Supplementary Information

Acylated aminooligosaccharides from the Yellow Sea *Streptomyces* sp. HO1518 as both α-glucosidase and lipase inhibitors

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Table of Contents

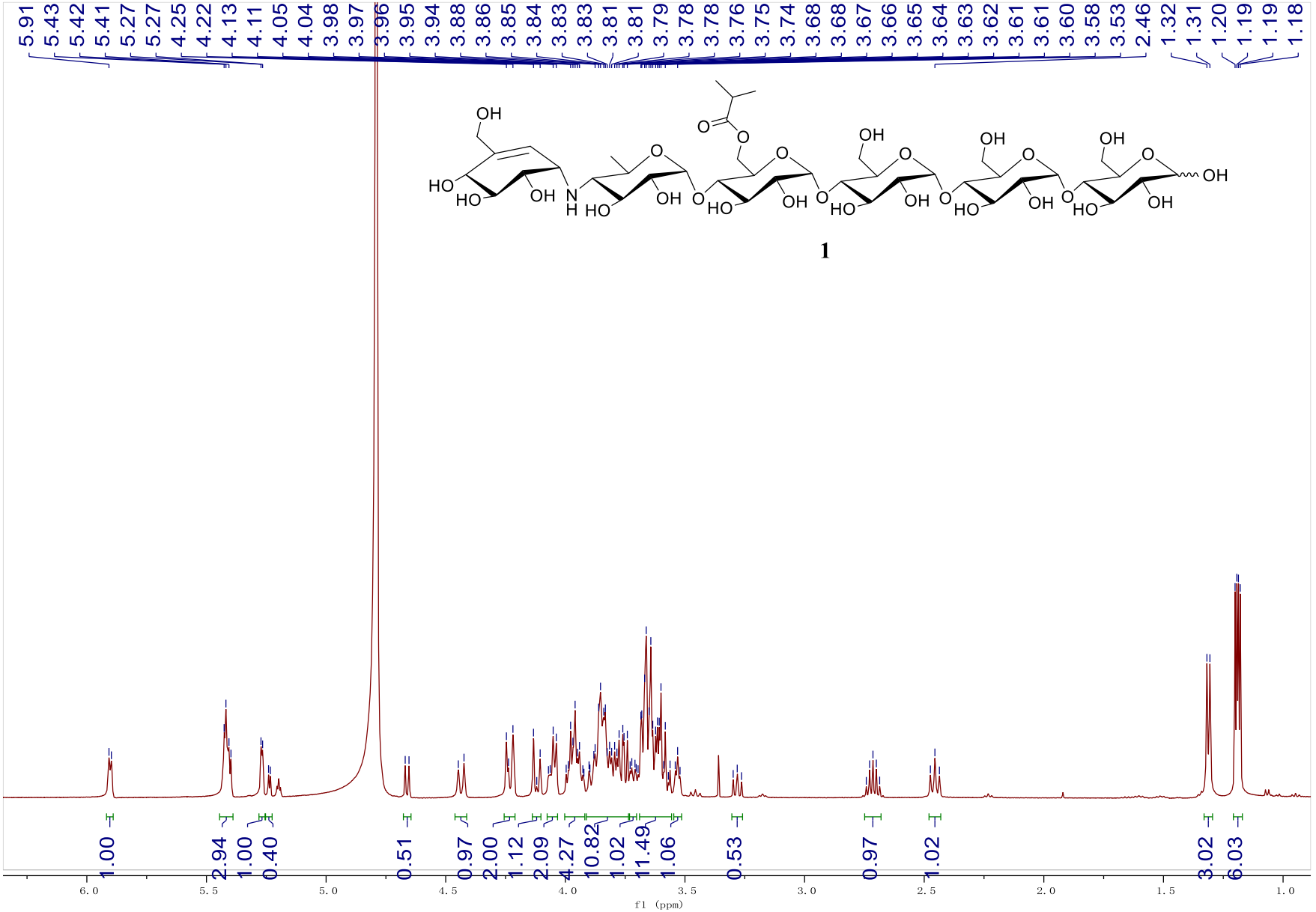

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Figure S1. ^{1}H NMR spectrum of compound **1** (500 MHz, D_2O).

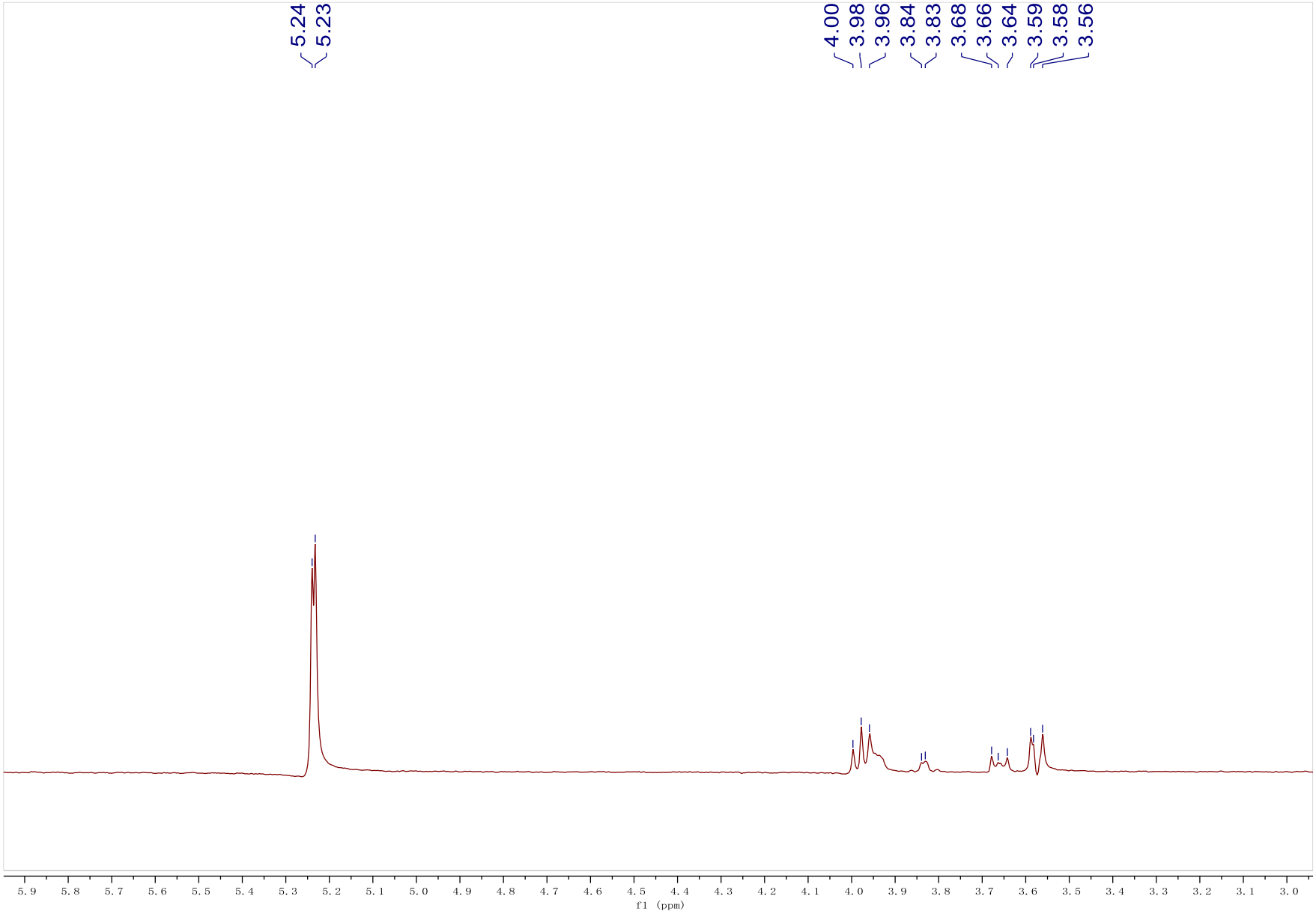

Figure S2. 1D-selective TOCSY spectrum of compound **1** (500 MHz, D_2O, excitation at δ5.24, H-**A**1α).

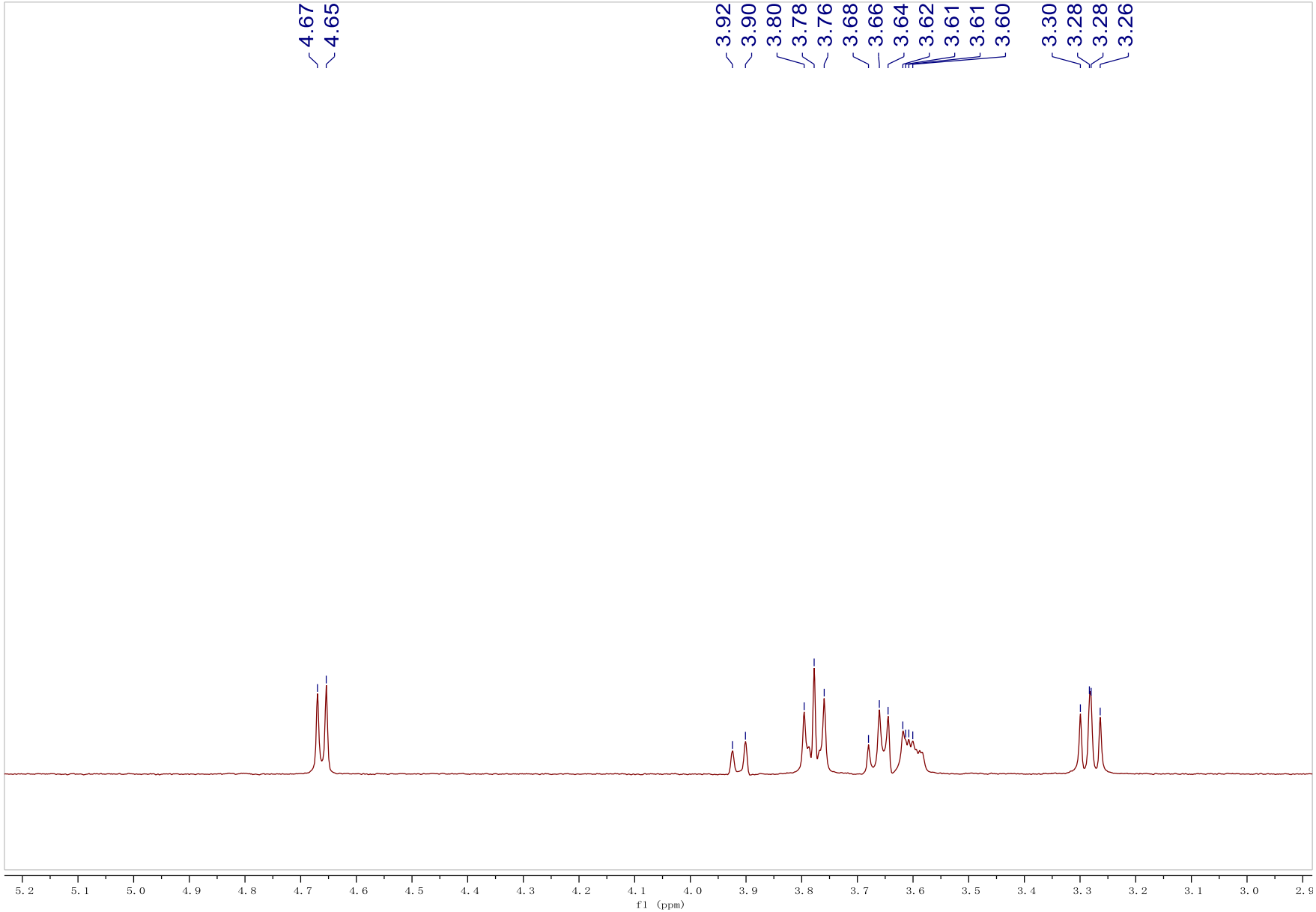

Figure S3. 1D-selective TOCSY spectrum of compound **2** (500 MHz, D_2O, excitation at δ4.66, H-**A**1β).

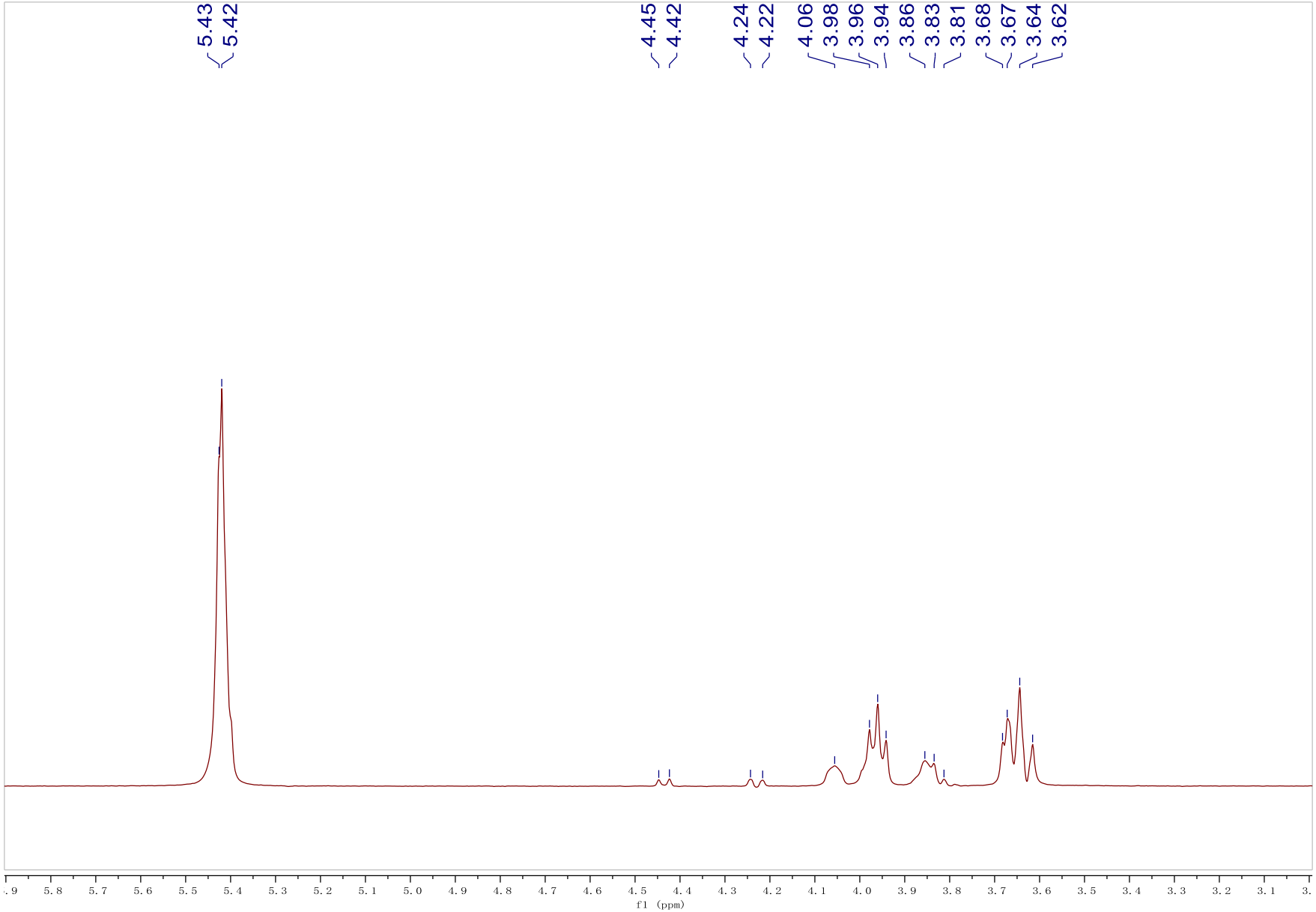

Figure S4. 1D-selective TOCSY spectrum of compound **1** (500 MHz, D_2O, excitation at δ5.42, H-**B**1, H-**C**1, and H-**D**1).

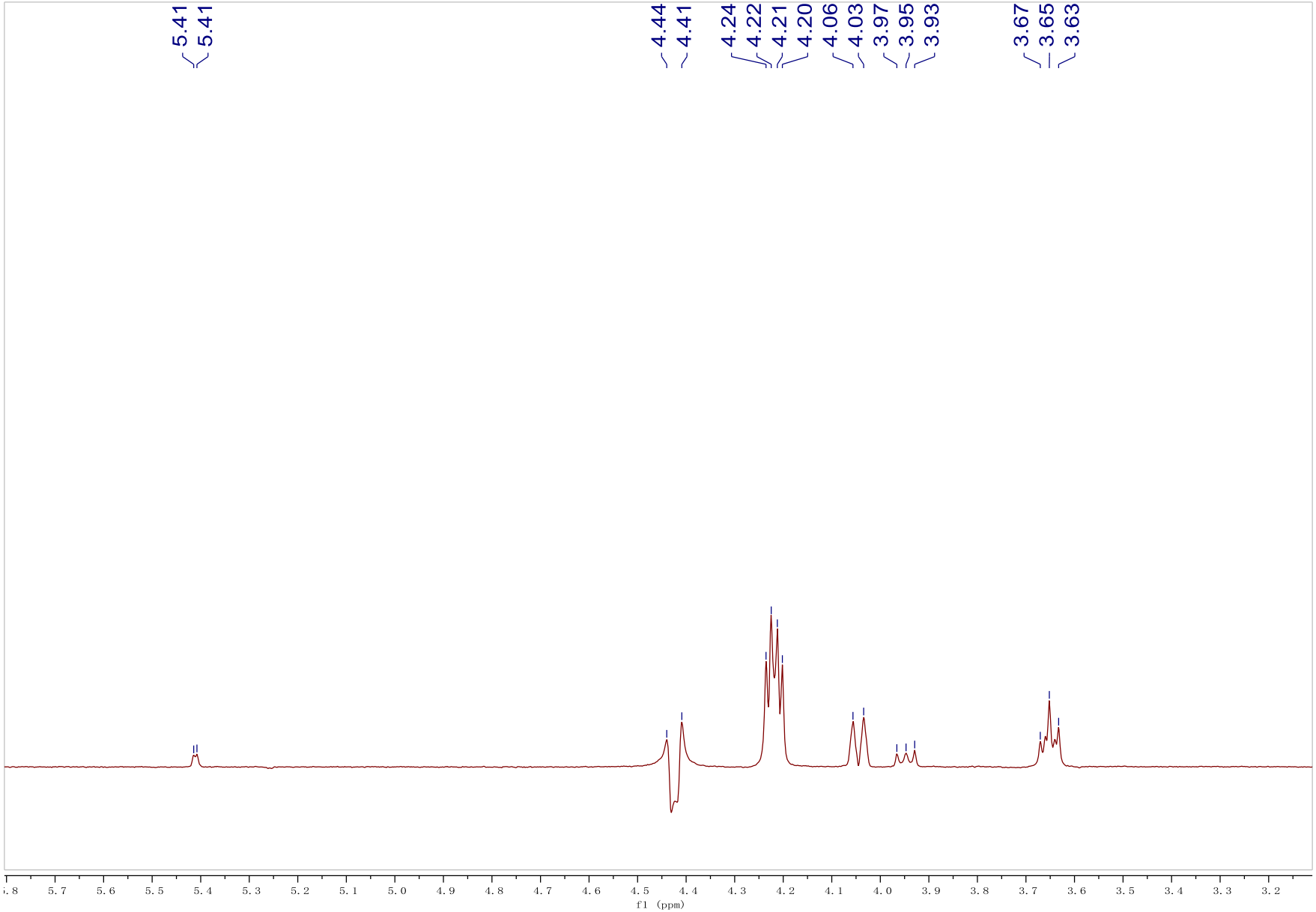

Figure S5. 1D-selective TOCSY spectrum of compound **1** (500 MHz, D_2O, excitation at δ4.44, H-**D**6a).

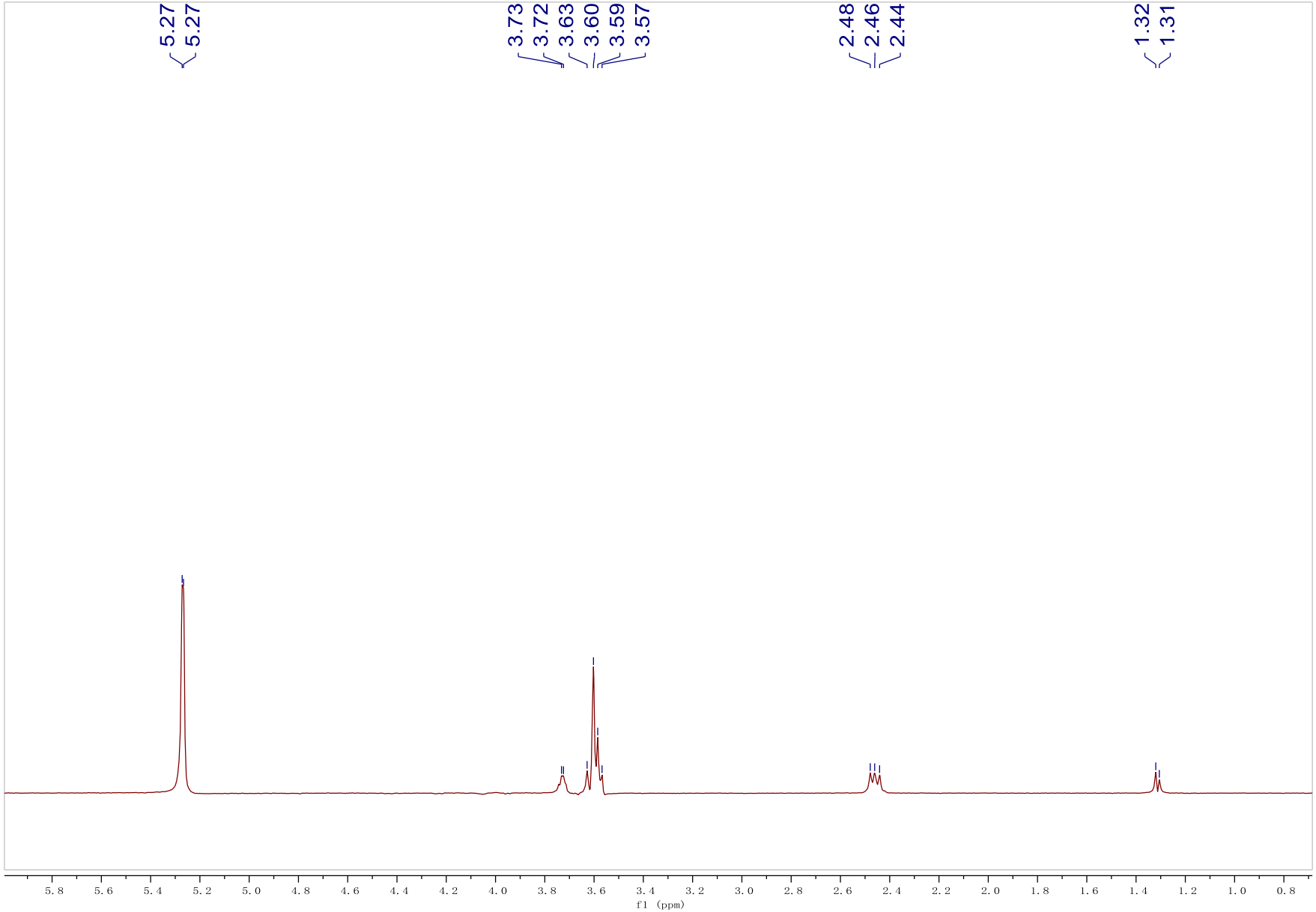

Figure S6. 1D-selective TOCSY spectrum of compound **1** (500 MHz, D_2O, excitation at δ5.27, H-**E**1).

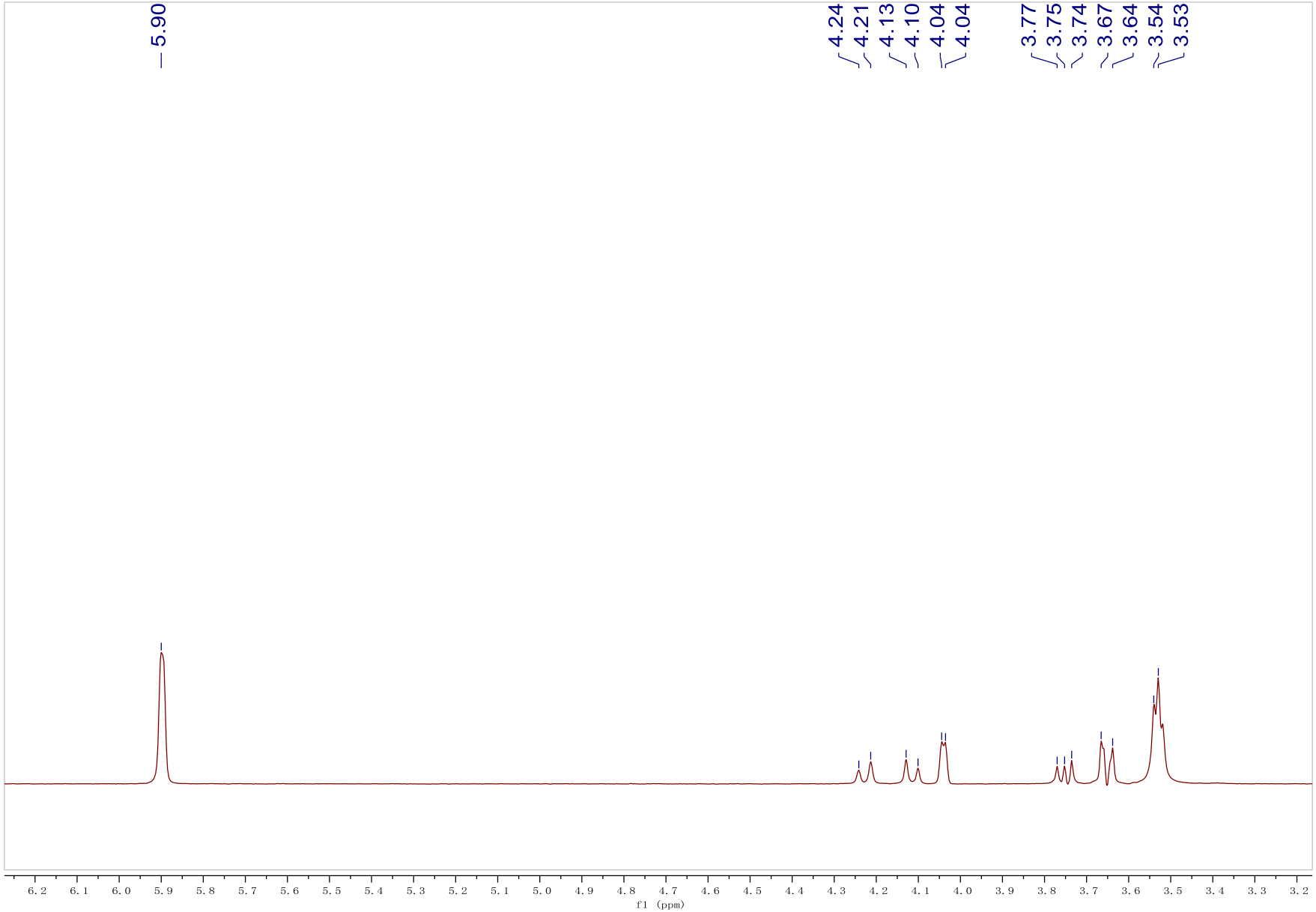

Figure S7. 1D-selective TOCSY spectrum of compound **1** (500 MHz, D_2O, excitation at δ5.90, H-**F**7).

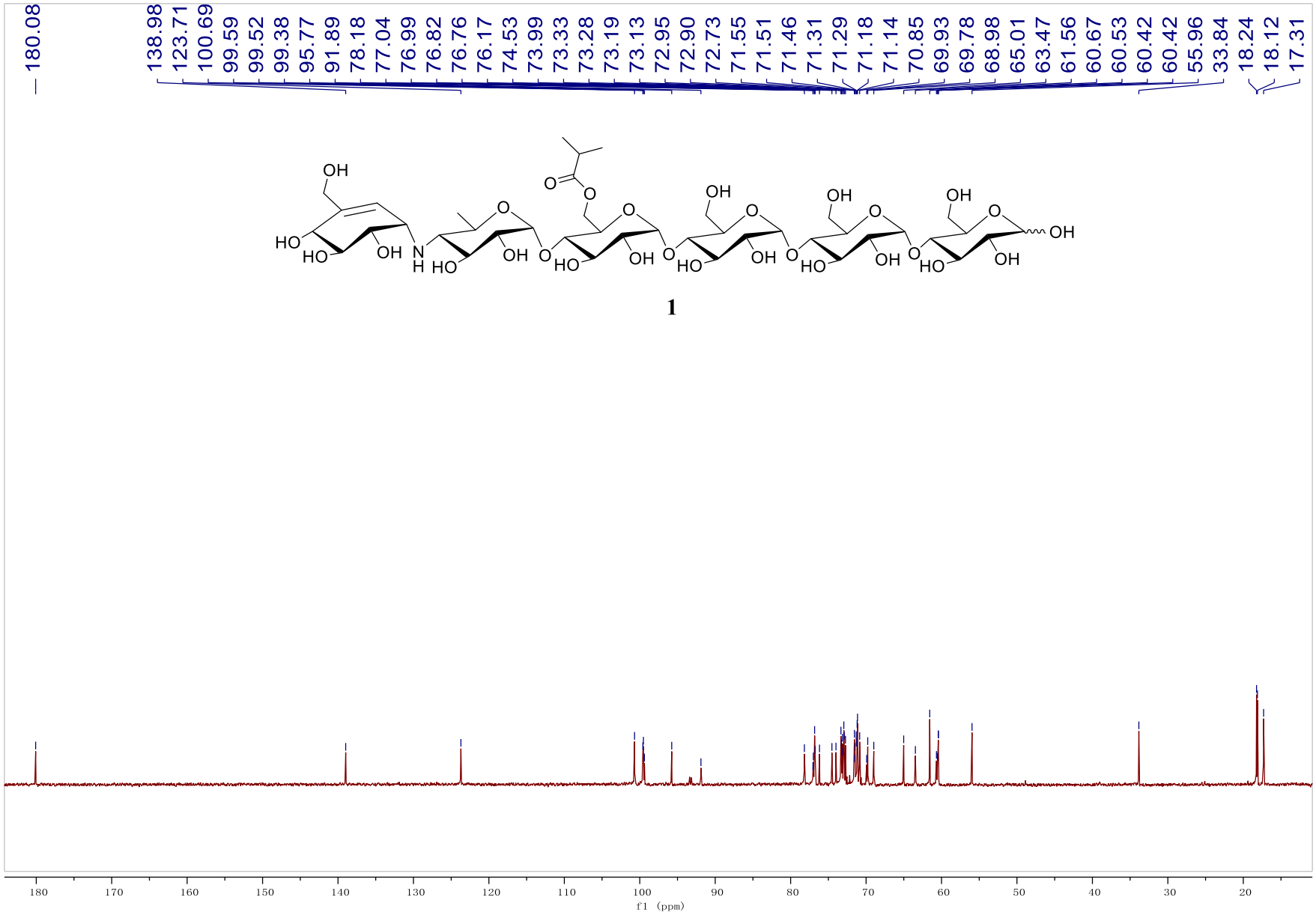

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Figure S8. ^{13}C NMR spectrum of compound **1** (125 MHz, D_2O).

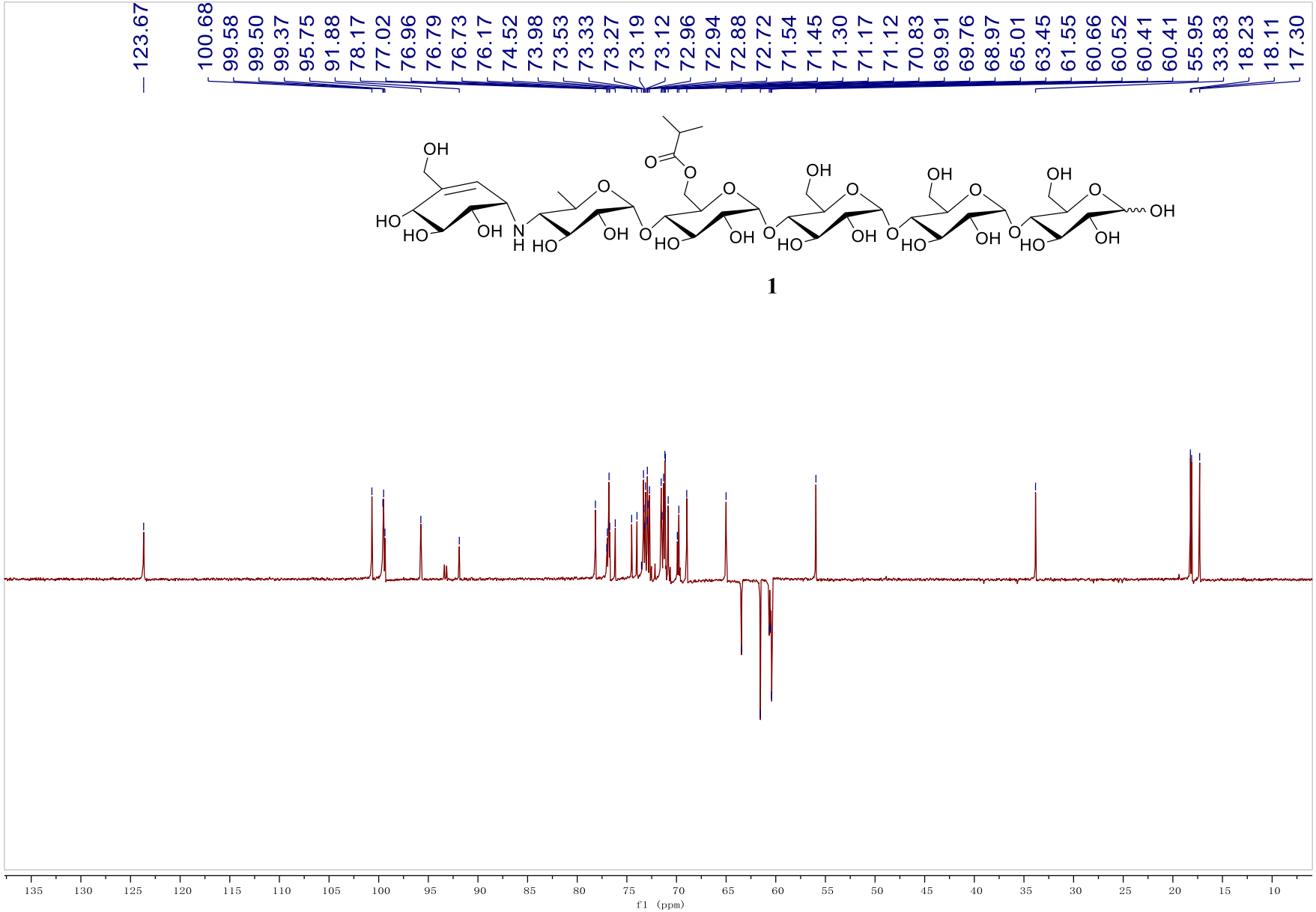

Figure S9. DEPT-135 spectrum of compound **1** (125 MHz, D_2O).

Figure S10. HSQC spectrum of compound **1** (500 MHz, D_2O).

Figure S11. ^{1}H-^{1}H COSY spectrum of compound **1** (500 MHz, D_2O).

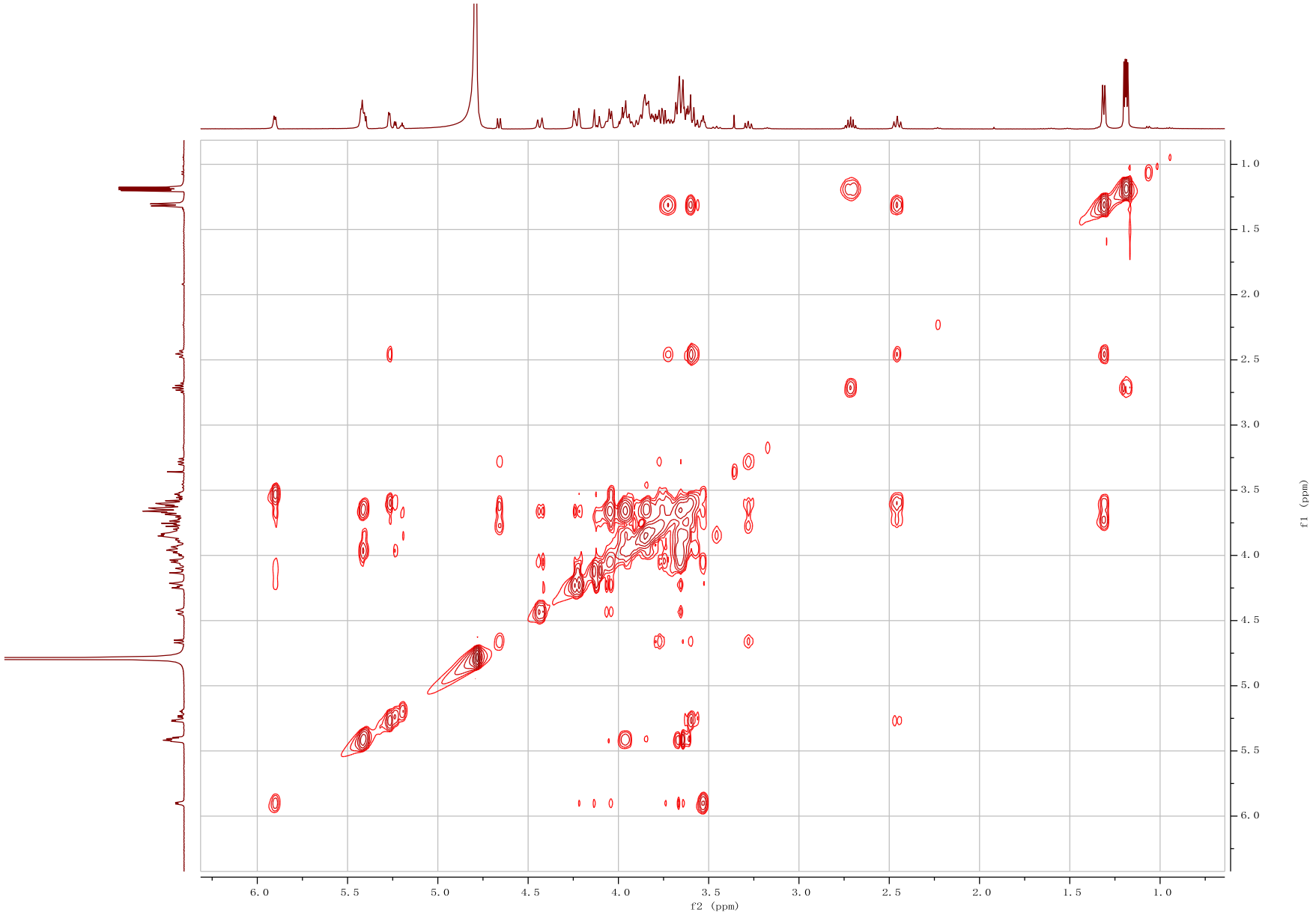

Figure S12. 2D-TCOSY spectrum of compound **1** (500 MHz, D_2O).

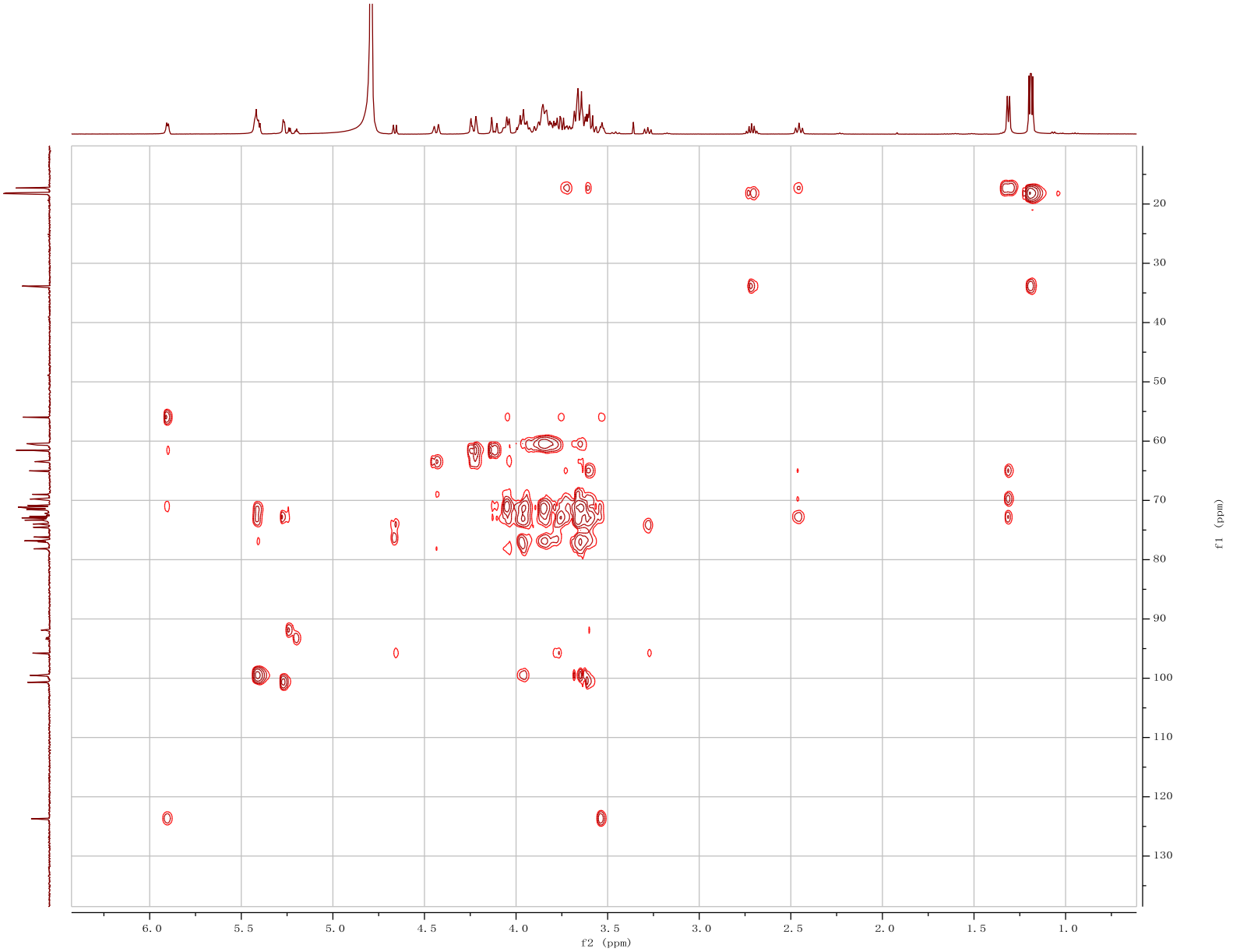

Figure S13. HSQC-TCOSY spectrum of compound **1** (500 MHz, D_2O).

Figure S14. HMBC spectrum of compound **1** (500 MHz, D_2O).

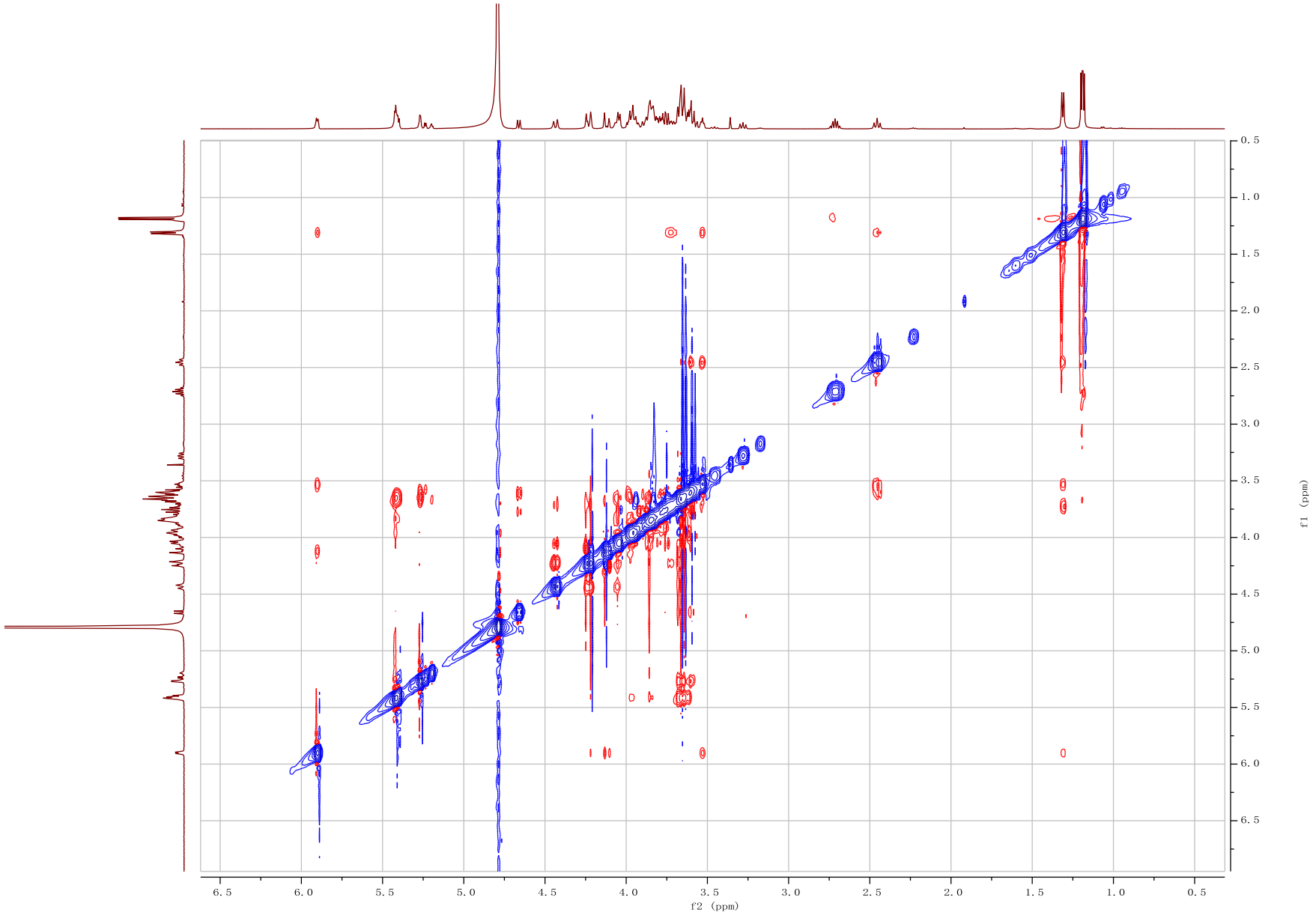

Figure S15. NOESY spectrum of compound **1** (500 MHz, D_2O).

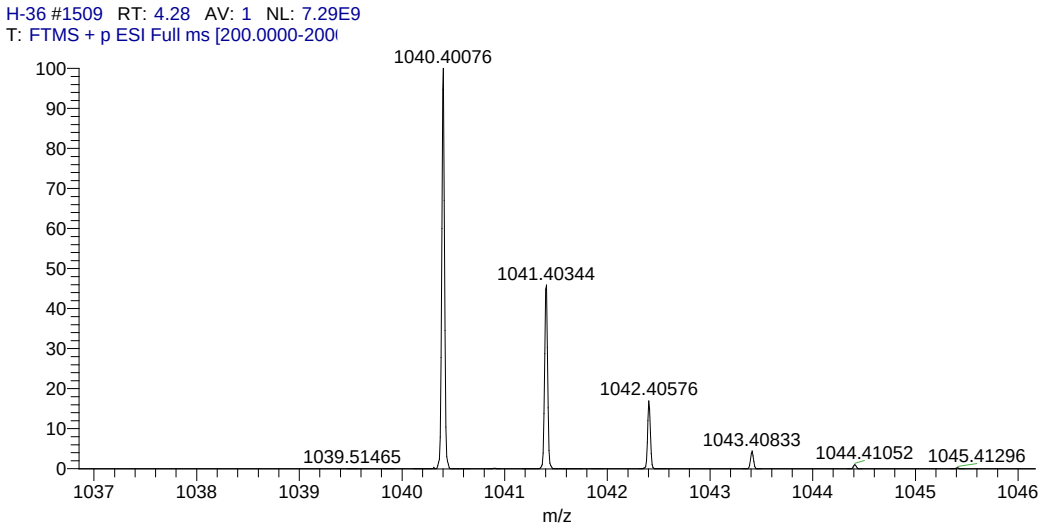

Figure S16. HRESIMS spectrum of compound **1**.

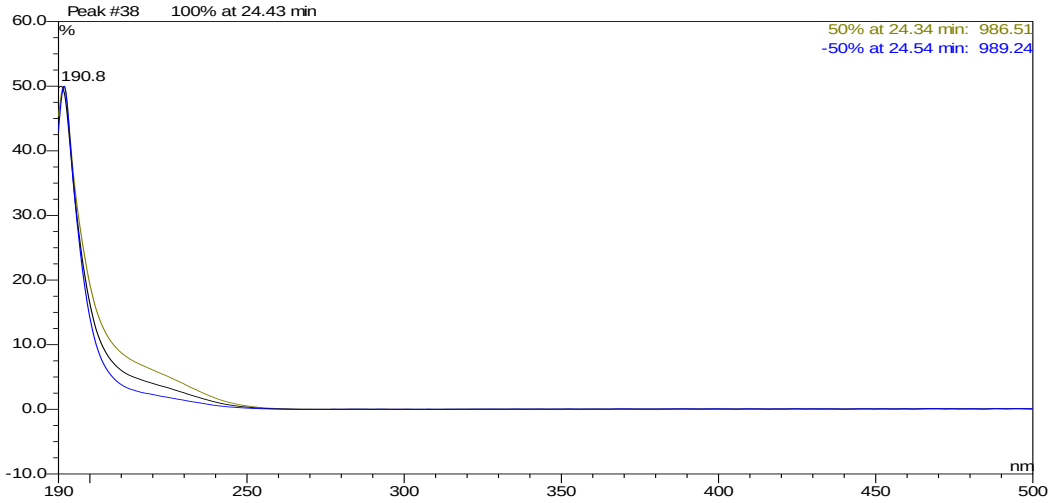

Figure S17. UV spectrum of compound **1**.

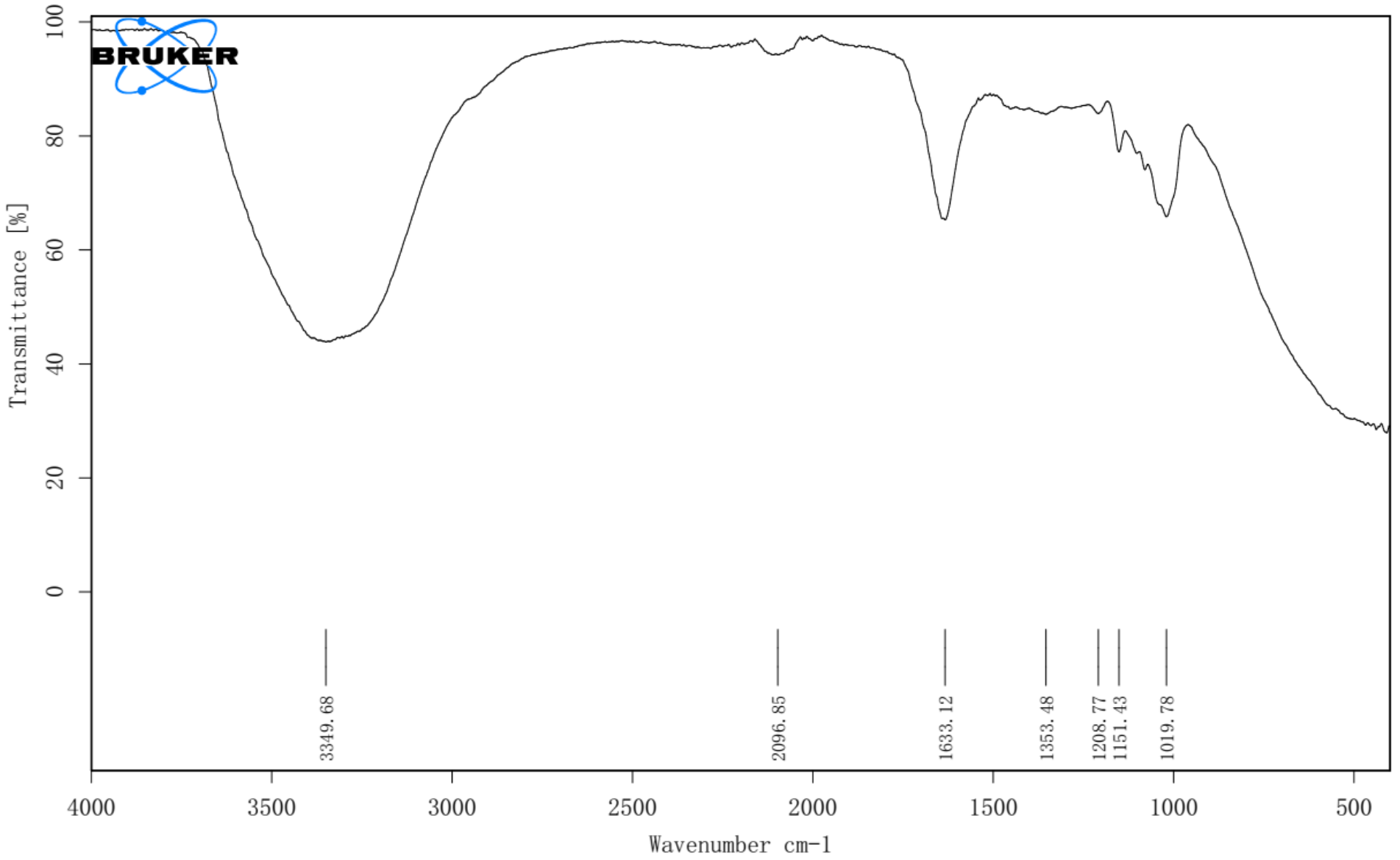

Figure S18. IR spectrum of compound **1**.

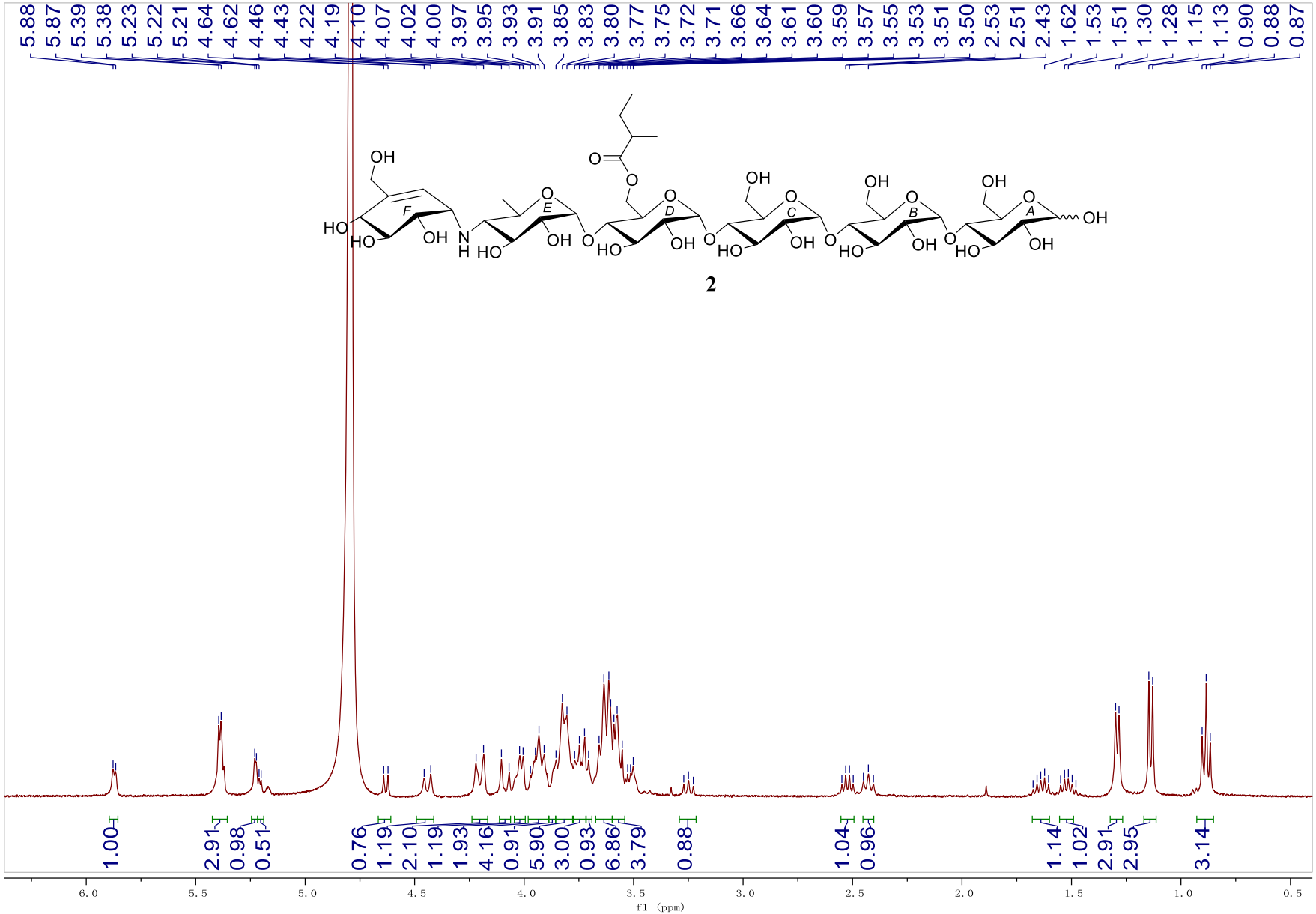

Figure S19. ^{1}H NMR spectrum of compound **2** (500 MHz, D_2O).

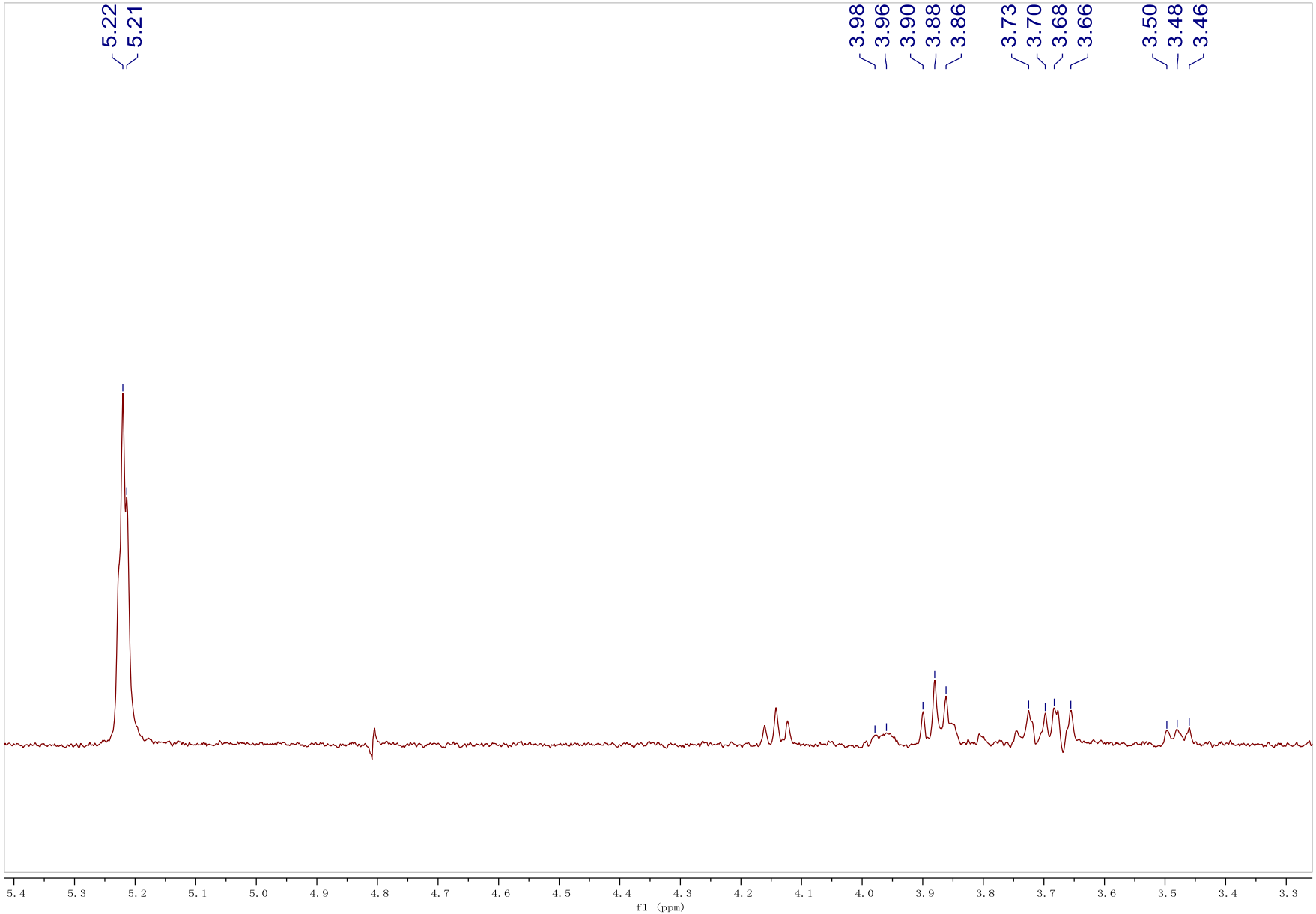

Figure S20. 1D-selective TOCSY spectrum of compound **2** (500 MHz, D_2O, excitation at δ5.21, H-A1α).

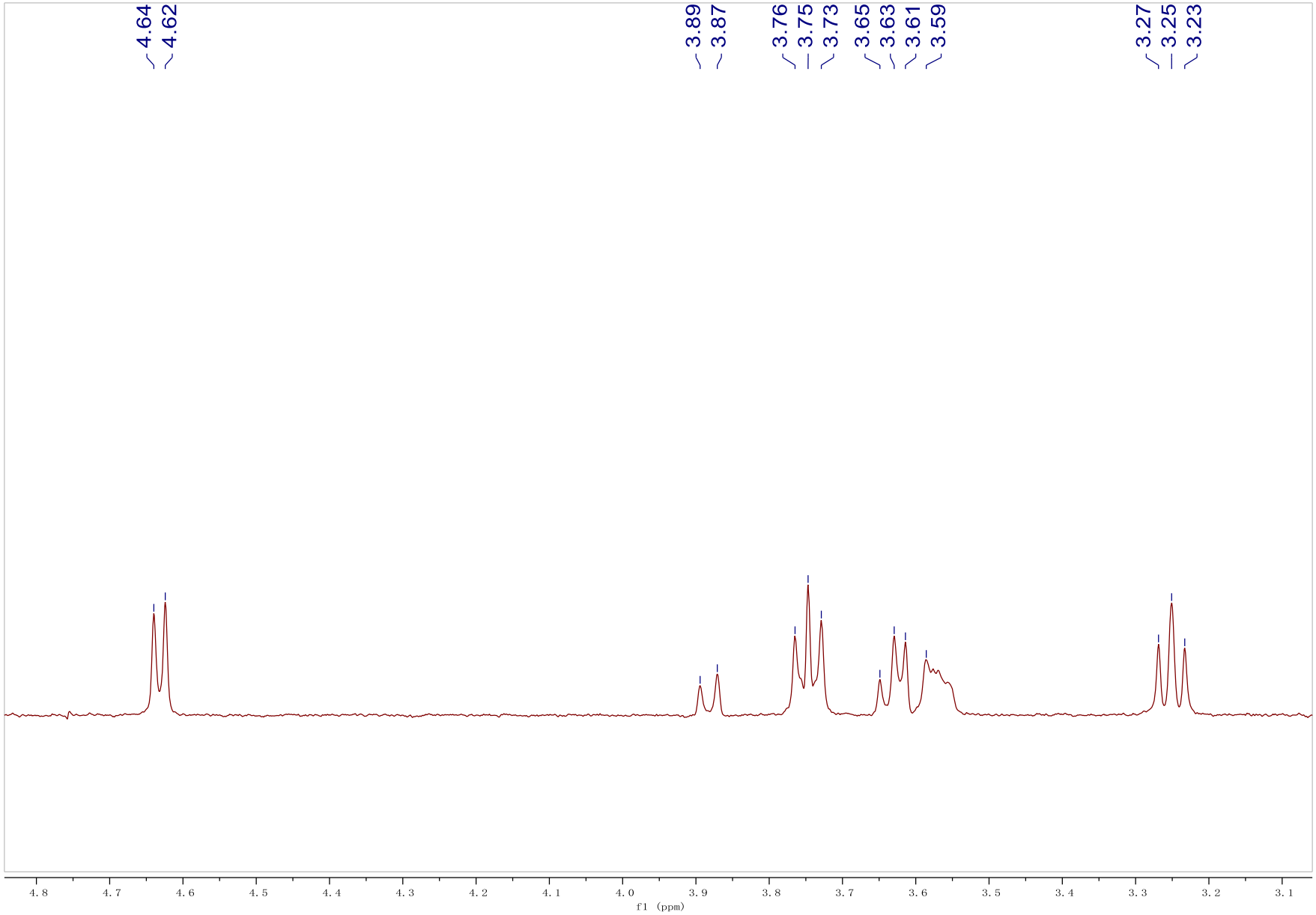

Figure S21. 1D-selective TOCSY spectrum of compound **2** (500 MHz, D_2O, excitation at δ 4.63, H-A1β).

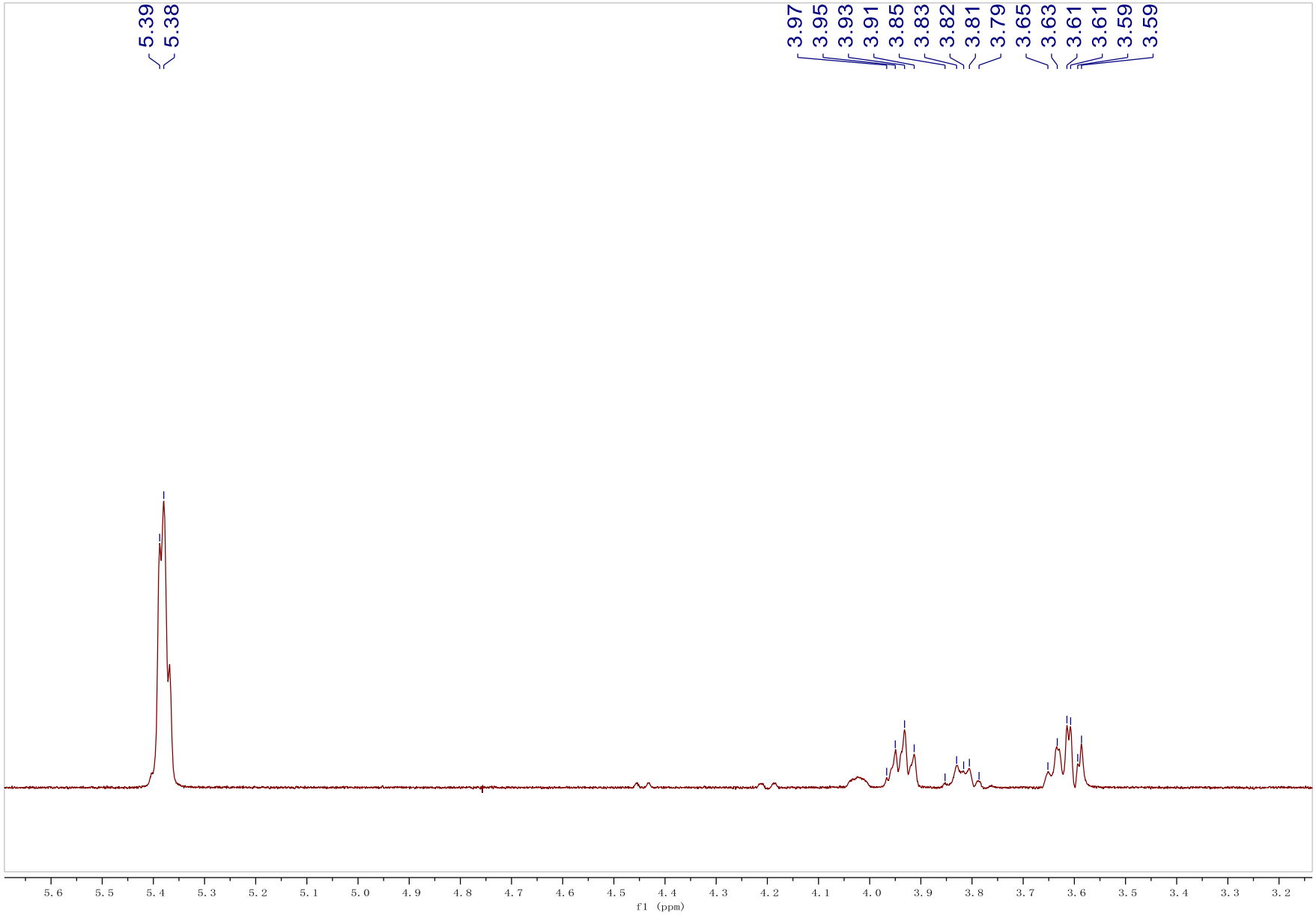

Figure S22. 1D-selective TOCSY spectrum of compound **2** (500 MHz, D_2O, excitation at δ5.38, H-**B**1, **C**1, and **D**1).

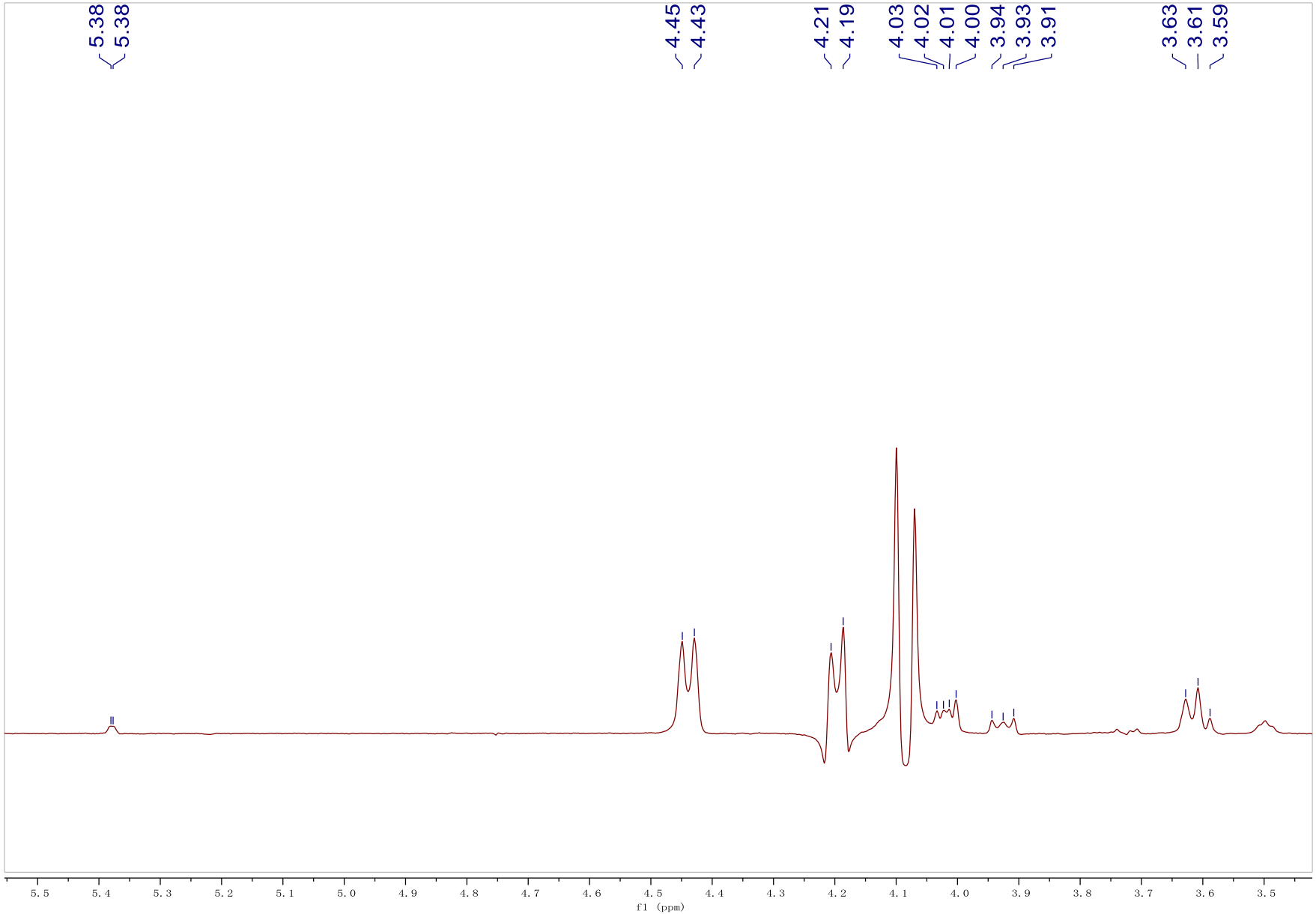

Figure S23. 1D-selective TOCSY spectrum of compound **2** (500 MHz, D_2O, excitation at δ 4.44, H-**D**6a).

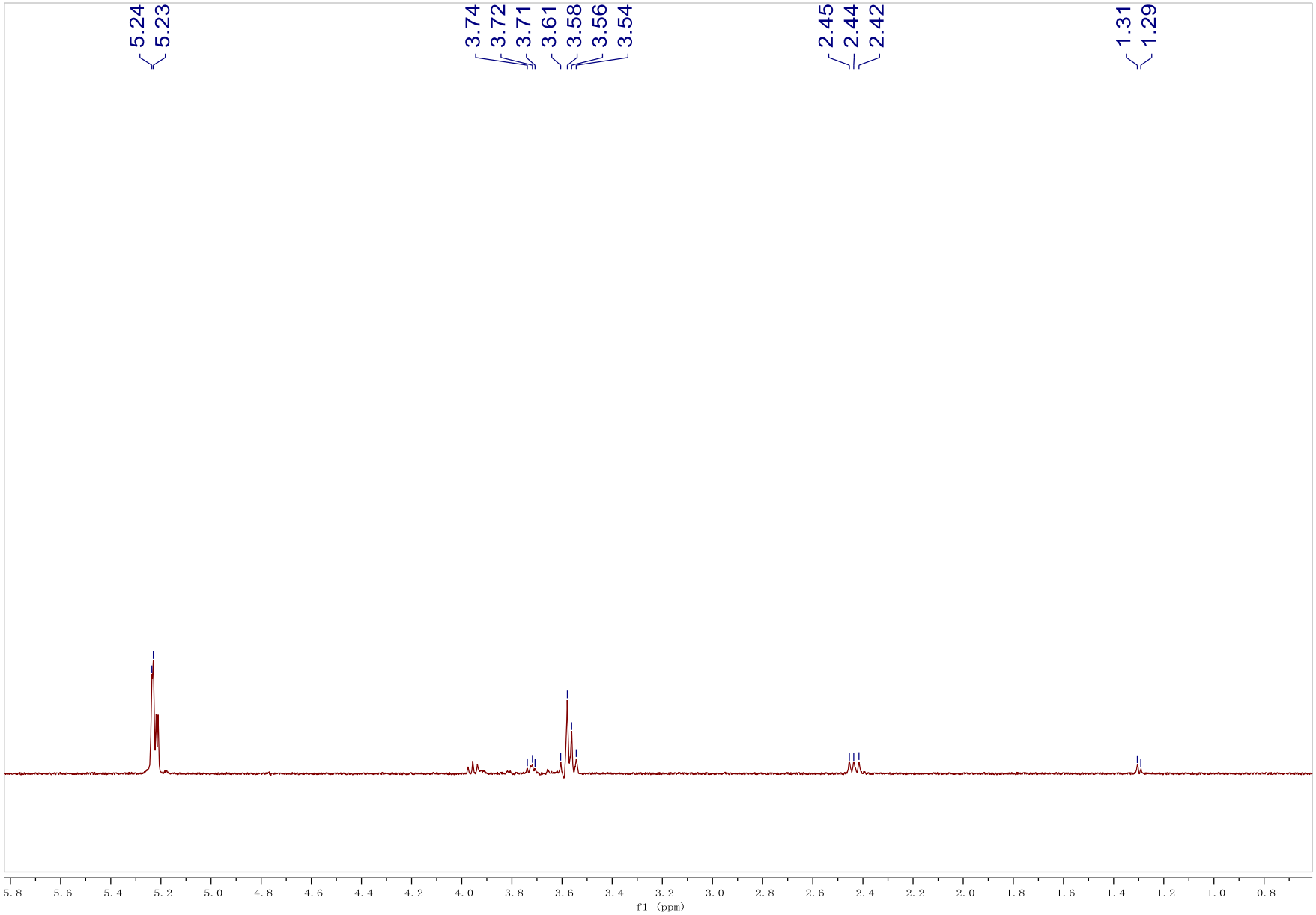

Figure S24. 1D-selective TOCSY spectrum of compound **2** (500 MHz, D_2O, excitation at δ5.23, H-**E**1).

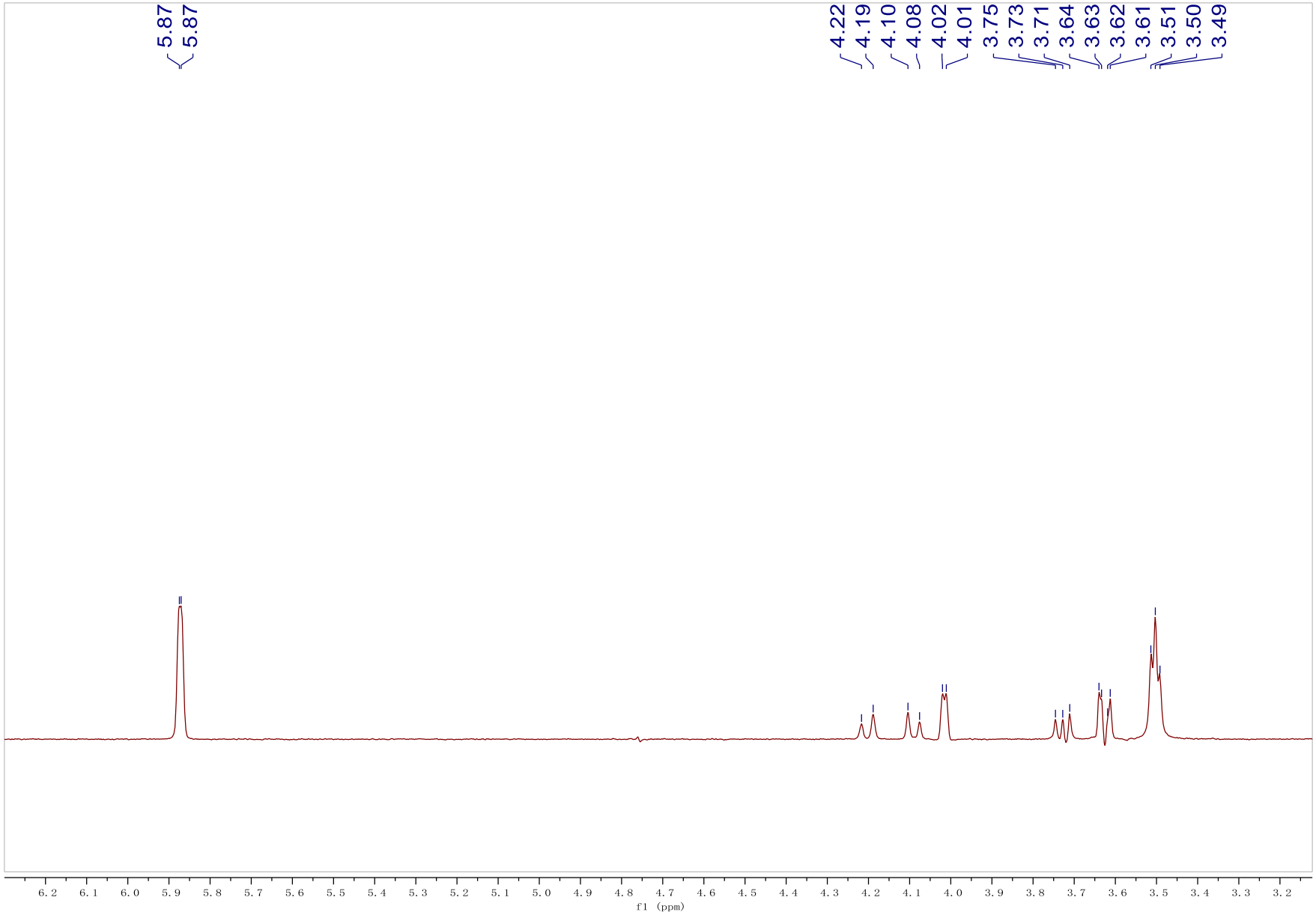

Figure S25. 1D-selective TOCSY spectrum of compound **2** (500 MHz, D_2O, excitation at δ5.87, H-**F**1).

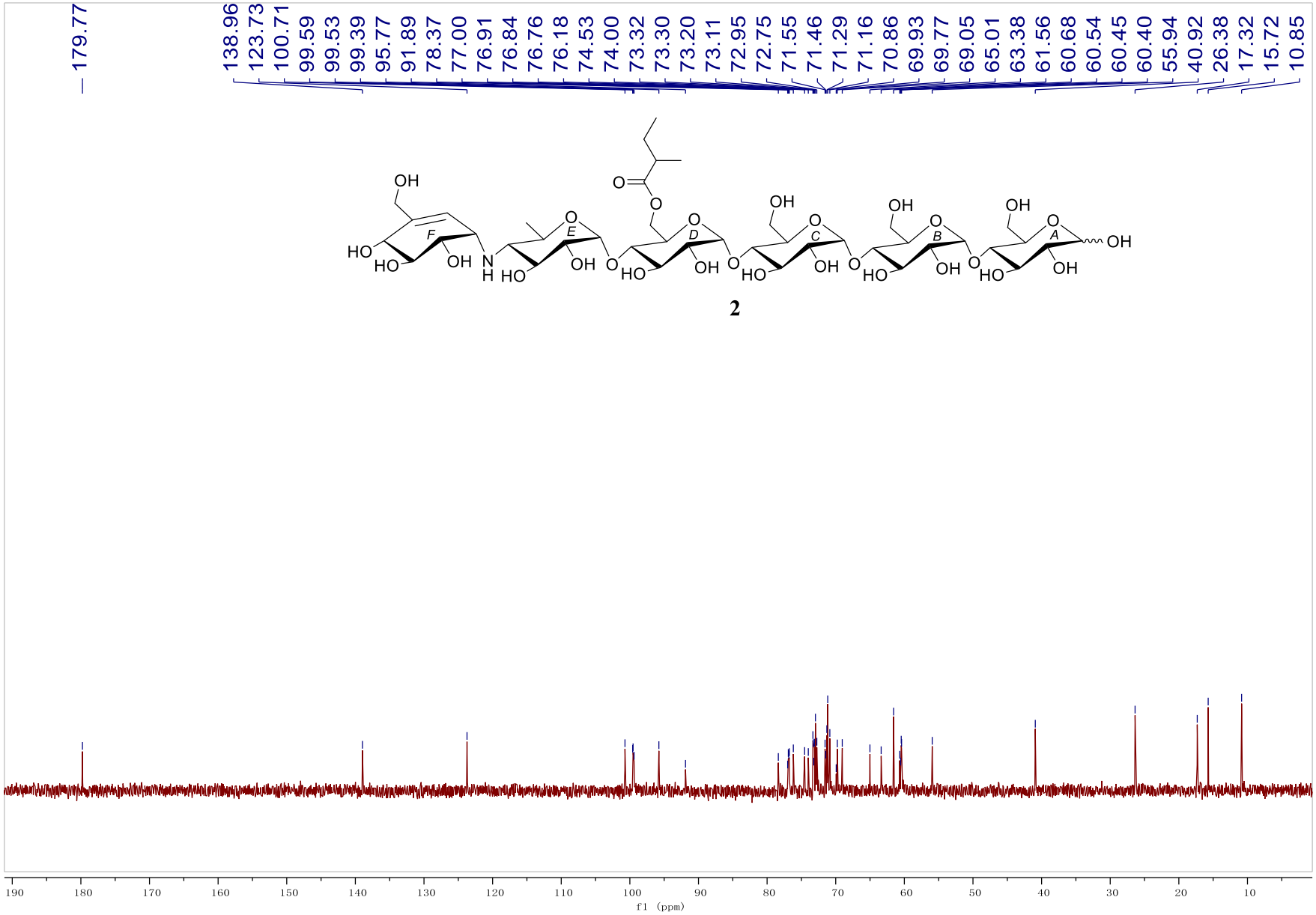

Figure S26. ^{13}C NMR spectrum of compound **2** (125 MHz, D_2O).

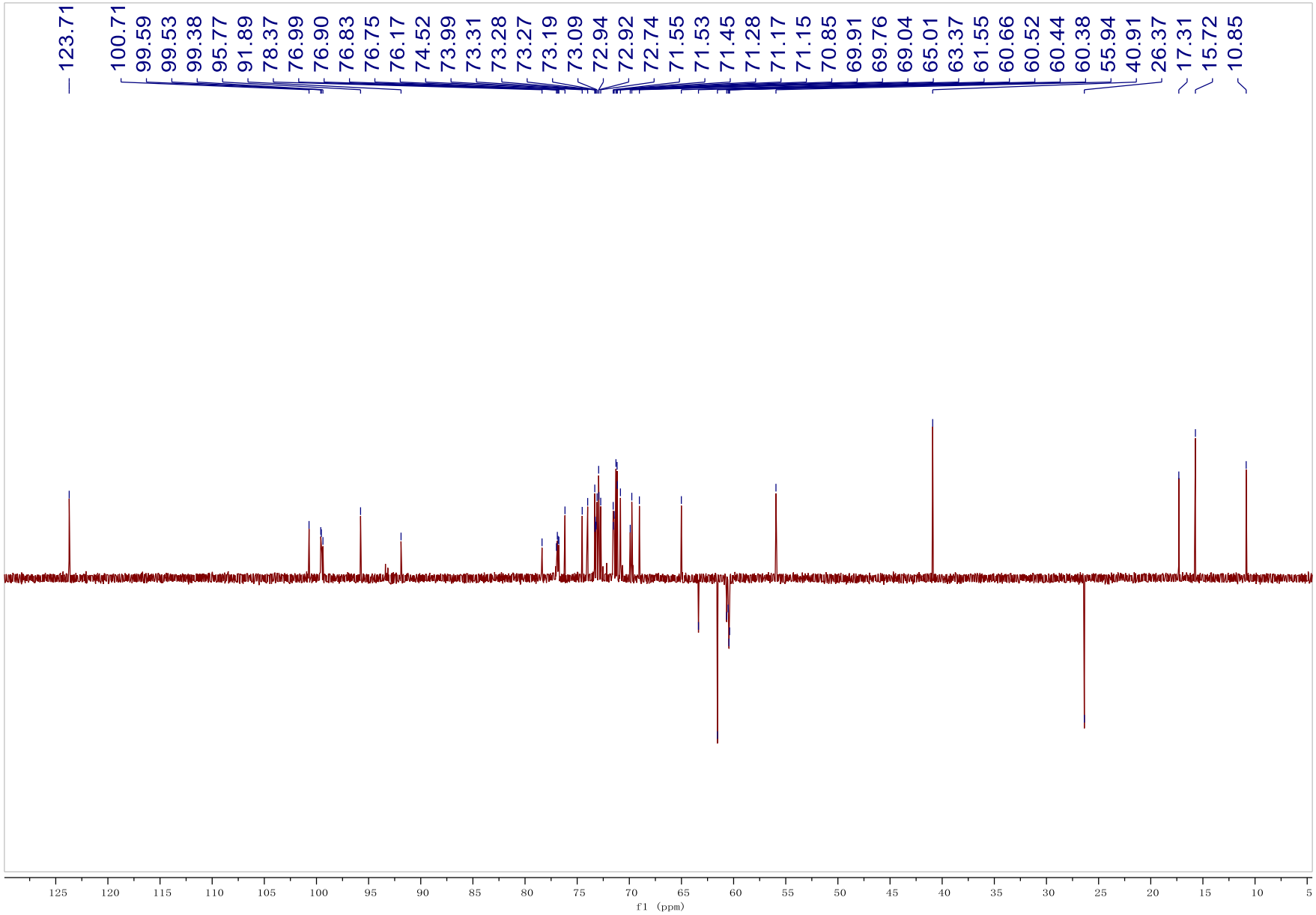

Figure S27. DEPT-135 spectrum of compound **2** (125 MHz, D_2O).

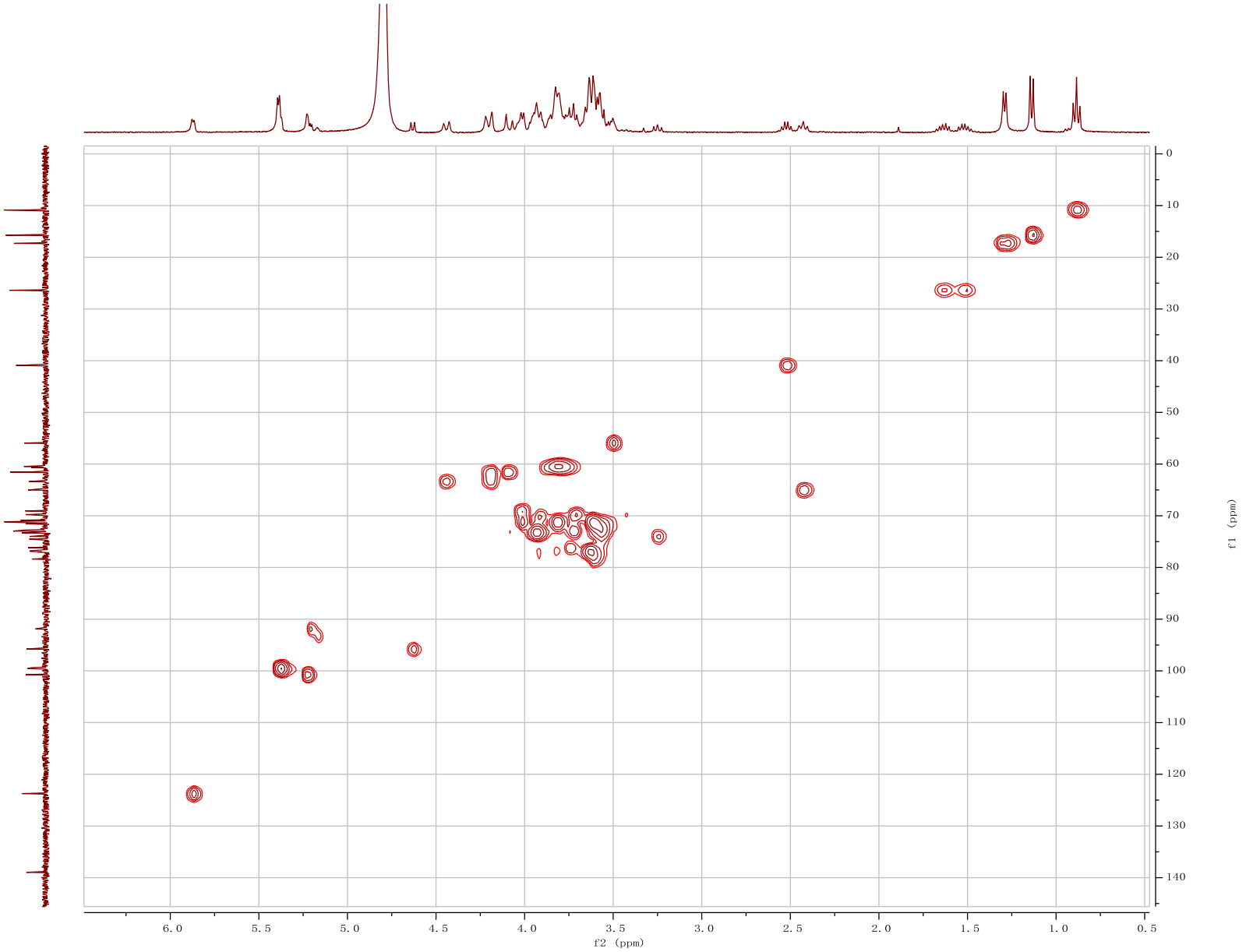

Figure S28. HSQC spectrum of compound **2** (500 MHz, D_2O).

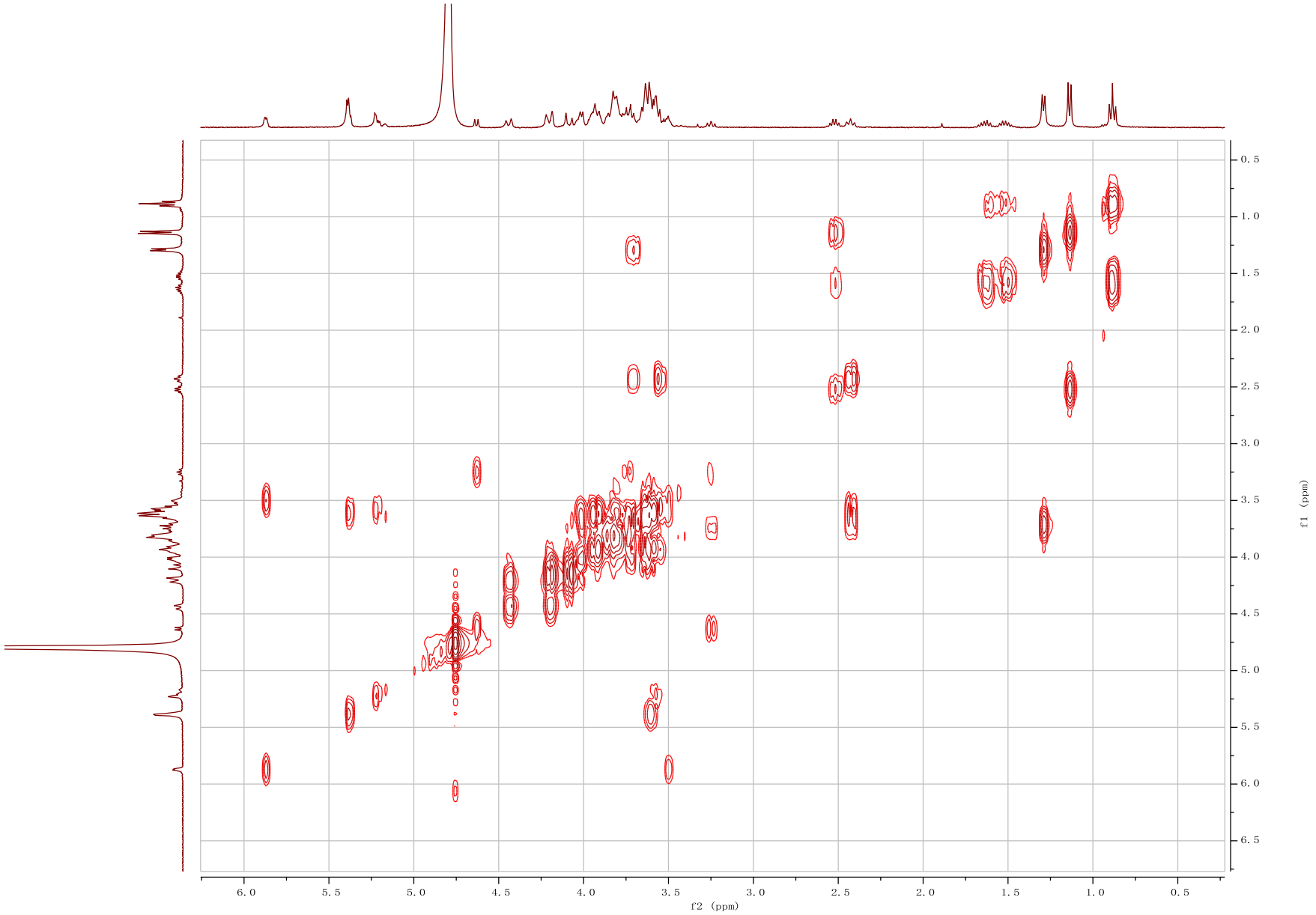

Figure S29. ^{1}H-^{1}H COSY spectrum of compound **2** (500 MHz, D_2O).

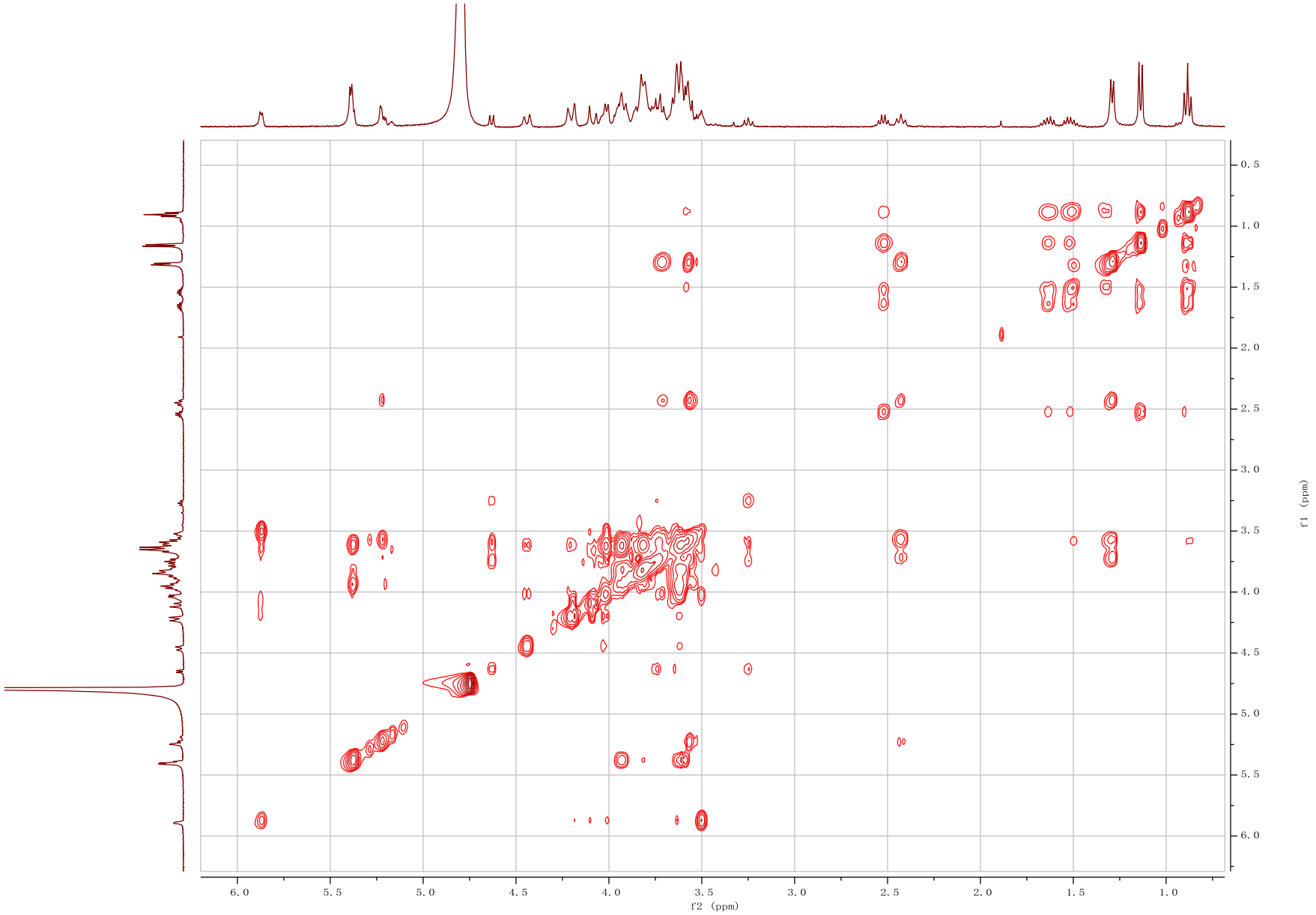

Figure S30. 2D-TCOSY spectrum of compound **2** (500 MHz, D_2O).

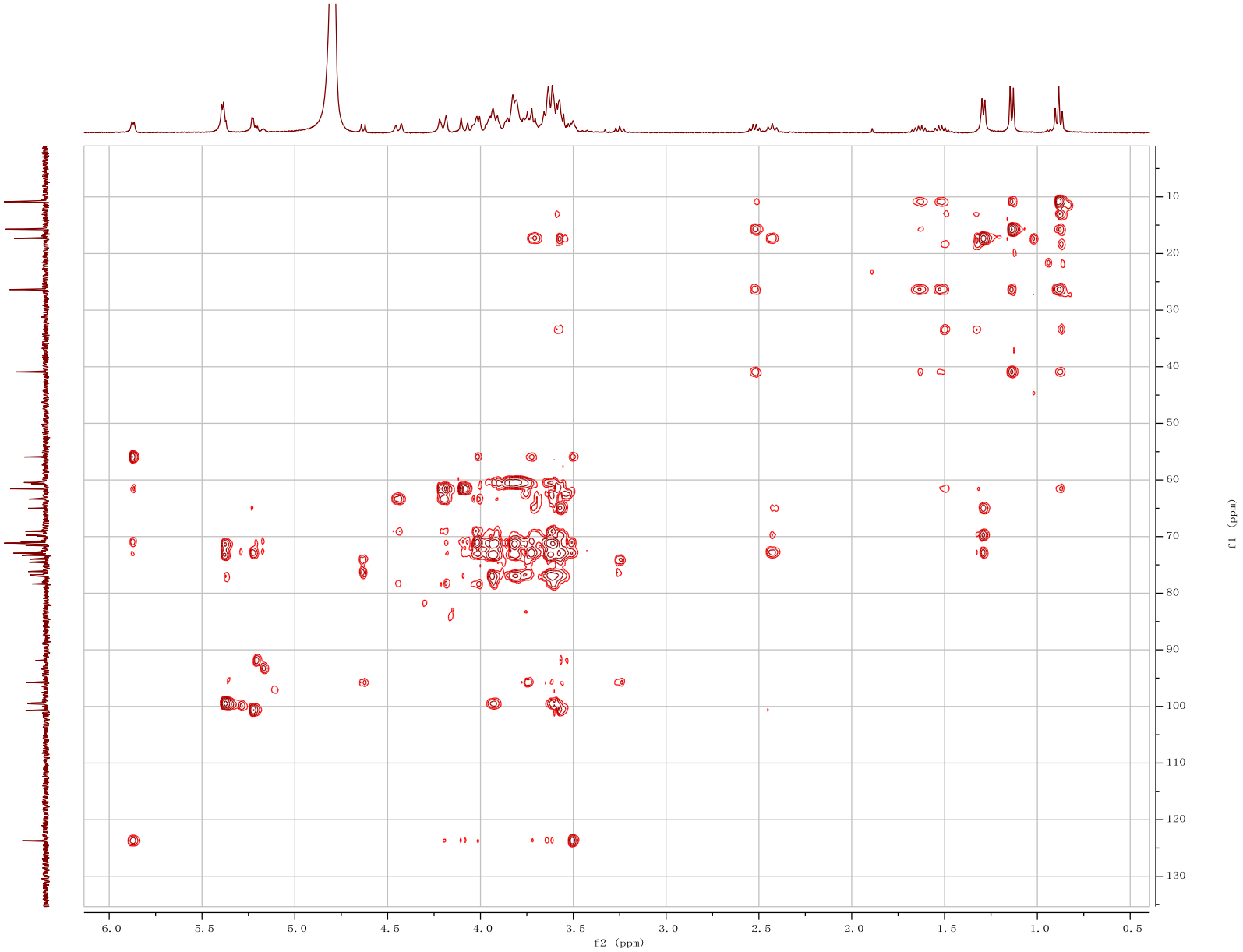

Figure S31. HSQC-TCOSY spectrum of compound **2** (500 MHz, D_2O).

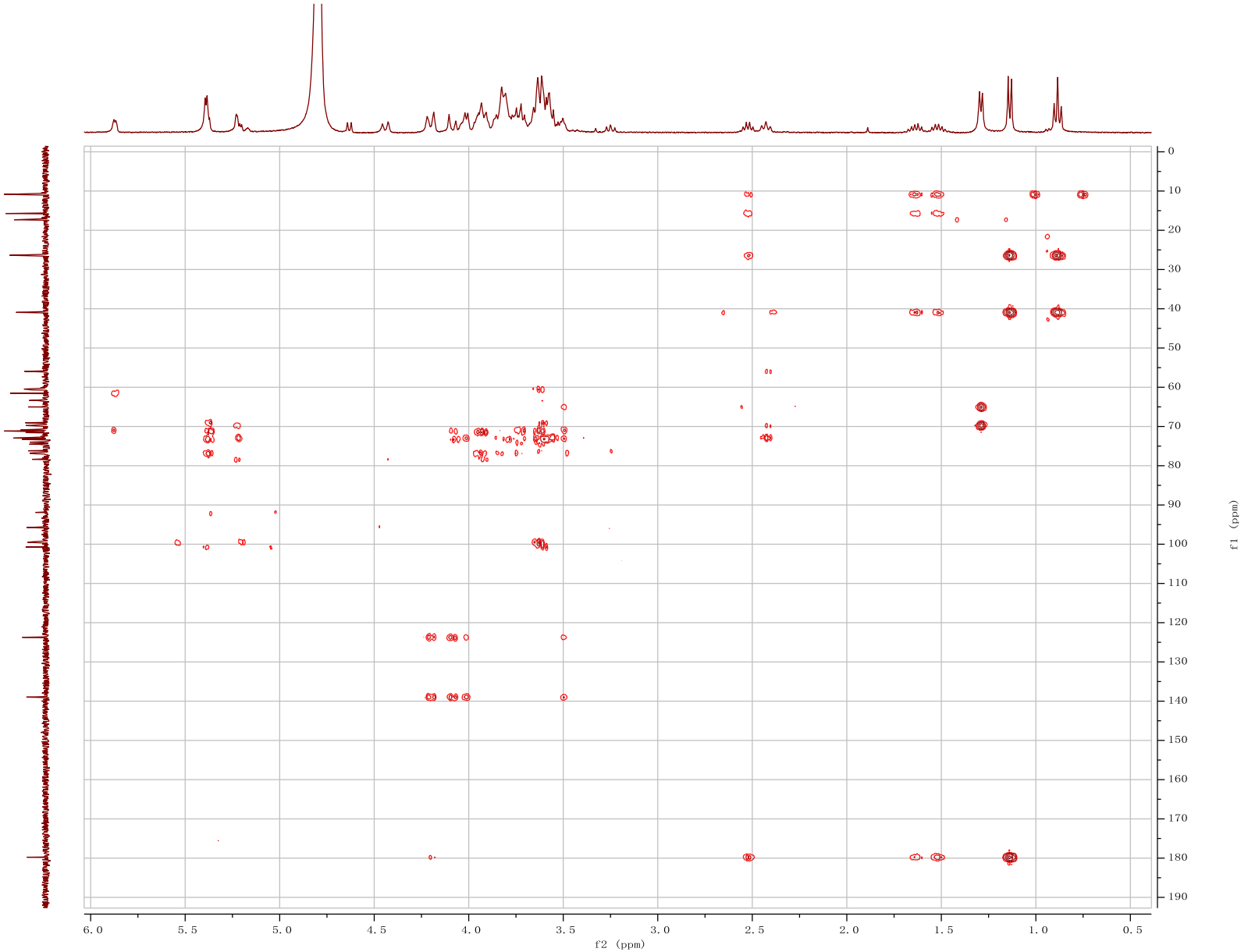

Figure S32. HMBC spectrum of compound **2** (500 MHz, D_2O).

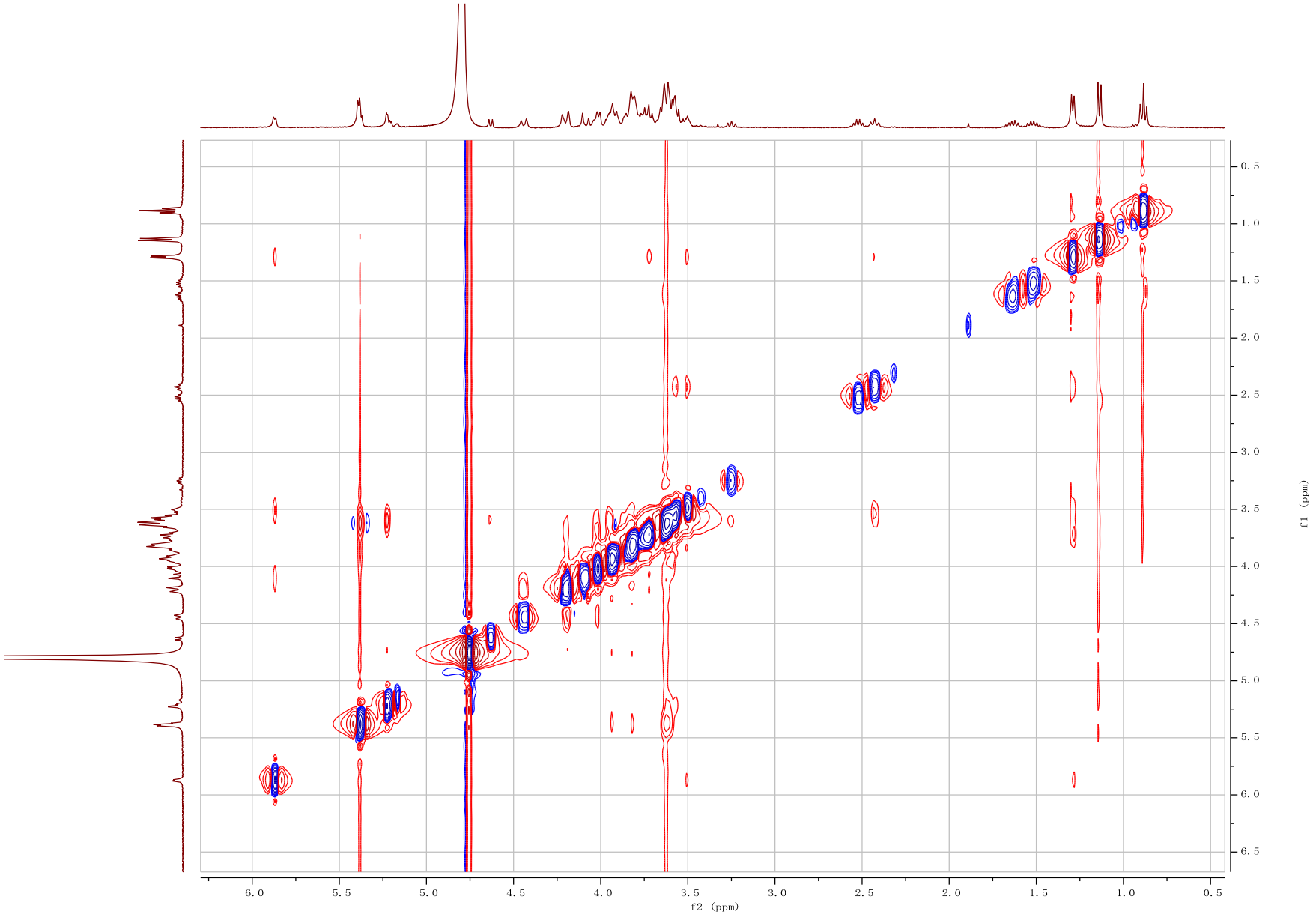

Figure S33. NOESY spectrum of compound **2** (500 MHz, D_2O).

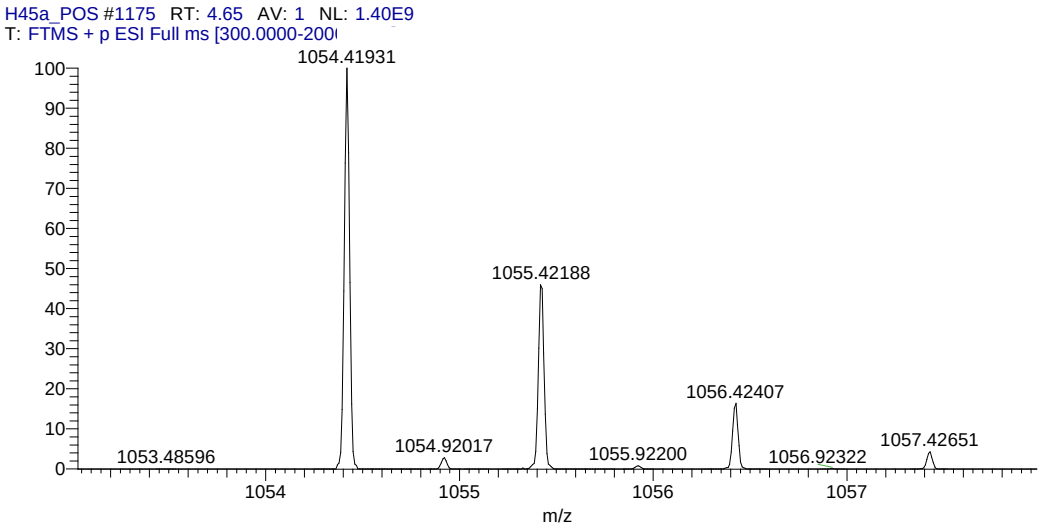

Figure S34. HRESIMS spectrum of compound **2**.

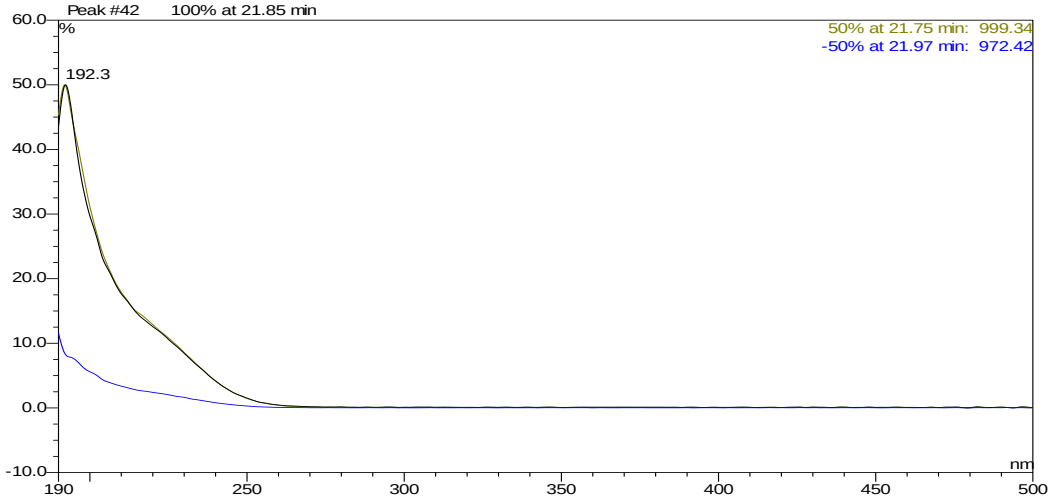

Figure S35. UV spectrum of compound **2**.

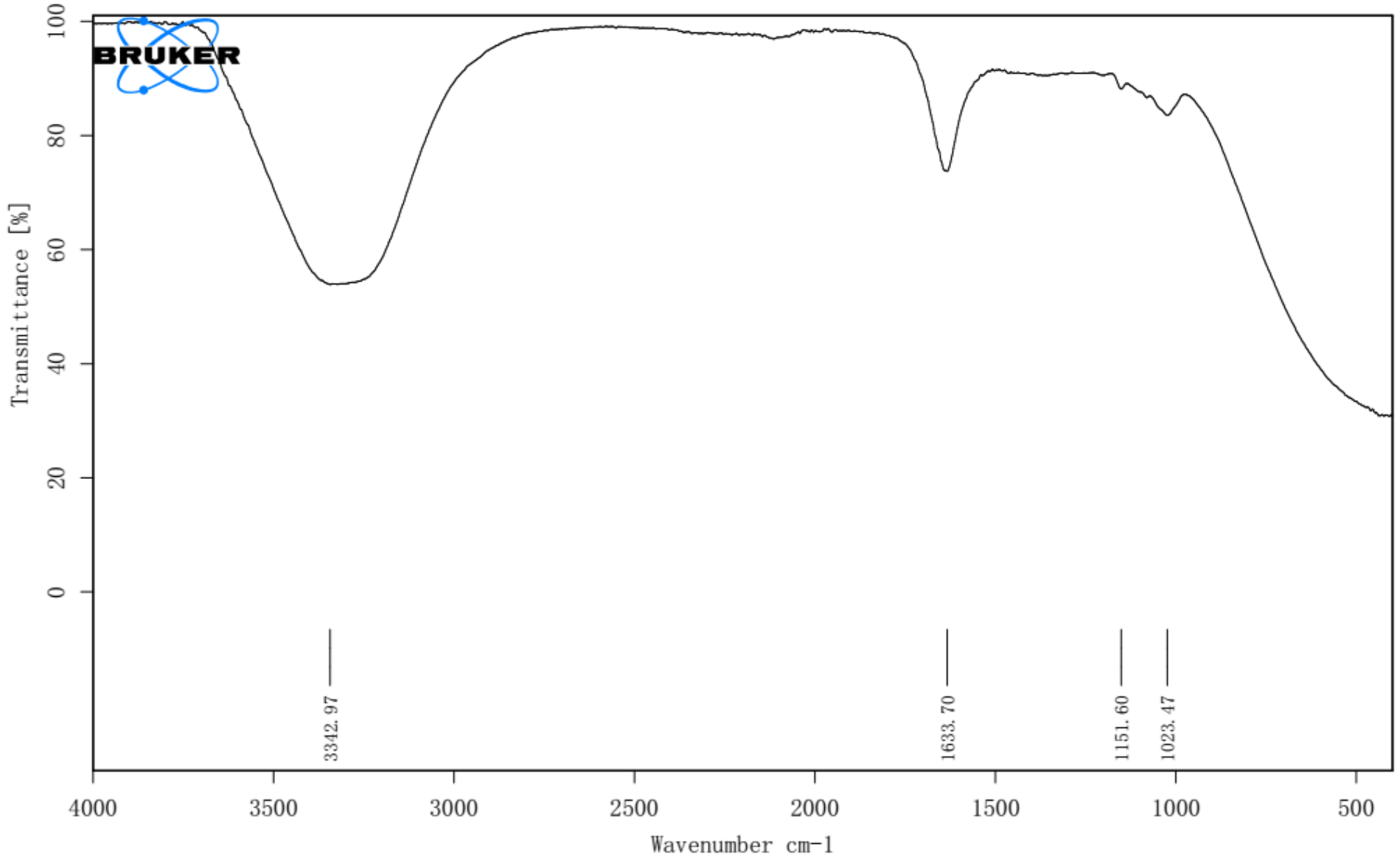

Figure S36. IR spectrum of compound **2**.

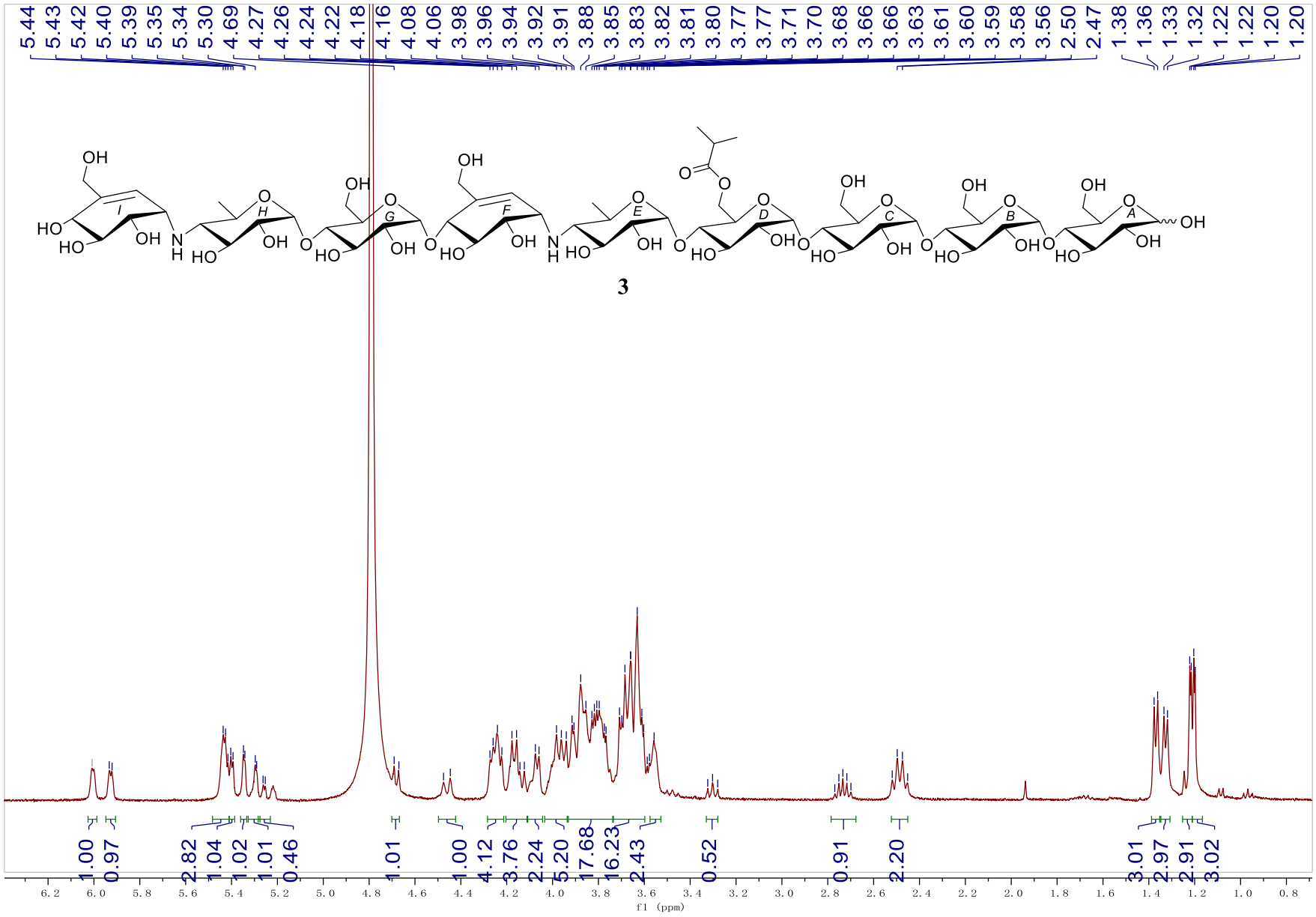

Figure S37. ^{1}H NMR spectrum of compound **1** (500 MHz, D_2O).

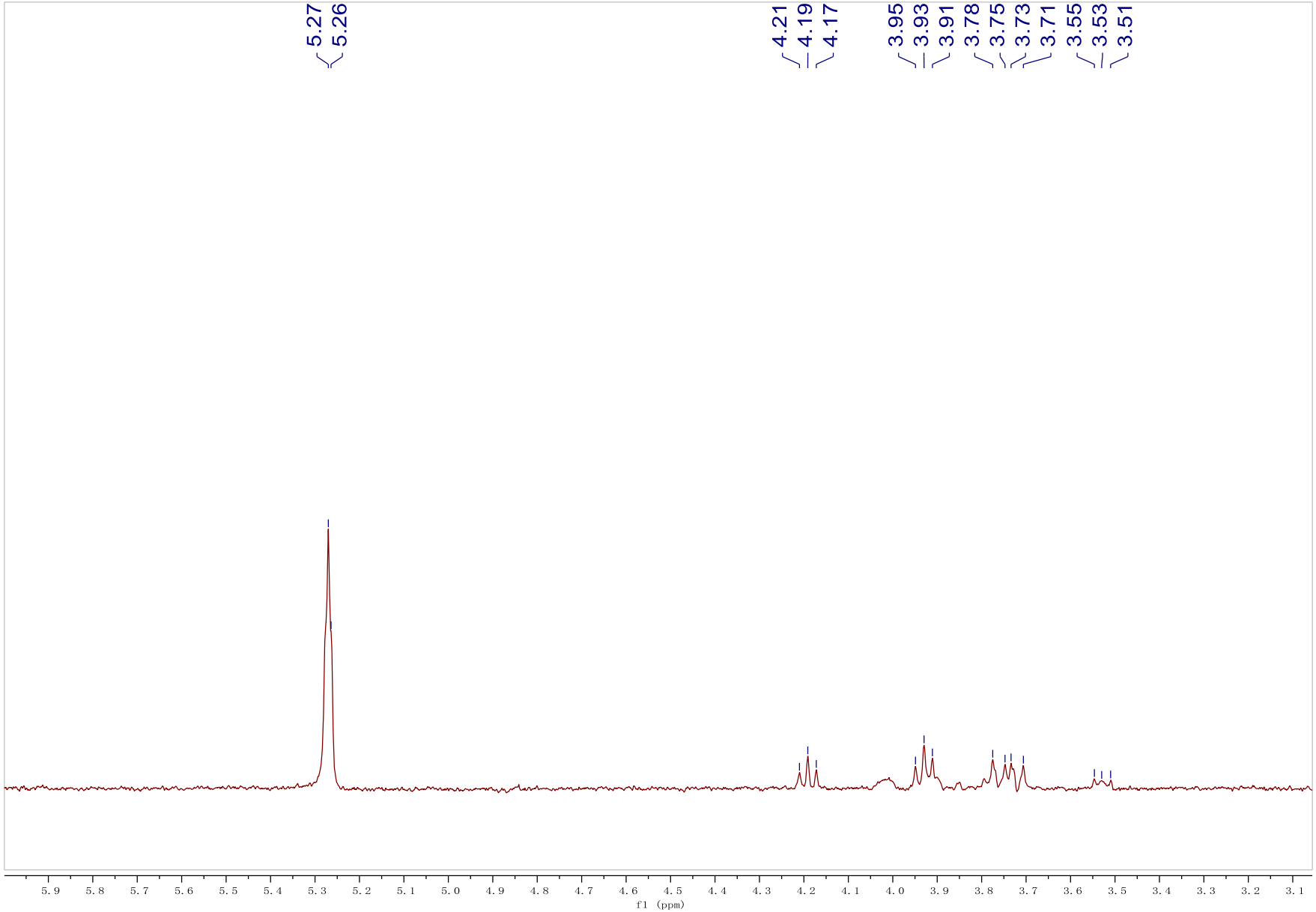

Figure S38. 1D-selective TOCSY spectrum of compound **3** (500 MHz, D_2O, excitation at δ5.26, H-**A**1α).

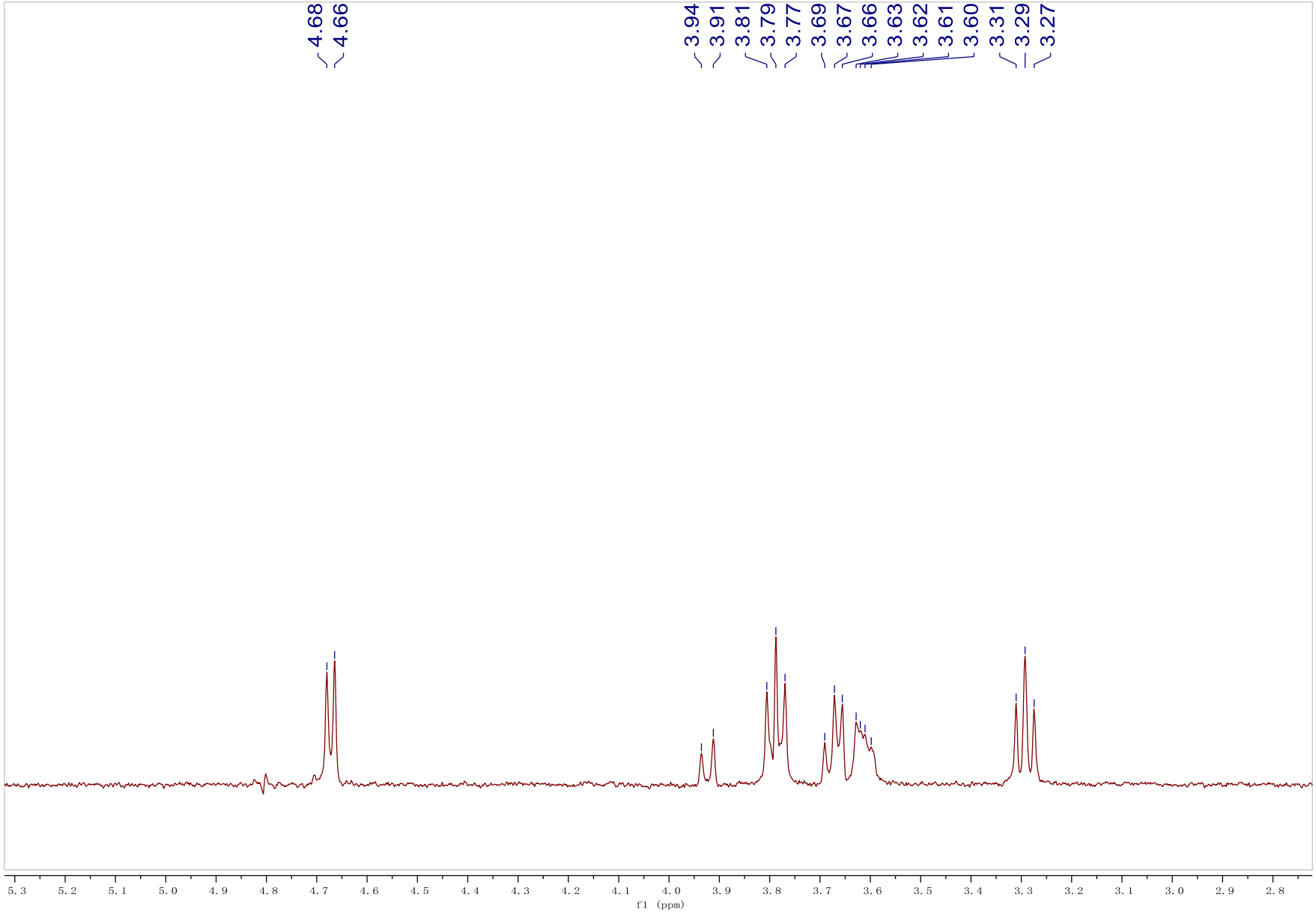

Figure S39. 1D-selective TOCSY spectrum of compound **3** (500 MHz, D_2O, excitation at δ 4.66, H-**A**1β).

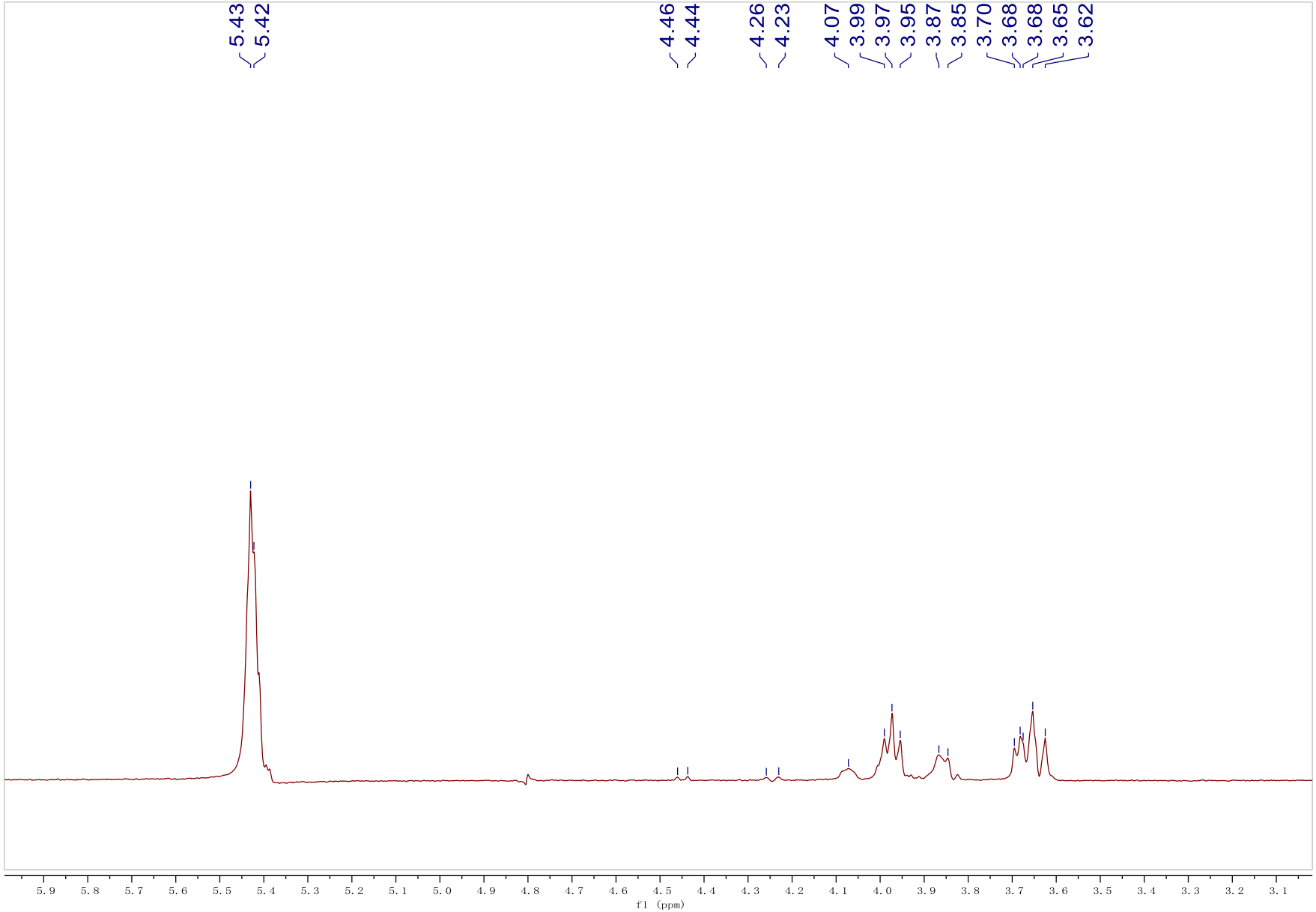

Figure S40. 1D-selective TOCSY spectrum of compound **3** (500 MHz, D_2O, excitation at δ5.43, H-**B**1, H-**C**1, H-**D**1).

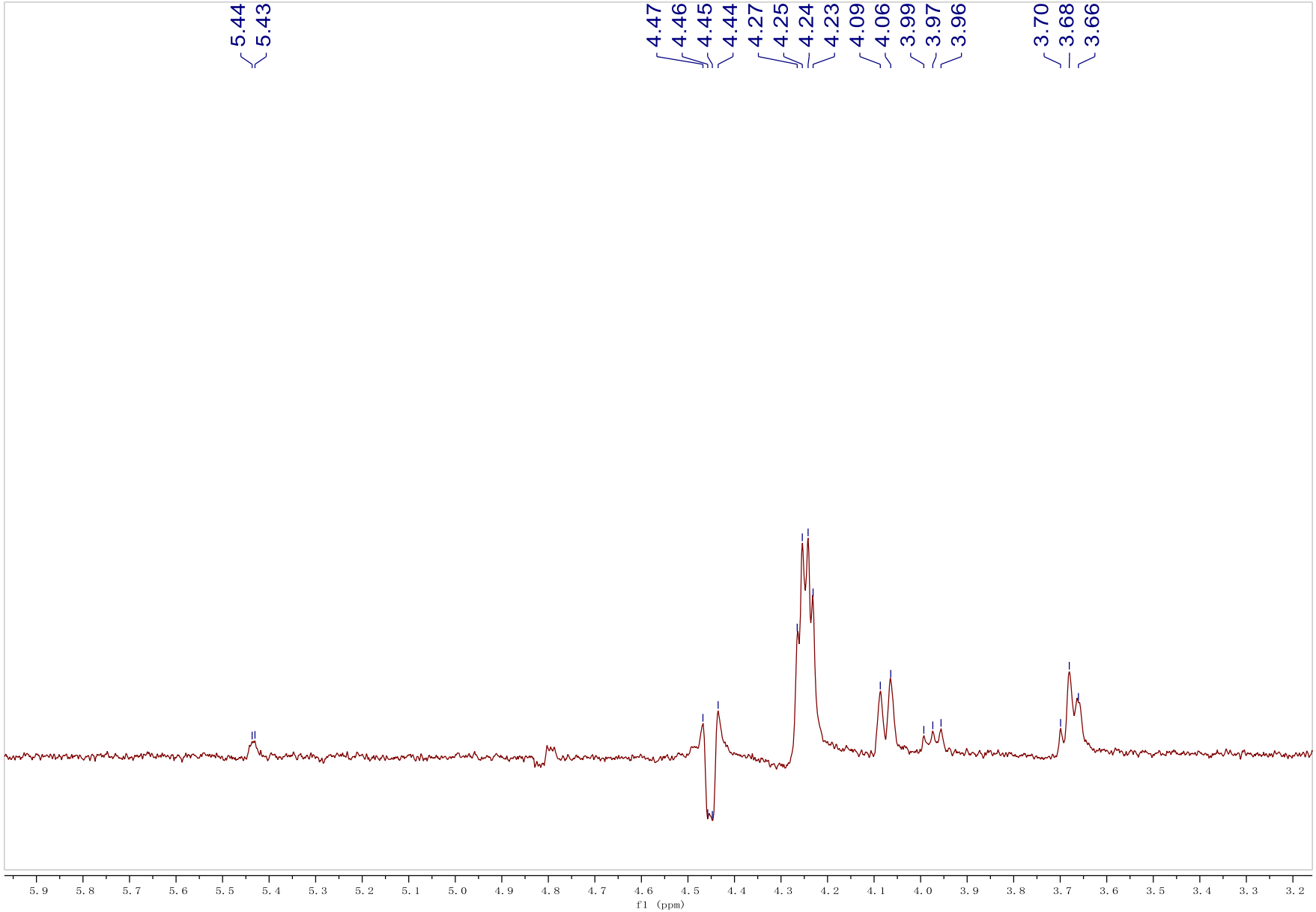

Figure S41. 1D-selective TOCSY spectrum of compound **3** (500 MHz, D_2O, excitation at δ 4.46, H-**D**6a).

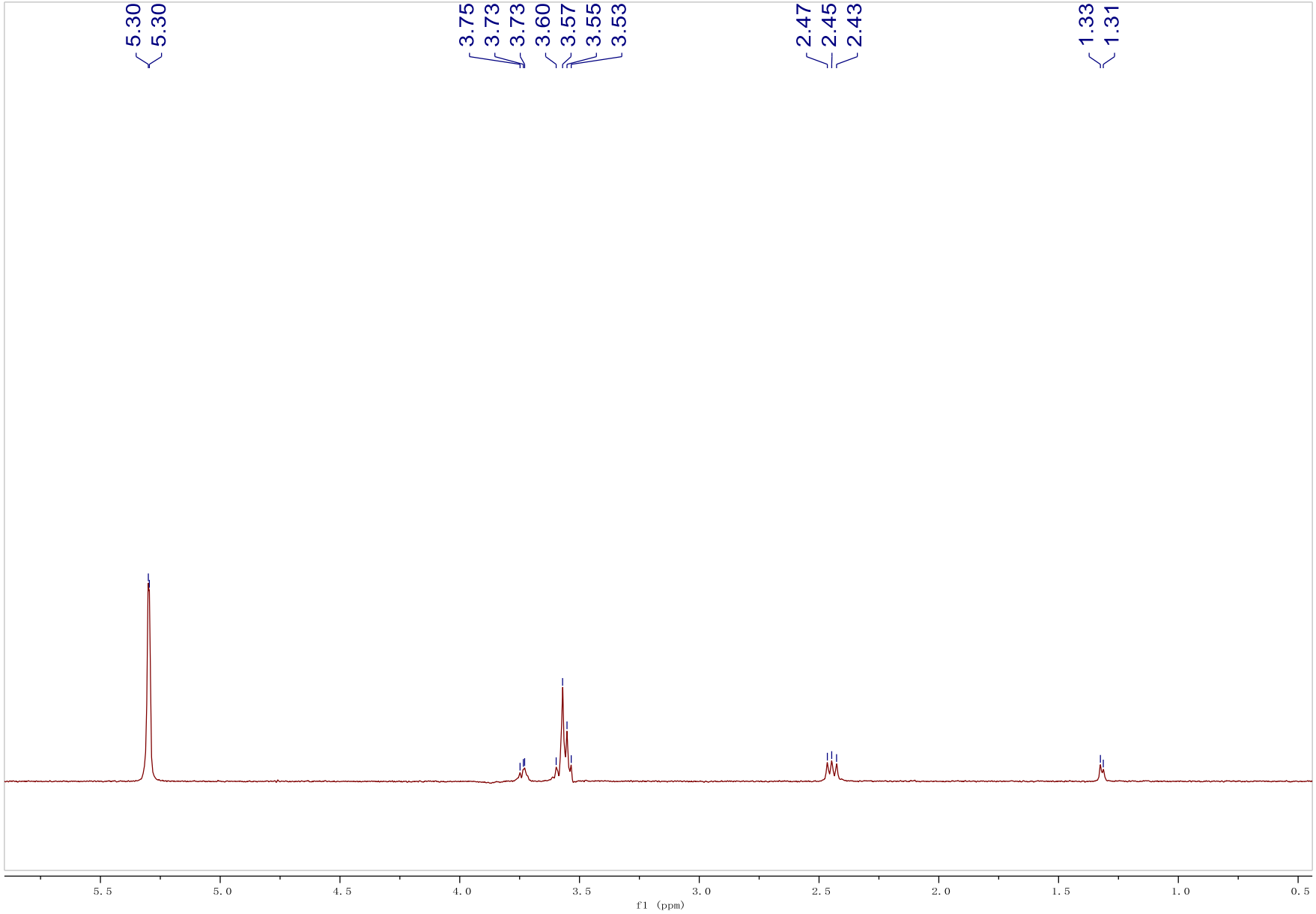

Figure S42. 1D-selective TOCSY spectrum of compound **3** (500 MHz, D_2O, excitation at δ5.29, H-**E**1).

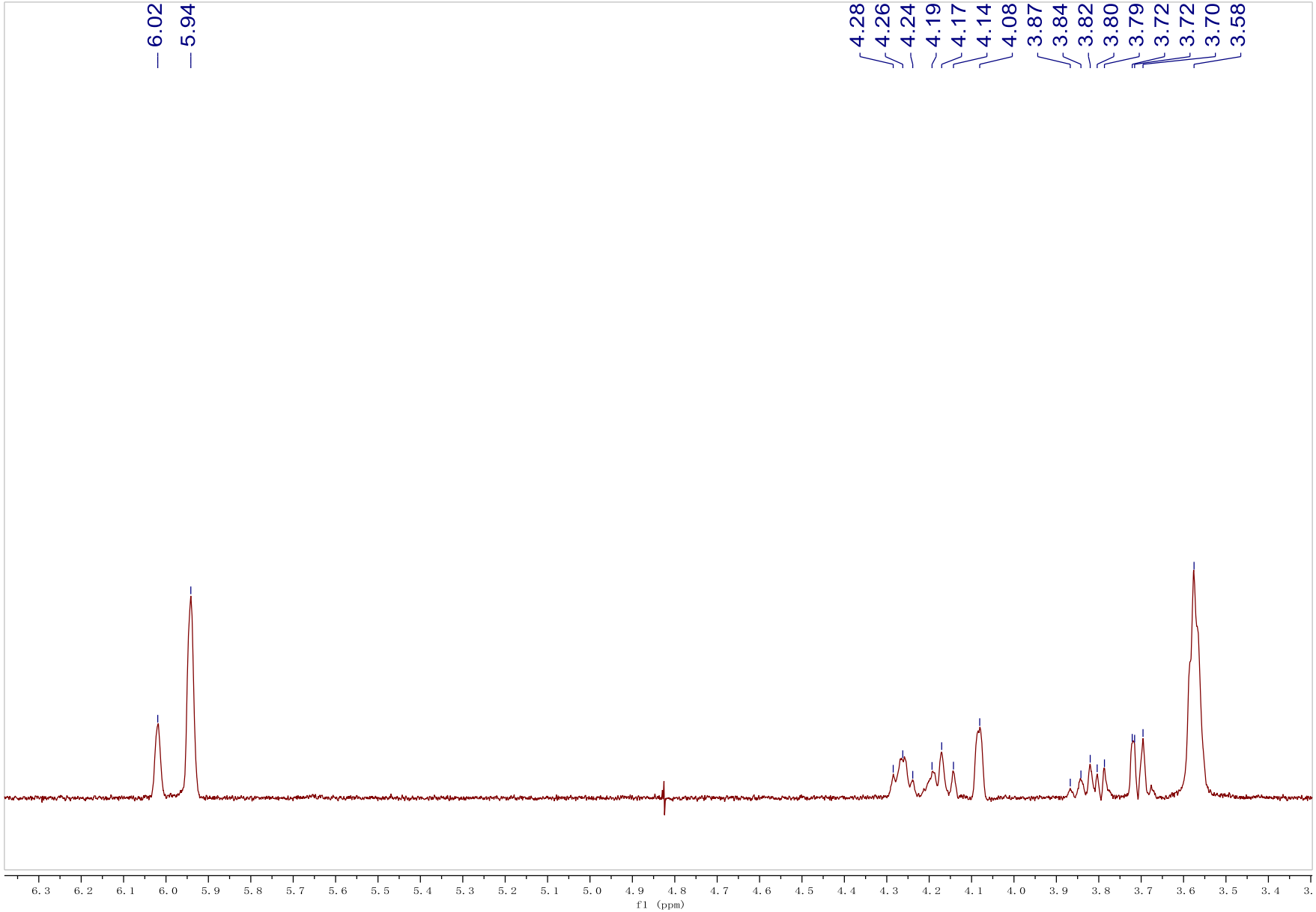

Figure S43. 1D-selective TOCSY spectrum of compound **3** (500 MHz, D_2O, excitation at δ6.01, H-**F**7).

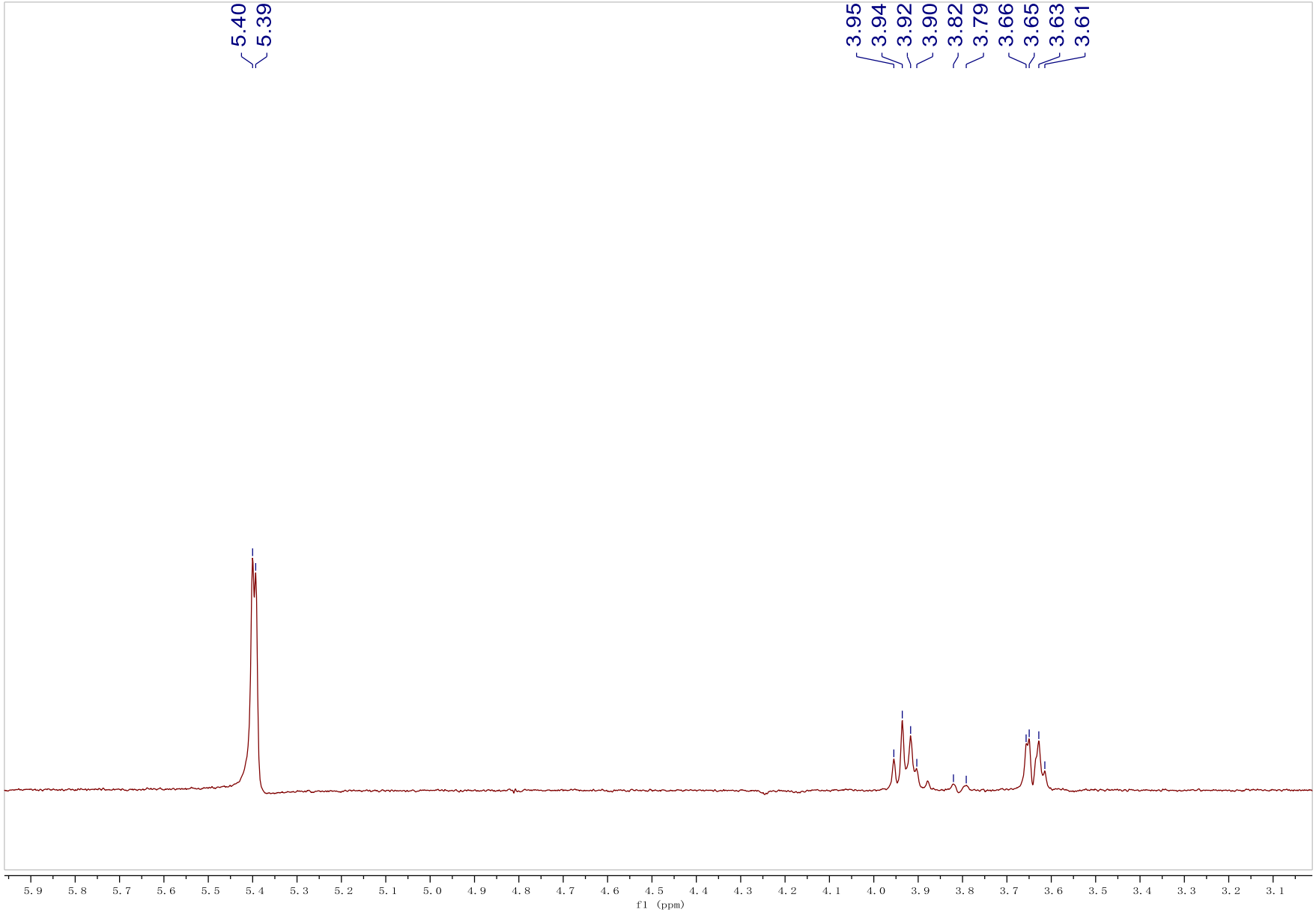

Figure S44. 1D-selective TOCSY spectrum of compound **3** (500 MHz, D_2O, excitation at δ5.40, H-**G**1).

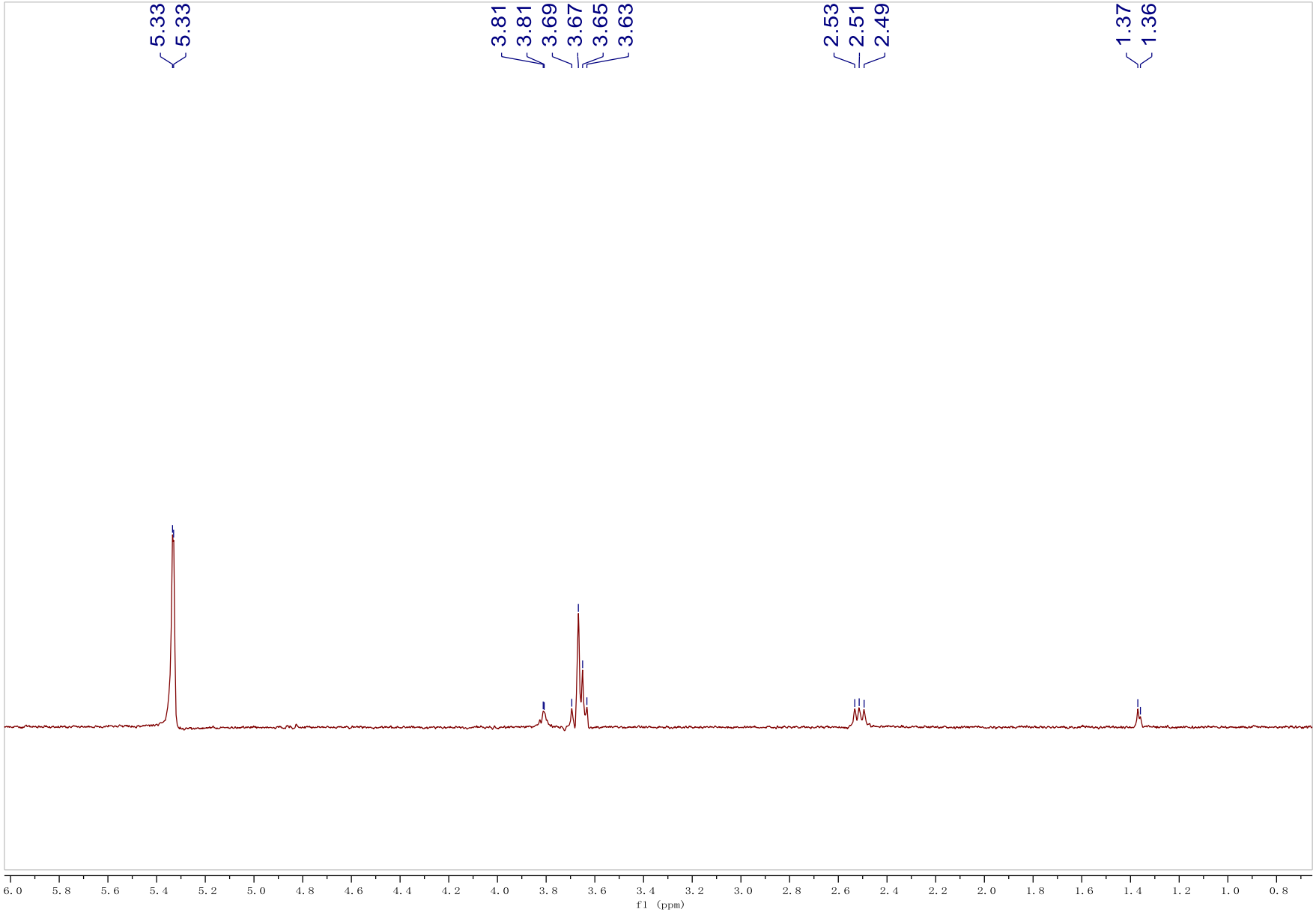

Figure S45. 1D-selective TOCSY spectrum of compound **3** (500 MHz, D_2O, excitation at δ5.34, H-**H**1).

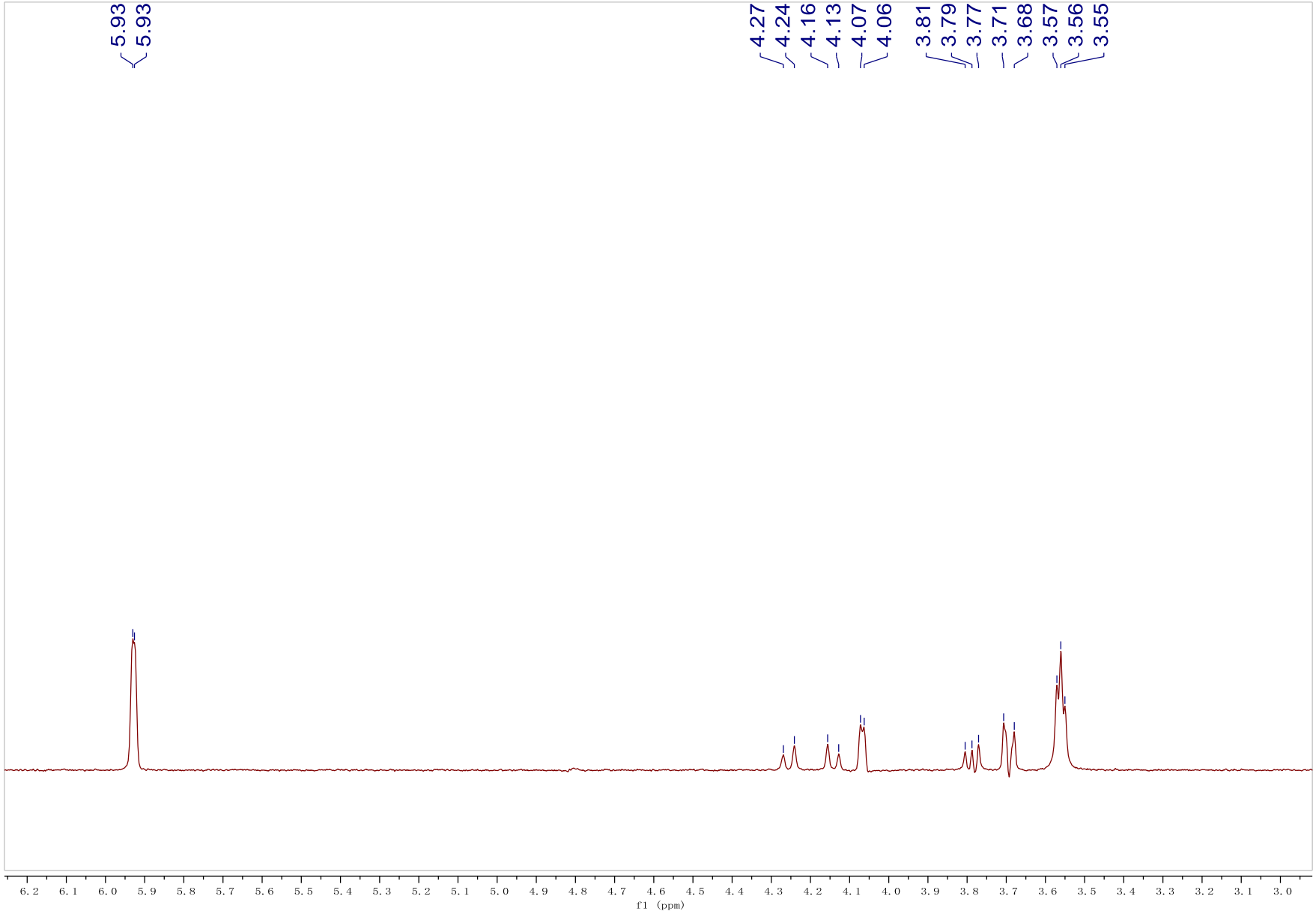

Figure S46. 1D-selective TOCSY spectrum of compound **3** (500 MHz, D_2O, excitation at δ5.93, H-**I**7).

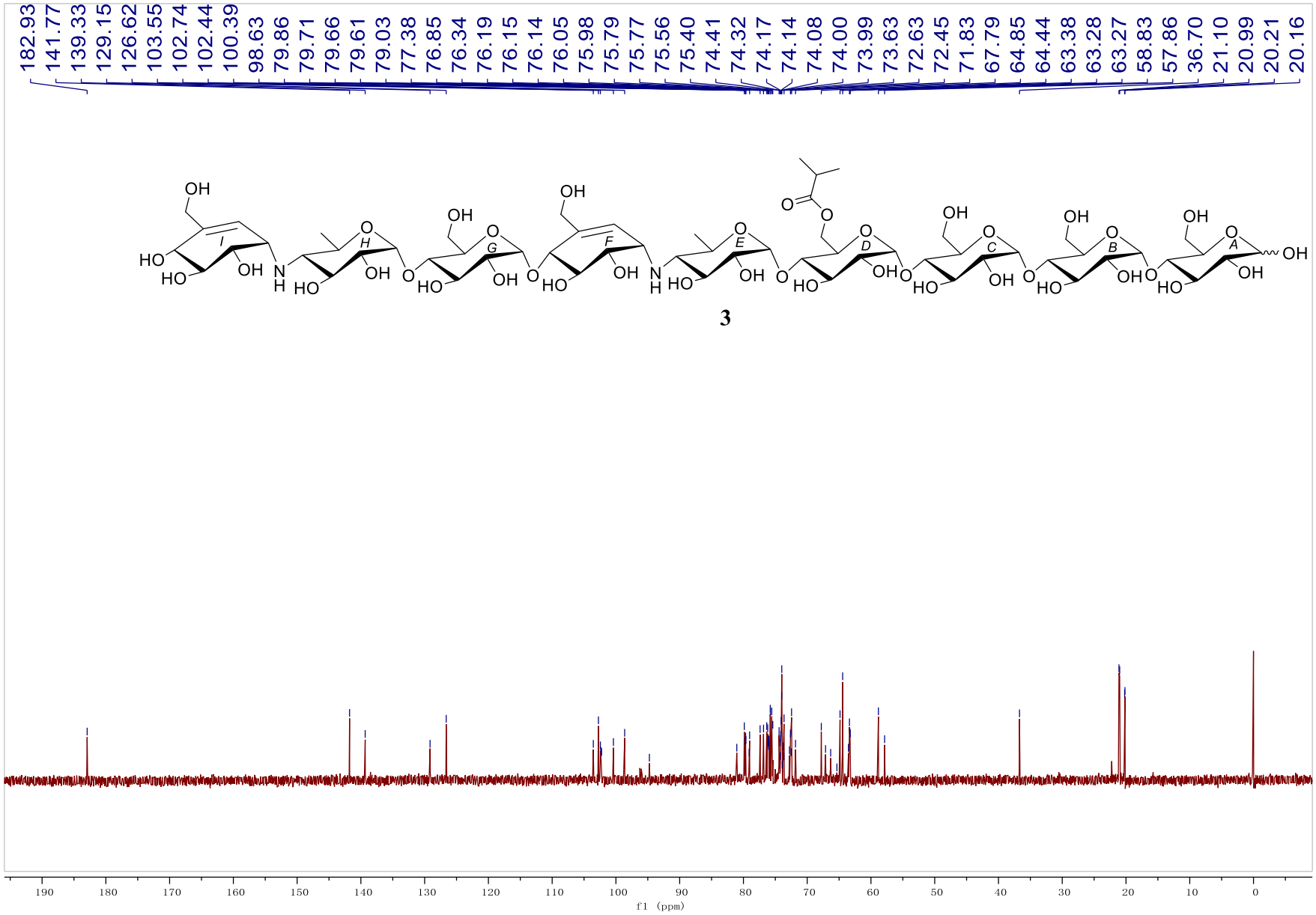

Figure S47. ^{13}C NMR spectrum of compound **3** (125 MHz, D_2O).

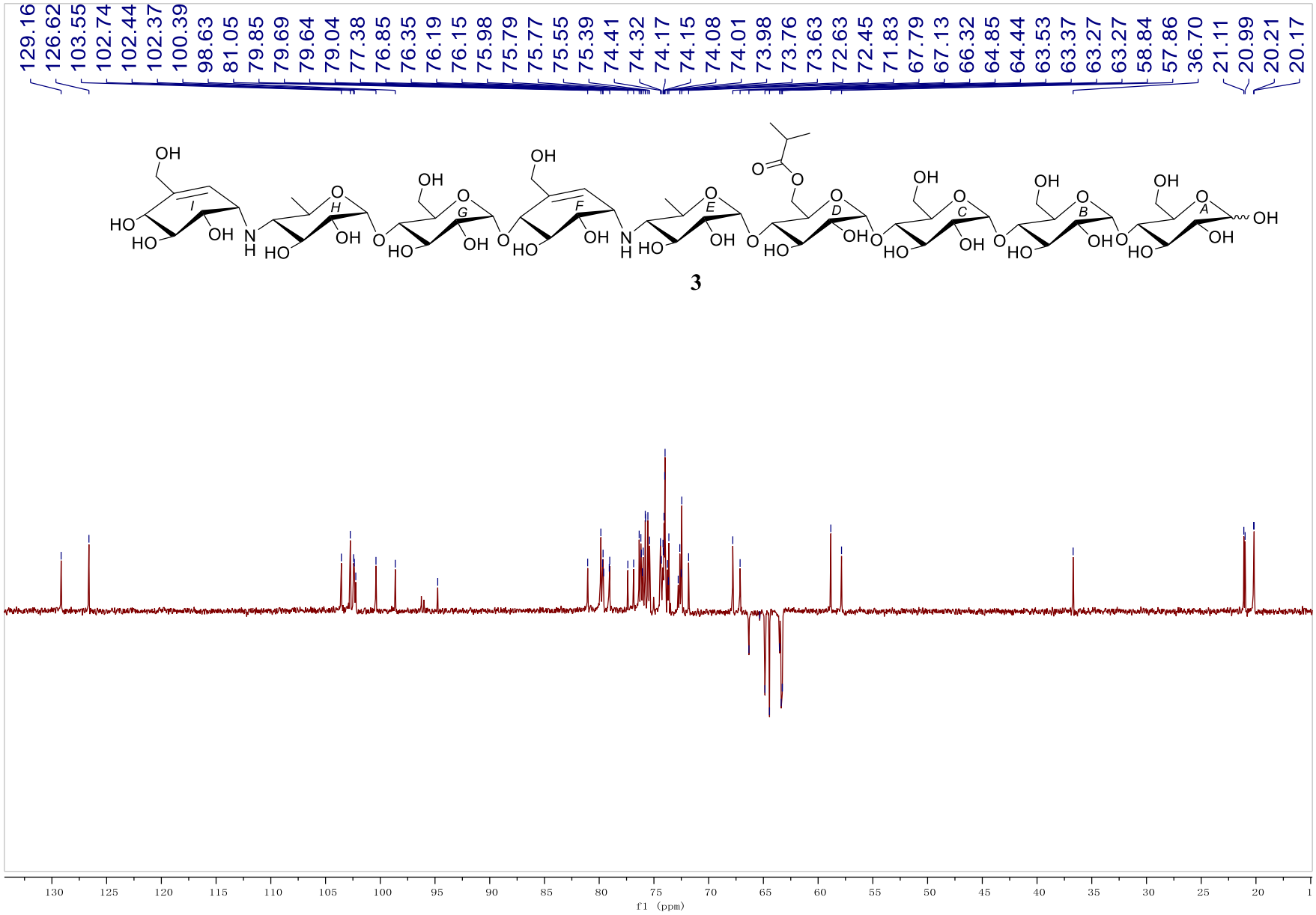

Figure S48. DEPT-135 spectrum of compound **3** (125 MHz, D_2O).

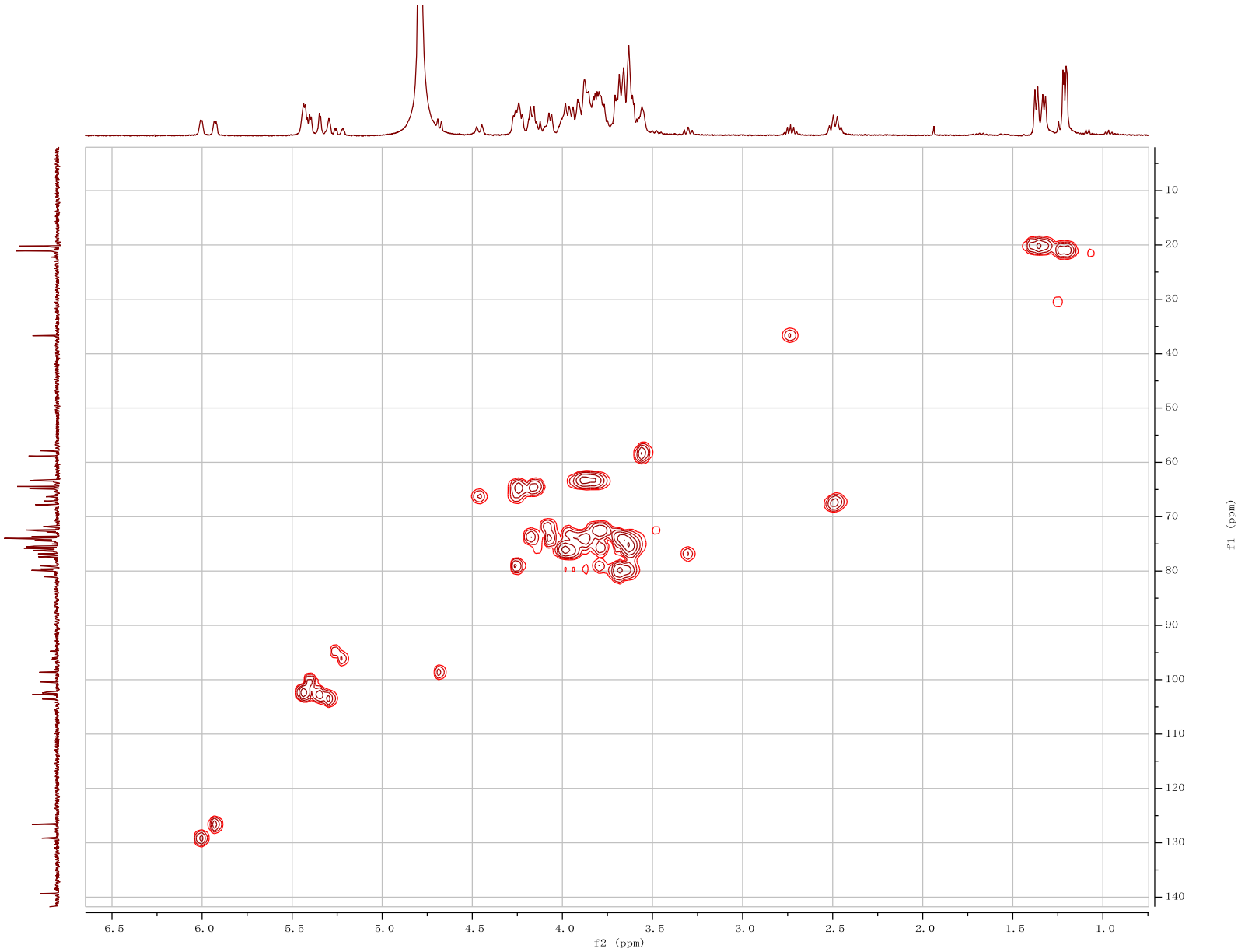

Figure S49. HSQC spectrum of compound **3** (500 MHz, D_2O).

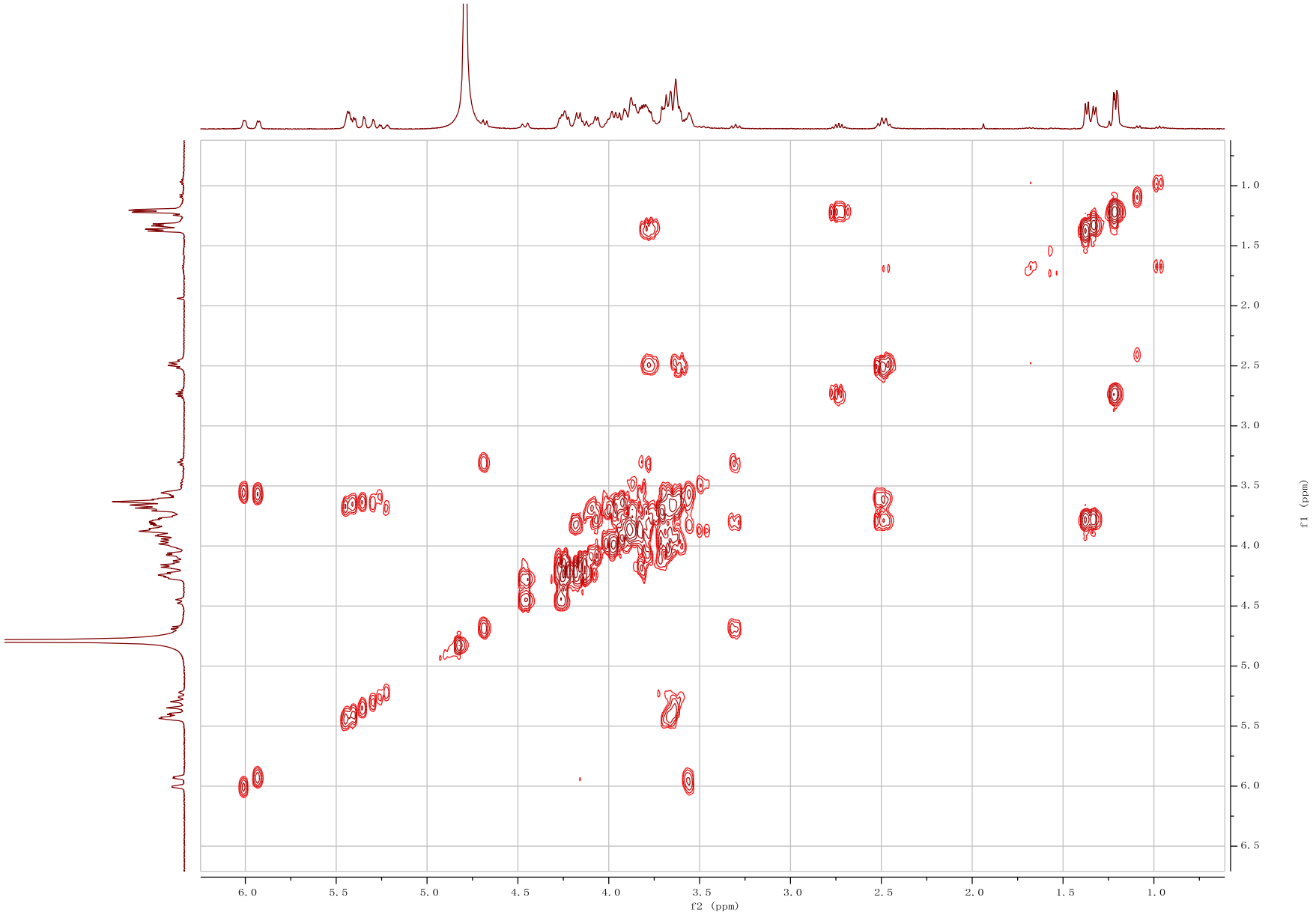

Figure S50. ^{1}H-^{1}H COSY spectrum of compound **3** (500 MHz, D_2O).

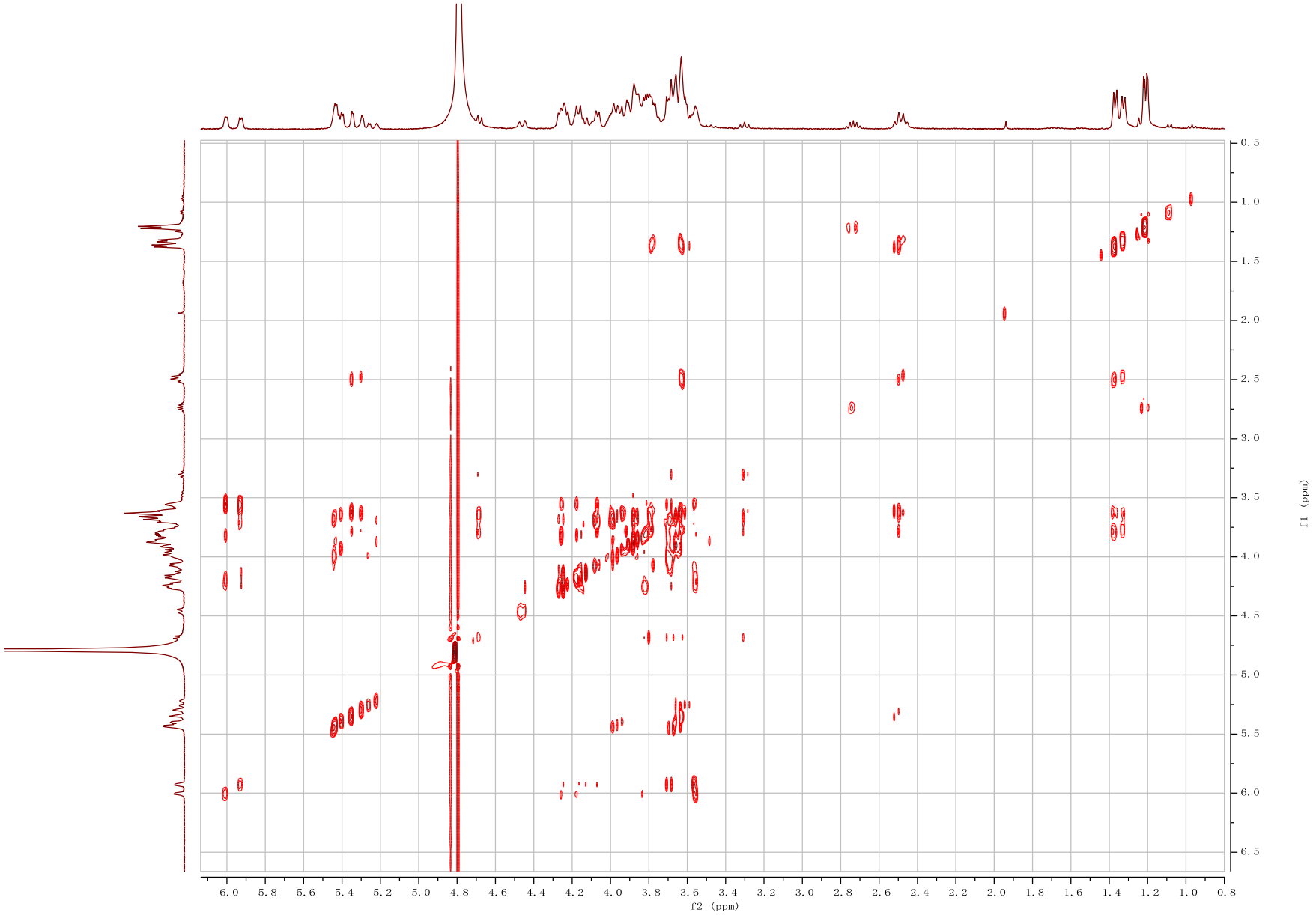

Figure S51. 2D-TOCSY spectrum of compound **3** (500 MHz, D_2O).

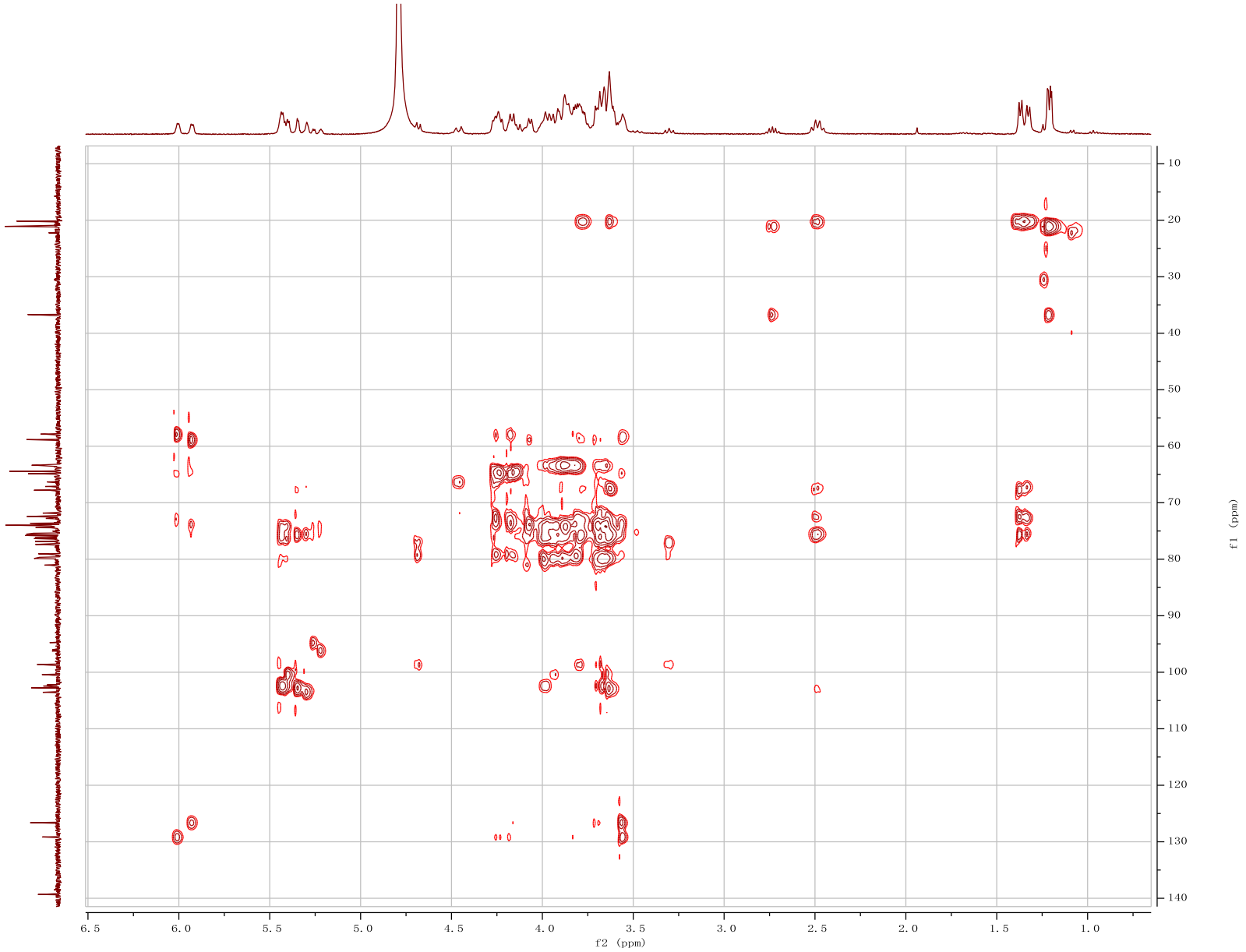

Figure S52. HSQC-TOCSY spectrum of compound **3** (500 MHz, D_2O).

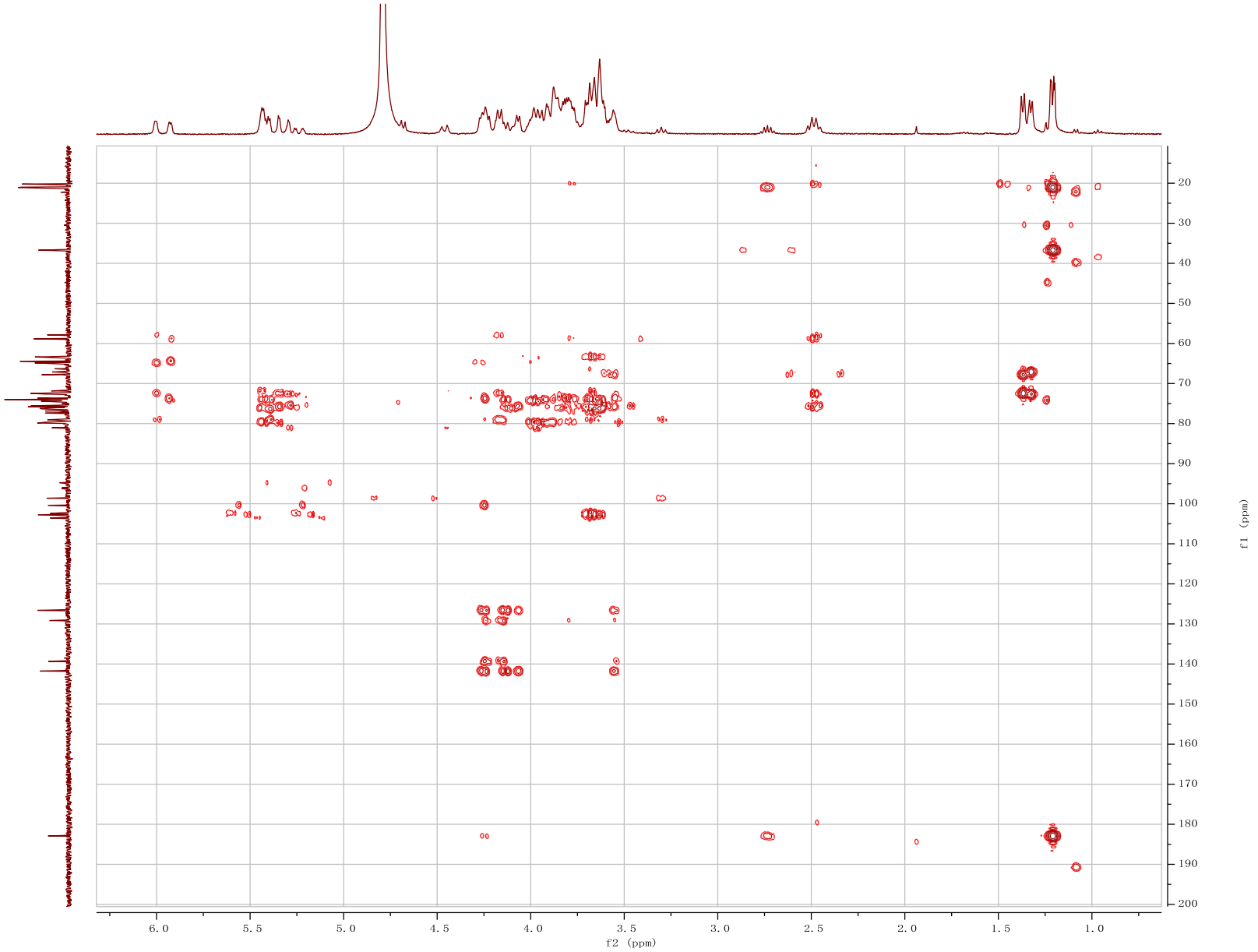

Figure S53. HMBC spectrum of compound **3** (500 MHz, D_2O).

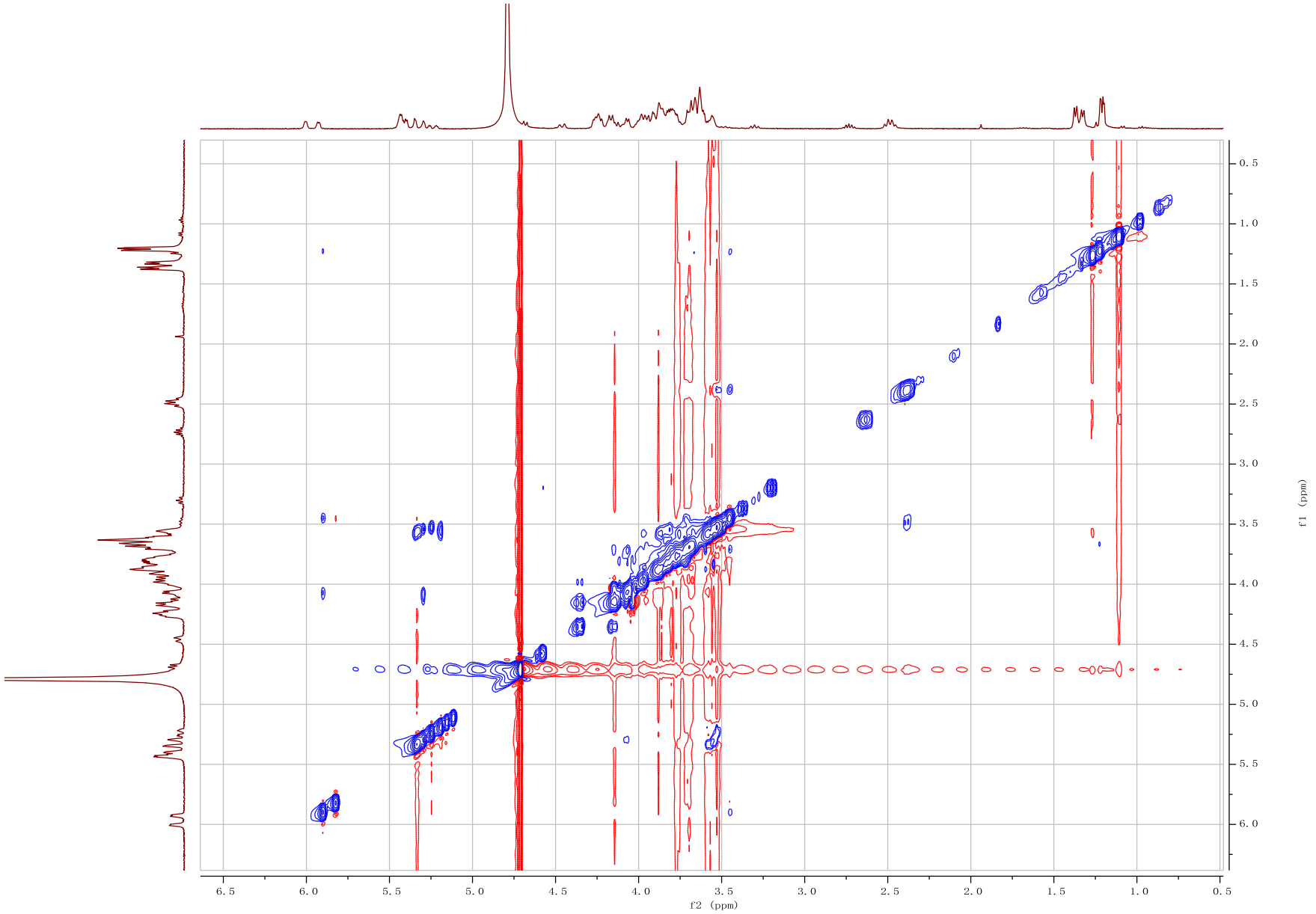

Figure S54. NOESY spectrum of compound **3** (500 MHz, D_2O).

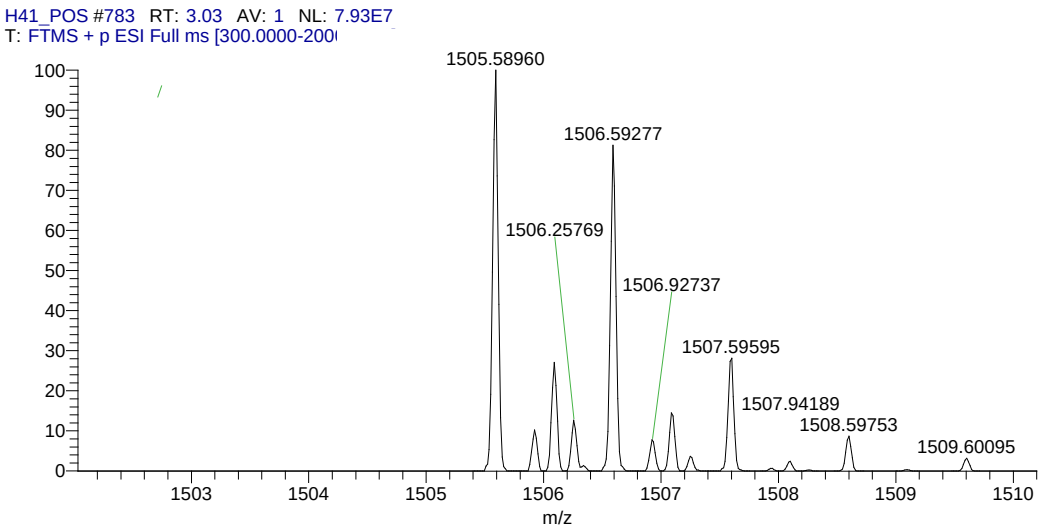

Figure S55. HRESIMS spectrum of compound **3**.

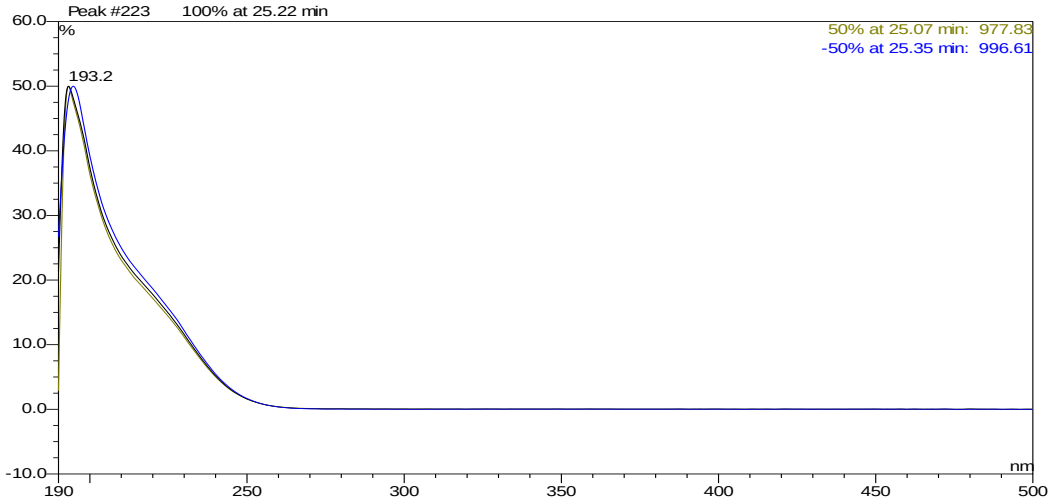

Figure S56. UV spectrum of compound **3**.

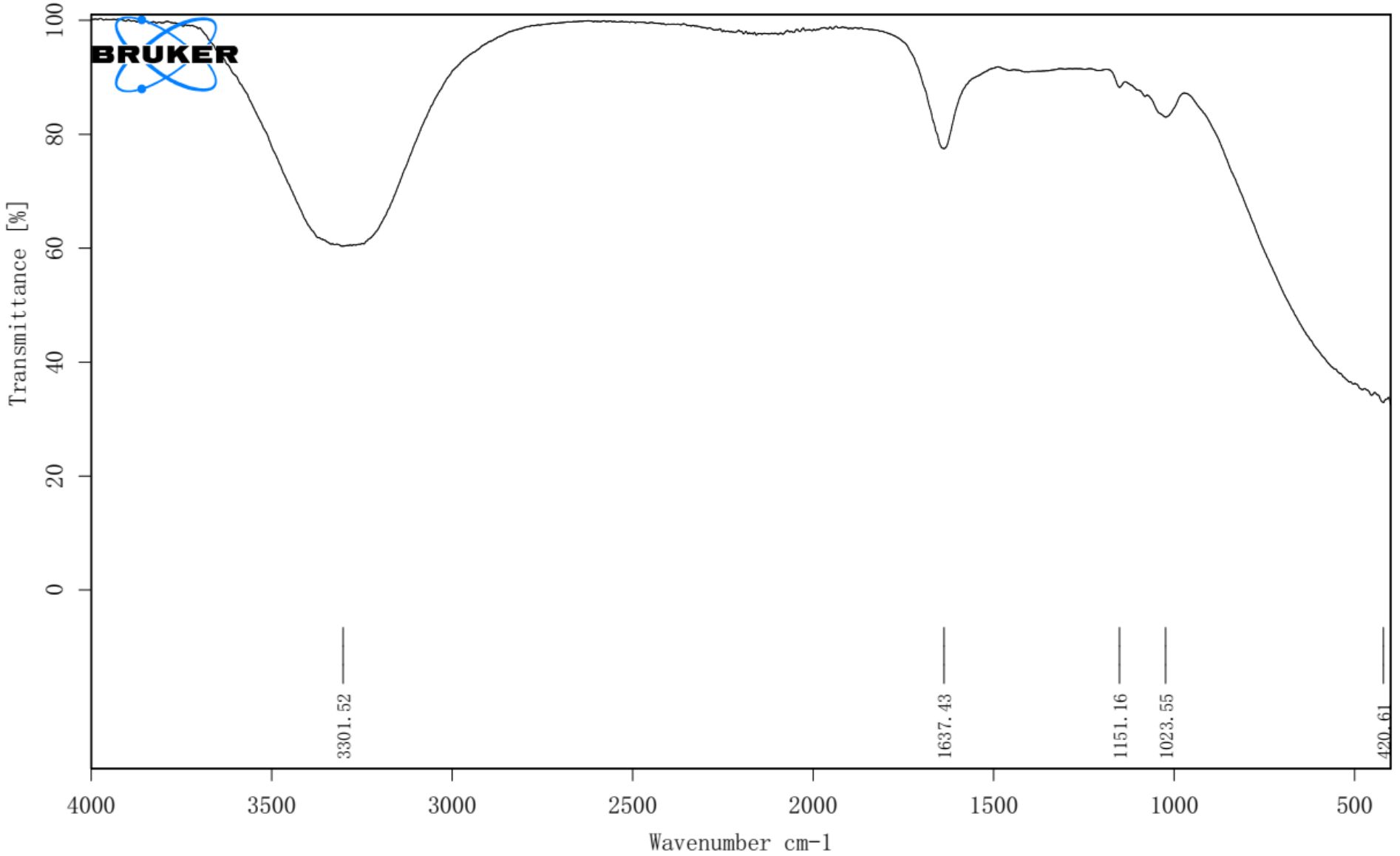

Figure S57. IR spectrum of compound **3**.

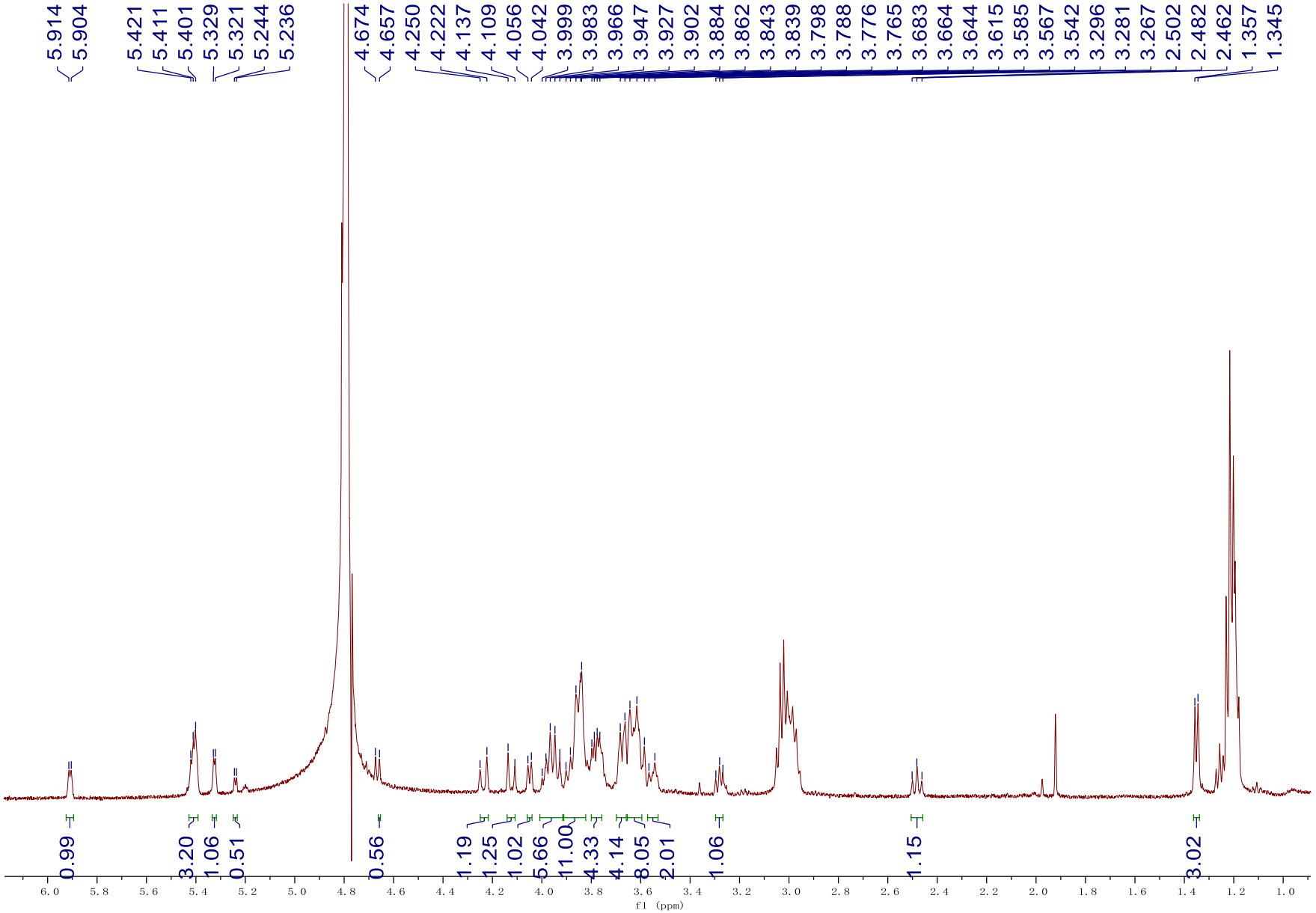

Figure S58. ^{1}H NMR spectrum of the common basic hydrolysis product (**9**) of compounds **1** and **5** (500 MHz, D_2O).

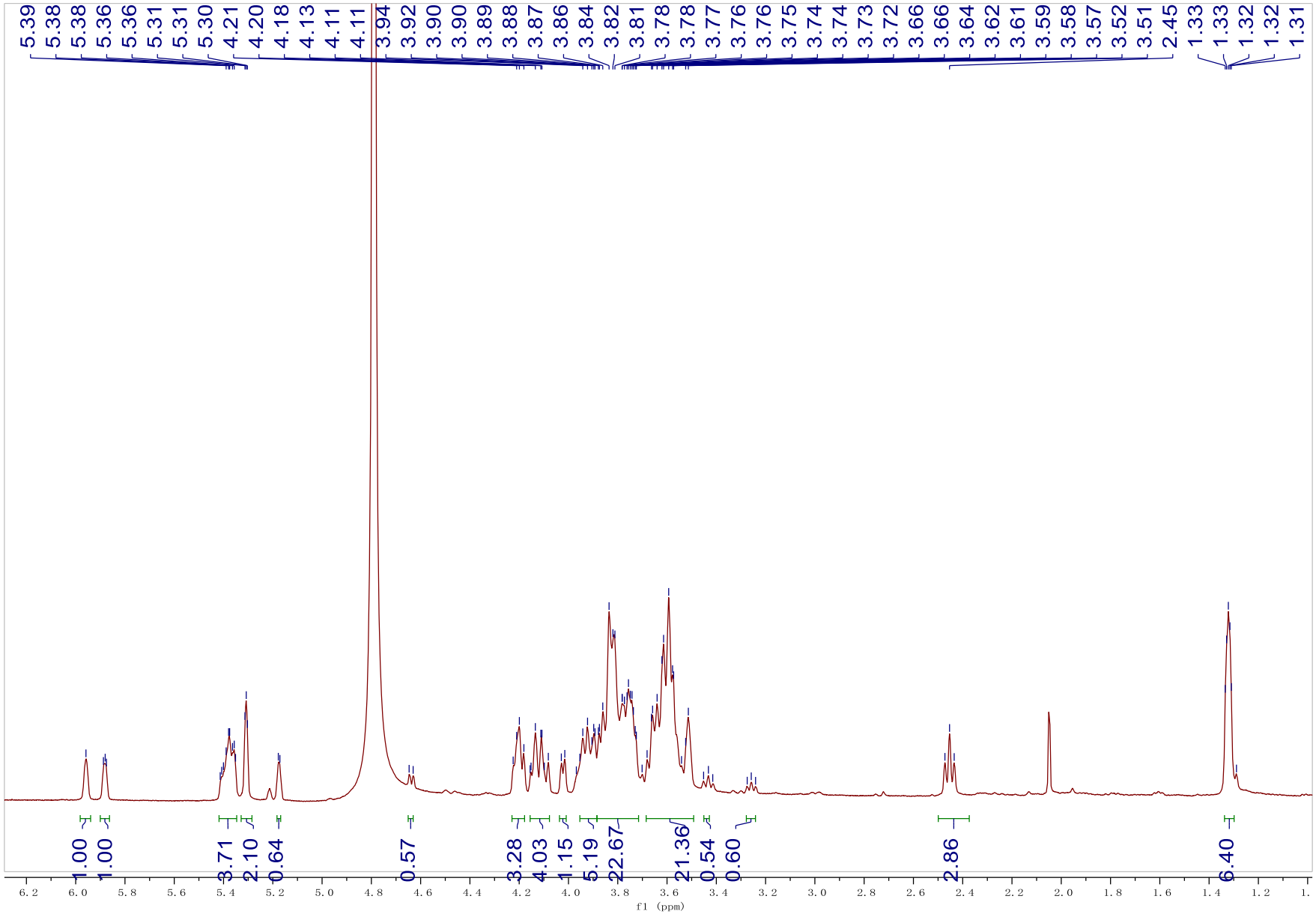

Figure S59. ^{1}H NMR spectrum of the common basic hydrolysis product (**10**) of compound **3** (500 MHz, D_2O).