

## Supporting Information

# Preparative Separation of $\alpha$ - and $\beta$ -Santalenes and (Z)- $\alpha$ - and (Z)- $\beta$ -Santalols using Silver Nitrate-Impregnated Silica Gel Medium Pressure Liquid Chromatography and Analysis of Sandalwood Oil

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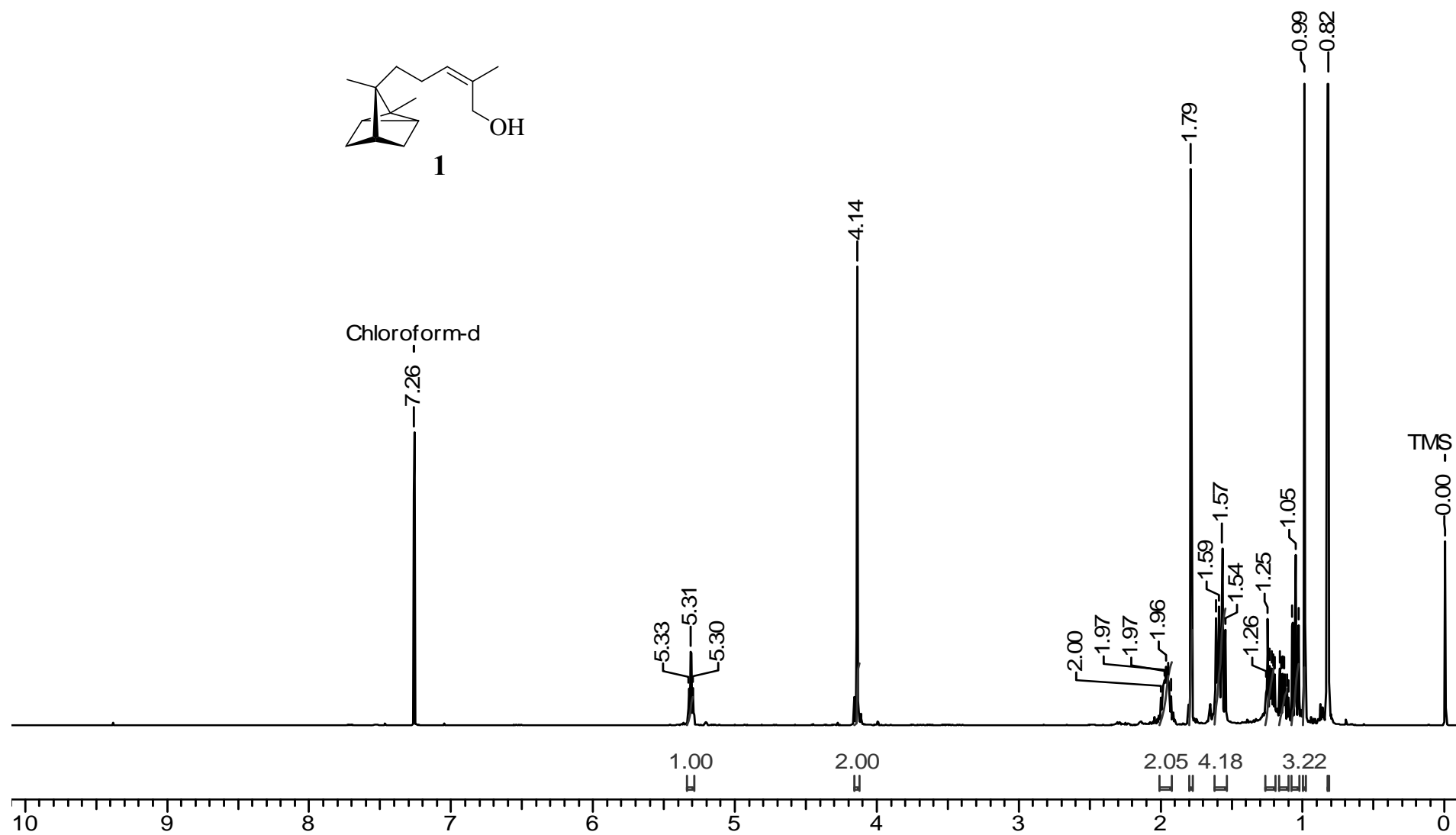


Fig S1: <sup>1</sup>H NMR spectrum of **1** in CDCl<sub>3</sub> at 500 MHz.

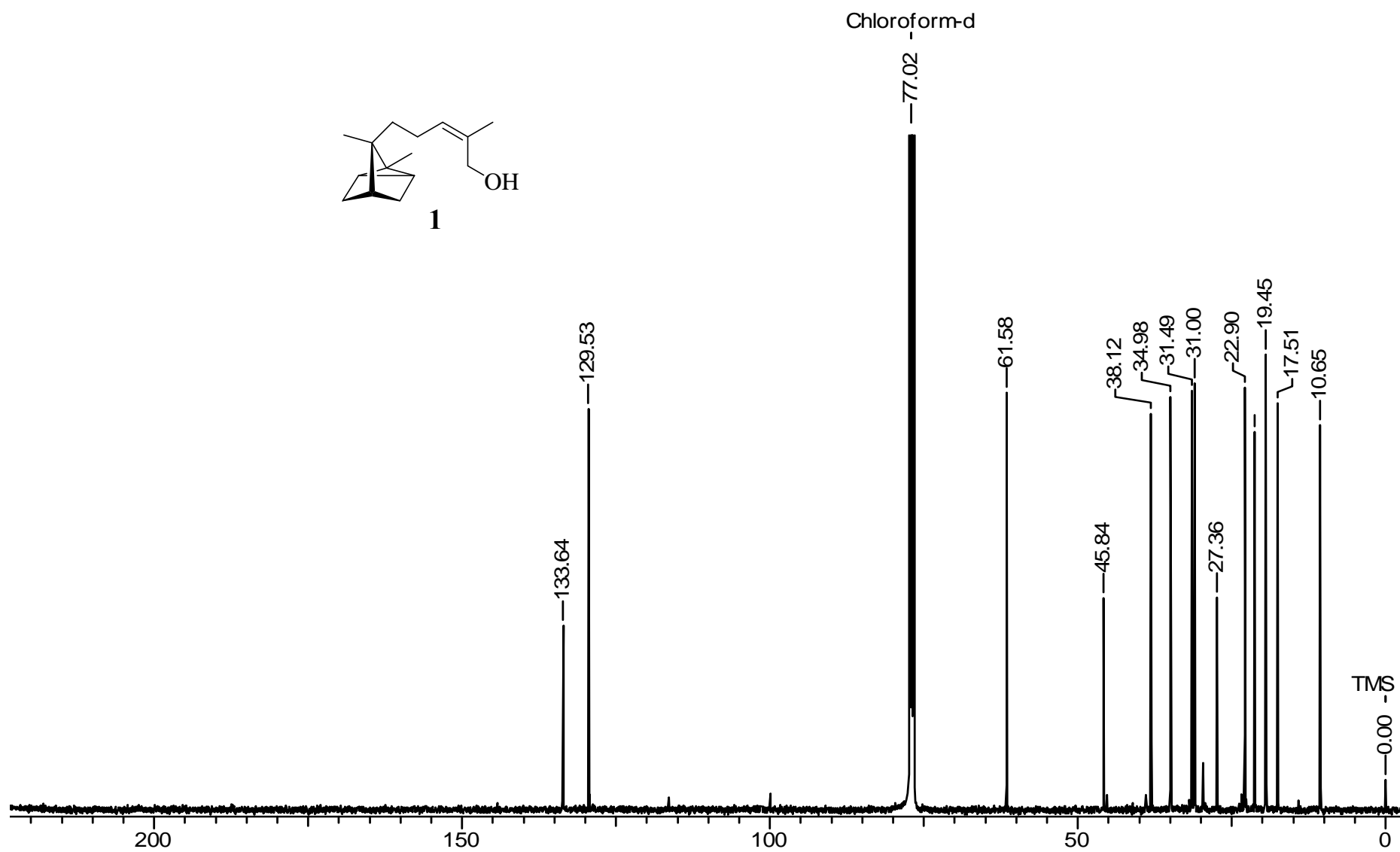
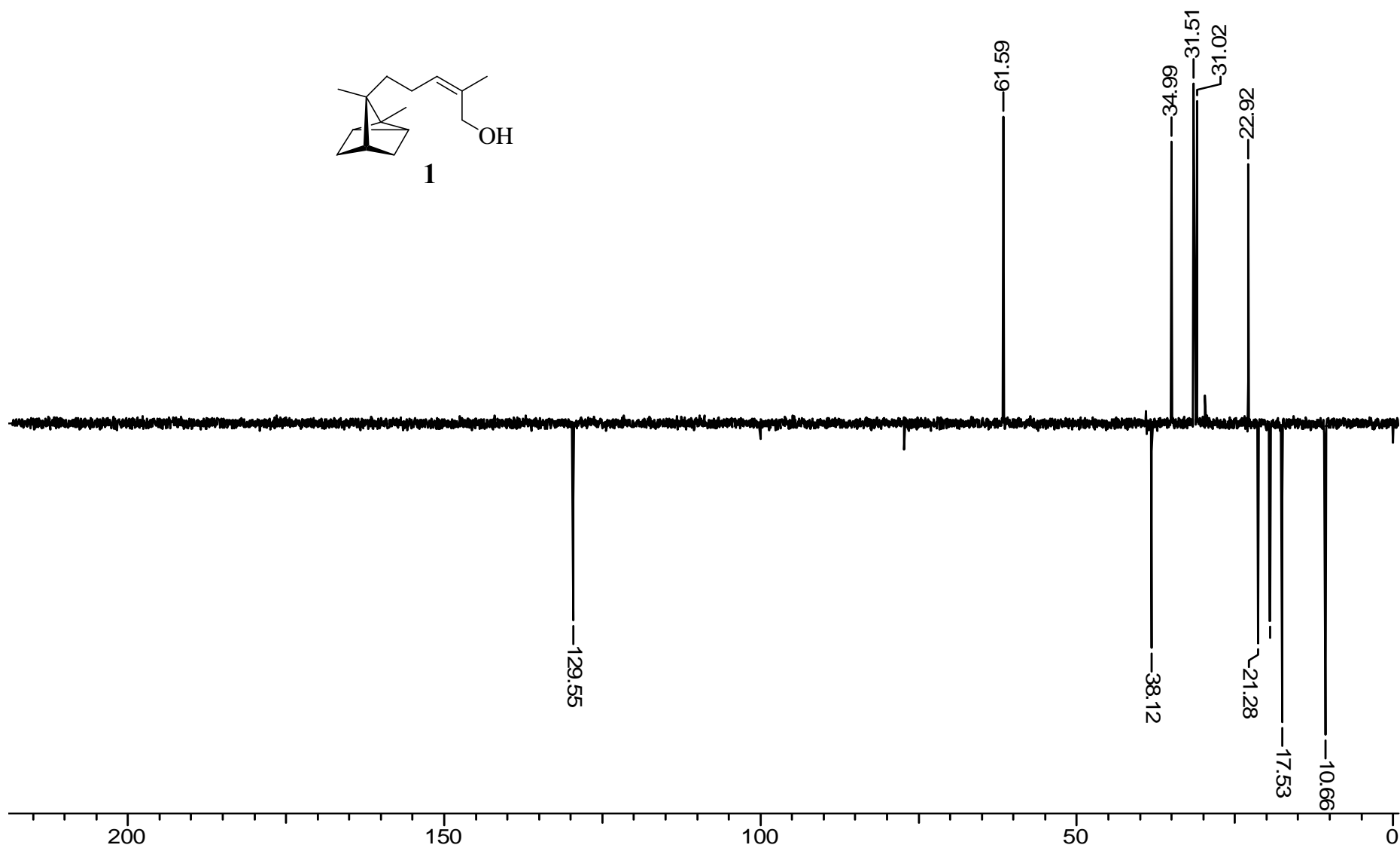


Fig S2: <sup>13</sup>C NMR spectrum of **1** in CDCl<sub>3</sub> at 125 MHz.



**Fig S3:** DEPT NMR spectrum of **1** in CDCl<sub>3</sub> at 125 MHz.

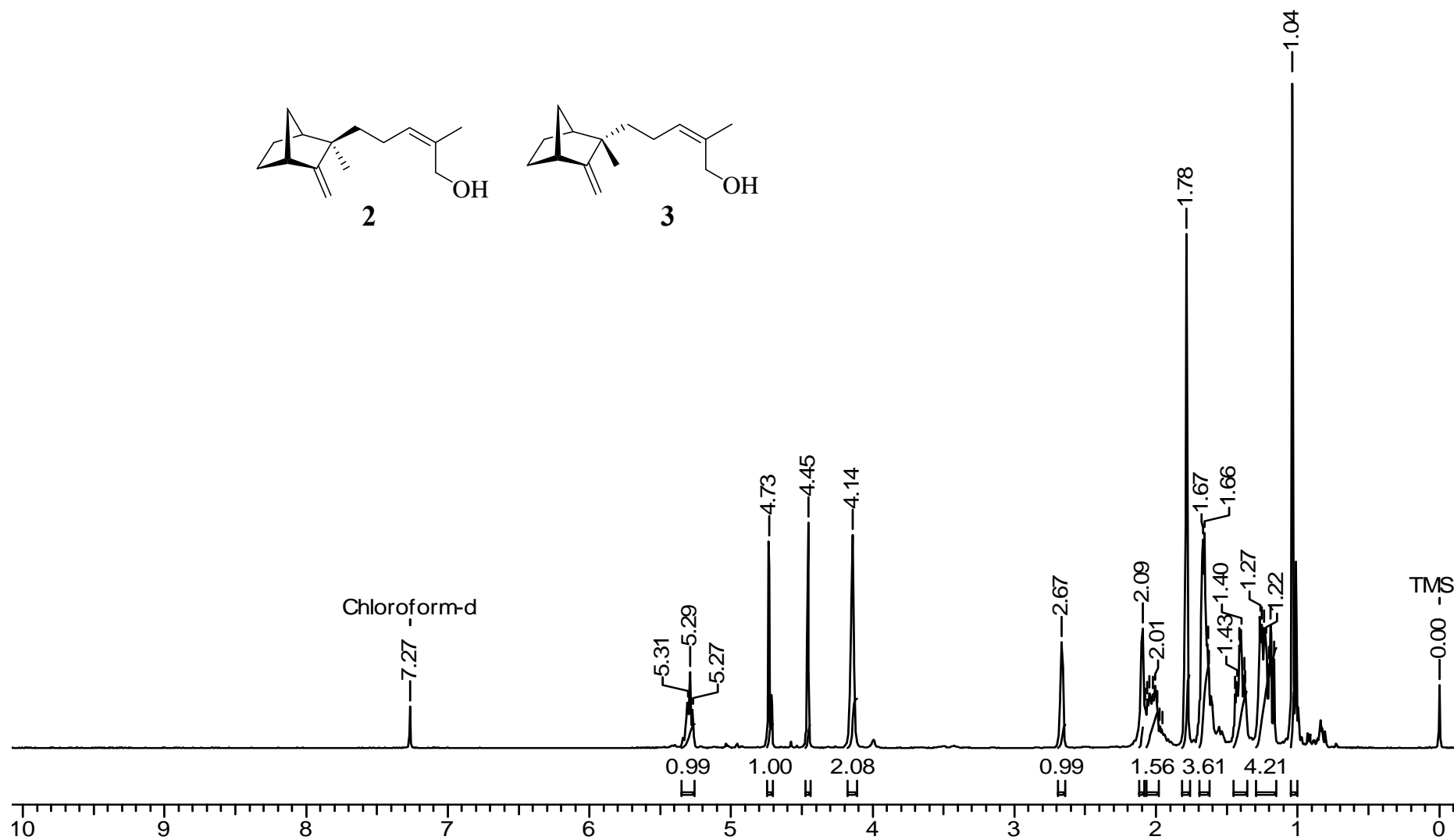


Fig S4: <sup>1</sup>H NMR spectrum of 2 & 3 in CDCl<sub>3</sub> at 500 MHz.

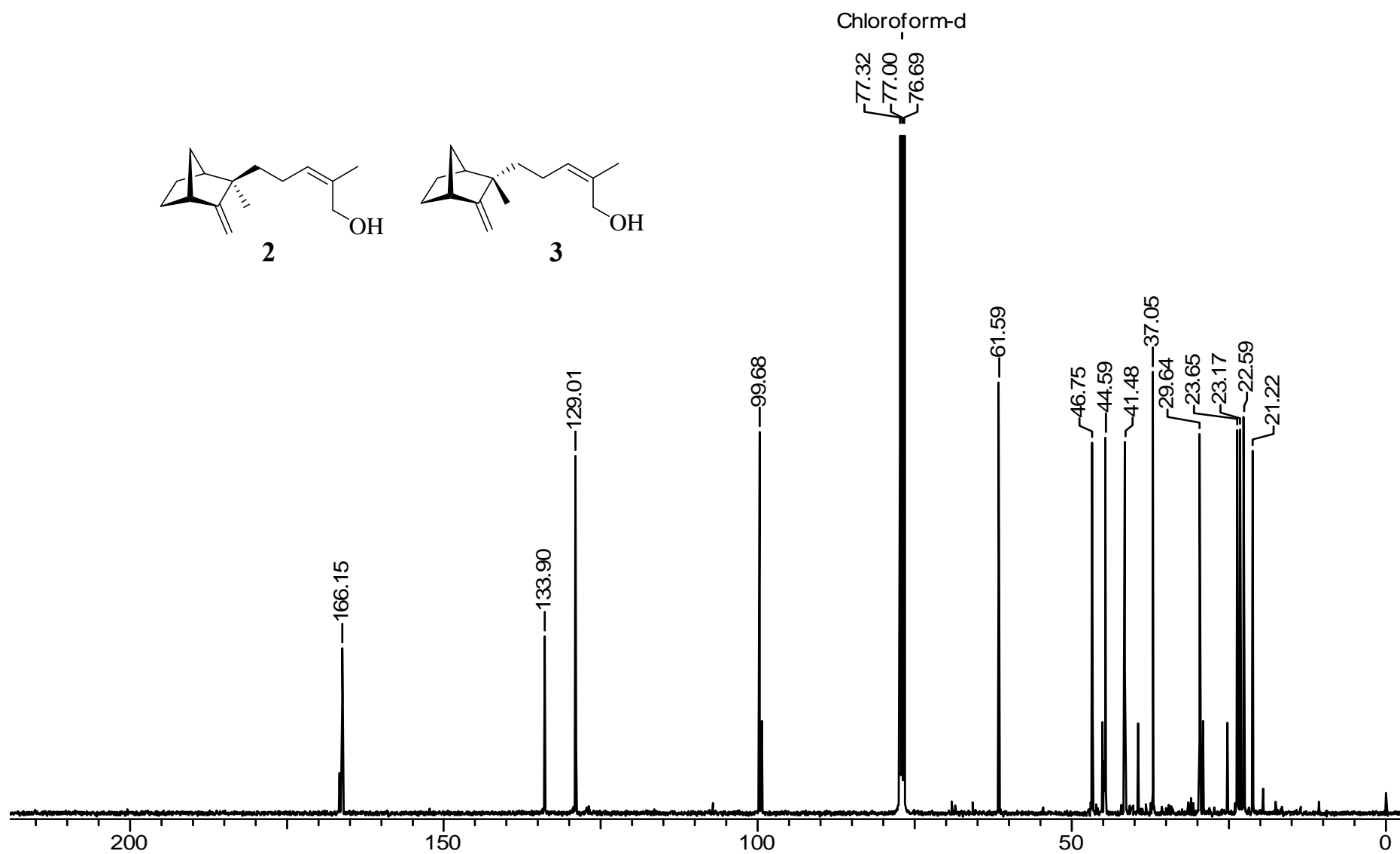
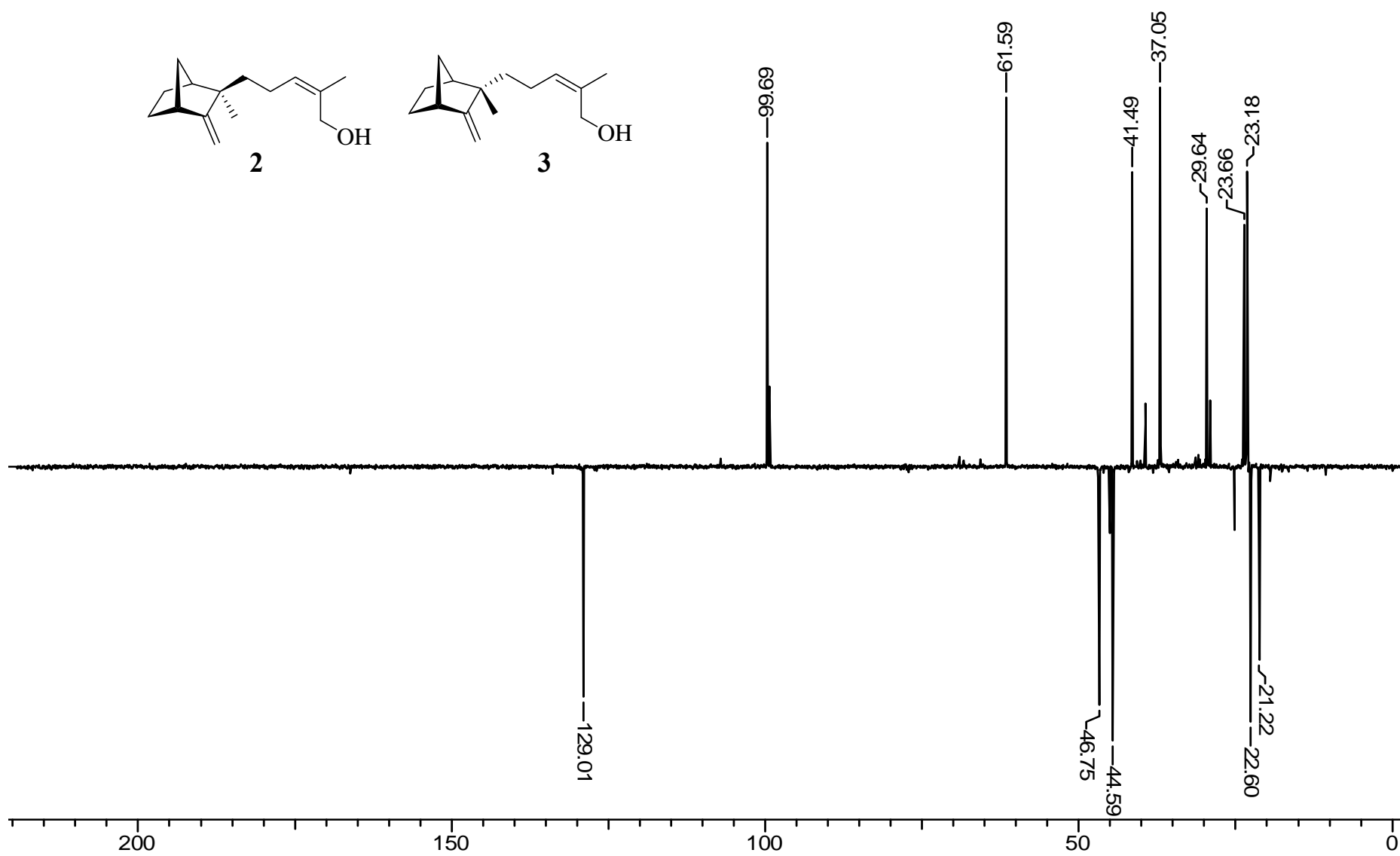


Fig S5:  $^{13}\text{C}$  NMR spectrum of **2** & **3** in  $\text{CDCl}_3$  at 125 MHz.





**Fig S6:** DEPT NMR spectrum of **2** & **3** in CDCl<sub>3</sub> at 125 MHz.

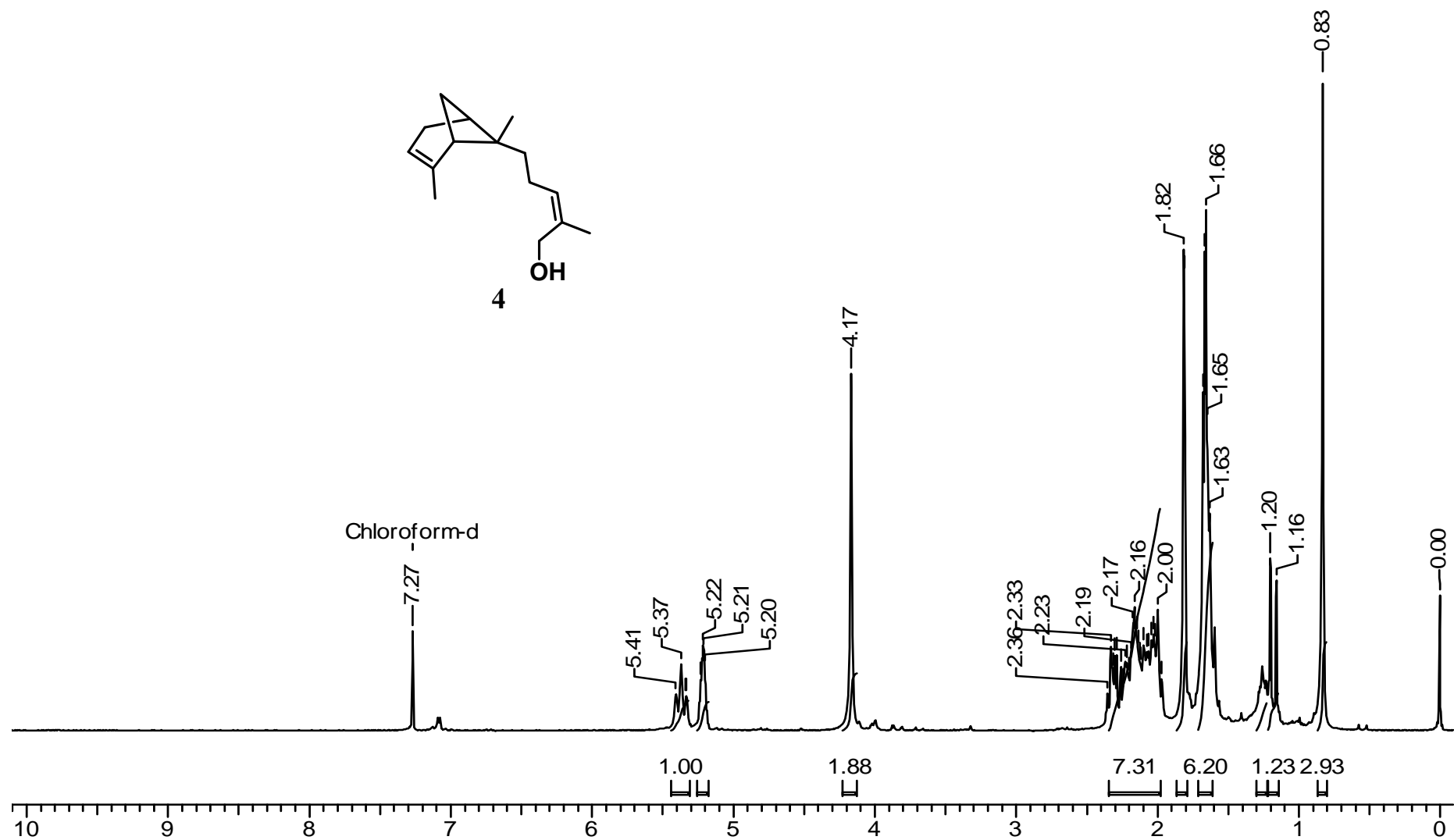


Fig S7:  $^1\text{H}$  NMR spectrum of **4** in  $\text{CDCl}_3$  at 200 MHz.

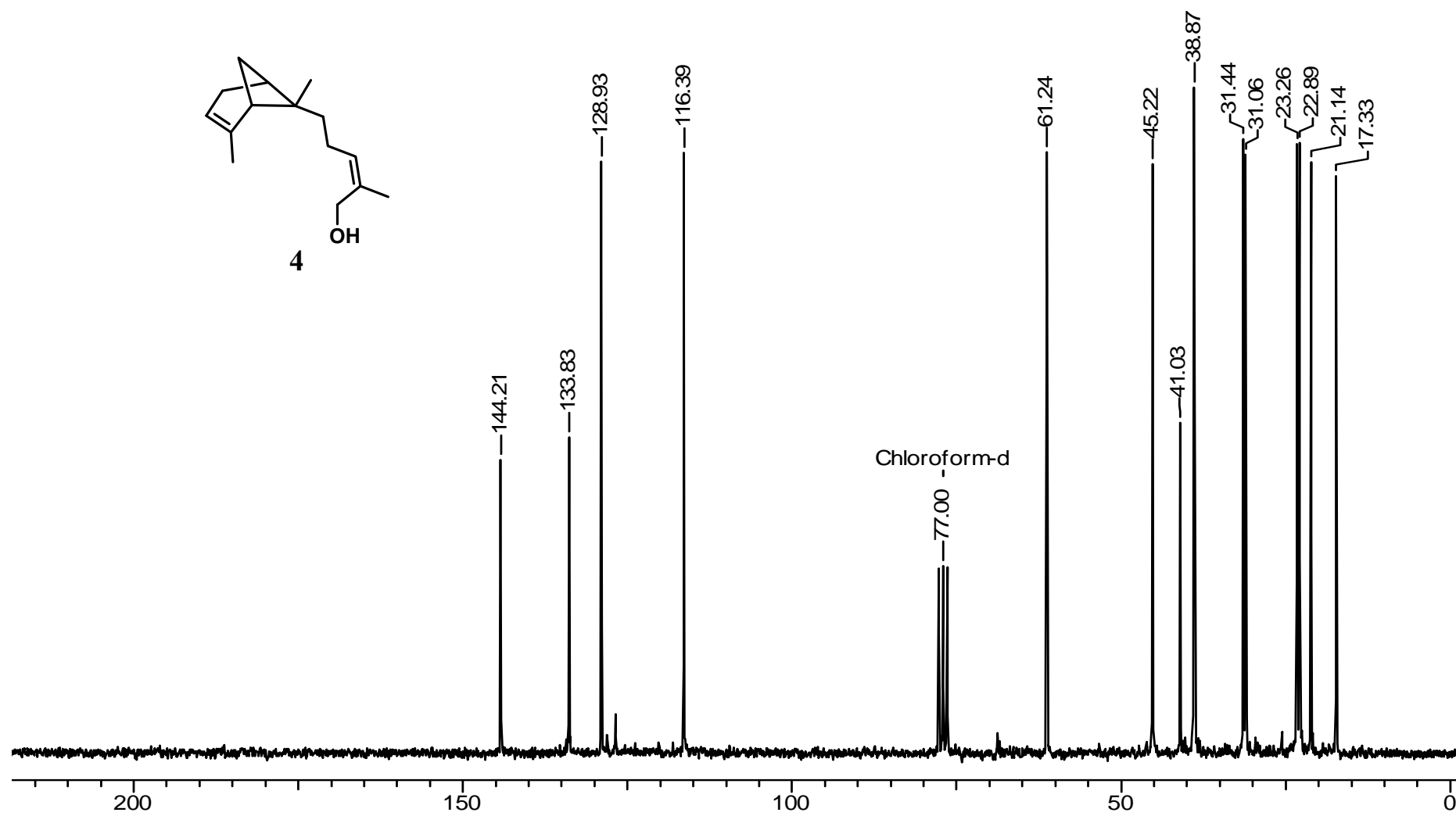
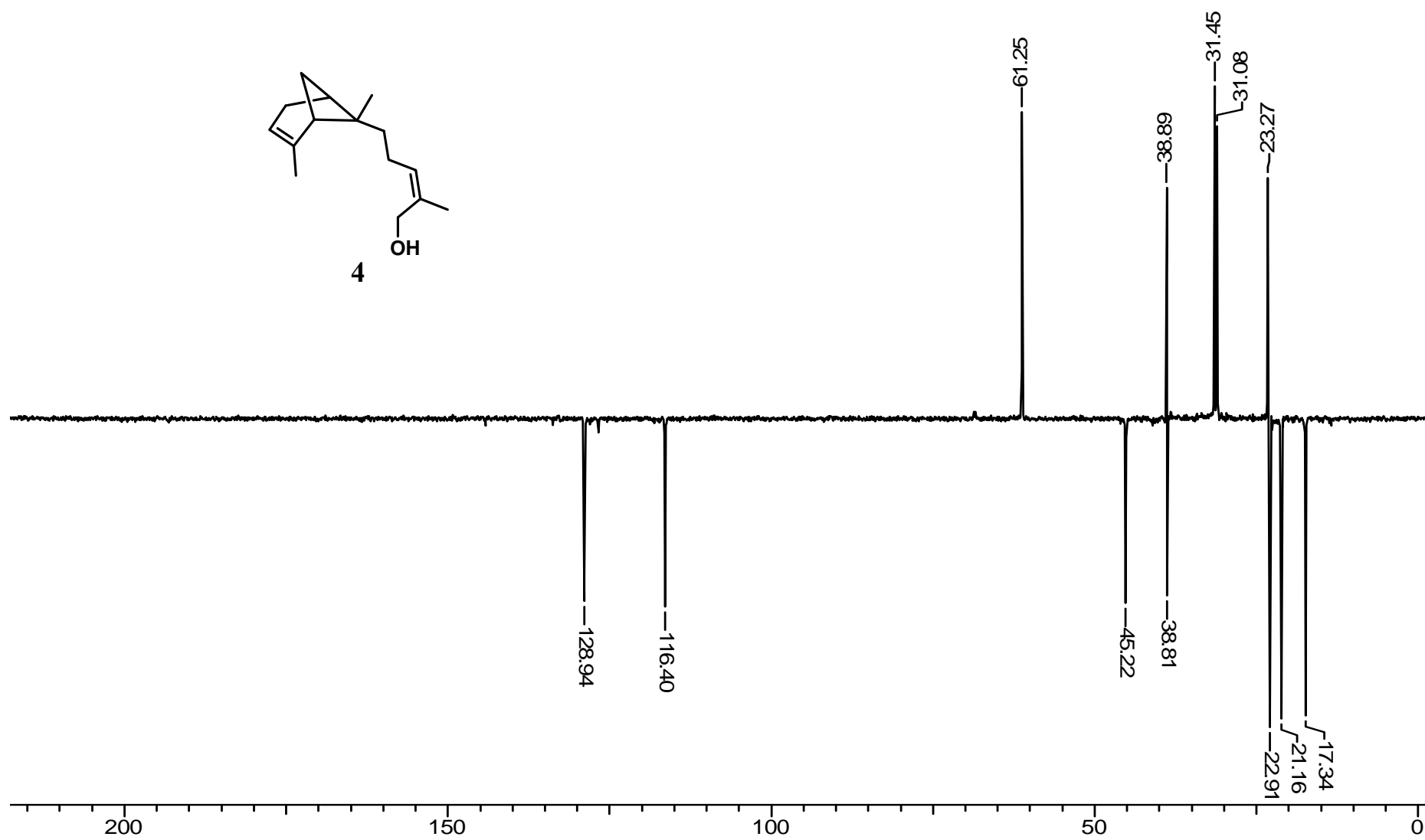
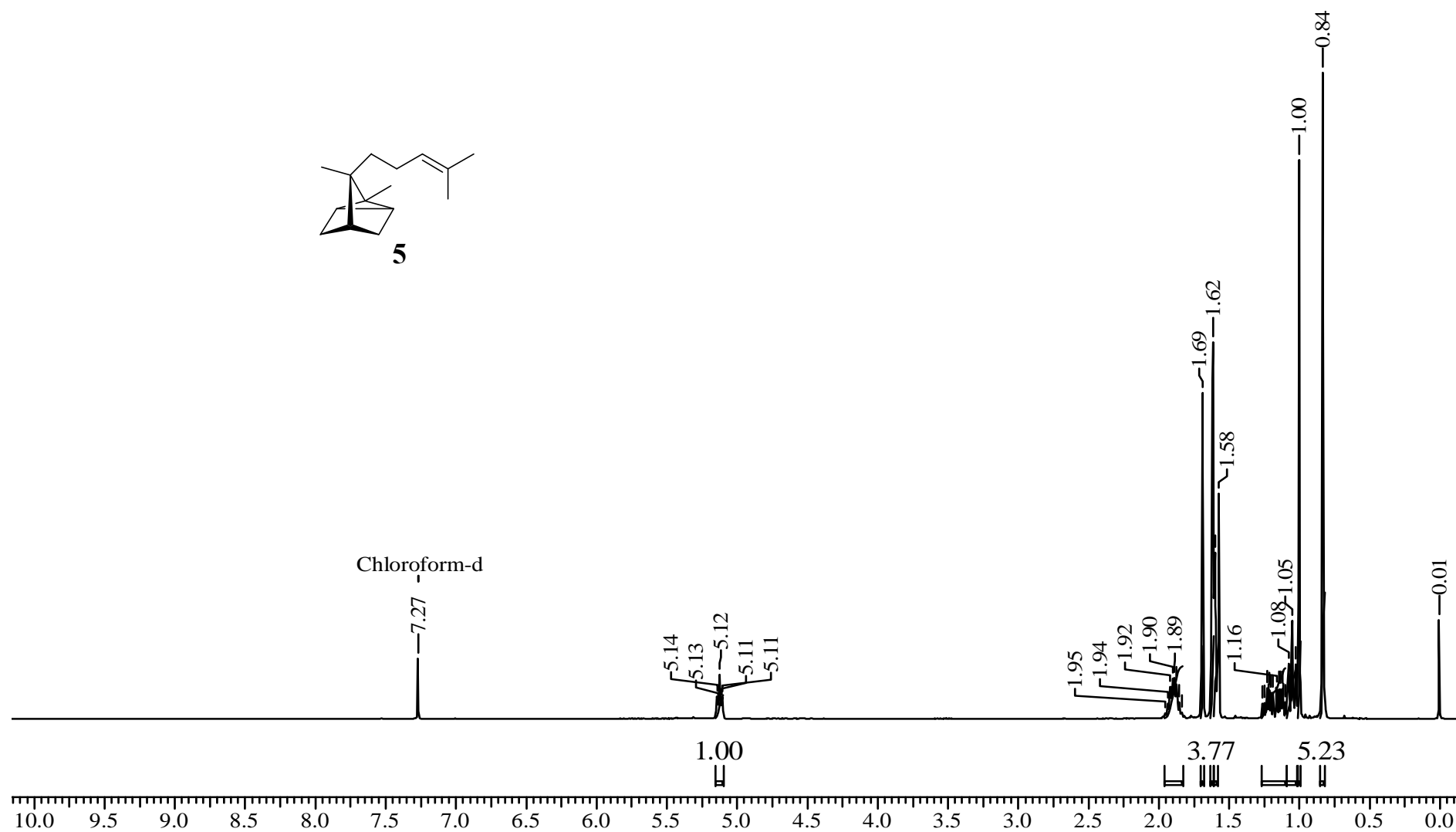


Fig S8: <sup>13</sup>C NMR spectrum of **4** in CDCl<sub>3</sub> at 50 MHz.



**Fig S9:** DEPT NMR spectrum of **4** in CDCl<sub>3</sub> at 50 MHz.



**Fig S10:** <sup>1</sup>H NMR spectrum of **5** in CDCl<sub>3</sub> at 500 MHz.

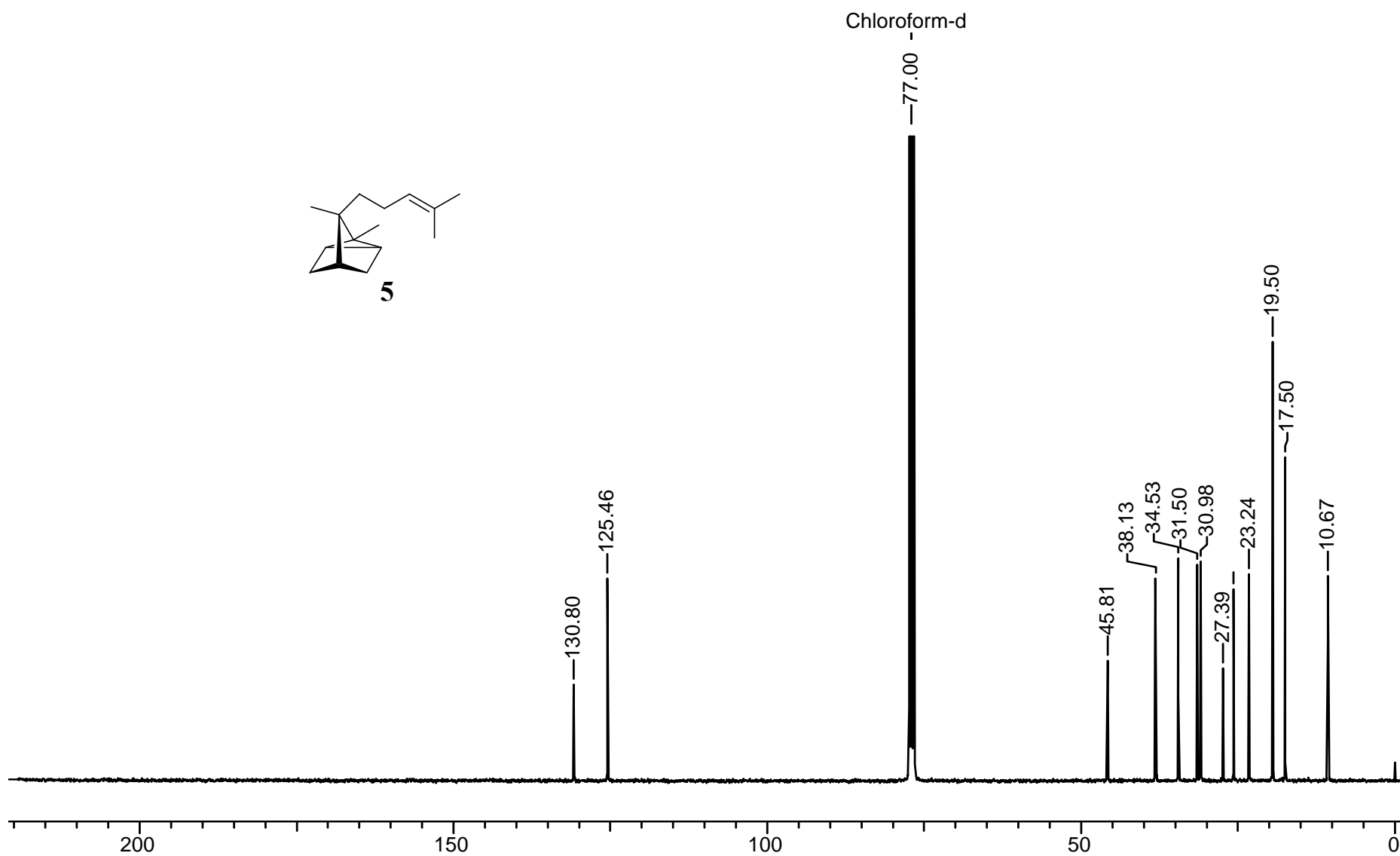
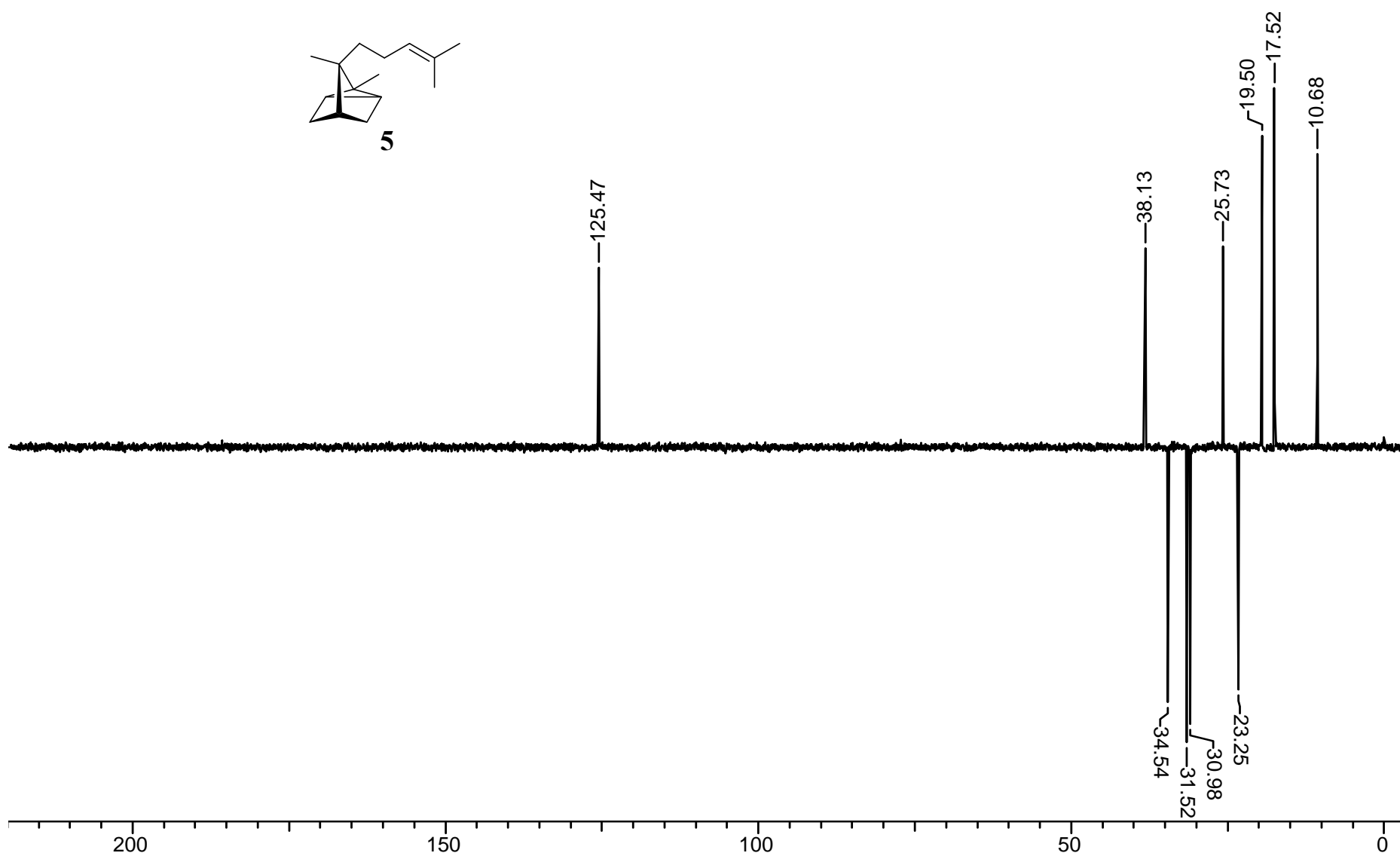


Fig S11:  $^{13}\text{C}$  NMR spectrum of **5** in  $\text{CDCl}_3$  at 125 MHz.



**Fig S12:** DEPT NMR spectrum of **5** in CDCl<sub>3</sub> at 125 MHz.

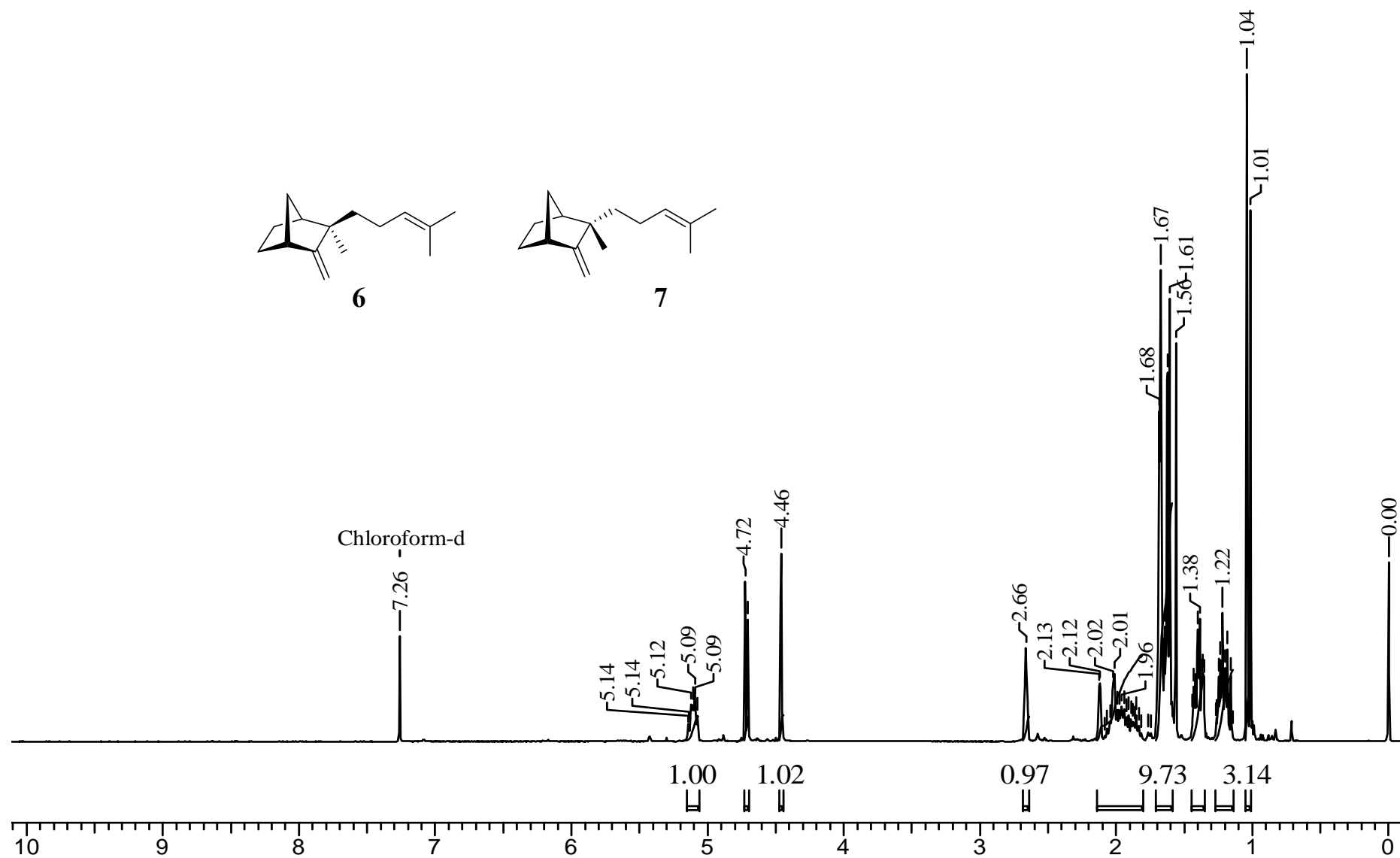


Fig S13: <sup>1</sup>H NMR spectrum of 6 & 7 in CDCl<sub>3</sub> at 500 MHz.



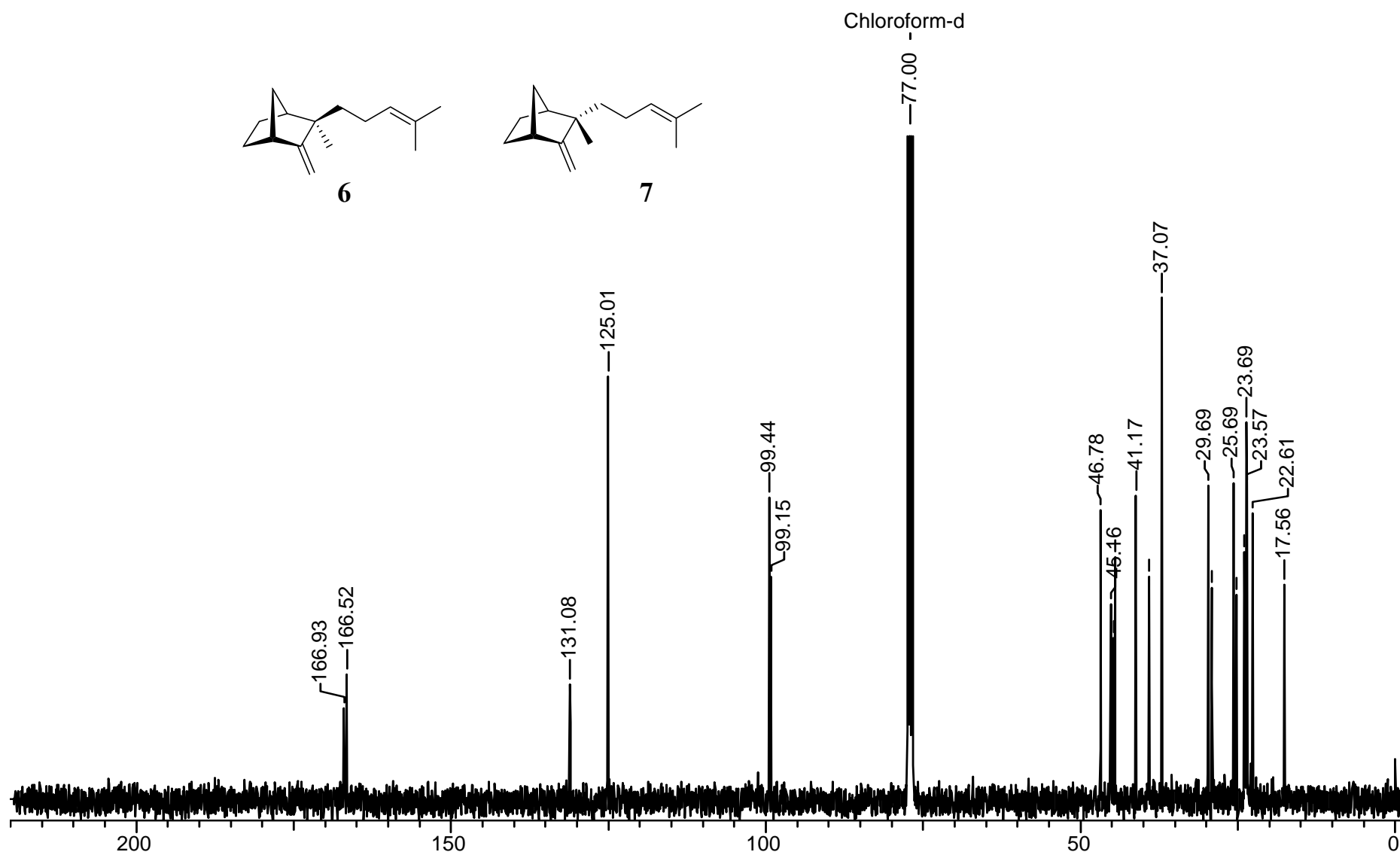


Fig S14:  $^{13}\text{C}$  NMR spectrum of 6 & 7 in  $\text{CDCl}_3$  at 125 MHz.

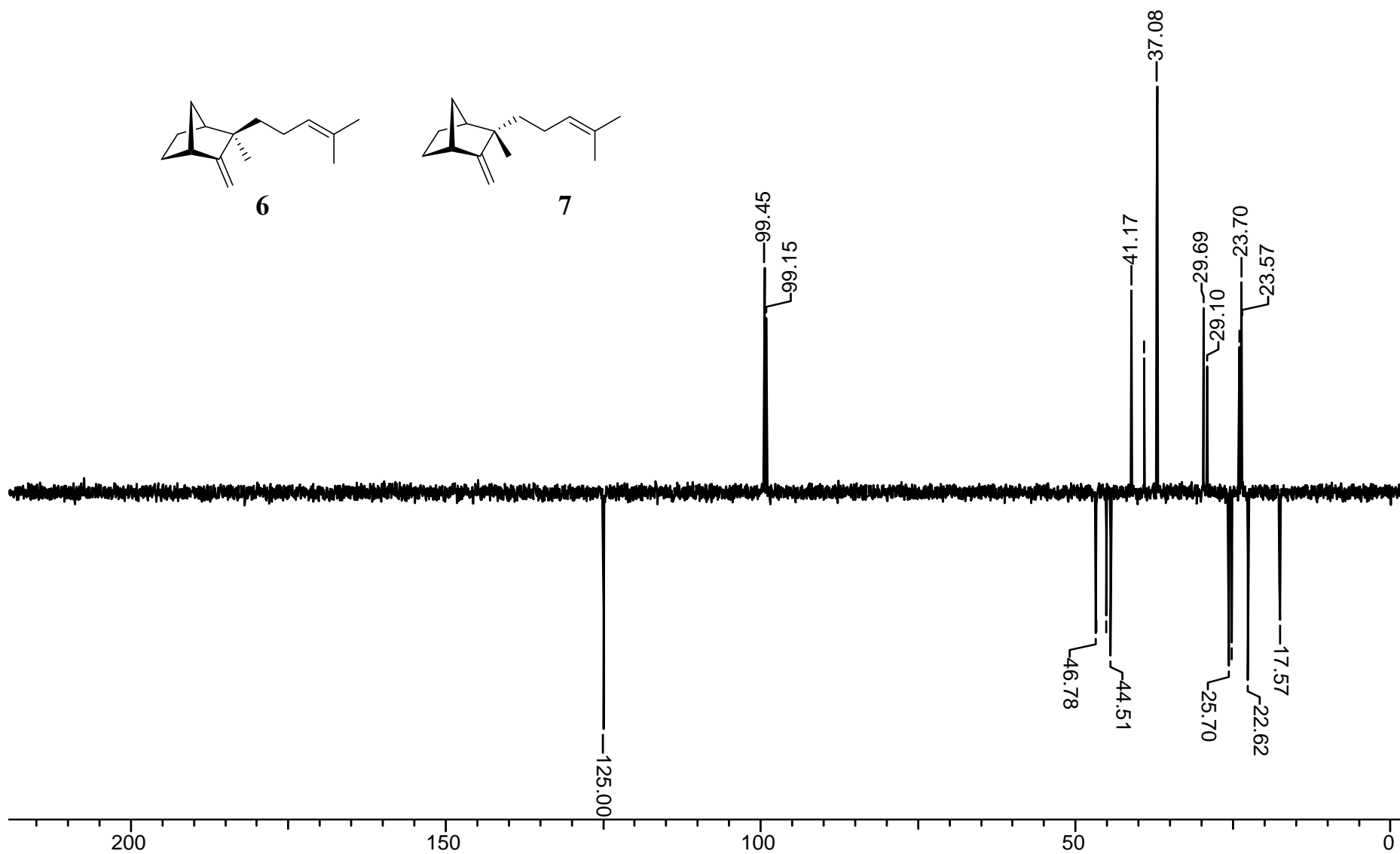
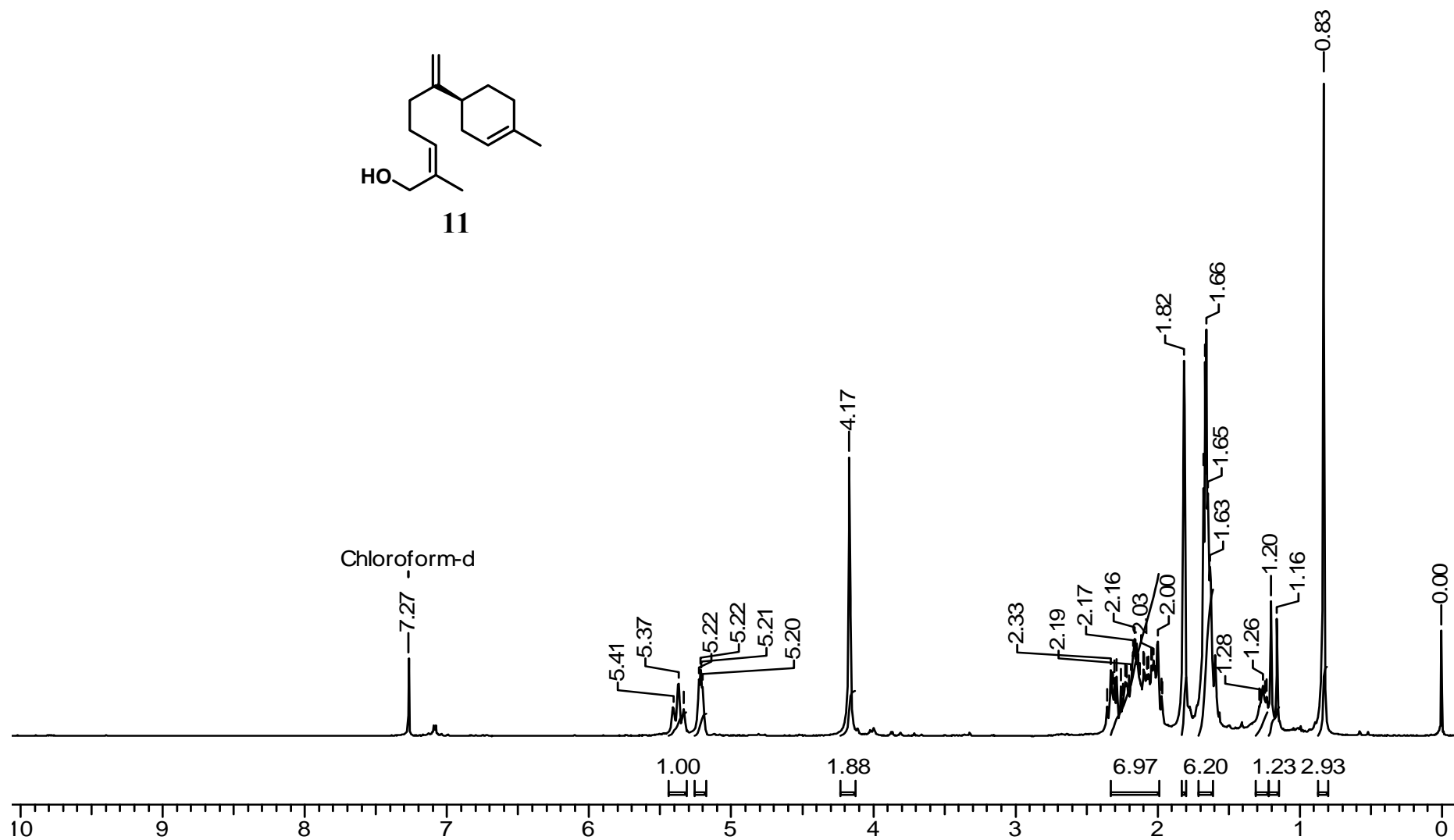
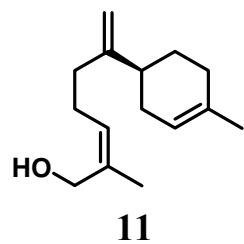
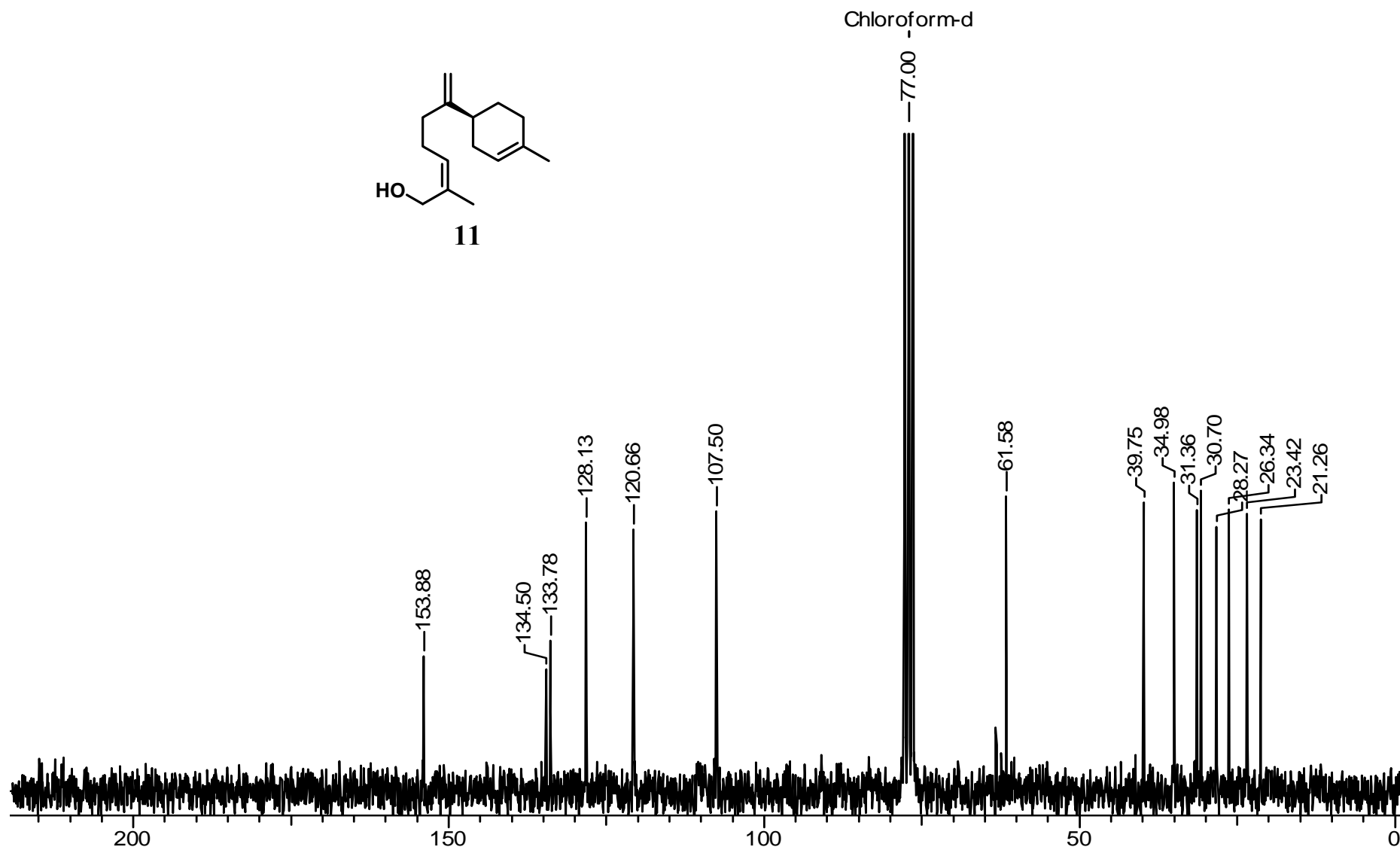


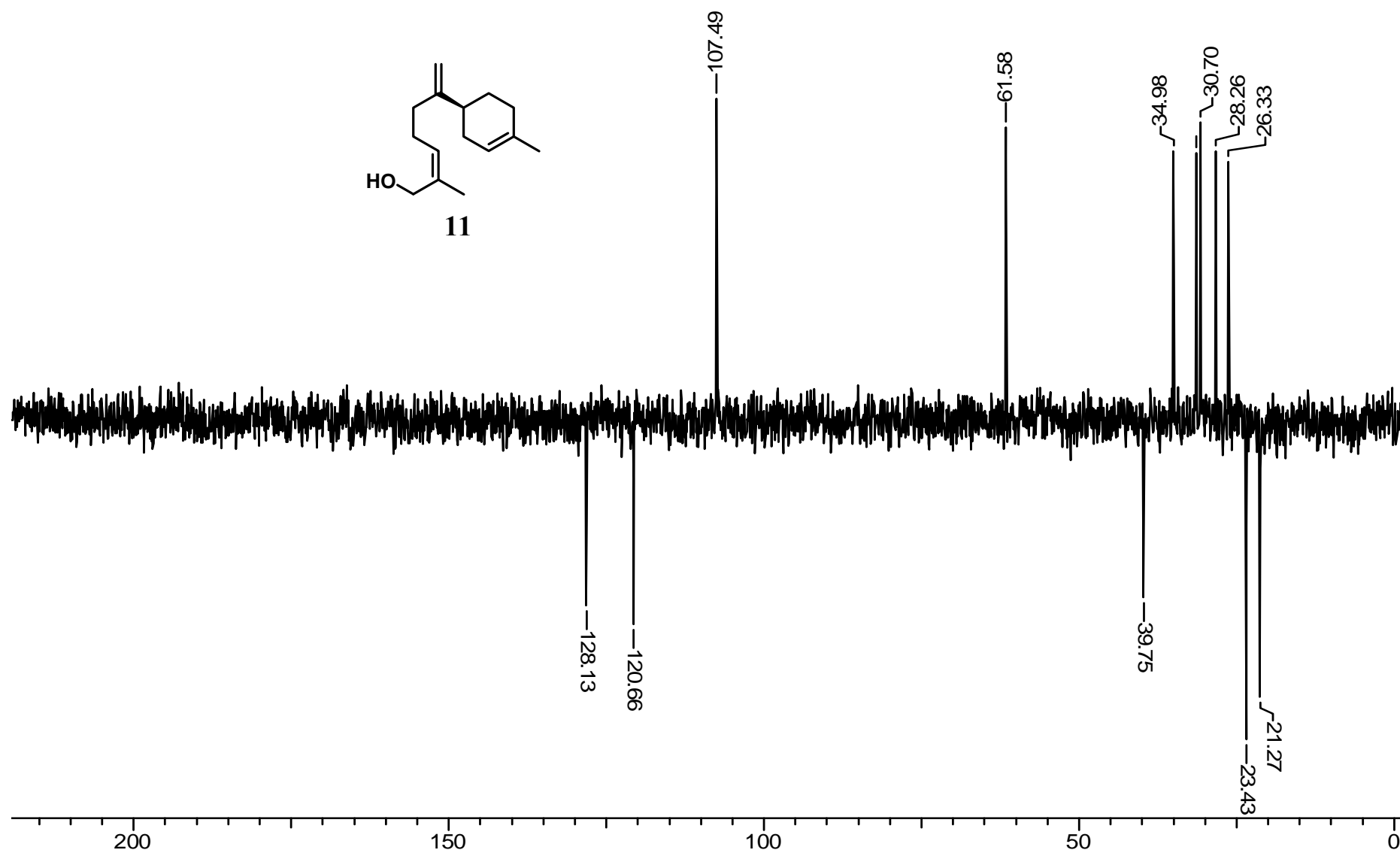
Fig S15: DEPT NMR spectrum of **6** & **7** in CDCl<sub>3</sub> at 125 MHz.



**Fig S16:** <sup>1</sup>H NMR spectrum of **11** in CDCl<sub>3</sub> at 200 MHz.



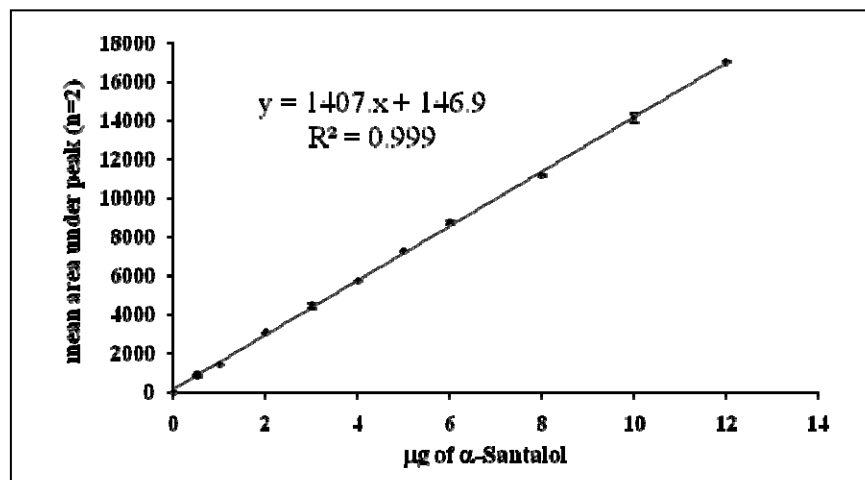
**Fig S17:**  $^{13}\text{C}$  NMR spectrum of **11** in  $\text{CDCl}_3$  at 50 MHz.



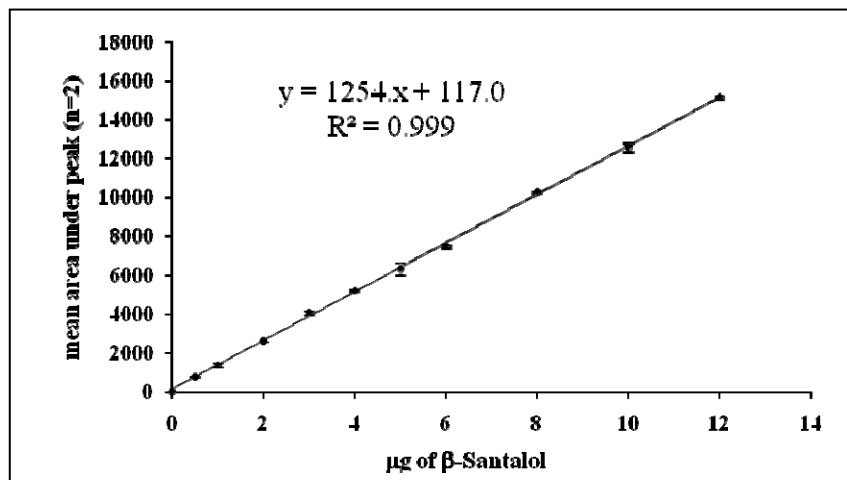
**Fig S18:** DEPT NMR spectrum of **11** in CDCl<sub>3</sub> at 50 MHz.

Fig S19: Graphs from quantification studies of components of sandalwood oil:

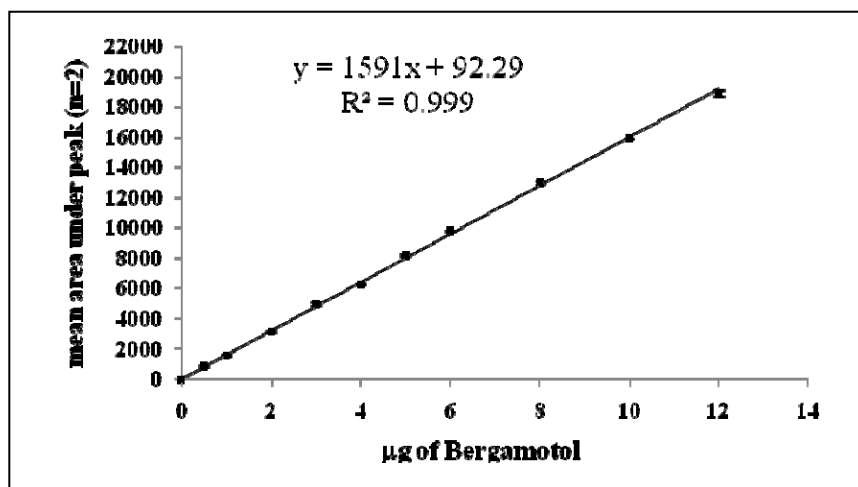
A) (Z)- $\alpha$ -Santalol (1):



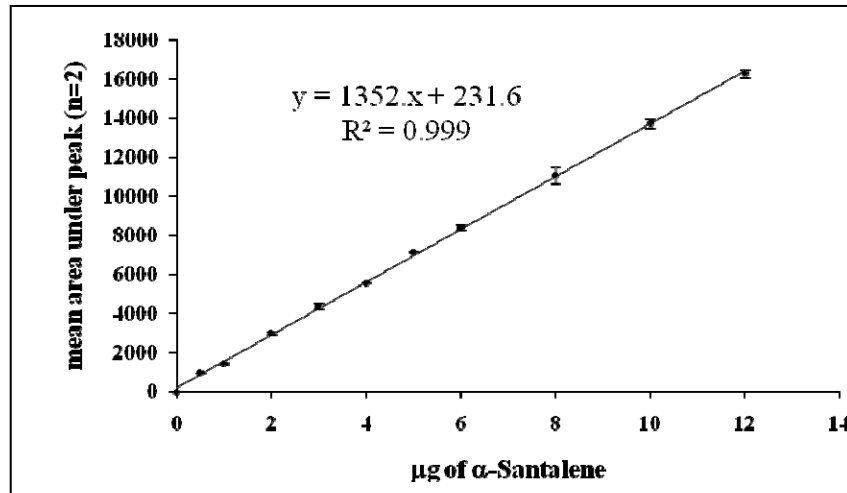
B) (Z)-( $\beta$  + *epi*- $\beta$ )-Santalol (2 & 3):



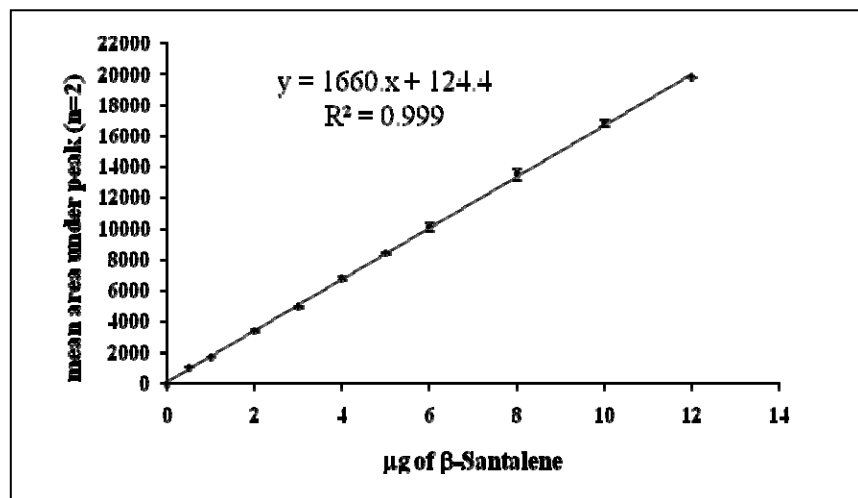
C) (Z)- $\alpha$ -trans-Bergamotol (4):



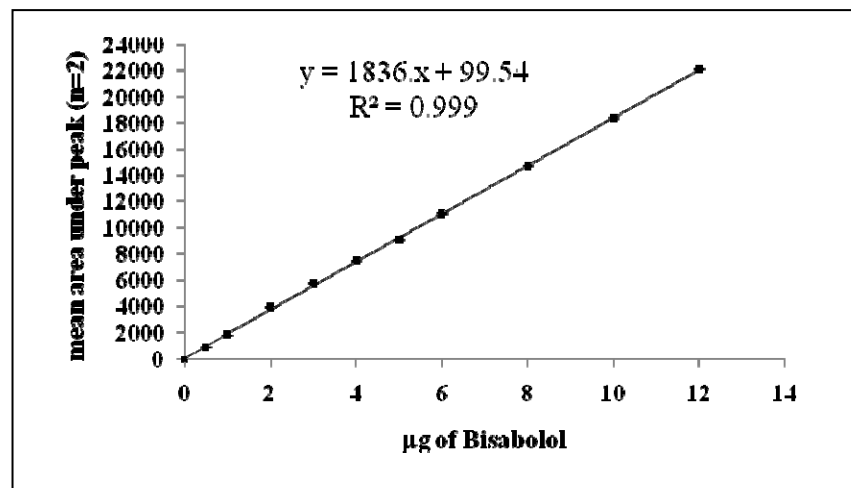
D)  $\alpha$ -Santalene (5):



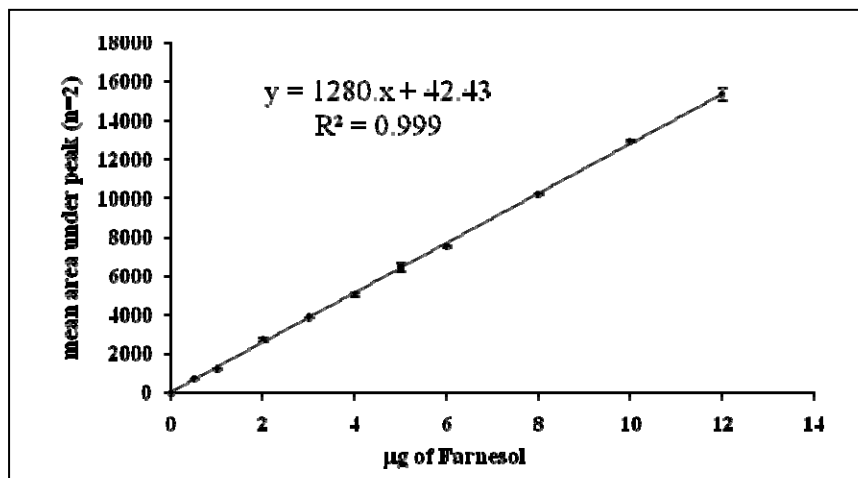
E) ( $\beta$ -*+* *epi*- $\beta$ )-Santalene (6 & 7):



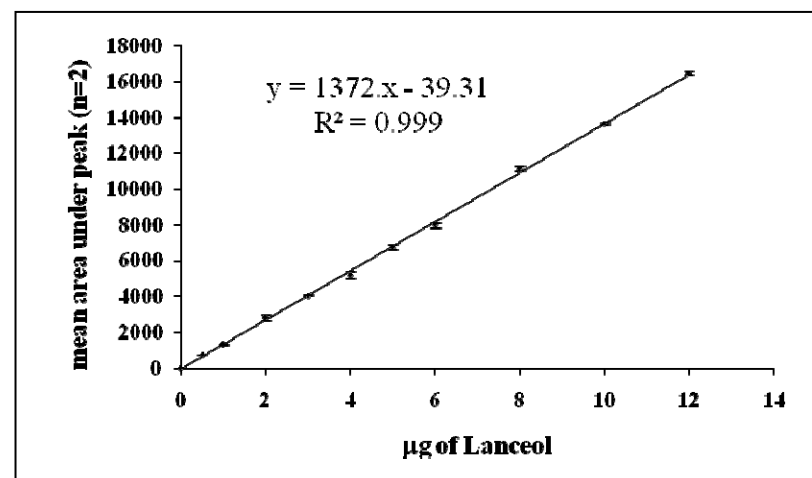
F) (-)- $\alpha$ -Bisabolol (8):



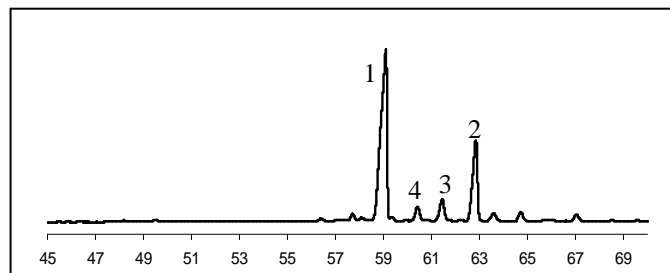
G) (*E*), (*E*)-Farnesol (9):



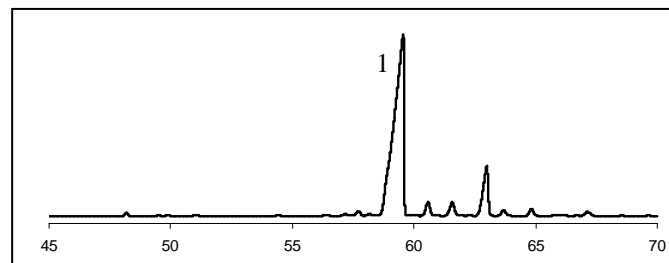
H) (*Z*)-Lanceol (11):



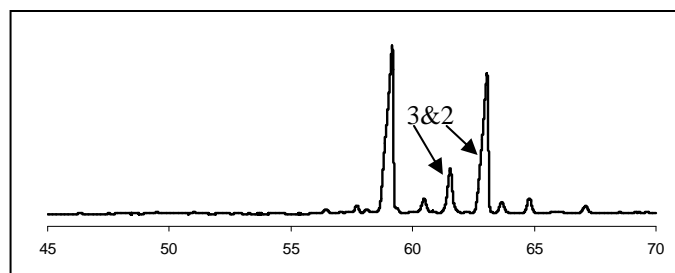
**Fig. S20: Co-injection of purified components with Sandalwood oil:**



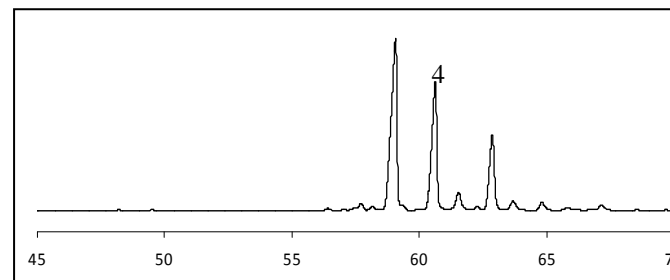
A) Sandalwood oil



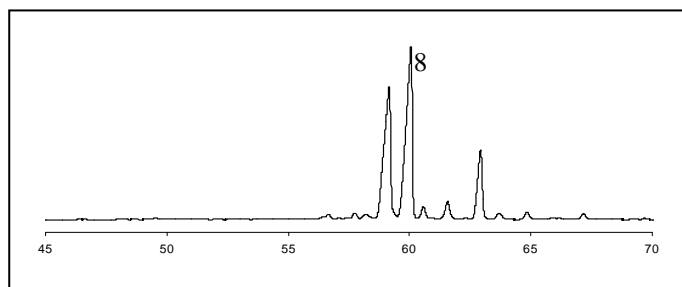
B) Co-injection of (Z)-α-Santalol (**1**) with Sandalwood oil



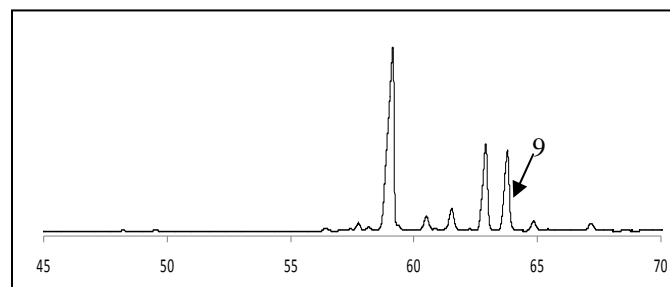
C) Co-injection of (Z)-(β+ *epi*-β)-Santalol (**2&3**) with Sandalwood oil



D) Co-injection of (Z)-α-trans-Bergamotol (**4**) with Sandalwood oil

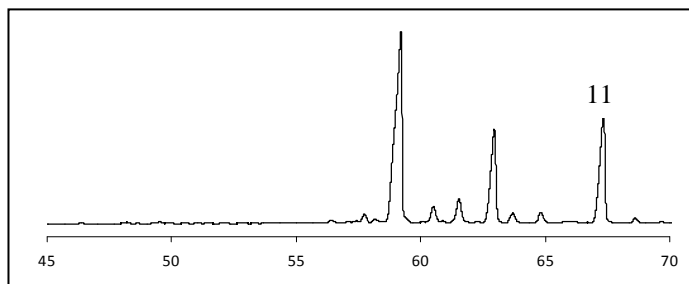


E) Co-injection of (-)-α-Bisabolol (**8**) with Sandalwood oil

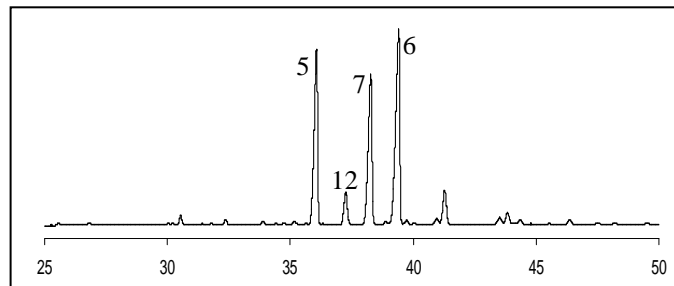


F) Co-injection of (E), (E)-Farnesol (**9**) with Sandalwood oil

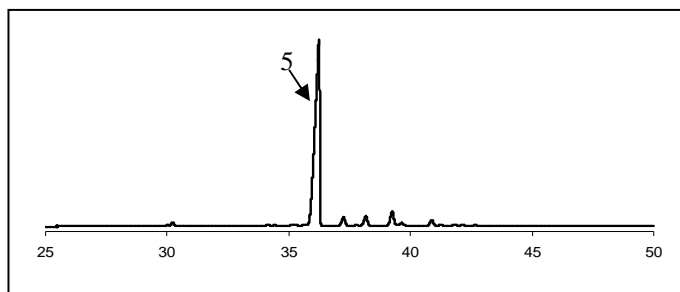




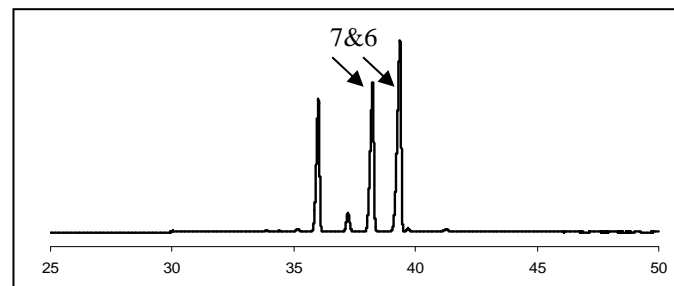
G) Co-injection of (*Z*)-Lanceol (**11**) with Sandalwood oil



H) Santalenes mixture



H) Co-injection of  $\alpha$ -Santalene (**5**) with Sandalwood oil.



J) Co-injection of ( $\beta$ + *epi*- $\beta$ )-Santalene (**6&7**) with Sandalwood oil