

Supplementary Materials

Six New Phragmalin Limonoids from the Stems of *Chukrasia tabularis* A. Juss

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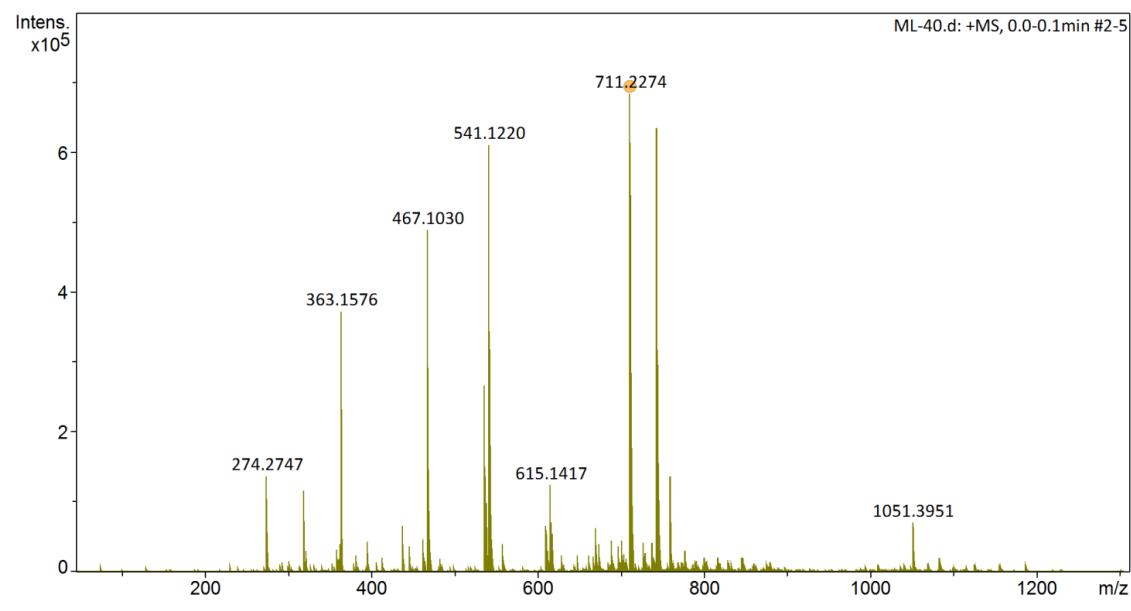
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Sum Formula	Ion Formula	Meas. m/z	m/z	err [mDa]	err [ppm]
C ₃₄ H ₄₀ O ₁₅	C ₃₄ H ₄₀ NaO ₁₅	711.2274	711.2259	-1.4	-2.0

Figure S1. HR-ESI-MS spectrum of **1**

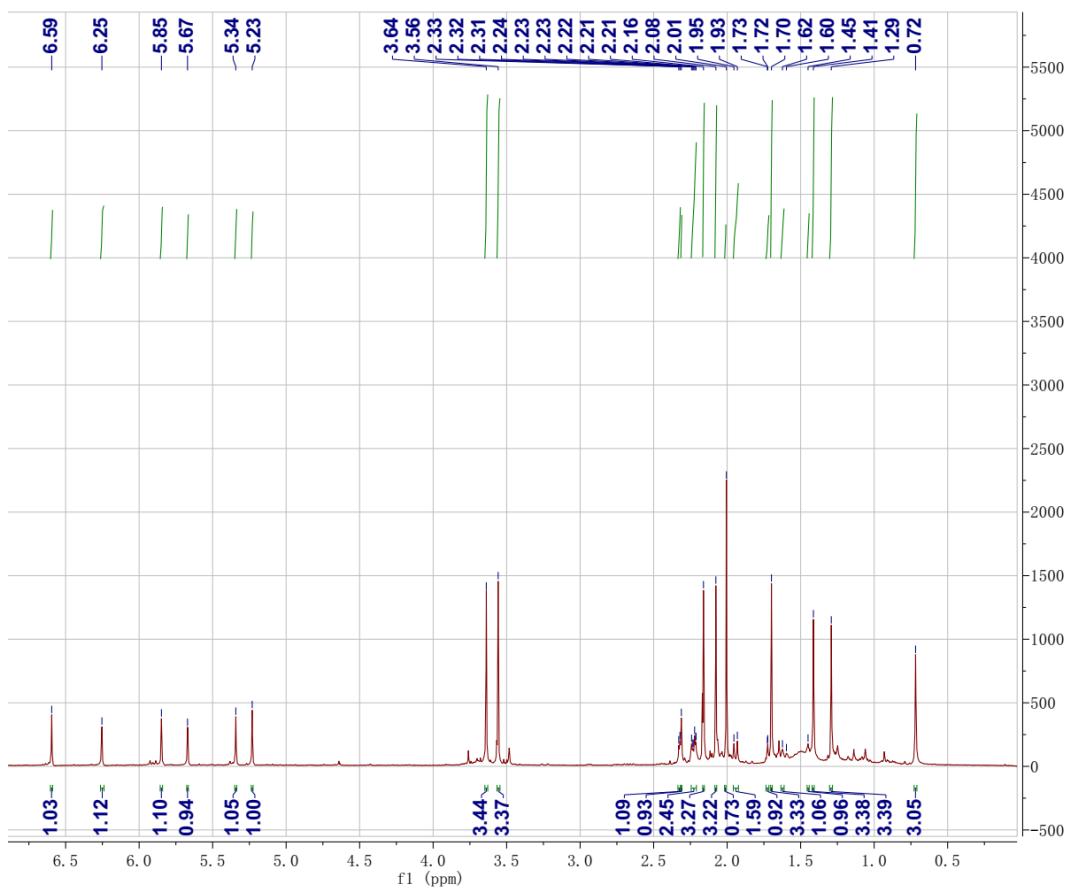


Figure S2. ¹H-NMR spectrum (CDCl_3 , 500 MHz) of **1**

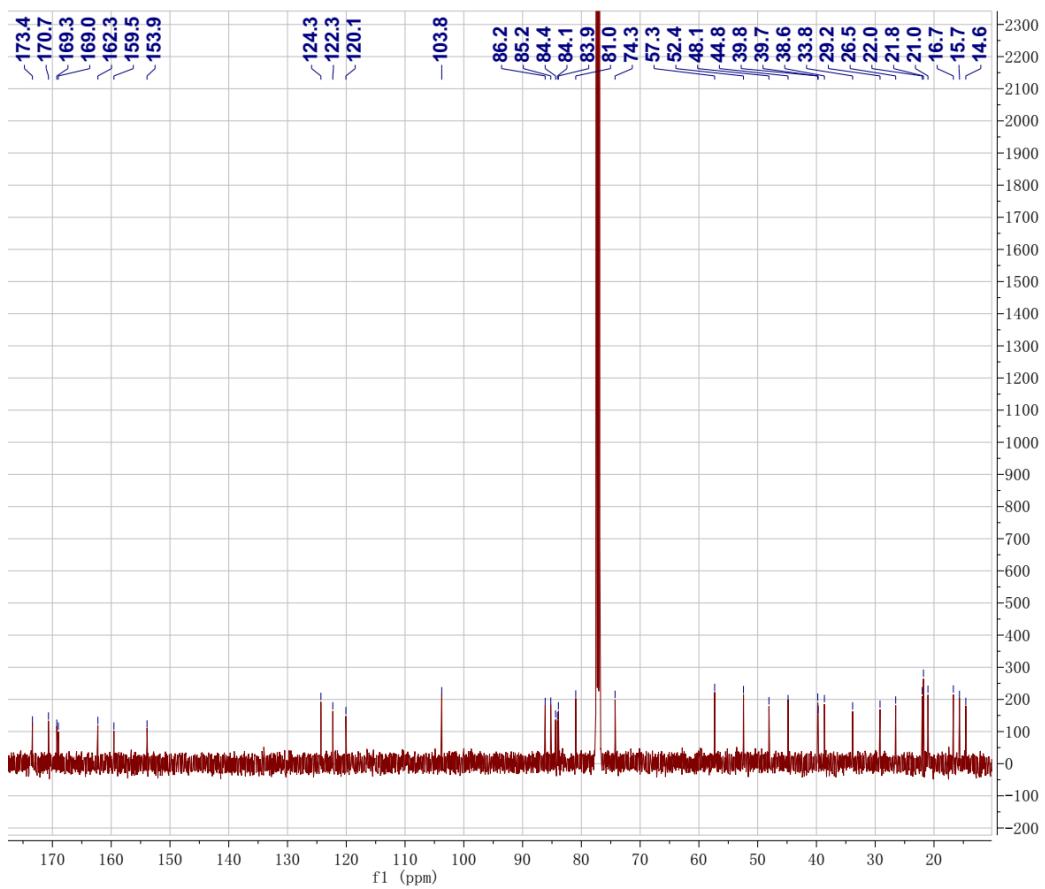


Figure S3. ^{13}C -NMR spectrum (CDCl_3 , 125 MHz) of **1**

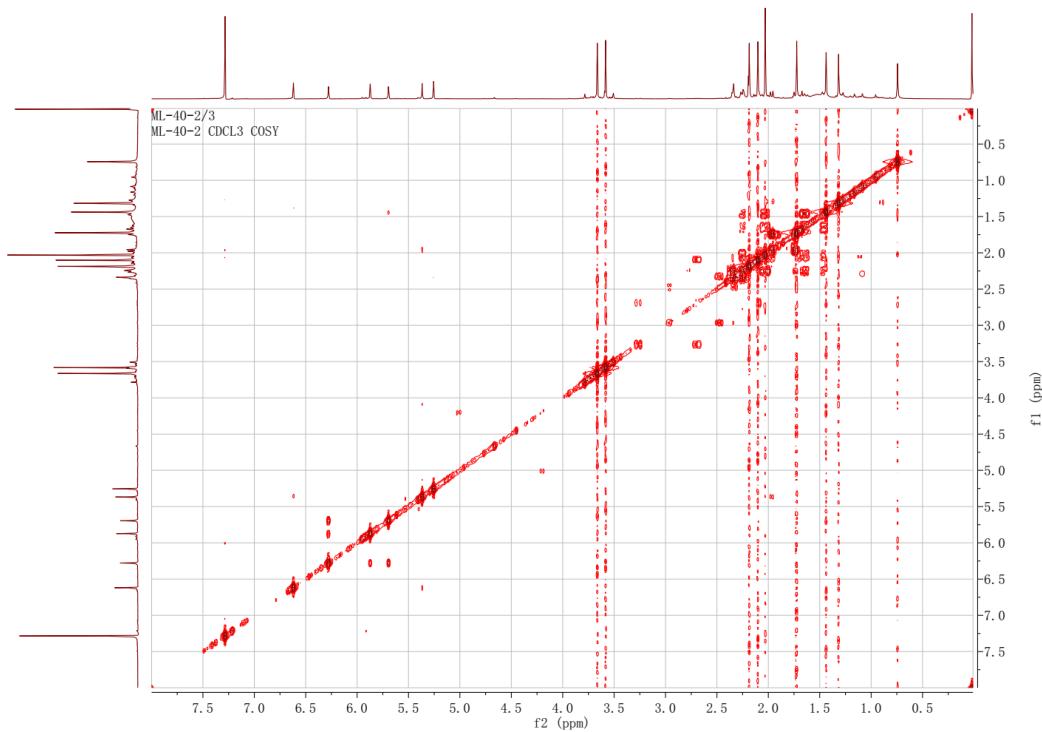


Figure S4. ^1H - ^1H COSY spectrum of **1**

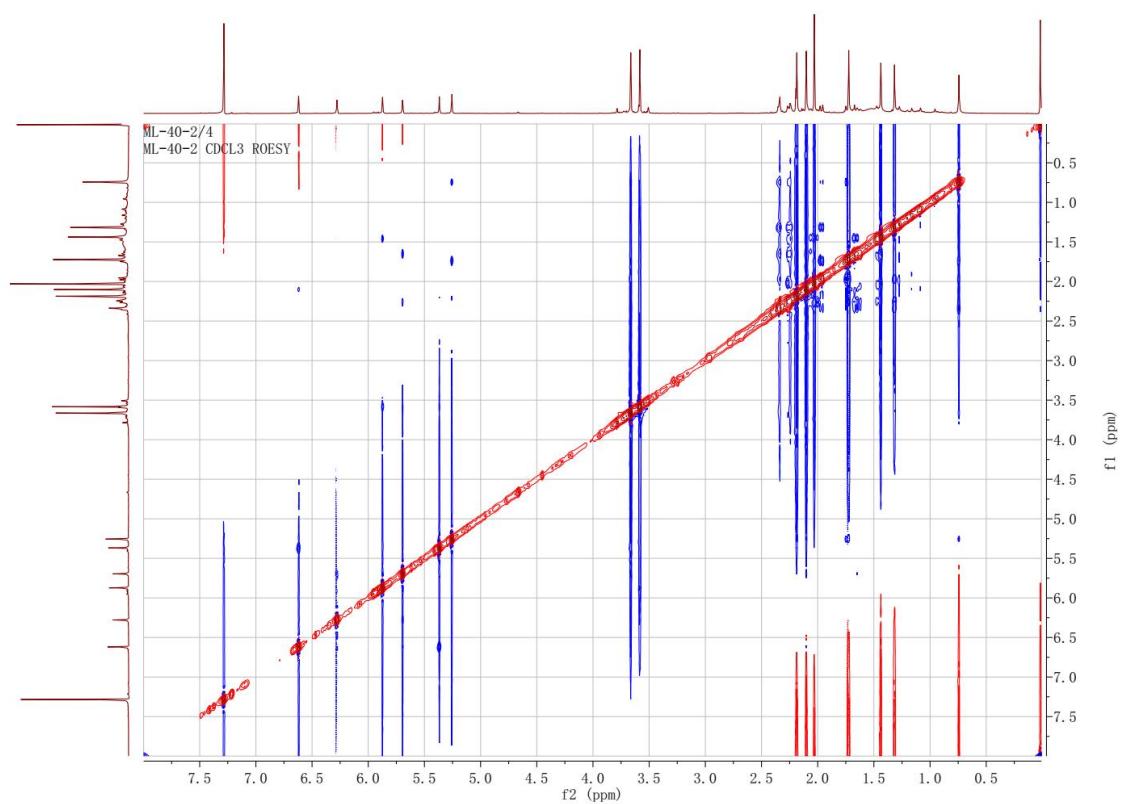


Figure S5. ROESY spectrum of **1**

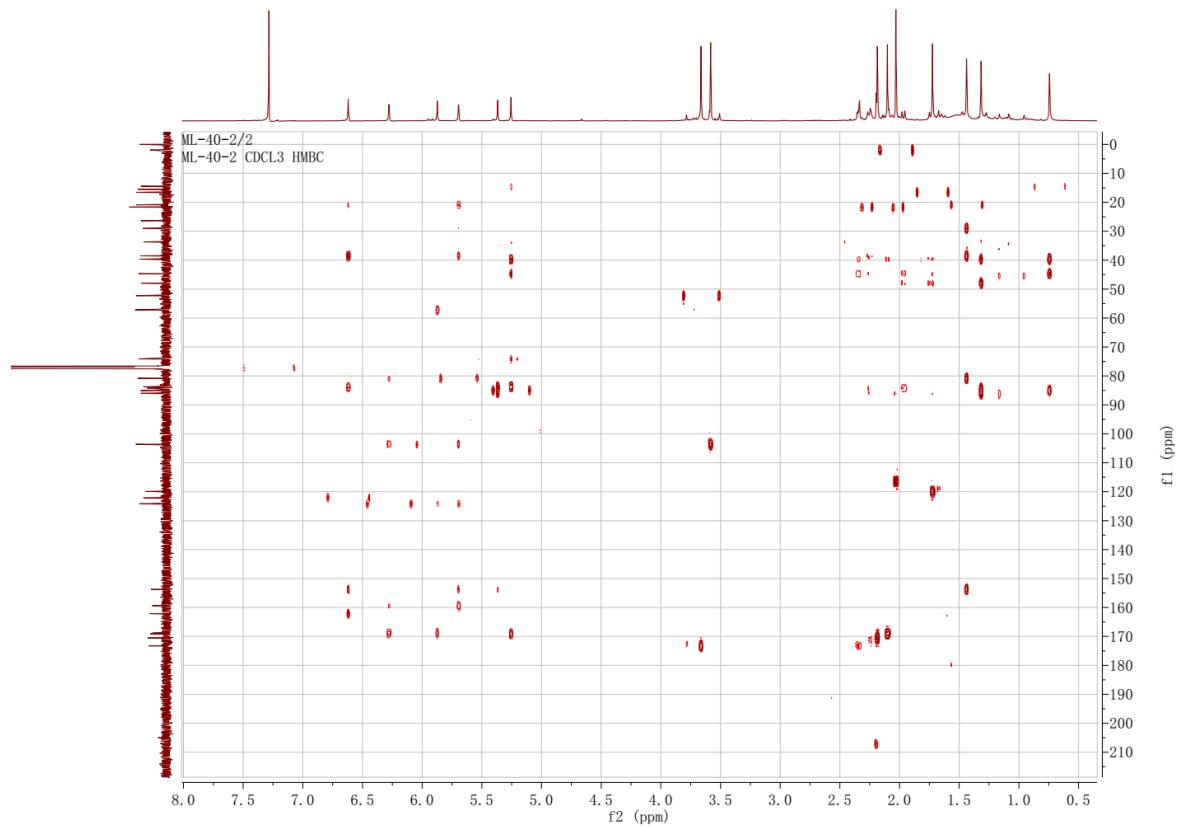


Figure S6. HMBC spectrum of **1**

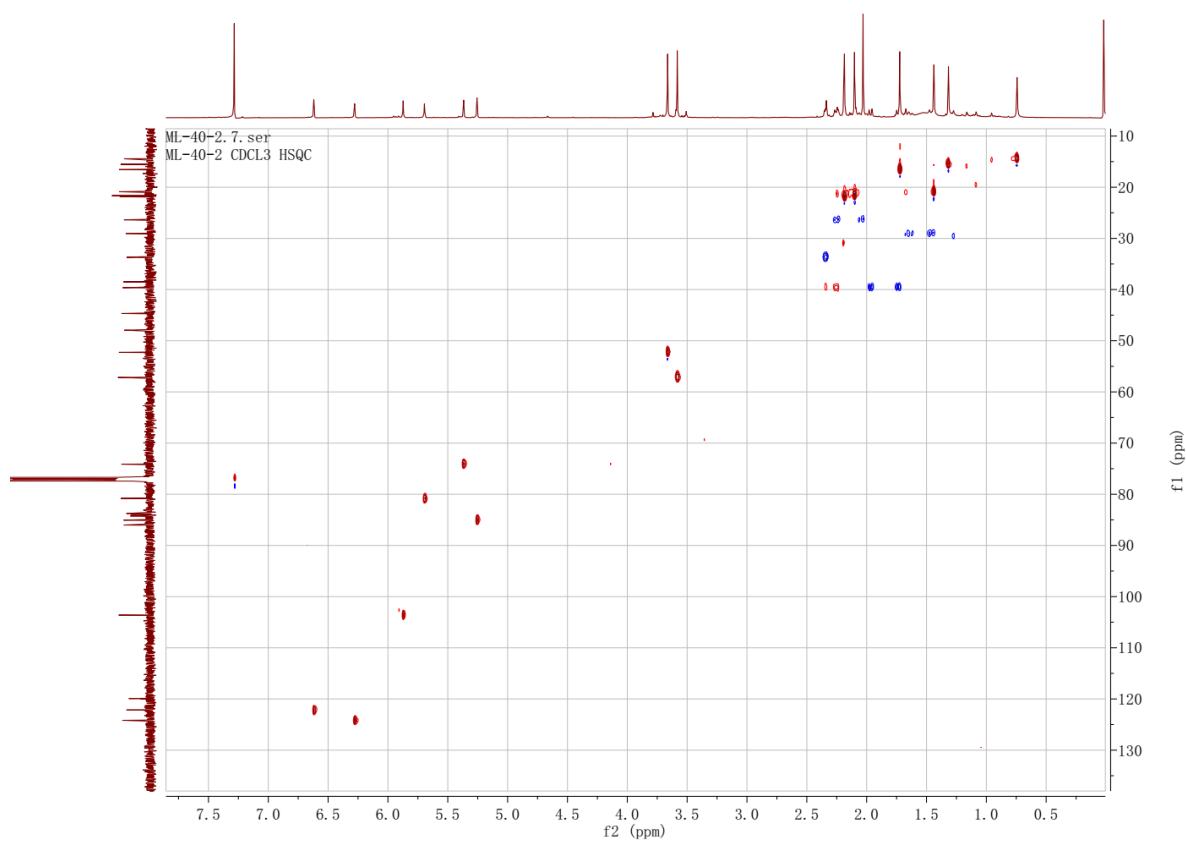


Figure S7. HSQC spectrum of **1**

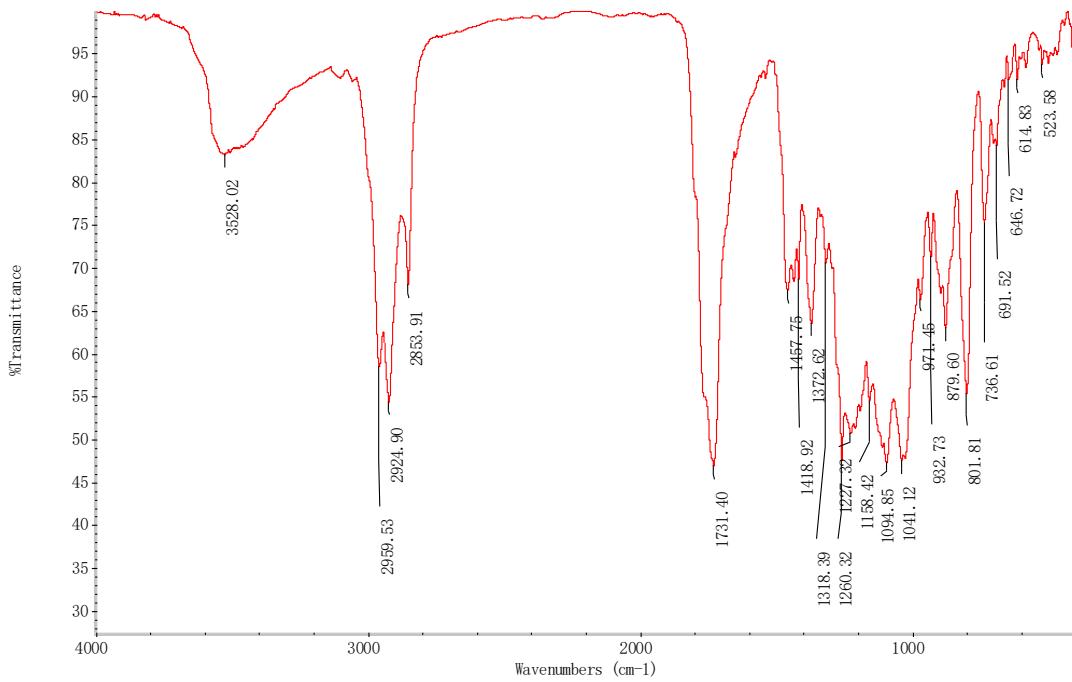
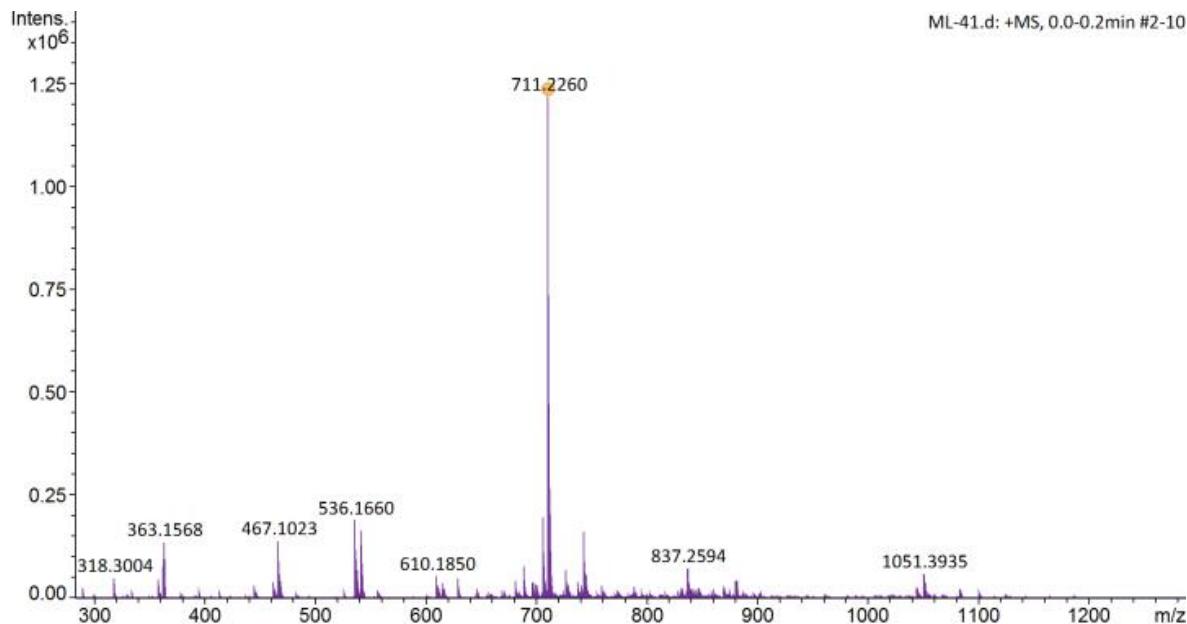


Figure S8. IR spectrum of **1**



Sum Formula	Ion Formula	Meas. m/z	m/z	err [mDa]	err [ppm]
C ₃₄ H ₄₀ O ₁₅	C ₃₄ H ₄₀ NaO ₁₅	711.2260	711.2259	-0.0	-0.0

Figure S9. HR-ESI-MS spectrum of **2**

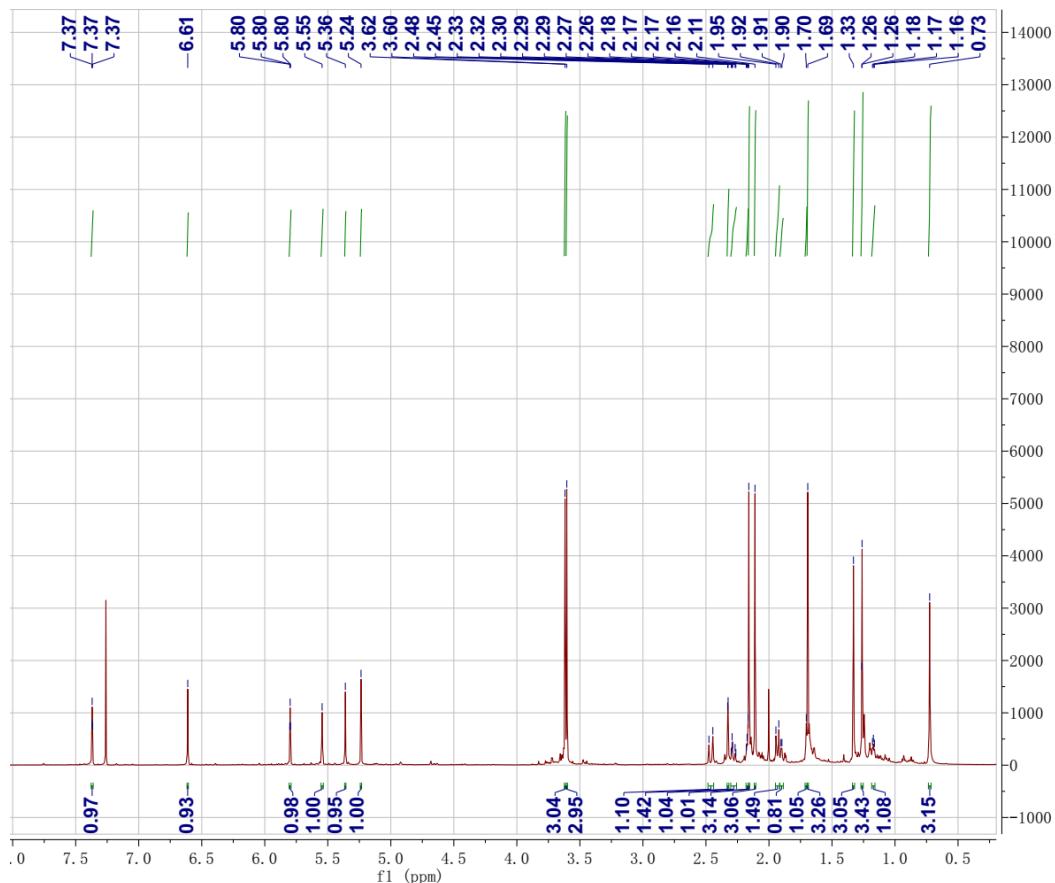


Figure S10. ^1H -NMR spectrum (CDCl_3 , 500 MHz) of **2**

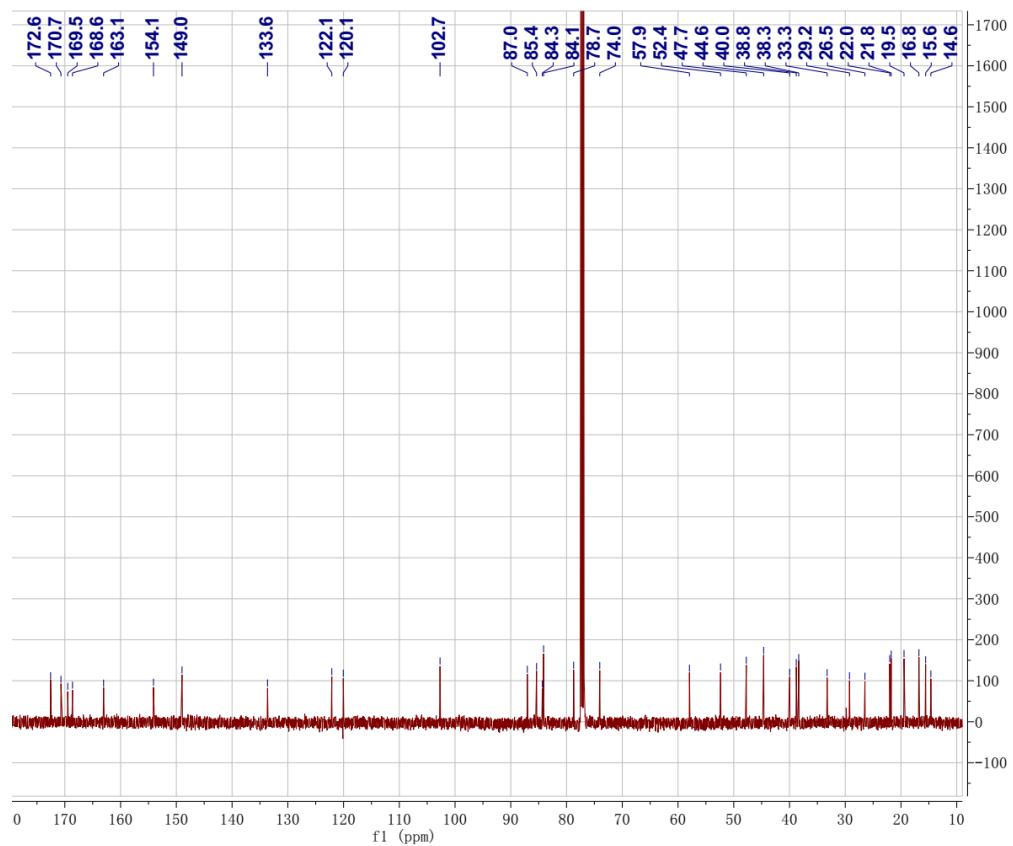


Figure S11. ^{13}C -NMR spectrum (CDCl_3 , 125 MHz) of **2**

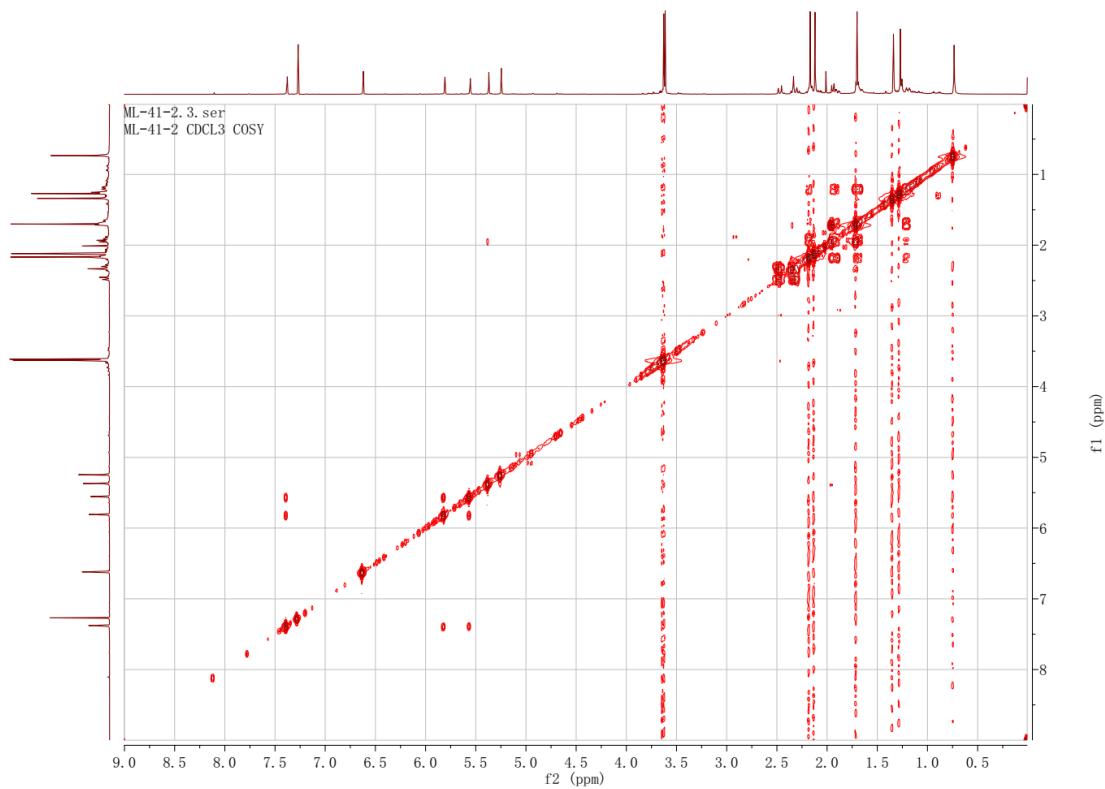


Figure S12. ^1H - ^1H COSY spectrum of **2**

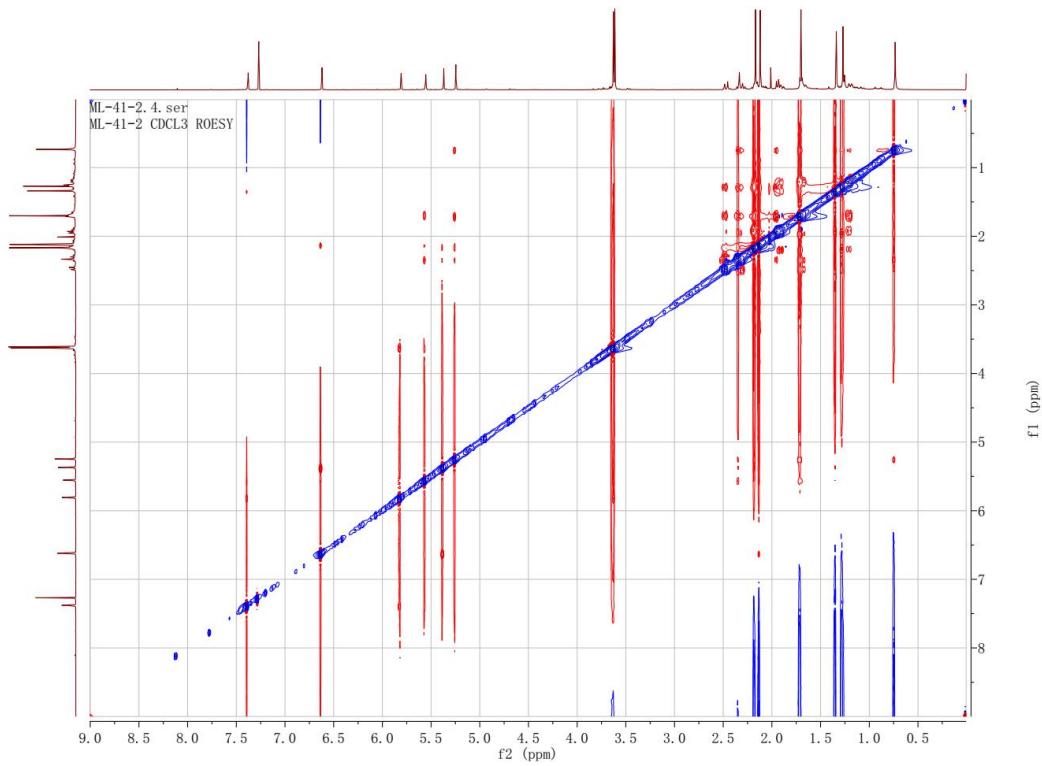


Figure S13. ROESY spectrum of **2**

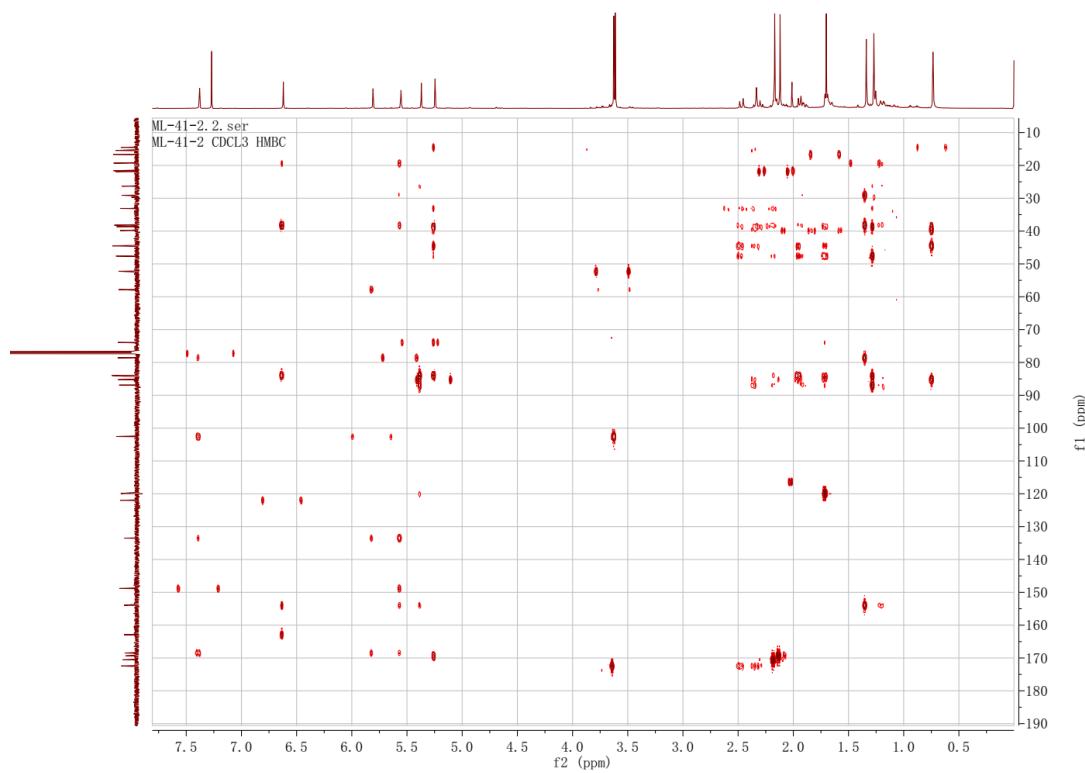


Figure S14. HMBC spectrum of **2**

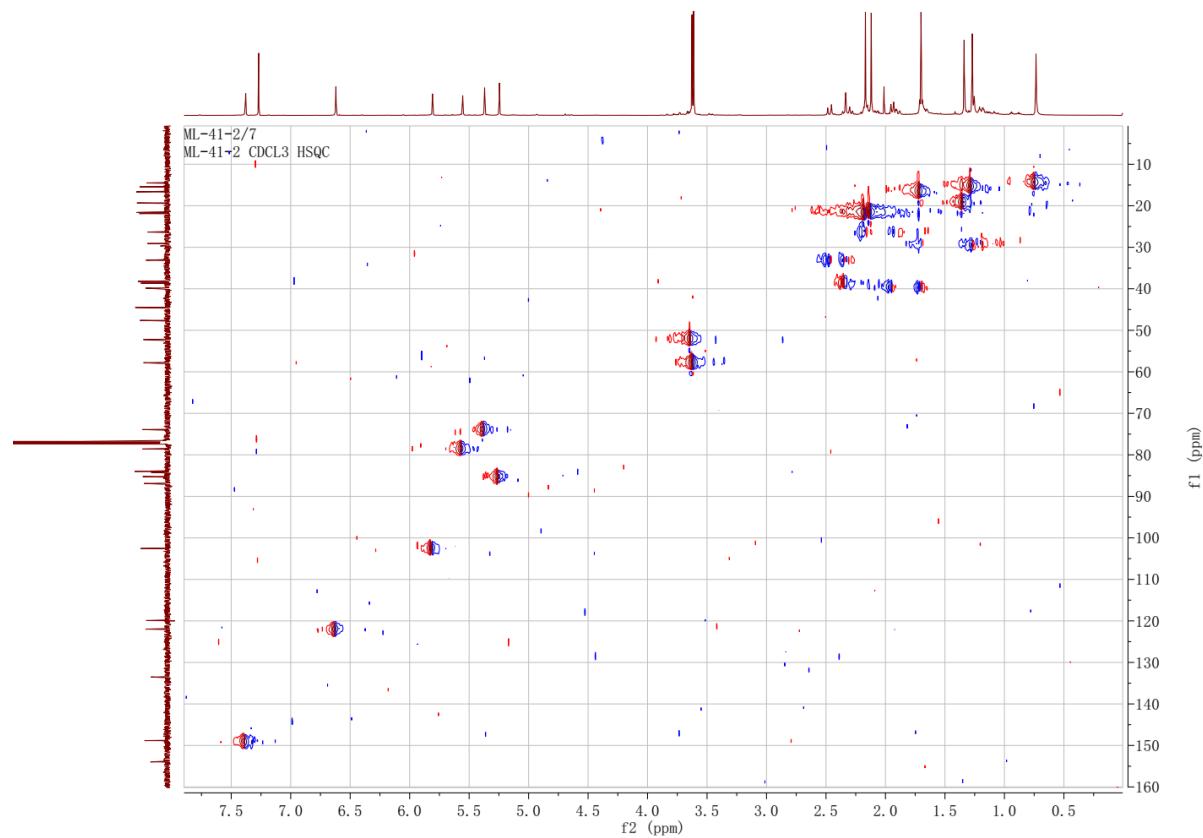


Figure S15. HSQC spectrum of **2**

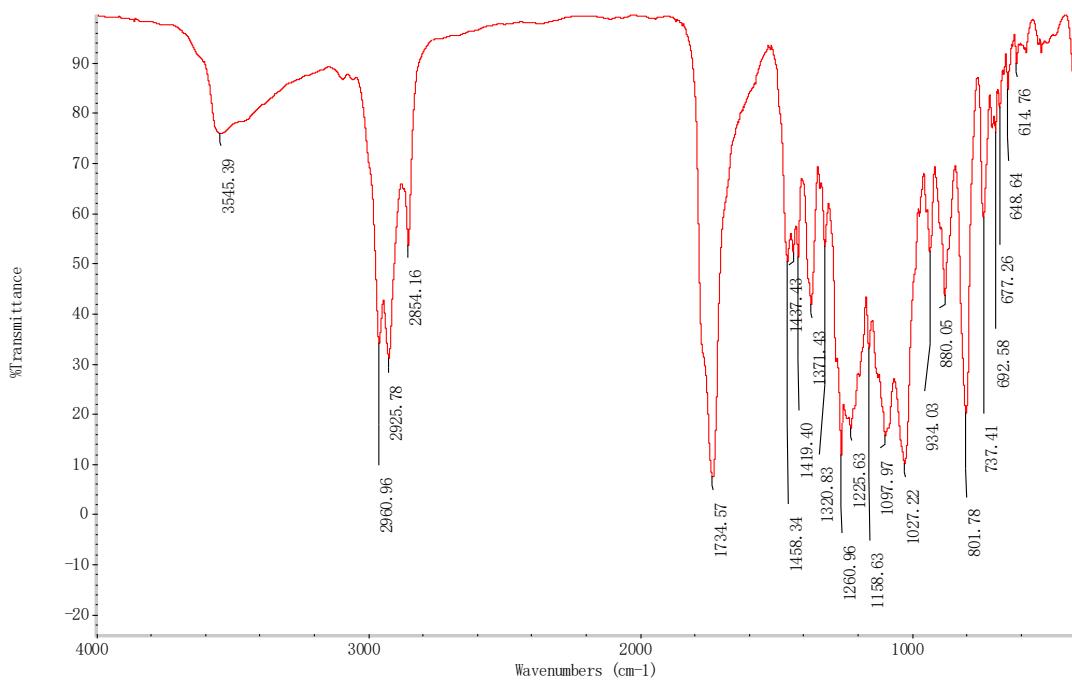
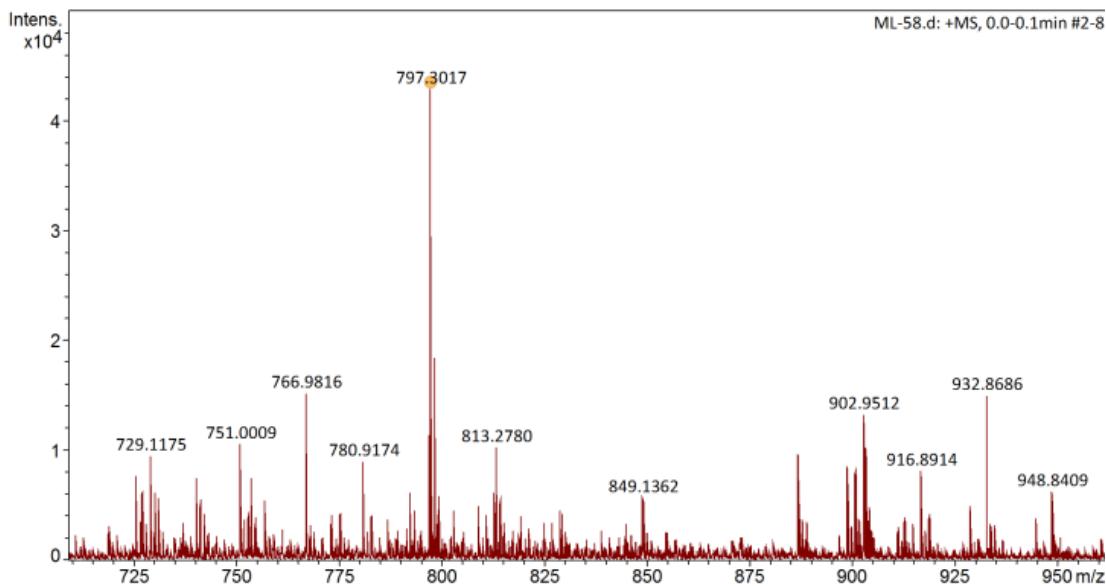


Figure S16. IR spectrum of **2**



Sum Formula	Ion Formula	Meas. m/z	m/z	err [mDa]	err [ppm]
C39H50O16	C39H50NaO16	797.3017	797.2991	-2.6	-3.3

Figure S17. HR-ESI-MS spectrum of 3

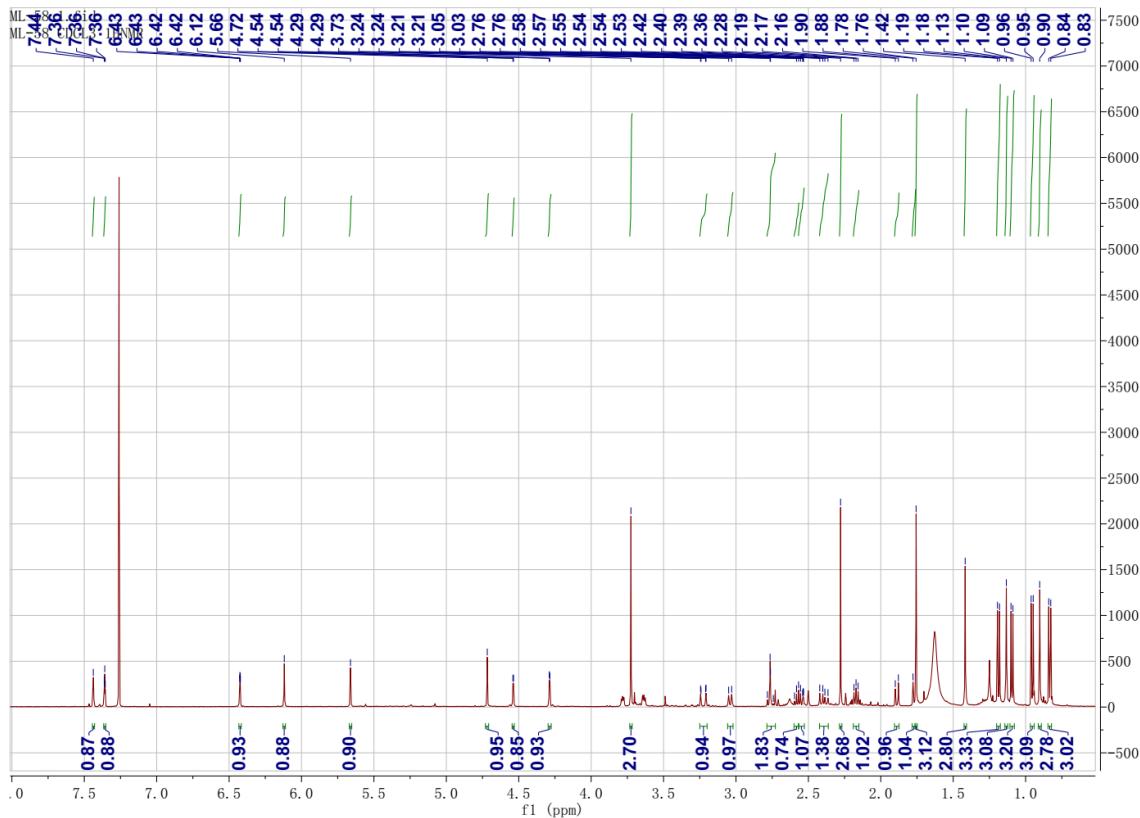


Figure S18. ^1H -NMR spectrum (CDCl_3 , 500 MHz) of 3

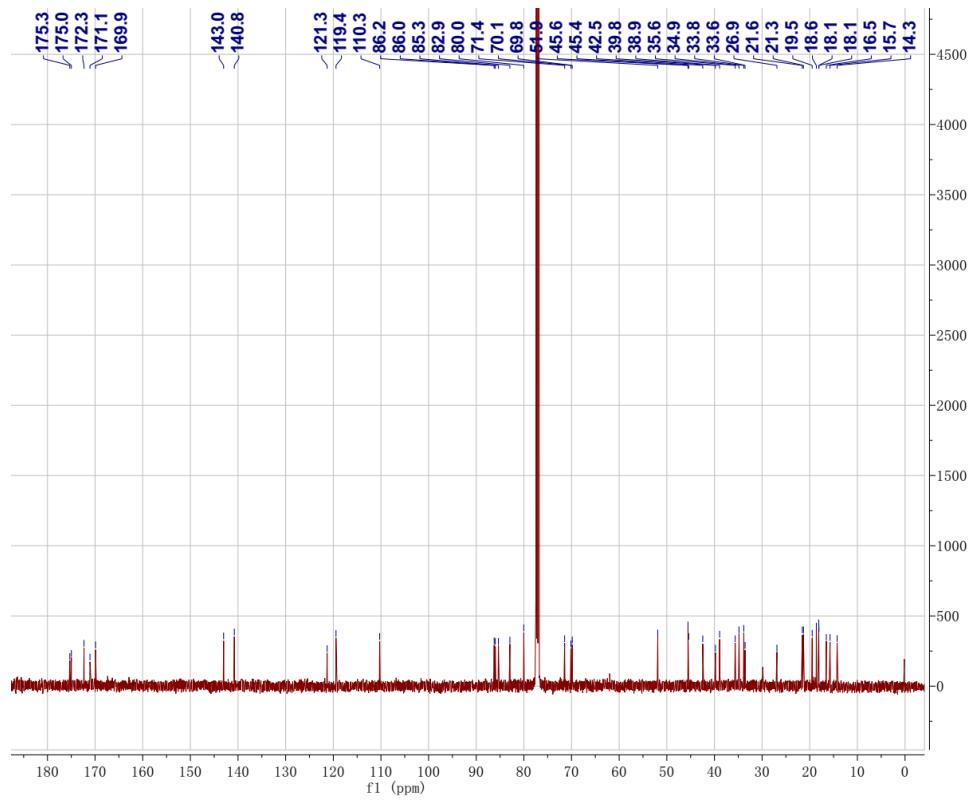


Figure S19. ^{13}C -NMR spectrum (CDCl_3 , 125 MHz) of **3**

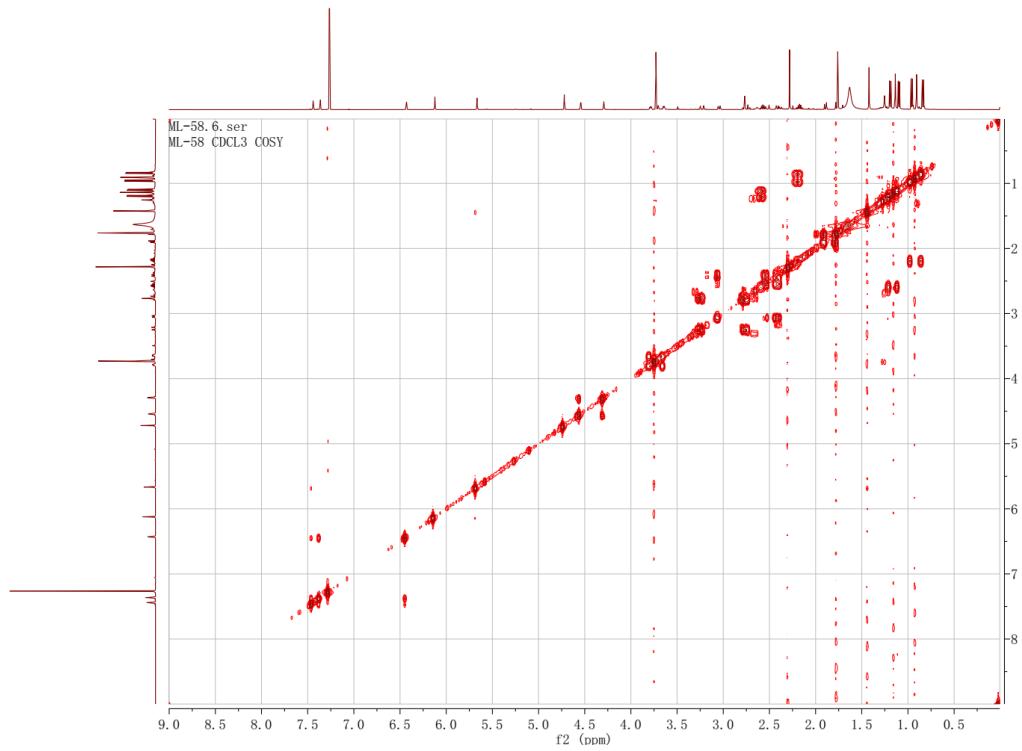


Figure S20. ^1H - ^1H COSY spectrum of **3**

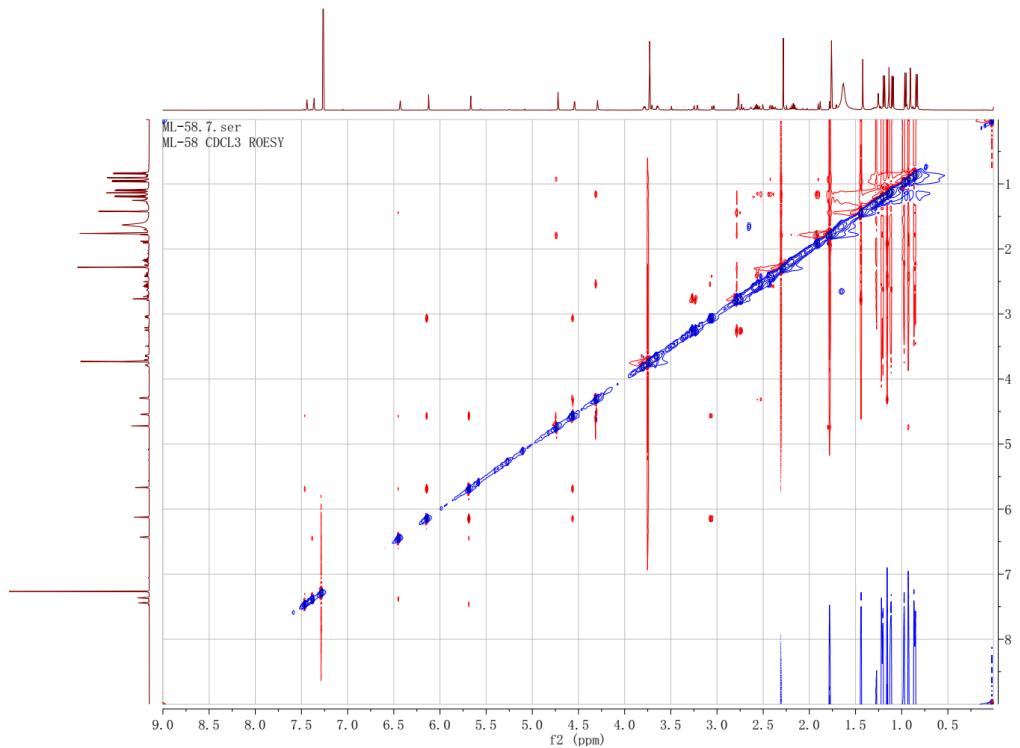


Figure S21. ROESY spectrum of **3**

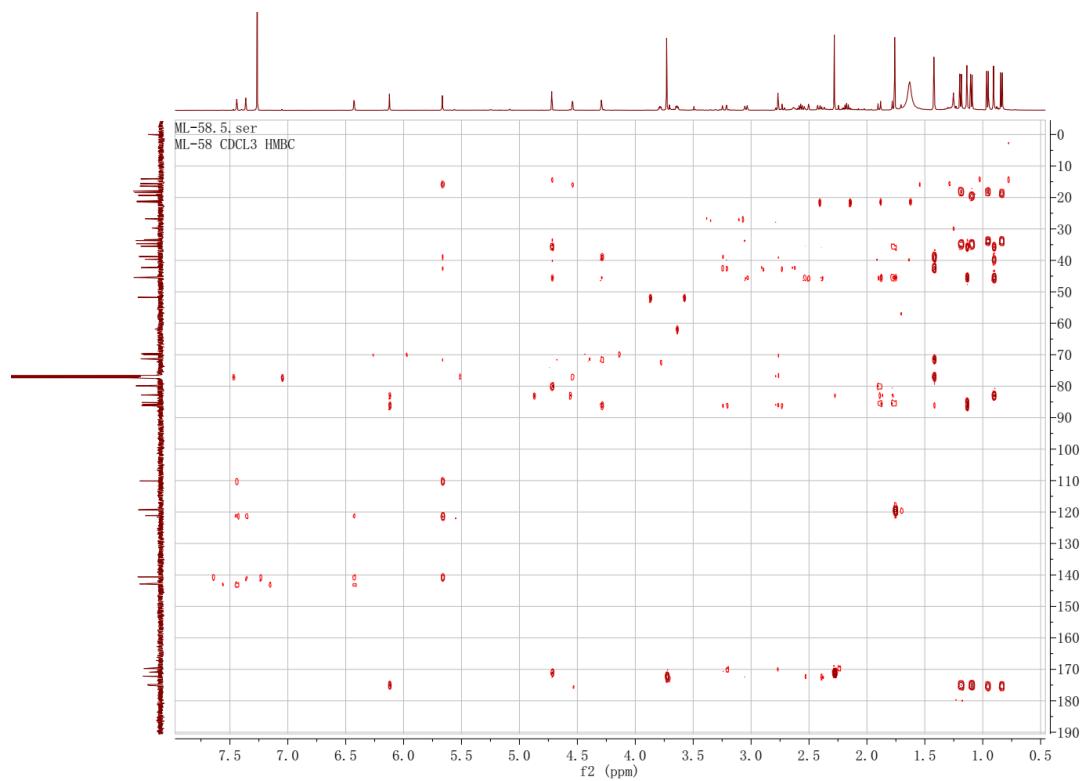


Figure S22. HMBC spectrum of **3**

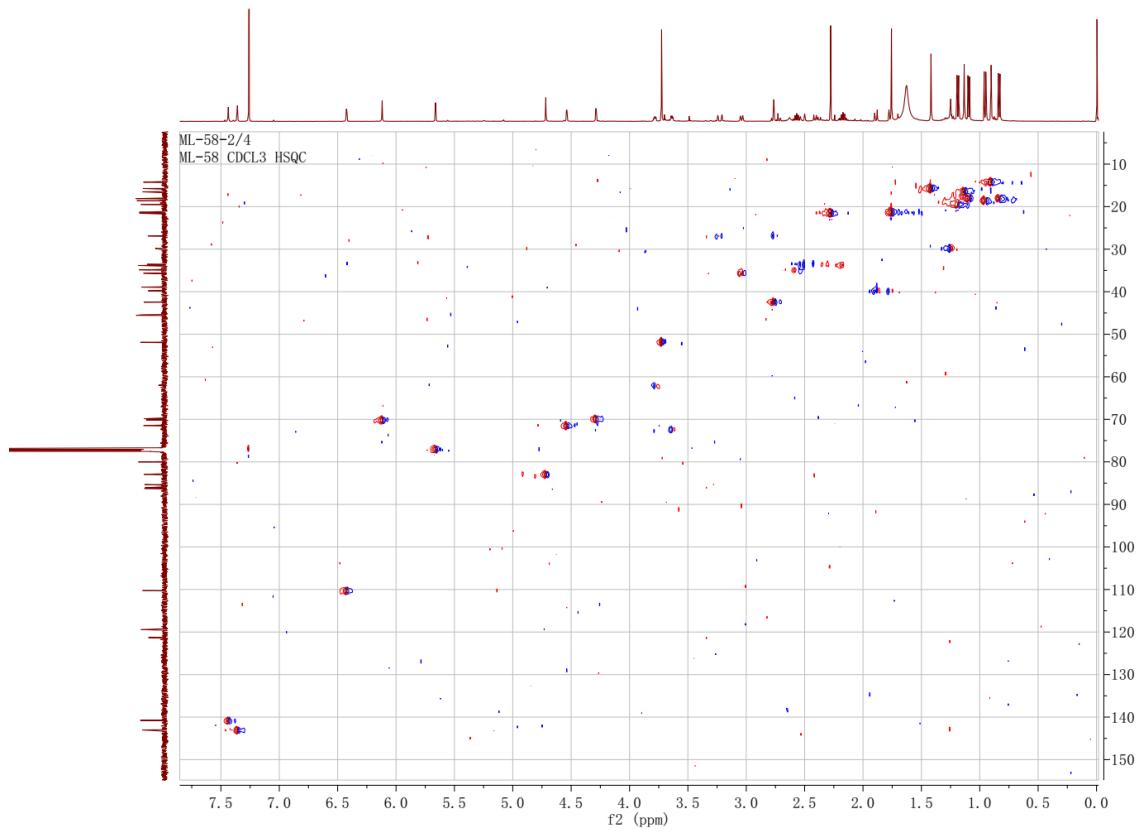


Figure S23. HSQC spectrum of **3**

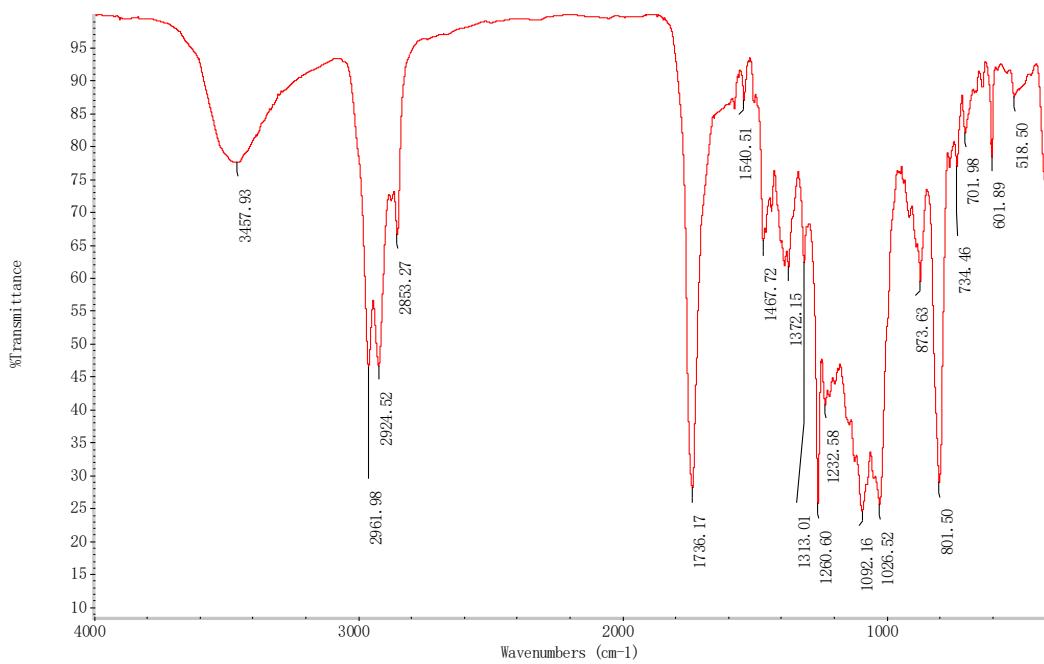
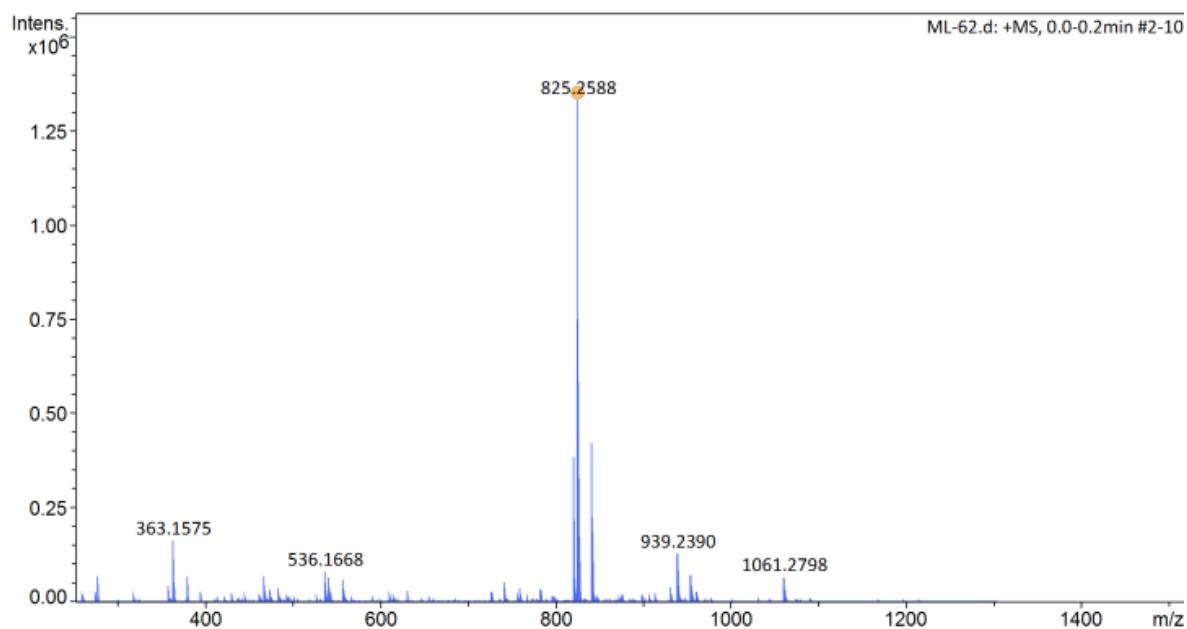


Figure S24. IR spectrum of **3**



Sum Formula	Ion Formula	Meas. m/z	m/z	err [mDa]	err [ppm]
C39H46O18	C39H46NaO18	825.2588	825.2576	-1.2	-1.4

Figure S25. HR-ESI-MS spectrum of 4

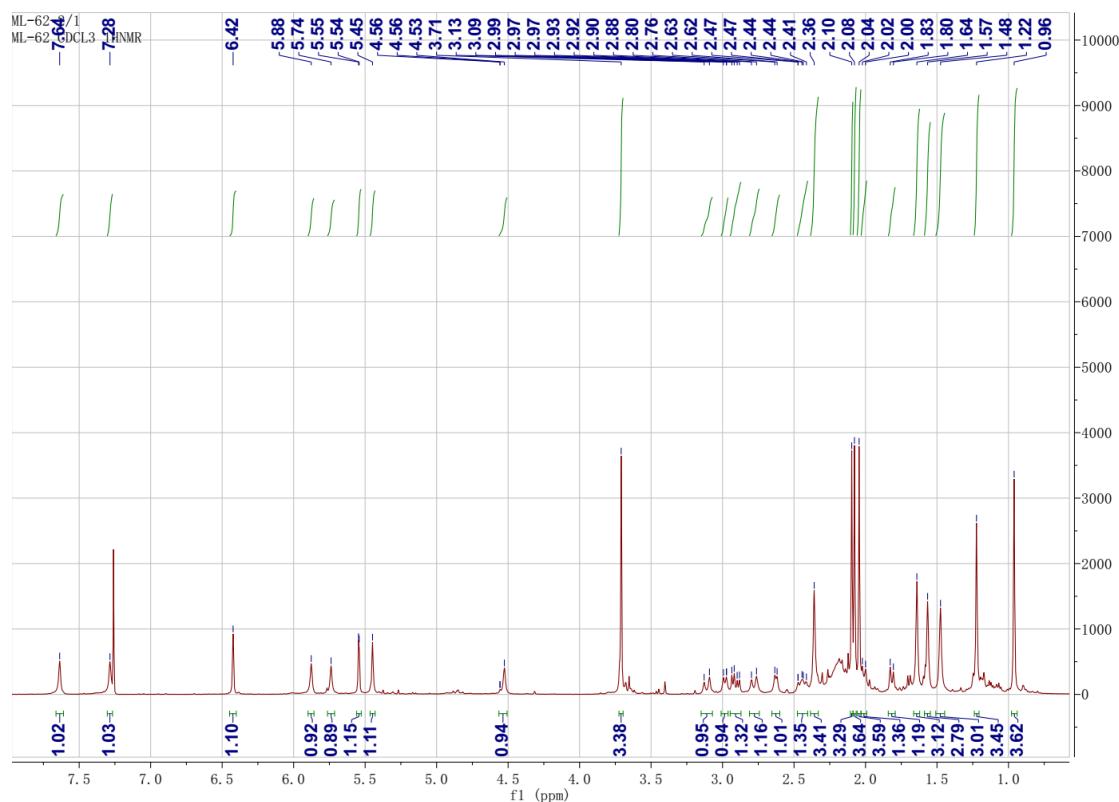


Figure S26. ¹H-NMR spectrum (CDCl₃, 500 MHz) of 4

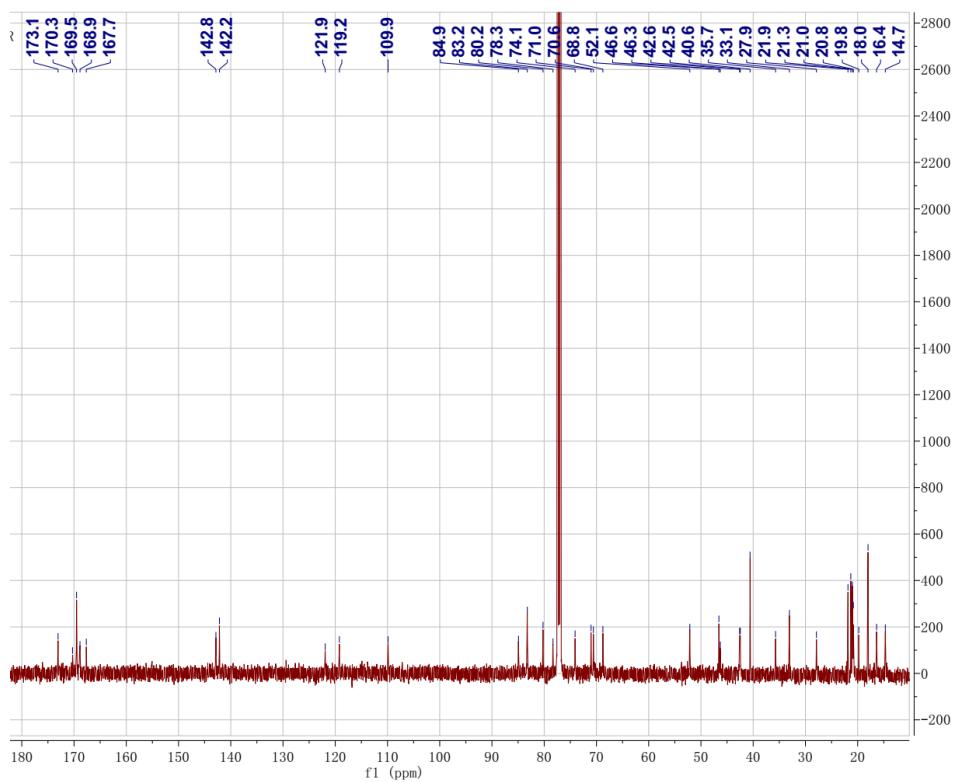


Figure S27. ^{13}C -NMR spectrum (CDCl_3 , 125 MHz) of **4**

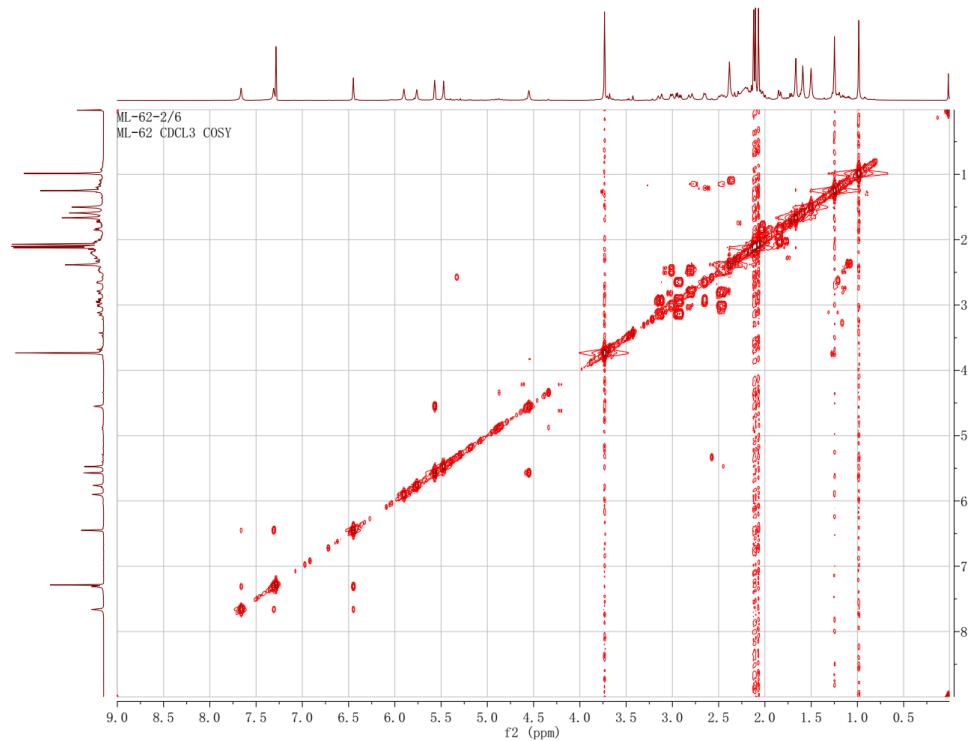


Figure S28. ^1H - ^1H COSY spectrum of **4**

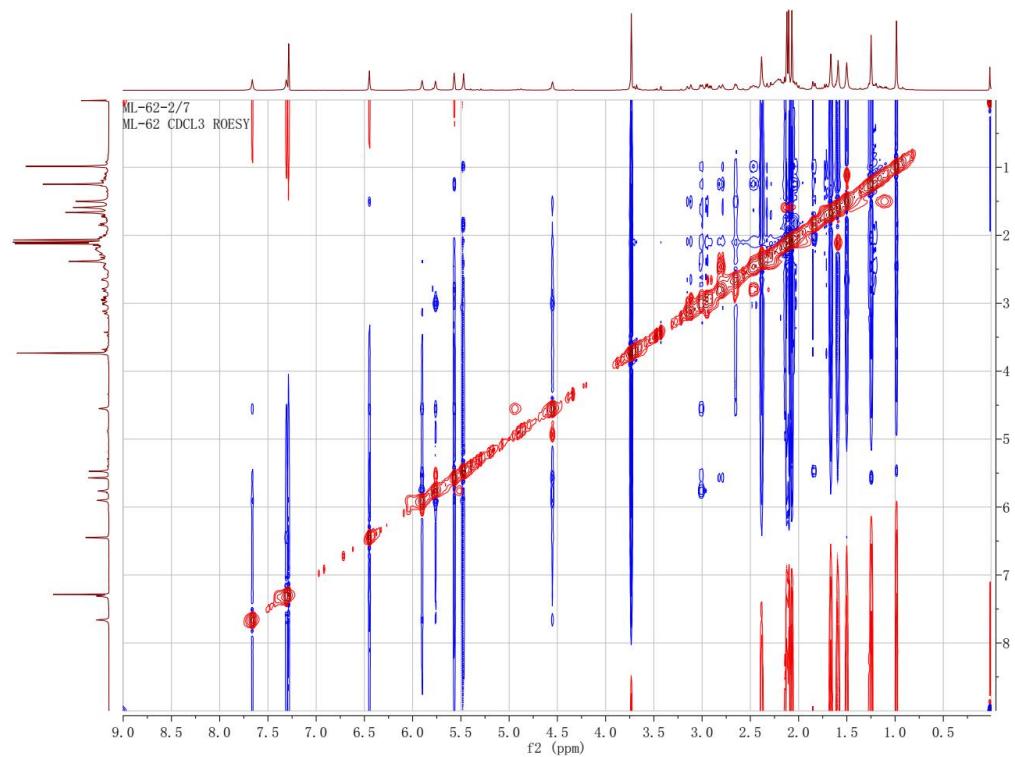


Figure S29. ROESY spectrum of 4

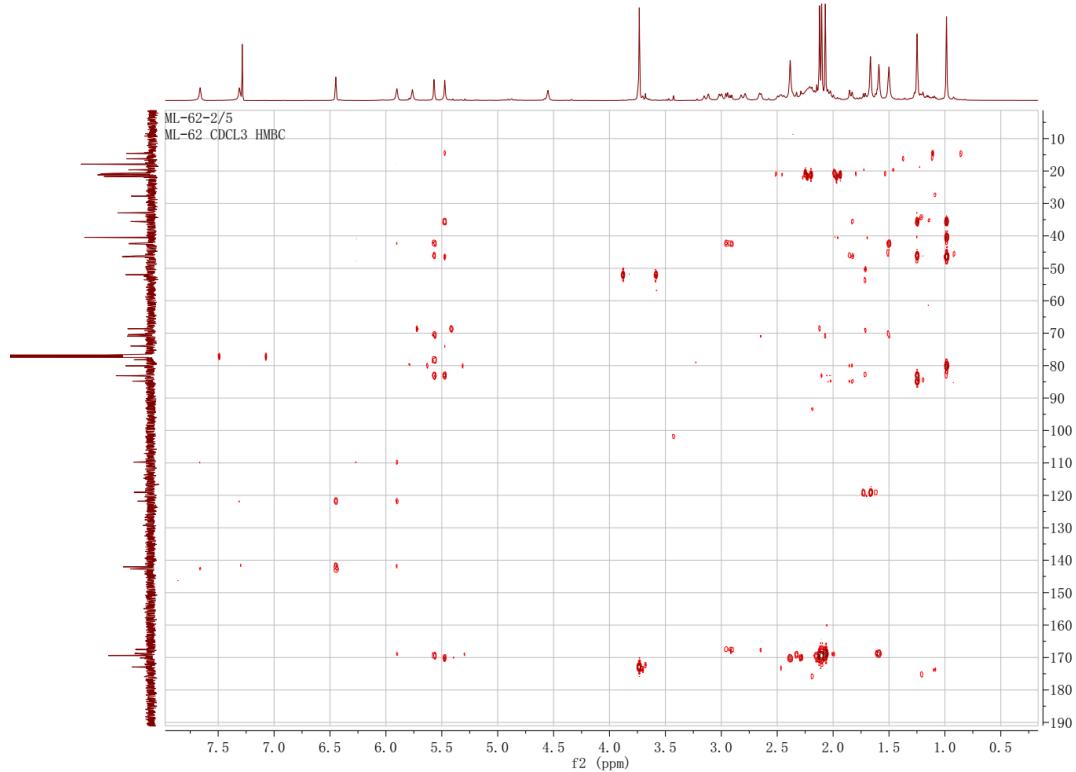


Figure S30. HMBC spectrum of 4

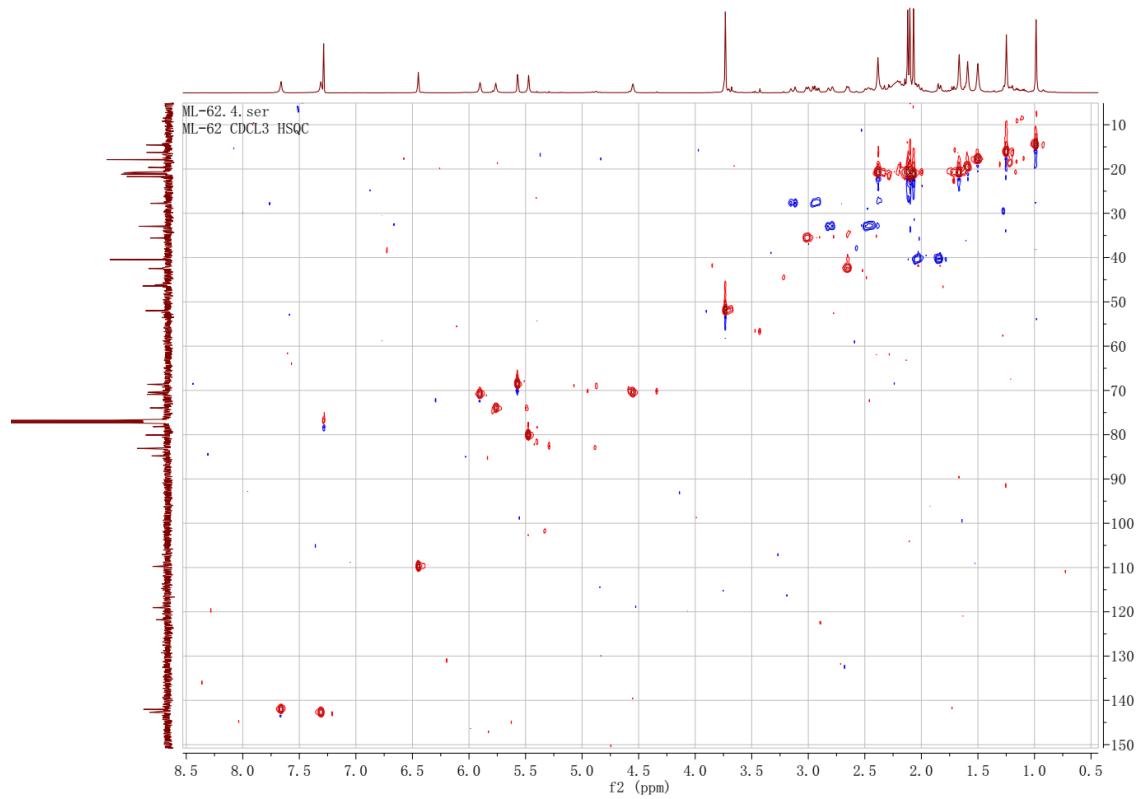


Figure S31. HSQC spectrum of **4**

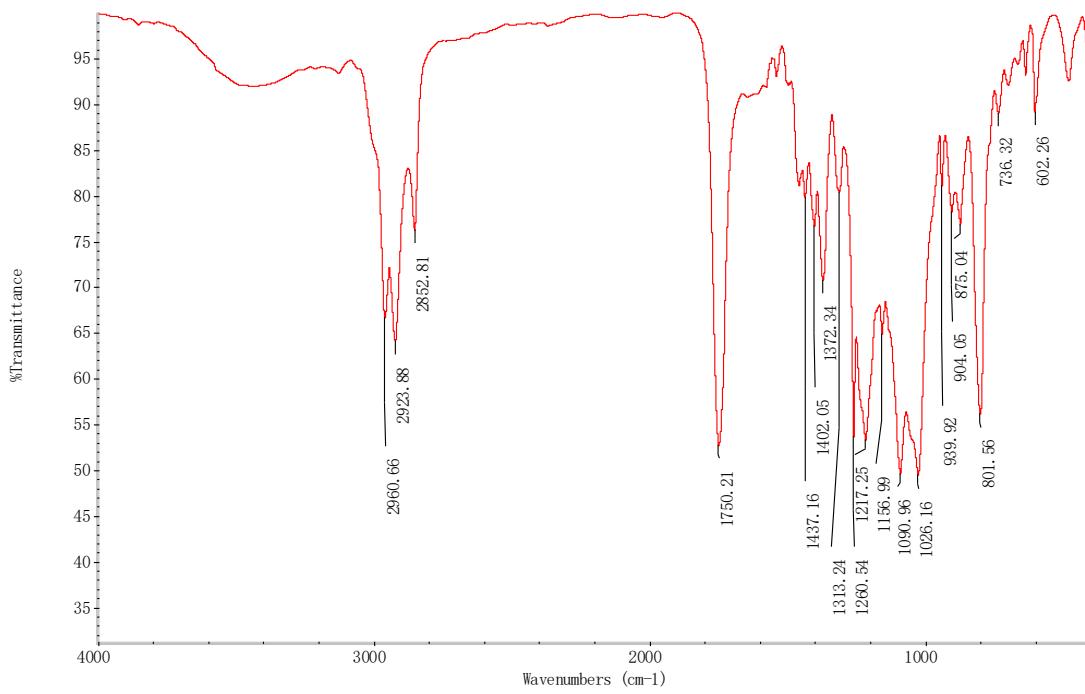
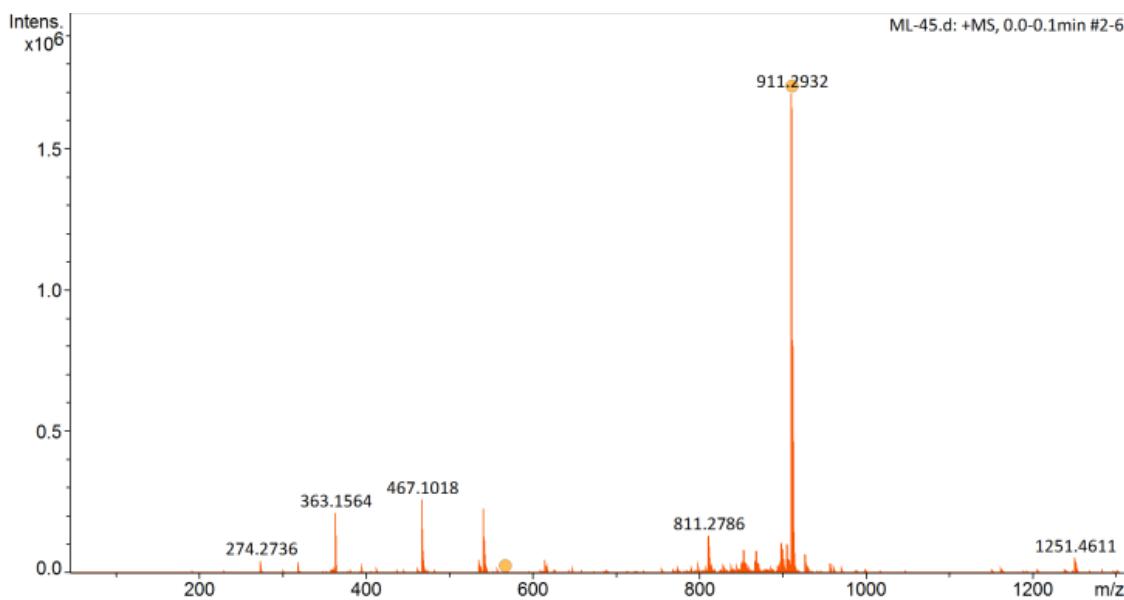


Figure S32. IR spectrum of **4**



Sum Formula	Ion Formula	Meas. m/z	m/z	err [mDa]	err [ppm]
C ₄₃ H ₅₂ O ₂₀	C ₄₃ H ₅₂ NaO ₂₀	911.2932	911.2944	1.2	1.4

Figure S33. HR-ESI-MS spectrum of **5**

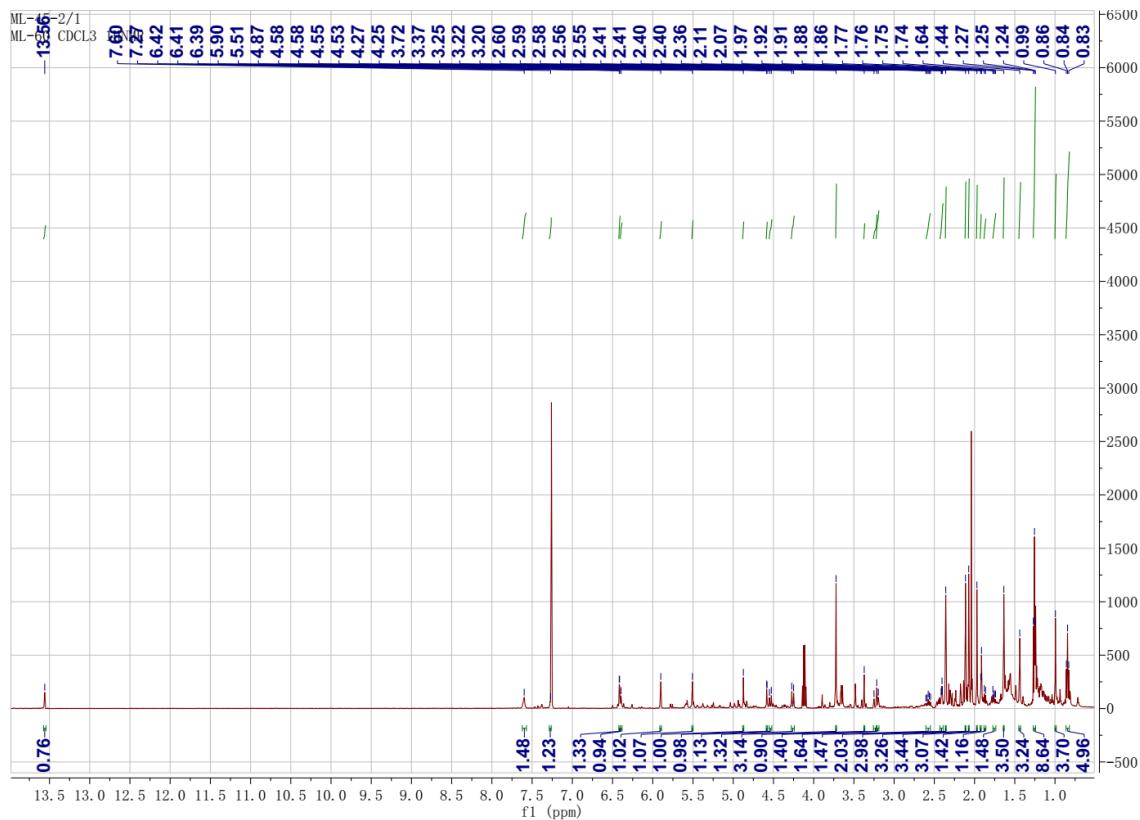


Figure S34. ¹H-NMR spectrum (CDCl₃, 500 MHz) of **5**

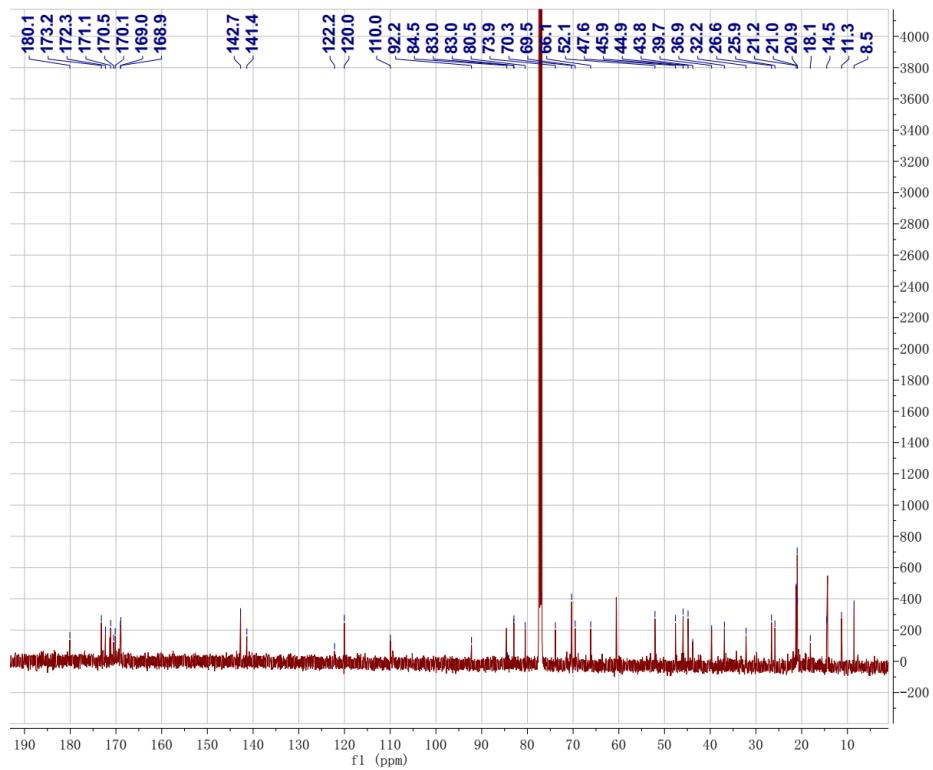


Figure S35. ^{13}C -NMR spectrum (CDCl_3 , 125 MHz) of **5**

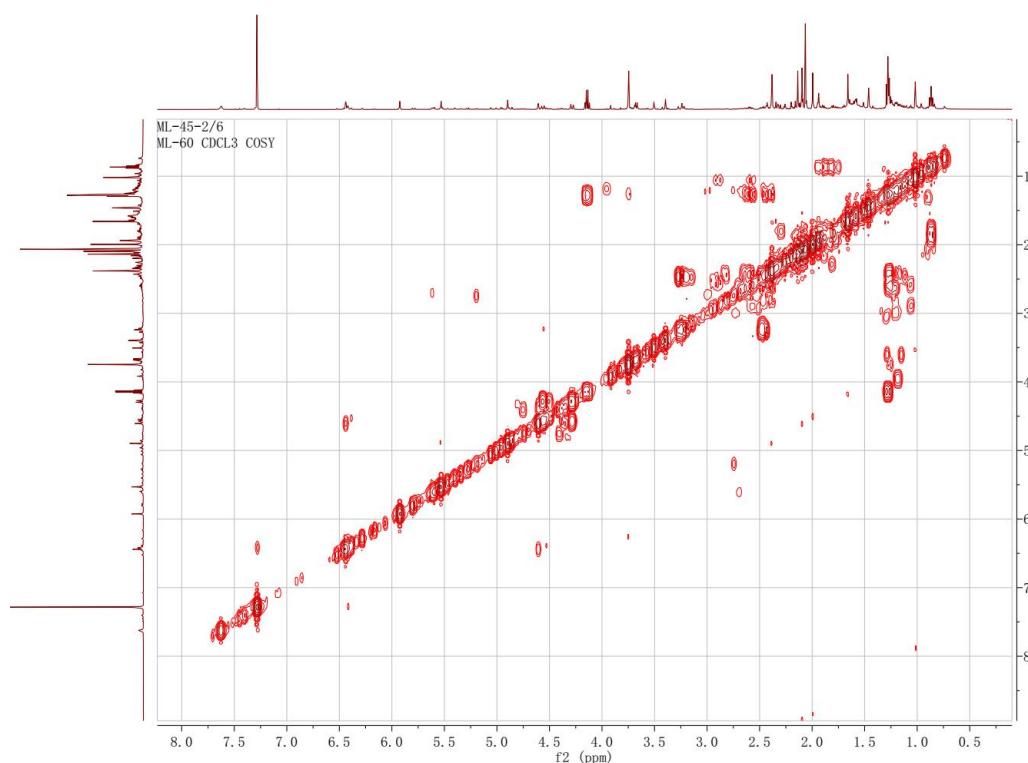


Figure S36. ^1H - ^1H COSY spectrum of **5**

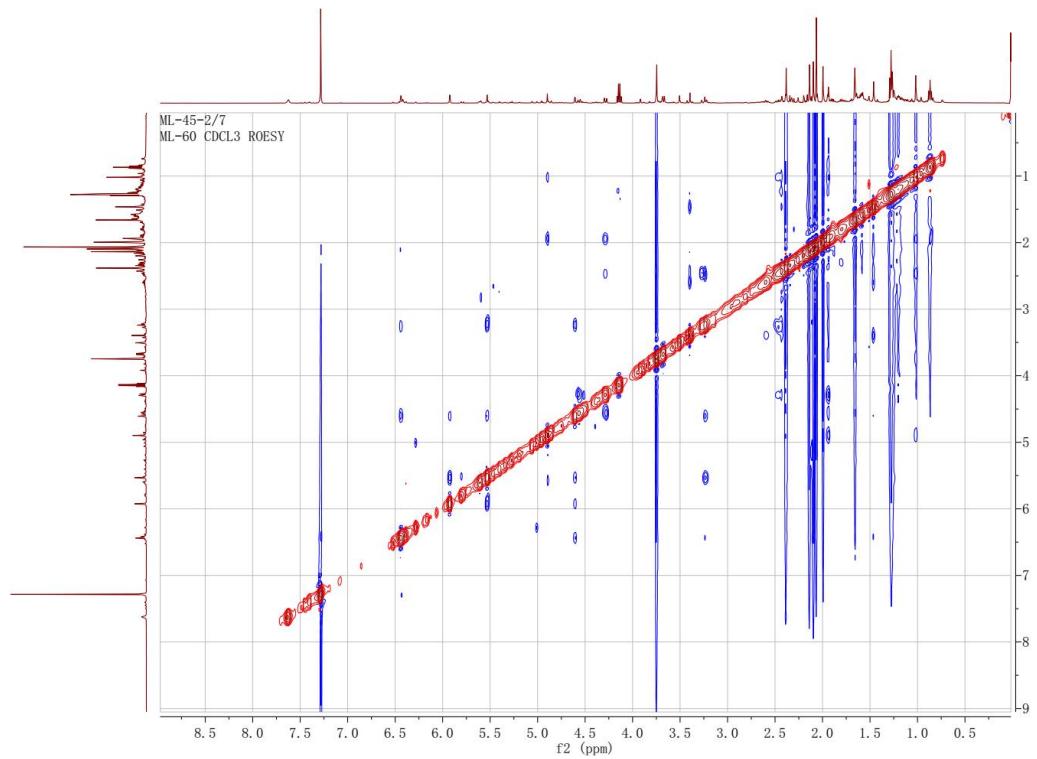


Figure S37. ROESY spectrum of **5**

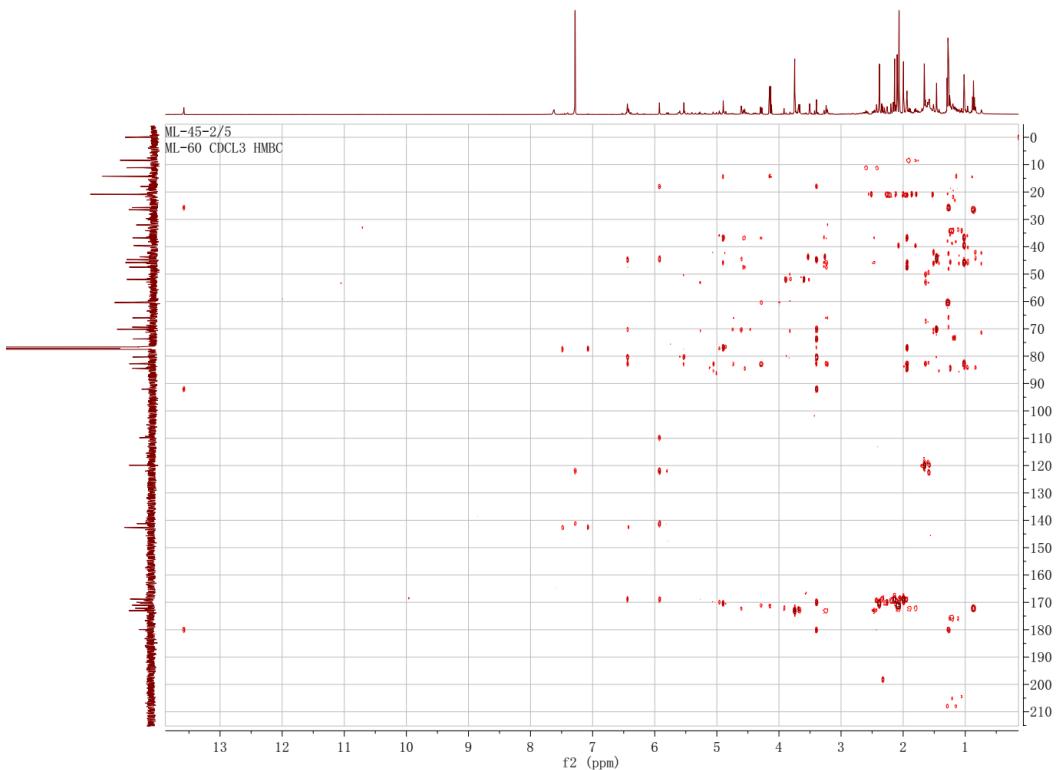


Figure S38. HMBC spectrum of **5**

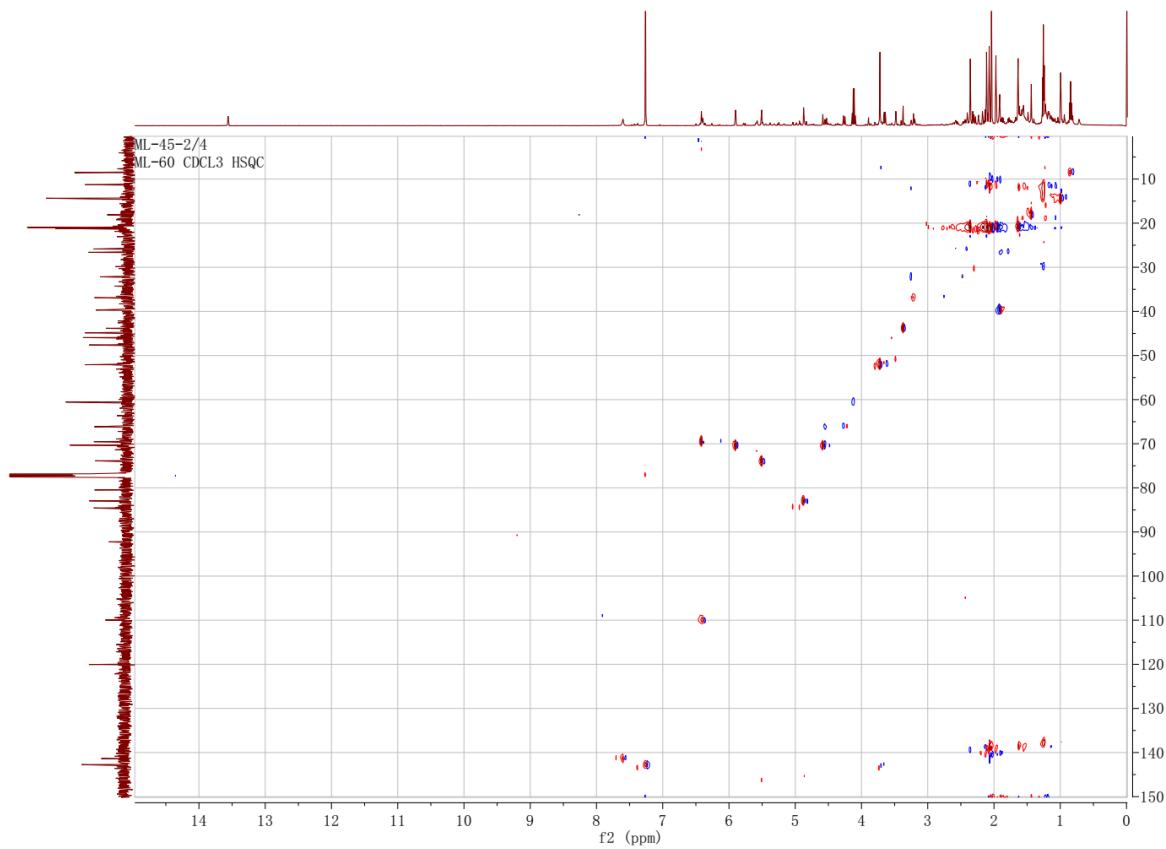


Figure S39. HSQC spectrum of **5**

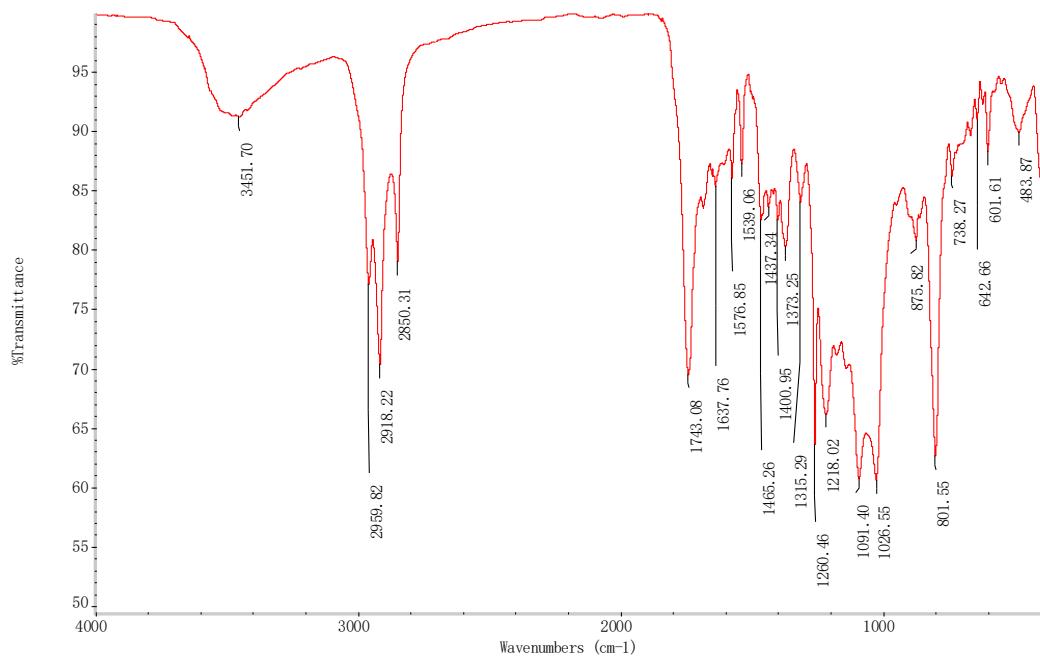
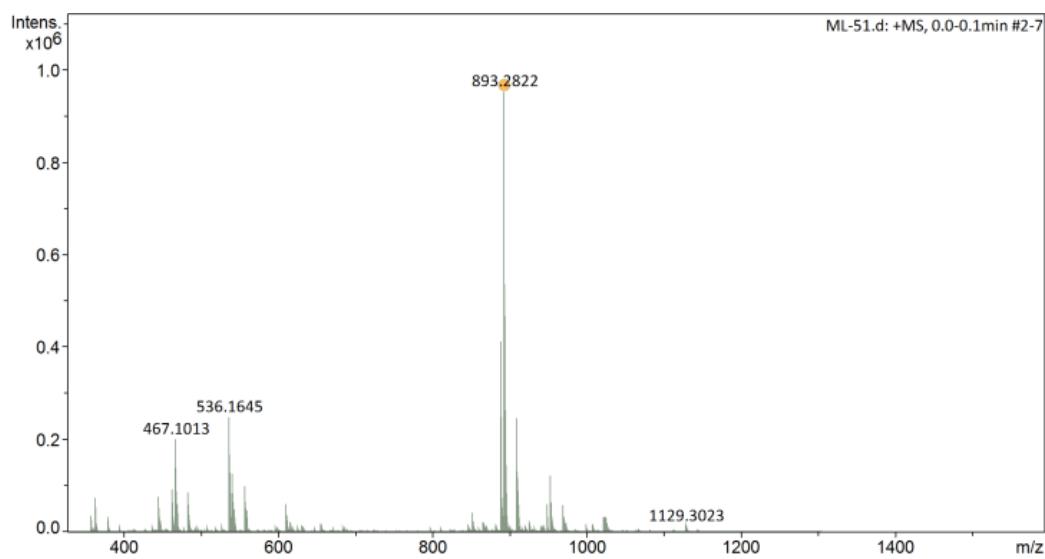


Figure S40. IR spectrum of **5**



Sum Formula	Ion Formula	Meas. m/z	m/z	err [mDa]	err [ppm]
C ₄₃ H ₅₀ O ₁₉	C ₄₃ H ₅₀ NaO ₁₉	893.2822	893.2839	1.7	1.9

Figure S41. HR-ESI-MS spectrum of **6**

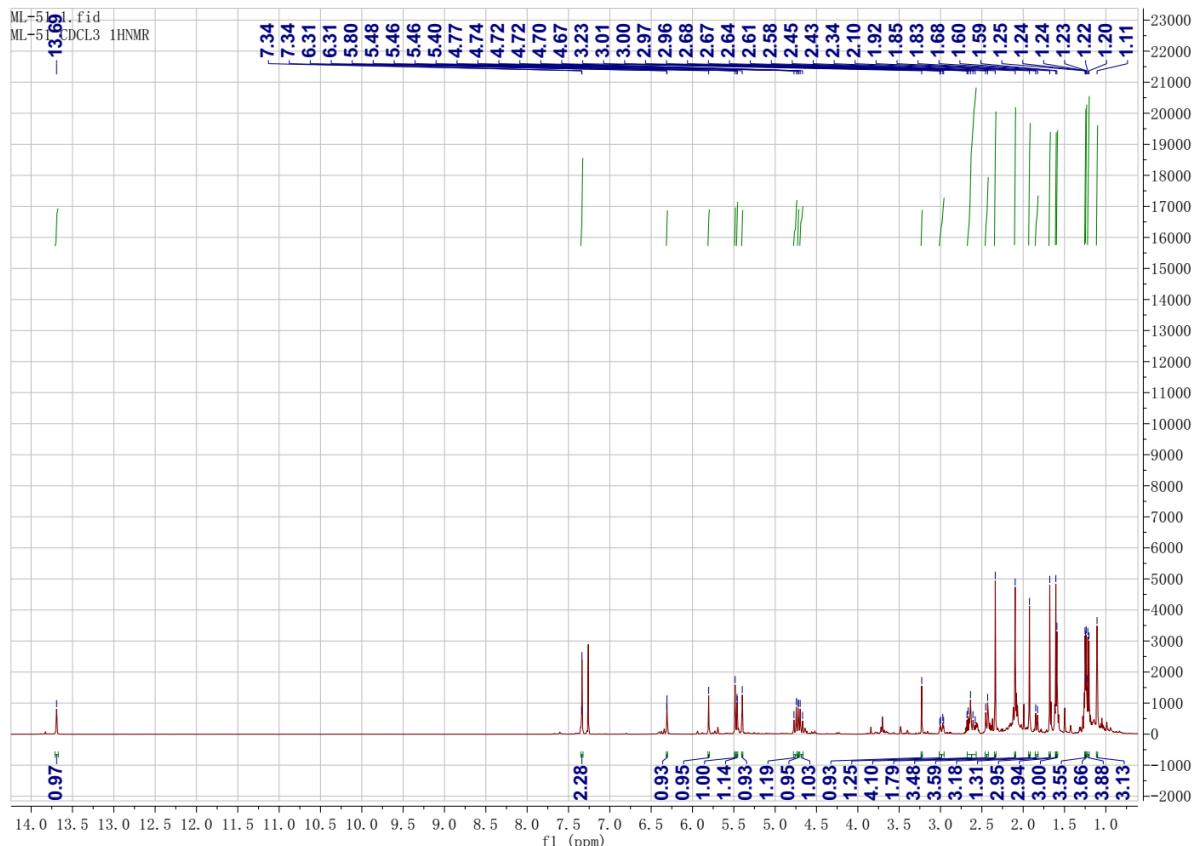


Figure S42. ¹H-NMR spectrum (CDCl₃, 500 MHz) of **6**

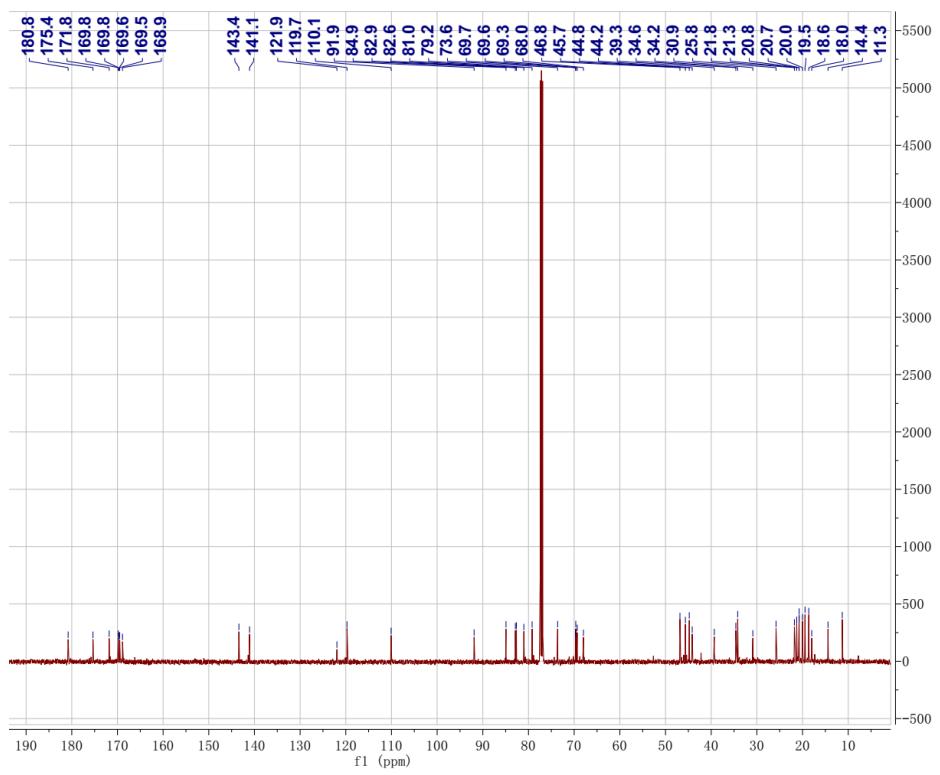


Figure S43. ¹³C-NMR spectrum (CDCl₃, 125 MHz) of **6**

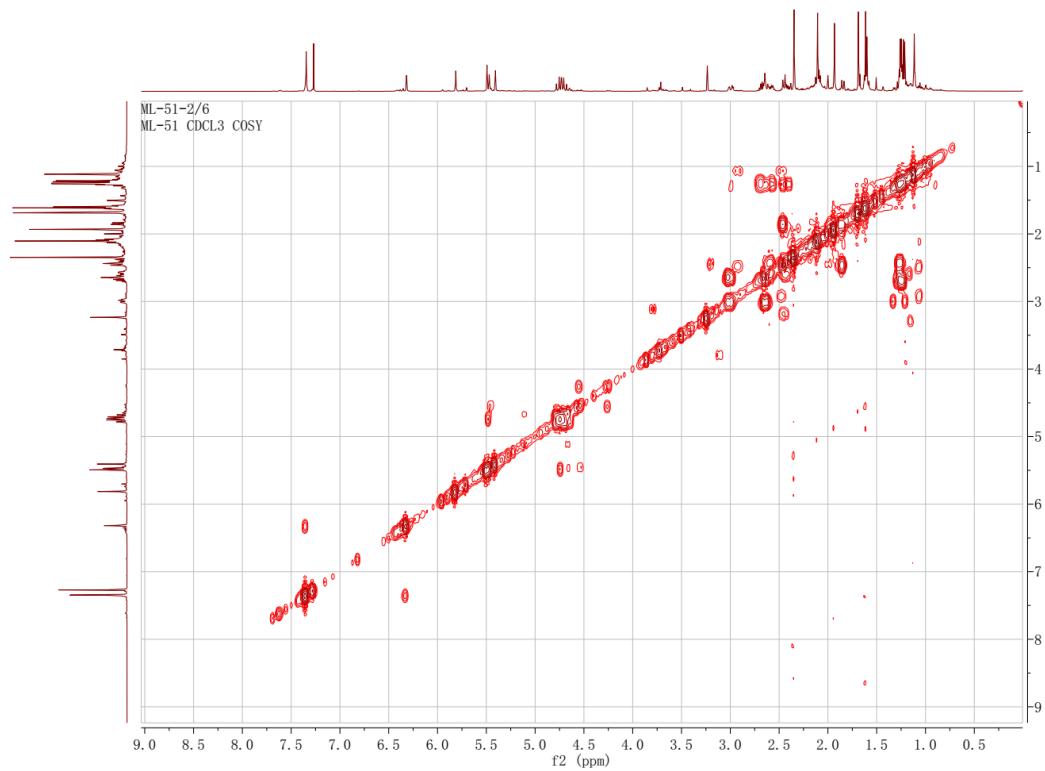


Figure S44. ¹H-¹H COSY spectrum of **6**

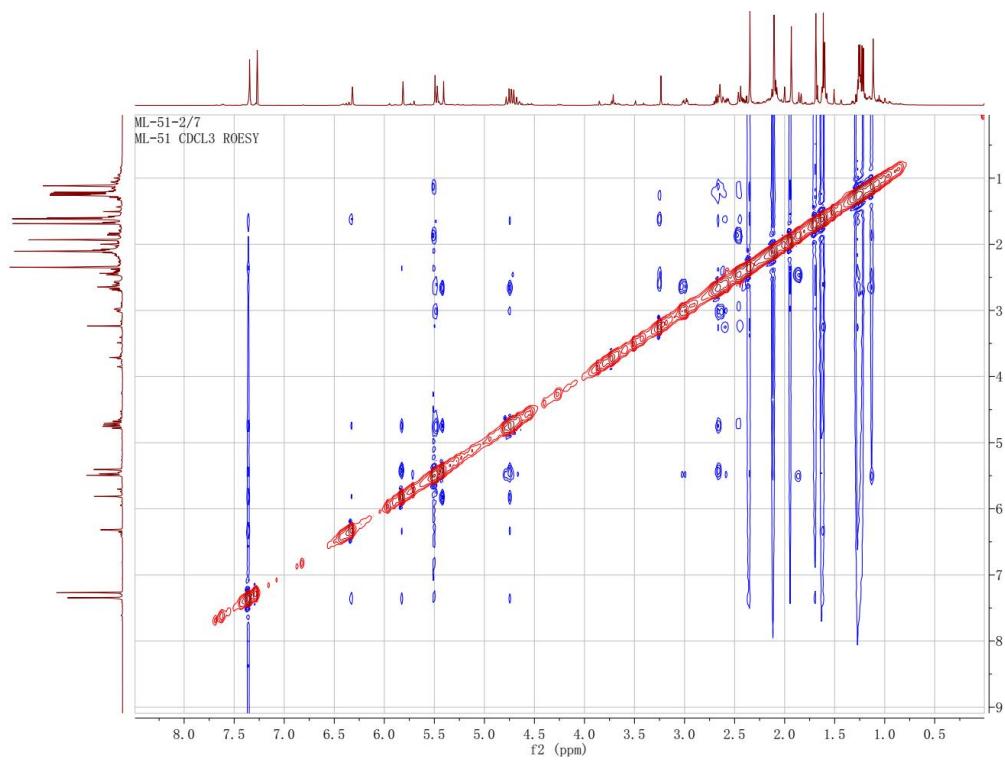


Figure S45. ROESY spectrum of **6**

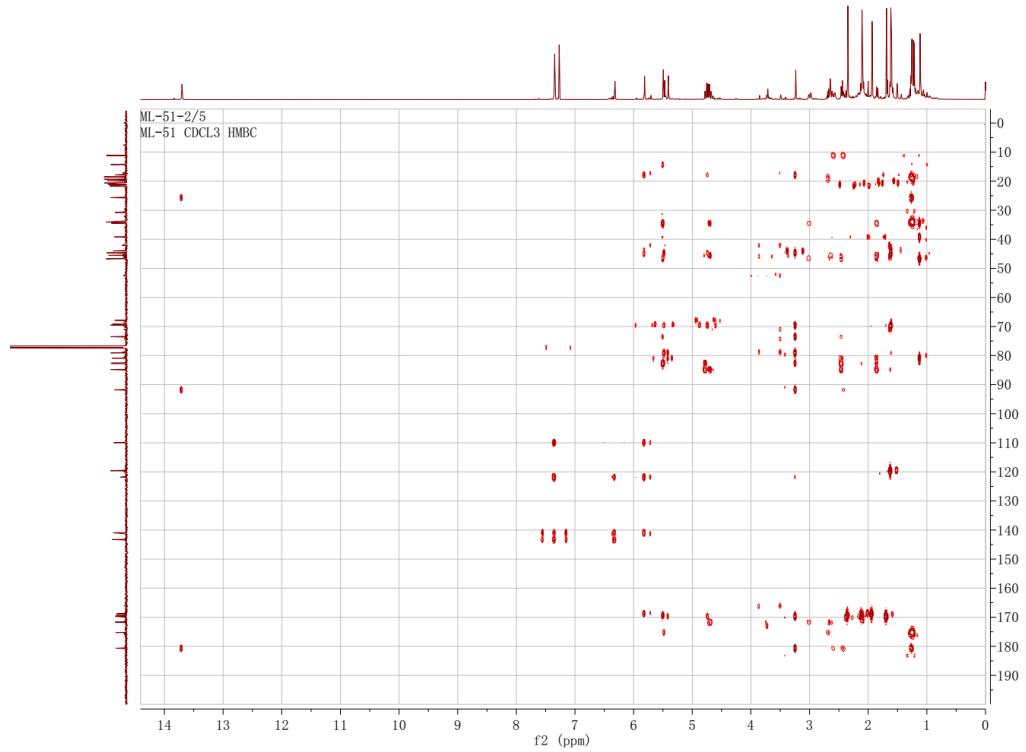


Figure S46. HMBC spectrum of **6**

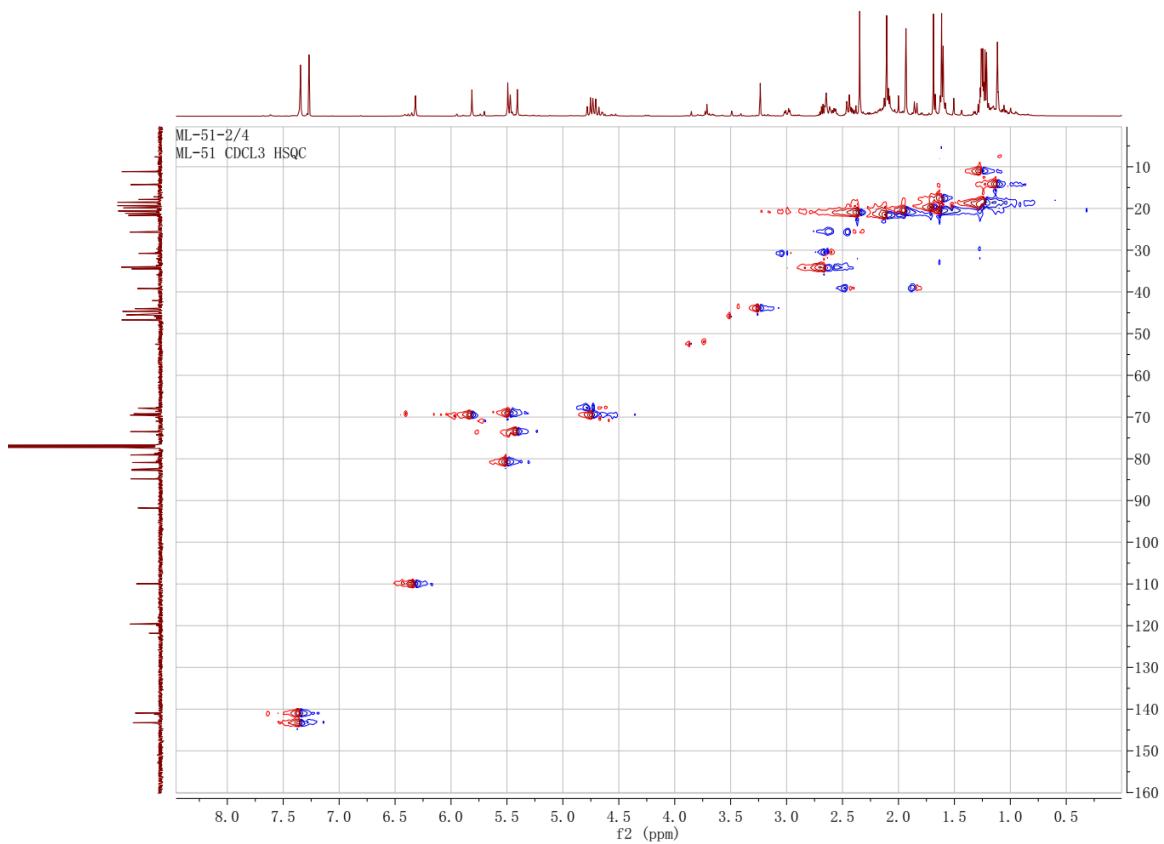


Figure S47. HSQC spectrum of **6**

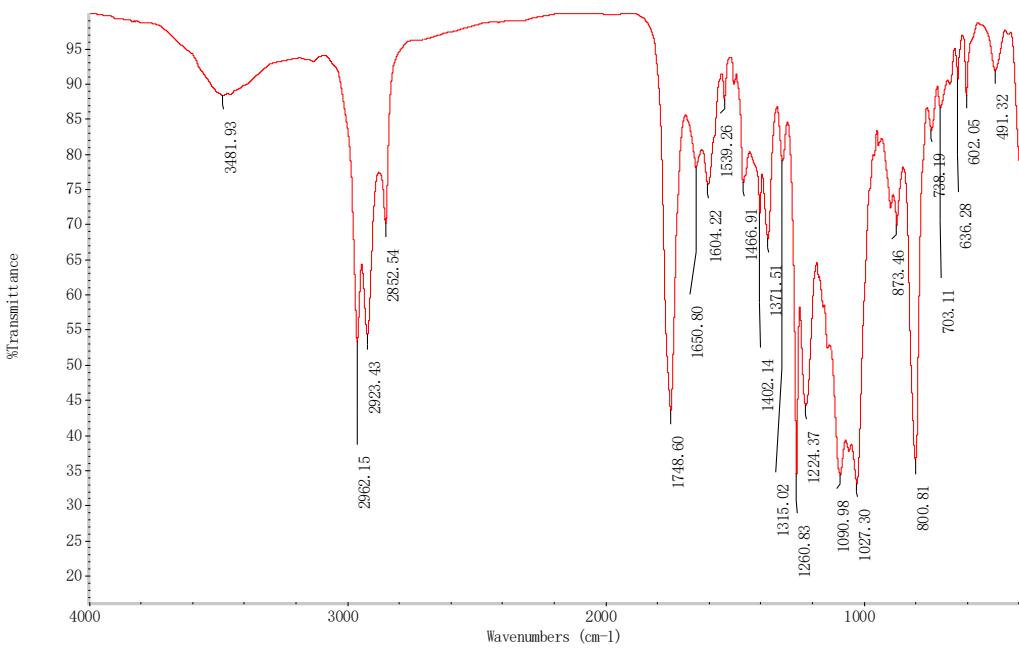


Figure S48. IR spectrum of **6**