

## Supporting Information

*Rec. Nat. Prod.* 18:6 (2024) 687-692

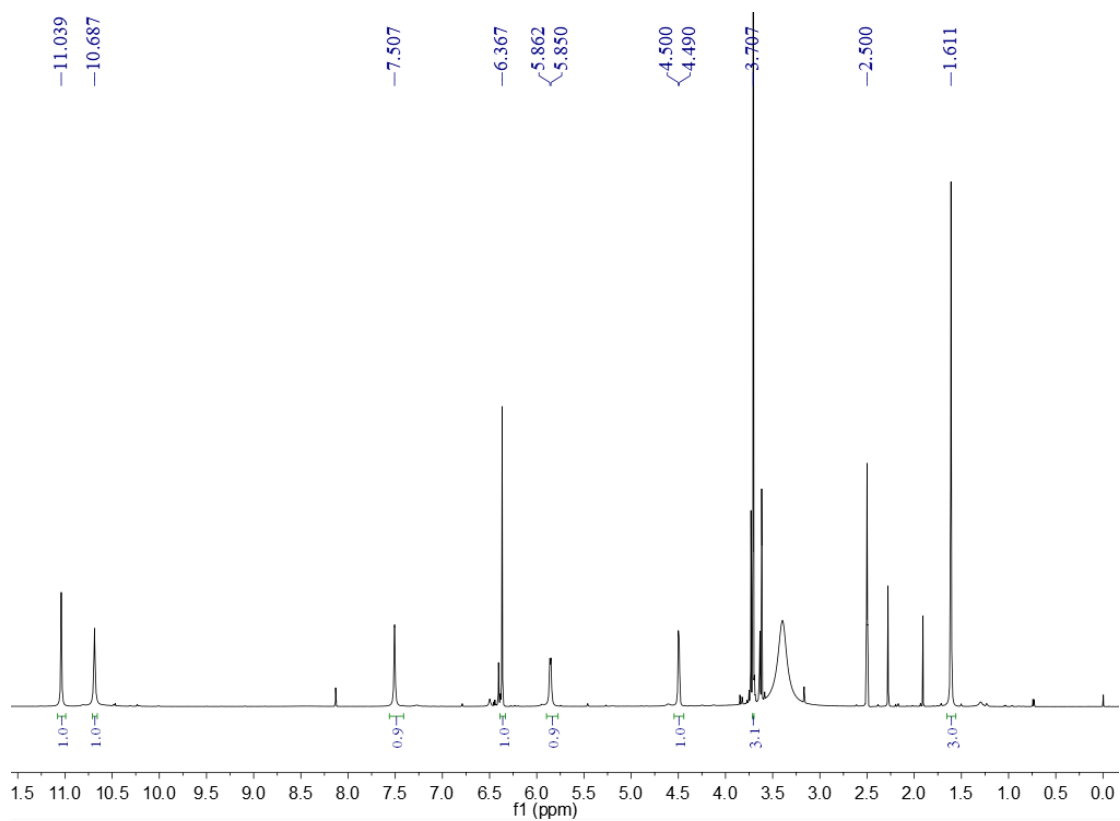
### A New Highly Oxygenated Isocoumarin from the Fungus *Penicillium* sp. Hzw-Fp1

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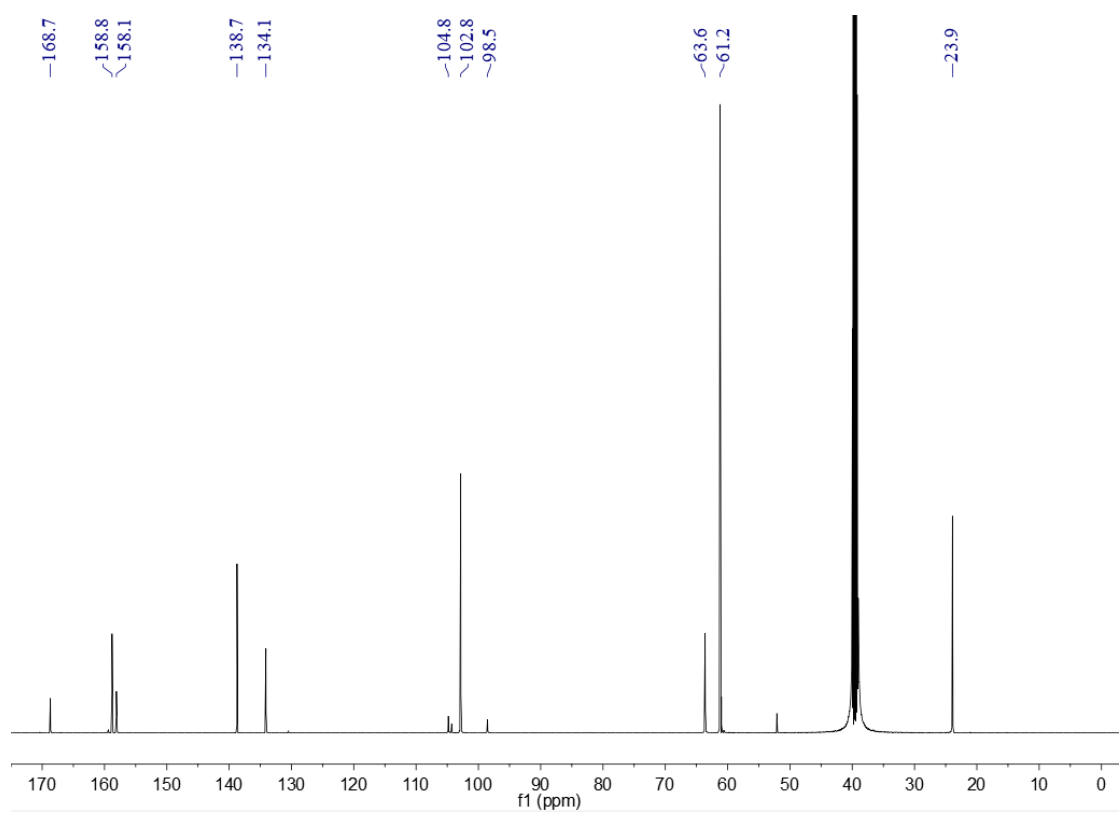
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<sup>2</sup> Hangzhou First People's Hospital Xiasha Campus, Hangzhou Rehabilitation Hospital, Hangzhou 310018, China

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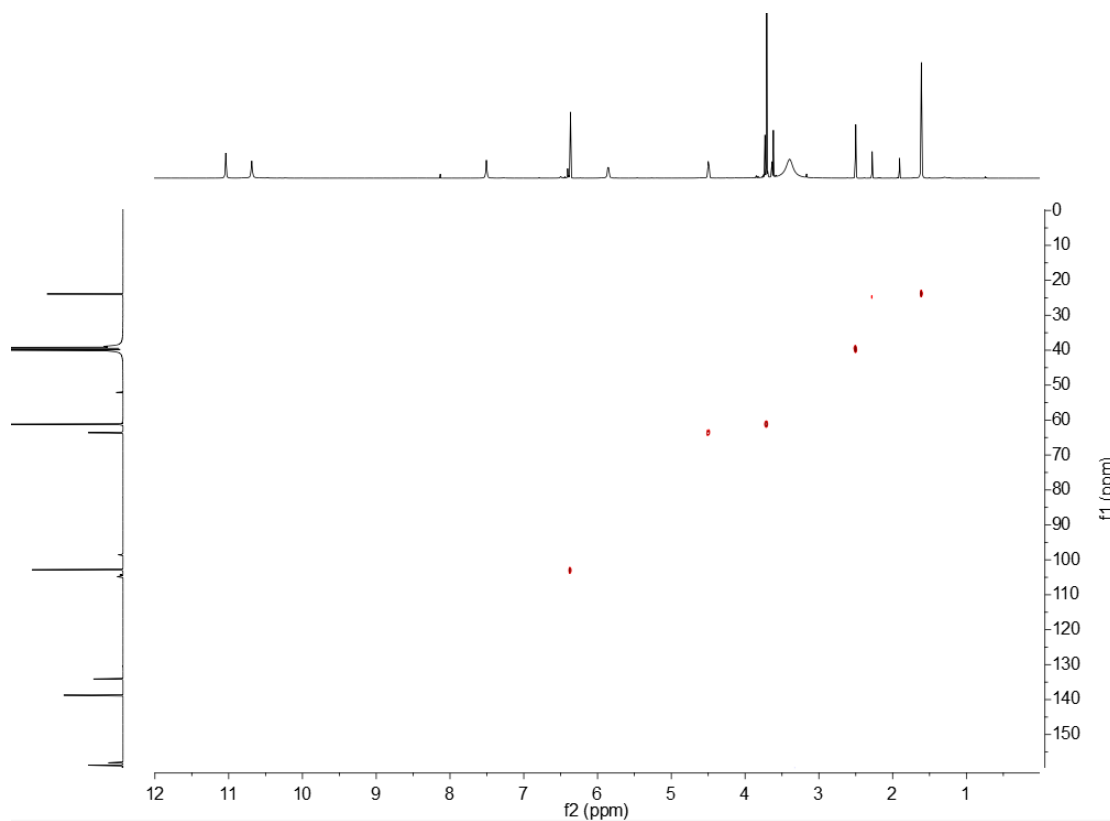


**Figure S1:**  $^1\text{H}$  NMR Spectrum of **1** in  $\text{DMSO-}d_6$  (400 MHz)

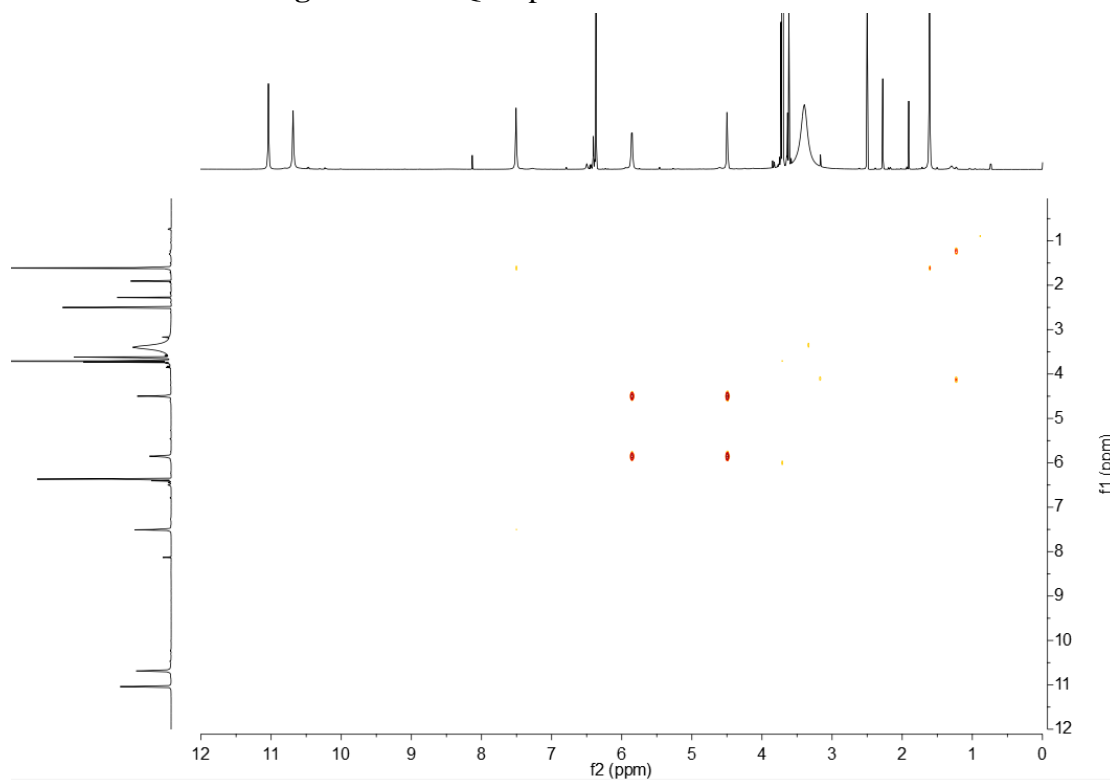


**Figure S2:**  $^{13}\text{C}$  NMR Spectrum of **1** in  $\text{DMSO-}d_6$  (100 MHz)

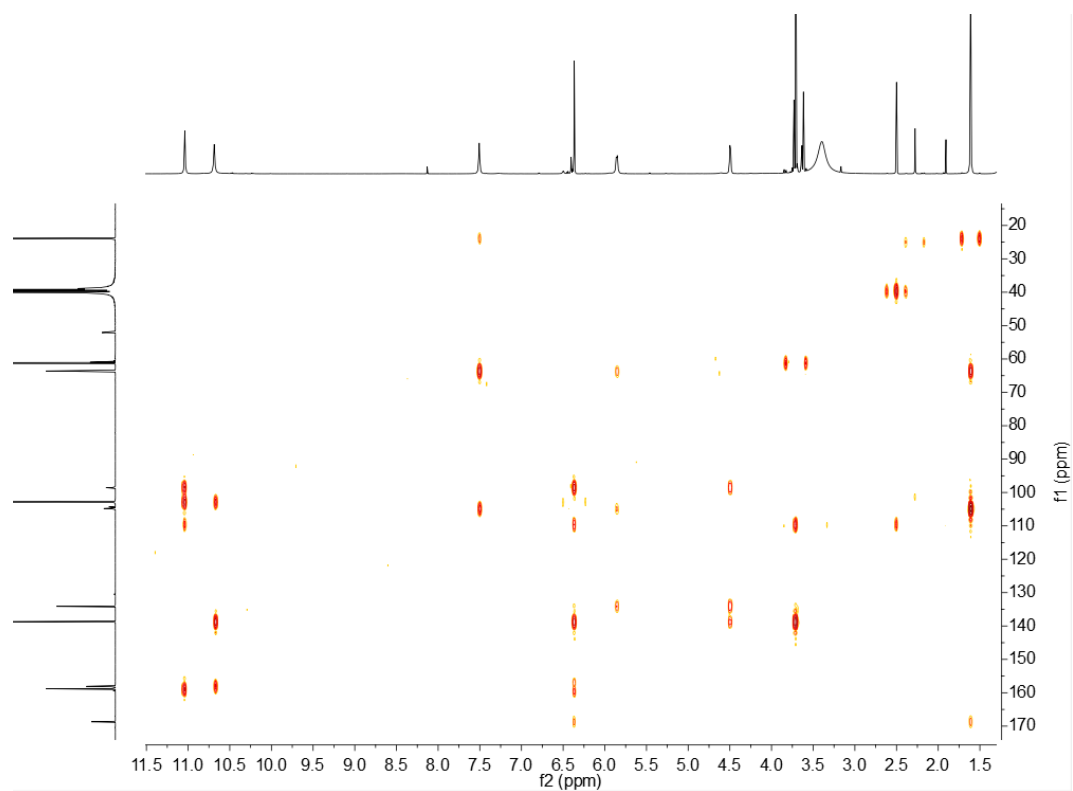
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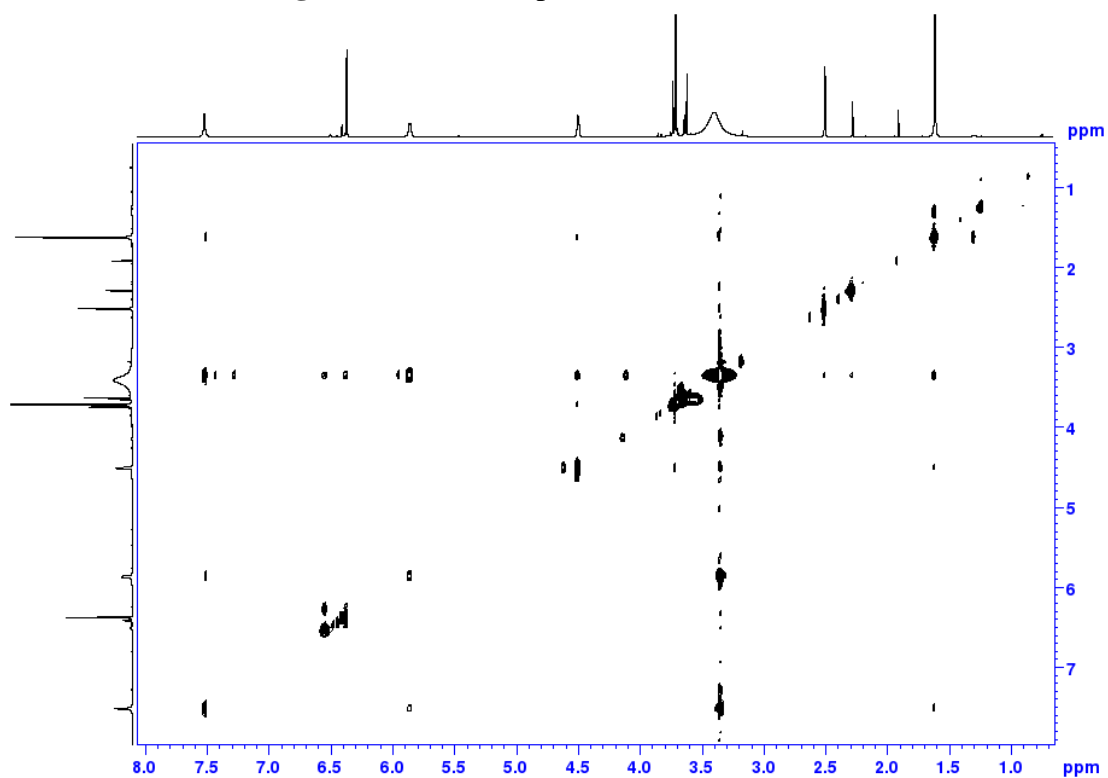
**Figure S3:** HSQC Spectrum of **1** in DMSO-*d*<sub>6</sub>



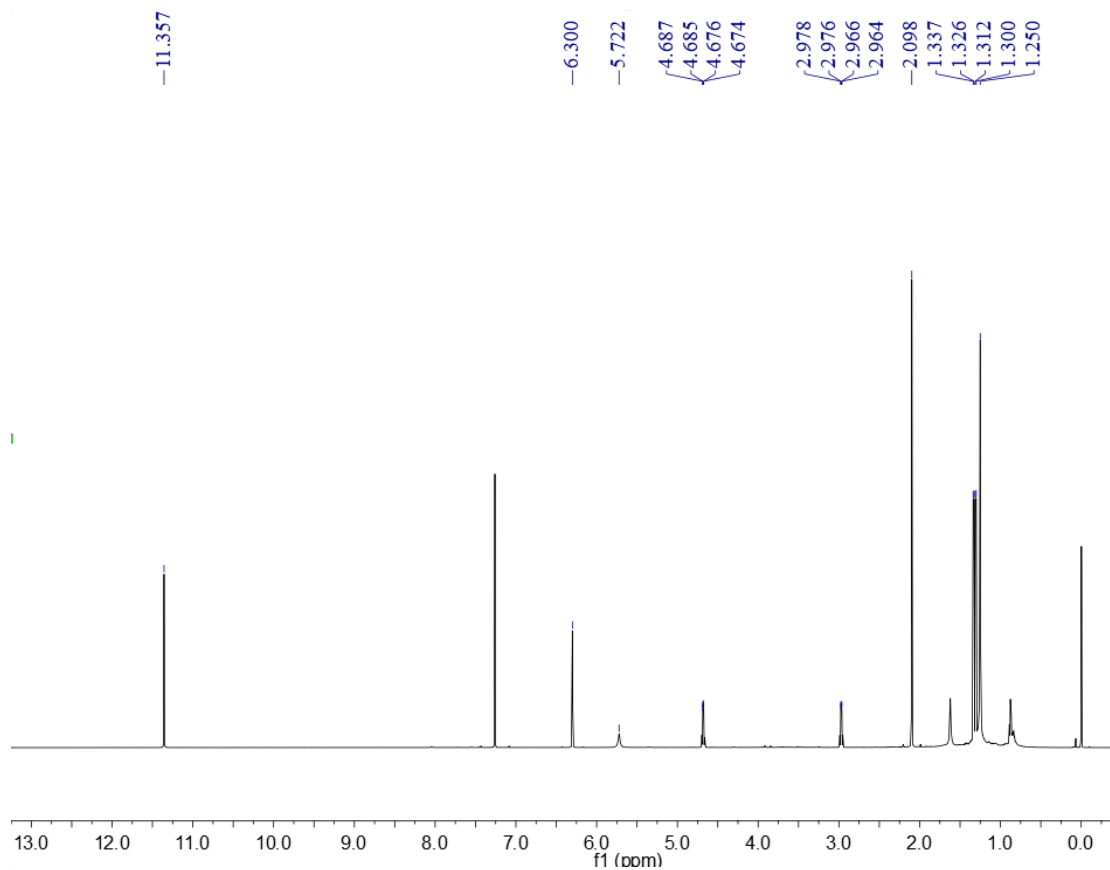
**Figure S4:** <sup>1</sup>H-<sup>1</sup>H COSY Spectrum of **1** in DMSO-*d*<sub>6</sub>



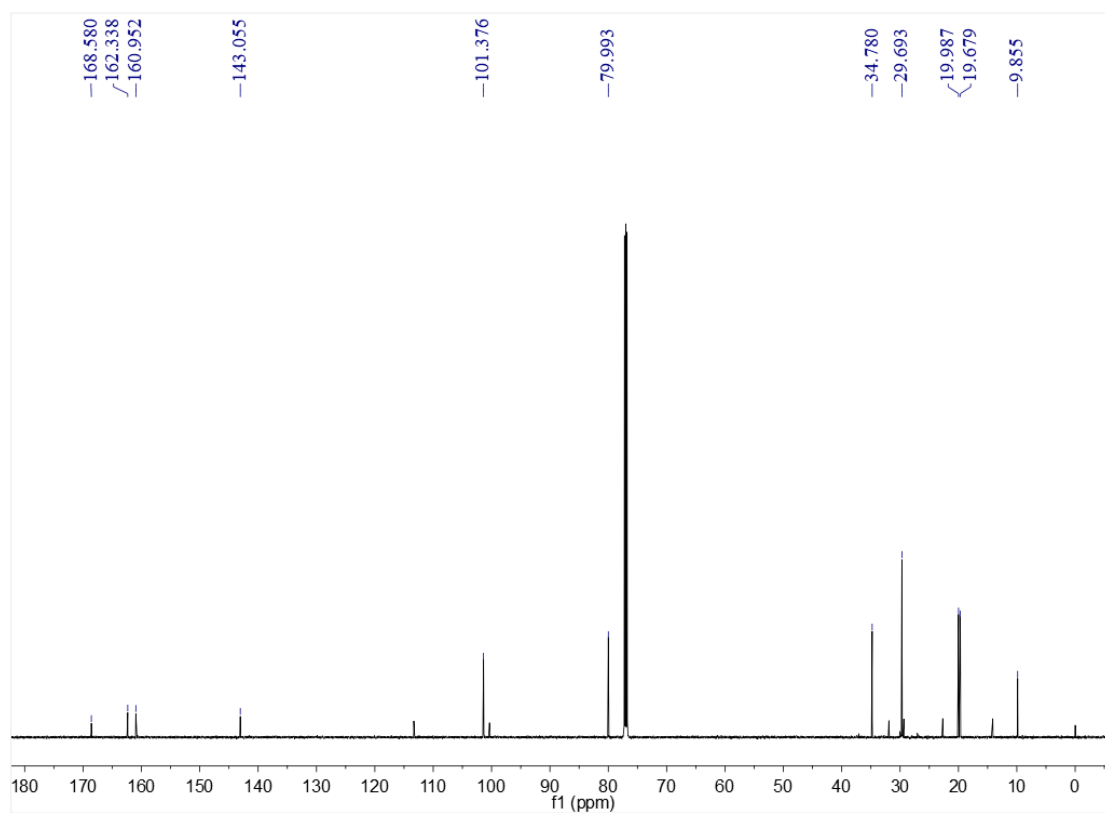
**Figure S5:** HMBC Spectrum of **1** in DMSO-*d*<sub>6</sub>



**Figure S6:** NOESY Spectrum of **1** in DMSO-*d*<sub>6</sub>

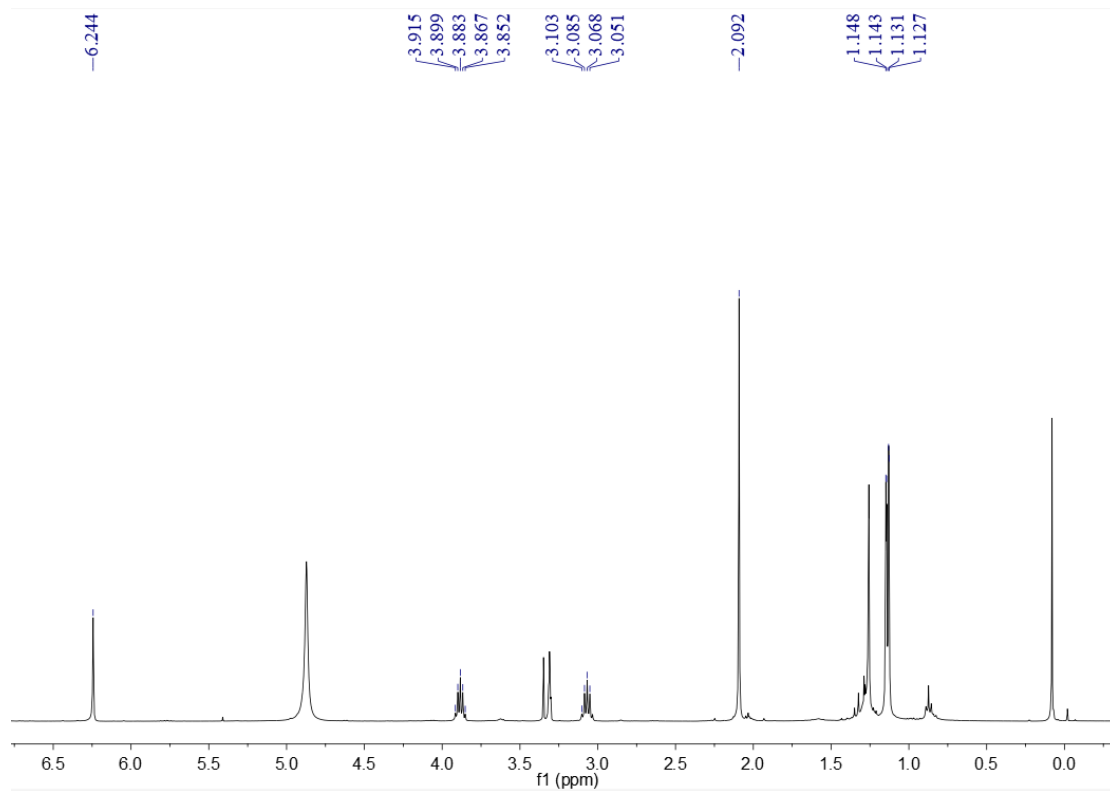


**Figure S7:**  $^1\text{H}$  NMR Spectrum of **2** in  $\text{CDCl}_3$

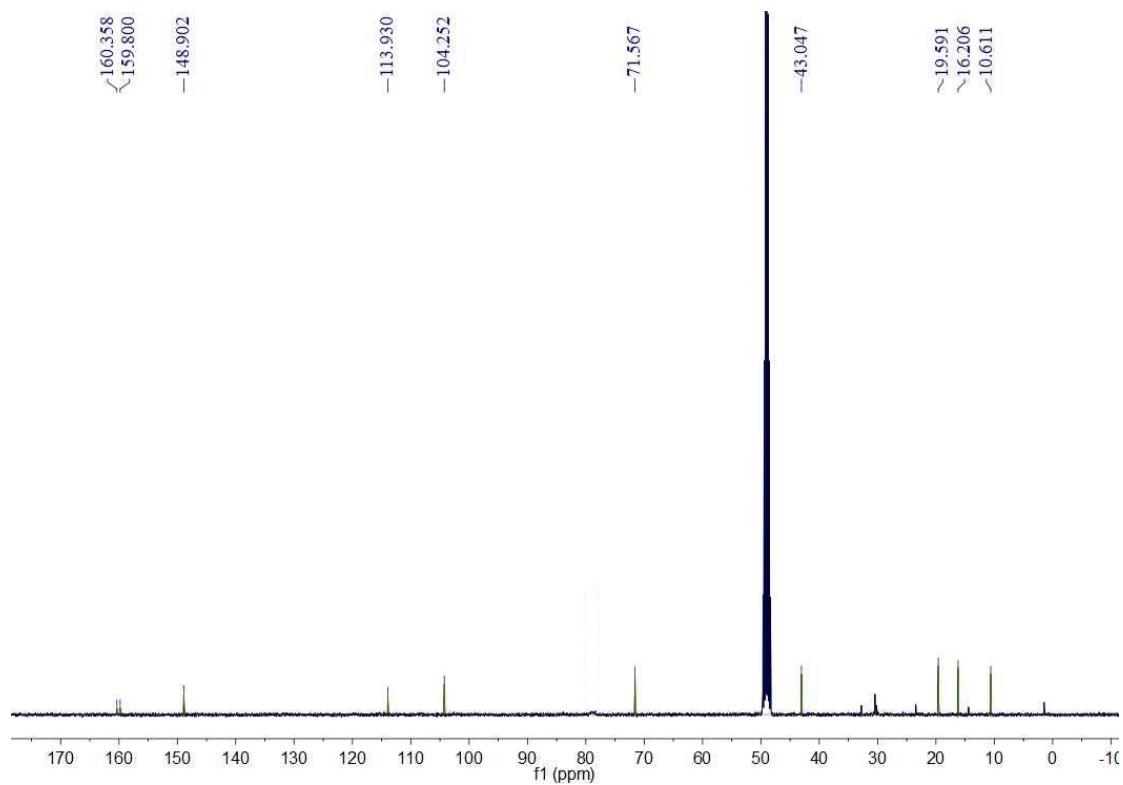


**Figure S8:**  $^{13}\text{C}$  NMR Spectrum of **2** in  $\text{CDCl}_3$

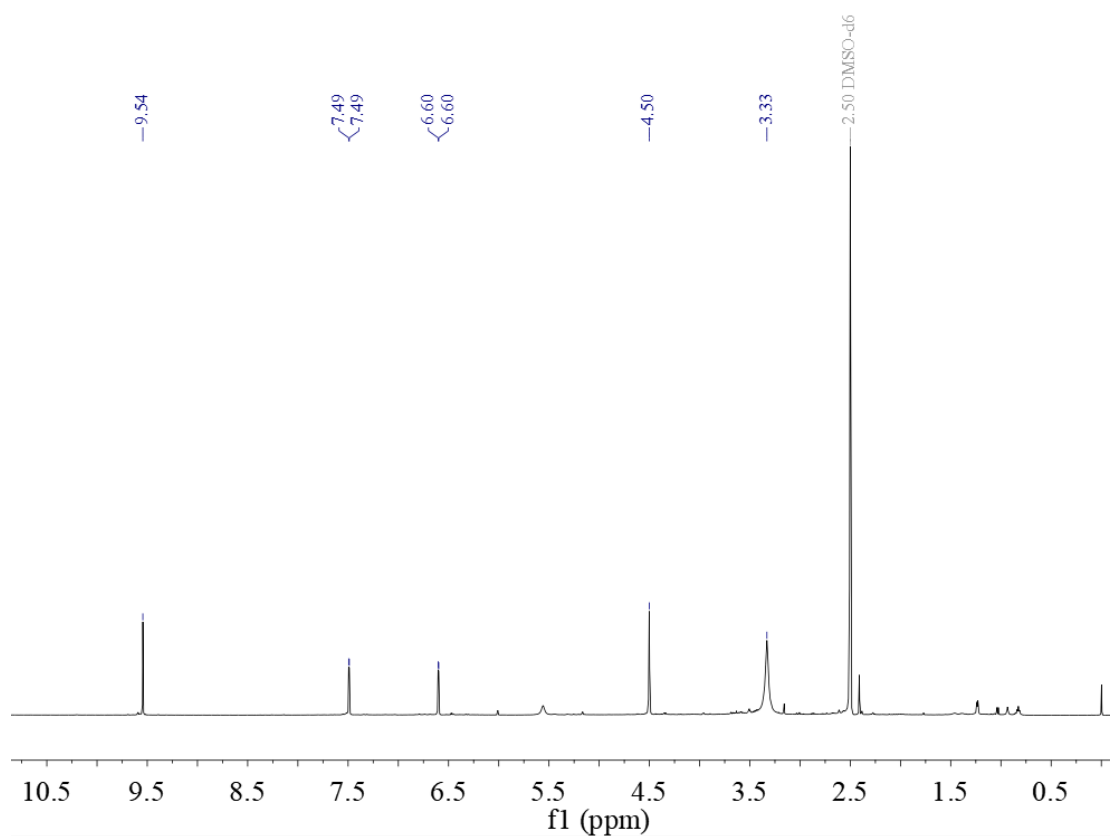
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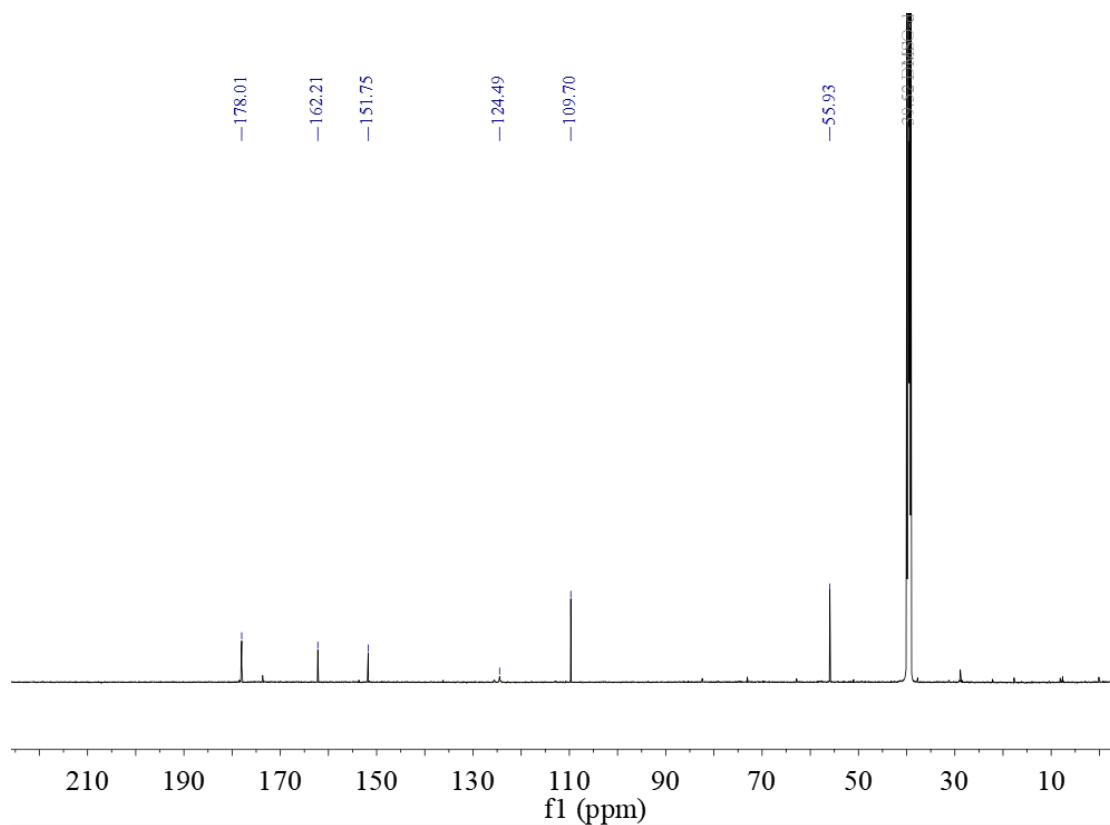
**Figure S9:**  $^1\text{H}$  NMR Spectrum of **3** in Methanol- $d_4$



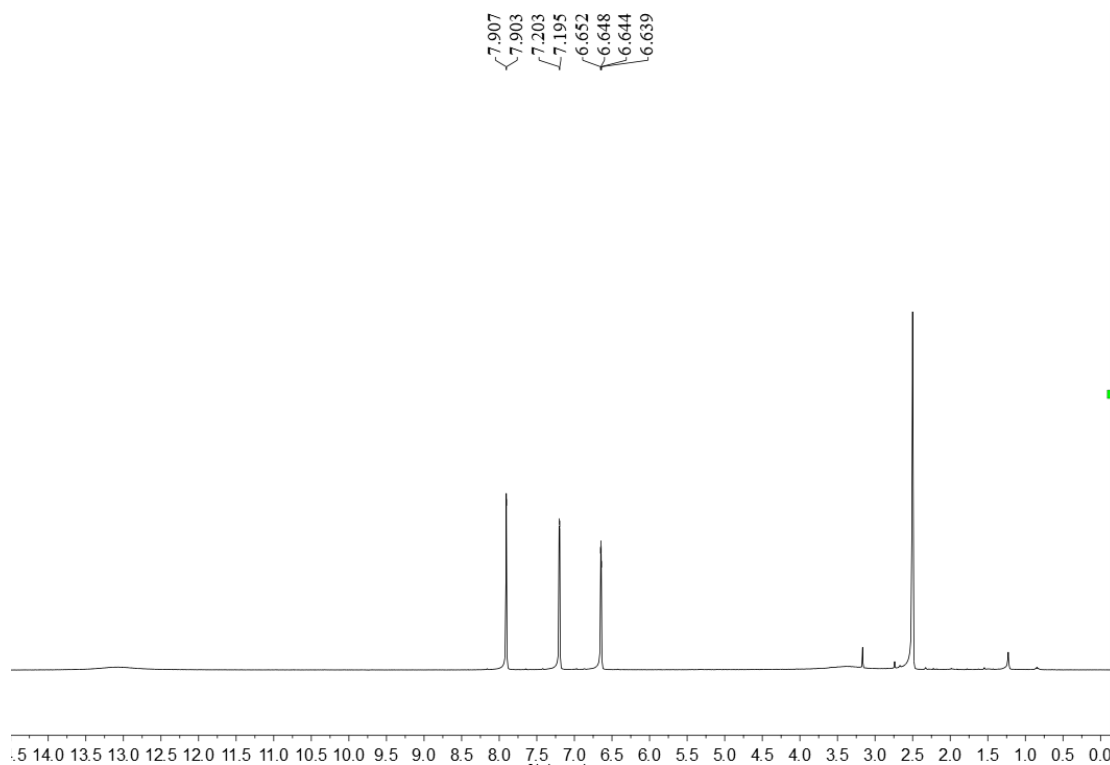
**Figure S10:**  $^{13}\text{C}$  NMR Spectrum of **3** in Methanol- $d_4$



**Figure S11:**  $^1\text{H}$  NMR Spectrum of **4** in  $\text{DMSO-}d_6$  (400 MHz)

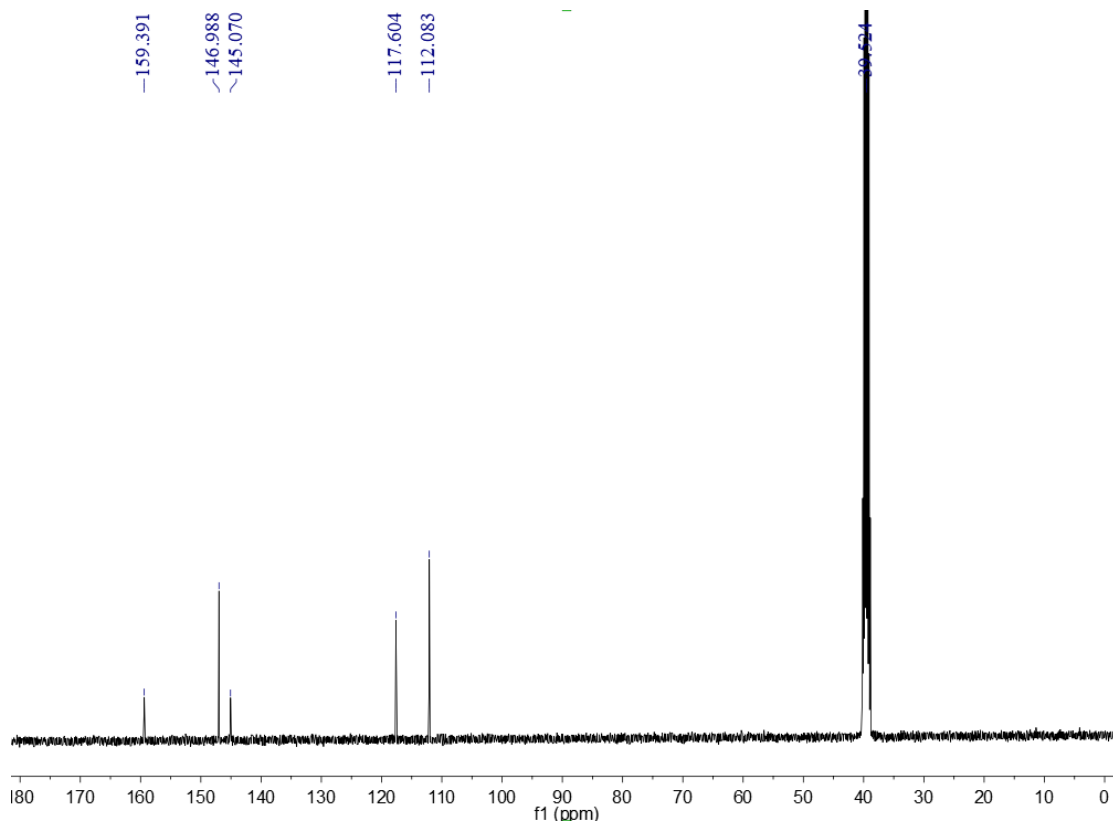


**Figure S12:**  $^{13}\text{C}$  NMR Spectrum of **4** in  $\text{DMSO-}d_6$  (100 MHz)

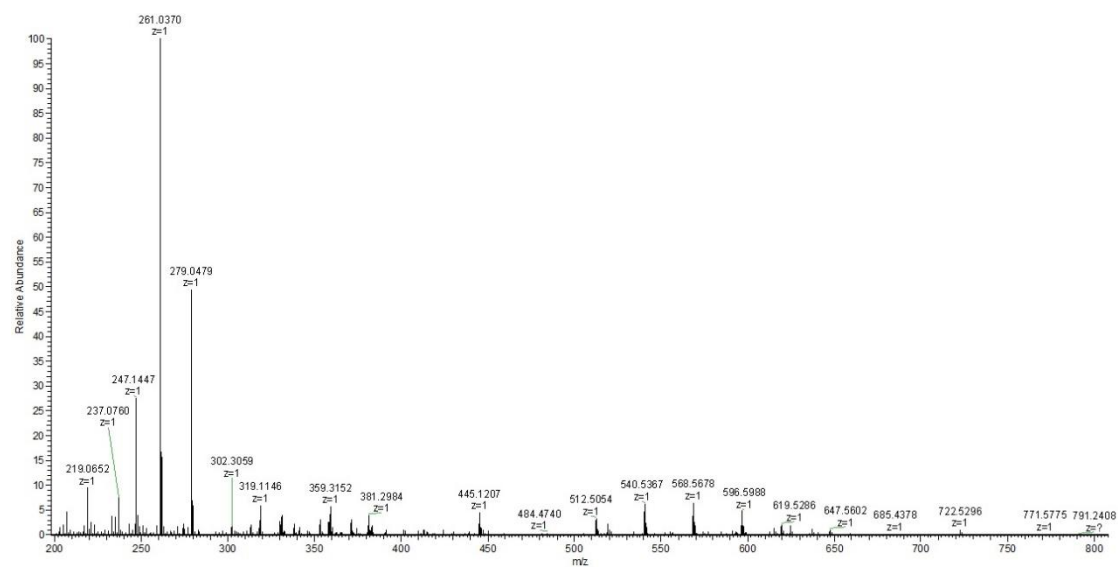


**Figure S13:**  $^1\text{H}$  NMR Spectrum of **5** in  $\text{DMSO-}d_6$





**Figure S14:**  $^{13}\text{C}$  NMR Spectrum of **5** in  $\text{DMSO-}d_6$



**Figure S15:** HRESIMS Spectrum of **1**.

Structure Match

As Drawn (0)

Substructure (0)

Similarity (25K)

Chemscape Analysis

Visually explore structure similarity with a powerful new tool.

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Filter Behavior

Filter by Exclude

Search Within Results

Similarity

90-94 (6)

85-89 (34)

80-84 (72)

75-79 (288)

70-74 (1,024)

View All

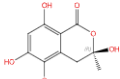
Reaction Role

Filtering: Similarity: 2 Selected X Number of Components: 1 X Clear All Filters

40 Results Sort: Relevance View: Partial

1 92 ●●●

1578167-98-2



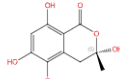
Absolute stereochemistry shown, Rotation (-)

C<sub>11</sub>H<sub>12</sub>O<sub>6</sub>  
(3*R*)-3,4-Dihydro-3,6,8-trihydroxy-5-methoxy-3-methyl-1*H*-2-benzopyran-1-one

2 References 0 Reactions 0 Suppliers

2 92 ●●●

1578167-99-3



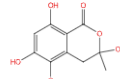
Absolute stereochemistry shown, Rotation (+)

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(3*S*)-3,4-Dihydro-3,6,8-trihydroxy-5-methoxy-3-methyl-1*H*-2-benzopyran-1-one

1 Reference 0 Reactions 0 Suppliers

3 92 ●●●

1571878-99-3

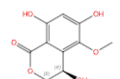


C<sub>11</sub>H<sub>12</sub>O<sub>6</sub>  
3,4-Dihydro-3,6,8-trihydroxy-5-methoxy-3-methyl-1*H*-2-benzopyran-1-one

1 Reference 0 Reactions 0 Suppliers

4 91 ●●●

2579418-23-6

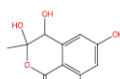


Absolute stereochemistry shown

C<sub>11</sub>H<sub>12</sub>O<sub>6</sub>  
(3*R*,4*R*)-3,4-Dihydro-4,6,8-trihydroxy-5-methoxy-3-methyl-1*H*-2-benzopyran-1-one

5 90 ●●●

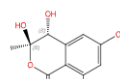
108354-31-0



C<sub>10</sub>H<sub>10</sub>O<sub>6</sub>  
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6 90 ●●●

1224588-53-7



Absolute stereochemistry shown

C<sub>10</sub>H<sub>10</sub>O<sub>6</sub>  
(3*R*,4*R*)-3,4-Dihydro-3,4,6,8-tetrahydroxy-3-methyl-1*H*-2-benzopyran-1-one

Figure S16: SciFinder report for compound 1