

*Supporting Information*

**Thiolactones and  $\Delta^{8,9}$ -Pregnene Steroids from the Marine-Derived Fungus *Meira* sp. 1210CH-42 and Their  $\alpha$ -Glucosidase Inhibitory Activity**

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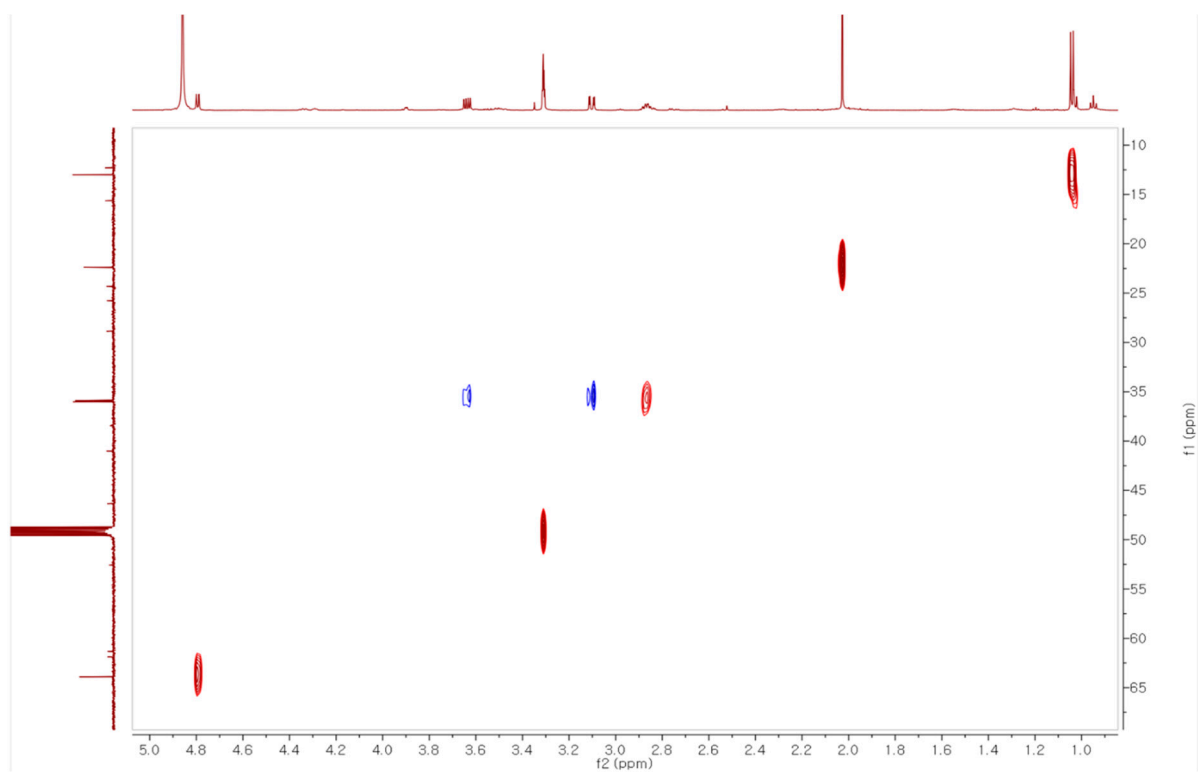


Figure S3. HSQC spectrum of **1** in CD<sub>3</sub>OD.

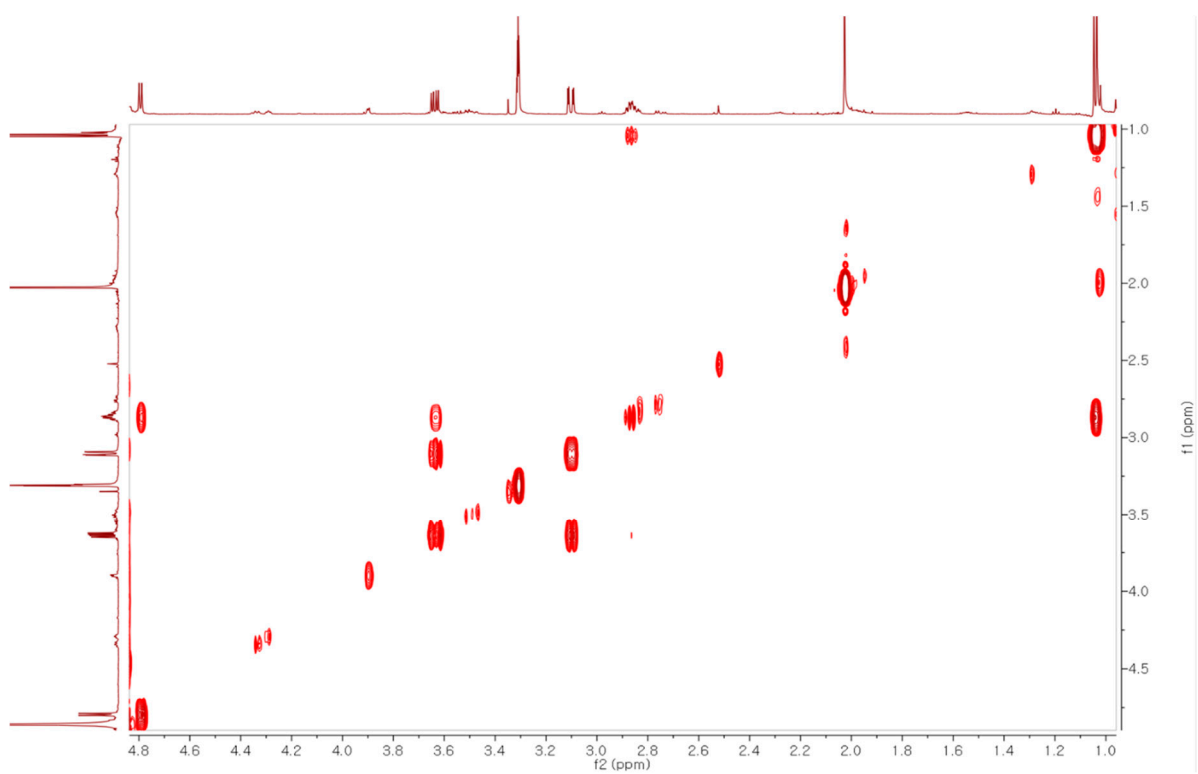


Figure S4. COSY spectrum of **1** in CD<sub>3</sub>OD.

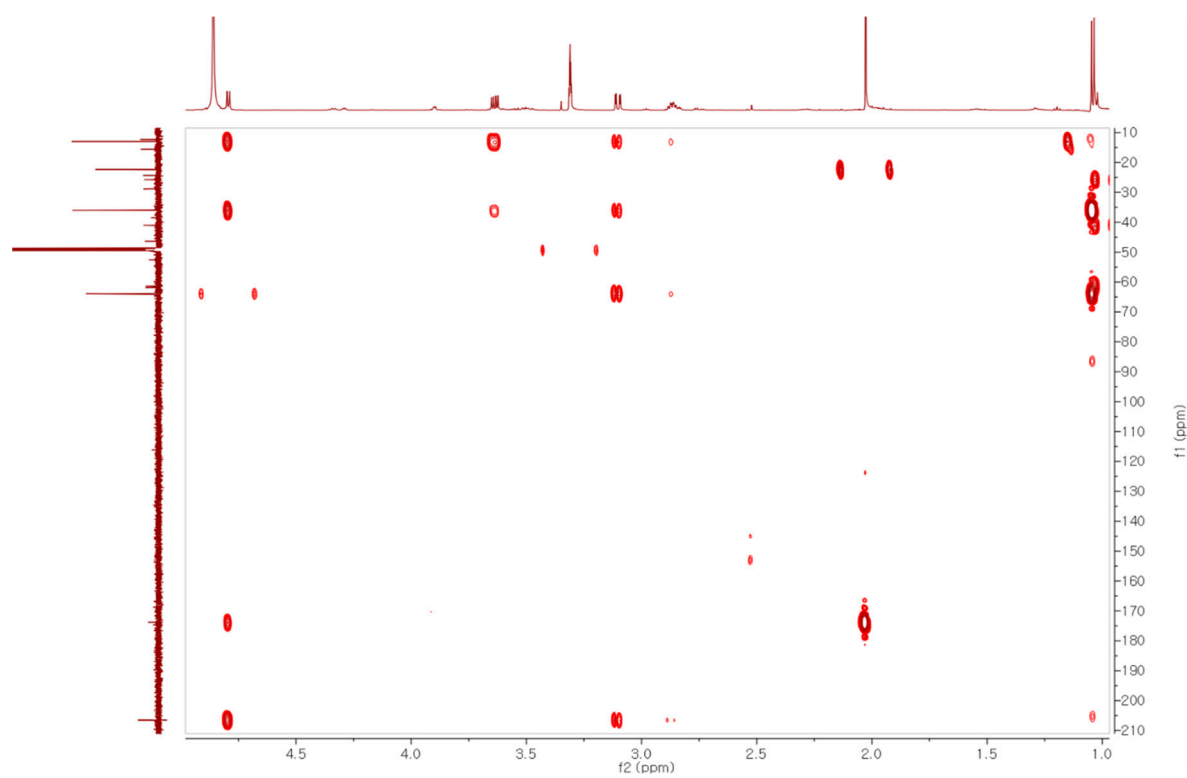


Figure S5. HMBC spectrum of **1** in CD<sub>3</sub>OD.

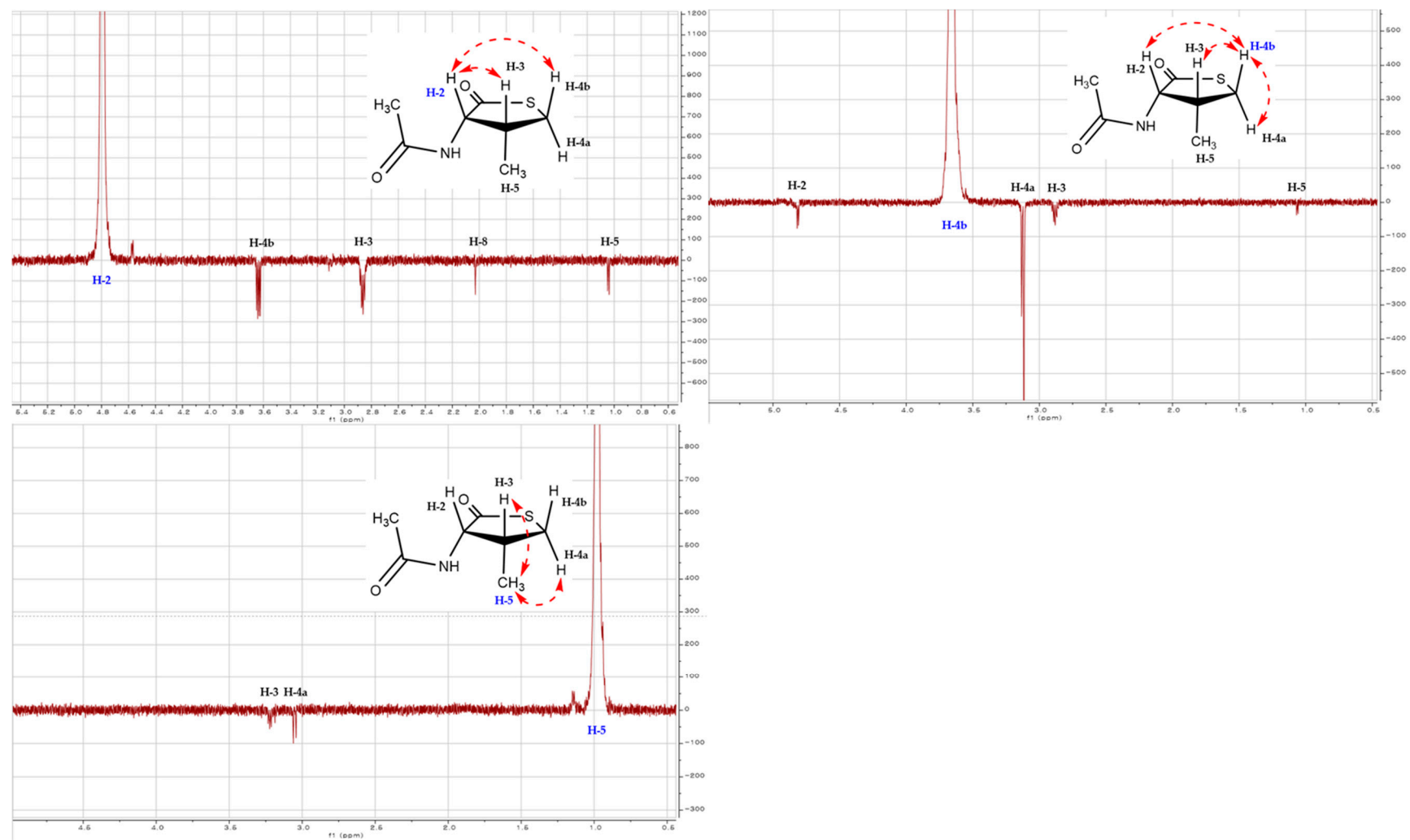


Figure S6. Selective 1D NOESY spectrum of 1 in CD<sub>3</sub>OD.

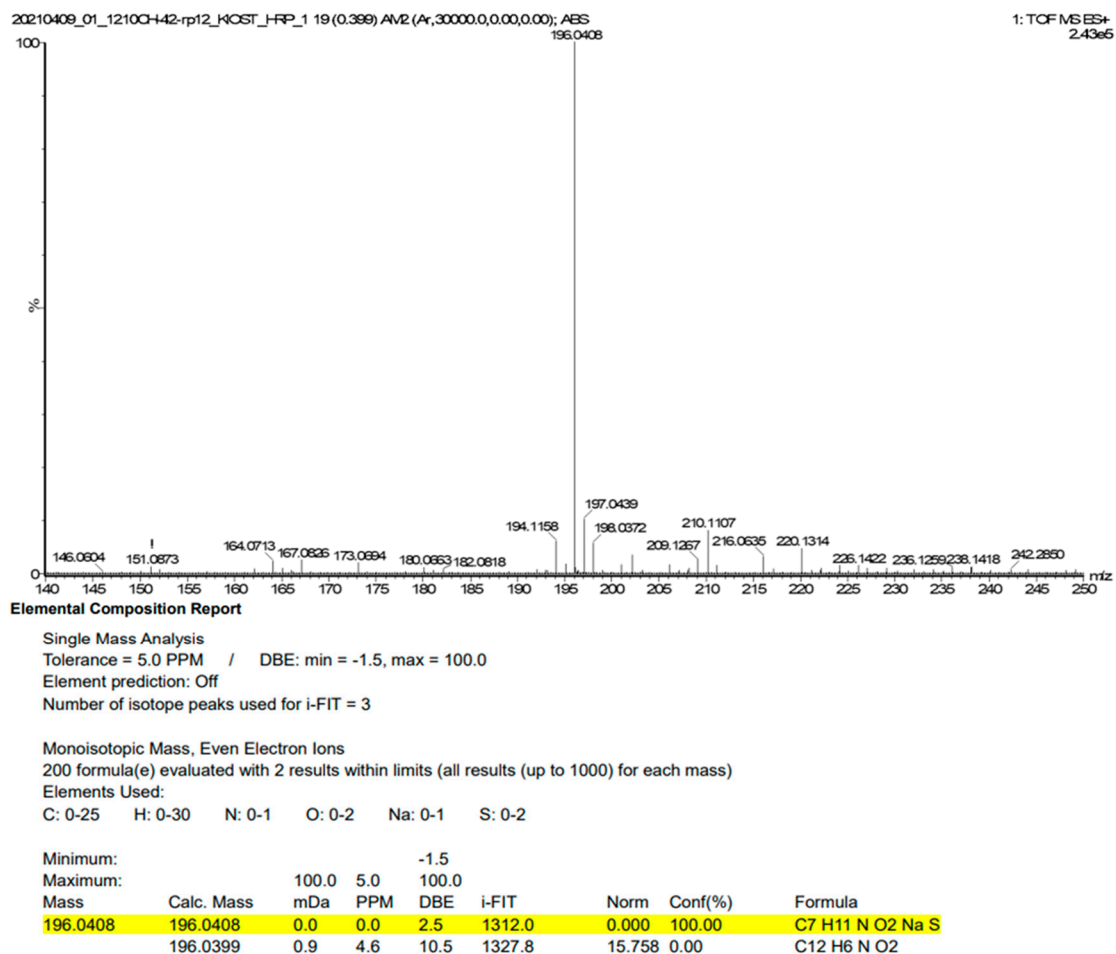


Figure S7. HR-ESIMS spectrum of **1**.



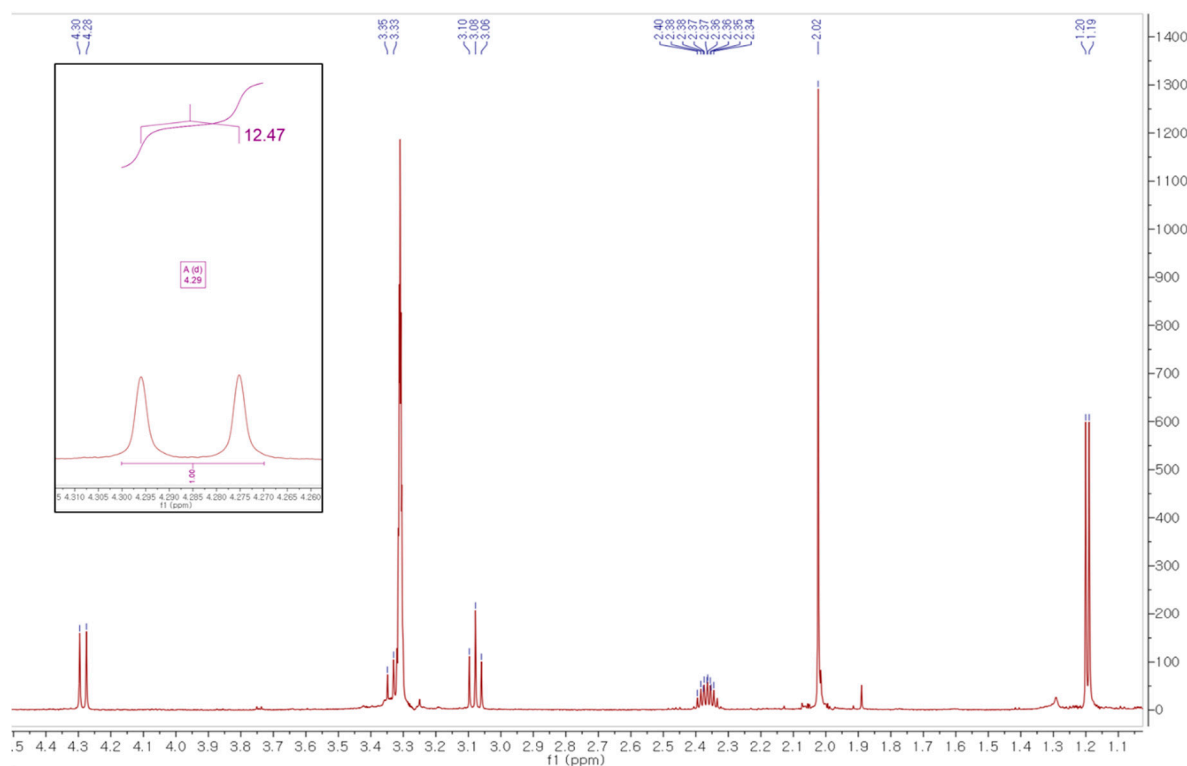


Figure S8.  $^1\text{H}$  NMR spectrum of **2** in  $\text{CD}_3\text{OD}$  (600 MHz).

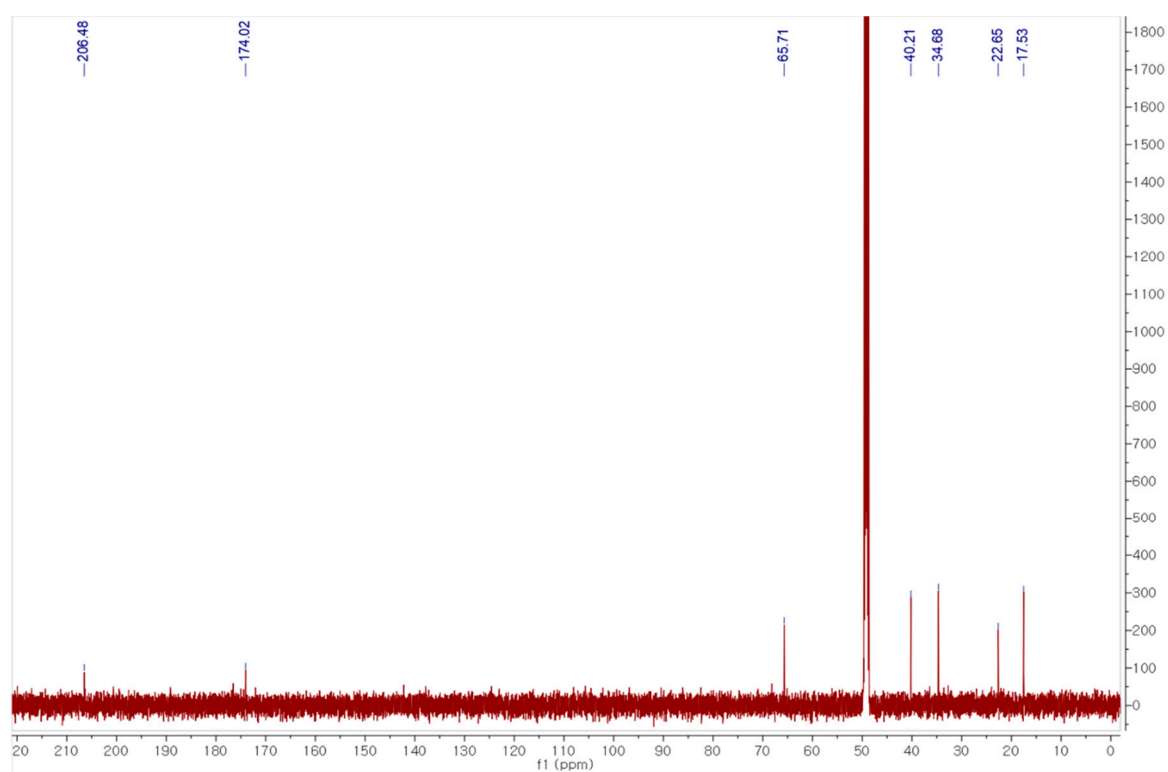


Figure S9.  $^{13}\text{C}$  NMR spectrum of **2** in  $\text{CD}_3\text{OD}$  (150 MHz).

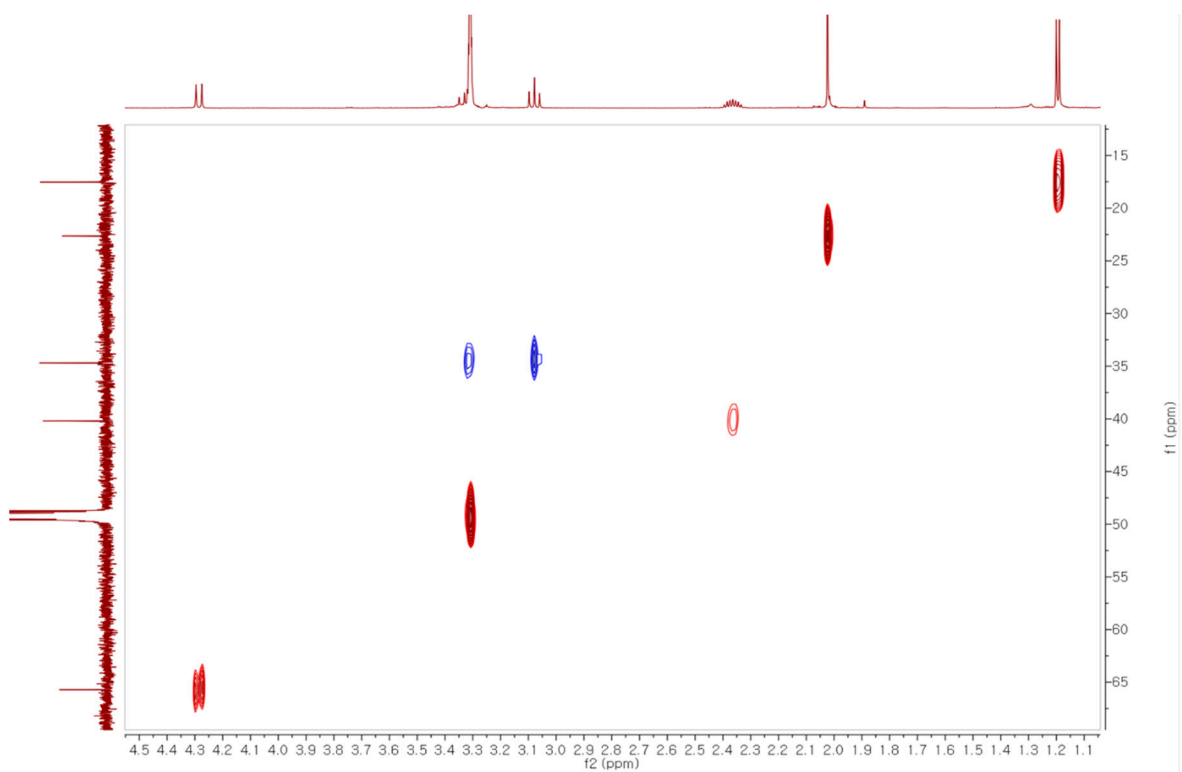


Figure S10. HSQC spectrum of **2** in CD<sub>3</sub>OD.

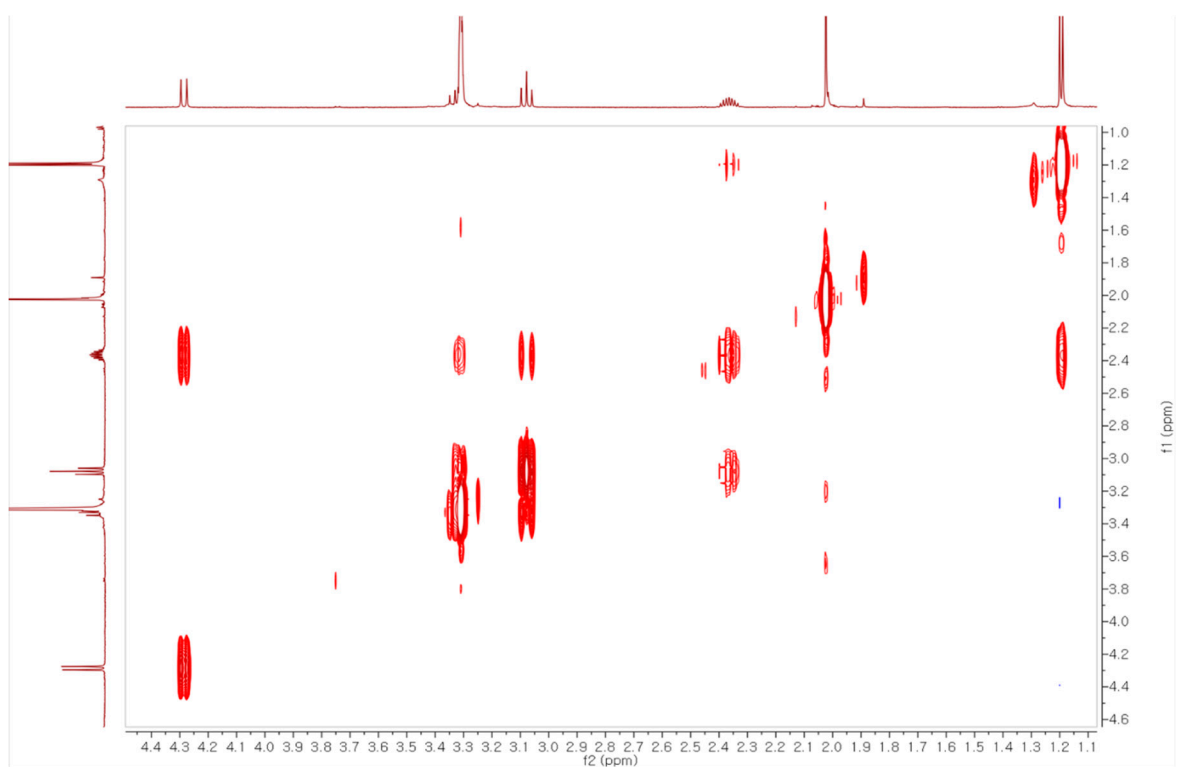


Figure S11. COSY spectrum of **2** in CD<sub>3</sub>OD.

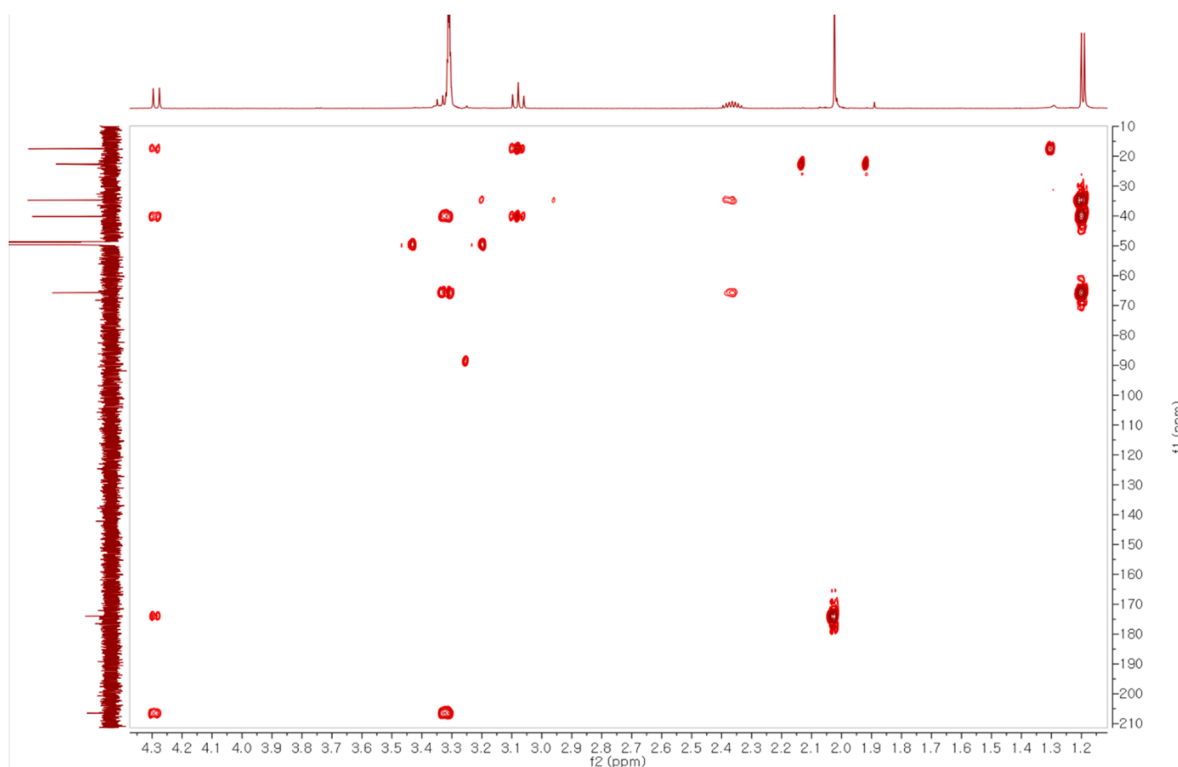


Figure S12. HMBC spectrum of **2** in  $\text{CD}_3\text{OD}$ .

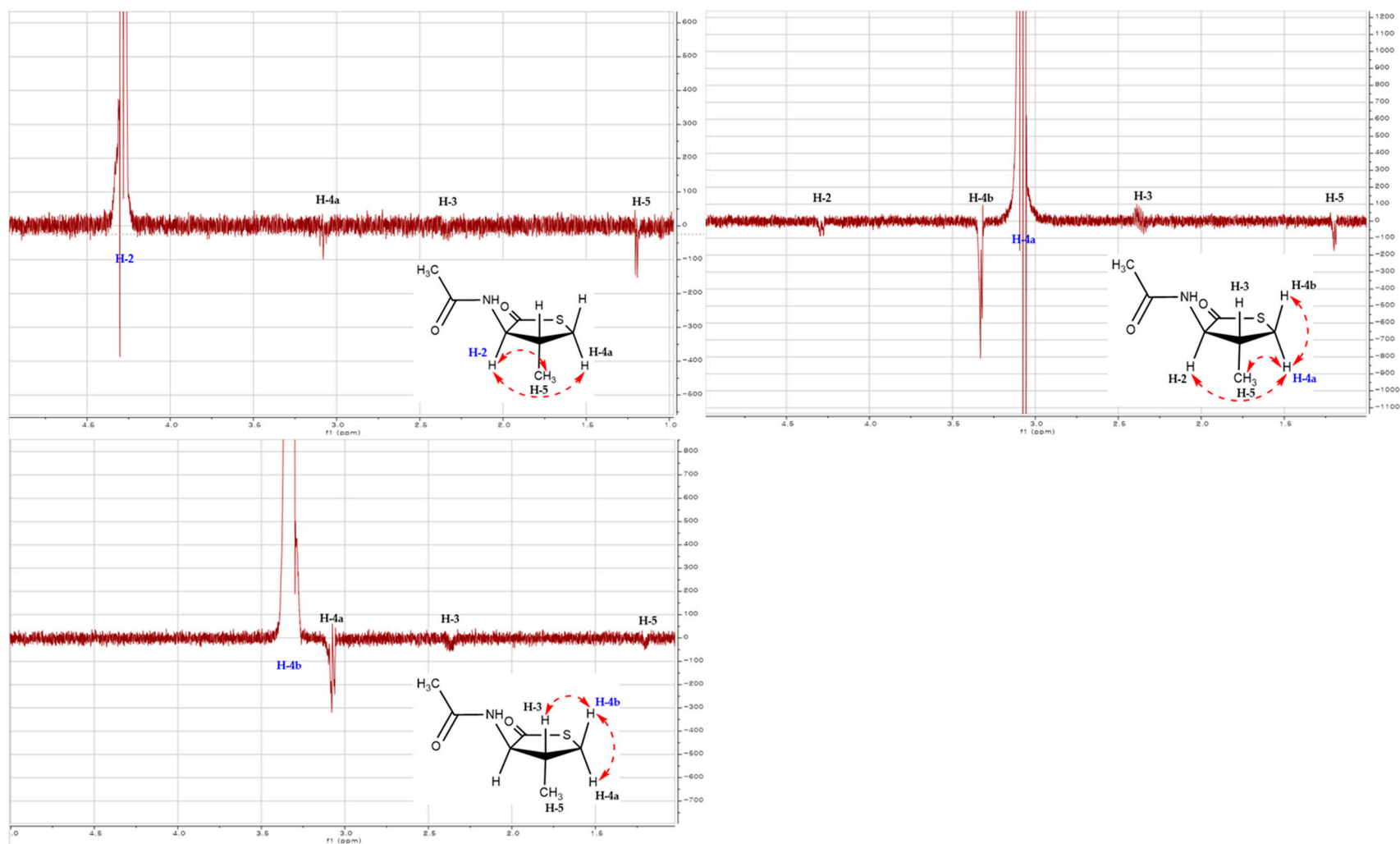
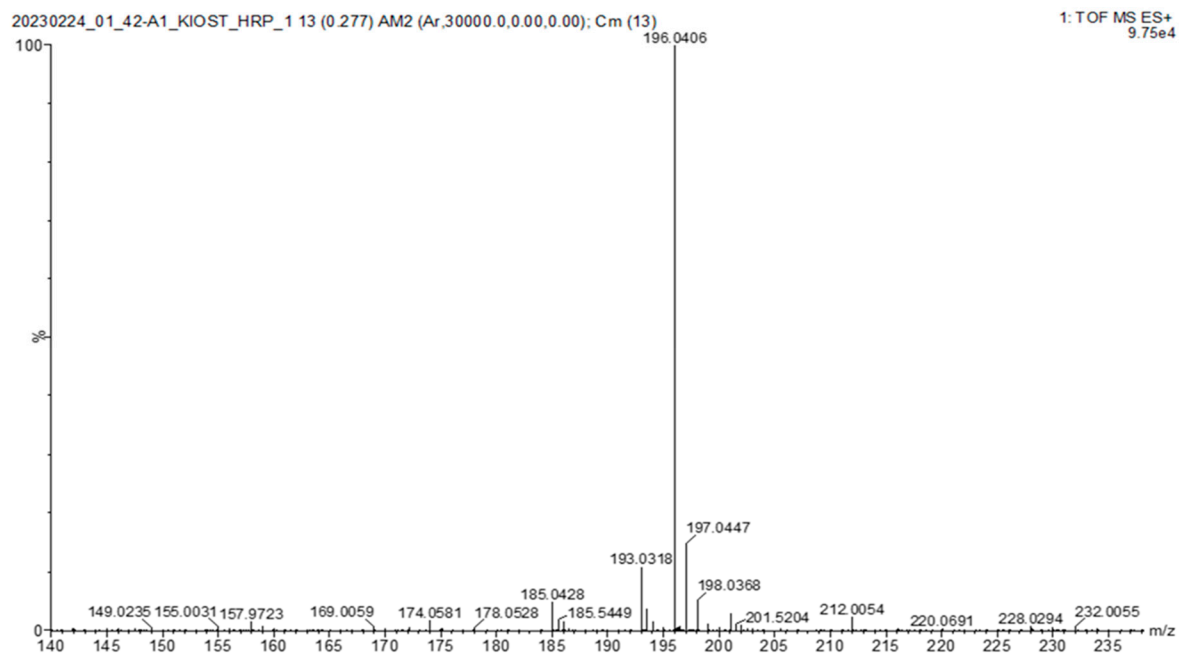


Figure S13. Selective 1D NOESY spectrum of **2** in CD<sub>3</sub>OD.



#### Elemental Composition Report

##### Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -9.0, max = 100.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

##### Monoisotopic Mass, Even Electron Ions

285 formula(e) evaluated with 2 results within limits (up to 50 closest results for each mass)

Elements Used:

C: 0-25 H: 0-100 N: 0-3 O: 0-4 Na: 0-1 S: 0-1

Minimum:

-9.0

Maximum:

5.0

5.0

100.0

Mass

Calc. Mass

mDa

PPM

DBE

i-FIT

Norm

Conf(%)

Formula

196.0406	196.0408	-0.2	-1.0	2.5	974.6	0.122	88.48	C7 H11 N O2 Na S
	196.0399	0.7	3.6	10.5	976.7	2.161	11.52	C12 H6 N O2

Figure S14. HR-ESIMS spectrum of **2**.

Table S1.  $^1\text{H}$  and  $^{13}\text{C}$  NMR data of **1**, **2**, and the reported compound in  $\text{CDCl}_3$

Position	<b>1</b>		<b>2</b>		Reported compound*	
	$\delta_{\text{C}}$ , type	$\delta_{\text{H}}$ (J in Hz)	$\delta_{\text{C}}$ , type	$\delta_{\text{H}}$ (J in Hz)	$\delta_{\text{C}}$ , type	$\delta_{\text{H}}$ (J in Hz)
<b>1</b>	205.3, C		204.9, C		204.9, C	
<b>2</b>	63.9, CH	4.57, ddd (6.7, 5.4, 1.4)	64.4, CH	4.45, dd (12.5, 8.6)	64.4, CH	4.45, d (12.5, 8.7)
<b>3</b>	34.5, CH	3.20, m	40.5, CH	2.24, m	40.5, CH	2.37, m
<b>4a</b>		3.05, d (11.5)		3.02, t (11.2)		3.02, t
<b>4b</b>	35.2, $\text{CH}_2$	3.61, dd (11.5, 5.2)	34.0, $\text{CH}_2$	3.24, dd (11.2, 6.2)	34.0, $\text{CH}_2$	3.24, dd (11.2, 6.2)
<b>5</b>	12.2, $\text{CH}_3$	0.97, d (7.0)	17.5, $\text{CH}_3$	1.25, d (6.6)	17.5, $\text{CH}_3$	1.25, d (6.5)
<b>6, -NH</b>		5.94, s		5.66, d (8.6)		5.67, s
<b>7</b>	170.6, C		170.9, C		170.9, C	
<b>8</b>	23.1, $\text{CH}_3$	2.07, s	23.4, $\text{CH}_3$	2.09, s	23.4, $\text{CH}_3$	2.08, s

\* *Nat. Prod. Res.* 2020, 34, 2926-2930.

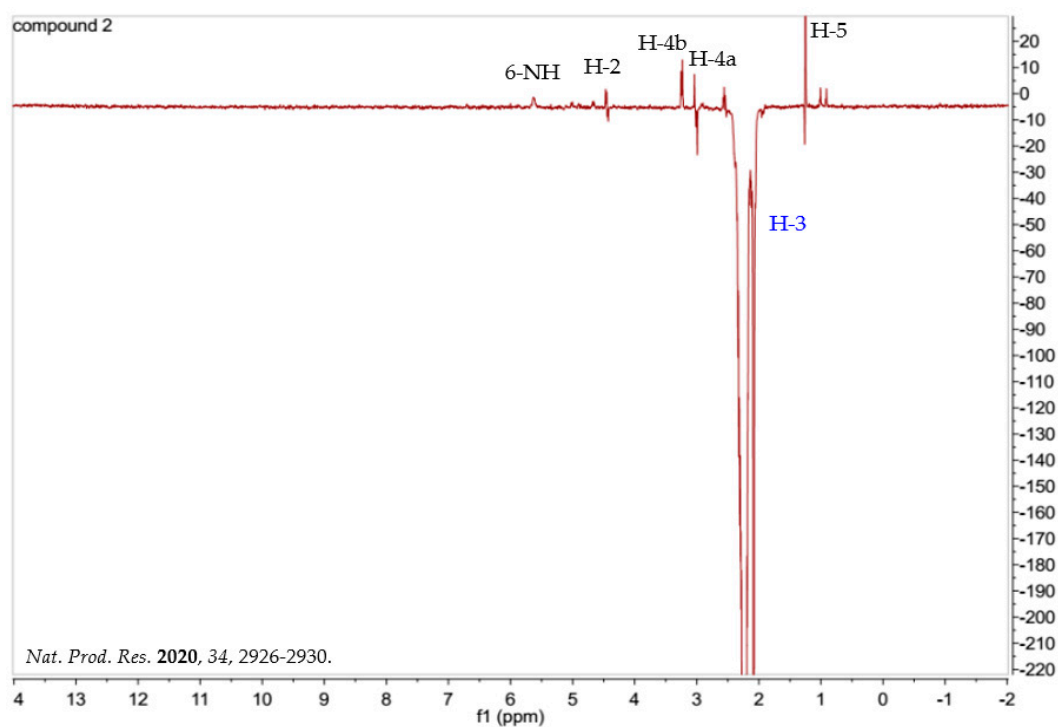


Figure S15. 1D NOESY spectrum of the reported compound.

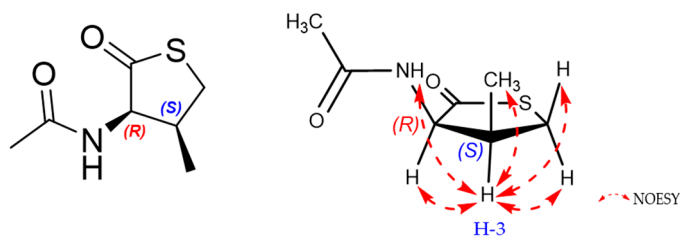


Figure S16. 1D NOESY correlations of the reported compound.

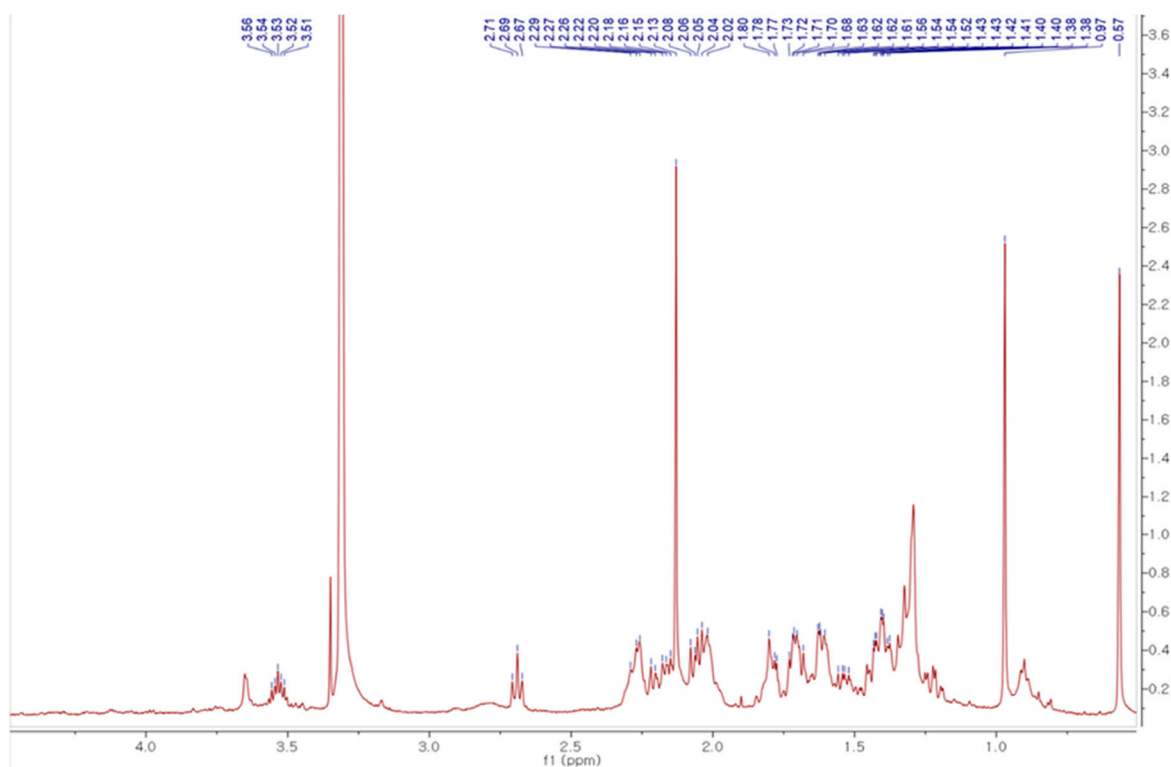


Figure S17.  $^1\text{H}$  NMR spectrum of **3** in  $\text{CD}_3\text{OD}$  (600 MHz).

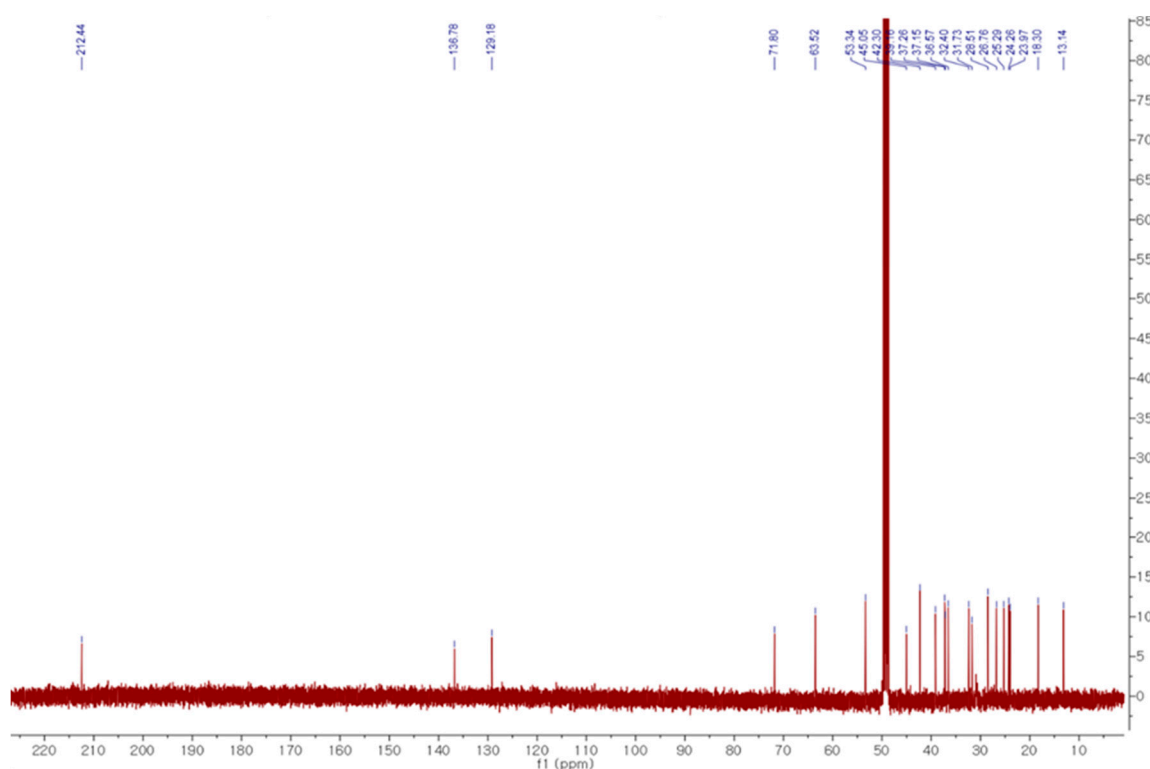


Figure S18.  $^{13}\text{C}$  NMR spectrum of **3** in  $\text{CD}_3\text{OD}$  (150 MHz).

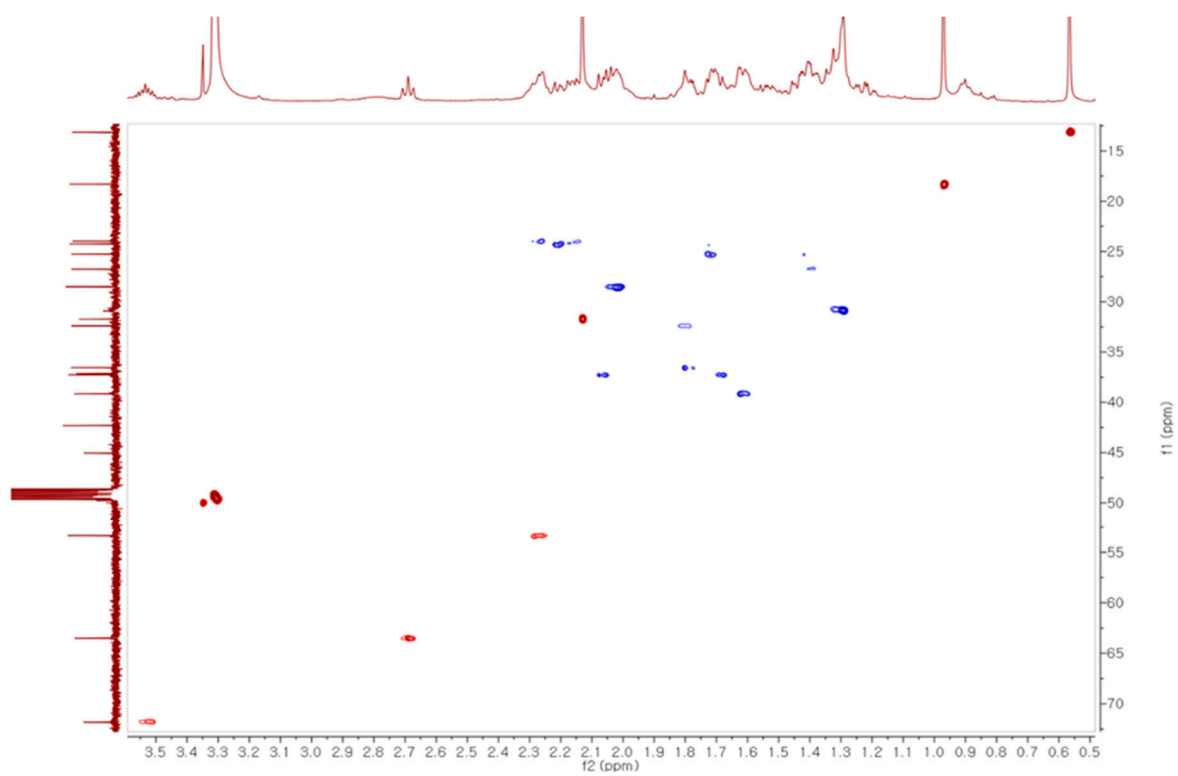


Figure S19. HSQC spectrum of **3** in CD<sub>3</sub>OD.



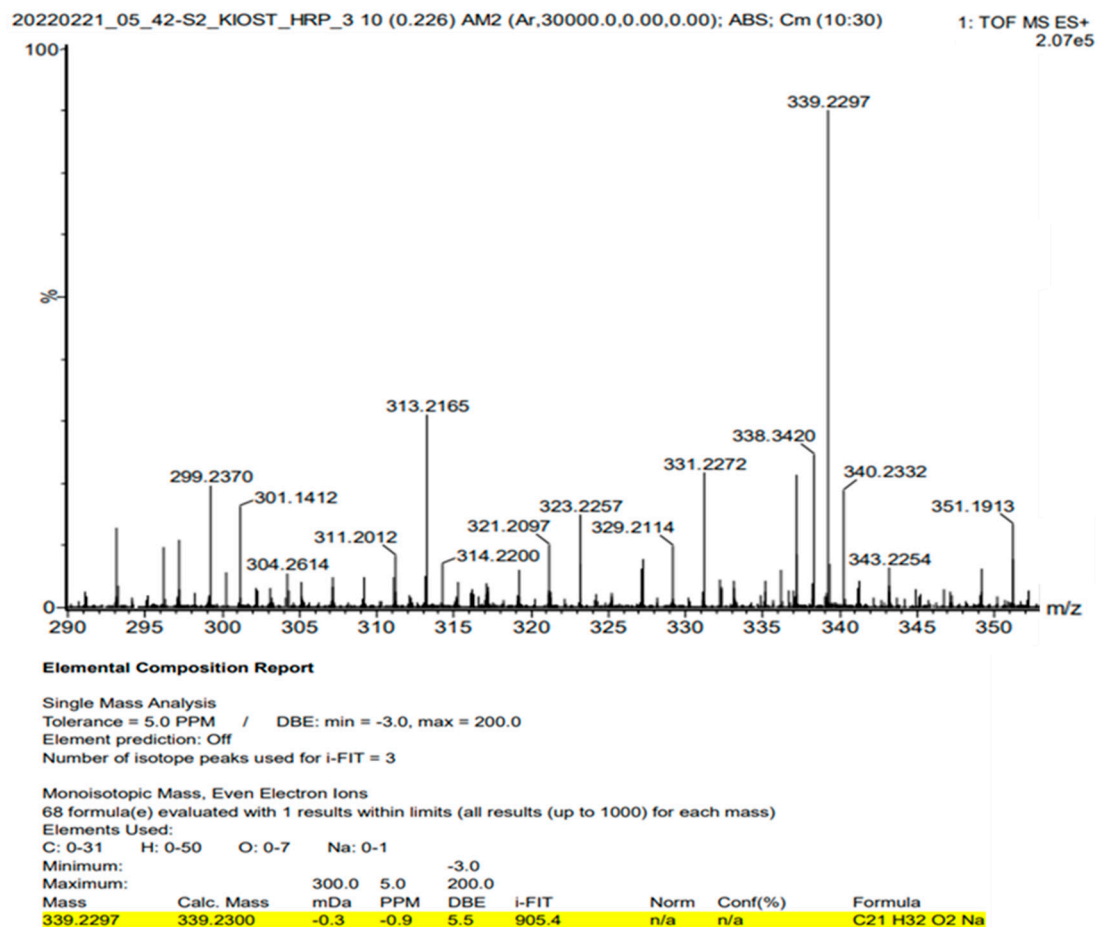


Figure S20. HR-ESIMS spectrum of **3**.

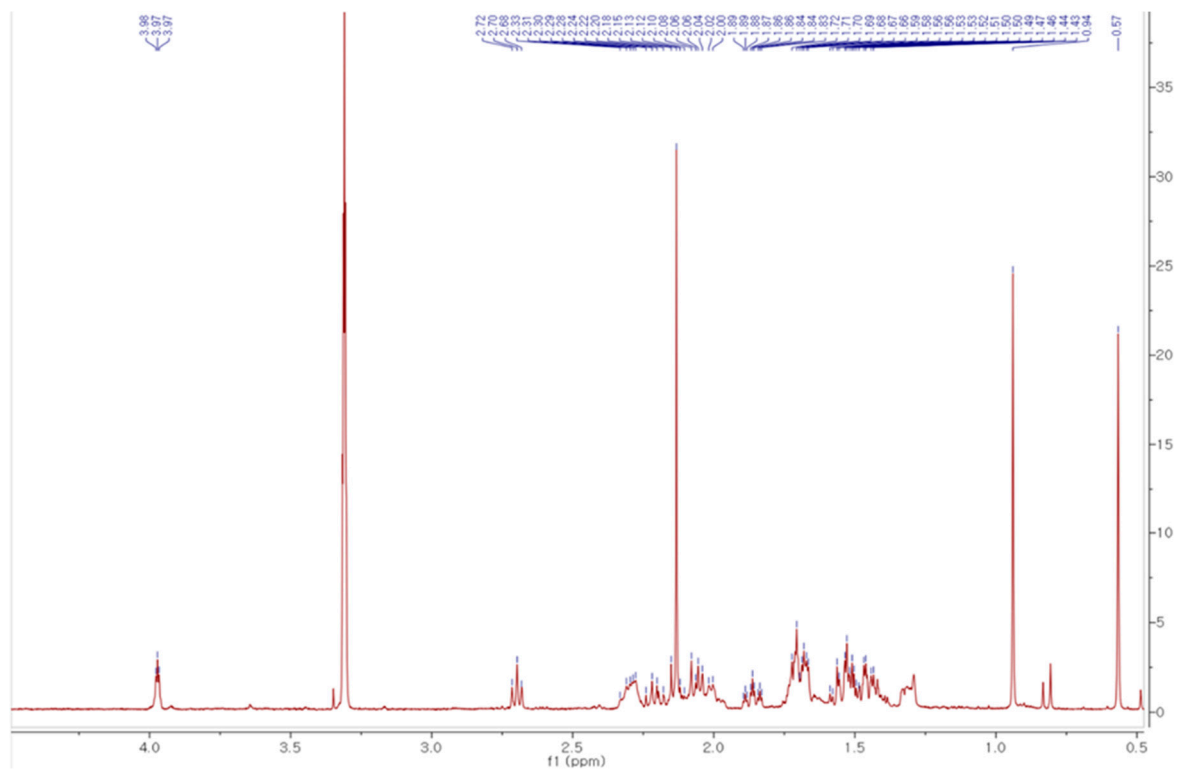


Figure S21.  $^1\text{H}$  NMR spectrum of **4** in  $\text{CD}_3\text{OD}$  (600 MHz).

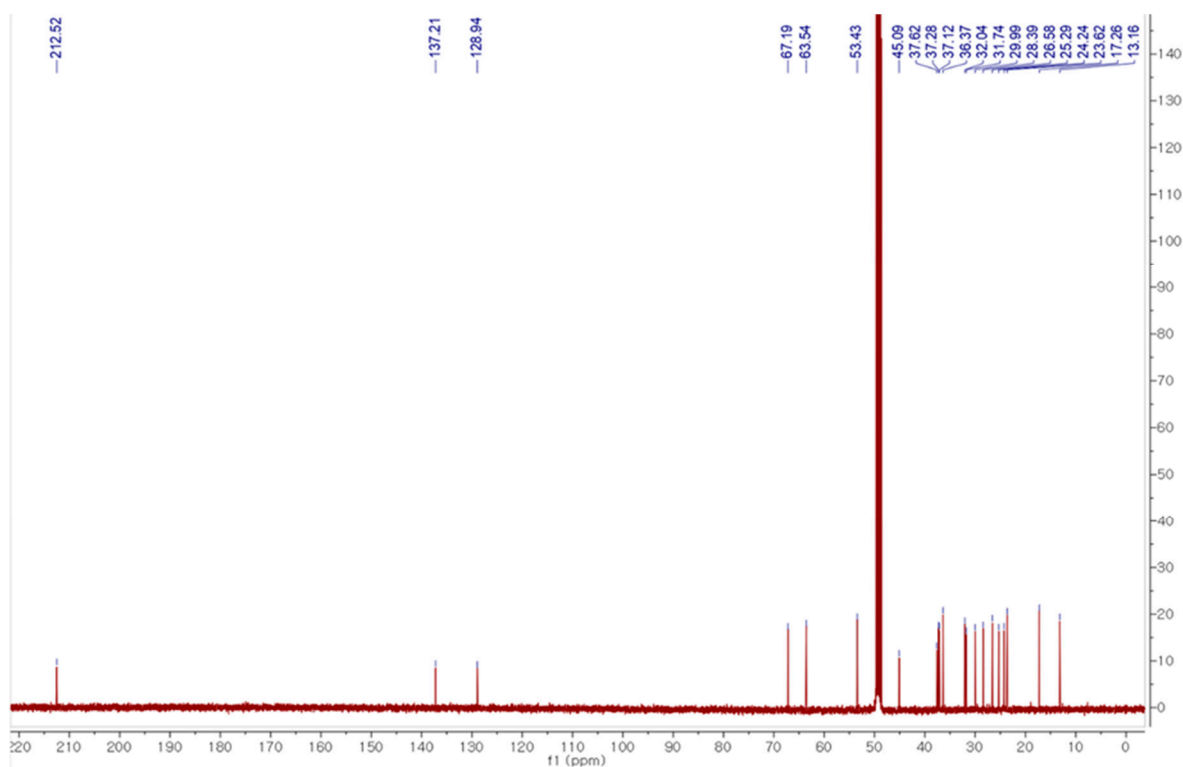


Figure S22.  $^{13}\text{C}$  NMR spectrum of **4** in  $\text{CD}_3\text{OD}$  (150 MHz).

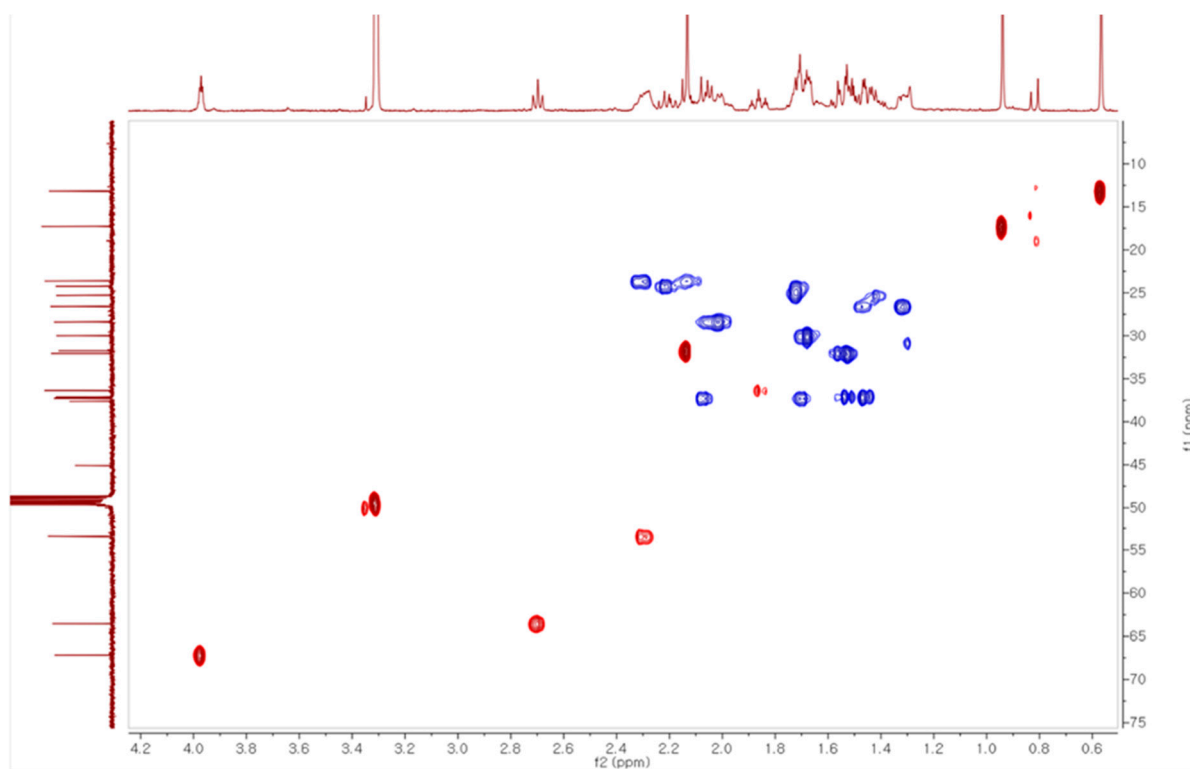


Figure S23. HSQC spectrum of **4** in CD<sub>3</sub>OD.

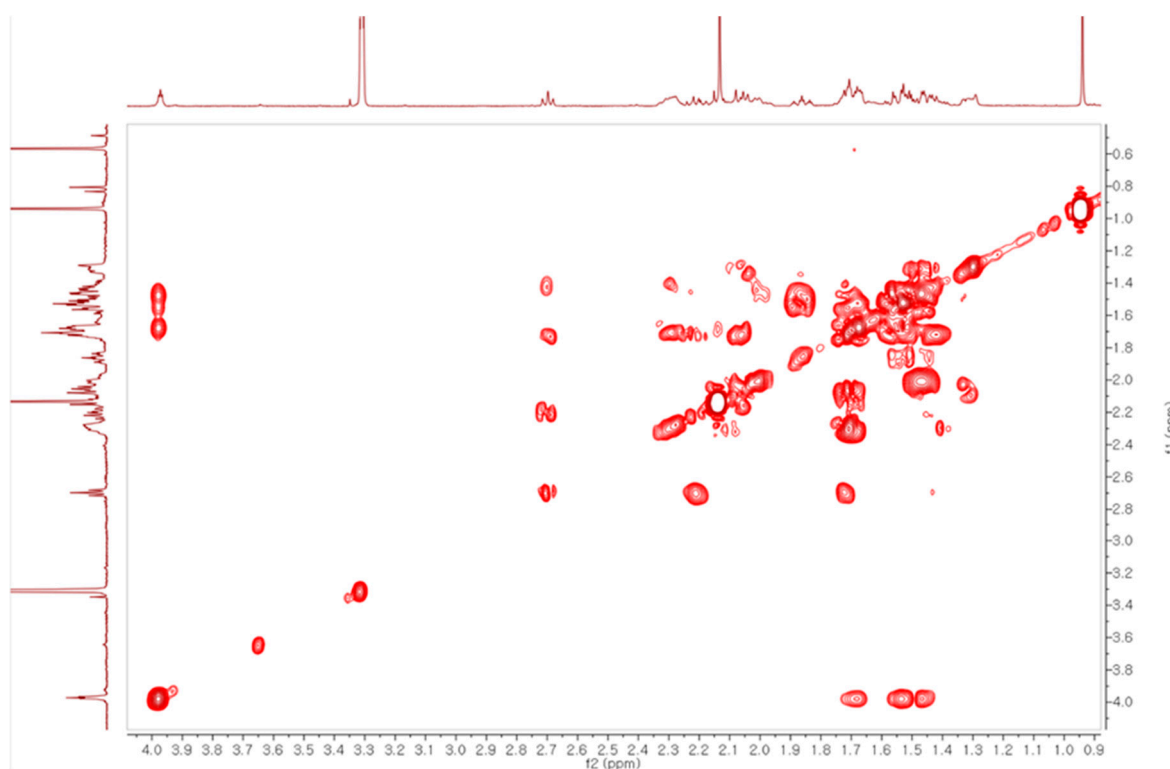


Figure S24. COSY spectrum of **4** in CD<sub>3</sub>OD.

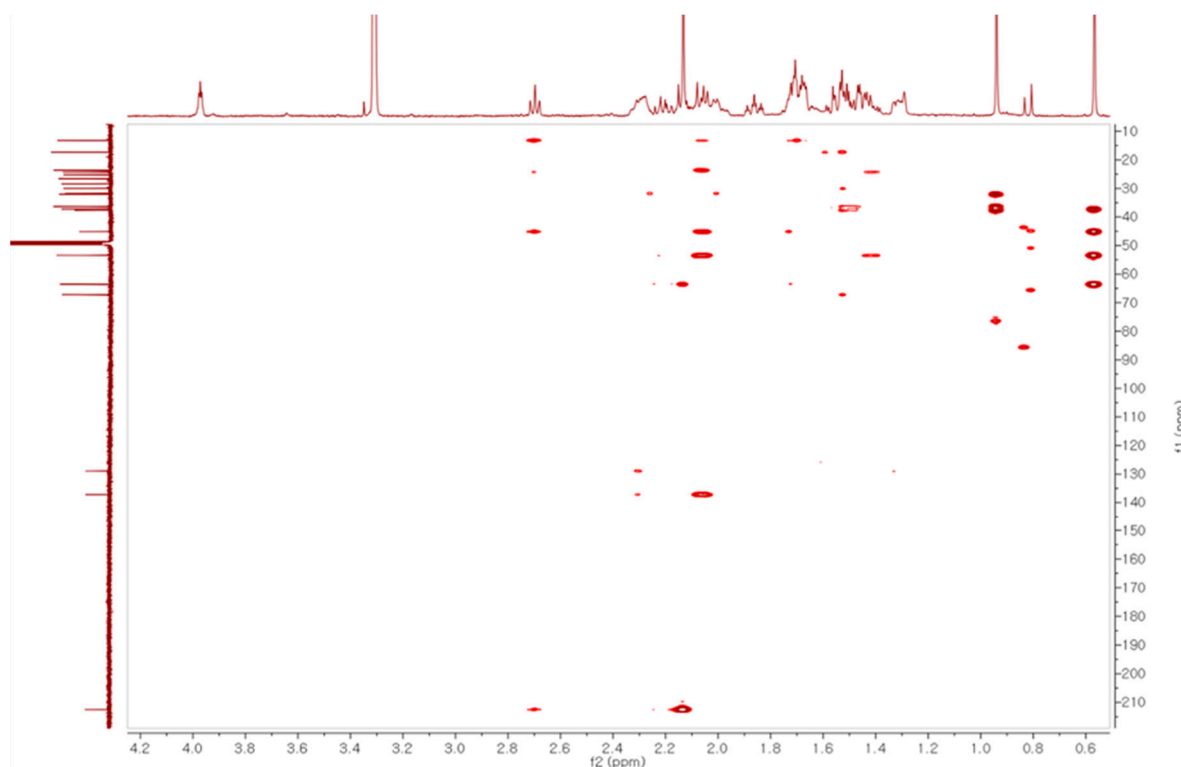


Figure S25. HMBC spectrum of **4** in CD<sub>3</sub>OD.

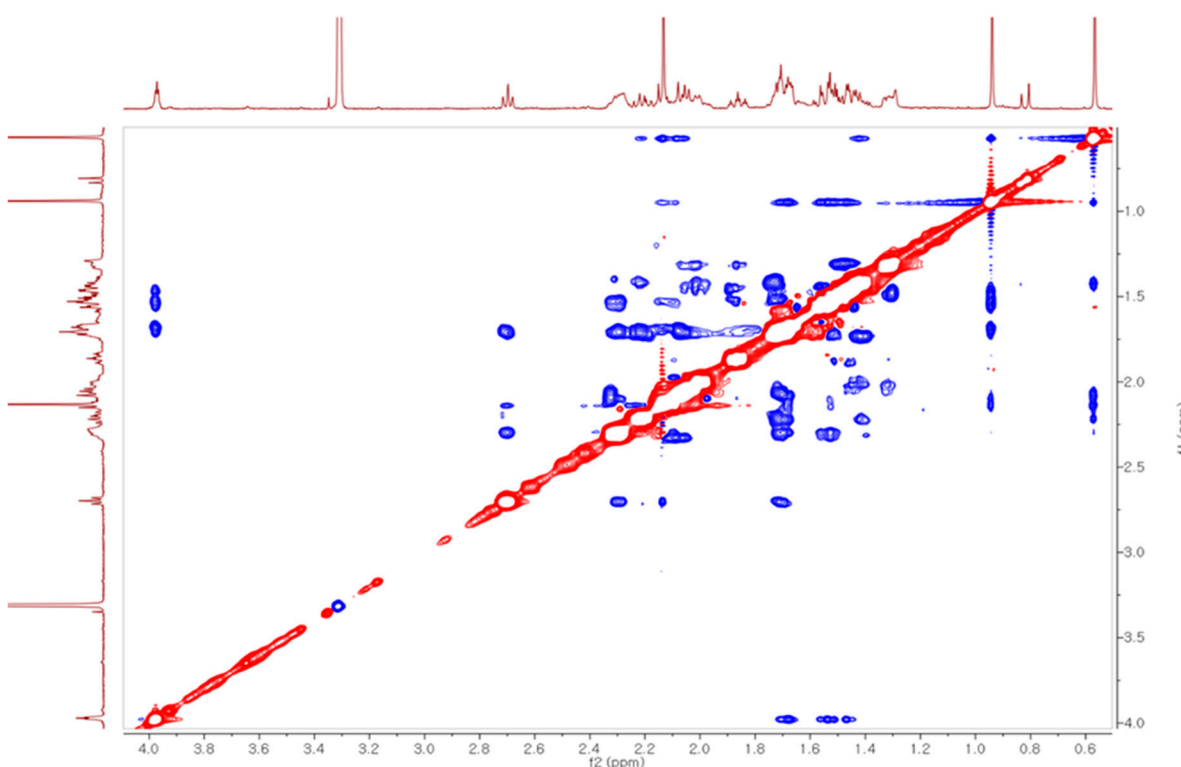


Figure S26. ROESY spectrum of **4** in CD<sub>3</sub>OD.

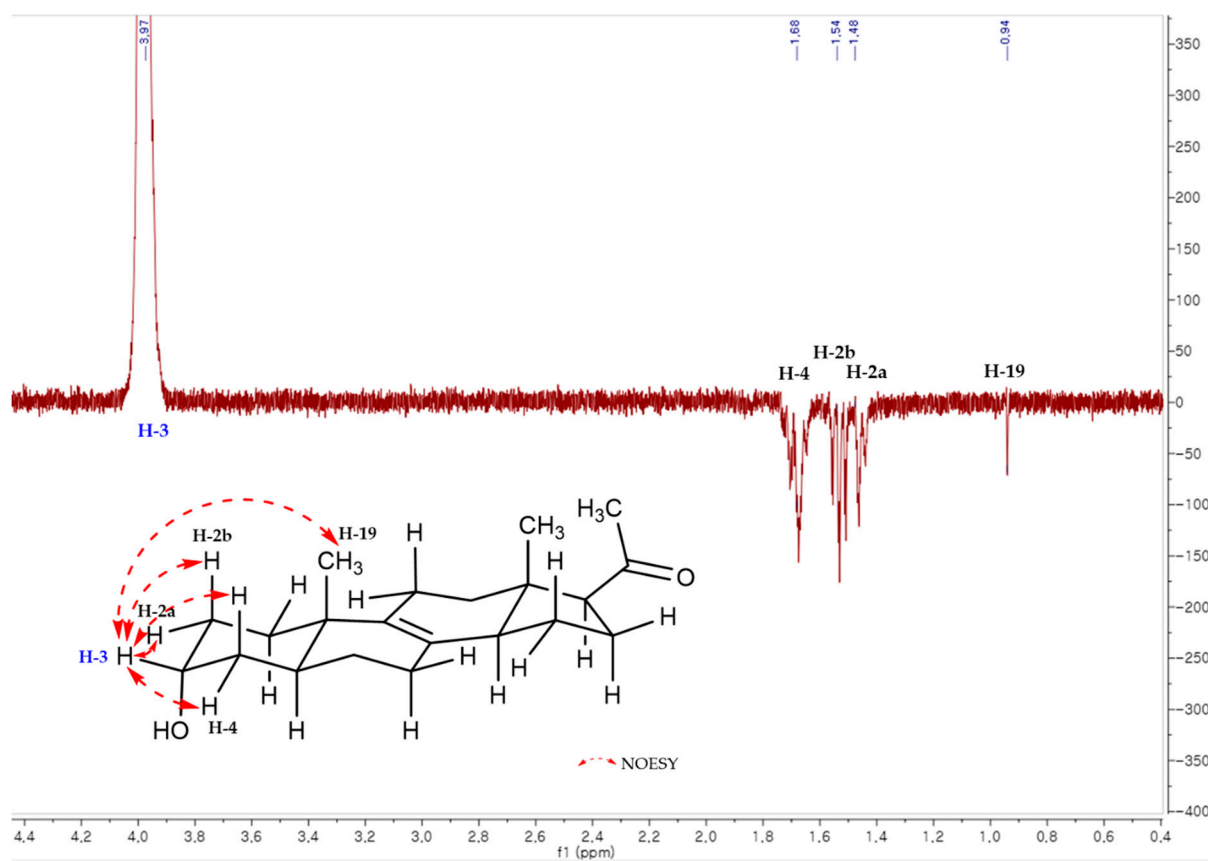
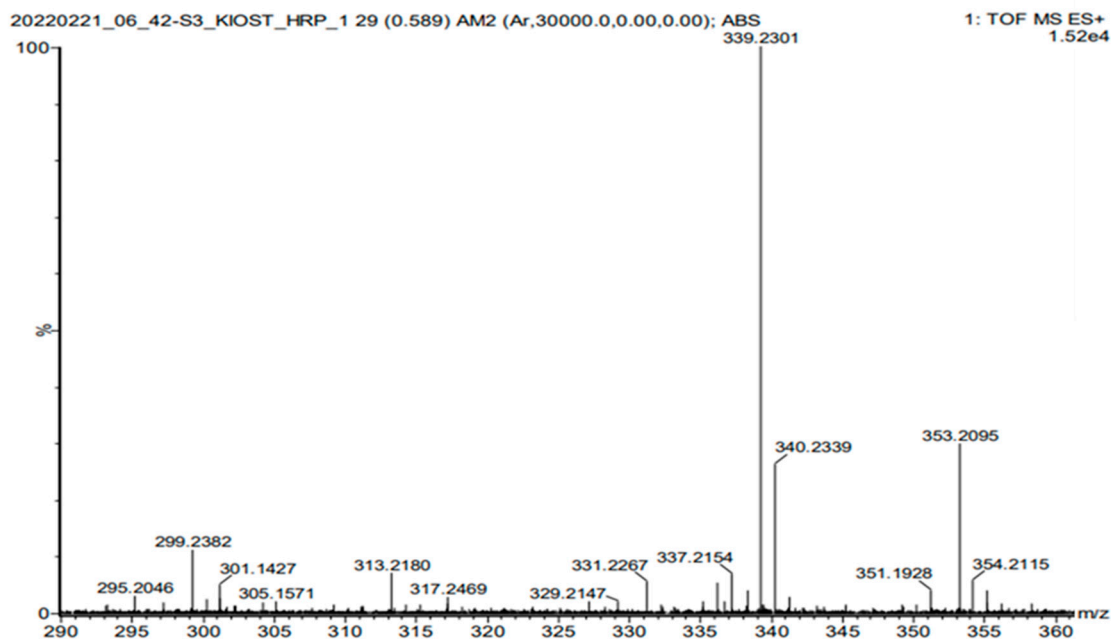


Figure S27. Selective 1D NOESY spectrum of **4** in CD<sub>3</sub>OD.



#### Elemental Composition Report

Single Mass Analysis  
Tolerance = 5.0 PPM / DBE: min = -3.0, max = 200.0  
Element prediction: Off  
Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions  
68 formula(e) evaluated with 1 results within limits (all results (up to 1000) for each mass)  
Elements Used:

C: 0-31 H: 0-50 O: 0-7 Na: 0-1

Minimum: -3.0  
Maximum: 200.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Norm	Conf(%)	Formula
339.2301	339.2300	0.1	0.3	5.5	562.8	n/a	n/a	C <sub>21</sub> H <sub>32</sub> O <sub>2</sub> Na

Figure S28. HR-ESIMS spectrum of 4.

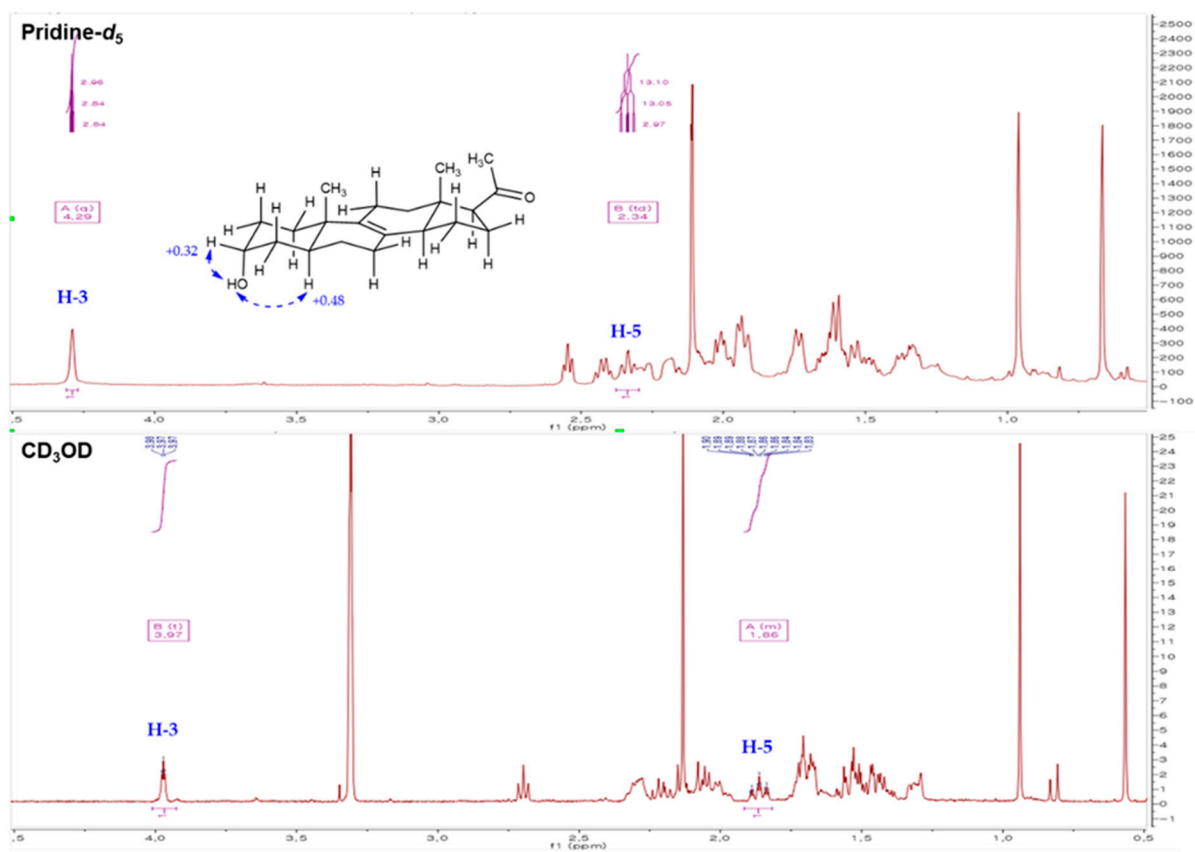


Figure S29. Comparison of  $^1\text{H}$  NMR spectra of **4** in pyridine- $d_5$  and in  $\text{CD}_3\text{OD}$ .

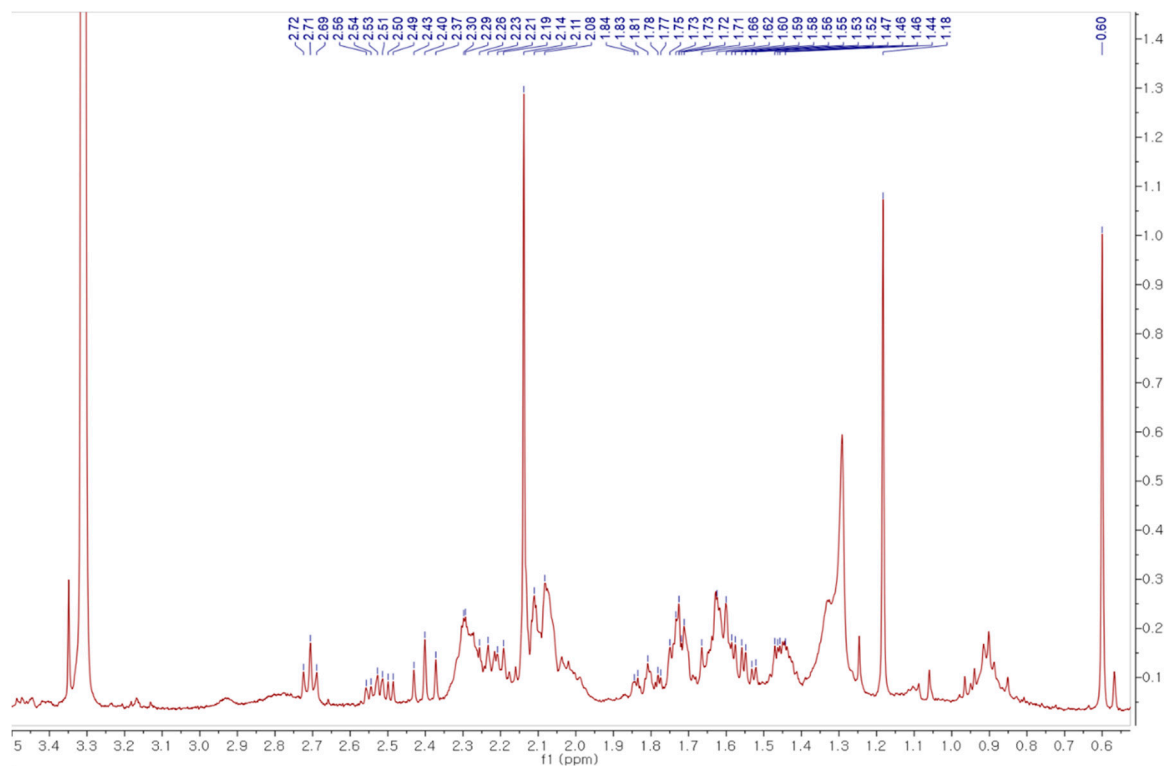


Figure S30.  $^1\text{H}$  NMR spectrum of **5** in  $\text{CD}_3\text{OD}$  (600 MHz)

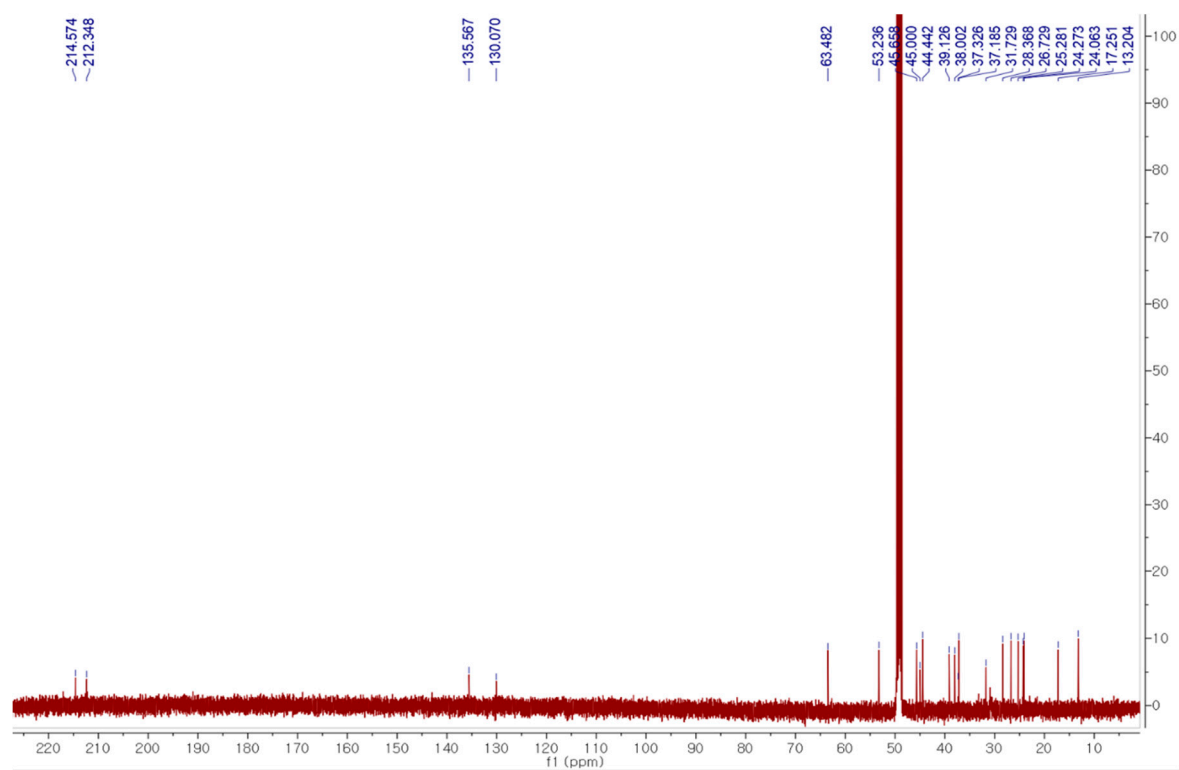


Figure S31.  $^{13}\text{C}$  NMR spectrum of **5** in  $\text{CD}_3\text{OD}$  (150 MHz).



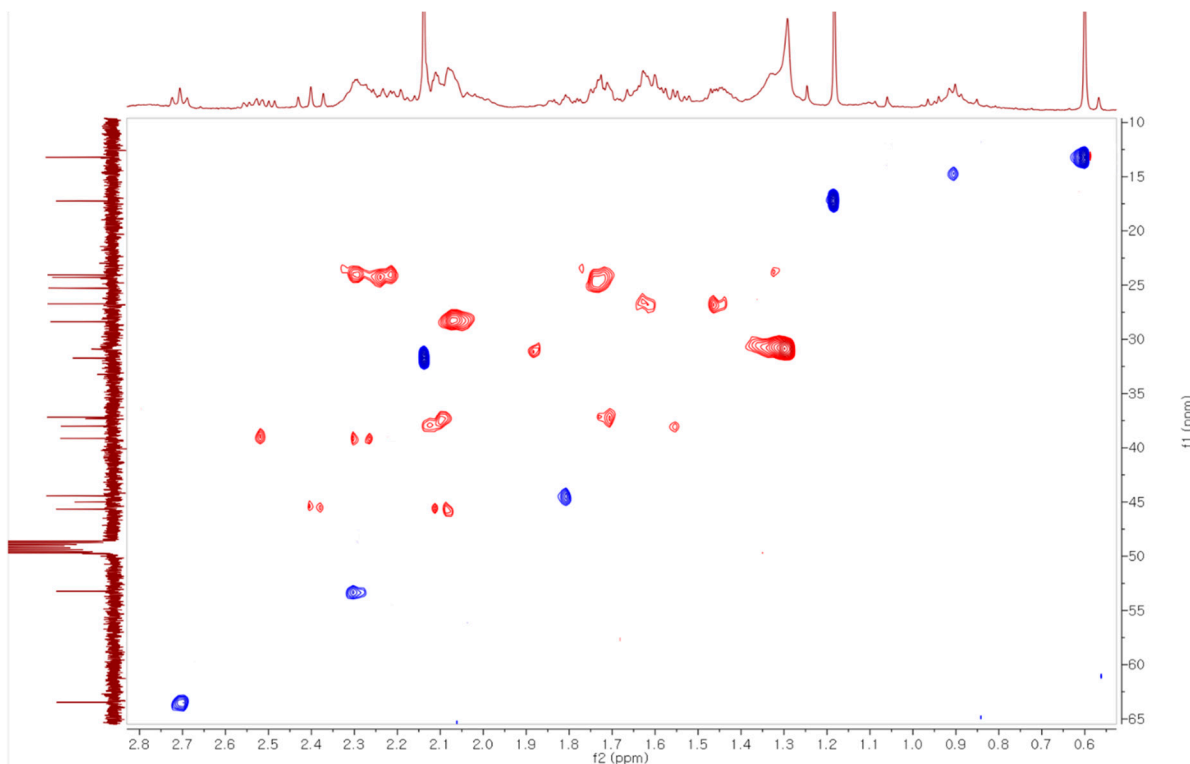


Figure S32. HSQC spectrum of **5** in CD<sub>3</sub>OD.

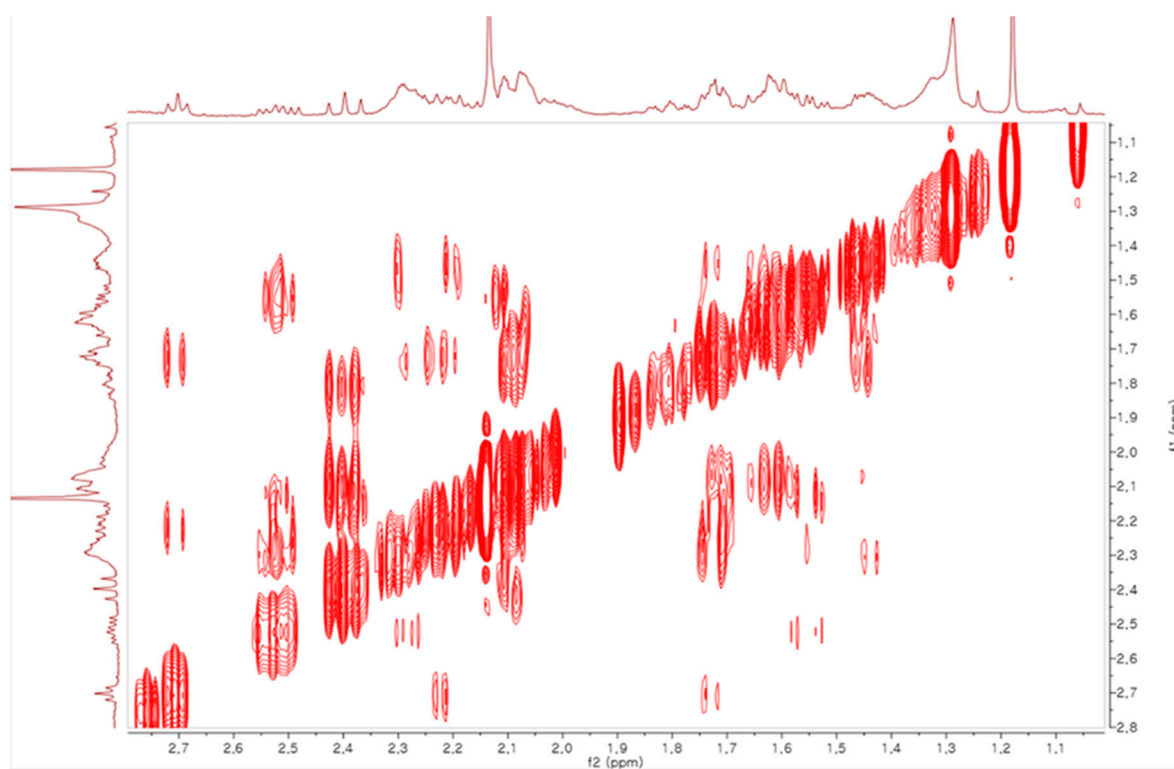


Figure S33. COSY spectrum of **5** in CD<sub>3</sub>OD.

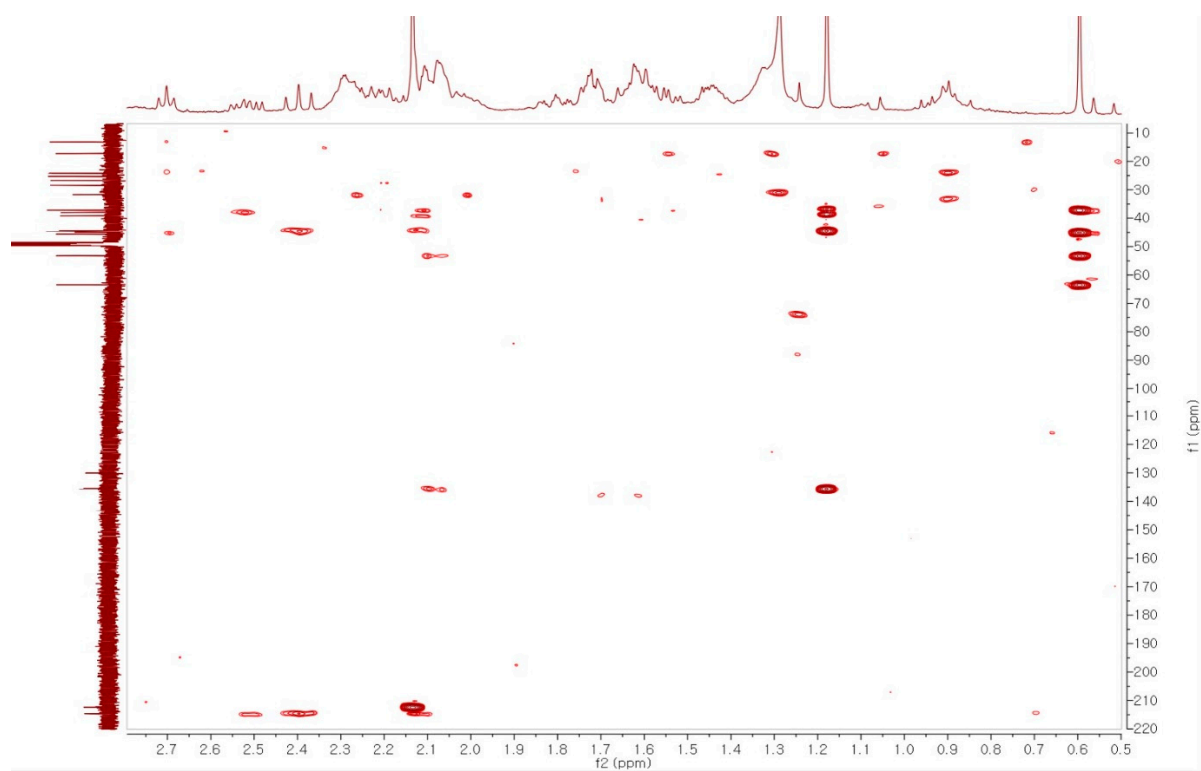


Figure S34. HMBC spectrum of **5** in CD<sub>3</sub>OD.

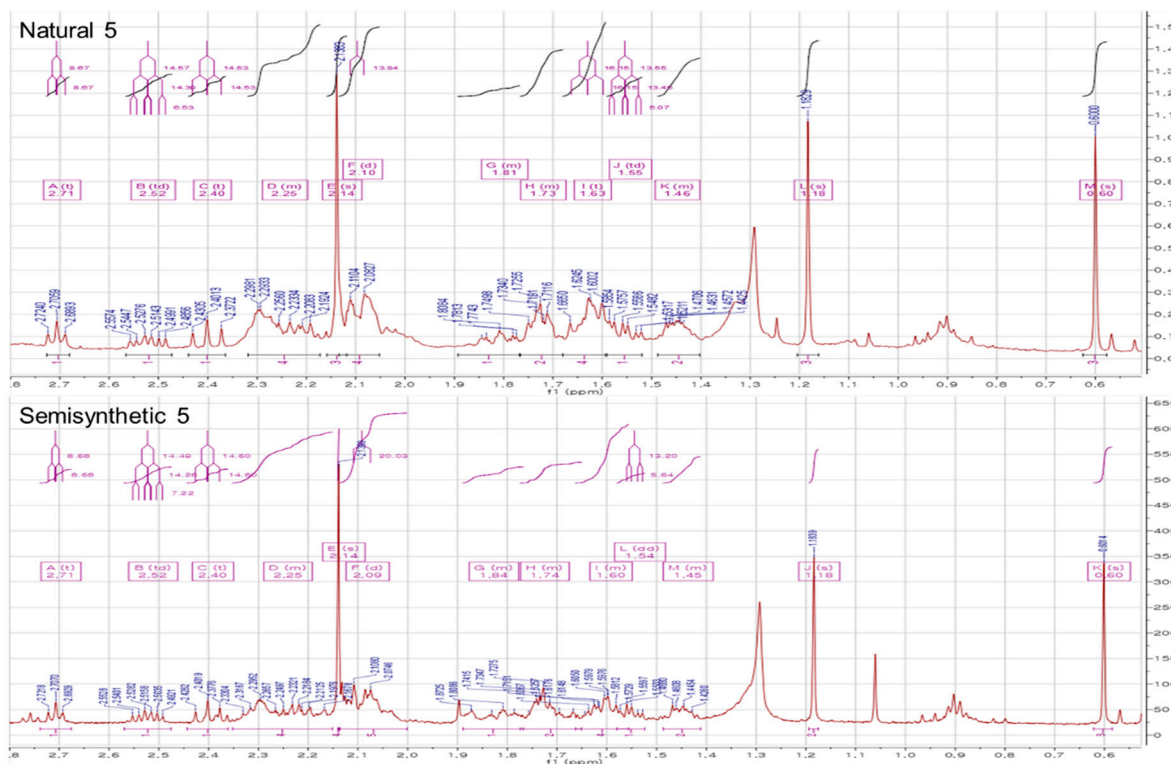


Figure S35. Comparison of  $^1\text{H}$  NMR spectra between natural **5** and semisynthetic **5** in  $\text{CD}_3\text{OD}$  (600 MHz).

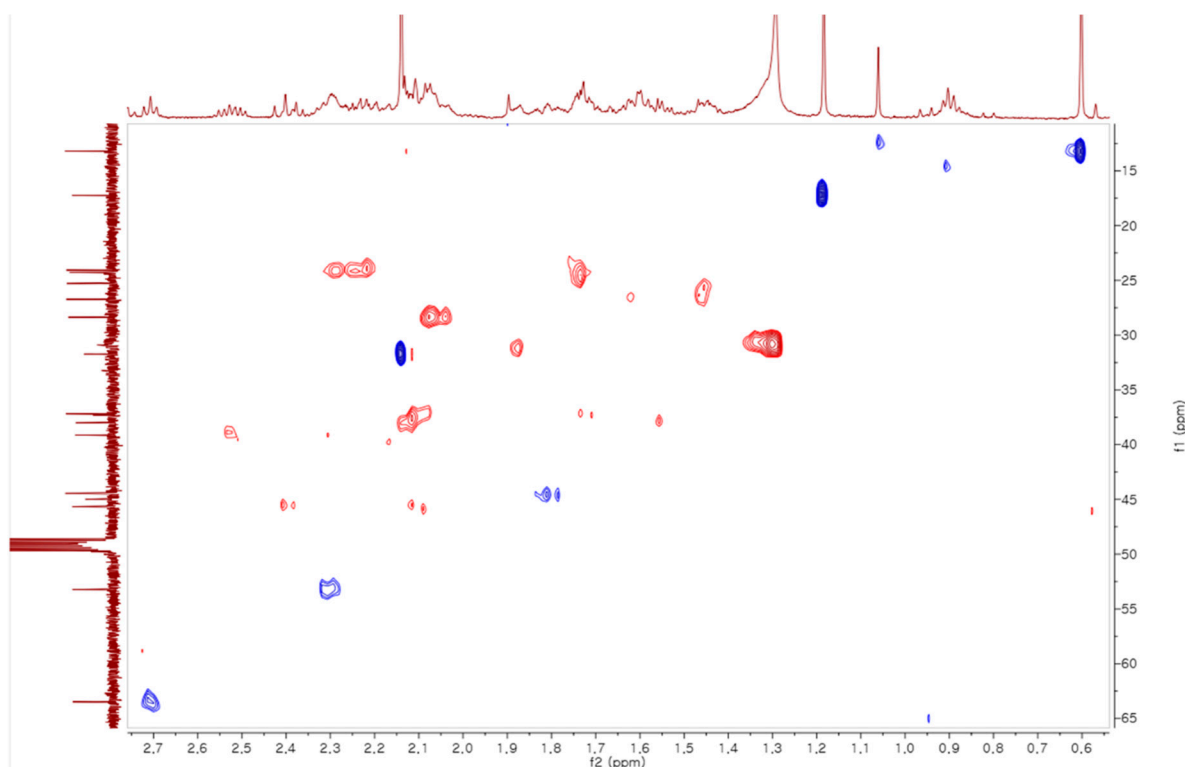


Figure S36. HSQC spectrum of semisynthetic **5** in CD<sub>3</sub>OD.

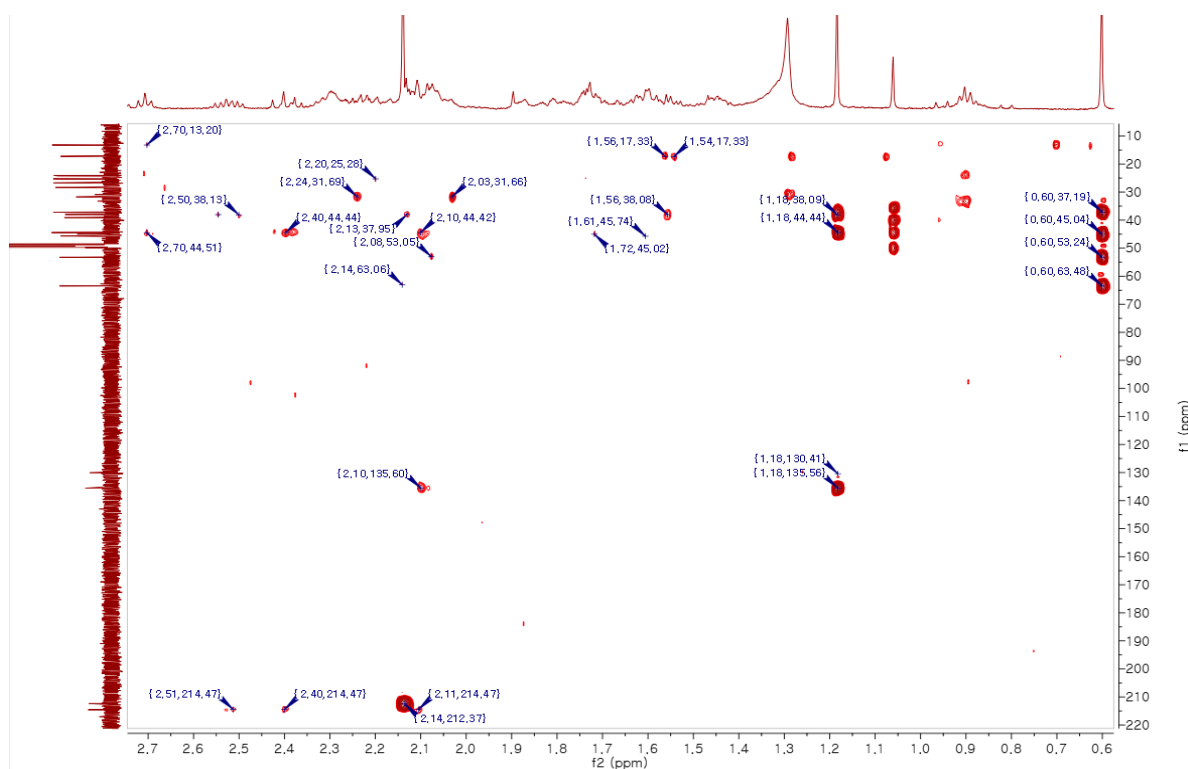


Figure S37. HMBC spectrum of semisynthetic **5** in CD<sub>3</sub>OD.



Figure S38. HR-ESIMS spectrum of semisynthetic 5.