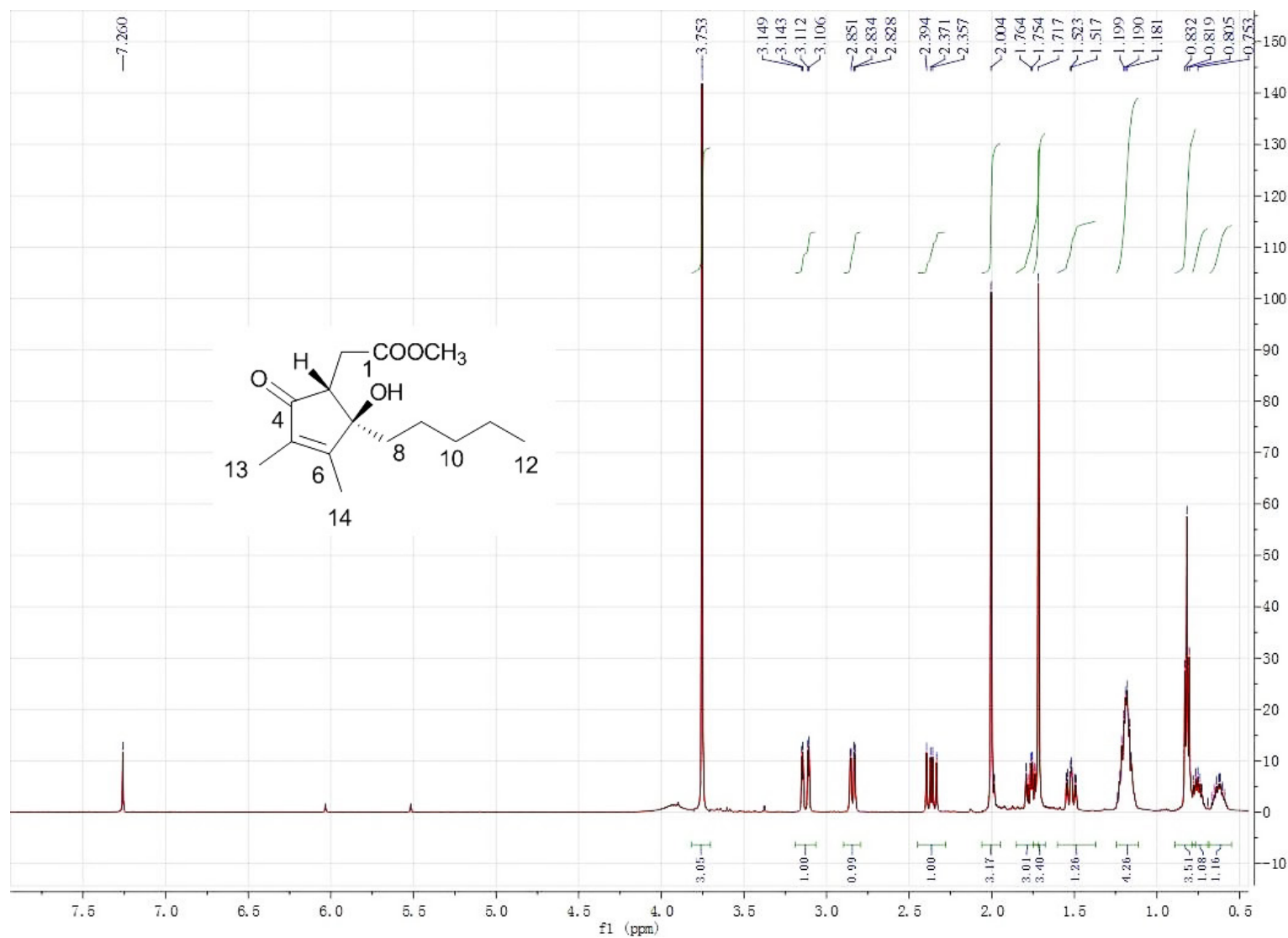
Figure S16. ^1H NMR Spectrum (500 MHz) of compound **3** in CDCl_3 .

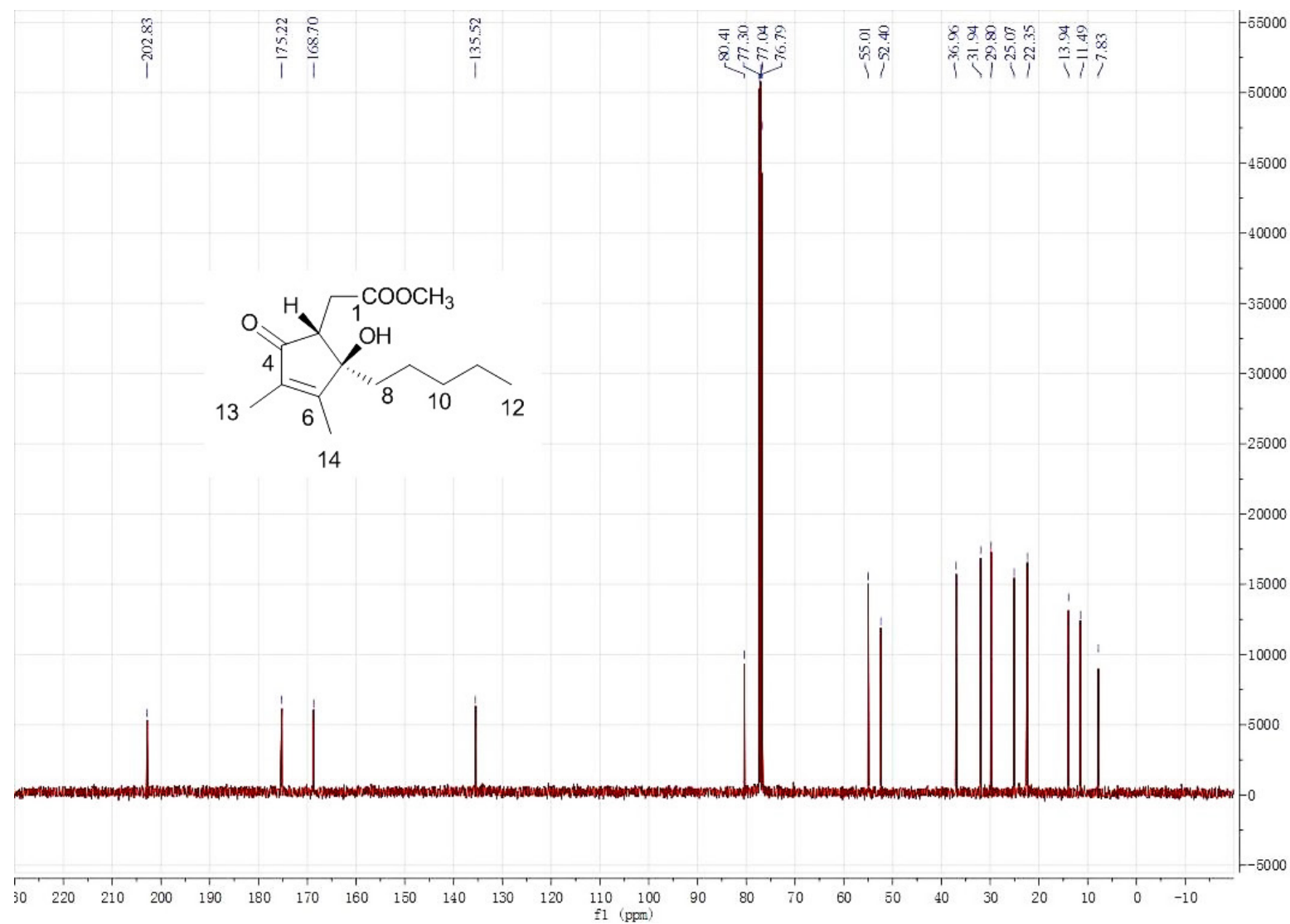
Figure S17. ^{13}C NMR Spectrum (125 MHz) of compound **3** in CDCl_3 .

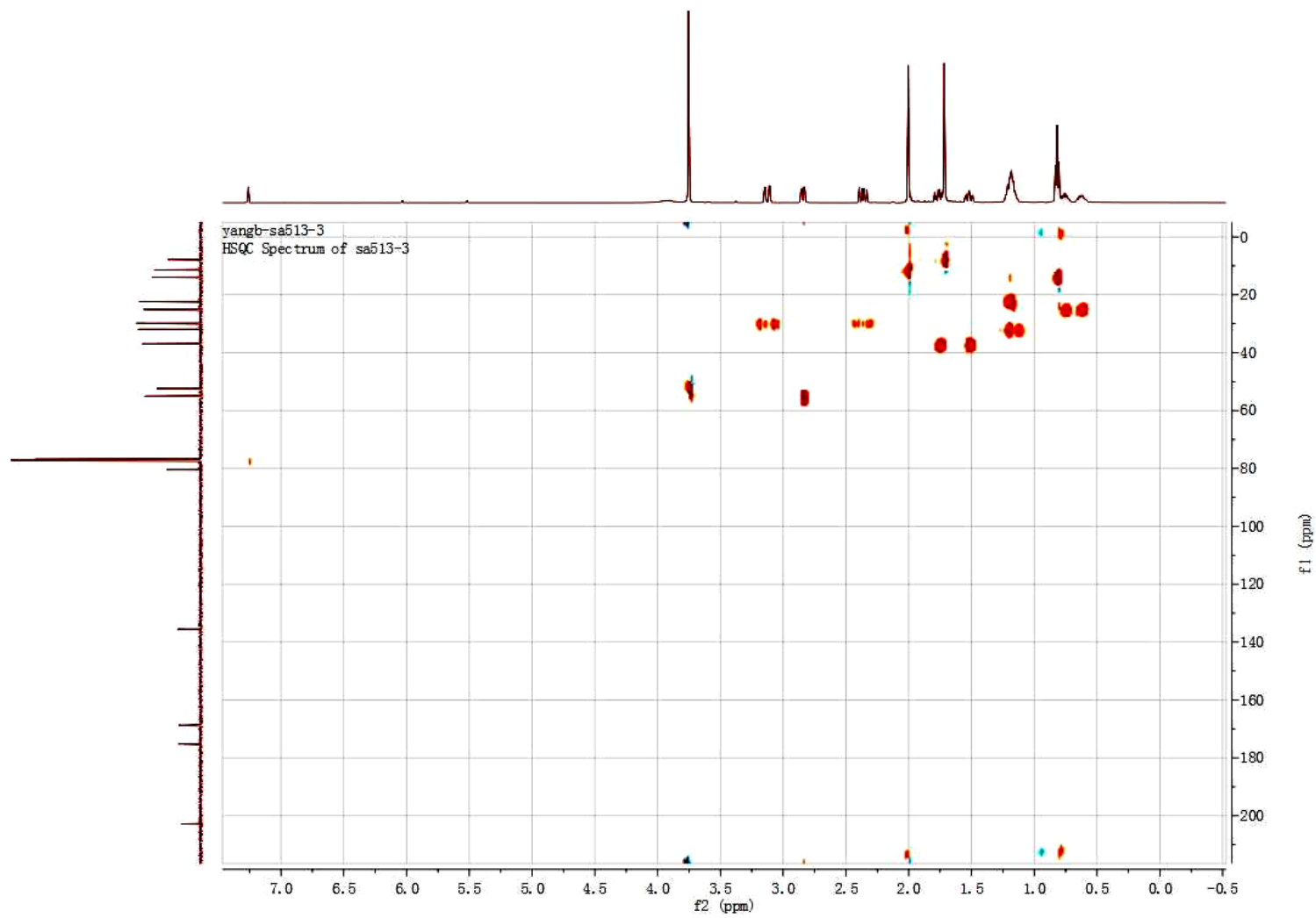
Figure S18. HSQC Spectrum of compound **3** in CDCl₃.

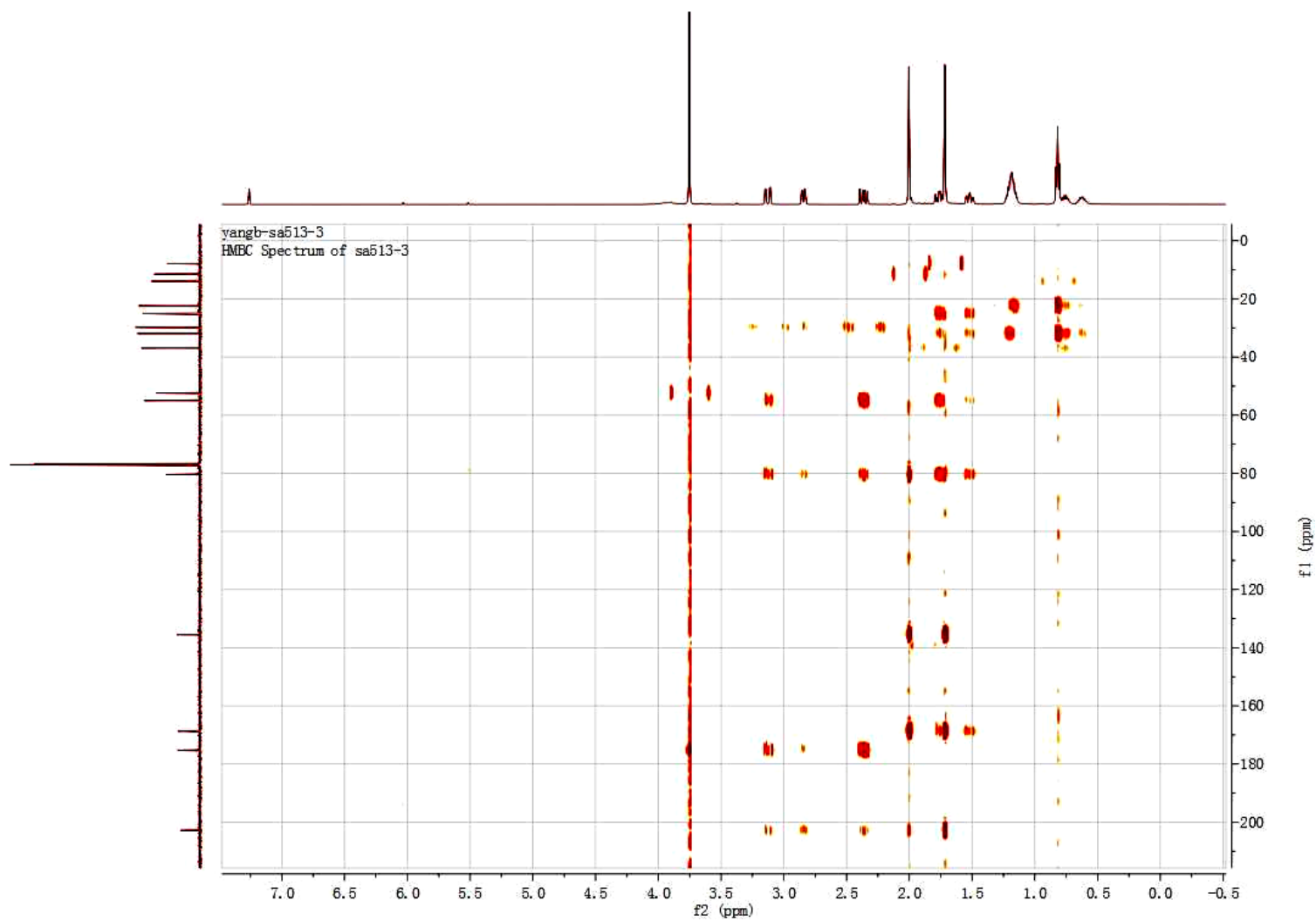
Figure S19. HMBC Spectrum of compound **3** in CDCl₃.

Figure S20. ESIMS spectrum of compound 3.

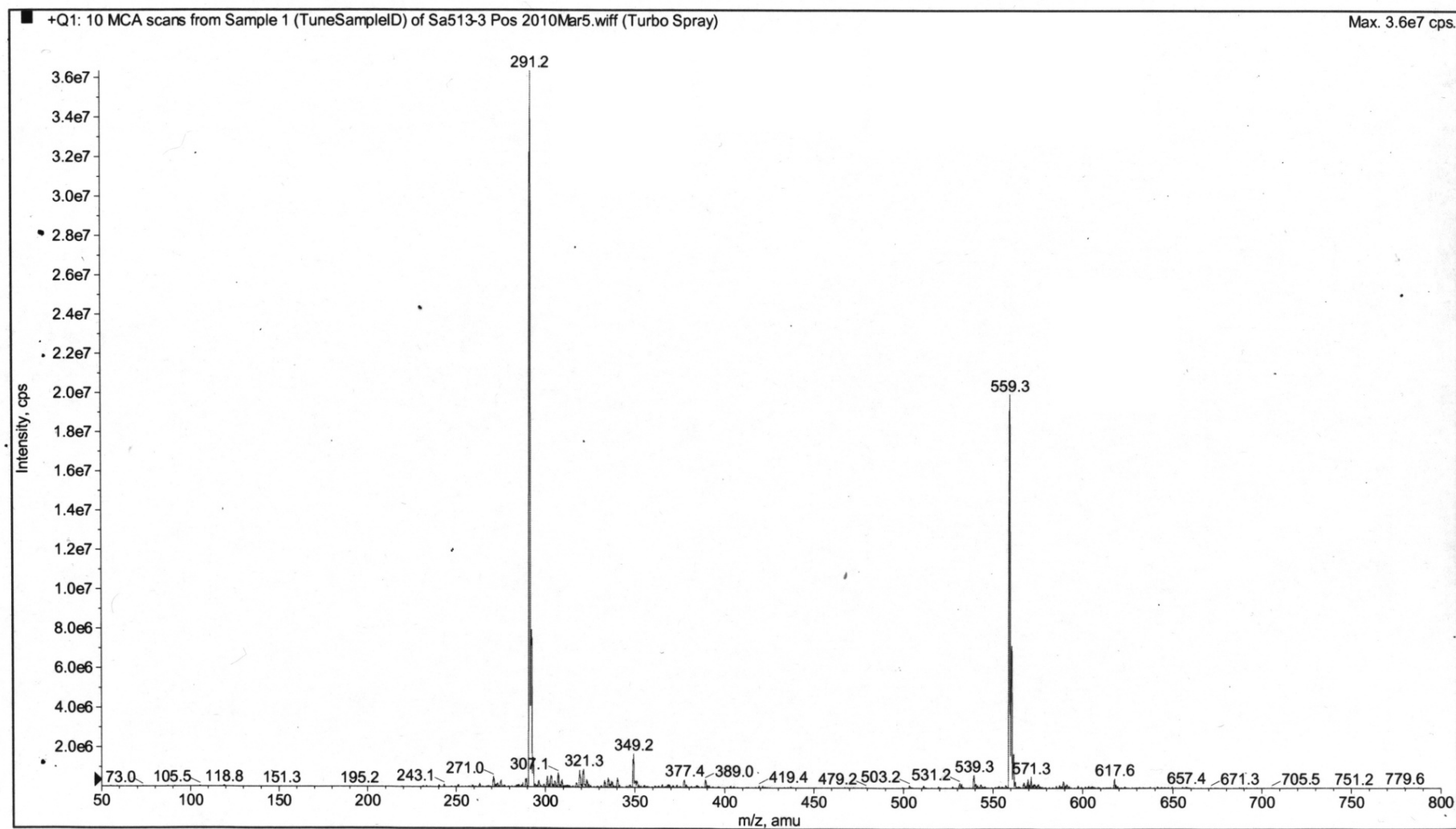


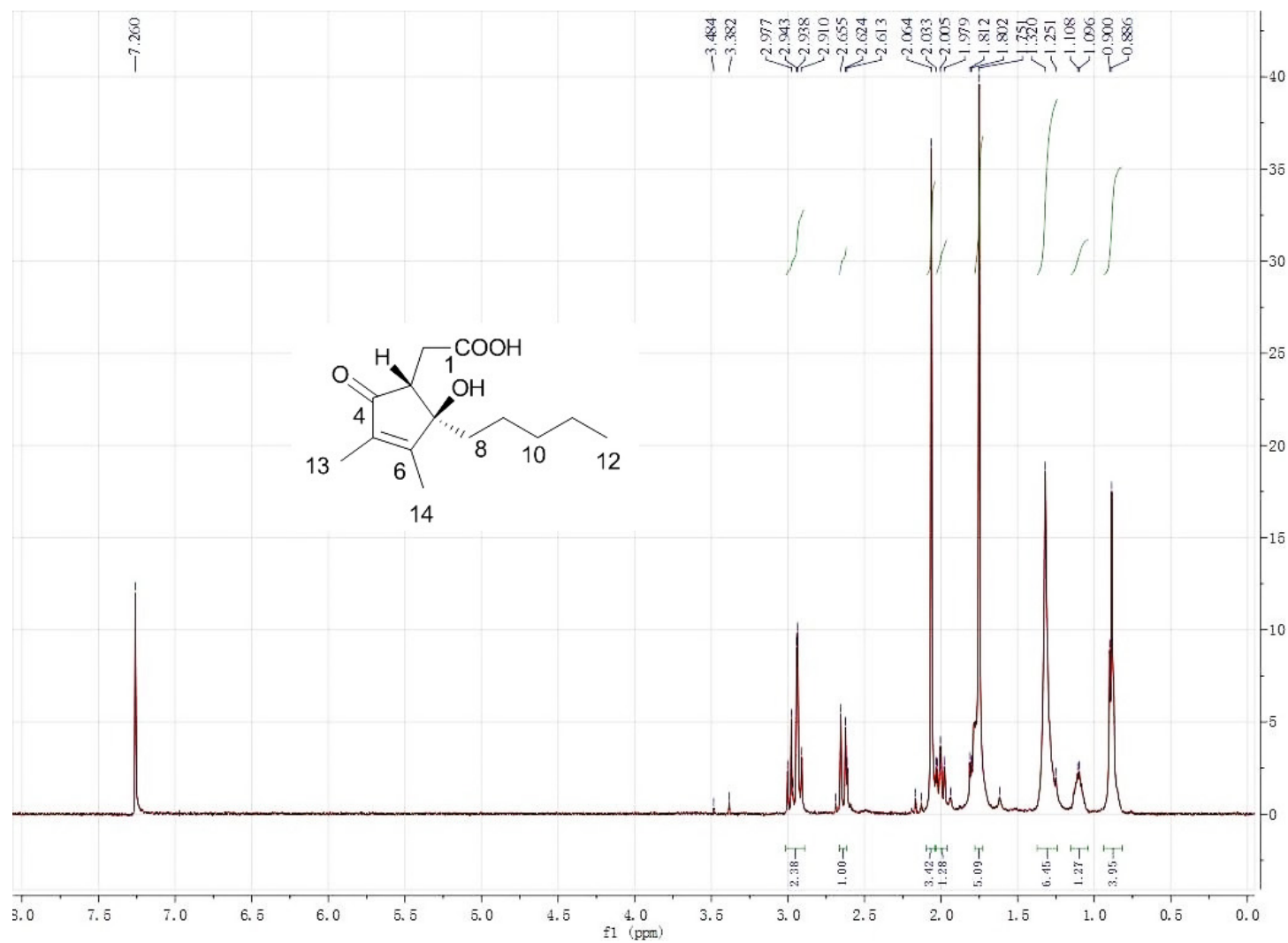
Figure S21. ^1H NMR Spectrum (500 MHz) of compound **4** in CDCl_3 .

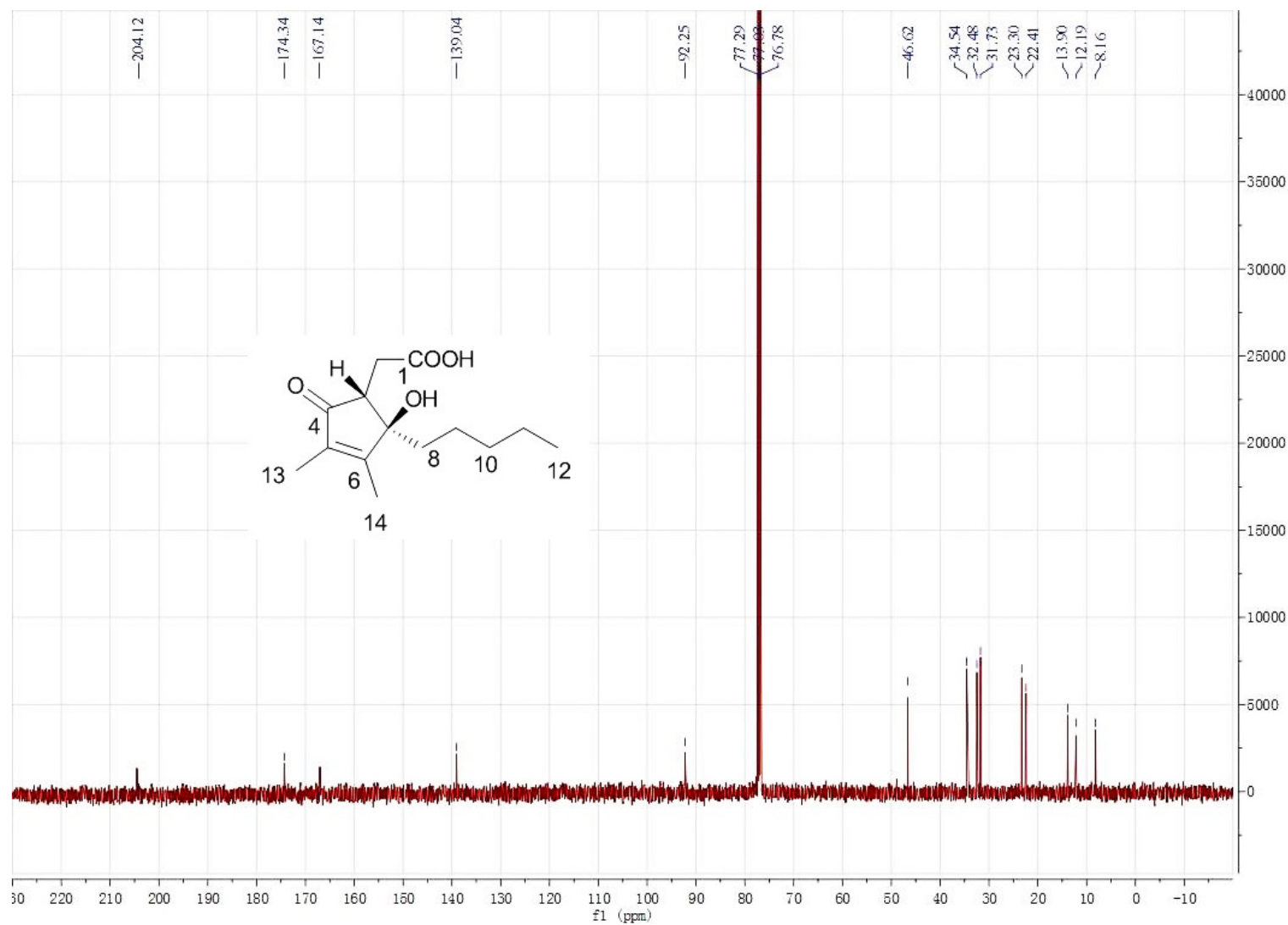
Figure S22. ^{13}C NMR Spectrum (125 MHz) of compound **4** in CDCl_3 .

Figure S23. ESIMS spectrum of compound 4.

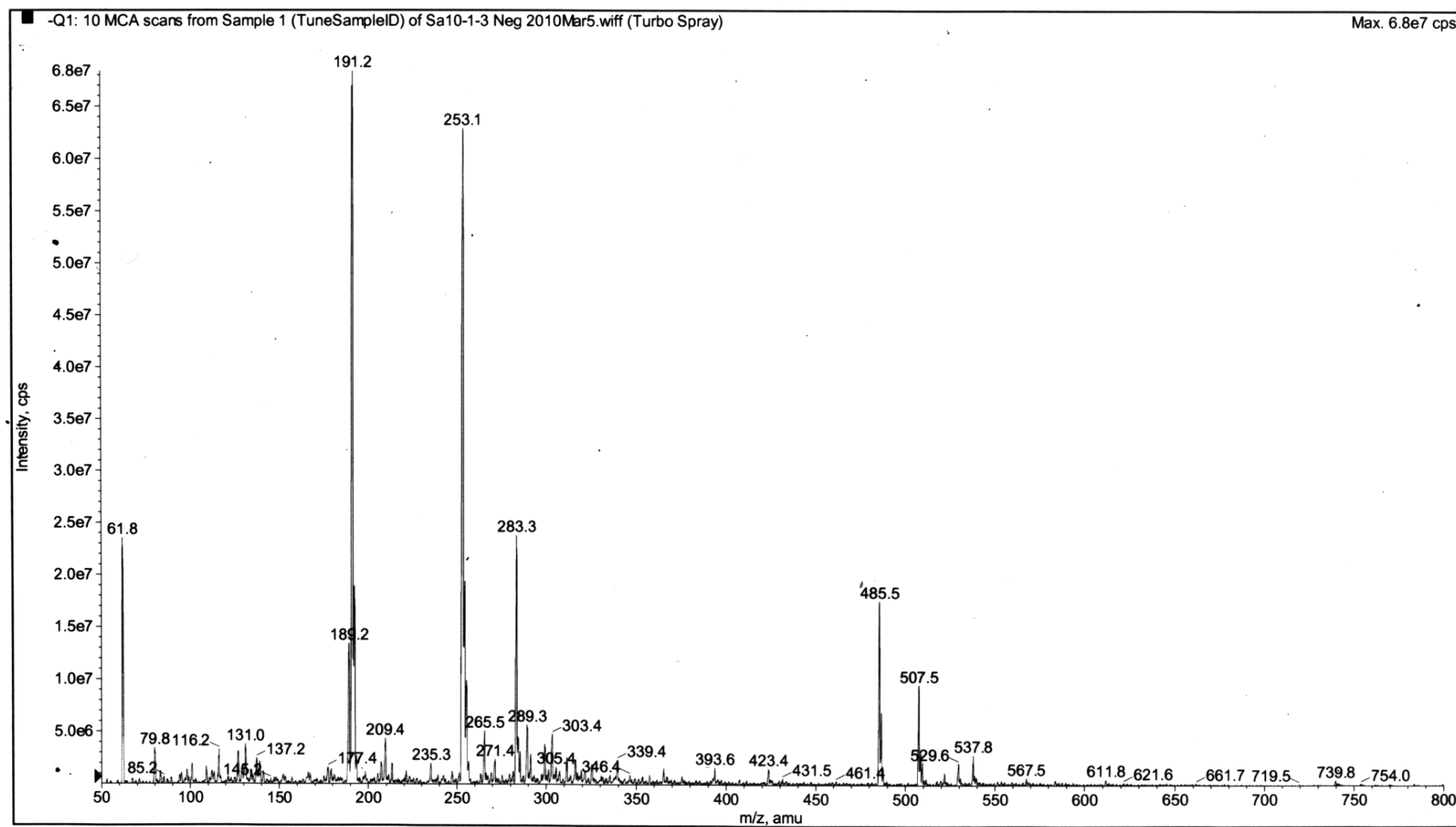


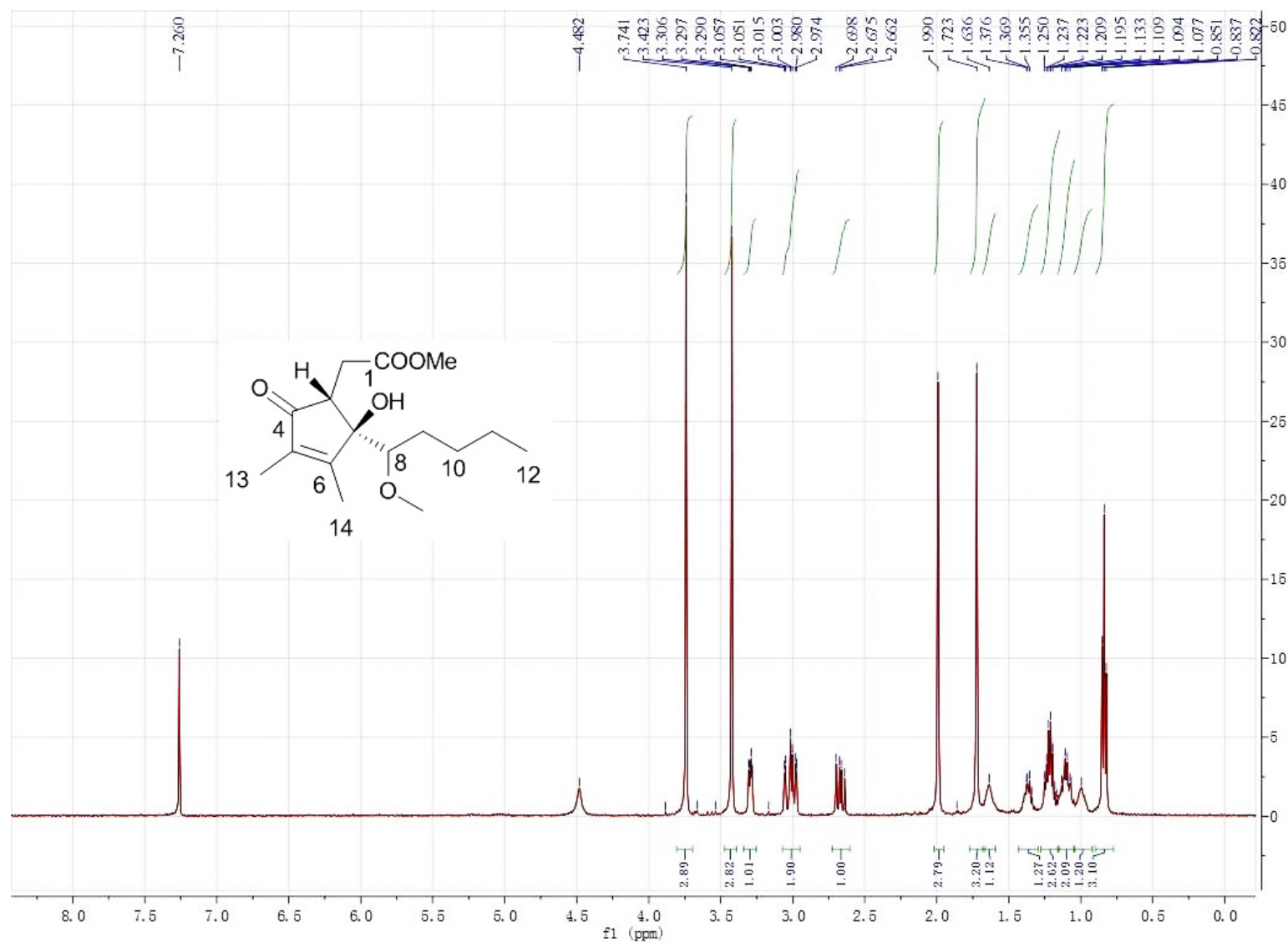
Figure S24. ^1H NMR Spectrum (500 MHz) of compound **5** in CDCl_3 .

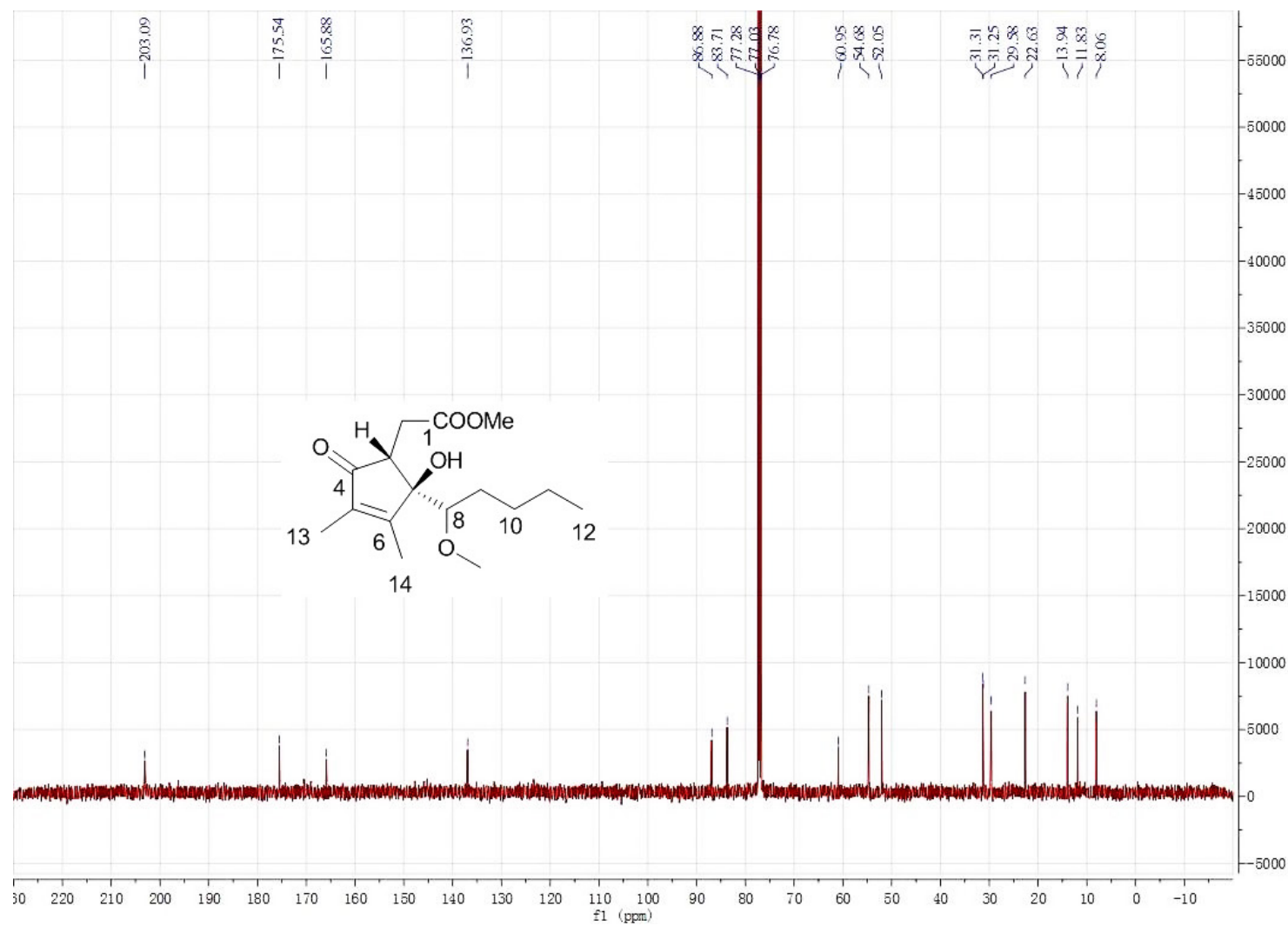
Figure S25. ^{13}C NMR Spectrum (125 MHz) of compound **5** in CDCl_3 .

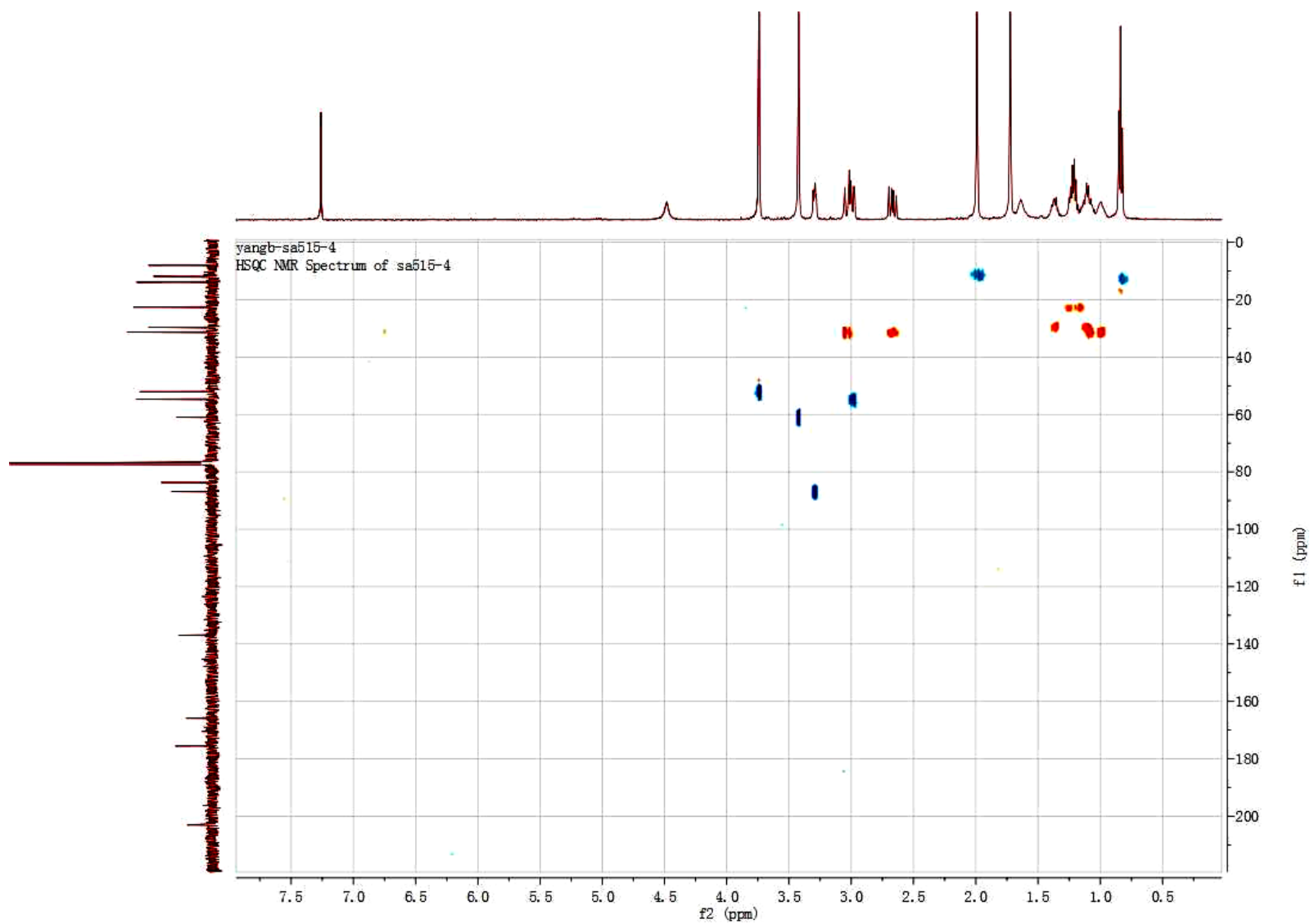
Figure S26. HSQC Spectrum of compound **5** in CDCl₃.

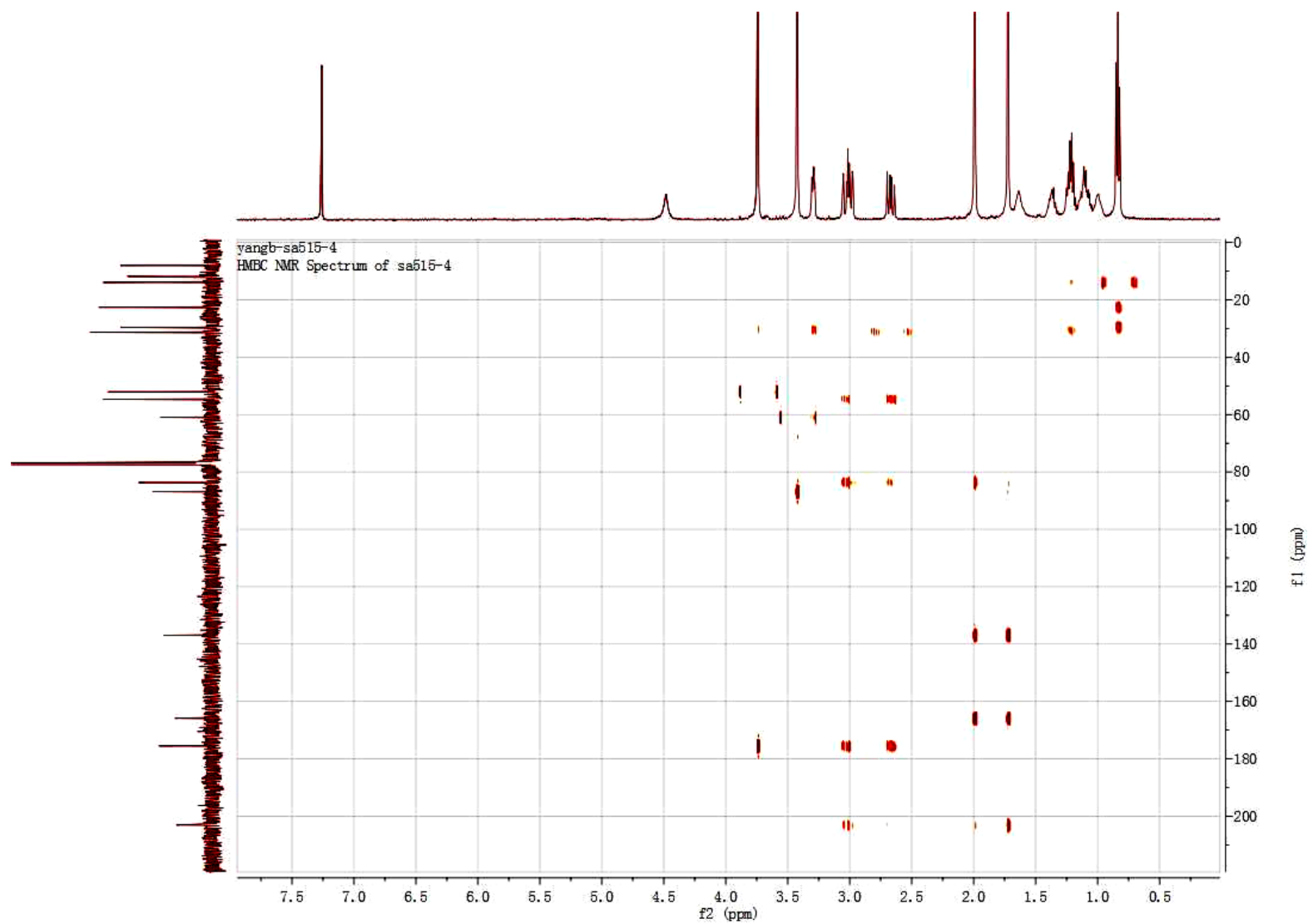
Figure S27. HMBC Spectrum of compound **5** in CDCl₃.

Figure S28. ESIMS spectrum of compound 5.

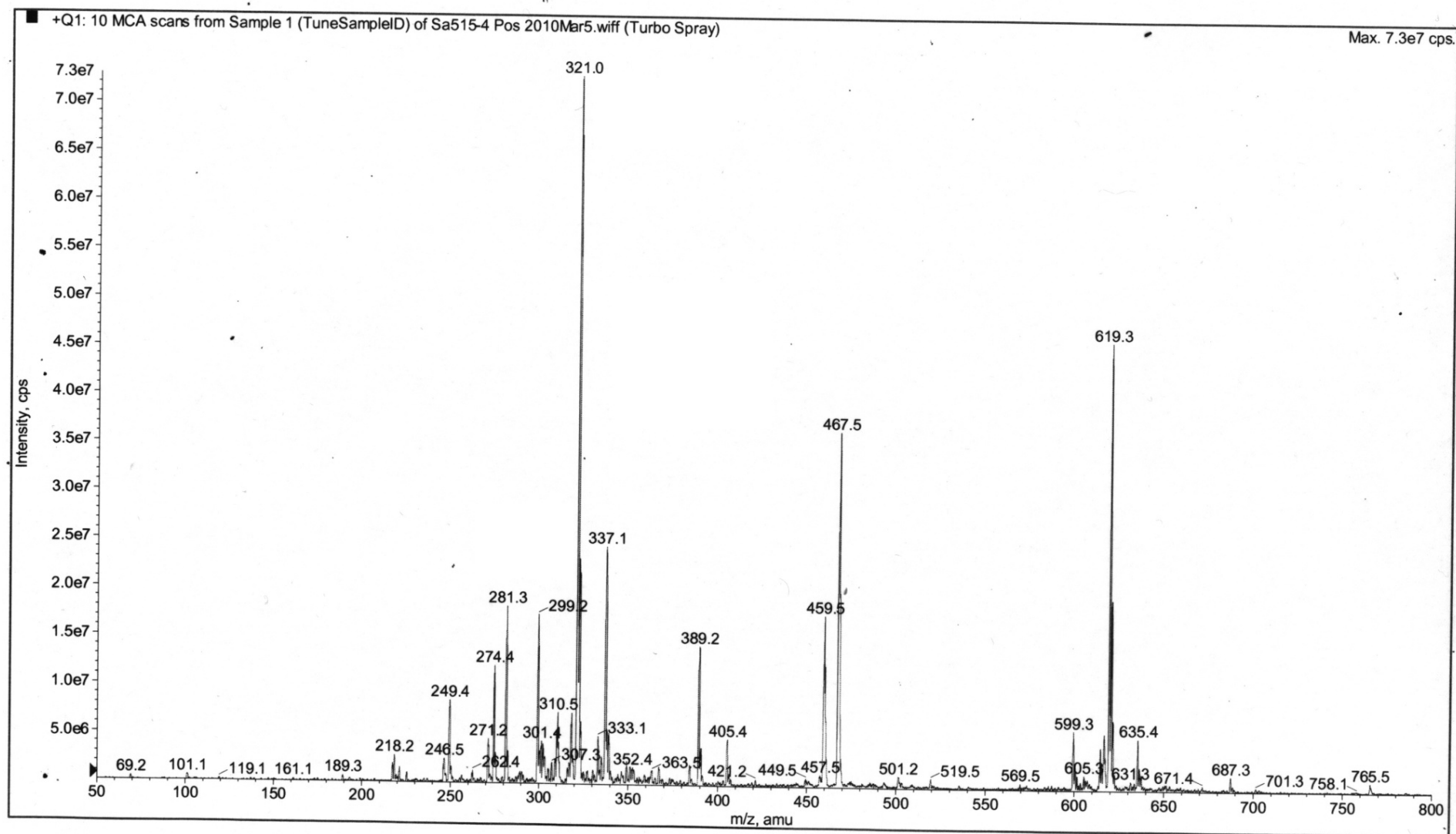


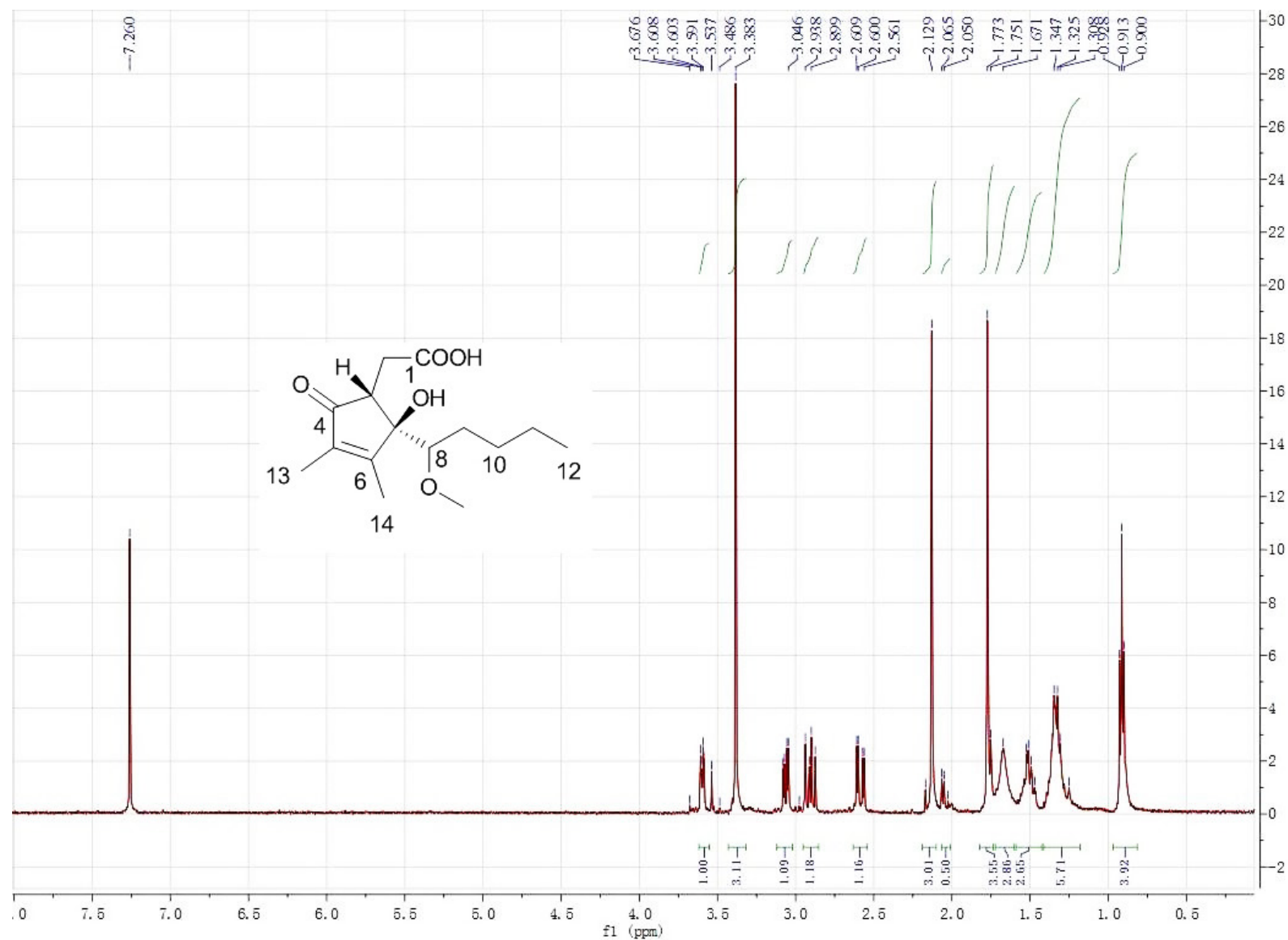
Figure S29. ^1H NMR Spectrum (500 MHz) of compound **6** in CDCl_3 .

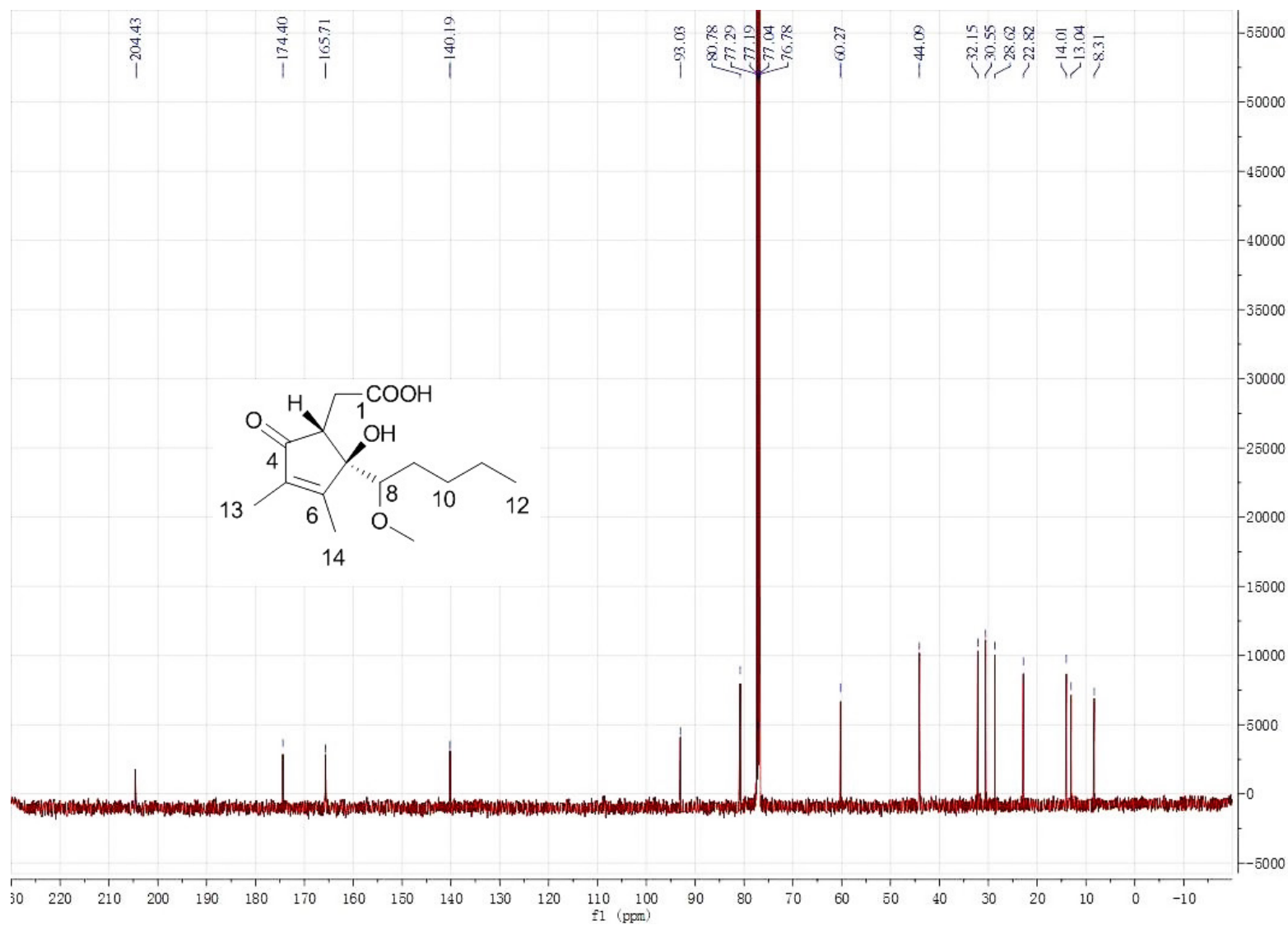
Figure S30. ^{13}C NMR Spectrum (125 MHz) of compound **6** in CDCl_3 .

Figure S31. ESIMS spectrum of compound 6.

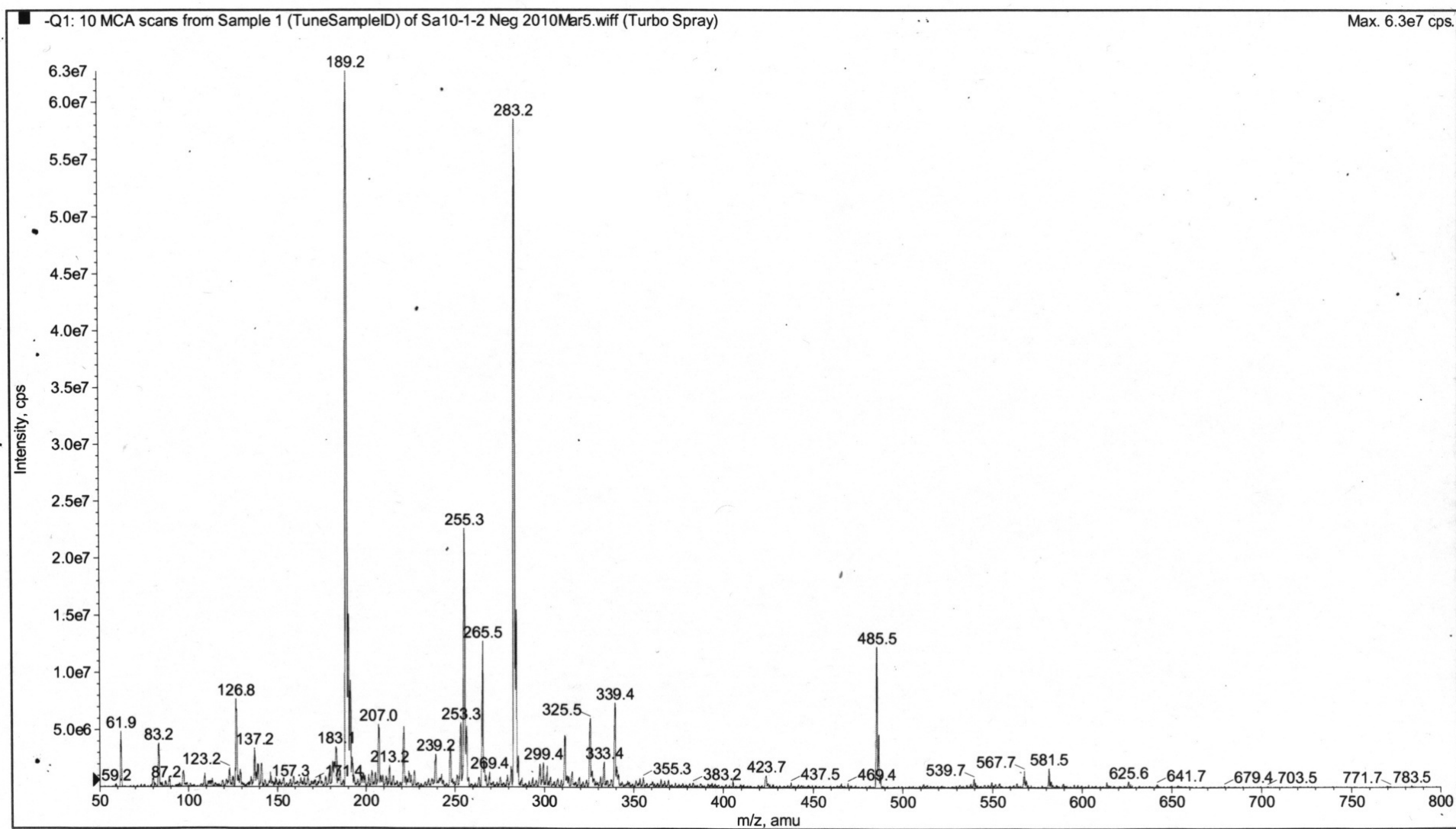


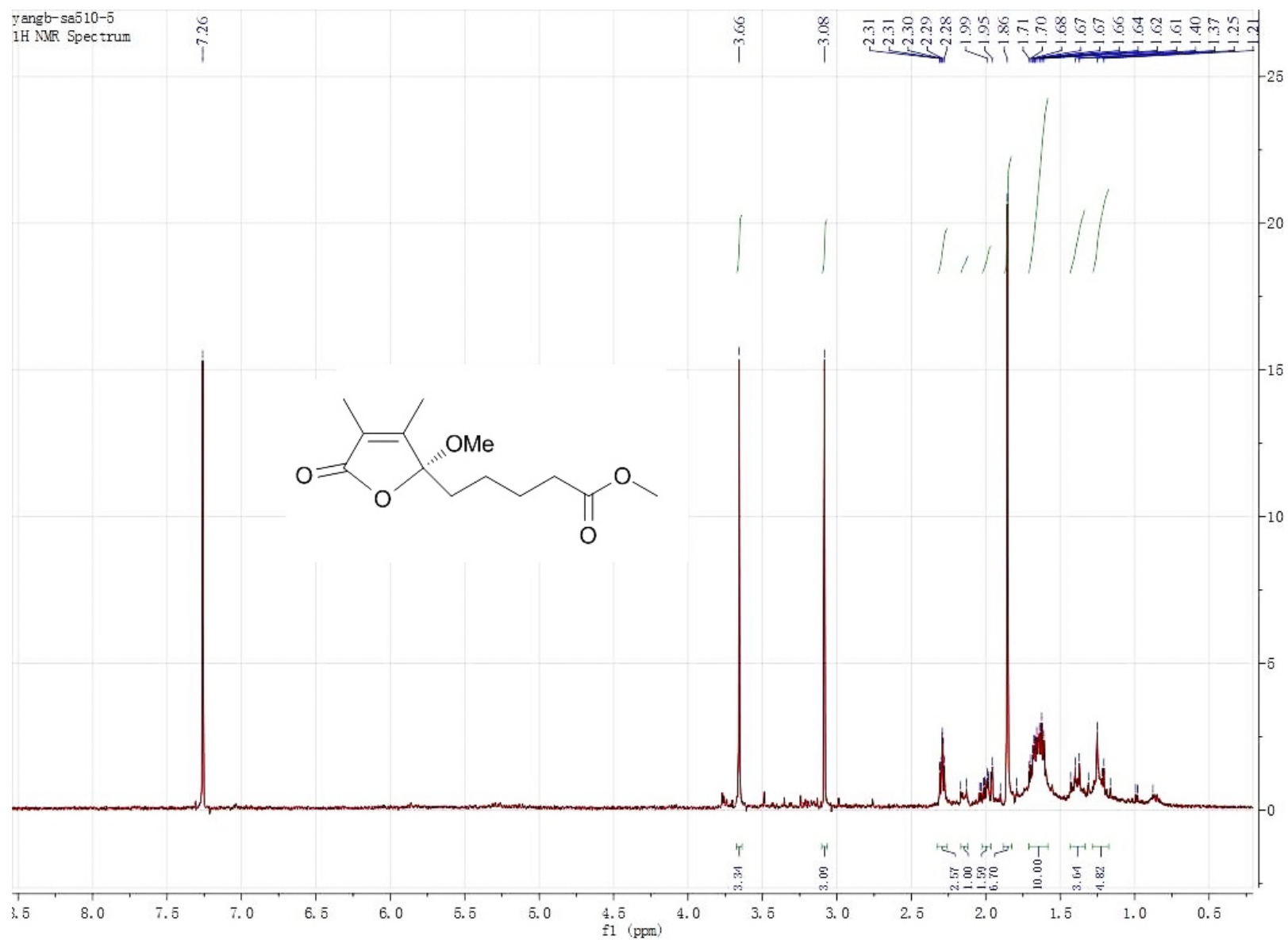
Figure S32. ^1H NMR Spectrum (500 MHz) of compound **7** in CDCl_3 .

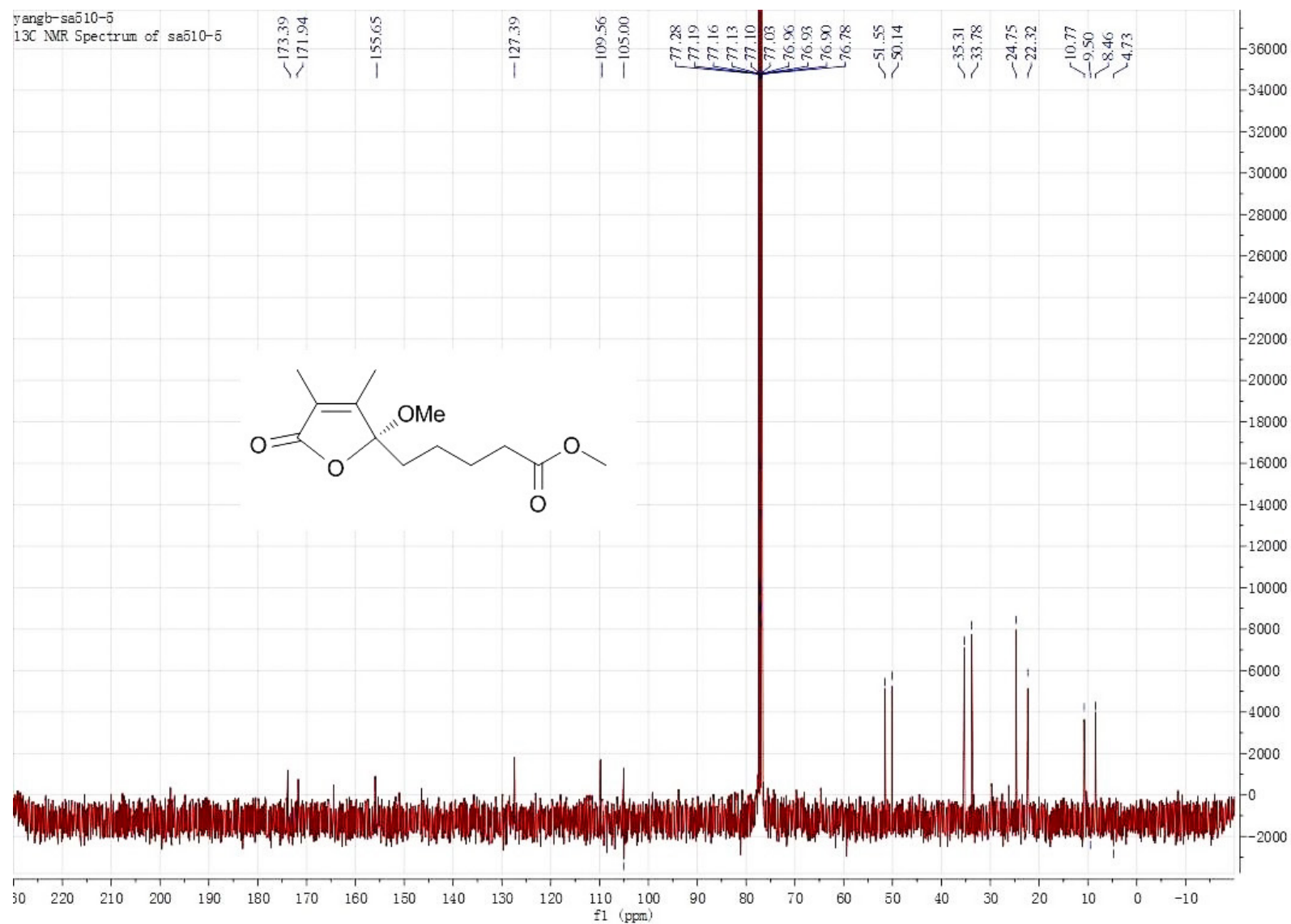
Figure S33. ^{13}C NMR Spectrum (125 MHz) of compound7 in CDCl_3 .

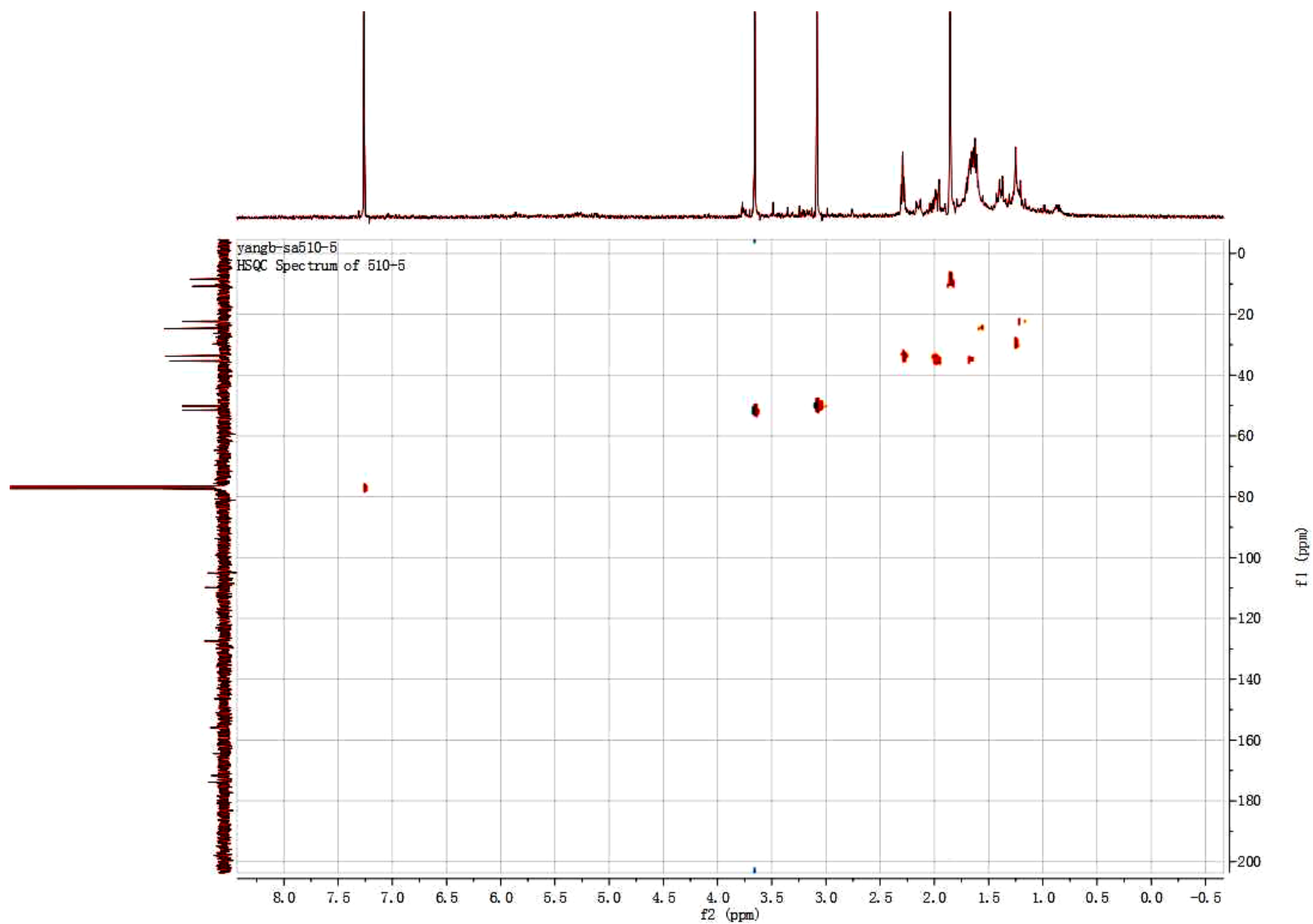
Figure S34. HSQC Spectrum of compound 7 in CDCl₃.

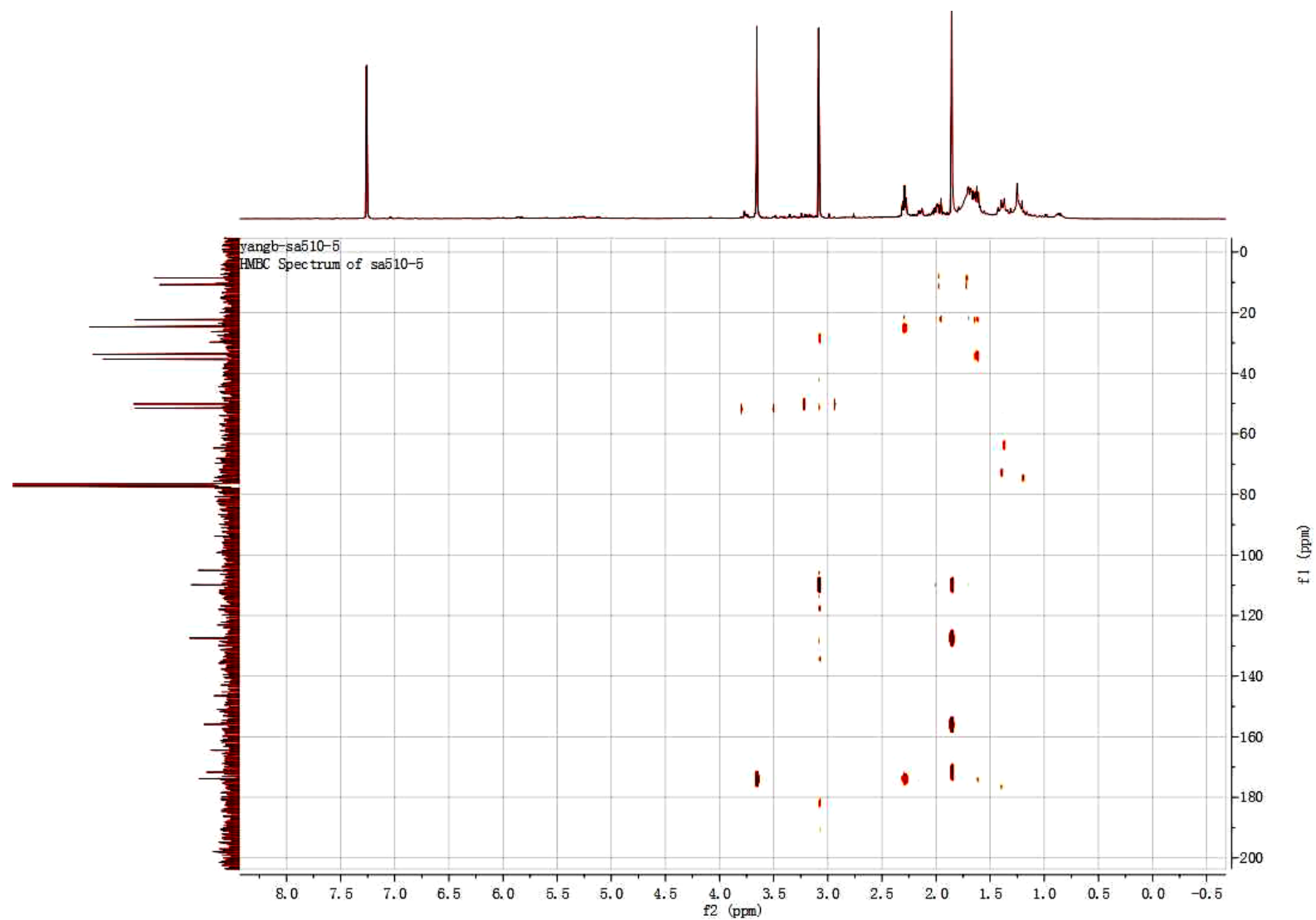
Figure S35. HMBC Spectrum of compound **7** in CDCl₃.

Figure S36. ESIMS spectrum of compound 7.

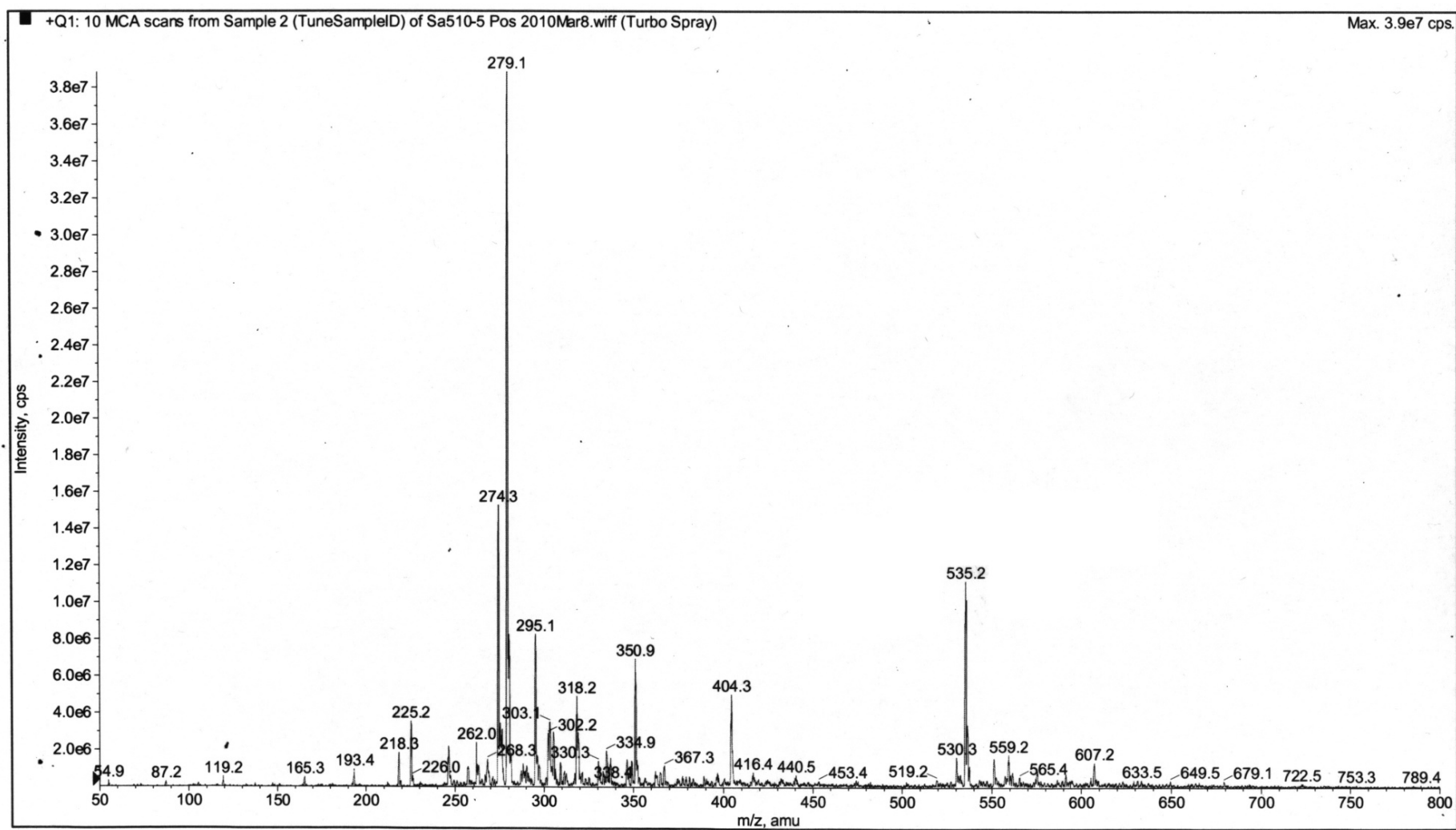


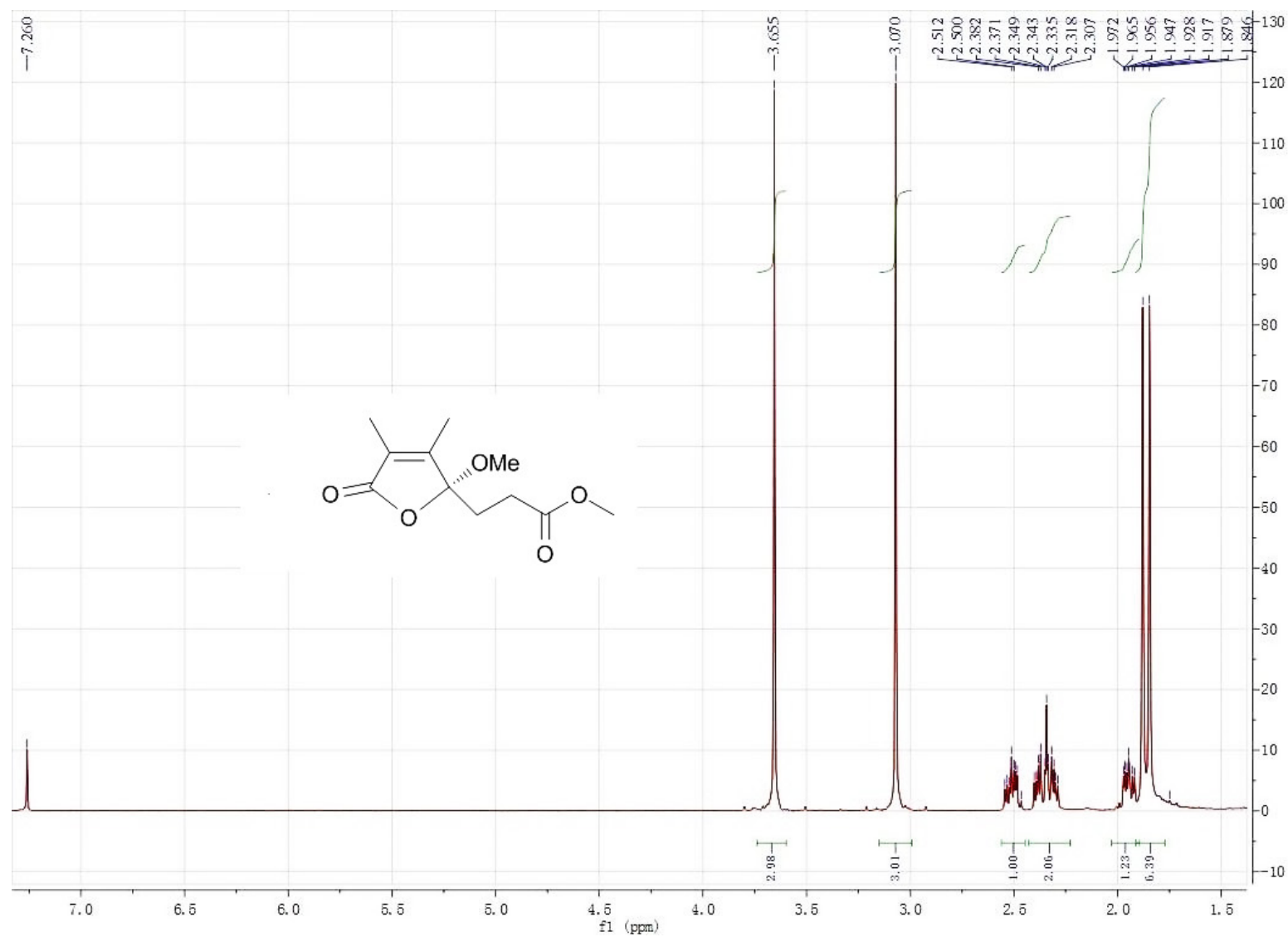
Figure S37. ^1H NMR Spectrum (500 MHz) of compound **8** in CDCl_3 .

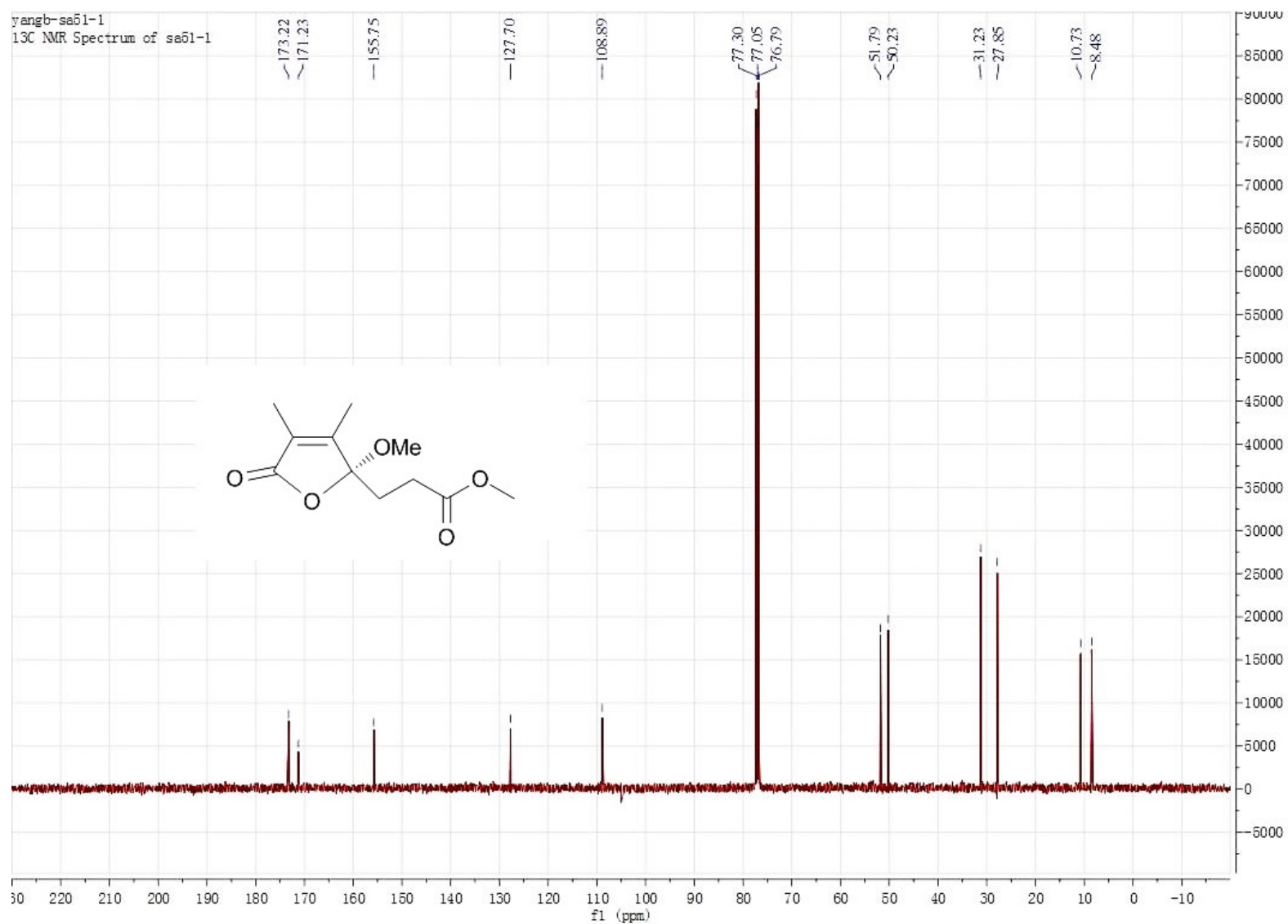
Figure S38. ^{13}C NMR Spectrum (125 MHz) of compound **8** in CDCl_3 .

Figure S39. ESIMS spectrum of compound 8.

