### **Supporting Information**

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# Three New Chromone Derivatives from the Deep-Sea-Derived

### Fungus Penicillium thomii

### Fan Yang<sup>1</sup>, Yu Liu<sup>1</sup>, Xiaoqian Zhang<sup>1</sup>, Wan Liu<sup>1</sup>, Ying Qiao<sup>2</sup>,

Wei Xu<sup>2, 3, \*</sup>, Qin Li<sup>1</sup> and Zhongbin Cheng<sup>,\*</sup>

<sup>1</sup> School of Pharmacy, Henan University, Kaifeng 475004, People's Republic of China <sup>2</sup> Key Laboratory of Tropical Marine Ecosystem and Bioresource, Fourth Institute of Oceanography, Ministry of Natural Resources, Beihai 536000, People's Republic of China <sup>3</sup> Key Laboratory of Marine Biogenetic Resources, Third Institute of Oceanography, Ministry of Natural Resources, Xiamen 361005, People's Republic of China

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Figure S1: <sup>1</sup>H NMR spectrum of 1 in DMSO-*d*<sub>6</sub> (400 MHz)



Figure S3: HSQC spectrum of 1 in DMSO-*d*<sub>6</sub>



Figure S4: <sup>1</sup>H-<sup>1</sup>H COSY spectrum of 1 in CD<sub>3</sub>OD









Figure S8: HSQC spectrum of 2 in CD<sub>3</sub>OD



Figure S9: COSY spectrum of 2 in CD<sub>3</sub>OD



Figure S10: HMBC spectrum of 2 in CD<sub>3</sub>OD



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Figure S13: HSQC spectrum of 3 in CD<sub>3</sub>OD



Figure S14: <sup>1</sup>H-<sup>1</sup>H COSY spectrum of 3 in CD<sub>3</sub>OD



Figure S15: HMBC spectrum of 3 in CD<sub>3</sub>OD







Figure S21: <sup>1</sup>H NMR spectrum of 7 in CD<sub>3</sub>OD





Figure S25: HRESIMS spectrum of 1









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**Figure S28:** Search report of SciFinder for compound **1** © 2022 ACG Publications. All rights reserved.

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Figure S30: Search report of SciFinder for compound 3



 Table S1: NMR data of compounds 1–3 and the known analog 1a

No	1		2		3		1a <sup>[1]</sup>	
INO.	$\delta_{\rm H}$	$\delta_{\rm C}$	$\delta_{\rm H}$	$\delta_{\rm C}$	$\delta_{\rm H}$	$\delta_{\rm C}$	$\delta_{\mathrm{H}}$	$\delta_{\rm C}$
2		165.8		167.6		170.9		166.2
3	5.87, s	110.4	6.00, s	111.1	6.09, s	108.5	5.95, s	110.7
4		175.7		179.9		183.9		178.3
4a		107.0		108.1		105.2		108.2
5		160.7		162.5		163.3		160.5
6	6.34, d (1.9)	95.1	6.39, d (1.9)	96.2	6.19, d (2.1)	100.1	6.25, br s	95.9
7		162.6		165.0		166.0		164.1
8	6.35, d (1.9)	96.4	6.39, d (1.9)	97.4	6.33, d (2.1)	94.9	6.36, br s	92.5
8a		159.5		161.6		159.8		160.0
9	2.53, t (7.0)	32.3	2.90, t (7.1)	29.6	2.93, t (7.2)	30.3	2.53, t (8.0)	32.5
10	1.61, m	25.6	2.75, t (7.1)	31.4	2.73, t (7.2)	31.6	1.94, qunit (8.0)	21.6
11	1.53, m	23.9		174.0		175.4	2.32, t (8.0)	32.6
12	2.24, t (7.2)	33.4						
13		174.5						
5-OCH <sub>3</sub>	3.75, s	55.9	3.86, s	56.4			3.80, s	55.8
11-OCH <sub>3</sub>			3.69, s	52.4				
7-OCH <sub>3</sub>							3.78, s	55.5

#### References

 W. H. Yuan, Z. W. Wei, P. Dai, H. Wu, Y. X. Zhao, M. M. Zhang, N. Jiang and W. F. Zheng (2014). Halogenated metabolites isolated from *Penicillium citreonigrum*, *Chem. Biodivers.* 11, 1078-1087.