

**SUPPLEMENTARY MATERIAL**

**Rhabdastrenones A-D from the sponge *Rhabdastrella globostellata***

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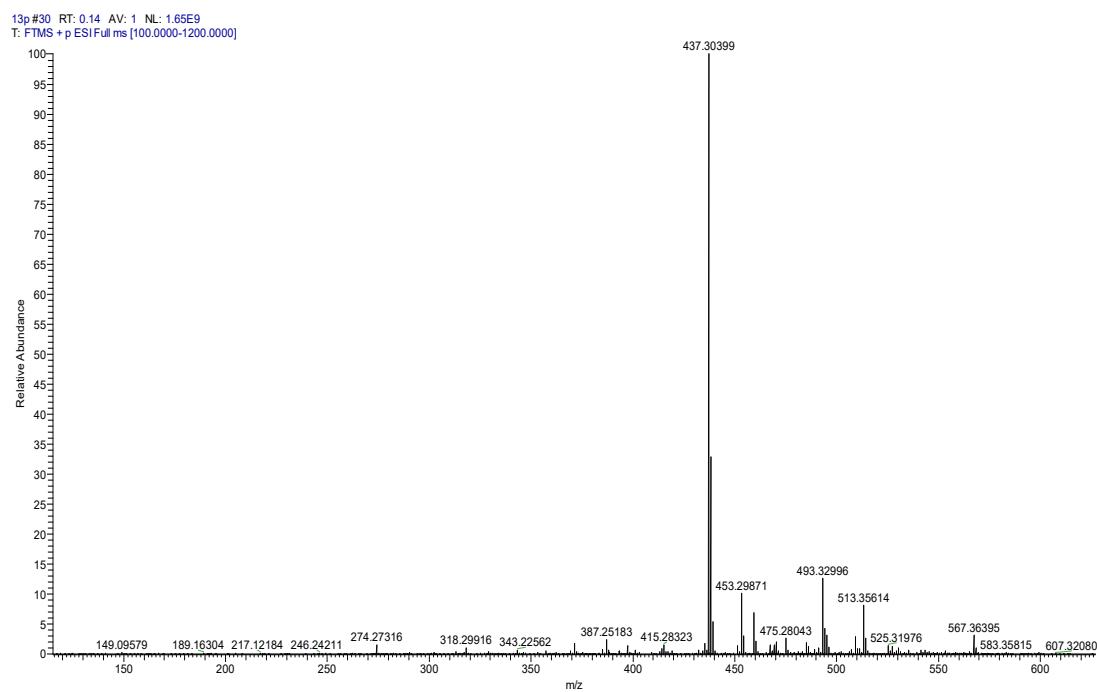
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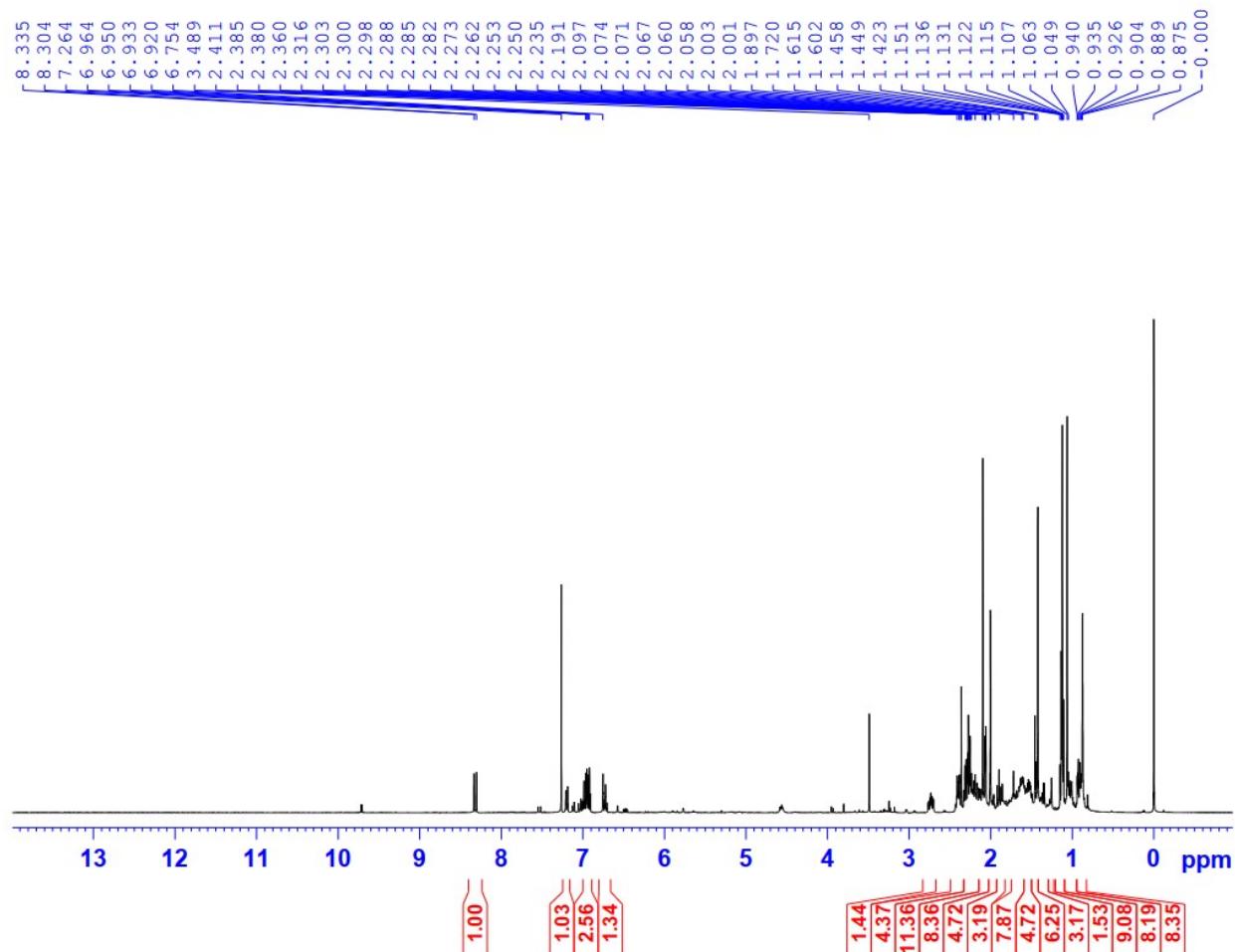
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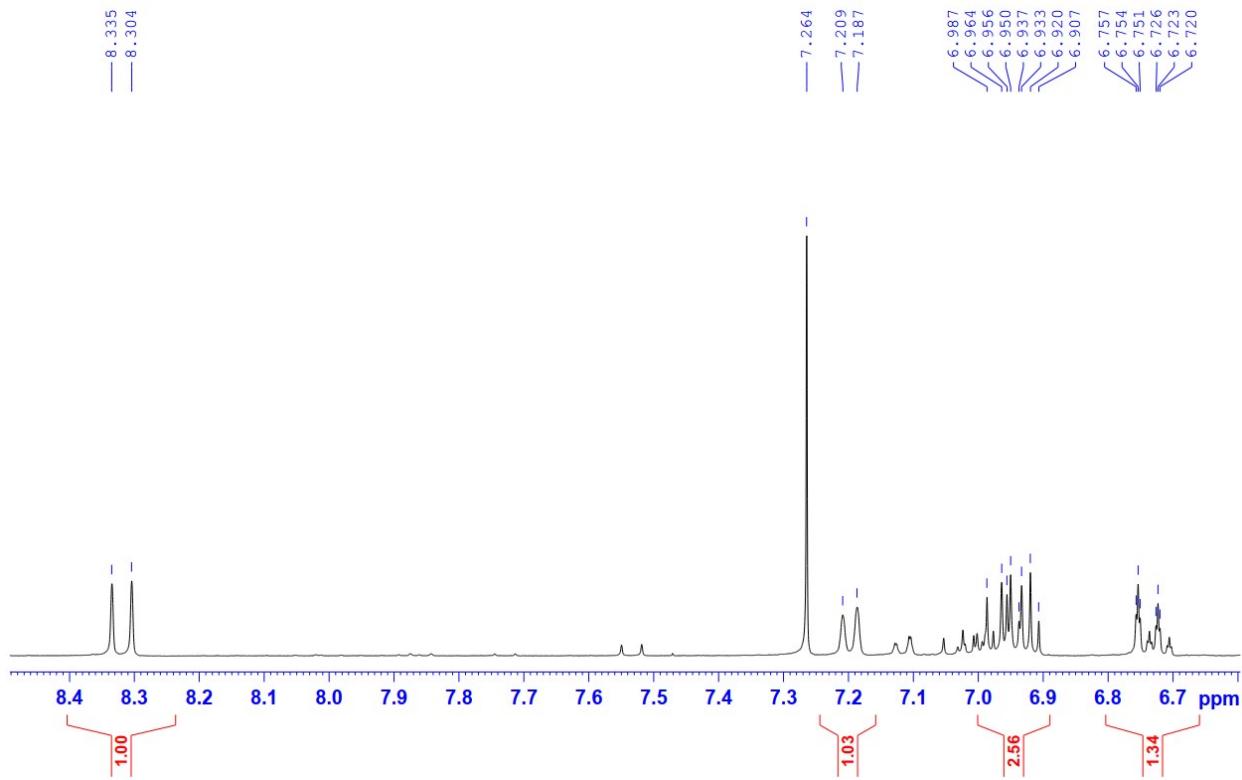
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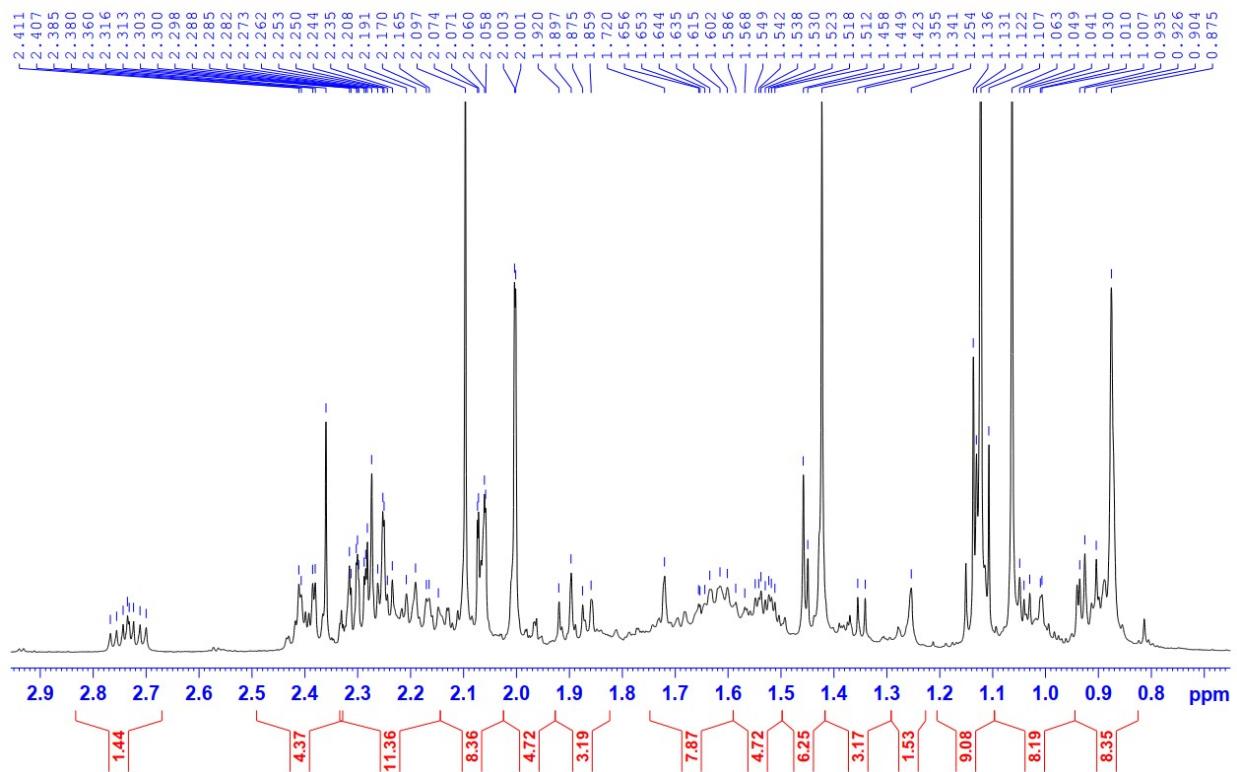
**Figure S1.** HR-ESI-MS of compound **1**



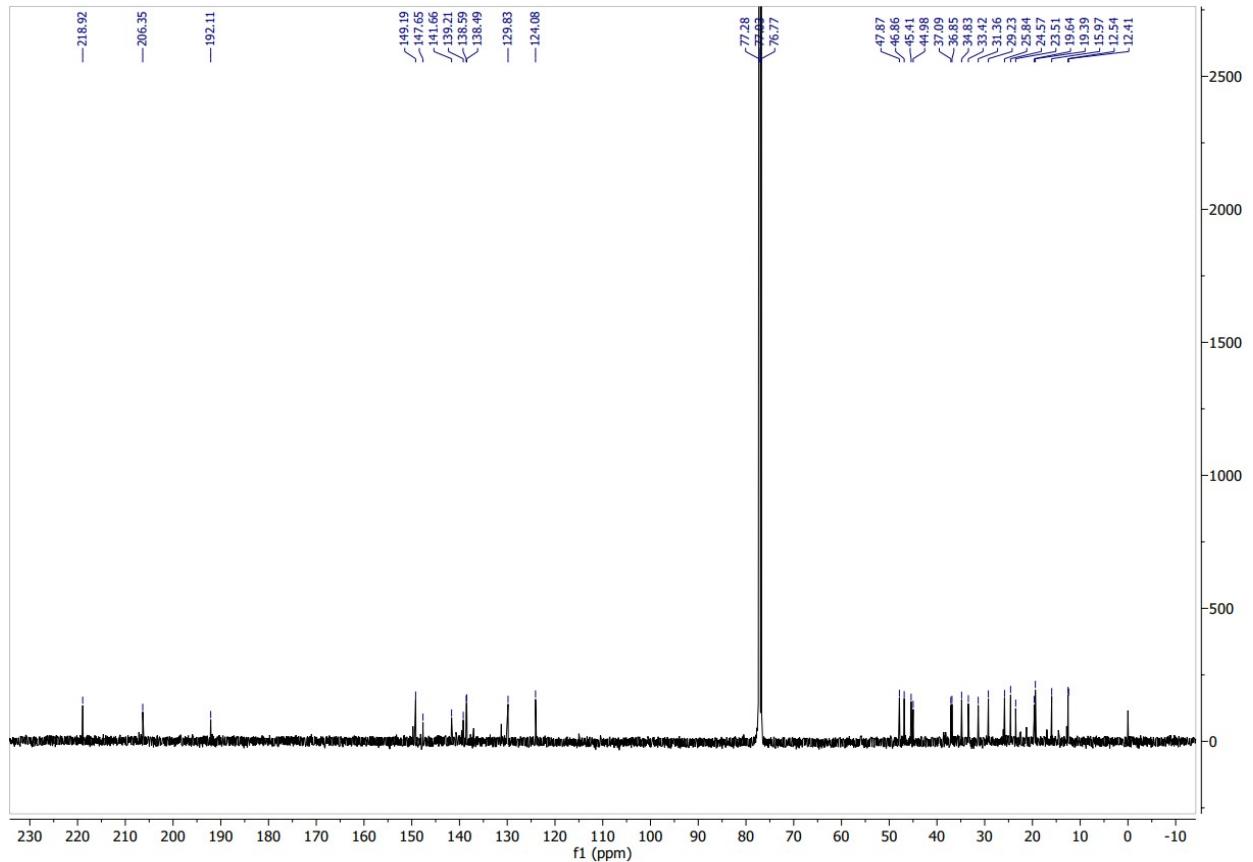
**Figure S2.**  $^1\text{H}$ -NMR spectrum of compound **1** in  $\text{CDCl}_3$



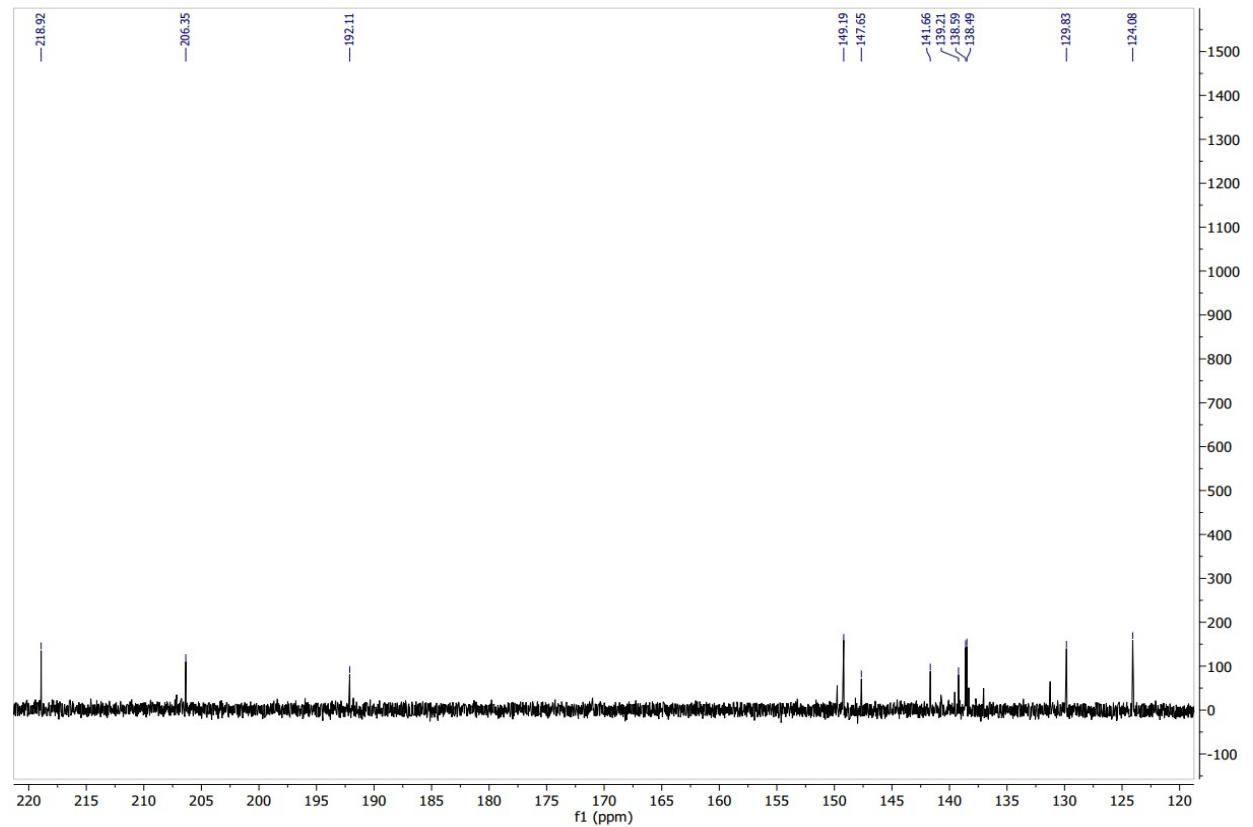
**Figure S3.** Expanded  $^1\text{H}$ -NMR spectrum of compound **1**



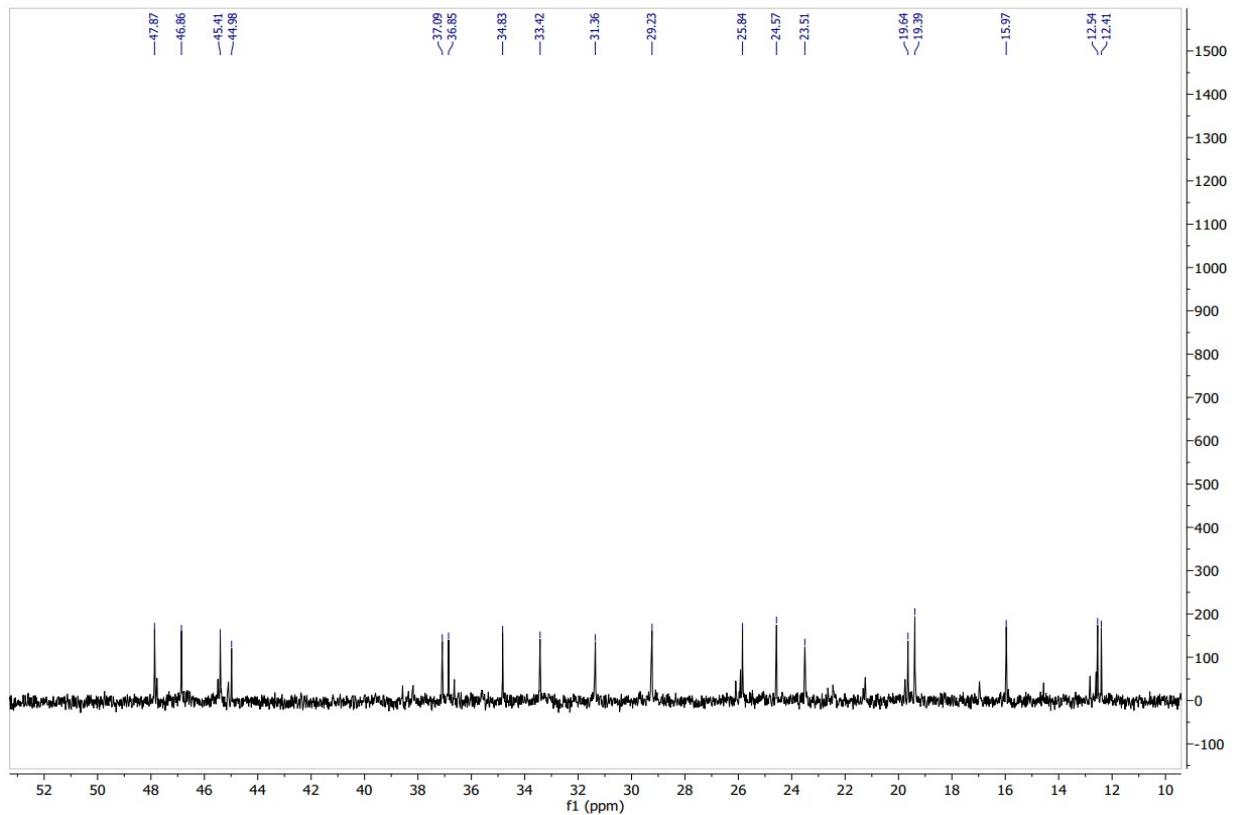
**Figure S4.** Expanded  $^1\text{H}$ -NMR spectrum of compound **1**



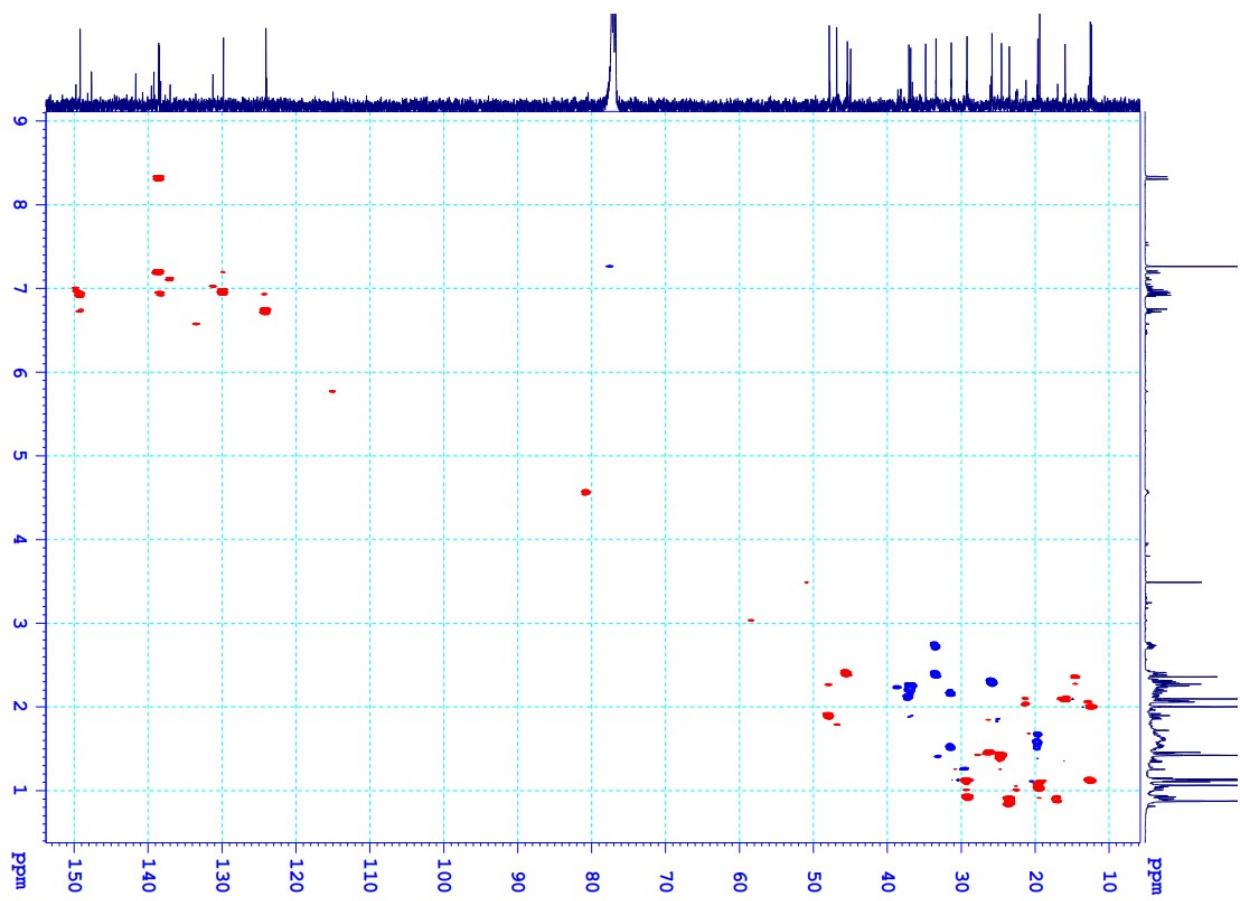
**Figure S5.**  $^{13}\text{C}$ -NMR spectrum of compound **1** in  $\text{CDCl}_3$



**Figure S6.** Expanded  $^{13}\text{C}$ -NMR spectrum of compound **1**



**Figure S7.** Expanded <sup>13</sup>C-NMR spectrum of compound 1



**Figure S8.** HSQC spectrum of compound 1

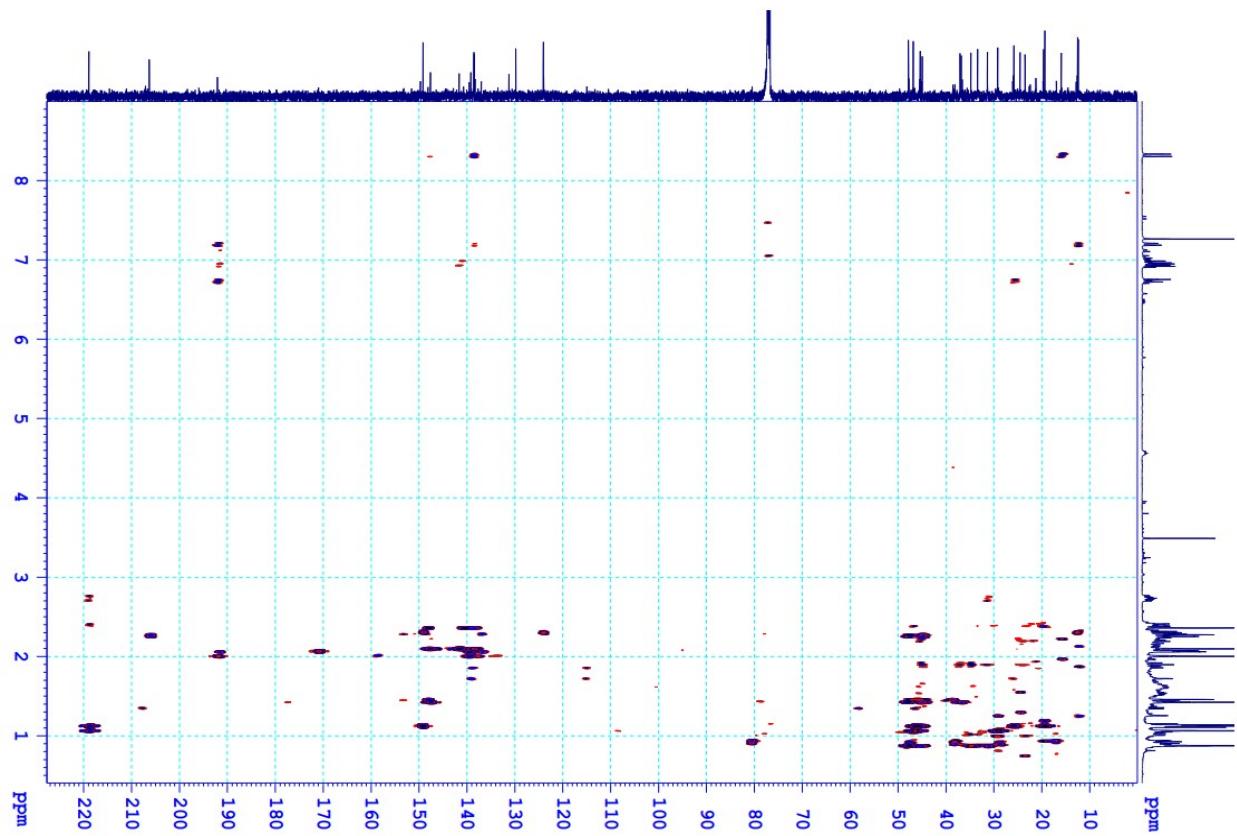


Figure S9. HMBC spectrum of compound 1

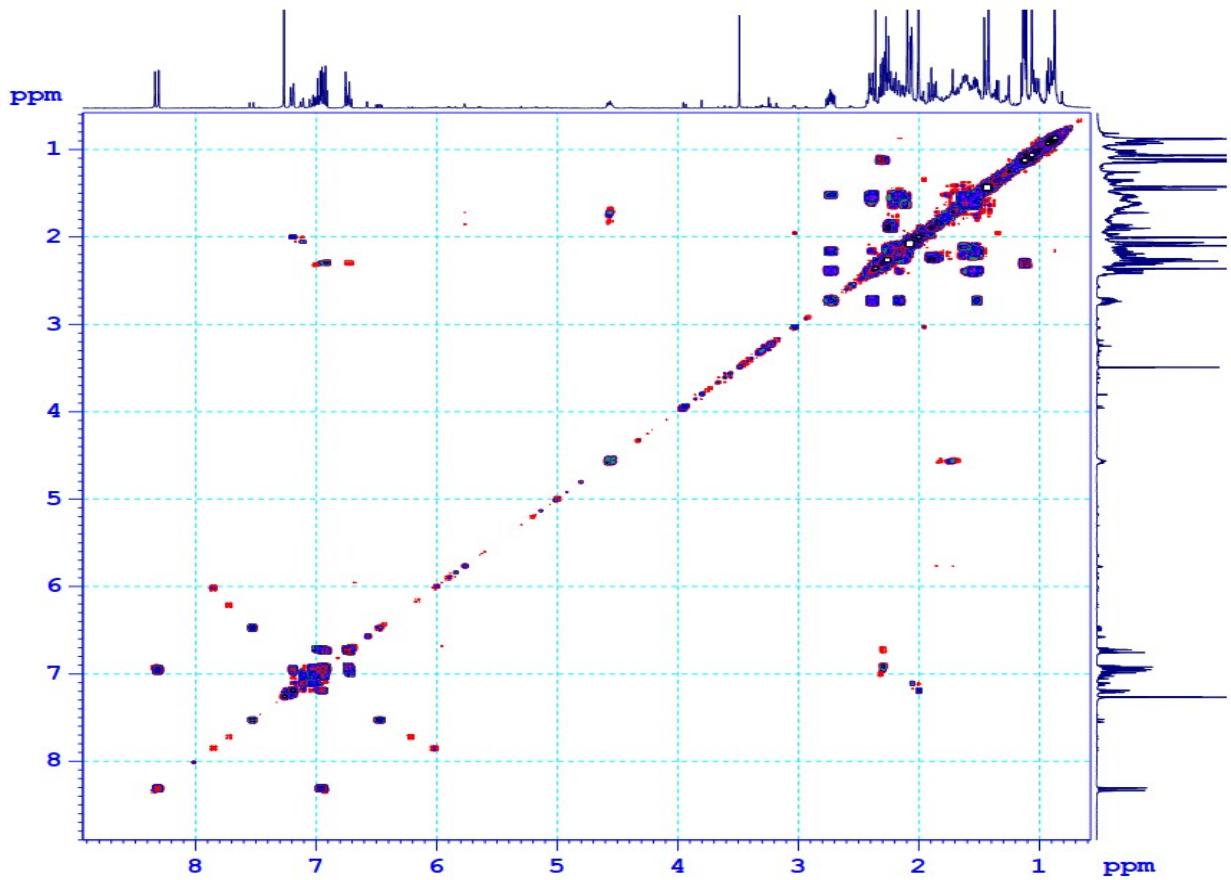
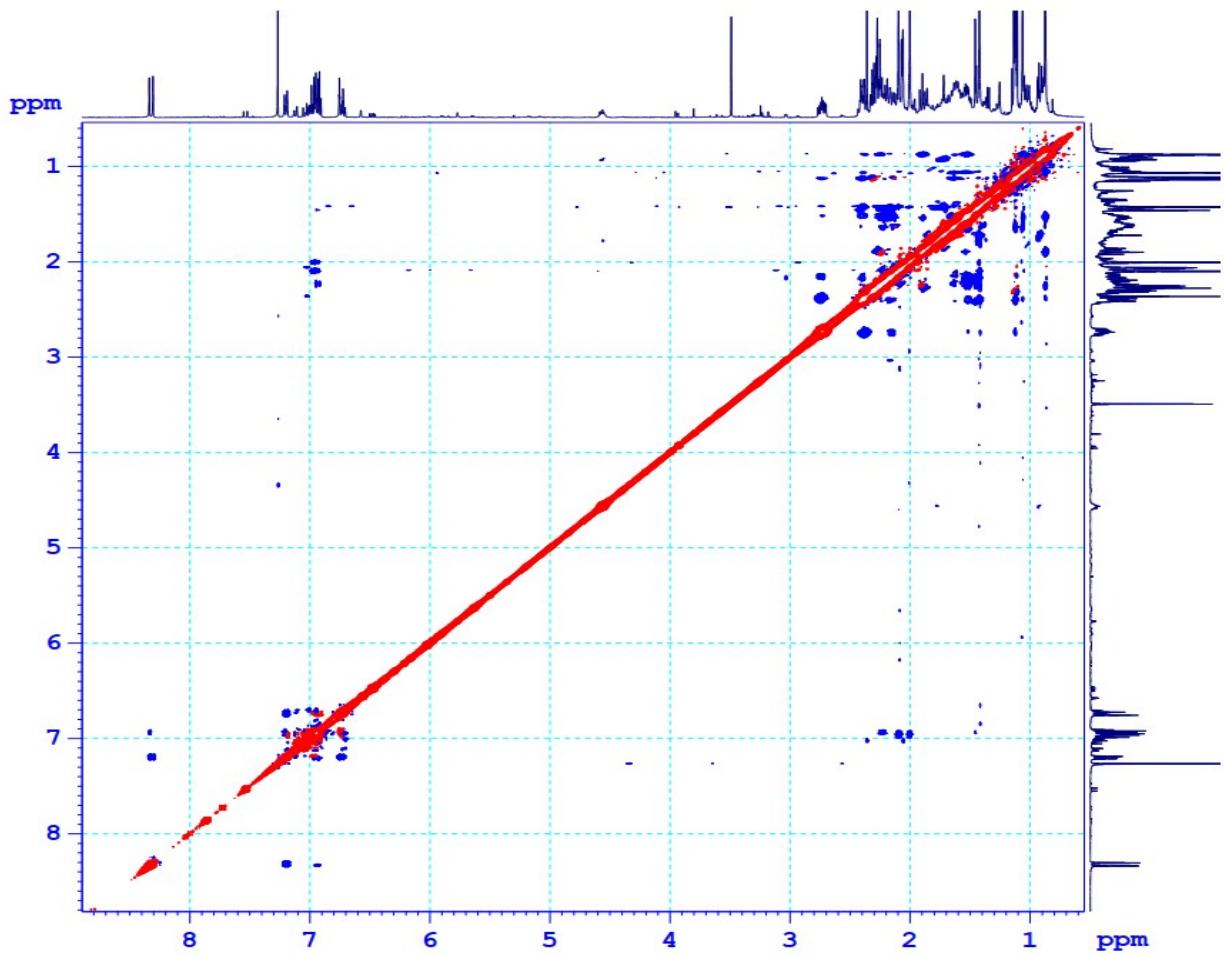
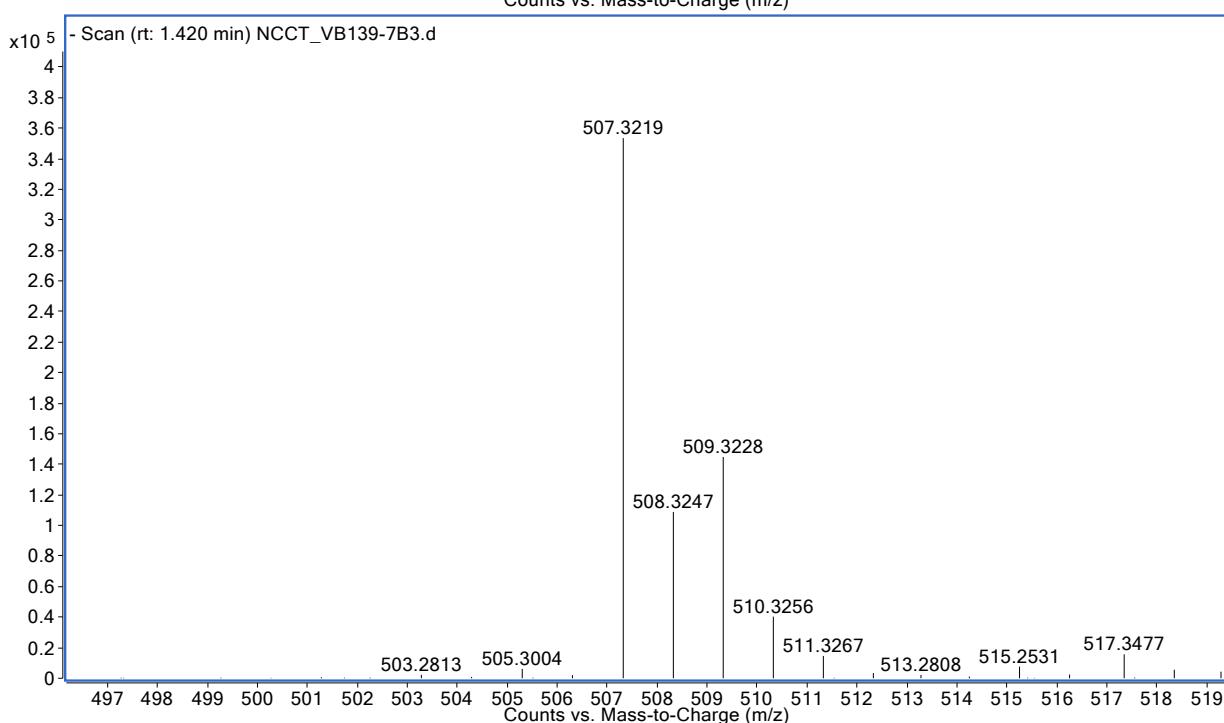
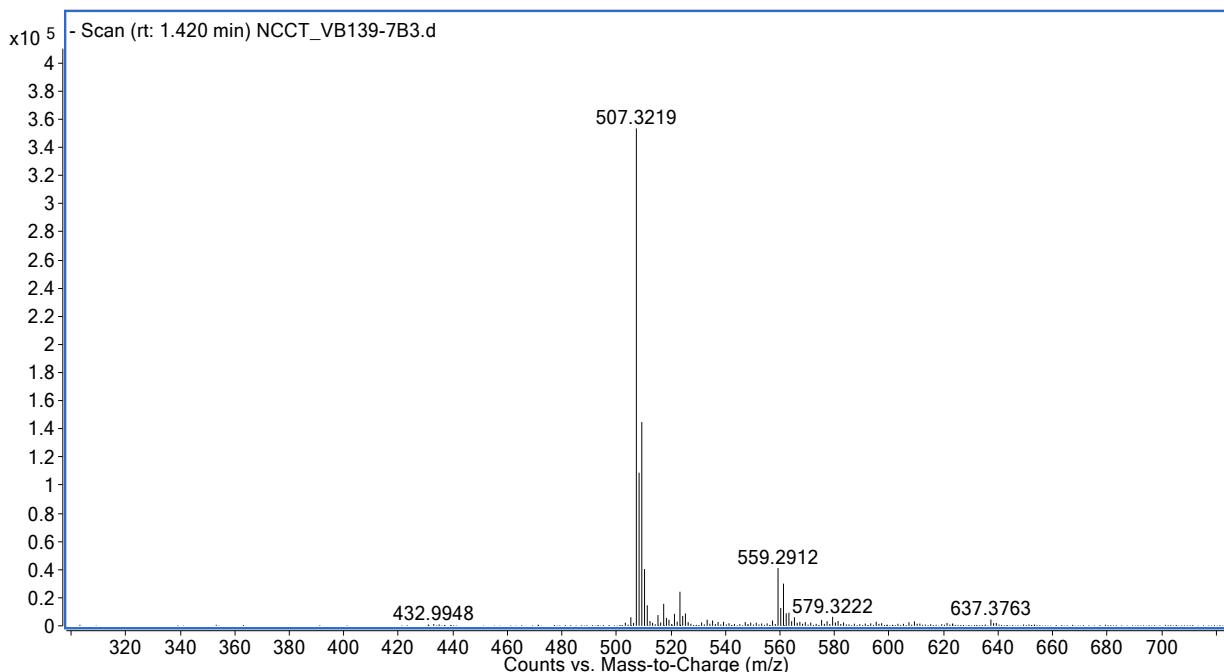


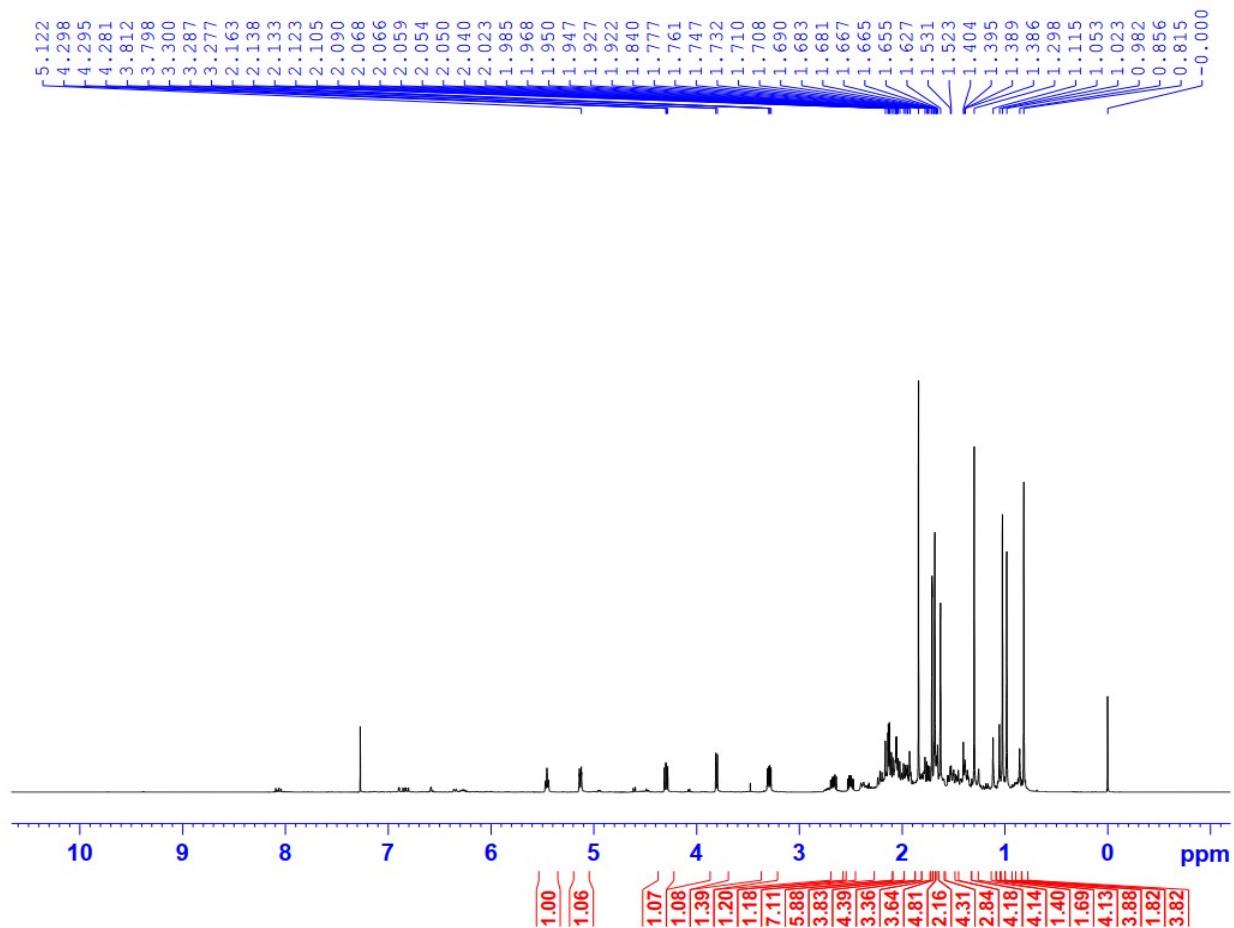
Figure S10.  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound 1



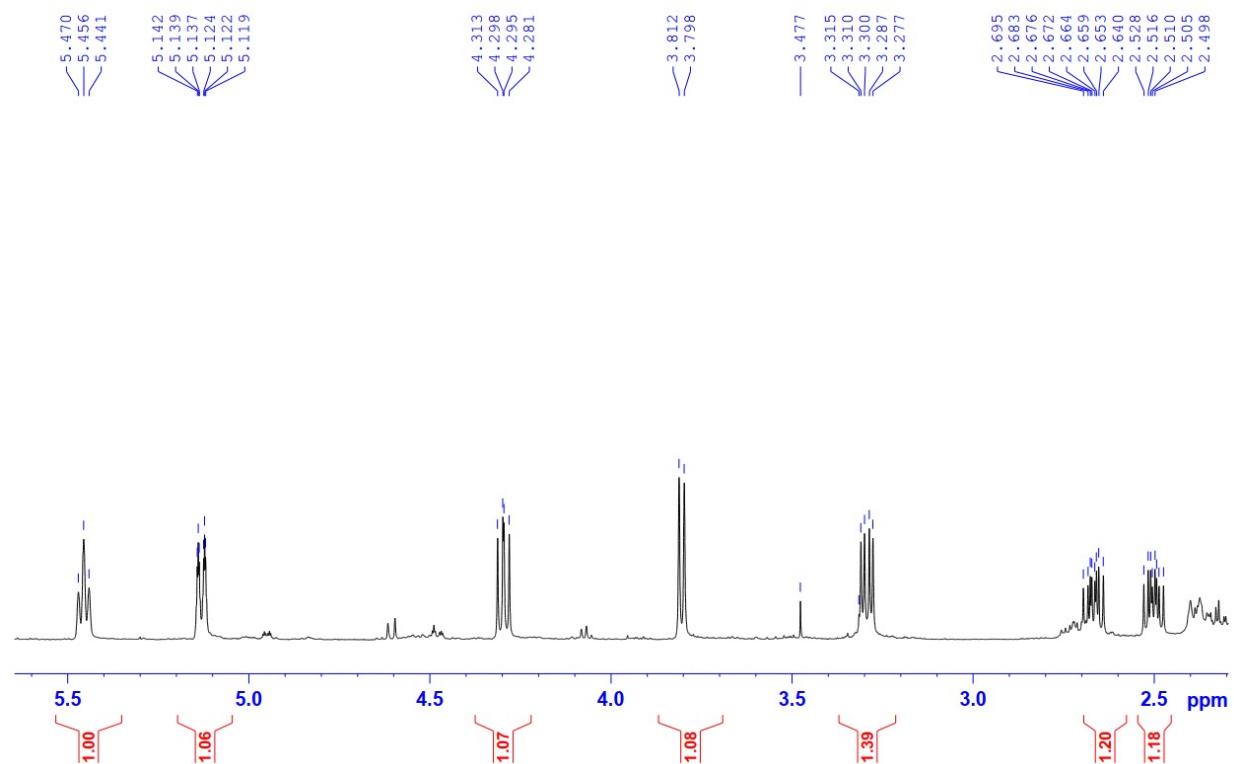
**Figure S11.** NOESY spectrum of compound 1



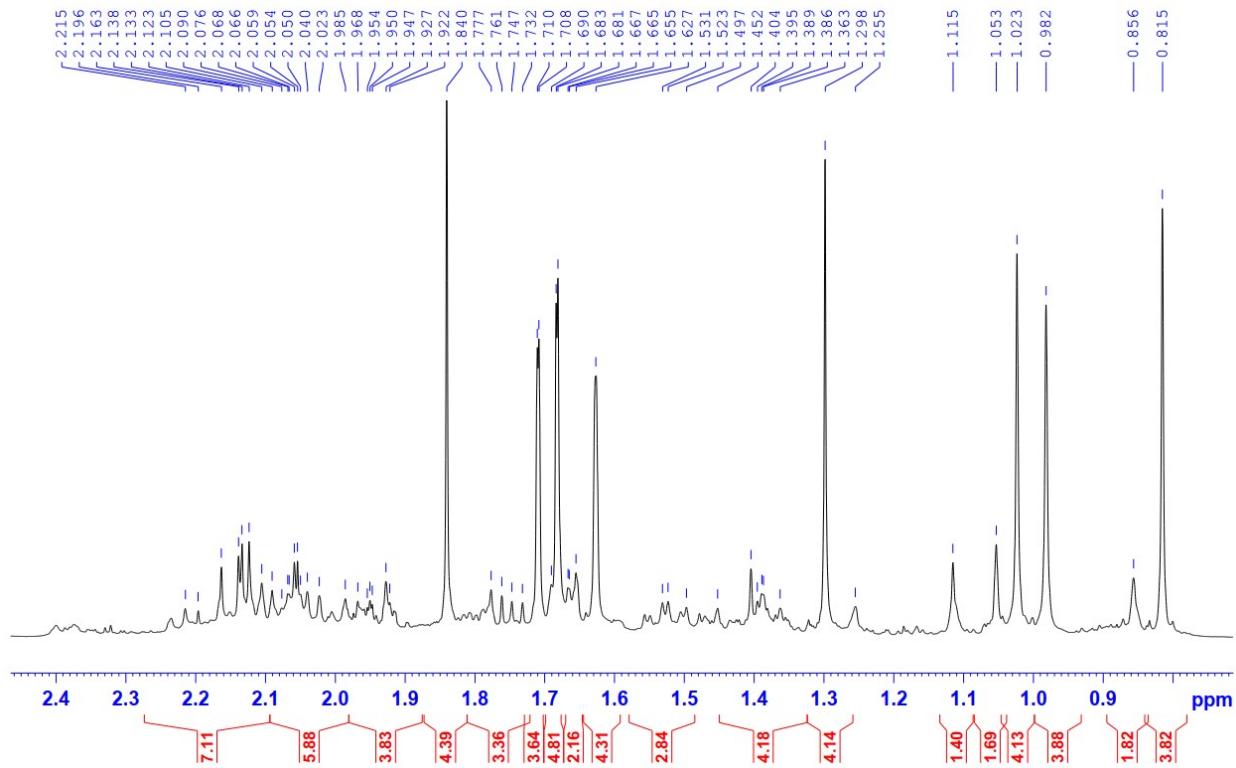
**Figure S12.** HRESIMS of compound 2



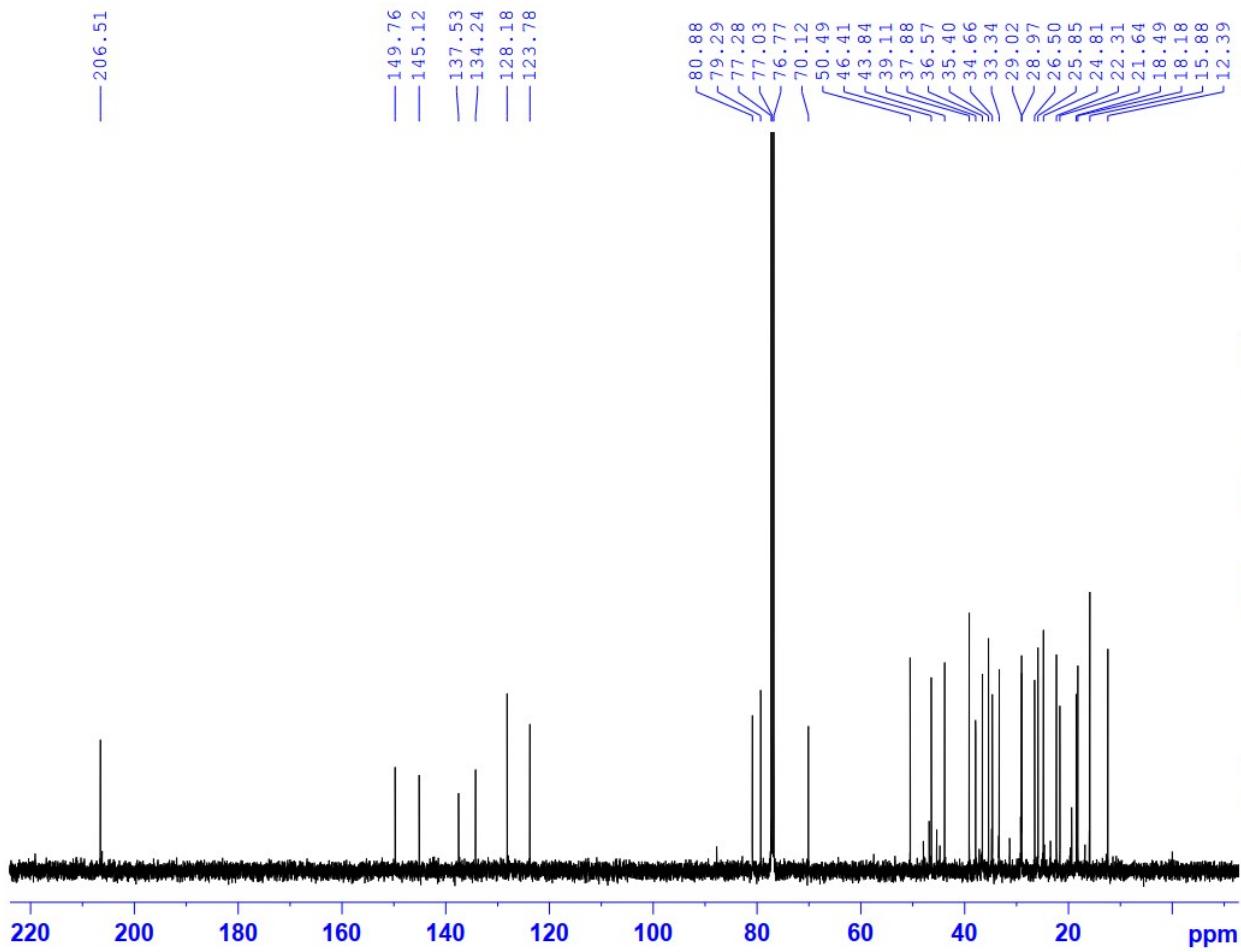
**Figure S13.**  $^1\text{H}$ -NMR spectrum of compound **2** in  $\text{CDCl}_3$



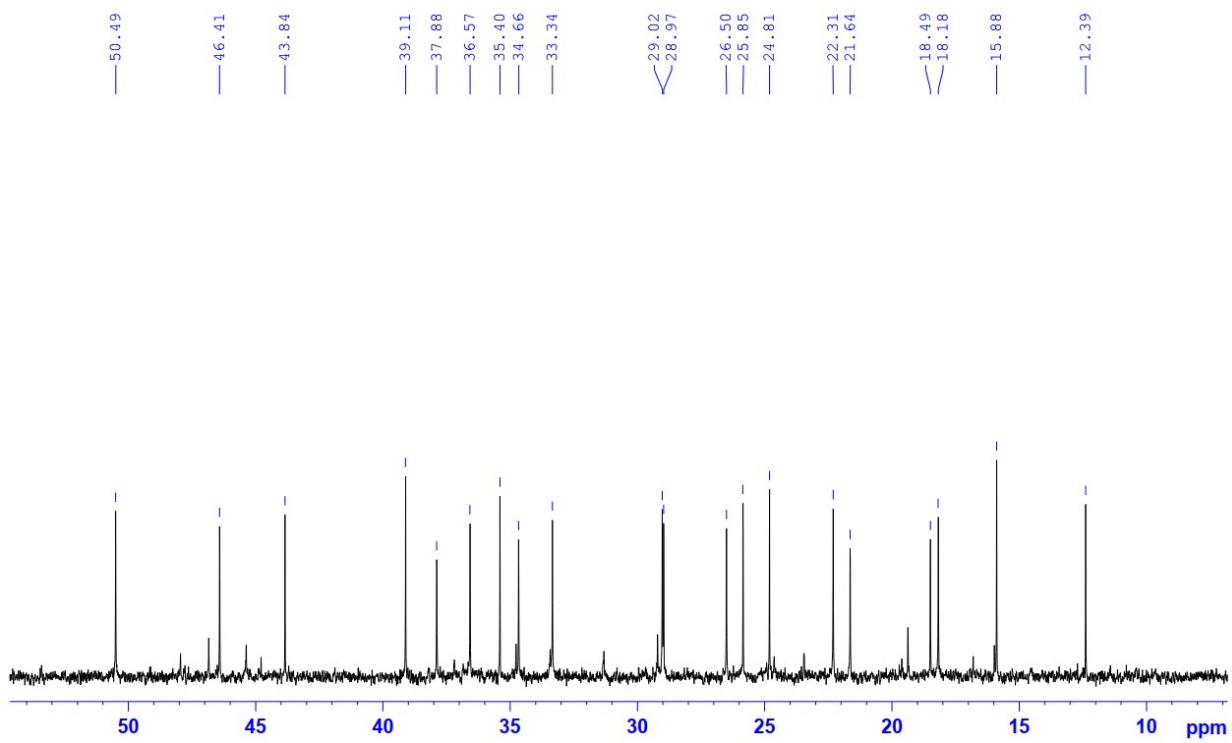
**Figure S14.** Expanded  $^1\text{H}$ -NMR spectrum of compound **2**



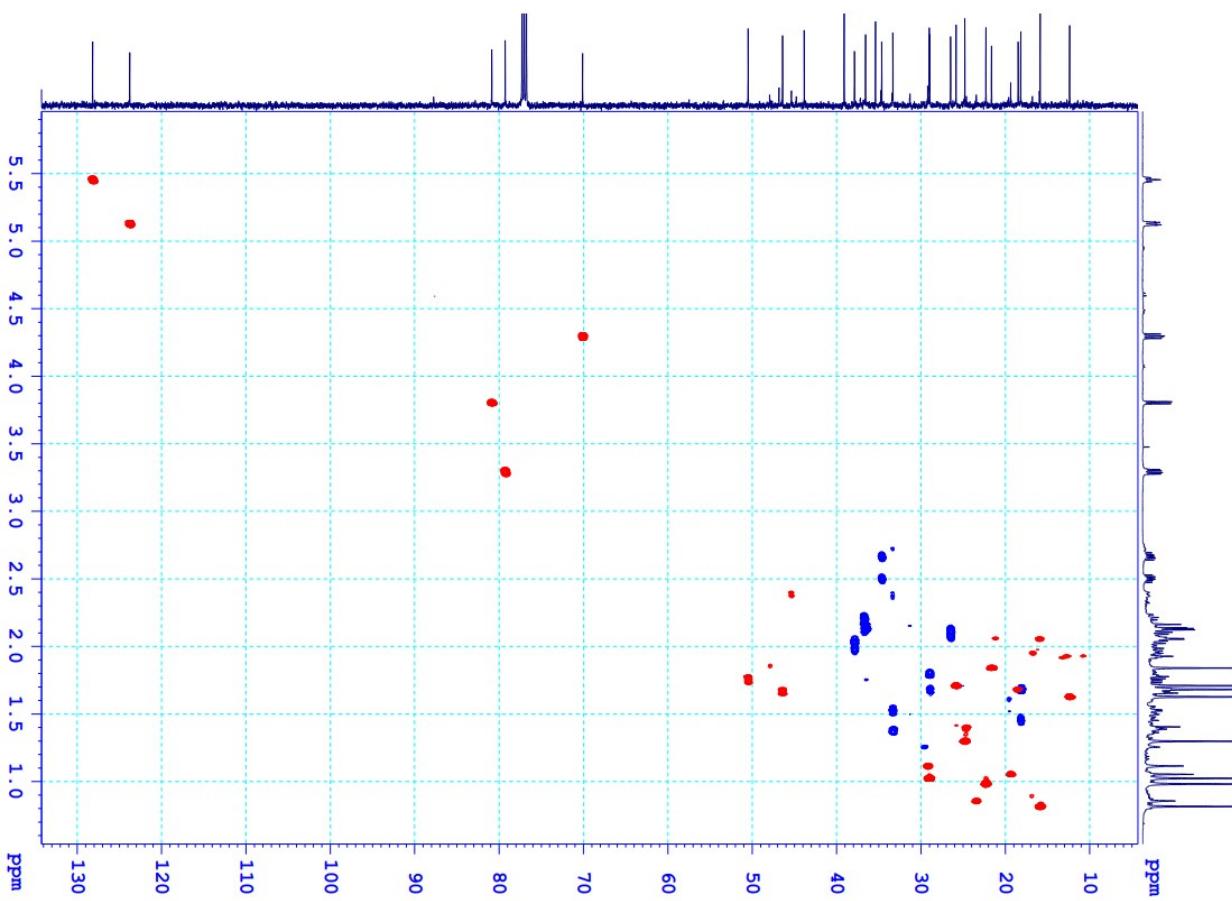
**Figure S15.** Expanded  $^1\text{H}$ -NMR spectrum of compound **2**



**Figure S16.**  $^{13}\text{C}$ -NMR spectrum of compound **2** in  $\text{CDCl}_3$



**Figure S17.** Expanded <sup>13</sup>C-NMR spectrum of compound 2



**Figure S18.** HSQC spectrum of compound 2

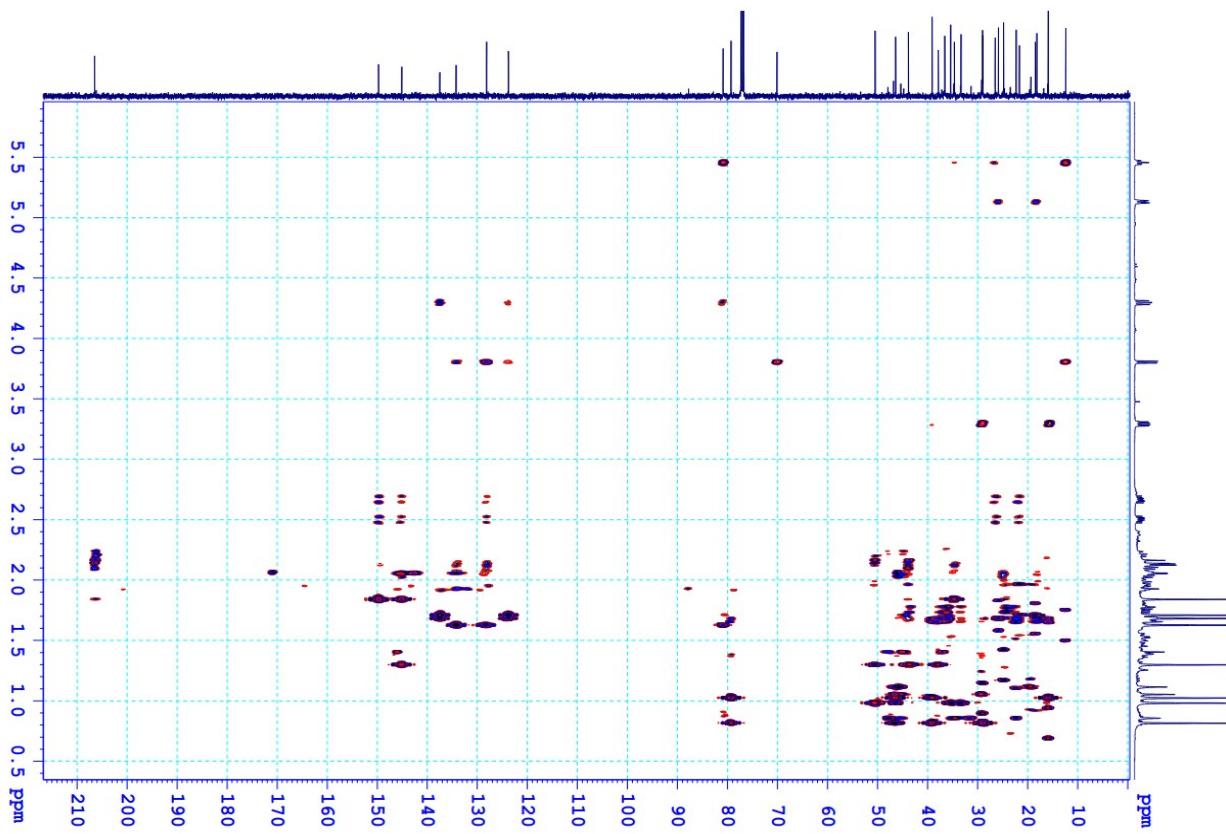


Figure S19. HMBC spectrum of compound 2

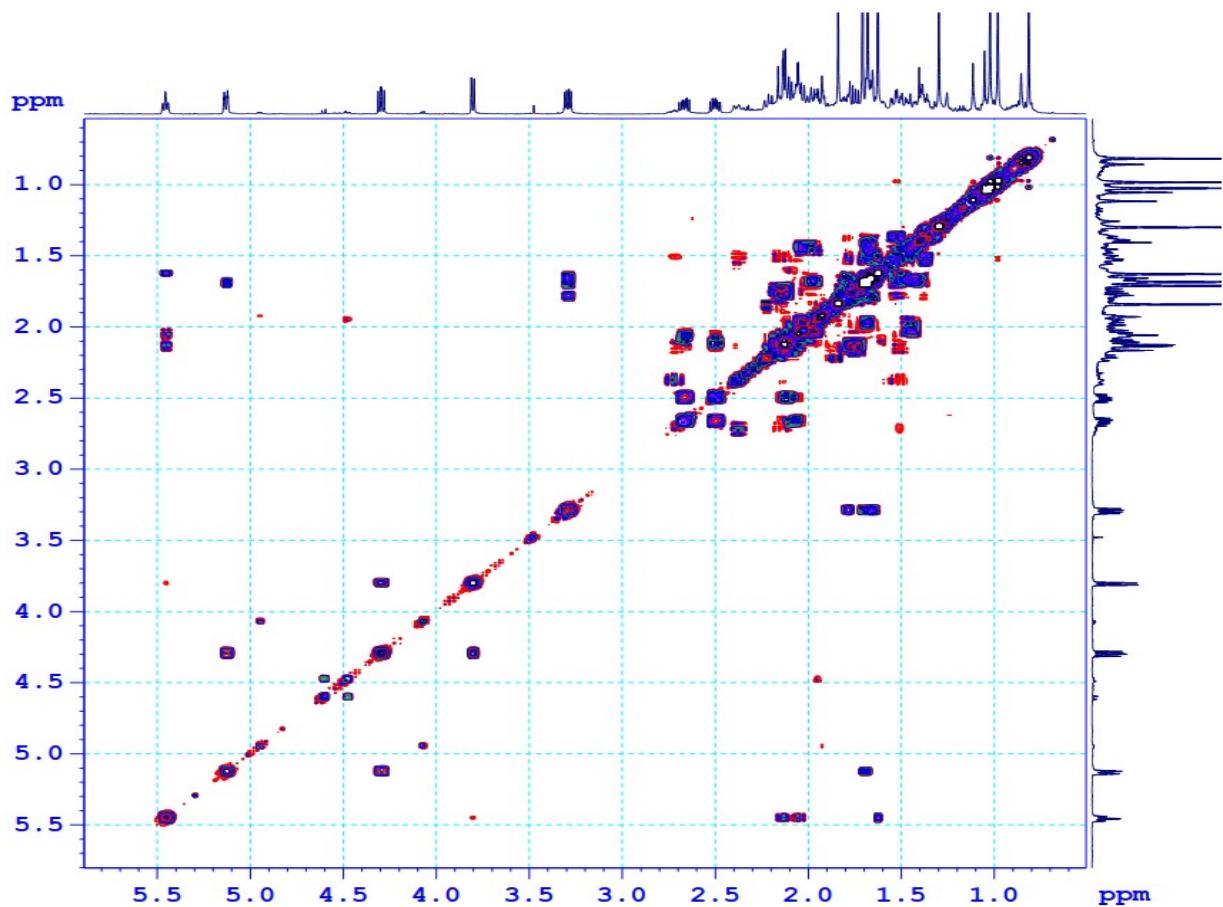
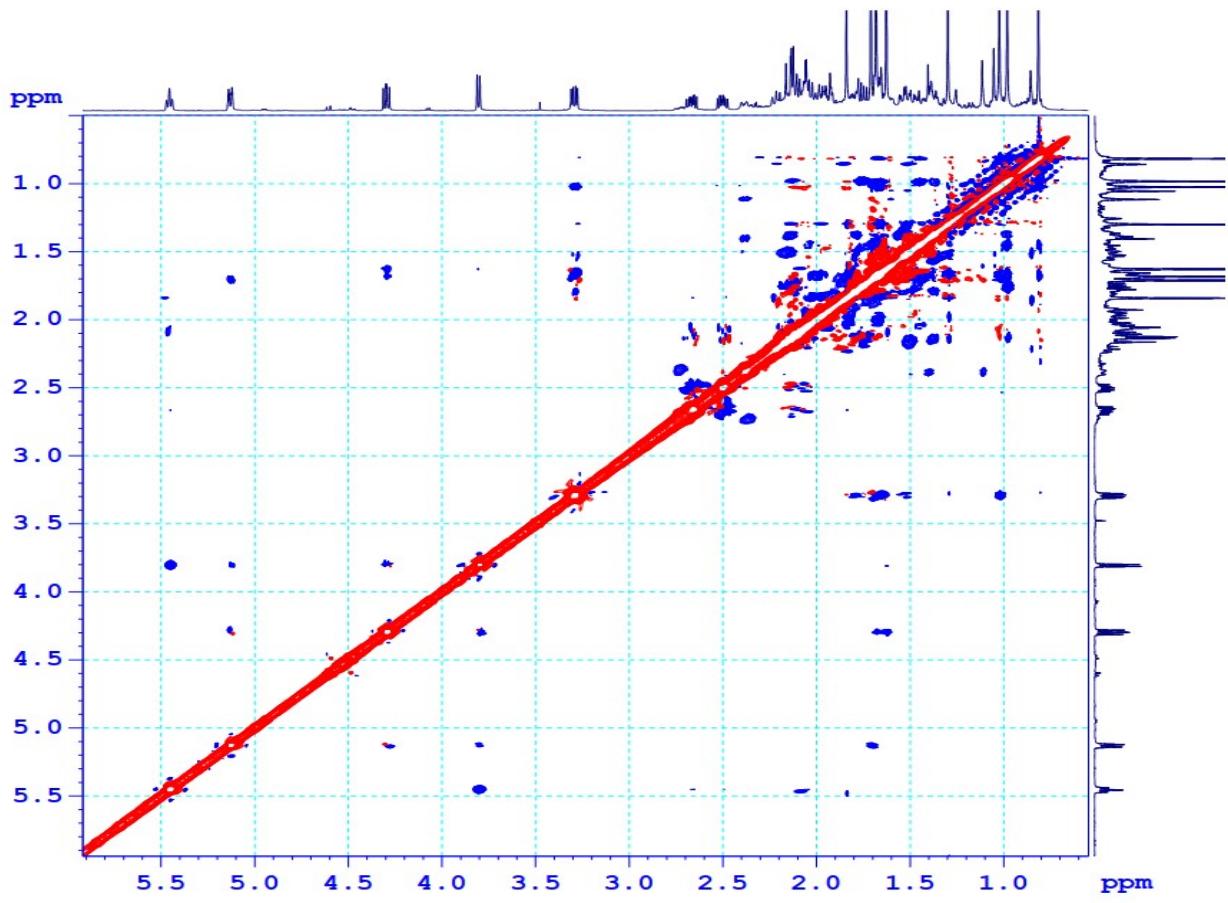
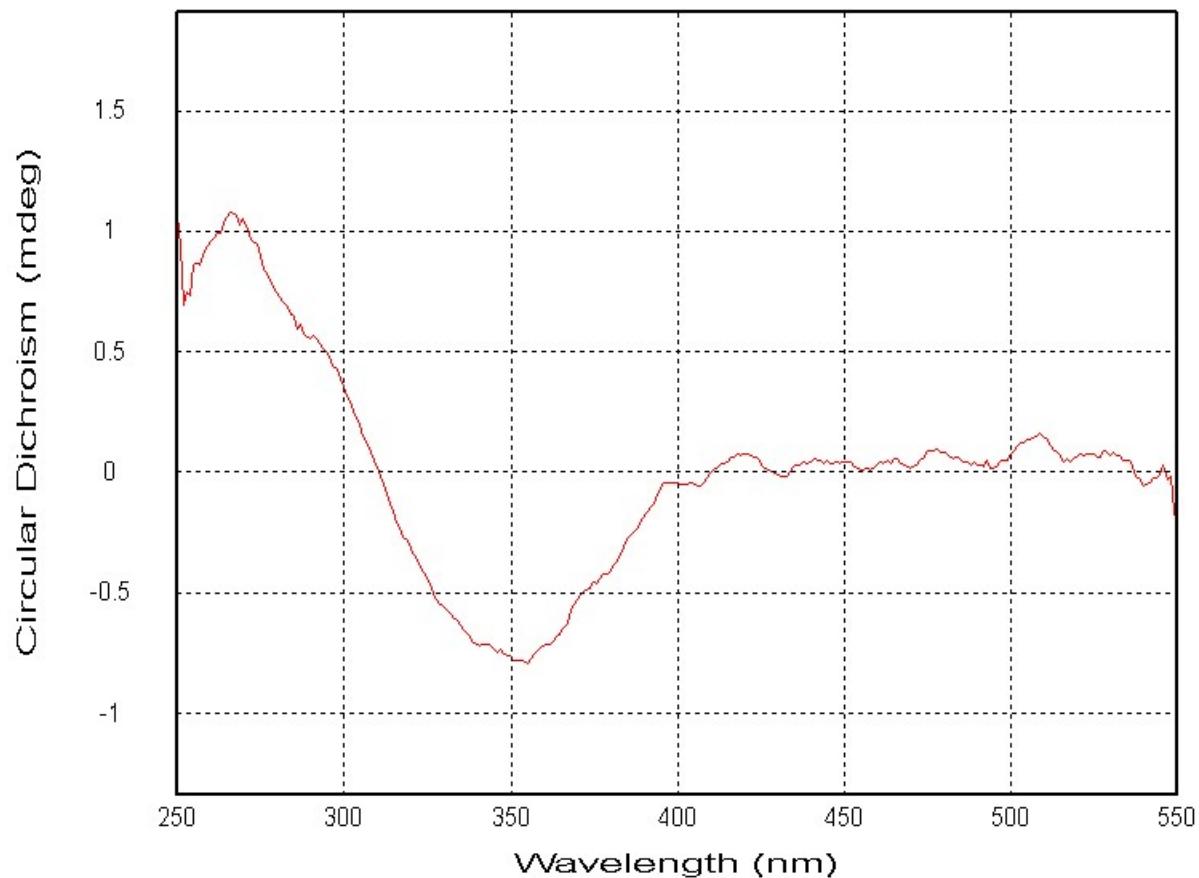


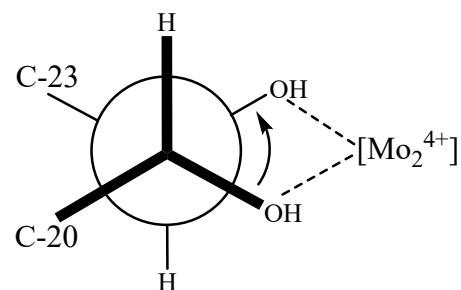
Figure S20.  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound 2



**Figure S21.** NOESY spectrum of compound 2

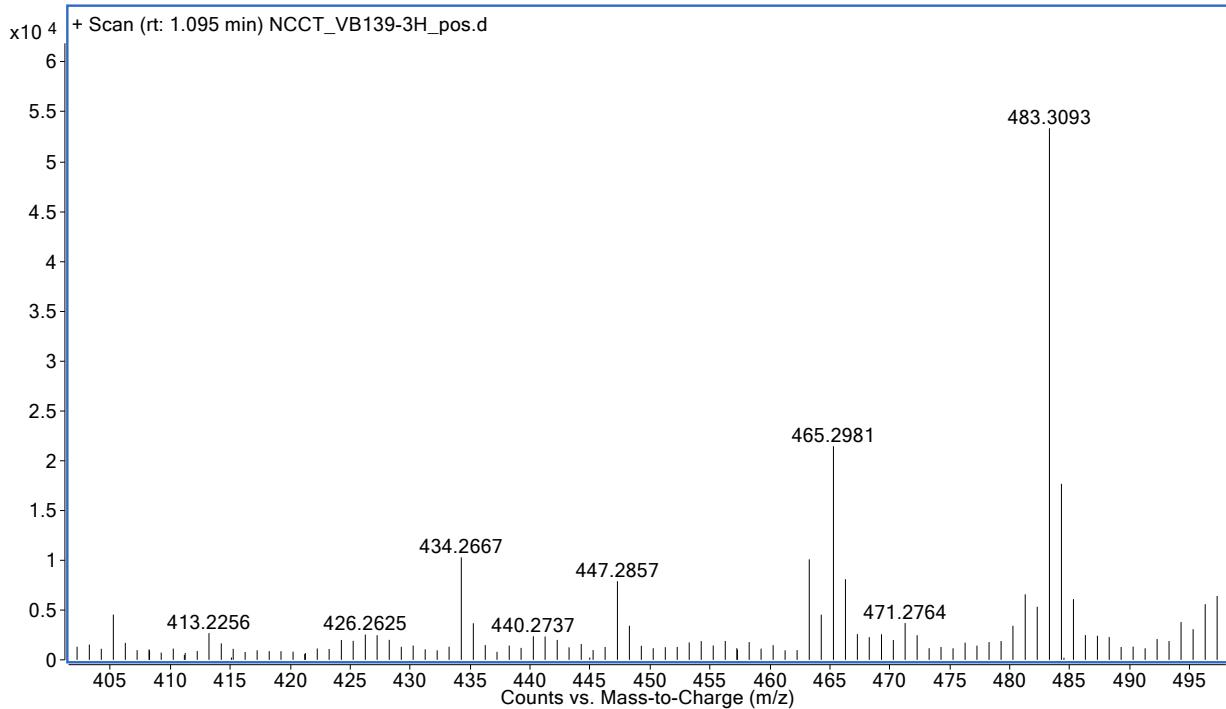


**Figure S22.**  $\text{Mo}_2(\text{OAc})_4$  induced ECD spectrum of compound **2**

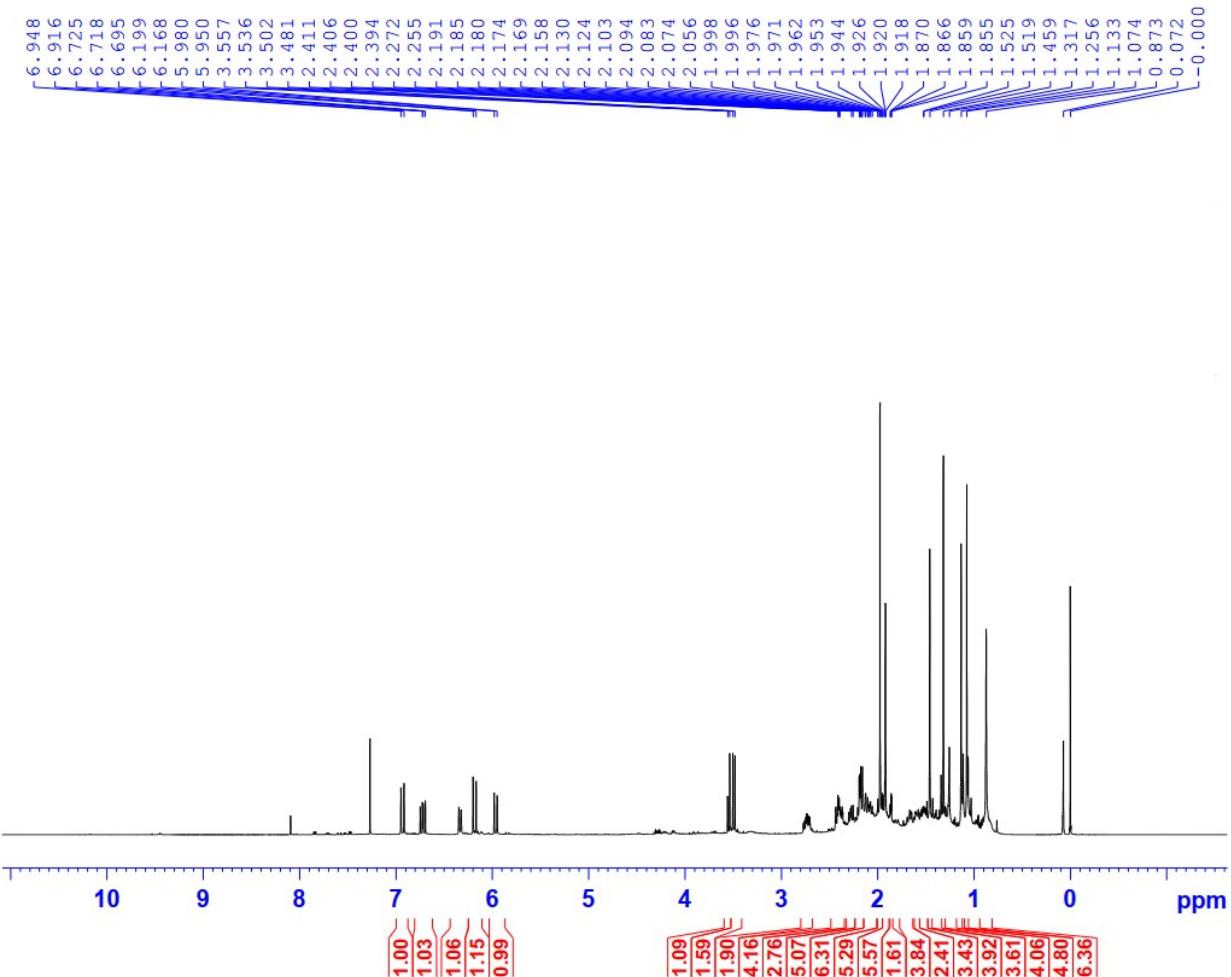


Negative chirality (negative helicity)

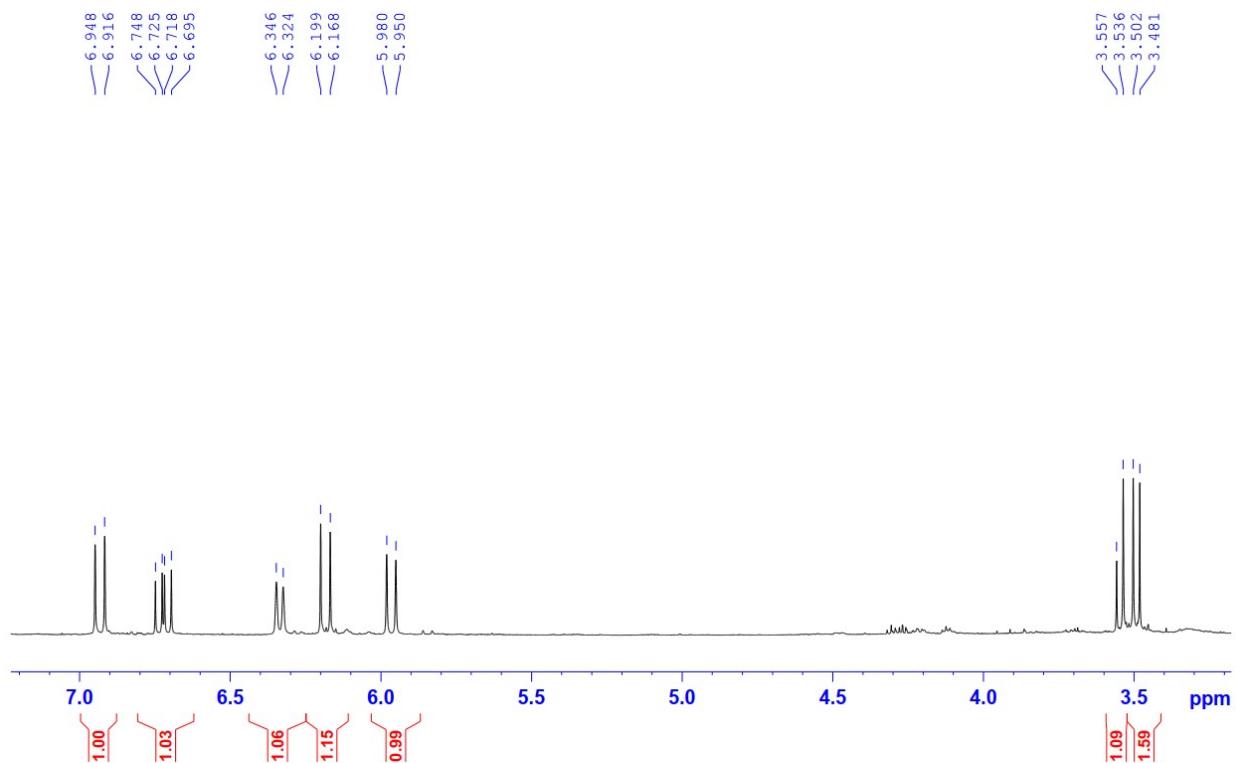
**Figure S23.** Favored conformation of the  $\text{Mo}_2^{4+}$  complex of compound **2**



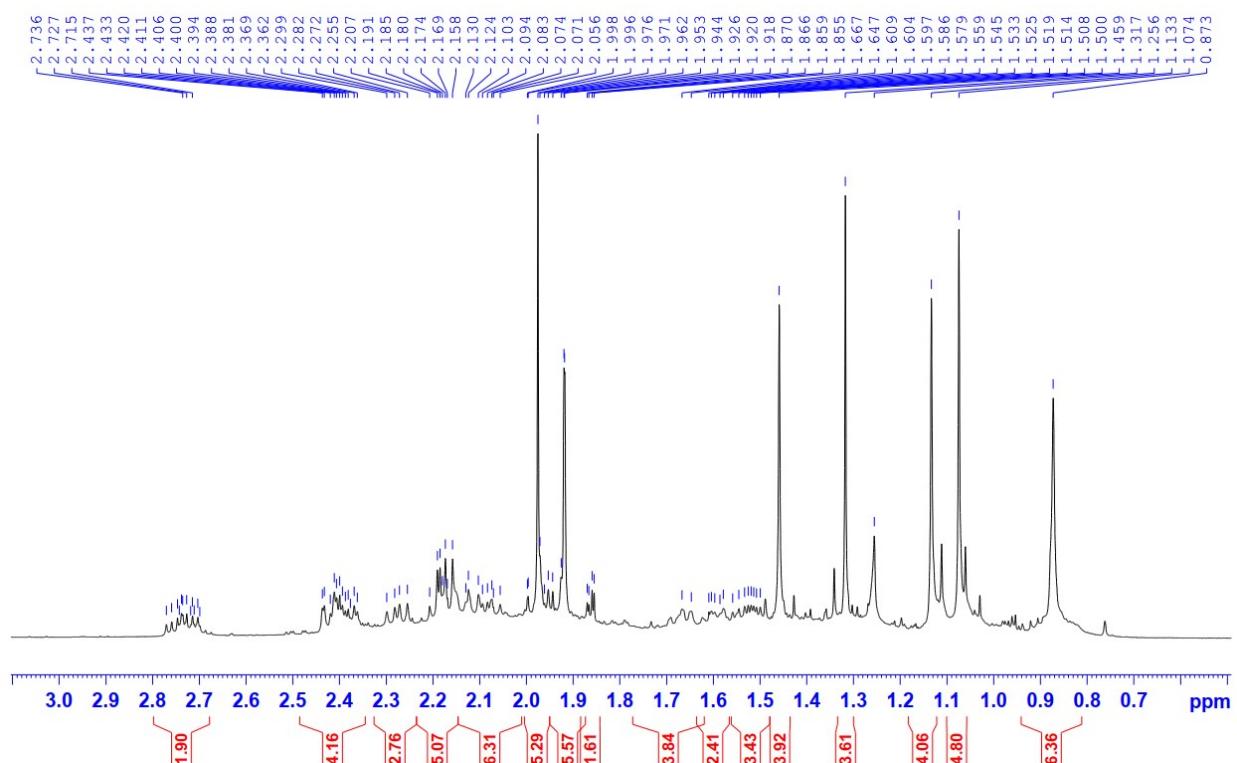
**Figure S24.** HRESIMS of compound **3**



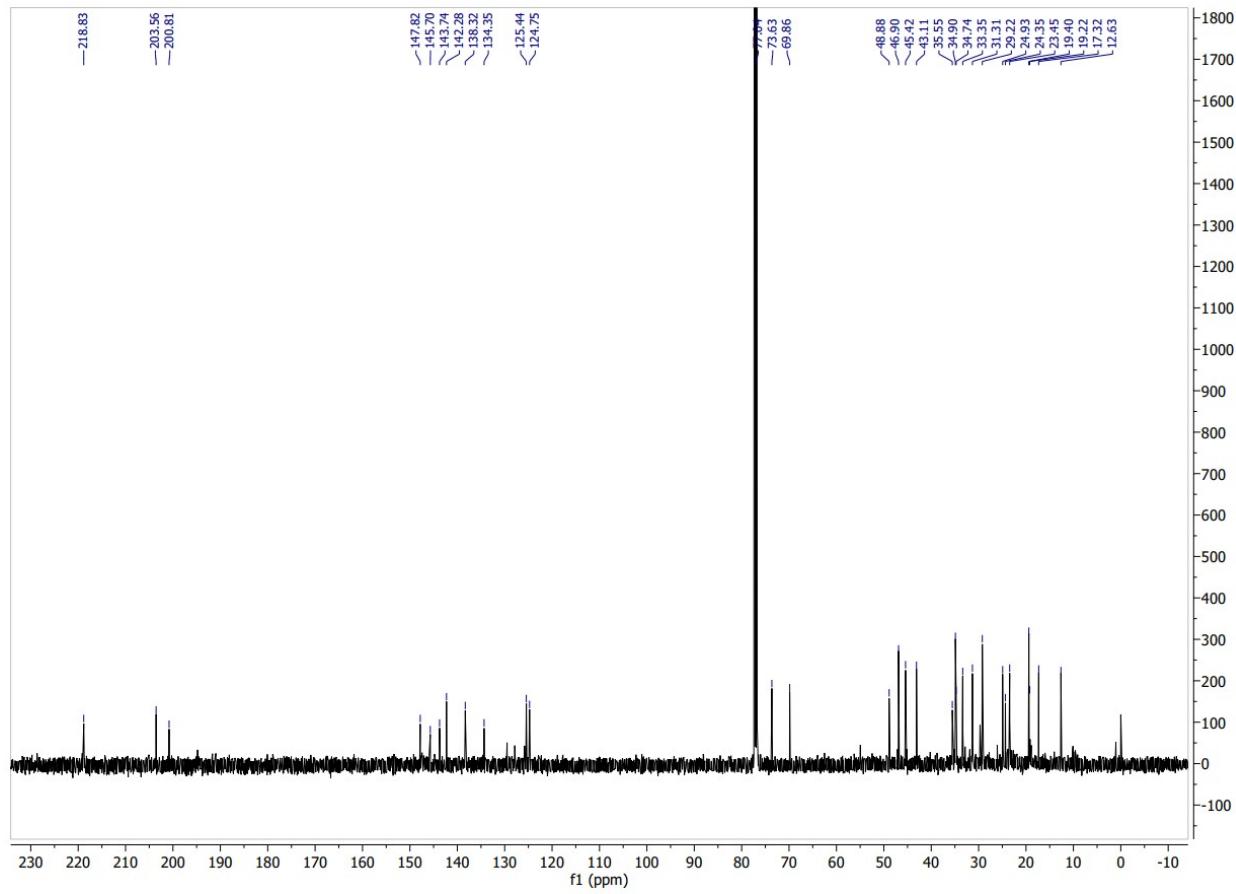
**Figure S25.**  $^1\text{H}$ -NMR spectrum of compound **3** in  $\text{CDCl}_3$



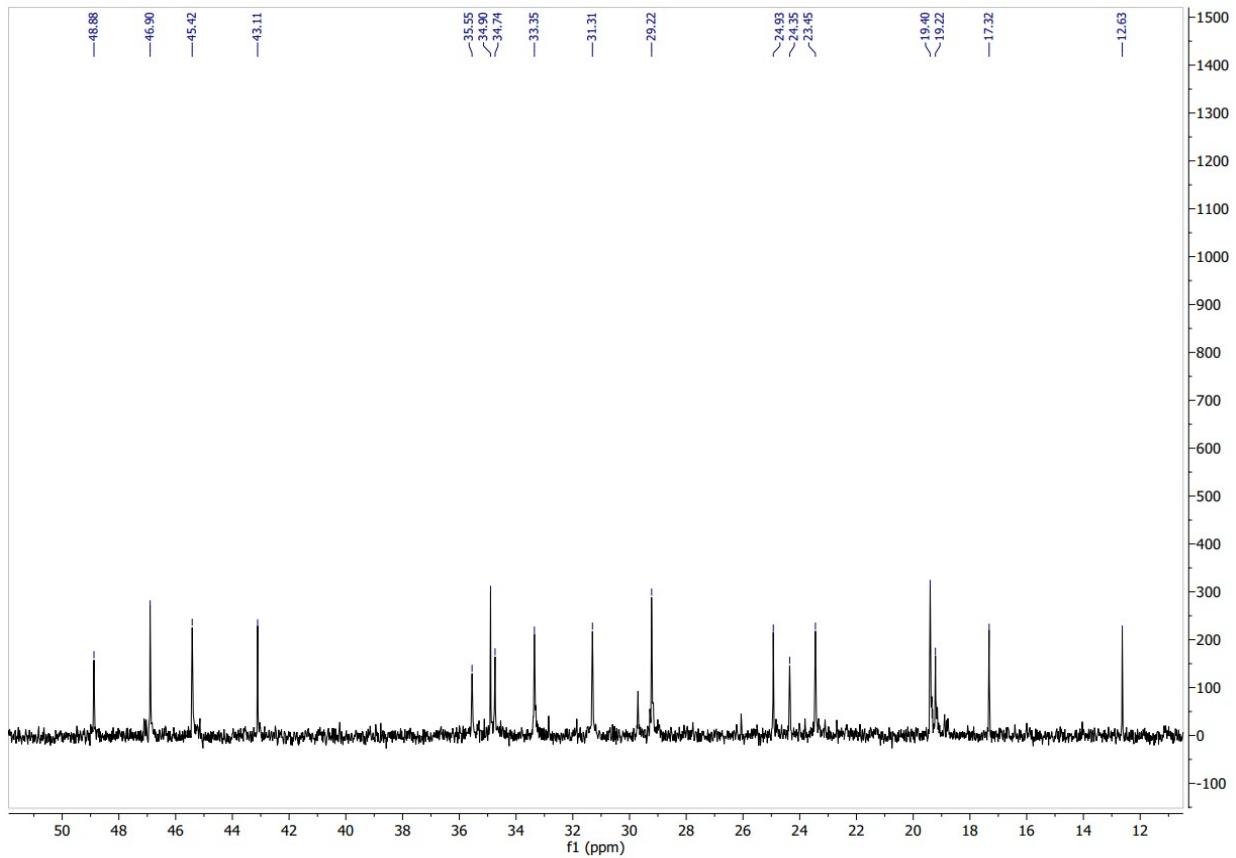
**Figure S26.** Expanded  $^1\text{H}$ -NMR spectrum of compound 3



**Figure S27.** Expanded  $^1\text{H}$ -NMR spectrum of compound 3



**Figure S28.**  $^{13}\text{C}$ -NMR spectrum of compound **3** in  $\text{CDCl}_3$



**Figure S29.** Expanded  $^{13}\text{C}$ -NMR spectrum of compound **3** in  $\text{CDCl}_3$

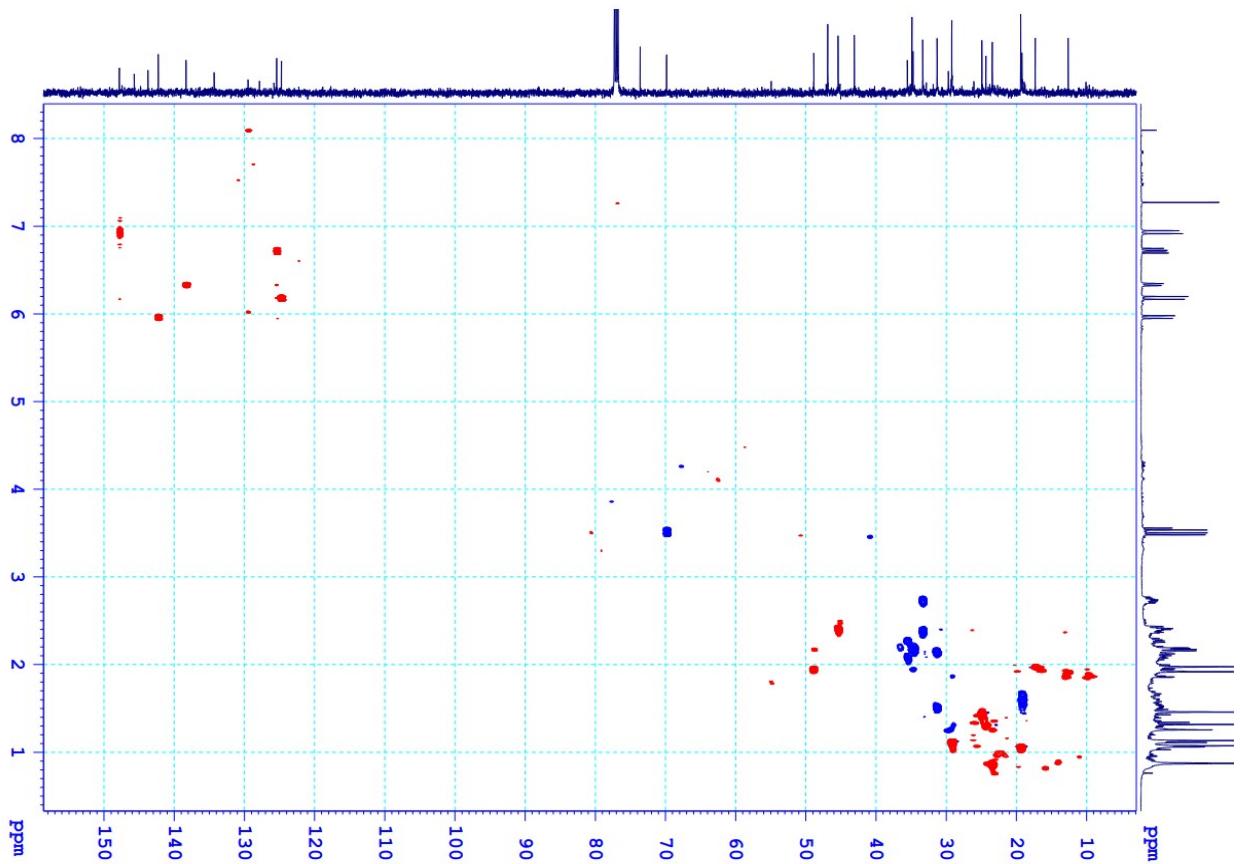


Figure S30. HSQC spectrum of compound 3

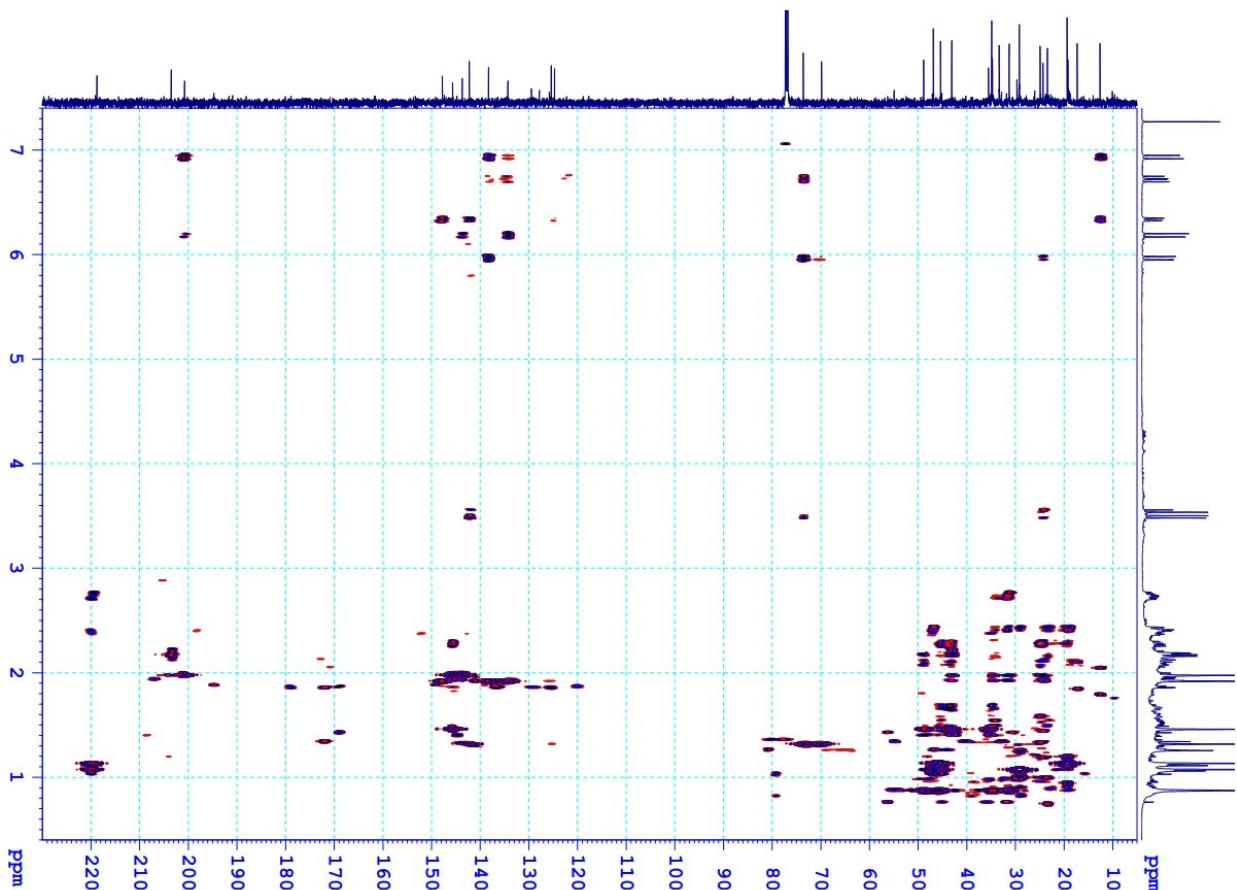


Figure S31. HMBC spectrum of compound 3

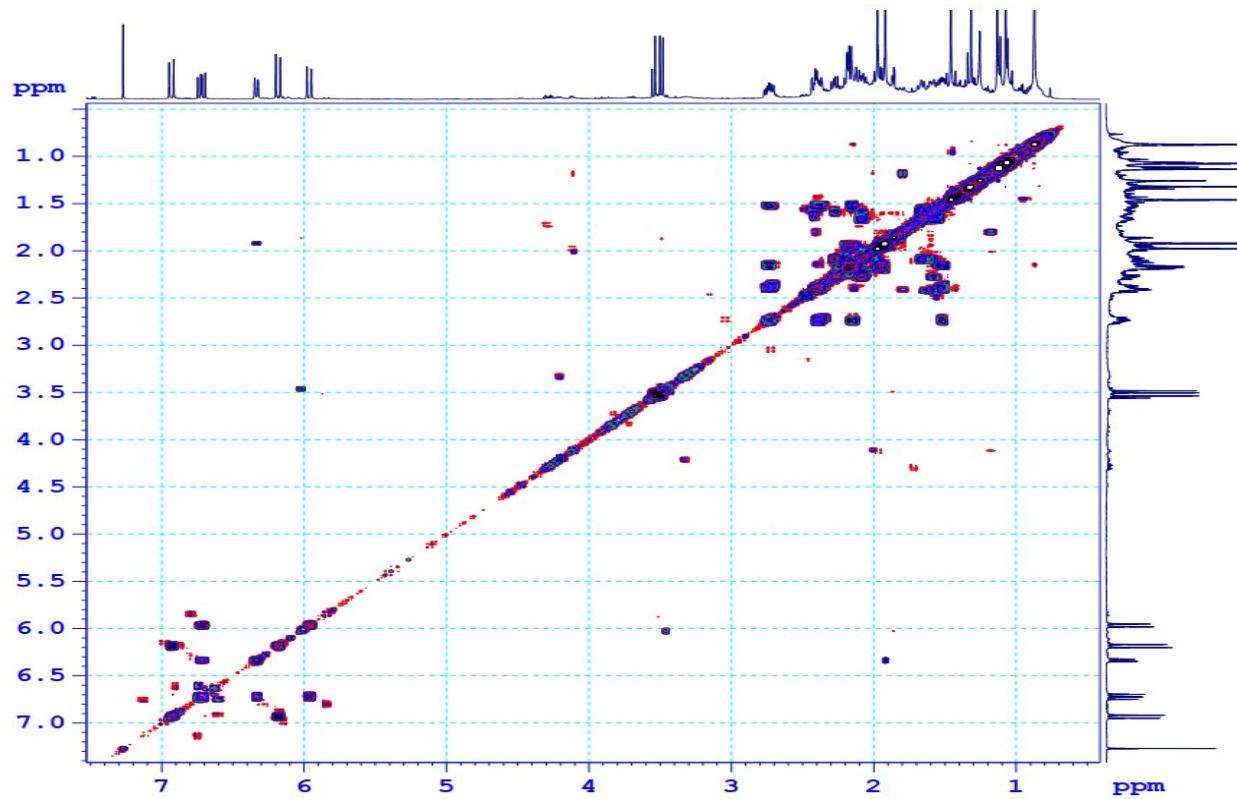


Figure S32. <sup>1</sup>H-<sup>1</sup>H COSY spectrum of compound 3

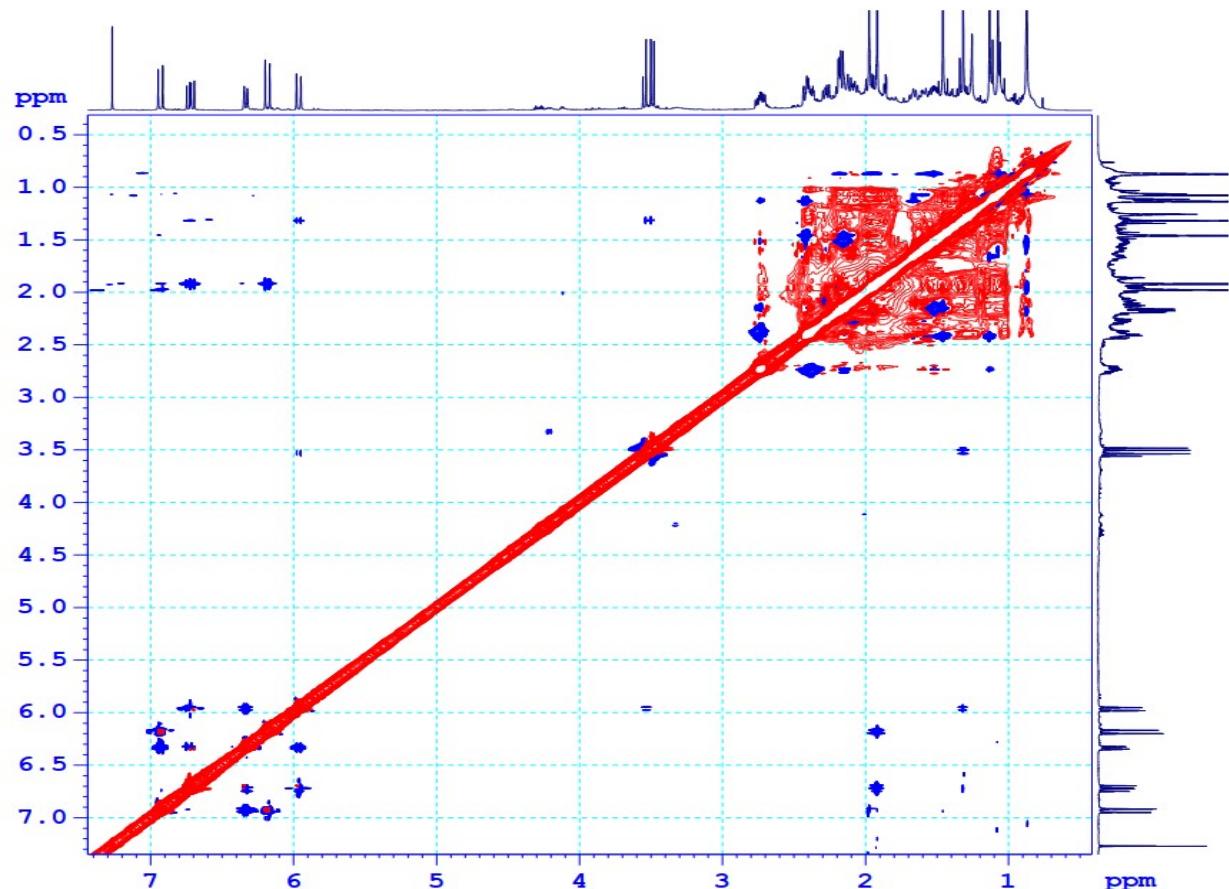
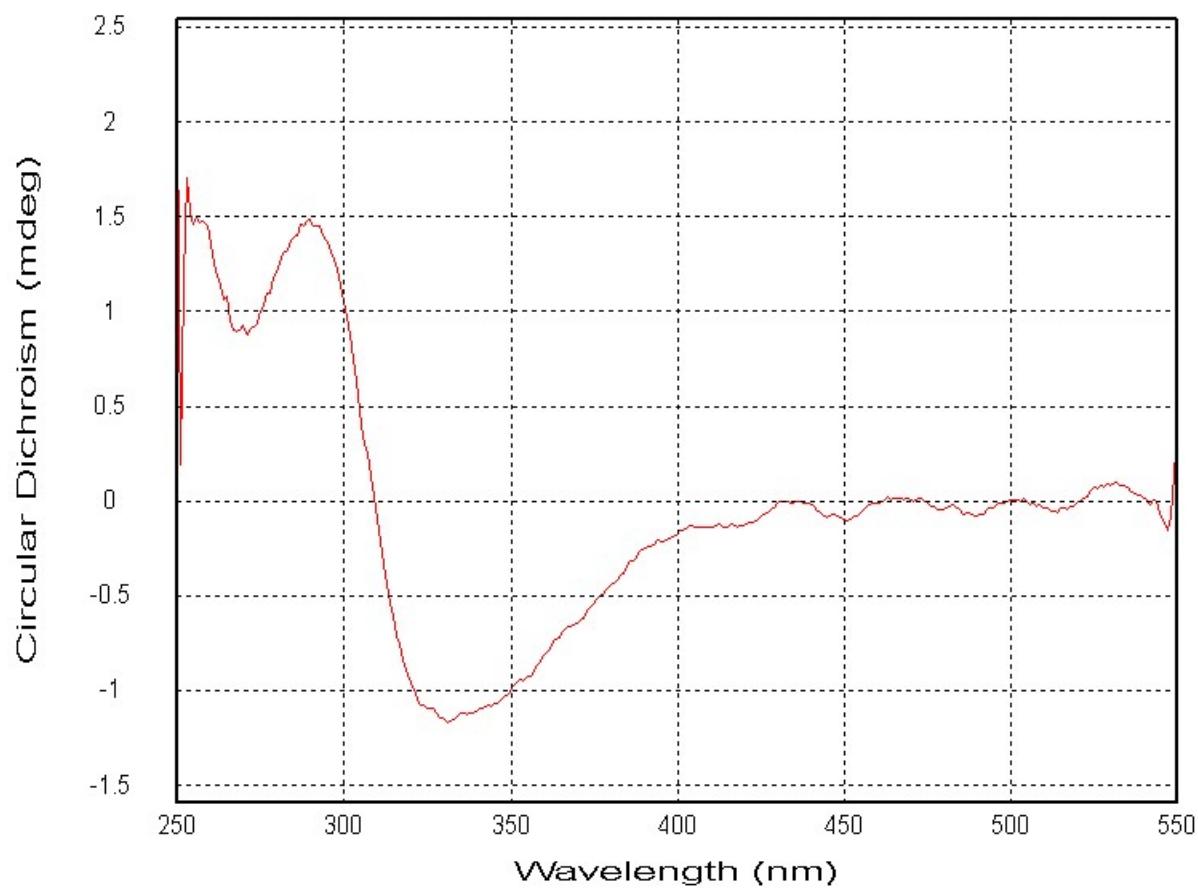
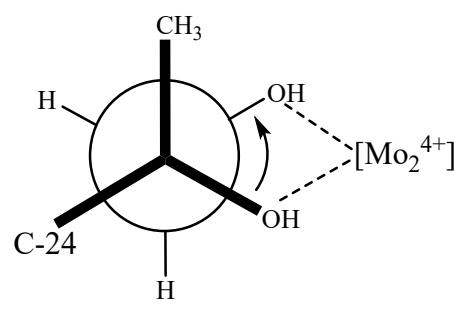


Figure S33. NOESY spectrum of compound 3

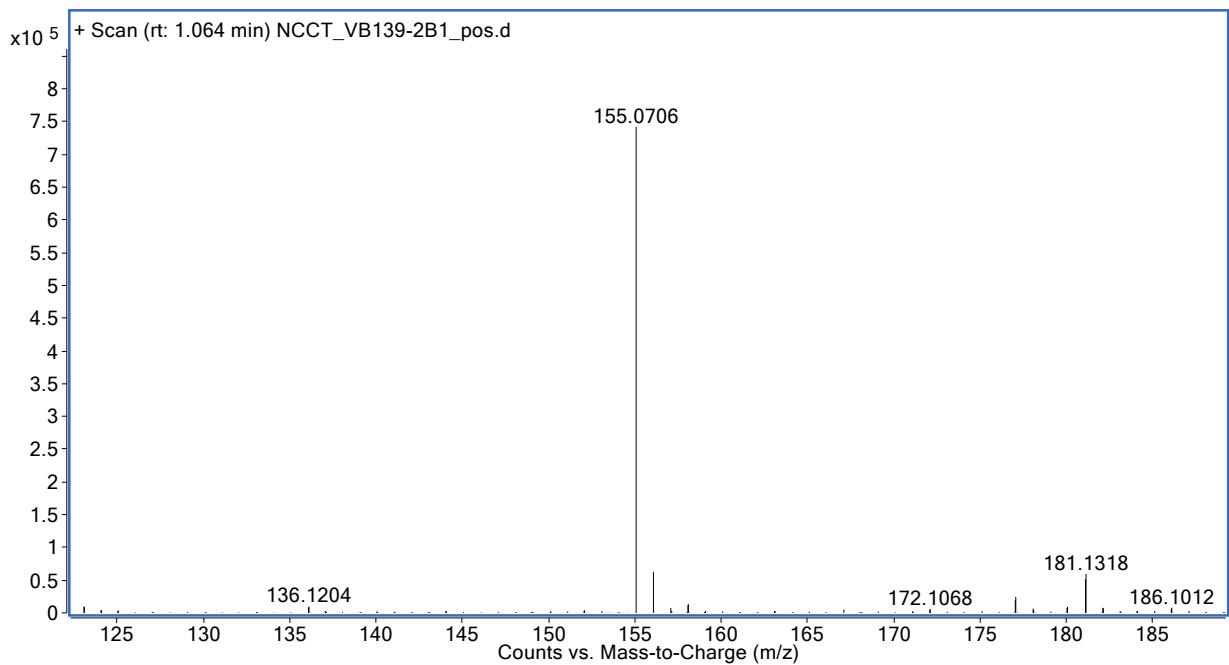


**Figure S34.**  $\text{Mo}_2(\text{OAc})_4$  induced ECD spectrum of compound **3**

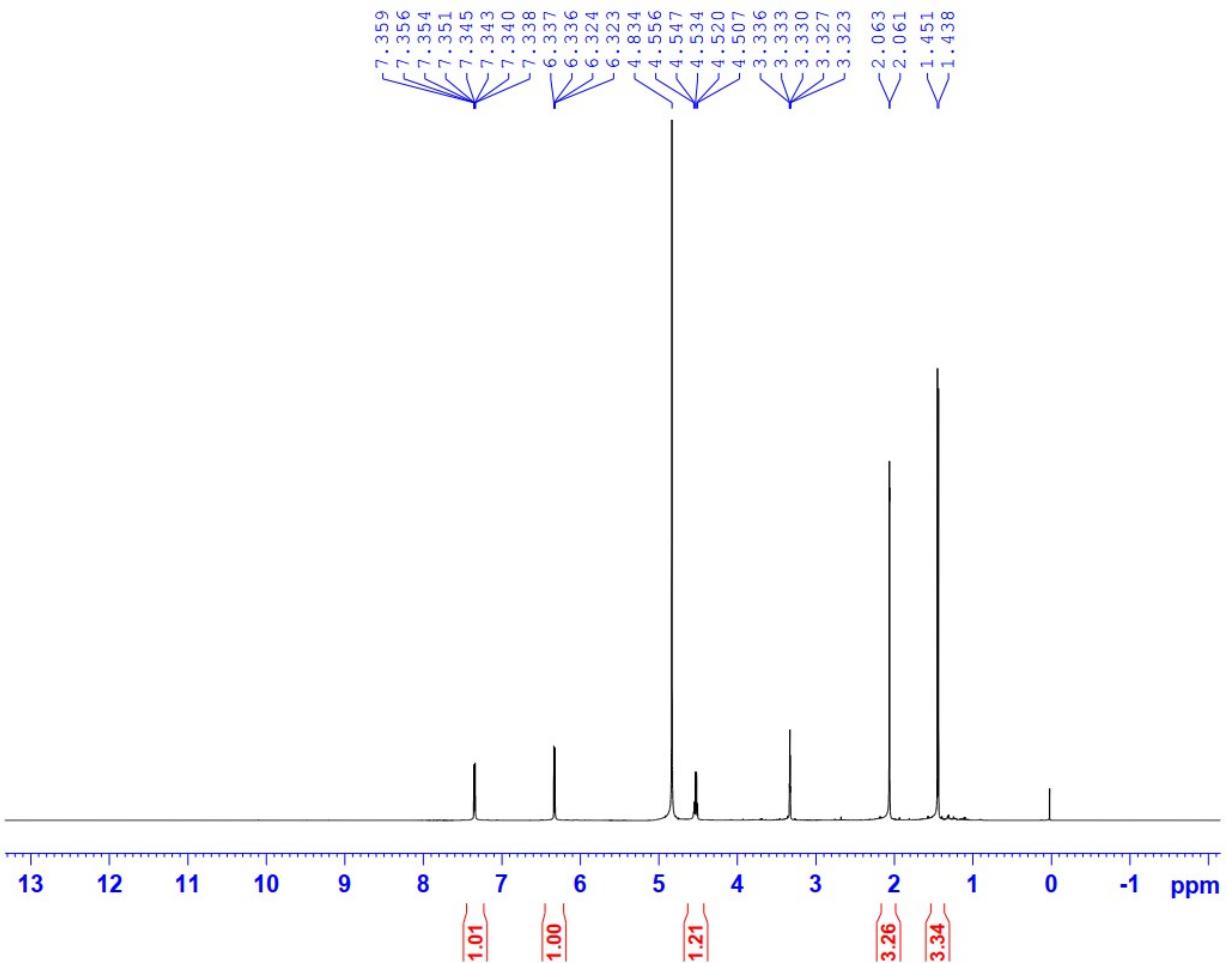


Negative chirality (negative helicity)

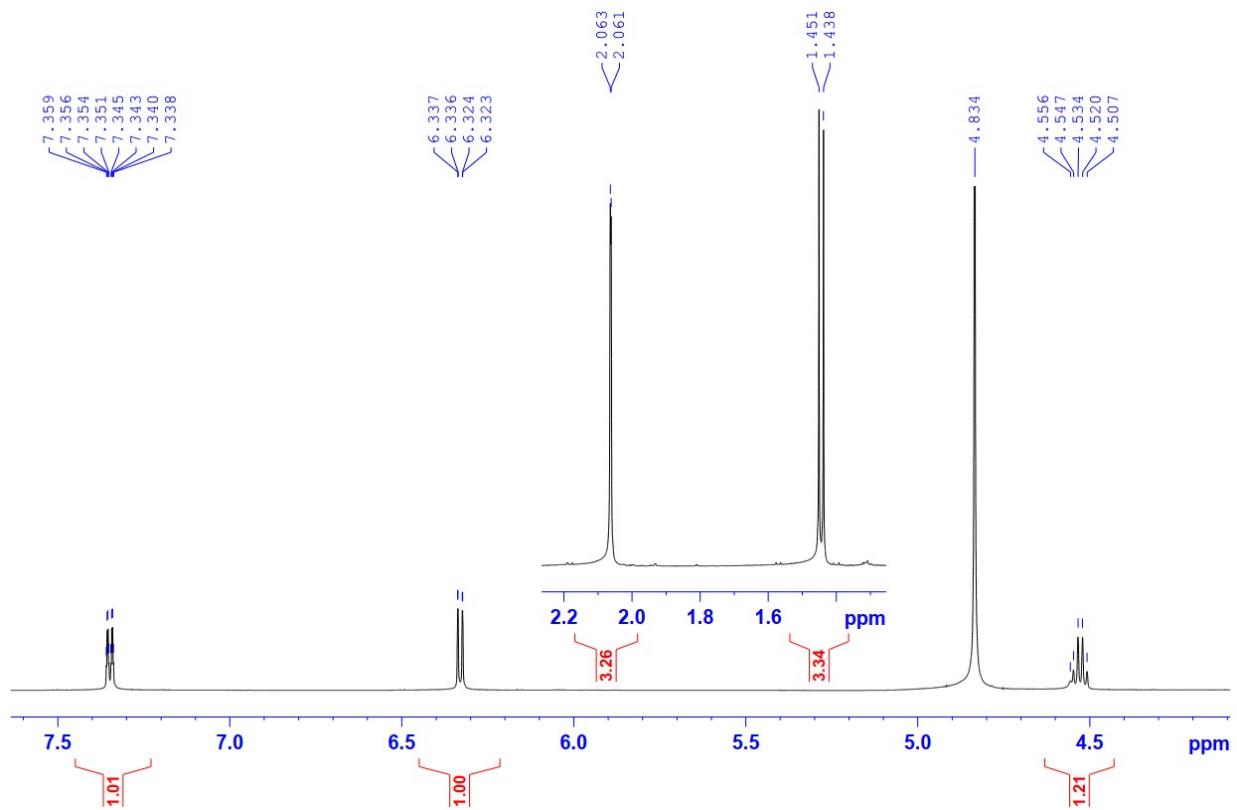
**Figure S35.** Favored conformation of the  $\text{Mo}_2^{4+}$  complex of compound **3**



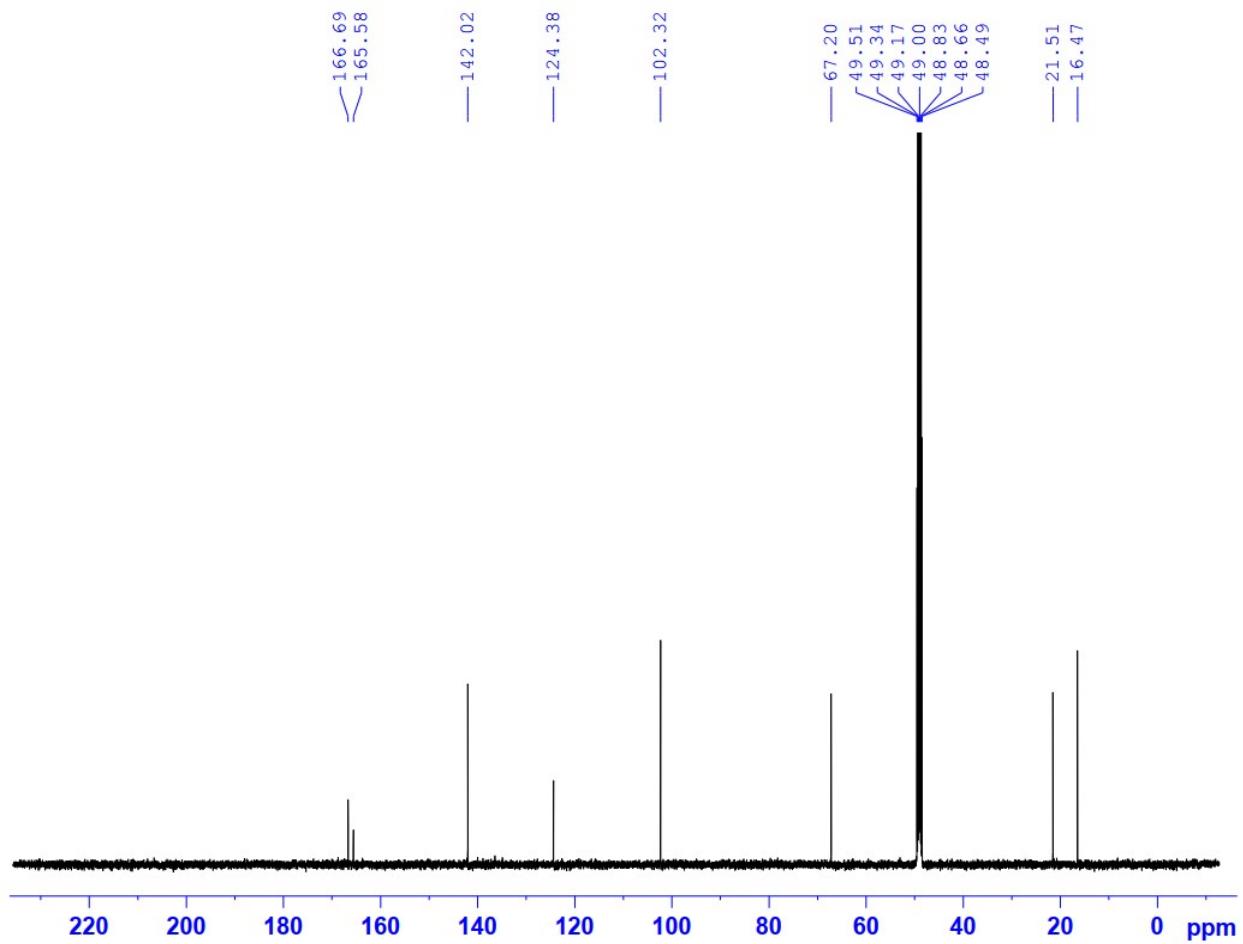
**Figure S36.** HRESIMS of compound 4



**Figure S37.**  $^1\text{H}$ -NMR spectrum of compound 4 in  $\text{CDCl}_3$



**Figure S38.** Expanded  $^1\text{H}$ -NMR spectrum of compound 4 in  $\text{CDCl}_3$



**Figure S39.**  $^{13}\text{C}$ -NMR spectrum of compound 4 in  $\text{CDCl}_3$

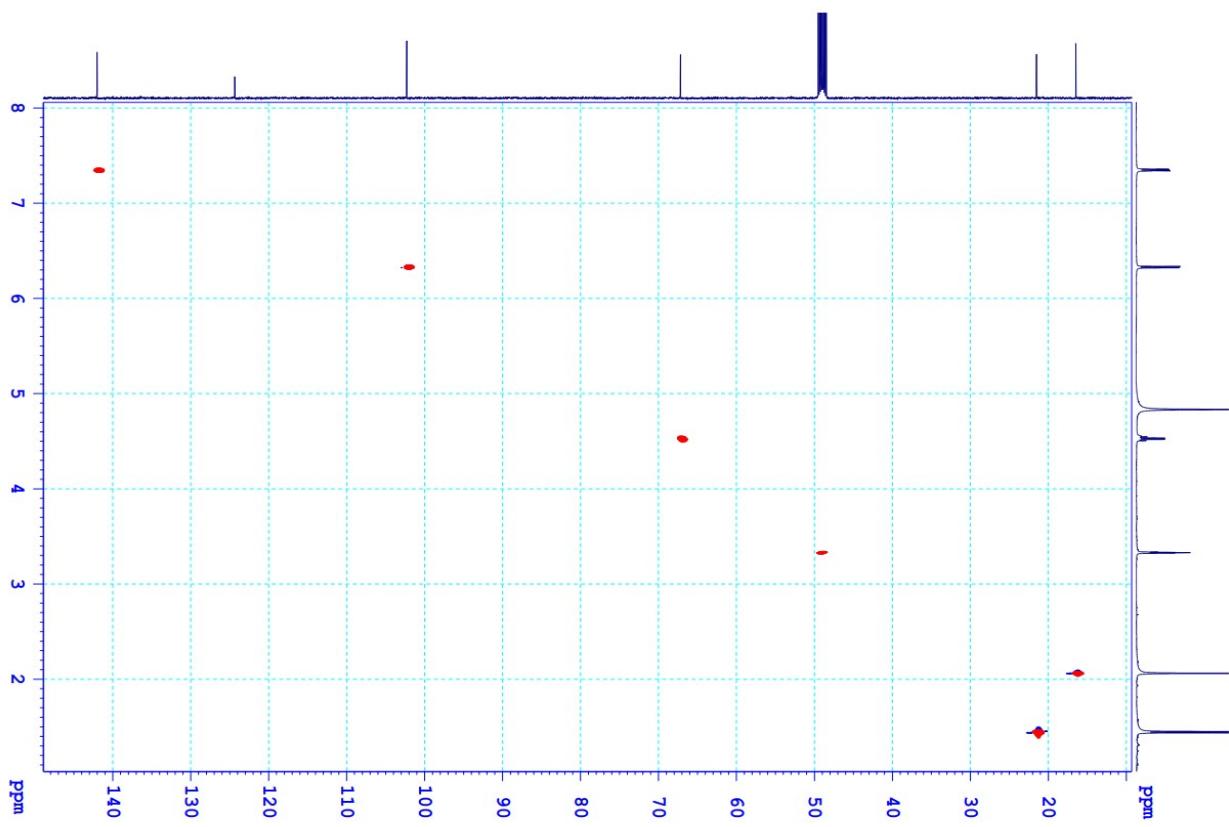


Figure S40. HSQC spectrum of compound 4

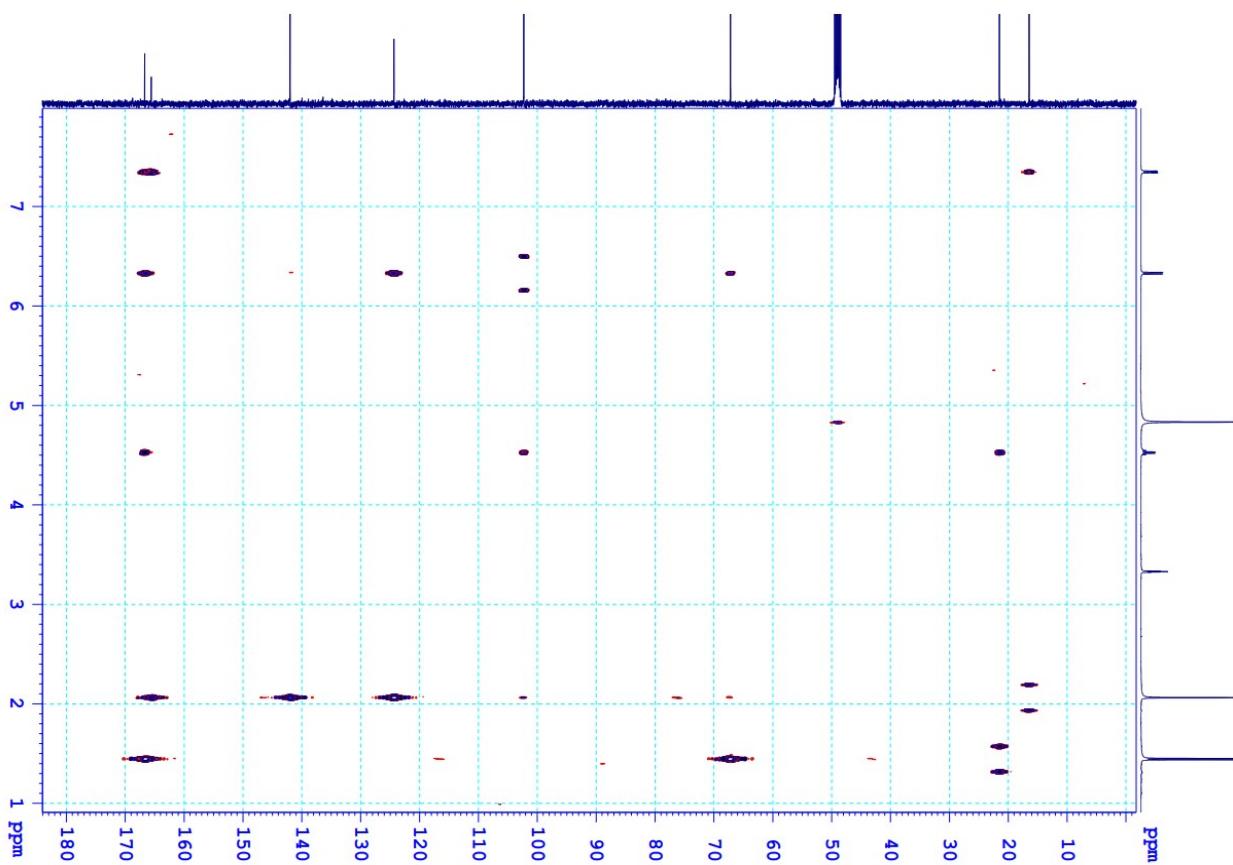
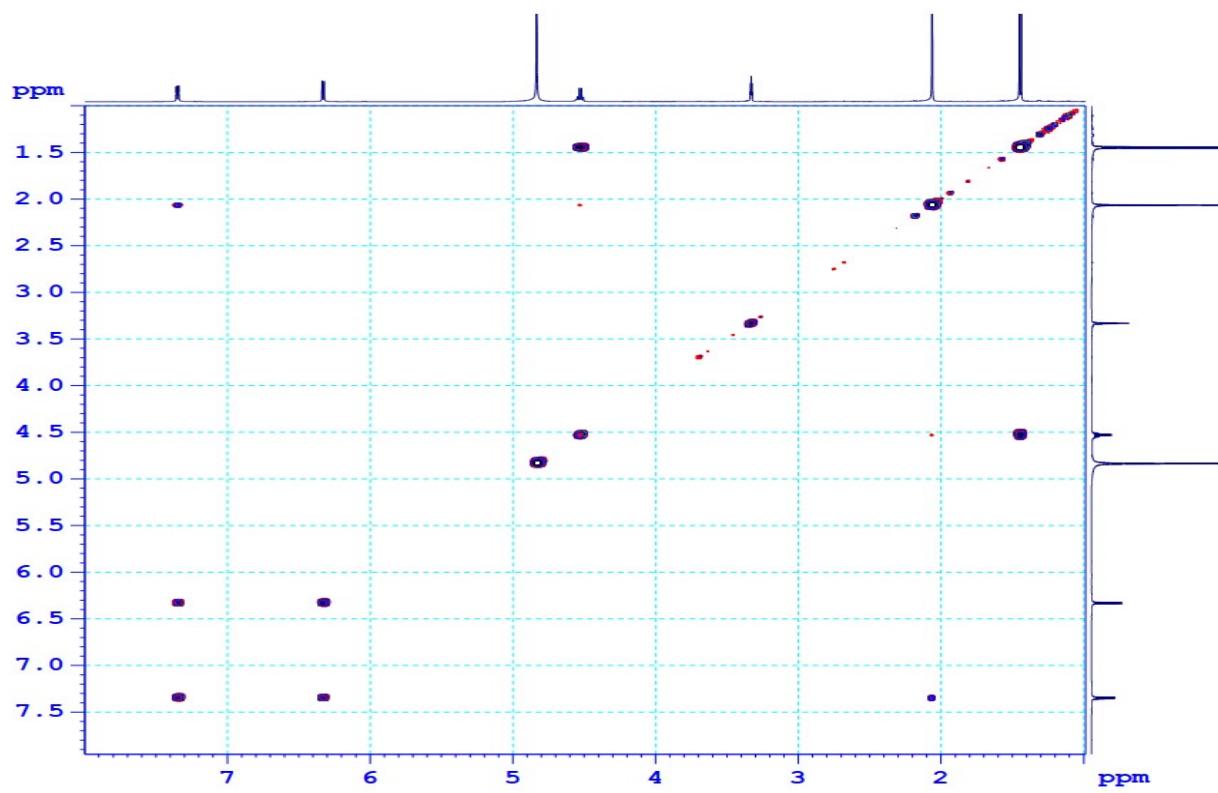
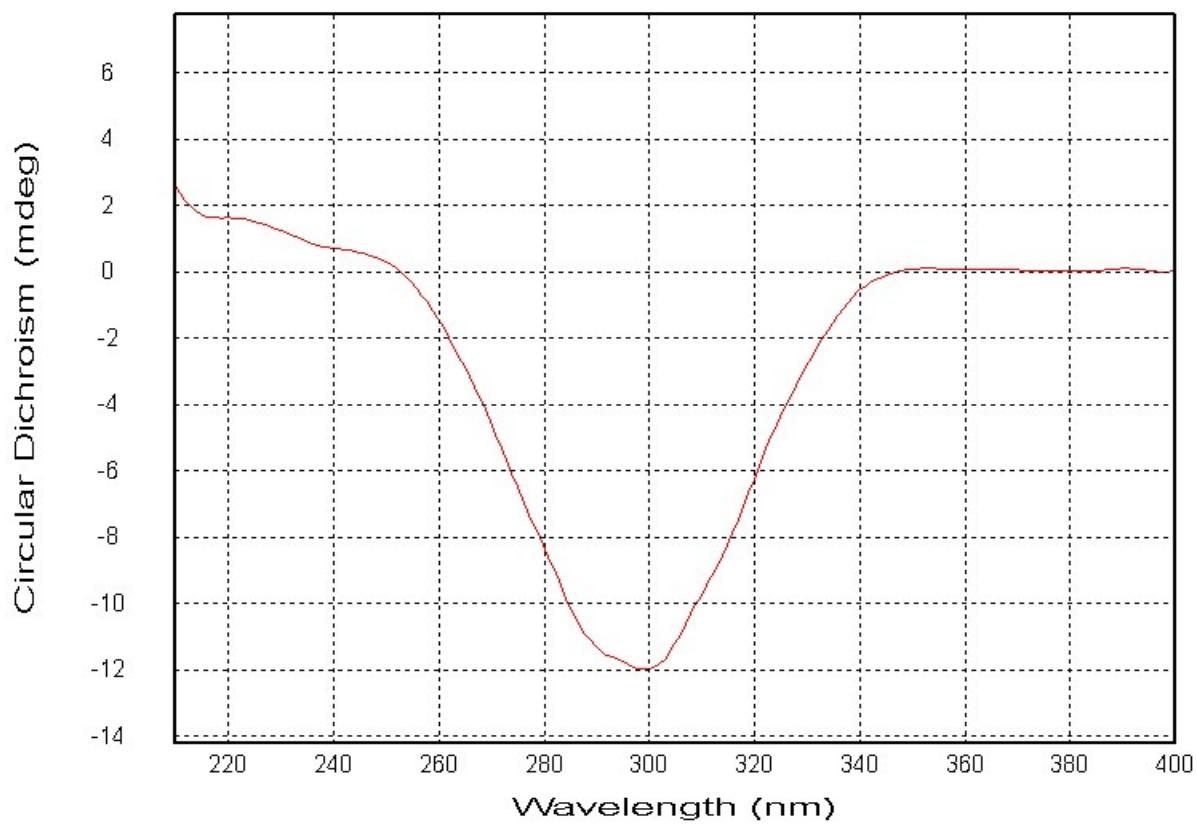


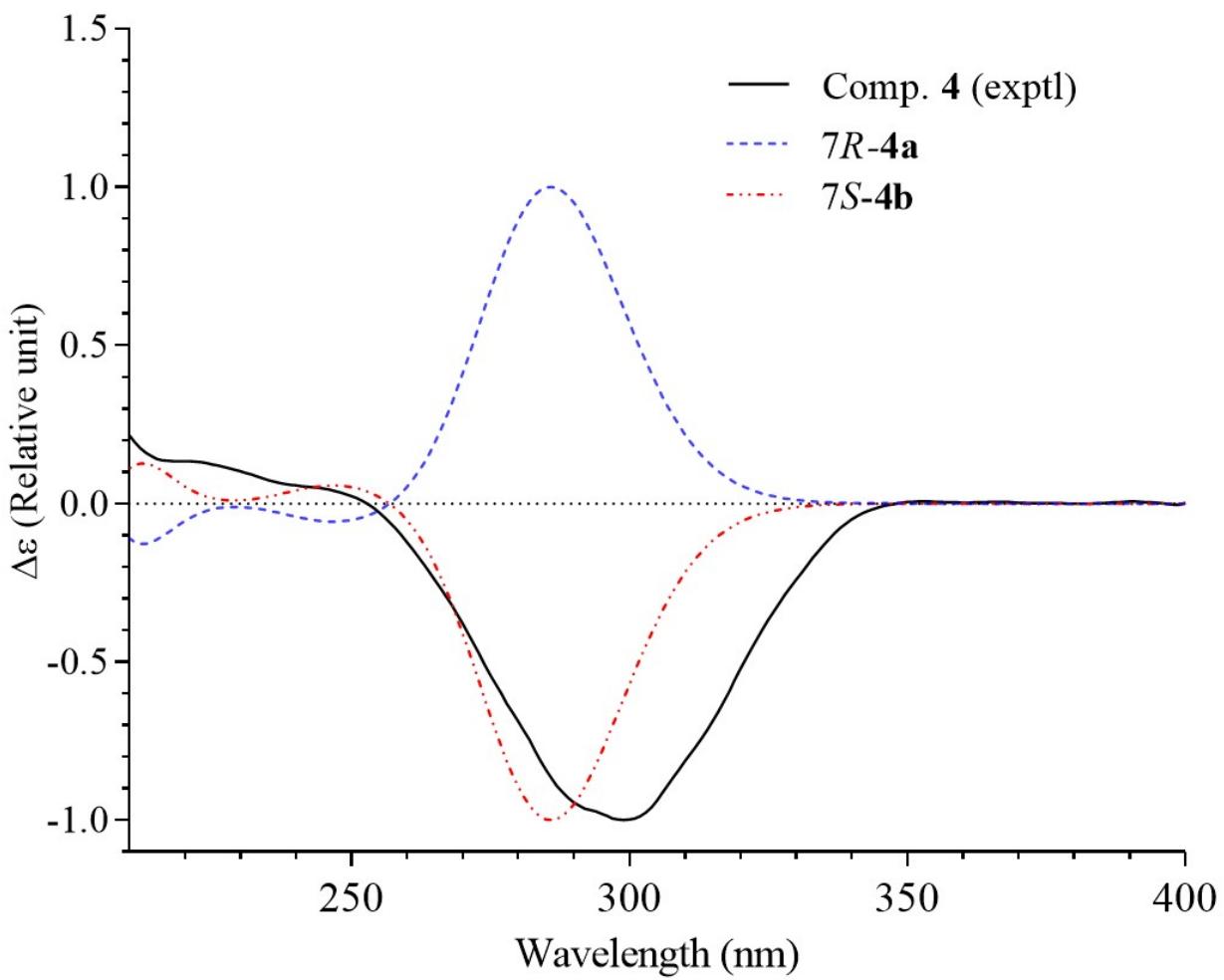
Figure S41. HMBC spectrum of compound 4



**Figure S42.** <sup>1</sup>H-<sup>1</sup>H COSY spectrum of compound 4



**Figure S43.** ECD spectrum of compound 4



**Figure S44.** Comparison experimental ECD spectrum of compound **4** and TD-DFT calculation ECD spectra of enantiomers (**4a** and **4b**)