



## Supplementary Material

# Alpha-glucosidase and Bacterial Beta-glucuronidase Inhibitors from the Stems of *Schisandra sphaerandra*

Guiwei Rao <sup>1,2,#</sup>, Hangfei Yu <sup>1,#</sup>, Manlai Zhang; <sup>1</sup>Yuchen Cheng; <sup>3</sup>Kun Ran <sup>1</sup>, Jianwei Wang <sup>1</sup>, Bin Wei <sup>1</sup>, Min Li <sup>4</sup>, Weiguang Shan <sup>1</sup>, Zhajun Zhan <sup>1</sup>, Youmin Ying <sup>1,\*</sup>

<sup>1</sup> College of Pharmaceutical Science, Zhejiang University of Technology, Hangzhou 310014, China;

<sup>2</sup> Interdisciplinary Research Academy, Zhejiang Shuren University, Hangzhou 310015, China;

<sup>3</sup> University of Edinburgh Institute, Zhejiang University, Haining, 314400, China;

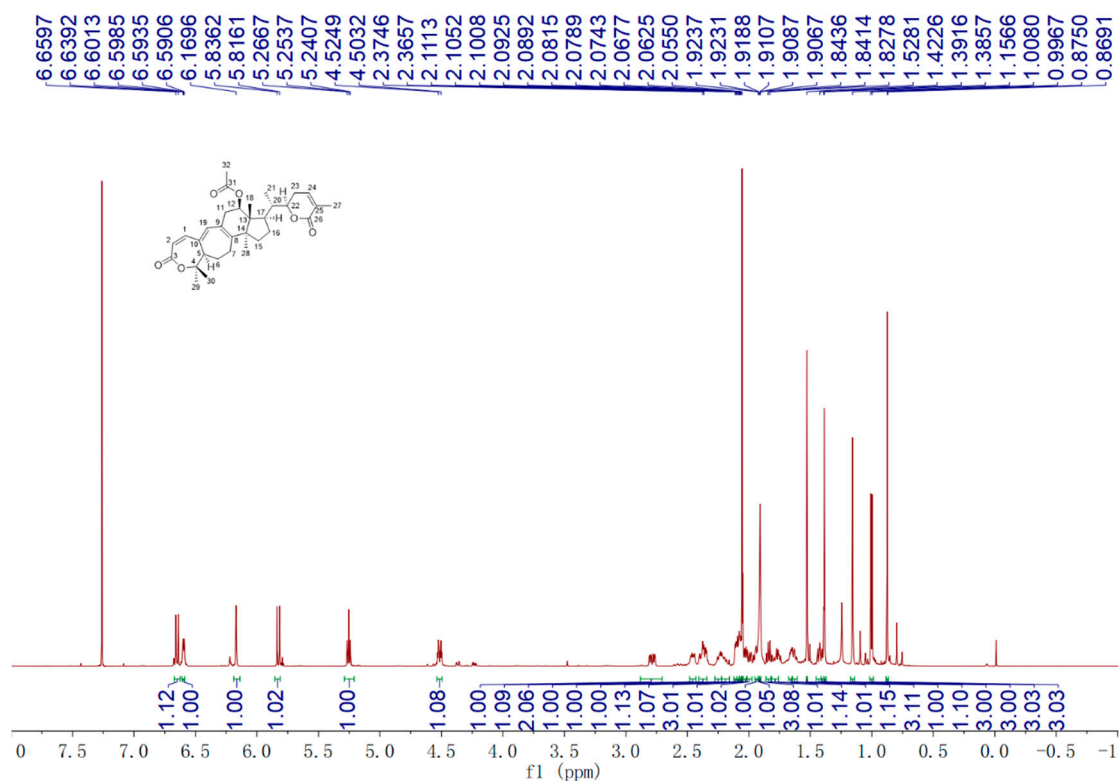
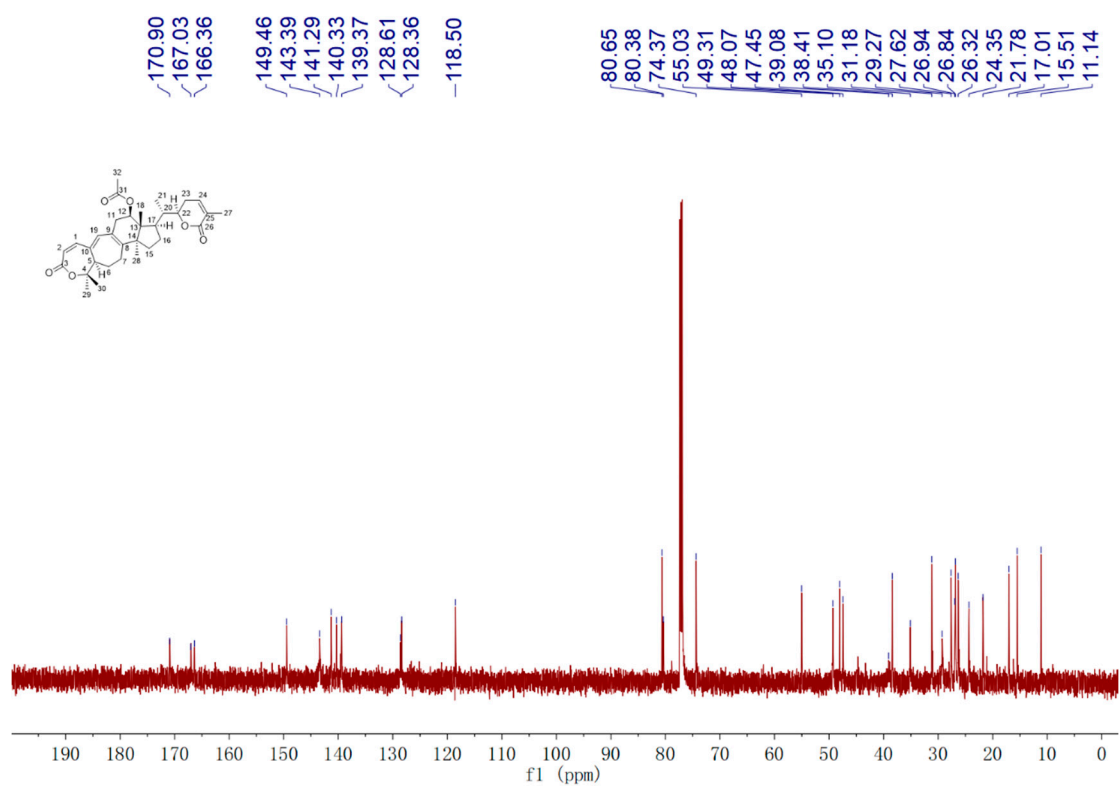
<sup>4</sup> Zhejiang Huahai Pharmaceutical Co. Ltd., Taizhou, 317000, China;

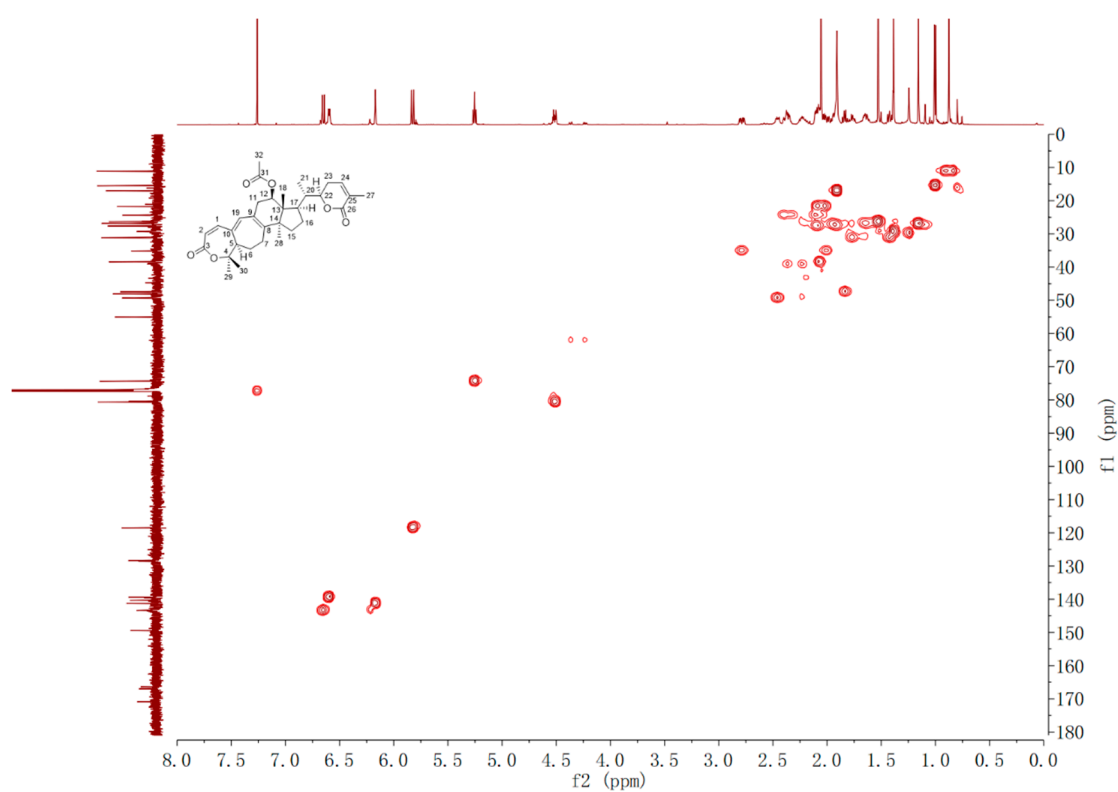
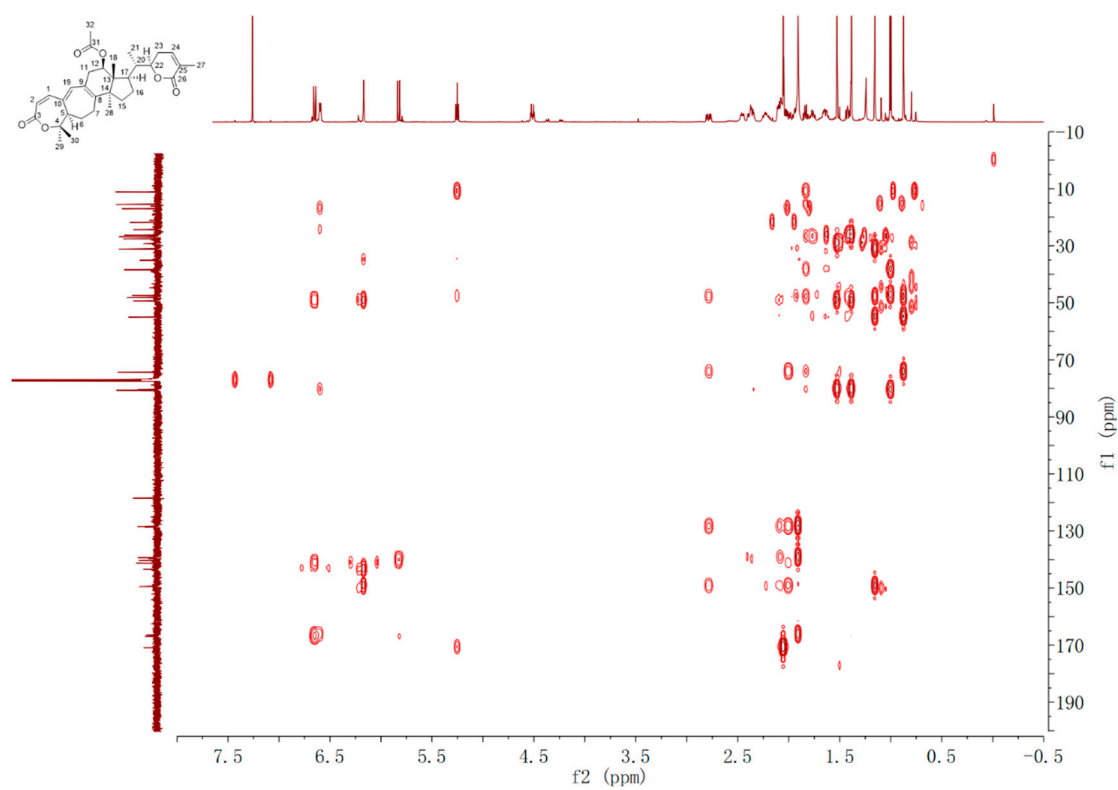
\* Correspondence: ymying@zjut.edu.cn;

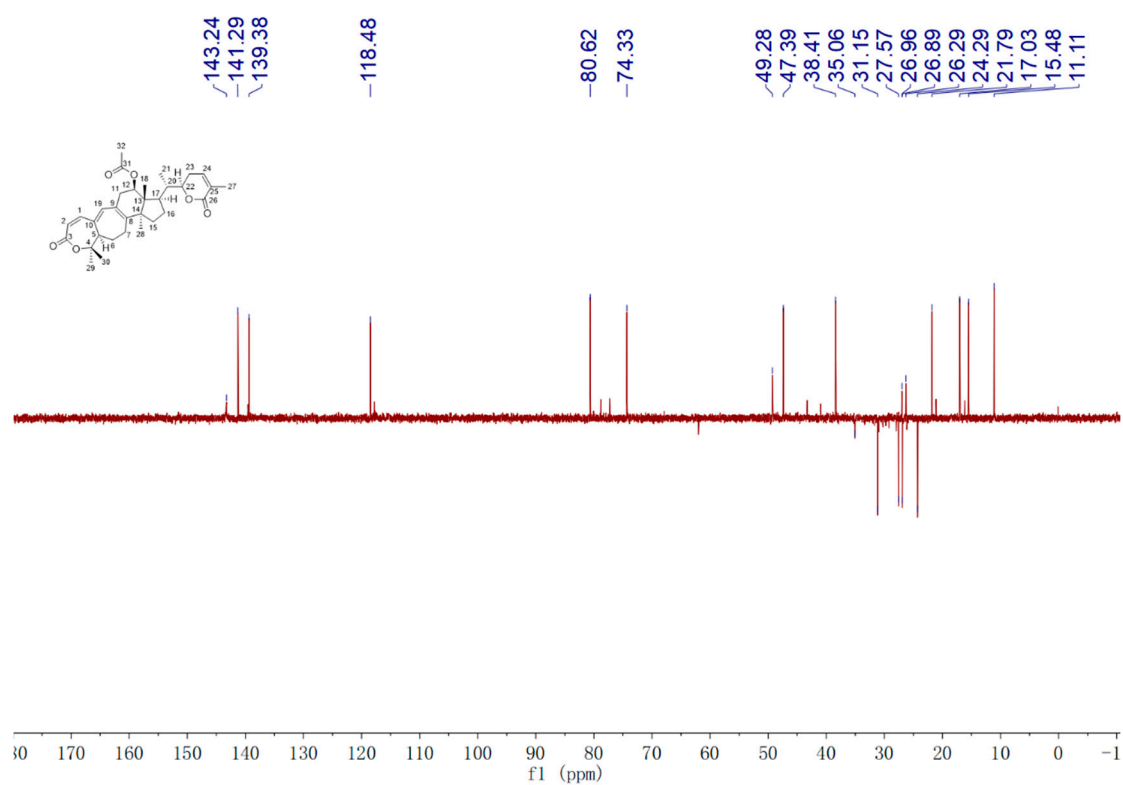
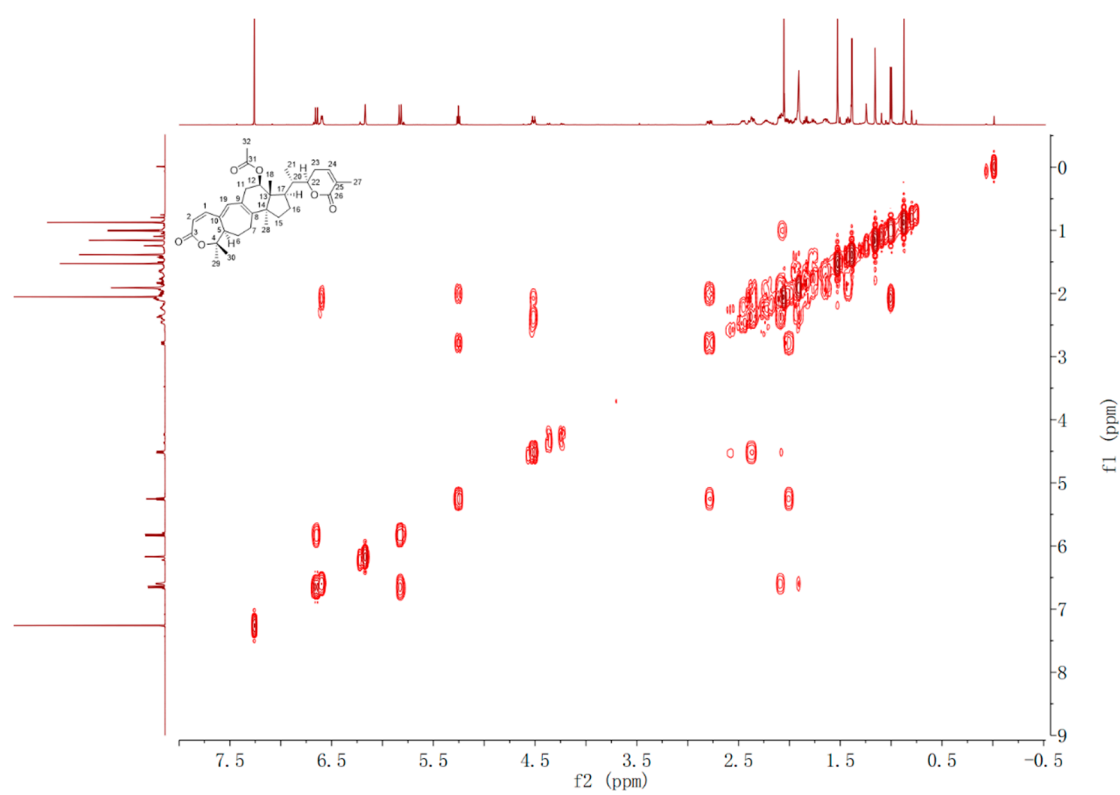
# These authors contributed equally;

## CONTENTS

Figure S1. <sup>1</sup> H NMR spectrum of <b>1</b> in CDCl <sub>3</sub> (600 MHz) .....	2
Figure S2. <sup>13</sup> C NMR spectrum of <b>1</b> in CDCl <sub>3</sub> (125 MHz) .....	2
Figure S3. HSQC spectrum of <b>1</b> in CDCl <sub>3</sub> .....	3
Figure S4. HMBC spectrum of <b>1</b> in CDCl <sub>3</sub> .....	3
Figure S5. DEPT spectrum of <b>1</b> in CDCl <sub>3</sub> .....	4
Figure S6. <sup>1</sup> H- <sup>1</sup> H COSY spectrum of <b>1</b> in CDCl <sub>3</sub> .....	4
Figure S7. NOESY spectrum of <b>1</b> in CDCl <sub>3</sub> .....	5
Figure S8. The IR (KBr disc) spectrum of <b>1</b> .....	5
Figure S9. The (+)-HRESIMS spectroscopic data of <b>1</b> .....	6
Figure S10. UV spectrum of <b>1</b> .....	6

Figure S1. <sup>1</sup>H NMR spectrum of 1 in CDCl<sub>3</sub> (600 MHz)Figure S2. <sup>13</sup>C NMR spectrum of 1 in CDCl<sub>3</sub> (125 MHz)

Figure S3. HSQC spectrum of **1** in CDCl<sub>3</sub>Figure S4. HMBC spectrum of **1** in CDCl<sub>3</sub>

Figure S5. DEPT spectrum of **1** in CDCl<sub>3</sub>Figure S6. <sup>1</sup>H-<sup>1</sup>H COSY spectrum of **1** in CDCl<sub>3</sub>

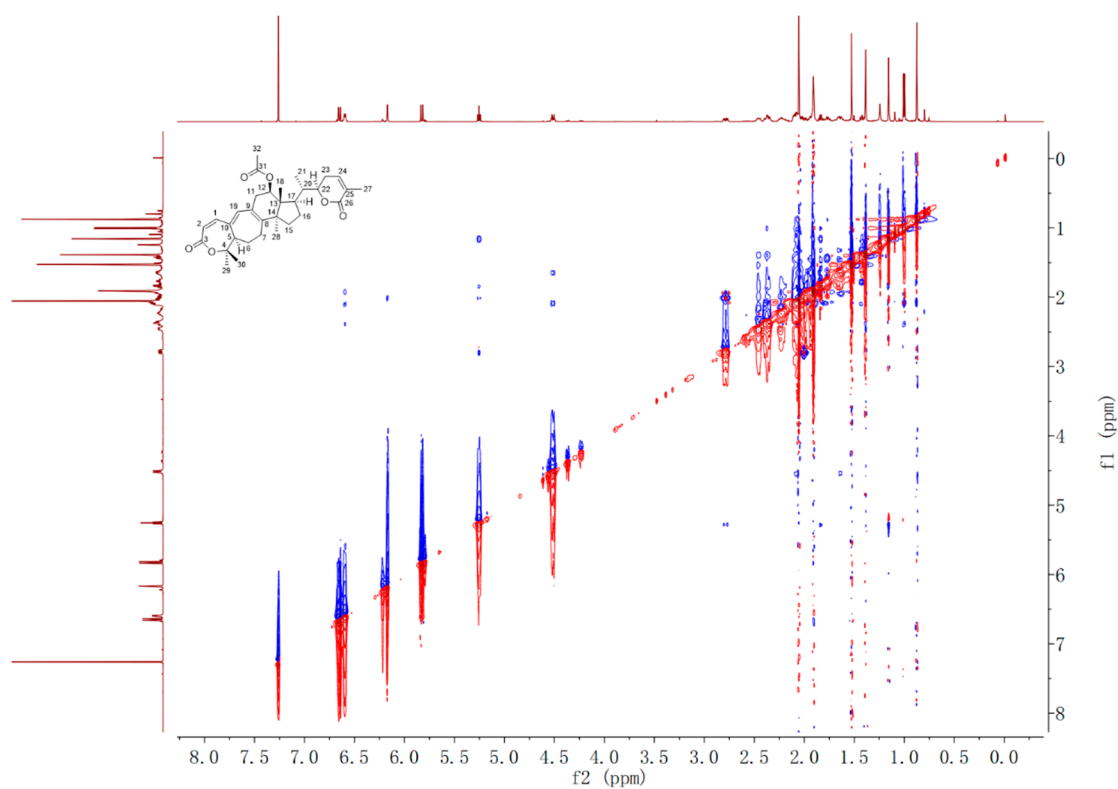


Figure S7. NOESY spectrum of **1** in CDCl<sub>3</sub>

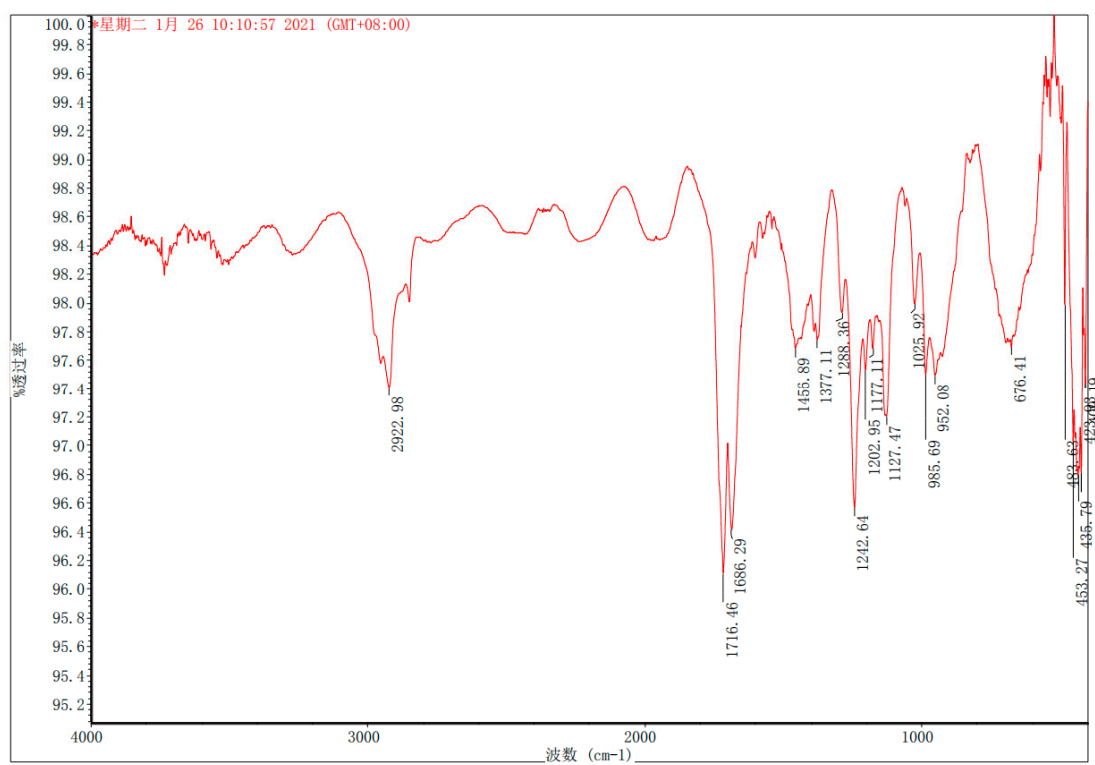
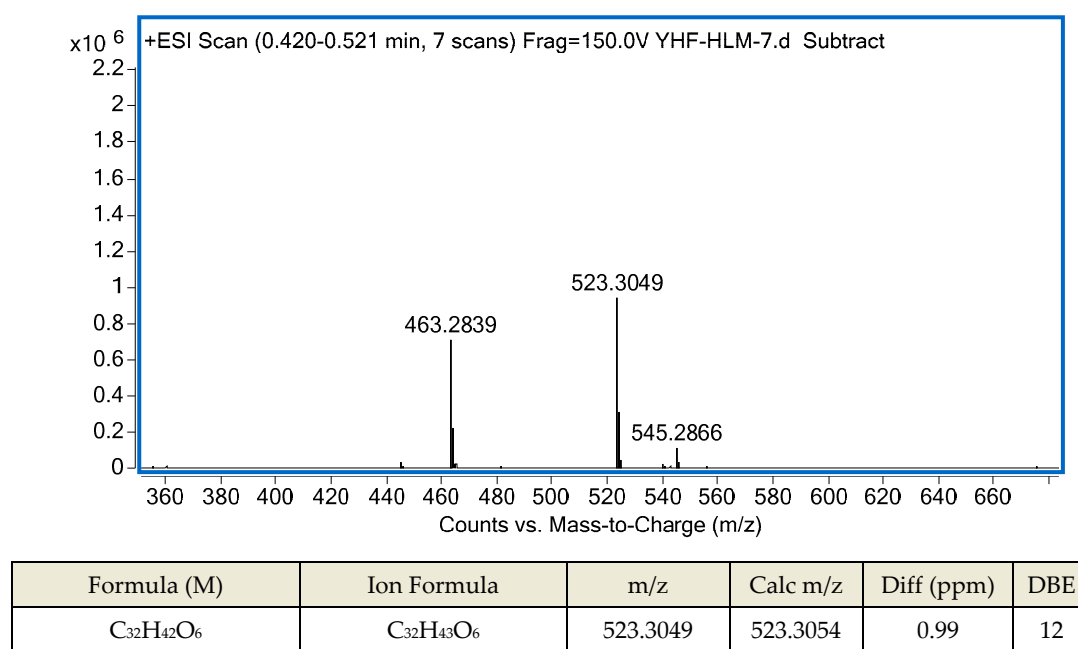
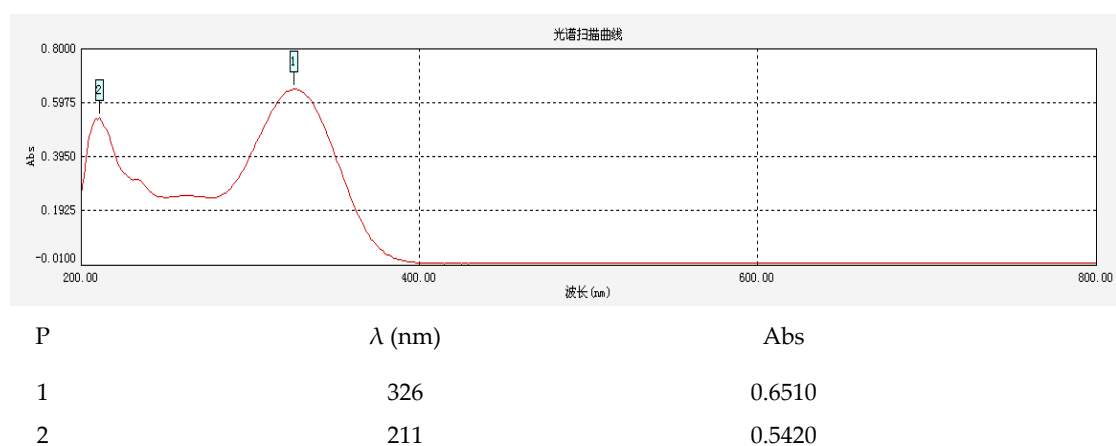


Figure S8. The IR (KBr disc) spectrum of **1**

Figure S9. The (+)-HRESIMS spectroscopic data of **1**Figure S10. UV spectrum of **1**