

# Supplementary Materials: Cytotoxic and *N*-acetyltransferase inhibitory Meroterpenoids from *Ganoderma cochlear*

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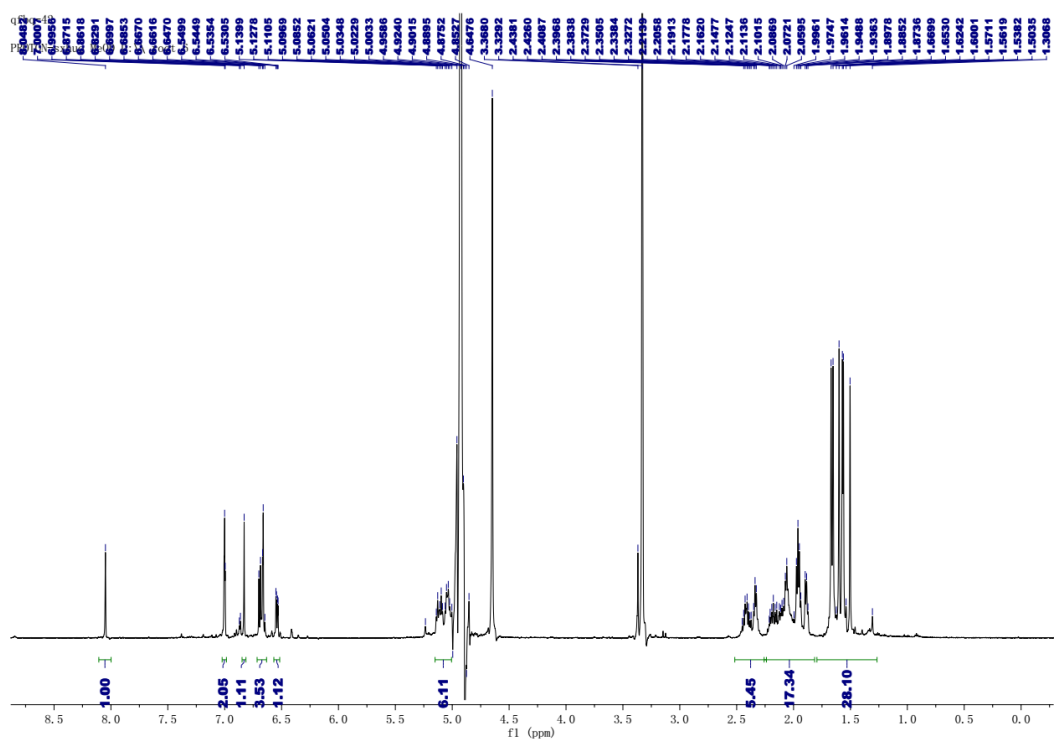


Figure S1. <sup>1</sup>H NMR spectrum of **1** in methanol-*d*<sub>4</sub>

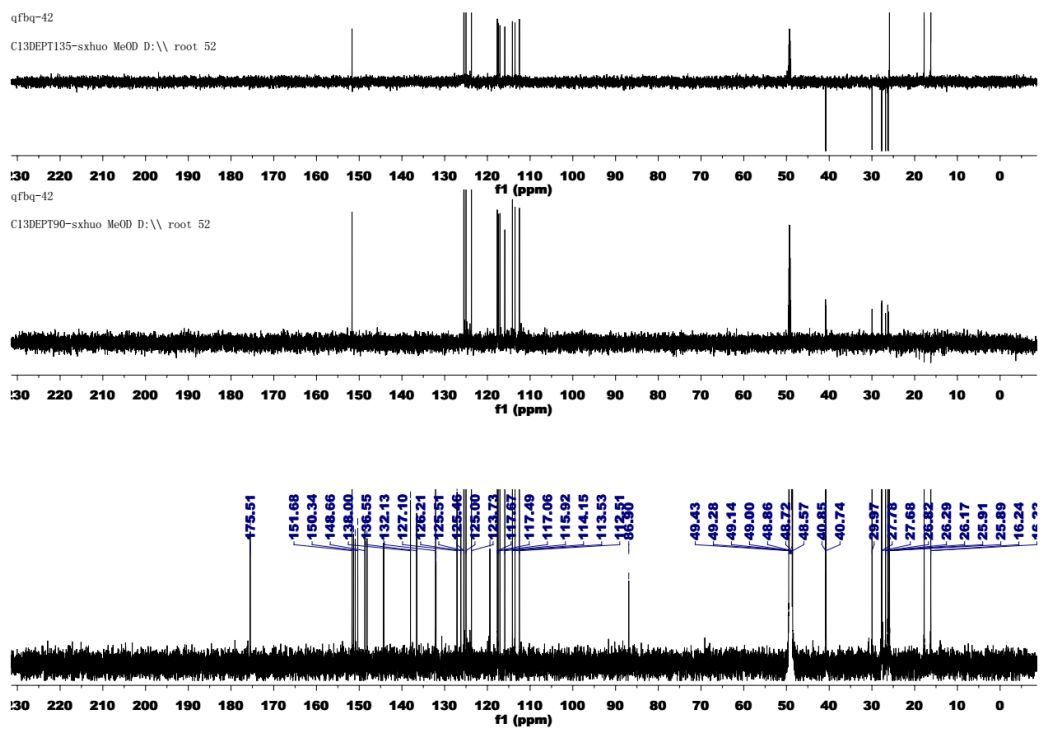


Figure S2.  $^{13}\text{C}$  NMR and DEPT spectra of **1** in methanol- $d_4$

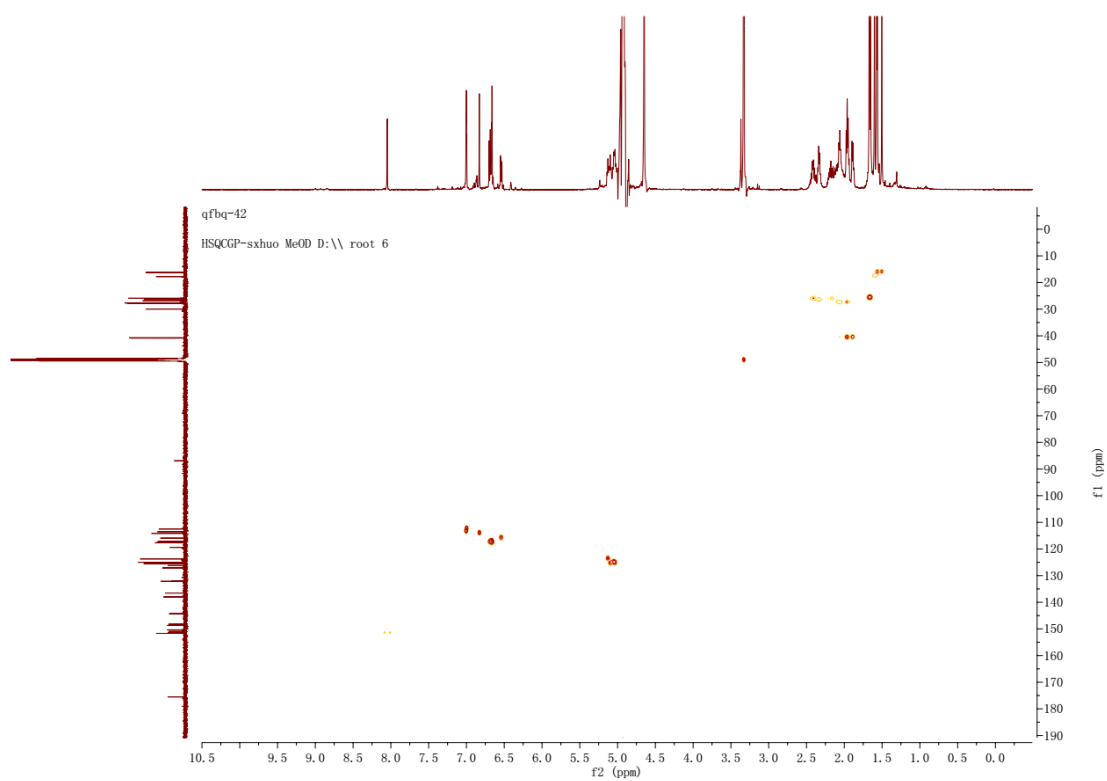


Figure S3. HSQC spectrum of **1** in methanol- $d_4$

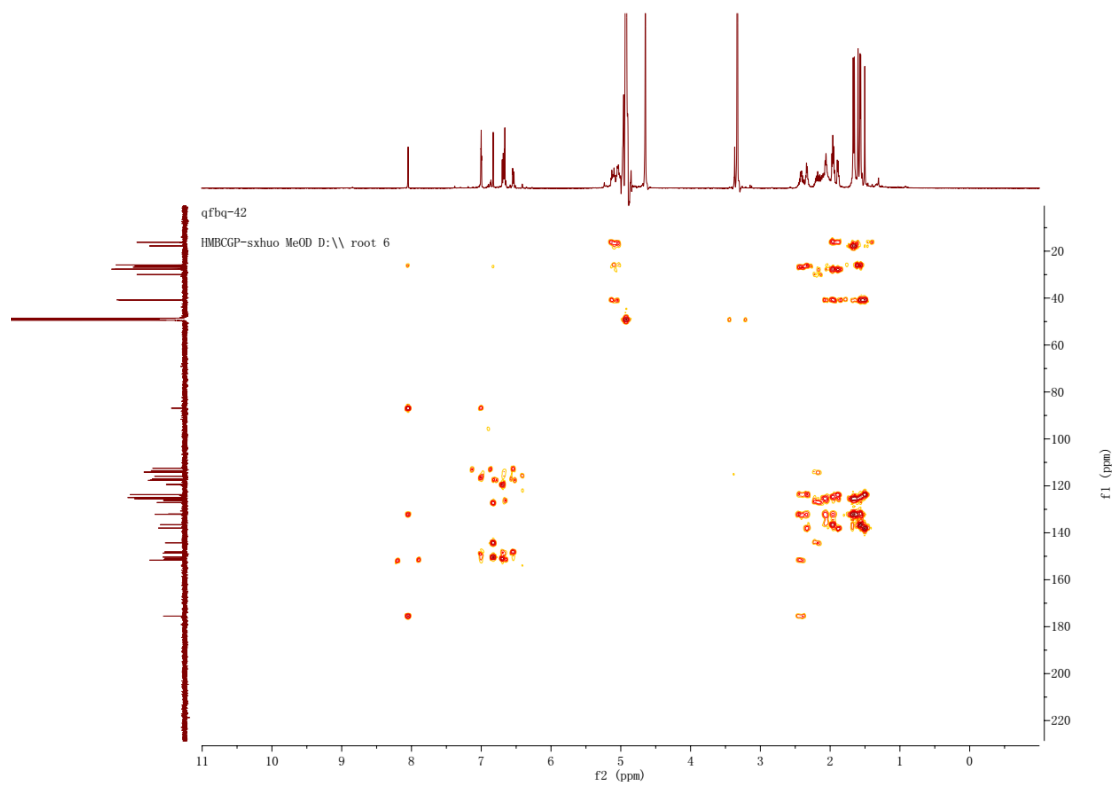


Figure S4. HMBC spectrum of **1** in methanol-*d*<sub>4</sub>

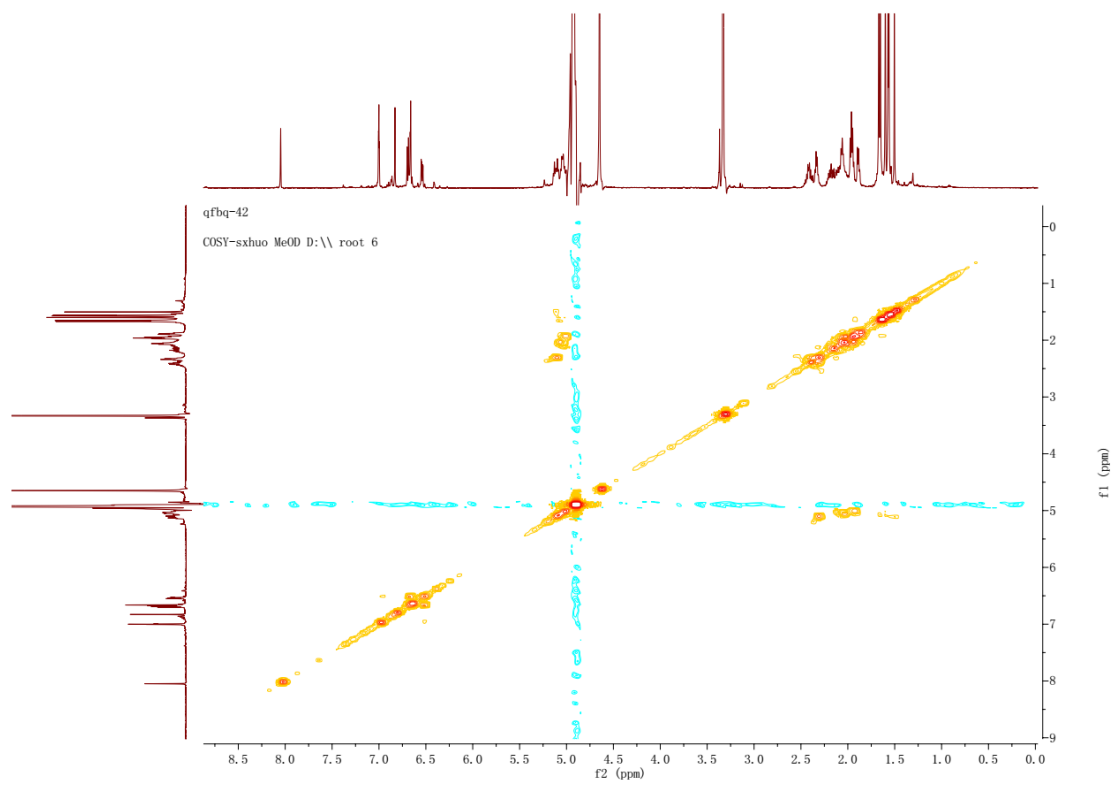


Figure S5. <sup>1</sup>H-<sup>1</sup>H COSY spectrum of **1** in methanol-*d*<sub>4</sub>

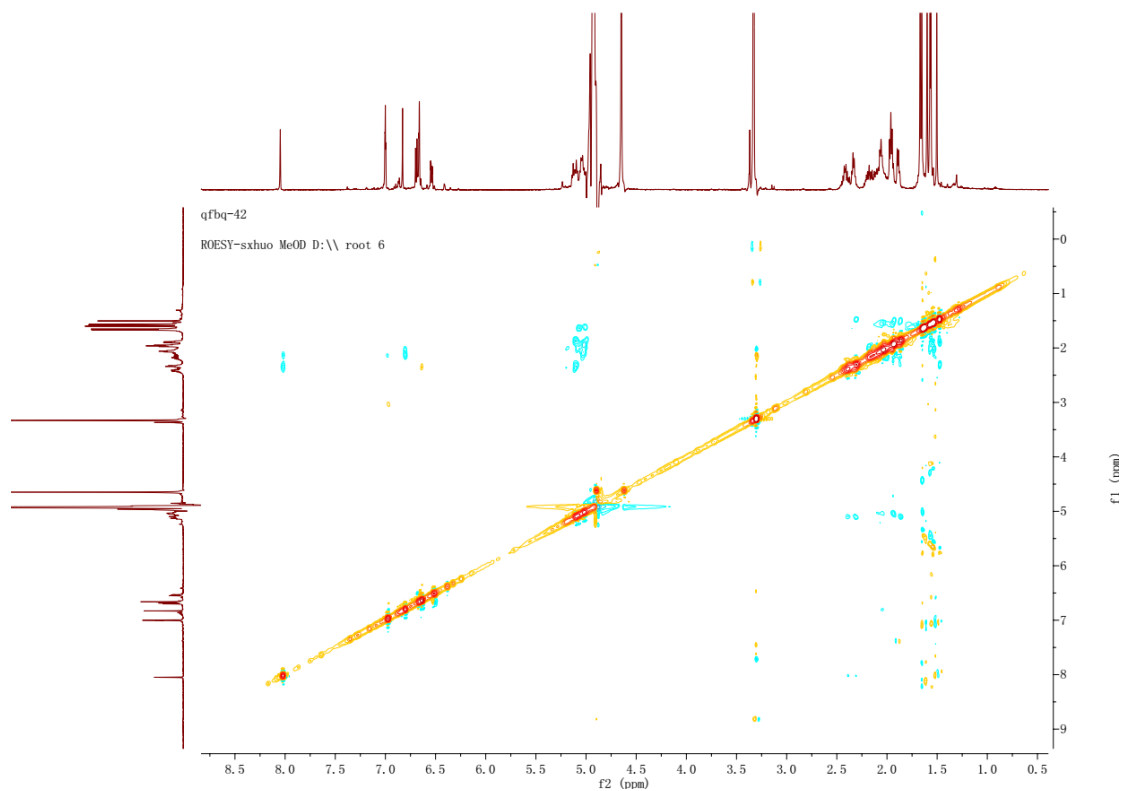


Figure S6. ROESY spectrum of **1** in methanol- $d_4$

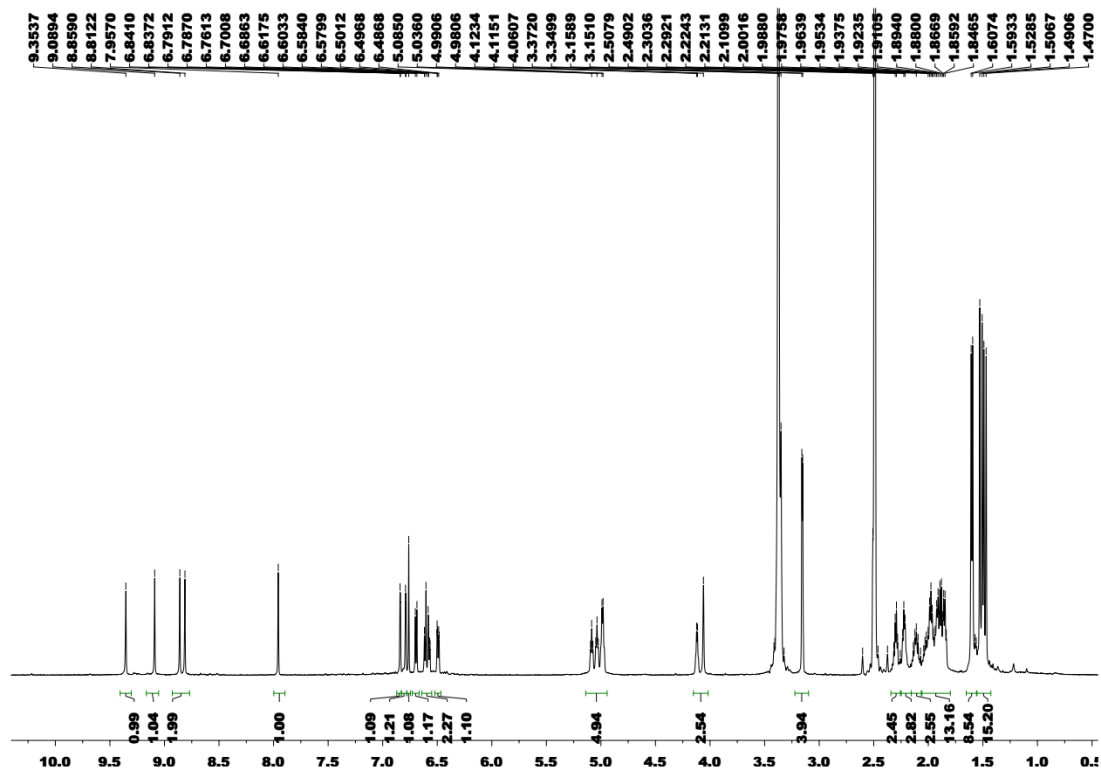


Figure S7.  $^1\text{H}$  NMR spectrum of **1** in DMSO- $d_6$

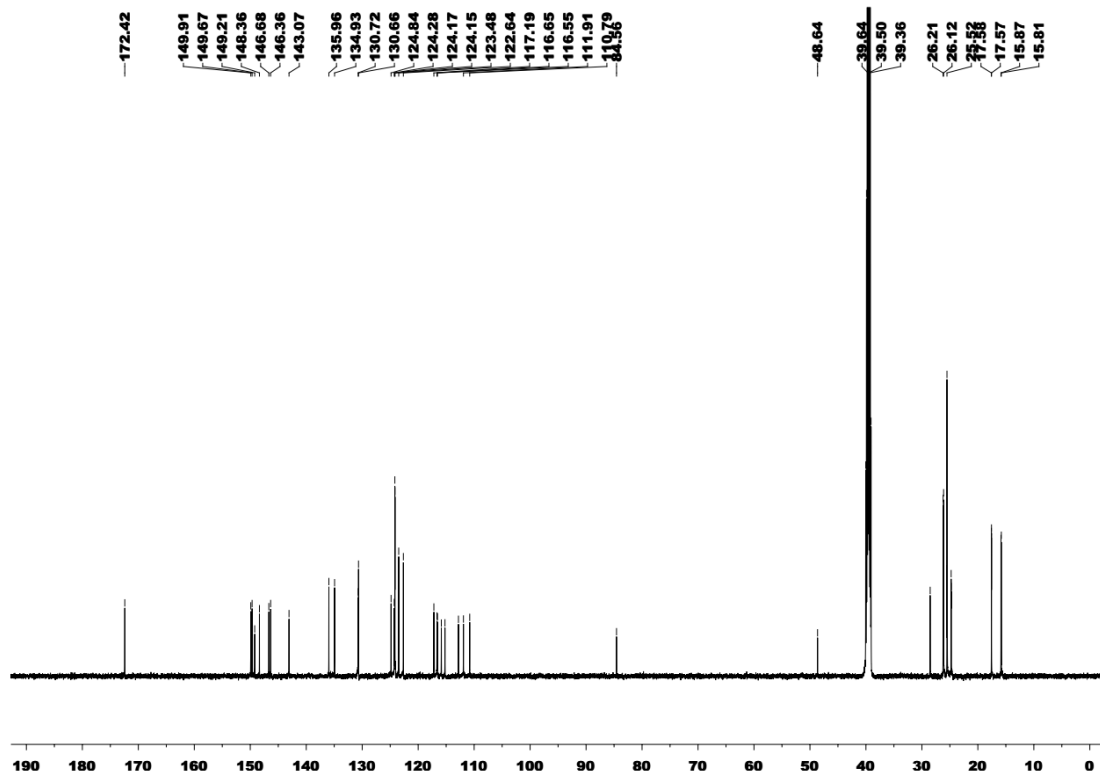


Figure S8.  $^{13}\text{C}$  NMR spectrum of **1** in  $\text{DMSO-}d_6$

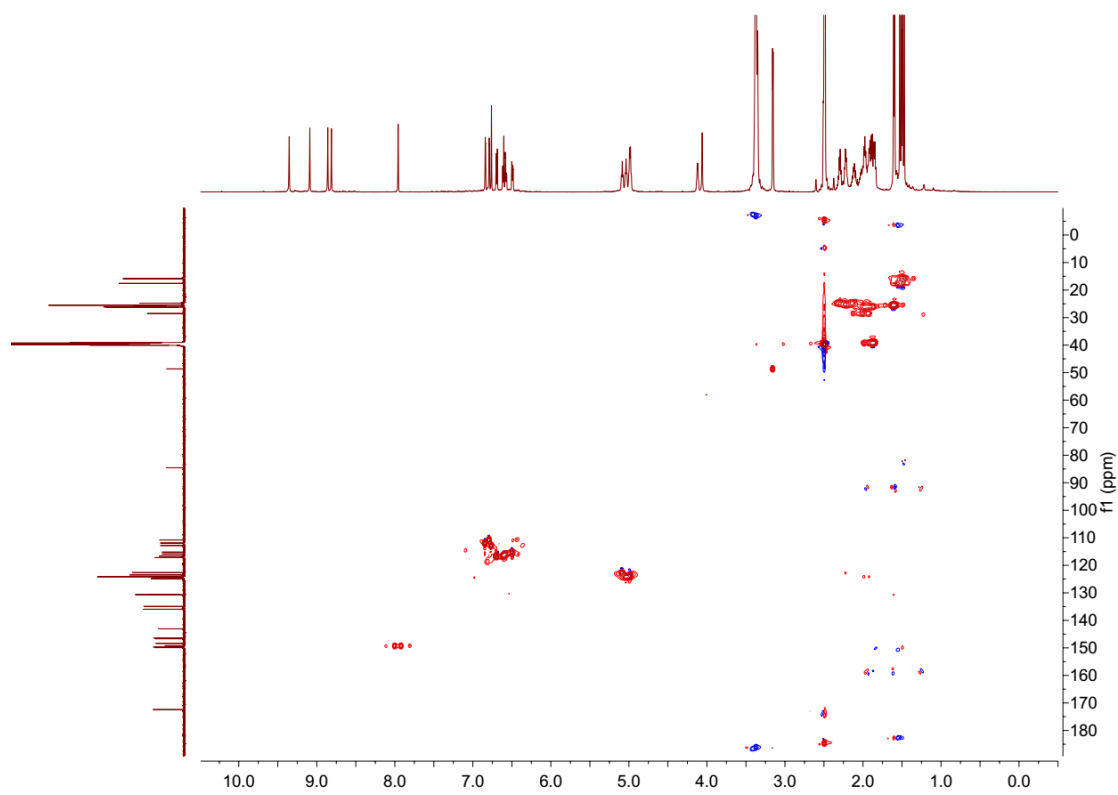


Figure S9. HSQC spectrum of **1** in  $\text{DMSO-}d_6$

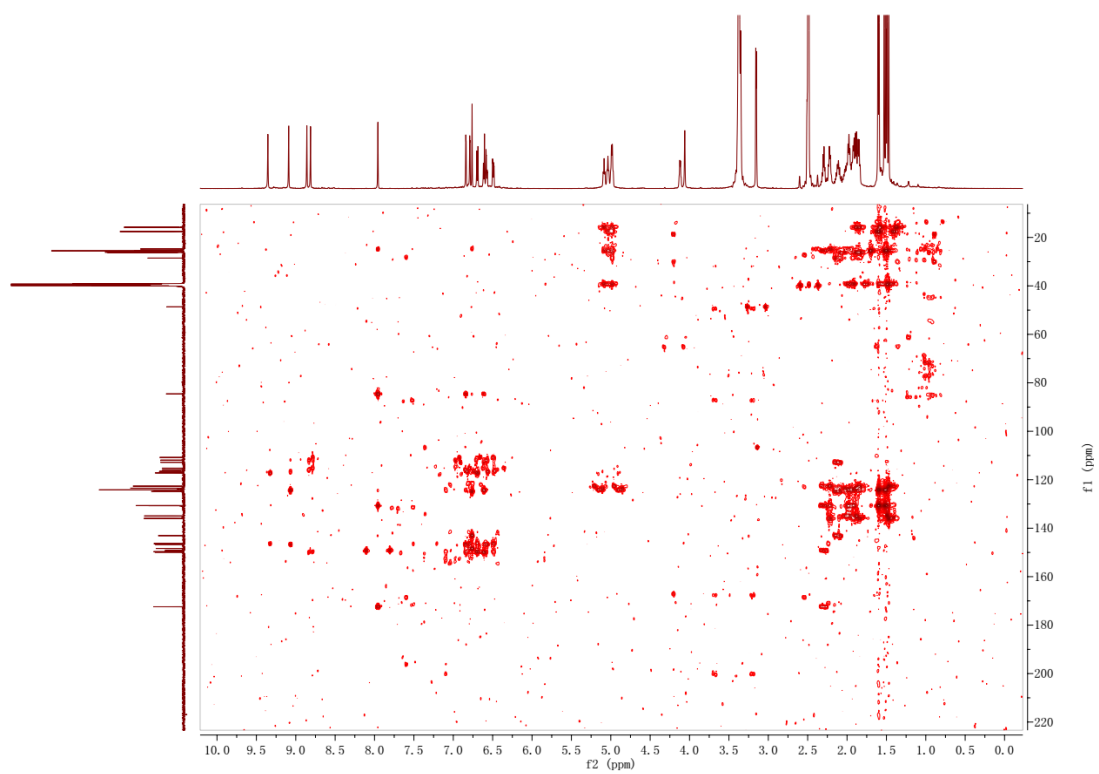


Figure S10. HMBC spectrum of **1** in DMSO-*d*<sub>6</sub>

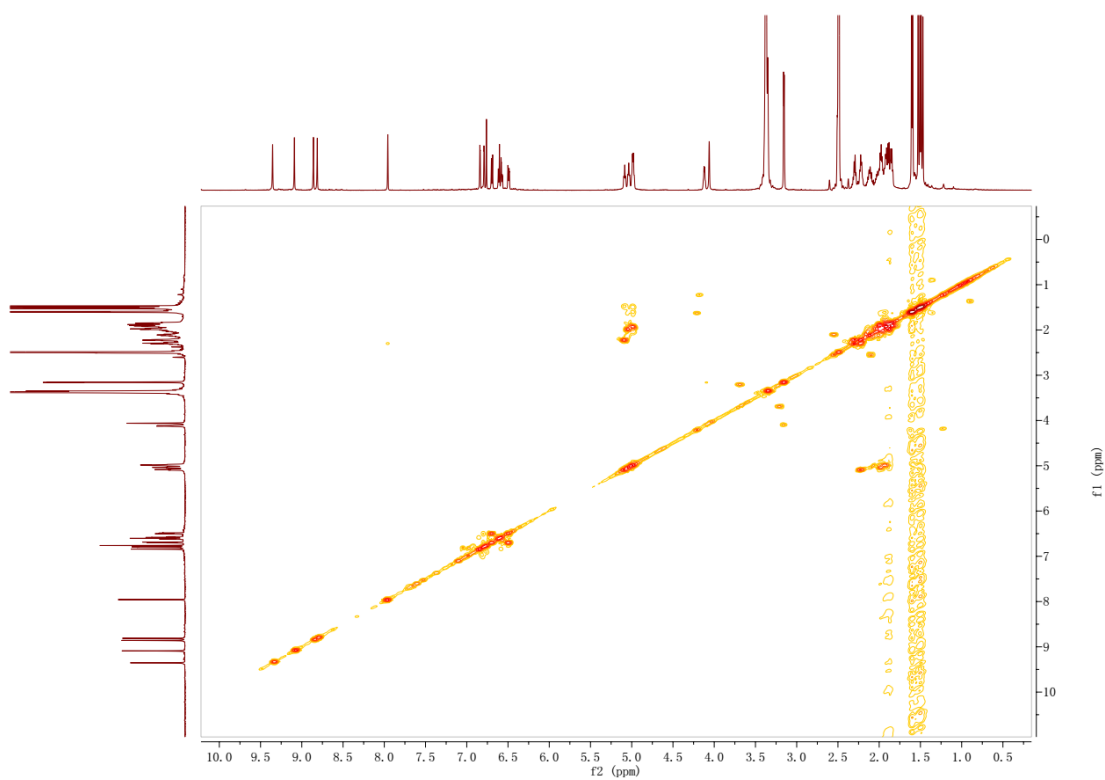


Figure S11. H<sup>1</sup>-H<sup>1</sup> COSY spectrum of **1** in DMSO-*d*<sub>6</sub>

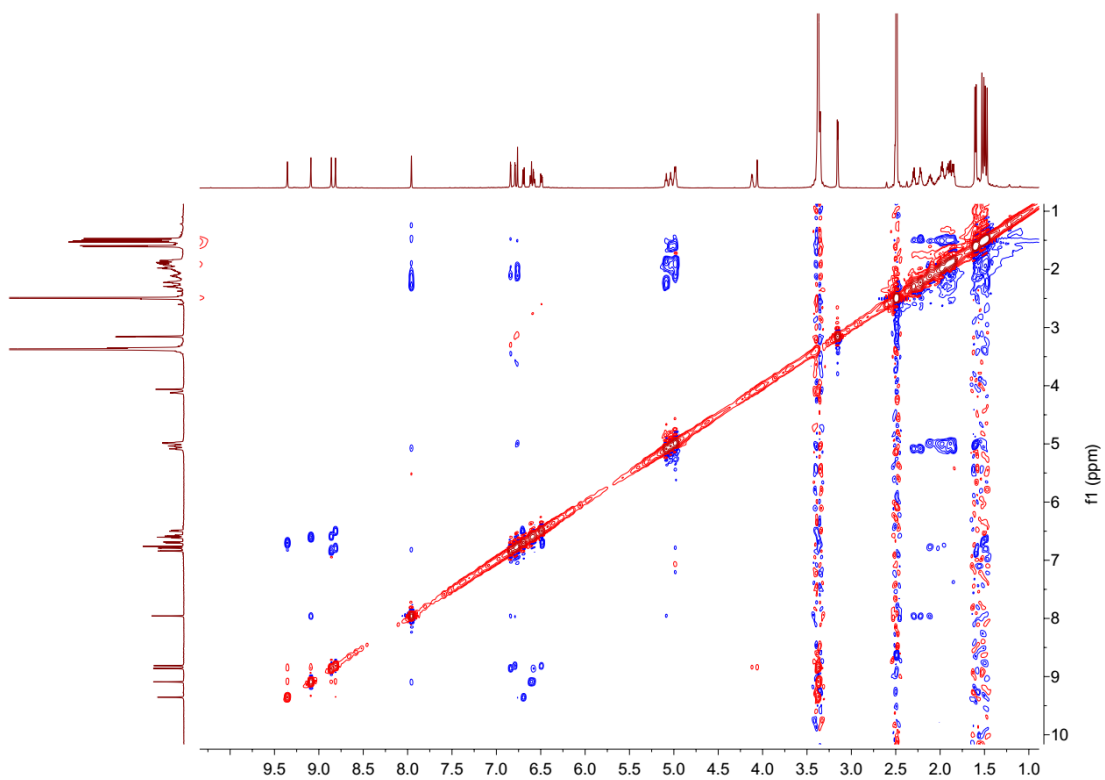


Figure S12. ROESY spectrum of **1** in DMSO- $d_6$

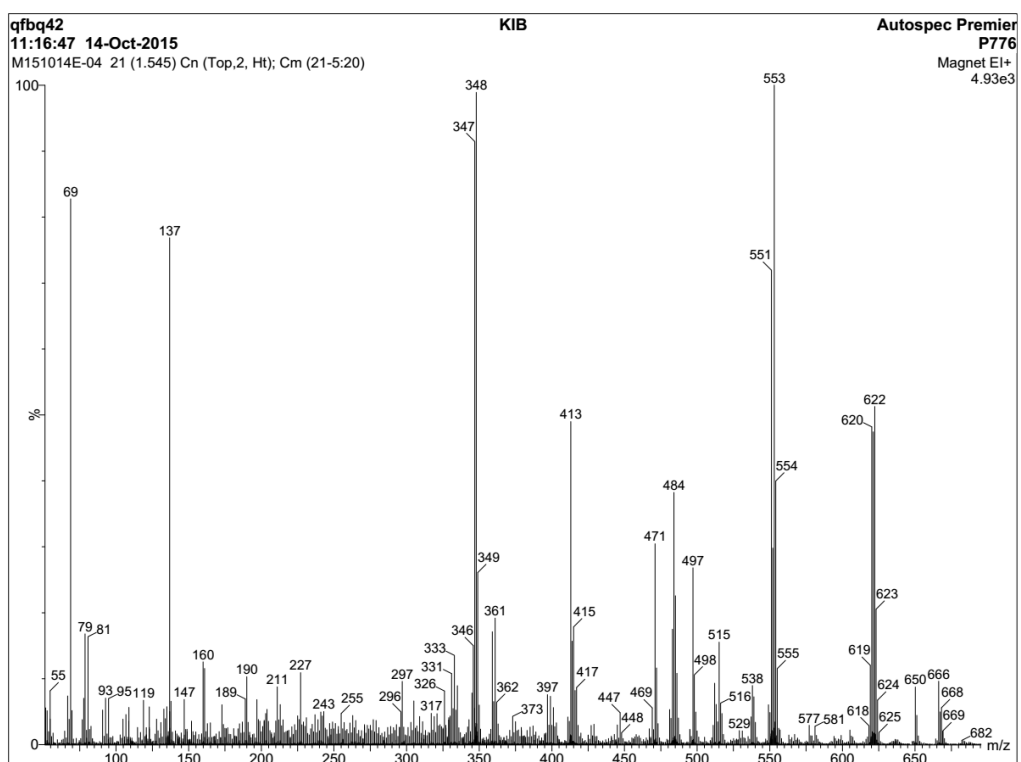


Figure S13. EIMS of **1**

## Single Mass Analysis

Tolerance = 10.0 PPM / DBE: min = -10.0, max = 120.0

Selected filters: None

Monoisotopic Mass, Odd and Even Electron Ions

26 formula(e) evaluated with 1 results within limits (up to 51 closest results for each mass)

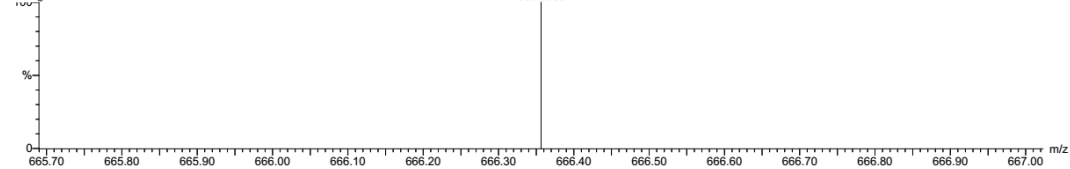
Elements Used:

C: 0-200 H: 0-400 O: 6-8

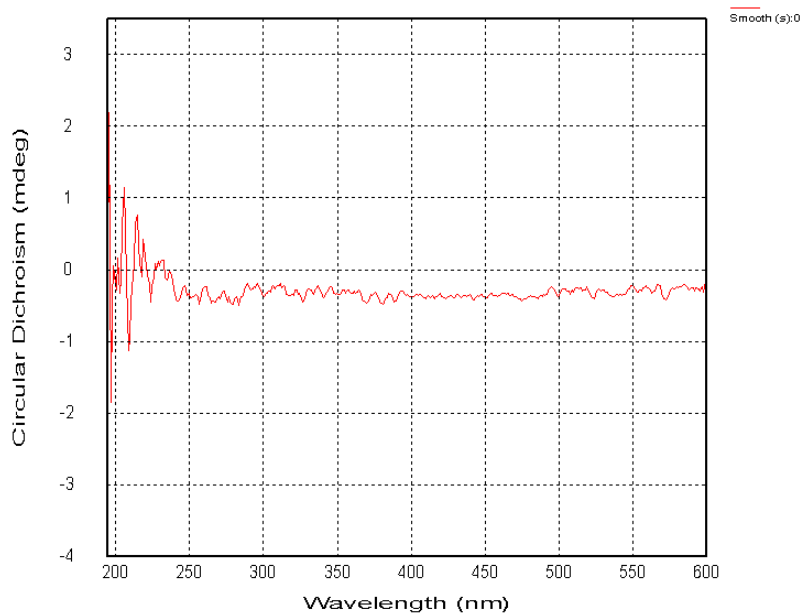
qfba42

12:02:19 14-Oct-2015

Voltage EI+

KIB  
M151014EA-02AFAMM 18 (1.652) Cm (17:19)  
666.3565Autospec Premier  
P776  
307

|          |            |      |     |       |           |            |  |  |  |  |
|----------|------------|------|-----|-------|-----------|------------|--|--|--|--|
| Minimum: |            |      |     |       |           |            |  |  |  |  |
| Maximum: | 200.0      | 10.0 |     | -10.0 |           |            |  |  |  |  |
| Mass     | Calc. Mass | mDa  | PPM | DBE   | i-FIT     | Formula    |  |  |  |  |
| 666.3565 | 666.3557   | 0.8  | 1.2 | 18.0  | 5546174.5 | C42 H50 O7 |  |  |  |  |

Figure S14. HREIMS of **1**Figure S15 CD spectrum of (+)-**1**



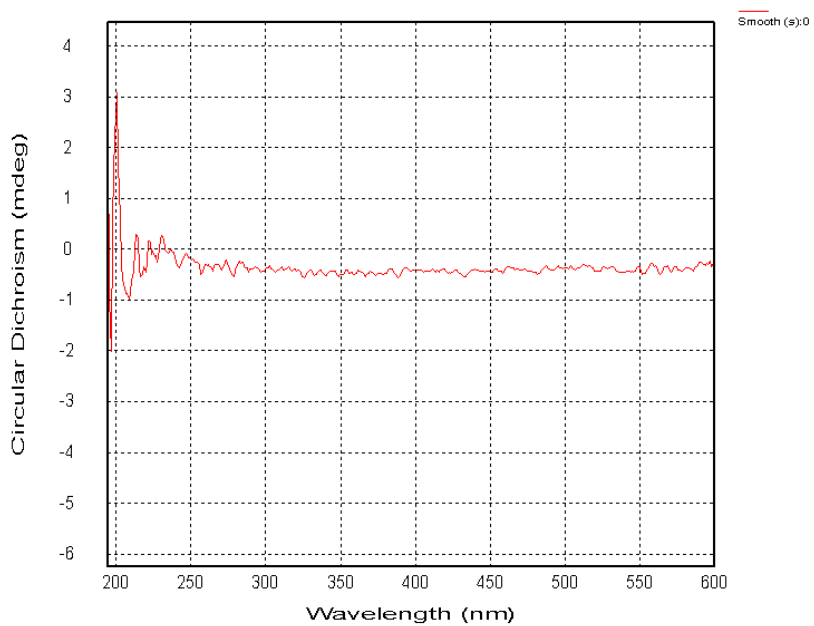


Figure S16 CD spectrum of (-)-**1**

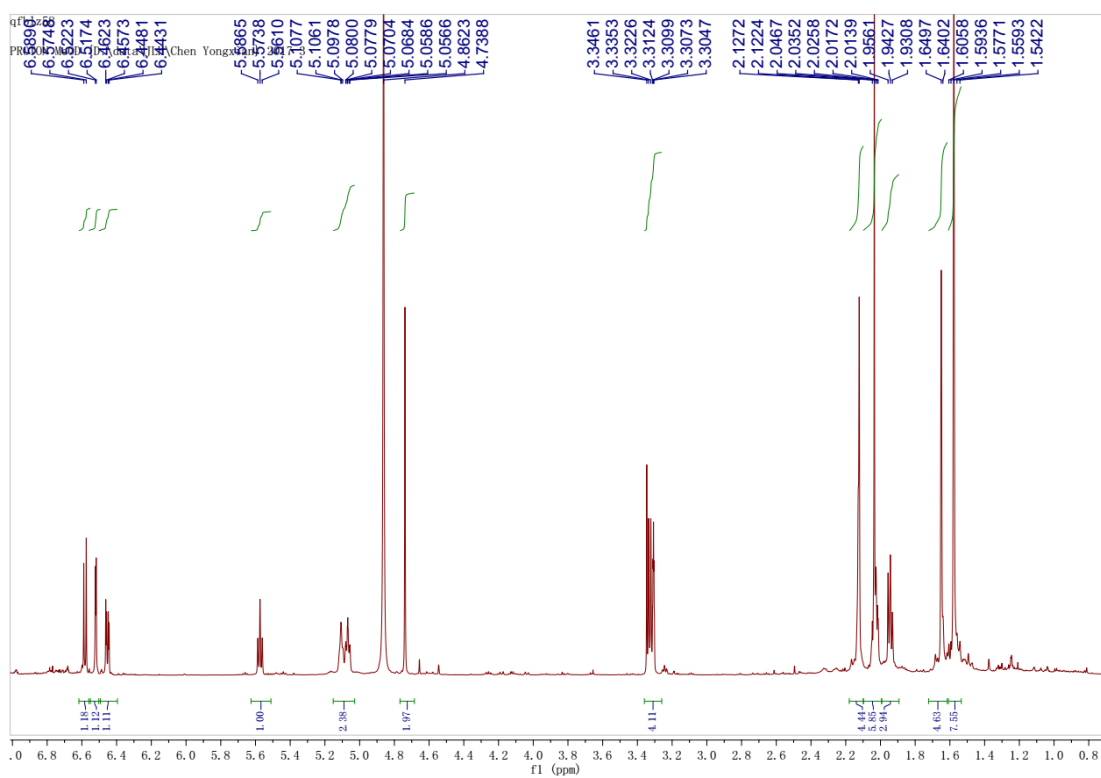


Figure S17.  $^1\text{H}$  NMR spectrum of **2** in methanol- $d_4$

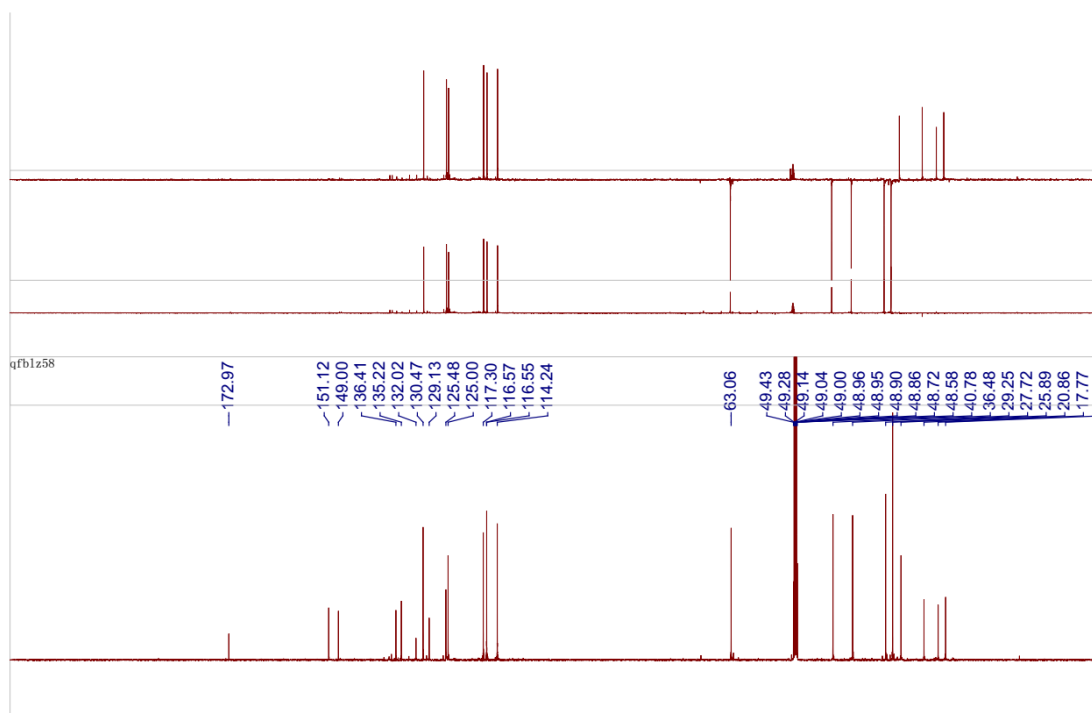


Figure S18.  $^{13}\text{C}$  NMR and DEPT spectra of **2** in methanol- $d_4$

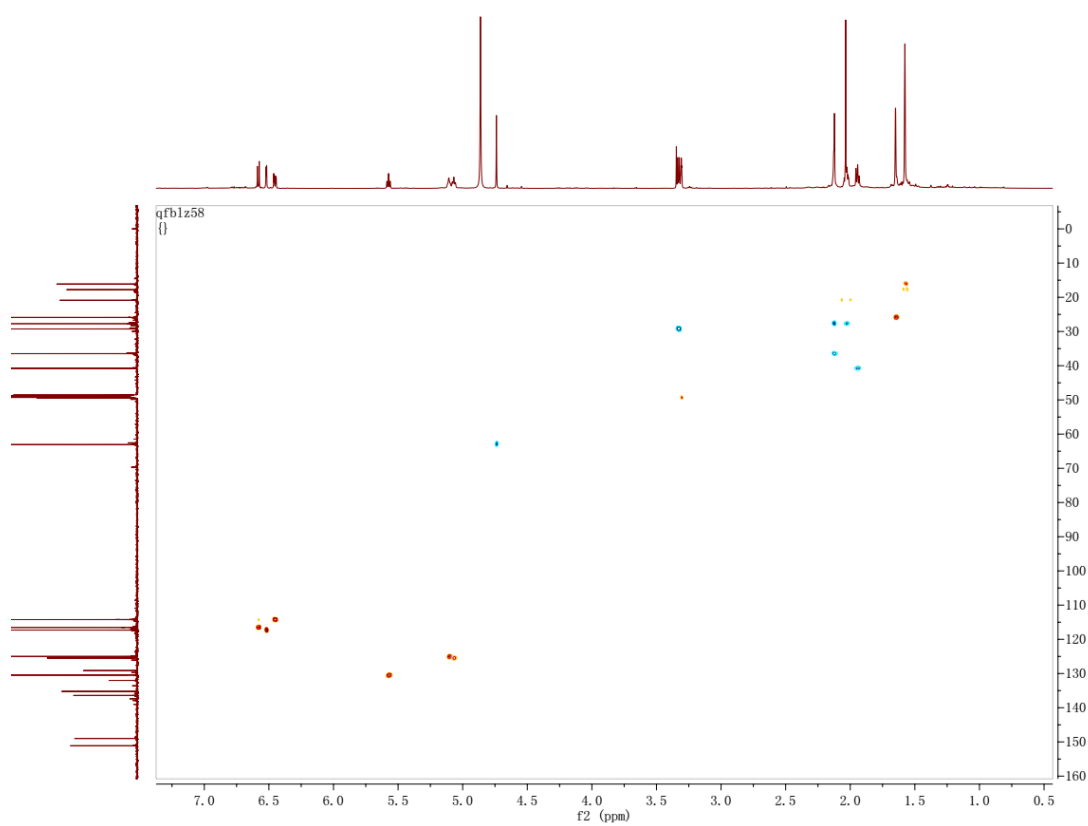


Figure S19. HSQC spectrum of **2** in methanol- $d_4$

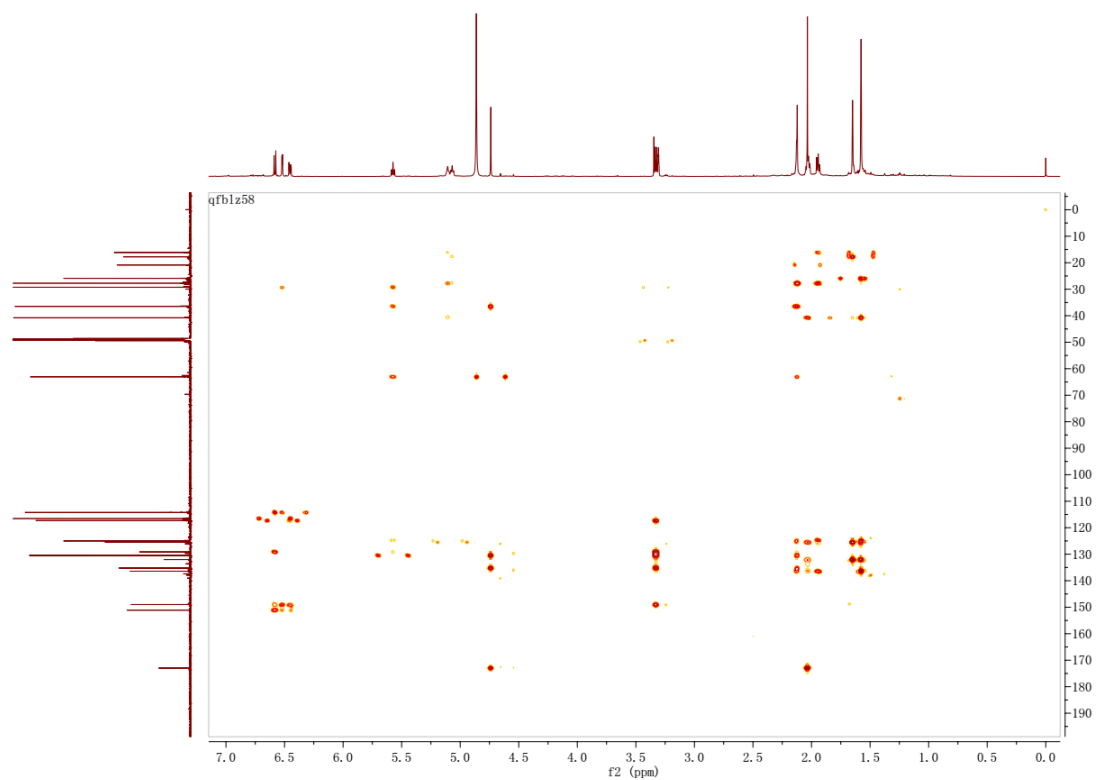


Figure S20. HMBC spectrum of **2** in methanol-*d*<sub>4</sub>

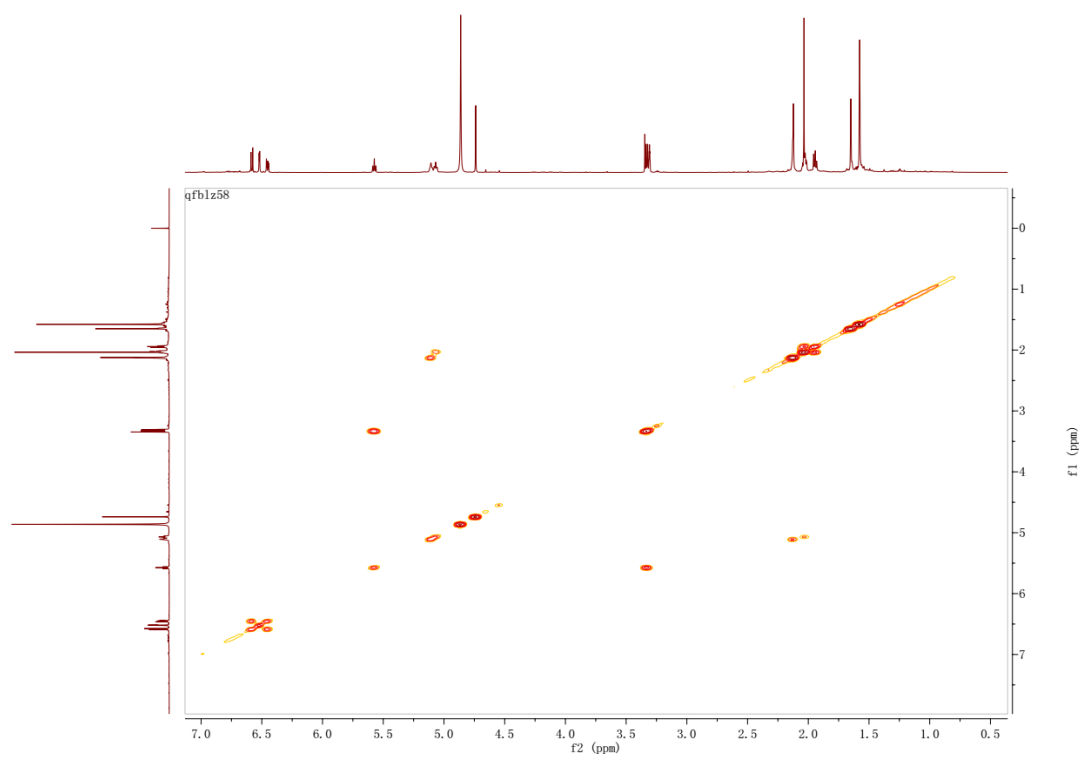


Figure S21. <sup>1</sup>H-<sup>1</sup>H COSY spectrum of **2** in methanol-*d*<sub>4</sub>

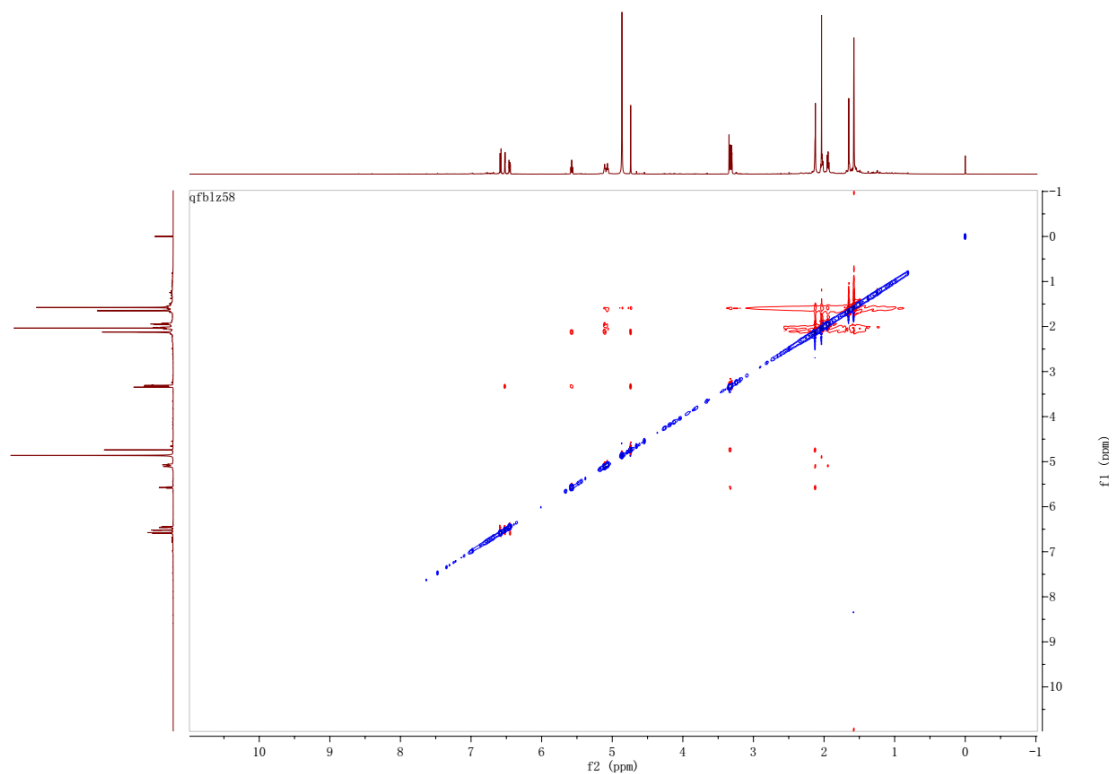
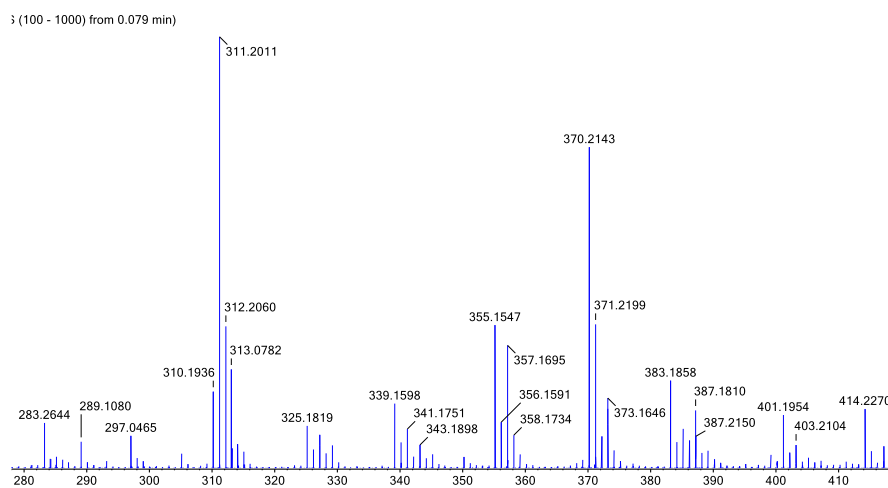


Figure S22. ROESY spectrum of **2** in methanol-*d*<sub>4</sub>



[M-H]<sup>-</sup> m/z 371.2199

| Hit | Formula  | m/z      | RDB | ppm  |
|-----|--|----------|-----|------|
| 1   | C <sub>23</sub> H <sub>31</sub> O <sub>4</sub> | 371.2228 | 8.0 | -7.8 |

Figure S23. HRESIMS of **2**

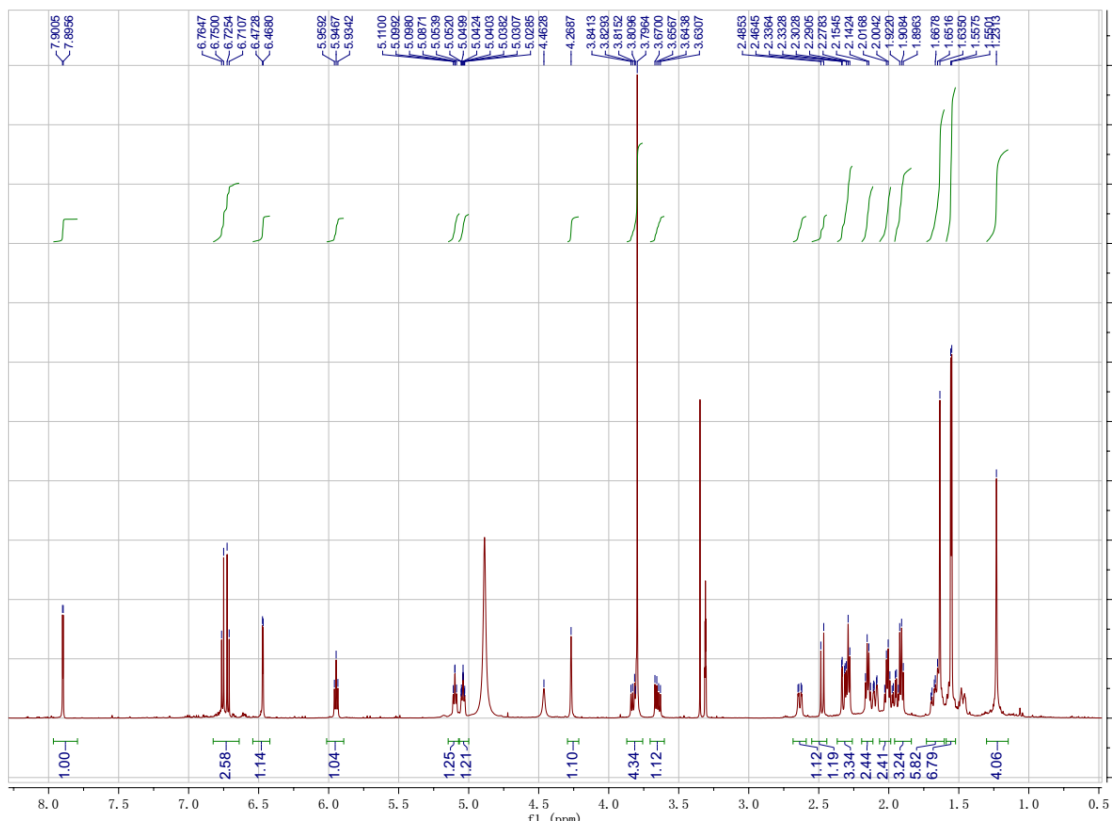


Figure S24.  $^1\text{H}$  NMR spectrum of **3** in methanol- $d_4$

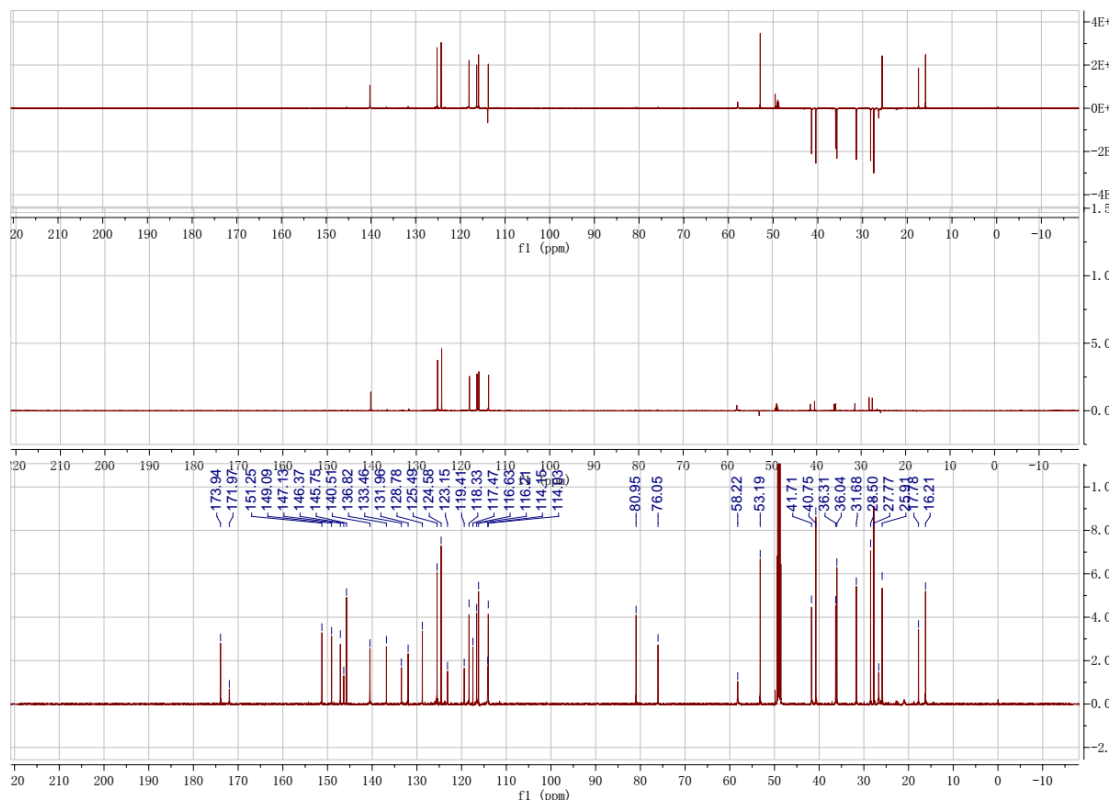


Figure S25.  $^{13}\text{C}$  NMR and DEPT spectra **3** in methanol- $d_4$

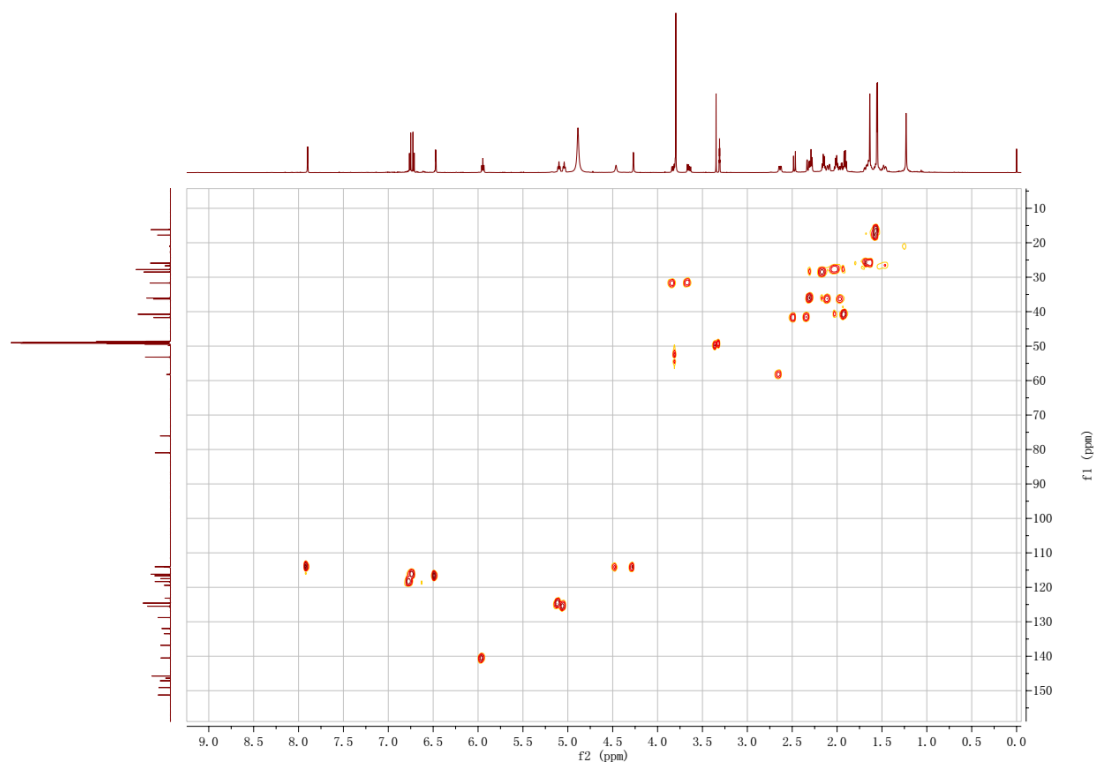


Figure S26. HSQC spectrum of **3** in methanol- $d_4$

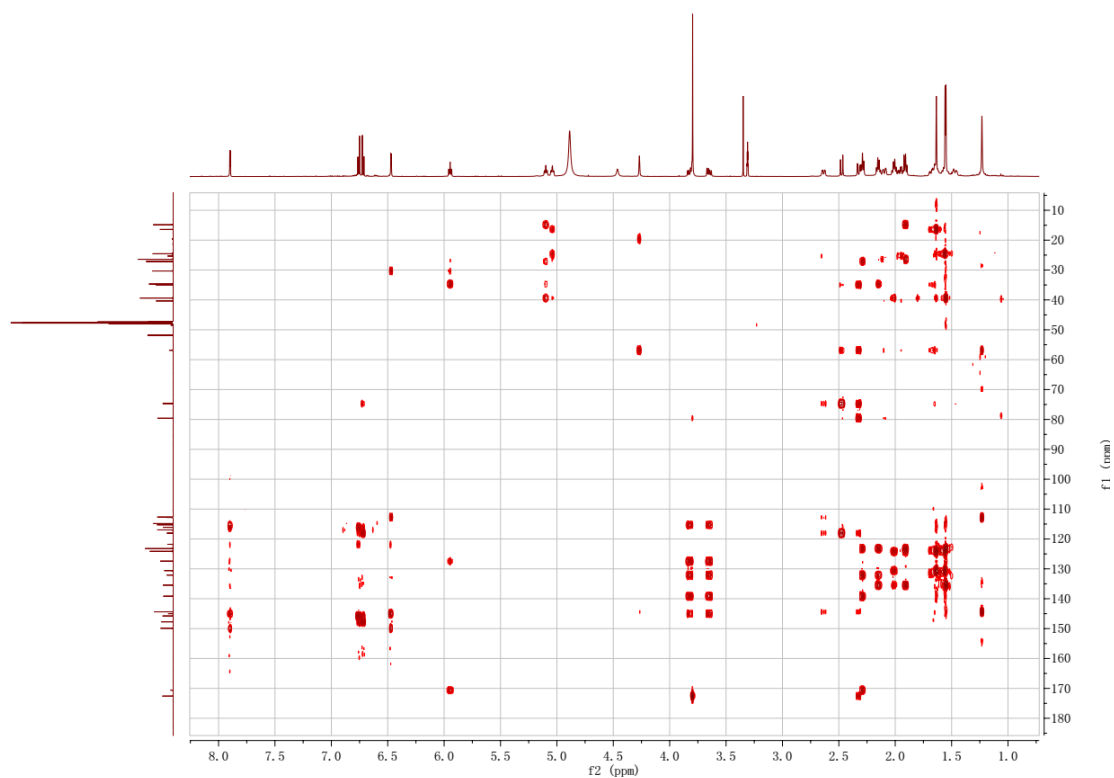


Figure S27. HMBC spectrum of **3** in methanol-*d*<sub>4</sub>

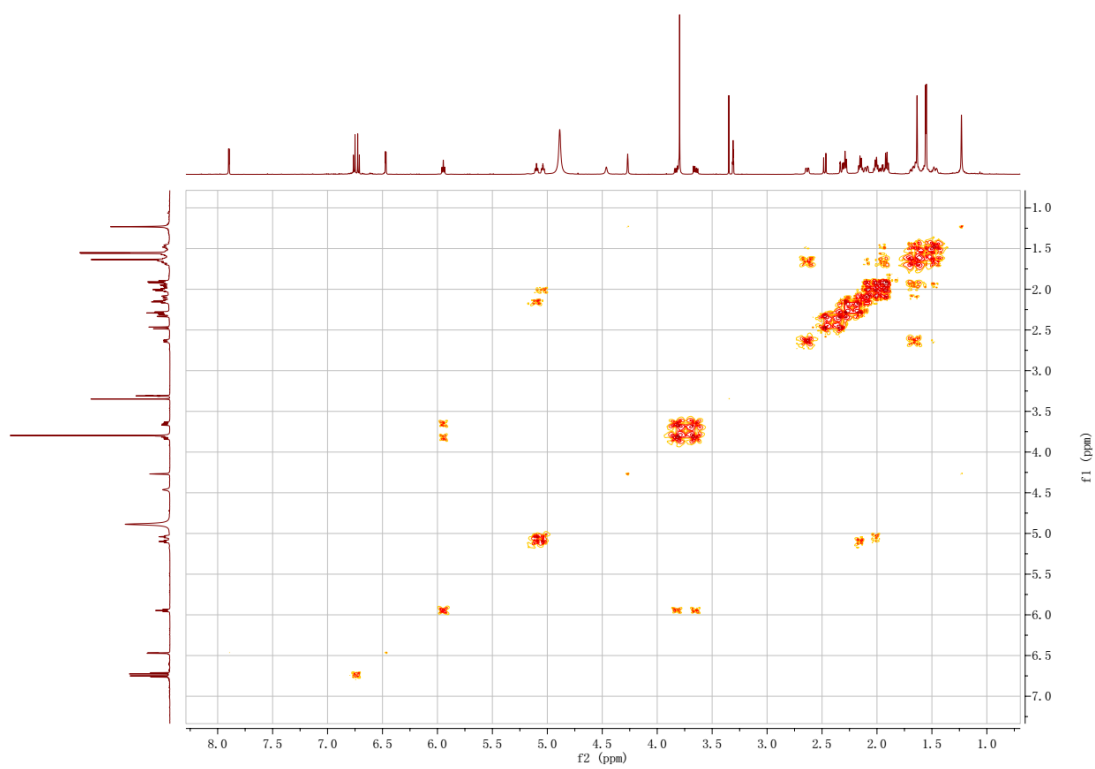


Figure S28. <sup>1</sup>H-<sup>1</sup>H COSY spectrum of **3** in Methanol-*d*<sub>4</sub>

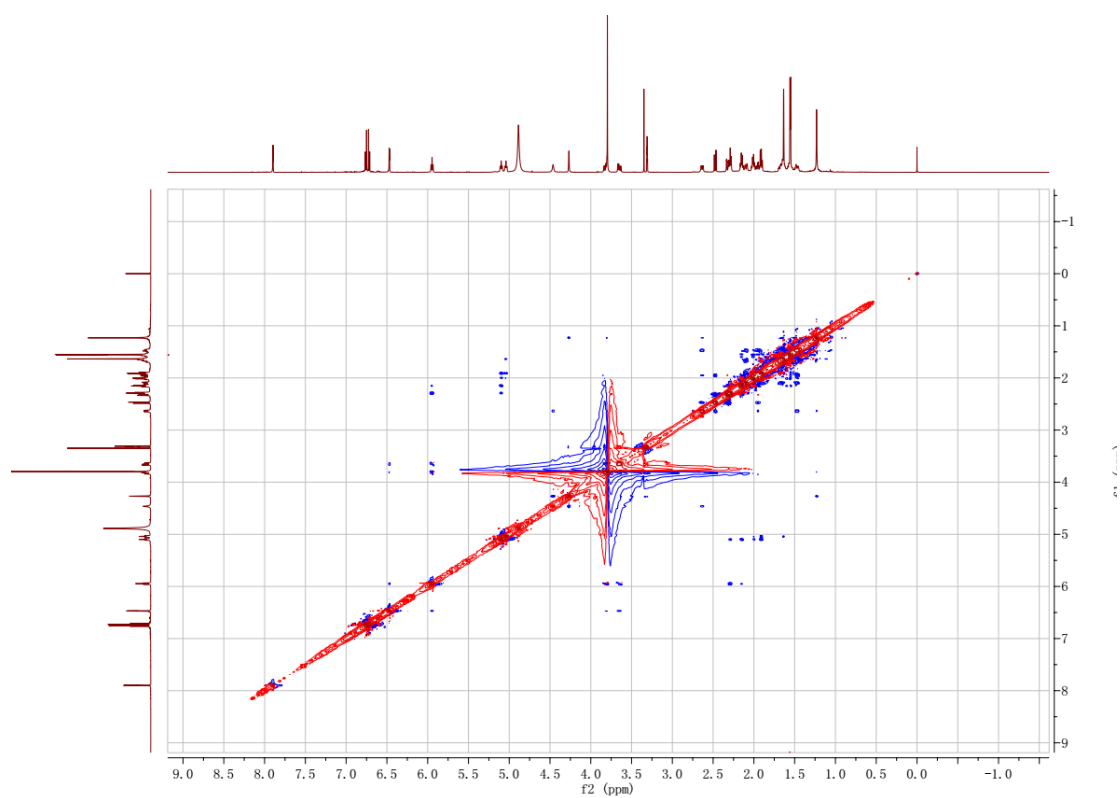


Figure S29. ROESY spectrum of **3** in methanol- $d_4$

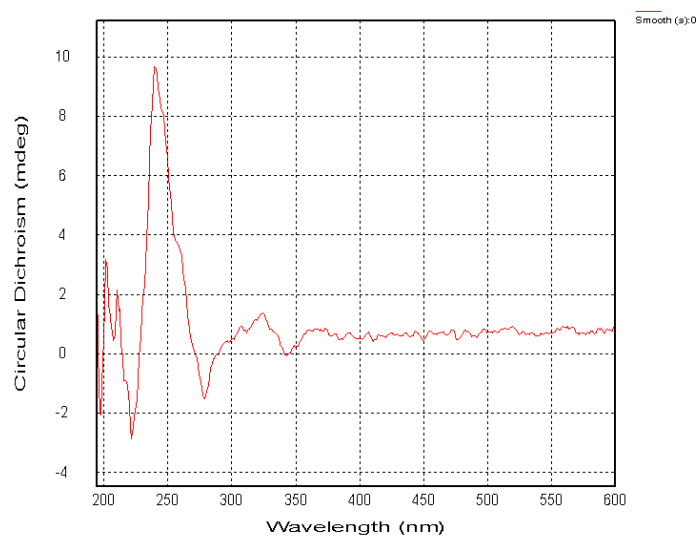


Figure S30 CD spectrum of (+)-**3**



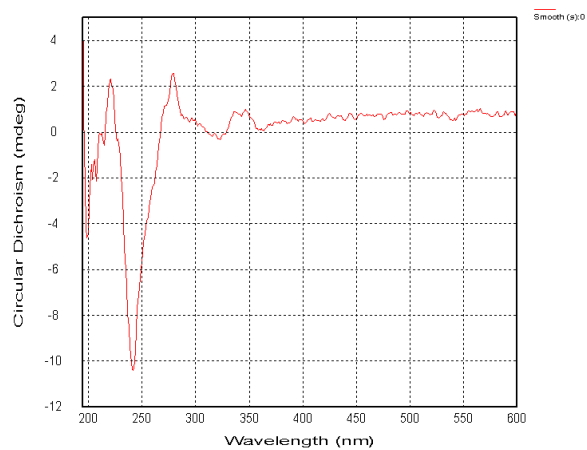
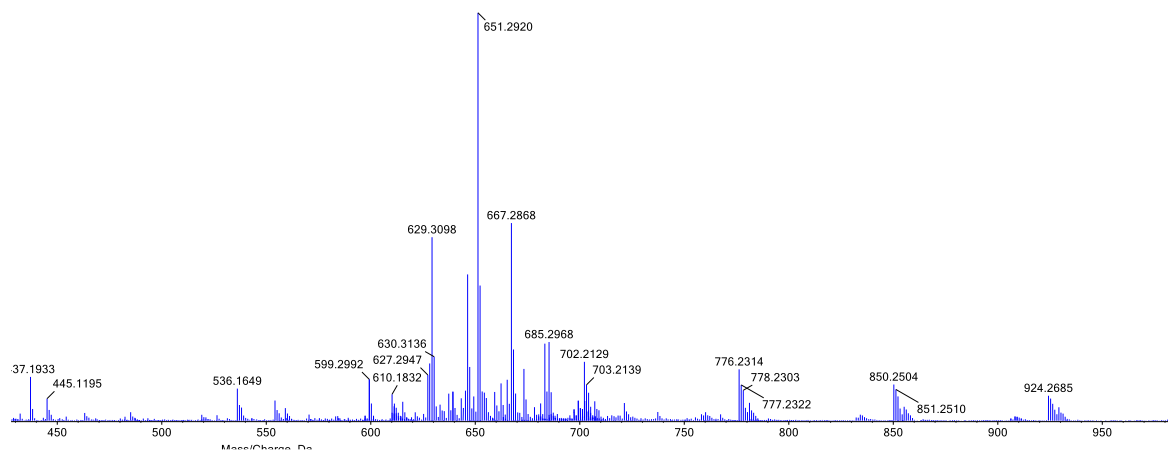


Figure S31 CD spectrum of (-)-**3**



$[M+H]^+$  m/z 629.3098

| Hit | Formula  | m/z      | RDB  | ppm  |
|-----|--|----------|------|------|
| 1   | C <sub>38</sub> H <sub>45</sub> O <sub>8</sub> | 629.3109 | 17.0 | -1.7 |

Figure S32. HRESIMS of **3**

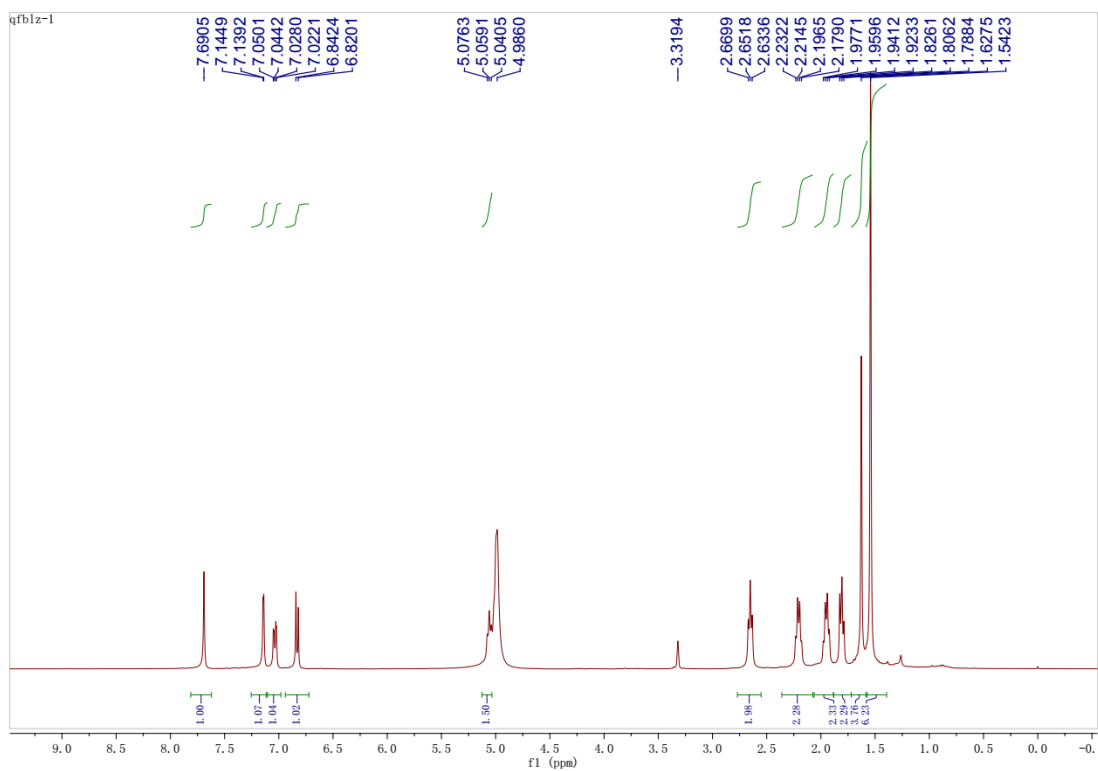


Figure S33.  $^1\text{H}$  NMR spectrum of **4** in methanol- $d_4$

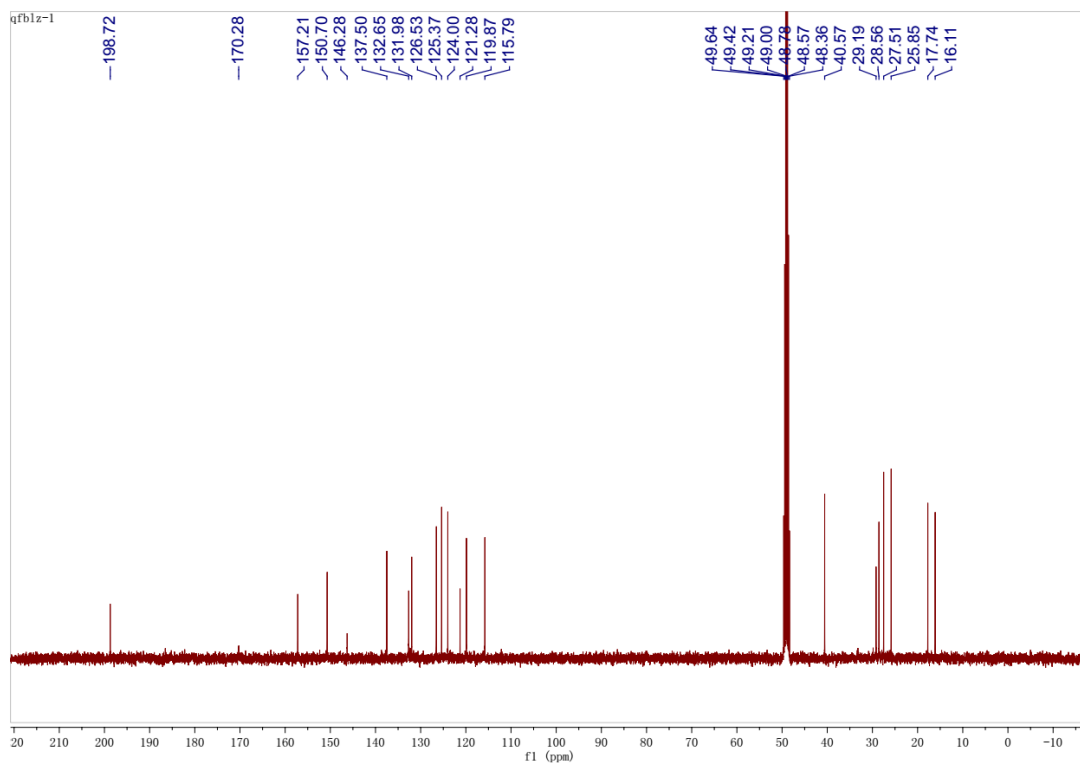


Figure S34.  $^{13}\text{C}$  NMR spectrum of **4** in methanol- $d_4$

Sample Name qfbiz1 Instrument Name Agilent G6230 TOF MS User Name KIB IRM Calibration Status Success  
 Data Filename 171206ESINA7.d ACQ Method ESIN.m Acquired Time 12/6/2017 10:28:12 AM

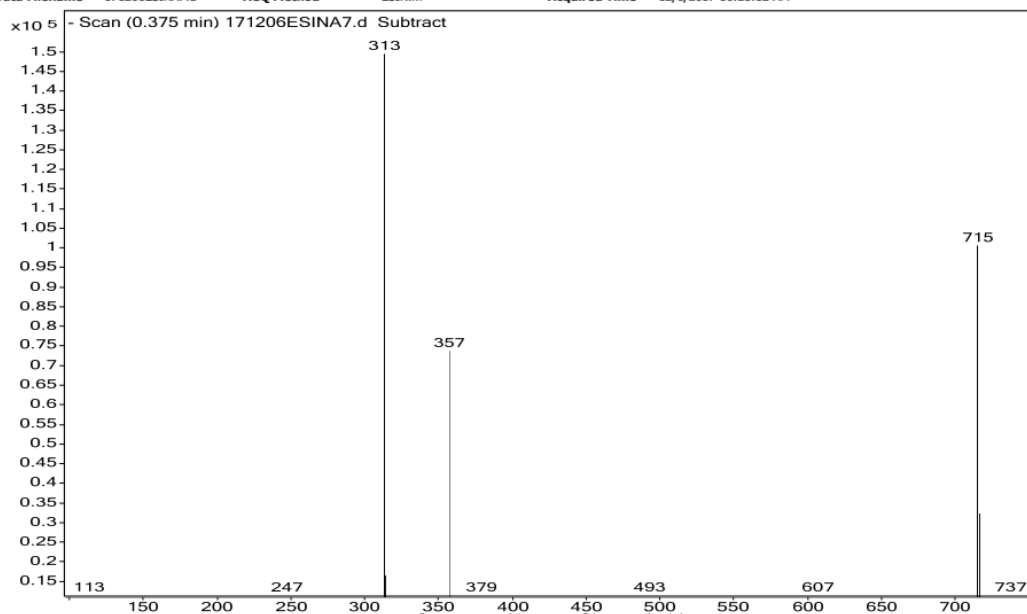


Figure S35. ESIMS of 4

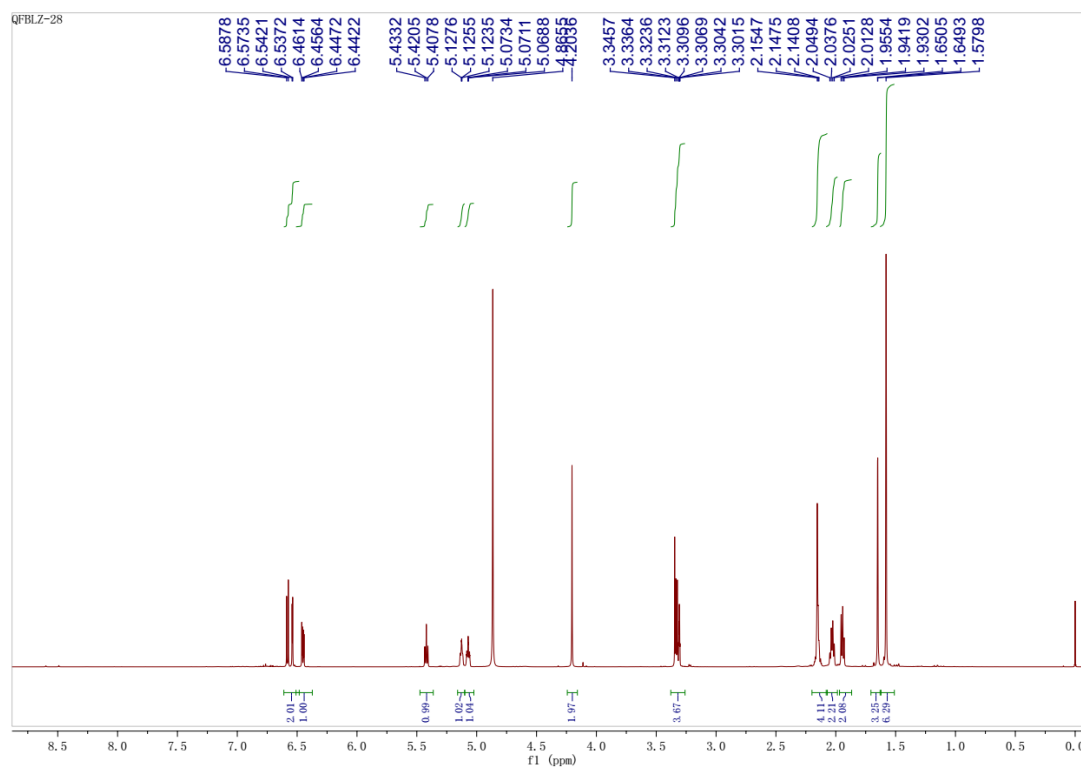


Figure S36.  $^1\text{H}$  NMR spectrum of 5 in methanol- $d_4$

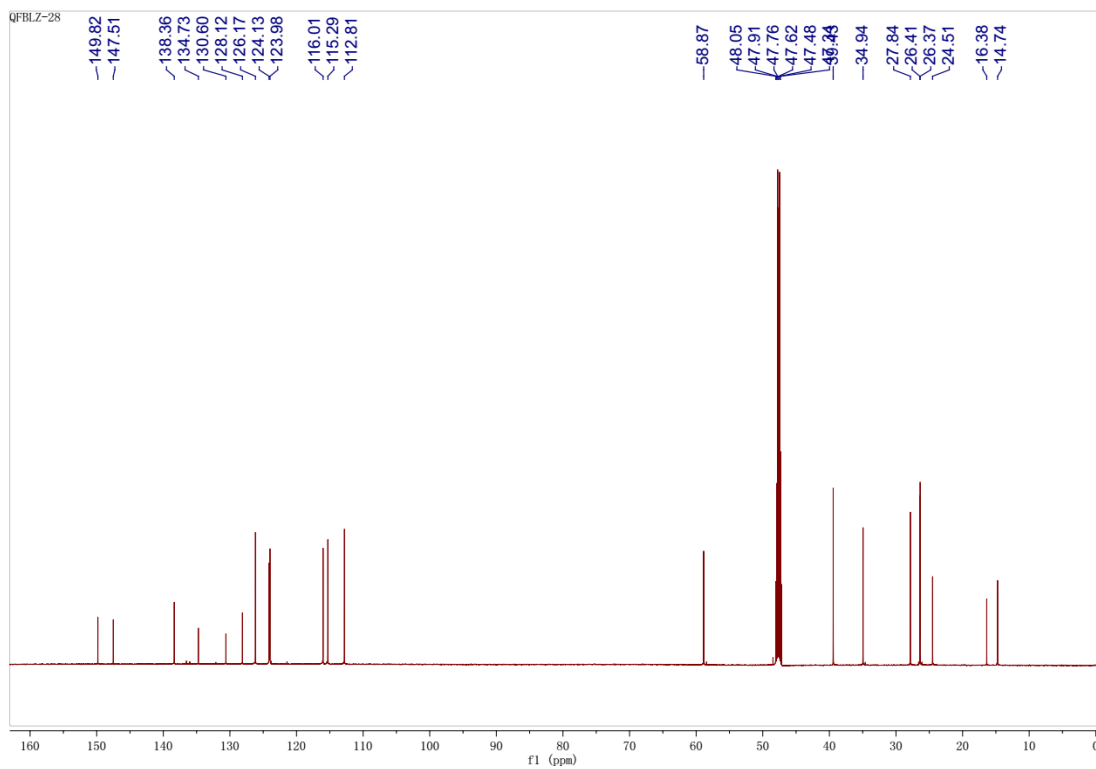


Figure S37.  $^{13}\text{C}$  NMR spectrum of **5** in methanol- $d_4$

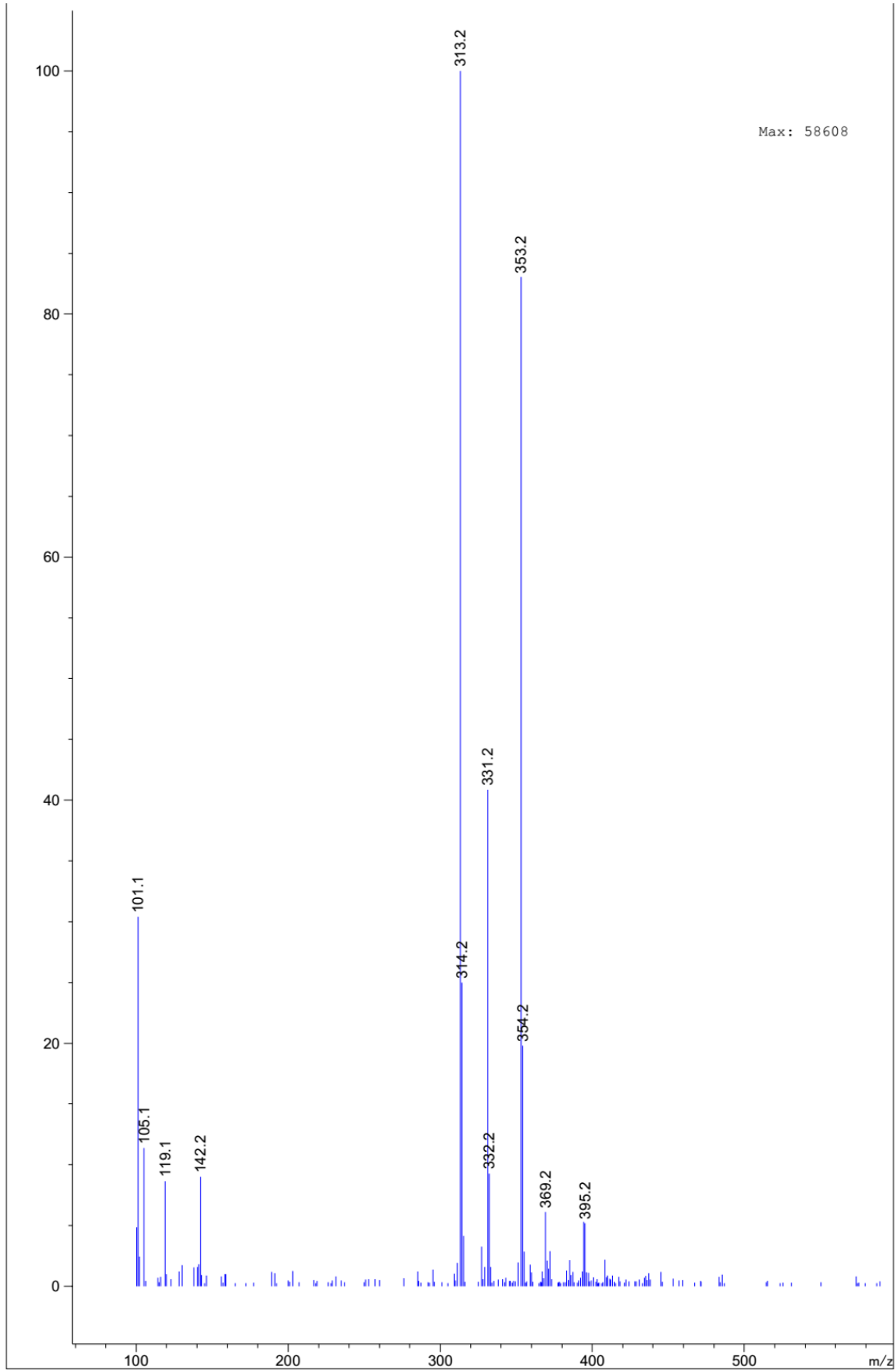


Figure S38. ESIMS of 5

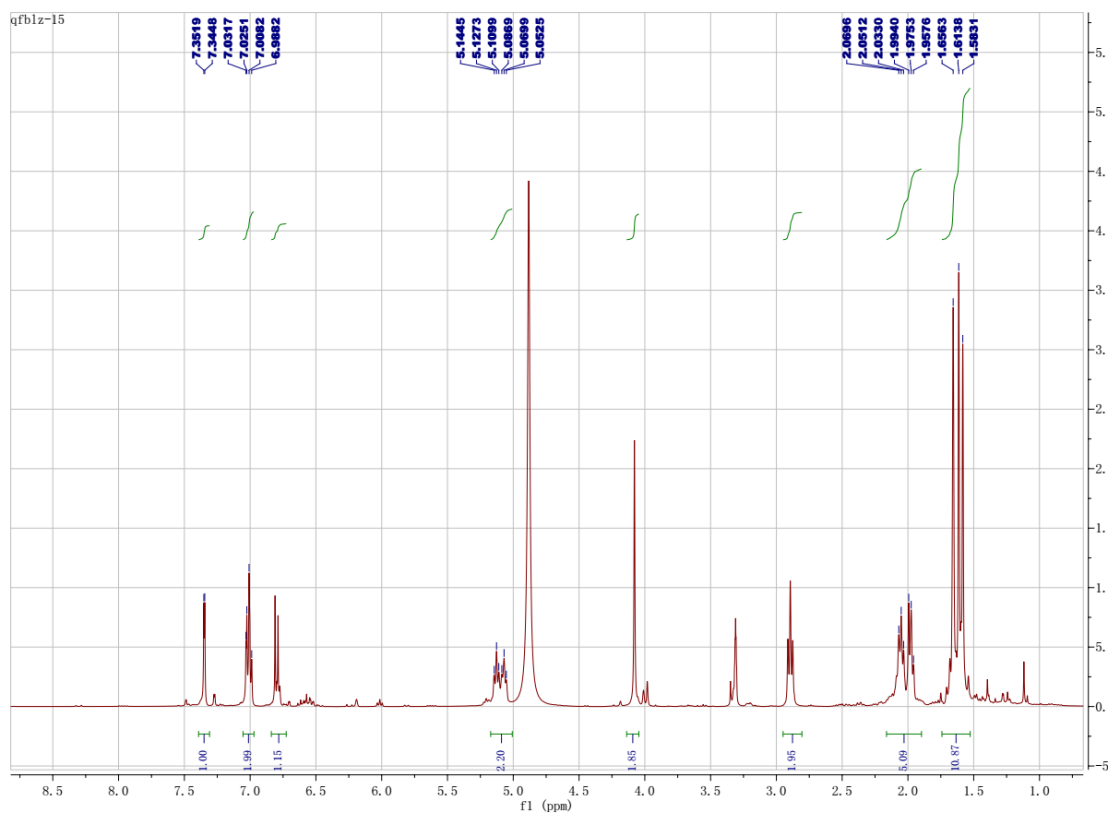


Figure S39.  $^1\text{H}$  NMR spectrum of **6** in methanol- $d_4$

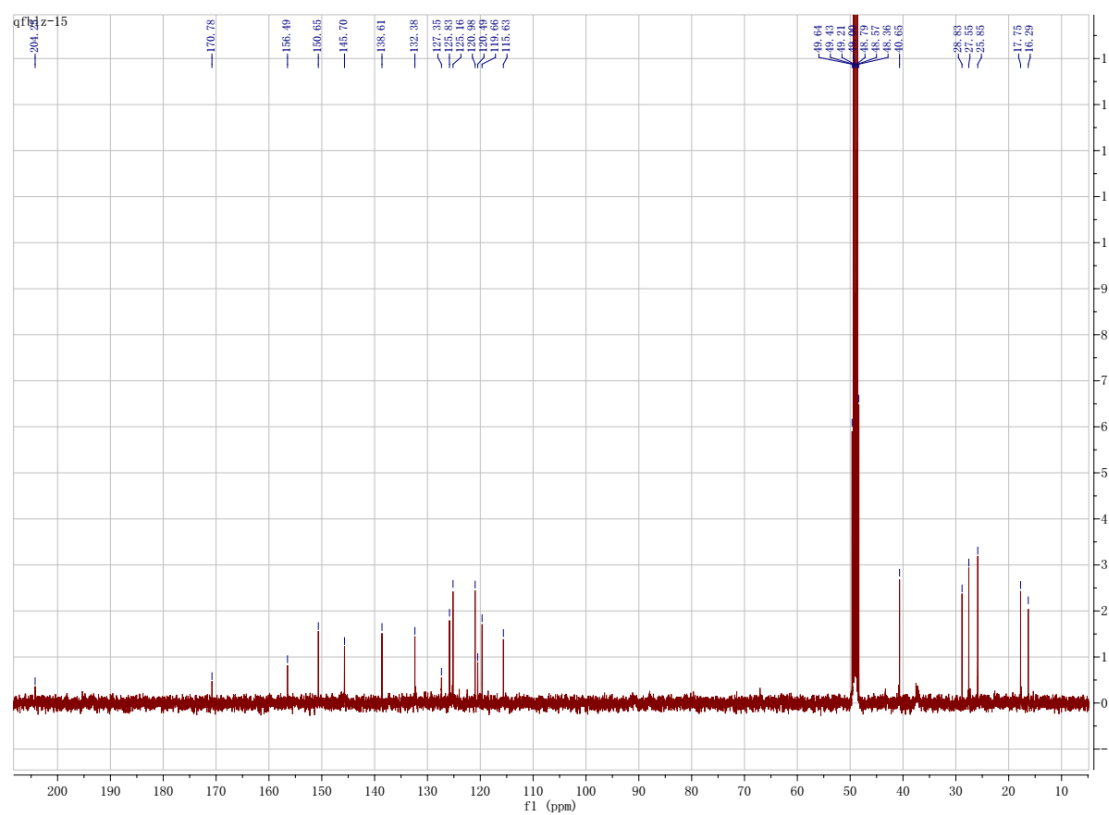


Figure S40.  $^{13}\text{C}$  NMR spectrum of **6** in methanol- $d_4$

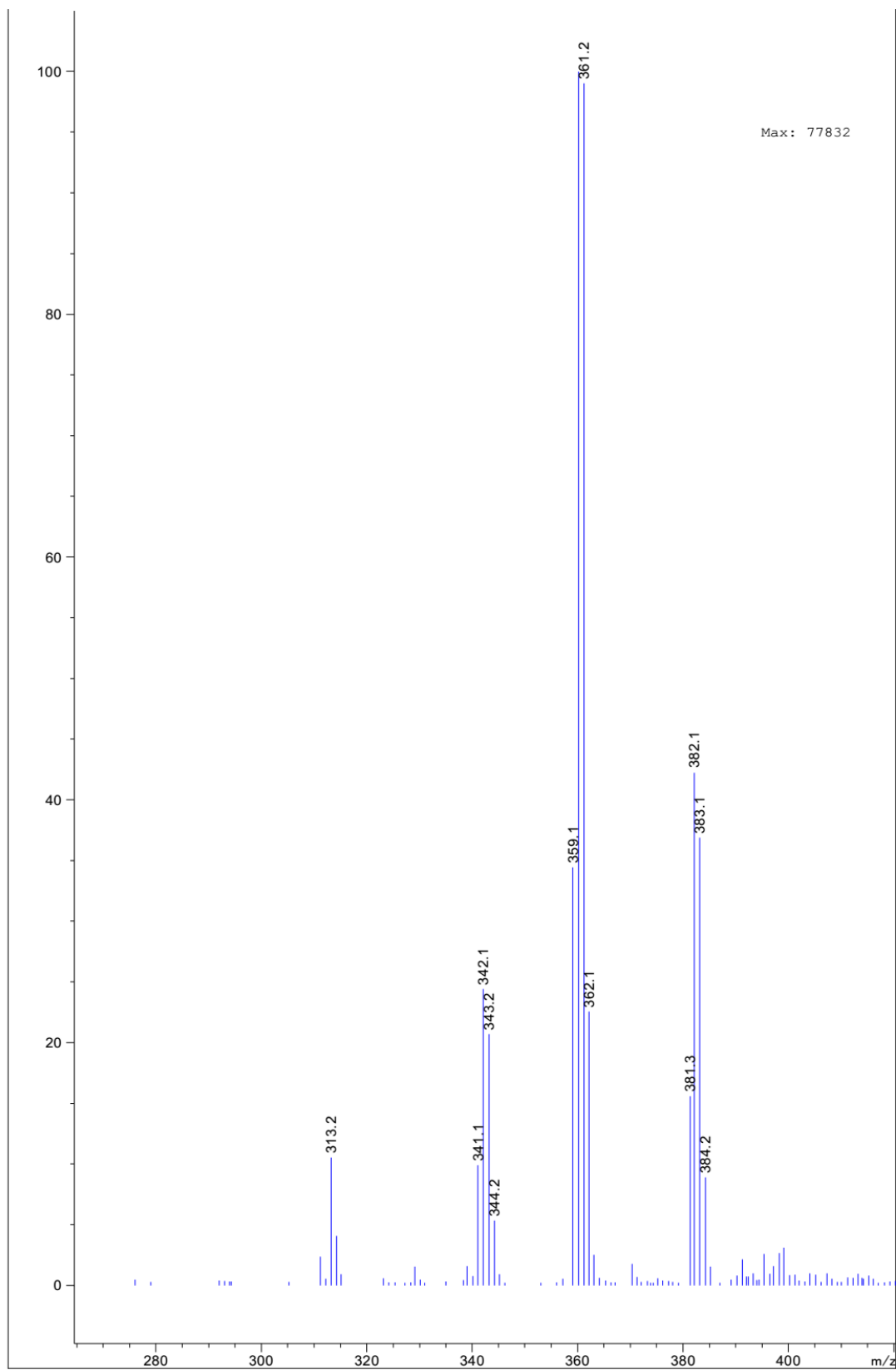


Figure S41. ESIMS of **6**

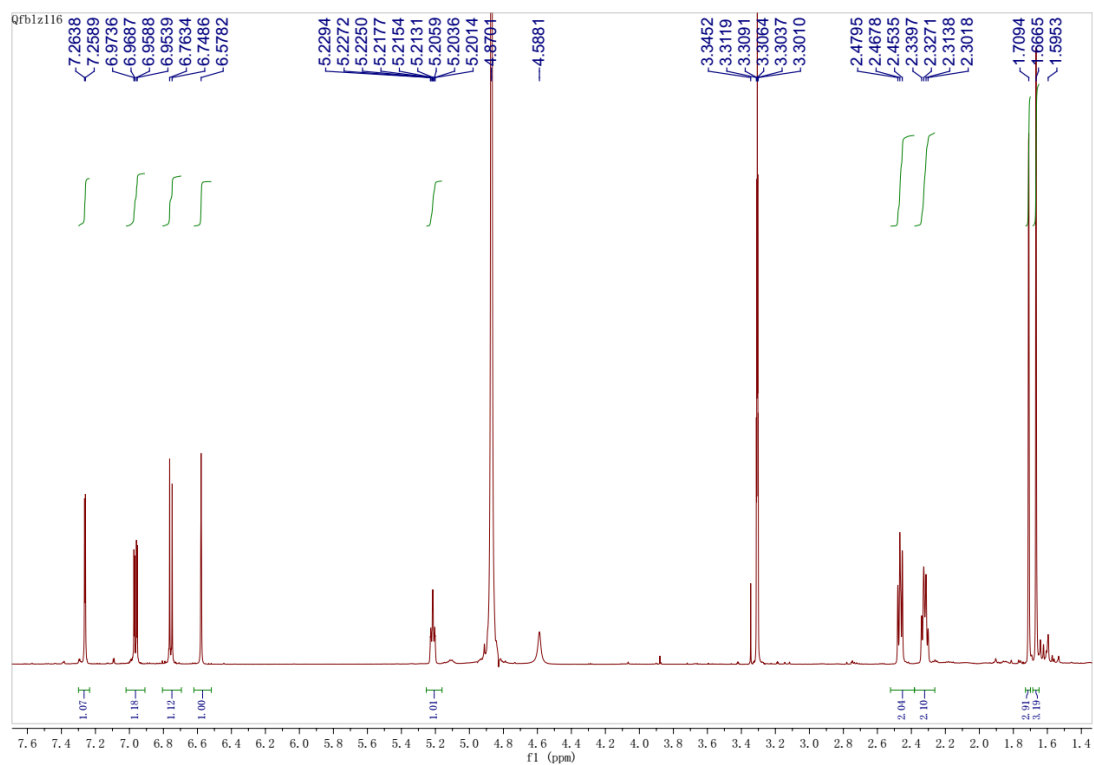


Figure S42.  $^1\text{H}$  NMR spectrum of **7** in methanol- $d_4$

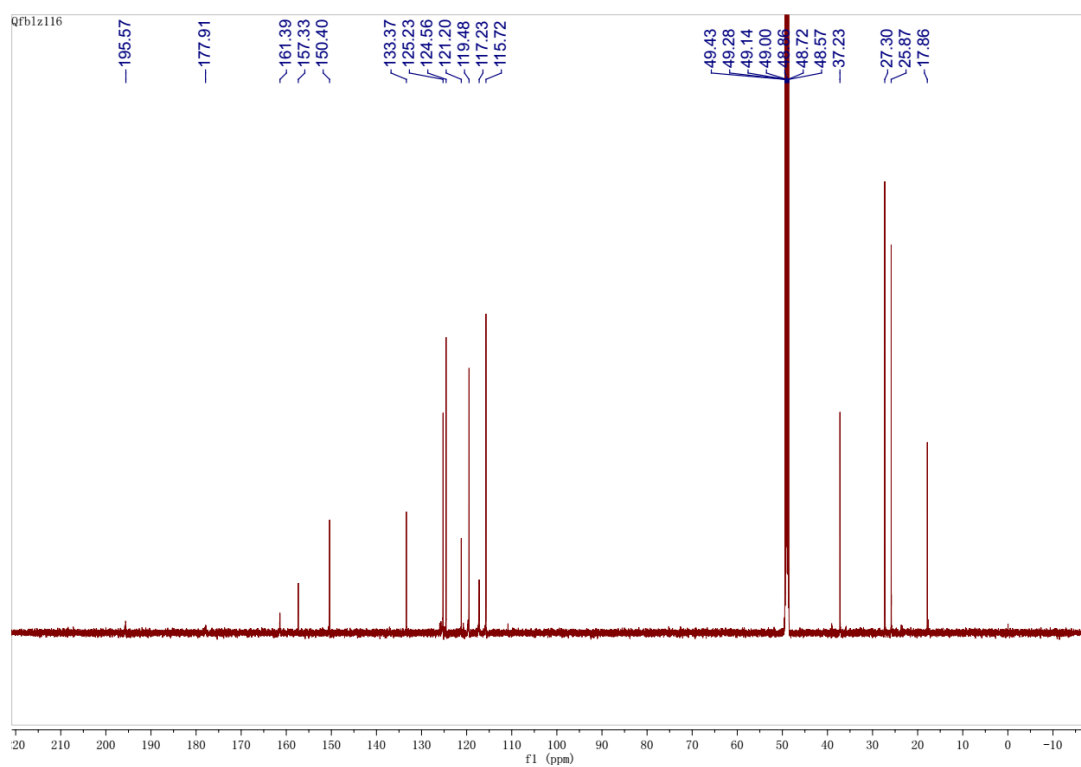


Figure S43.  $^{13}\text{C}$  NMR spectrum of **7** in methanol- $d_4$



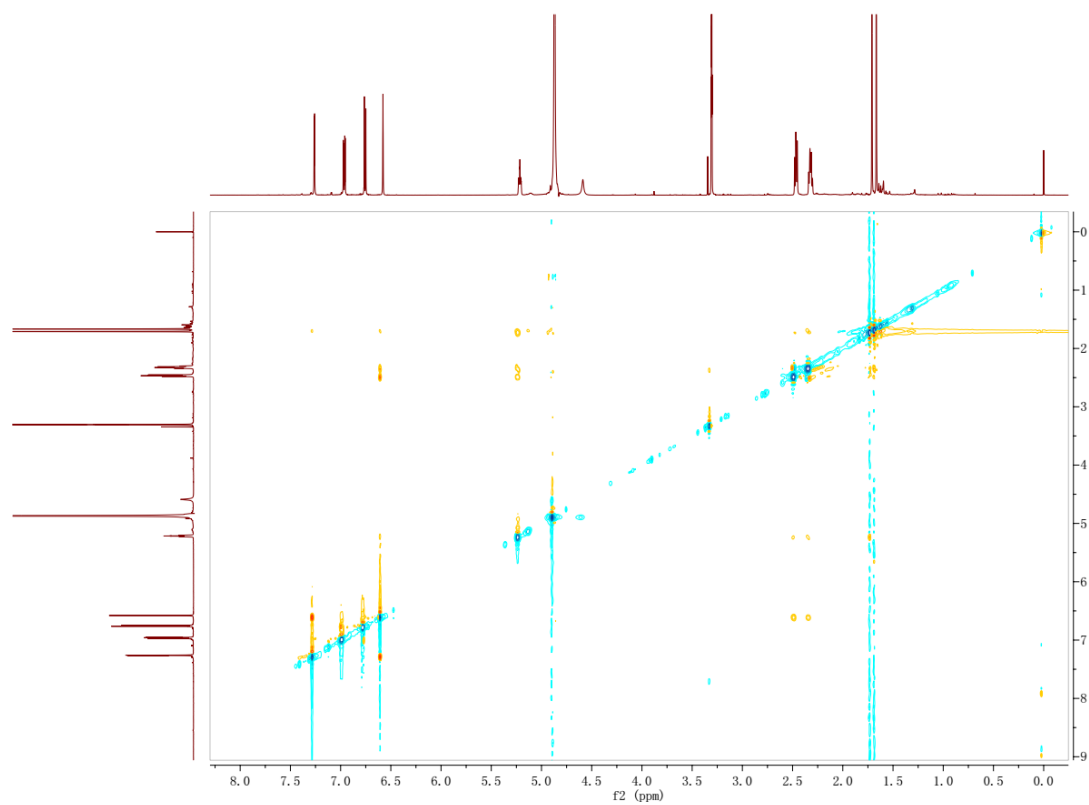


Figure S44. ROESY spectrum of **7** in methanol-*d*<sub>4</sub>

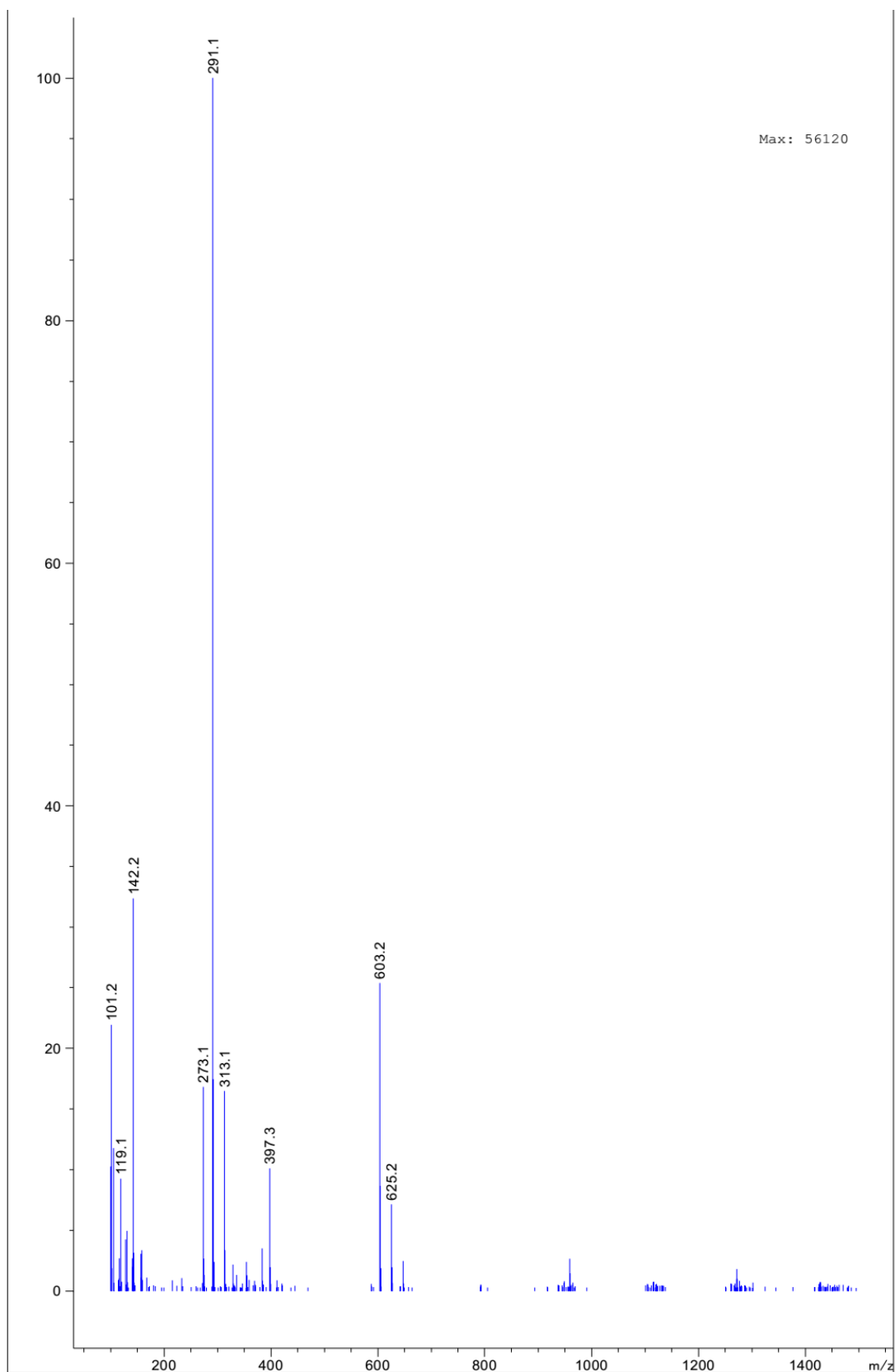


Figure S45. ESIMS of 7

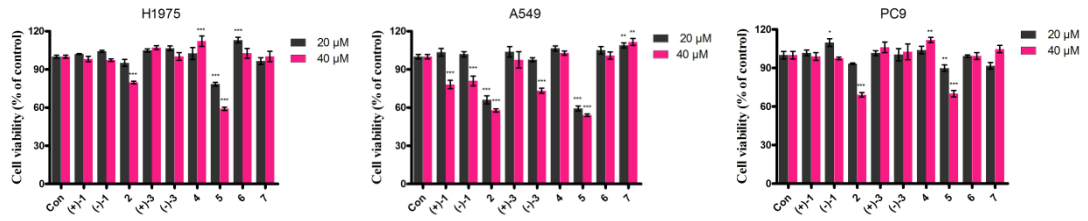


Figure S46. Cytotoxicity of the compounds toward three human lung cancer cell lines was measured using *TransDetect*<sup>®</sup> Cell Counting Kit