

Supplementary information.

Secondary Metabolites and Their Cytotoxic Activity of *Artemisia nitrosa* Weber. and *Artemisia marschalliana* Spreng.

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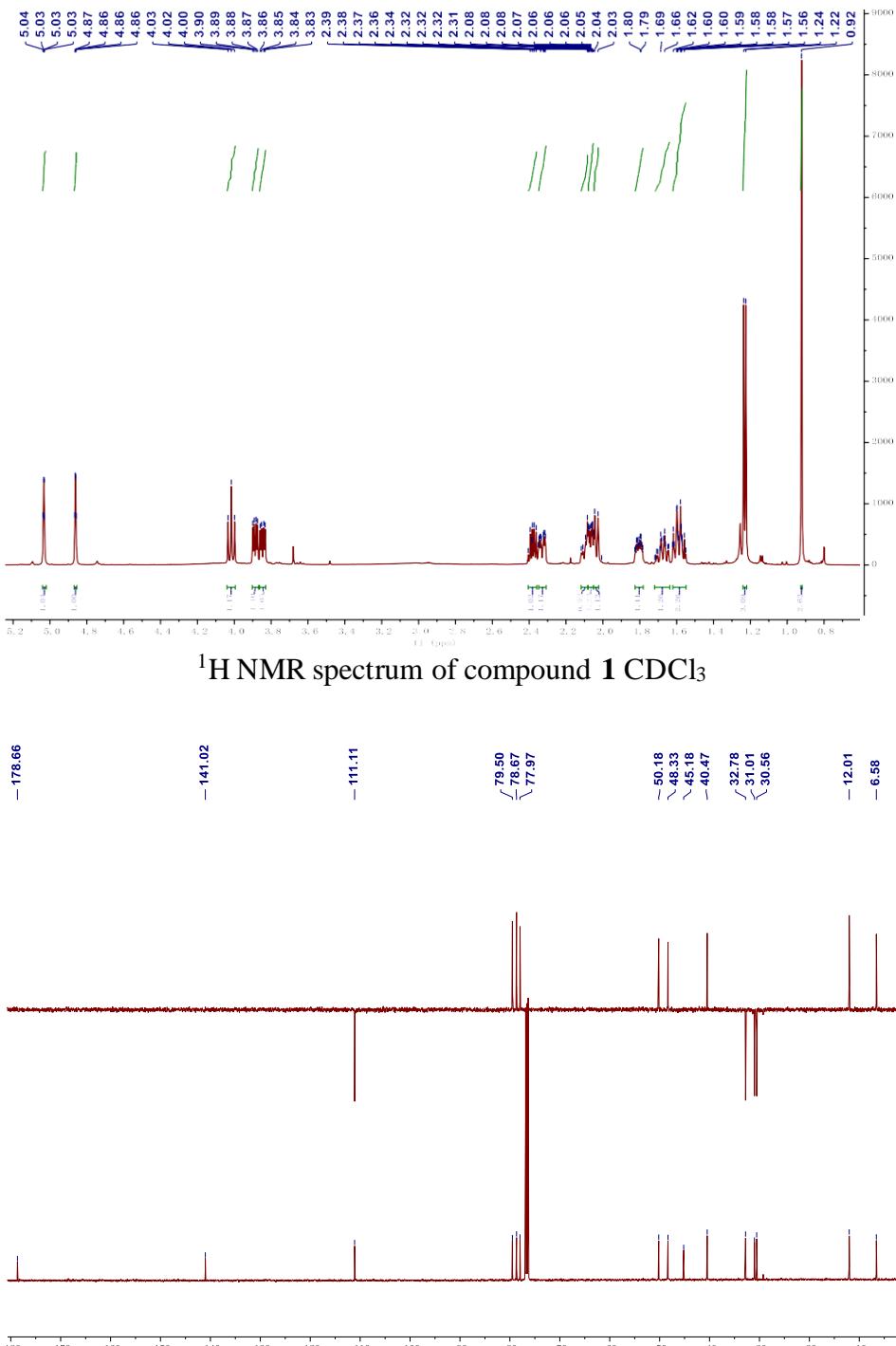
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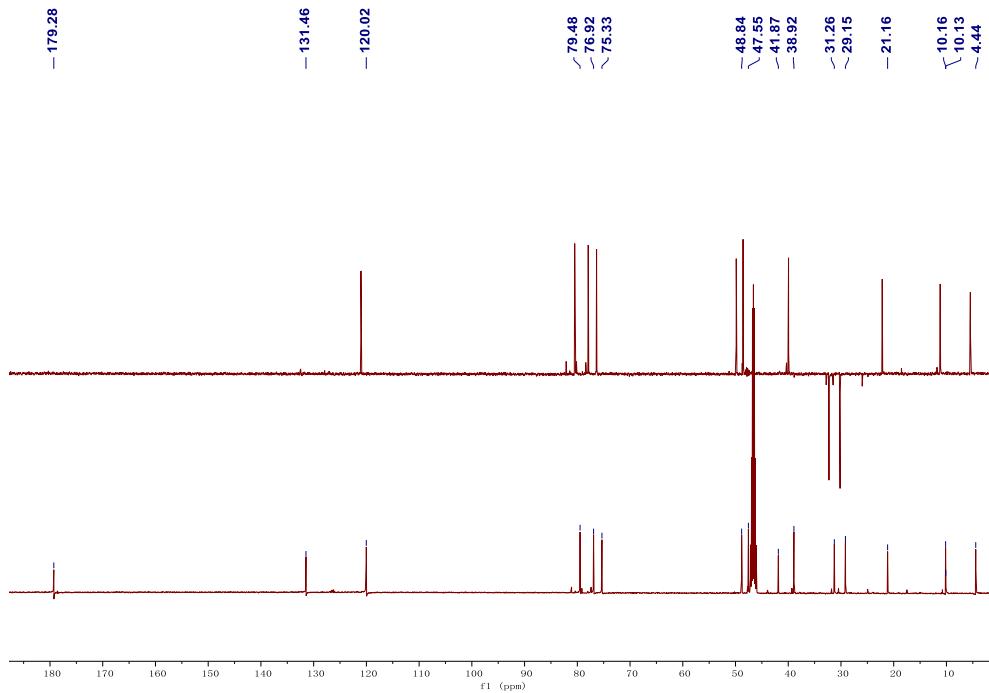
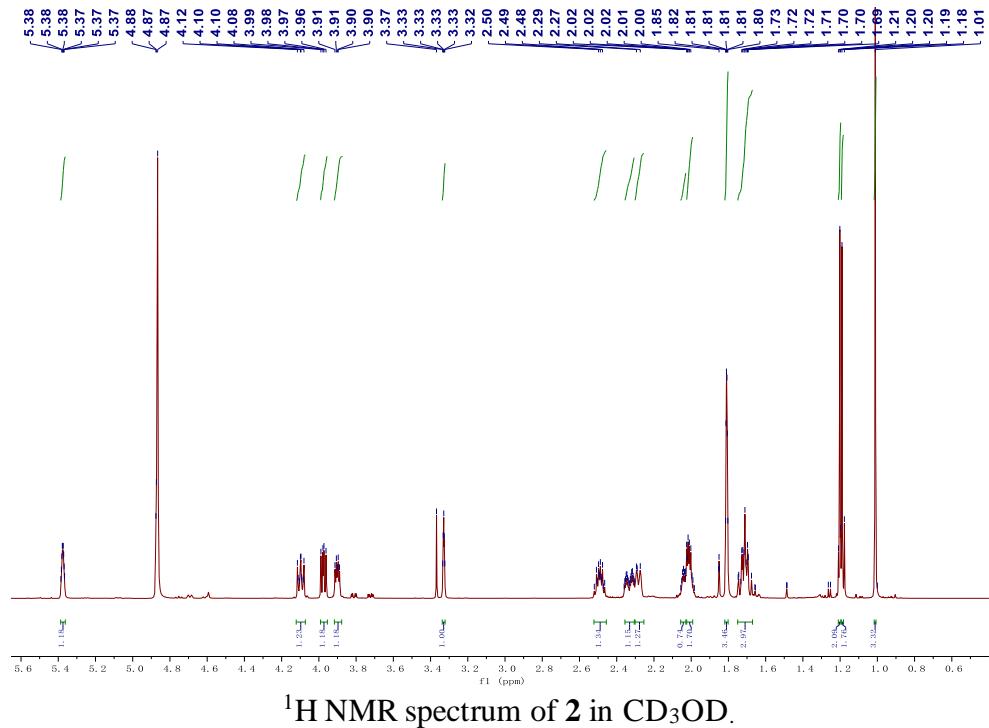
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Supplementary data for *Artemisia nitrosa*



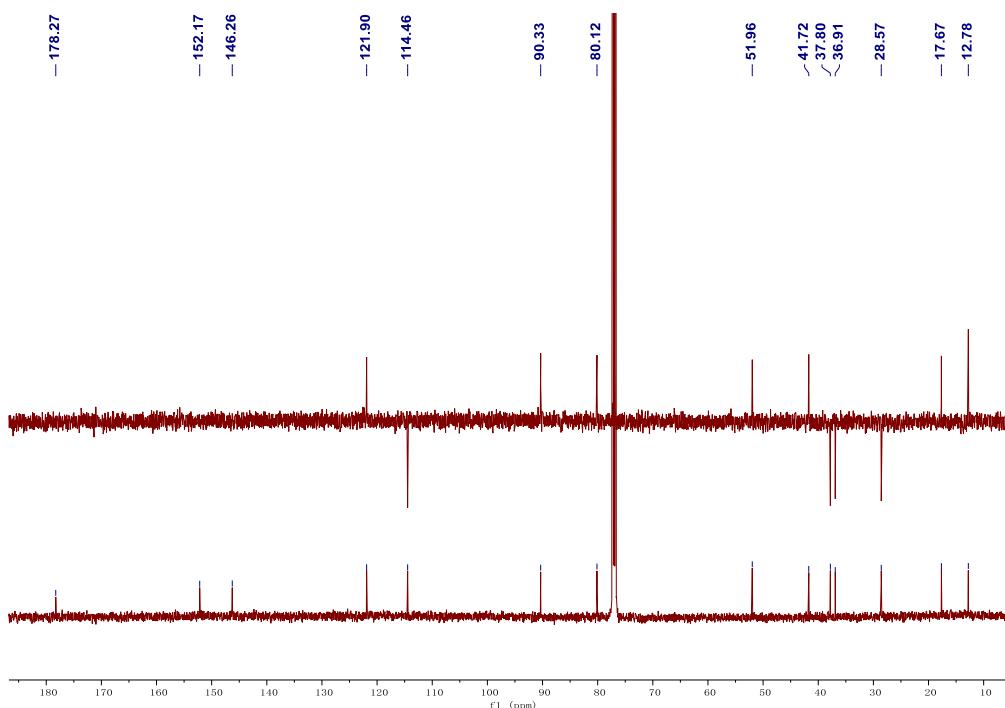
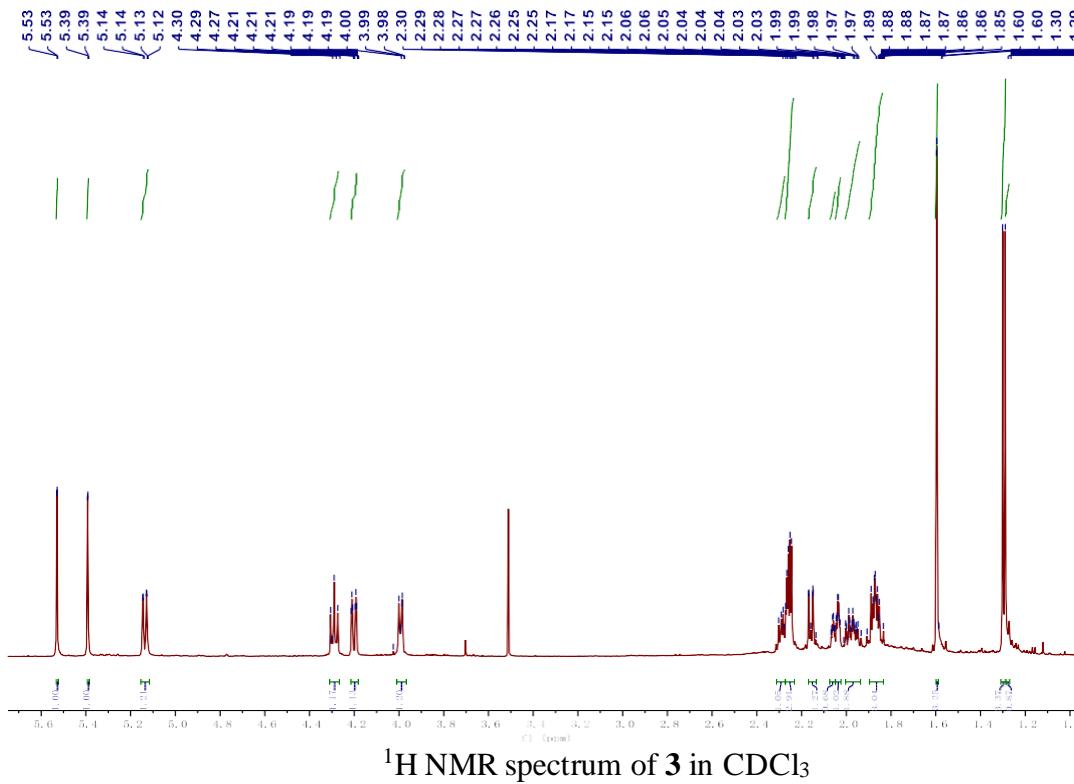
^{13}C NMR, DEPT spectrum of **1** in CDCl_3

Figure S1. ^1H NMR, ^{13}C NMR, DEPT spectrum of **1** in CDCl_3



¹³C NMR, DEPT spectrum of **2** in CD₃OD.

Figure S2. ^1H NMR, ^{13}C NMR, DEPT spectrum of **2** in CD_3OD .



¹³C NMR, DEPT spectrum of **3** in CDCl₃.

Figure S3. ^1H NMR, ^{13}C NMR, DEPT spectrum of **3** in CDCl_3 .

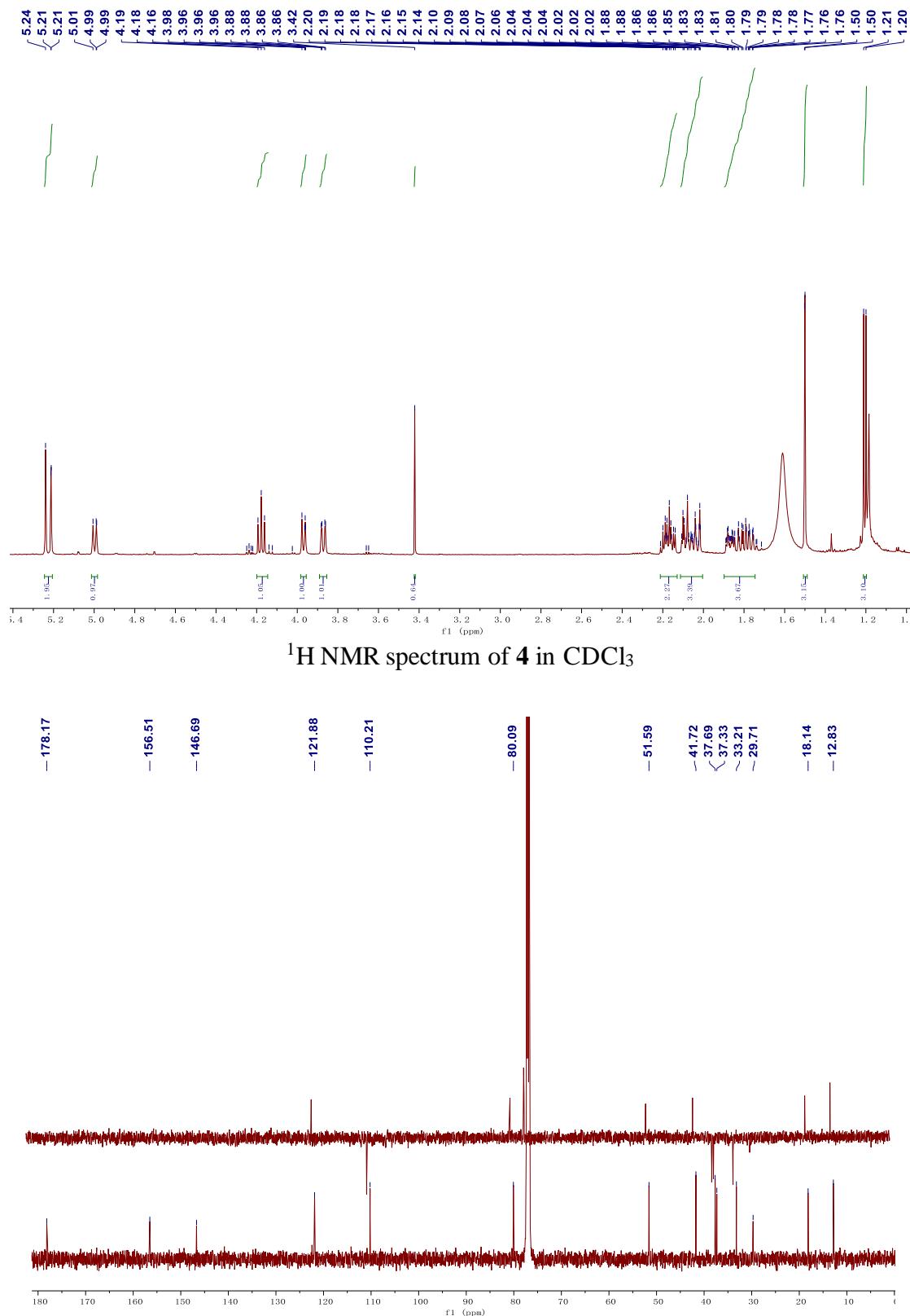
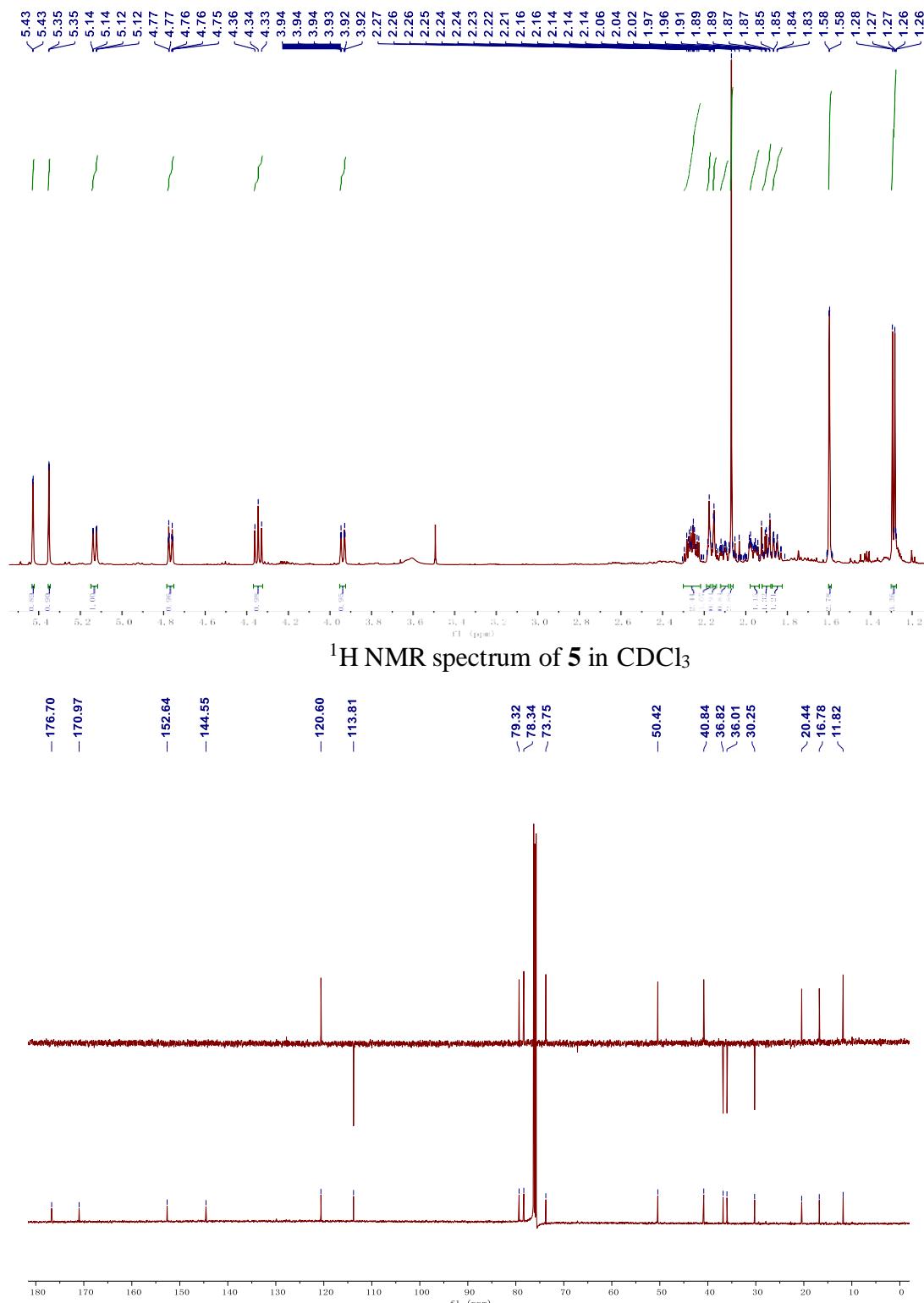
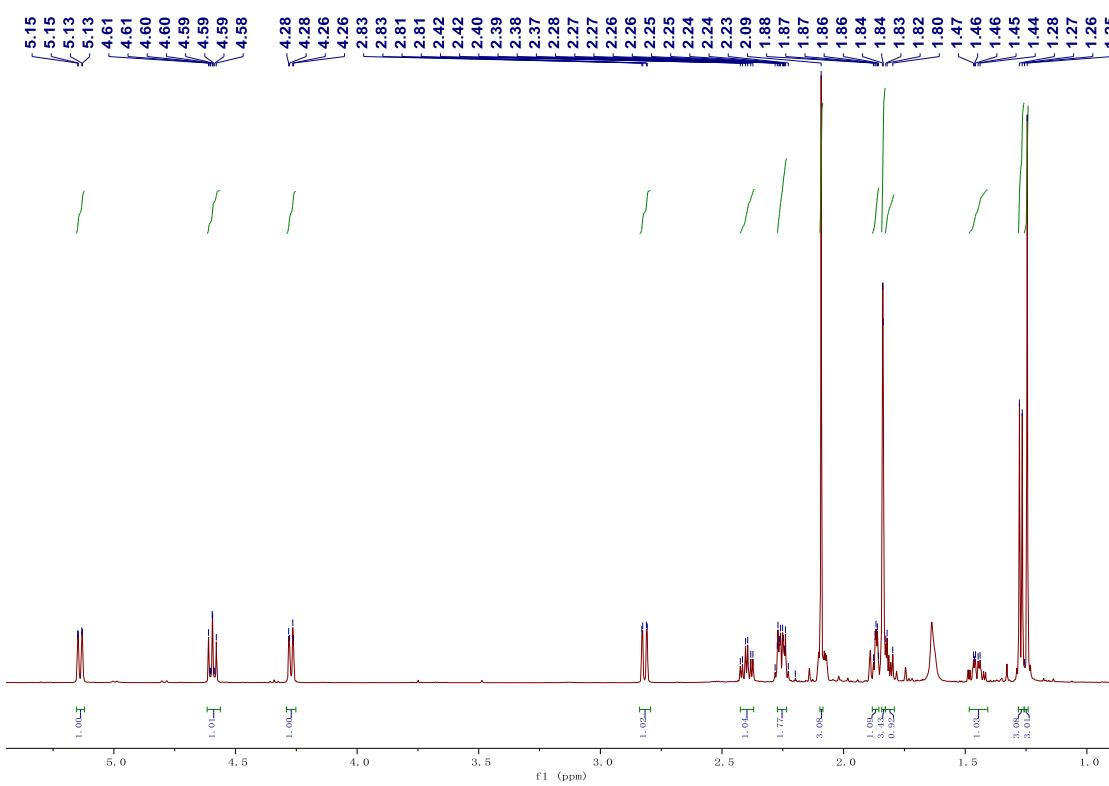


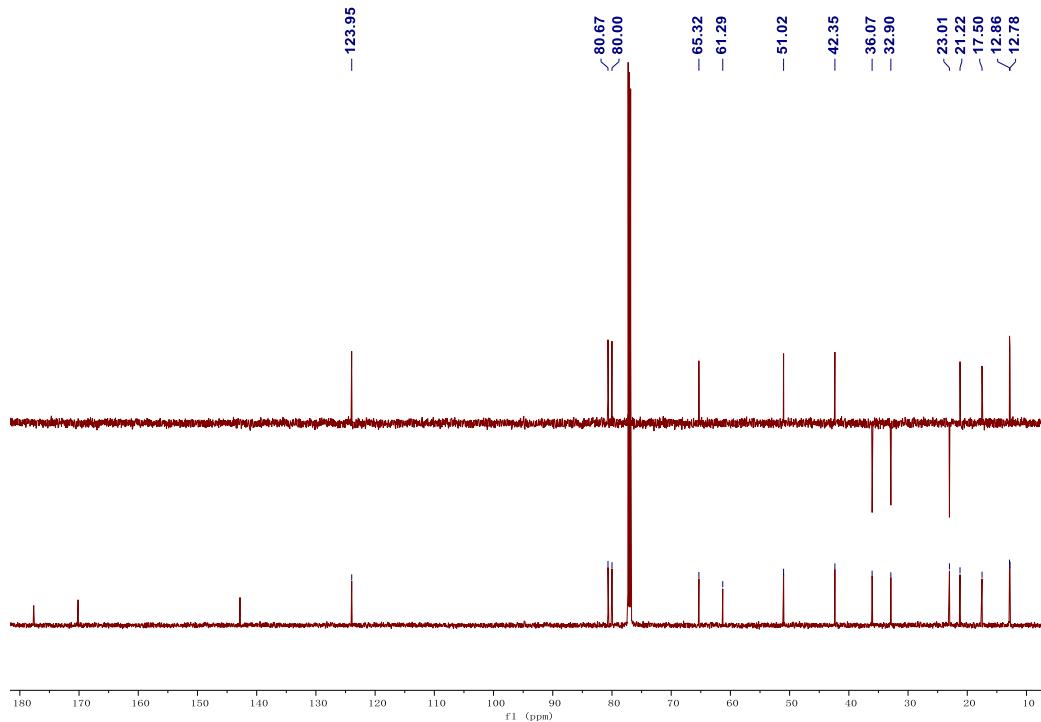
Figure S4. ^1H NMR, ^{13}C NMR, DEPT spectrum of **4** in CDCl_3 .



^{13}C NMR, DEPT spectrum of **5** in CDCl_3 .
Figure S5. ^1H NMR, ^{13}C NMR, DEPT spectrum of **5** in CDCl_3 .

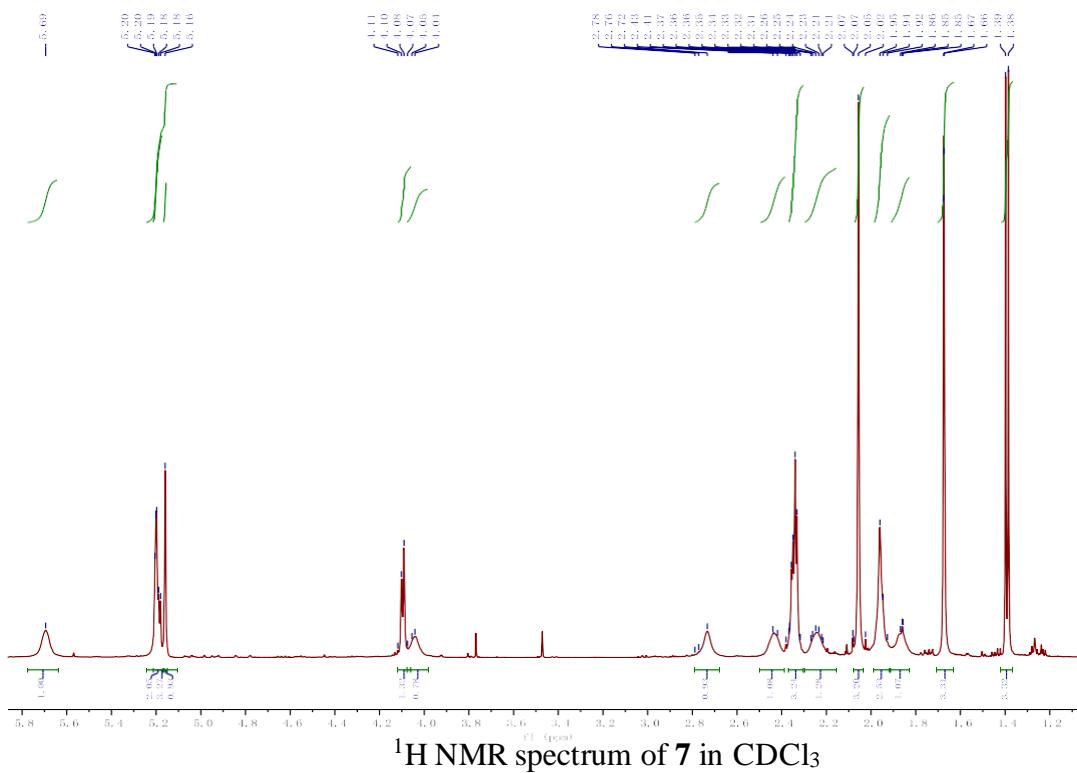


^1H NMR spectrum of **6** in CDCl_3



^{13}C NMR, DEPT spectrum of **6** in CDCl_3 .

Figure S6. ^1H NMR, ^{13}C NMR, DEPT spectrum of **6** in CDCl_3 .



¹H NMR spectrum of **7** in CDCl₃

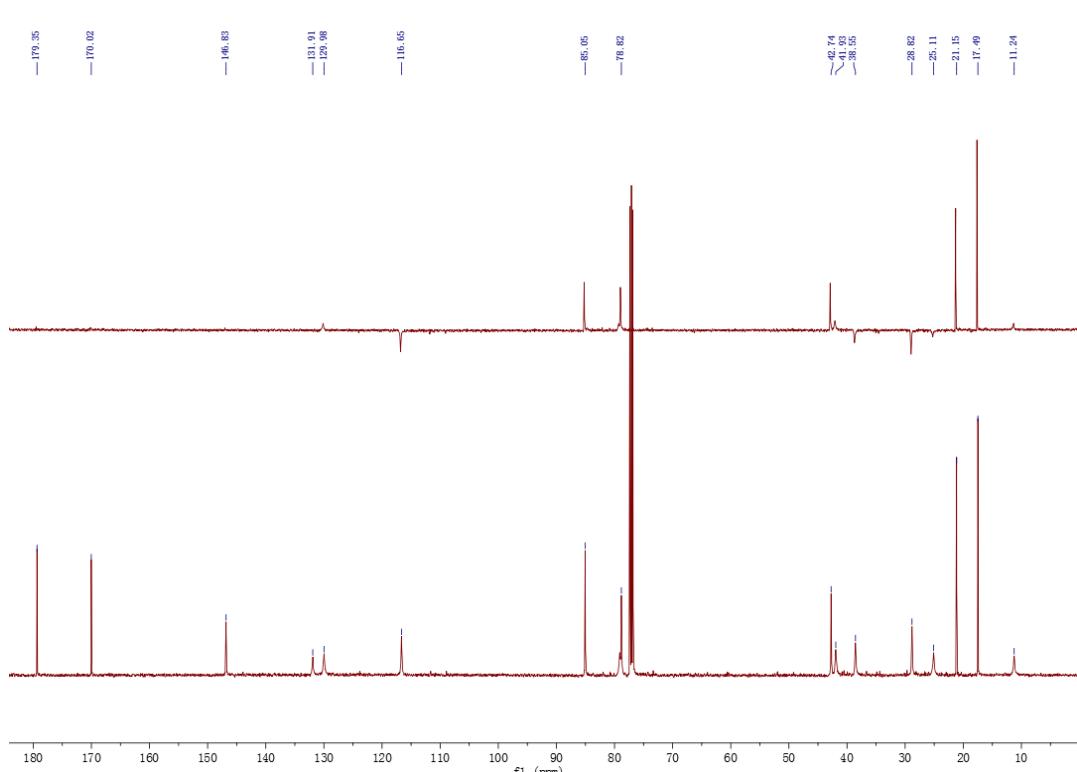
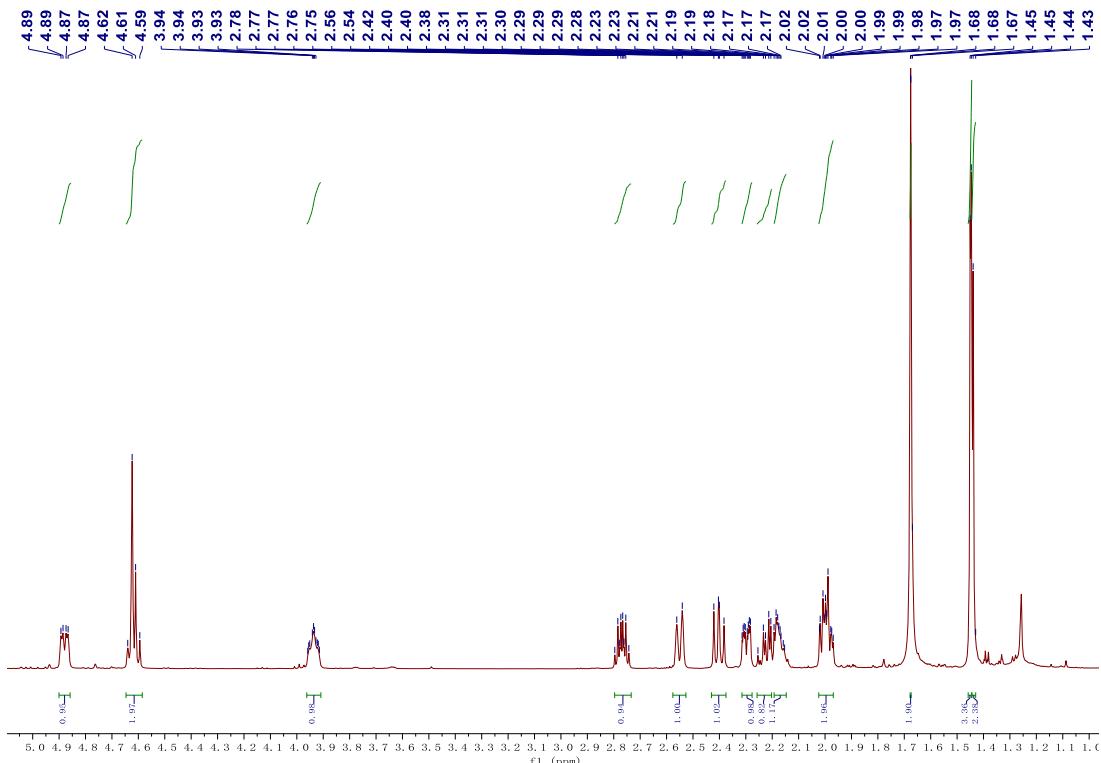
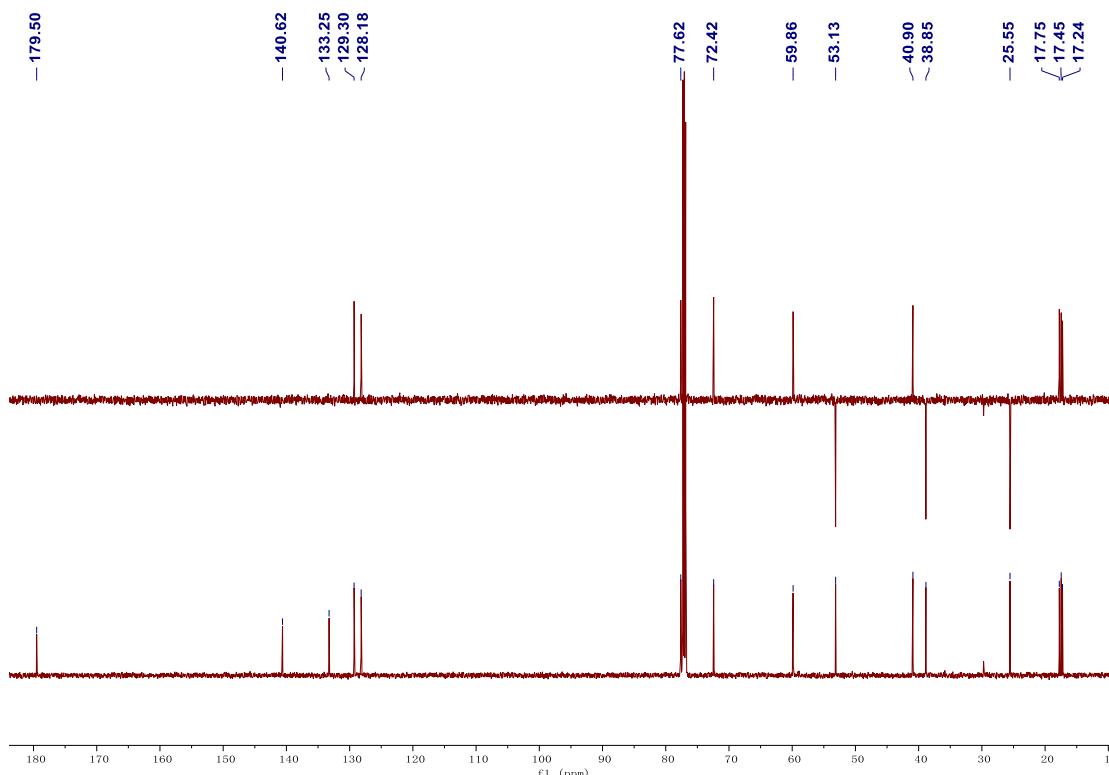


Figure S7. ¹H NMR, ¹³C NMR, DEPT spectrum of **7** in CDCl₃

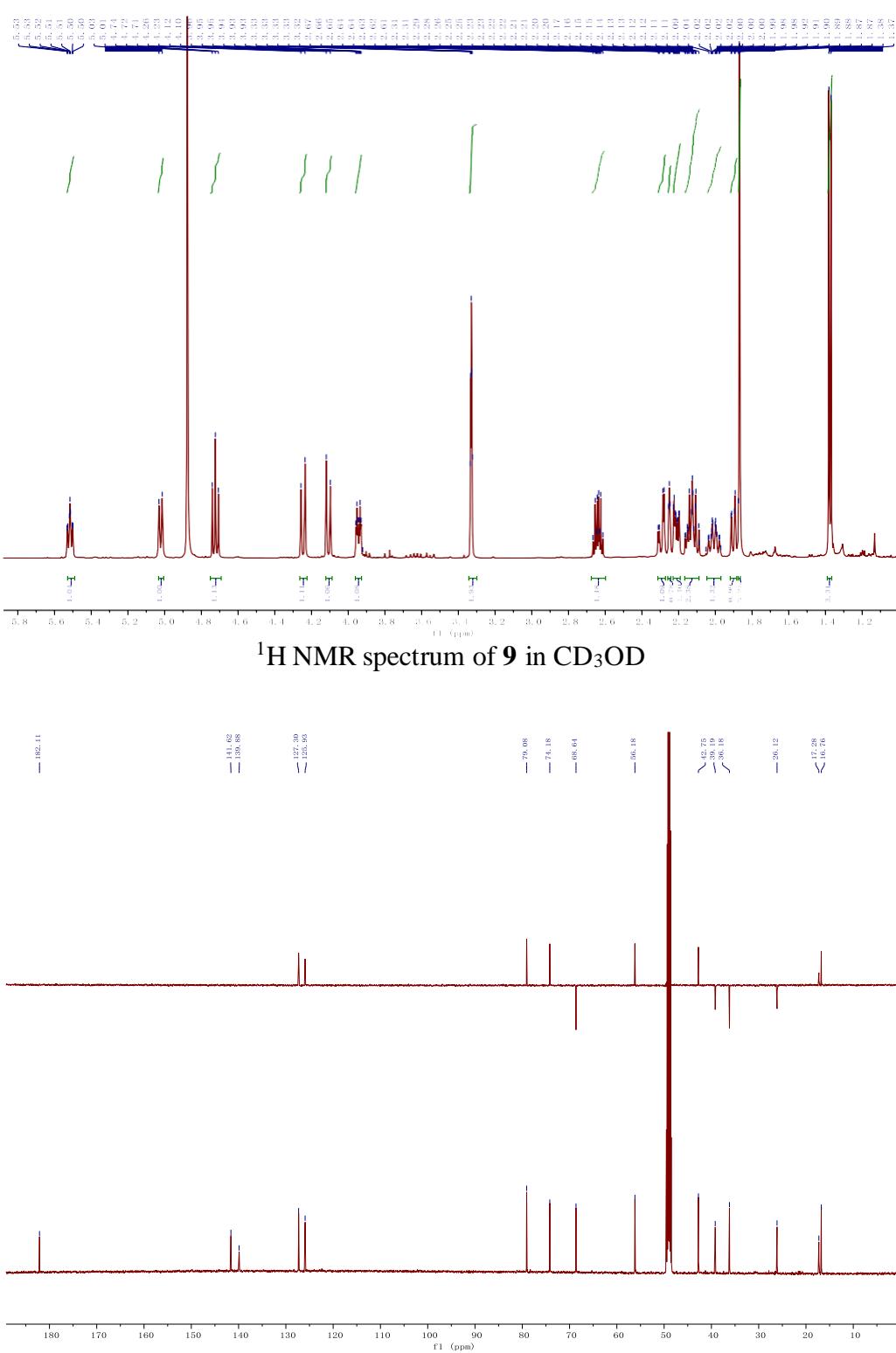


¹H NMR spectrum of **8** in CDCl₃



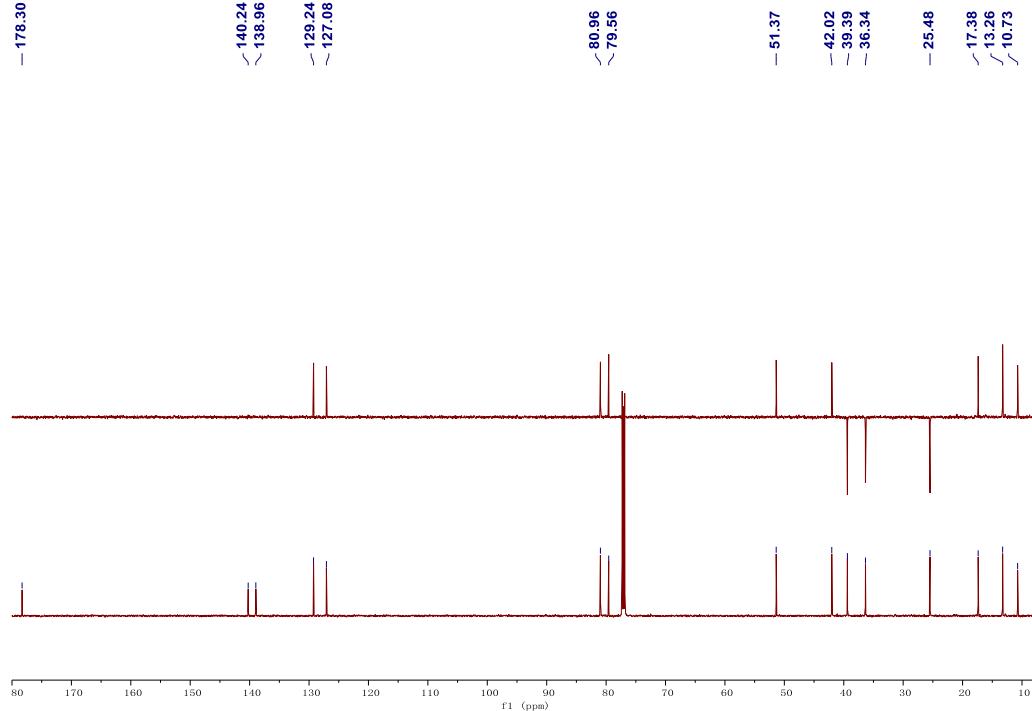
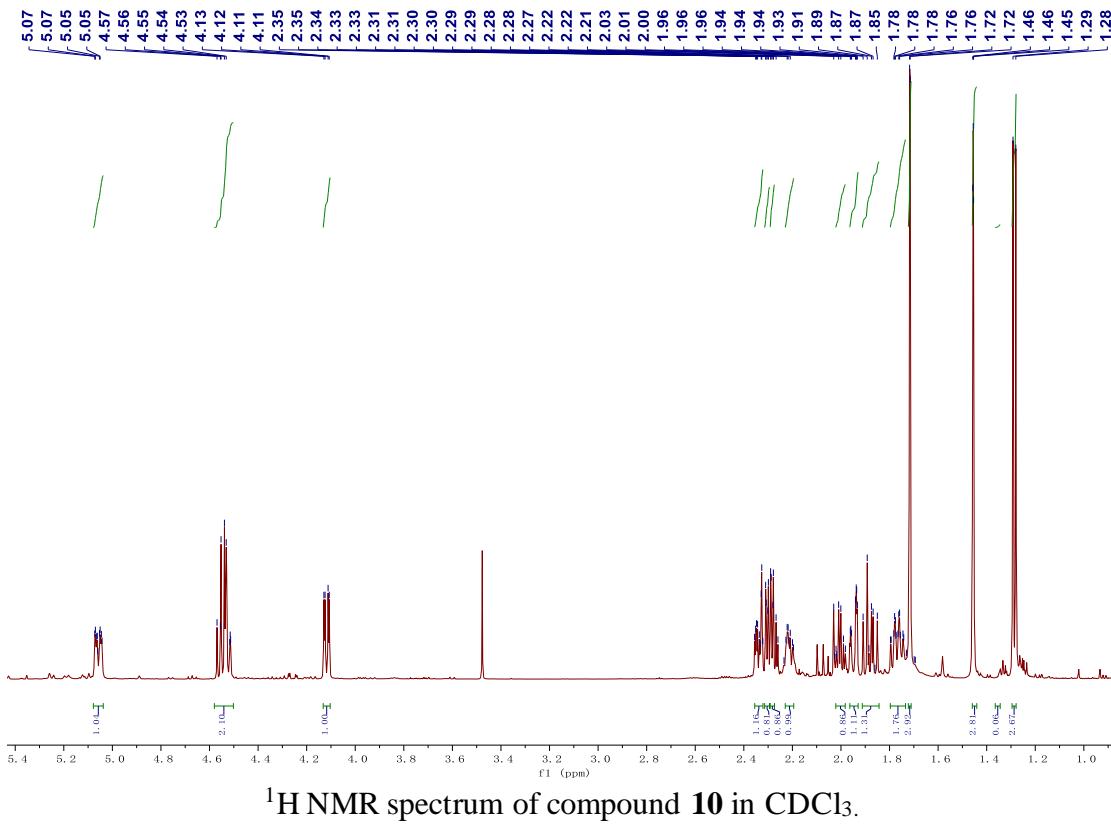
¹³C NMR, DEPT spectrum of **8** in CDCl₃.

Figure S8. ^1H NMR, ^{13}C NMR, DEPT spectrum of **8** in CDCl_3 .



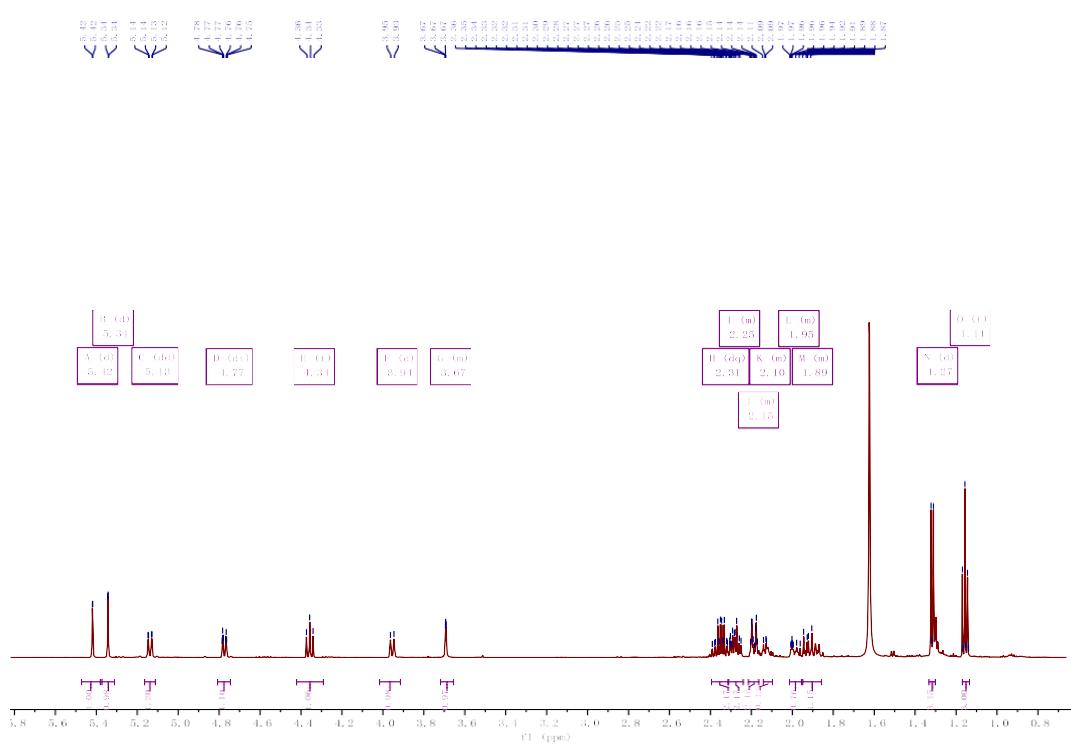
¹³C NMR, DEPT spectrum of **9** in CD₃OD.

Figure S9. ^1H NMR, ^{13}C NMR, DEPT spectrum of **9** in CD_3OD .

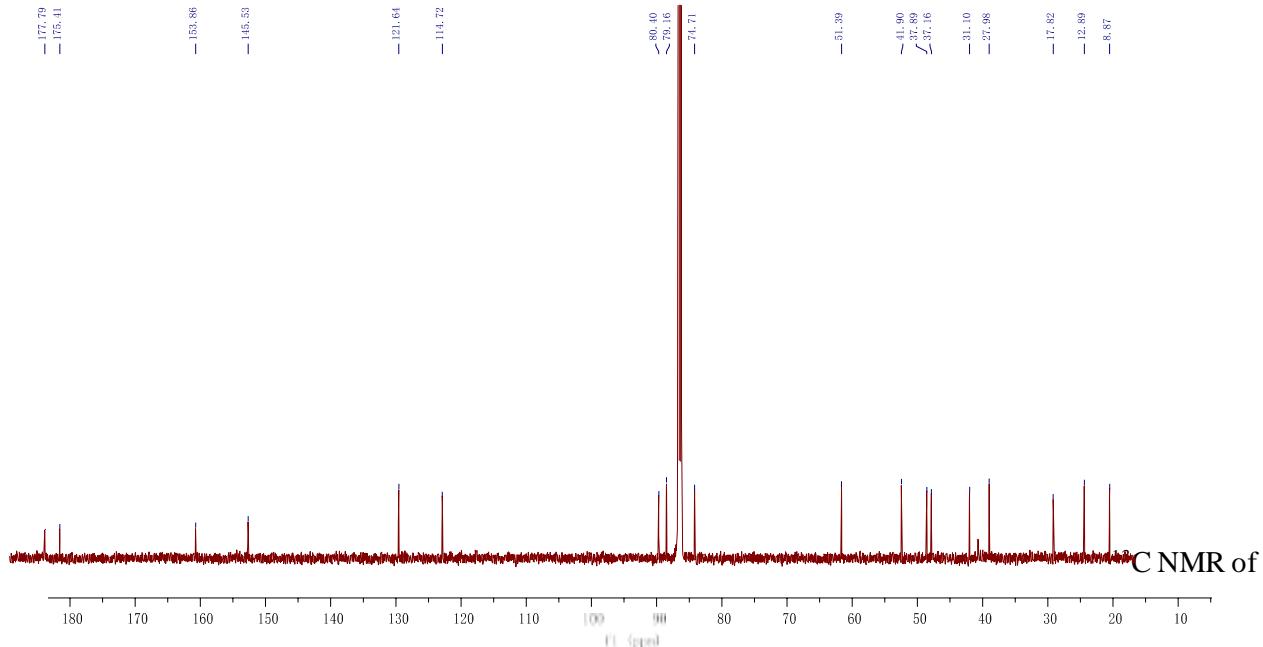


¹³C NMR, DEPT spectrum of compound **10** in CDCl₃

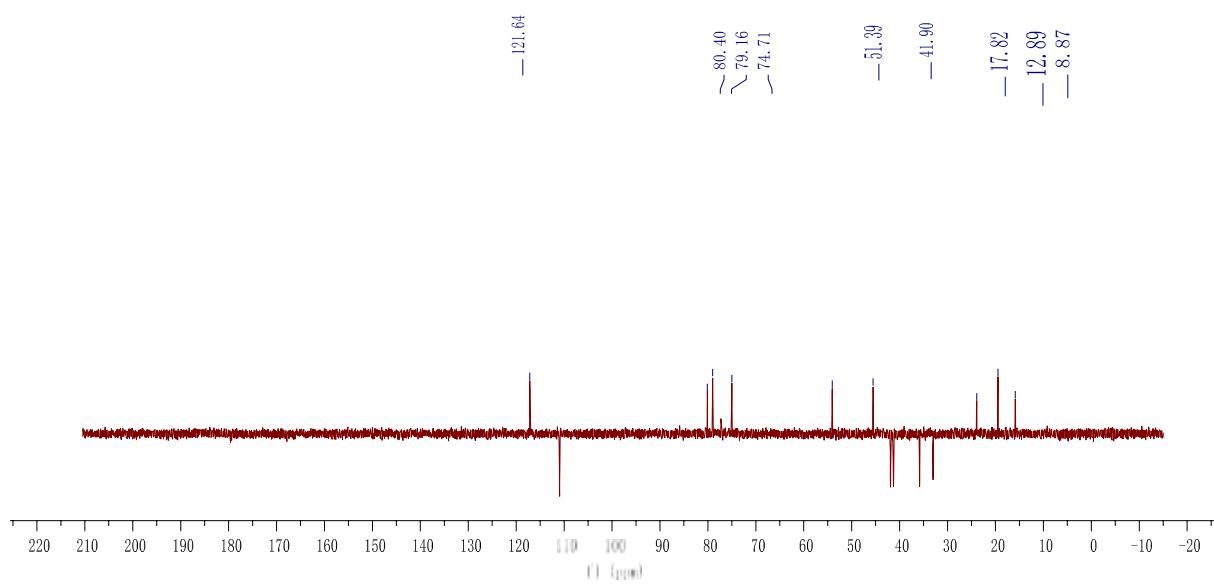
Figure S10. ¹H NMR, ¹³C NMR, DEPT spectrum of compound **10** in CDCl₃.



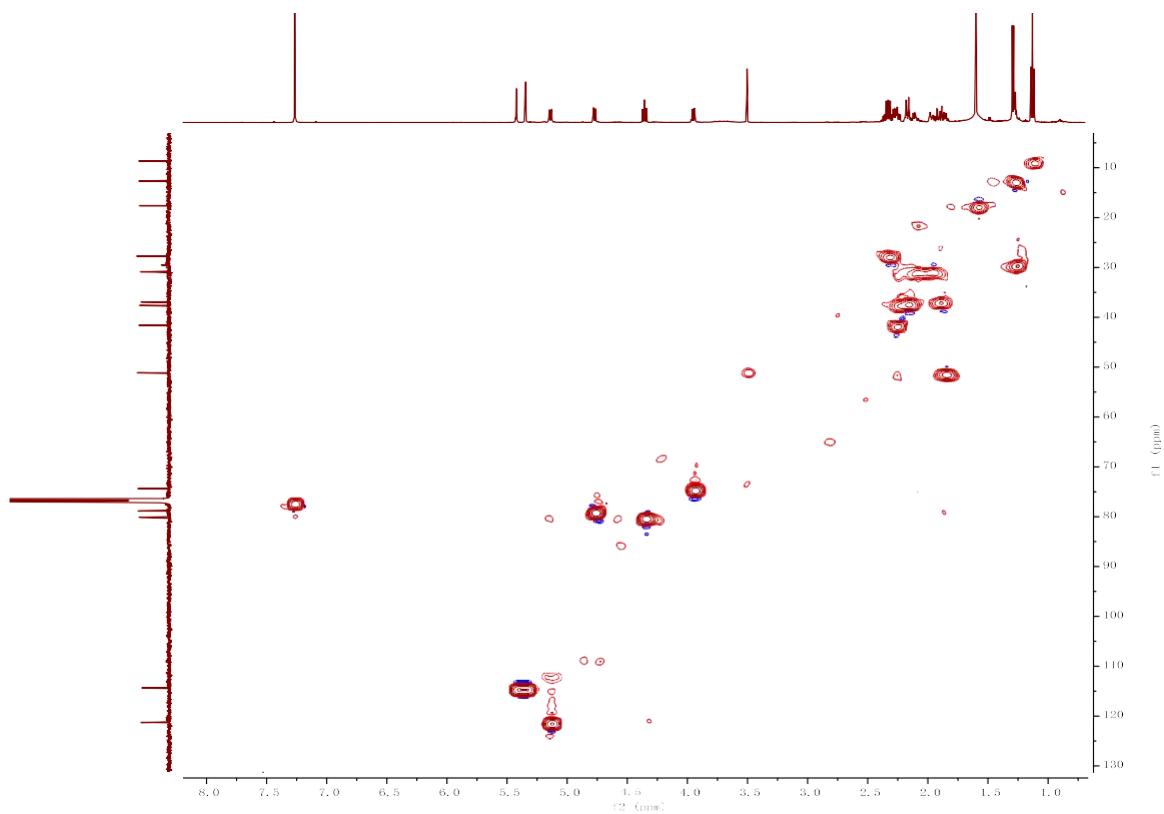
¹H NMR of Compound 11



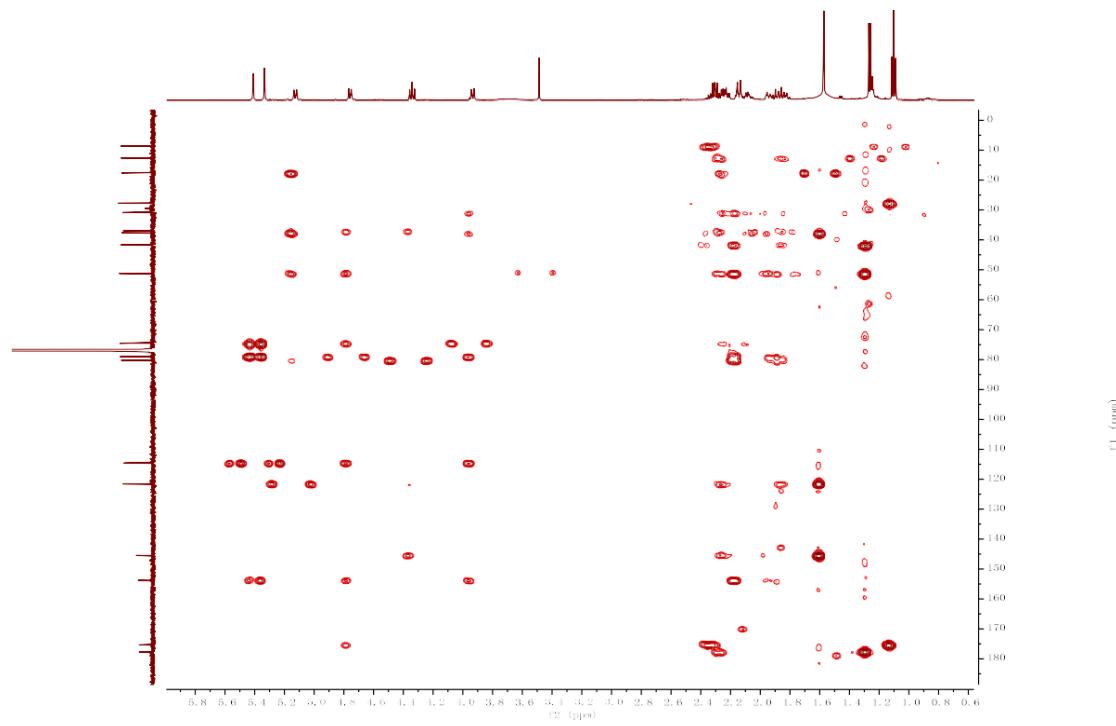
Compound 11



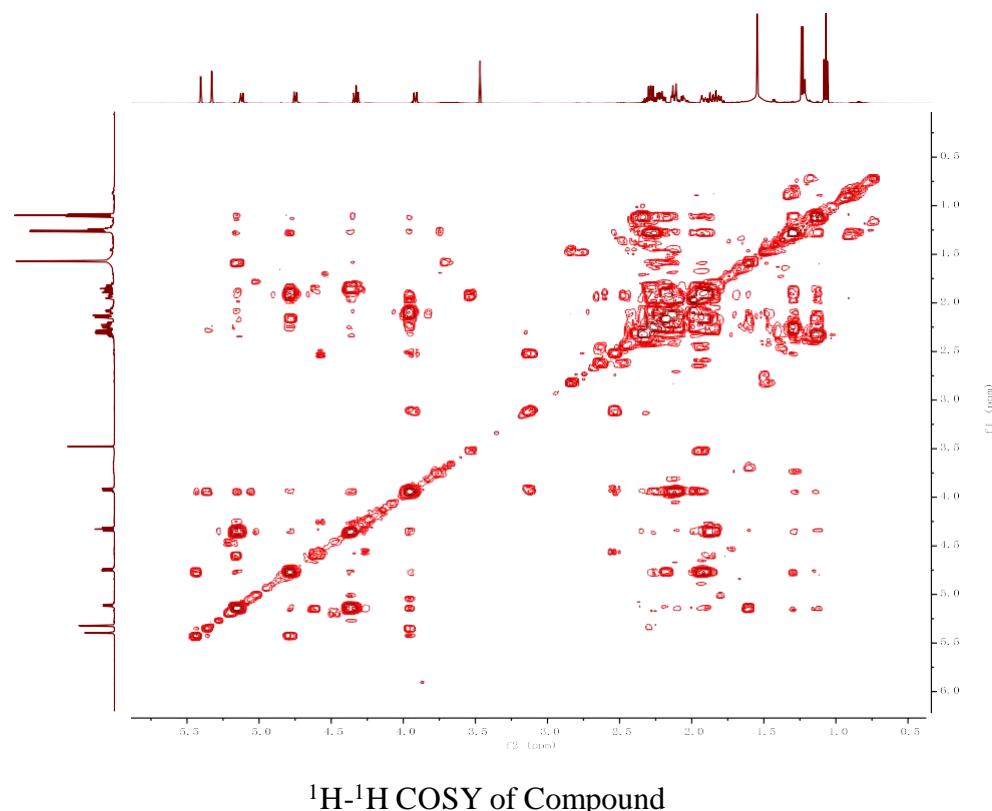
DEPT of Compound **11**



HSQC of Compound **11**



HMBC of Compound 11



¹H-¹H COSY of Compound

Figure S11. ¹H NMR, ¹³C NMR, DEPT, HSQC, HMBC and ¹H-¹H COSY spectra of **11** in CDCl₃

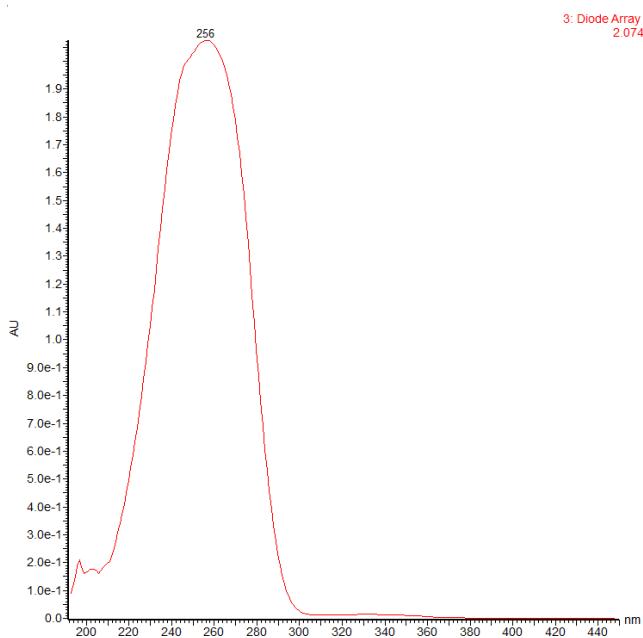


Figure S12. UV spectrum of **11** in MeOH.

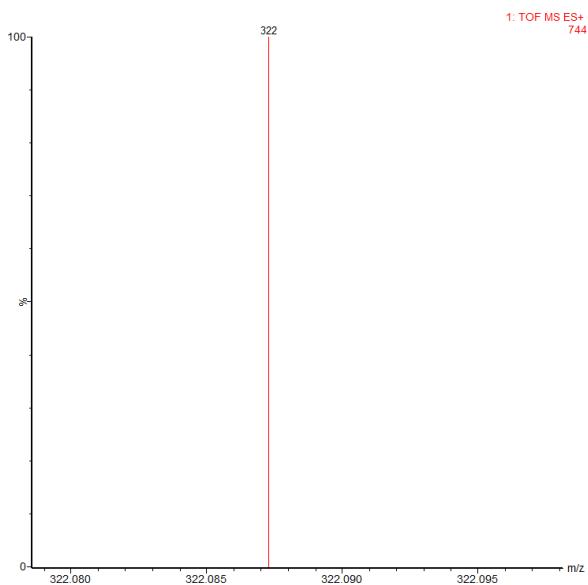
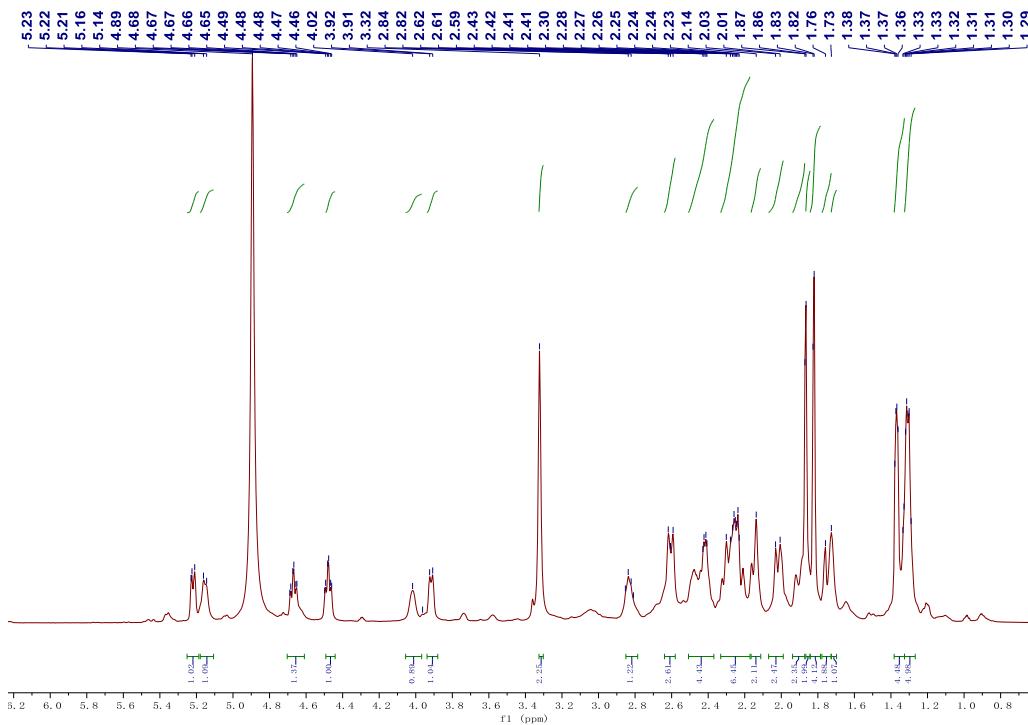
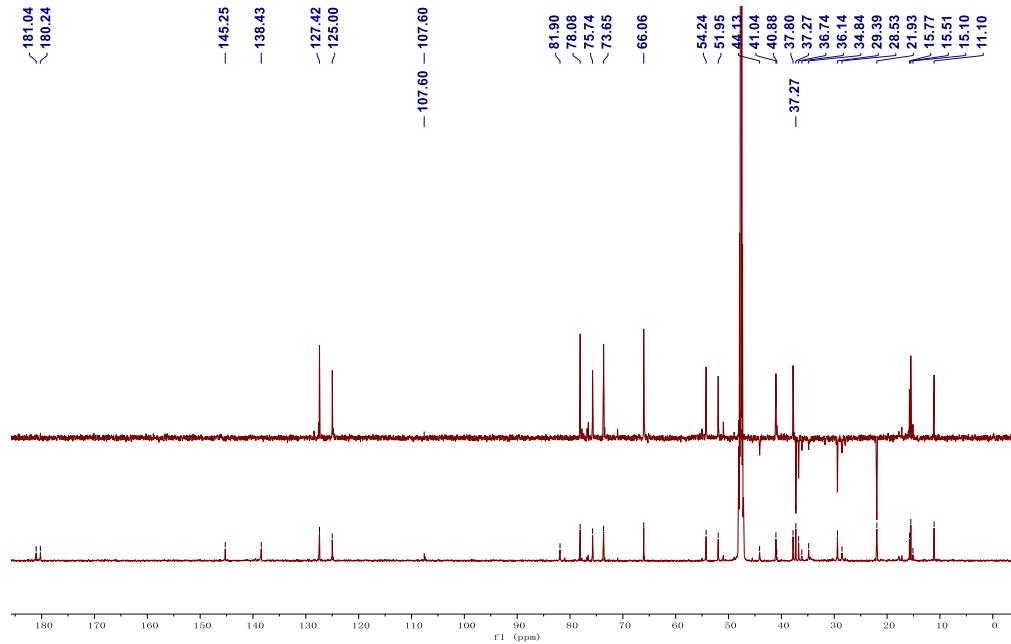


Figure S13. TOFMS spectral analysis of **11**.



^1H NMR spectrum of **12** in CDCl_3 .

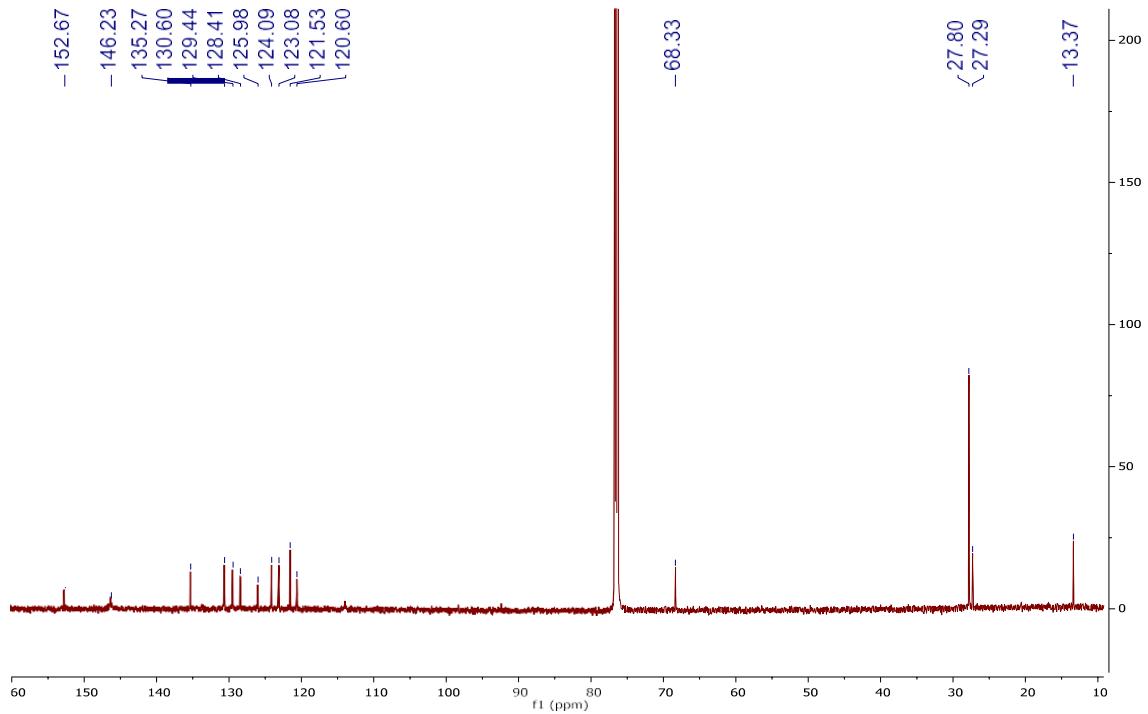
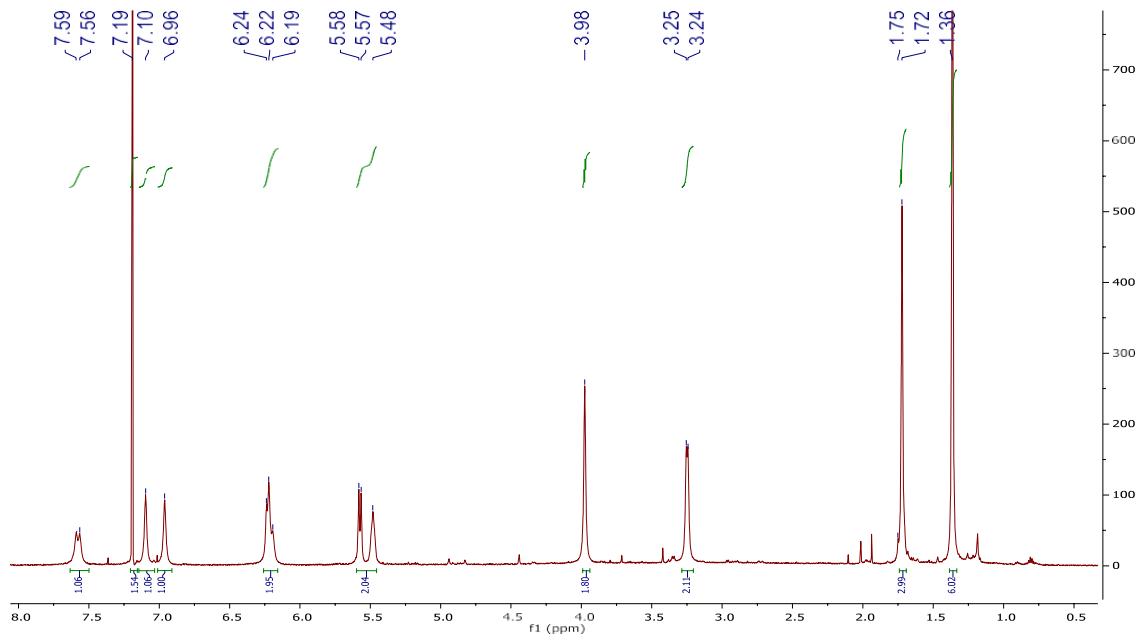


^{13}C NMR and DEPT spectrum of **12** in CDCl_3

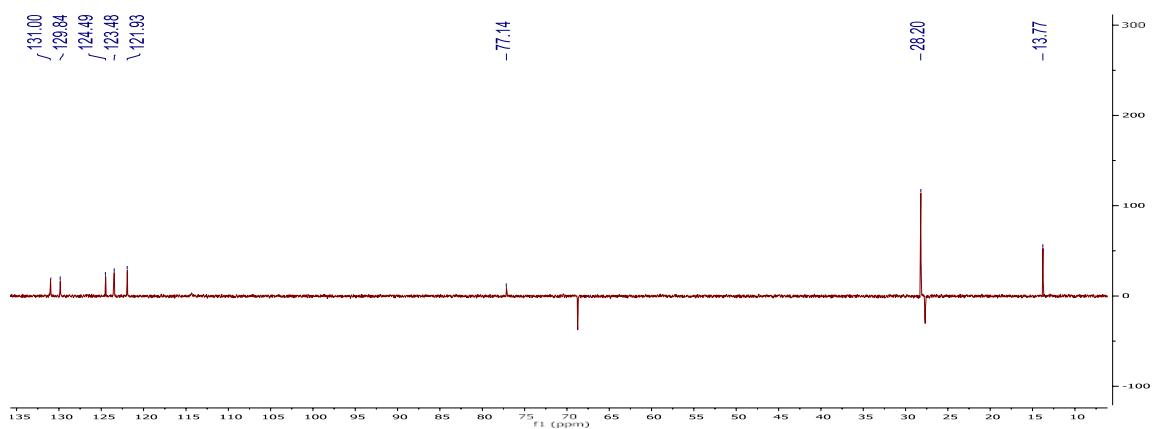
Figure S14. ^1H NMR, ^{13}C NMR, and DEPT spectrum of **12** in CDCl_3 .

Supplementary data for *Artemisia marschalliana*

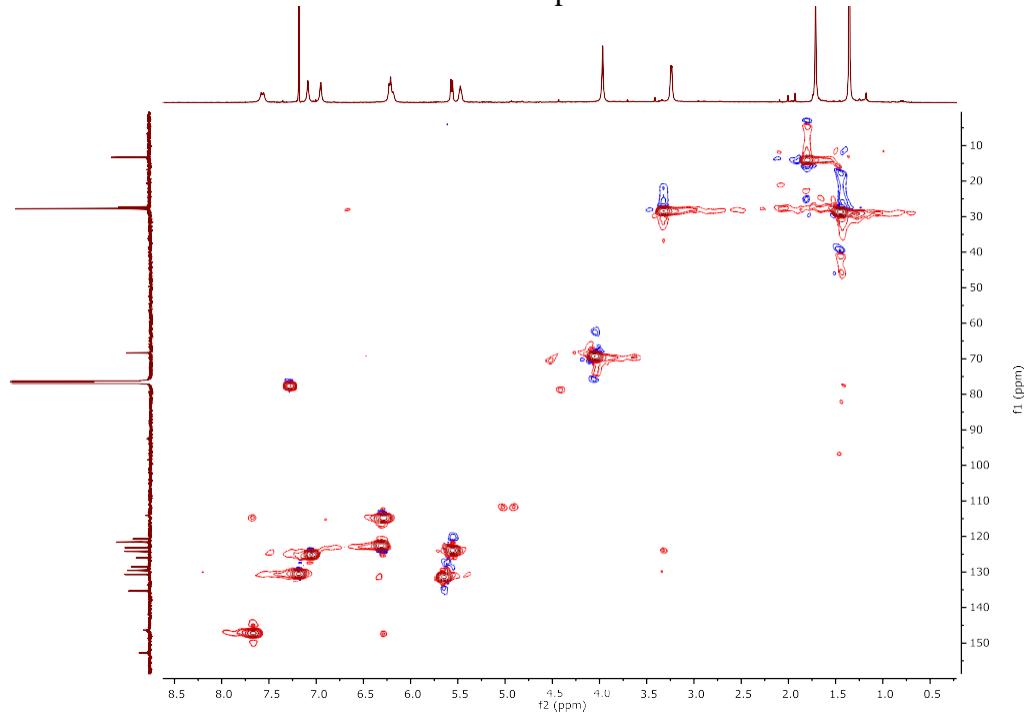
^1H NMR of Compound **1'**



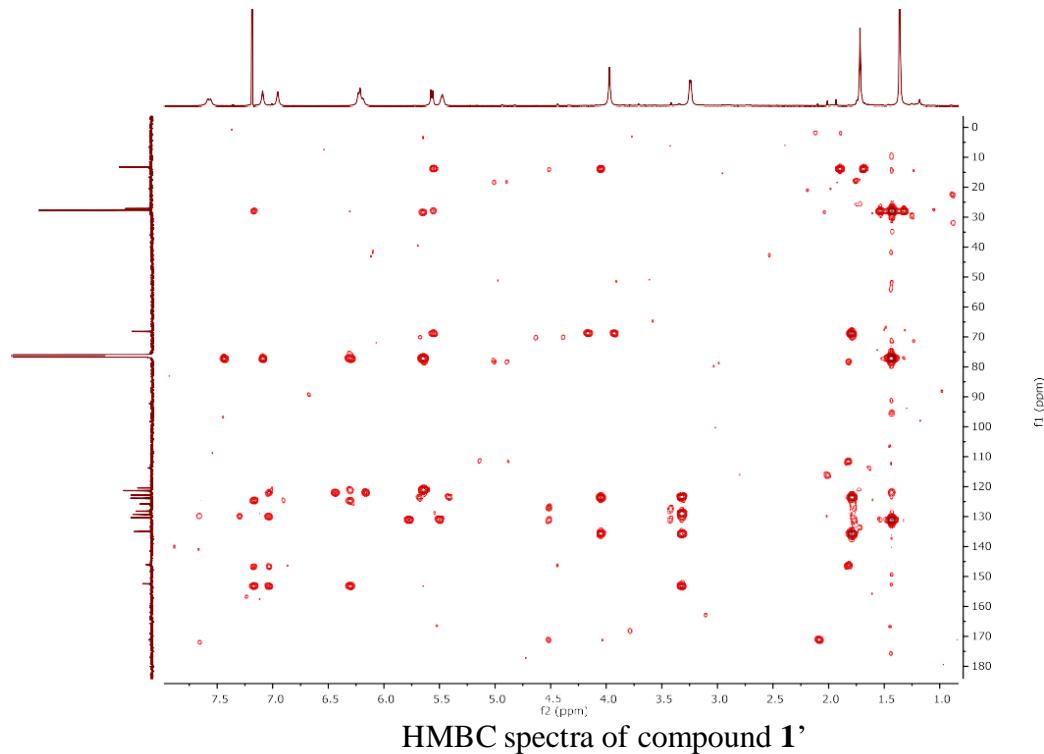
^{13}C NMR of Compound **1'**



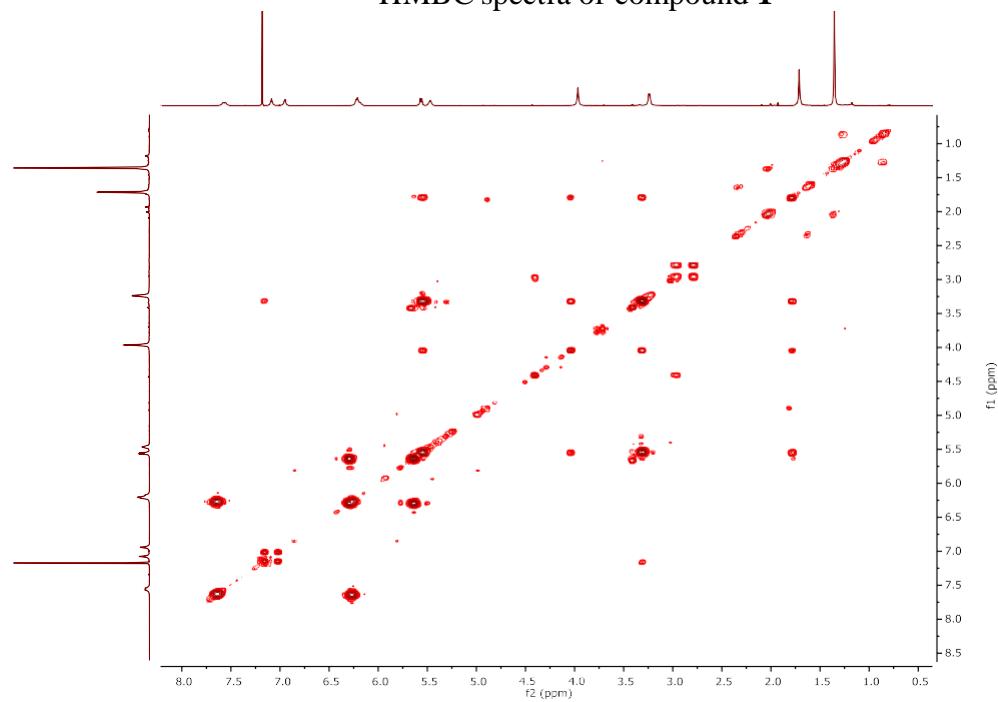
DEPT of Compound 1'



HSQC of Compound 1'



HMBC spectra of compound **1'**



1H - 1H COSY spectra of compound **1'**

Figure S15. 1H NMR, ^{13}C NMR, DEPT, HSQC, HMBC and 1H - 1H COSY spectra of **1'** in $CDCl_3$

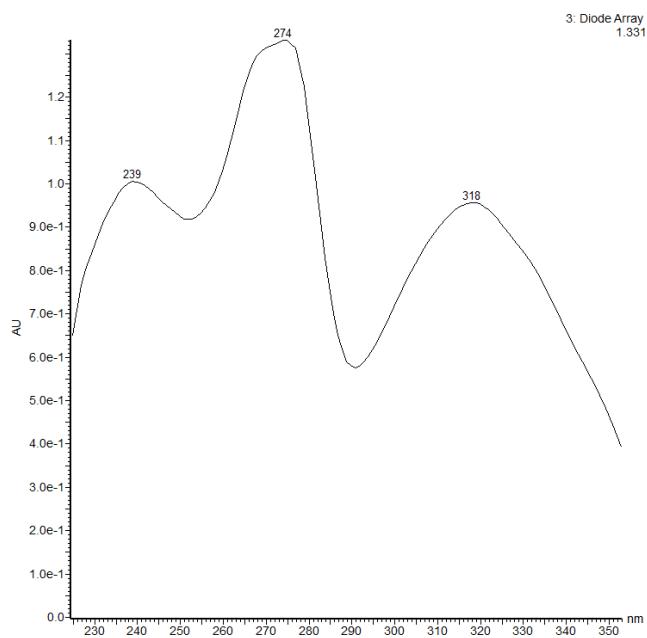


Figure S16. UV spectrum of Compound 1' in MeOH.

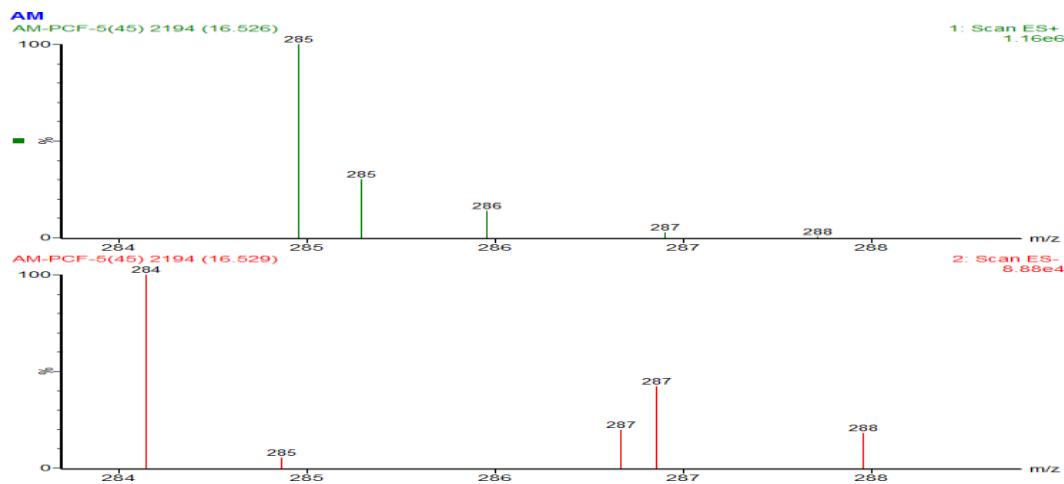
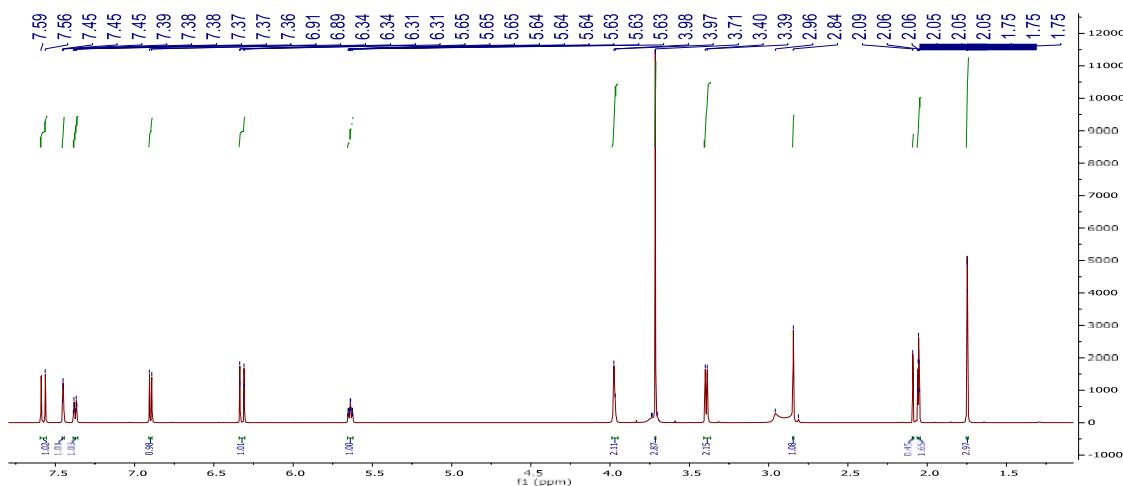
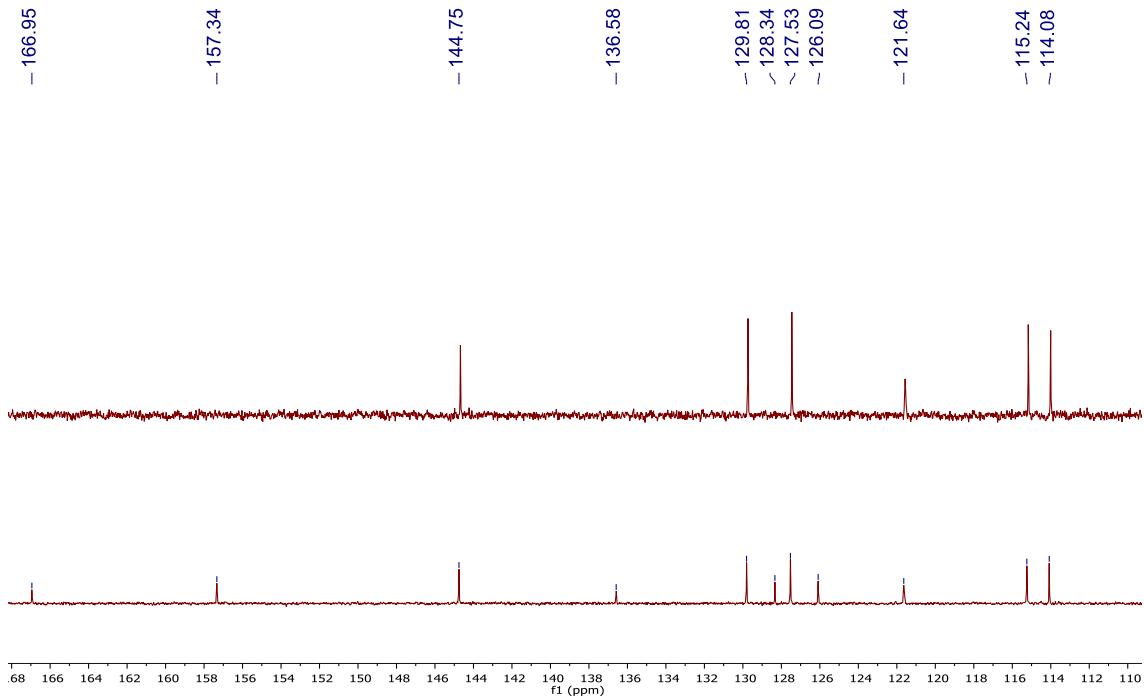


Figure S17. ESI-MS spectrum of Compound 1'.

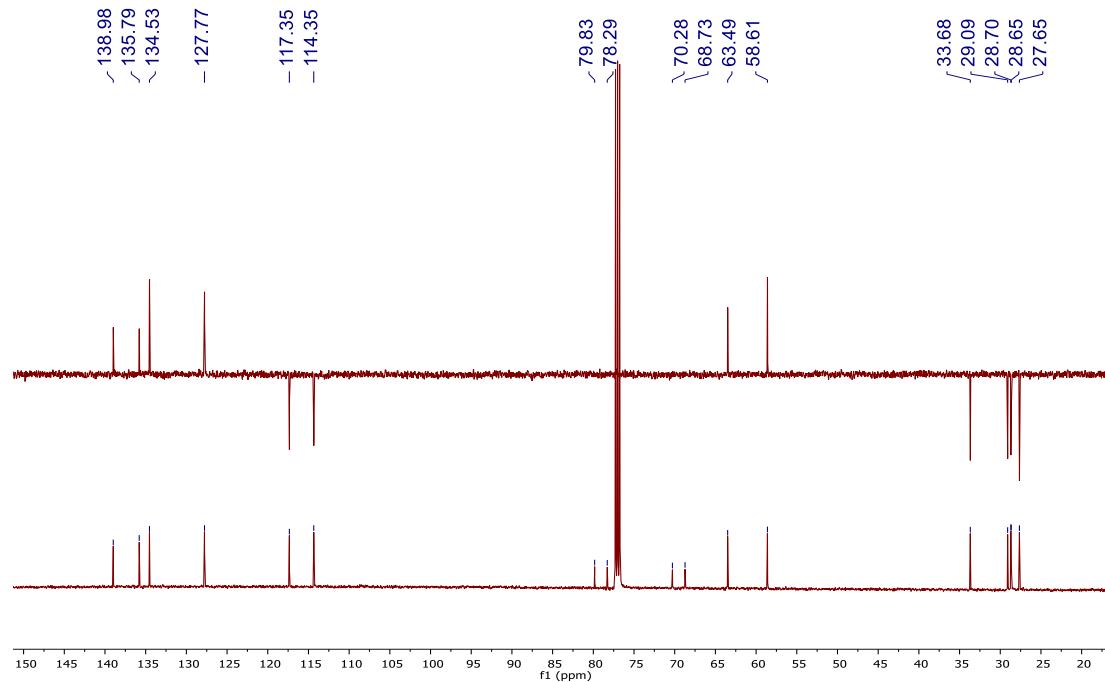
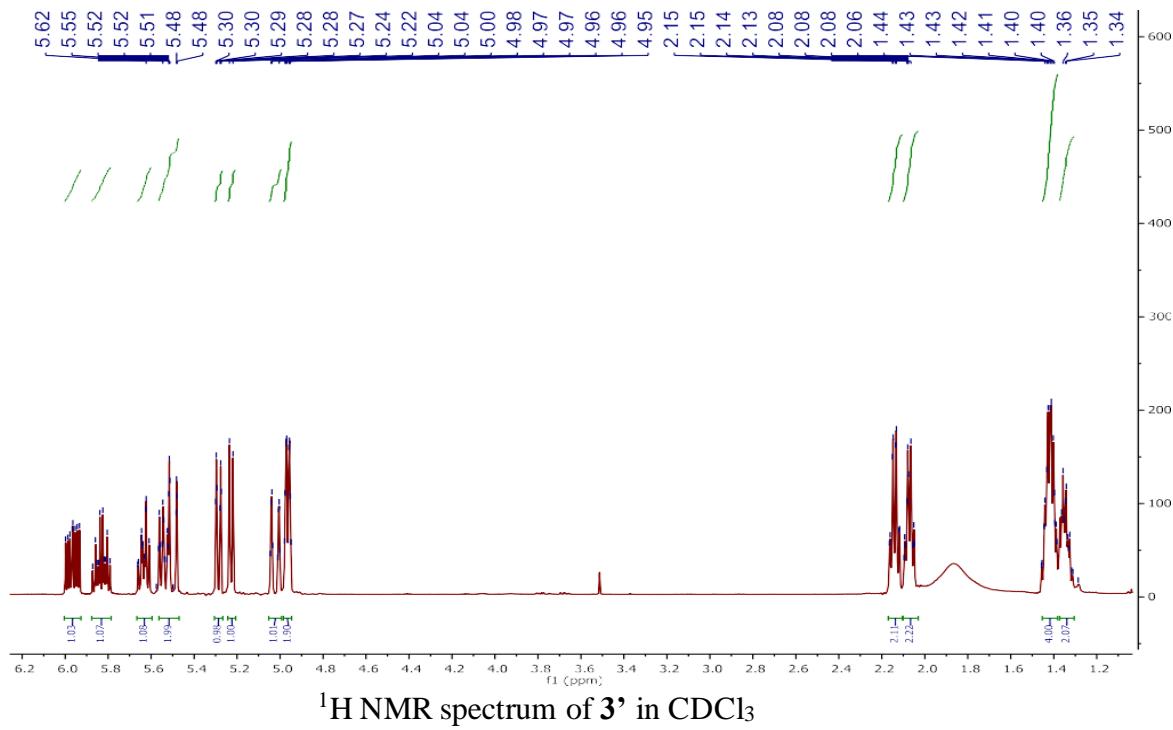


^1H NMR spectrum of **2'** in Acetone d-6



^{13}C NMR, DEPT spectrum of **2'** in Acetone d-6.

Figure S18. ^1H NMR, ^{13}C NMR, DEPT spectrum of **2'** in Acetone d-6.



^{13}C NMR and DEPT spectrum of **3'** in CDCl_3 .

Figure S19. ^1H NMR, ^{13}C NMR and DEPT spectrum of **3'** in CDCl_3

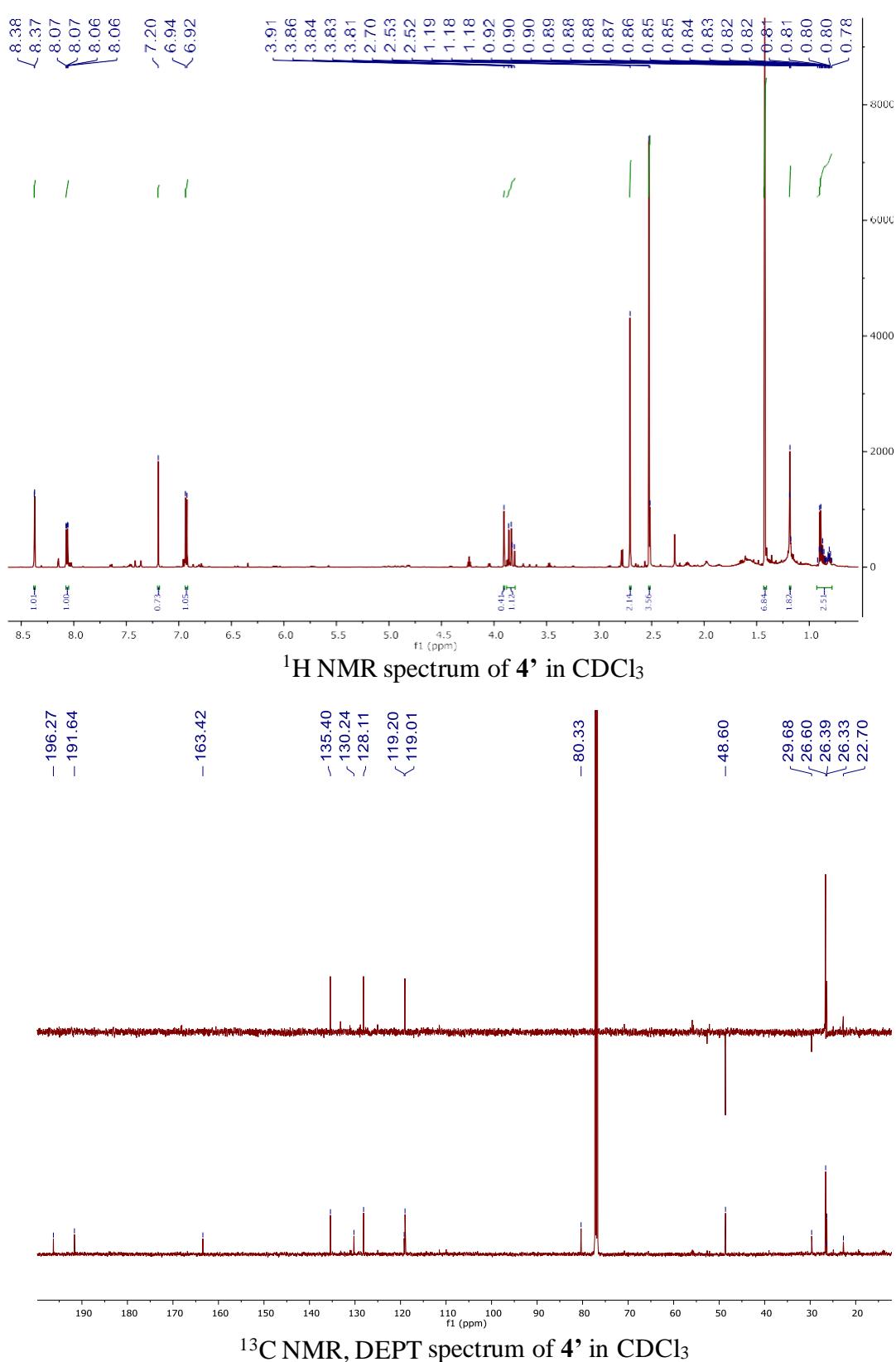
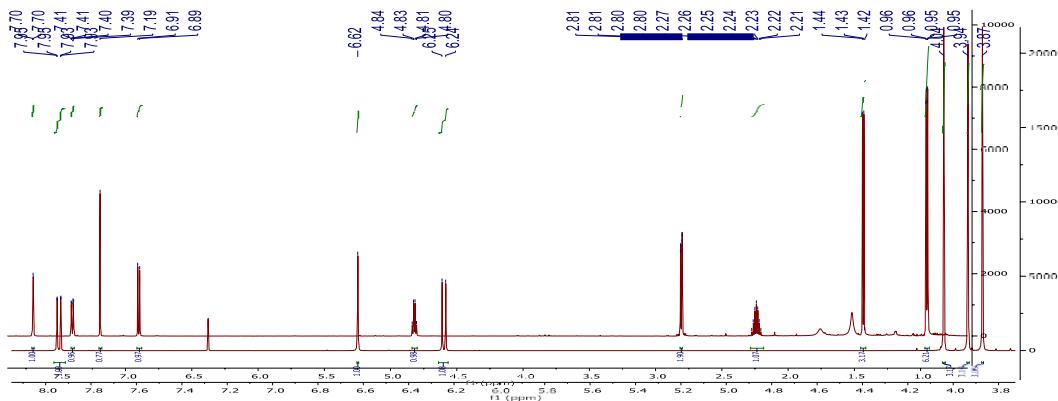
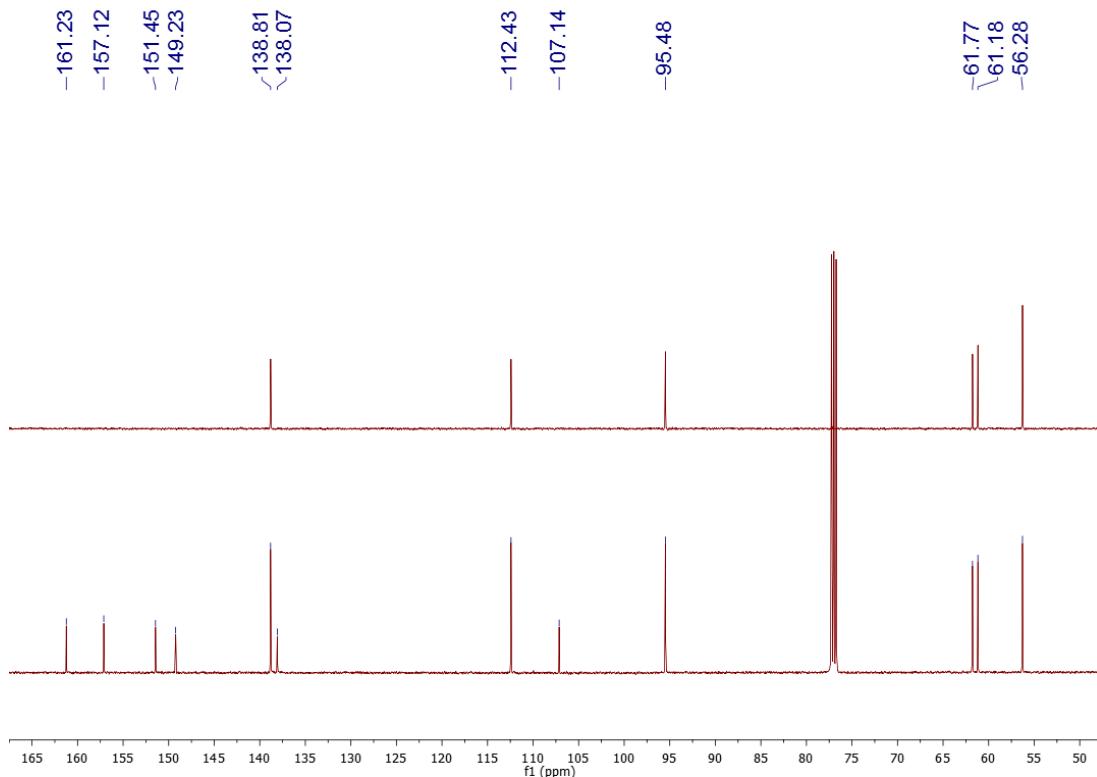


Figure S20. ¹H NMR, ¹³C NMR, DEPT spectrum of **4'** in CDCl_3



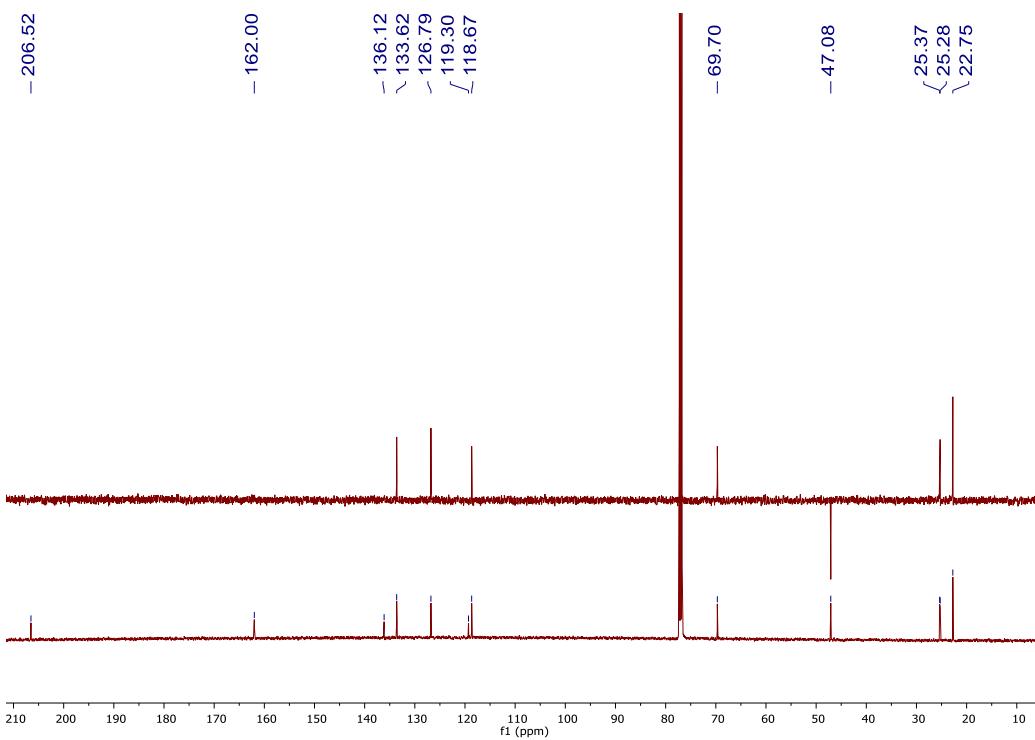
^1H NMR spectrum of **5'** in CDCl_3



^{13}C NMR, DEPT spectrum of **5'** in CDCl_3 .

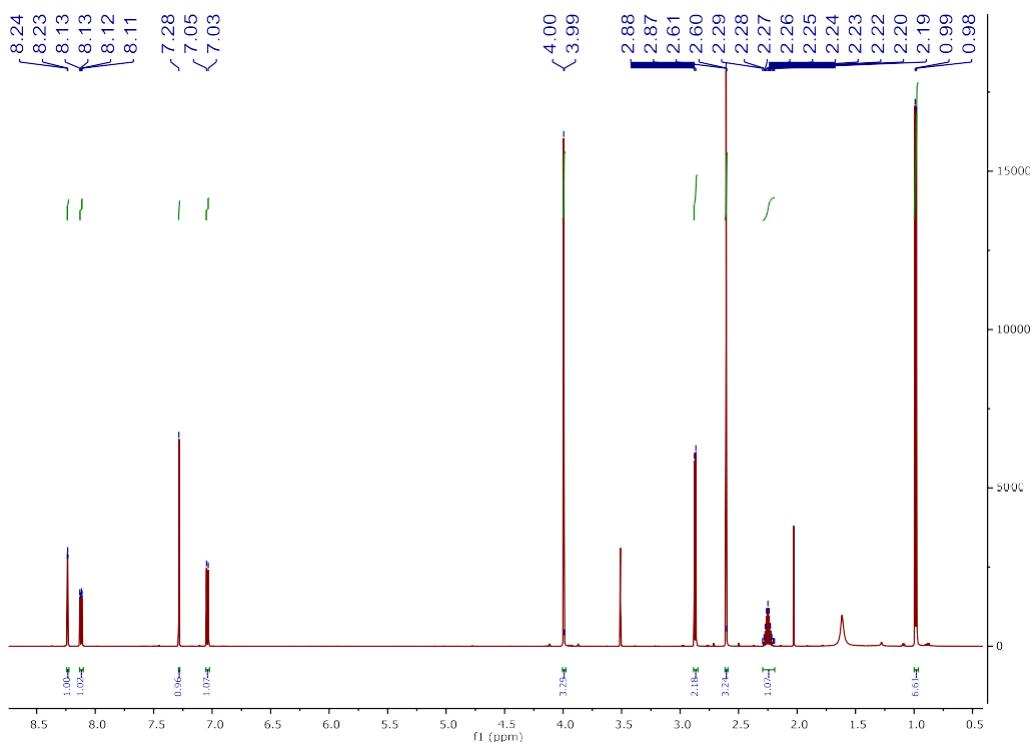
Figure S21. ^1H NMR, ^{13}C NMR, DEPT spectrum of **5'** in CDCl_3 .

^1H NMR spectrum of **6'** in CDCl_3

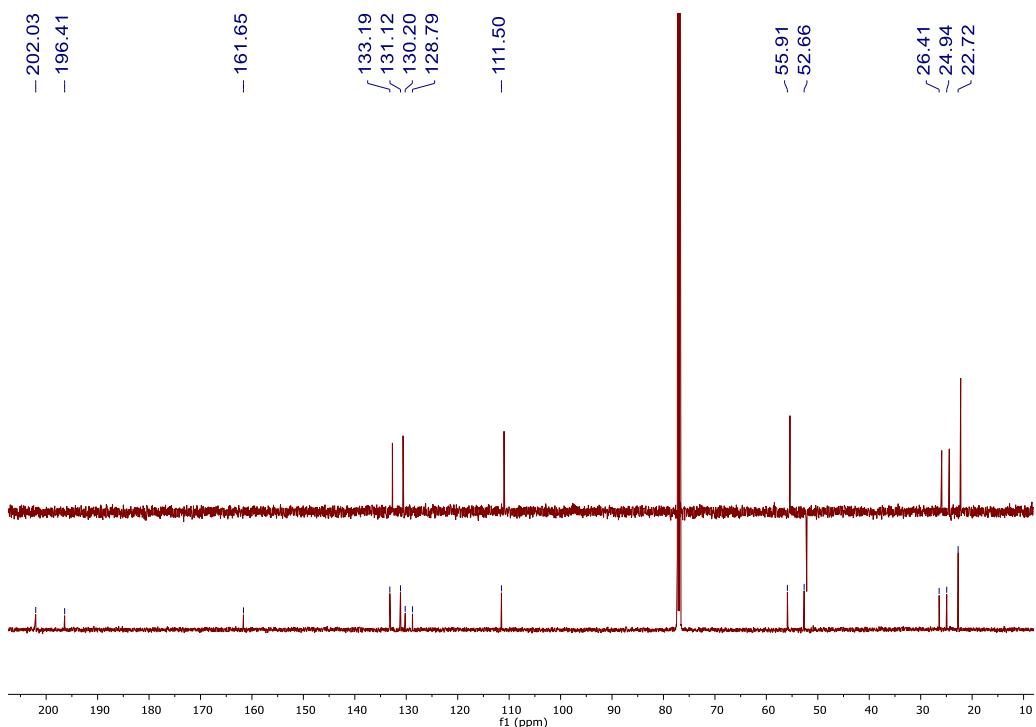


¹³C NMR, DEPT spectrum of **6'** in CDCl₃

Figure S22. ¹H NMR, ¹³C NMR, DEPT spectrum of **6'** in CDCl₃.

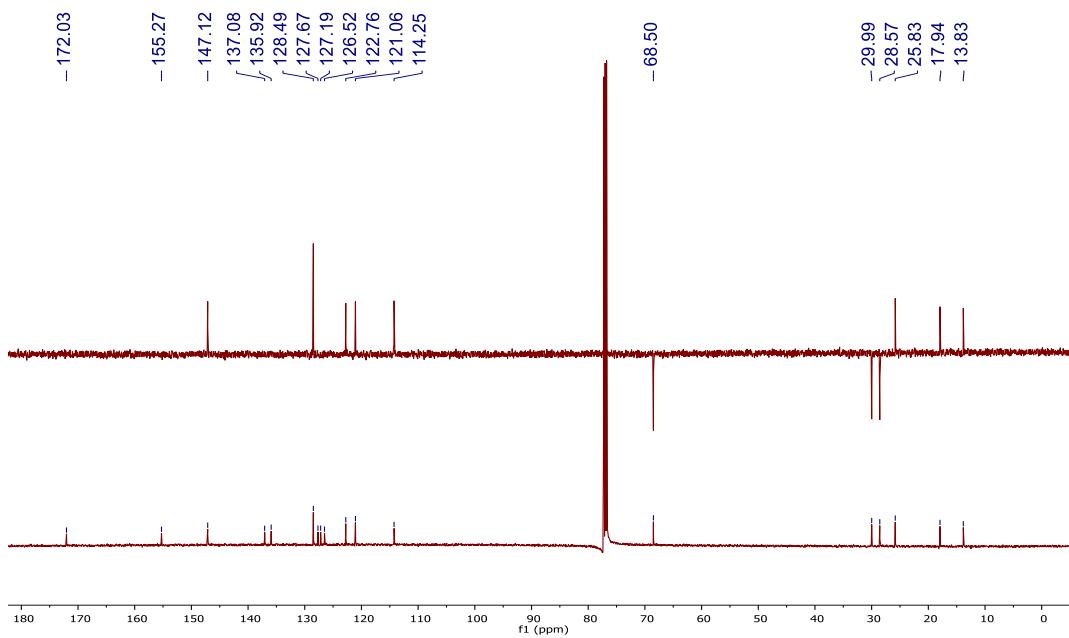
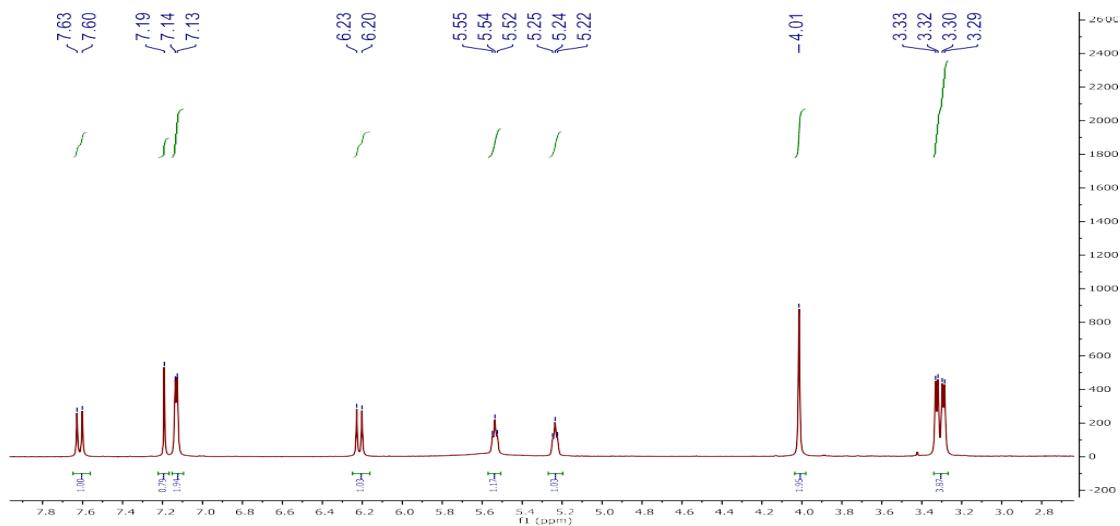


¹H NMR spectrum of **7'** in CDCl₃



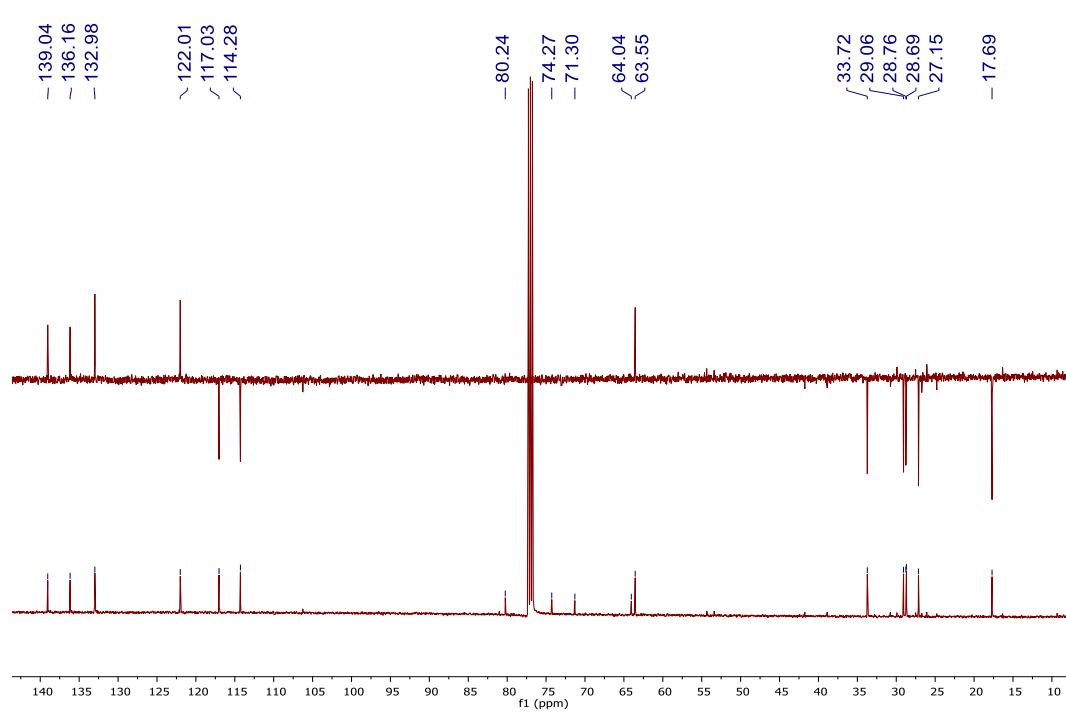
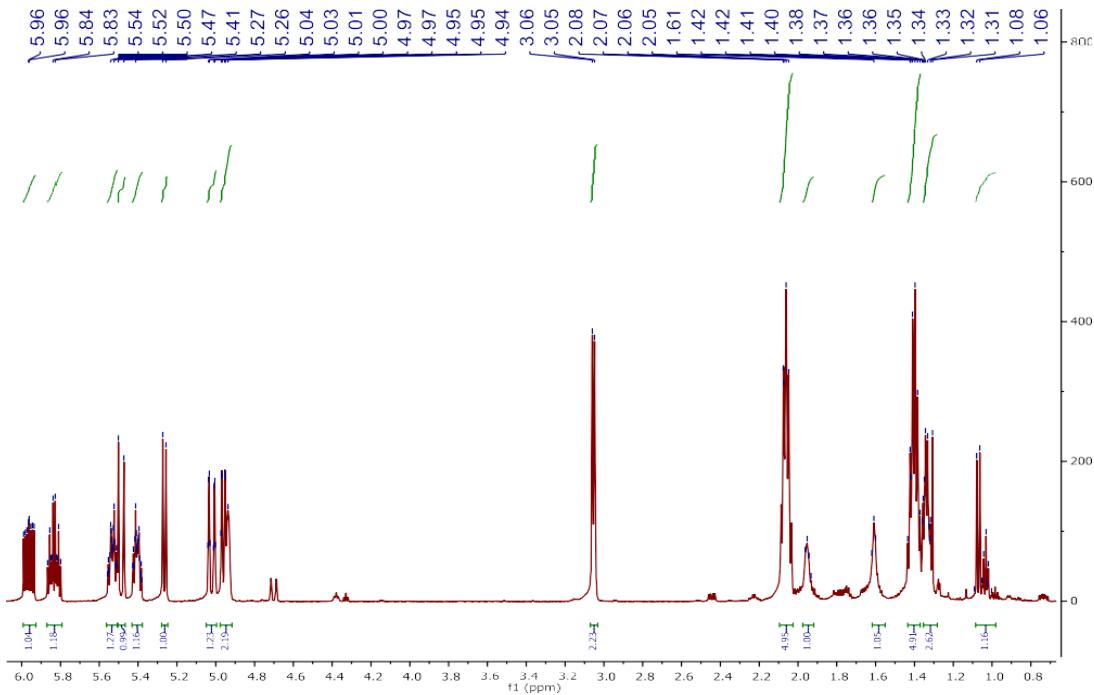
^{13}C NMR, DEPT spectrum of **7'** in CDCl_3

Figure S23. ^1H NMR, ^{13}C NMR, DEPT spectrum of **7'** in CDCl_3



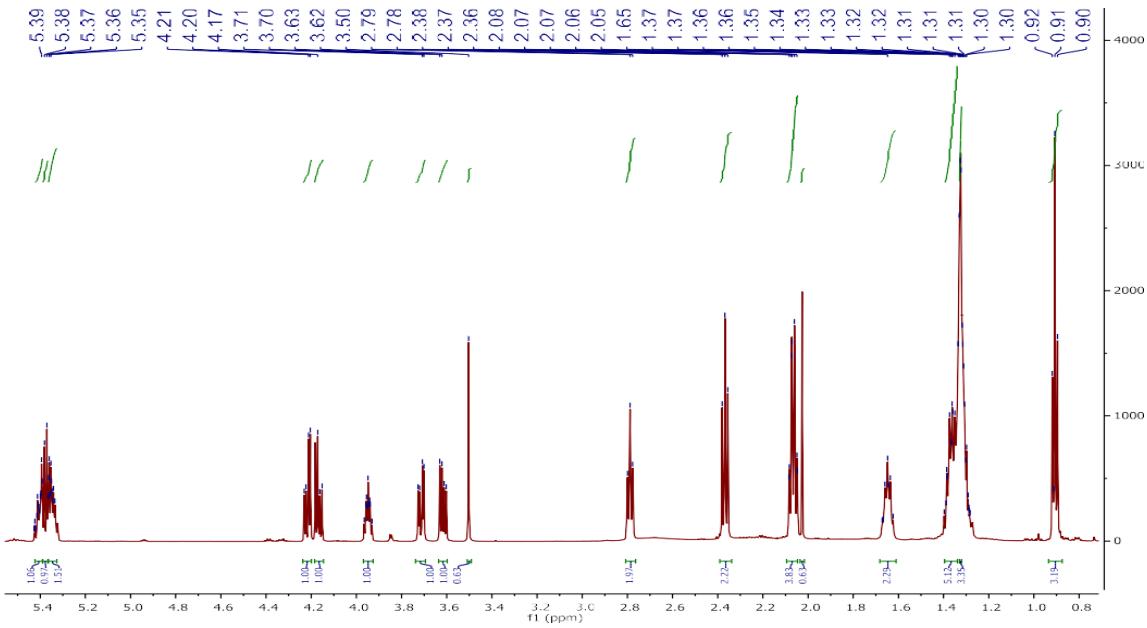
^{13}C NMR, DEPT spectrum of **8'** in CDCl_3

Figure S24. ^1H NMR, ^{13}C NMR, DEPT spectrum of **8'** in CDCl_3

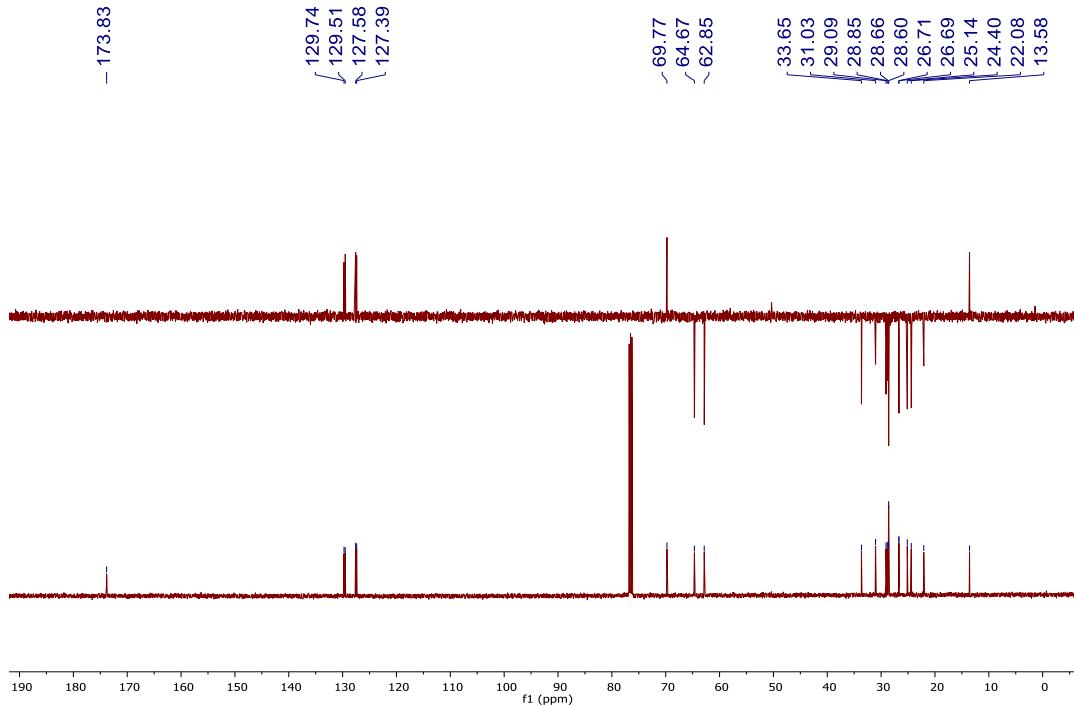


¹³C NMR, DEPT spectrum of **9'** in CDCl₃

Figure S25. ¹H NMR, ¹³C NMR, DEPT spectrum of **9'** in CDCl₃

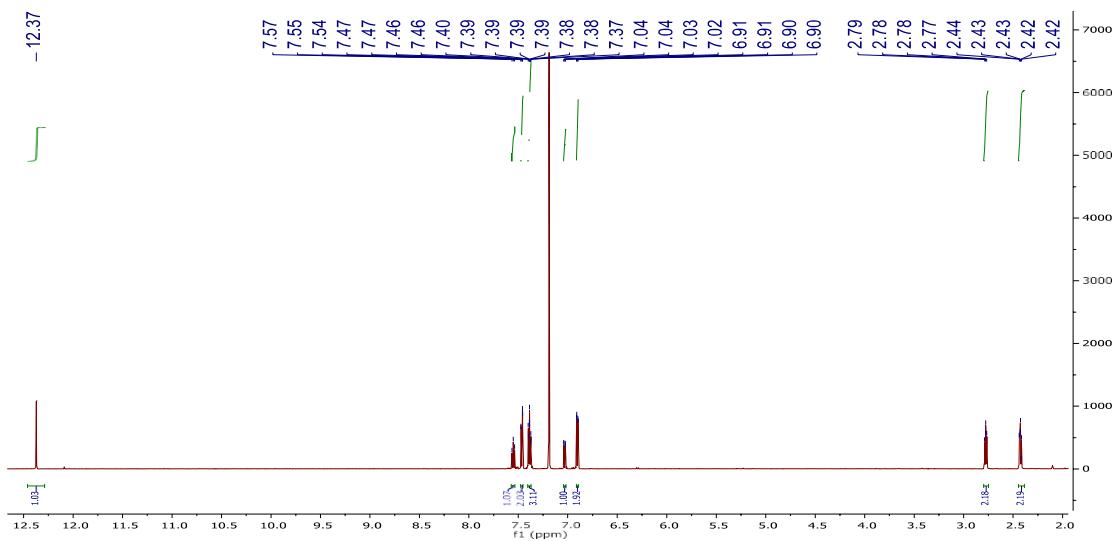


^1H NMR spectrum of **10'** in CDCl_3 .

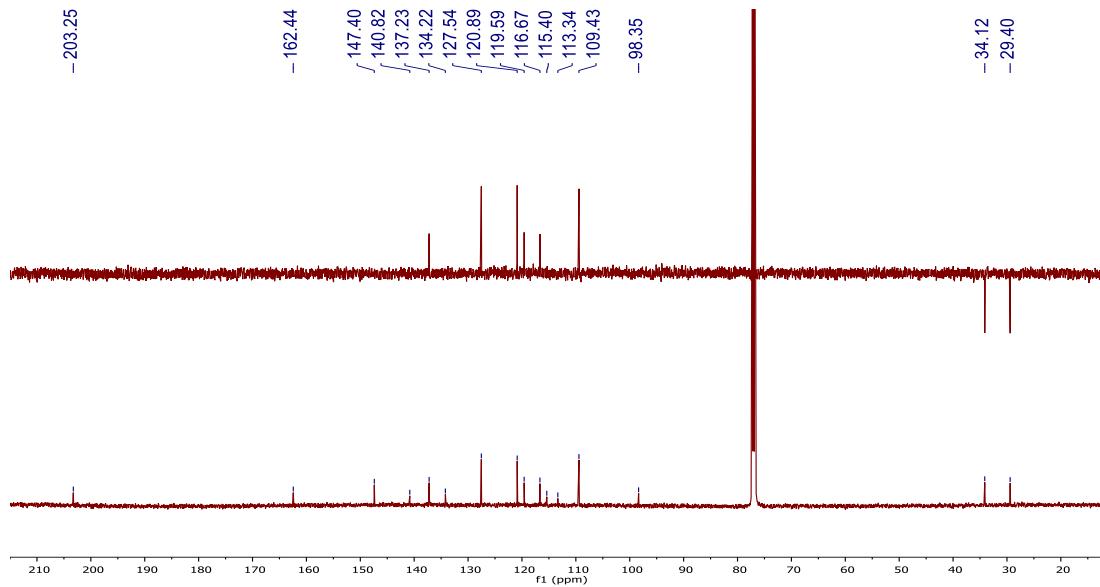


^{13}C NMR, DEPT spectrum of **10'** in CDCl_3 .

Figure S26. ^1H NMR, ^{13}C NMR, DEPT spectrum of **10'** in CDCl_3

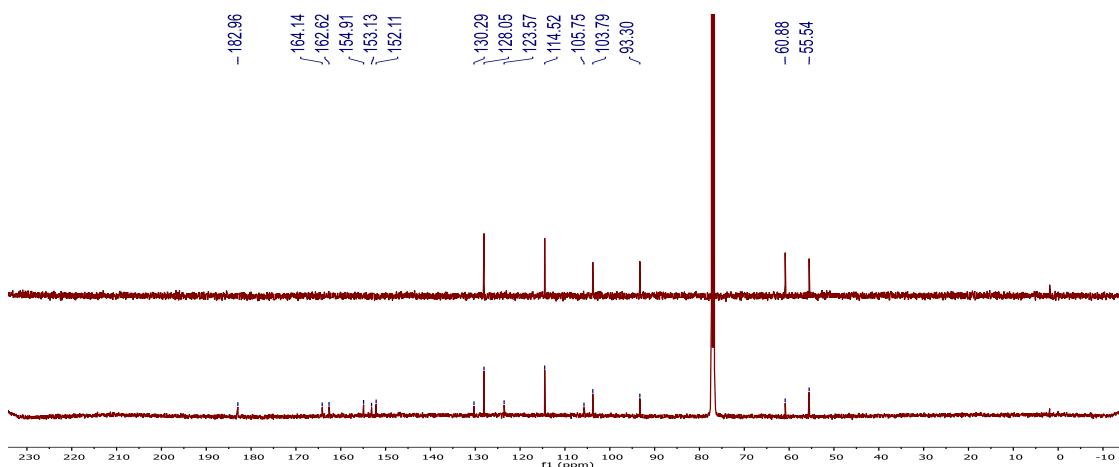
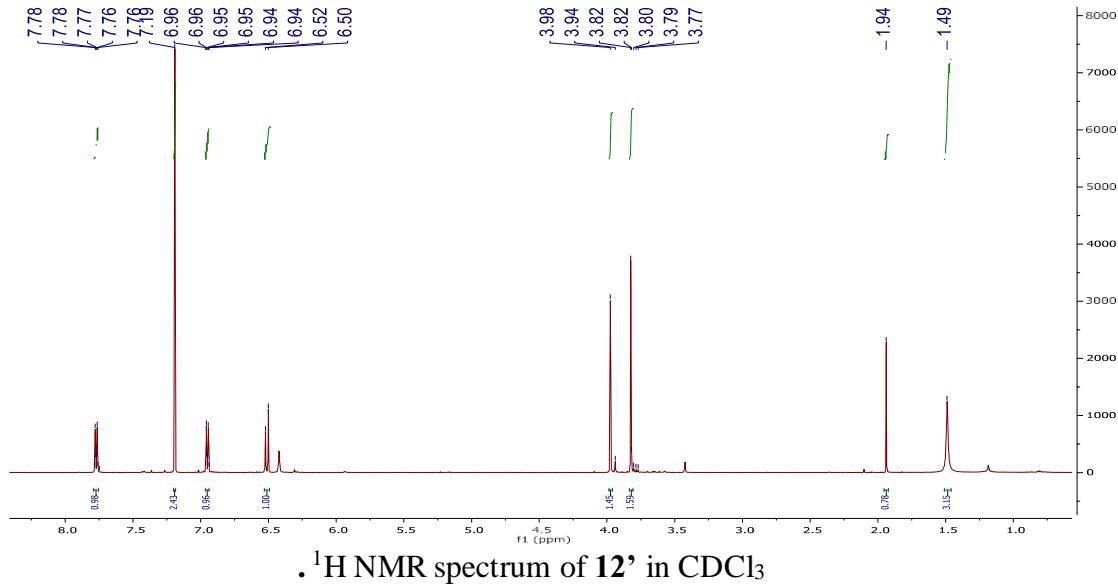


¹H NMR spectrum of **11'** in CDCl₃.



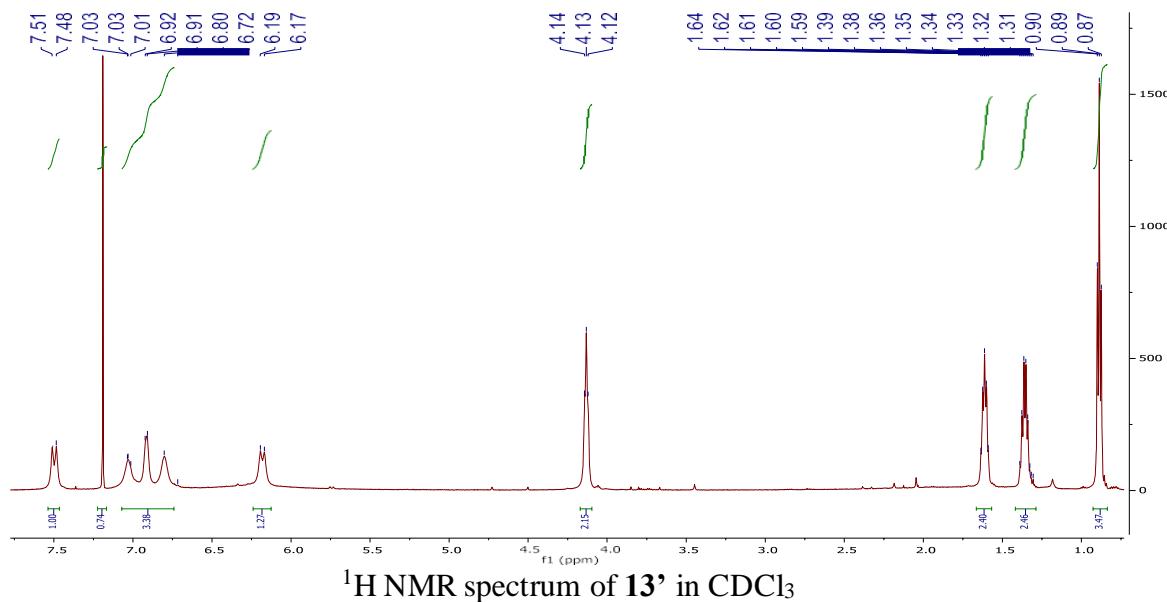
¹³C NMR, DEPT spectrum of **11'** in CDCl₃.

Figure S27. ^1H NMR, ^{13}C NMR, DEPT spectrum of **11'** in CDCl_3 .

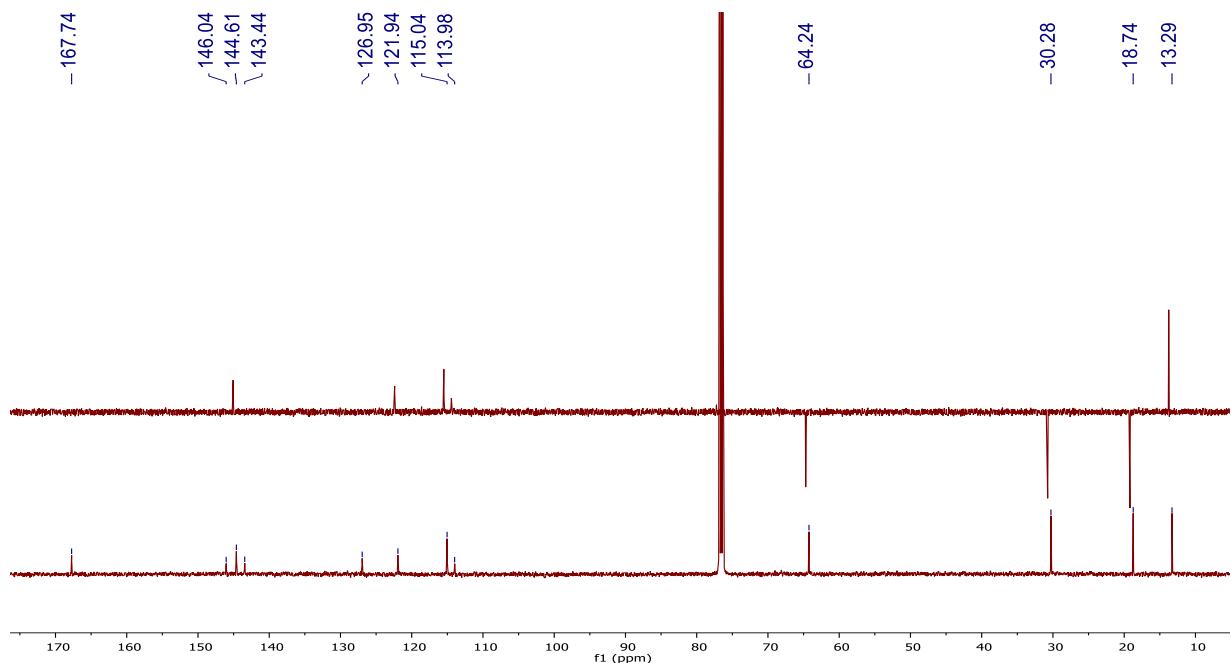


¹³C NMR, DEPT spectrum of **12'** in CDCl₃.

Figure S28. ^1H NMR, ^{13}C NMR, DEPT spectrum of **12'** in CDCl_3 .



^1H NMR spectrum of **13'** in CDCl_3



^{13}C NMR, DEPT spectrum of **13'** in CDCl_3

Figure S29. ^1H NMR, ^{13}C NMR, DEPT spectrum of **13'** in CDCl_3

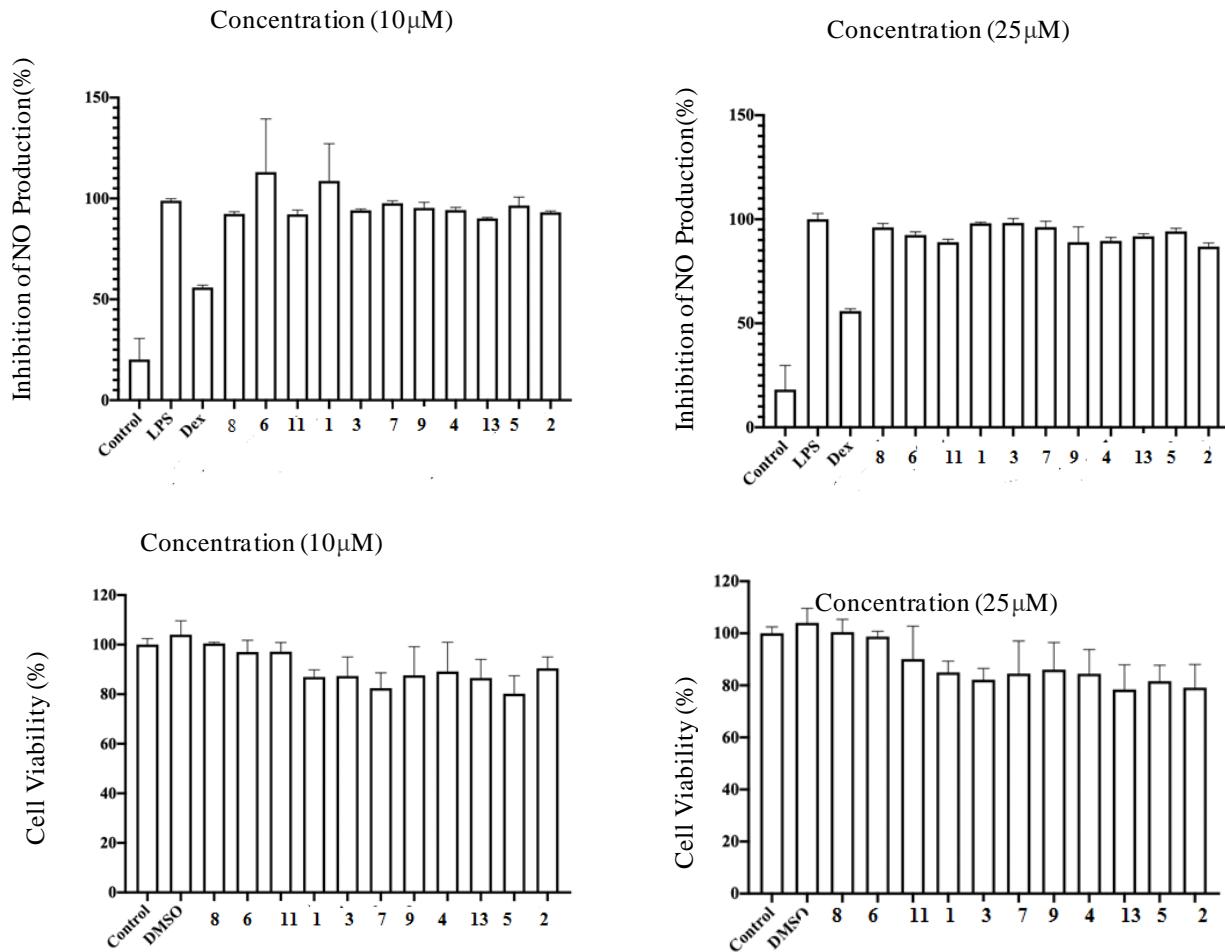


Figure S30. Inhibitory Effects of *A.nitrosa* compounds on LPS-Enhanced Inflammatory Mediators



Figure S31. Pictures of the whole plant of *Artemisia nitrosa*.



Figure S32. Pictures of the whole plant of *Artemisia marschalliana*.