Supplementary Materials

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

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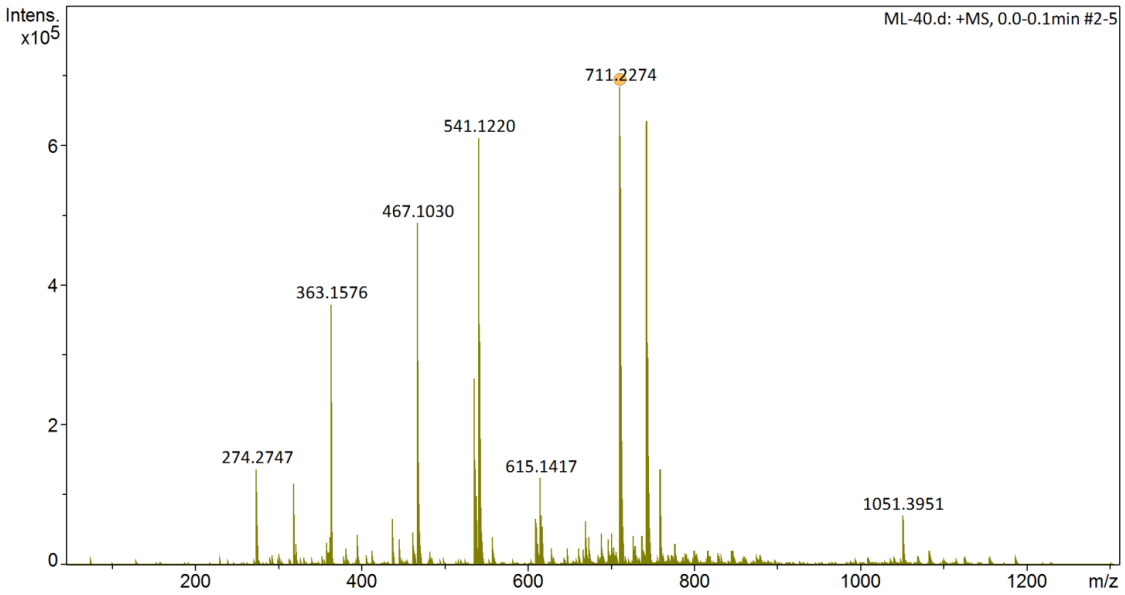
Contents



Sum Formula	Ion Formula	Meas. m/z	m/z	err [mDa]	err [ppm]
C34H40O15	C34H40NaO15	711.2274	711.2259	-1.4	-2.0

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

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

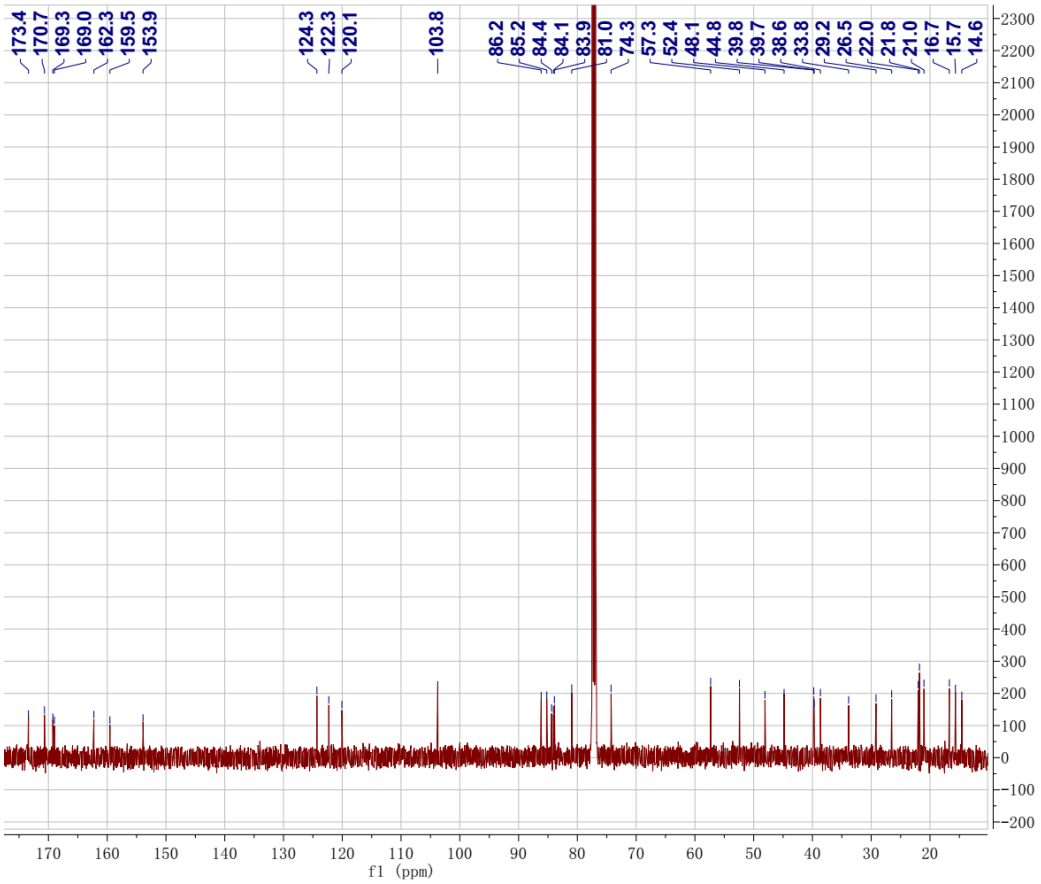


Figure S3. ^{13}C-NMR spectrum ($CDCl_3$, 125 MHz) of **1**

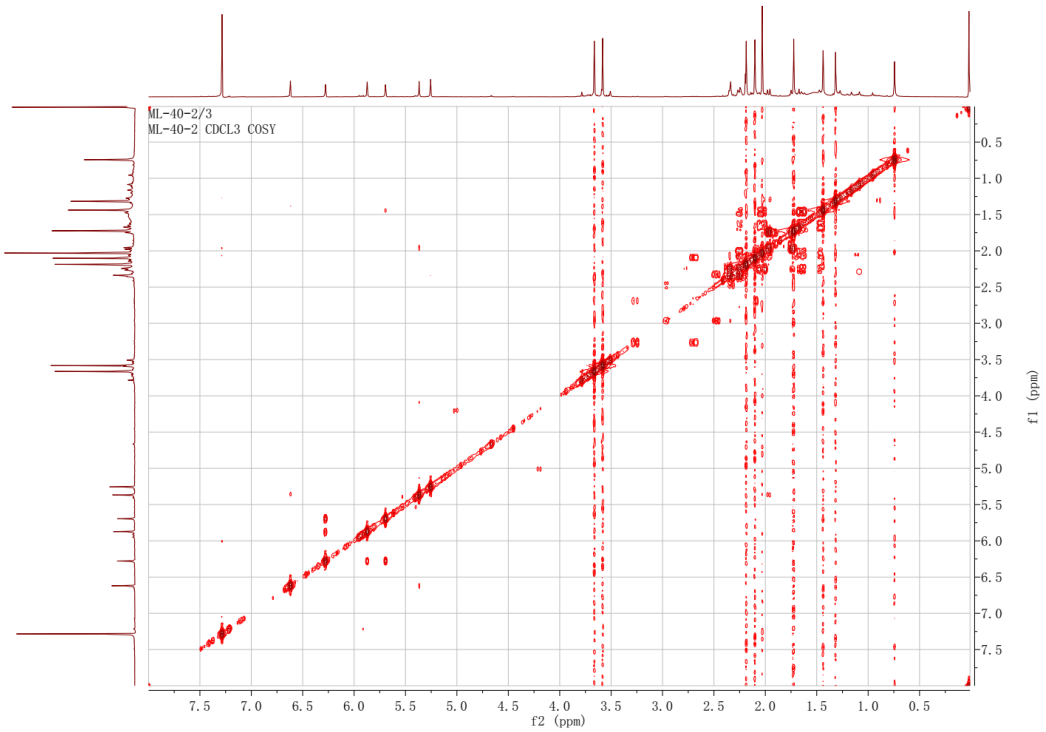


Figure S4. ^{1}H-^{1}H COSY spectrum of **1**

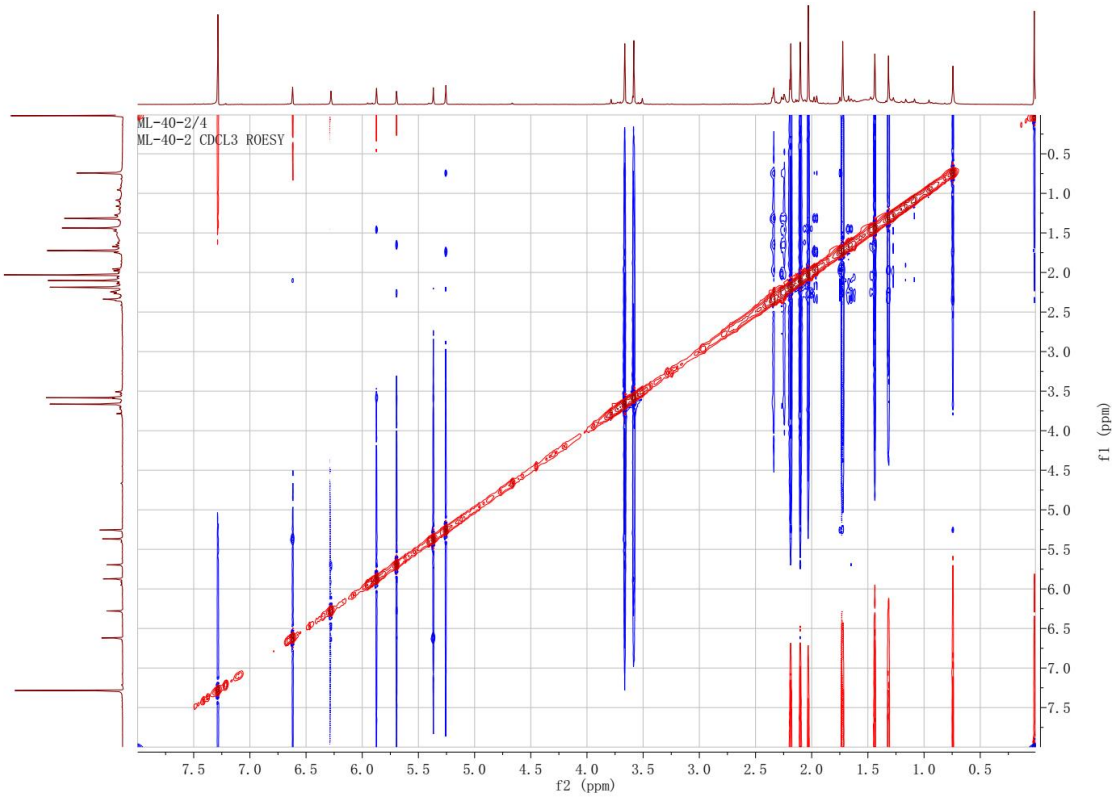


Figure S5. ROESY spectrum of **1**

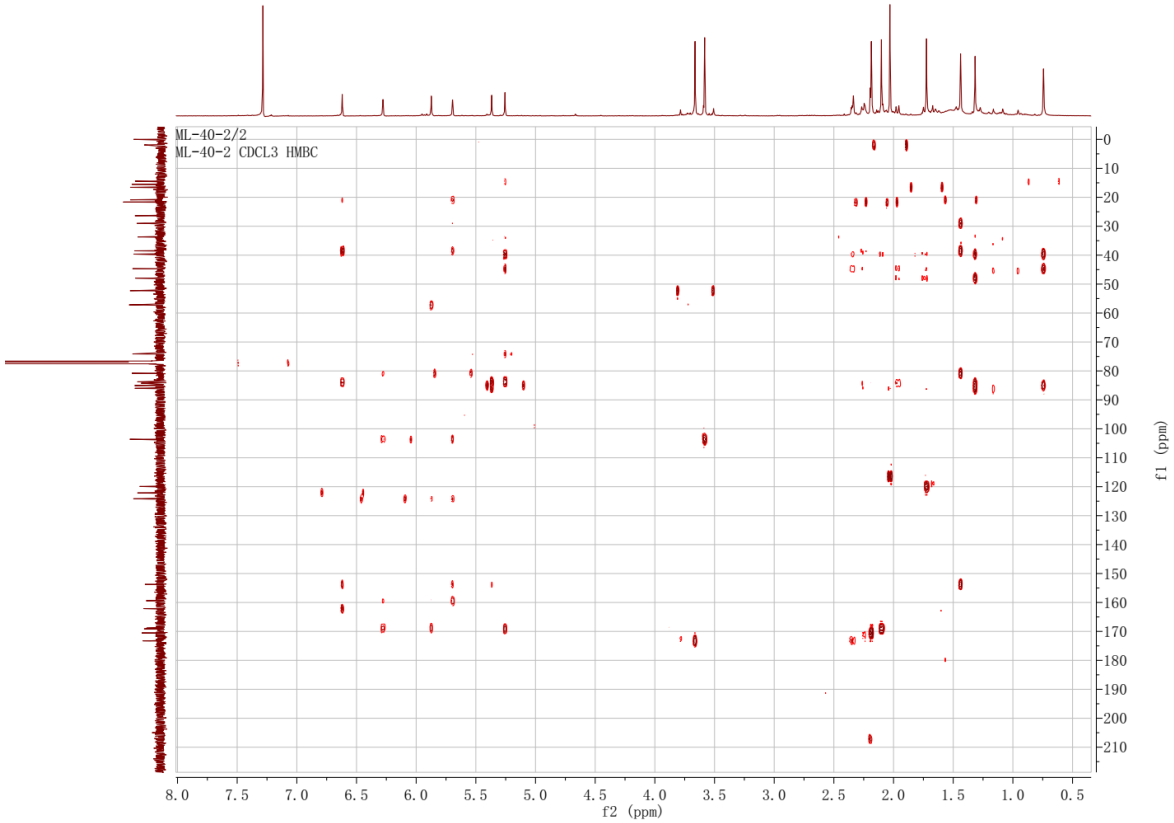


Figure S6. HMBC spectrum of **1**

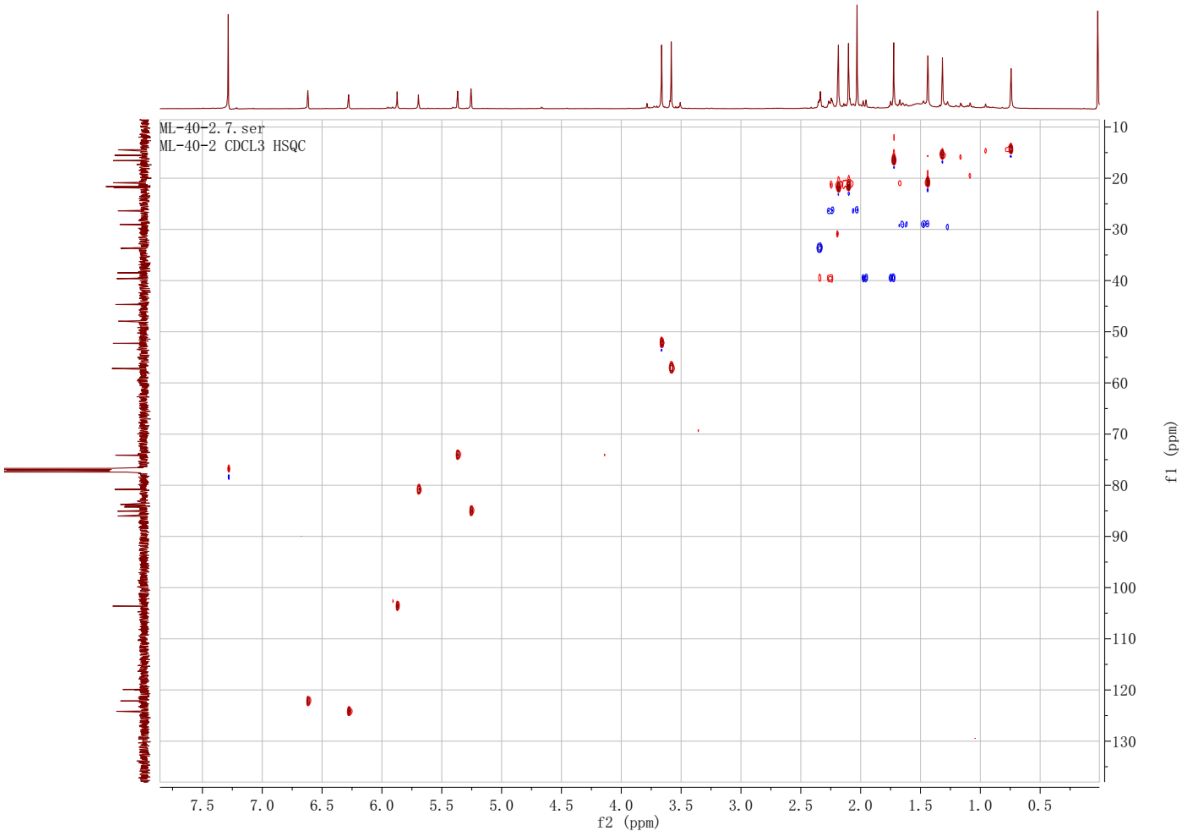


Figure S7. HSQC spectrum of **1**

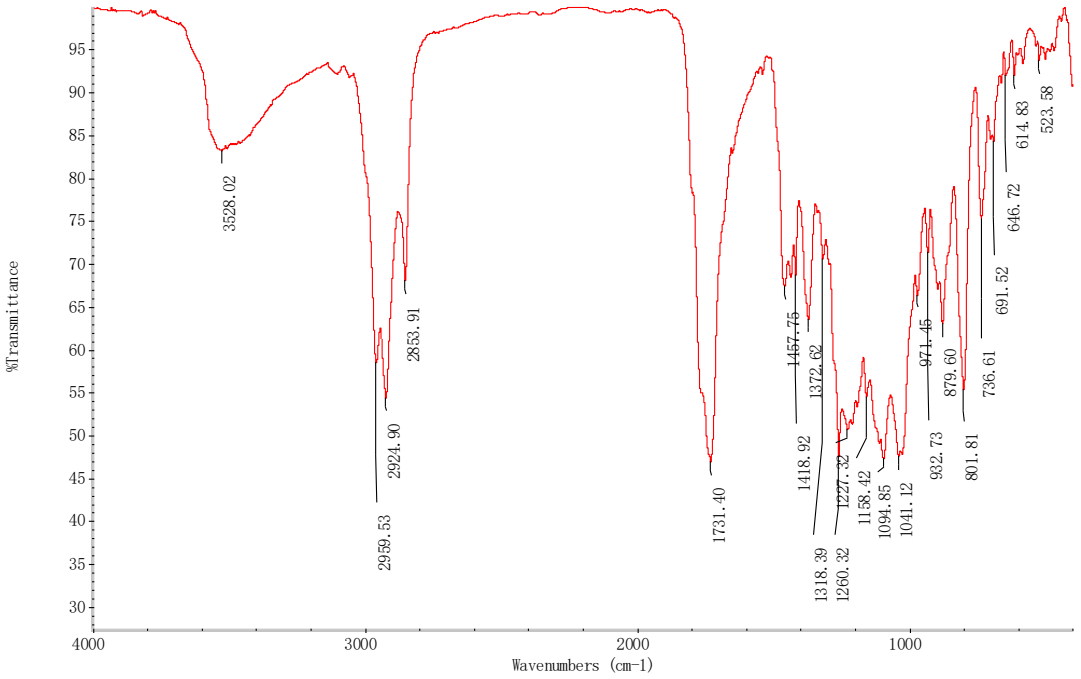
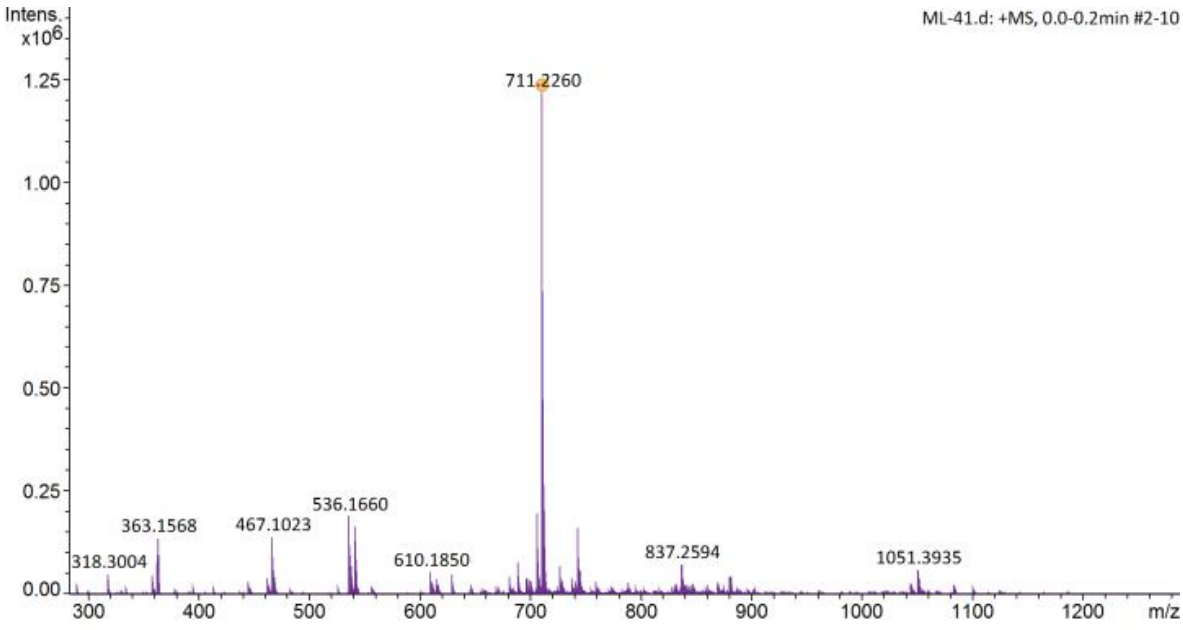


Figure S8. IR spectrum of **1**



Sum Formula	Ion Formula	Meas. m/z	m/z	err [mDa]	err [ppm]
C34H40O15	C34H40NaO15	711.2260	711.2259	-0.0	-0.0

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

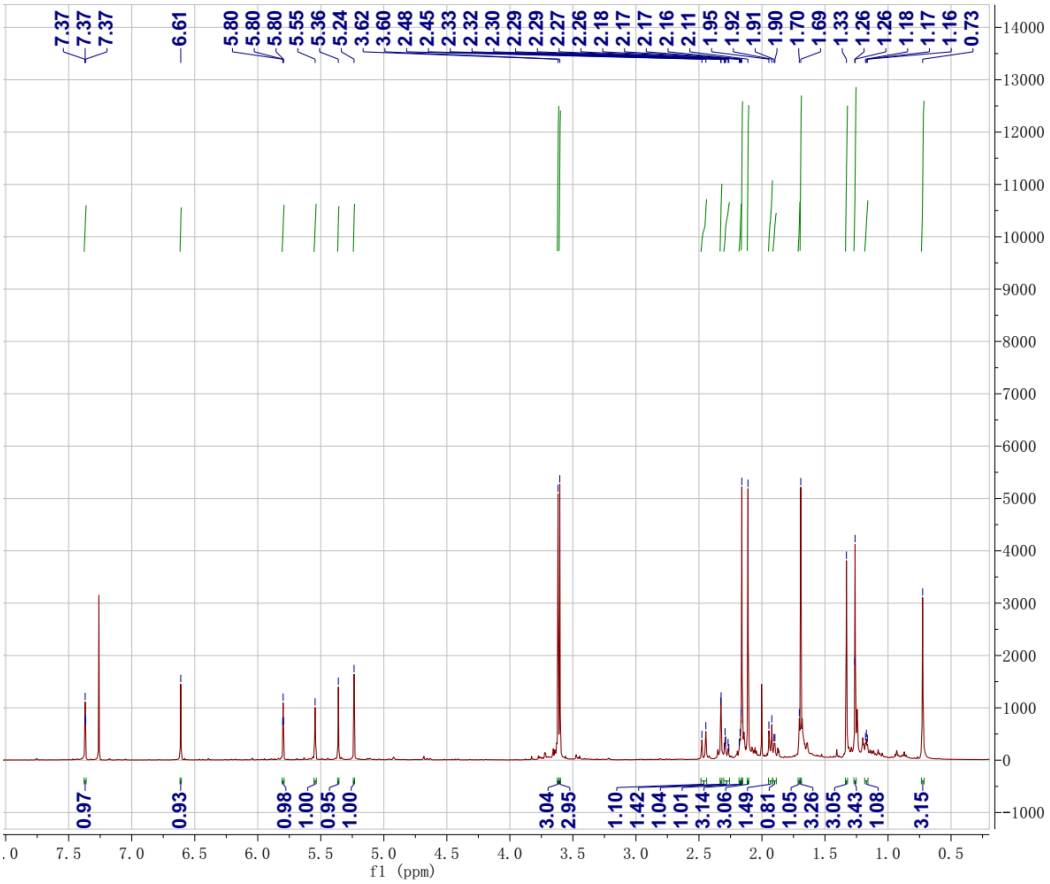


Figure S10. ^{1}H-NMR spectrum ($CDCl_3$, 500 MHz) of **2**

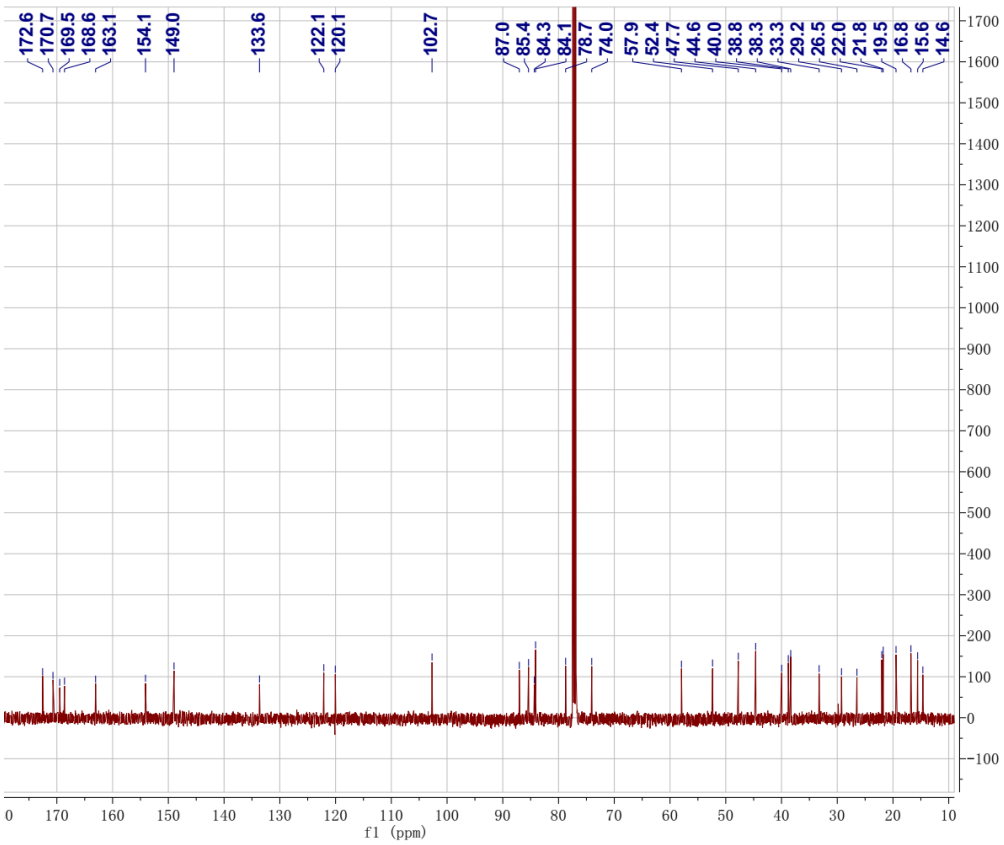


Figure S11. ^{13}C-NMR spectrum ($CDCl_3$, 125 MHz) of **2**

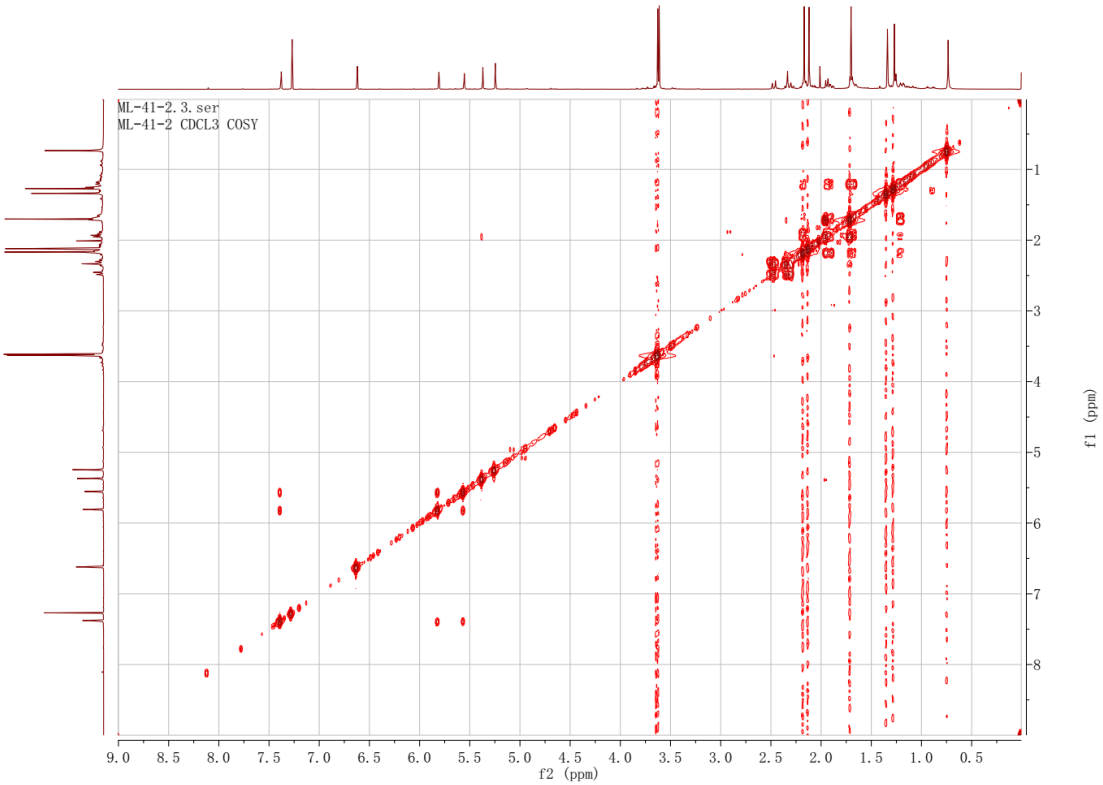


Figure S12. ^{1}H-^{1}H COSY spectrum of **2**

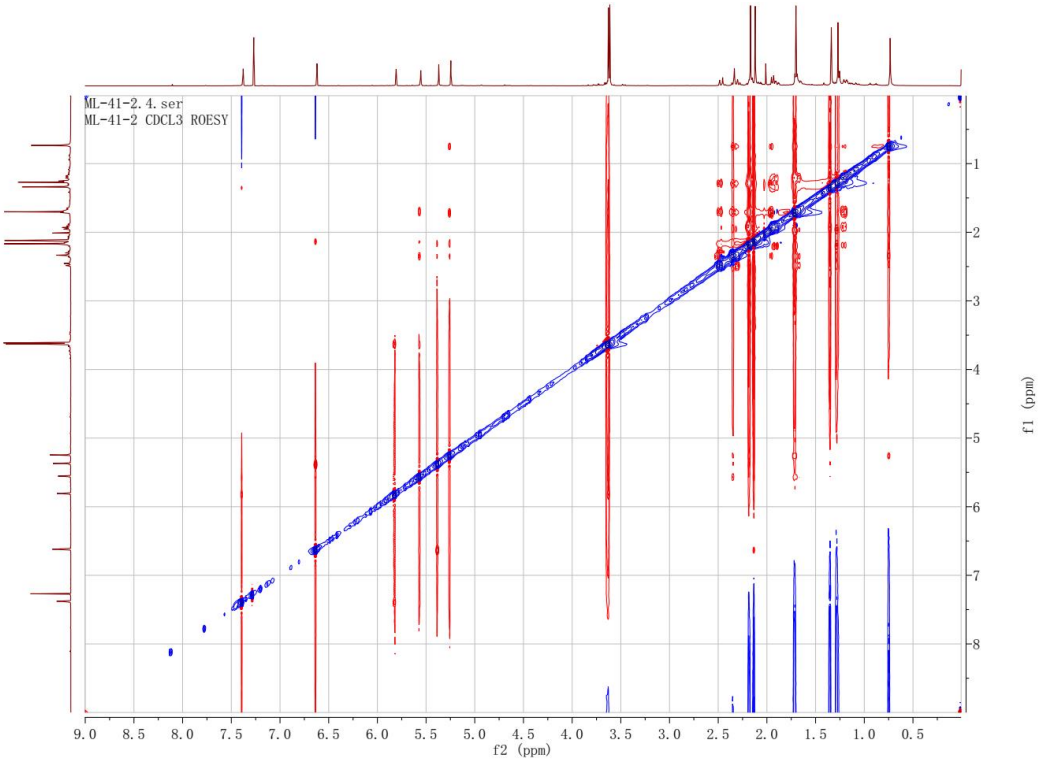


Figure S13. ROESY spectrum of **2**

Figure S14. HMBC spectrum of **2**

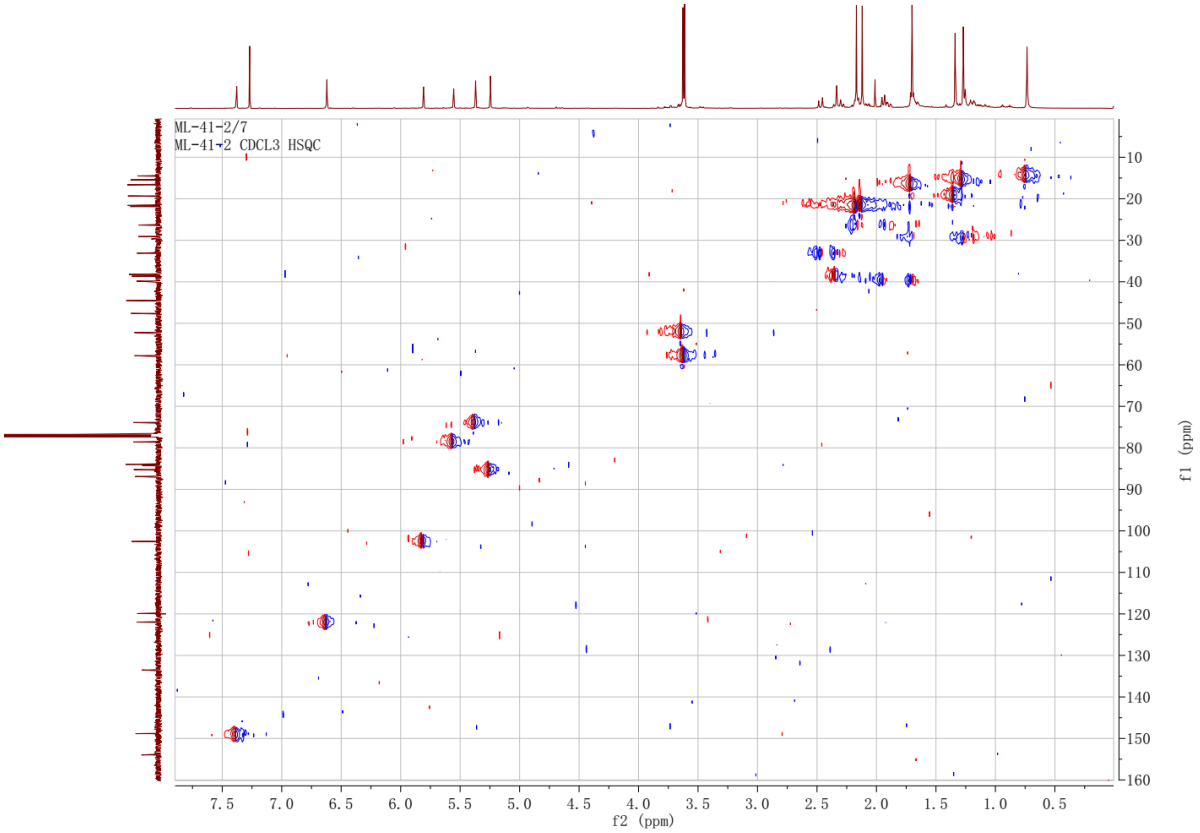


Figure S15. HSQC spectrum of **2**

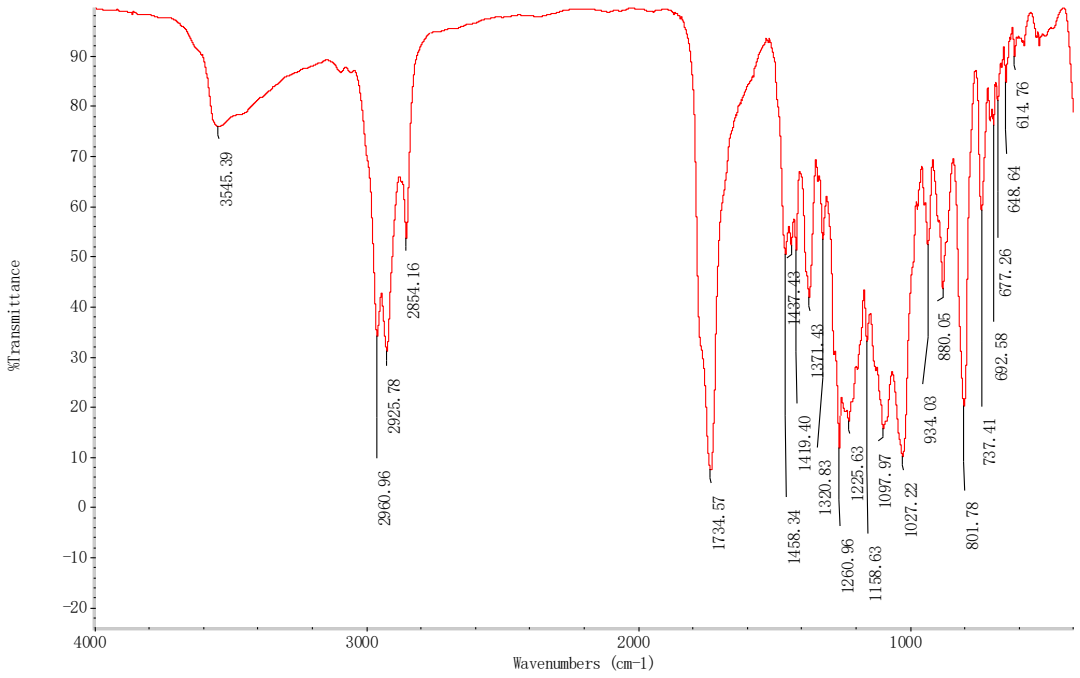
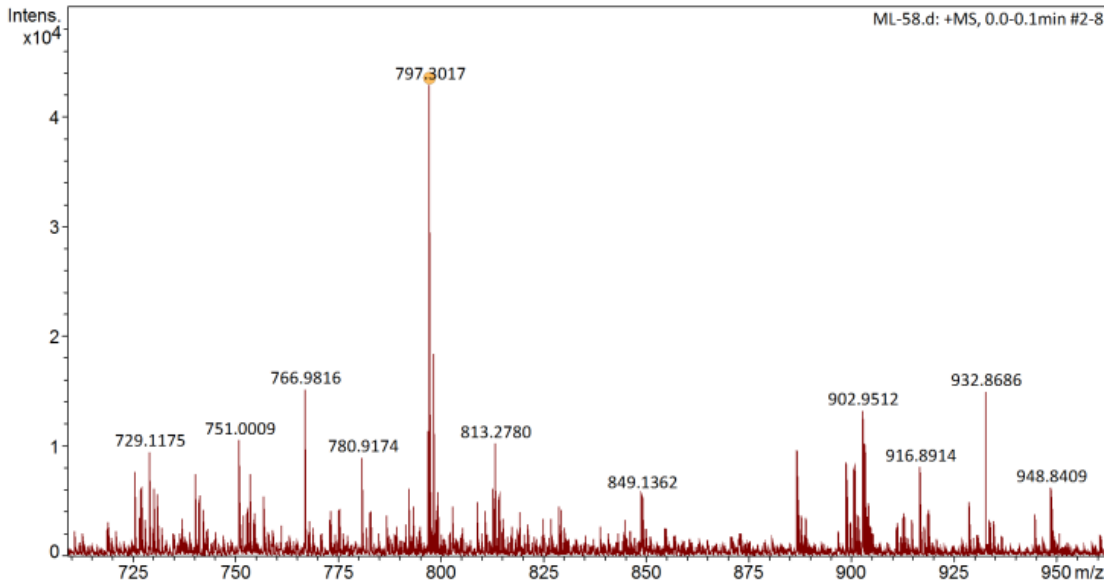


Figure S16. IR spectrum of **2**



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**

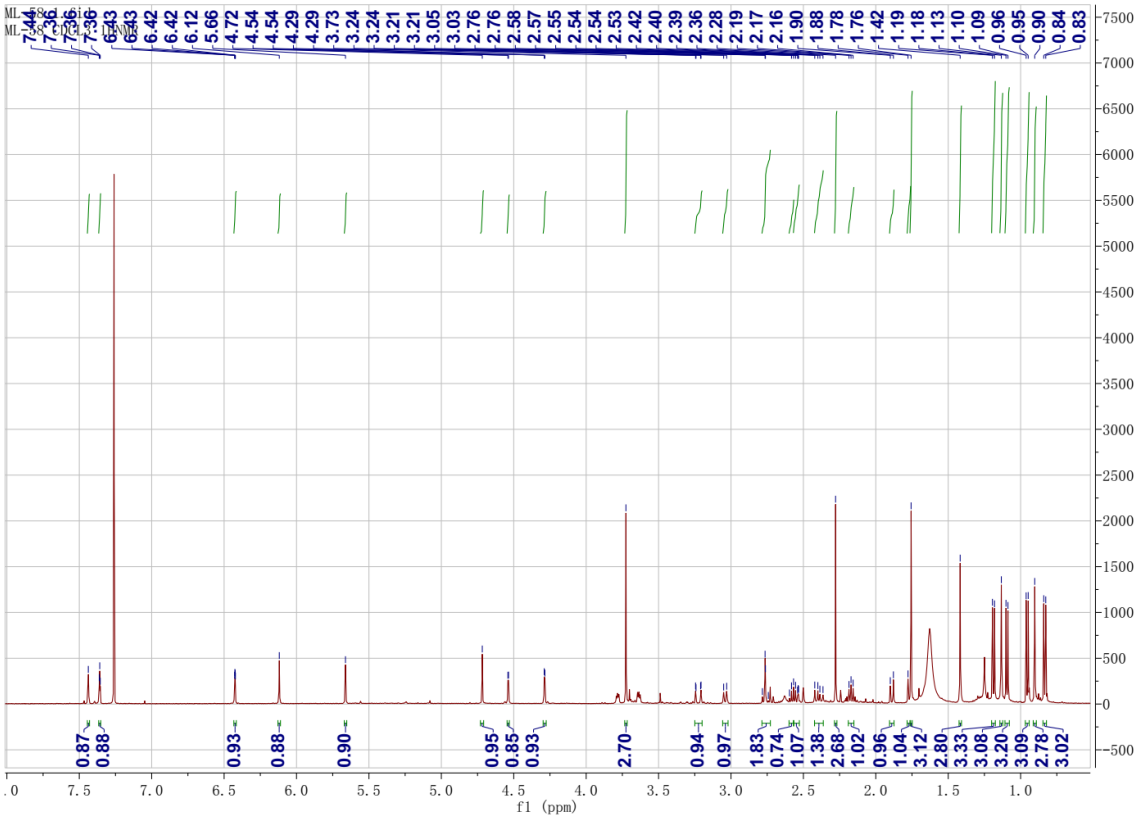


Figure S18. ^{1}H-NMR spectrum ($CDCl_3$, 500 MHz) of **3**

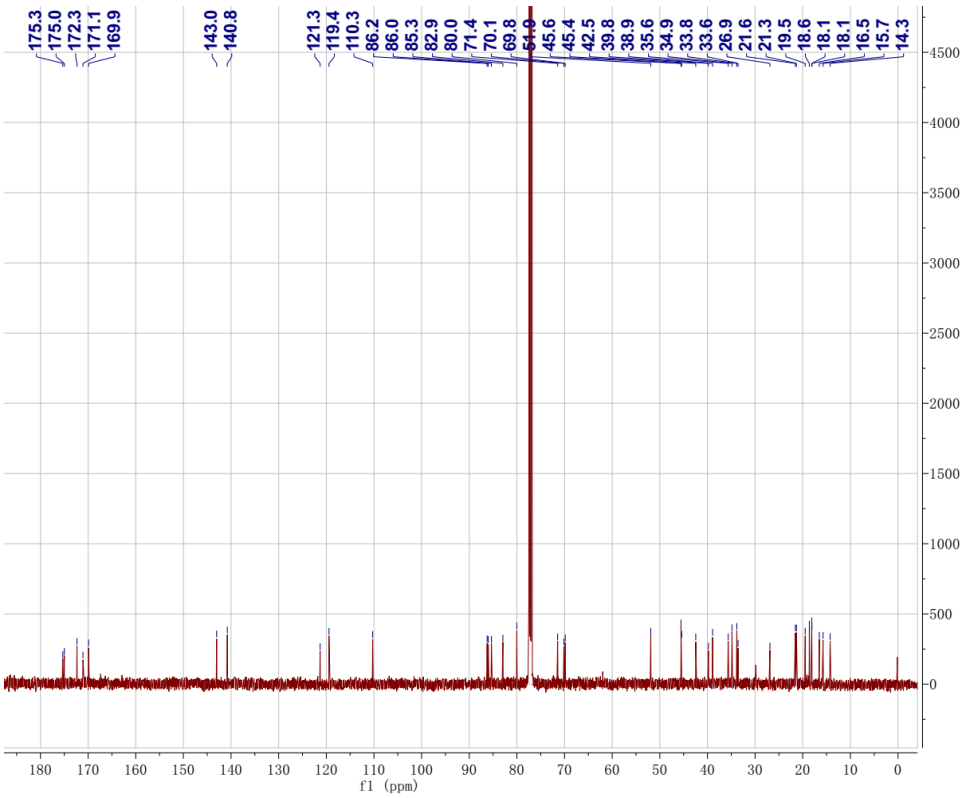


Figure S19. ^{13}C-NMR spectrum ($CDCl_3$, 125 MHz) of **3**

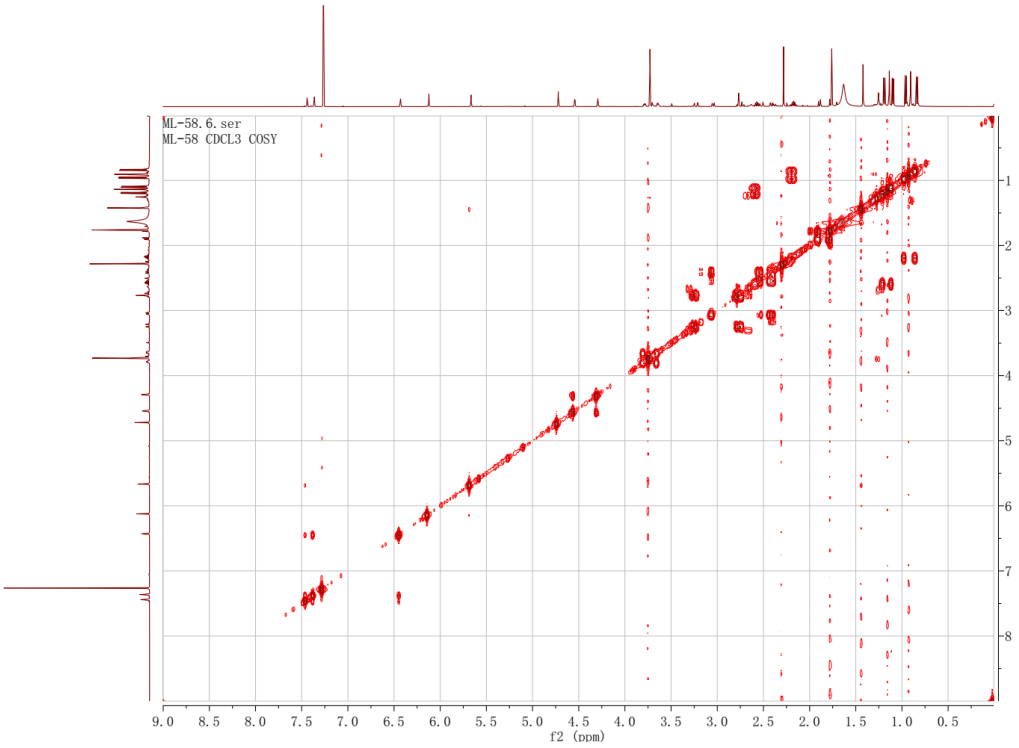


Figure S20. ^{1}H-^{1}H COSY spectrum of **3**

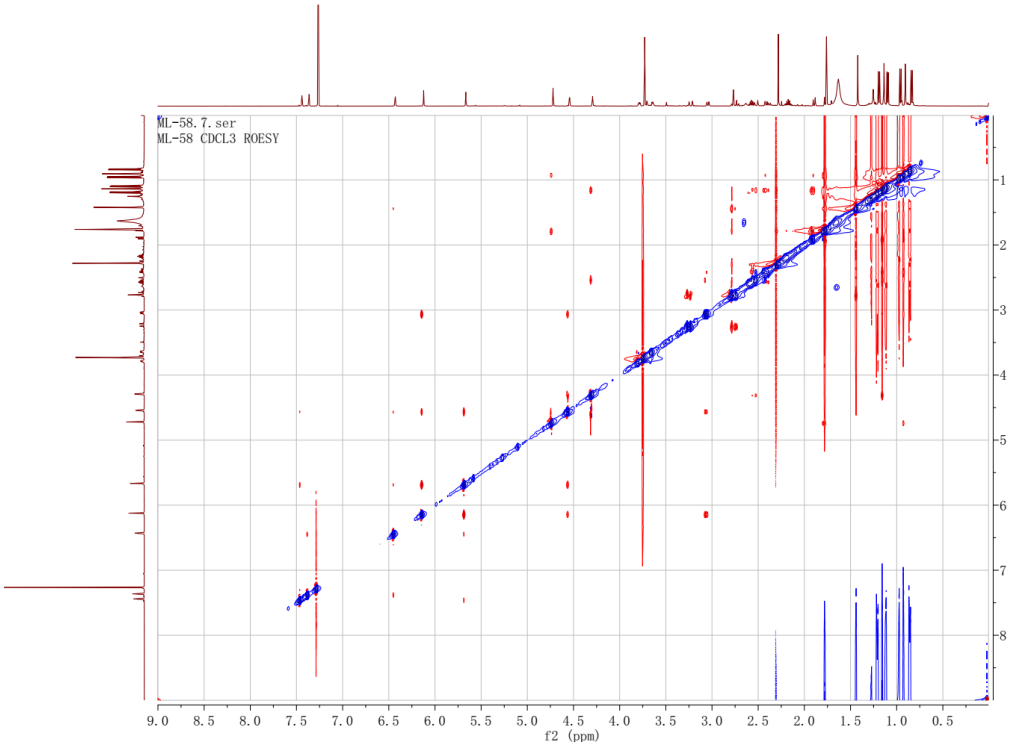


Figure S21. ROESY spectrum of **3**

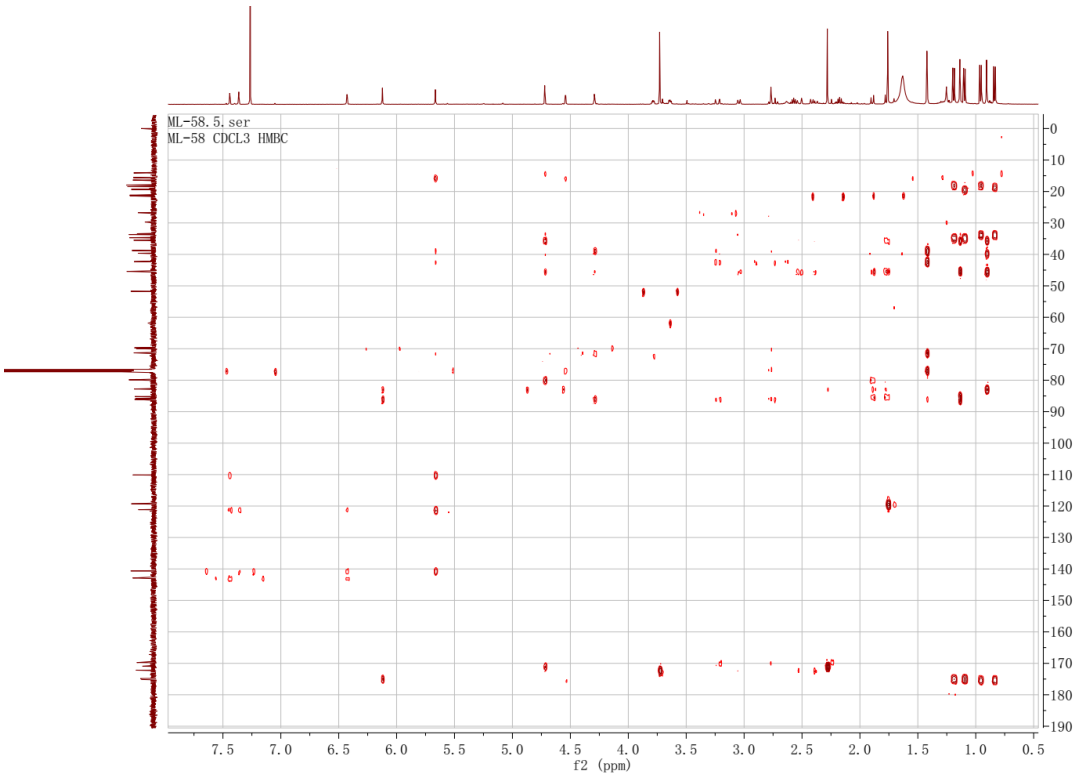


Figure S22. HMBC spectrum of **3**

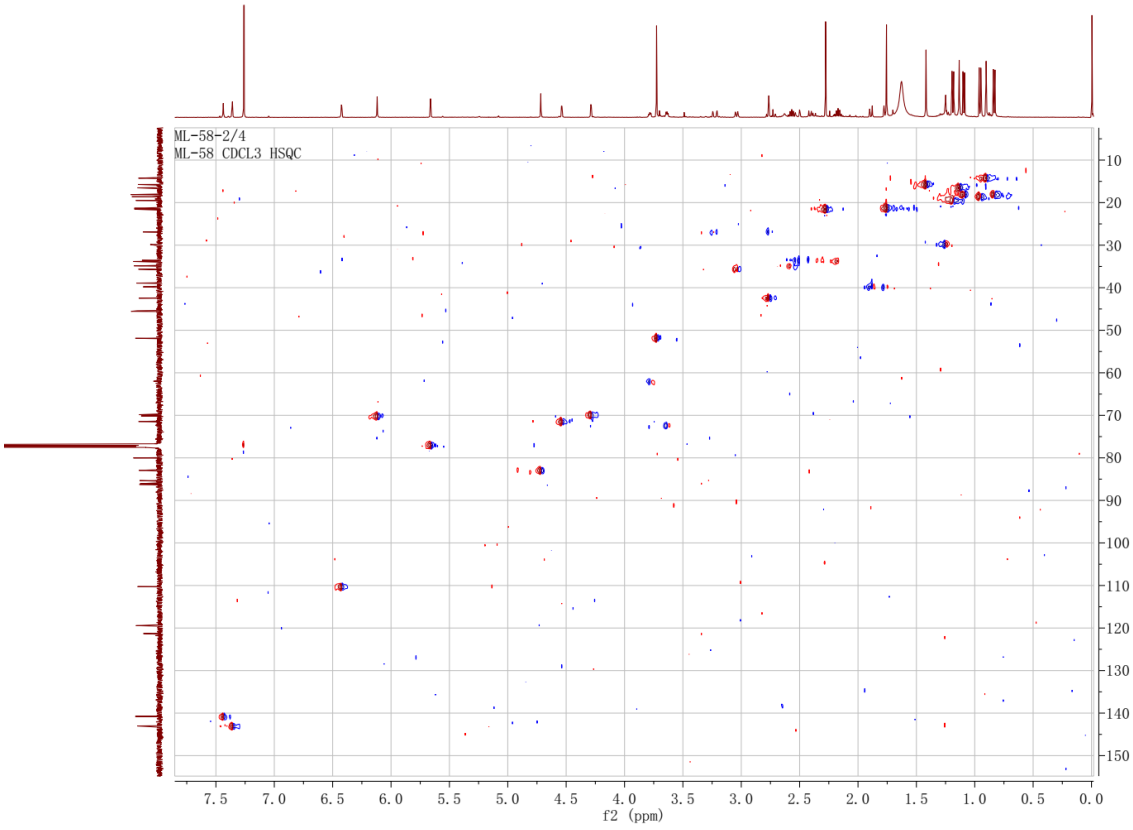


Figure S23. HSQC spectrum of **3**

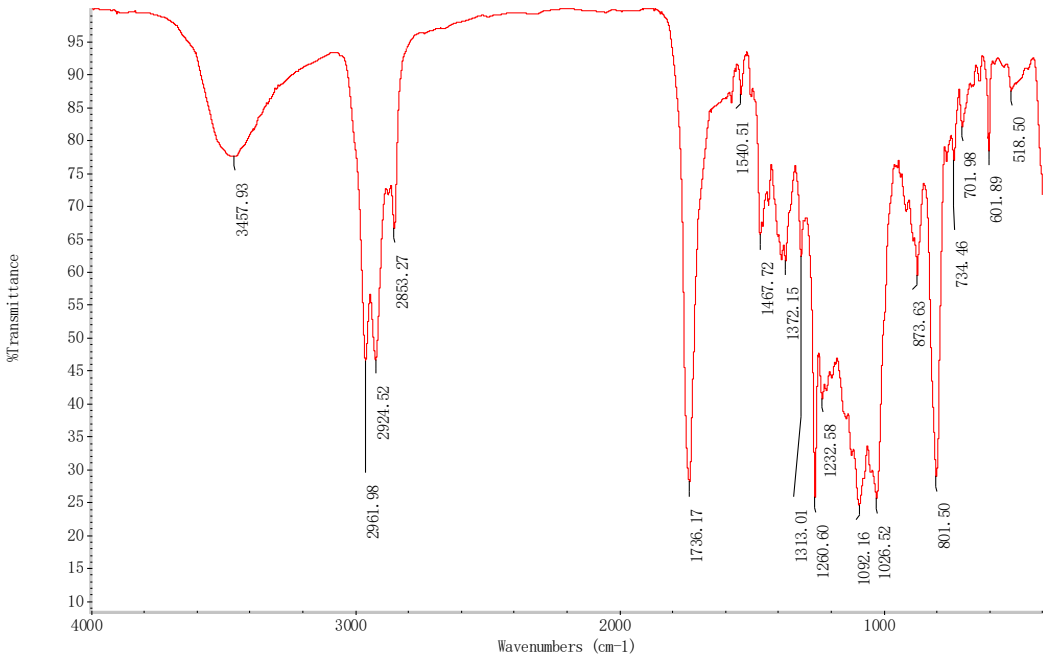
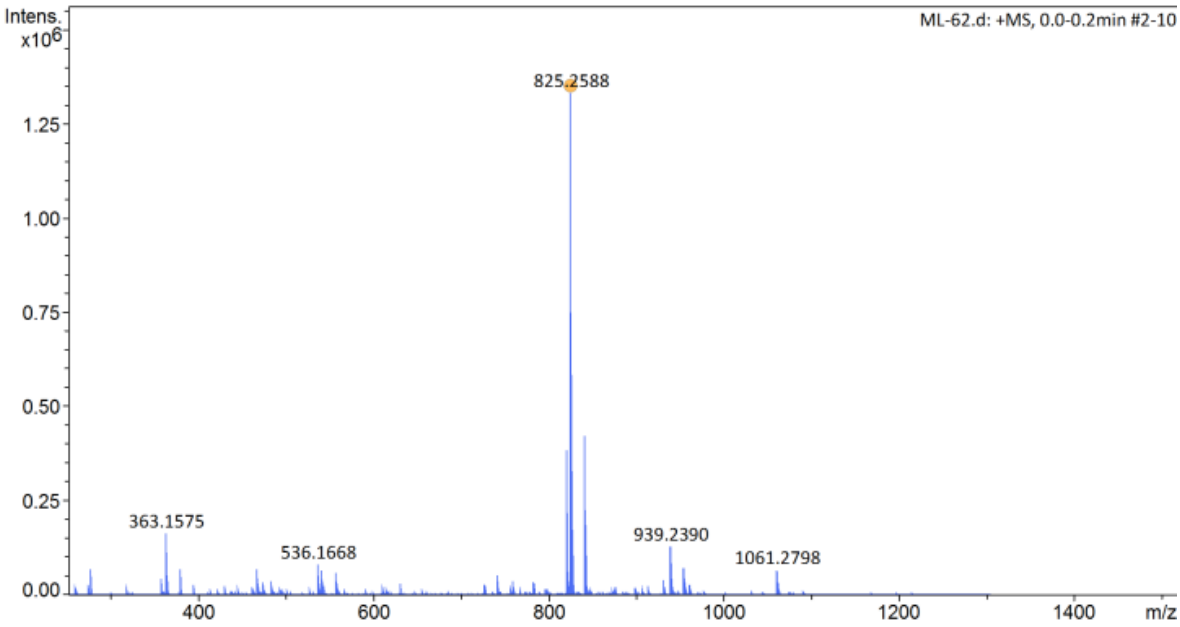


Figure S24. IR spectrum of **3**



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**

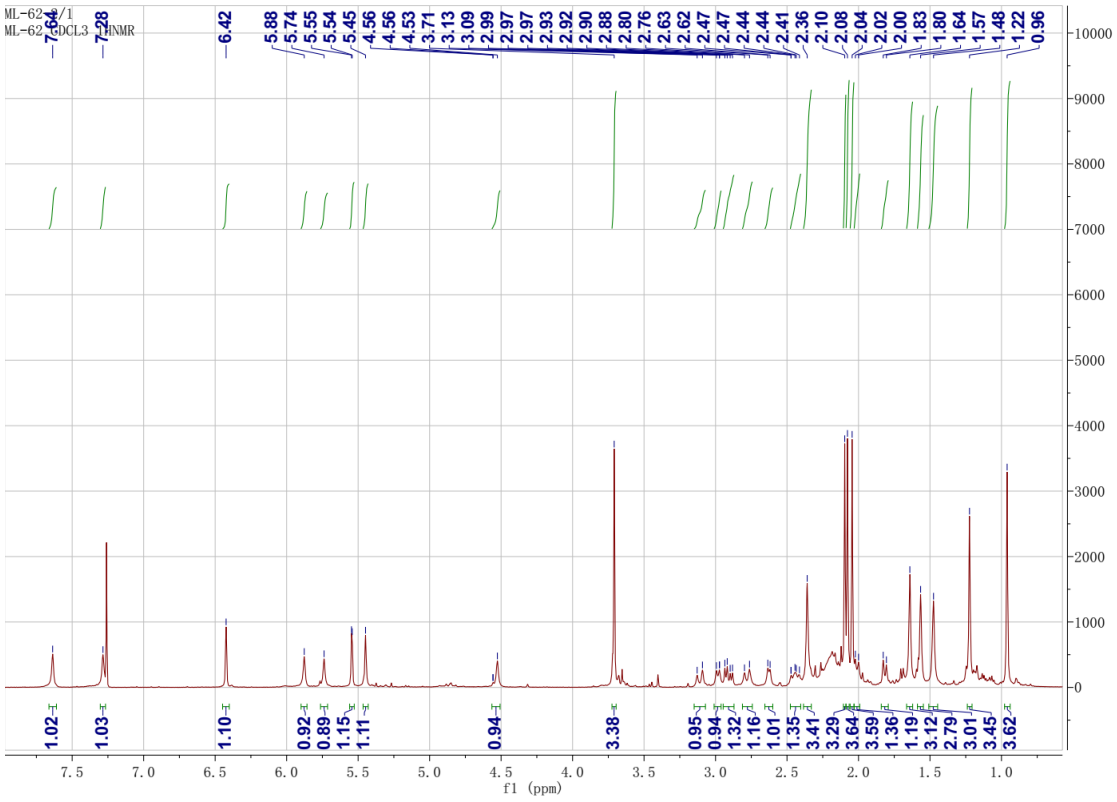


Figure S26. ^{1}H-NMR spectrum ($CDCl_3$, 500 MHz) of **4**

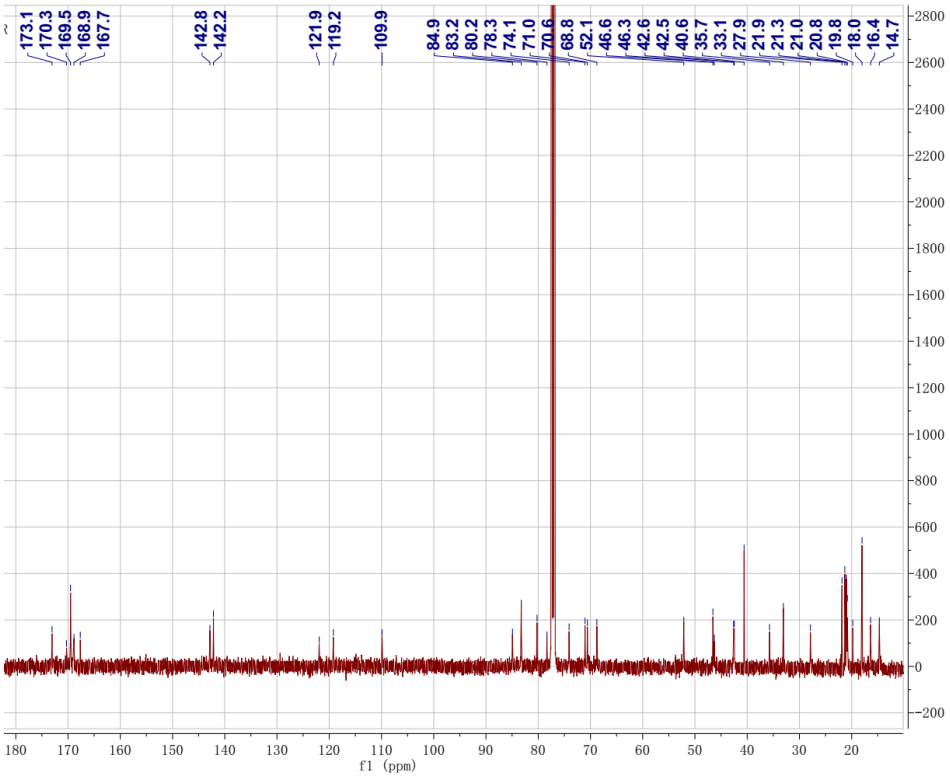


Figure S27. ^{13}C-NMR spectrum ($CDCl_3$, 125 MHz) of **4**

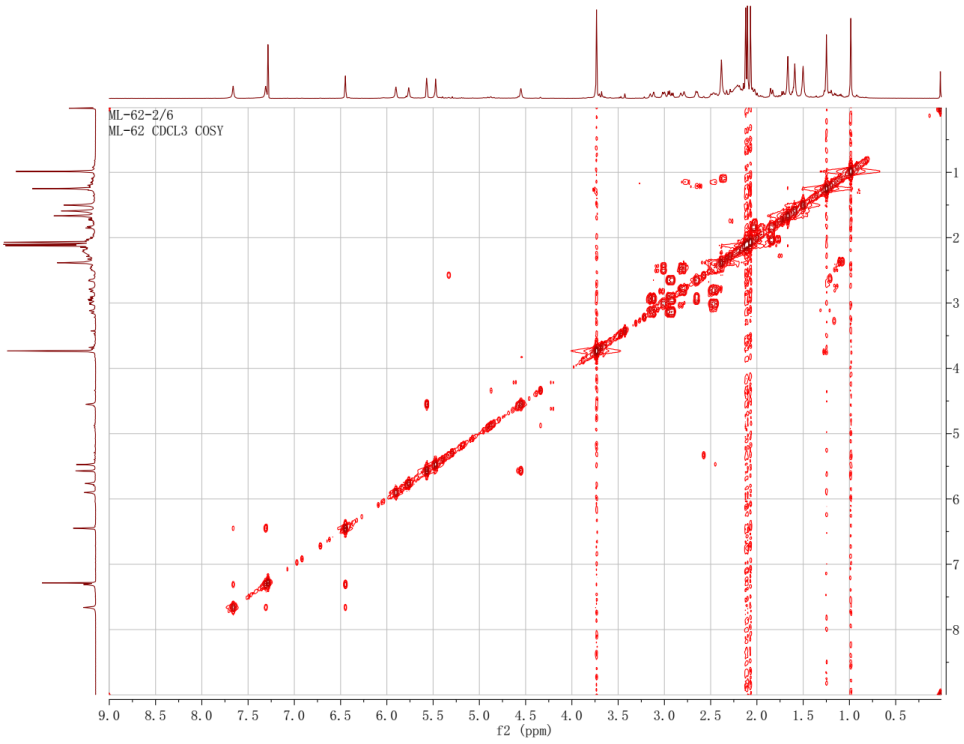


Figure S28. ^{1}H-^{1}H COSY spectrum of **4**

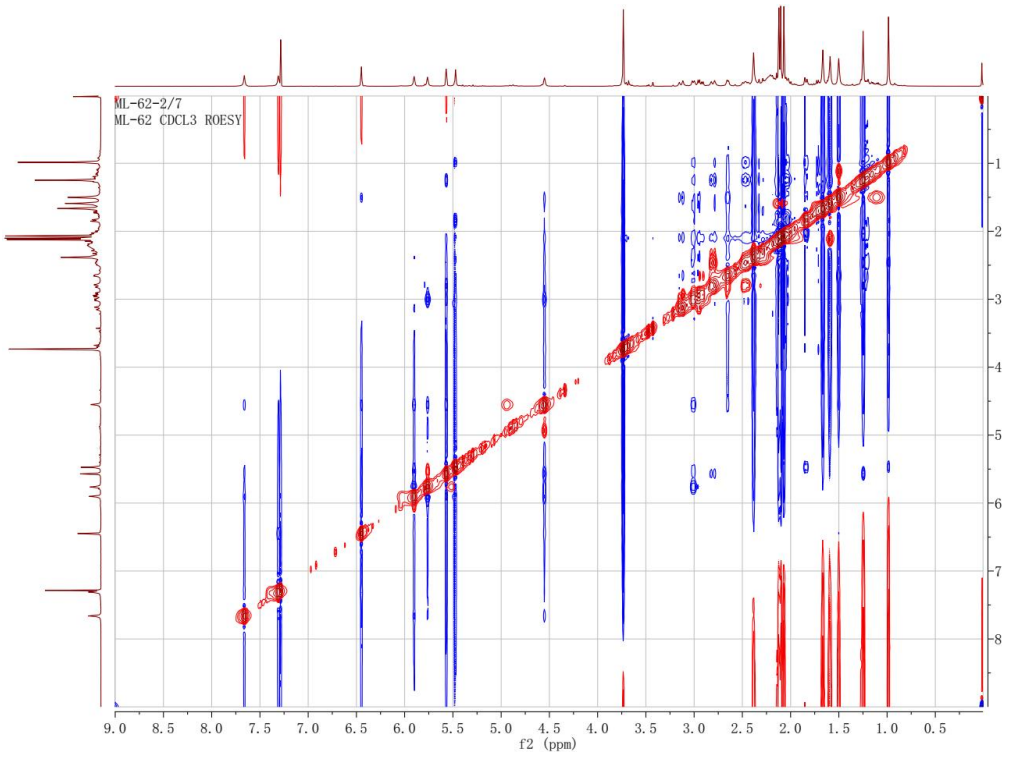


Figure S29. ROESY spectrum of **4**

Figure S30. HMBC spectrum of **4**

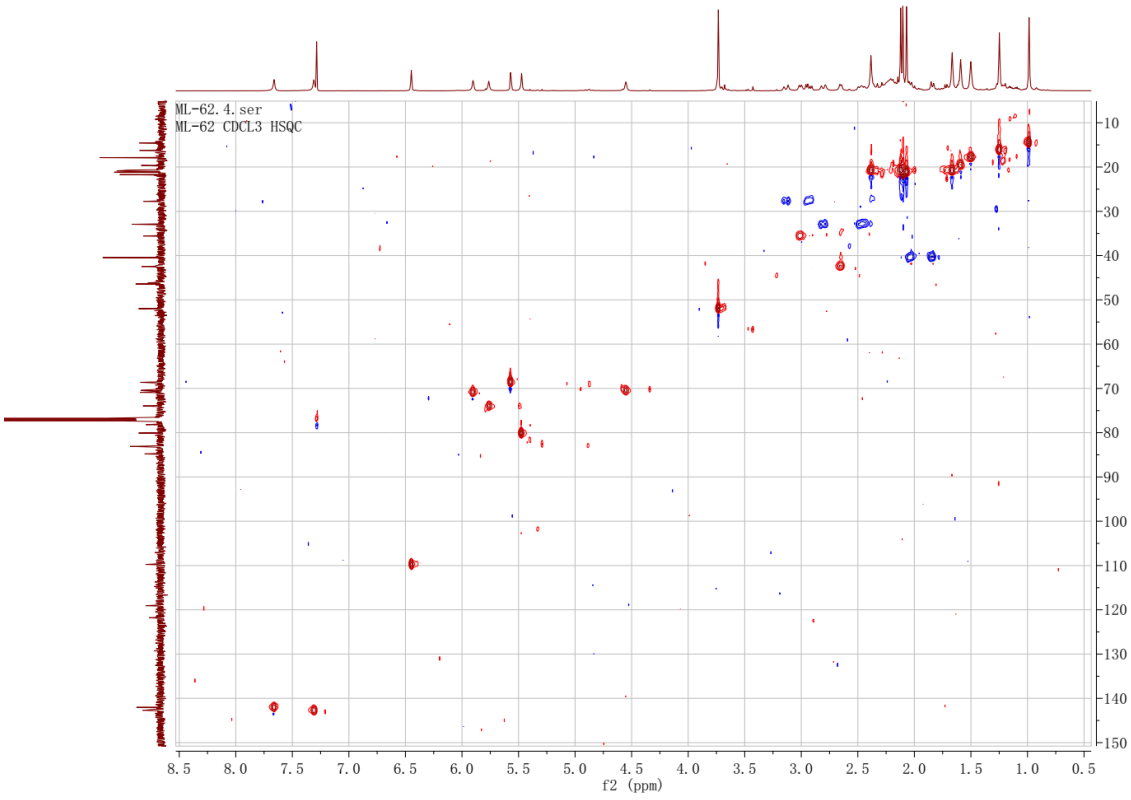


Figure S31. HSQC spectrum of **4**

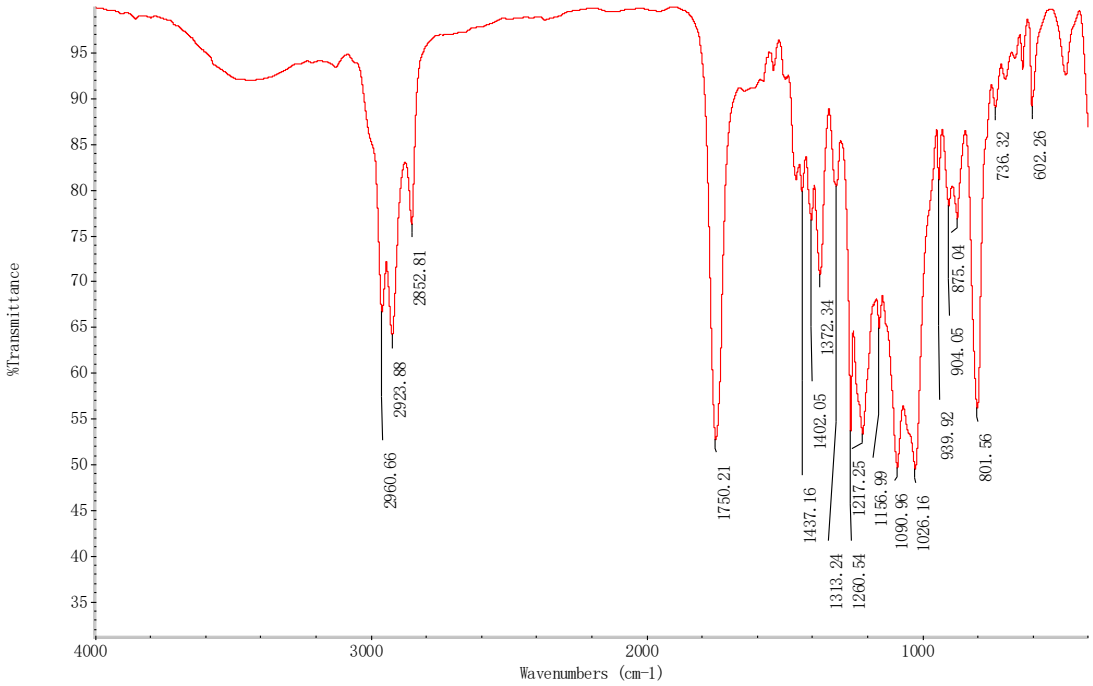
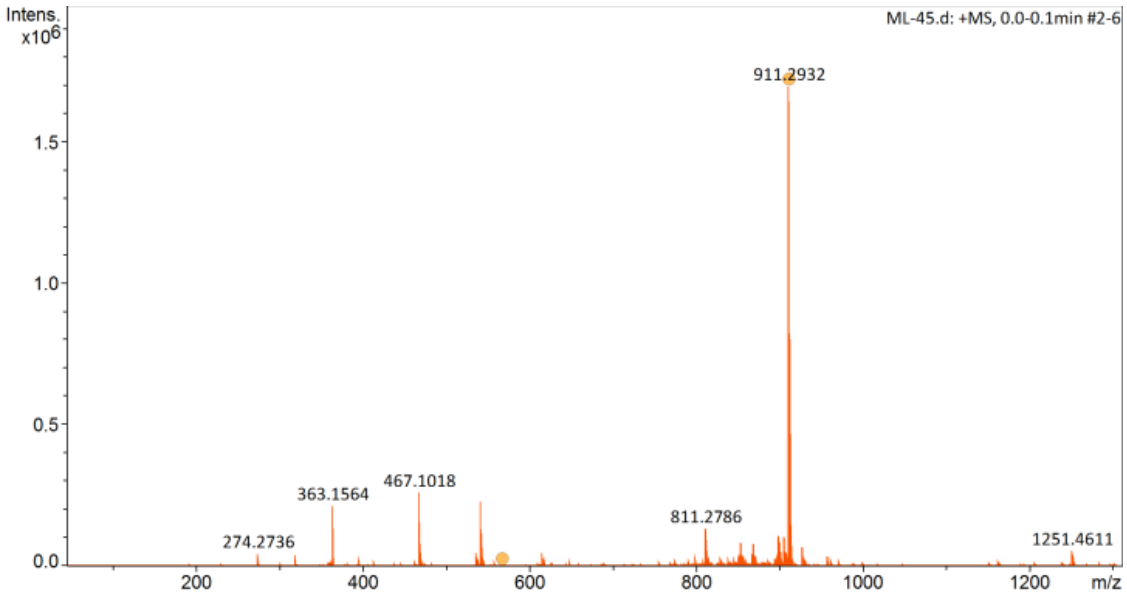


Figure S32. IR spectrum of **4**



Sum Formula	Ion Formula	Meas. m/z	m/z	err [mDa]	err [ppm]
C43H52O20	C43H52NaO20	911.2932	911.2944	1.2	1.4

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

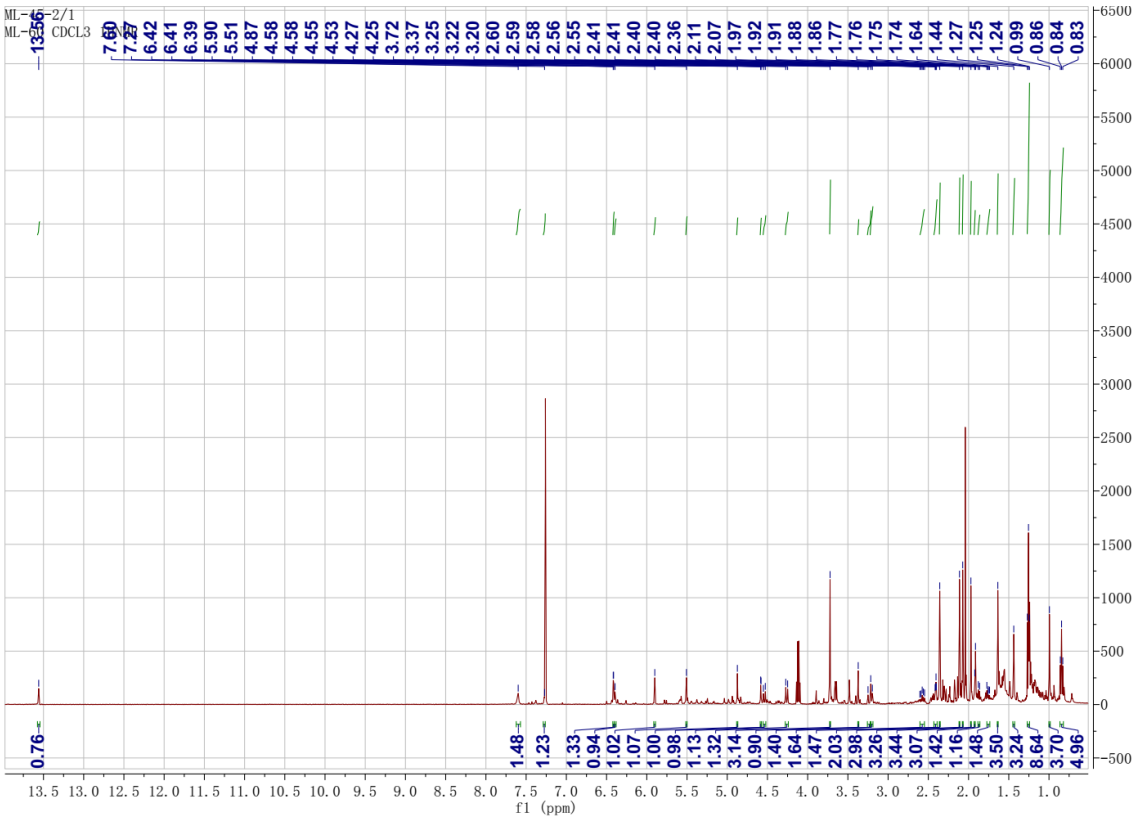


Figure S34. ^{1}H-NMR spectrum ($CDCl_3$, 500 MHz) of **5**

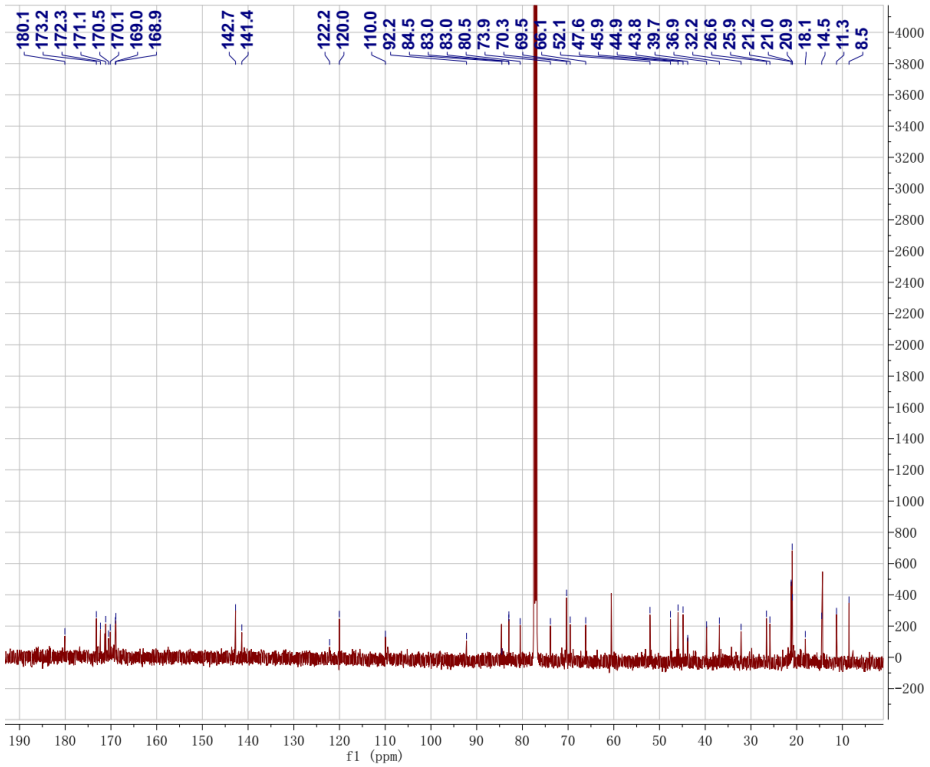


Figure S35. ^{13}C-NMR spectrum ($CDCl_3$, 125 MHz) of **5**

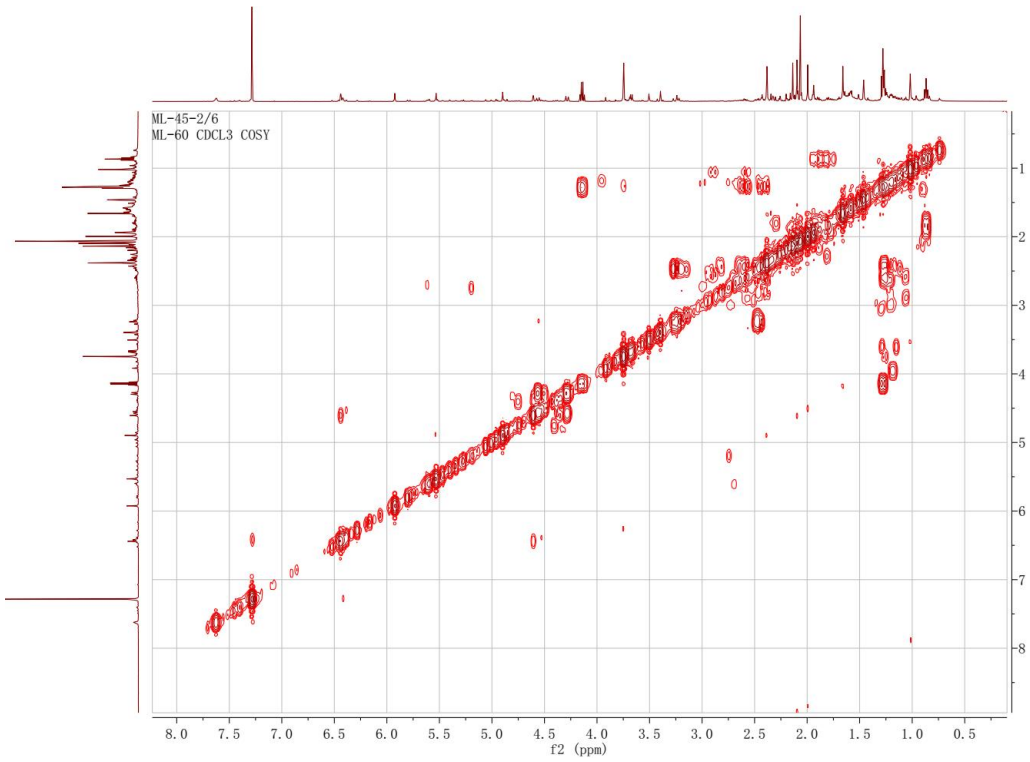


Figure S36. ^{1}H-^{1}H COSY spectrum of **5**

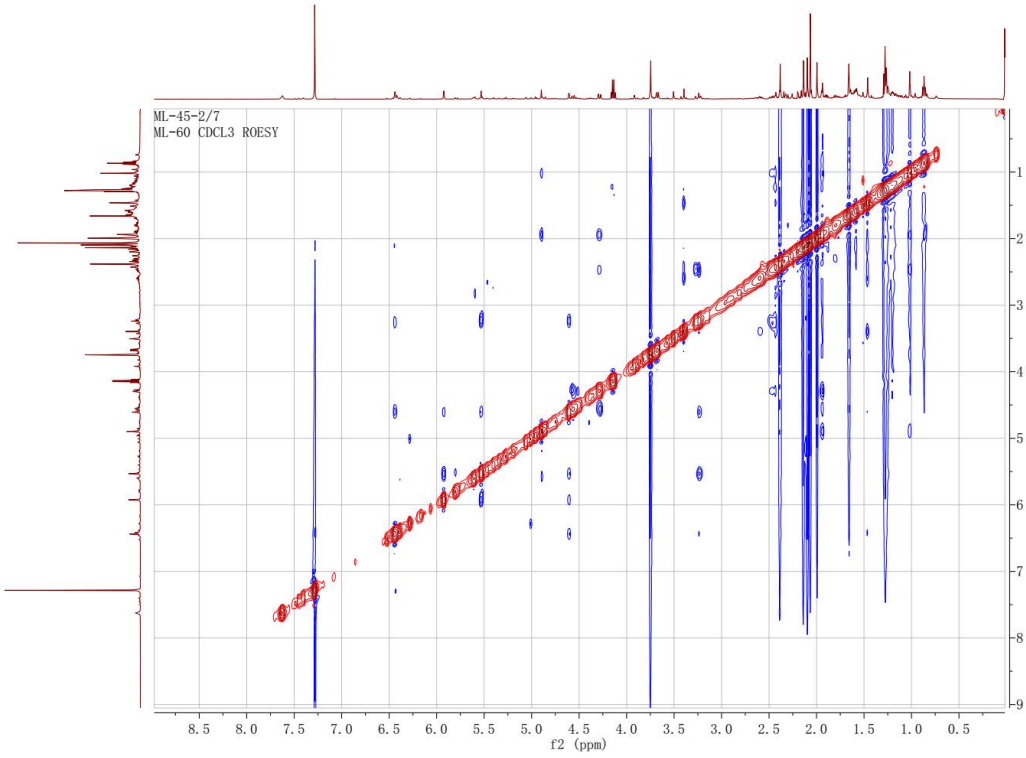


Figure S37. ROESY spectrum of **5**

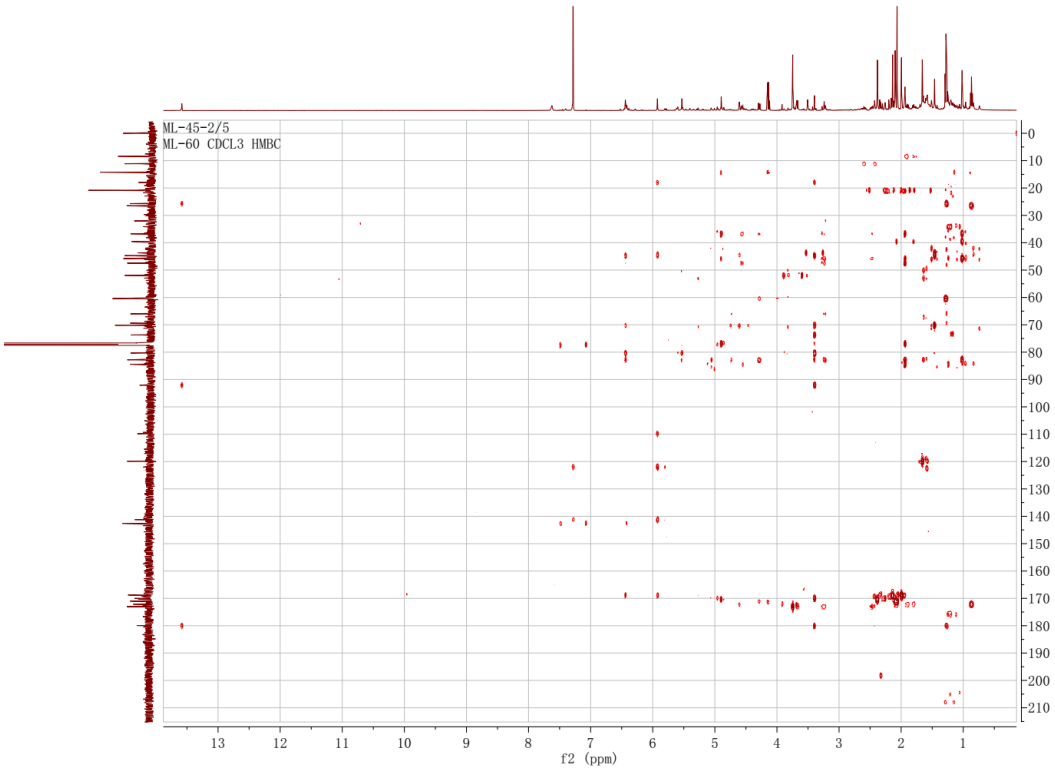


Figure S38. HMBC spectrum of **5**

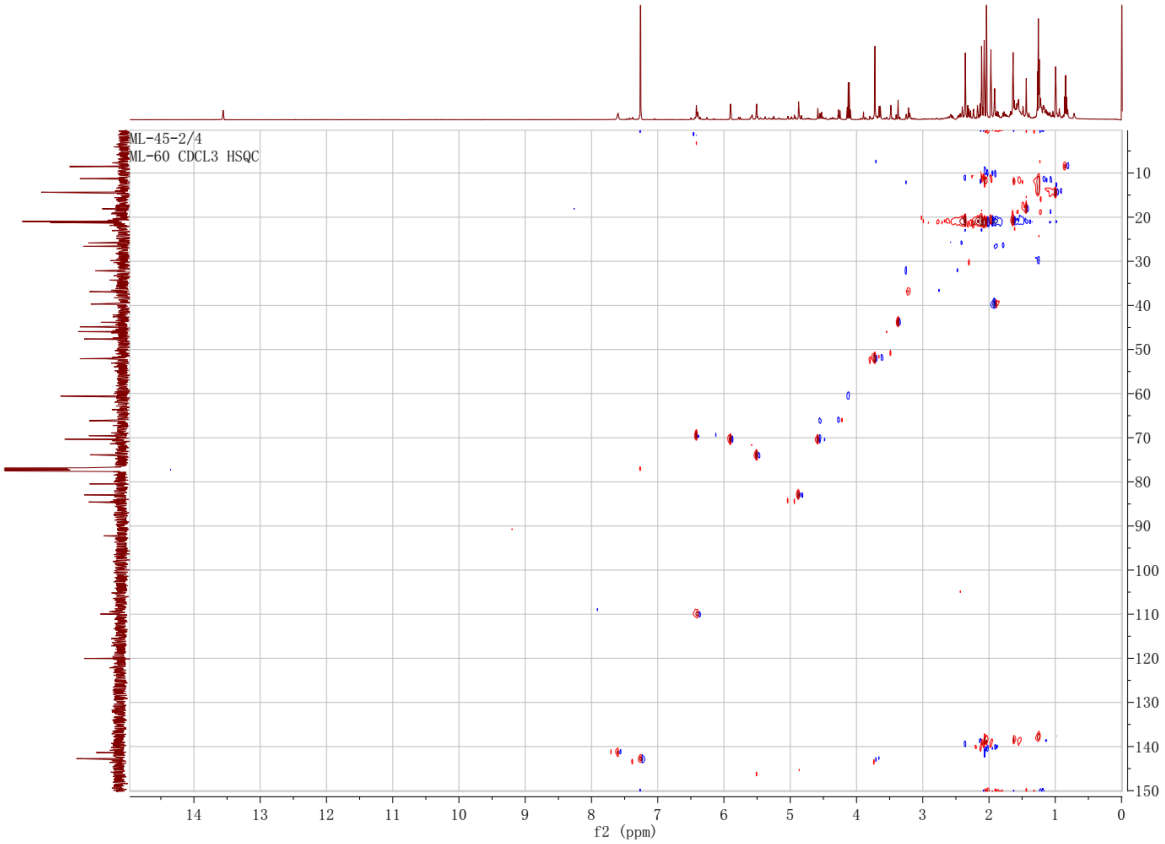


Figure S39. HSQC spectrum of **5**

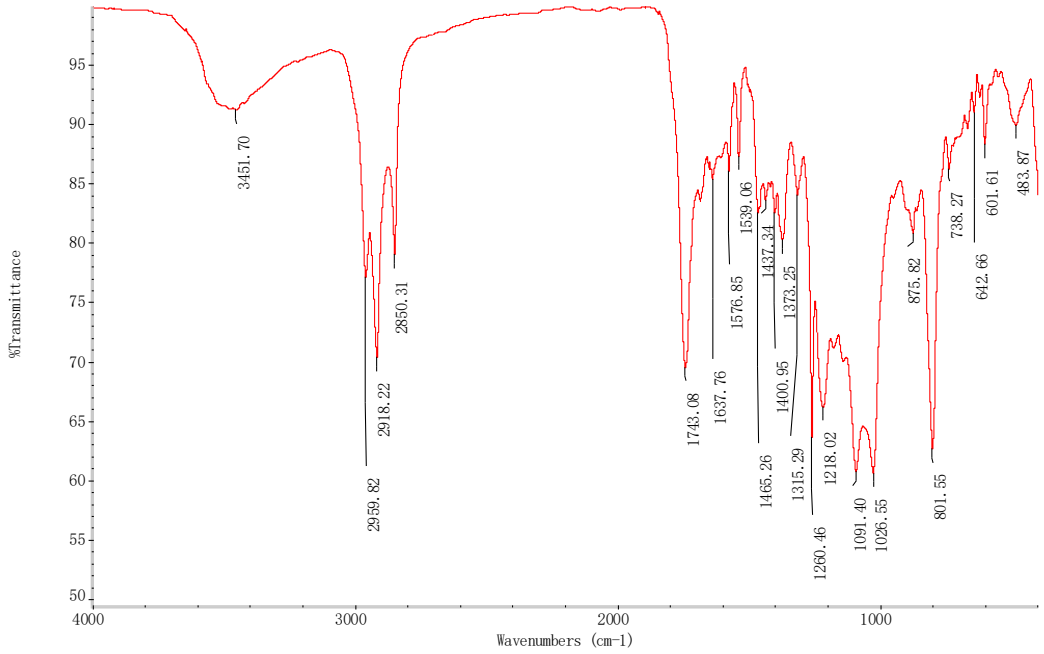
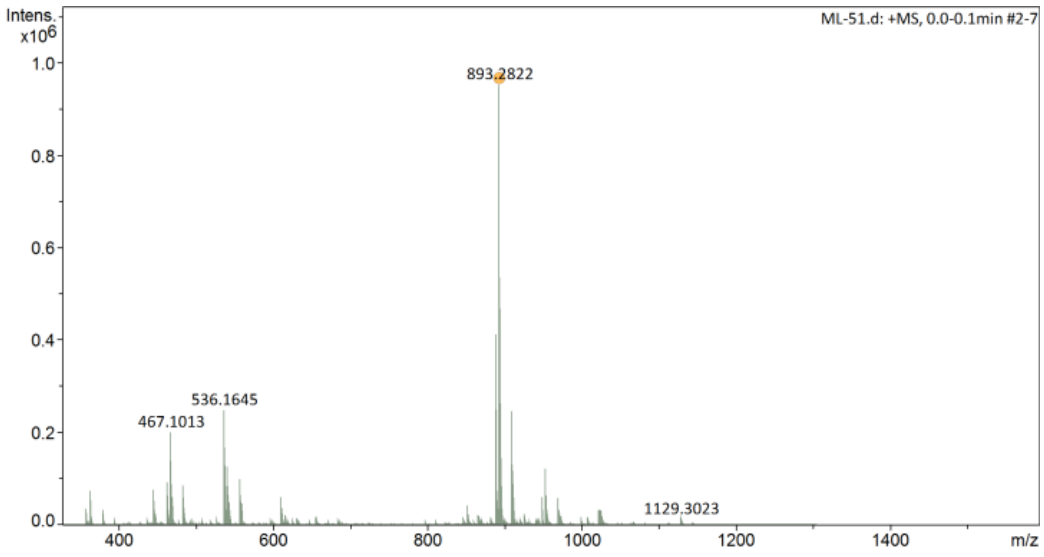


Figure S40. IR spectrum of **5**



Sum Formula	Ion Formula	Meas. m/z	m/z	err [mDa]	err [ppm]
C43H50O19	C43H50NaO19	893.2822	893.2839	1.7	1.9

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

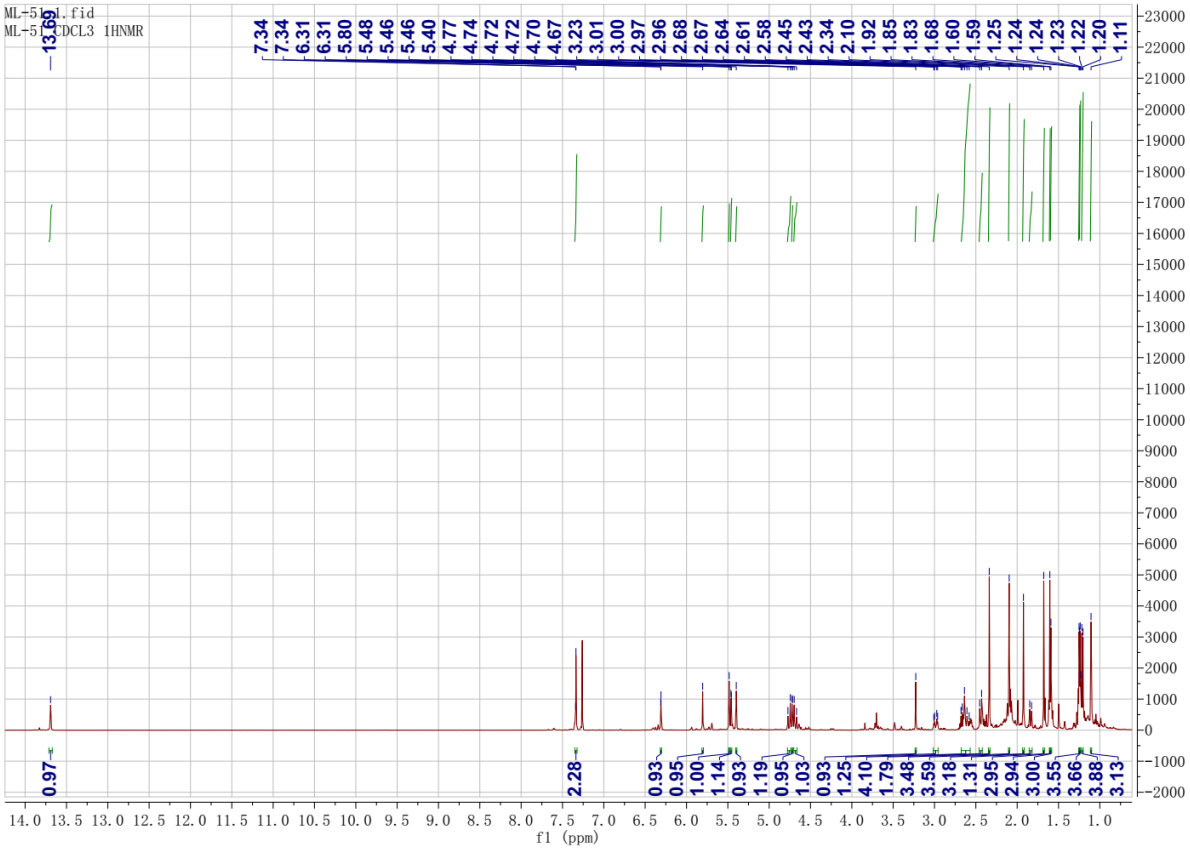


Figure S42. ^{1}H-NMR spectrum ($CDCl_3$, 500 MHz) of **6**

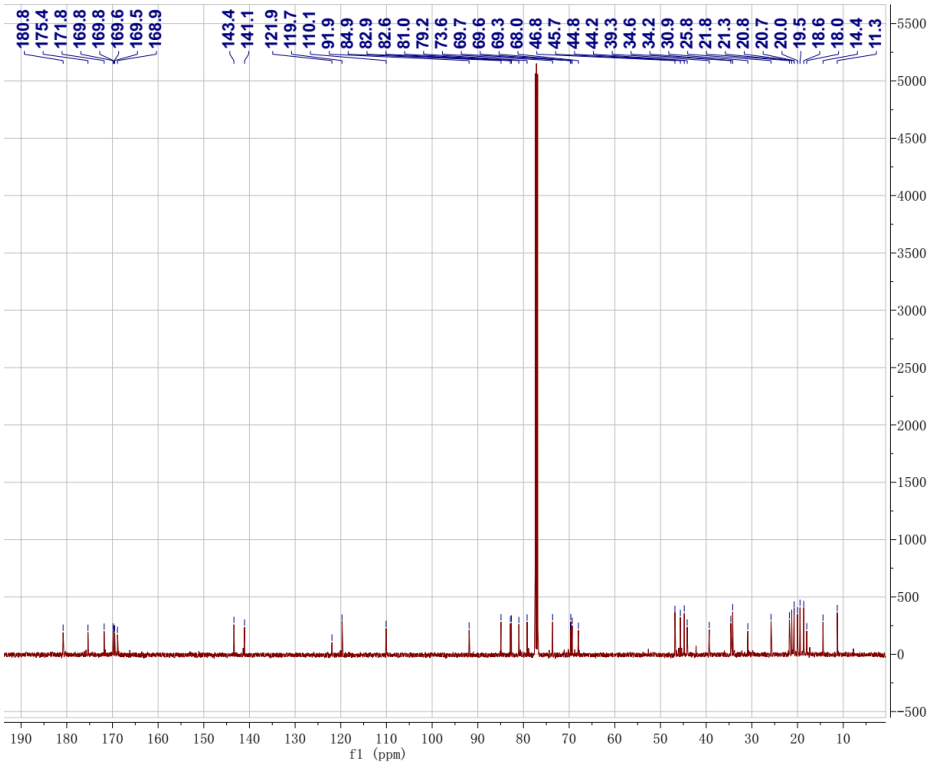


Figure S43. ^{13}C-NMR spectrum ($CDCl_3$, 125 MHz) of **6**

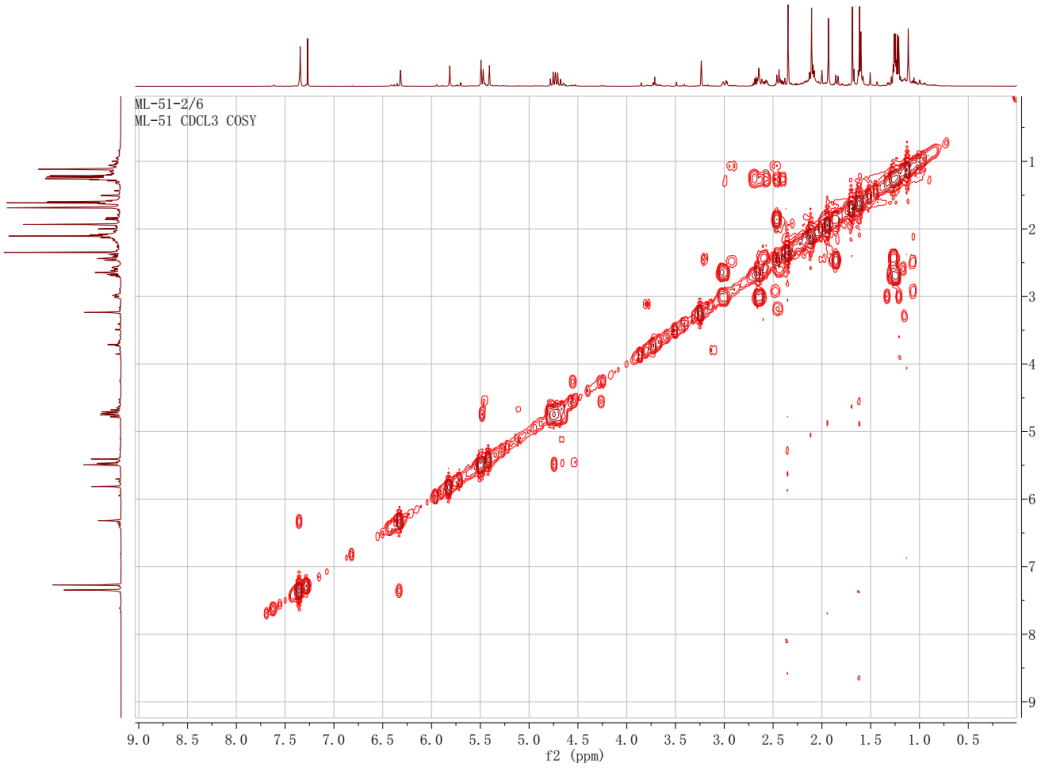


Figure S44. ^{1}H-^{1}H COSY spectrum of **6**

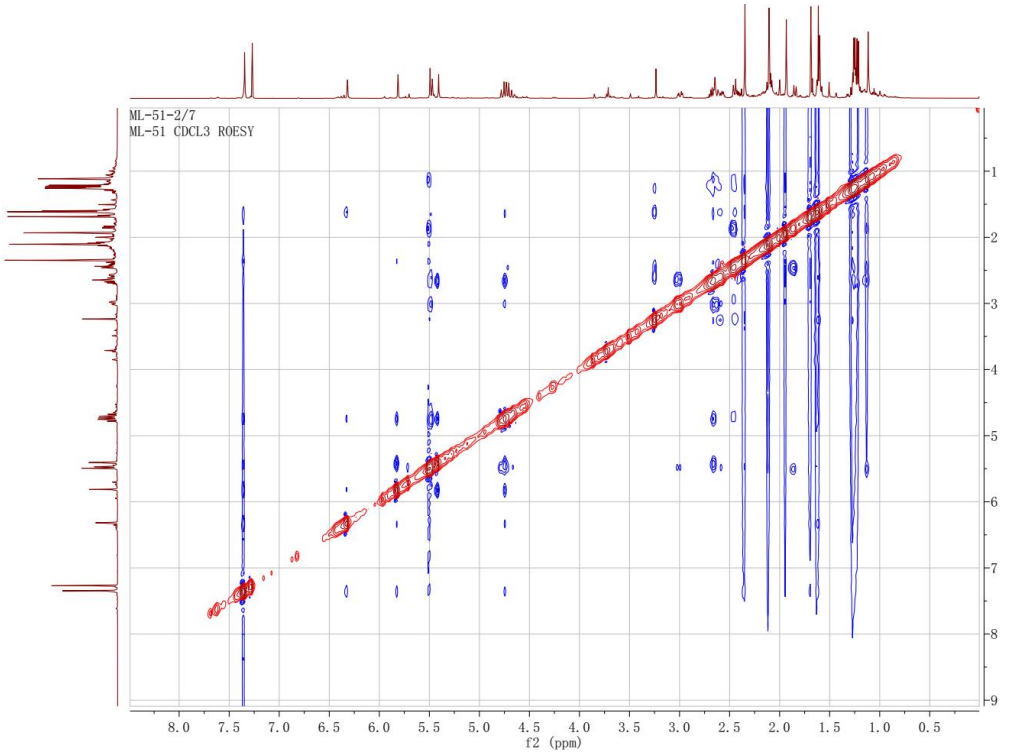


Figure S45. ROESY spectrum of **6**

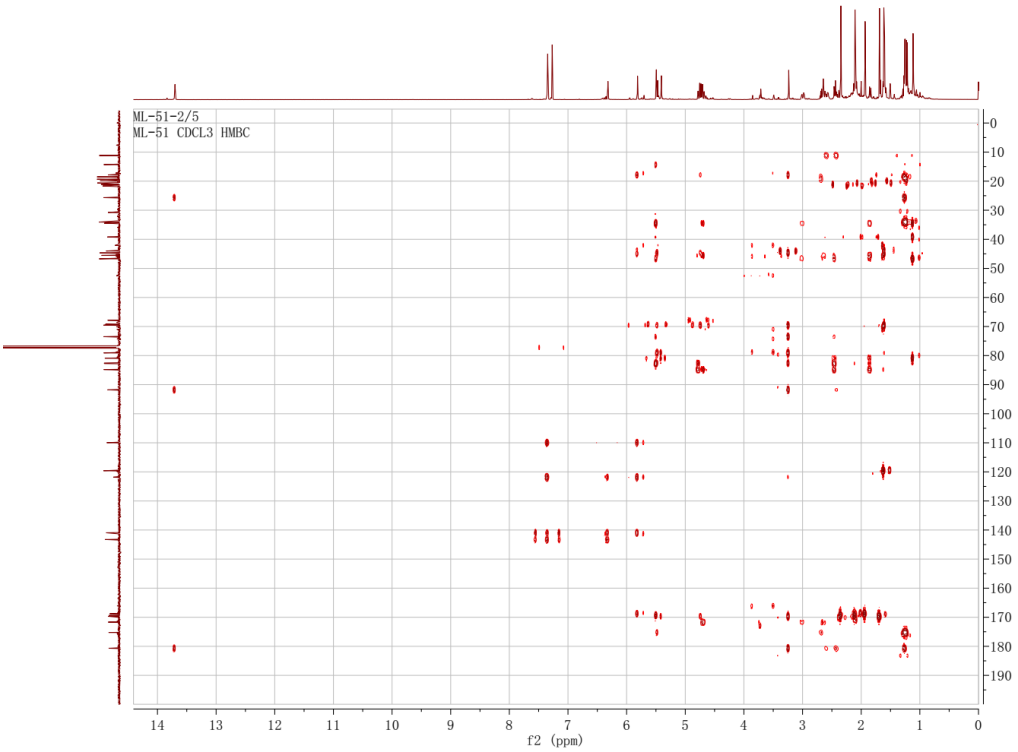


Figure S46. HMBC spectrum of **6**

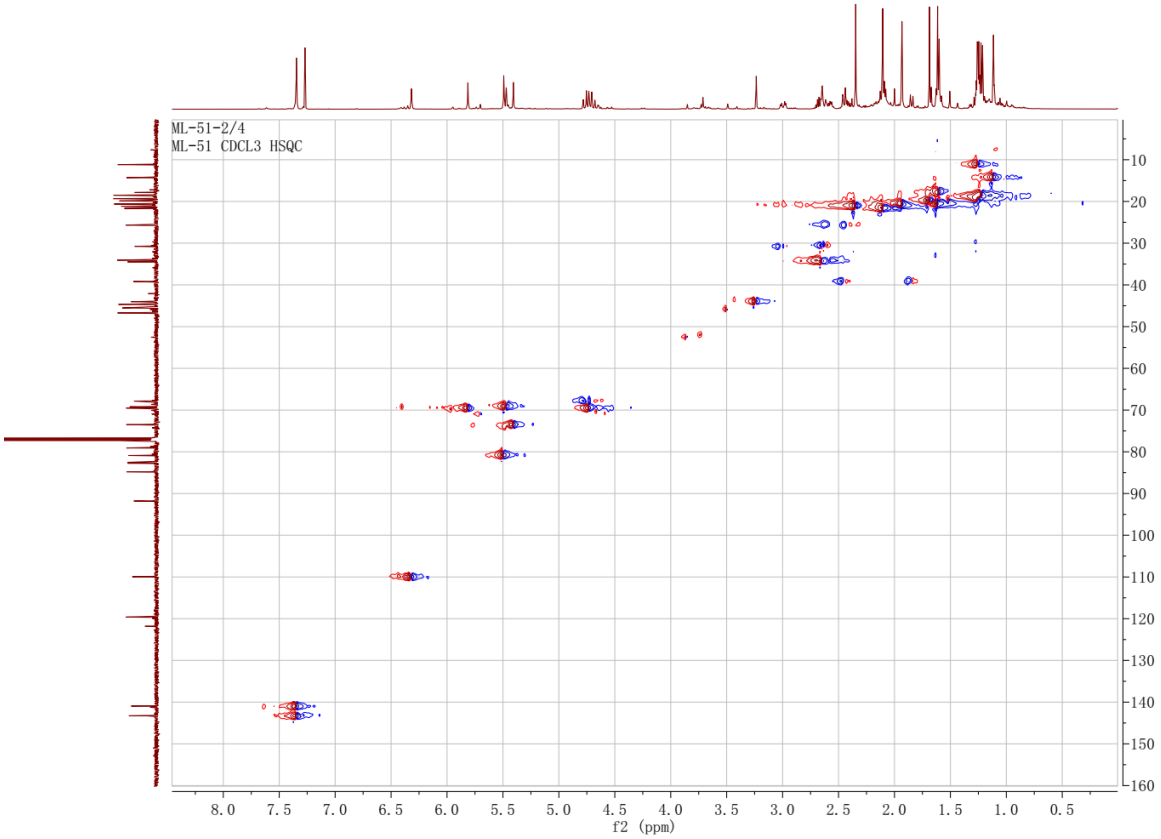


Figure S47. HSQC spectrum of **6**

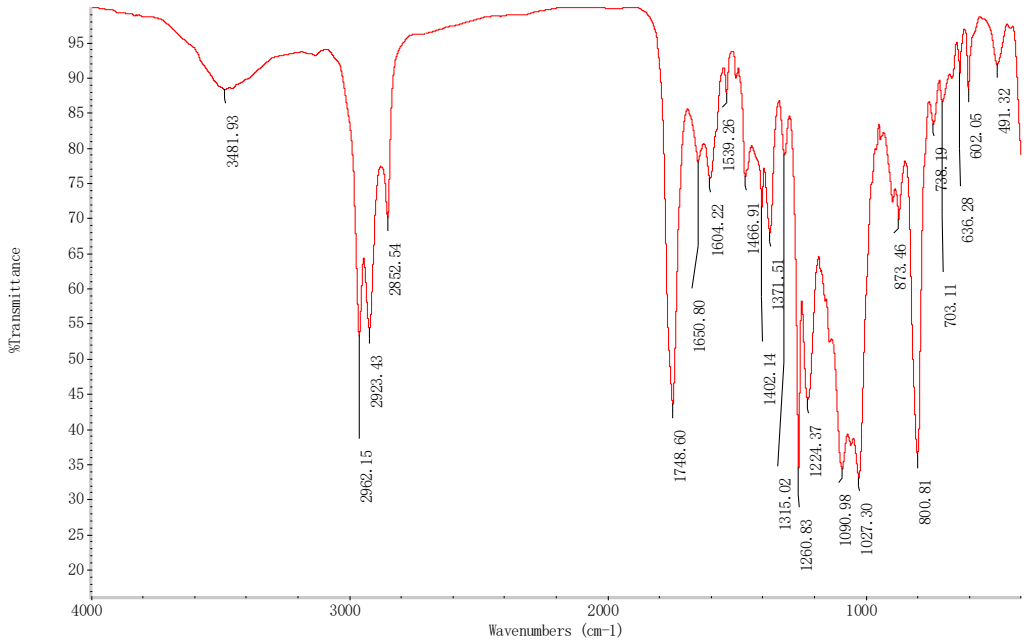


Figure S48. IR spectrum of **6**