



## Supporting Information

for

### **New terpenoids from the fermentation broth of the edible mushroom *Cyclocybe aegerita***

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**$^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of compound 1 and  $^1\text{H}$ ,  $^{13}\text{C}$ , COSY, ROESY, HSQC and HMBC NMR spectra of compounds 2–4**

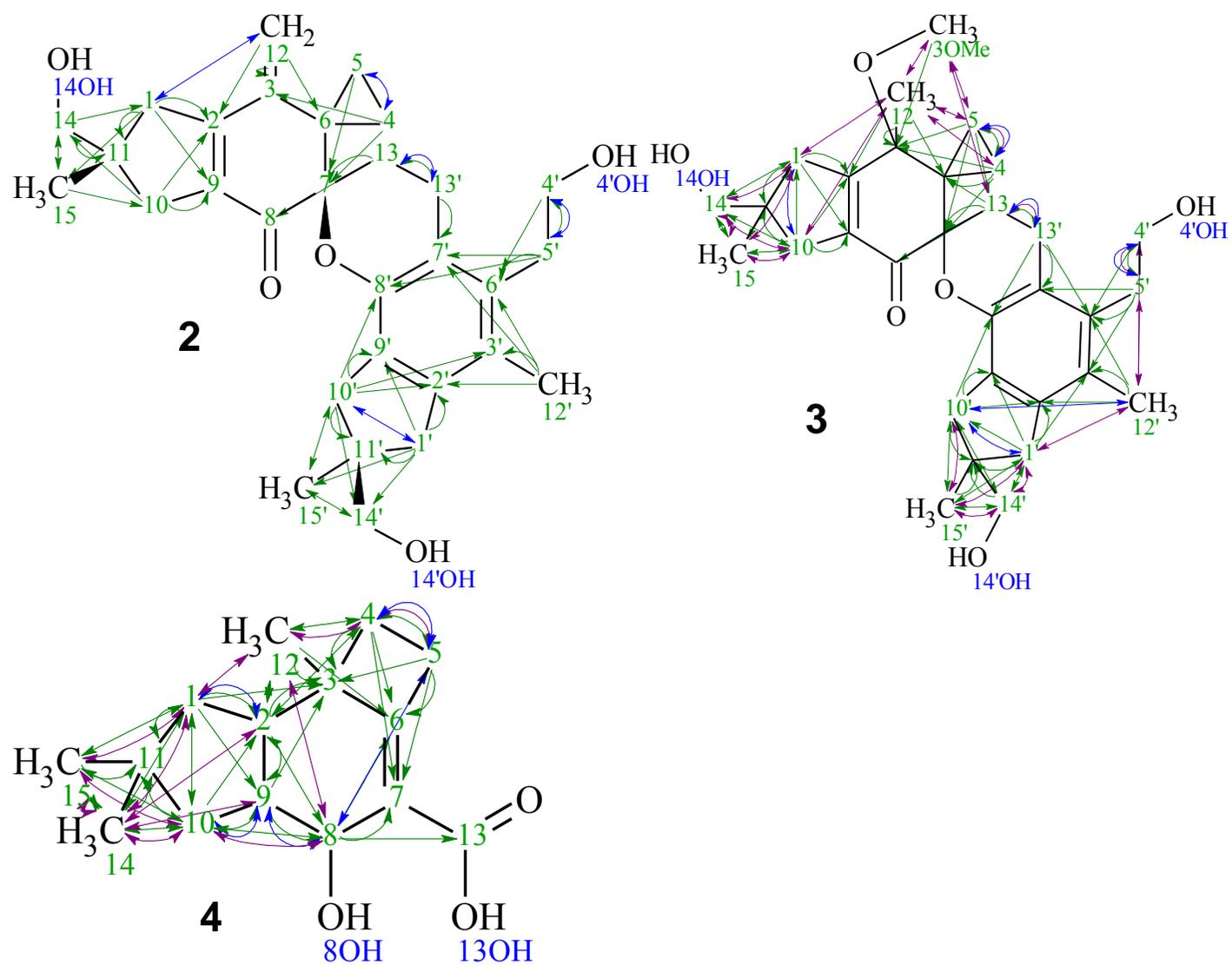


Figure S1. COSY (blue arrows), HMBC (green arrows) and ROESY (violet arrows) correlations indicating the structures of **2–4**.

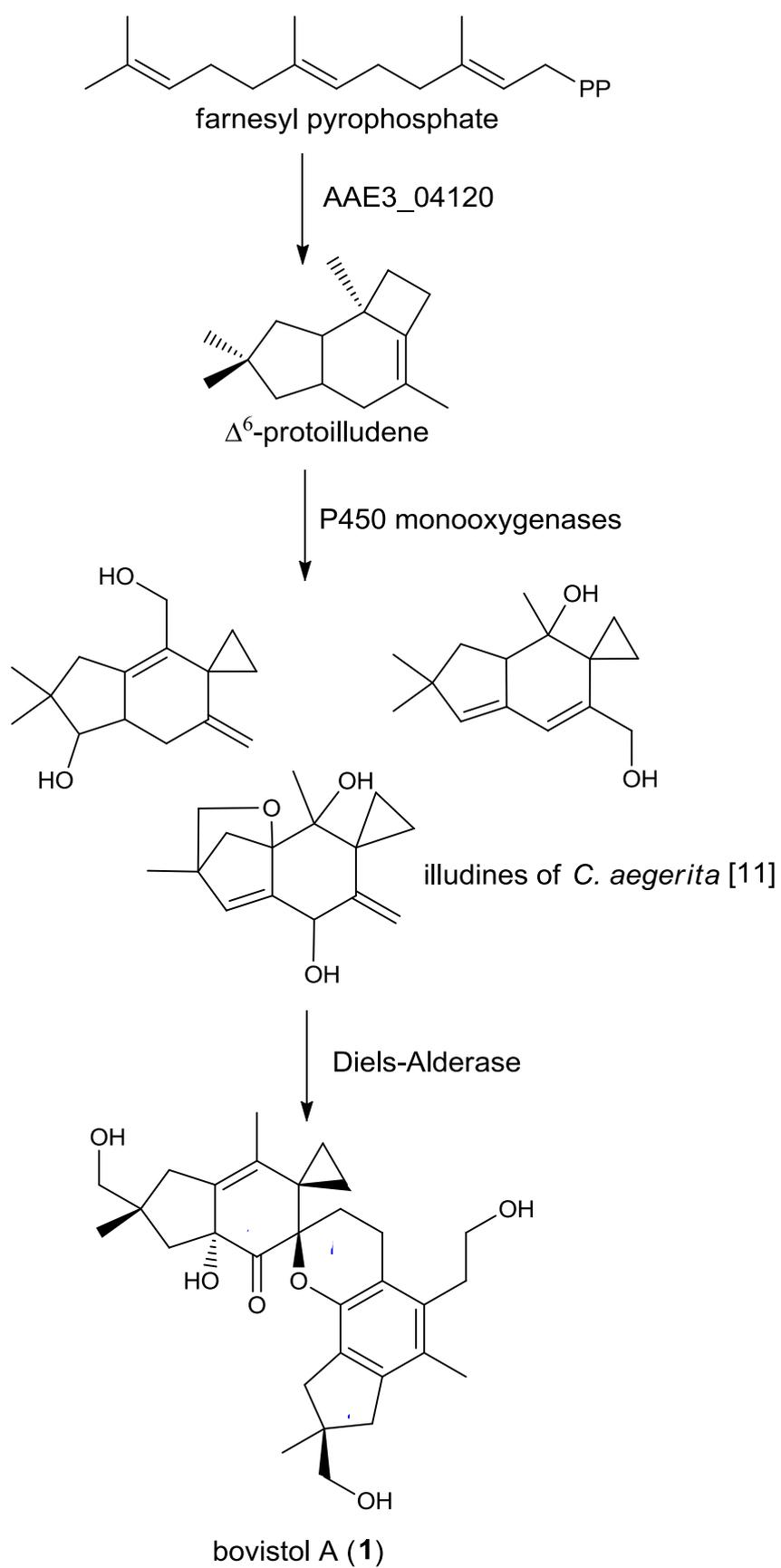
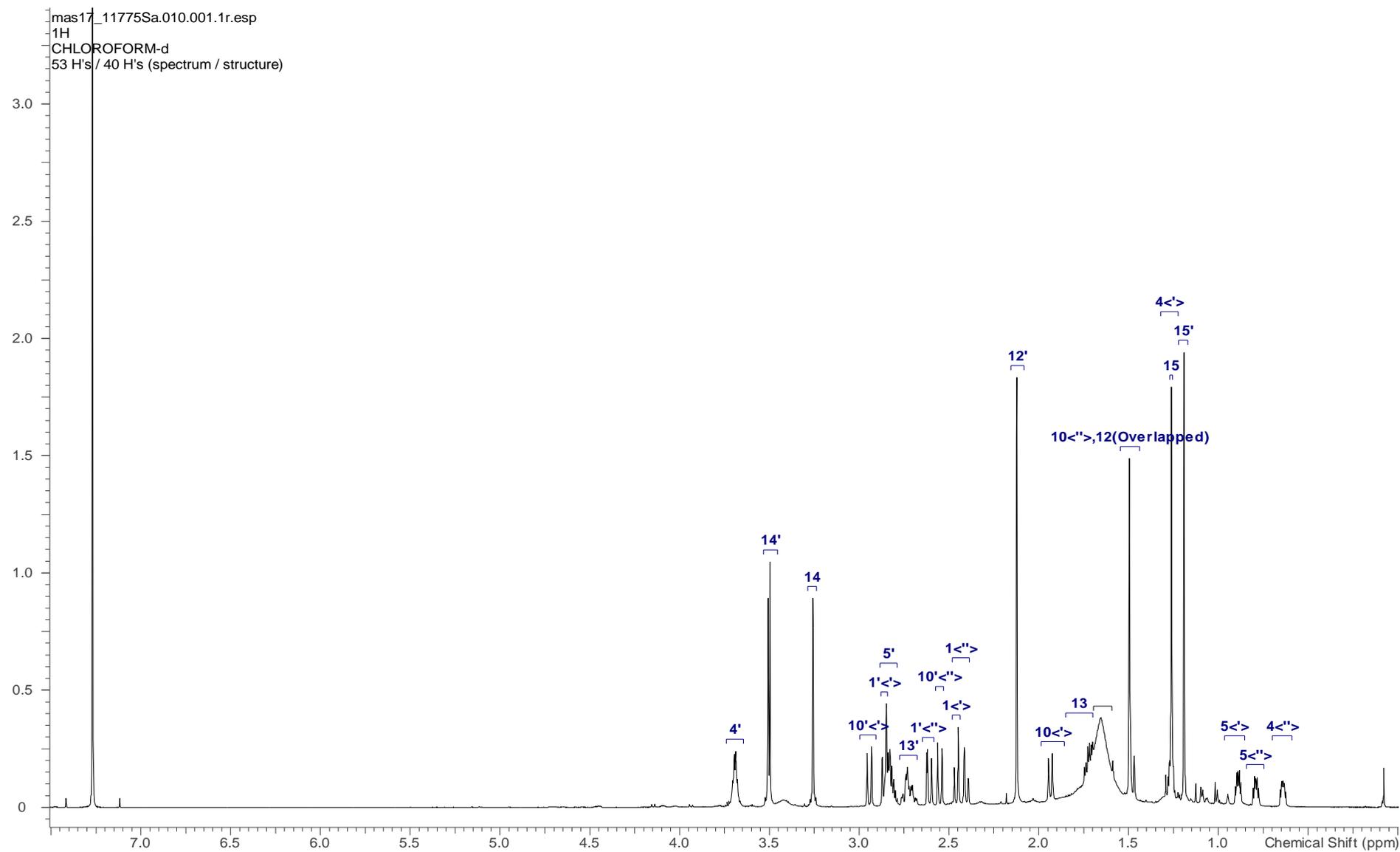
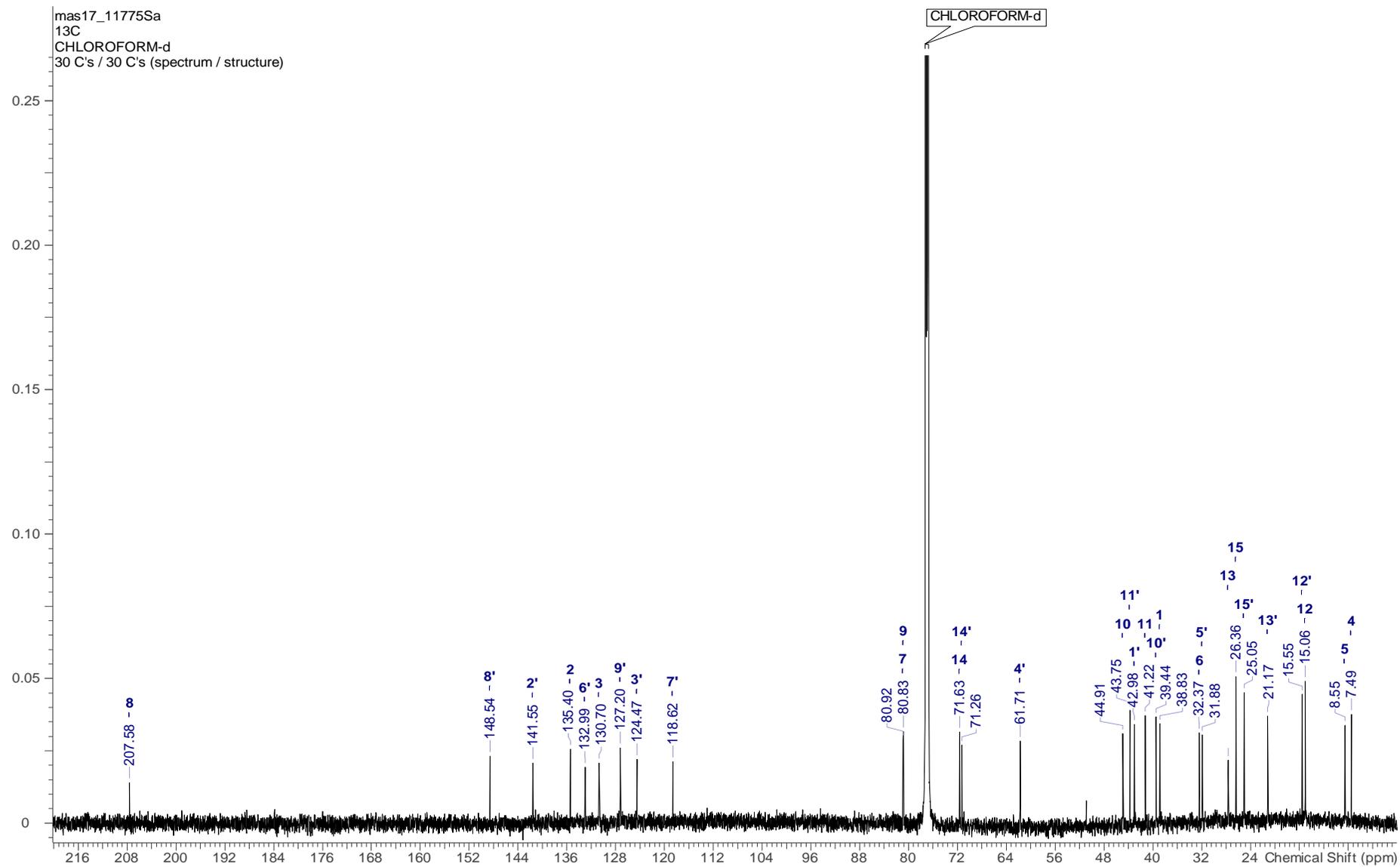


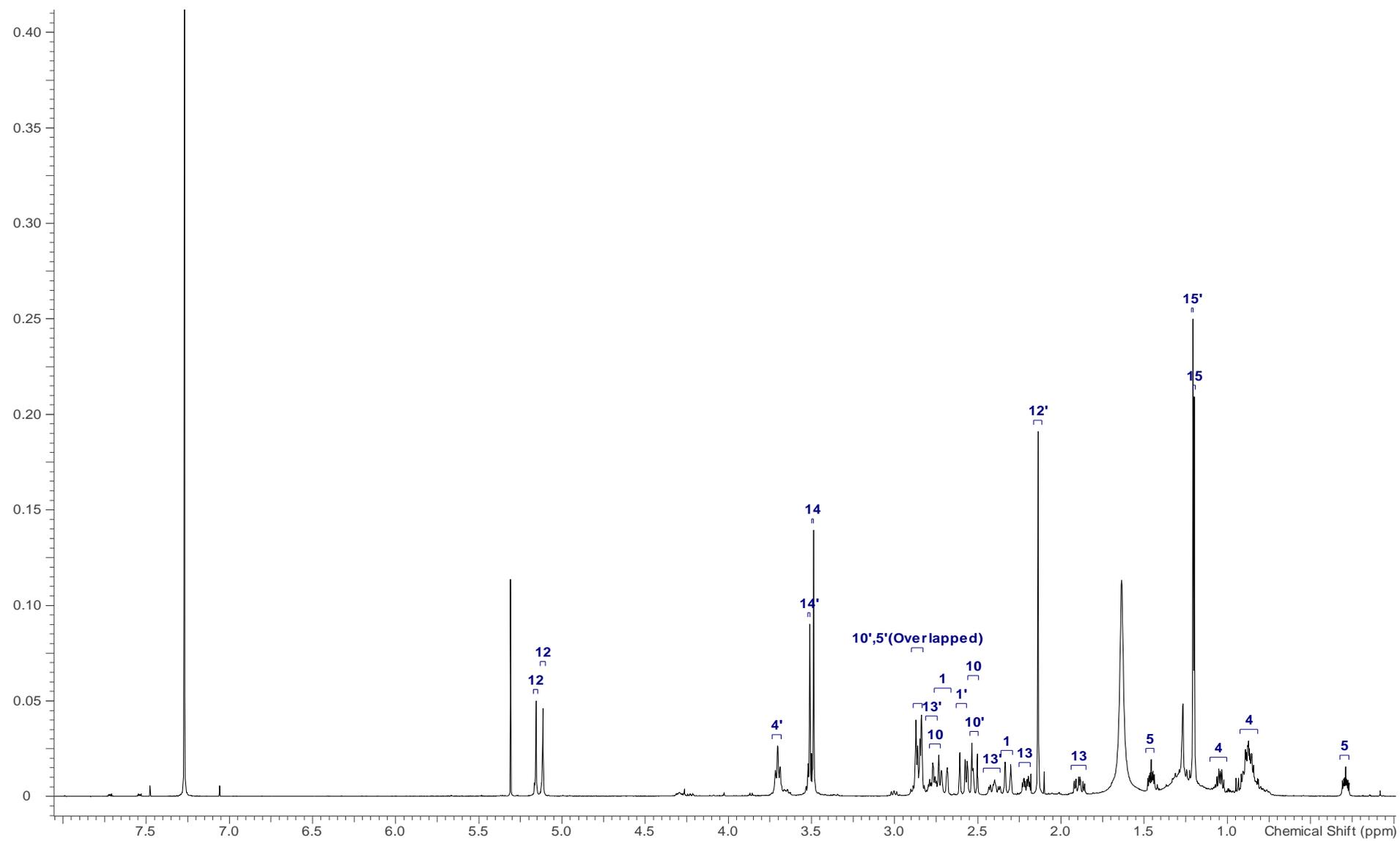
Figure S2. Proposed pathway for production of **1** in *C. aegerita*.



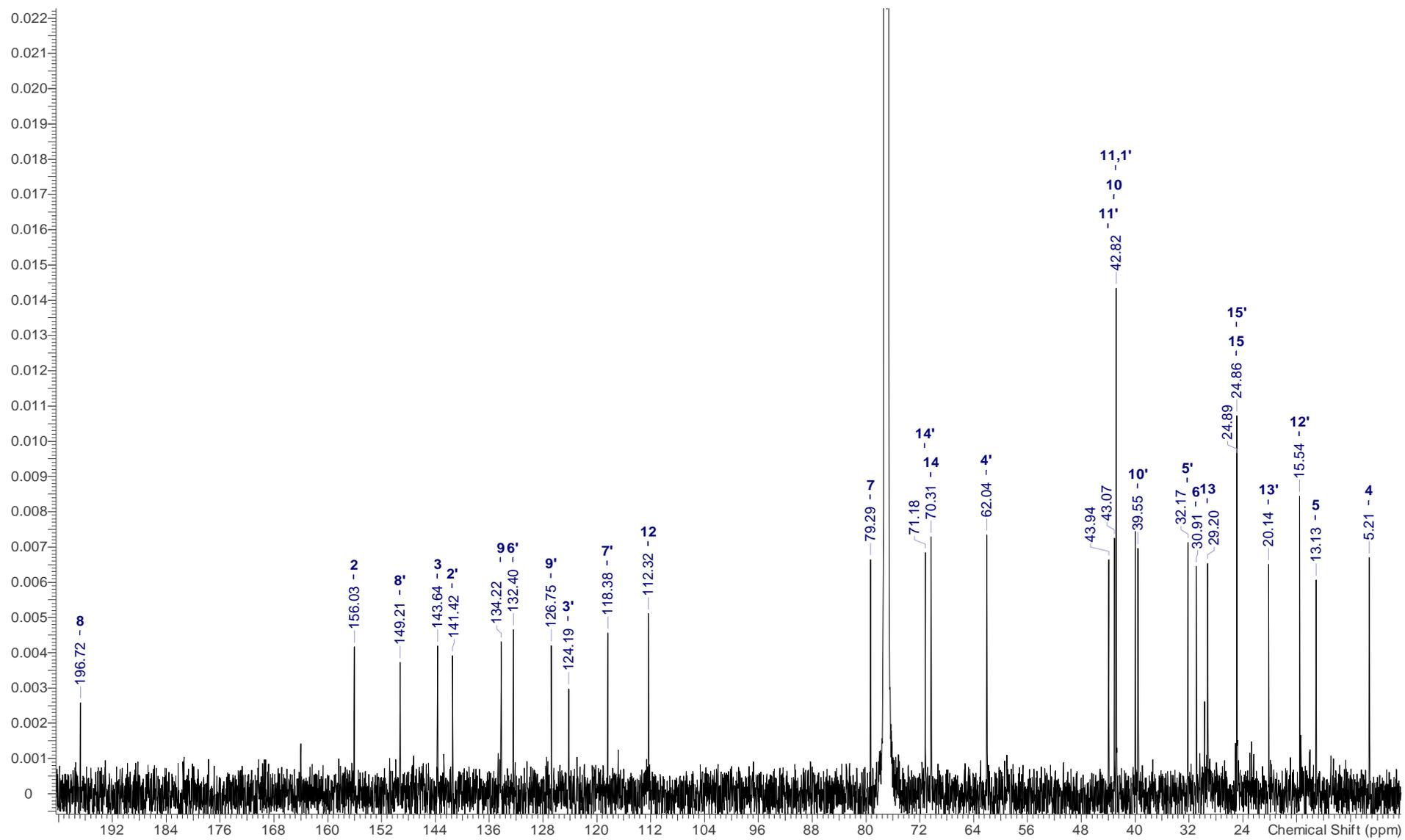
$^1\text{H}$  NMR spectrum of **1** (700 MHz,  $\text{CDCl}_3$ ).



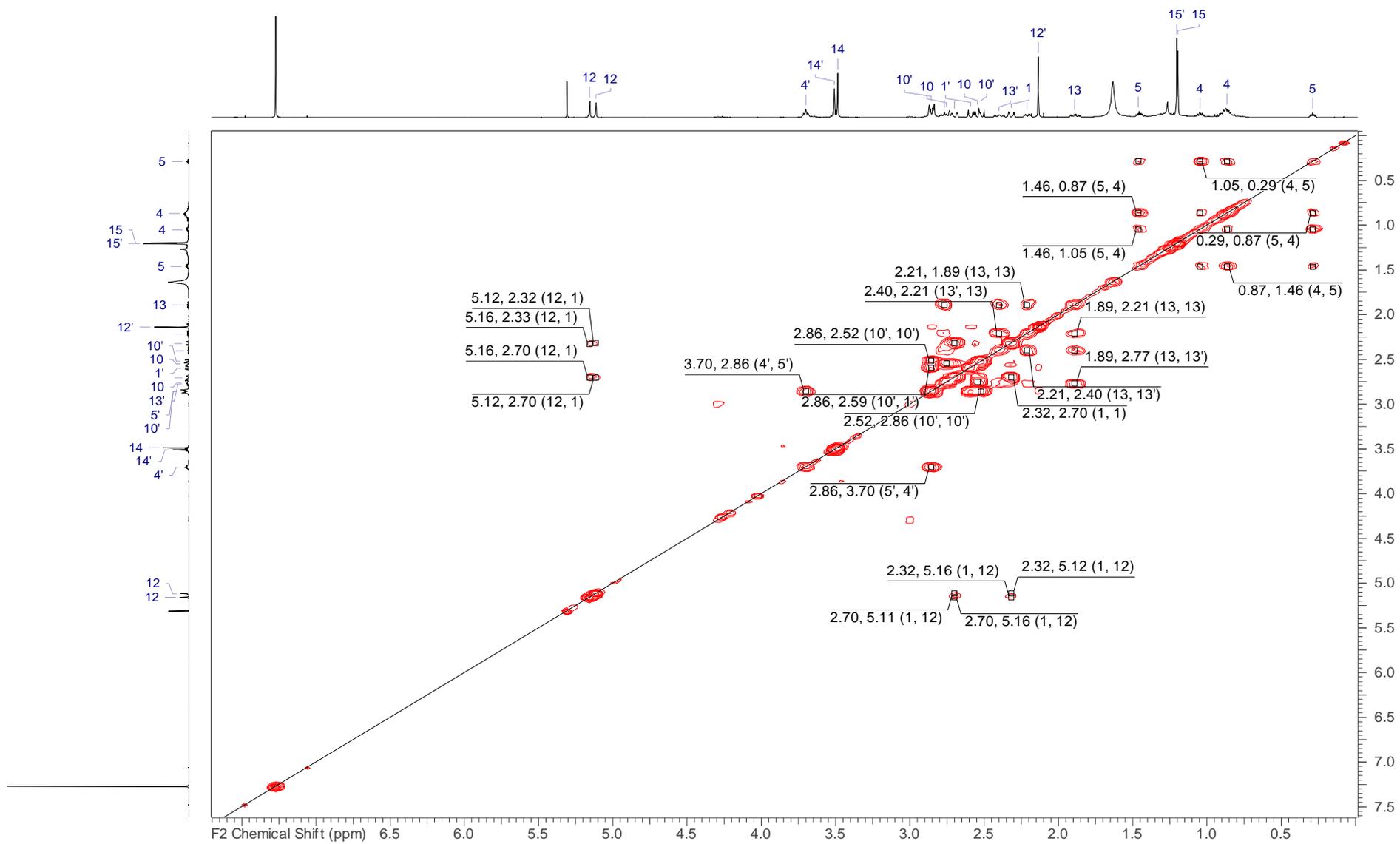
<sup>13</sup>C NMR spectrum of **1** (175 MHz, CDCl<sub>3</sub>).



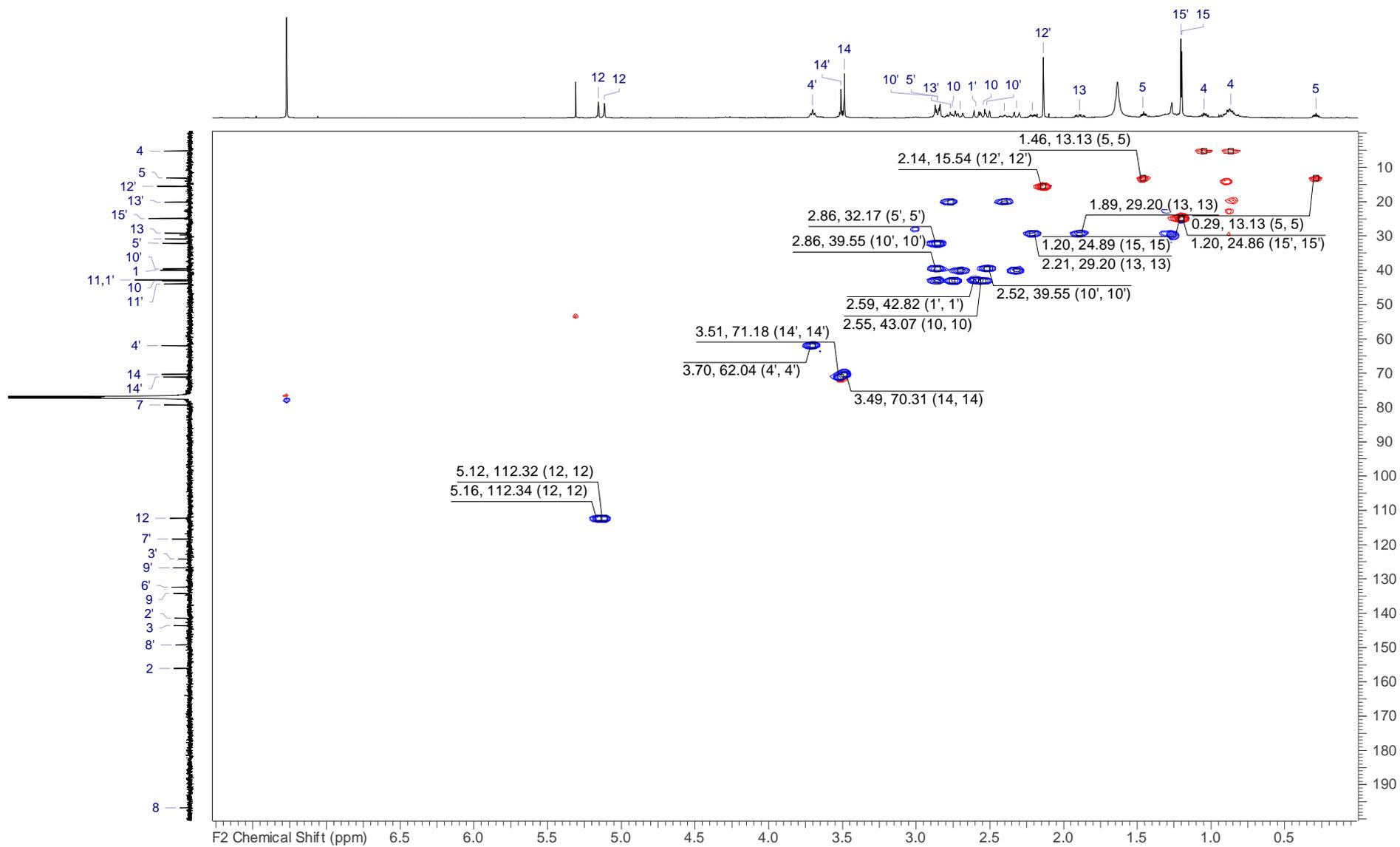
$^1\text{H}$  NMR spectrum of **2** (700 MHz,  $\text{CDCl}_3$ ).



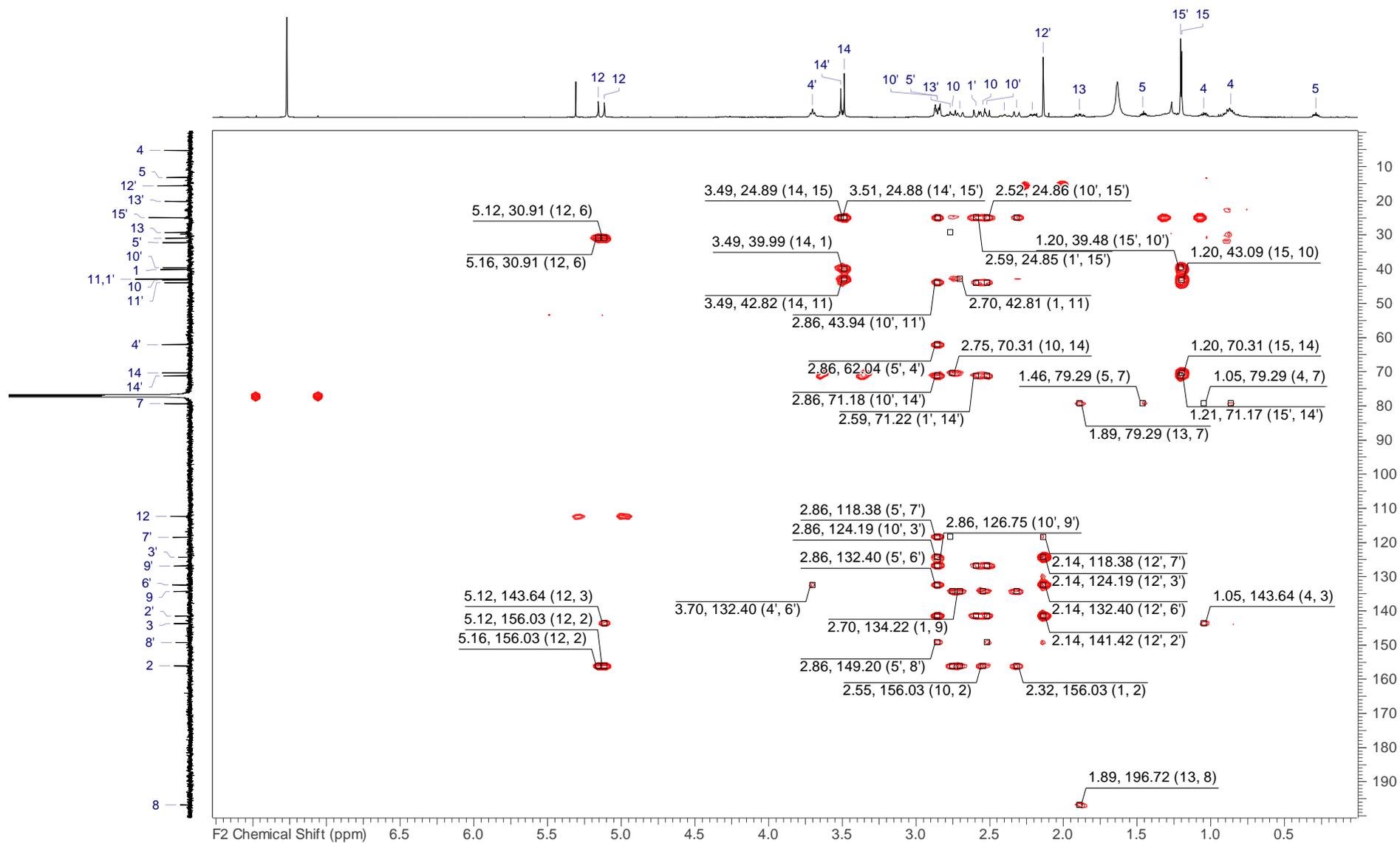
<sup>13</sup>C NMR spectrum of **2** (175 MHz, CDCl<sub>3</sub>).



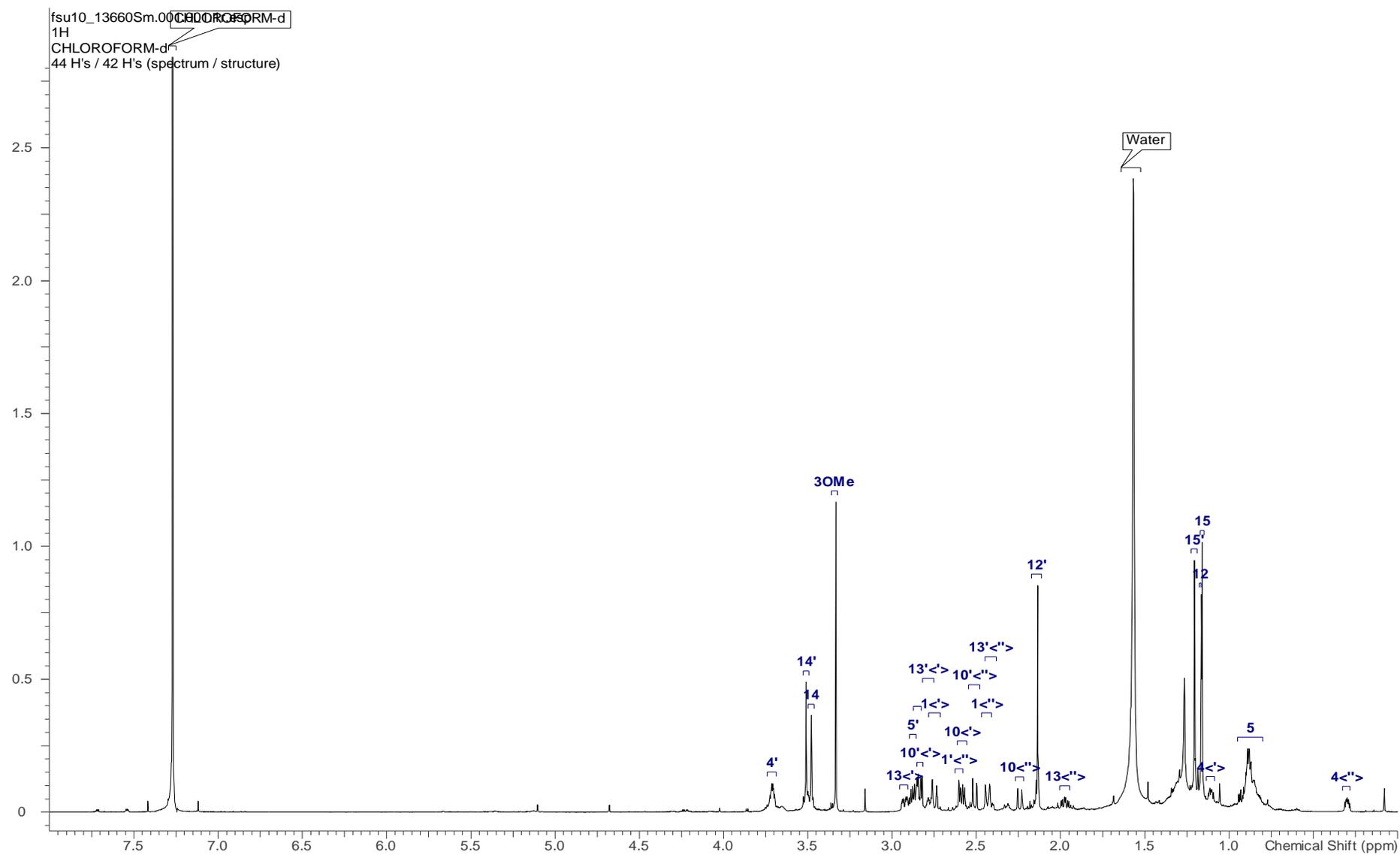
COSY NMR spectrum of **2** (700 MHz, CDCl<sub>3</sub>).



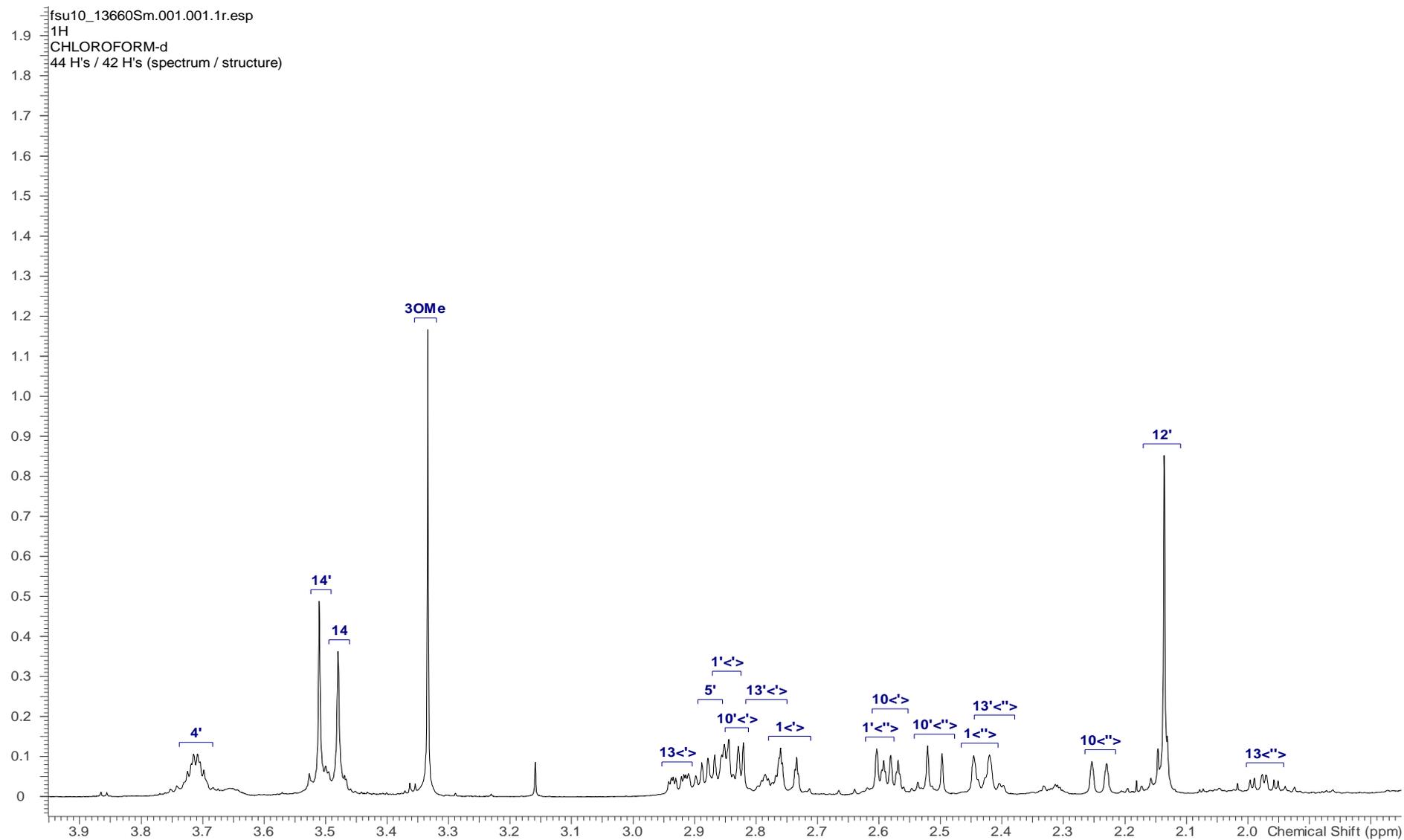
HSQC NMR spectrum of **2** (700 MHz, CDCl<sub>3</sub>).



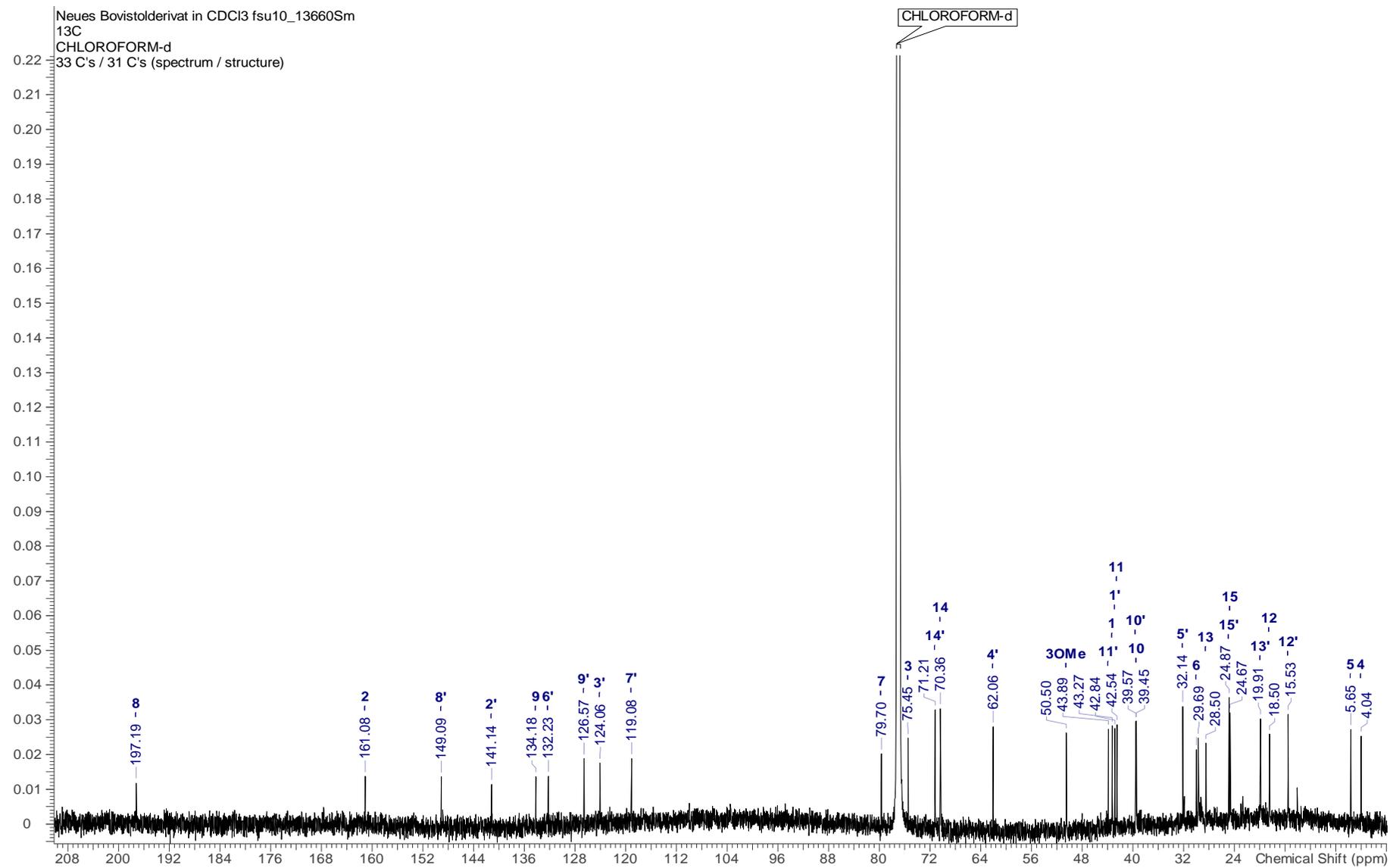
HMBC NMR spectrum of **2** (700 MHz,  $\text{CDCl}_3$ ).



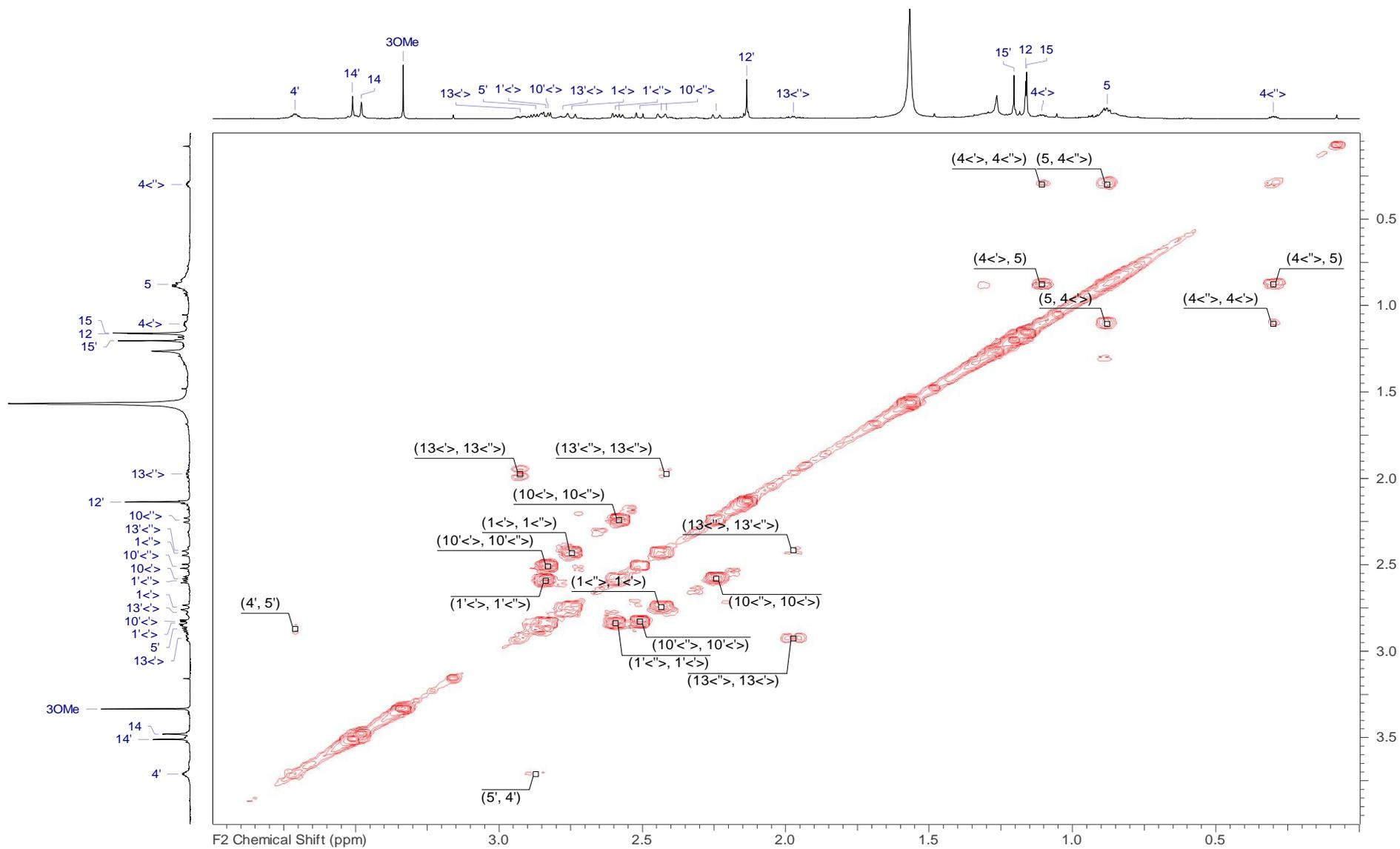
$^1\text{H}$  NMR spectrum of **3** (700 MHz,  $\text{CDCl}_3$ ).



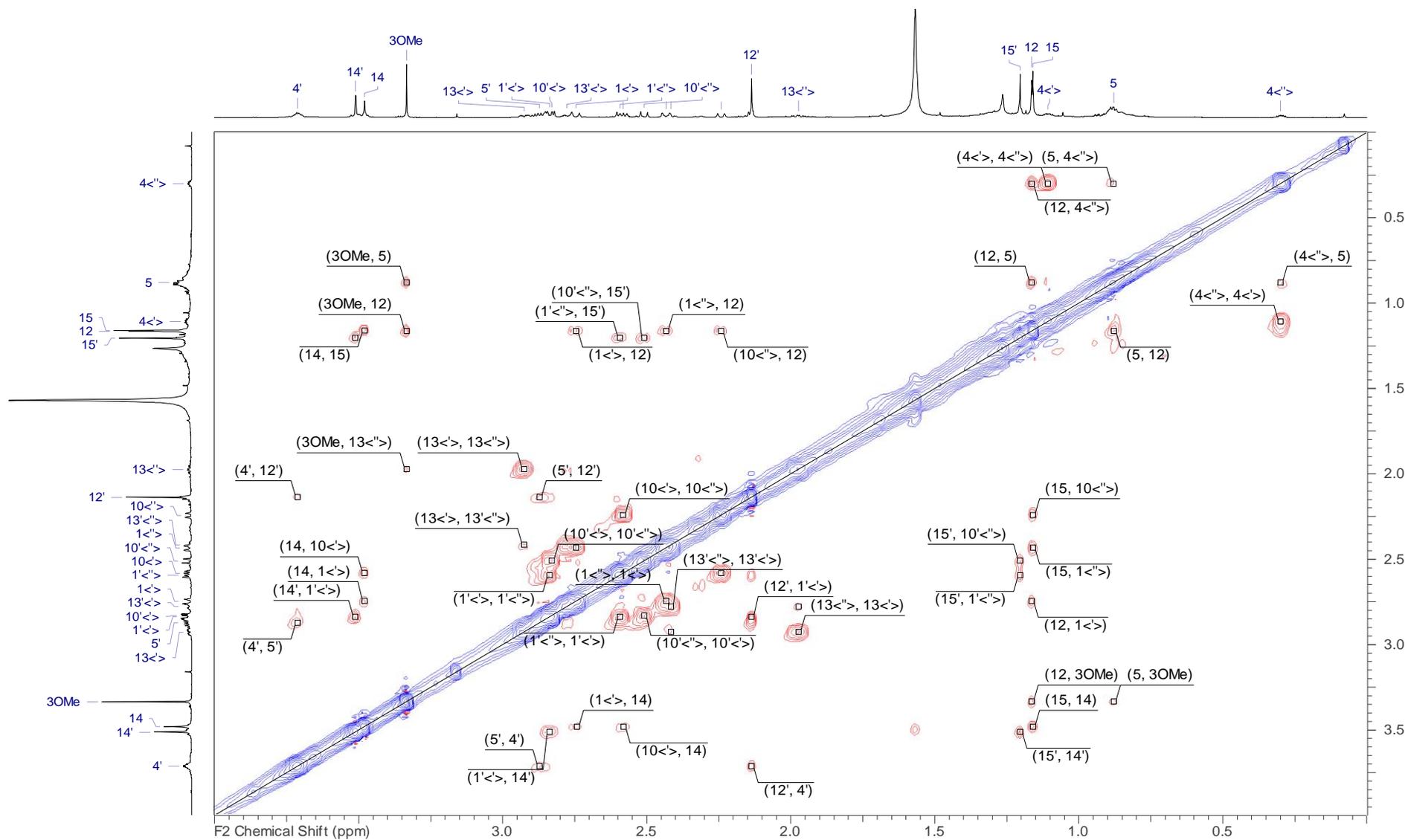
Section from <sup>1</sup>H NMR spectrum of **3** (700 MHz, CDCl<sub>3</sub>).



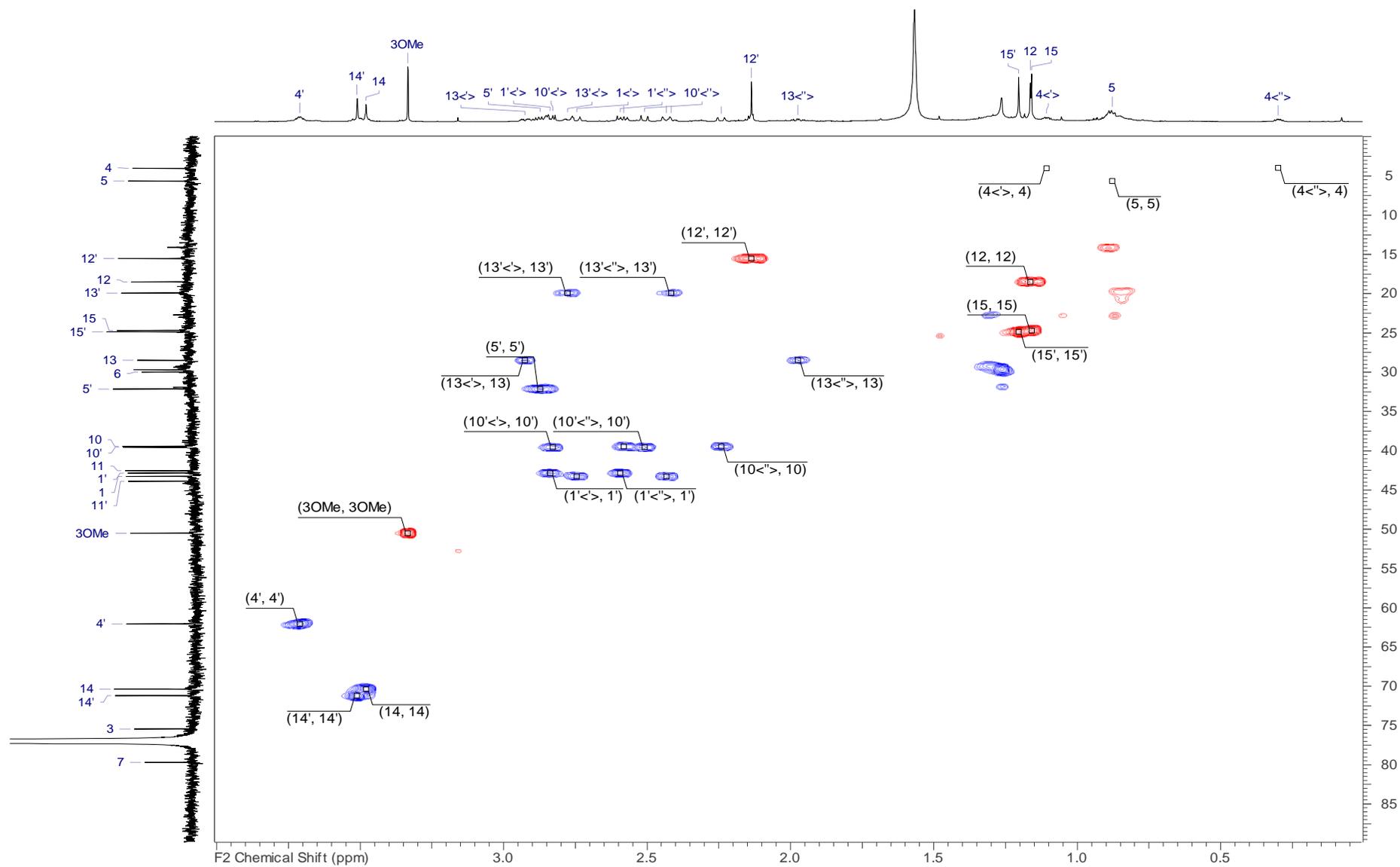
<sup>13</sup>C NMR spectrum of **3** (175 MHz, CDCl<sub>3</sub>).



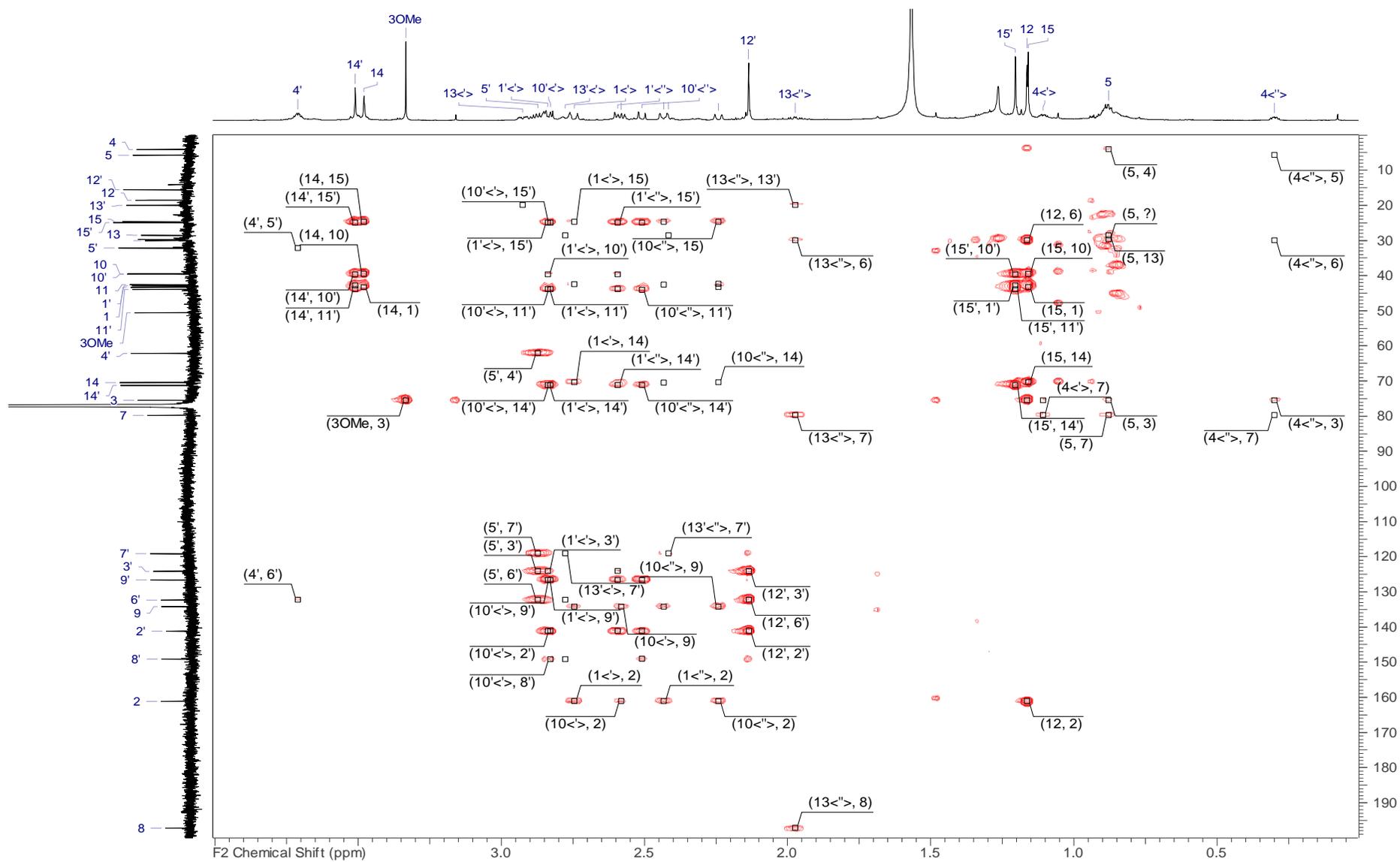
COSY NMR spectrum of **3** (700 MHz, CDCl<sub>3</sub>).



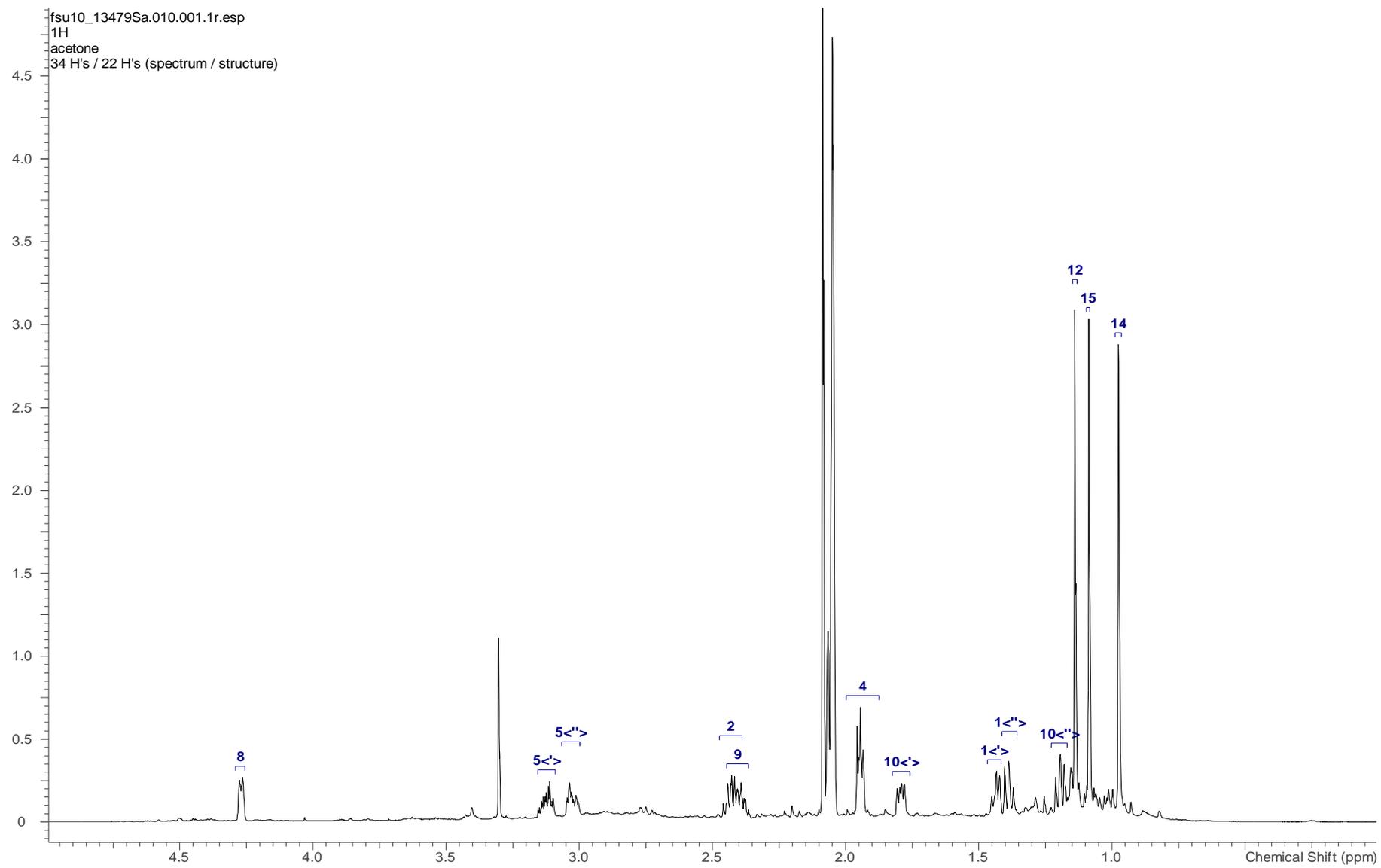
ROESY NMR spectrum of **3** (700 MHz, CDCl<sub>3</sub>).



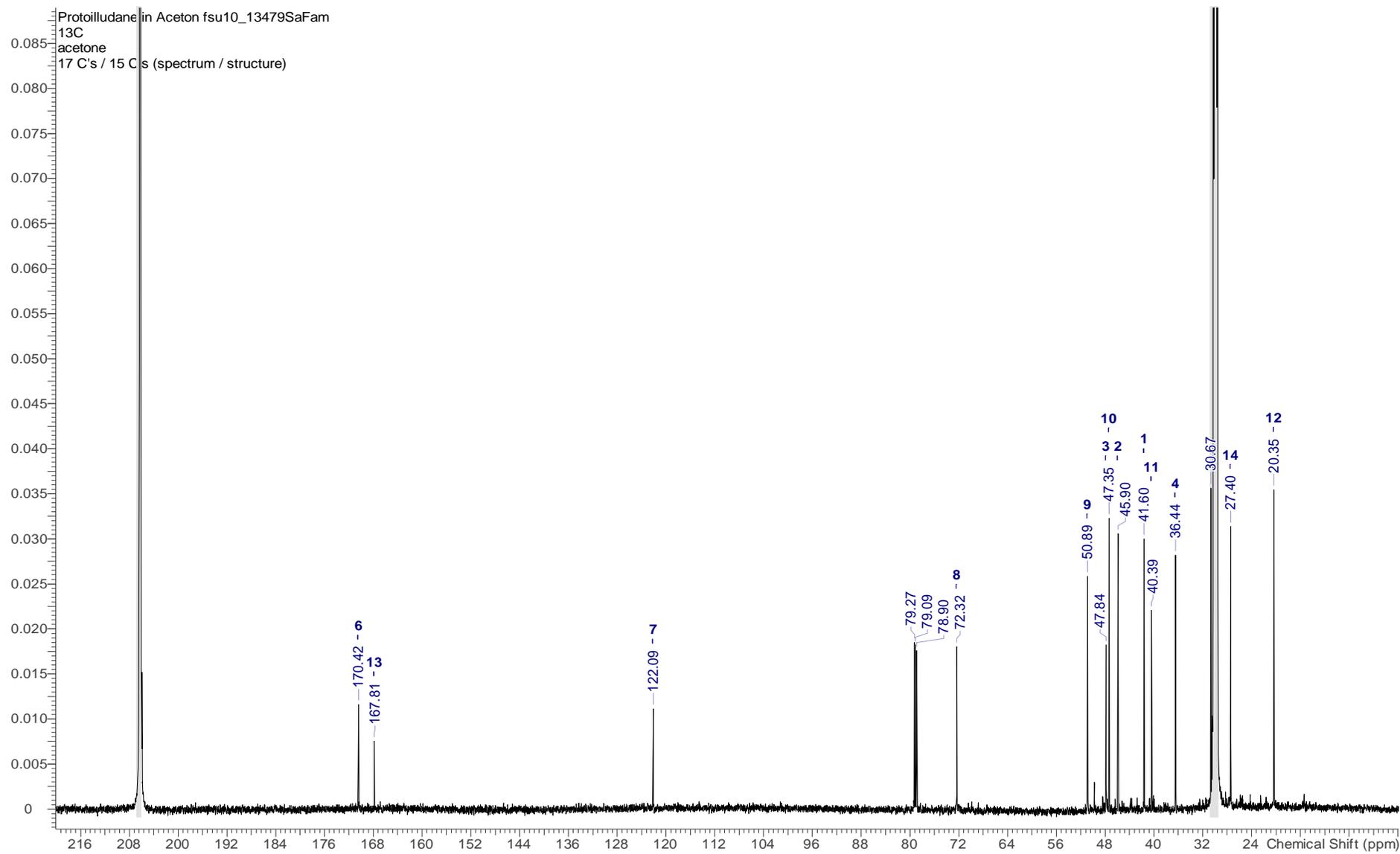
ROESY NMR spectrum of **3** (700 MHz, CDCl<sub>3</sub>).



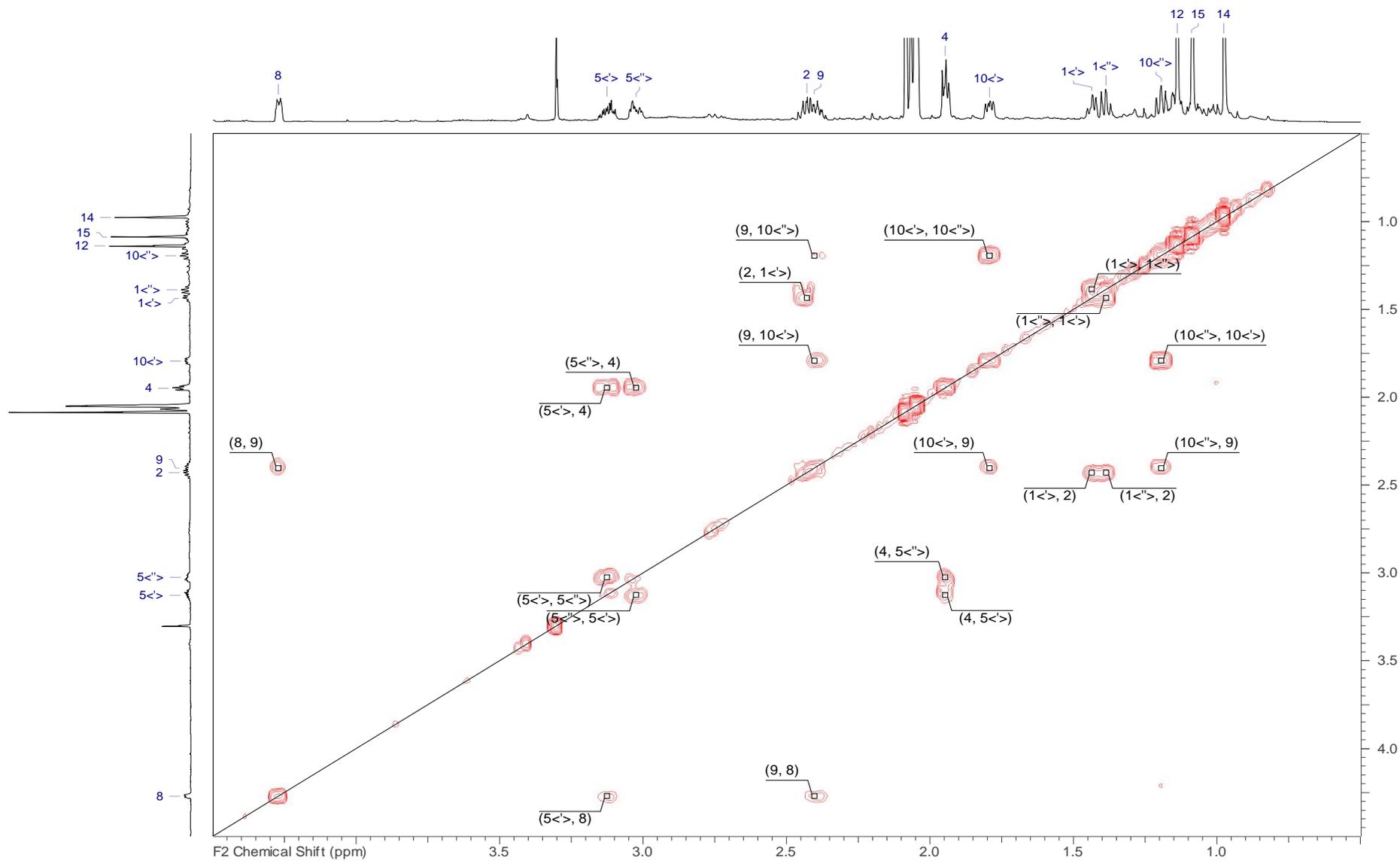
HMBC NMR spectrum of **3** (700 MHz, CDCl<sub>3</sub>).



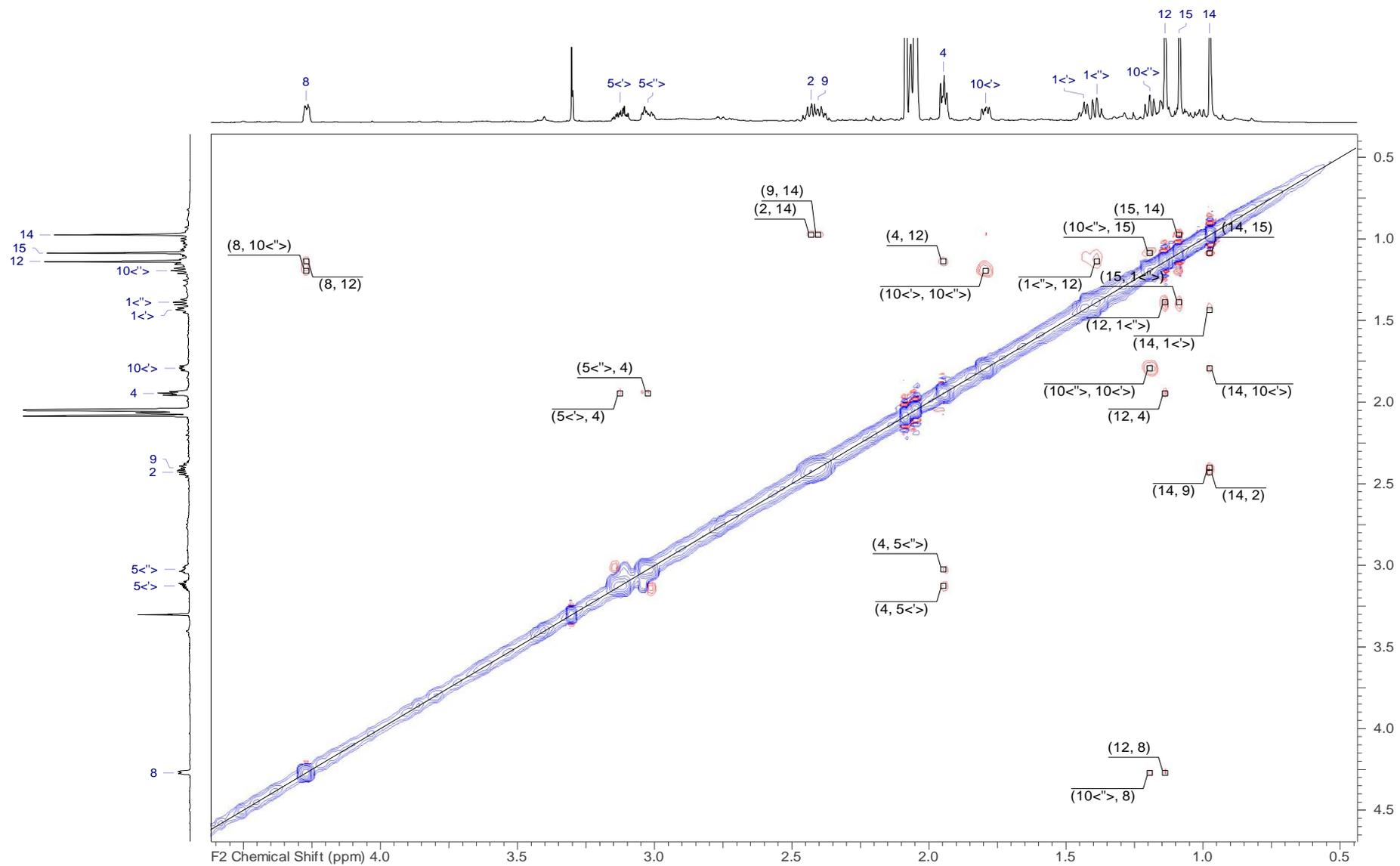
$^1\text{H}$  NMR spectrum of **4** (700 MHz, acetone- $d_6$ ).



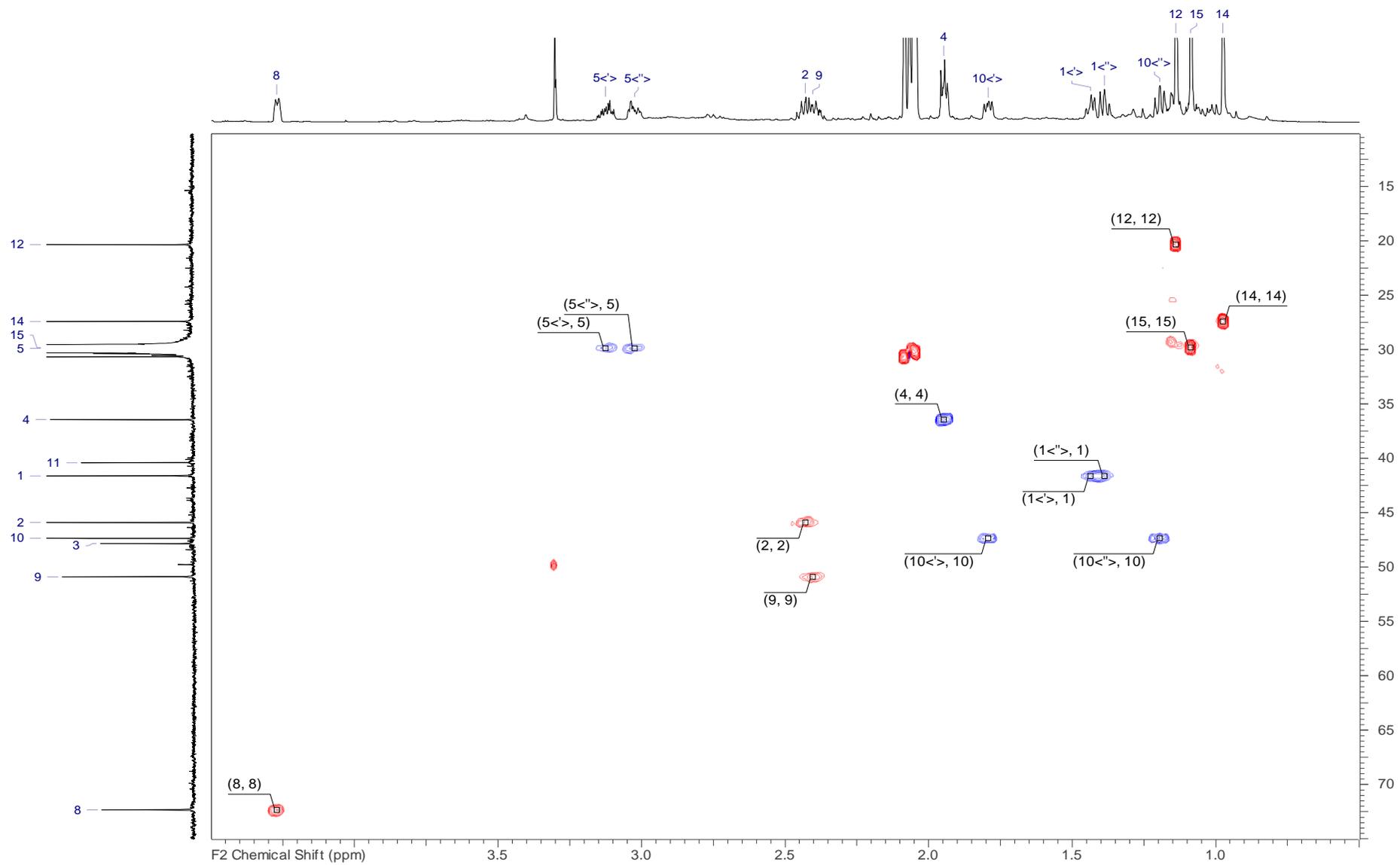
$^{13}\text{C}$  NMR spectrum of **4** (175 MHz, acetone- $d_6$ ).



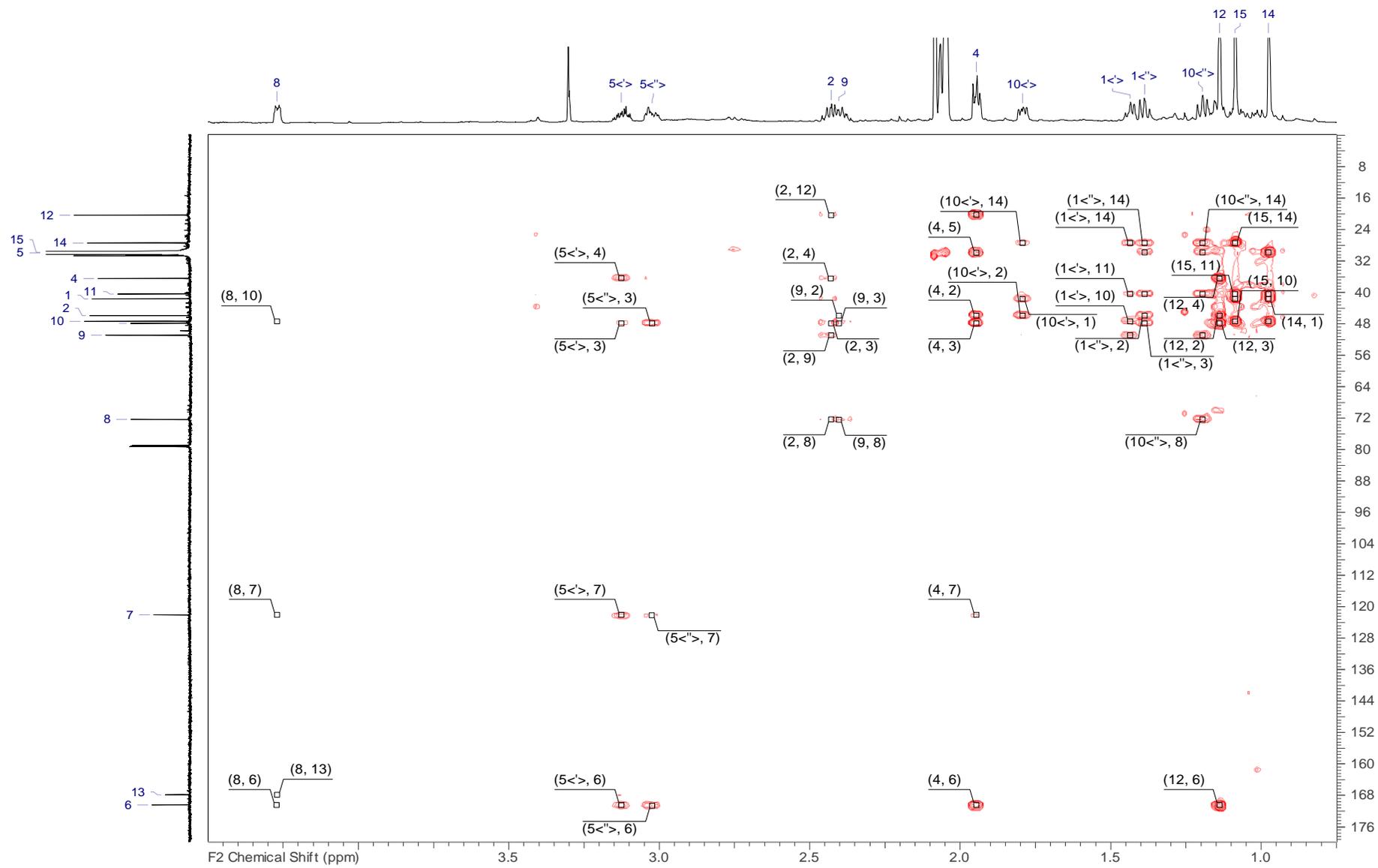
COSY NMR spectrum of **4** (700 MHz, acetone-*d*<sub>6</sub>).



ROESY NMR spectrum of **4** (700 MHz, acetone-*d*<sub>6</sub>).



HSQC NMR spectrum of **4** (700 MHz, acetone-*d*<sub>6</sub>).



HMBC NMR spectrum of **4** (700 MHz, acetone- $d_6$ ).