

# **Ulapualides C-E Isolated from a Hawaiian *Hexabranchus sanguineus* Egg Mass**

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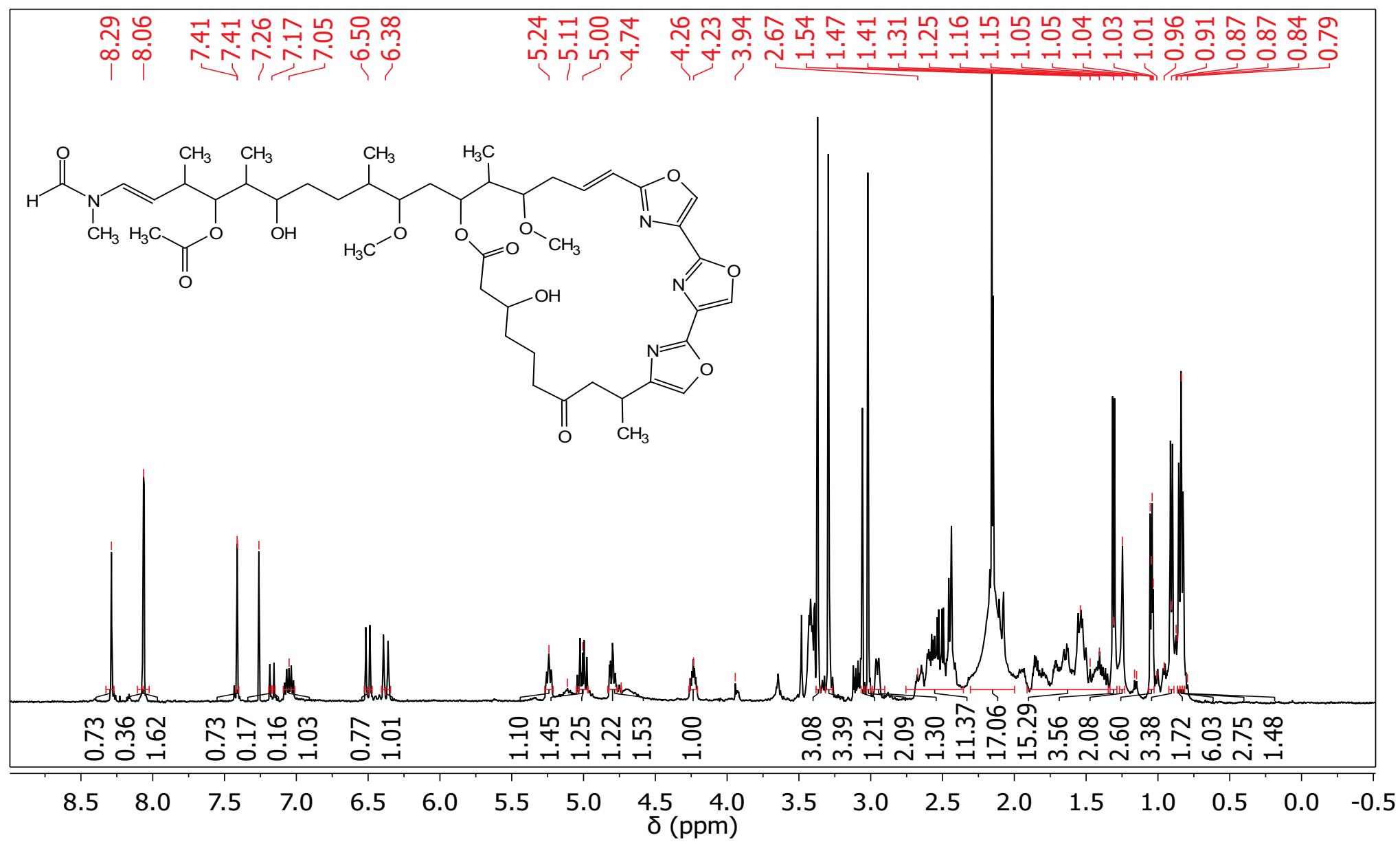
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**Figure S1.**  $^1\text{H}$  NMR Spectrum of Ulapualide C (3) ( $\text{CDCl}_3$ , 500 MHz)



S3

Figure S2.  $^{13}\text{C}$  NMR Spectrum of Ulapualide C (3) ( $\text{CDCl}_3$ , 125 MHz)

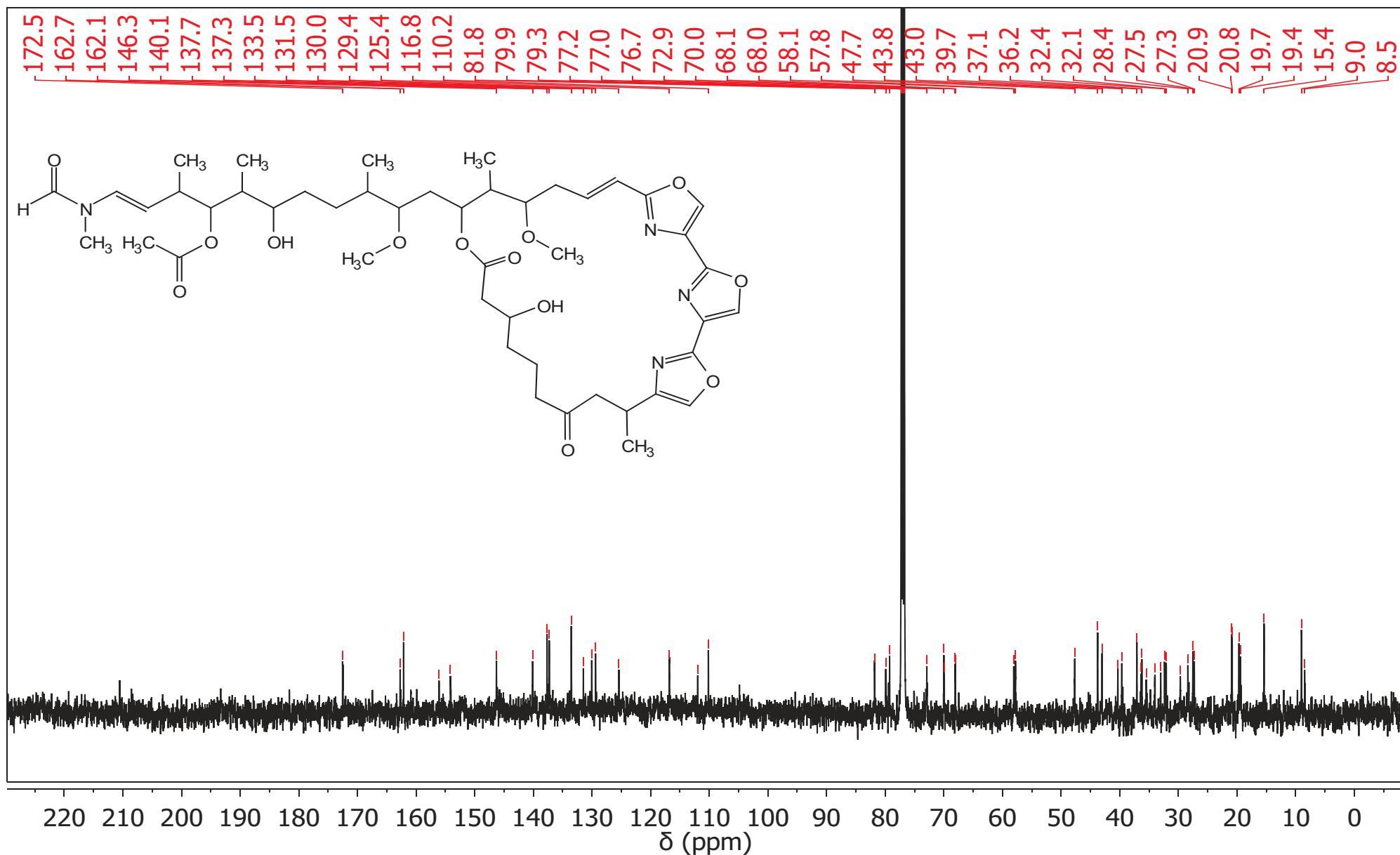


Figure S3. g HSQC Spectrum of Ulapualide C (3) ( $\text{CDCl}_3$ , 500 MHz)

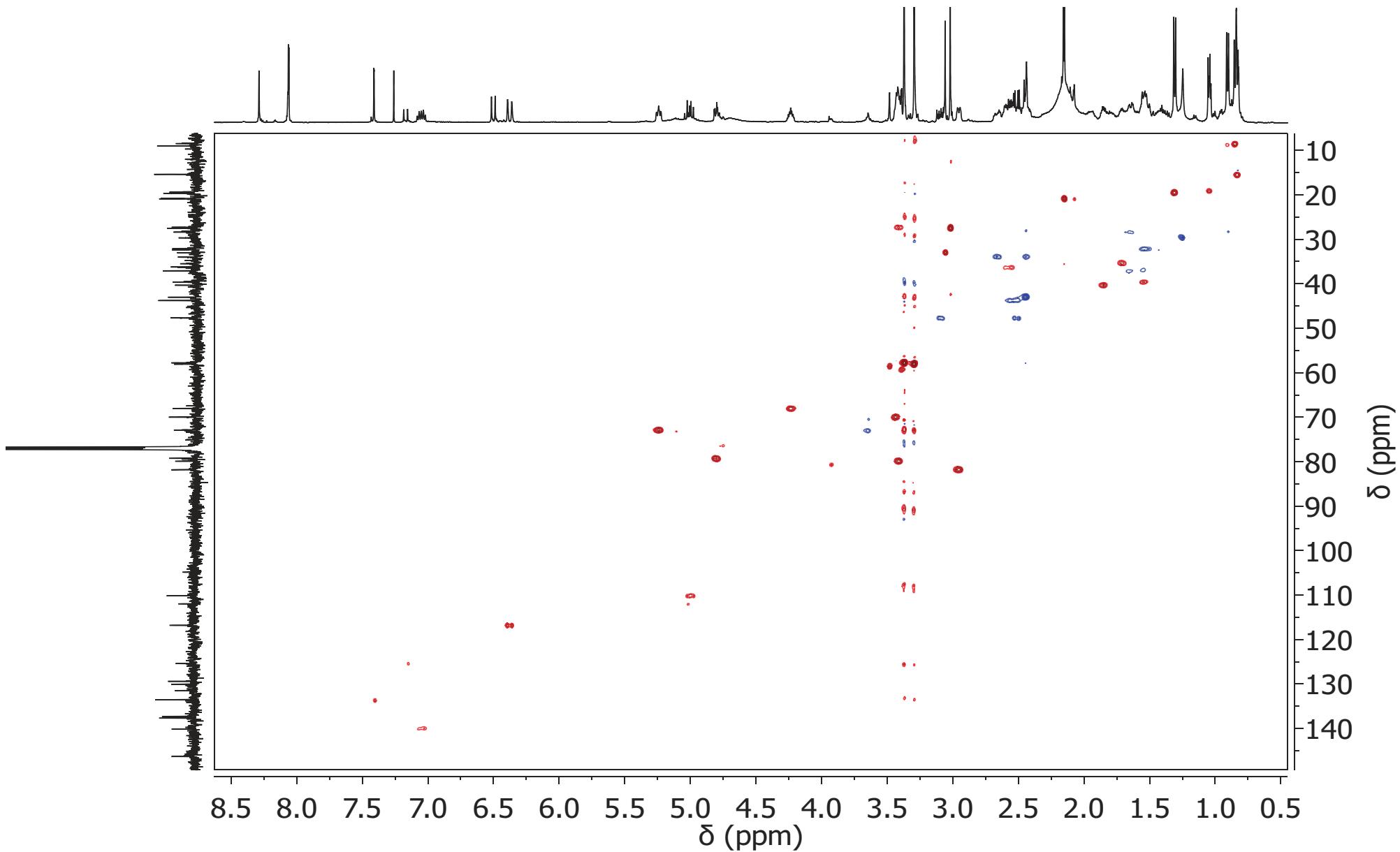


Figure S4. gCOSY Spectrum of Ulapualide C (3) ( $\text{CDCl}_3$ , 500 MHz)

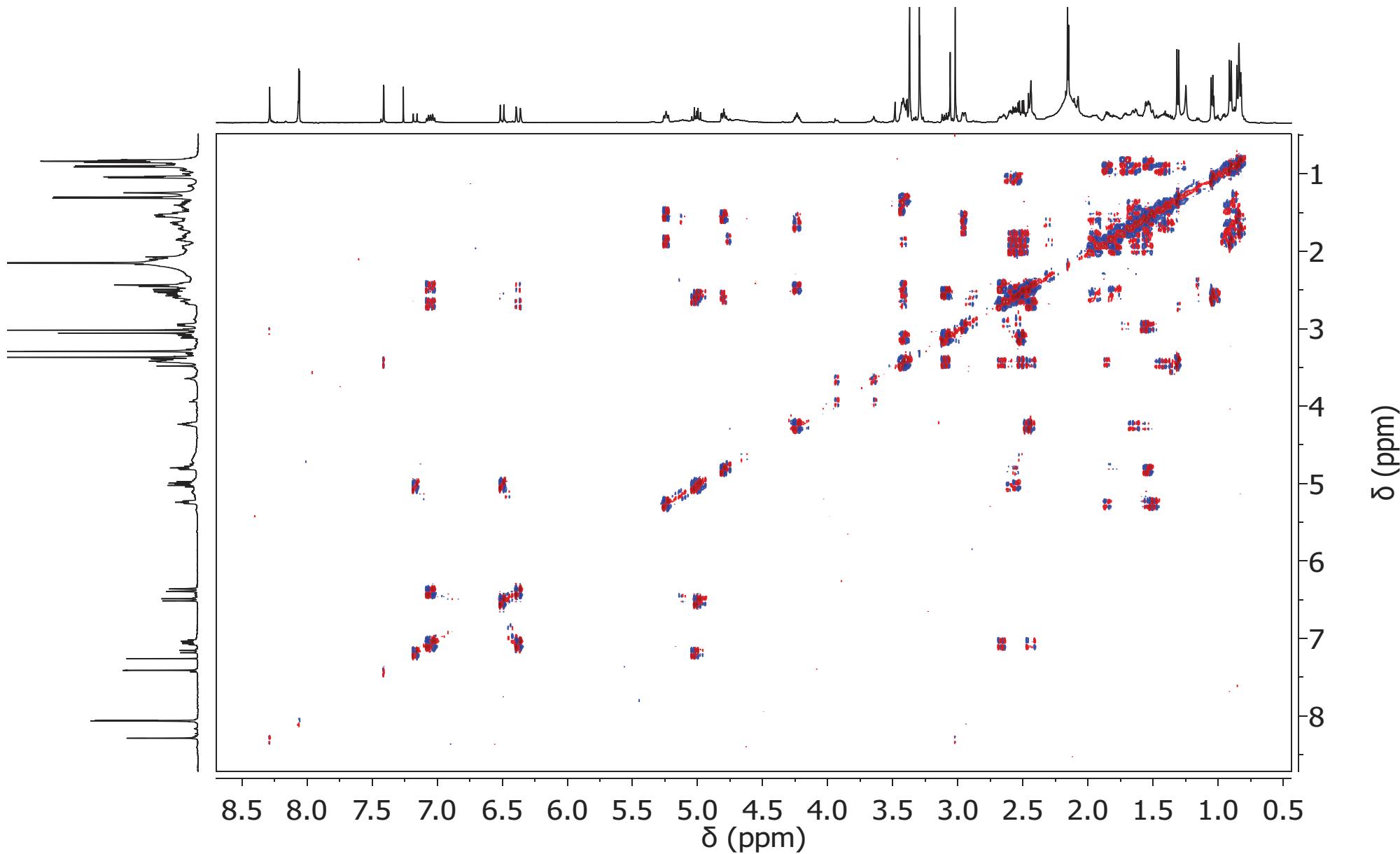
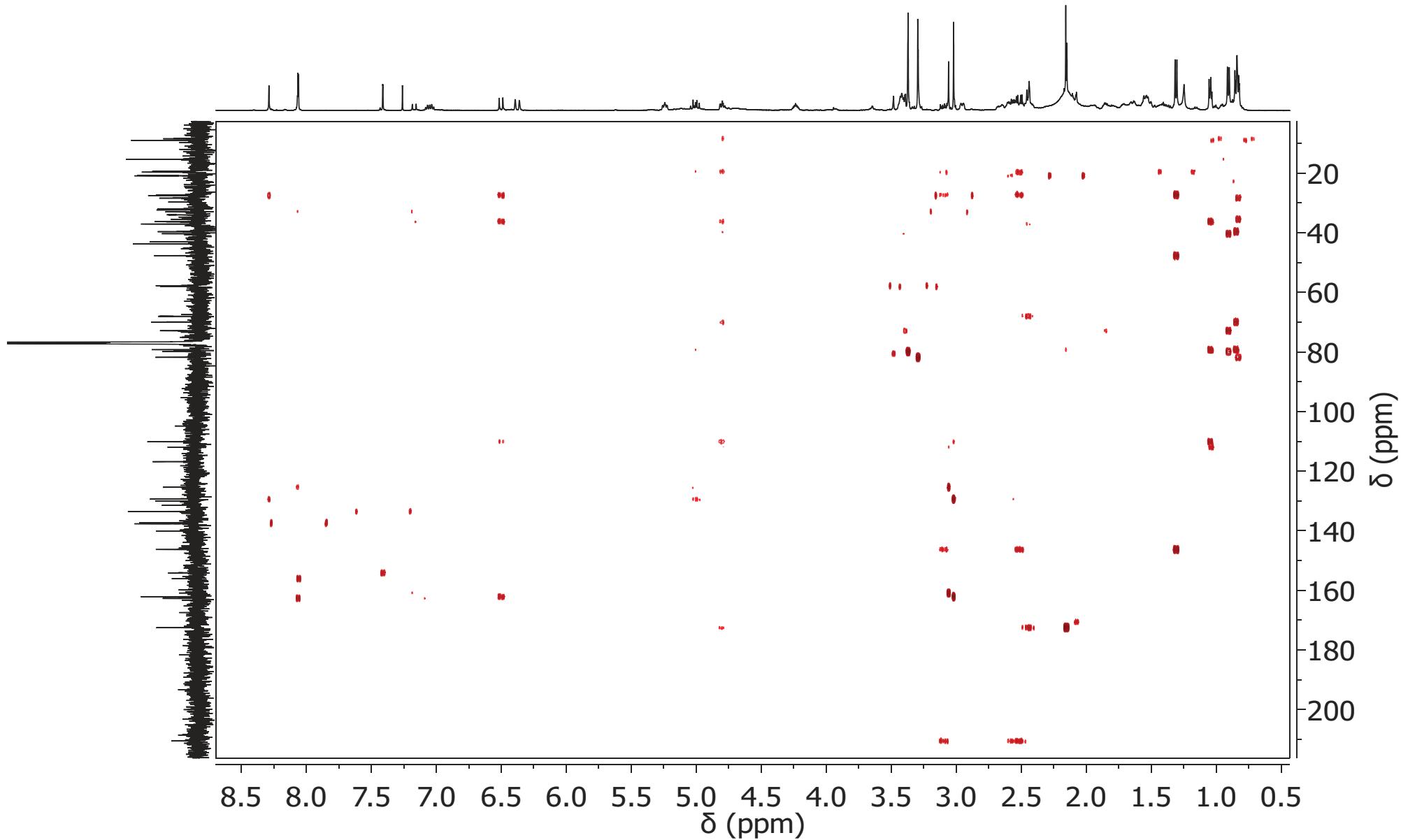


Figure S5. gHMBC Spectrum of Ulapualide C (3) ( $\text{CDCl}_3$ , 500 MHz)



**Figure S6.**  $^1\text{H}$  NMR Spectrum of Ulapualide D (4) ( $\text{CDCl}_3$ , 500 MHz)

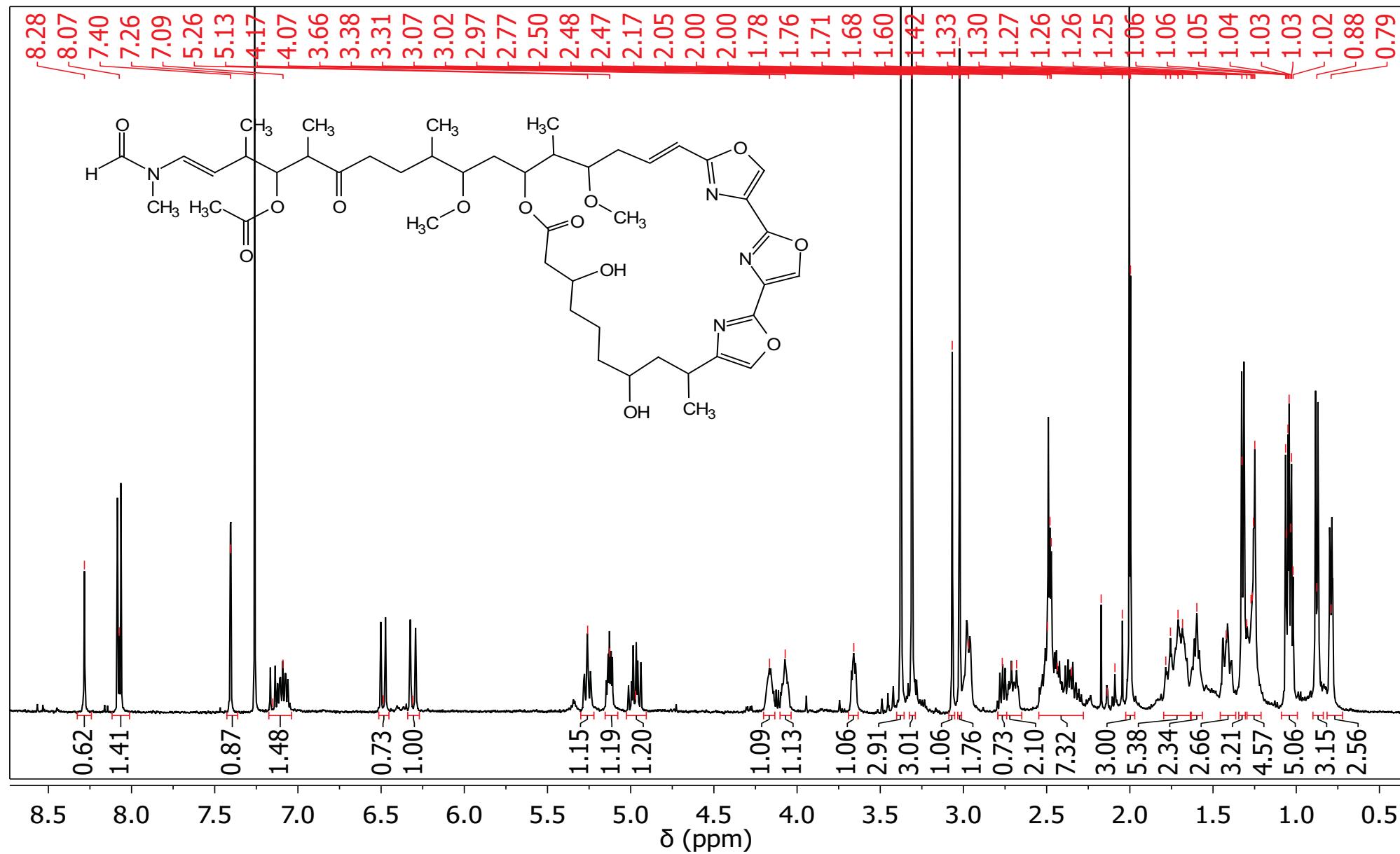
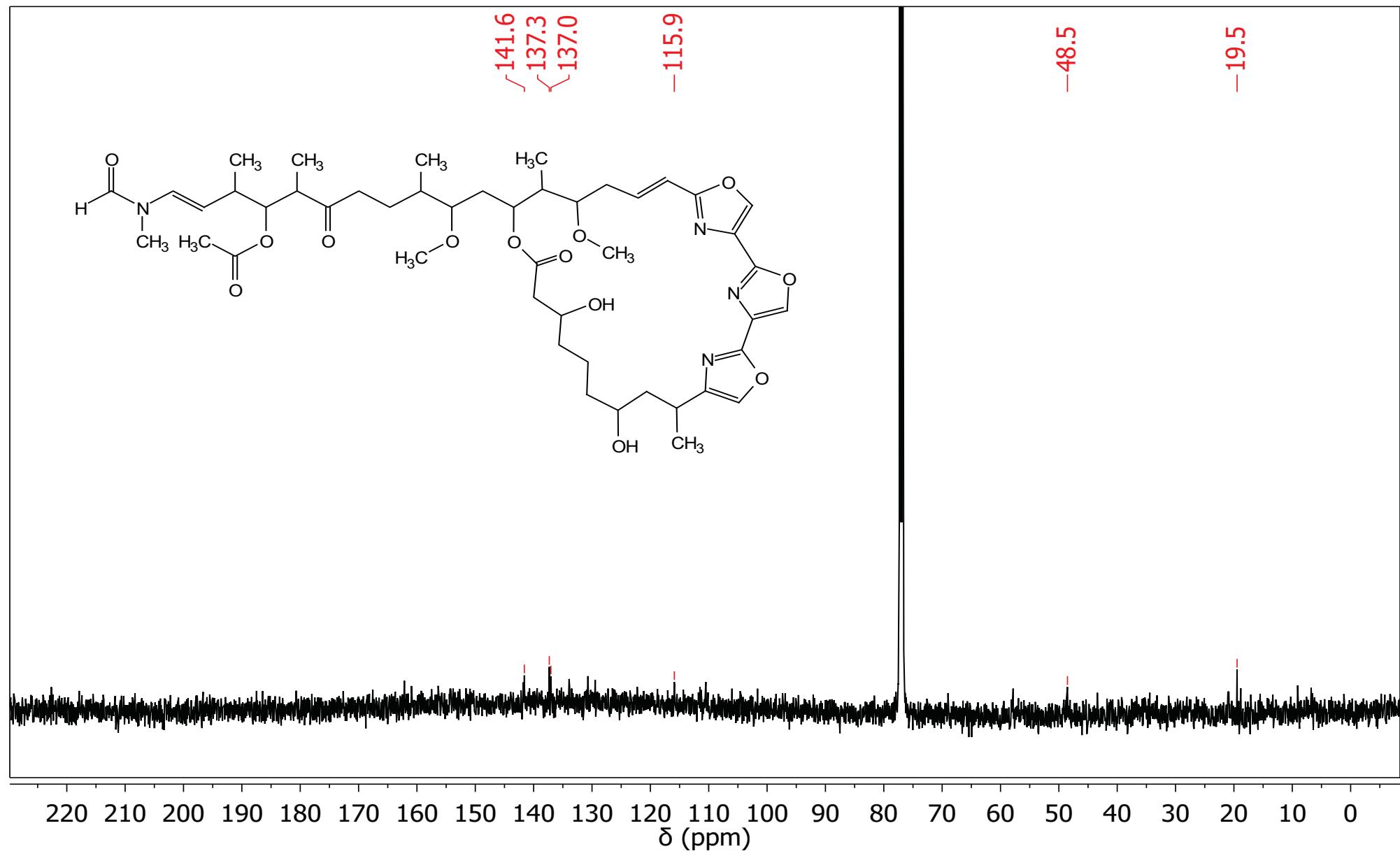


Figure S7.  $^{13}\text{C}$  NMR Spectrum of Ulapualide D (4) ( $\text{CDCl}_3$ , 125 MHz)



**Figure S8. gHSQC Spectrum of Ulapualide D (4) ( $\text{CDCl}_3$ , 500 MHz)**

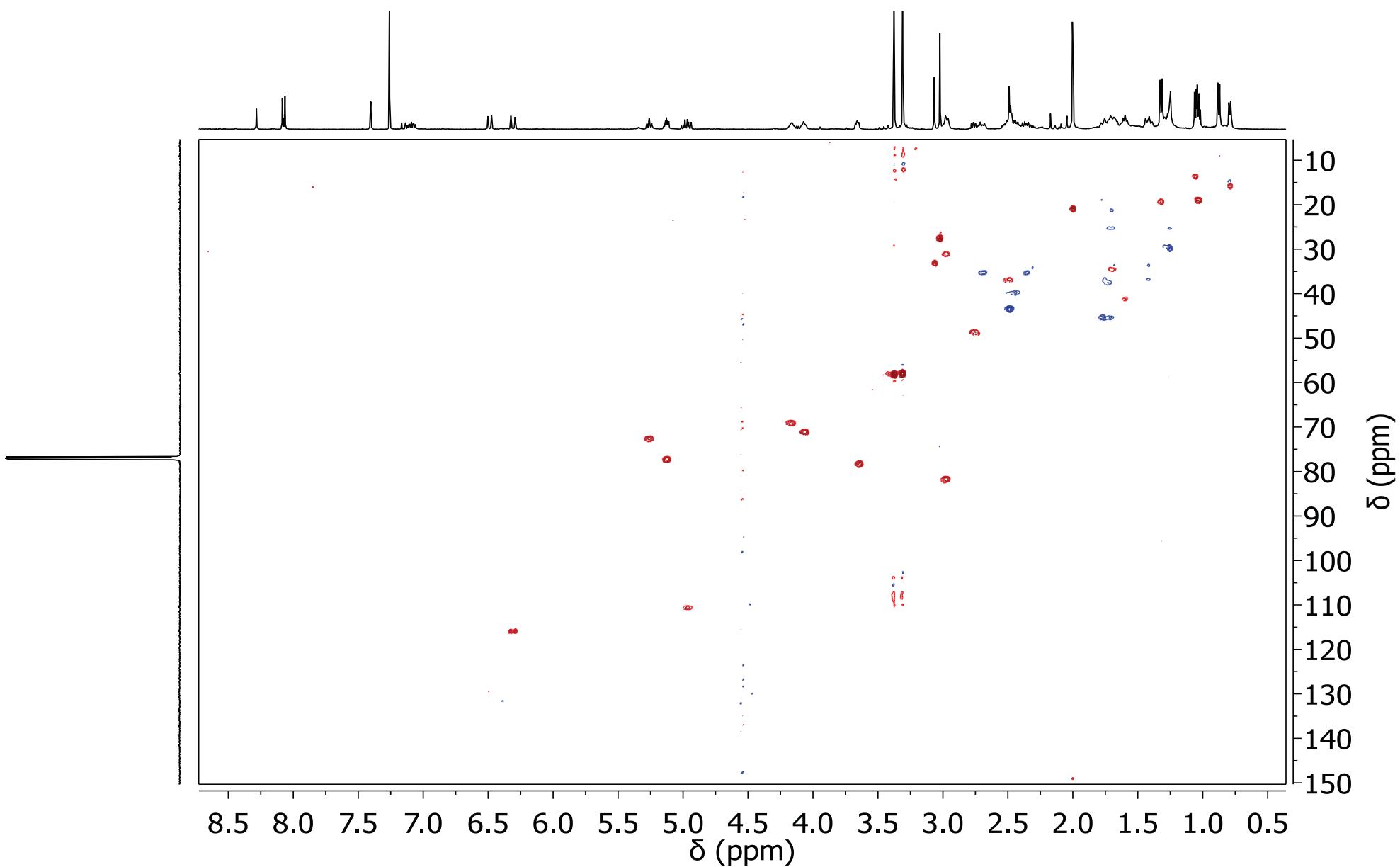
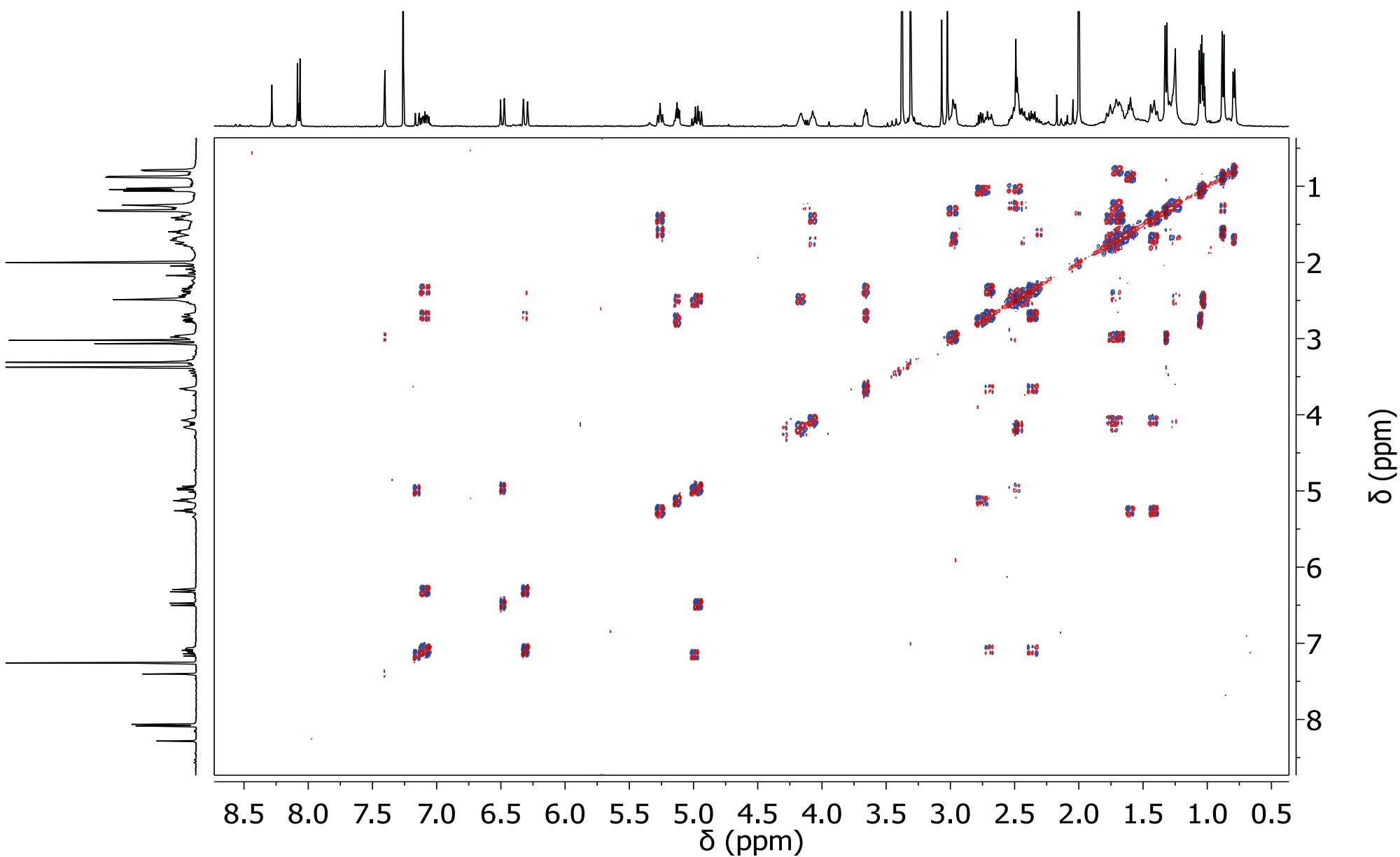
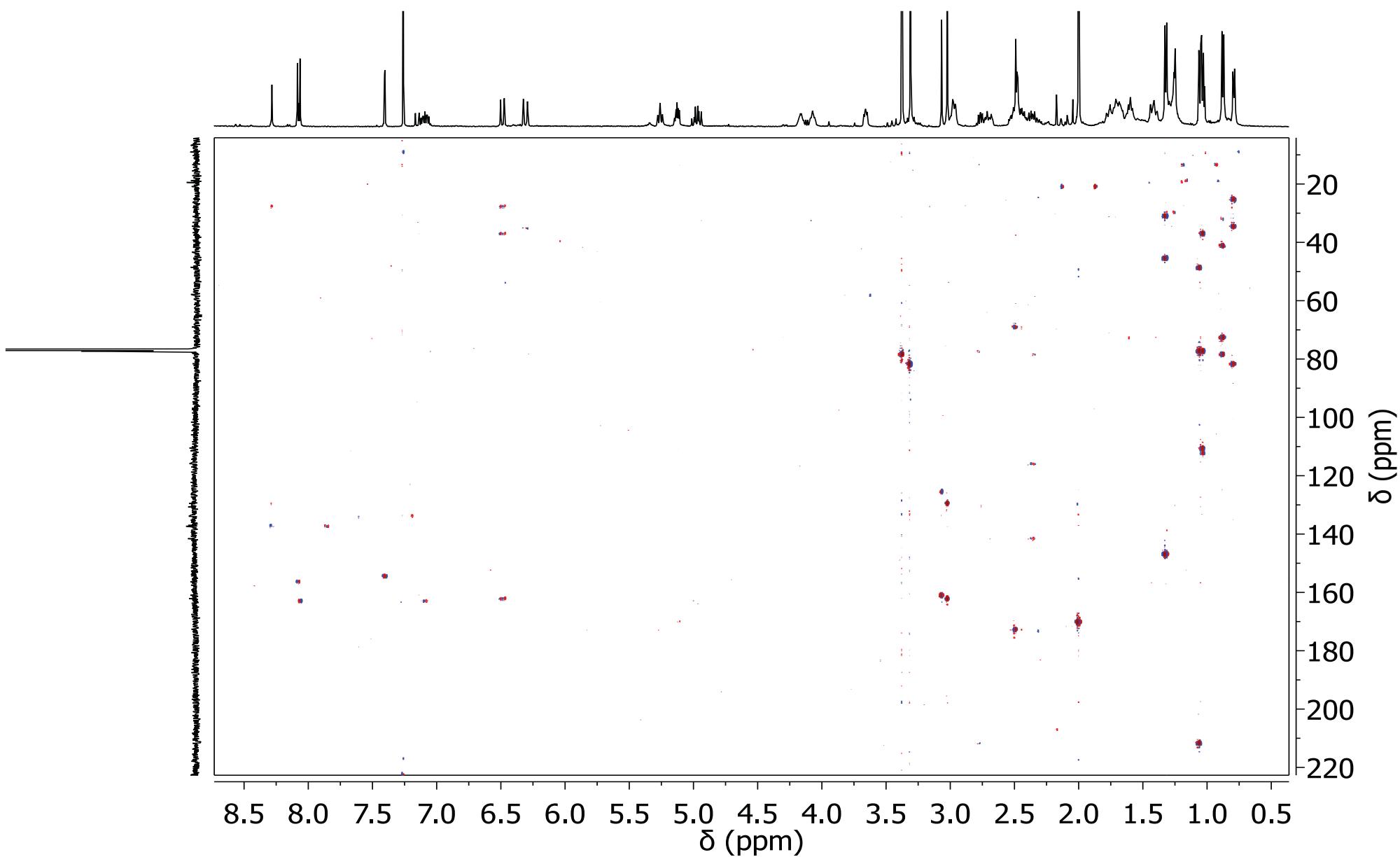


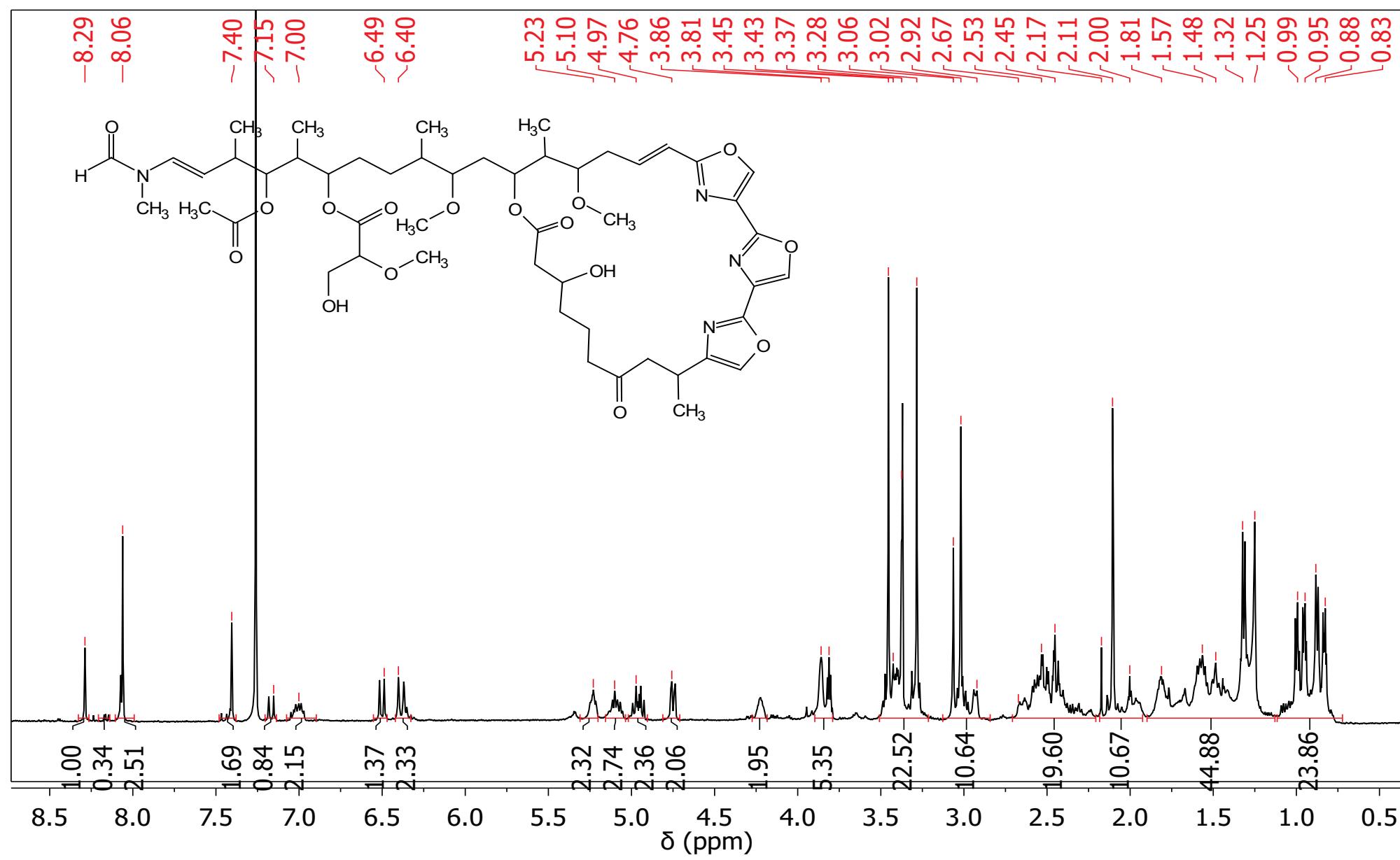
Figure S9. gCOSY Spectrum of Ulapualide D (4) ( $\text{CDCl}_3$ , 500 MHz)



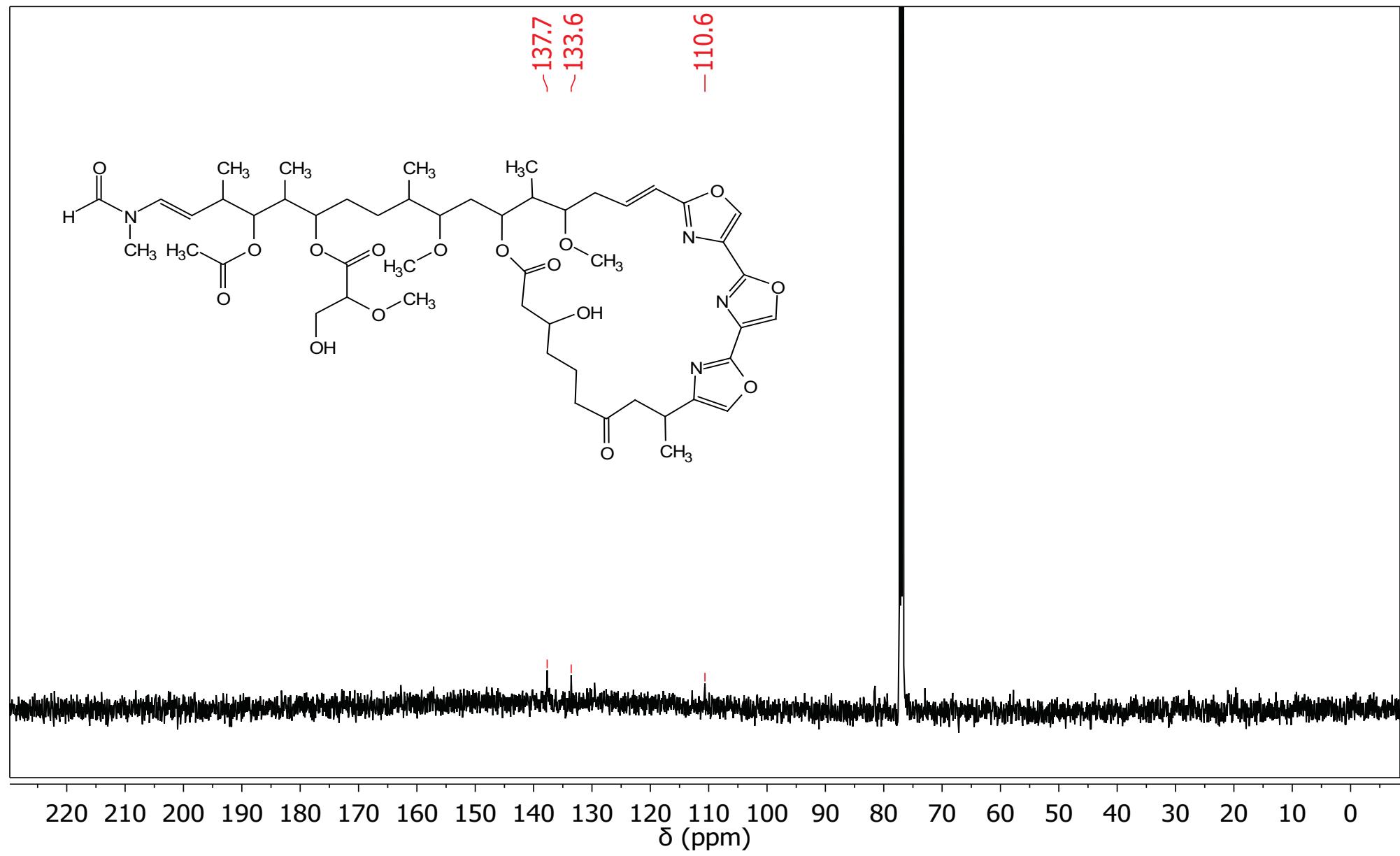
**Figure S10.** HMBC Spectrum of Ulapualide D (4) ( $\text{CDCl}_3$ , 500 MHz)



**Figure S11.**  $^1\text{H}$  NMR Spectrum of Ulapualide E (**5**) ( $\text{CDCl}_3$ , 500 MHz)



**Figure S12.**  $^{13}\text{C}$  NMR Spectrum of Ulapualide E (5) ( $\text{CDCl}_3$ , 125 MHz)



**Figure S13.** gHSQC Spectrum of Ulapualide E (**5**) ( $\text{CDCl}_3$ , 500 MHz)

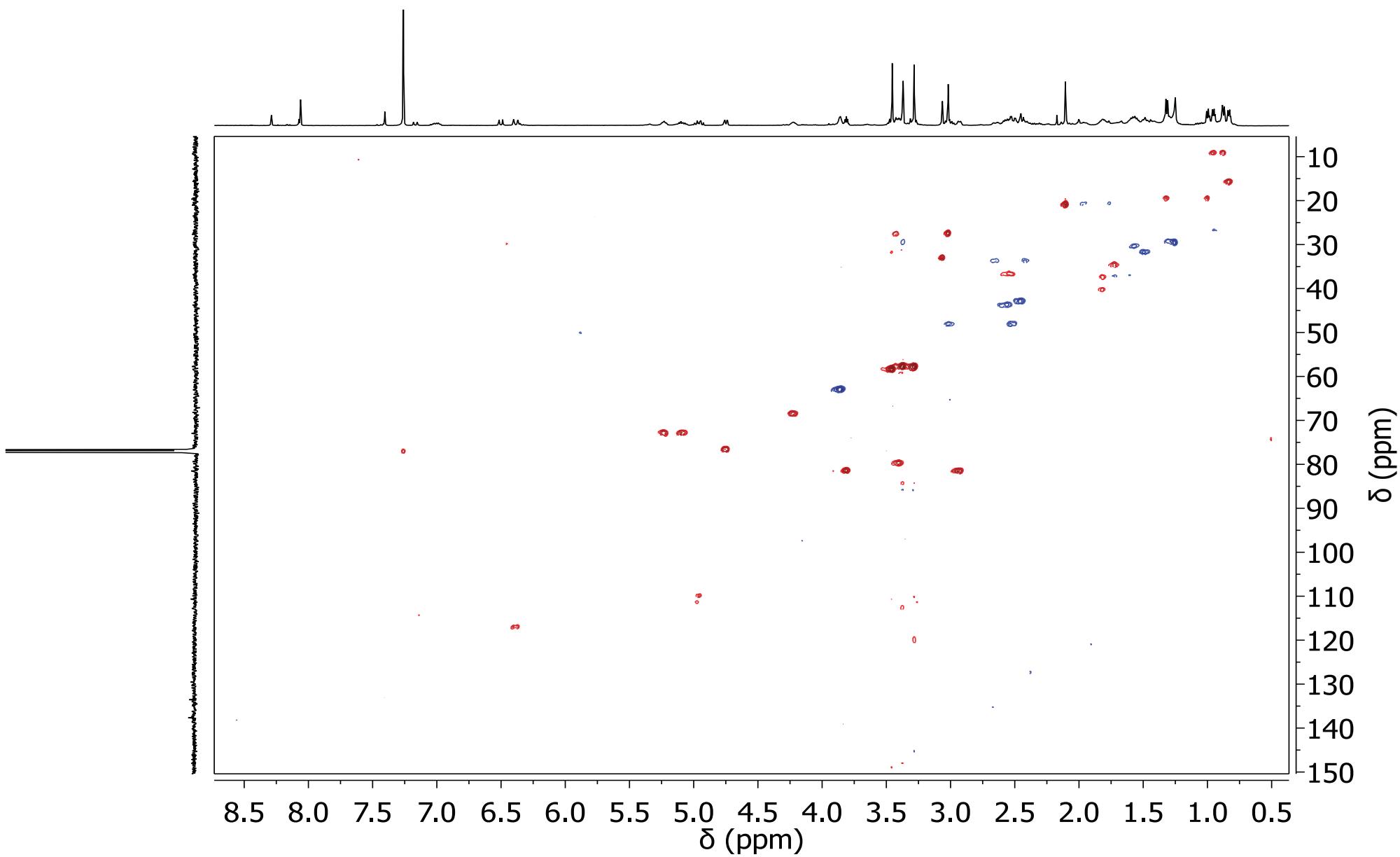


Figure S14. gCOSY Spectrum of Ulapualide E (5) ( $\text{CDCl}_3$ , 500 MHz)

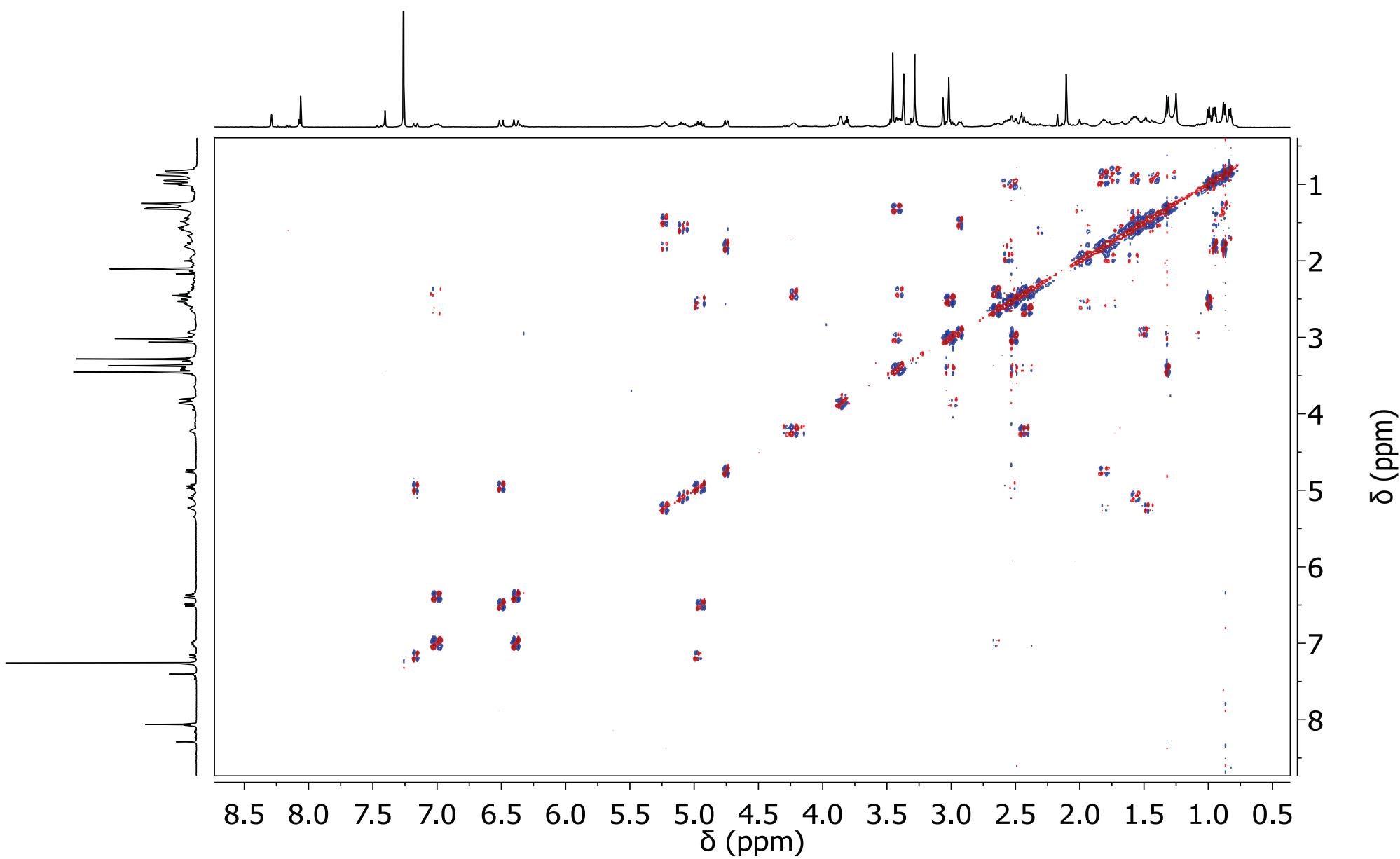


Figure S15. HMBC Spectrum of Ulapualide E (5) ( $\text{CDCl}_3$ , 500 MHz)

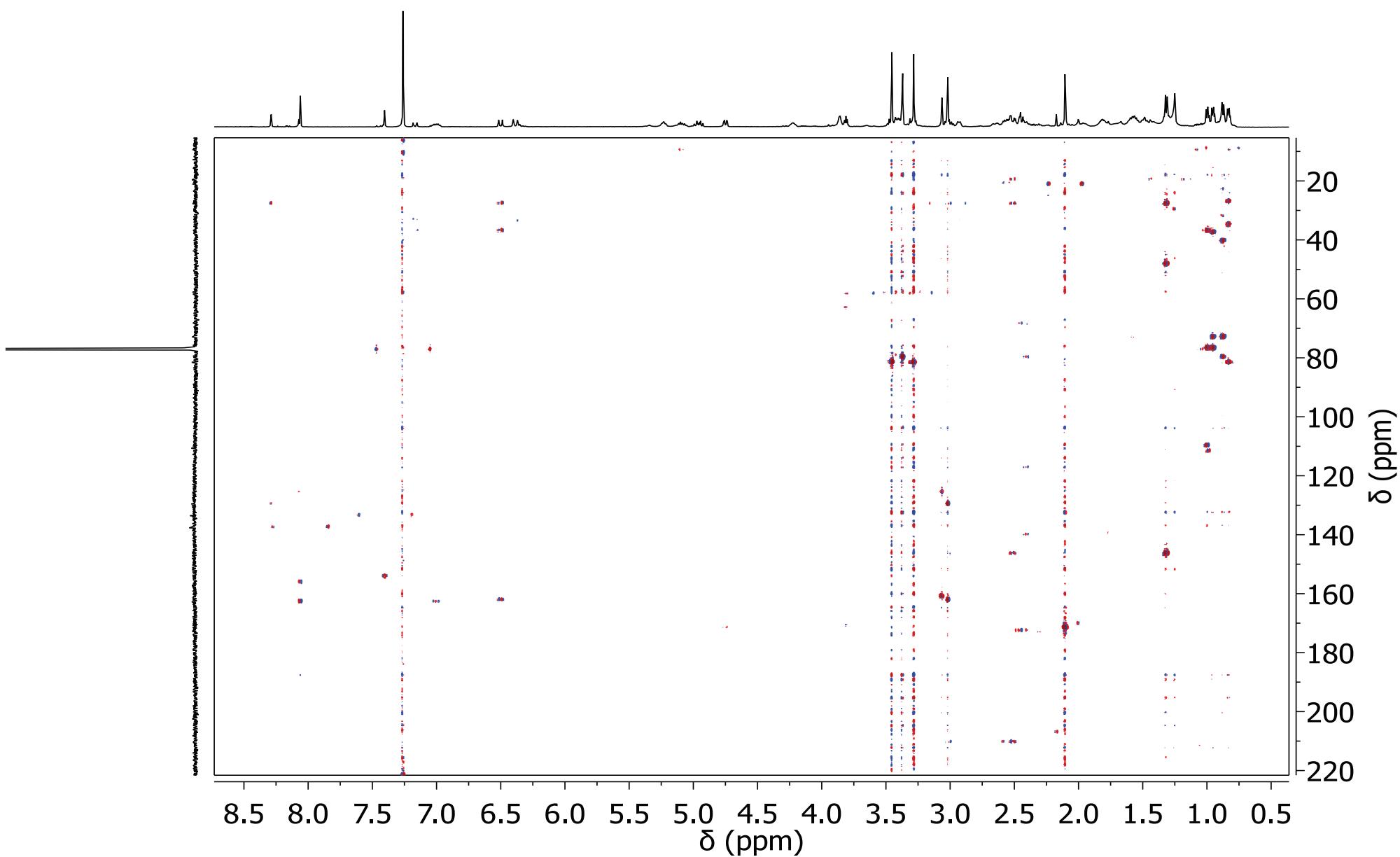


Figure S16.  $^1\text{H}$  NMR Spectrum of Ulapualide A (1) ( $\text{CDCl}_3$ , 500 MHz)

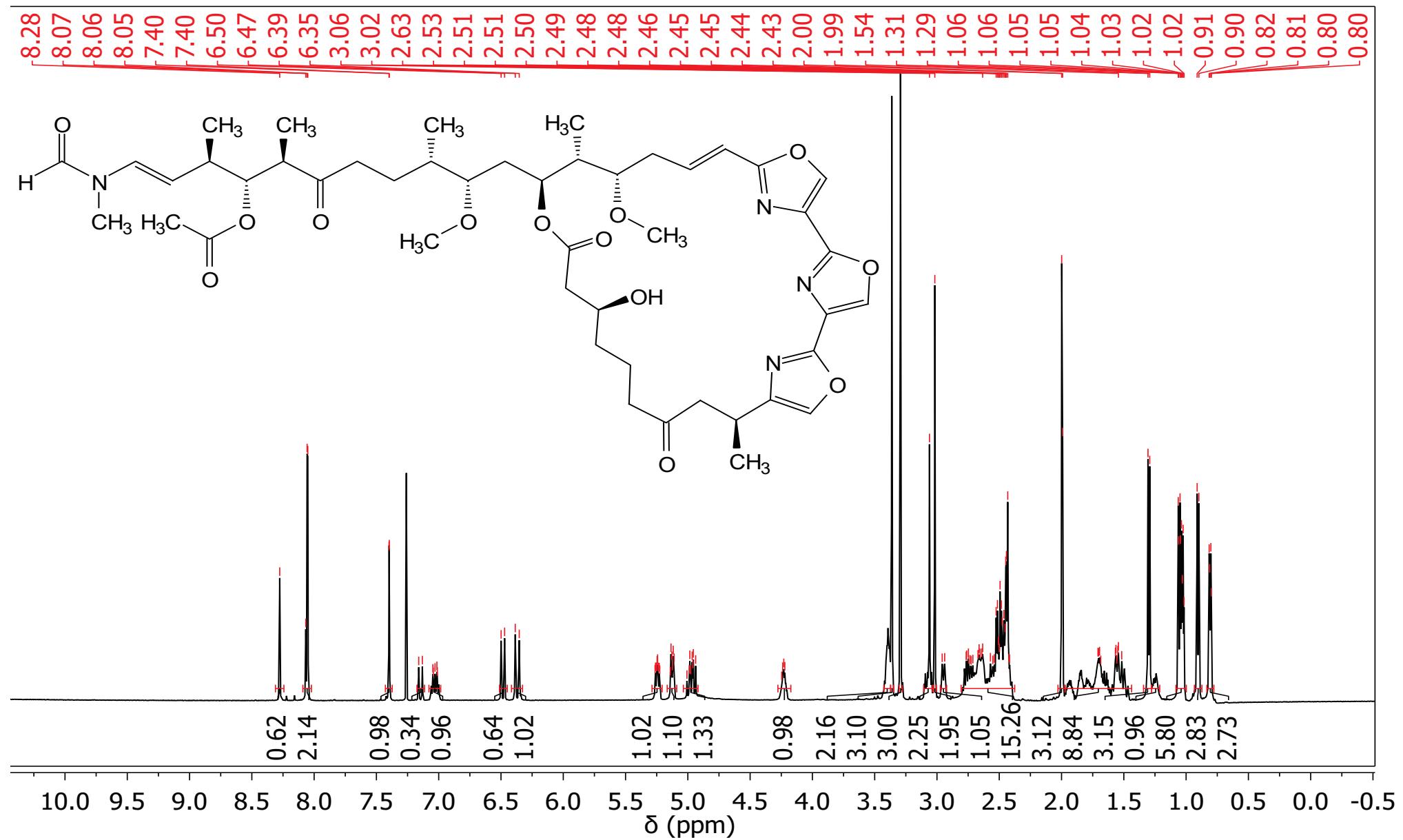


Figure S17.  $^{13}\text{C}$  NMR Spectrum of Ulapualide A (1) ( $\text{CDCl}_3$ , 125 MHz)

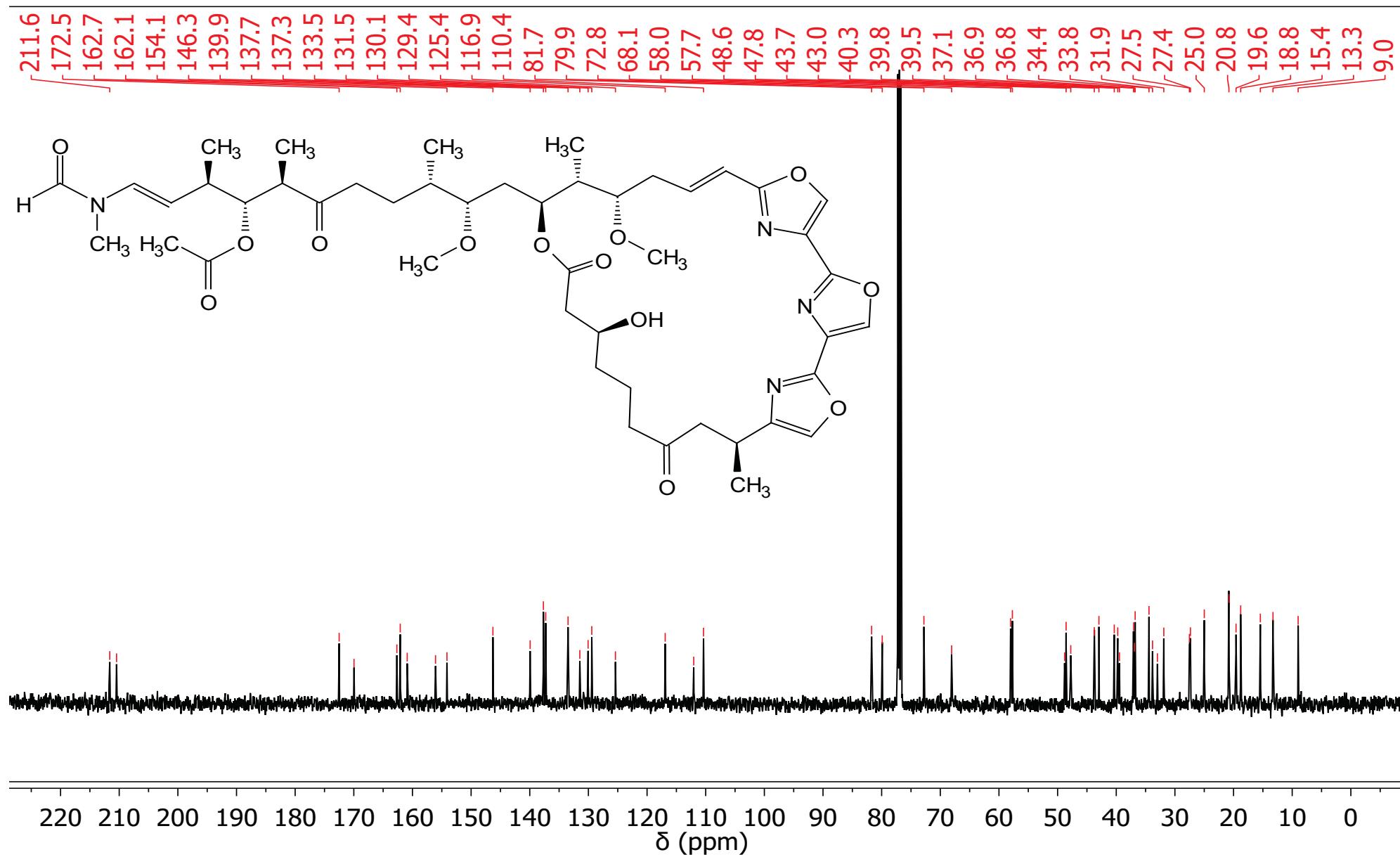
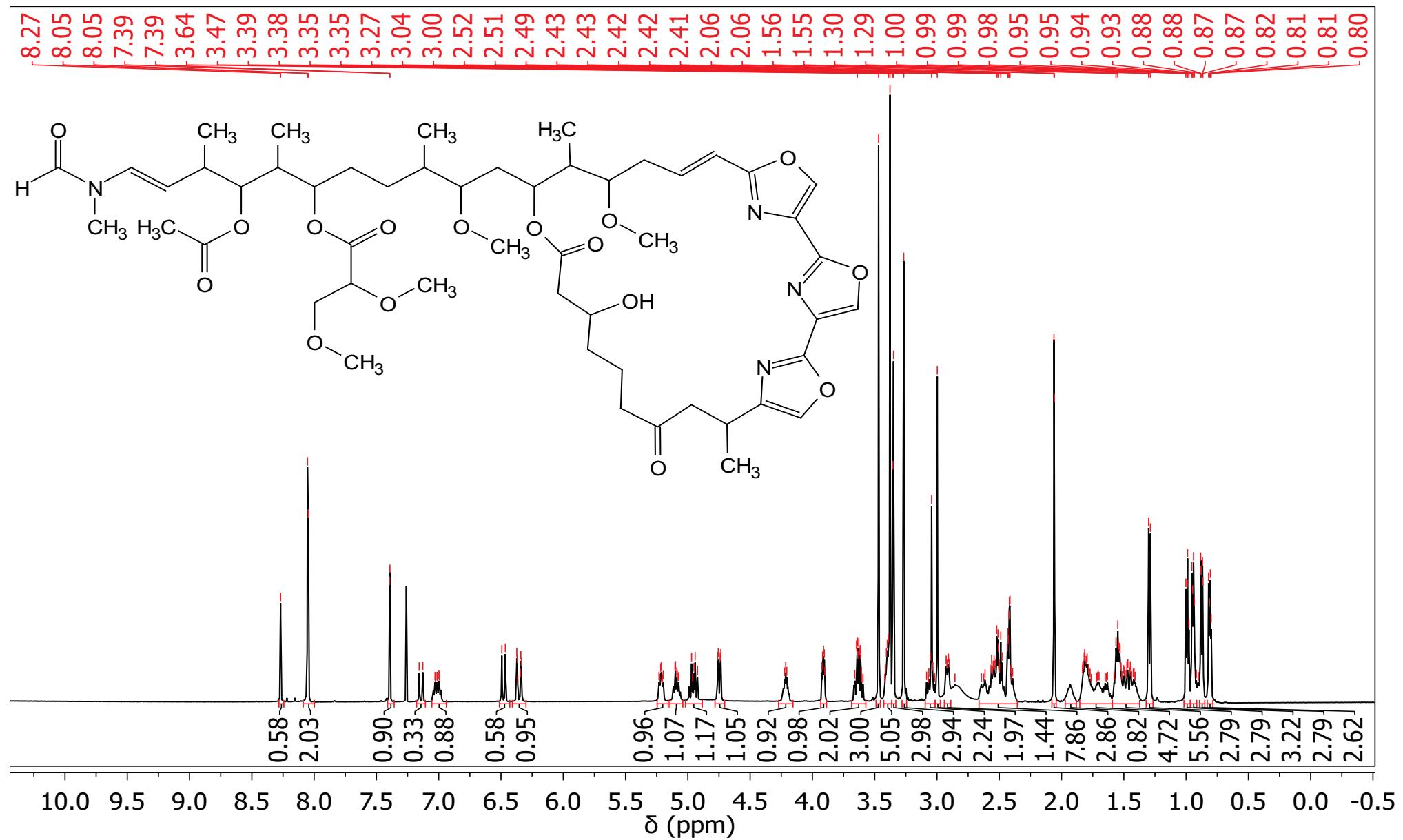
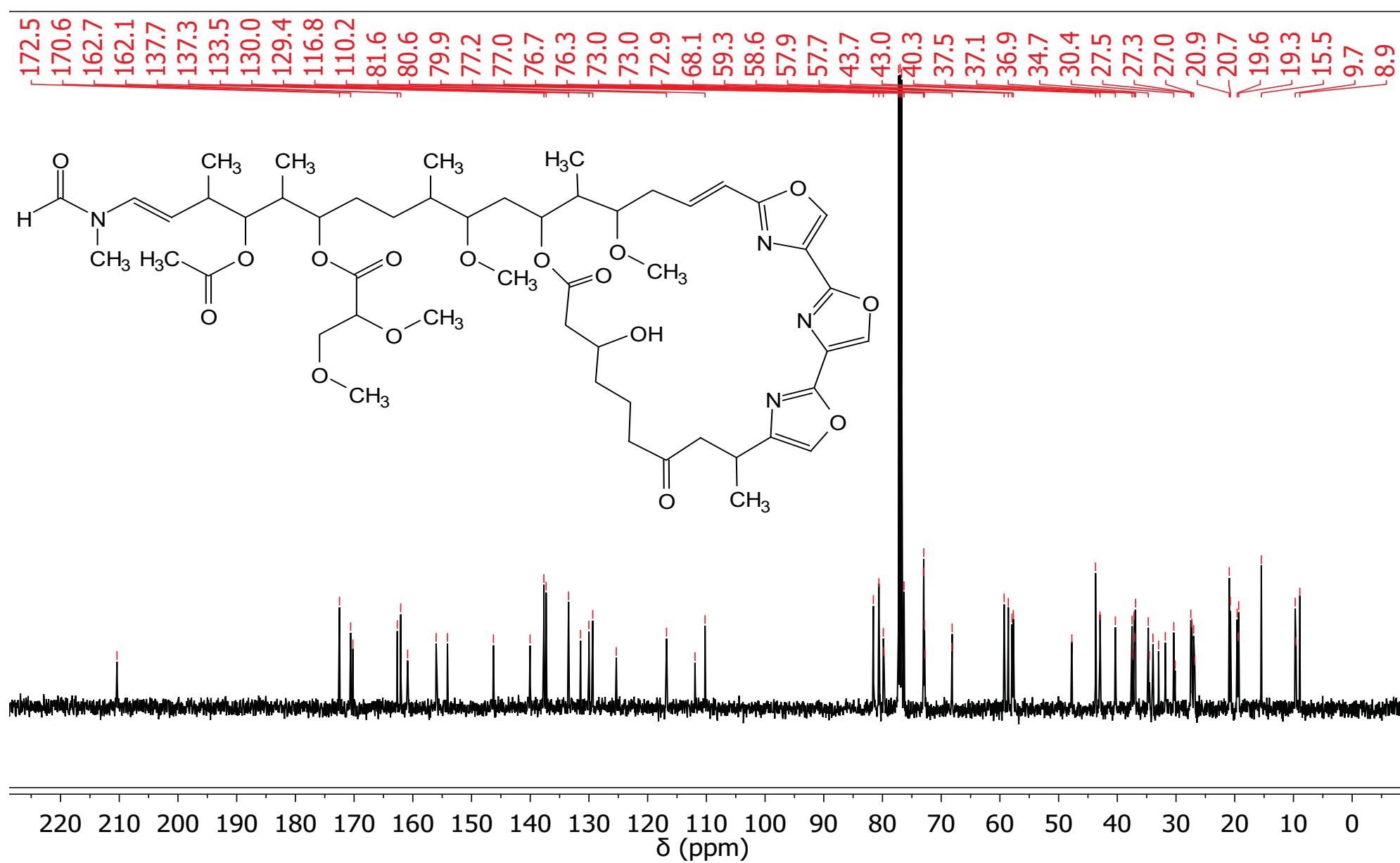


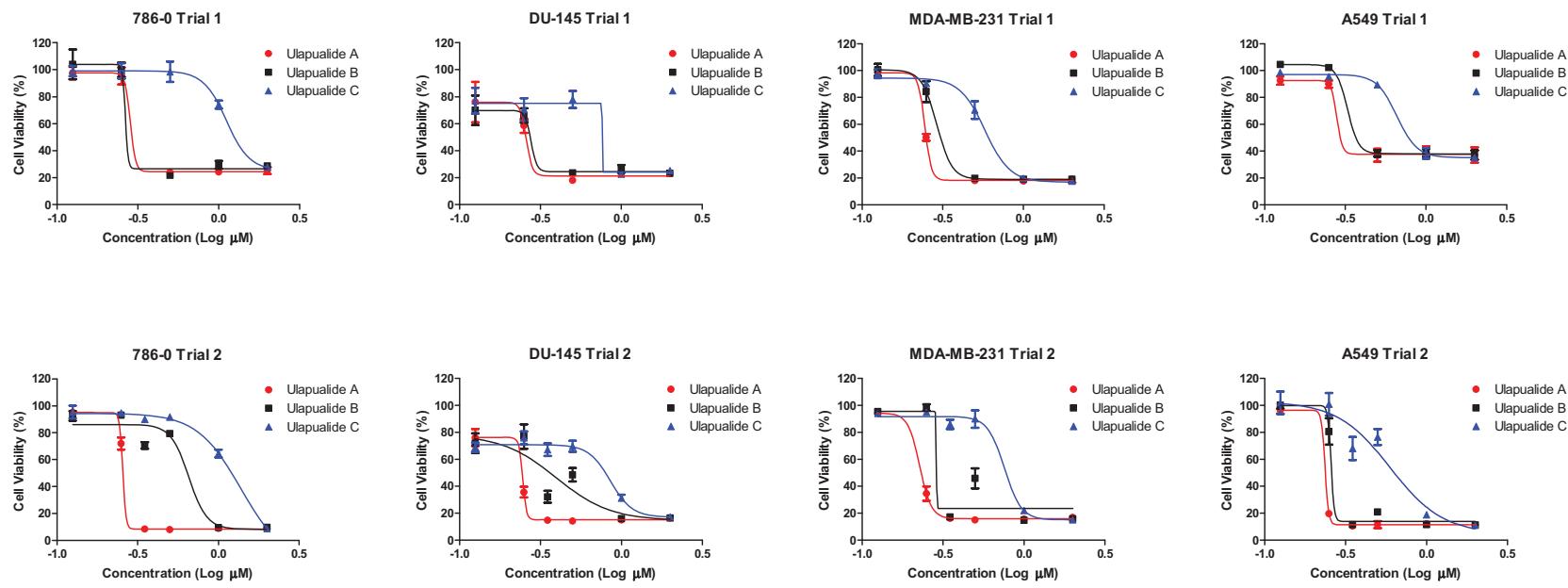
Figure S18.  $^1\text{H}$  NMR Spectrum of Ulapualide B (2) ( $\text{CDCl}_3$ , 500 MHz)



**Figure S19.**  $^{13}\text{C}$  NMR Spectrum of Ulapualide B (2) ( $\text{CDCl}_3$ , 125 MHz)



**Figure S20. IC<sub>50</sub> Curves for Ulapualides A-C Against Select Cell Lines**



**Figure S21. Image of *Hexabranchus sanguineus* Egg Mass**

Collected approximately 20 ft deep at Electric Beach, O'ahu (21°21'14.3"N 158°07'49.7"W).



## **Assay Protocols: BACE1**

**BACE1 Assay:** The proteolytic cleavage of amyloid precursor protein was assayed as described by Naqvi.<sup>1</sup> Test compounds were solubilized in DMSO at the desired concentration and incubated in triplicate with the enzyme for 16 h in 96-well plates. A DMSO control (1.5 µL) and an inhibitor standard (Calbiochem β-secretase inhibitor IV, IC<sub>50</sub> = 11 nm) were also tested in triplicate. The chemiluminescence signal was read using a Fluorostar Optima spectrophotometer.

(1) Naqvi, T. J. *Biomol. Screen.* **2004**, 9, 298–408.