

Electronic supplementary information

Hyperelatosides A–E, biphenyl ether glycosides from *Hypericum elatoides* with neurotrophic activity

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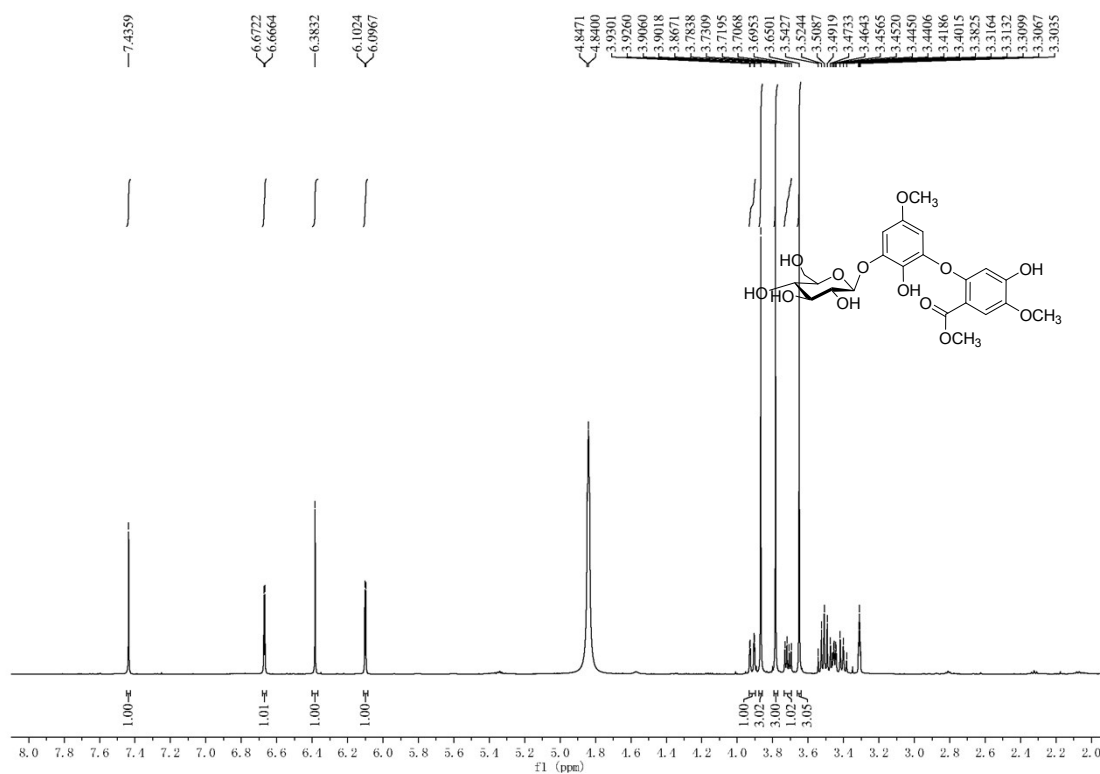


Figure S1. ^1H NMR spectrum (500 MHz) of **1** in CD_3OD

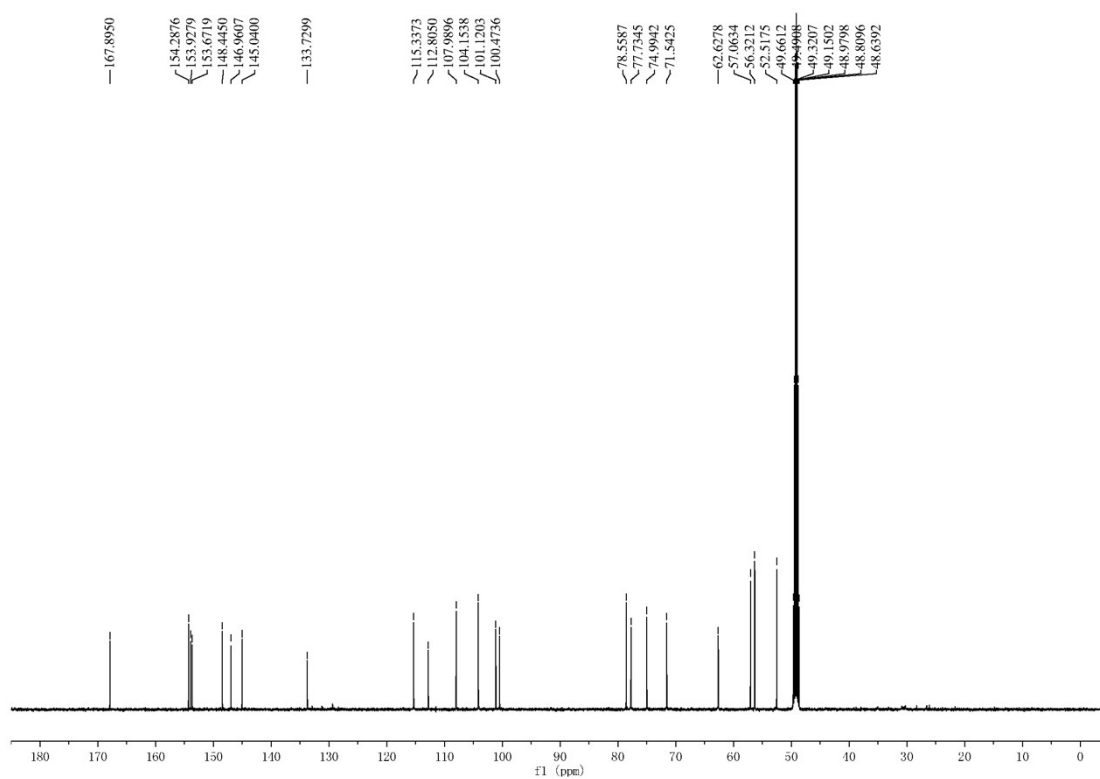


Figure S2. ^{13}C NMR spectrum (125 MHz) of **1** in CD_3OD

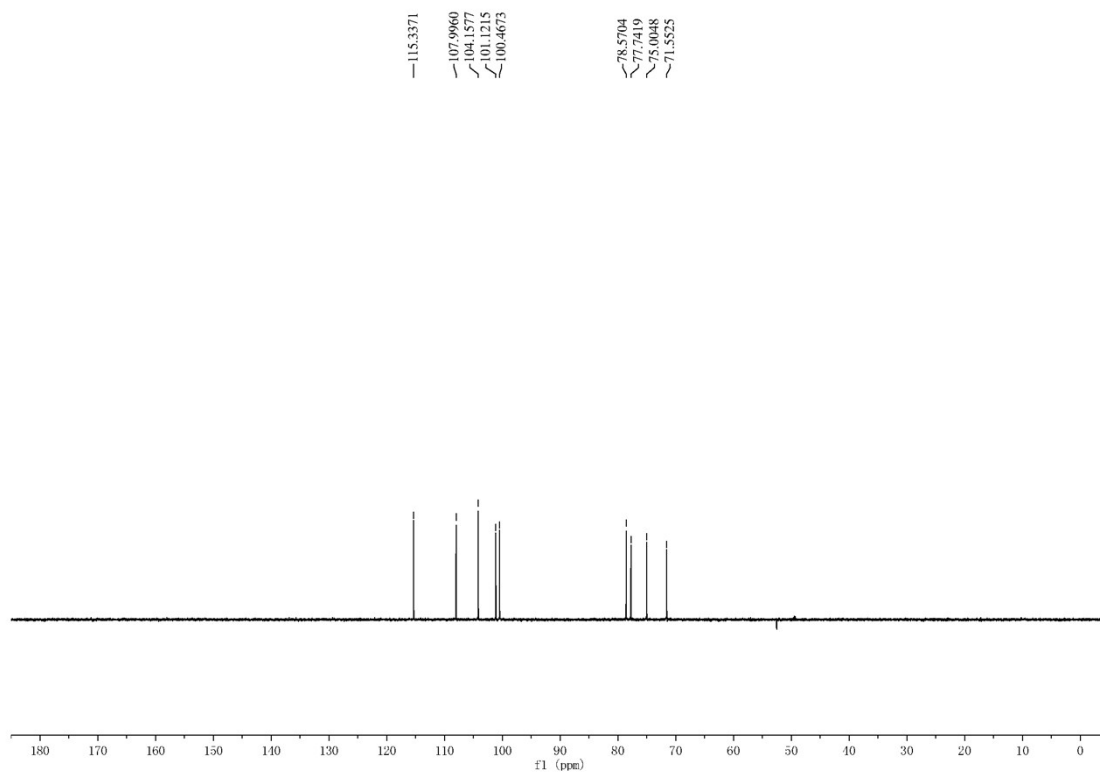


Figure S3. DEPT-90 spectrum (125 MHz) of **1** in CD₃OD

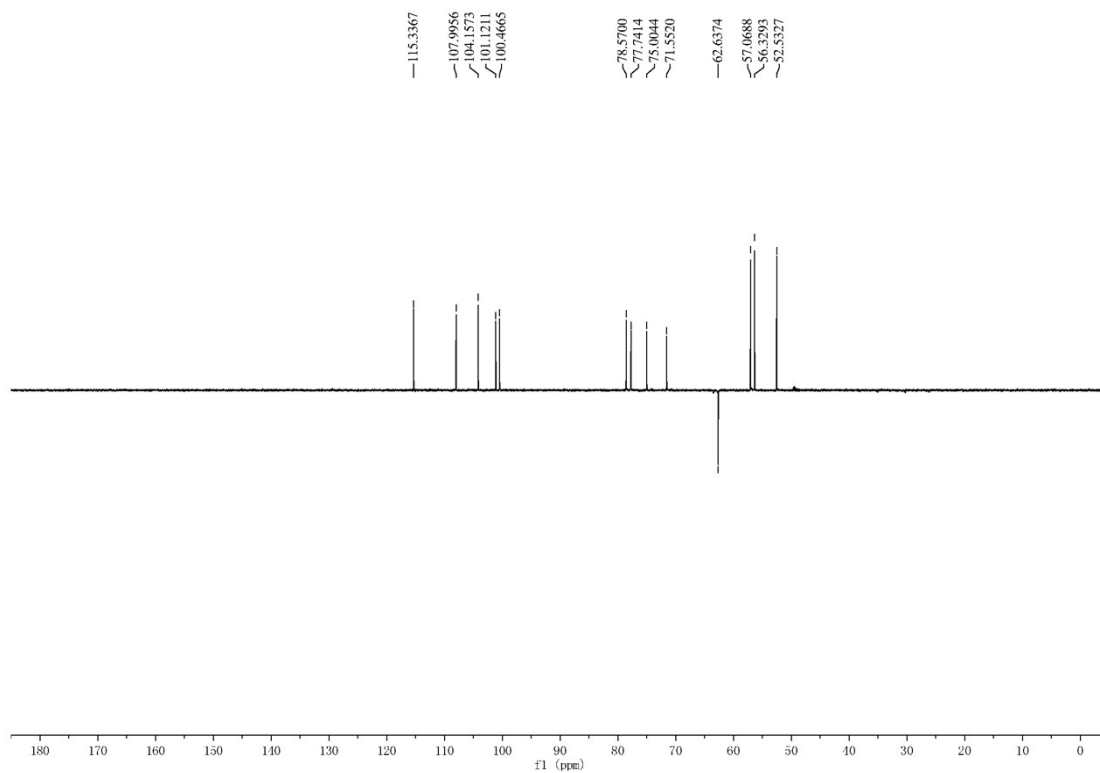


Figure S4. DEPT-135 spectrum (125 MHz) of **1** in CD₃OD

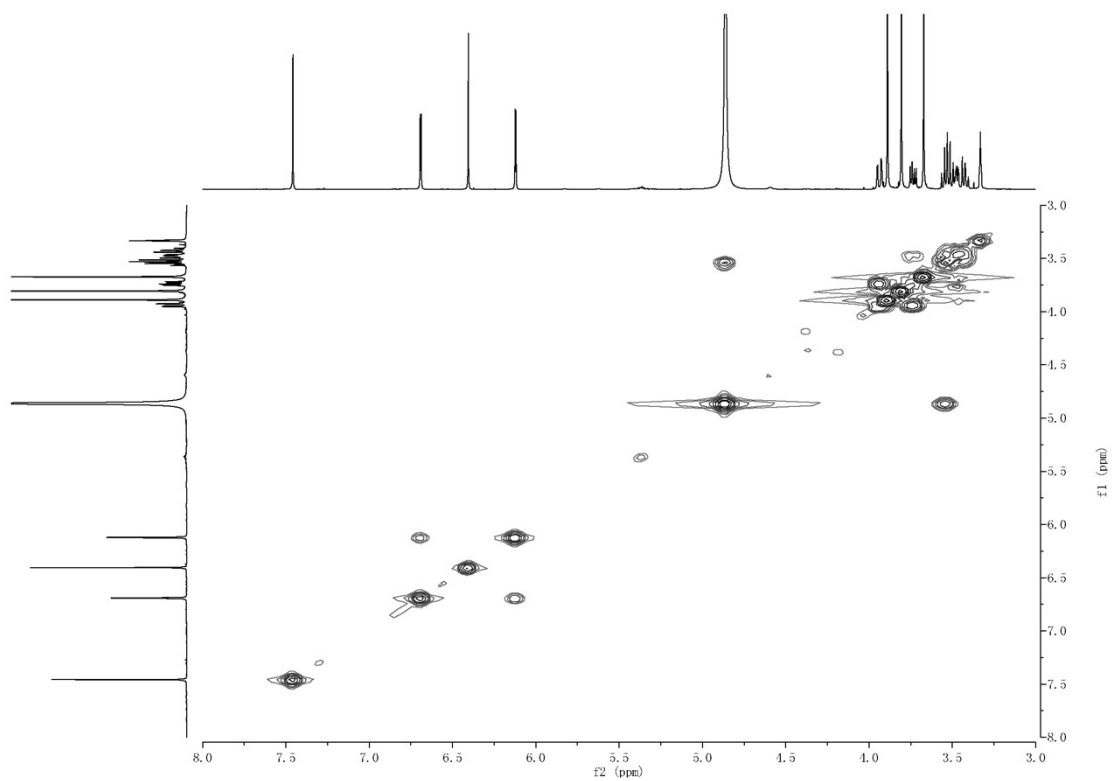


Figure S5. COSY spectrum (500 MHz) of **1** in CD₃OD

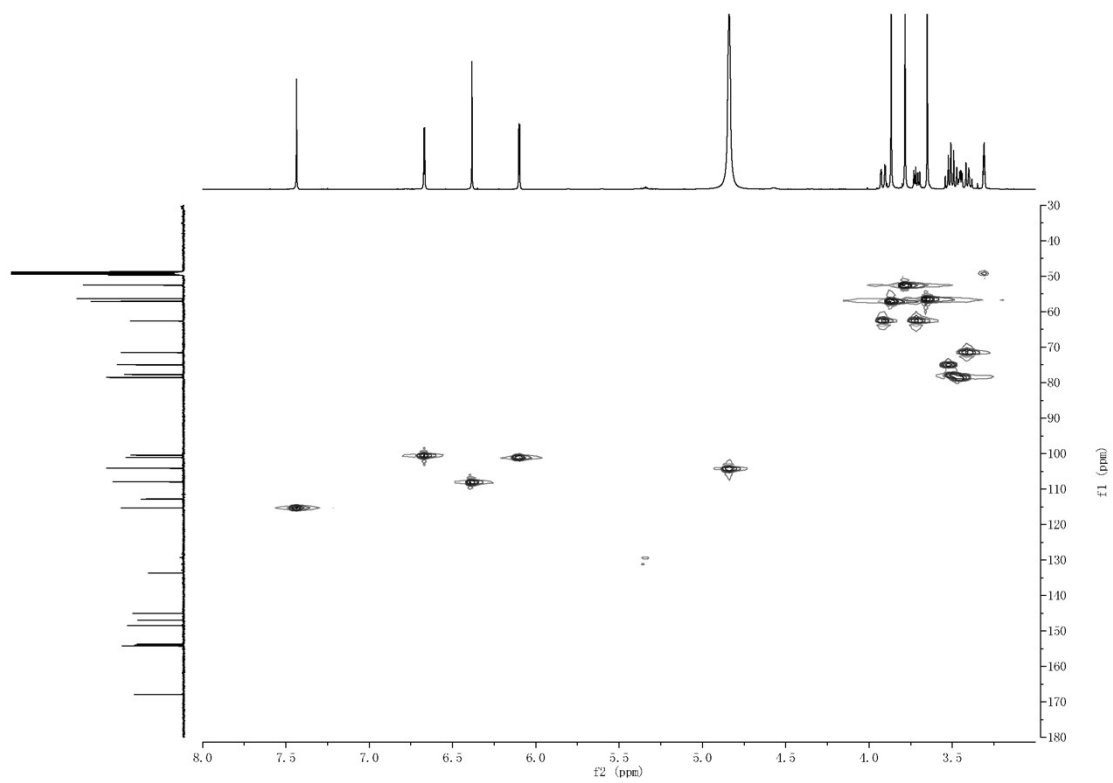


Figure S6. HSQC spectrum (500 MHz) of **1** in CD₃OD

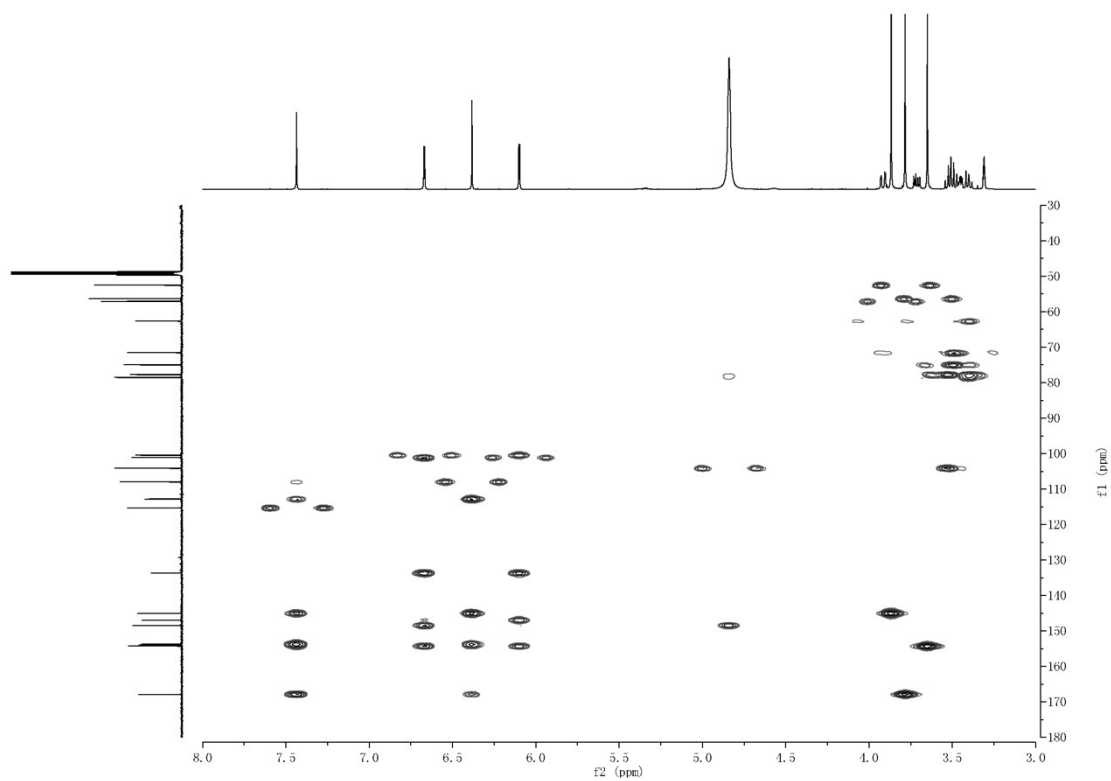


Figure S7. HMBC spectrum (500 MHz) of **1** in CD₃OD

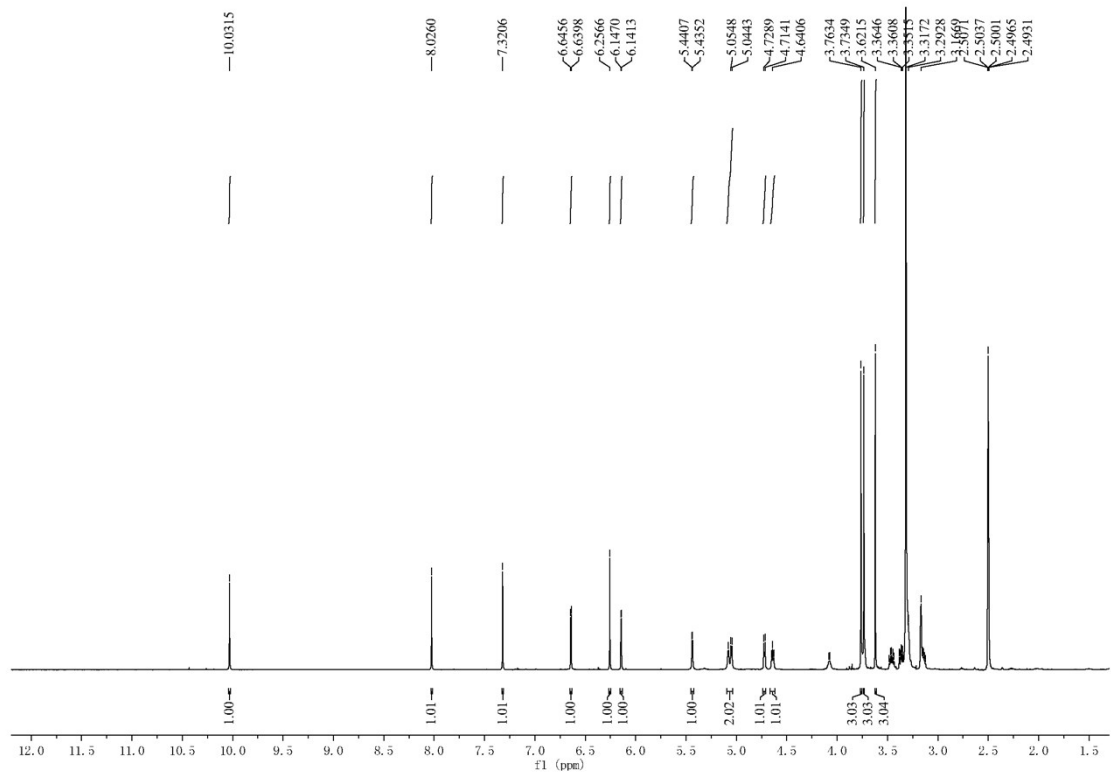


Figure S8. ¹H NMR spectrum (500 MHz) of **1** in DMSO-*d*₆

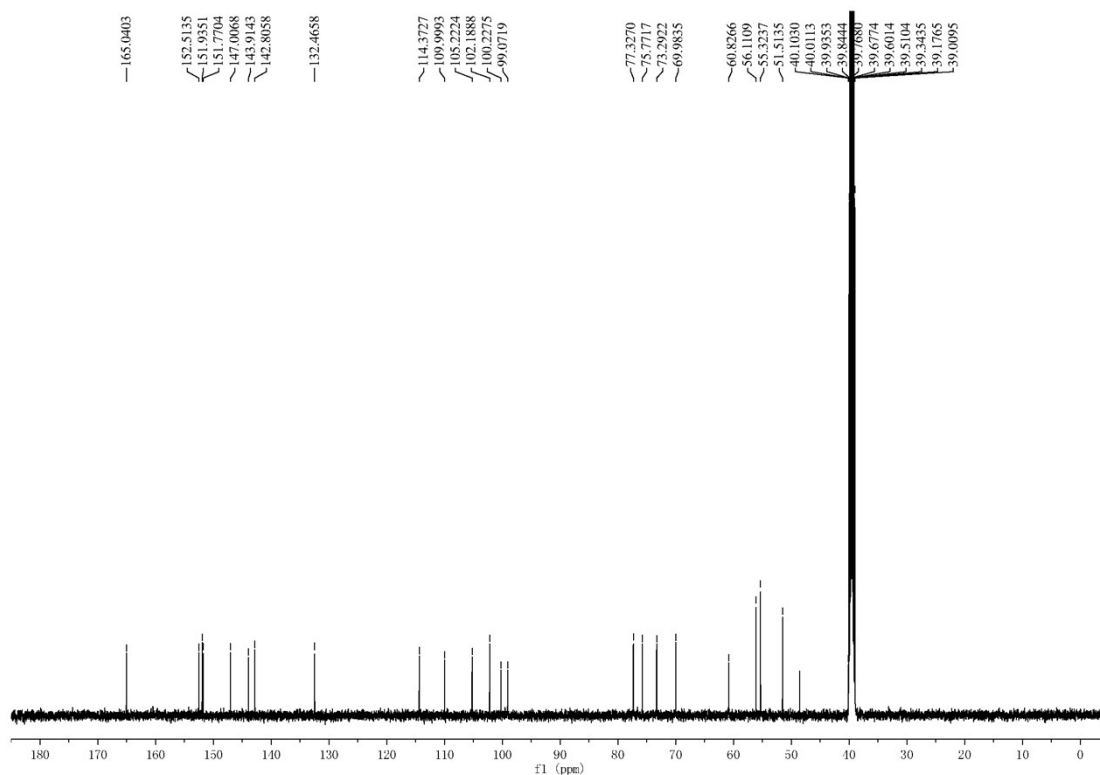


Figure S9. ^{13}C NMR spectrum (125 MHz) of **1** in $\text{DMSO-}d_6$

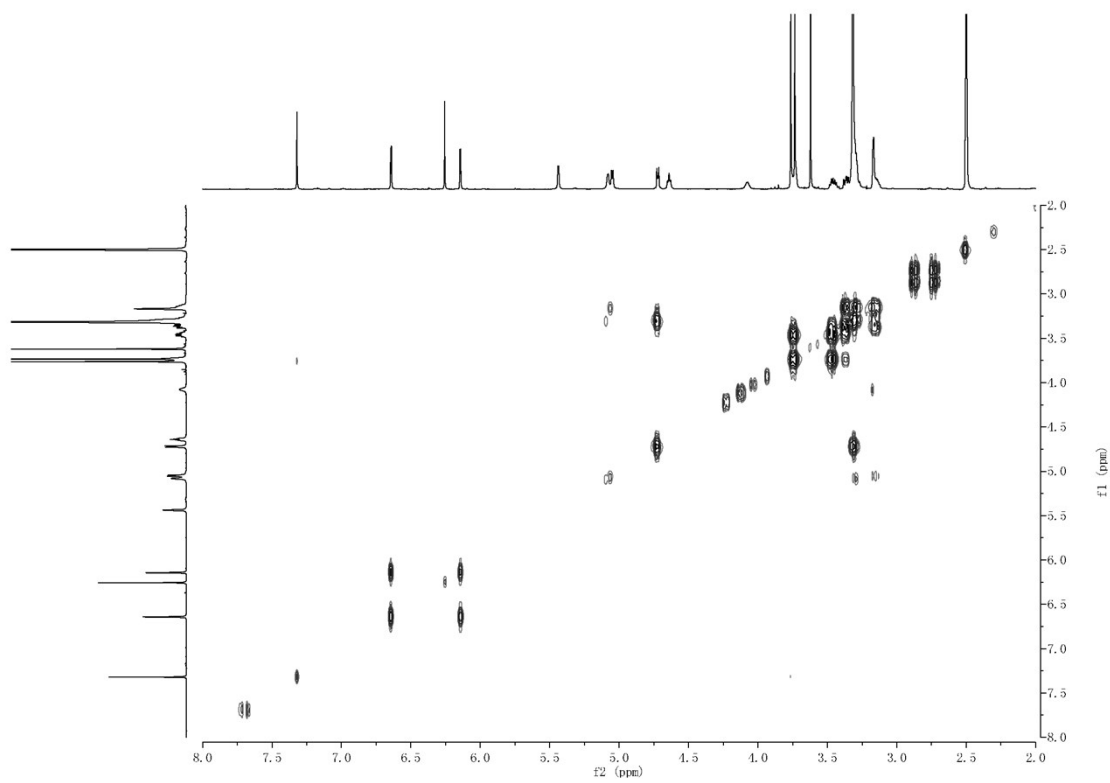


Figure S10. COSY spectrum (500 MHz) of **1** in $\text{DMSO-}d_6$

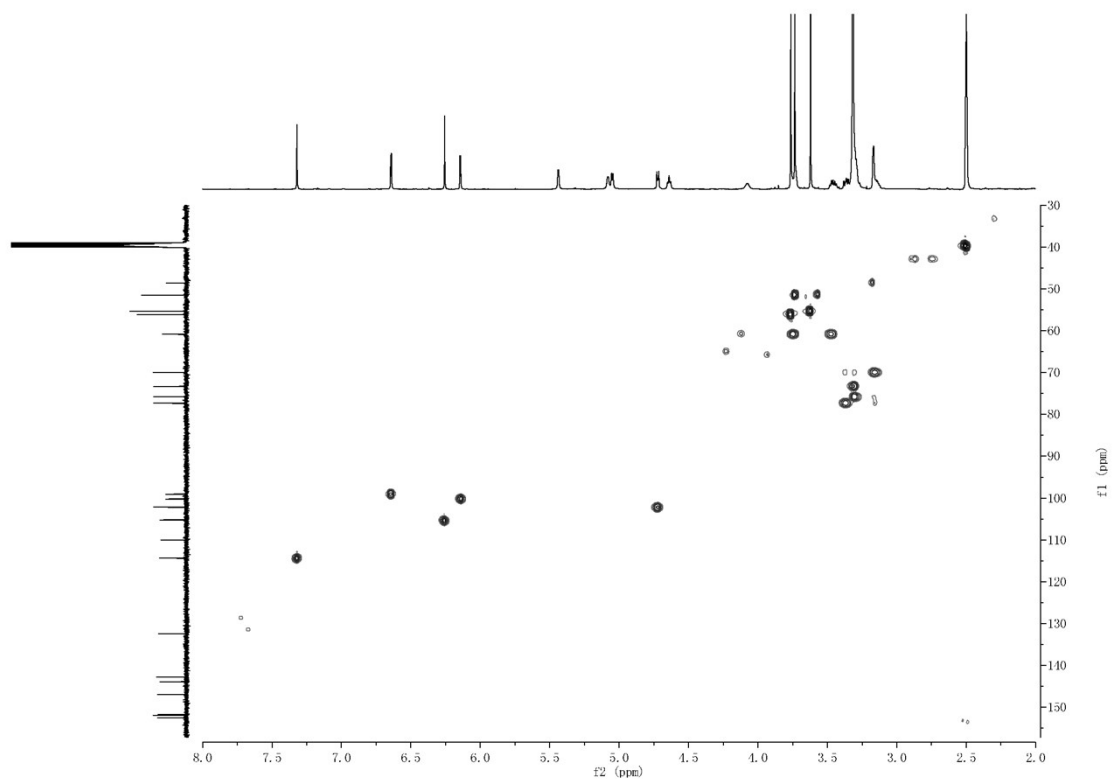


Figure S11. HSQC spectrum (500 MHz) of **1** in DMSO- d_6

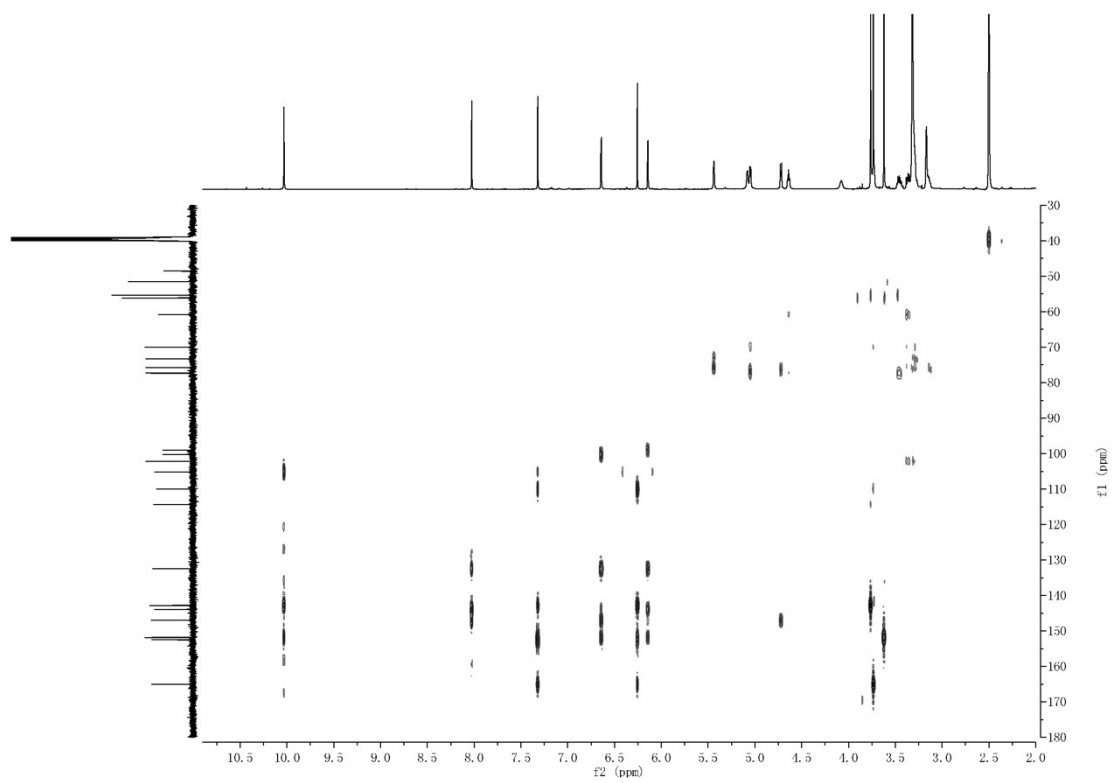


Figure S12. HMBC spectrum (500 MHz) of **1** in DMSO- d_6

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T: ITMS + c ESIsid=35.00 Full ms [100.00-2000.00]

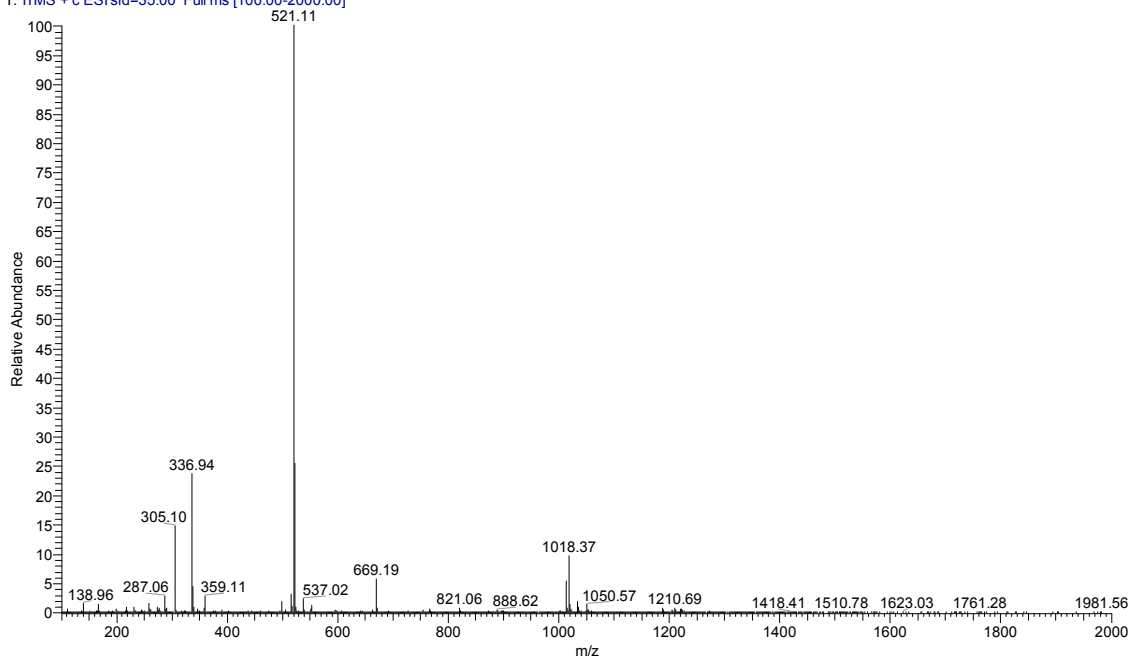


Figure S13. ESIMS spectrum of 1

Acq. File: P-Xiaojian-2.wiff

Sample Name: Sample003
Sample Number: N/A

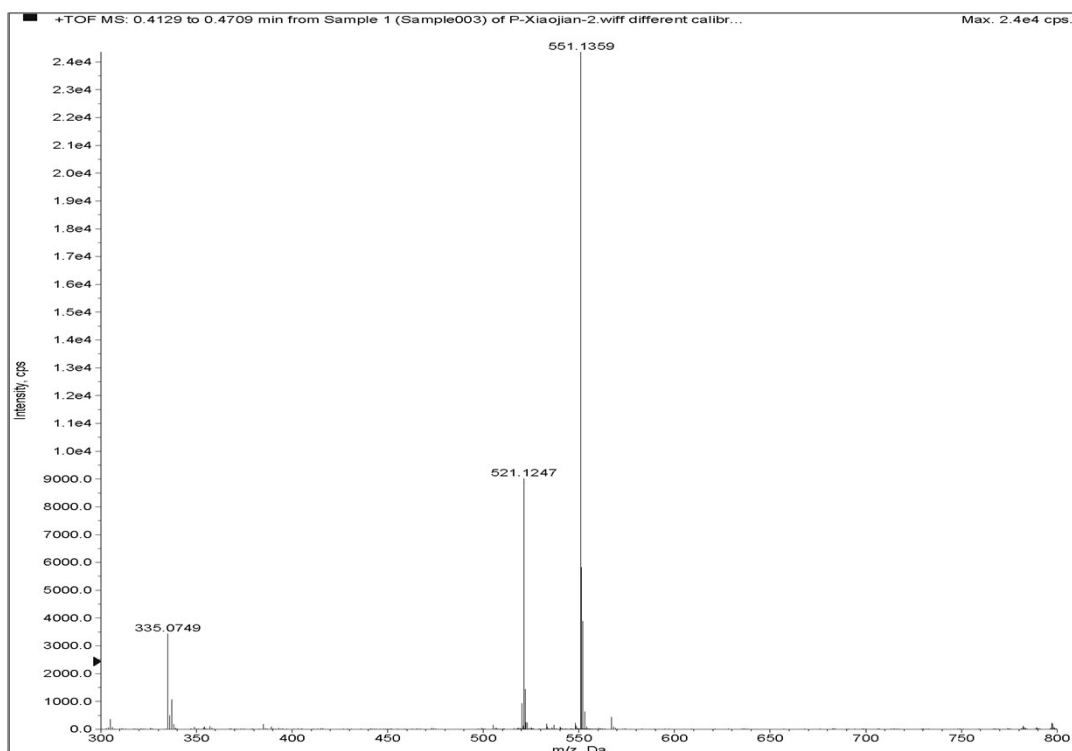


Figure S14. HRESIMS spectrum of 1

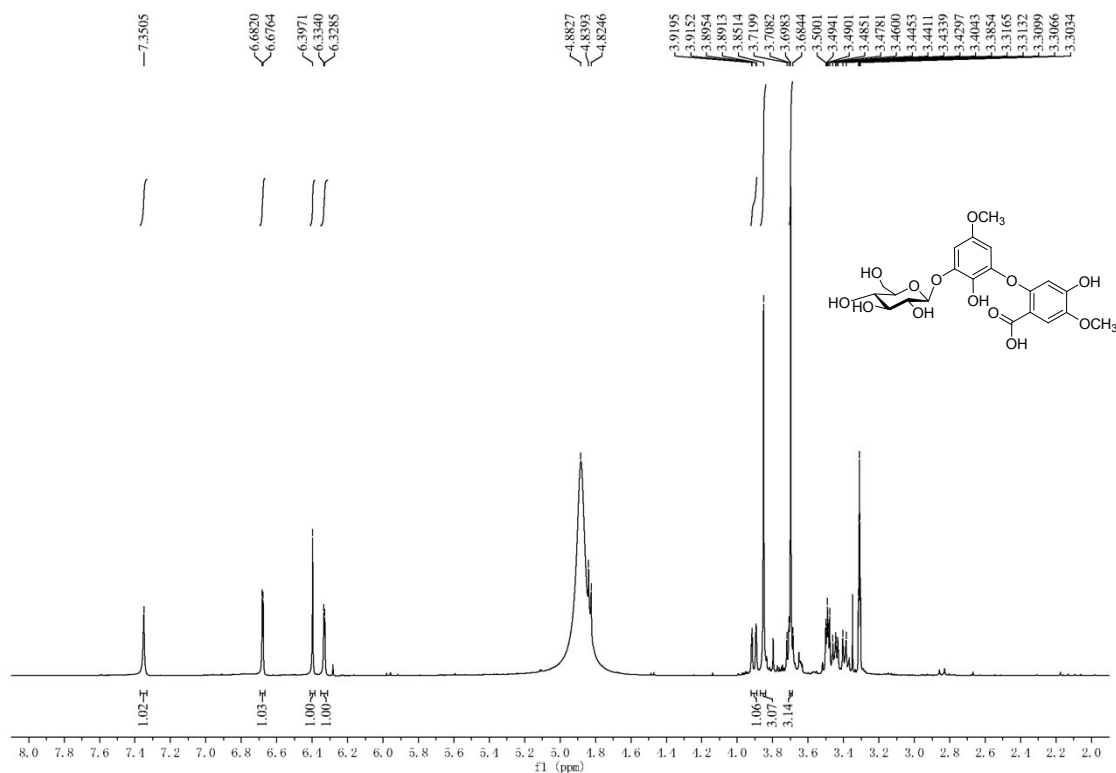


Figure S15. ^1H NMR spectrum (500 MHz) of **2** in CD_3OD

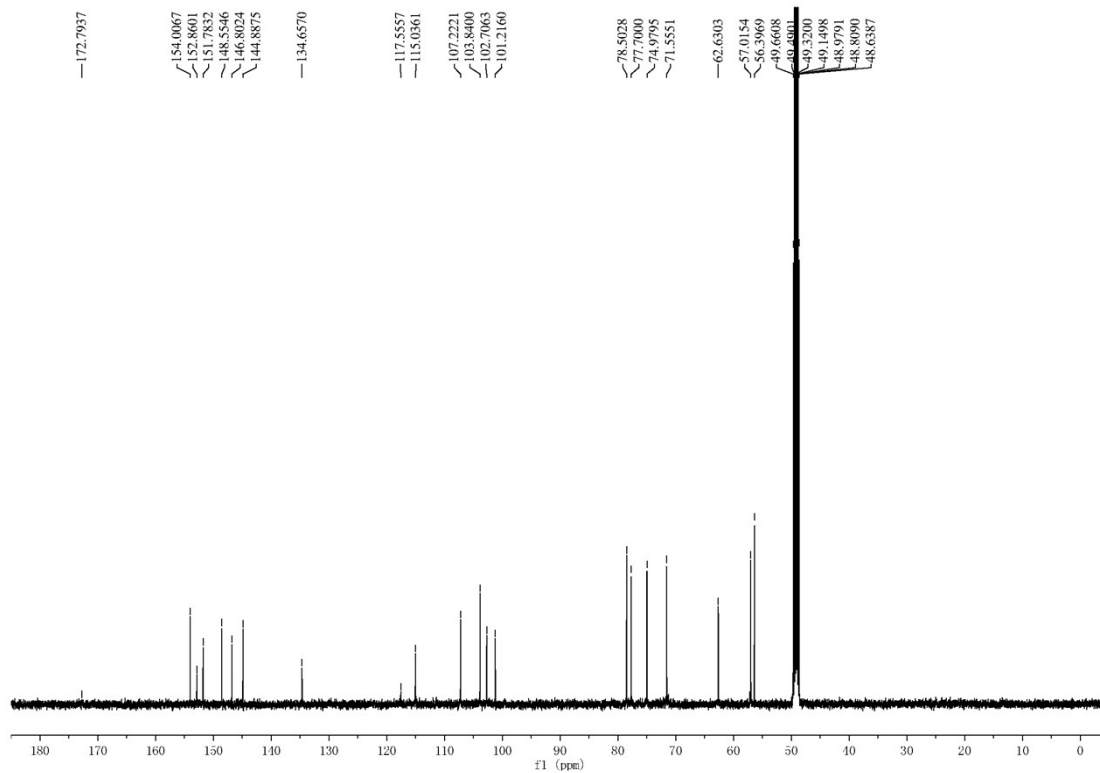


Figure S16. ^{13}C NMR spectrum (125 MHz) of **2** in CD_3OD

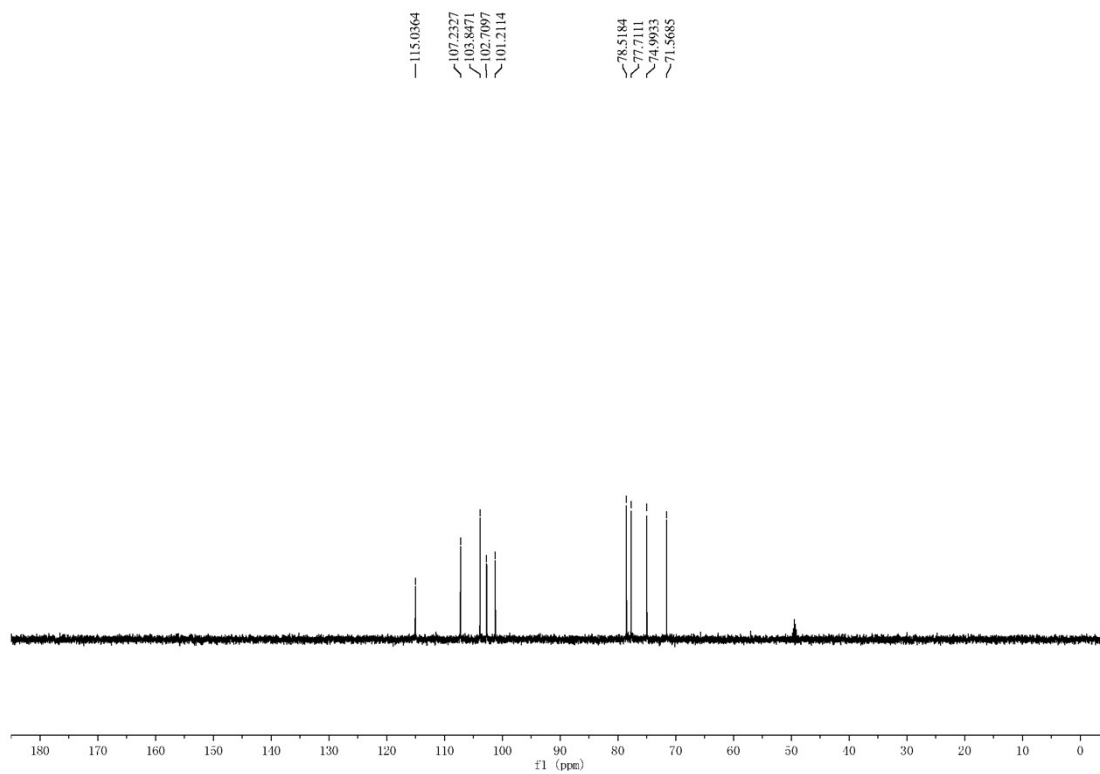


Figure S17. DEPT-90 spectrum (125 MHz) of **2** in CD₃OD

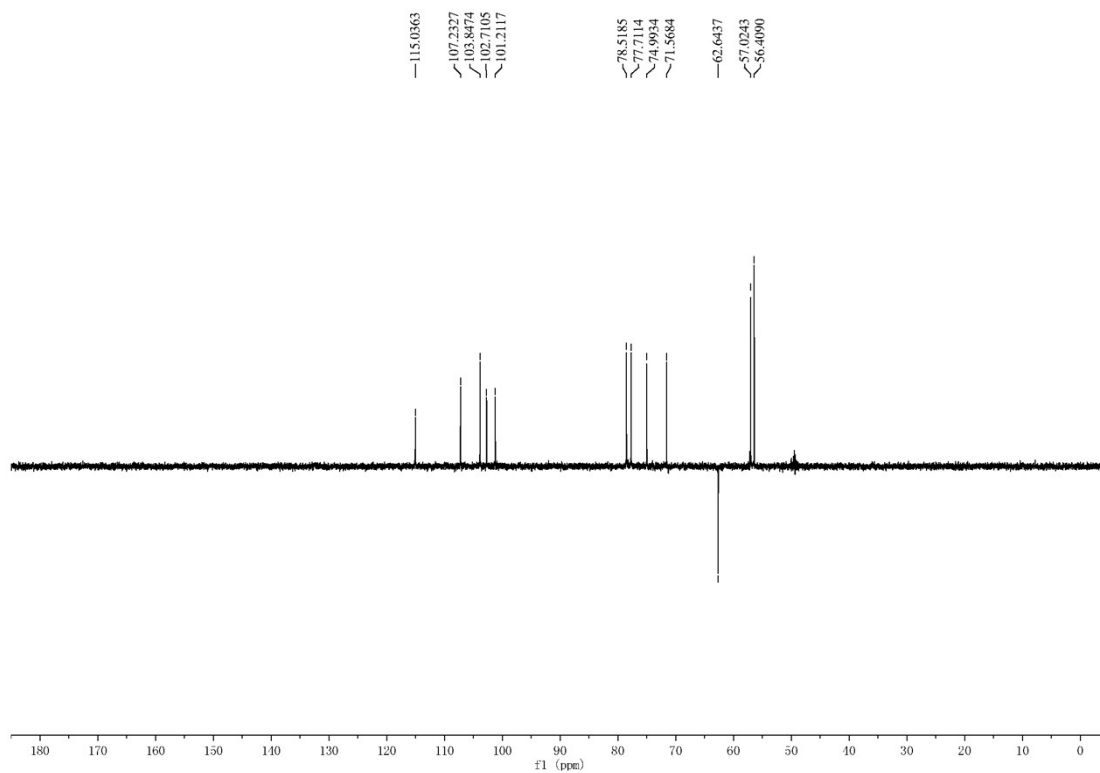


Figure S18. DEPT-135 spectrum (125 MHz) of **2** in CD₃OD

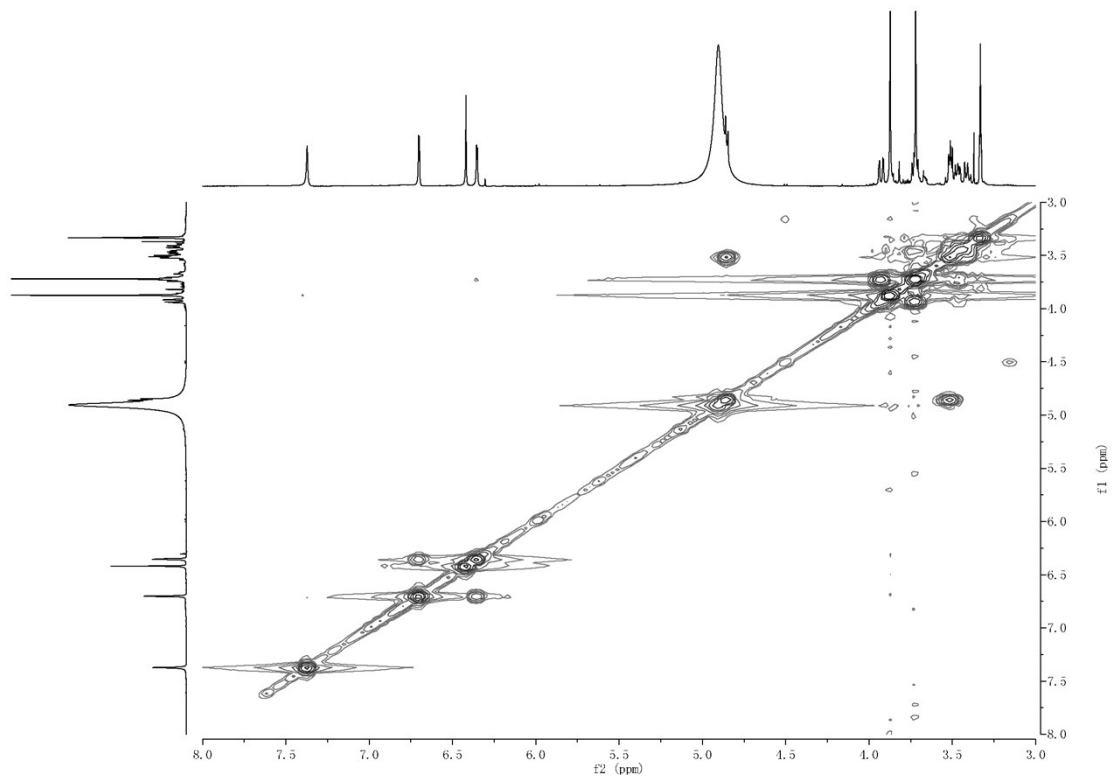


Figure S19. COSY spectrum (500 MHz) of **2** in CD₃OD

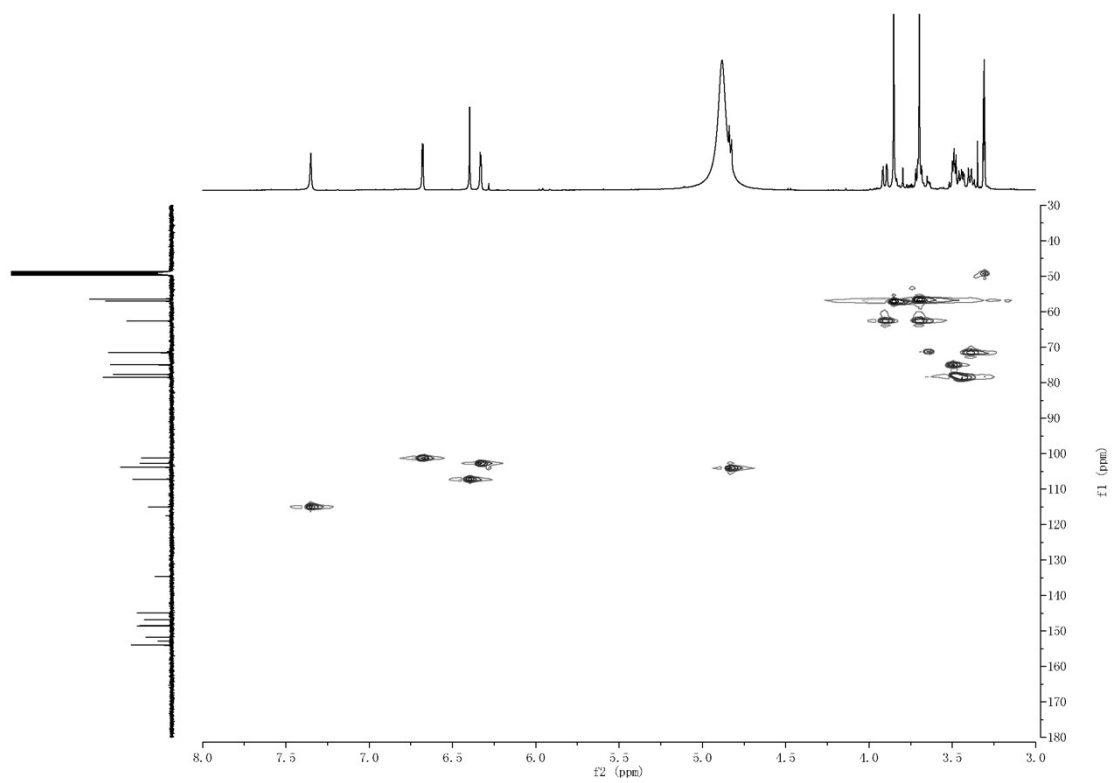


Figure S20. HSQC spectrum (500 MHz) of **2** in CD₃OD

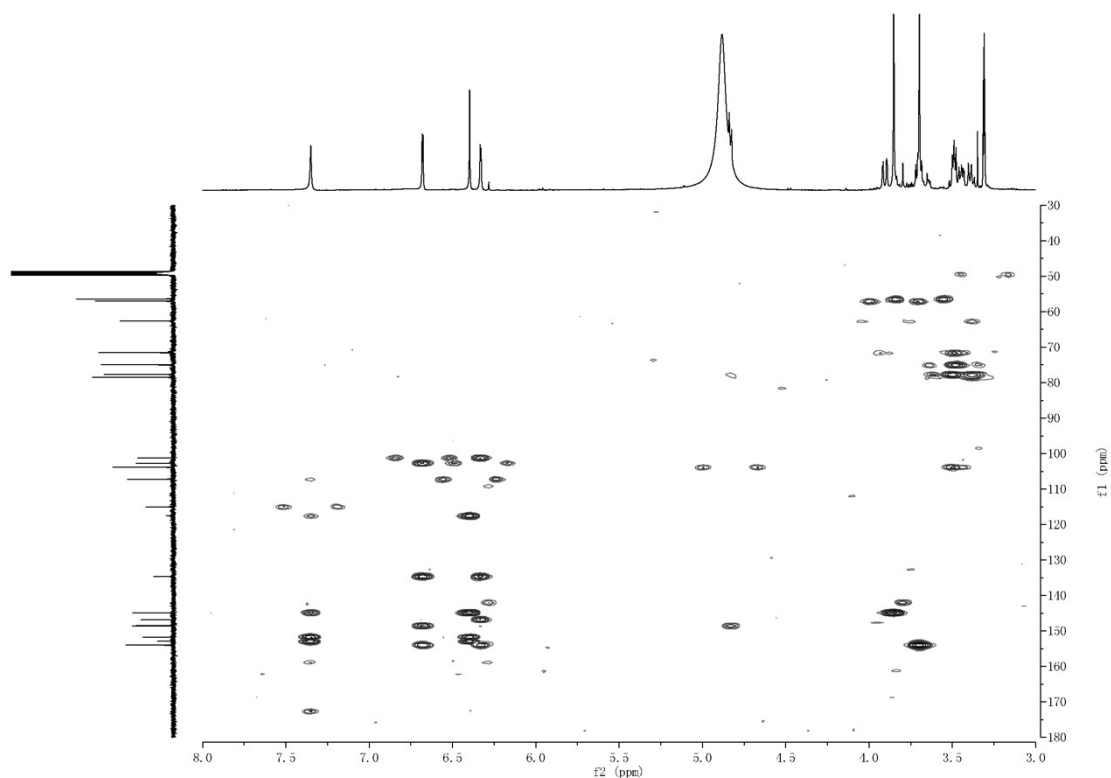


Figure S21. HMBC spectrum (500 MHz) of **2** in CD₃OD

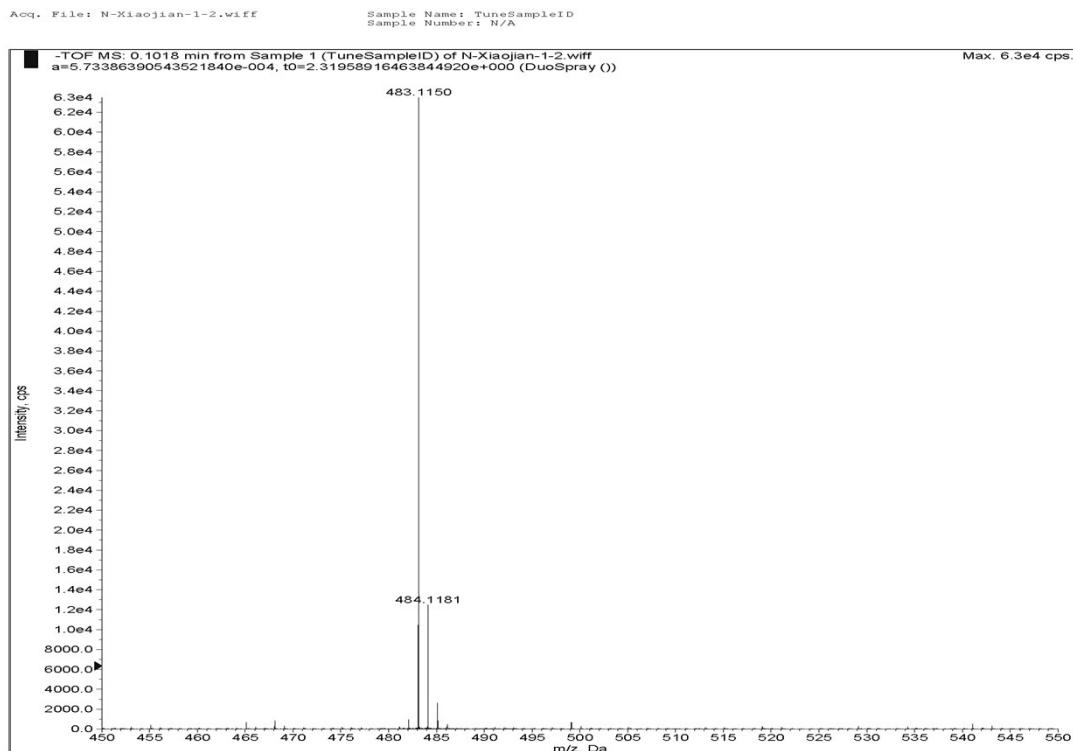


Figure S22. HRESIMS spectrum of **2**

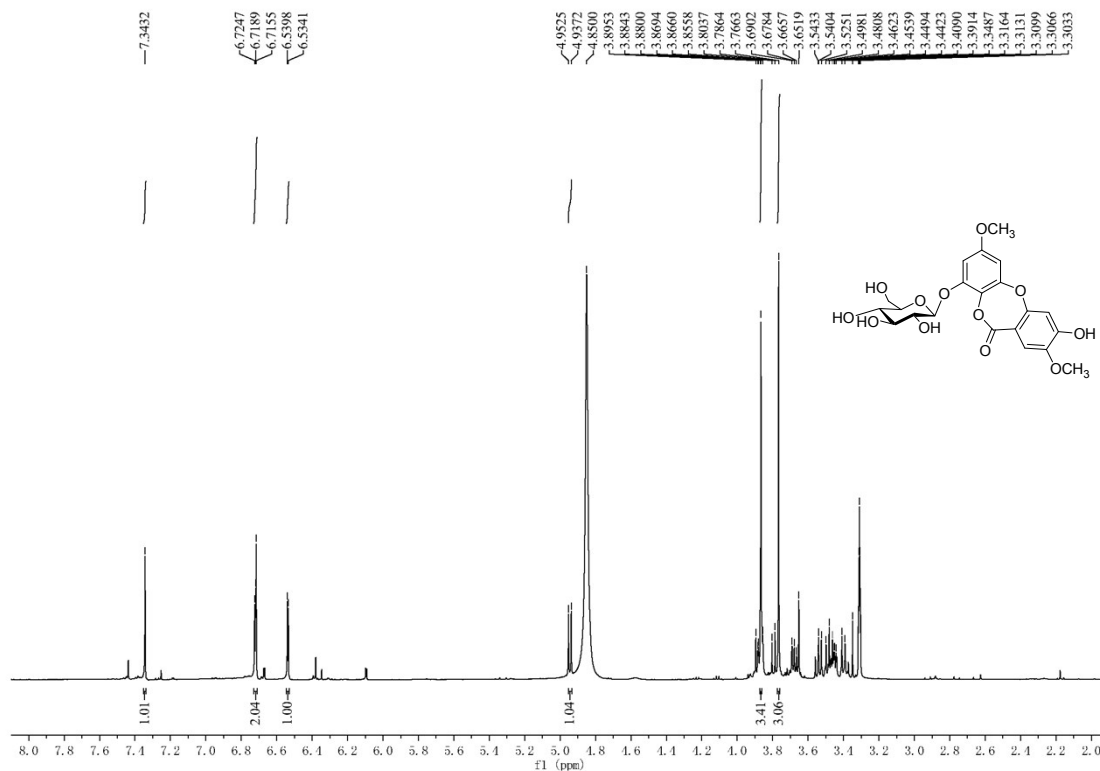


Figure S23. ^1H NMR spectrum (500 MHz) of **3** in CD_3OD

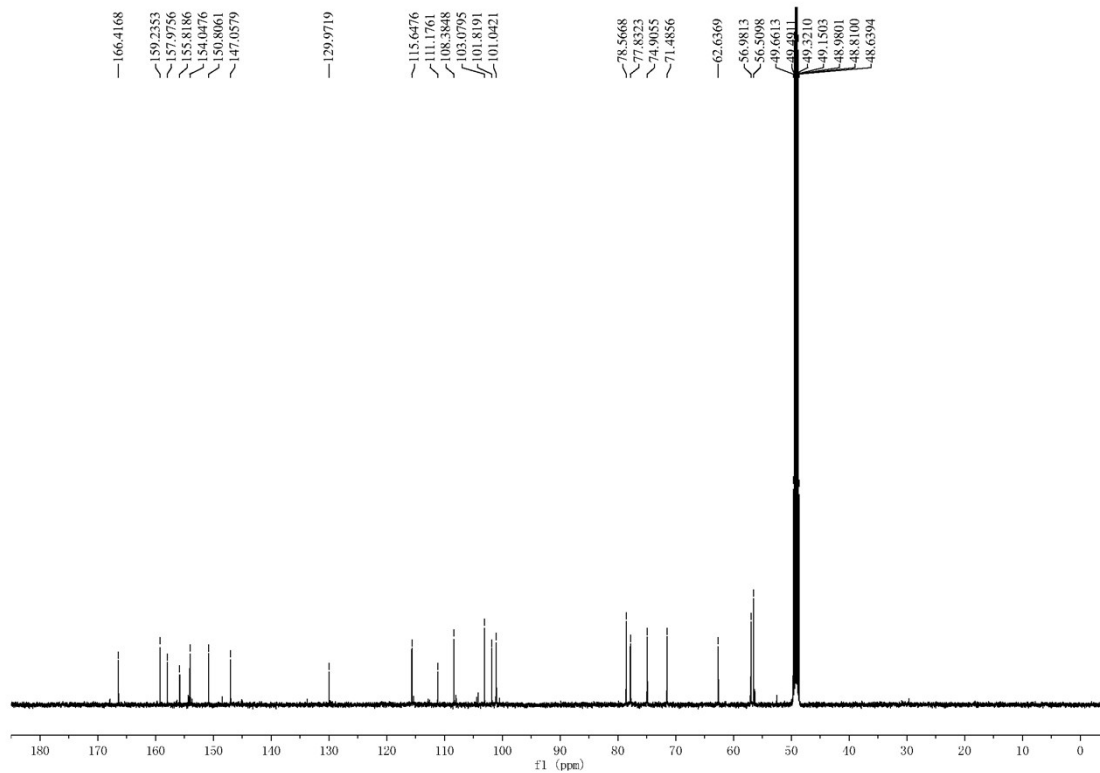


Figure S24. ^{13}C NMR spectrum (125 MHz) of **3** in CD_3OD

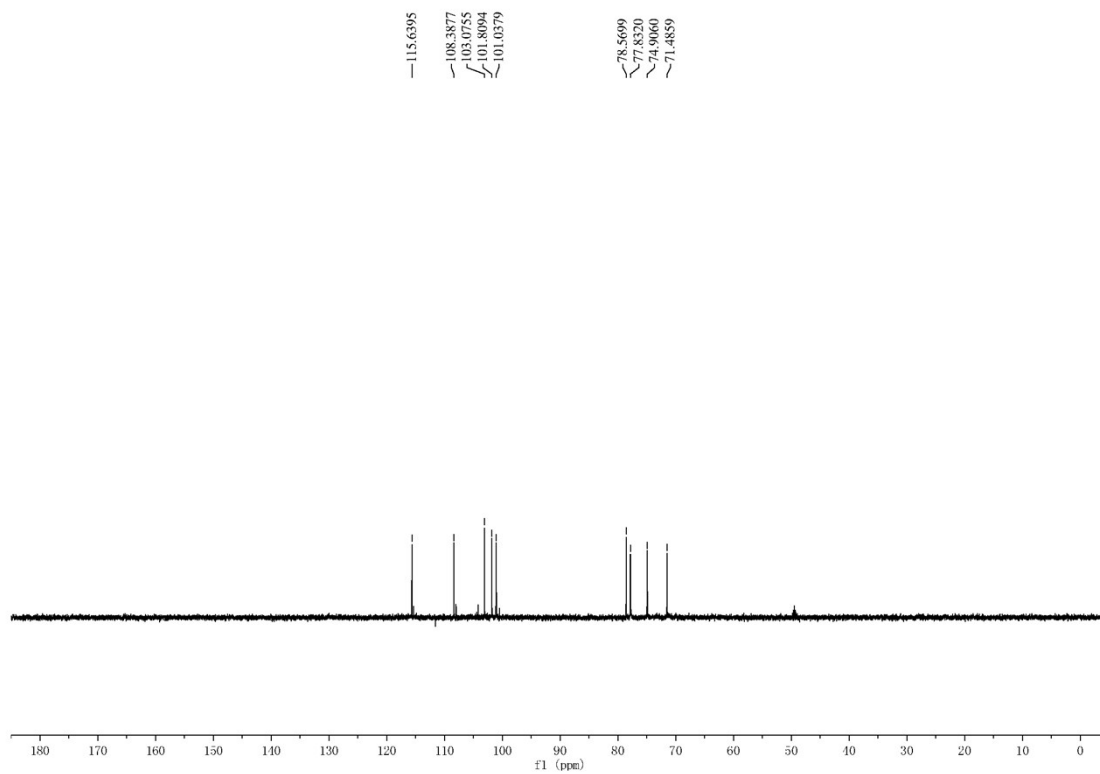


Figure S25. DEPT-90 spectrum (125 MHz) of **3** in CD₃OD

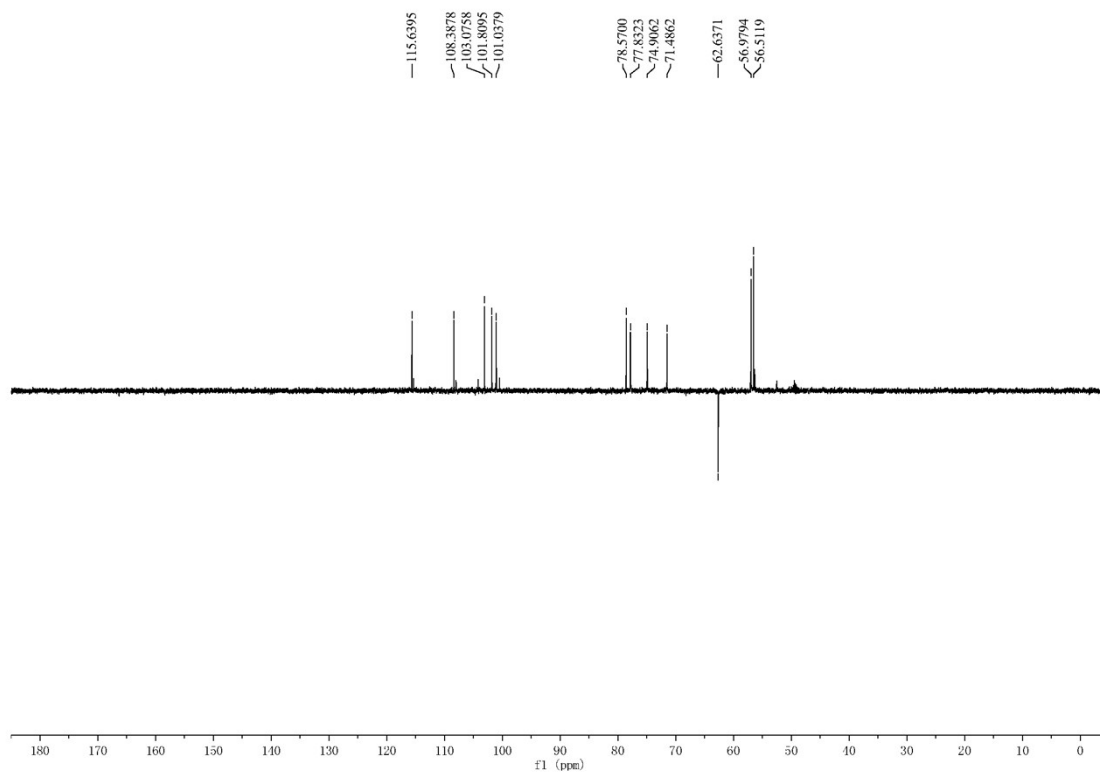


Figure S26. DEPT-135 spectrum (125 MHz) of **3** in CD₃OD

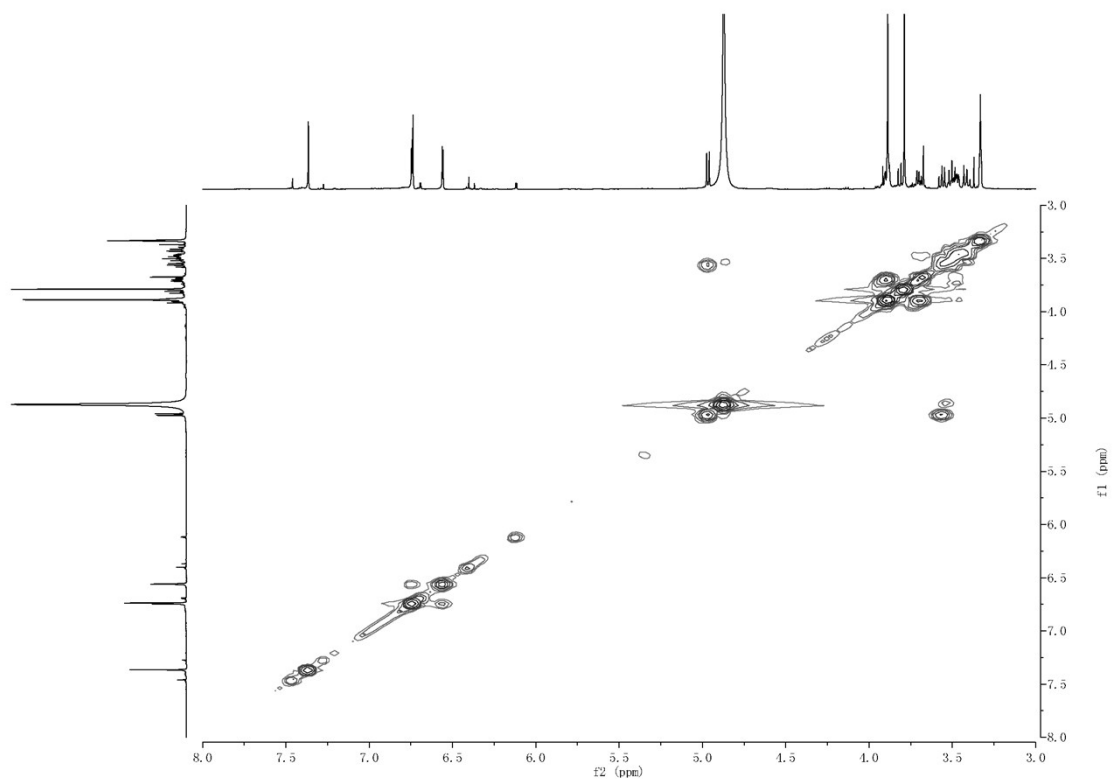


Figure S27. COSY spectrum (500 MHz) of **3** in CD₃OD

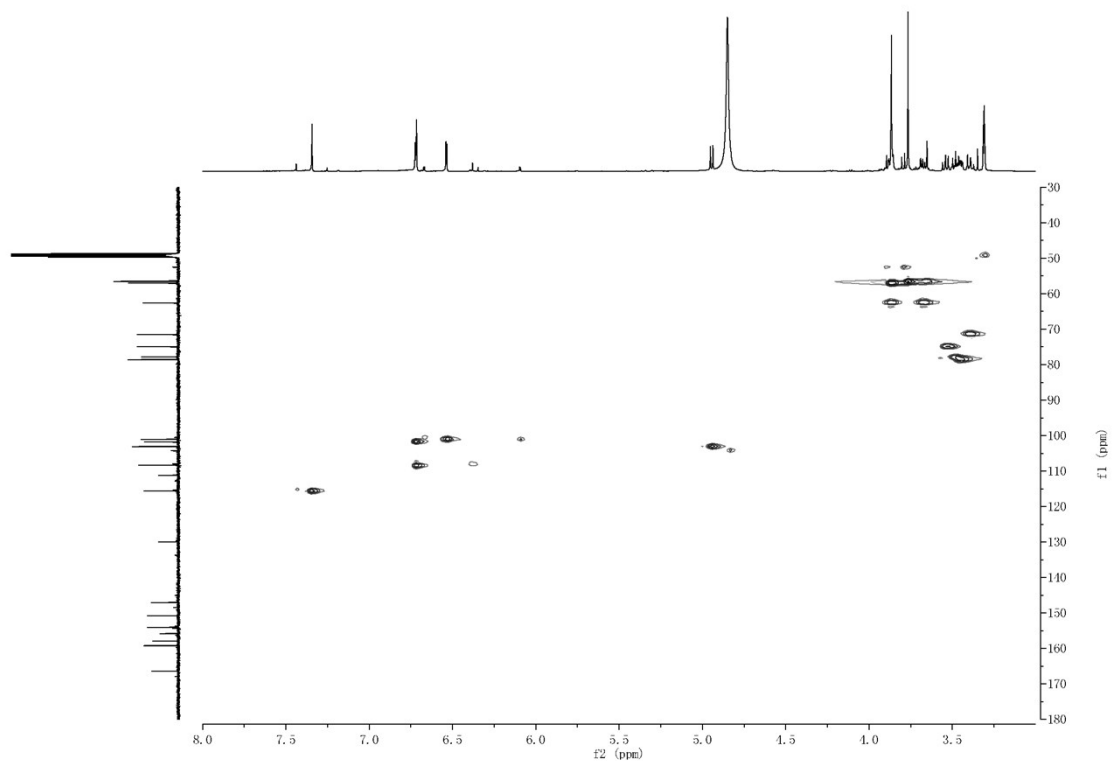


Figure S28. HSQC spectrum (500 MHz) of **3** in CD₃OD

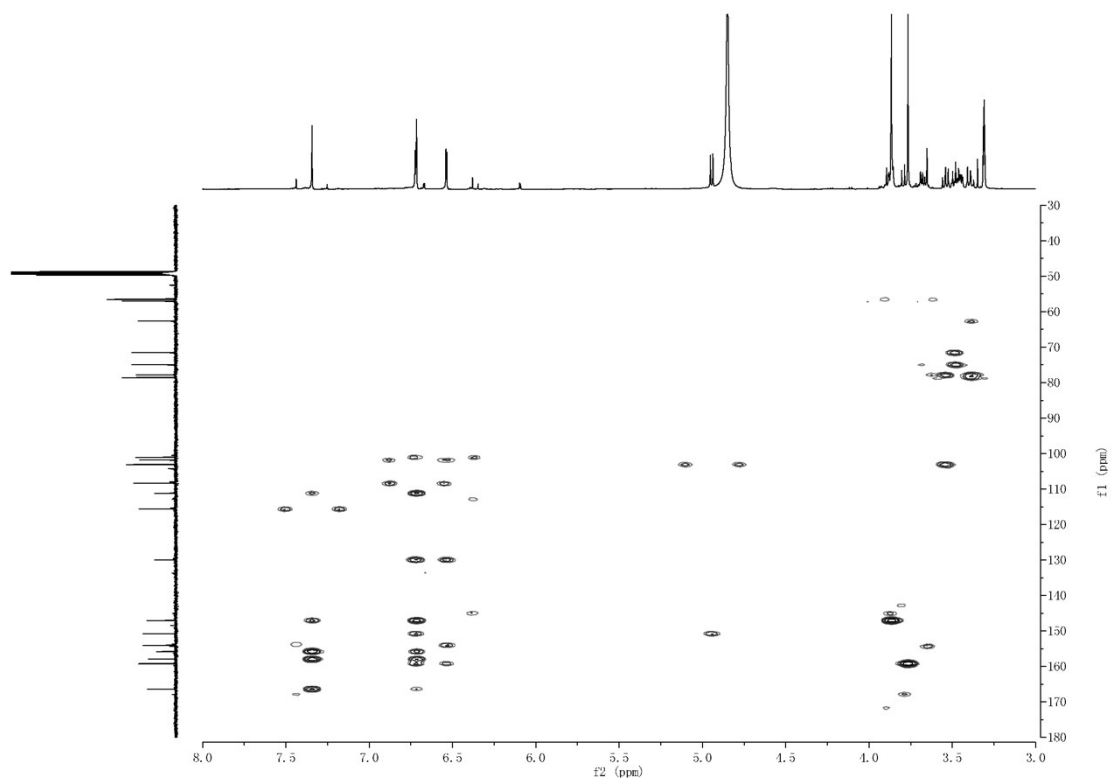


Figure S29. HMBC spectrum (500 MHz) of **3** in CD₃OD

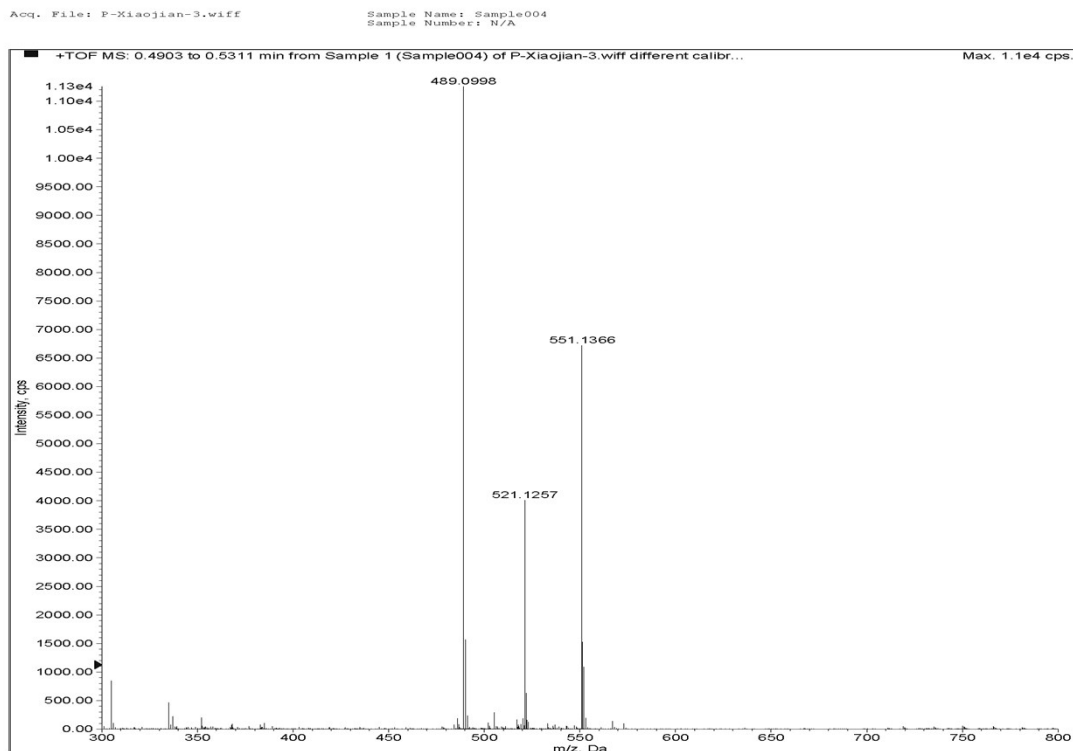


Figure S30. HRMSIMS spectrum of **3**

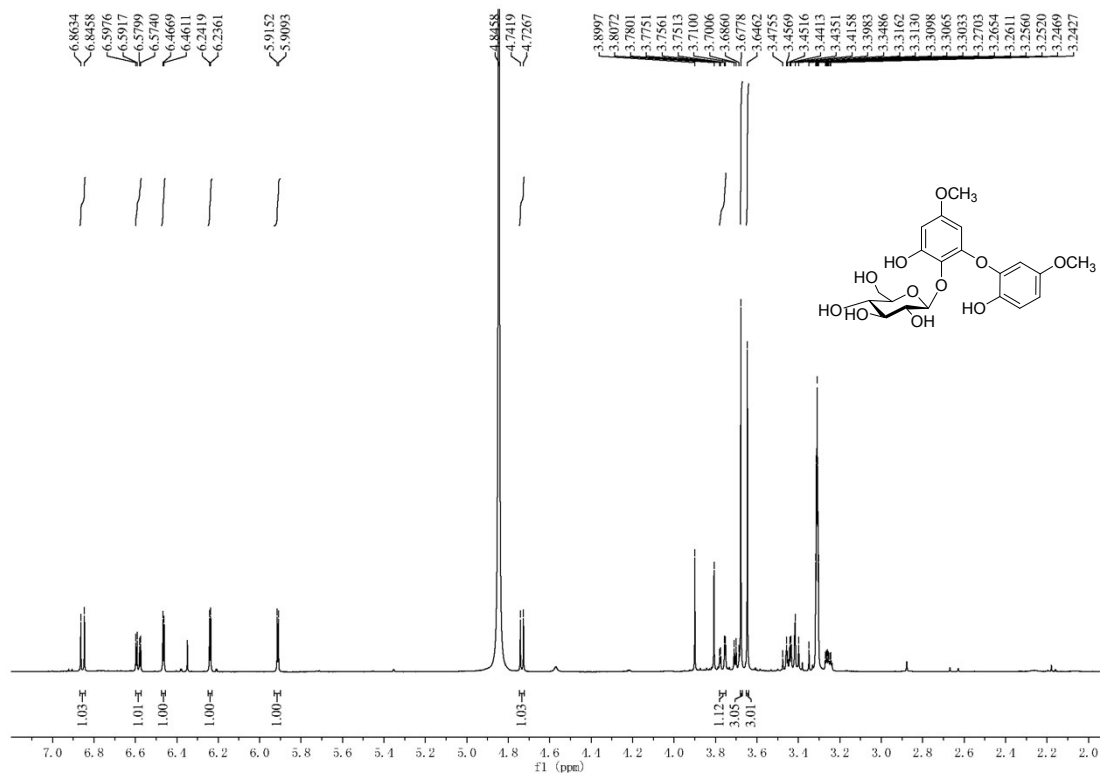


Figure S31. ^1H NMR spectrum (500 MHz) of 4 in CD_3OD

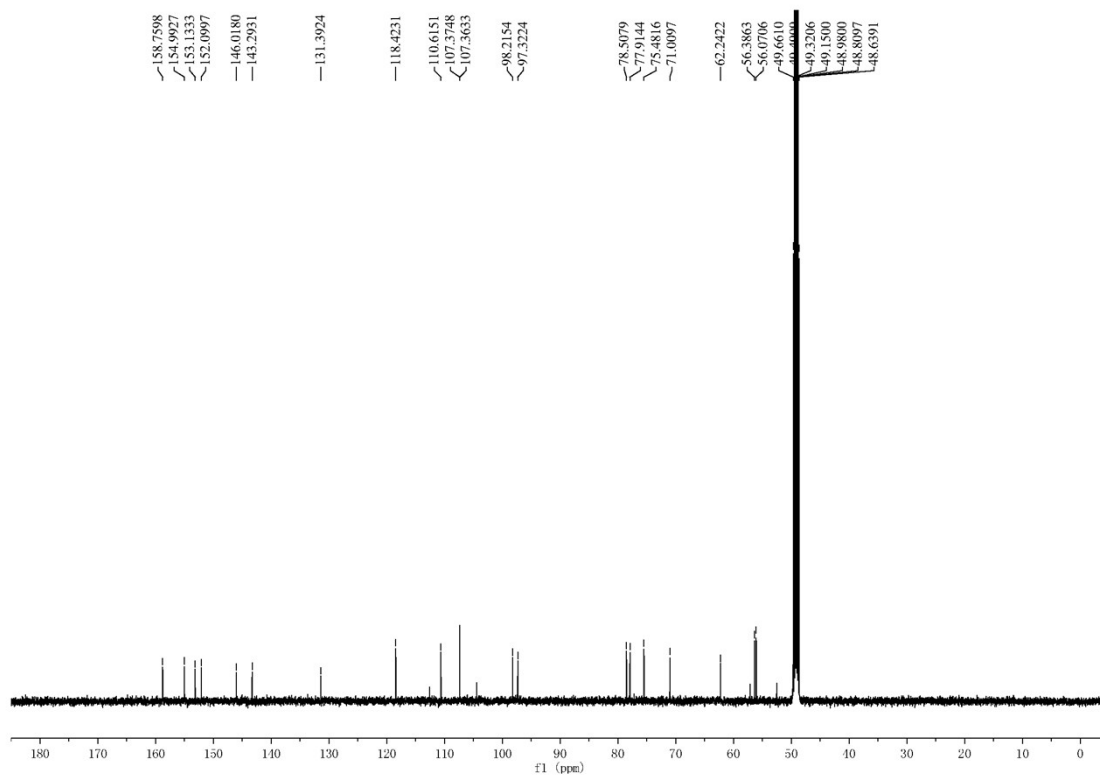


Figure S32. ^{13}C NMR spectrum (125 MHz) of 4 in CD_3OD

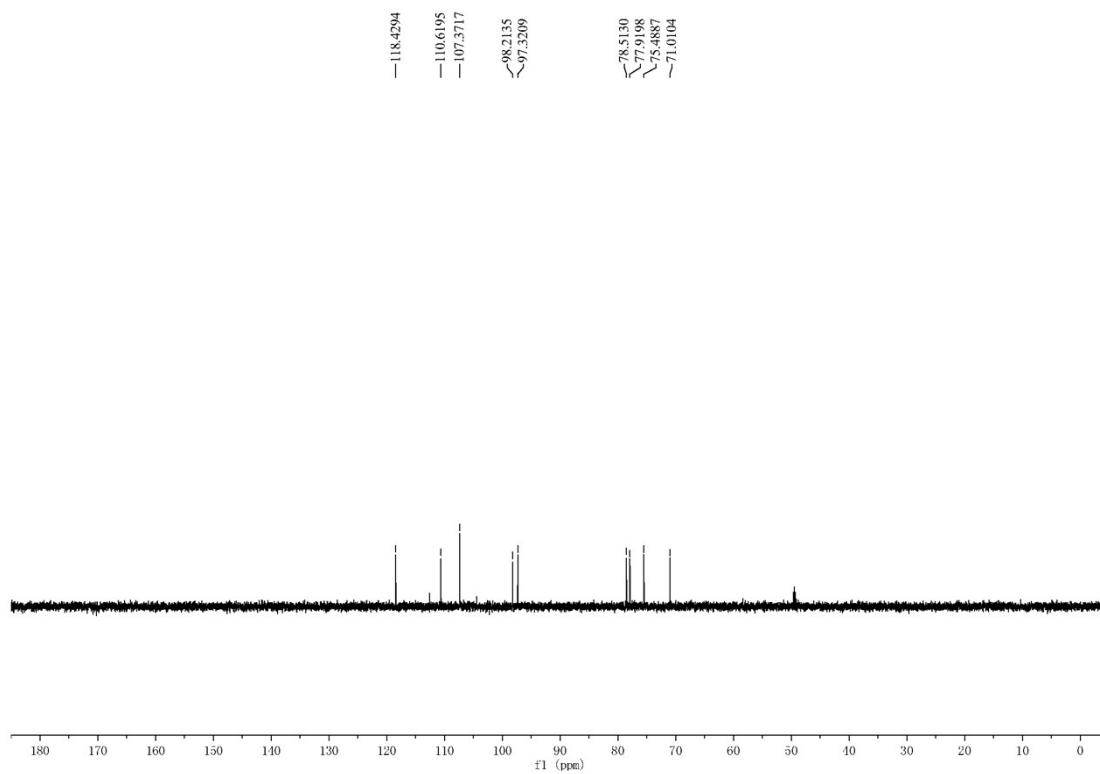


Figure S33. DEPT-90 spectrum (125 MHz) of **4** in CD₃OD

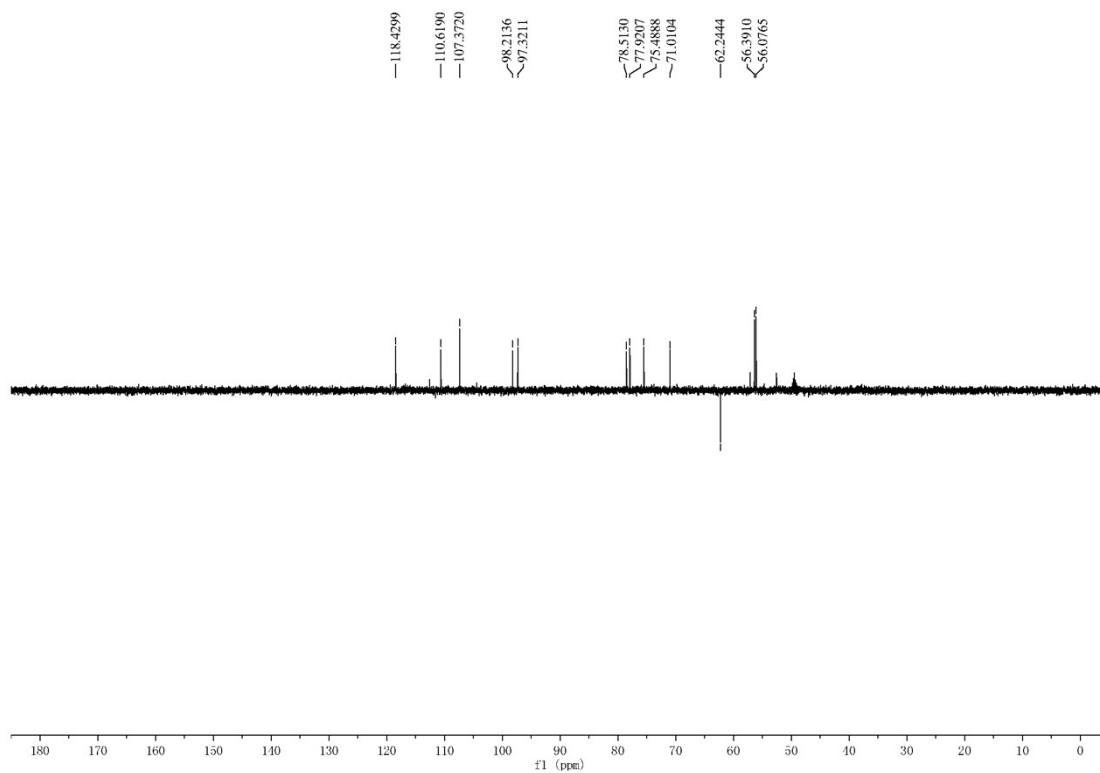


Figure S34. DEPT-135 spectrum (125 MHz) of **4** in CD₃OD

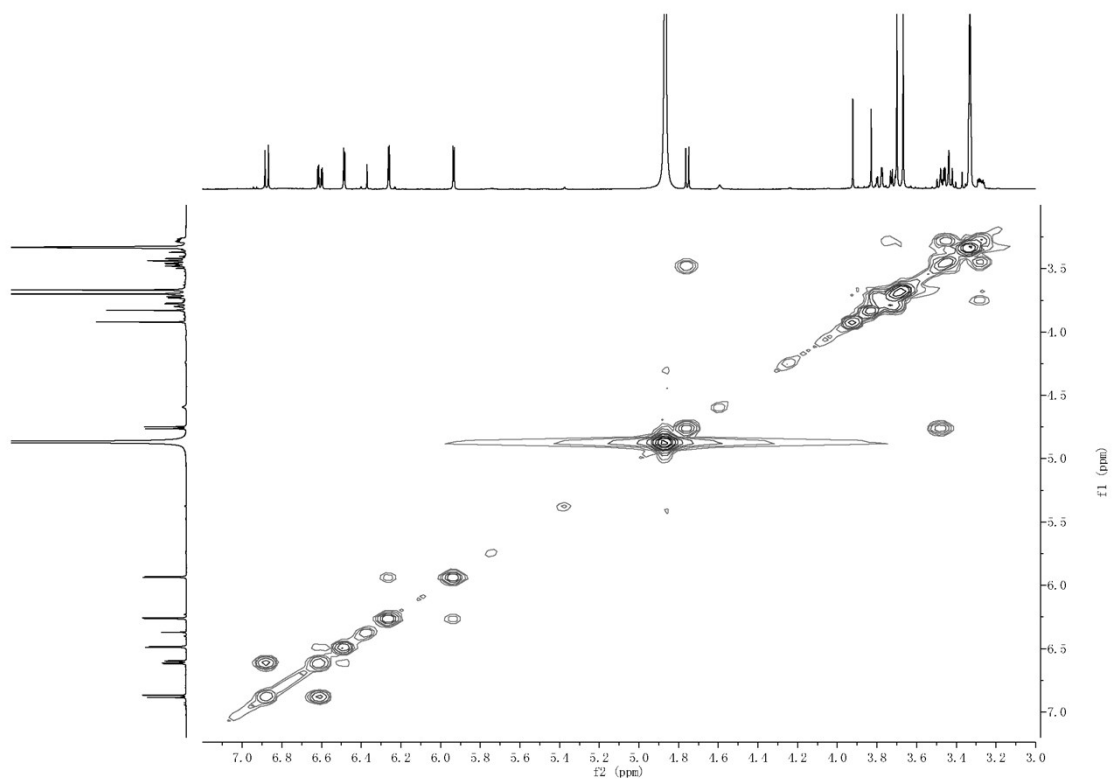


Figure S35. COSY spectrum (500 MHz) of **4** in CD₃OD

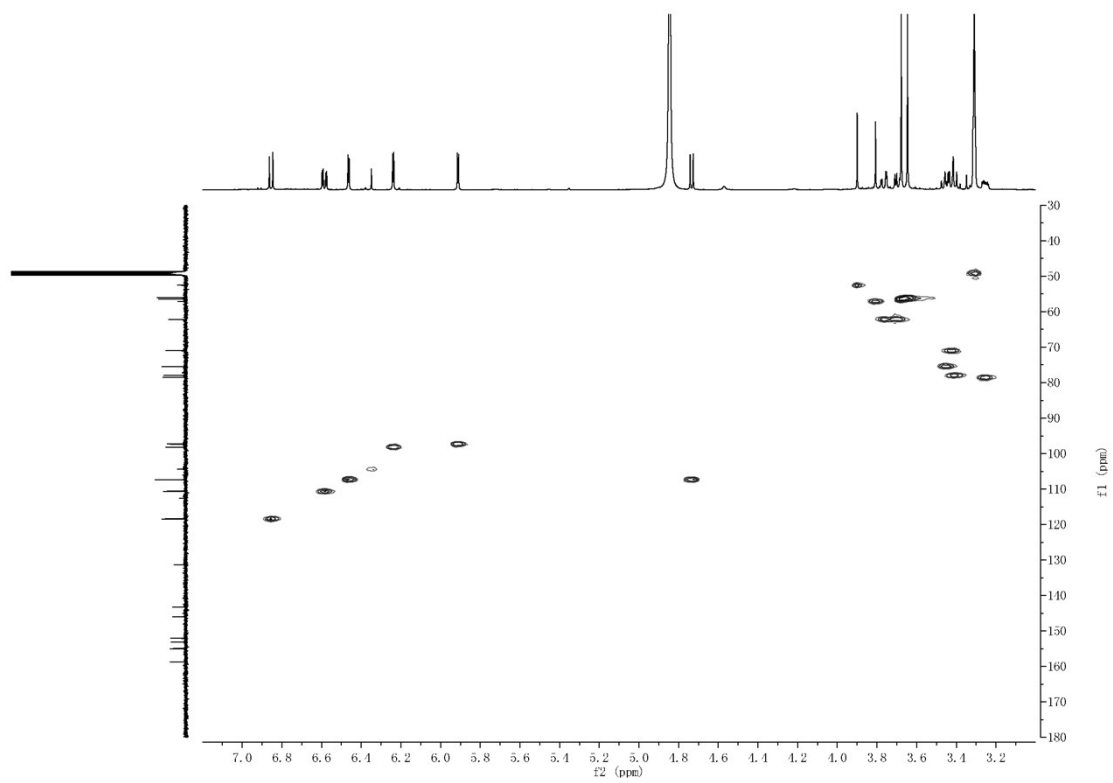


Figure S36. HSQC spectrum (500 MHz) of **4** in CD₃OD

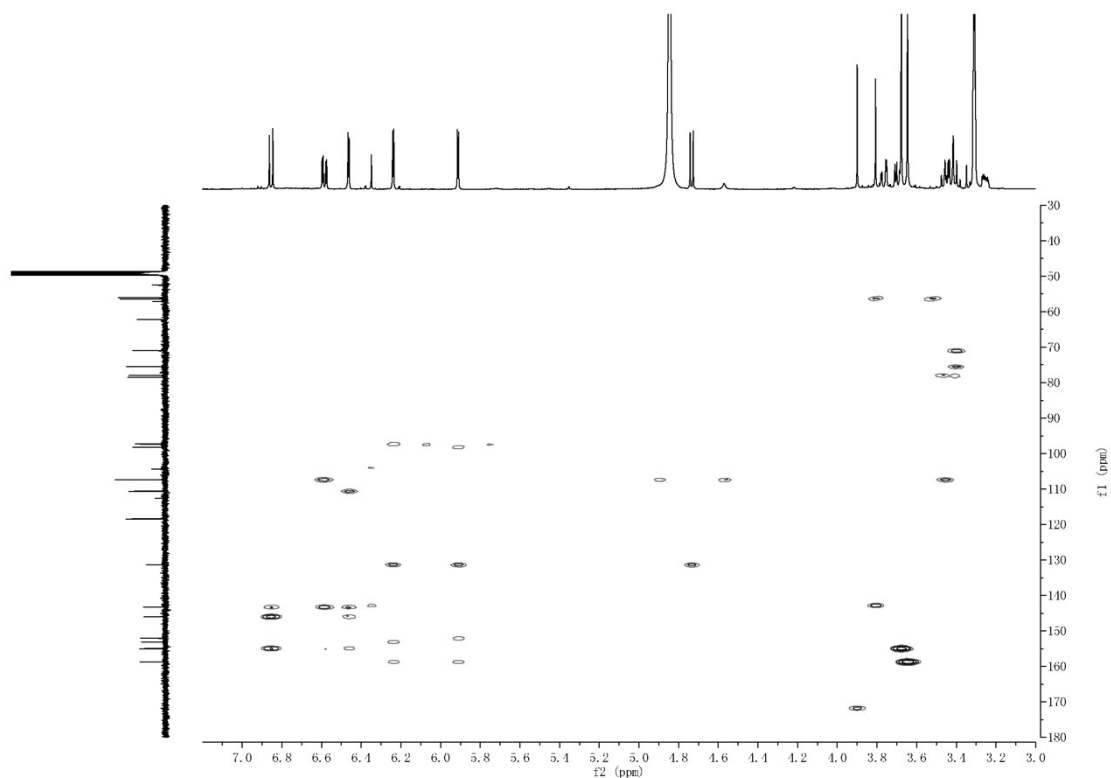


Figure S37. HMBC spectrum (500 MHz) of **4** in CD₃OD

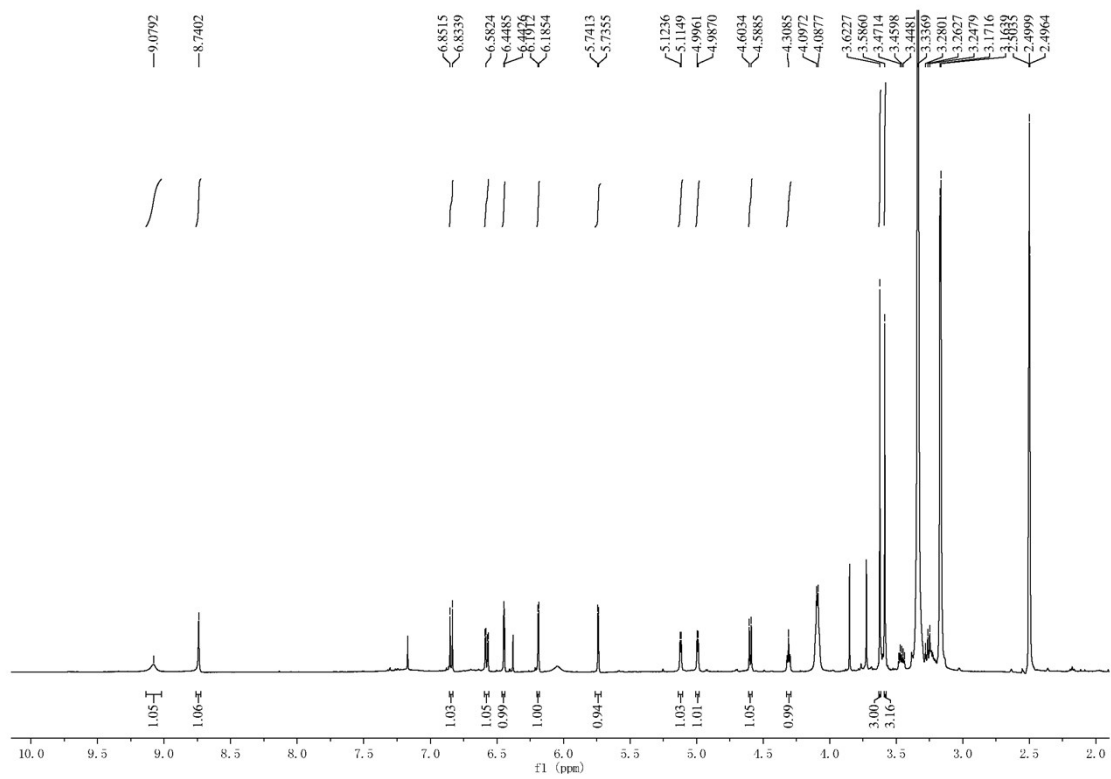


Figure S38. ¹H NMR spectrum (500 MHz) of **4** in DMSO-*d*₆

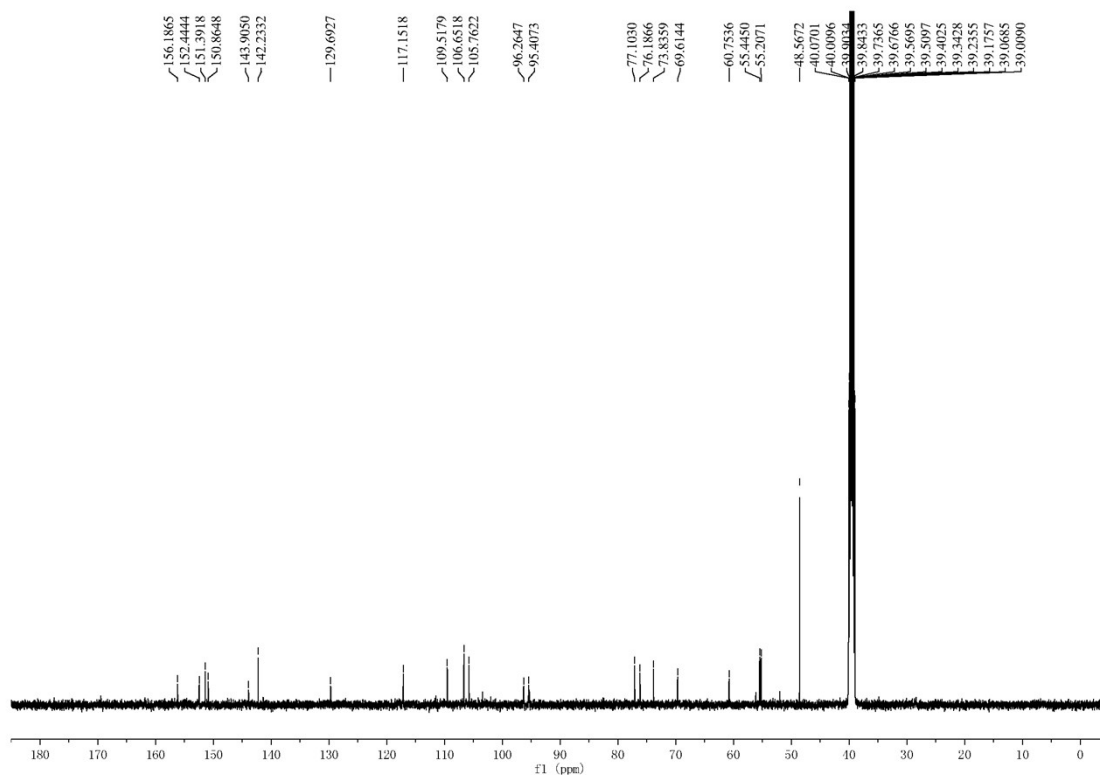


Figure S39. ^{13}C NMR spectrum (125 MHz) of **4** in $\text{DMSO-}d_6$

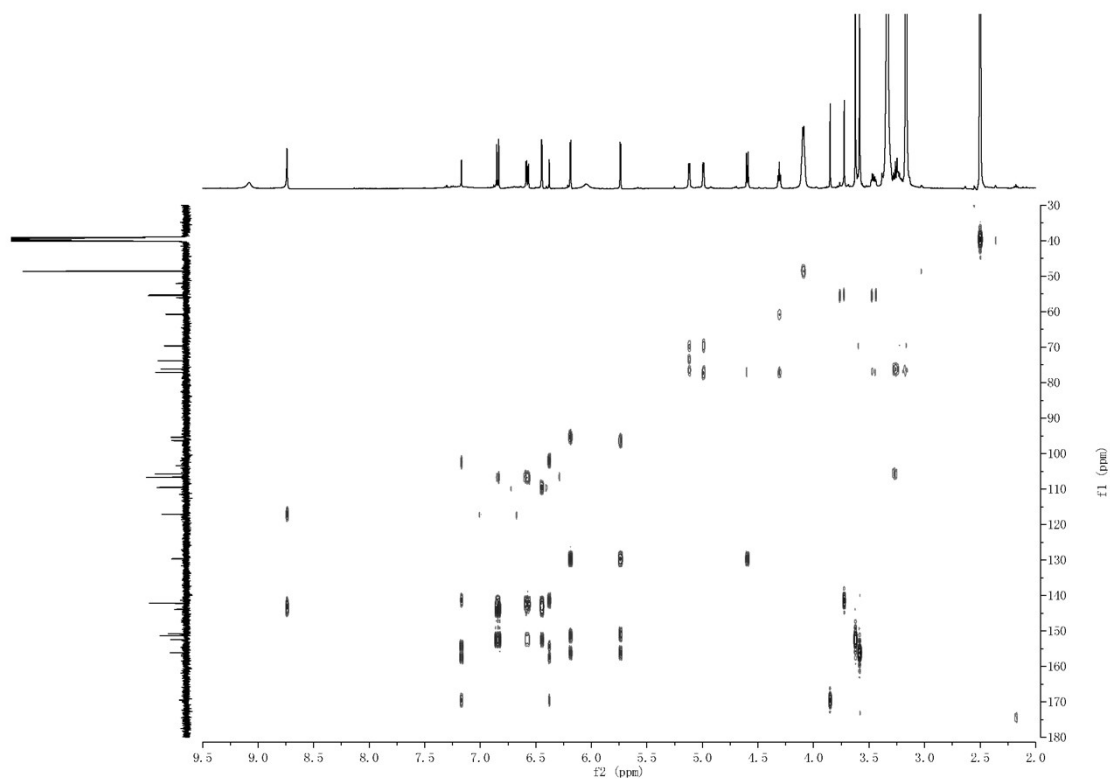


Figure S40. HMBC spectrum (500 MHz) of **4** in $\text{DMSO-}d_6$

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T: ITMS + c ESIsid=35.00 Full ms [100.00-2000.00]

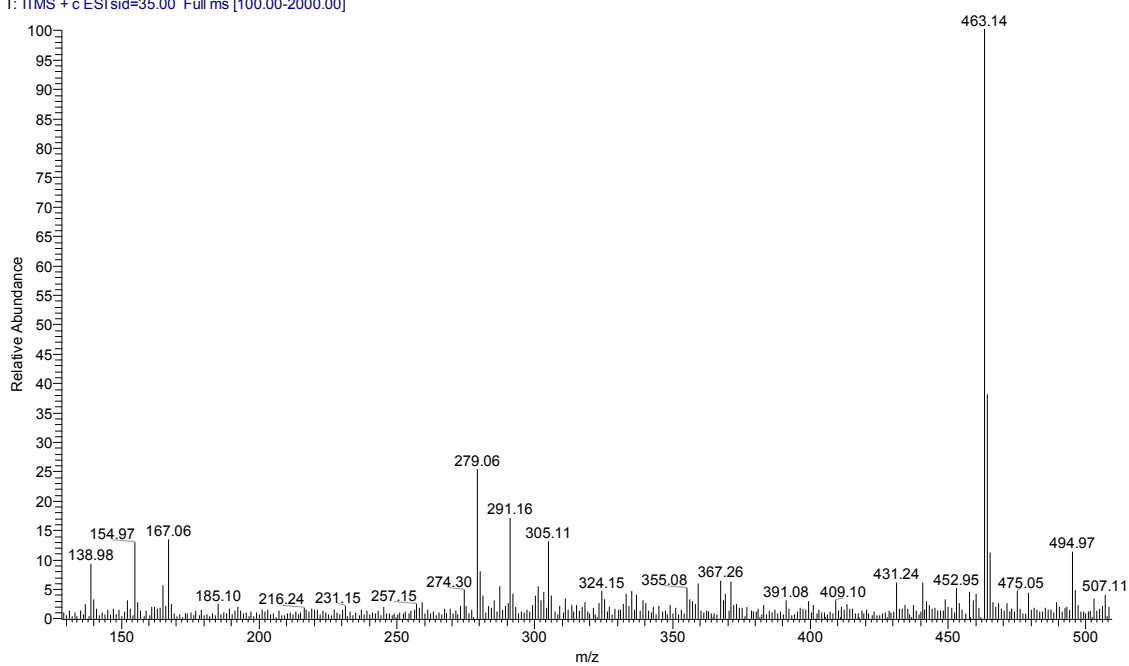


Figure S41. ESIMS spectrum of 4

Acq. File: P-Xiaojian-4.wiff

Sample Name: Sample005
Sample Number: N/A

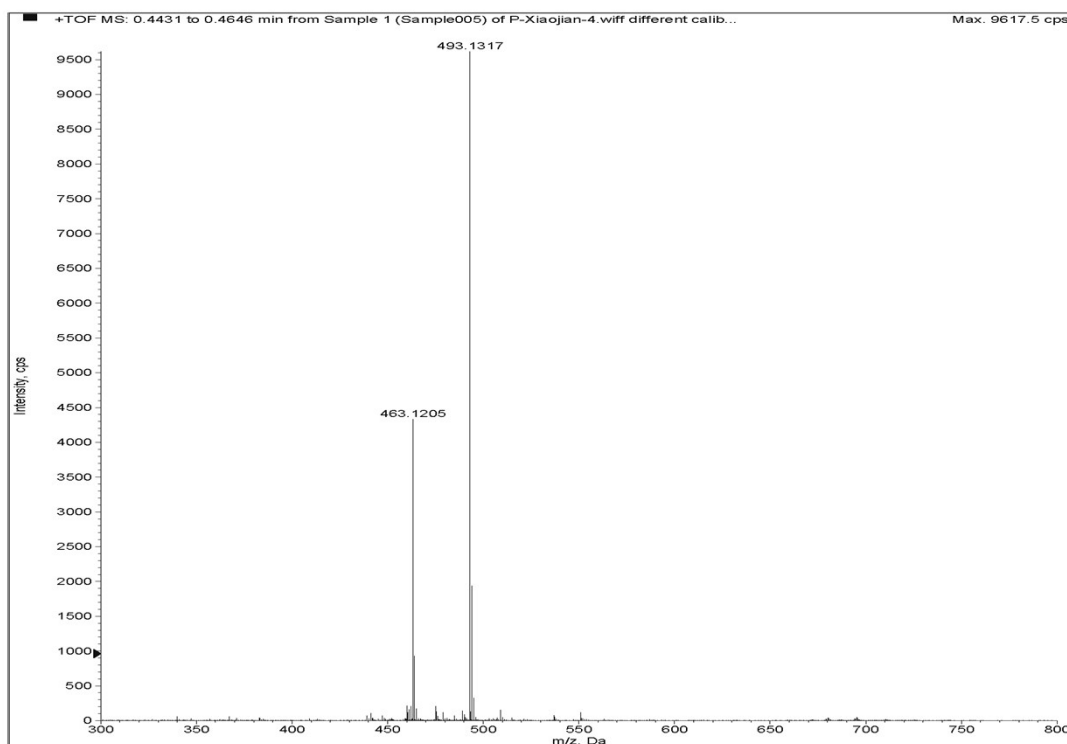


Figure S42. HRMSIMS spectrum of 4

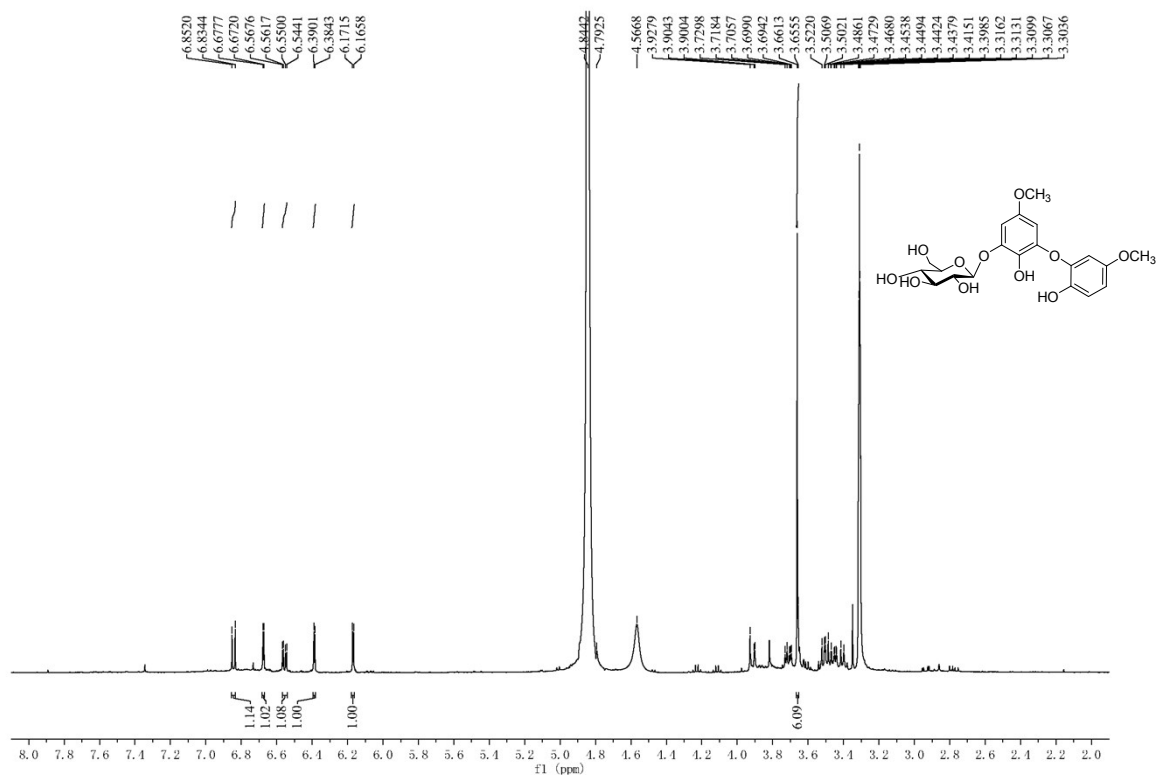


Figure S43. ^1H NMR spectrum (500 MHz) of **5** in CD_3OD

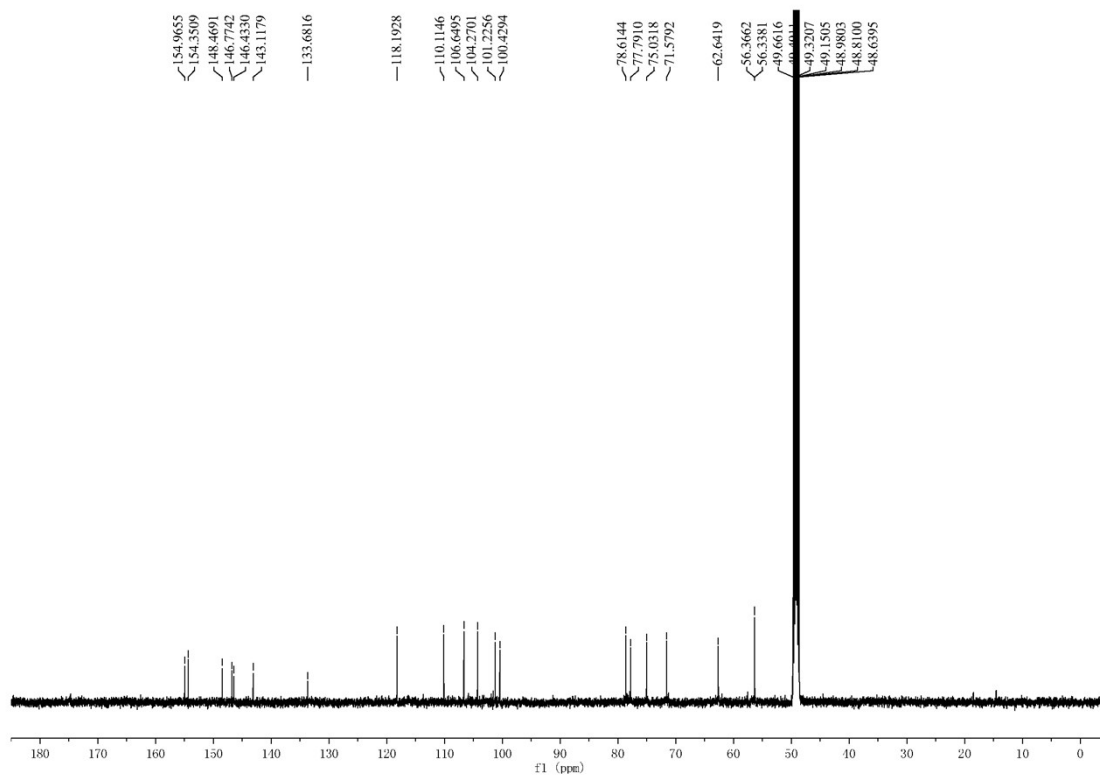


Figure S44. ^{13}C NMR spectrum (125 MHz) of **5** in CD_3OD

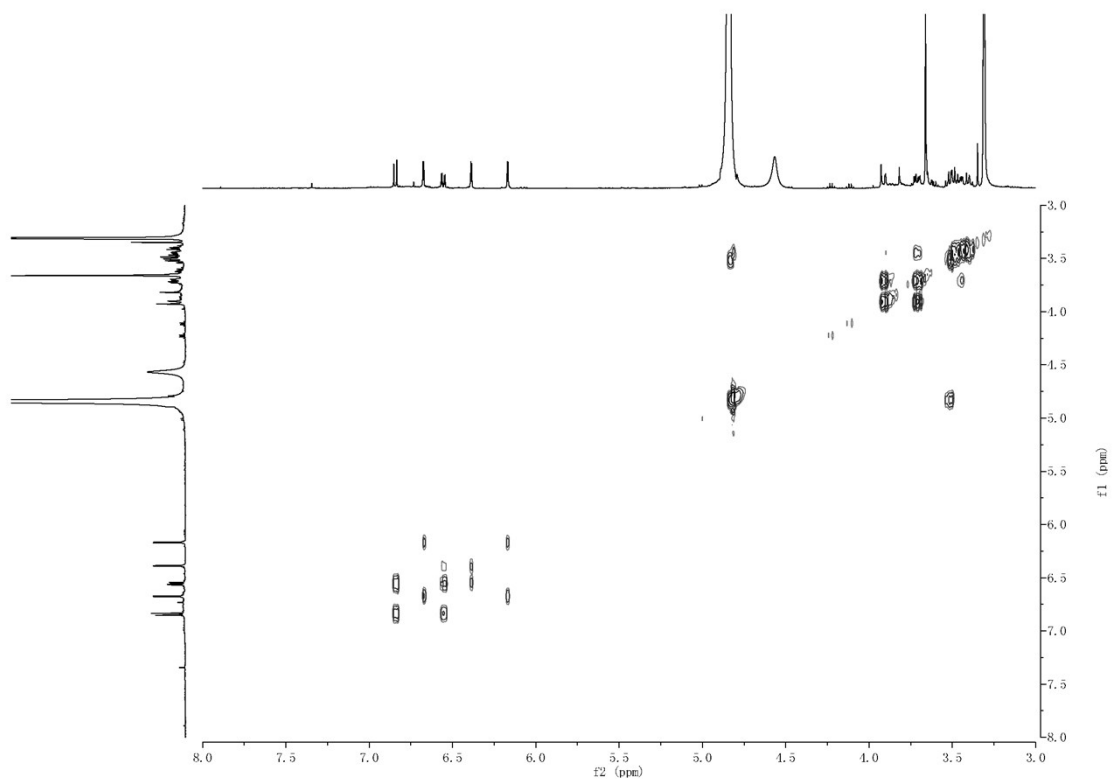


Figure S45. COSY spectrum (500 MHz) of **5** in CD₃OD

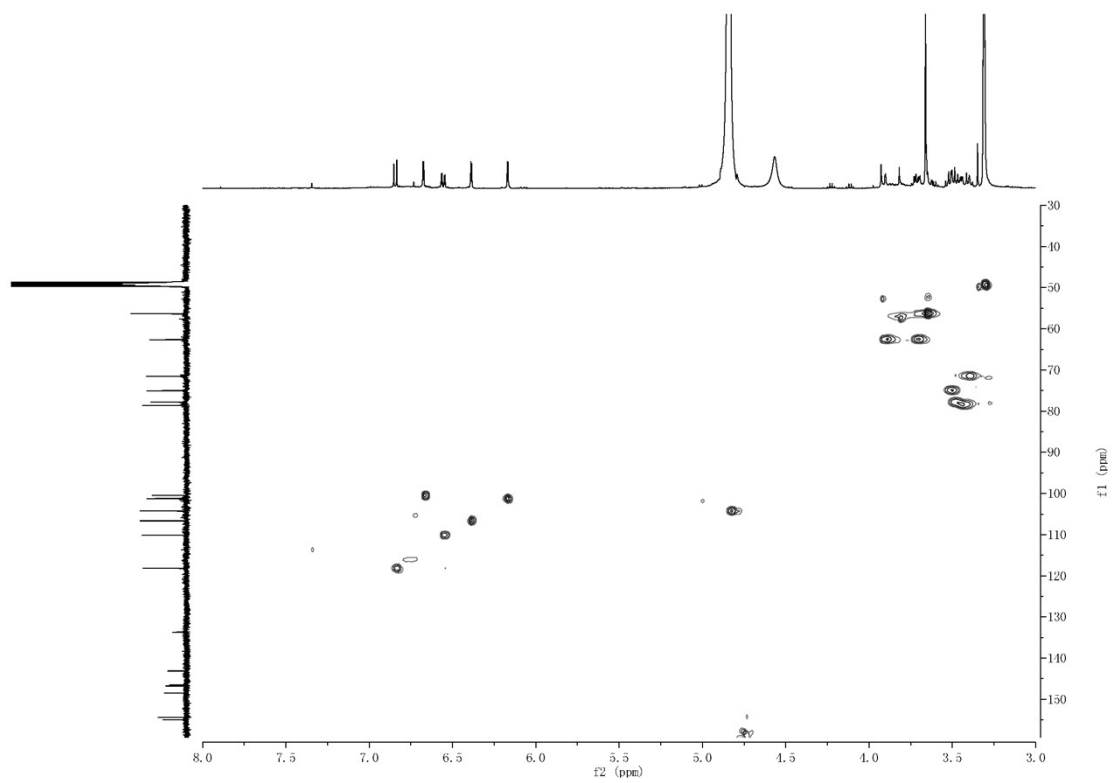


Figure S46. HSQC spectrum (500 MHz) of **5** in CD₃OD

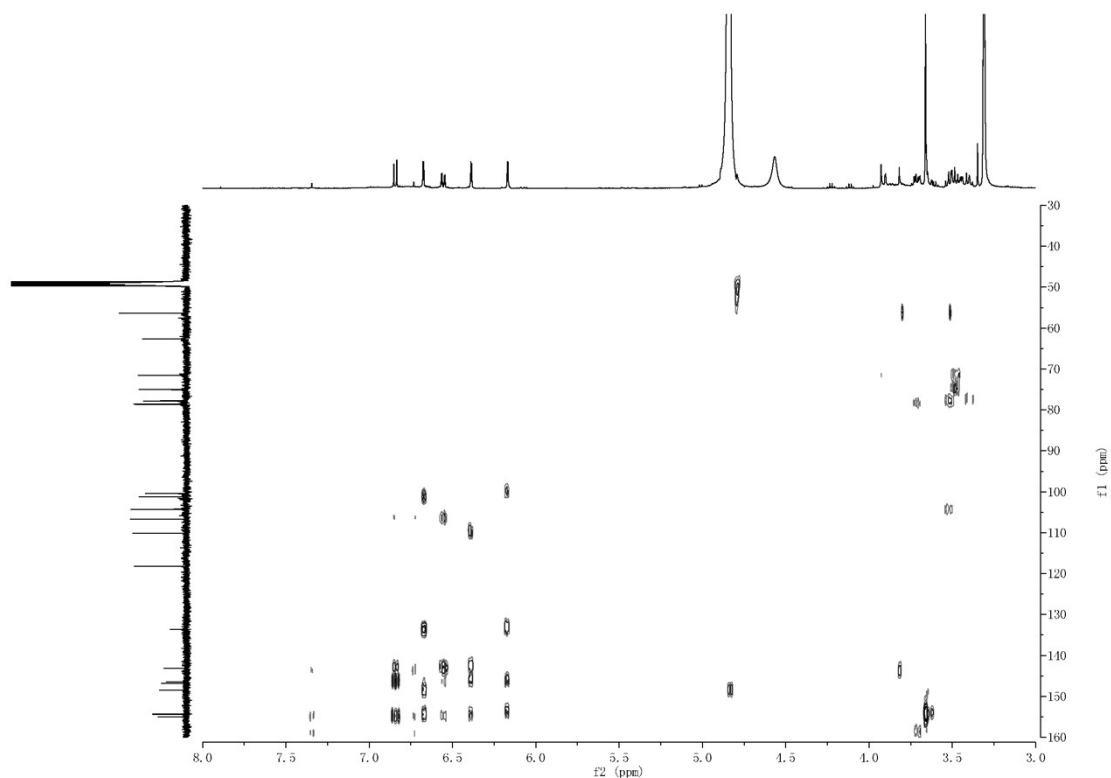


Figure S47. HMBC spectrum (500 MHz) of **5** in CD₃OD

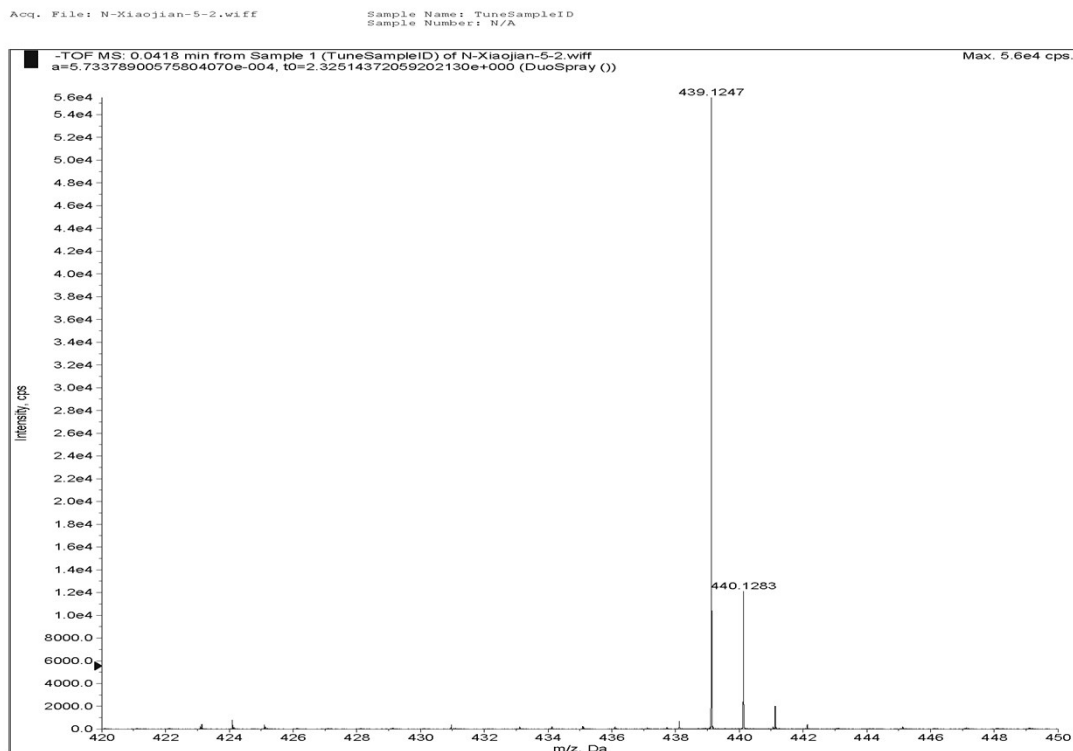


Figure S48. HRMSIMS spectrum of **5**

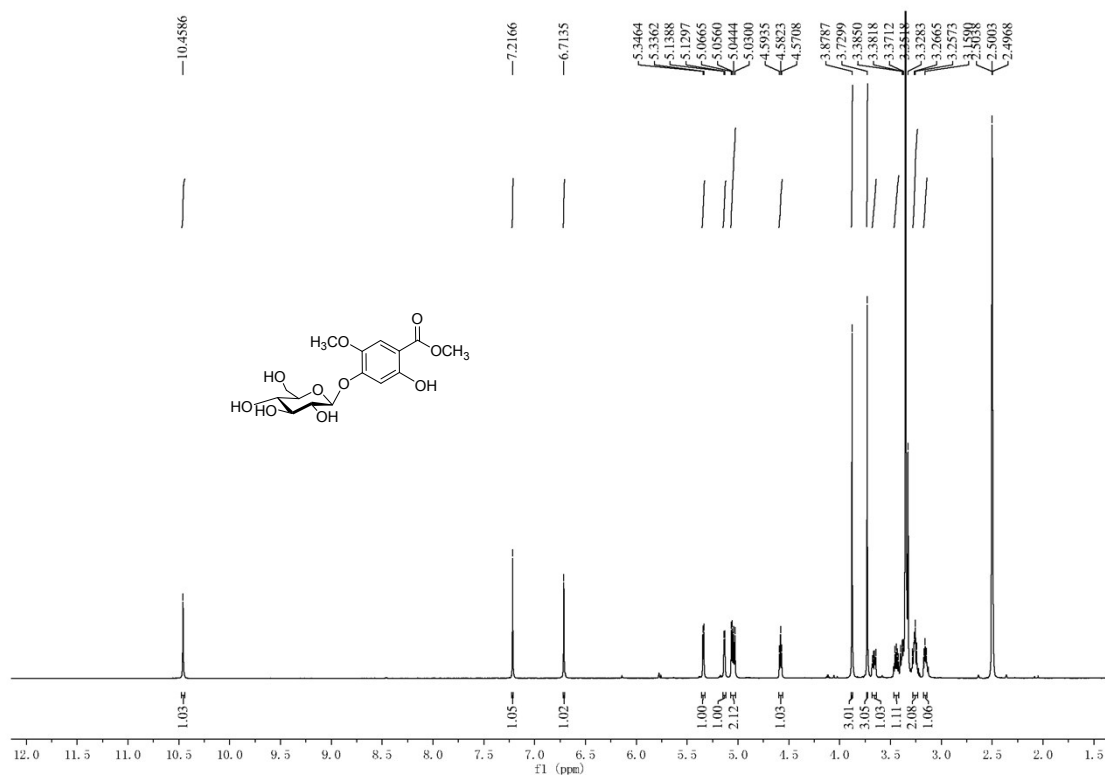


Figure S49. ¹H NMR spectrum (500 MHz) of 6 in DMSO-*d*₆

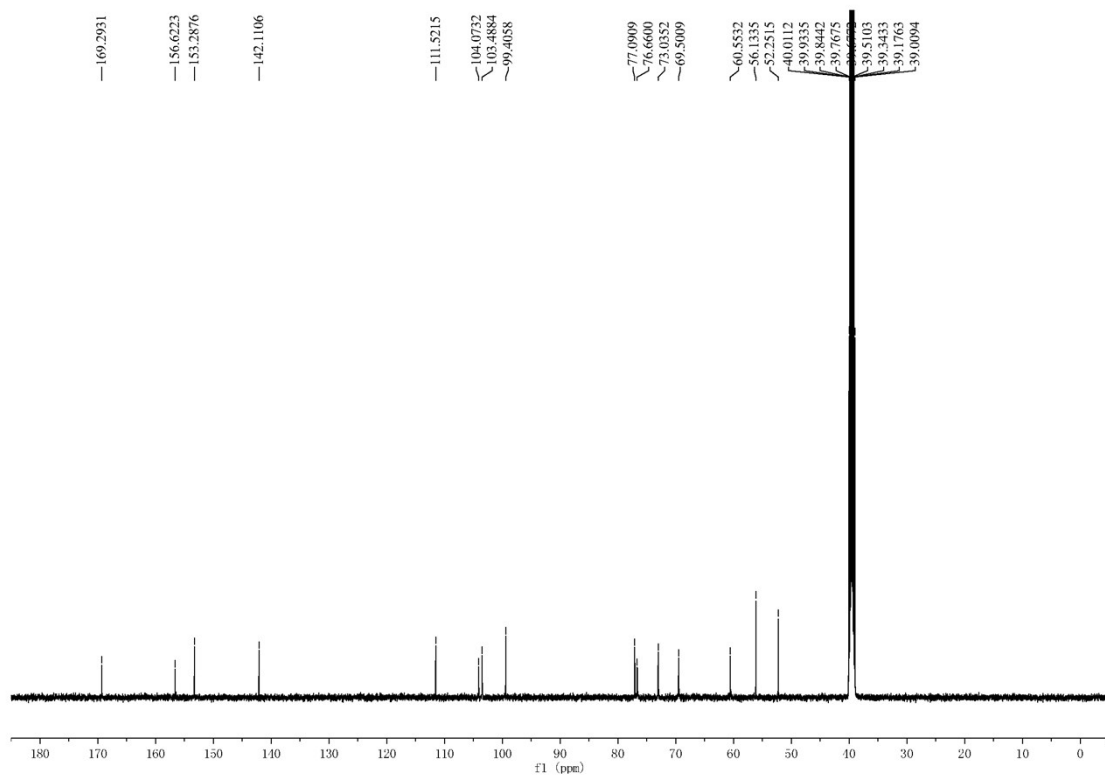


Figure S50. ¹³C NMR spectrum (125 MHz) of 6 in DMSO-*d*₆

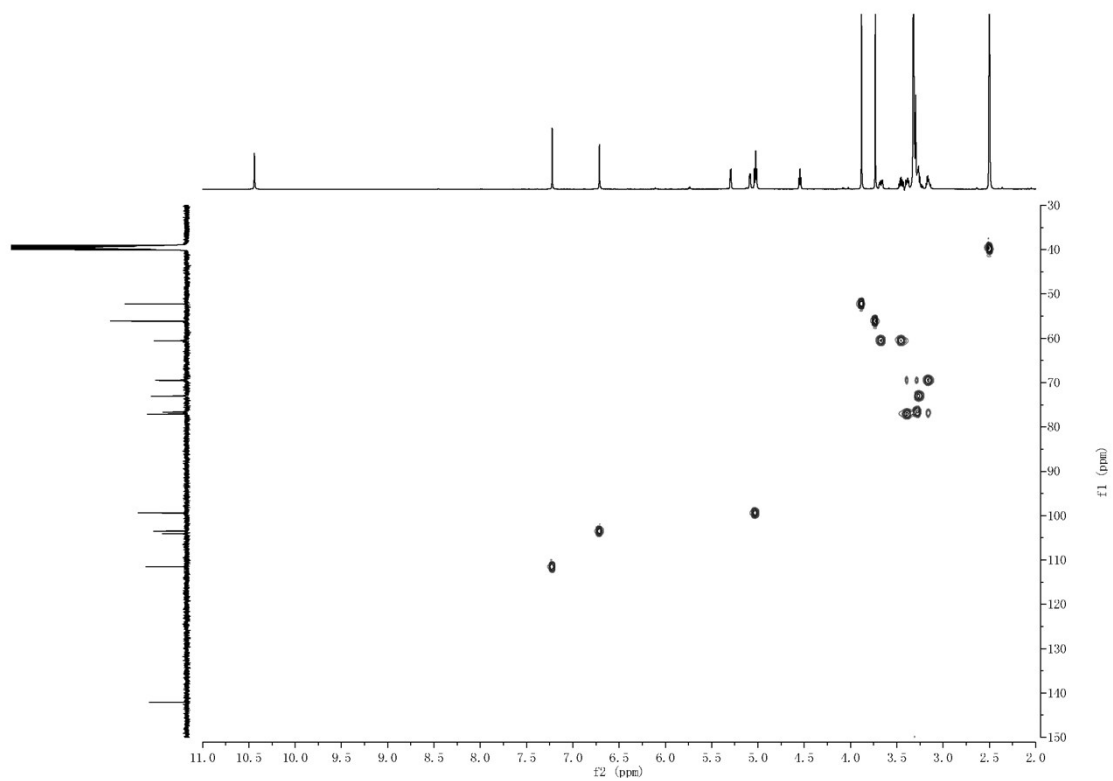


Figure S51. HSQC spectrum (500 MHz) of **6** in DMSO- d_6

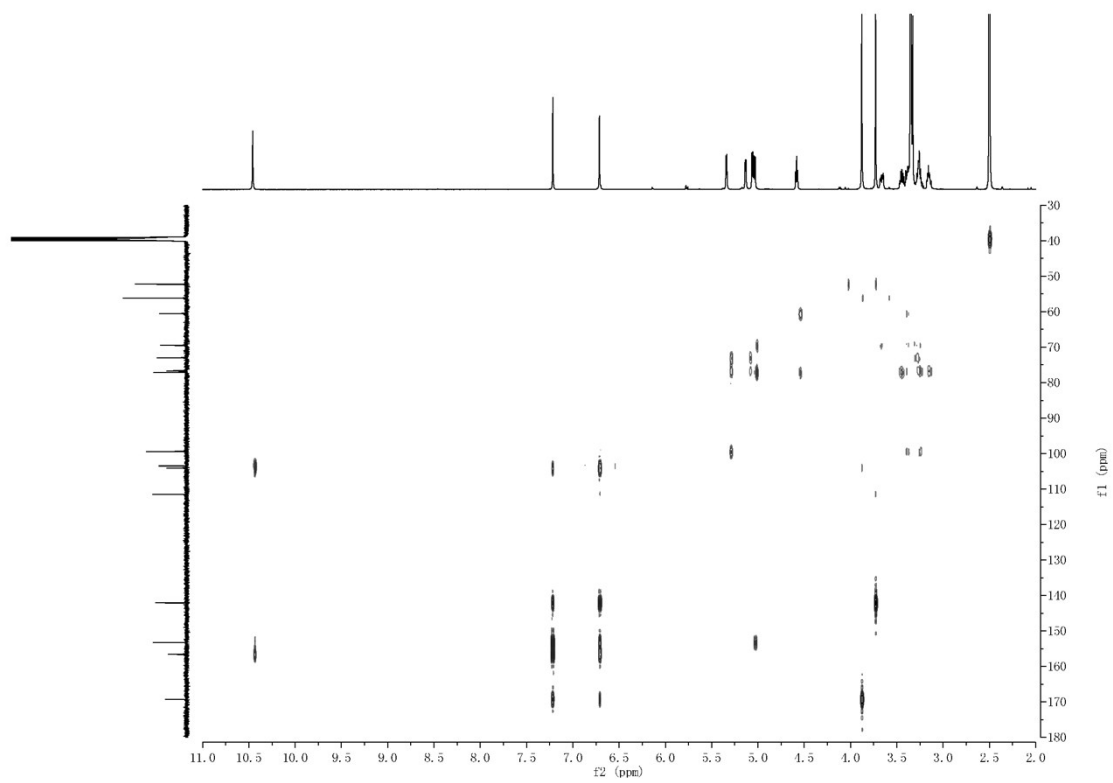
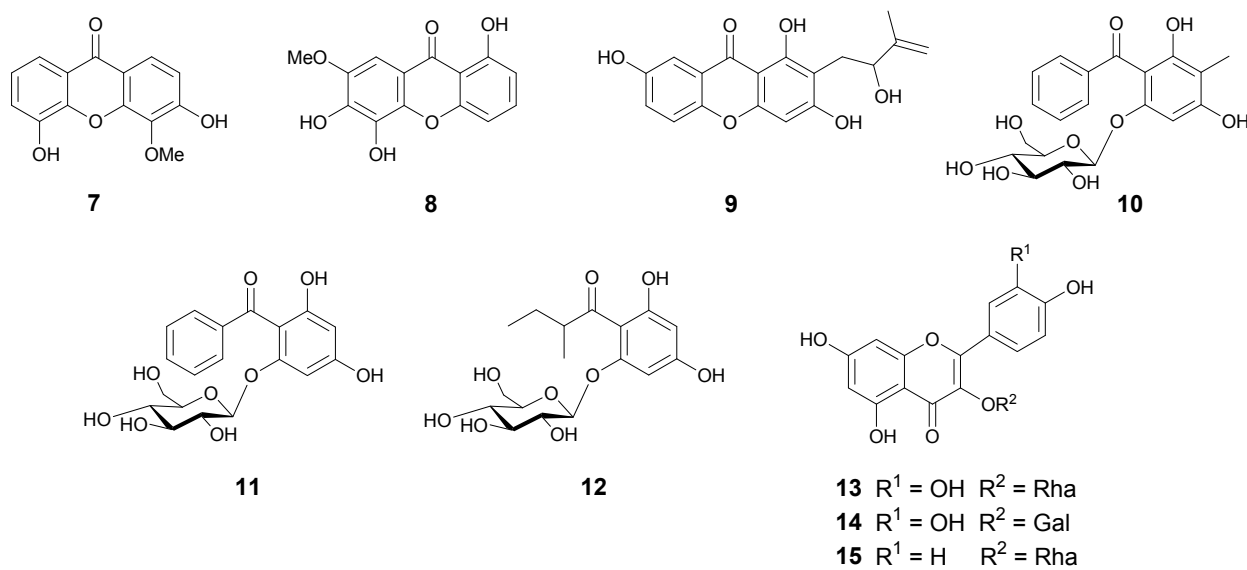


Figure S52. HMBC spectrum (500 MHz) of **6** in DMSO- d_6

Figure S53. HRESIMS spectrum of **6**Figure S54. Chemical structures of **7–15** from *Hypericum elatoides*