

# Supporting Information

## **Spiralyde A, an antikinoplastid dolabellane from the brown algae *Dictyota spiralis***

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**Scheme S1.** Bioassay-guided fractionation process of *Dictyota spiralis*

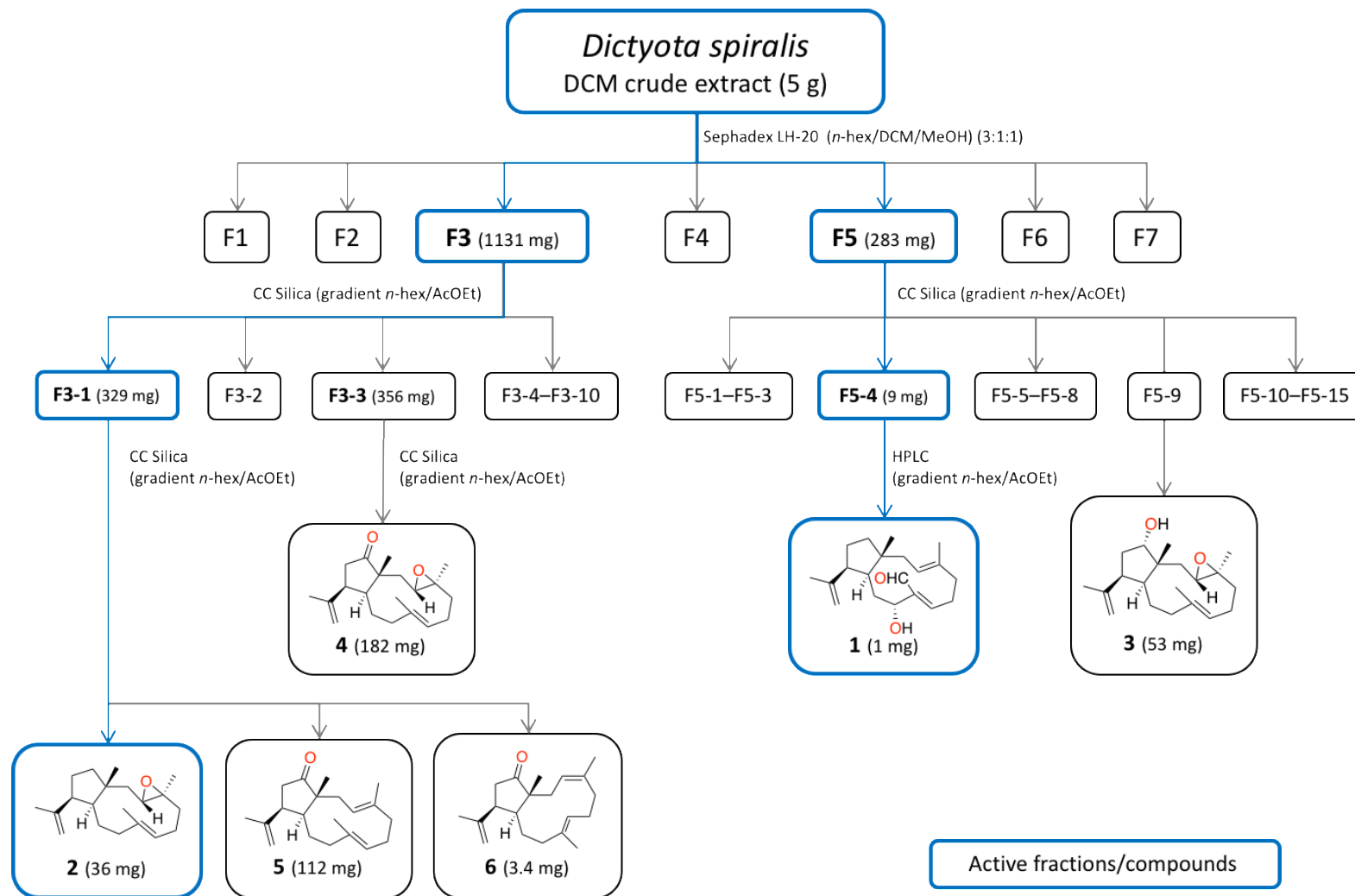


Figure S1.  $^1\text{H}$  NMR spectrum of spiralyde A (**1**) (600 MHz,  $\text{CDCl}_3$ )

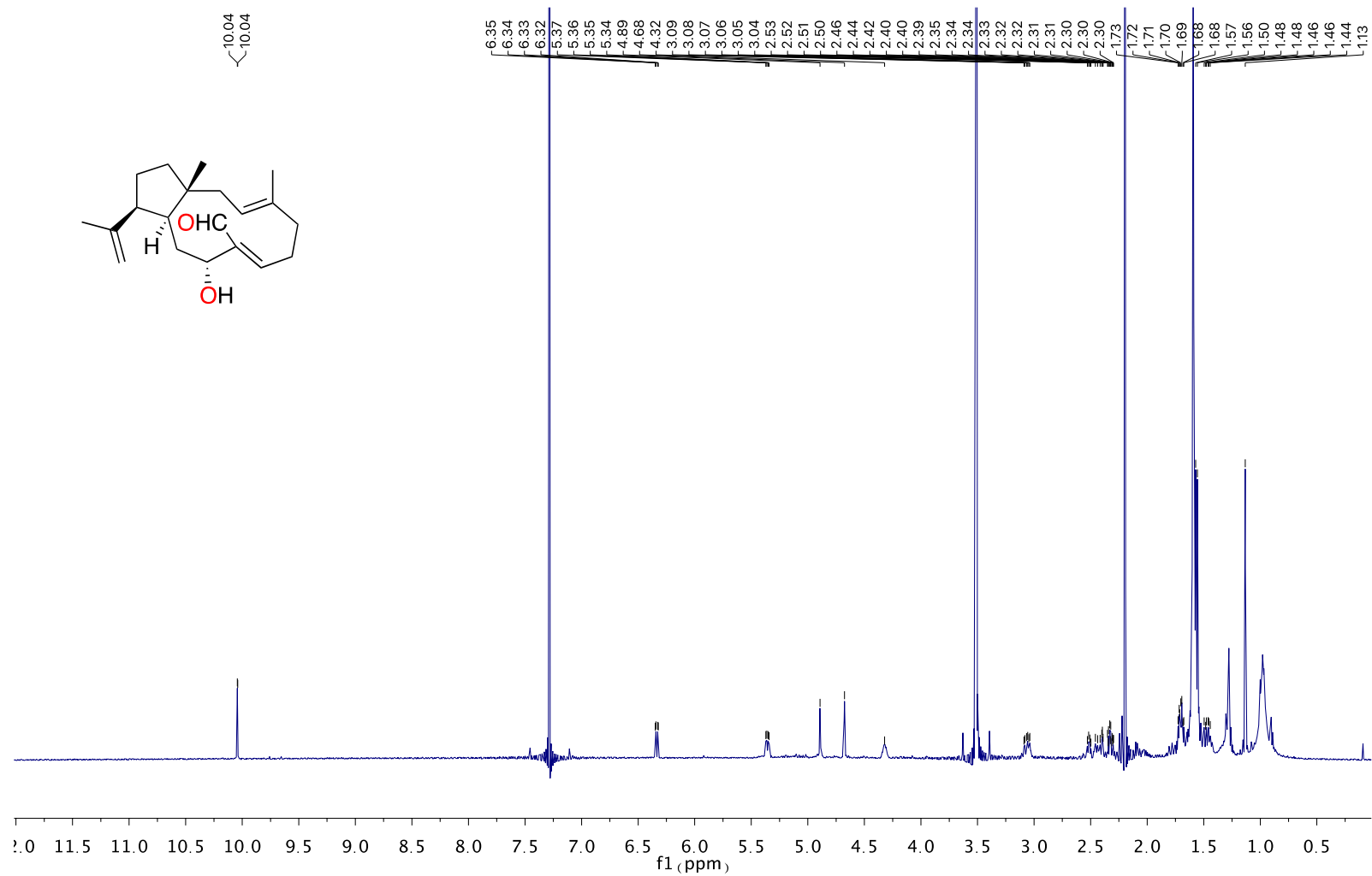
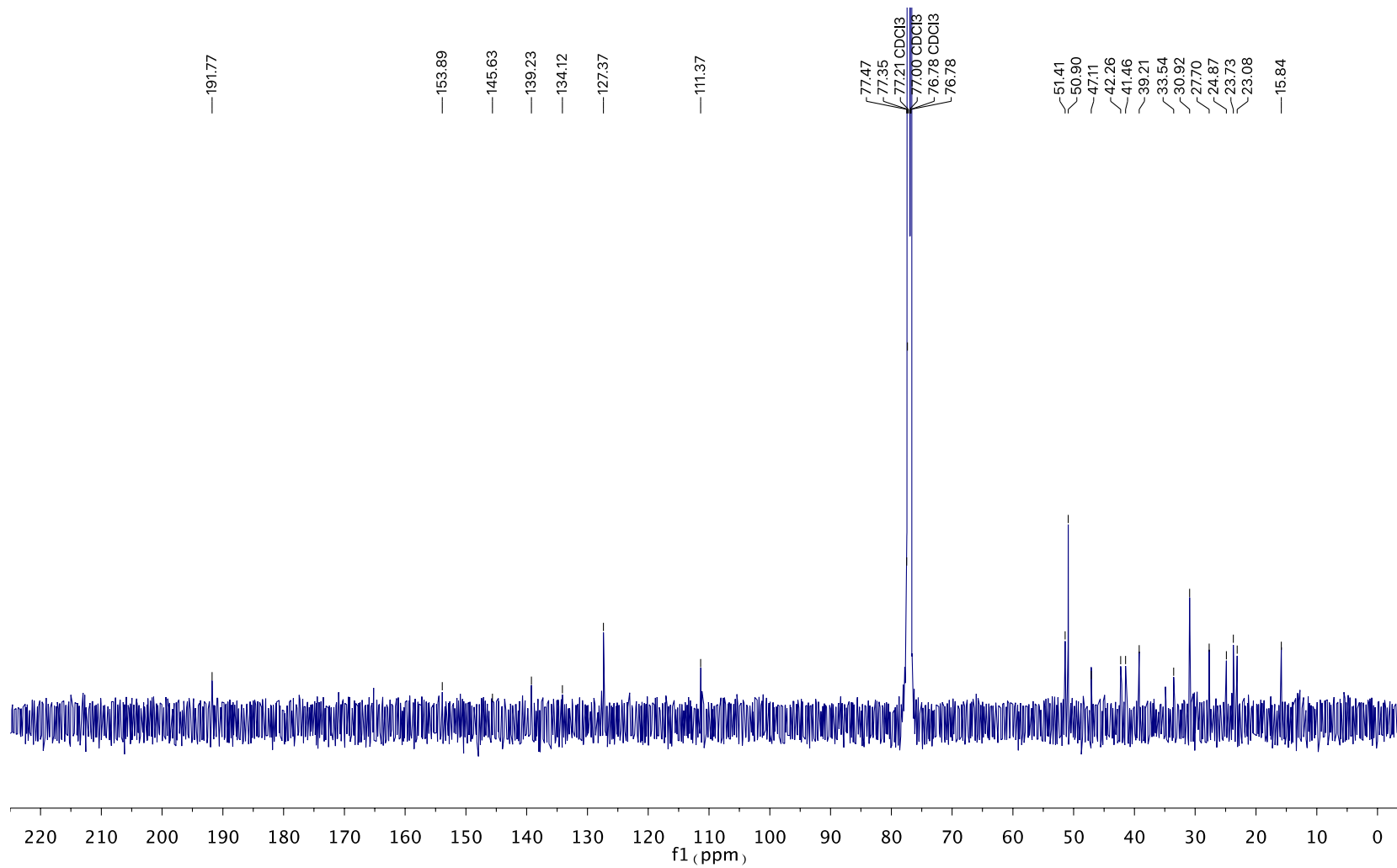


Figure S2.  $^{13}\text{C}$  NMR spectrum of spiralyde A (**1**) (150 MHz,  $\text{CDCl}_3$ )



**Figure S3.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of spiralyde A (**1**) (600 MHz,  $\text{CDCl}_3$ )

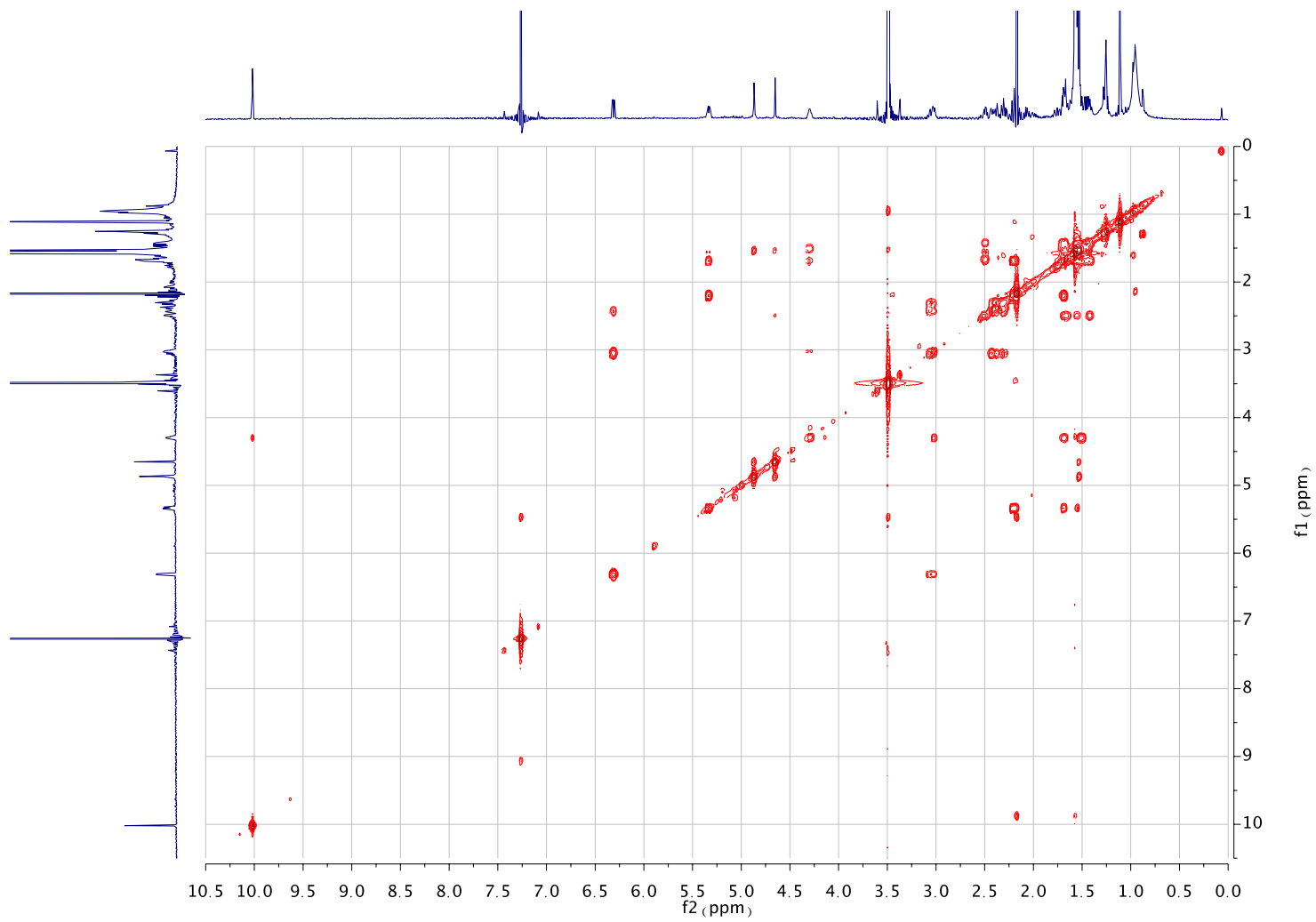


Figure S4. HSQC spectrum of spiralyde A (1) (600 MHz, CDCl<sub>3</sub>)

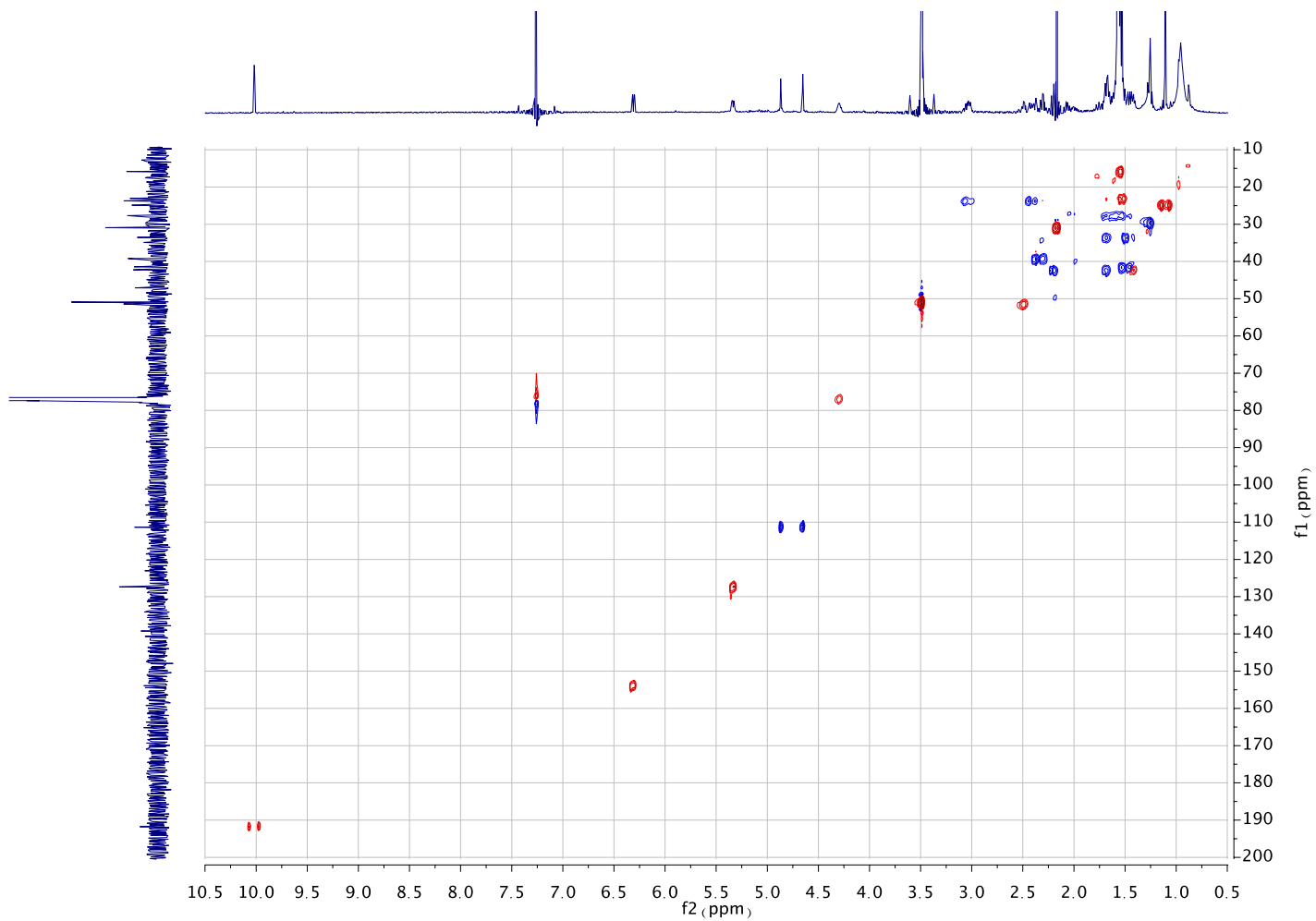


Figure S5. HMBC spectrum of spiralyde A (1) (600 MHz, CDCl<sub>3</sub>)

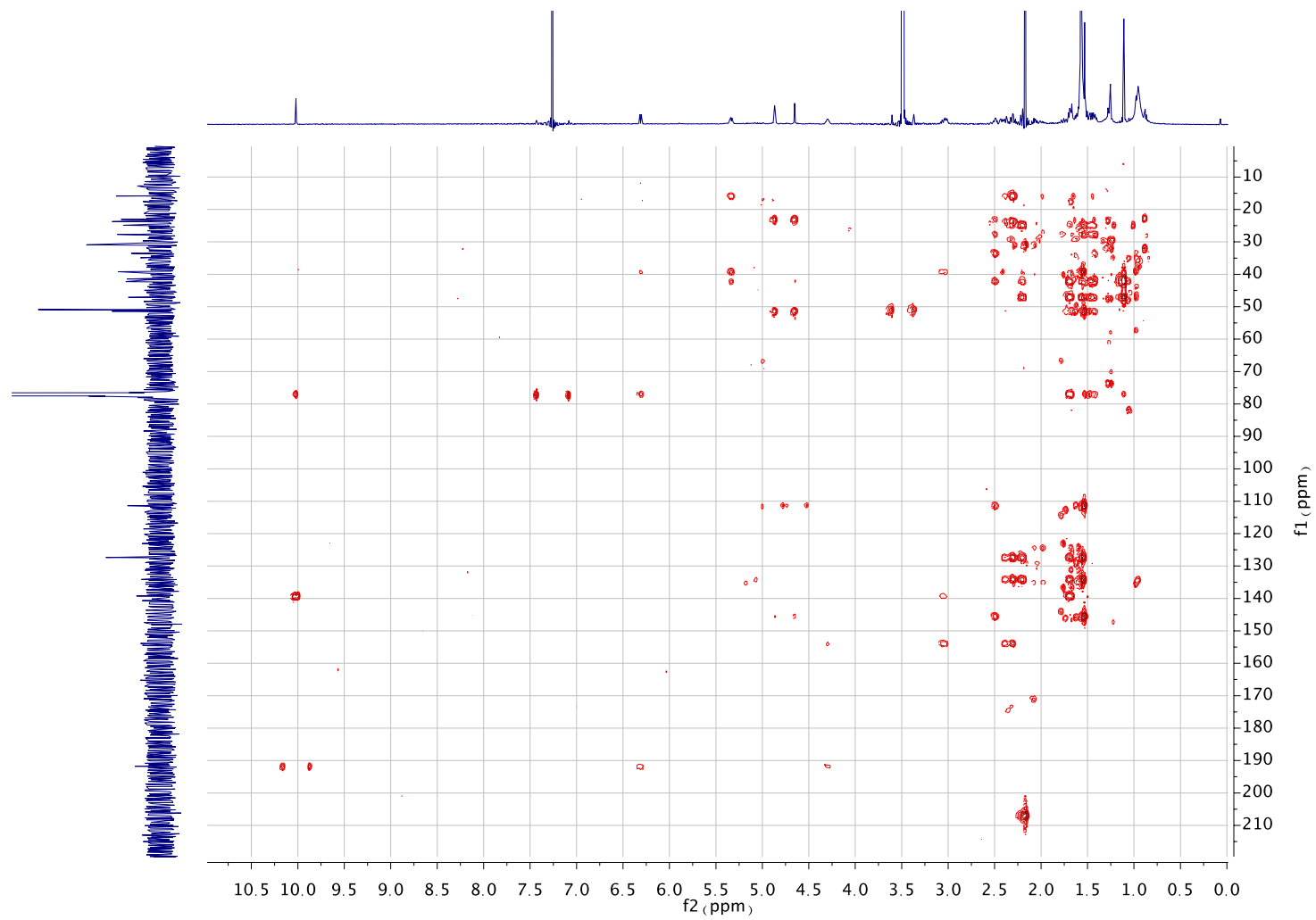




Figure S6. ROESY spectrum of spiralyde A (1) (600 MHz, CDCl<sub>3</sub>)

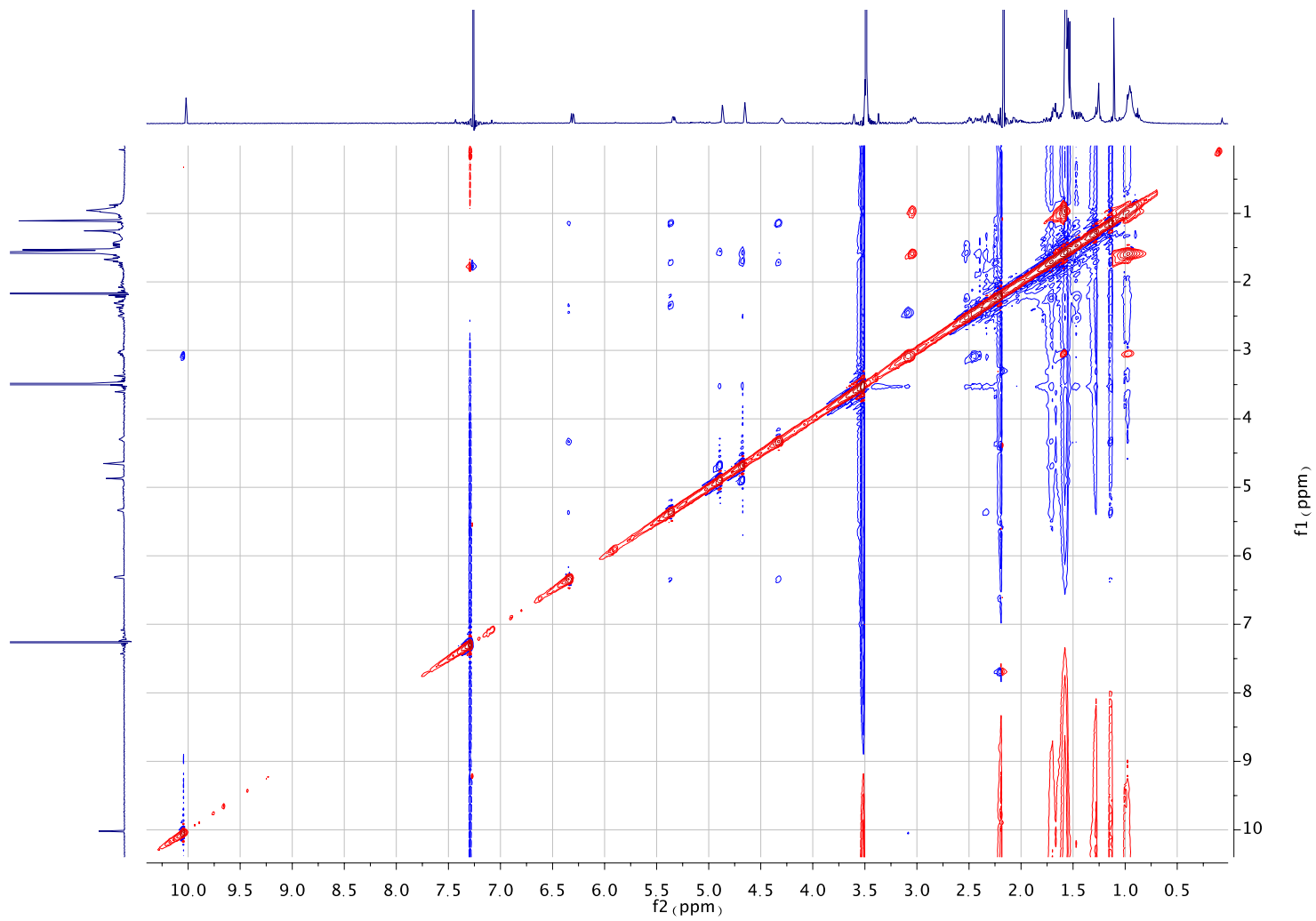


Figure S7. H-9 long-range COSY couplings of spiralyde A (1) (600 MHz, CDCl<sub>3</sub>)

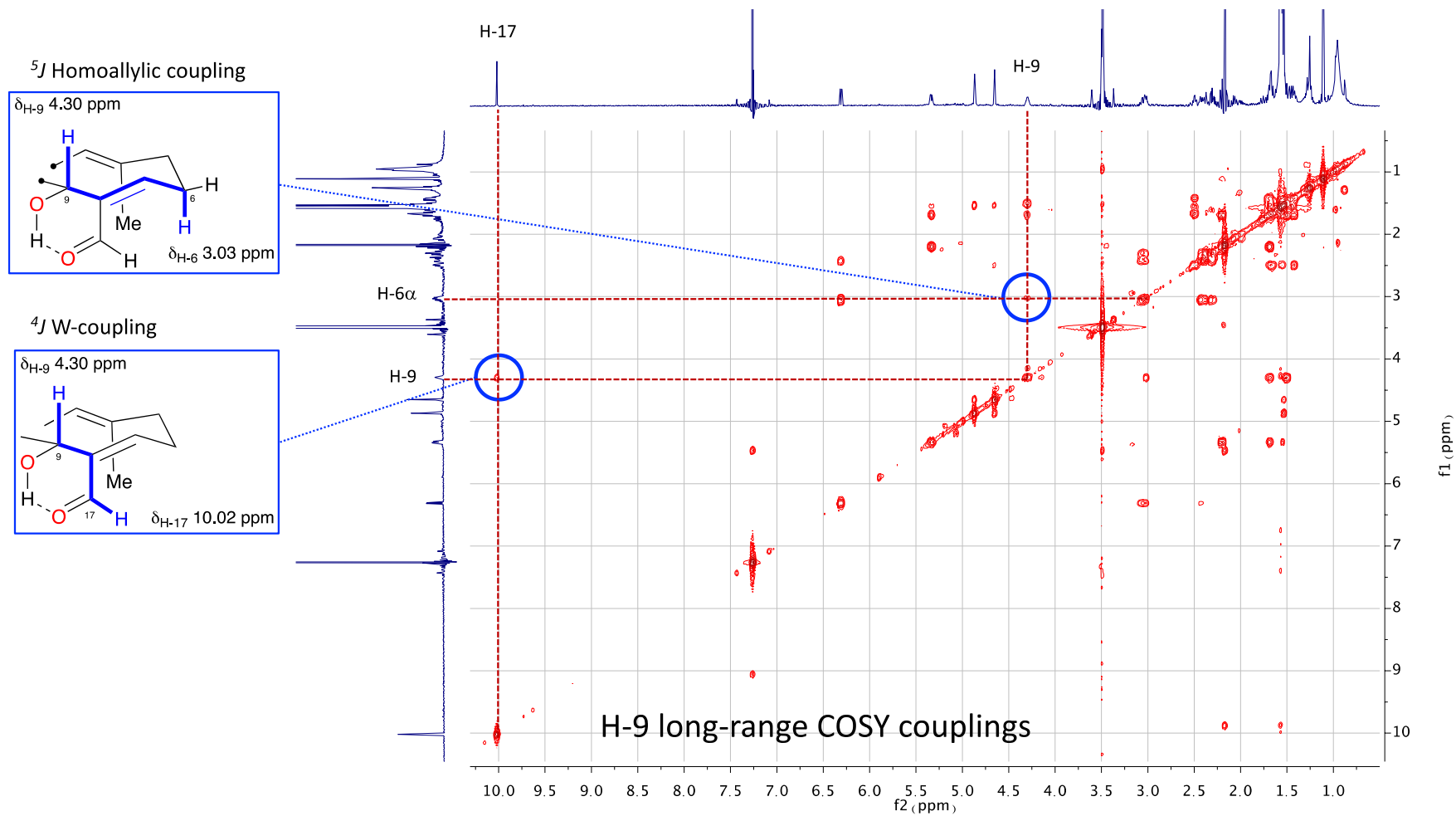
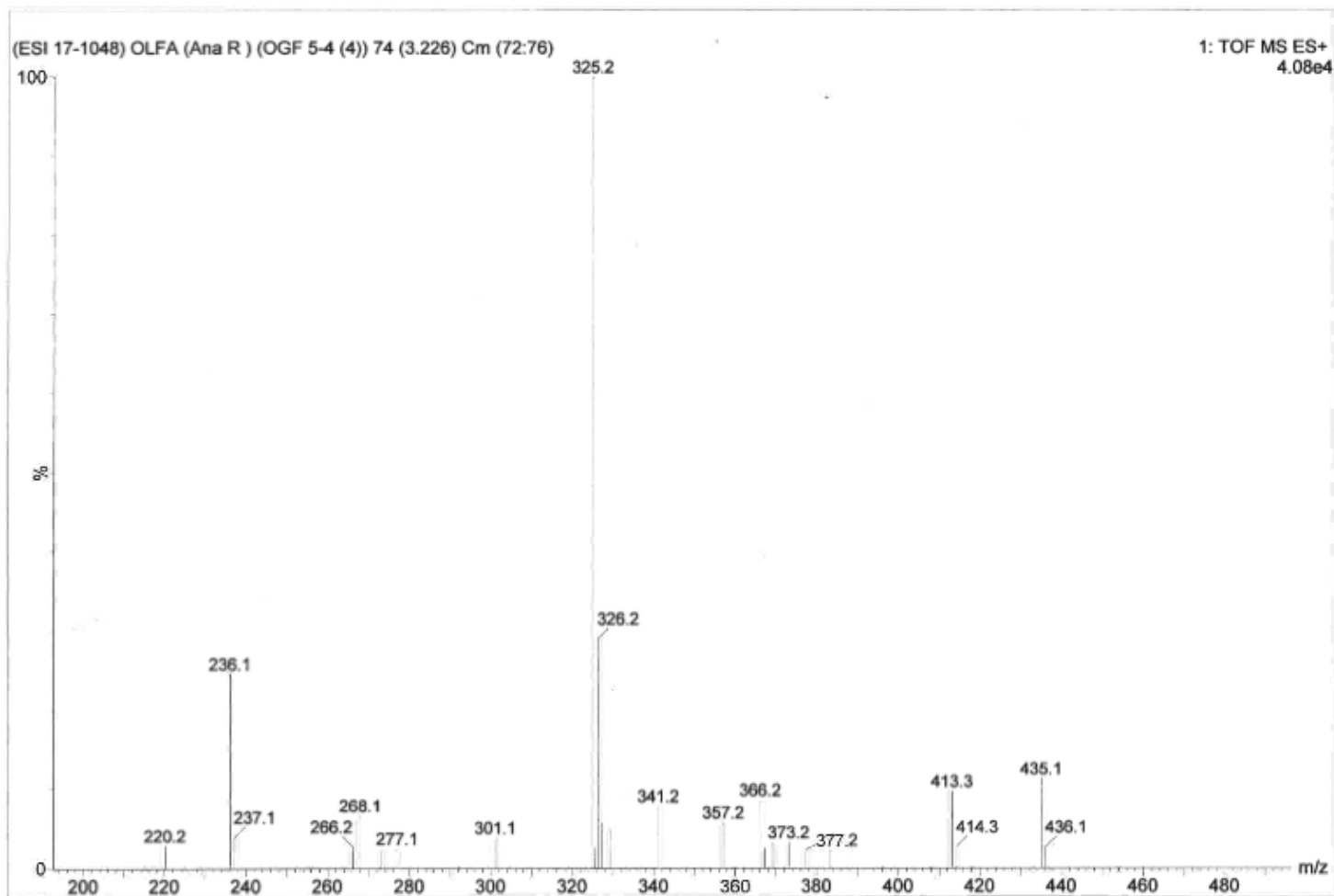


Figure S8. LRESIMS spectrum of spiralyde A (1)



**Figure S9.** HRESIMS spectrum of spiralyde A (1)

**Elemental Composition Report**

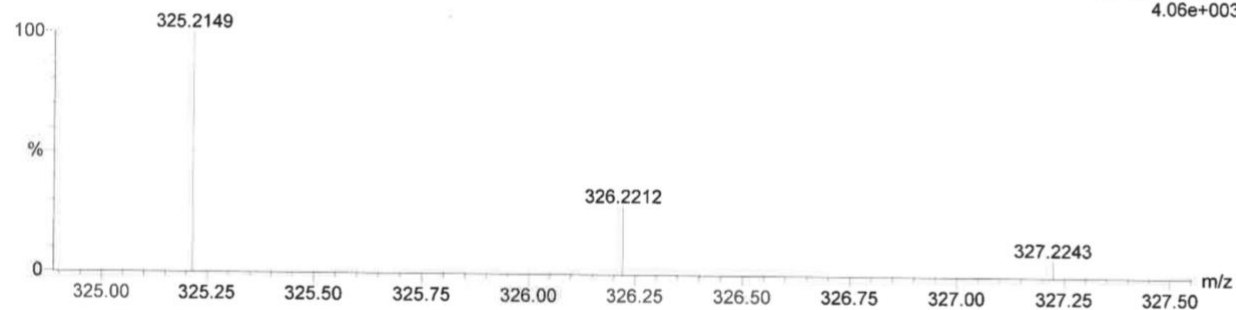
Page 1

Tolerance = 5.0 PPM / DBE: min = -10.0, max = 1000.0  
 Element prediction: Off  
 Number of isotope peaks used for i-FIT = 2

Monoisotopic Mass, Even Electron Ions  
 1565 formula(e) evaluated with 1 results within limits (all results (up to 1000) for each mass)  
 Elements Used:  
 C: 0-128 H: 0-160 N: 0-1 O: 0-24 Na: 0-1 S: 0-4 133Cs: 0-1

(ESI 17-1048) OLFA (Ana R ) (OGF 5-4 (4)) 40 (1.393)

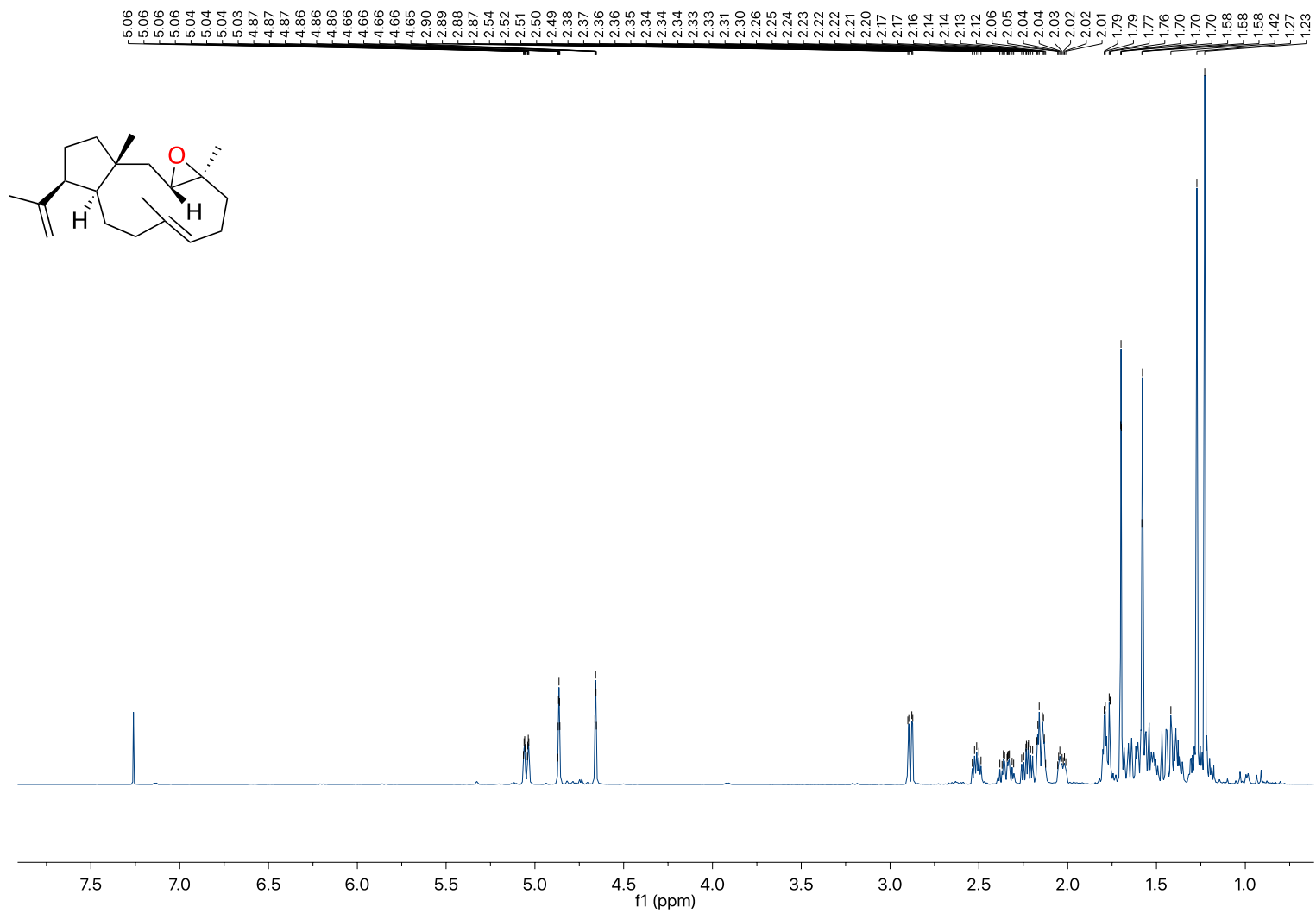
2: TOF MS ES+  
 4.06e+003



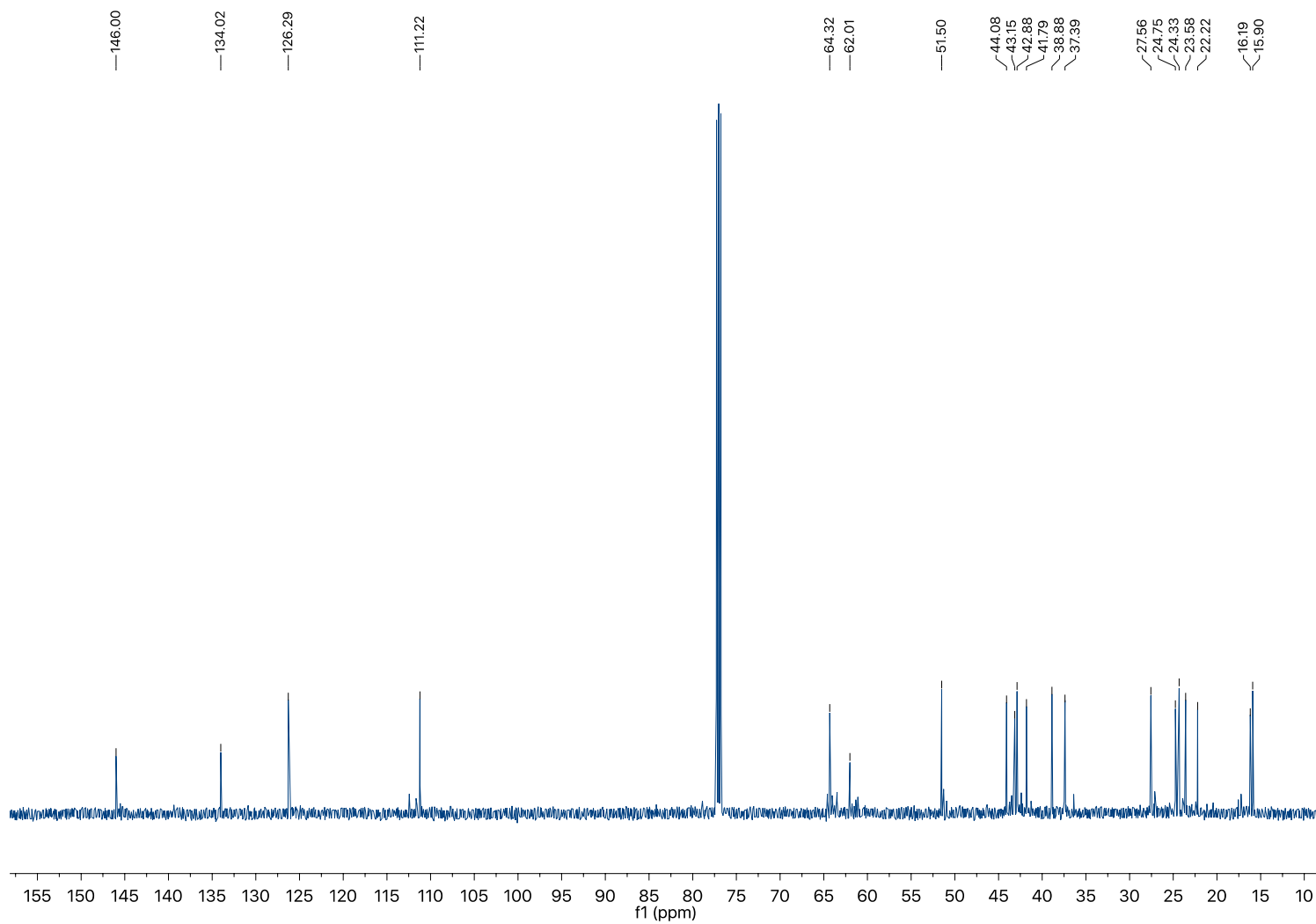
Minimum: 30.00  
 Maximum: 100.00

| Mass     | RA     | Calc. Mass | mDa | PPM | DBE | i-FIT | Formula       |
|----------|--------|------------|-----|-----|-----|-------|---------------|
| 325.2149 | 100.00 | 325.2144   | 0.5 | 1.5 | 5.5 | 17.9  | C20 H30 O2 Na |

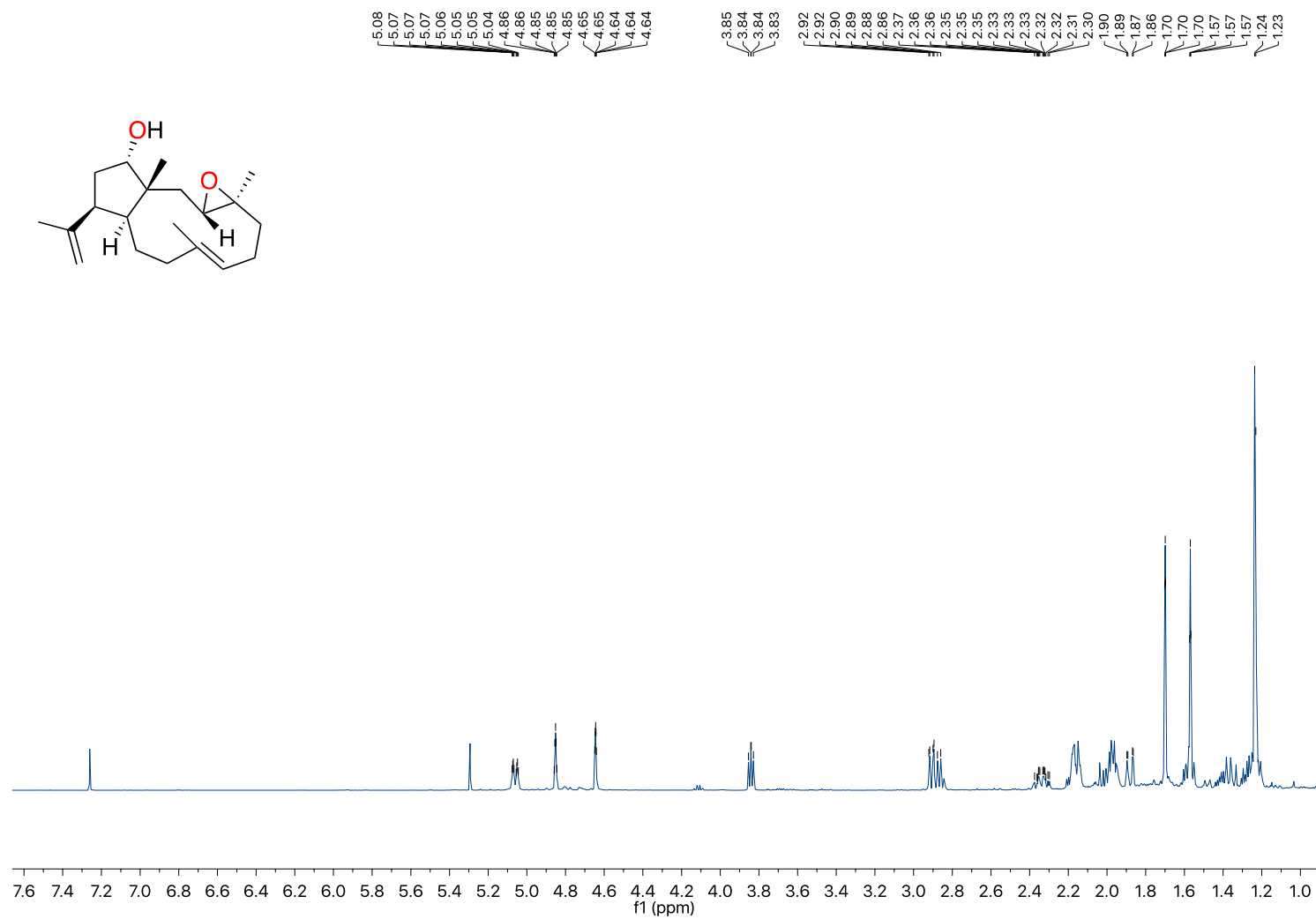
**Figure S10.**  $^1\text{H}$  NMR spectrum of (1*R*,3*S*,4*S*,7*E*,11*S*,12*S*)-3,4-Epoxy-7,18-dolabelladiene (**2**) (500 MHz,  $\text{CDCl}_3$ )



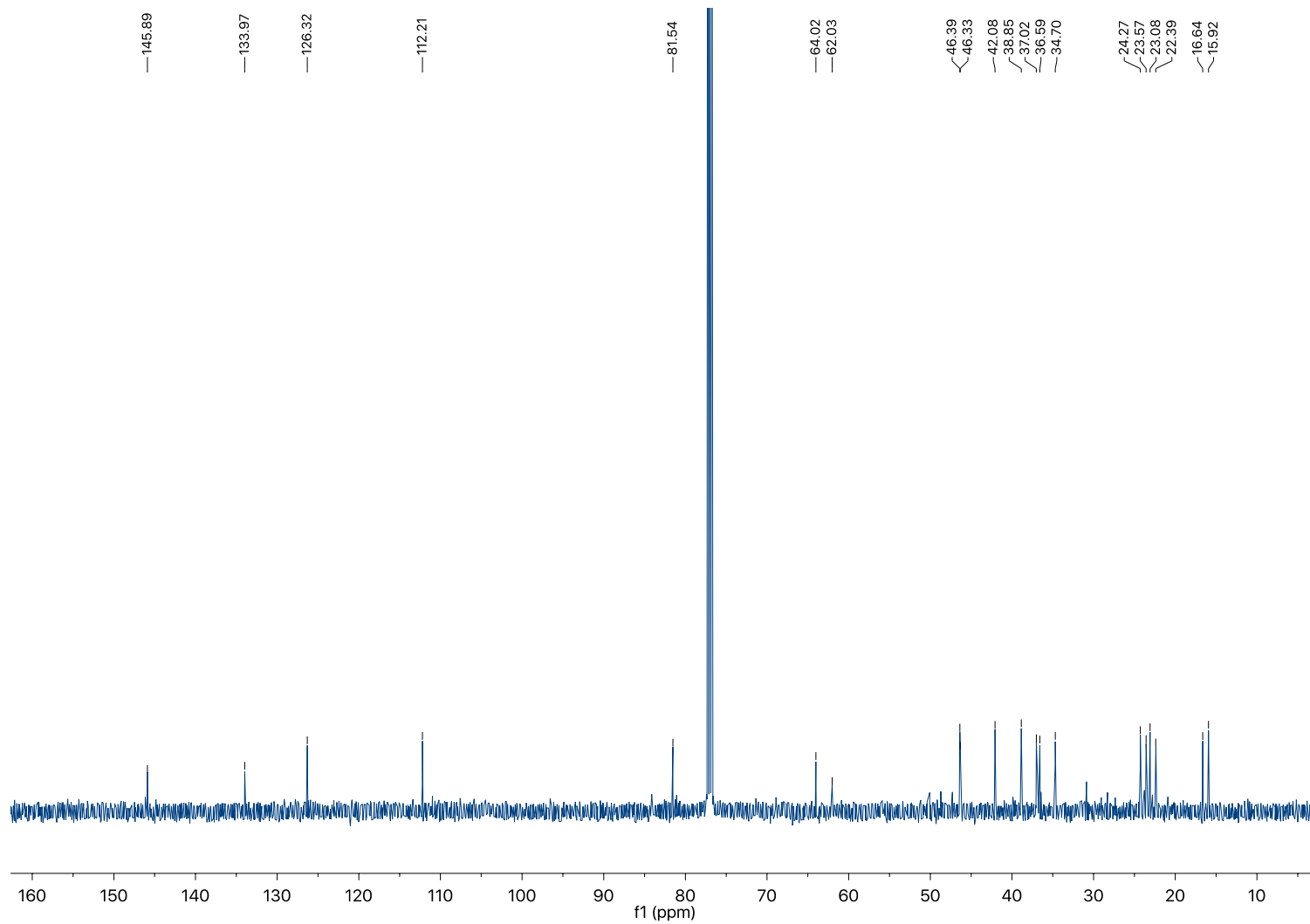
**Figure S11.**  $^{13}\text{C}$  NMR spectrum of (1*R*,3*S*,4*S*,7*E*,11*S*,12*S*)-3,4-Epoxy-7,18-dolabelladiene (**2**) (125 MHz,  $\text{CDCl}_3$ )



**Figure S12.**  $^1\text{H}$  NMR spectrum of (1*R*,3*S*,4*S*,7*E*,11*S*,12*S*,14*S*)-3,4-Epoxy-14-hydroxy-7,18-dolabelladiene (**3**) (500 MHz,  $\text{CDCl}_3$ )

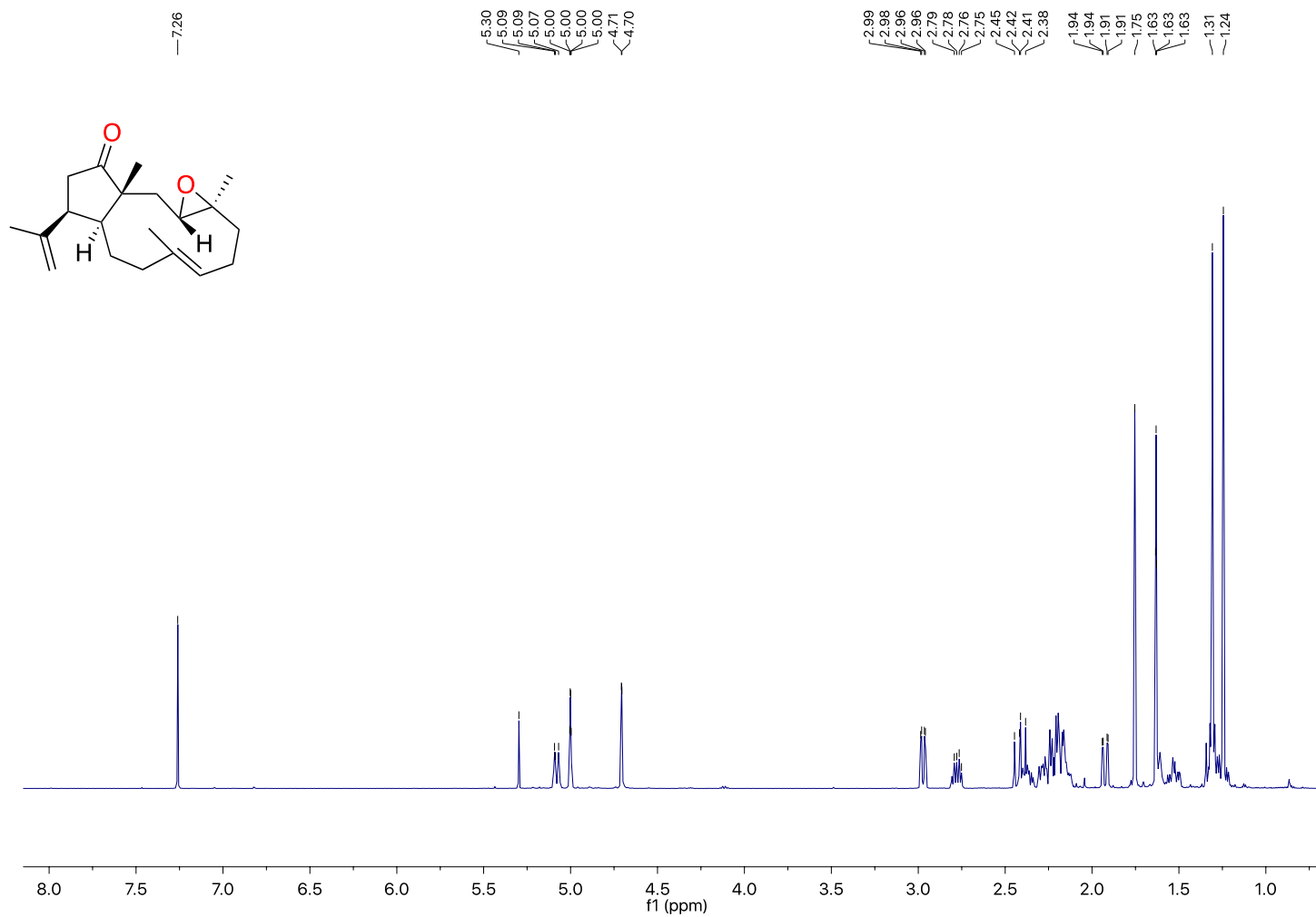


**Figure S13.**  $^{13}\text{C}$  NMR spectrum of (1*R*,3*S*,4*S*,7*E*,11*S*,12*S*,14*S*)-3,4-Epoxy-14-hydroxy-7,18-dolabelladiene (**3**) (125 MHz,  $\text{CDCl}_3$ )





**Figure S14.**  $^1\text{H}$  NMR spectrum of (1*R*,3*S*,4*S*,7*E*,11*S*,12*S*)-3,4-Epoxy-14-oxo-7,18-dolabelladiene (**4**) (500 MHz,  $\text{CDCl}_3$ )



**Figure S15.**  $^{13}\text{C}$  NMR spectrum of (1*R*,3*S*,4*S*,7*E*,11*S*,12*S*)-3,4-Epoxy-14-oxo-7,18-dolabelladiene (**4**) (125 MHz,  $\text{CDCl}_3$ )

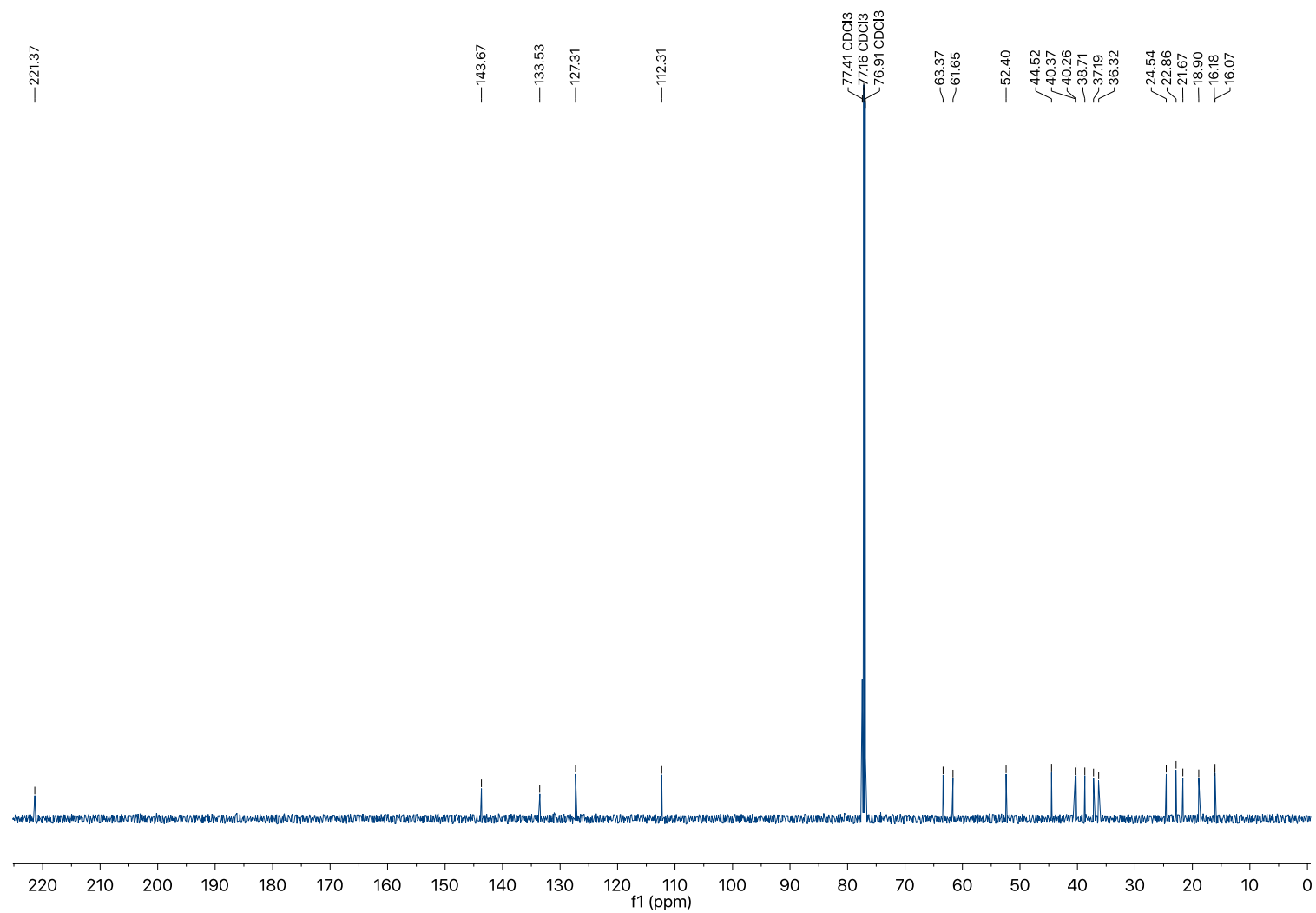
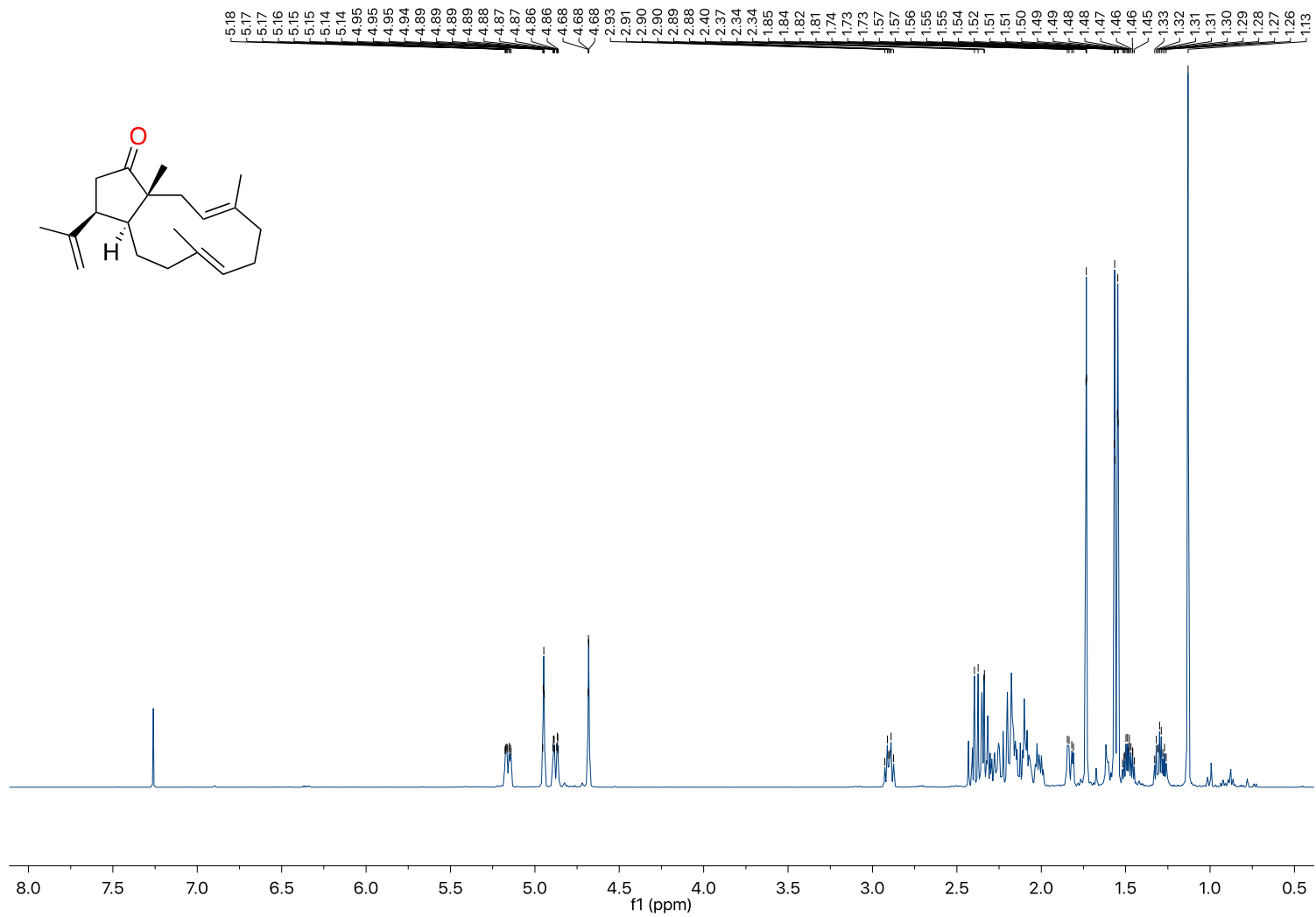


Figure S16.  $^1\text{H}$  NMR spectrum of (1*R*,3*E*,7*E*,11*S*,12*S*)-14-oxo-3,7,18-dolabellatriene (**5**) (500 MHz,  $\text{CDCl}_3$ )



**Figure S17.**  $^{13}\text{C}$  NMR spectrum of (1*R*,3*E*,7*E*,11*S*,12*S*)-14-oxo-3,7,18-dolabellatriene (**5**) (125 MHz,  $\text{CDCl}_3$ )

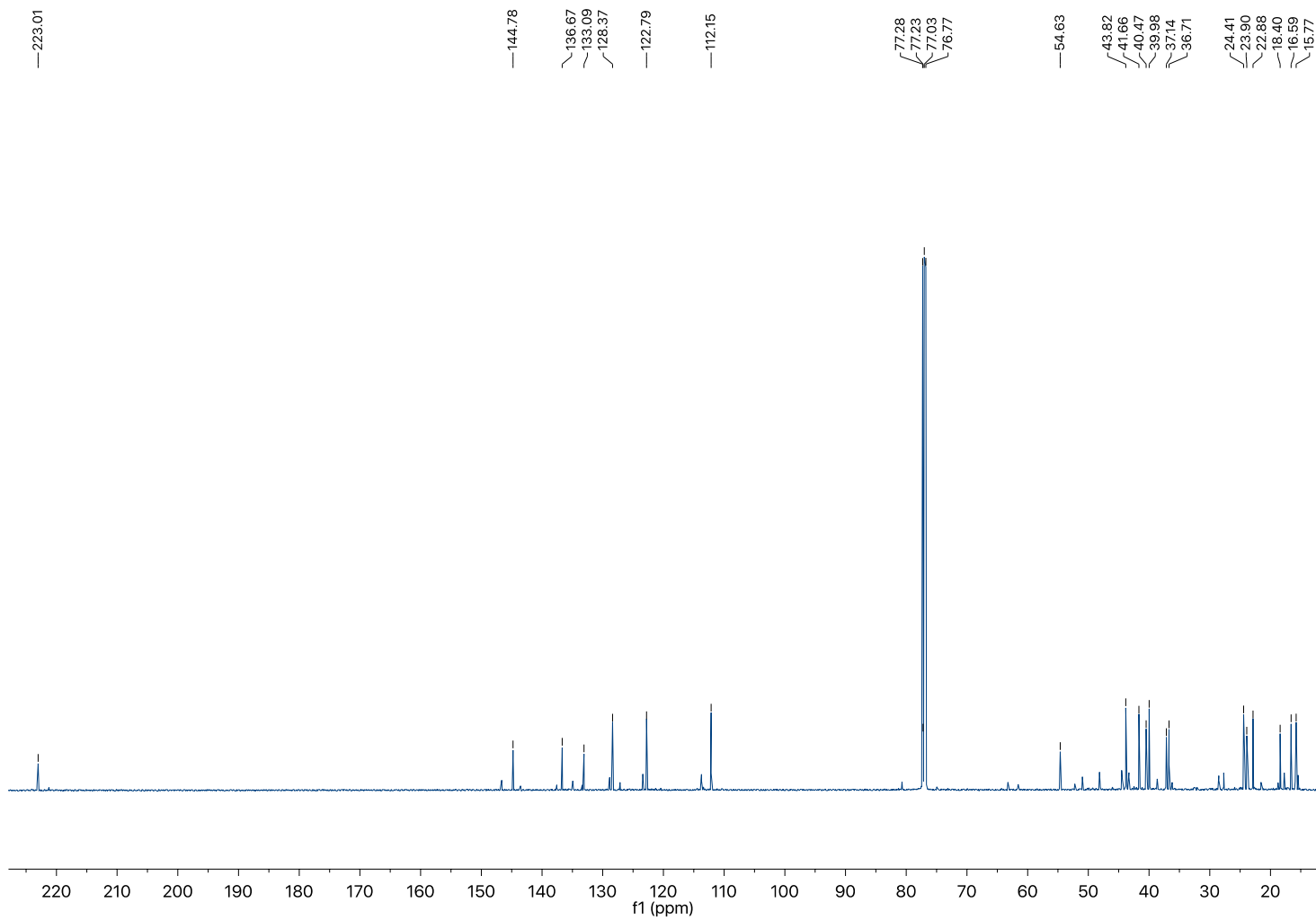
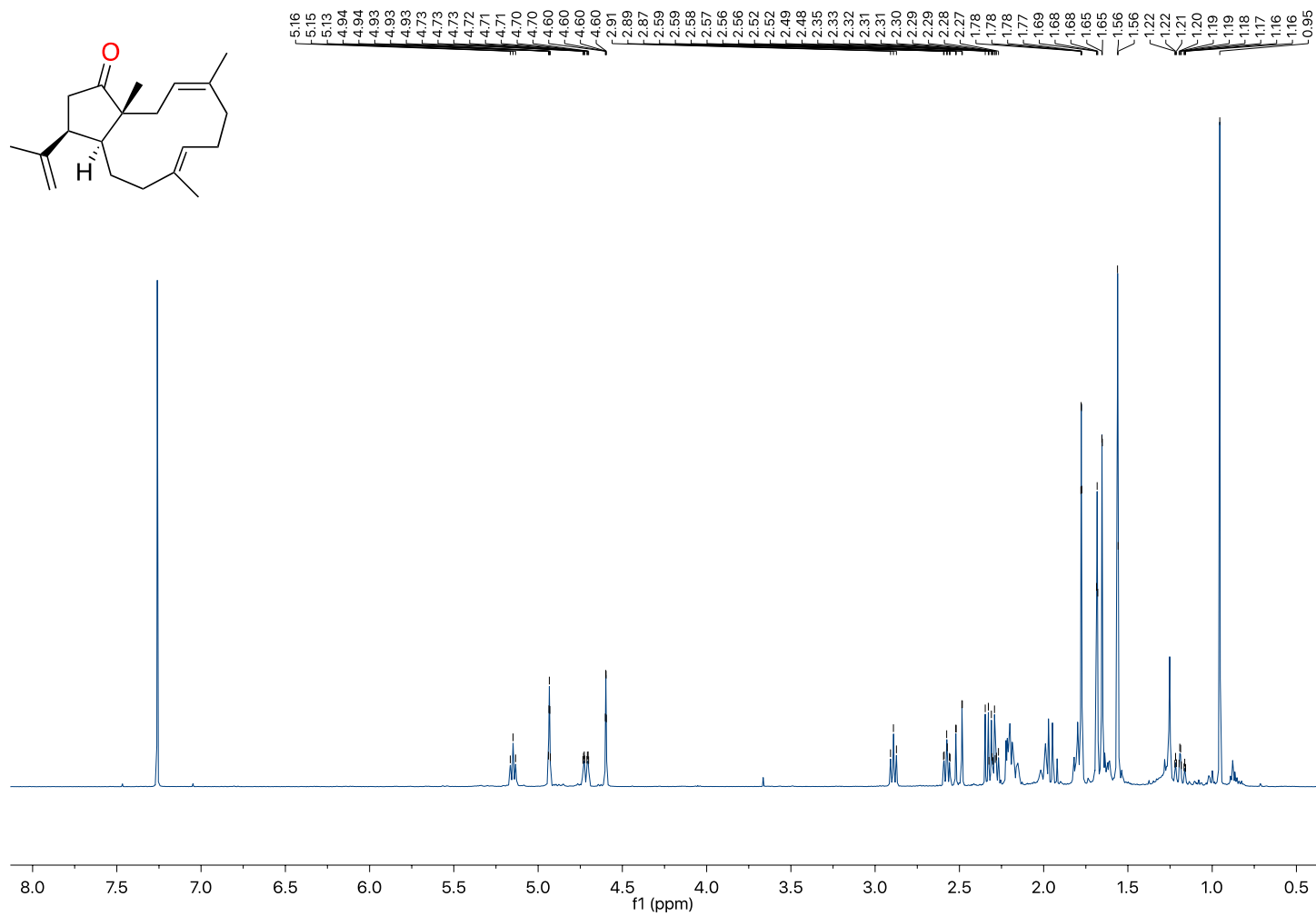


Figure S18.  $^1\text{H}$  NMR spectrum of (1*R*,3*Z*,7*E*,11*S*,12*S*)-14-oxo-3,7,18-dolabellatriene (**6**) (500 MHz,  $\text{CDCl}_3$ )



**Figure S19.**  $^{13}\text{C}$  NMR spectrum of (1*R*,3*Z*,7*E*,11*S*,12*S*)-14-oxo-3,7,18-dolabellatriene (**6**) (125 MHz,  $\text{CDCl}_3$ )

