SUPPLEMENTARY MATERIAL

One new flavanocoumarin from the thorns of *Gleditsia sinensis*

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Abstract: One new flavanocoumarin (**1**), as well as six known flavonoids (**2-7**), was isolated from the ethyl acetate extract of the thorns of *Gleditsia sinensis*. The structures of these compounds were elucidated by extensive spectroscopic measurements and comparison with data reported in literatures. Cytotoxic activities of compounds **1-6** were evaluated against human liver cancer SK-hep-1 cells *in vitro* by the MTT method, with compound **1** displaying moderate activity (IC₅₀ of 62.53 μM). Furthermore, compound **1** could increase the number of apoptosis cells in a concentration-dependent manner.

Keywords: *Gleditsia sinensis*; Flavanocoumarin; Cytotoxic activity; Apoptosis

Supporting Information

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Figure S1. The HREIMS Spectroscopic Data of Compound **1**

Figure S2. The ¹H NMR Spectrum of Compound **1** in DMSO-*d*₆ (500 MHz)

Figure S3. The ¹³C NMR Spectrum of Compound **1** in DMSO-*d*₆ (125 MHz)

Figure S4. The HSQC Spectrum of Compound **1** in DMSO- d_6

Figure S5. The HMBC Spectrum of Compound **1** in DMSO- d_6

Figure S6. Key correlations in HMBC ($\rightarrow$) of compound **1**.