SUPPLEMENTARY MATERIAL

A new anti-inflammatory β -carboline alkaloid from the hairy-root cultures of *Eurycoma longifolia*

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Abstract

One new β -carboline alkaloid 7-methoxy-(9H- β -carbolin-1-yl)-(E)-2-propenoic acid (**1**) together with 9-methoxycanthin-6-one (**2**) and 9-hydroxycanthin-6-one (**3**) were isolated from the hairy-root cultures of *Eurycoma longifolia*. The effects of these compounds on lipopolysaccharide (LPS)-induced nitric oxide (NO) production in RAW264.7 cells were investigated. Compound **1** strongly inhibited the production of NO while **2** and **3** having weak or inactive effect. Consistently, compound **1** decreased the expression of cyclooxygenase-2 (COX-2) and inducible nitric oxide synthase (iNOS).

Keywords: *Eurycoma longifolia*; hairy-root cultures; β -carboline alkaloid

Figure S1. ¹H-NMR spectrum of **1**

Figure S2. ¹³C-NMR spectrum of **1**

Figure S3. DEPT spectrum of **1**

Figure S4. HSQC spectrum of **1**

Figure S5. HMBC spectrum of **1**

Figure S6. Inhibition of LPS-induced iNOS and COX-2 expression in RAW264.7 cells by compound **1**. Cells were pretreated with compound at different concentrations for 30 min followed by stimulation with LPS (1 μ g/ml) for 24 h. iNOS and COX-2 proteins in cell lysates were examined by Western blot. α -Tubulin was used as a loading control.