

## Supporting Information

### **Isolation, Synthesis, and Biological activity of Tementosenol A from the Leaves of *Rhodomyrtus tomentosa***

Hong-Xin Liu,<sup>a,b</sup> Wei-Min Zhang,<sup>b</sup> Zhi-Fang Xu,<sup>a</sup> Yu-Chan Chen,<sup>b</sup> Hao-Bo Tan,<sup>a\*</sup>  
Sheng-Xiang Qiu<sup>a\*</sup>

<sup>a</sup>Program for Natural Product Chemical Biology, Key Laboratory of Plant Resources Conservation and Sustainable Utilization, South China Botanical Garden, Chinese Academy of Sciences, Guangzhou 510650, China

<sup>b</sup>State Key Laboratory of Applied Microbiology Southern China, Guangdong Provincial Key Laboratory of Microbial Culture Collection and Application, Guangdong Open Laboratory of Applied Microbiology, Guangdong Institute of Microbiology, Guangzhou 510070, China

---

\*Corresponding authors: Tel/fax: +86-20-37081190; E-mail address: sxqiu@scbg.ac.cn (S.-X. Qiu); tanhaibo@scbg.ac.cn (H.-B. Tan).

## Contents

- Figure S1.  $^1\text{H}$  NMR spectrum (500 MHz,  $\text{CDCl}_3$ ) of **1**.
- Figure S2.  $^{13}\text{C}$  NMR spectrum (125 MHz,  $\text{CDCl}_3$ ) of **1**.
- Figure S3.  $^1\text{H}$ - $^1\text{H}$  COSY spectrum (500 MHz,  $\text{CDCl}_3$ ) of **1**.
- Figure S4. HSQC spectrum of **1**.
- Figure S5. HMBC spectrum of **1**.
- Figure S6. NOESY spectrum of **1**.
- Figure S7. HRESIMS spectrum of **1**.
- Figure S8. UV spectrum of **1**.
- Figure S9.  $^1\text{H}$  NMR spectrum (500 MHz,  $\text{CDCl}_3$ ) of **2**.
- Figure S10.  $^1\text{H}$  NMR spectrum (500 MHz,  $\text{CDCl}_3$ ) of **3**.
- Figure S11.  $^{13}\text{C}$  NMR spectrum (125 MHz,  $\text{CDCl}_3$ ) of **3**.
- Figure S12.  $^1\text{H}$  NMR spectrum (500 MHz,  $\text{CDCl}_3$ ) of key intermediate **i**.
- Figure S13.  $^{13}\text{C}$  NMR spectrum (125 MHz,  $\text{CDCl}_3$ ) of key intermediate **i**.
- Figure S14.  $^1\text{H}$  NMR spectrum (500 MHz,  $\text{CDCl}_3$ ) of synthetic **1**.
- Figure S15.  $^{13}\text{C}$  NMR spectrum (125 MHz,  $\text{CDCl}_3$ ) of synthetic **1**.
- Figure S16.  $^1\text{H}$  NMR spectrum (500 MHz,  $\text{CDCl}_3$ ) of synthetic **2**.
- Figure S17.  $^{13}\text{C}$  NMR spectrum (125 MHz,  $\text{CDCl}_3$ ) of synthetic **2**.
- Figure S18.  $^1\text{H}$  NMR spectrum (500 MHz,  $\text{CDCl}_3$ ) of synthetic **3**.
- Figure S19.  $^{13}\text{C}$  NMR spectrum (125 MHz,  $\text{CDCl}_3$ ) of synthetic **3**.

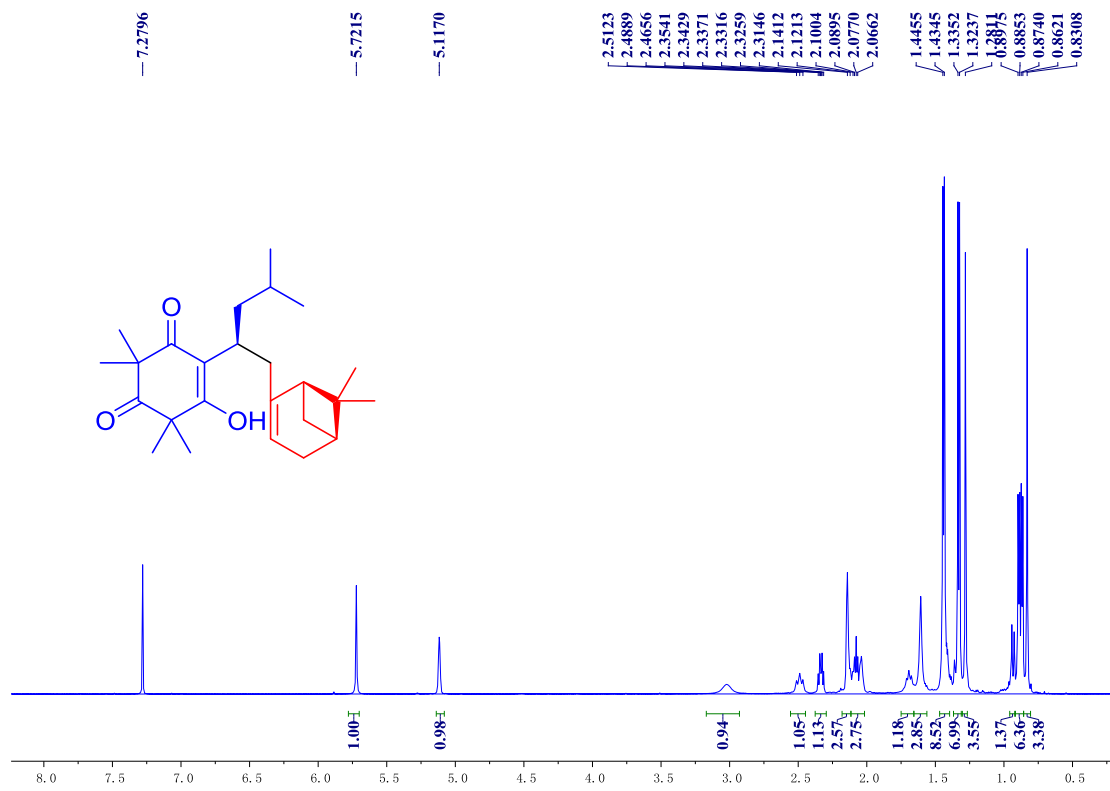


Figure S1. <sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of **1**.

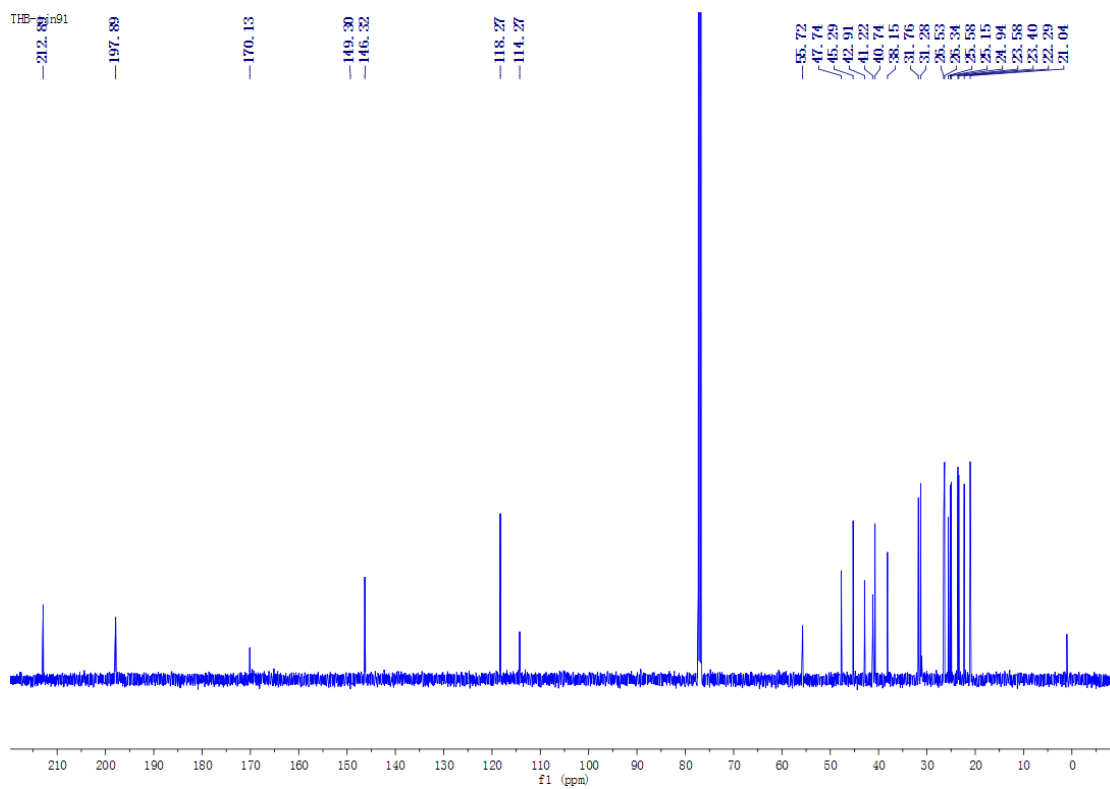


Figure S2. <sup>13</sup>C NMR spectrum (125 MHz, CDCl<sub>3</sub>) of **1**.

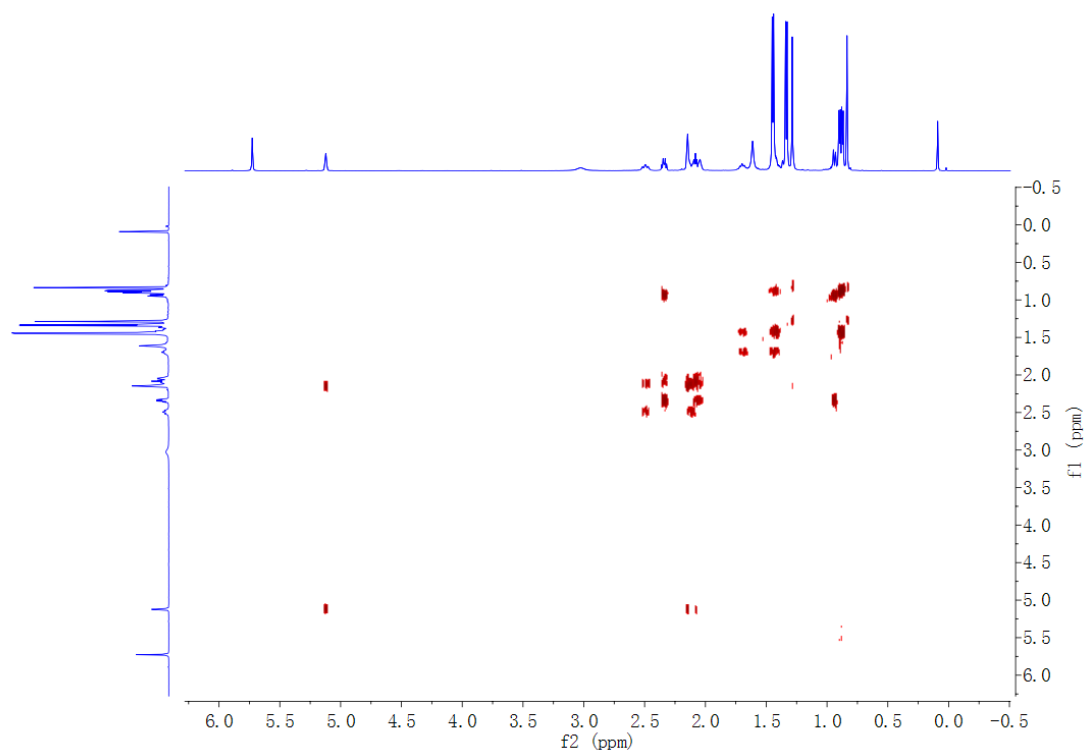


Figure S3.  $^1\text{H}$ - $^1\text{H}$  COSY spectrum (500 MHz,  $\text{CDCl}_3$ ) of **1**.

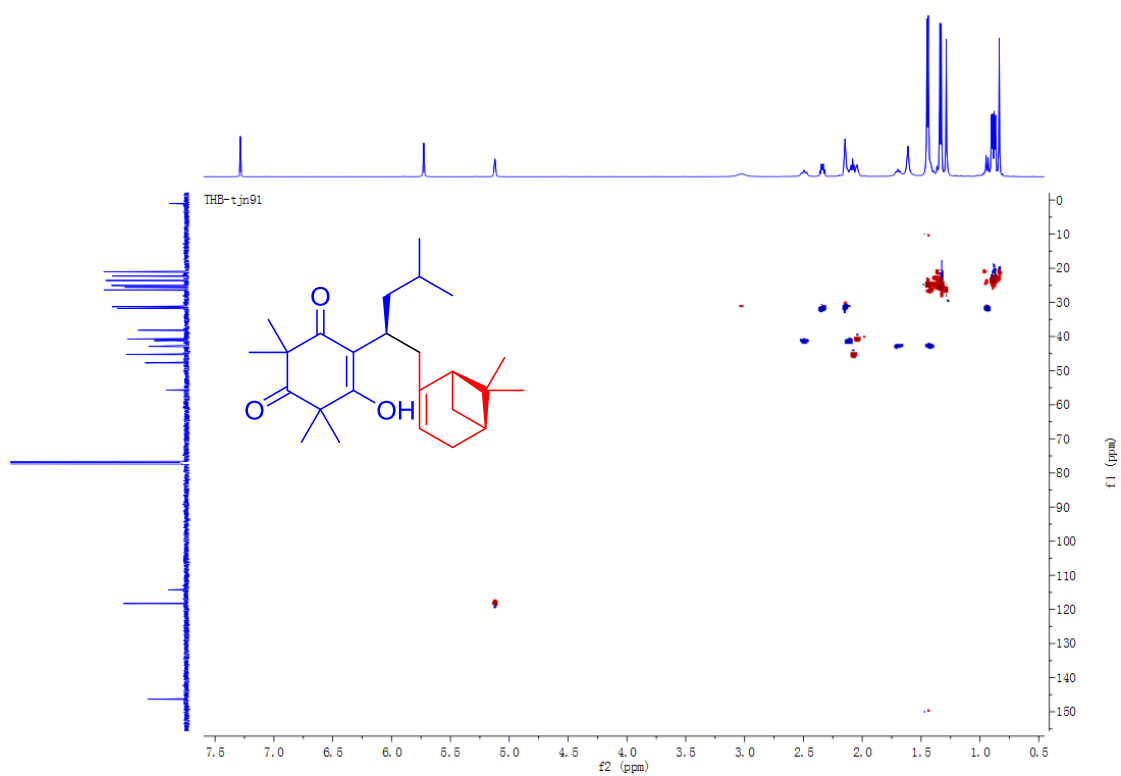


Figure S4. HSQC spectrum of **1**.

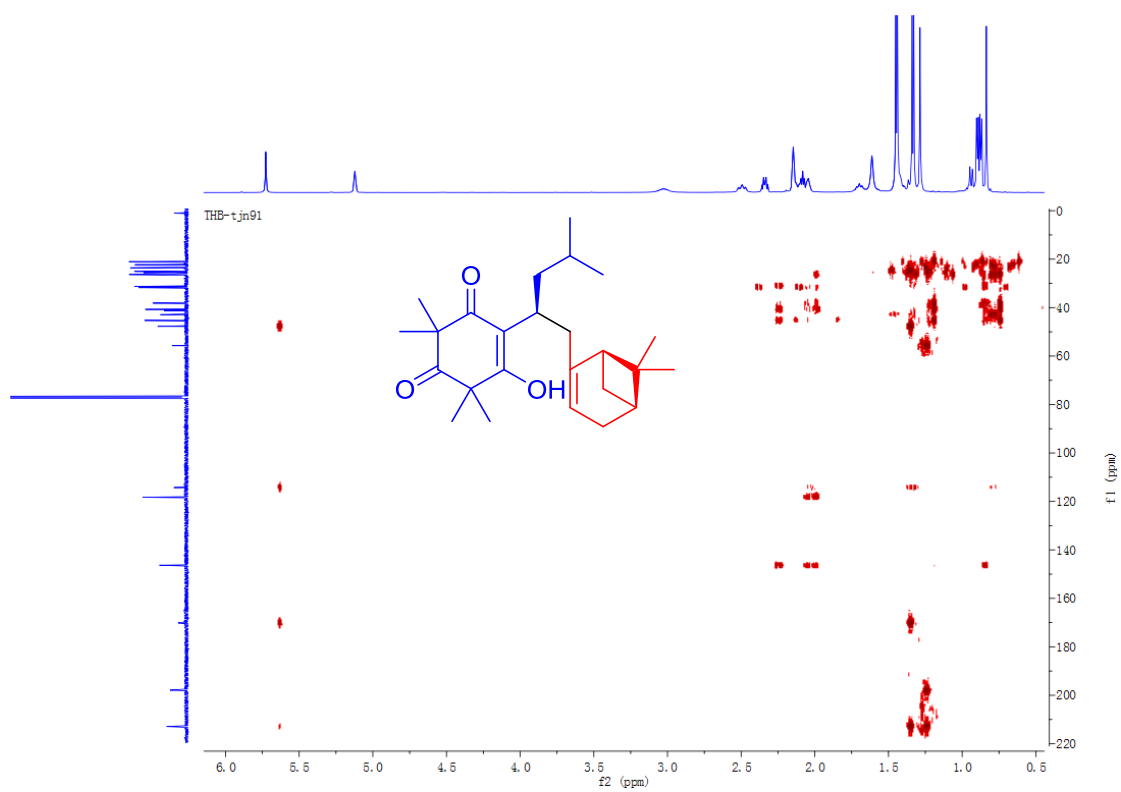


Figure S5. HMBC spectrum of **1**.

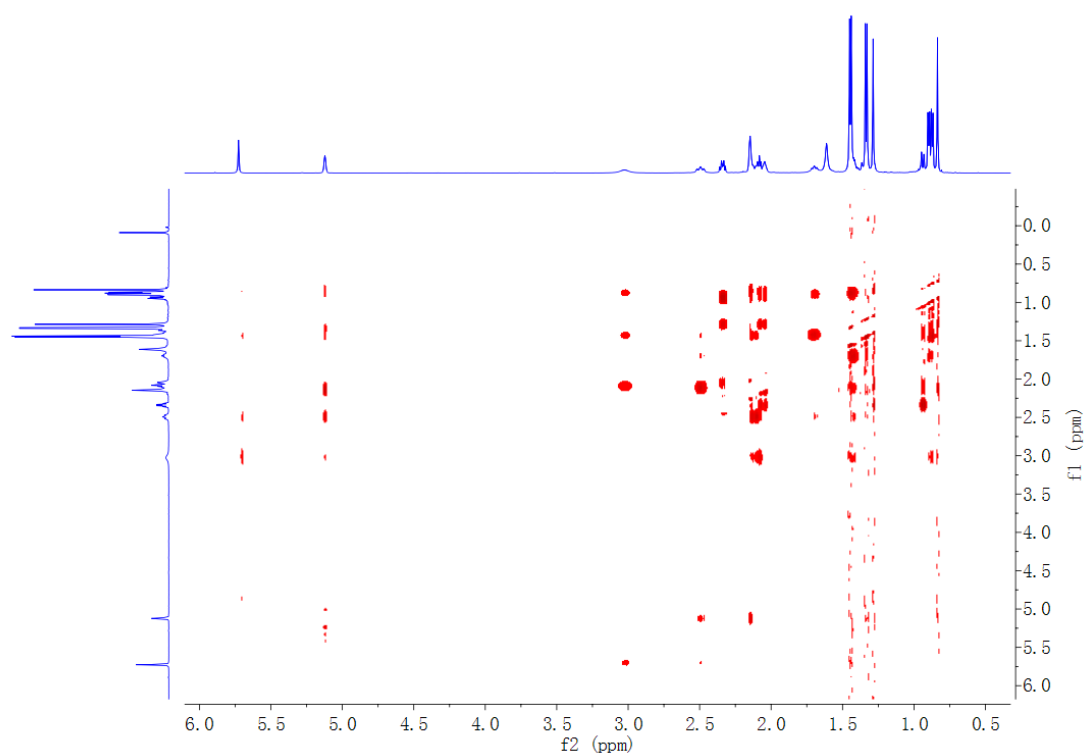


Figure S6. NOESY spectrum of **1**.

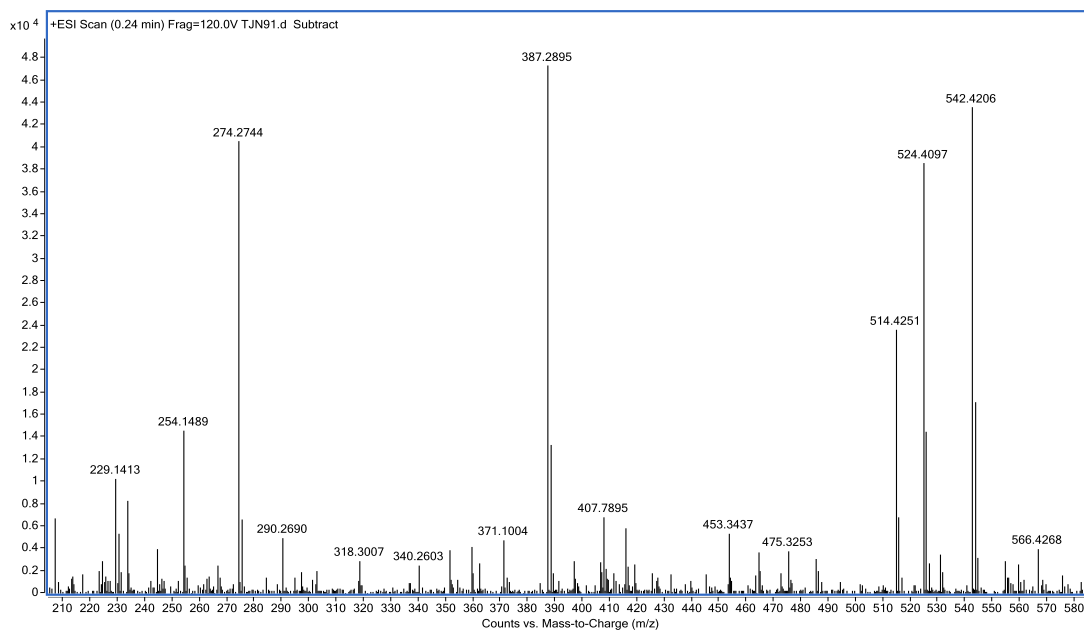


Figure S7. HRESIMS spectrum of **1**.

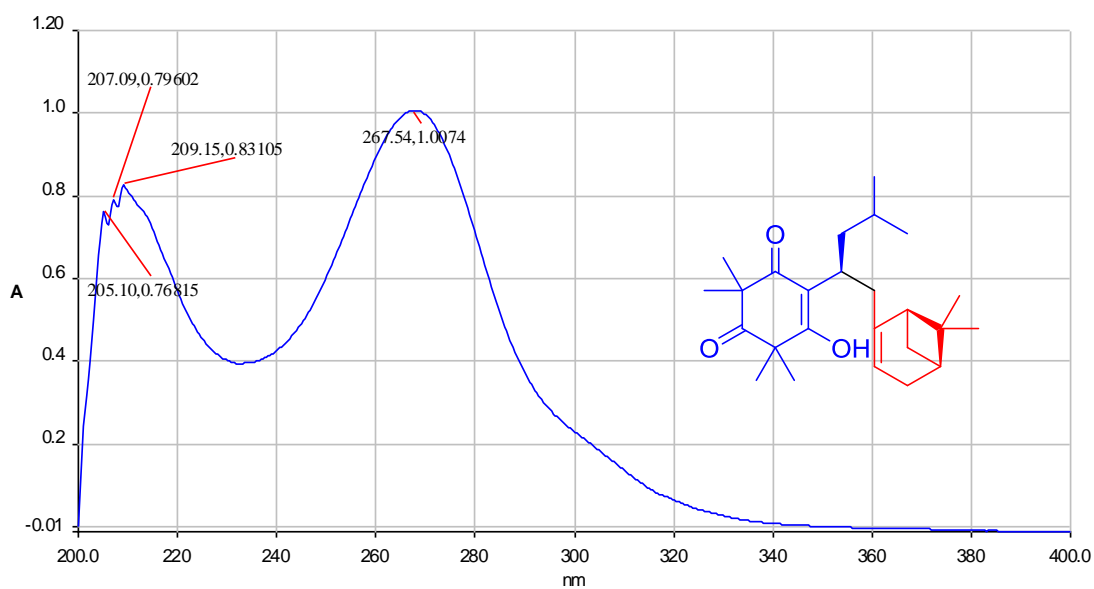


Figure S8. UV spectrum of **1**.

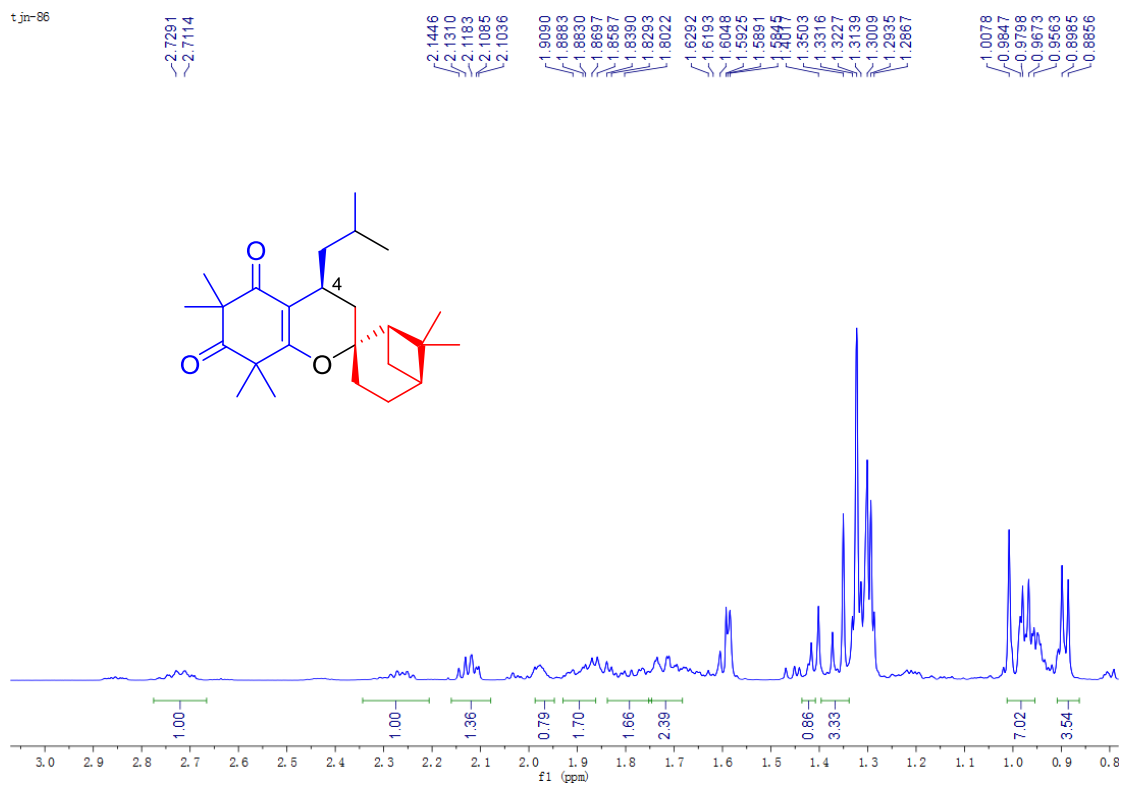


Figure S9. <sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of **2**.

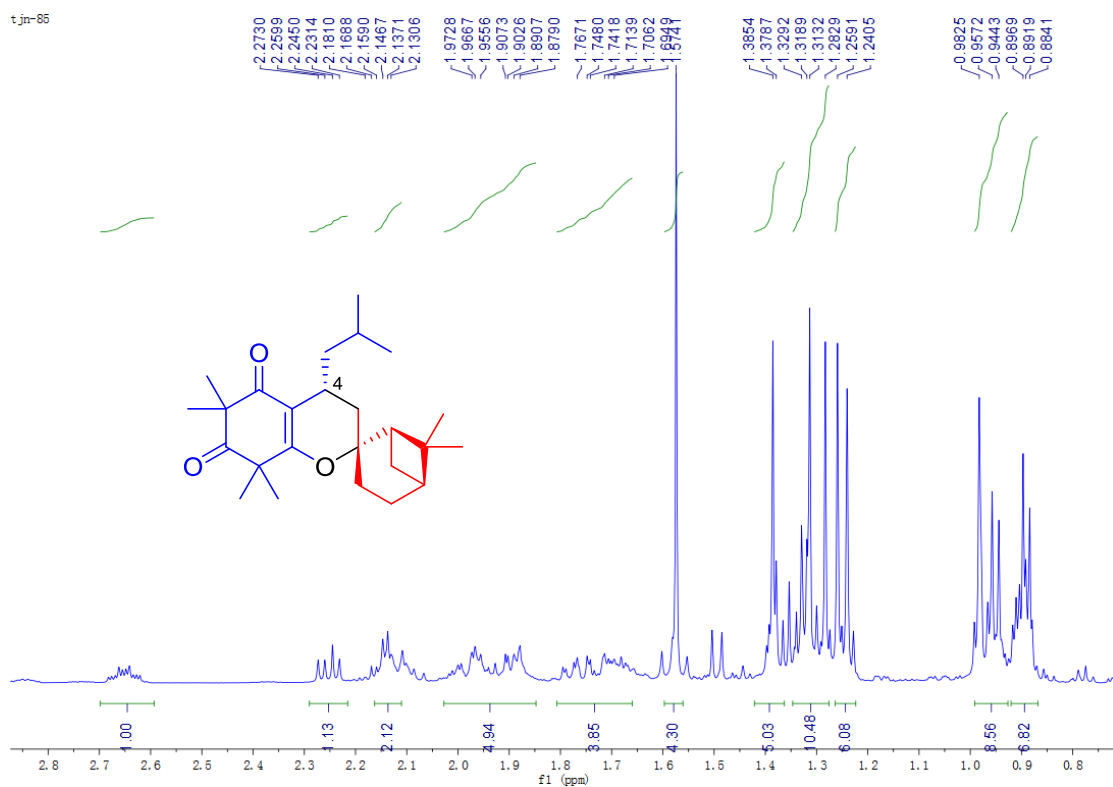


Figure S10. <sup>1</sup>H NMR spectrum (500 MHz, CDCl<sub>3</sub>) of **3**.

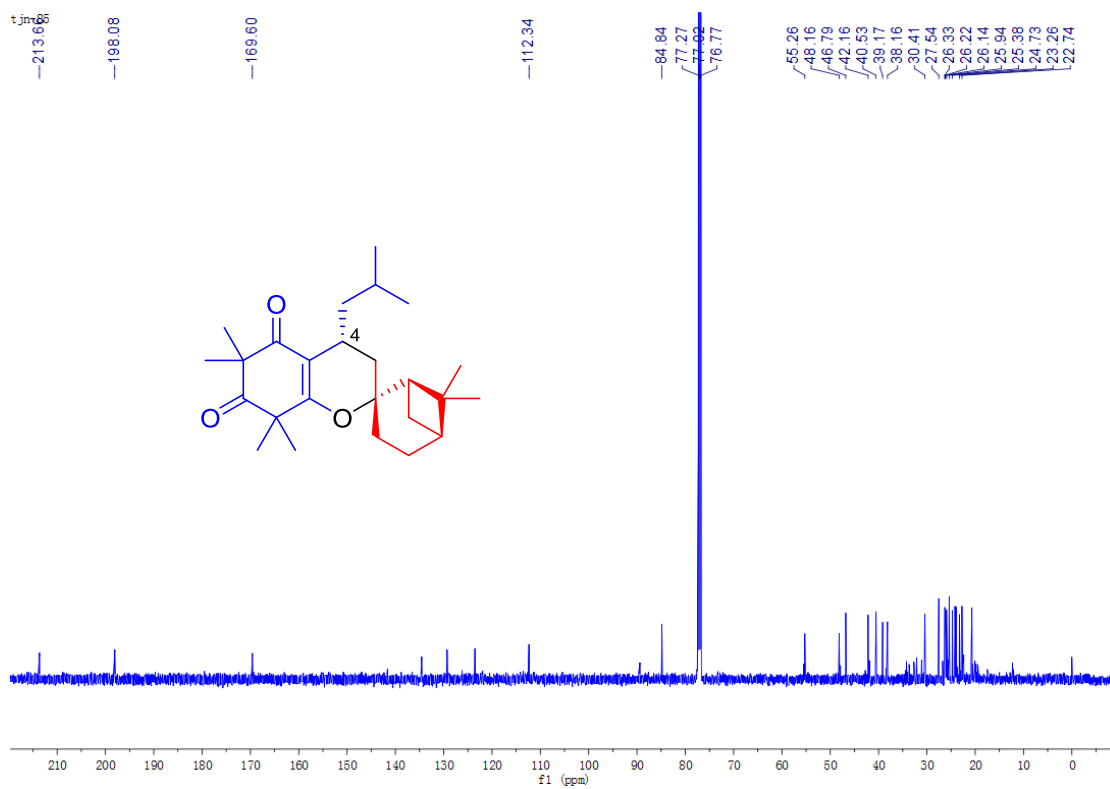


Figure S11.  $^{13}\text{C}$  NMR spectrum (500 MHz,  $\text{CDCl}_3$ ) of **3**.

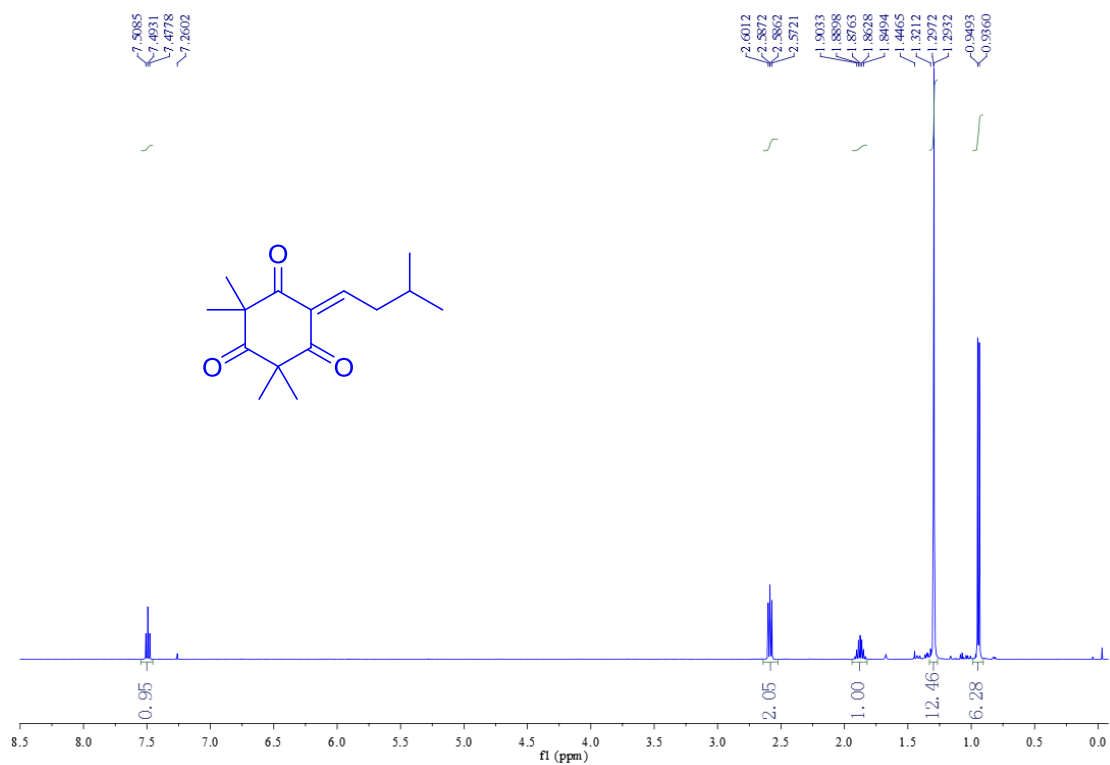


Figure 12.  $^1\text{H}$  NMR spectrum (500 MHz,  $\text{CDCl}_3$ ) of key intermediate **i**.



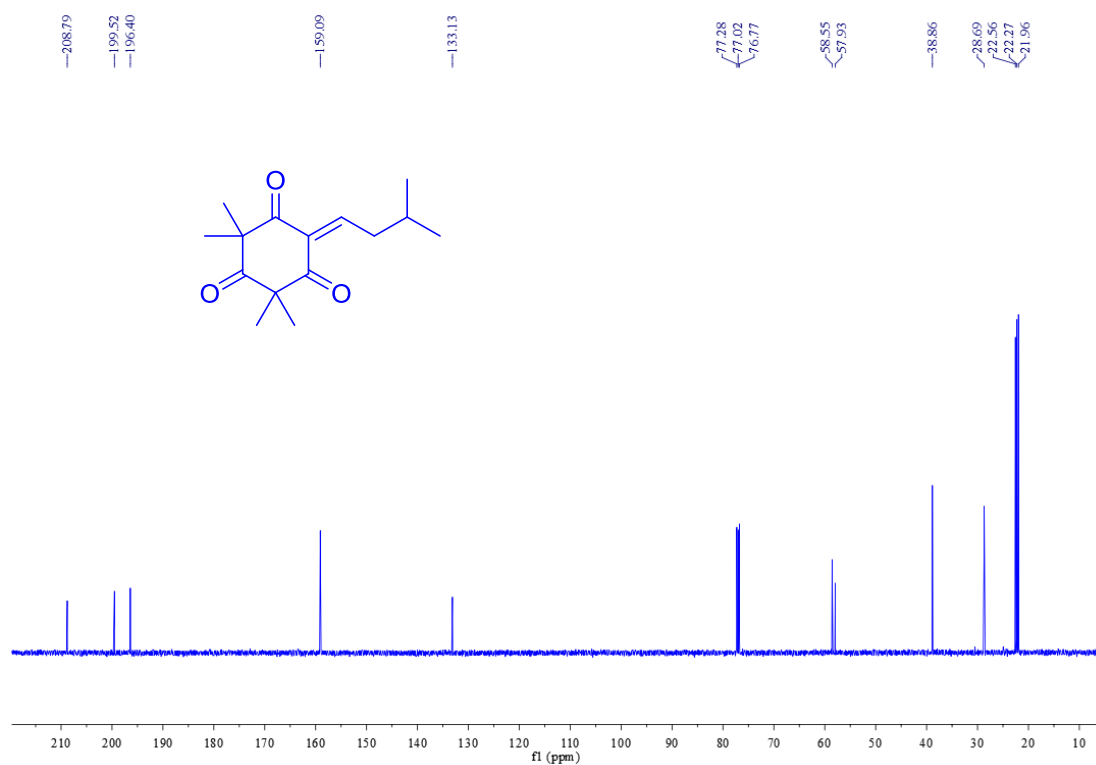


Figure 13.  $^{13}\text{C}$  NMR spectrum (125 MHz,  $\text{CDCl}_3$ ) of key intermediate **i**.

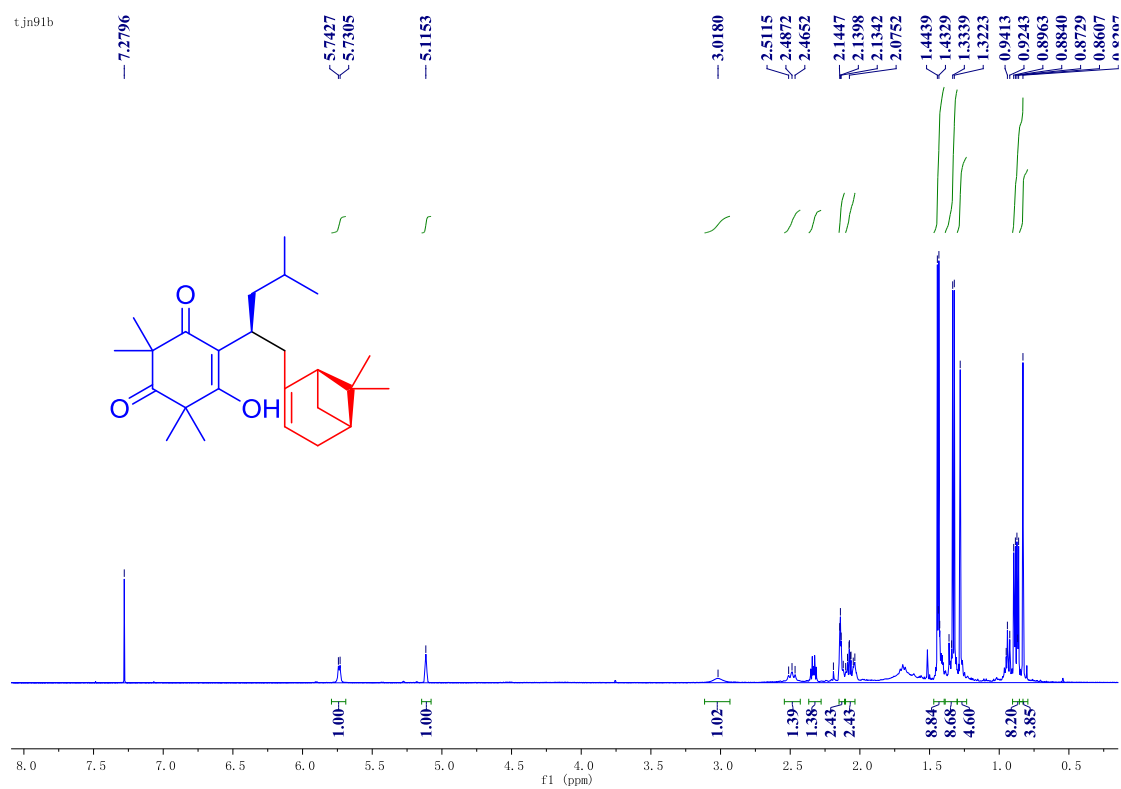


Figure S14.  $^1\text{H}$  NMR spectrum (500 MHz,  $\text{CDCl}_3$ ) of synthetic **1**.

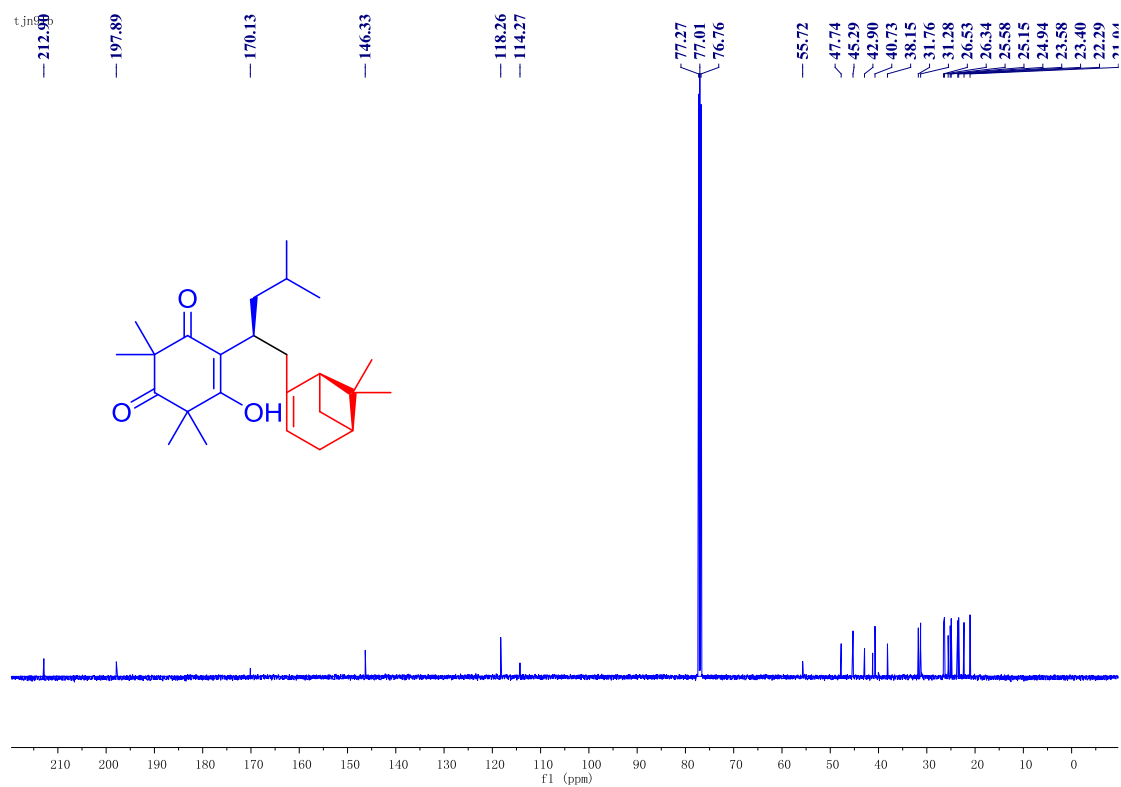


Figure S15.  $^{13}\text{C}$  NMR spectrum (125 MHz,  $\text{CDCl}_3$ ) of synthetic **1**.

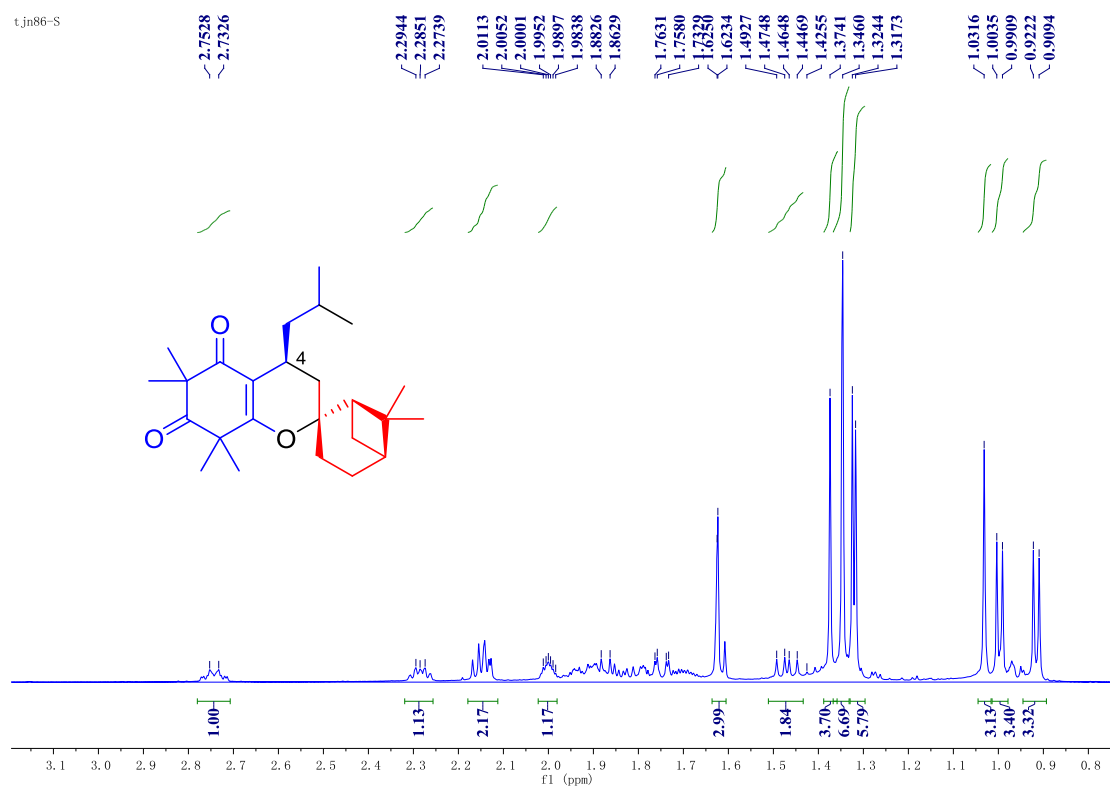


Figure S16.  $^1\text{H}$  NMR spectrum (500 MHz,  $\text{CDCl}_3$ ) of synthetic **2**.

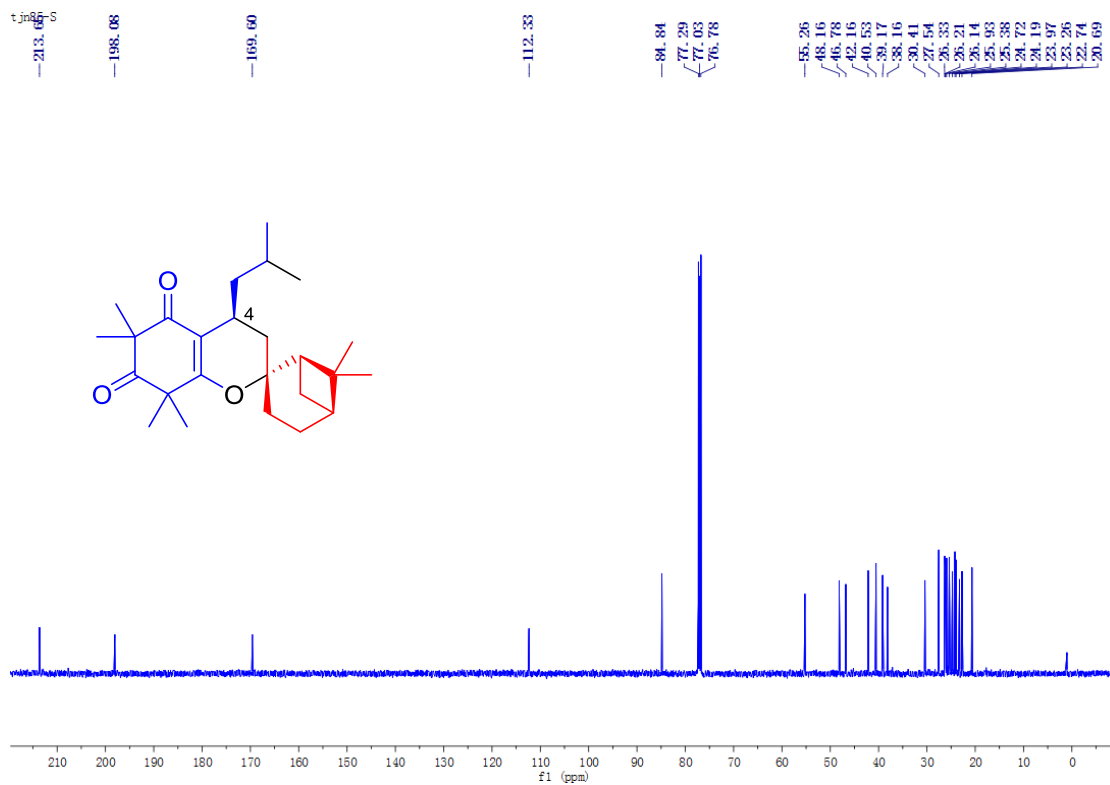


Figure S17.  $^{13}\text{C}$  NMR spectrum (125 MHz,  $\text{CDCl}_3$ ) of synthetic **2**.

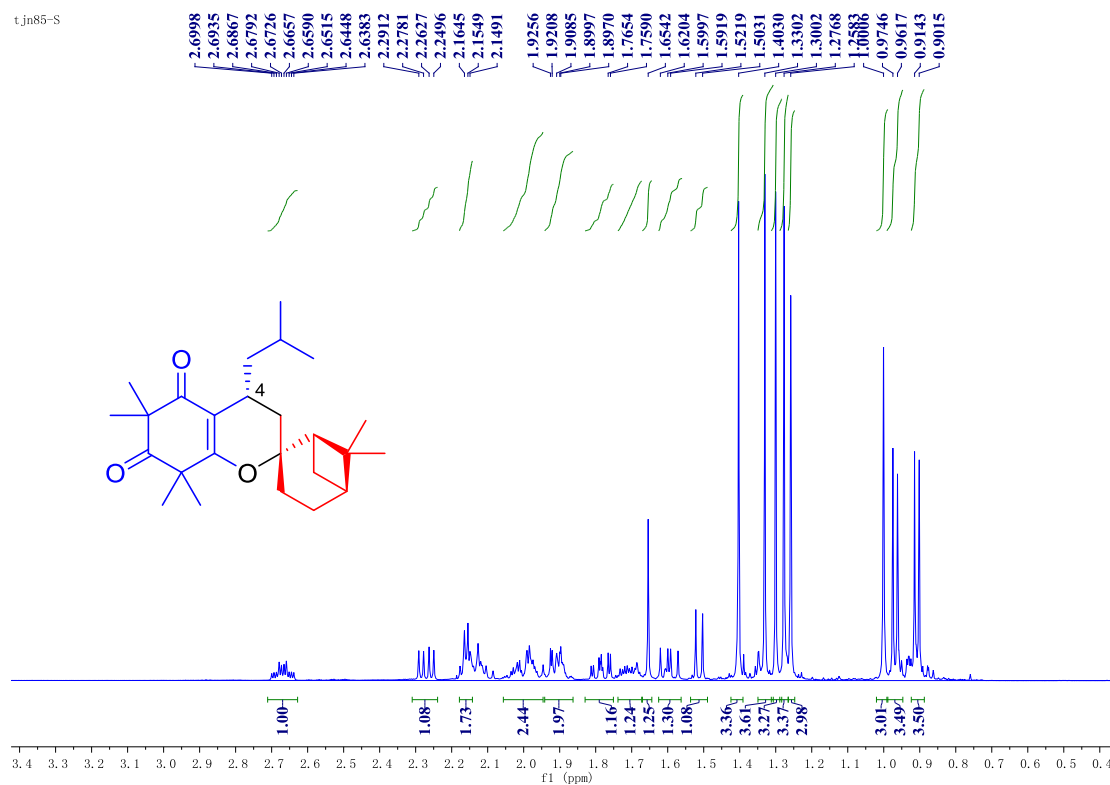


Figure S18.  $^1\text{H}$  NMR spectrum (500 MHz,  $\text{CDCl}_3$ ) of synthetic **3**.

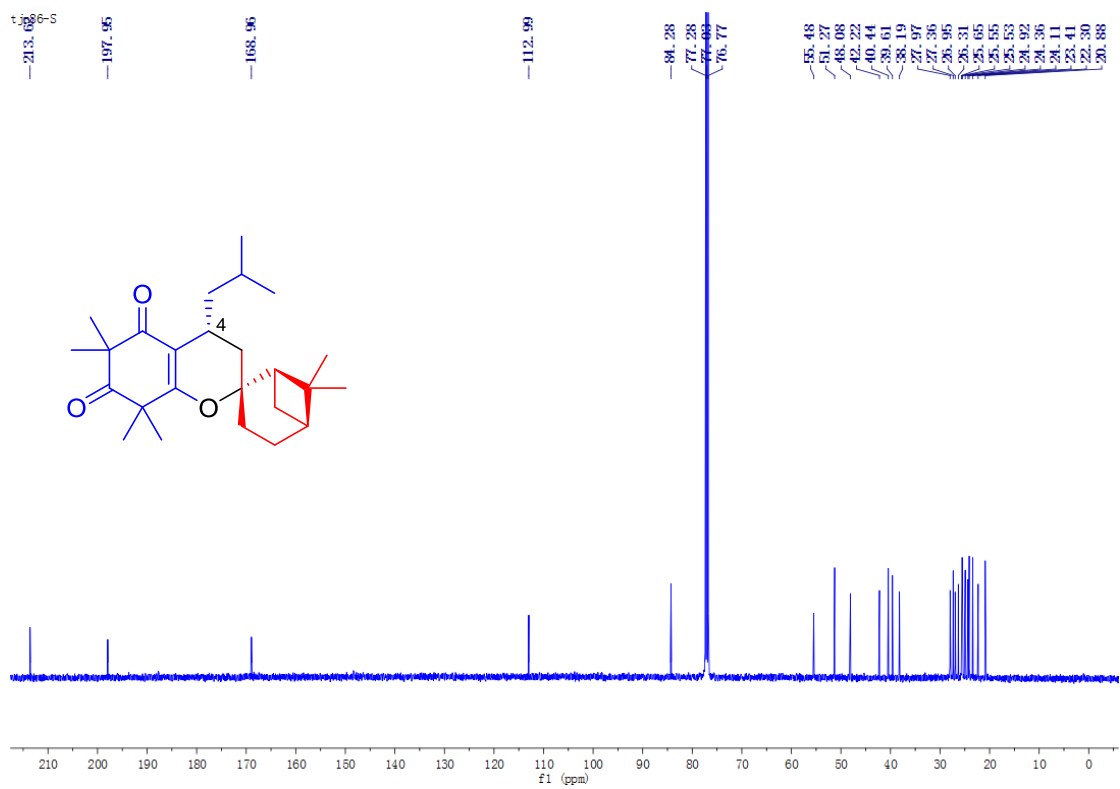


Figure S19.  $^{13}\text{C}$  NMR spectrum (125 MHz,  $\text{CDCl}_3$ ) of synthetic **3**.