

# Cherbonolides M and N from a Formosan soft coral *Sarcophyton cherbonnieri*

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## Spectroscopic data of cherbonolide M (1)

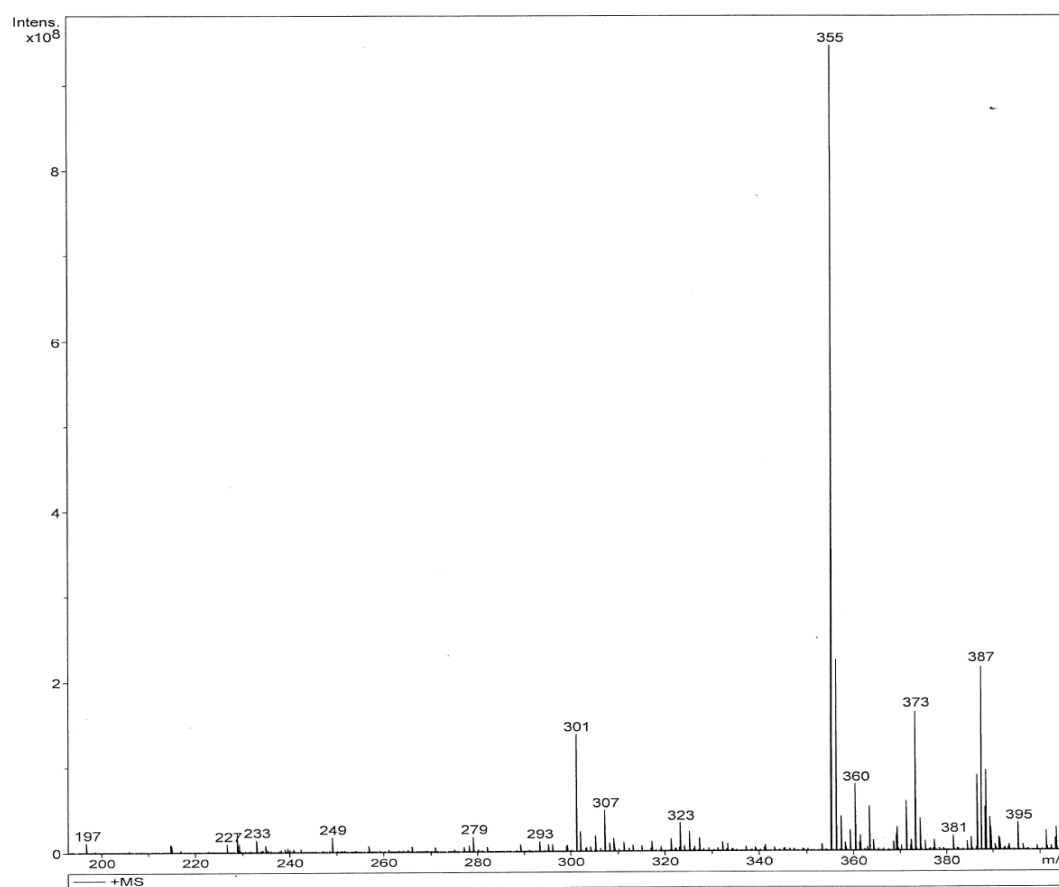
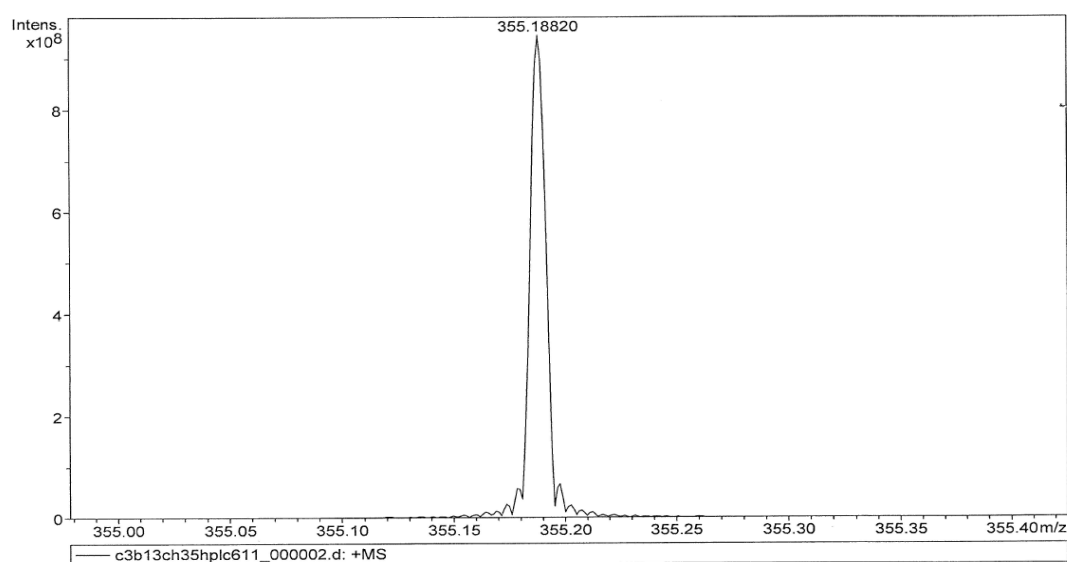


Figure S1: ESIMS spectrum of 1



Meas. m/z	#	Formula	Score	m/z	err [mDa]	err [ppm]	mSigma	rdb	e <sup>-</sup>	Conf	N-Rule
355.18820	1	C <sub>20</sub> H <sub>28</sub> NaO <sub>4</sub>	100.00	355.18798	-0.22	-0.63	14.9	6.5	even		ok

Figure S2: HRESIMS spectrum of 1

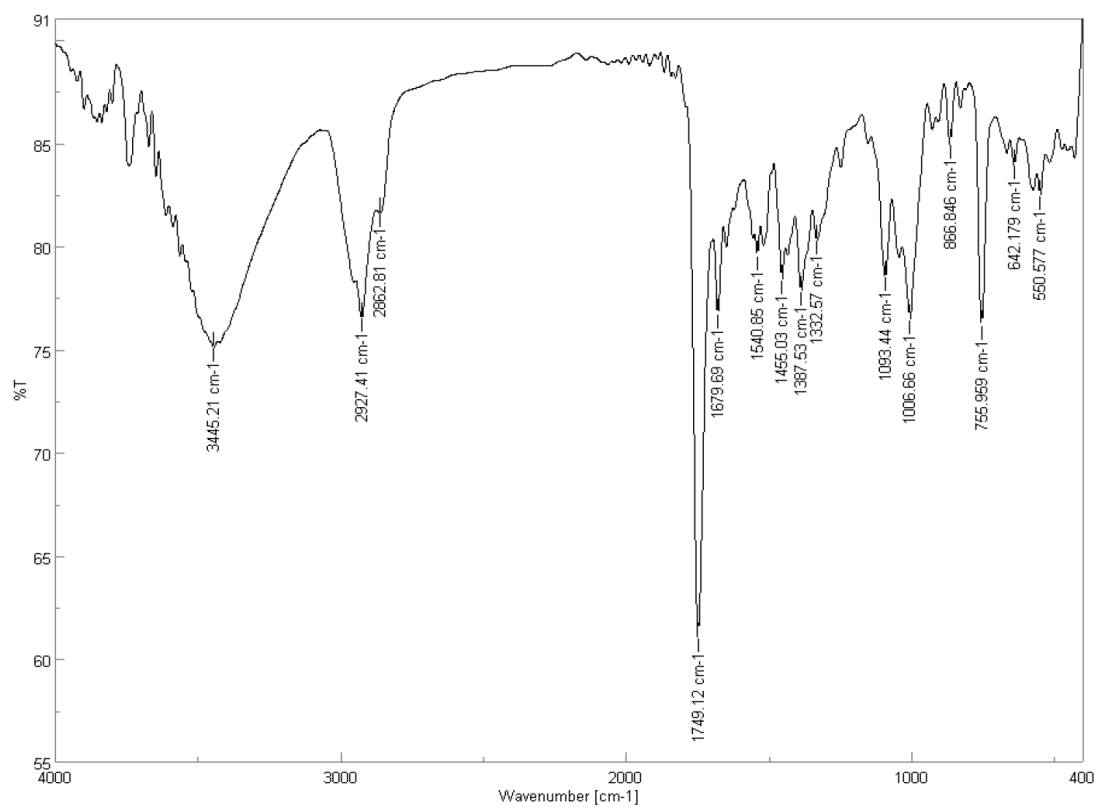


Figure S3: IR spectrum of 1

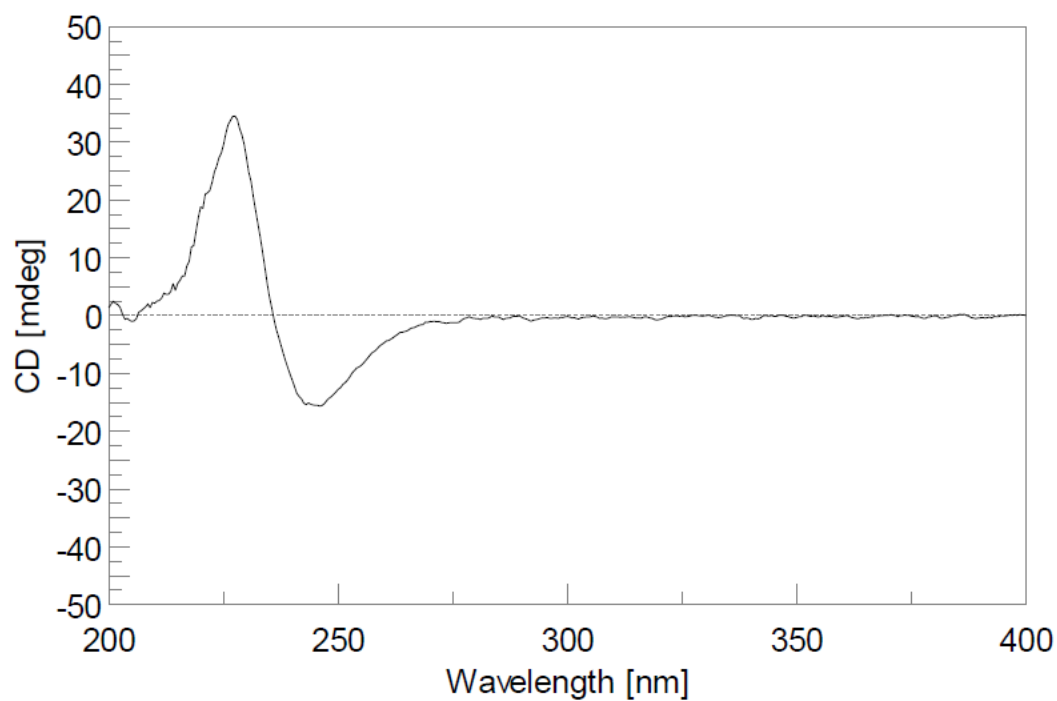


Figure S4: CD spectrum ( $1.2 \times 10^{-4}$  M, MeOH) of 1

PROTON\_01  
c3b-13-LH3-5-61.9

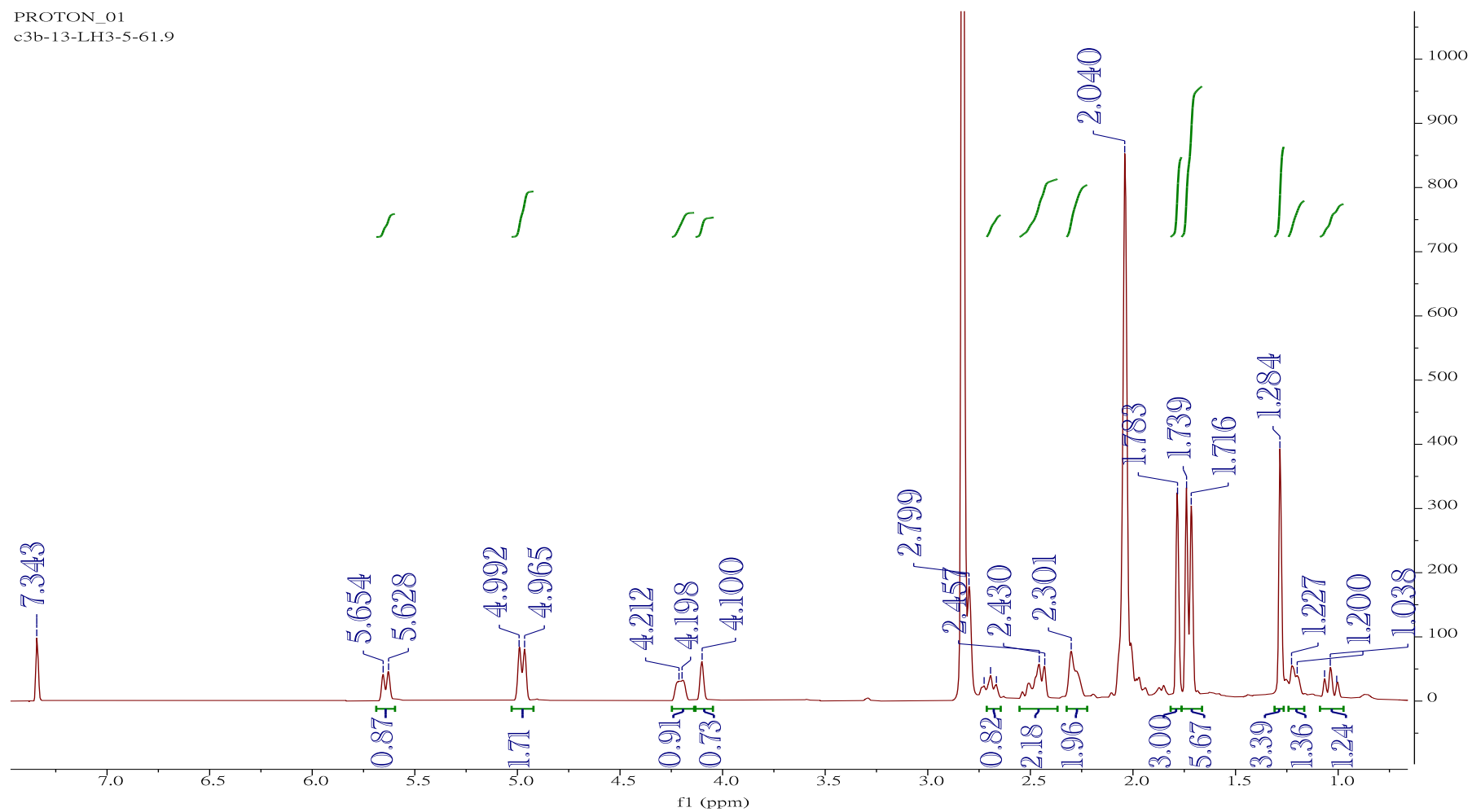


Figure S5:  $^1\text{H}$  NMR spectrum of **1** in acetone- $d_6$  at 400 MHz

PROTON\_01  
c3b-13-LH3-5-61.9

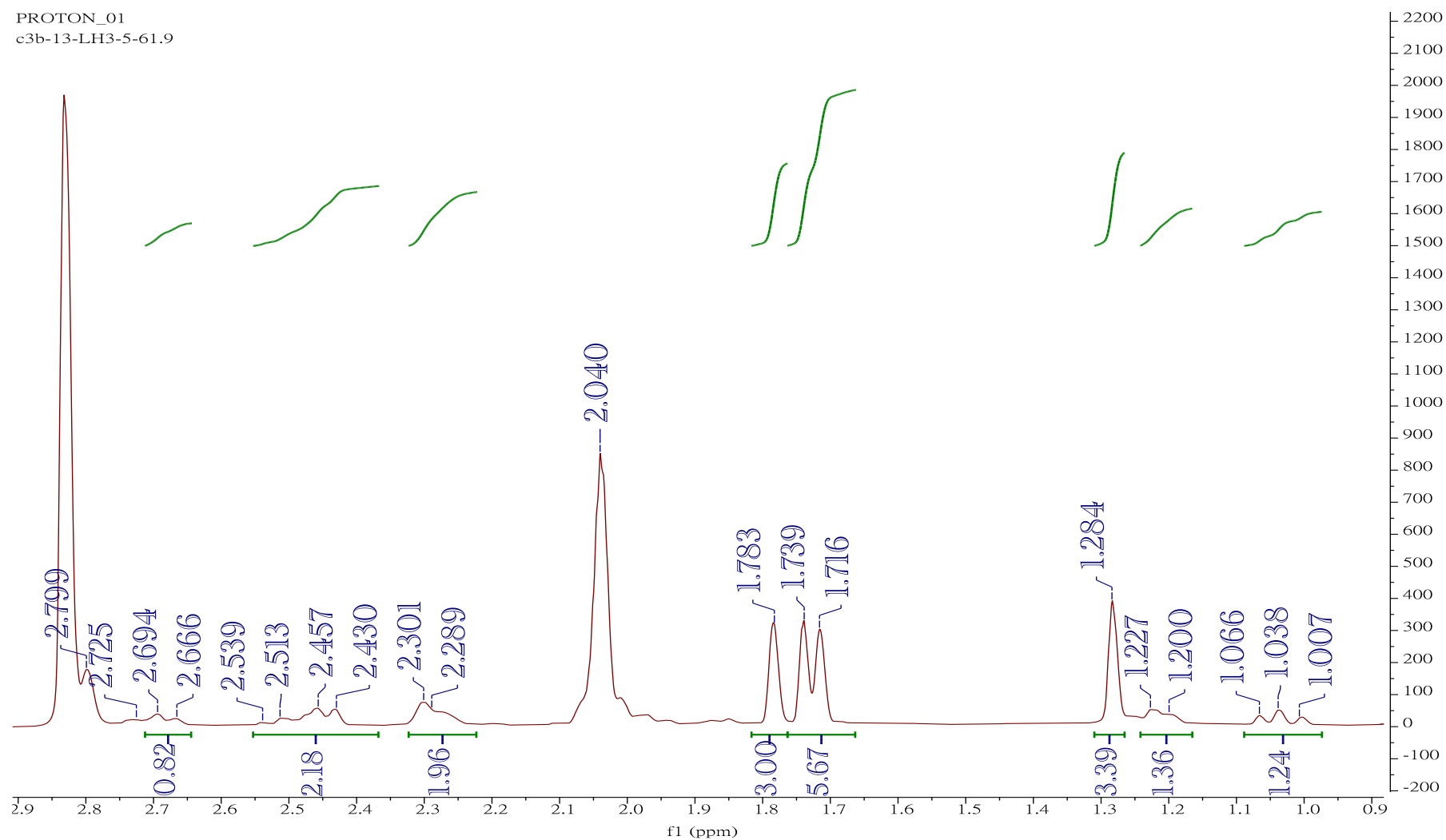


Figure S6:  $^1\text{H}$  NMR spectrum (from 0.9 to 2.9 ppm) of **1** in acetone- $d_6$  at 400 MHz

CARBON\_01  
c3b-13-LH3-5-61.9

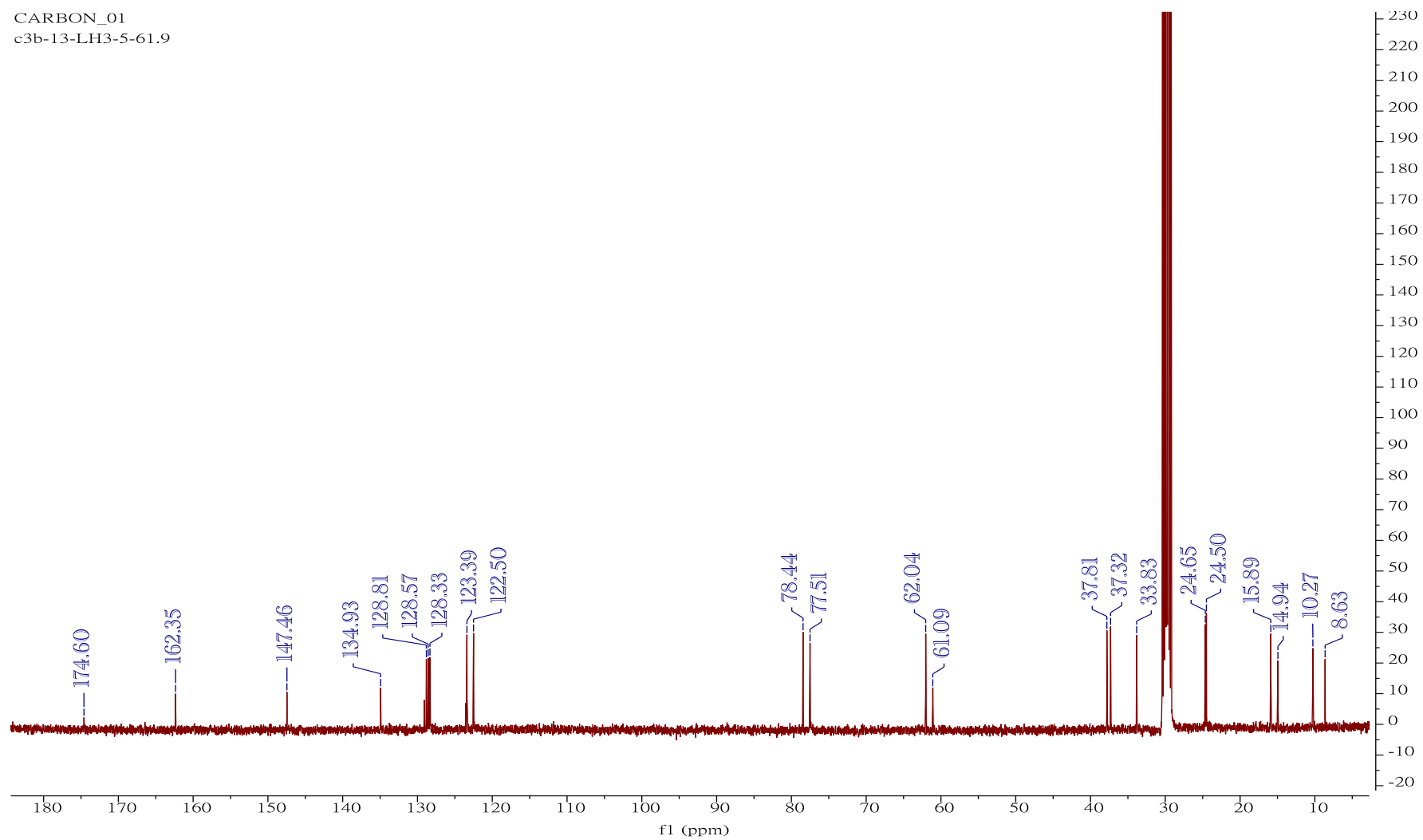


Figure S7: <sup>13</sup>C NMR spectrum of **1** in acetone-*d*<sub>6</sub> at 100 MHz



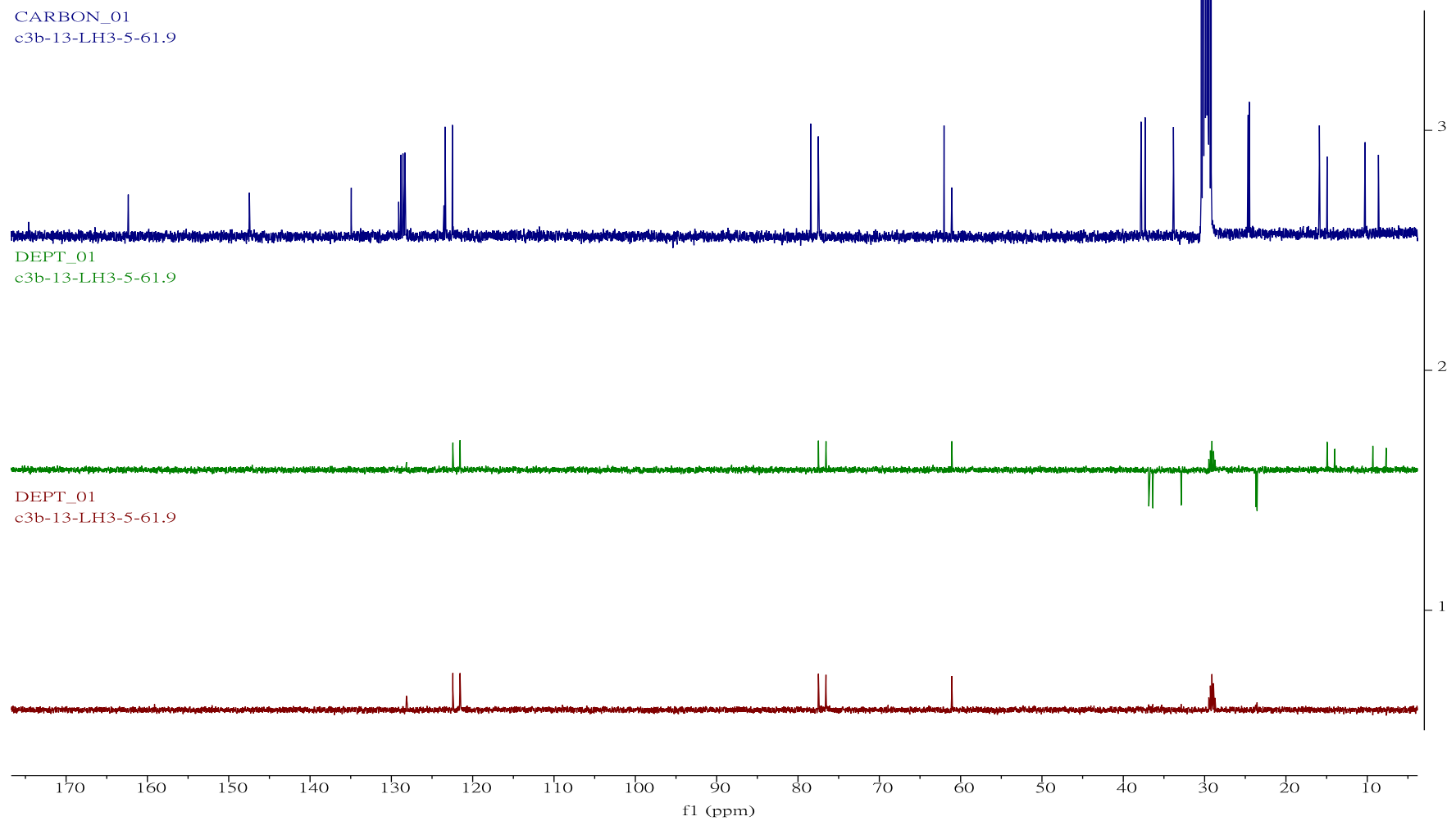


Figure S8: DEPT spectrum of **1** in acetone- $d_6$

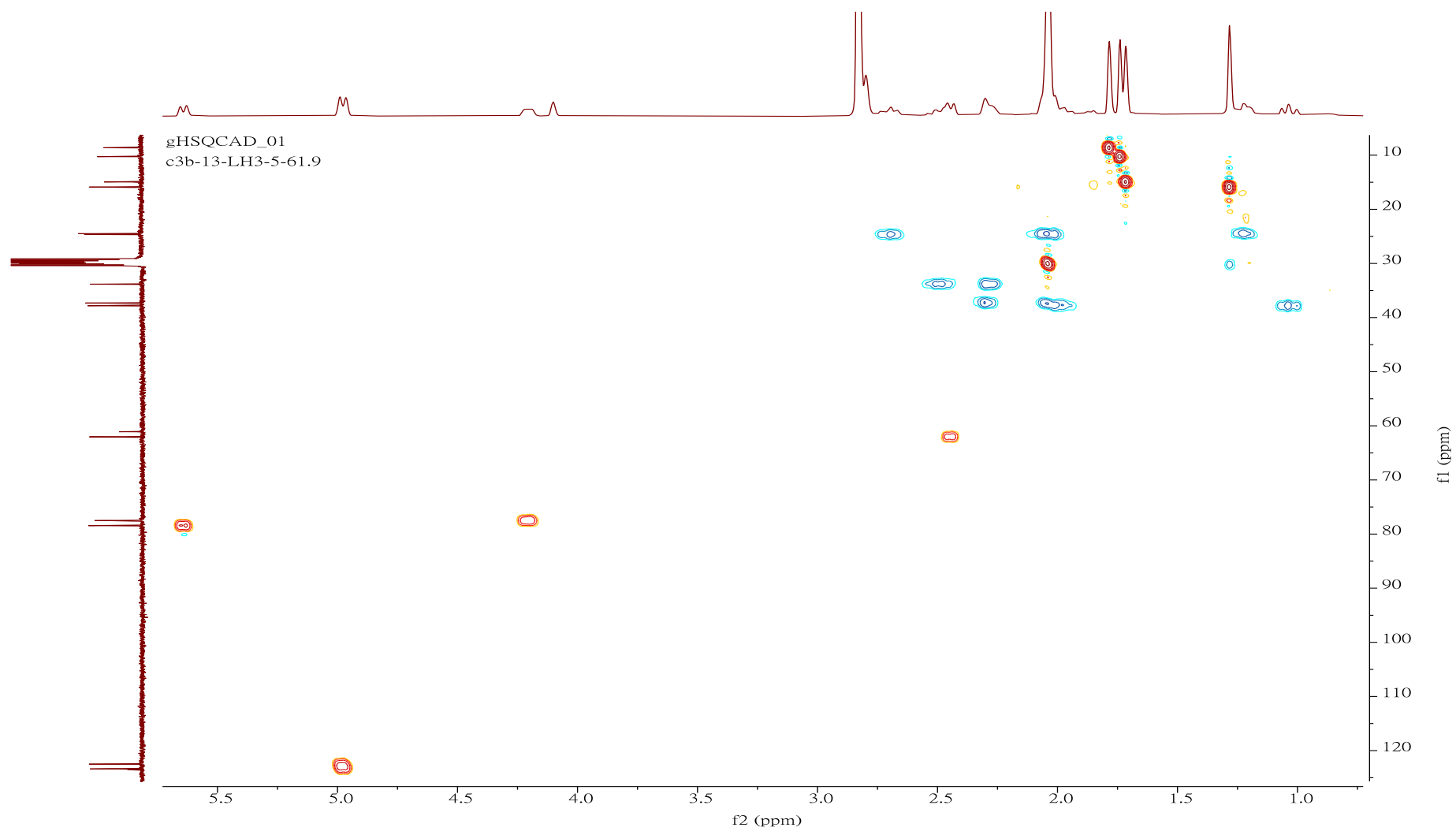


Figure S9: HSQC spectrum of **1** in acetone- $d_6$

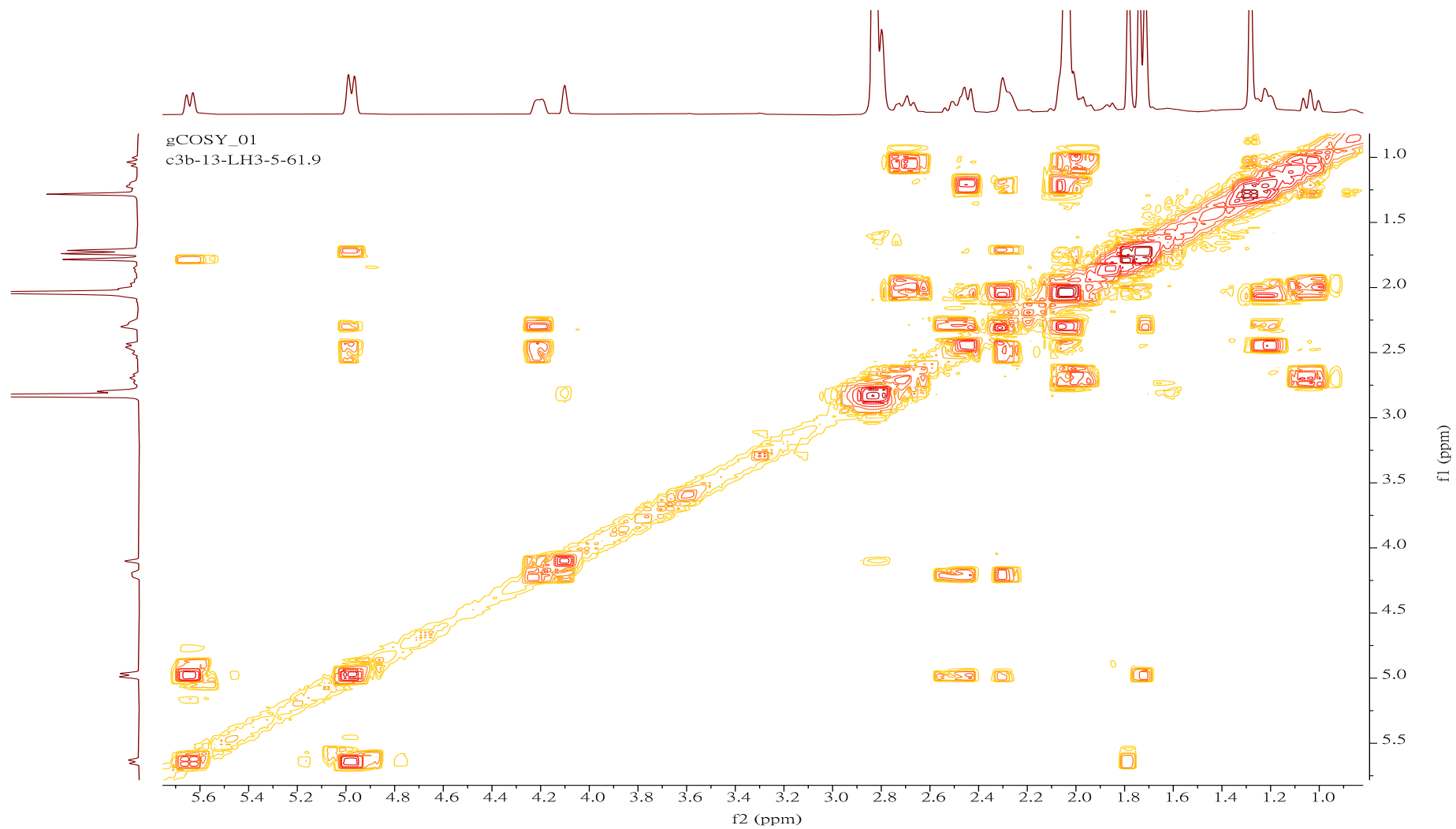


Figure S10: COSY spectrum of **1** in acetone- $d_6$

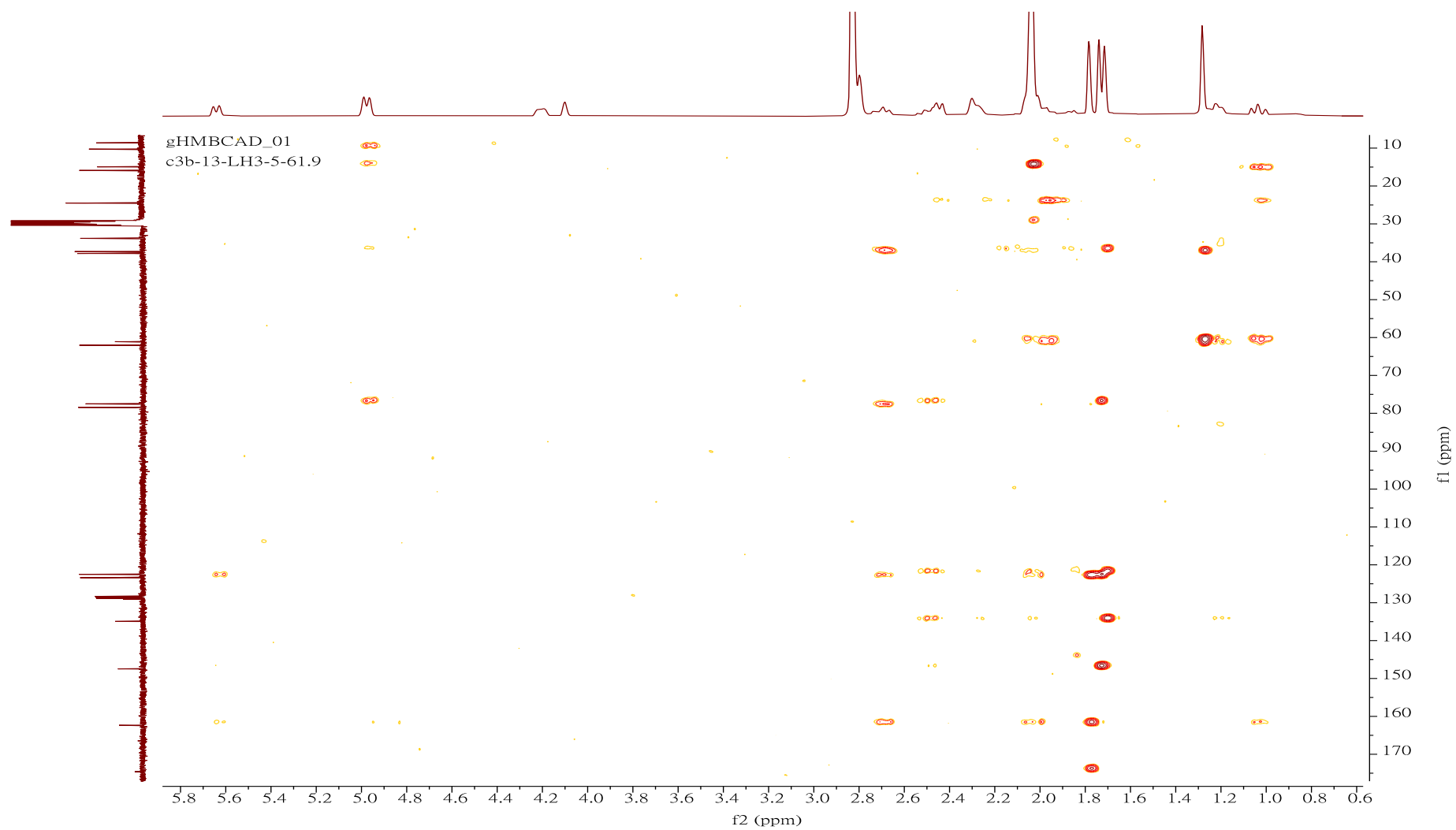


Figure S11: HMBC spectrum of **1** in acetone- $d_6$

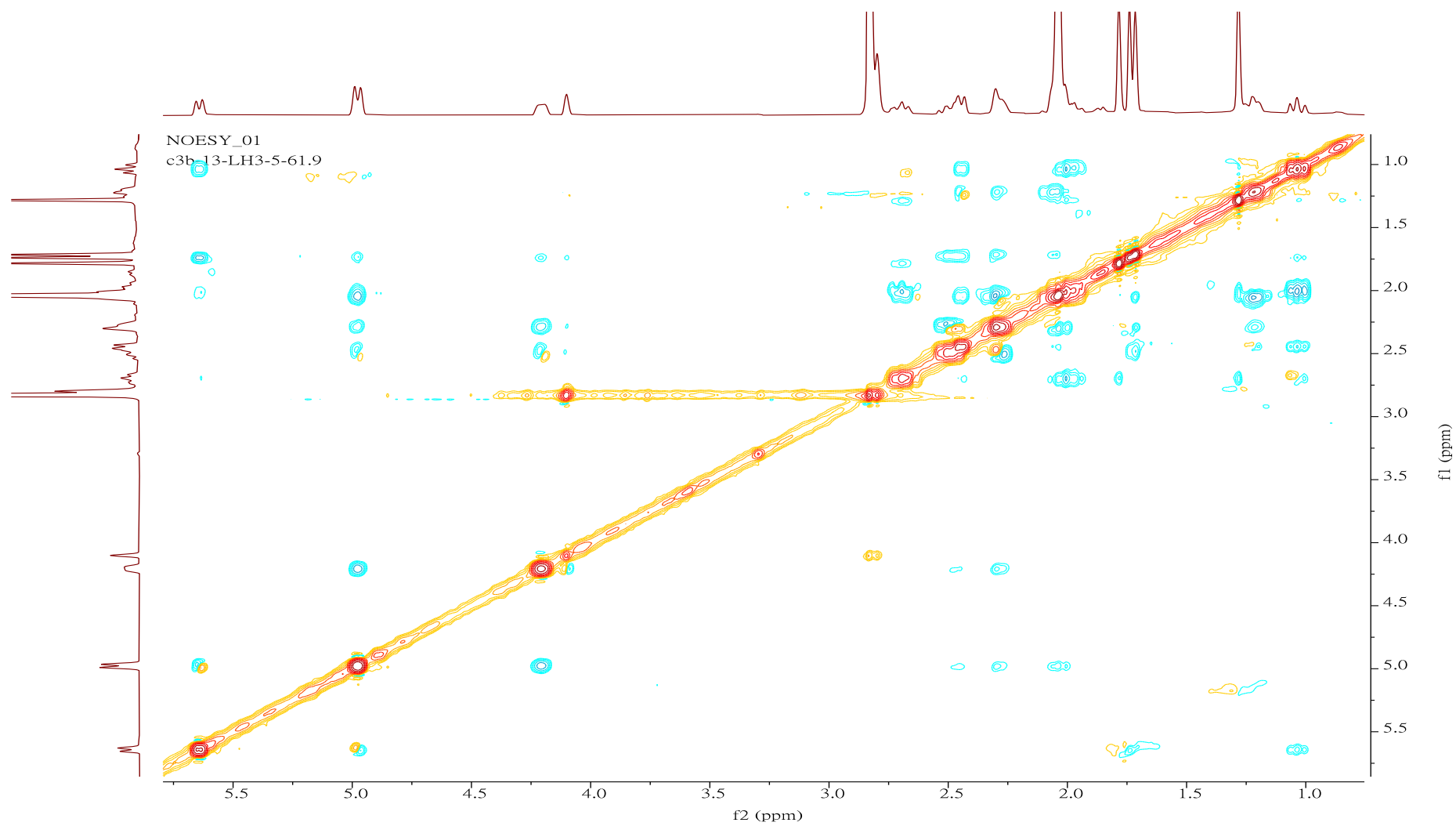


Figure S12: NOESY spectrum of **1** in acetone- $d_6$

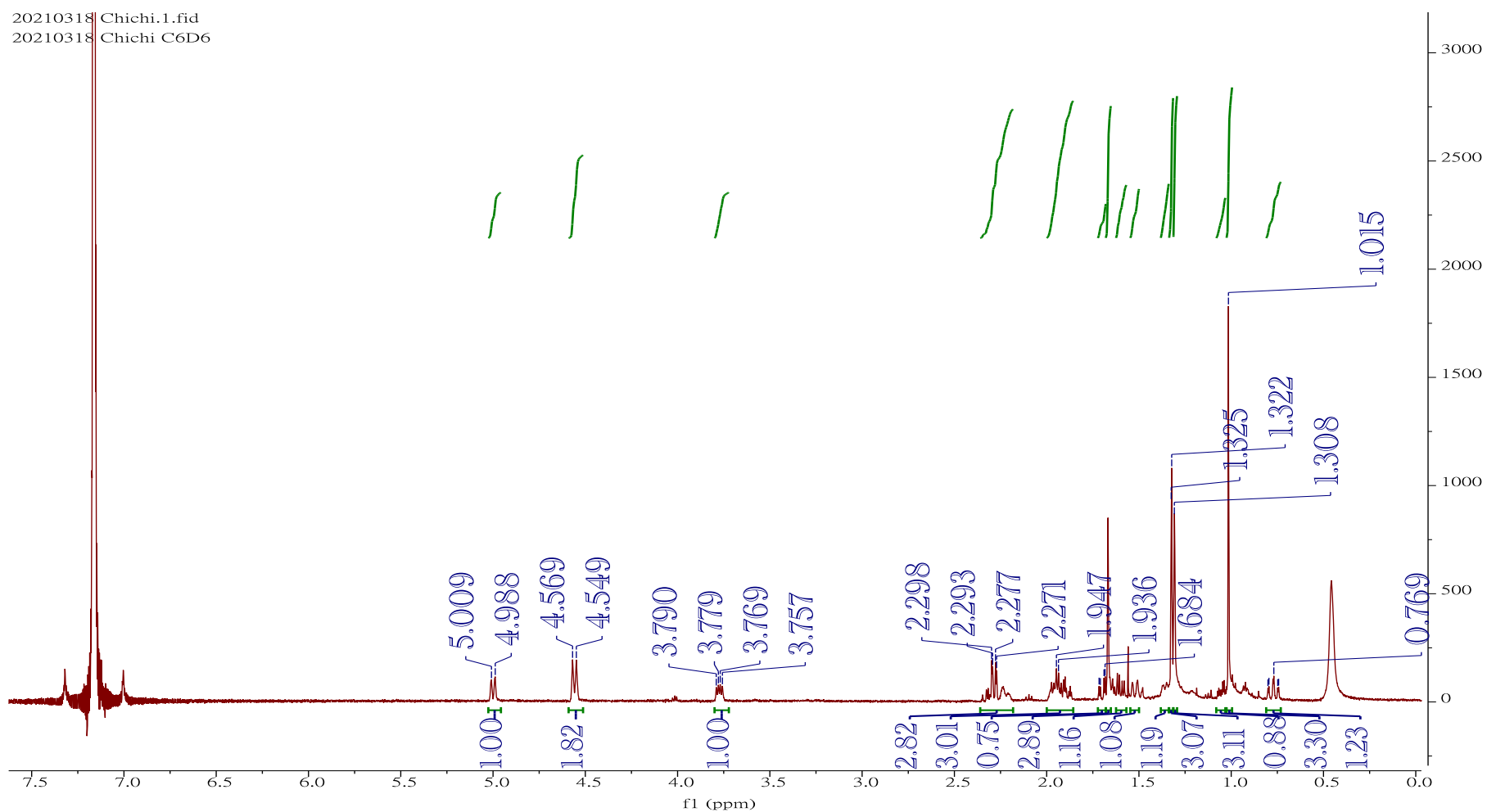


Figure S13:  $^1\text{H}$  NMR spectrum of **1** in  $\text{C}_6\text{D}_6$  at 500 MHz

20210318 Chichi.1.fid  
20210318 Chichi C6D6

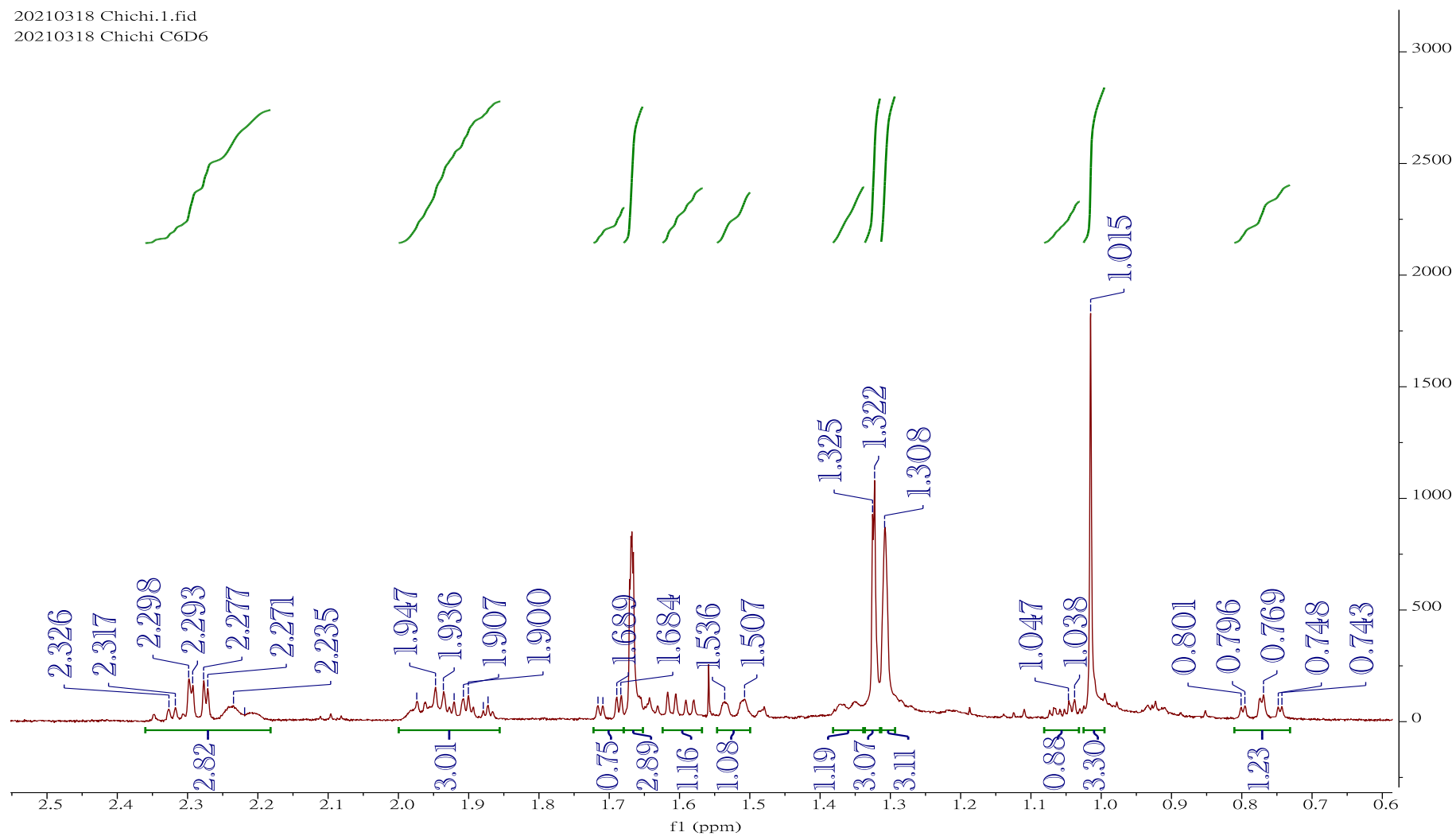


Figure S14:  $^1\text{H}$  NMR spectrum (from 0.6 to 2.5 ppm) of **1** in  $\text{C}_6\text{D}_6$  at 500 MHz

20210318 Chichi.4.fid  
20210318 Chichi C6D6 13C

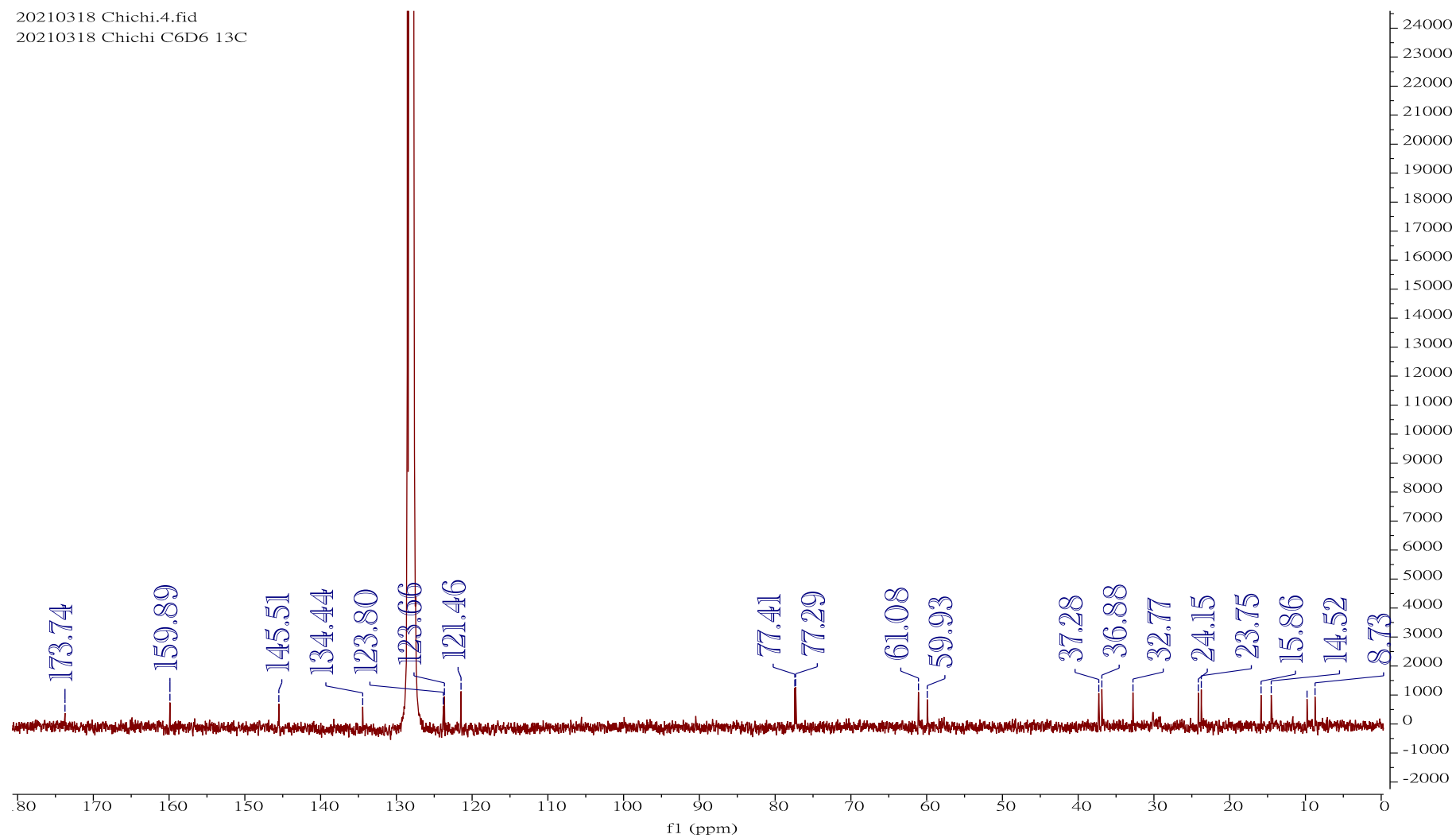


Figure S15: <sup>13</sup>C NMR spectrum of **1** in C<sub>6</sub>D<sub>6</sub> at 125 MHz



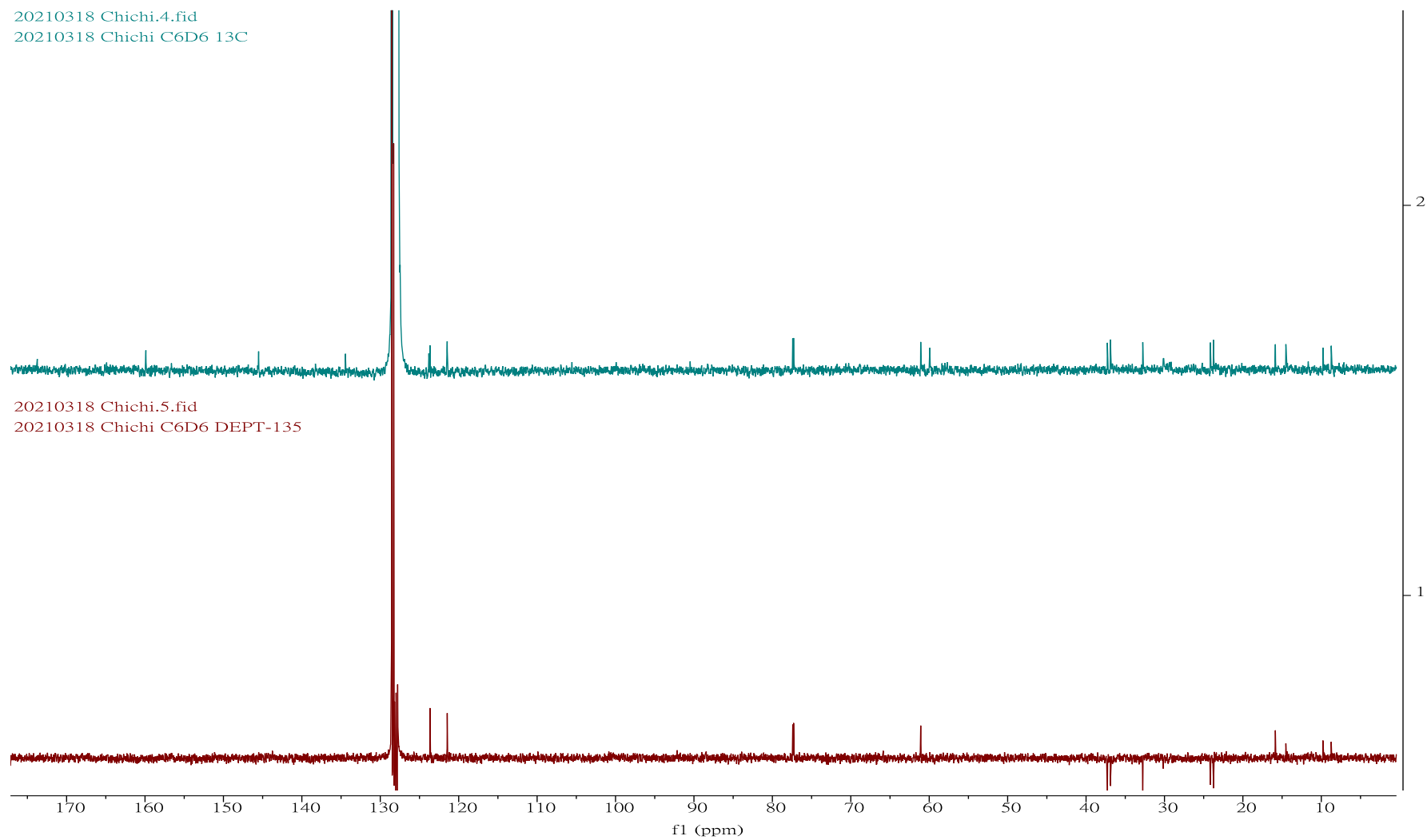


Figure S16: DEPT spectrum of **1** in C<sub>6</sub>D<sub>6</sub>

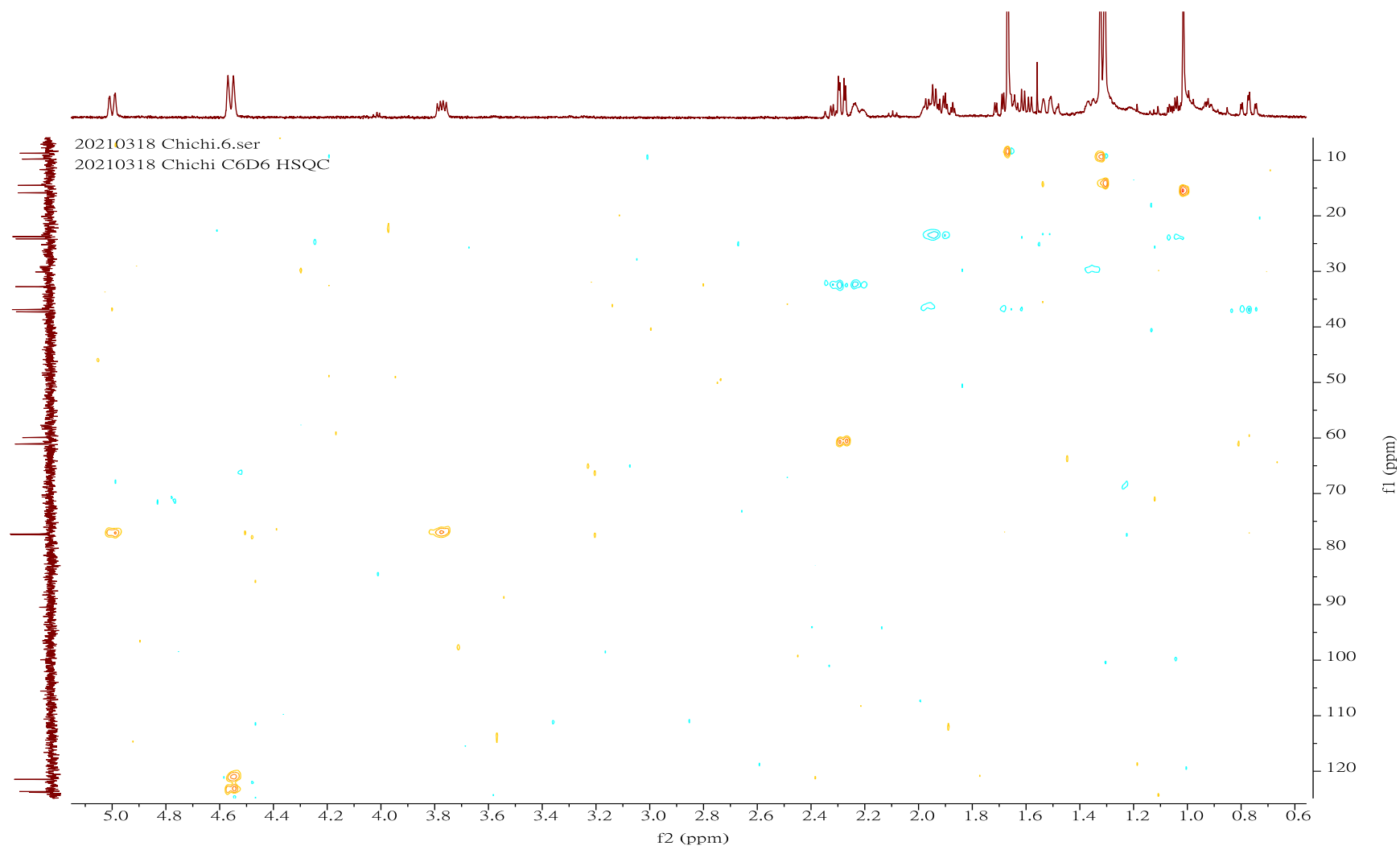


Figure S17: HSQC spectrum of **1** in C<sub>6</sub>D<sub>6</sub>

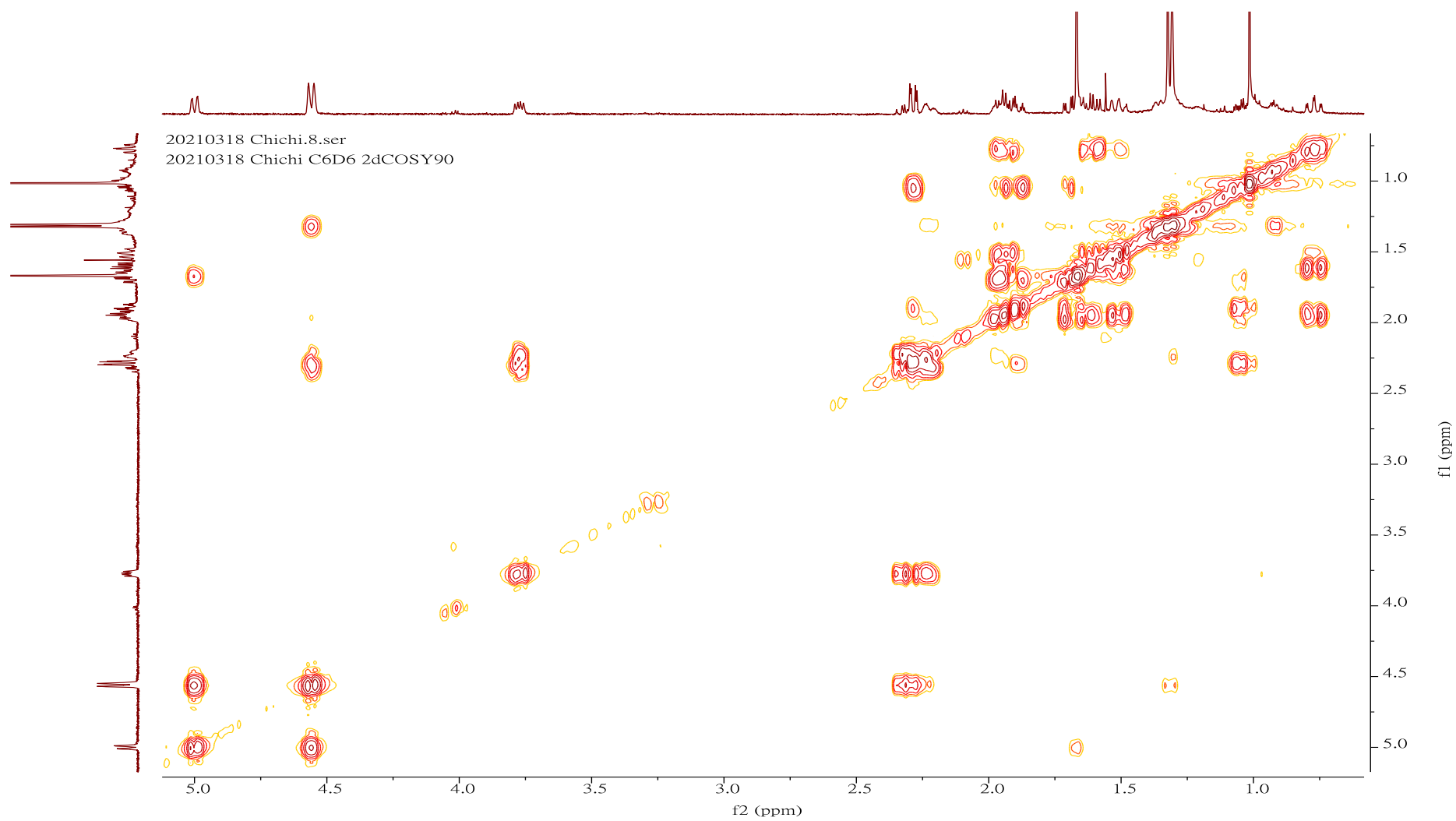


Figure S18: COSY spectrum of **1** in C<sub>6</sub>D<sub>6</sub>

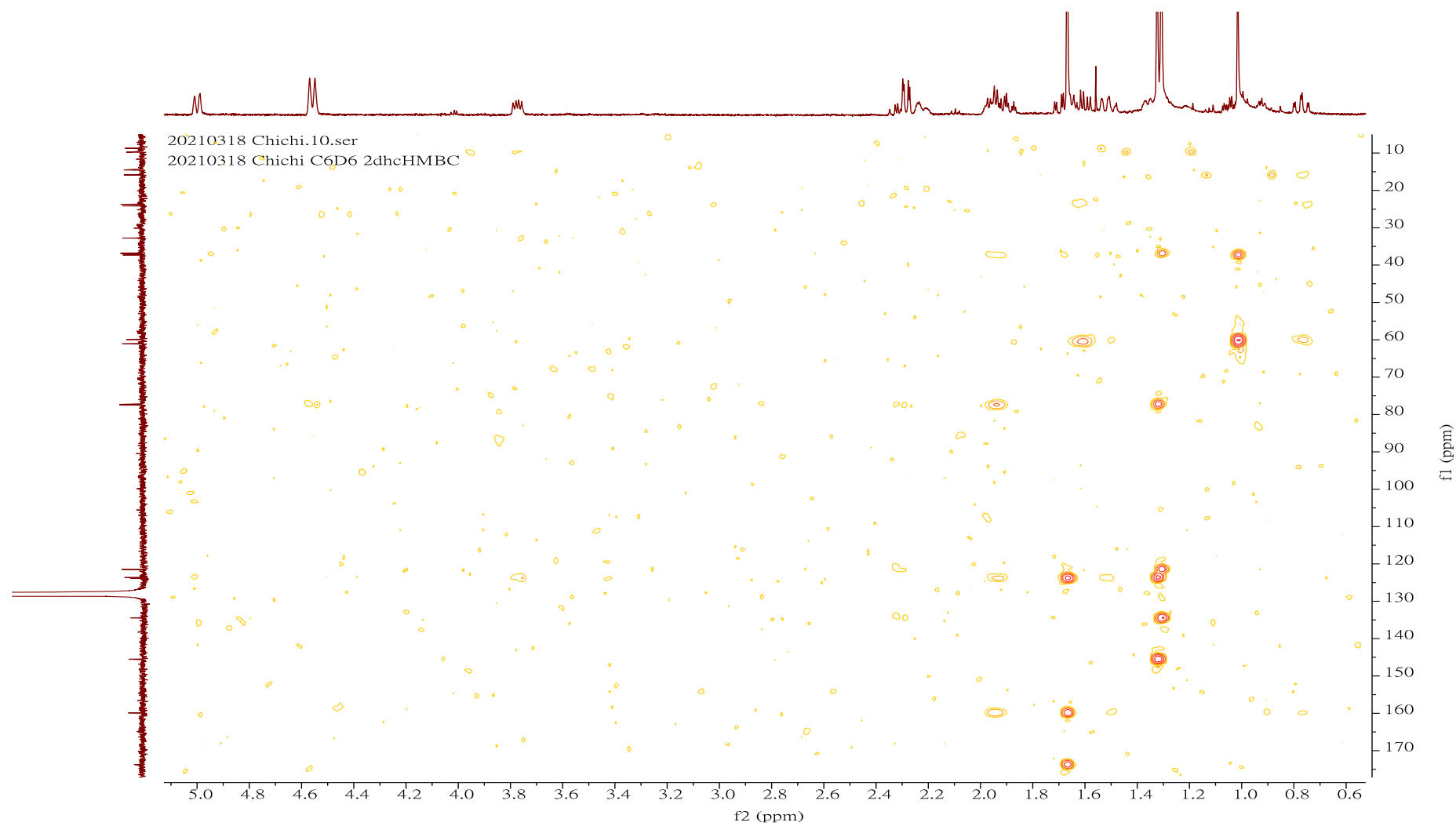


Figure S19: HMBC spectrum of **1** in C<sub>6</sub>D<sub>6</sub>

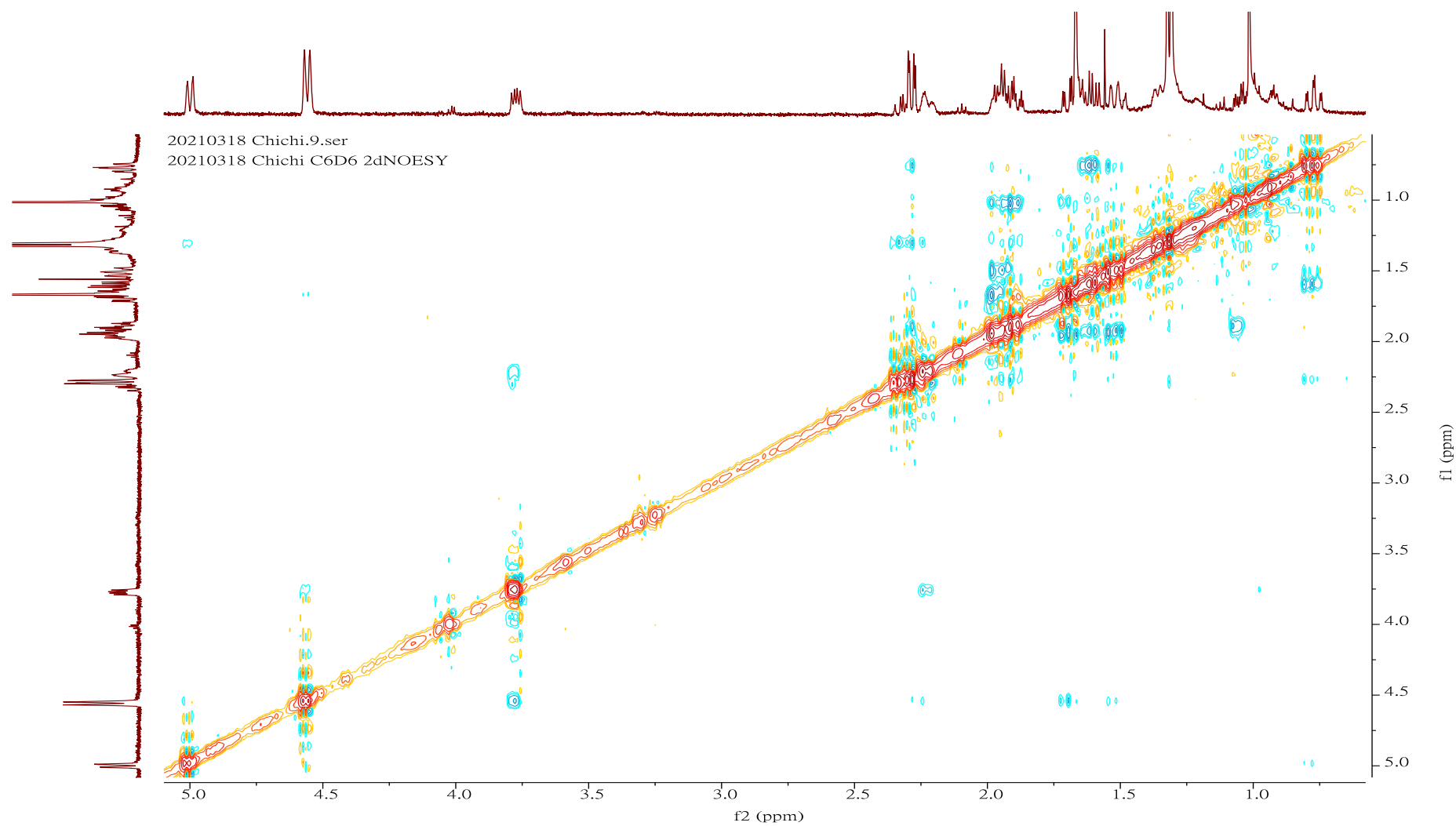


Figure S20: NOESY spectrum of **1** in C<sub>6</sub>D<sub>6</sub>

## Spectroscopic data of cherbonolide N (2)

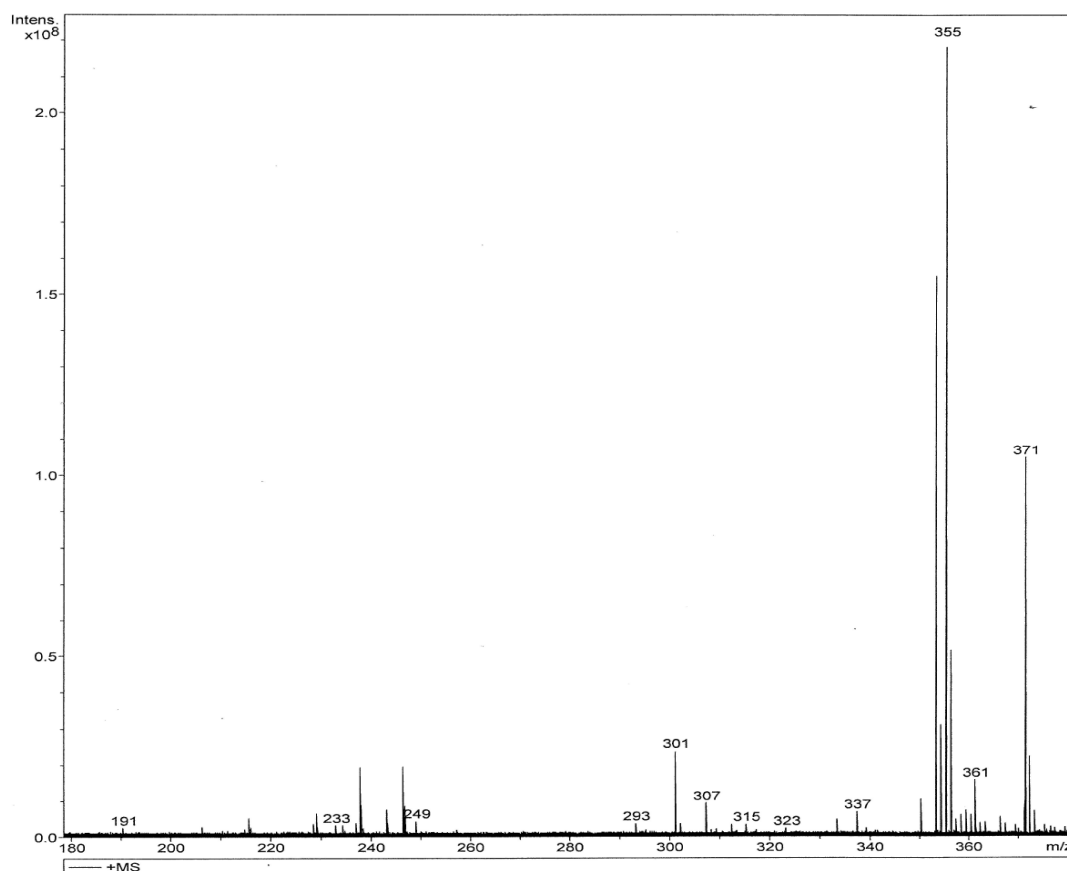
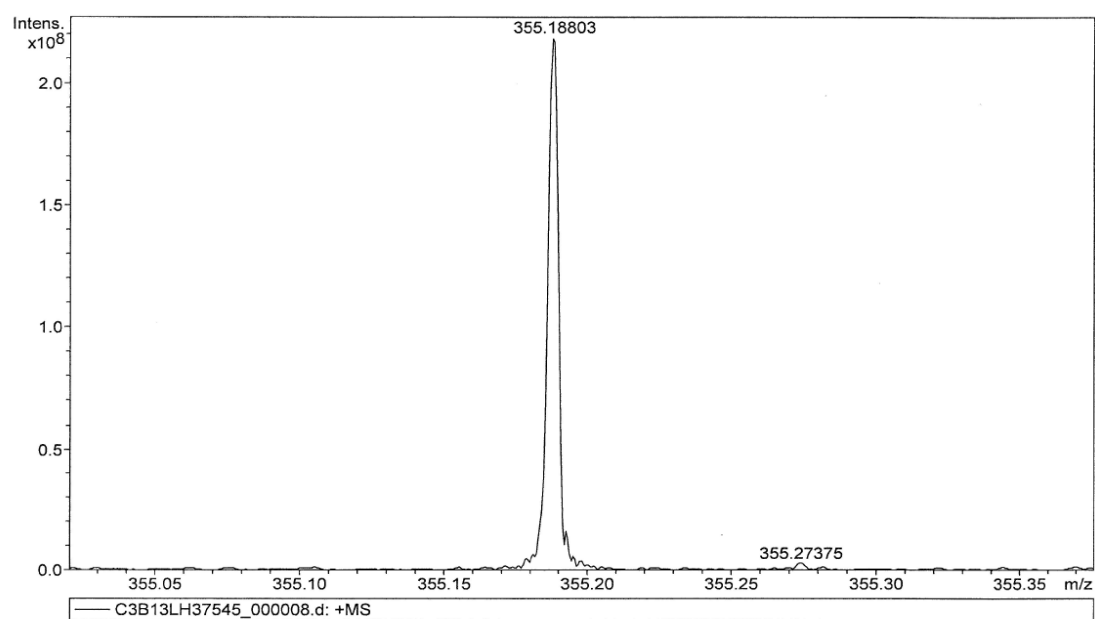


Figure S21: ESIMS spectrum of 2



Meas. m/z	#	Formula	Score	m/z	err [mDa]	err [ppm]	mSigma	rdB	e <sup>-</sup> Conf	N-Rule
355.18803	1	C <sub>20</sub> H <sub>28</sub> NaO <sub>4</sub>	100.00	355.18798	-0.05	-0.15	12.4	6.5	even	ok

Figure S22: HRESIMS spectrum of 2

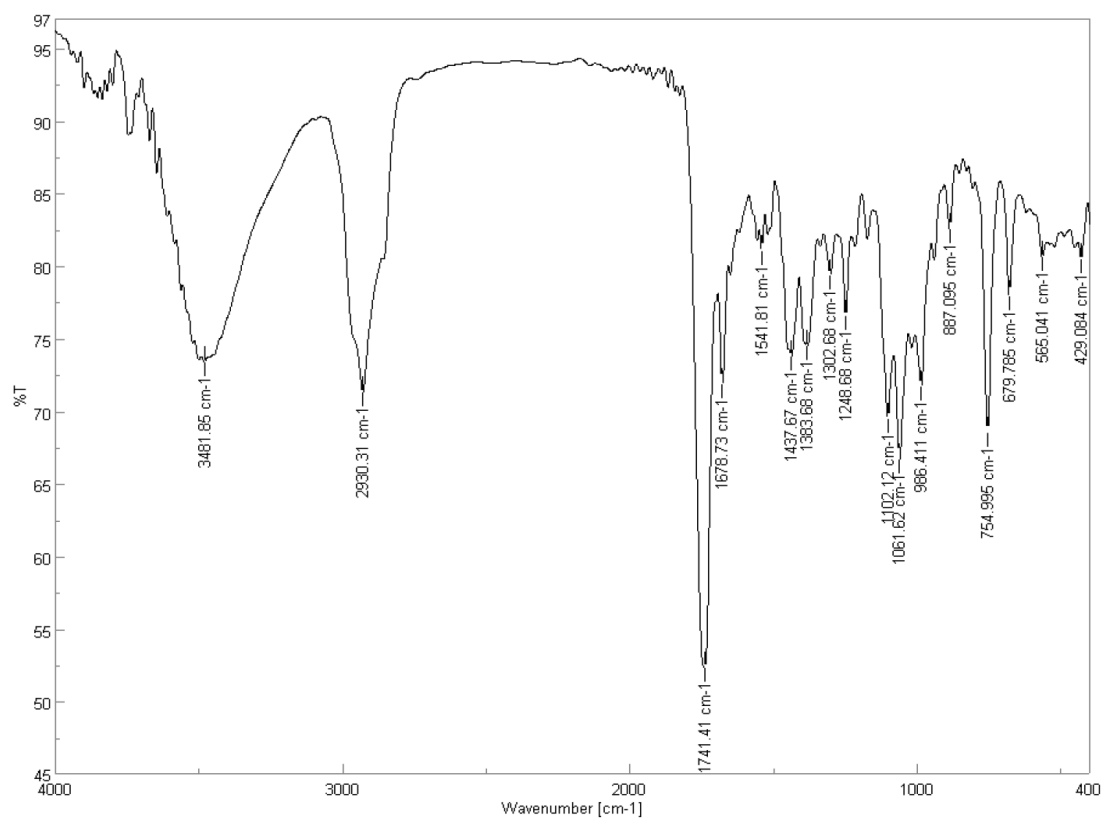


Figure S23: IR spectrum of **2**

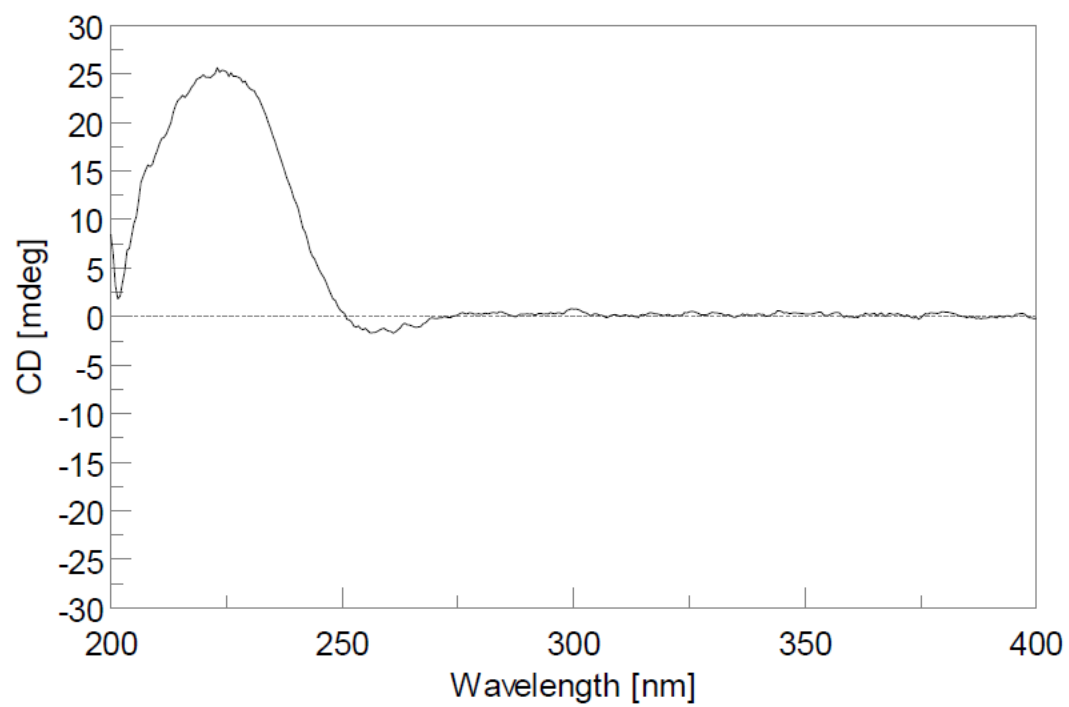


Figure S24: CD spectrum ( $1.2 \times 10^{-4}$  M, MeOH) of **2**

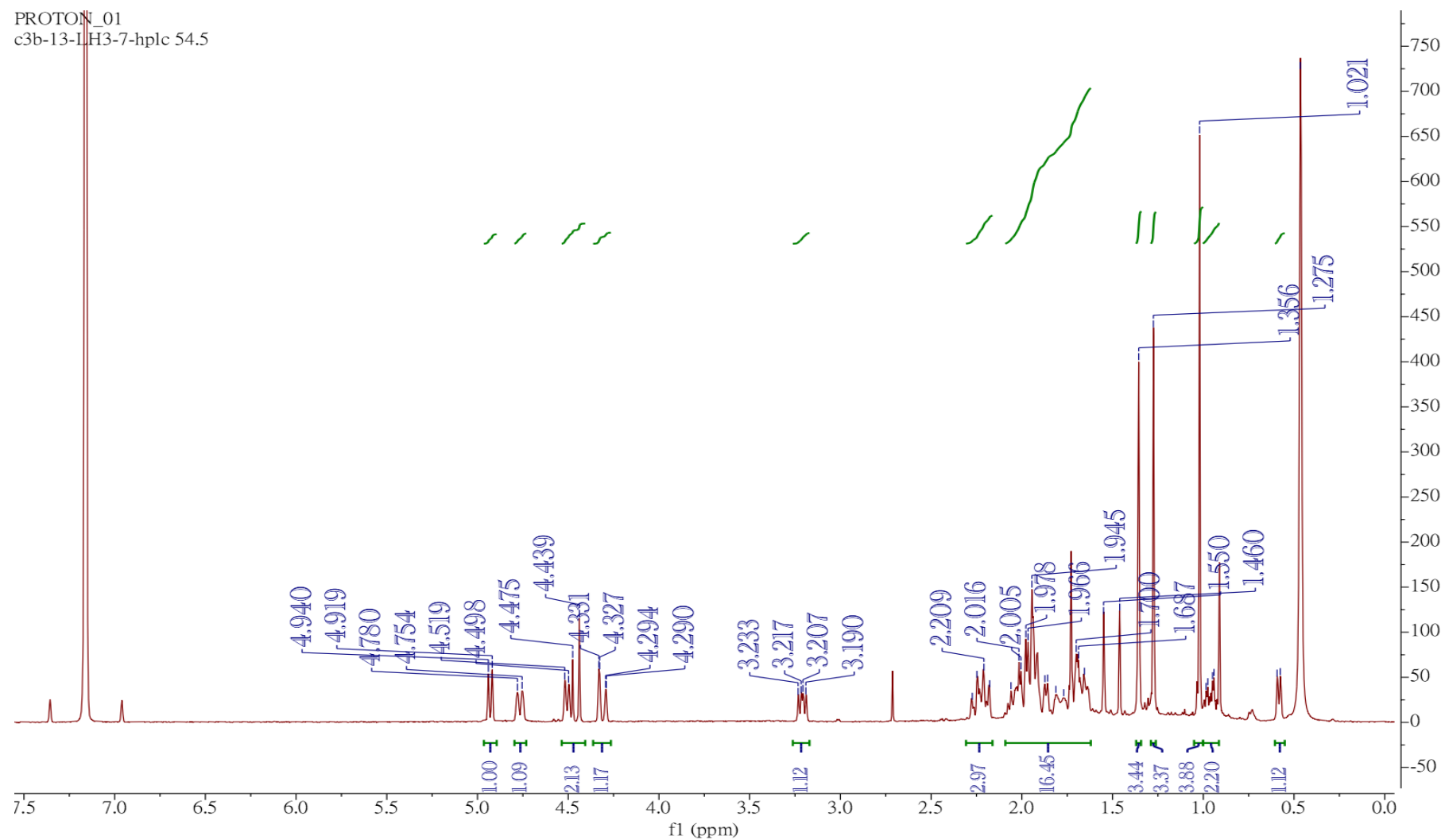


Figure S25:  $^1\text{H}$  NMR spectrum of **2** in  $\text{C}_6\text{D}_6$  at 400 MHz



PROTON\_01  
c3b-13-LH3-7-hplc 54.5

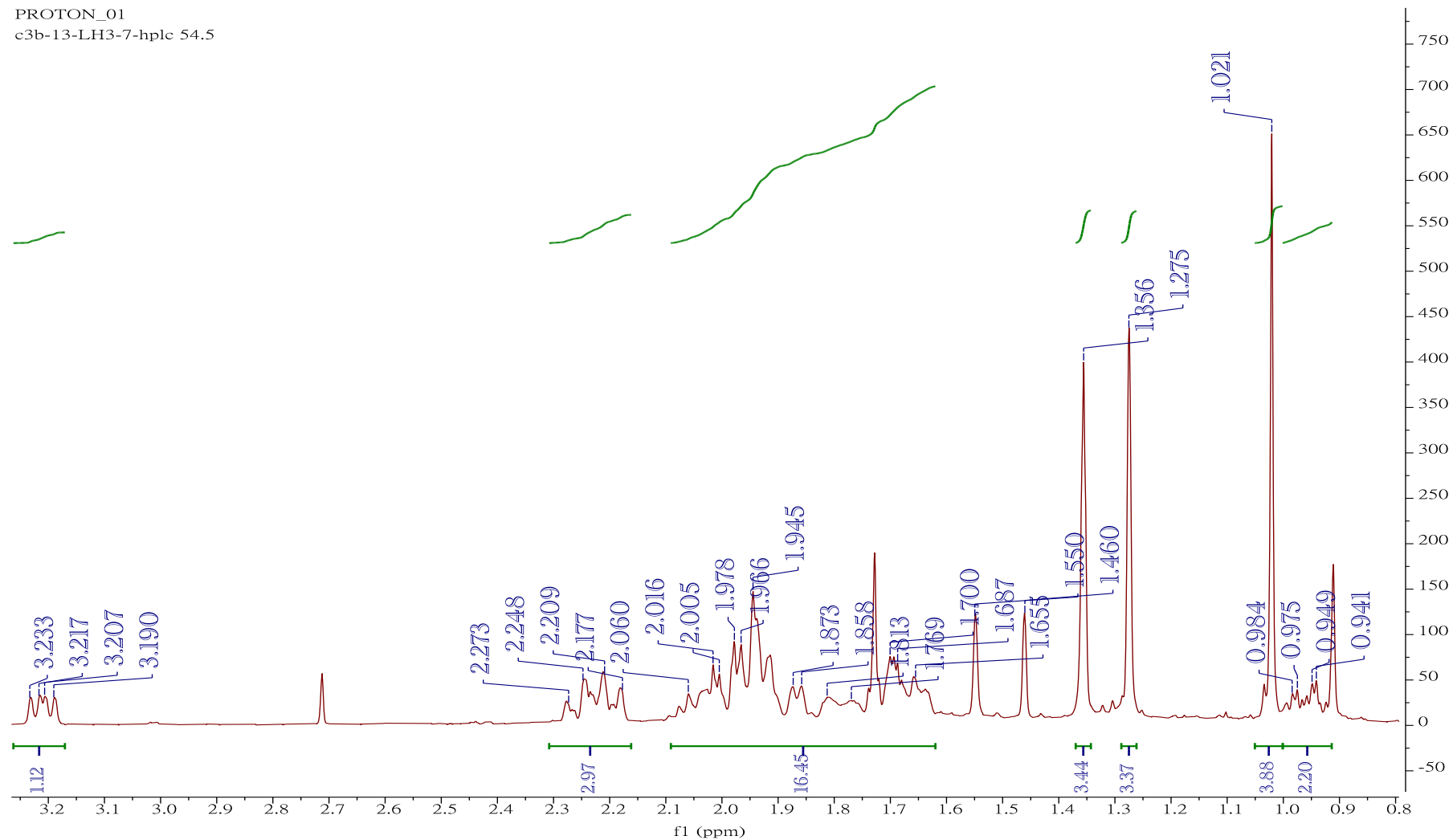


Figure S26:  $^1\text{H}$  NMR spectrum (from 0.8 to 3.2 ppm) of **2** in  $\text{C}_6\text{D}_6$  at 400 MHz

CARBON\_01  
c3b-13-LH3-7-hplc 54.5

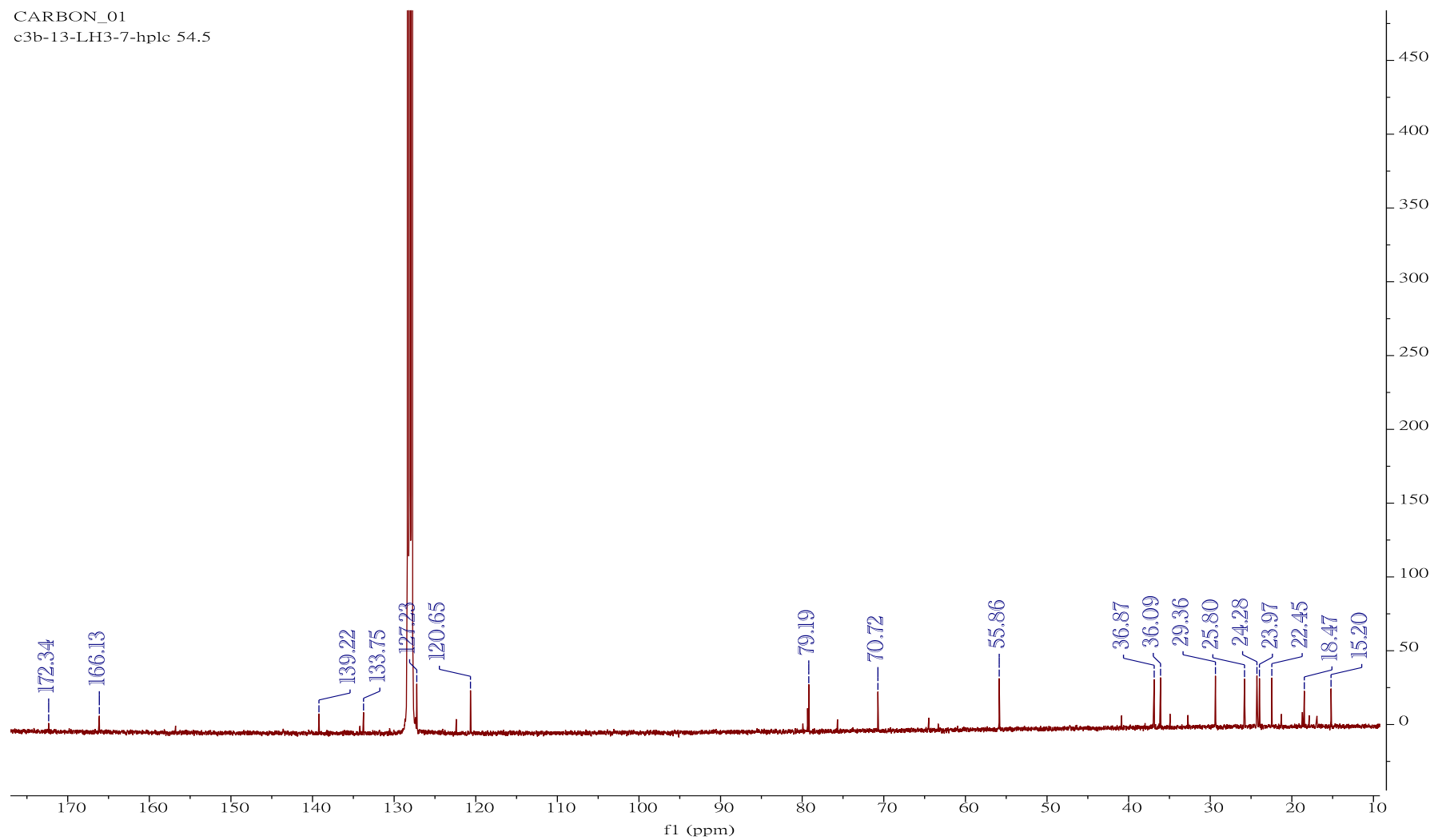


Figure S27: <sup>13</sup>C NMR spectrum of **2** in C<sub>6</sub>D<sub>6</sub> at 100 MHz

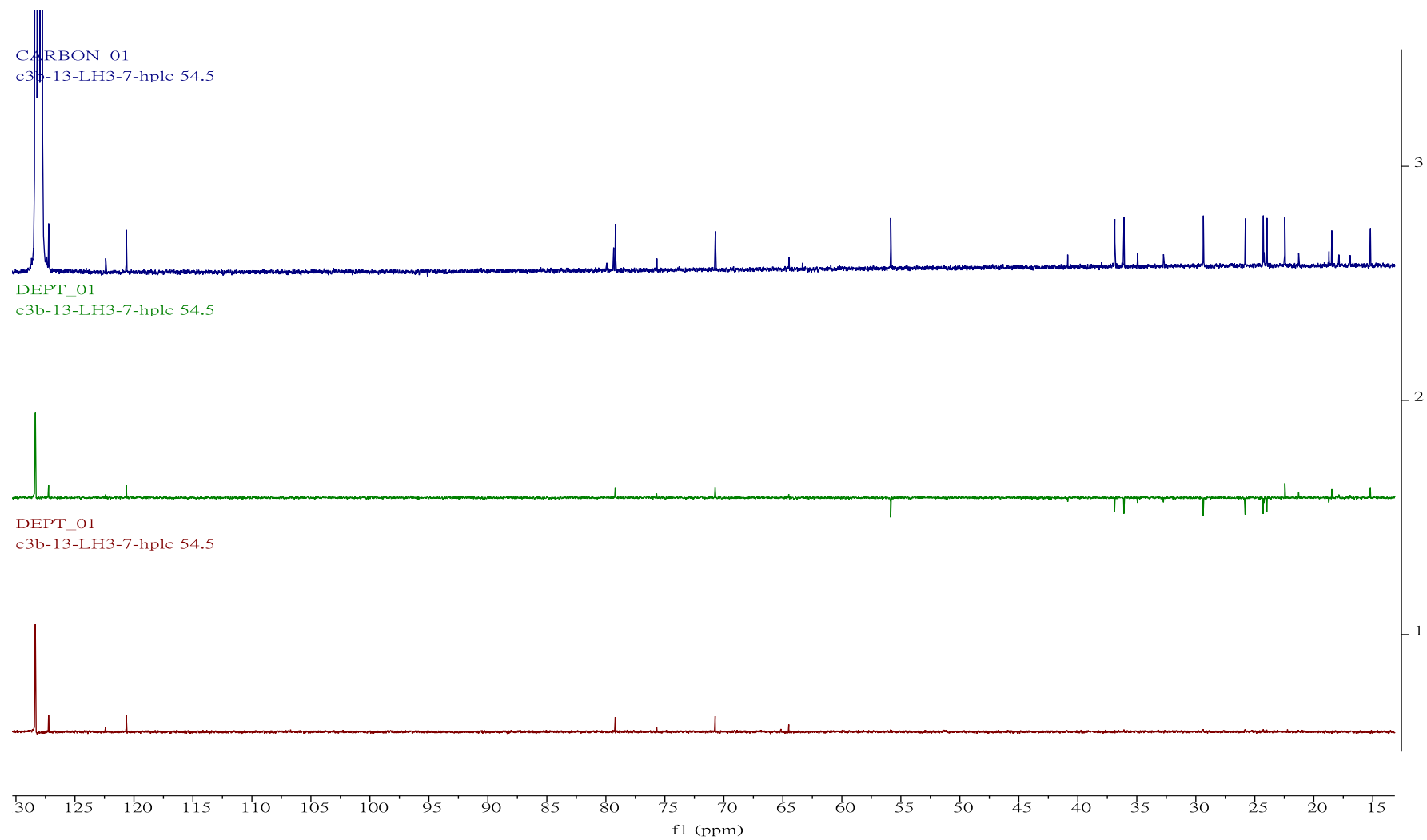


Figure S28: DEPT spectrum of 2

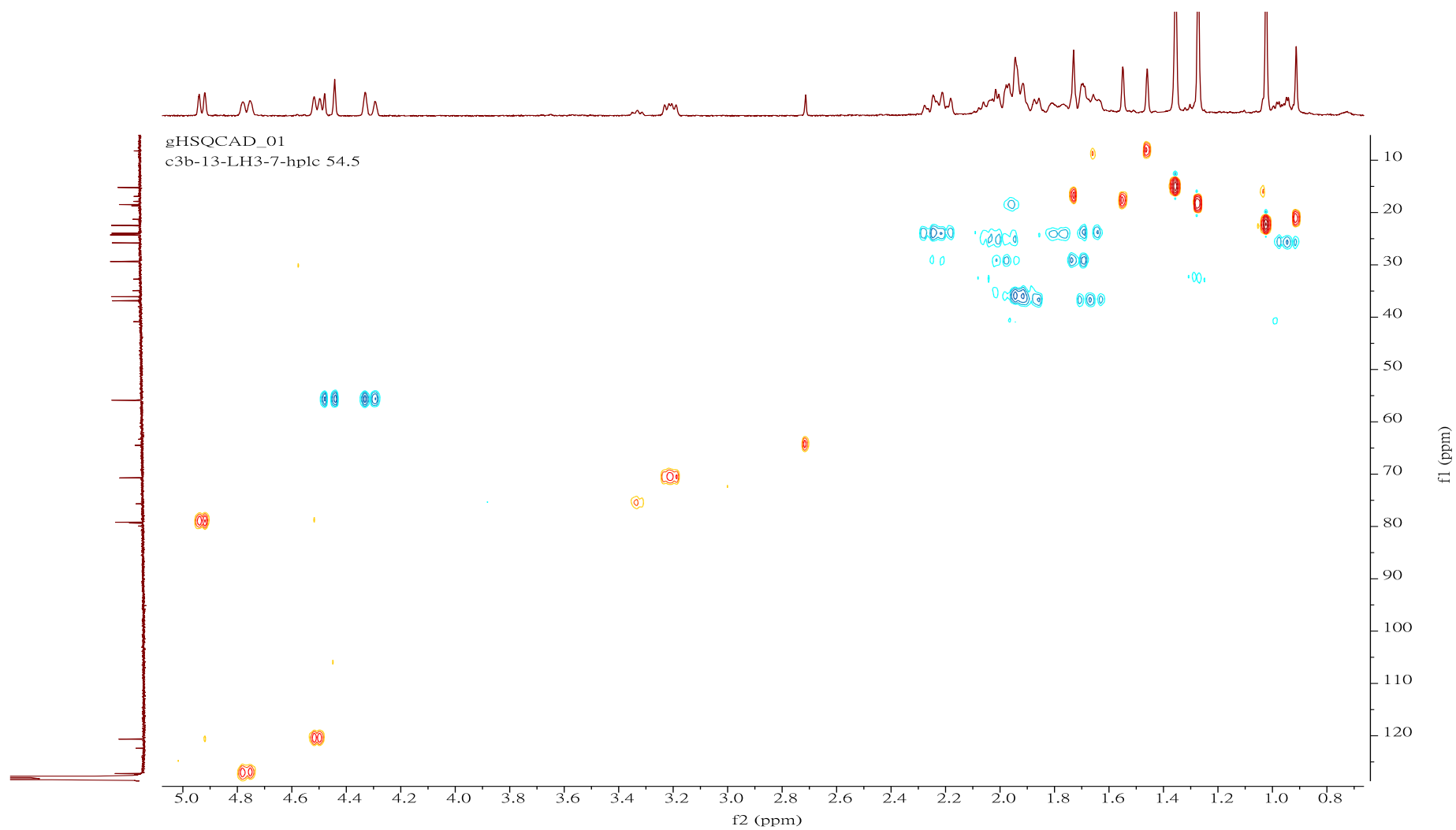


Figure S29: HSQC spectrum of **2**



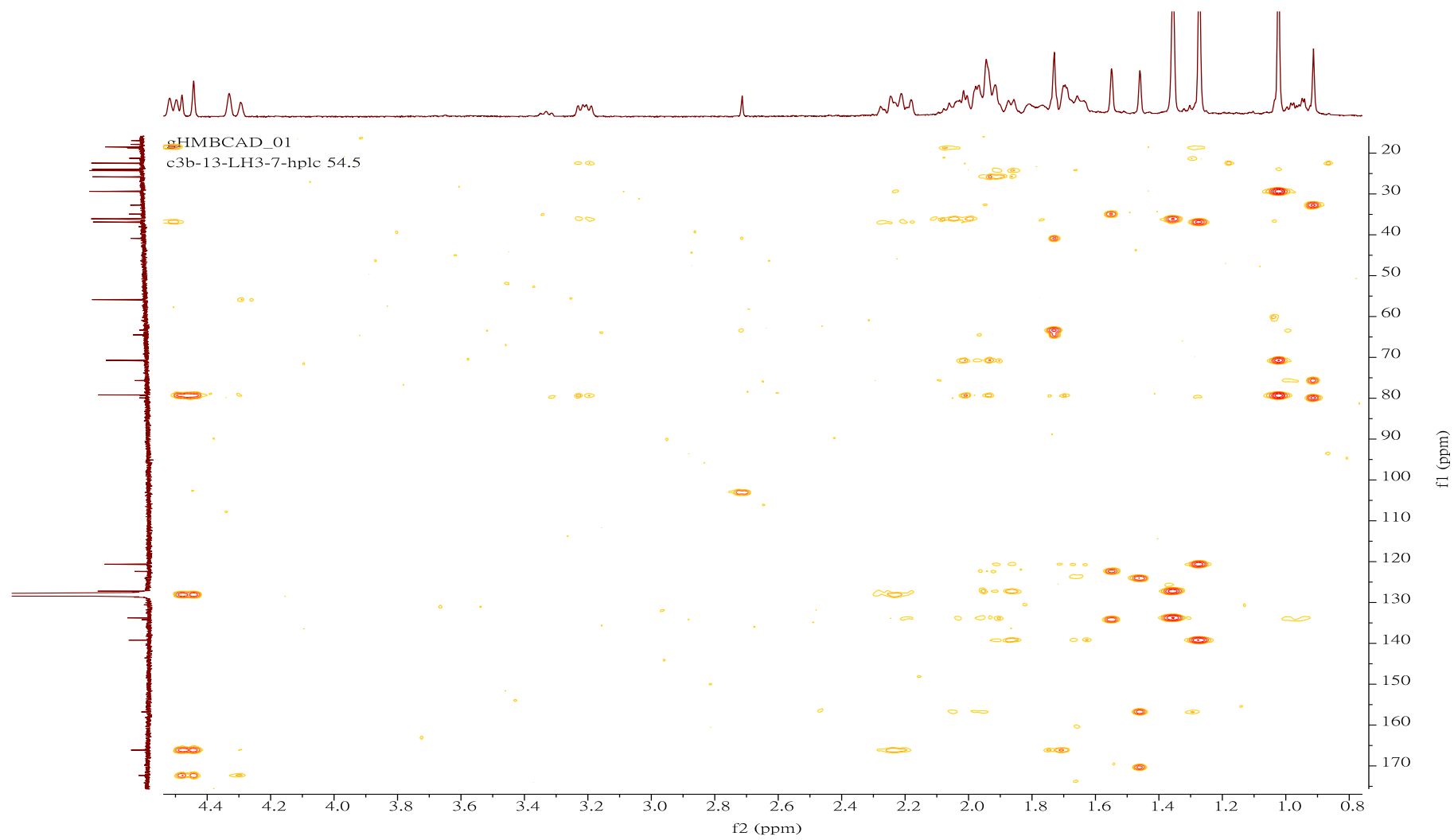


Figure S31: HMBC spectrum of **2**

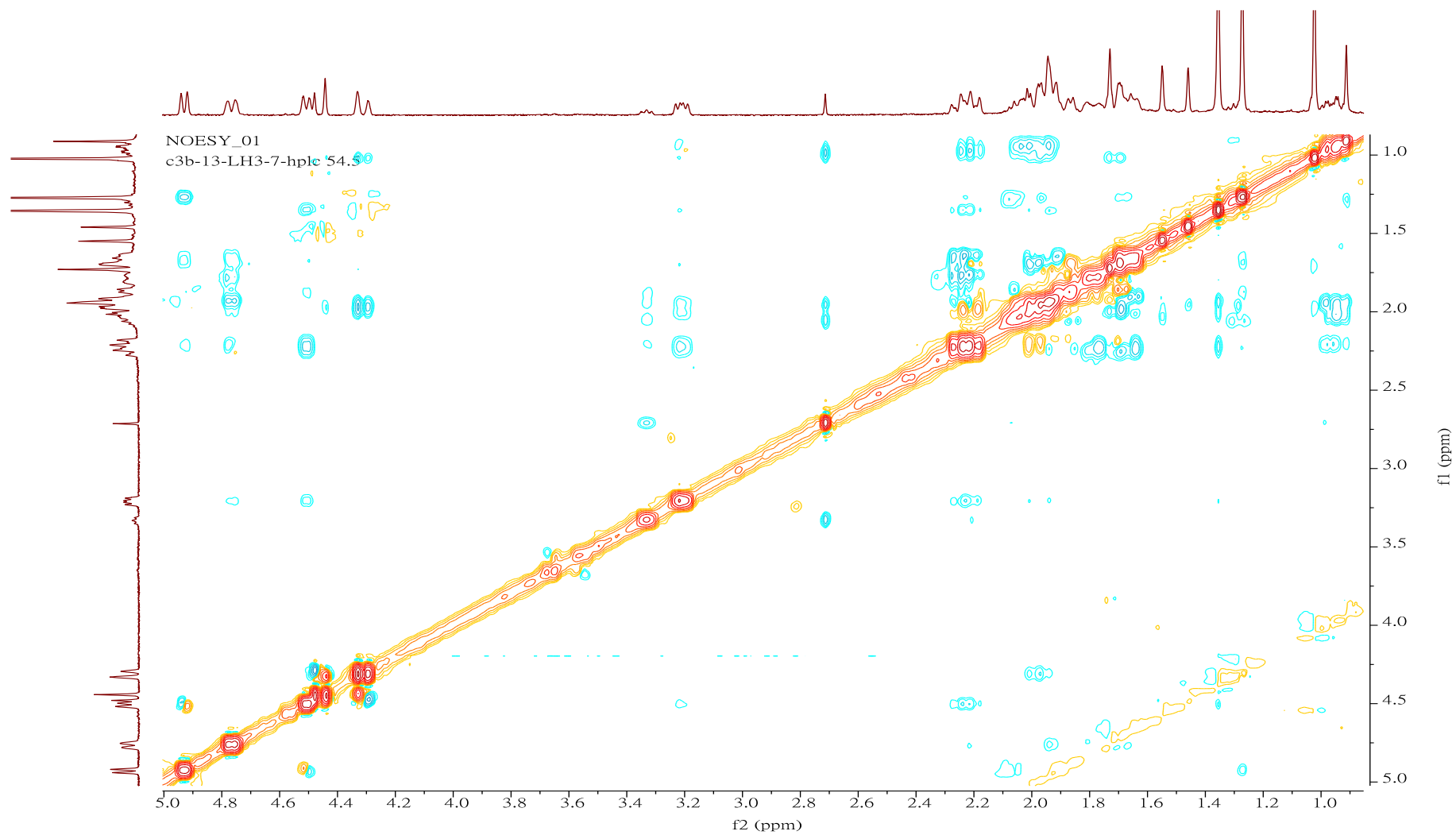


Figure S32: NOESY spectrum of **2**

### Spectroscopic data of isosarcophine (3)

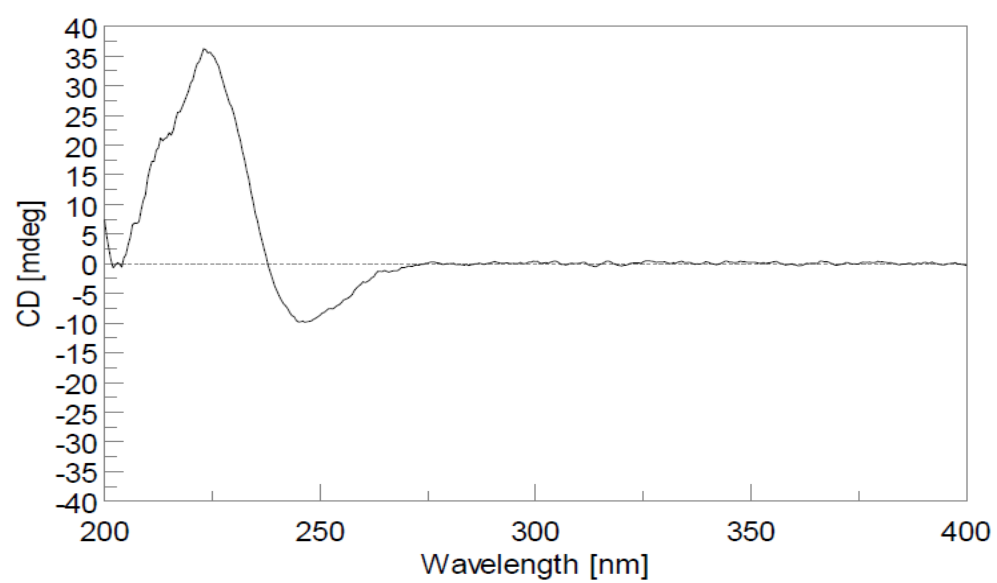


Figure S33: CD spectrum ( $1.6 \times 10^{-4}$  M, MeOH) of isosarcophine (3)