

Supporting information

Antioxidative indenone and benzophenone derivatives from the Mangrove-Derived Fungus *Cytospora heveae* NSHSJ-2

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Supporting information

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Figure S37. ECD spectrum of compound (+)-**7**.

Figure S38. ECD spectrum of compound (–)-**7**.

Figure S39. Structure of compounds

3,4-dihydro-4 β ,6-dihydroxy-5-methoxy-2 α -methyl-1(2*H*)-naphthalenone,
(4*S*)-4,8-dihydroxy- α -tetralone, (4*R*)-4,8-dihydroxy- α -tetralone,
(4*S*)-5-hydroxy-4-methoxy- α -tetralone and (4*R*)-5-hydroxy-4-methoxy- α -tetralone.

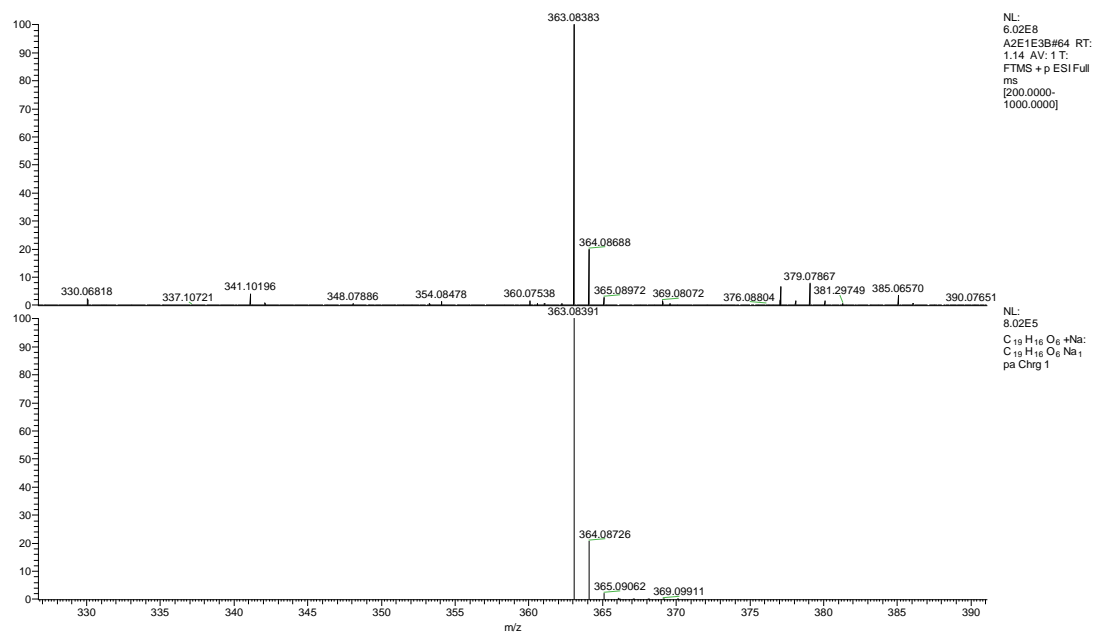


Figure S1. HRESIMS spectrum of compound **1**.

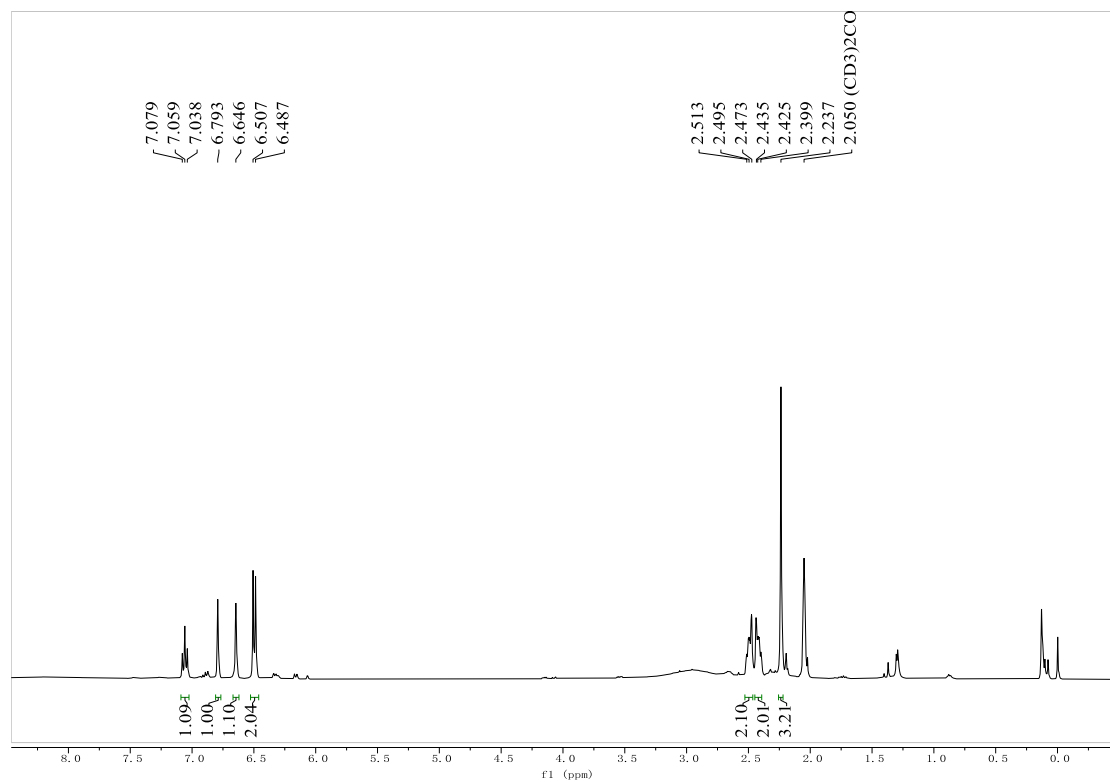


Figure S2. ¹H NMR spectrum of compound **1** (400 MHz, Acetone-*d*₆).

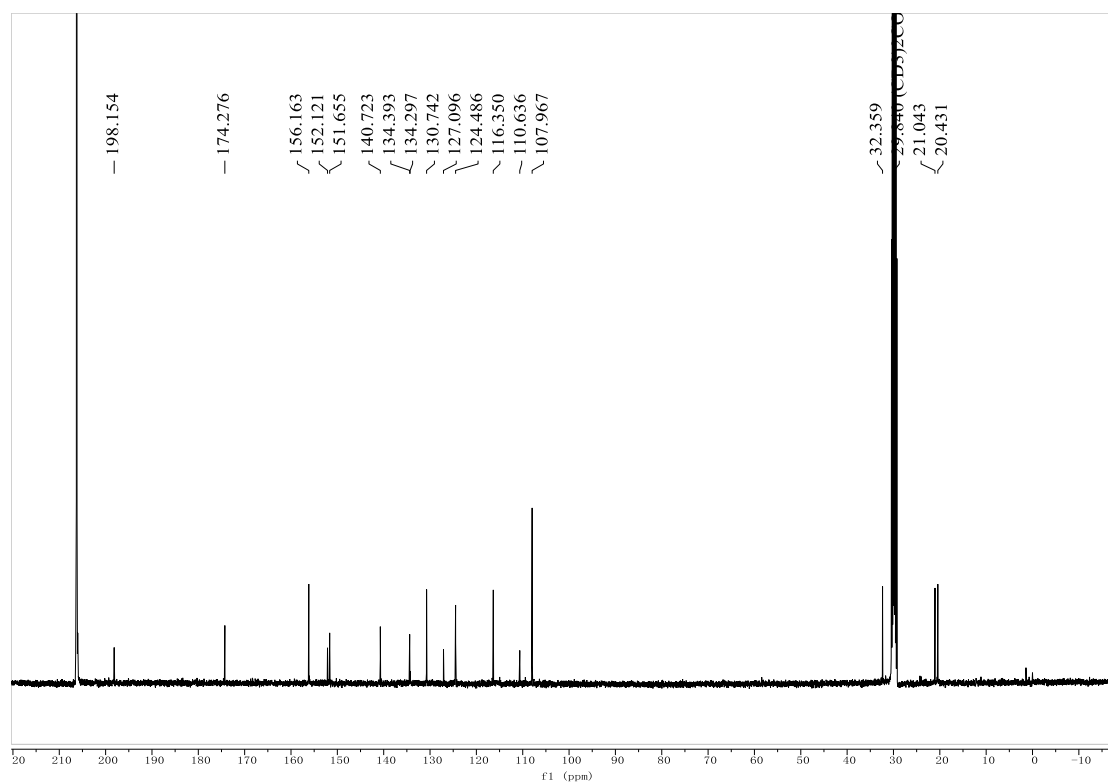


Figure S3. ^{13}C NMR spectrum of compound **1** (100 MHz, Actone- d_6).



Figure S4. ^1H - ^1H COSY spectrum of compound **1**.

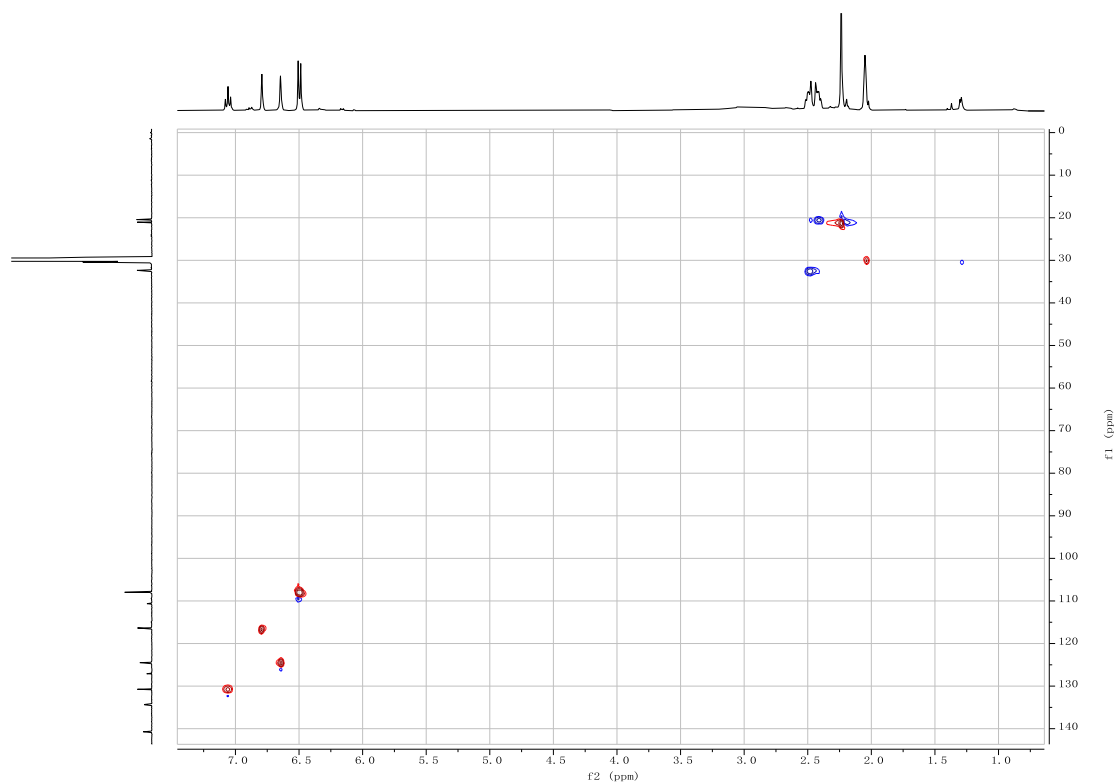


Figure S5. HSQC spectrum of compound **1**.

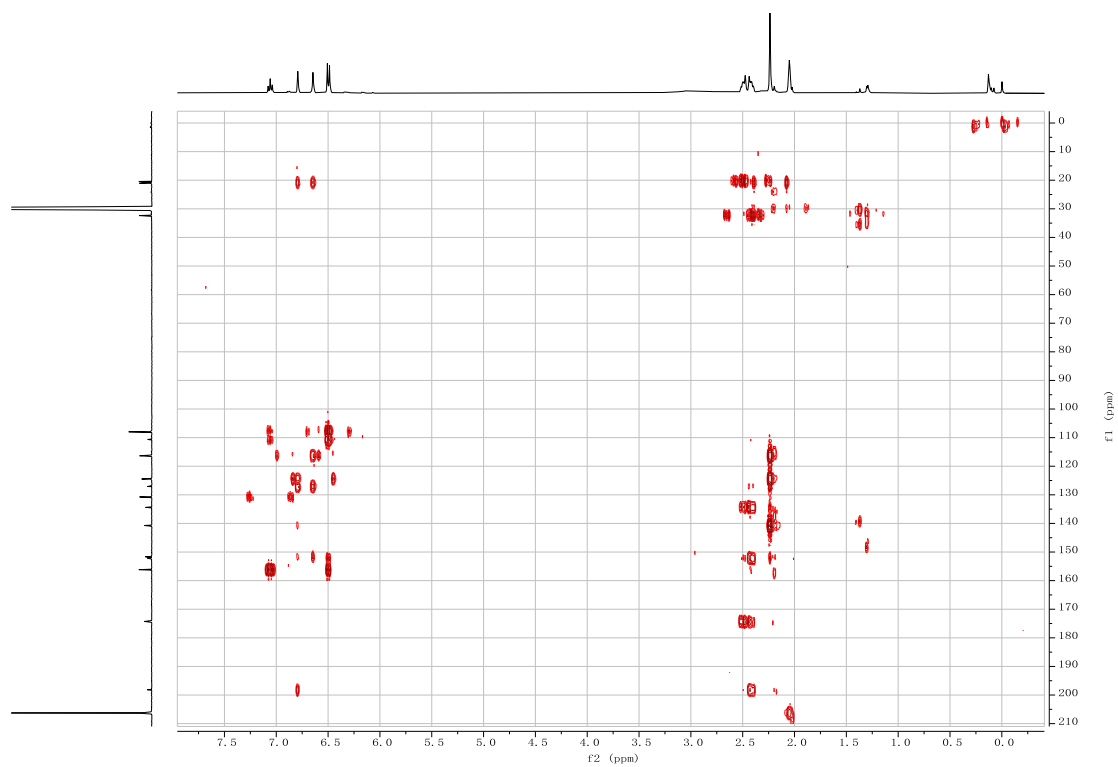


Figure S6. HMBC spectrum of compound **1**.

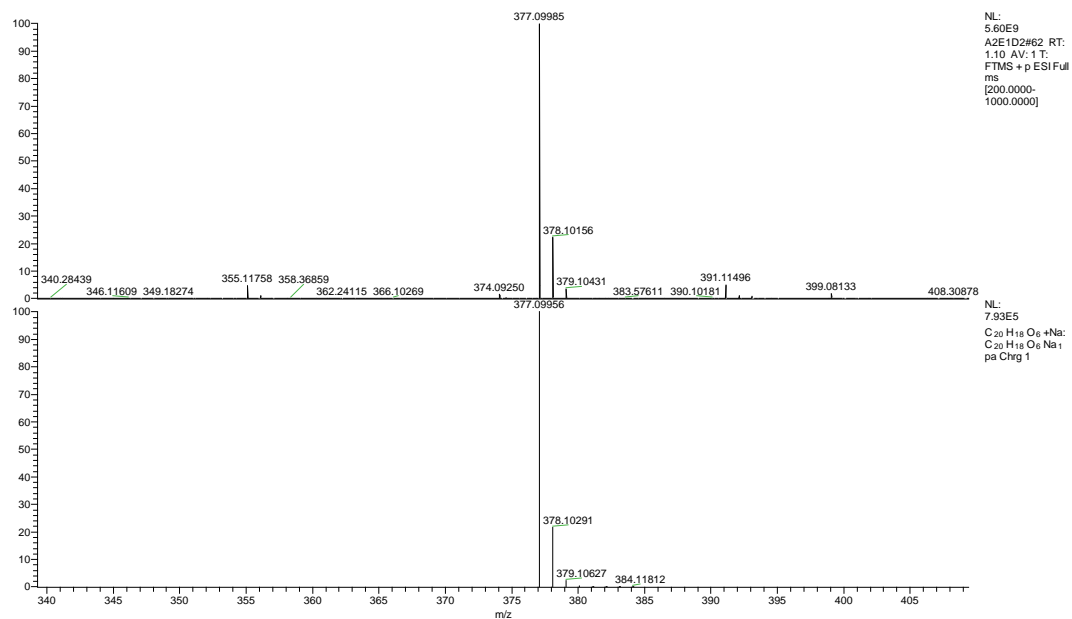


Figure S7. HRESIMS spectrum of compound **2**.

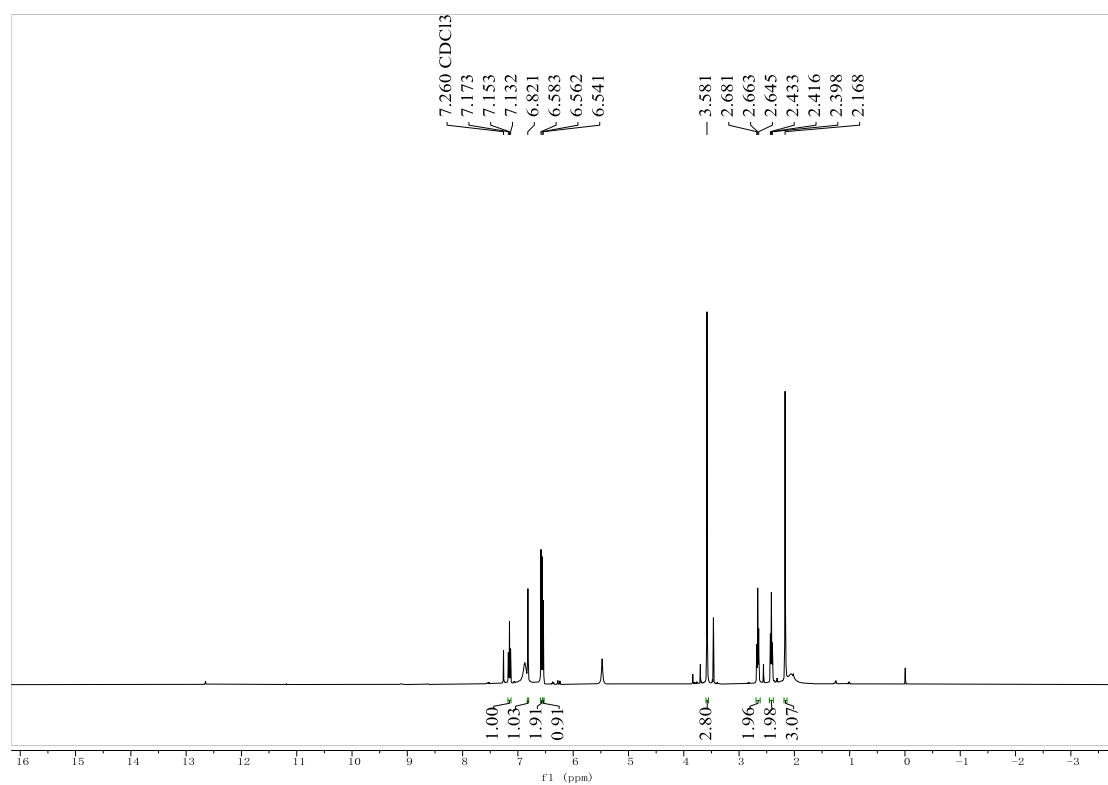


Figure S8. ^1H NMR spectrum of compound **2** (400 MHz, CDCl_3).

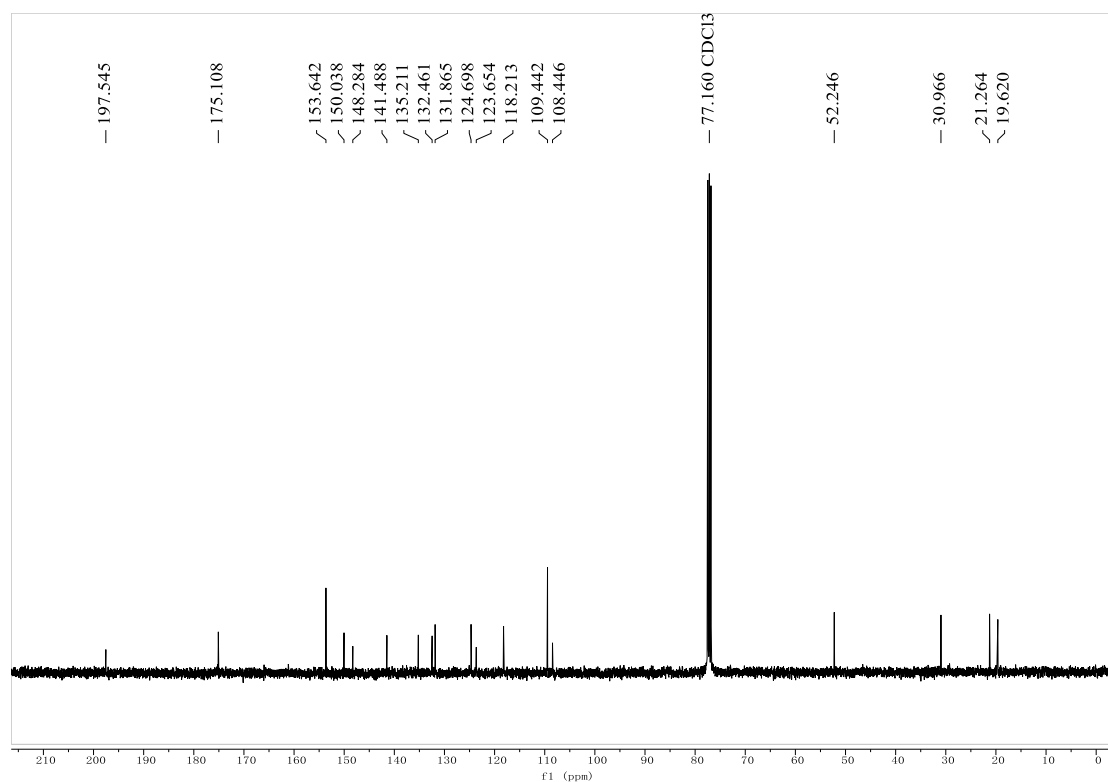


Figure S9. ^{13}C NMR spectrum of compound 2 (100 MHz, CDCl_3).

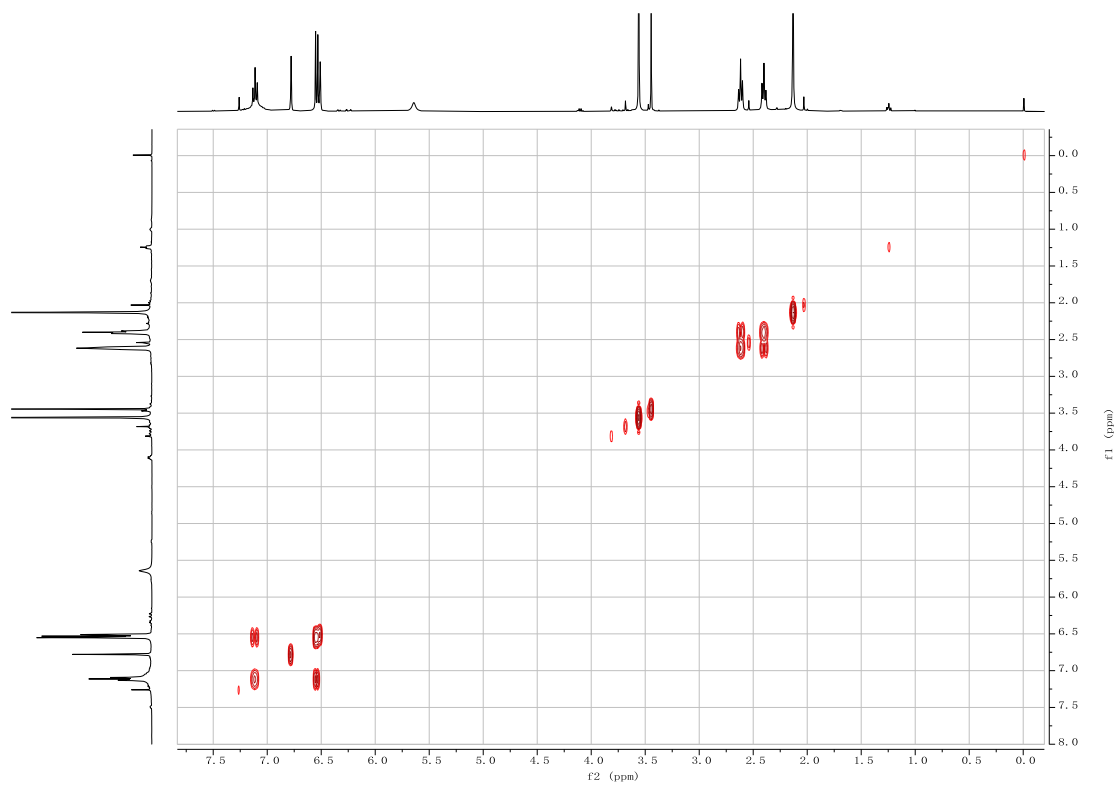


Figure S10. ^1H - ^1H COSY spectrum of compound 2.

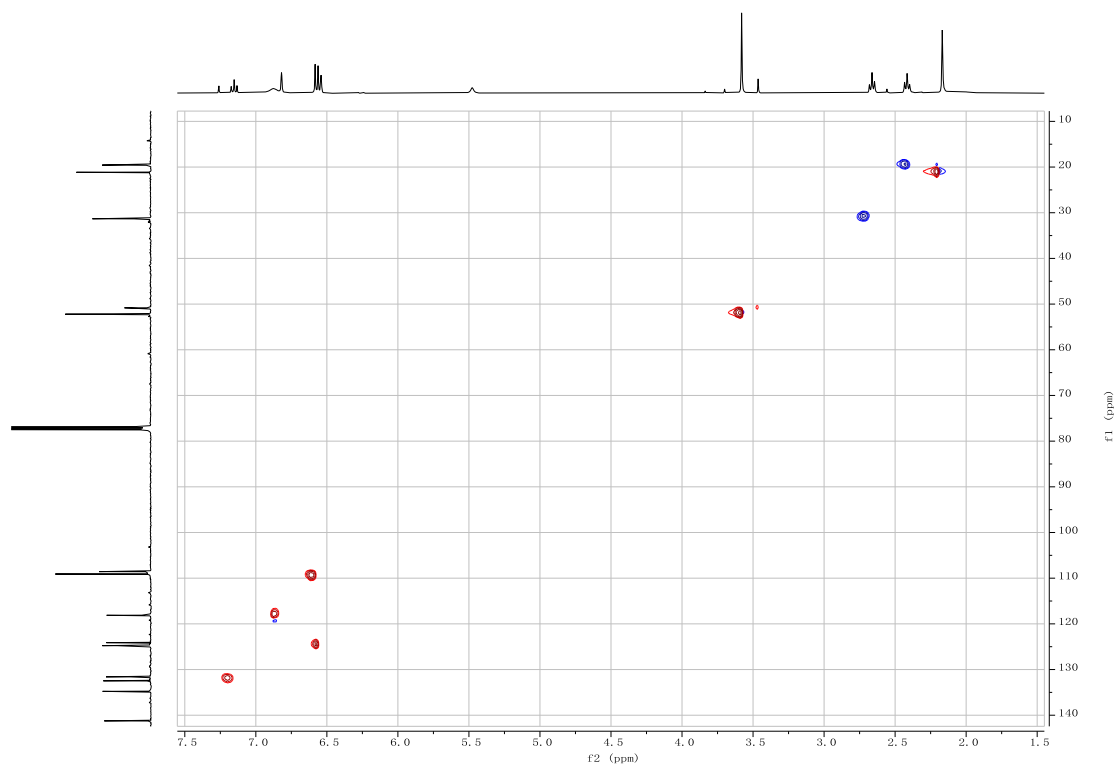


Figure S11. HSQC spectrum of compound **2**.

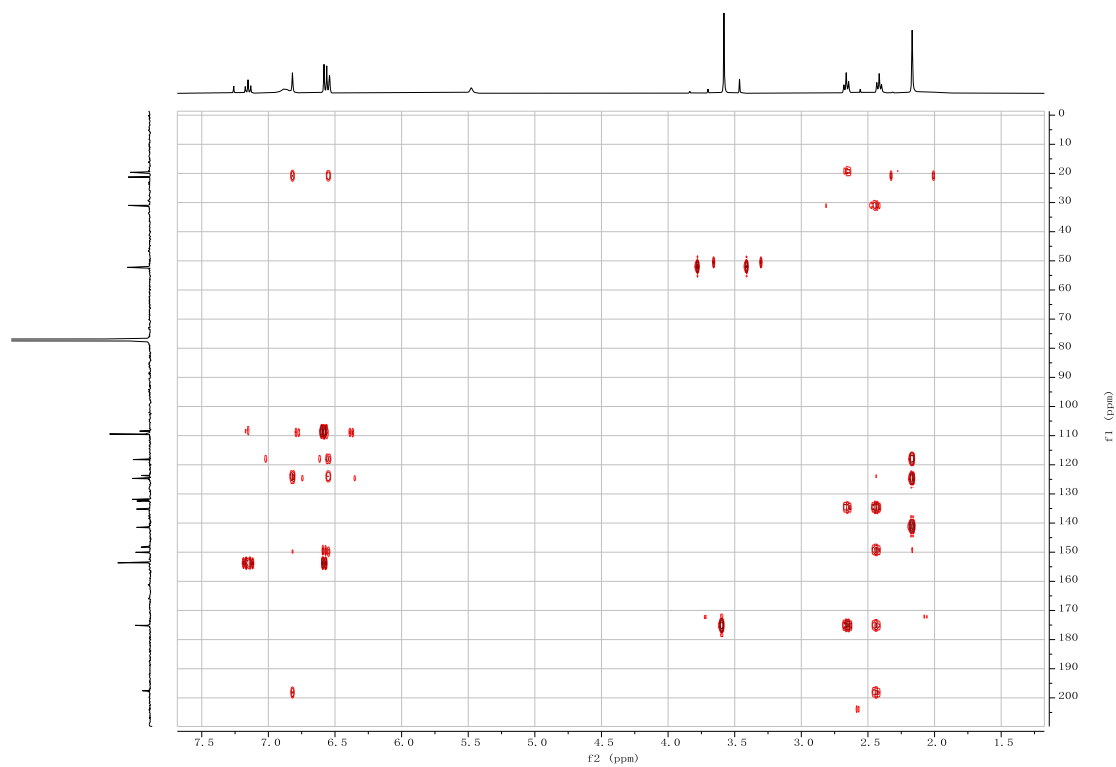


Figure S12. HMBC spectrum of compound **2**.

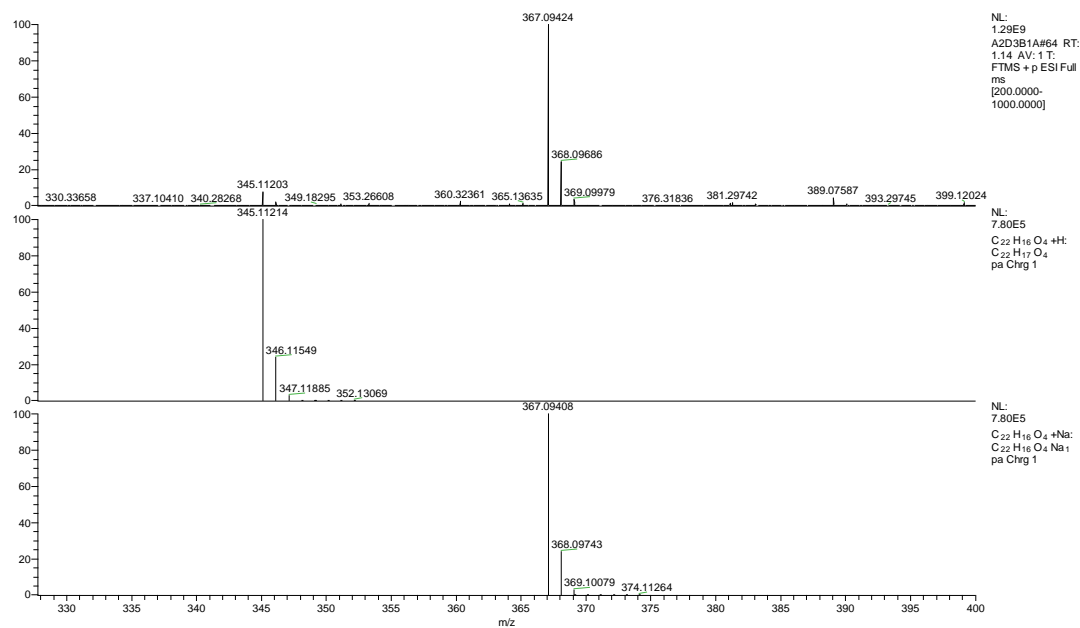


Figure S13. HRESIMS spectrum of compound **3**.

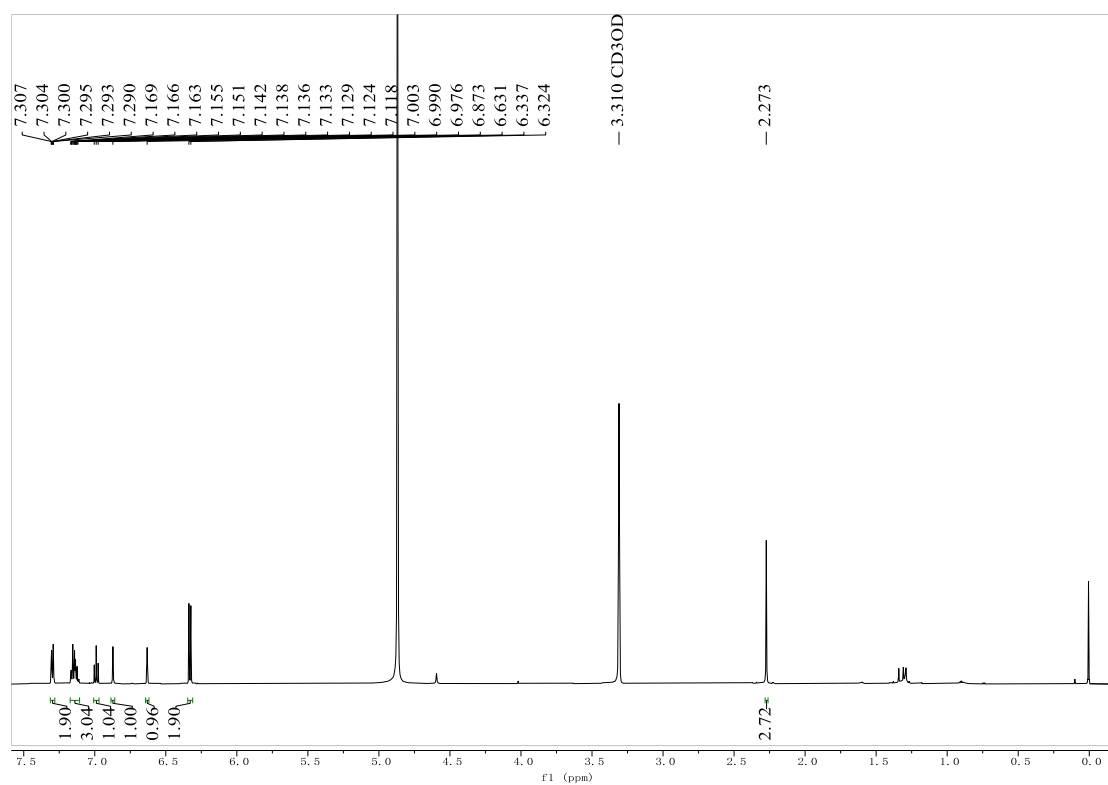


Figure S14. ¹H NMR spectrum of compound **3** (600 MHz, CD₃OD).

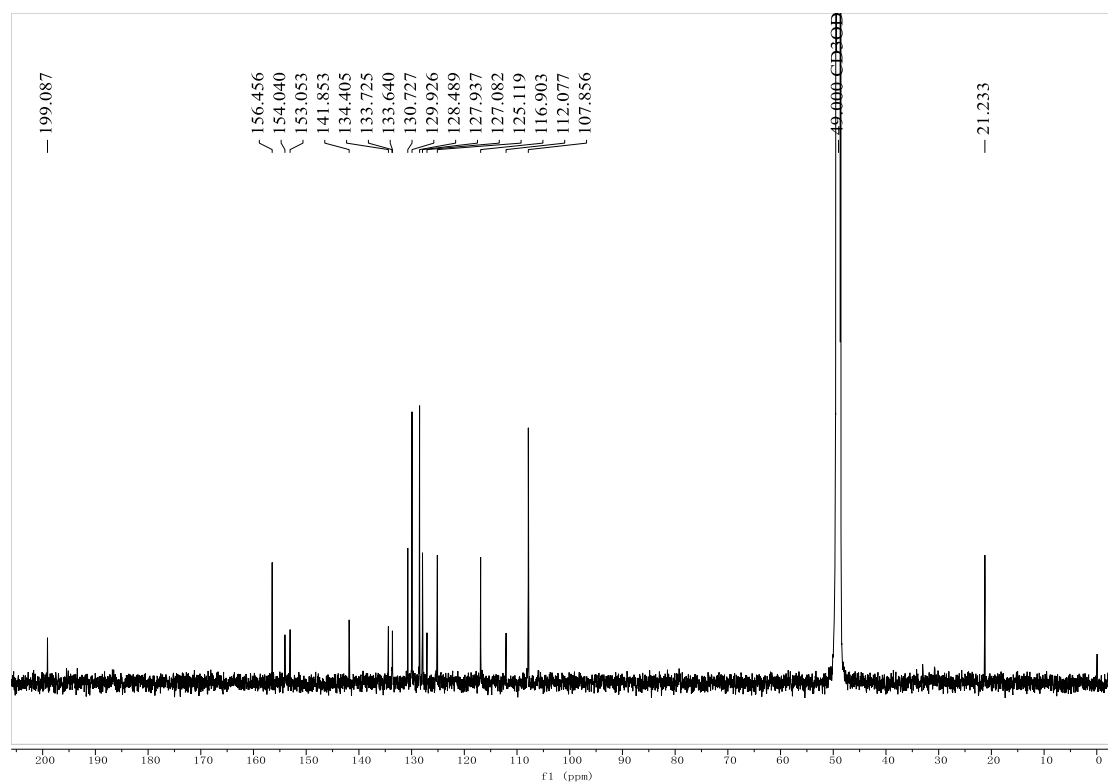


Figure S15. ^{13}C NMR spectrum of compound **3** (150 MHz, CD₃OD).

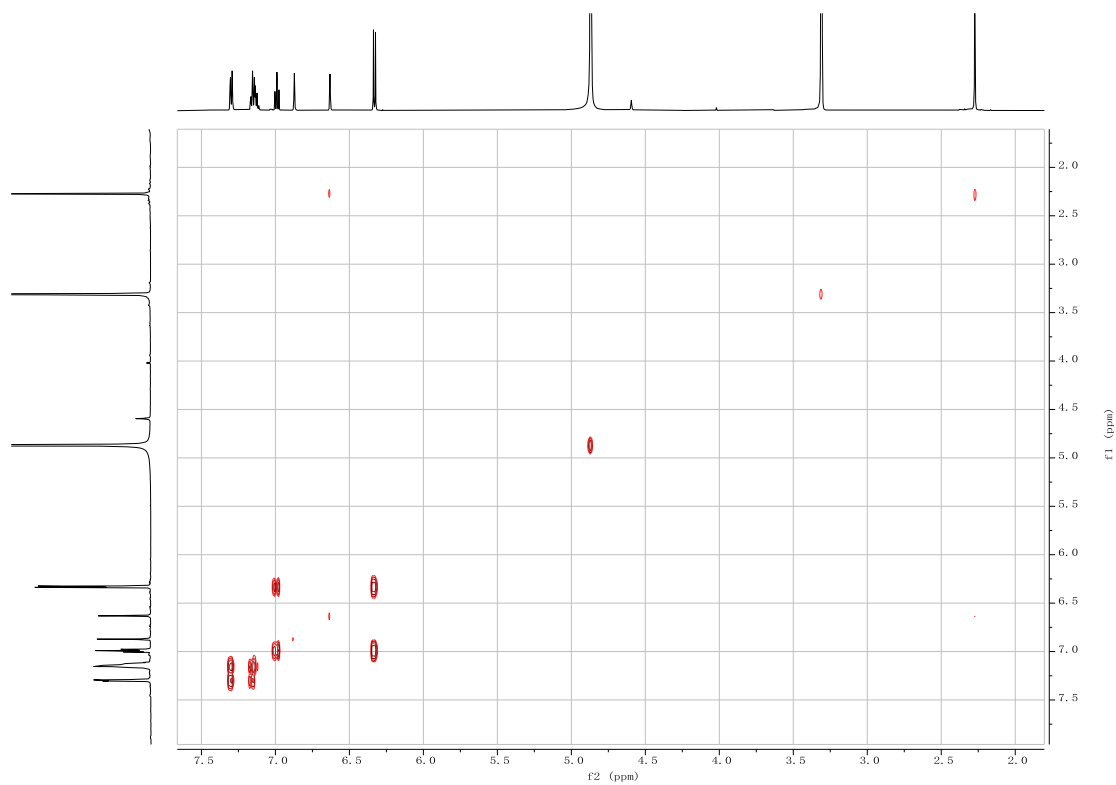


Figure S16. ^1H - ^1H COSY spectrum of compound **3**.

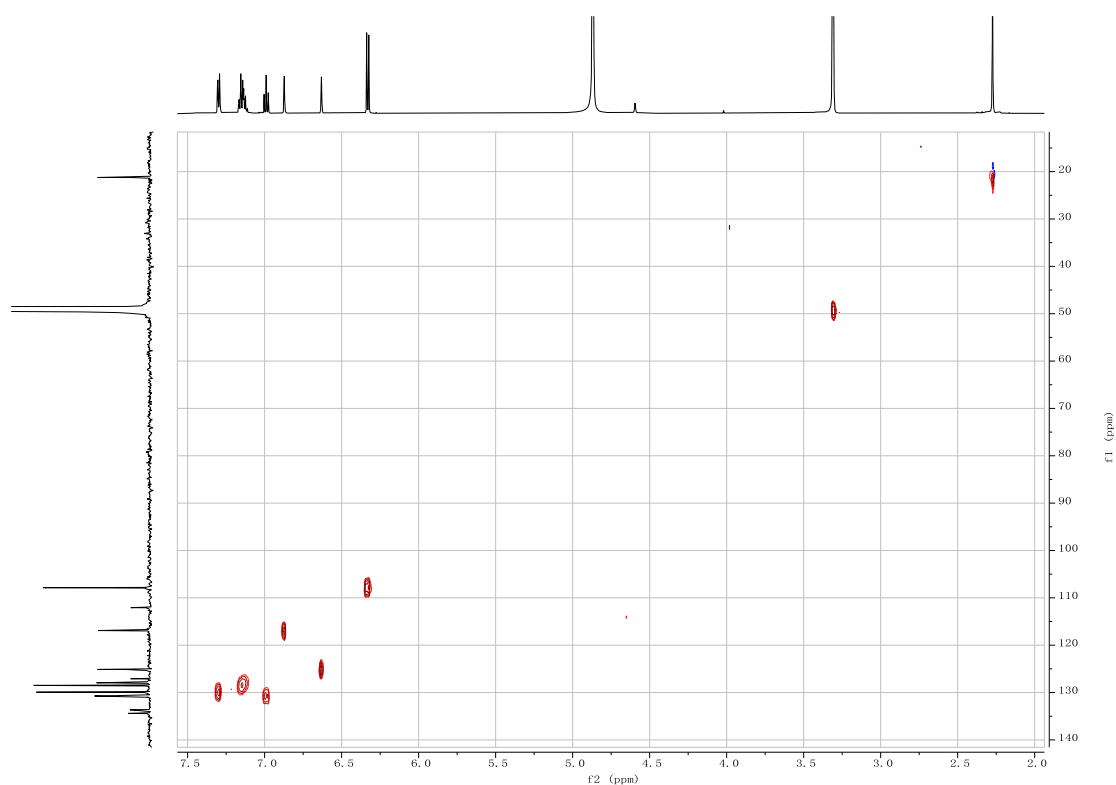


Figure S17. HSQC spectrum of compound **3**.

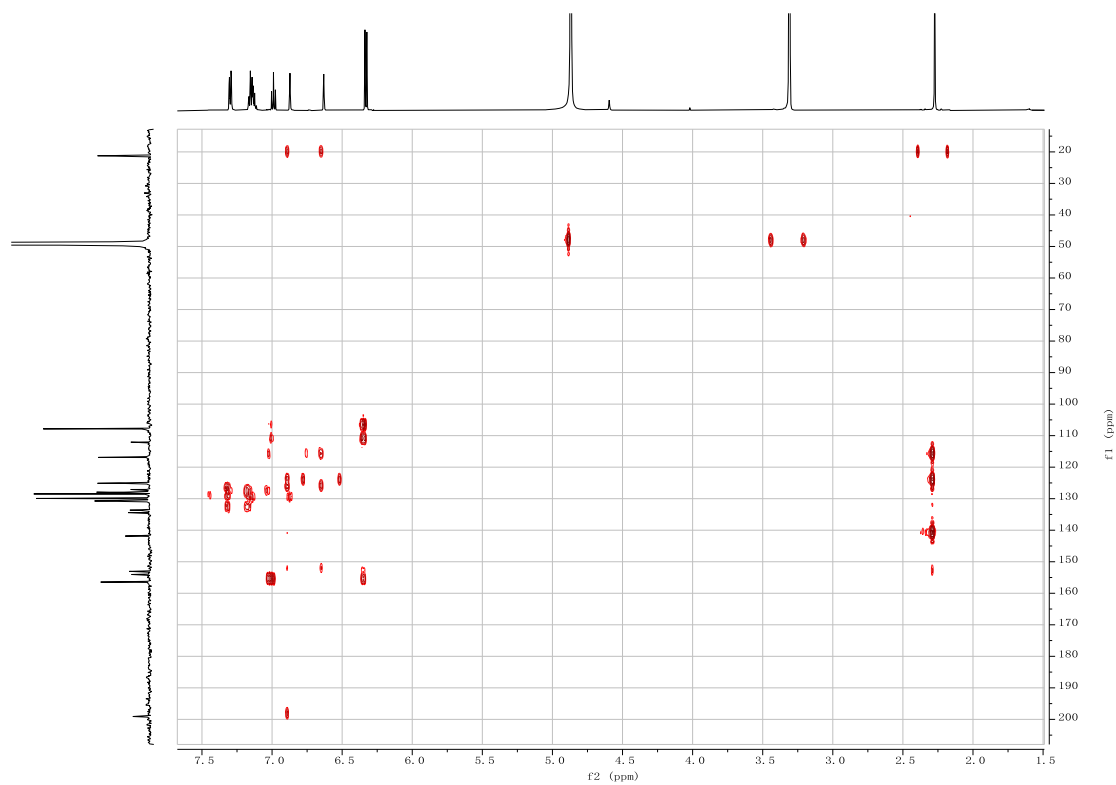


Figure S18. HMBC spectrum of compound **3**.

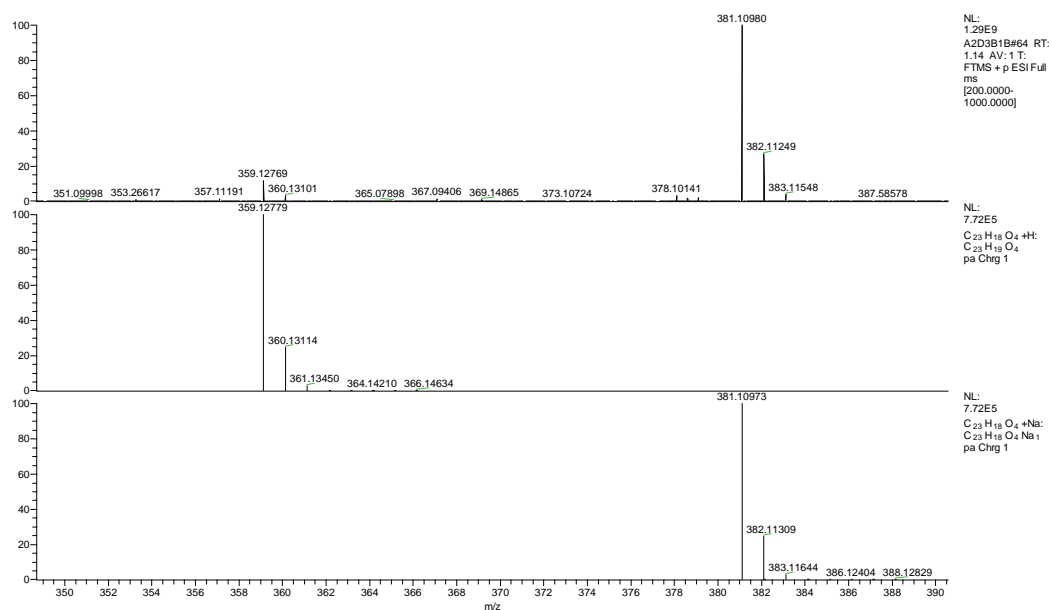


Figure S19. HRESIMS spectrum of compound **4**.

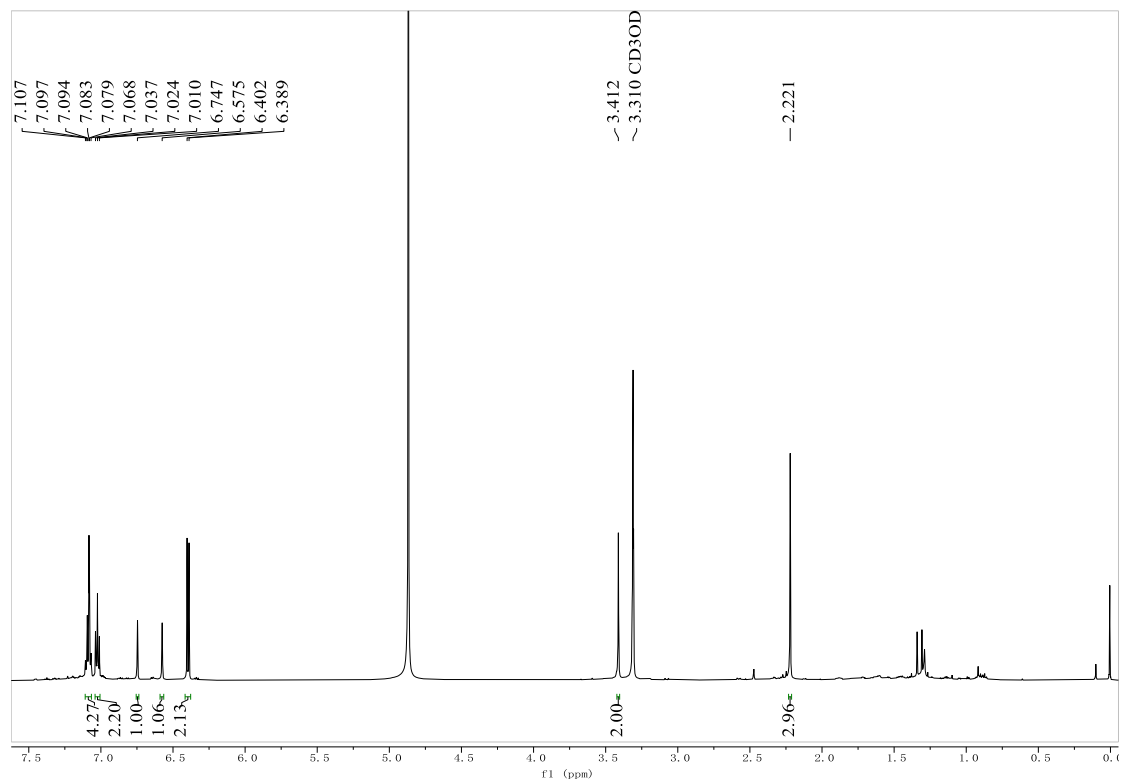


Figure S20. ¹H NMR spectrum of compound **4** (600 MHz, CD₃OD).

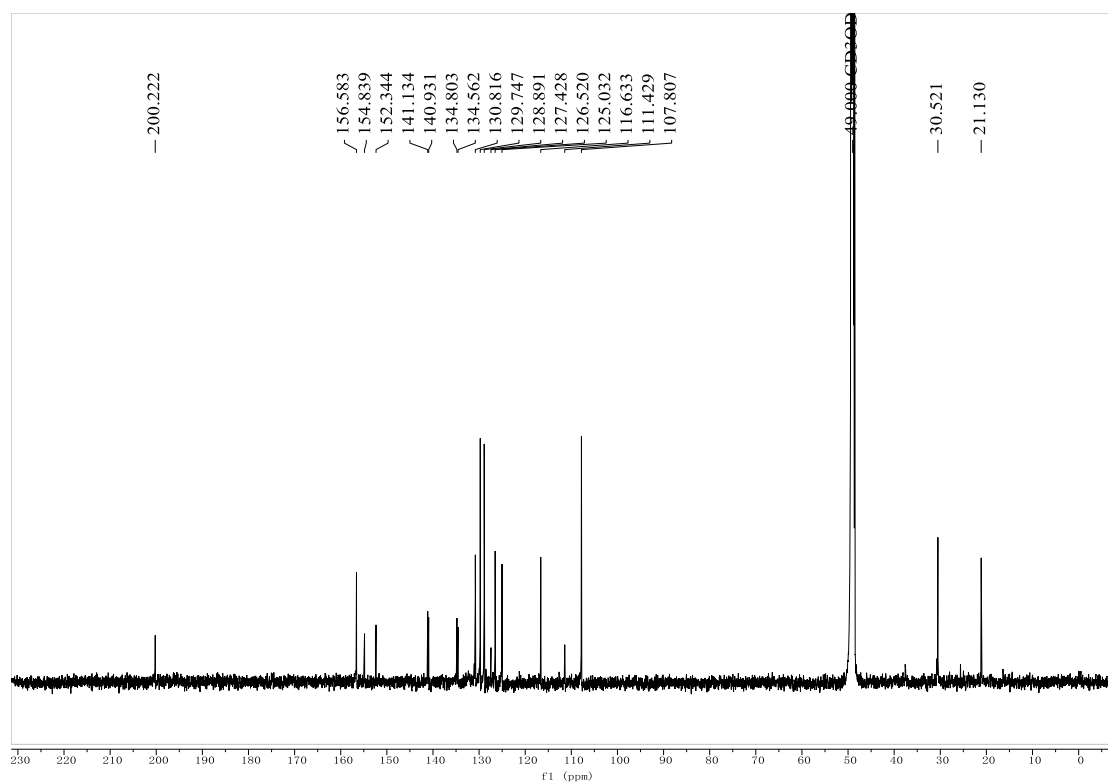


Figure S21. ^{13}C NMR spectrum of compound **4** (150 MHz, CD₃OD).

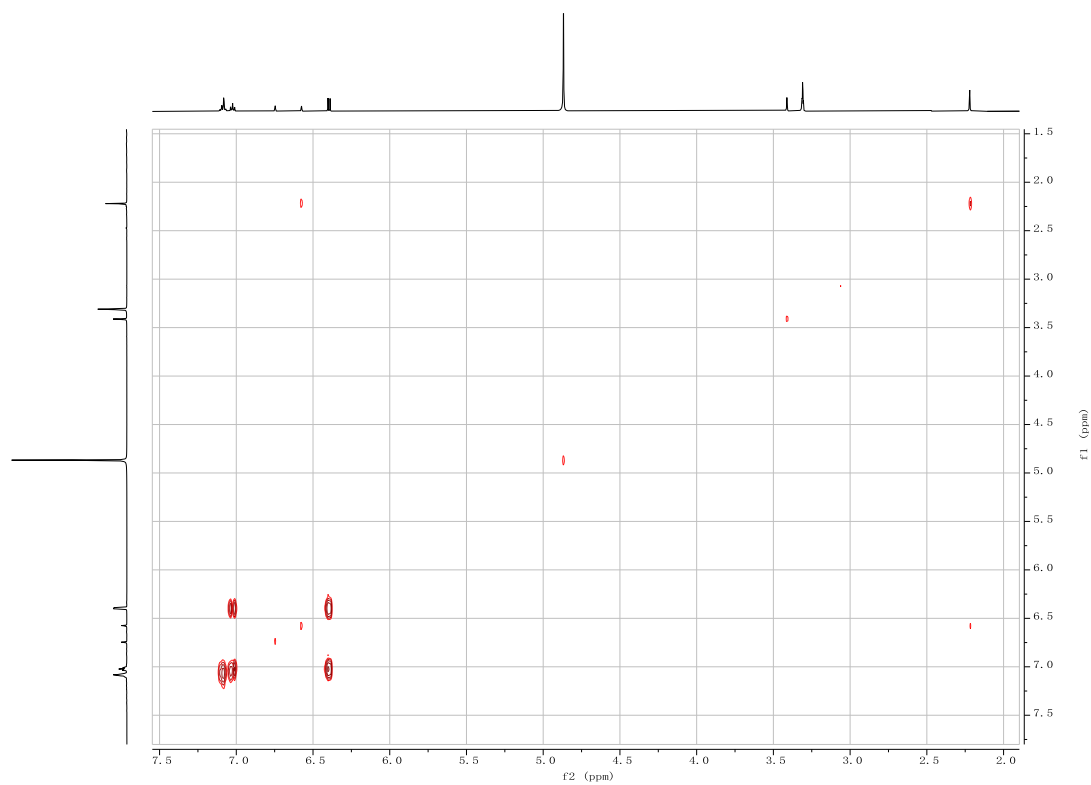


Figure S22. ^1H - ^1H COSY spectrum of compound **4**.

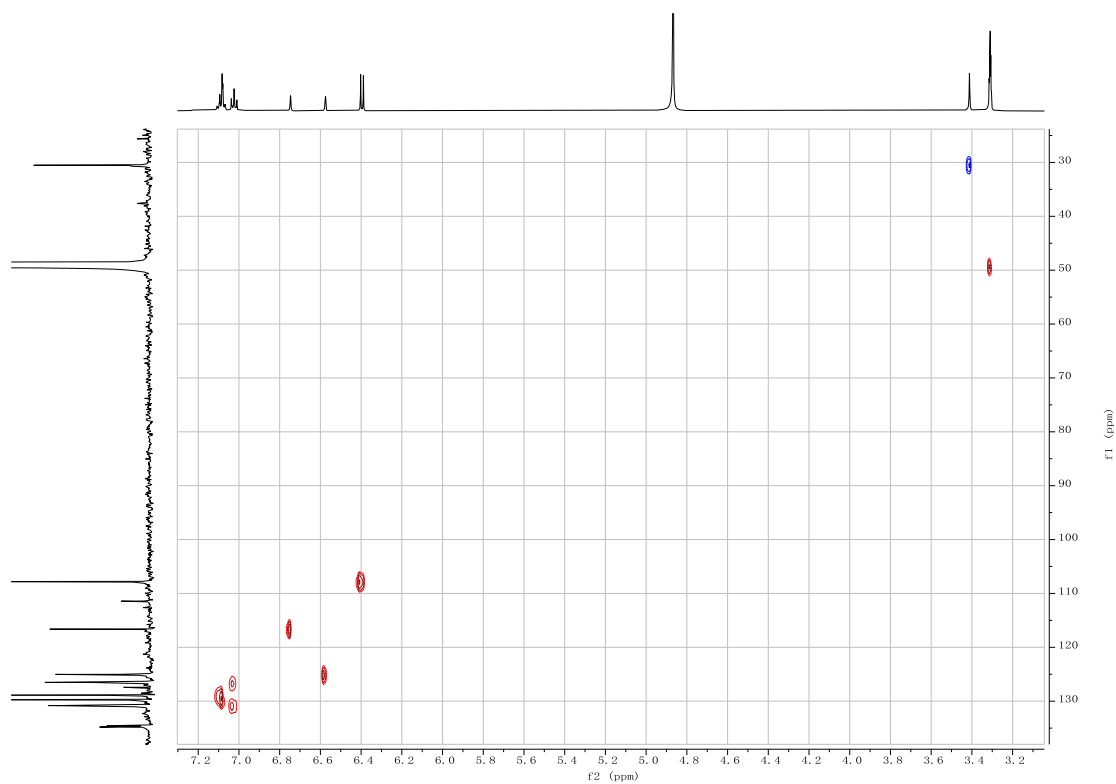


Figure S23. HSQC spectrum of compound **4**.

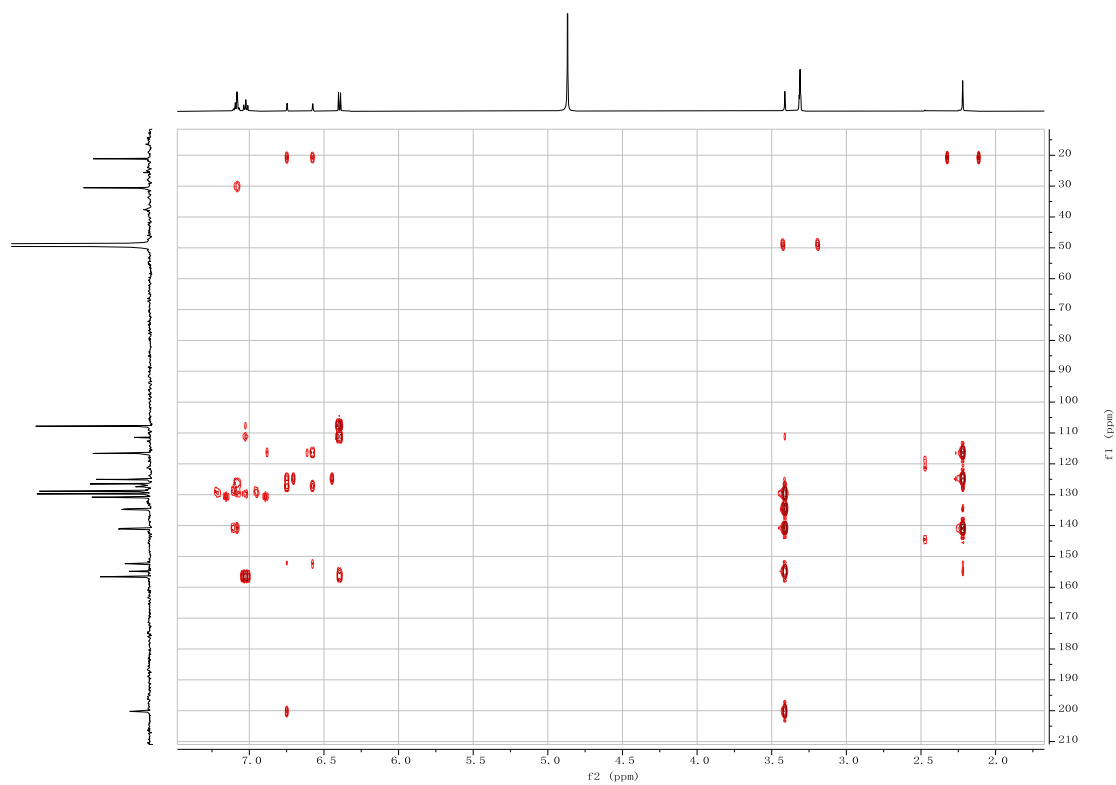


Figure S24. HMBC spectrum of compound **4**.

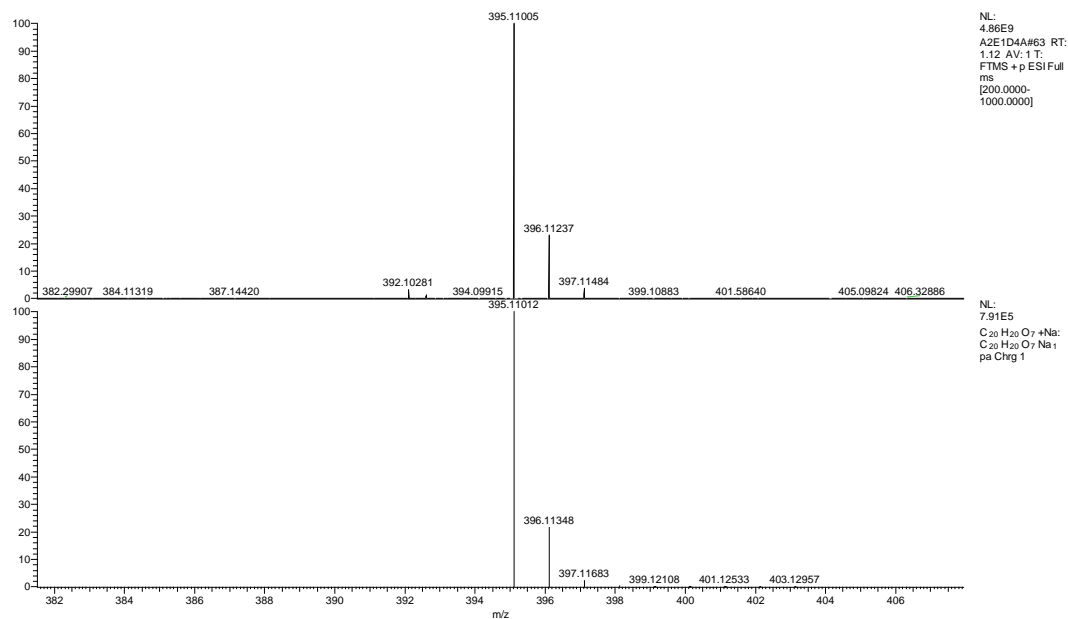


Figure S25. HRESIMS spectrum of compound **6**.

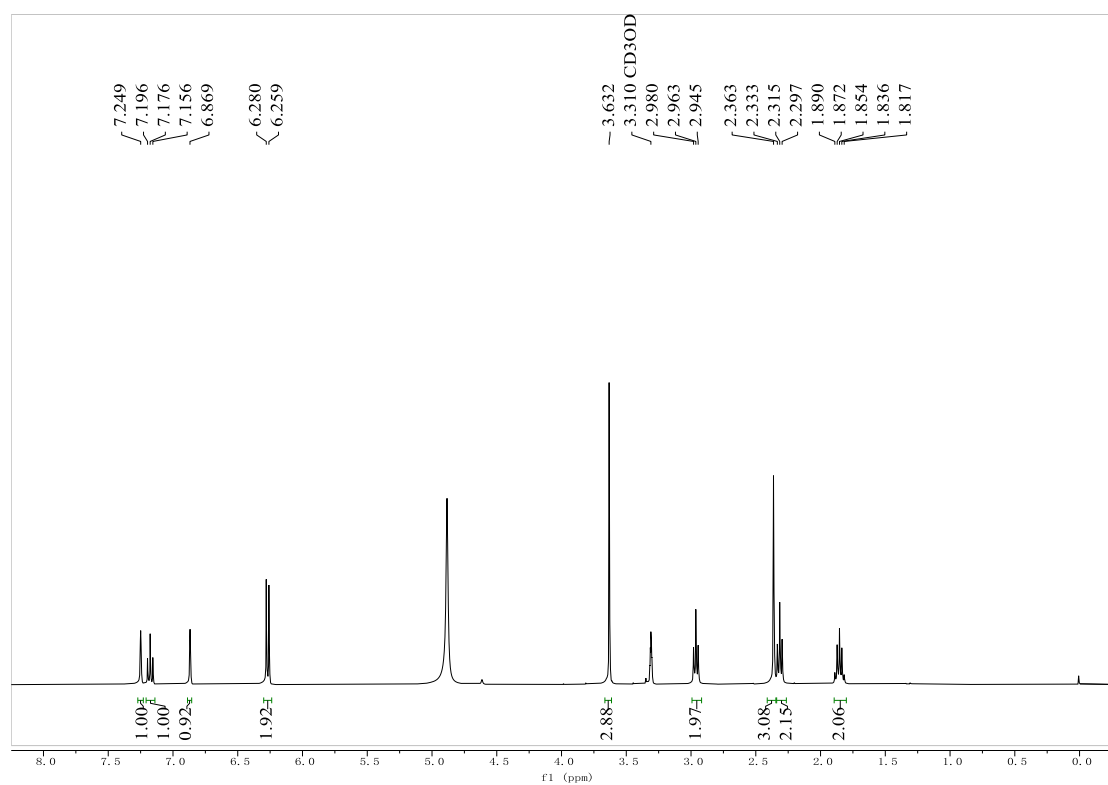


Figure S26. ^1H NMR spectrum of compound **6** (400 MHz, CD_3OD).

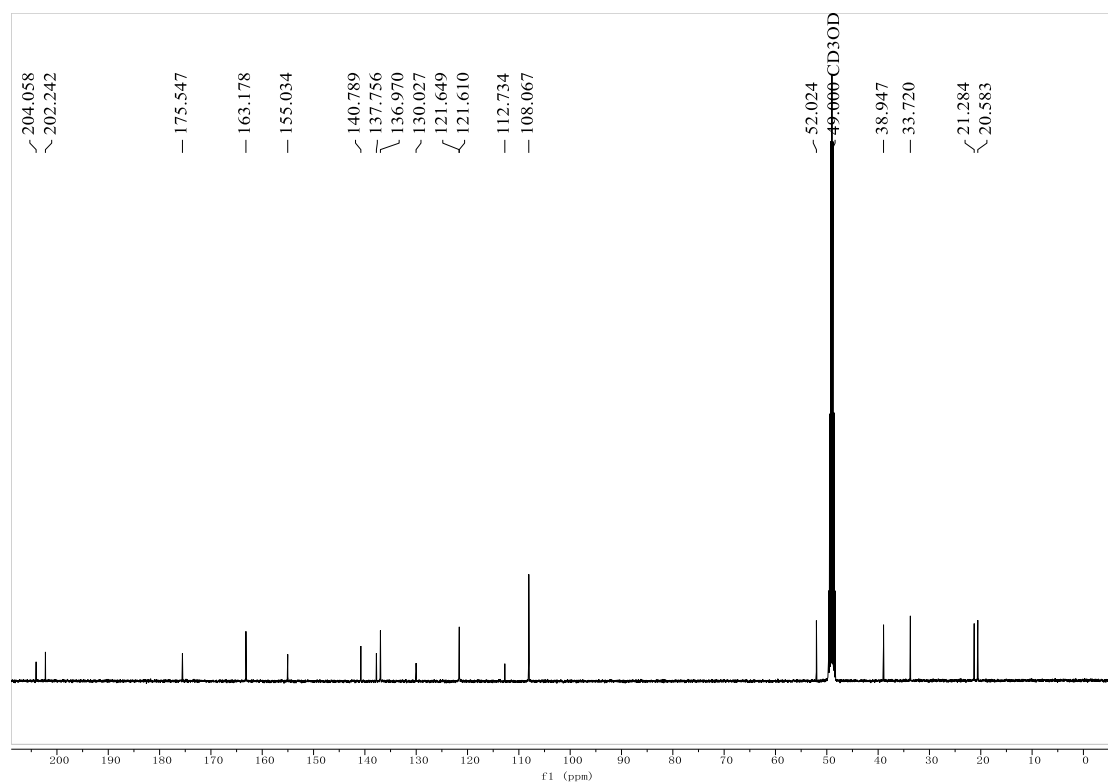


Figure S27. ^{13}C NMR spectrum of compound **6** (100 MHz, CD_3OD).

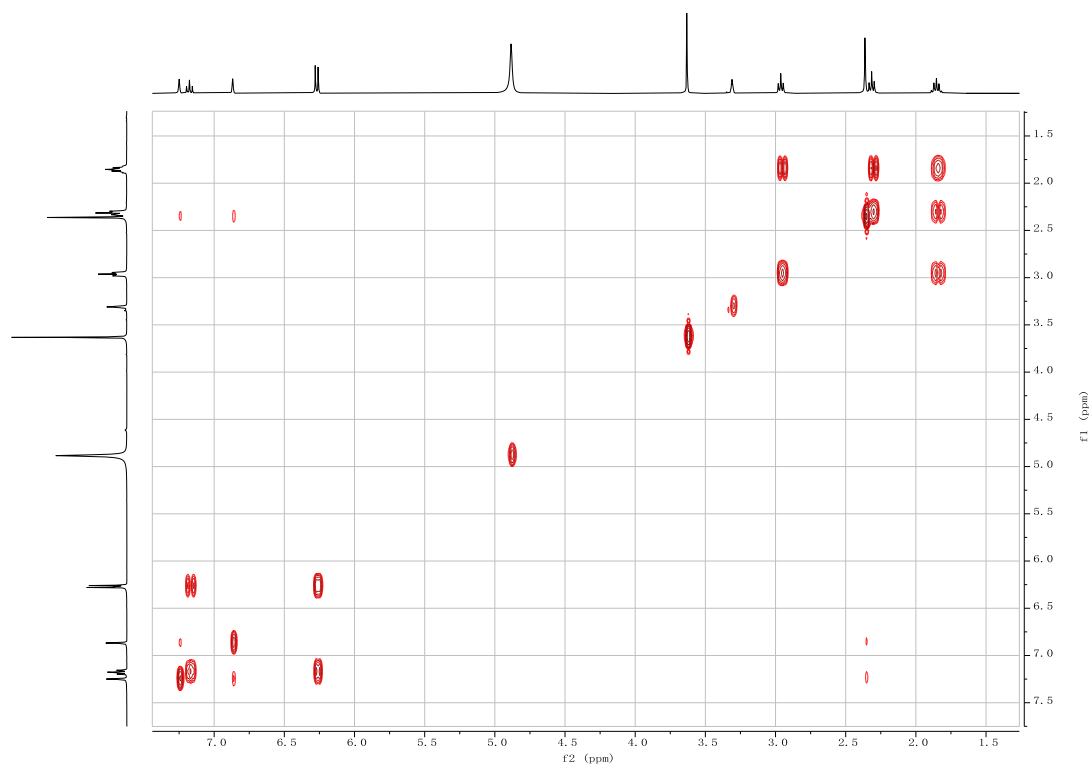


Figure S28. ^1H - ^1H COSY spectrum of compound **6**.

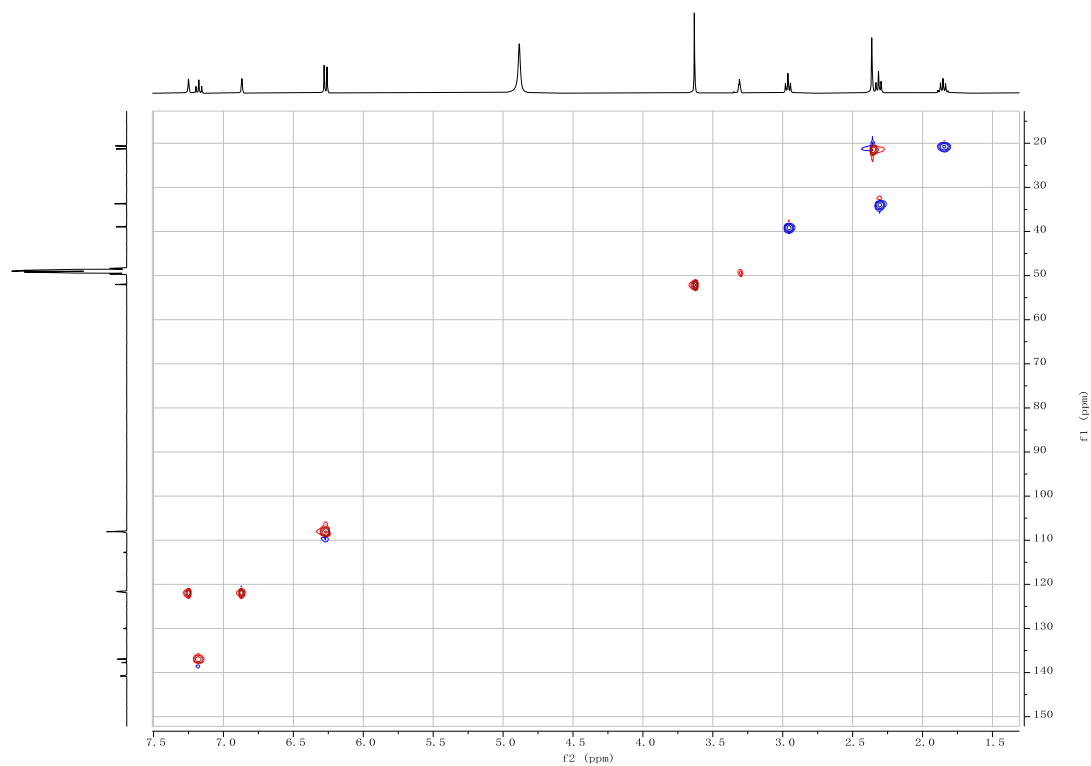


Figure S29. HSQC spectrum of compound **6**.

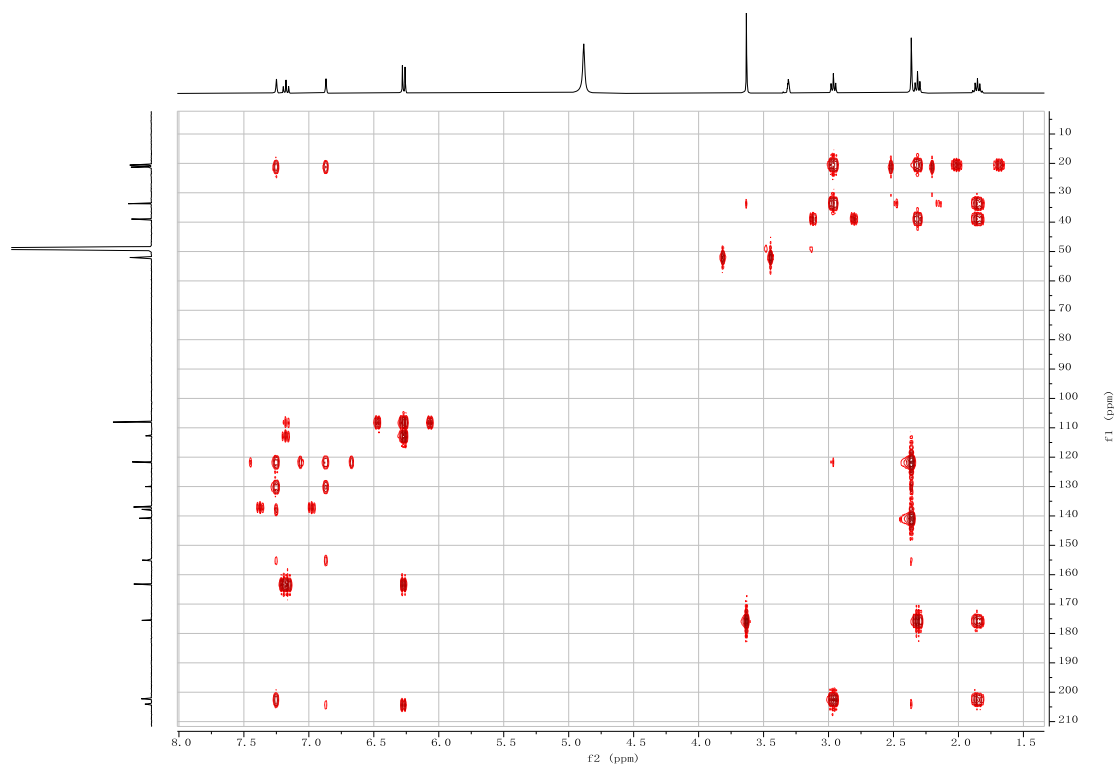


Figure S30. HMBC spectrum of compound **6**.

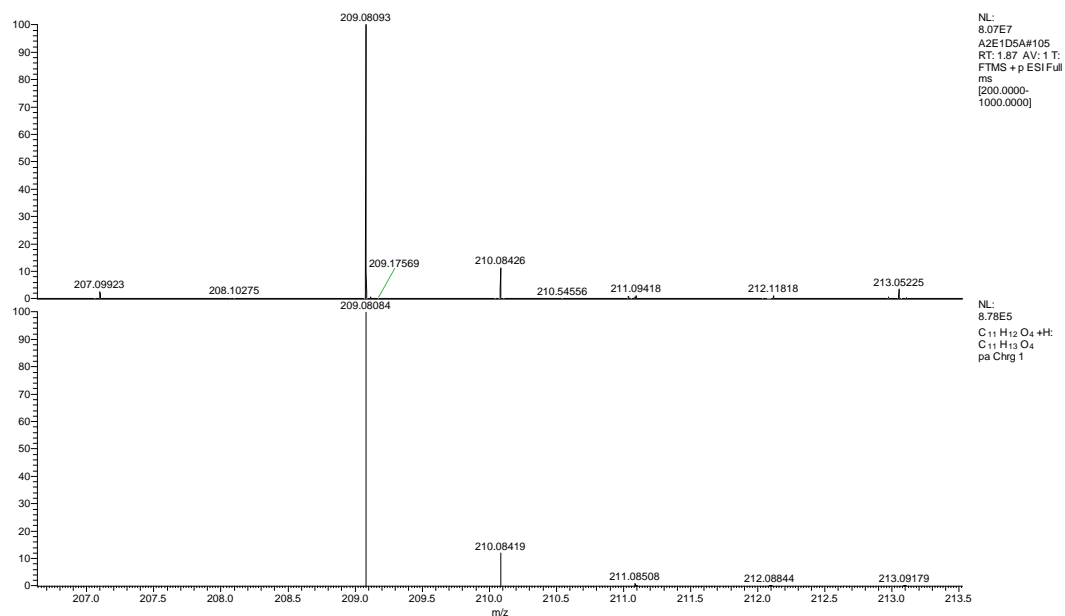


Figure S31. HRESIMS spectrum of compound **7**.

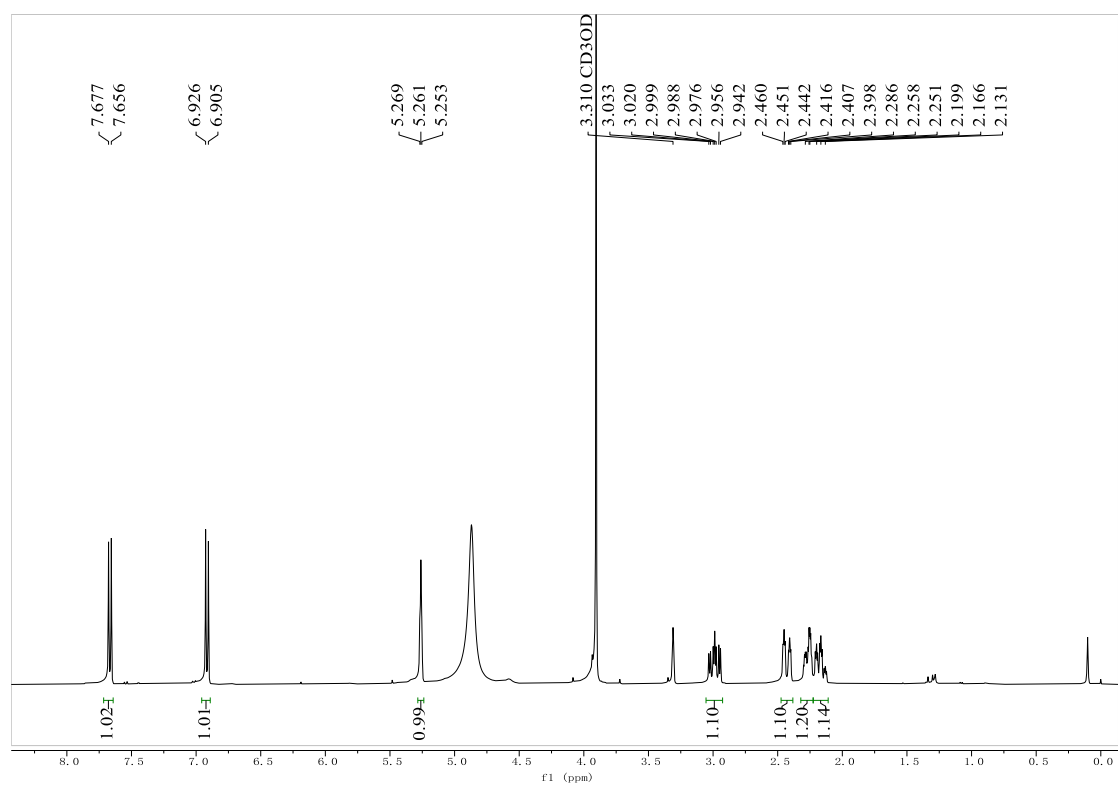


Figure S32. ^1H NMR spectrum of compound **7** (400 MHz, CD_3OD).

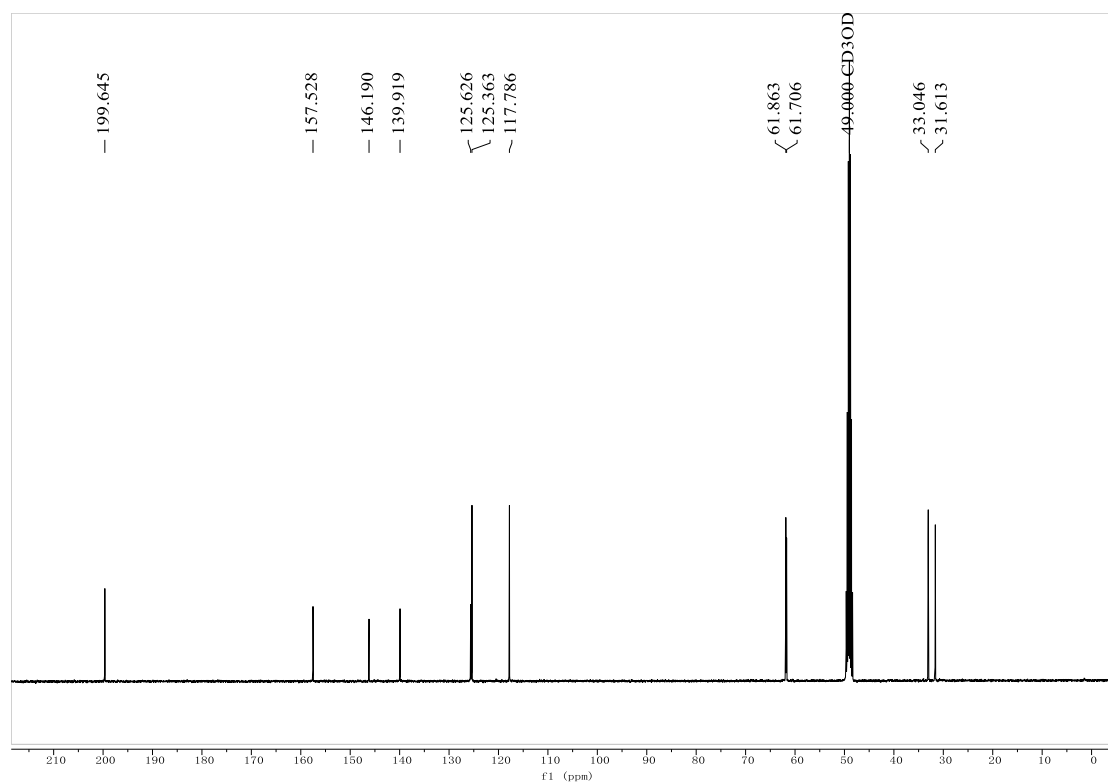


Figure S33. ^{13}C NMR spectrum of compound **7** (100 MHz, CD_3OD).

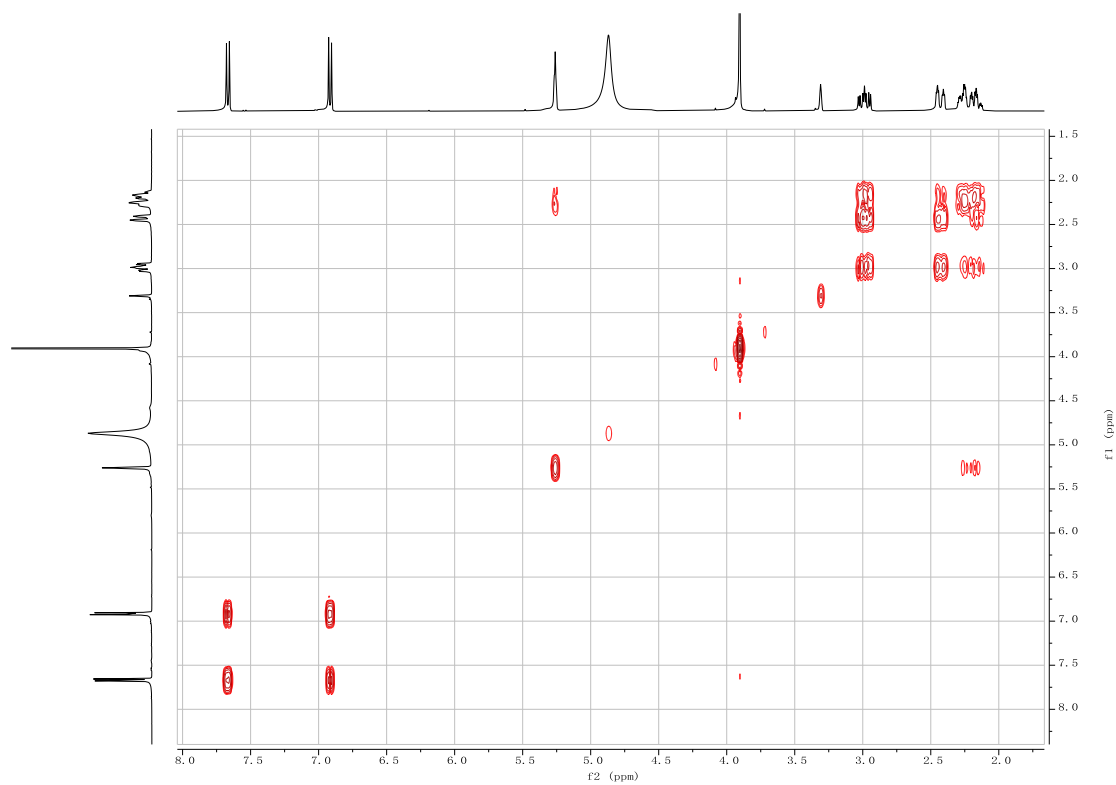


Figure S34. ^1H - ^1H COSY spectrum of compound **7**.

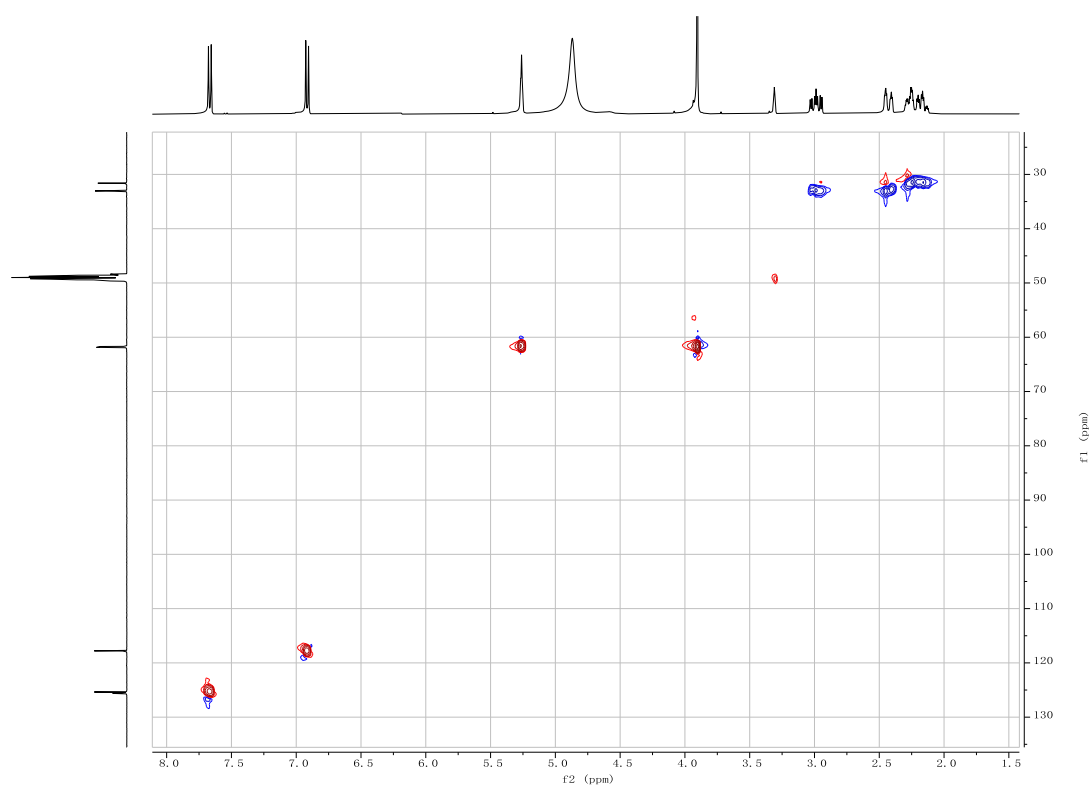


Figure S35. HSQC spectrum of compound **7**.

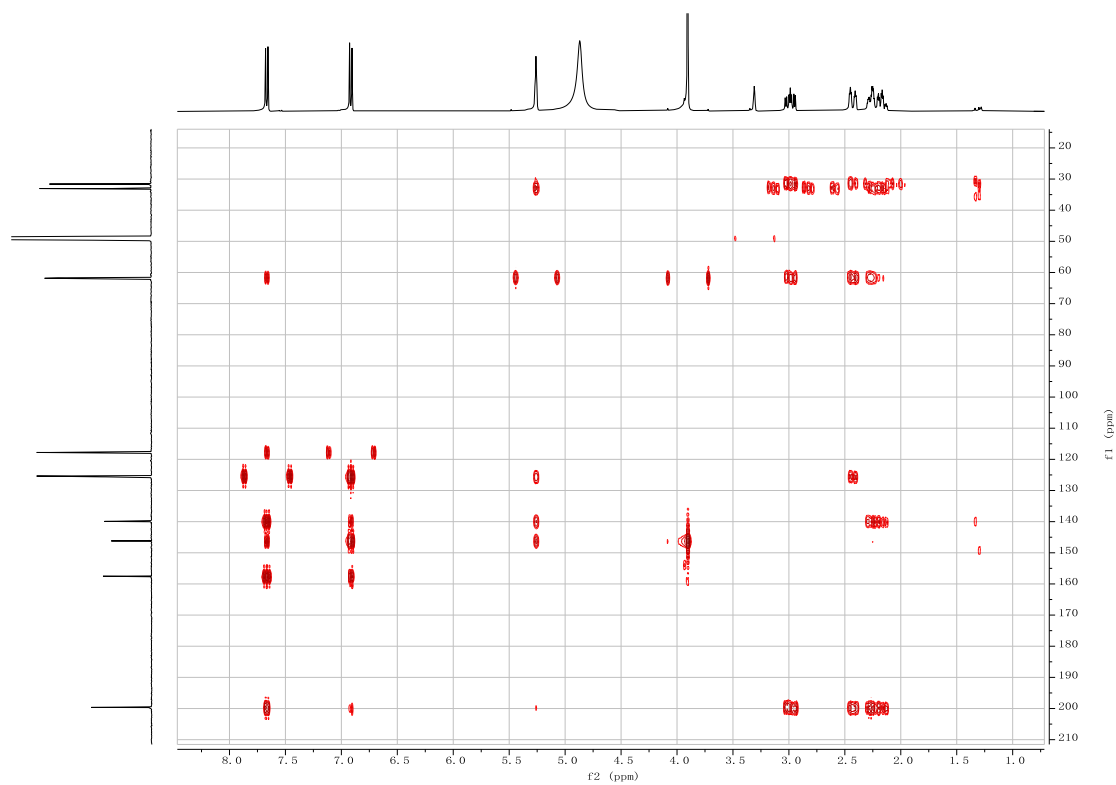


Figure S36. HMBC spectrum of compound **7**.

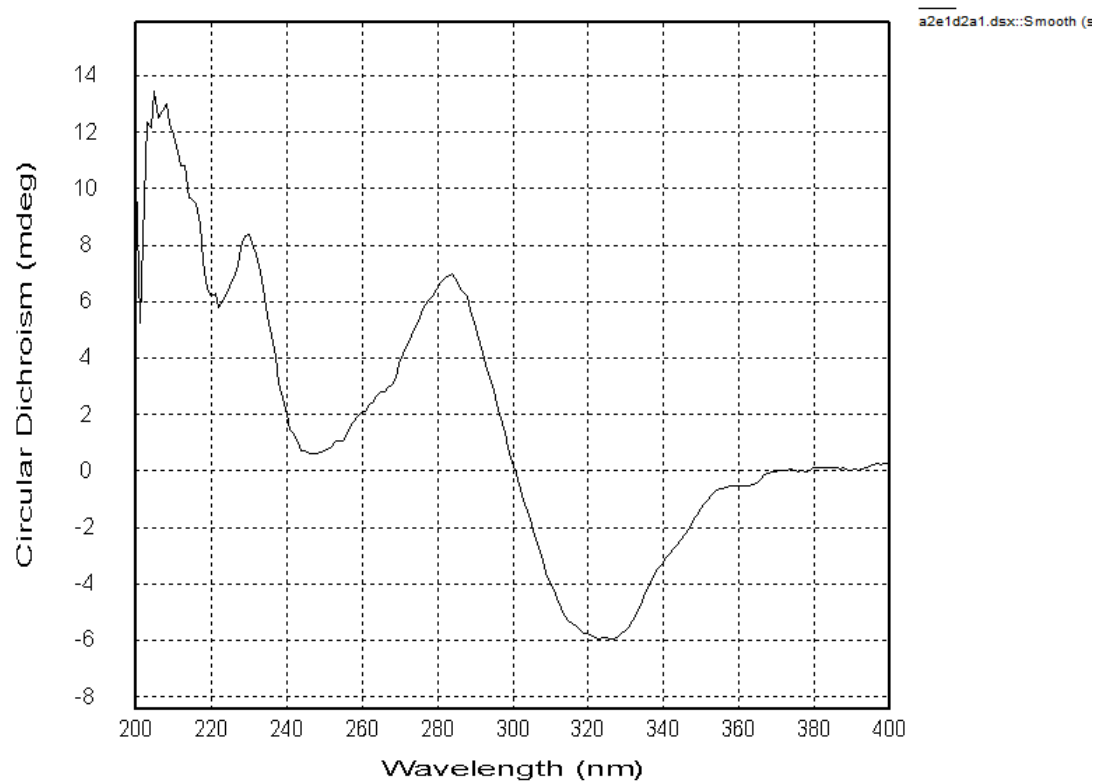


Figure S37. ECD spectrum of compound (+)-7.

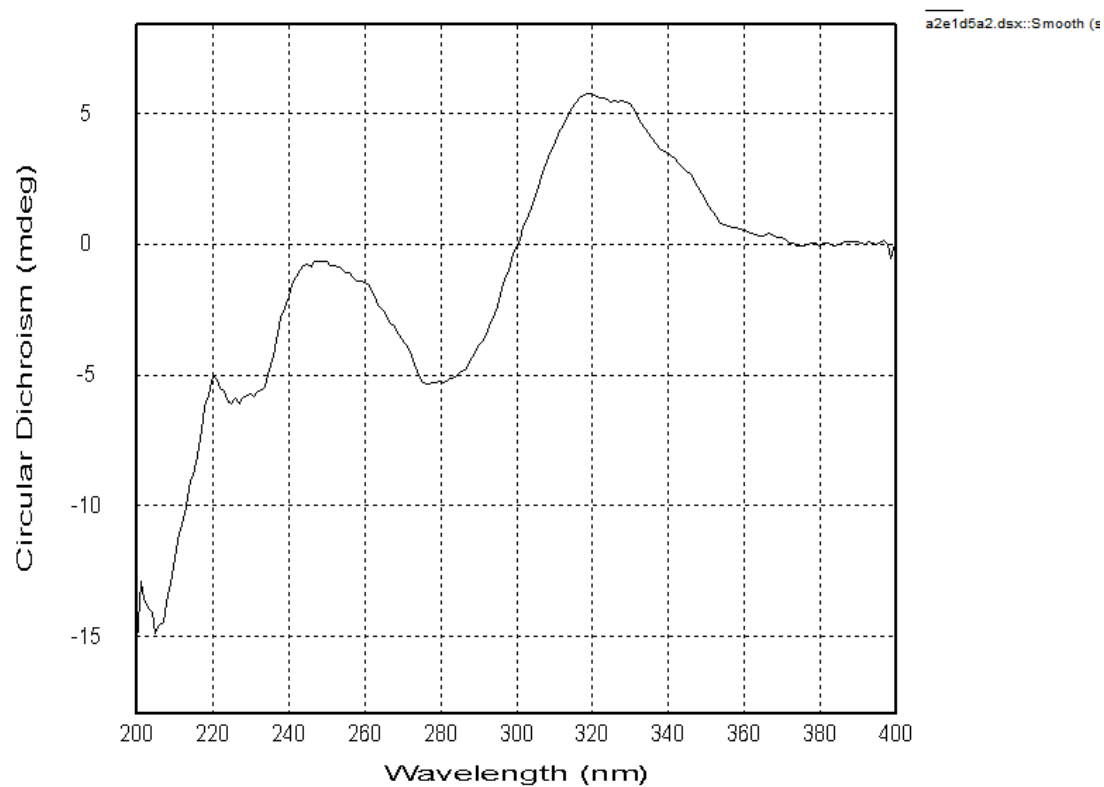


Figure S38. ECD spectrum of compound (-)-7.

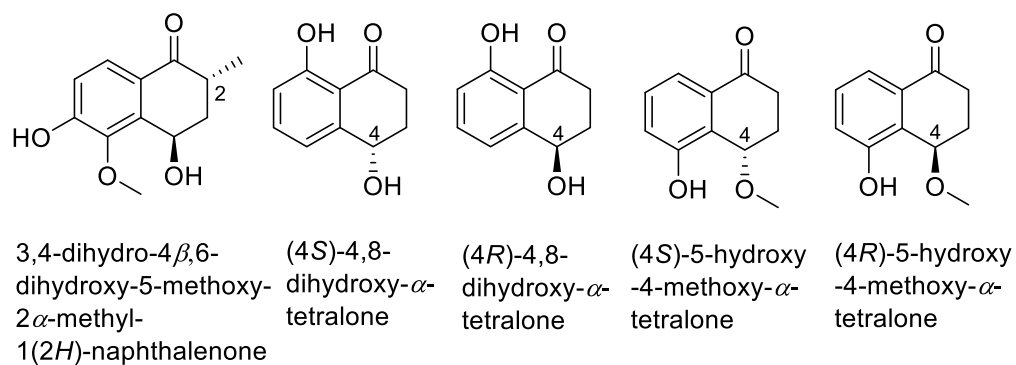


Figure S39. Structure of compounds

3,4-dihydro-4 β ,6-dihydroxy-5-methoxy-2 α -methyl-1(2*H*)-naphthalenone,
 (4*S*)-4,8-dihydroxy- α -tetralone, (4*R*)-4,8-dihydroxy- α -tetralone,
 (4*S*)-5-hydroxy-4-methoxy- α -tetralone and (4*R*)-5-hydroxy-4-methoxy- α -tetralone.