**Supplementary materials**

**New polyoxygenated polyketide from pathogenic fungus *Cylindrocarpon* *destructans* with α-glycosidase inhibitory activity**

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**Abstract** Photochemical investigation on pathogenic fungus *Cylindrocarpon destructans* isolated form *Meconopsisgrandis* plant led to the isolation of one new polyoxygenated polyketides, namely *cylindrocarpolide A* (**1**) along with five known compounds (**2-6**). The structures of the isolated compounds were elucidated by 1D and 2D NMR and mass spectroscopic data analysis. The isolated compounds were evaluated for α-glycosidase inhibition activity. The compounds **1**, **5** and **6** showed potent inhibition with IC50 values of 23.4 ± 0.3, 36.5 ± 0.5 and 52.6 ± 0.6 respectively. Compounds **3** and **4** showed moderate anti-diabetic activity with IC50 values of 82.5 ± 0.8 and 66.3 ± 0.5. Compound **2** did not show inhibition activity at all.

**Keywords:** Pathogenic fungus*, Cylindrocarpon destructans, Meconopsis grandis*, α-glycosidase

These authors contributed equally to this work.

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Figure **S1**. Key HMBC H-C correlation of compound **1**

Figure S2. 1H NMR spectrum of compound 1 in Acetone-d6

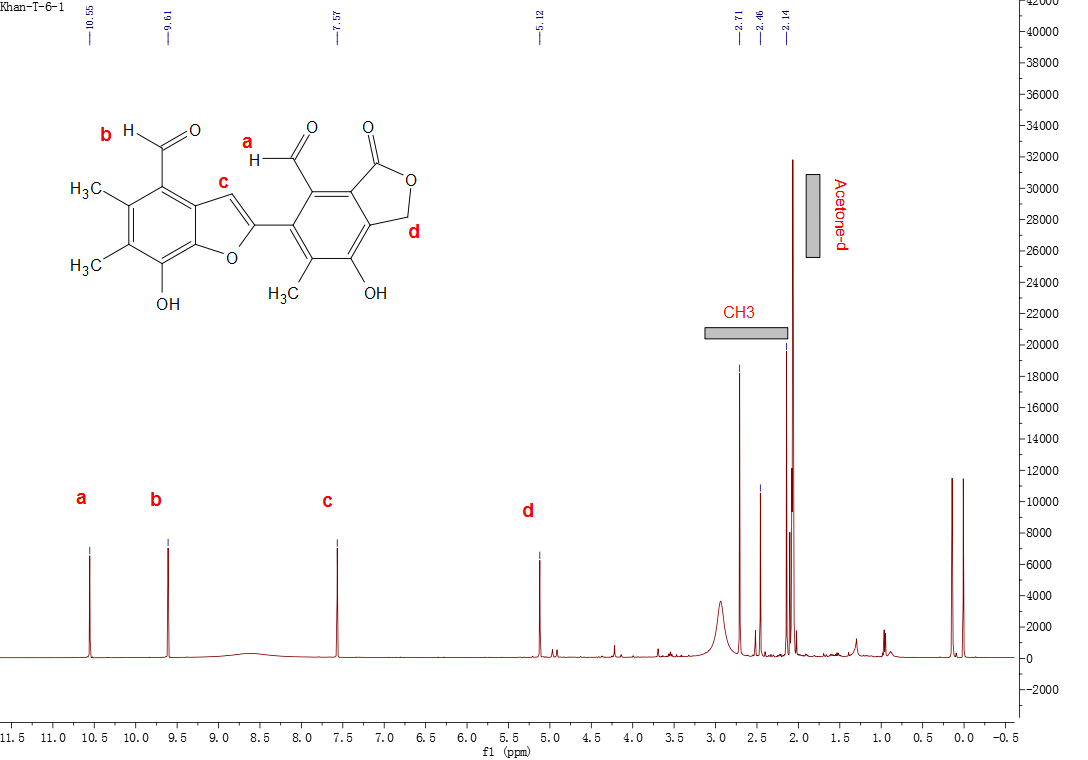


Figure S3. 13C NMR spectrum of compound 1 in Acetone-d6

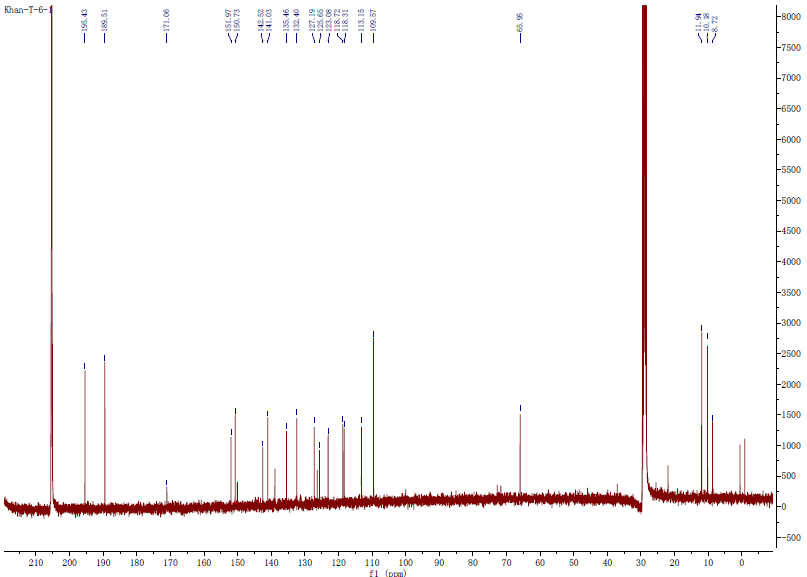


Figure S4. DEPT-135 spectrum of compound 1 in Acetone-d6

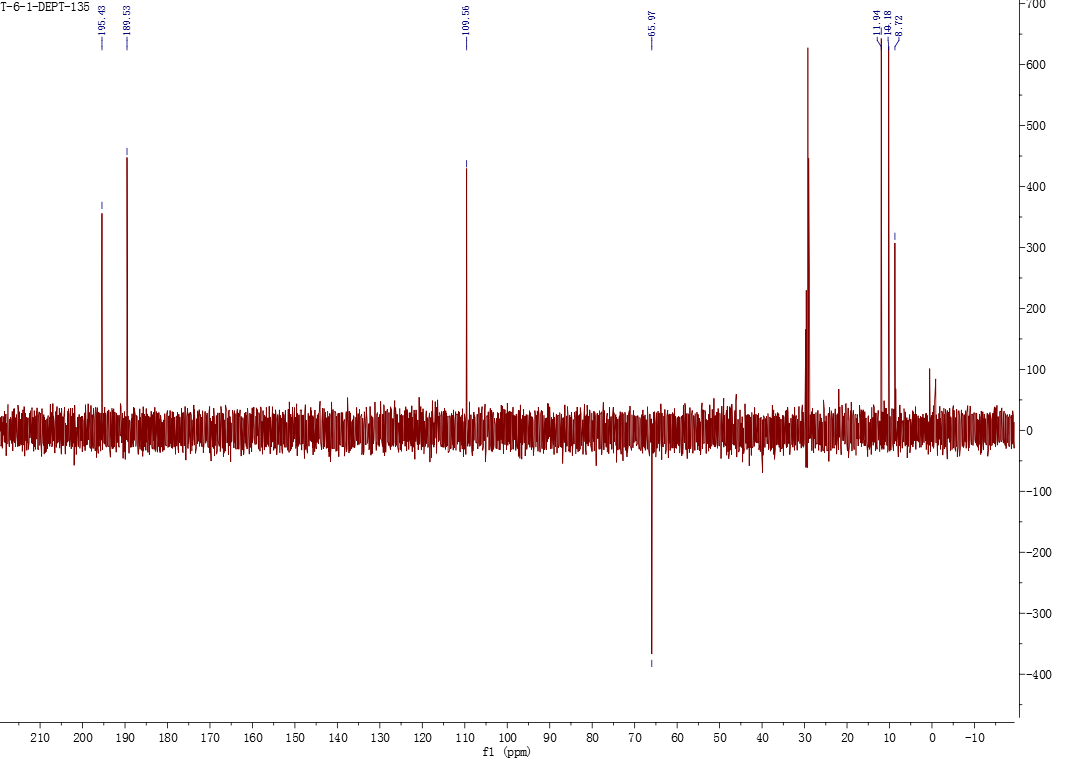


Figure **S5**. The 1H-1H COSEY spectrum of compound **1**

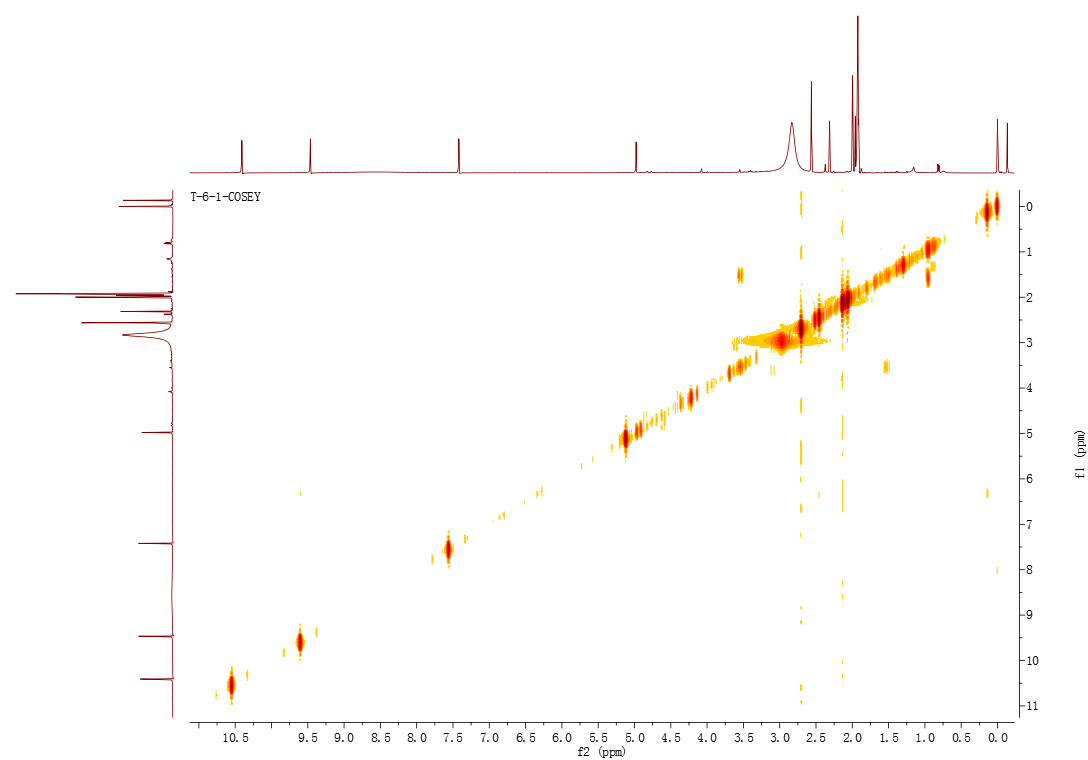


Figure **S6**. HSQC Spectrum of compound **1** in Acetone-d6

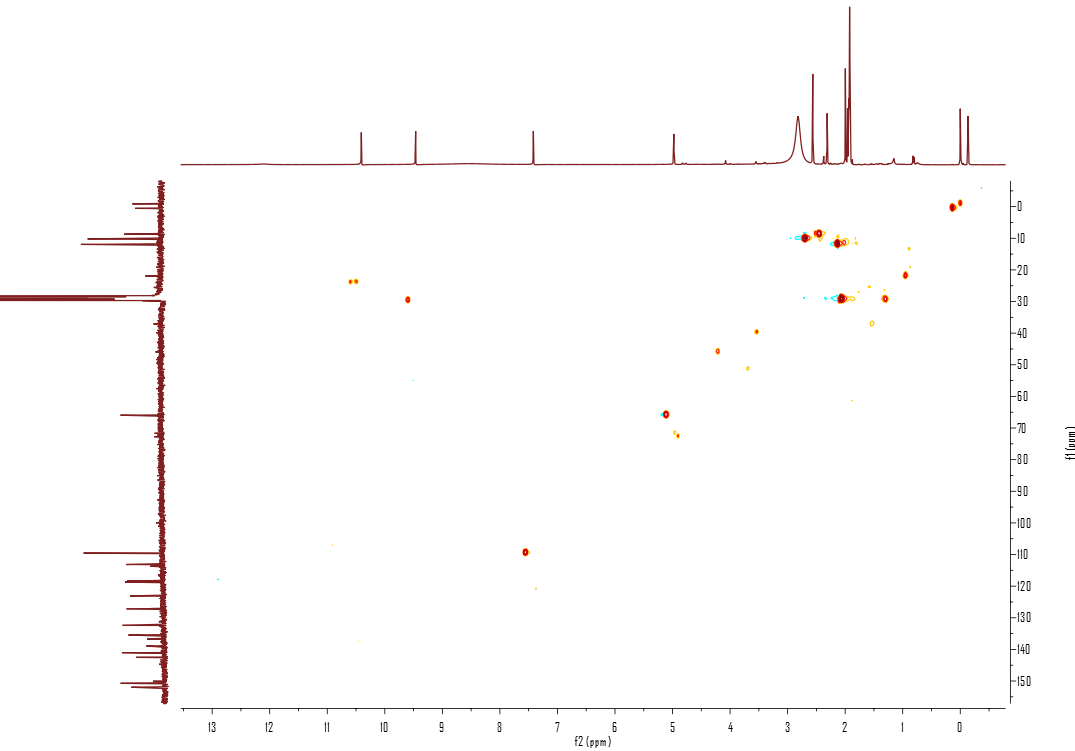


Figure **S7**. HMBC Spectrum of compound **1** in Acetone-d6

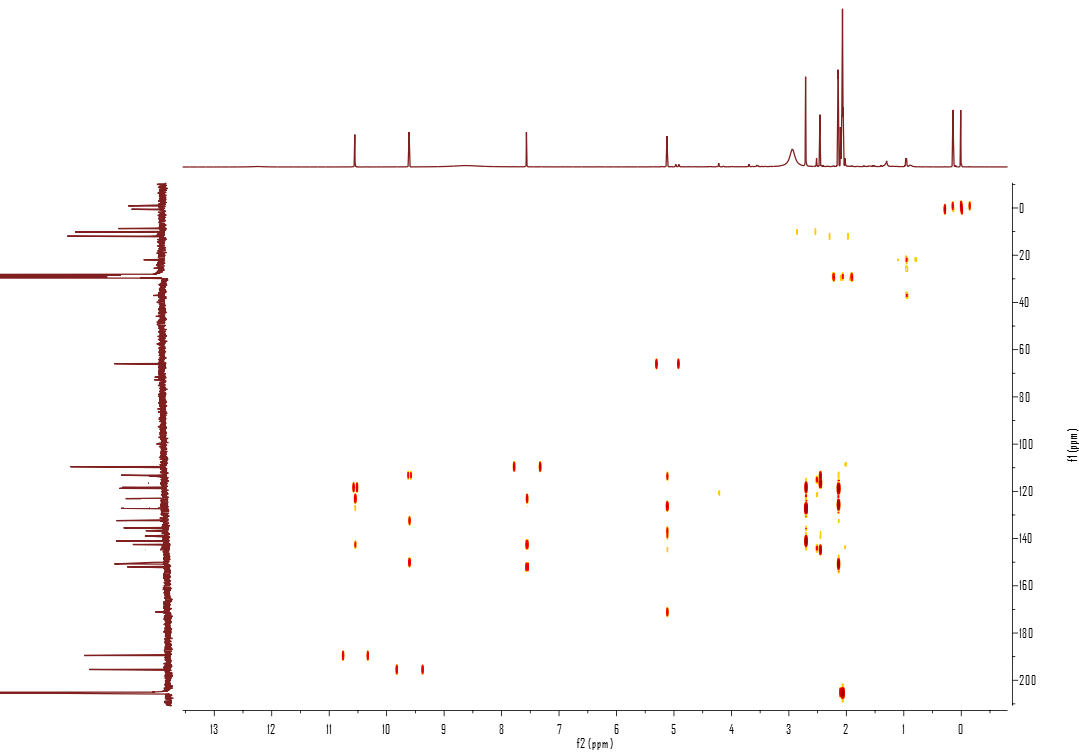


Figure **S8**. (+)-HRESIMS of compound **1**

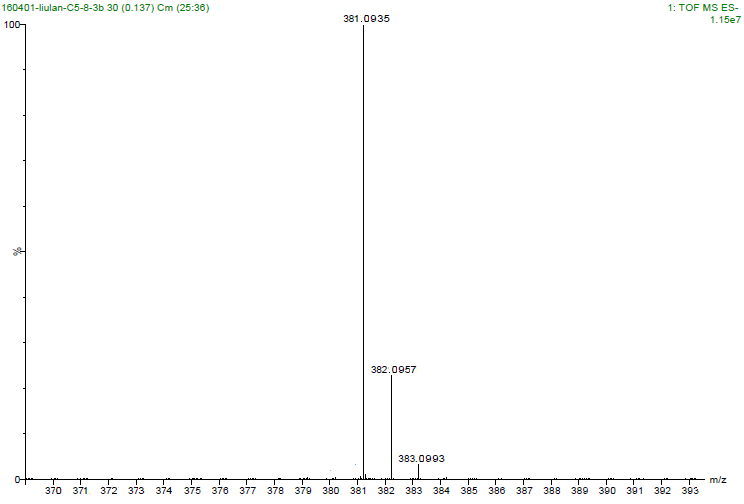


Figure **S9**. 1H NMR Spectrum (400 MHZ) of compound **2** in Acetone-d6

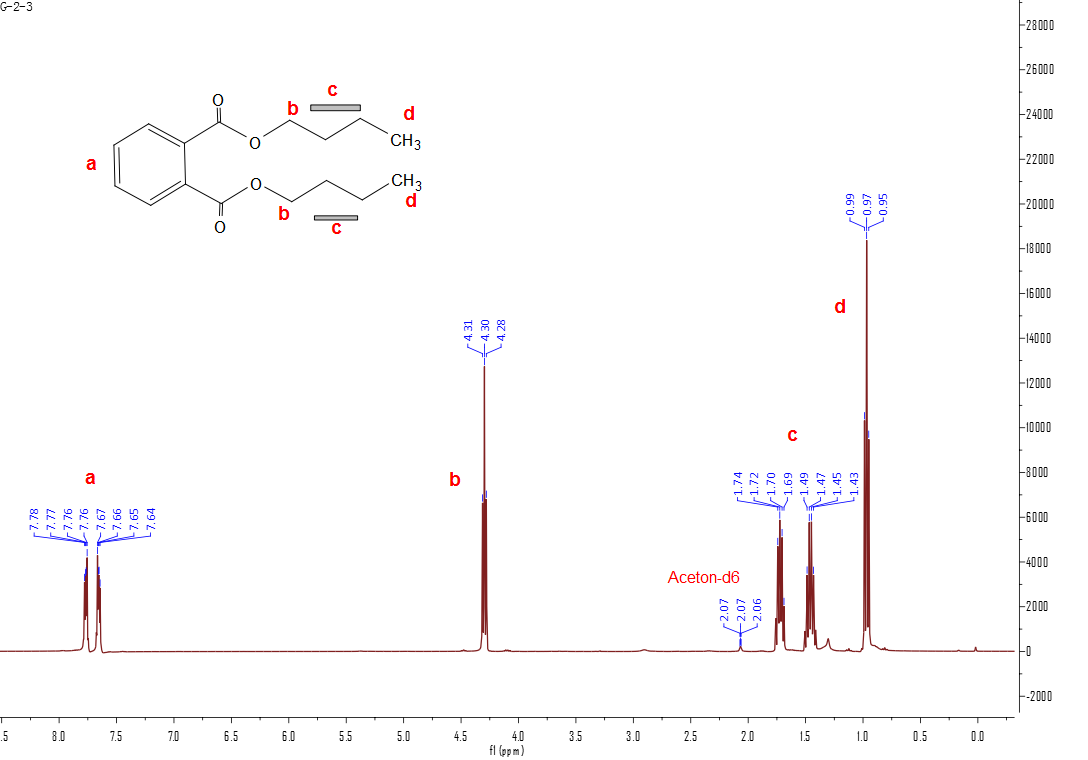


Figure **S10**. 13C NMR Spectrum (100 MHZ) of compound **2** in Acetone-d6

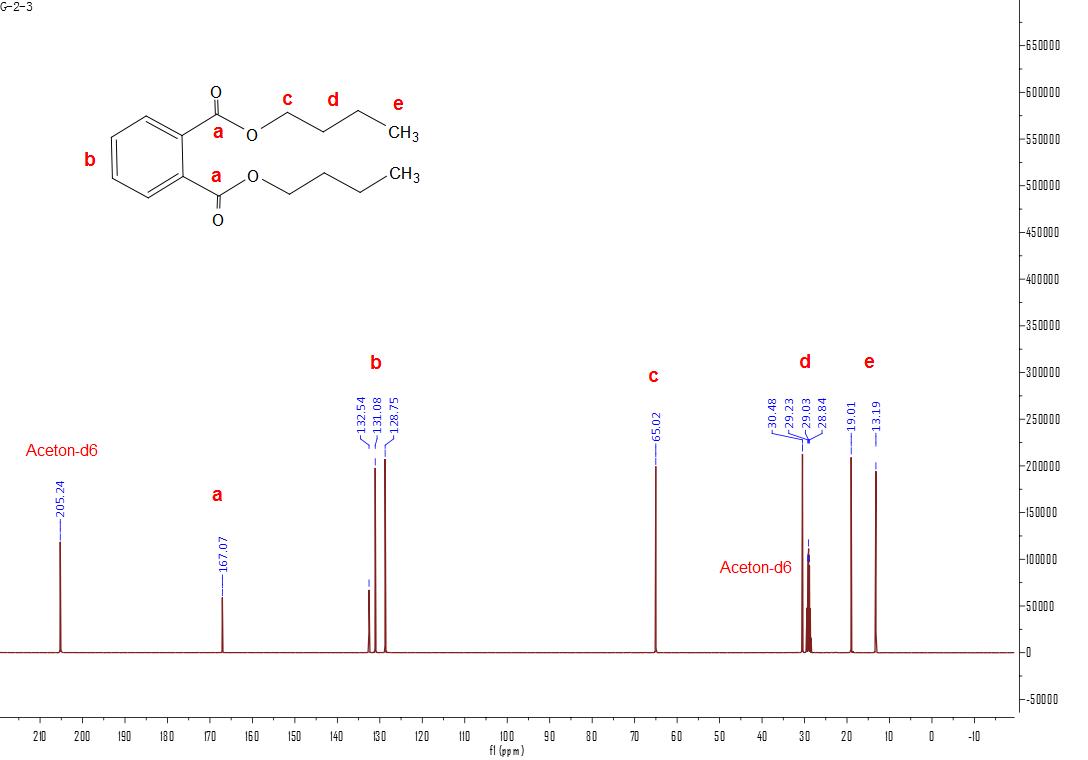


Figure **S11**. 1H NMR Spectrum (400 MHZ) of compound **3** in Acetone-d6



Figure **S12**. 13C NMR Spectrum (100 MHZ) of compound **3** in Acetone-d6

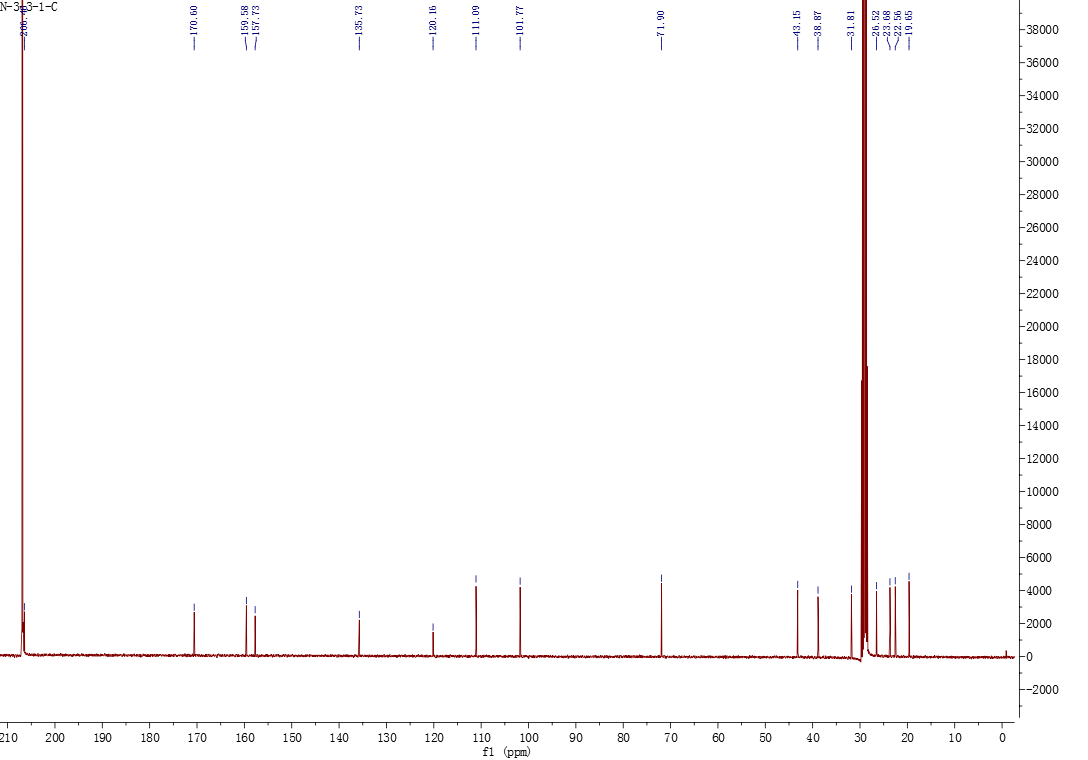


Figure **S13**. 1H NMR Spectrum (400 MHZ) of compound **4** in Acetone-d6

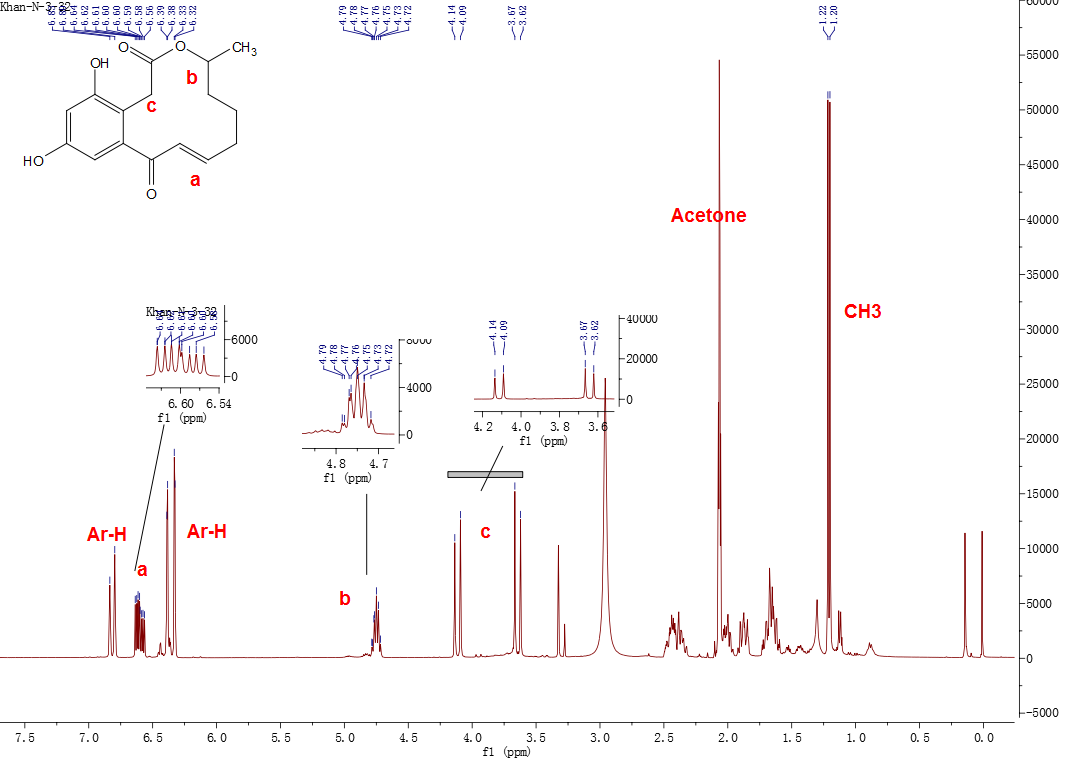


Figure **S14**. 13C NMR Spectrum (100 MHZ) of compound **4** in Acetone-d6

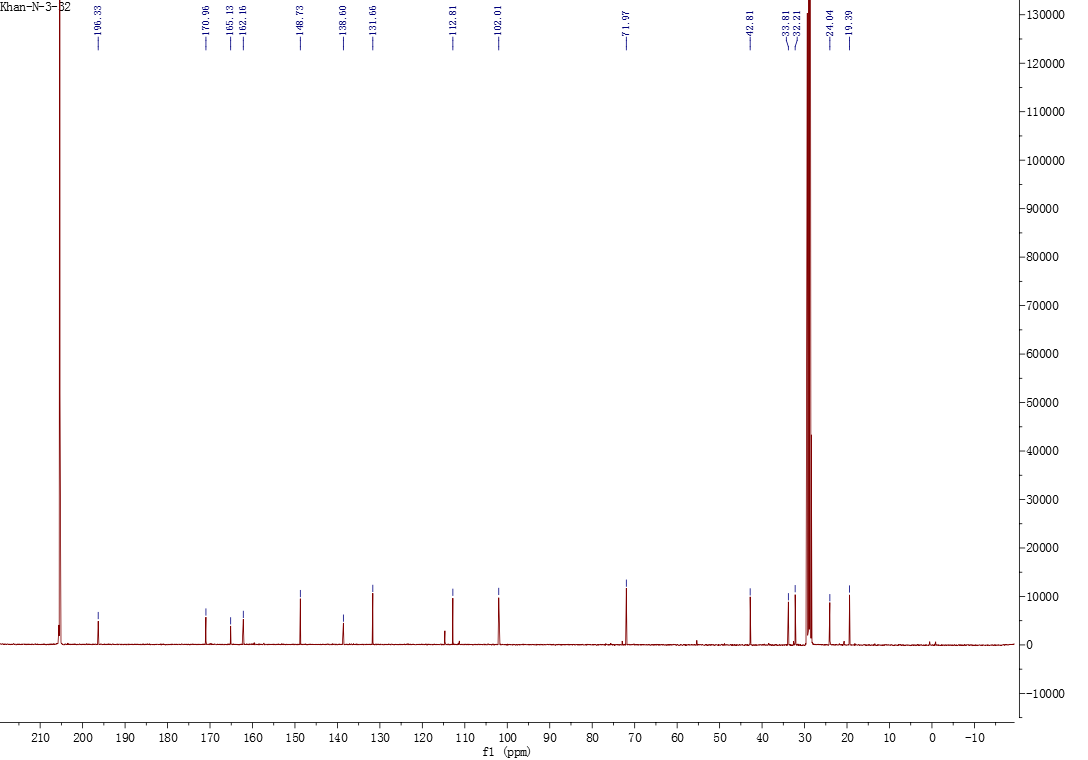


Figure **S15**. 1H NMR Spectrum (400 MHZ) of compound **5** in DMSO-d6

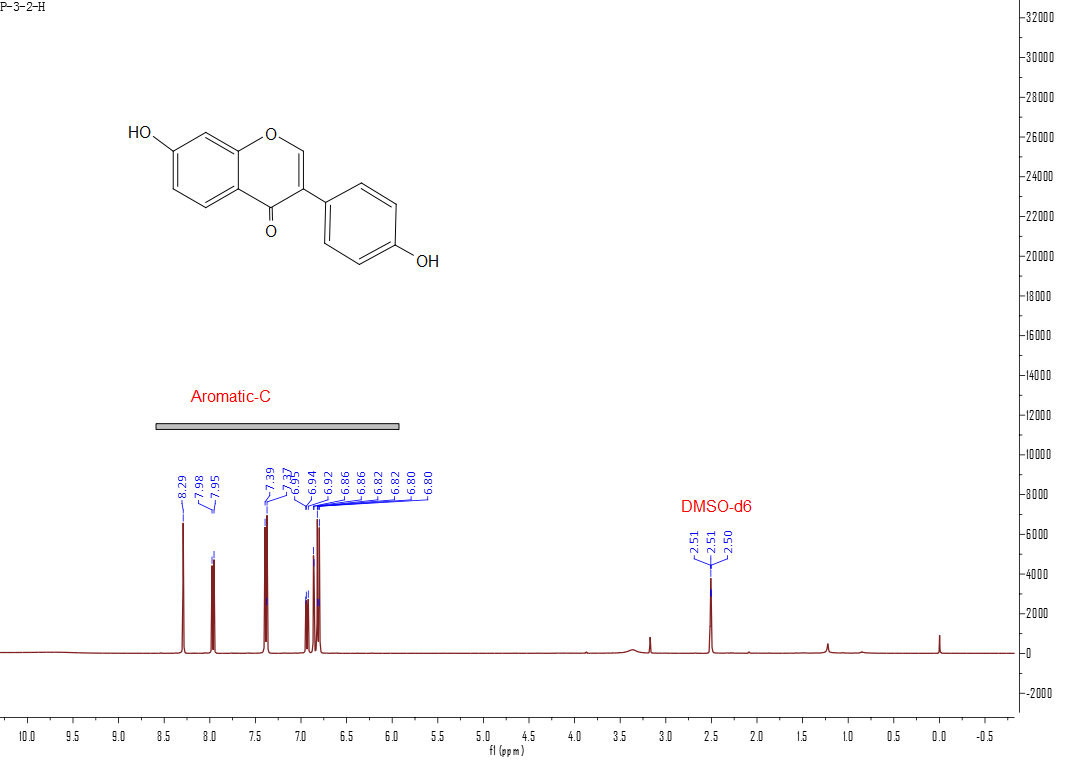


Figure **S16**. 13C NMR Spectrum (100 MHZ) of compound **5** in DMSO-d6

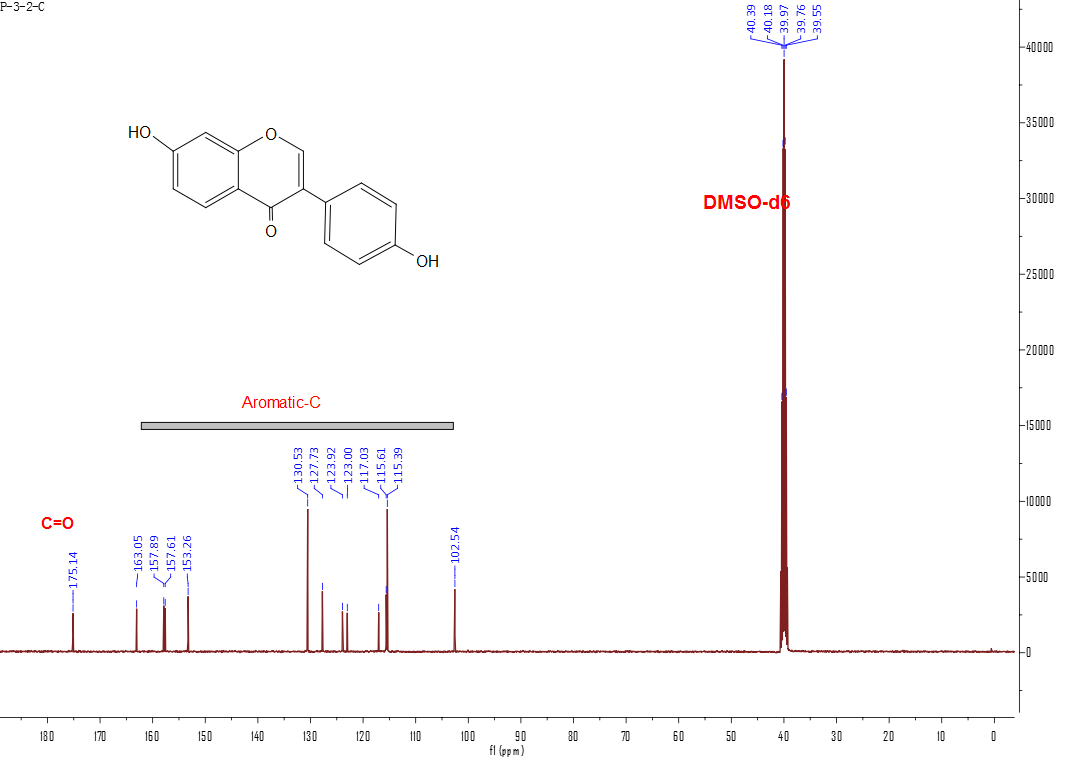


Figure **S17**. 1H NMR Spectrum (400 MHZ) of compound **6** in CDCl3

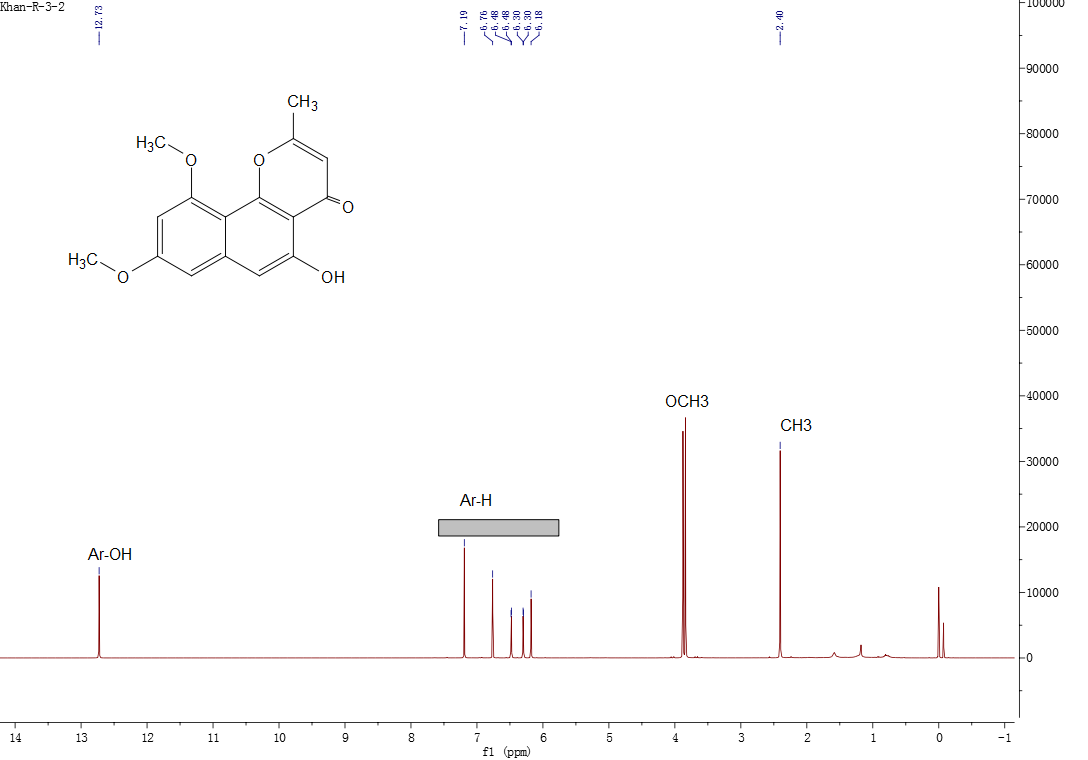


Figure **S18**. 13C NMR Spectrum (100 MHZ) of compound **6** in CDCl3

