

Supplementary Information

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- Figure S44** HMBC spectrum of **6** in $\text{DMSO}-d_6$

Figure S1. ¹H NMR spectrum of 1 at 400 MHz in CD₃OD.

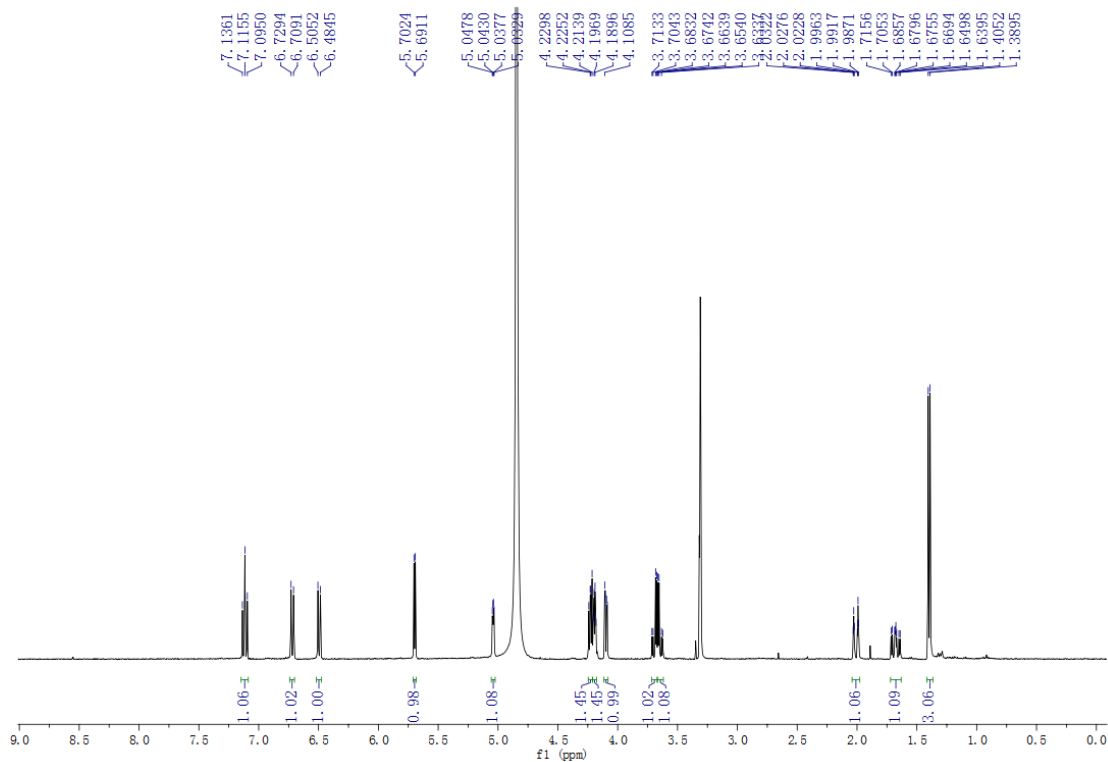


Figure S2. ¹³C NMR spectrum of 1 at 100 MHz in CD₃OD.

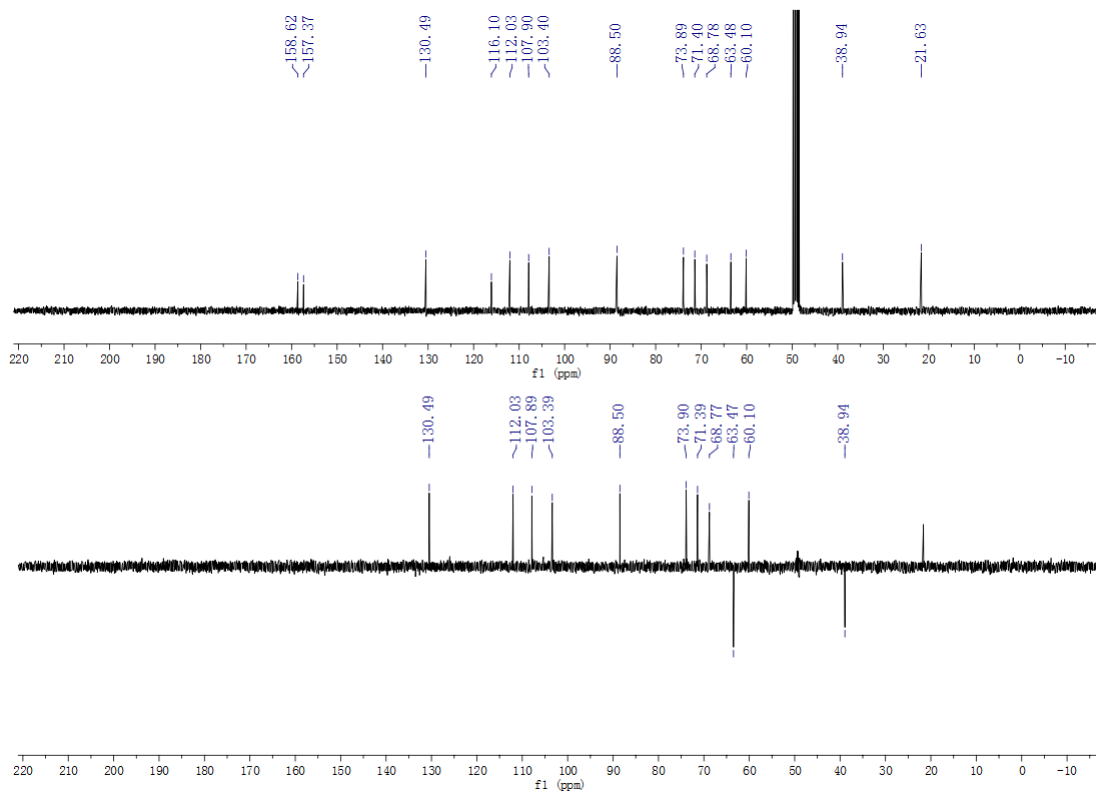


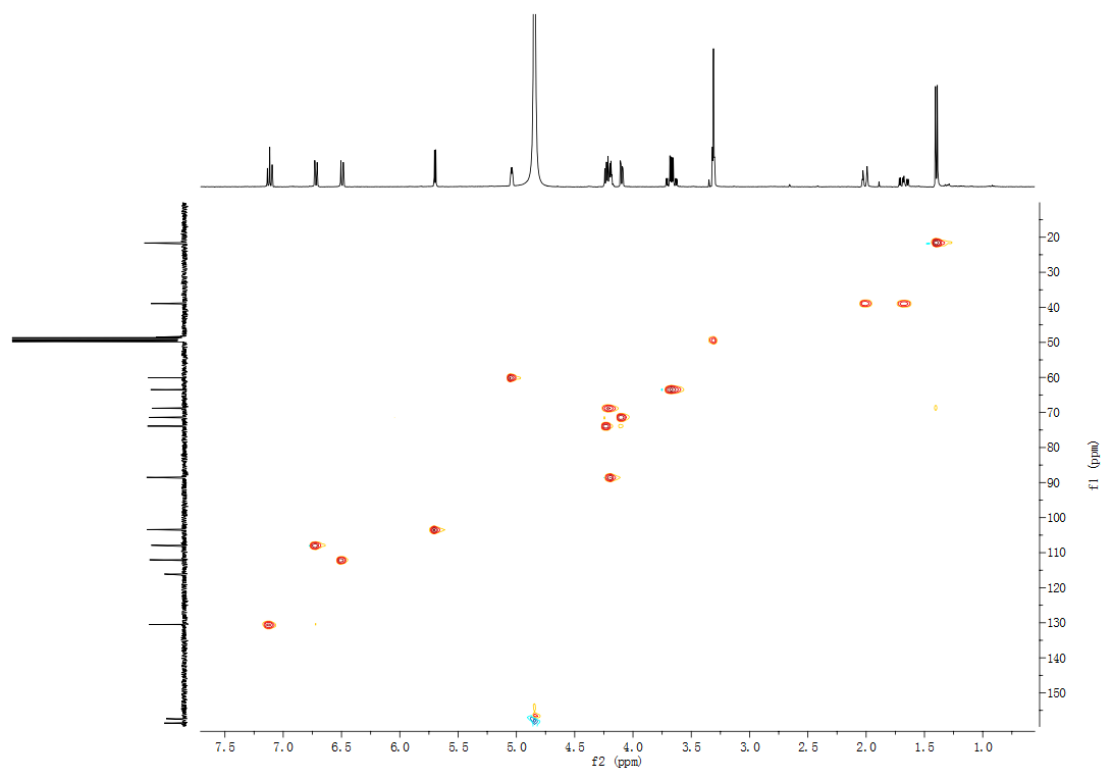
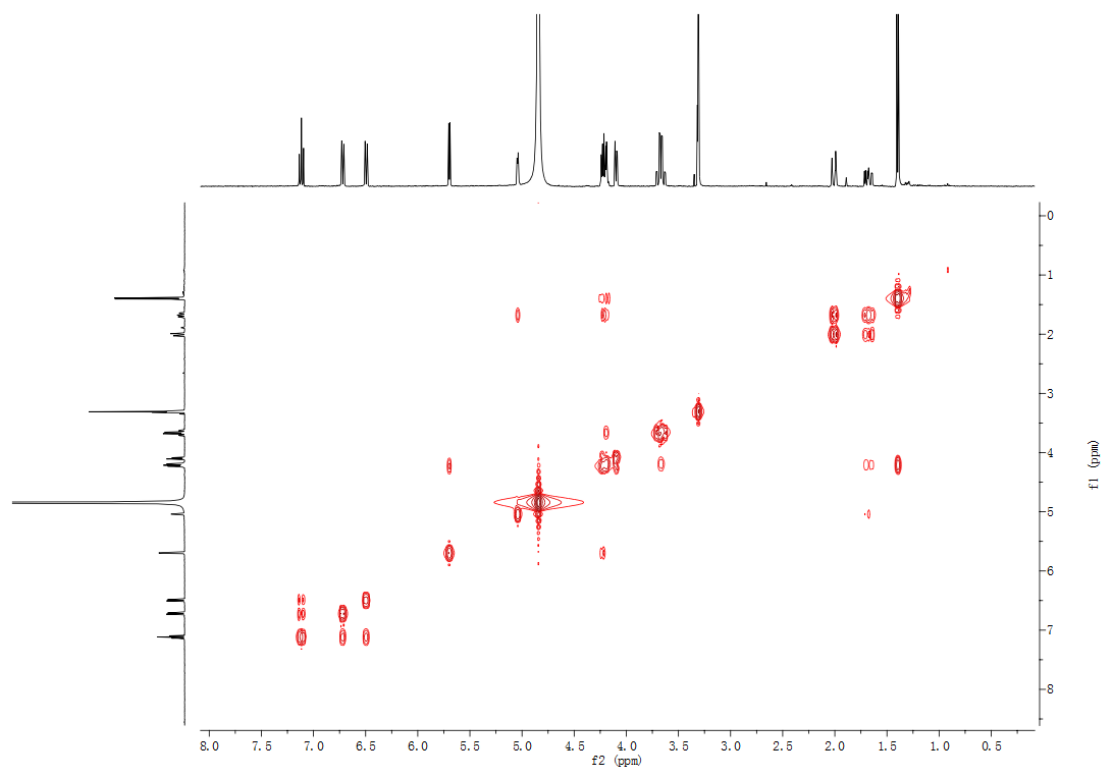
Figure S3. HSQC spectrum of **1** in CD₃OD.**Figure S4.** ¹H-¹H COSY spectrum of **1** in CD₃OD.

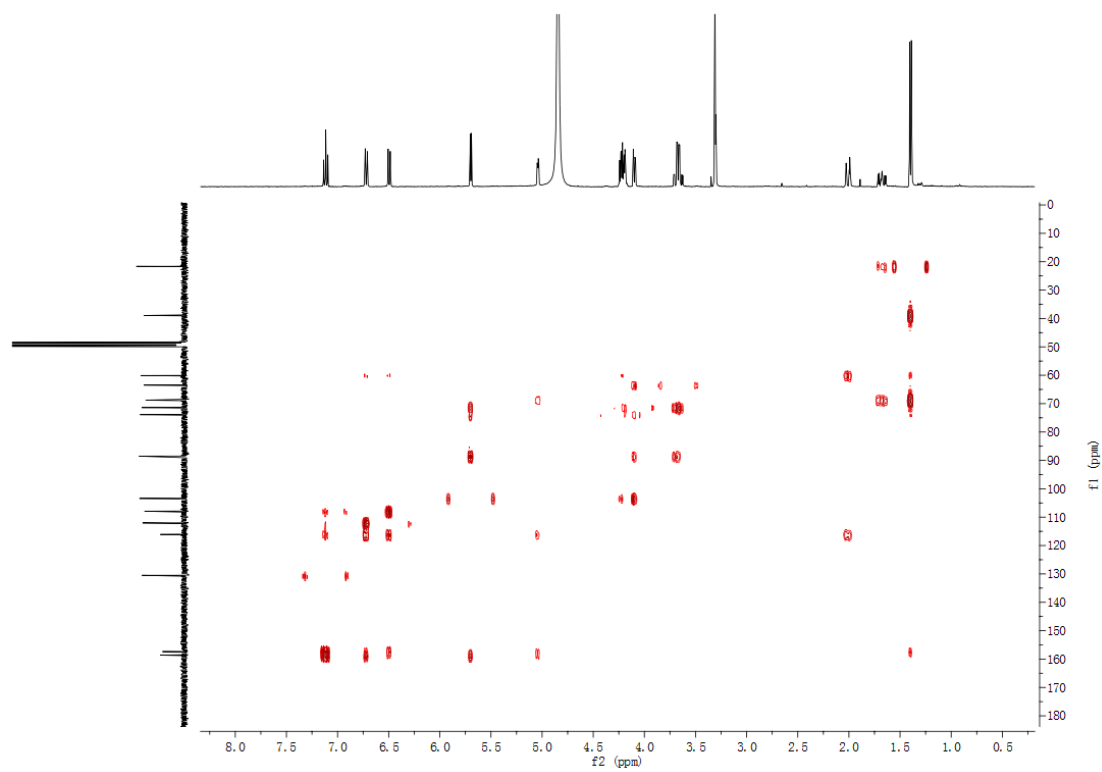
Figure S5. HMBC spectrum of 1 in CD₃OD.

Figure S6. HRESIMS spectrum of 1.

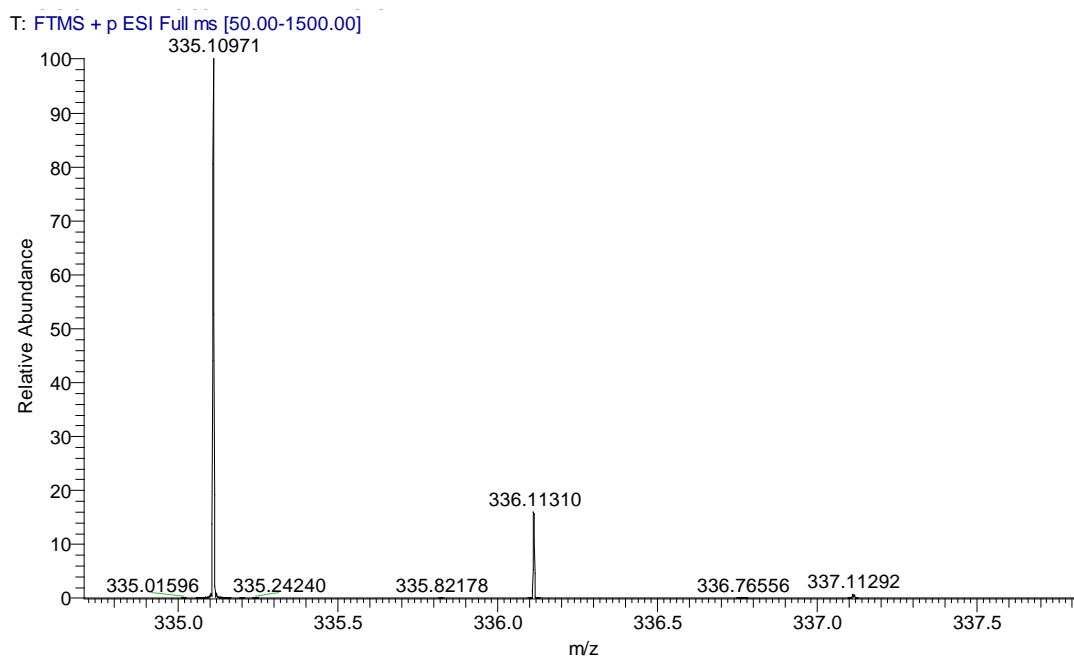


Figure S7. IR spectrum of 1.

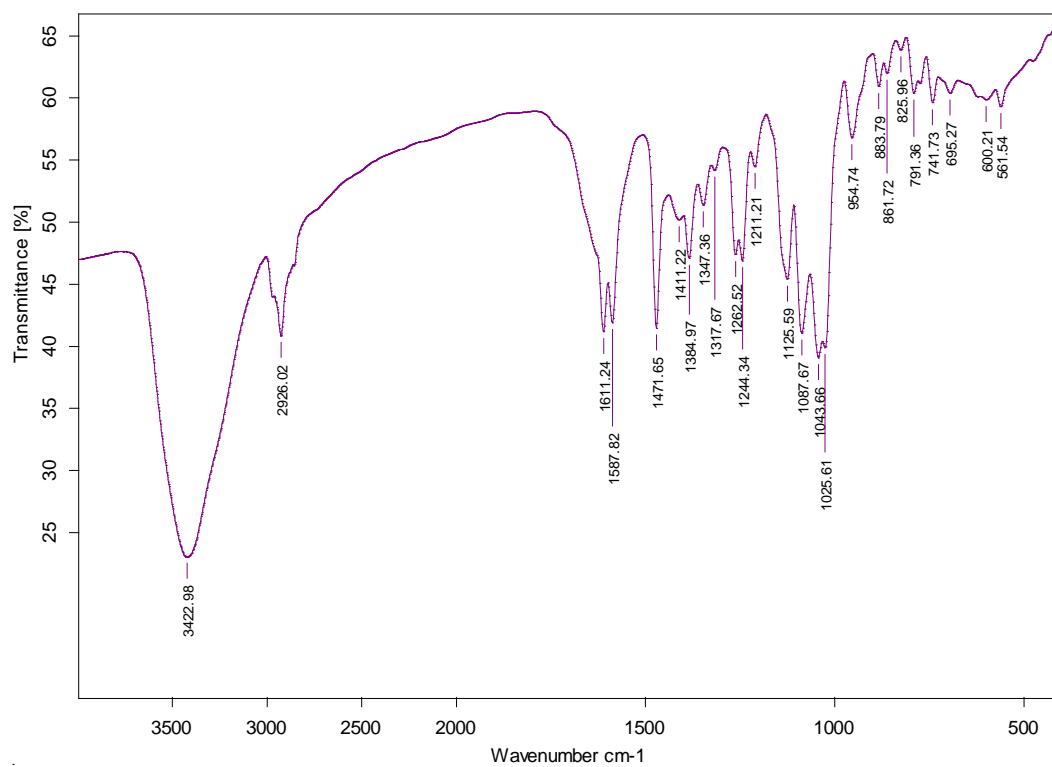


Figure S8. UV spectrum of 1.

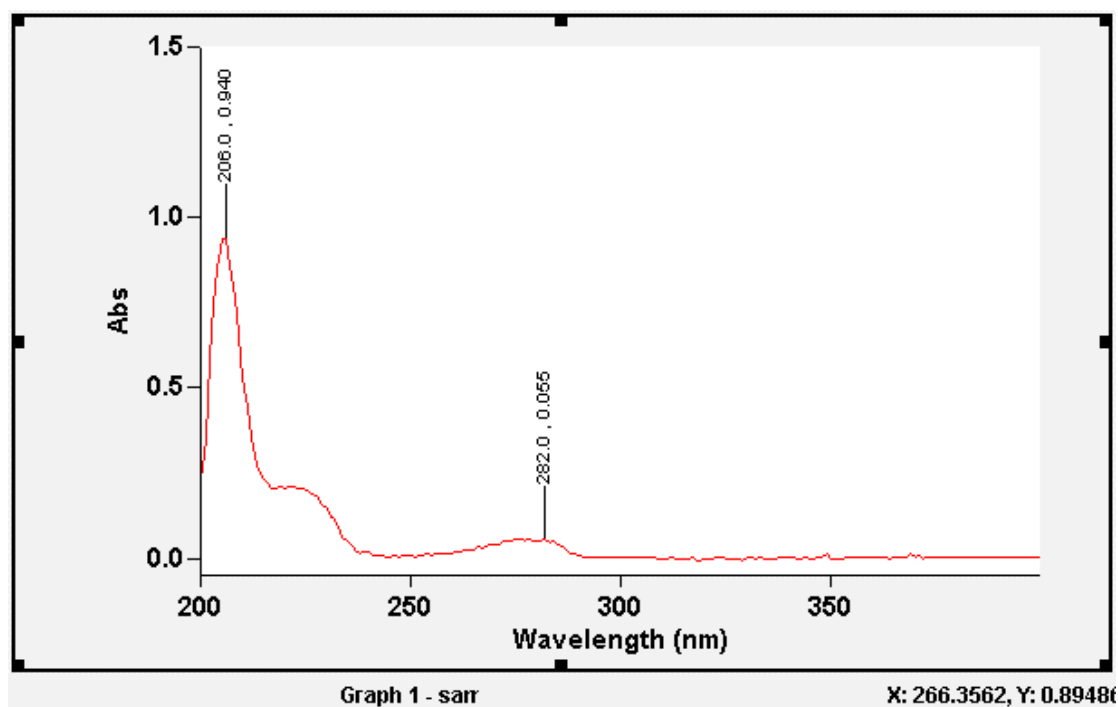


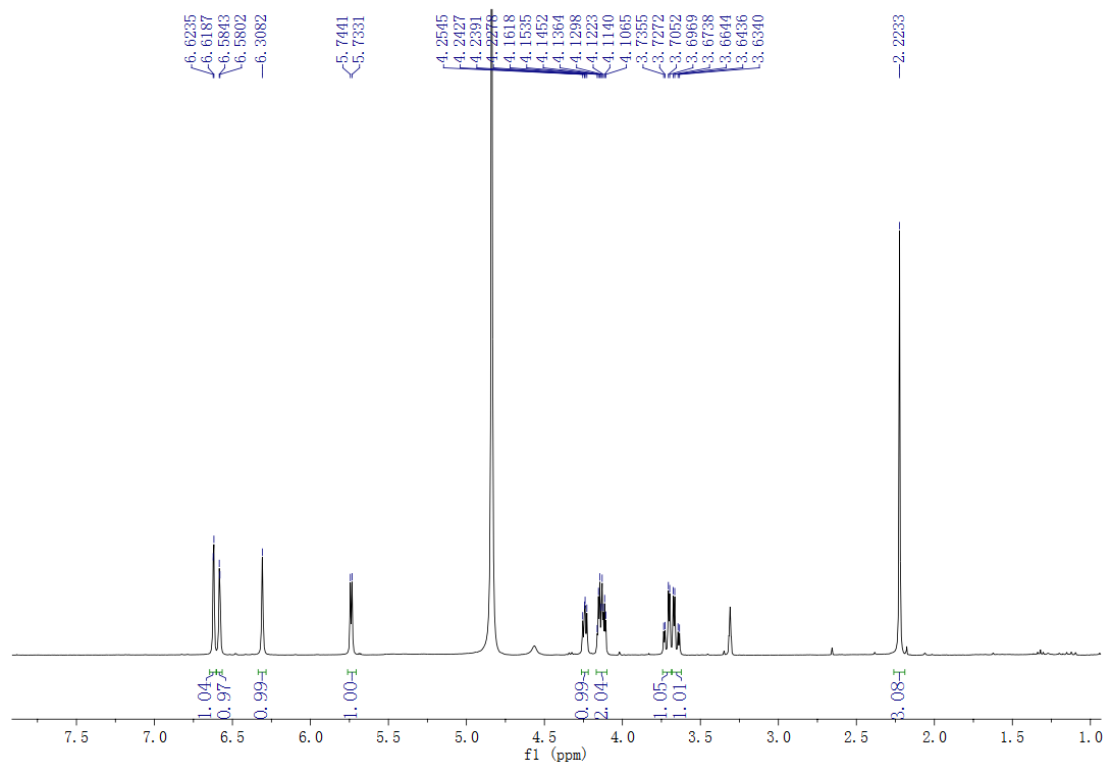
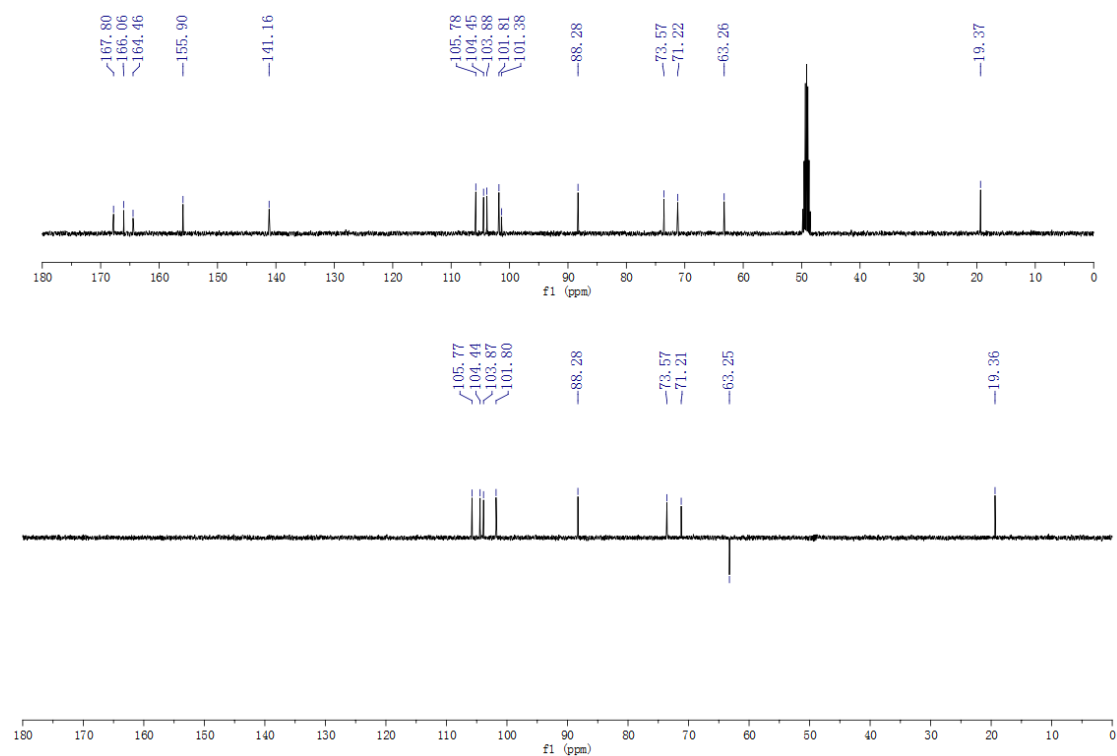
Figure S9. ^1H NMR spectrum of **2** at 400 MHz in CD_3OD .**Figure S10.** ^{13}C NMR spectrum of **2** at 100 MHz in CD_3OD .

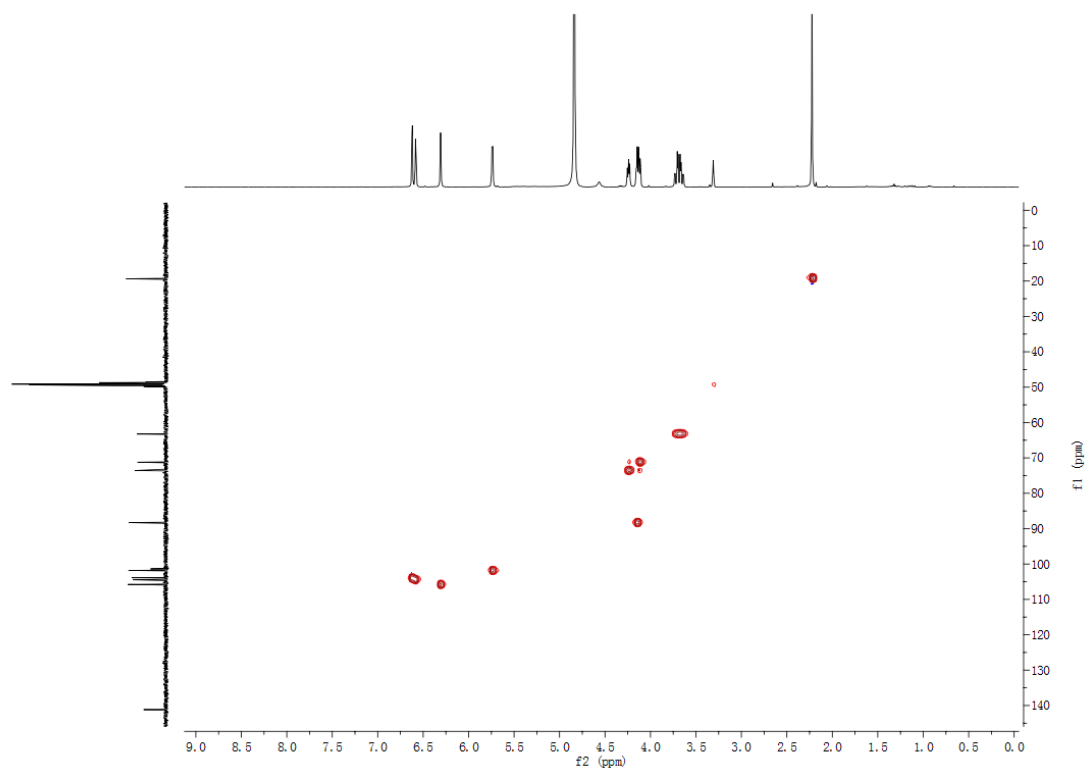
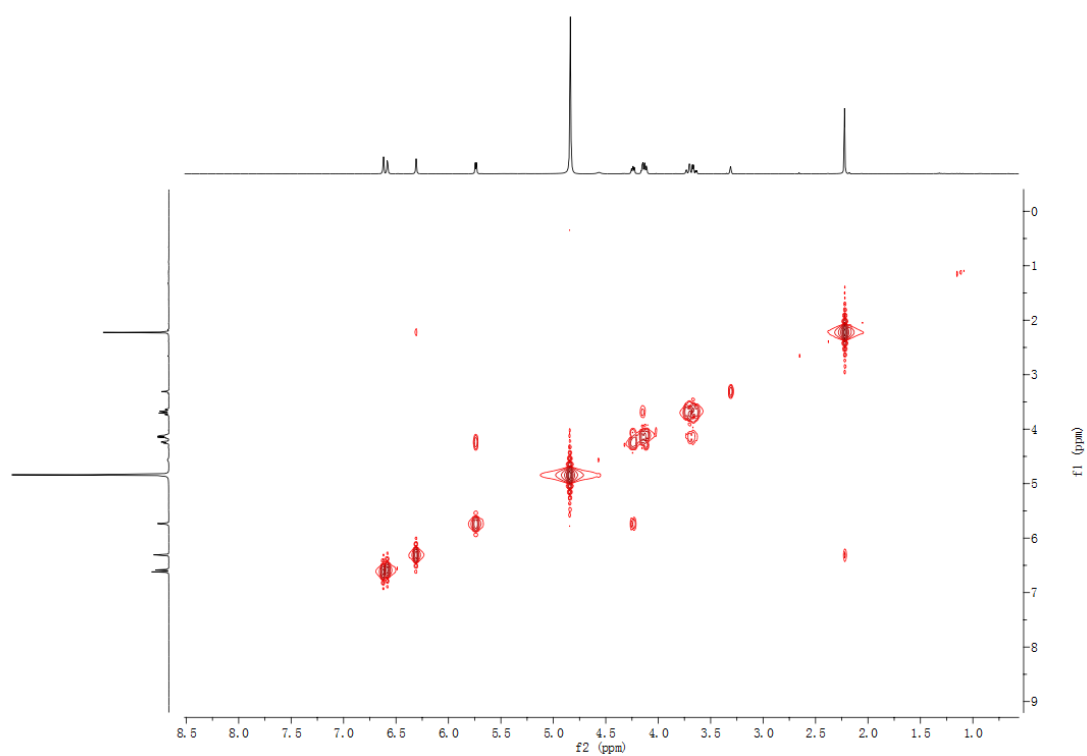
Figure S11. HSQC spectrum of **2** in CD₃OD.**Figure S12.** ¹H–¹H COSY spectrum of **2** in CD₃OD.

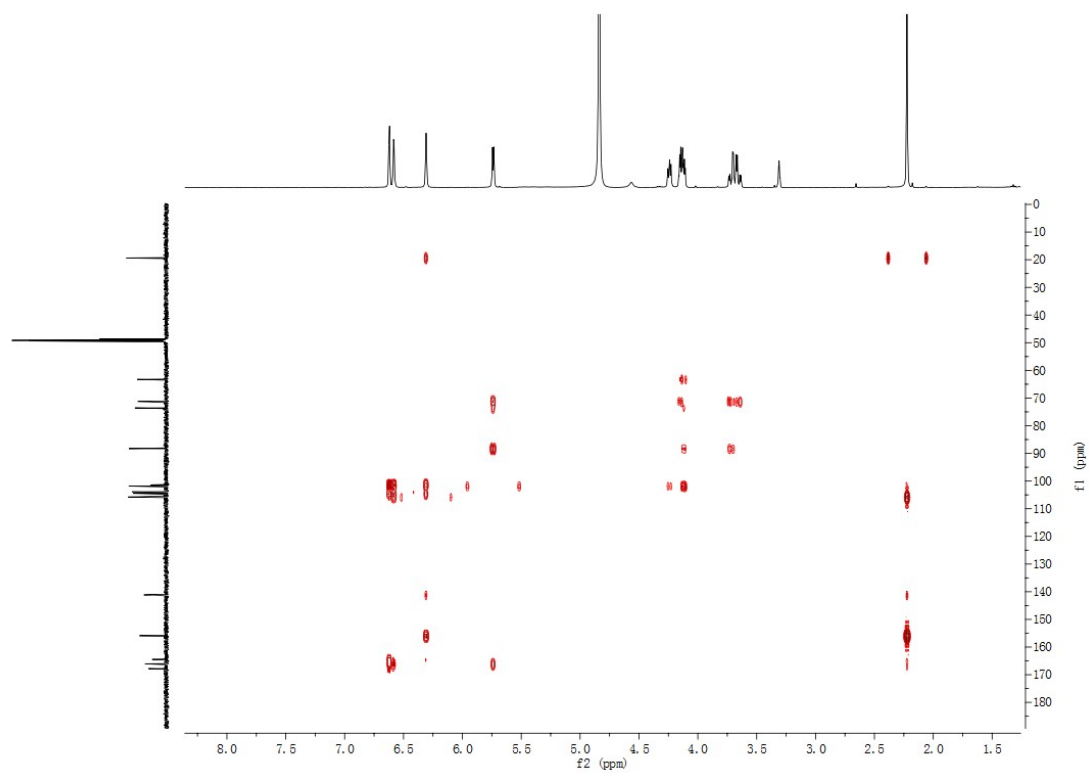
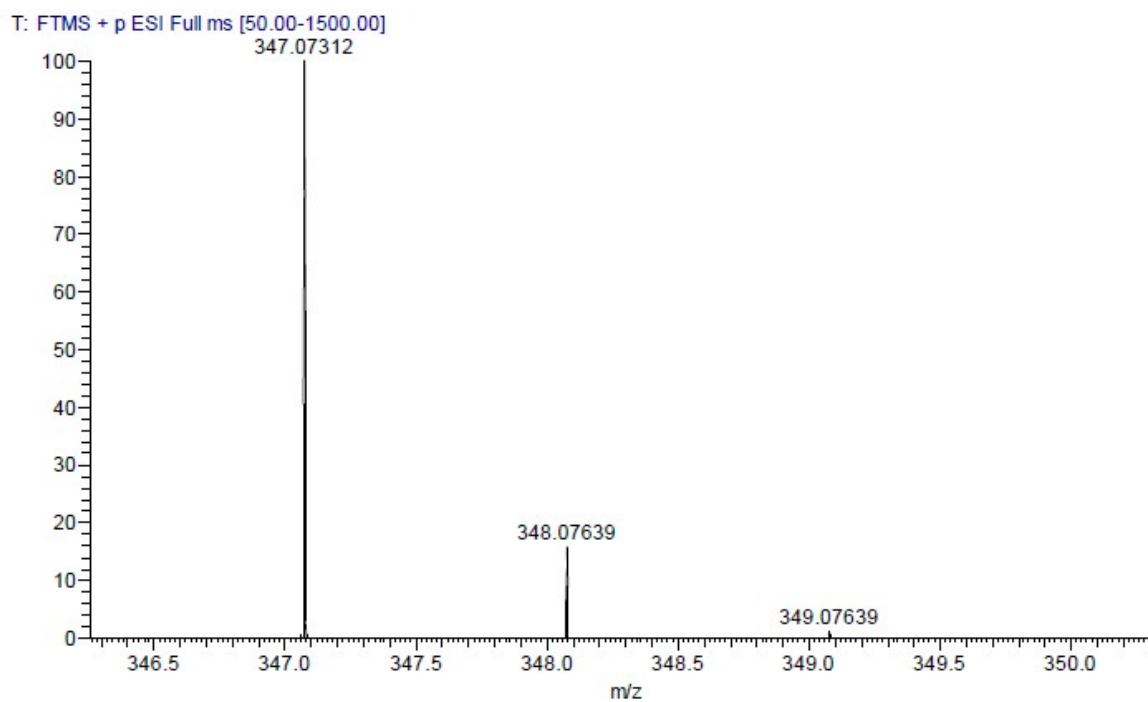
Figure S13. HMBC spectrum of **2** in CD₃OD.Figure S14. HRESIMS spectrum of **2**.

Figure S15. IR spectrum of 2.

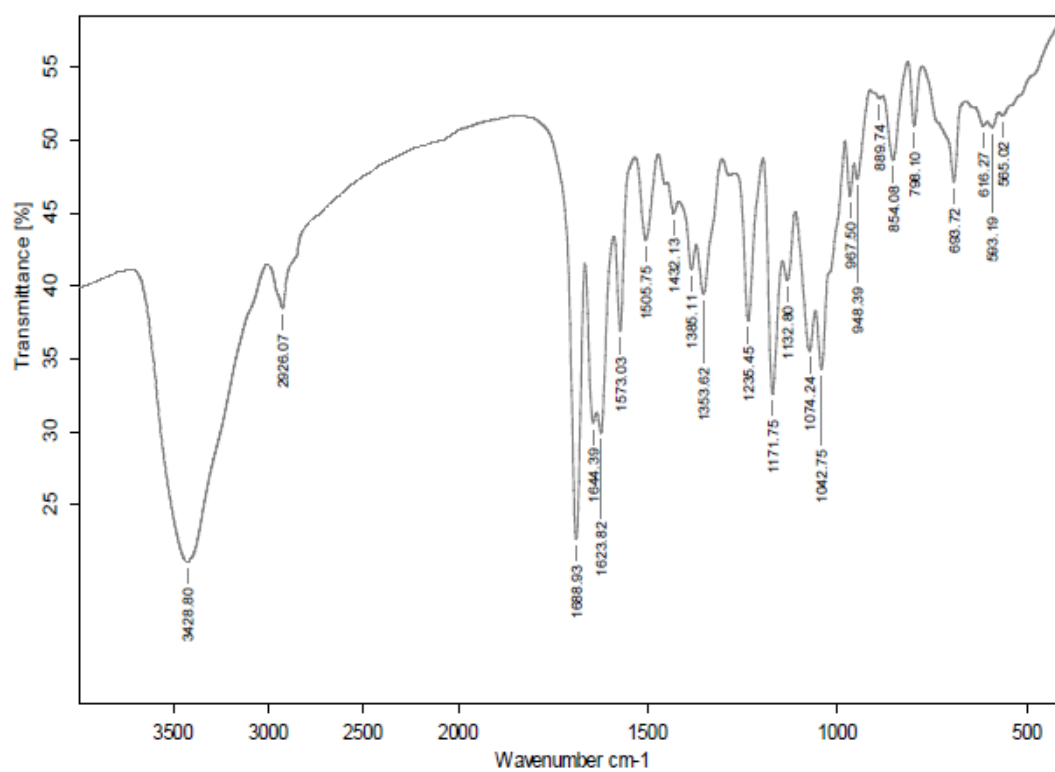


Figure S16. UV spectrum of 2.

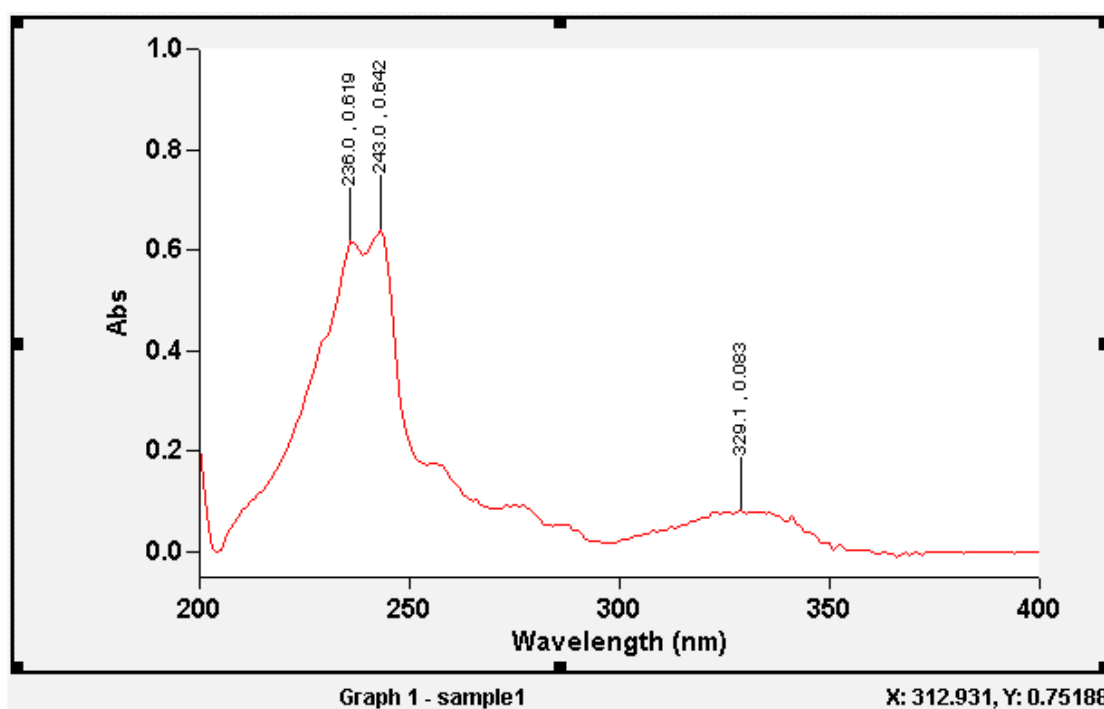


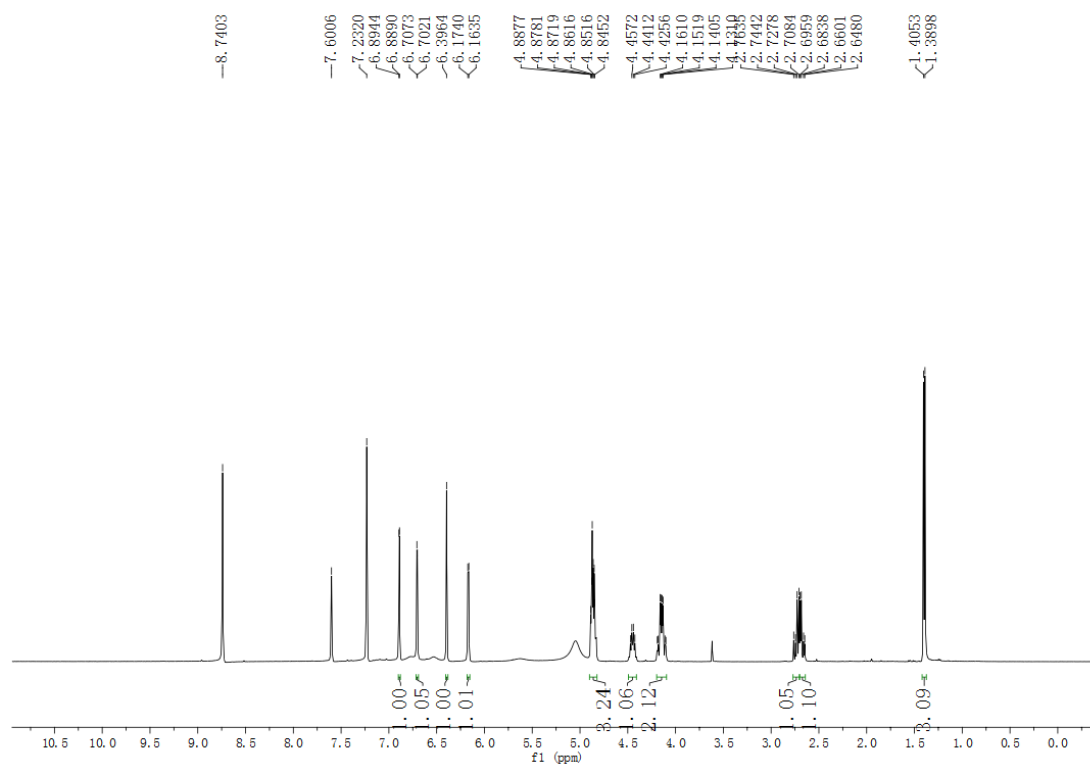
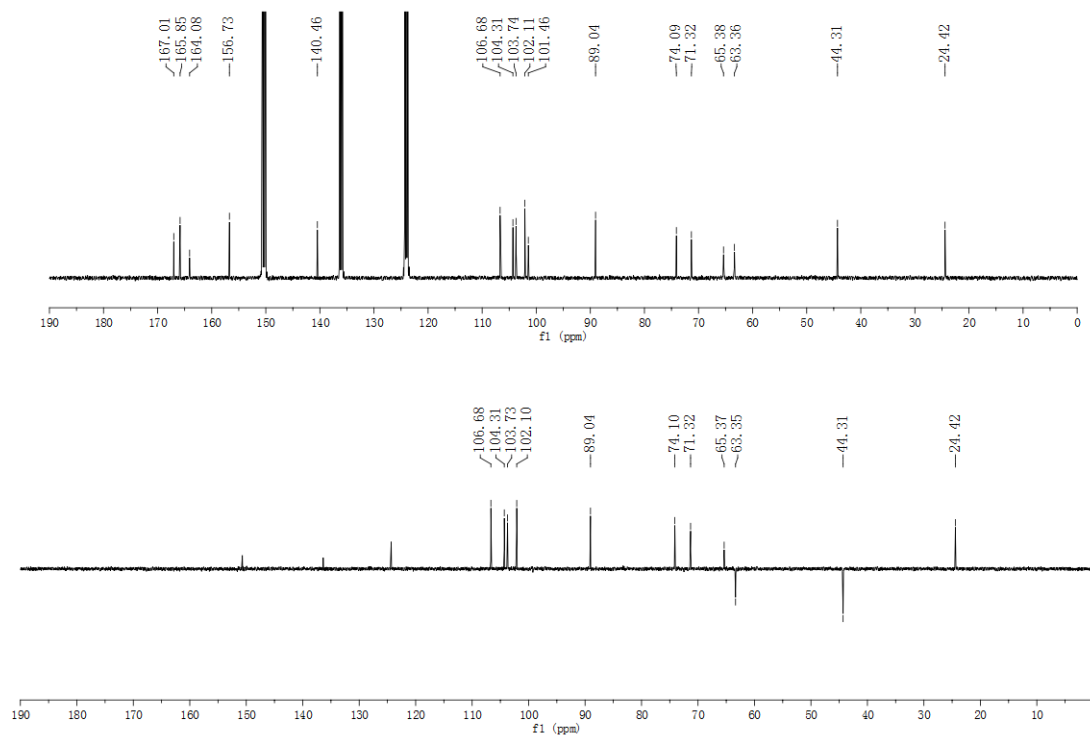
Figure S17. ^1H NMR spectrum of **3** at 400 MHz in $\text{C}_5\text{D}_5\text{N}$.**Figure S18.** ^{13}C NMR spectrum of **3** at 100 MHz in $\text{C}_5\text{D}_5\text{N}$.

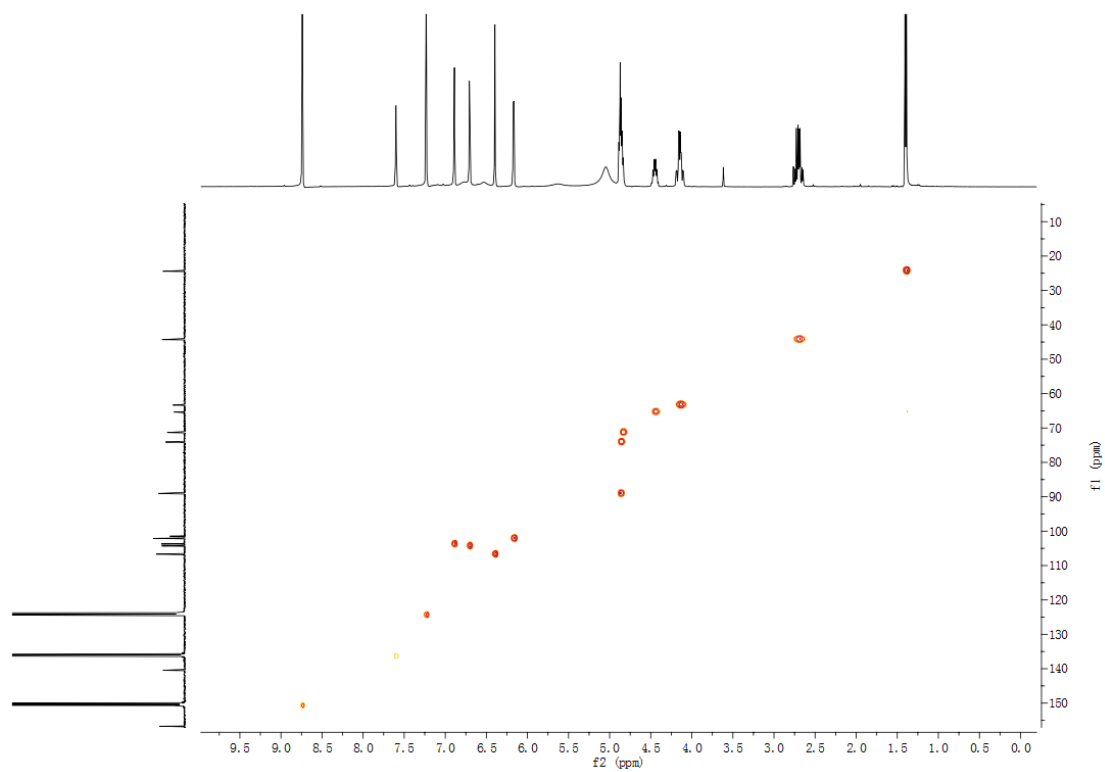
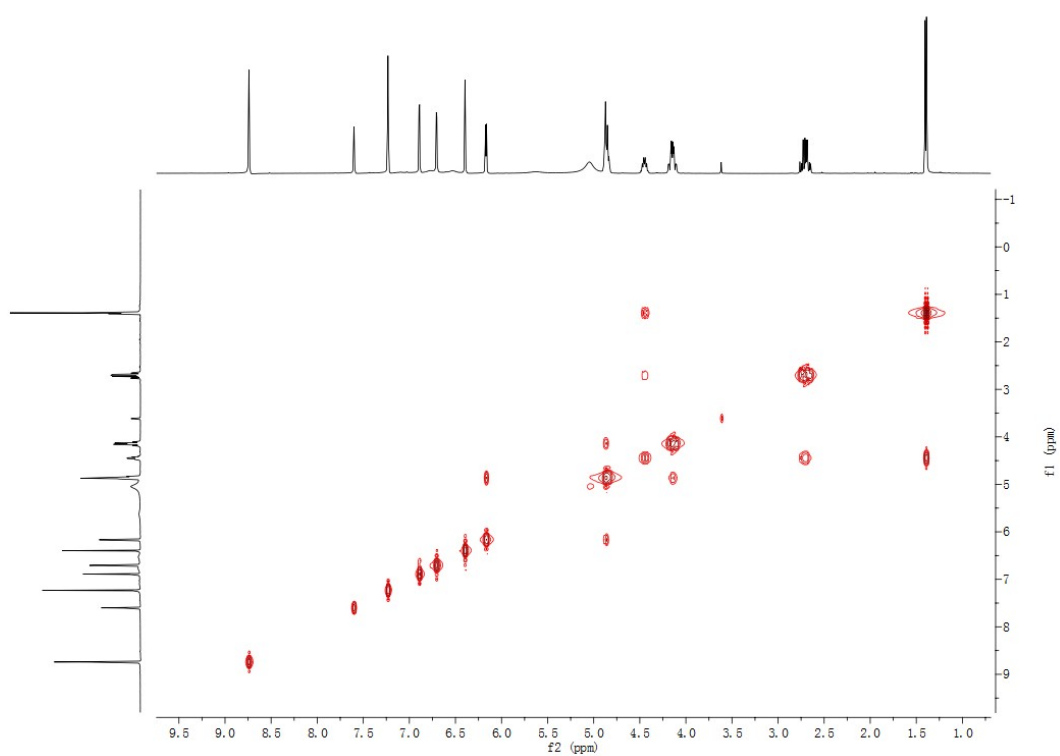
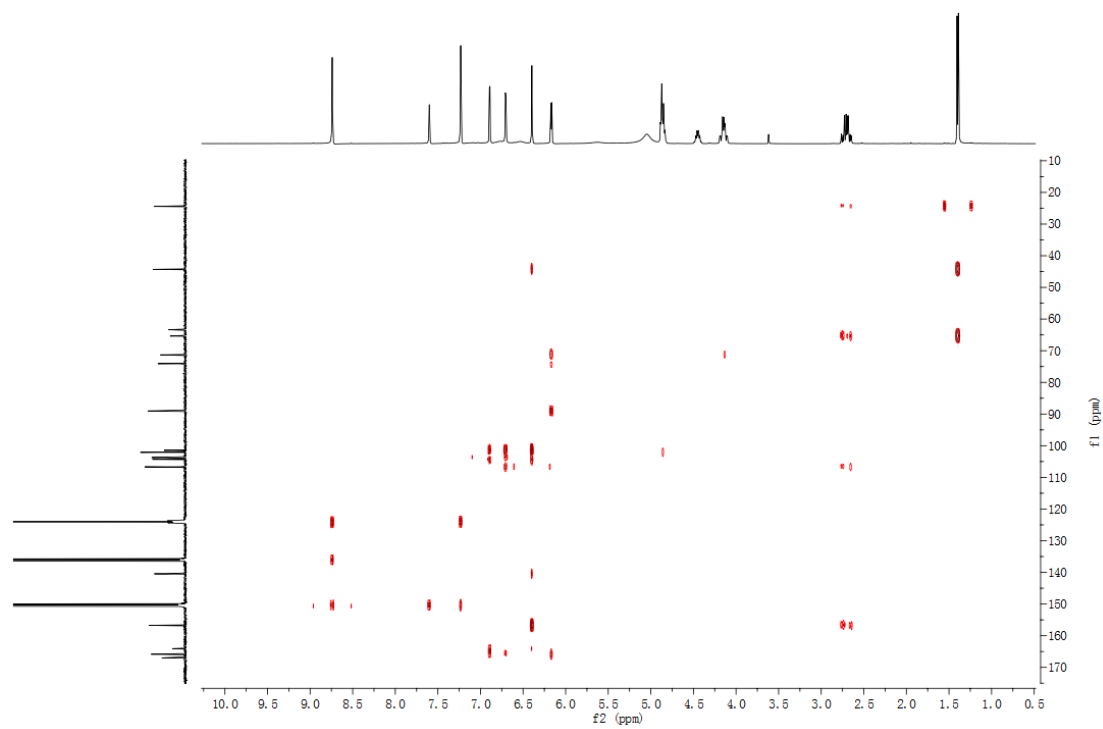
Figure S19. HSQC spectrum of **3** in C_5D_5N .**Figure S20.** 1H - 1H COSY spectrum of **3** in C_5D_5N .

Figure S21. HMBC spectrum of **3** in C₅D₅N.**Figure S22.** HRESIMS spectrum of **3**.

T: FTMS + p ESI Full ms [50.00-1500.00]

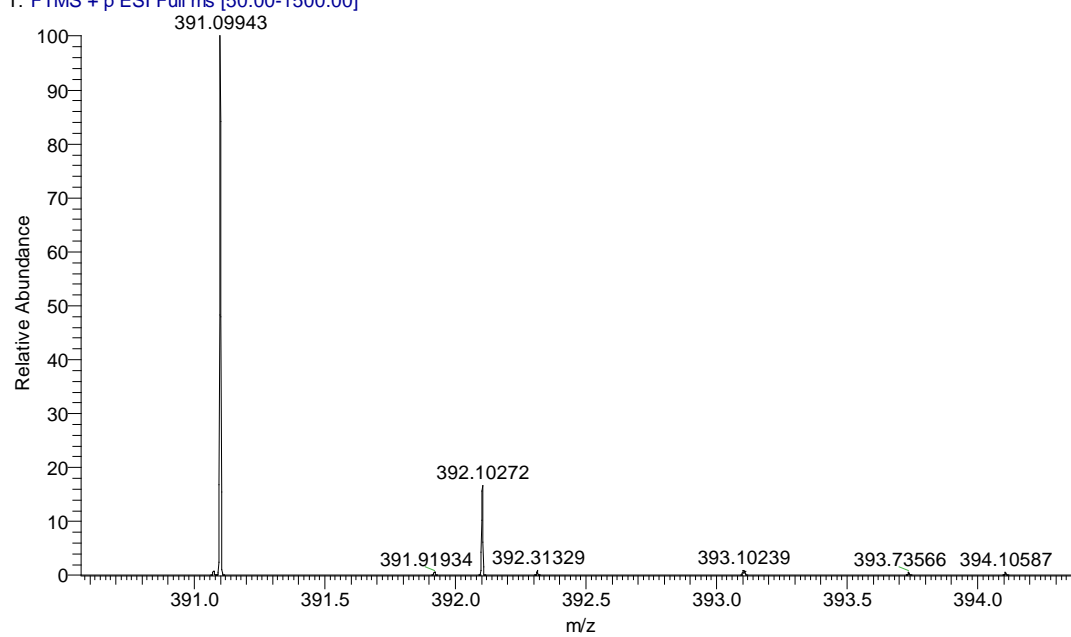


Figure S23. IR spectrum of 3.

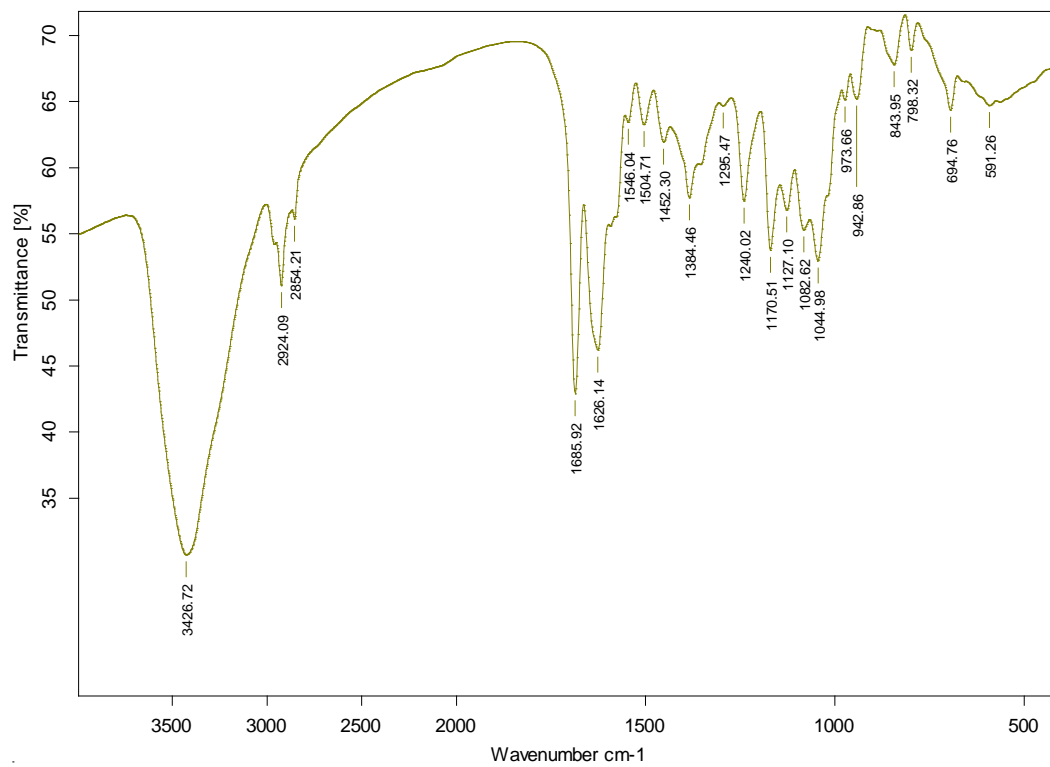


Figure S24. UV spectrum of 3.

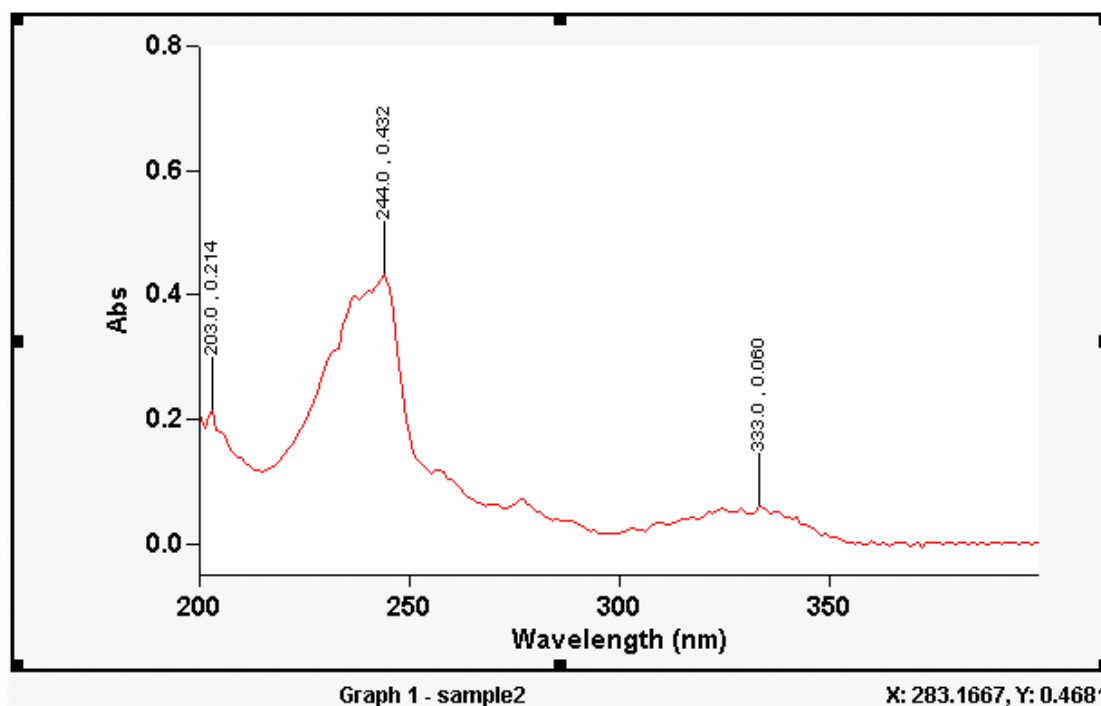


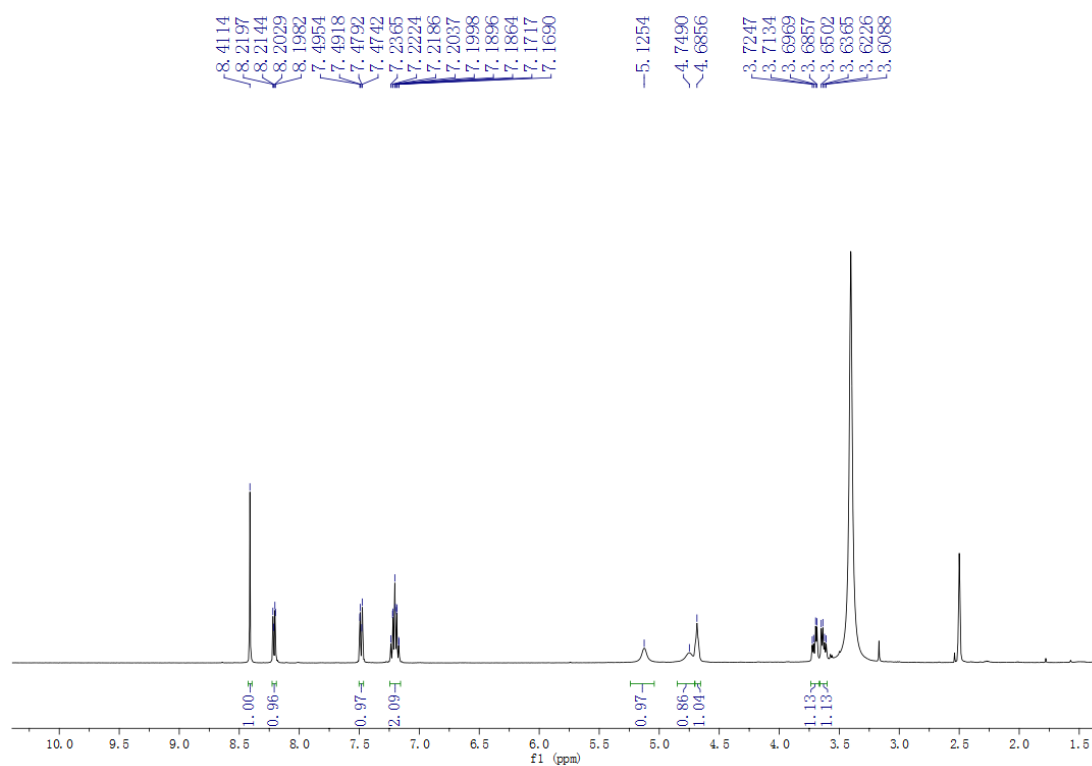
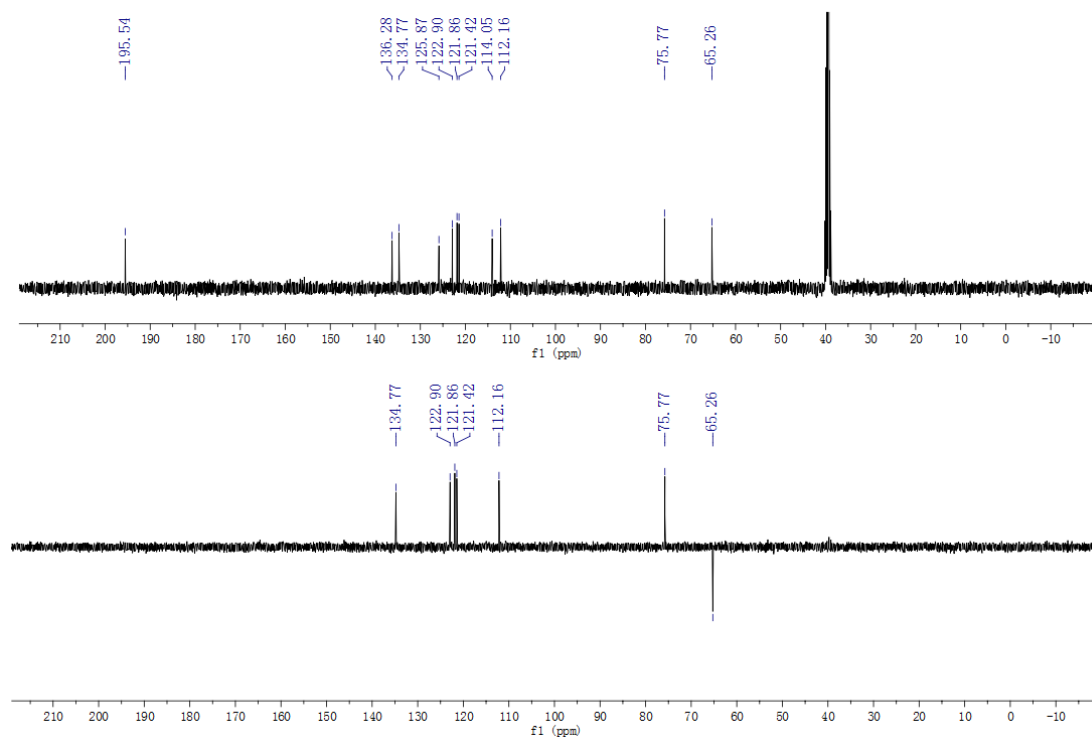
Figure S25. ^1H NMR spectrum of **4** at 400 MHz in $\text{DMSO-}d_6$.Figure S26. ^{13}C NMR spectrum of **4** at 100 MHz in $\text{DMSO-}d_6$.

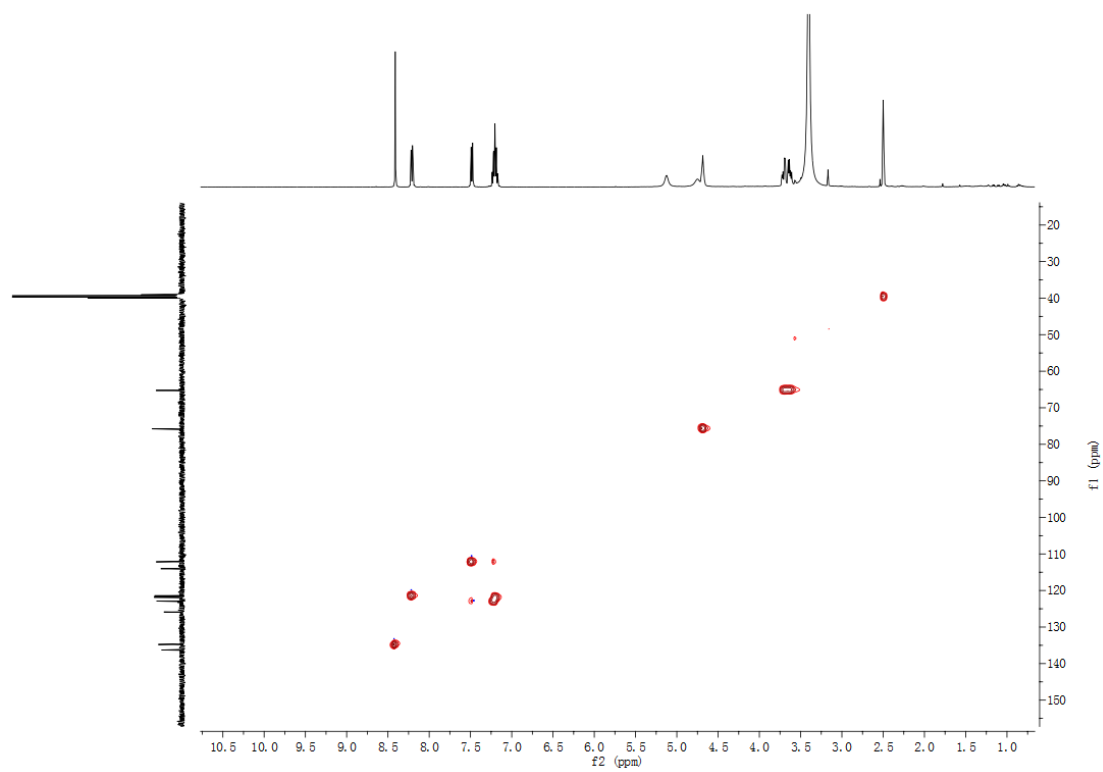
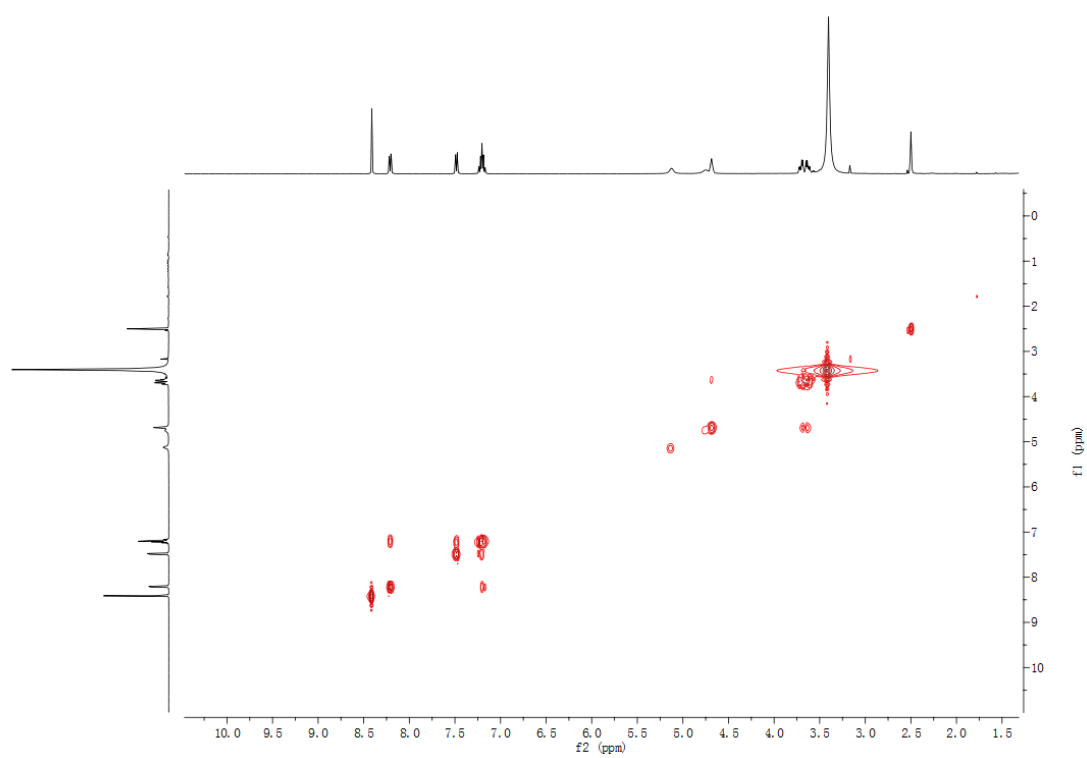
Figure S27. HSQC spectrum of **4** in DMSO-*d*₆.**Figure S28.** ¹H-¹H COSY spectrum of **4** in DMSO-*d*₆.

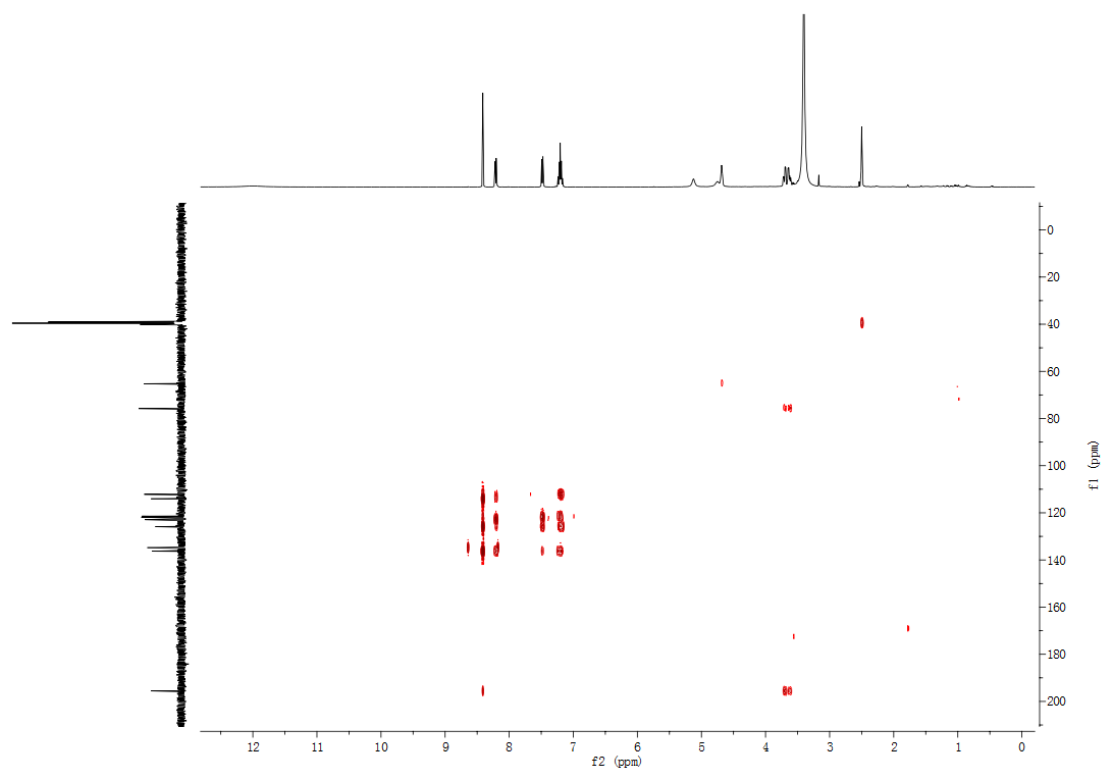
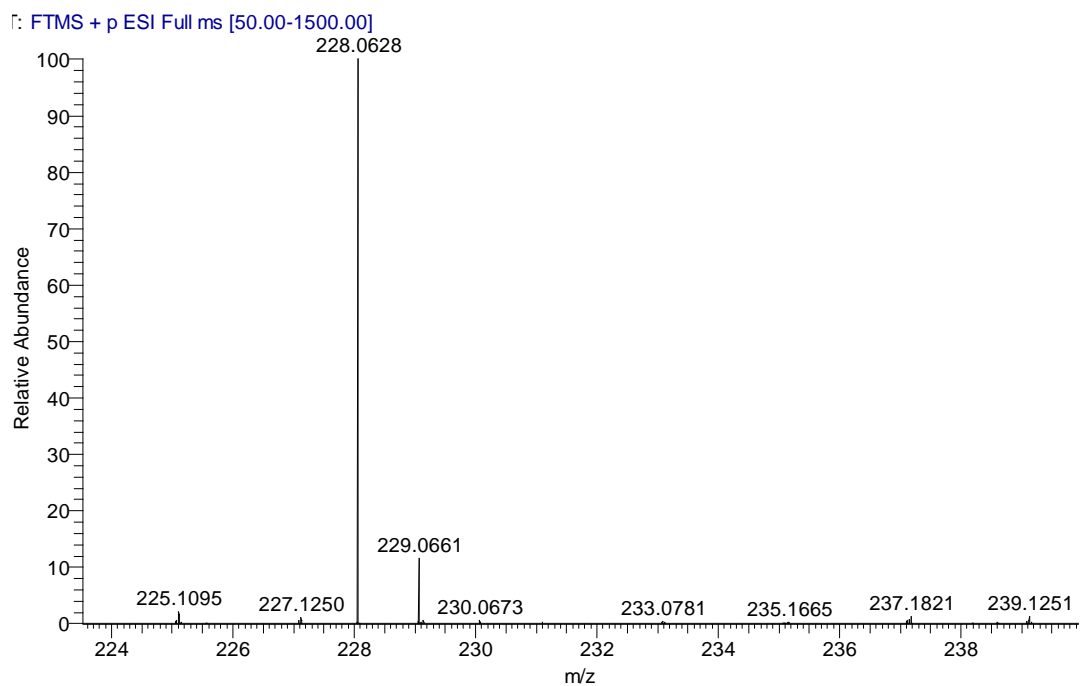
Figure S29. HMBC spectrum of **4** in DMSO-*d*₆.Figure S30. HRESIMS spectrum of **4**.

Figure S31. IR spectrum of 4.

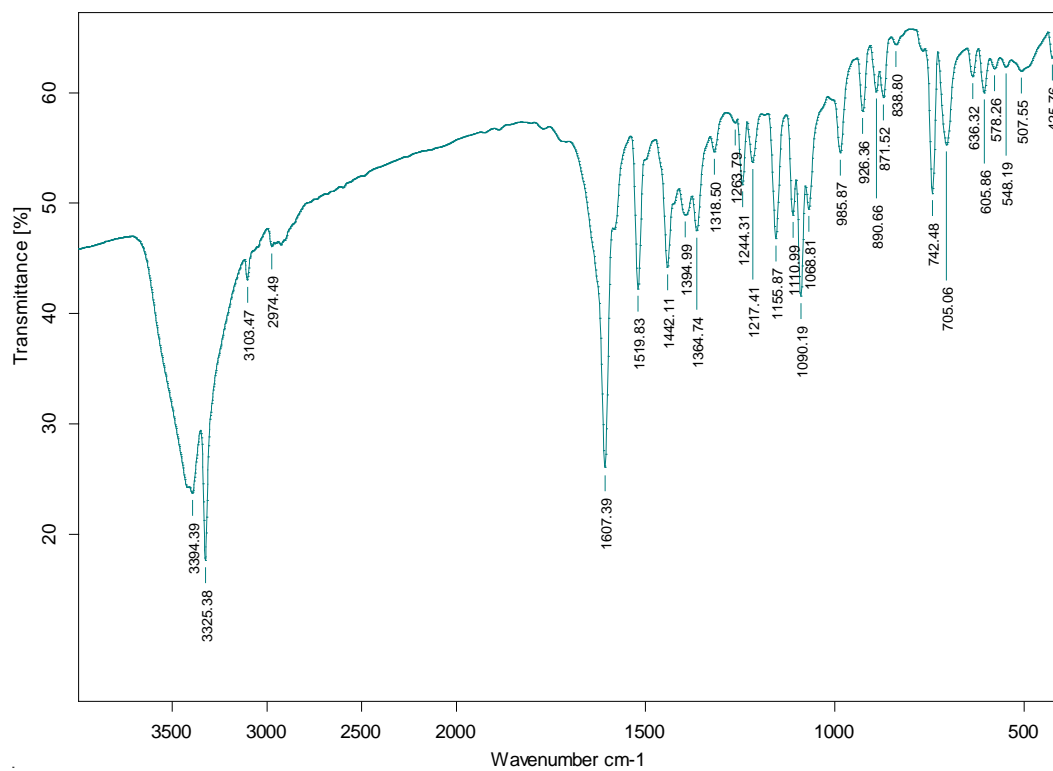


Figure S32. UV spectrum of 4.

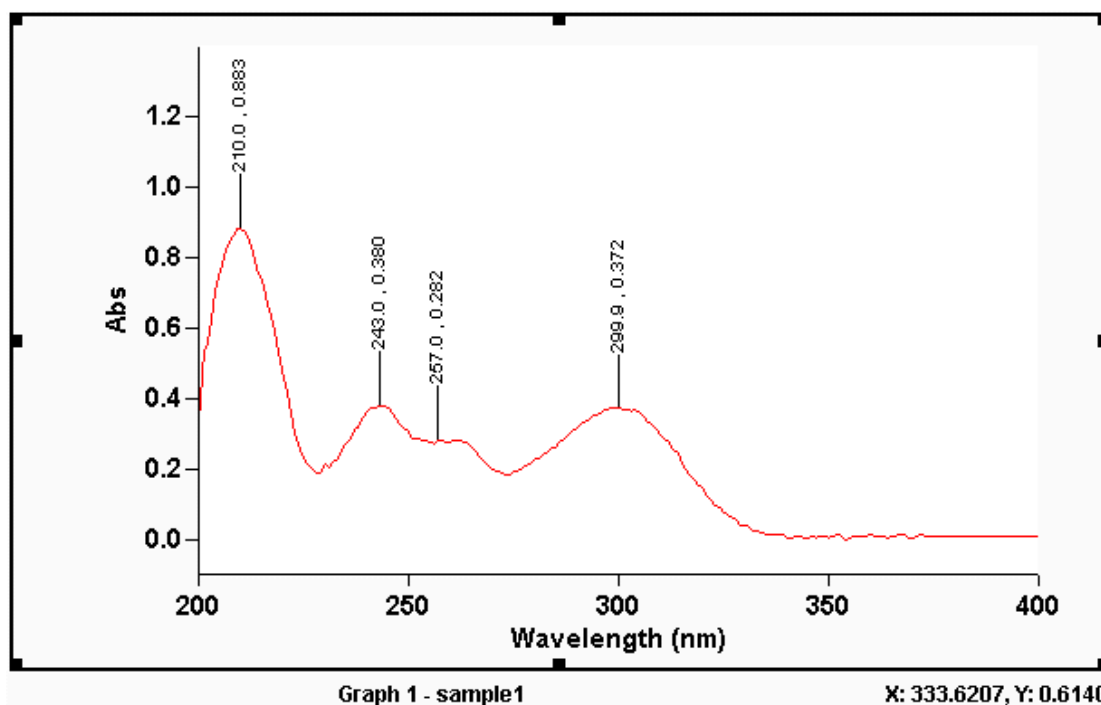


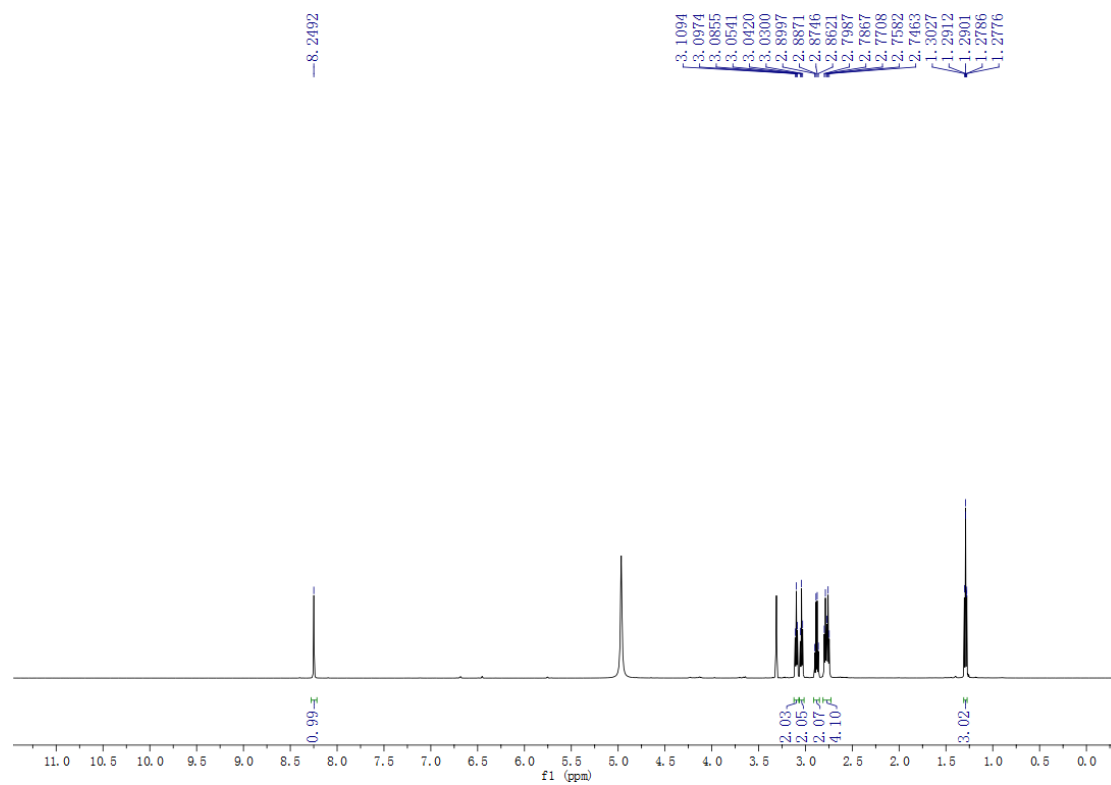
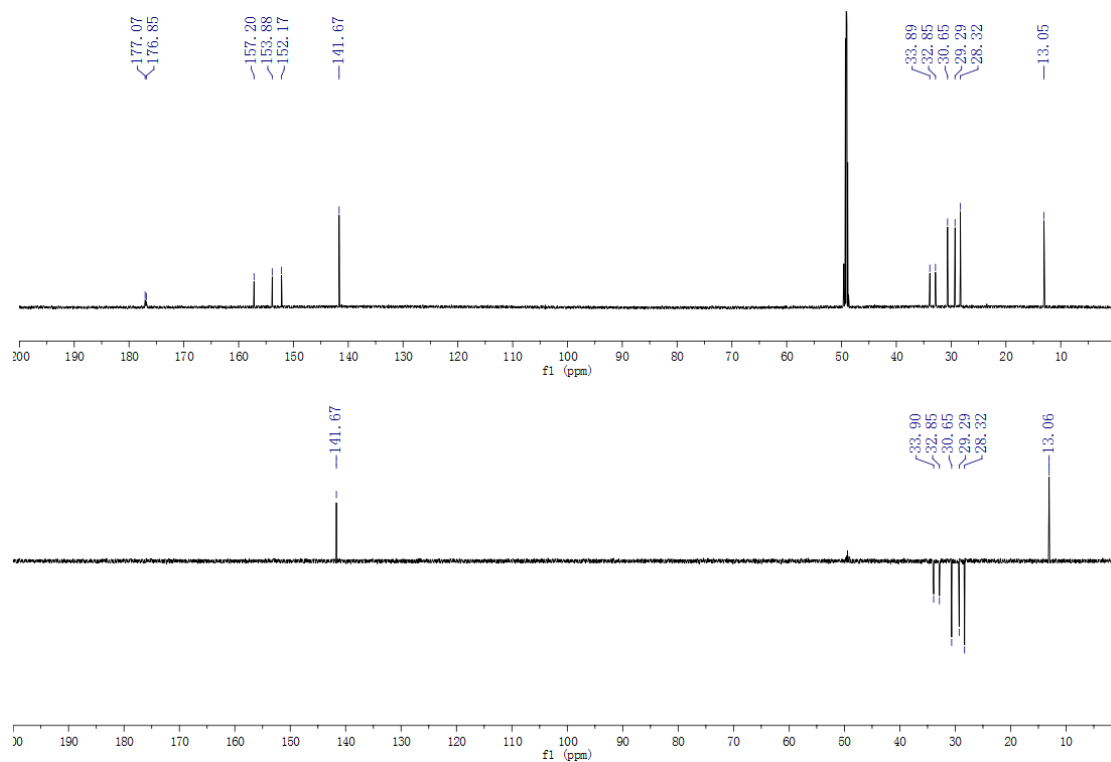
Figure S33. ^1H NMR spectrum of **5** at 600 MHz in CD_3OD .**Figure S34.** ^{13}C NMR spectrum of **5** at 150 MHz in CD_3OD .

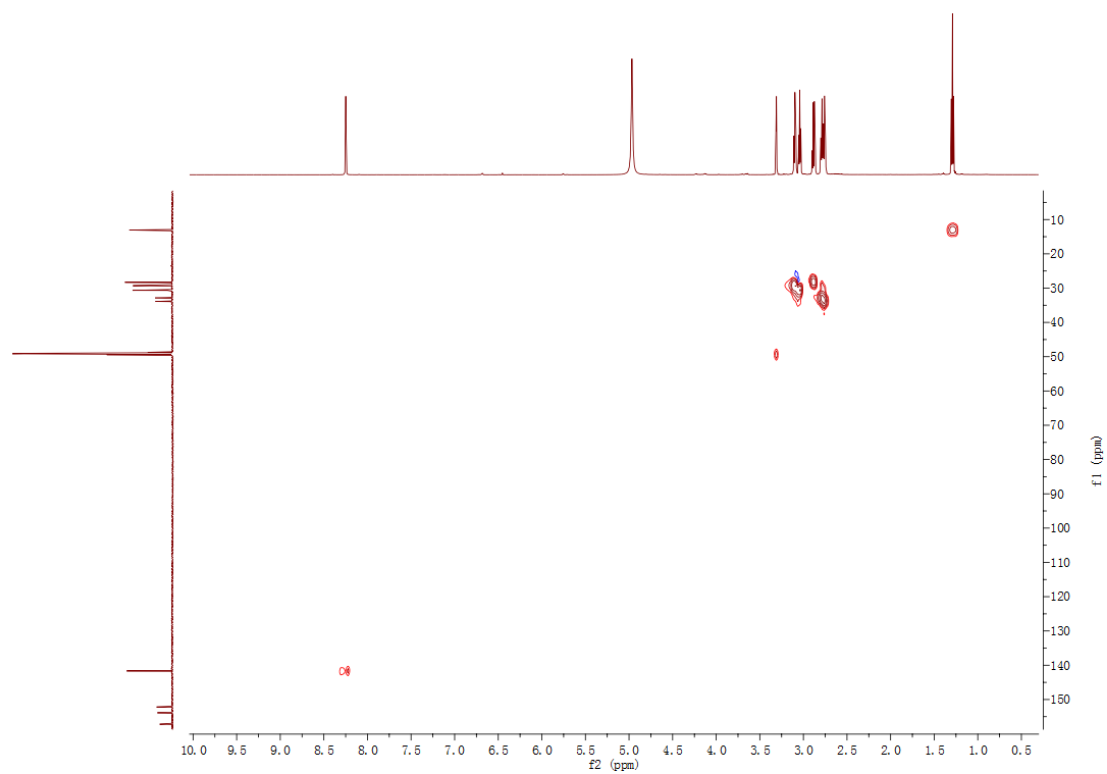
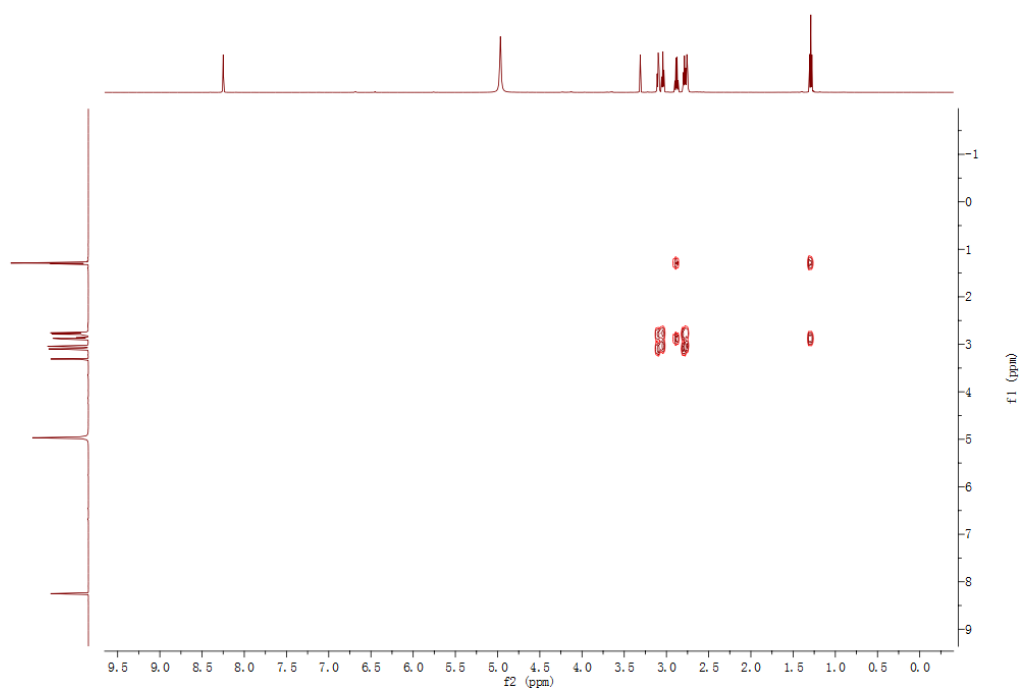
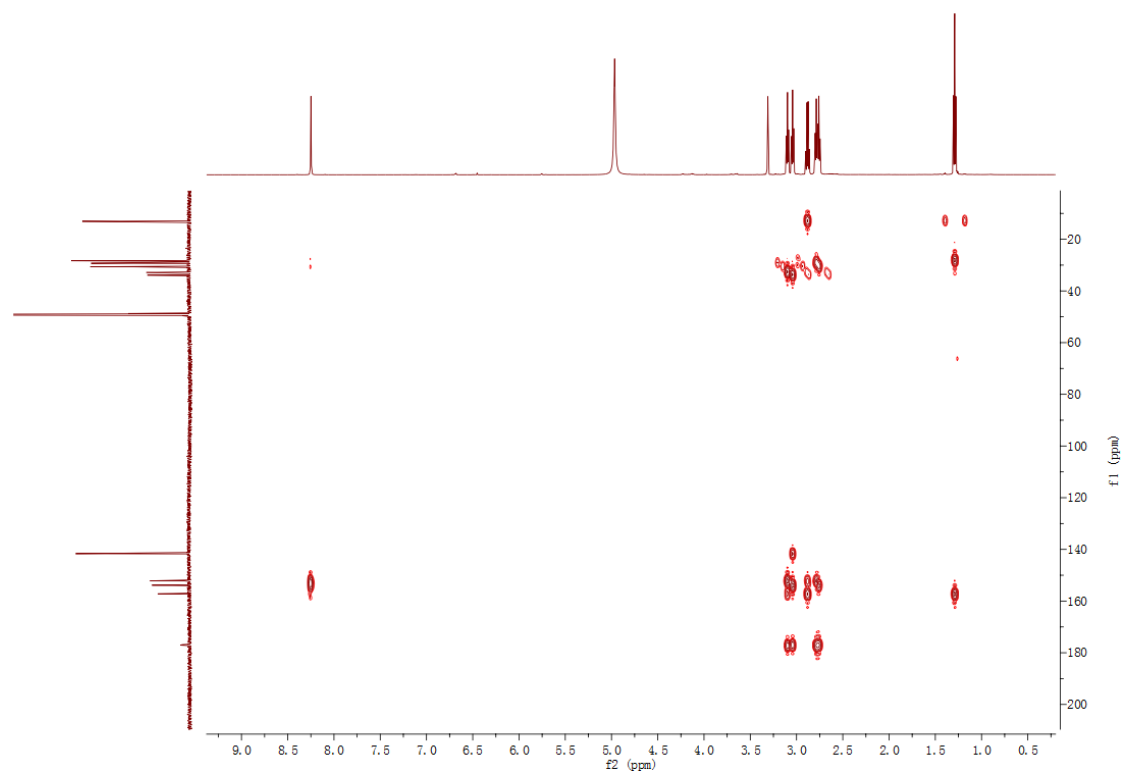
Figure S35. HSQC spectrum of **5** in CD₃OD.**Figure S36.** ¹H–¹H COSY spectrum of **5** in CD₃OD.

Figure S37. HMBC spectrum of **5** in CD₃OD.Figure S38. HRESIMS spectrum of **5**.

T: FTMS + p ESI Full ms [50.00-1500.00]

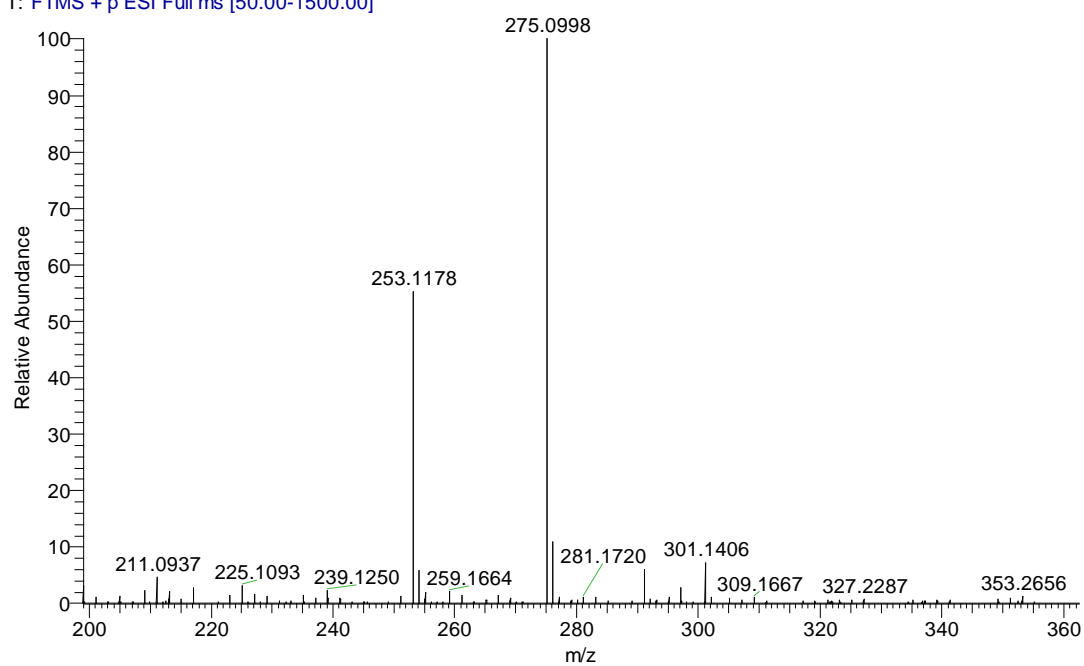


Figure S39. IR spectrum of 5.

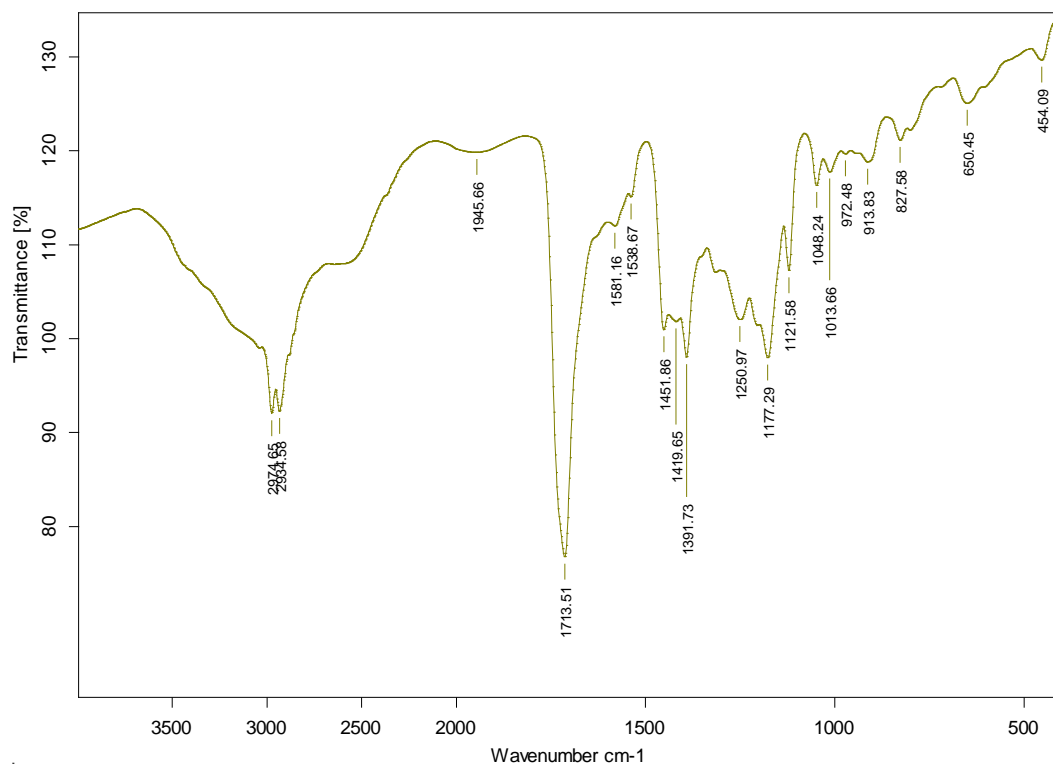
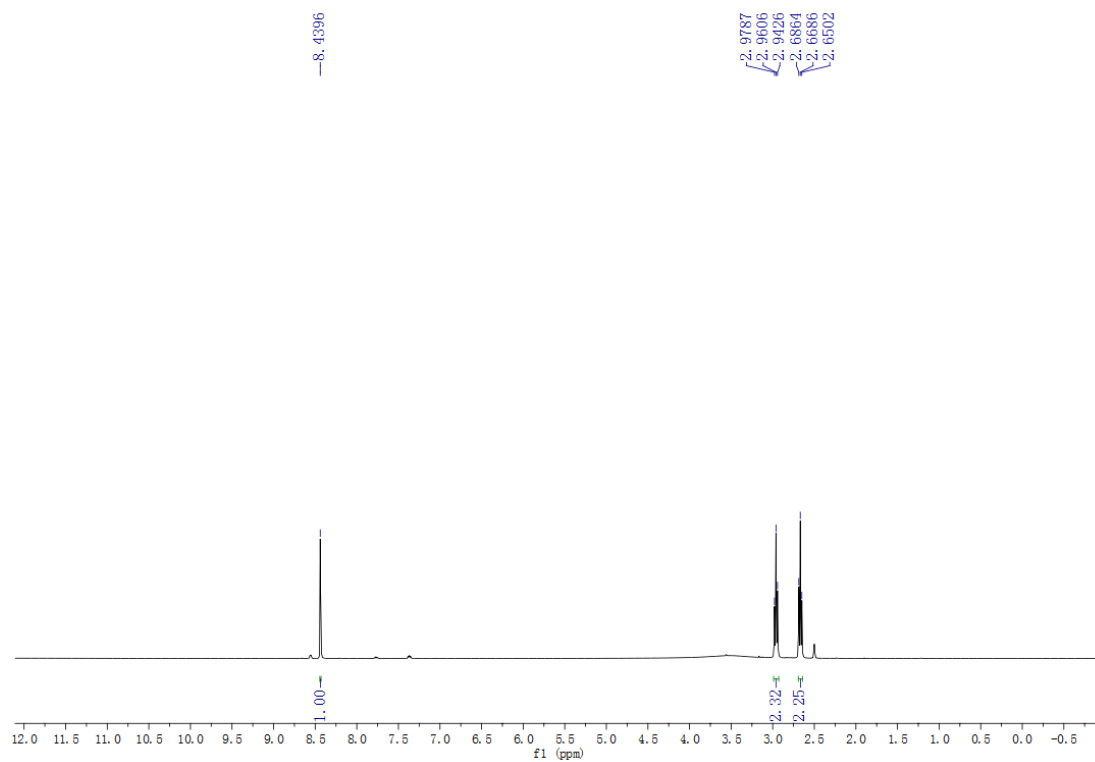
Figure S40. ¹H NMR spectrum of 6 at 400 MHz in DMSO-d₆.

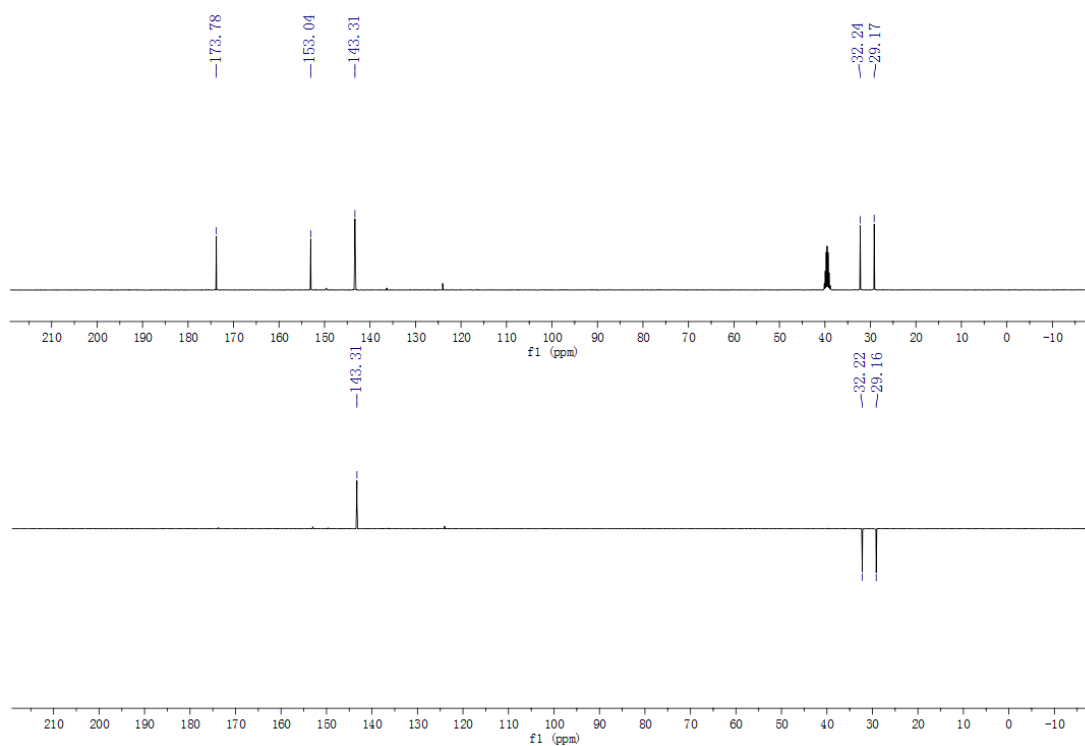
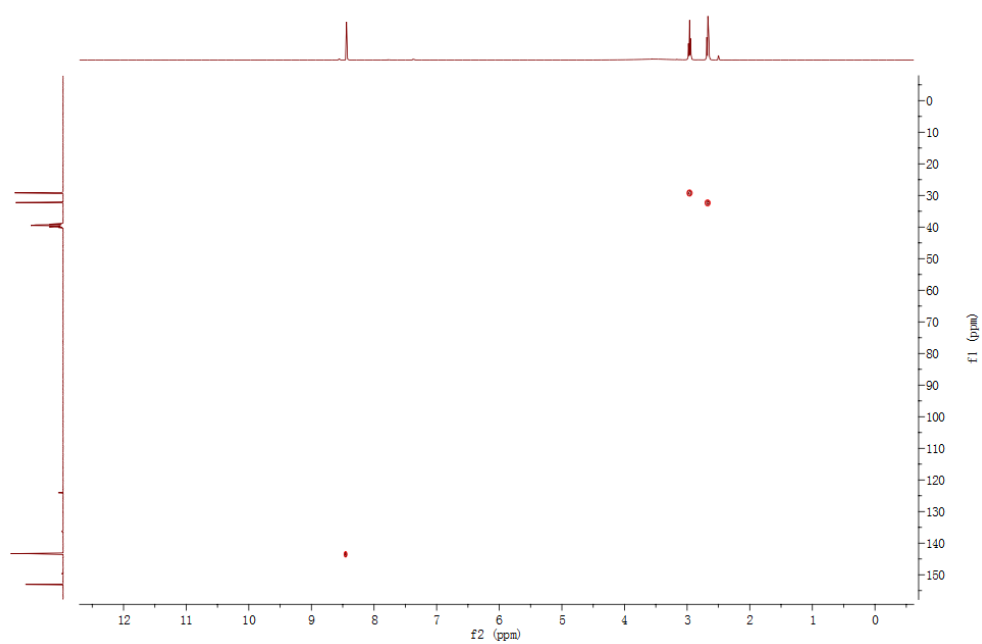
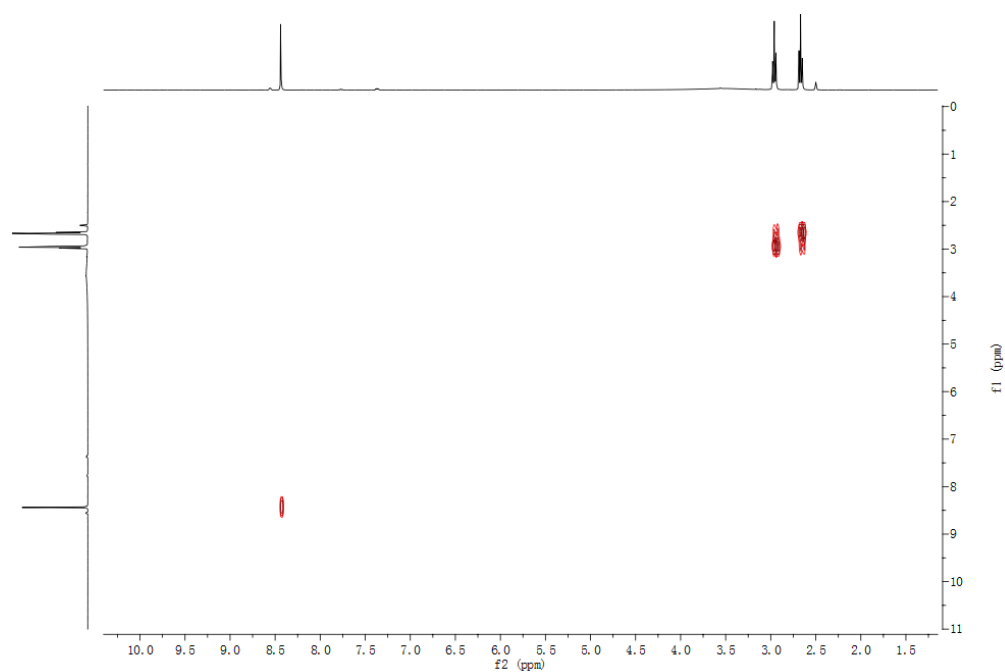
Figure S41. ^{13}C NMR spectrum of **6** at 100 MHz in $\text{DMSO-}d_6$.**Figure S42.** HSQC spectrum of **6** in $\text{DMSO-}d_6$.

Figure S43. ^1H - ^1H COSY spectrum of **6** in $\text{DMSO-}d_6$.**Figure S44.** HMBC spectrum of **6** in $\text{DMSO-}d_6$.