

## SUPPORTING INFORMATION

### **Generation of Indoles with Agrochemical Significance through Biotransformation by *Chaetomium globosum***

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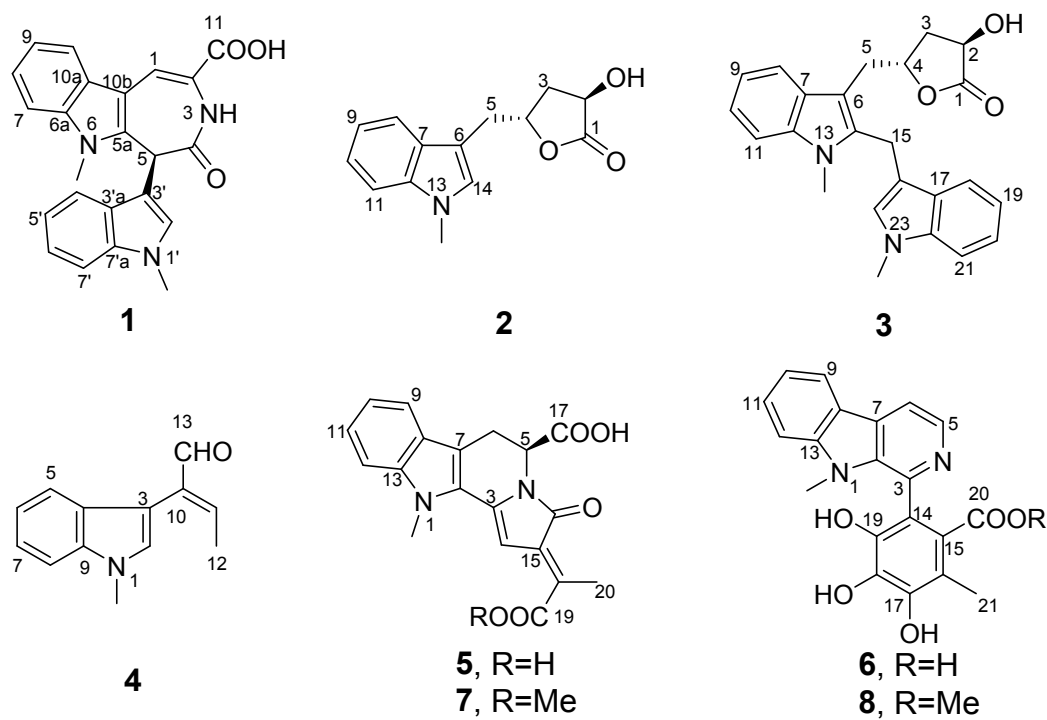
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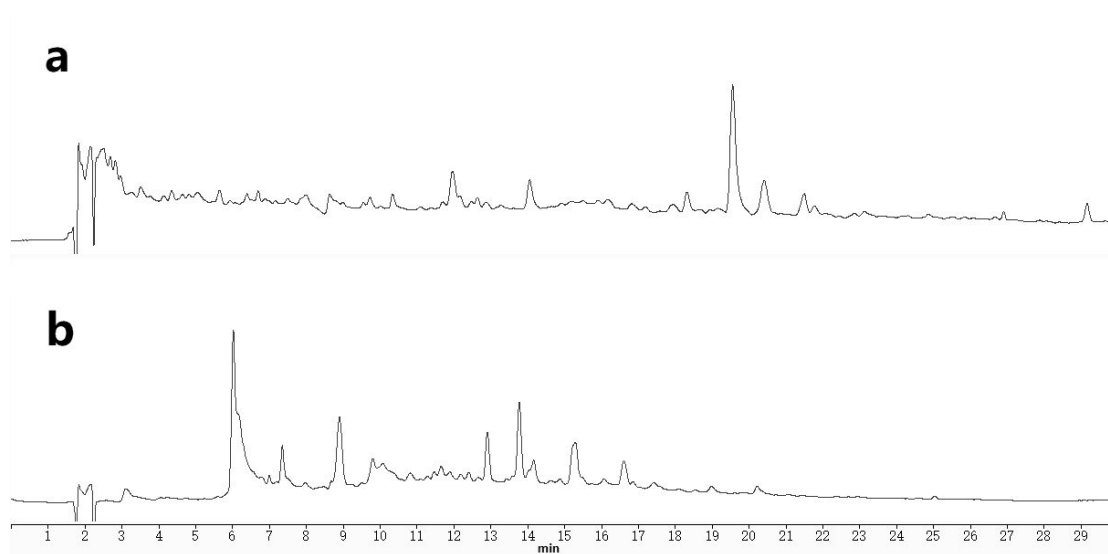
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**Figure S1.** Structures of compounds **1-8**.



**Figure S2.** HPLC profiles of crude extracts of fermentation broths from *Chaetomium globosum* 1C51 with **(b)** and without **(a)** supplement of 1-methyl-L-tryptophan. Changes in the HPLC figures indicated the production of new secondary metabolites.

**Table S1.** NMR Spectroscopic Data of **5** in CDCl<sub>3</sub>

position	$\delta_C$	$\delta_H$ (mult. $J$ in Hz)
2	126.7	
3	136.0	
5	50.4	5.20 (d, 7.1)
6	24.3	3.78 (d, 16.6) 3.40 (dd, 7.1, 16.6)
7	113.8	
8	126.2	
9	120.4	7.67 (d, 8.0)
10	125.4	7.14 (t, 8.0 )
11	120.9	7.32 (t, 8.0)
12	110.6	7.50 (d, 8.0)
13	140.9	
14	98.7	7.04 (s)
15	136.9	
16	169.5	
17	171.7	
18	132.6	
19	169.2	
20	14.9	2.53 (s)
1-NMe	31.7	3.97 (s)

**Table S2.** NMR Spectroscopic Data of **6a** in acetone-*d*<sub>6</sub>

position	$\delta_{\text{C}}$	$\delta_{\text{H}}$ (mult. <i>J</i> in Hz)
2	136.0	
3	134.8	
5	136.7	9.28 (d, 6.5)
6	118.1	8.98 (d, 6.5)
7	130.1	
8	120.1	
9	124.5	8.62 (d, 7.5)
10	123.2	7.55 (t, 7.5)
11	133.4	7.91 (t, 7.5)
12	112.1	7.84 (d, 7.5)
13	146.9	
14	100.9	
15	128.9	
16	117.4	
17	157.2	
17-OMe	61.5	4.06 (s)
18	151.0	
18-OMe	61.7	3.84 (s)
19	149.1	
19-OMe	61.6	4.06 (s)
20	167.5	
21	13.5	2.39 (s)
22	53.0	3.38 (s)
1-NMe	31.7	3.58 (s)
4-NMe	46.4	4.40 (s)

**Table S3.** Antibacterial activities against four phytopathogens. All values are expressed in MIC (µg/mL)

Compound	<i>X. oryzae</i> pv. <i>oryzae</i>	<i>R.</i> <i>solanacearum</i>	<i>X. oryzae</i> pv. <i>oryzicola</i>	<i>P. syringae</i> pv. <i>lachrymans</i>
<b>1</b>	8	32	32	128
<b>3</b>	32	>128	>128	>128
<b>5</b>	32	128	64	>128
<b>6</b>	64	>128	>128	>128
streptomycin sulfate <sup>a</sup>	0.25	3.125	2.5	12.5

<sup>a</sup> positive control

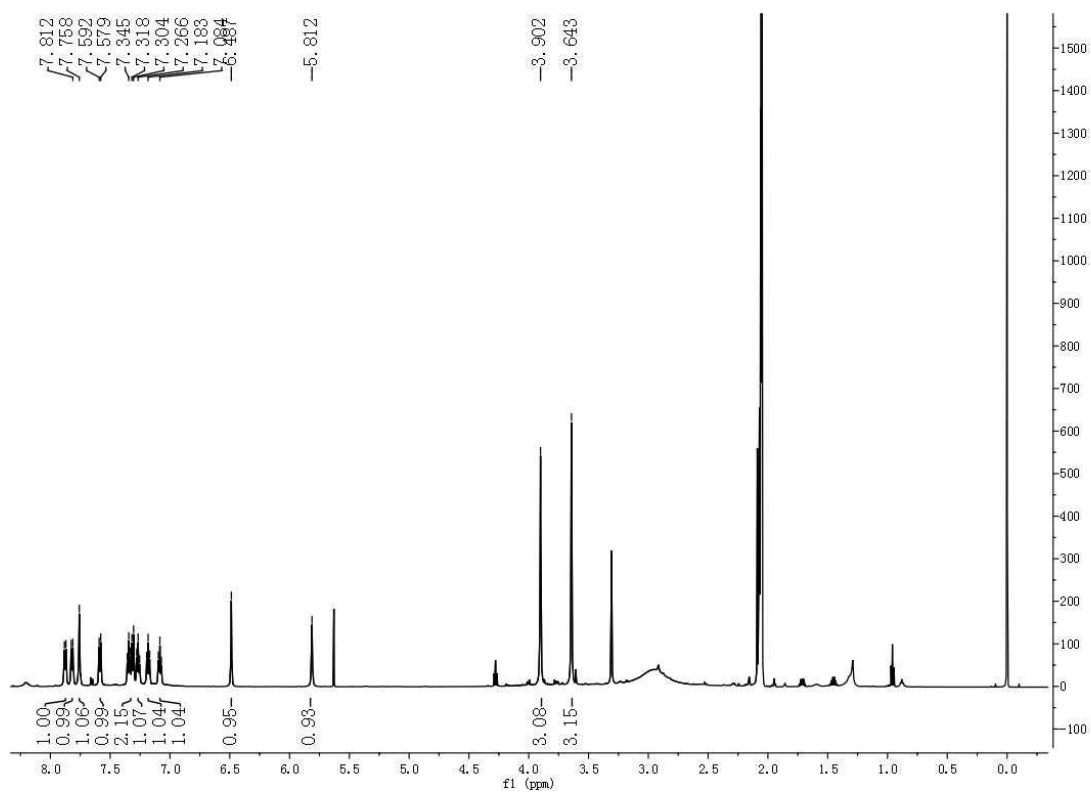


Figure S3. <sup>1</sup>H NMR spectrum of **1**

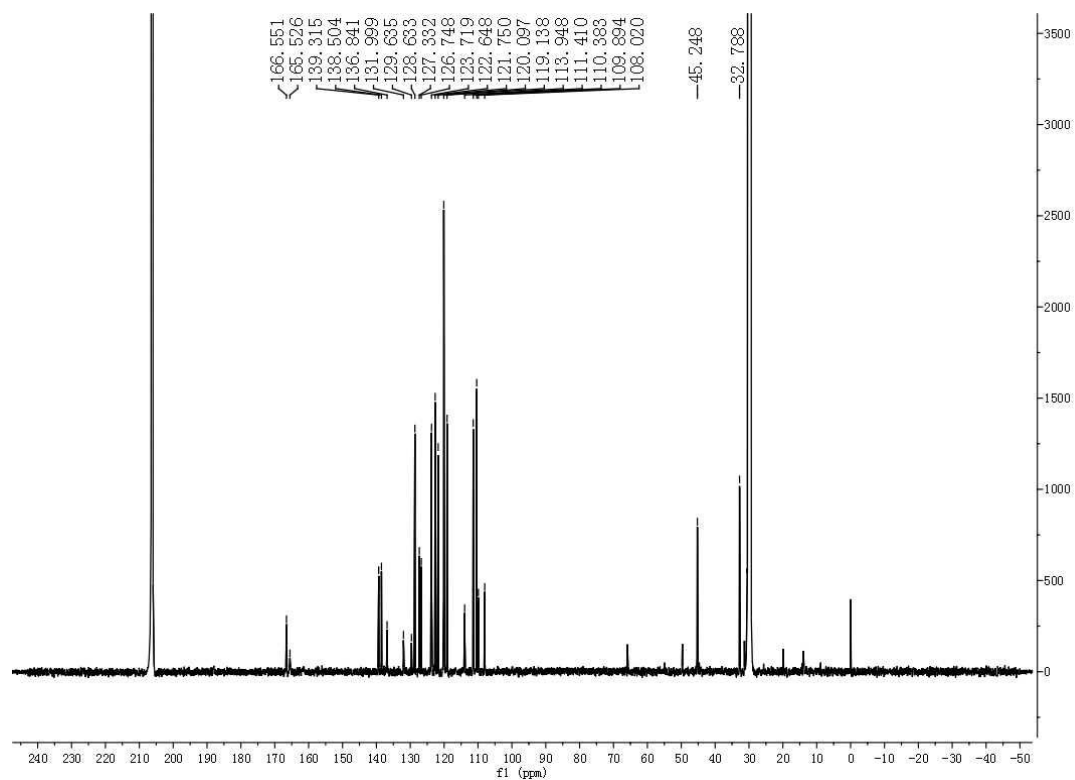
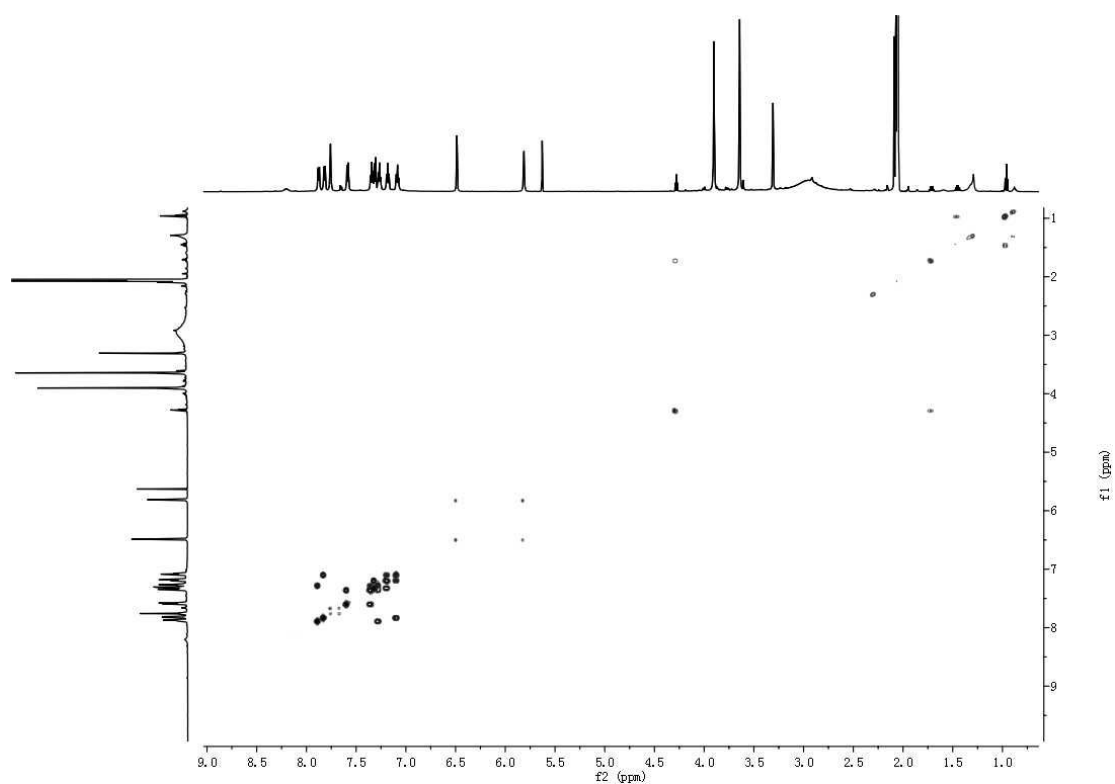
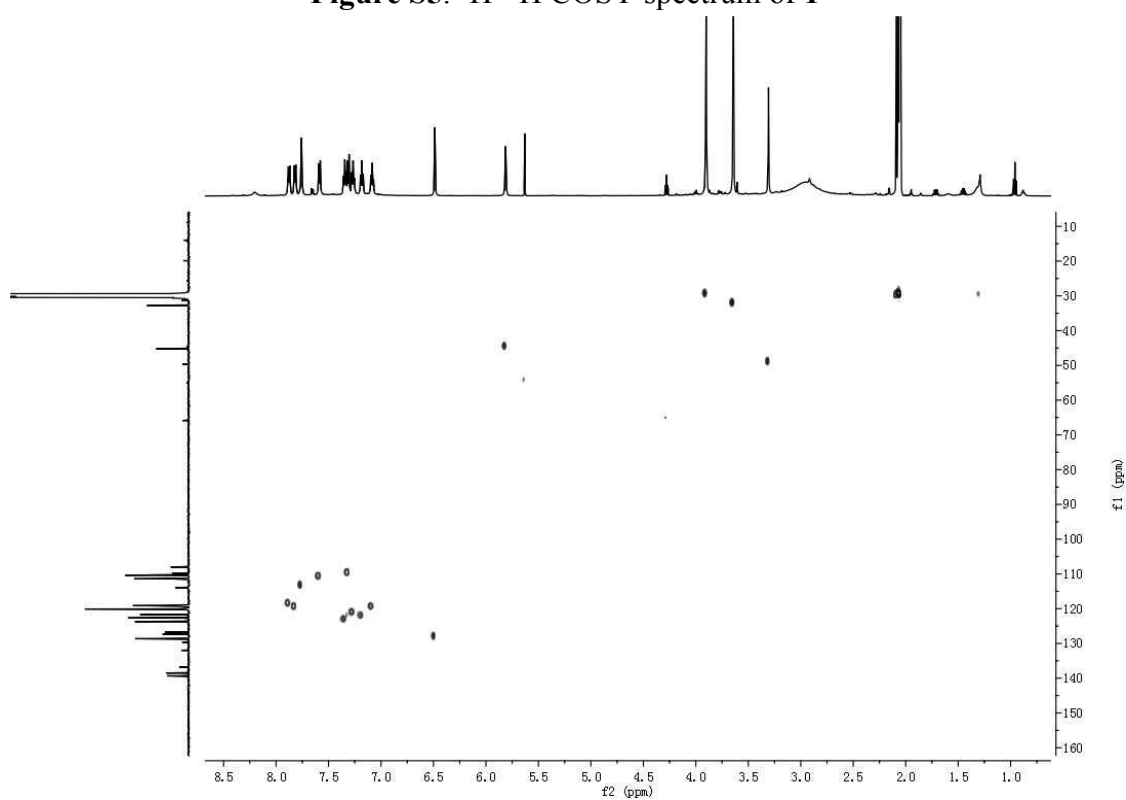


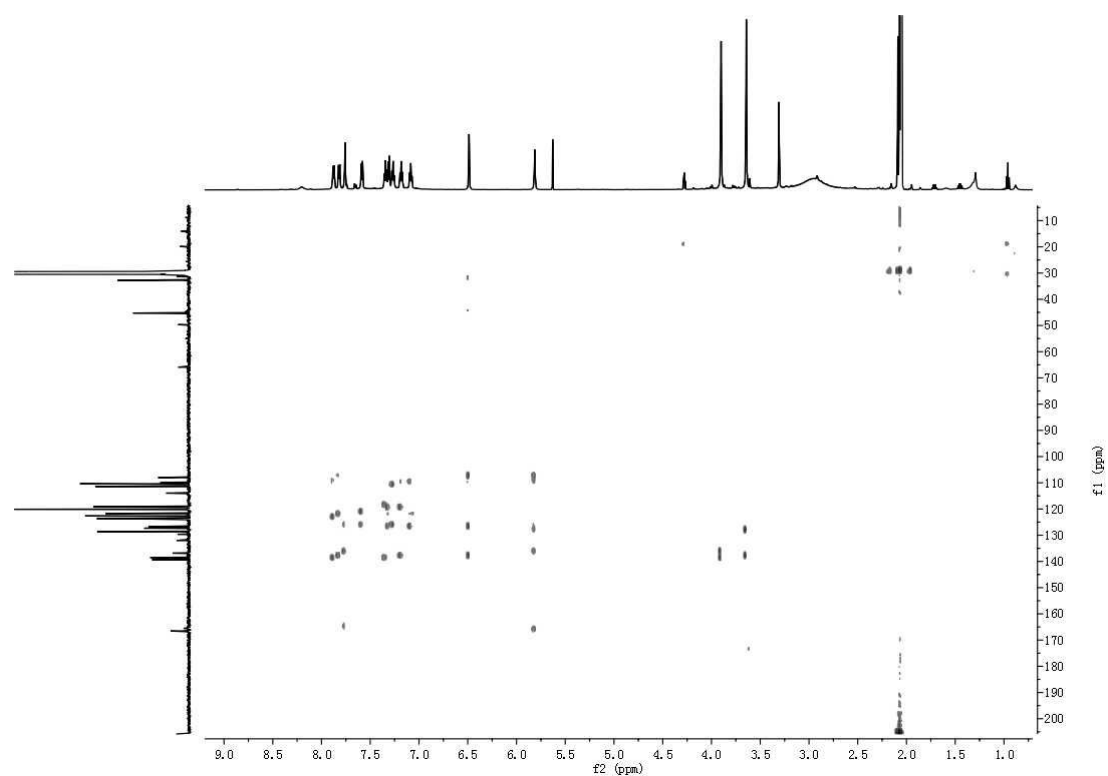
Figure S4. <sup>13</sup>C NMR spectrum of **1**



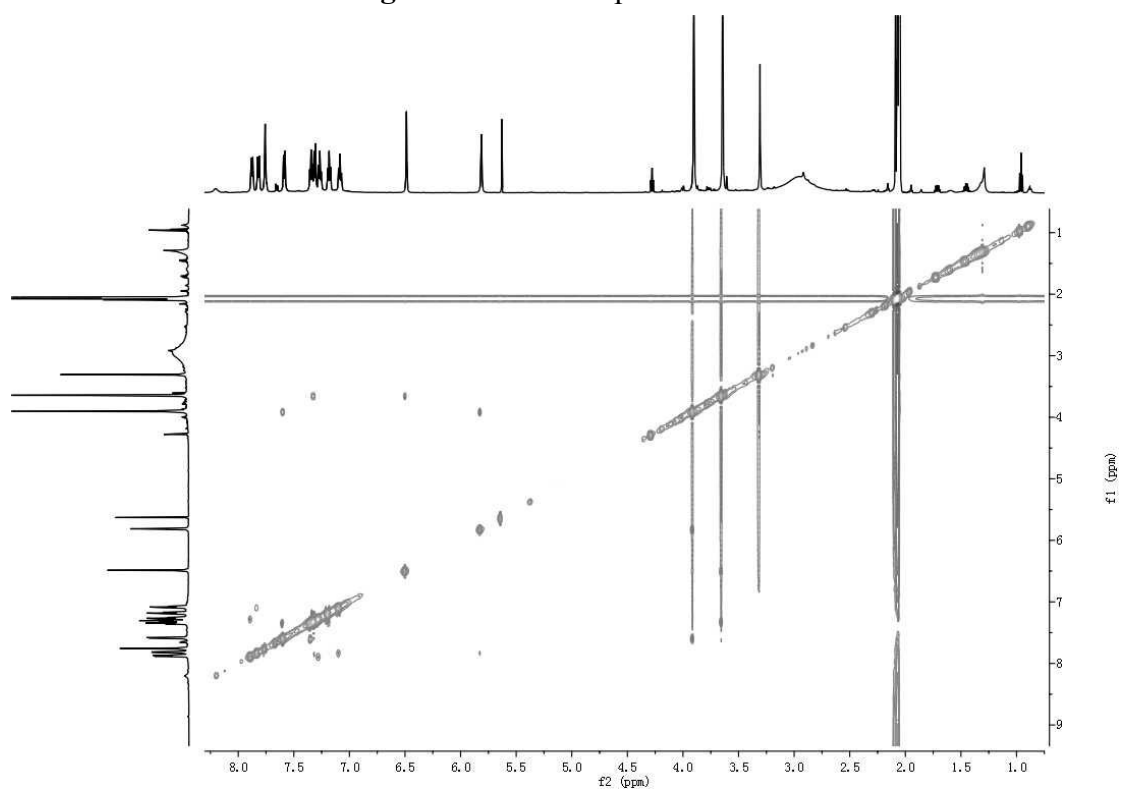
**Figure S5.**  $^1\text{H}$ – $^1\text{H}$  COSY spectrum of **1**



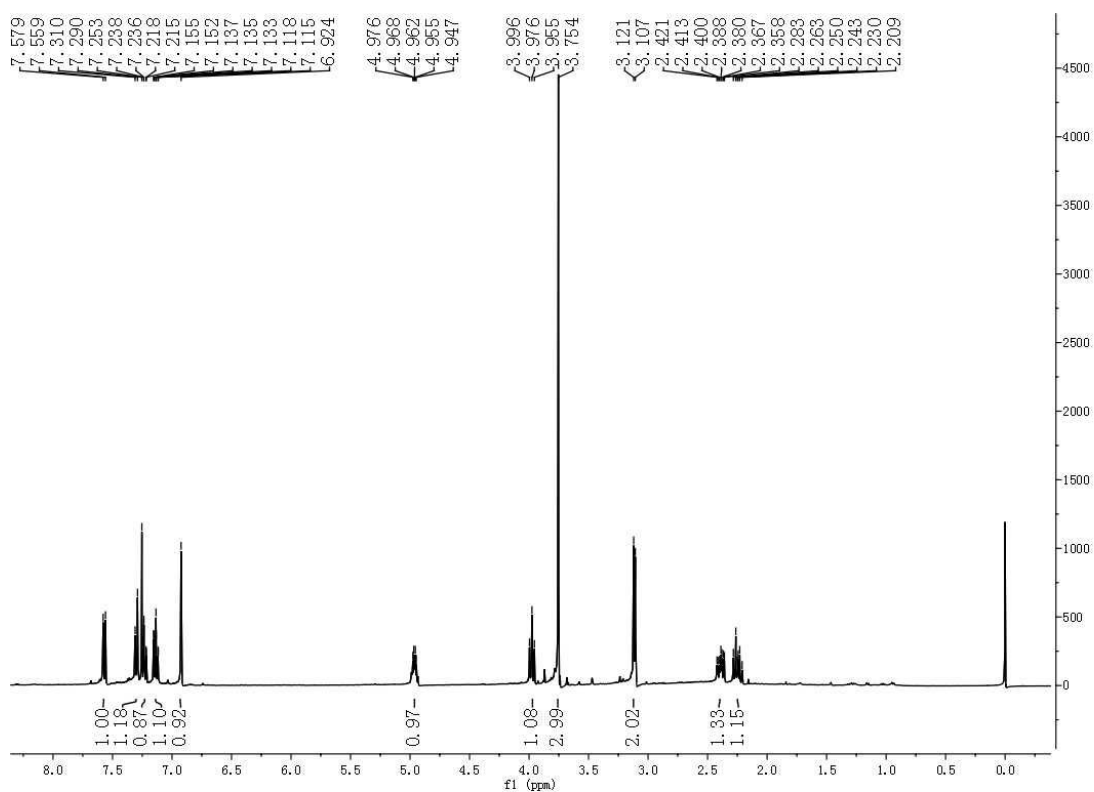
**Figure S6.** HSQC spectrum of **1**



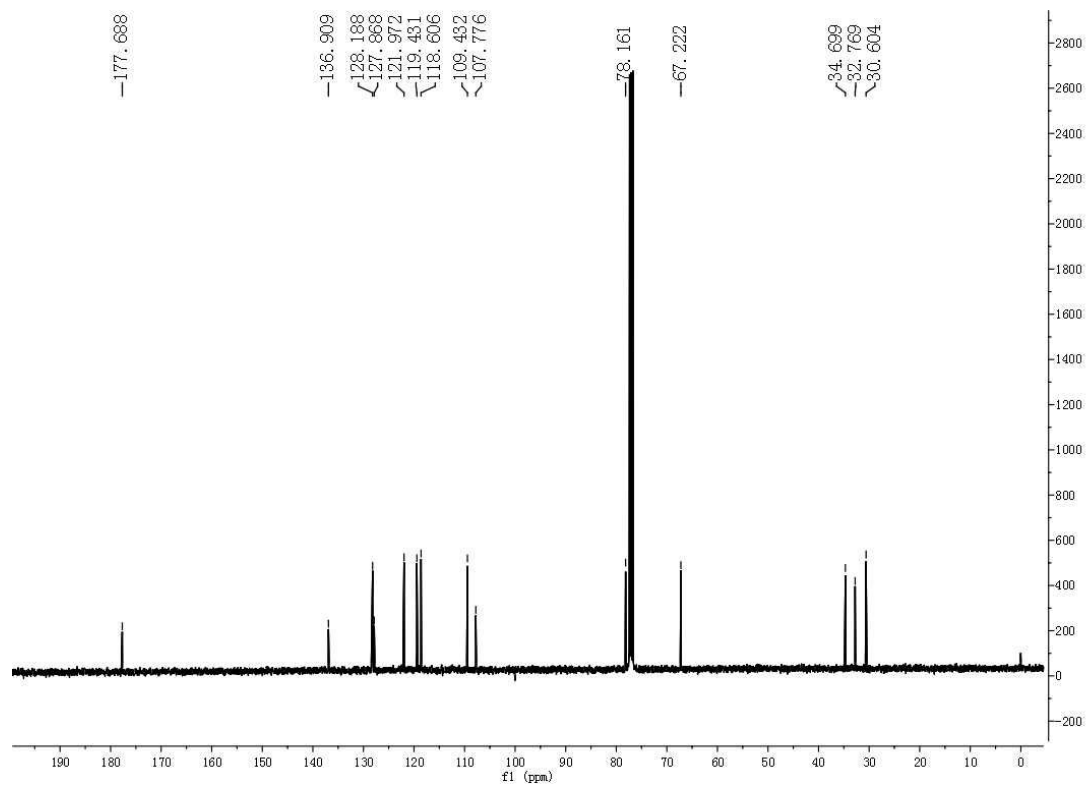
**Figure S7.** HMBC spectrum of **1**



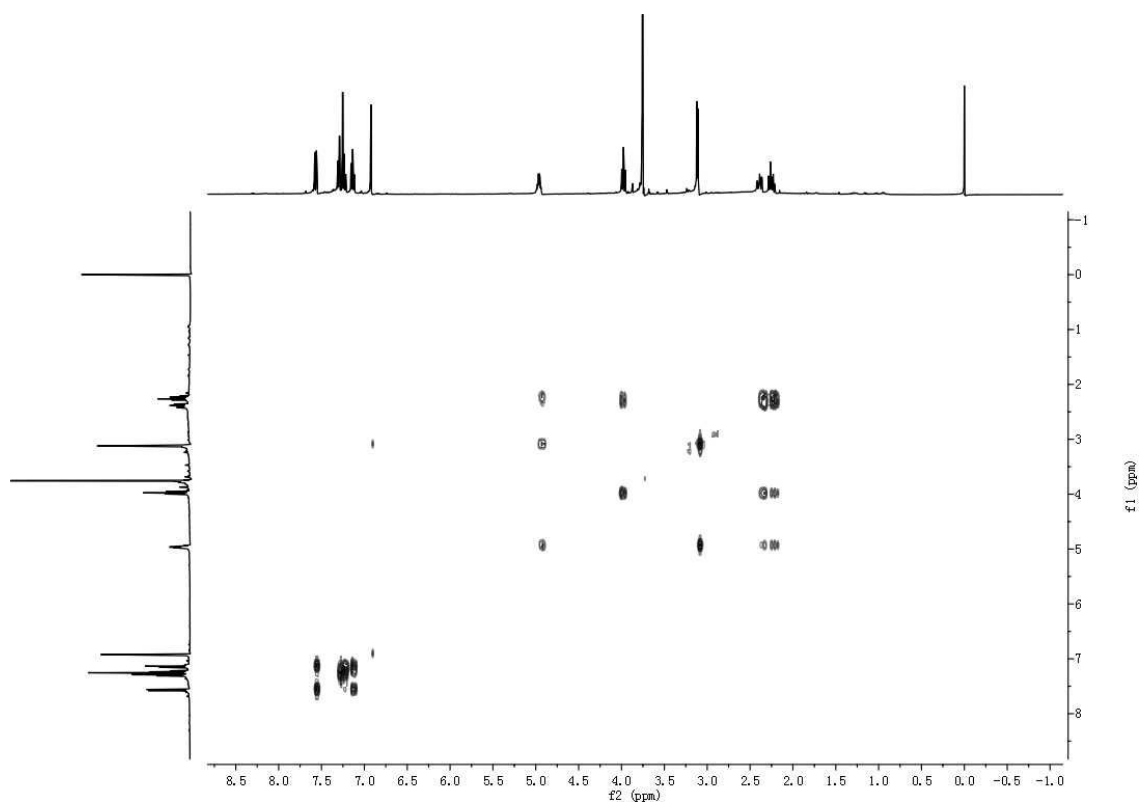
**Figure S8.** NOESY spectrum of **1**



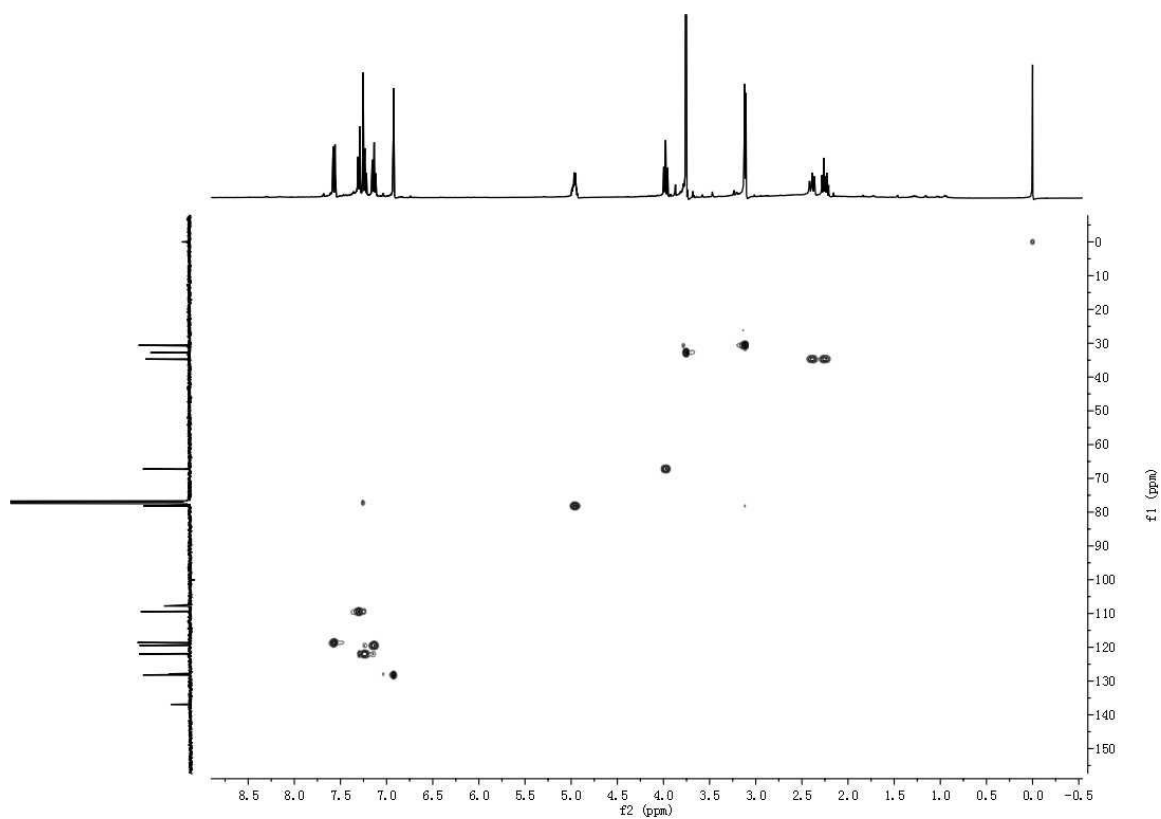
**Figure S9.  $^1\text{H}$  NMR spectrum of **2****



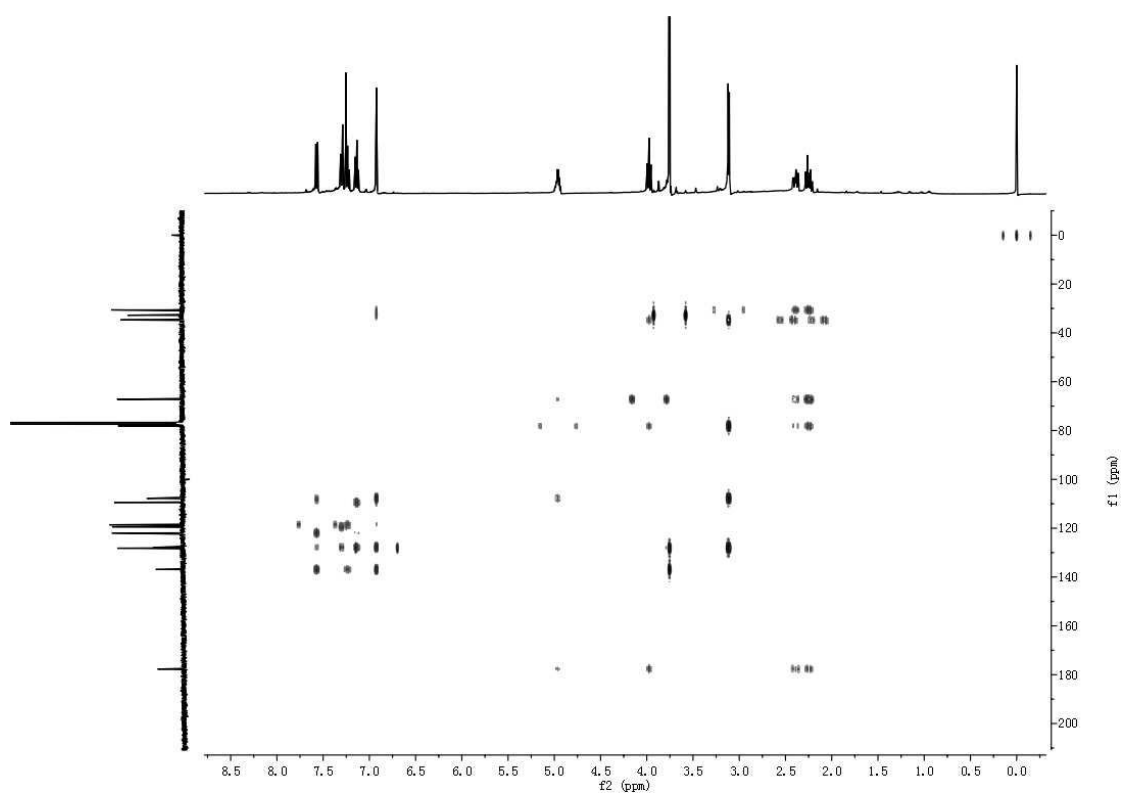
**Figure S10.  $^{13}\text{C}$  NMR spectrum of **2****



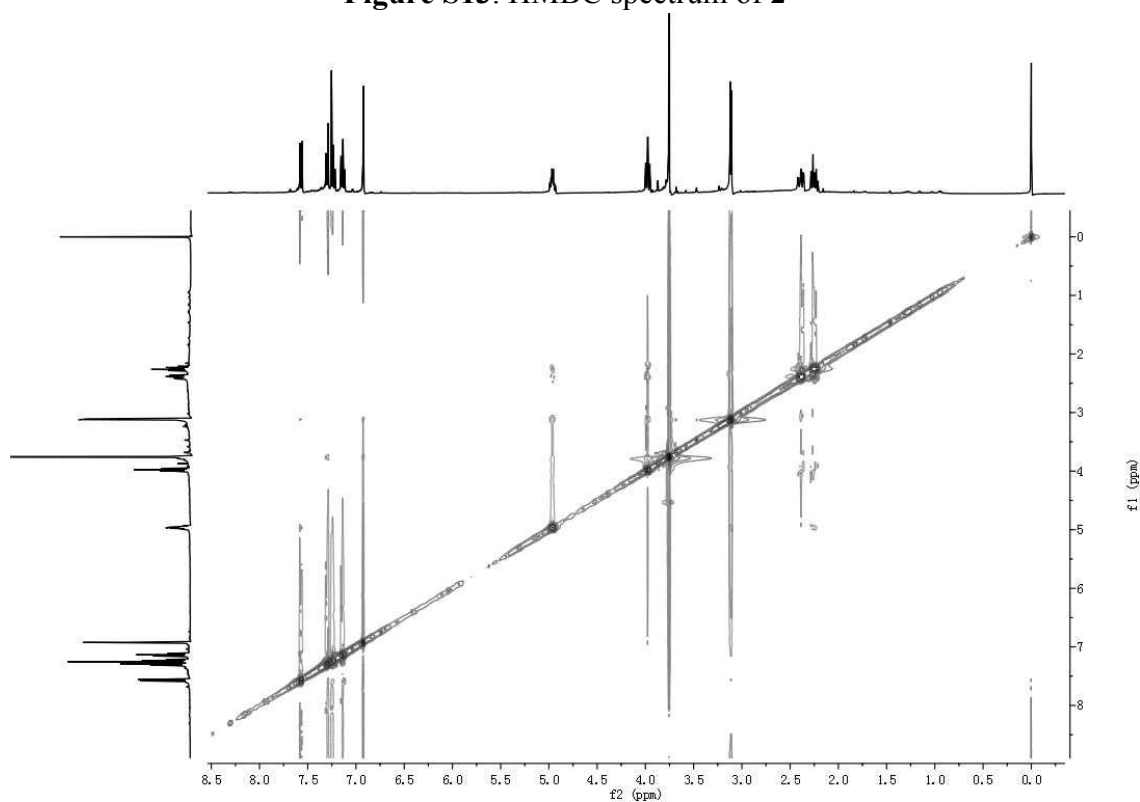
**Figure S11.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of **2**



**Figure S12.** HSQC spectrum of **2**



**Figure S13.** HMBC spectrum of **2**



**Figure S14.** NOESY spectrum of **2**

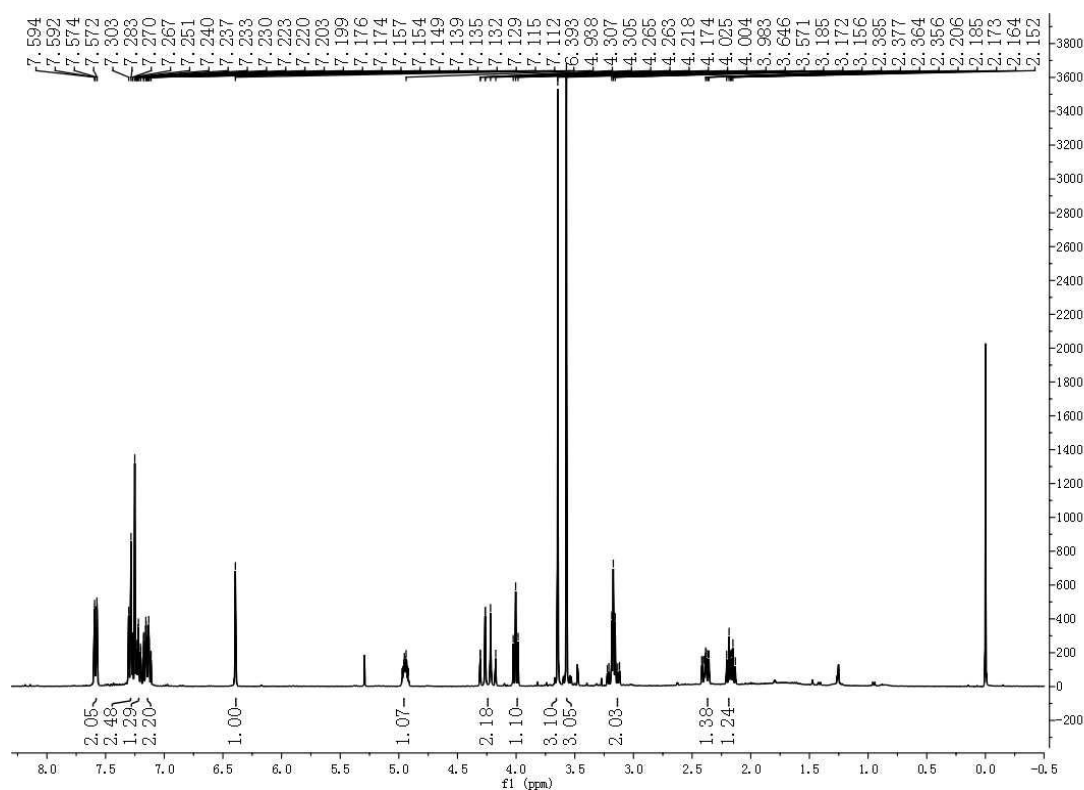


Figure S15. <sup>1</sup>H NMR spectrum of **3**

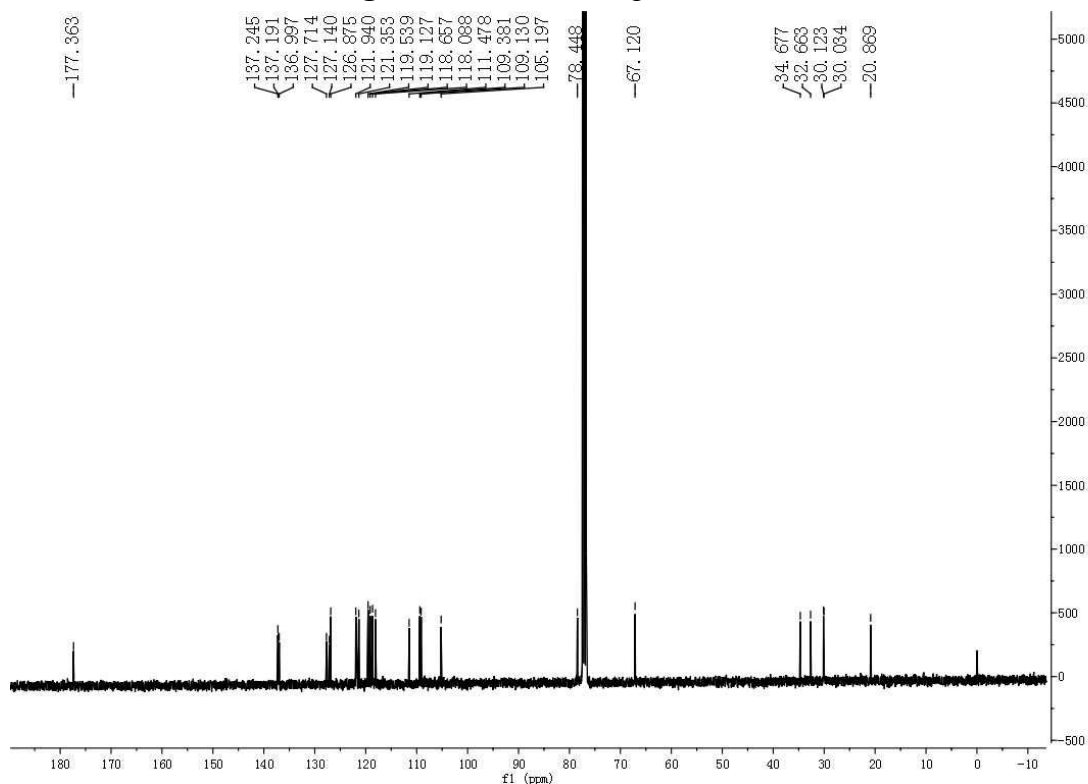
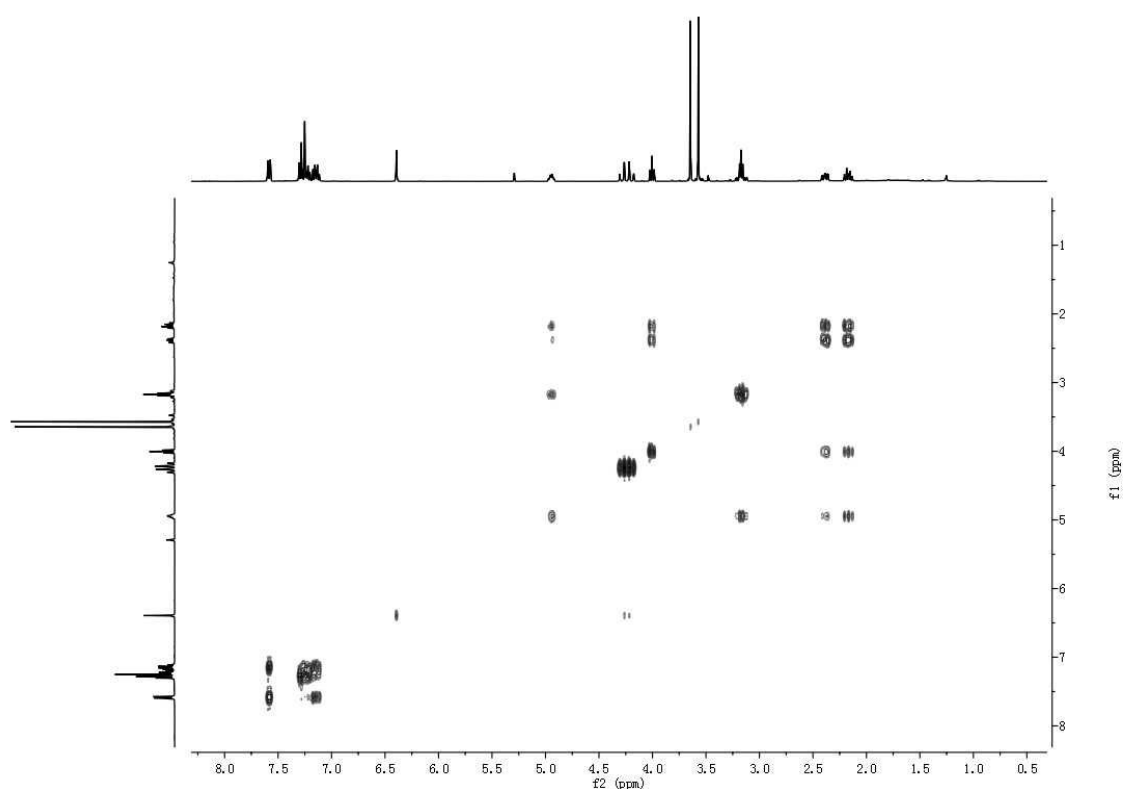
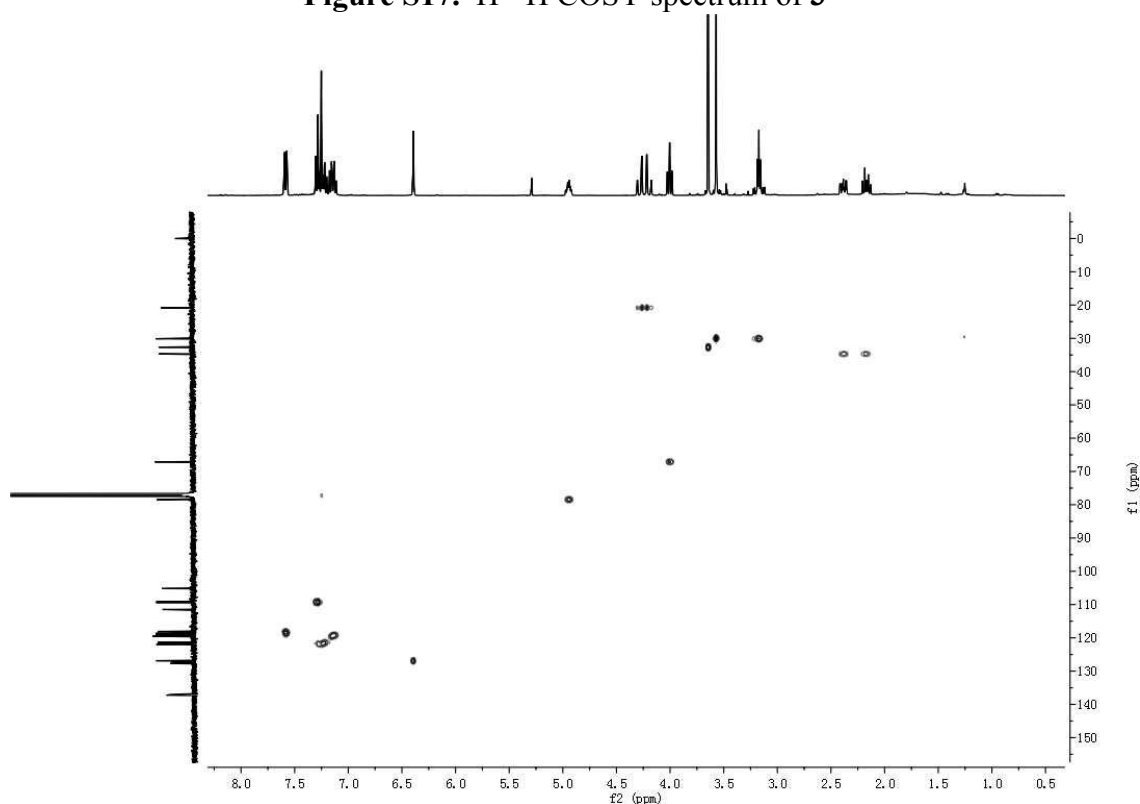


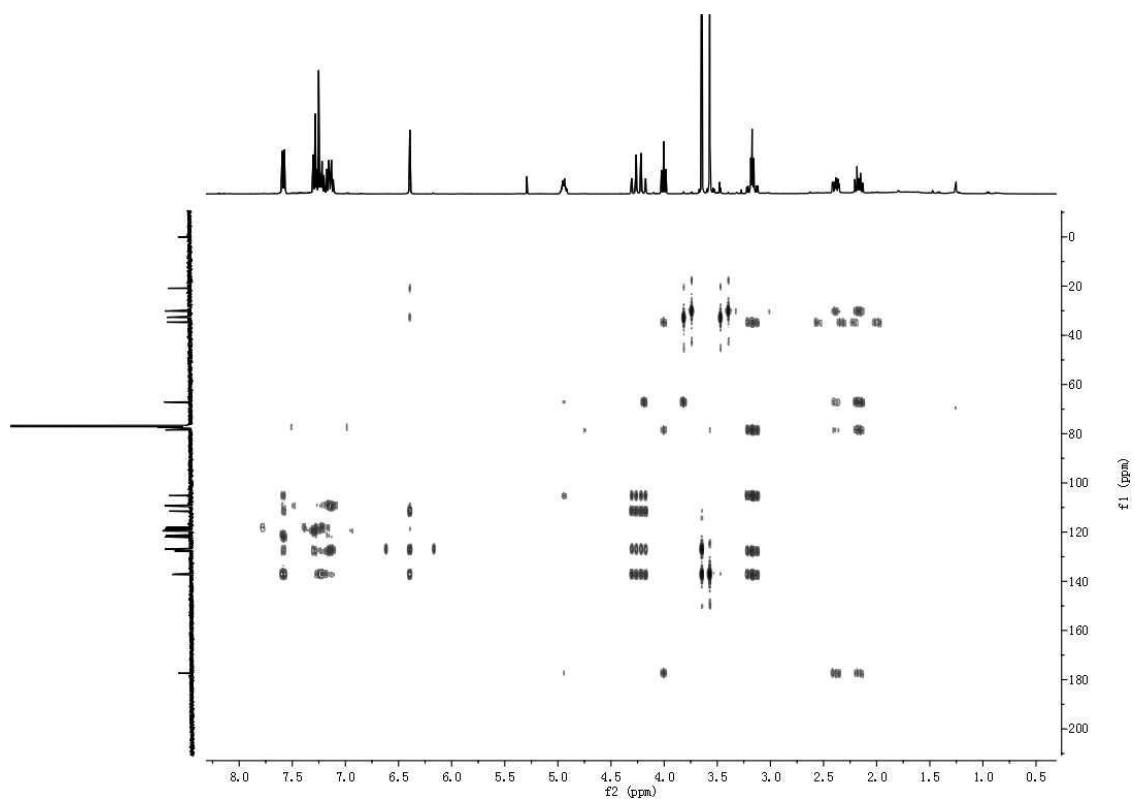
Figure S16. <sup>13</sup>C NMR spectrum **3**



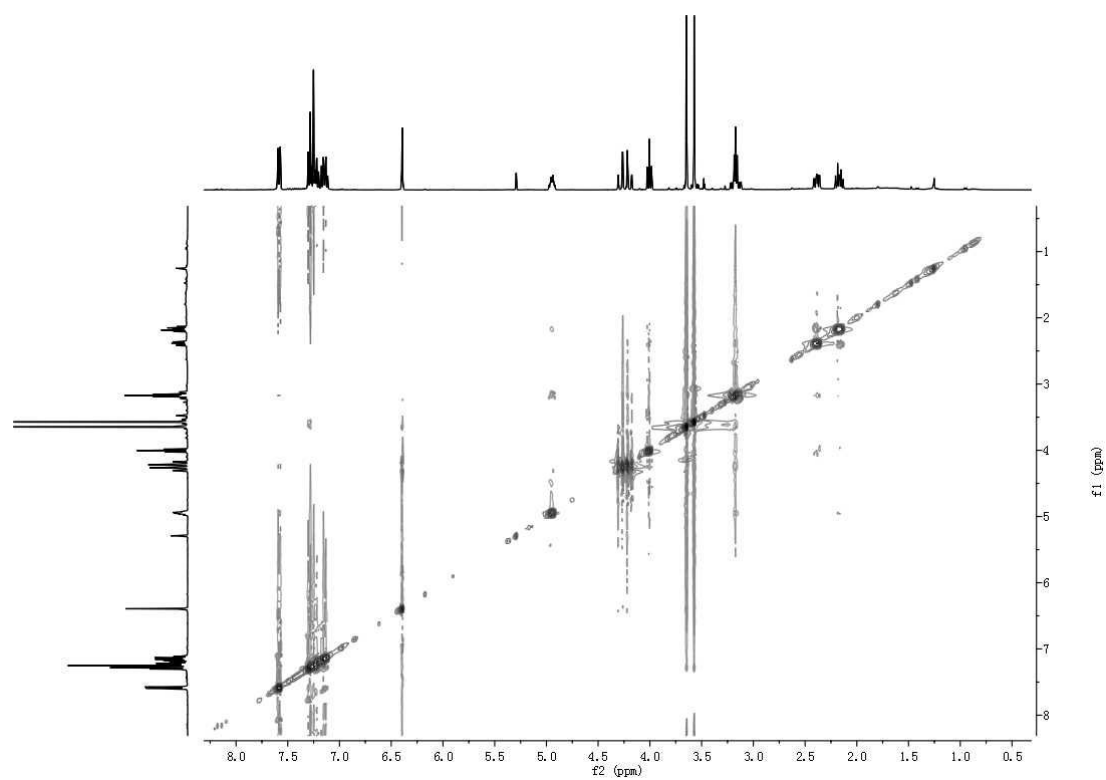
**Figure S17.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of **3**



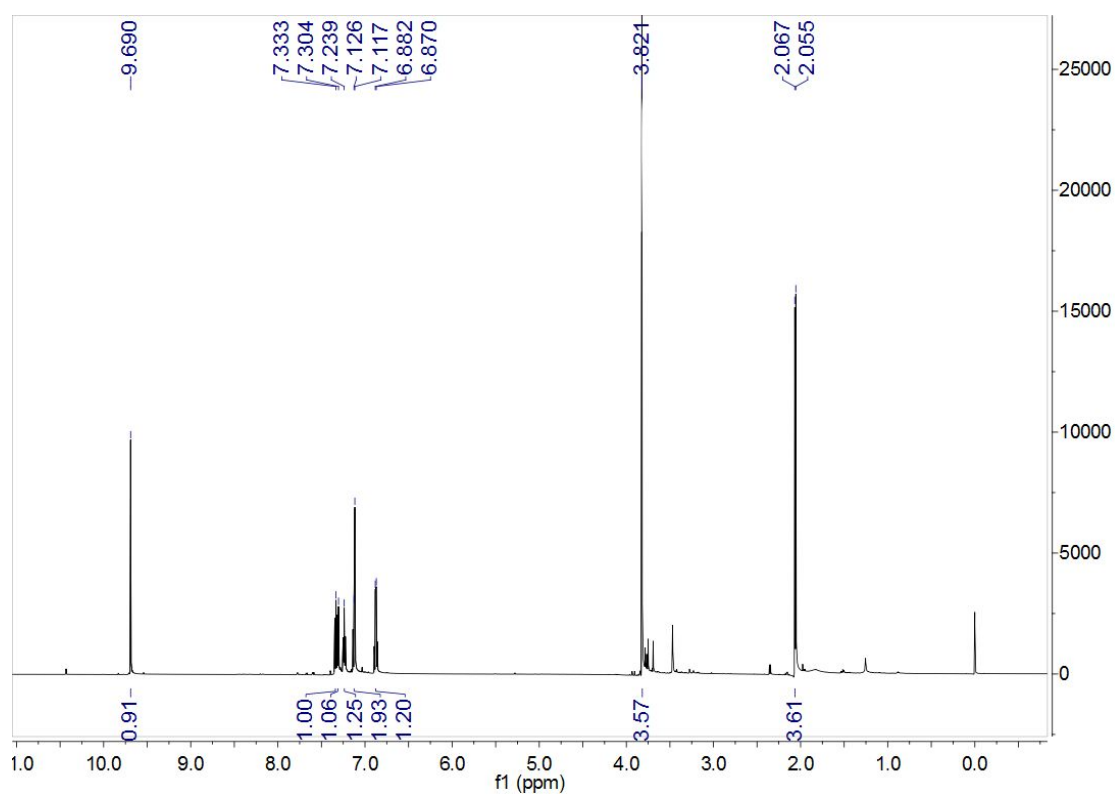
**Figure S18.** HSQC spectrum of **3**



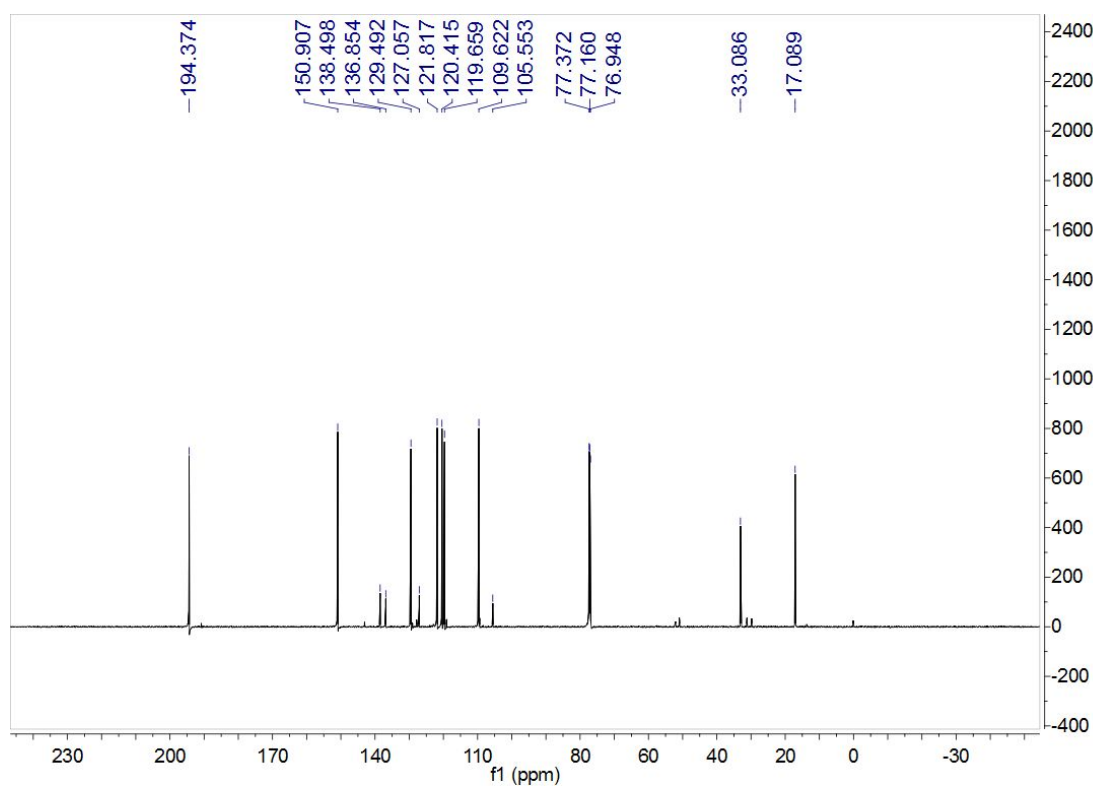
**Figure S19.** HMBC spectrum of **3**



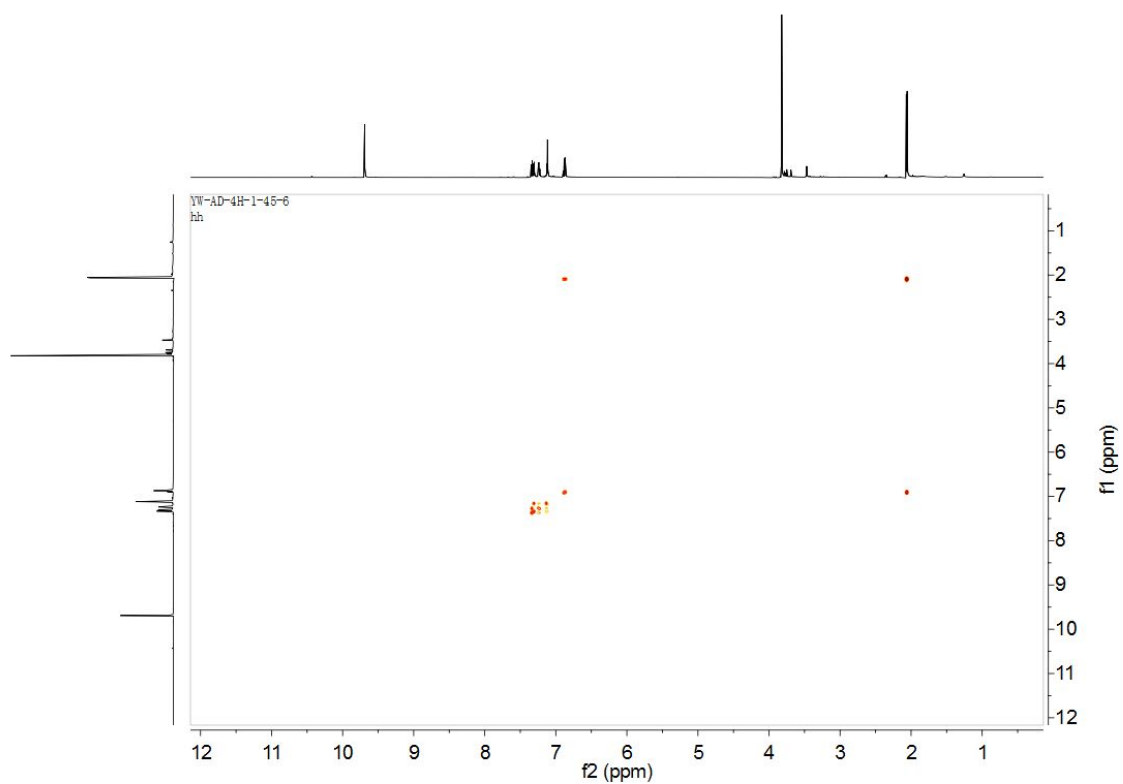
**Figure S20.** NOESY spectrum of **3**



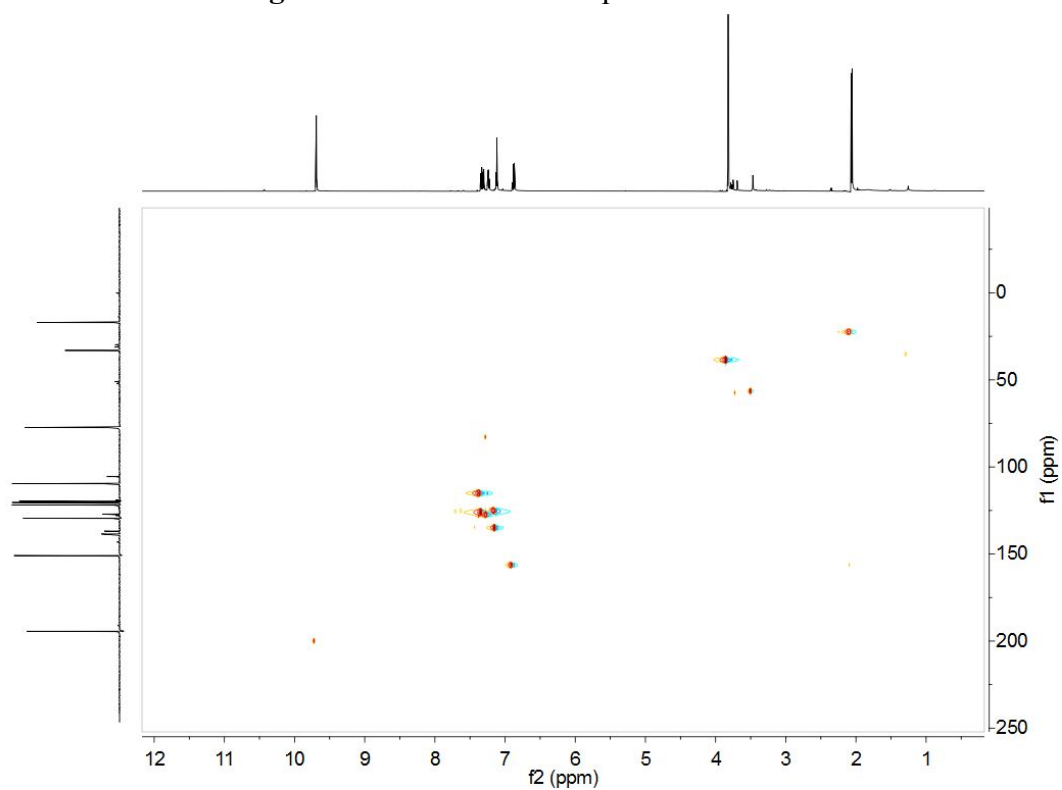
**Figure S21.** <sup>1</sup>H NMR spectrum (400 MHz) of 4



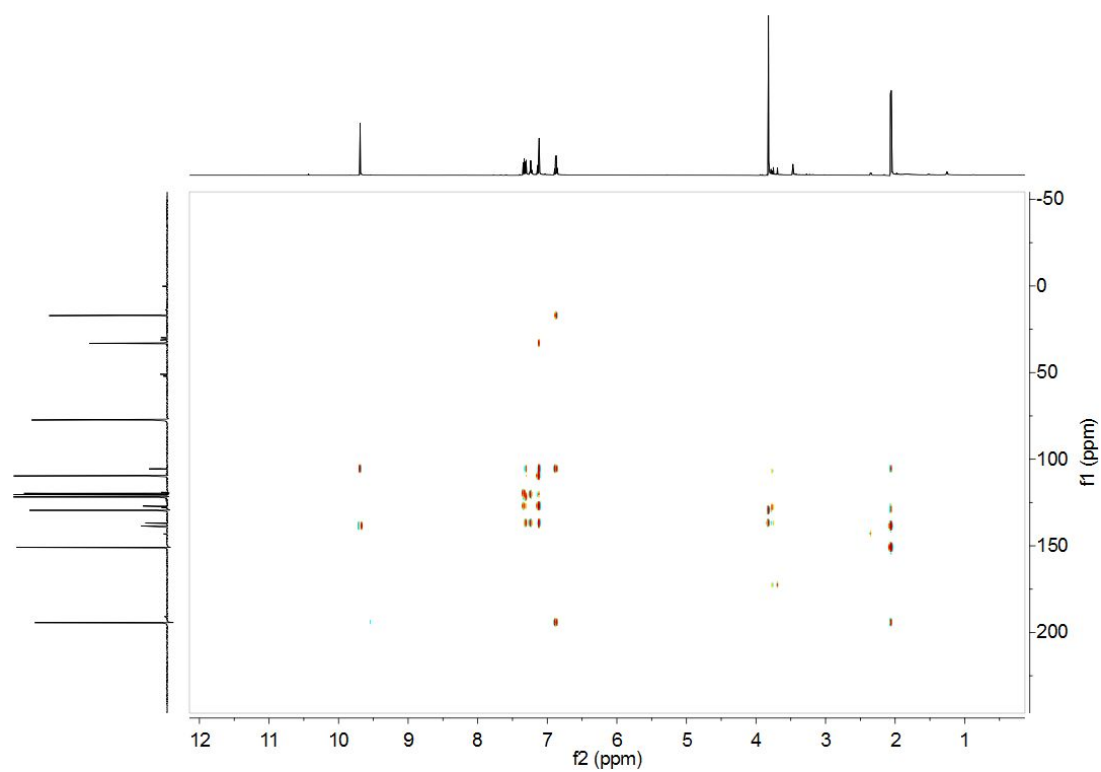
**Figure S22.** <sup>13</sup>C NMR spectrum of 4



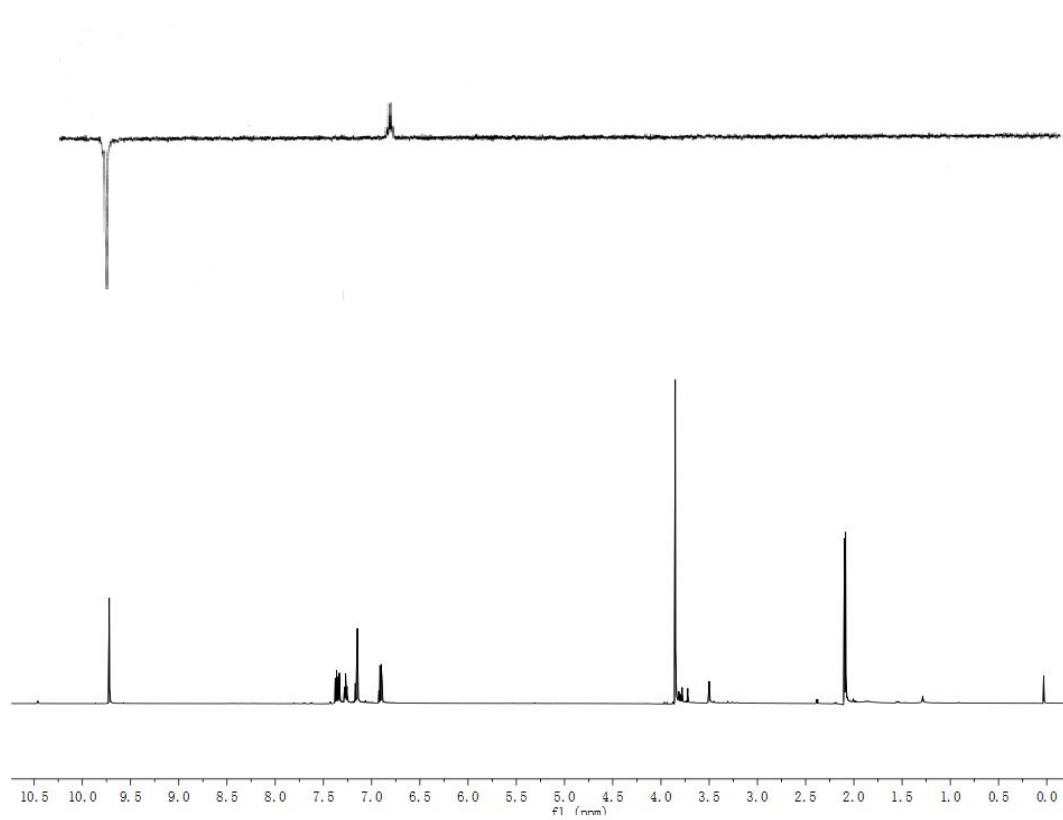
**Figure S23.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of 4



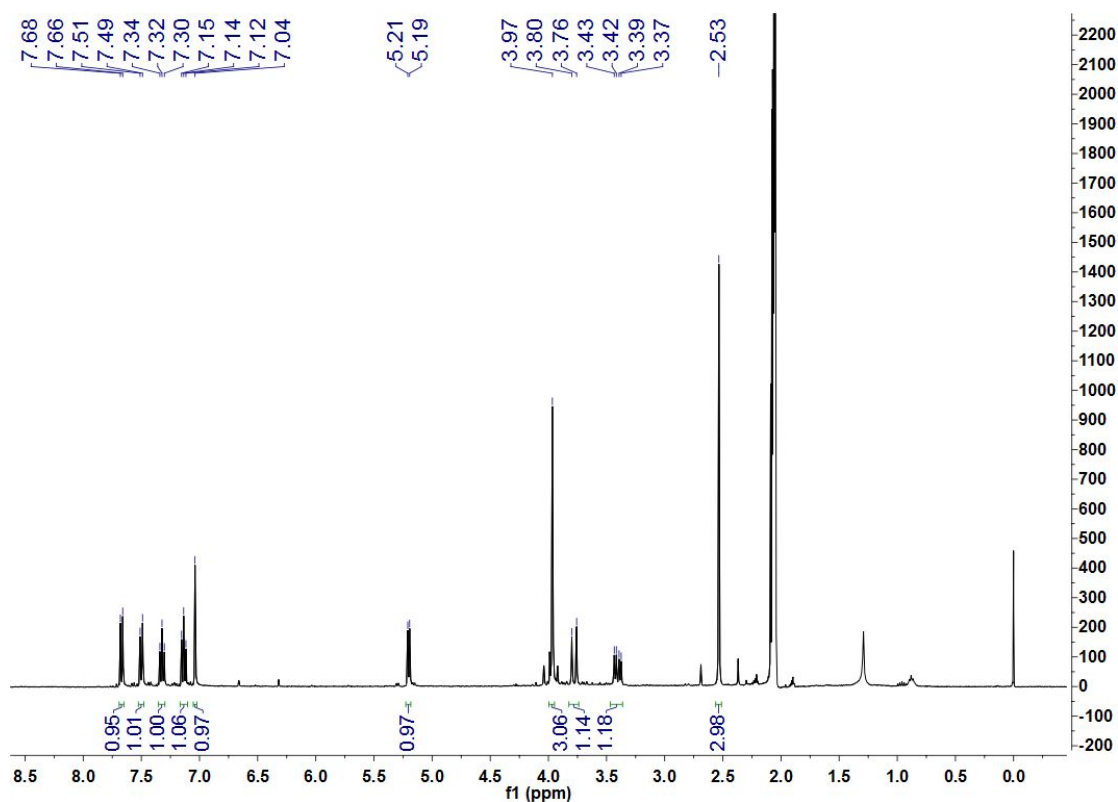
**Figure S24.** HSQC spectrum of 4



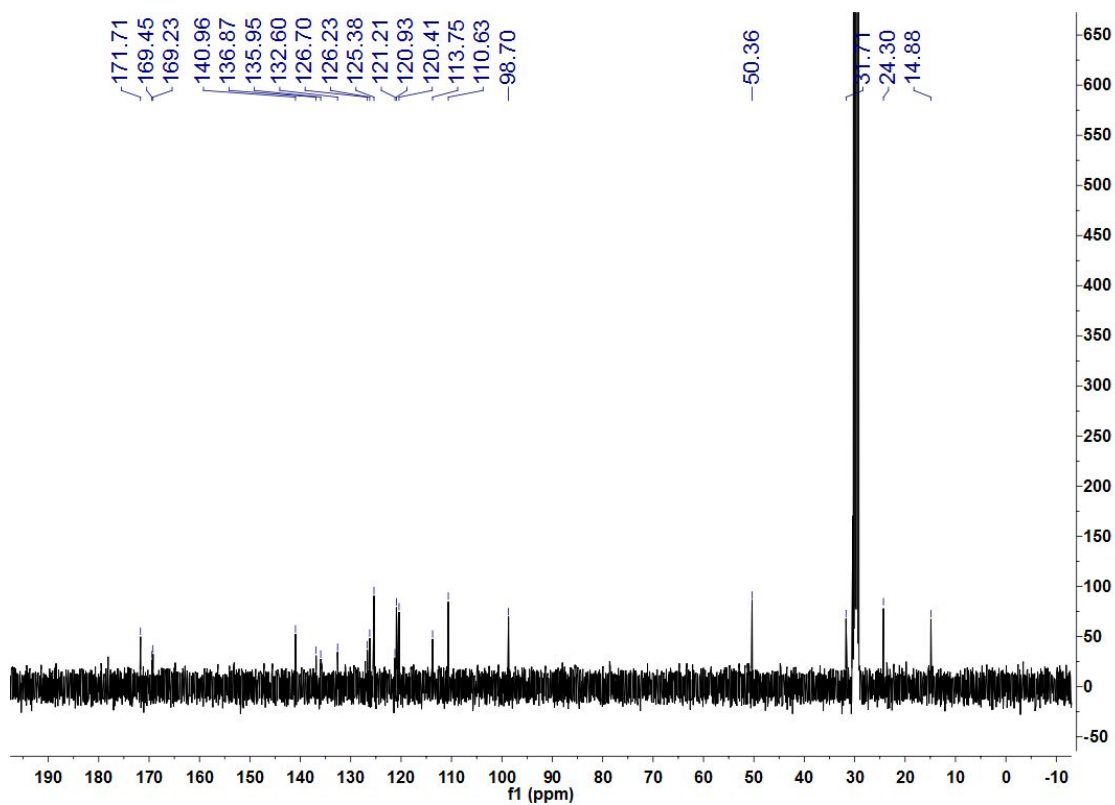
**Figure S25.** HMBC spectrum of **4**



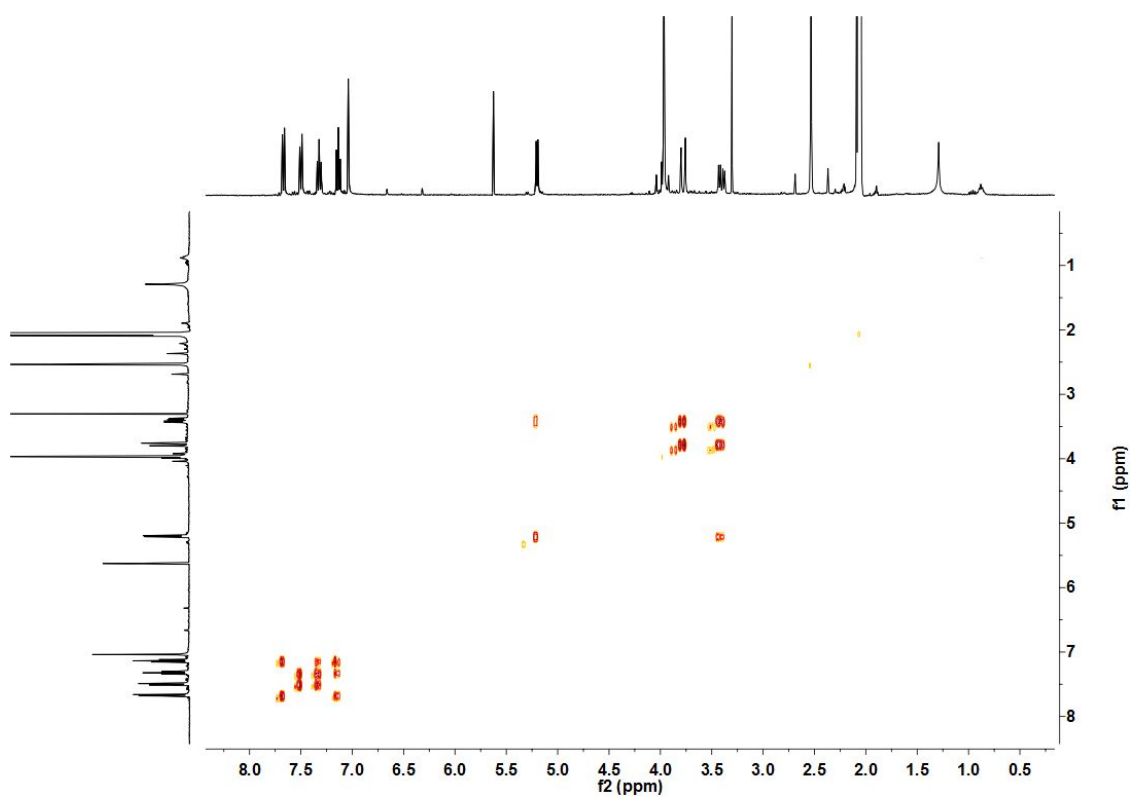
**Figure S26.** NOESY spectrum of **4**



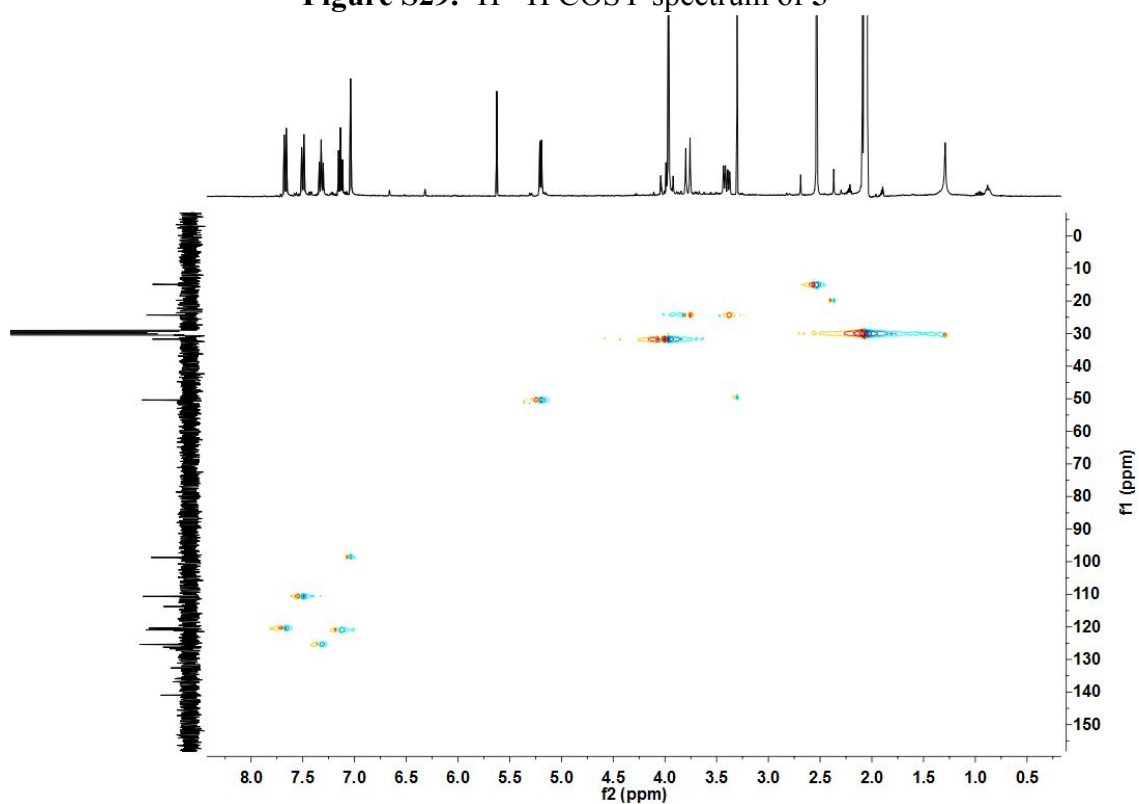
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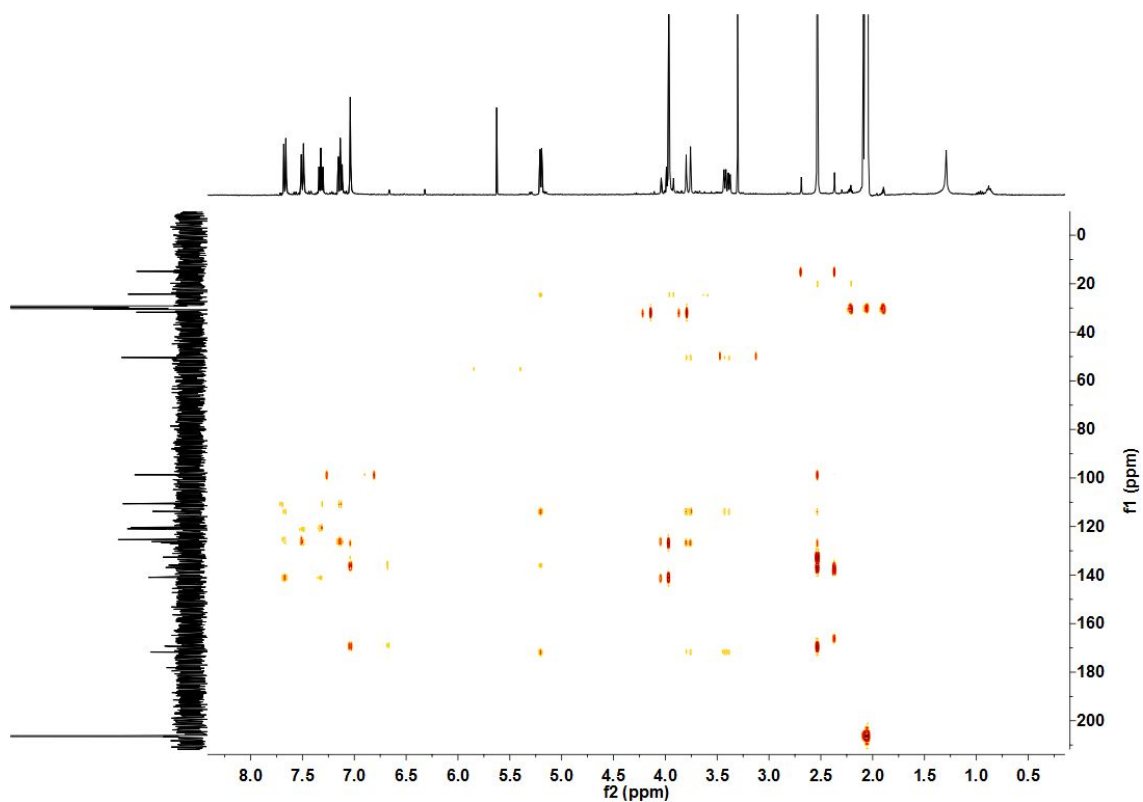
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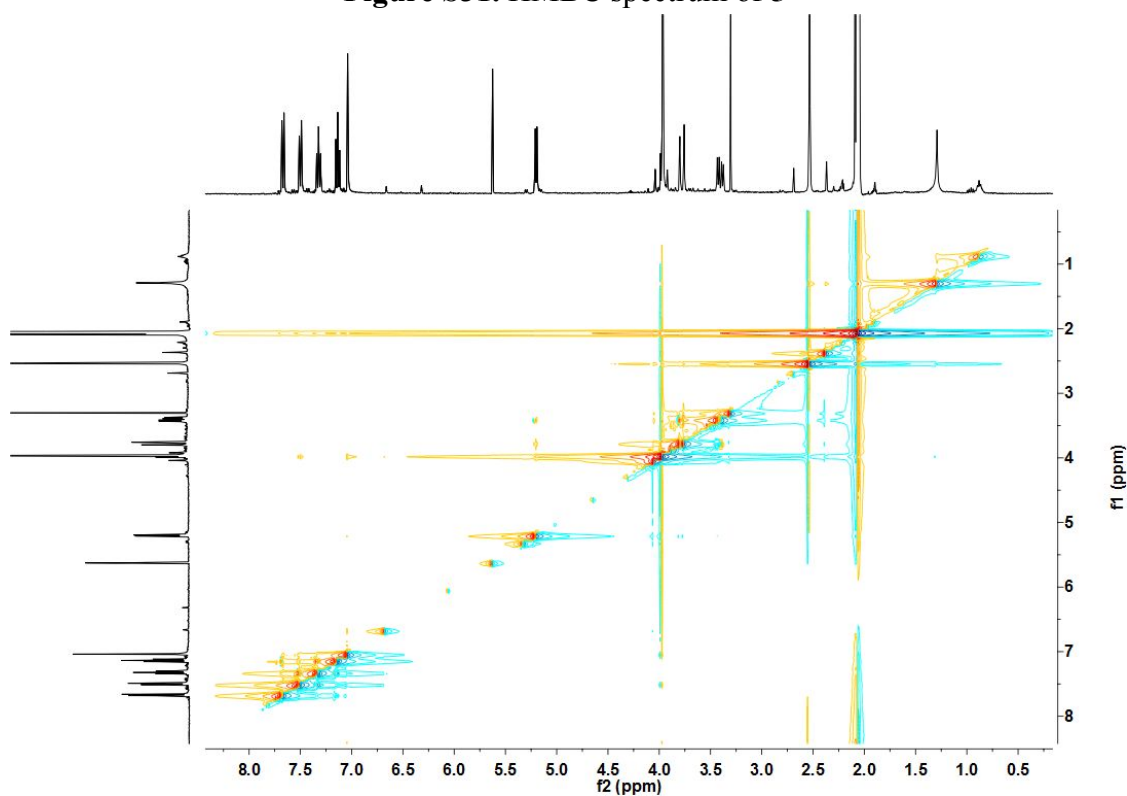
**Figure S29.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of **5**



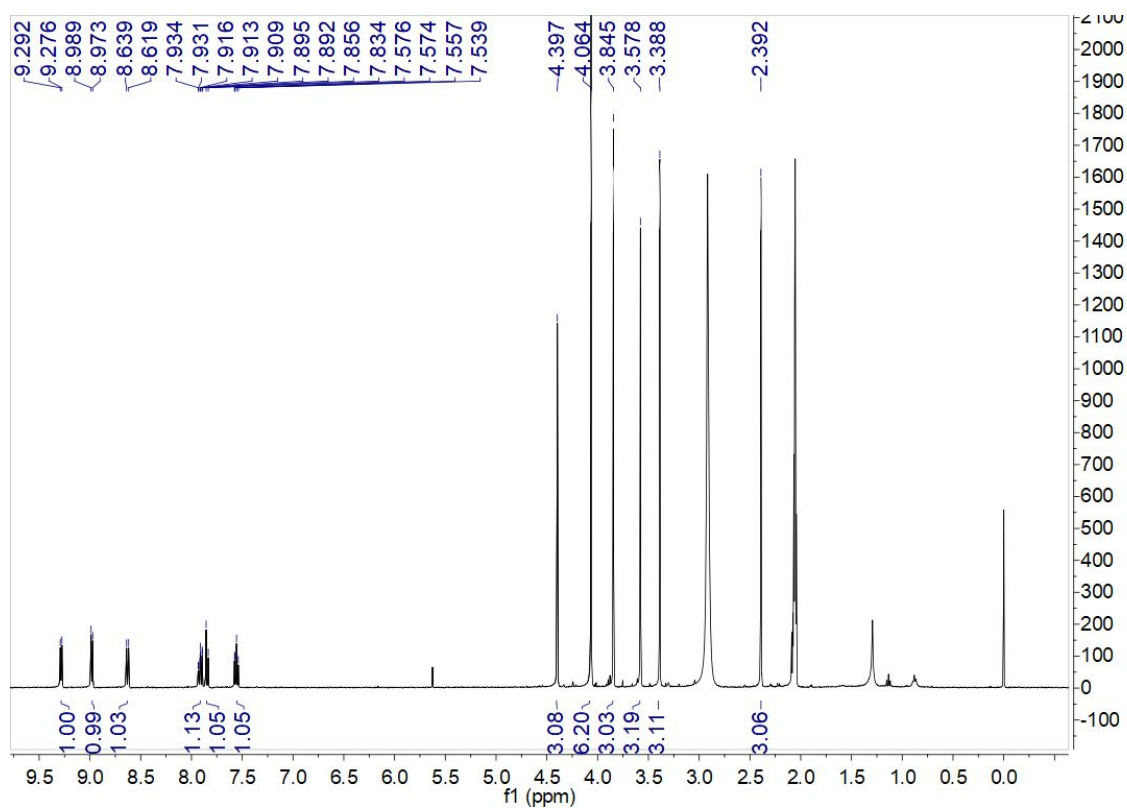
**Figure S30.** HSQC spectrum of **5**



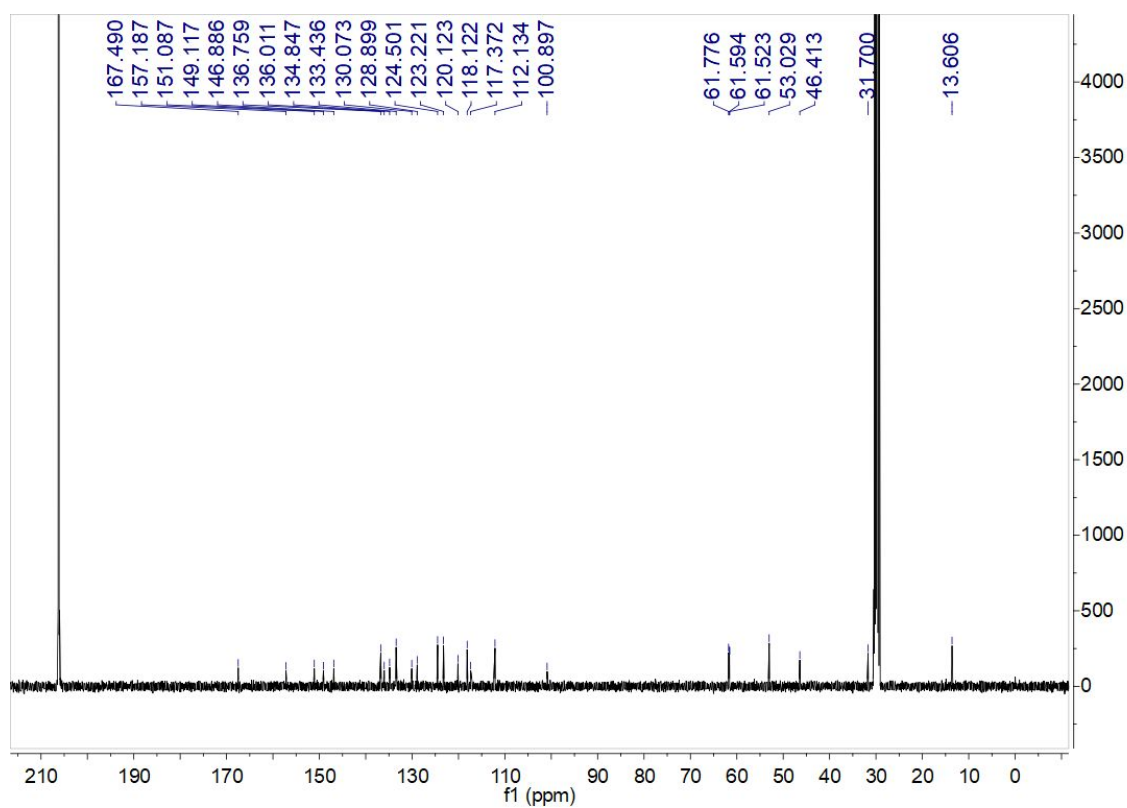
**Figure S31.** HMBC spectrum of **5**



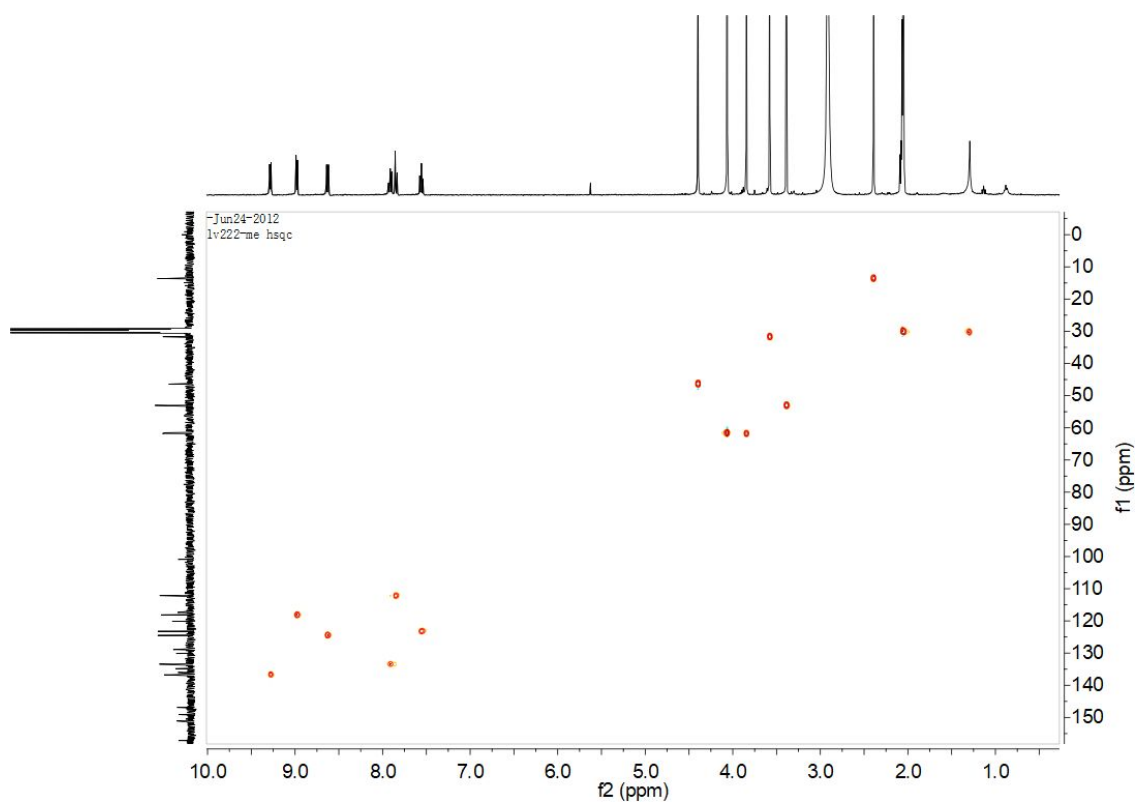
**Figure S32.** NOESY spectrum of **5**



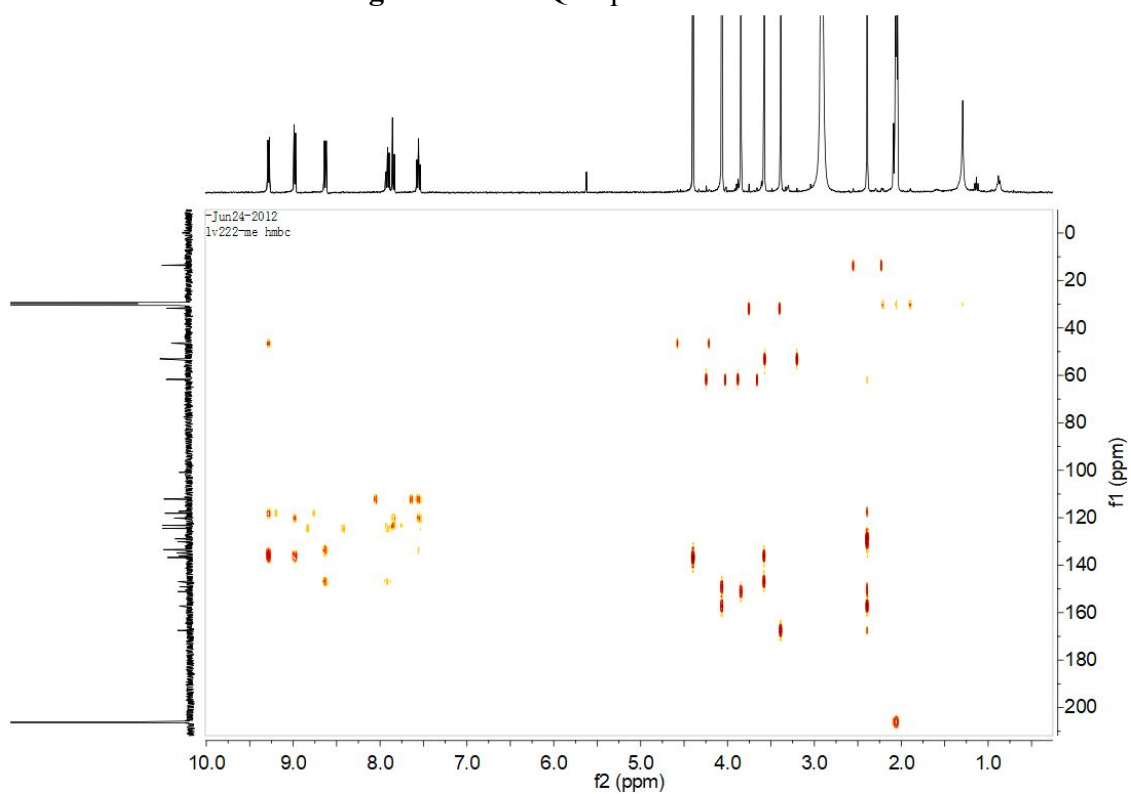
**Figure S33.  $^1\text{H}$  NMR spectrum of 6a**



**Figure S34.  $^{13}\text{C}$  NMR spectrum of 6a**



**Figure S35.** HSQC spectrum of **6a**



**Figure S36.** HMBC spectrum of **6a**