

## **Supplementary Materials**

# **Metabolic Profiling and *In Vitro* Assessment of the Biological Activities of the Ethyl Acetate Extract of *Penicillium chrysogenum* “endozoic of *Cliona spp* Marine Sponge,” from the Red Sea (Egypt)**

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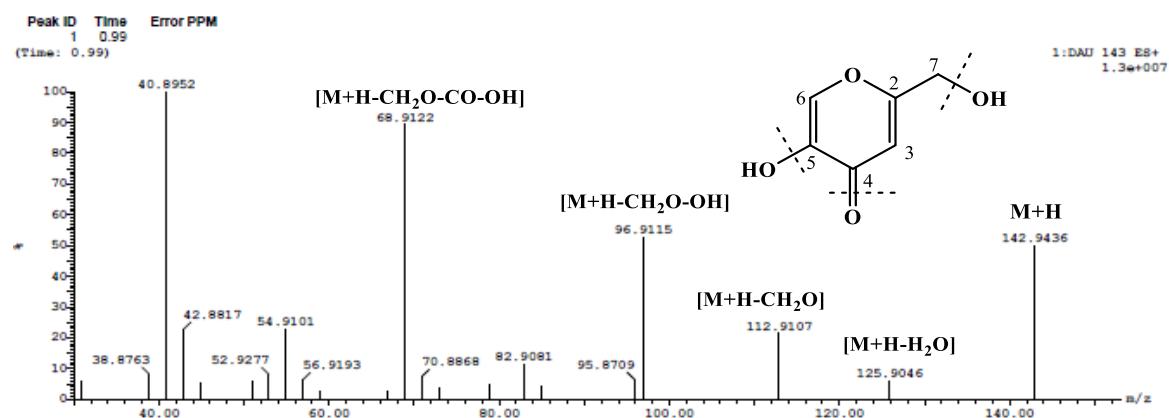
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**Table S1.**  $^1\text{H}$  NMR (400 MHz, DMSO- $d_6$ ) and  $^{13}\text{C}$  NMR (100 MHz, DMSO- $d_6$ ) data for kojic acid

Position	$\delta\text{c}$ , ppm (mult.)	$\delta\text{H}$ , ppm [mult., $J(\text{Hz})$ ]	HMBC (C $\rightarrow$ H)
2	168	--	
3	109.84 (d)	6.33 (s)	H <sub>7</sub> , H <sub>8</sub>
4	173.9 (s)	--	
5	139.3 (s)	--	
6	145.7 (d)	8.02 (s)	H <sub>3</sub> , H <sub>6</sub>
7	59.5 (t)	4.29 (s)	H <sub>3</sub> , H <sub>8</sub>
8	--	5.65 (t)	
9	--	9.04 (s)	



**Figure S1.** Positive ESI-MS/MS spectrum of kojic acid

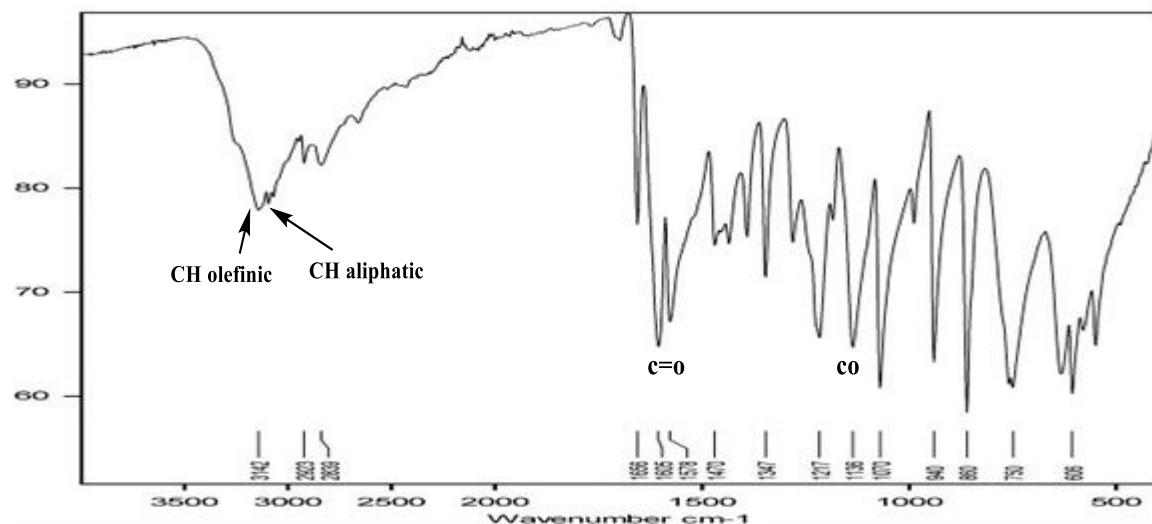


Figure S2. IR spectrum of kojic acid

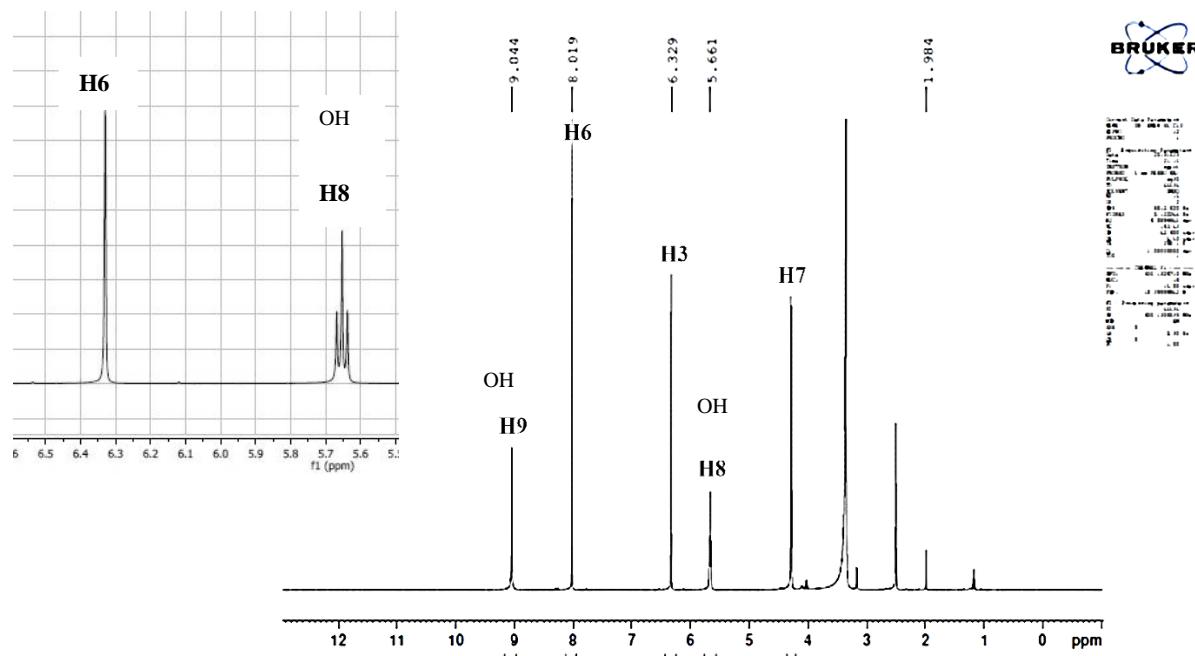
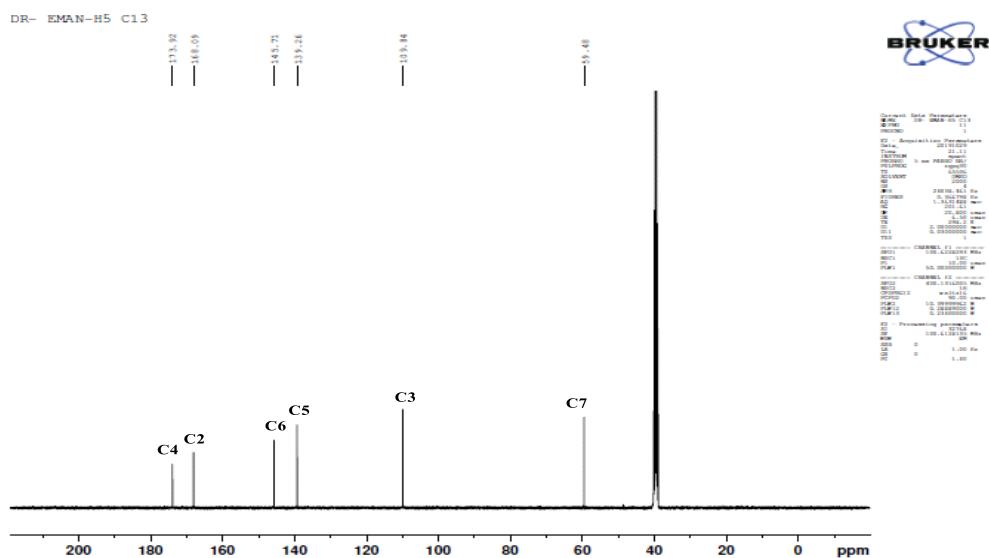
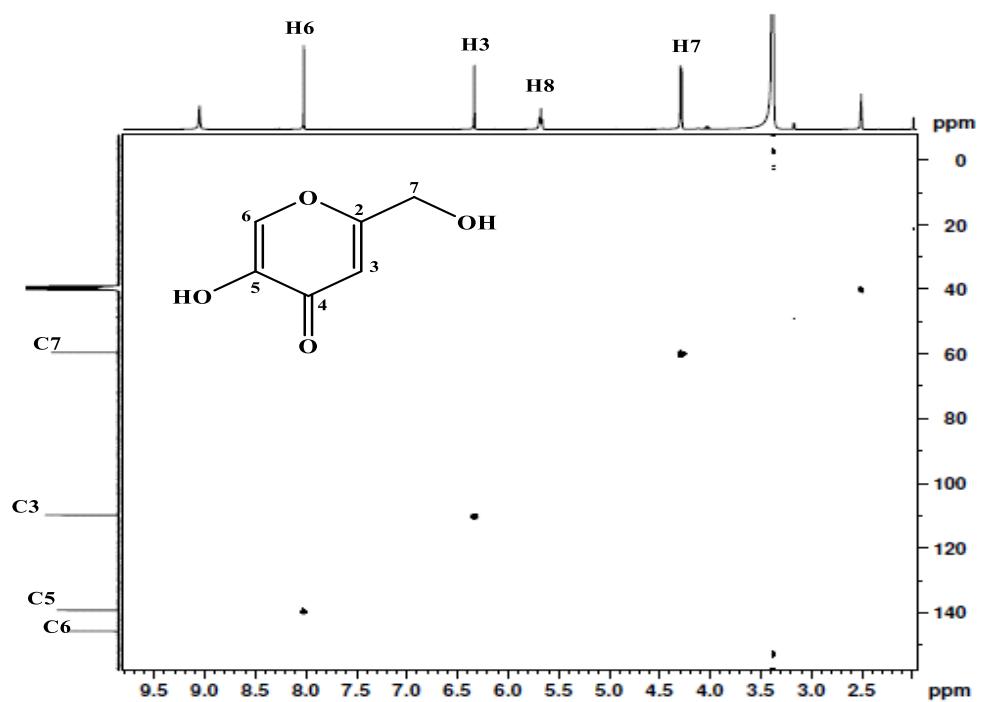


Figure S3. <sup>1</sup>H NMR spectrum of kojic acid



**Figure S4.**  $^{13}\text{C}$  spectrum of kojic acid



**Figure S5.** HSQC spectrum of kojic acid

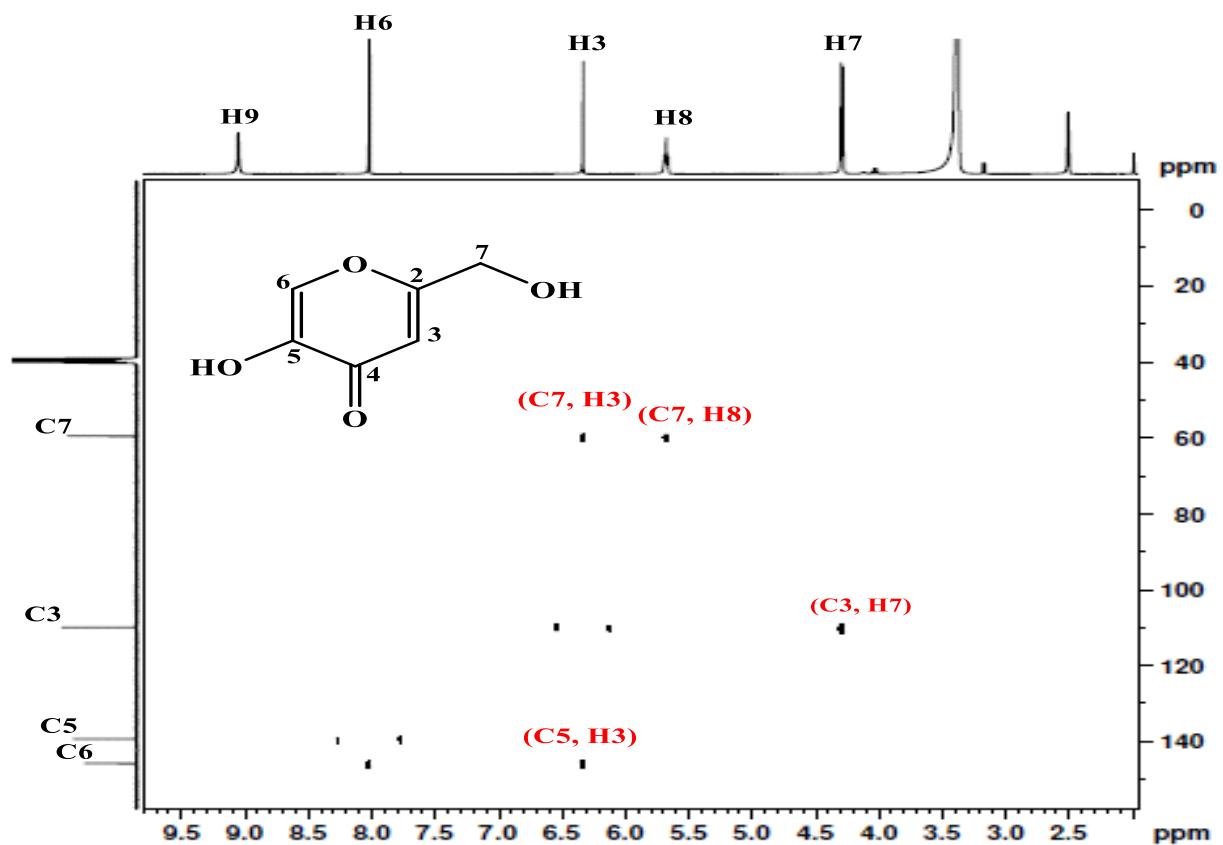


Figure S6. HMBC spectrum of kojic acid

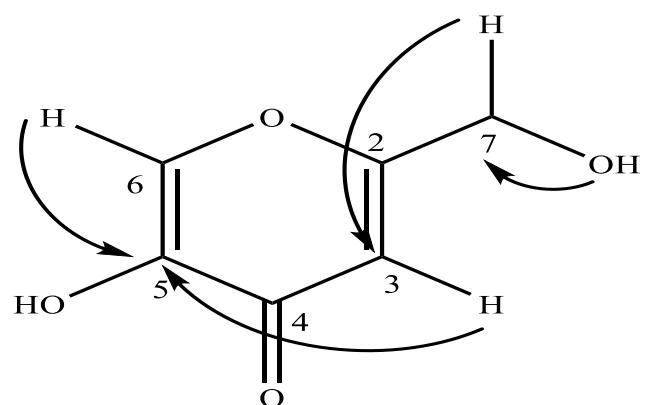


Figure S7. HMBC correlation of kojic acid