SUPPLEMENTARY MATERIAL

Two novel diterpenes from the stems and leaves of tropical seagrass *Enhalus acoroides* in the South China Sea [1]

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Abstract: Two novel diterpenes Enhoidin A (**1**) and Enhoidin B (**2**) featuring an unusual gibberellane skeleton were isolated from the stems and leaves of *Enhalus acoroides*. Their structures were elucidated on the basis of spectroscopic analysis including 1D and 2D NMR techniques and HR-ESI-MS. This is the first time that this type of lactone ring between C-18 and C-20 has been found among gibberellanes from the tropical seagrasses. Evaluation of the all compounds for cytotoxicity against four human cancer cell lines (MCF-7, HCT-116, HepG-2 and HeLa), and showed moderate cytotoxic activities.

Keywords: tropical seagrass; *Enhalus acoroides*; diterpene; cytotoxic activity

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Figure S1. ^{1}H-NMR (600 MHz, pyridine) spectrum of the new compound **1**

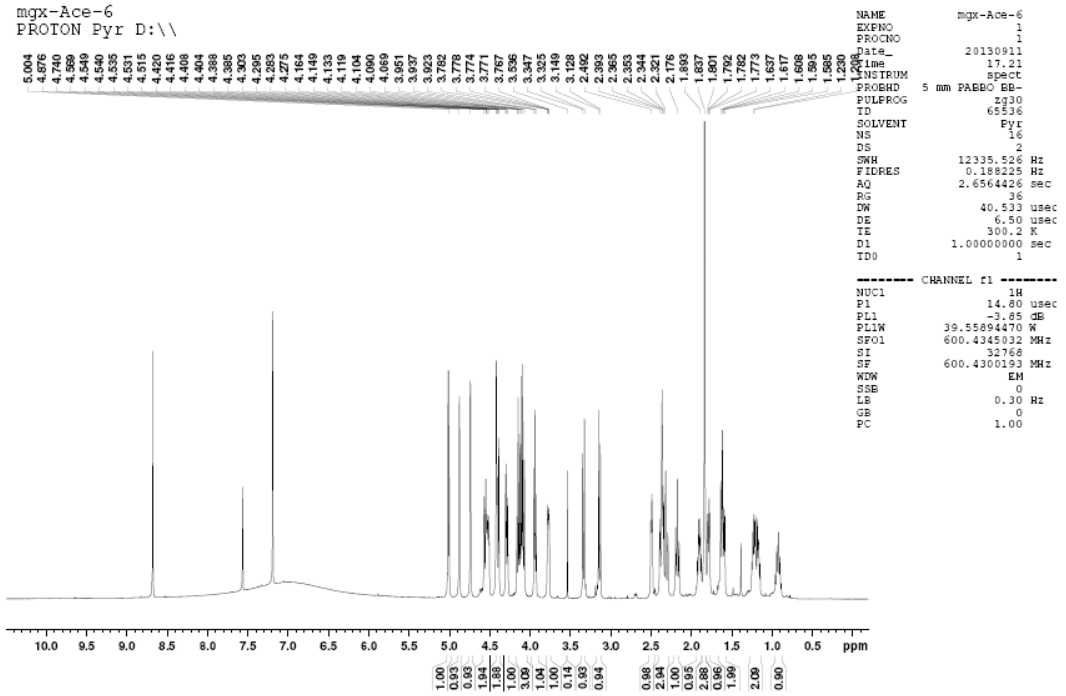

Figure S2. ^{13}C-APT (150 MHz, pyridine) spectrum of the new compound **1**

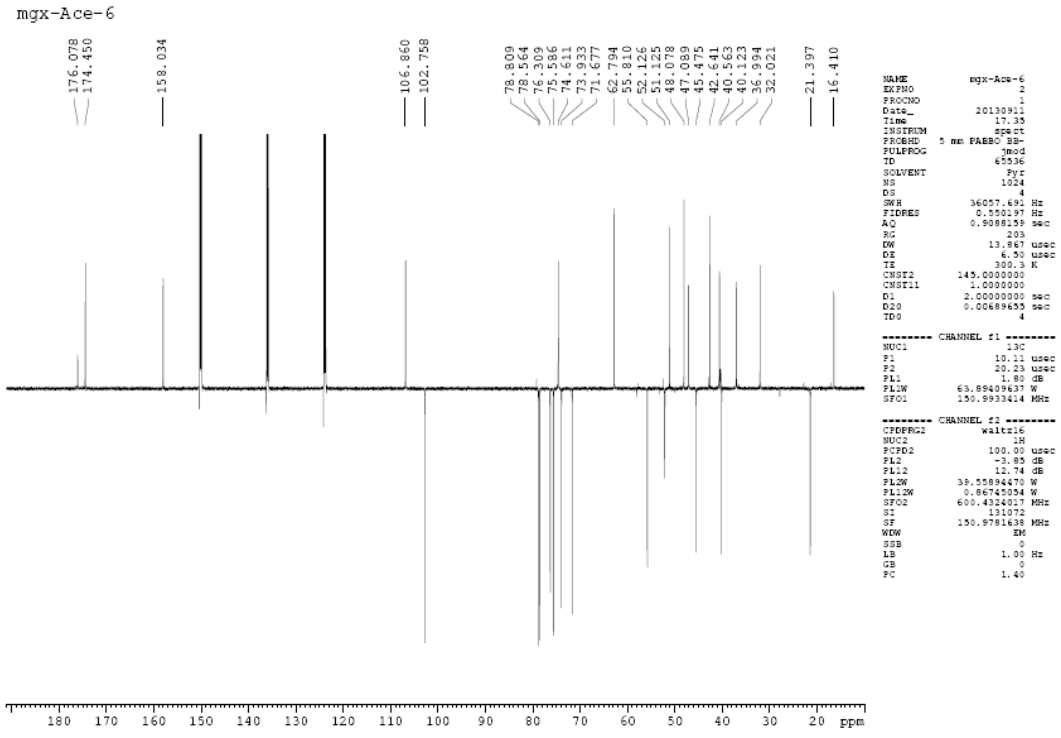

Figure S3. HSQC spectrum of the new compound **1**

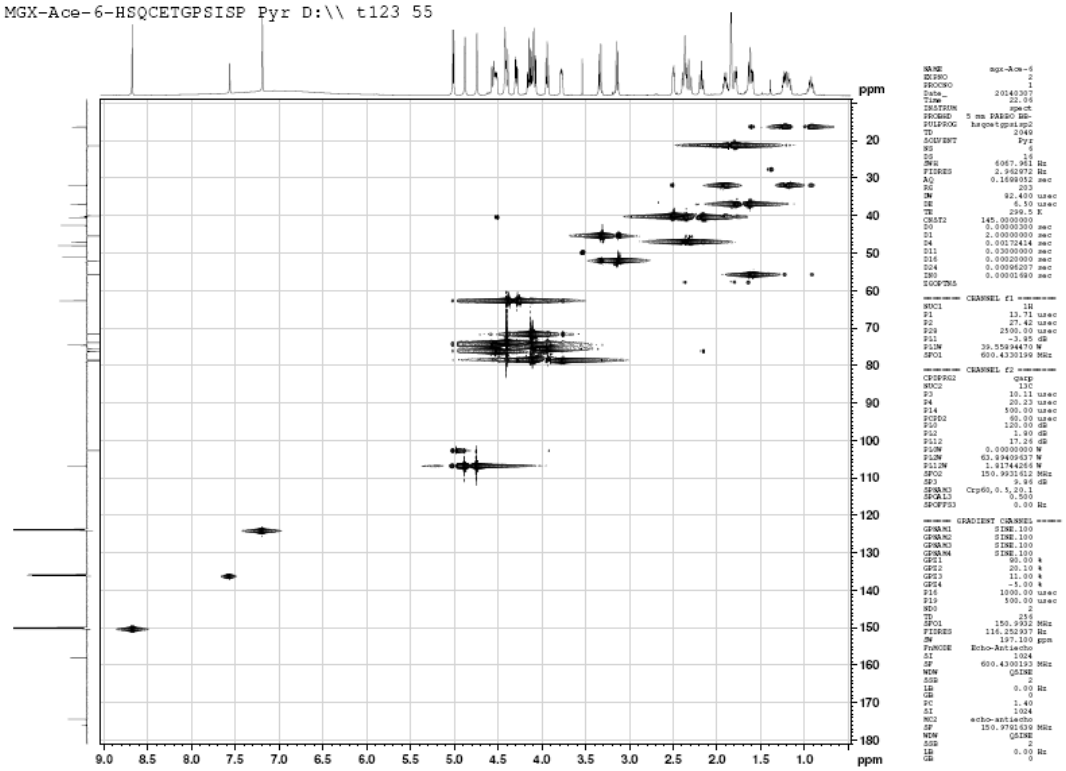

Figure S4. HMBC spectrum of the new compound **1**

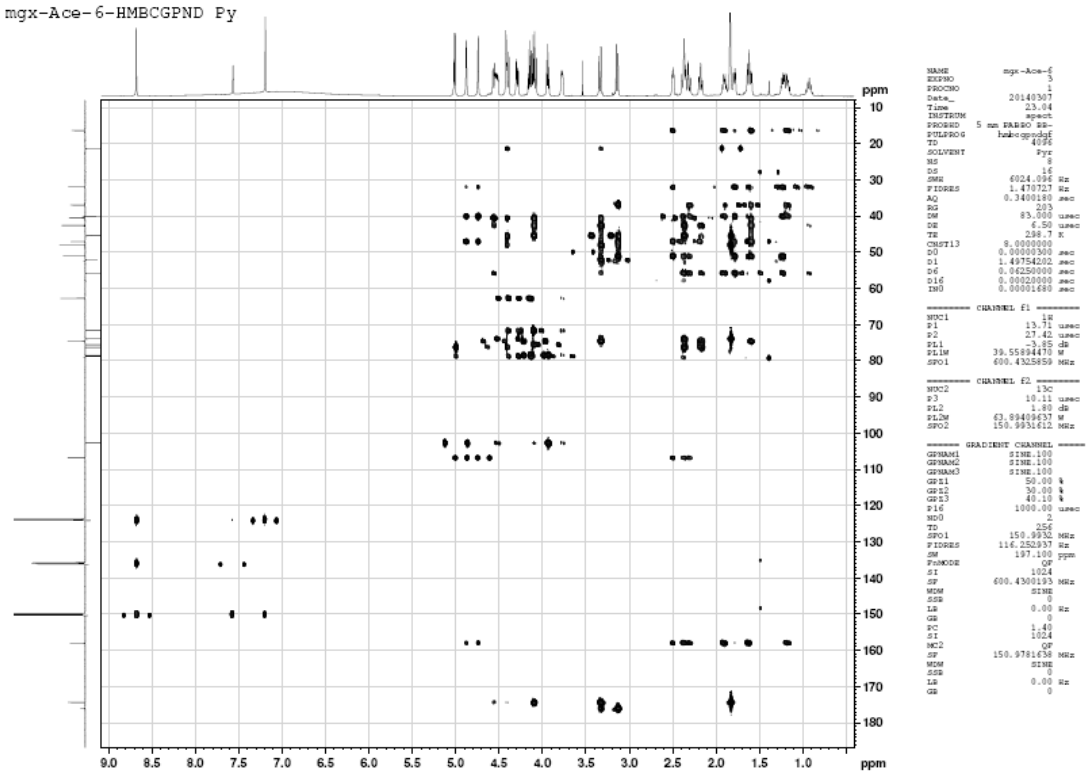

Figure S5. ^{1}H-^{1}H COSY spectrum of the new compound **1**

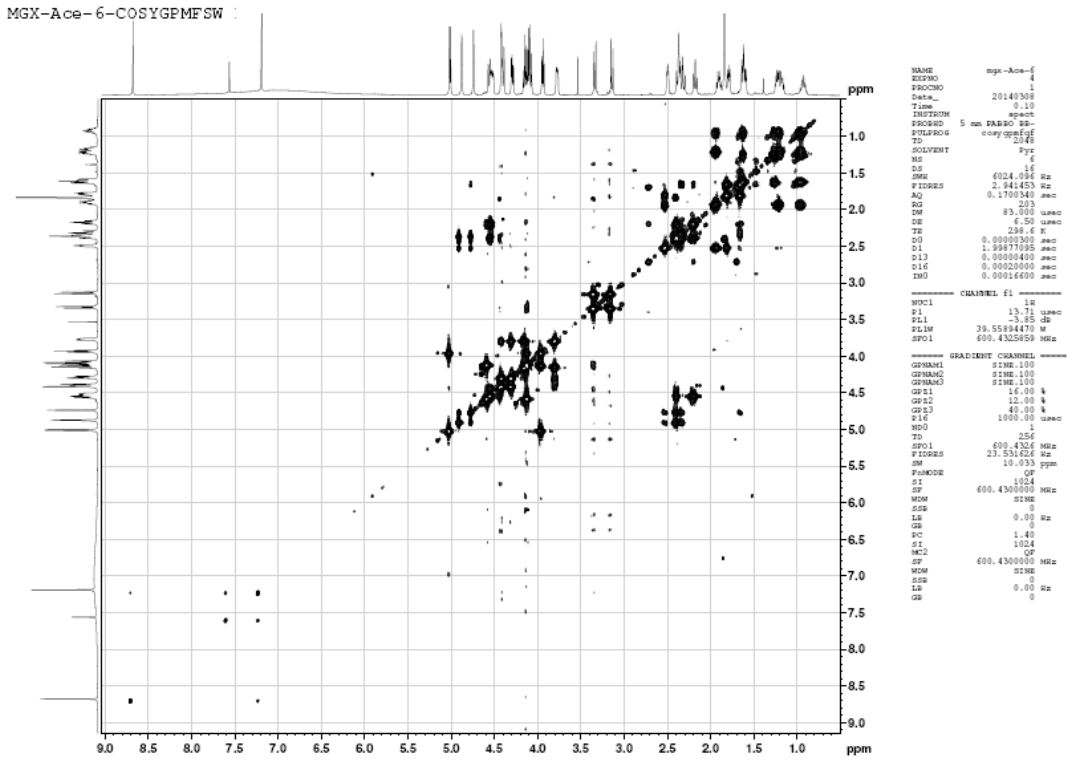

Figure S6. NOESY spectrum of the new compound **1**

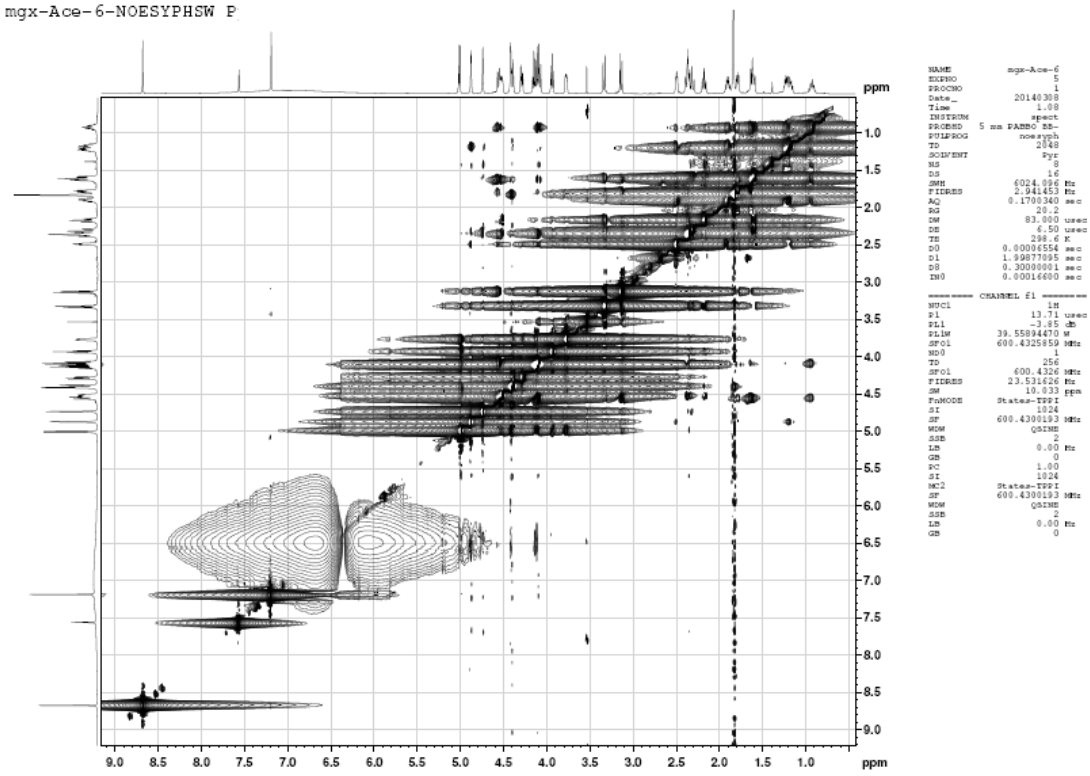

Figure S7. ^{1}H-NMR (600 MHz, pyridine) spectrum of the new compound **2**

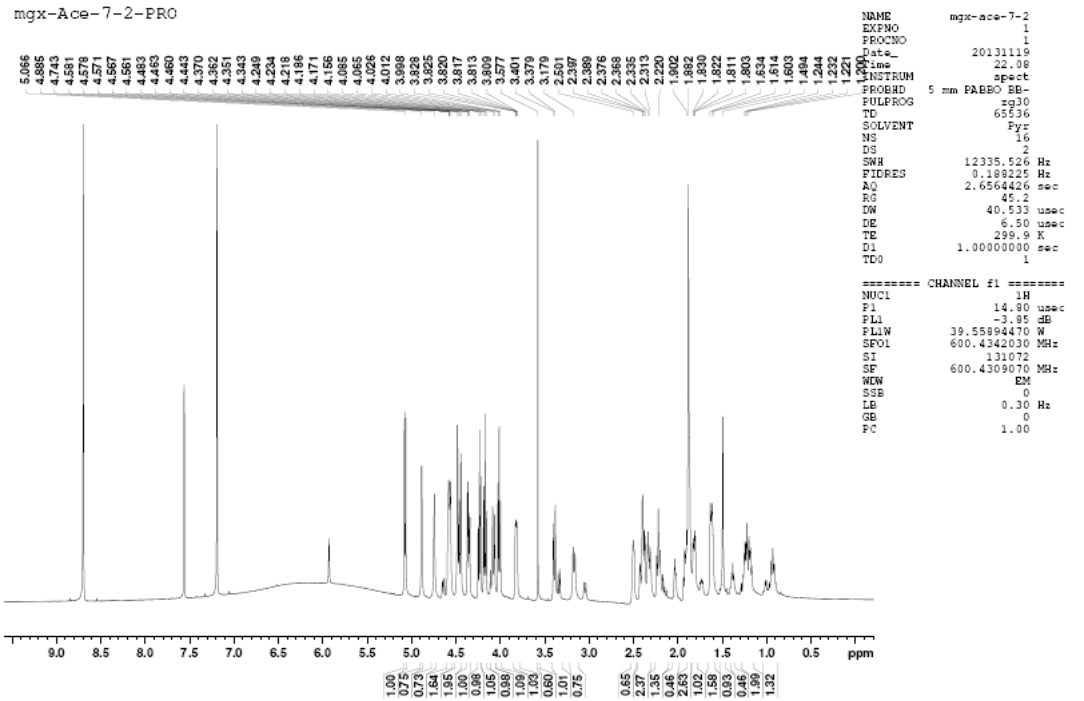

Figure S8. ^{13}C-APT (150 MHz, pyridine) spectrum of the new compound **2**

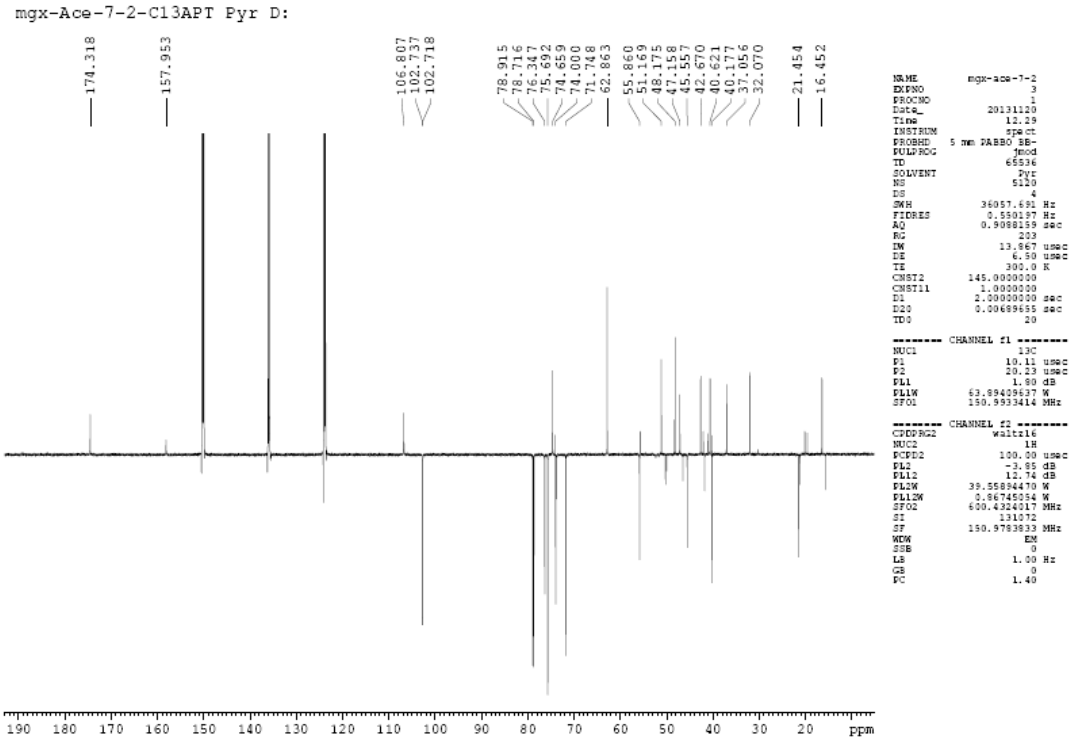

Figure S9. HSQC spectrum of the new compound **2**

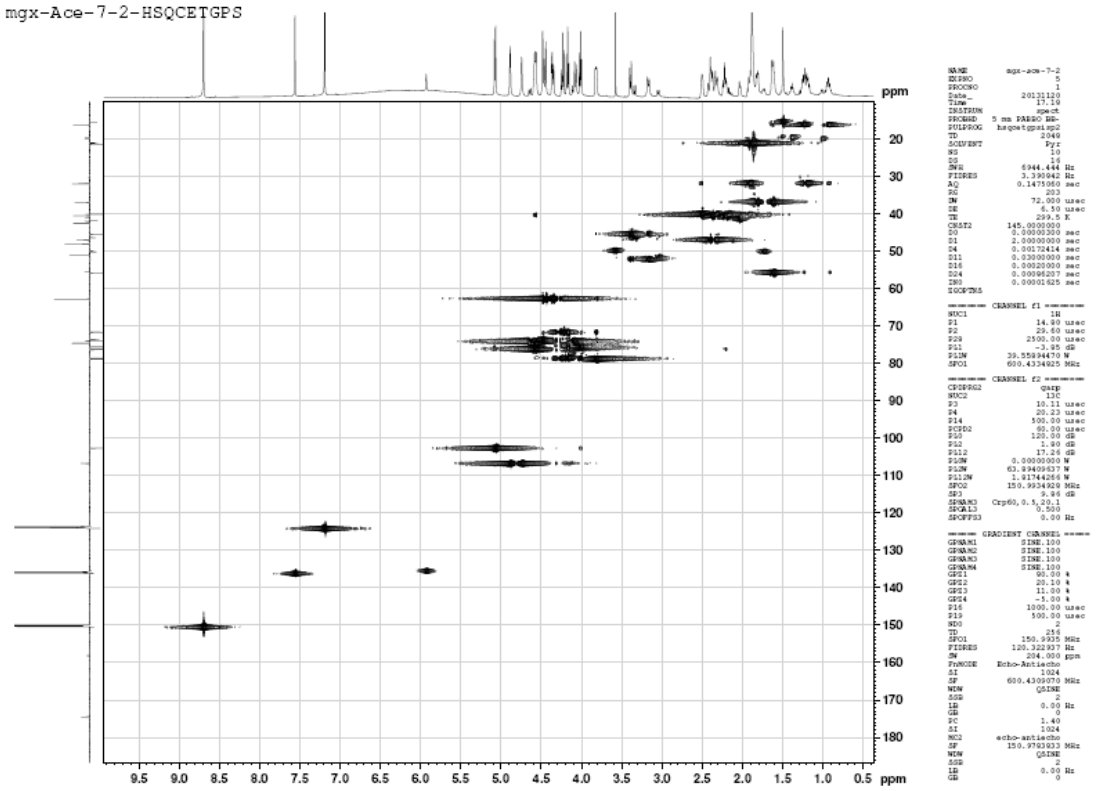

Figure S10. HMBC spectrum of the new compound **2**

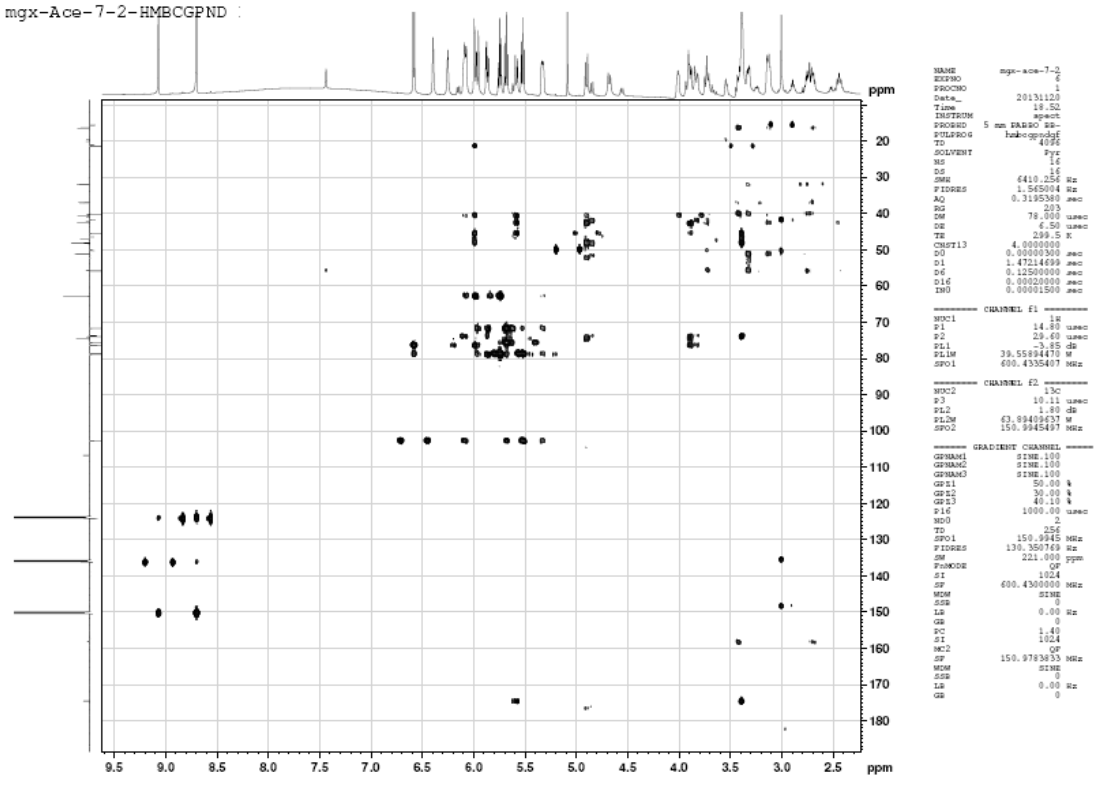

Figure S11. ^{1}H-^{1}H COSY spectrum of the new compound **2**

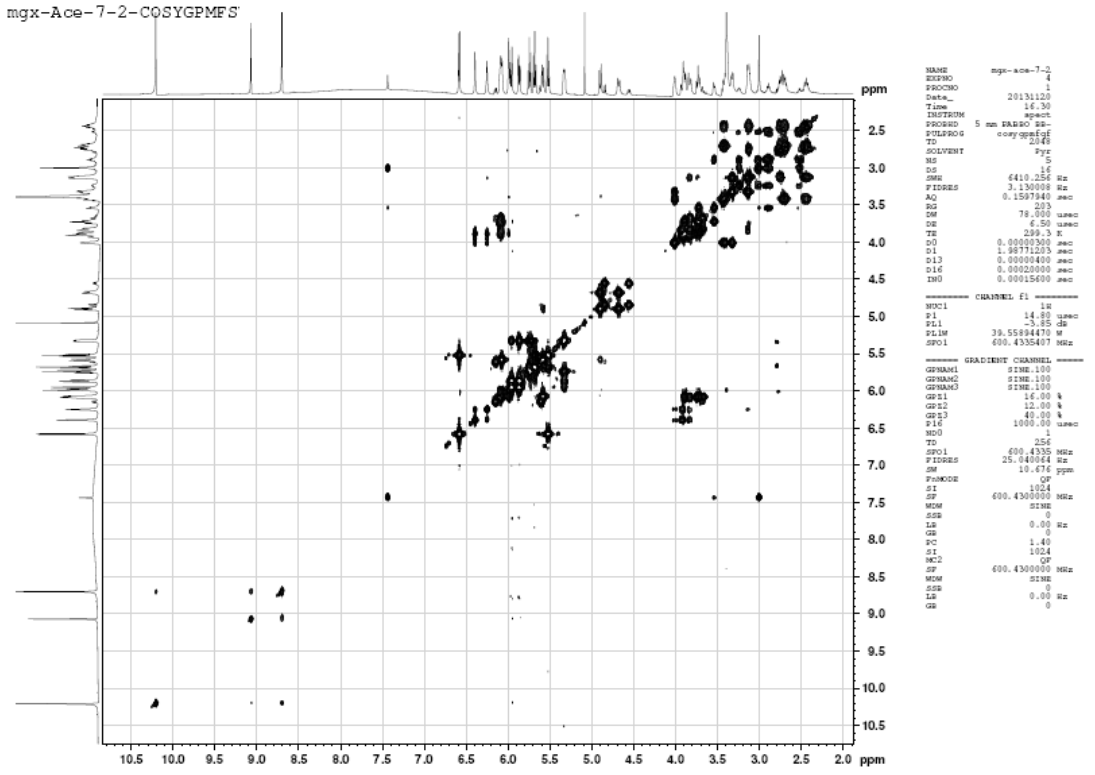

Figure S12. NOESY spectrum of the new compound **2**

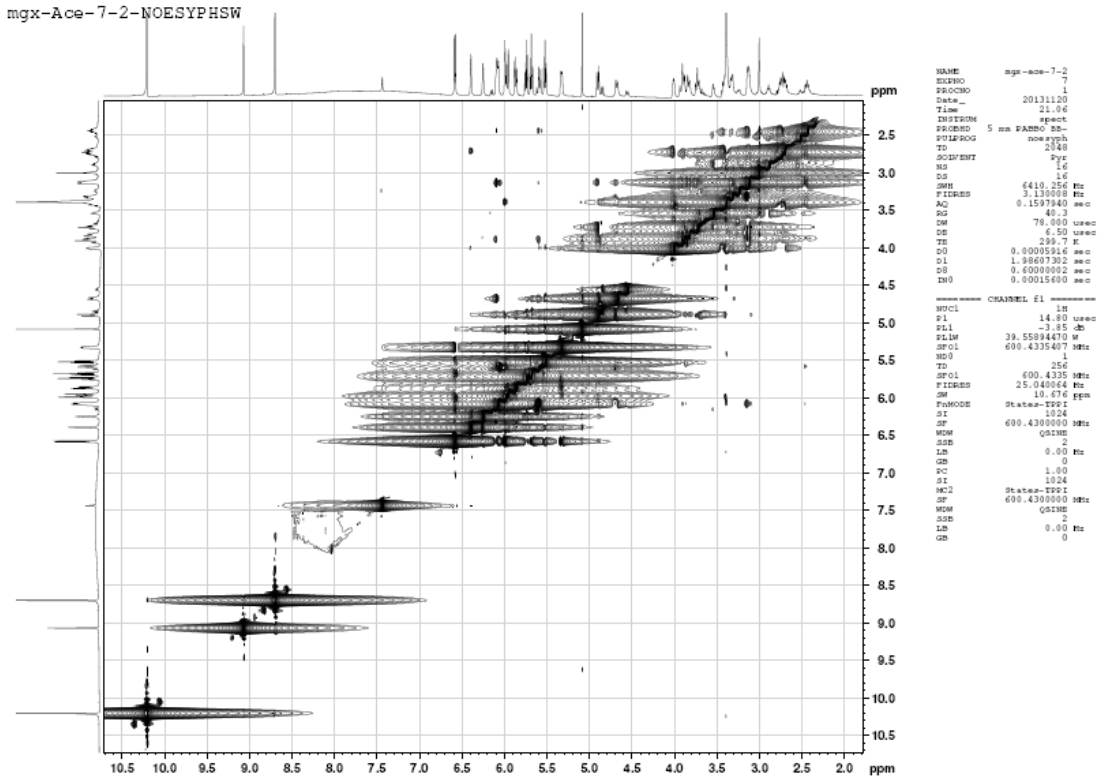

Figure S13. (a) Key ^{1}H-^{1}H COSY and HMBC Correlations of Compound **1**; (b) Key NOE Correlations of Compound **1**

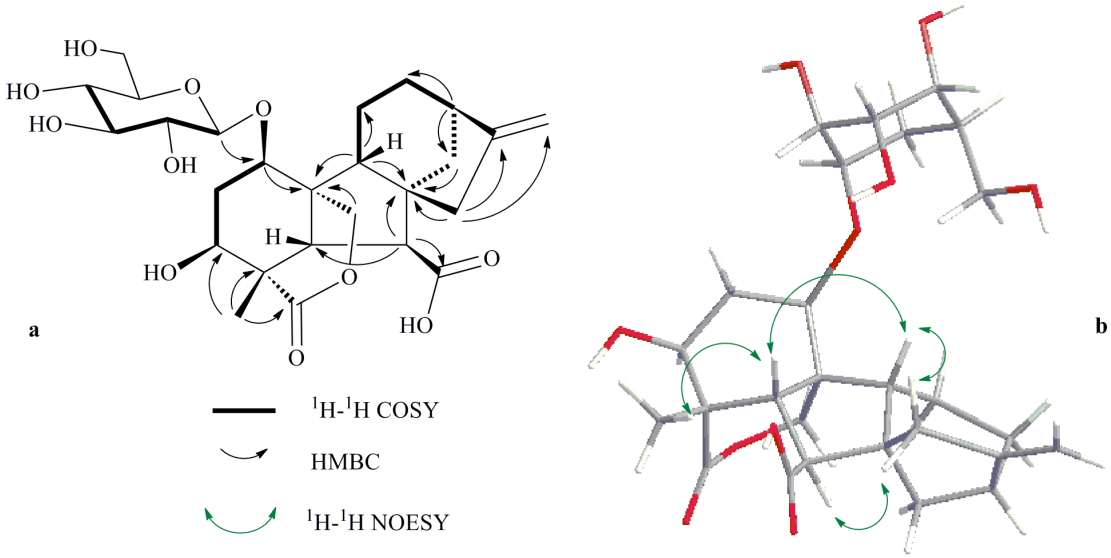

Table S1 ^{1}H-NMR and ^{13}C-NMR (Pyridine, 600, 150MHz) assignments for **1** and **2**

Position	**1**		**2**	
	δ_C	δ_H (J in Hz)	δ_C	δ_H (J in Hz)
1	76.3	4.53, m	76.3	4.57, m
2	40.6	2.18, m; 2.32, m	40.3	2.32, m; 2.17, m
3	73.9	4.38, dd, 12.0, 1.8	73.8	4.64, dd, 12.0, 1.2
4	48.1		48.3	
5	45.5	3.33, d, 12.6	46.5	3.34, d, 12.6
6	52.1	3.13, d, 12.6	50.3	3.05, d, 12.6
7	176.1		176.2	
8	51.1		55.7	
9	55.8	1.60, dd, 13.8, 6.0	55.9	1.60, dd, 13.8, 6.0
10	42.6		42.1	
11	16.4	0.94, m; 1.24, m	19.7	1.00, m; 1.51, m
12	32.0	1.16, m; 1.90, m	20.2	1.42, m; 1,74, m
13	40.1	2.49, m	41.8	2.03, d, 7.2
14	37.0	1.62, m; 1.79, m	41.1	2.21, m; 2.02, m
15	47.1	2.39, m; 2.32, m	135.8	5.93, s
16	158.0		149.4	
17	106.9	4.87, s; 4.74, s	15.7	1.50, s
18	174.5		174.6	
19	21.4	1.84, s	21.2	1.87, s
20	74.6	4.57, d, 12.0; 4.10, d, 12.0	74.1	4.10, d, 12.0 4.64, d, 12.0
Glu-1	102.8	5.01, d, 7.8	102.8	5.09, d, 7.8
Glu-2	75.6	3.94, m	75.7	4.02, m
Glu-3	78.6	4.07, m	78.7	4.16, m
Glu-4	71.7	4.15, m	71.8	4.24, m
Glu-5	78.8	3.78, m	79.0	3.82, m

Glu-6	62.8	4.28,m; 4.39,m	62.9	4.47, m; 4.36, m

Note: Assignments were accomplished using HSQC, HMBC, ^{1}H-^{1}H COSY and NOESY experiments.

Table S2 In vitro cytotoxicity of compounds **1**-**6**

Compounds	IC_{50}(uM) [a]			
	MCF-7	HCT-116	HepG-2	HeLa
1	45.4± 1.8	57.3± 3.5	40.2± 2.4	>100
2	82.5± 3.9	77.3± 4.8	>100	>100
3	38.6± 3.2	68.7± 4.1	56.6± 2.5	45.5± 1.6
4	69.6± 4.9	80.2± 3.2	>100	35.8± 2.3
5	76.2± 4.6	88.9± 3.8	>100	>100
6	30.5± 1.6	28.5± 2.7	32.2± 1.8	47.5± 2.8
Doxorubicin[c]	1.35± 0.07	1.14 ± 0.04	0.9± 0.02	1.21 ± 0.08

[a] IC_{50} = inhibitory concentration 50%; Values are means ± SD of triplicate experiments. [c] Positive control sunatance