

# Paulomycin G, a new natural product with cytotoxic activity against tumor cell lines produced by a deep-sea sediment derived *Micromonospora matsumotoense* M-412 from the Avilés Canyon in the Cantabrian Sea

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## List of supplementary materials

**Figure S1.** HPLC trace of the sample isolated.

**Figure S2.** UV spectrum of compound 1.

**Figure S3.** ESI-TOF spectra of compound 1.

**Figure S4.** UV spectrum of compound 2.

**Figure S5.** ESI-TOF spectra of compound 2.

**Figure S6.** <sup>1</sup>H NMR spectrum (DMSO-*d*<sub>6</sub>, 500 MHz) of compound 1.

**Figure S7.** <sup>13</sup>C NMR spectrum (DMSO-*d*<sub>6</sub>, 125 MHz) of compound 1.

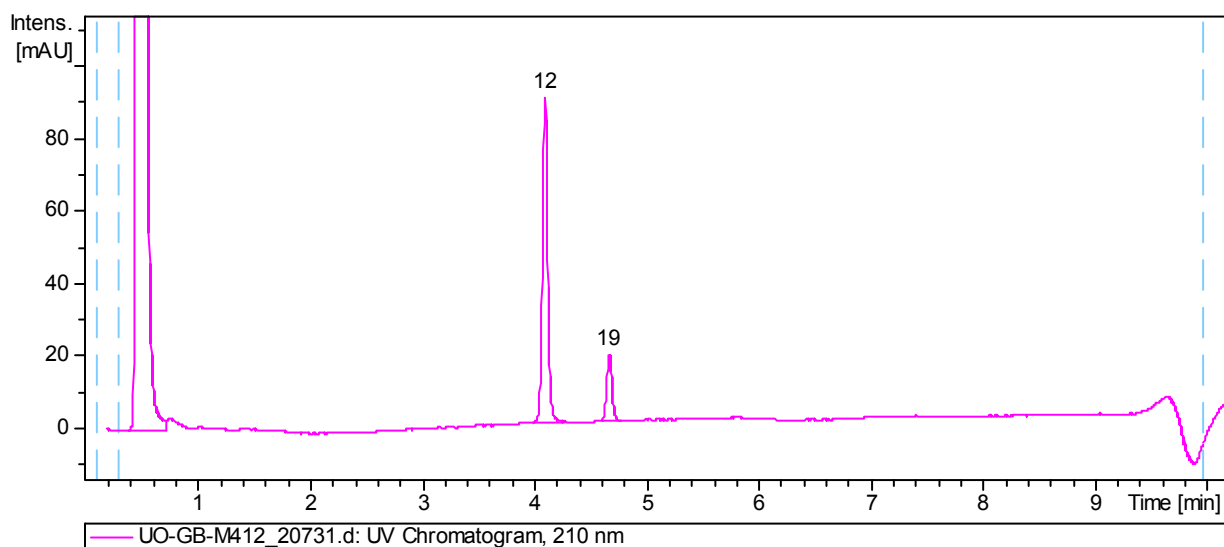
**Figure S8.** COSY spectrum (DMSO-*d*<sub>6</sub>) of compound 1.

**Figure S9.** HSQC spectrum (DMSO-*d*<sub>6</sub>) of compound 1.

**Figure S10.** HMBC spectrum (DMSO-*d*<sub>6</sub>) of compound 1.

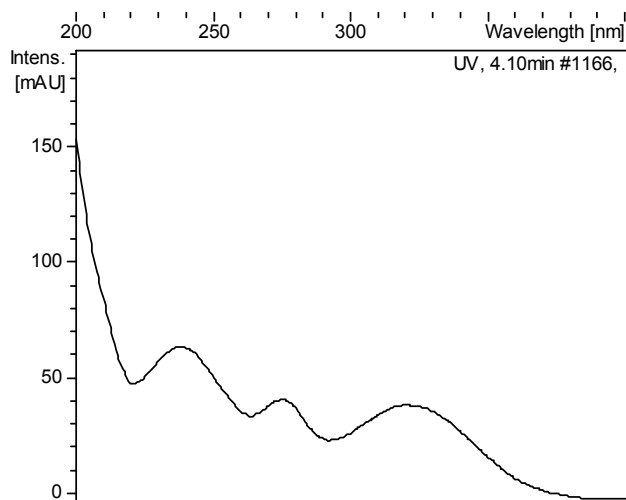
**Figure S11.** ROESY spectrum (DMSO-*d*<sub>6</sub>) of compound 1.

**Figure S12.** Picture of *Micromonospora matsumotoense* M-412.



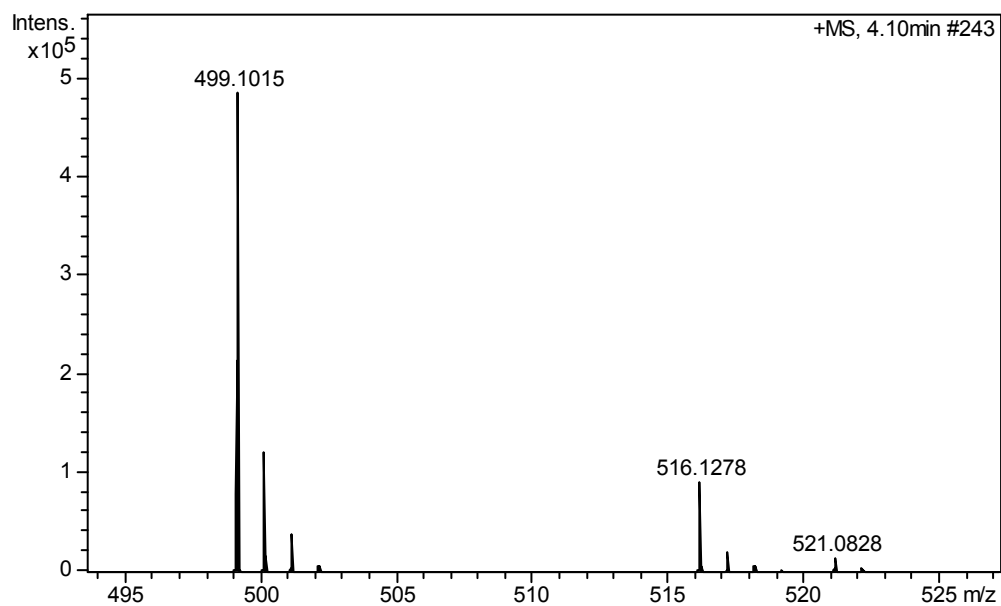
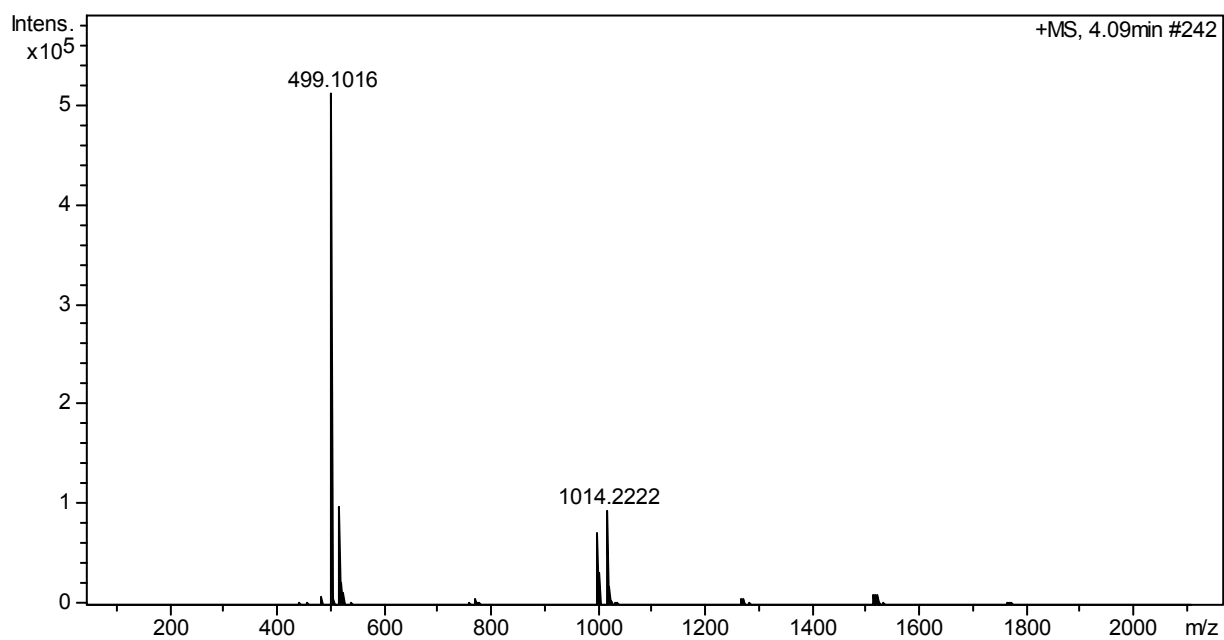
Compound	Peak	RT [min]	Area	% Area
1	12	4.10	293	83.5
2	19	4.66	58	16.5

**Figure S1.** HPLC trace of the sample isolated.



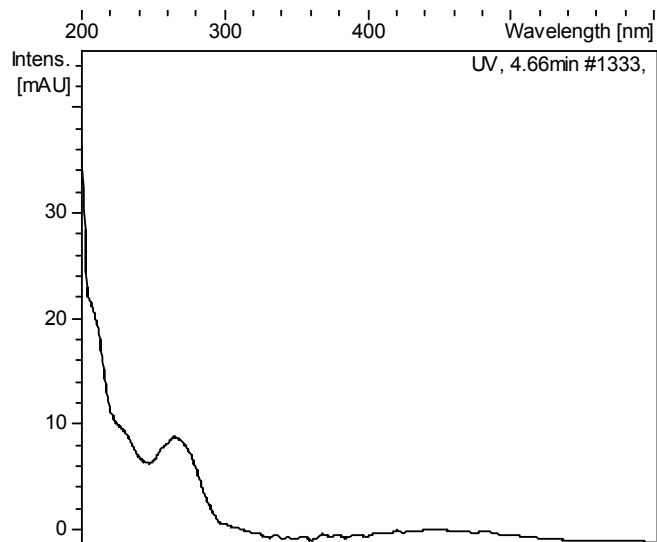
Maxima: 238, 276 and 320nm

**Figure S2.** UV spectrum of compound 1.

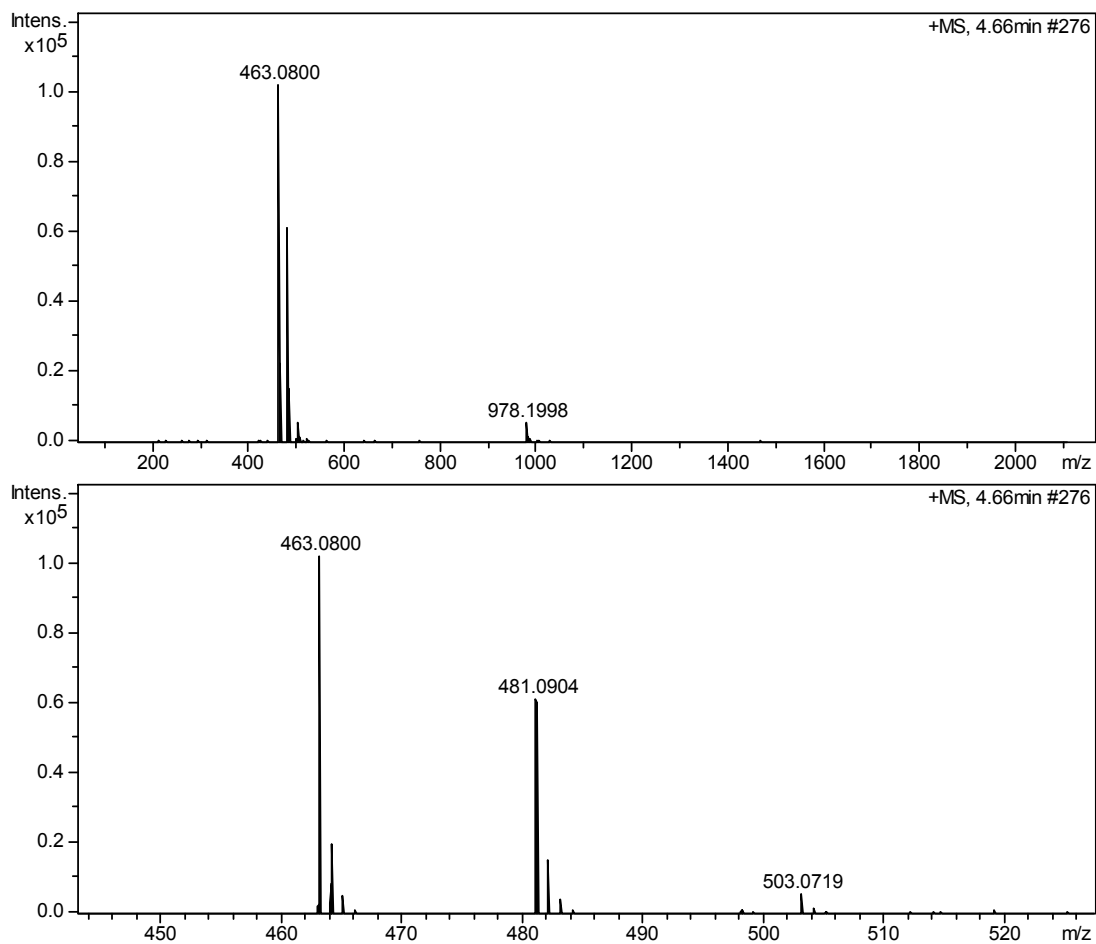


$C_{20}H_{23}N_2O_{11}S^+$ : calc= 499.101707; exp= 499.1015; err=-0.4 ppm  
 $C_{20}H_{26}N_3O_{11}S^+$ : calc= 516.128256; exp=516.1278; err=-0.9 ppm  
 $C_{20}H_{22}N_2O_{11}SNa^+$ : calc= 521.083651; exp=521.0828; err=-1.6 ppm

**Figure S3.** ESI TOF spectra of compound 1.



**Figure S4.** UV spectrum of compound 2.

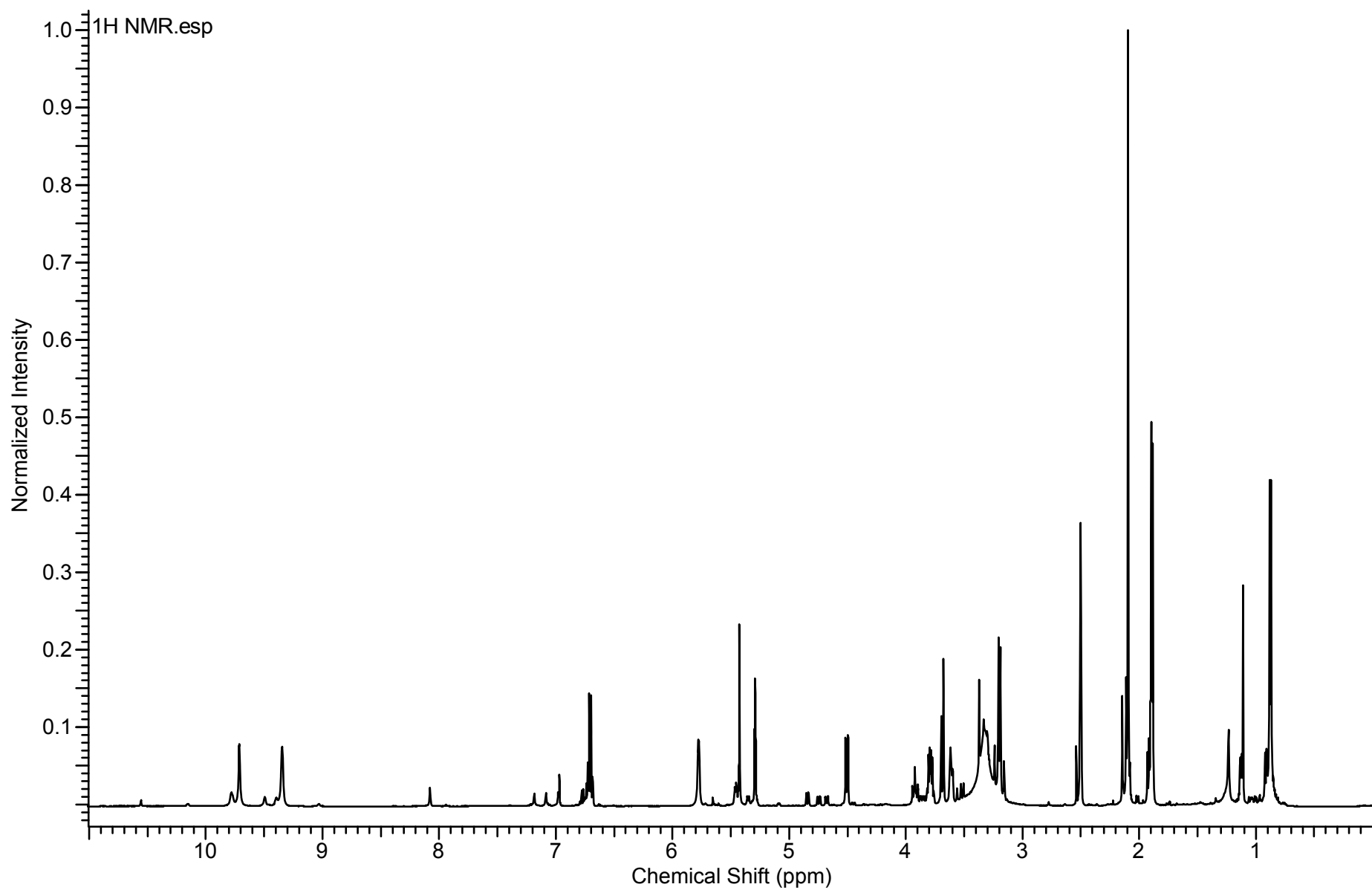


$C_{20}H_{21}N_2O_{10}S^+$ : calc= 481.091142; exp= 481.0904; err=-1.5 ppm

$C_{20}H_{19}N_2O_9S^+$ : calc= 463.080577; exp=463.0800; err=-1.2 ppm

$C_{20}H_{22}N_2O_{10}SNa^+$ : calc= 503.073087; exp=503.0719; err=-2.4 ppm

**Figure S5.** ESI TOF spectra of compound 2.



**Figure S6.**  $^1\text{H}$  NMR ( $\text{DMSO-}d_6$ , 500 MHz) of compound 1.

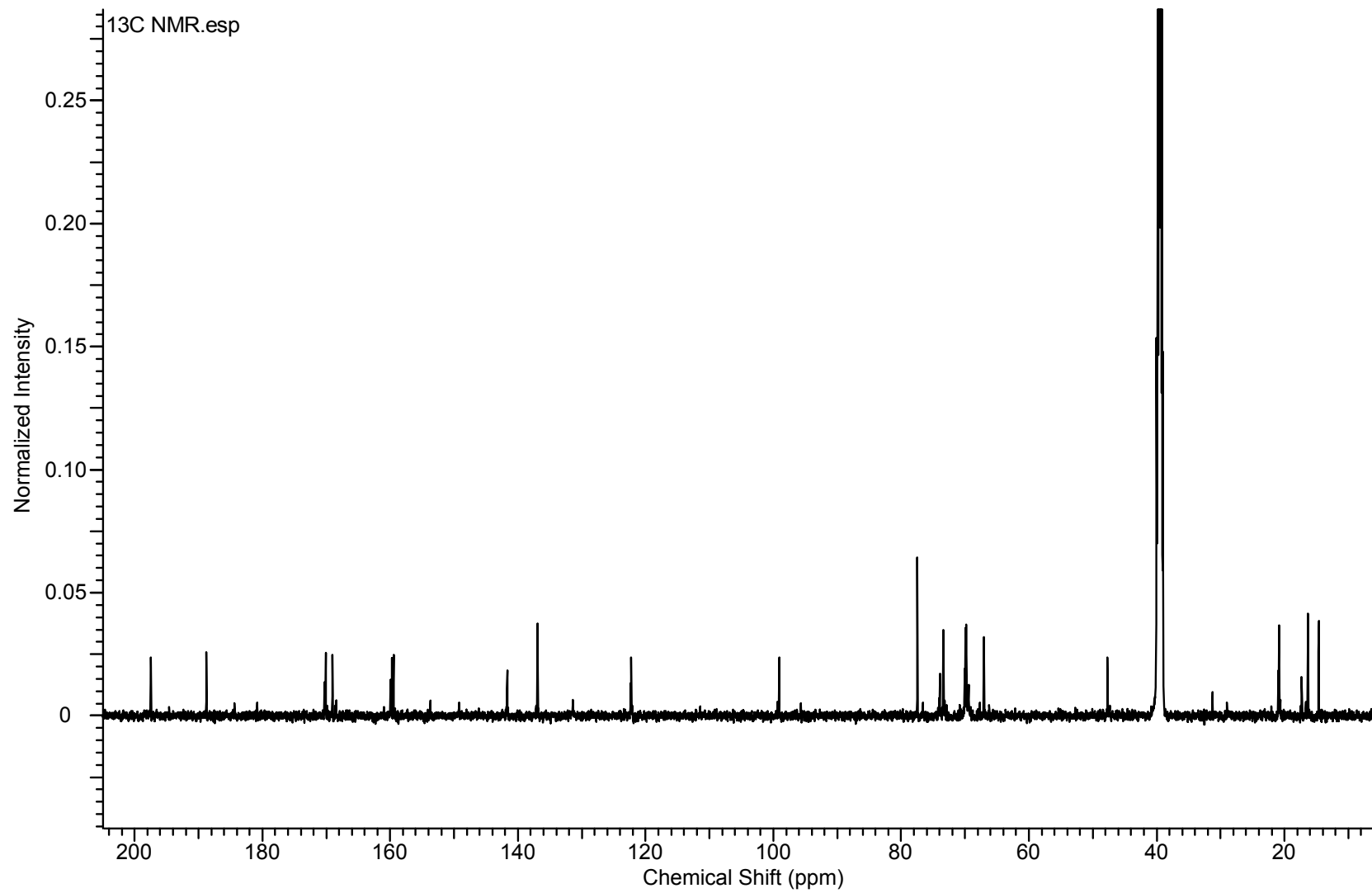
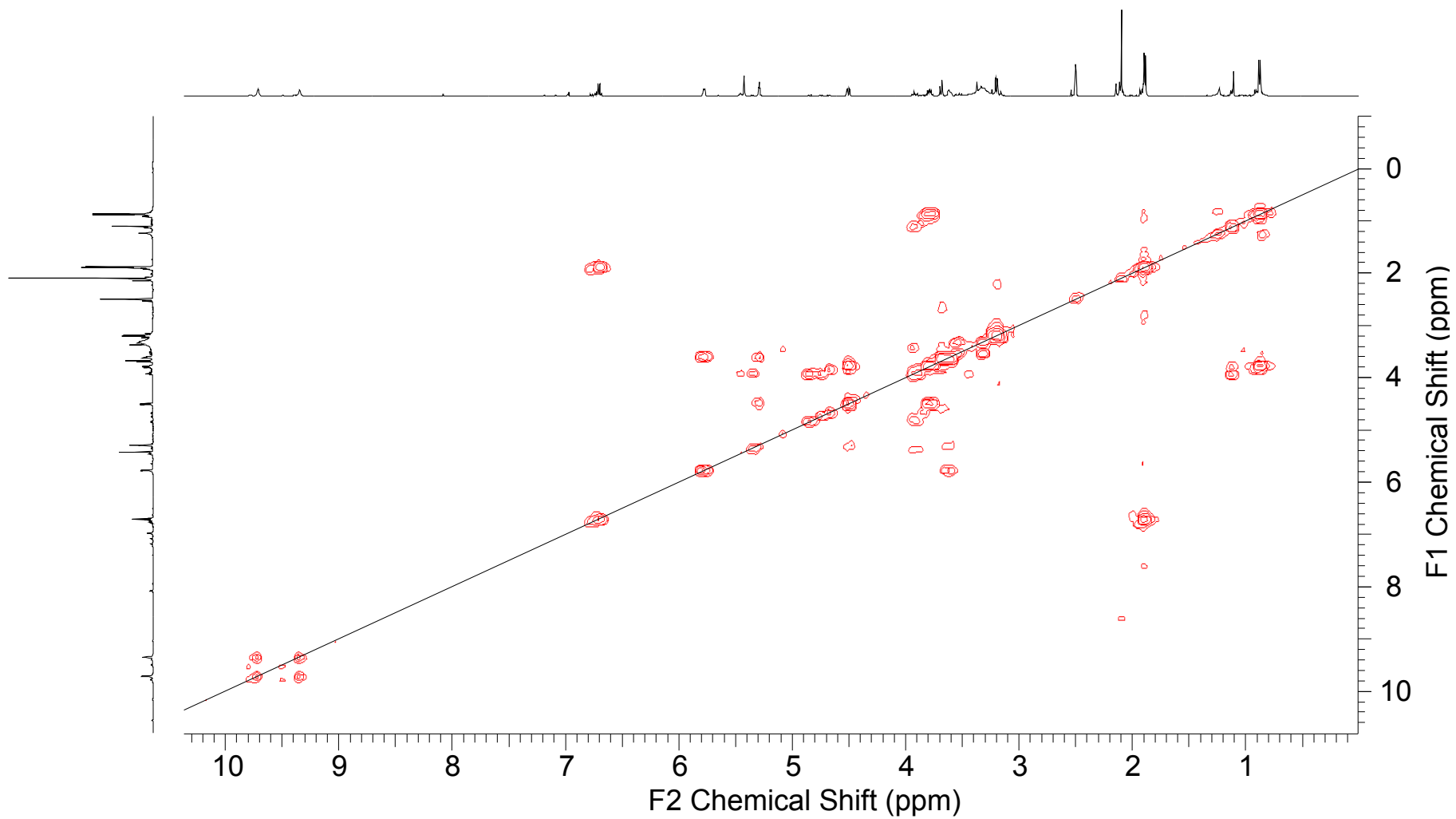


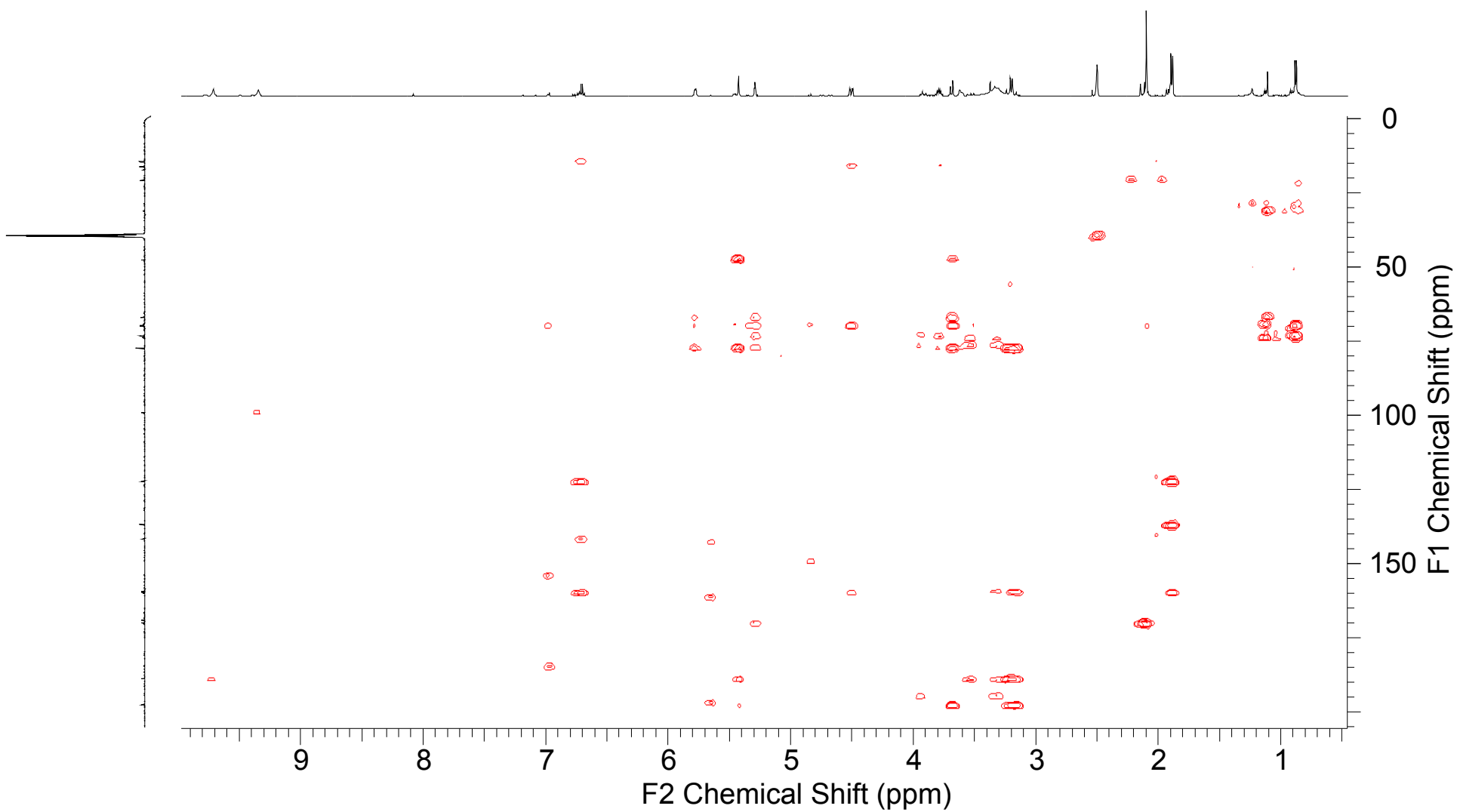
Figure S7. <sup>13</sup>C NMR (DMSO-*d*<sub>6</sub>, 125 MHz) of compound 1.



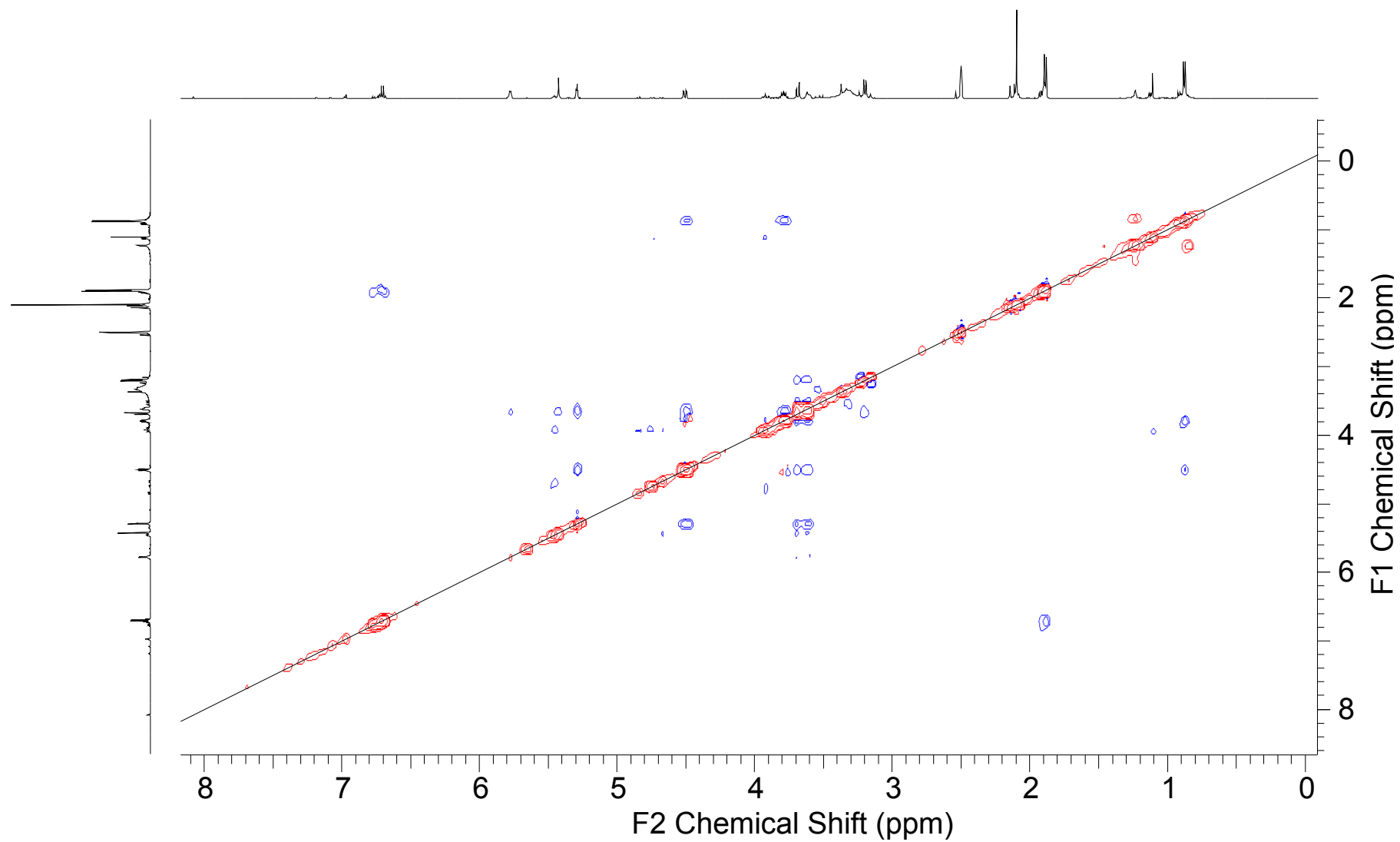
**Figure S8.** COSY spectrum (DMSO- $d_6$ ) of compound **1**.



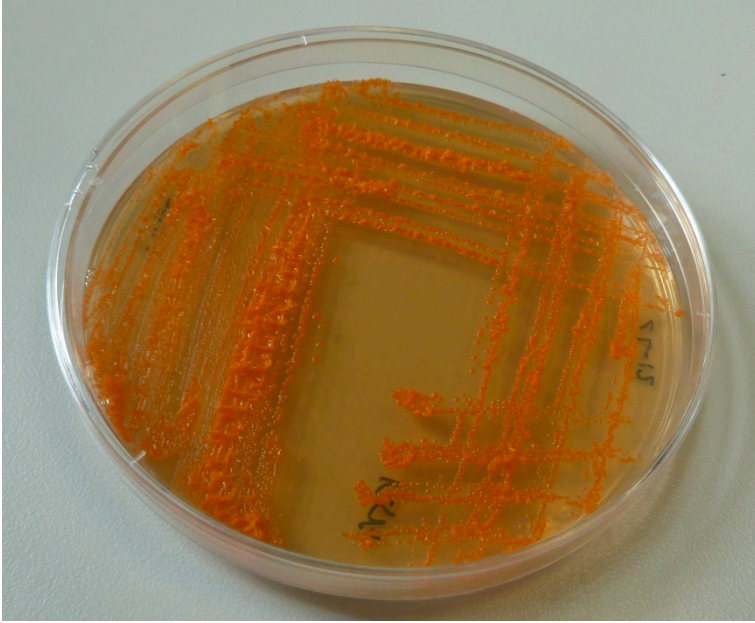




**Figure S10.** HMBC spectrum (DMSO-*d*<sub>6</sub>) of compound **1**.



**Figure S11.** ROESY spectrum (DMSO- $d_6$ ) of compound 1



**Figure S12.** Picture of *Micromonospora matsumotoense* M-412.