

SUPPLEMENTARY MATERIAL

Two new compounds from the marine sponge derived fungus

Penicillium chrysogenum

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Two new compounds (**1** and **2**) were isolated from the marine sponge derived fungus *Penicillium chrysogenum* by using various column chromatography techniques. Their structures were elucidated by extensive analysis of spectroscopic data and quantum chemical calculation. Compound **1** exhibited moderate activity against PTP1B with $2.95 \pm 0.97\%$ at the concentration of $30 \mu\text{mol} \cdot \text{L}^{-1}$.

Keywords: Marine sponge; Fungus; *Penicillium chrysogenum*; PTP1B activity

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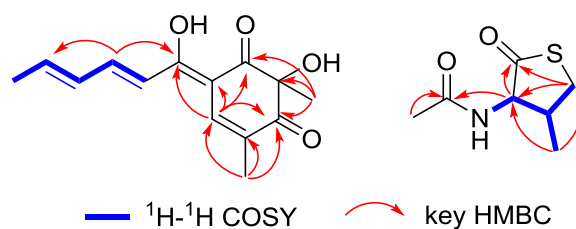
Figure S13. NOE spectrum of compound **2** in CDCl_3

Table S1 ^1H NMR (500 MHz, CDCl_3) and ^{13}C NMR (150 MHz, CDCl_3) data for compound **1**

Position	δ_{H} , mult. (J in Hz)	δ_{C} , Type
1		202.4, s
2		81.3, s
3		198.9, s
4		123.8, s
5	7.35, s	136.7, d
6		104.8, s
7		173.1, s
8	7.42, dd (14.3, 10.2)	144.1, d
9	6.41, d (14.7)	116.9, d
10	6.35, d (15.3)	130.6, d
11	6.29, m	141.9, d
12	1.93, d (5.4)	19.0, q
13	1.55, s	30.1, q
14	1.99, s	15.7, q
OH-2	5.43, s	
OH-7	3.49, s	

Table S2 ^1H NMR (500 MHz, CDCl_3) and ^{13}C NMR (150 MHz, CDCl_3) data for compound **2**

Position	δ_{H} , mult. (J in Hz)	δ_{C} , Type
1		204.9, s
2	4.45, dd (12.5, 8.7)	64.4, d
3	2.24, m	40.5, d
4	3.24, dd (11.2, 6.2)	34.0, t
5	1.25, d (6.5)	17.5, q
6-NH	5.67, s	
7		170.9, s
8	2.08, s	23.4, q

**Figure S1** Key COSY and HMBC correlations of compound **1** and **2**

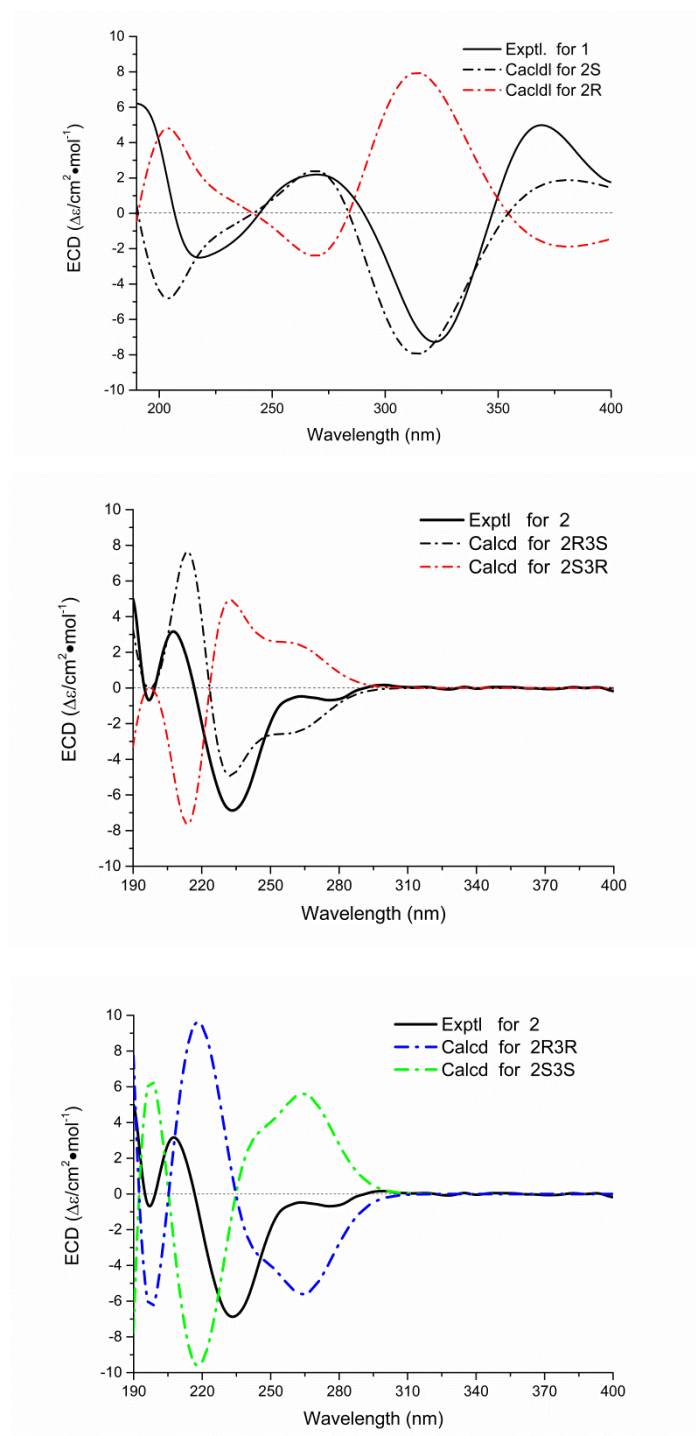


Figure S2 The experimental CD and calculated ECD spectrum of compound **1** and **2**

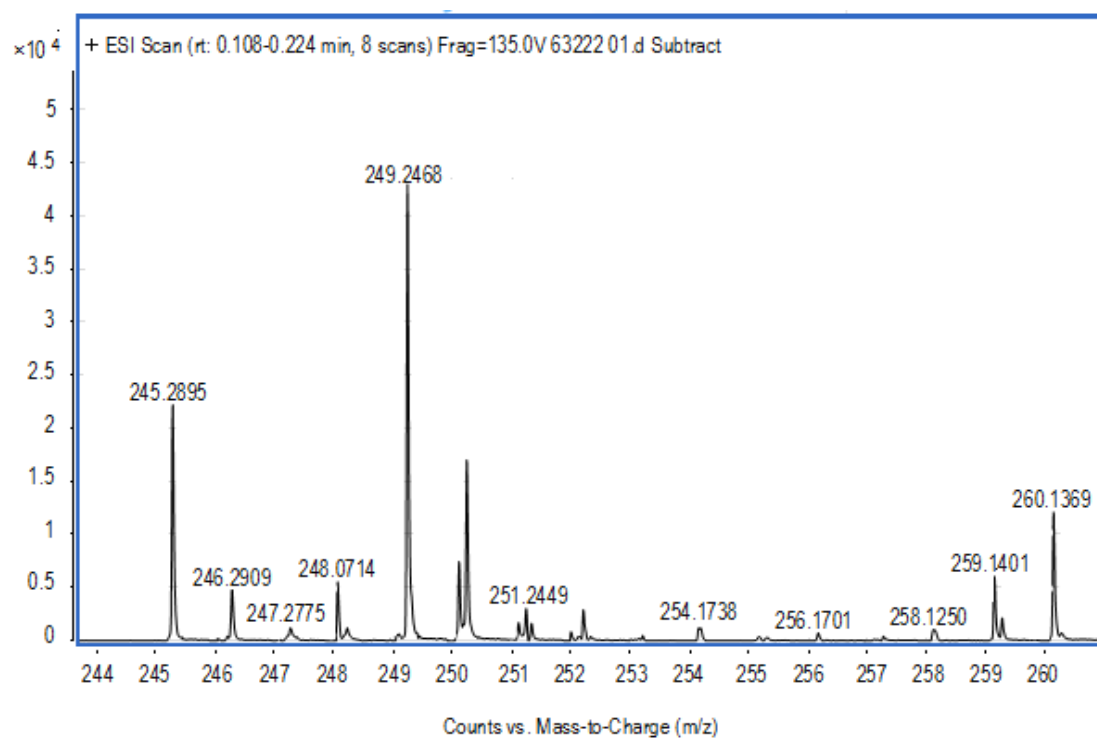


Figure S3 HRESIMS spectrum of compound **1**

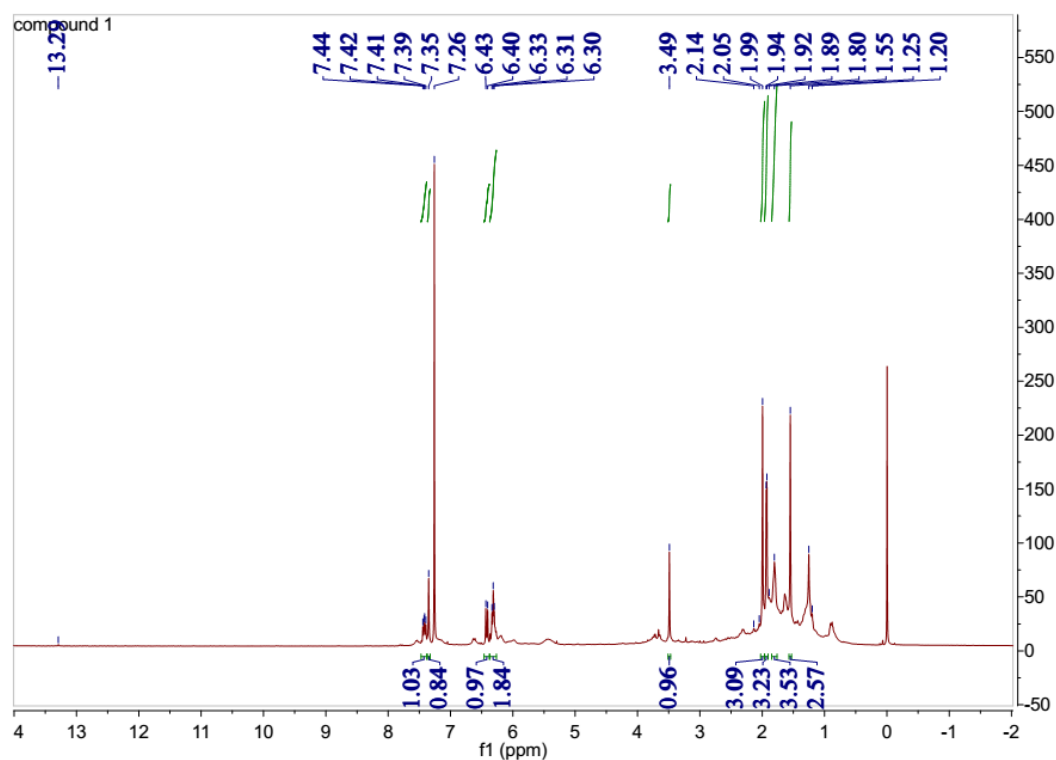


Figure S4 ¹H NMR spectrum of compound **1** in CDCl₃

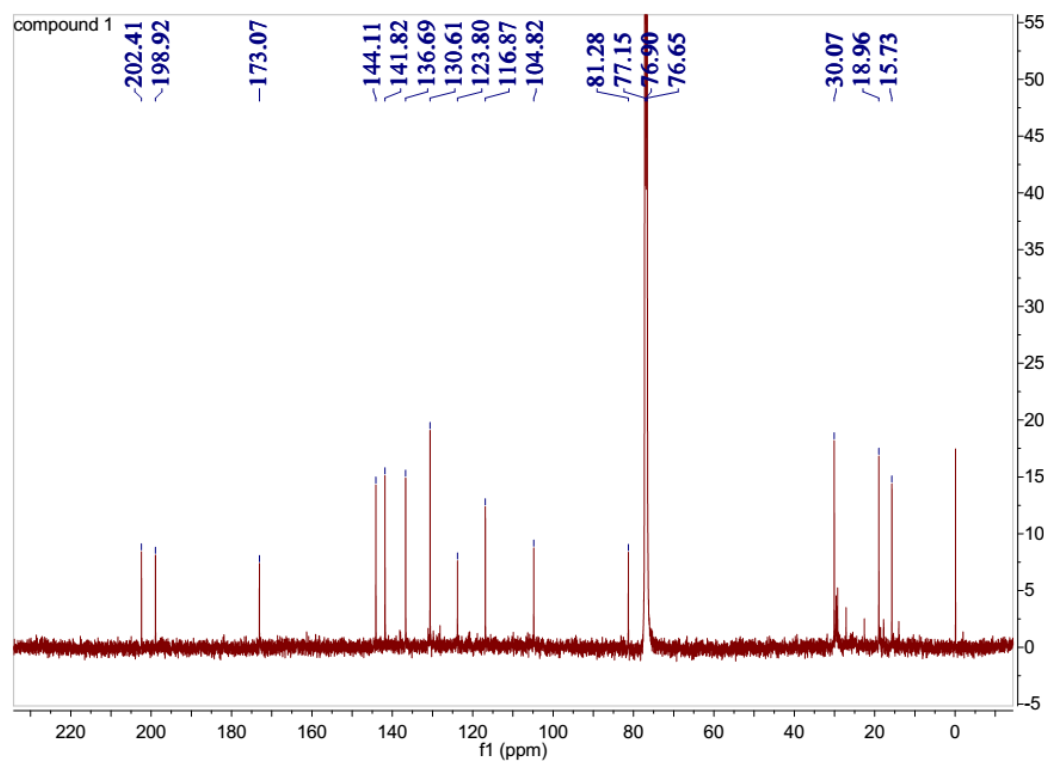


Figure S5 ^{13}C NMR spectrum of compound **1** in CDCl_3

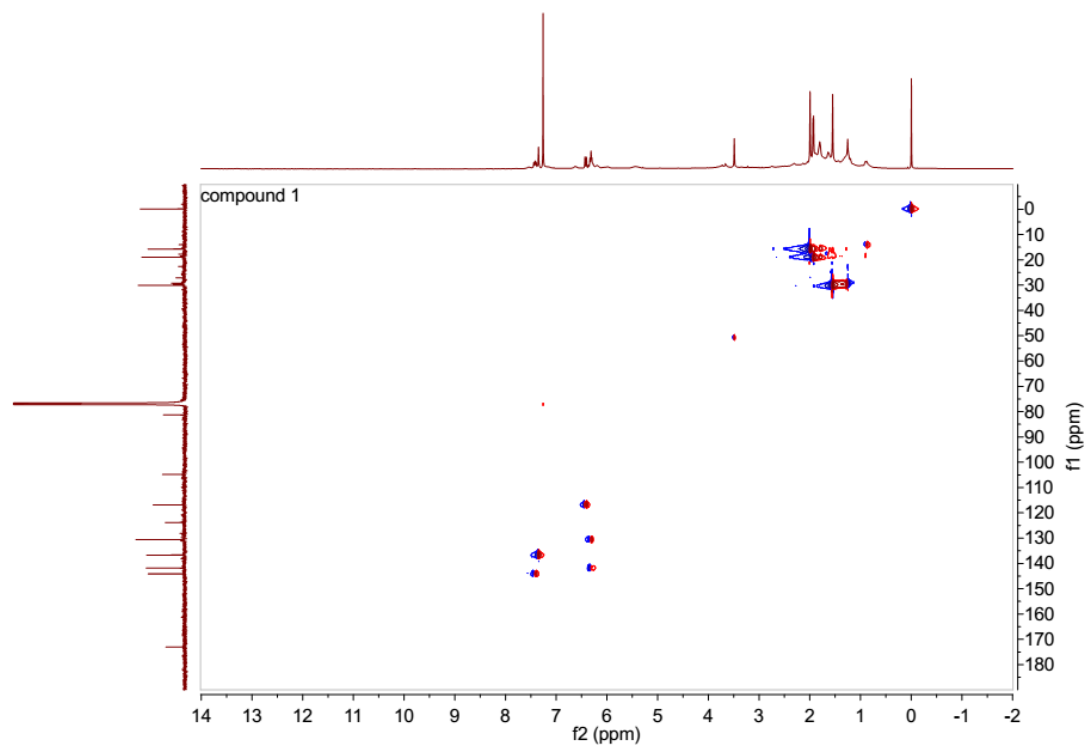


Figure S6 HSQC spectrum of compound **1** in CDCl_3

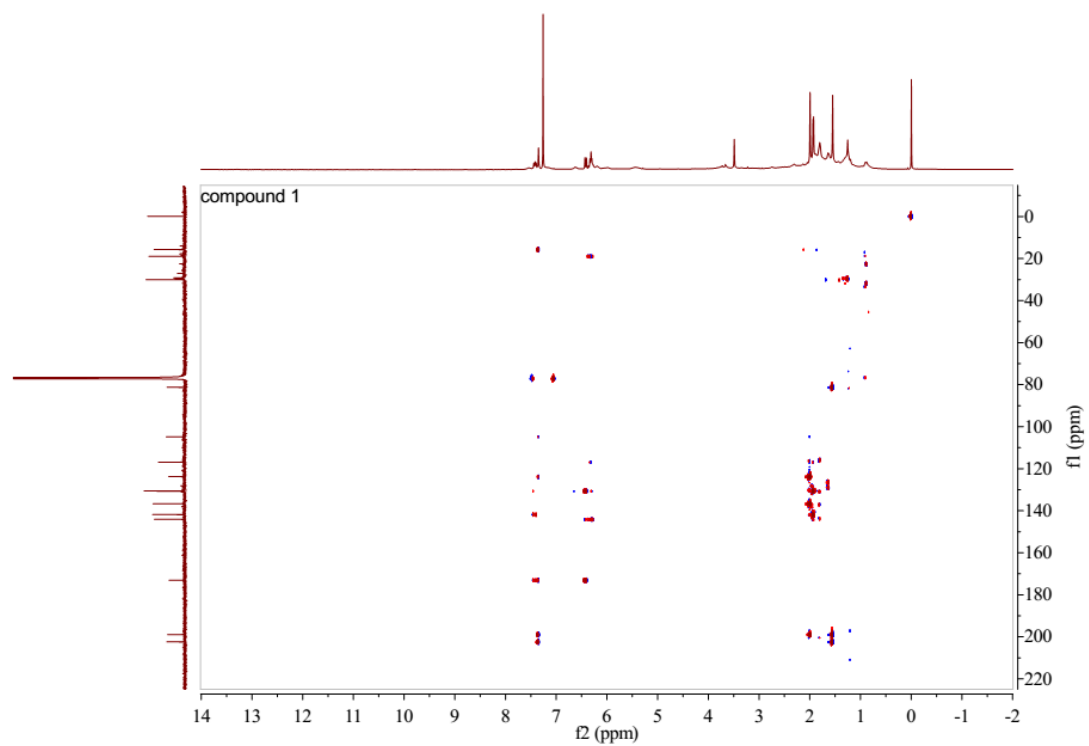


Figure S7 HMBC spectrum of compound **1** in CDCl_3

20181016-X-2281_181016111020 #56 RT: 0.46 AV: 1 NL: 4.74E6

T: FTMS + p ESI Full ms [150.00-2000.00]

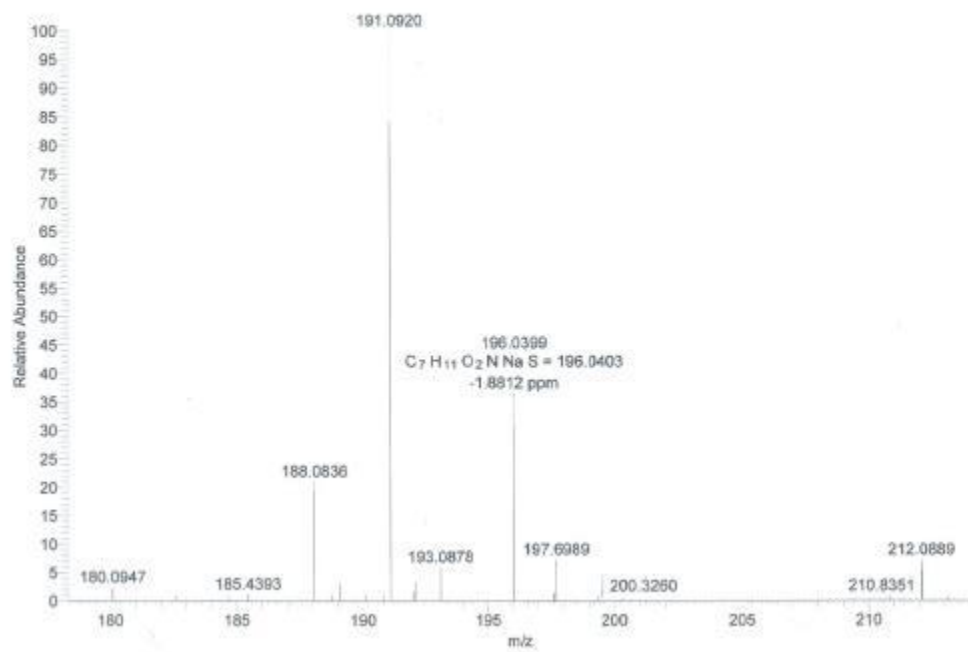


Figure S8 HRESIMS spectrum of compound **2**

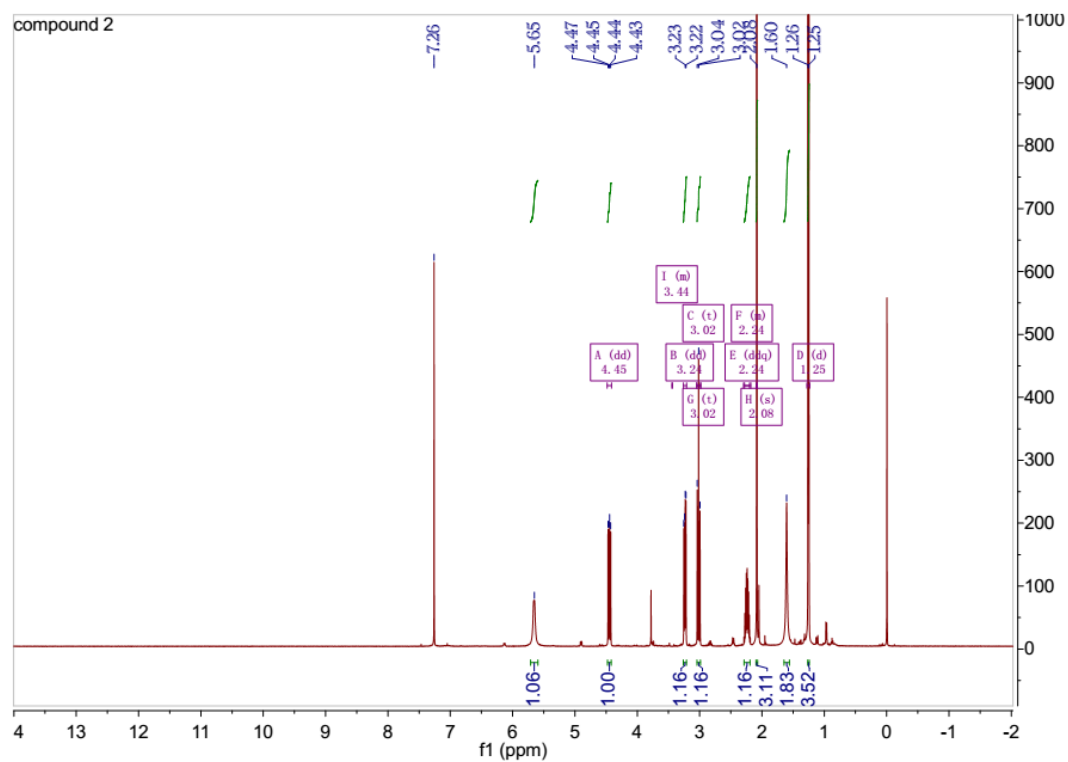


Figure S9 ^1H NMR spectrum of compound **2** in CDCl_3

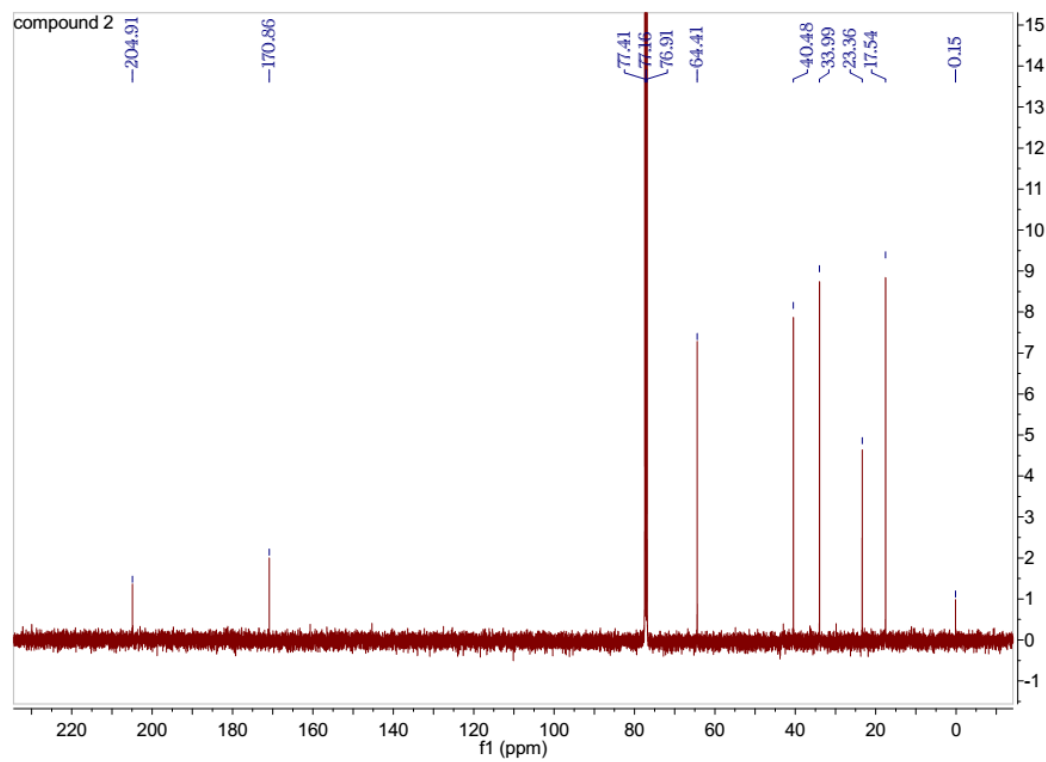


Figure S10 ^{13}C NMR spectrum of compound **2** in CDCl_3

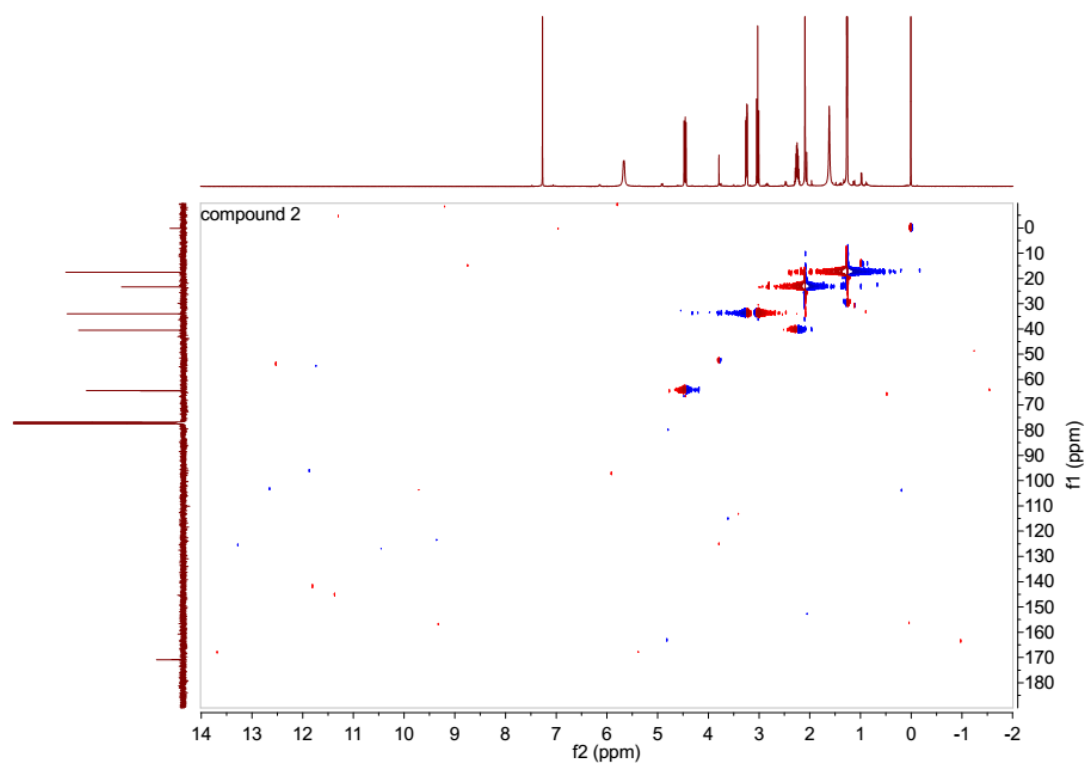


Figure S11 HSQC spectrum of compound **2** in CDCl₃

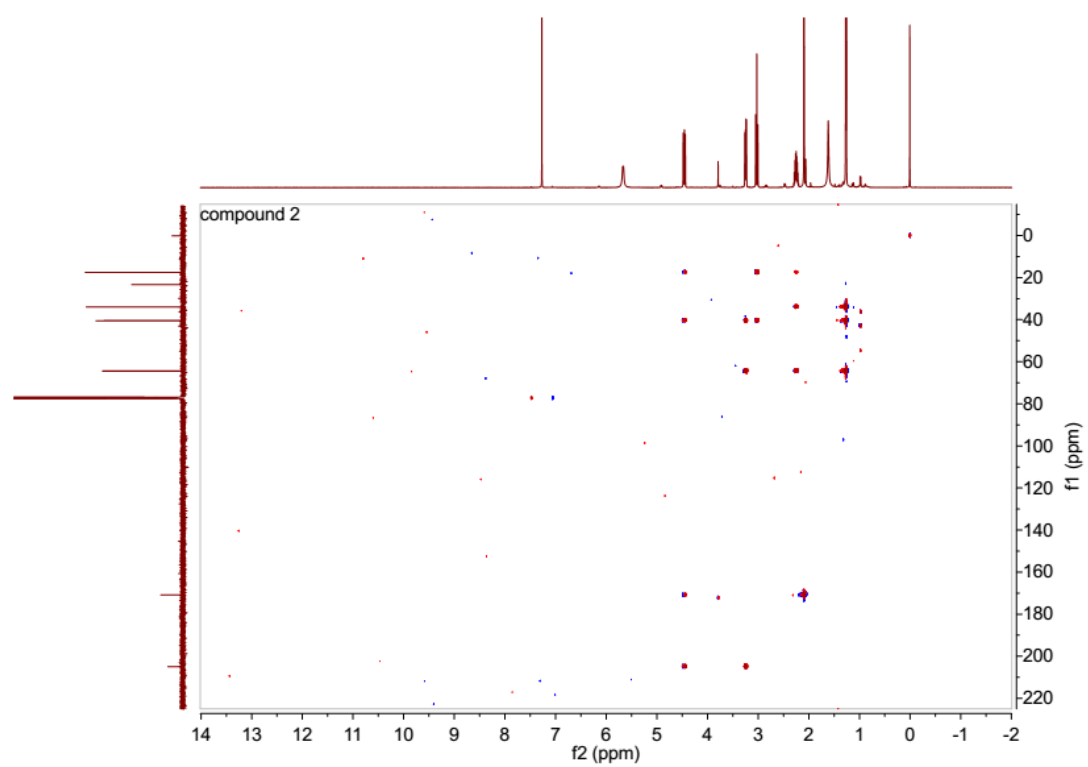


Figure S12 HMBC spectrum of compound **2** in CDCl₃

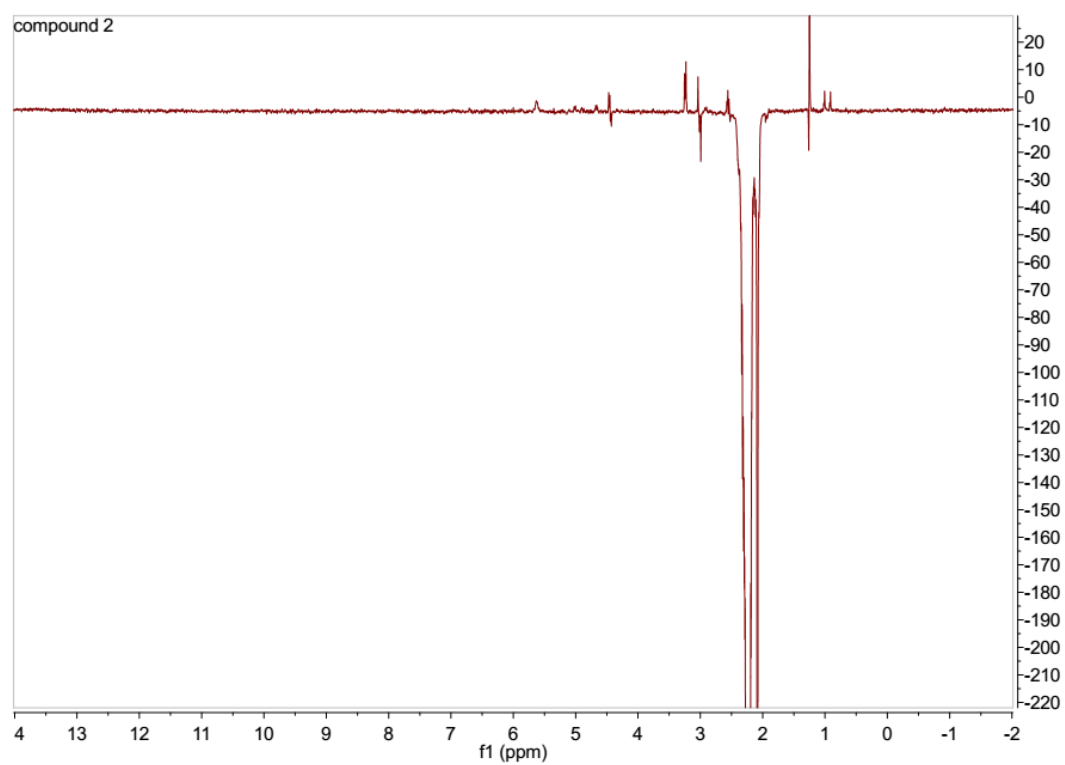


Figure S13 NOE spectrum of compound **2** in CDCl_3