Supplementary Material

New pyranone derivatives and sesquiterpenoid isolated from the endophytic fungus *Xylaria* sp. Z184

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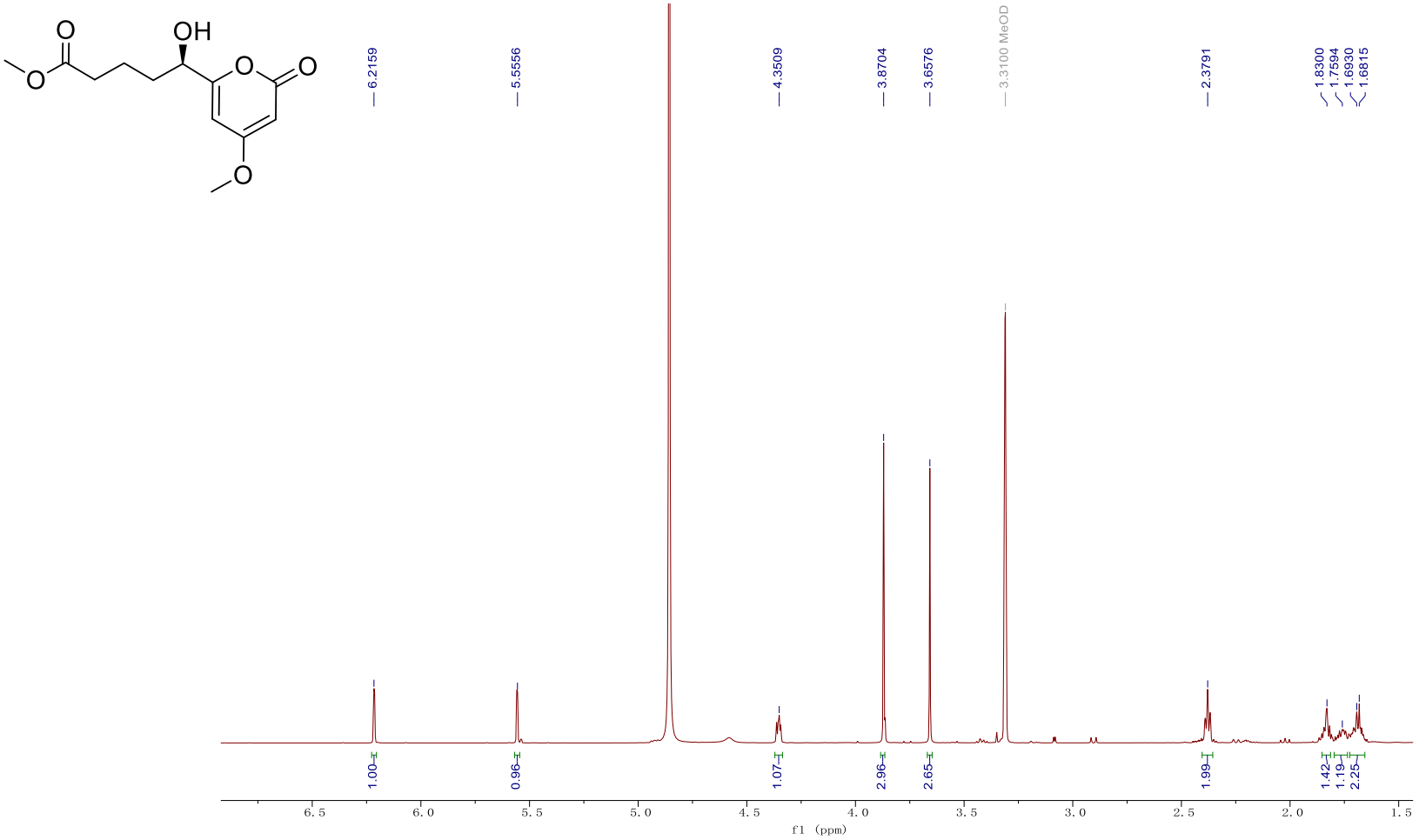


Fig. S1 ^{1}H NMR spectrum of **1** in methanol-d_4 (600 MHz).

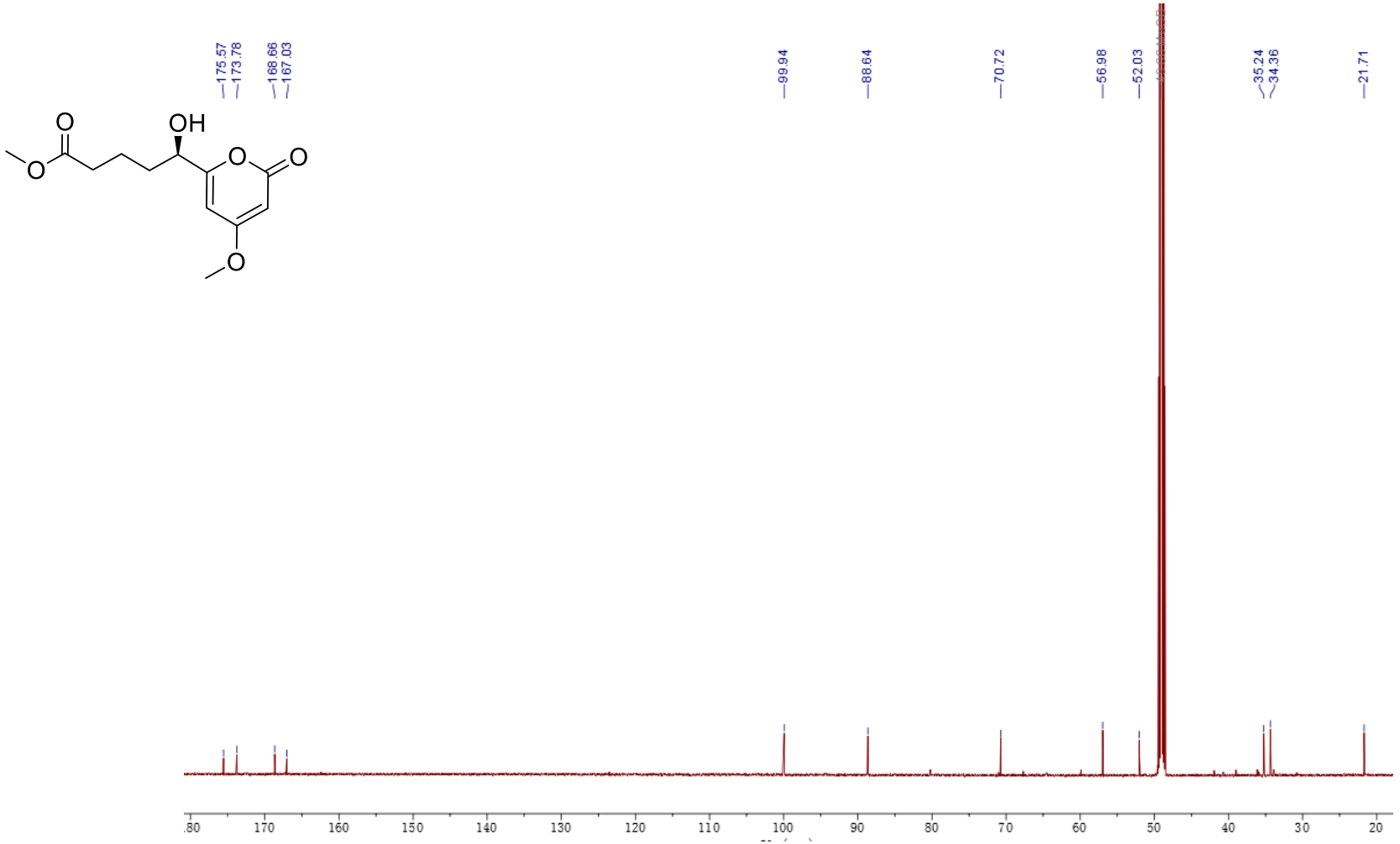


Fig. S2 ^{13}C NMR spectrum of **1** in methanol-d_4 (150 MHz).

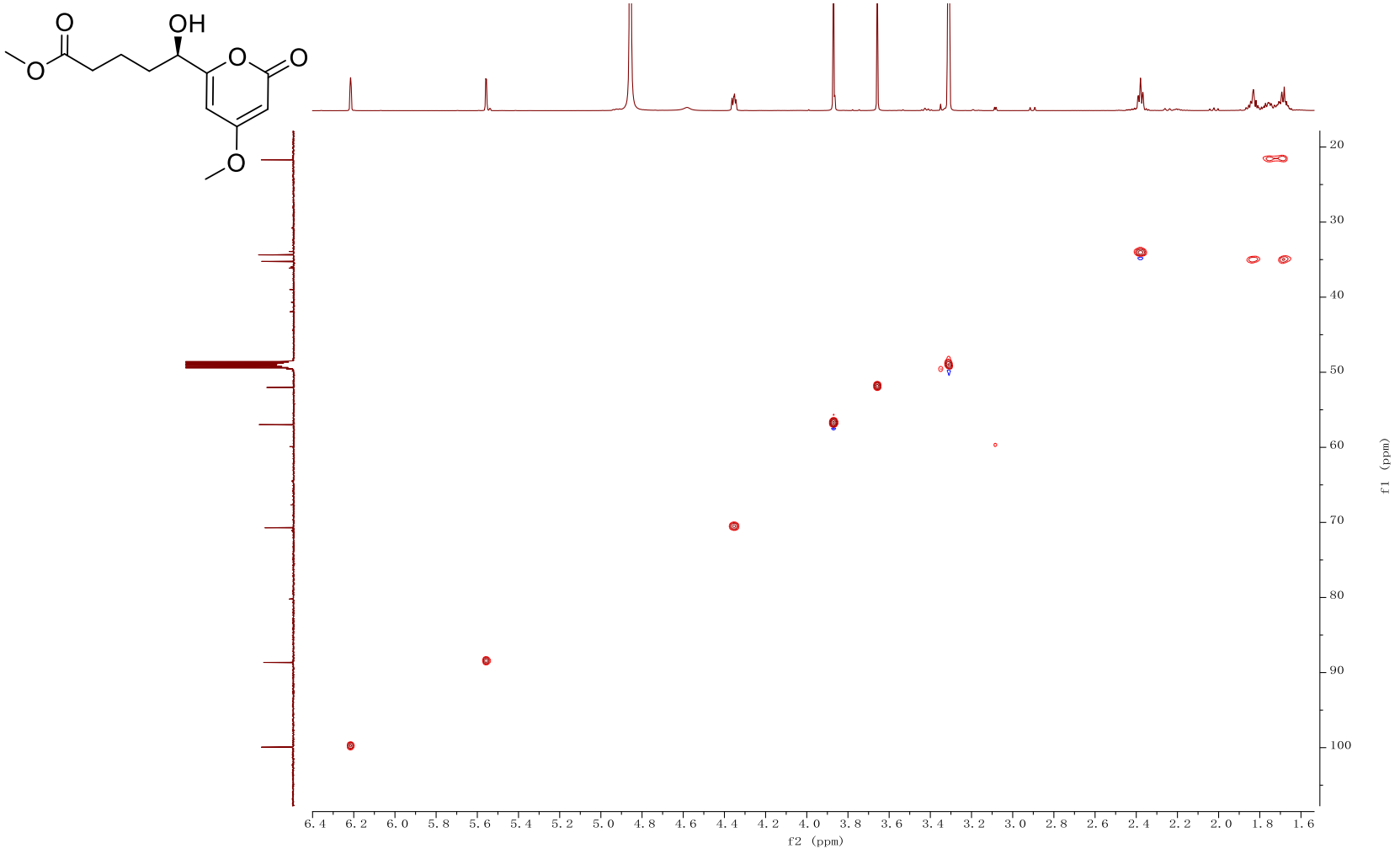


Fig. S3 HSQC spectrum of **1** in methanol-d_4 (600 MHz).

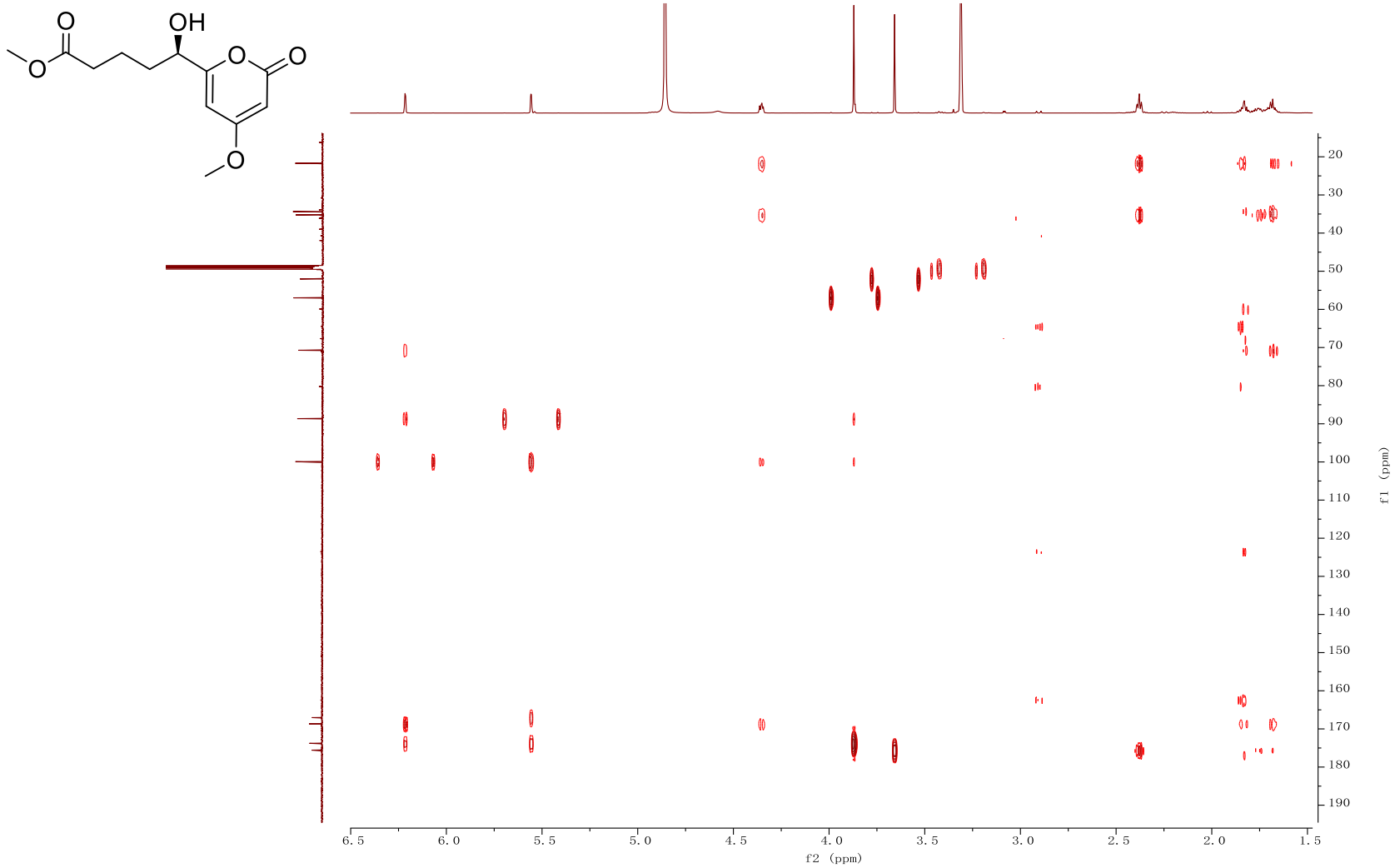


Fig. S4 HMBC spectrum of **1** in methanol-d_4 (600 MHz).

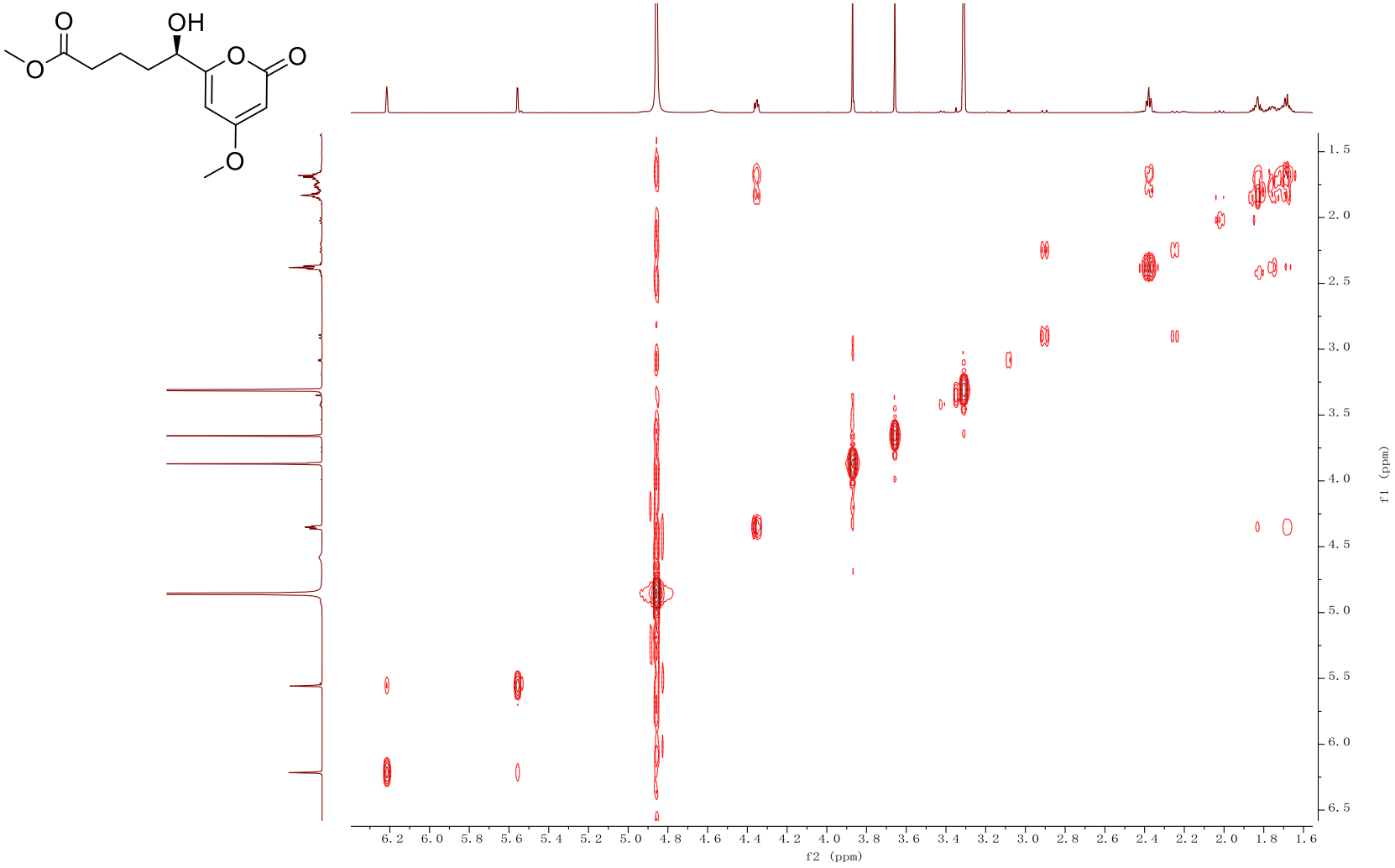


Fig. S5 ^{1}H–^{1}H COSY spectrum of **1** in methanol-d_4 (600 MHz).

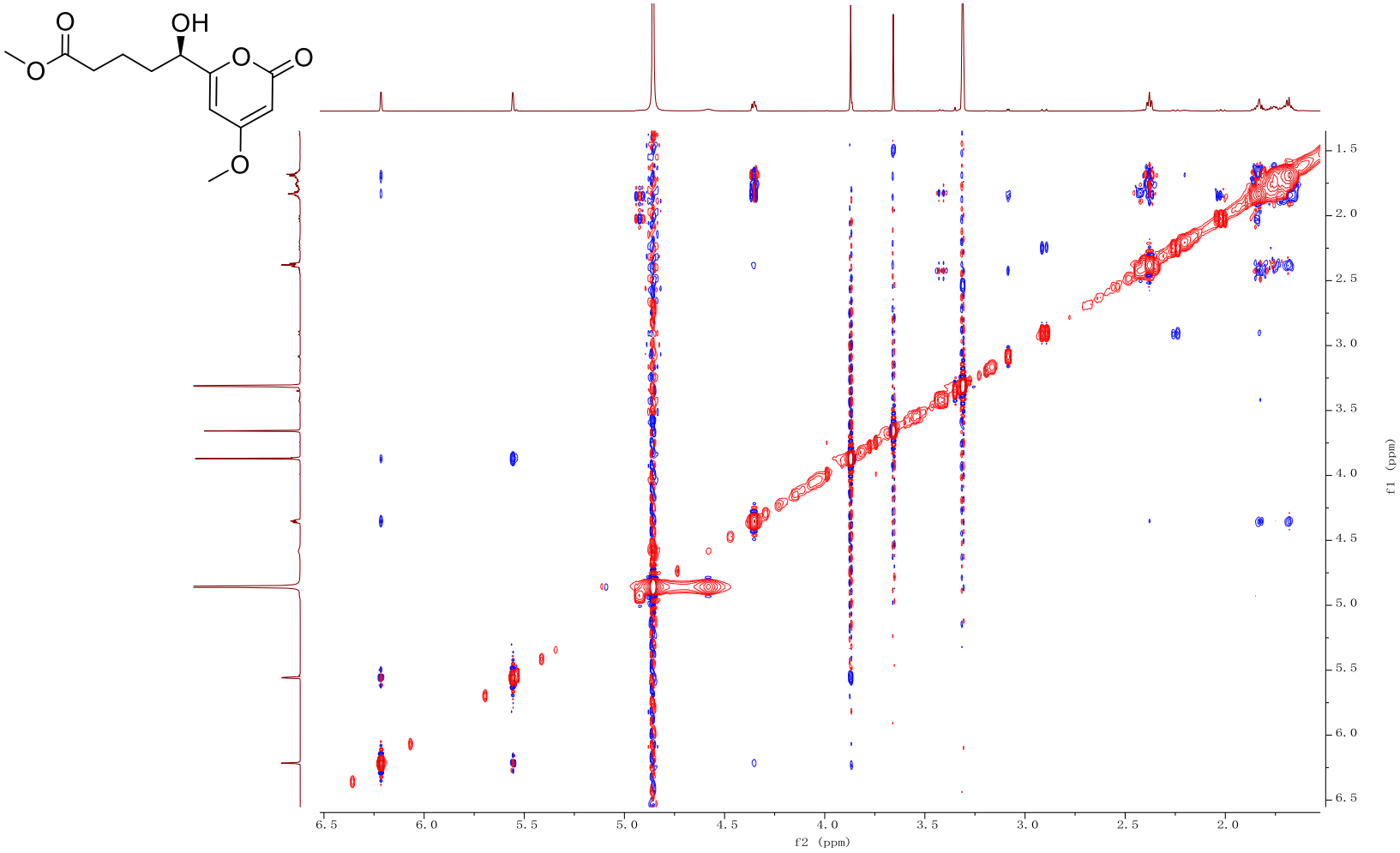
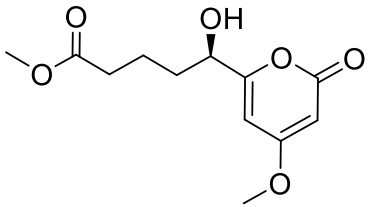


Fig. S6 ROESY spectrum of **1** in methanol-d_4 (600 MHz).



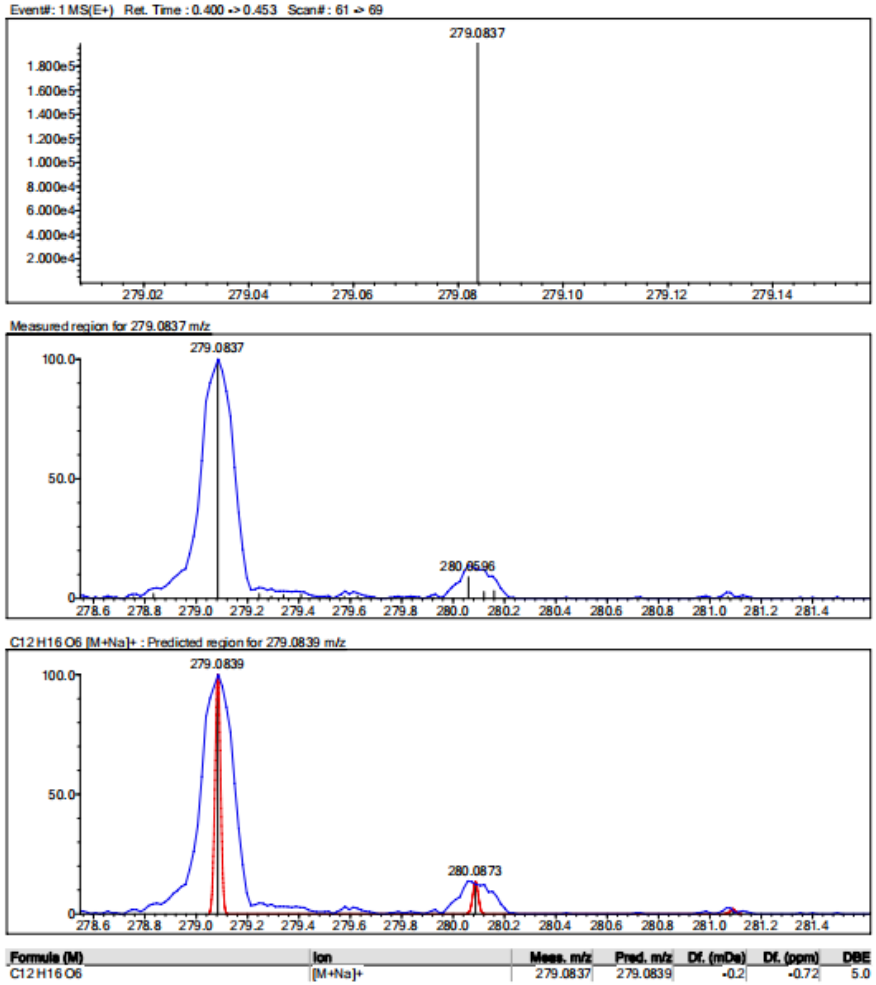
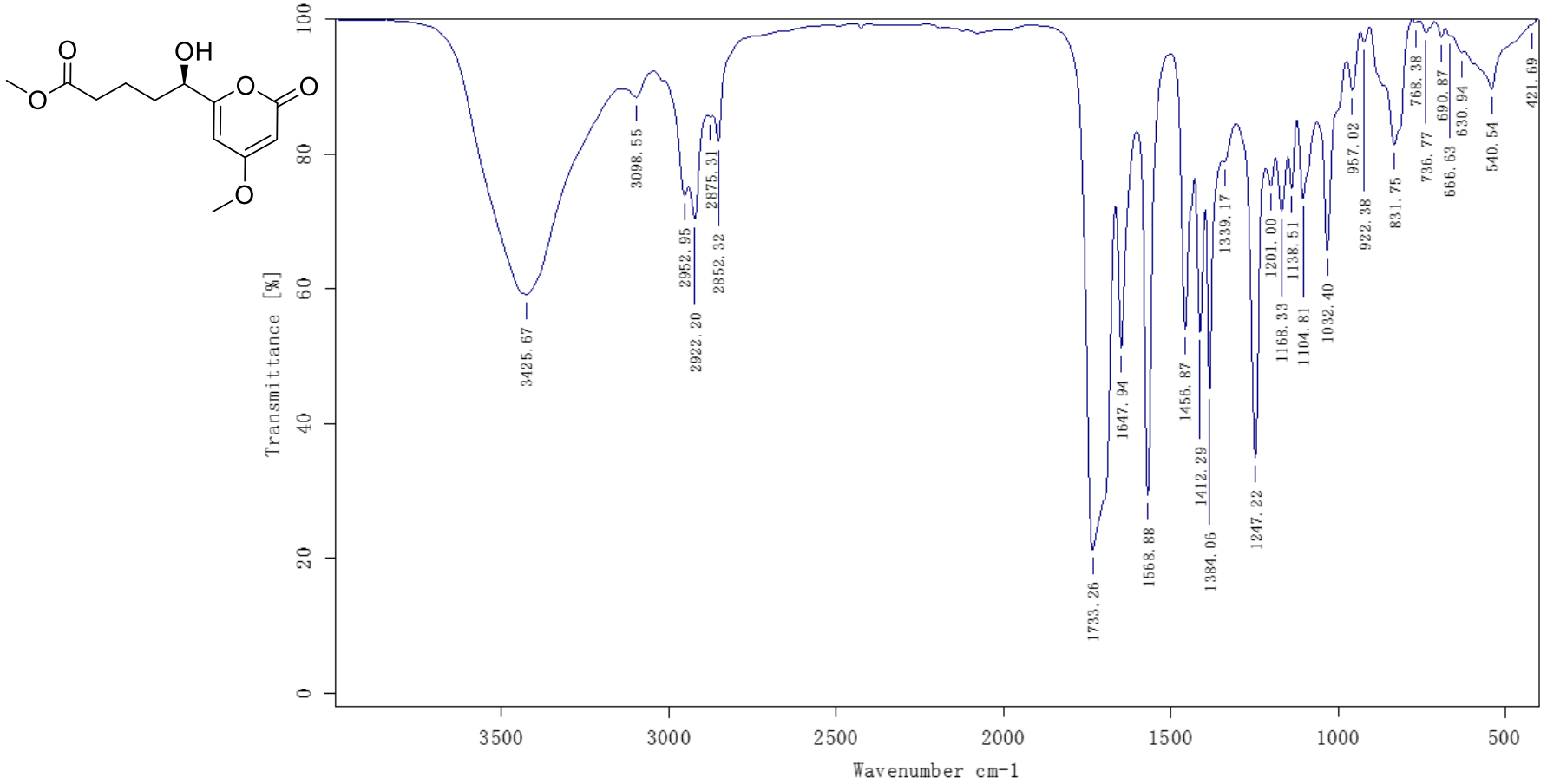


Fig. S7 HRESIMS spectrum of **1**.



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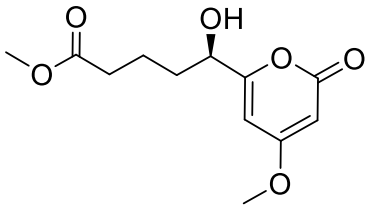


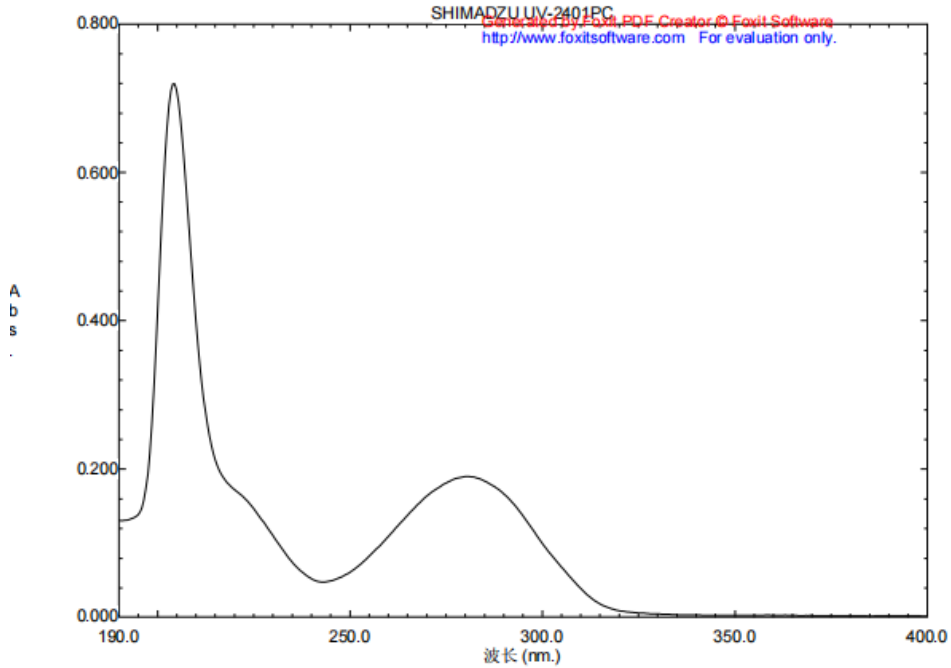


Fig. S9 UV spectrum of **1**.

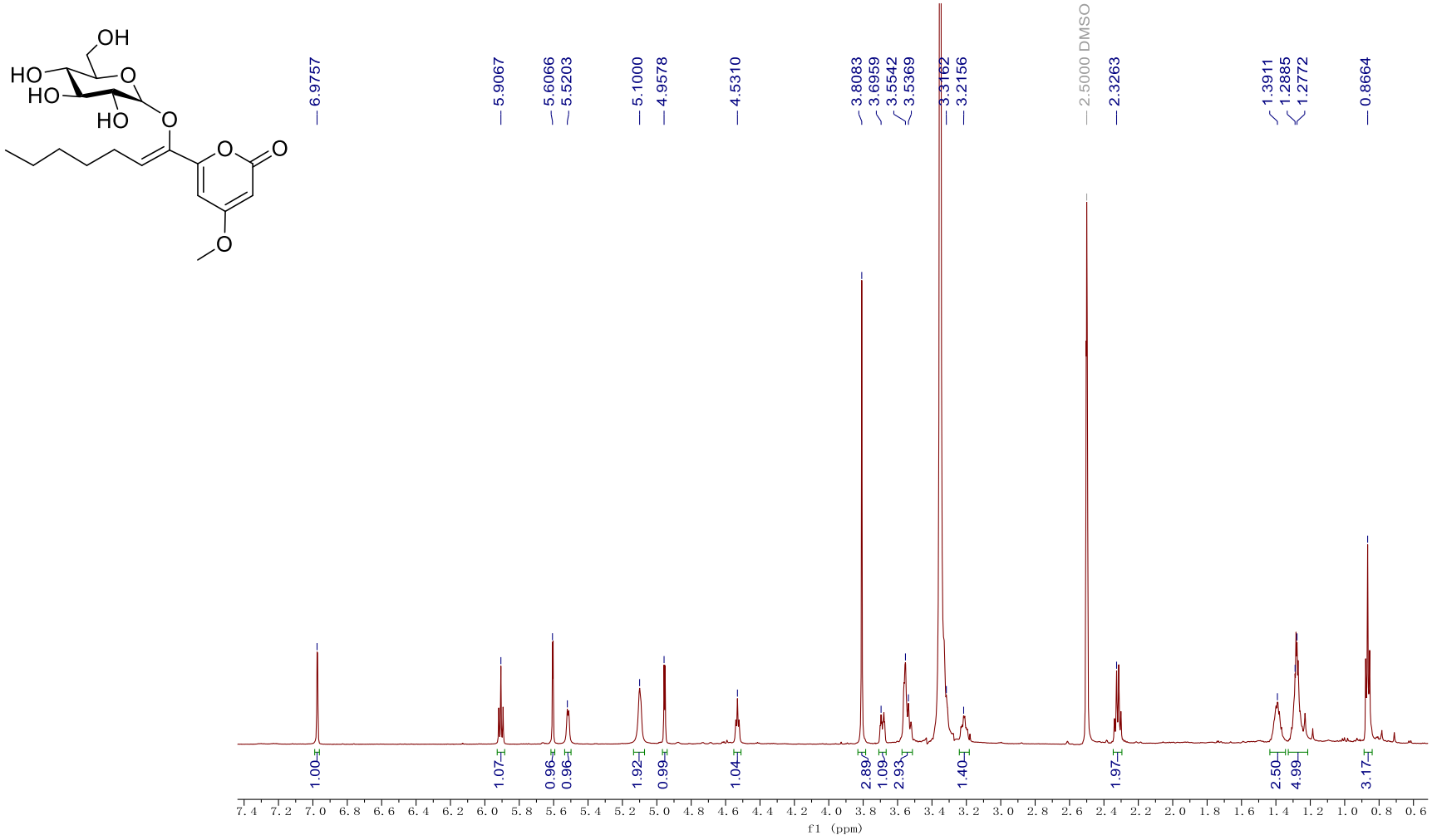


Fig. S10 ^{1}H NMR spectrum of **2** in DMSO-d_6 (600 MHz).

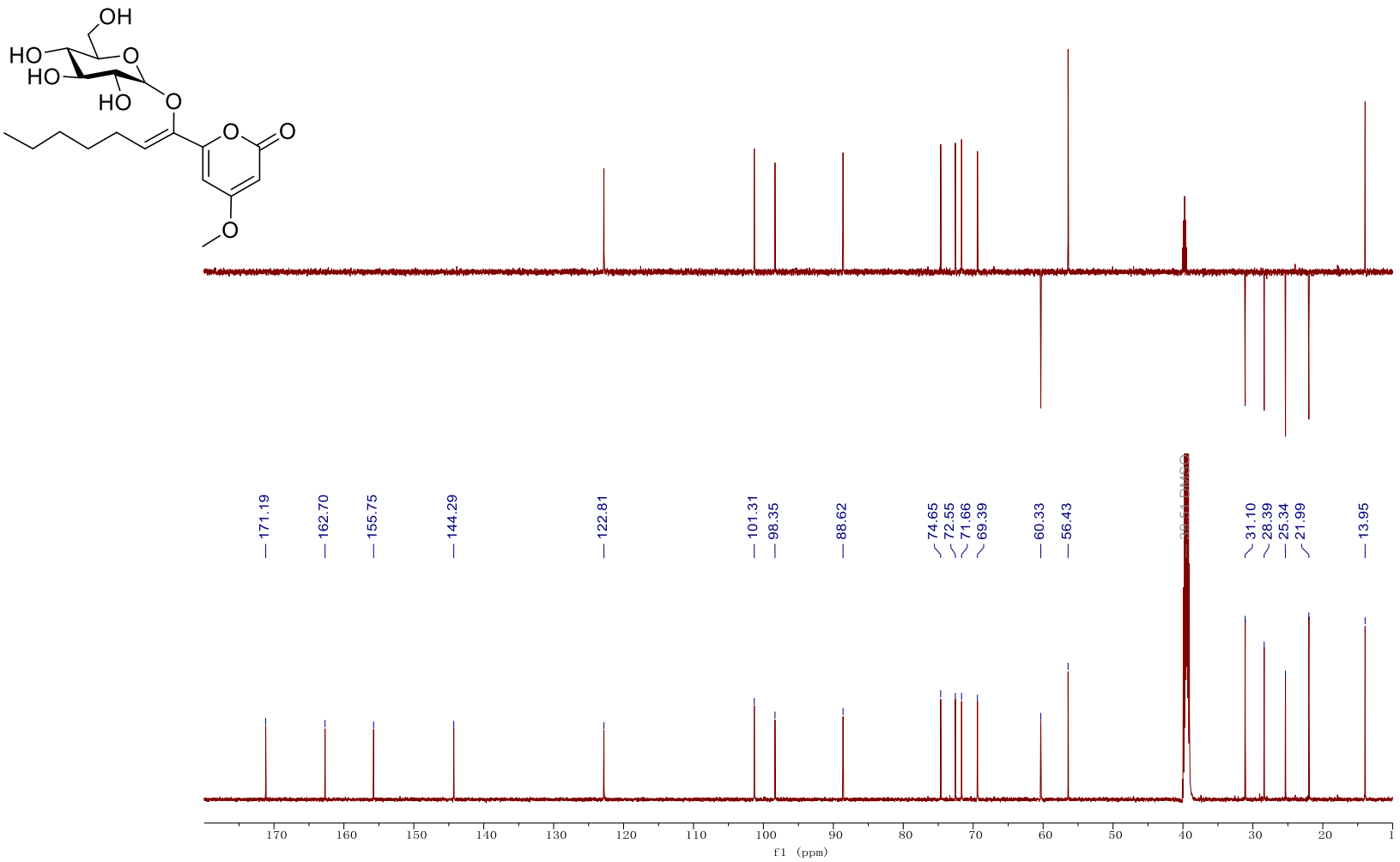


Fig. S11 ^{13}C NMR spectrum of **2** in DMSO-d_6 (150 MHz).

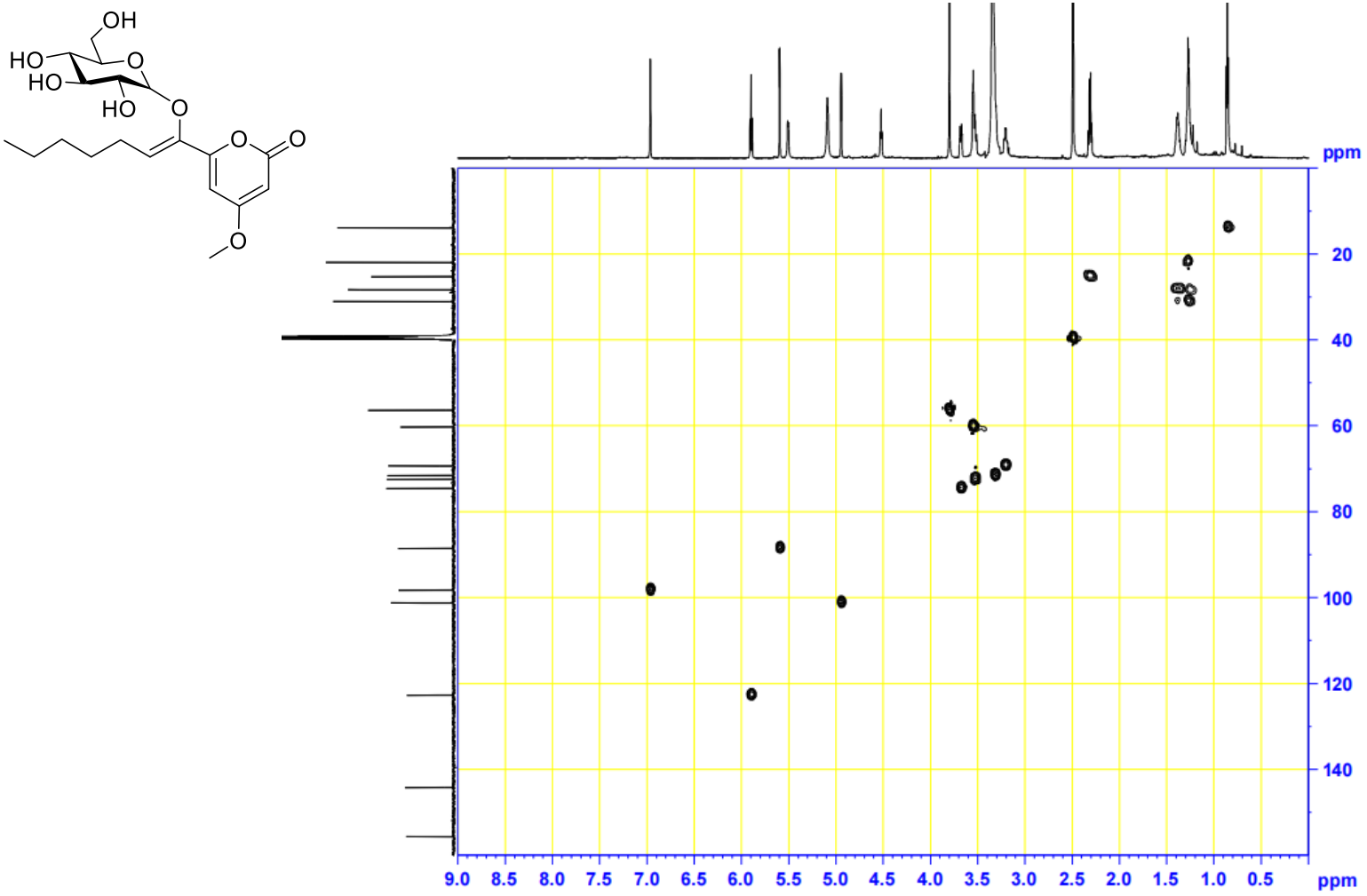


Fig. S12 HSQC spectrum of **2** in DMSO-d_6 (600 MHz).

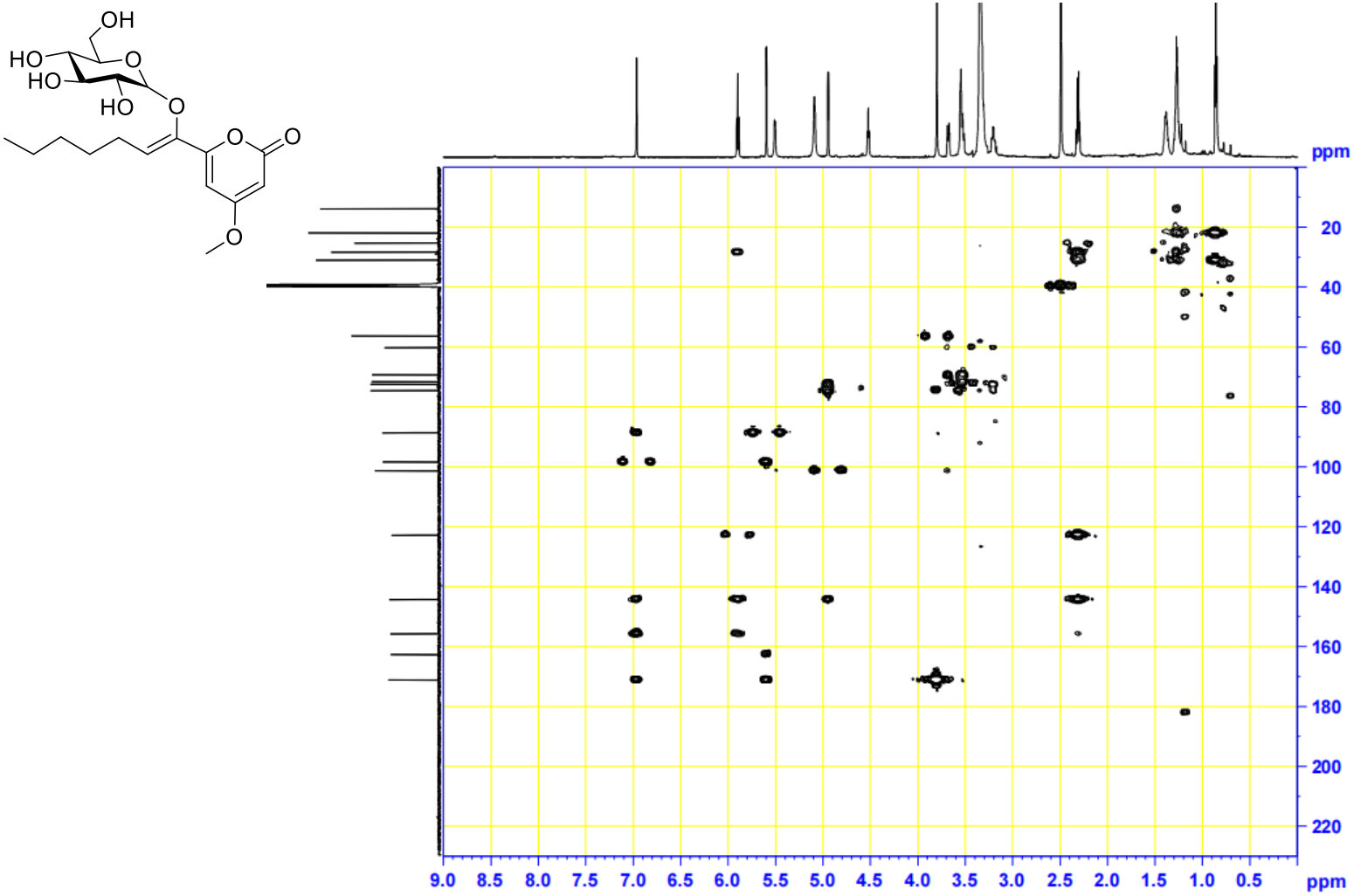


Fig. S13 HMBC spectrum of **2** in DMSO-d_6 (600 MHz).

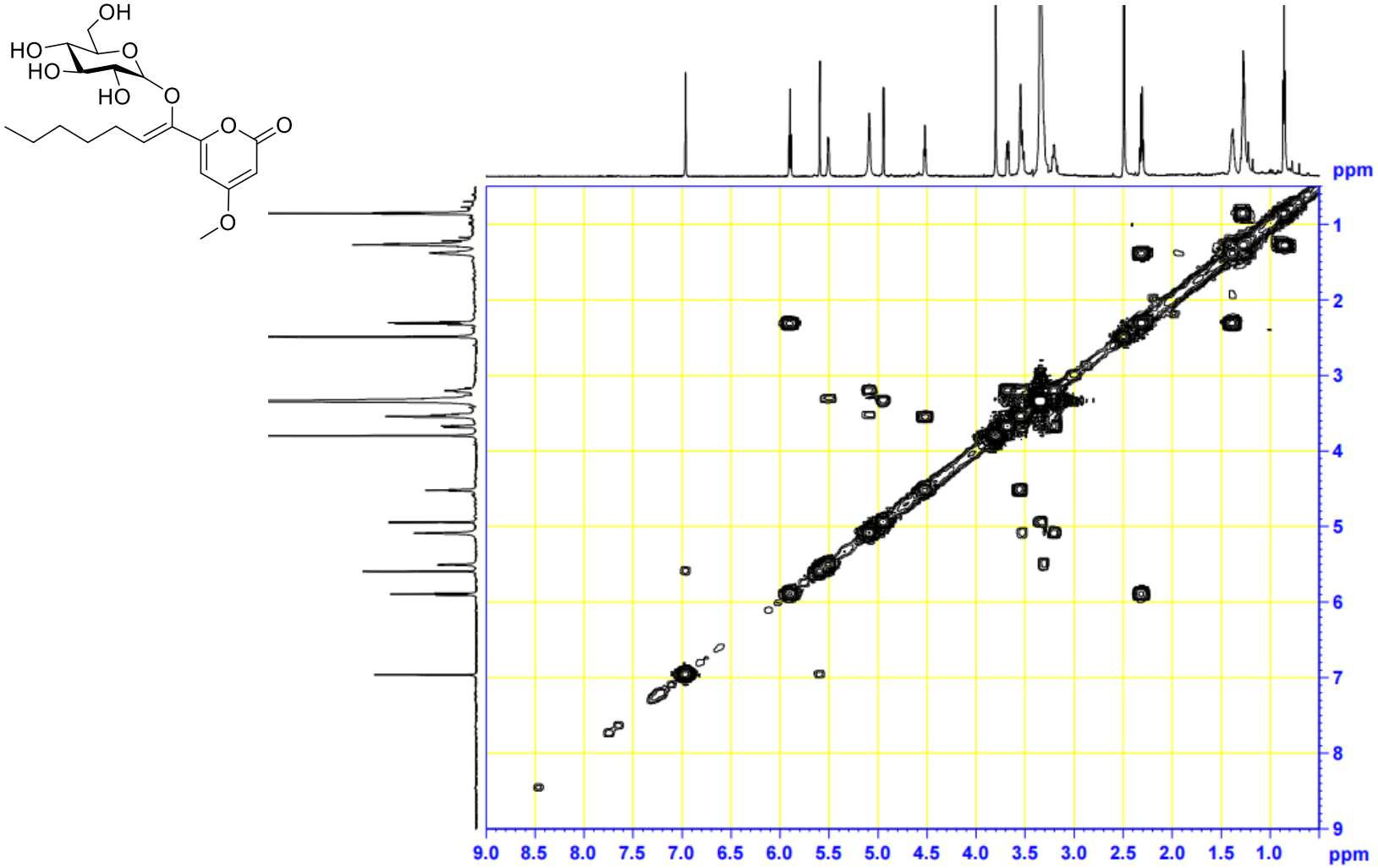
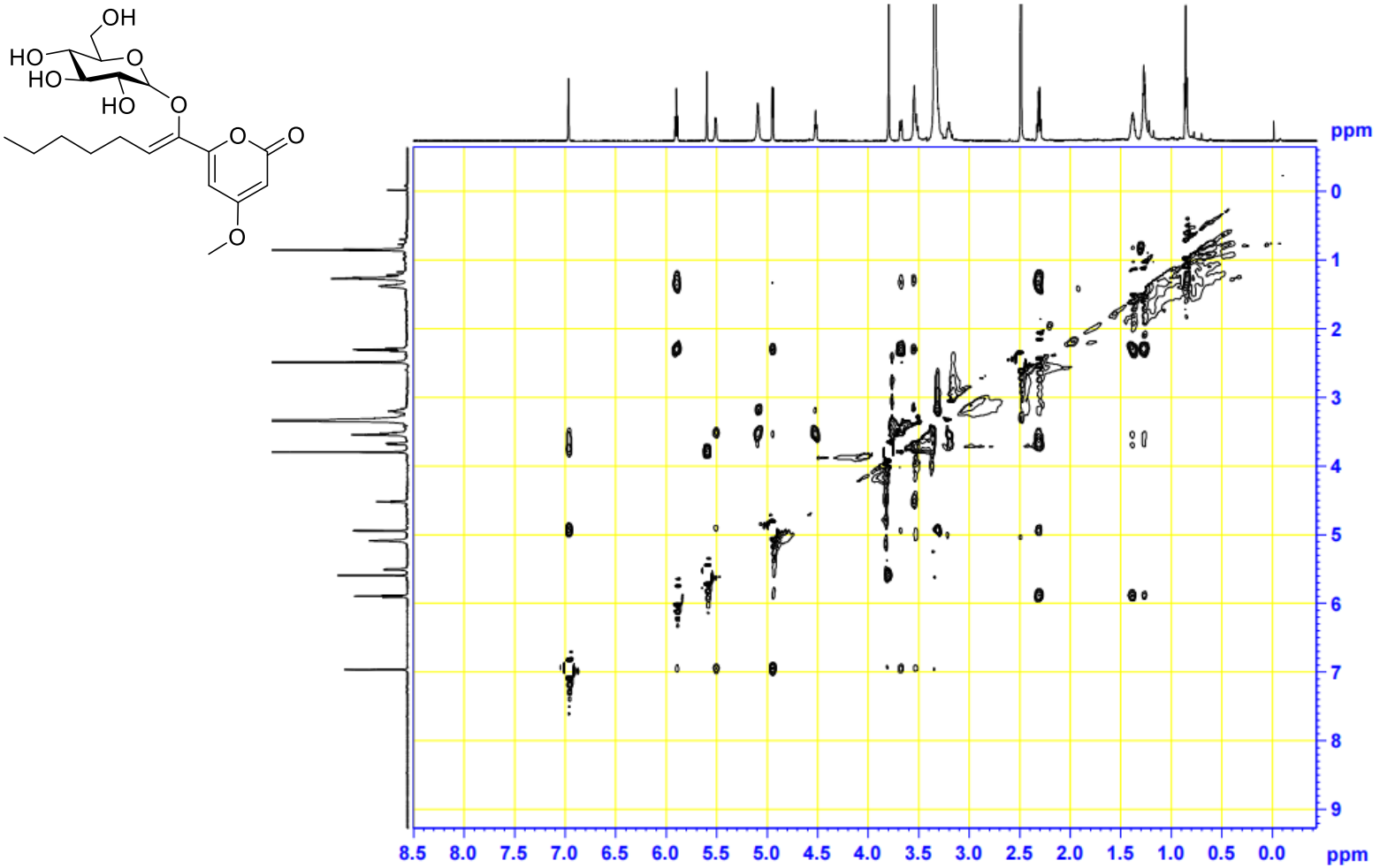


Fig. S14 ^{1}H-^{1}H COSY spectrum of **2** in DMSO-d_6 (600 MHz).



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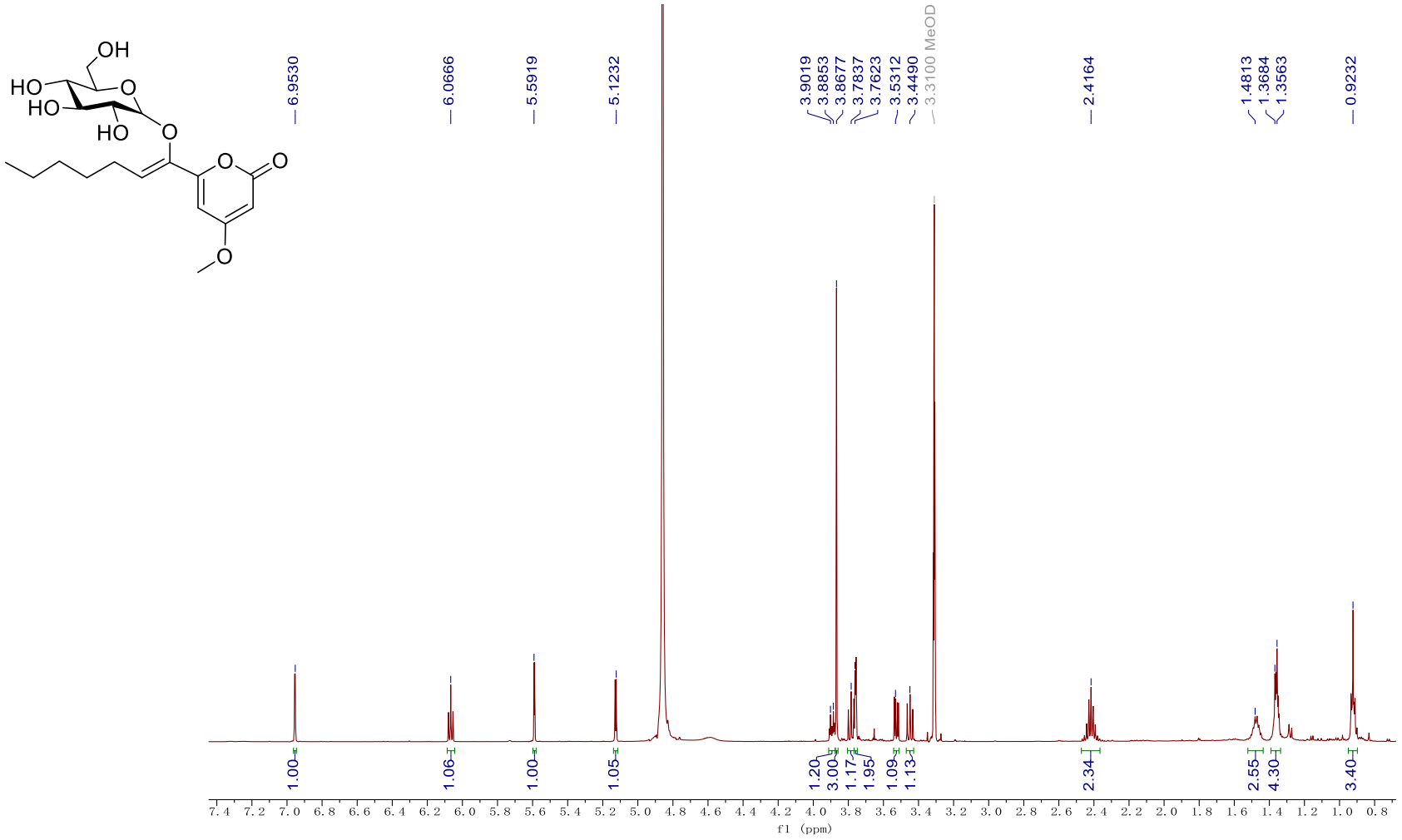


Fig. S16 ^{1}H NMR spectrum of **2** in methanol-d_4 (600 MHz).

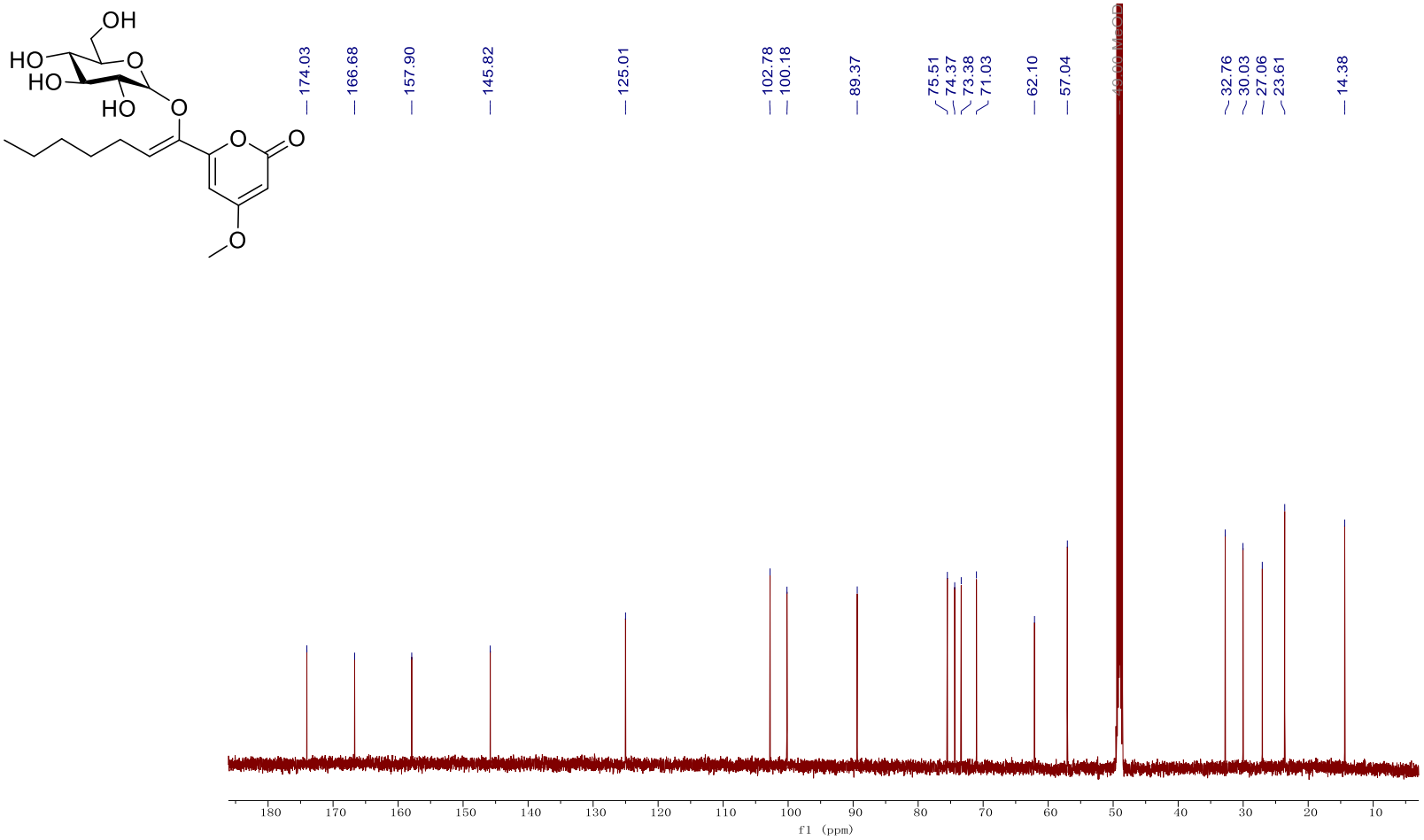


Fig. S17 ^{13}C NMR spectrum of **2** in methanol-d_4 (150 MHz).

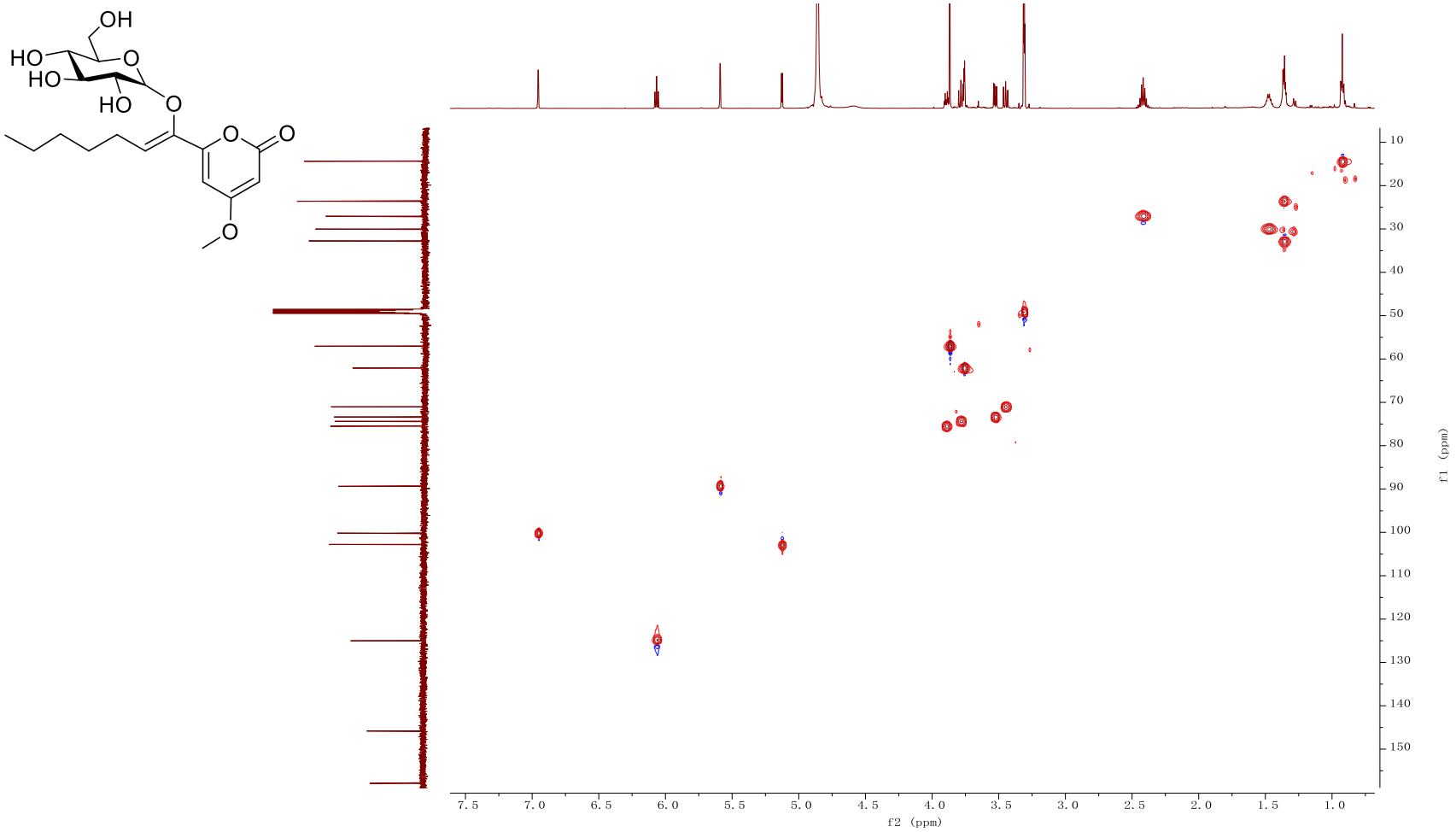


Fig. S18 HSQC spectrum of **2** in methanol-d_4 (600 MHz).

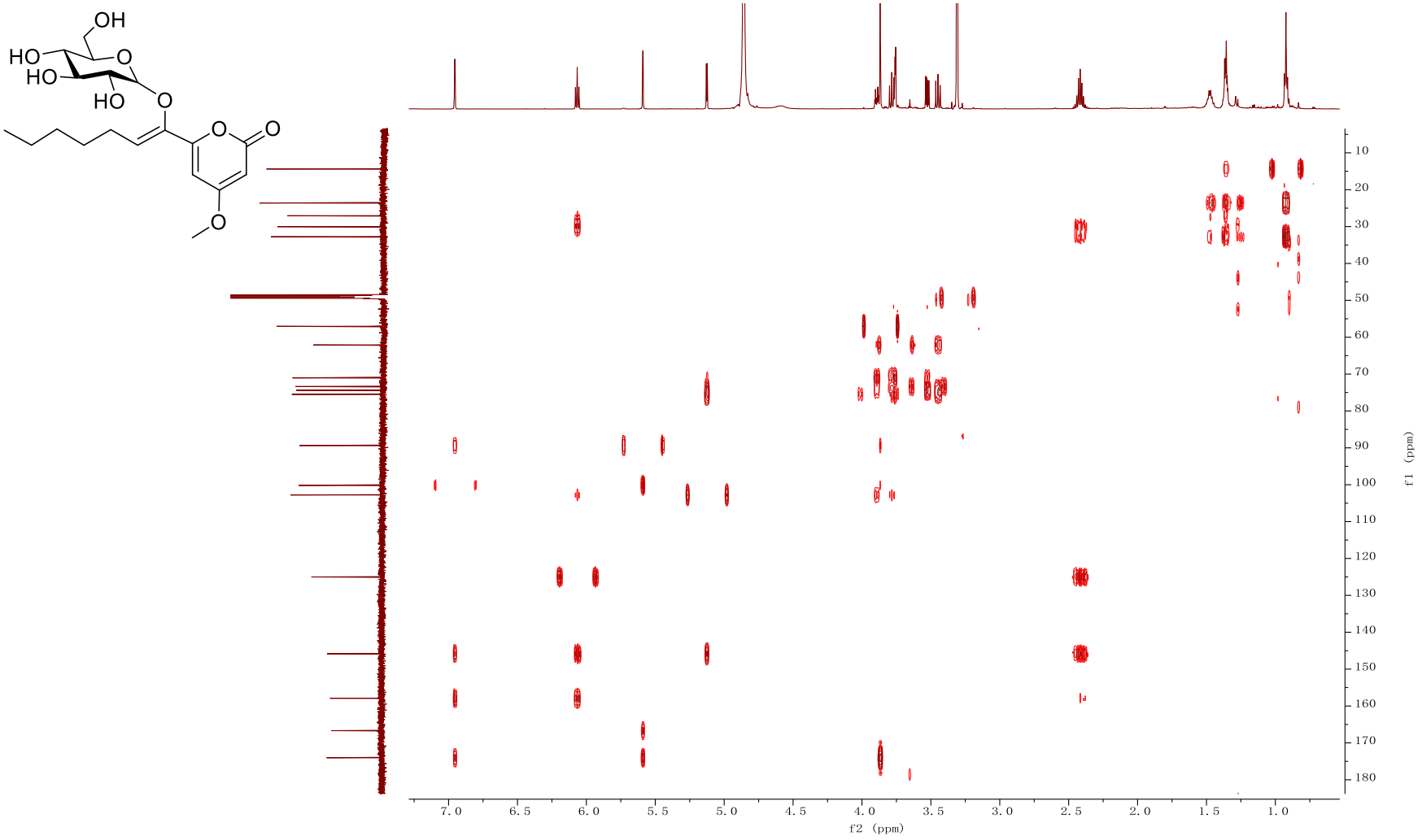


Fig. S19 HMBC spectrum of **2** in methanol-d_4 (600 MHz).

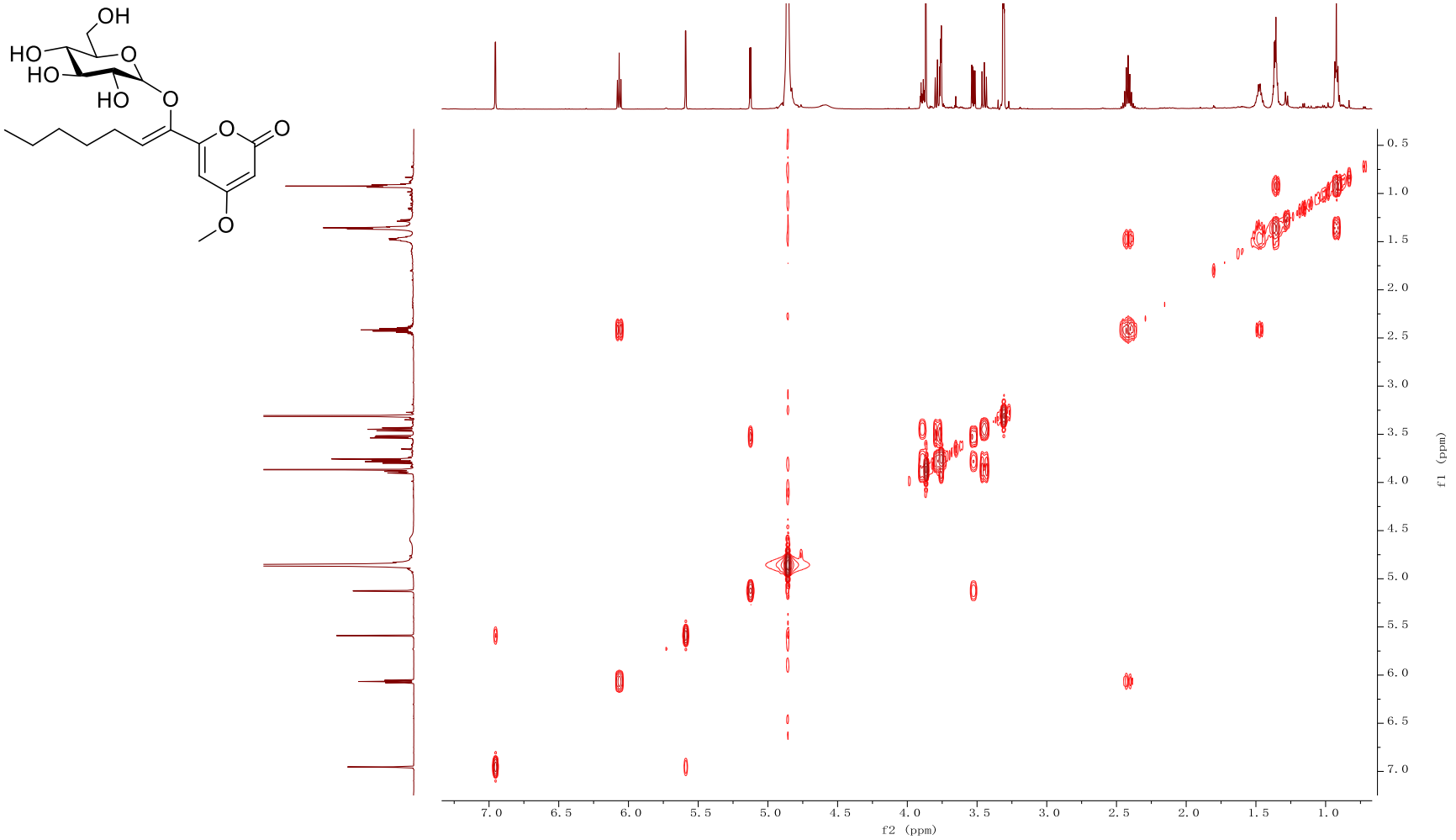


Fig. S20 ^{1}H–^{1}H COSY spectrum of **2** in methanol-d_4 (600 MHz).

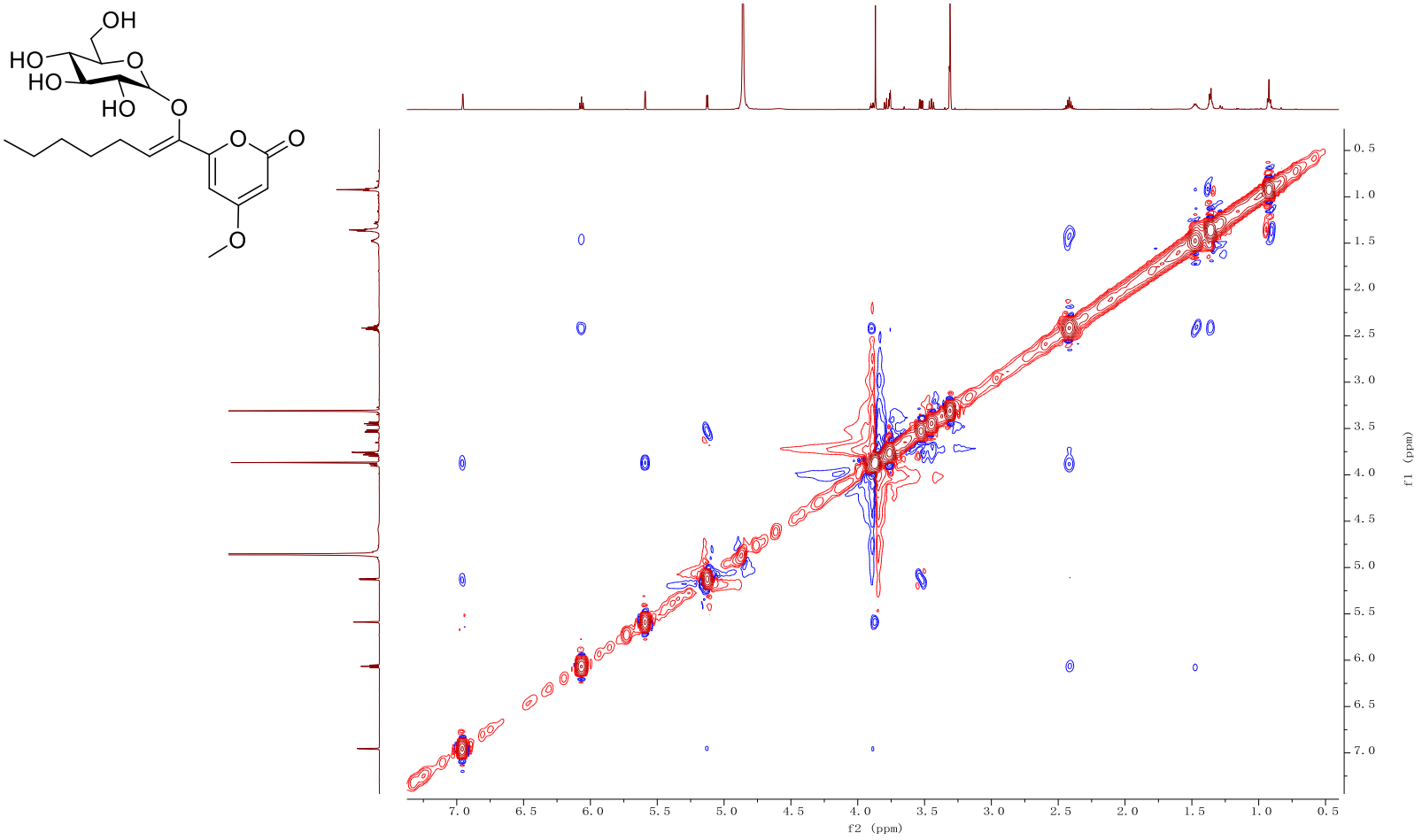


Fig. S21 ROESY spectrum of **2** in methanol-d_4 (600 MHz).

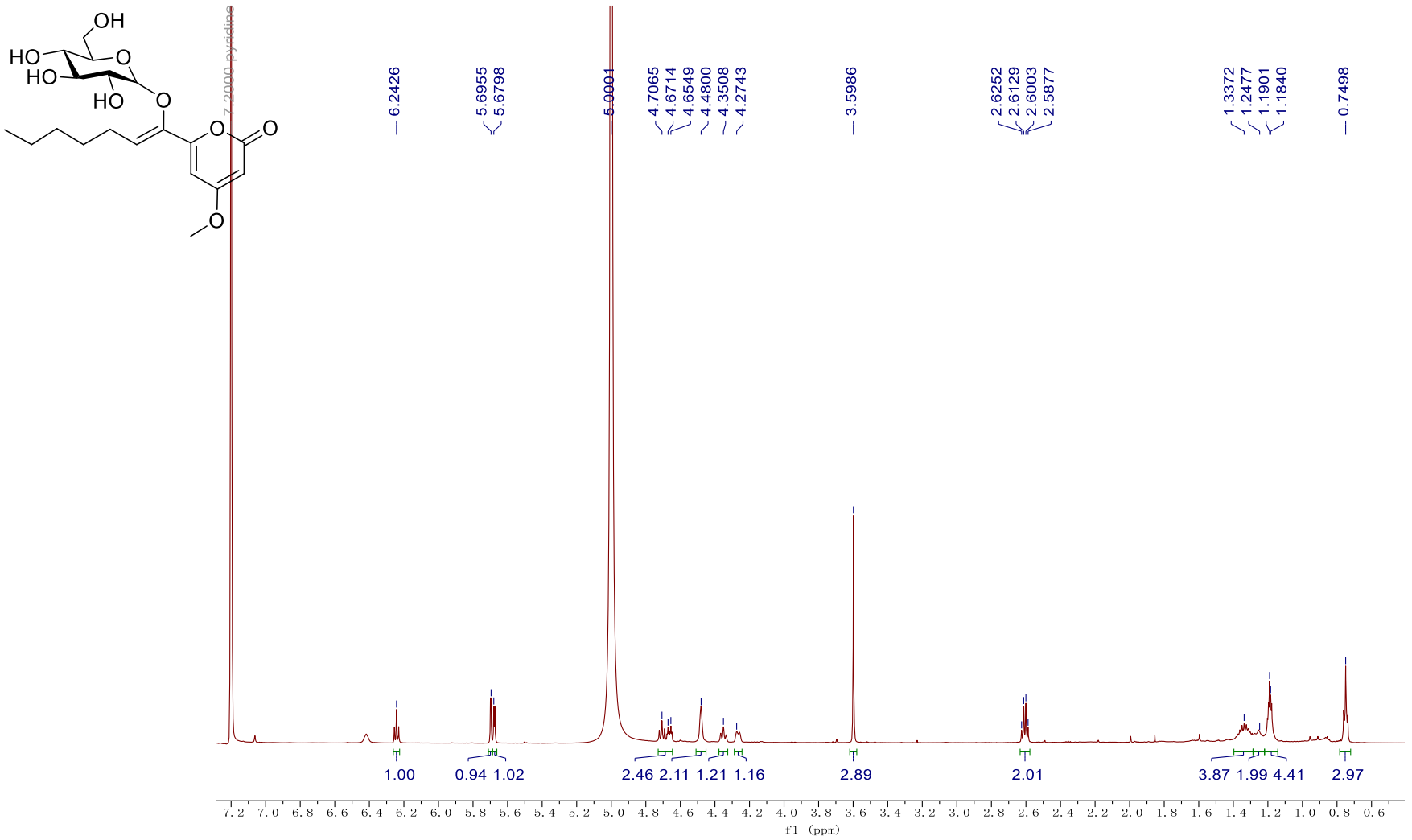


Fig. S22 ^{1}H NMR spectrum of **2** in pyridine-d_5 (600 MHz).

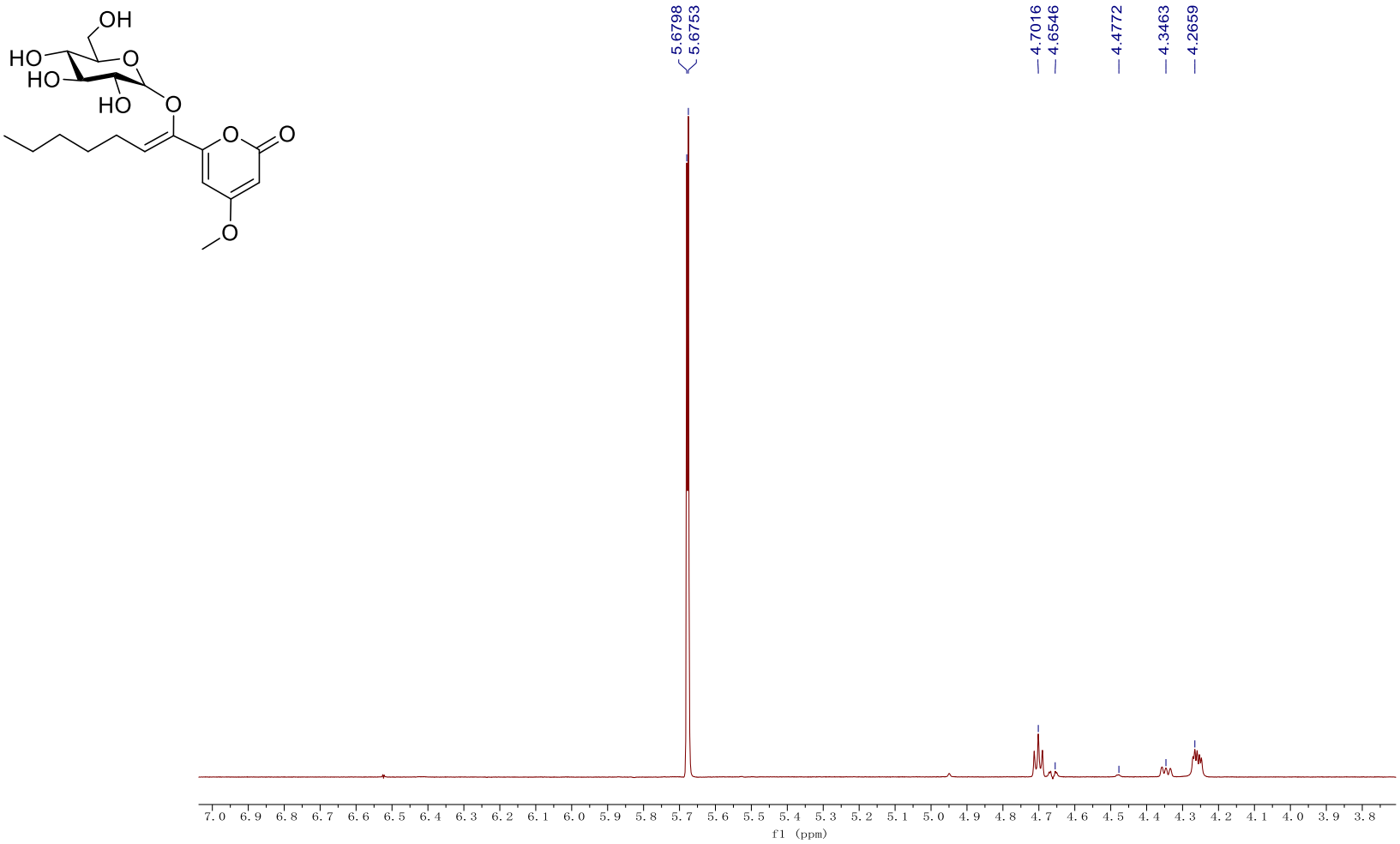


Fig. S23 1D-TOCSY spectrum of **2** in pyridine-d_5 (800 MHz).

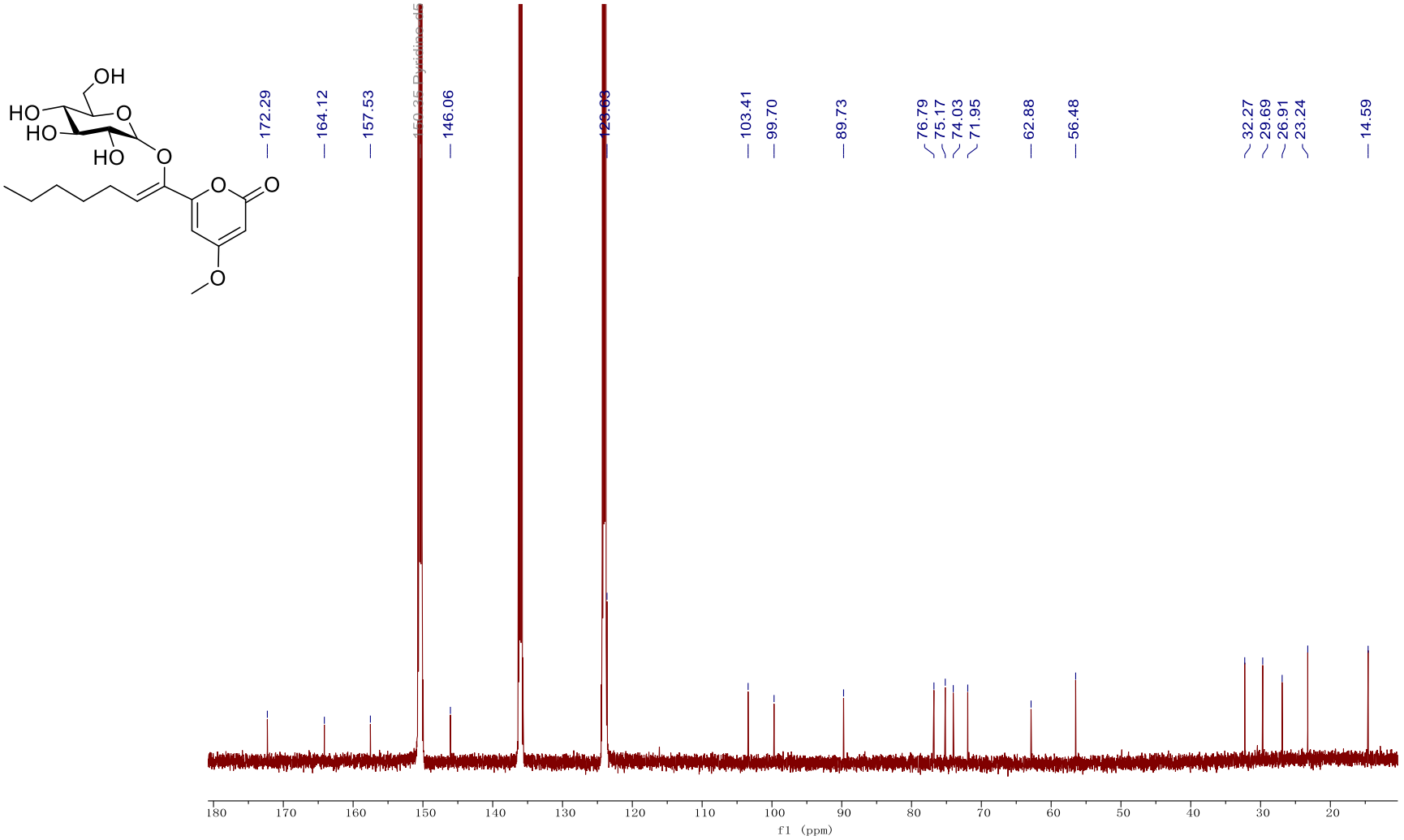


Fig. S24 ^{13}C NMR spectrum of **2** in pyridine-d_5 (150 MHz).

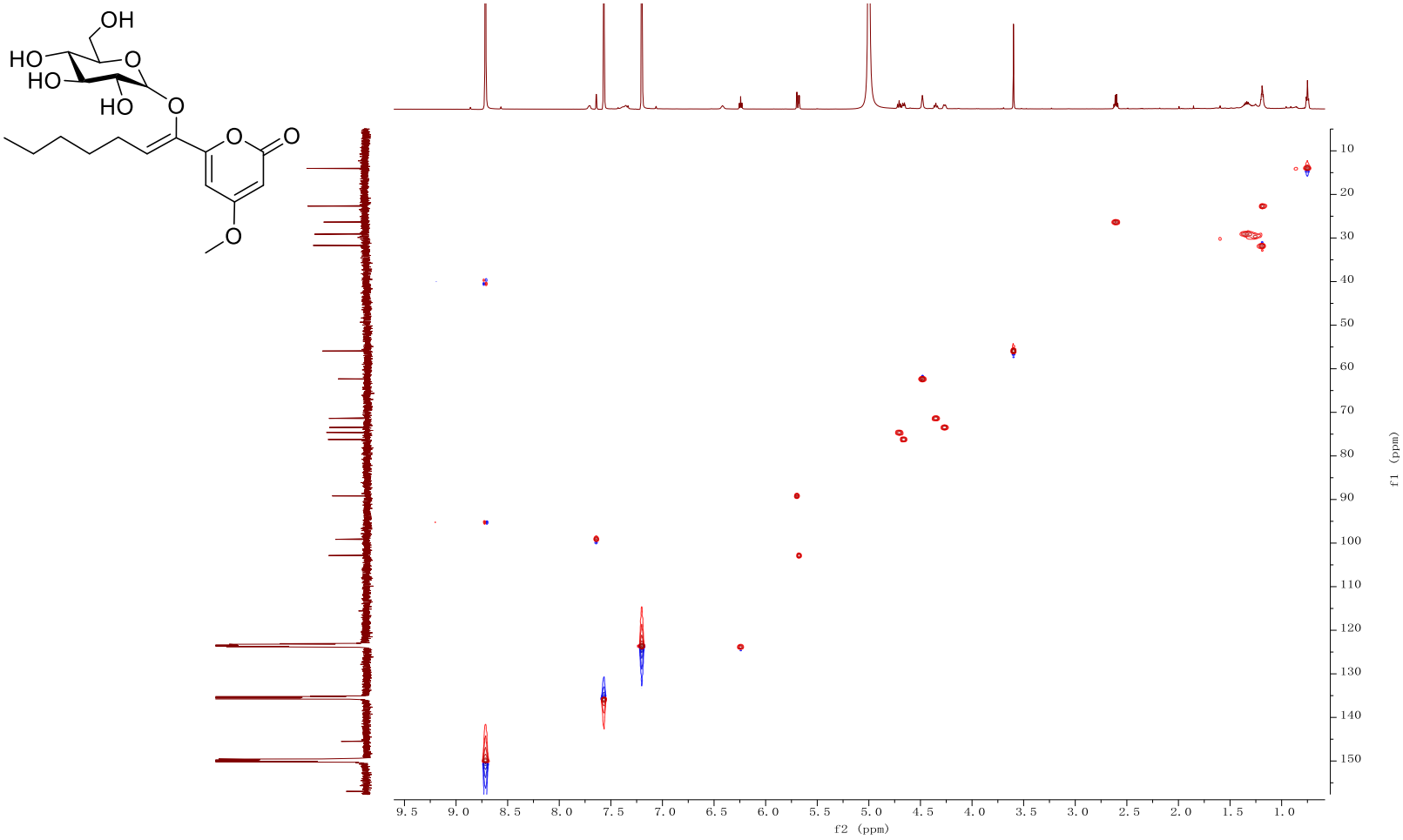


Fig. S25 HSQC spectrum of **2** in pyridine-d_5 (600 MHz).

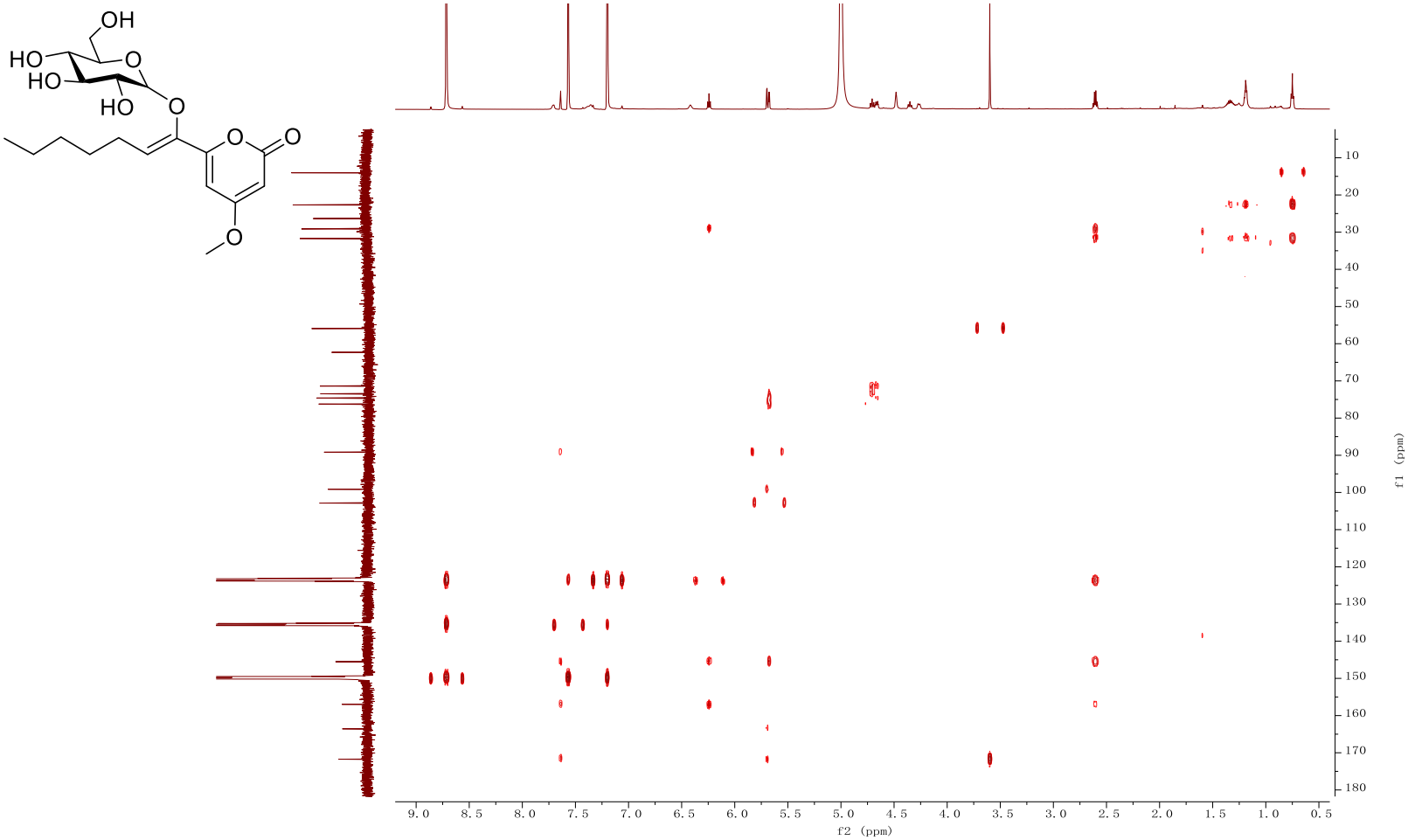


Fig. S26 HMBC spectrum of **2** in pyridine-d_5 (600 MHz).

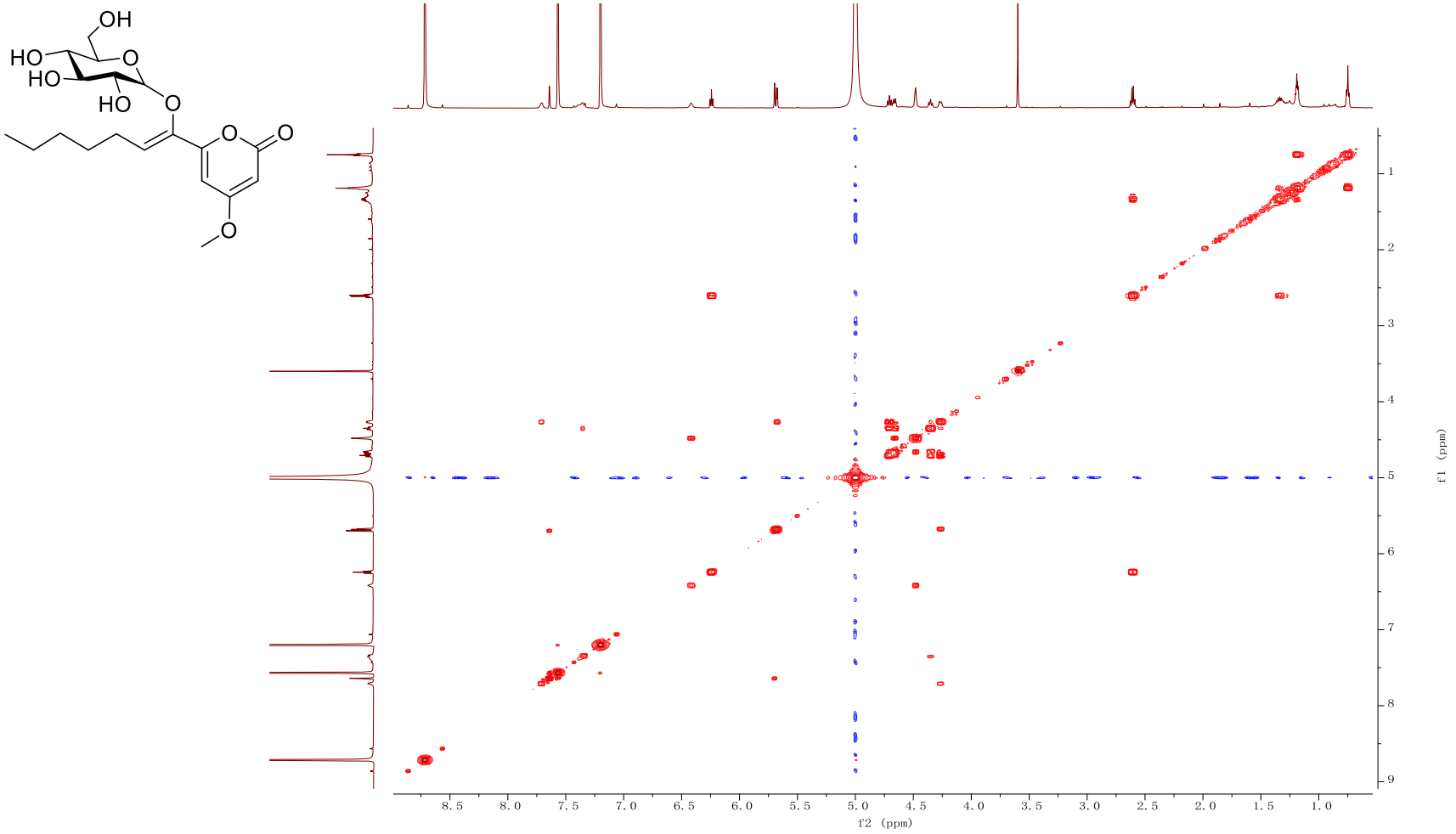
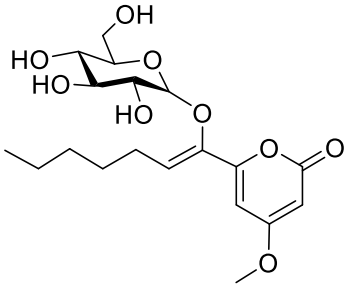


Fig. S27 ^{1}H–^{1}H COSY spectrum of **2** in pyridine-d_5 (600 MHz).



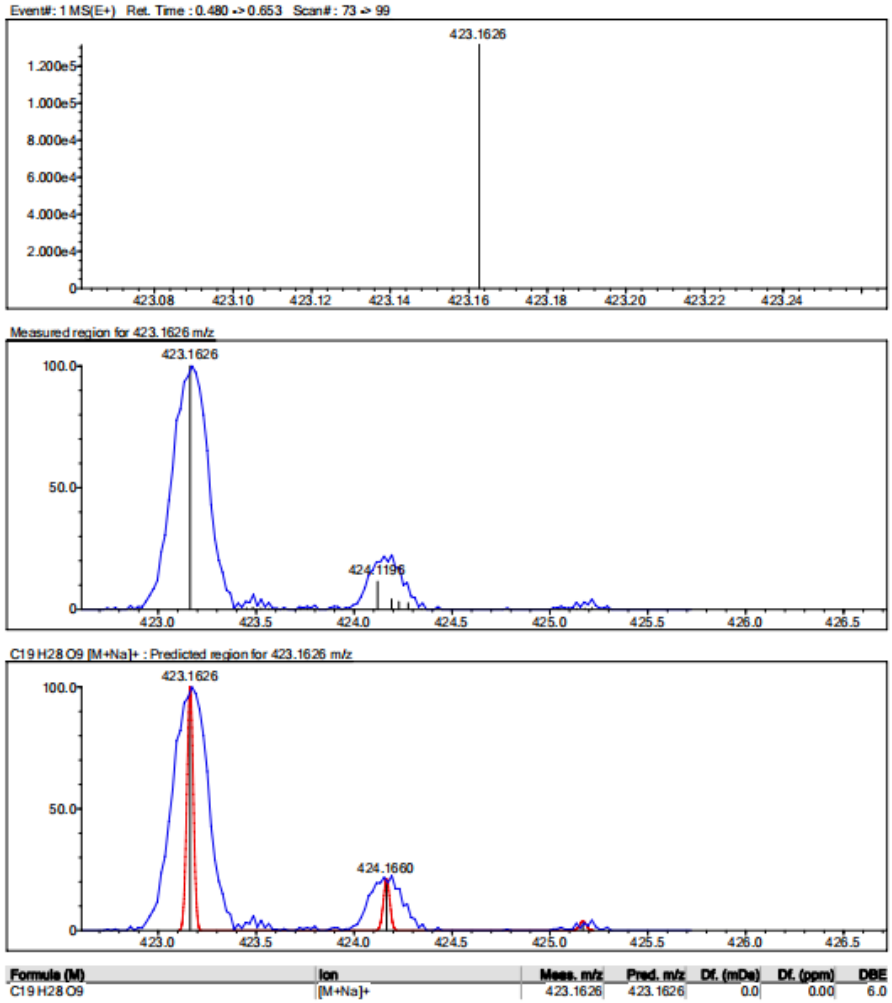


Fig. S28 HRESIMS spectrum of **2**.

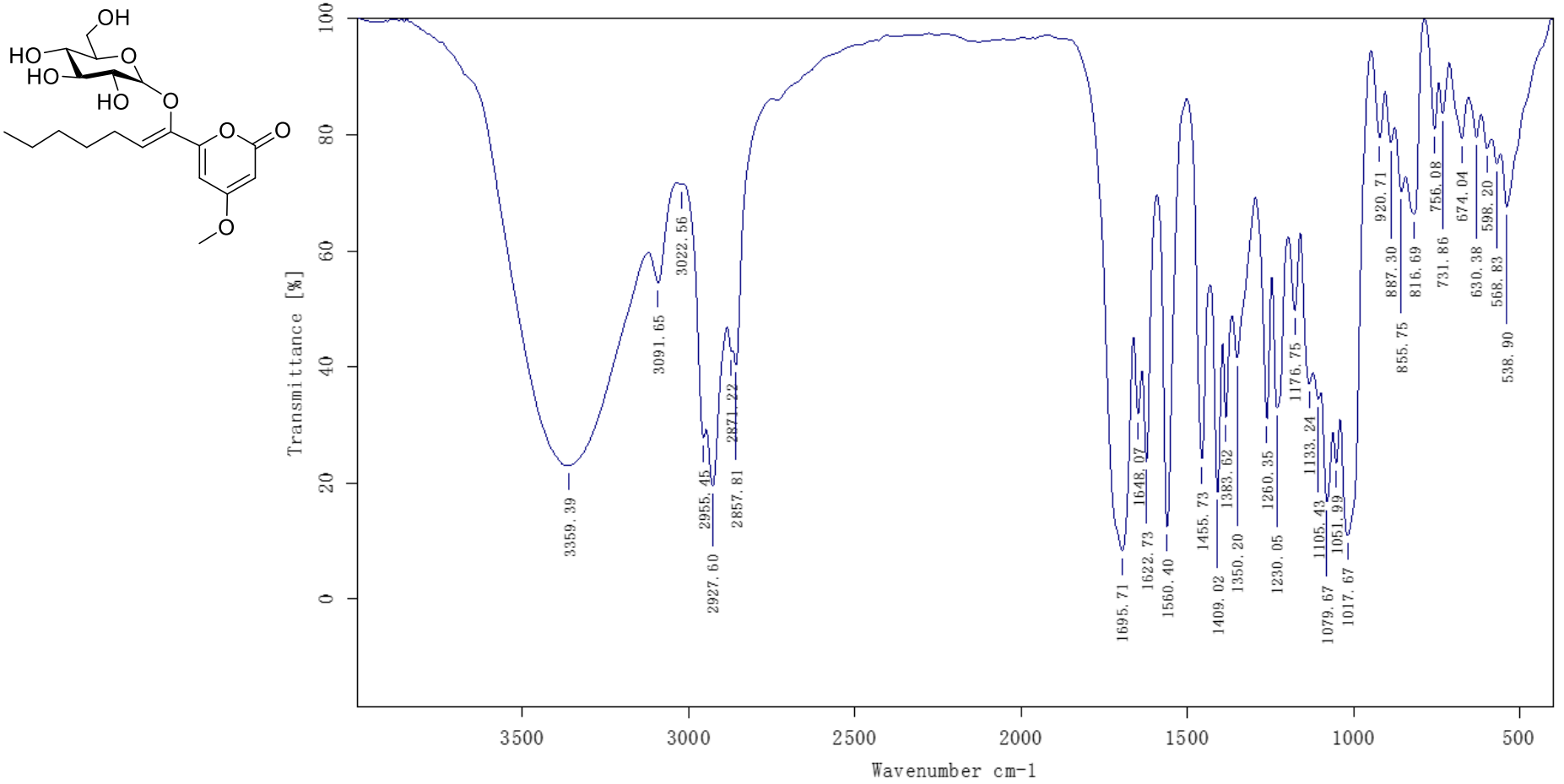
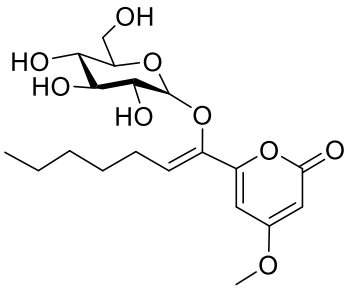


Fig. S29 IR spectrum of **2**.



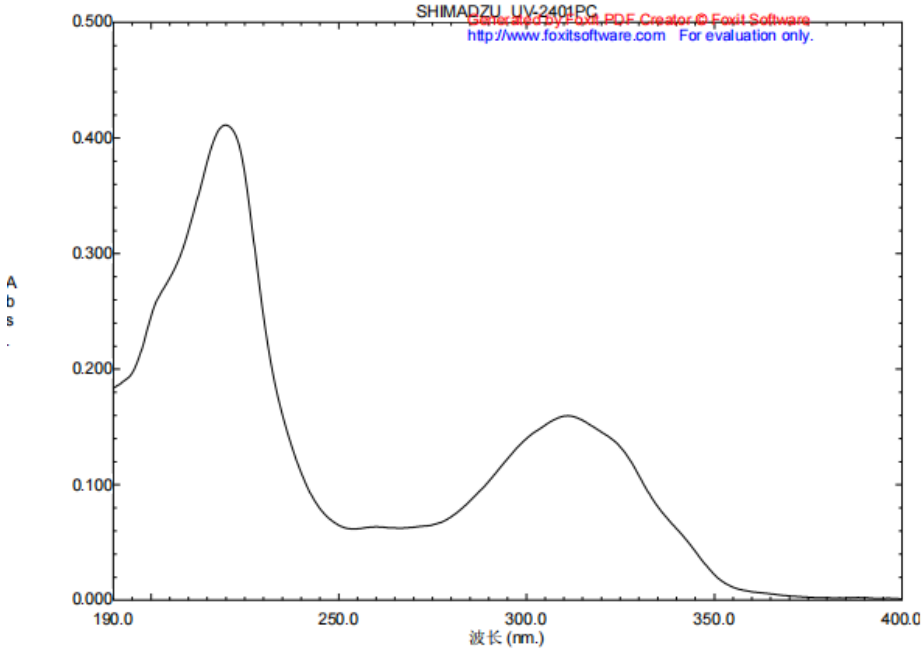


Fig. S30 UV spectrum of **2**.

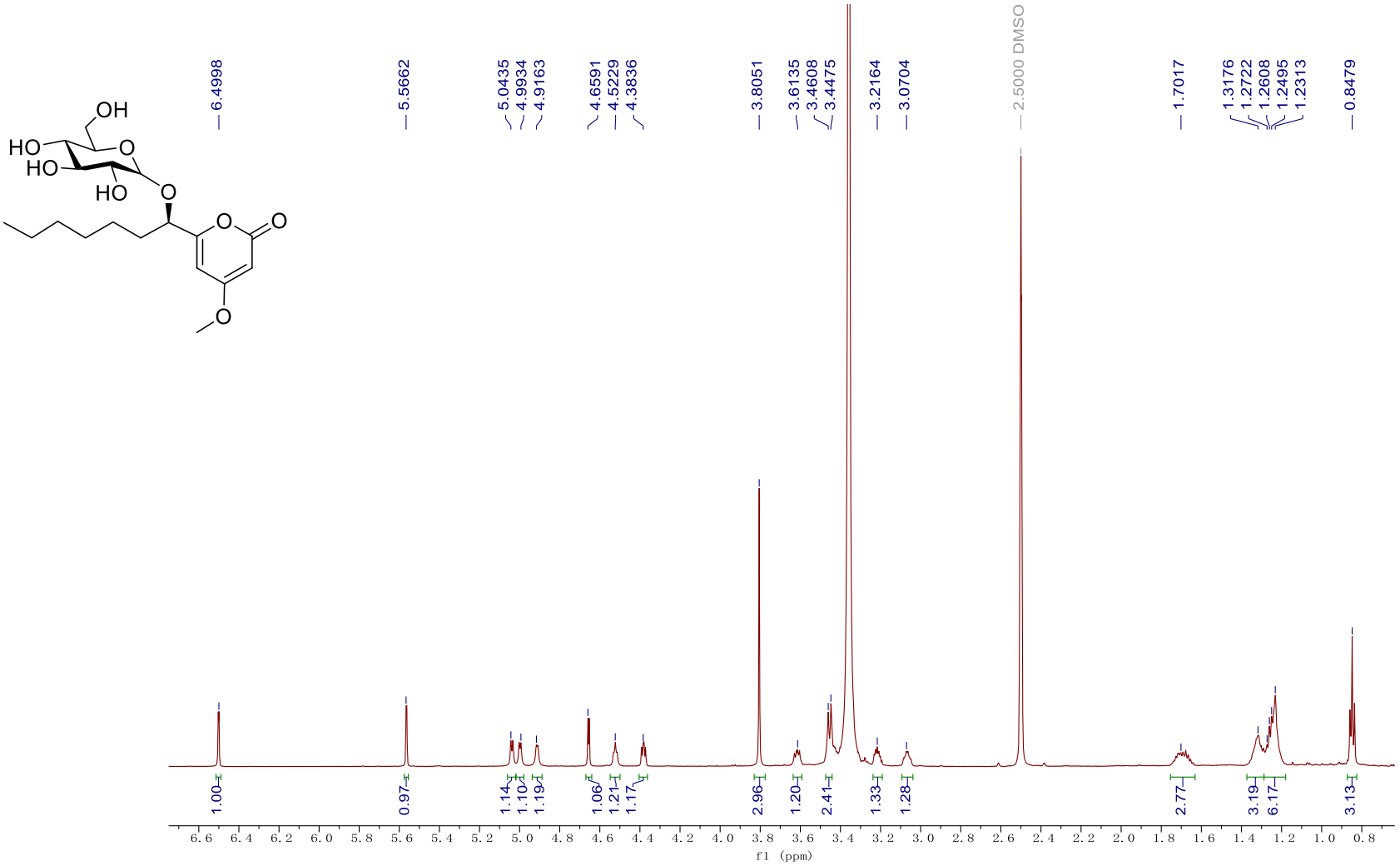


Fig. S31 ^{1}H NMR spectrum of **3** in DMSO-d_6 (600 MHz).

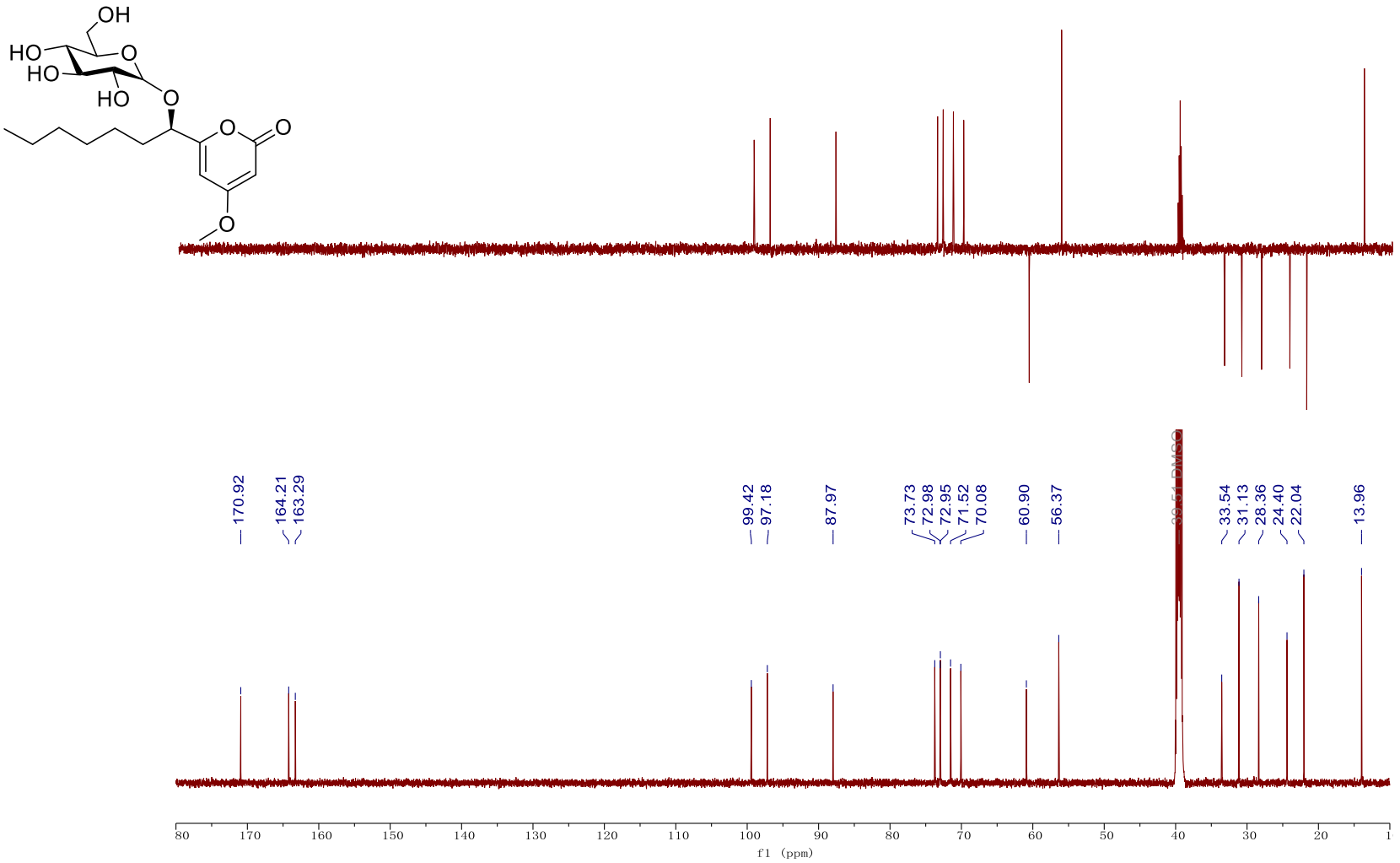


Fig. S32 ^{13}C NMR spectrum of **3** in DMSO-d_6 (600 MHz).

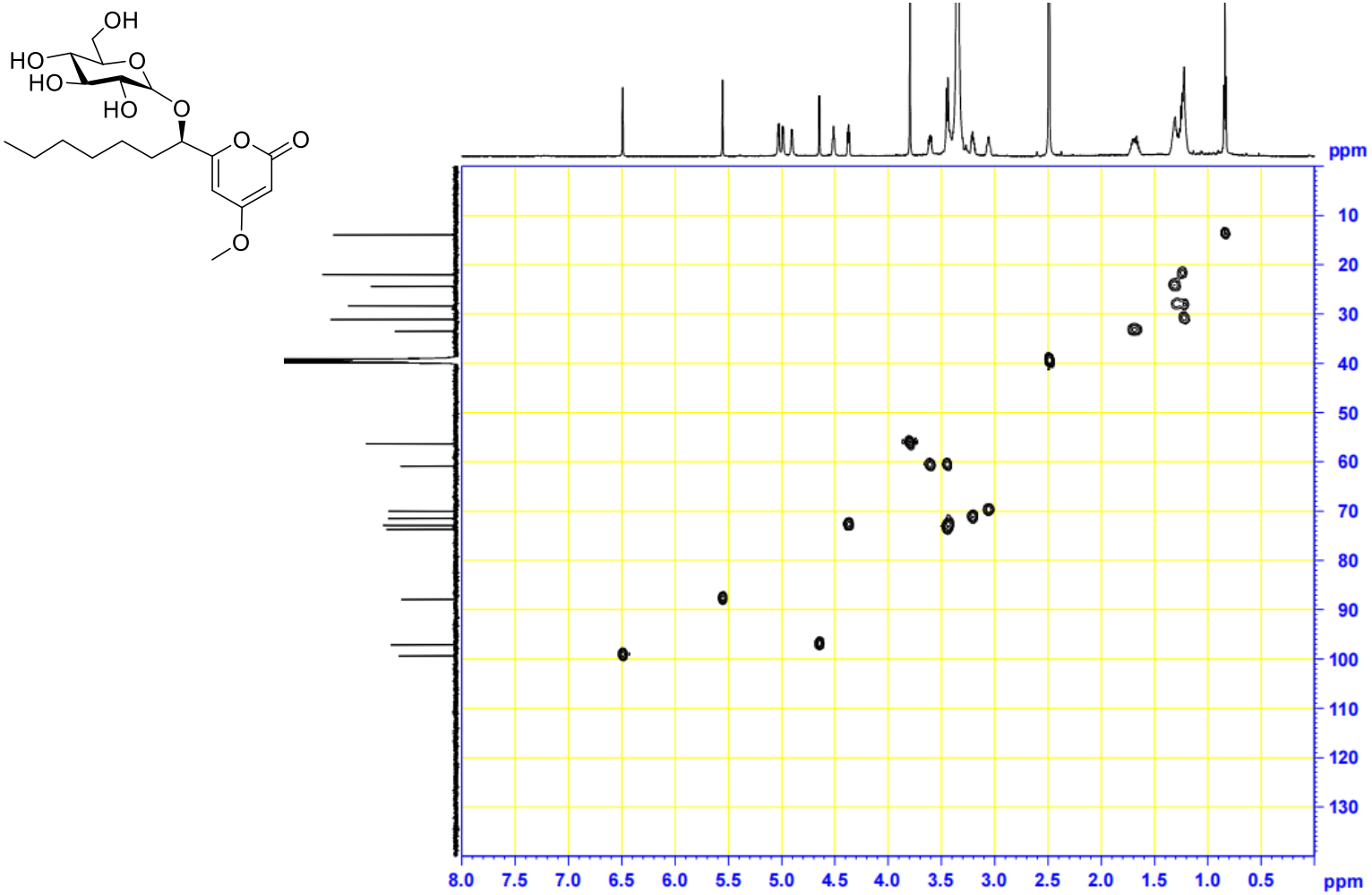


Fig. S33 HSQC spectrum of **3** in DMSO-d_6 (600 MHz).

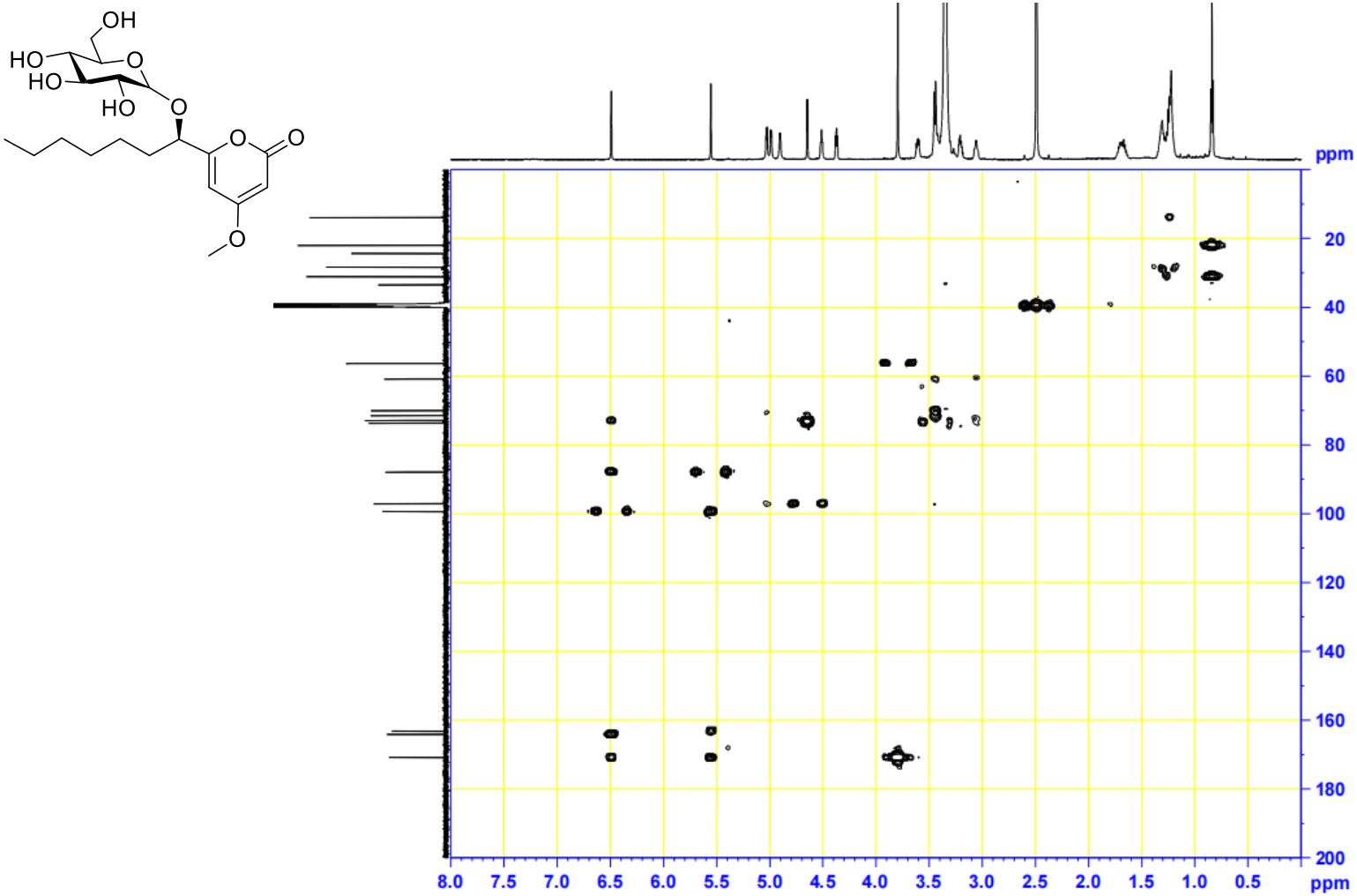


Fig. S34 HMBC spectrum of **3** in DMSO-d_6 (600 MHz).

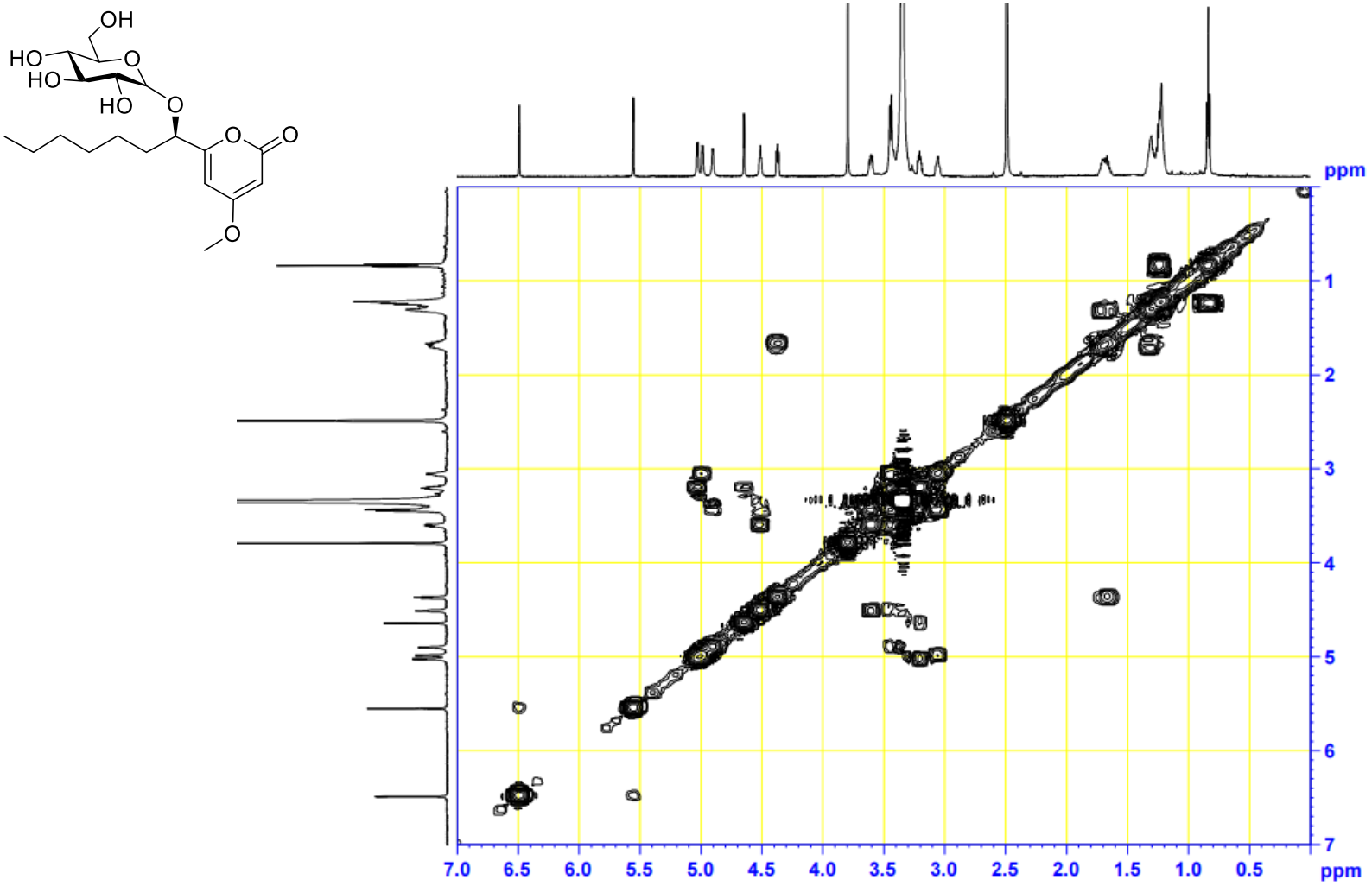


Fig. S35 ^{1}H-^{1}H COSY spectrum of **3** in DMSO-d_6 (600 MHz).

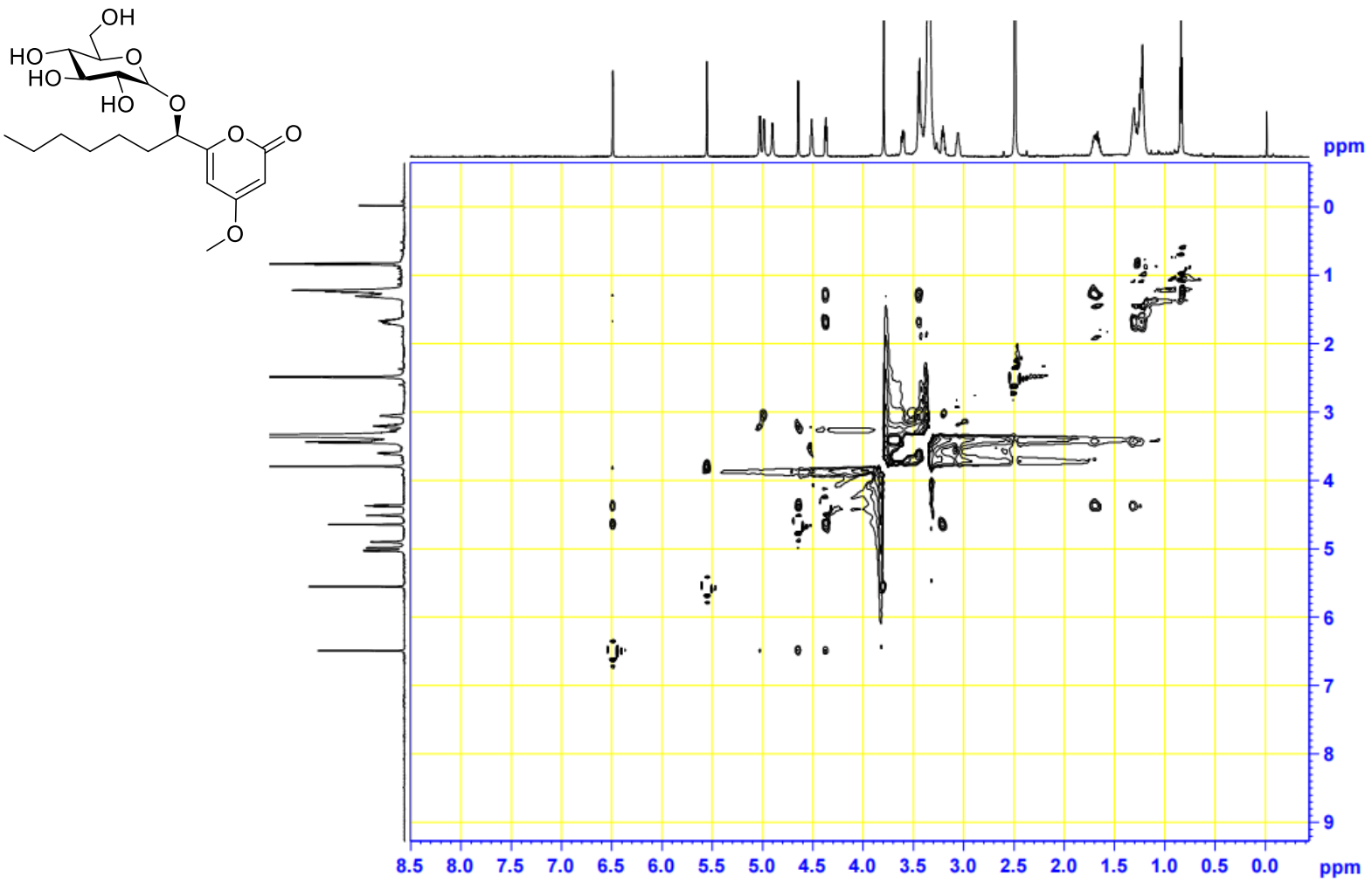


Fig. S36 ROESY spectrum of **3** in DMSO-d_6 (600 MHz).

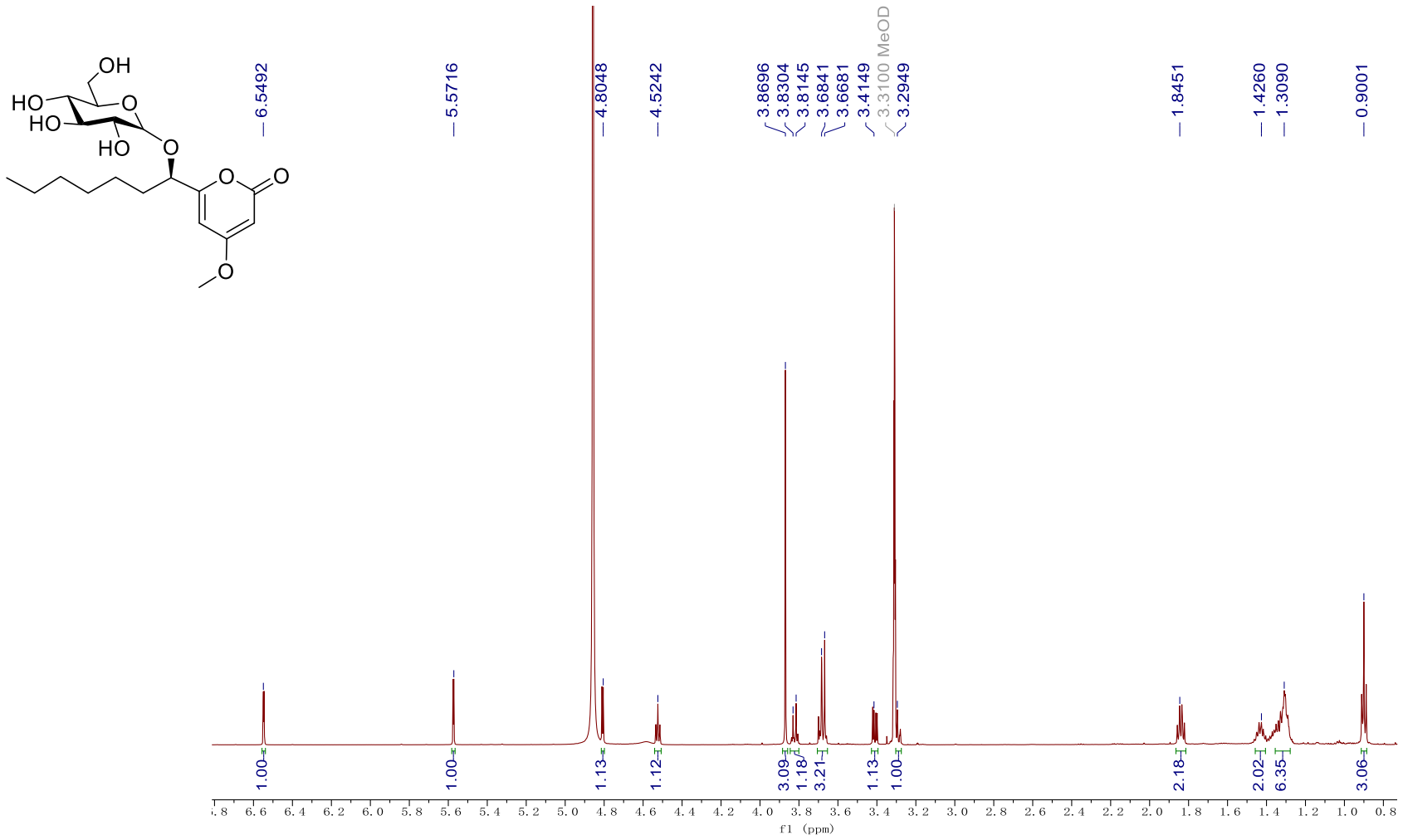


Fig. S37 ^{1}H NMR Spectrum of **3** in methanol-d_4 (600 MHz)

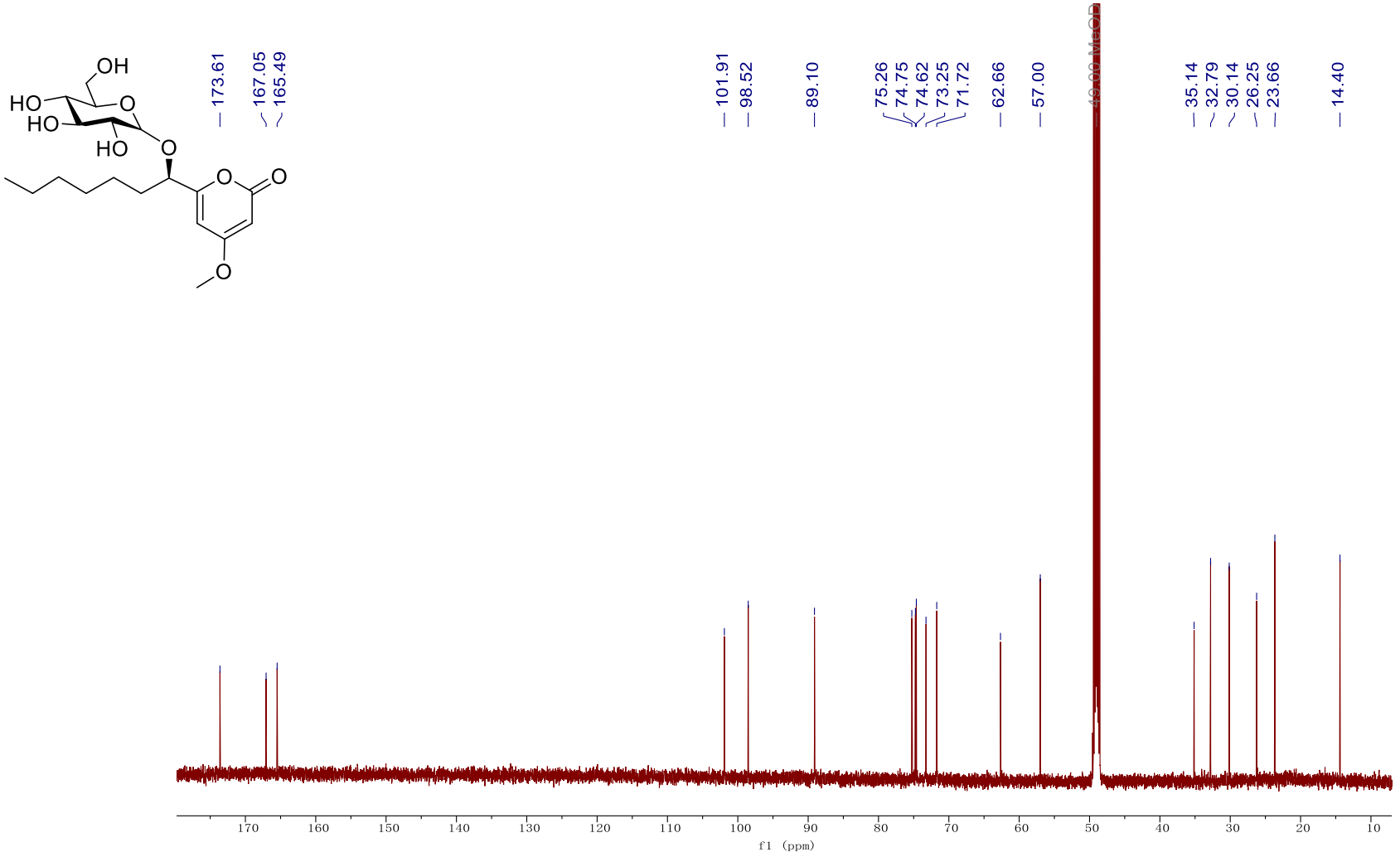


Fig. S38 ^{13}C NMR spectrum of **3** in methanol-d_4 (600 MHz).

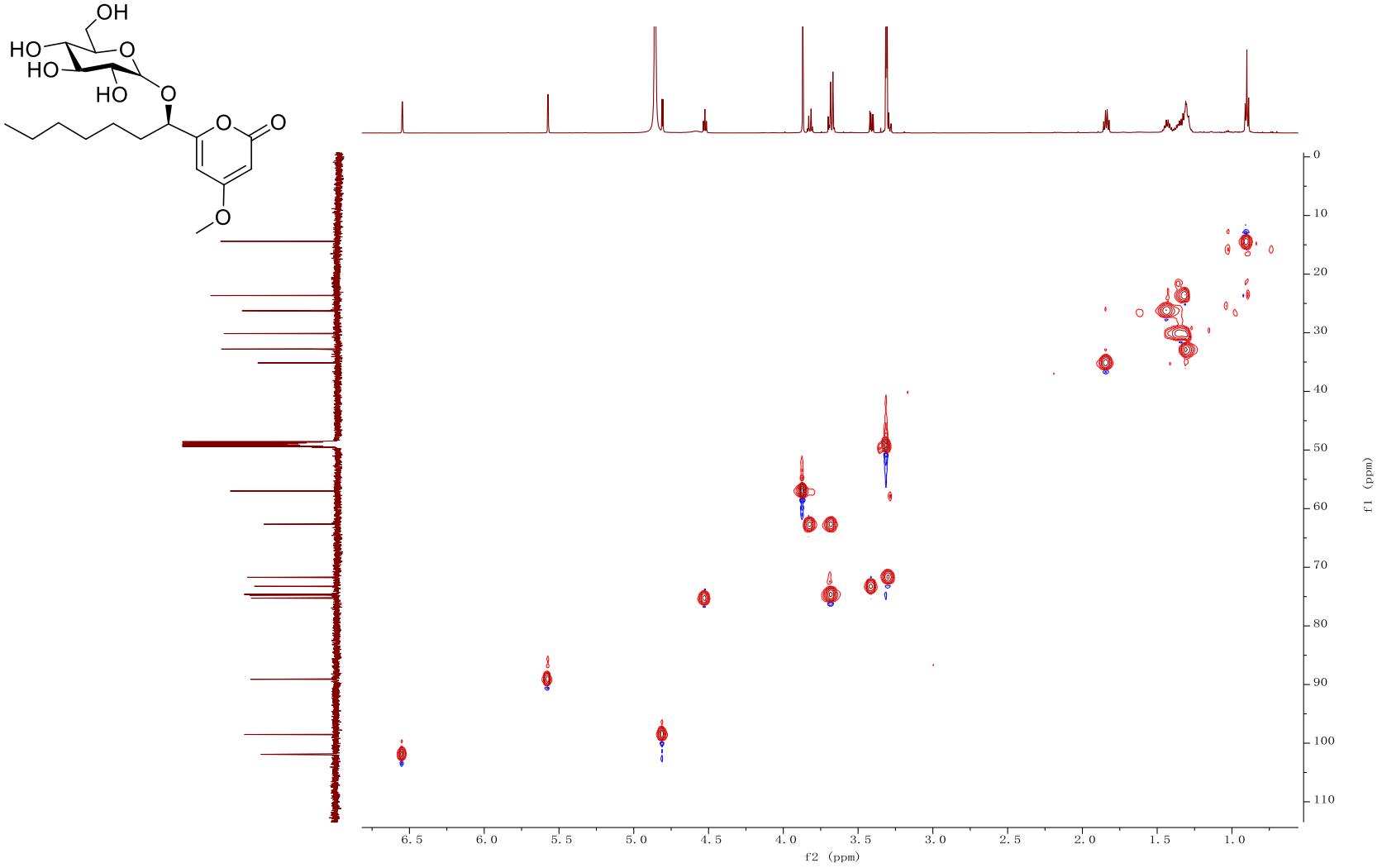


Fig. S39 HSQC spectrum of **3** in methanol-d_4 (600 MHz).

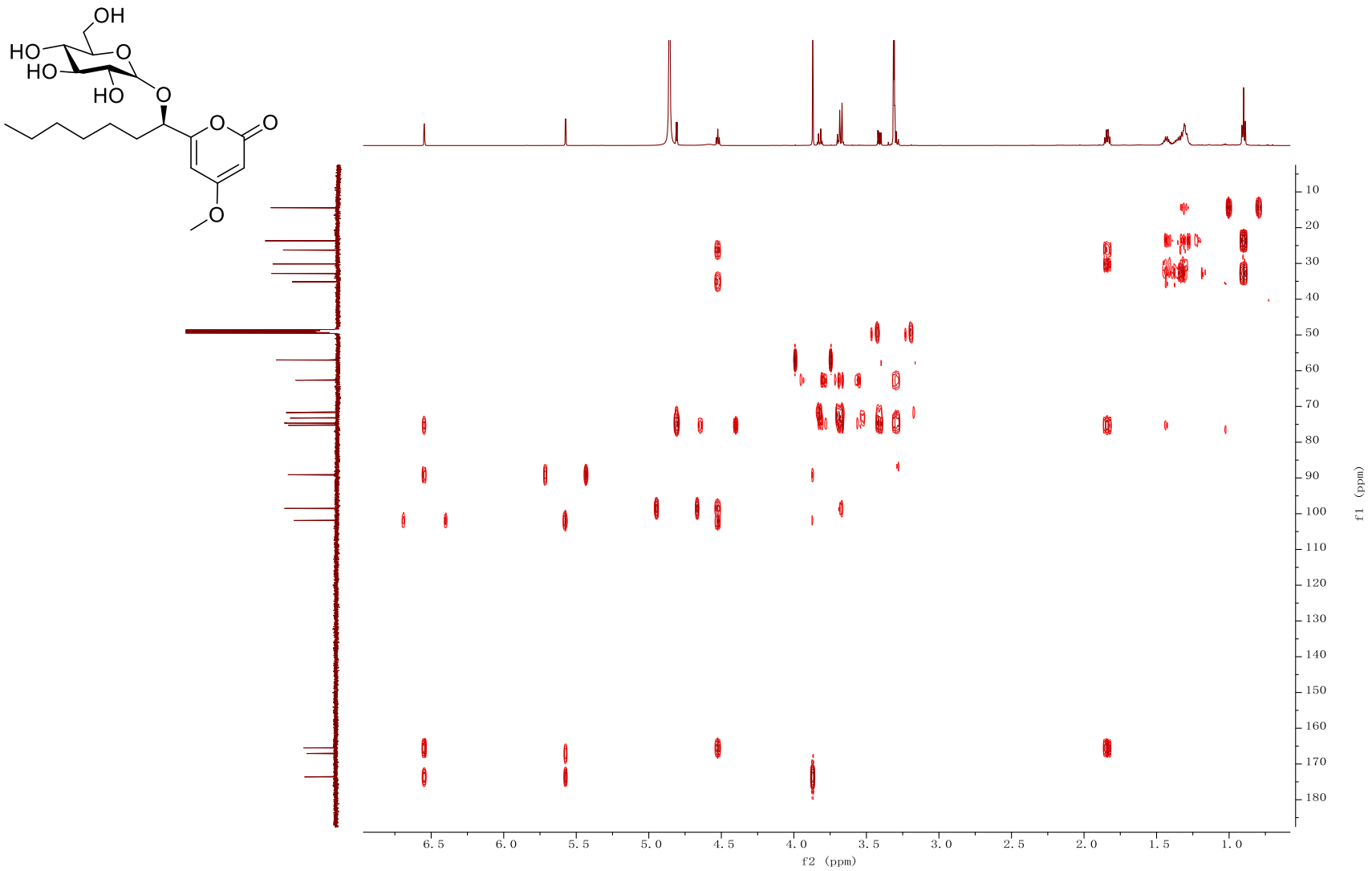


Fig. S40 HMBC spectrum of **3** in methanol-d_4 (600 MHz).

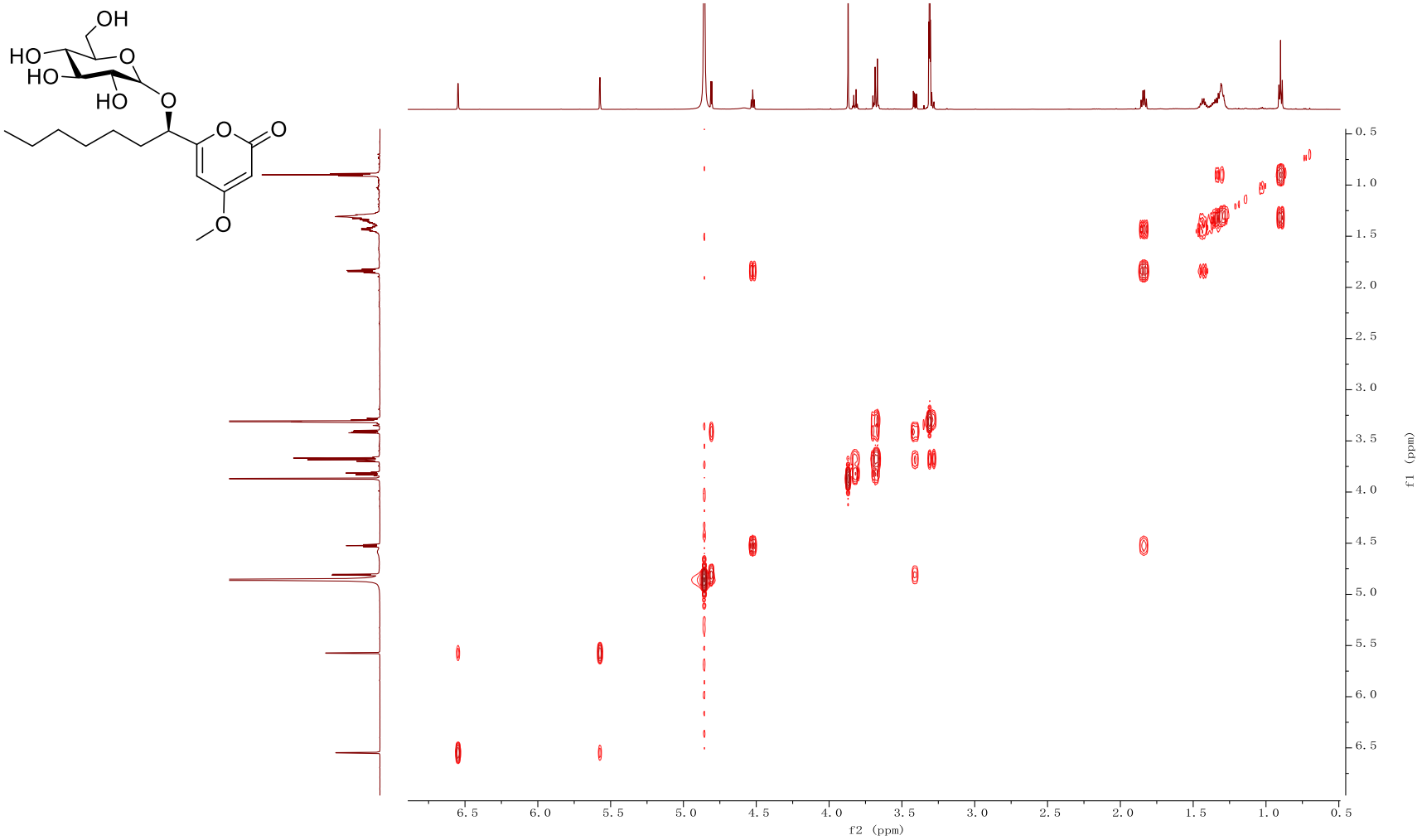


Fig. S41 ^{1}H–^{1}H COSY spectrum of **3** in methanol-d_4 (600 MHz).

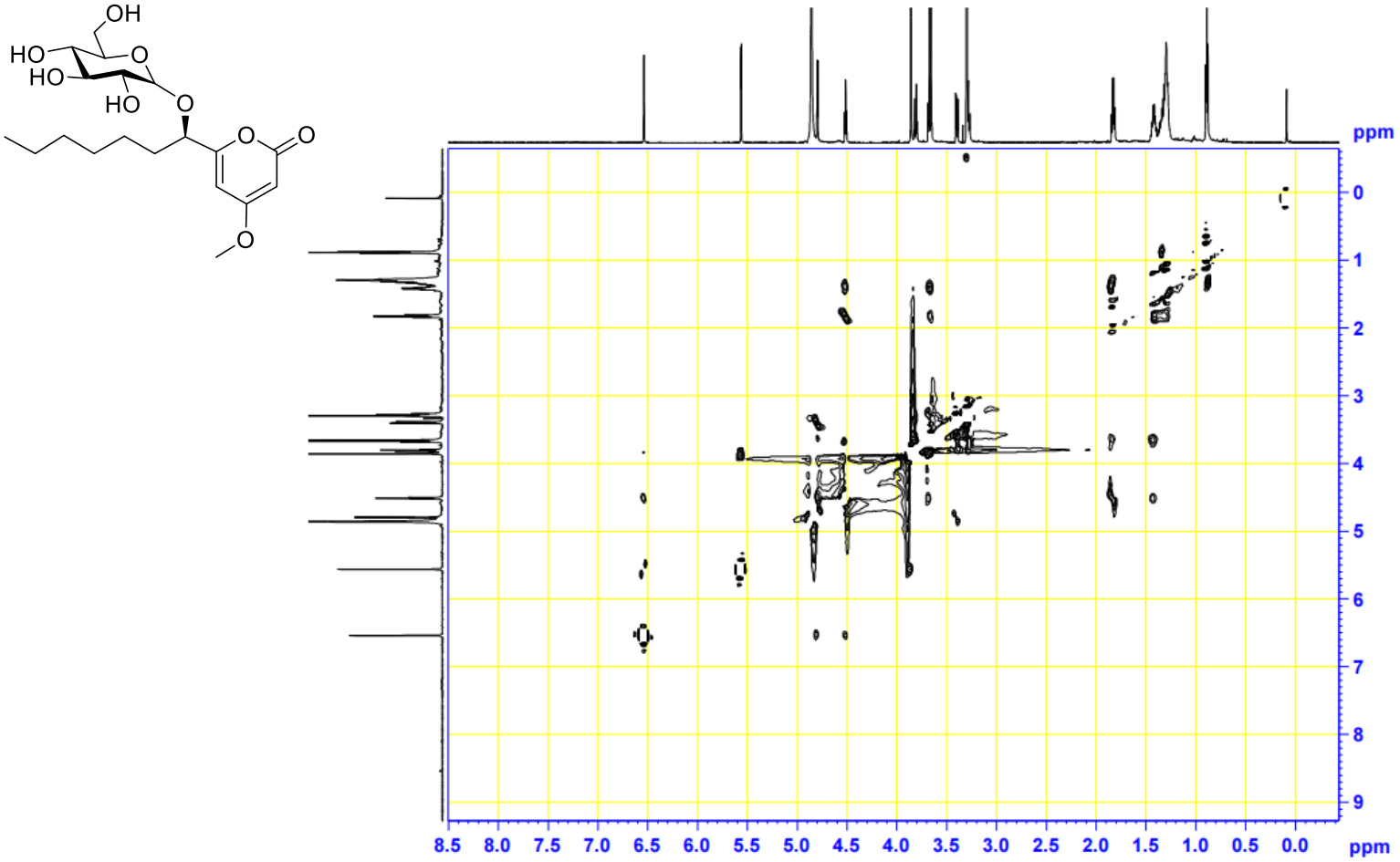


Fig. S42 ROESY spectrum of **3** in methanol-d_4 (600 MHz).

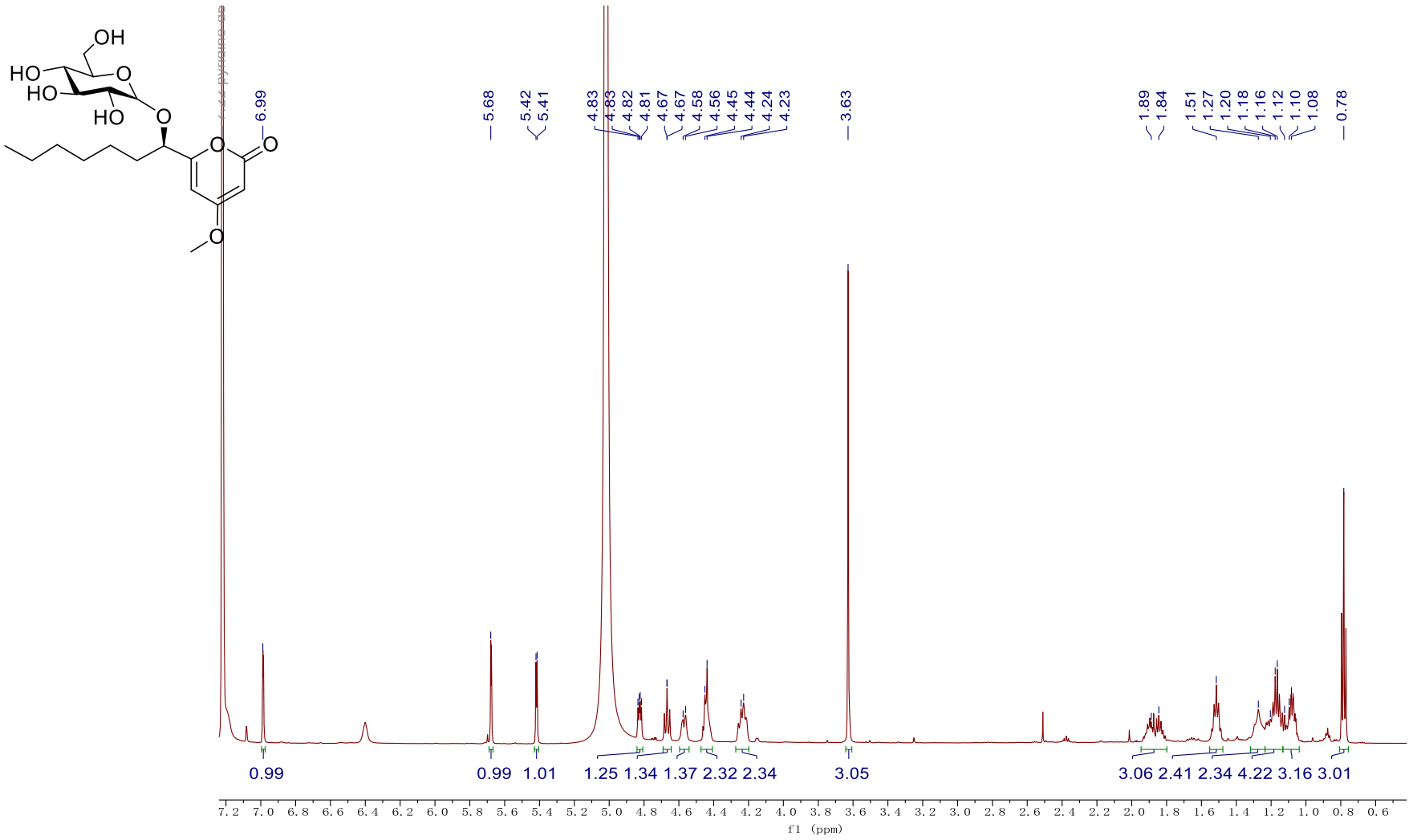


Fig. S43 ^{1}H NMR spectrum of **3** in pyridine-d_5 (600 MHz).

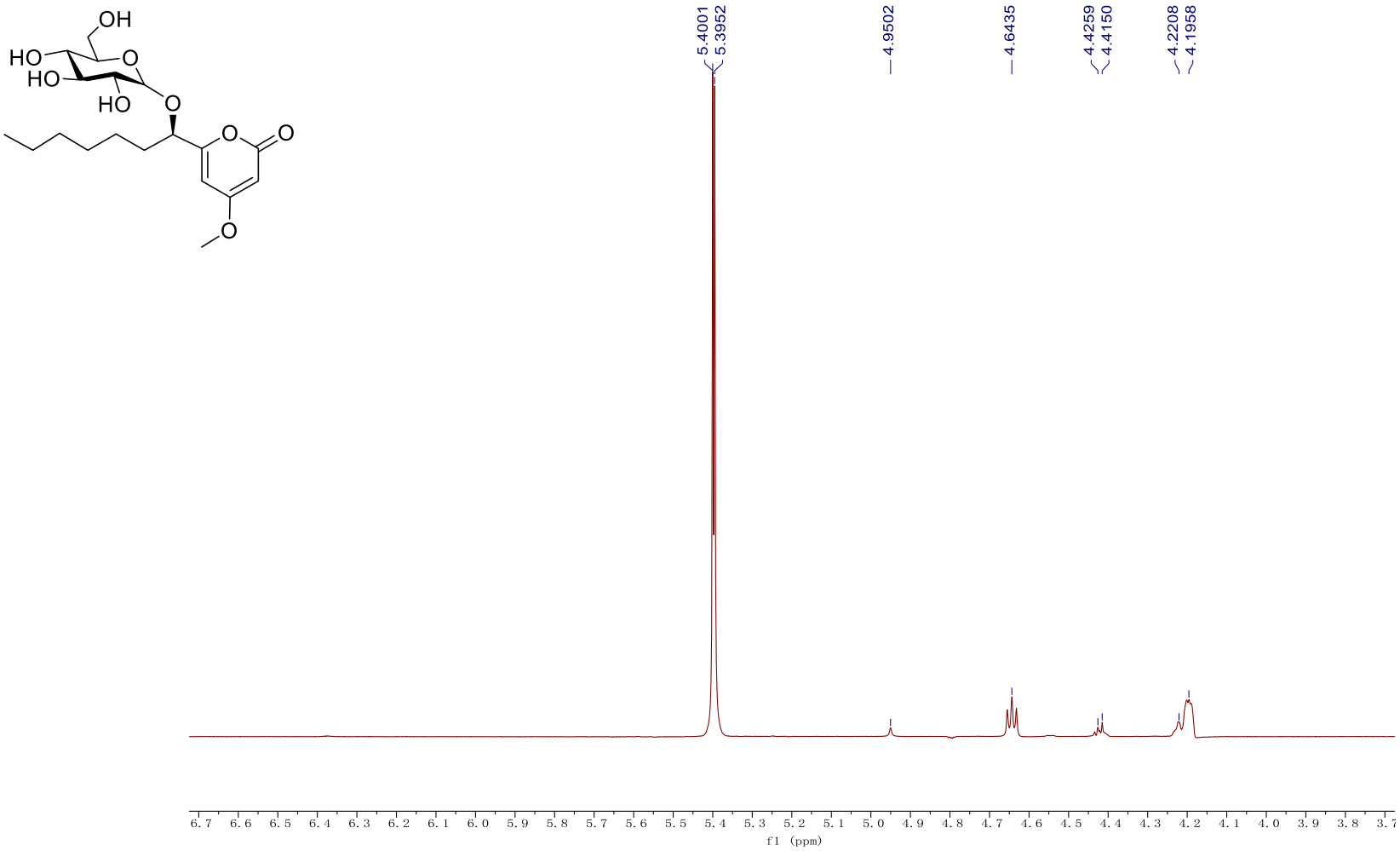


Fig. S44 1D-TOCSY spectrum of **3** in pyridine-d_5 (800 MHz).

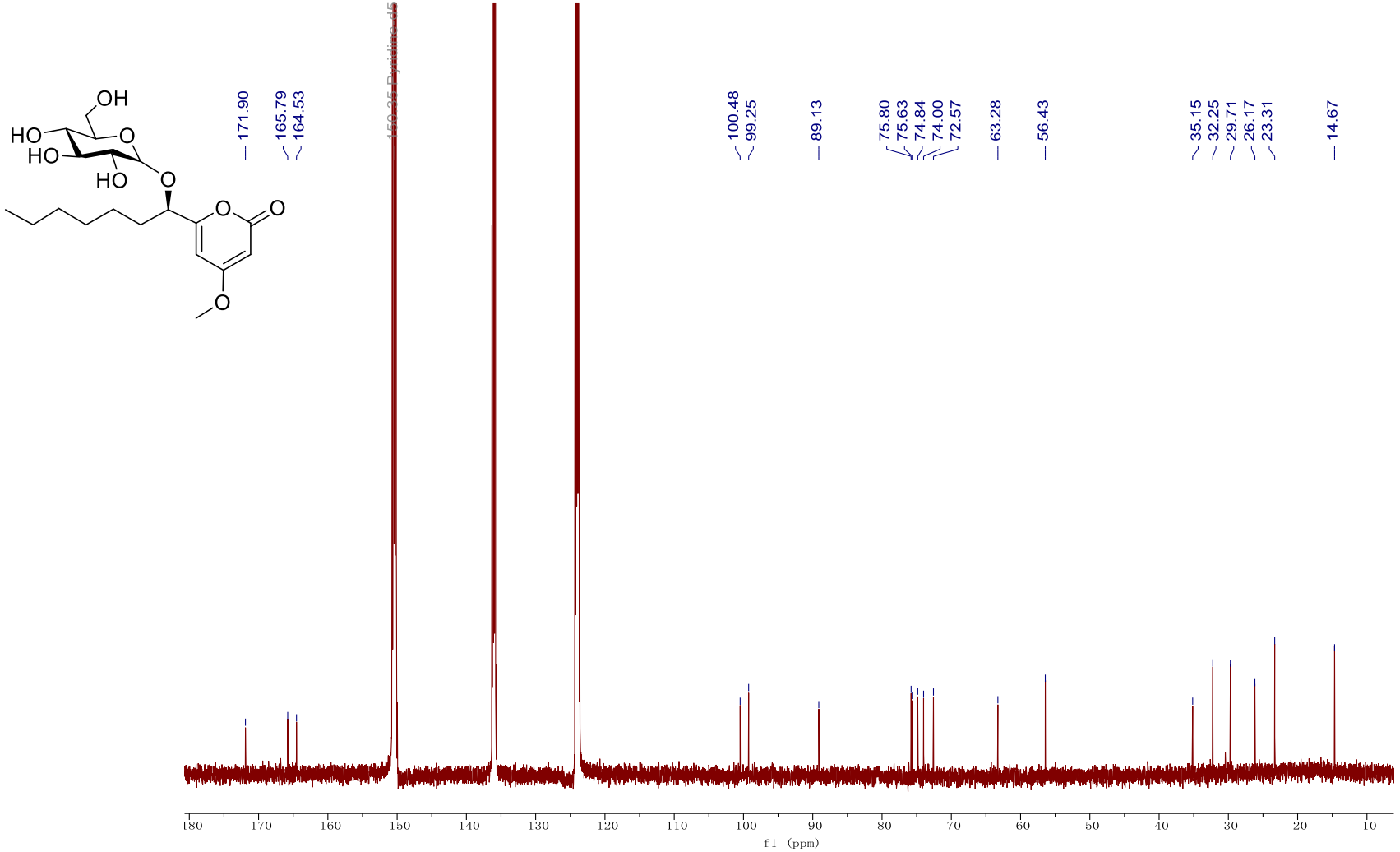


Fig. S45 ^{13}C NMR spectrum of **3** in pyridine-d_5 (150 MHz).

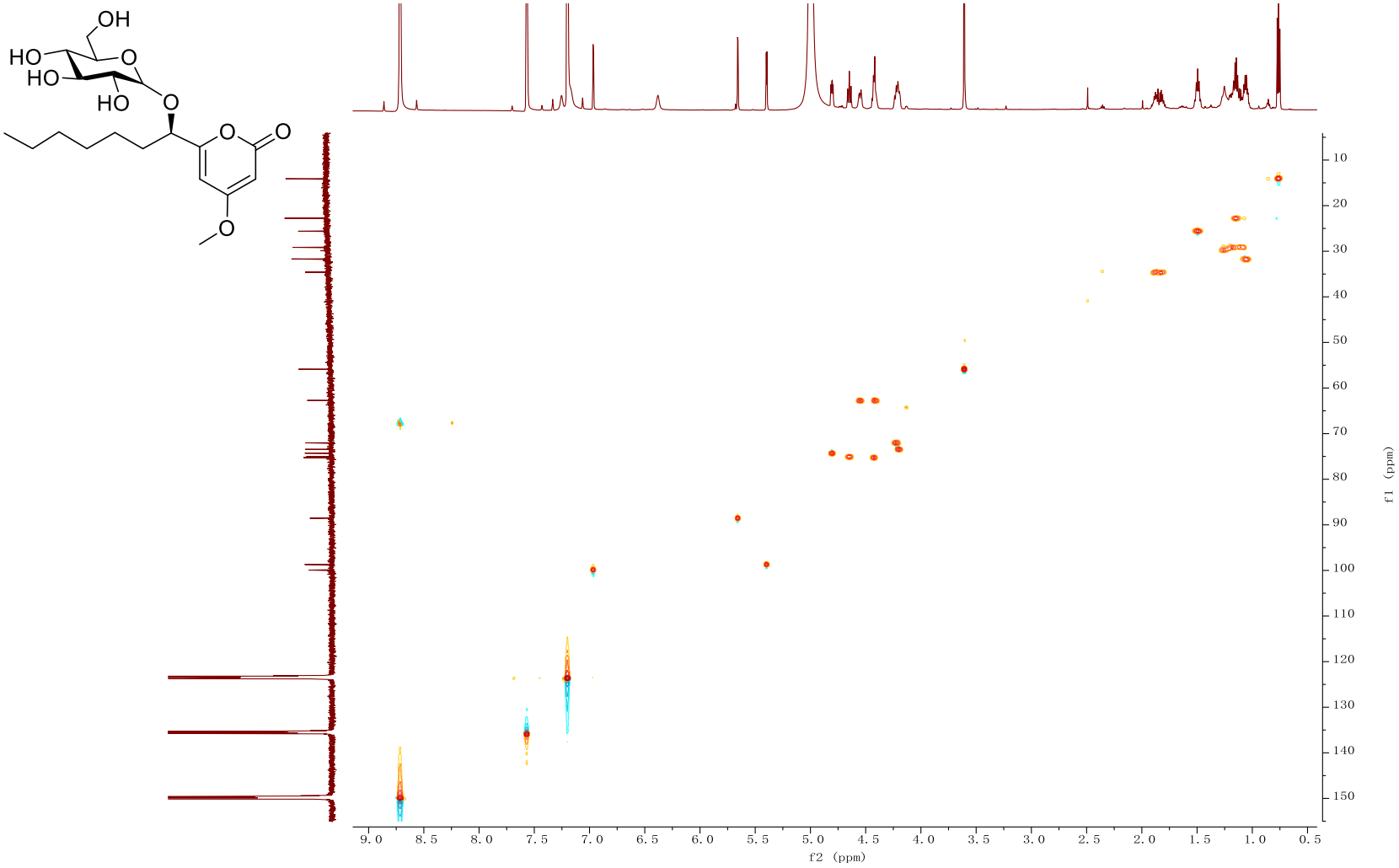


Fig. S46 HSQC spectrum of **3** in pyridine-d_5 (600 MHz).

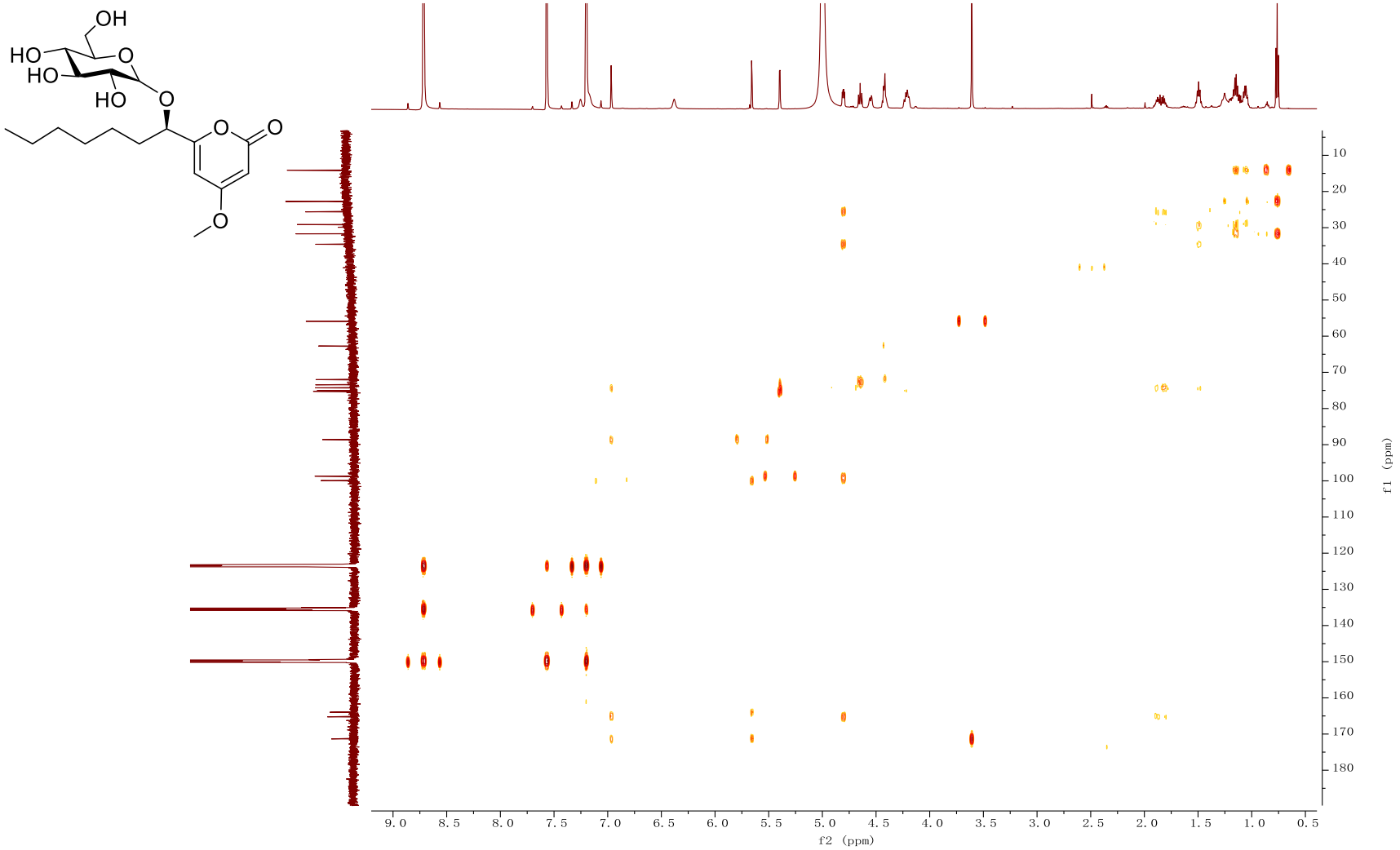


Fig. S47 HMBC spectrum of **3** in pyridine-d_5 (600 MHz).

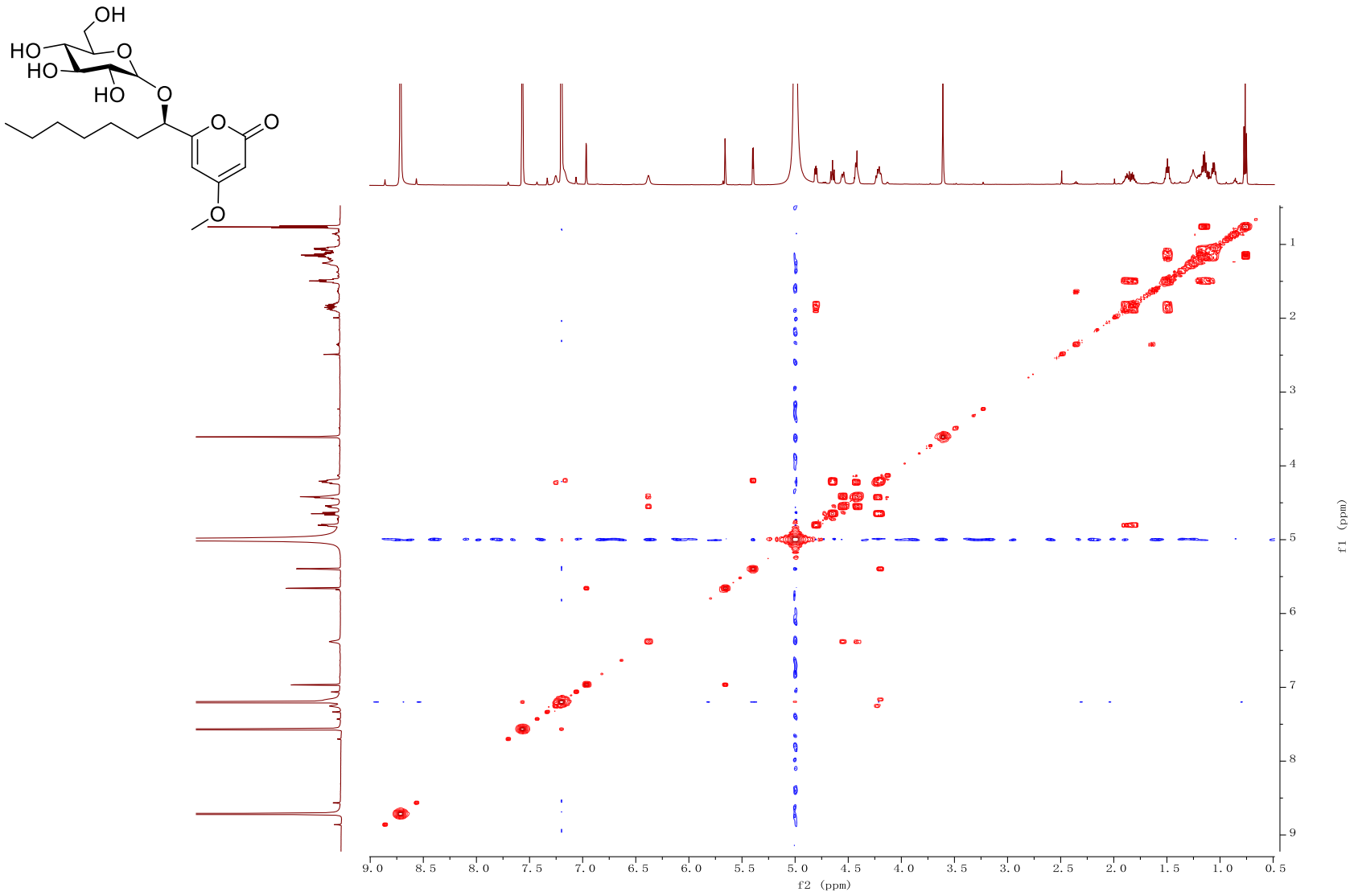
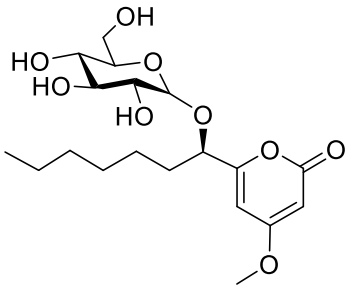


Fig. S48 ^{1}H–^{1}H COSY spectrum of **2** in pyridine-d_5 (600 MHz).



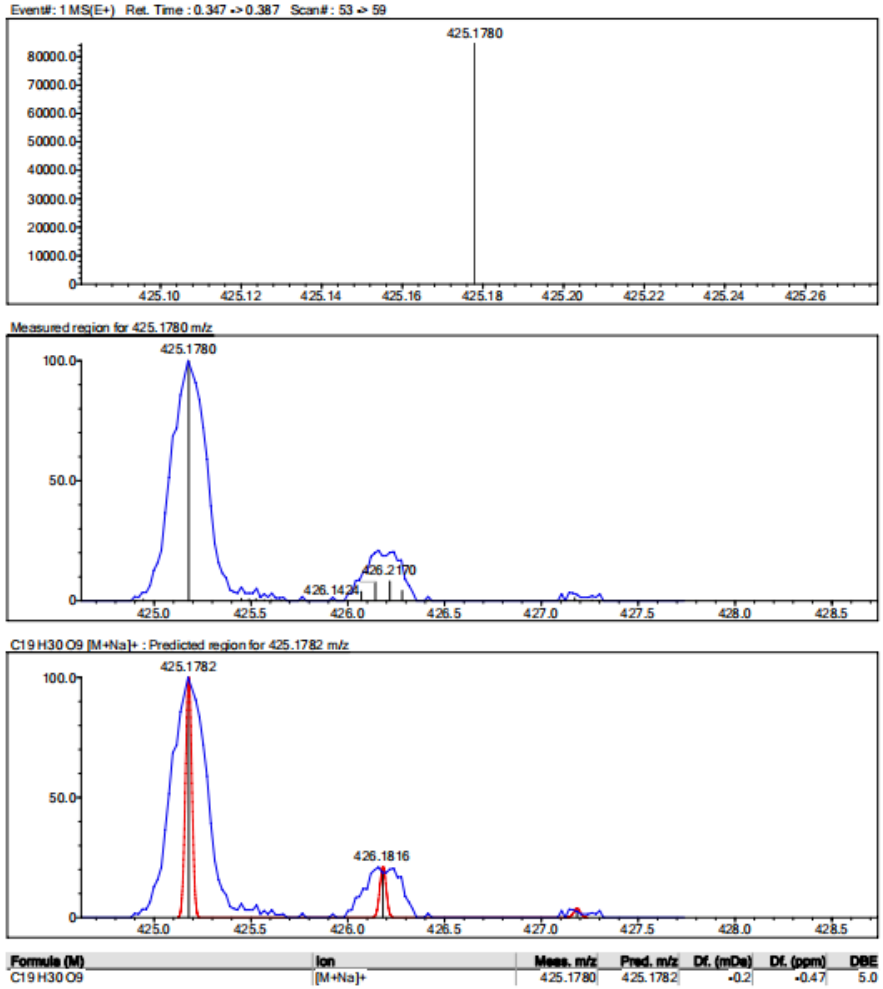


Fig. S49 HRESIMS spectrum of **3**.

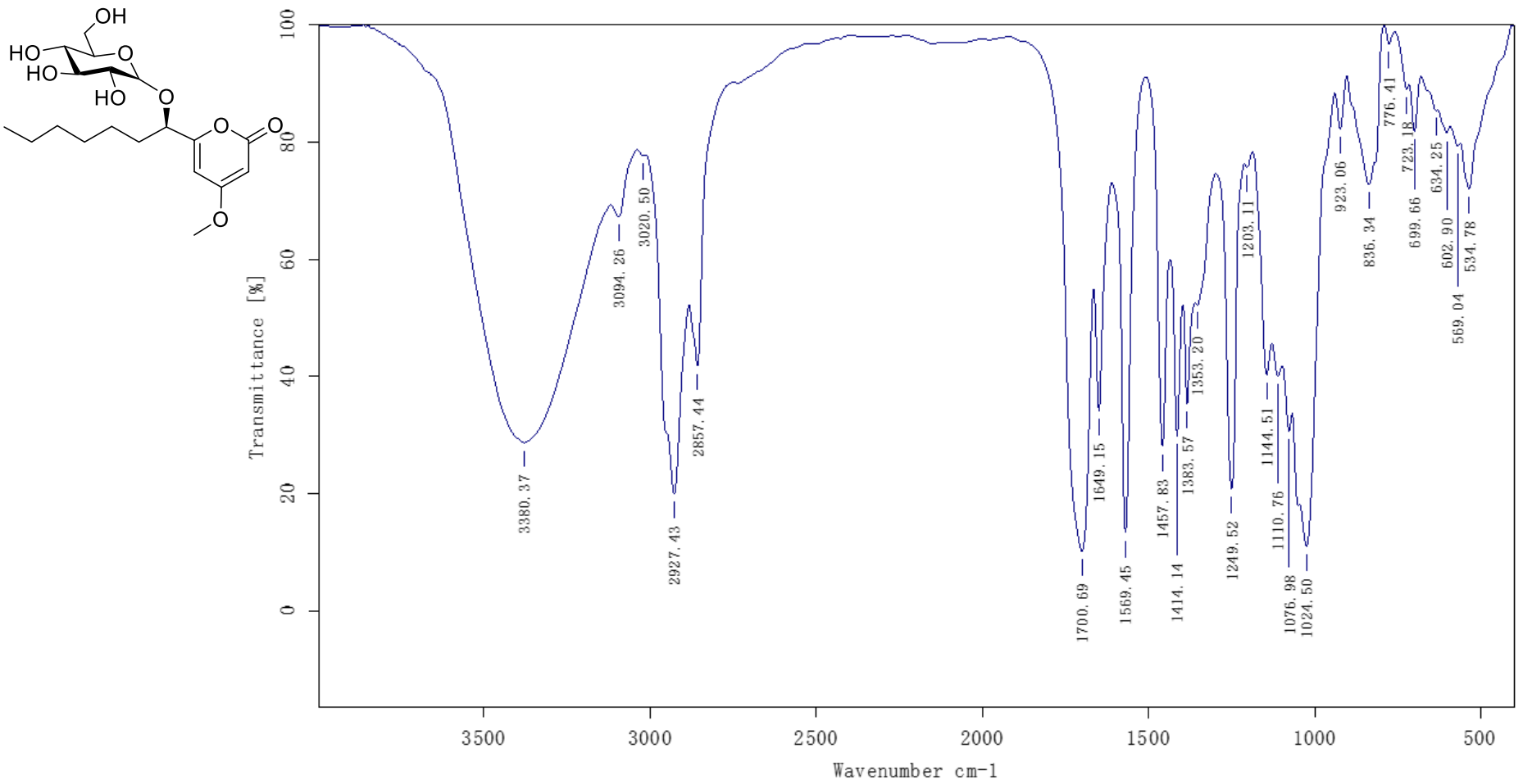
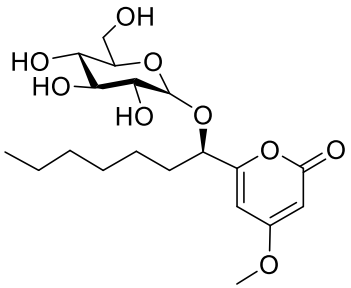


Fig. S50 IR spectrum of **3**.



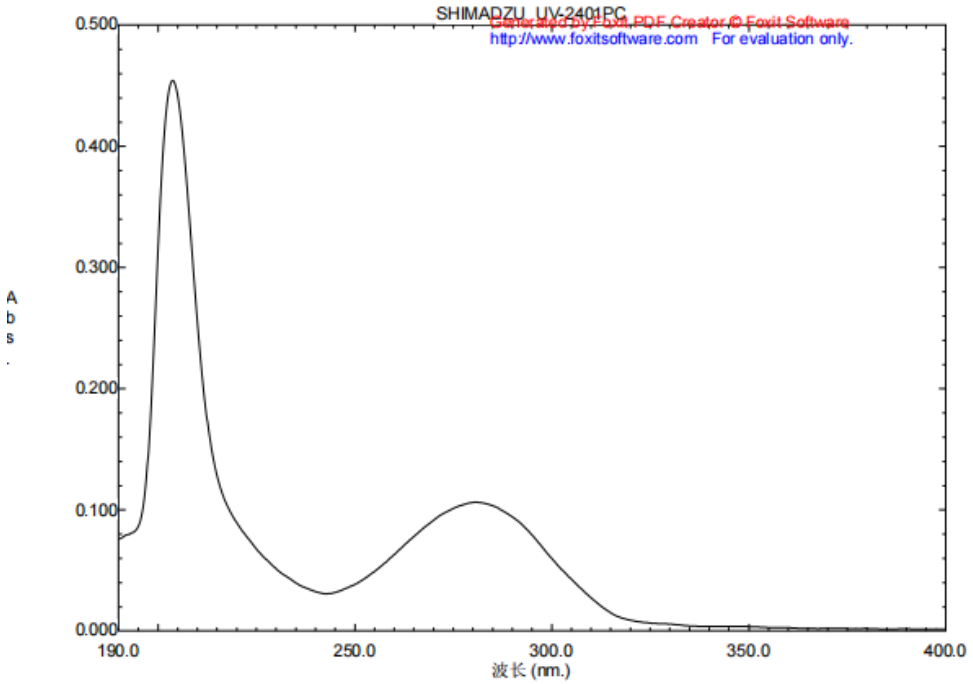


Fig. S51 UV spectrum of **3**.

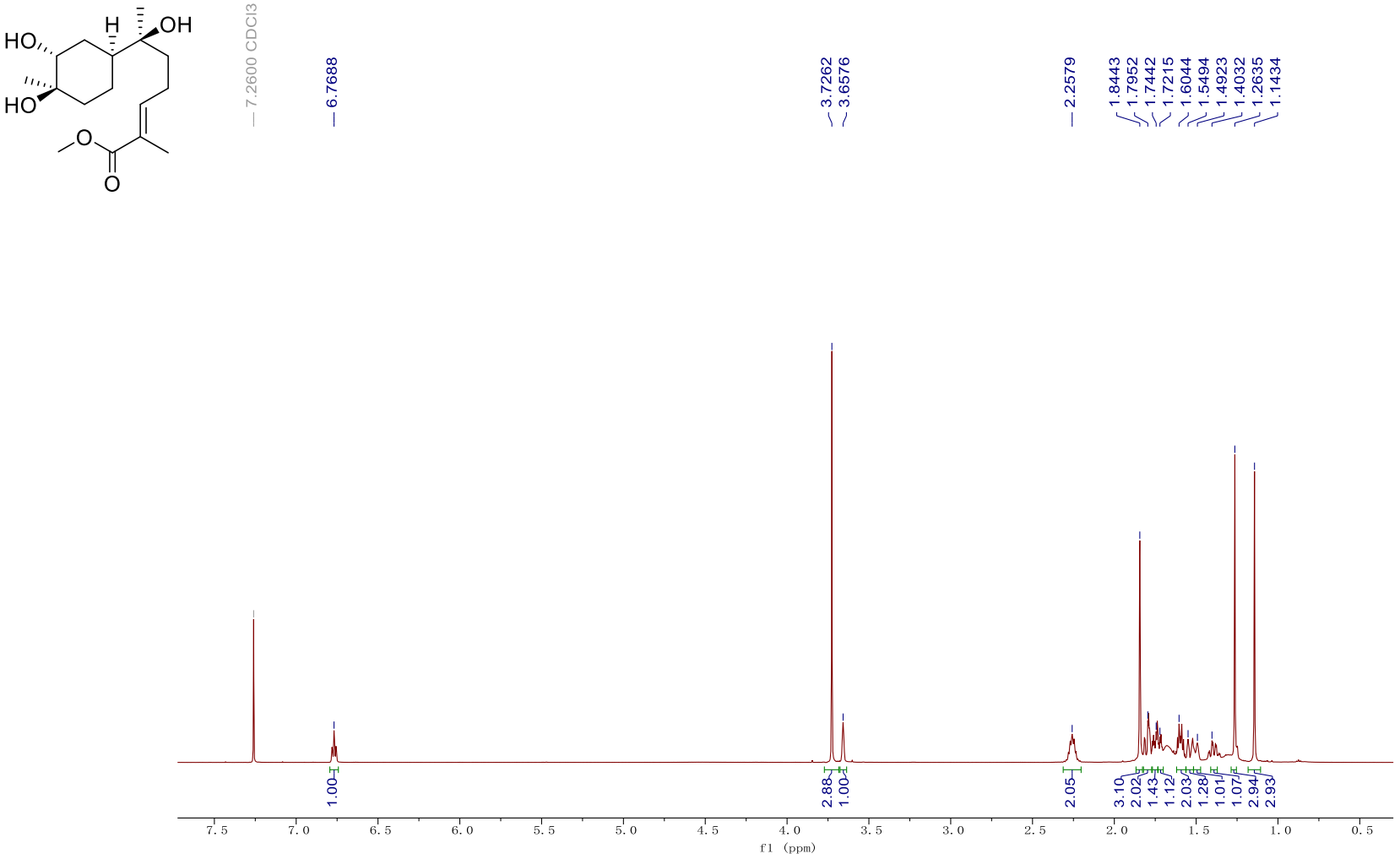


Fig. S52 ^{1}H NMR Spectrum of **4** in chloroform-*d* (600 MHz).

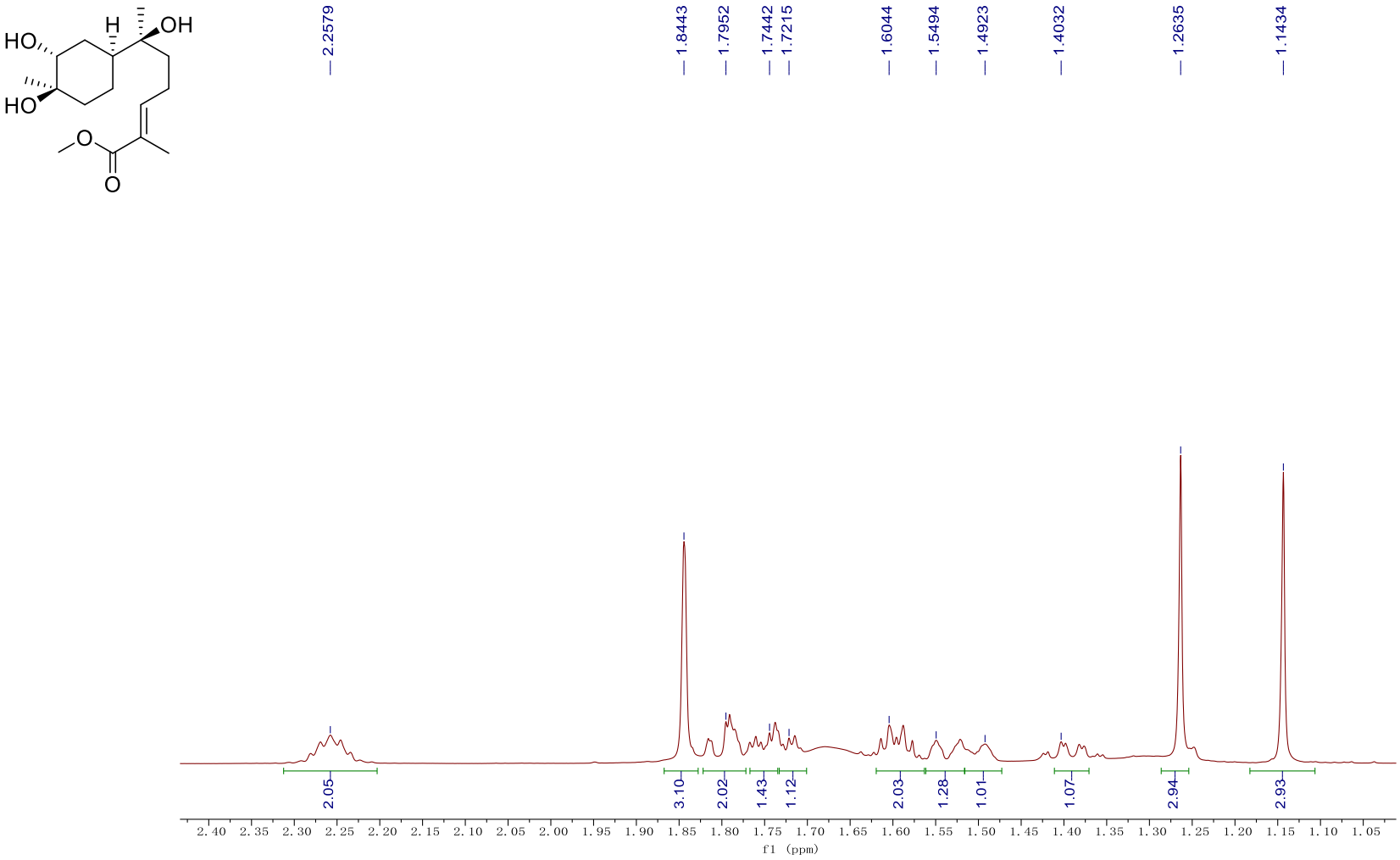


Fig. S53 ^{1}H NMR Spectrum of **4** in chloroform-*d* (600 MHz) (expanded).

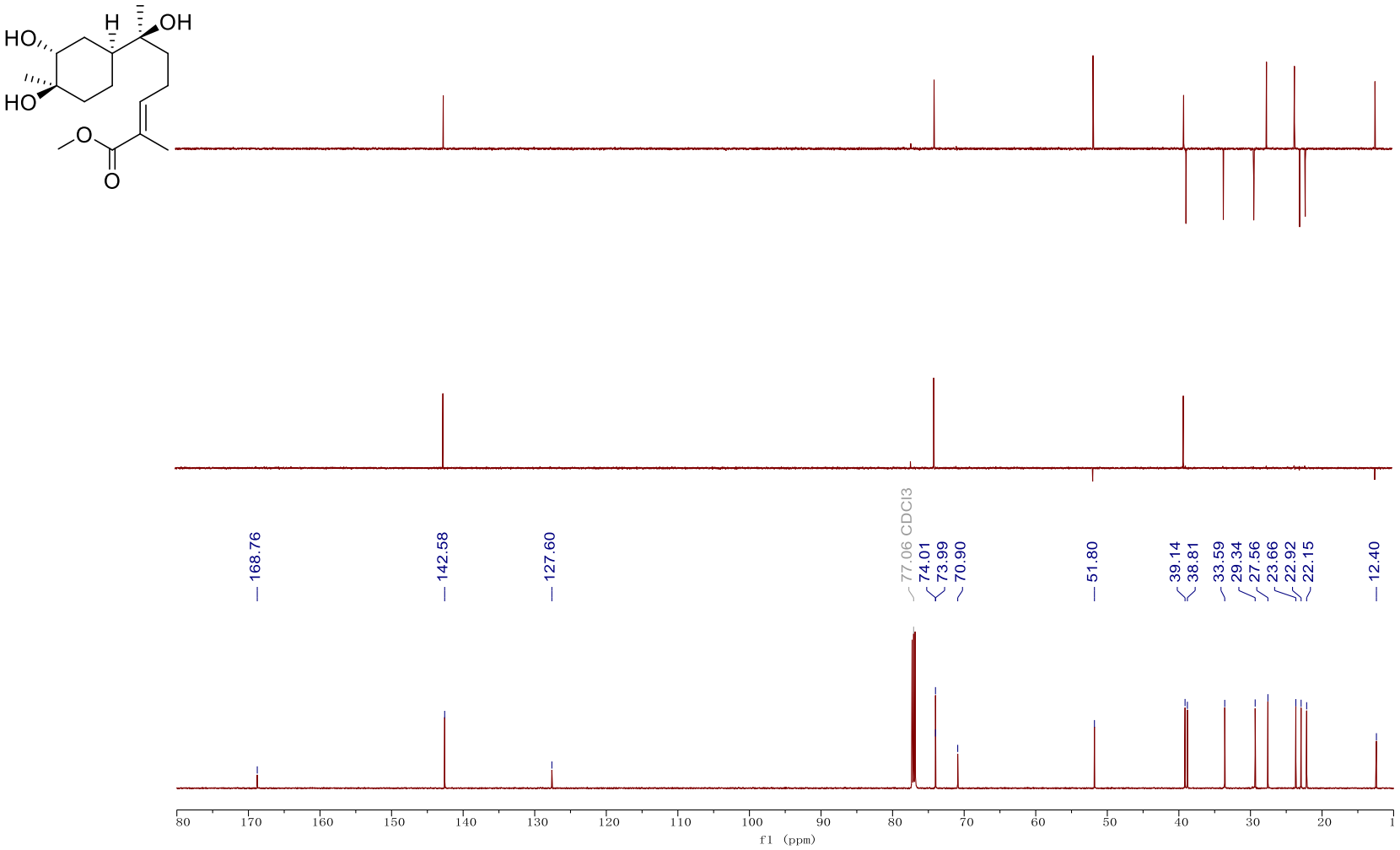


Fig. S54 ^{13}C NMR Spectrum of **4** in chloroform-*d* (150 MHz).

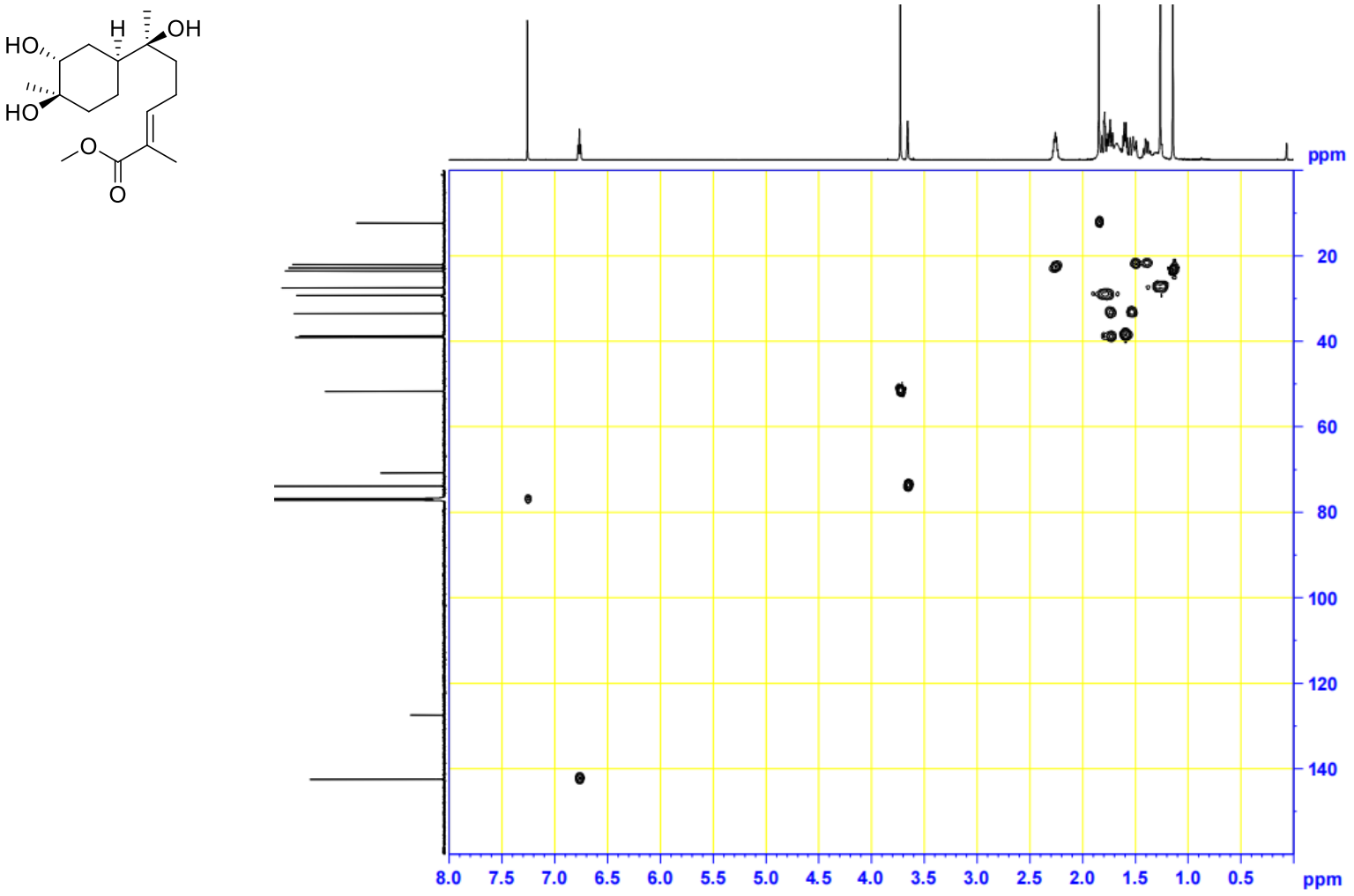


Fig. S55 HSQC Spectrum of **4** in chloroform-*d* (600 MHz).

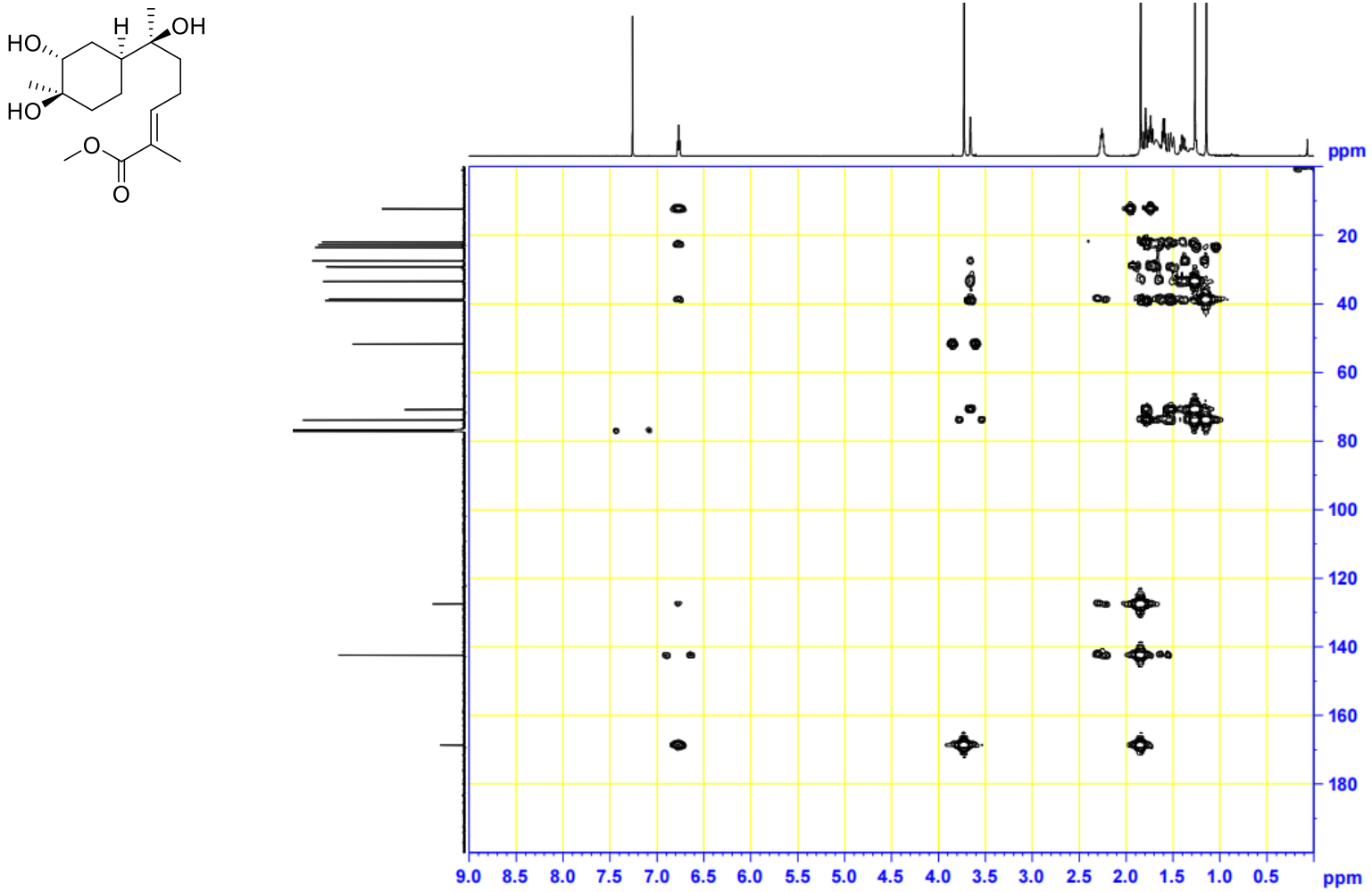


Fig. S56 HMBC Spectrum of **4** in chloroform-*d* (600 MHz).

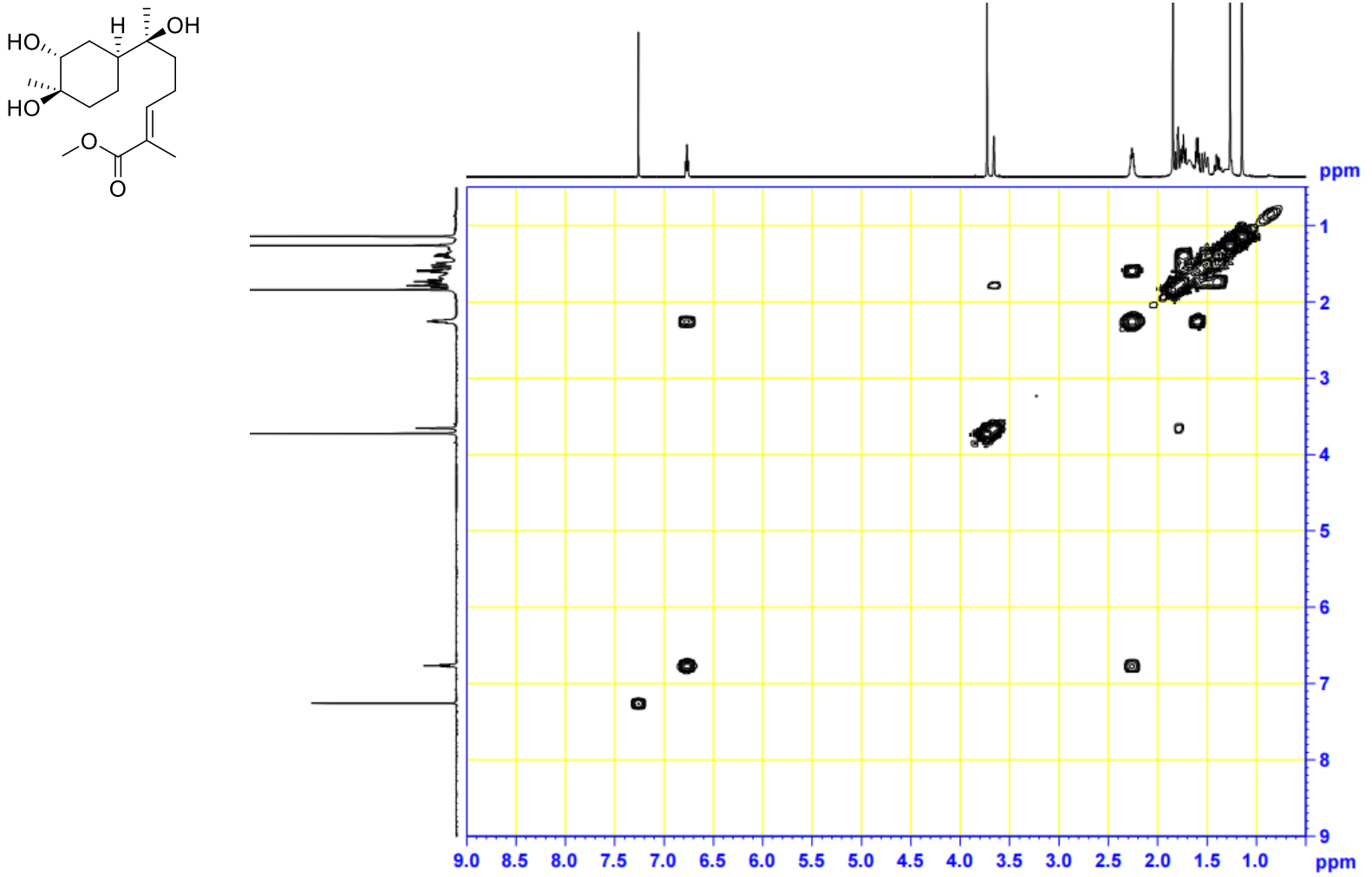


Fig. S57 ^{1}H–^{1}H COSY Spectrum of **4** in chloroform-*d* (600 MHz).

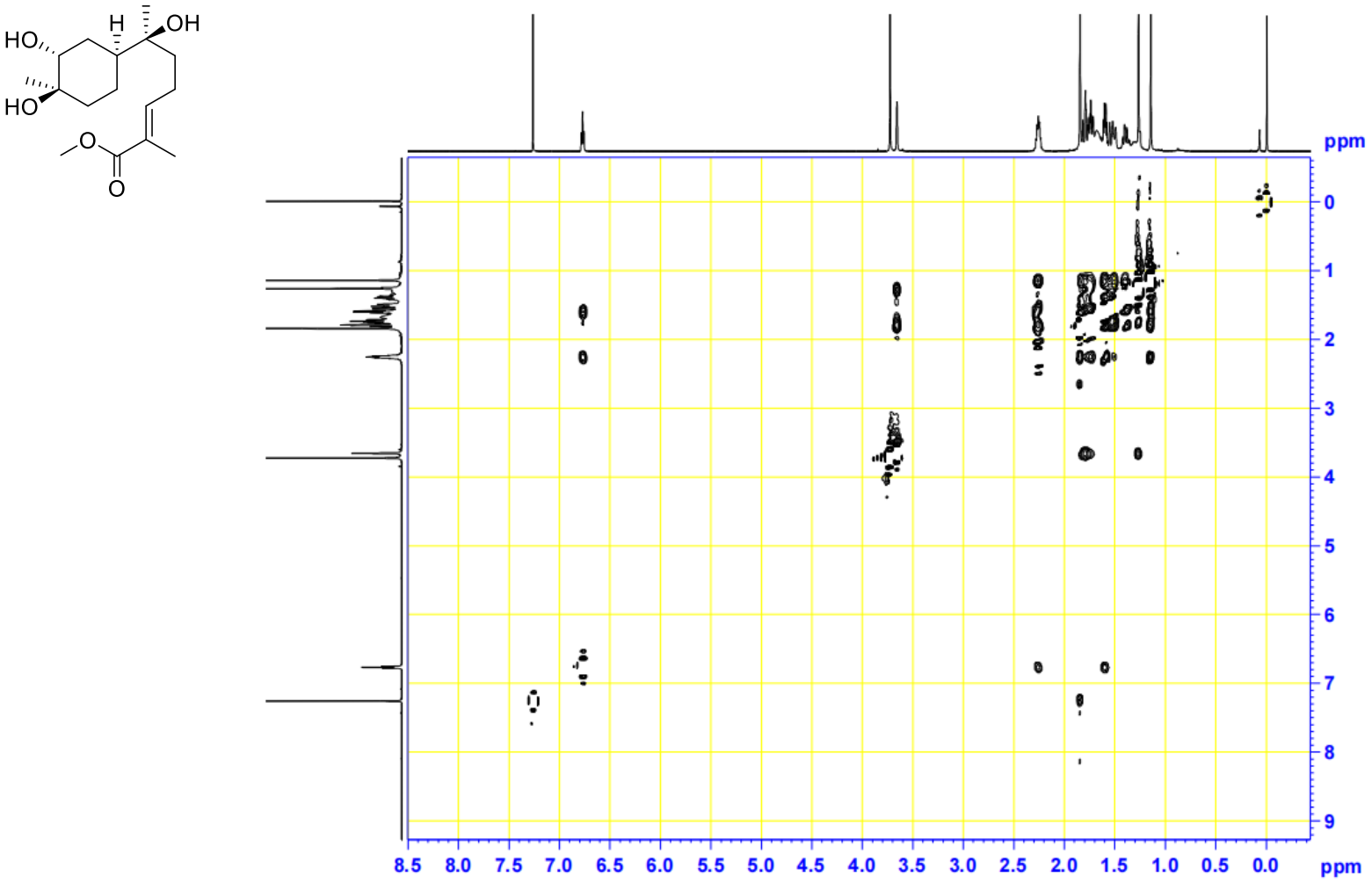
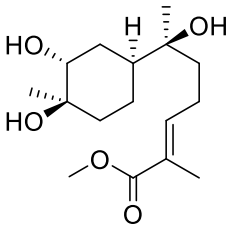


Fig. S58 ROESY Spectrum of **4** in chloroform-*d* (600 MHz).



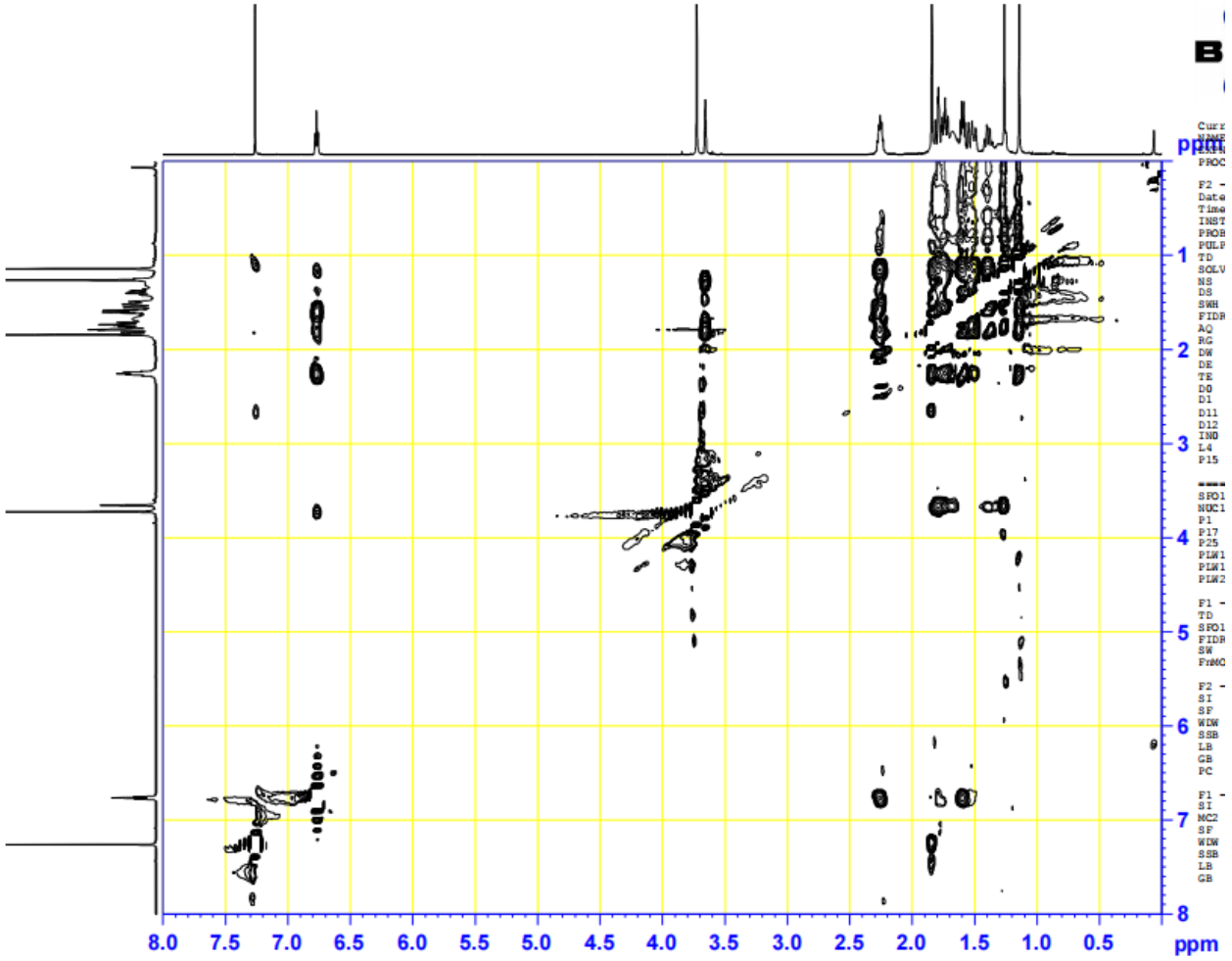


Fig. S59 ROESY Spectrum of **4** in chloroform-*d* (600 MHz) (expanded).

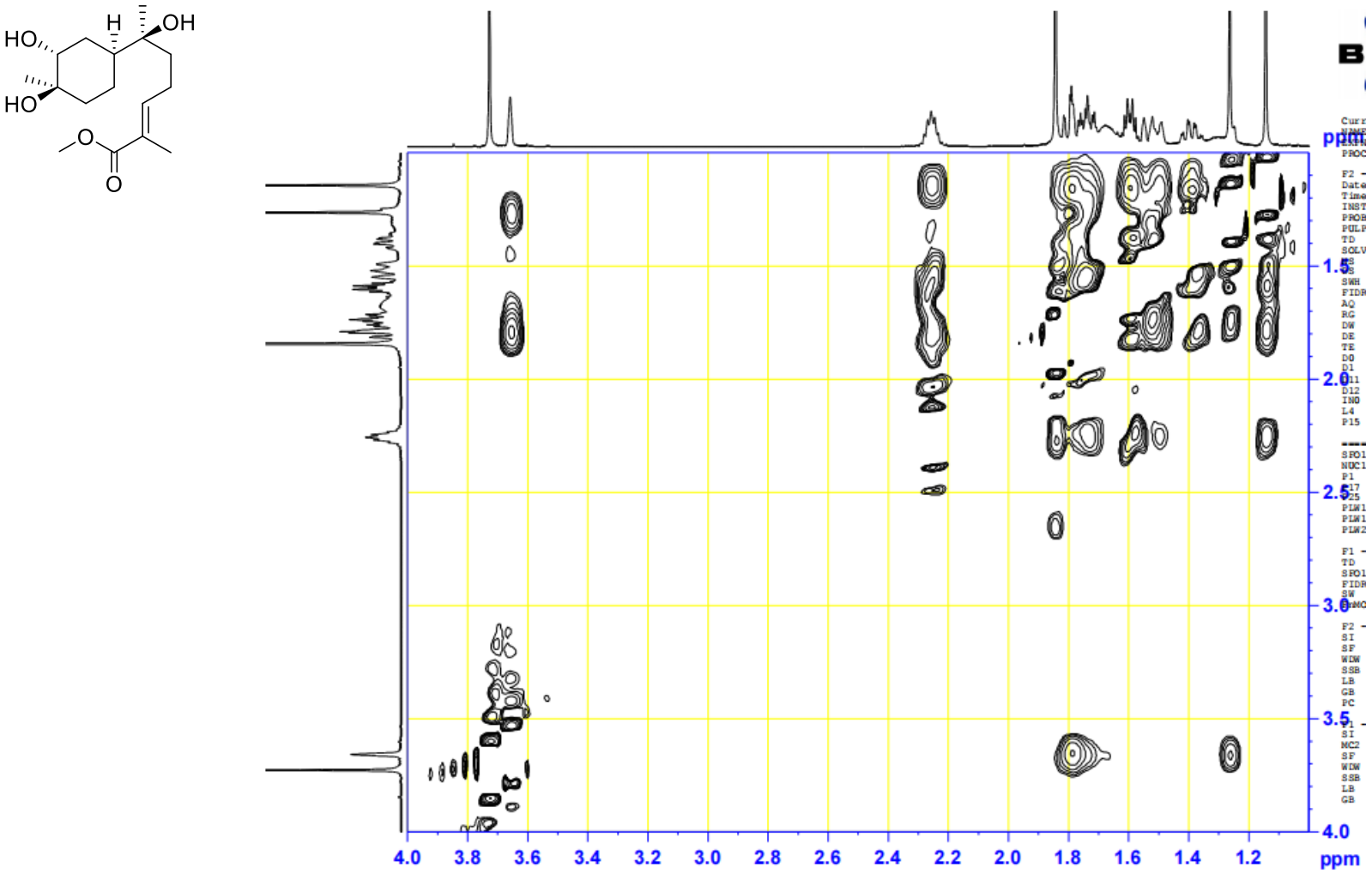


Fig. S60 ROESY Spectrum of **4** in chloroform-*d* (600 MHz) (expanded).

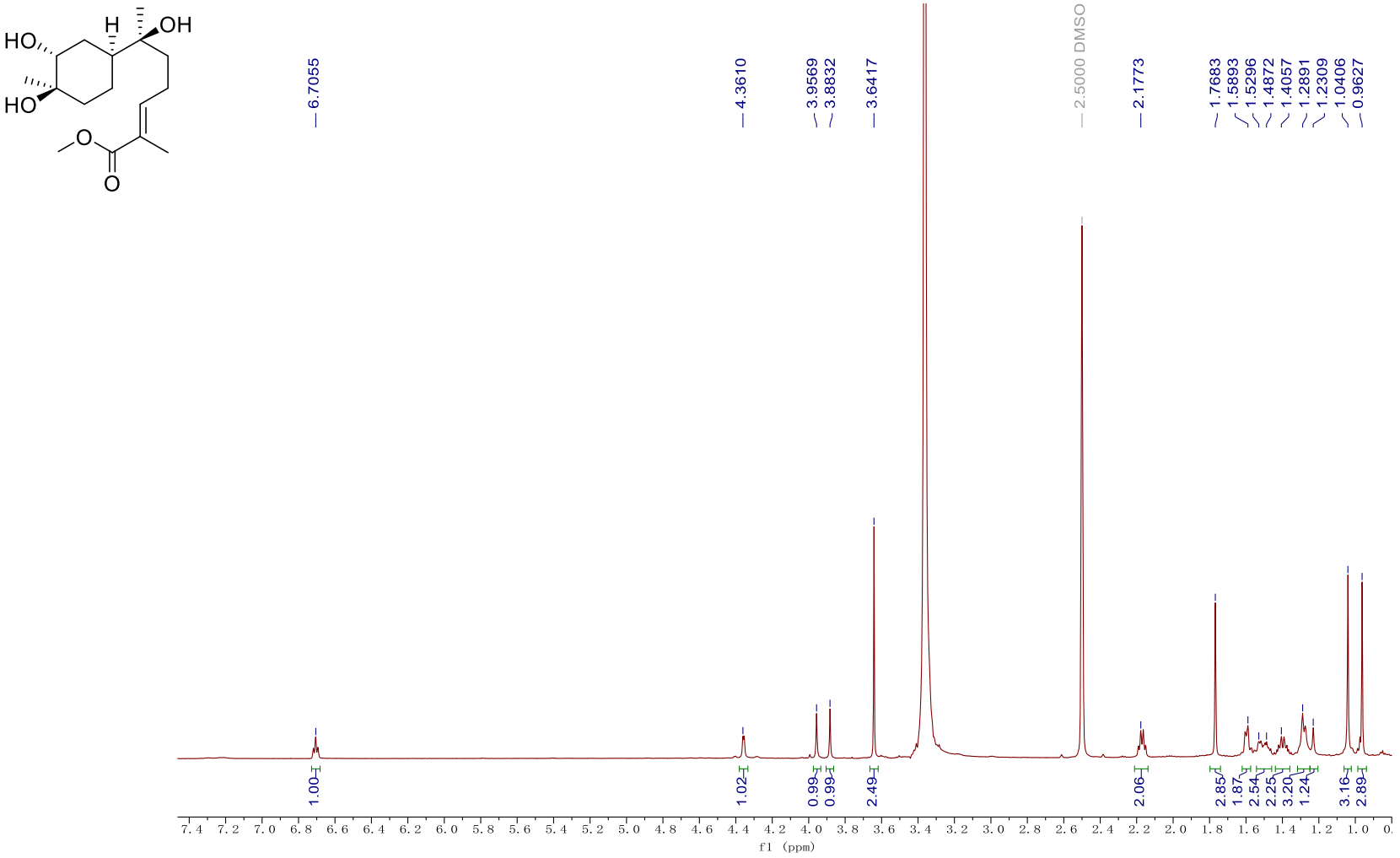


Fig. S61 ^{1}H NMR Spectrum of **4** in DMSO-d_6 (600 MHz).

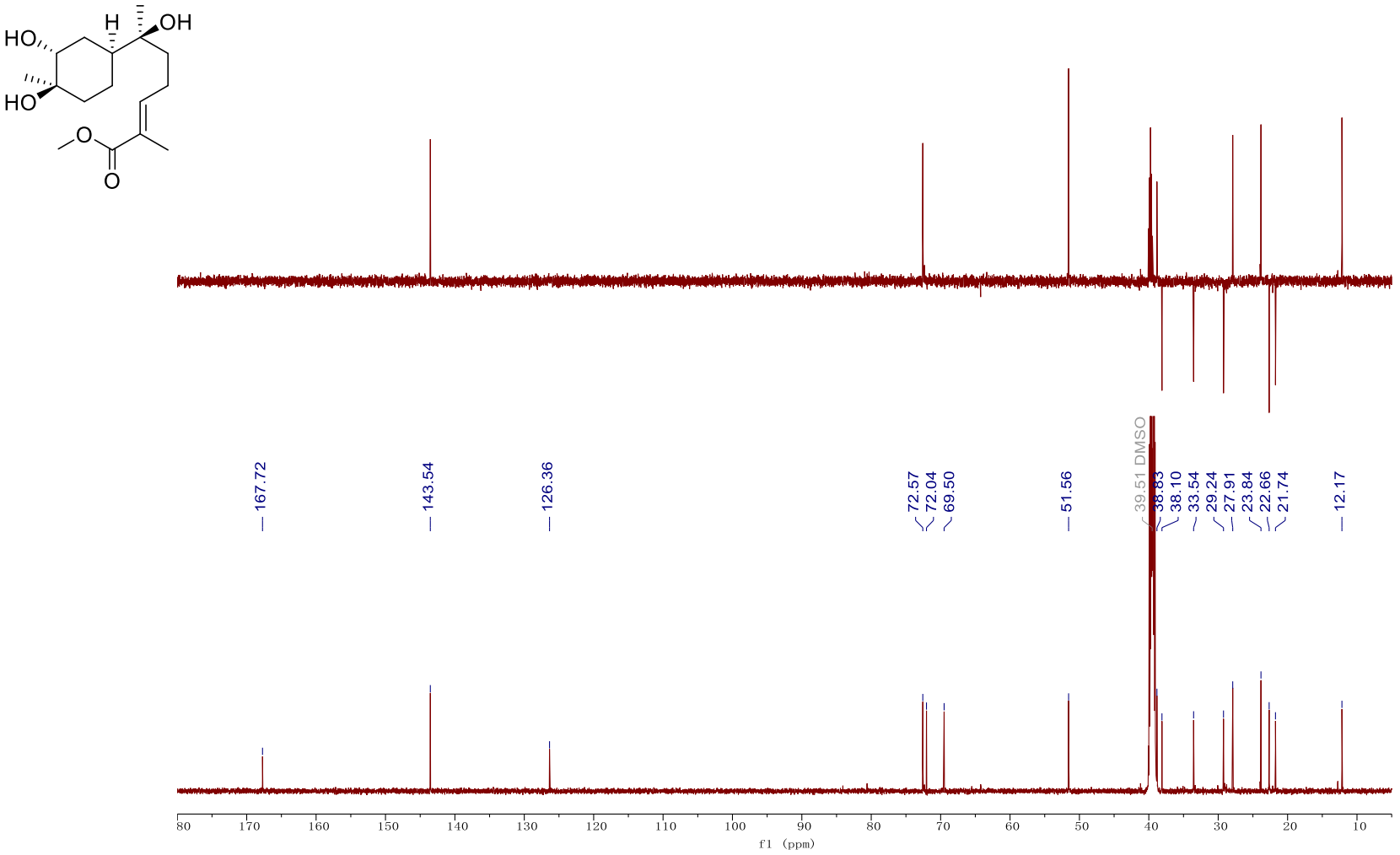


Fig. S62 ^{13}C NMR Spectrum of **4** in DMSO-d_6 (150 MHz).

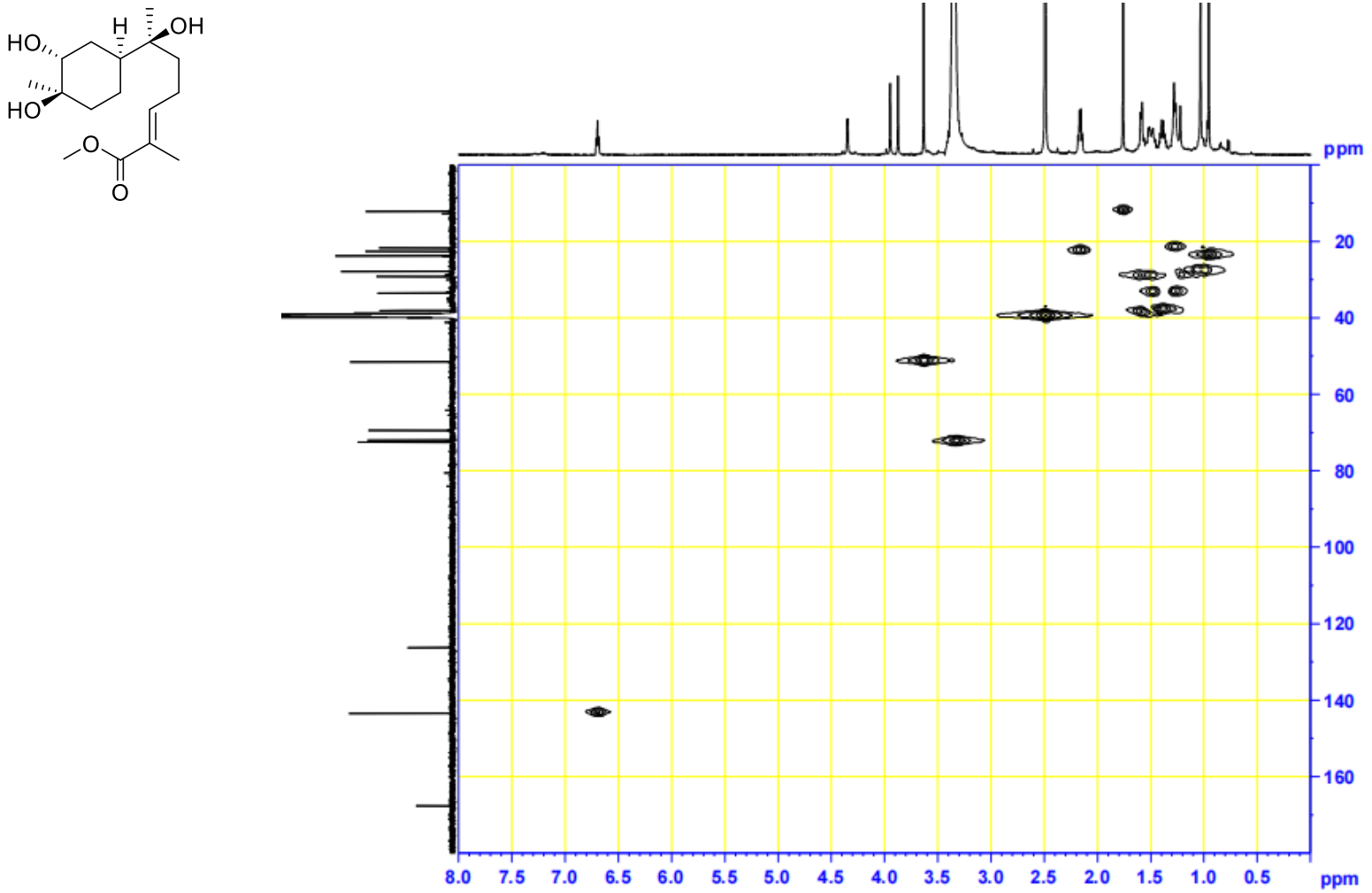


Fig. S63 HSQC Spectrum of **4** in DMSO-d_6 (600 MHz).

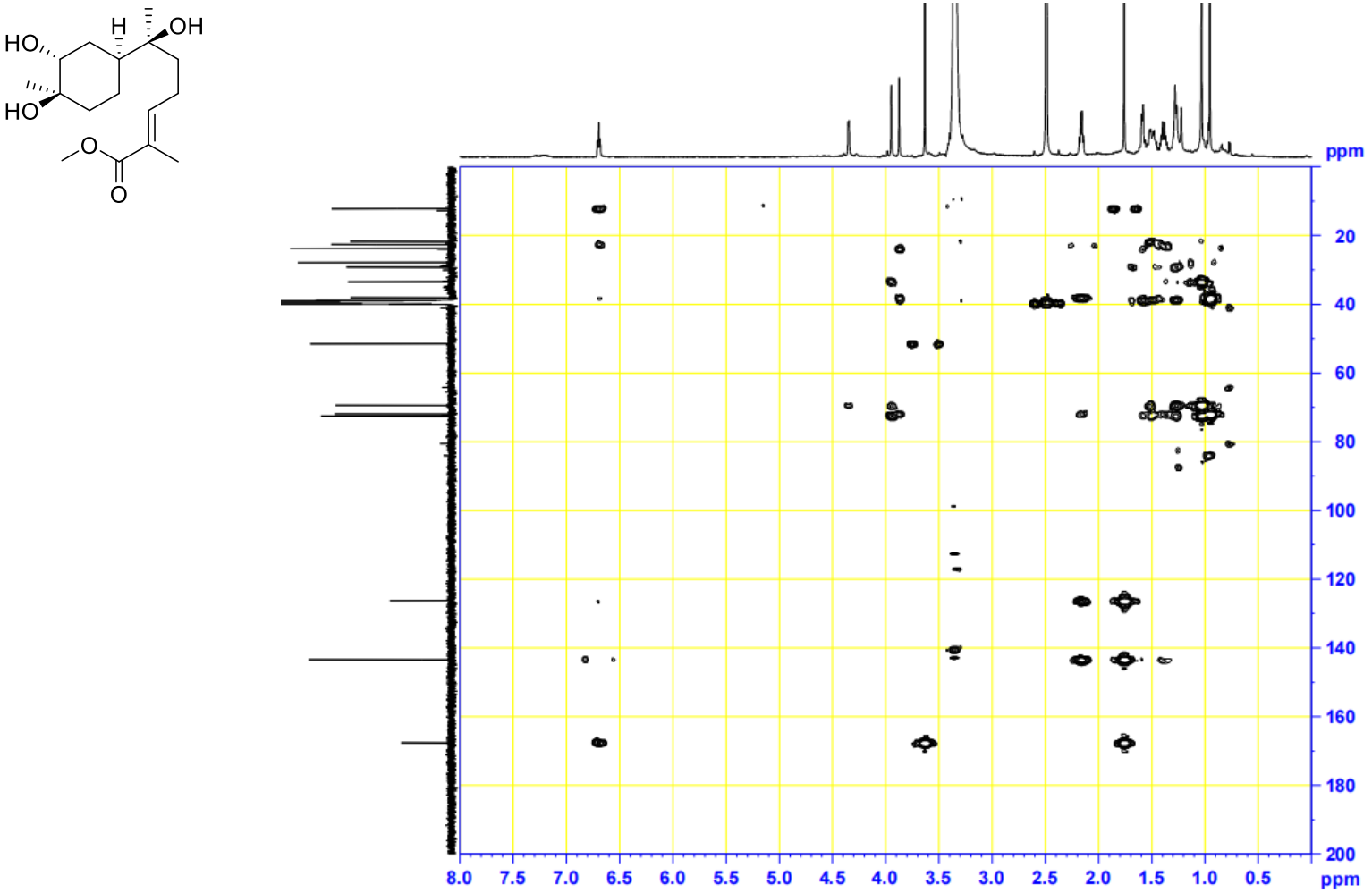
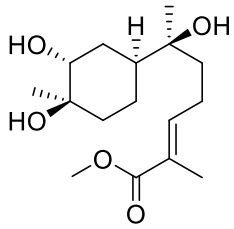


Fig. S64 HMBC Spectrum of **4** in DMSO-d_6 (600 MHz)



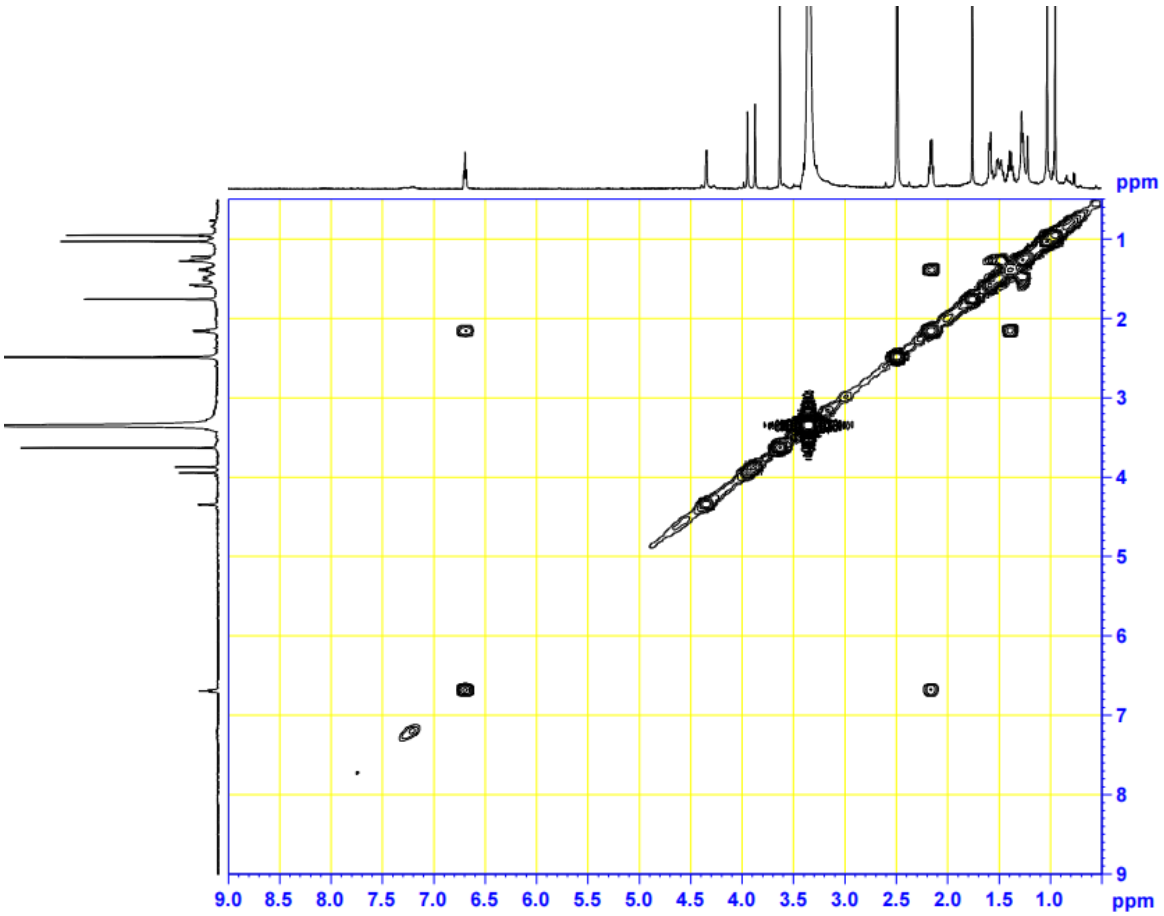


Fig. S65 ^{1}H–^{1}H COSY Spectrum of **4** in DMSO-d_6 (600 MHz).

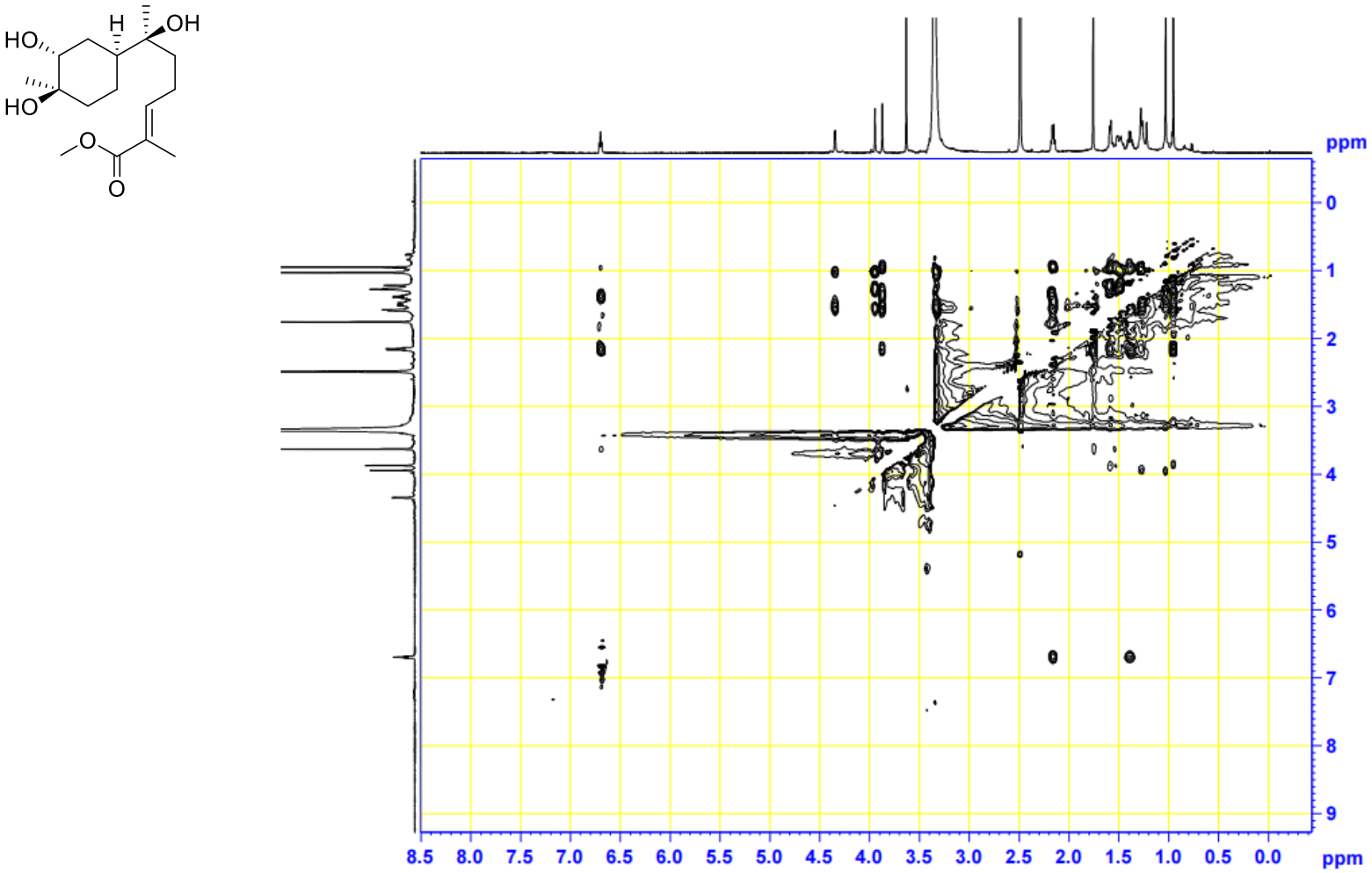


Fig. S66 ROESY Spectrum of **4** in DMSO-d_6 (600 MHz).

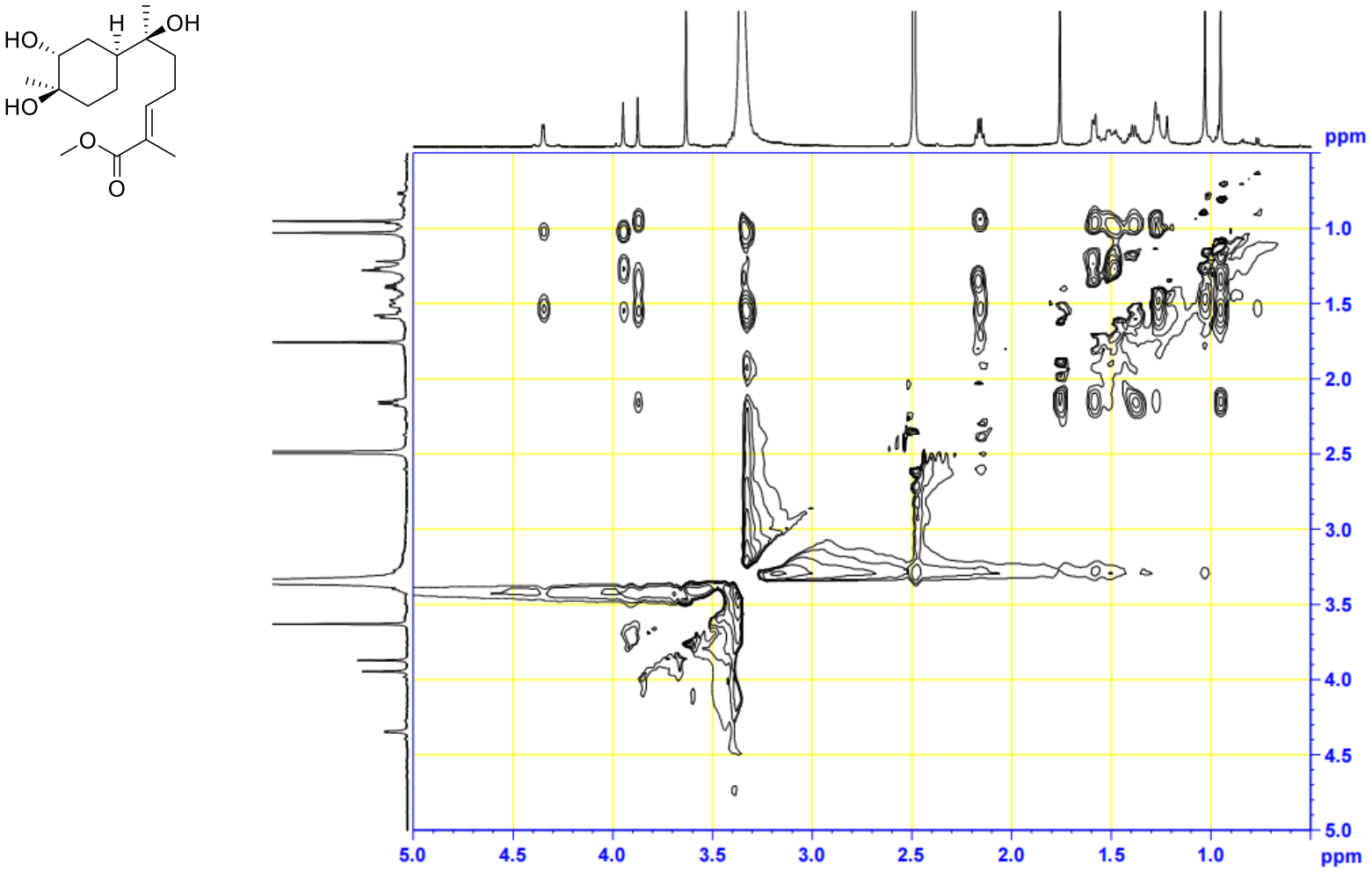
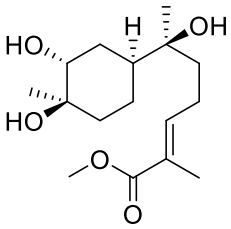


Fig. S67 ROESY Spectrum of **4** in DMSO-d_6 (600 MHz) (expanded).



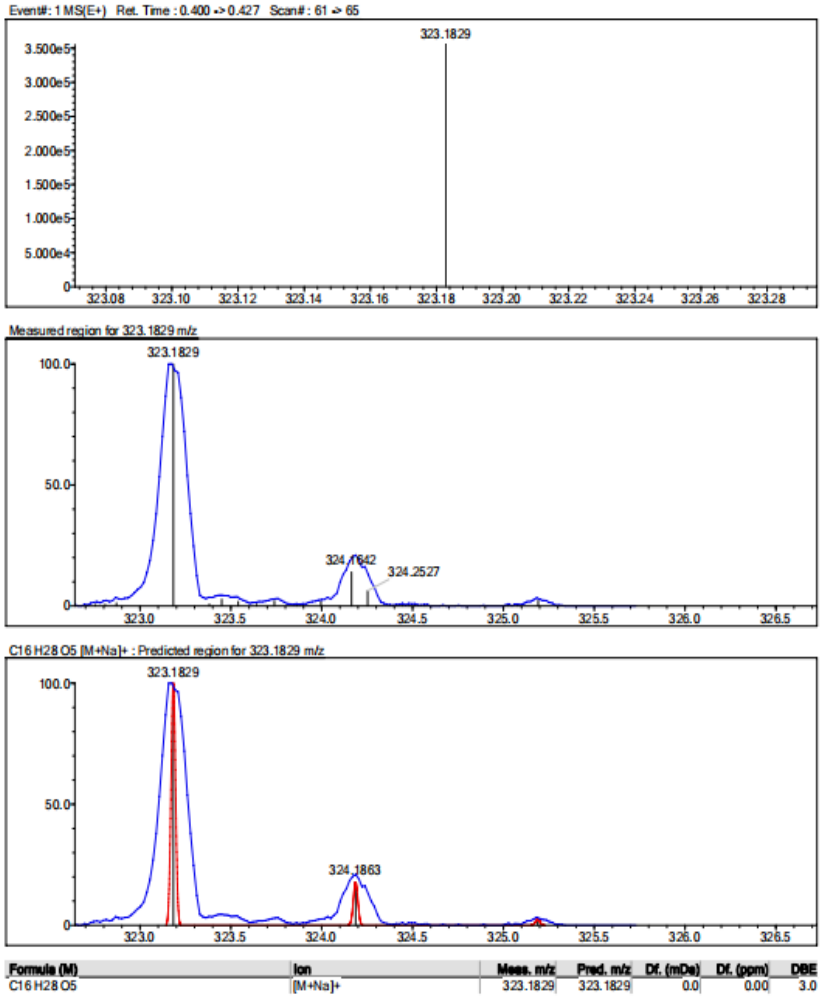


Fig. S68 HRESIMS Spectrum of **4**.

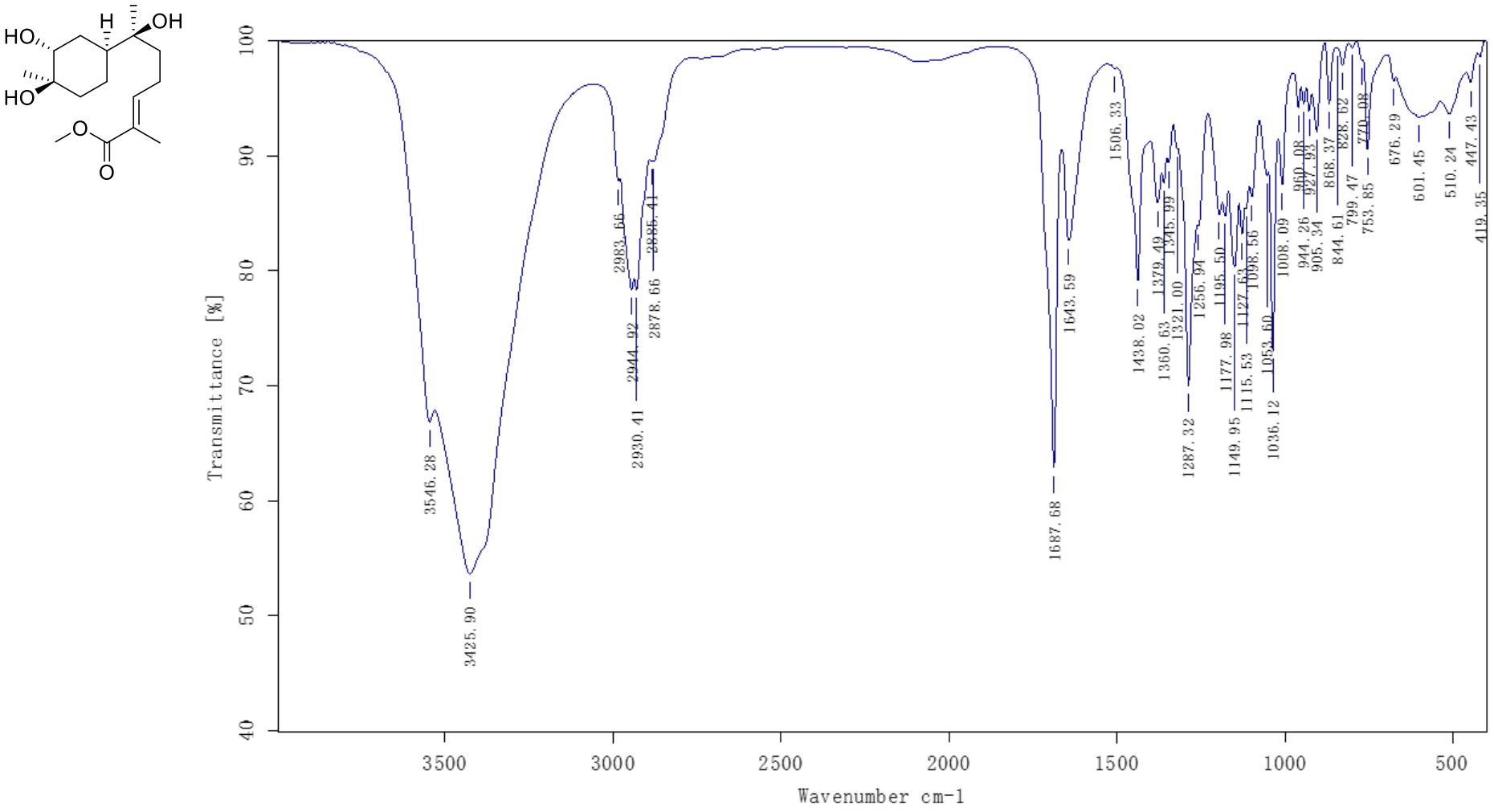
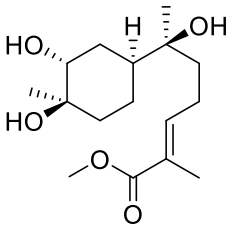


Fig. S69 IR Spectrum of **4**.



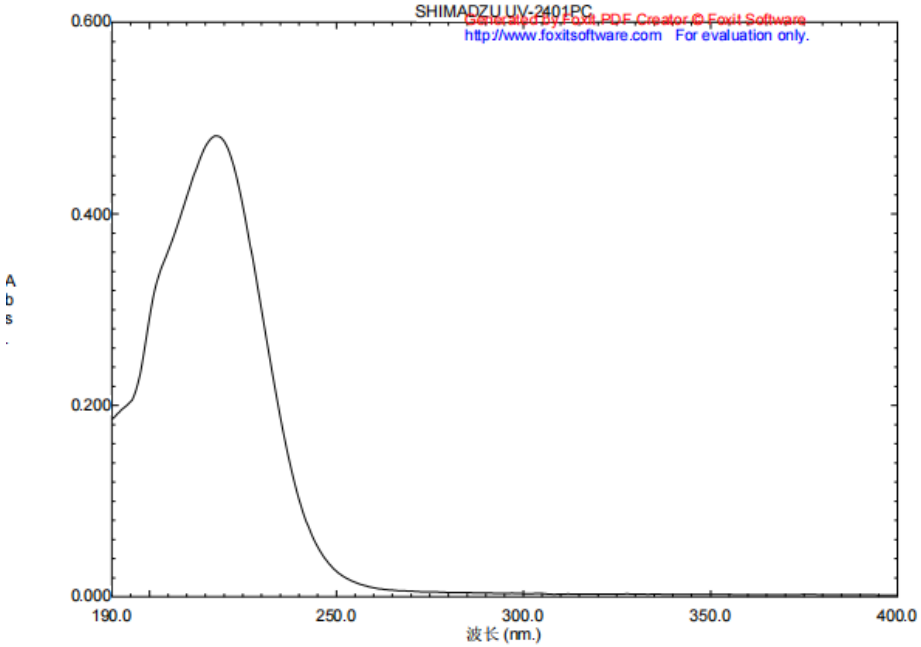


Fig. S70 UV Spectrum of **4**.

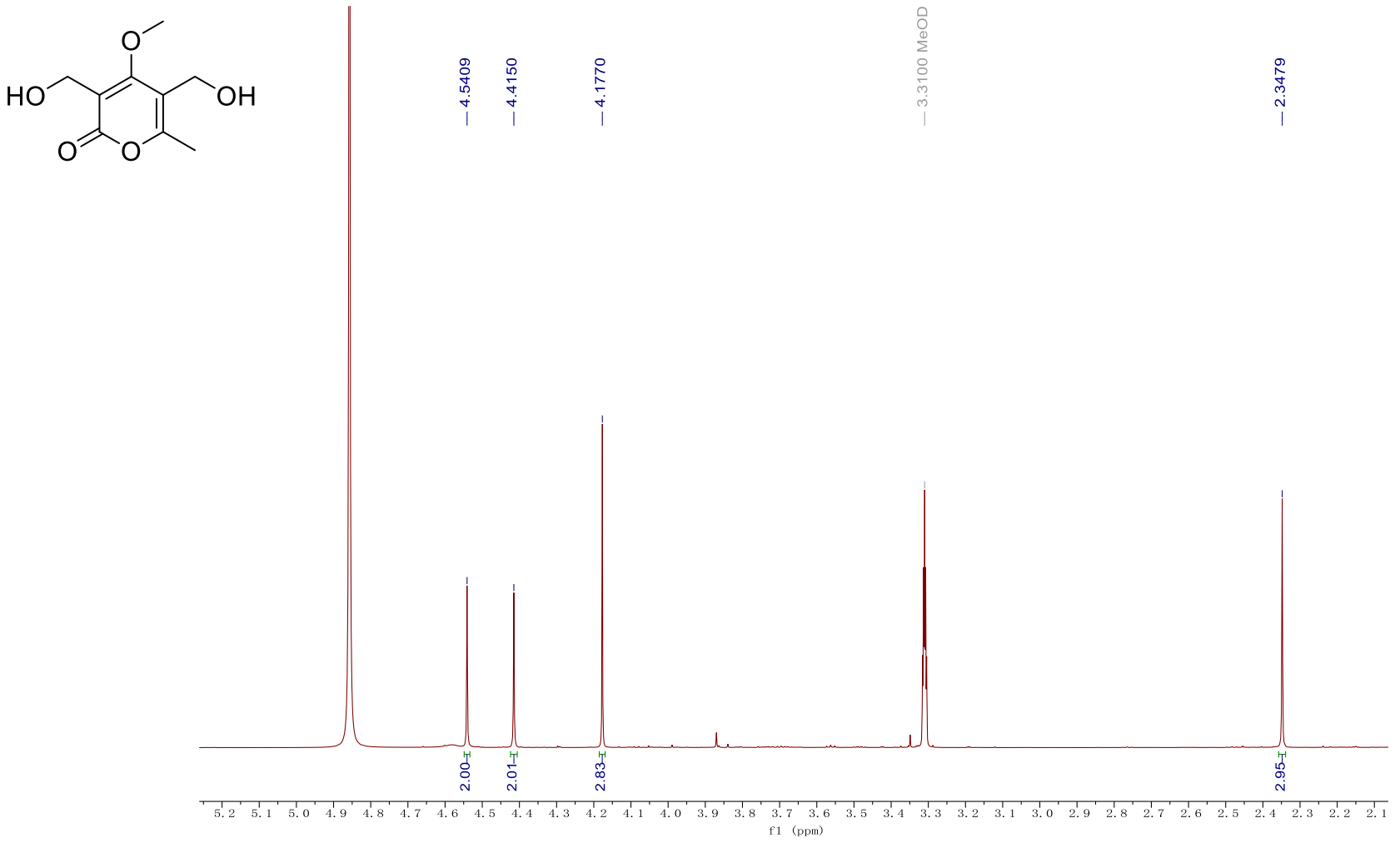


Fig. S71 ^{1}H NMR Spectrum of **5** in methanol-d_4 (600 MHz).

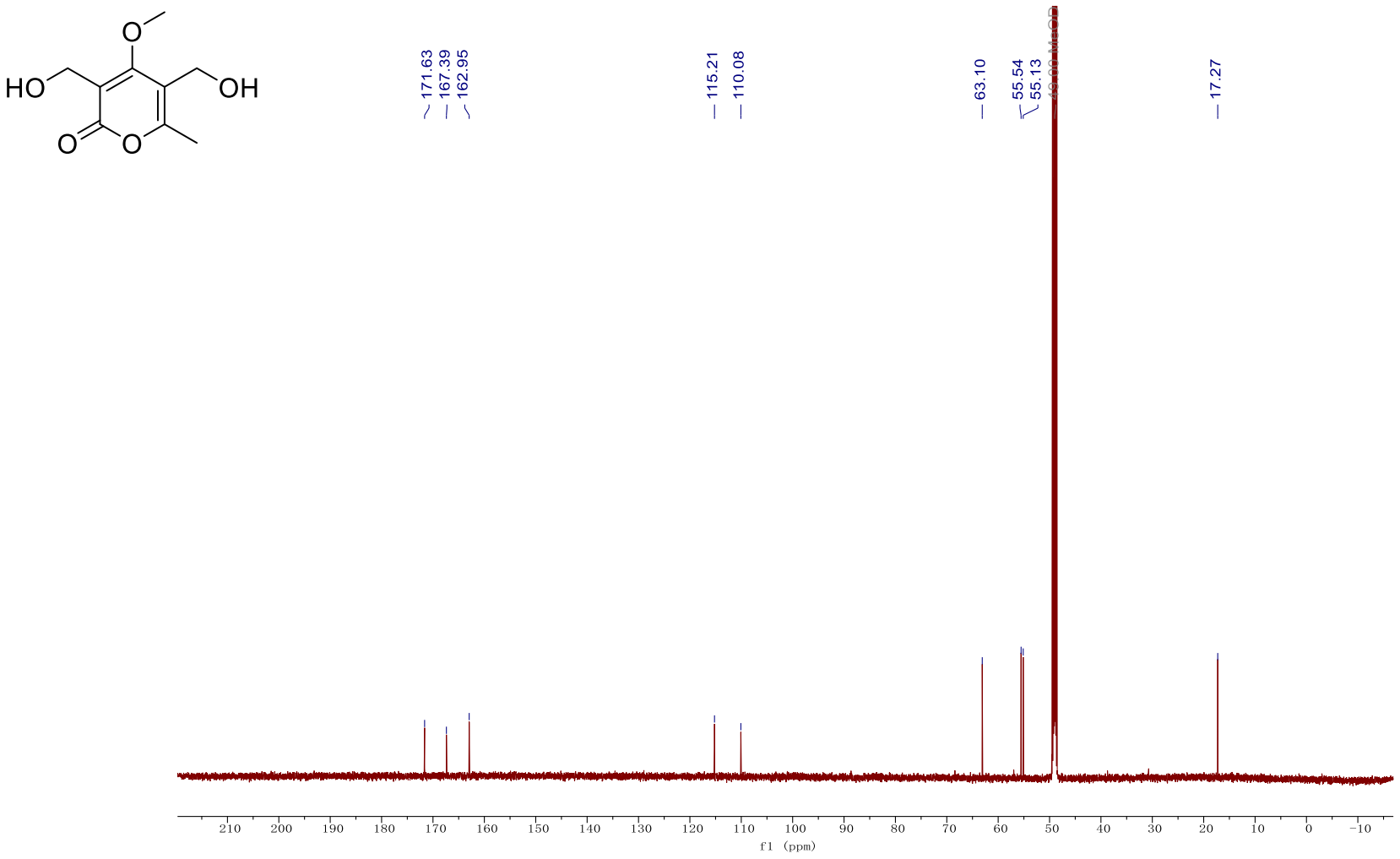


Fig. S72 ^{13}C NMR Spectrum of **5** in methanol-d_4 (150 MHz).

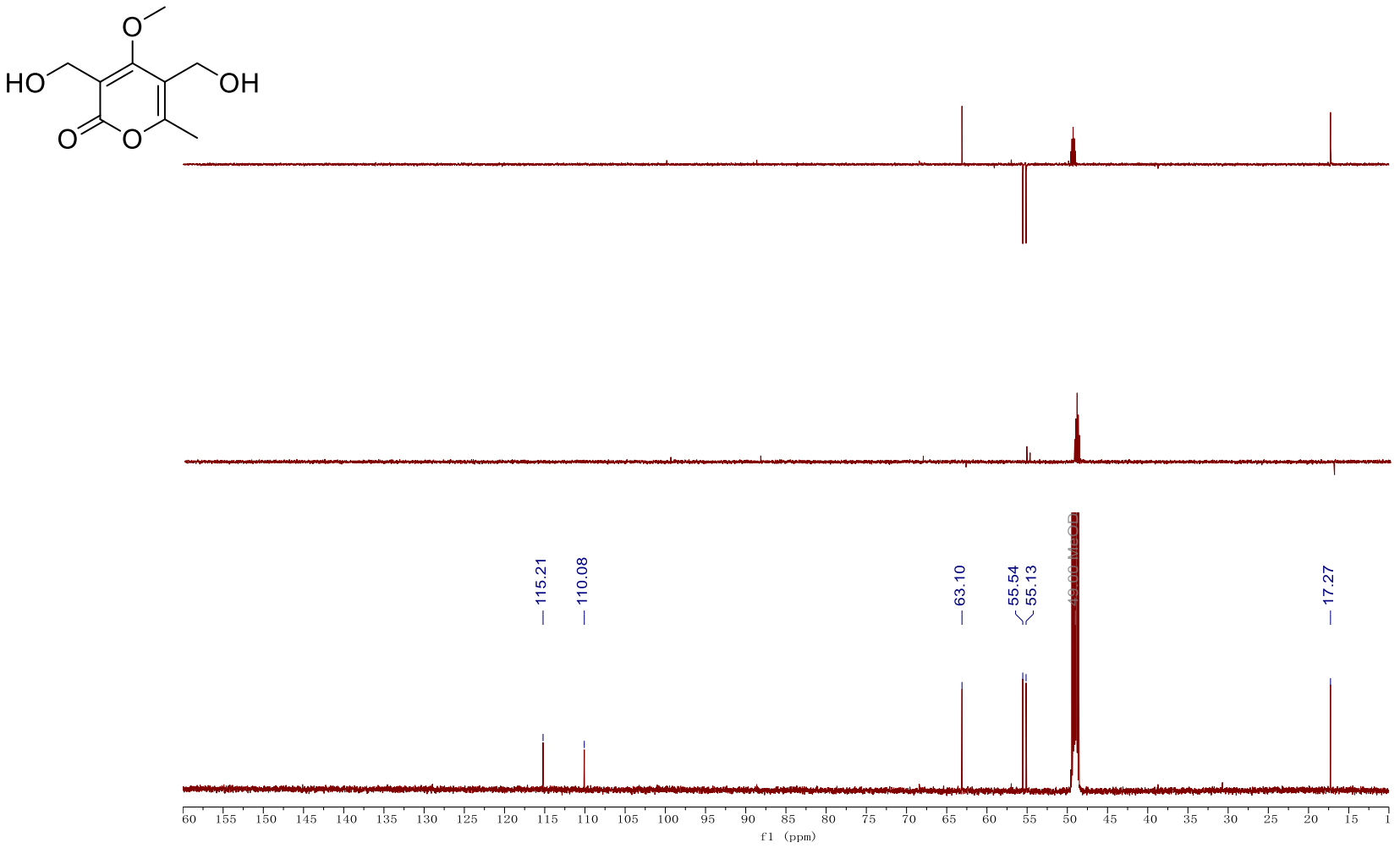


Fig. S73 The DEPT Spectrum of **5** in methanol-d_4 (150 MHz).

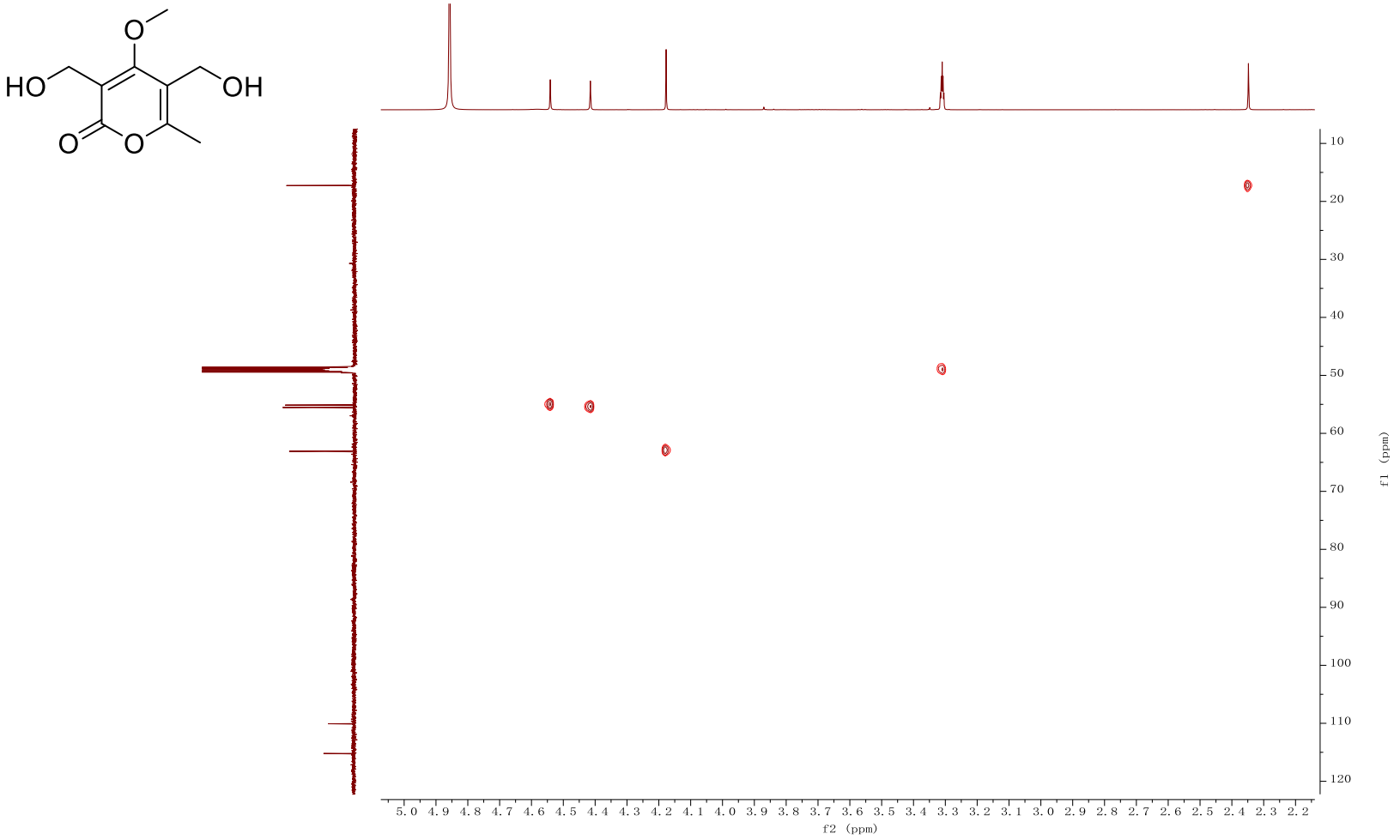


Fig. S74 HSQC Spectrum of **5** in methanol-d_4 (600 MHz).

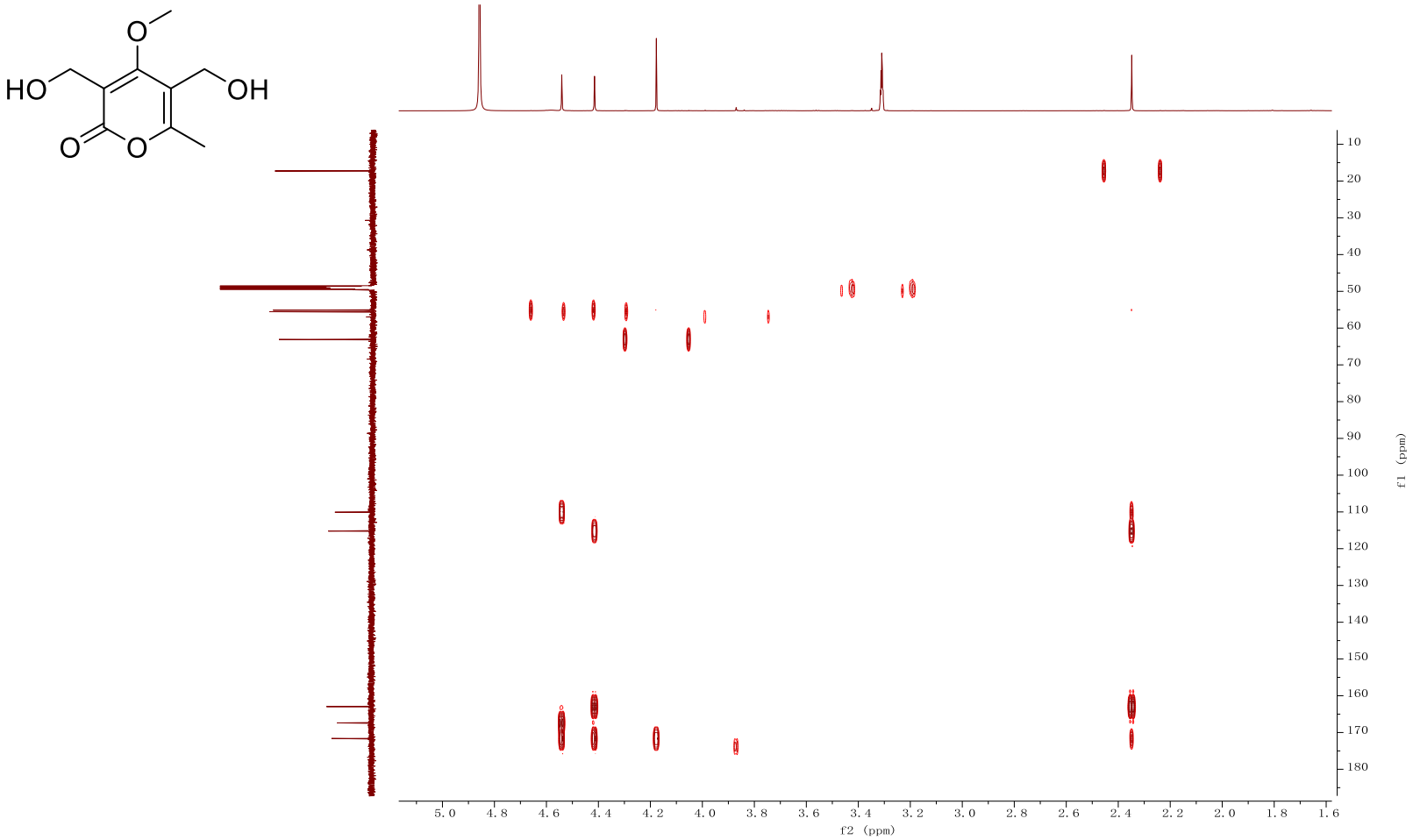


Fig. S75 HMBC Spectrum of **5** in methanol-d_4 (600 MHz).

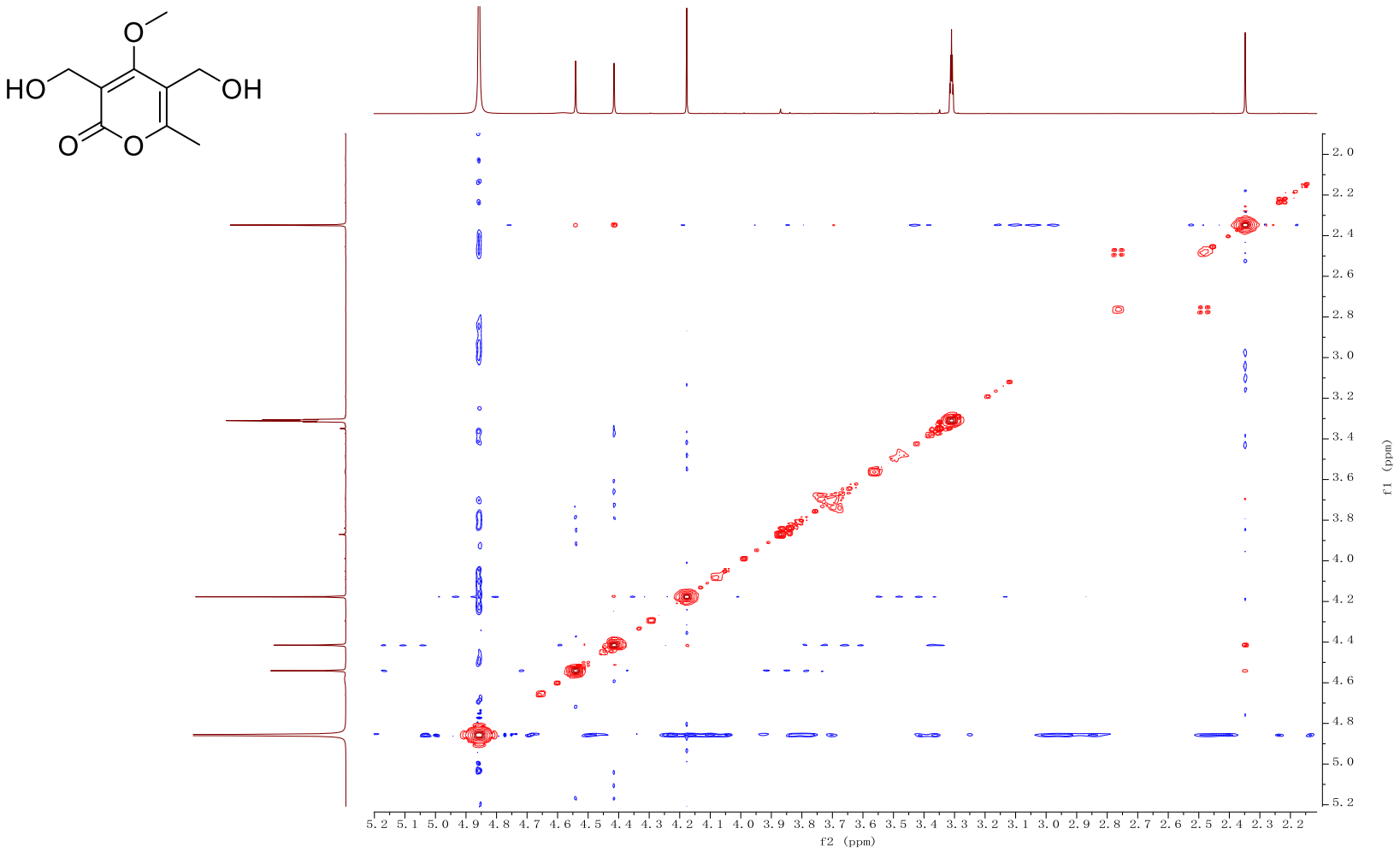
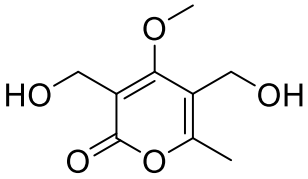


Fig. S76 ^{1}H–^{1}H COSY Spectrum of **5** in methanol-d_4 (600 MHz).



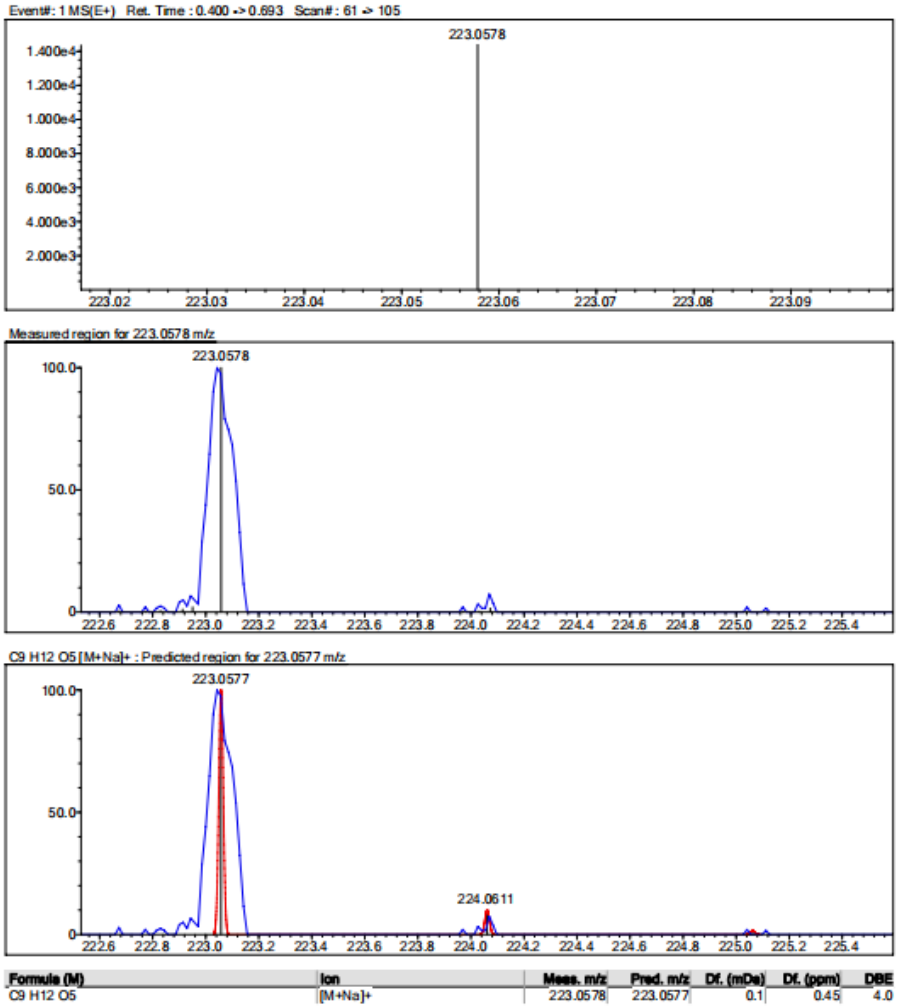


Fig. S77 HRESIMS Spectrum of **5**.

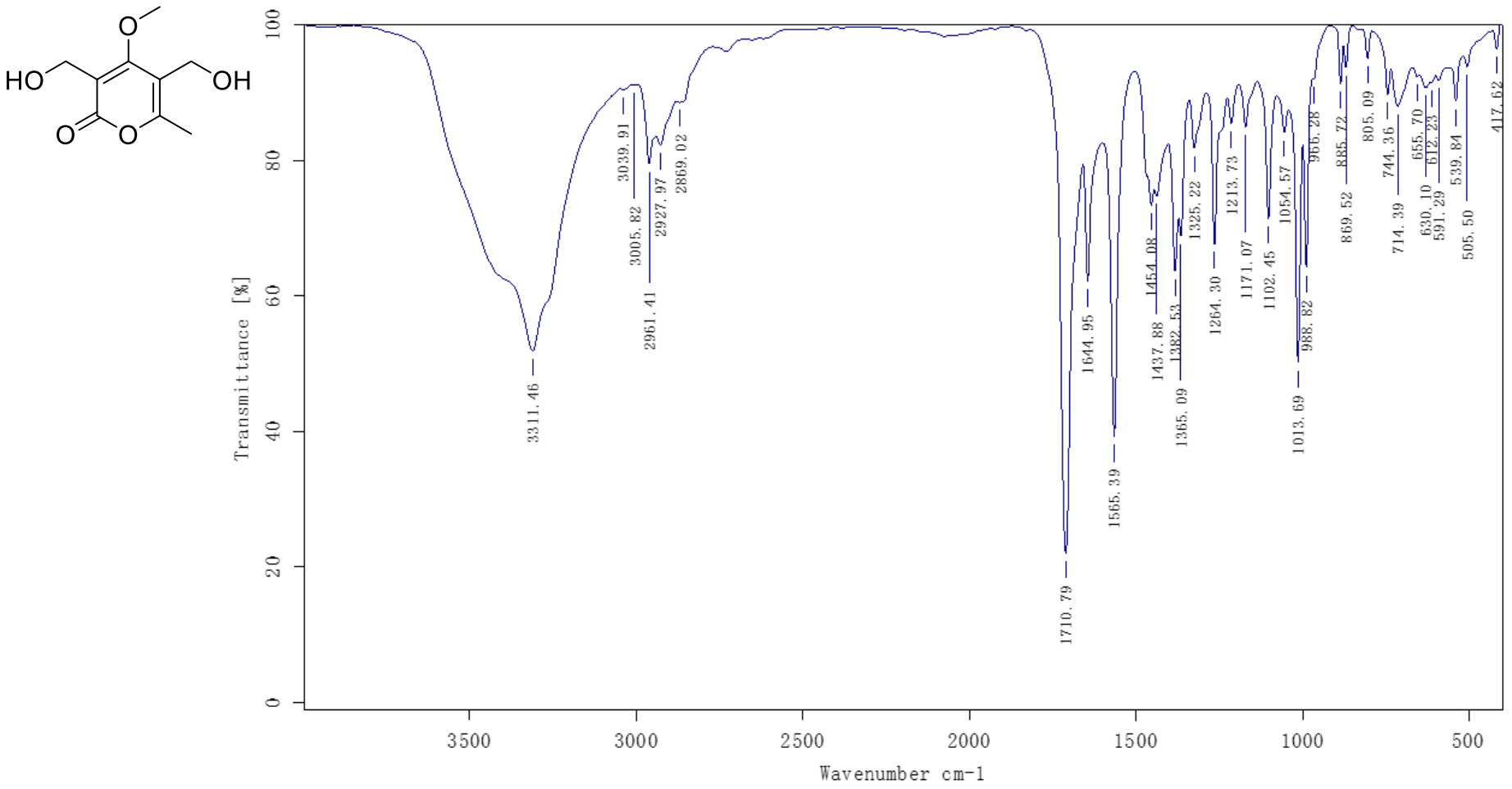
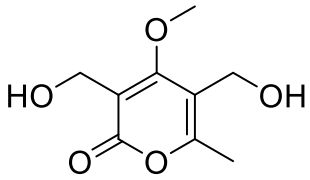


Fig. S78 IR Spectrum of **5**.



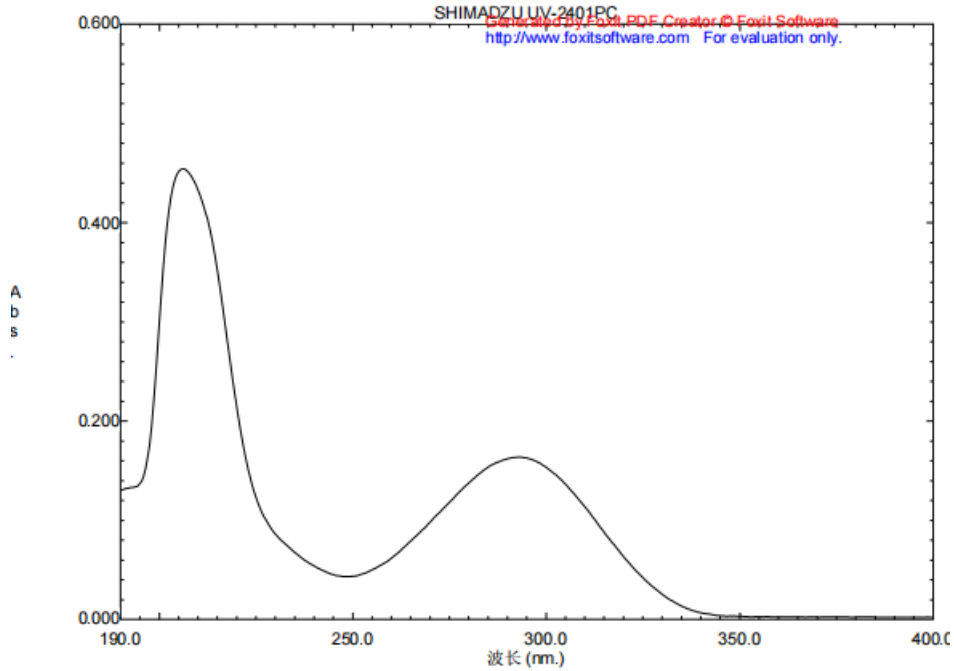


Fig. S79 UV Spectrum of **5**.

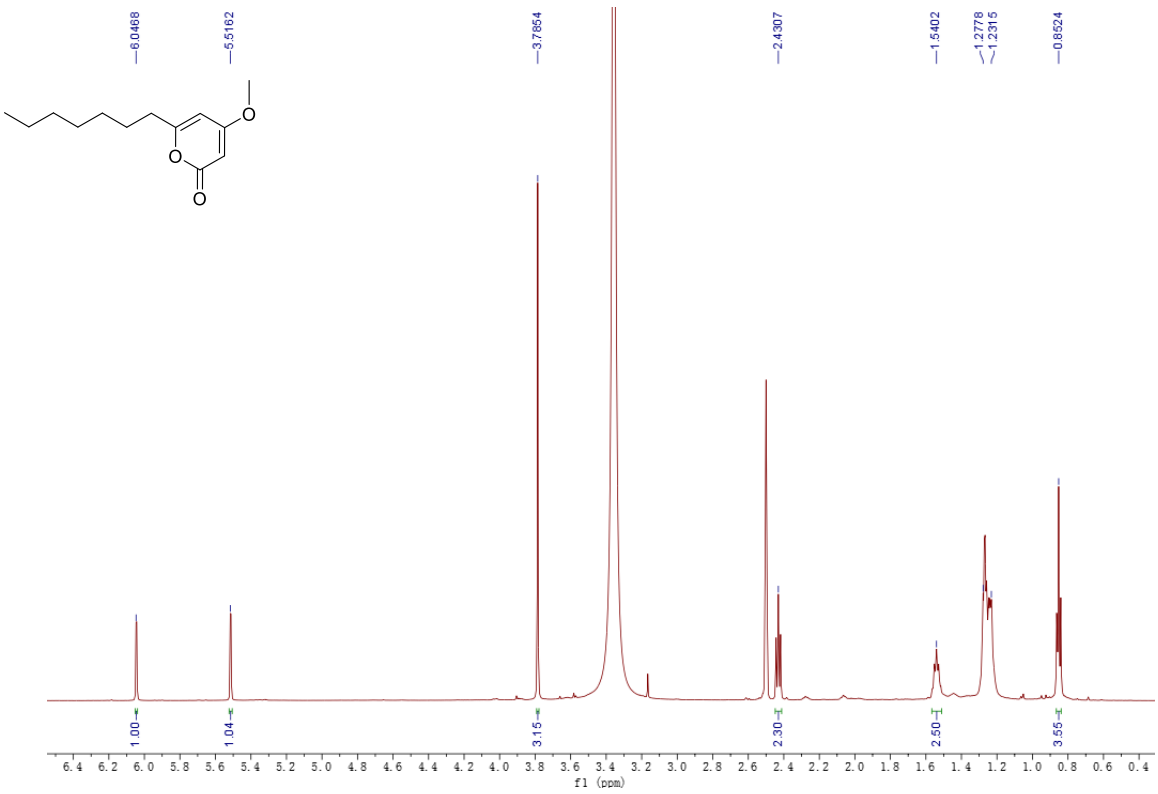


Fig. S80 ^{1}H NMR spectrum of **6** in DMSO-d_6 (600 MHz).

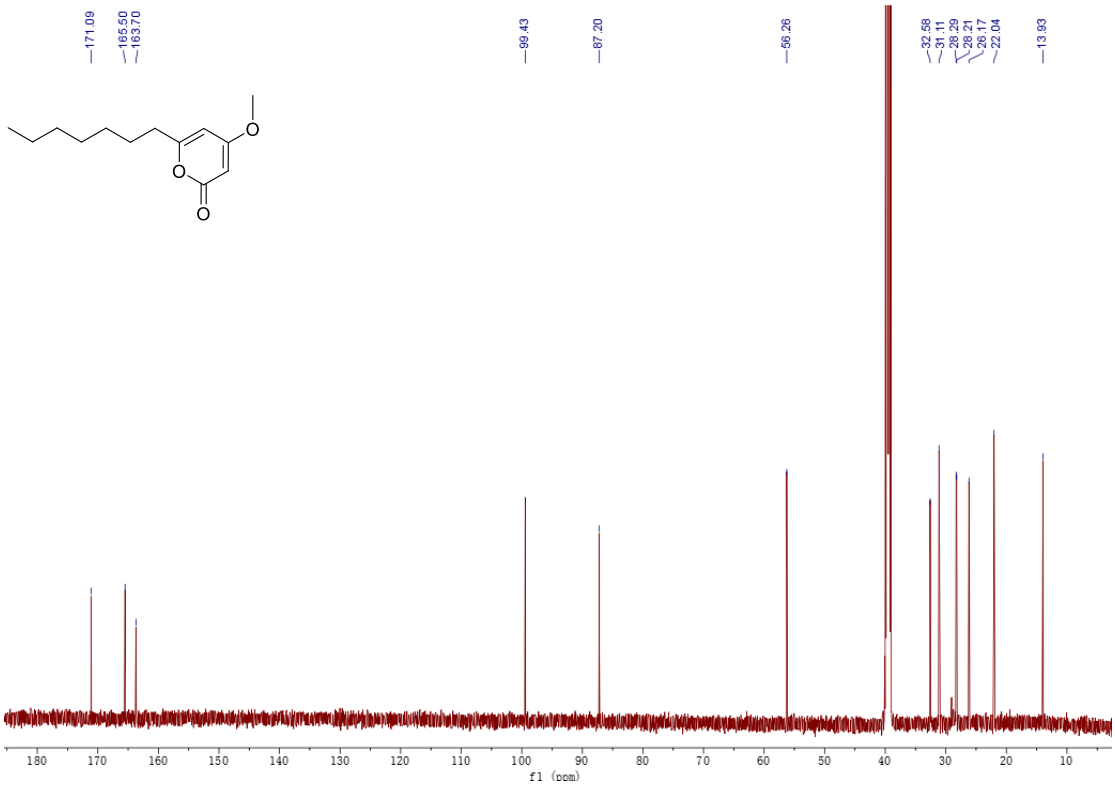


Fig. S81 ^{13}C NMR spectrum of **6** in DMSO-d_6 (150 MHz).

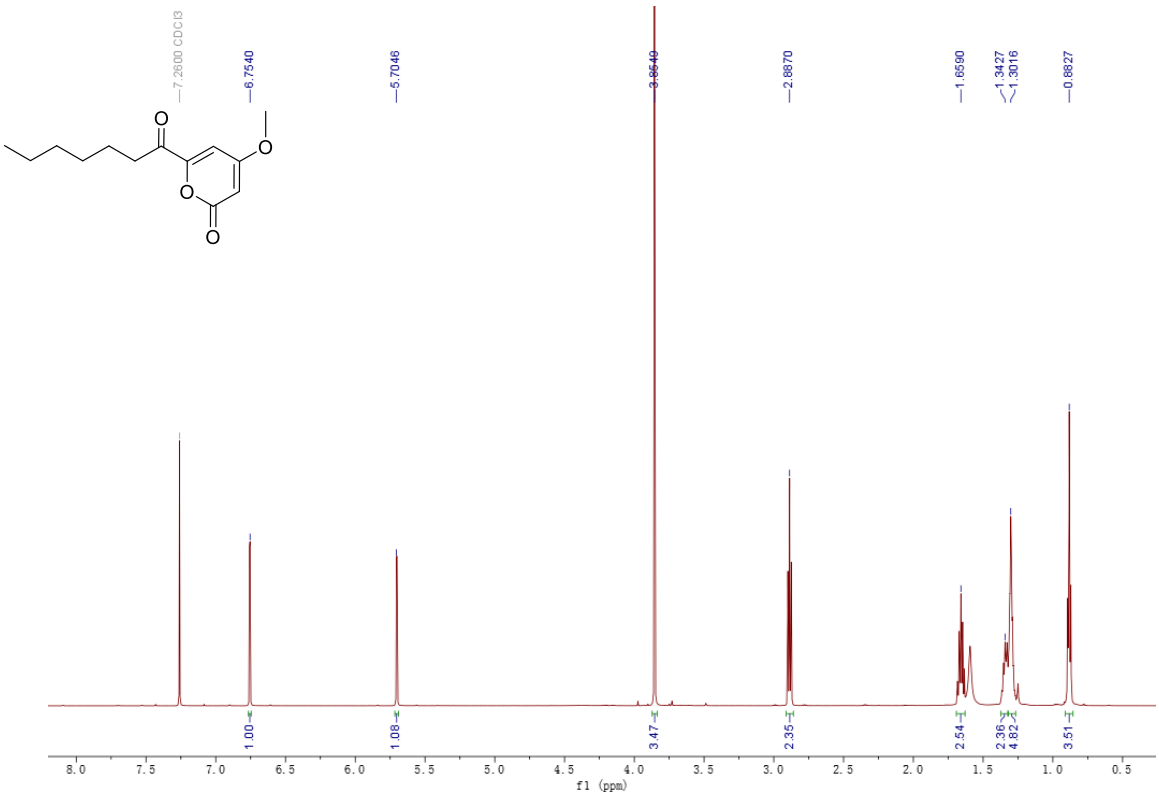


Fig. S82 ^{1}H NMR spectrum of **7** in chloroform-*d* (600 MHz).

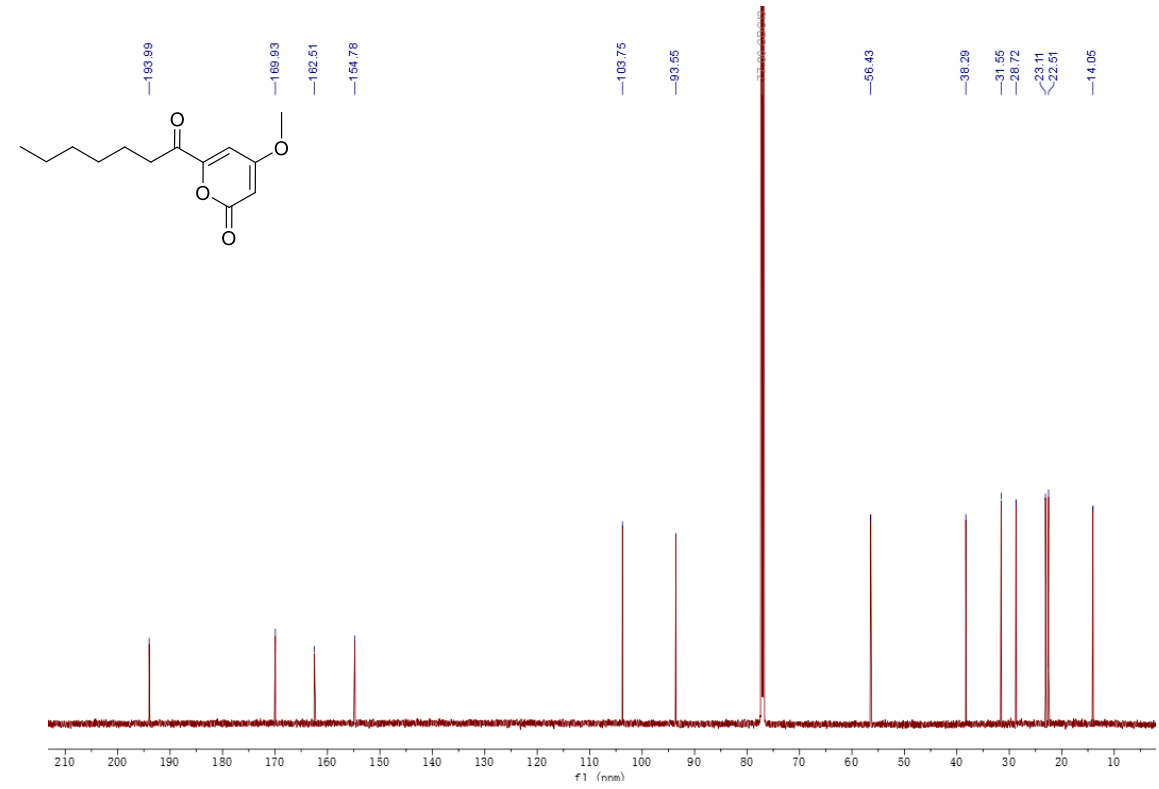


Fig. S83 ^{13}C NMR spectrum of **7** in chloroform-*d* (150 MHz).

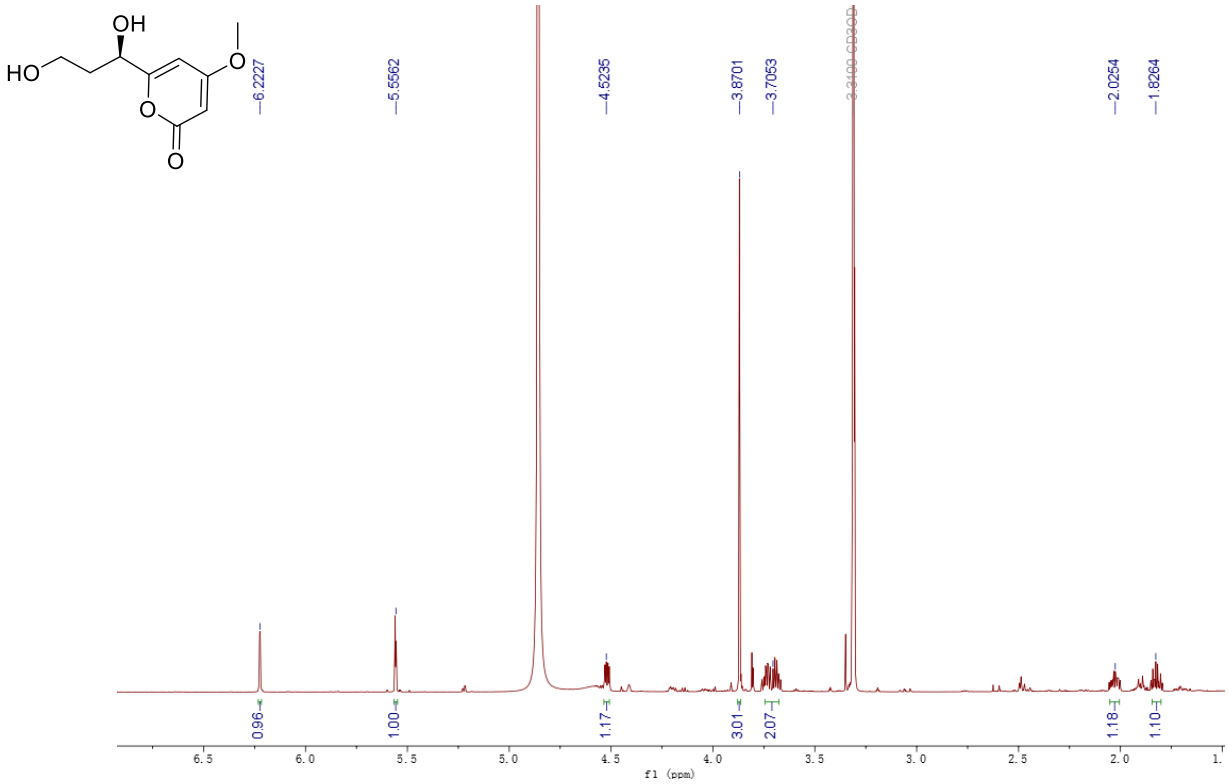


Fig. S84 ^{1}H NMR spectrum of **8** in methanol-d_4 (600 MHz).

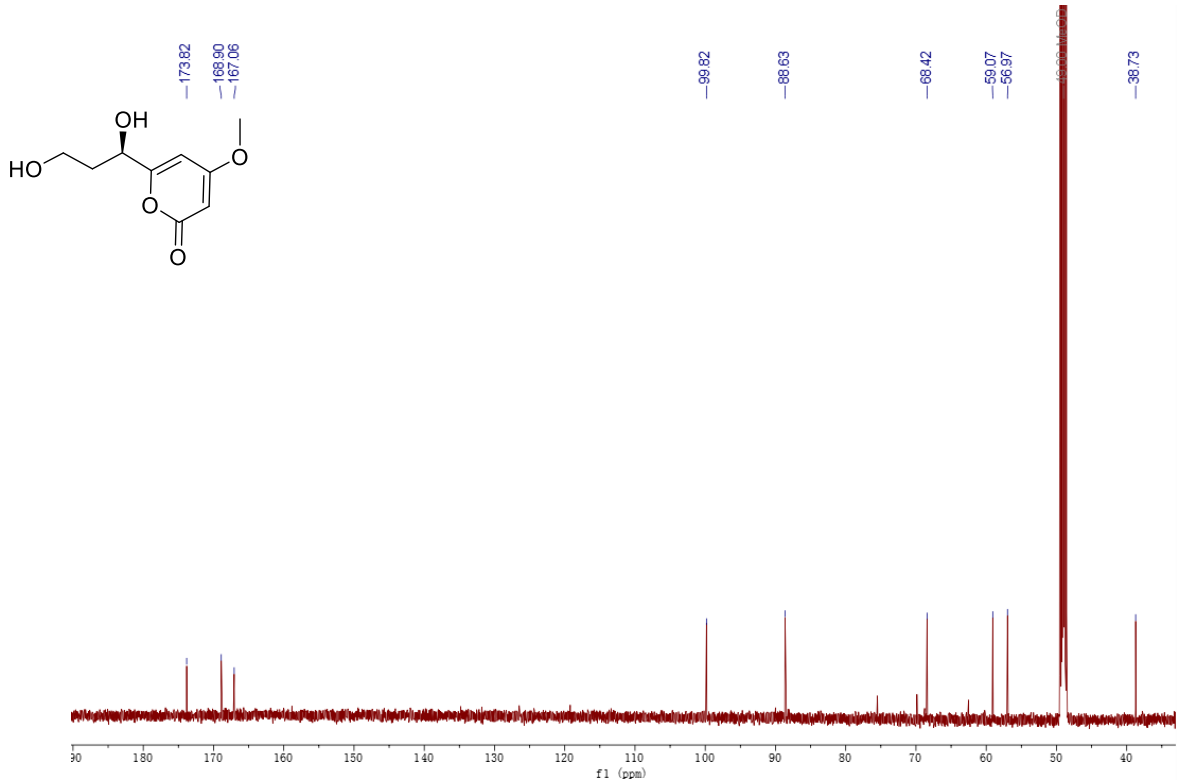


Fig. S85 ^{13}C NMR spectrum of **8** in methanol-d_4 (150 MHz).

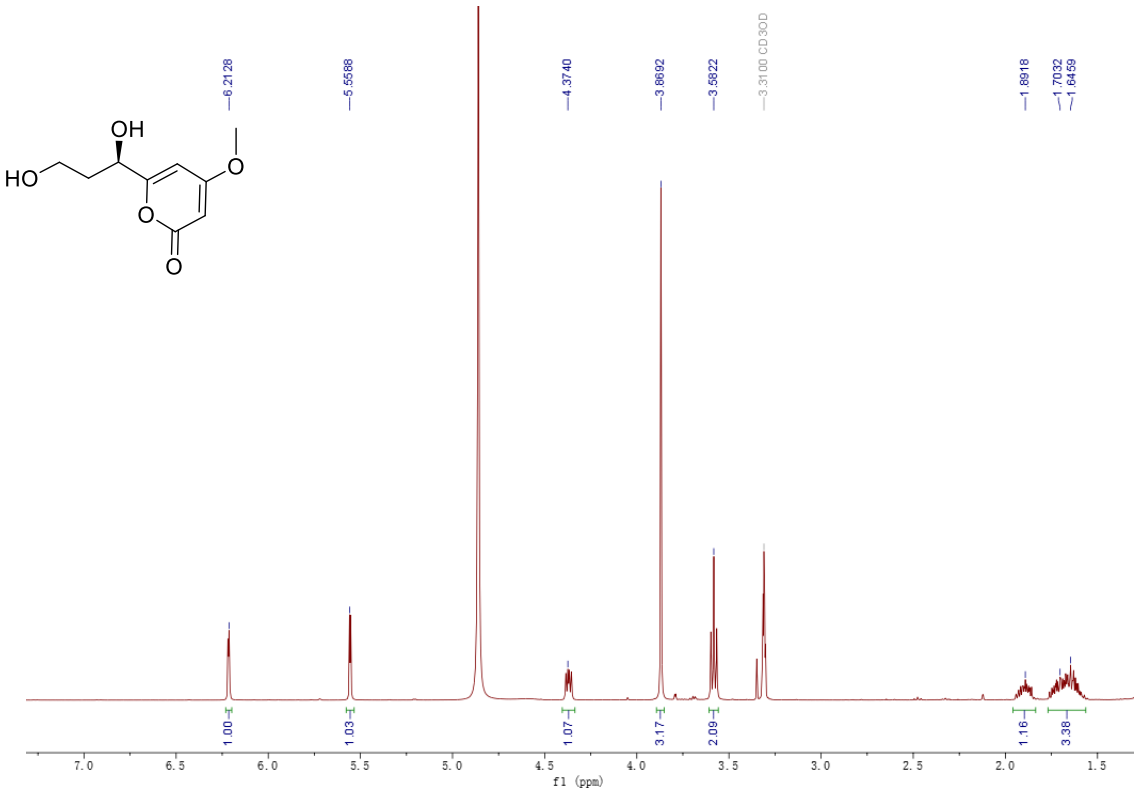


Fig. S86 ^{1}H NMR spectrum of **9** in methanol-d_4 (600 MHz).

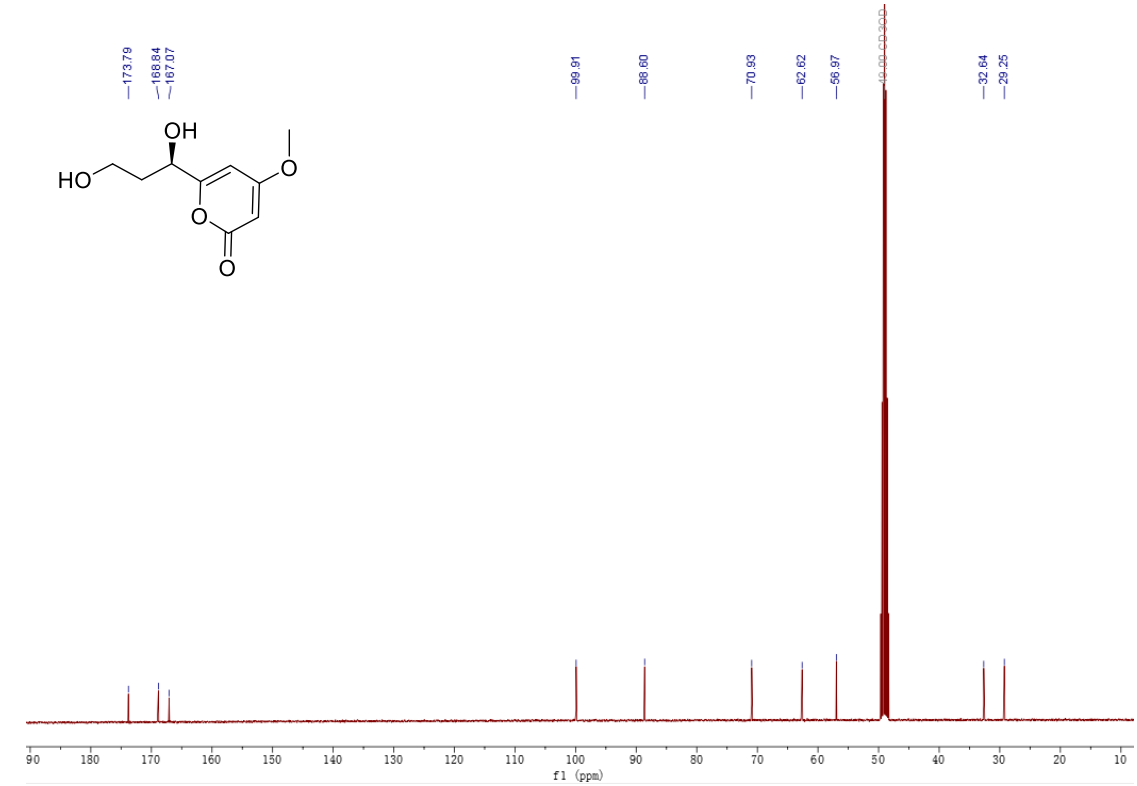


Fig. S87 ^{13}C NMR spectrum of **9** in methanol-d_4 (150 MHz).

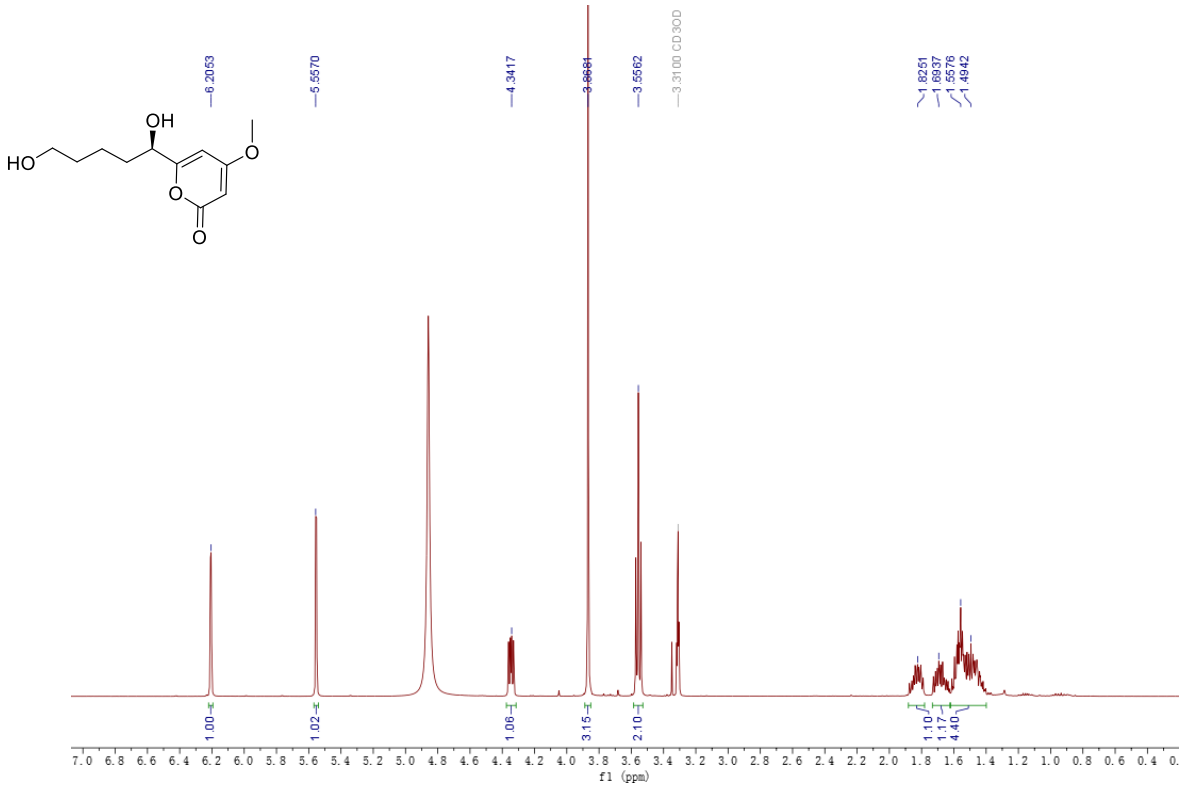


Fig. S88 ^{1}H NMR spectrum of **10** in methanol-d_4 (400 MHz).

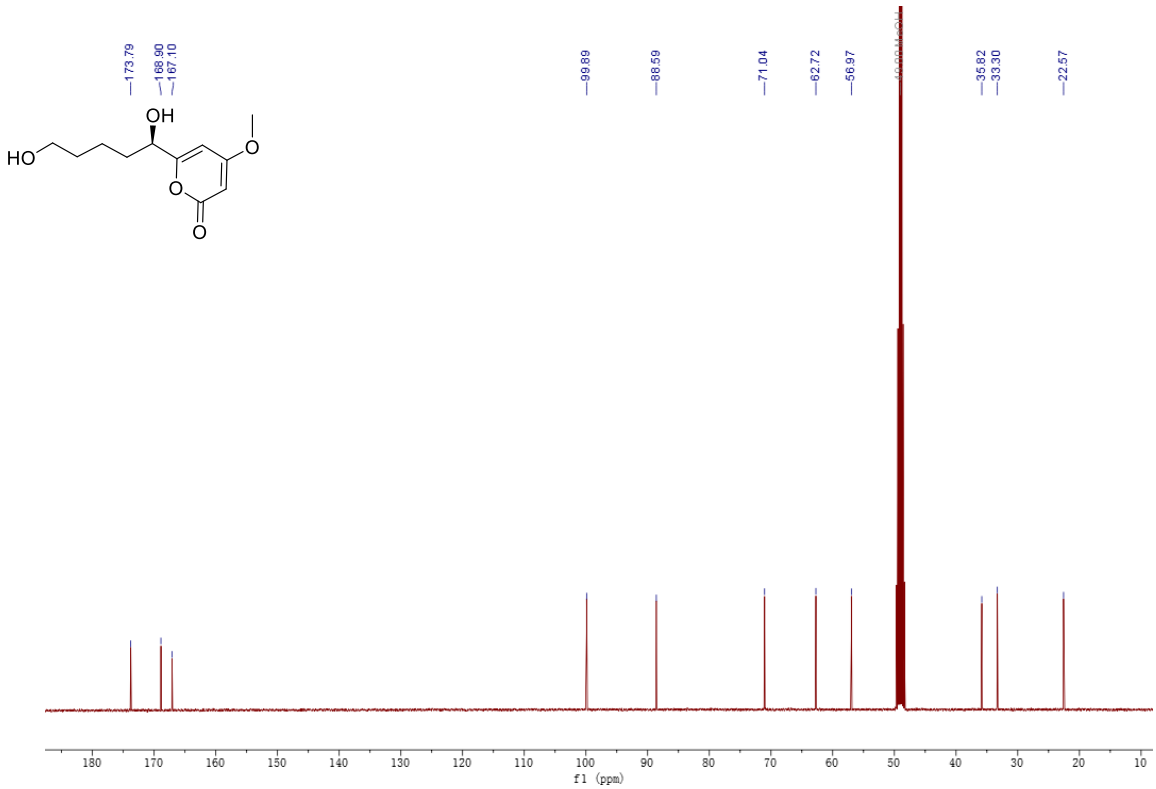


Fig. S89 ^{13}C NMR spectrum of **10** in methanol-d_4 (100 MHz).

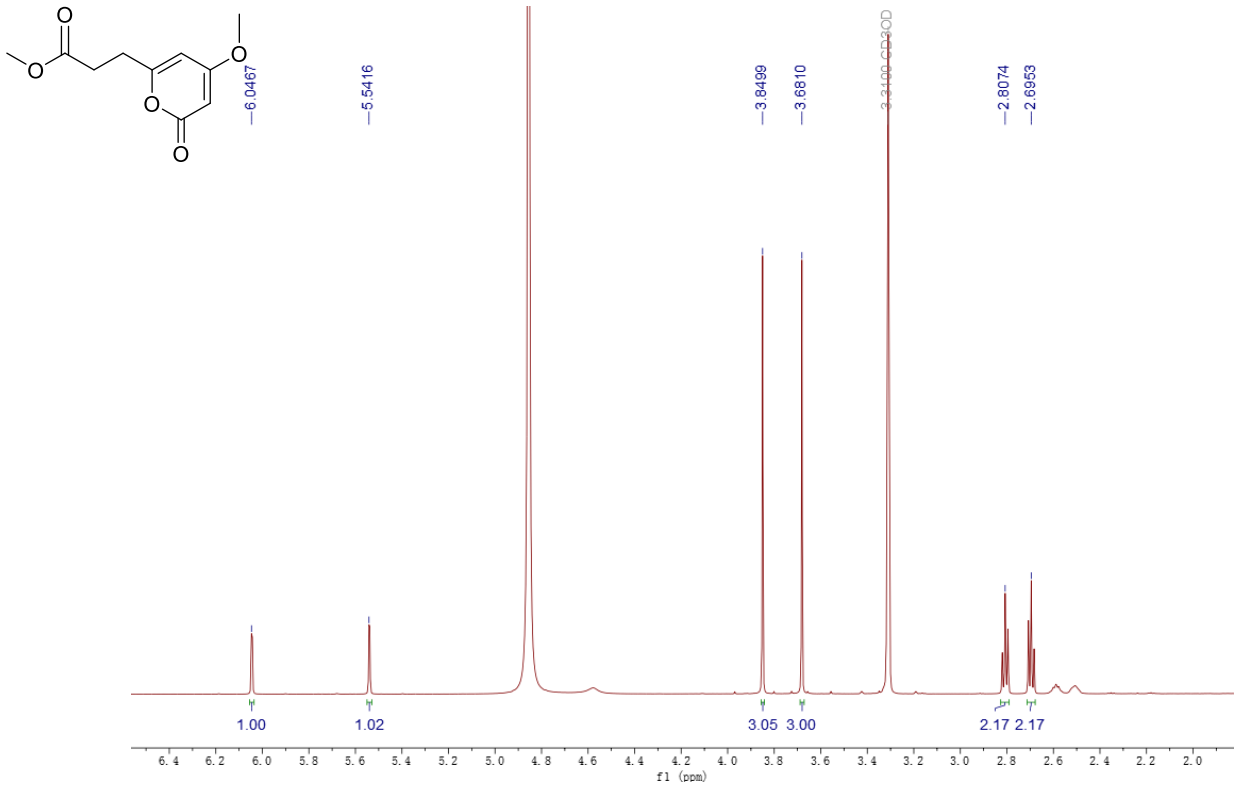


Fig. S90 ^{1}H NMR spectrum of **11** in methanol-d_4 (600 MHz).

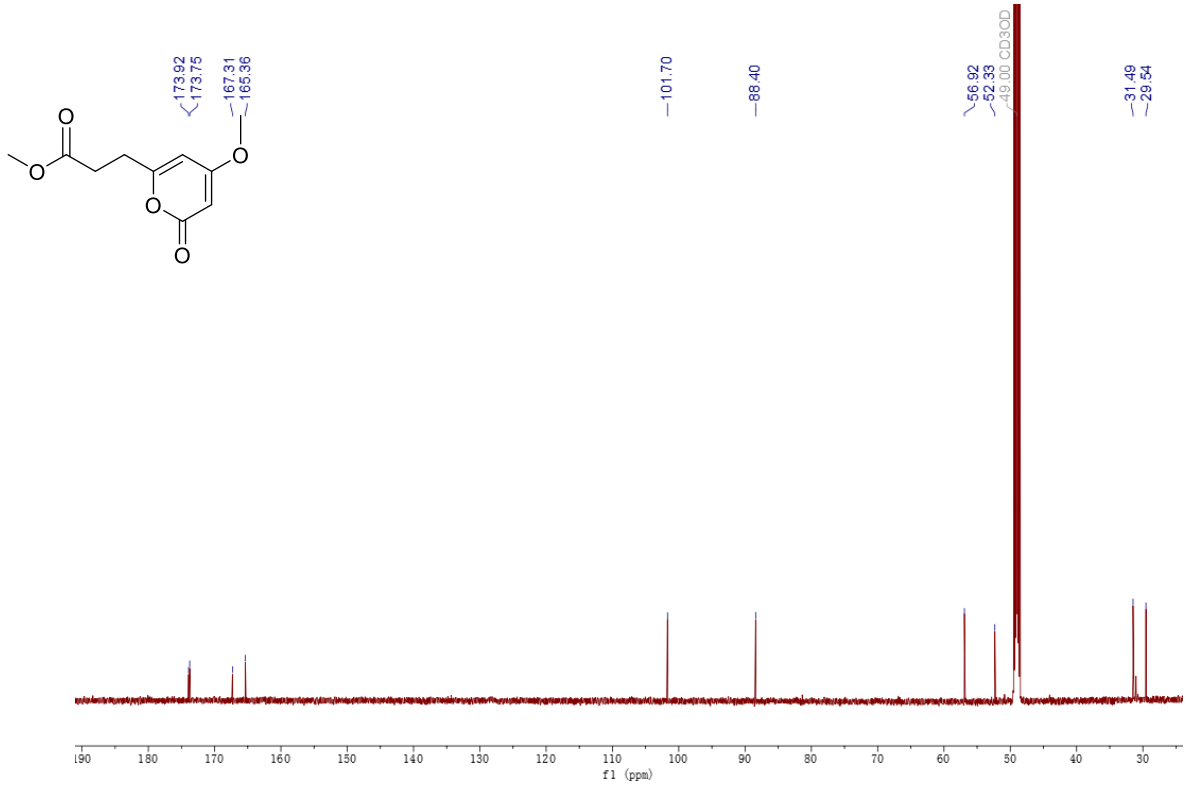


Fig. S91 ^{13}C NMR spectrum of **11** in methanol-d_4 (150 MHz).

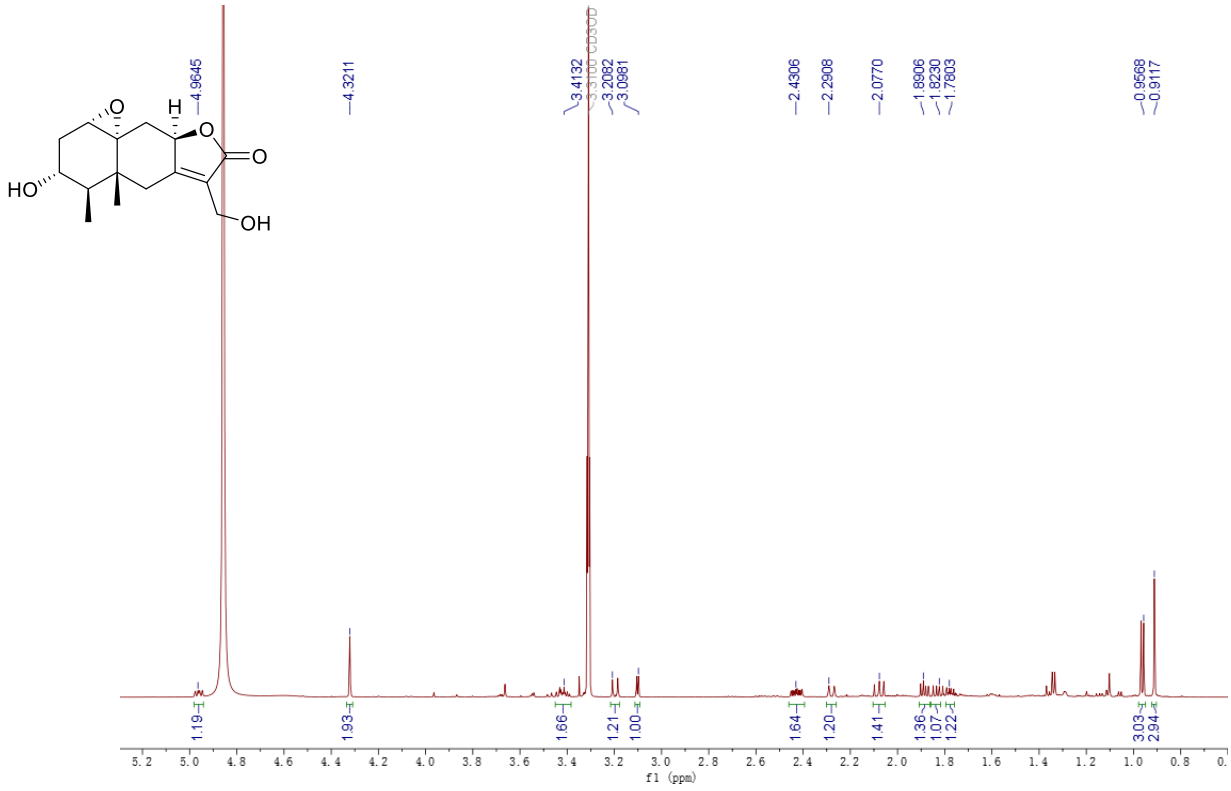


Fig. S92 ^{1}H NMR spectrum of **12** in methanol-d_4 (600 MHz).

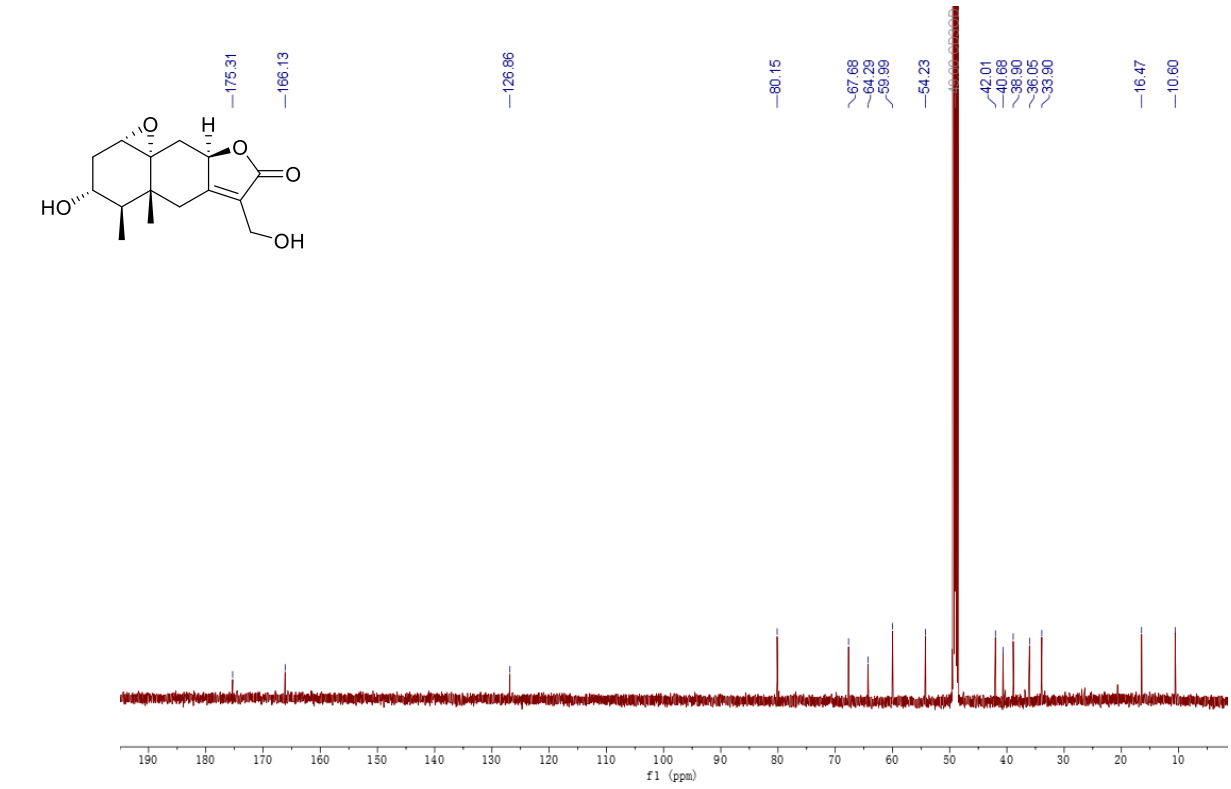


Fig. S93 ^{13}C NMR spectrum of **12** in methanol-d_4 (150 MHz).

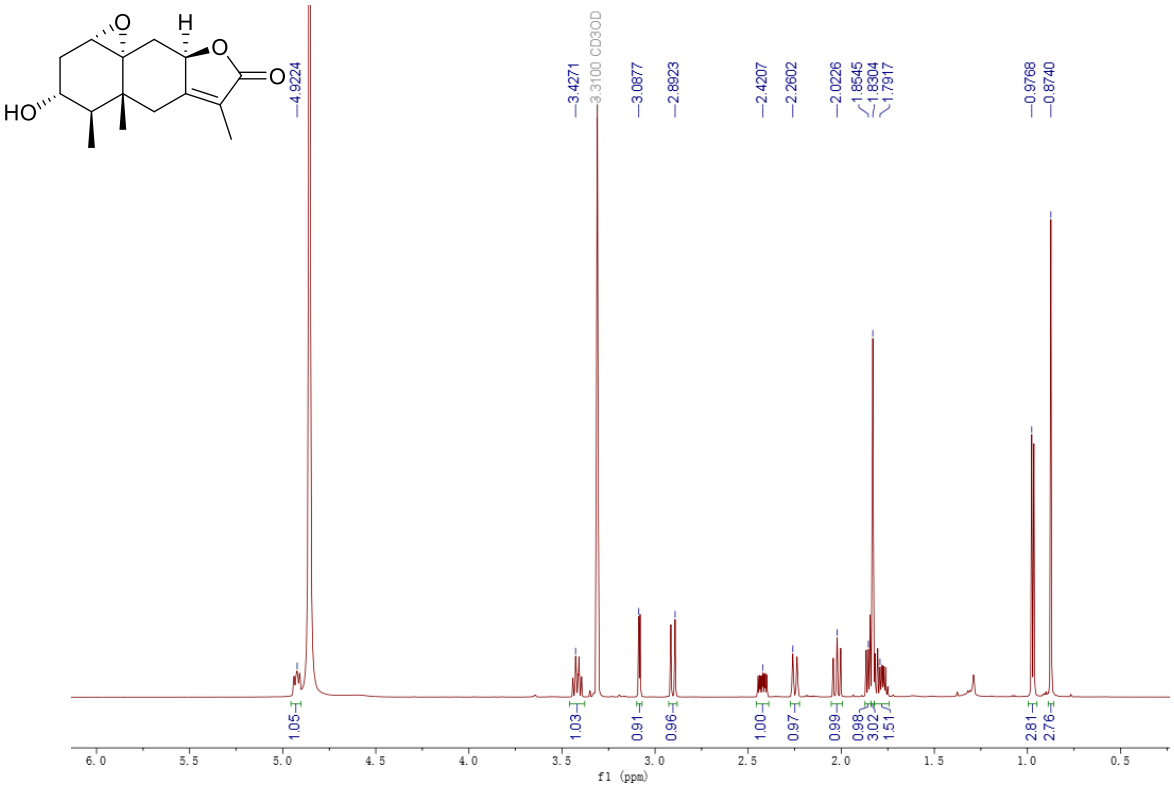


Fig. S94 ^{1}H NMR spectrum of **13** in methanol-d_4 (600 MHz).

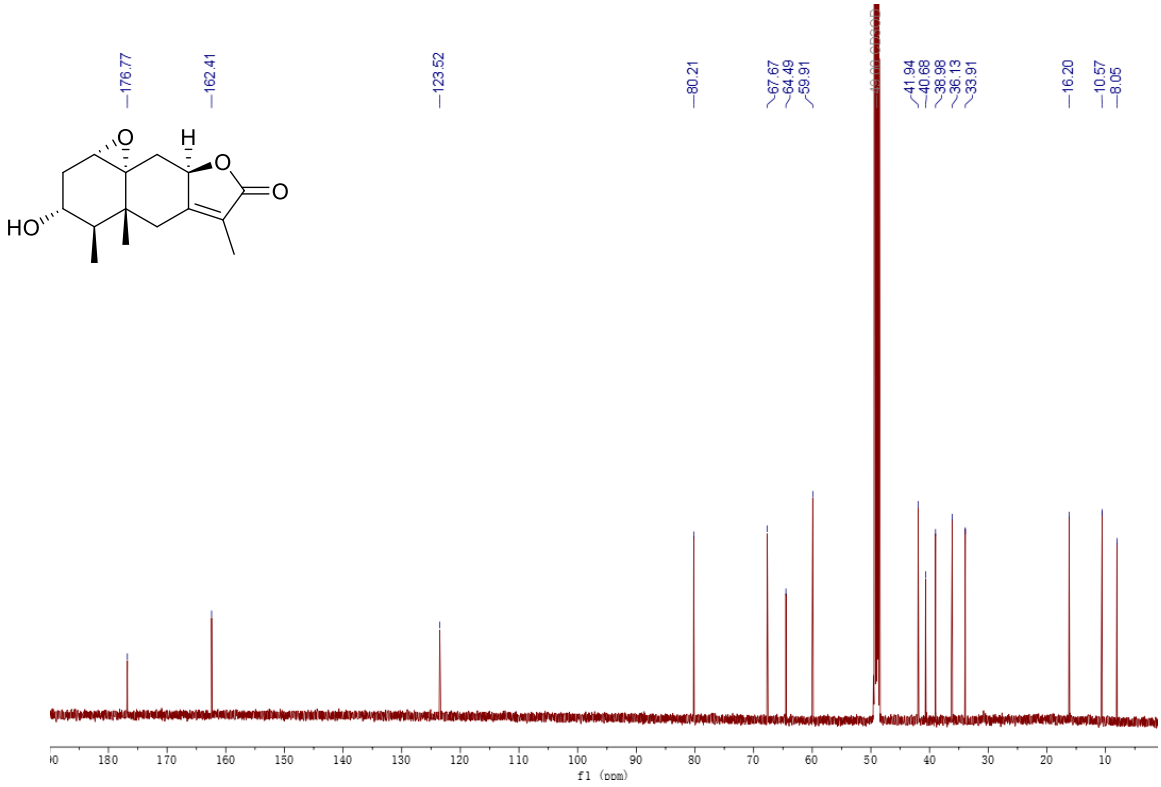


Fig. S95 ^{13}C NMR spectrum of **13** in methanol-d_4 (150 MHz).

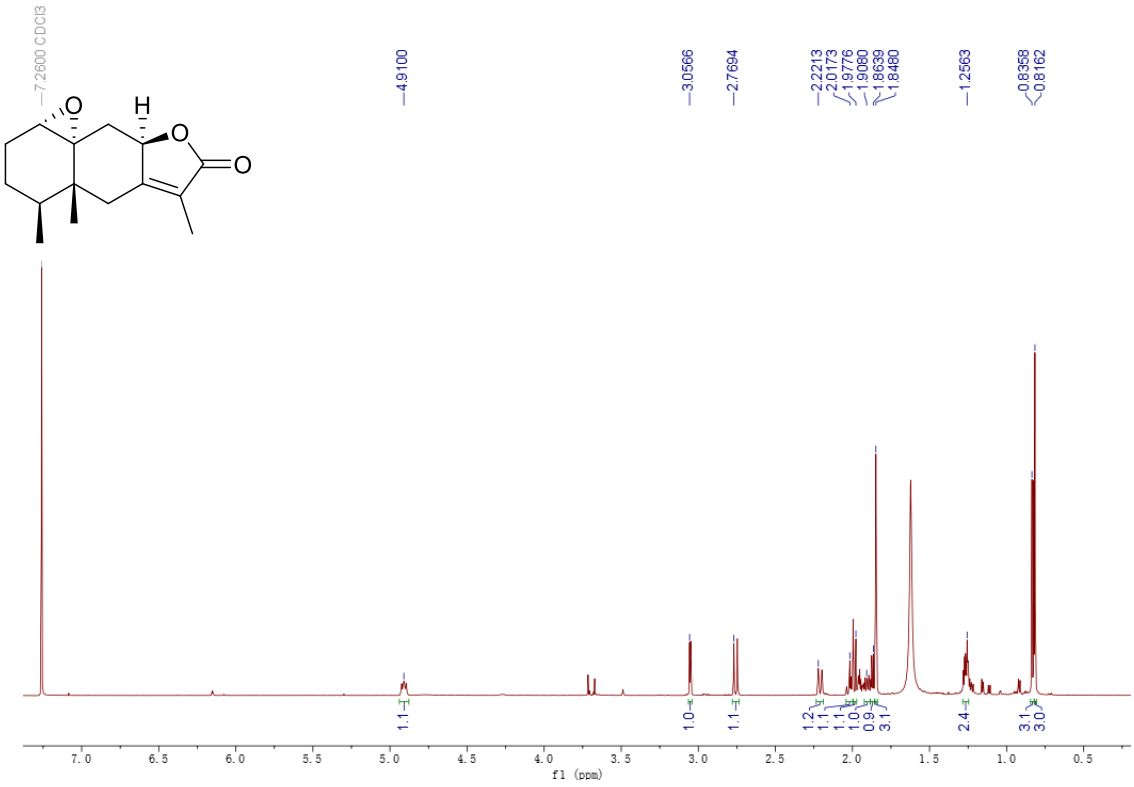


Fig. S96 ^{1}H NMR spectrum of **14** in chloroform-*d* (600 MHz).

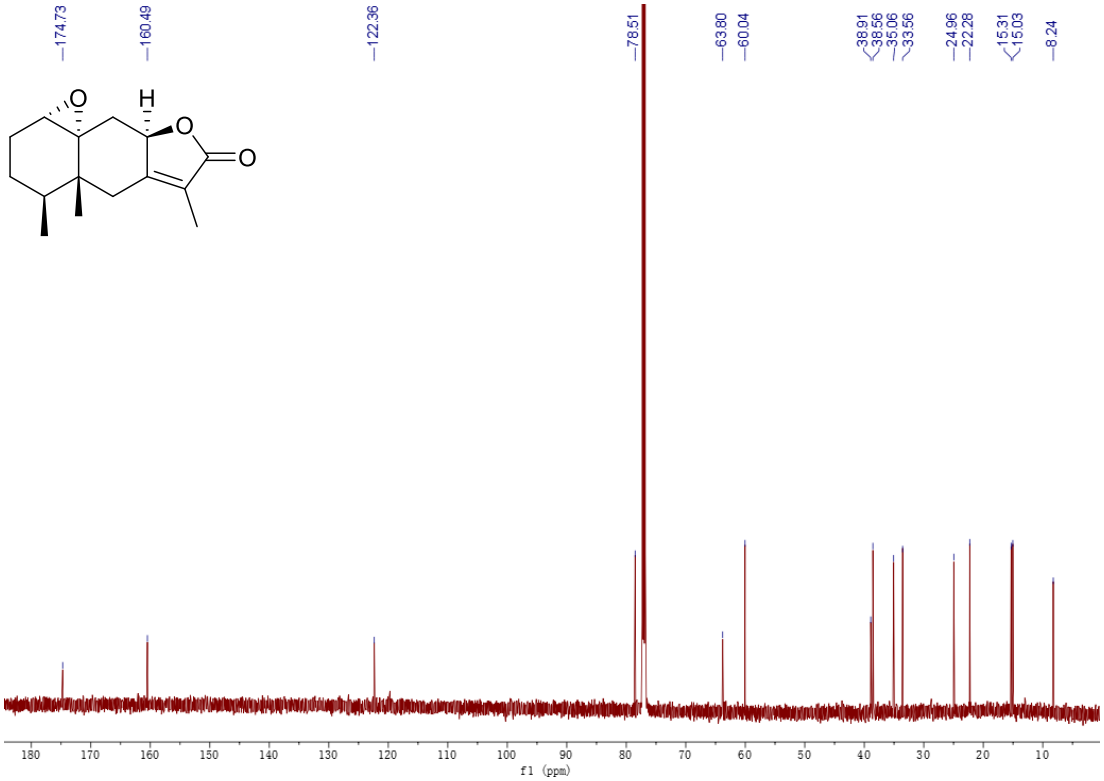


Fig. S97 ^{13}C NMR spectrum of **14** in chloroform-*d* (150 MHz).

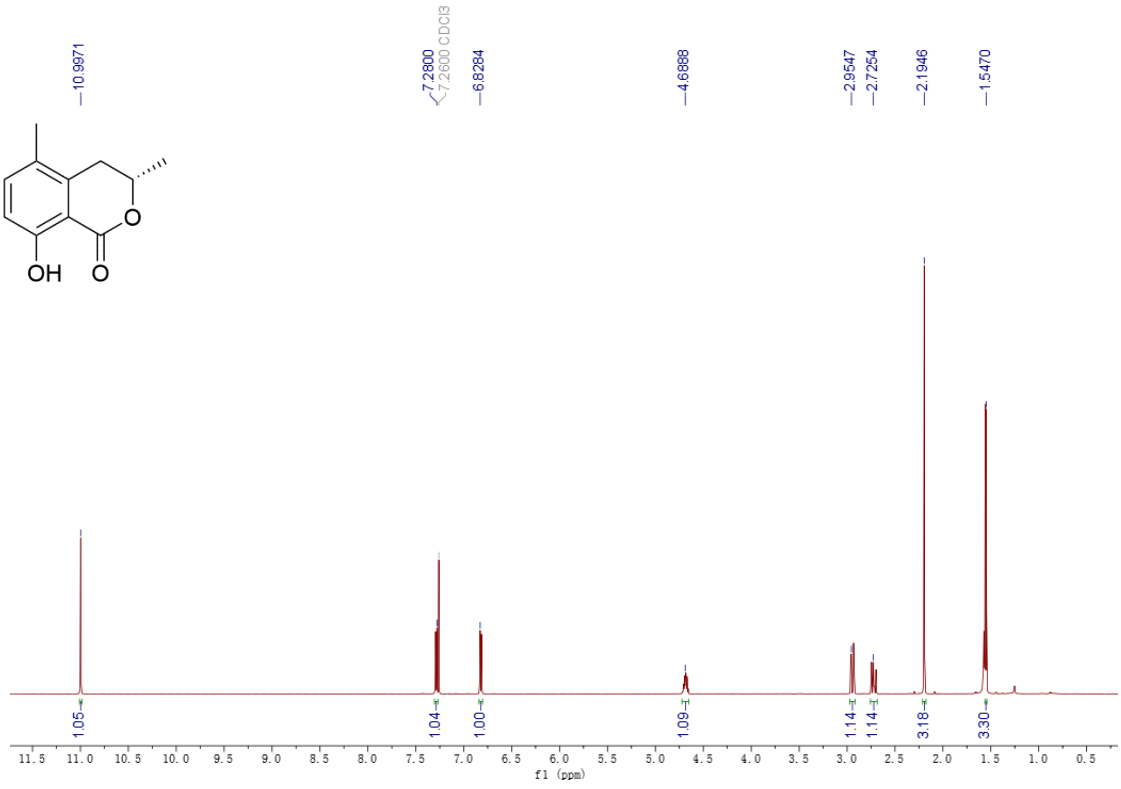


Fig. S98 ^{1}H NMR spectrum of **15** in chloroform-*d* (600 MHz).

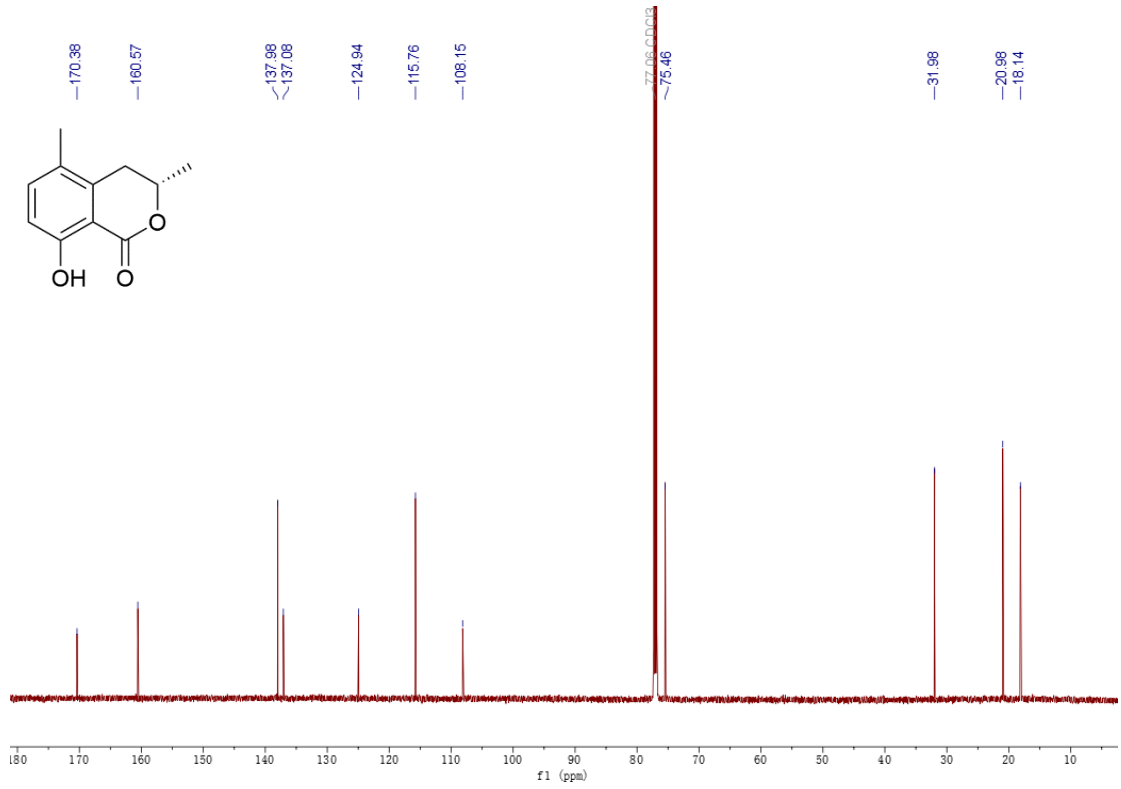


Fig. S99 ^{13}C NMR spectrum of **15** in chloroform-*d* (150 MHz).

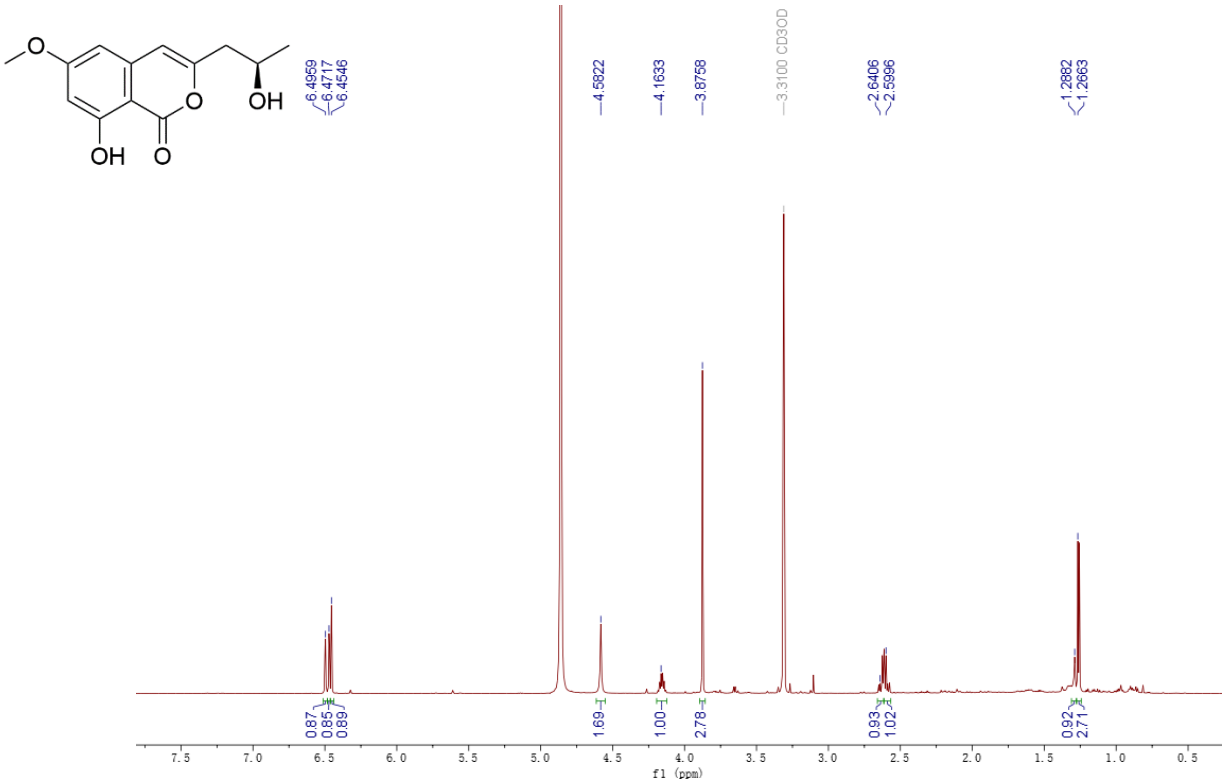


Fig. S100 ^{1}H NMR spectrum of **16** in methanol-d_4 (600 MHz).

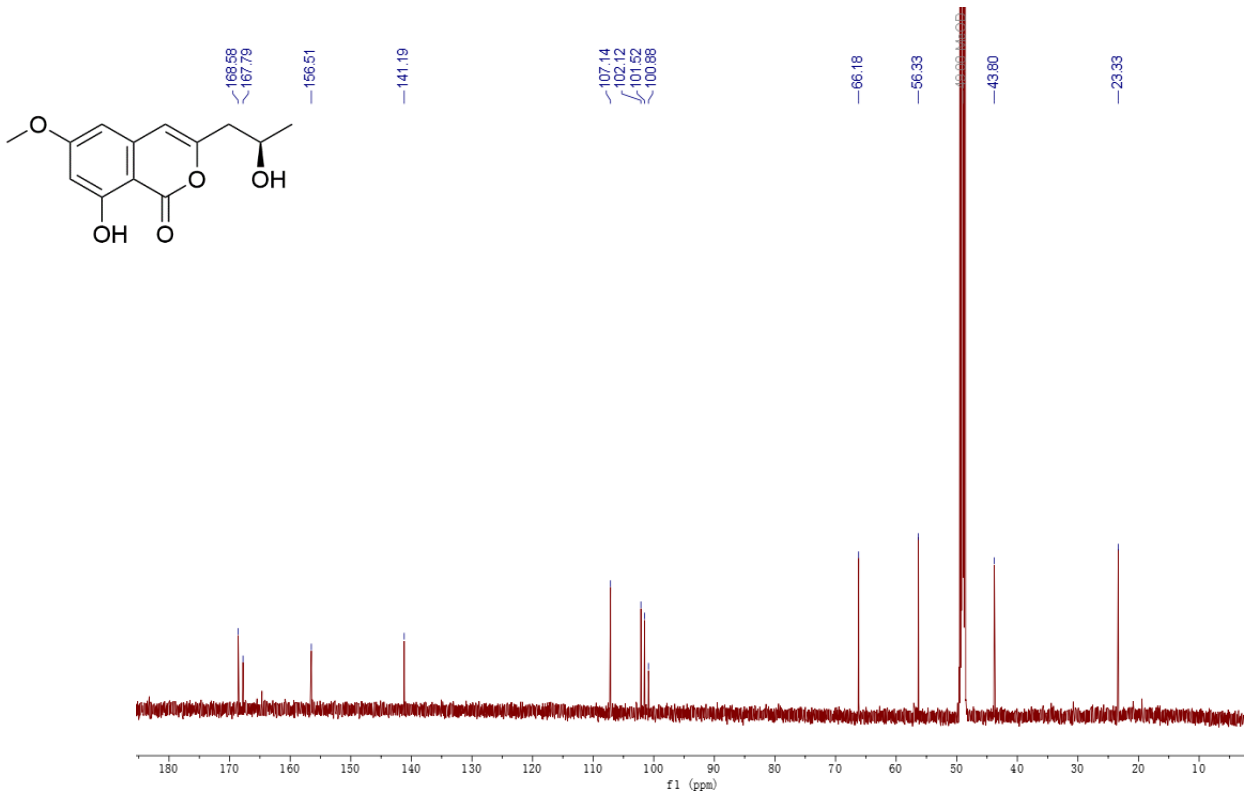


Fig. S101 ^{13}C NMR spectrum of **16** in methanol-d_4 (150 MHz).

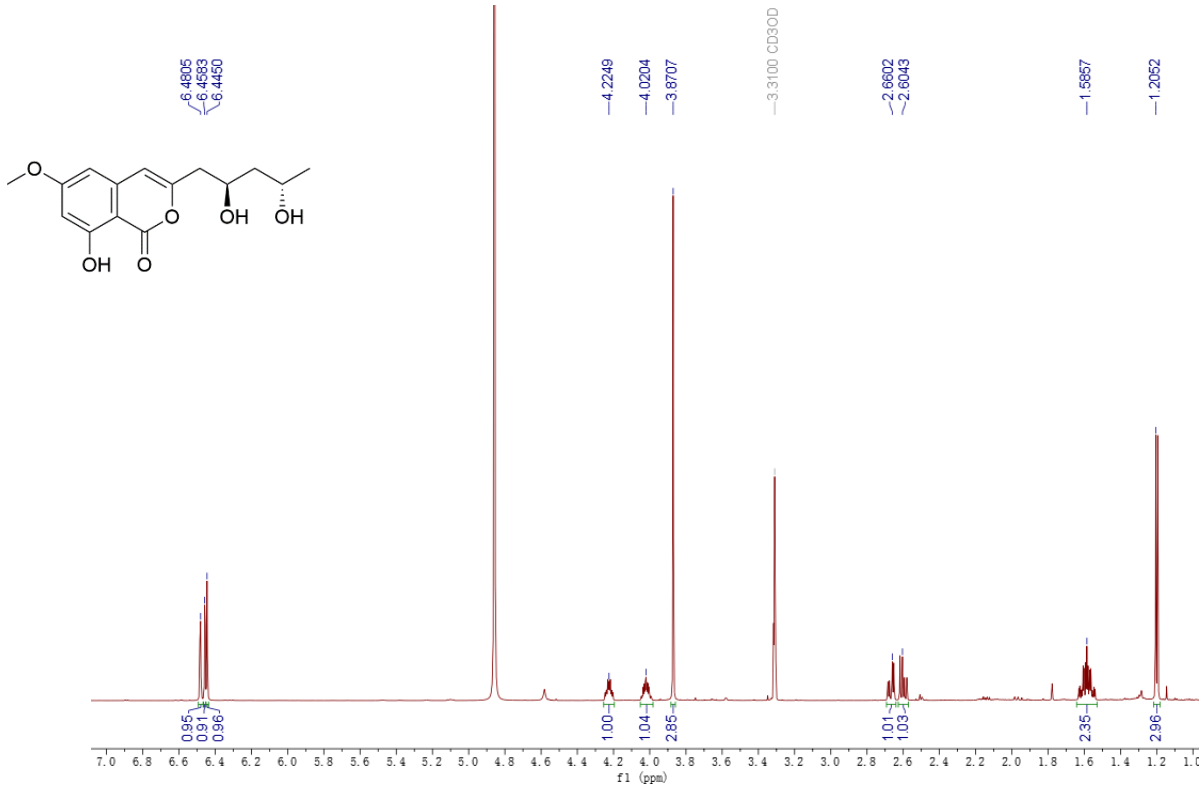


Fig. S102 ^{1}H NMR spectrum of **17** in methanol-d_4 (600 MHz).

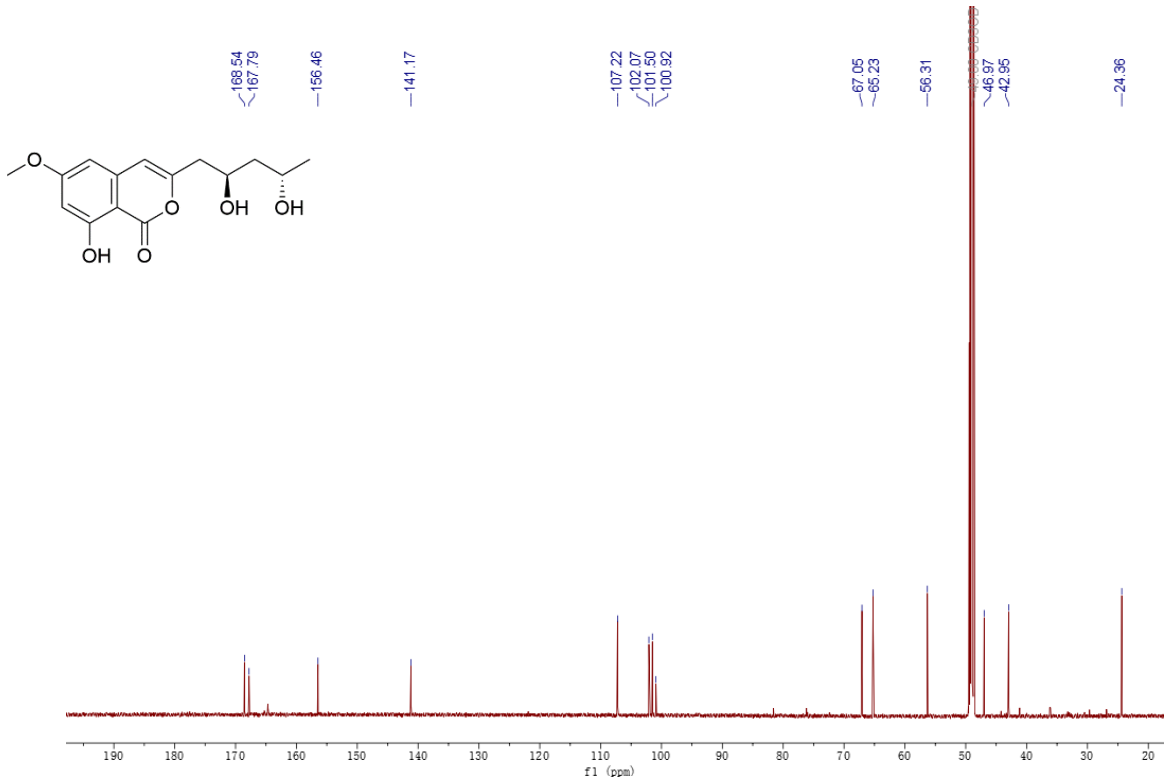


Fig. S103 ^{13}C NMR spectrum of **17** in methanol-d_4 (150 MHz).

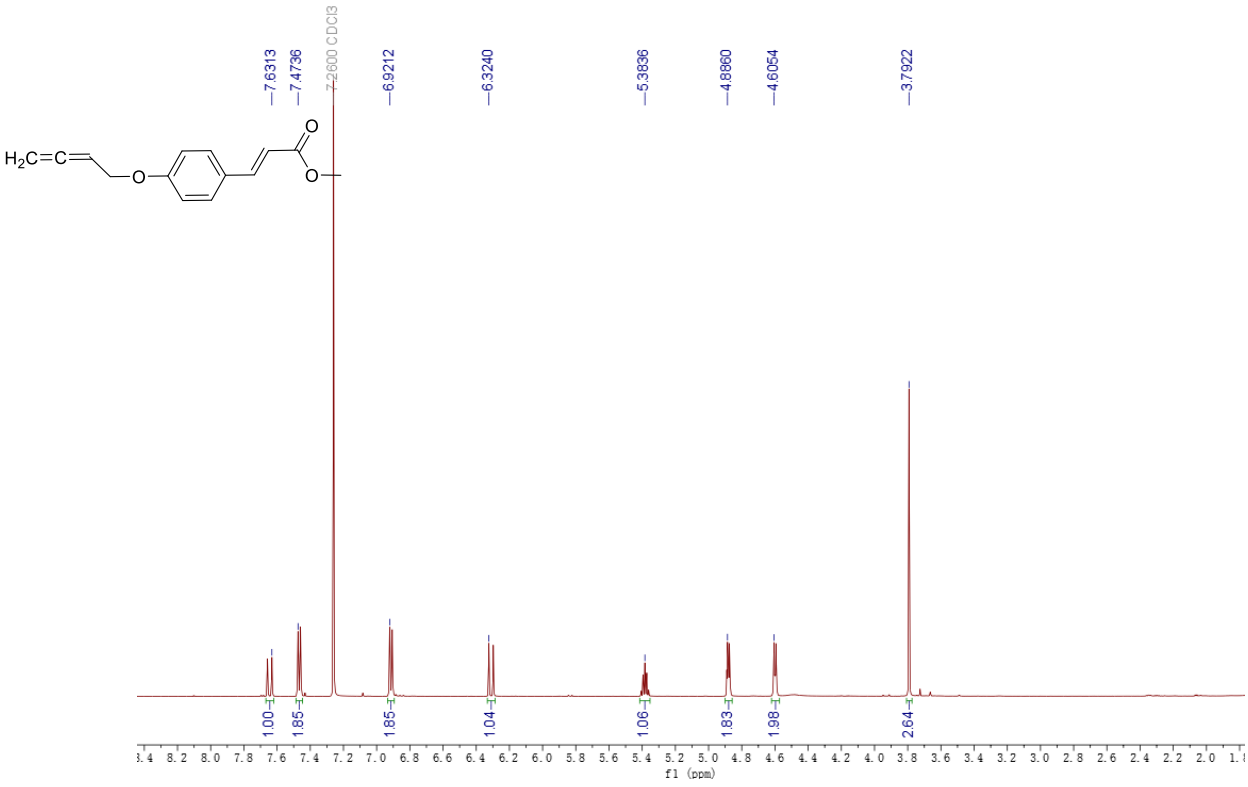


Fig. S104 ^{1}H NMR spectrum of **18** in chloroform-*d* (600 MHz).

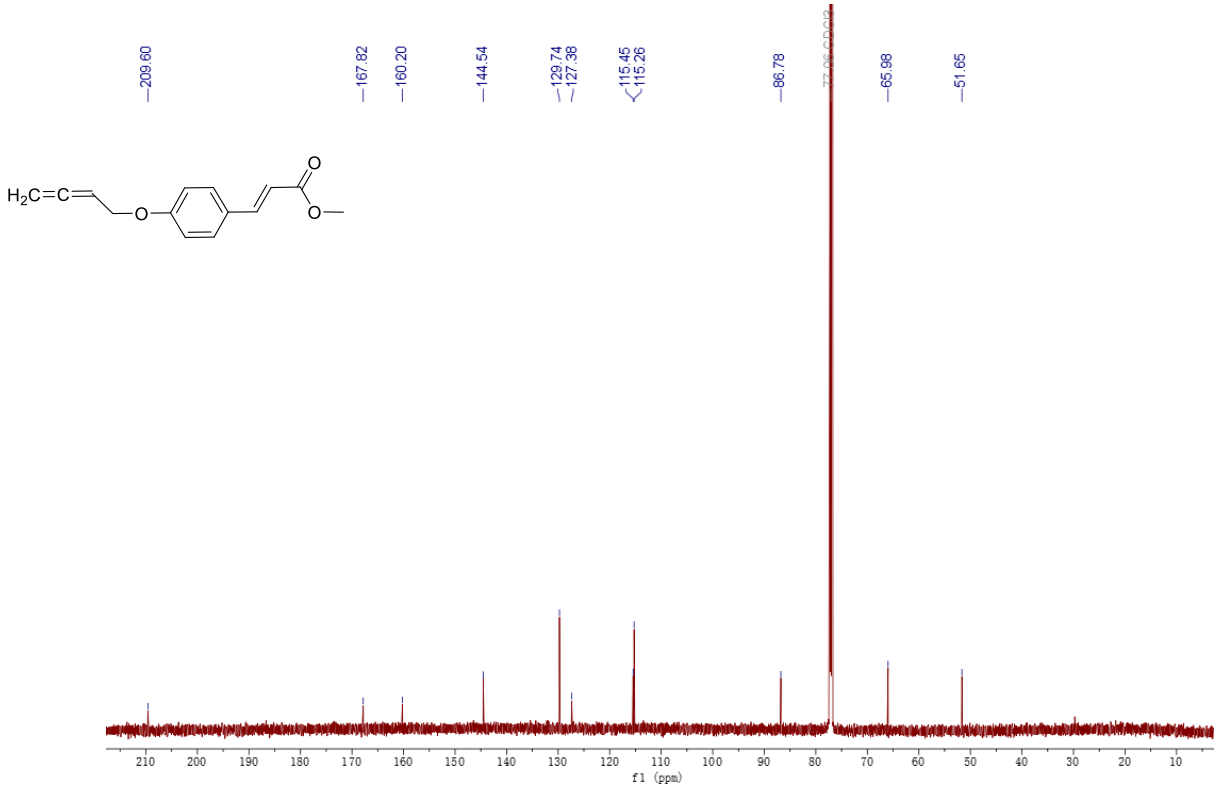


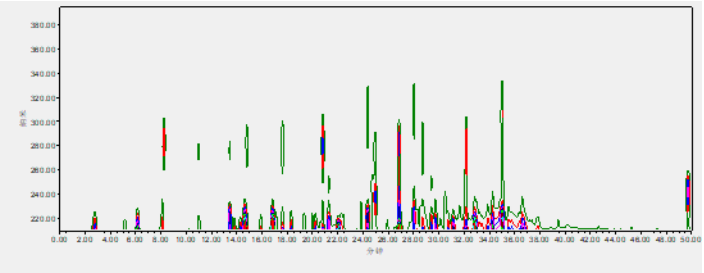
Fig. S105 ^{13}C NMR spectrum of **18** in chloroform-*d* (150 MHz).

HPLC system: Waters, Waters e2695 pump, Waters 2996 detector.

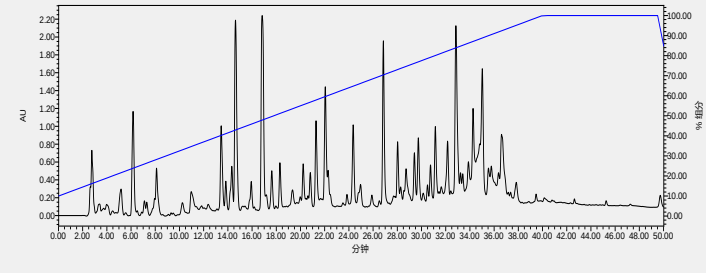
-Column: XB-C18, 5 μm, 4.6 × 250 mm.

-Solvent system.

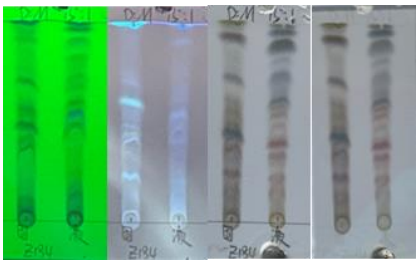
Time (min), Flow rate (1 mL/min)	MeOH (%)	Water (%)
-	10	90
40	100	0
50	100	0



(a) HPLC analysis



Wavelength at 215 nm.



(b) TLC analysis (dichloromethane: methanol = 15:1) of crude extract.

Fig. S106 The TLC and HPLC profiles of the crude extract of *Xylaria* sp. Z184.