Chlojaponilactone B Attenuates Lipopolysaccharide-Induced Inflammatory Responses by Suppressing TLR4-Mediated ROS Generation and NF-KB Signaling Pathway

Shaoxia Ye¹, Qiyao Zheng¹, Yang Zhou¹, Bai Bai¹, Depo Yang^{1,2} and Zhimin Zhao^{1,2*}

¹ School of Pharmaceutical Sciences, Sun Yat-sen University, Guangzhou,

Guangdong 510006, People's Republic of China

yeshx9@mail2.sysu.edu.cn (S.Y.); zhengqy5@mail2.sysu.edu.cn (Q.Z.);

zhouy596@mail2.sysu.edu.cn (Z.Y.); baib6@mail2.sysu.edu.cn (B.B.);

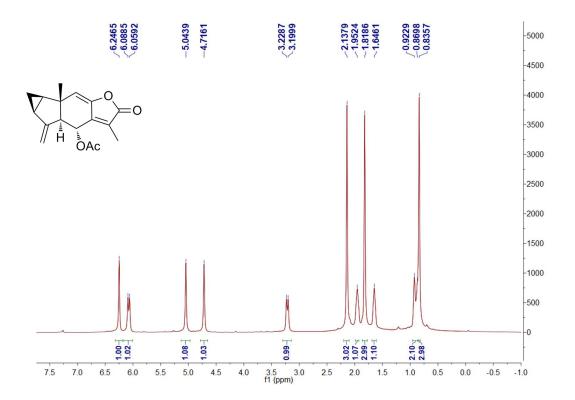
lssydp@mail.sysu.edu.cn (D.Y.); zhaozhm2@mail.sysu.edu.cn (Z.Z.)

² Guangdong Technology Research Center for Advanced Chinese Medicine,

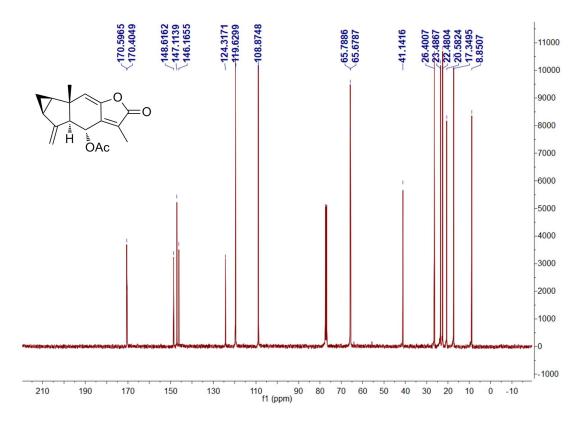
Guangzhou, Guangdong 510006, People's Republic of China

* Correspondence: zhaozhm2@mail.sysu.edu.cn; Tel.: +86-020-39943043

Figure	Content	Page
S1	¹ H NMR spectrum of chlojaponilactone B (1)	3
S2	¹³ C NMR spectrum of chlojaponilactone B (1)	4
S3	Cytotoxicity Test	5
S4	Figure S1. Determination of the cytotoxic effects of 1 and TAK-242	6



S1. ¹H NMR spectrum of chlojaponilactone B (1) (CDCl₃, 400 MHz)



S2. ¹³C NMR spectrum of chlojaponilactone B (1) (CDCl₃, 100 MHz)

S3. *Cytotoxicity Test*

Cell viability was analyzed using the 3-(4,5-dimetrylthiazol)-2,5diphenyltetrazolium bromide (MTT) assay. RAW 264.7 macrophages were seeded at a density of 5×10^3 cells/well in 96-well plates for 24 h. The cells were then treated with 1 or TAK-242 at various concentrations with or without LPS (1µg/ml) for 24h. An equal concentration of a solvent vehicle (DMSO, 0.5%) was included as the control. MTT (5 mg/mL in sterile PBS) solution was added to the culture (20 µL/well), followed by incubation for 4 h. Finally, the medium was removed, 100 µL DMSO was added to each well, and absorbance was measured at 490 nm by using a microplate reader (Molecular Devices, Sunnyvale, CA, USA).

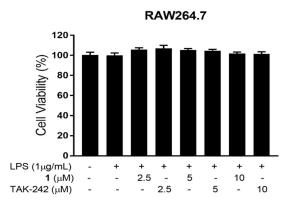


Figure S1. Determination of the cytotoxic effects of 1 and TAK-242 in LPS-induced RAW264.7 cells. Cells were incubated with increasing concentrations of 1 (2.5, 5 or 10 μ M) or TAK-242 (2.5, 5 or 10 μ M) and treated with LPS (1 μ g/mL). The cell viability was examined with the MTT assay.