

## Supporting information

### Antioxidative Polyketones from the Mangrove-Derived Fungus *Ascomycota* sp. SK2YWS-L

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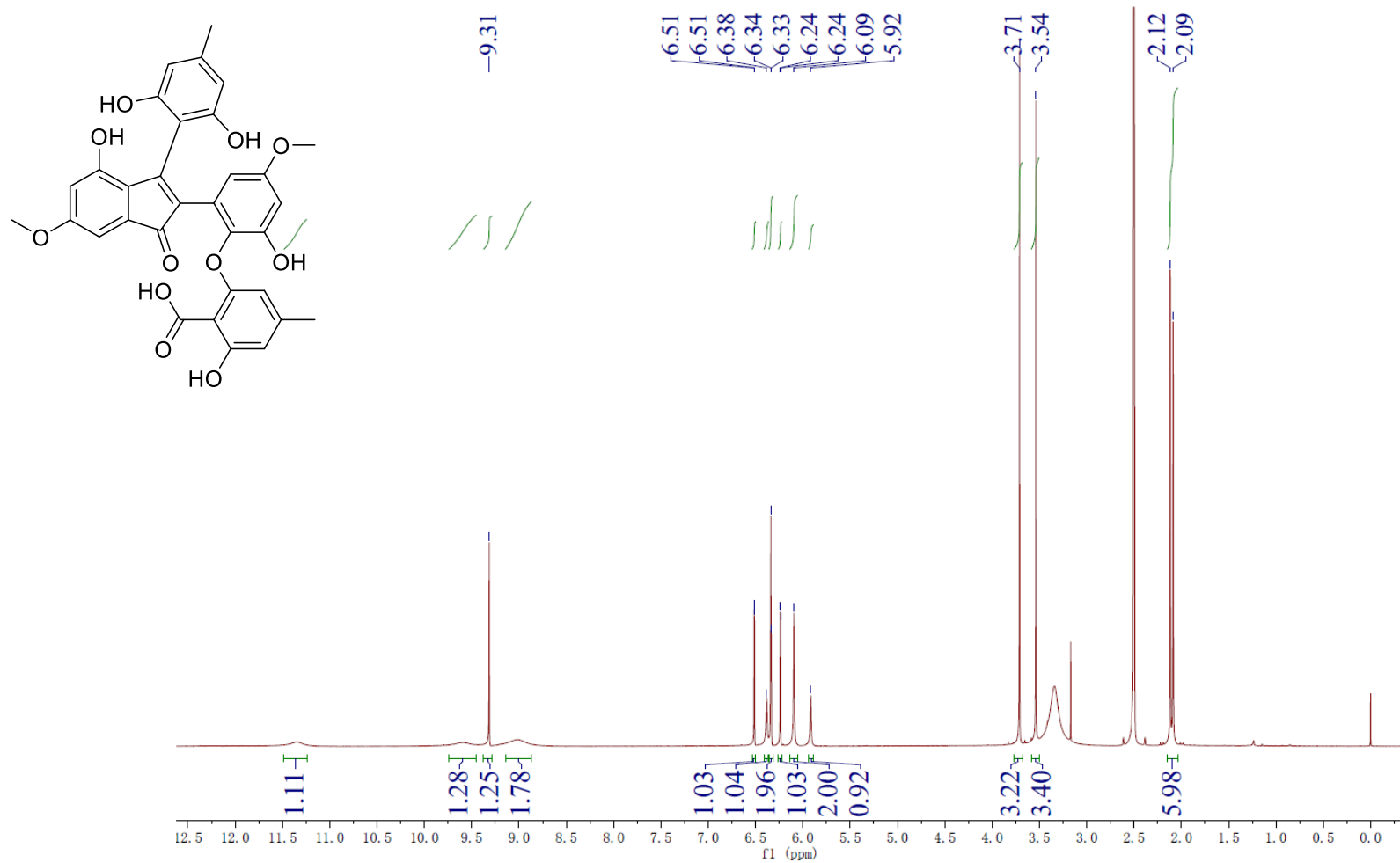
**Figure S1.** <sup>1</sup>H NMR spectrum of compound **1** in DMSO-*d*<sub>6</sub> (600 MHz).

**Figure S2.** <sup>13</sup>C NMR spectrum of compound **1** in DMSO-*d*<sub>6</sub> (150 MHz).

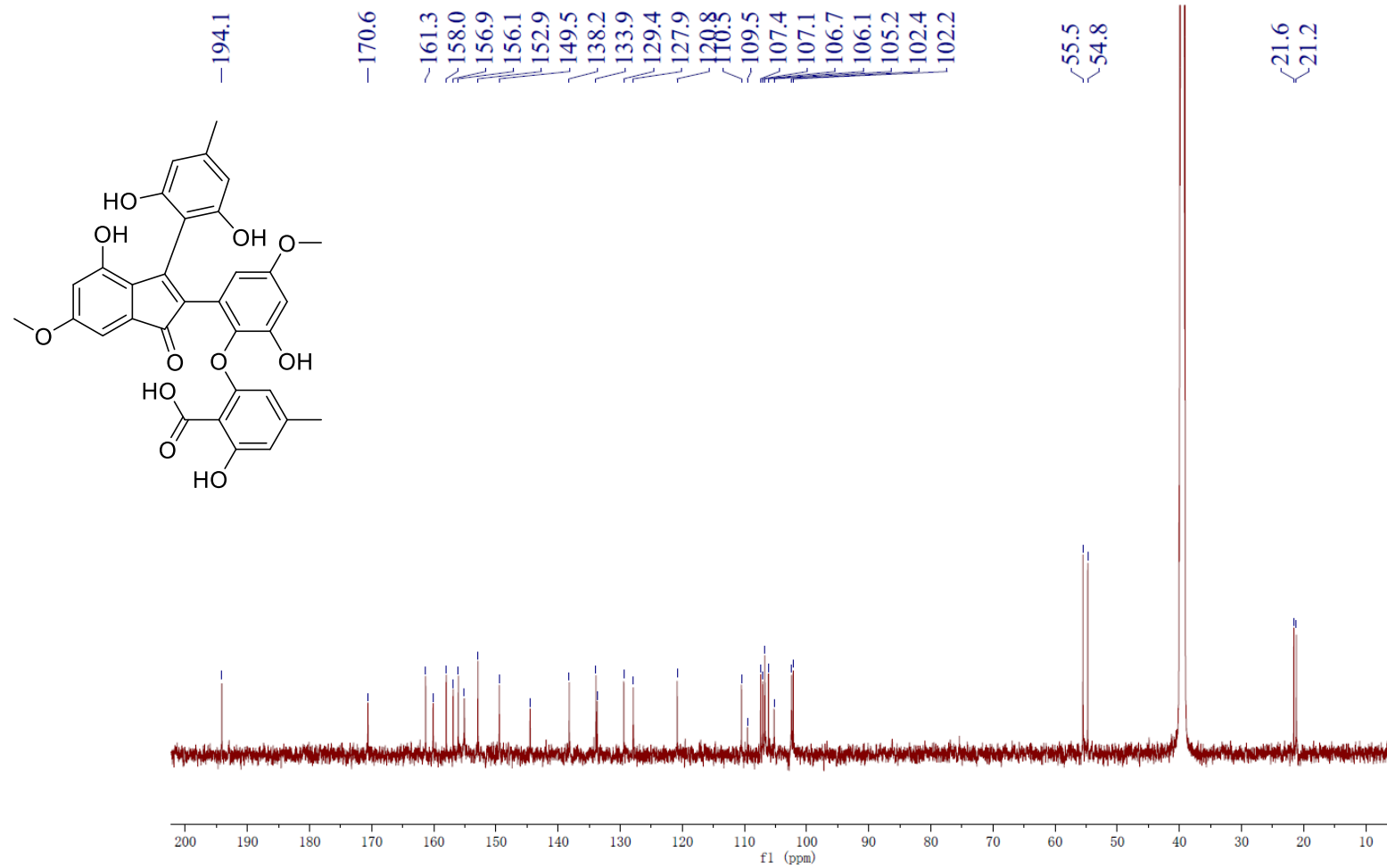
**Figure S3.** DEPT-90 ° spectrum of compound **1** in DMSO-*d*<sub>6</sub> (150 MHz).  
**Figure S4.** DEPT-135 ° spectrum of compound **1** in DMSO-*d*<sub>6</sub> (150 MHz).  
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- Figure S36.** HRESIMS spectrum of compound **1**.
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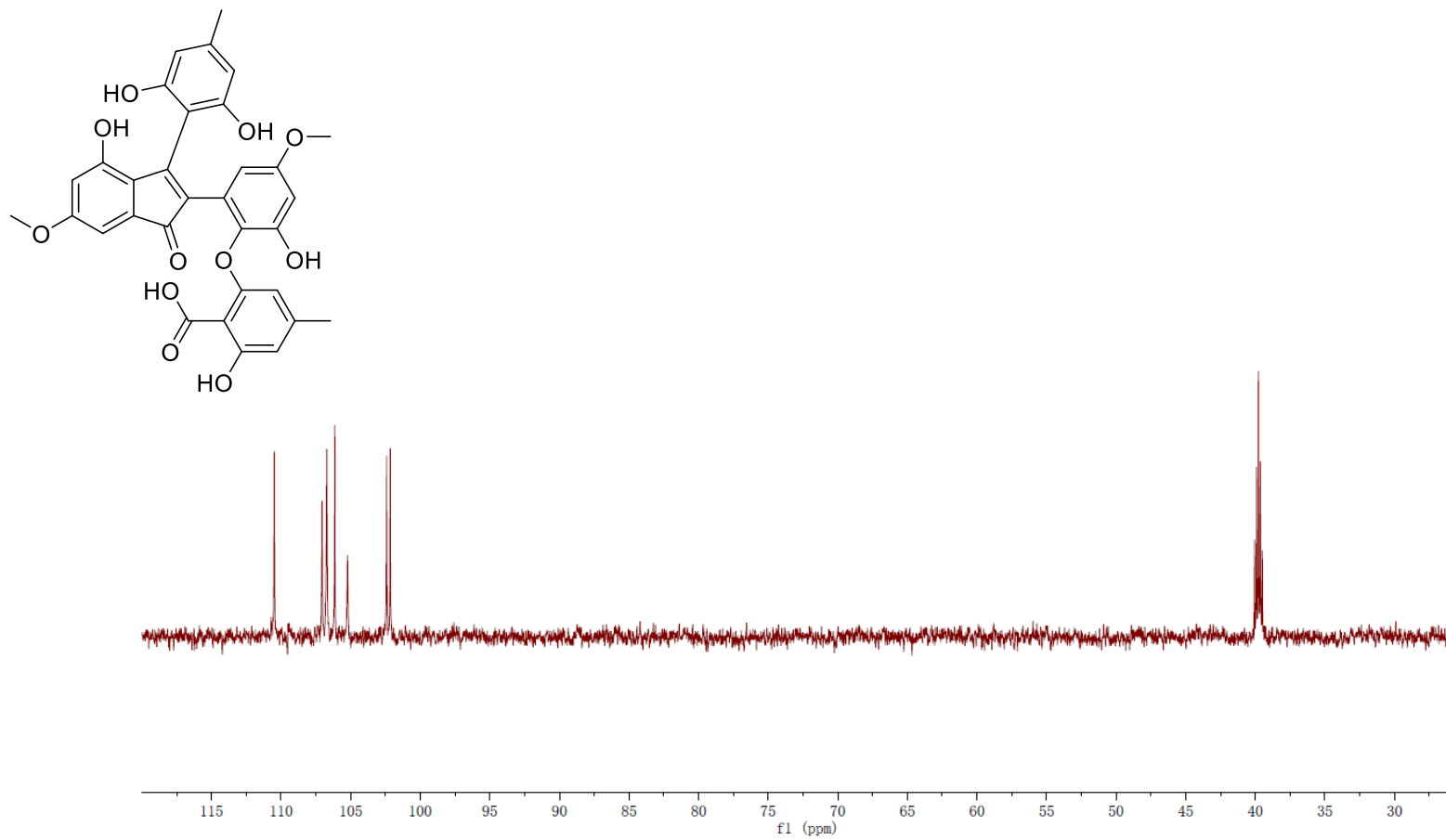
**Figure S1.**  $^1\text{H}$  NMR spectrum of compound **1** in  $\text{DMSO-}d_6$  (600 MHz).



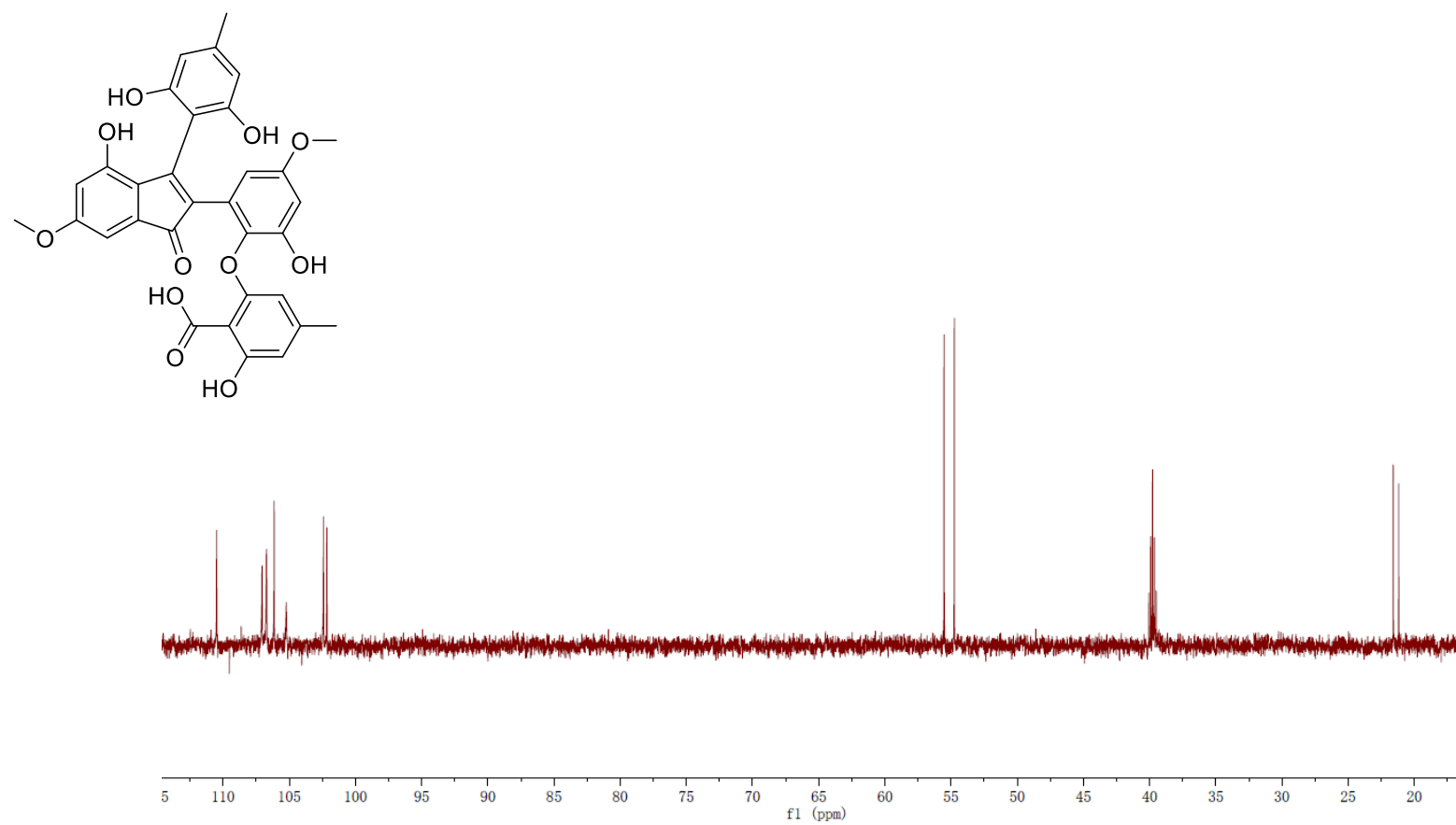
**Figure S2.**  $^{13}\text{C}$  NMR spectrum of compound **1** in  $\text{DMSO-}d_6$  (150 MHz).



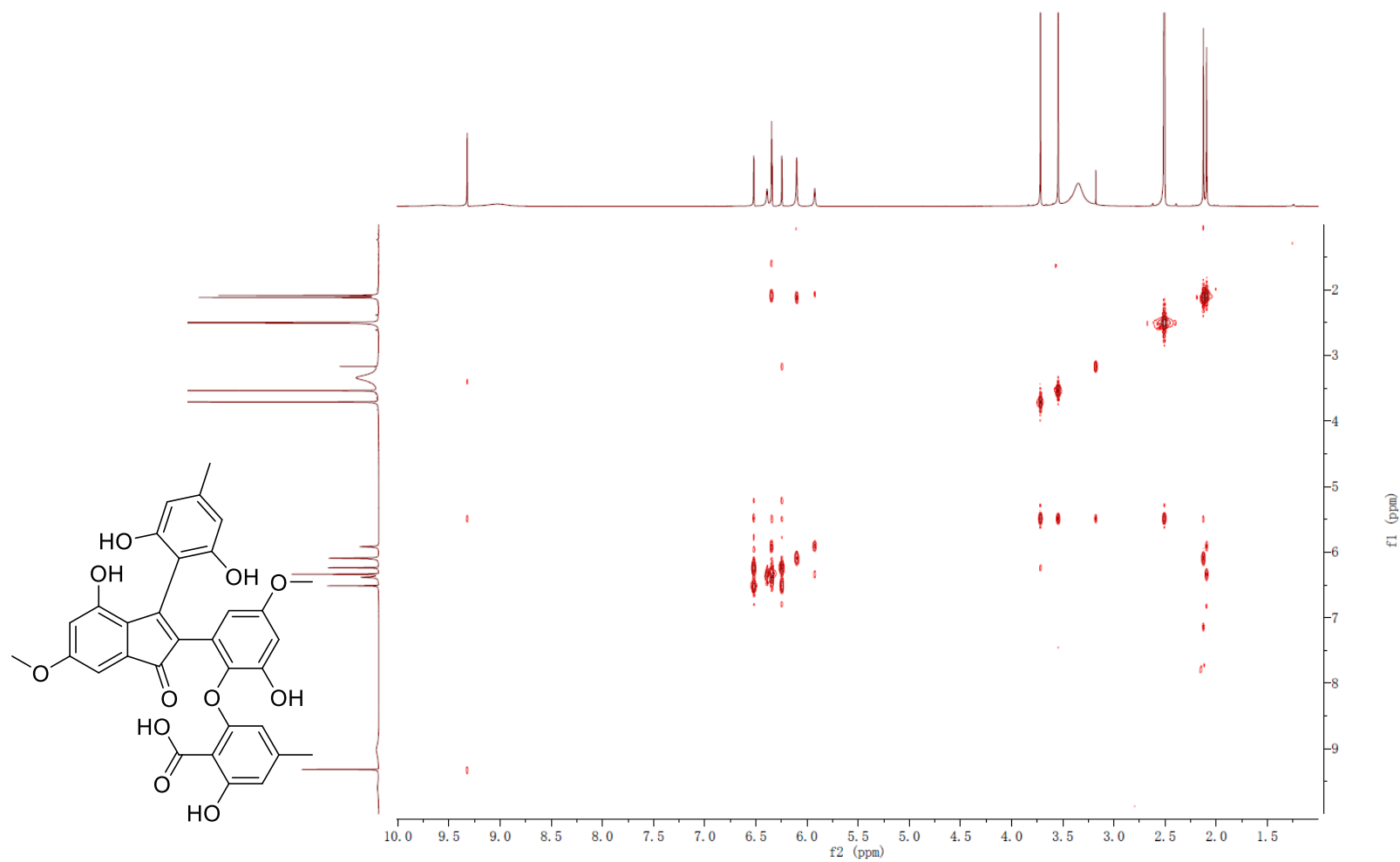
**Figure S3.** DEPT-90 ° spectrum of compound **1** in DMSO-*d*<sub>6</sub> (150 MHz).



**Figure S4.** DEPT-135 ° spectrum of compound **1** in DMSO-*d*<sub>6</sub> (150 MHz).

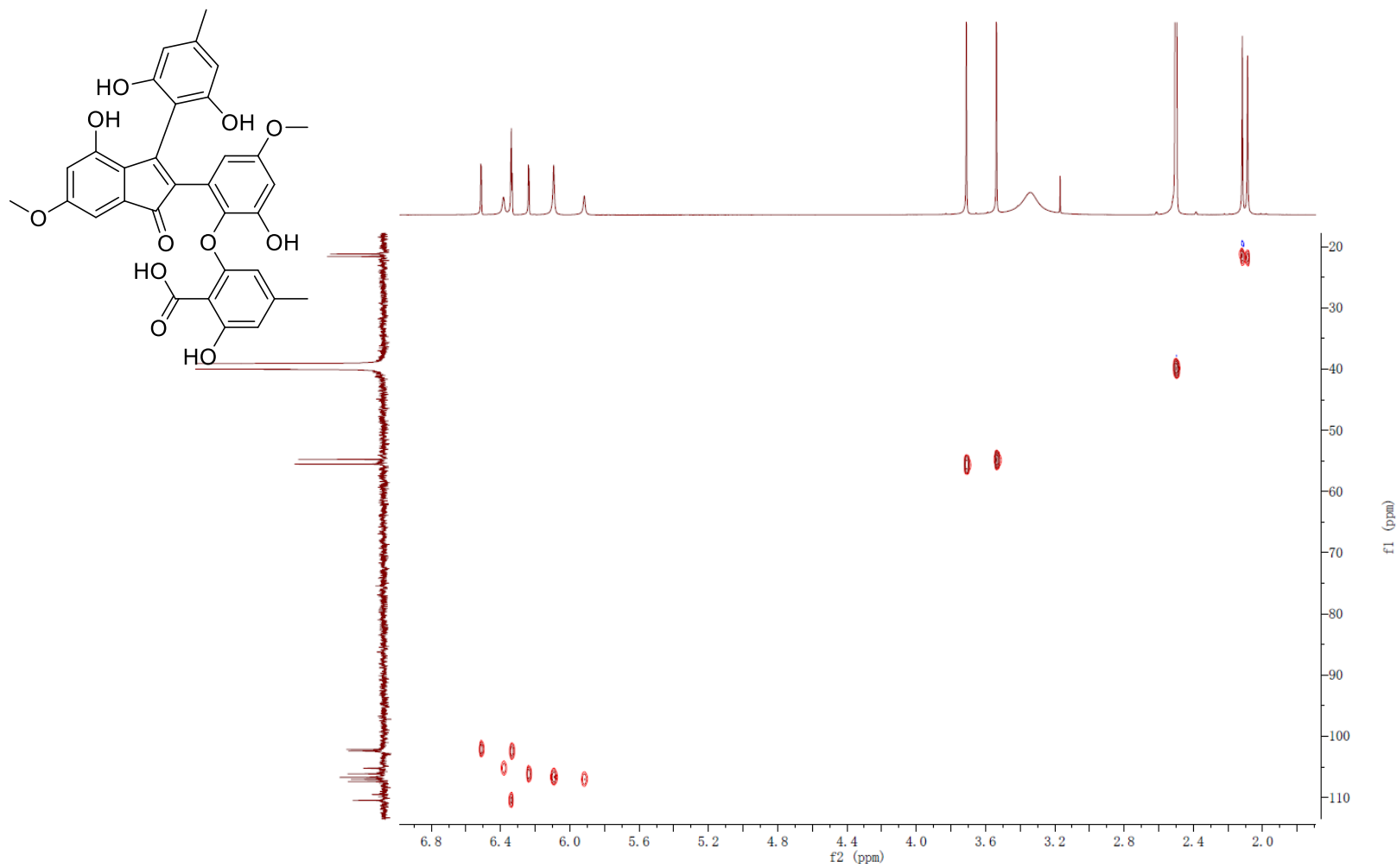


**Figure S5.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound **1** in  $\text{DMSO-}d_6$  (600 MHz).

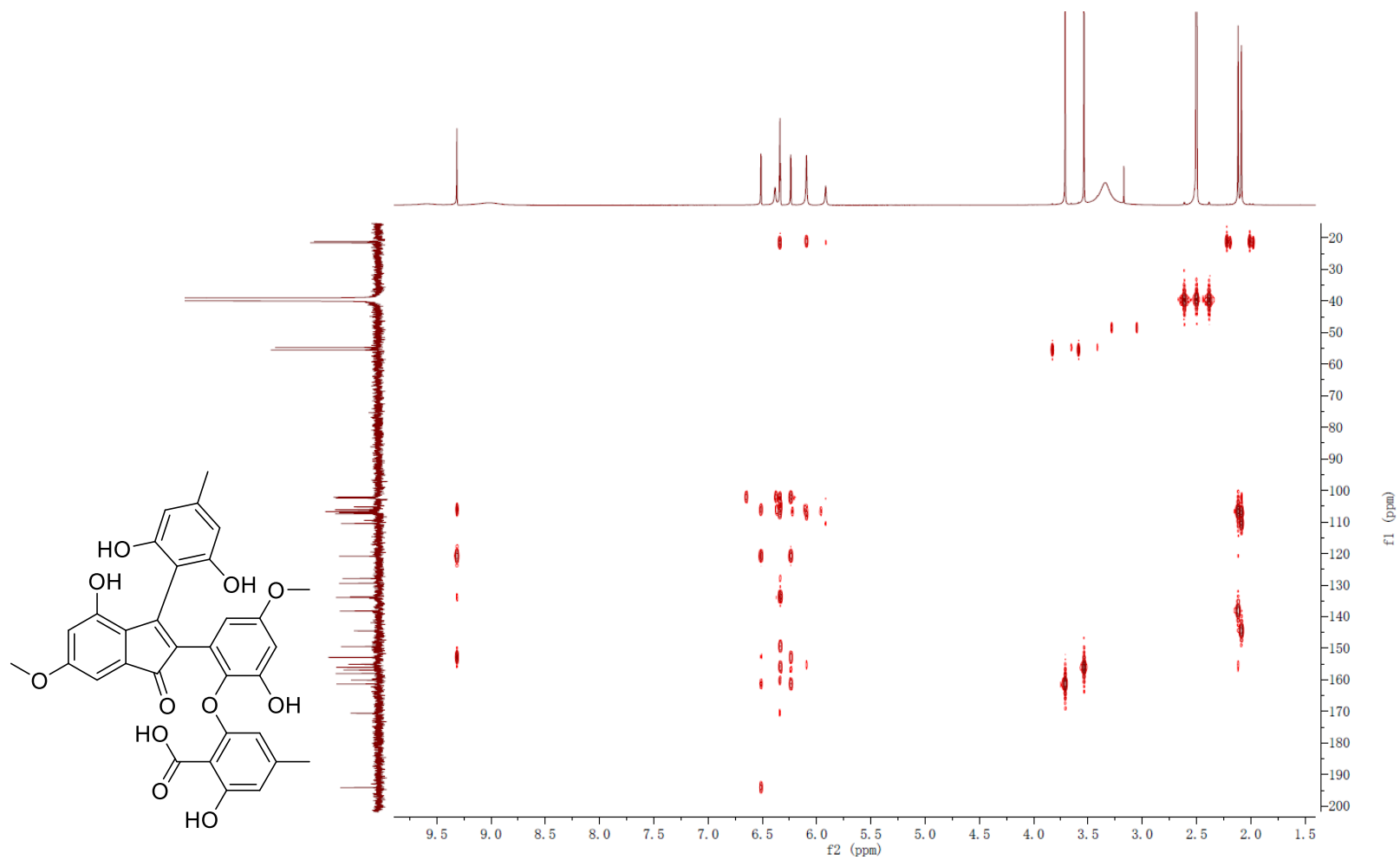




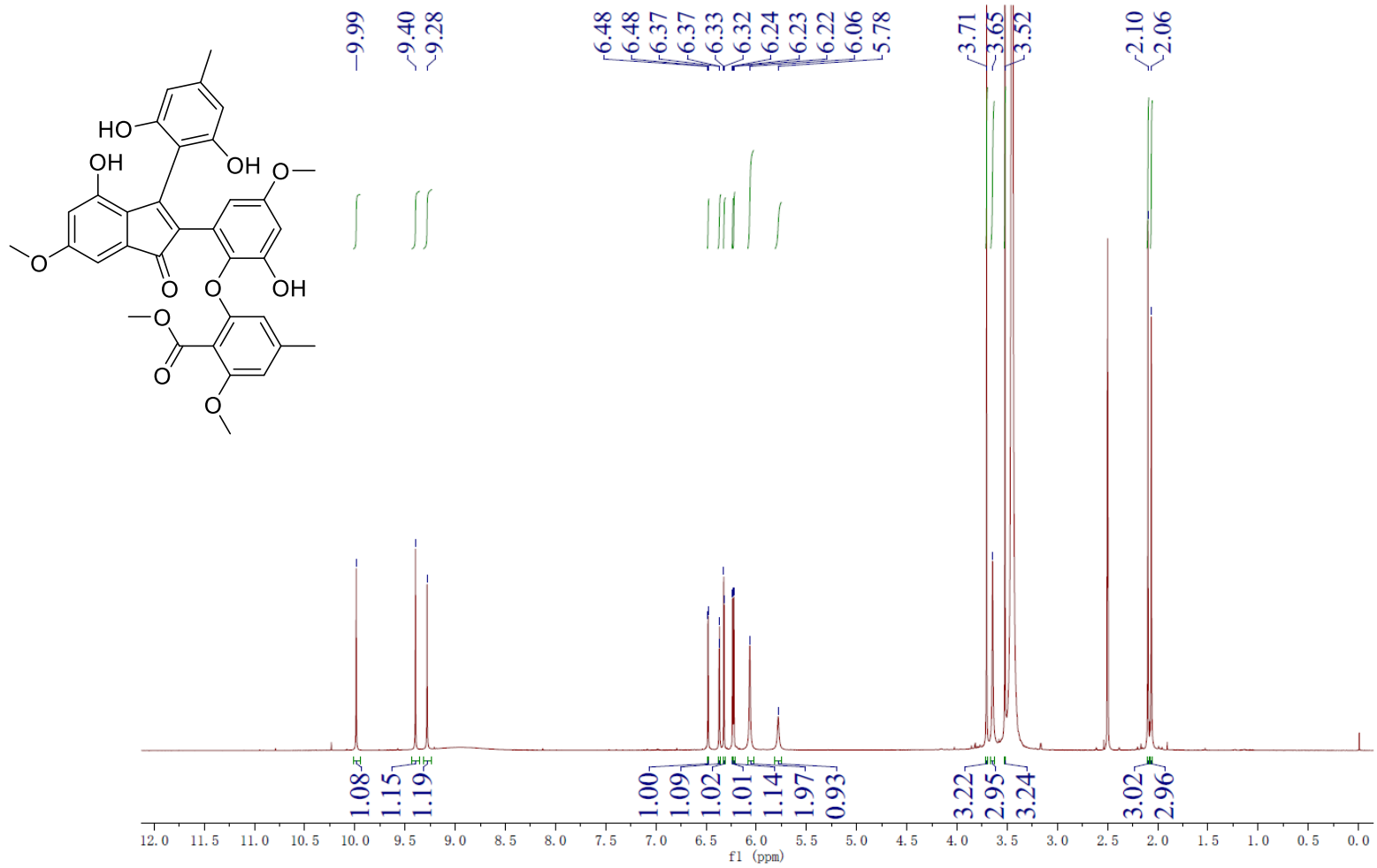
**Figure S6.** HSQC spectrum of compound **1** in DMSO-*d*<sub>6</sub> (600 MHz).



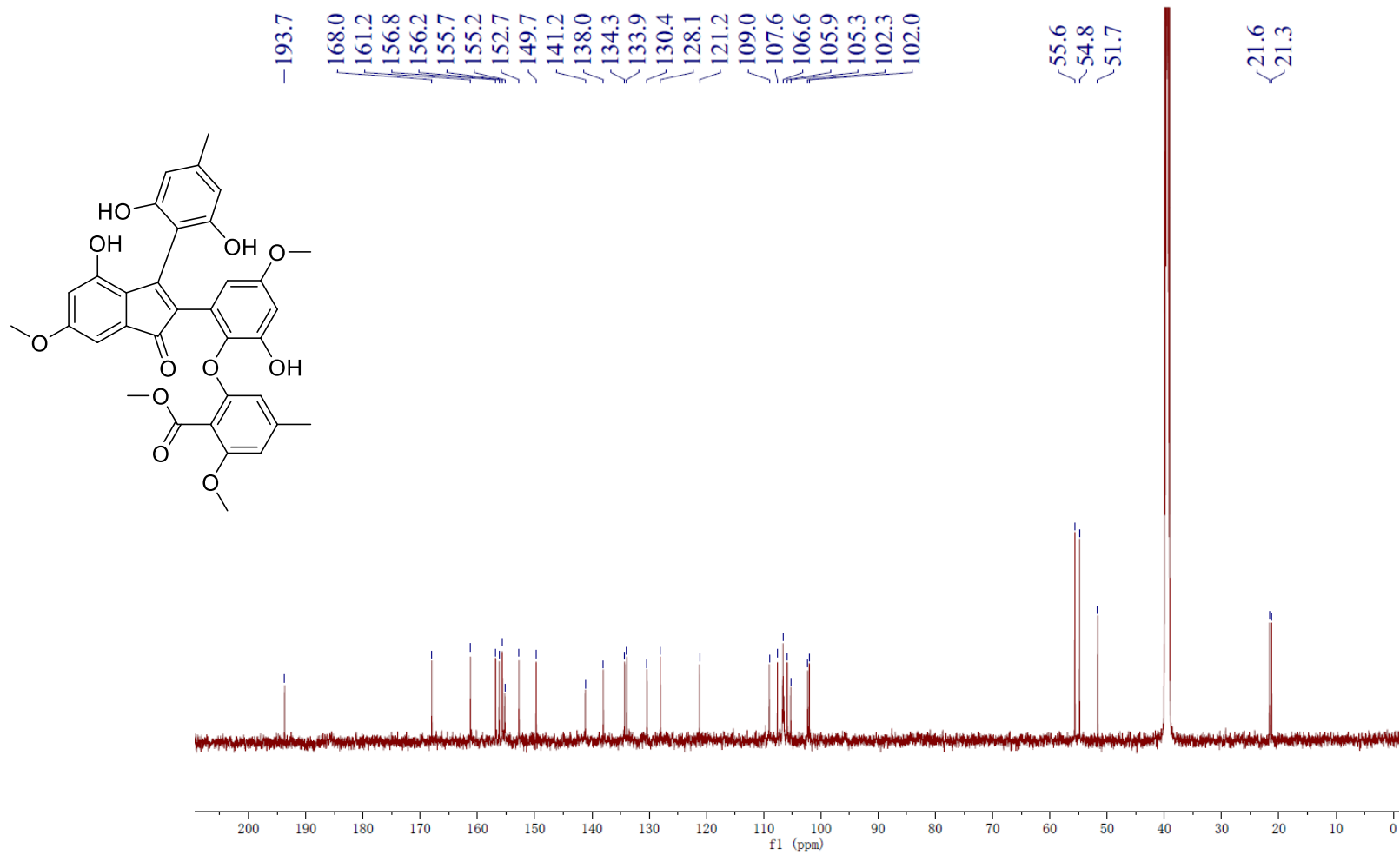
**Figure S7.** HMBC spectrum of compound **1** in DMSO-*d*<sub>6</sub> (600 MHz).



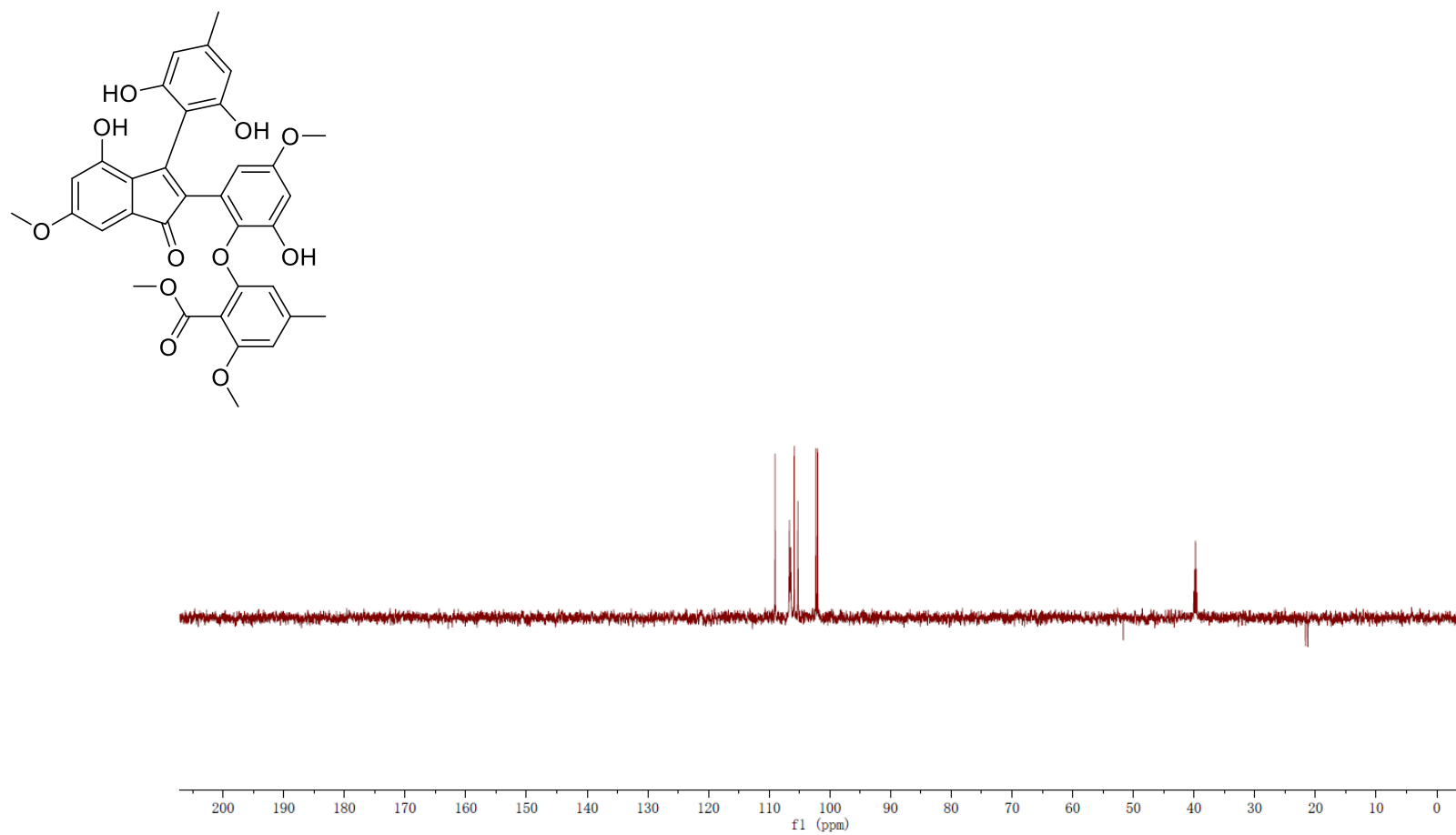
**Figure S8.**  $^1\text{H}$  NMR spectrum of compound **2** in  $\text{DMSO-}d_6$  (600 MHz).



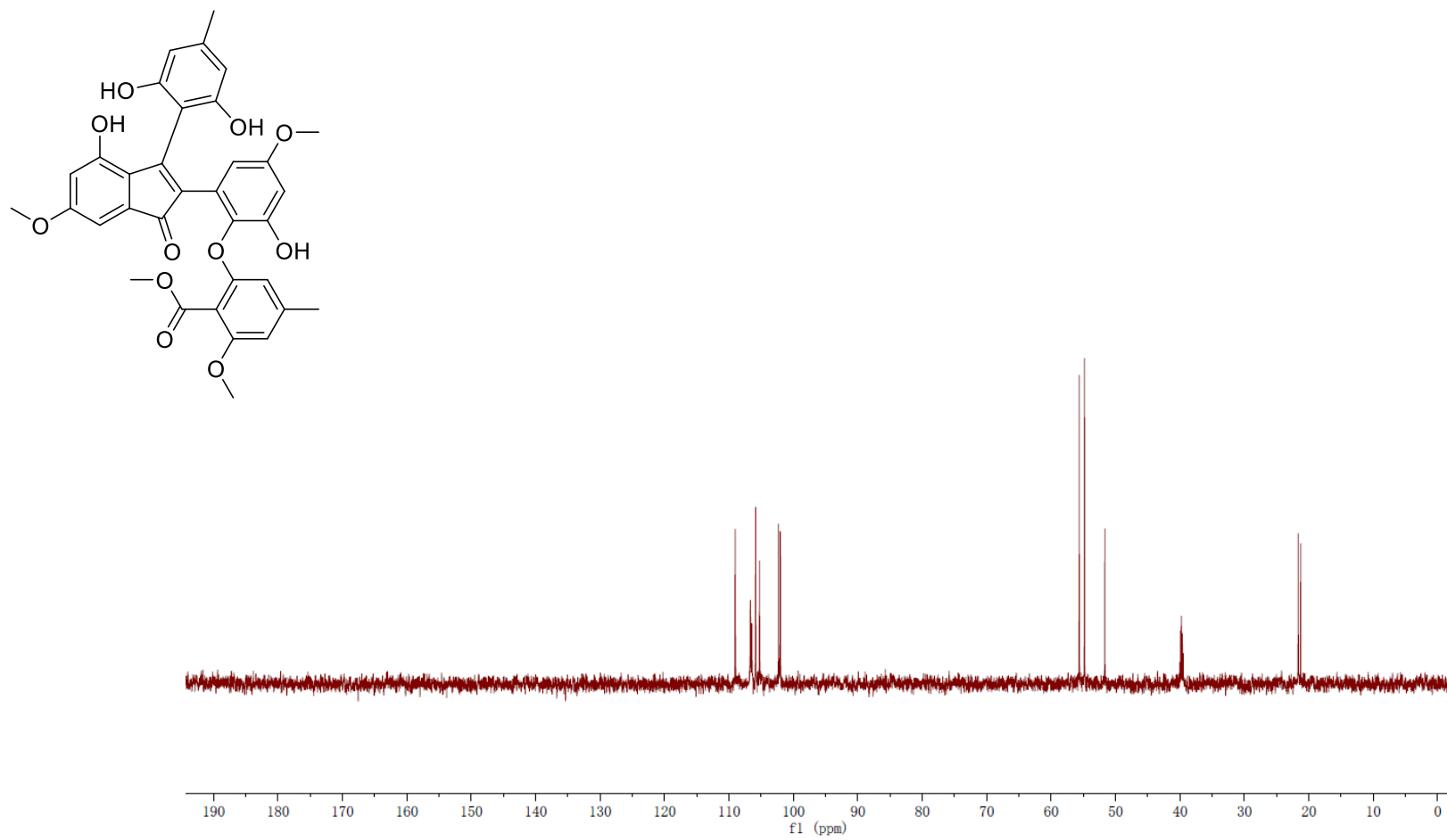
**Figure S9.**  $^{13}\text{C}$  NMR spectrum of compound **2** in  $\text{DMSO-}d_6$  (150 MHz).



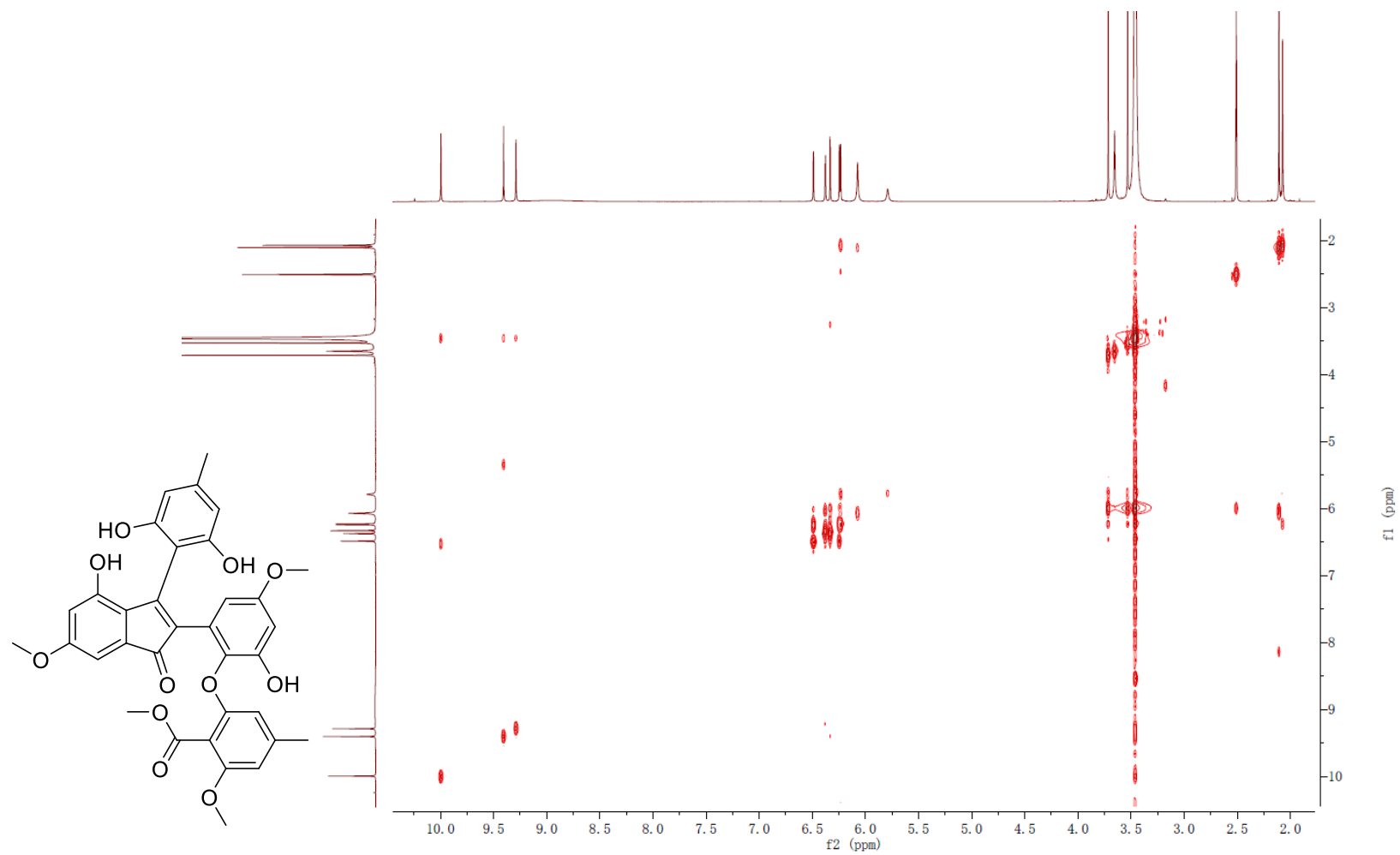
**Figure S10.** DEPT-90 ° spectrum of compound **2** in DMSO-*d*<sub>6</sub> (150 MHz).



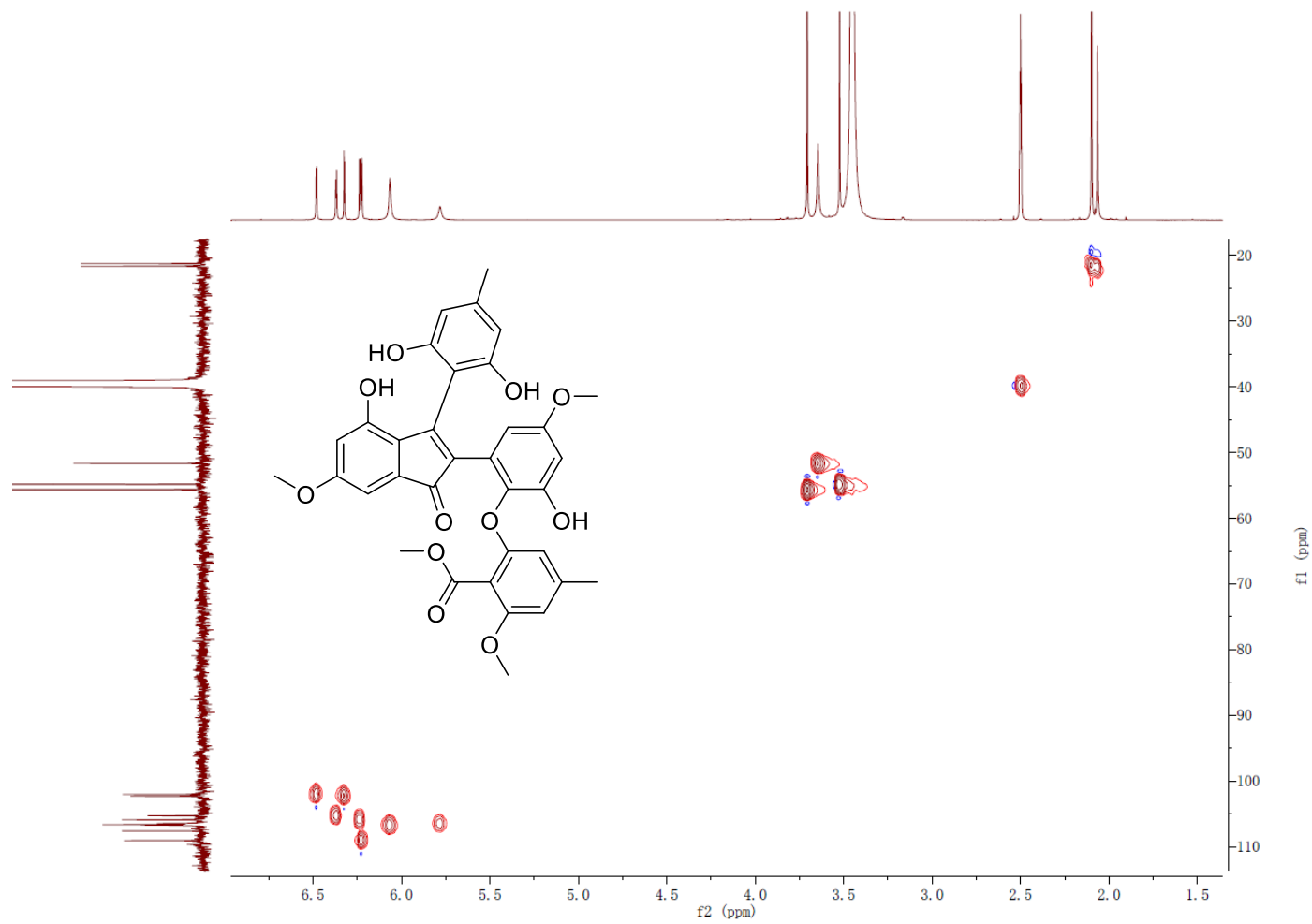
**Figure S11.** DEPT-135 ° spectrum of compound **2** in DMSO-*d*<sub>6</sub> (150 MHz).



**Figure S12.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound **2** in  $\text{DMSO-}d_6$  (600 MHz).

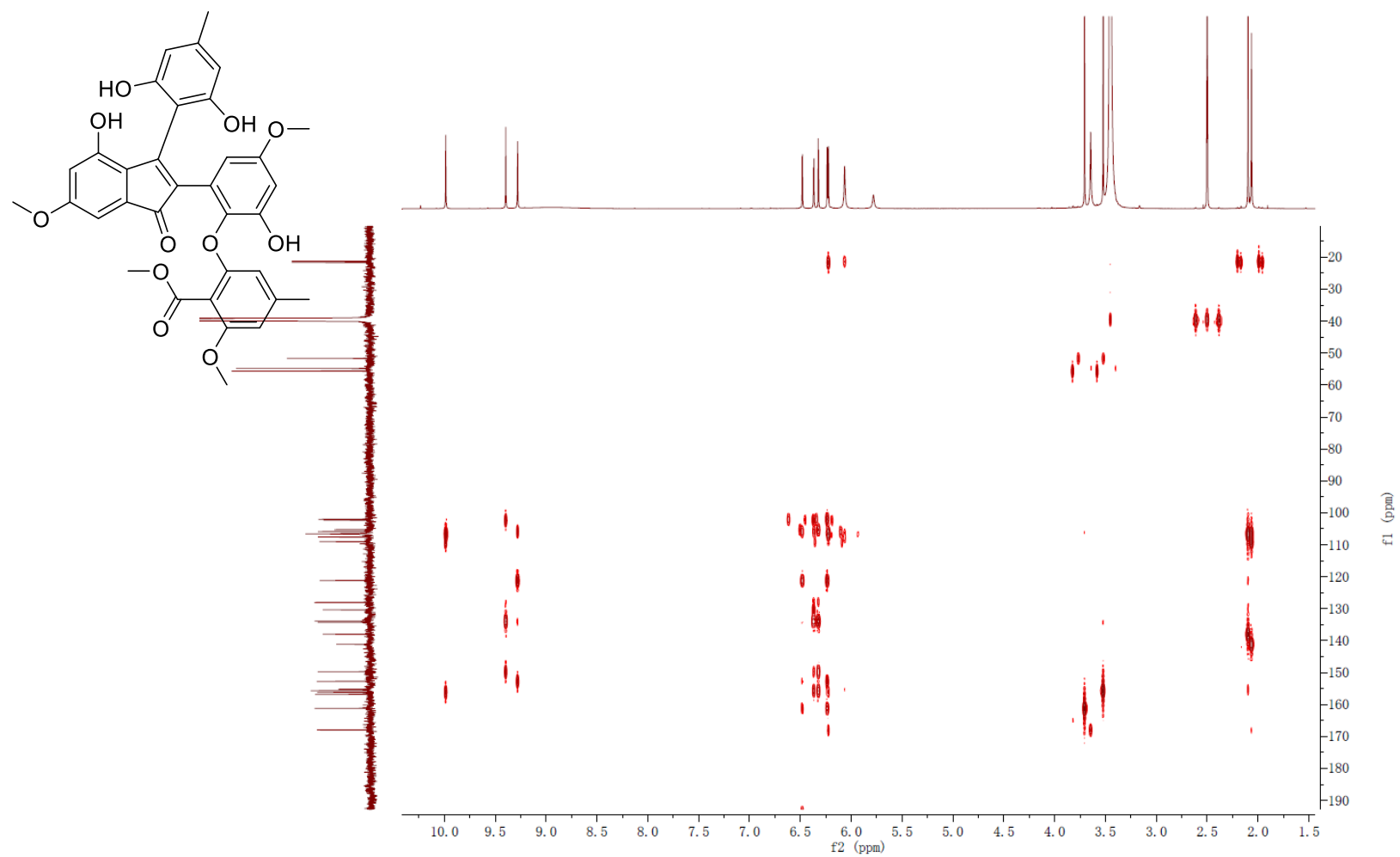


**Figure S13.** HSQC spectrum of compound **2** in DMSO- $d_6$  (600 MHz).

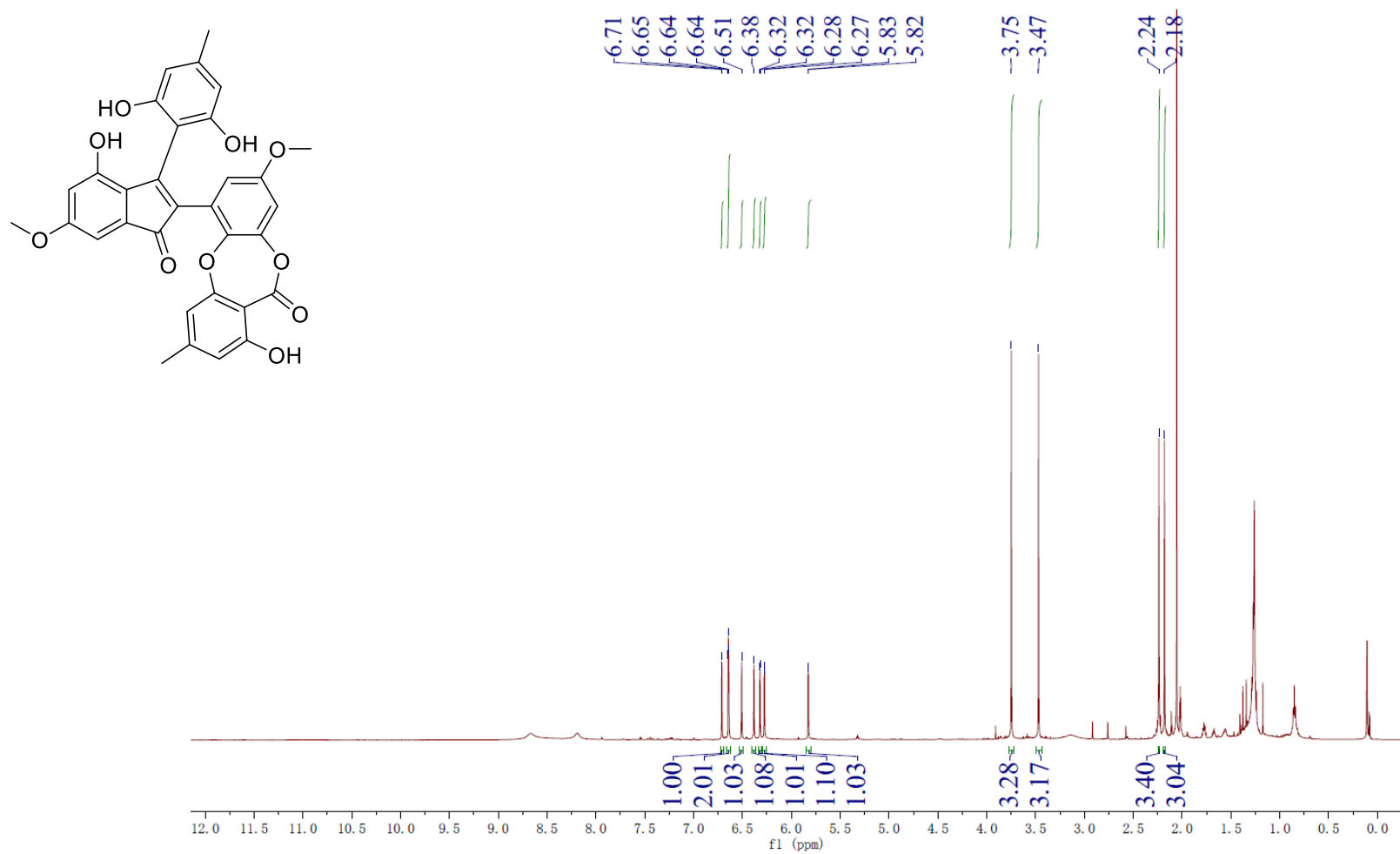




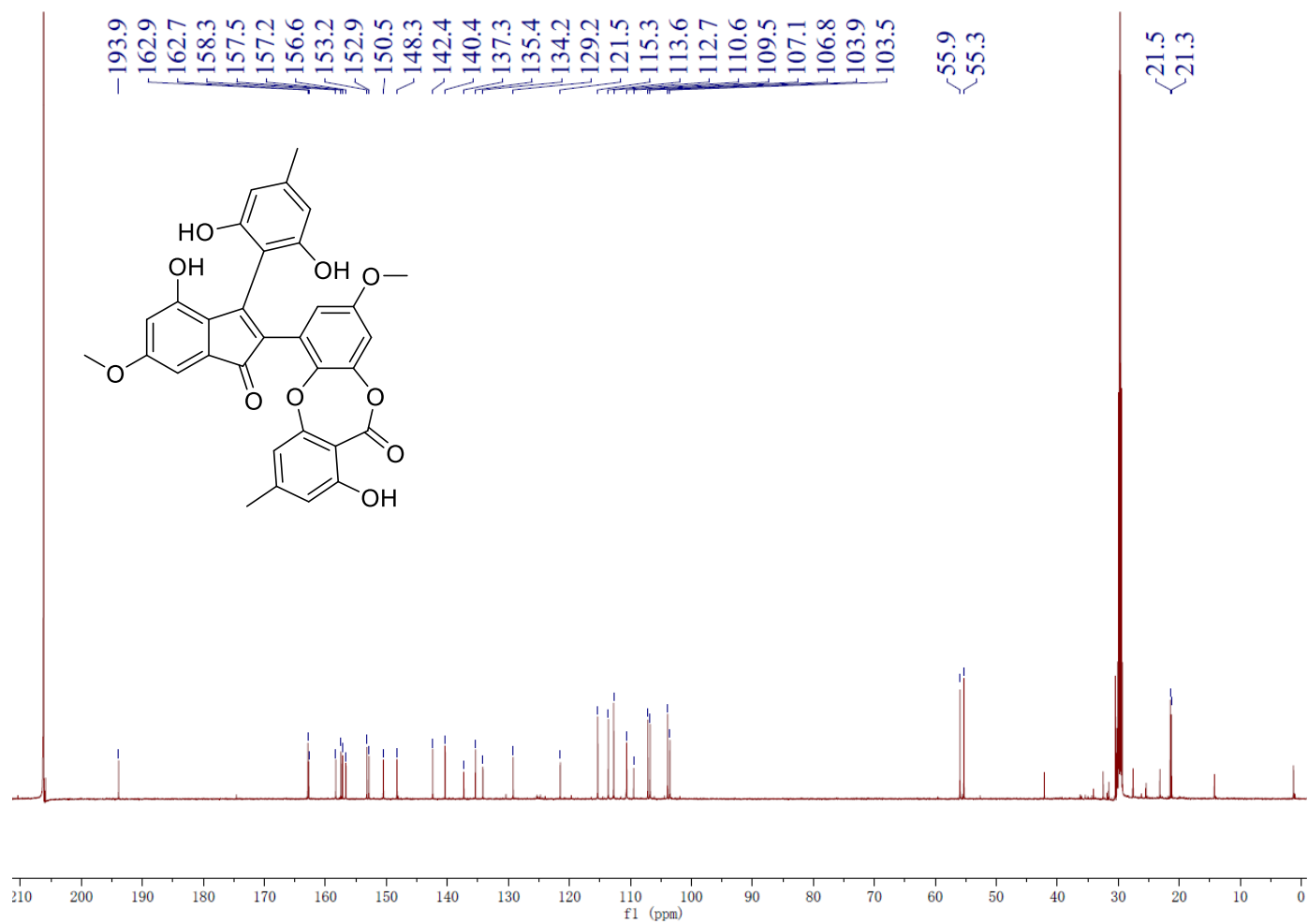
**Figure S14.** HMBC spectrum of compound **2** in DMSO-*d*<sub>6</sub> (600 MHz).



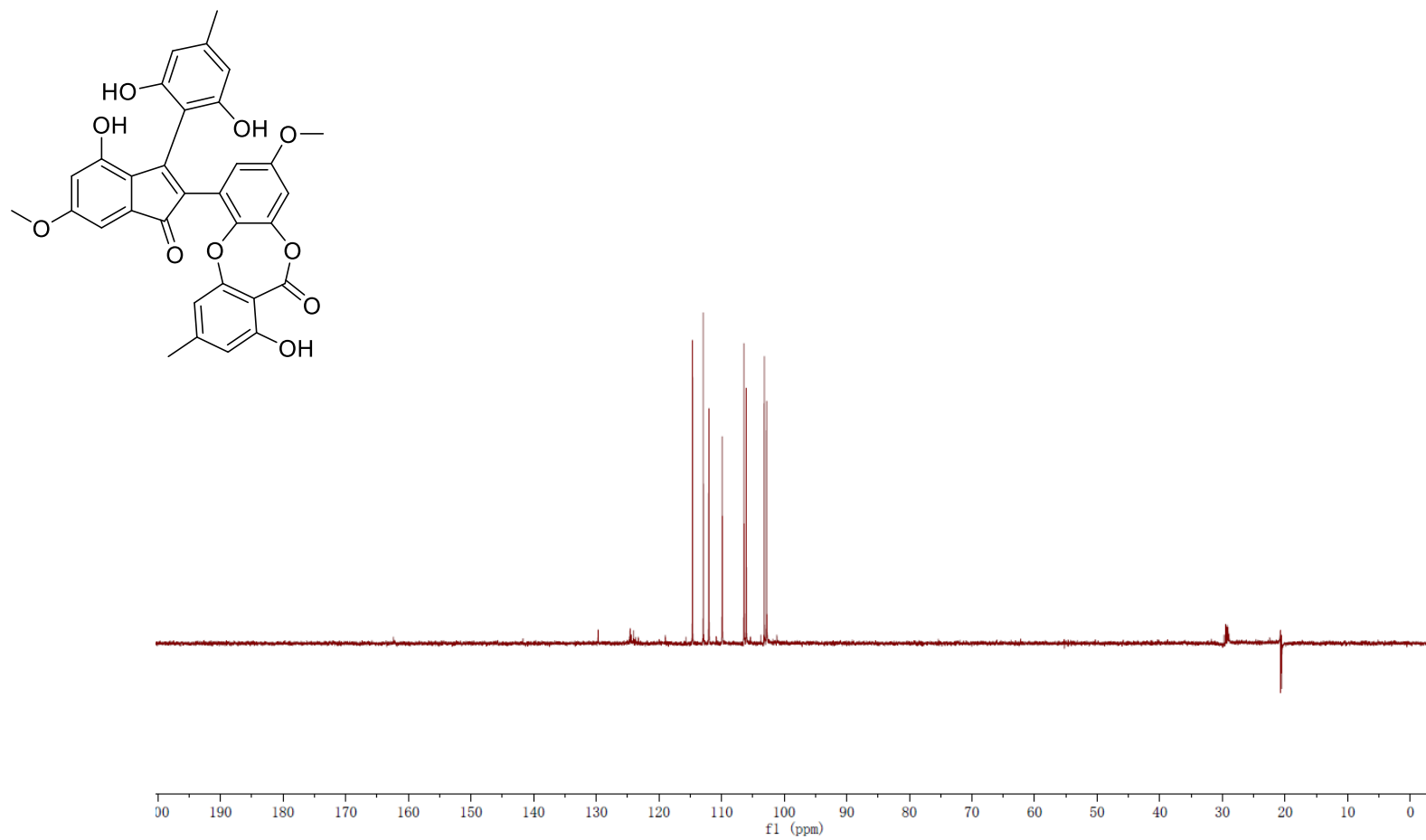
**Figure S15.**  $^1\text{H}$  NMR spectrum of compound **3** in acetone- $d_6$  (600 MHz).



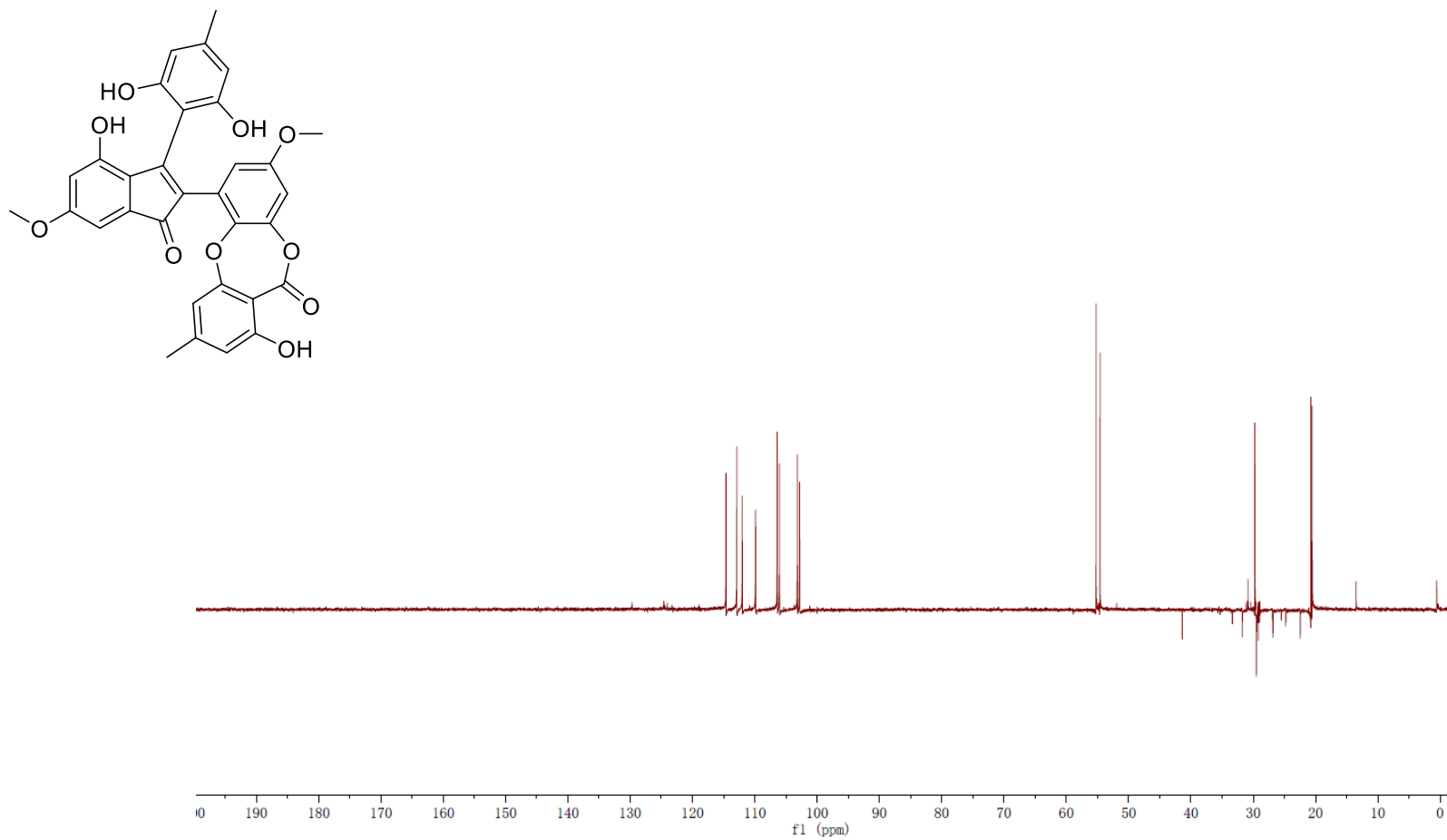
**Figure S16.**  $^{13}\text{C}$  NMR spectrum of compound **3** in acetone- $d_6$  (150 MHz).



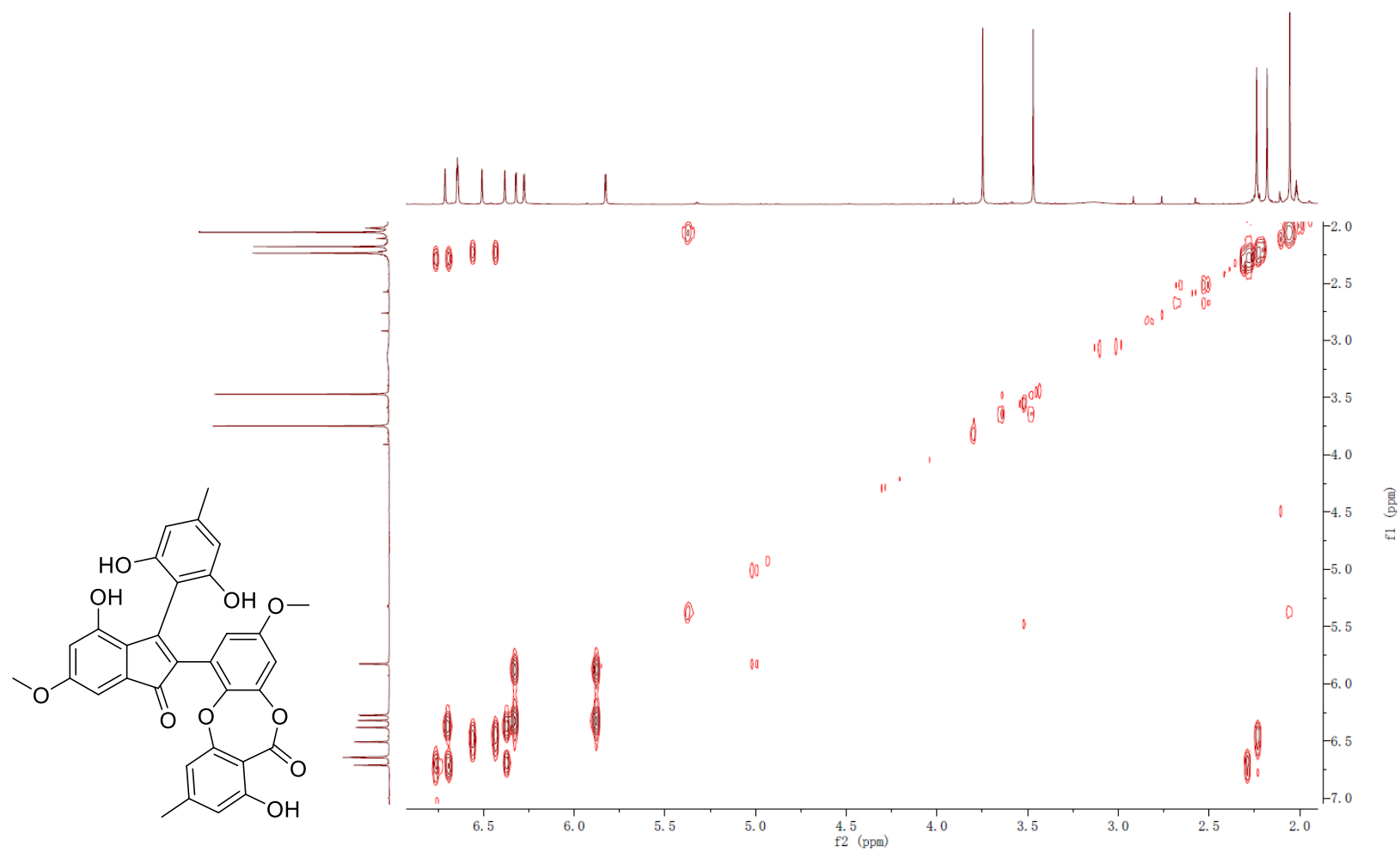
**Figure S17.** DEPT-90 ° spectrum of compound **3** in acetone-*d*<sub>6</sub> (150 MHz).



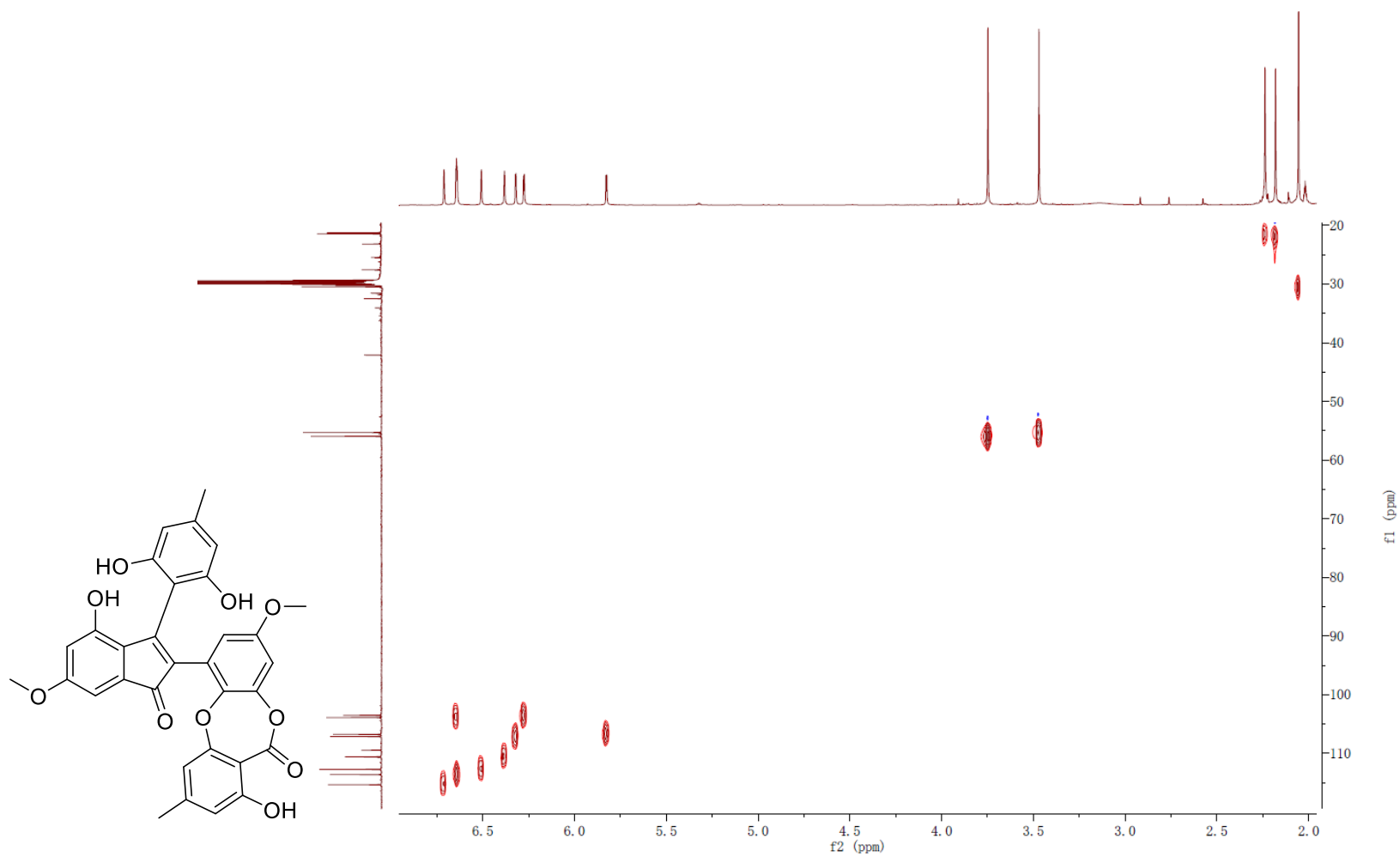
**Figure S18.** DEPT-135 ° spectrum of compound **3** in acetone-*d*<sub>6</sub> (150 MHz).



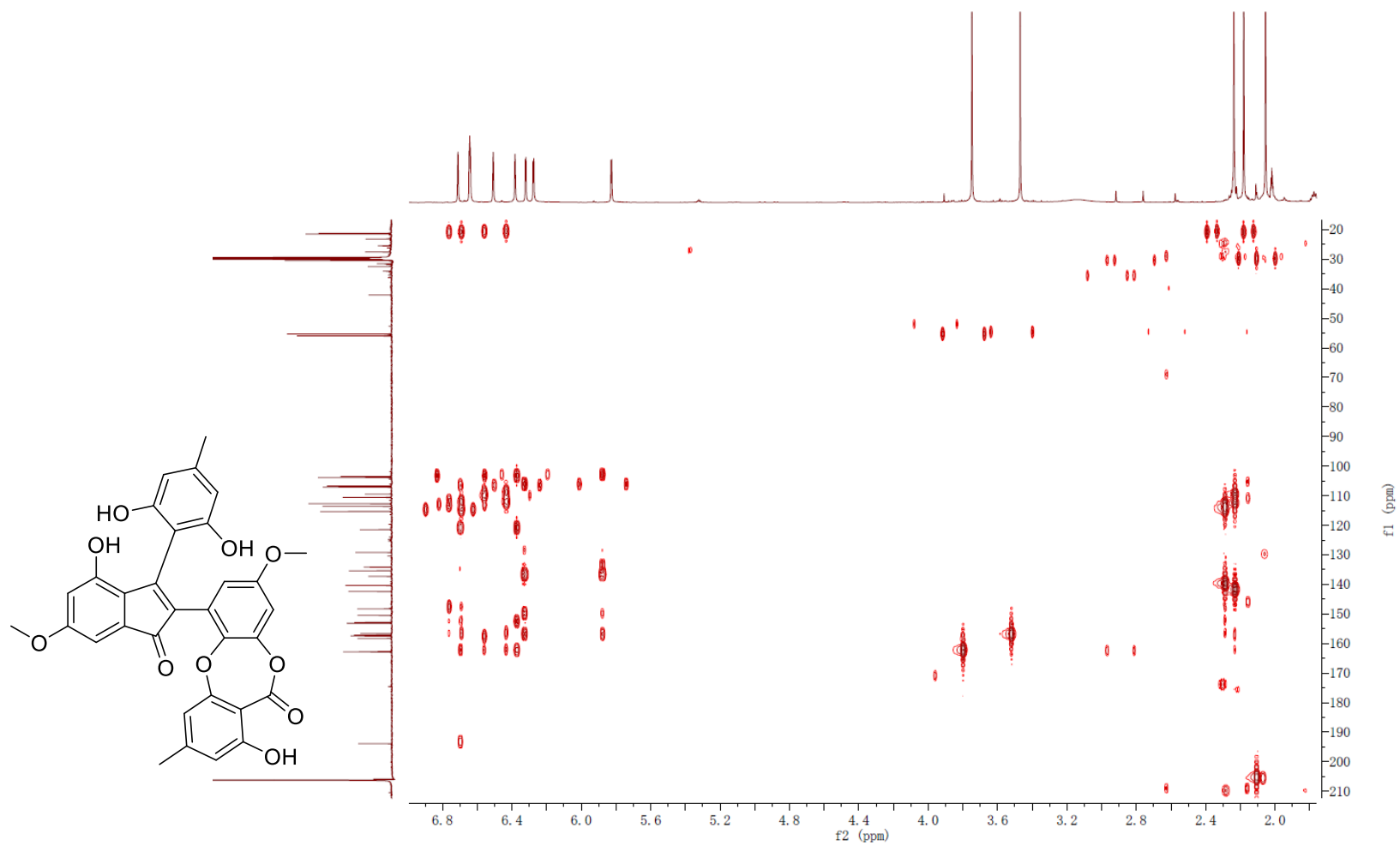
**Figure S19.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound **3** in acetone- $d_6$  (600 MHz).



**Figure S20.** HSQC spectrum of compound **3** in acetone- $d_6$  (600 MHz).

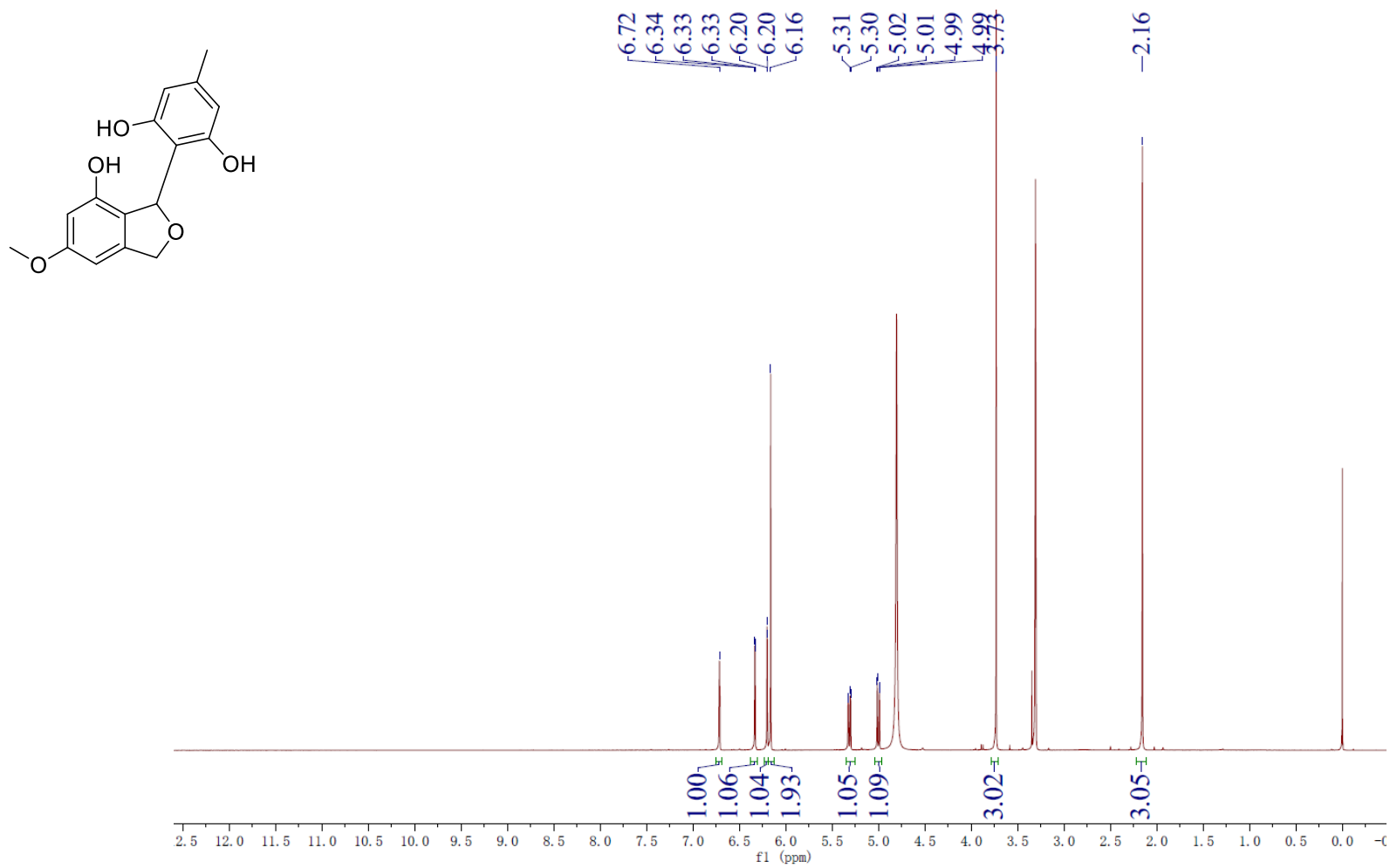


**Figure S21.** HSQC spectrum of compound **3** in acetone-*d*<sub>6</sub> (600 MHz).

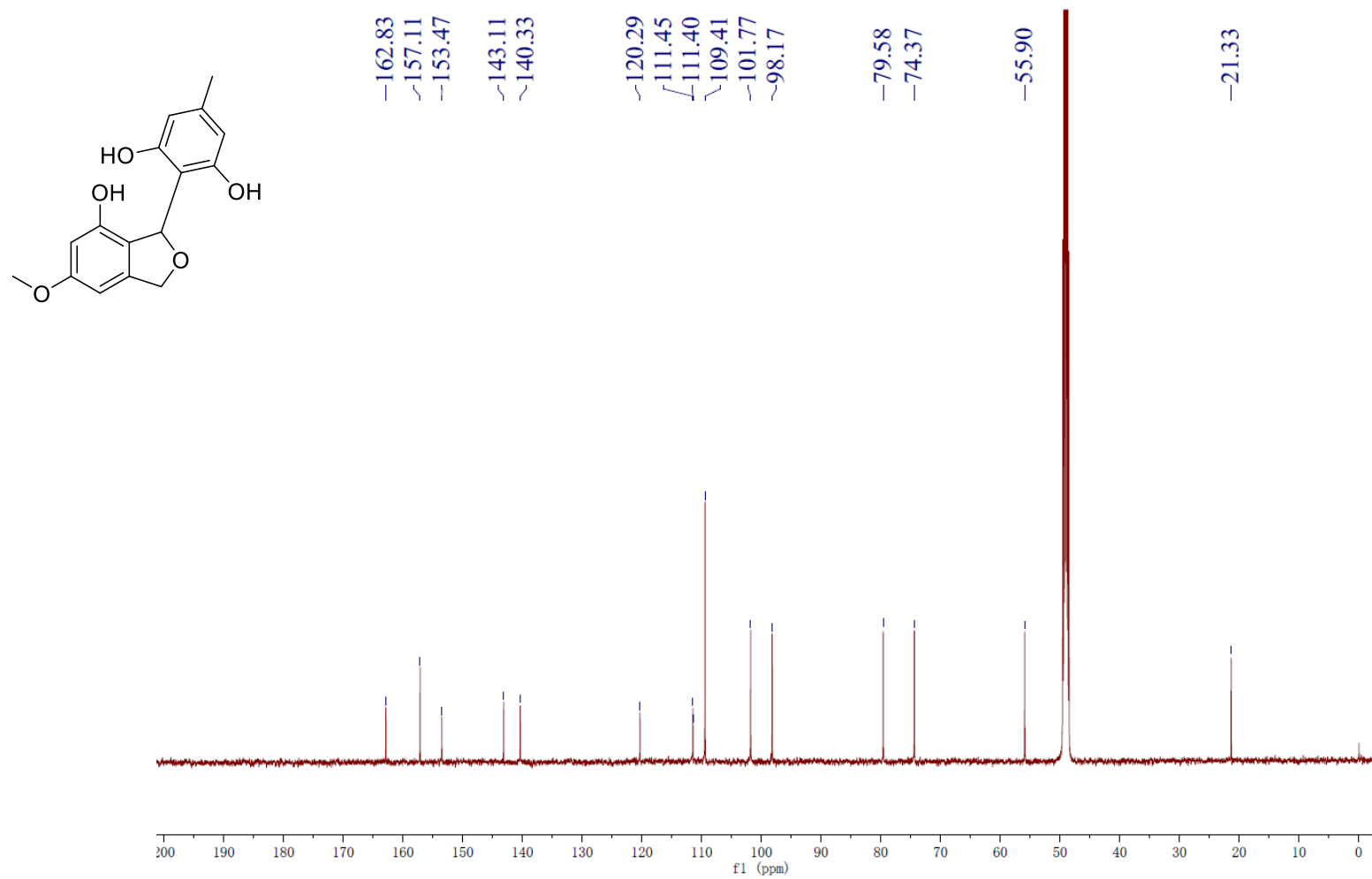




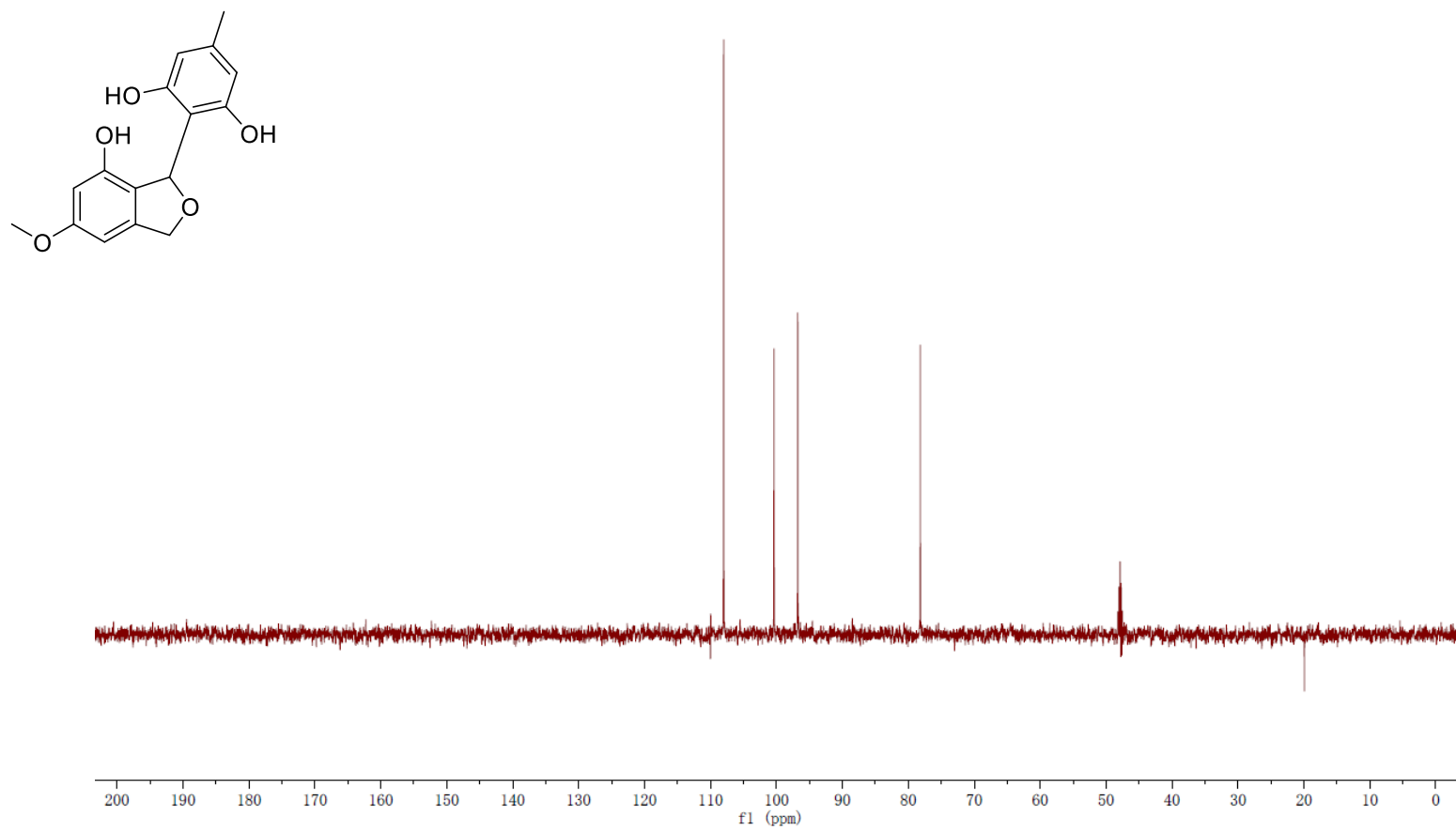
**Figure S22.**  $^1\text{H}$  NMR spectrum of compound **4** in methanol- $d_4$  (500 MHz).



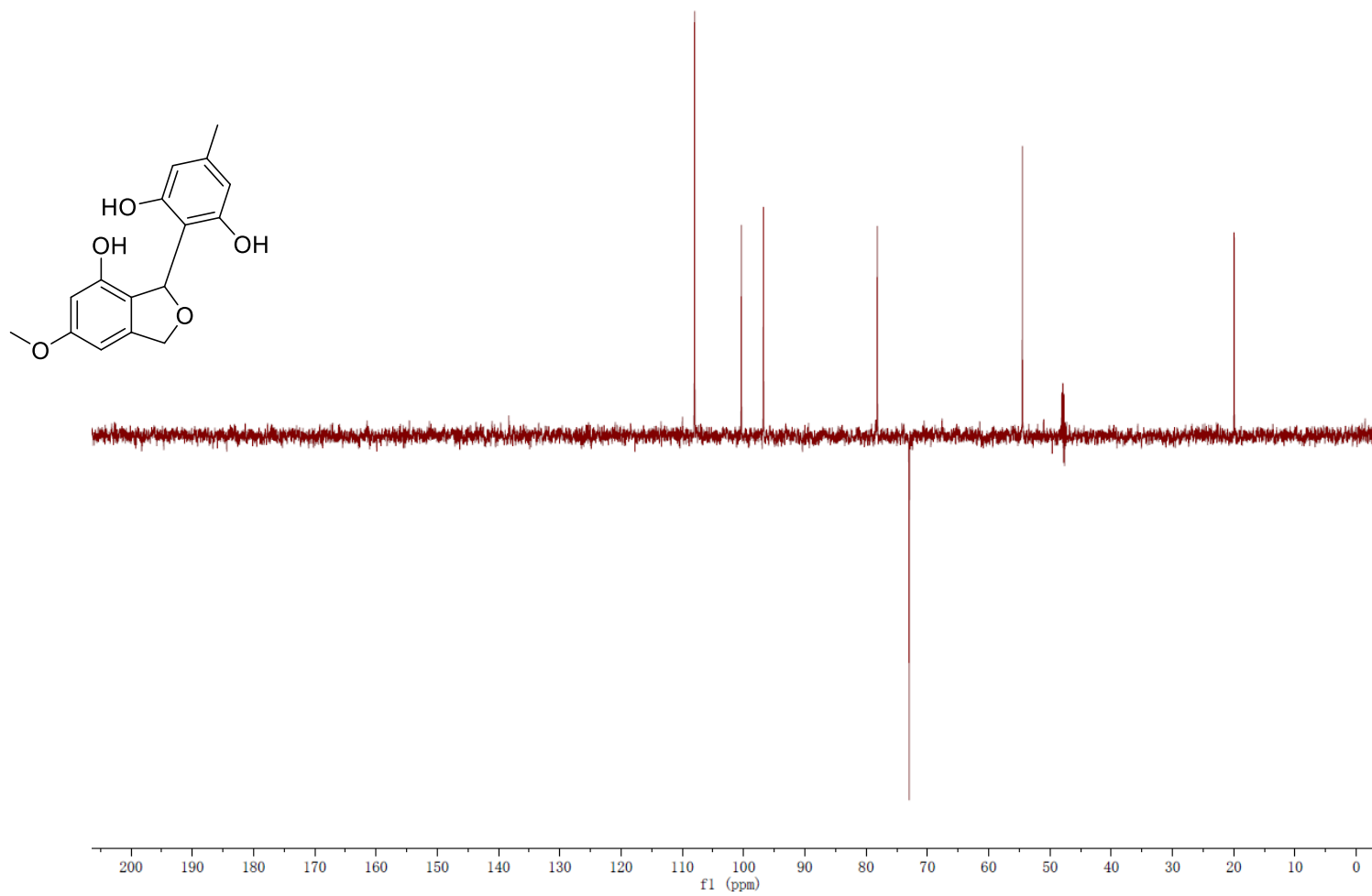
**Figure S23.**  $^{13}\text{C}$  NMR spectrum of compound **4** in methanol- $d_4$  (125 MHz).



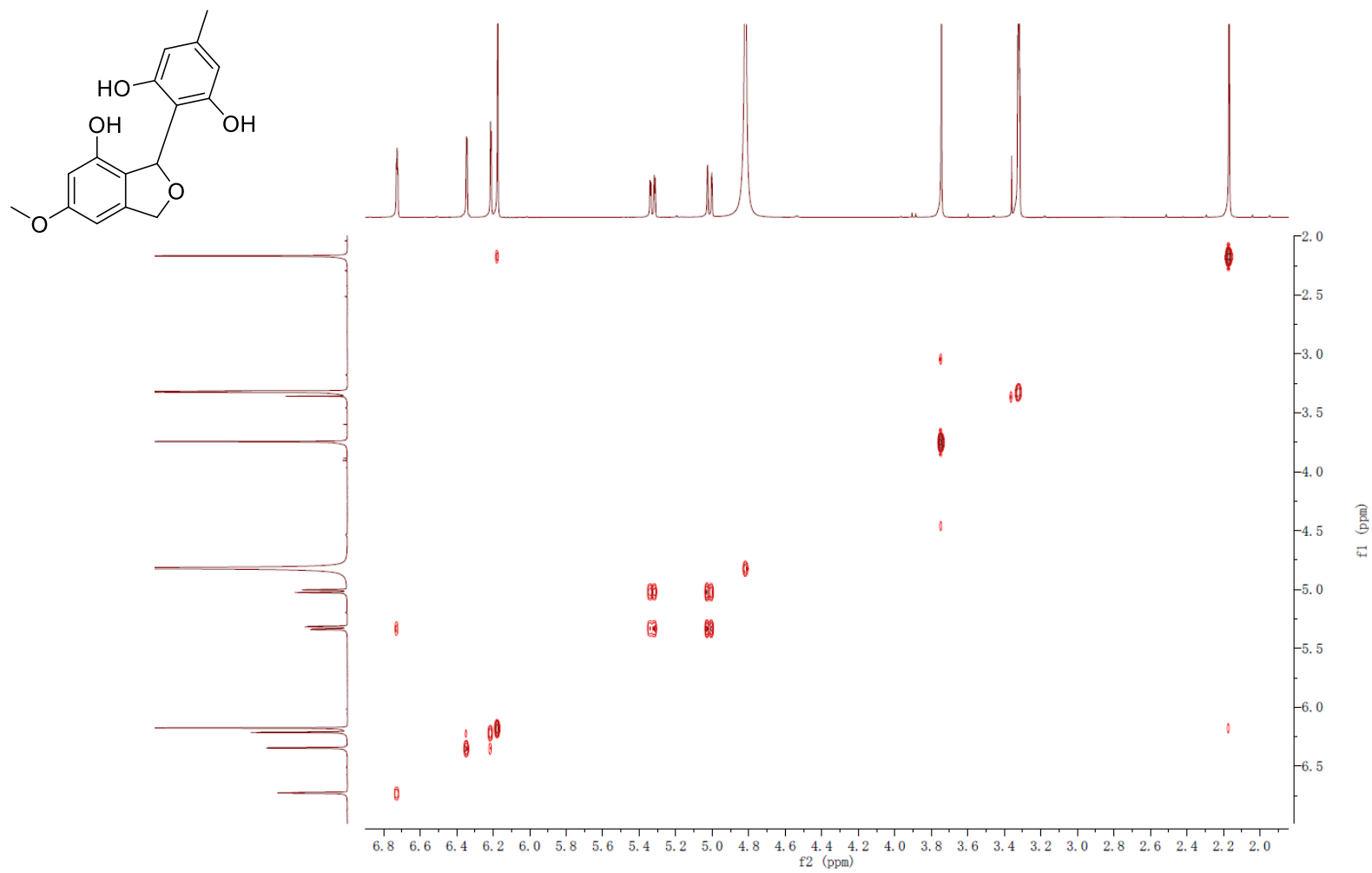
**Figure S24.** DEPT-90 ° spectrum of compound **4** in methanol- $d_4$  (125 MHz).



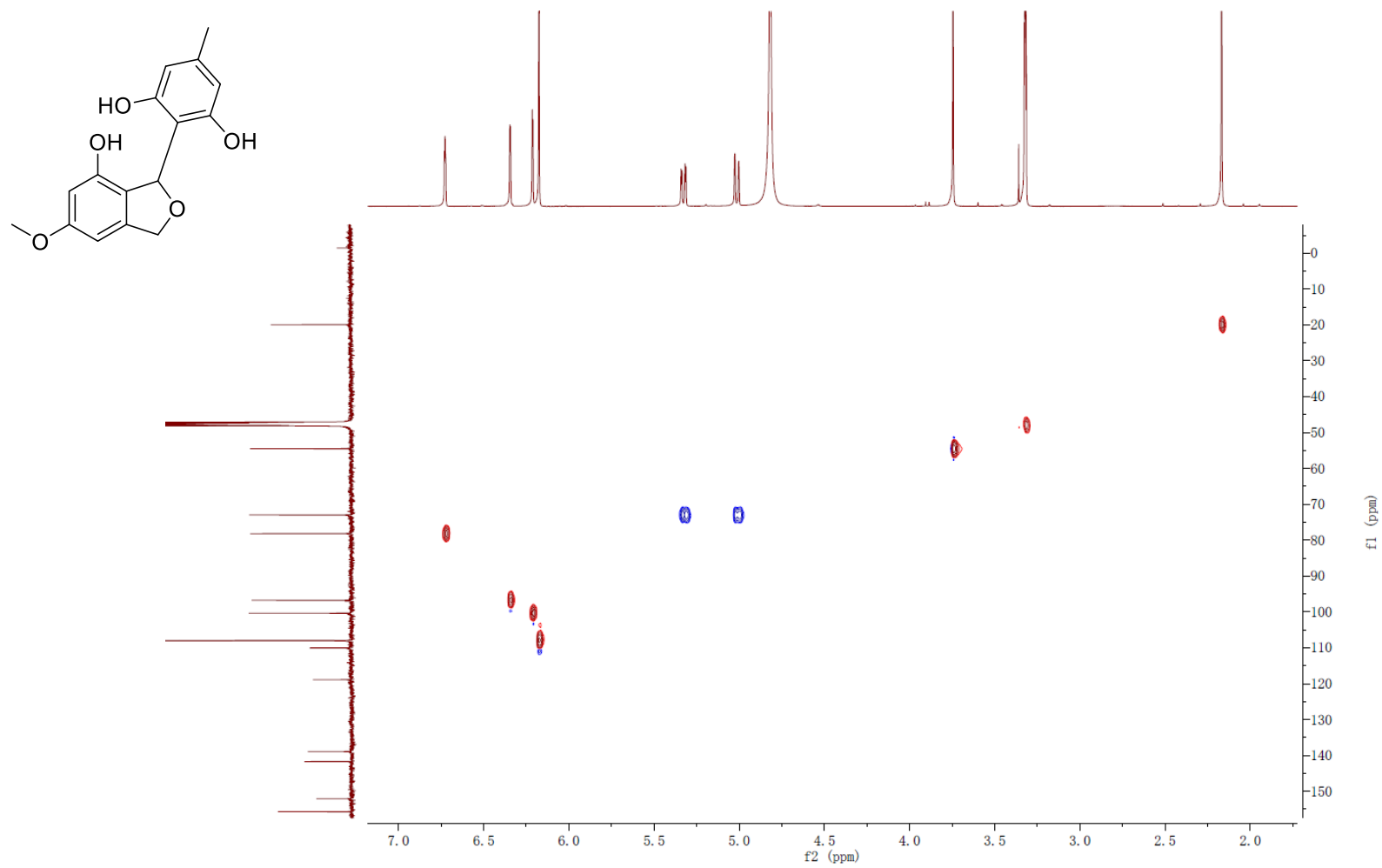
**Figure S25.** DEPT-135 ° spectrum of compound **4** in mathanol- $d_4$  (125 MHz).



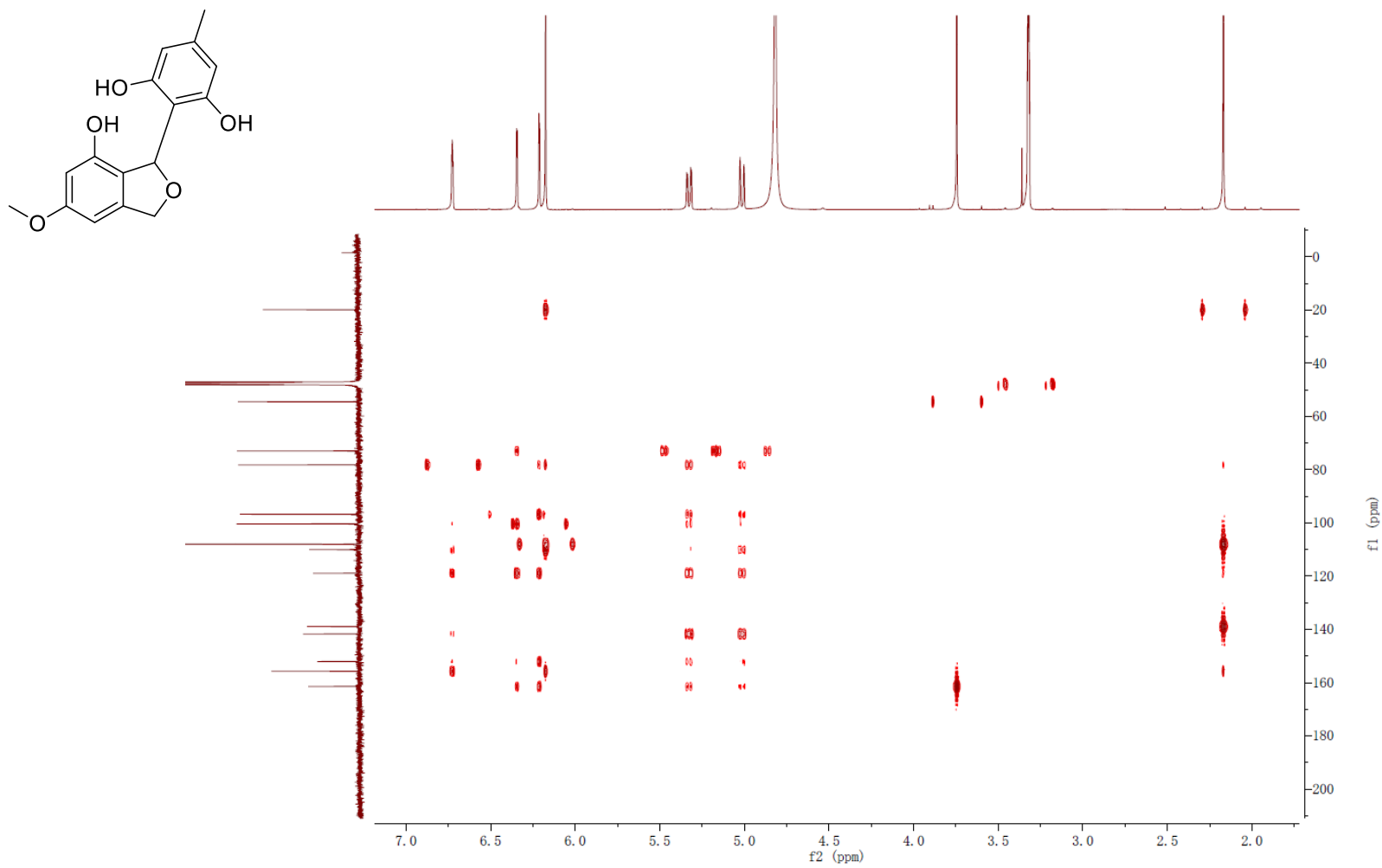
**Figure S26.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound **4** in methanol- $d_4$  (600 MHz).



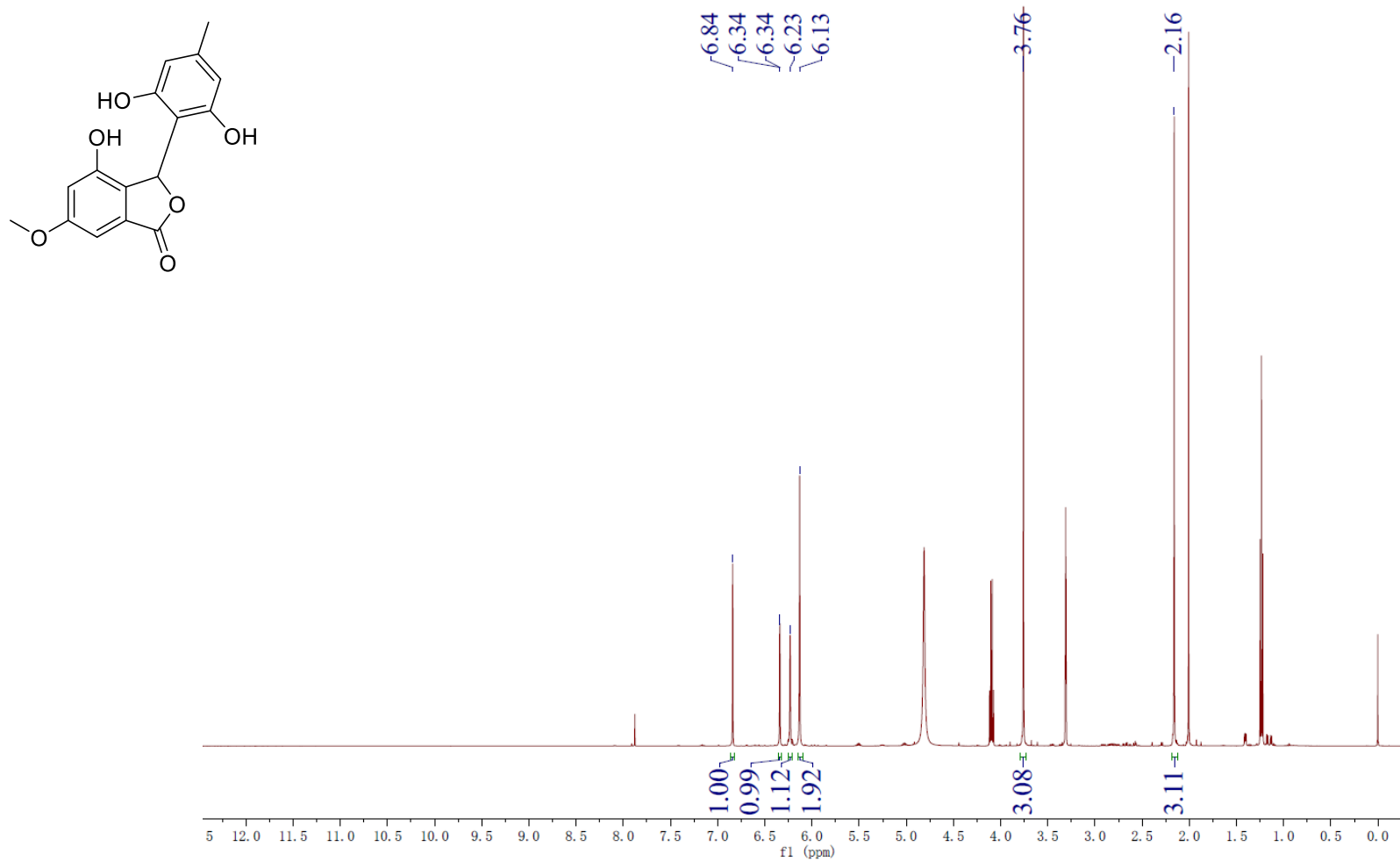
**Figure S27.** HSQC spectrum of compound **4** in methanol- $d_4$  (600 MHz).



**Figure S28.** HMBC spectrum of compound **4** in methanol-*d*<sub>4</sub> (600 MHz).

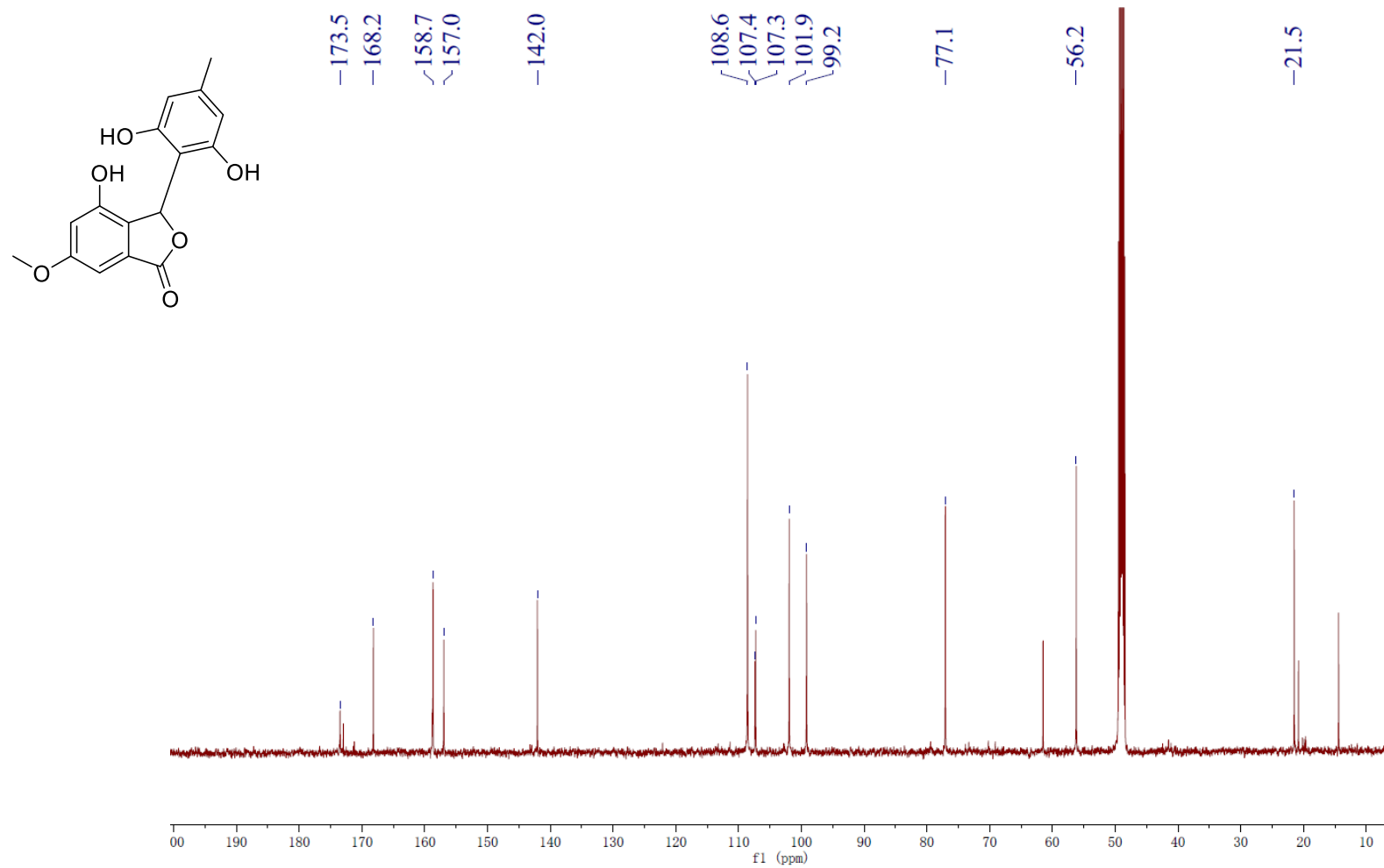


**Figure S29.**  $^1\text{H}$  NMR spectrum of compound **5** in methanol- $d_4$  (500 MHz).

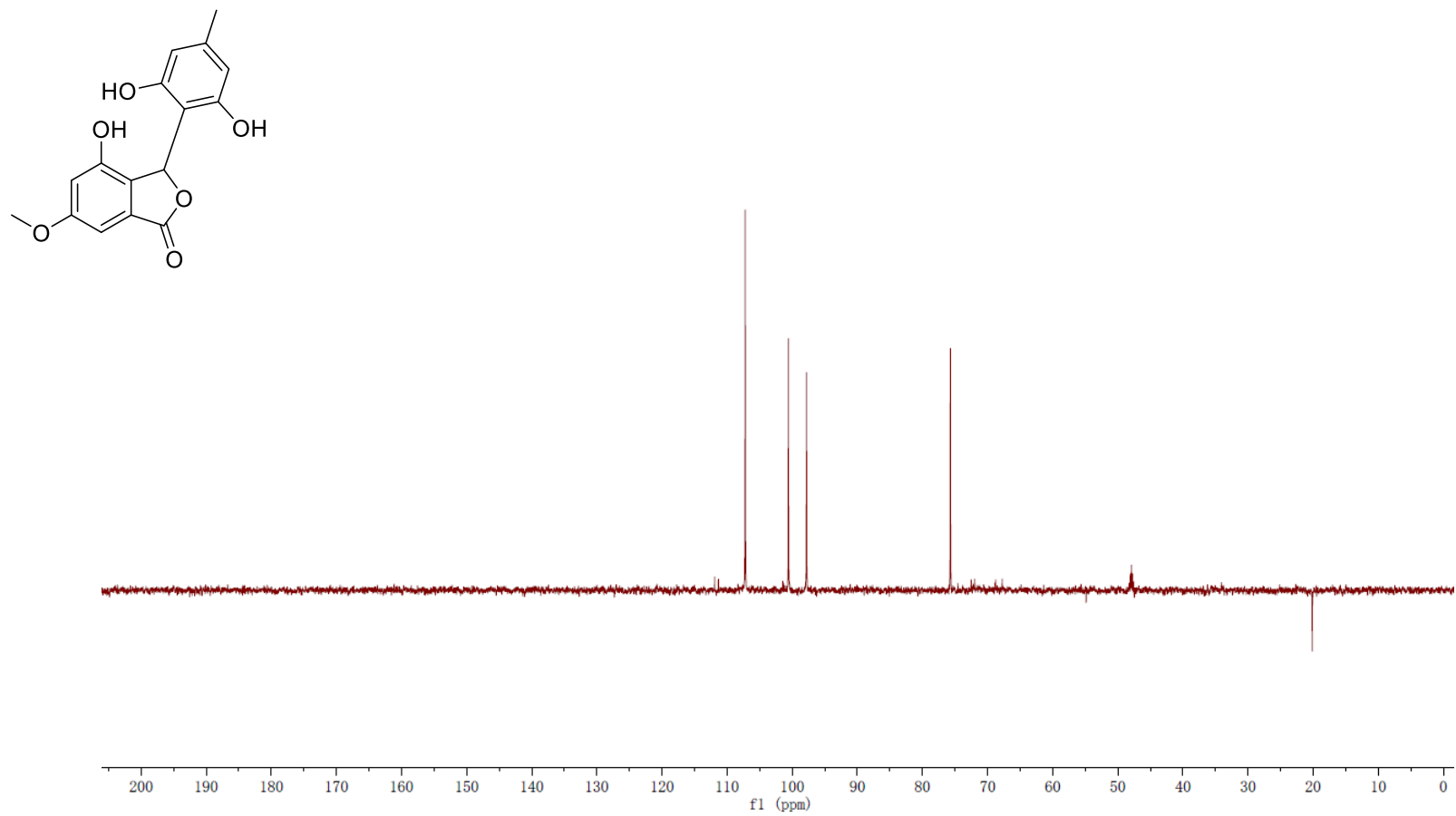




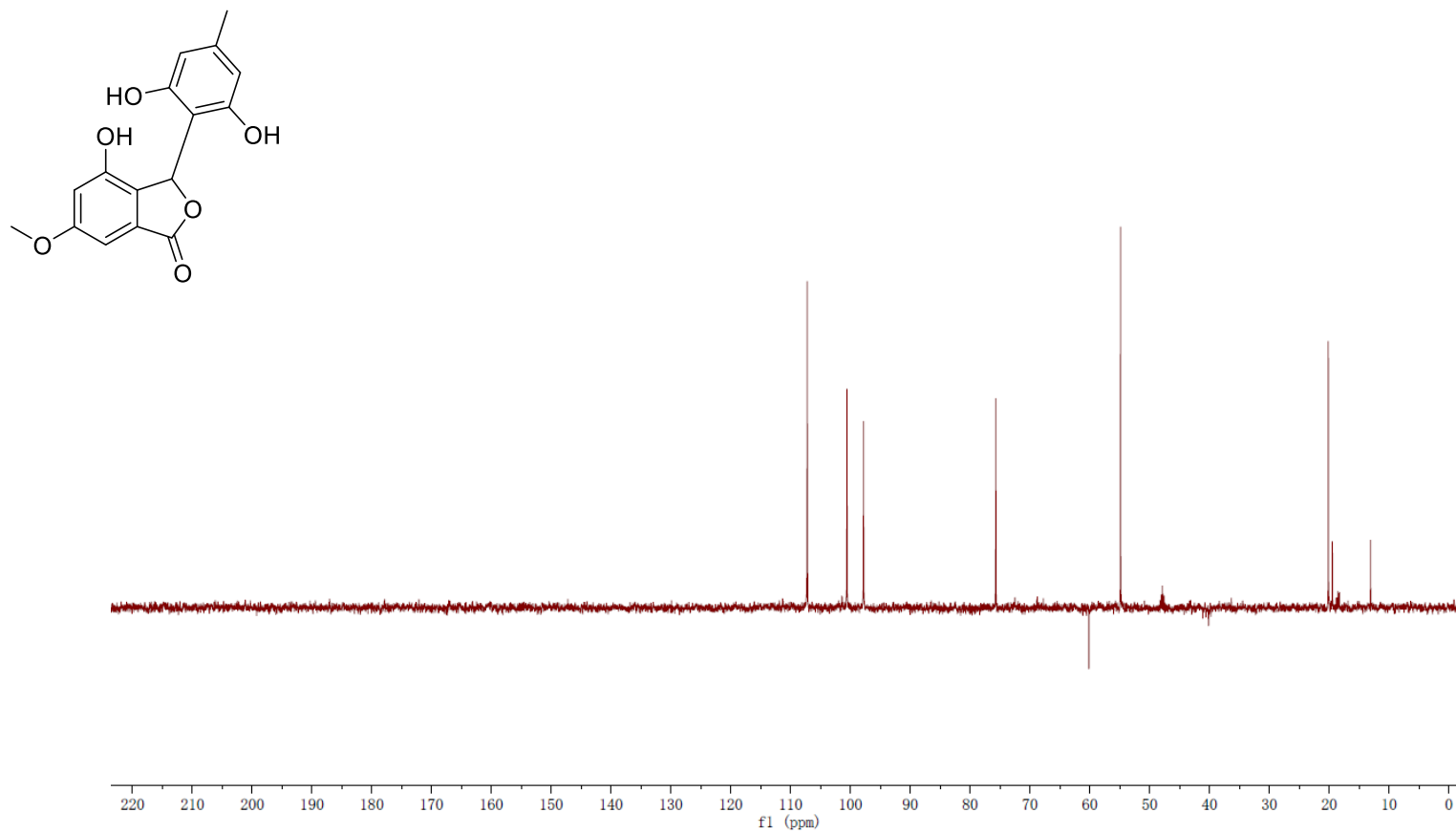
**Figure S30.**  $^{13}\text{C}$  NMR spectrum of compound **5** in methanol- $d_4$  (125 MHz).



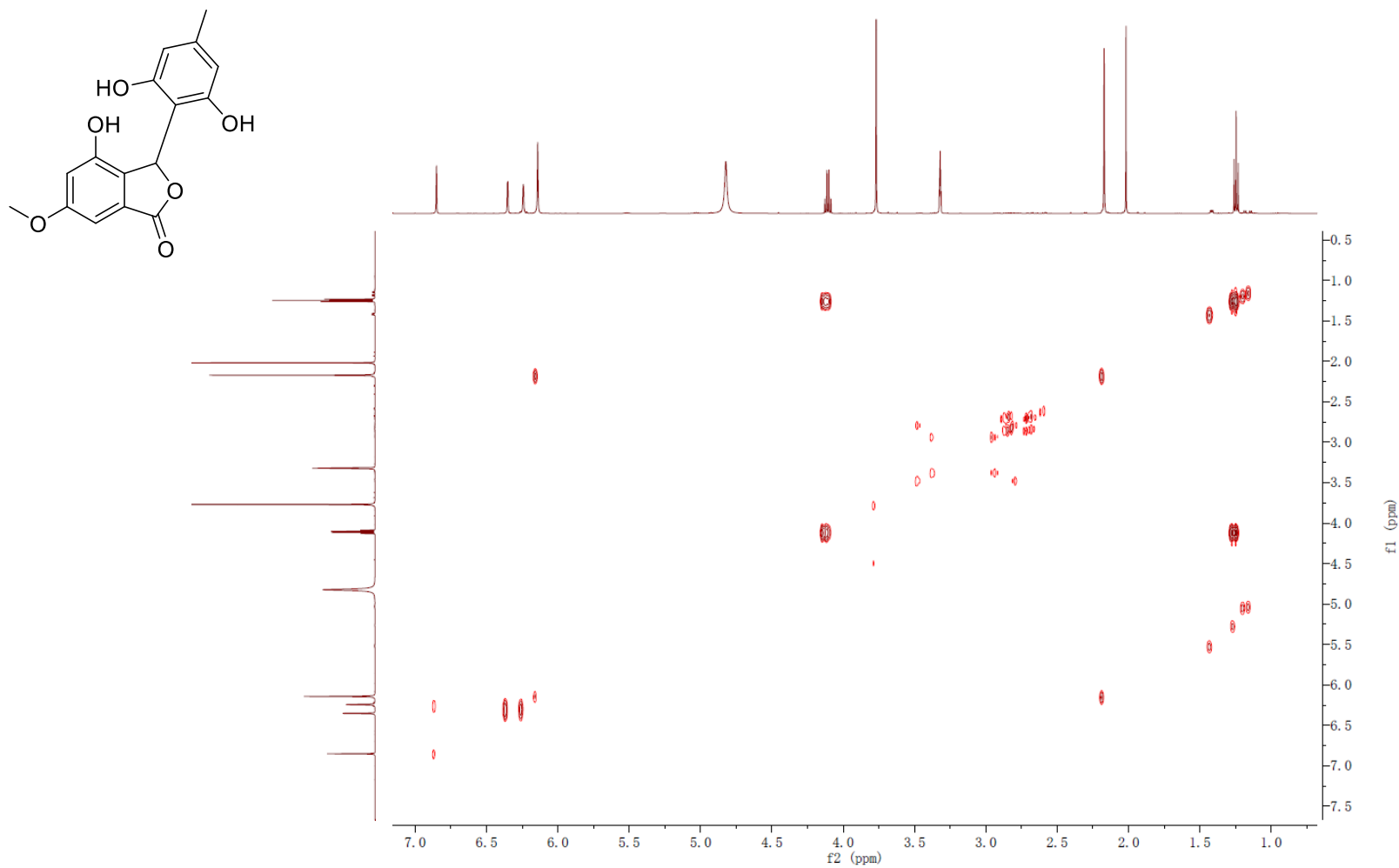
**Figure S31.** DEPT-90 ° spectrum of compound **5** in methanol- $d_4$  (125 MHz).



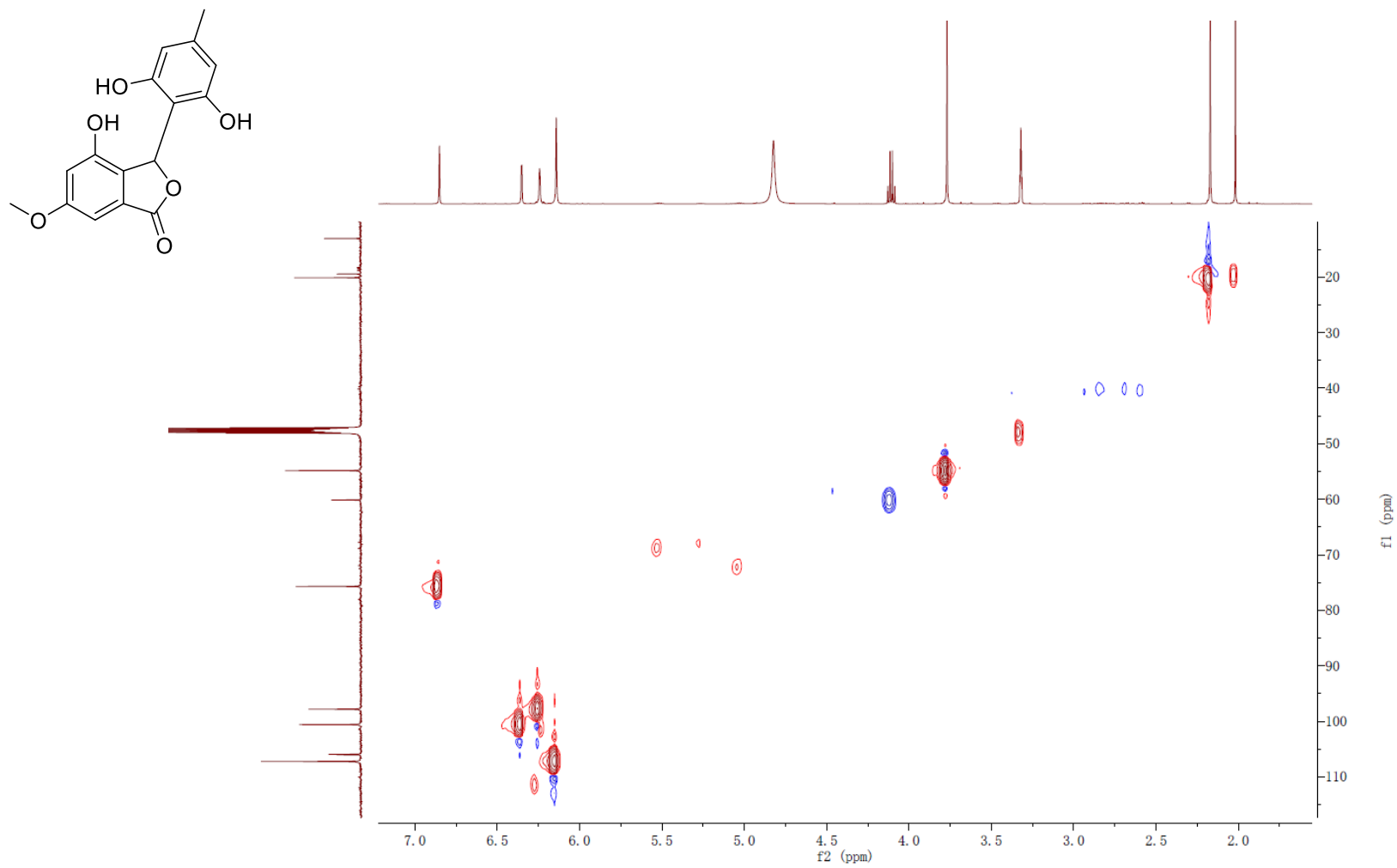
**Figure S32.** DEPT-135 ° spectrum of compound **5** in mathanol- $d_4$  (125 MHz).



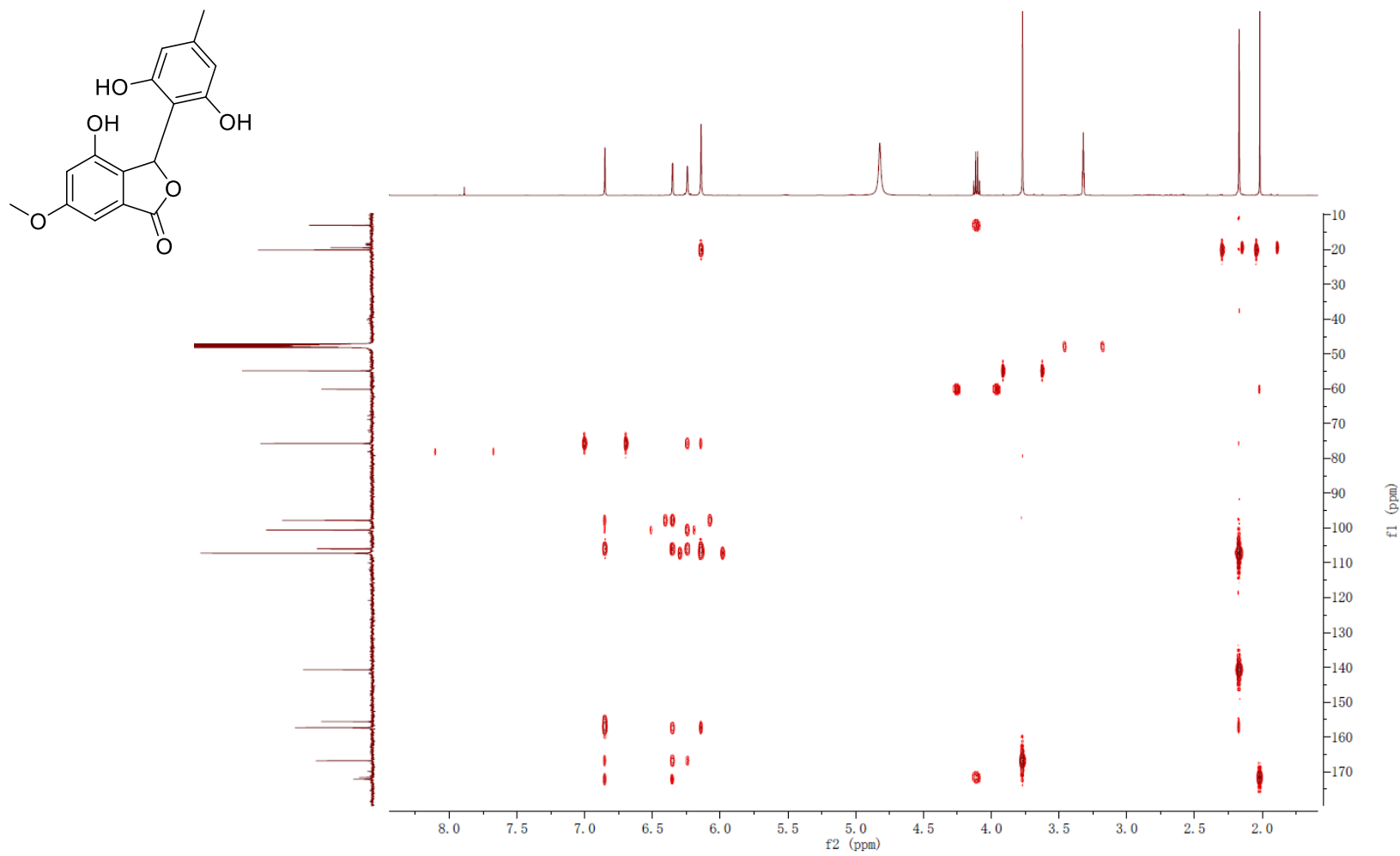
**Figure S33.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound **5** in methanol- $d_4$  (600 MHz).



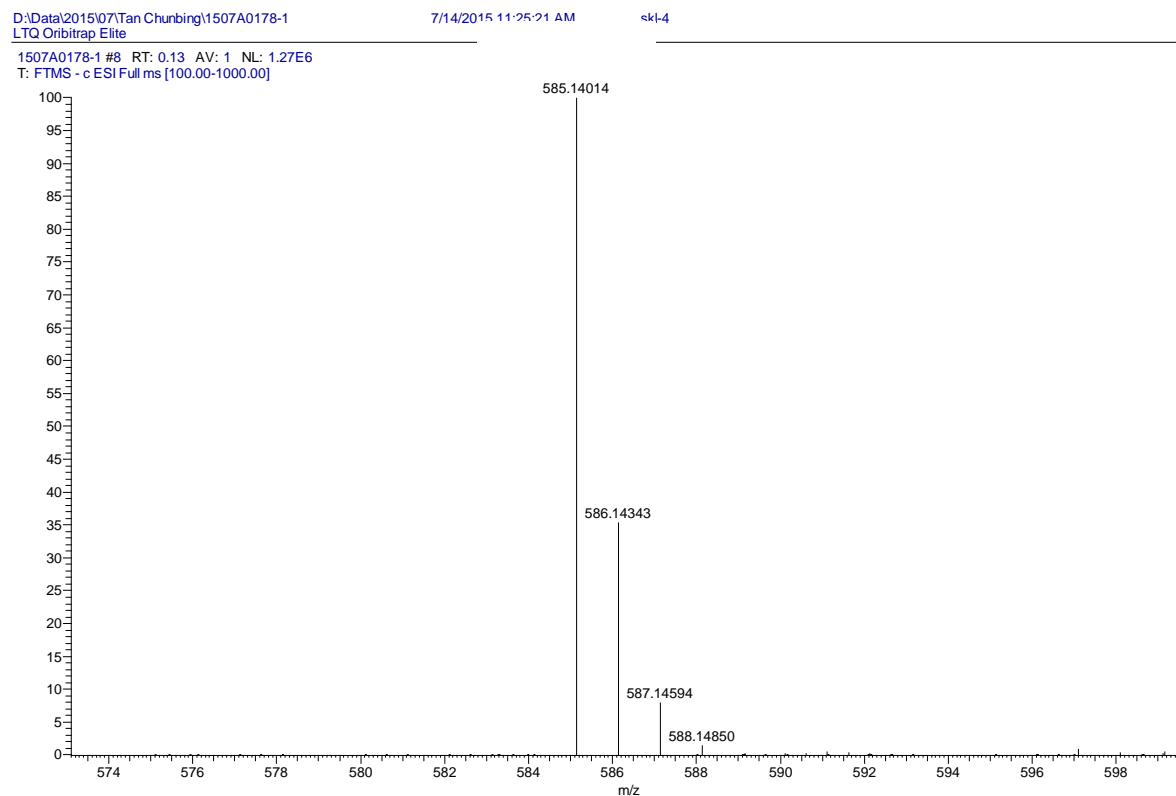
**Figure S34.** HSQC spectrum of compound **5** in methanol- $d_4$  (600 MHz).



**Figure S35.** HMBC spectrum of compound **5** in methanol- $d_4$  (600 MHz).



**Figure S36.** HRESIMS spectrum of compound **1**.



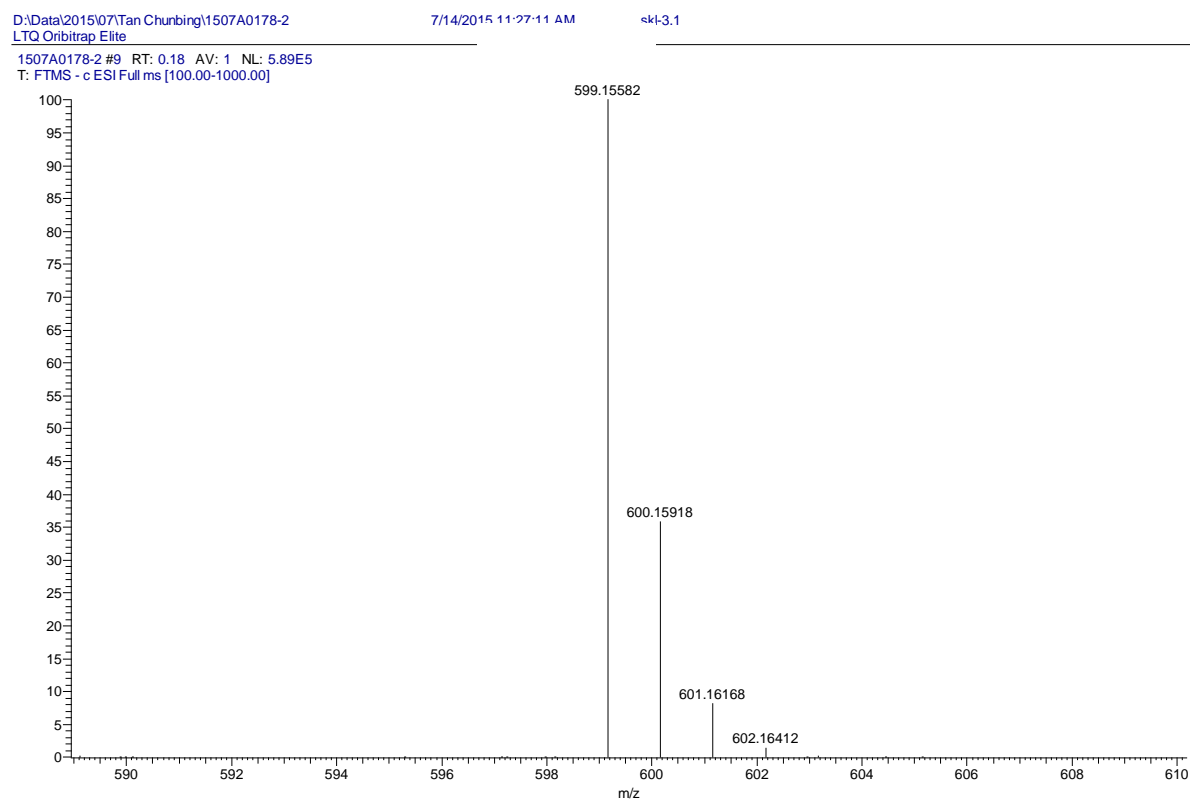
SPECTRUM - simulation :

m/z	Theo. Mass	Delta (ppm)	RDB equiv.	Composition
585.14014	585.14023	-0.16	20.5	C <sub>32</sub> H <sub>25</sub> O <sub>11</sub>

**Limits:**

- (1) Charge: -1
- (2) Nitrogen-Rule: Do not use
- (3) Mass tolerance: 10.00 ppm
- (4) Elements in use: <sup>12</sup>C (25~35), <sup>1</sup>H (0~60), <sup>16</sup>O (0~15)

**Figure S37.** HRESIMS spectrum of compound **2**.



SPECTRUM - simulation :

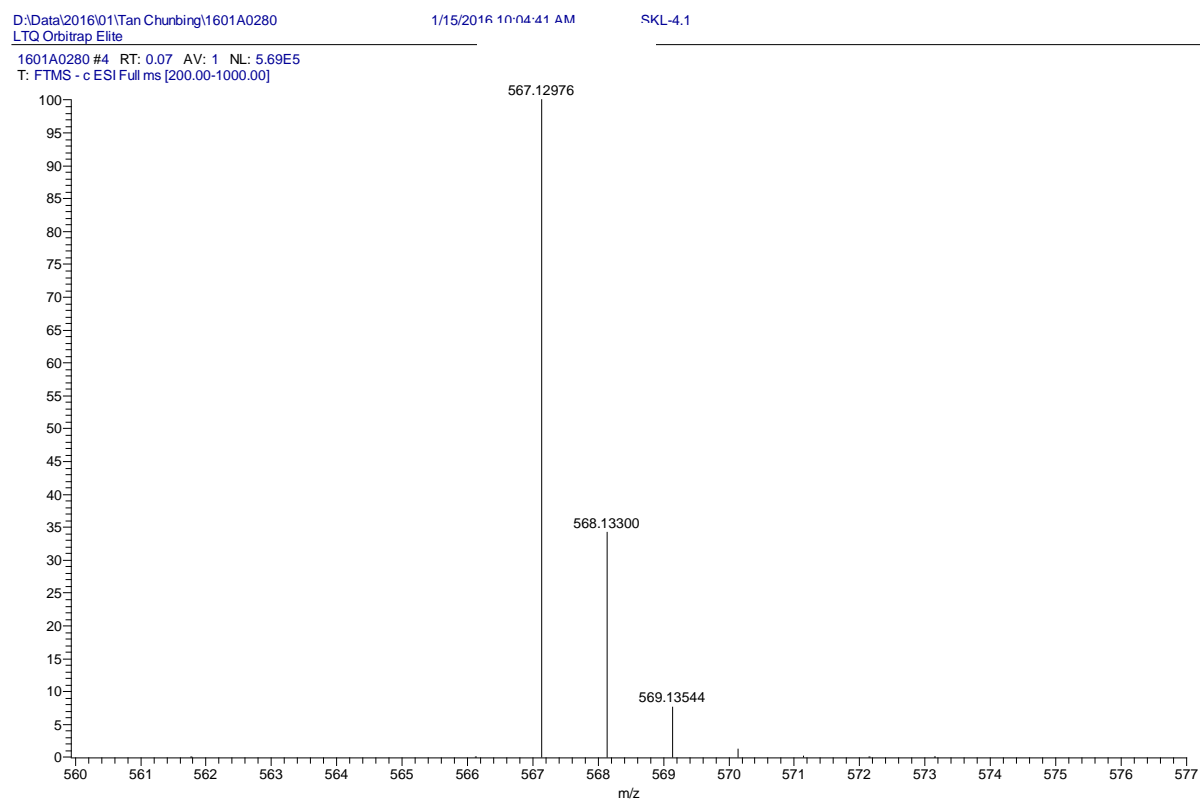
m/z	Theo. Mass	Delta (ppm)	RDB equiv.	Composition
599.15582	599.15588	-0.11	20.5	C <sub>33</sub> H <sub>27</sub> O <sub>11</sub>

**Limits:**

- (1) Charge: -1
- (2) Nitrogen-Rule: Do not use
- (3) Mass tolerance: 10.00 ppm
- (4) Elements in use: <sup>12</sup>C (25~35), <sup>1</sup>H (0~60), <sup>16</sup>O (0~15)



**Figure S38.** HRESIMS spectrum of compound **3**.



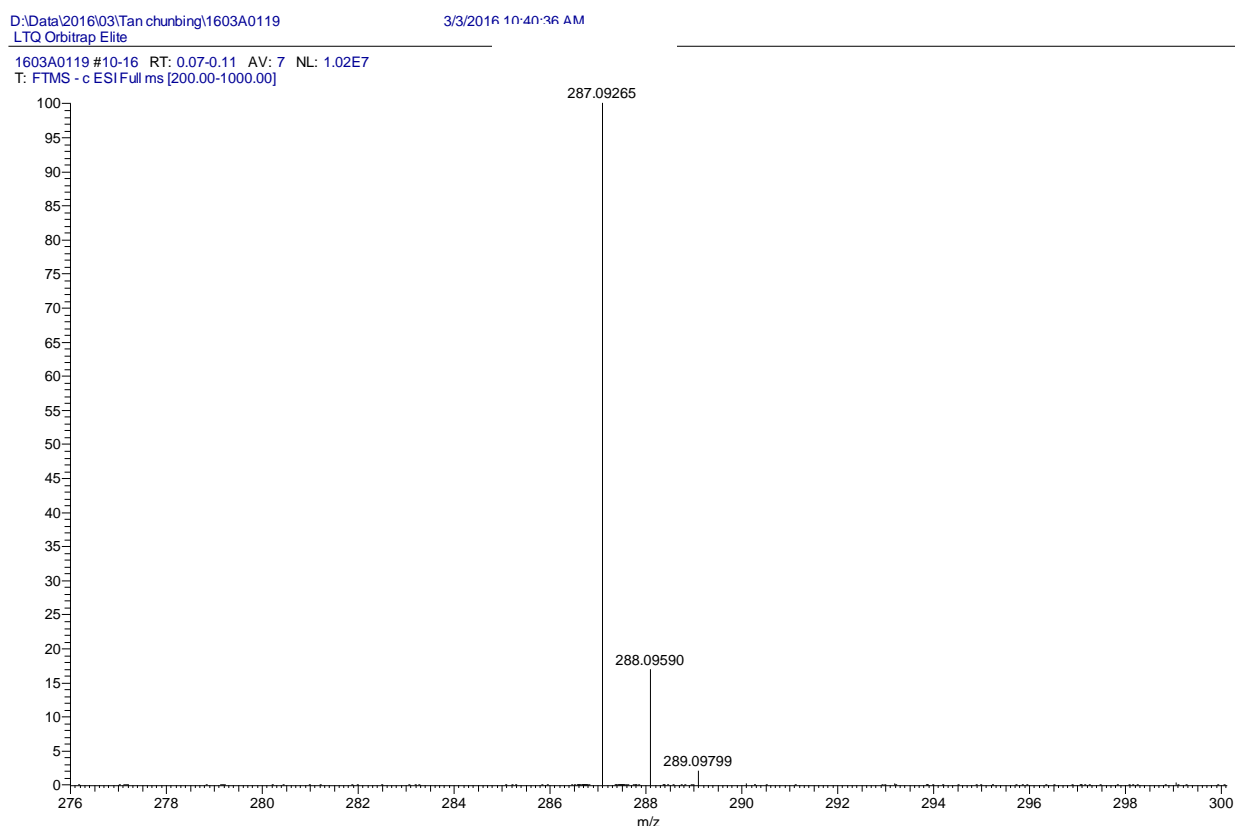
SPECTRUM - simulation :

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**Limits:**

- (1) Charge: -1
- (2) Nitrogen-Rule: Do not use
- (3) Mass tolerance: 10.00 ppm
- (4) Elements in use: <sup>12</sup>C (0~40), <sup>1</sup>H (0~60), <sup>16</sup>O (0~15)

**Figure S39.** HRESIMS spectrum of compound **4**.



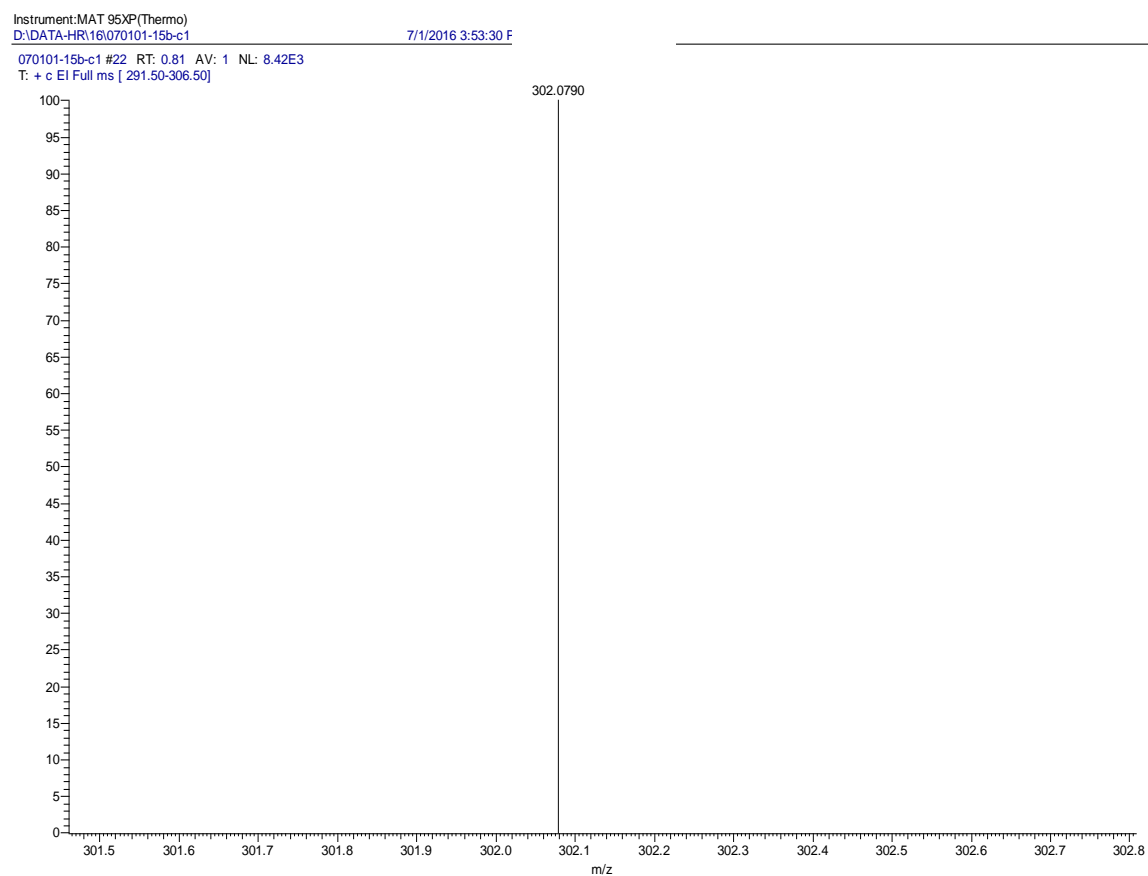
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**Limits:**

- (1) Charge: -1
- (2) Nitrogen-Rule: Do not use
- (3) Mass tolerance: 10.00 ppm
- (4) Elements in use:  $^{12}\text{C}$  (0~30),  $^1\text{H}$  (0~60),  $^{16}\text{O}$  (0~15);

**Figure S40.** HREI-MS spectrum of compound **5**.



**SPECTRUM - MS**

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Full ms [291.500 - 306.500 ] - Range: 291.500 - 306.500

Scan No. 22 of 36

Scan #: 22

RT: 0.81

Data points: 1

m/z	Theo. Mass	Delta (ppm)	RDB equiv.	Composition
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