

## Supplementary material

# Anti-Inflammatory Triterpenoids from the *Caulophyllum robustum* Maxim in LPS-Stimulated RAW264.7 Cells

Bin-Hua Qin<sup>1</sup>, Xin-Qiao Liu<sup>1,\*</sup>, Qiao-Yu Yuan<sup>2</sup>, Jing Wang<sup>1</sup> and Hai-Yan Han<sup>1</sup>

<sup>1</sup> School of Pharmaceutical Sciences, South-Central University for Nationalities, Wuhan 430074, China; binhuawuhan@163.com (B.-H.Q.); wjingwuhan@126.com (J.W.); 15827253179@163.com (H.-Y.H.)

<sup>2</sup> Department of Bioengineering, Wuhan Polytechnic, Wuhan 430074, China; yqyscuc@163.com

\* Correspondence: lxqscuc@163.com or 3095709@mail.scuec.edu.cn; Tel.: +86-27-6784-1196

### Table of contents

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

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

Figure S3. DEPT-135° spectrum of compound **1**

Figure S4. DEPT-90° spectrum of compound **1**

Figure S5. HSQC spectrum of compound **1**

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

Figure S7. HR-ESI-MS spectrum of compound **1**

Figure S8. IR (KBr disc) spectrum of compound **1**

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

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

Figure S11. HSQC spectrum of compound **2**

Figure S12. HMBC spectrum of compound **2**

Figure S13. HR-ESI-MS spectrum of compound **2**

Figure S14. IR (KBr disc) spectrum of compound **2**

Figure S15. <sup>1</sup>H-NMR (600 MHz, CD<sub>3</sub>OD) spectrum of compound **3**

Figure S16. <sup>13</sup>C-NMR (150 MHz, CD<sub>3</sub>OD) spectrum of compound **3**

Figure S17. HSQC spectrum of compound **3**

Figure S18. HMBC spectrum of compound **3**

Figure S19. ROE spectrum of compound **3**

Figure S20. HR-ESI-MS spectrum of compound **3**

Figure S21. IR (KBr disc) spectrum of compound **3**

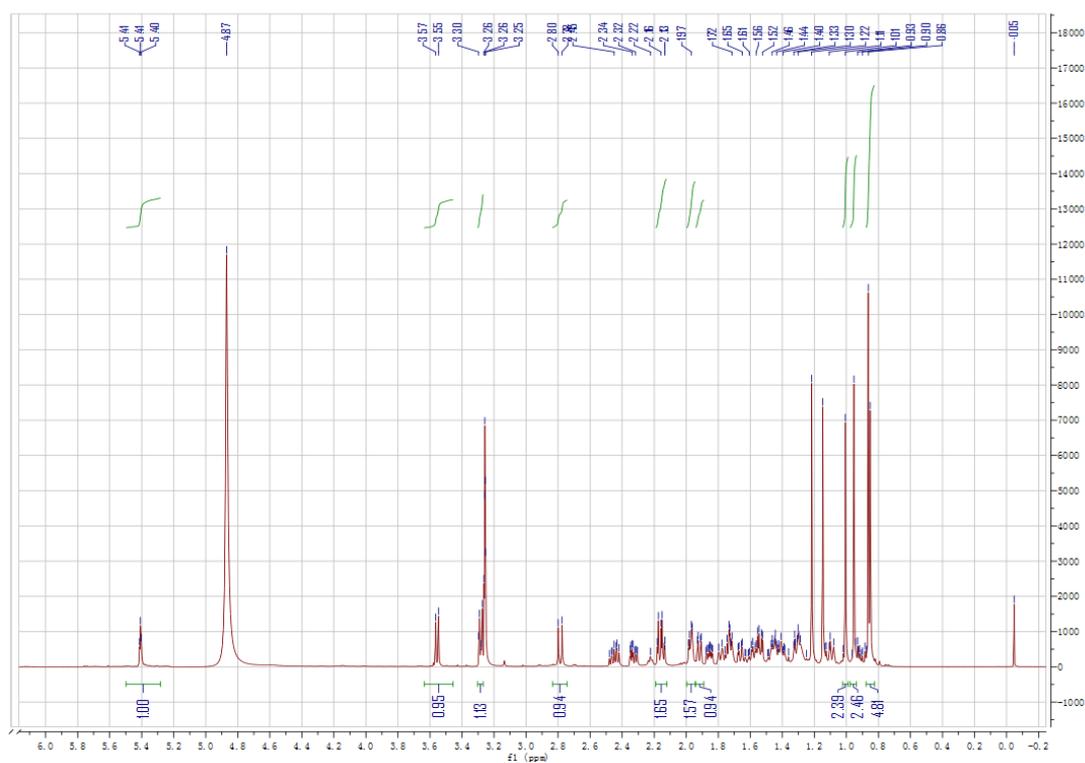
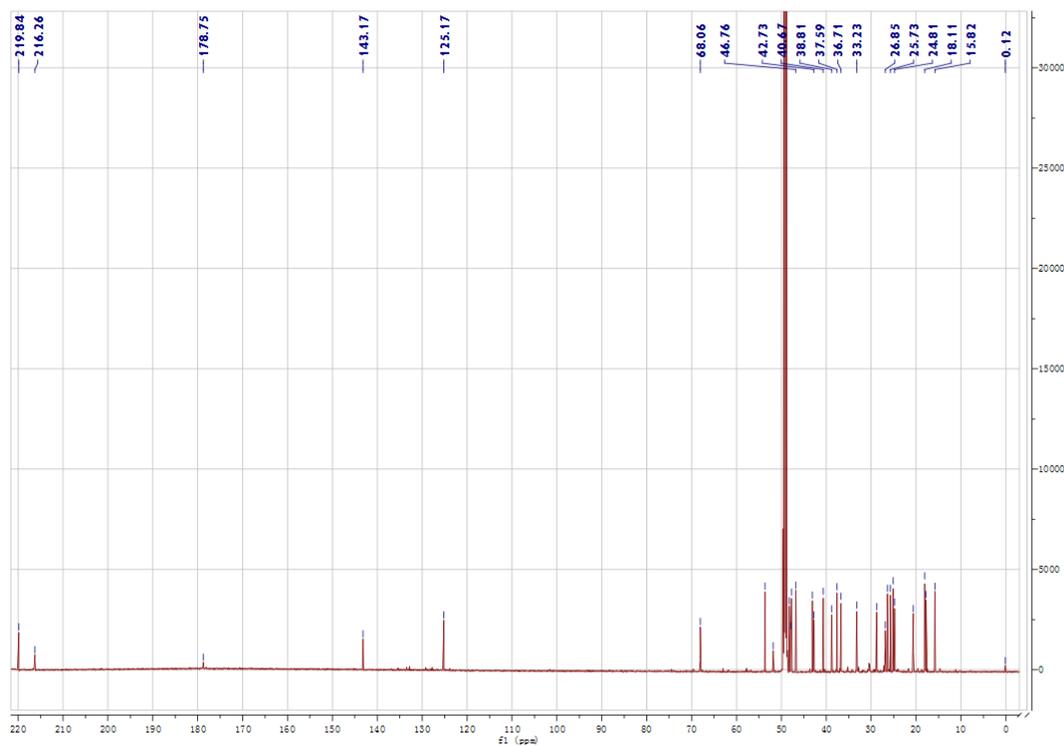
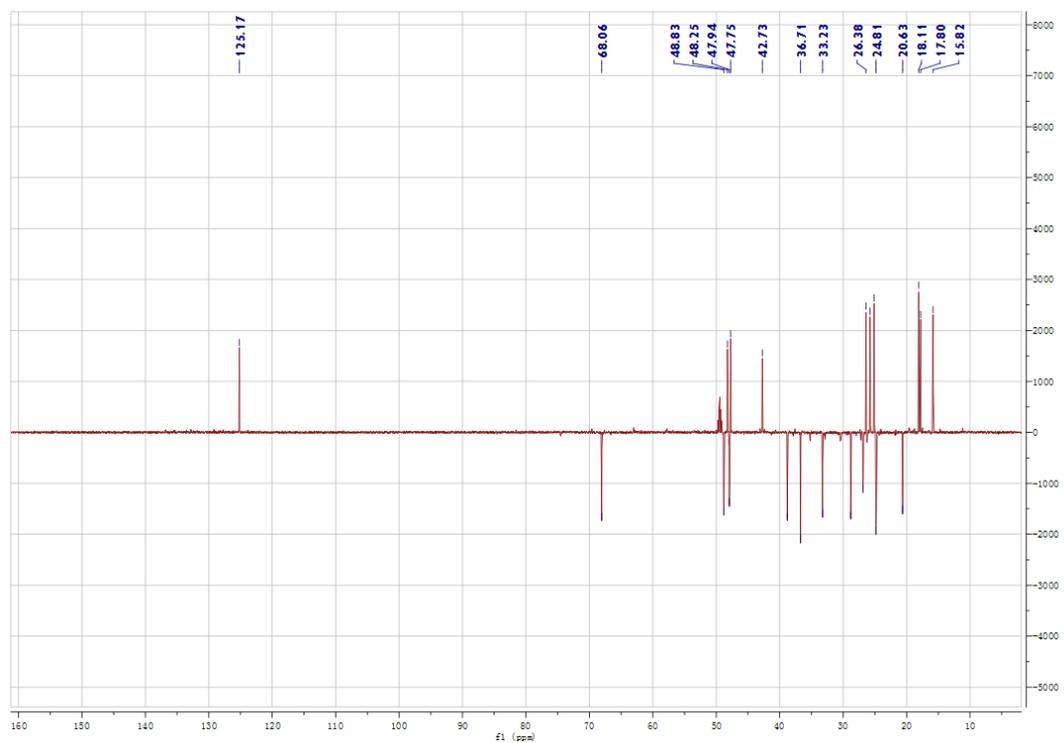
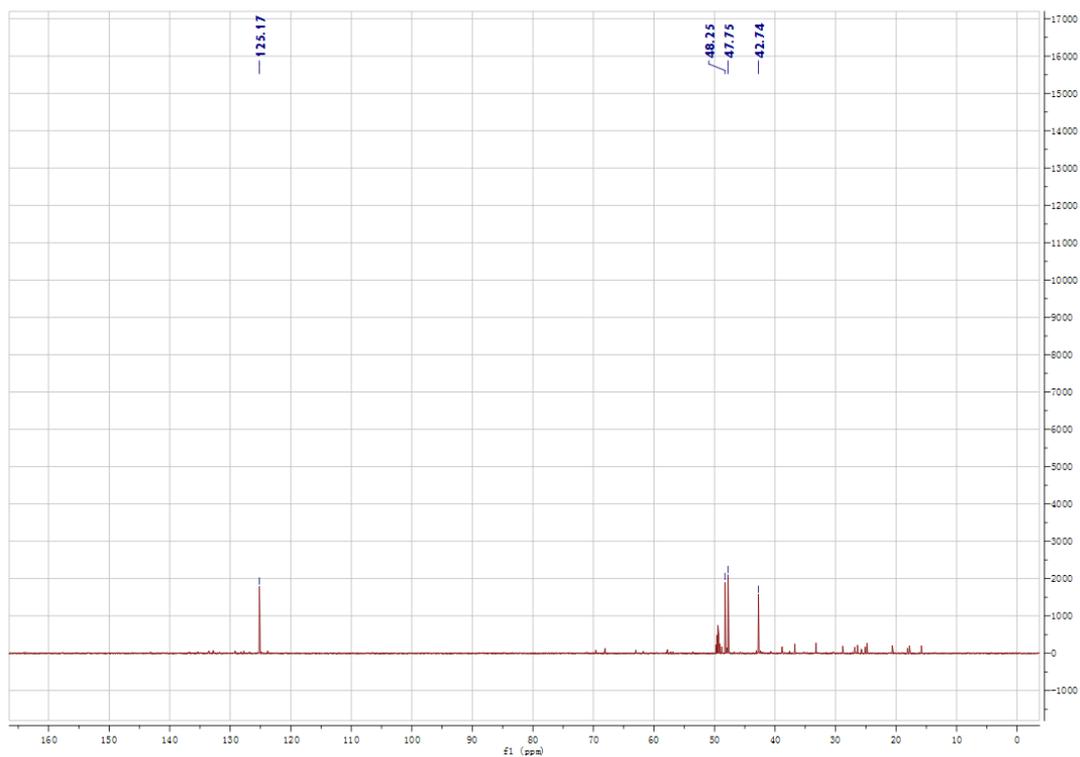
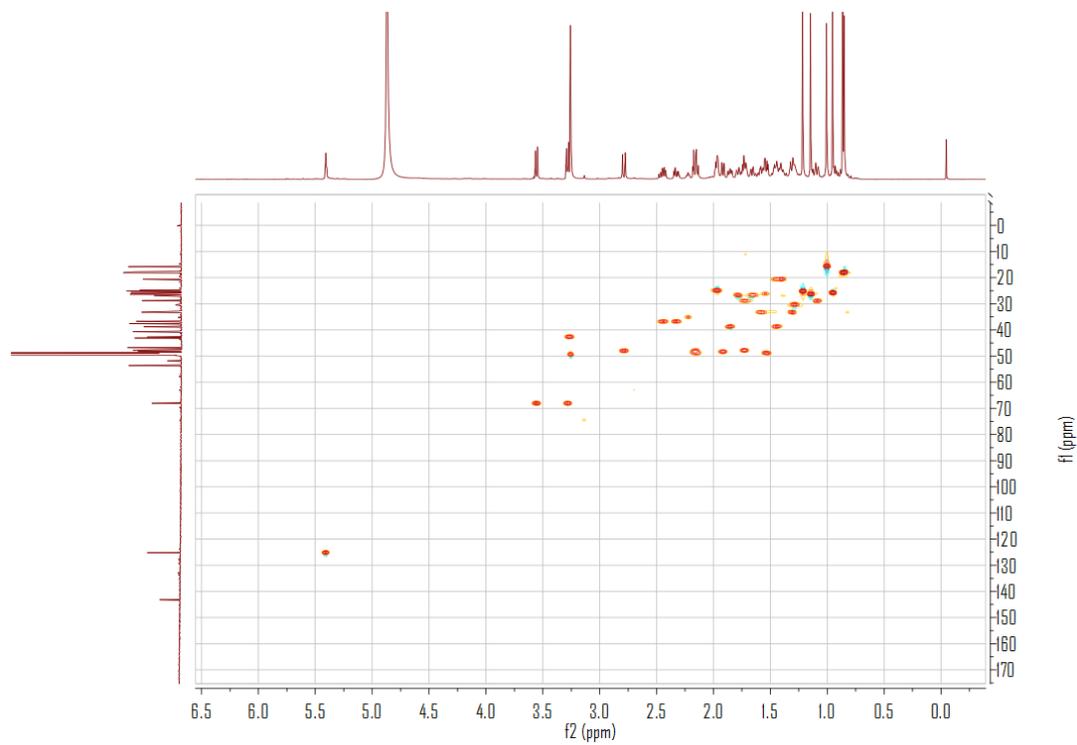
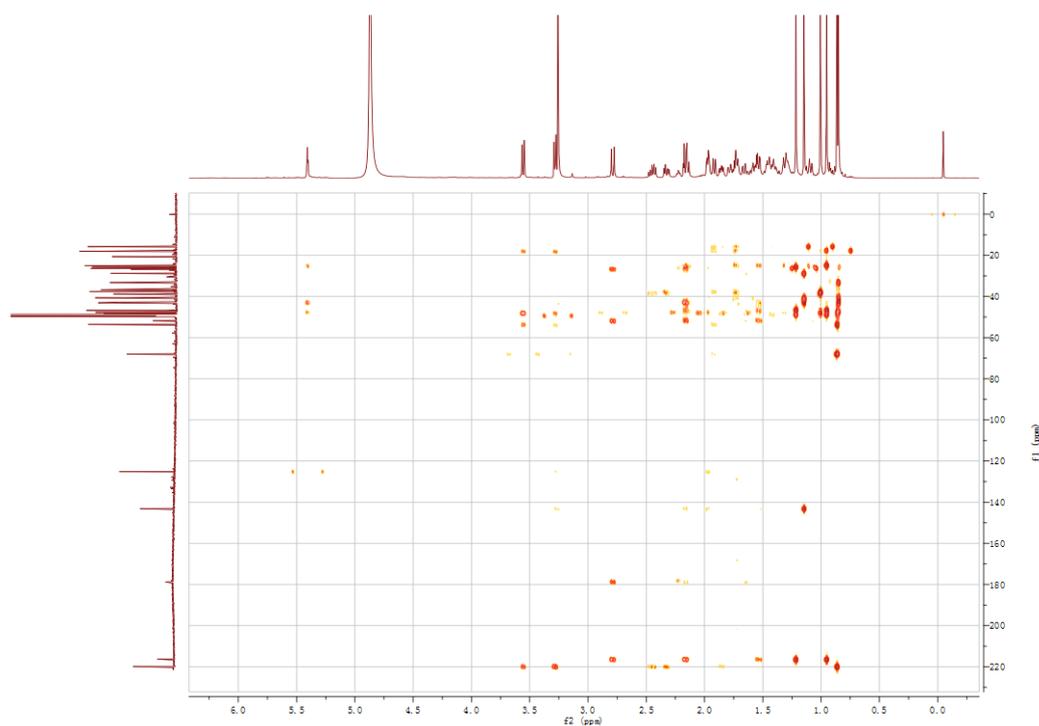
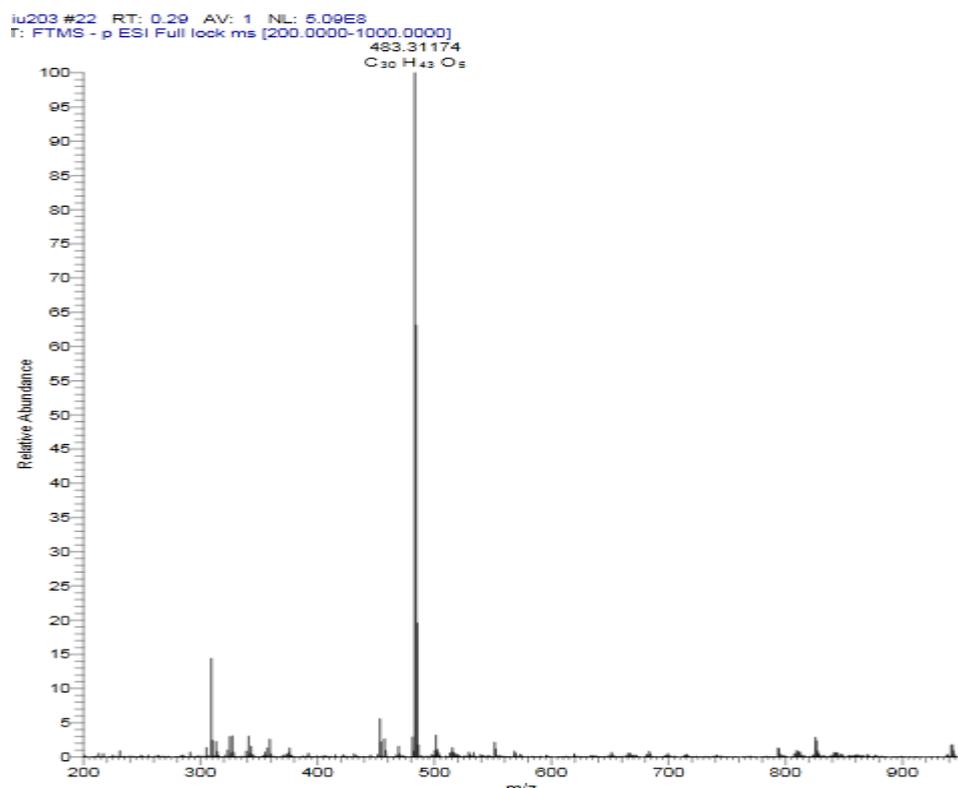


Figure S1.  $^1\text{H-NMR}$  (600 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of compound **1**

Figure S2.  $^{13}\text{C}$ -NMR (150 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of compound **1**Figure S3. DEPT-135° spectrum of compound **1**

Figure S4. DEPT-90° spectrum of compound **1**Figure S5. HSQC spectrum of compound **1**

Figure S6. HMBC spectrum of compound **1**Figure S7. HR-ESI-MS spectrum of compound **1**

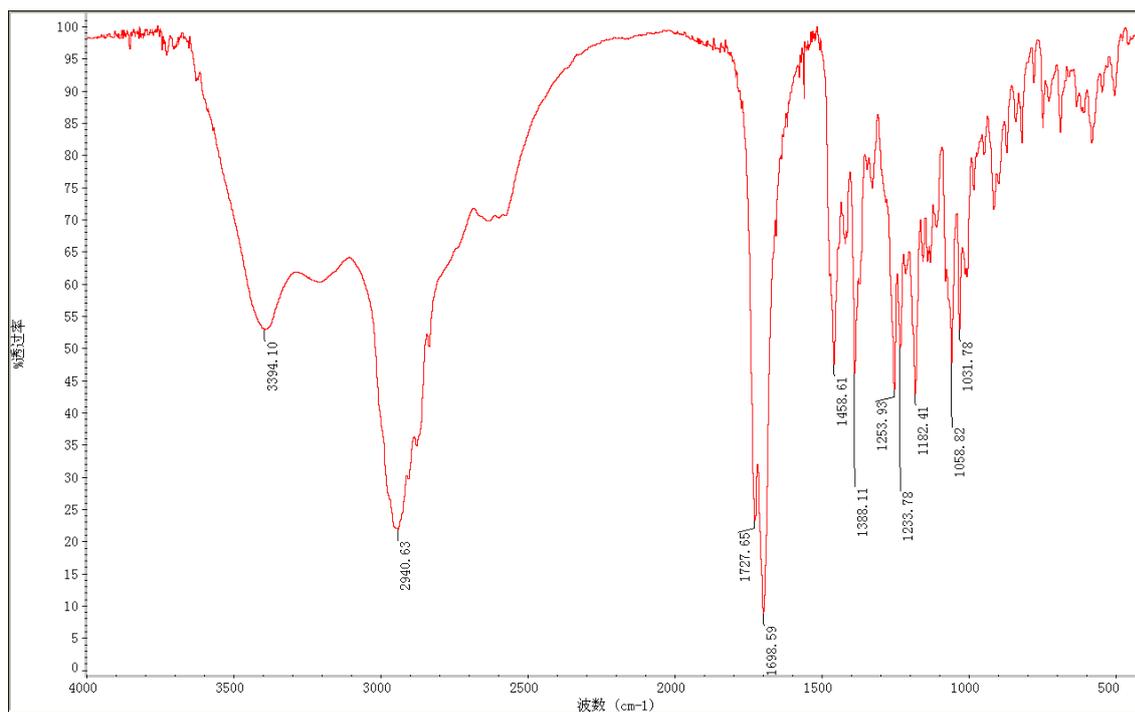
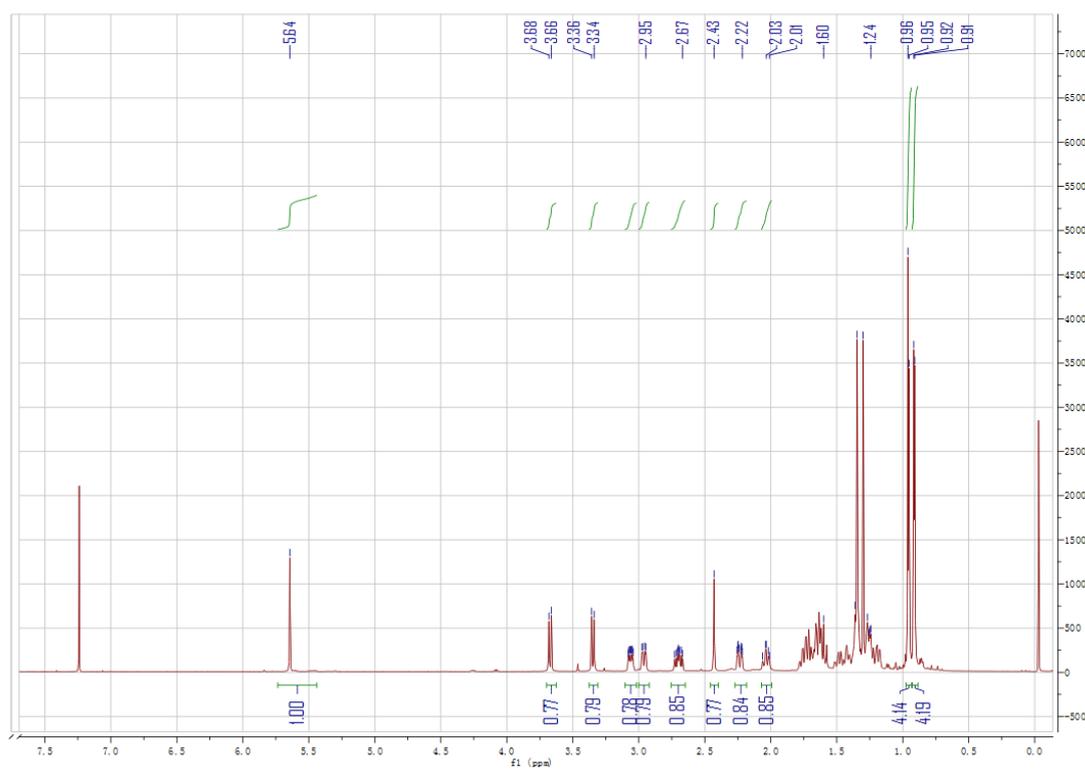


Figure S8. IR (KBr disc) spectrum of compound 1

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

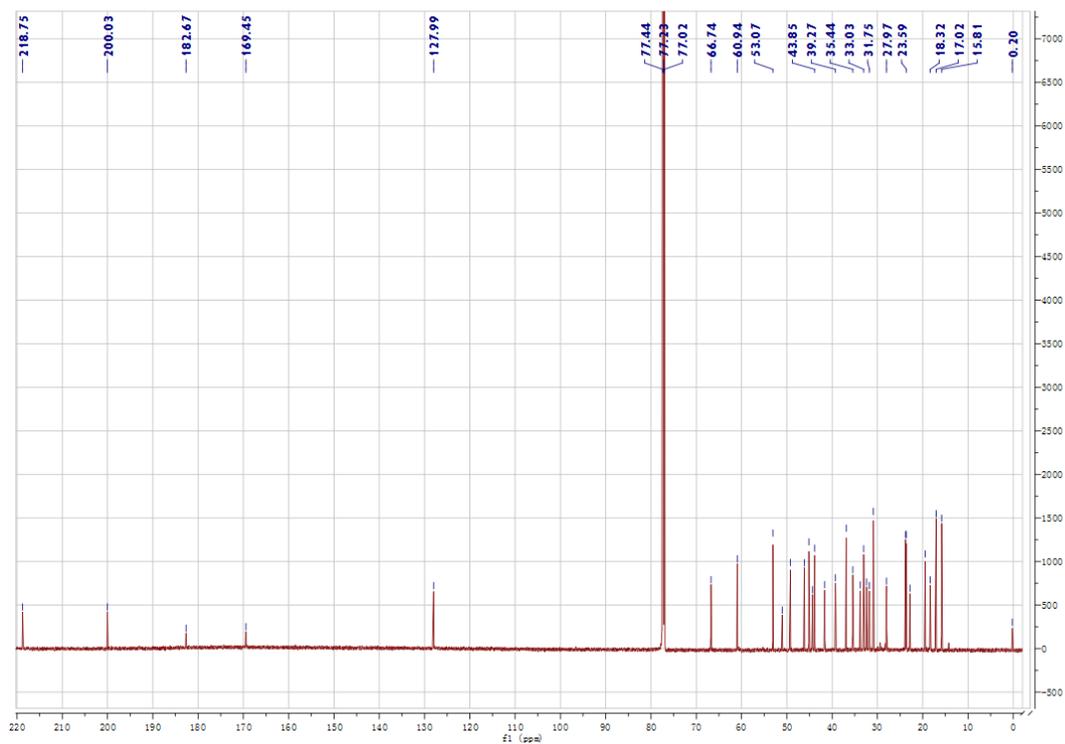
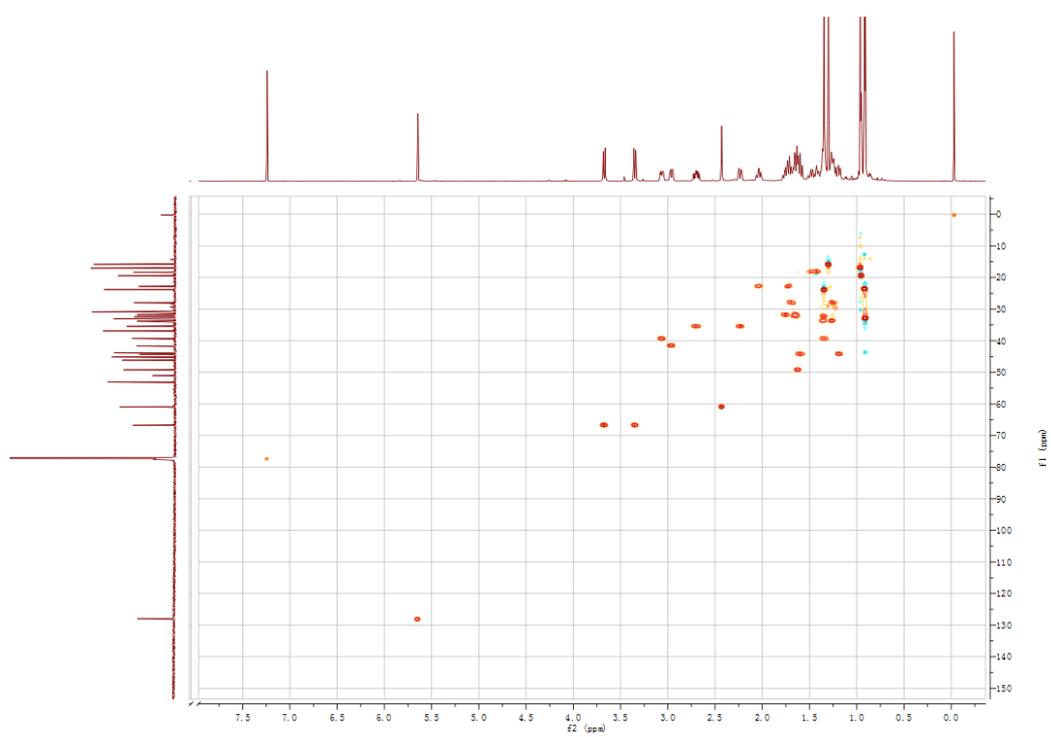
Figure S10.  $^{13}\text{C}$ -NMR (150 MHz, CDCl<sub>3</sub>) spectrum of compound 2

Figure S11. HSQC spectrum of compound 2

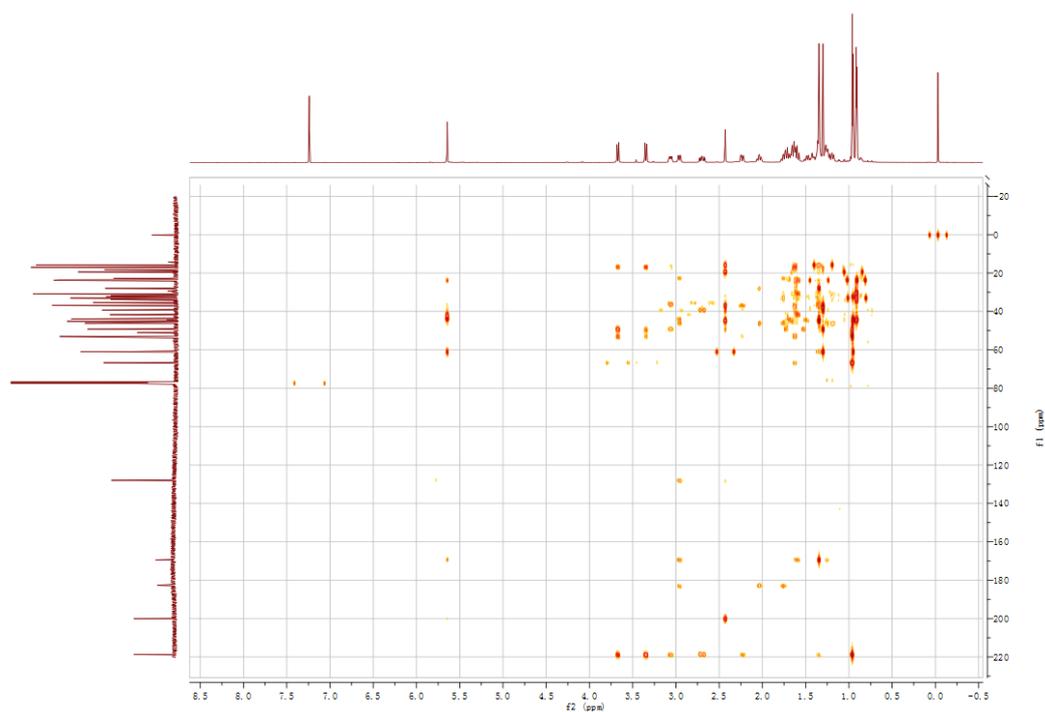


Figure S12. HMBC spectrum of compound 2

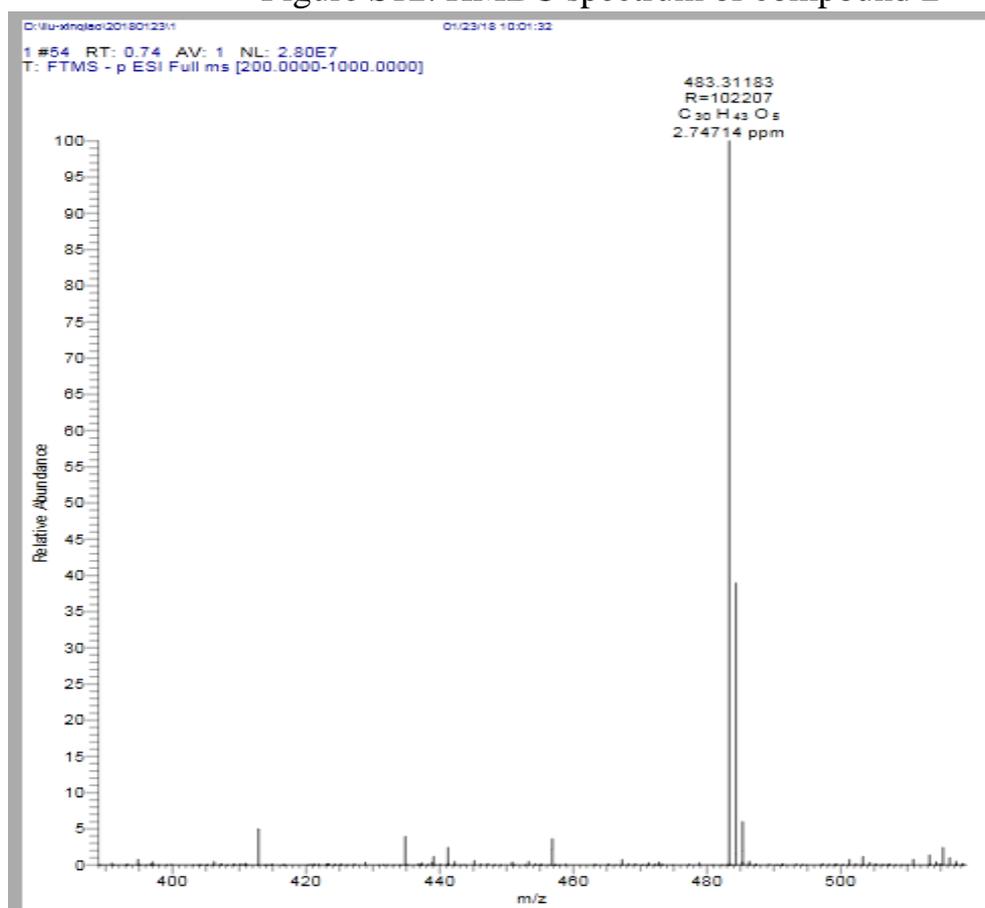


Figure S13. HR-ESI-MS spectrum of compound 2

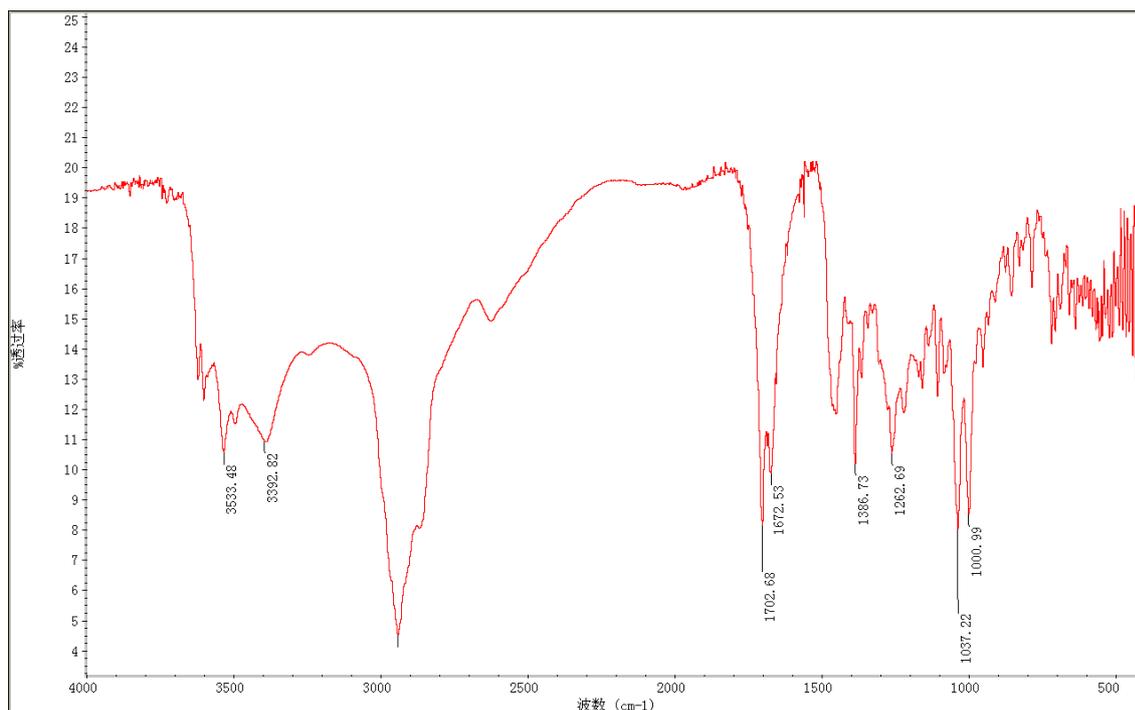
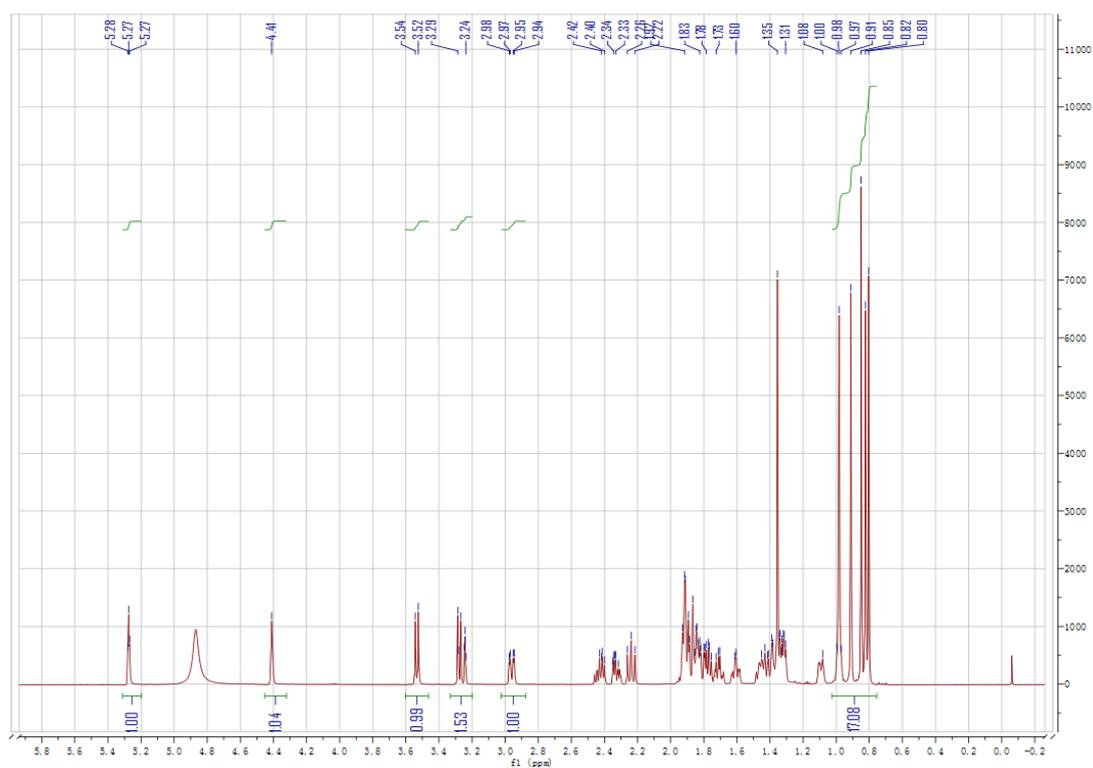
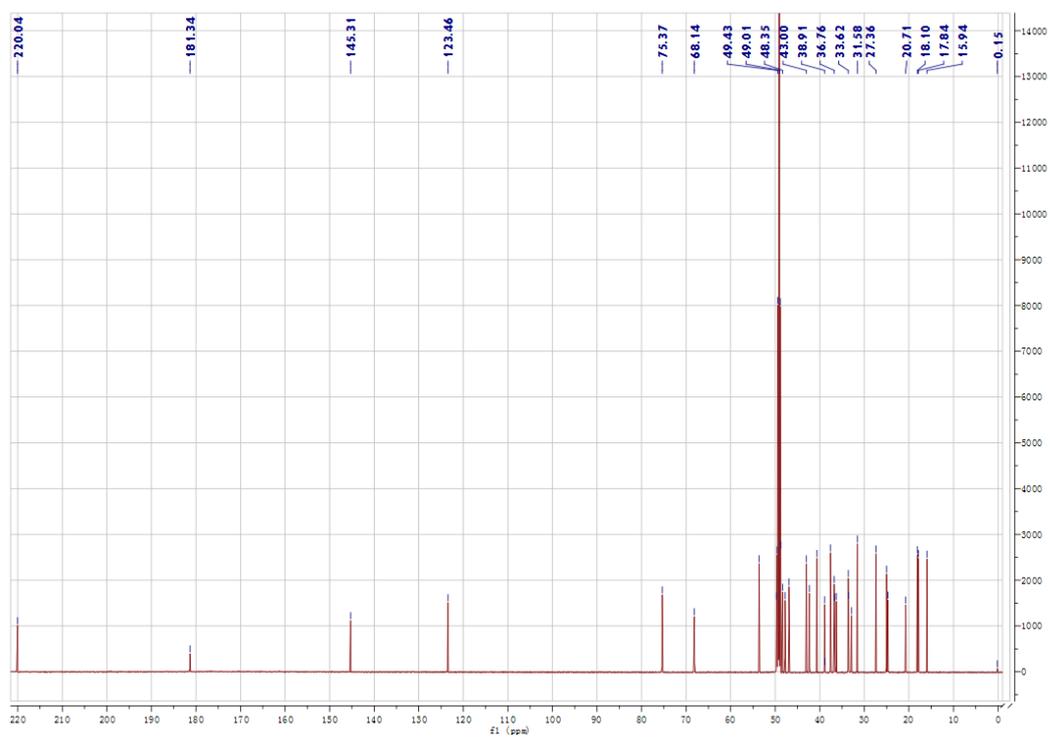
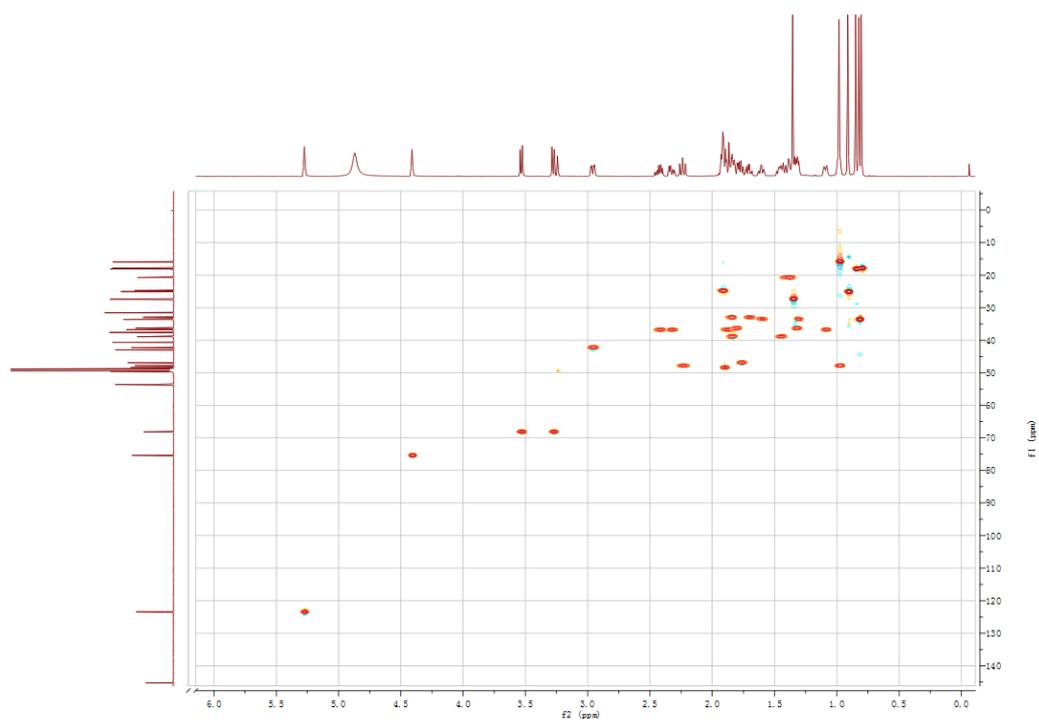
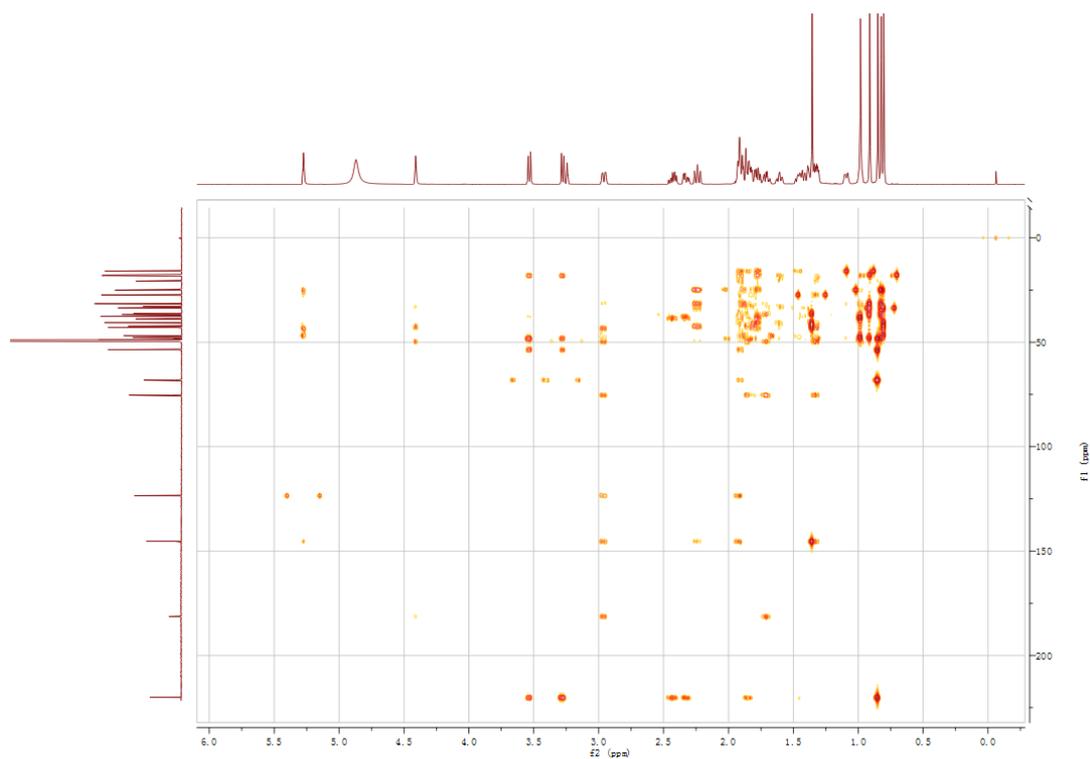
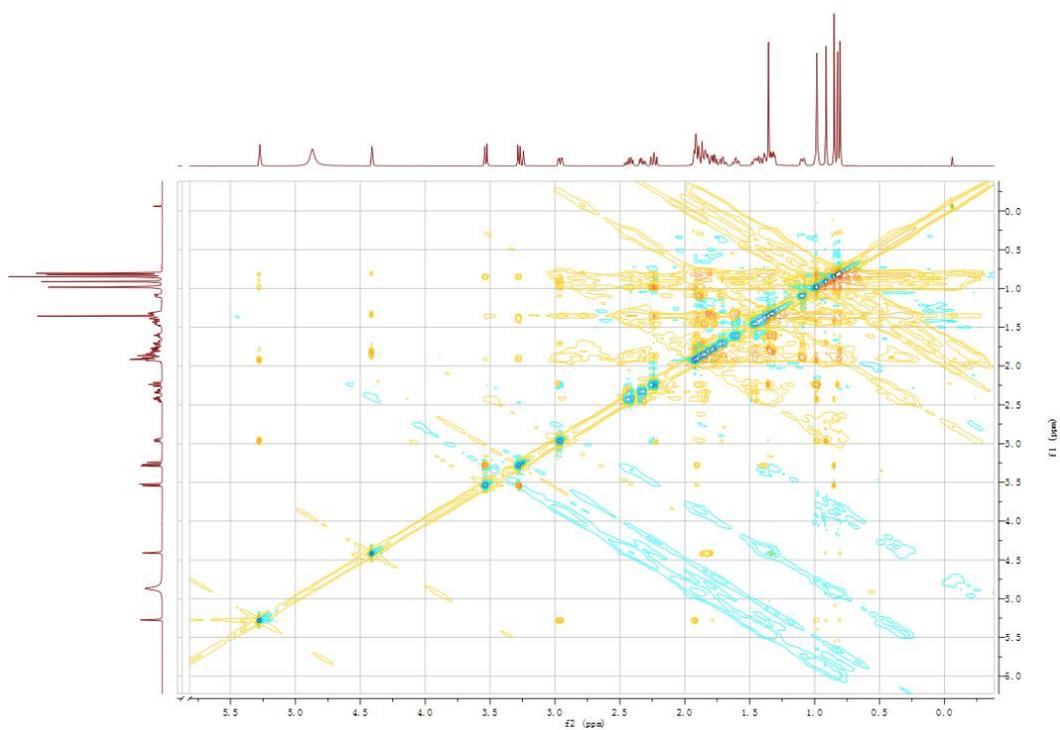


Figure S14. IR (KBr disc) spectrum of compound 2

Figure S15. <sup>1</sup>H-NMR (600 MHz, CD<sub>3</sub>OD) spectrum of compound 3

Figure S16.  $^{13}\text{C}$ -NMR (150 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of compound **3**Figure S17. HSQC spectrum of compound **3**

Figure S18. HMBC spectrum of compound **3**Figure S19. ROE spectrum of compound **3**

2 #36 RT: 0.50 AV: 1 NL: 1.35E9  
T: FTMS - p ESI Full ms [200.0000-1000.0000]

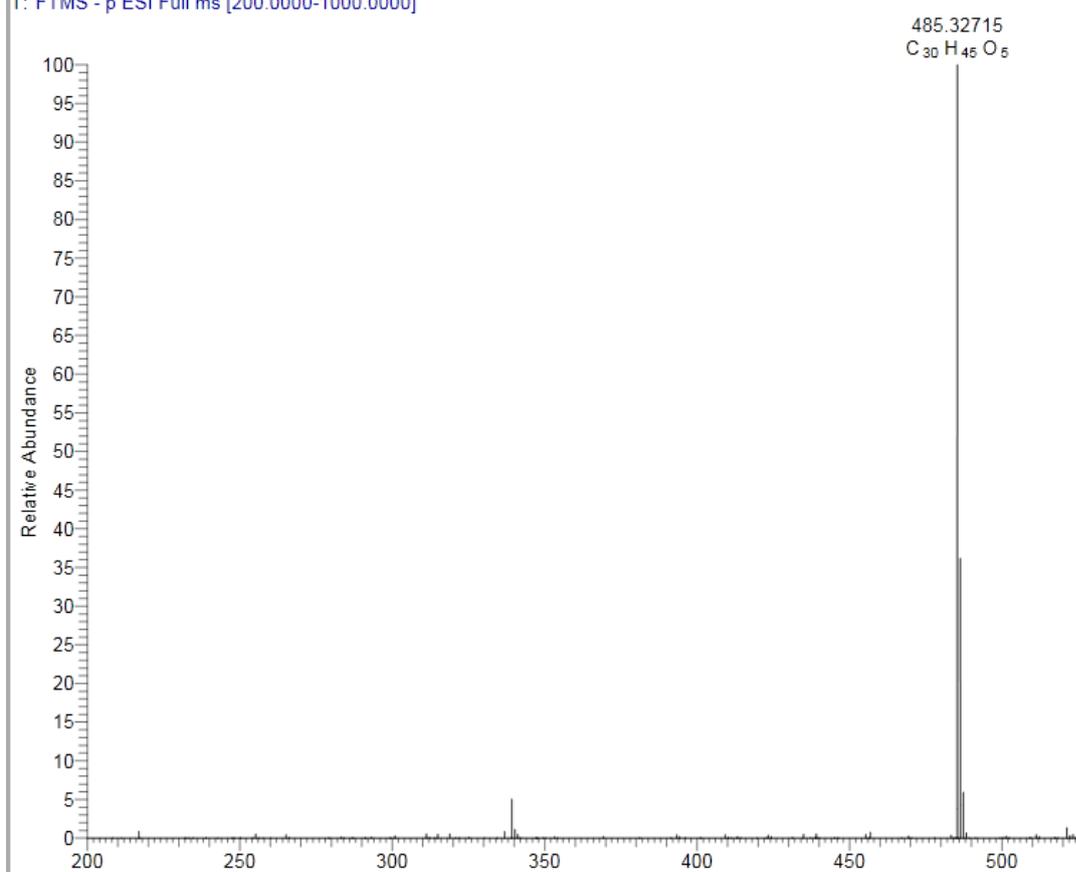


Figure S20. HR-ESI-MS spectrum of compound 3

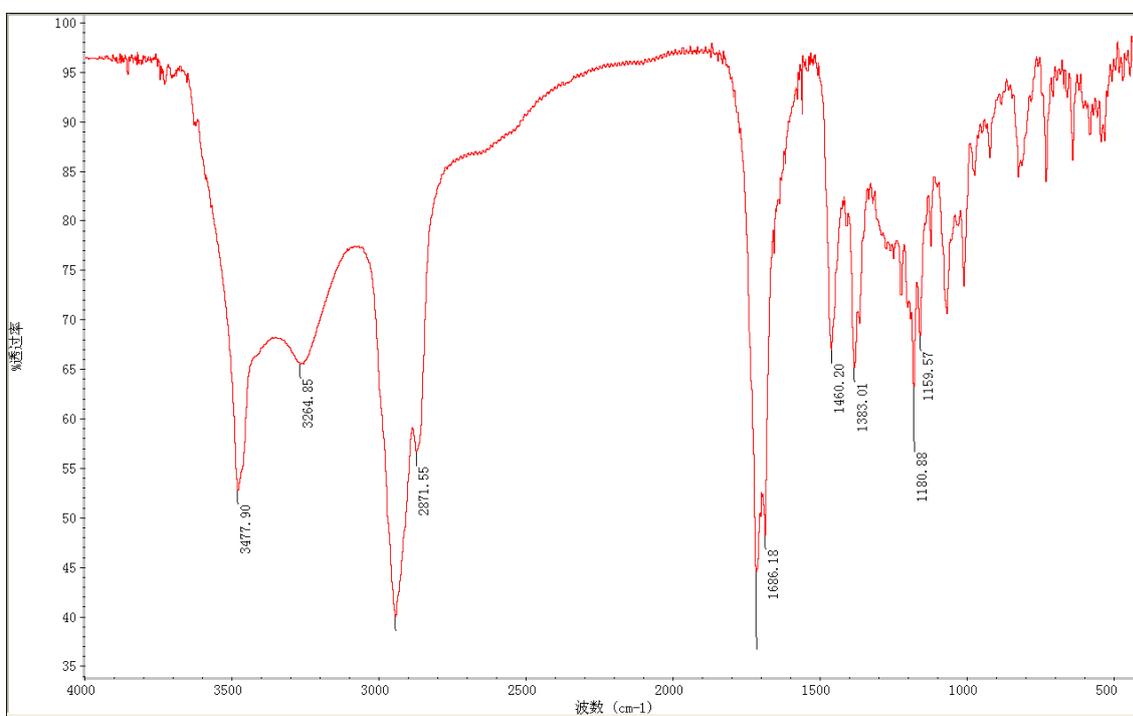


Figure S21. IR (KBr disc) spectrum of compound 3