

## **Dermal Papilla Cell Proliferation of Phytochemicals Isolated from Chestnut Shells (*Castanea crenata*)**

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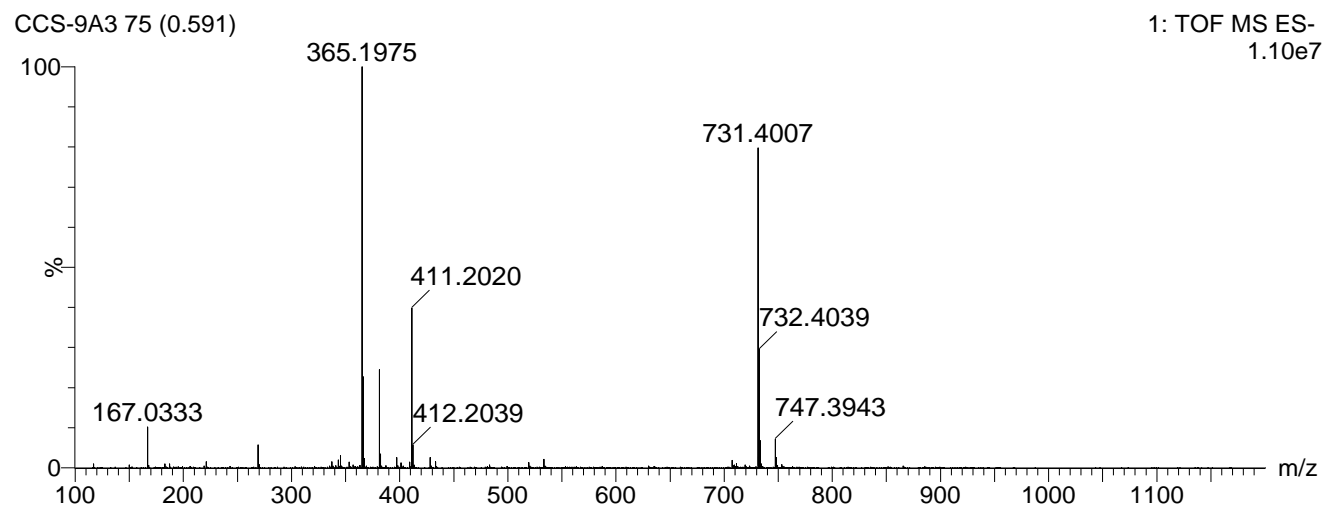
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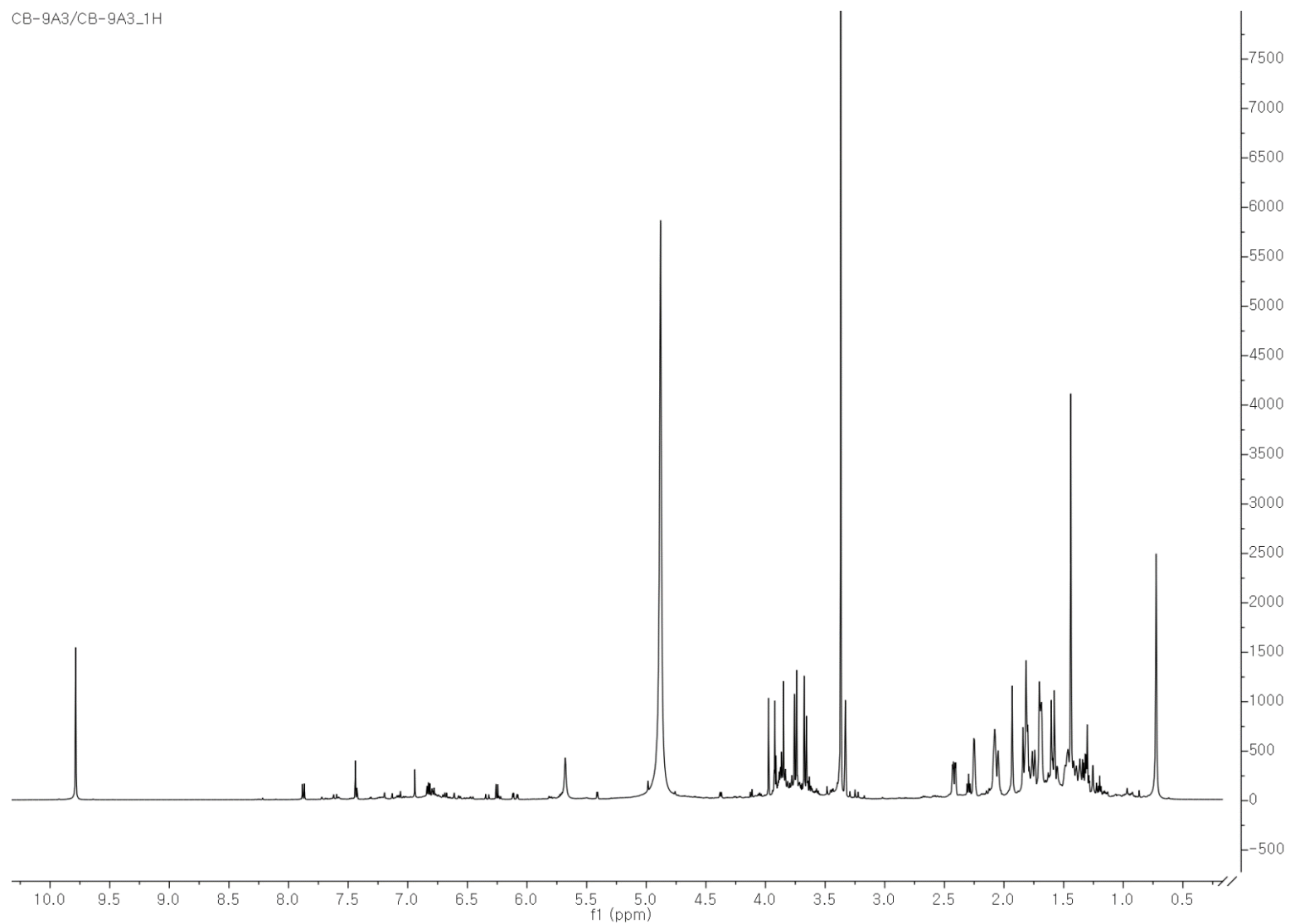
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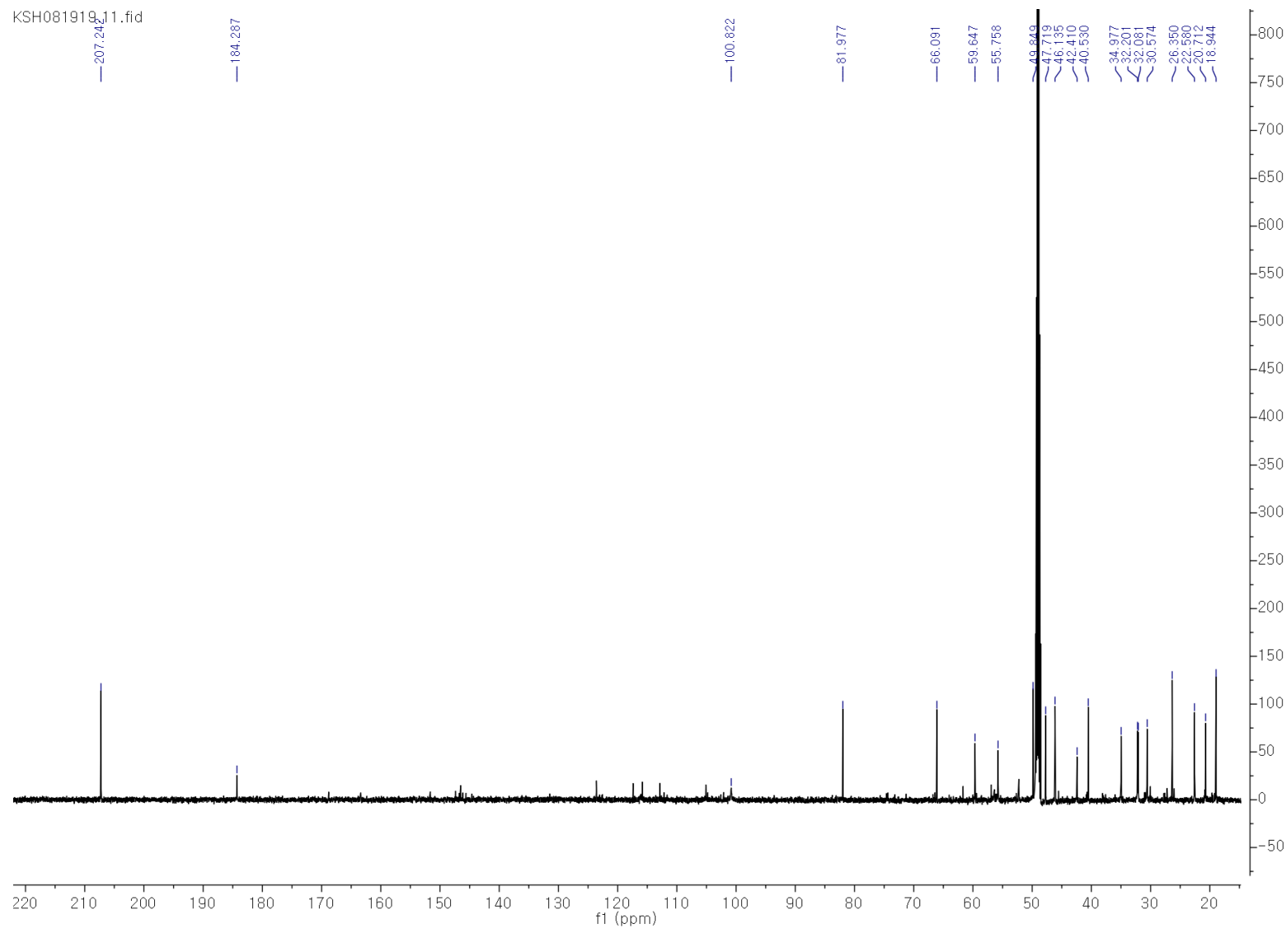


**Figure S1** HR-ESI-MS of compound **1**

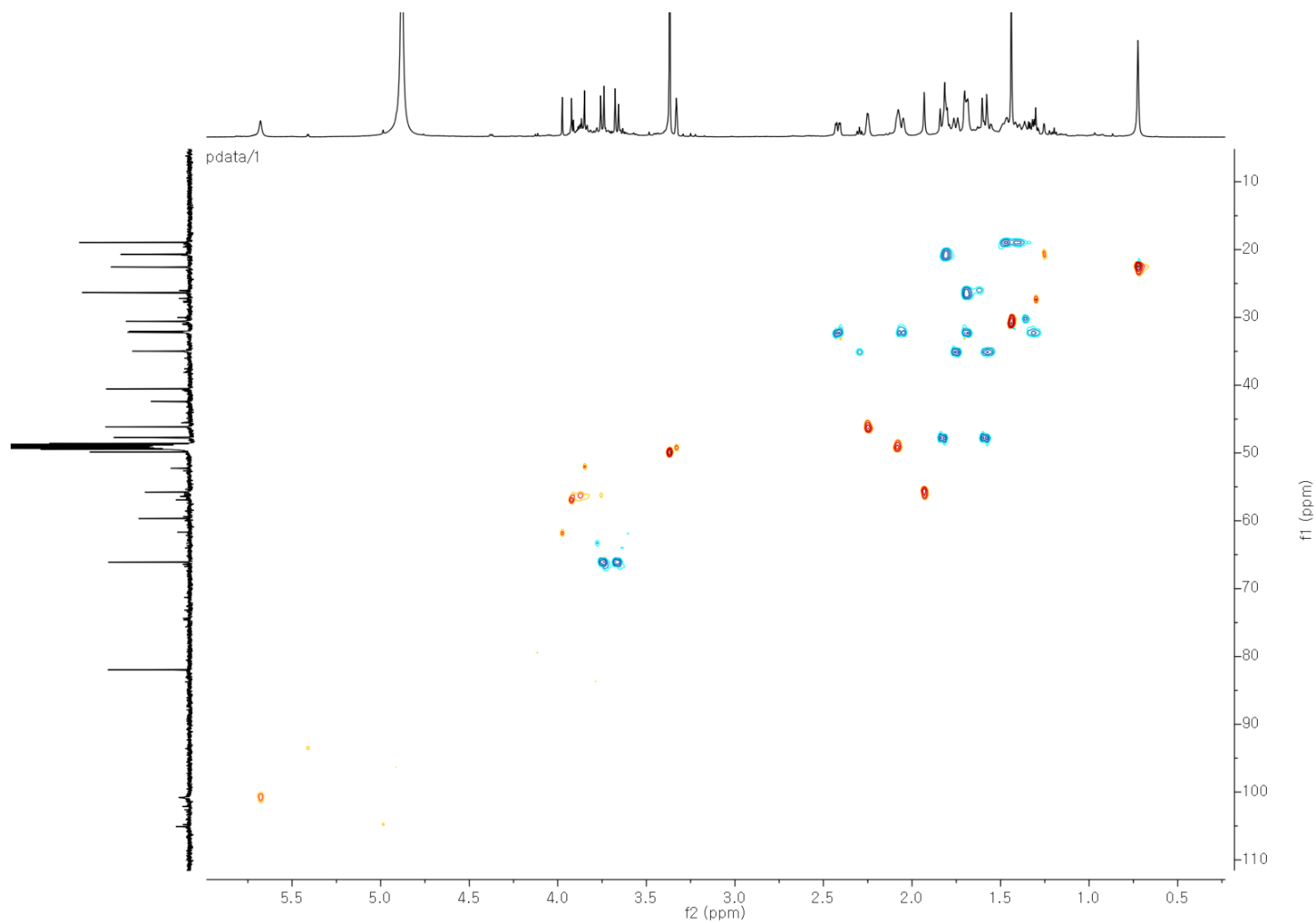
CB-9A3/CB-9A3\_1H



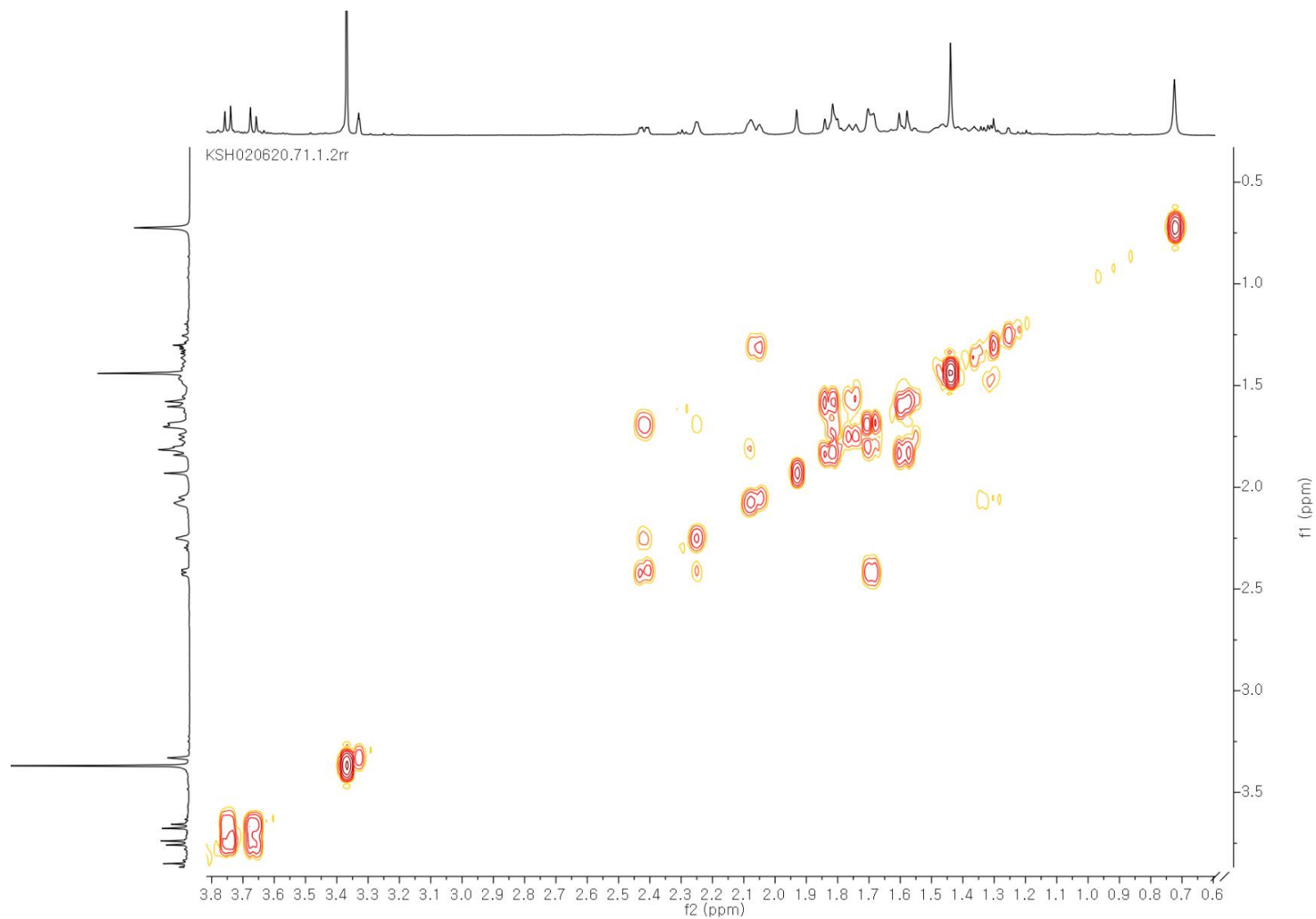
**Figure S2**  $^1\text{H}$ -NMR spectrum of compound **1** (600 MHz, methanol- $d_4$ )



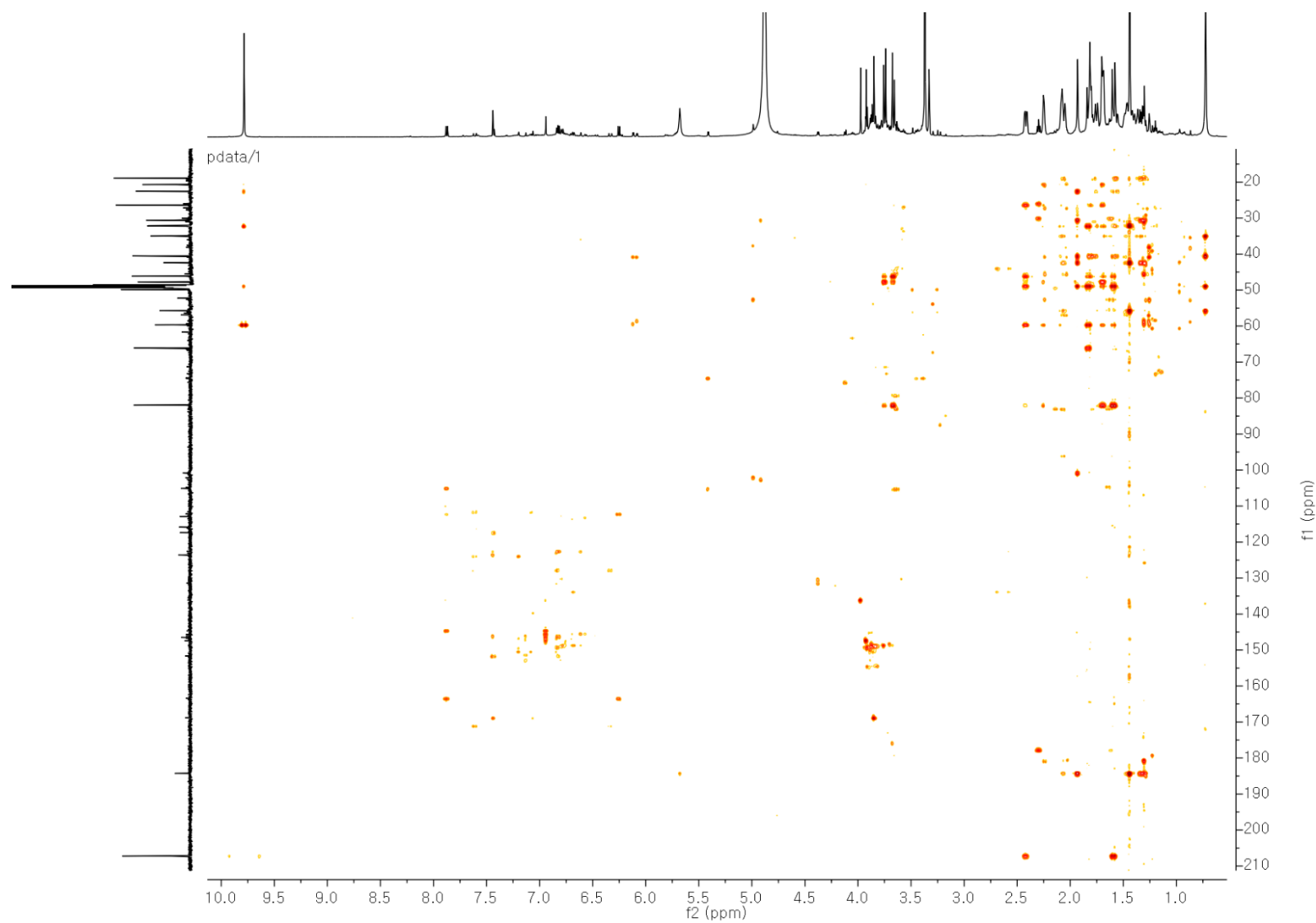
**Figure S3**  $^{13}\text{C}$ -NMR spectrum of compound **1** (150 MHz, methanol- $d_4$ )



**Figure S4** HSQC spectrum of compound **1** (methanol- $d_4$ )

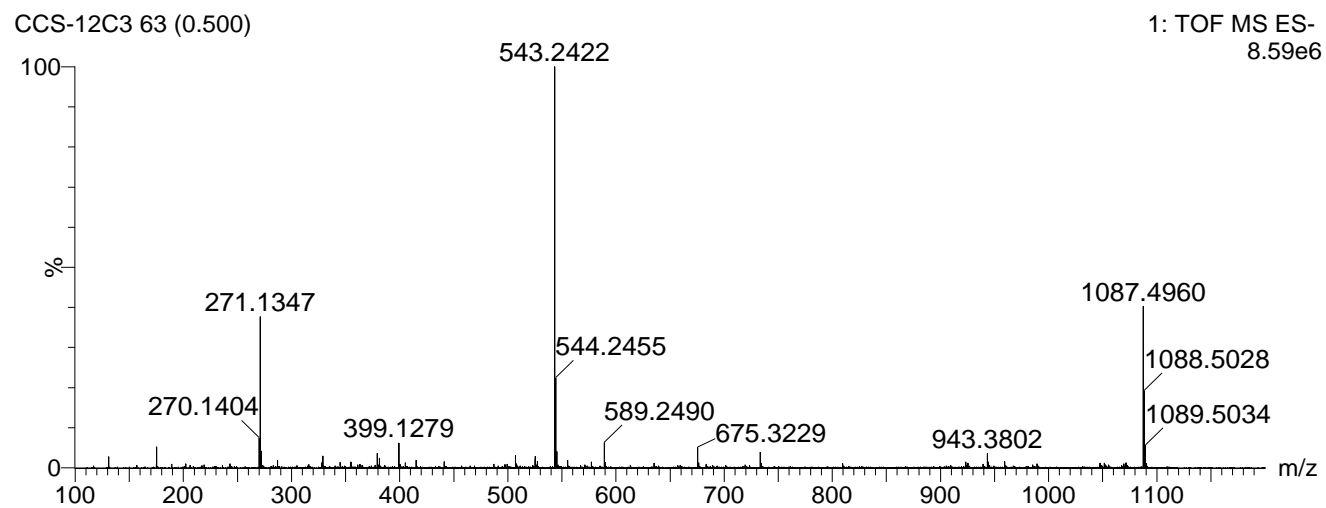


**Figure S5** COSY of compound **1** (methanol- $d_4$ )

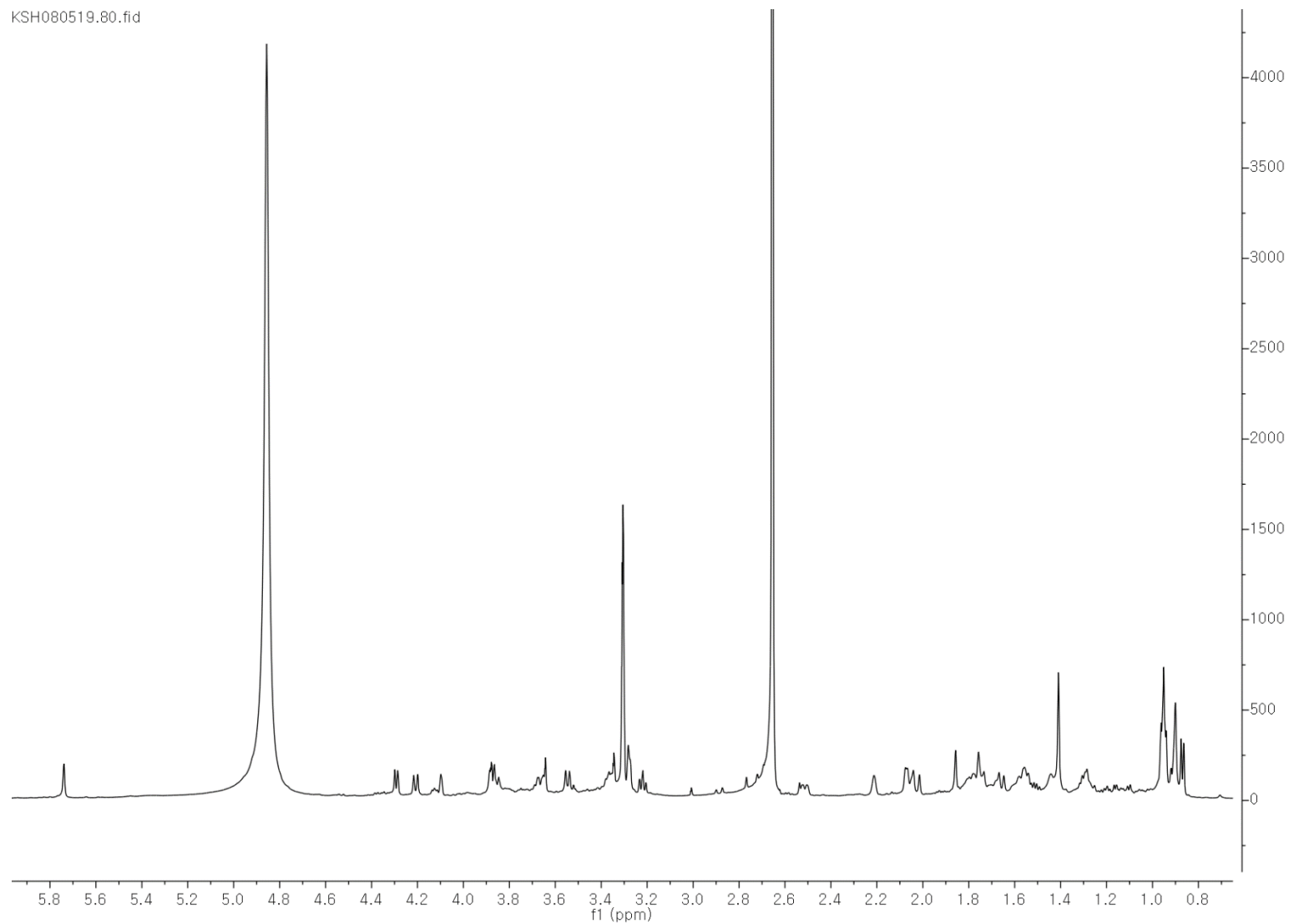


**Figure S6** HMBC spectrum of compound **1** (methanol- $d_4$ )

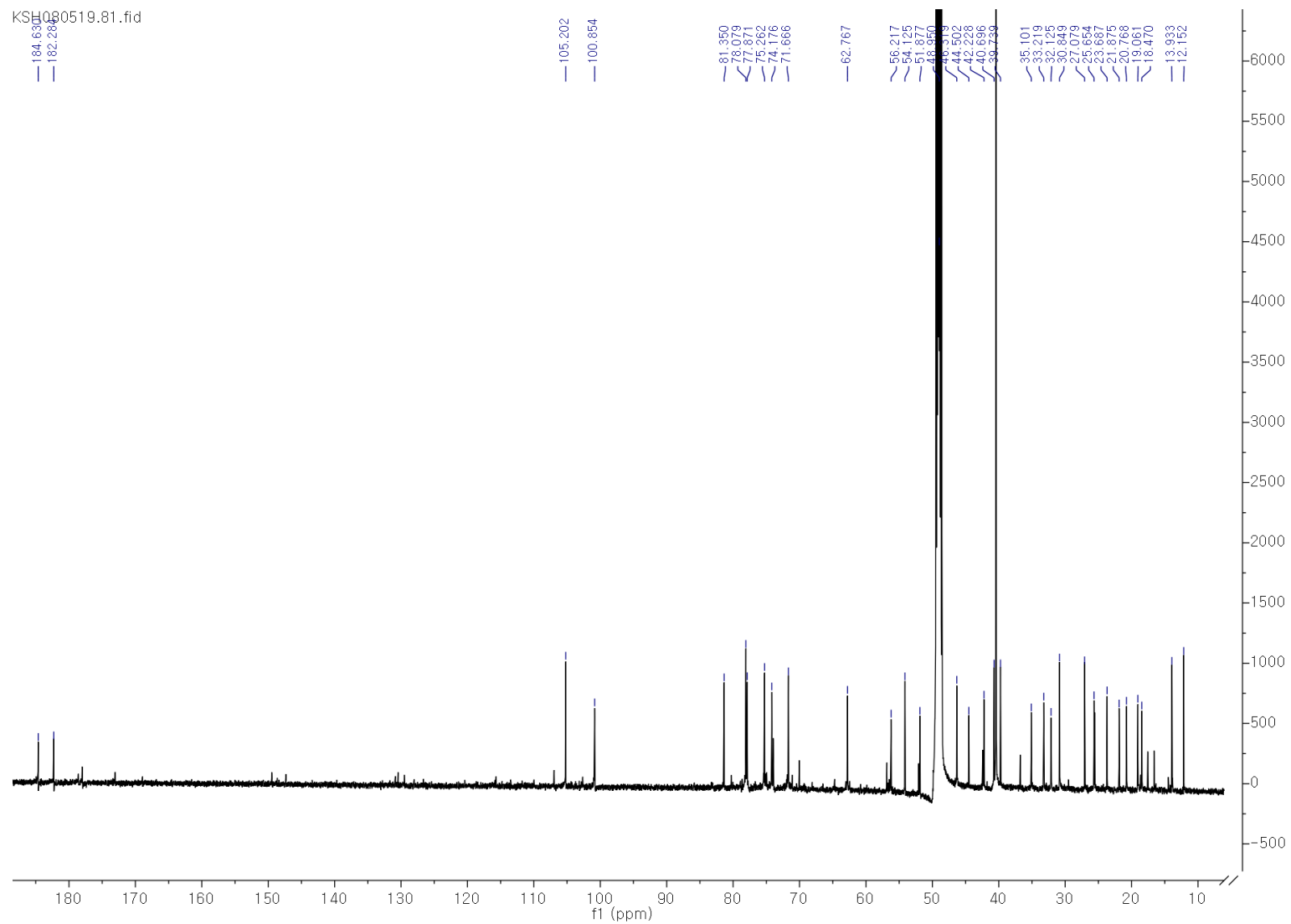




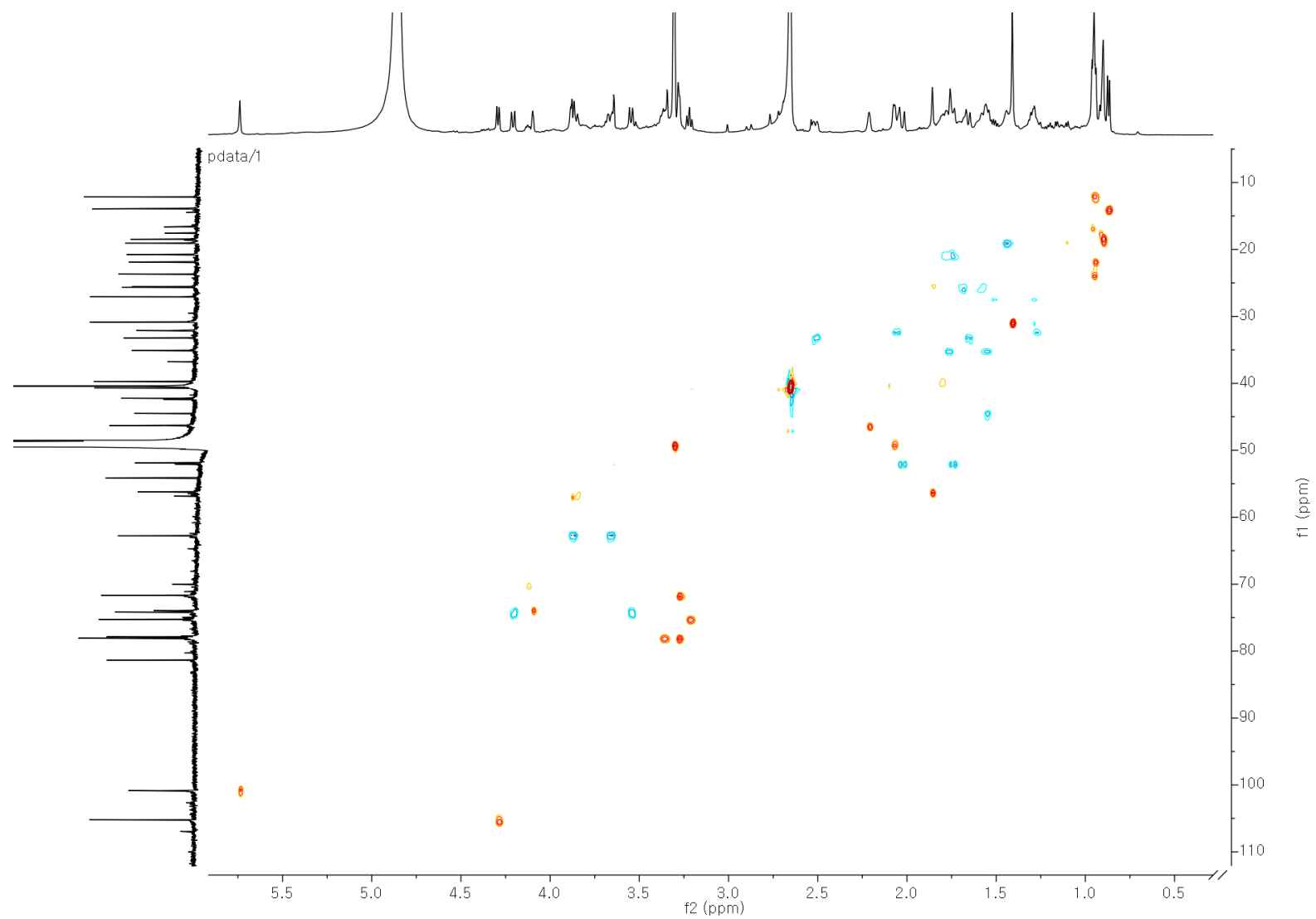
**Figure S7** HR-ESI-MS of compound **2**



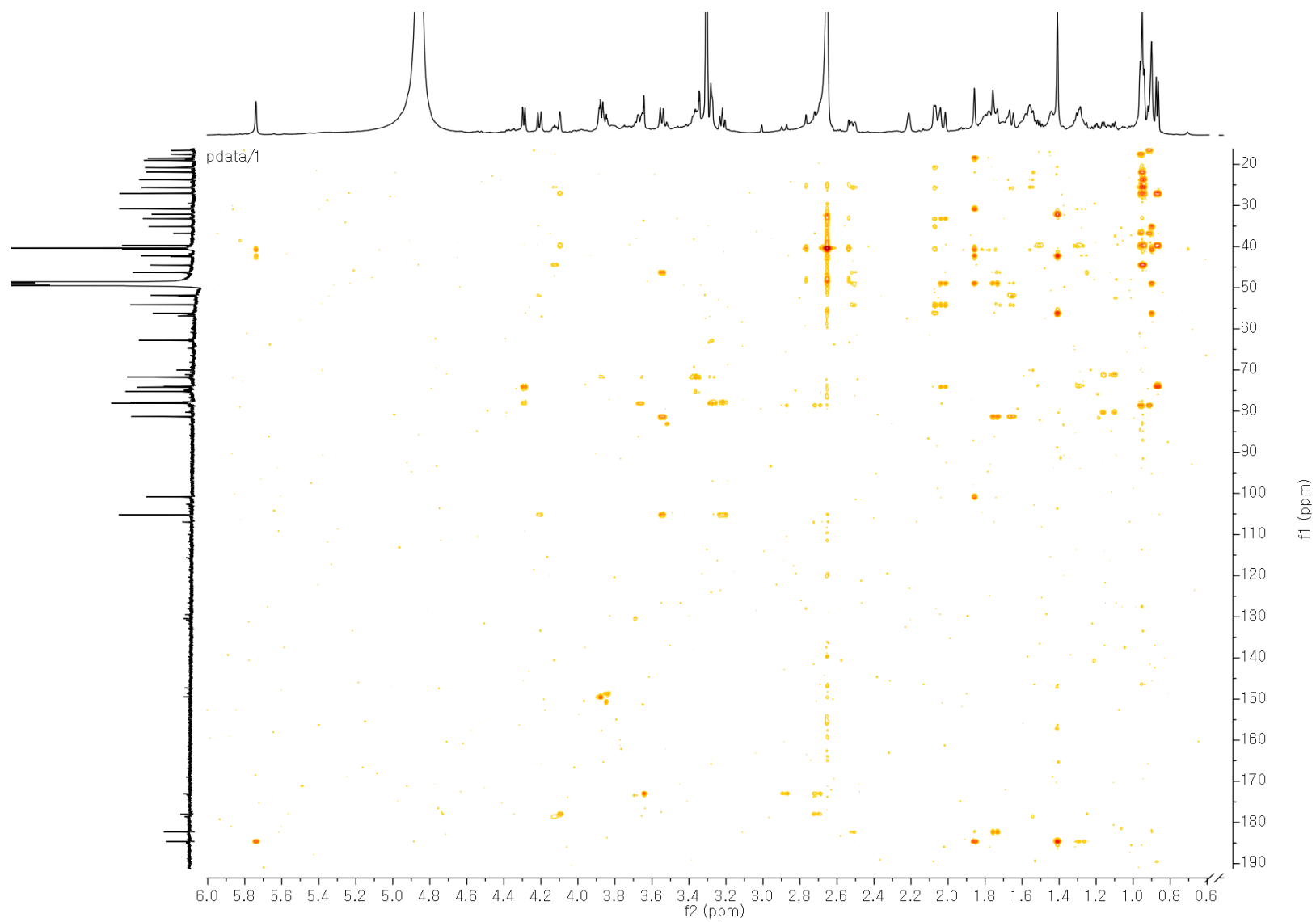
**Figure S8**  $^1\text{H}$ -NMR spectrum of compound **2** (600 MHz, methanol- $d_4$ )



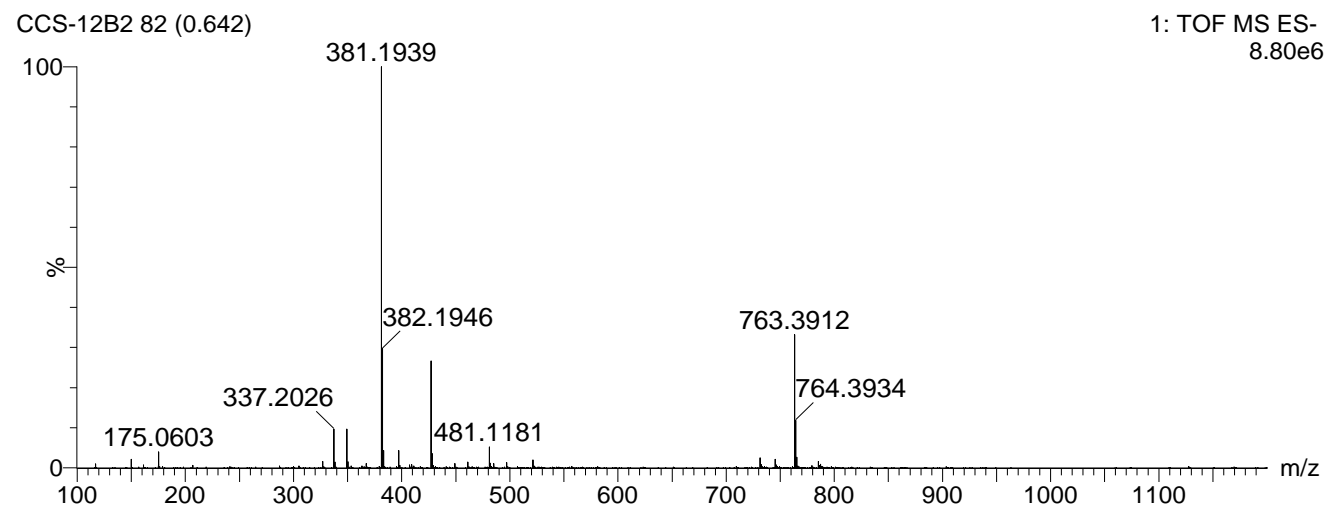
**Figure S9**  $^{13}\text{C}$ -NMR spectrum of compound **2** (150 MHz, methanol- $d_4$ )



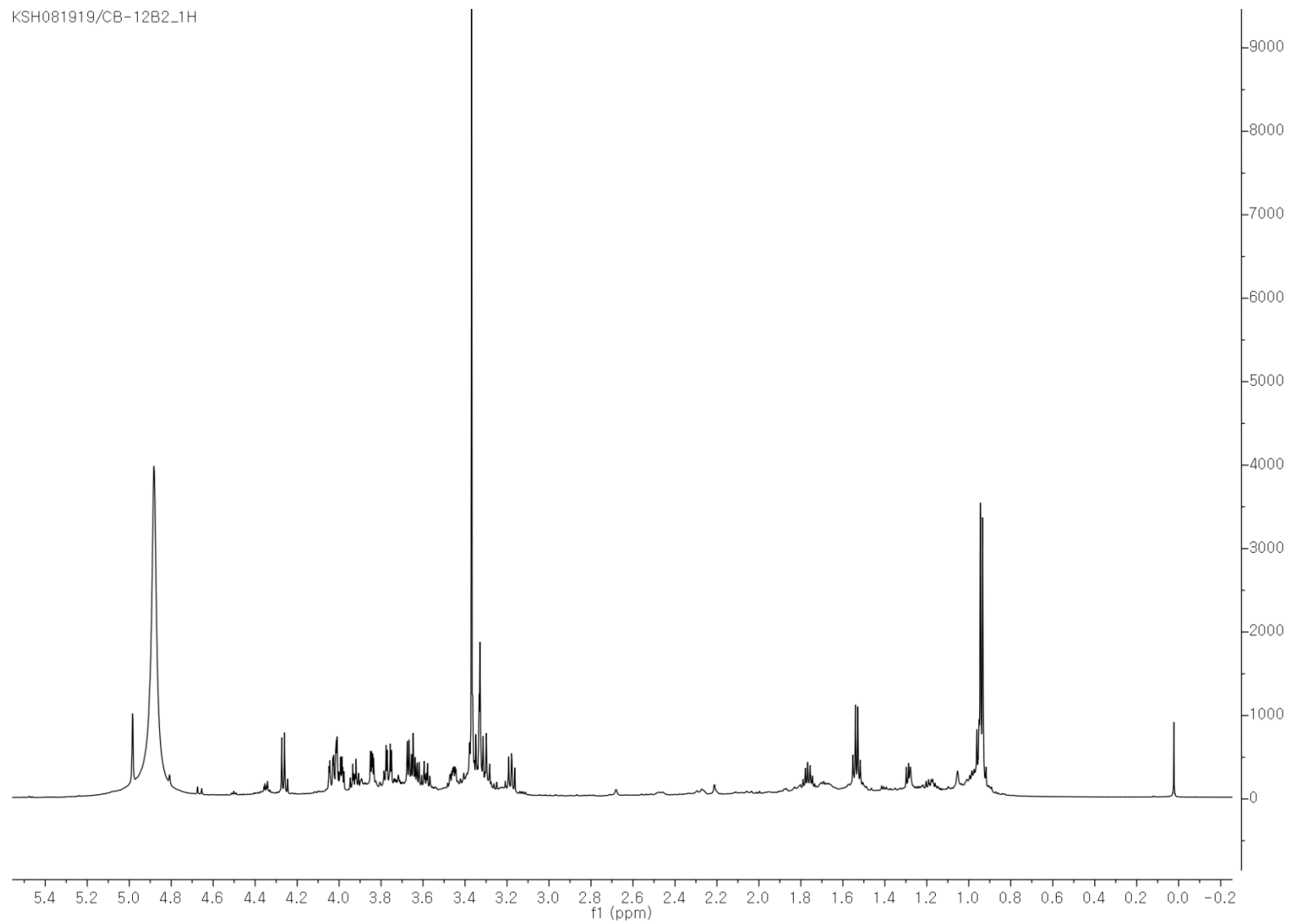
**Figure S10** HSQC spectrum of compound **2** (methanol- $d_4$ )



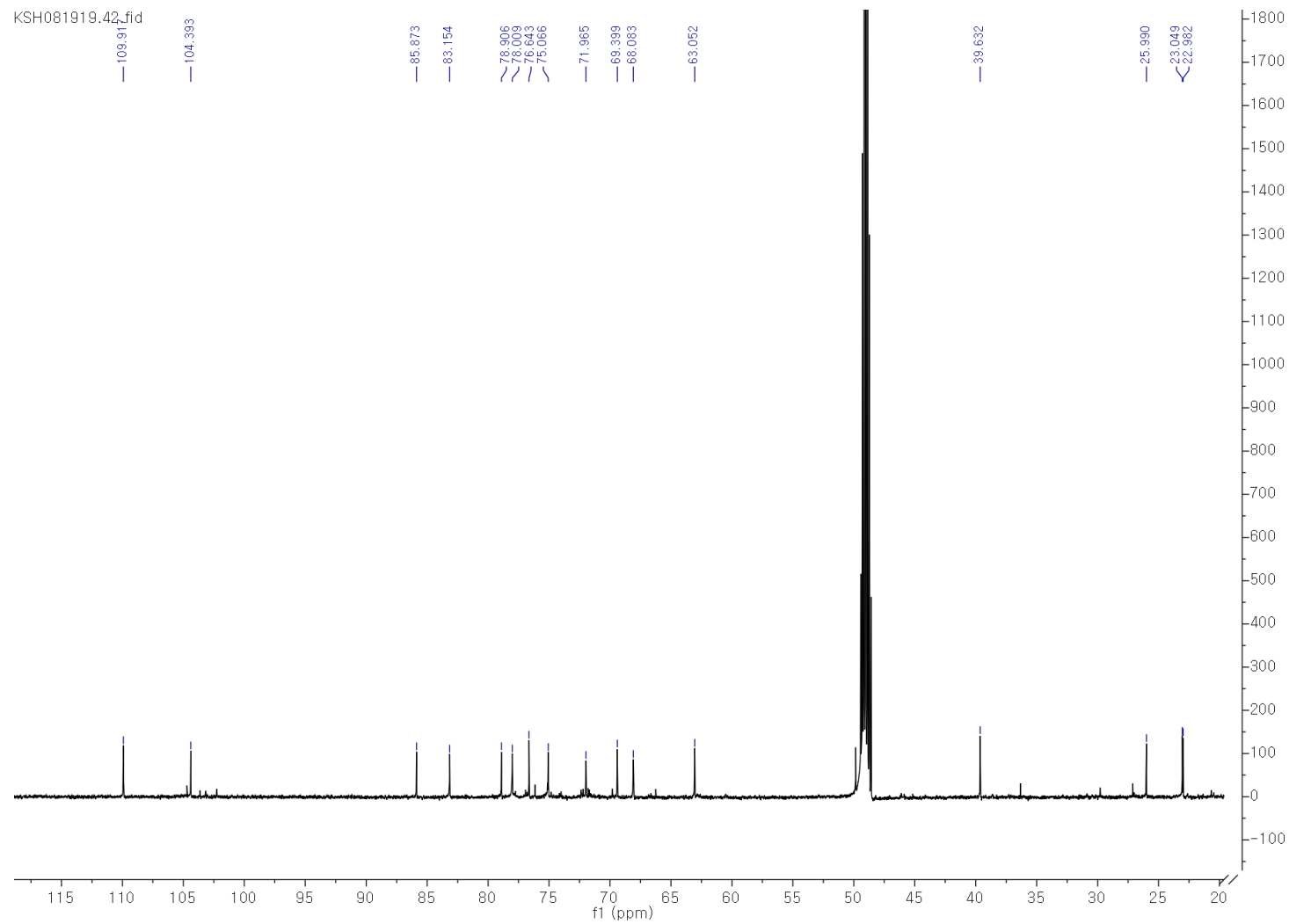
**Figure S11** HMBC spectrum of compound **2** (methanol- $d_4$ )



**Figure S12** HR-ESI-MS of compound **6**

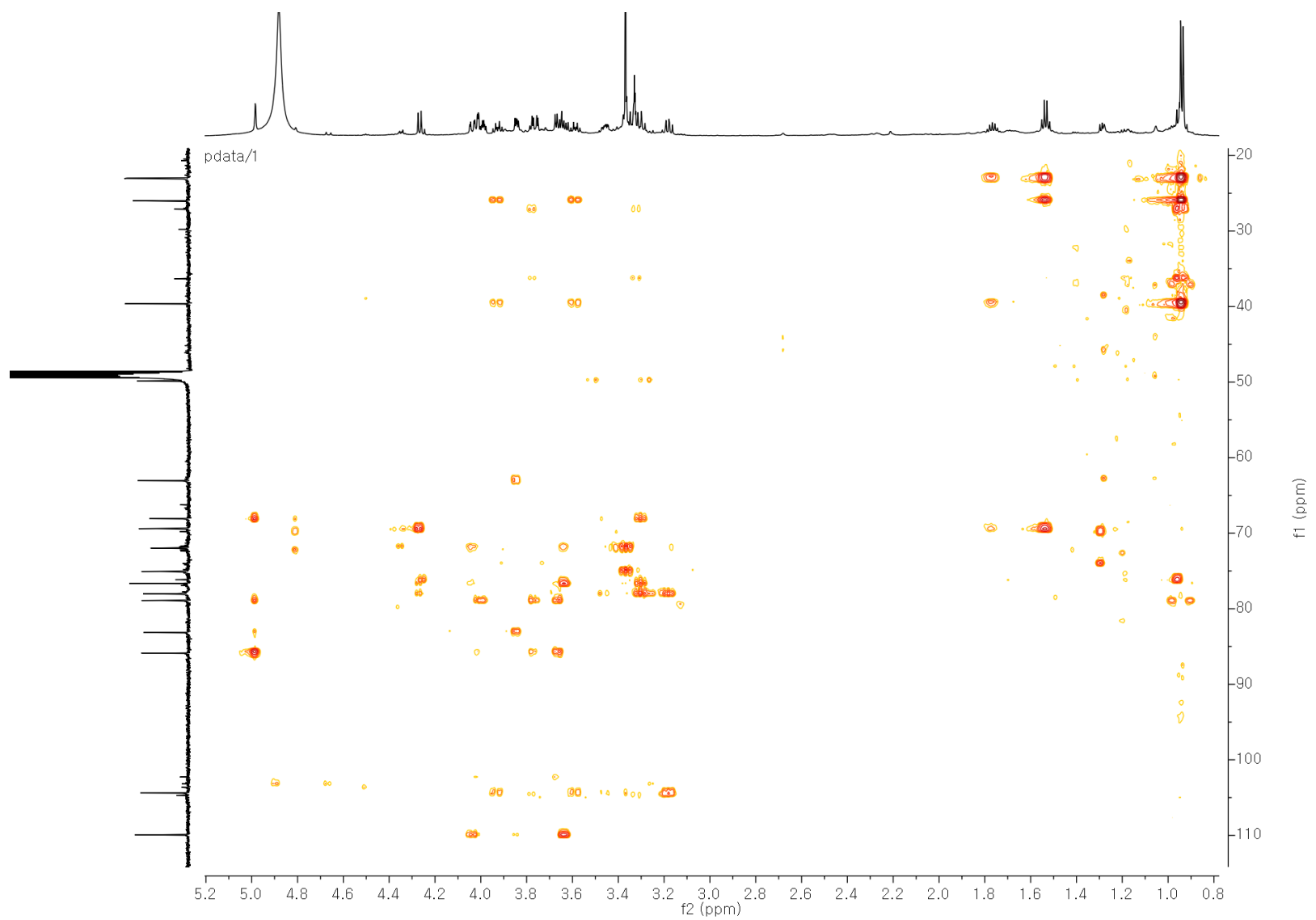


**Figure S13**  $^1\text{H}$ -NMR spectrum of compound **6** (600 MHz,  $\text{methanol-}d_4$ )



**Figure S14**  $^{13}\text{C}$ -NMR spectrum of compound **6** (150 MHz, methanol- $d_4$ )

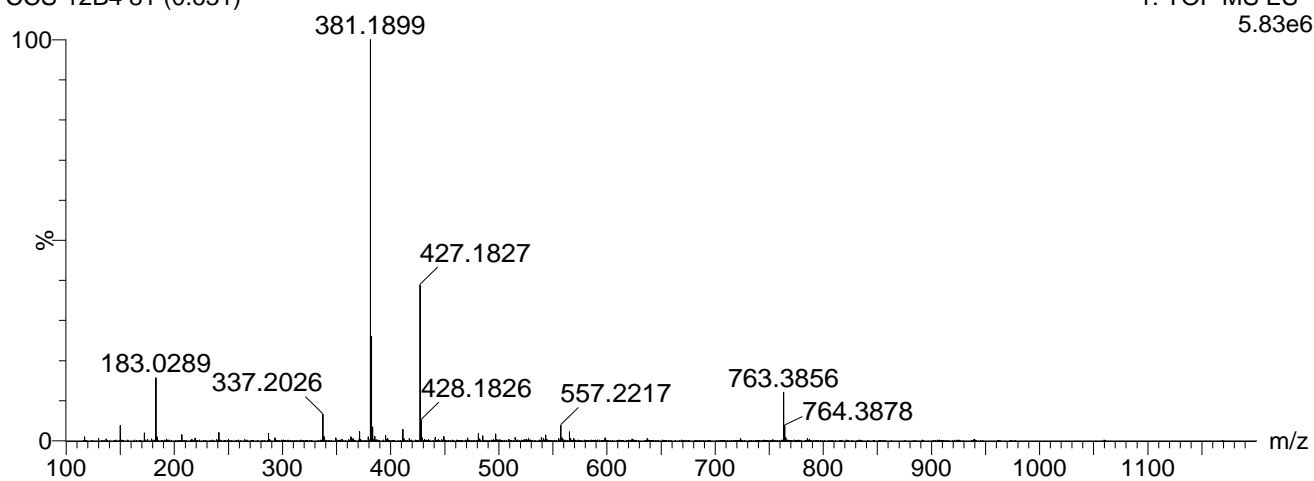




**Figure S15** HMBC spectrum of compound **6** (methanol- $d_4$ )

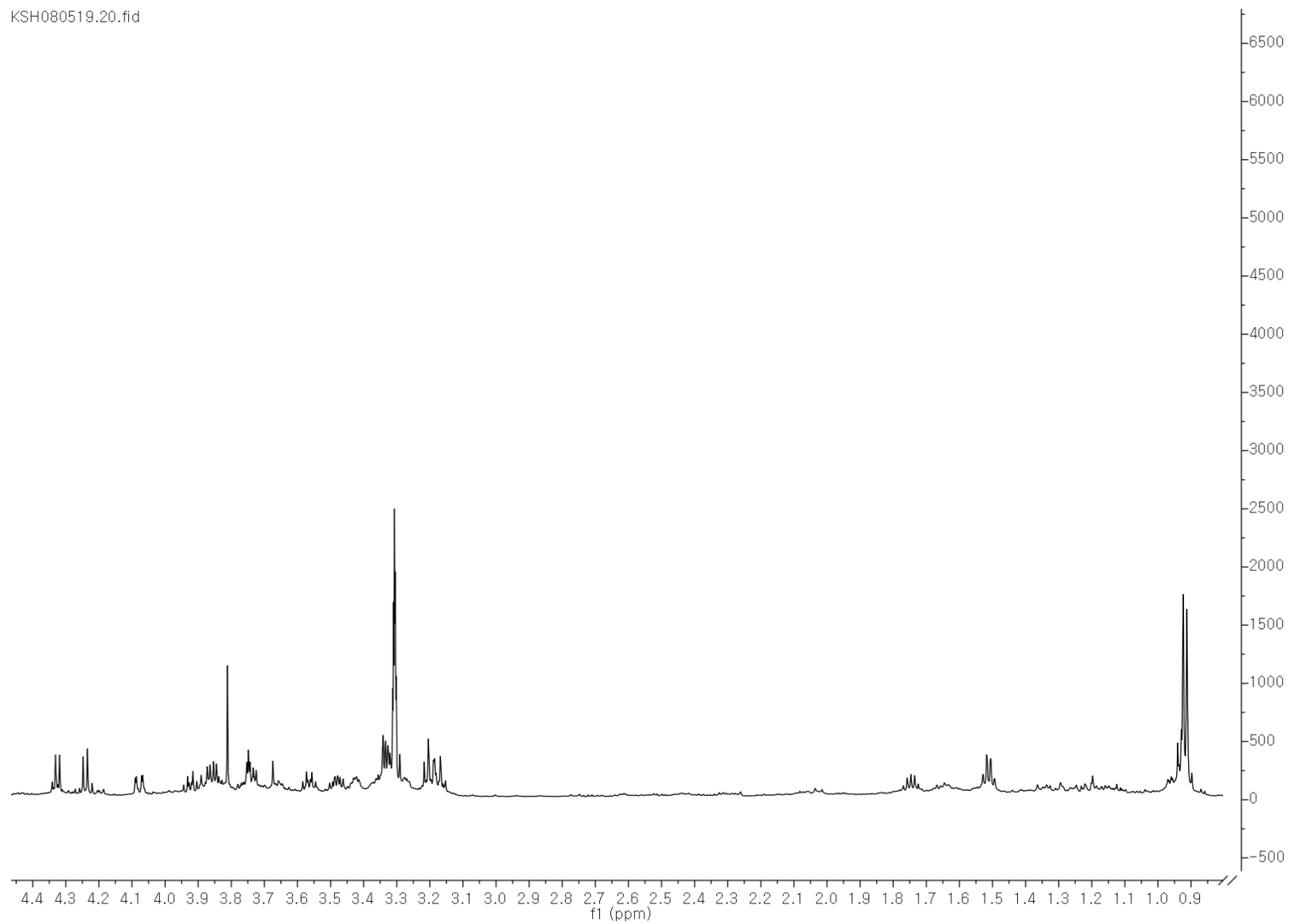
CCS-12B4 81 (0.631)

1: TOF MS ES-  
5.83e6

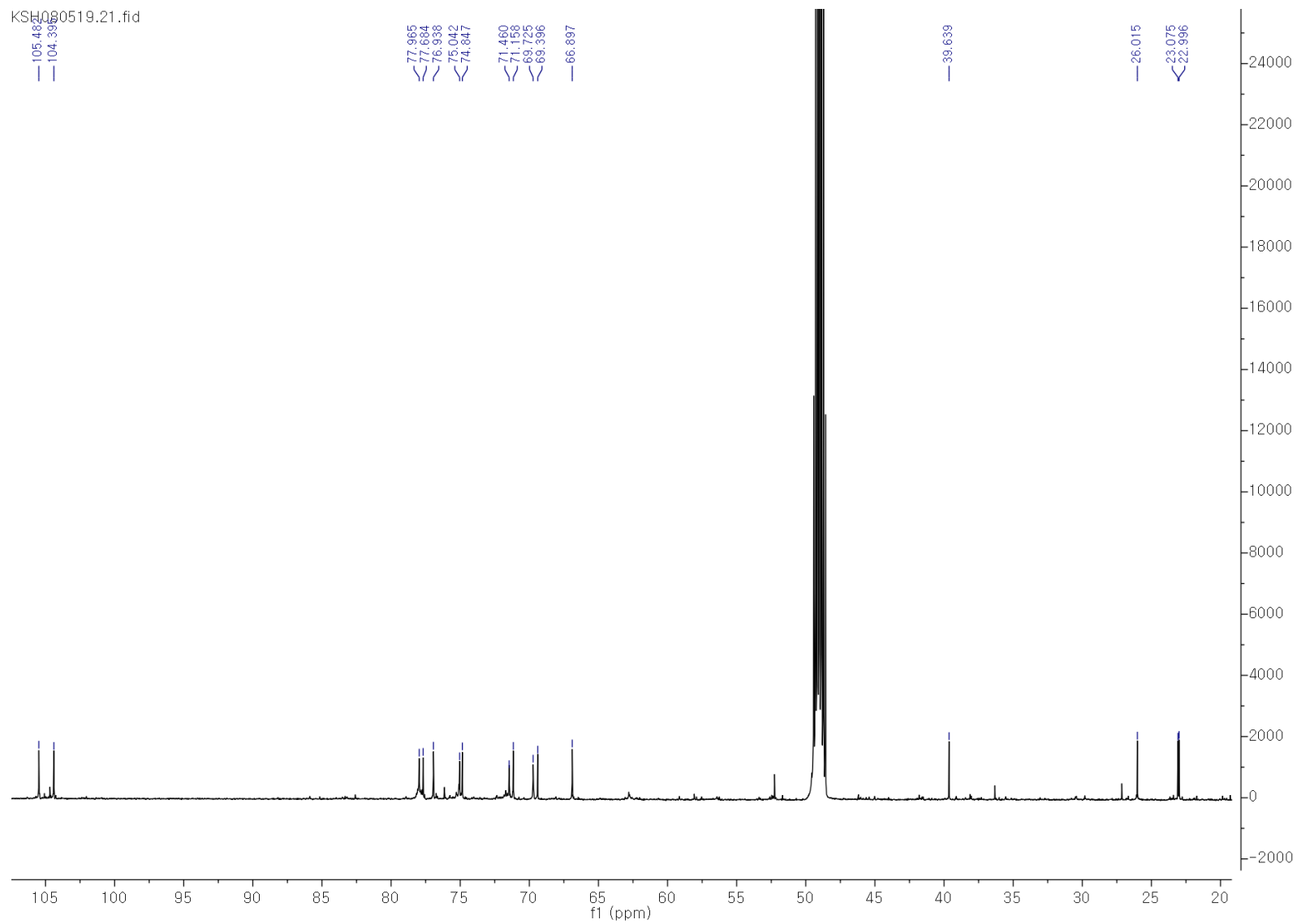


**Figure S16** HR-ESI-MS of compound **7**

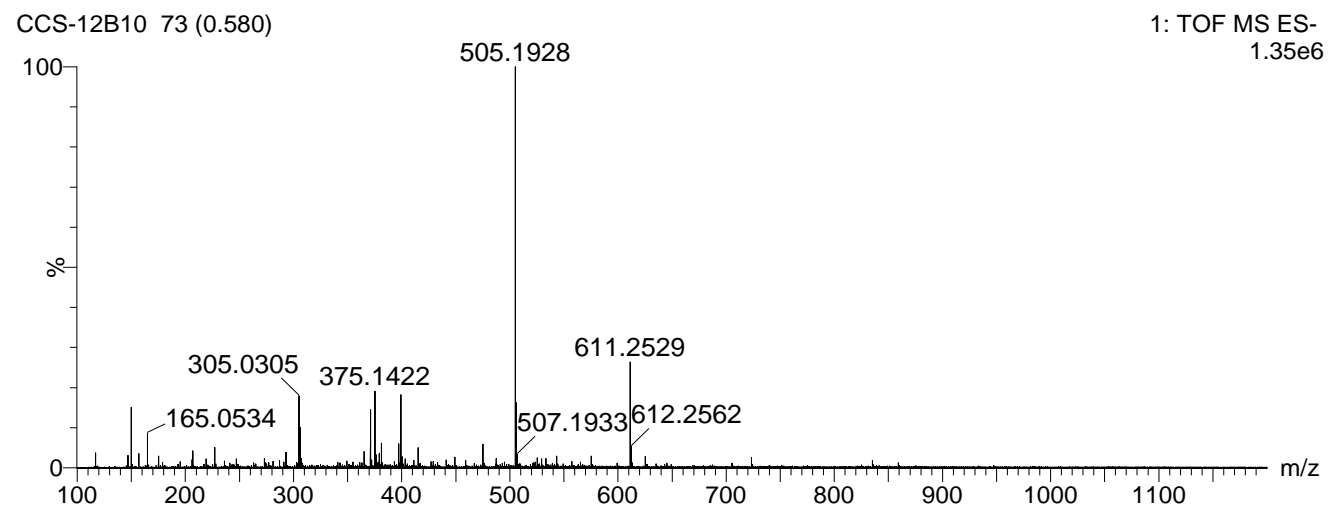
KSH080519.20.fid



**Figure S17**  $^1\text{H}$ -NMR spectrum of compound **7** (600 MHz,  $\text{methanol-}d_4$ )

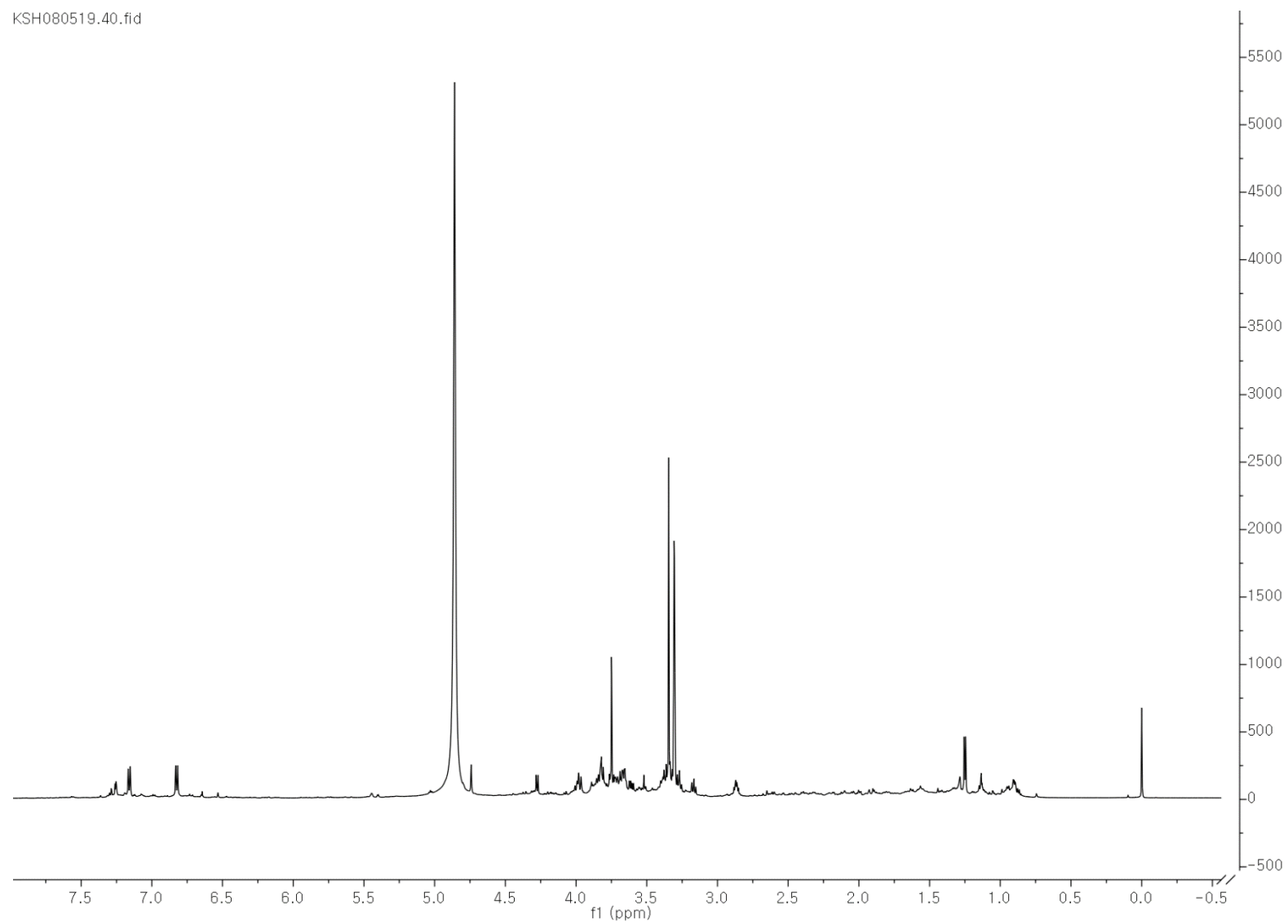


**Figure S18**  $^{13}\text{C}$ -NMR spectrum of compound **7** (150 MHz, methanol- $d_4$ )

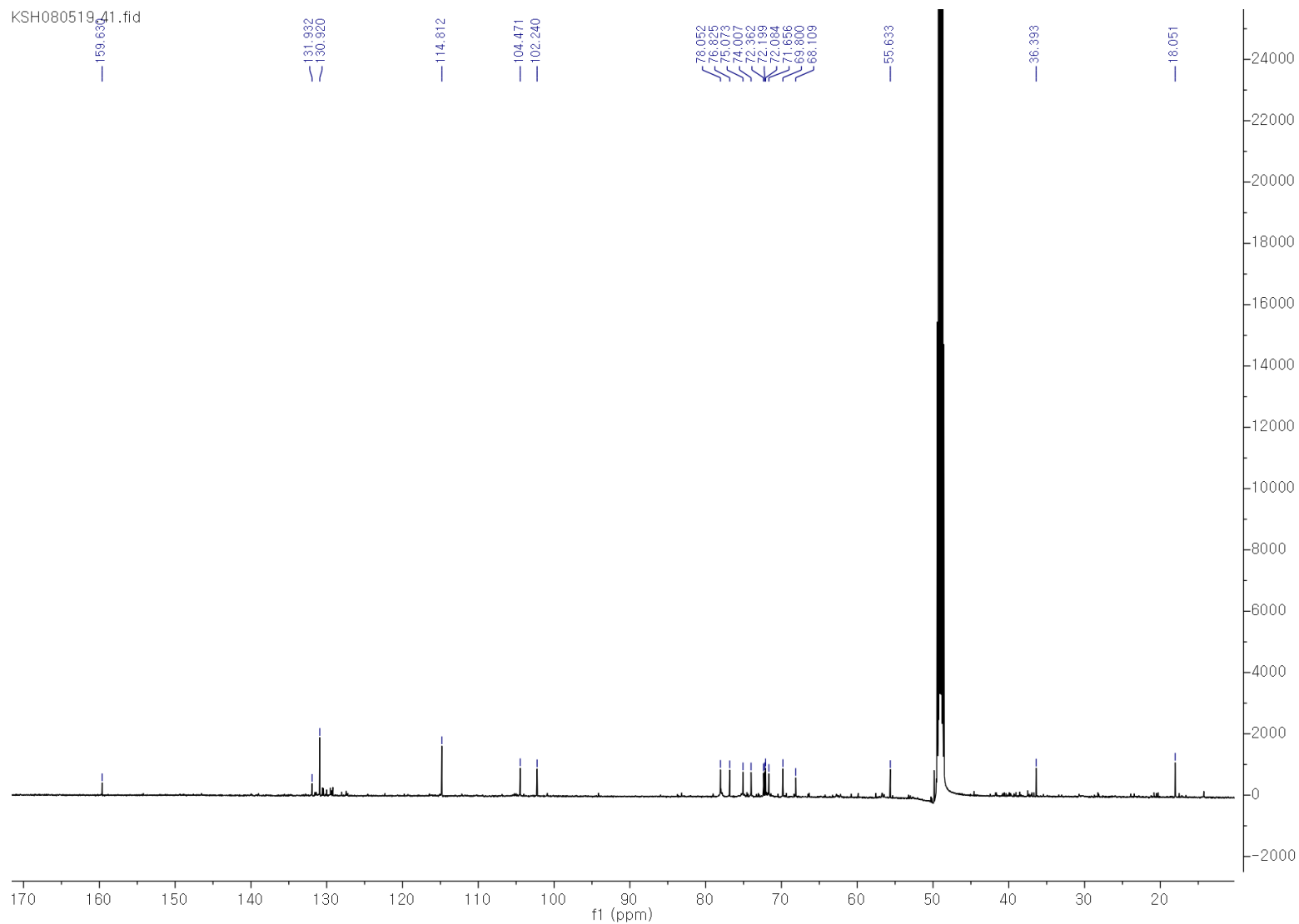


**Figure S19** HR-ESI-MS of compound **8**

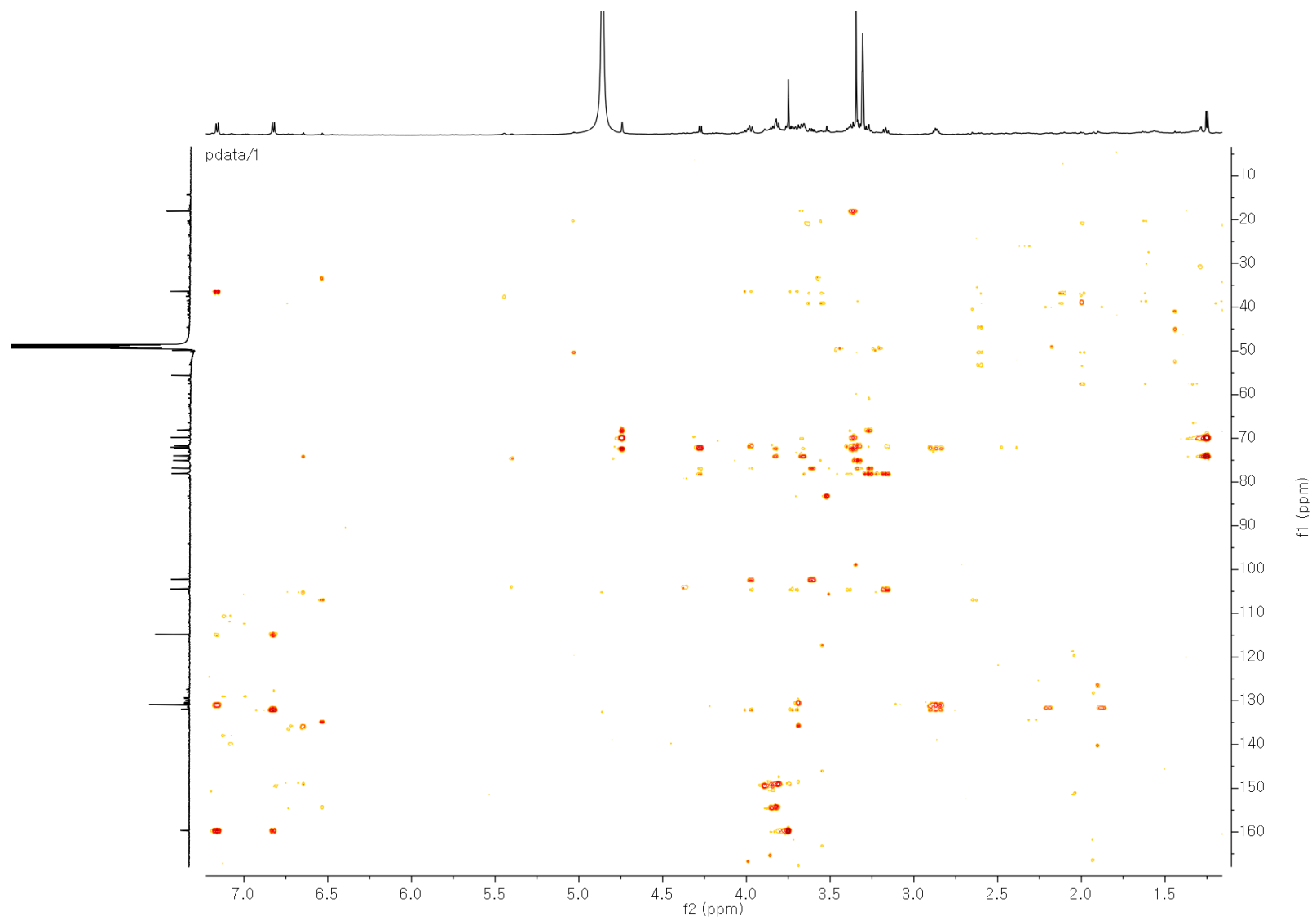
KSH080519.40.fid



**Figure S20**  $^1\text{H}$ -NMR spectrum of compound **8** (600 MHz,  $\text{methanol-}d_4$ )



**Figure S21**  $^{13}\text{C}$ -NMR spectrum of compound **8** (150 MHz, methanol- $d_4$ )



**Figure S22** HMBC spectrum of compound **8** (methanol- $d_4$ )