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## Supplementary Materials

### Aromatic Acids and Leucine Derivatives Produced from the Deep-Sea Actinomycetes *Streptomyces Chumphonensis* SCSIO15079 with Antihyperlipidemic Activities

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**Figure S46.**  $^{13}\text{C}$  NMR spectrum of compound **7** ( $\text{CD}_3\text{OD}$ , 150 MHz)

**Figure S47.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound **7** ( $\text{CD}_3\text{OD}$ )

**Figure S48.** HSQC spectrum of compound **7** ( $\text{CD}_3\text{OD}$ )

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**Figure S49.** HMBC spectrum of compound **7** (CD<sub>3</sub>OD)

**Figure S50.** HRESIMS spectrum of compound **7**

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**Figure S65.** HRESIMS spectrum of compound **9**

**Figure S66.** IR spectrum of compound **9**

**Figure S67.** UV spectrum of compound **9**

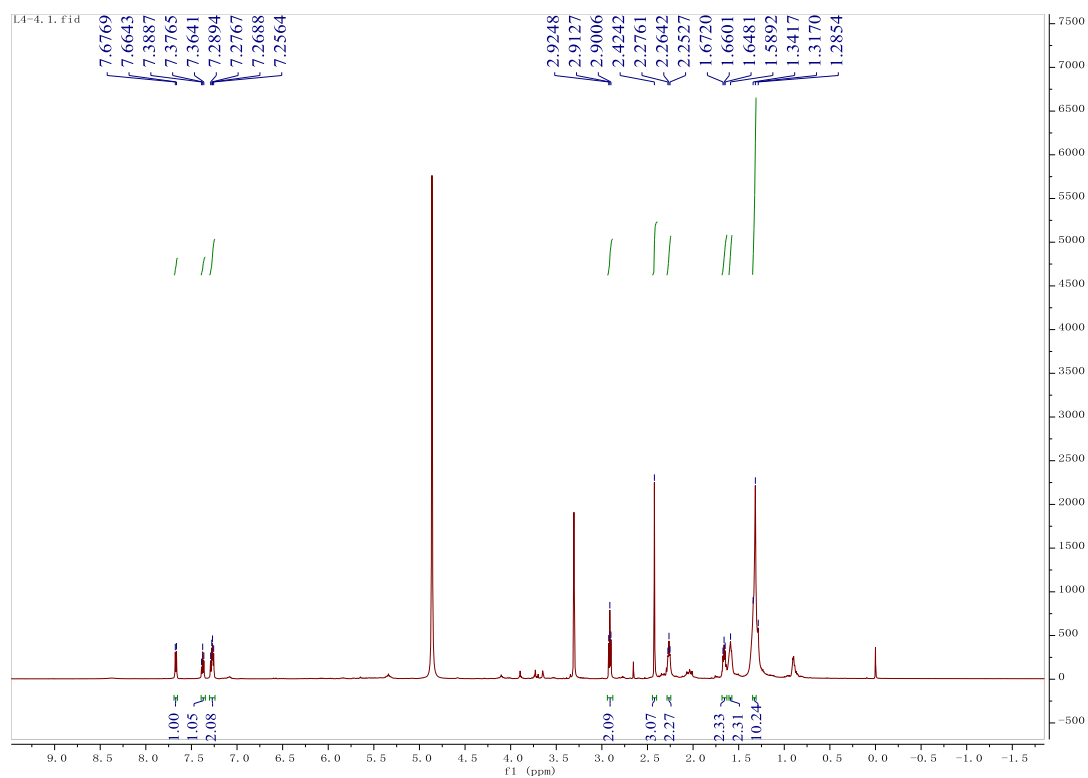
**Figure S68.** Hydrolysis reaction of compound **7**

**Table S1.** Cell Viability (%) of HepG2 treated with compounds **1-9** and lovastatin (5, 10, and 20 μM).

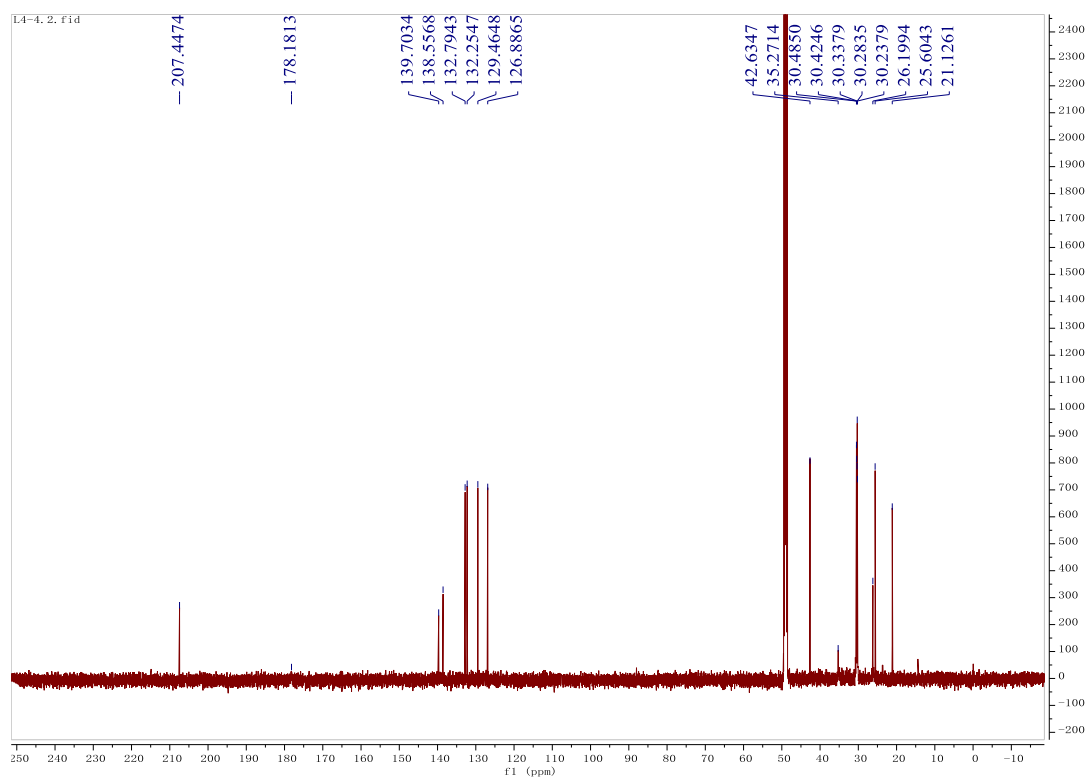
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**16S rRNA Sequence of the Strain SCSIO15079**

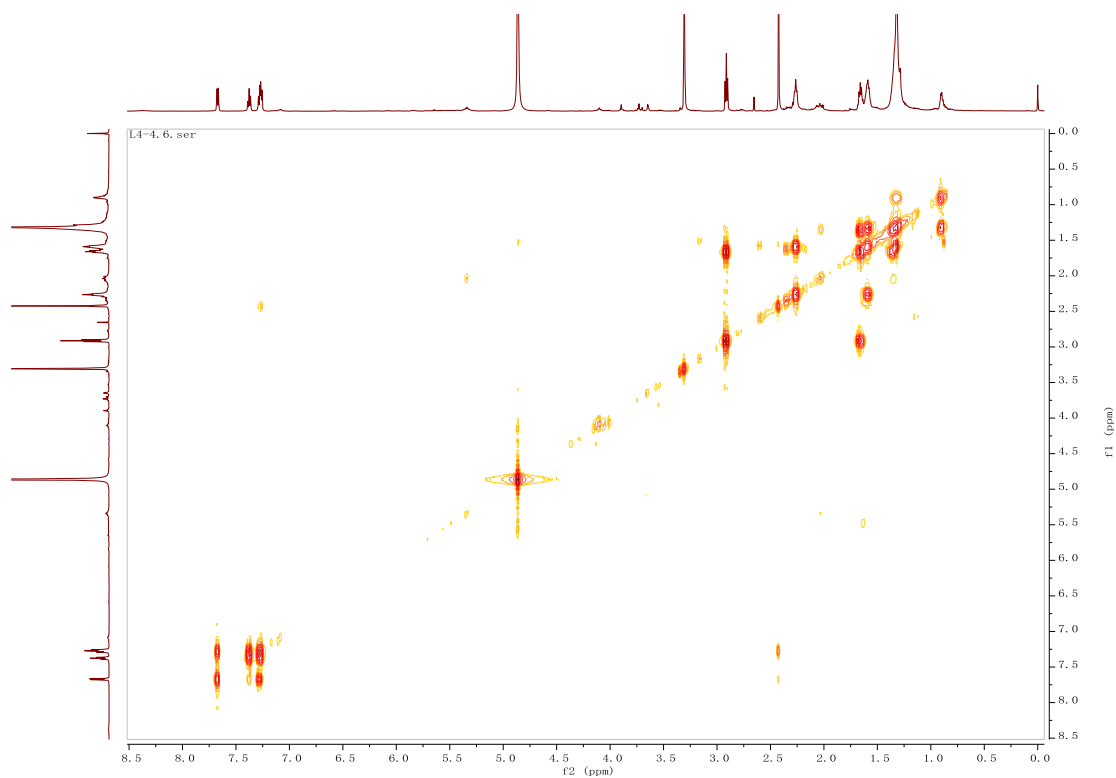
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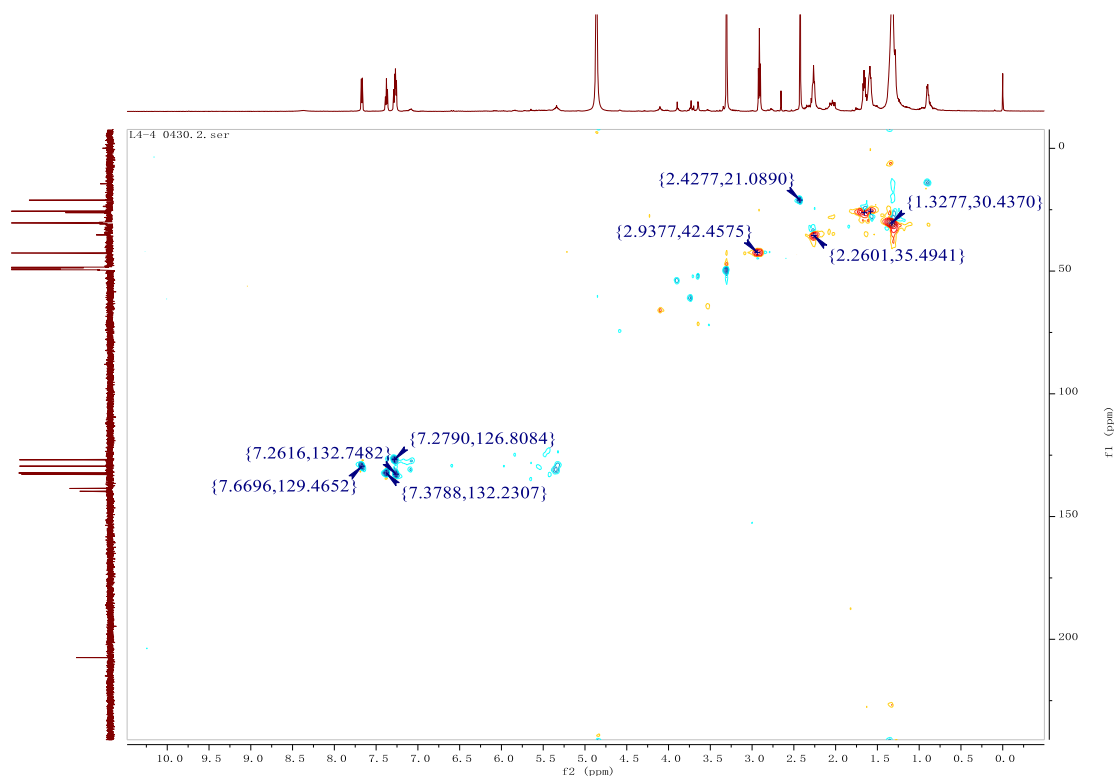
**Figure S1.** <sup>1</sup>H NMR spectrum of compound **1** (CD<sub>3</sub>OD, 600 MHz)



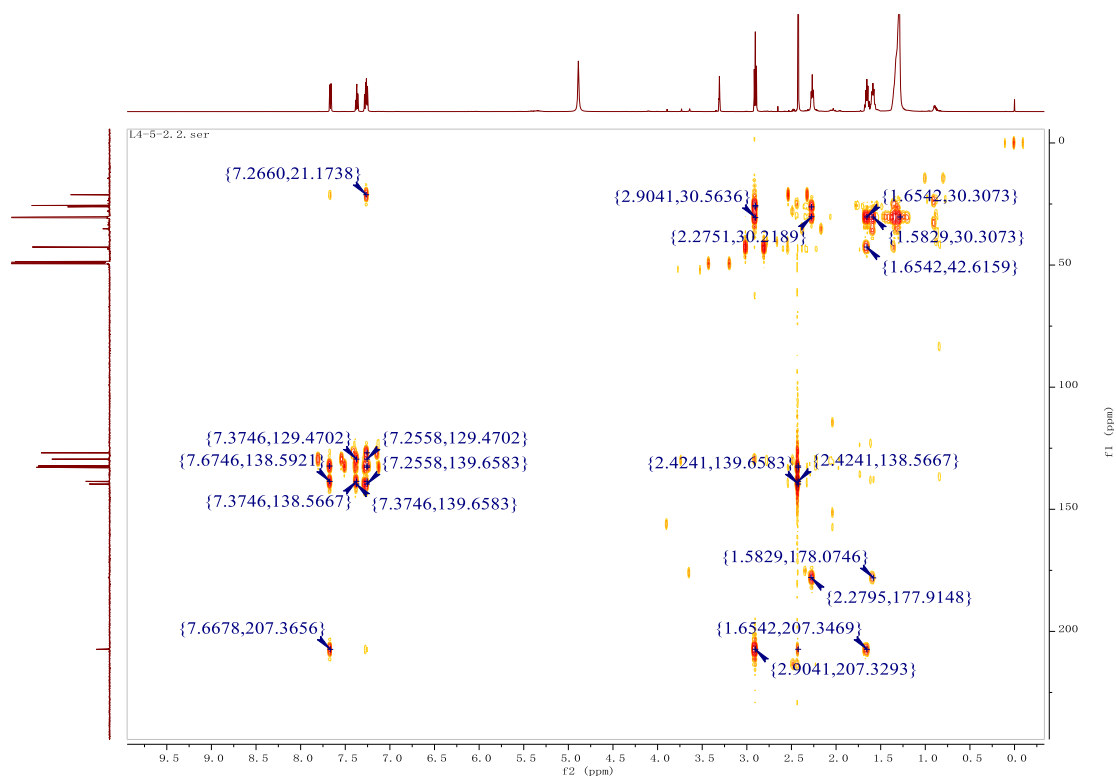
**Figure S2.** <sup>13</sup>C NMR spectrum of compound **1** (CD<sub>3</sub>OD, 150 MHz)



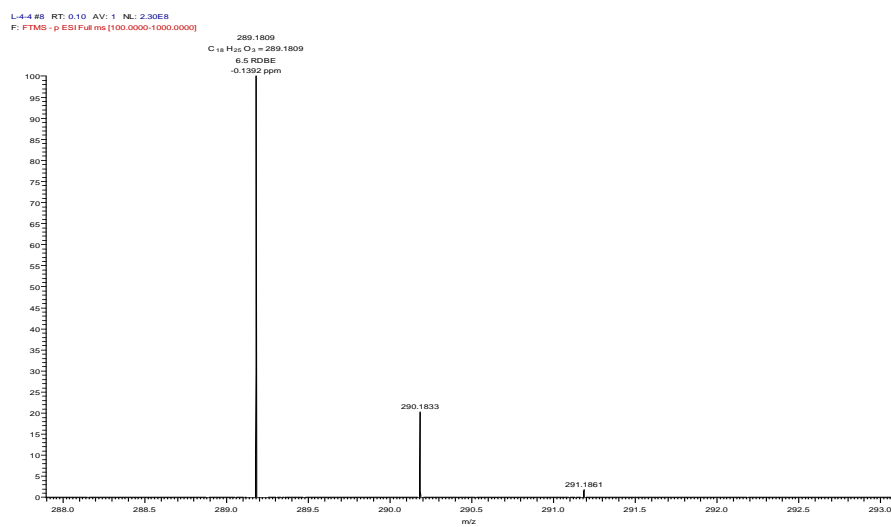
**Figure S3.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound **1** ( $\text{CD}_3\text{OD}$ )



**Figure S4.** HSQC spectrum of compound **1** ( $\text{CD}_3\text{OD}$ )

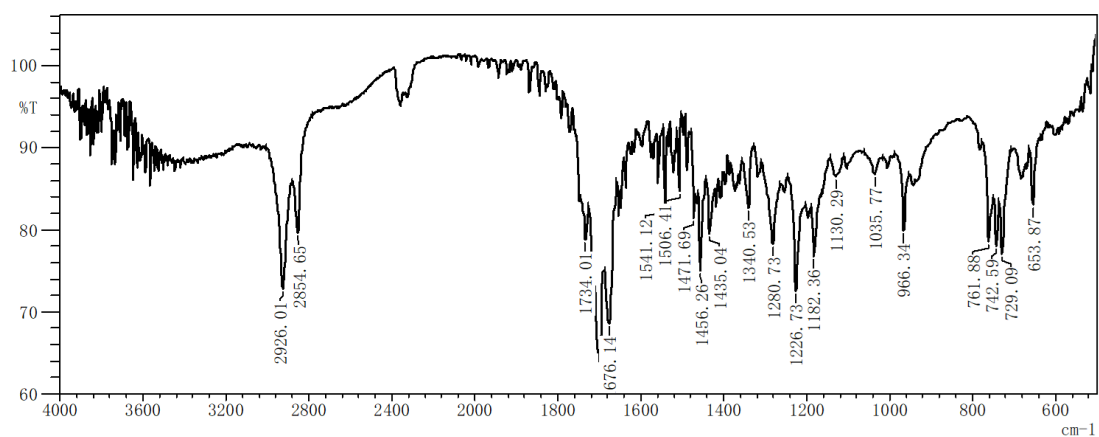


**Figure S5.** HMBC spectrum of compound **1** ( $\text{CD}_3\text{OD}$ )

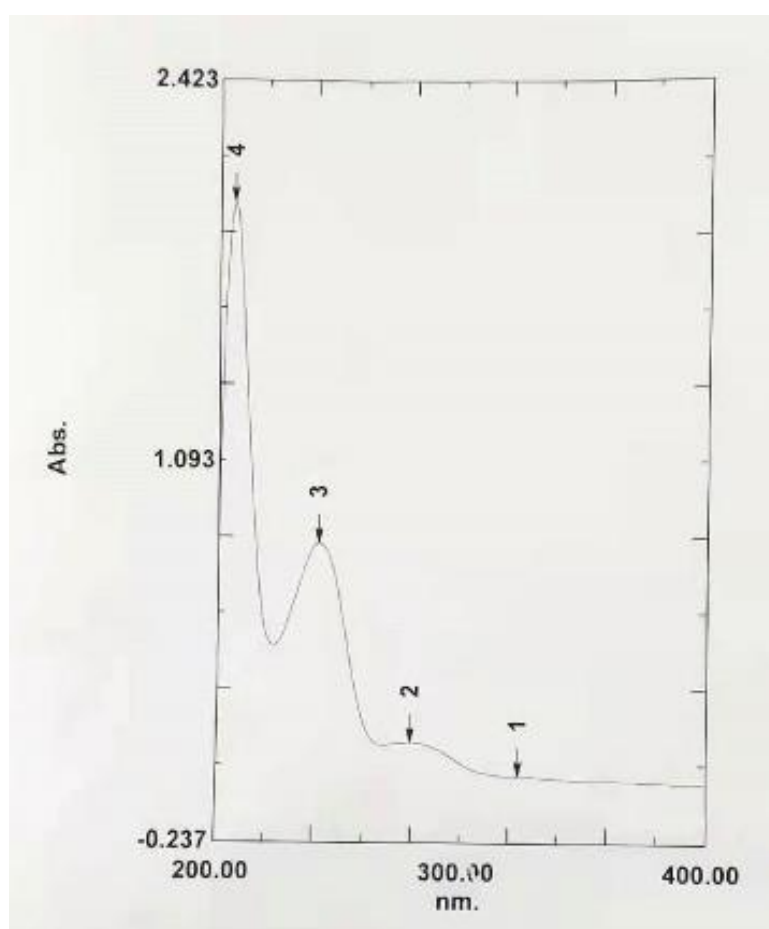


**Figure S6.** HRESIMS spectrum of compound **1**

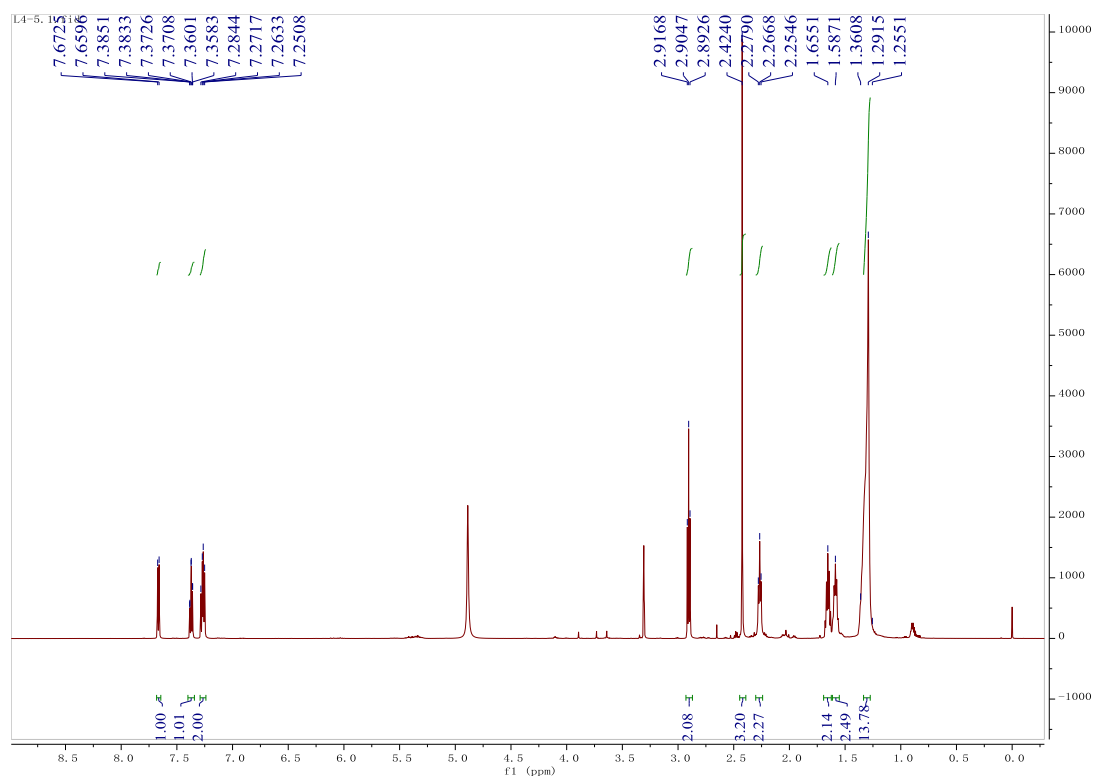




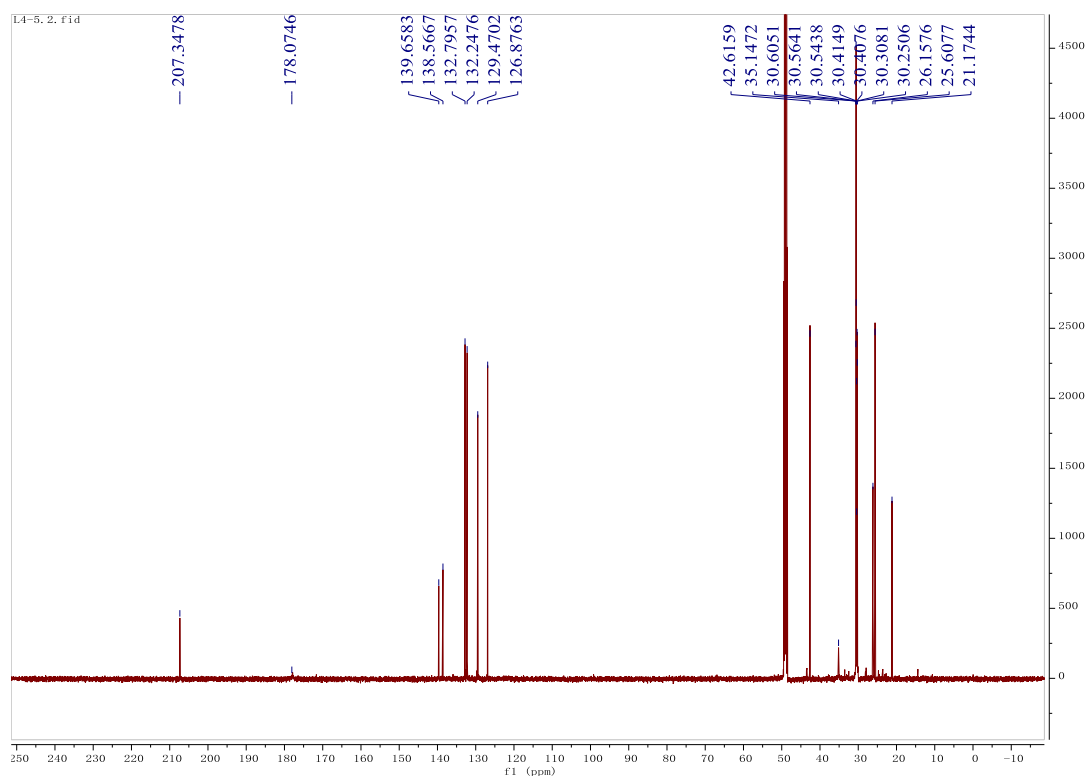
**Figure S7.** IR spectrum of compound **1**



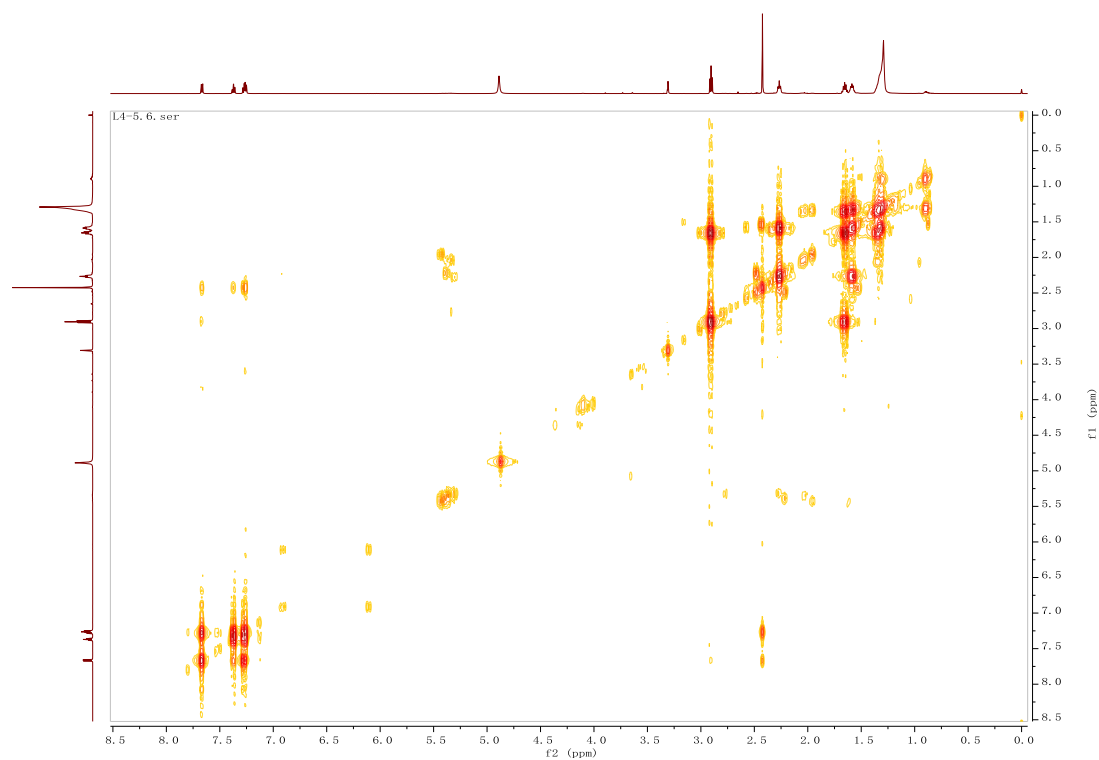
**Figure S8.** UV spectrum of compound **1**



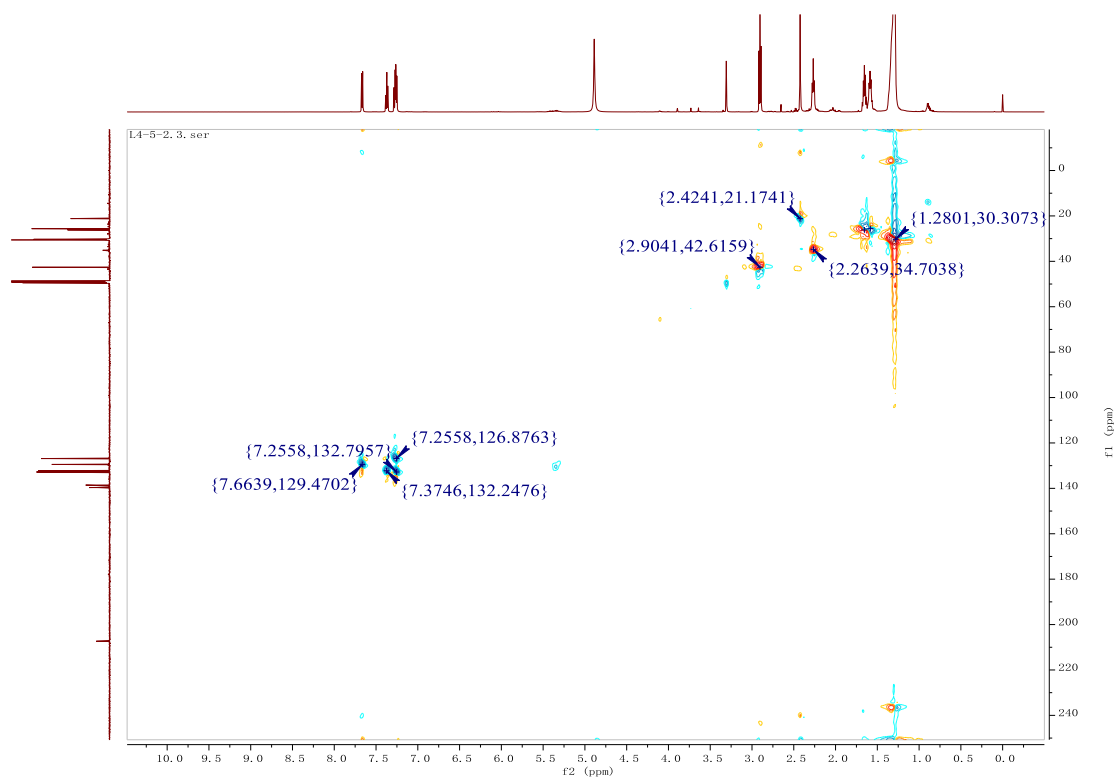
**Figure S9.** <sup>1</sup>H NMR spectrum of compound **2** (CD<sub>3</sub>OD, 600 MHz)



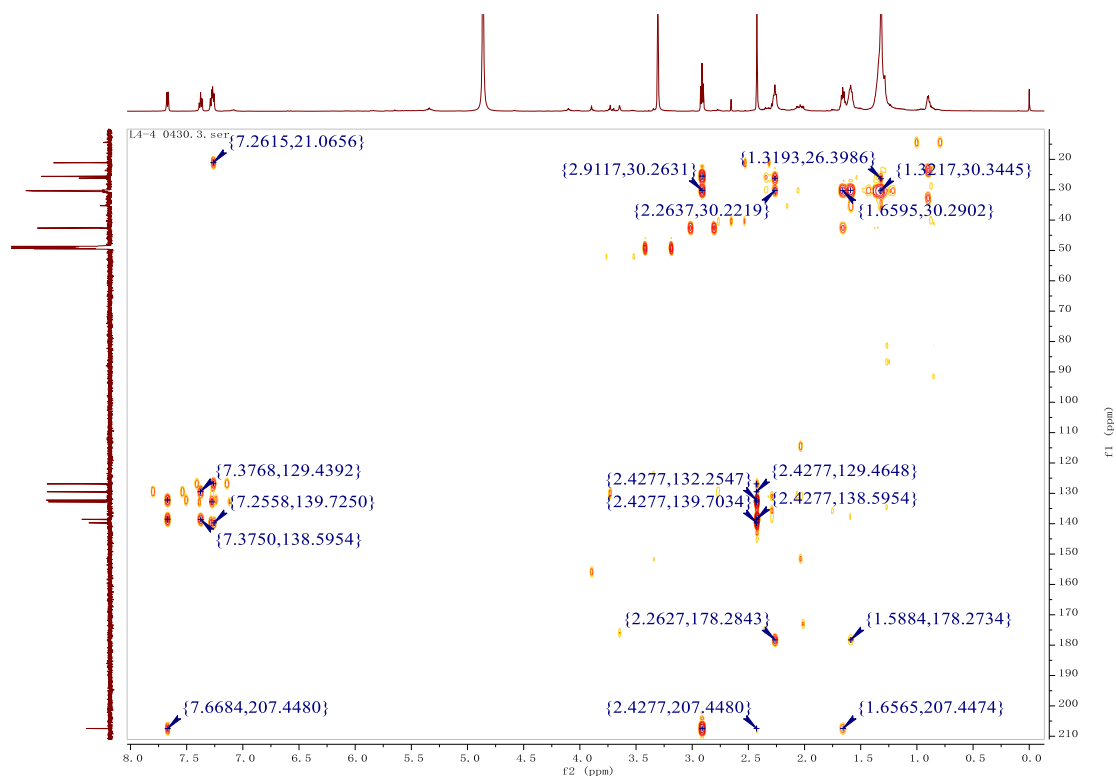
**Figure S10.** <sup>13</sup>C NMR spectrum of compound **2** (CD<sub>3</sub>OD, 150 MHz)



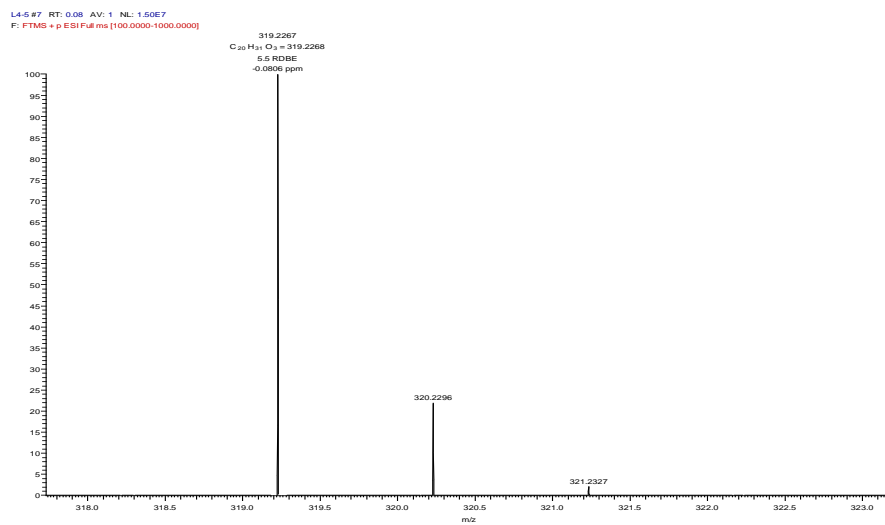
**Figure S11.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound **2** ( $\text{CD}_3\text{OD}$ )



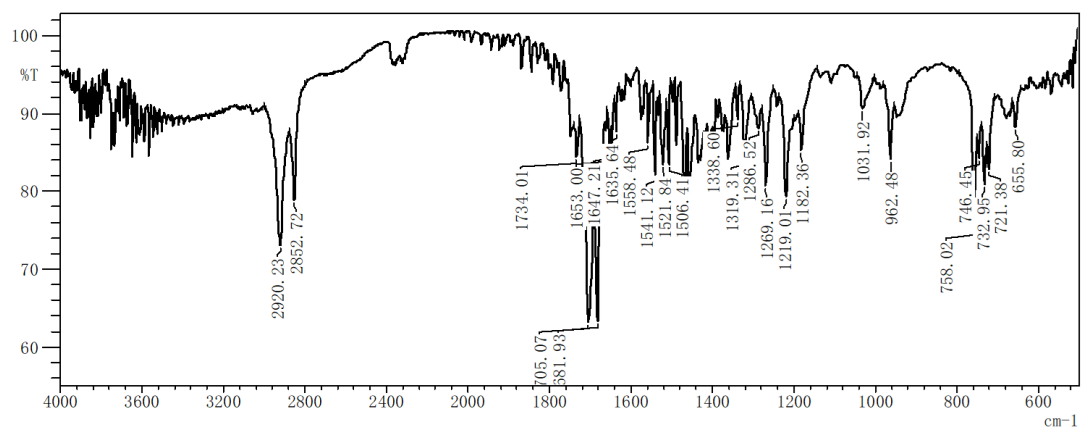
**Figure S12.** HSQC spectrum of compound **2** ( $\text{CD}_3\text{OD}$ )



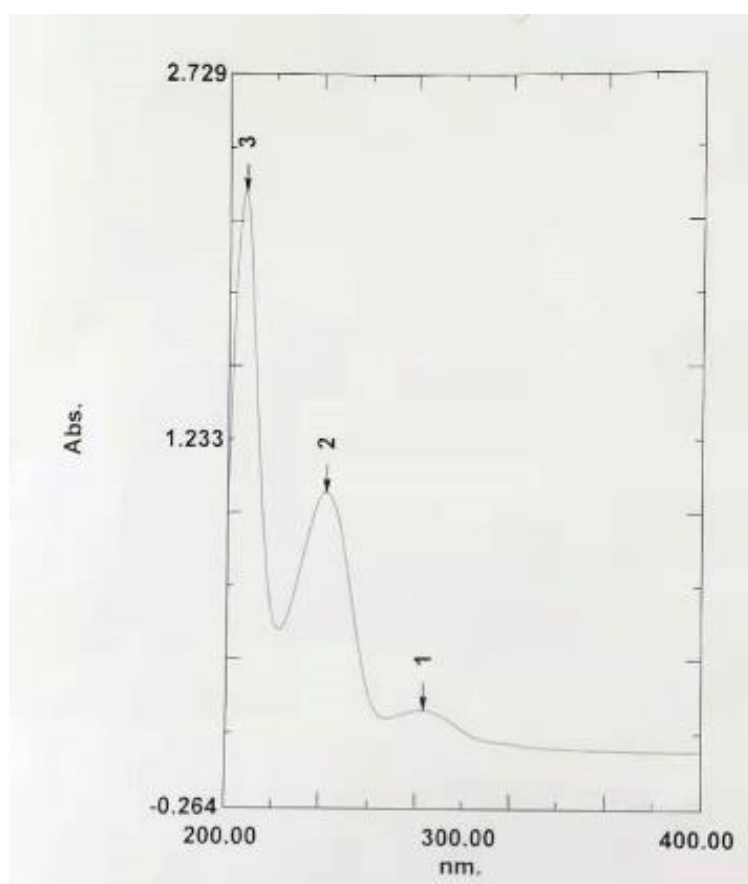
**Figure S13.** HMBC spectrum of compound **2** (CD<sub>3</sub>OD)



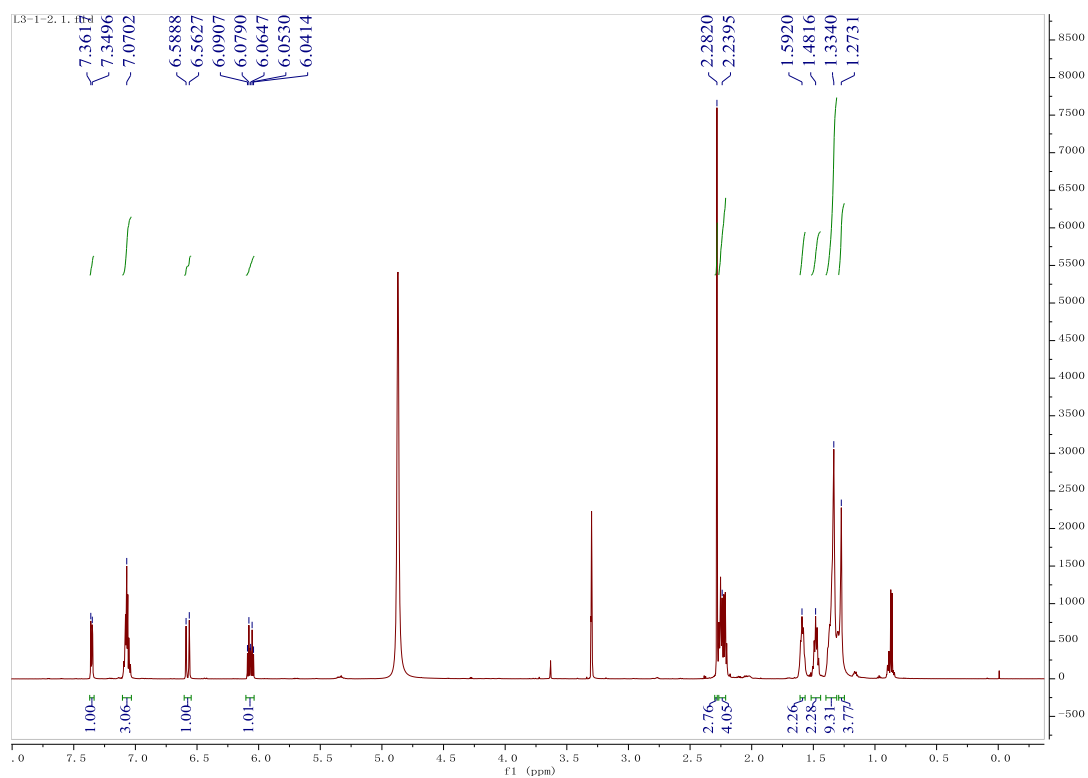
**Figure S14.** HRESIMS spectrum of compound **2**



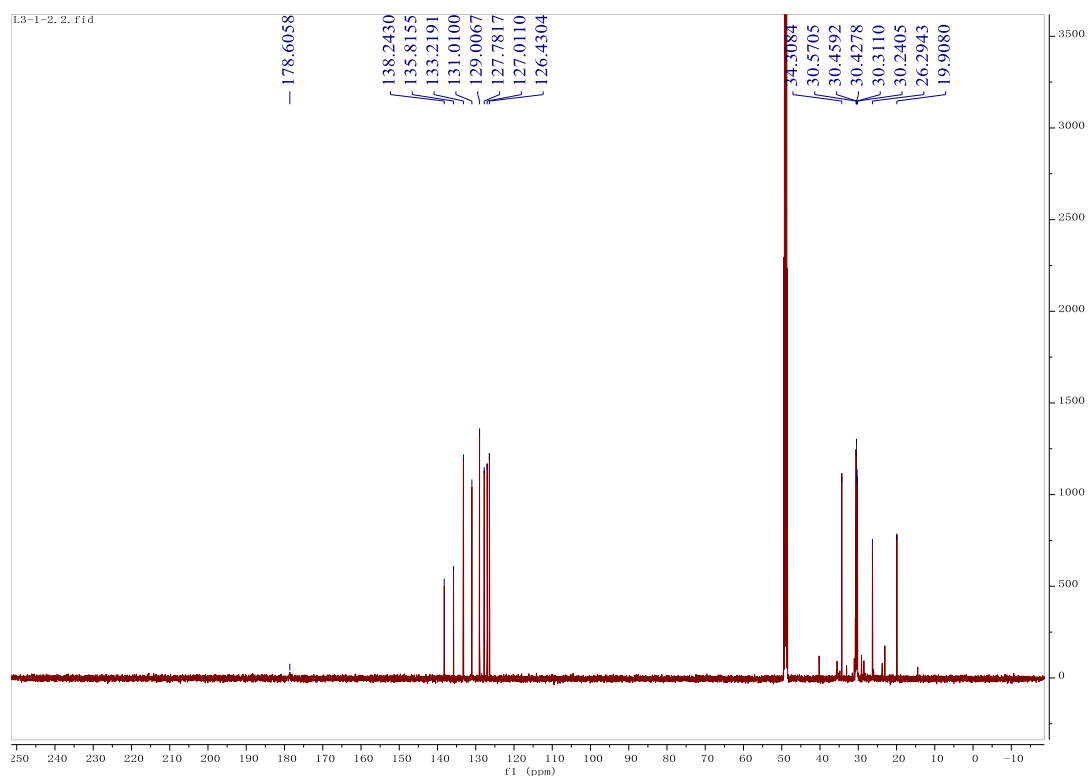
**Figure S15.** IR spectrum of compound **2**



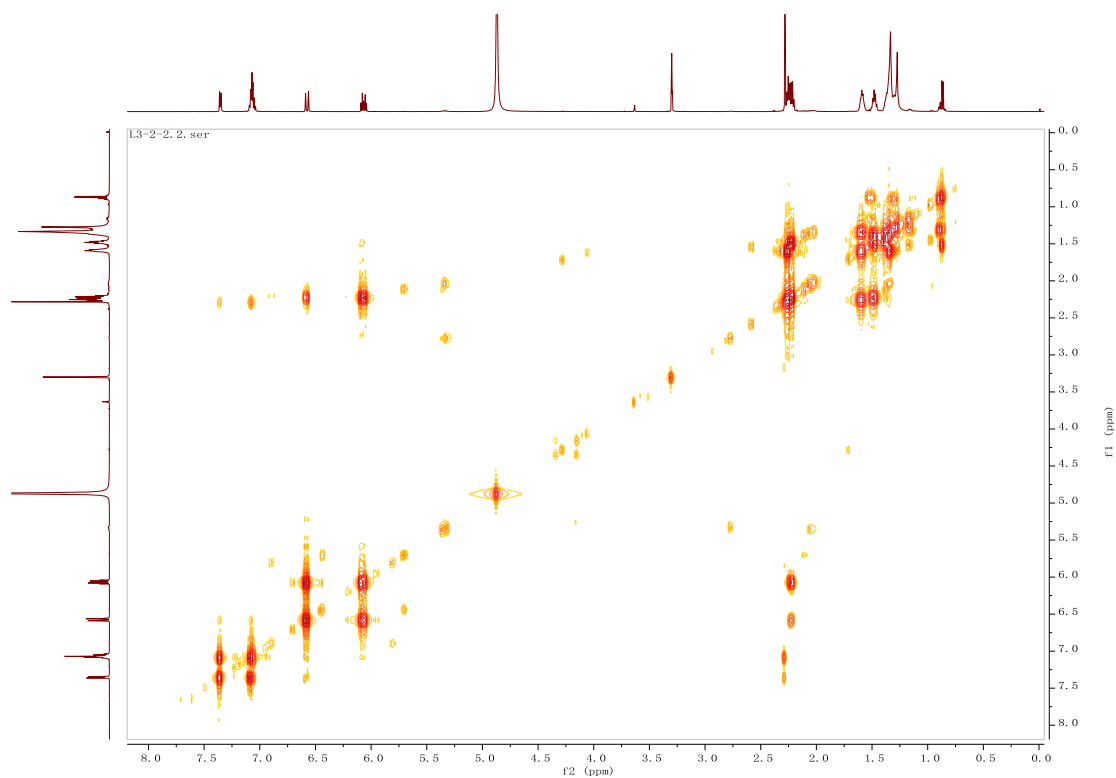
**Figure S16.** UV spectrum of compound **2**



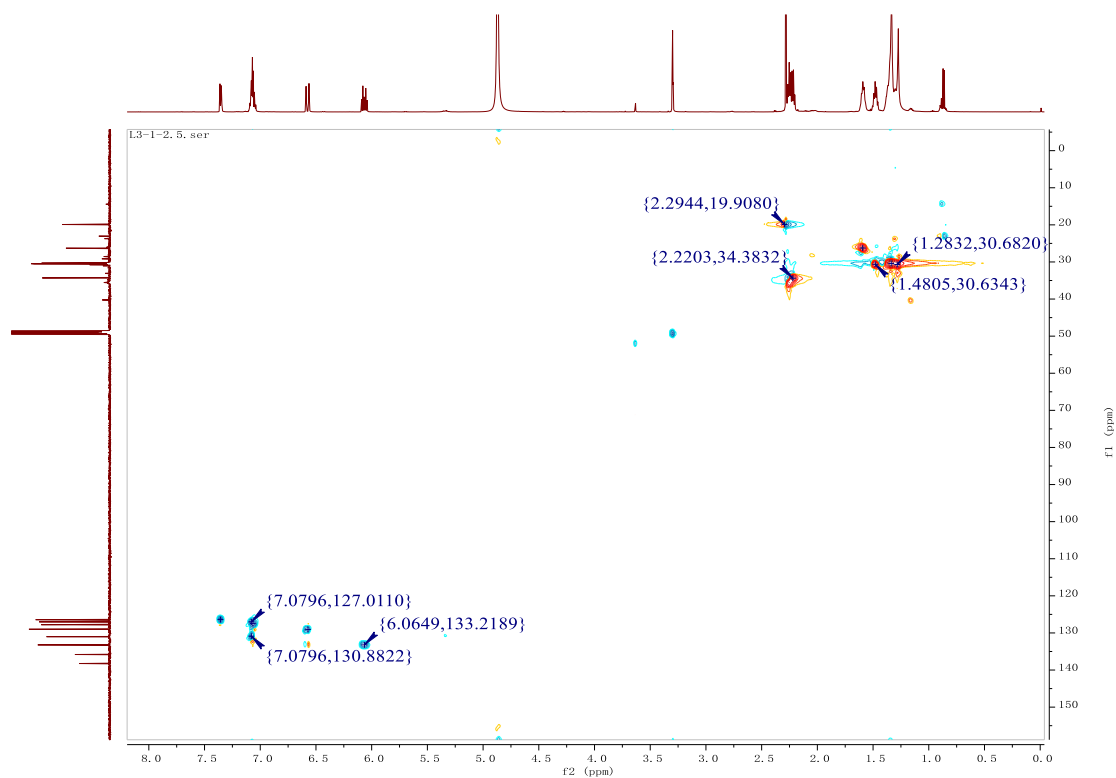
**Figure S17.** <sup>1</sup>H NMR spectrum of compound **3** (CD<sub>3</sub>OD, 600 MHz)



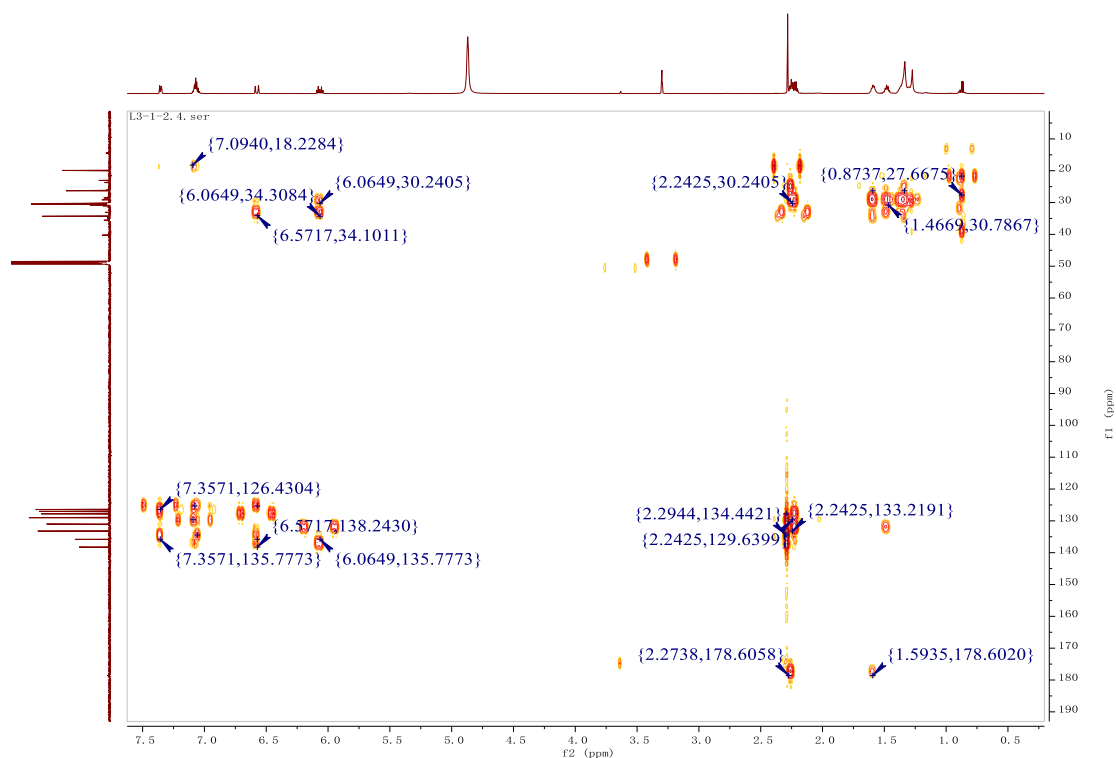
**Figure S18.** <sup>13</sup>C NMR spectrum of compound **3** (CD<sub>3</sub>OD, 150 MHz)



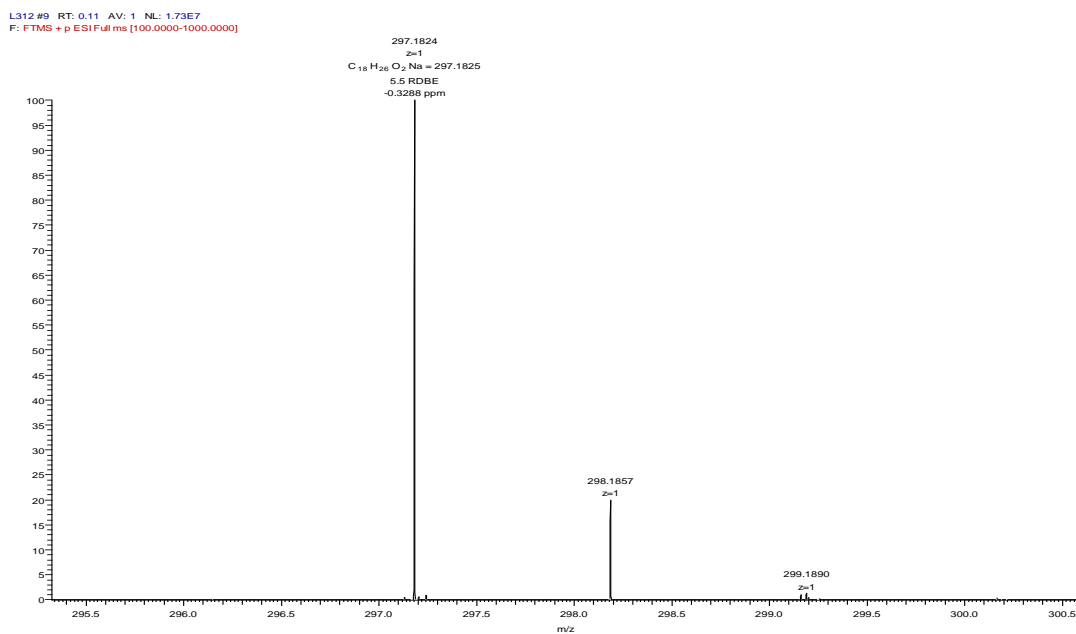
**Figure S19.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound **3** ( $\text{CD}_3\text{OD}$ )



**Figure S20.** HSQC spectrum of compound **3** ( $\text{CD}_3\text{OD}$ )

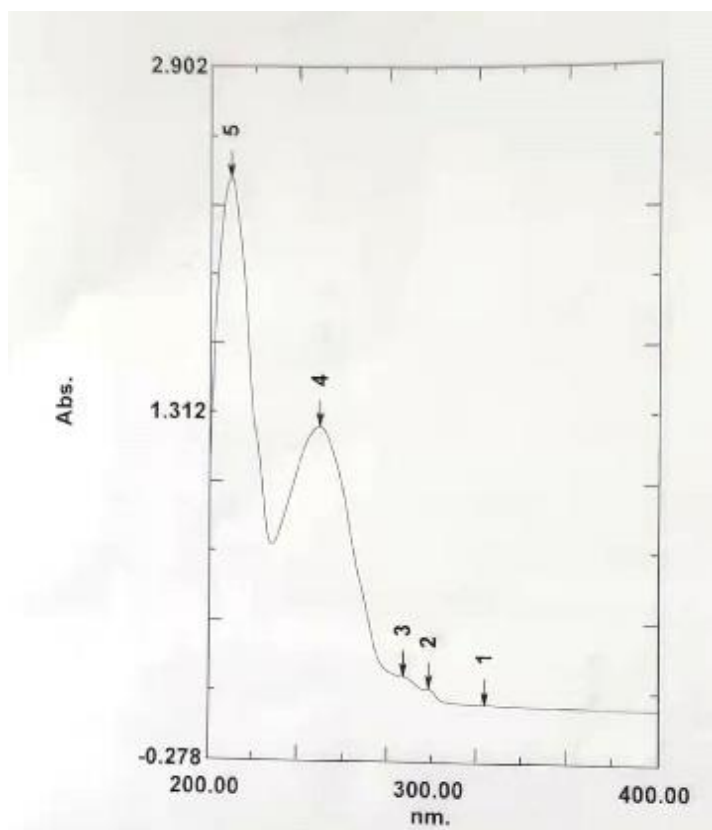


**Figure S21.** HMBC spectrum of compound **3** (CD<sub>3</sub>OD)

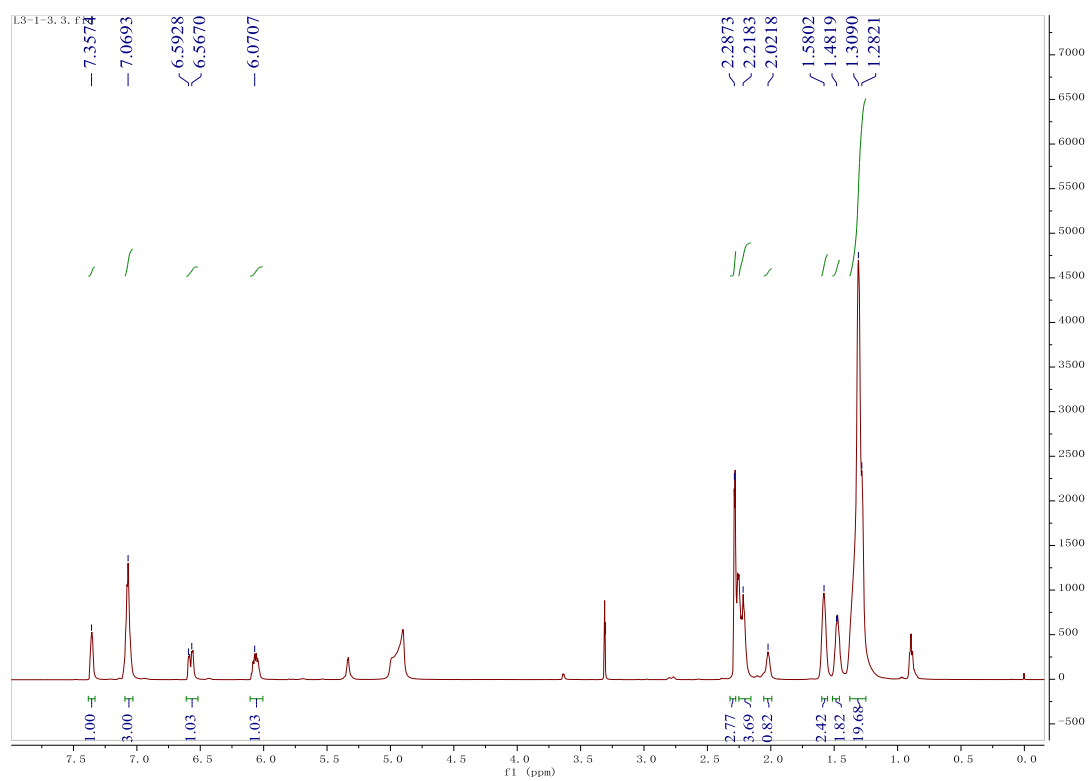


**Figure S22.** HRESIMS spectrum of compound **3**

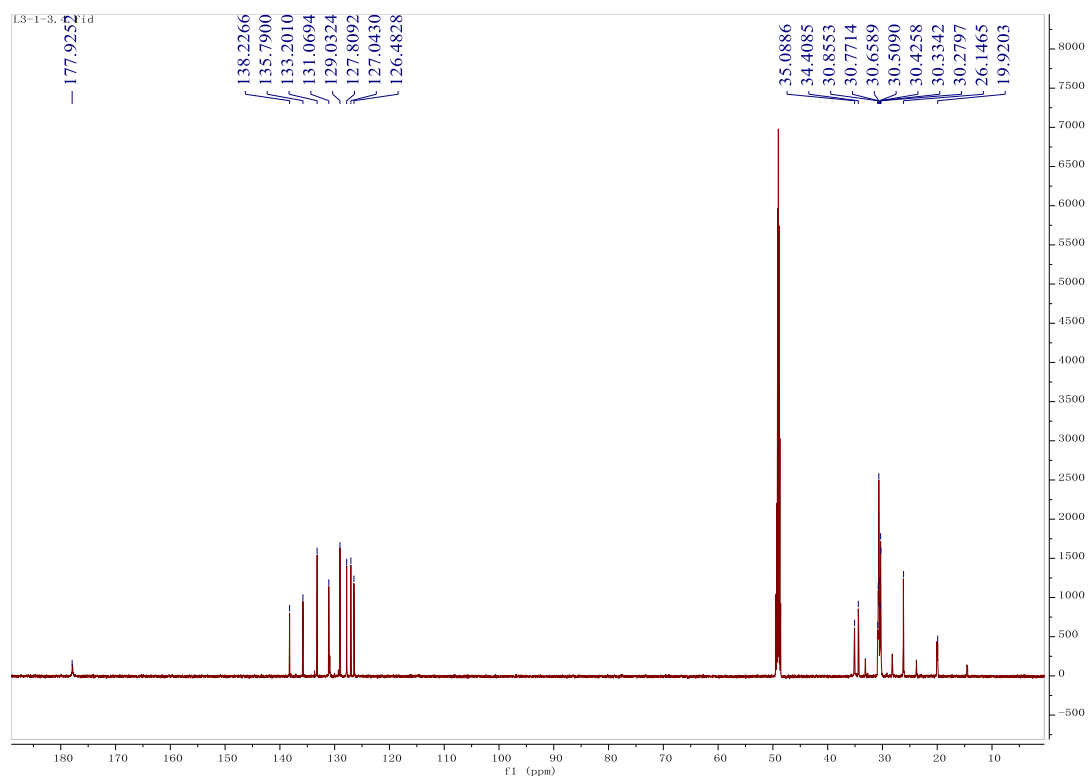




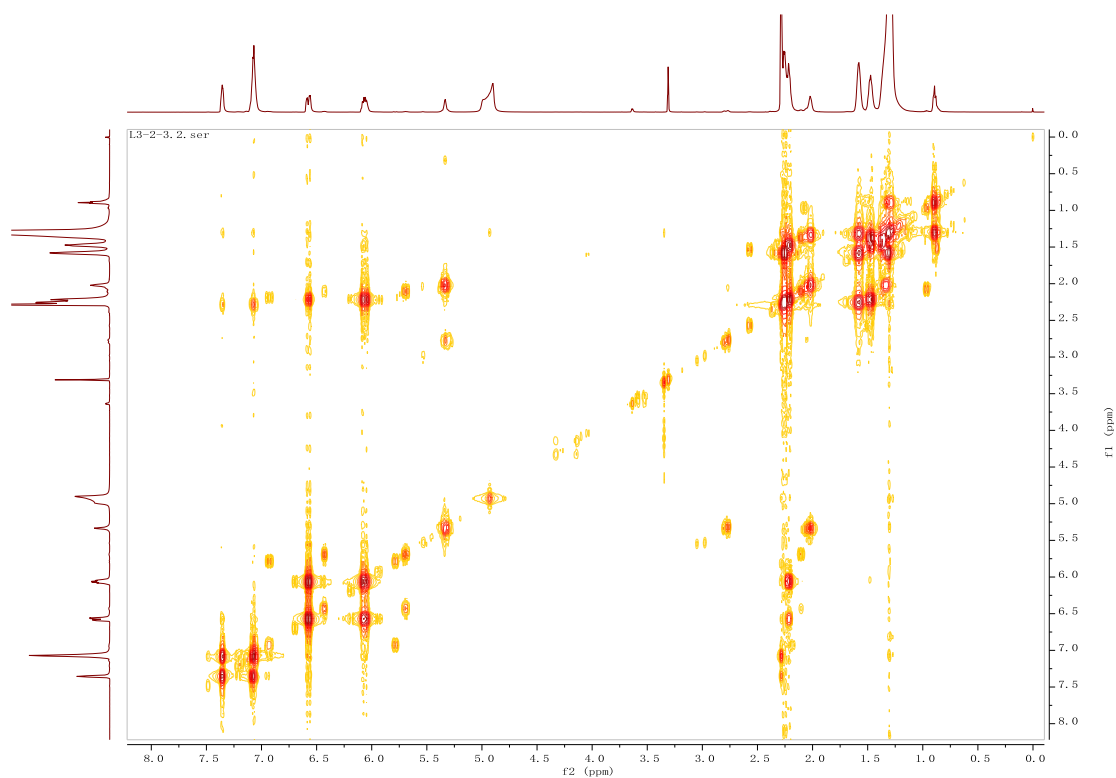
**Figure S23.** UV spectrum of compound **3**



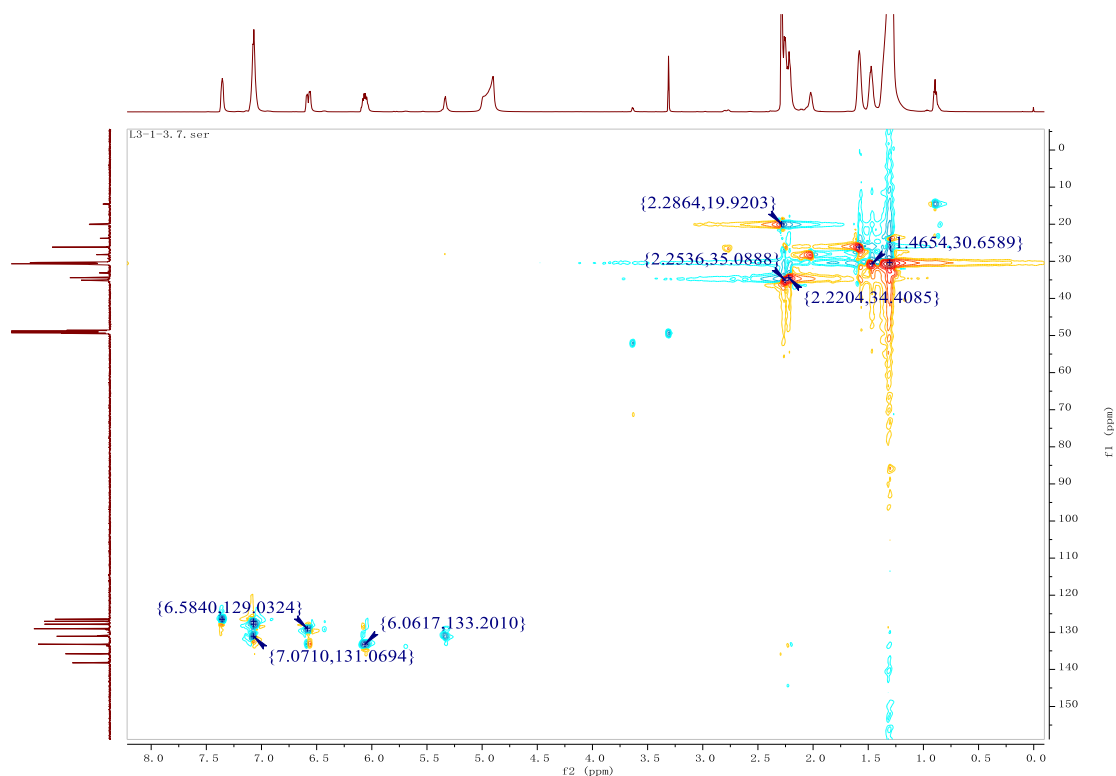
**Figure S24.**  $^1\text{H}$  NMR spectrum of compound **4** ( $\text{CD}_3\text{OD}$ , 600 MHz)



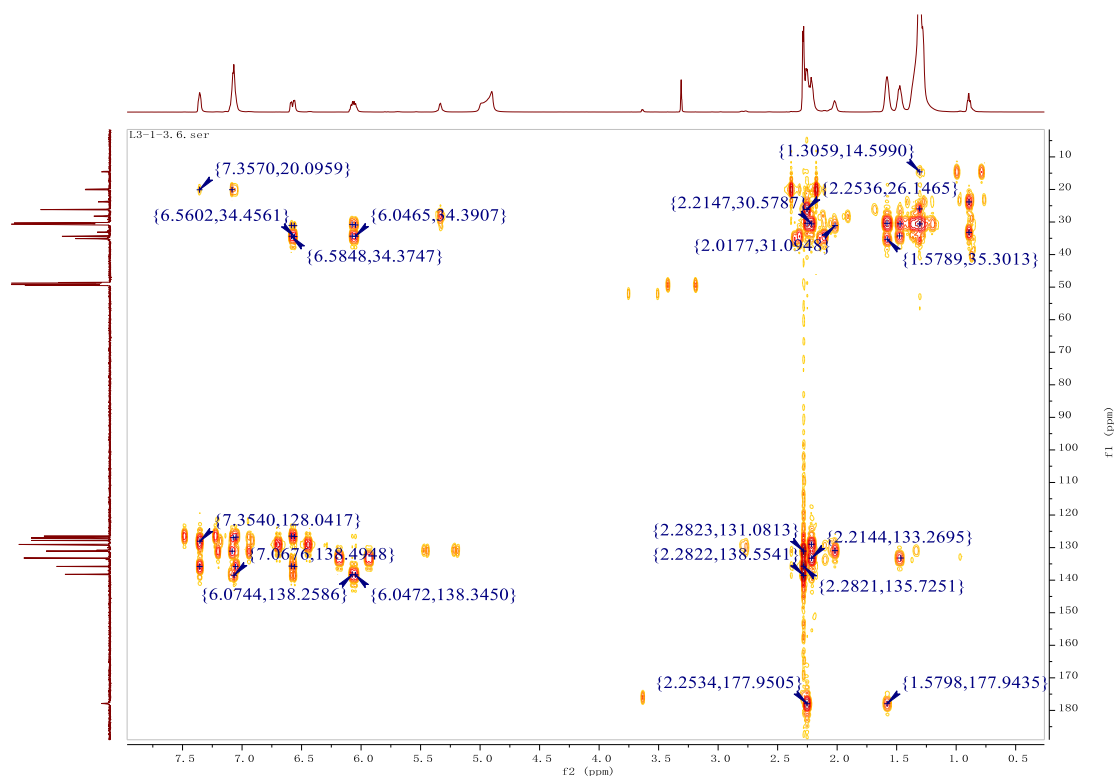
**Figure S25.** <sup>13</sup>C NMR spectrum of compound **4** (CD<sub>3</sub>OD, 150 MHz)



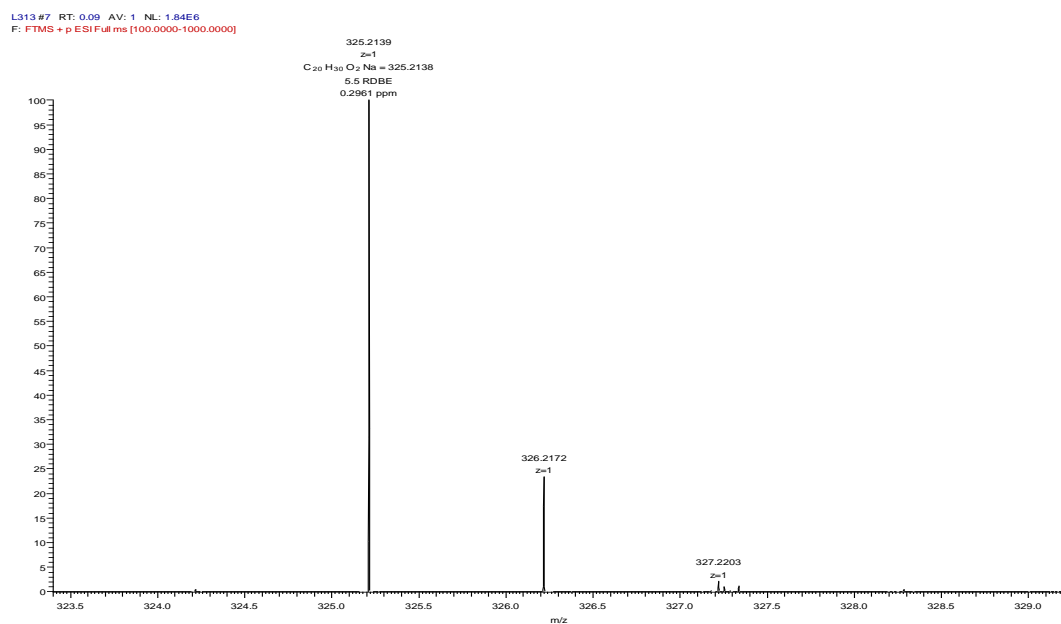
**Figure S26.** <sup>1</sup>H-<sup>1</sup>H COSY spectrum of compound **4** (CD<sub>3</sub>OD)



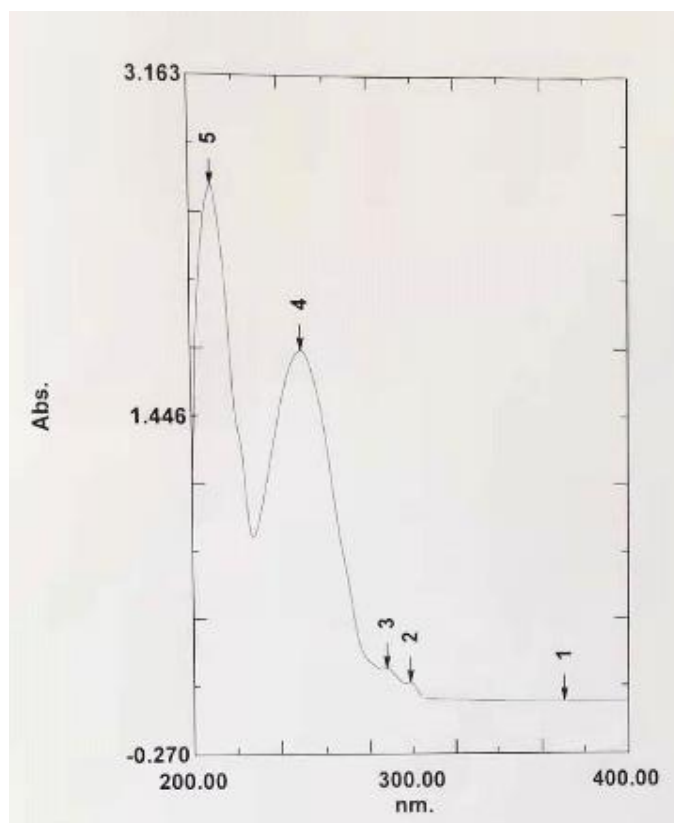
**Figure S27.** HSQC spectrum of compound **4** (CD<sub>3</sub>OD)



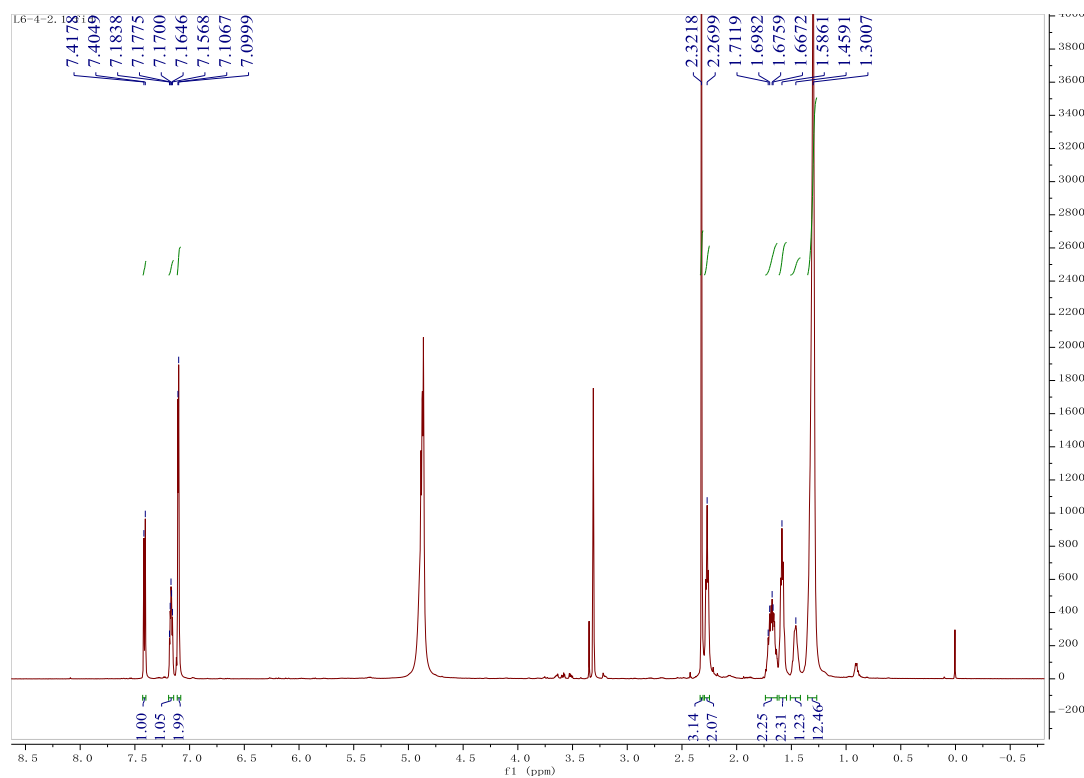
**Figure S28.** HMBC spectrum of compound **4** (CD<sub>3</sub>OD)



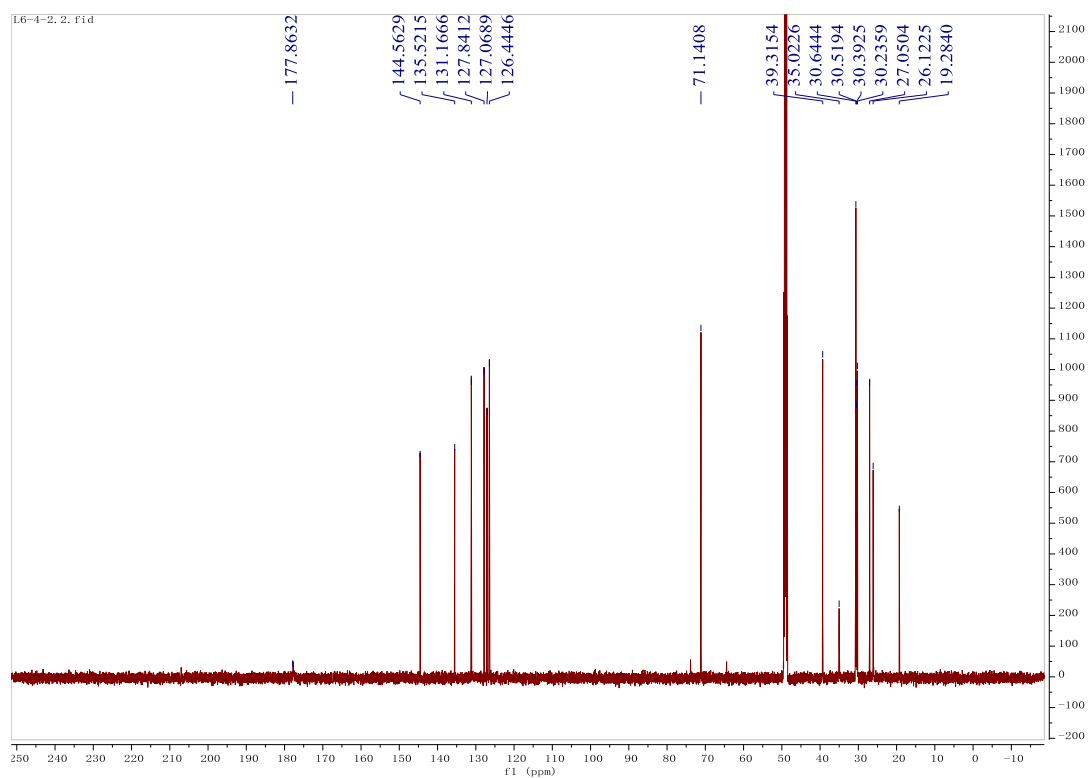
**Figure S29.** HRESIMS spectrum of compound **4**



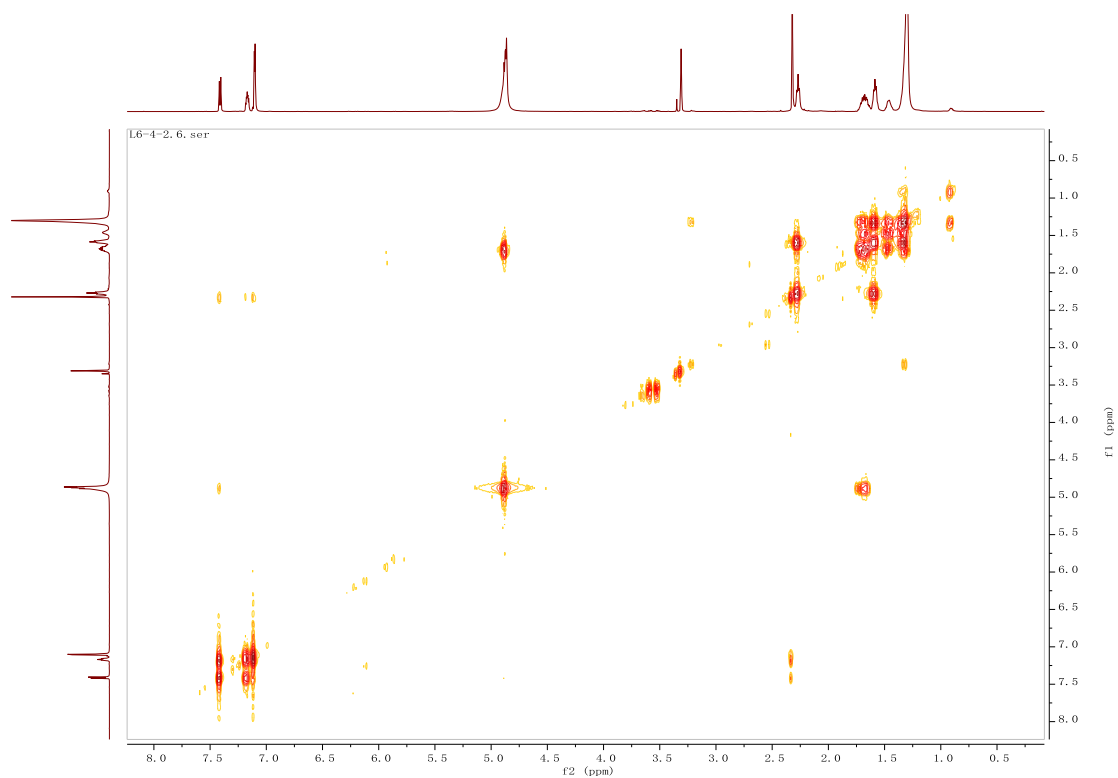
**Figure S30.** UV spectrum of compound **4**



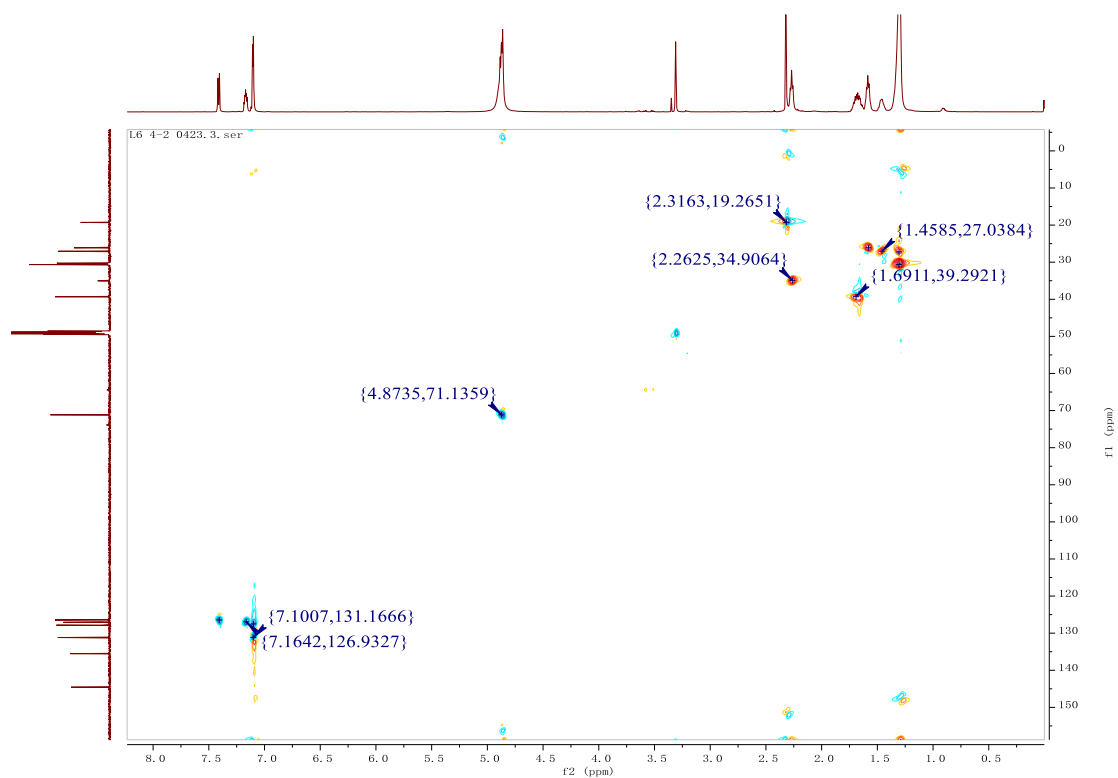
**Figure S31.**  $^1\text{H}$  NMR spectrum of compound **5** ( $\text{CD}_3\text{OD}$ , 600 MHz)



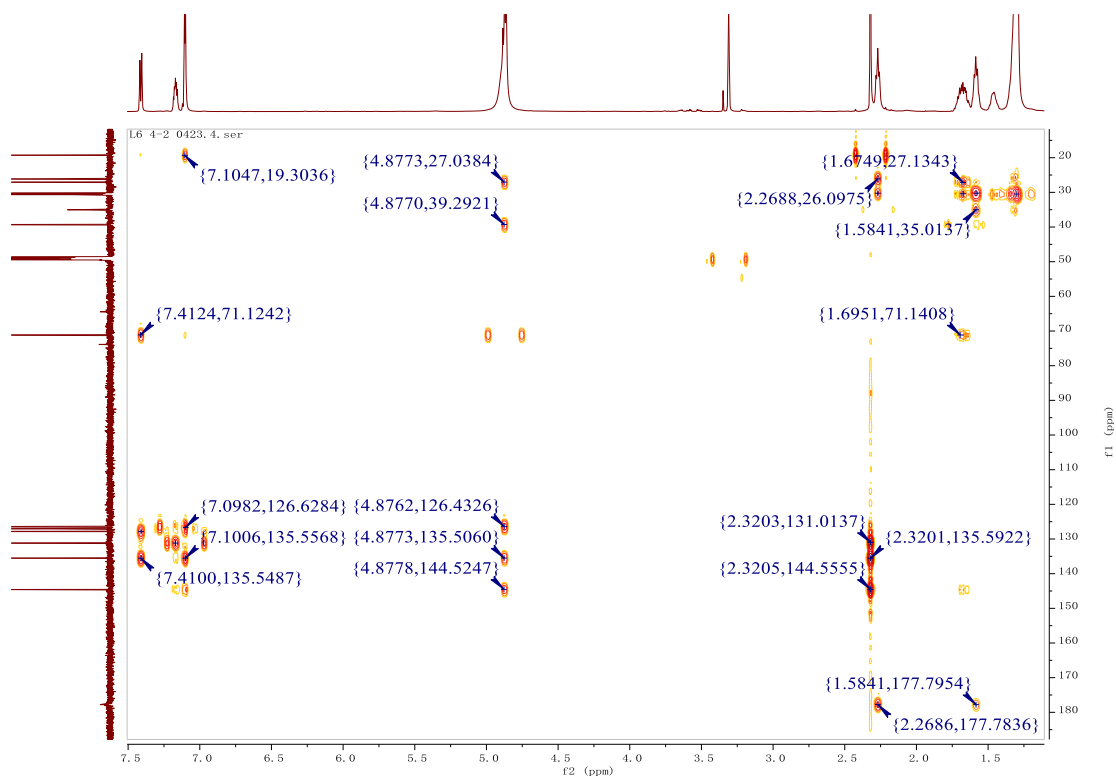
**Figure S32.**  $^{13}\text{C}$  NMR spectrum of compound **5** ( $\text{CD}_3\text{OD}$ , 150 MHz)



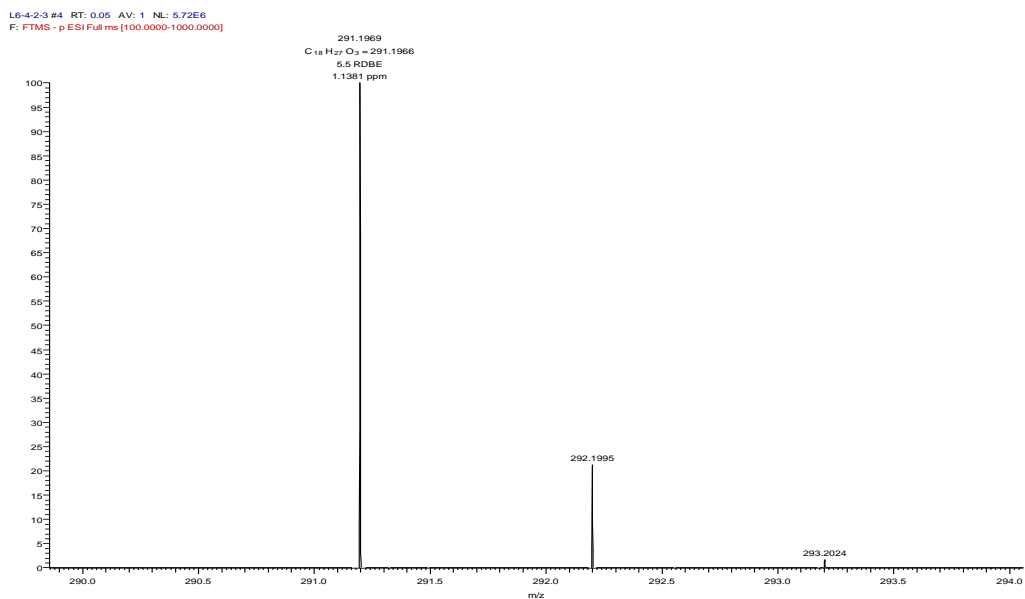
**Figure S33.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound **5** ( $\text{CD}_3\text{OD}$ )



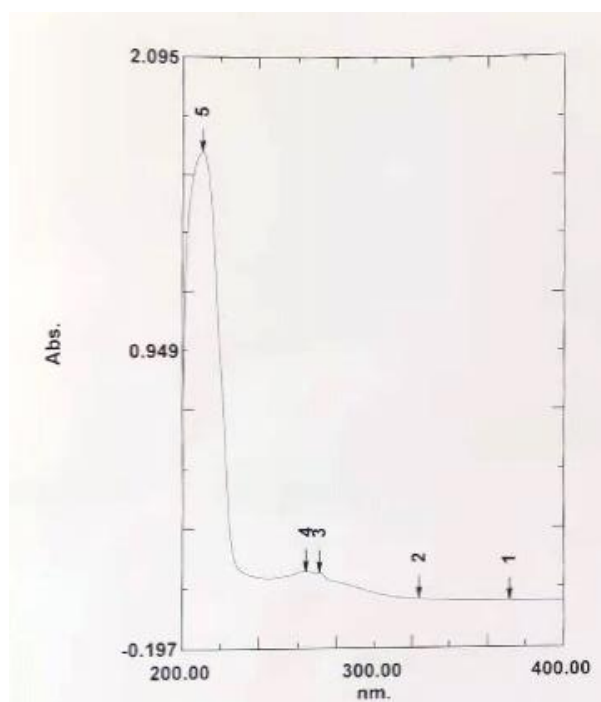
**Figure S34.** HSQC spectrum of compound **5** ( $\text{CD}_3\text{OD}$ )



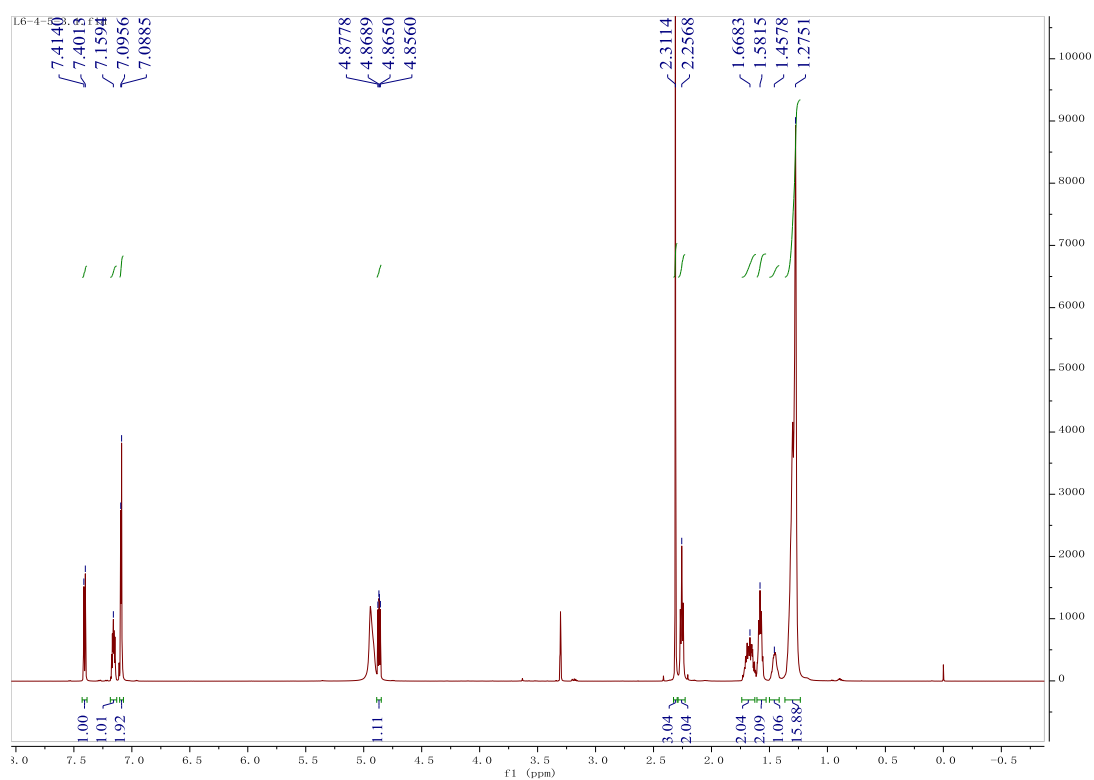
**Figure S35.** HMBC spectrum of compound **5** (CD<sub>3</sub>OD)



**Figure S36.** HRESIMS spectrum of compound **5**

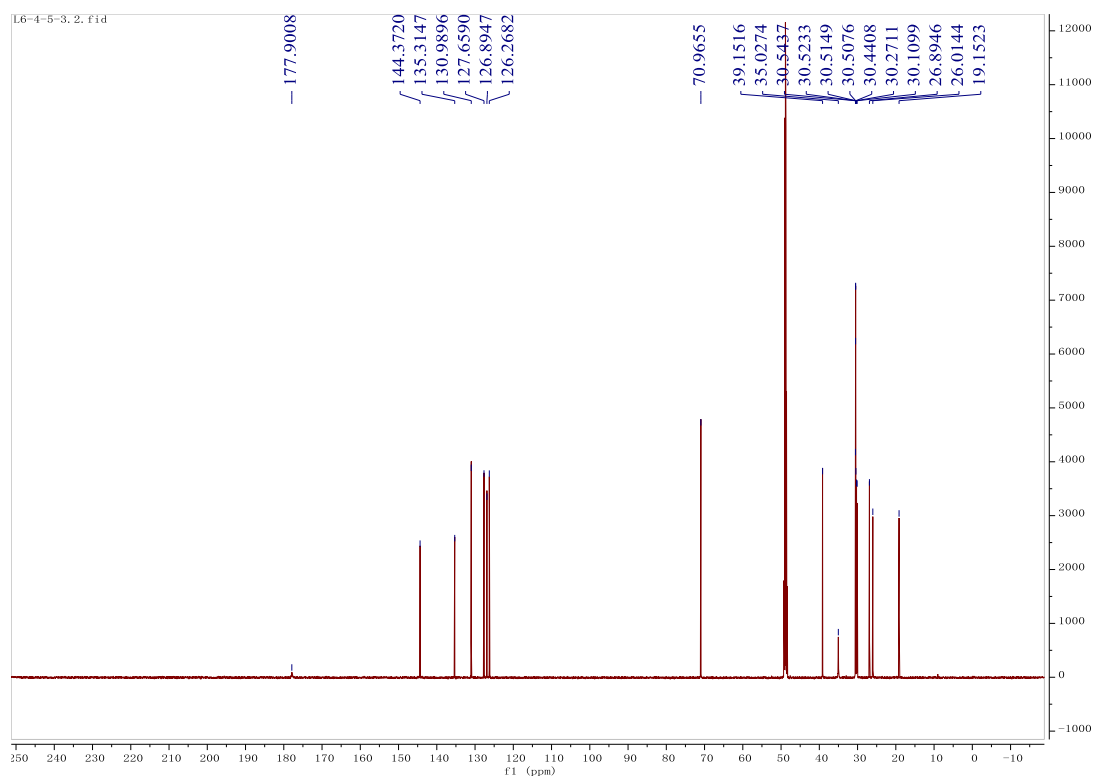


**Figure S37.** UV spectrum of compound **5**

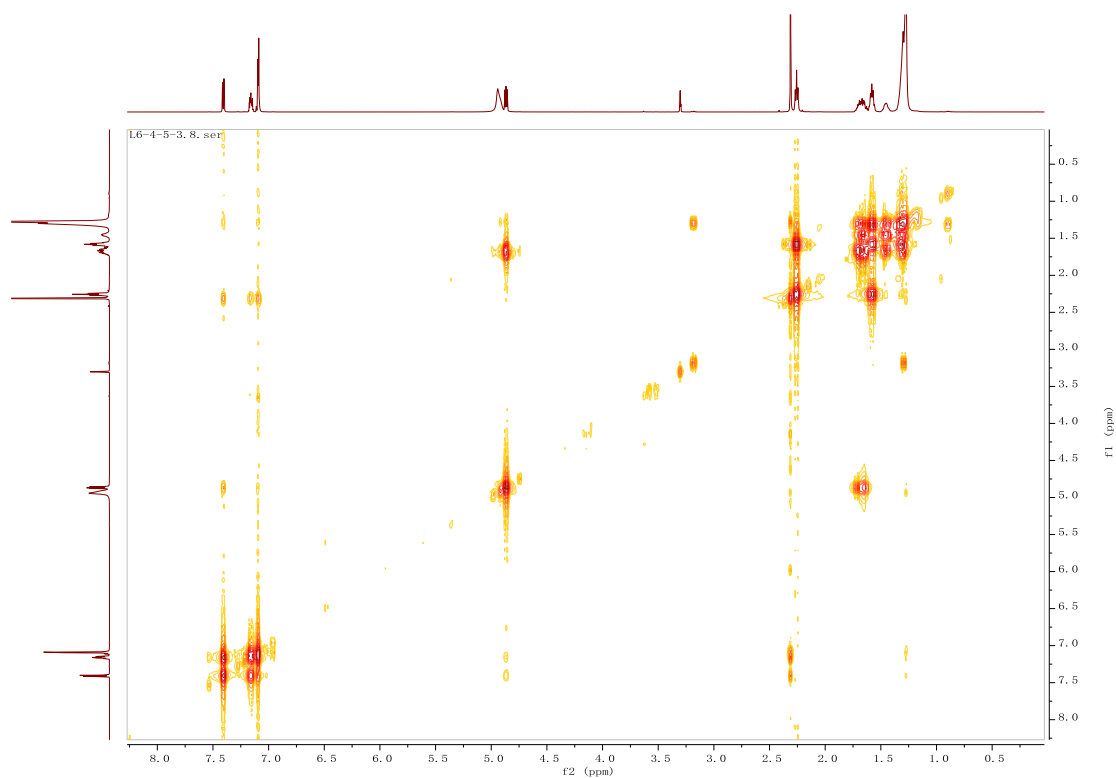


**Figure S38.** <sup>1</sup>H NMR spectrum of compound **6** (CD<sub>3</sub>OD, 600 MHz)

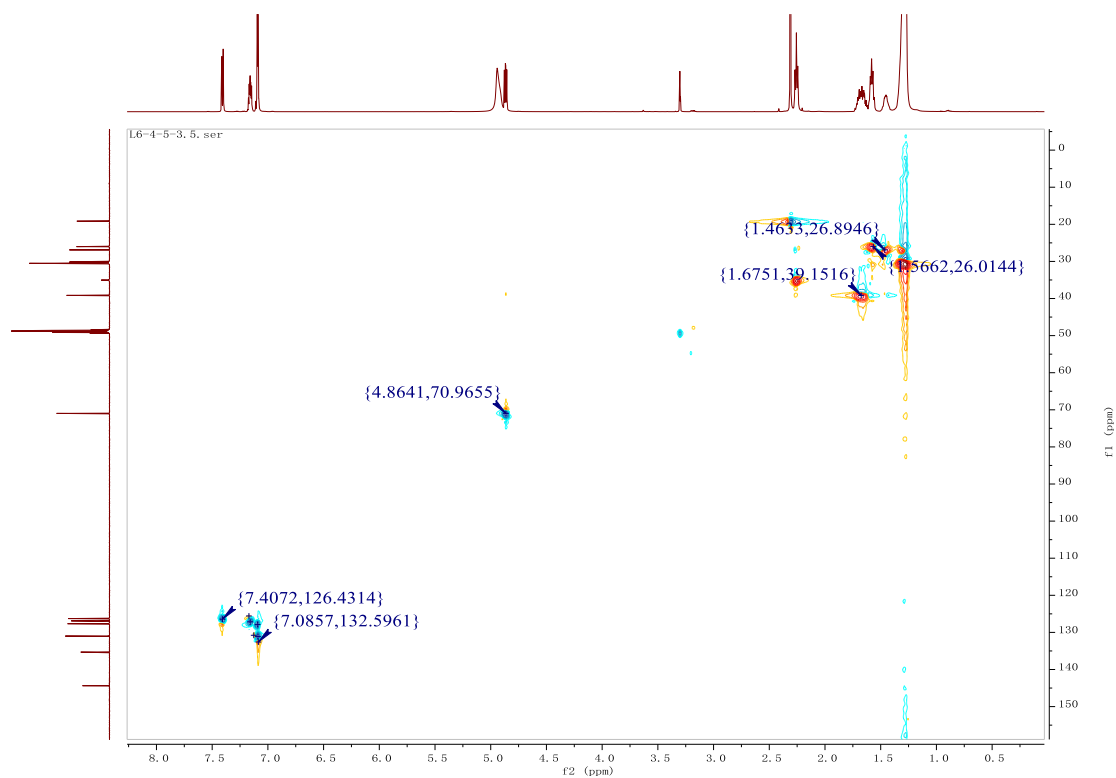




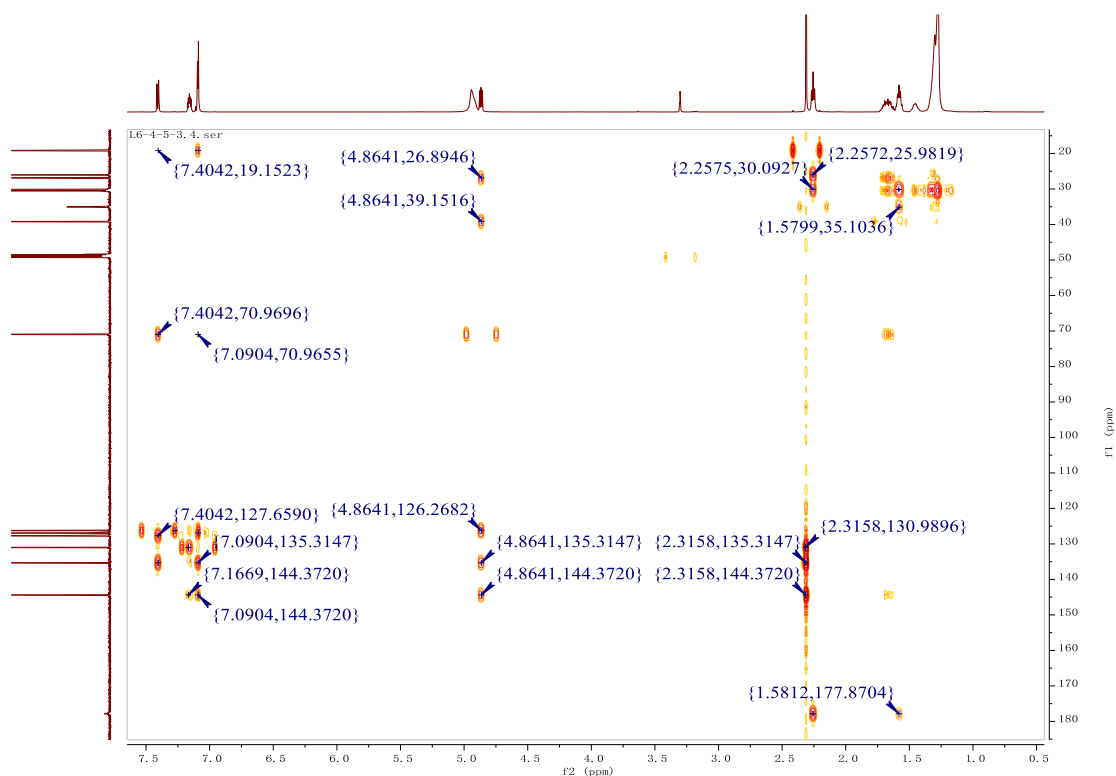
**Figure S39.** <sup>13</sup>C NMR spectrum of compound **6** (CD<sub>3</sub>OD, 150 MHz)



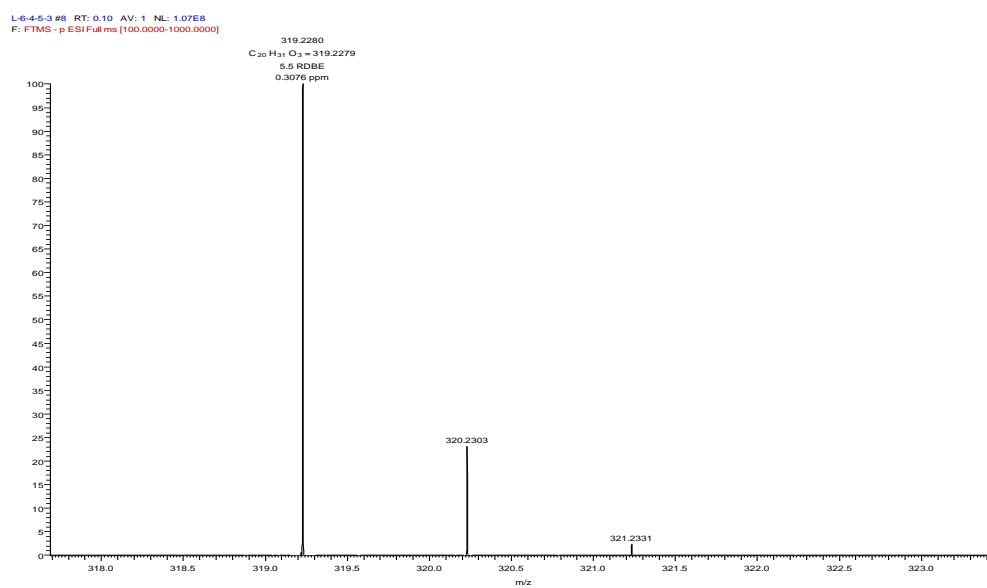
**Figure S40.** <sup>1</sup>H-<sup>1</sup>H COSY spectrum of compound **6** (CD<sub>3</sub>OD)



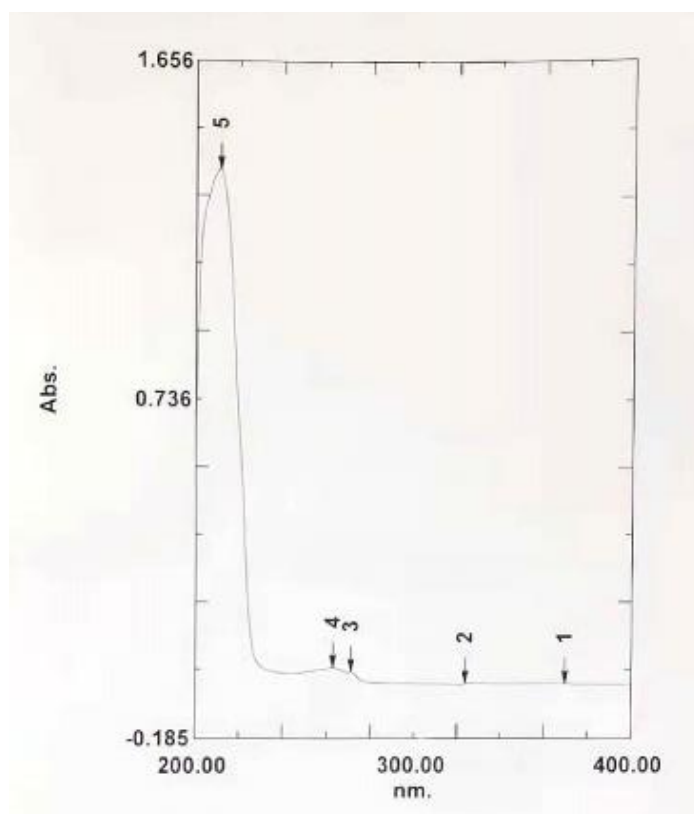
**Figure S41.** HSQC spectrum of compound **6** (CD<sub>3</sub>OD)



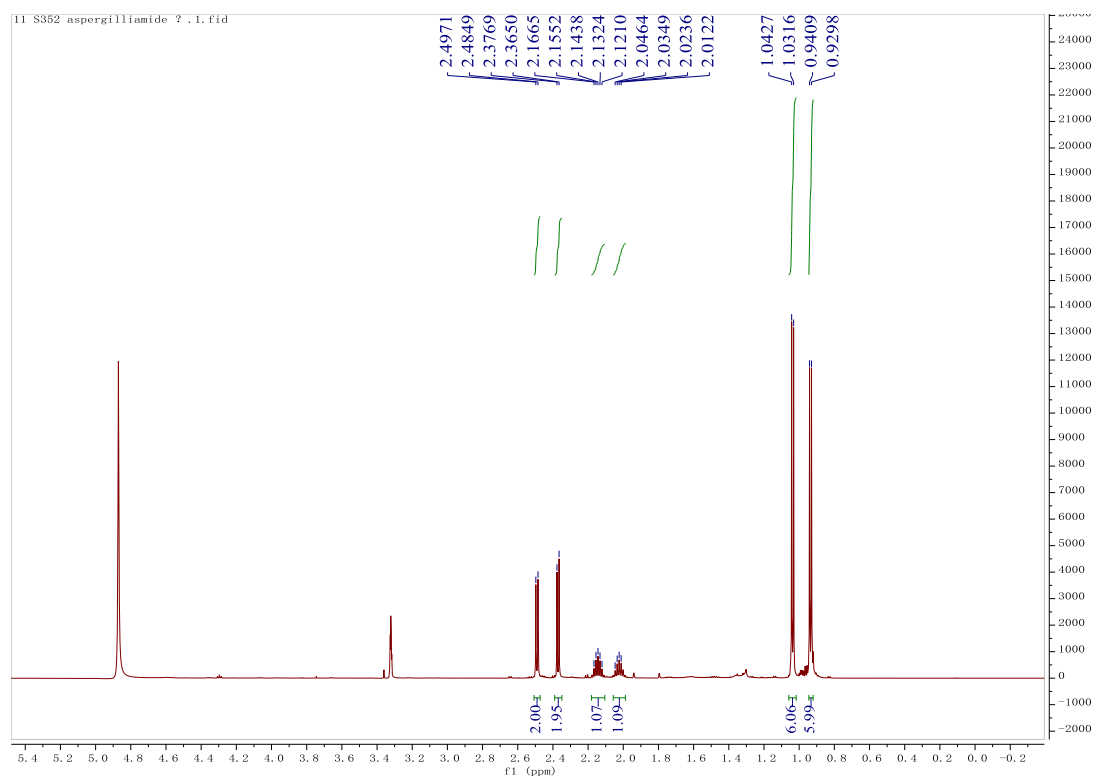
**Figure S42.** HMBC spectrum of compound **6** (CD<sub>3</sub>OD)



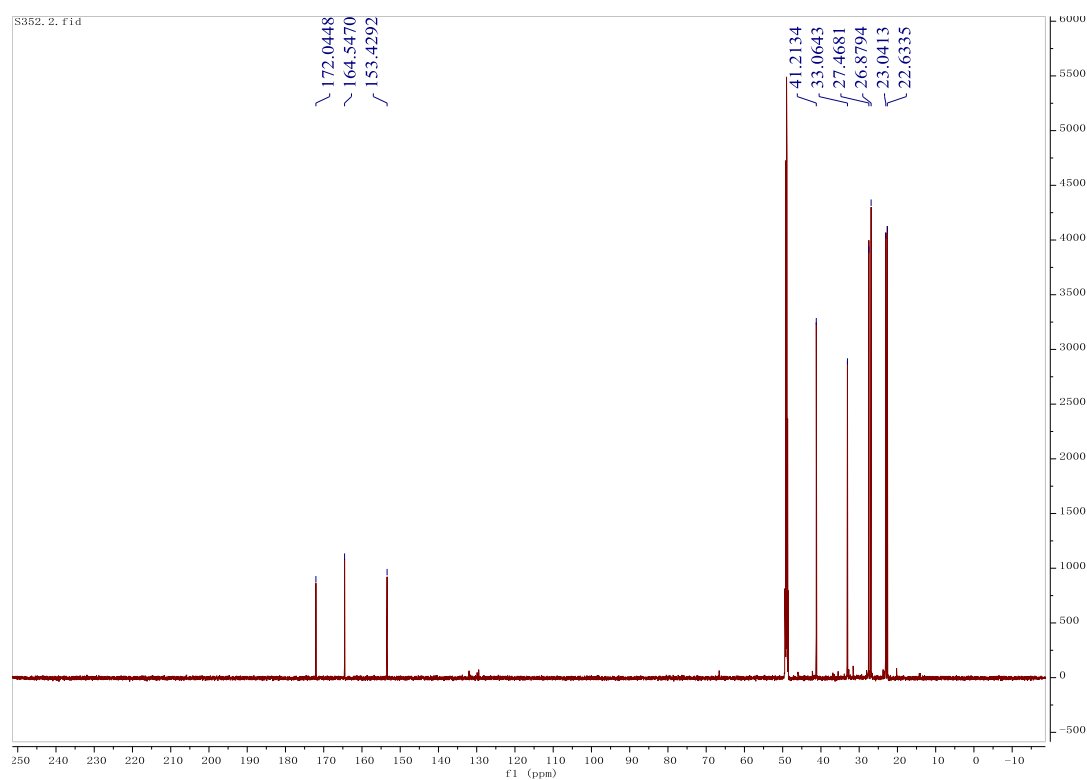
**Figure S43.** HRESIMS spectrum of compound **6**



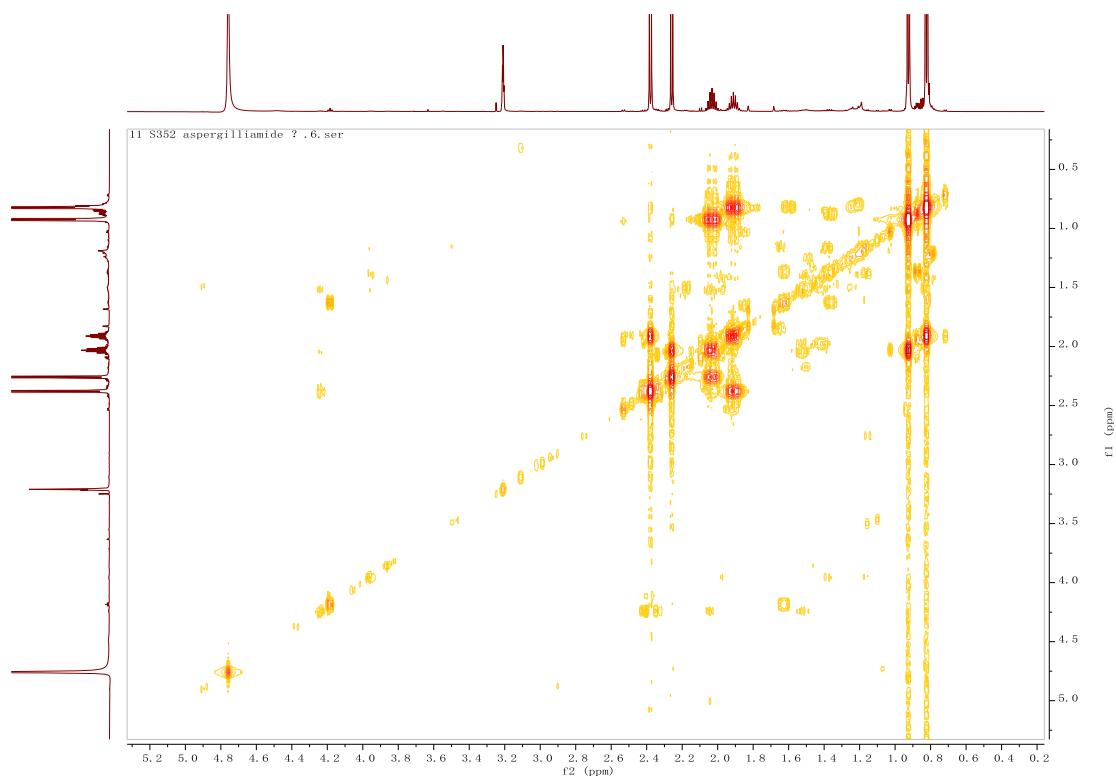
**Figure S44.** UV spectrum of compound **6**



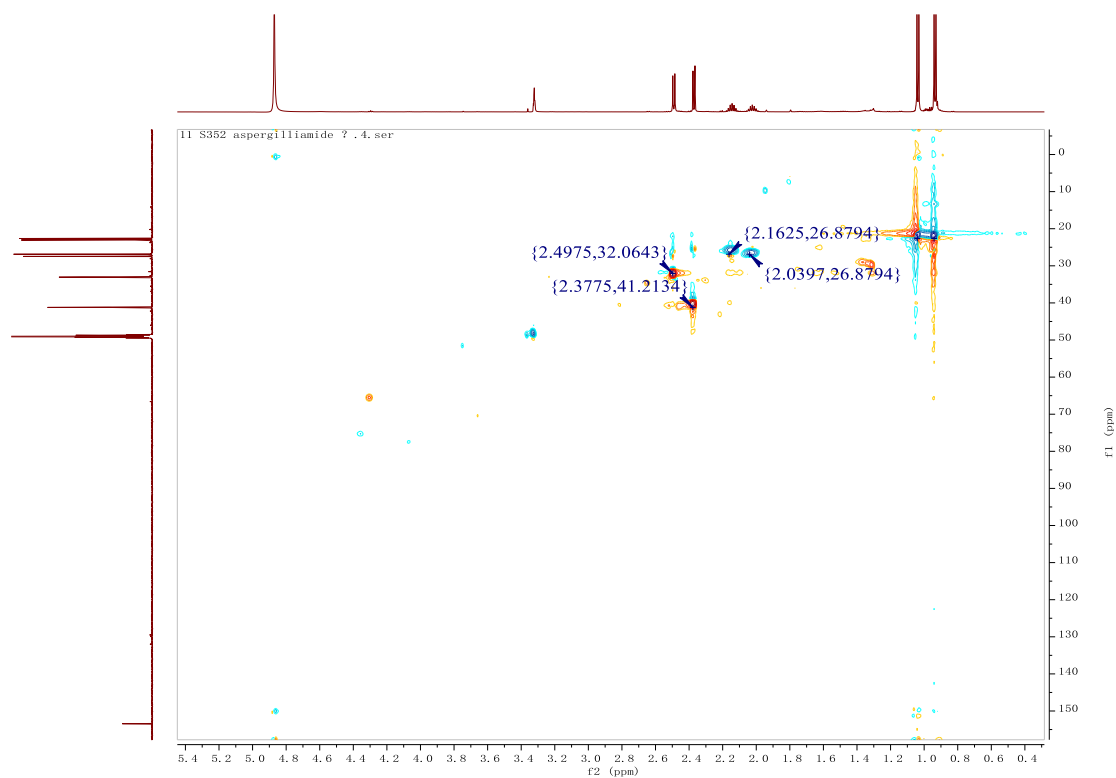
**Figure S45.** <sup>1</sup>H NMR spectrum of compound **7** (CD<sub>3</sub>OD, 600 MHz)



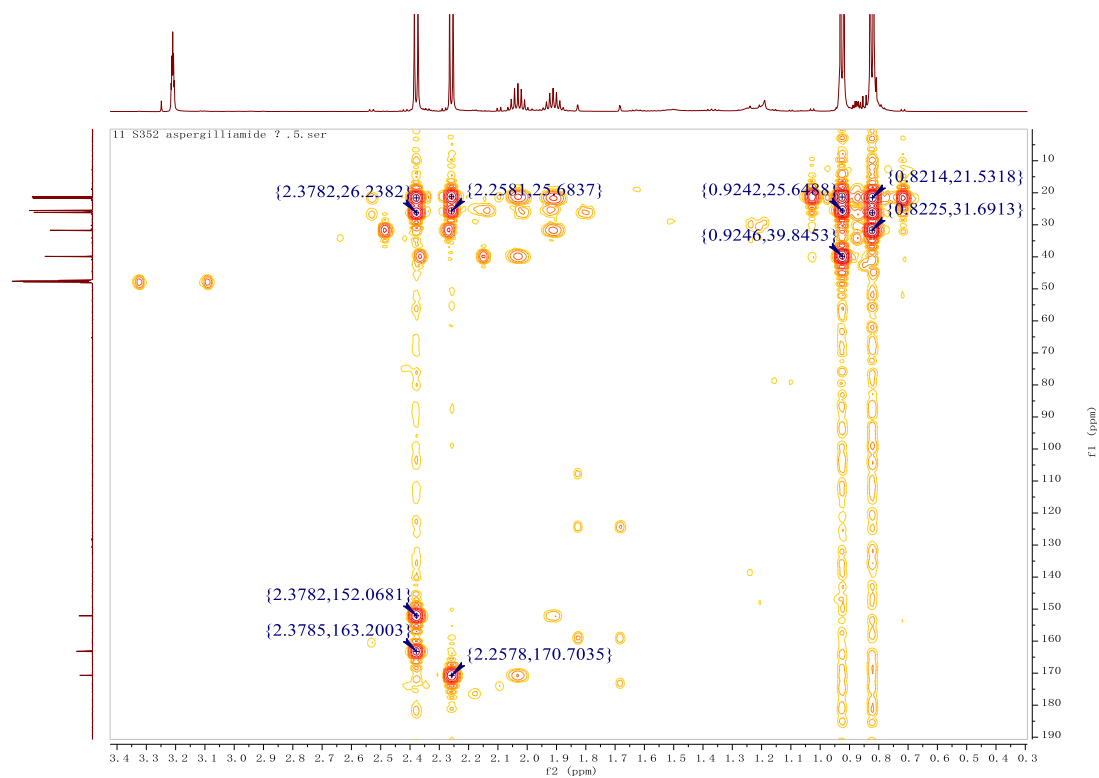
**Figure S46.** <sup>13</sup>C NMR spectrum of compound **7** (CD<sub>3</sub>OD, 150 MHz)



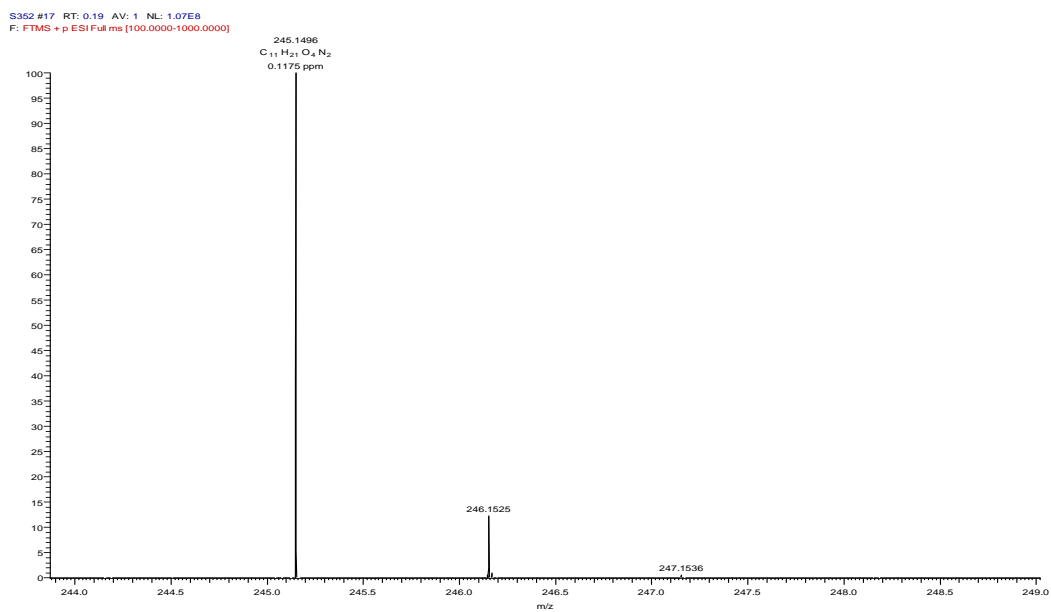
**Figure S47.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound **7** ( $\text{CD}_3\text{OD}$ )



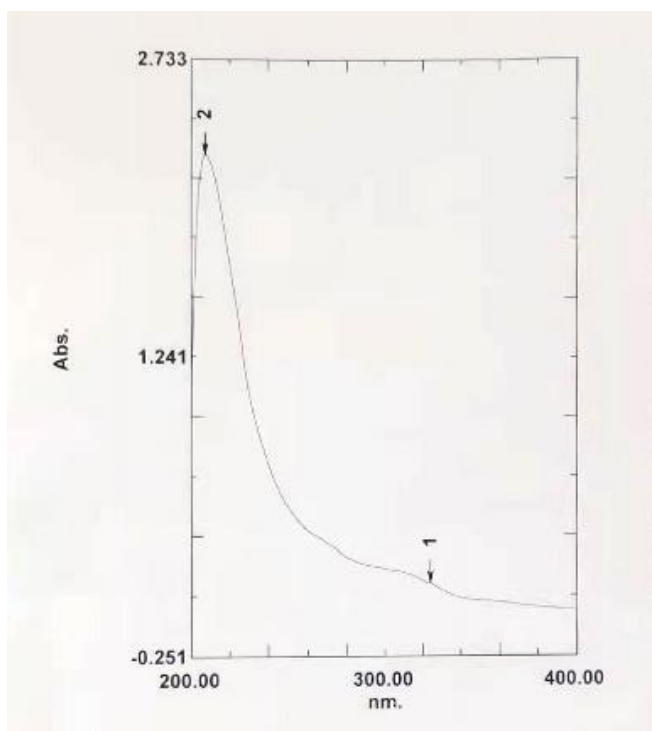
**Figure S48.** HSQC spectrum of compound **7** ( $\text{CD}_3\text{OD}$ )



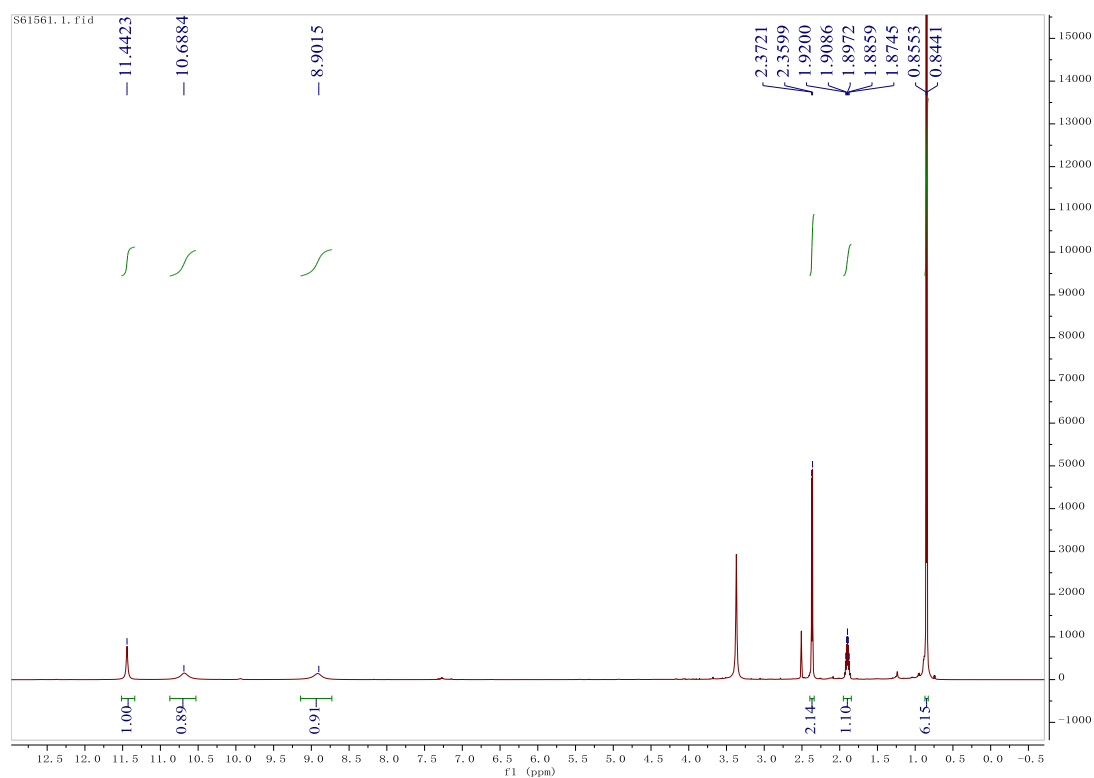
**Figure S49.** HMBC spectrum of compound **7** (CD<sub>3</sub>OD)



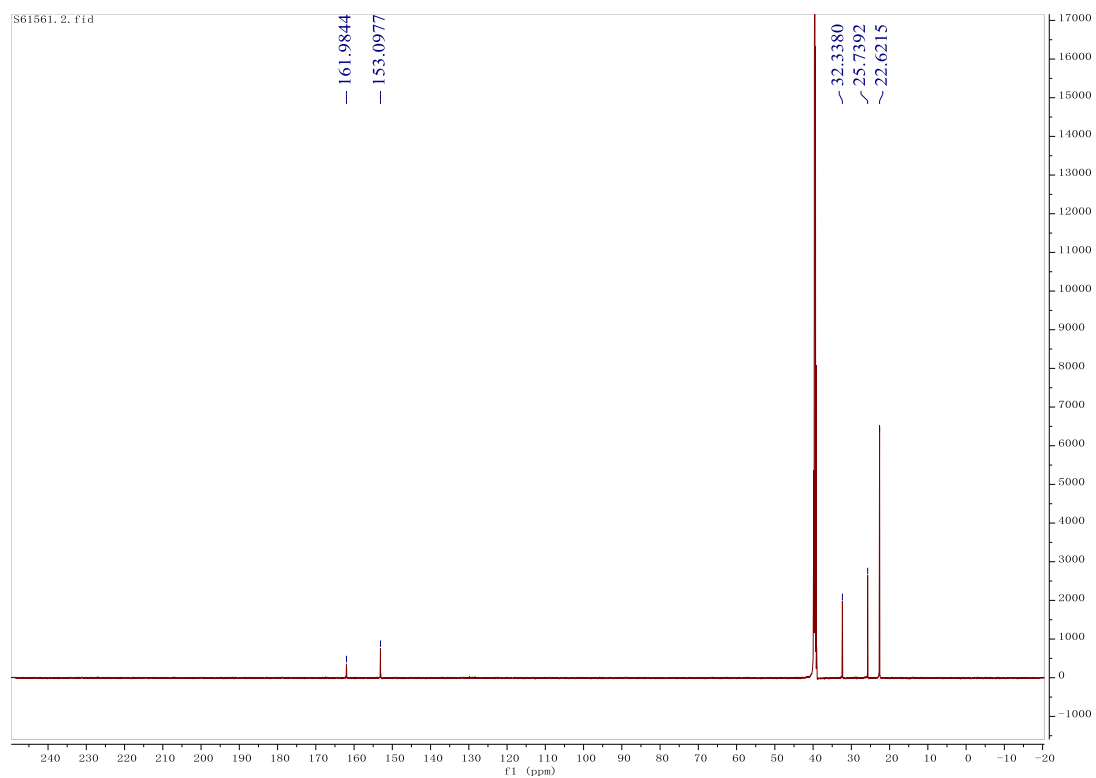
**Figure S50.** HRESIMS spectrum of compound **7**



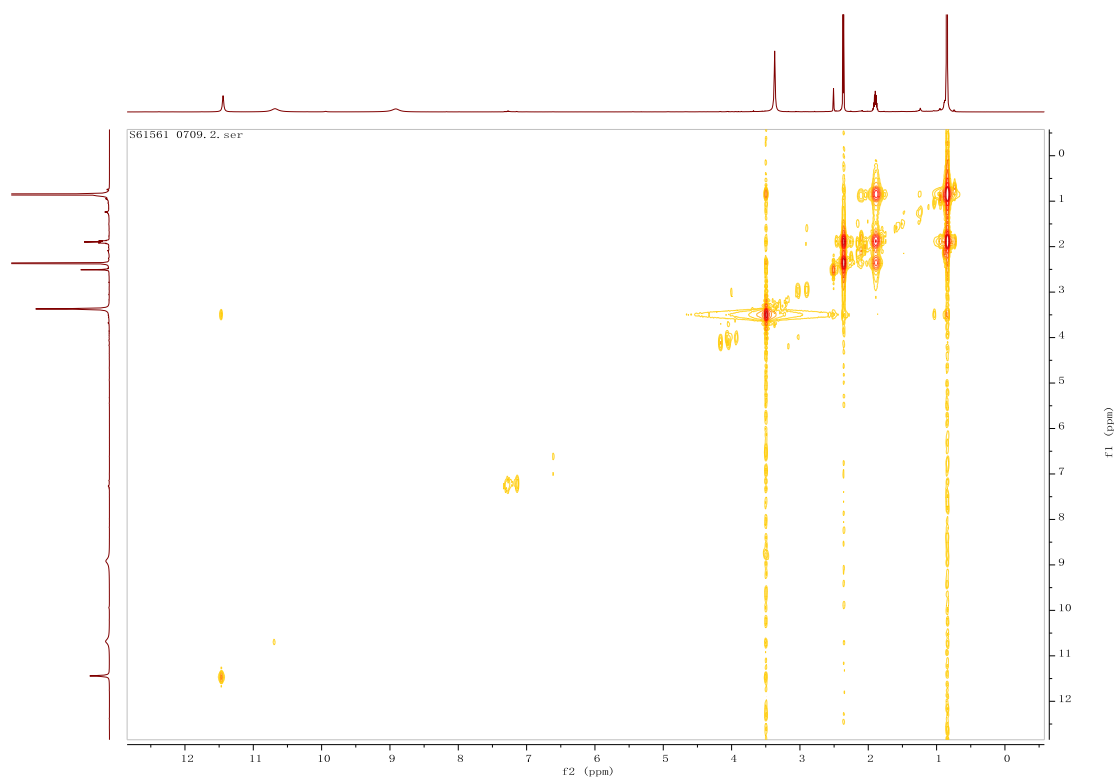
**Figure S51.** UV spectrum of compound **7**



**Figure S52.**  $^1\text{H}$  NMR spectrum of compound **8** (MDSO- $\text{d}_6$ , 600 MHz)

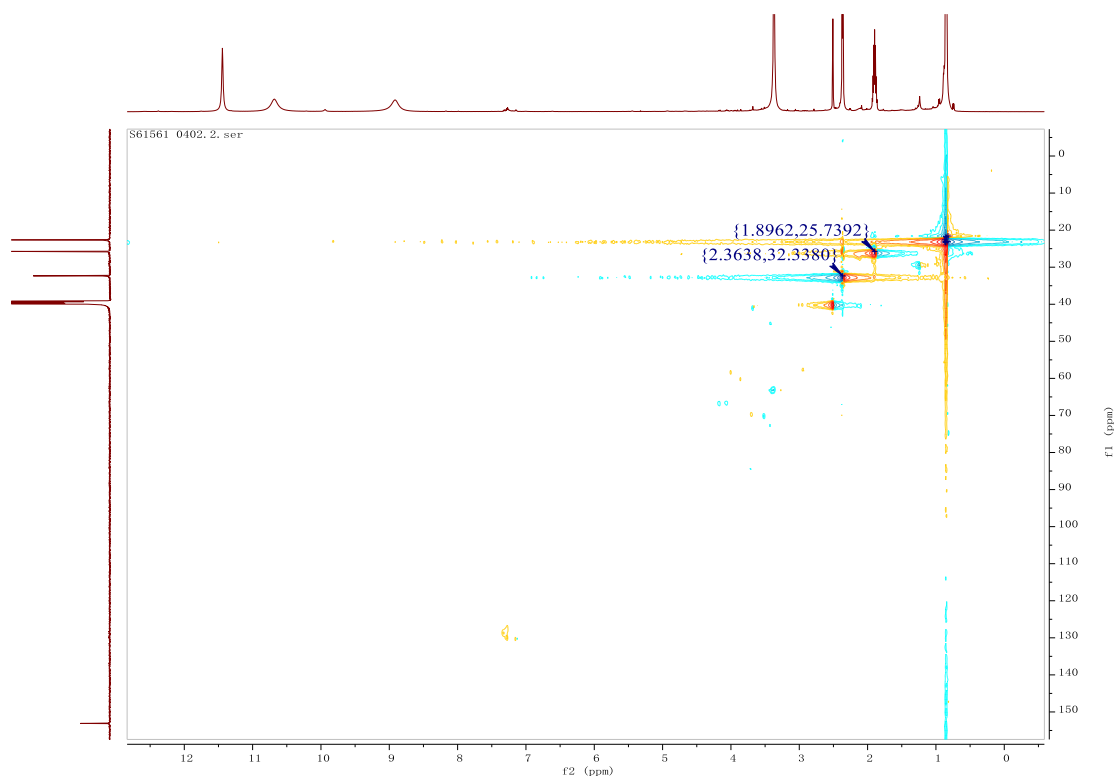


**Figure S53.**  $^{13}\text{C}$  NMR spectrum of compound **8** (MDSO- $\text{d}_6$ , 150 MHz)

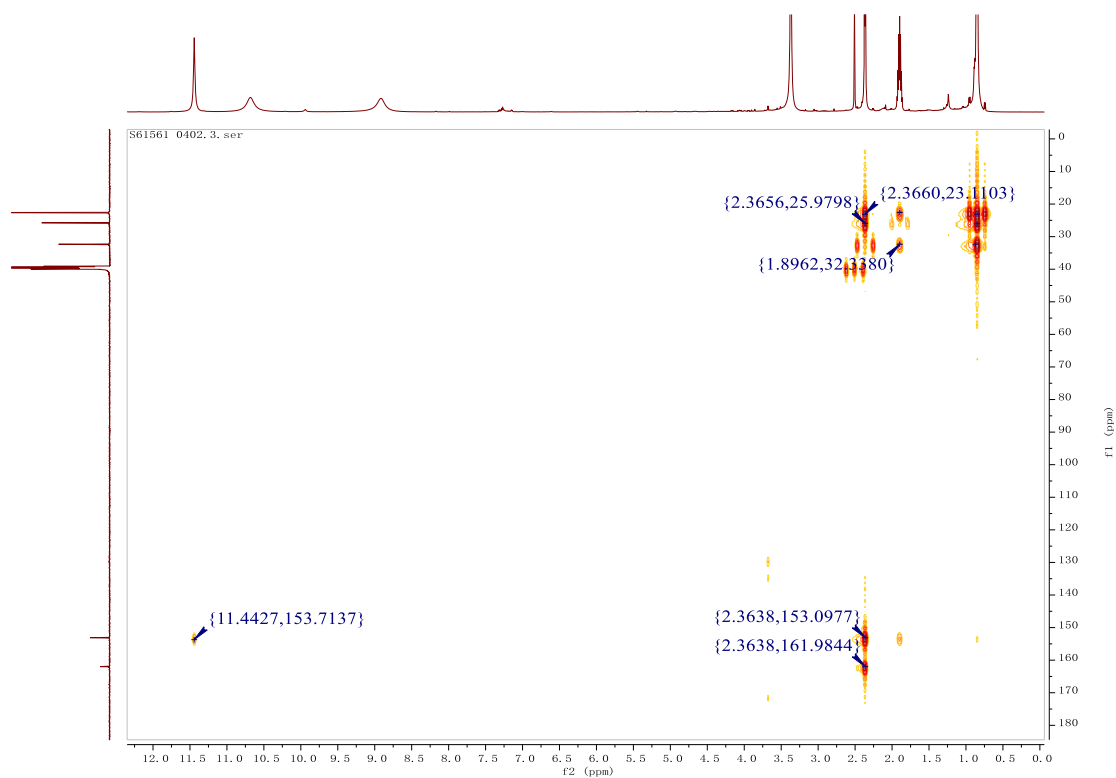


**Figure S54.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound **8** (MDSO- $\text{d}_6$ )

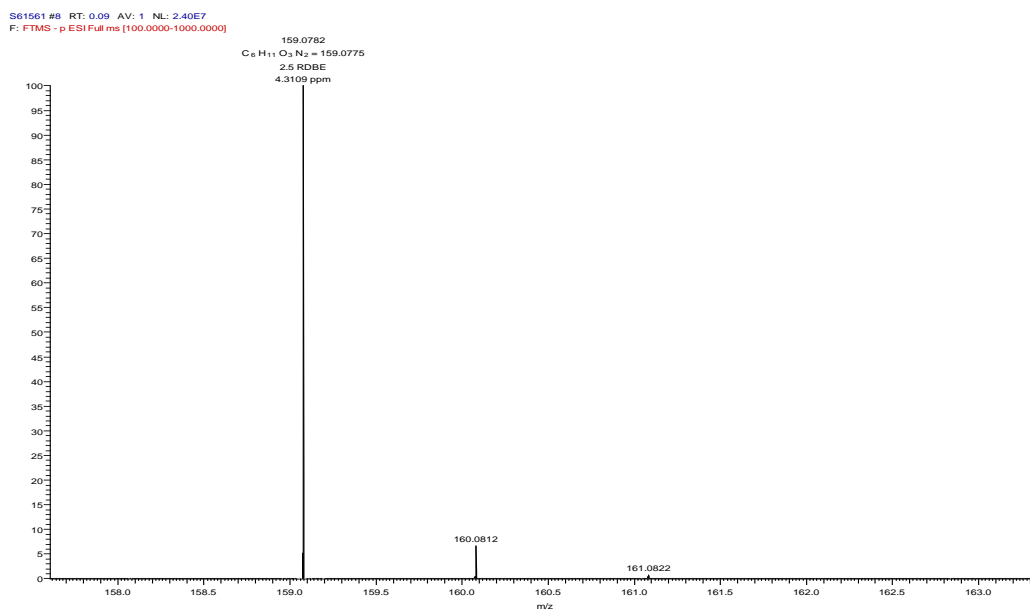




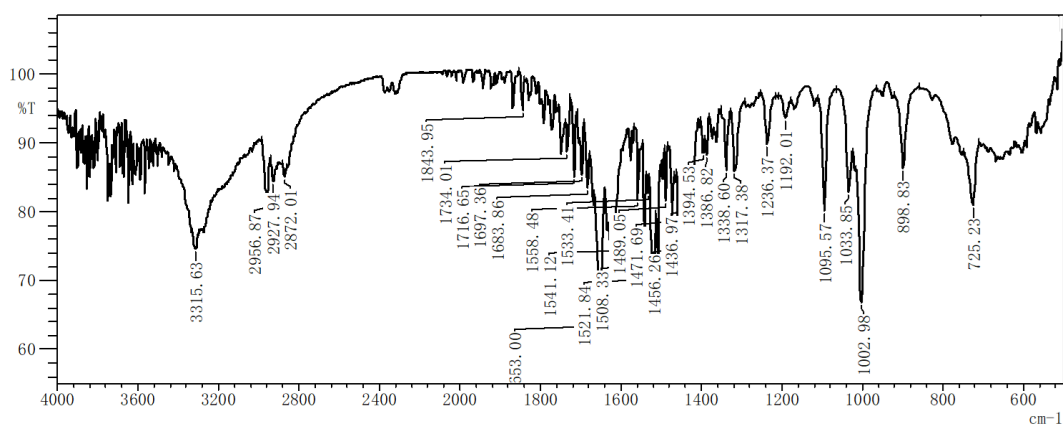
**Figure S55.** HSQC spectrum of compound **8** (MDSO-d<sub>6</sub>)



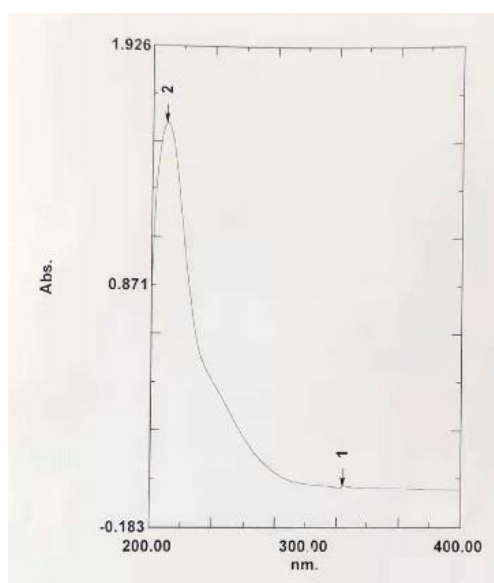
**Figure S56.** HMBC spectrum of compound **8** (MDSO-d<sub>6</sub>)



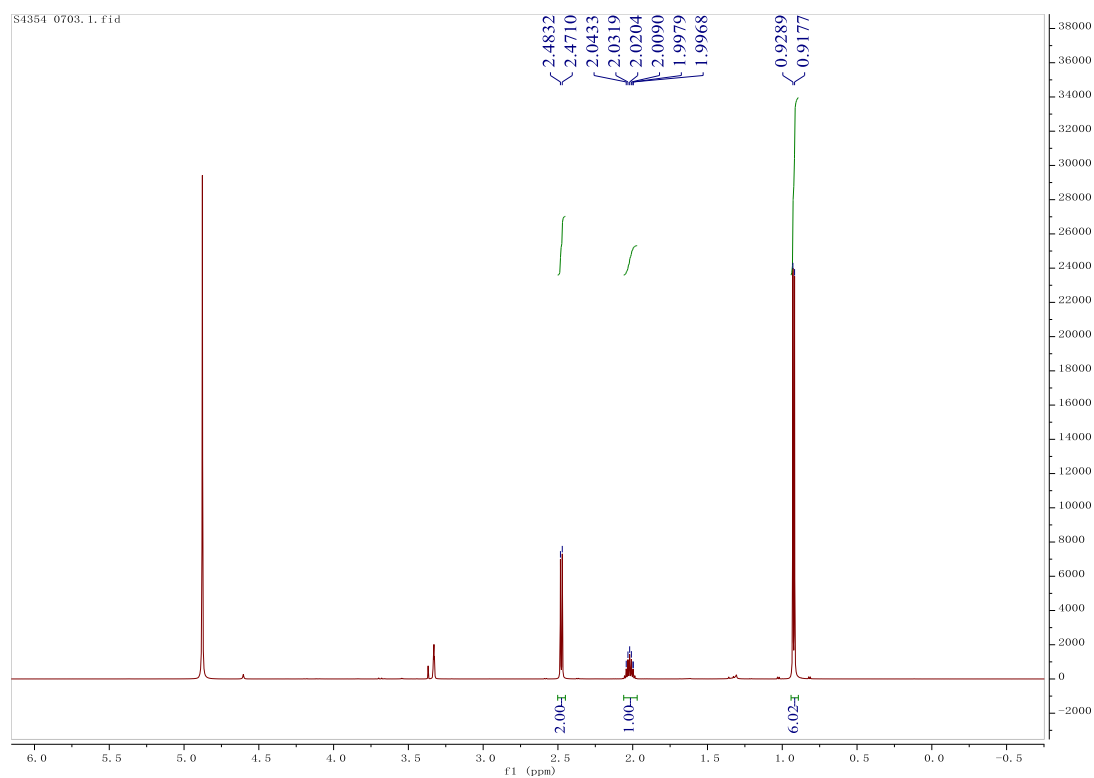
**Figure S57.** HRESIMS spectrum of compound **8**



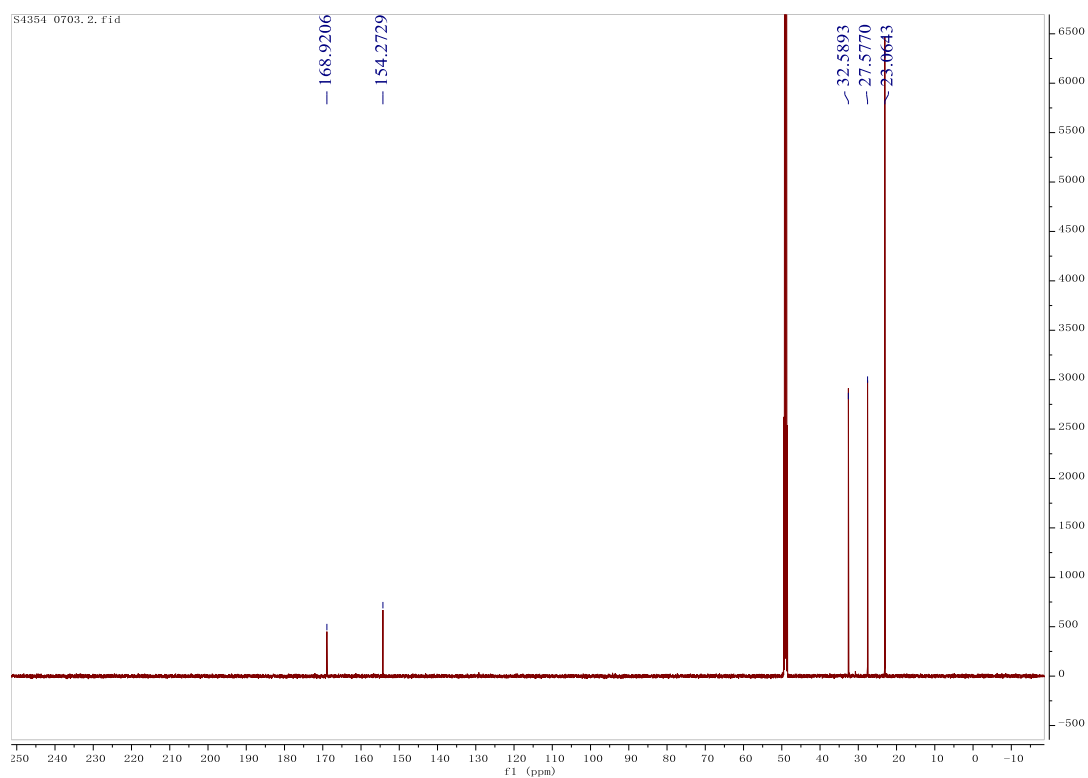
**Figure S58.** IR spectrum of compound **8**



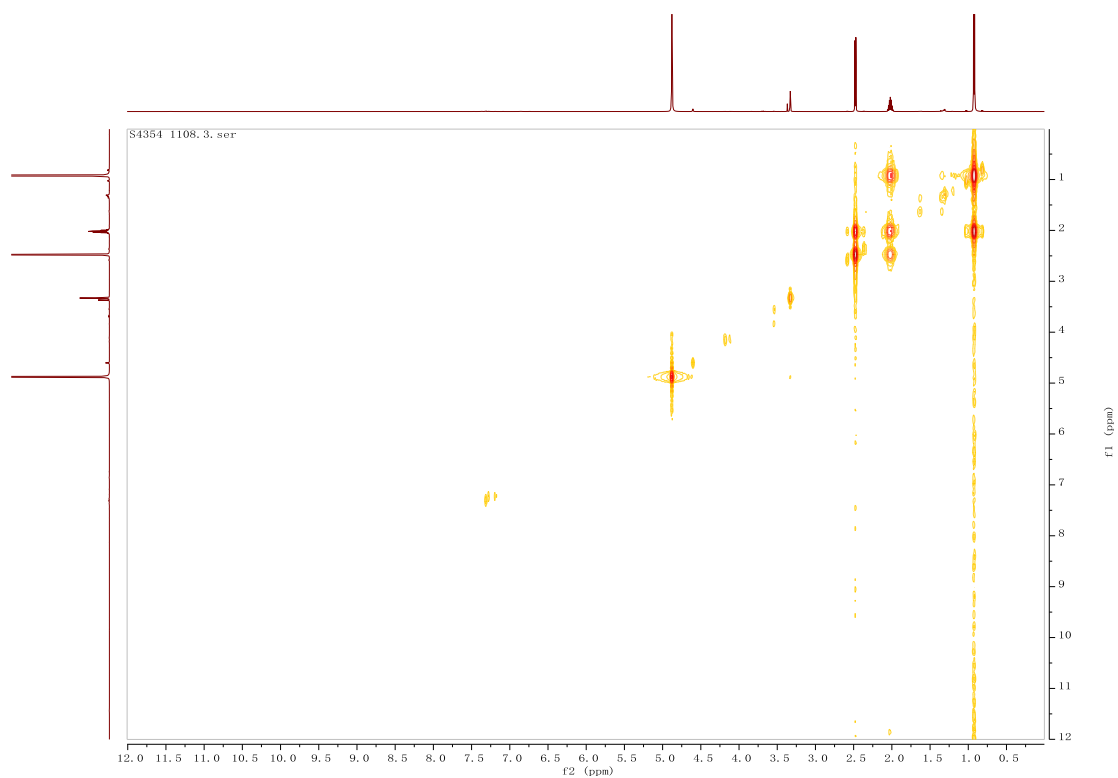
**Figure S59.** UV spectrum of compound **8**



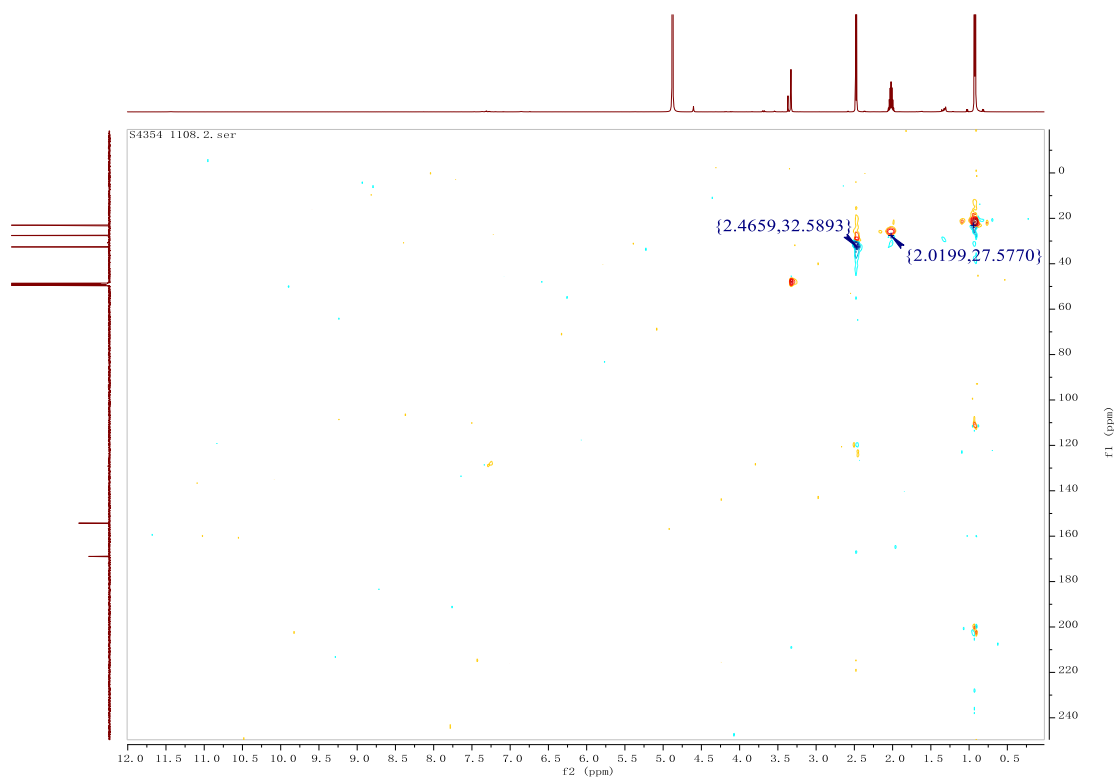
**Figure S60.** <sup>1</sup>H NMR spectrum of compound **9** (CD<sub>3</sub>OD, 600 MHz)



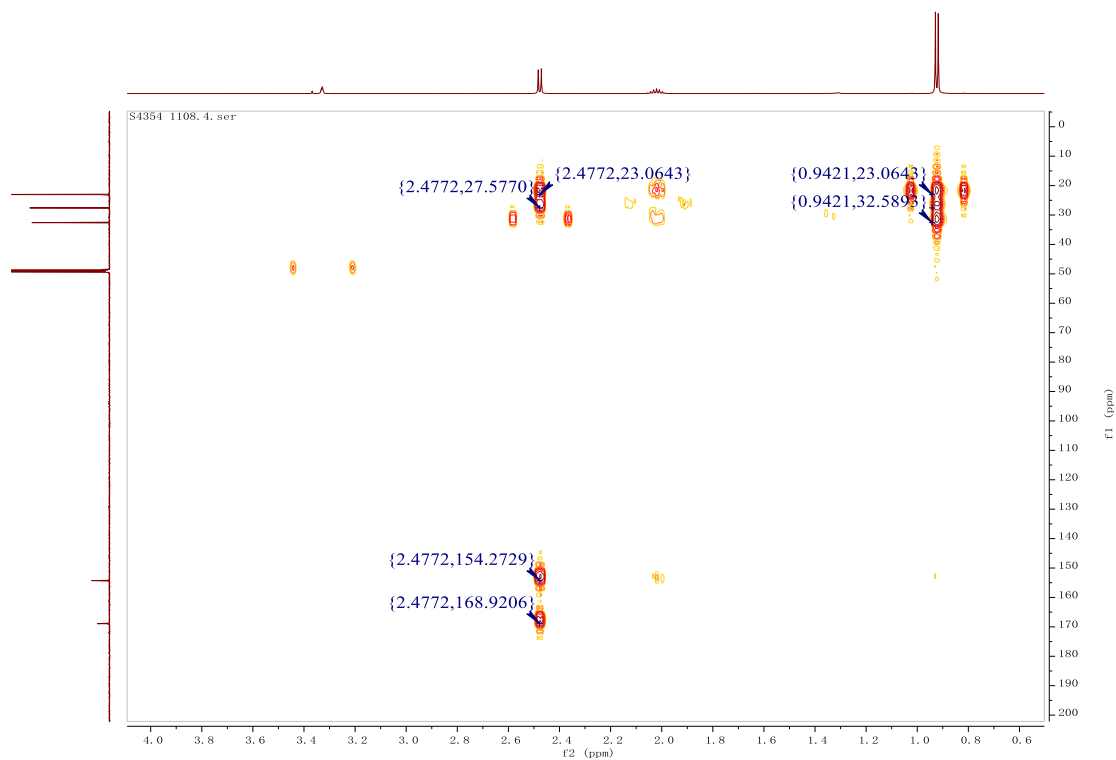
**Figure S61.** <sup>13</sup>C NMR spectrum of compound **9** (CD<sub>3</sub>OD, 150 MHz)



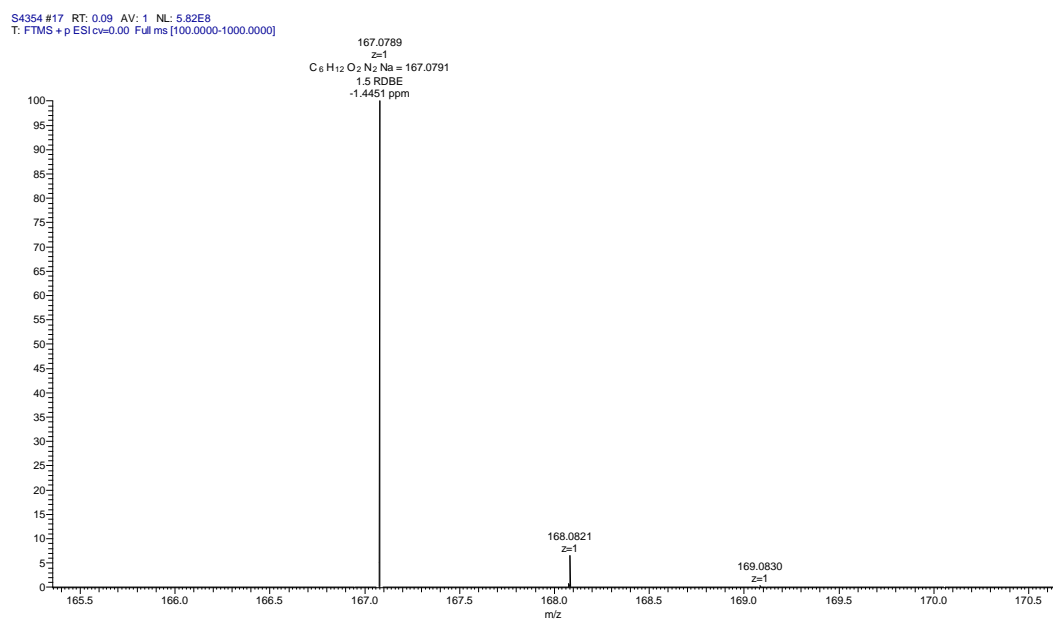
**Figure S62.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound **9** ( $\text{CD}_3\text{OD}$ )



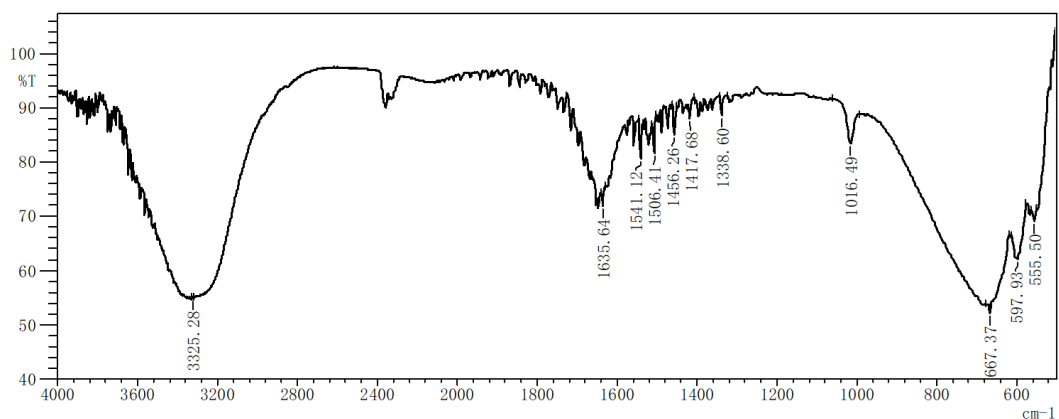
**Figure S63.** HSQC spectrum of compound **9** ( $\text{CD}_3\text{OD}$ )



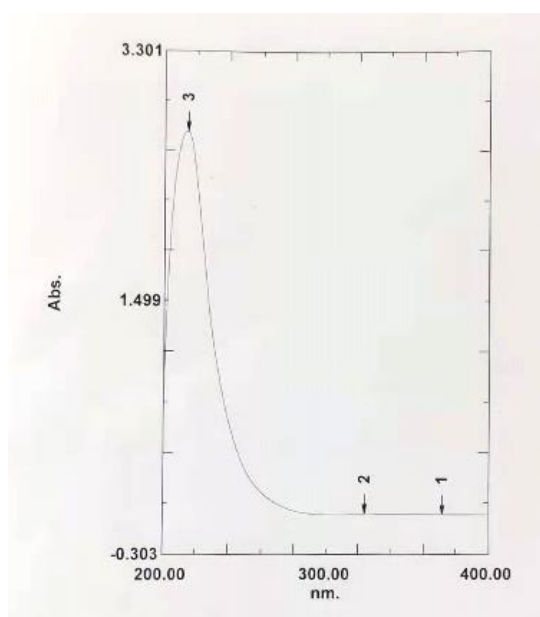
**Figure S64.** HMBC spectrum of compound **9** (CD<sub>3</sub>OD)



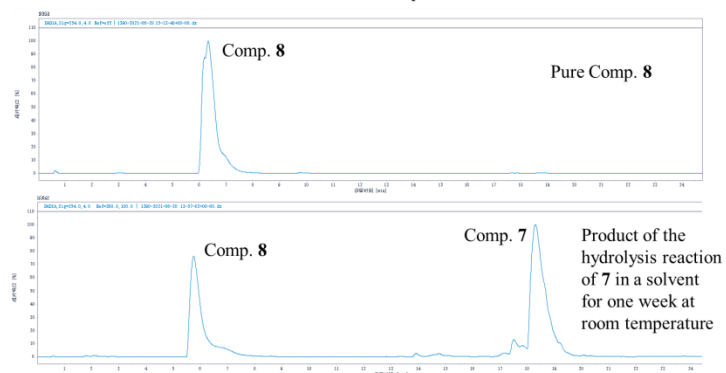
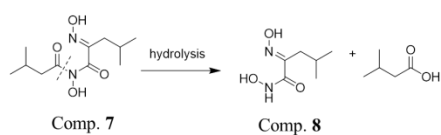
**Figure S65.** HRESIMS spectrum of compound **9**



**Figure S66.** IR spectrum of compound **9**



**Figure S67.** UV spectrum of compound **9**



**Figure S68.** Hydrolysis reaction of compound **7**

**Table S1.** Cell Viability (%) of HepG2 treated with compounds **1-9** and lovastatin (5, 10, and 20  $\mu\text{M}$ ).

Compounds Concentration( $\mu\text{M}$ )	1	2	3	4	5	6	7	8	9	lovastatin
5	109.56	109.56	109.31	100.06	107.19	102.75	100.56	101.04	109.52	100.84
10	108.69	105.81	105.19	100.88	107.06	100.75	104.94	109.24	116.90	100.71
20	108.25	108.69	113.69	110.44	104.58	107.38	106.63	108.64	110.88	115.46