SUPPLEMENTARY MATERIAL

A novel diarylheptanoid-bearing sesquiterpene moiety from the rhizomes of *Alpinia officinarum*

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A new diarylheptanoid analogue-bearing sesquiterpene moiety, named Alpinisin A, was isolated from the rhizomes of *Alpinia officinarum* Hance. The new structure was determined by various spectroscopic techniques (\(^{1}H\) and \(^{13}C\) APT, HSQC, HMBC, \(^{1}H\)-\(^{1}H\) COSY, NOESY, and HR-ESI-MS). The compound was tested for cytotoxic activity *in vitro* against human tumor cell lines (SGC-7901, MCF-7, and Caski), which showed significant inhibitory effects with IC\(_{50}\) levels of 11.42, 15.14, and 14.78 \(\mu\)M, respectively. The novel chemical structure characterized with a diarylheptanoid linked to a chain-like sesquiterpenoid should be highlighted.

**Keywords**: *Alpinia officinarum* Hance, Alpinisin A, cytotoxicity activity
Figure S1  Key HMBC (→) and $^1$H-$^1$H COSY (—) correlations of compound 1

Figure S2  Key NOESY correlations of compound 1
Figure S3 $^1$H-NMR spectrum of compound 1

Figure S4 $^{13}$C-APT spectrum of compound 1
Figure S5 HSQC spectrum of compound 1

Figure S6 $^1$H-$^1$H COSY spectrum of compound 1
Figure S7 HMBC spectrum of compound1

Figure S8 NOESY spectrum of compound1
Figure S9 IR spectrum of compound 1
Figure S10 HR-MS spectrum of compound 1