

## Supplementary Materials

# New Ceramides and Cerebrosides from the Deep-Sea Far Eastern Starfish *Ceramaster patagonicus*

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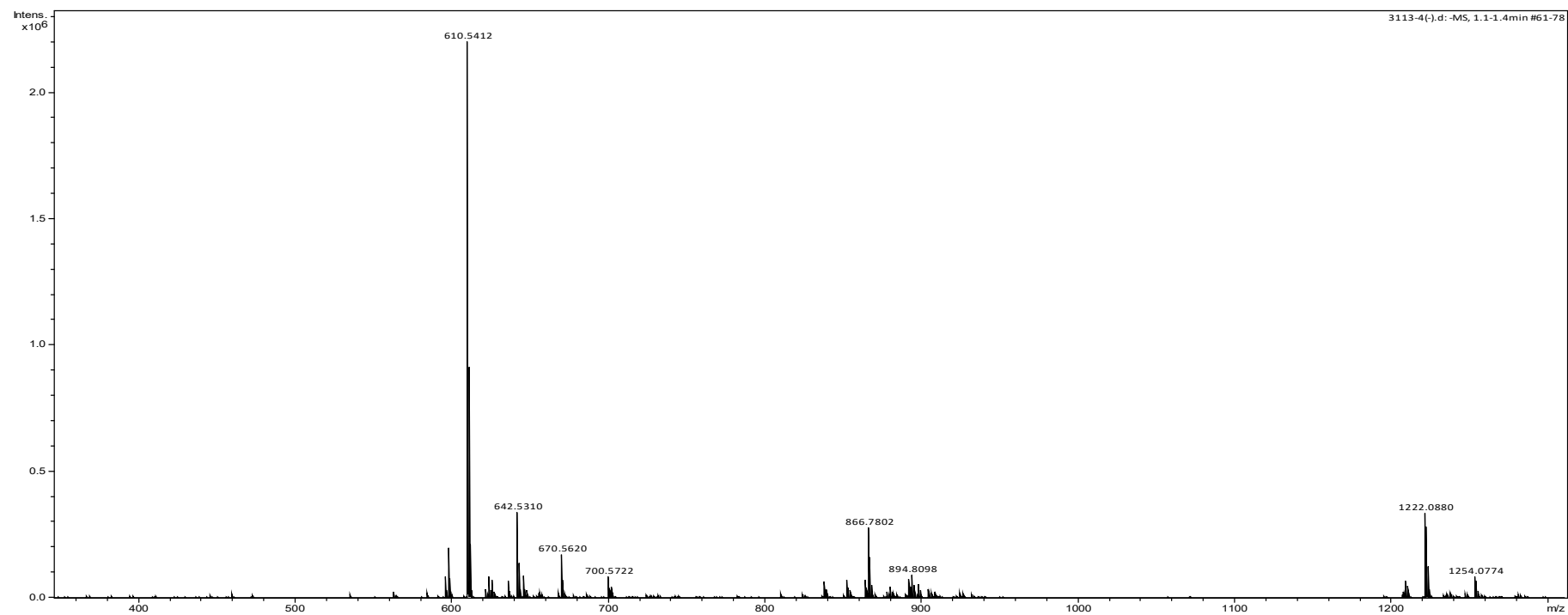
**Figure S40.**  $^{13}\text{C}$ -NMR spectrum of cerebroside **9** in  $\text{C}_5\text{D}_5\text{N}$ .

**Figure S41.**  $^1\text{H}$ - $^1\text{H}$ -COSY spectrum of cerebroside **9** in  $\text{C}_5\text{D}_5\text{N}$ .

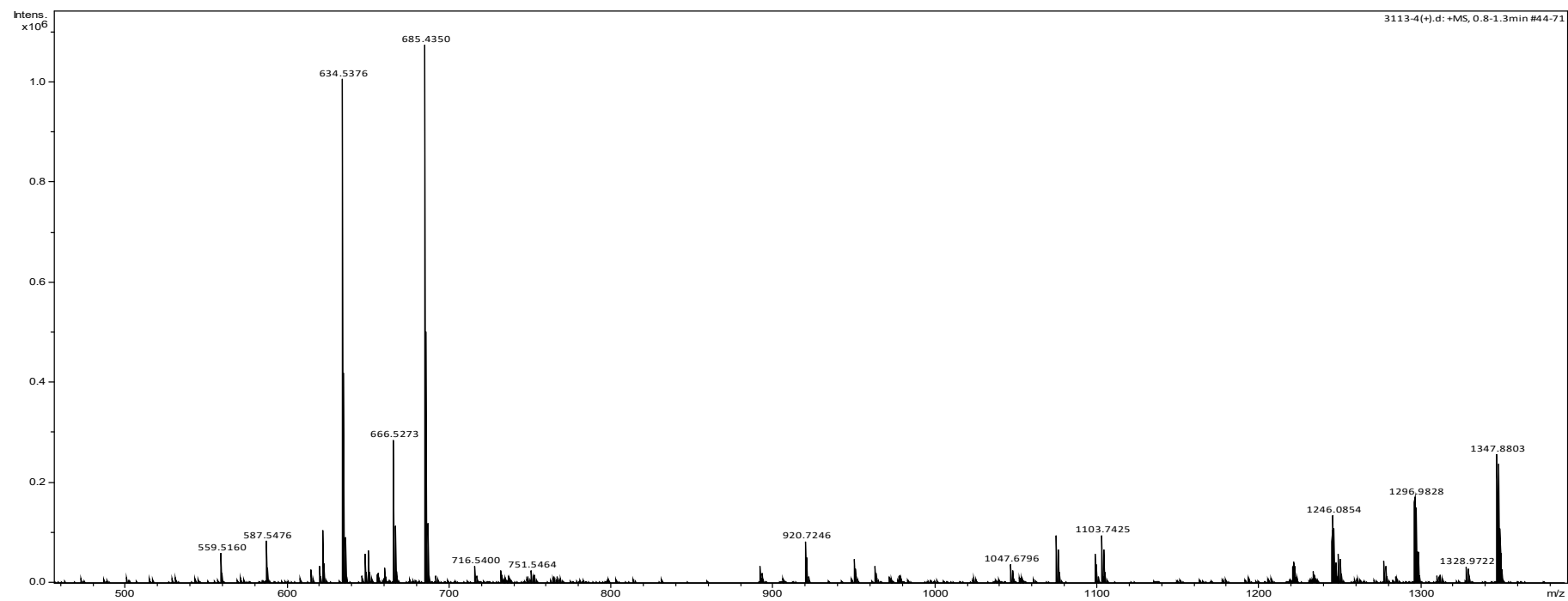
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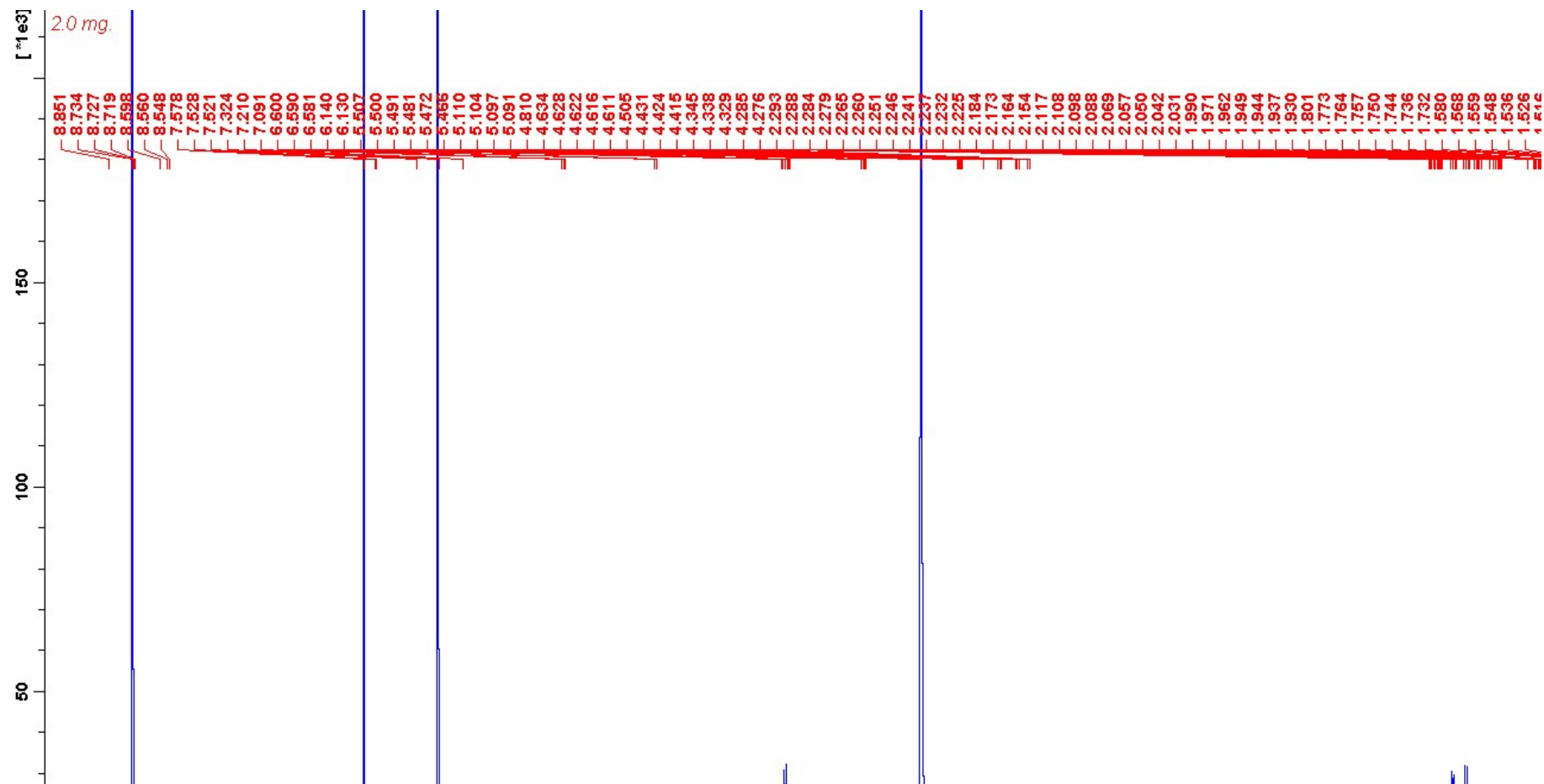
**Figure S1.** (-)-HRESIMS spectrum of ceramide 1.



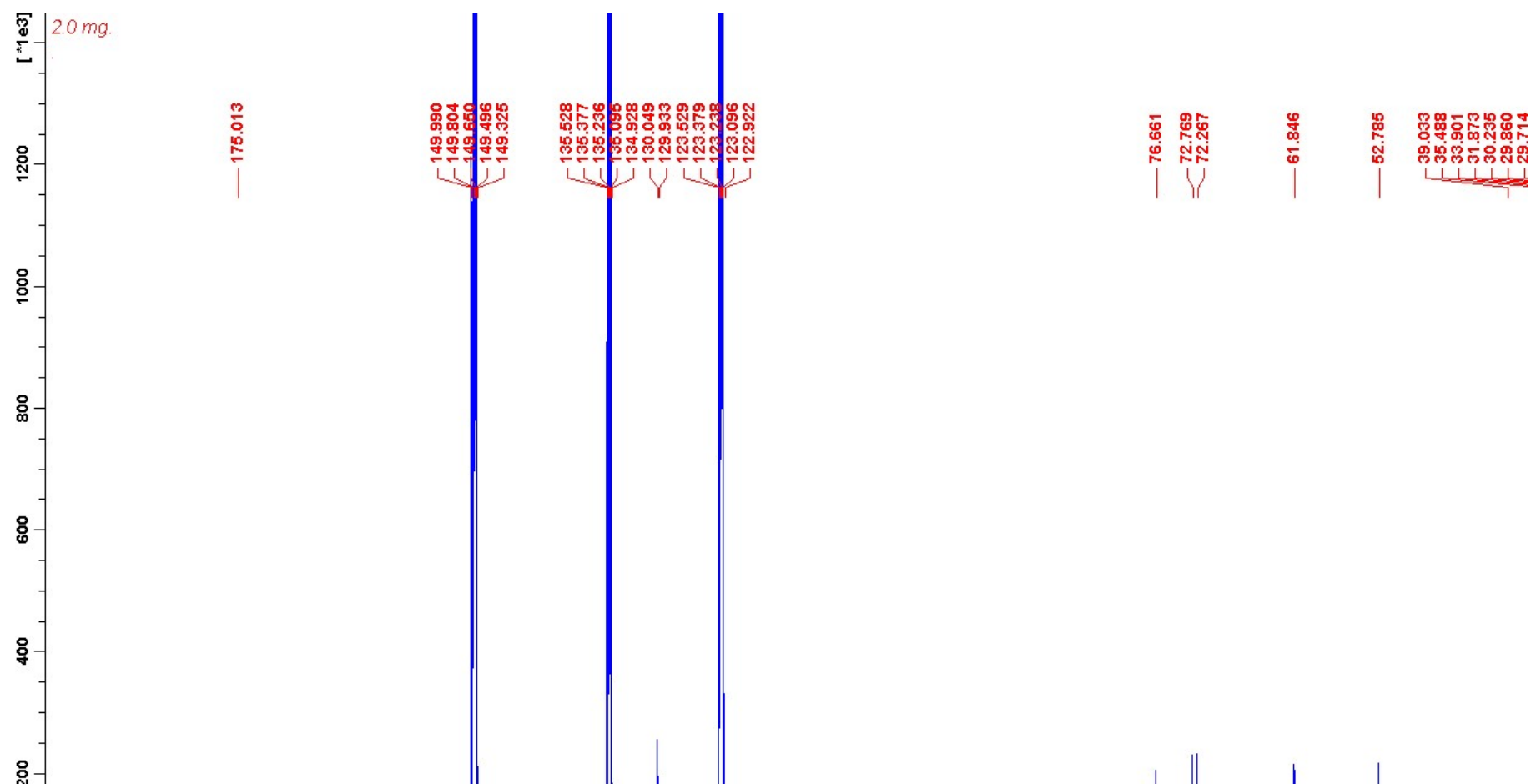
**Figure S2.** (+)-HRESIMS spectrum of ceramide 1.



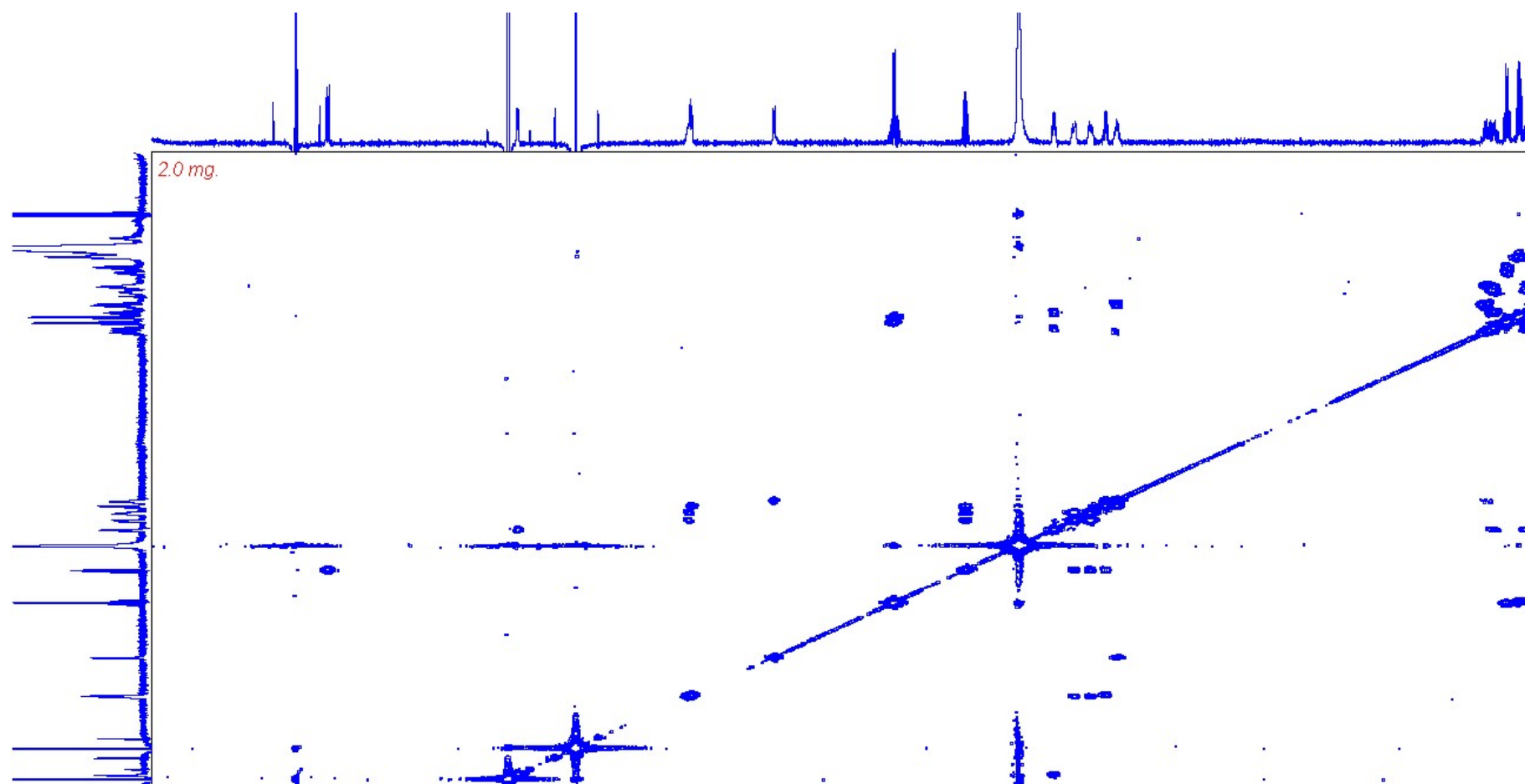
**Figure S3.**  $^1\text{H}$ -NMR spectrum of ceramide **1** in  $\text{C}_5\text{D}_5\text{N}$ .



**Figure S4.**  $^{13}\text{C}$ -NMR spectrum of ceramide **1** in  $\text{C}_5\text{D}_5\text{N}$ .

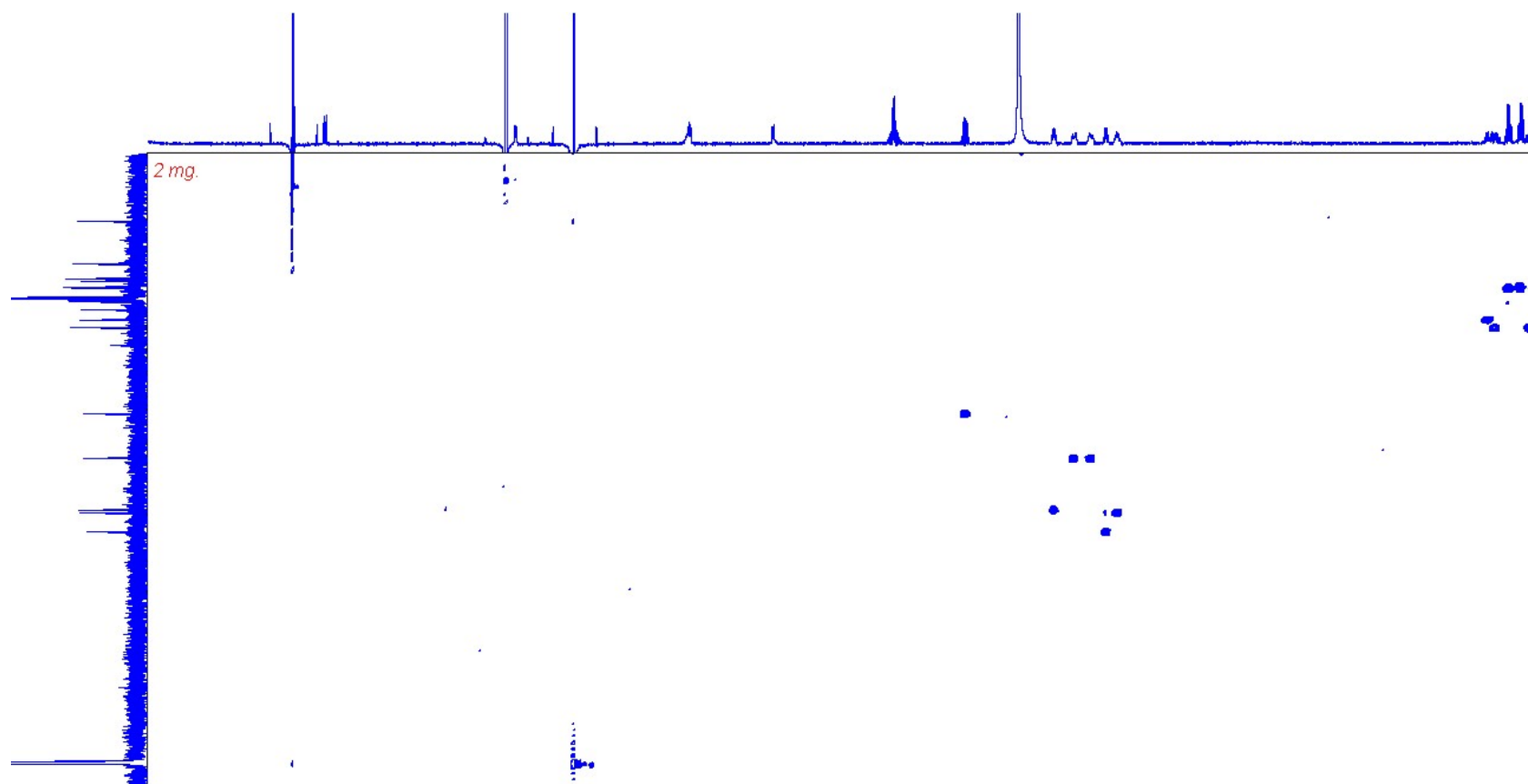


**Figure S5.**  $^1\text{H}$ - $^1\text{H}$ -COSY spectrum of ceramide 1 in  $\text{C}_5\text{D}_5\text{N}$ .

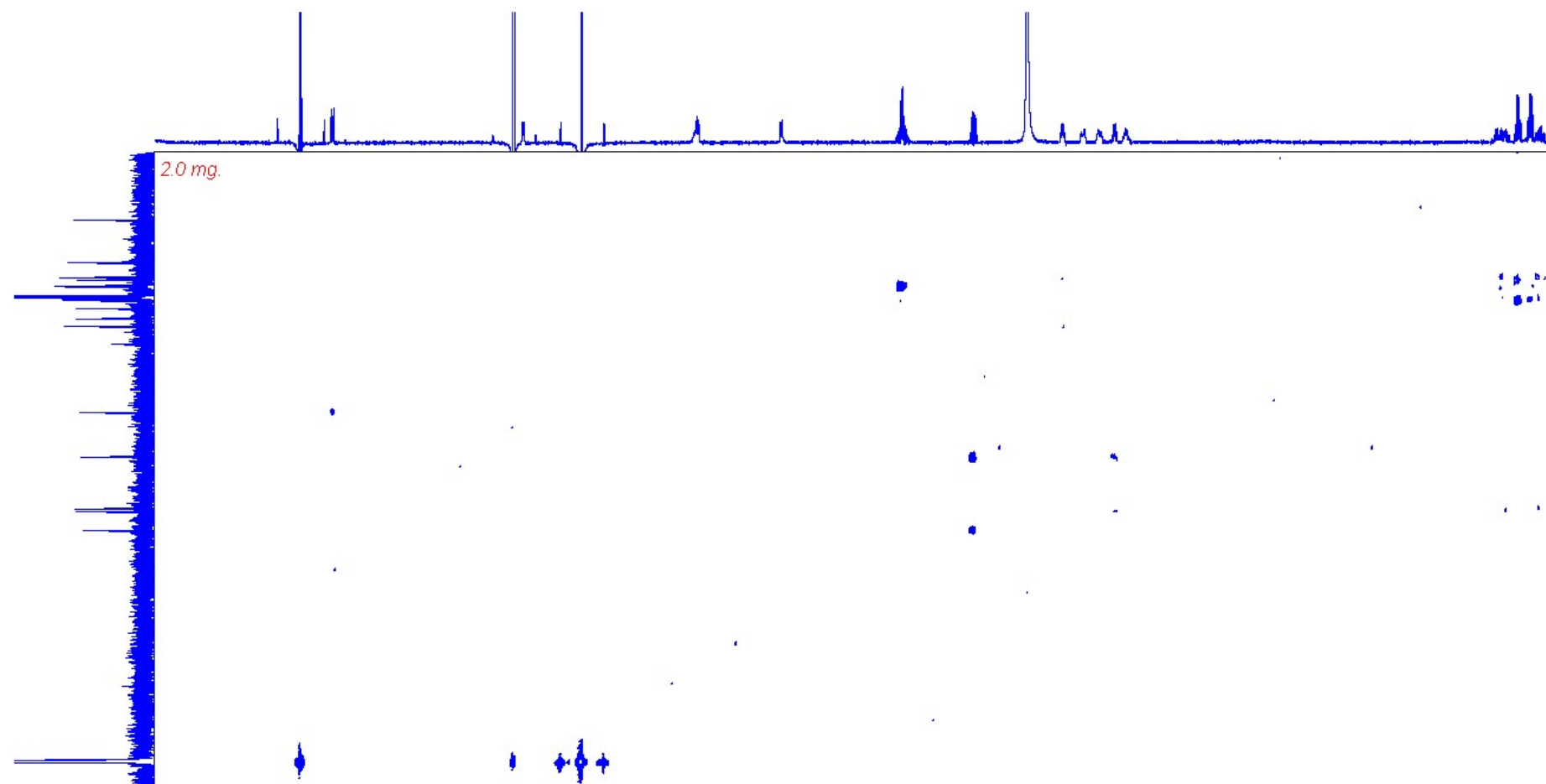




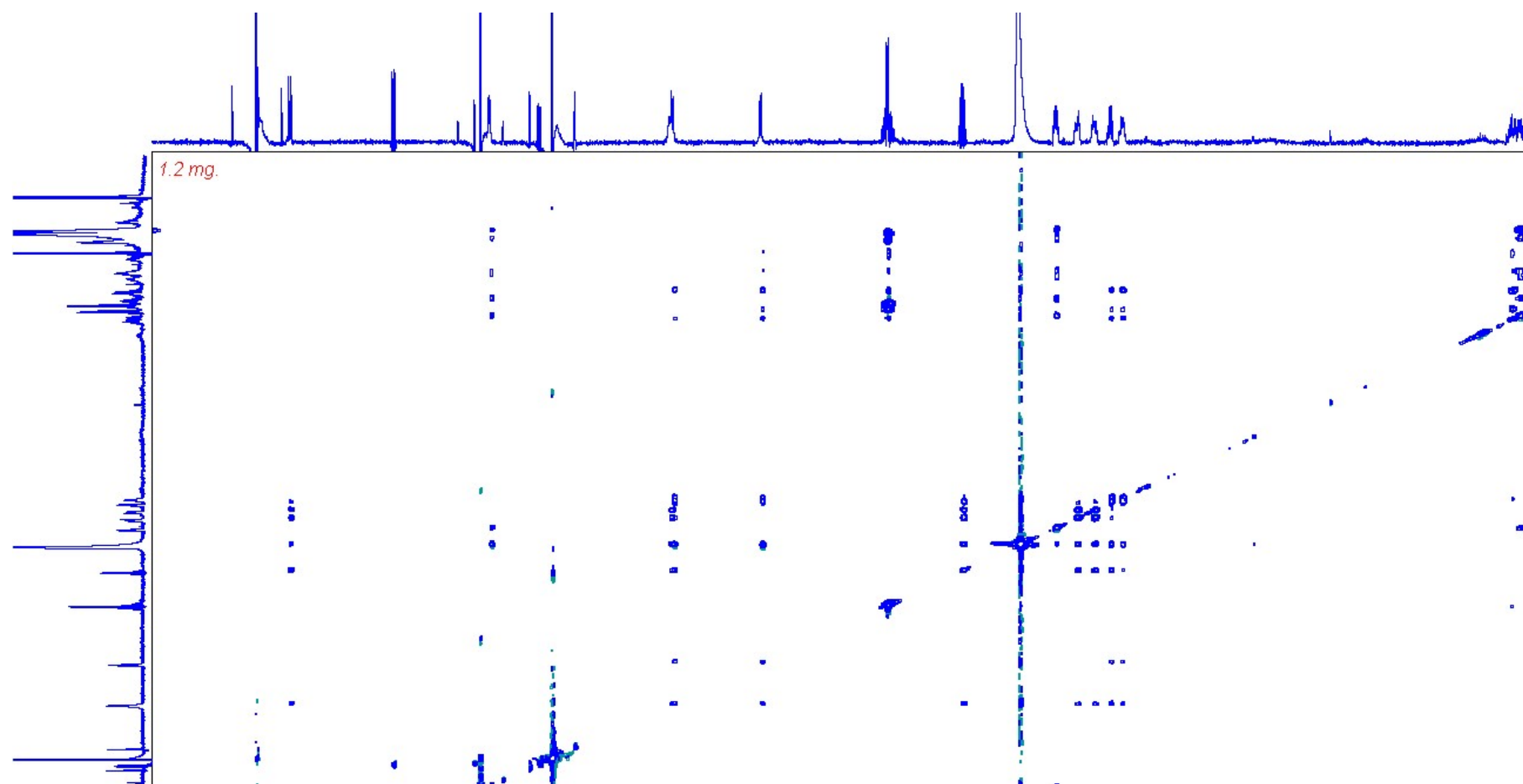
**Figure S6.** HSQC spectrum of ceramide **1** in C<sub>5</sub>D<sub>5</sub>N.



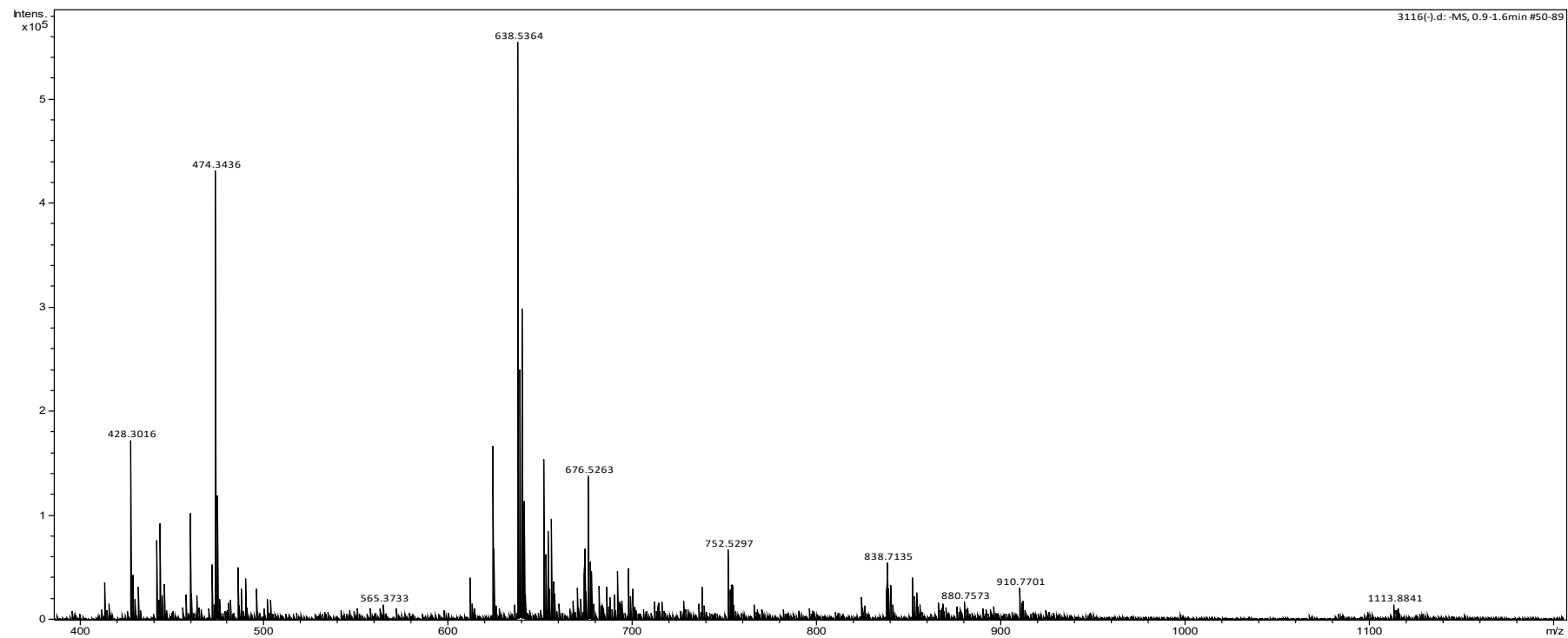
**Figure S7.** HMBC spectrum of ceramide **1** in C<sub>5</sub>D<sub>5</sub>N.



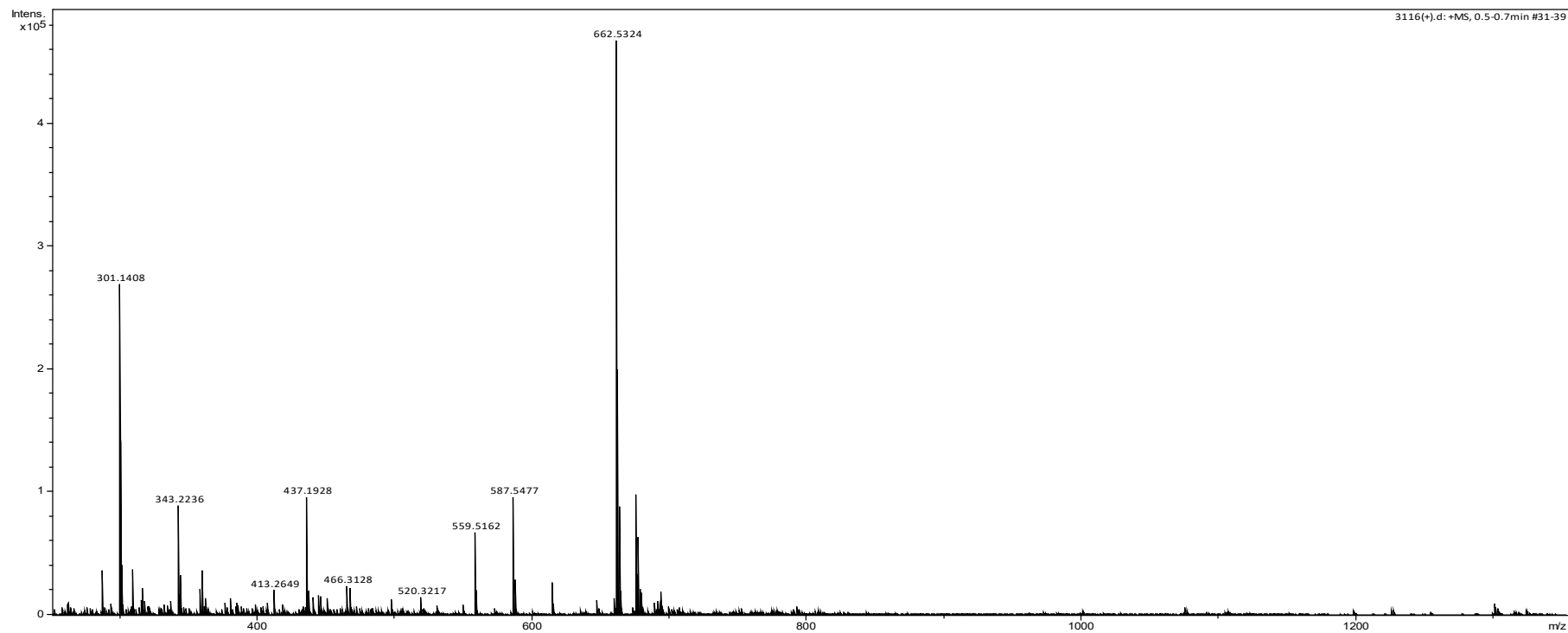
**Figure S8.** 2D TOCSY spectrum of ceramide **1** in  $\text{C}_5\text{D}_5\text{N}$ .



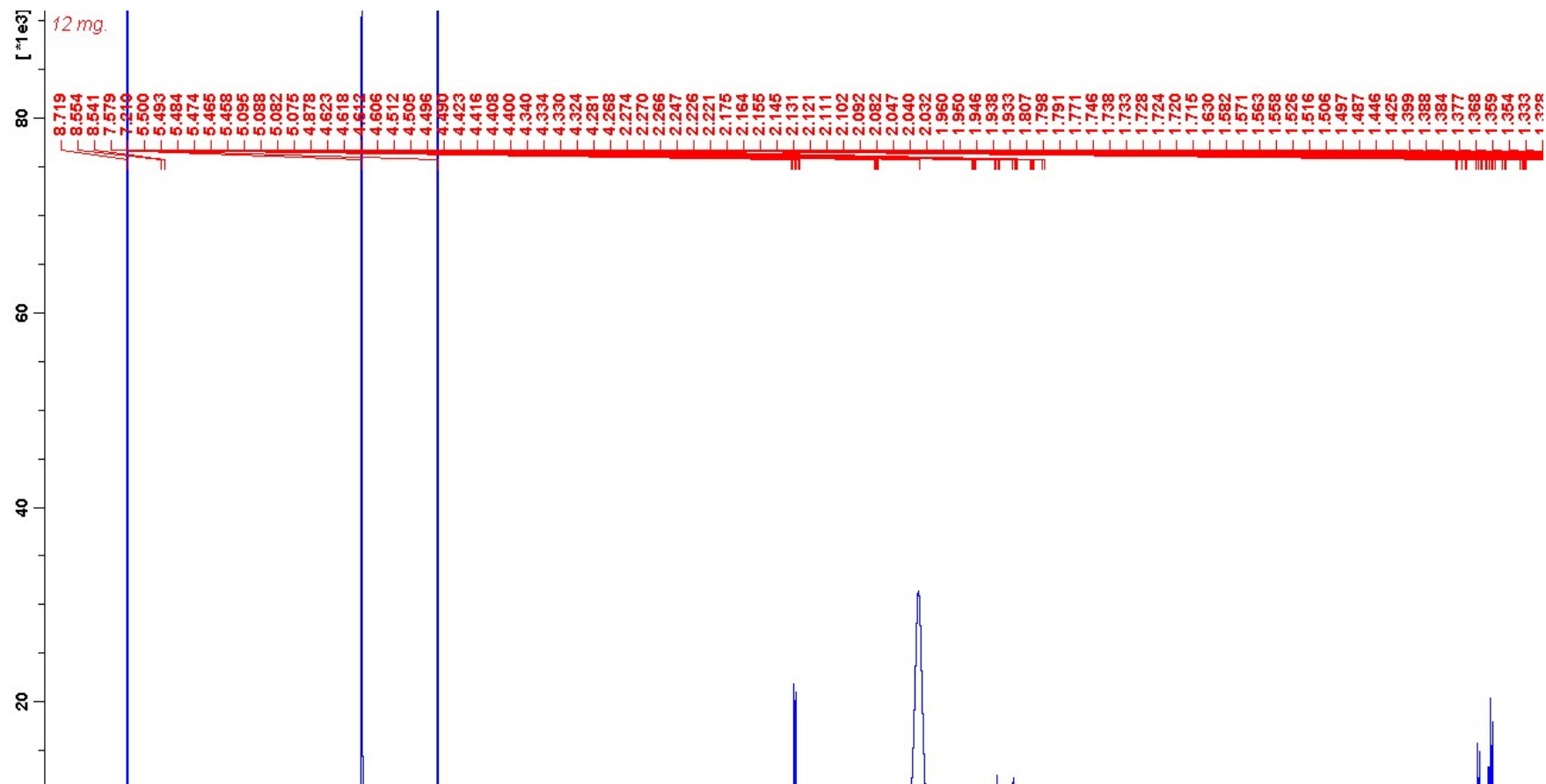
**Figure S9.** (–)-HRESIMS spectrum of ceramide 2.



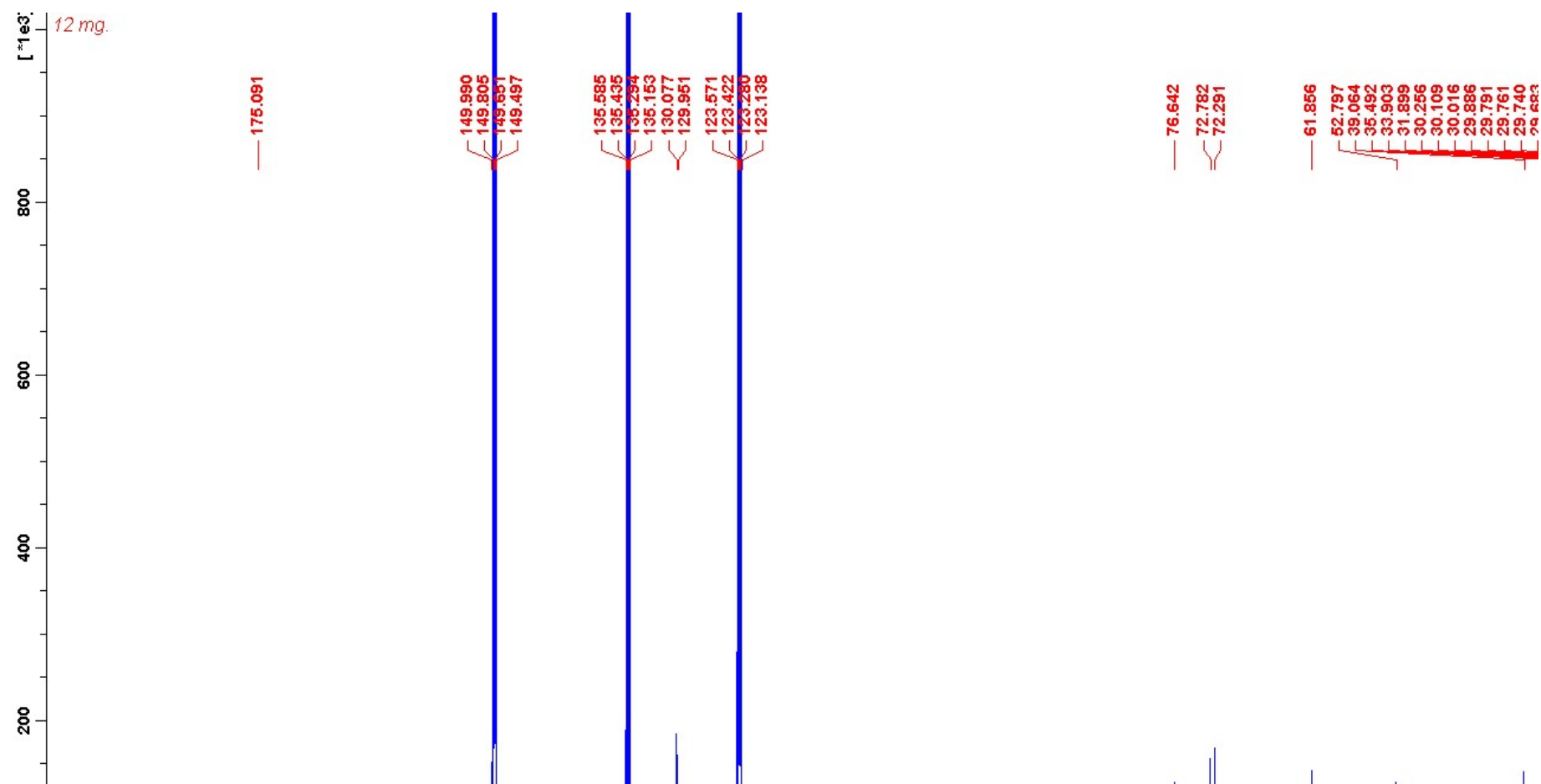
**Figure S10.** (+)-HRESIMS spectrum of ceramide 2.



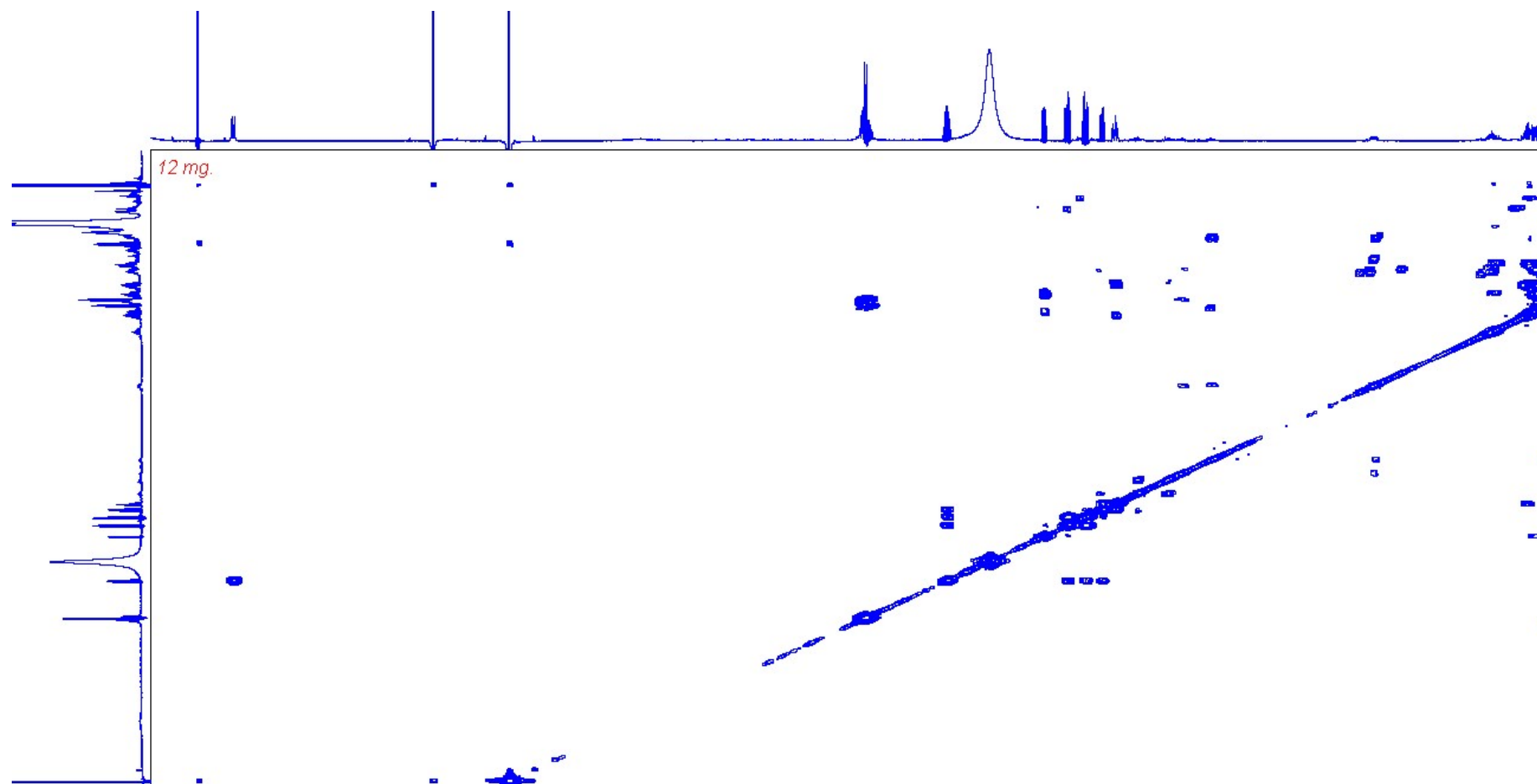
**Figure S11.**  $^1\text{H}$ -NMR spectrum of ceramide **2** in  $\text{C}_5\text{D}_5\text{N}$ .



**Figure S12.**  $^{13}\text{C}$ -NMR spectrum of ceramide 2 in  $\text{C}_5\text{D}_5\text{N}$ .

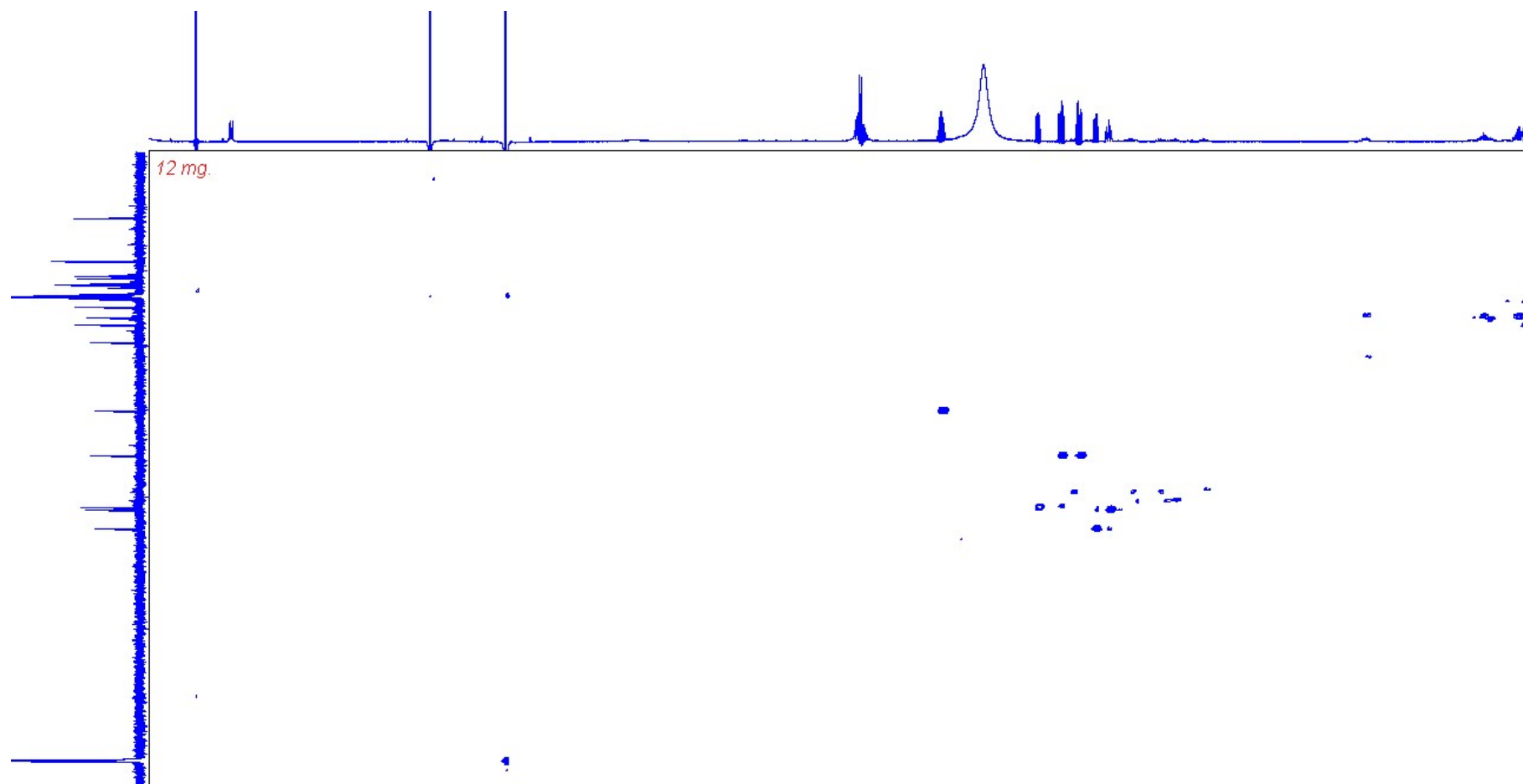


**Figure S13.**  $^1\text{H}$ - $^1\text{H}$ -COSY spectrum of ceramide 2 in  $\text{C}_5\text{D}_5\text{N}$ .

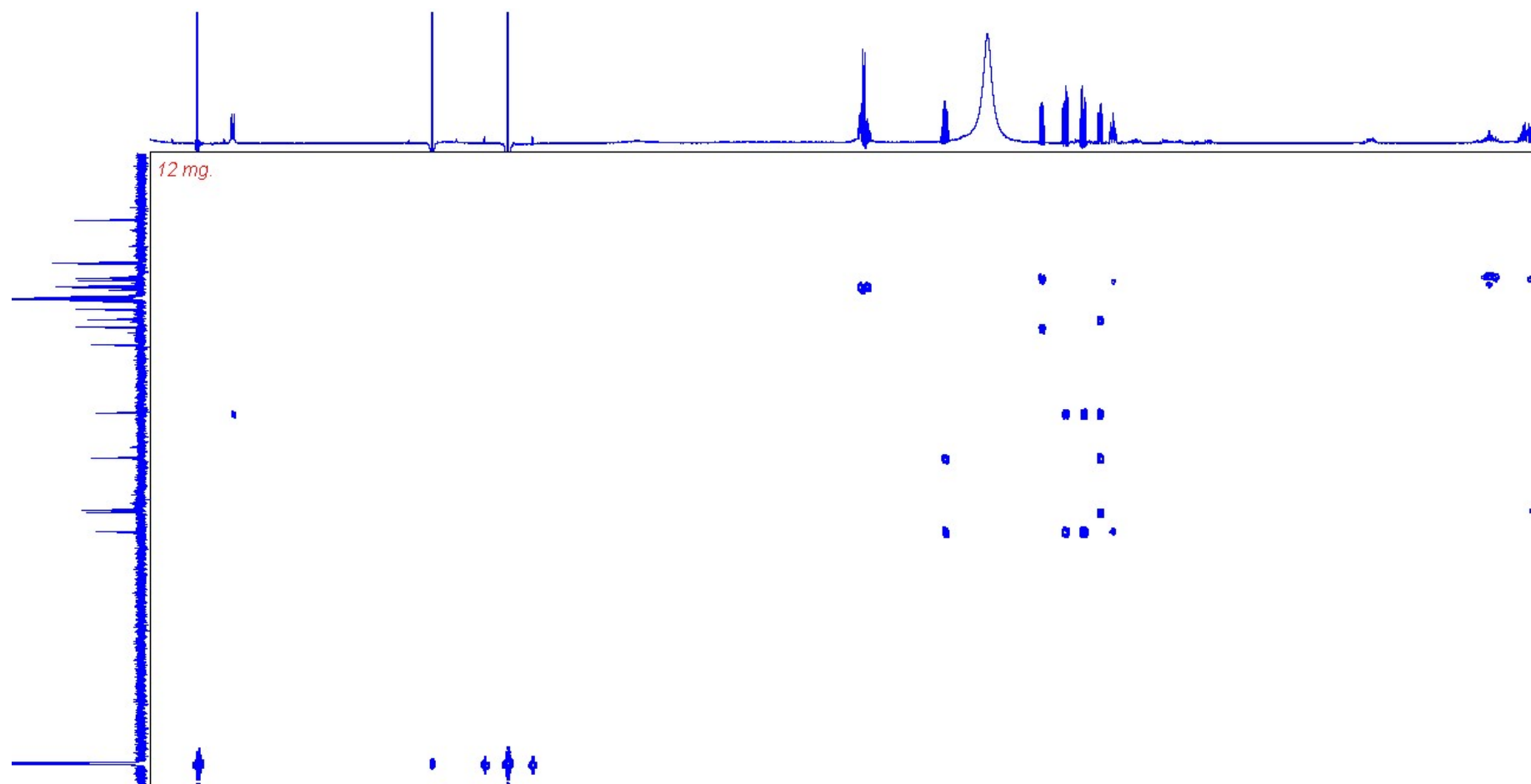




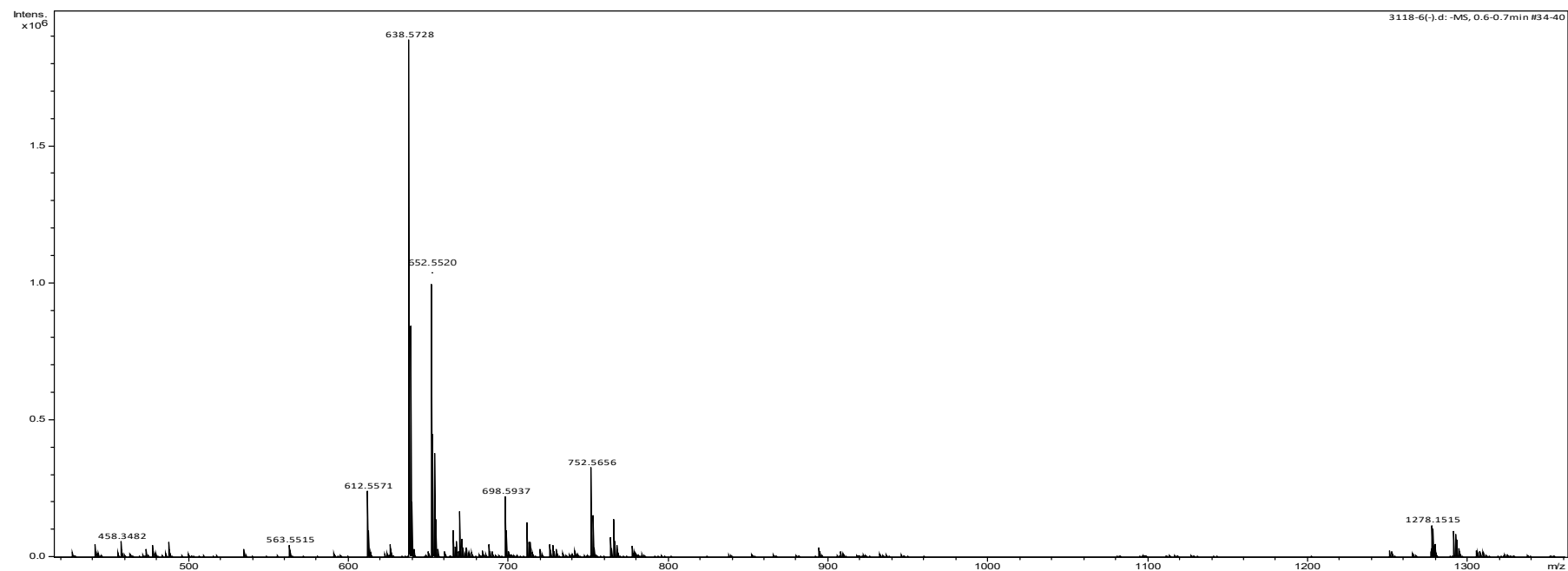
**Figure S14.** HSQC spectrum of ceramide **2** in  $\text{C}_5\text{D}_5\text{N}$ .



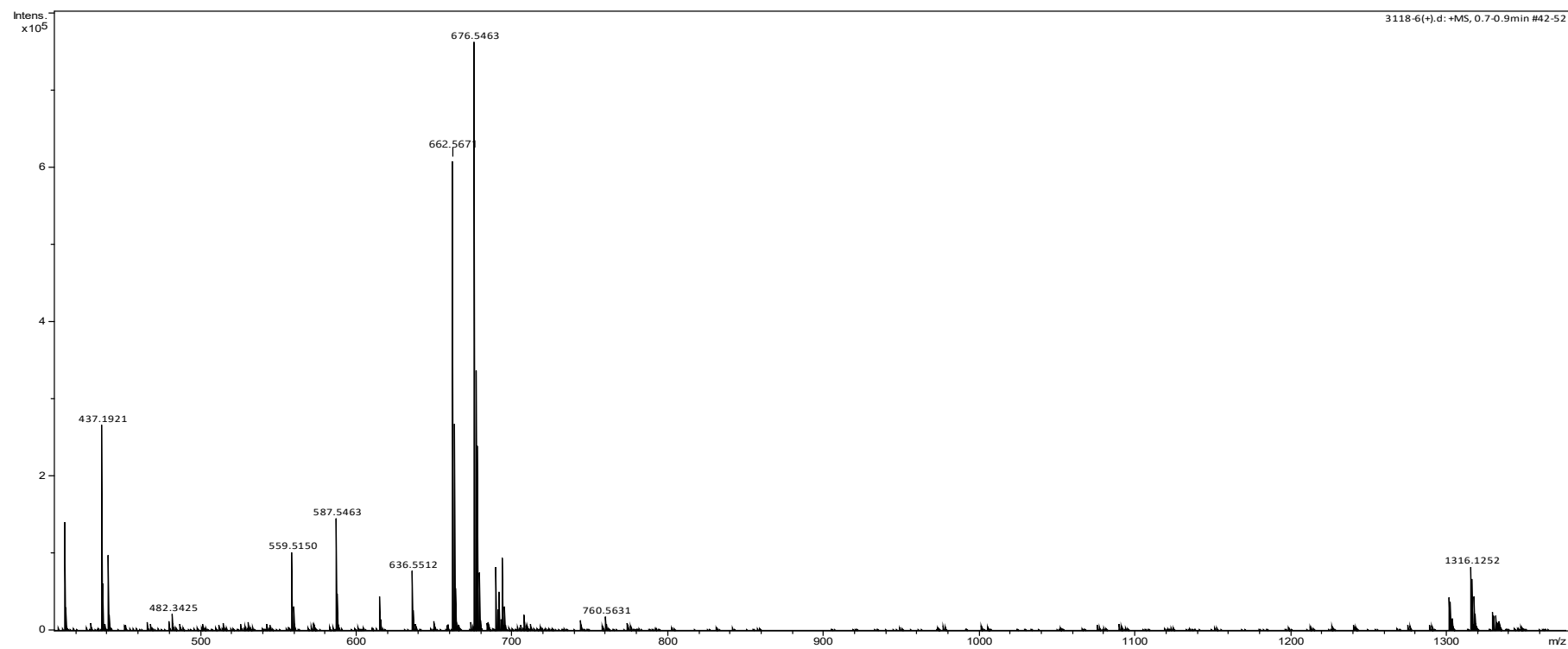
**Figure S15.** HMBC spectrum of ceramide **2** in C<sub>5</sub>D<sub>5</sub>N.



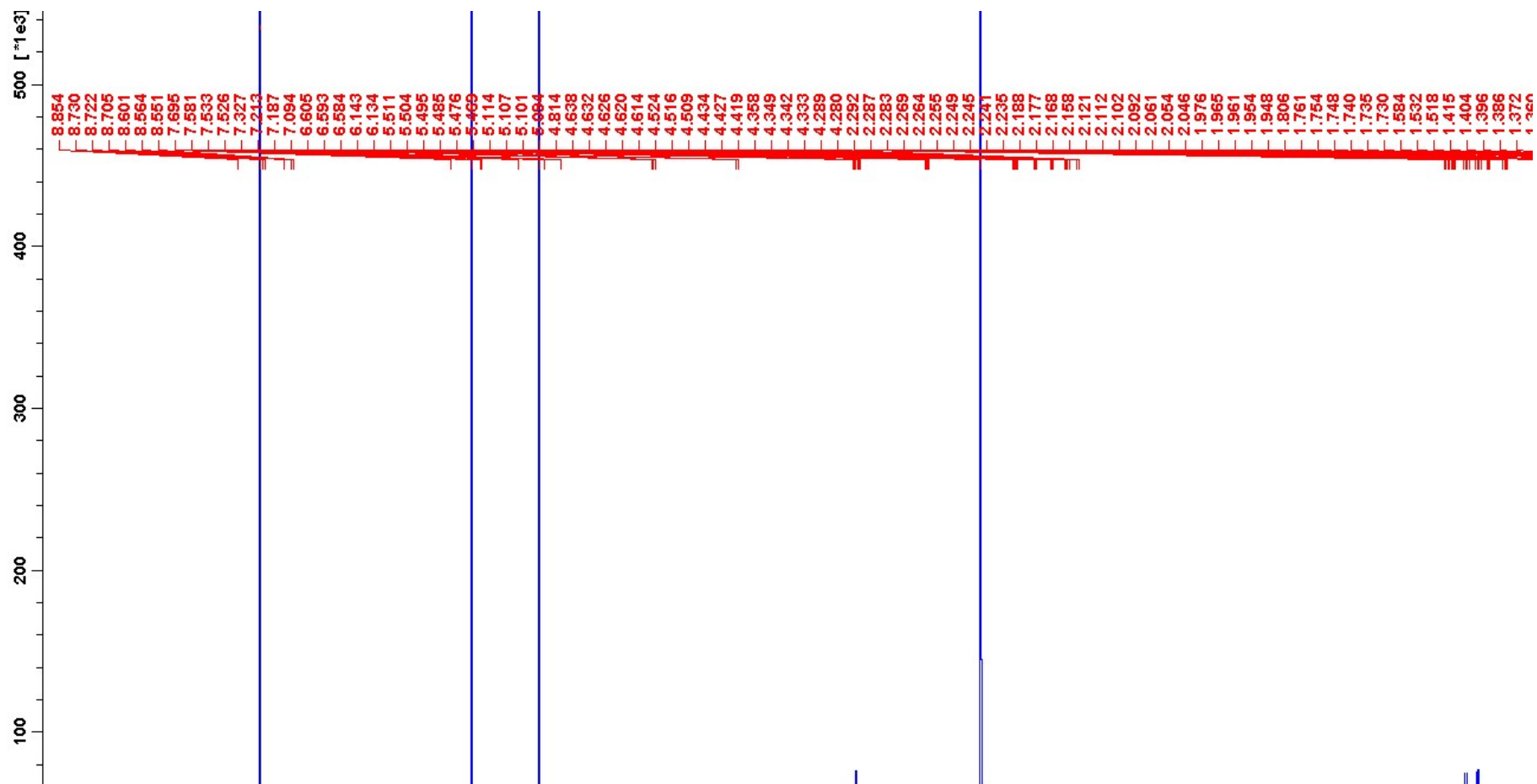
**Figure S16.** (-)-HRESIMS spectrum of ceramide 3.



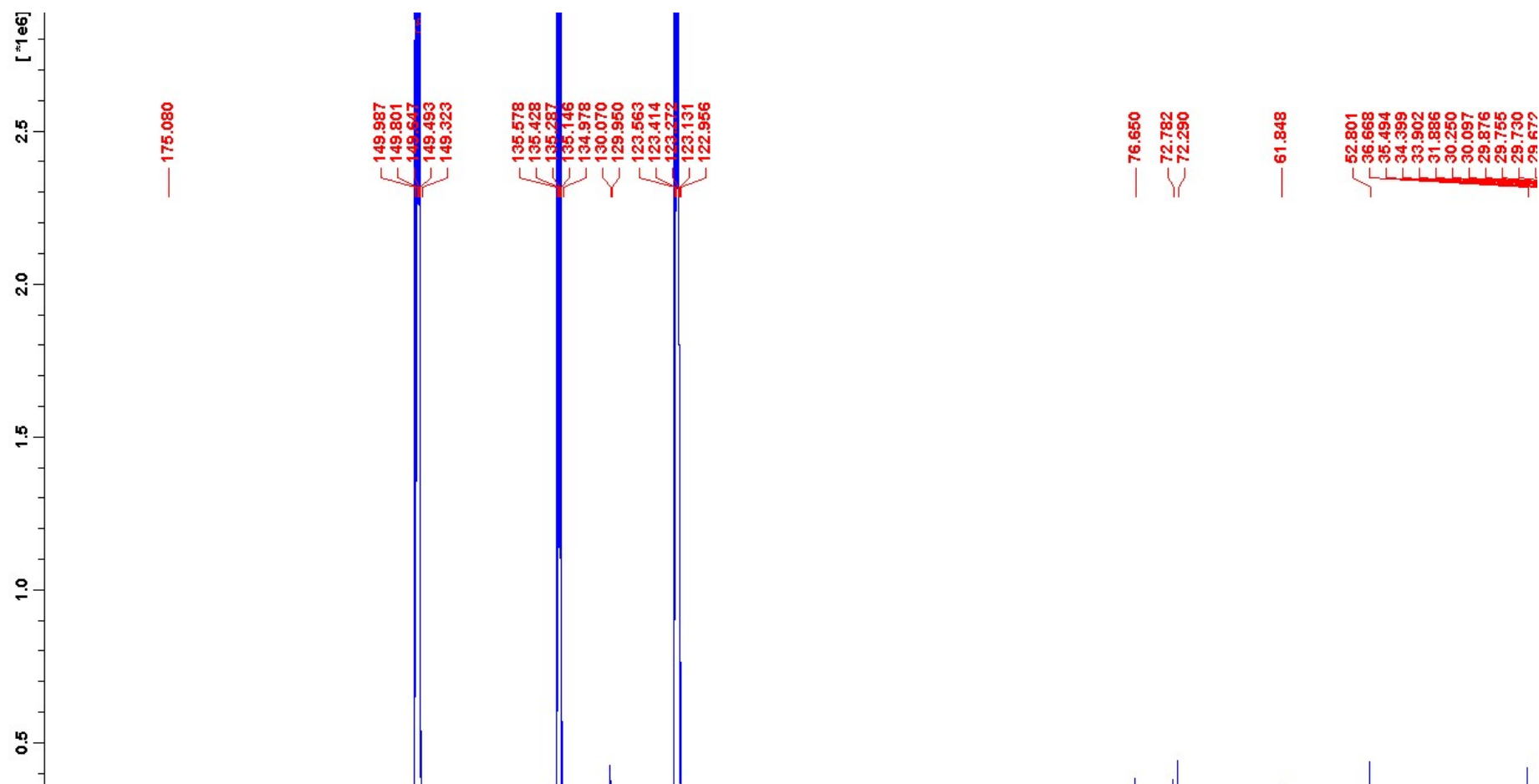
**Figure S17.** (+)-HRESIMS spectrum of ceramide 3.



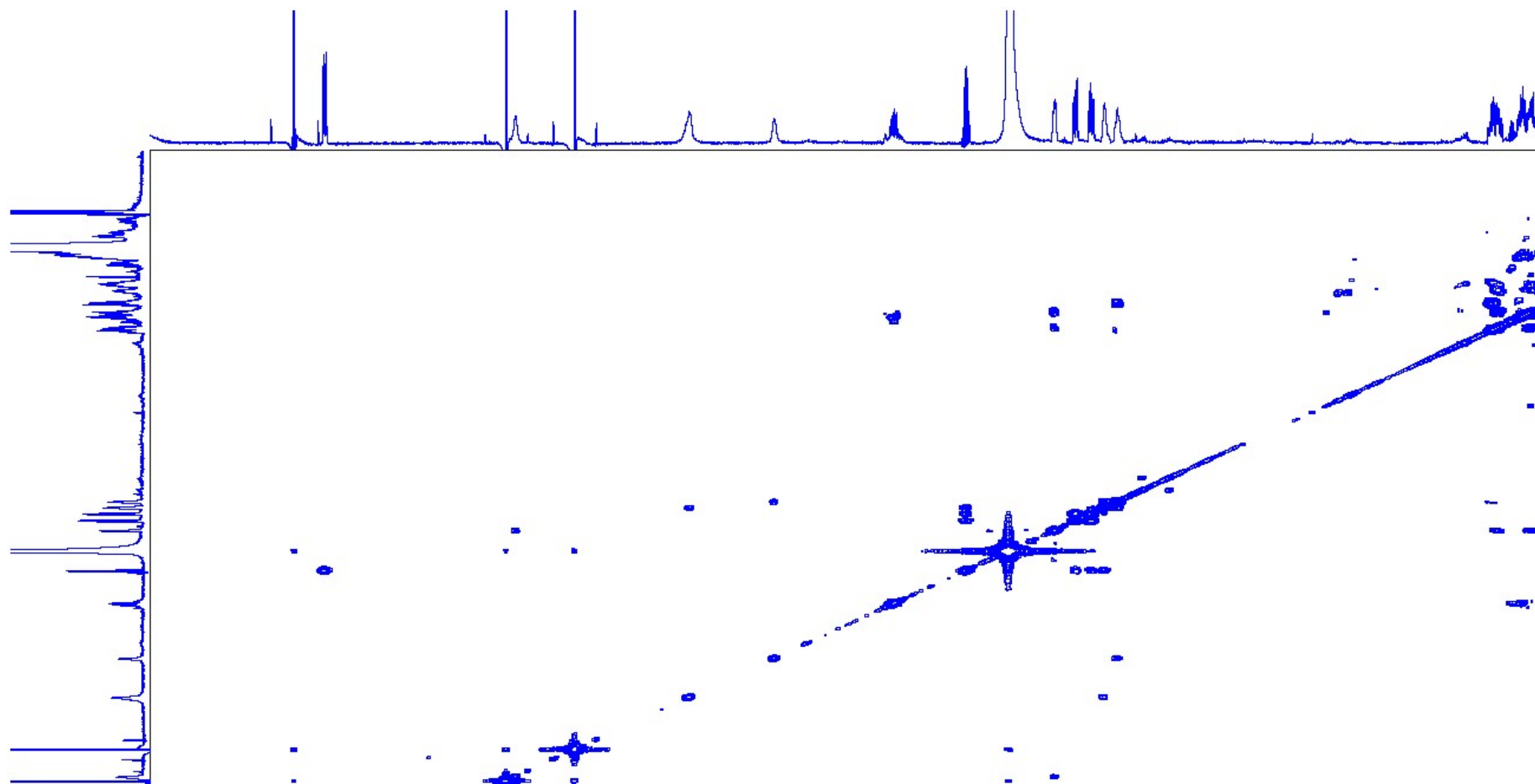
**Figure S18.**  $^1\text{H}$ -NMR spectrum of ceramide **3** in  $\text{C}_5\text{D}_5\text{N}$ .



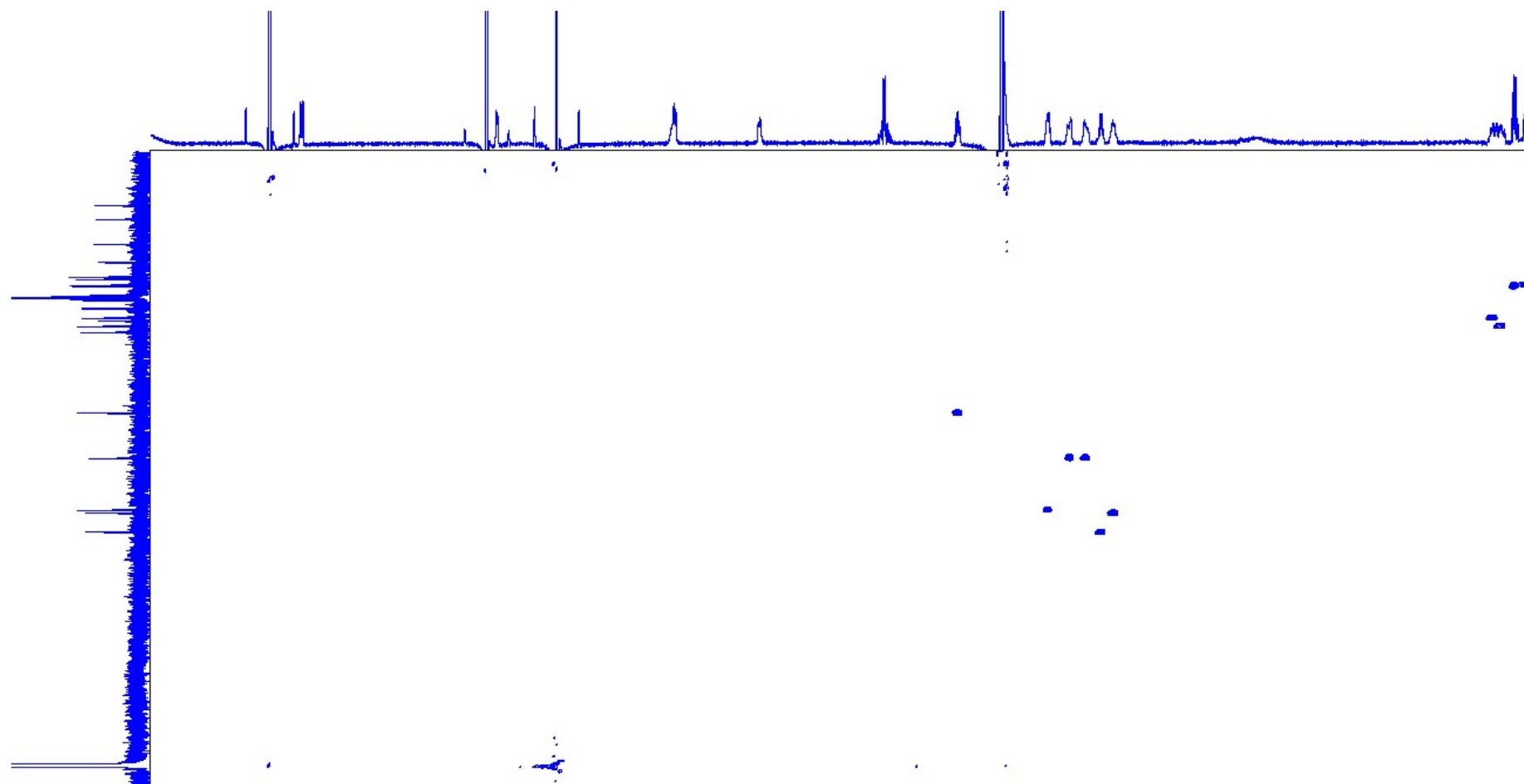
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**Figure S20.**  $^1\text{H}$ - $^1\text{H}$ -COSY spectrum of ceramide **3** in  $\text{C}_5\text{D}_5\text{N}$ .

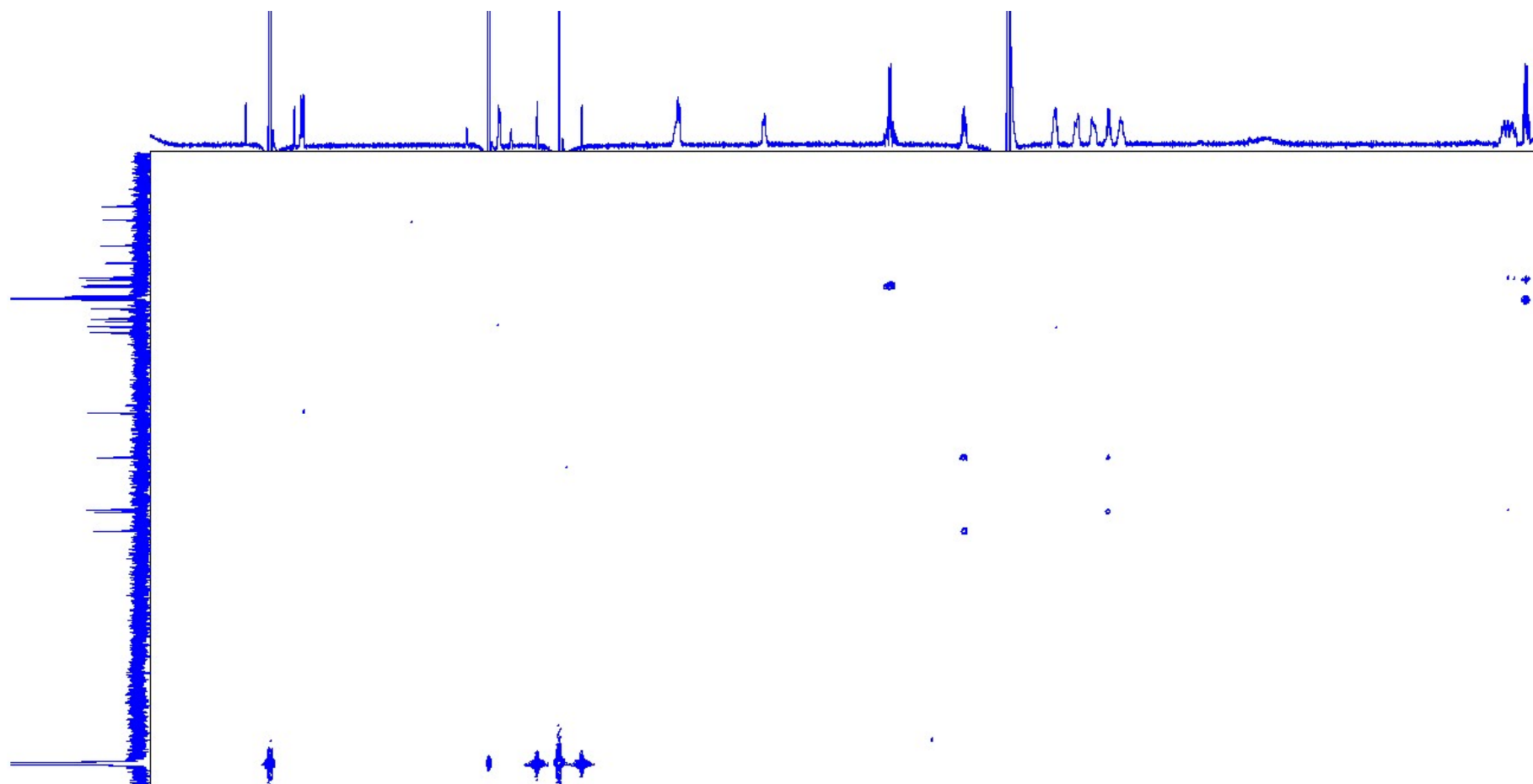


**Figure S21.** HSQC spectrum of ceramide **3** in C<sub>5</sub>D<sub>5</sub>N.

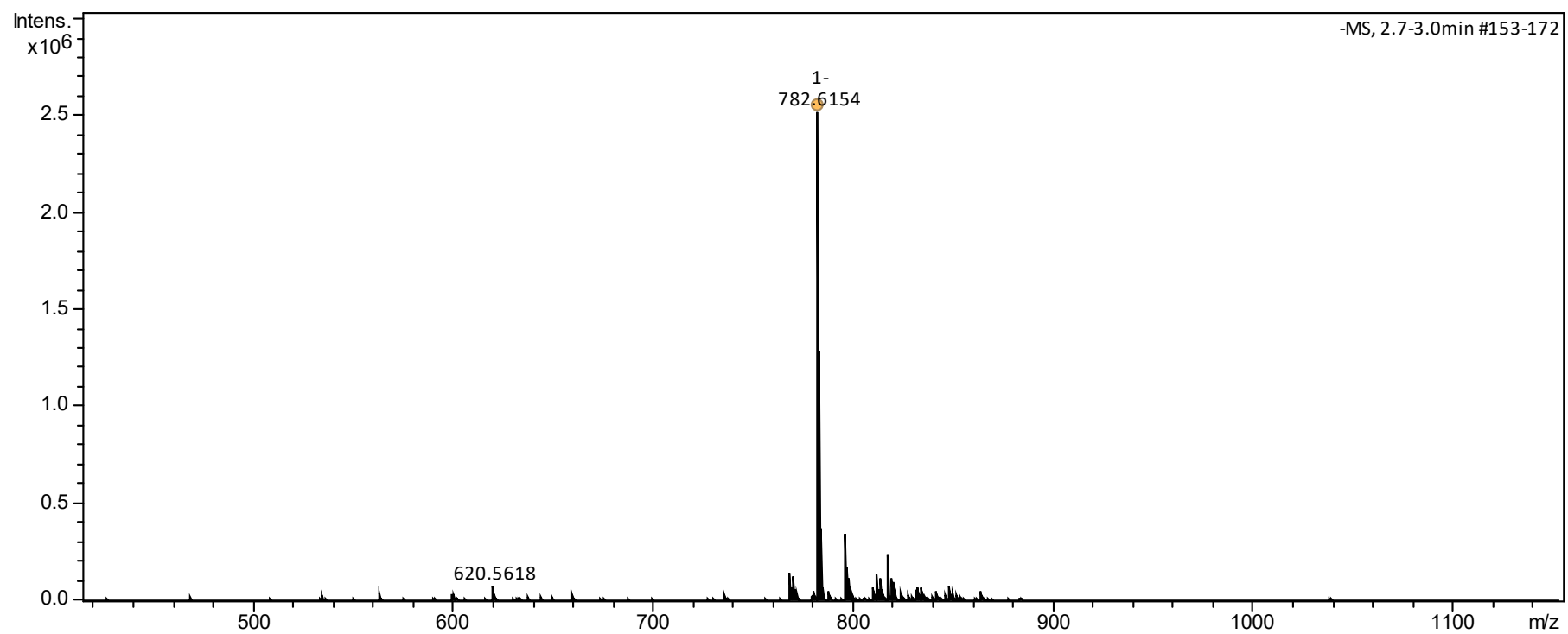




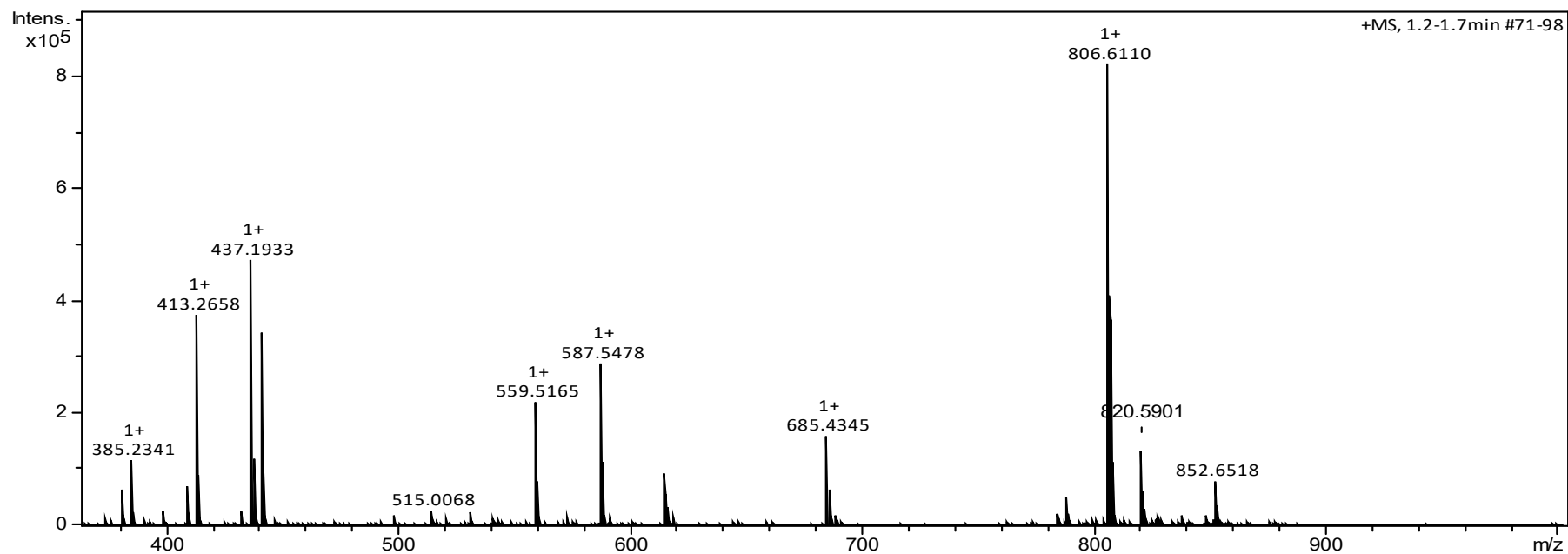
**Figure S22.** HMBC spectrum of ceramide **3** in C<sub>5</sub>D<sub>5</sub>N.



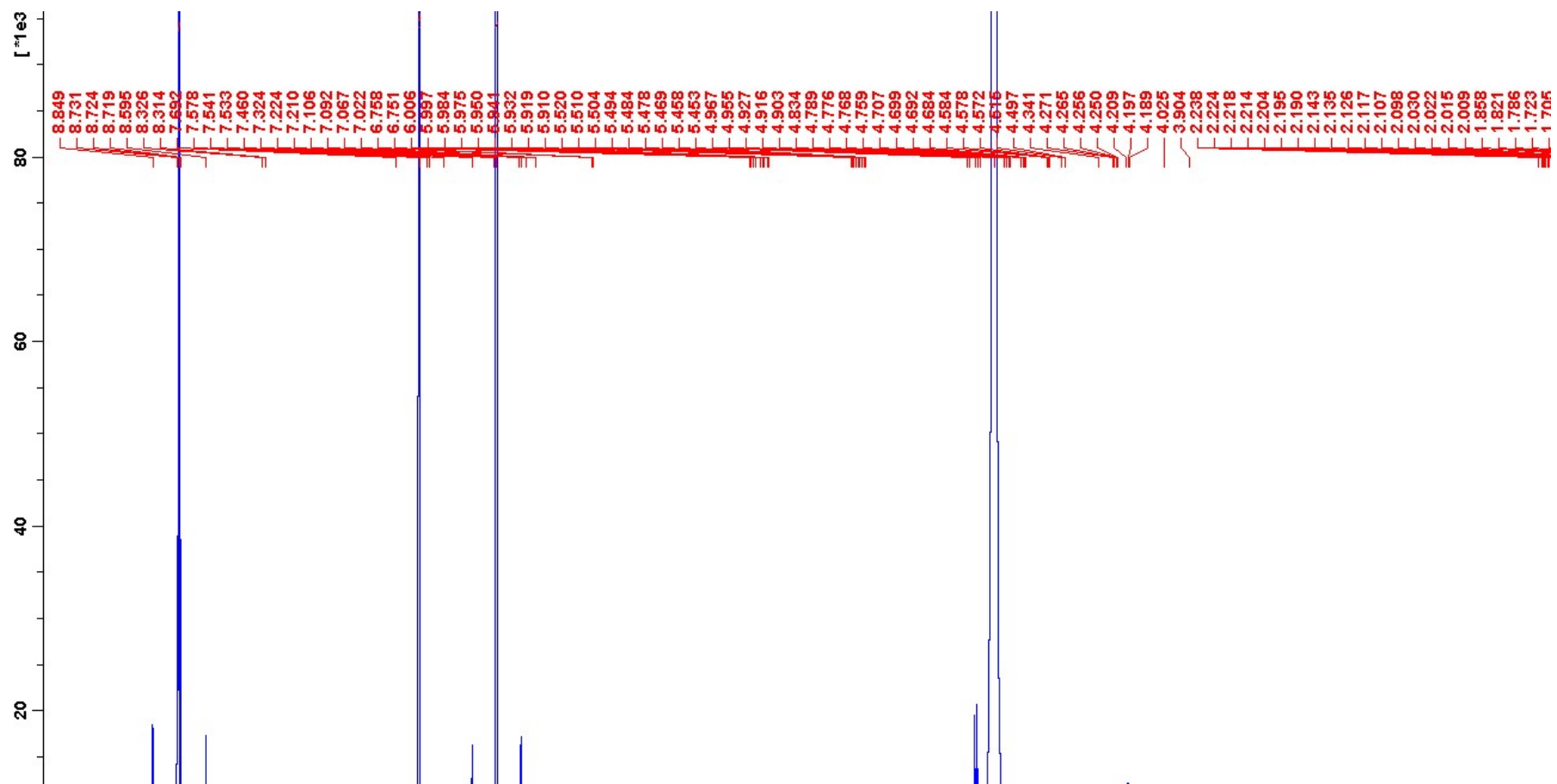
**Figure S23.** (-)-HRESIMS spectrum of cerebroside **4**.



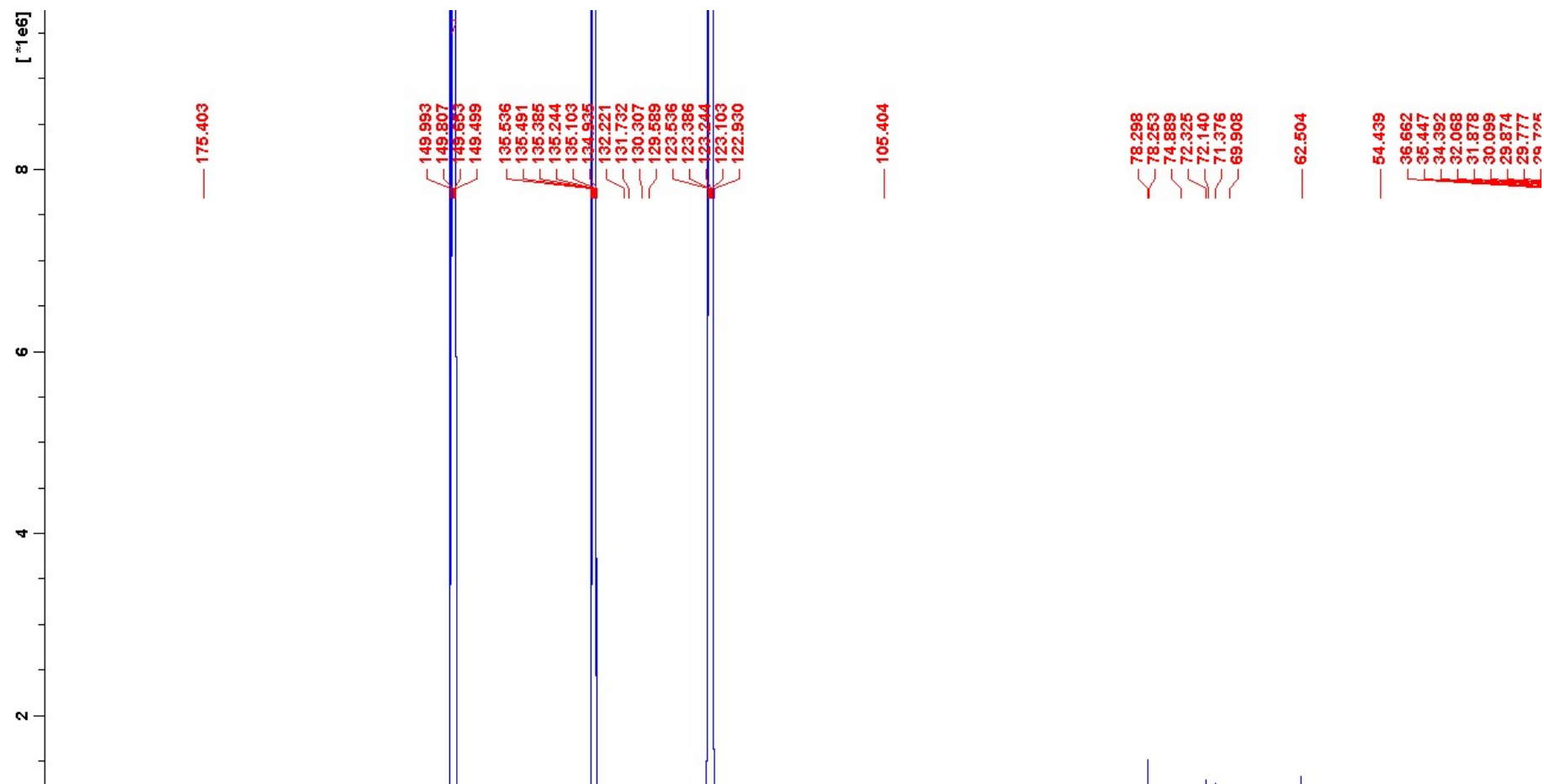
**Figure S24.** (+)-HRESIMS spectrum of cerebroside **4**.



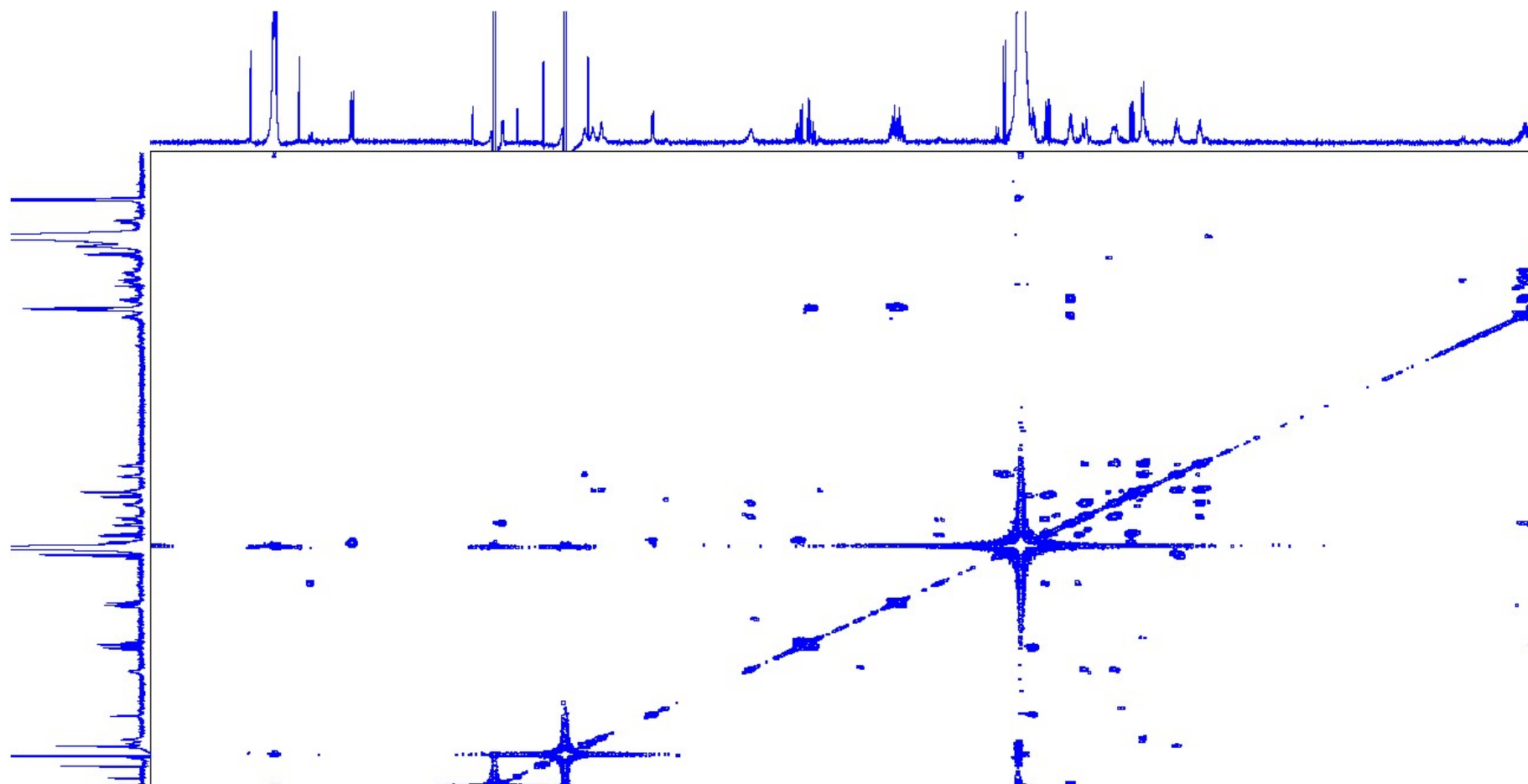
**Figure S25.**  $^1\text{H}$ -NMR spectrum of cerebroside **4** in  $\text{C}_5\text{D}_5\text{N}$ .



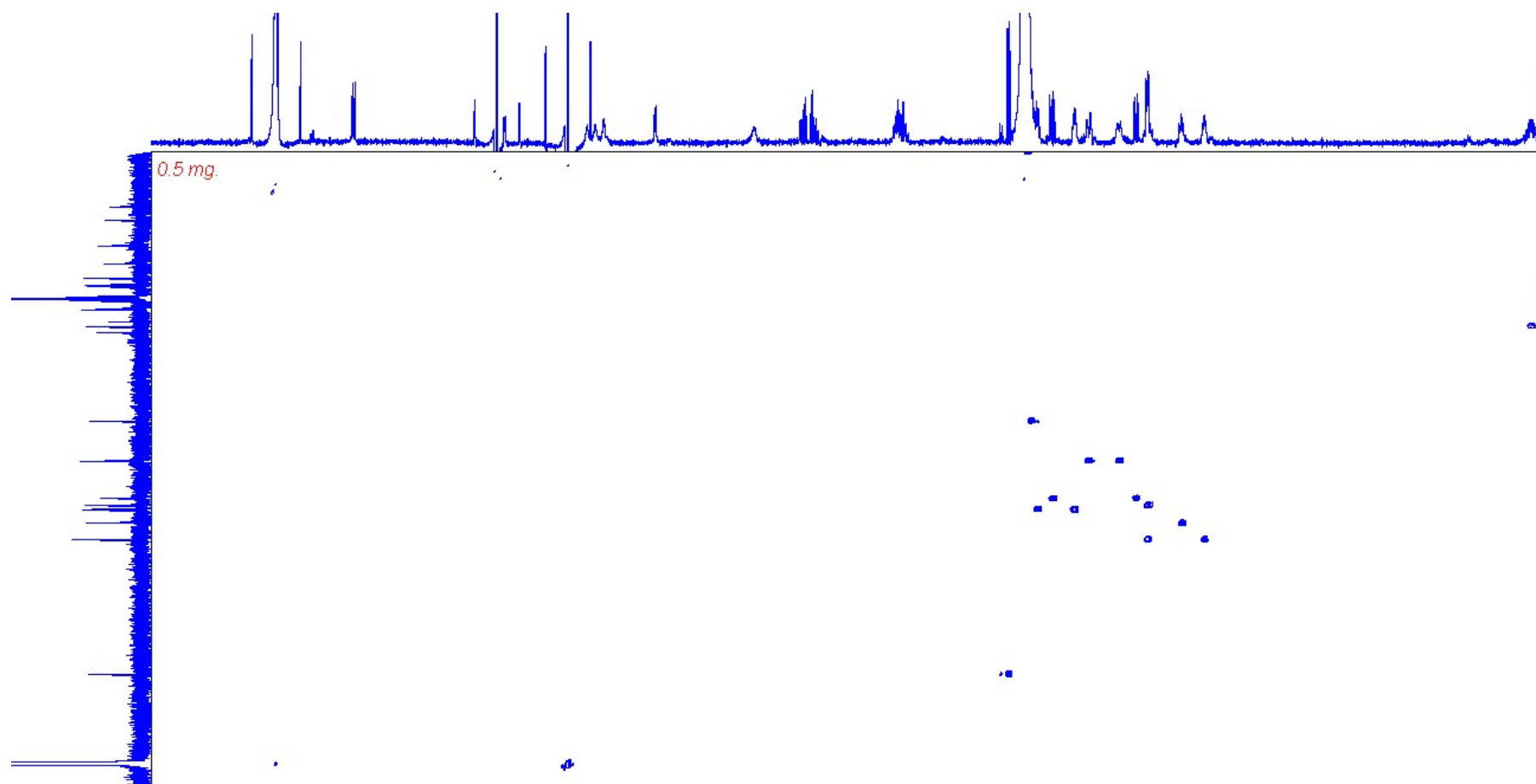
**Figure S26.**  $^{13}\text{C}$ -NMR spectrum of cerebroside **4** in  $\text{C}_5\text{D}_5\text{N}$ .



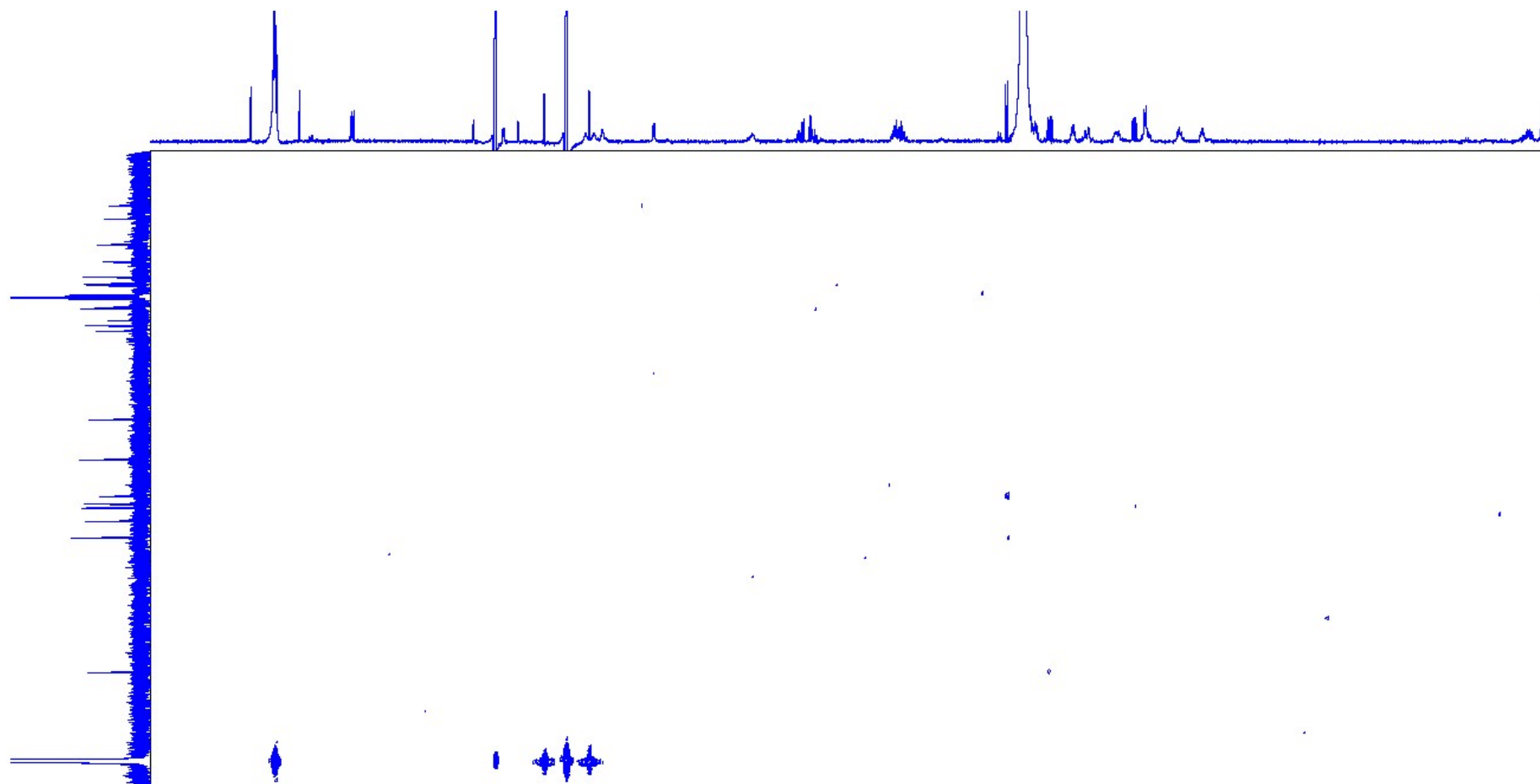
**Figure S27.**  $^1\text{H}$ - $^1\text{H}$ -COSY spectrum of cerebroside 4 in  $\text{C}_5\text{D}_5\text{N}$ .



**Figure S28.** HSQC spectrum of cerebroside **4** in C<sub>5</sub>D<sub>5</sub>N.

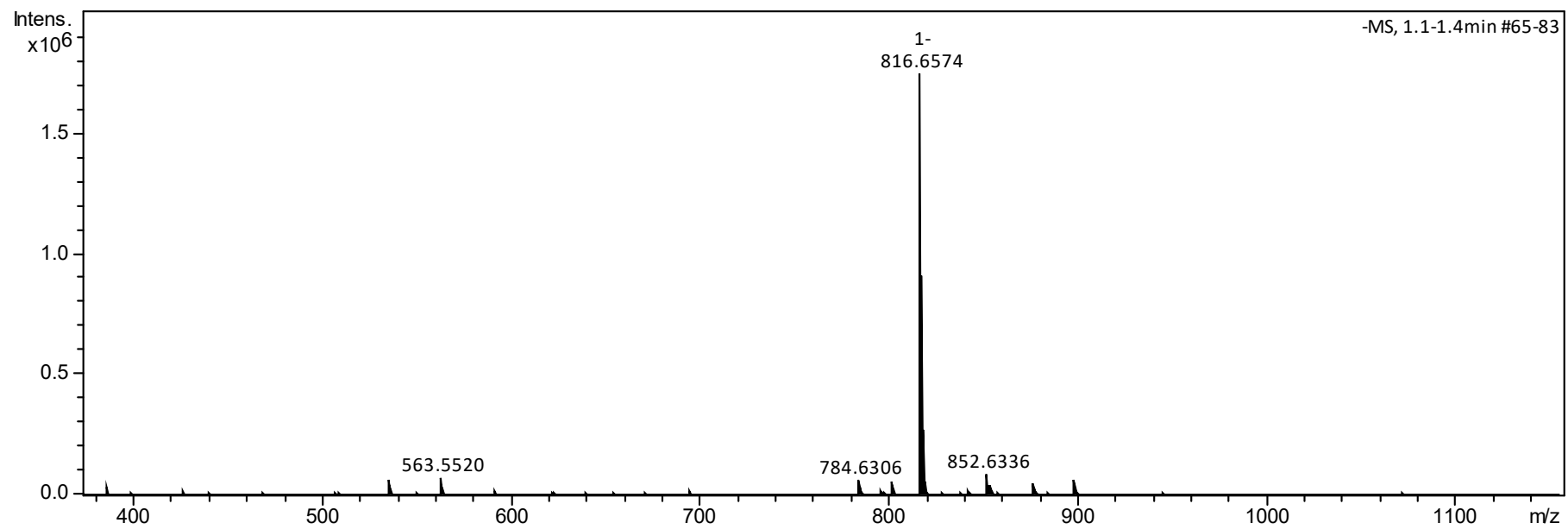


**Figure S29.** HMBC spectrum of cerebroside **4** in C<sub>5</sub>D<sub>5</sub>N.





**Figure S30.** (-)-HRESIMS spectrum of cerebroside 8.



**Figure S31.** (+)-HRESIMS spectrum of cerebroside 8.

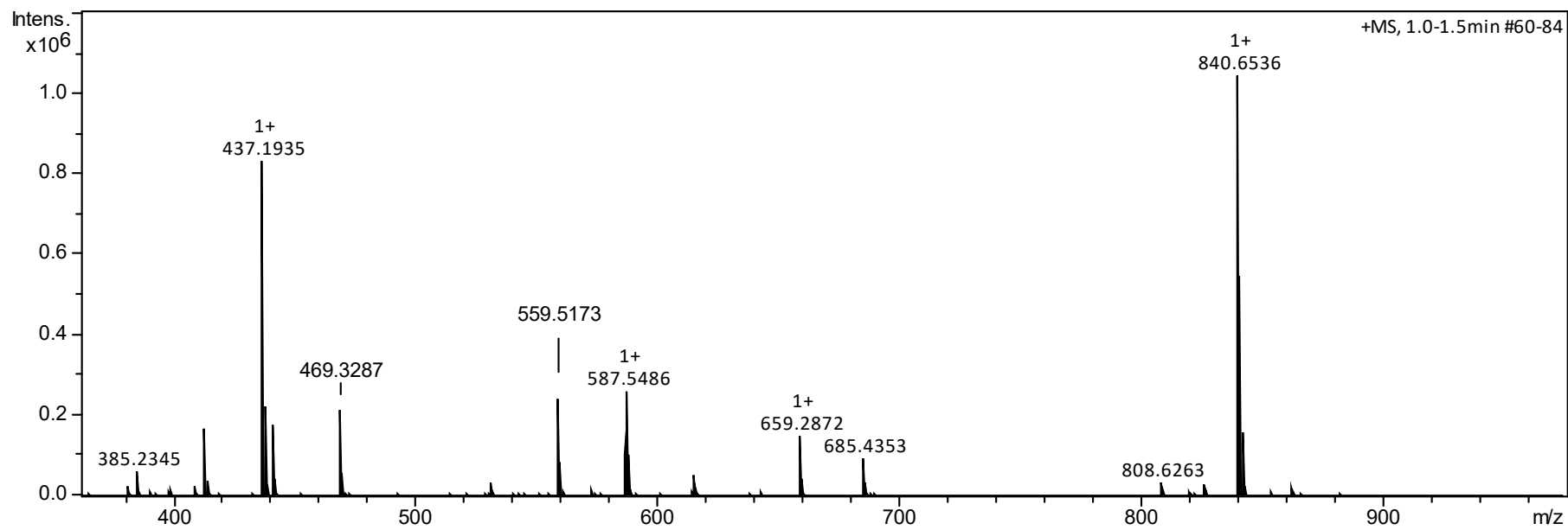
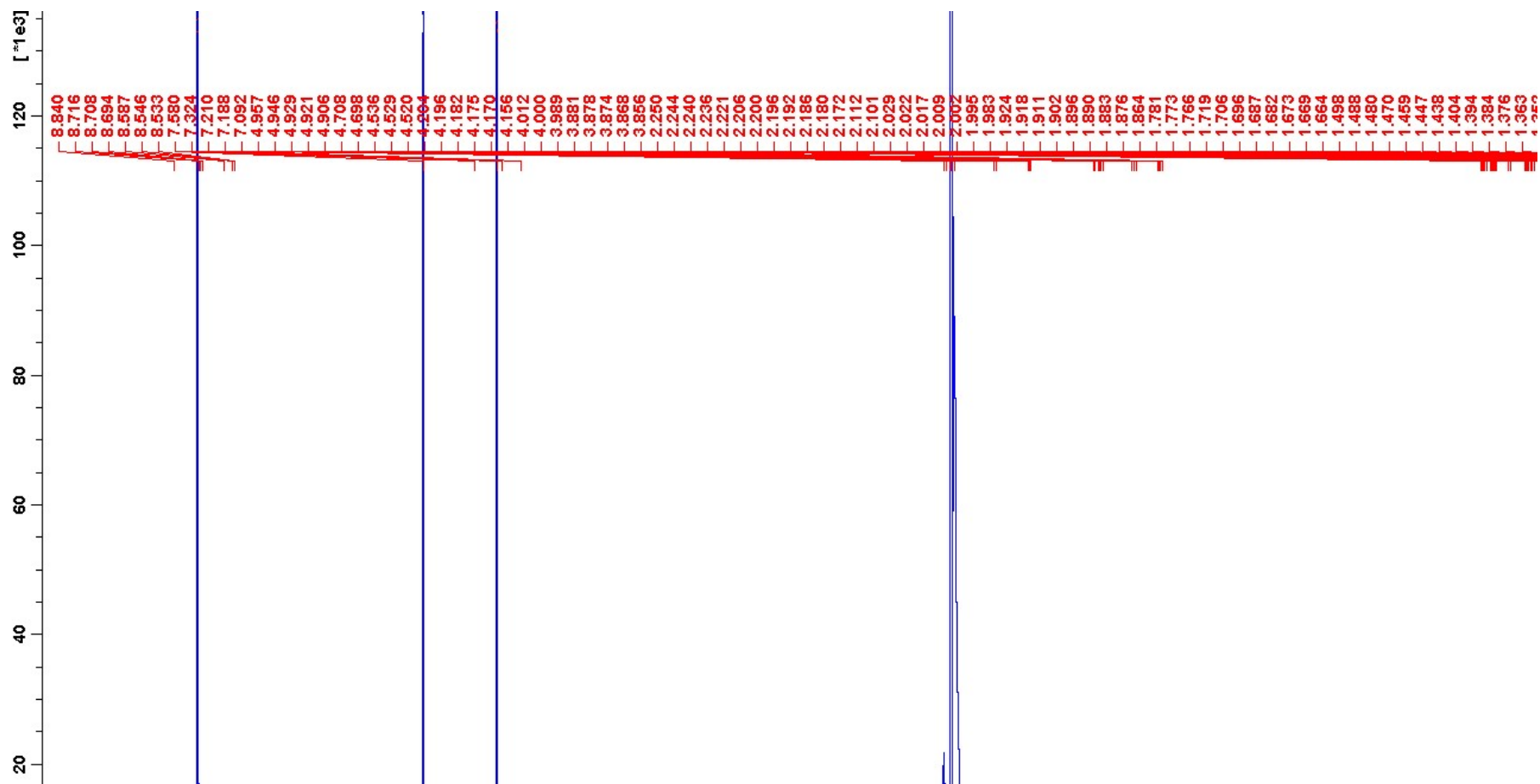
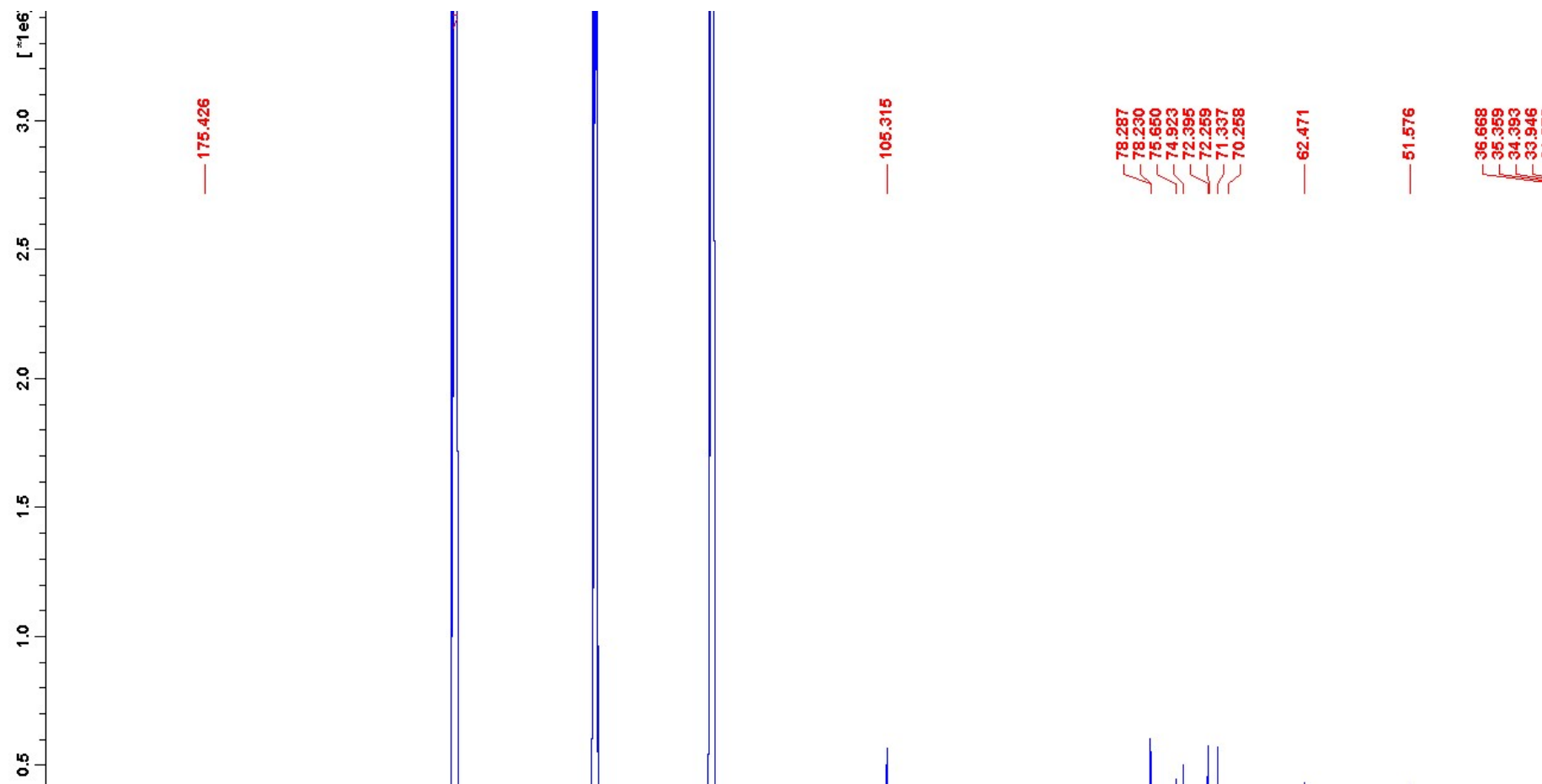


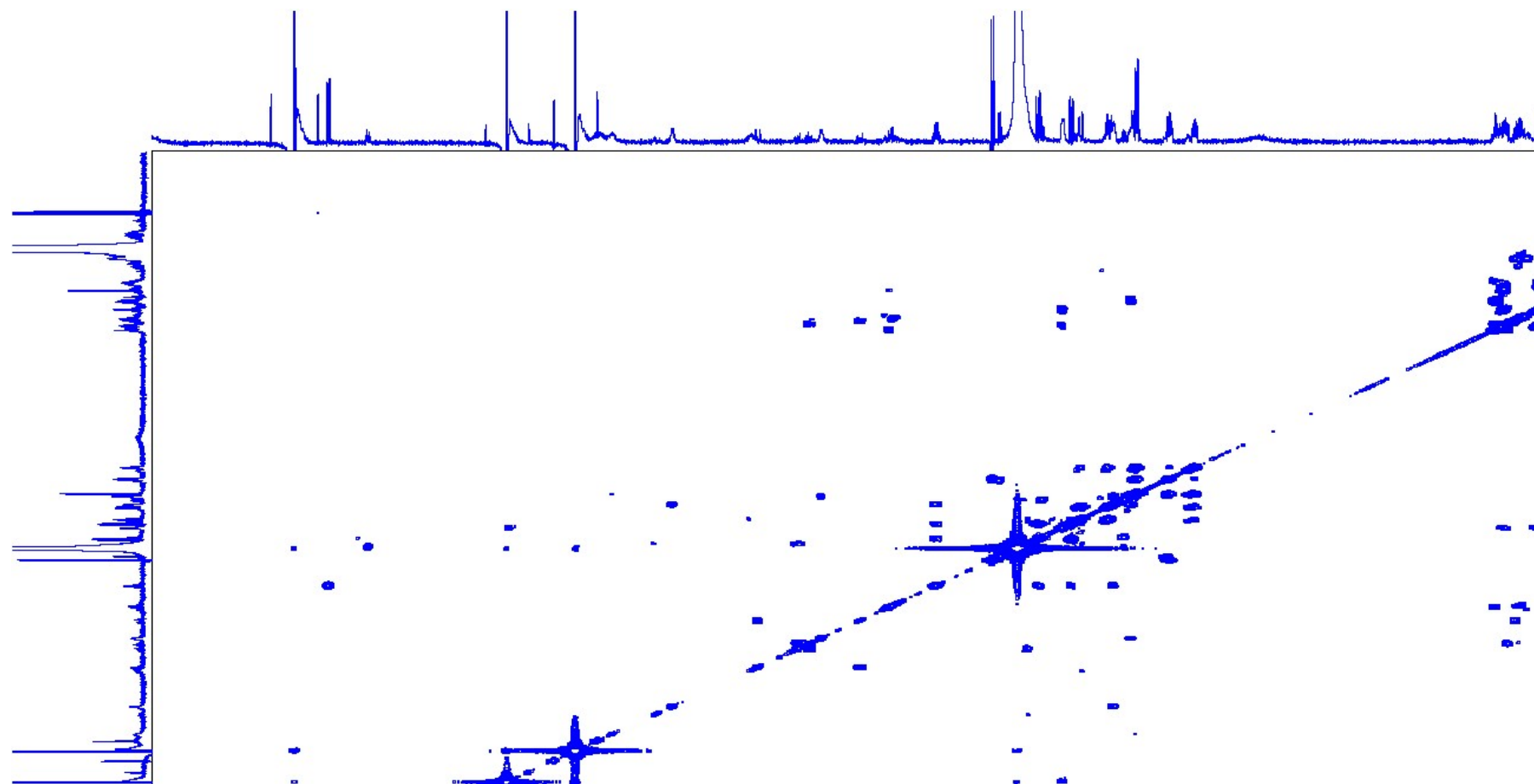
Figure S32.  $^1\text{H}$ -NMR spectrum of cerebroside 8 in  $\text{C}_5\text{D}_5\text{N}$ .



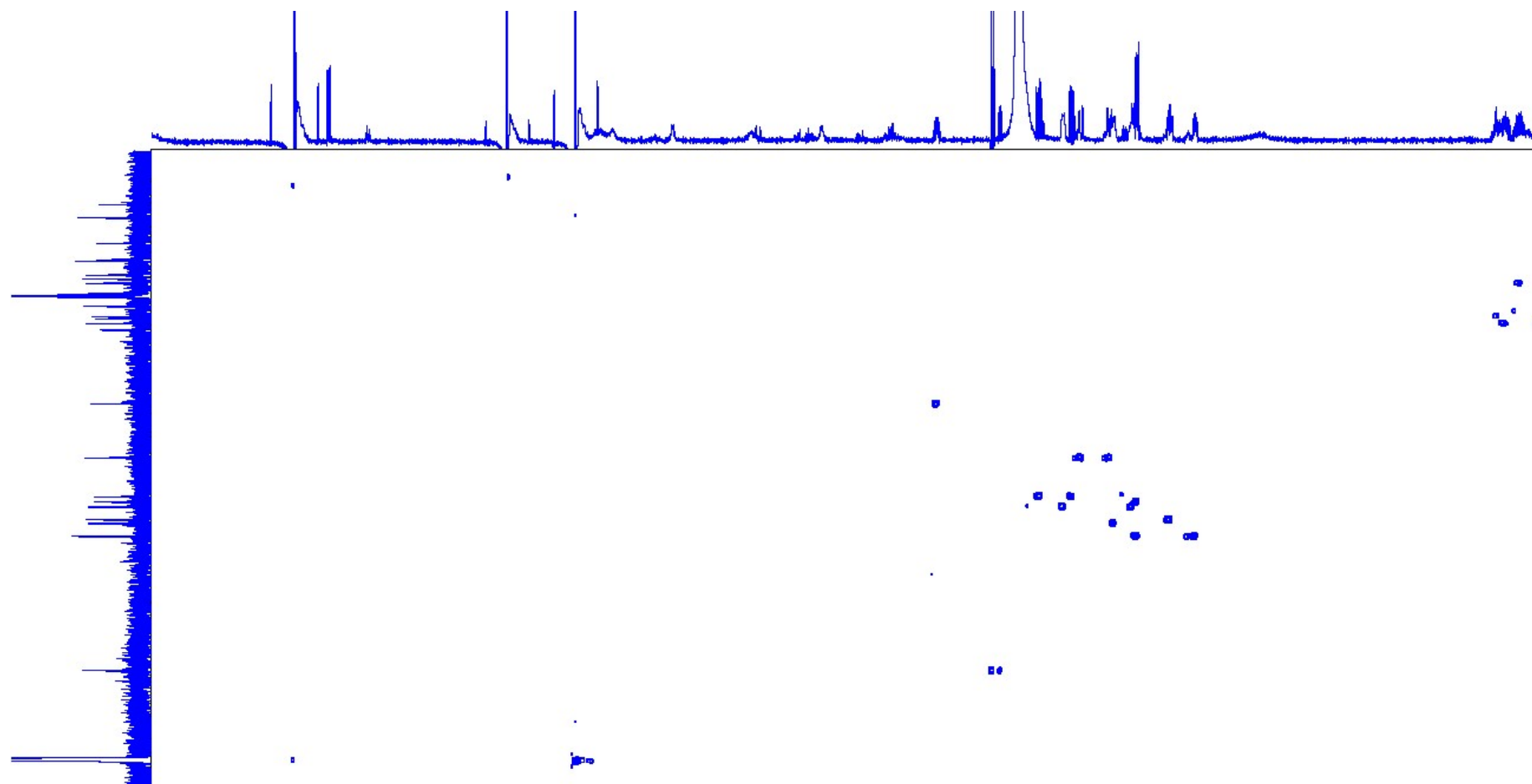
**Figure S33.**  $^{13}\text{C}$ -NMR spectrum of cerebroside **8** in  $\text{C}_5\text{D}_5\text{N}$ .



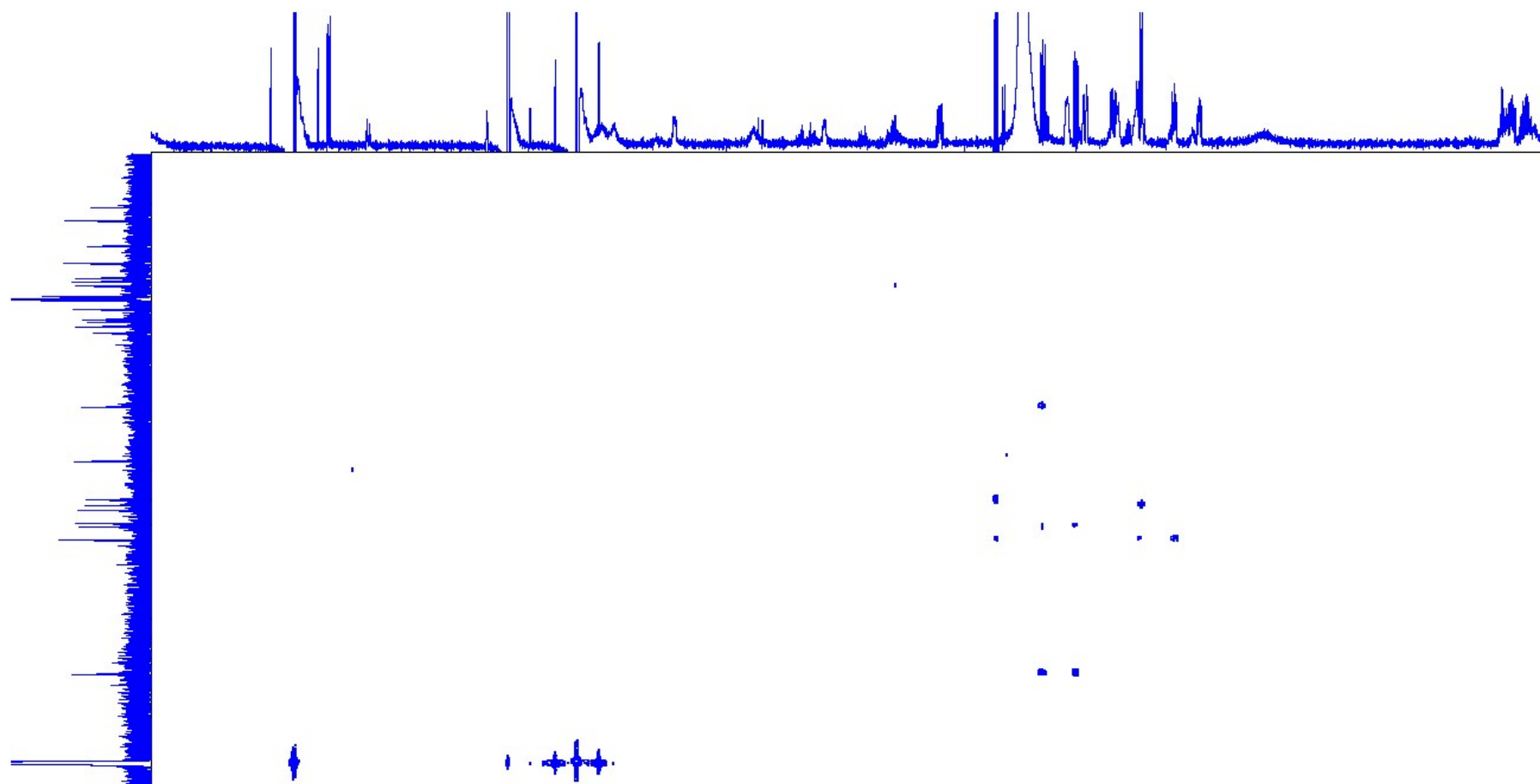
**Figure S34.**  $^1\text{H}$ - $^1\text{H}$ -COSY spectrum of cerebroside 8 in  $\text{C}_5\text{D}_5\text{N}$ .



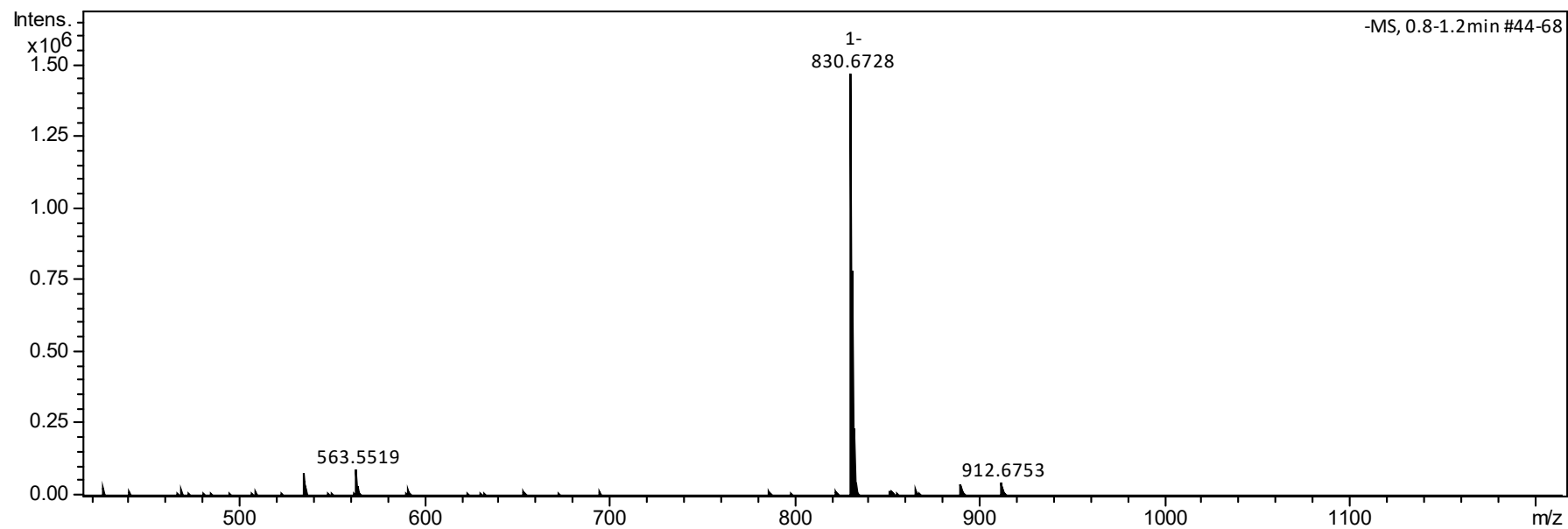
**Figure S35.** HSQC spectrum of cerebroside **8** in C<sub>5</sub>D<sub>5</sub>N.



**Figure S36.** HMBC spectrum of cerebroside 8 in C<sub>5</sub>D<sub>5</sub>N.

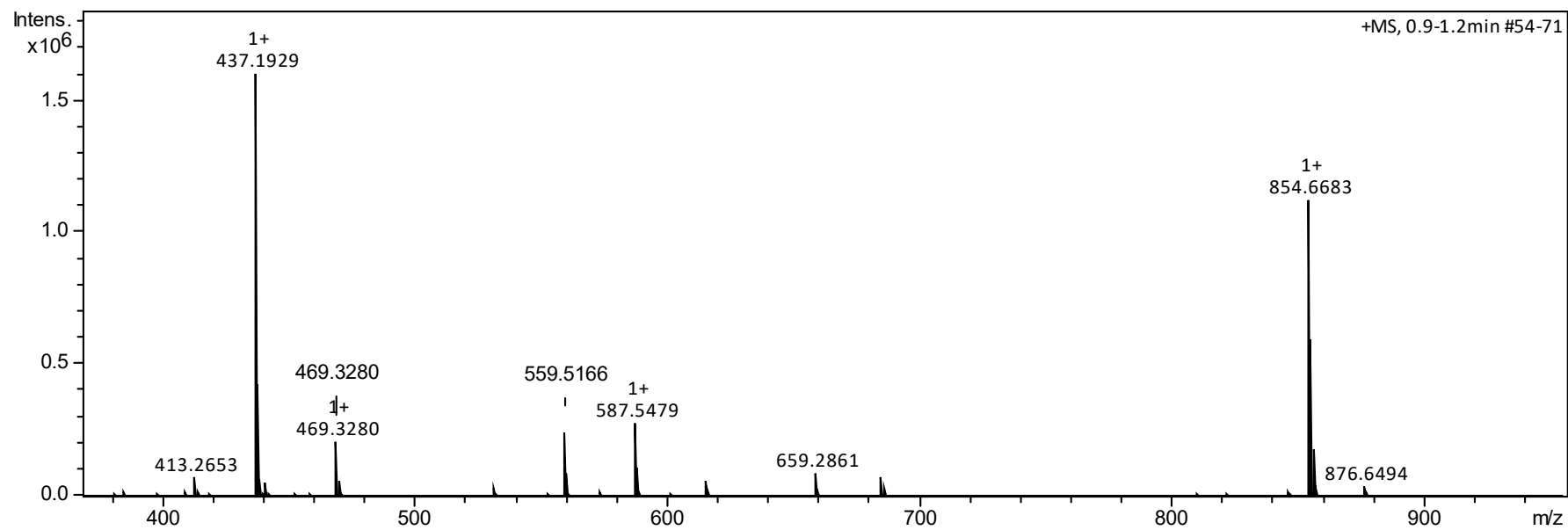


**Figure S37.** (-)-HRESIMS spectrum of cerebroside **9**.

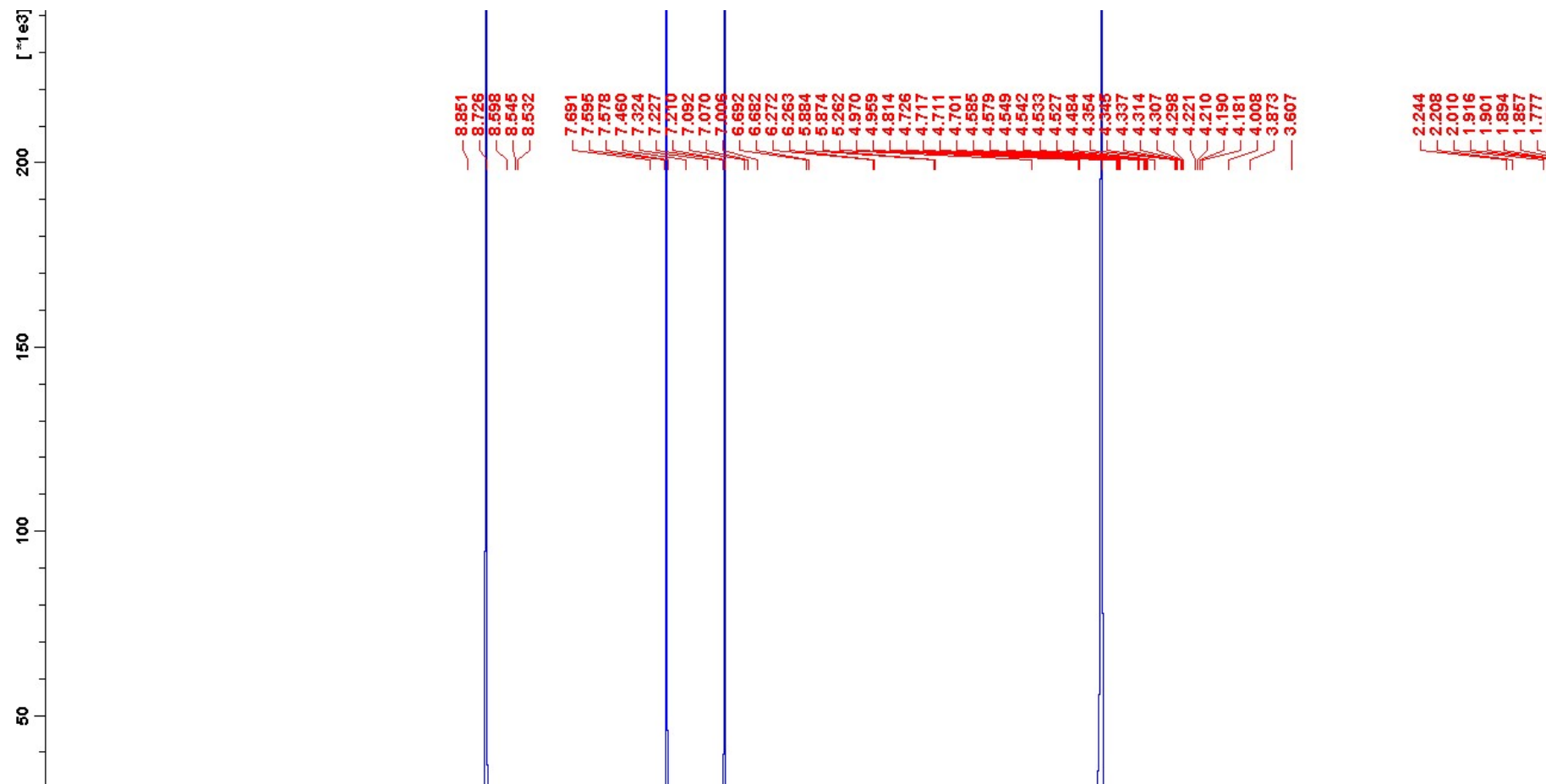




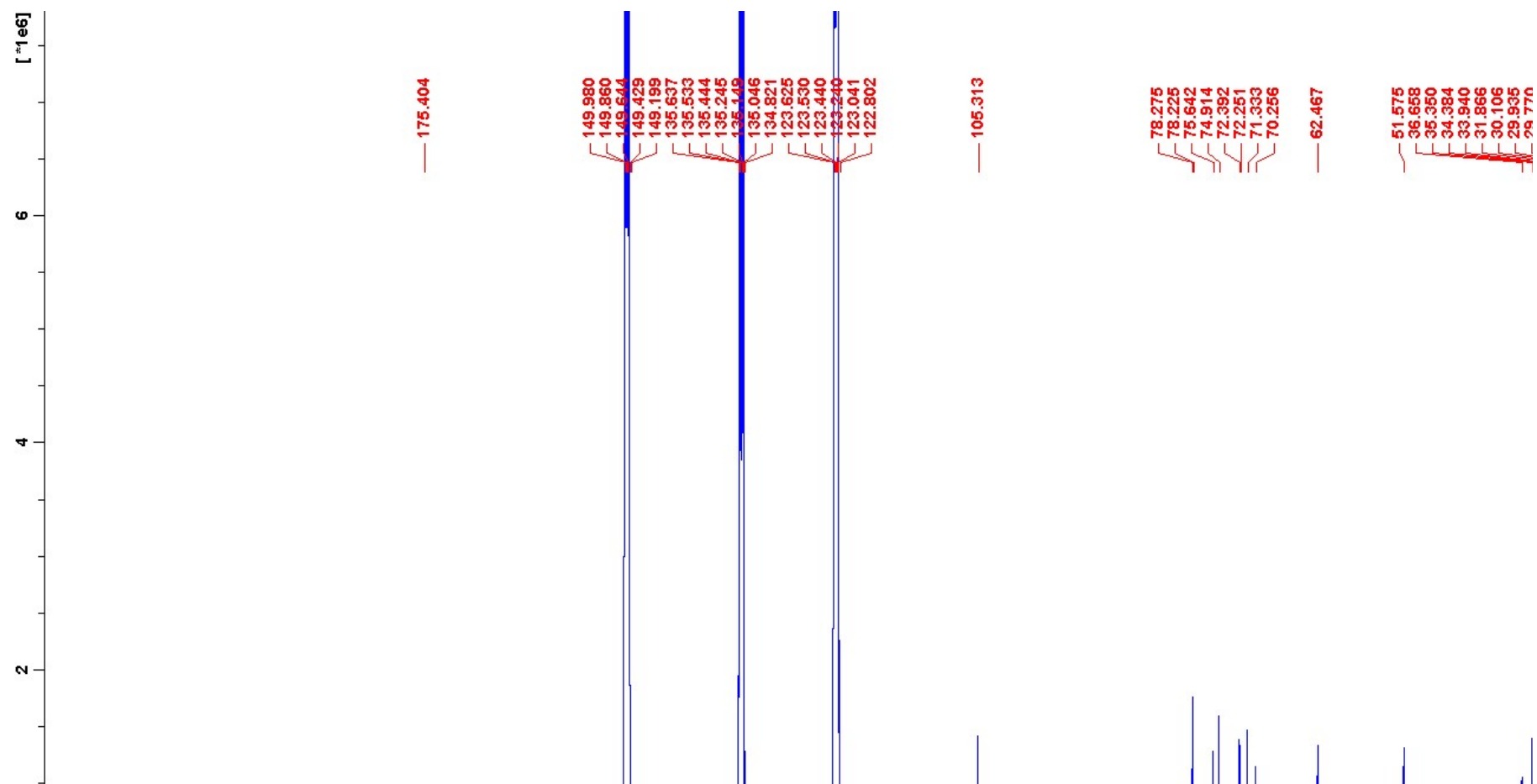
**Figure S38.** (+)-HRESIMS spectrum of cerebroside 9.



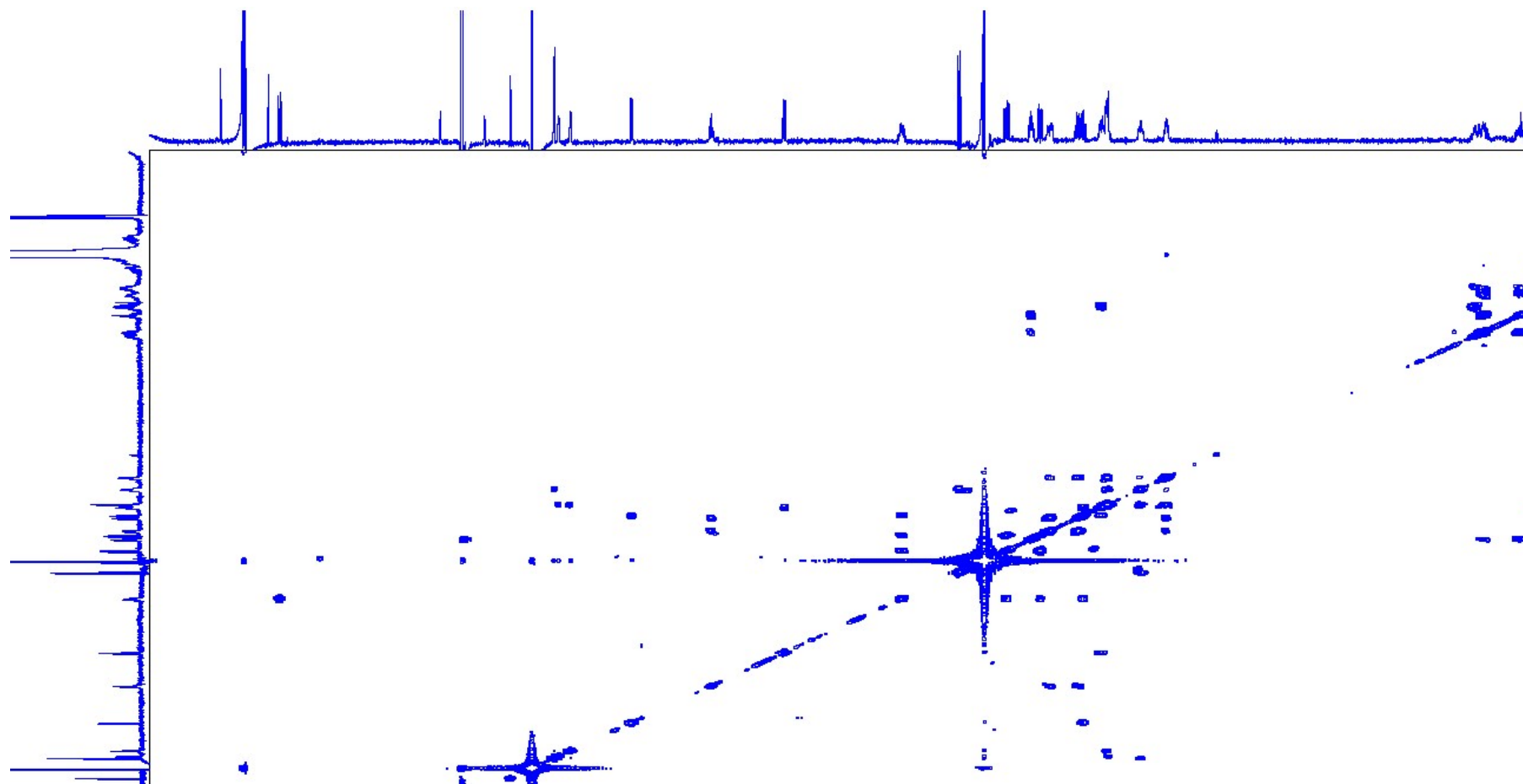
**Figure S39.**  $^1\text{H}$ -NMR spectrum of cerebroside **9** in  $\text{C}_5\text{D}_5\text{N}$ .



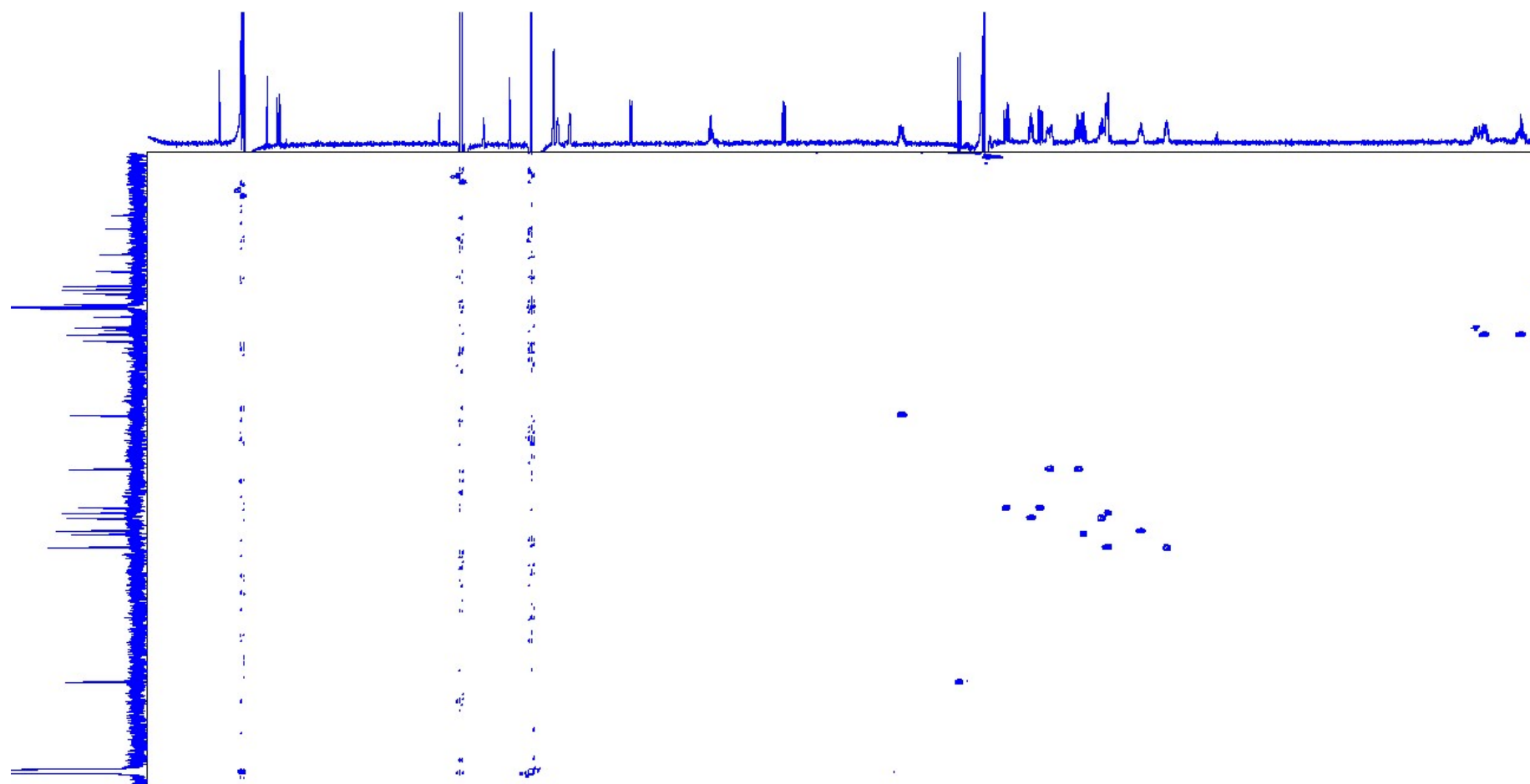
**Figure S40.**  $^{13}\text{C}$ -NMR spectrum of cerebroside **9** in  $\text{C}_5\text{D}_5\text{N}$ .



**Figure S41.**  $^1\text{H}$ - $^1\text{H}$ -COSY spectrum of cerebroside **9** in  $\text{C}_5\text{D}_5\text{N}$ .



**Figure S42.** HSQC spectrum of cerebroside **9** in C<sub>5</sub>D<sub>5</sub>N.



**Figure S43.** HMBC spectrum of cerebroside **9** in C<sub>5</sub>D<sub>5</sub>N.

