

Electronic Supplementary Information (ESI)

Heptaketides from the Endophytic Fungus *Pleosporales* sp. F46 and Their Antifungal and Cytotoxic Activities

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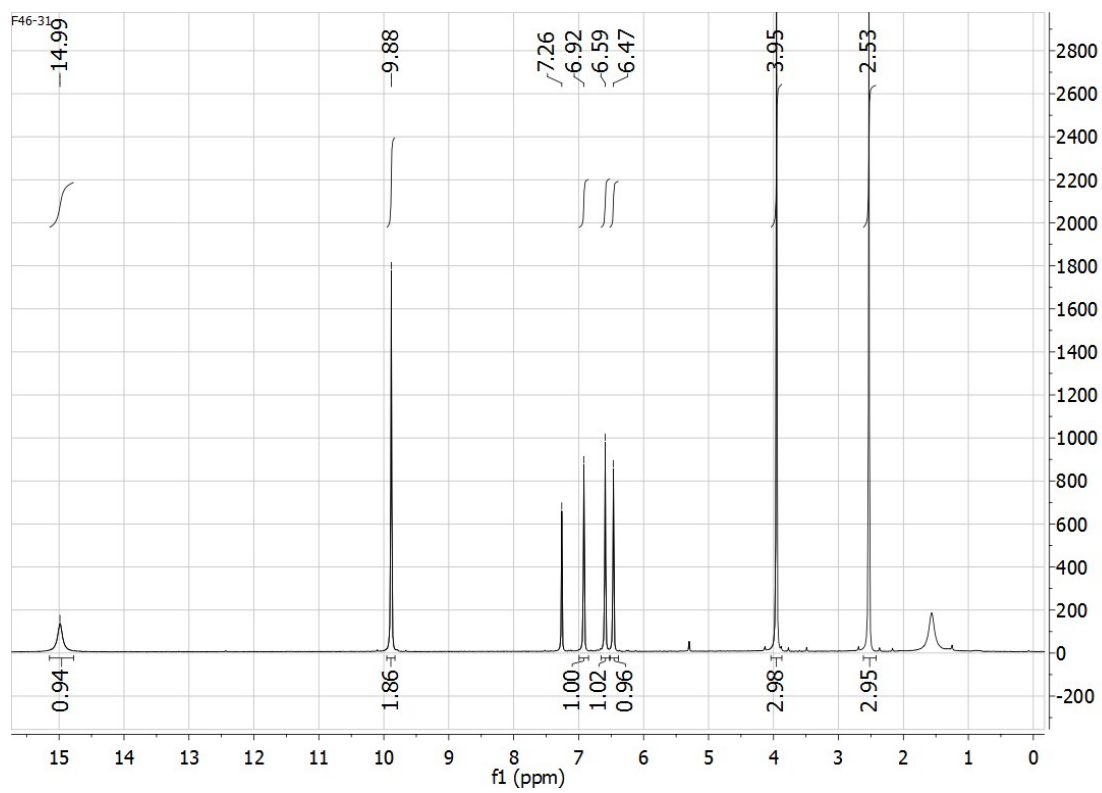


Figure S1. ¹H NMR spectrum (400 MHz) of **1** in CDCl₃.

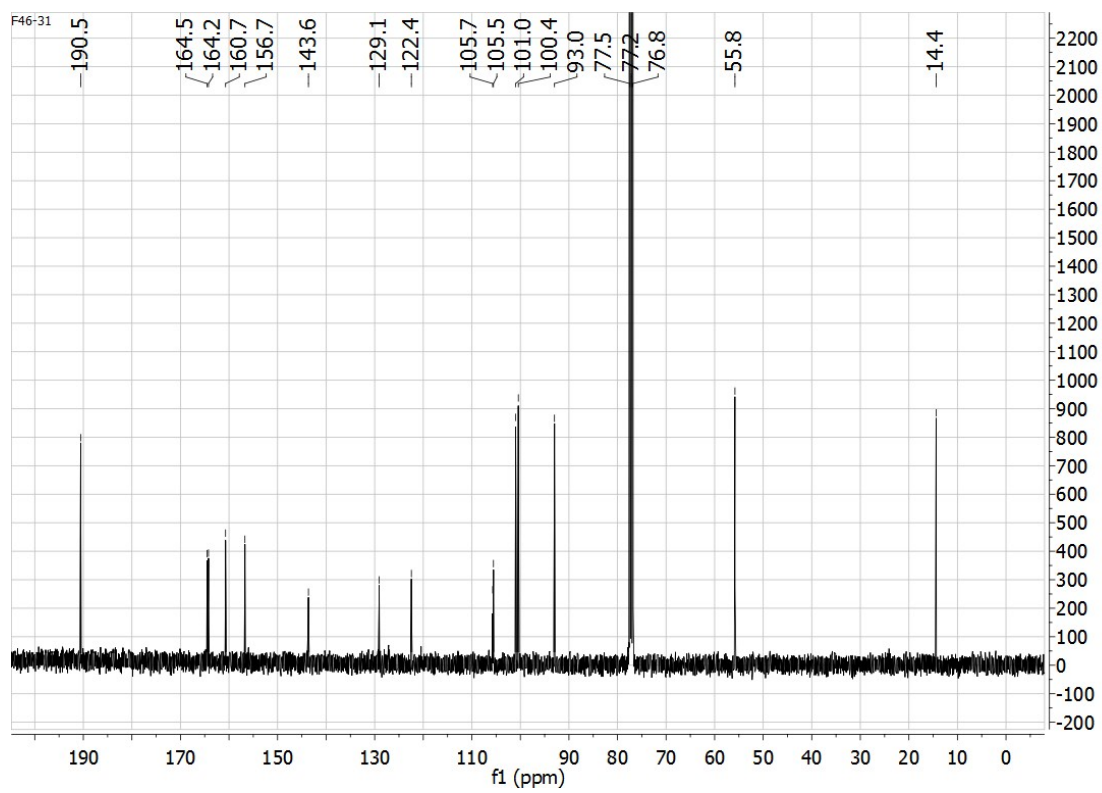


Figure S2. ¹³C NMR spectrum (100 MHz) of **1** in CDCl₃.

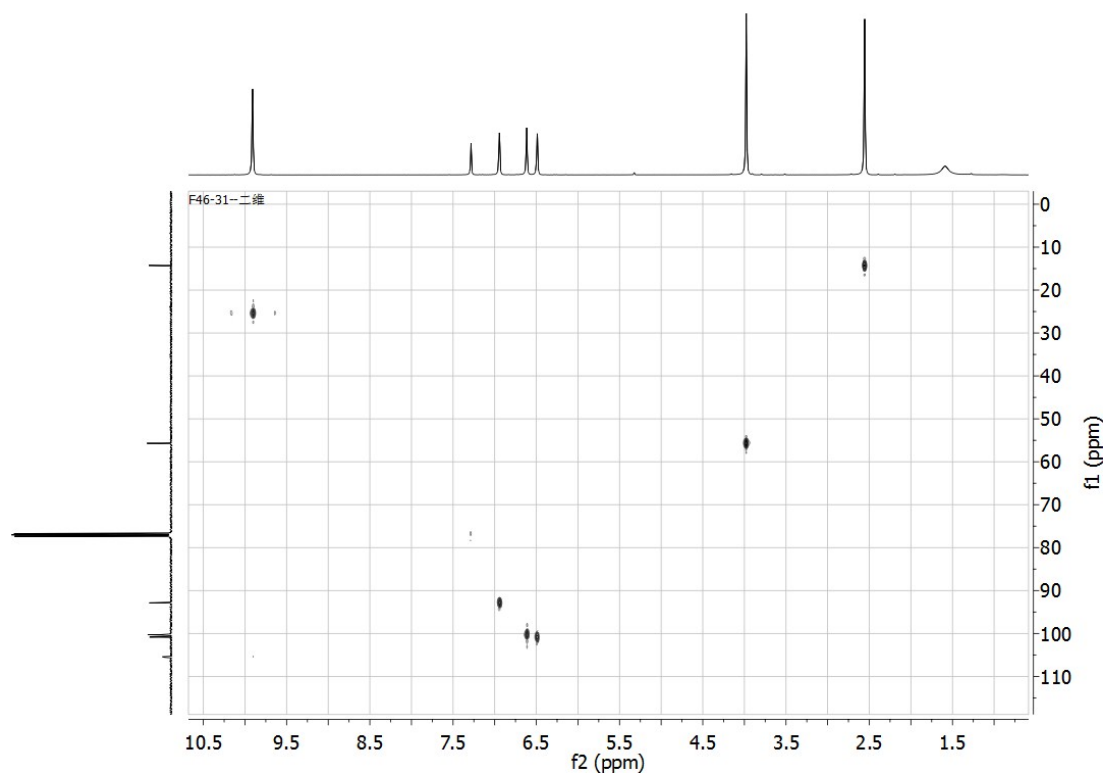


Figure S3. HSQC spectrum (400 MHz) of **1** in CDCl_3 .

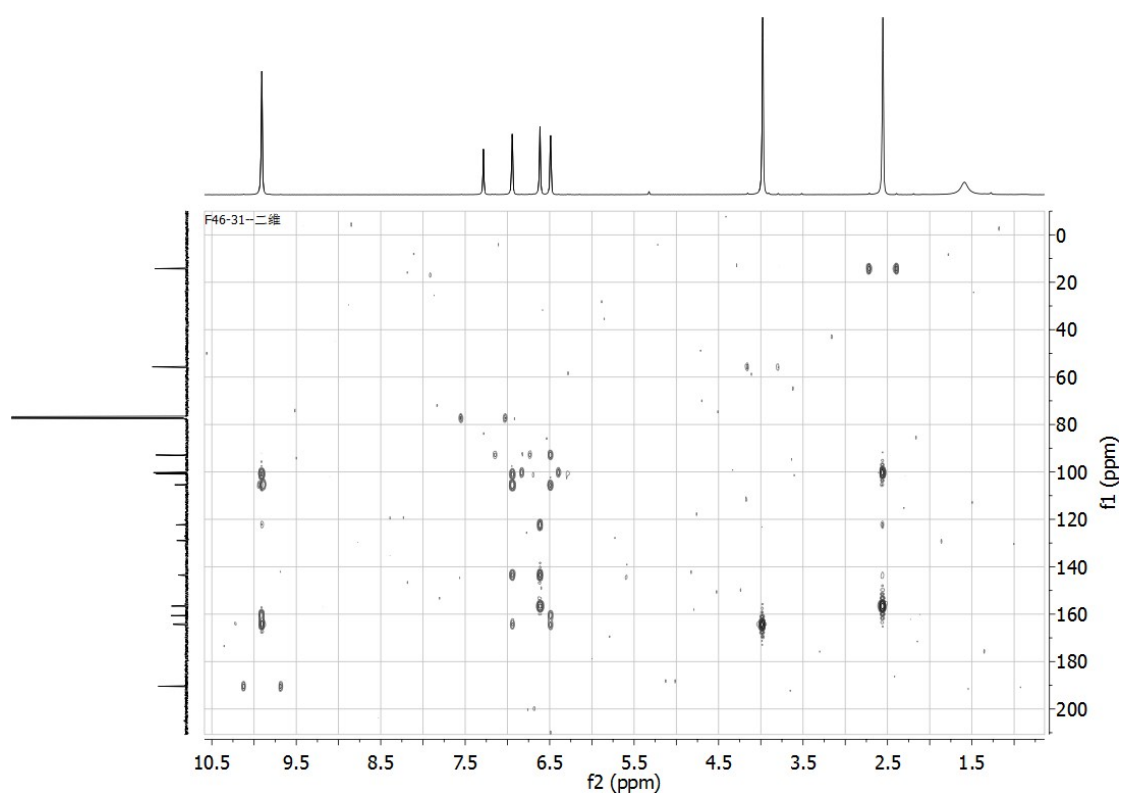


Figure S4. HMBC spectrum (400 MHz) of **1** in CDCl_3 .

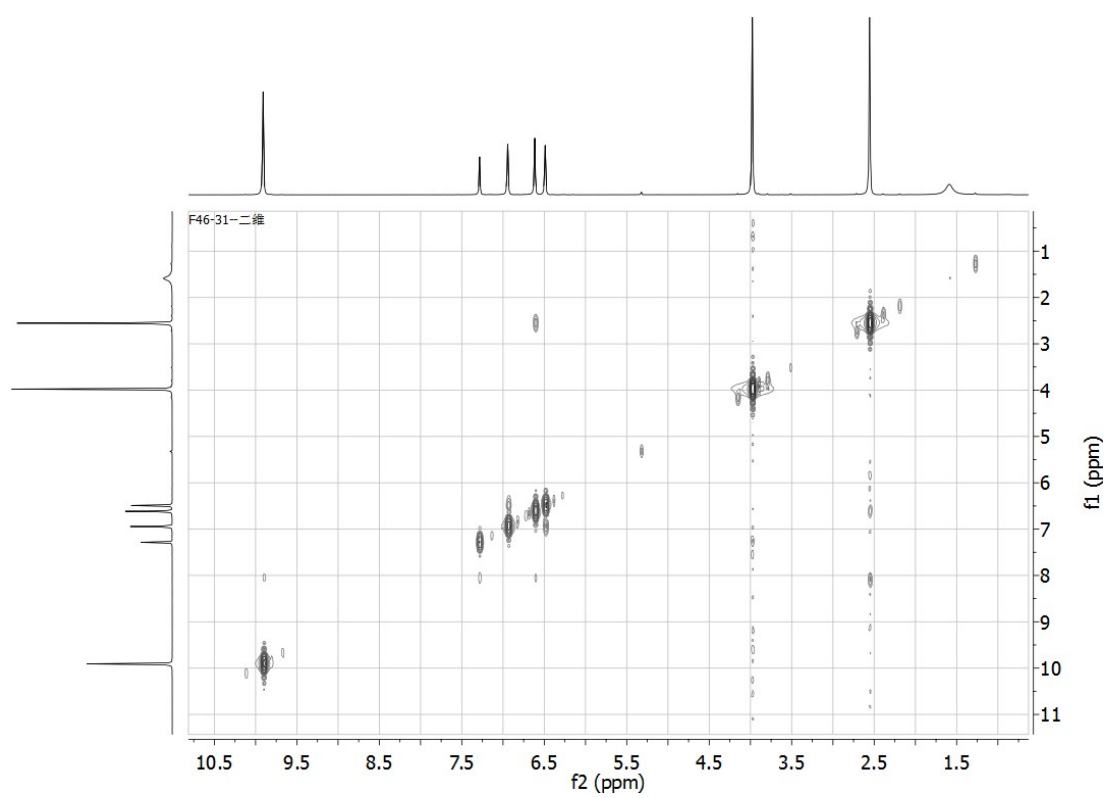


Figure S5. ^1H - ^1H COSY spectrum (400 MHz) of **1** in CDCl_3 .

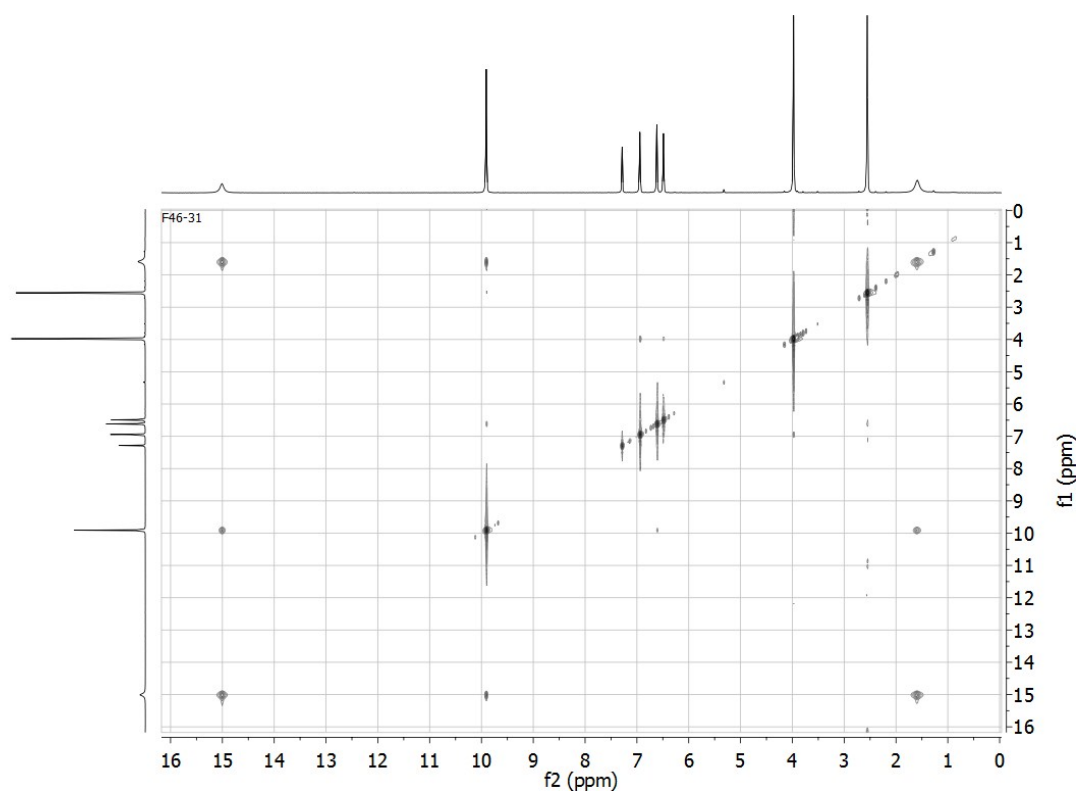


Figure S6. NOESY spectrum (400 MHz) of **1** in CDCl_3 .

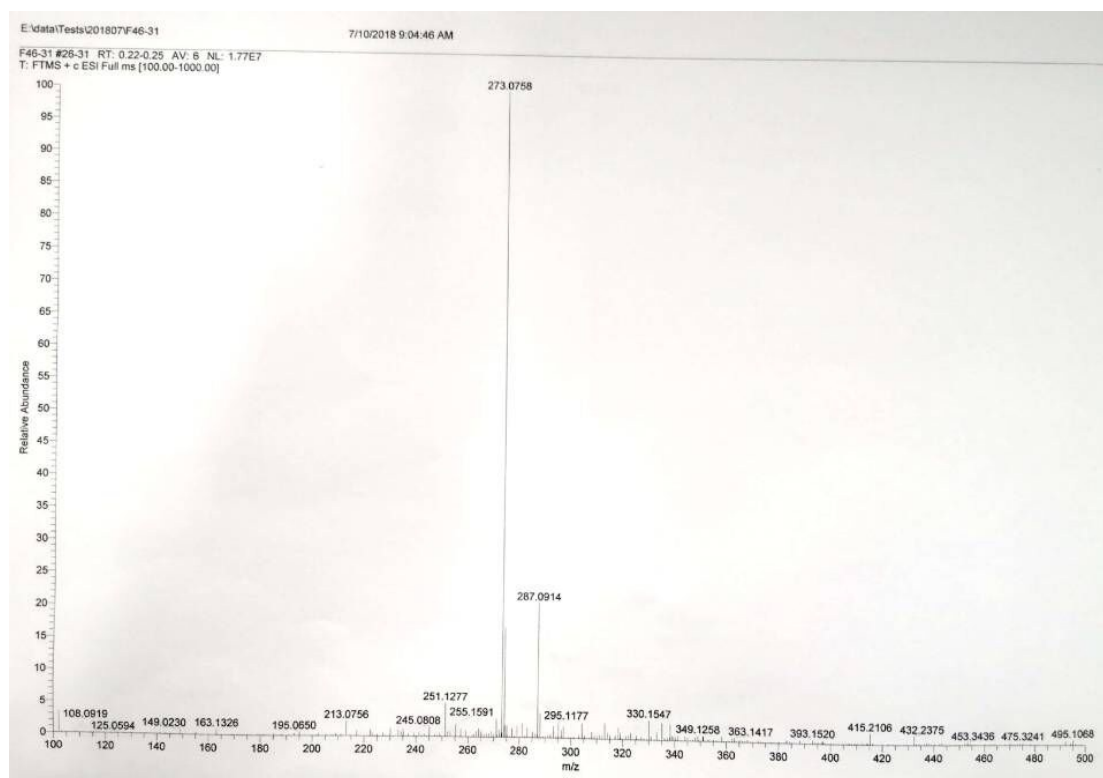


Figure S7. ESIHRMS spectrum of **1**.

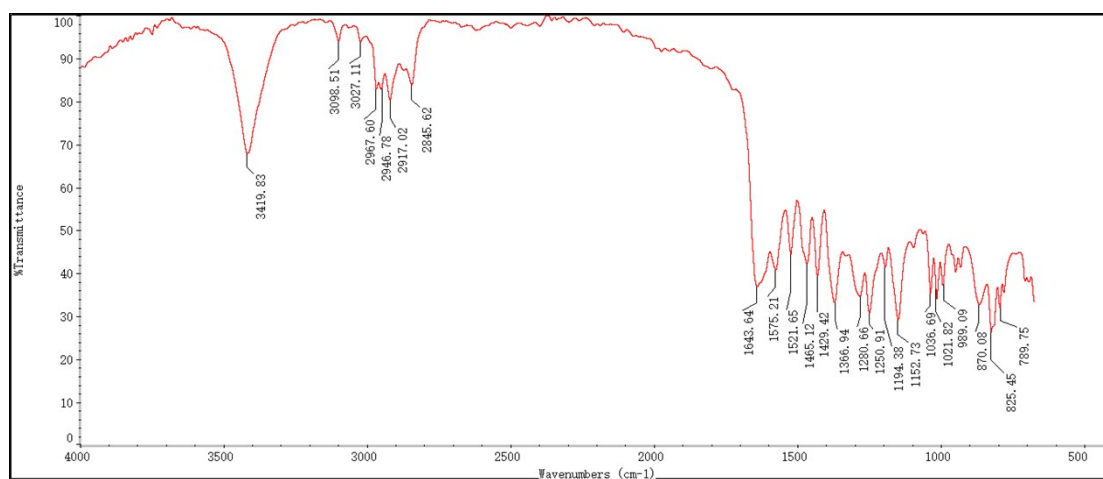


Figure S8. IR spectrum of **1**.

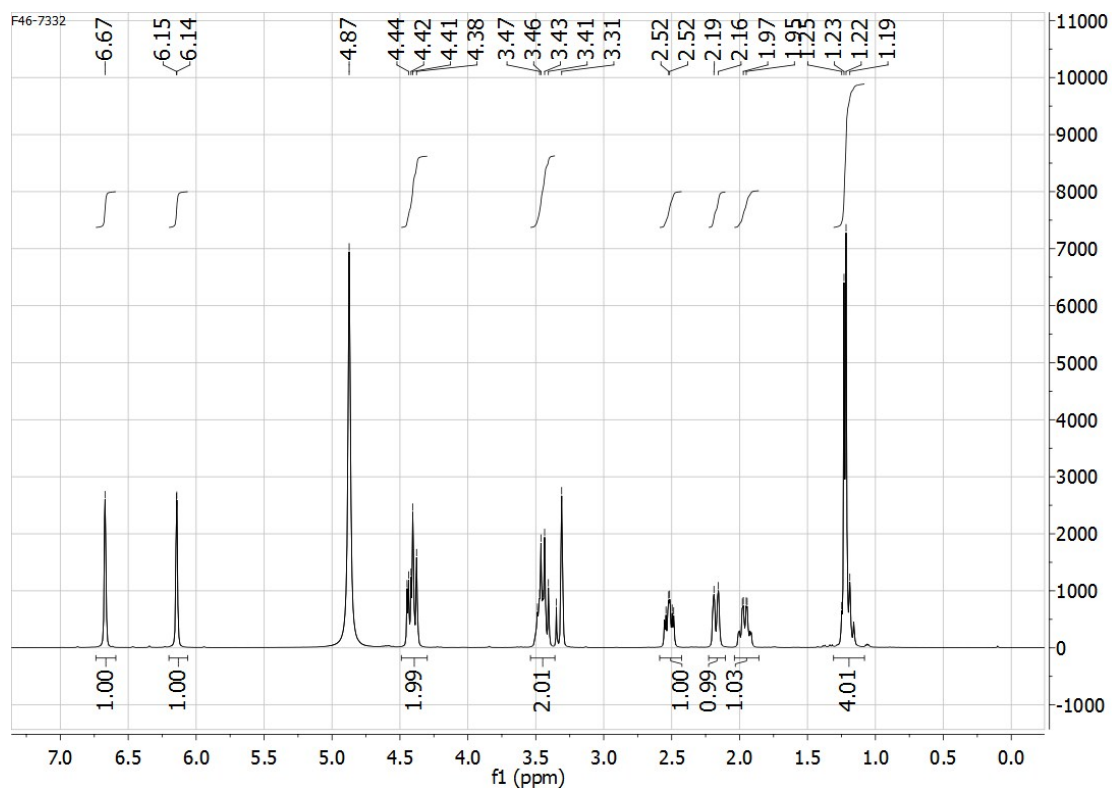


Figure S9. ^1H NMR spectrum (400 MHz) of **2** in CD_3OD .

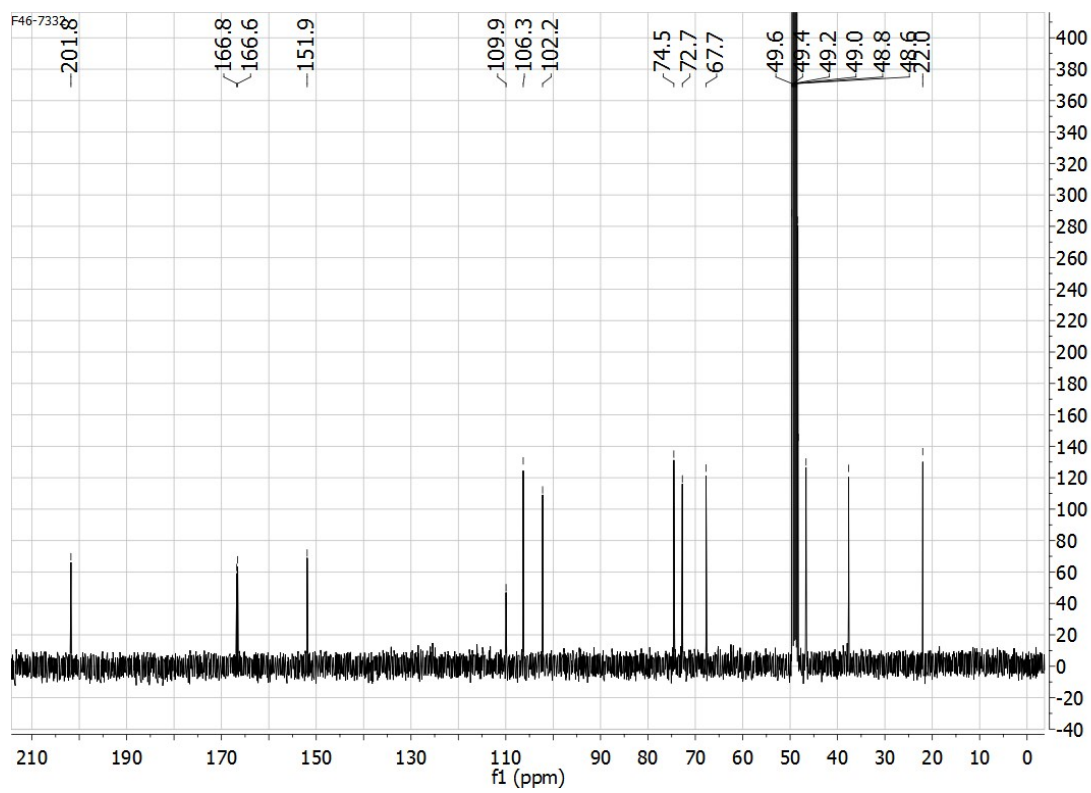


Figure S10. ¹³C NMR spectrum (100 MHz) of **2** in CD₃OD.

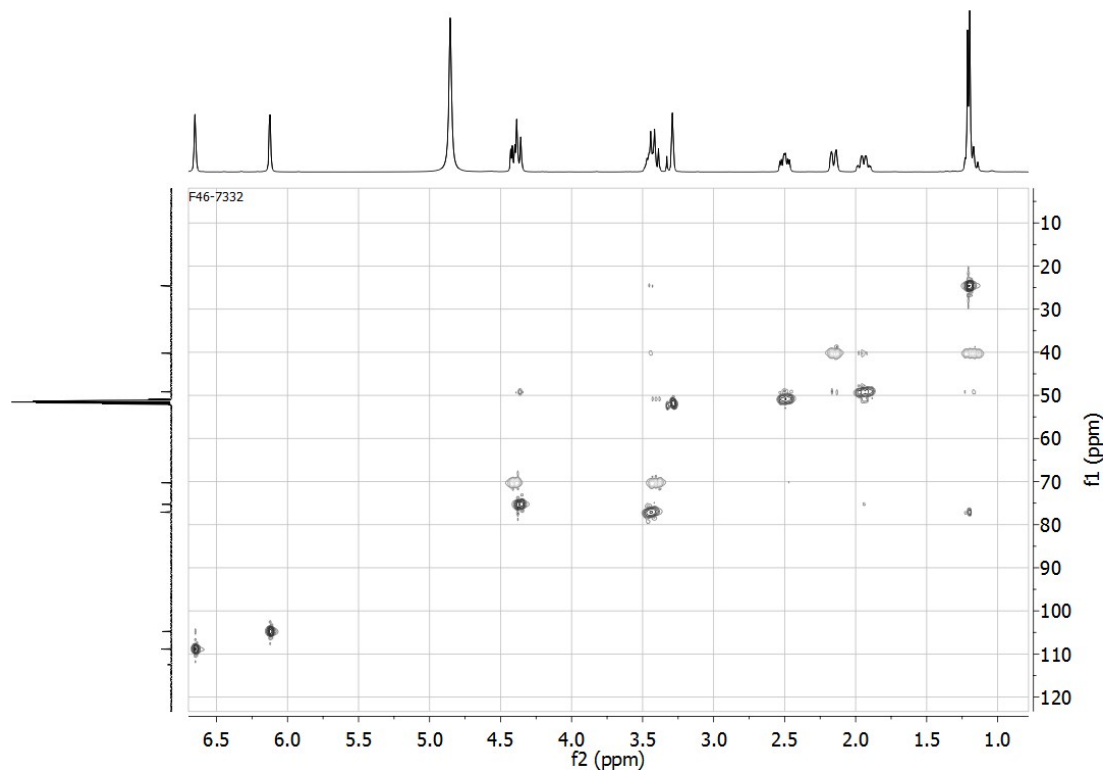


Figure S11. HSQC spectrum (400 MHz) of **2** in CD₃OD.

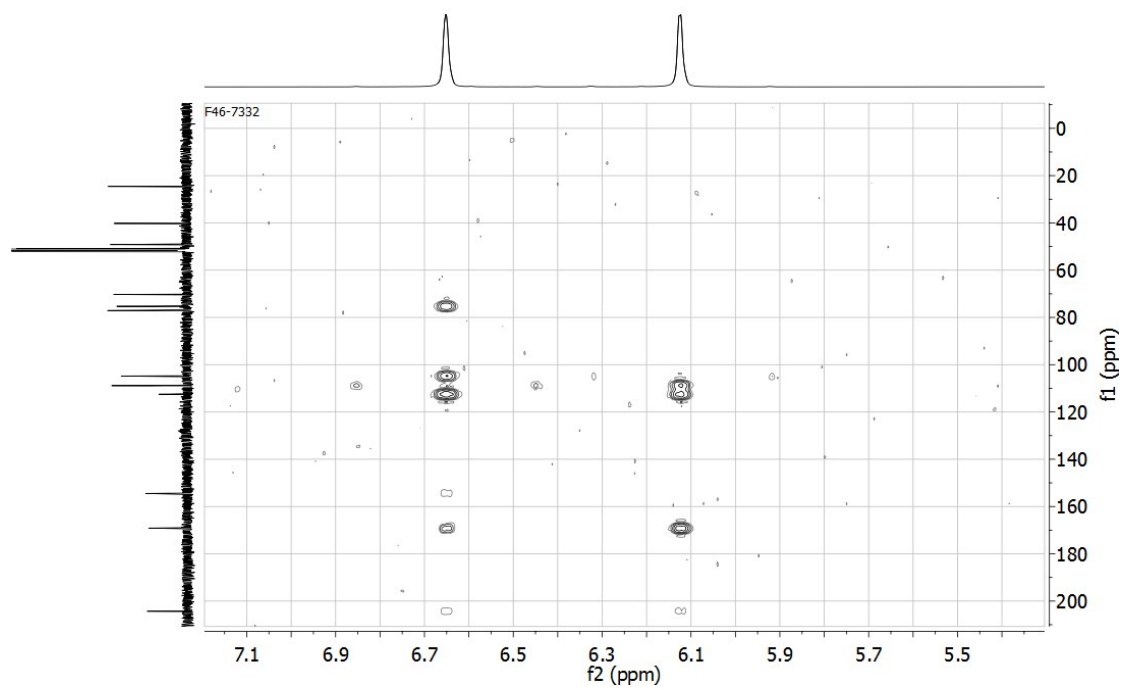


Figure S12. HMBC spectrum (400 MHz) of **2** in CD₃OD.

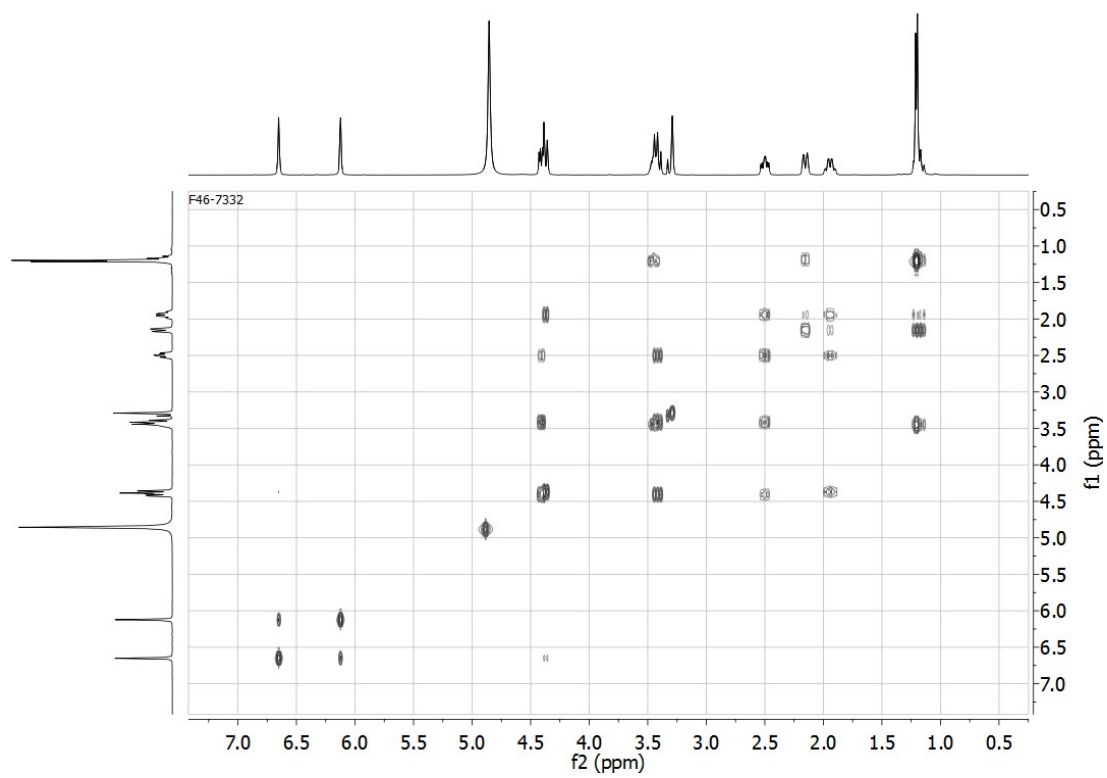


Figure S13. ^1H - ^1H COSY spectrum (400 MHz) of **2** in CD_3OD .

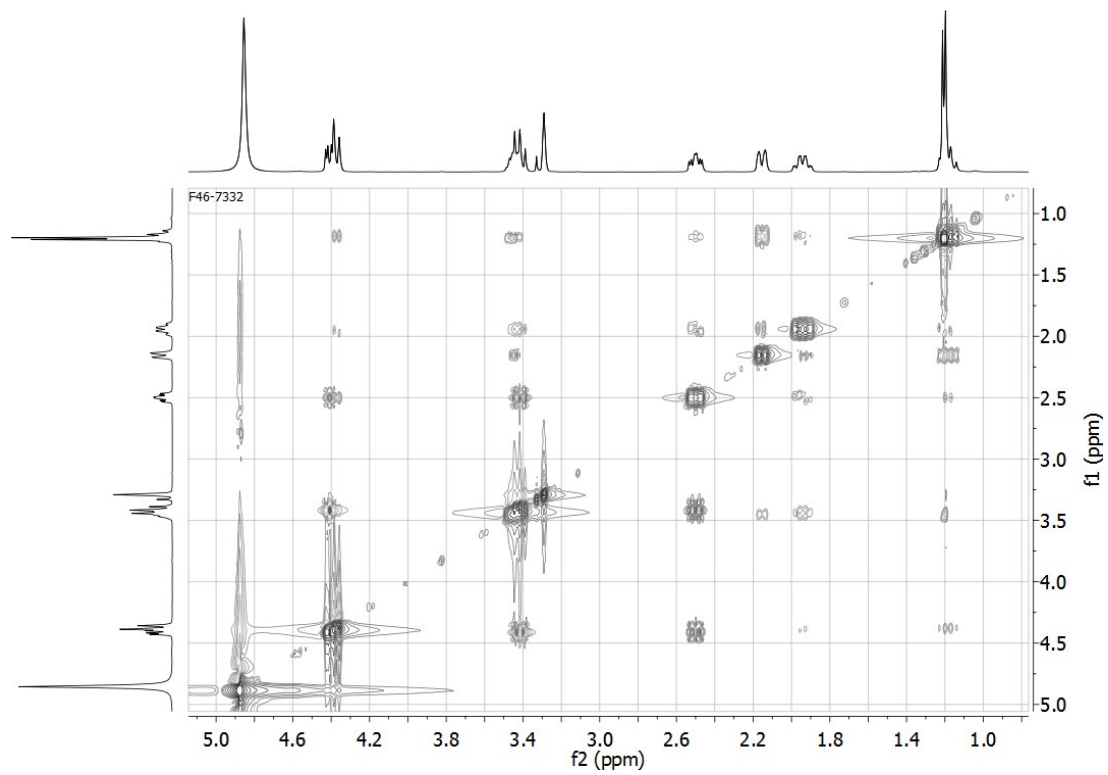


Figure S14. NOESY spectrum (400 MHz) of **2** in CD₃OD.

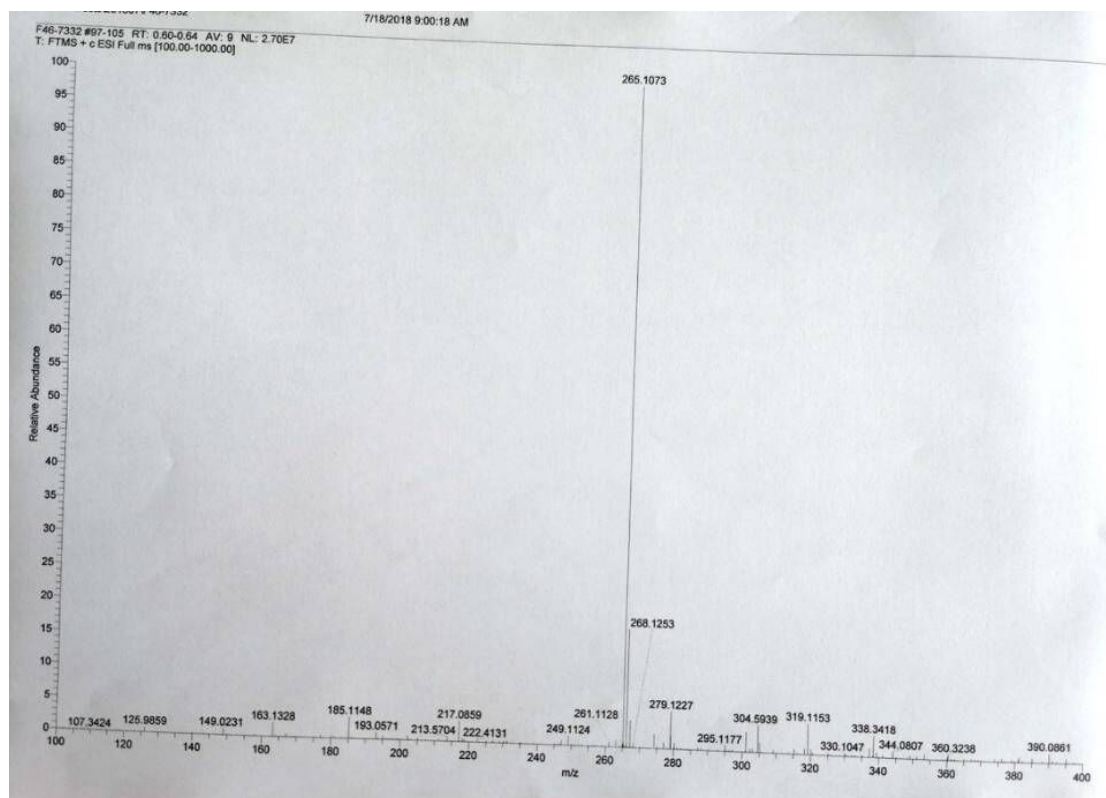


Figure S15. ESIHRMS spectrum of **2**.

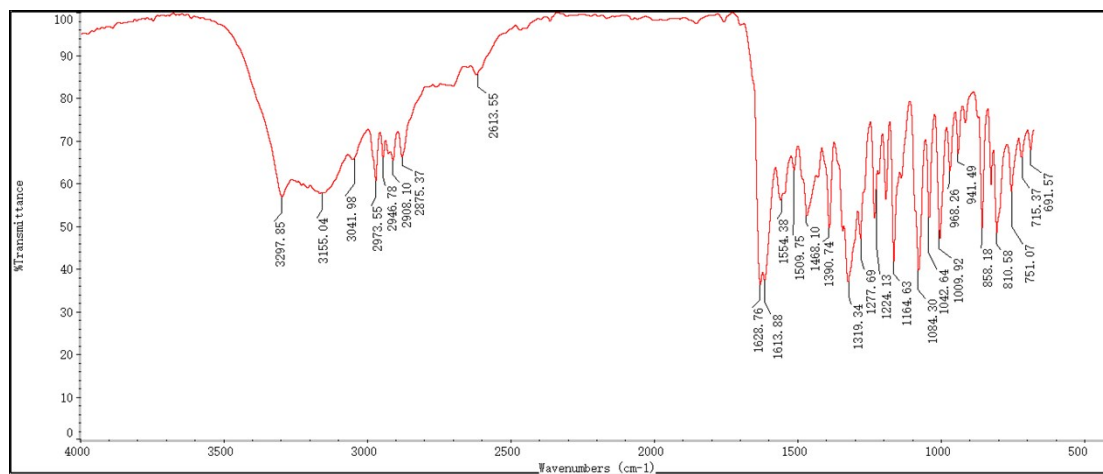


Figure S16. IR spectrum of **2**.

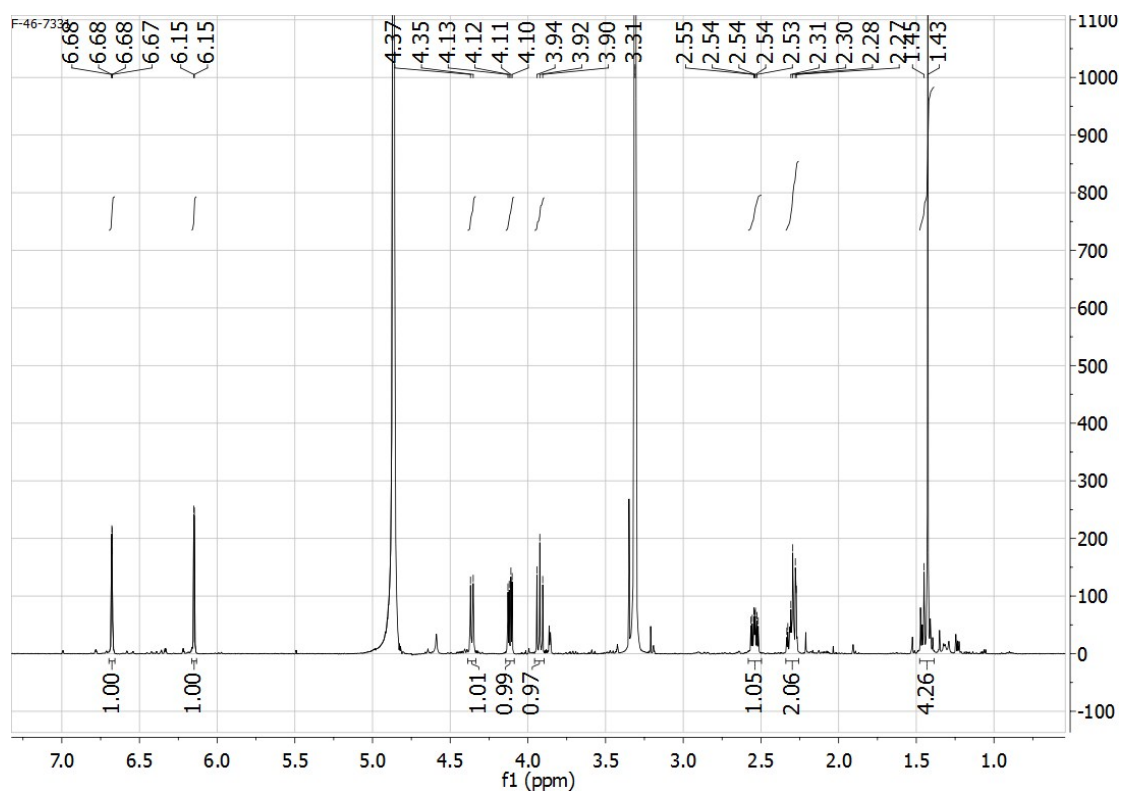


Figure S17. ^1H NMR spectrum (600 MHz) of **3** in CD_3OD .

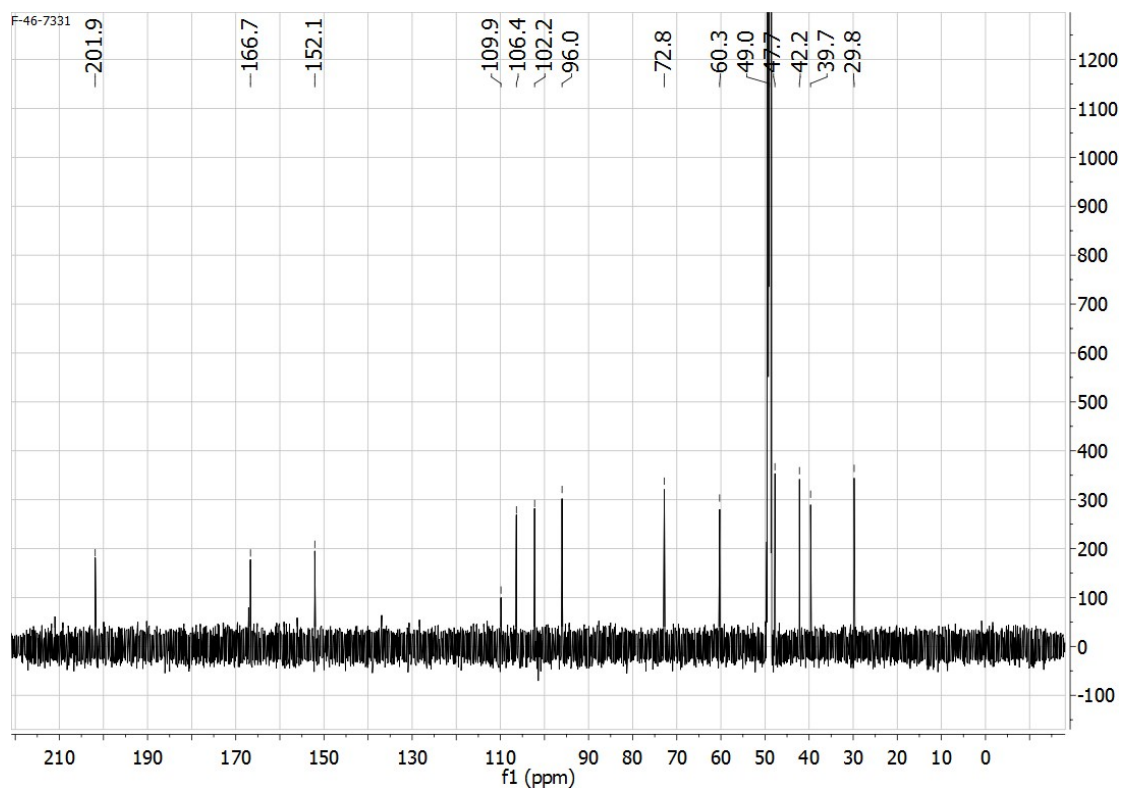


Figure S18. ^{13}C NMR spectrum (150 MHz) of **3** in CD_3OD .

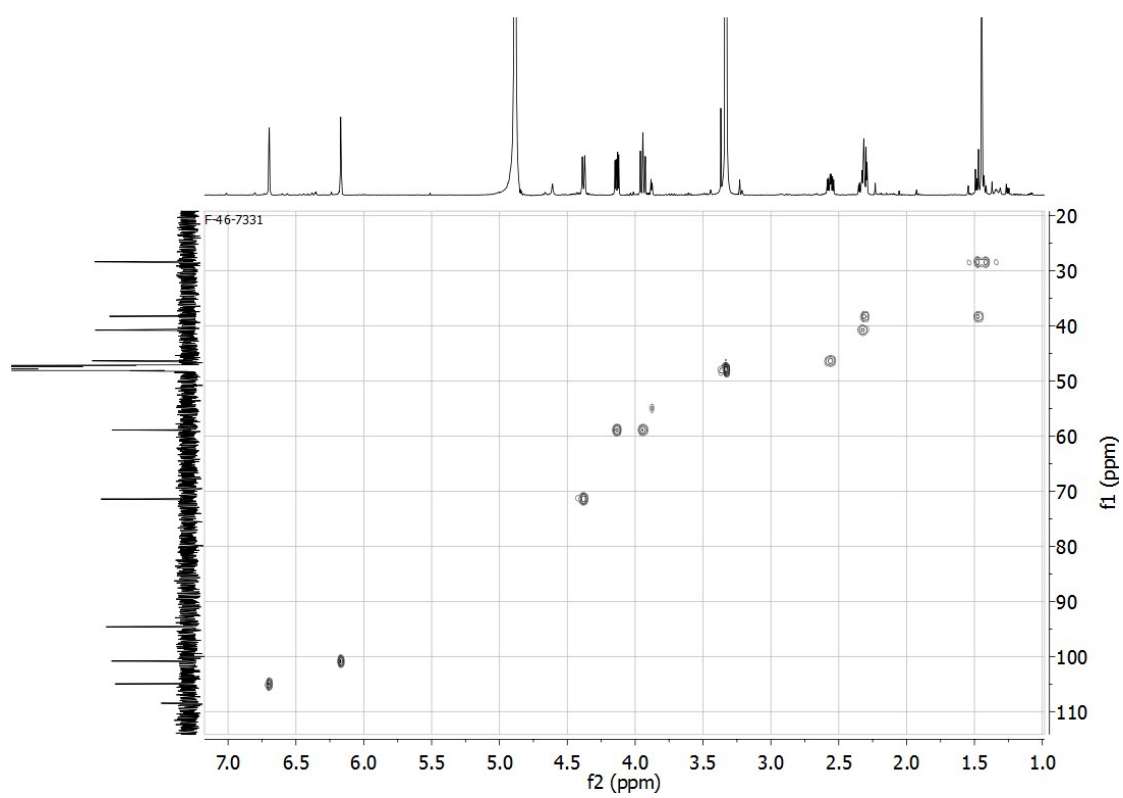


Figure S19. HSQC spectrum (600 MHz) of **3** in CD_3OD .

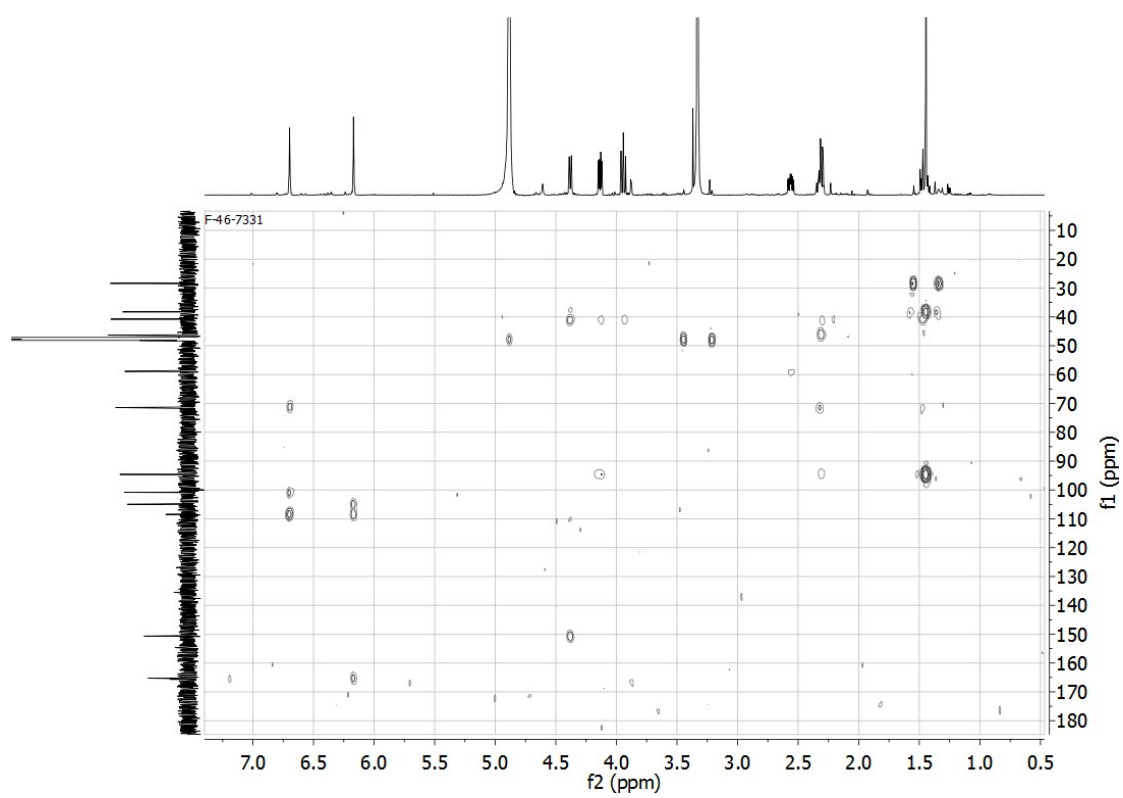


Figure S20. HMBC spectrum (600 MHz) of **3** in CD₃OD.

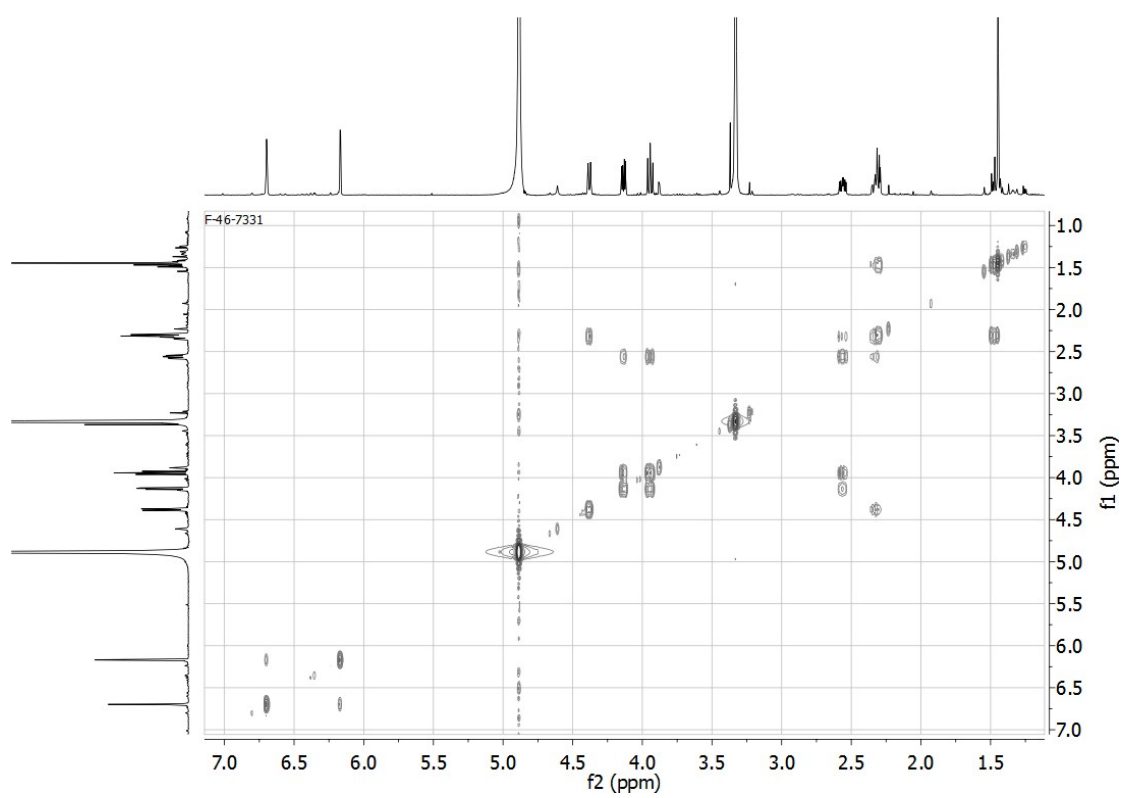


Figure S21. ^1H - ^1H COSY spectrum (600 MHz) of **3** in CD_3OD .

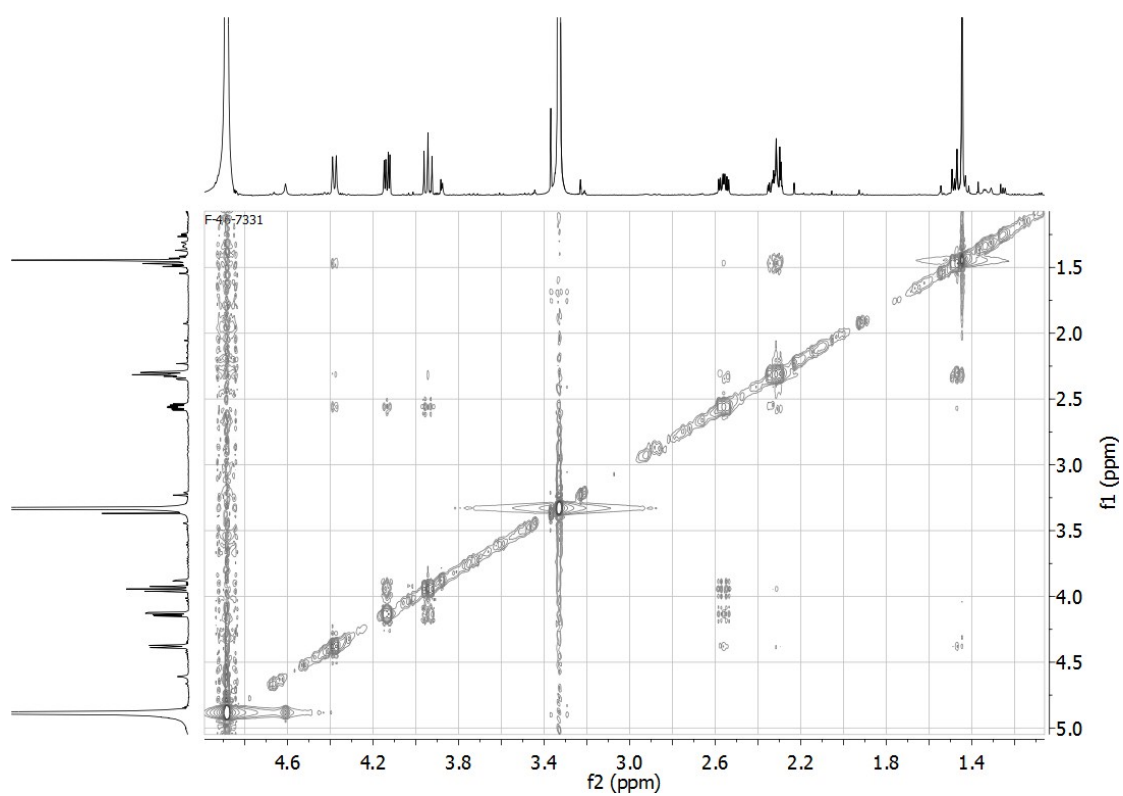


Figure S22. NOESY spectrum (600 MHz) of **3** in CD₃OD.

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T: FTMS - p ESI Full lock ms [200.0000-2000.0000]

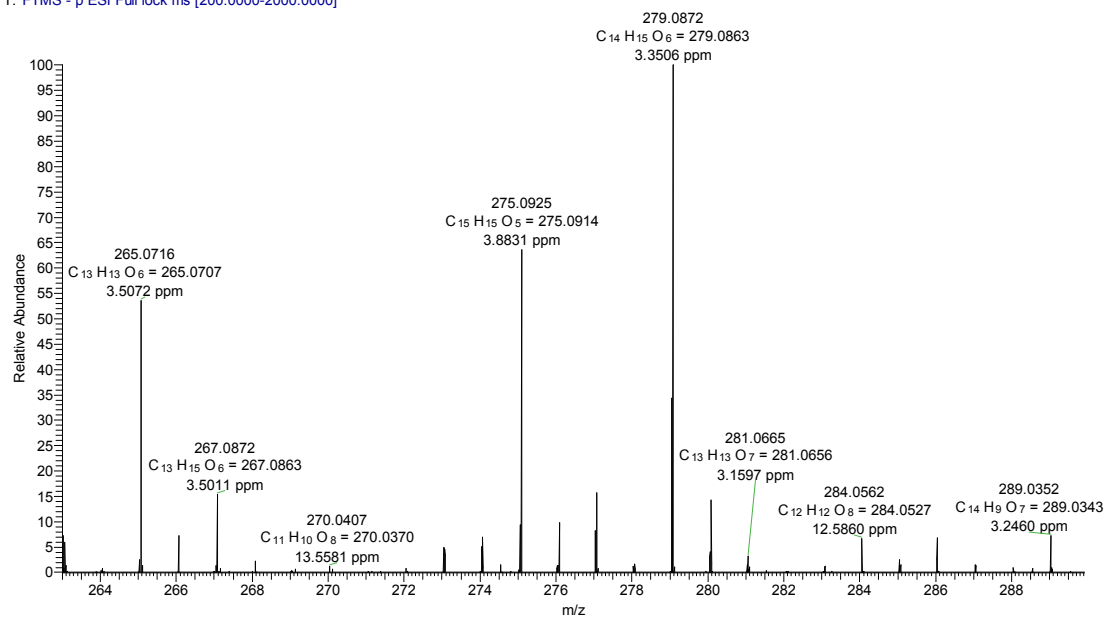


Figure S23. ESIHRMS spectrum of 3.

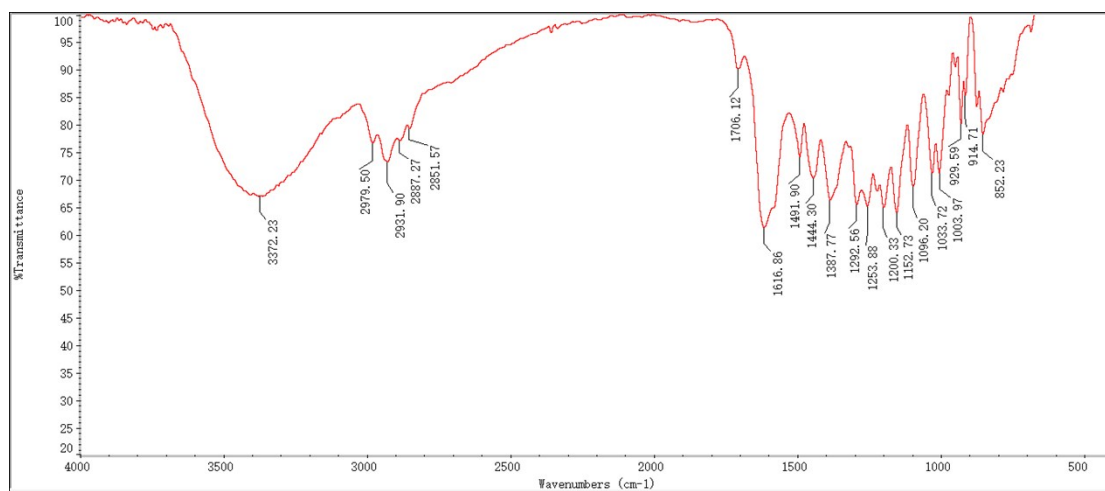


Figure S24. IR spectrum of **3**.

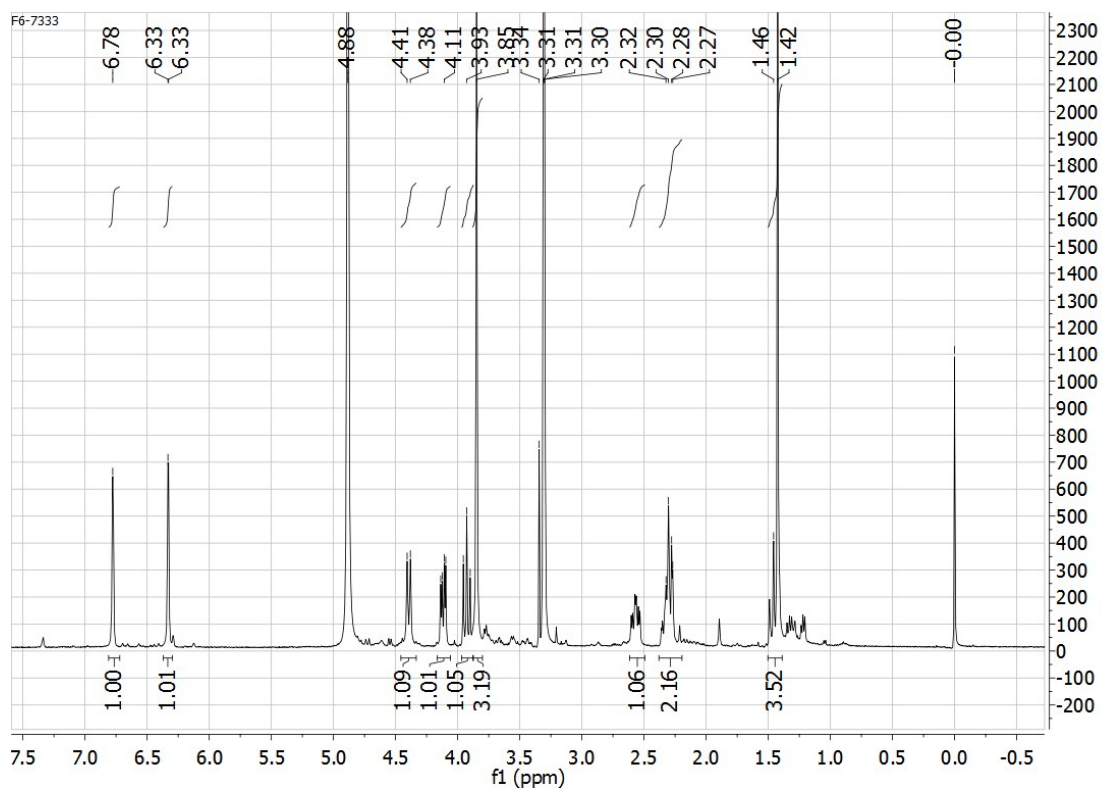


Figure S25. ^1H NMR spectrum (400 MHz) of **4** in CD_3OD .

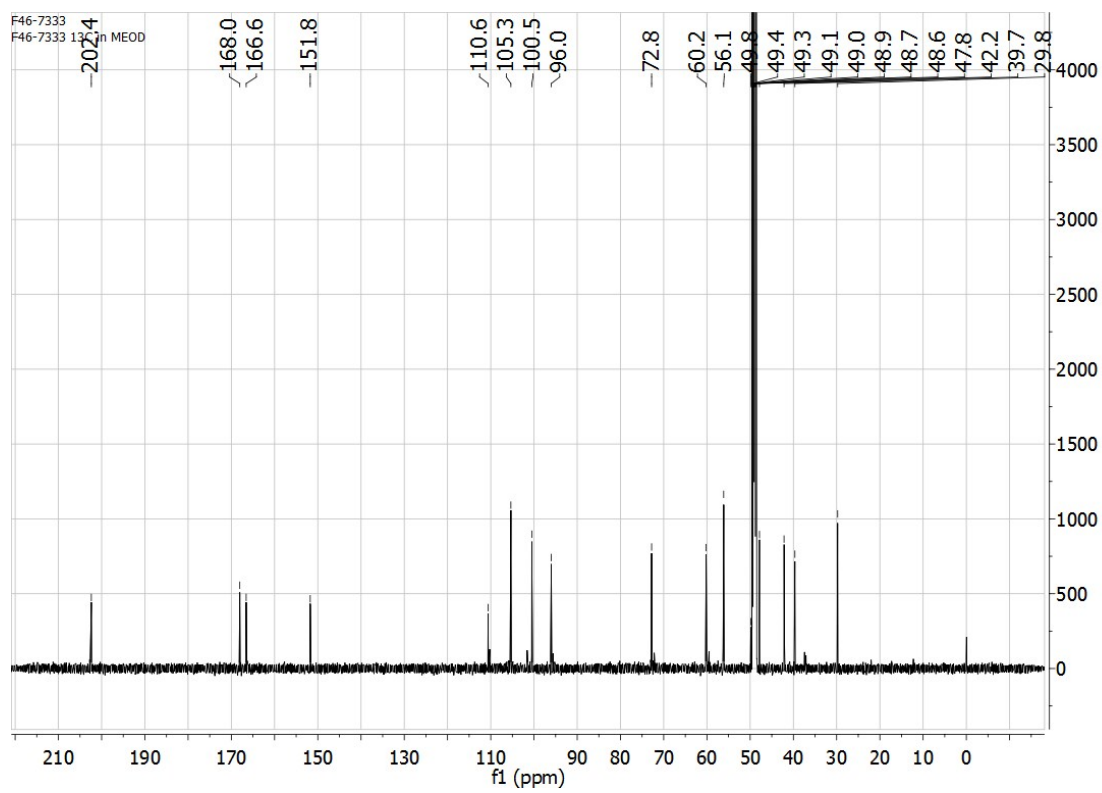


Figure S26. ^{13}C NMR spectrum (150 MHz) of **4** in CD_3OD .

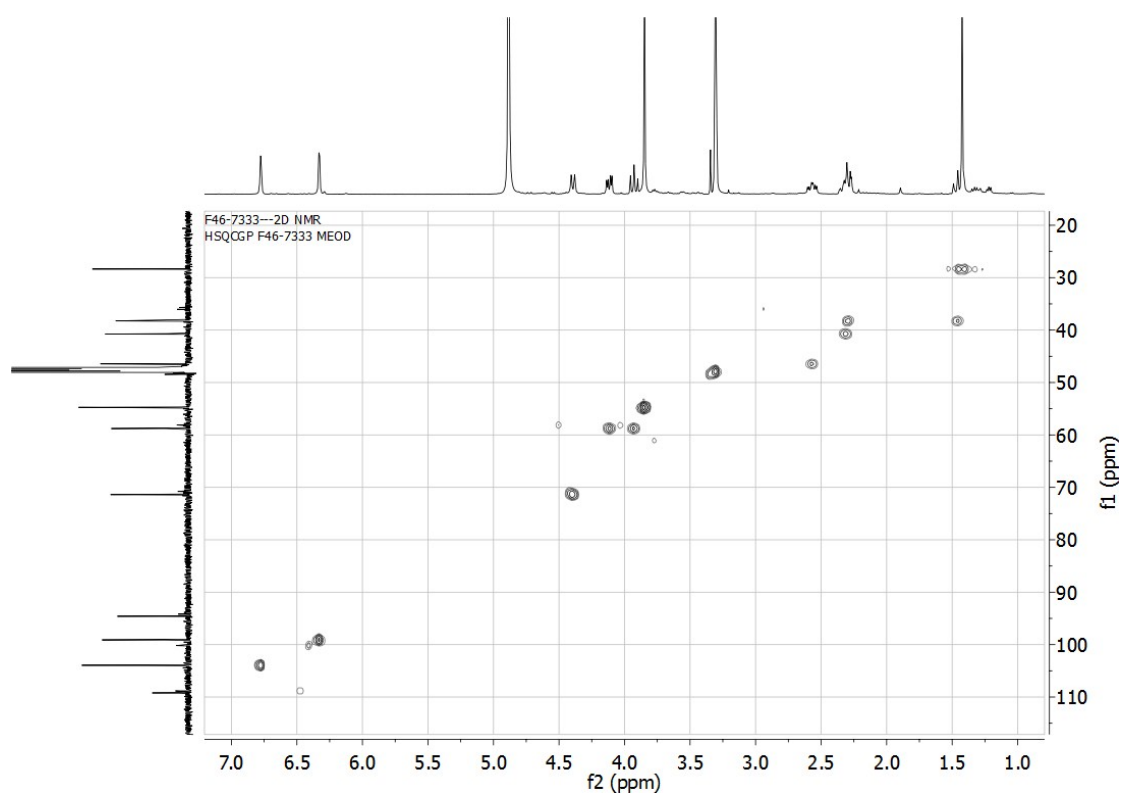


Figure S27. HSQC spectrum (600 MHz) of **4** in CD₃OD.

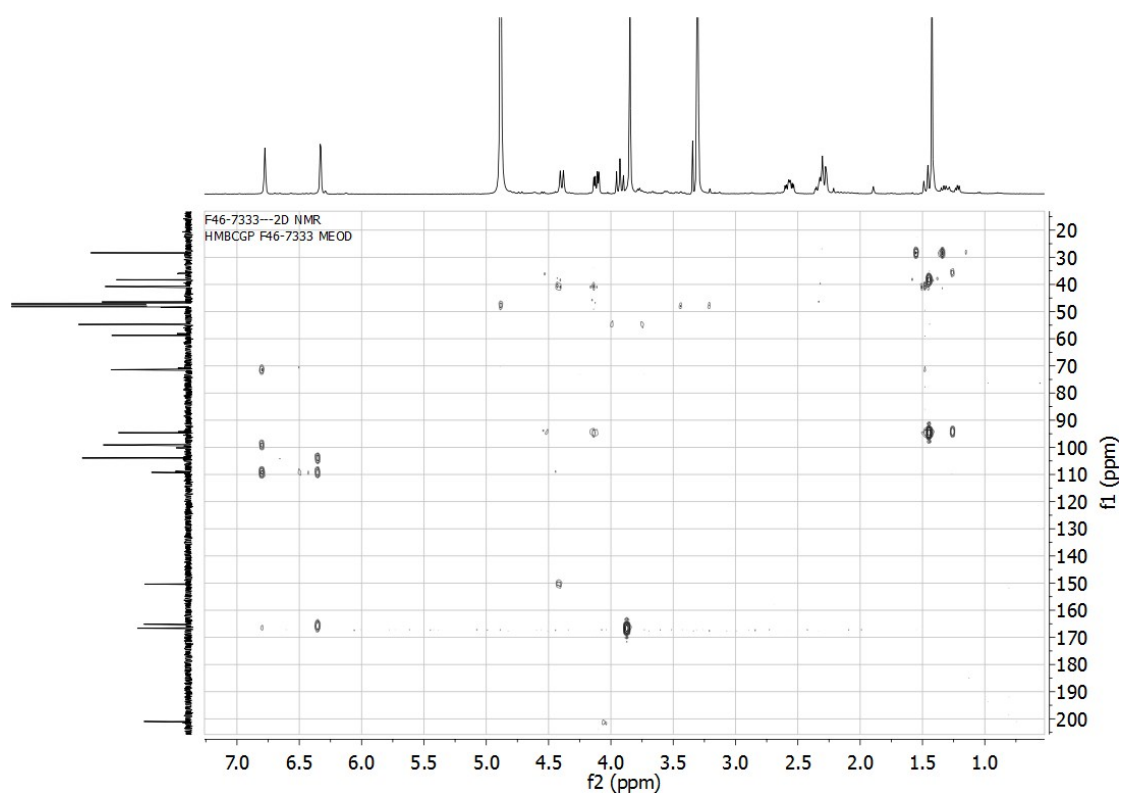


Figure S28. HMBC spectrum (600 MHz) of **4** in CD₃OD.

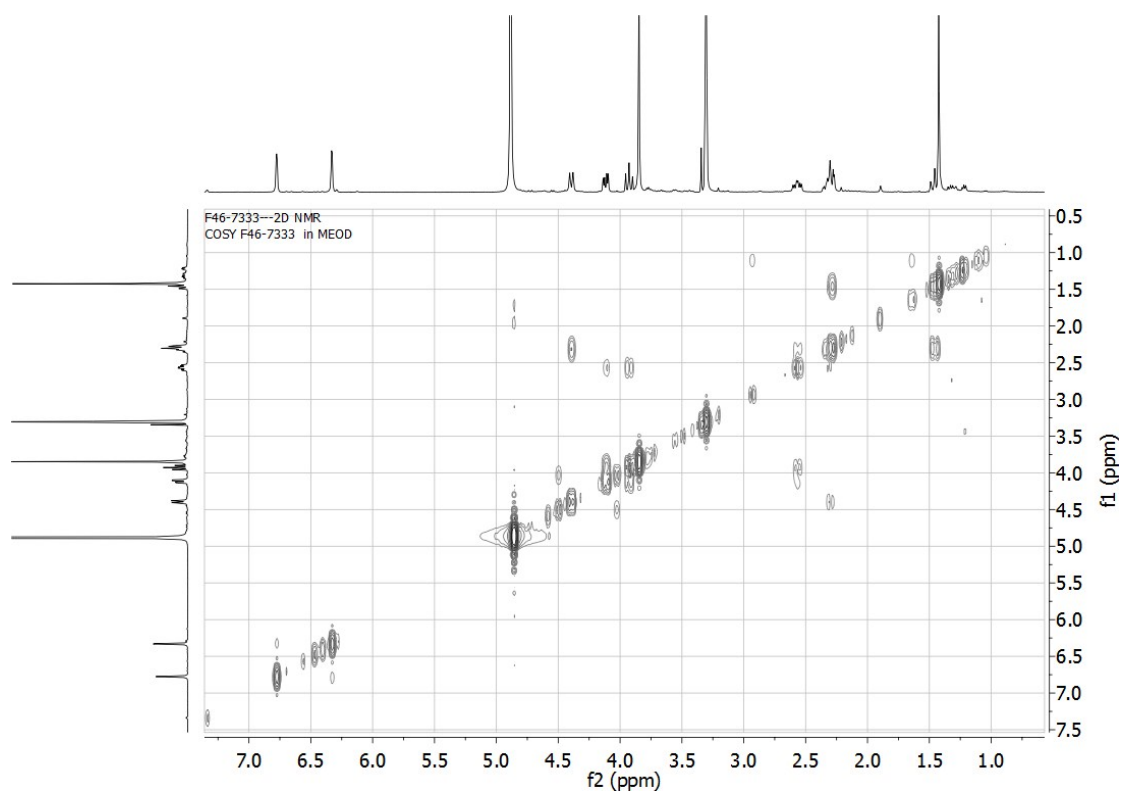


Figure S29. ^1H - ^1H COSY spectrum (600 MHz) of **4** in CD_3OD .

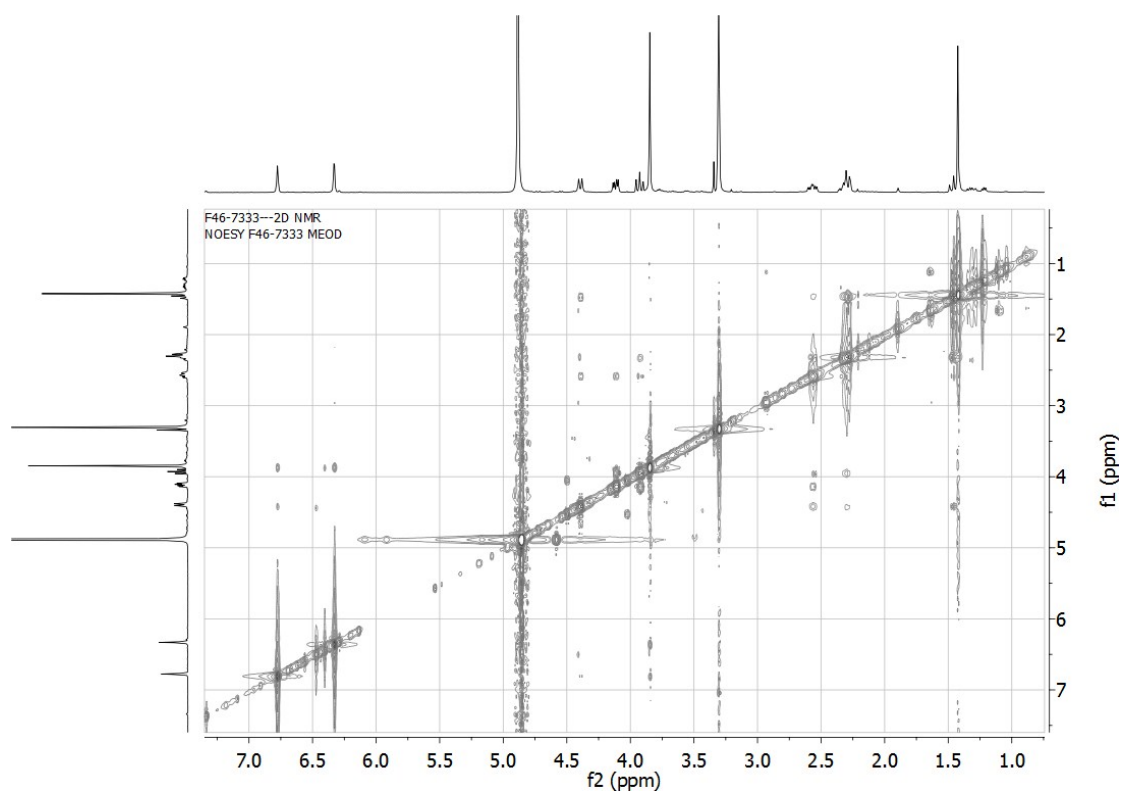


Figure S30. NOESY spectrum (600 MHz) of **4** in CD₃OD.

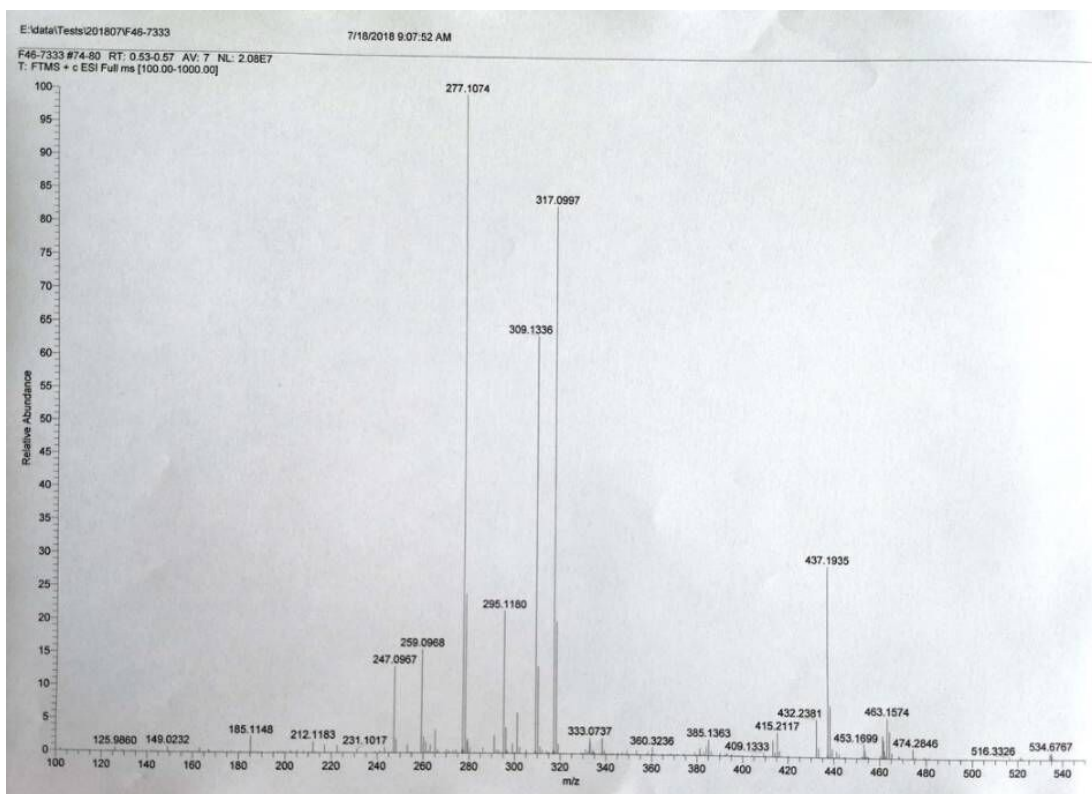


Figure S31. ESIHRMS spectrum of **4**.

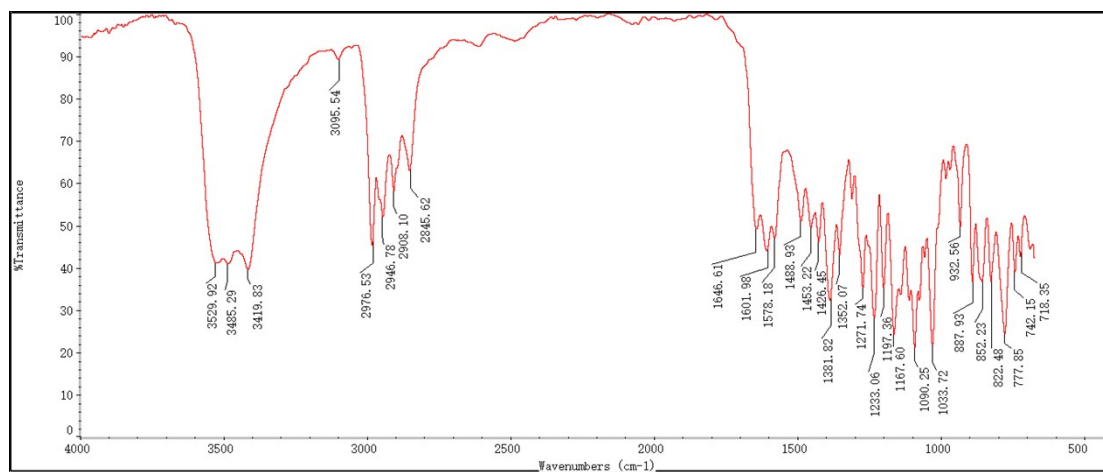


Figure S32. IR spectrum of **4**.

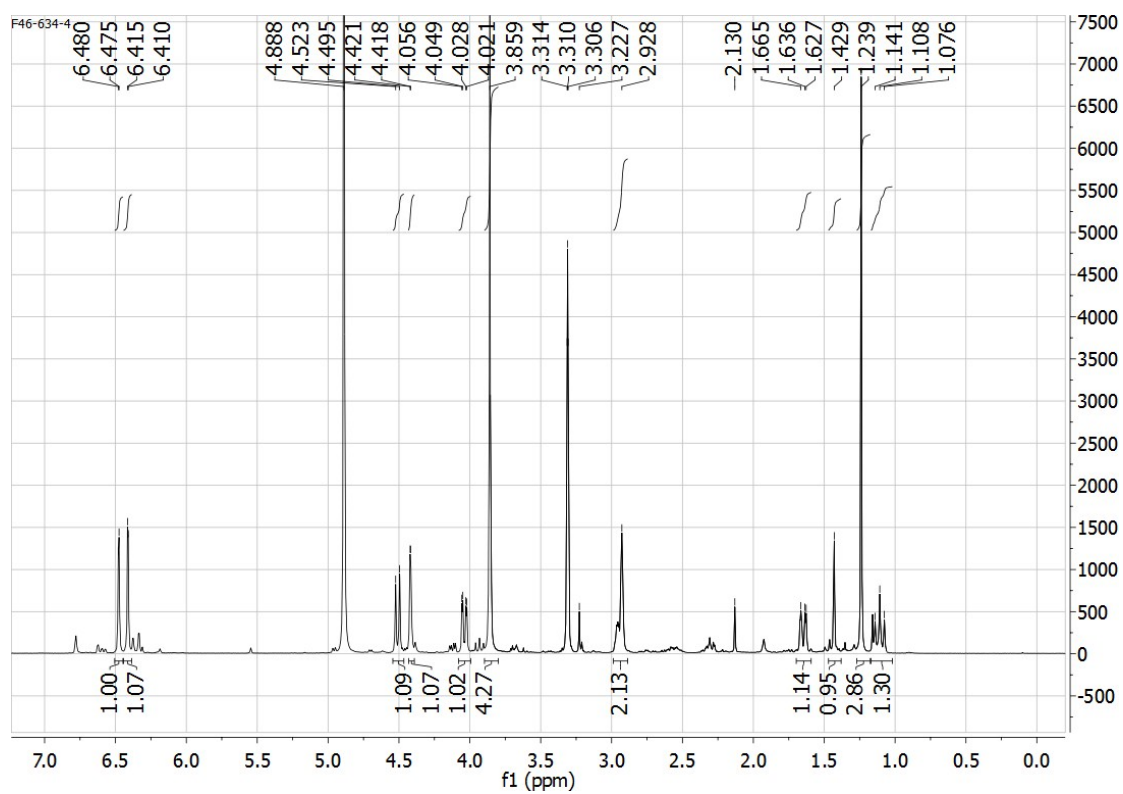


Figure S33. ^1H NMR spectrum (400 MHz) of **5** in CD_3OD .

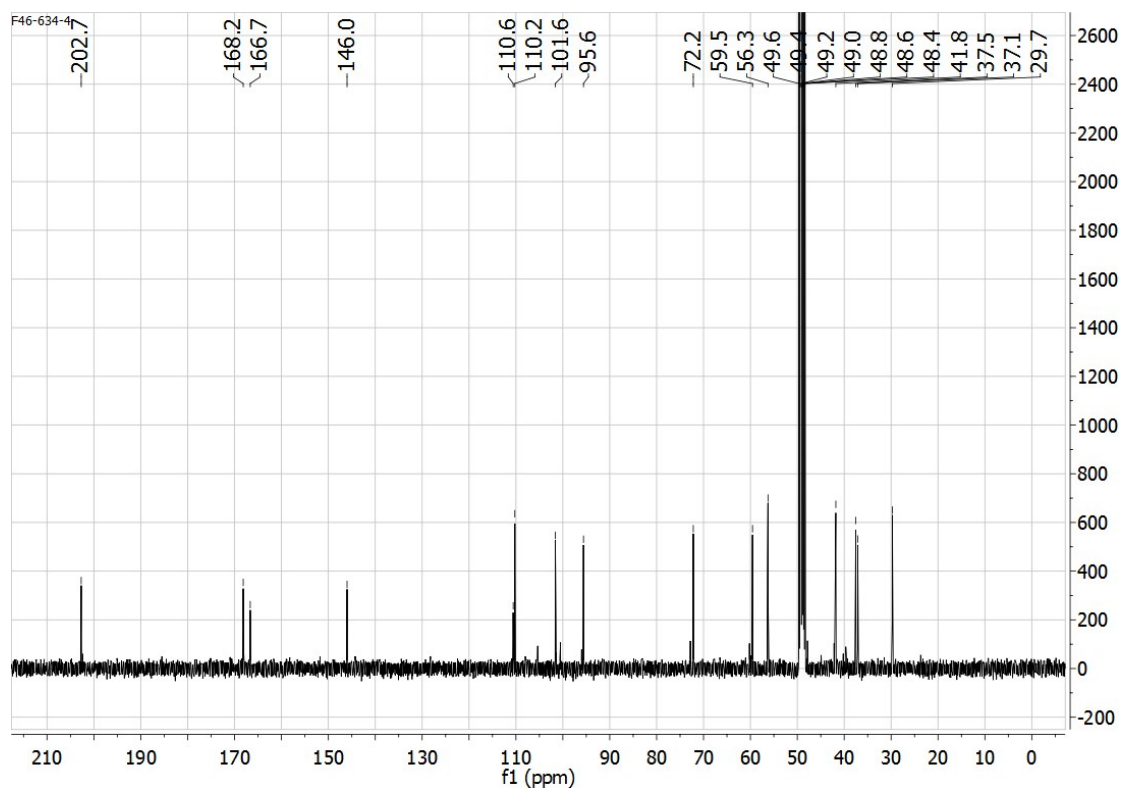


Figure S34. ¹³C NMR spectrum (100 MHz) of **5** in CD₃OD.

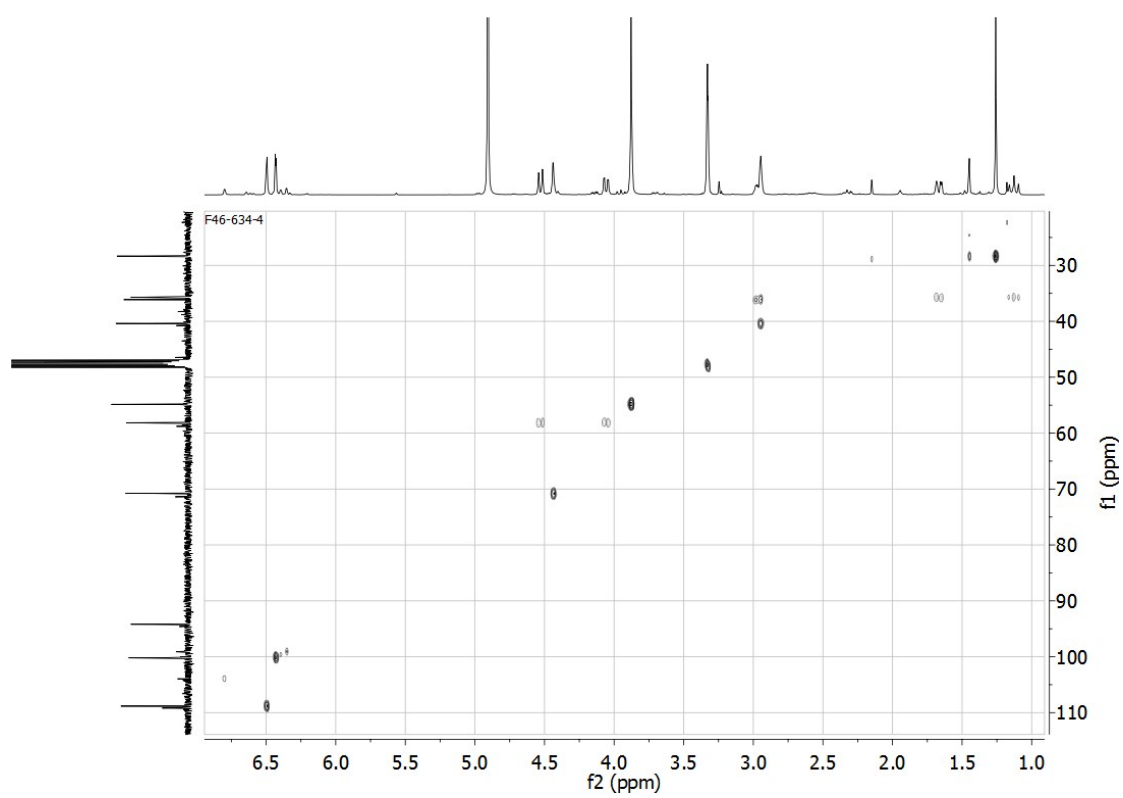


Figure S35. HSQC spectrum (400 MHz) of **5** in CD₃OD.

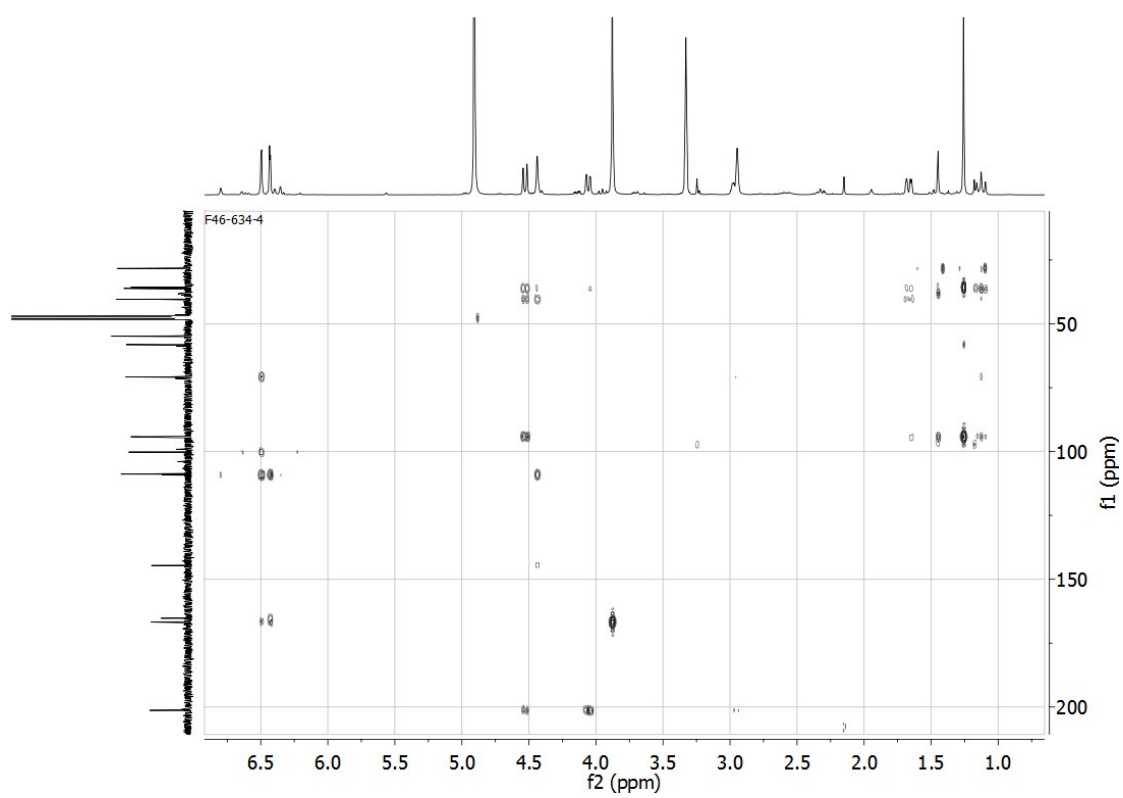


Figure S36. HMBC spectrum (400 MHz) of **5** in CD₃OD.

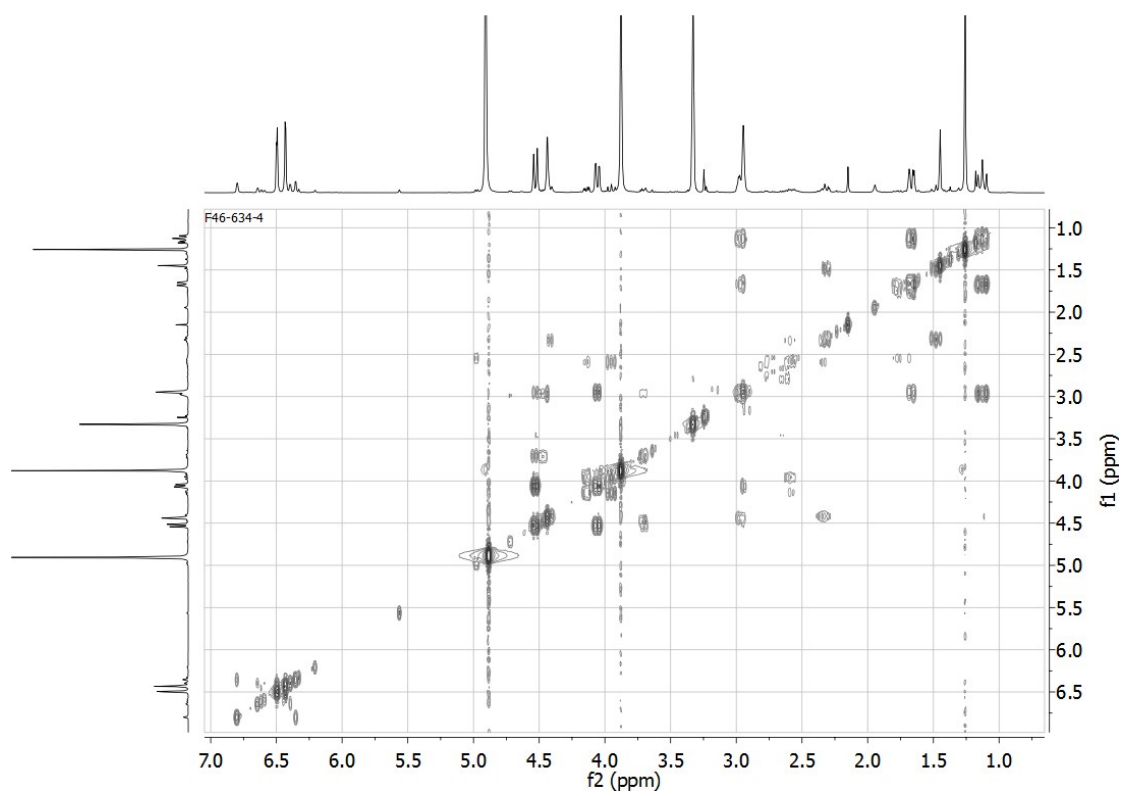


Figure S37. ^1H - ^1H COSY spectrum (400 MHz) of **5** in CD_3OD .

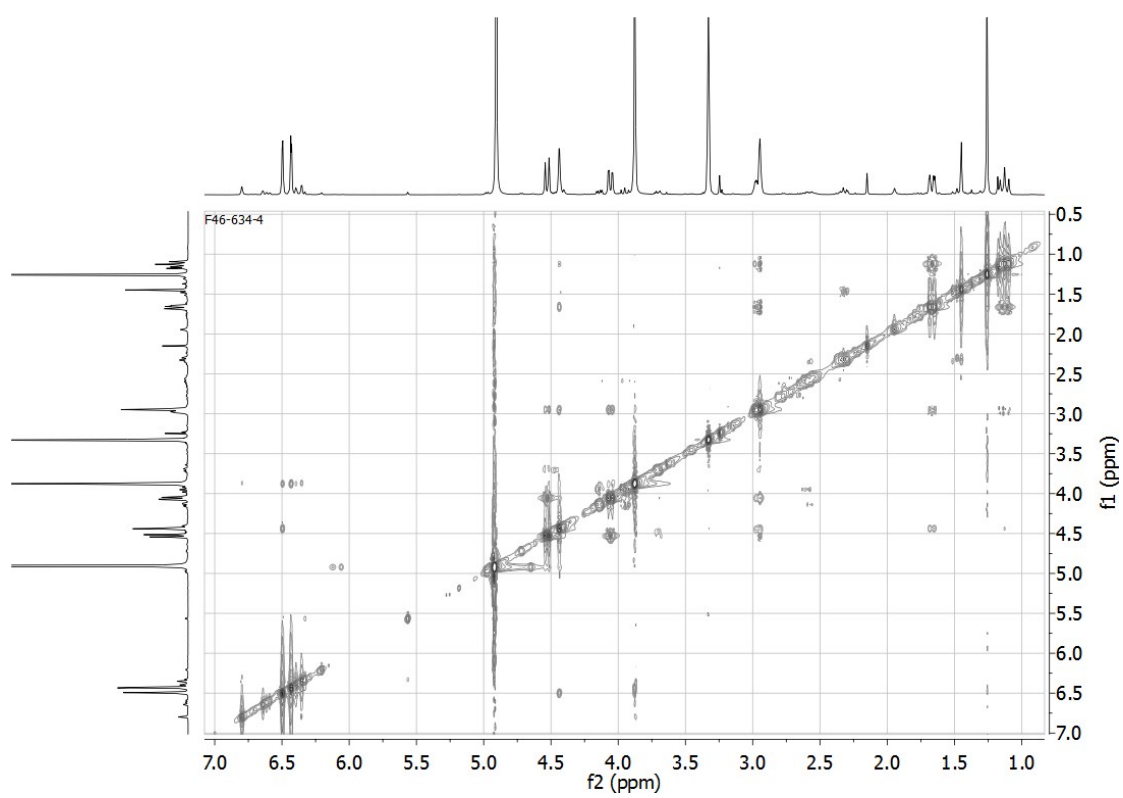


Figure S38. NOESY spectrum (400 MHz) of **5** in CD₃OD.

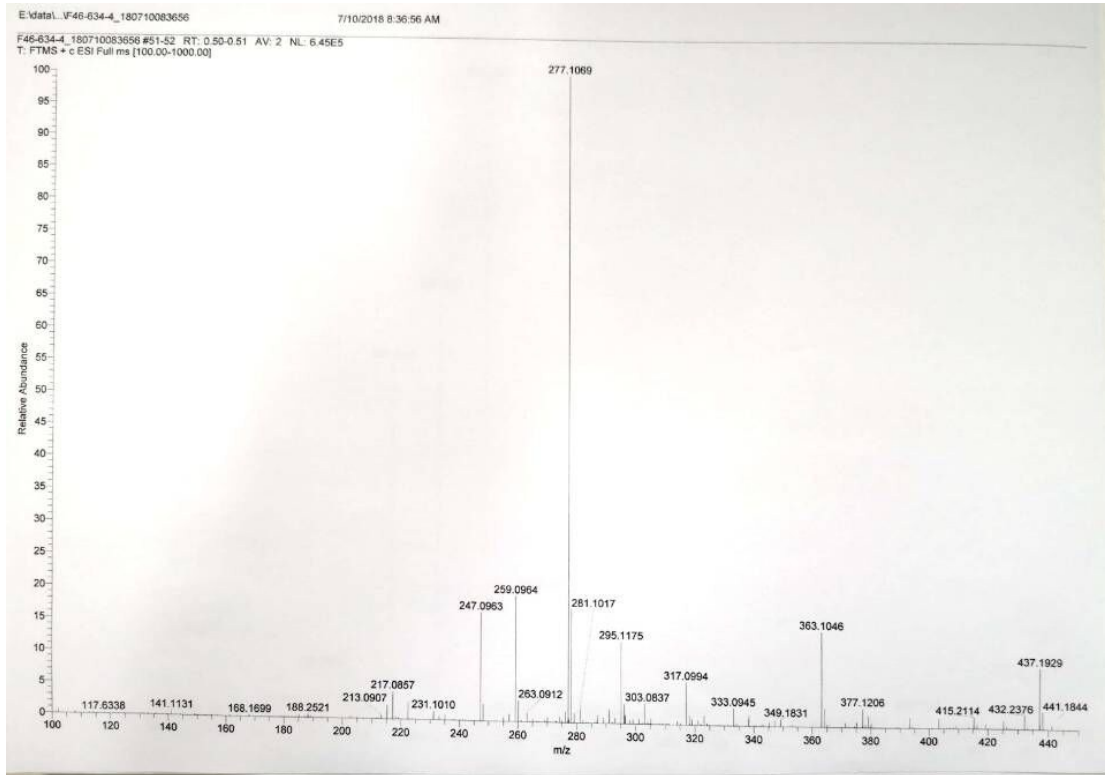


Figure S39. ESIHRMS spectrum of **5**.

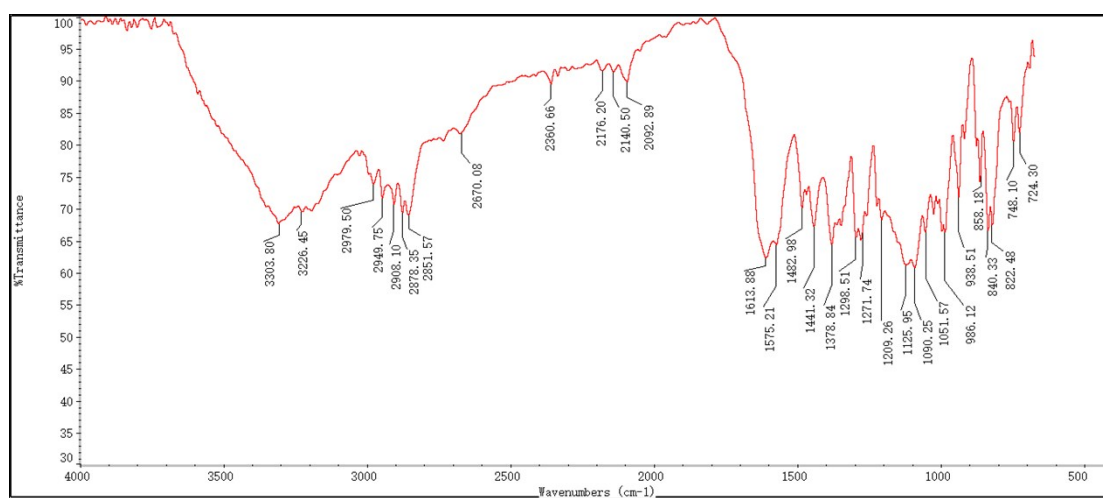


Figure S40. IR spectrum of **5**.

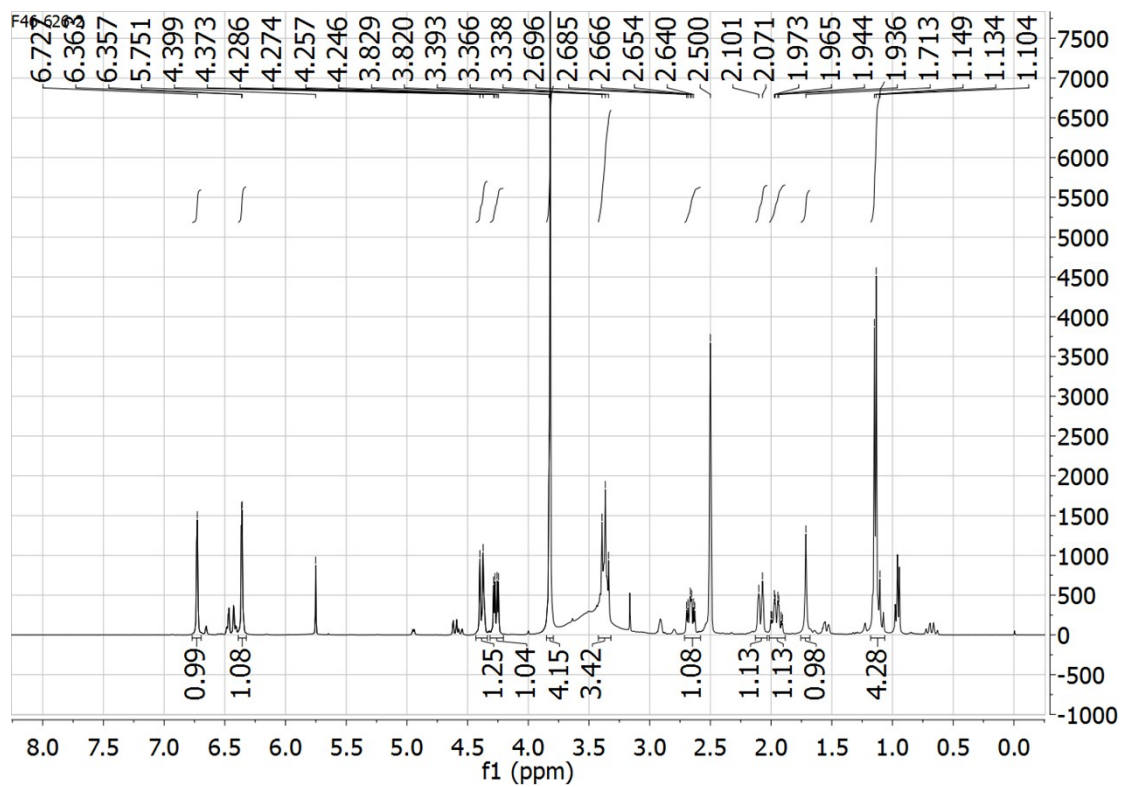


Figure S41. ¹H NMR spectrum (400 MHz) of **6** in DMSO-*d*₆.

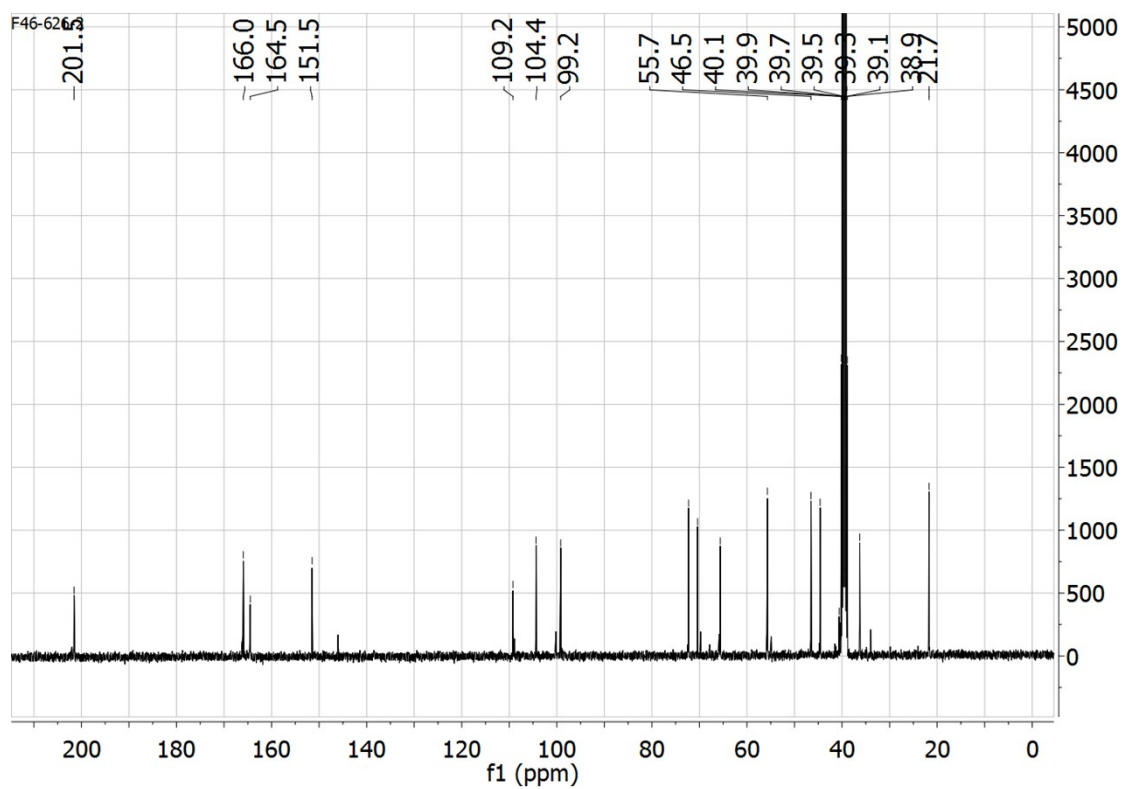


Figure S42. ^{13}C NMR spectrum (100 MHz) of **6** in $\text{DMSO-}d_6$.

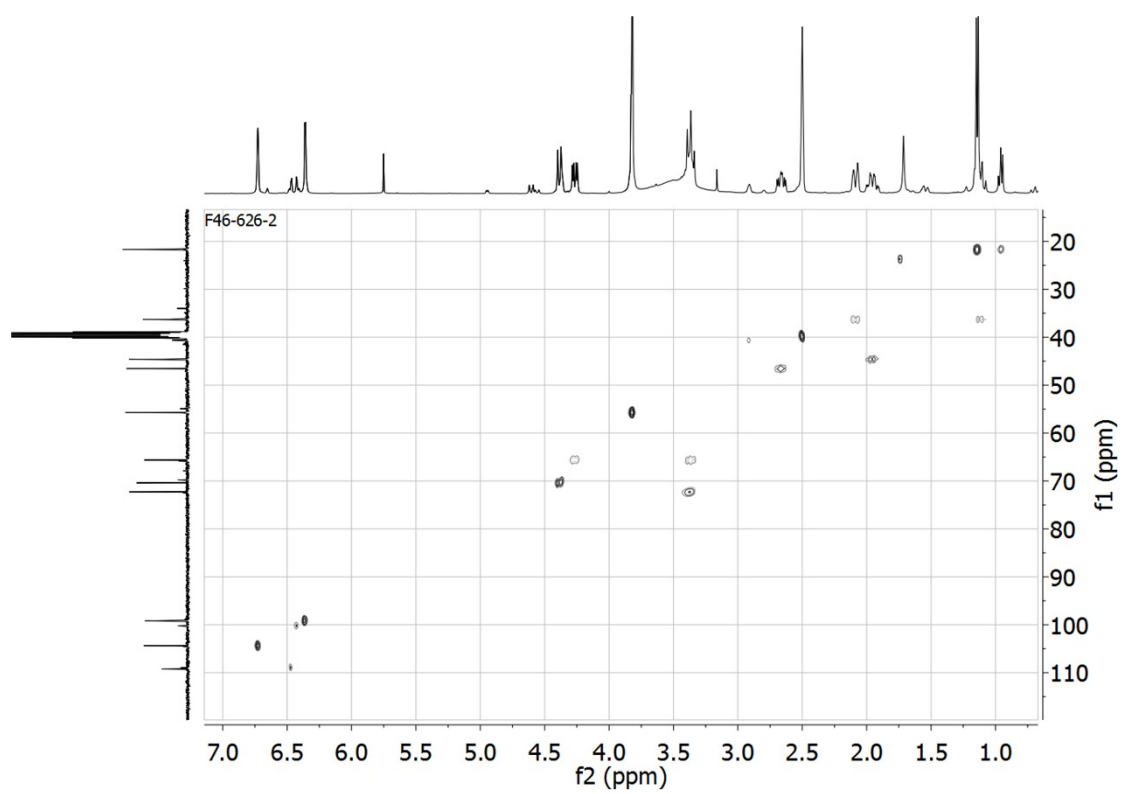


Figure S43. HSQC spectrum (400 MHz) of **6** in DMSO- d_6 .

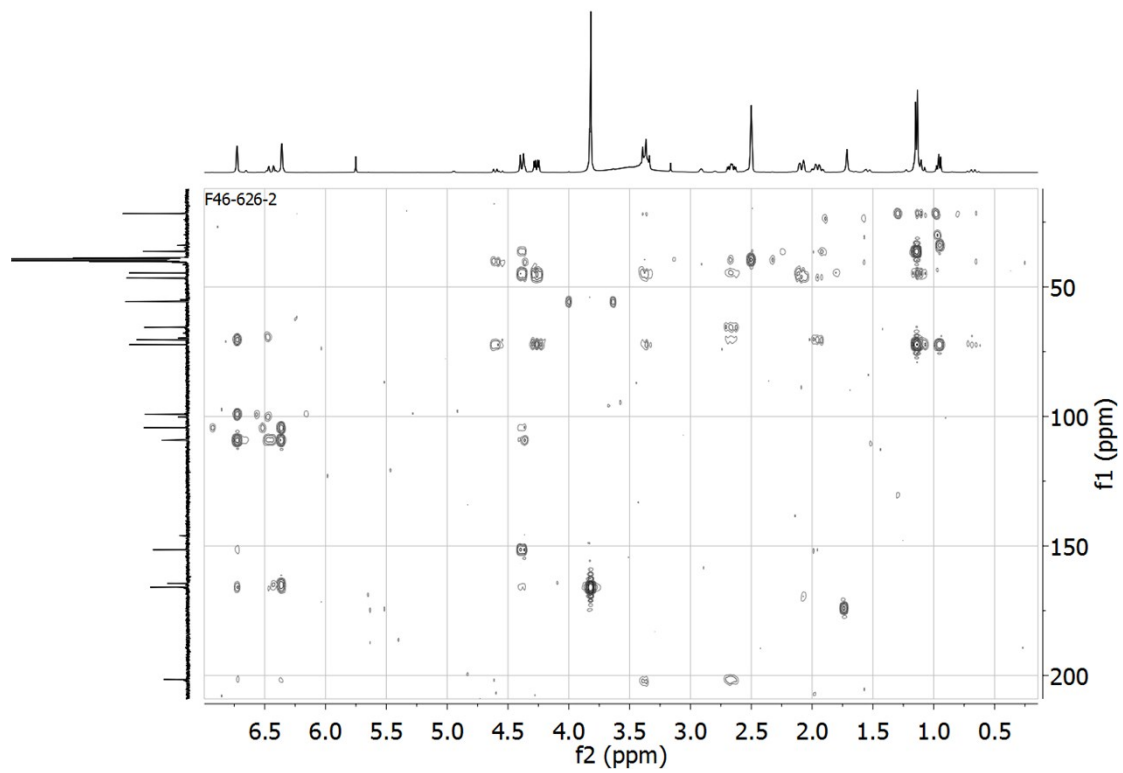


Figure S44. HMBC spectrum (400 MHz) of **6** in DMSO- d_6 .

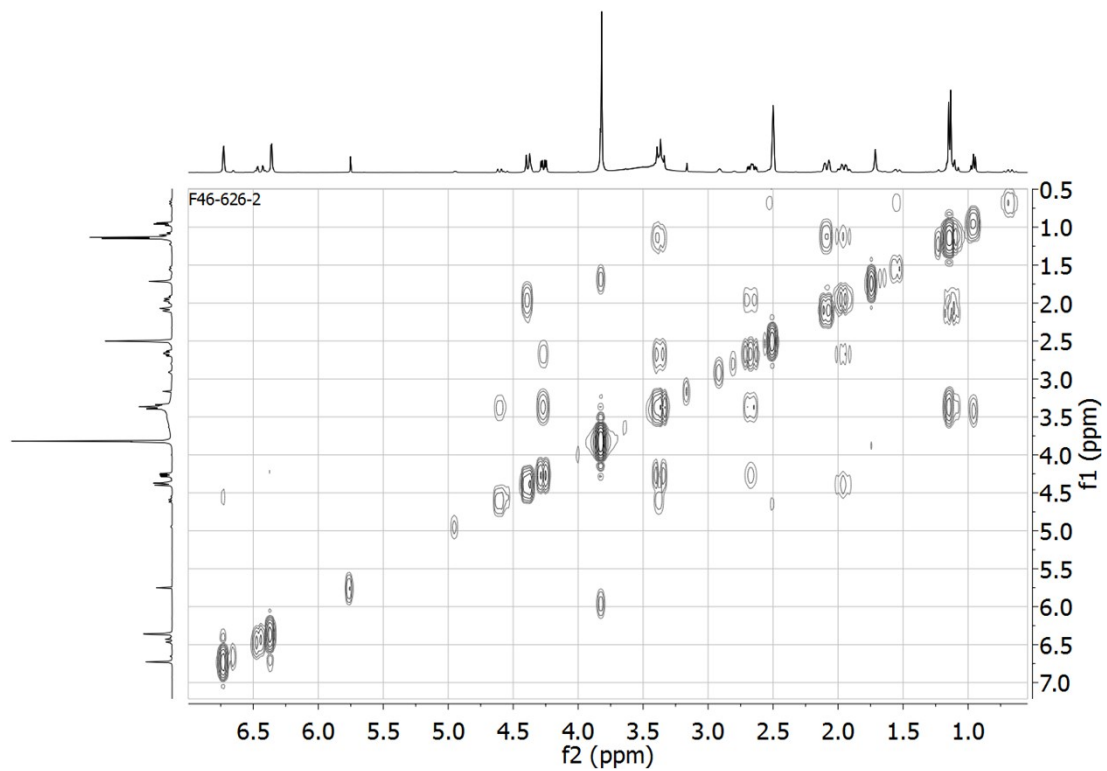


Figure S45. ^1H - ^1H COSY spectrum (400 MHz) of **6** in $\text{DMSO-}d_6$.

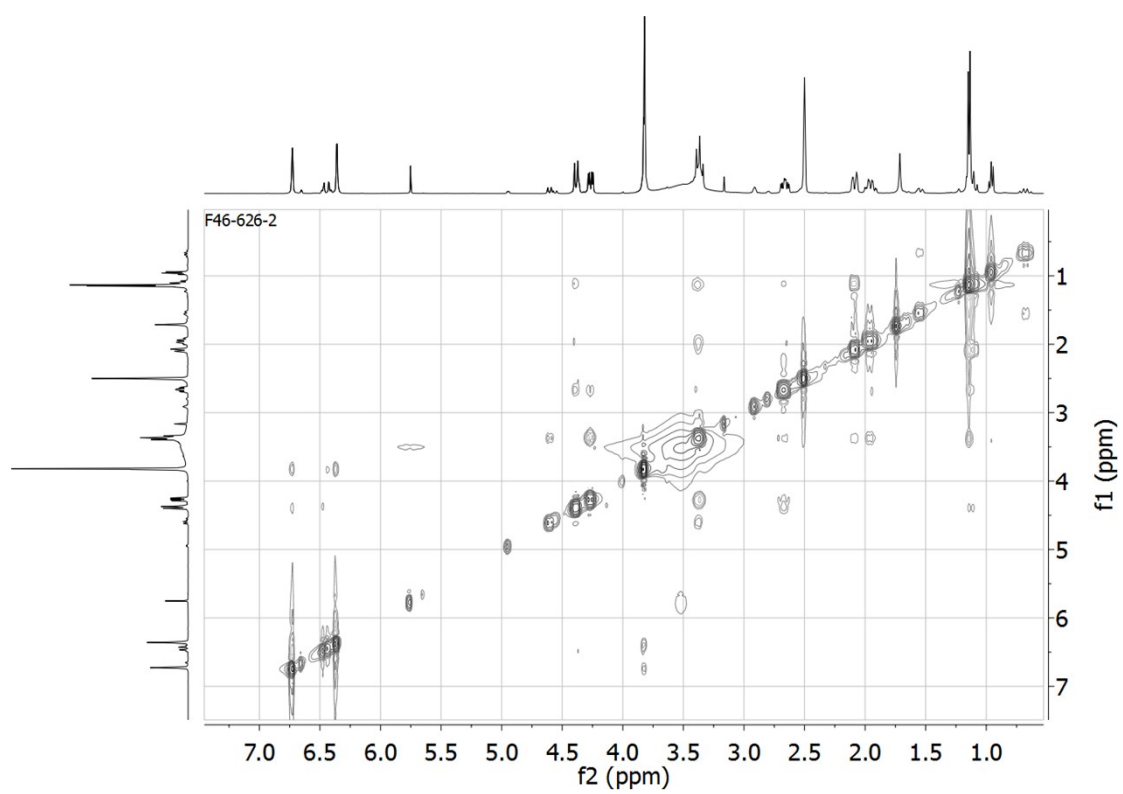


Figure S46. NOESY spectrum (400 MHz) of **6** in DMSO-*d*₆.

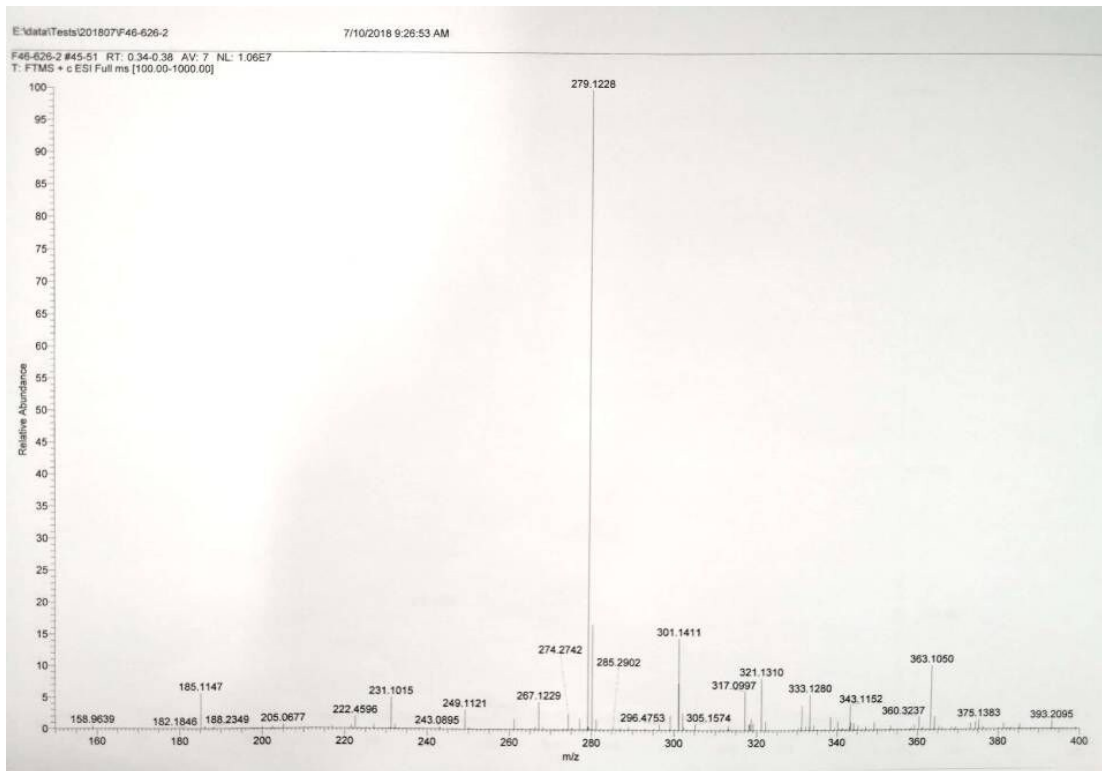


Figure S47. ESIHRMS spectrum of **6**.

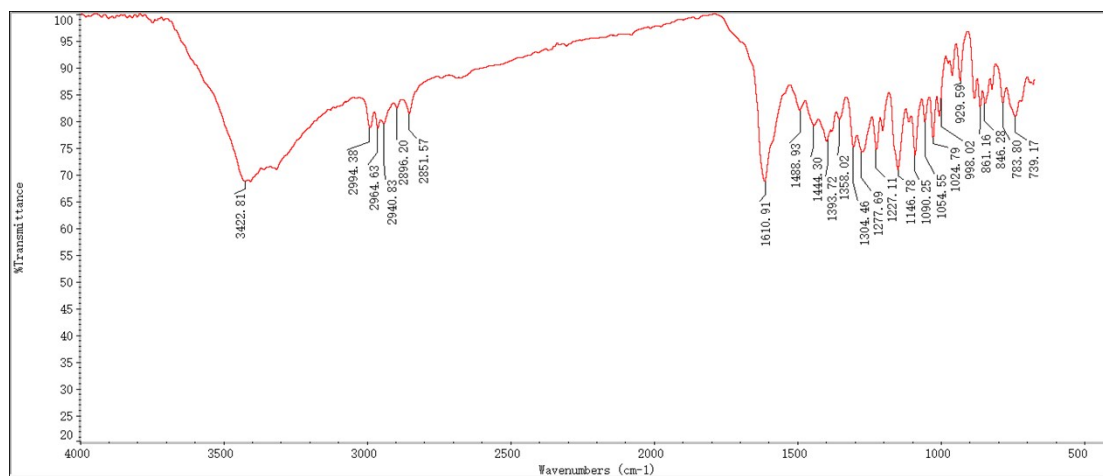


Figure S48. IR spectrum of **6**.

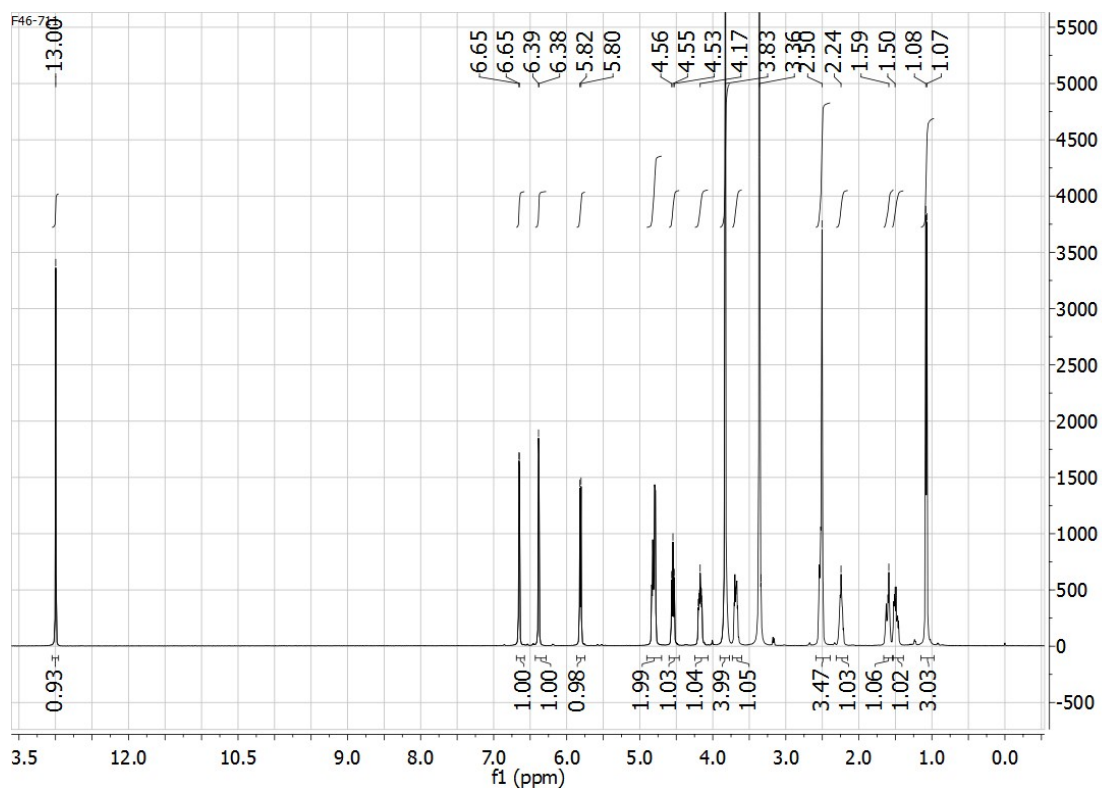


Figure S49. ^1H NMR spectrum (400 MHz) of **7** in $\text{DMSO-}d_6$.

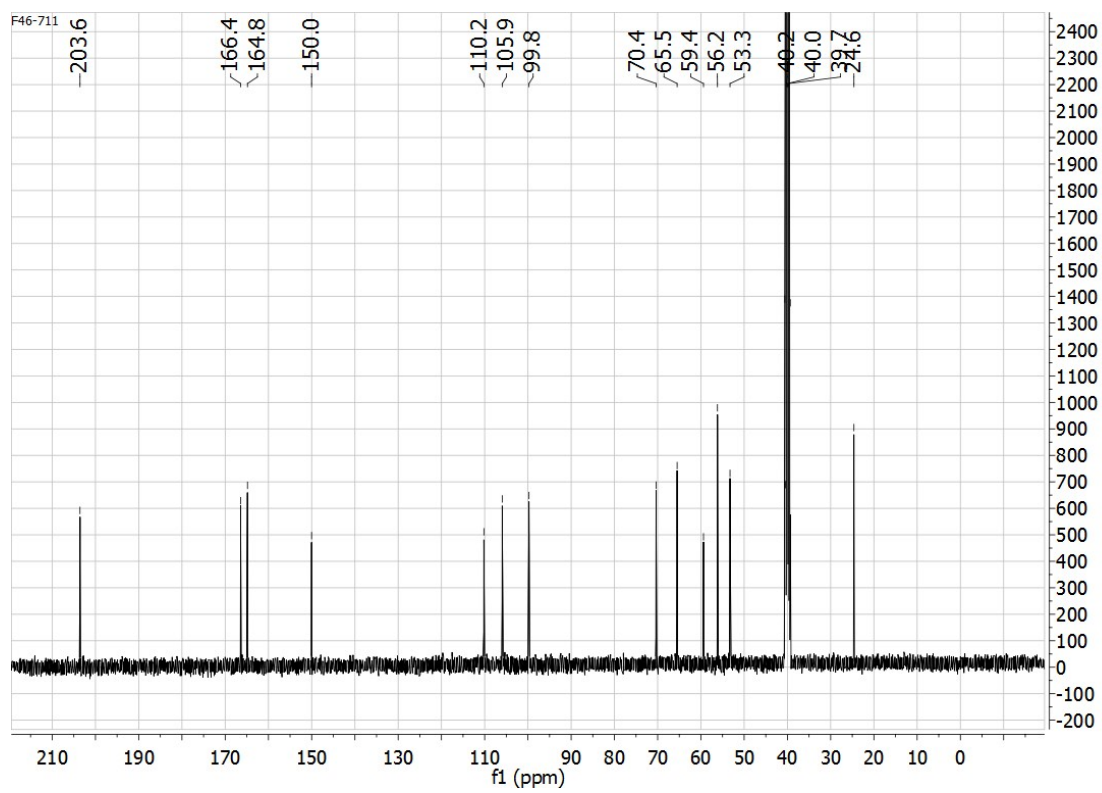


Figure S50. ¹³C NMR spectrum (100 MHz) of 7 in DMSO-*d*₆.

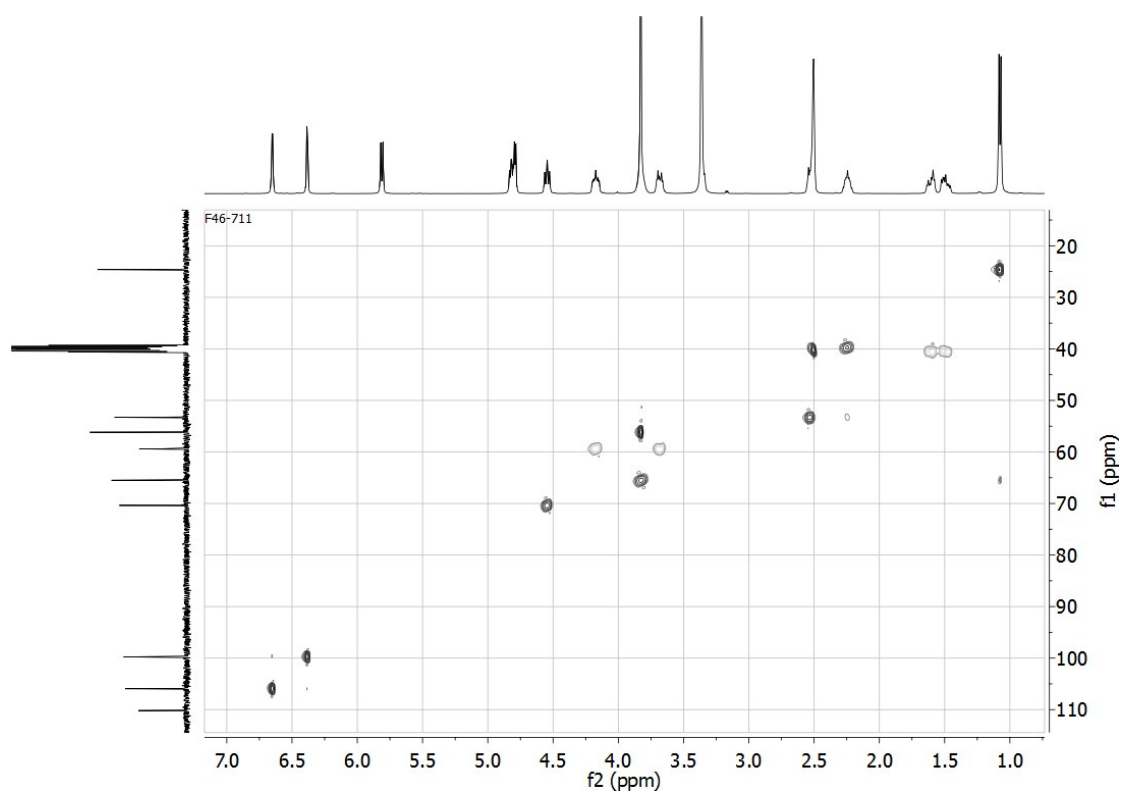


Figure S51. HSQC spectrum (400 MHz) of **7** in DMSO- d_6 .

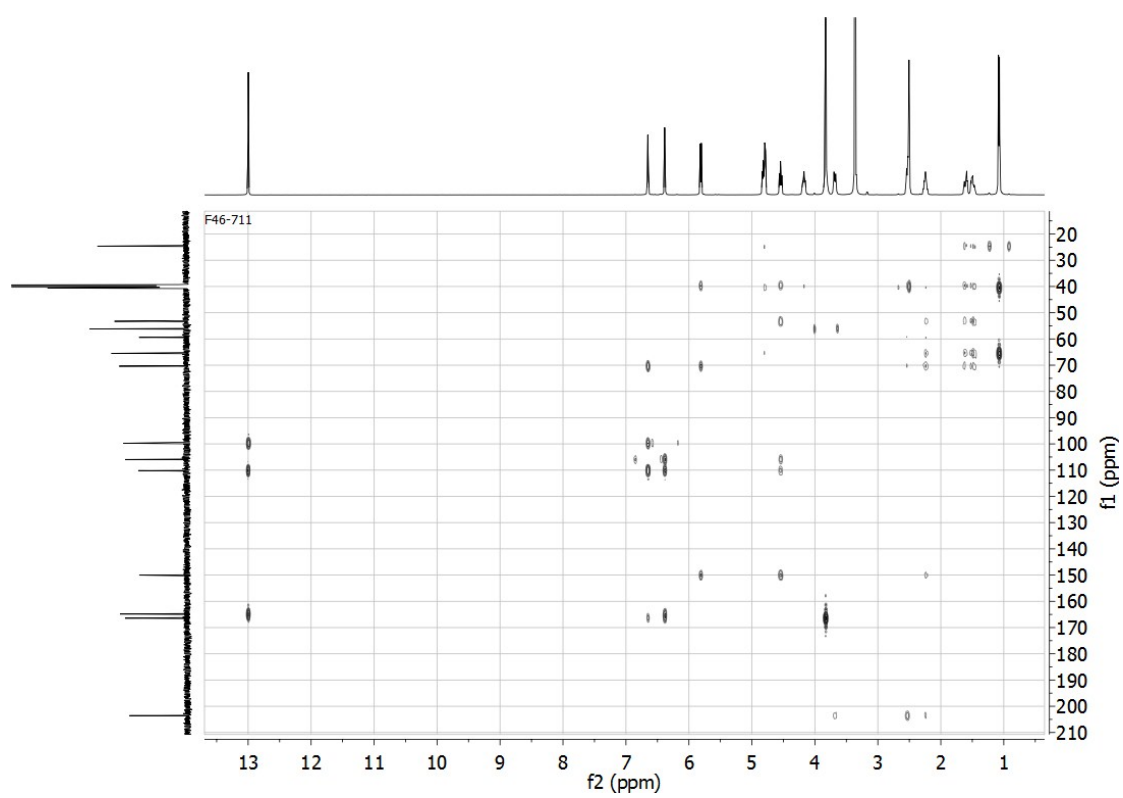


Figure S52. HMBC spectrum (400 MHz) of **7** in DMSO-*d*₆.

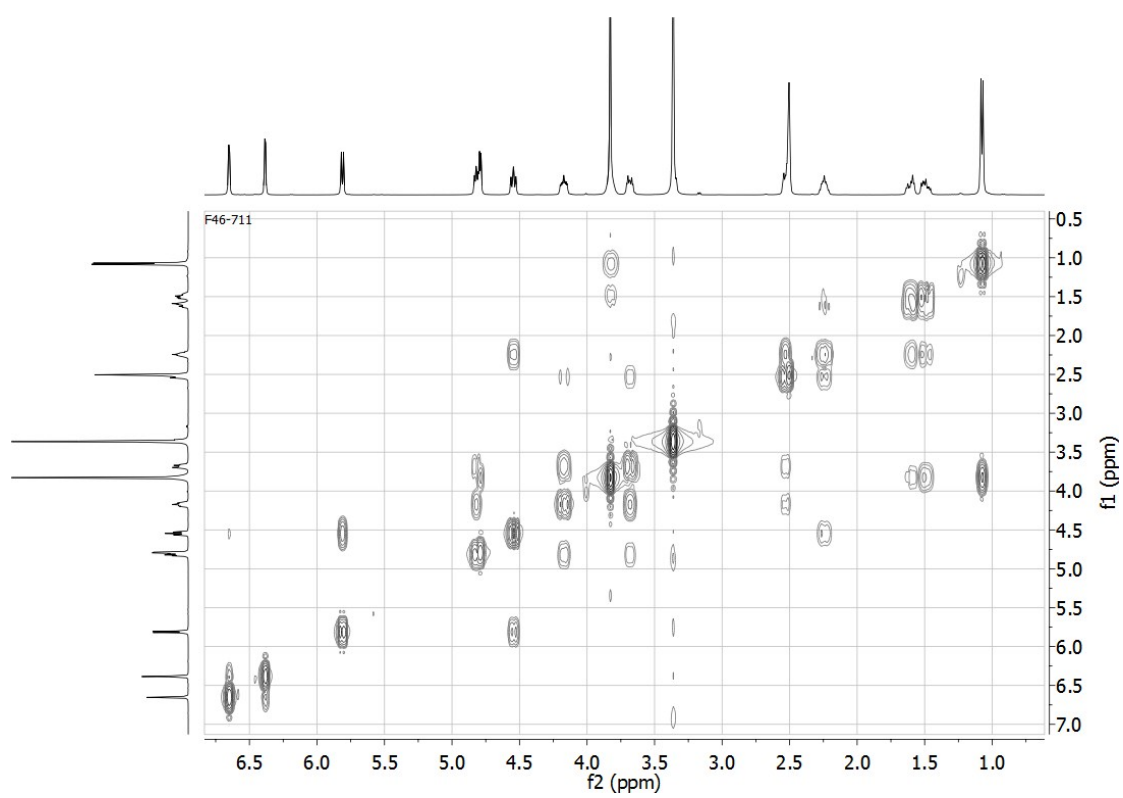


Figure S53. ^1H - ^1H COSY spectrum (400 MHz) of **7** in $\text{DMSO-}d_6$.

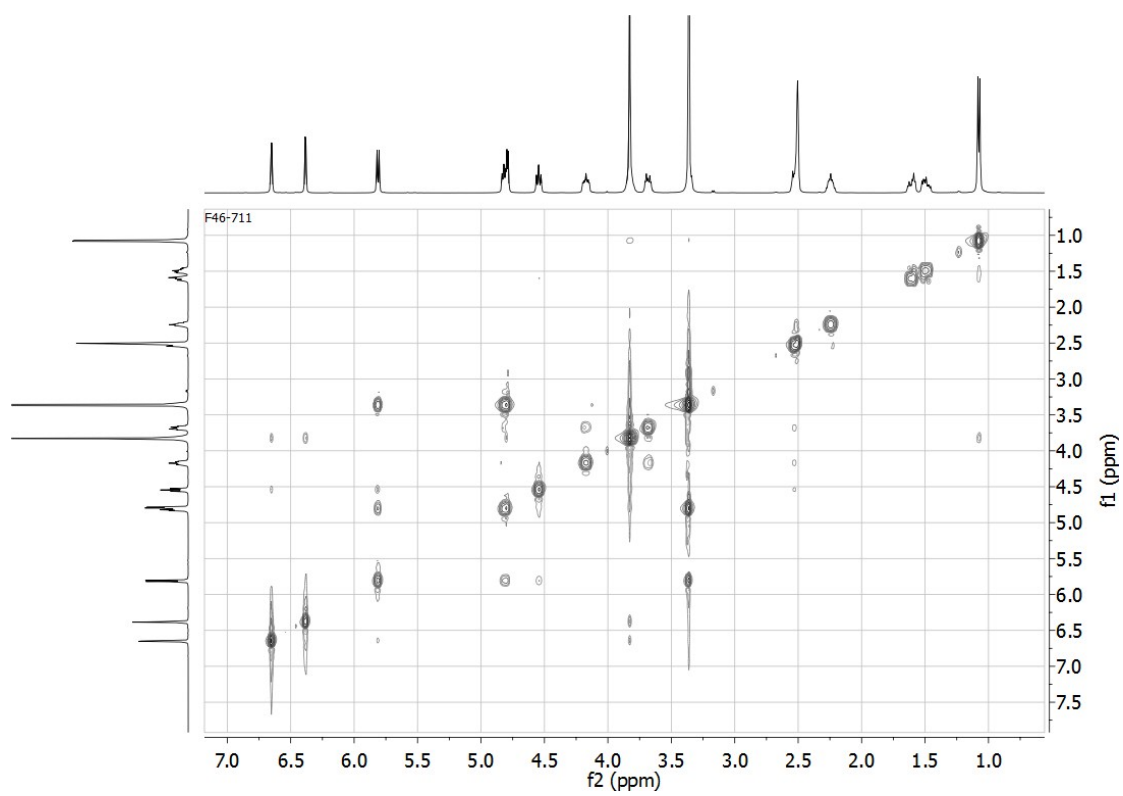


Figure S54. NOESY spectrum (400 MHz) of **7** in DMSO- d_6 .

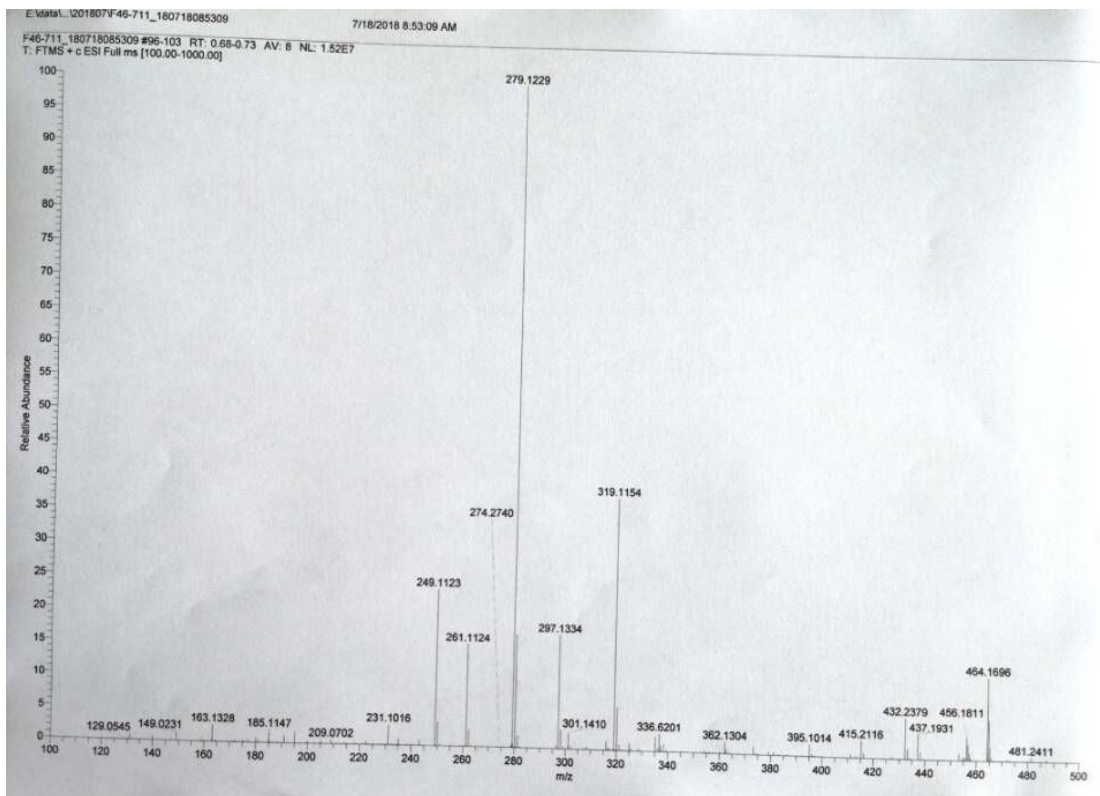


Figure S55. ESIHRMS spectrum of **7**.

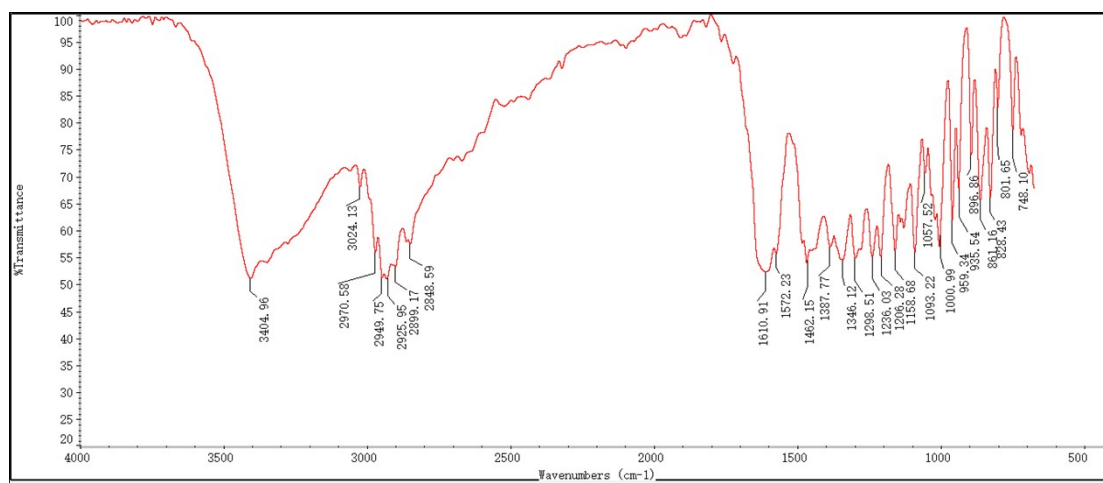


Figure S56. IR spectrum of 7.

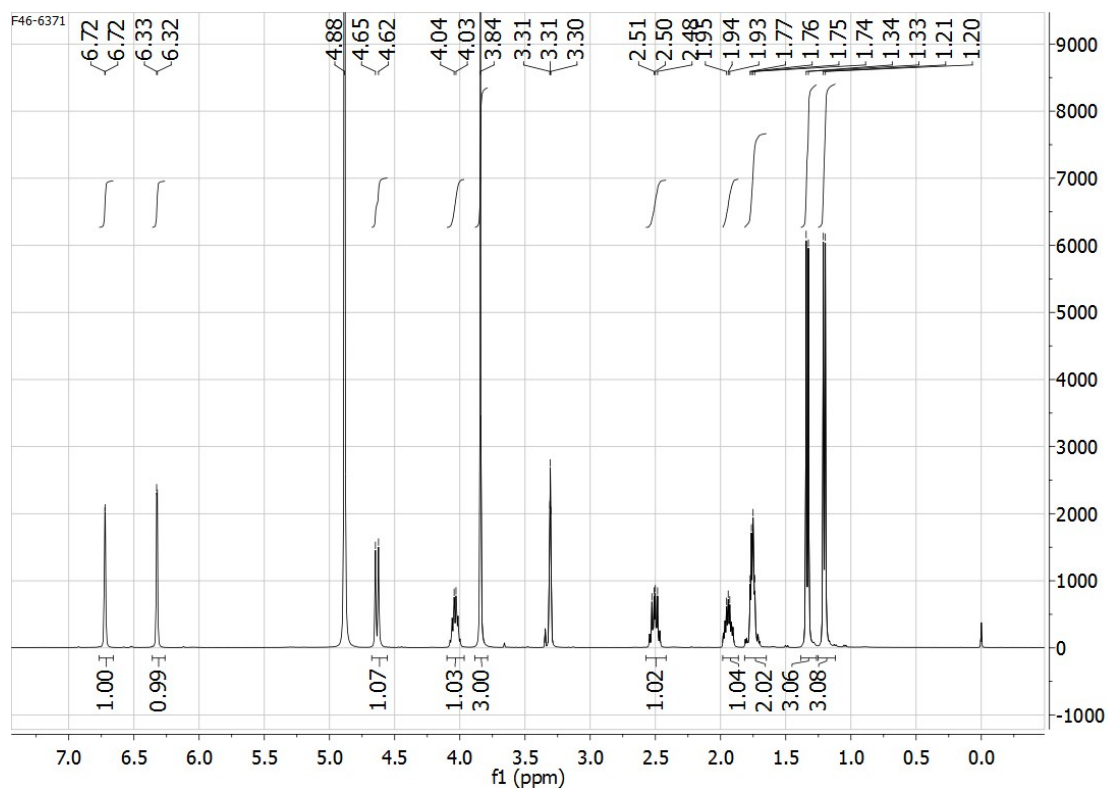
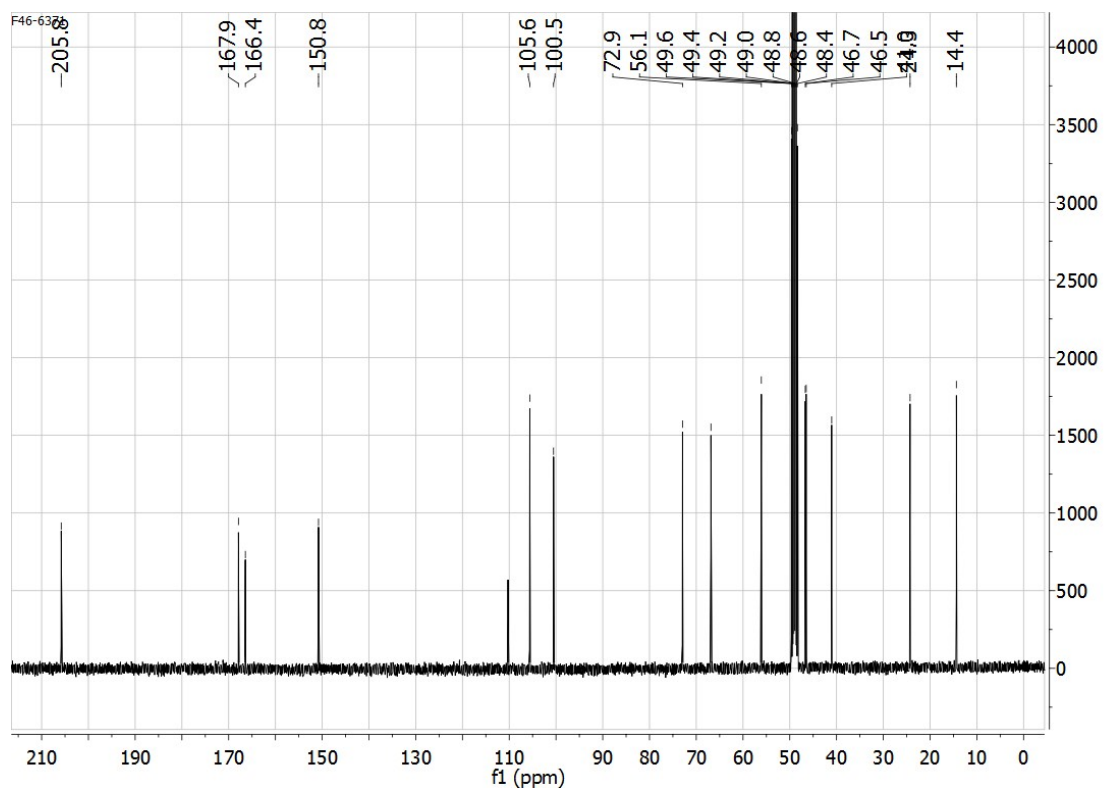


Figure S57. ^1H NMR spectrum (400 MHz) of **8** in CD_3OD .



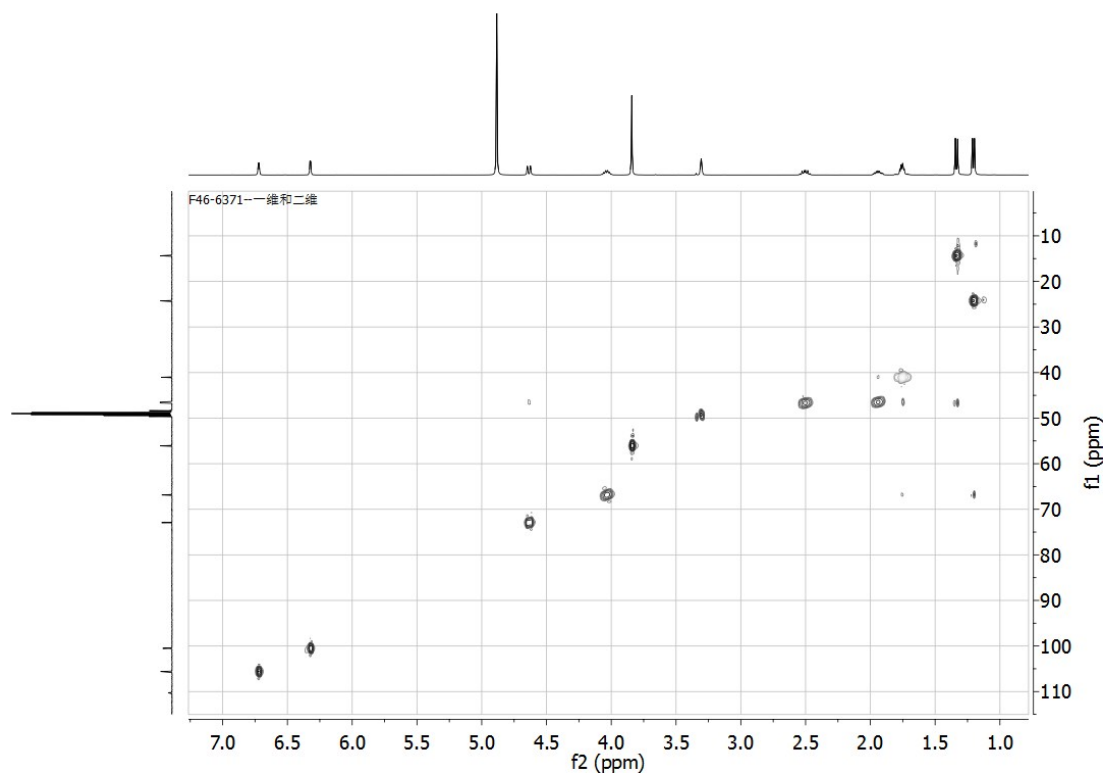


Figure S59. HSQC spectrum (400 MHz) of **8** in CD₃OD.

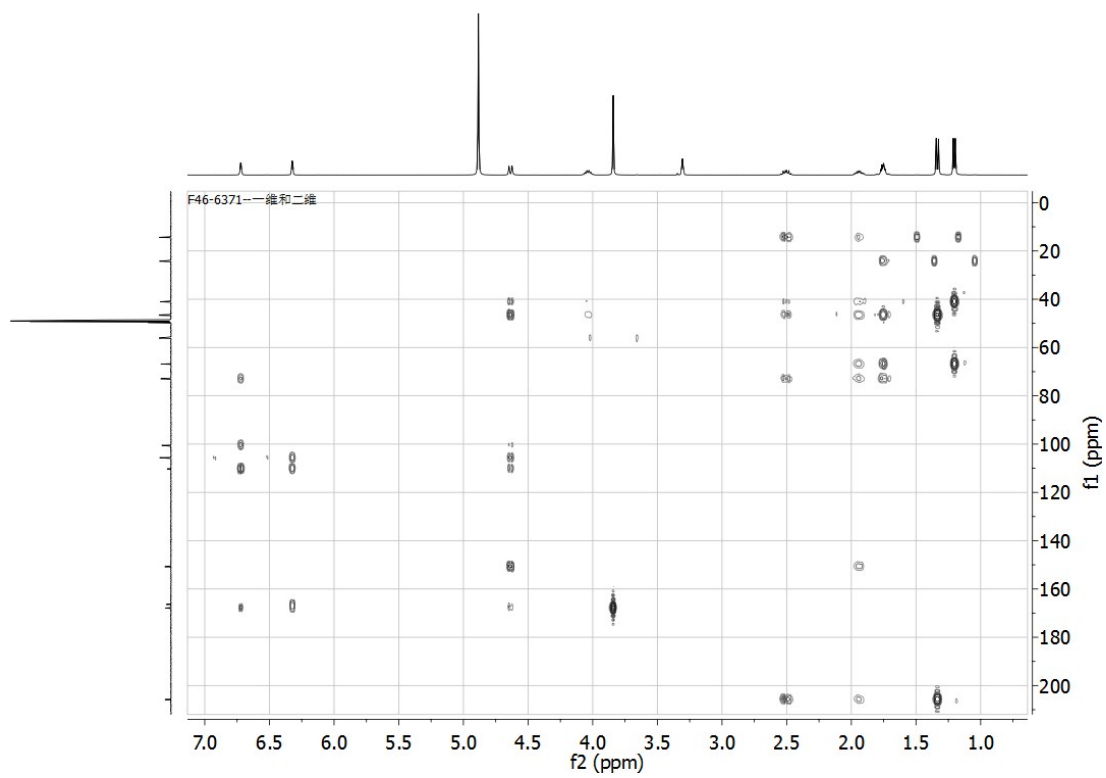


Figure S60. HMBC spectrum (400 MHz) of **8** in CD₃OD.

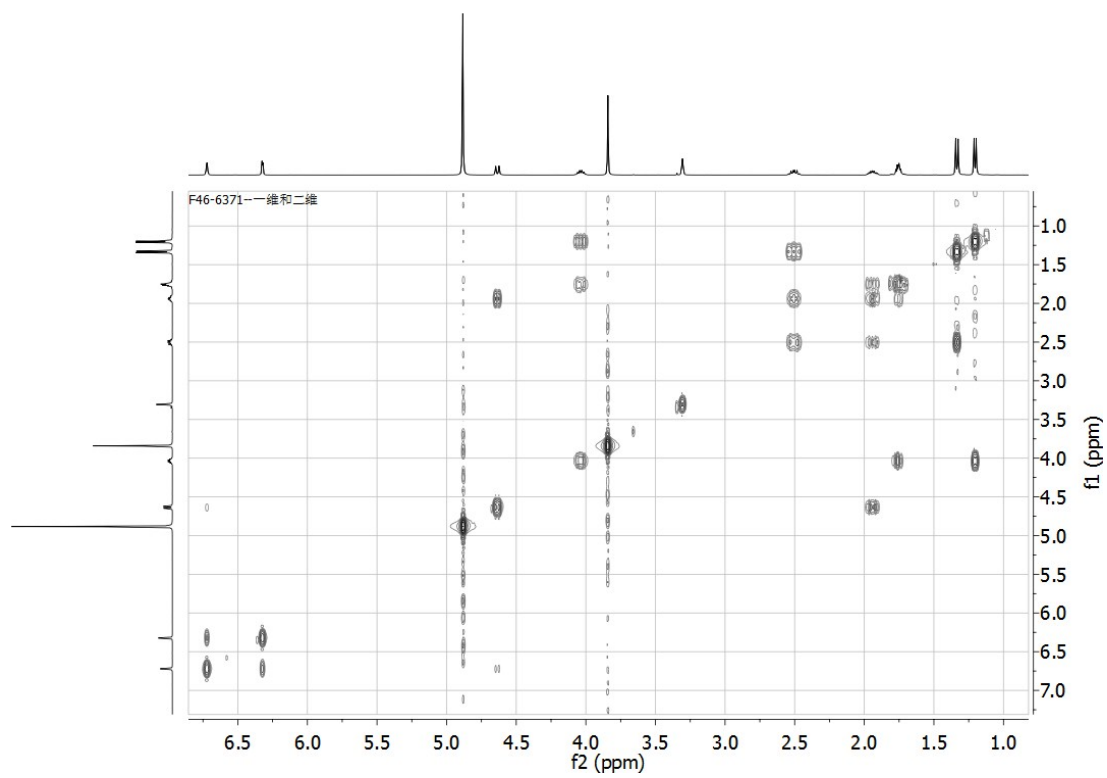


Figure S61. ^1H - ^1H COSY spectrum (400 MHz) of **8** in CD_3OD .

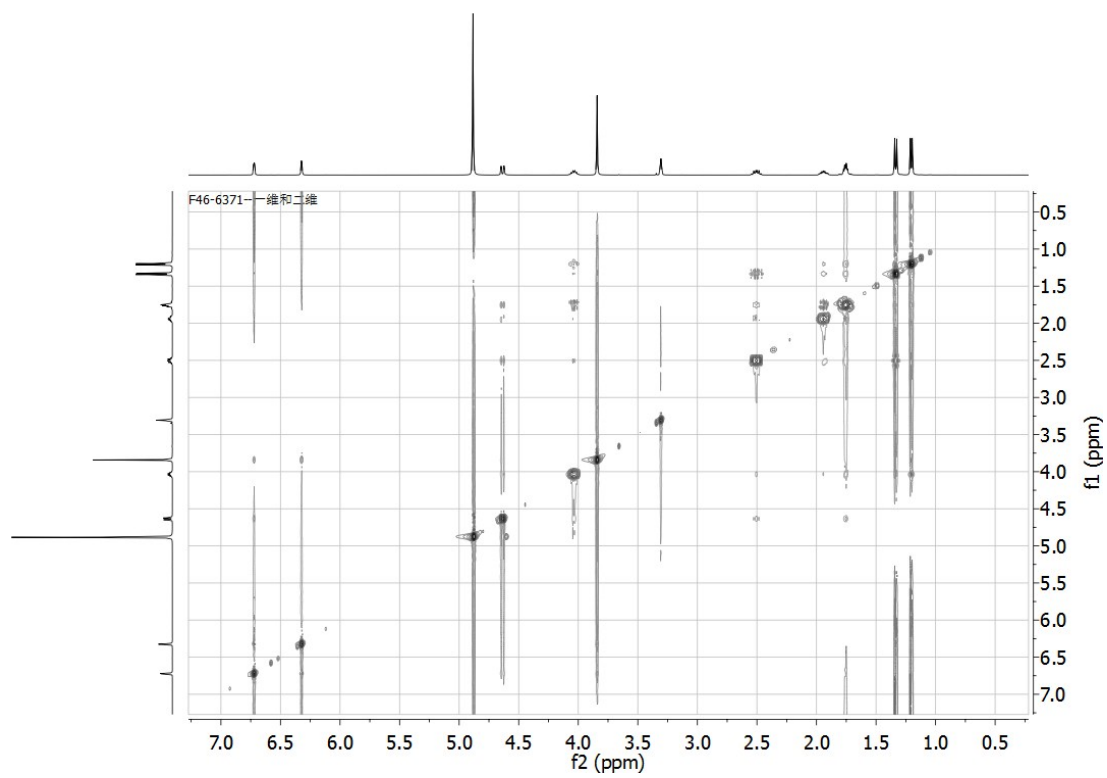


Figure S62. NOESY spectrum (400 MHz) of **8** in CD₃OD.

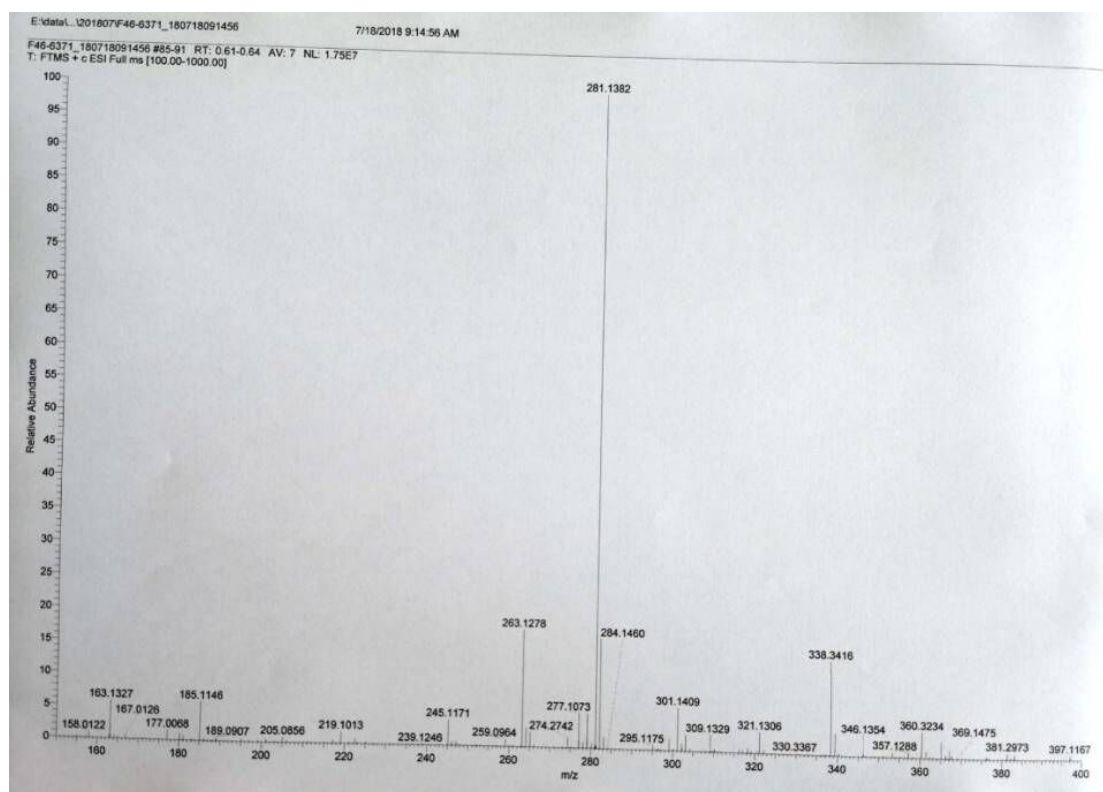


Figure S63. ESIHRMS spectrum of **8**.

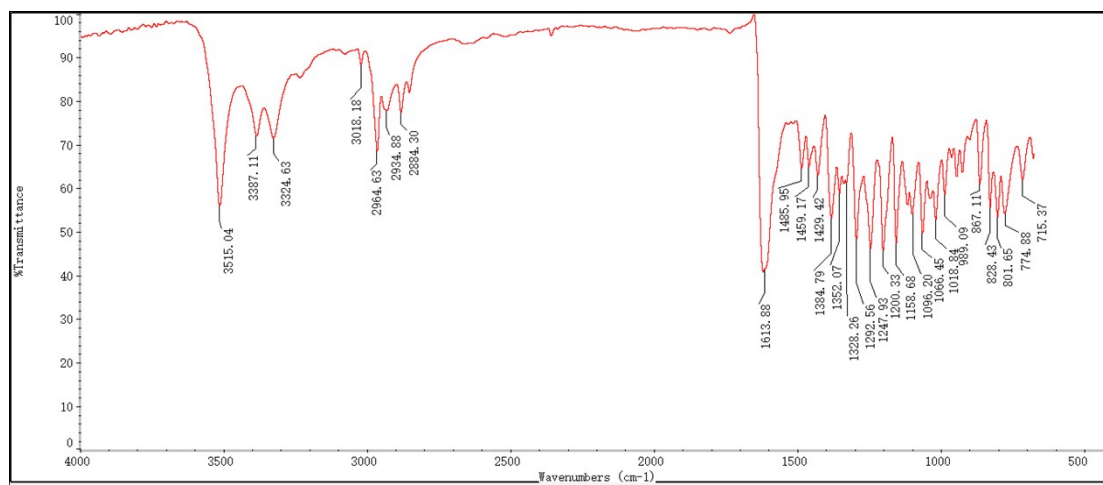


Figure S64. IR spectrum of **8**.

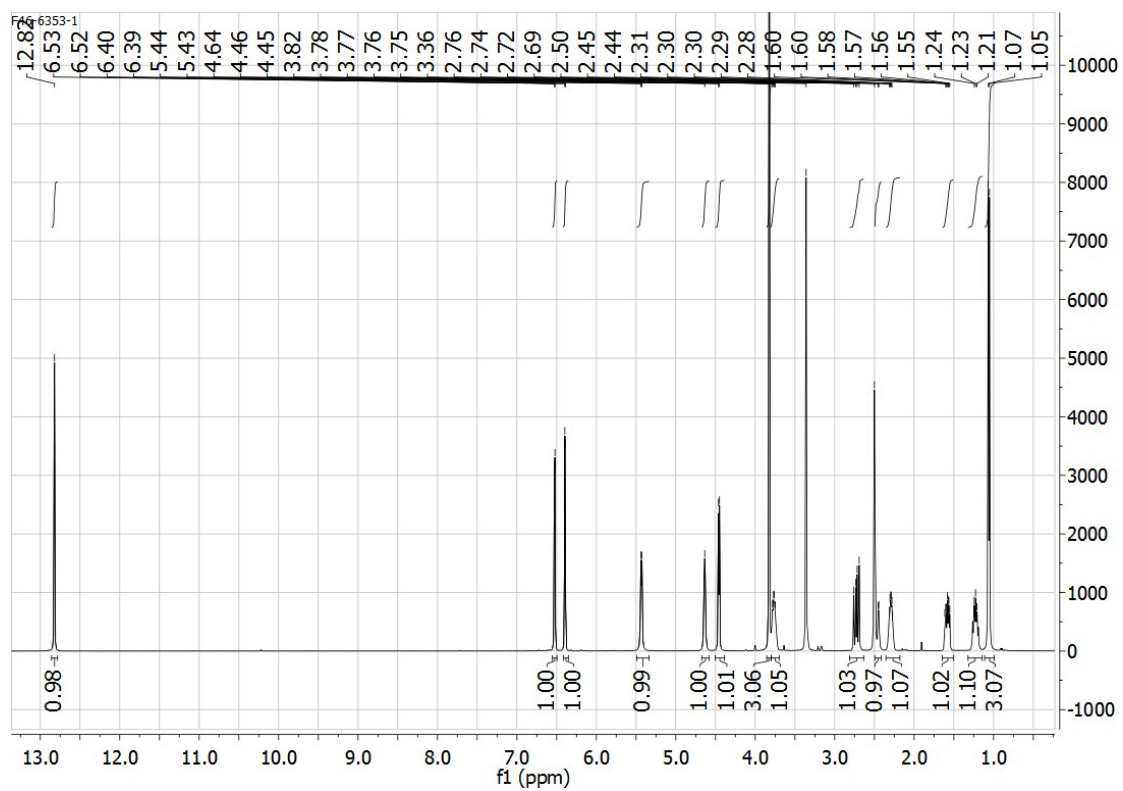


Figure S65. ^1H NMR spectrum (400 MHz) of **9** in $\text{DMSO-}d_6$.

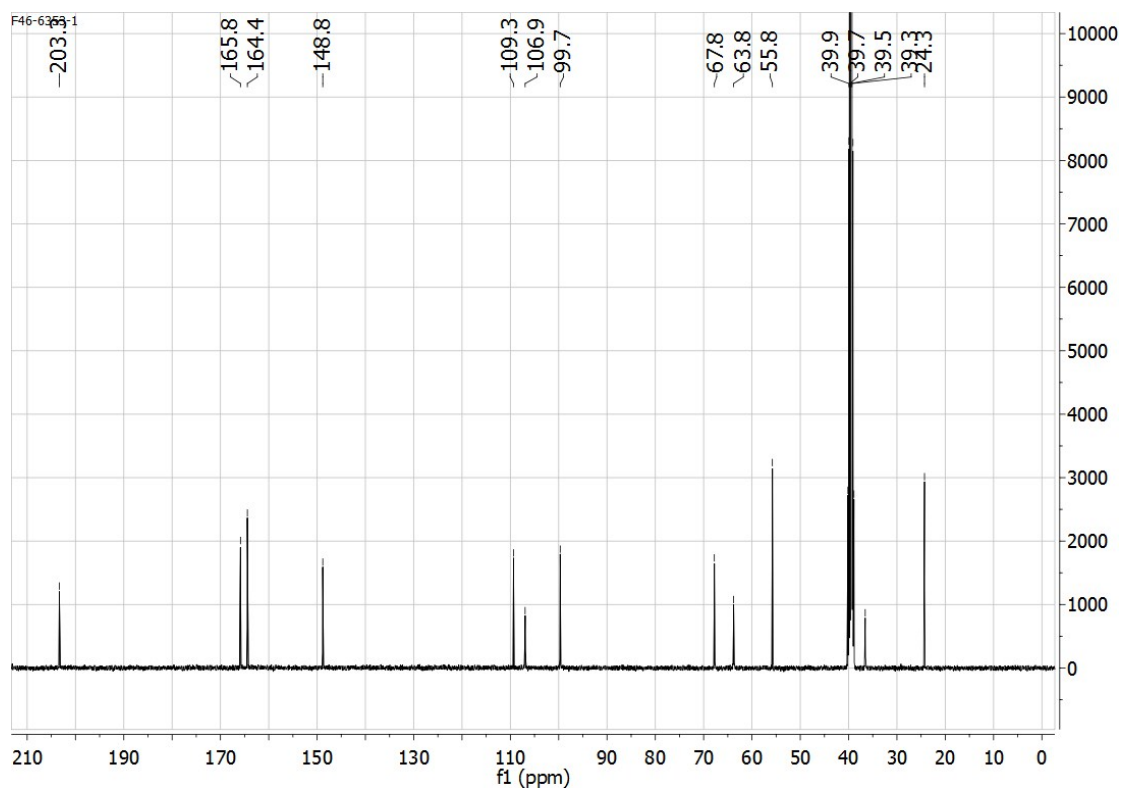


Figure S66. ^{13}C NMR spectrum (100 MHz) of **9** in $\text{DMSO-}d_6$.

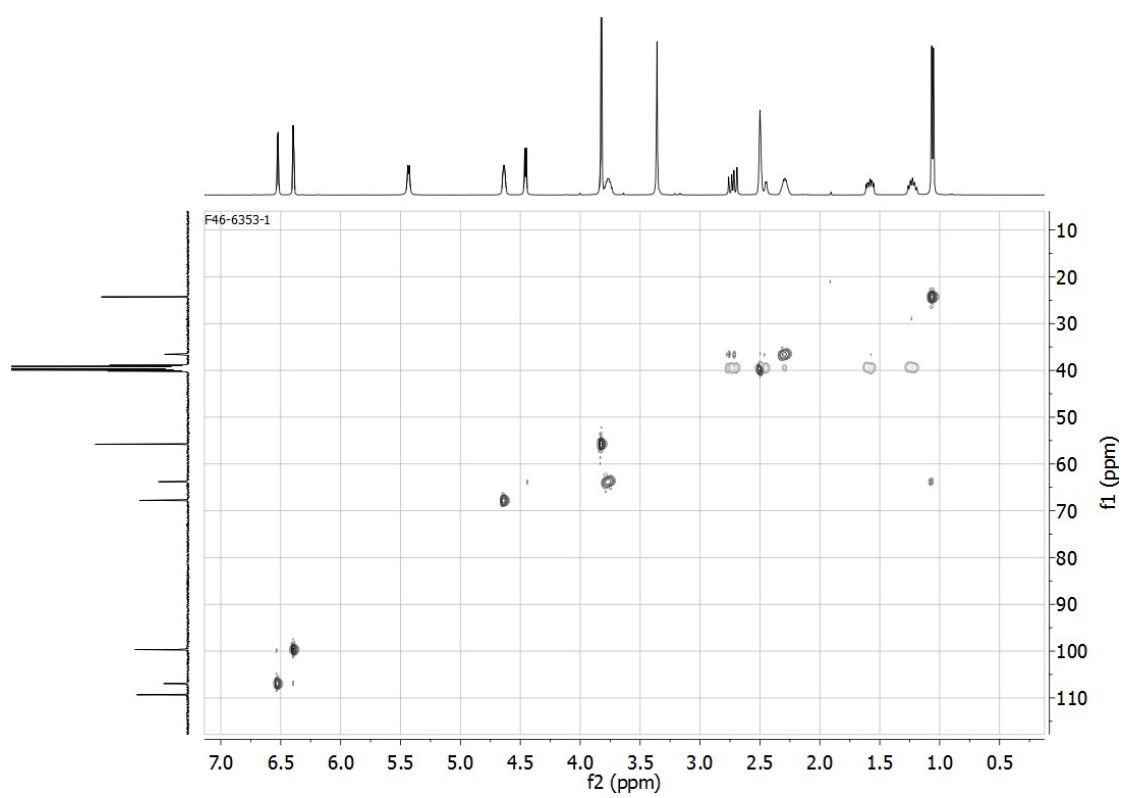


Figure S67. HSQC spectrum (400 MHz) of **9** in DMSO-*d*₆.

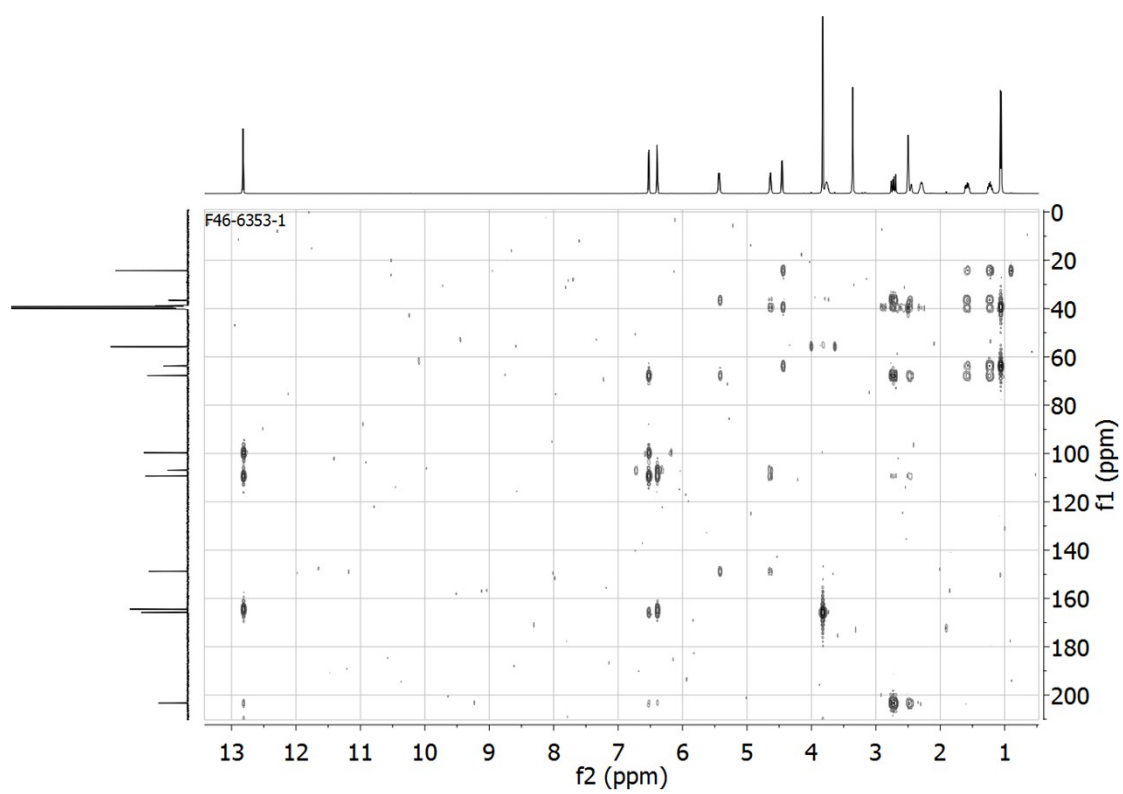


Figure S68. HMBC spectrum (400 MHz) of **9** in DMSO- d_6 .

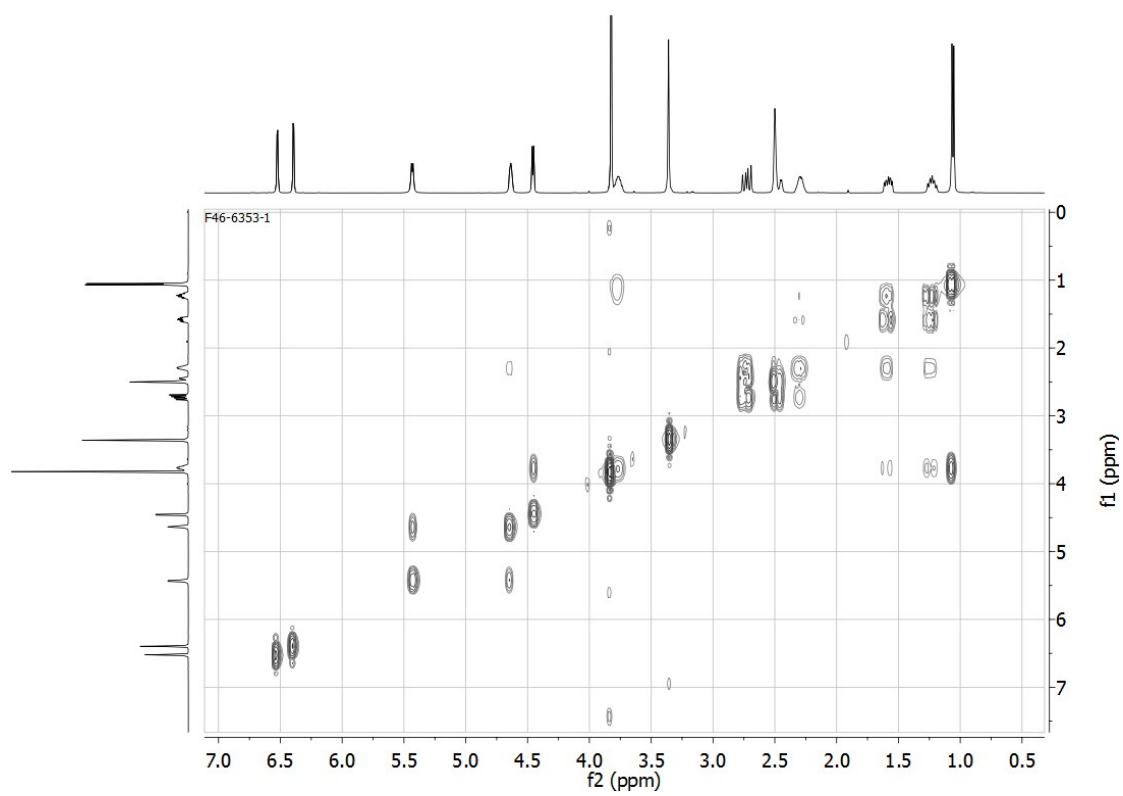


Figure S69. ^1H - ^1H COSY spectrum (400 MHz) of **9** in $\text{DMSO-}d_6$.

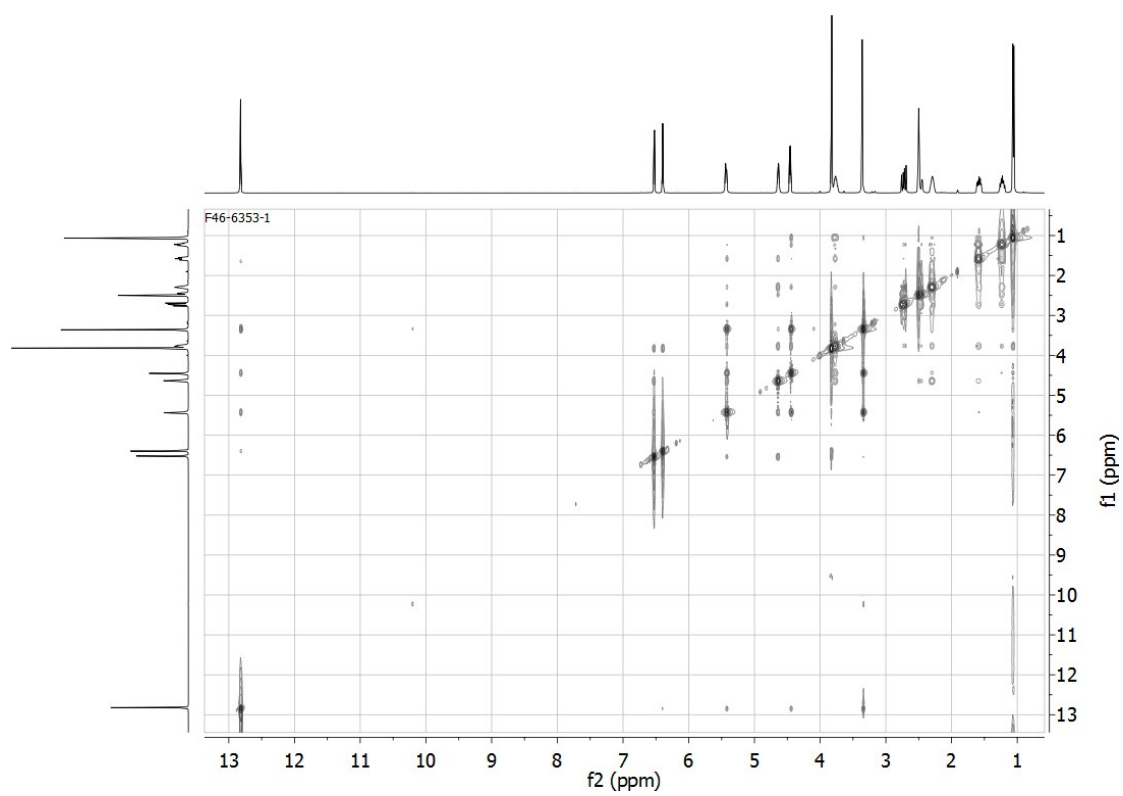


Figure S70. NOESY spectrum (400 MHz) of **9** in DMSO- d_6 .

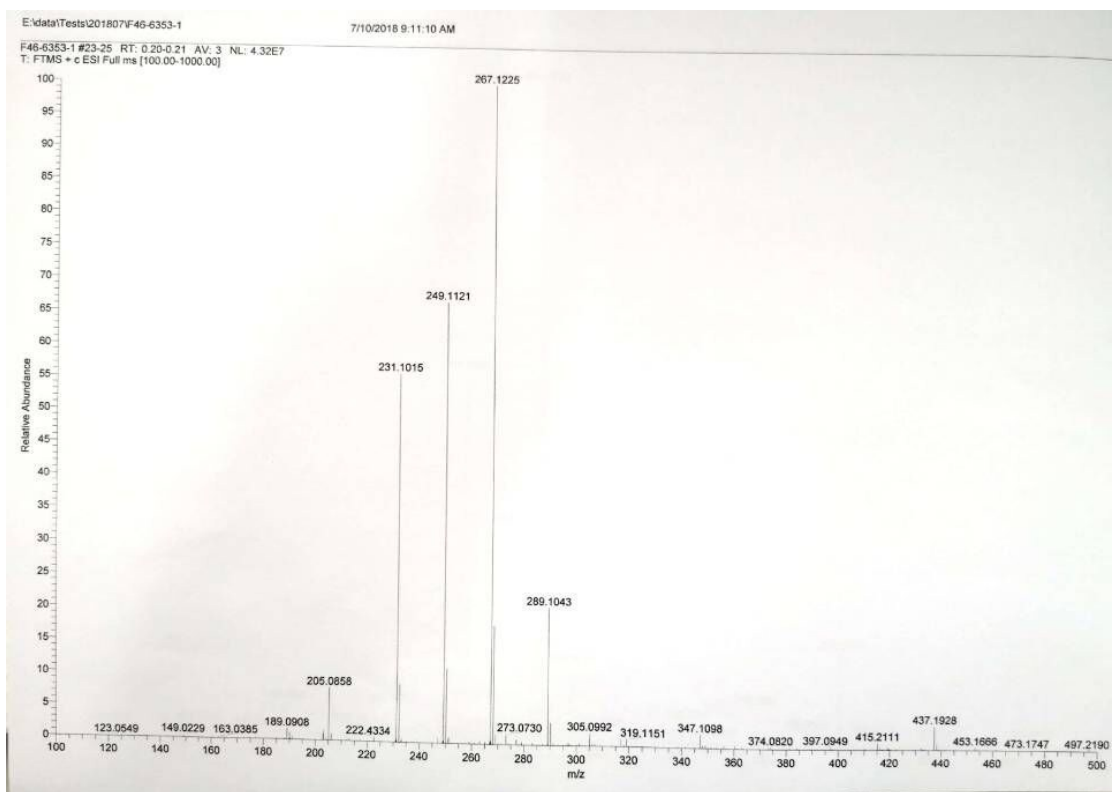


Figure S71. ESIHRMS spectrum of **9**.

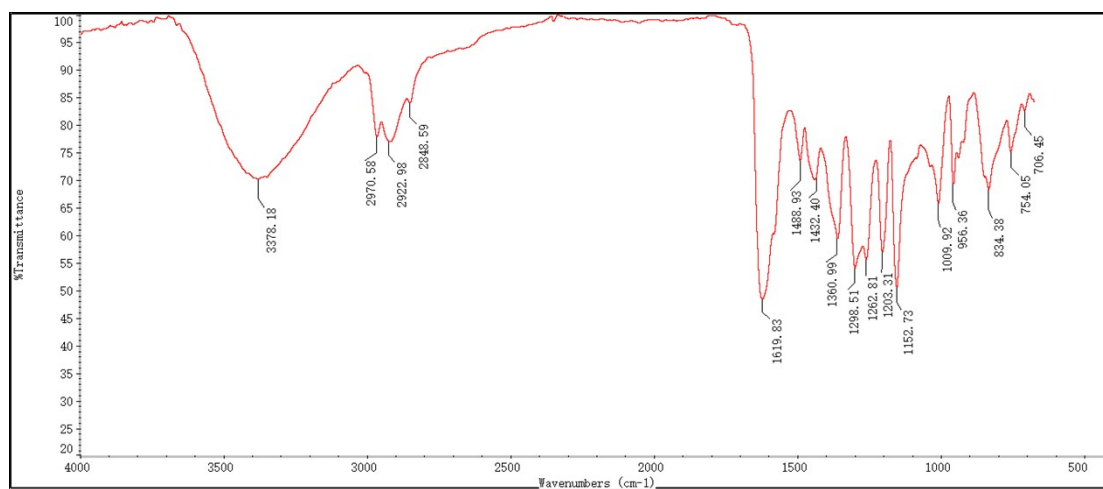


Figure S72. IR spectrum of **9**.

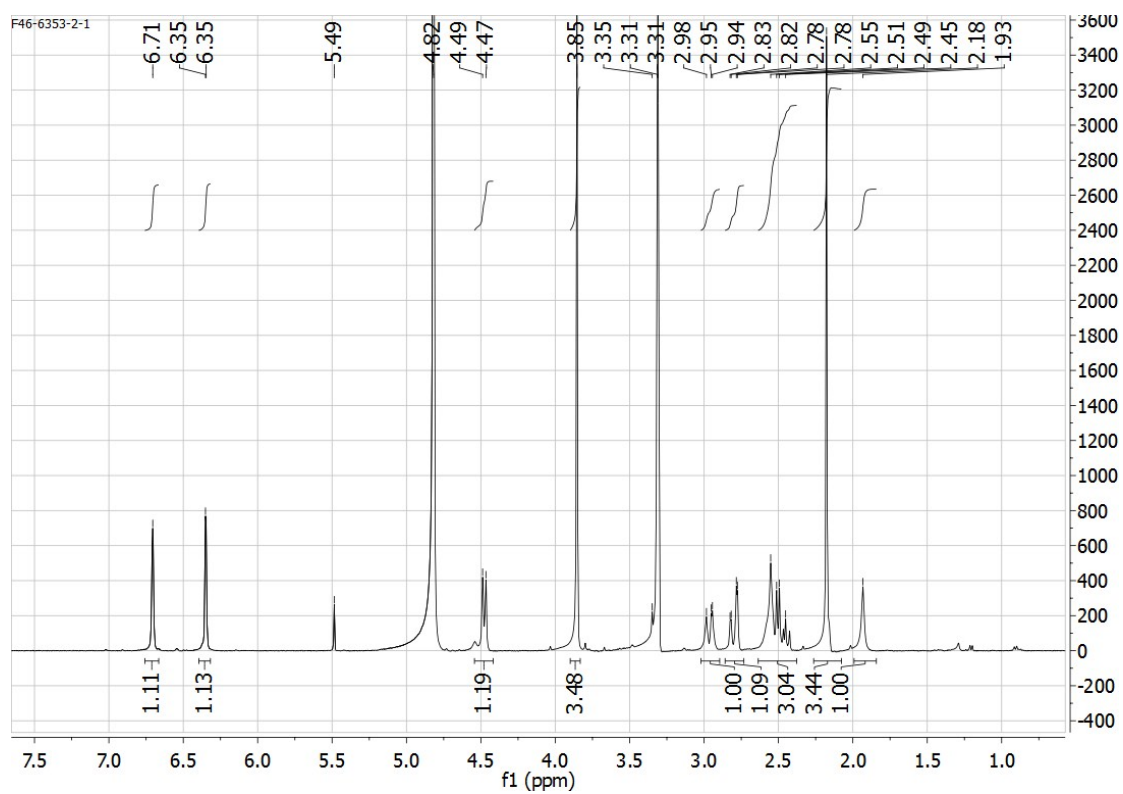


Figure S73. ^1H NMR spectrum (400 MHz) of **10** in CD_3OD .

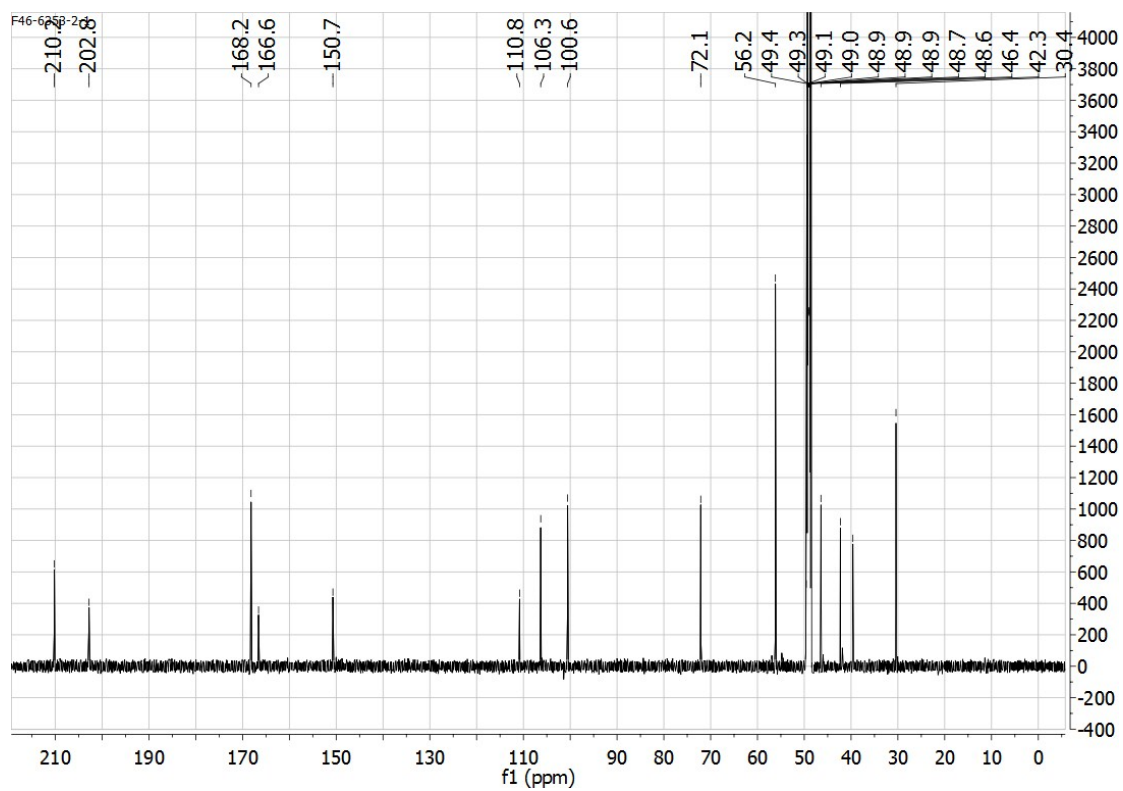


Figure S74. ¹³C NMR spectrum (150 MHz) of **10** in CD₃OD.

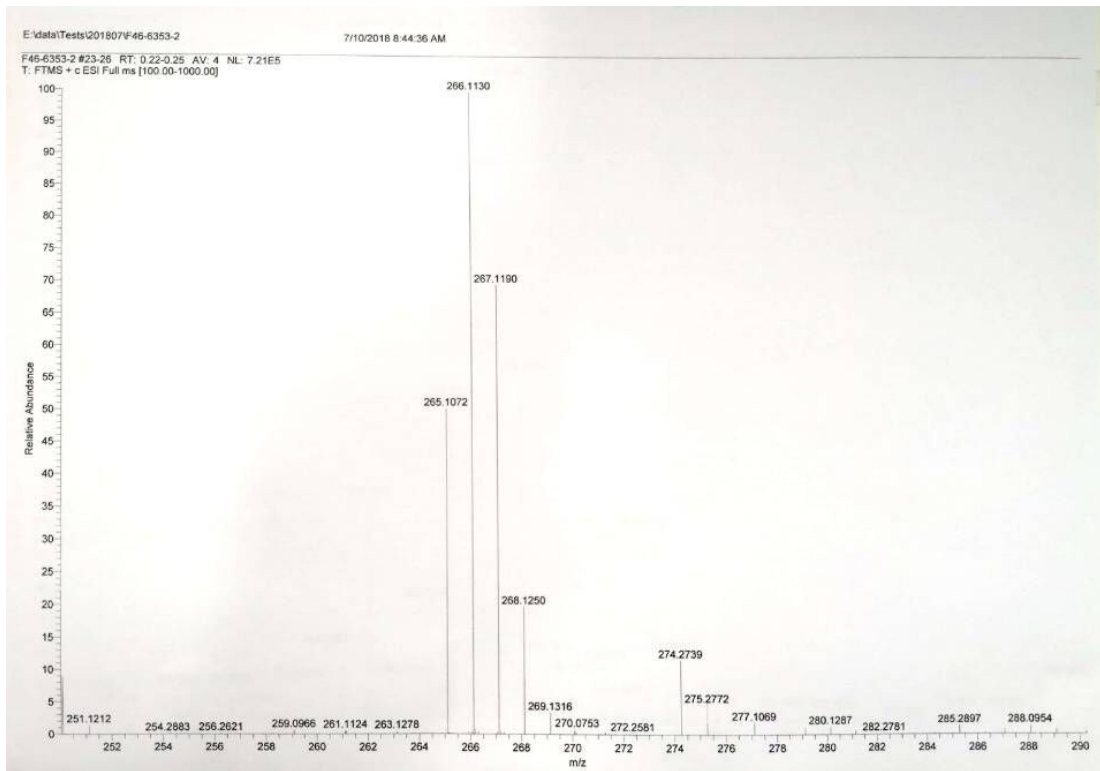


Figure S75. ESIHRMS spectrum of **10**.

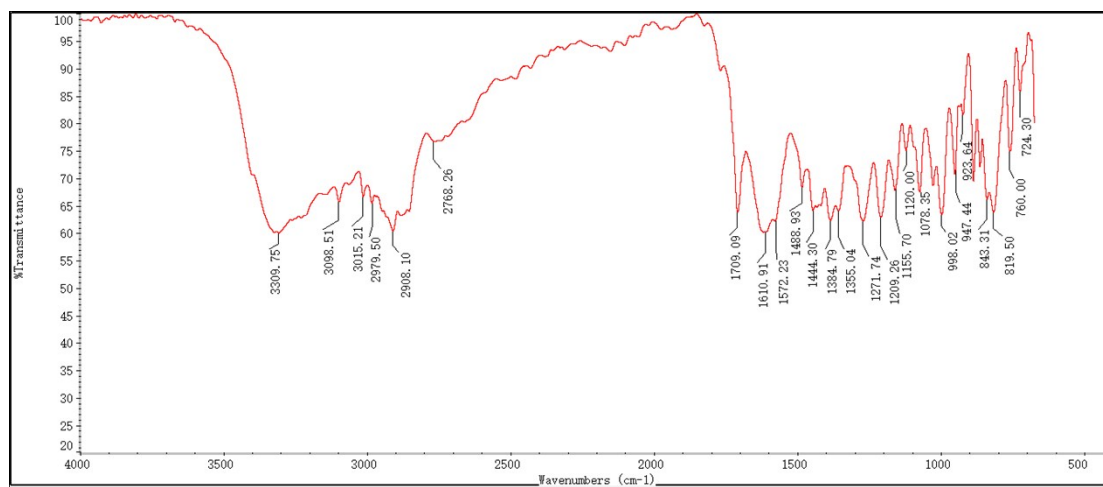


Figure S76. IR spectrum of **10**.

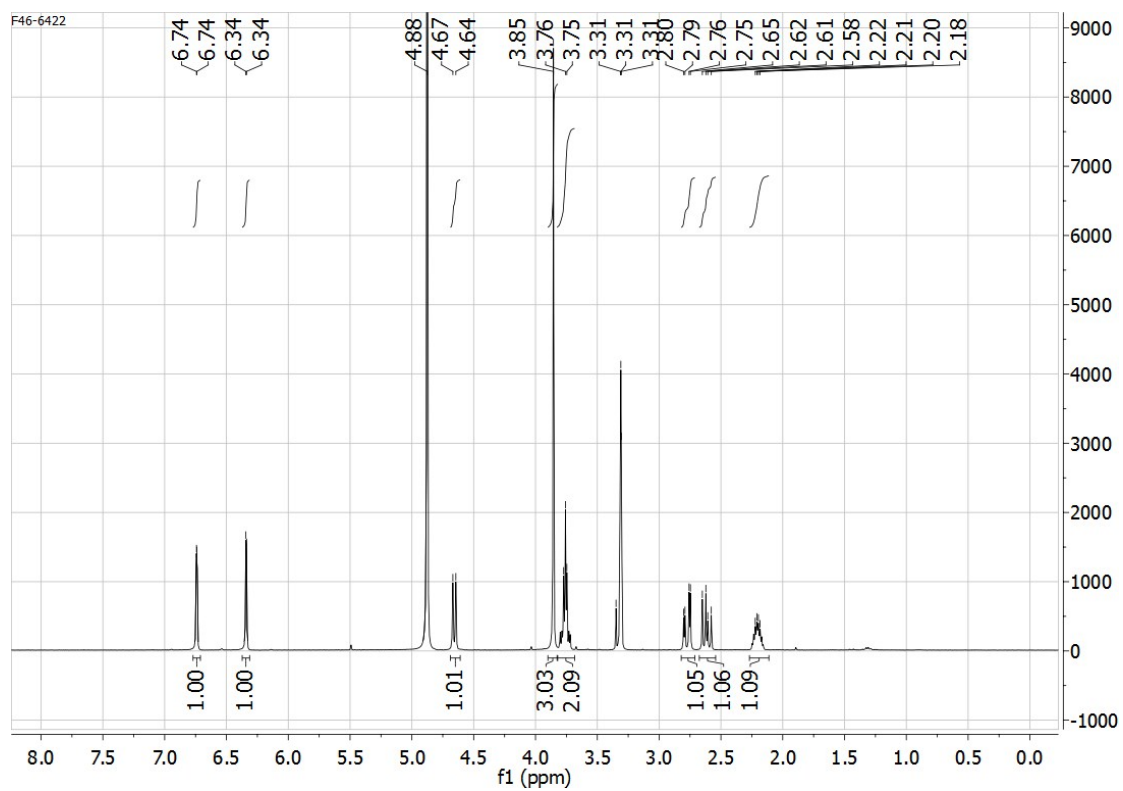


Figure S77. ^1H NMR spectrum (400 MHz) of **11** in CD_3OD .

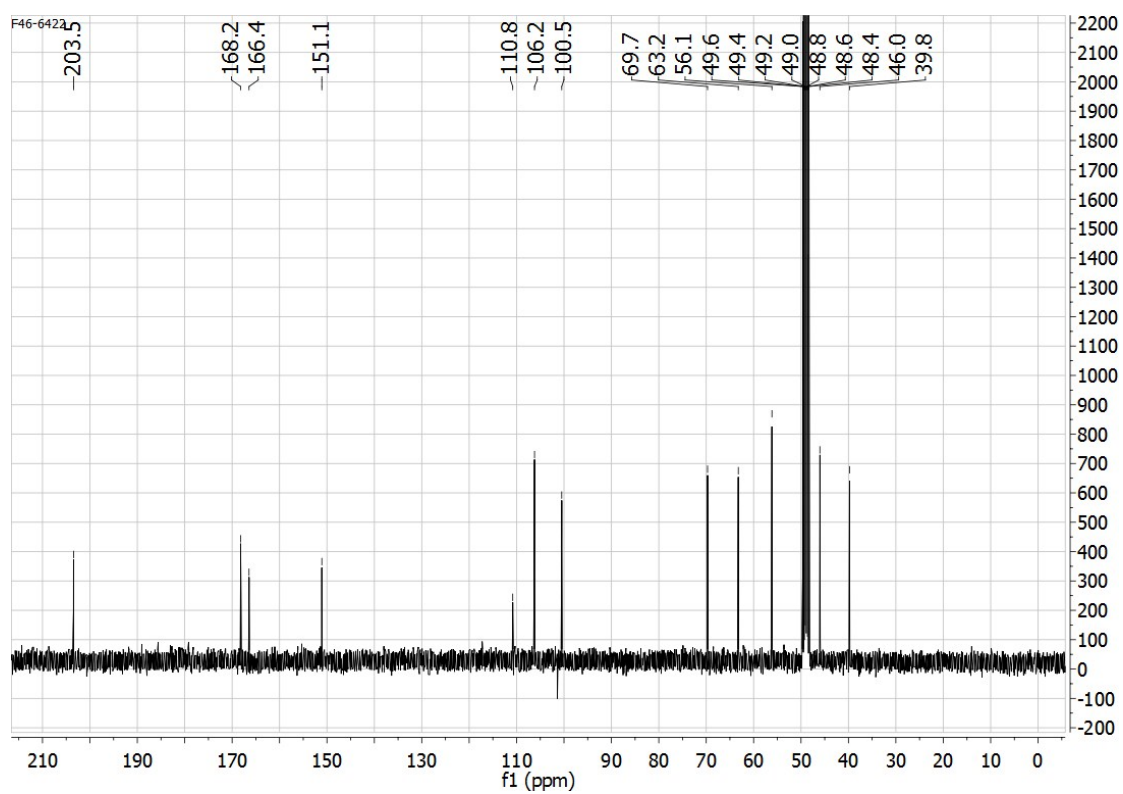


Figure S78. ¹³C NMR spectrum (100 MHz) of **11** in CD₃OD.

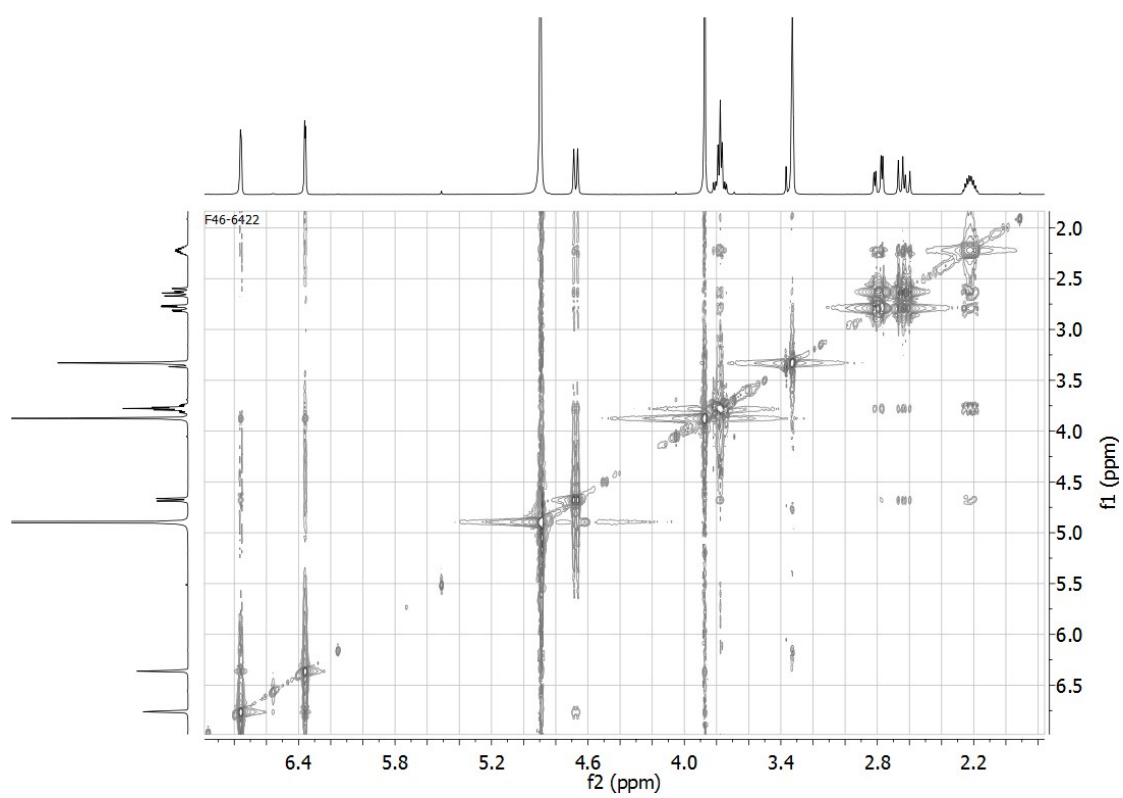


Figure S79. NOESY spectrum (400 MHz) of **11** in CD₃OD.

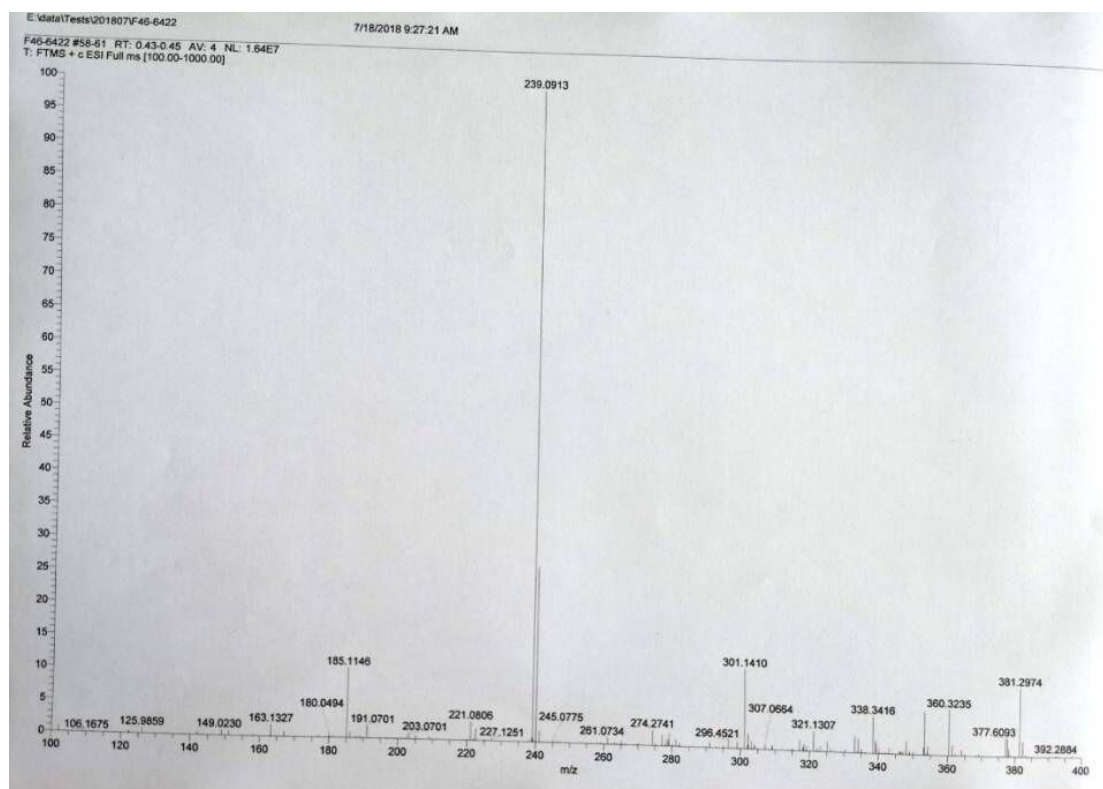


Figure S80. ESIHRMS spectrum of **11**.

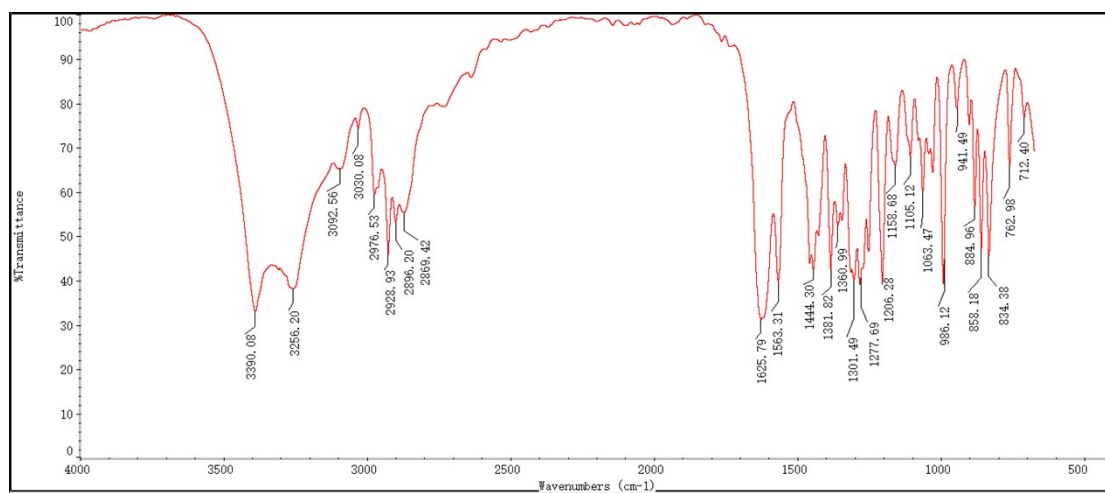


Figure S81. IR spectrum of **11**.

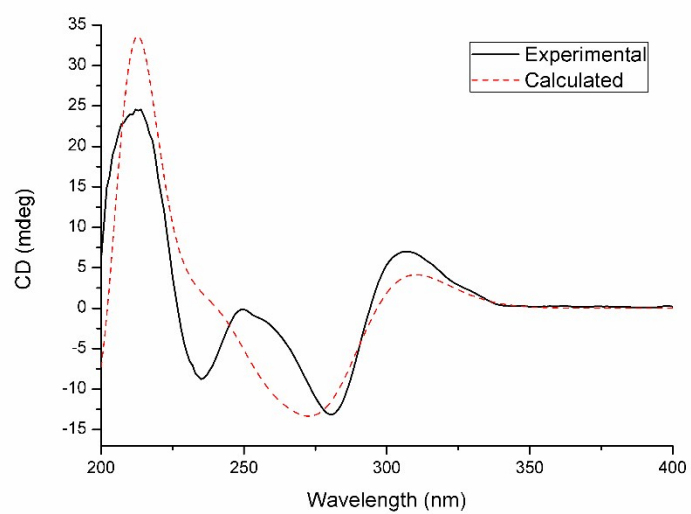


Figure S82. Experimental (black, solid) and calculated (red, dash) ECD curves of compound **10**.

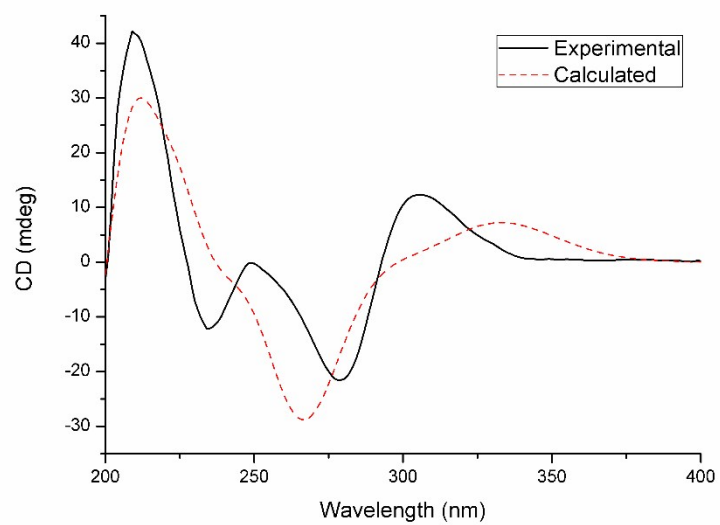


Figure S83. Experimental (black, solid) and calculated (red, dash) ECD curves of compound **11**.

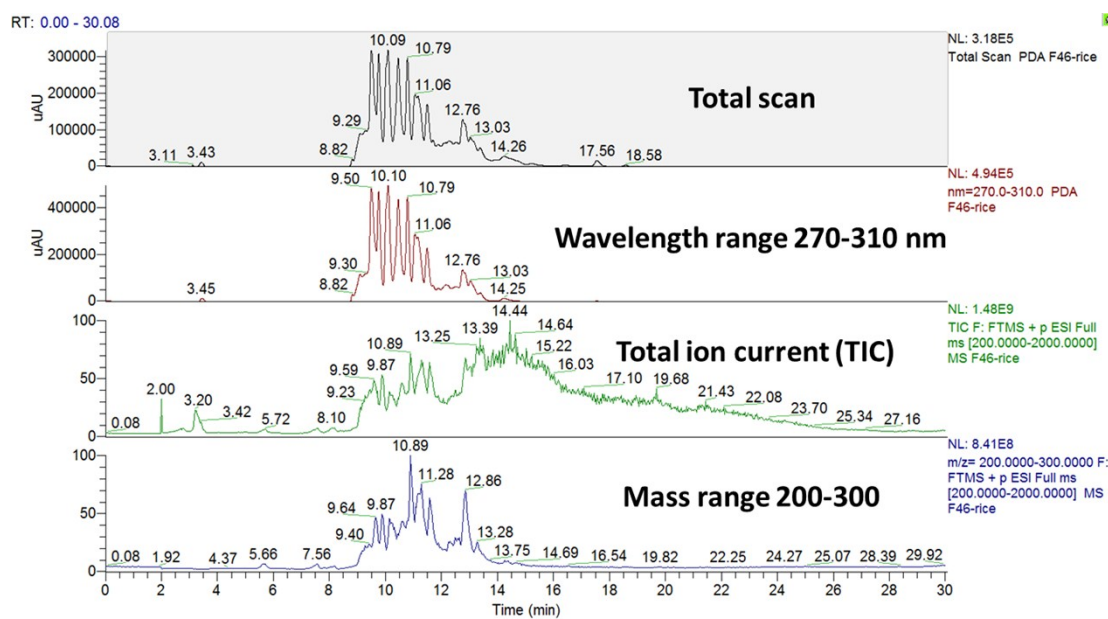


Figure S84. LC-ESI-HRMS analysis of the crude extract of endophytic fungus *Pleosporales* sp. F46.

Table S1. The antifungal and cytotoxic activities of compounds **1-11**.

No.	1	2	3	4	5	6	7	8	9	10	11	Fluconazole	Adriamycin
<i>Candida albicans</i> SC5314	128	>128	>128	>128	>128	>128	>128	>128	>128	>128	>128	2.0	--
($\mu\text{g mL}^{-1}$)													
A549 (μM)	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80	--	1.5 \pm 0.1
SMMC-721 (μM)	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80	>80	--	1.3 \pm 0.2
MDA-MB-231 (μM)	>80	>80	>80	>80	>80	>80	22.4\pm1.1	>80	>80	>80	>80	--	0.45\pm0.1