Supporting Information

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A New Benzofuran from the Roots of *Eupatorium chinense* L. and Its *α*-glucosidase and PTP1B Inhibitory Activities

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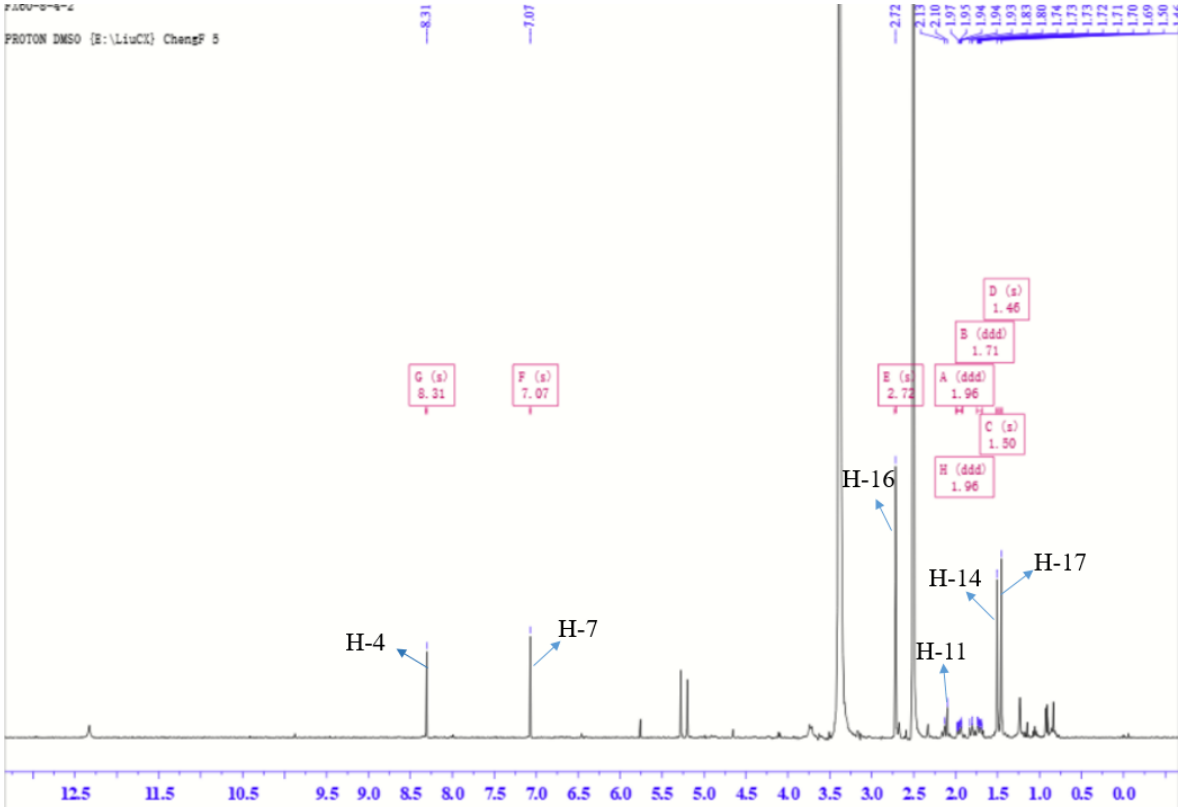


Figure S1: ^{1}H NMR spectrum of compound **1**

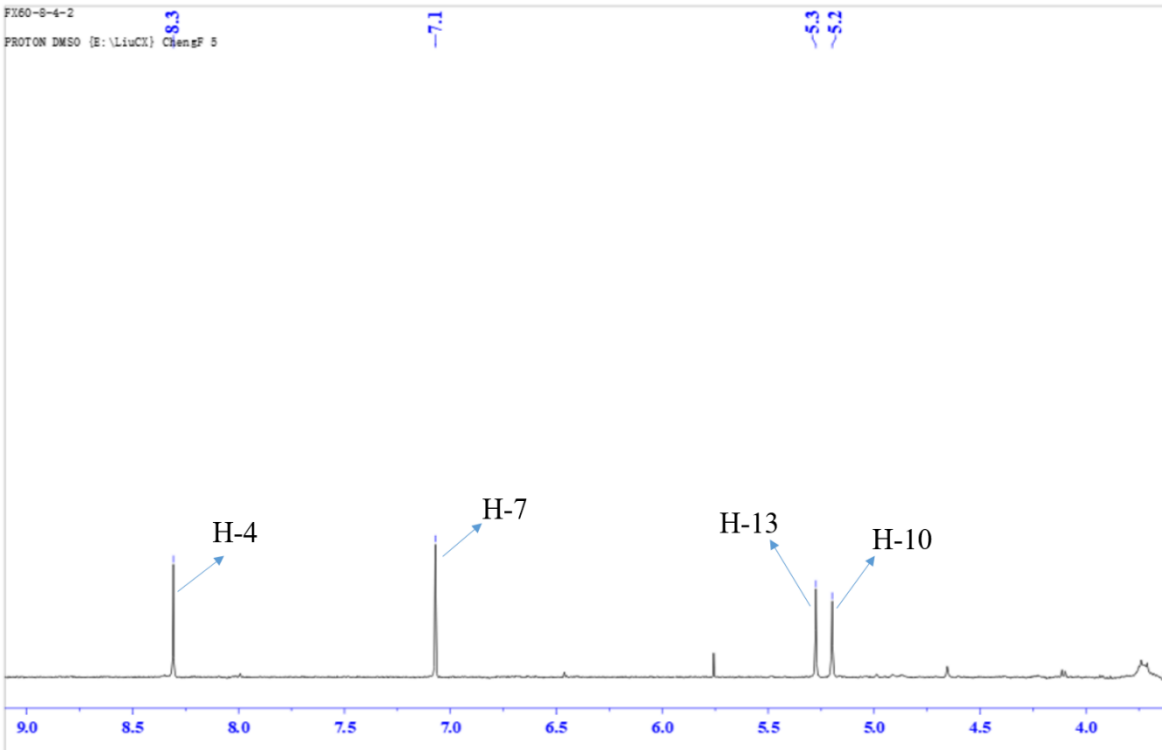


Figure S1-1:. ^{1}H NMR spectrum of compound **1** (enlarged image)

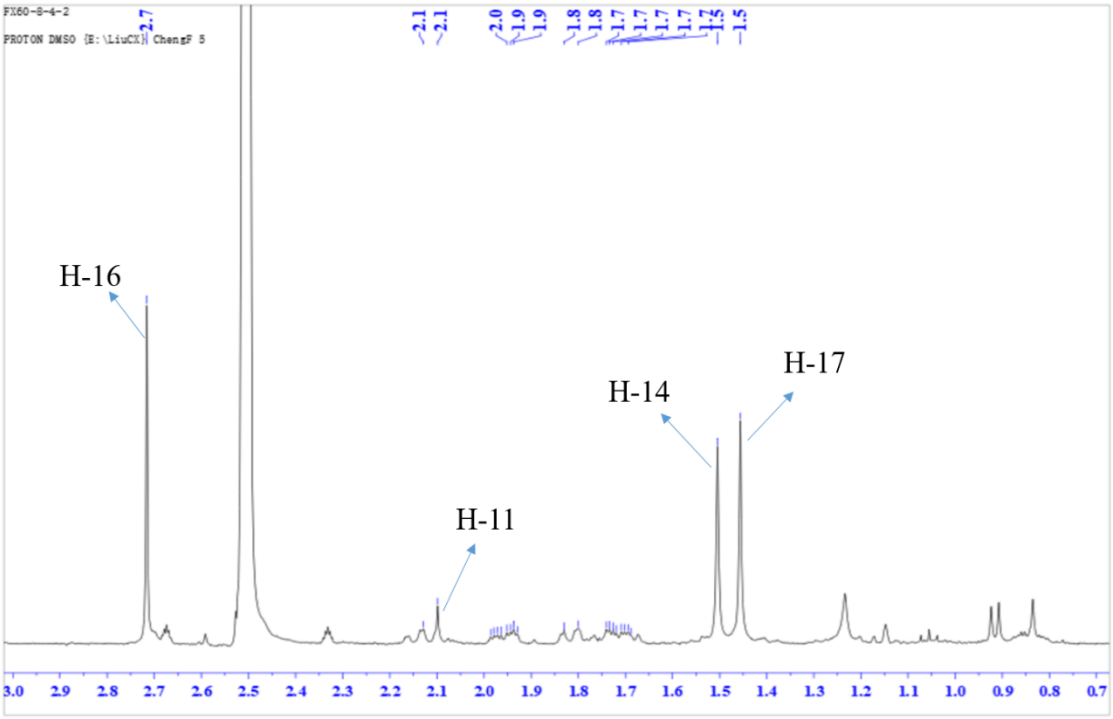


Figure S1-2: ^{1}H NMR spectrum of compound **1** (enlarged image)

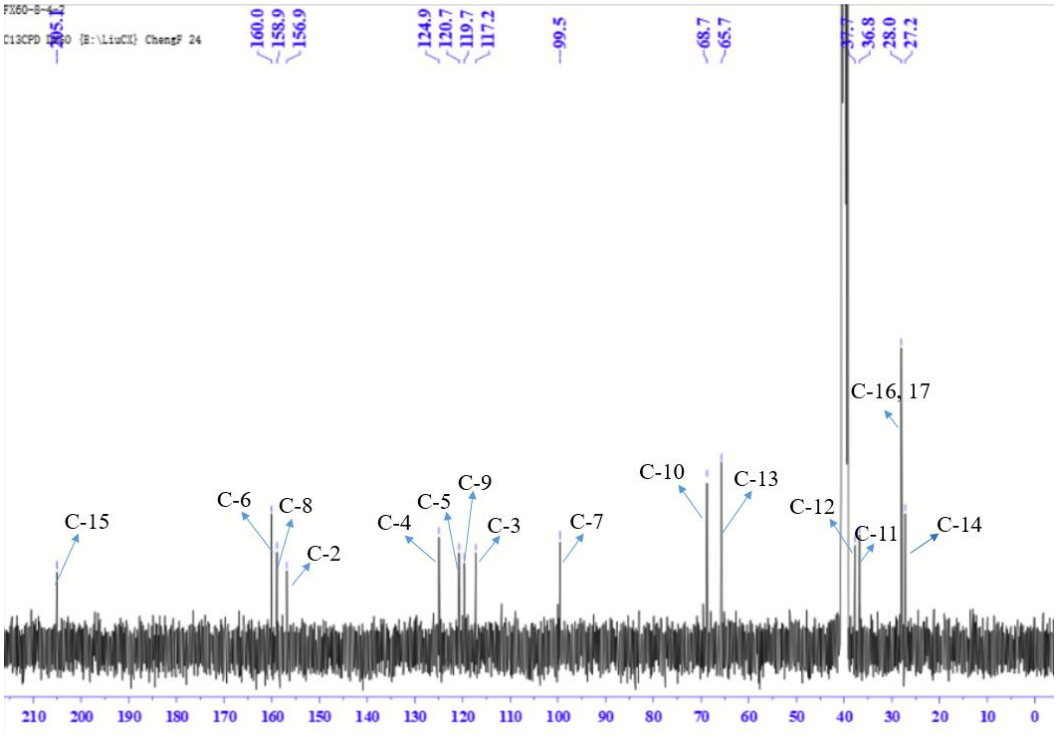


Figure S2: ^{13}C NMR spectrum of compound **1**

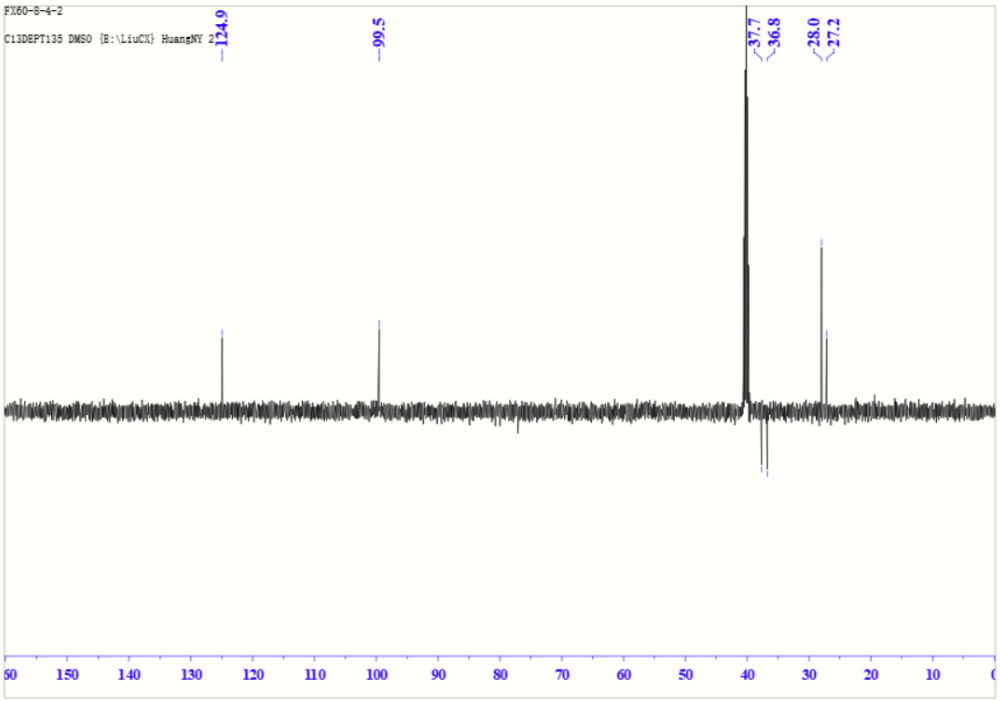


Figure S3: DEPT135 spectrum of compound **1**

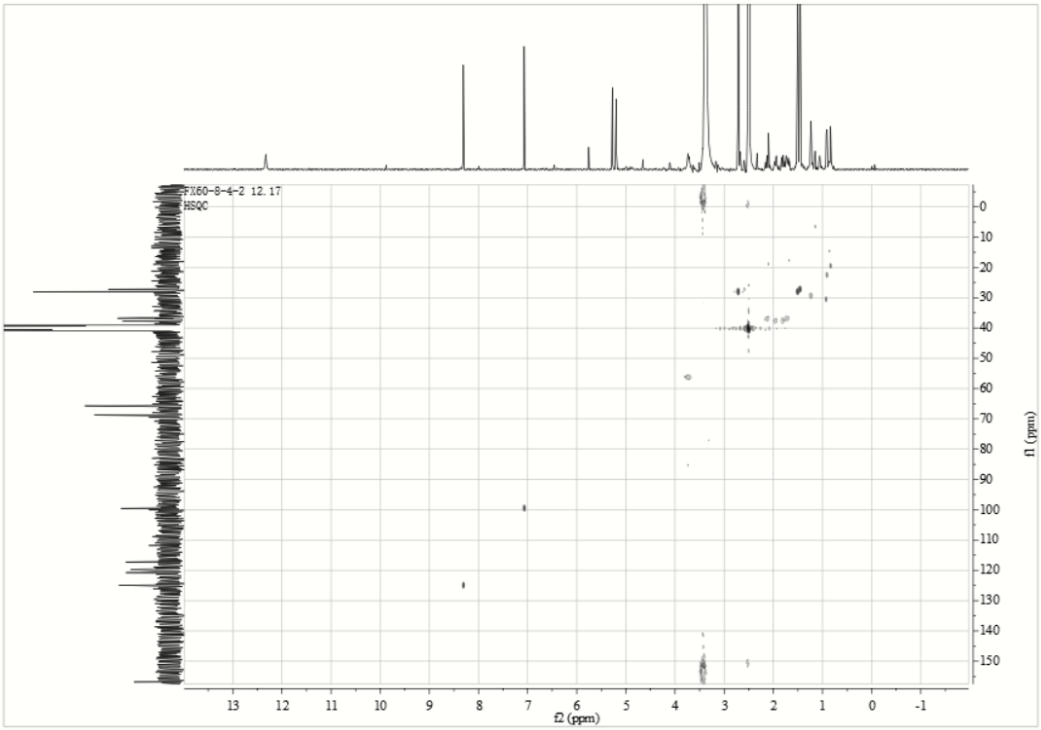


Figure S4: HSQC spectrum of compound **1**

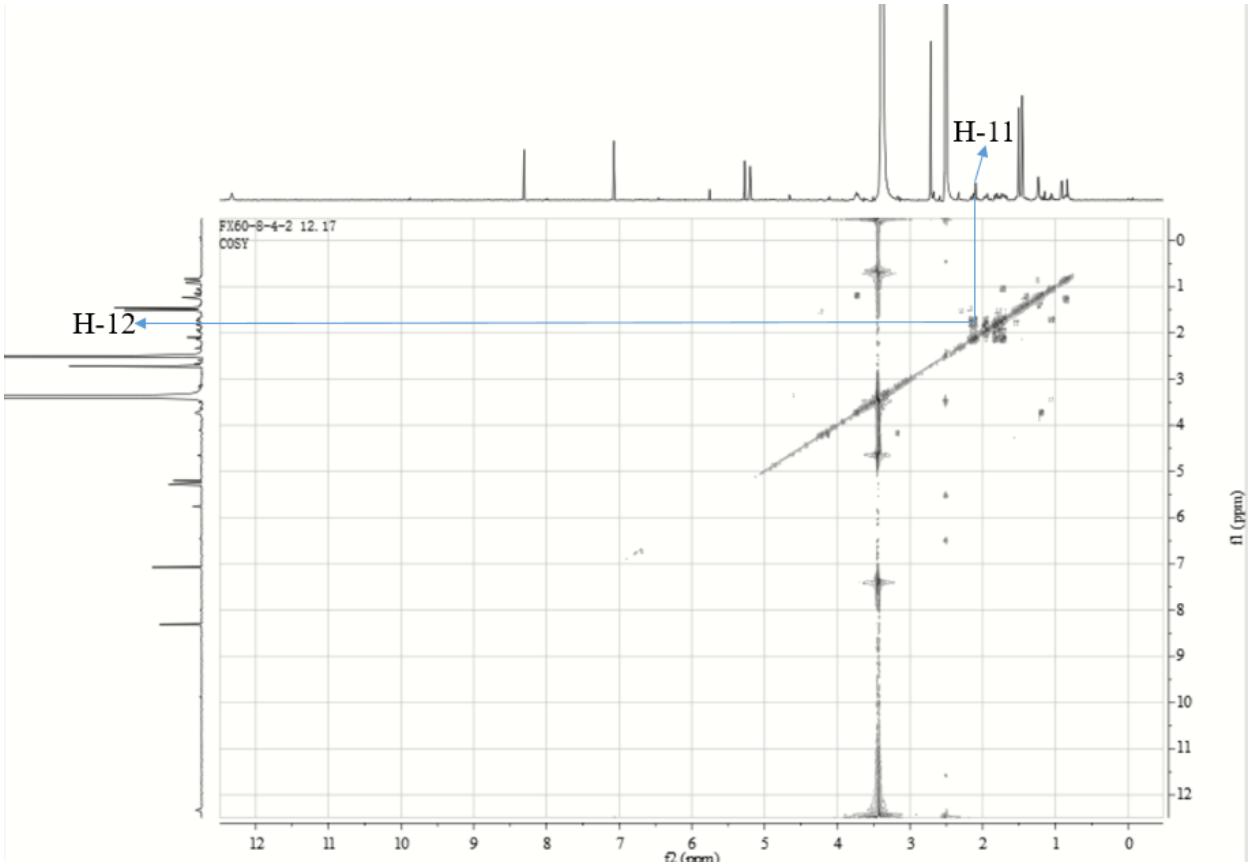


Figure S5: ^{1}H-^{1}H COSY spectrum of compound **1**

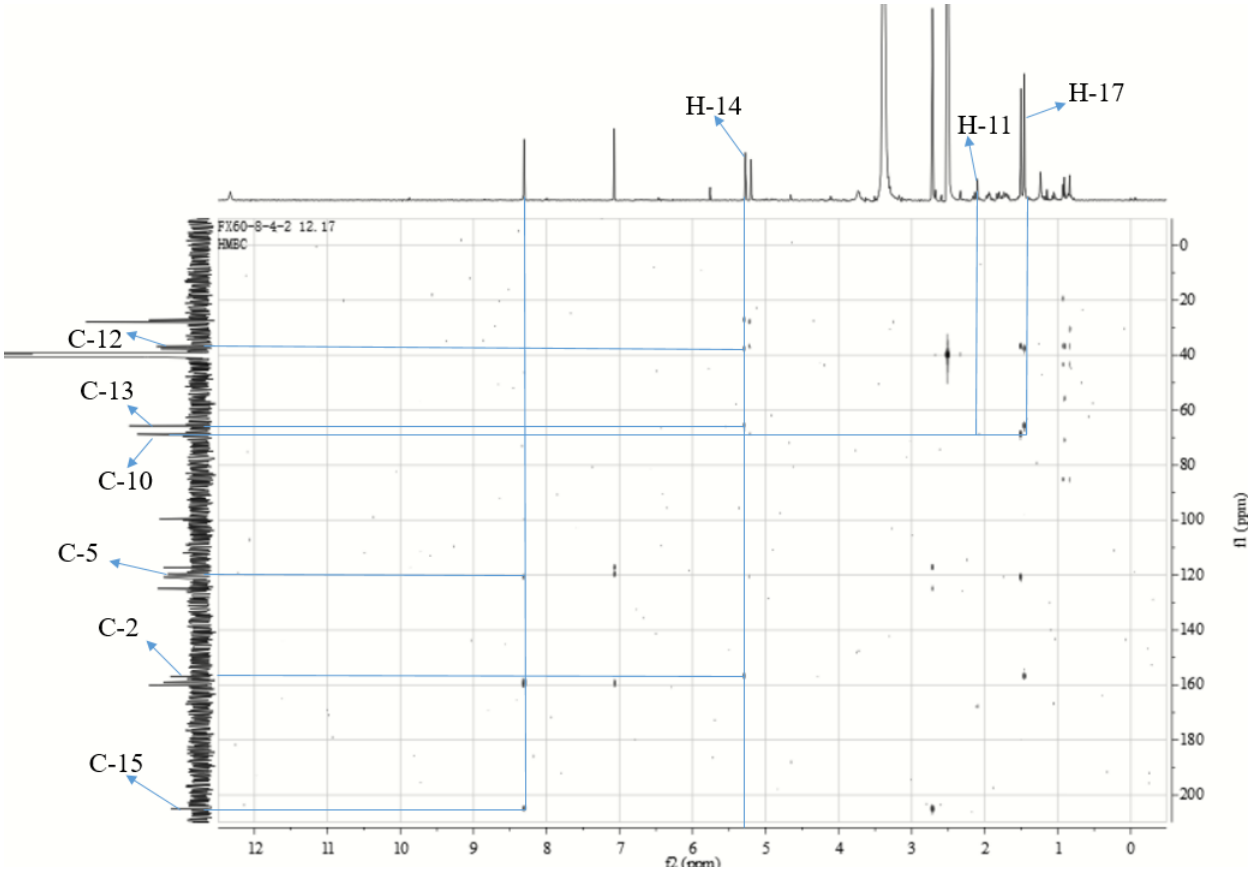


Figure S6: HMBC spectrum of **1** compound

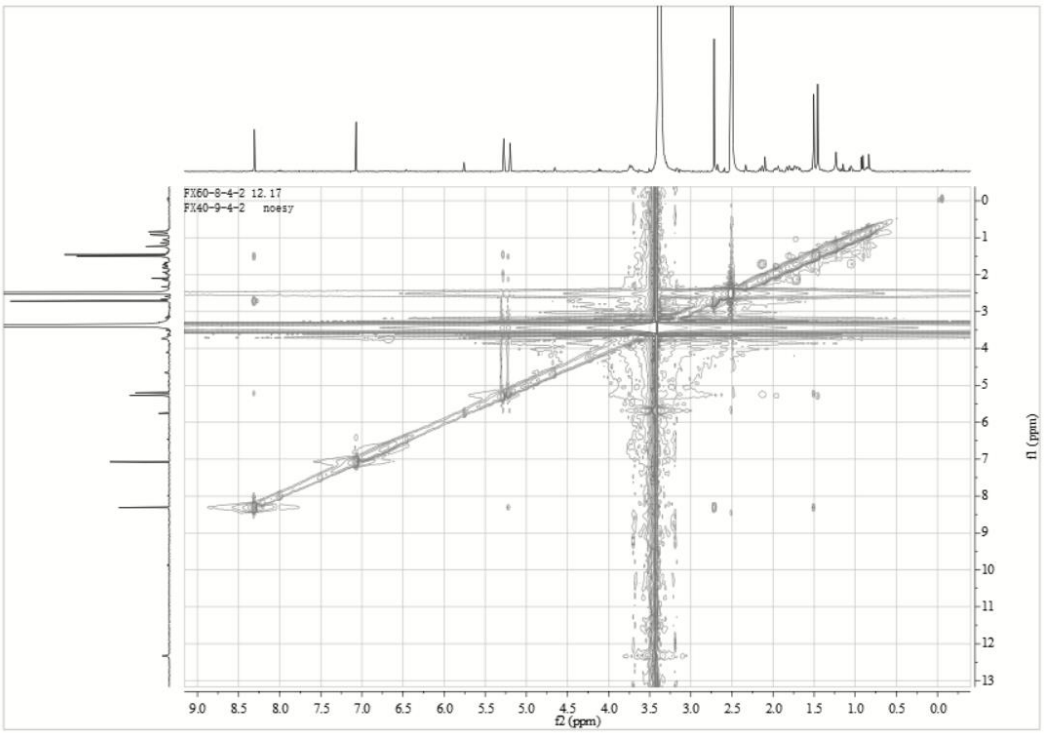


Figure S7: NOESY spectrum of compound **1**

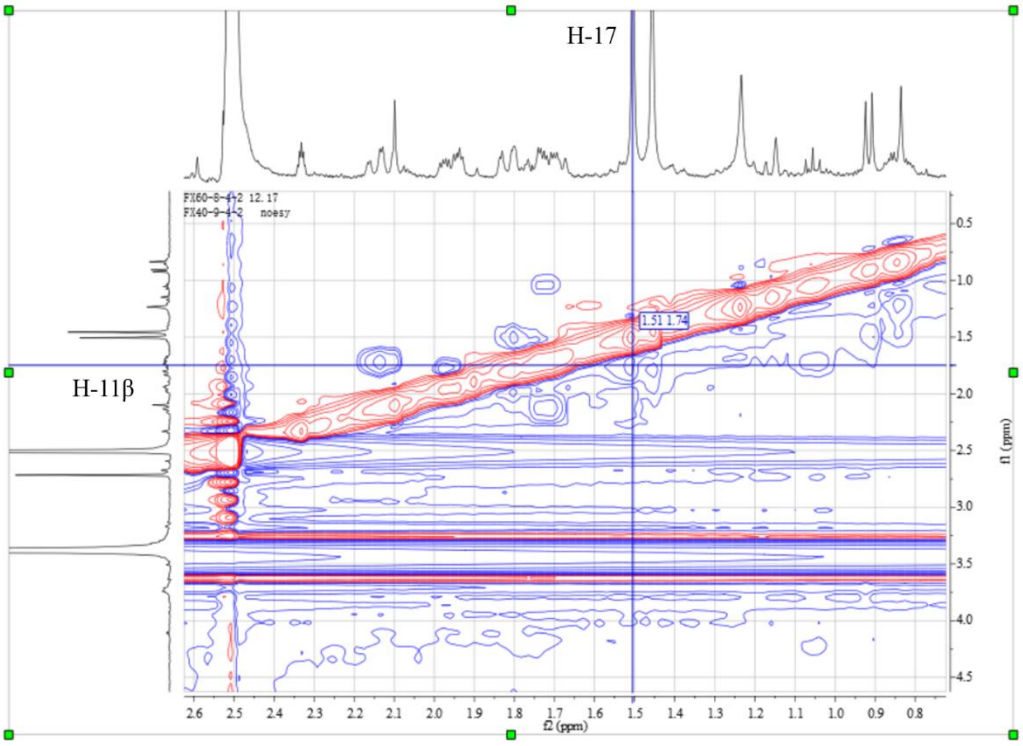


Figure S7-1: NOESY expanded spectrum of compound **1**

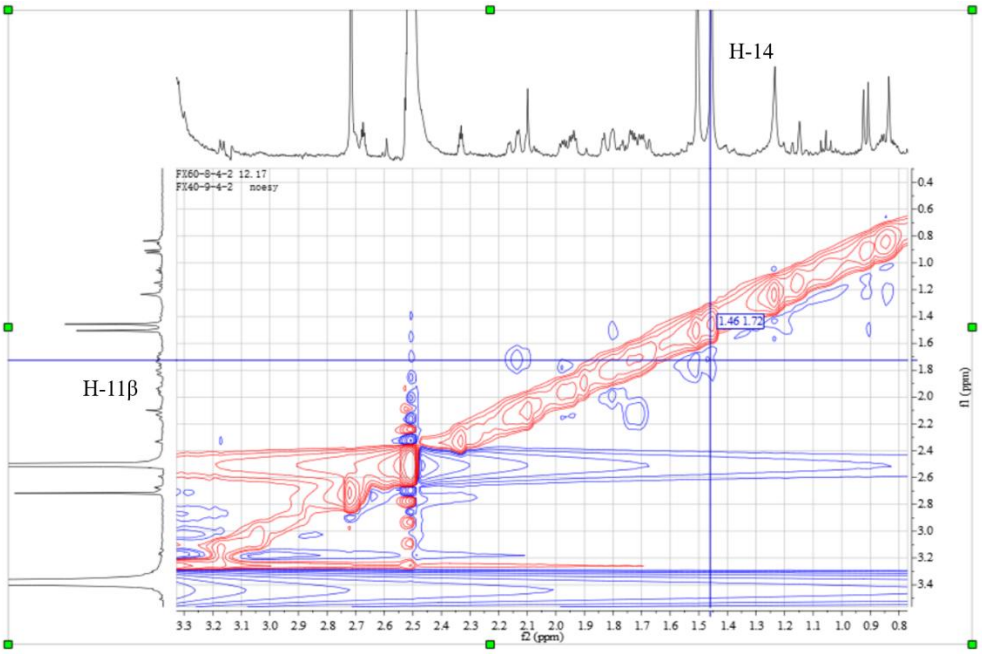


Figure S7-2: NOESY expanded spectrum of compound 1

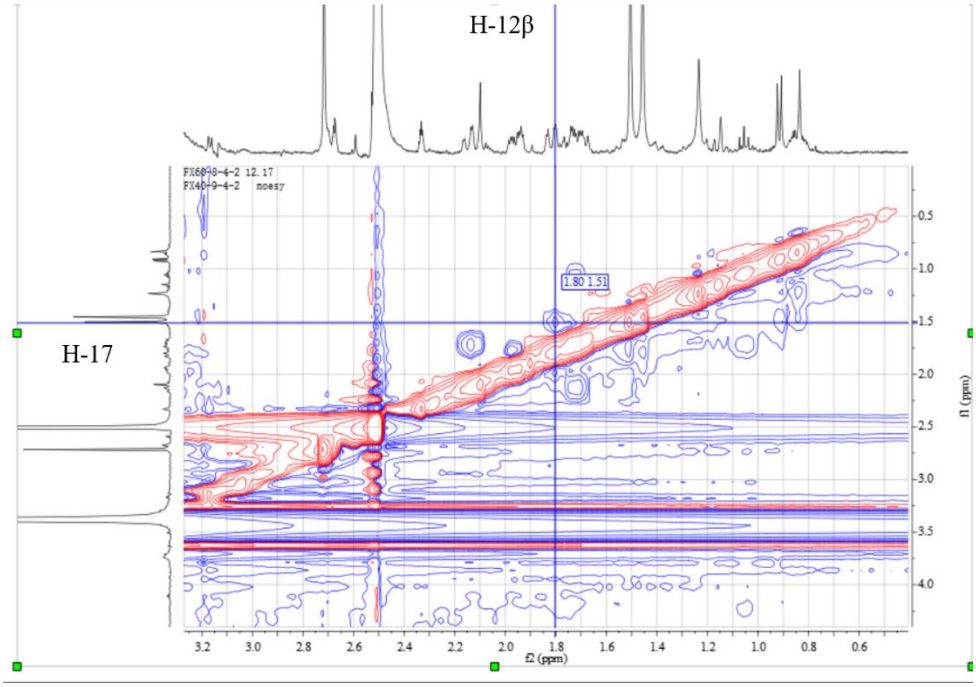


Figure S7-3: NOESY expanded spectrum of compound **1**

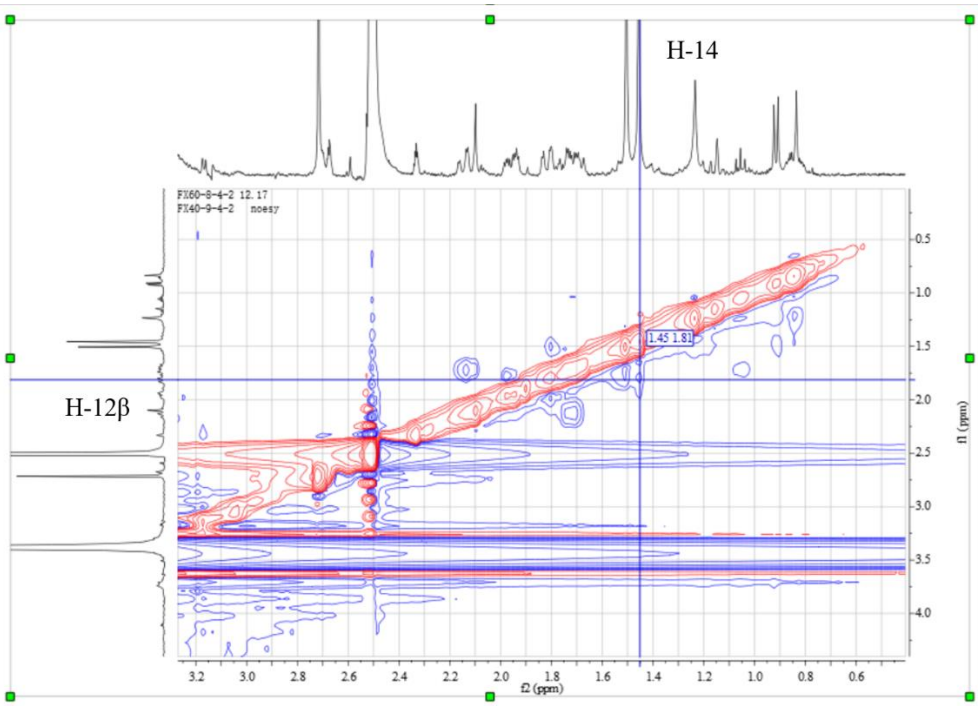


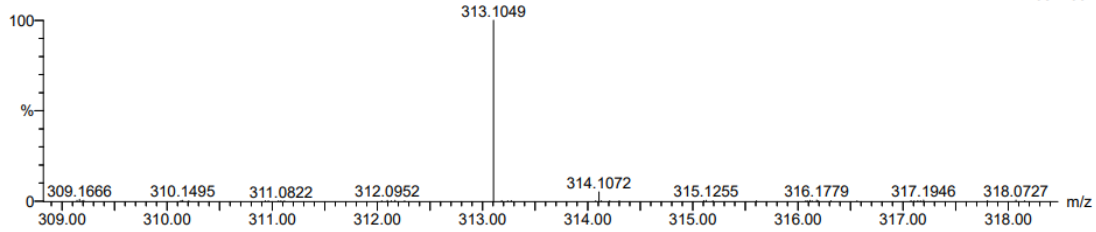
Figure S7-4: NOESY expanded spectrum of compound 1

Elemental Composition Report **Page 1**

Single Mass Analysis
Tolerance = 5.0 mDa / DBE: min = -1.5, max = 50.0
Element prediction: Off
Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions
809 formula(e) evaluated with 1 results within limits (up to 50 best isotopic matches for each mass)
Elements Used:
C: 16-16 H: 18-18 N: 0-100 O: 0-100 Na: 0-4
11
240316-6-539-5-FX40-8-4-2 11 (0.076)

1: TOF MS ES+
1.08e+004



Minimum:				-1.5				
Maximum:		5.0	10.0	50.0				
Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Norm	Conf(%)	Formula
313.1049	313.1052	-0.3	-1.0	7.5	83.5	n/a	n/a	C16 H18 O5 Na

Figure S8: HRESIMS spectrum of compound **1** (positive ion mode)

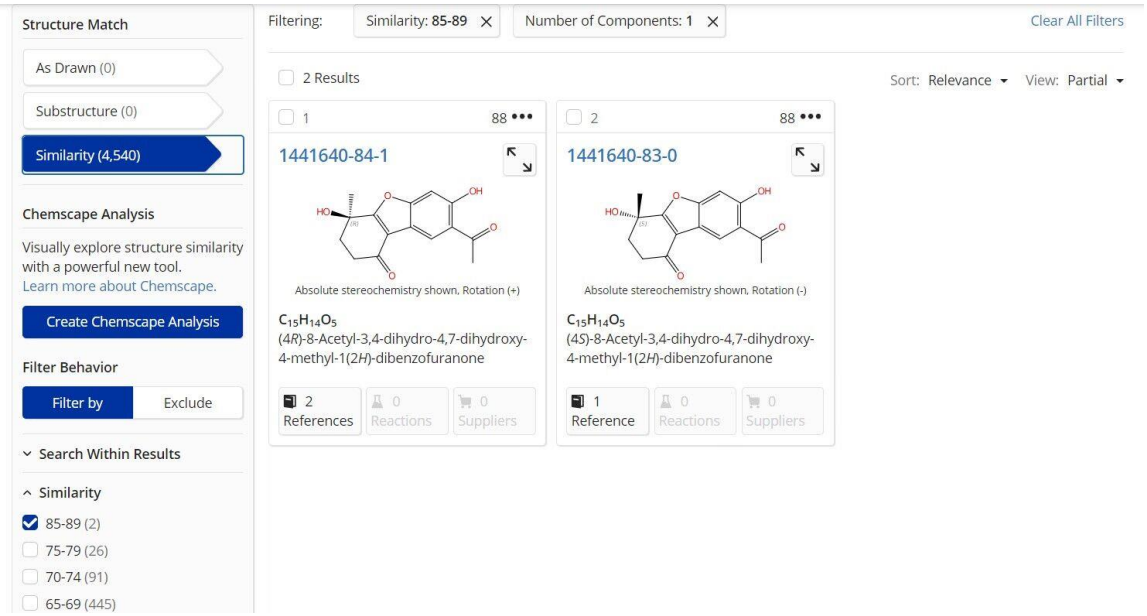


Figure S9: Scifinder similarity report for compound **1**

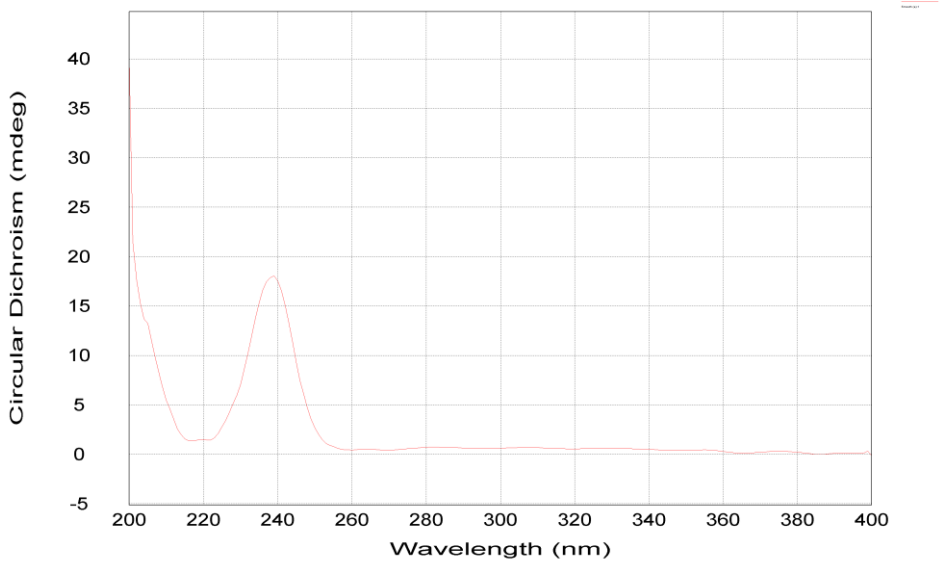


Figure S10: Experimental ECD spectrum of compound **1**

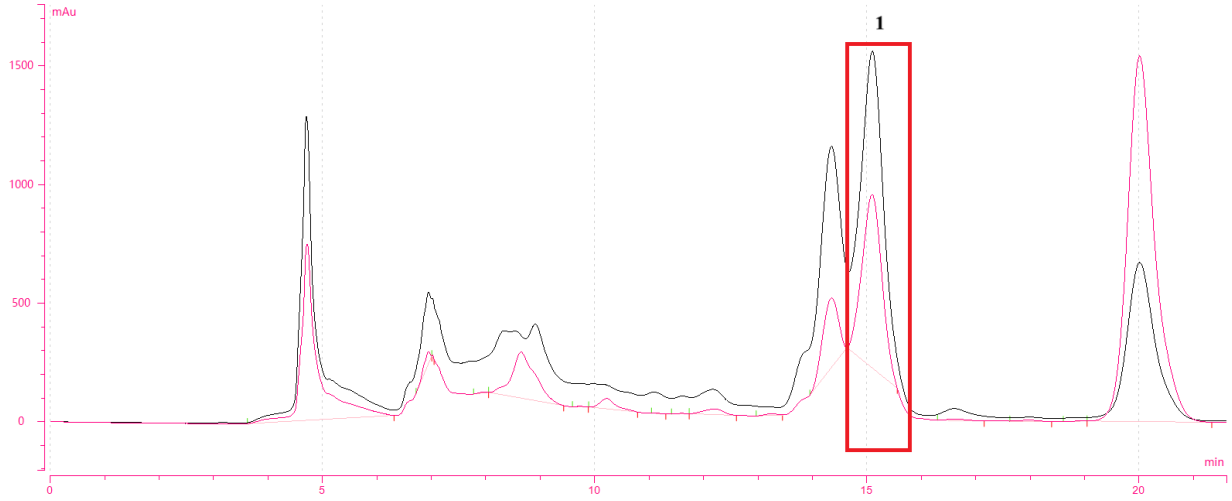


Figure S11: HPLC preparation spectrum of compound **1**

(5.9 mg, ACN:H_2O=60:40, v/v, 2 mL/min, 15 min)

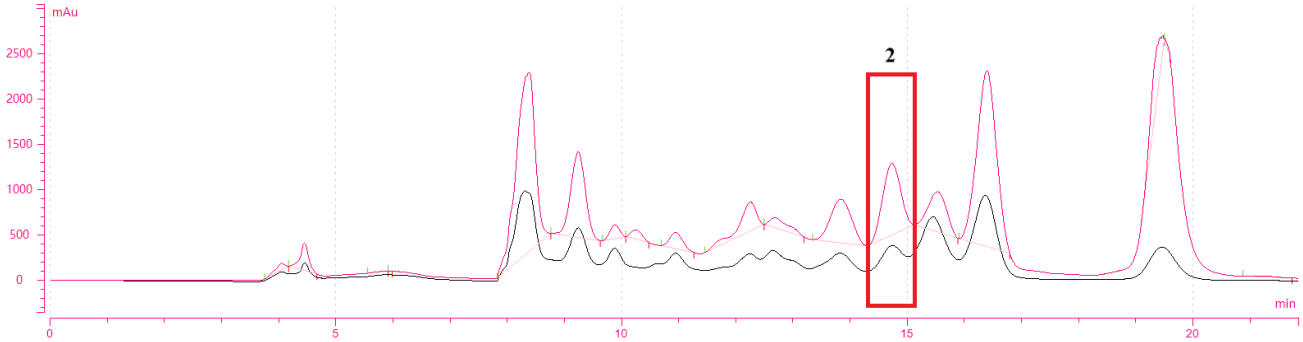


Figure S12: HPLC preparation spectrum of compound **2**

(8.9 mg, ACN:H_2O=37:63, v/v, 2 mL/min, 14 min).

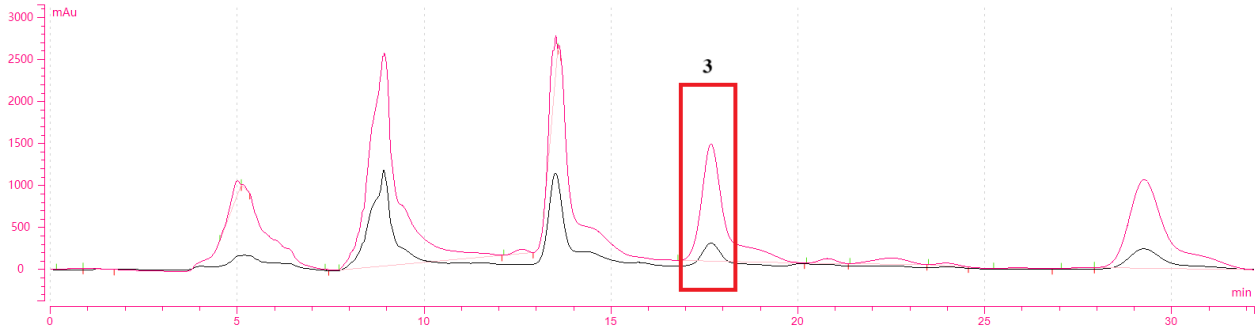


Figure S13: HPLC preparation spectrum of compound **3**

(22.8 mg, ACN:H_2O=45:55, v/v, 2 mL/min, 18 min)

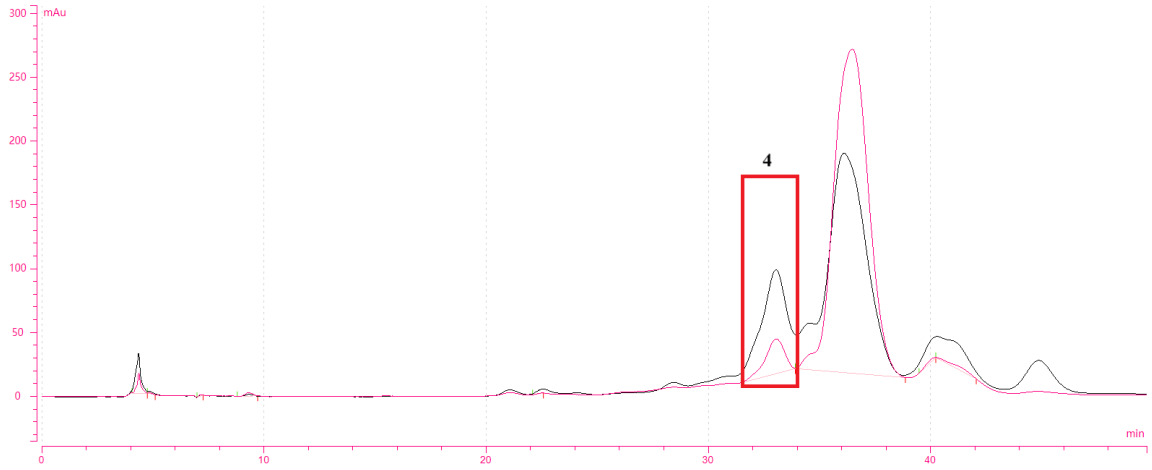


Figure S14:HPLC preparation spectrum of compound **4**

(21.8 mg, ACN:H_2O=47:53, v/v, 2 mL/min, 33 min)

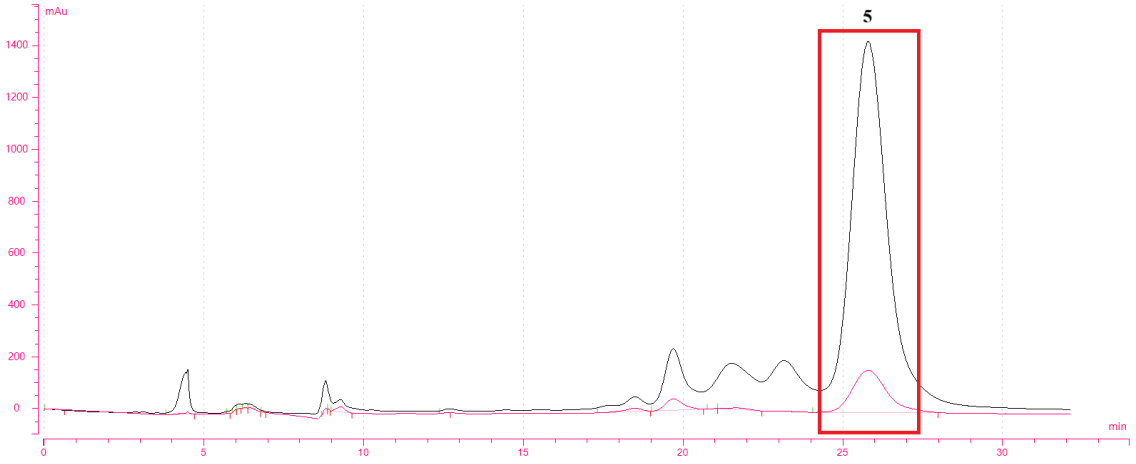
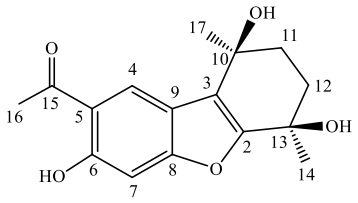
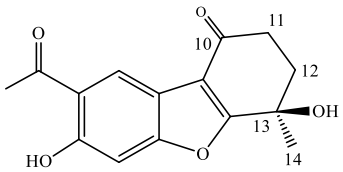


Figure S15: HPLC preparation spectrum of compound **5**

(8.8 mg, ACN:H_2O=35:65, v/v, 2 mL/min, 25 min)



1*



(-)-eupachinin A

Table S1: ^{1}H (400 MHz) and ^{13}C NMR (100 MHz) data of compound **1** and the analogue (-)- eupachinin A in DMSO-d_6. (δ in ppm)

Position	compound **1**		**(-)- eupachinin A**	
	δ_C	$\delta_H J$ (Hz)	δ_C	$\delta_H J$ (Hz)
2	156.86	-	171.0	-
3	117.22	-	115.8	-
4	124.92	8.31 (s)	125.2	8.43 (s)
5	120.73	-	118.2	-
6	160.04	-	162.0	-
7	99.52	7.07 (s)	100.4	7.05 (s)
8	158.92	-	159.0	-
9	119.66	-	115.1	-
10	68.74	-	194.1	-
11	36.77	2.13 (m), 1.73 (m)	35.7	2.36 (m)
12	37.71	1.95 (ddd, 13.8, 5.8, 3.0), 1.81 (m)	38.2	2.63 (ddd, 17.0, 6.6, 5.0)，2.92 (ddd, 17.0, 9.0, 5.0)
13	65.69	-	67.4	-
14	27.18	1.45 (s)	25.8	1.78 (s)
15	205.05	-	204.6	-
16	27.99	2.72 (s)	27.2	2.74 (s)
17	27.99	1.50 (s)	-	-
6-OH	-	12.33 (s)		
10-OH	-	5.20 (s)		
13-OH	-	5.28 (s)		