

Xanthones from the Bark of *Garcinia xanthochymus* and the Mechanism of Induced Apoptosis in Human Hepatocellular Carcinoma HepG2 Cells via the Mitochondrial Pathway

Shan Jin ¹, Kuan Shi ¹, Liu Liu ², Yu Chen ² and Guangzhong Yang ^{1,*}

¹ School of Pharmaceutical Sciences, South-Central University for Nationalities, Wuhan 430074, China

² College of Chemistry and Material Sciences, South-Central University for Nationalities, Wuhan 430074, China

* Correspondence: yangguangzhong@mail.scuec.edu.cn; Tel.: +86-27-67841196

Electronic Supplementary Information

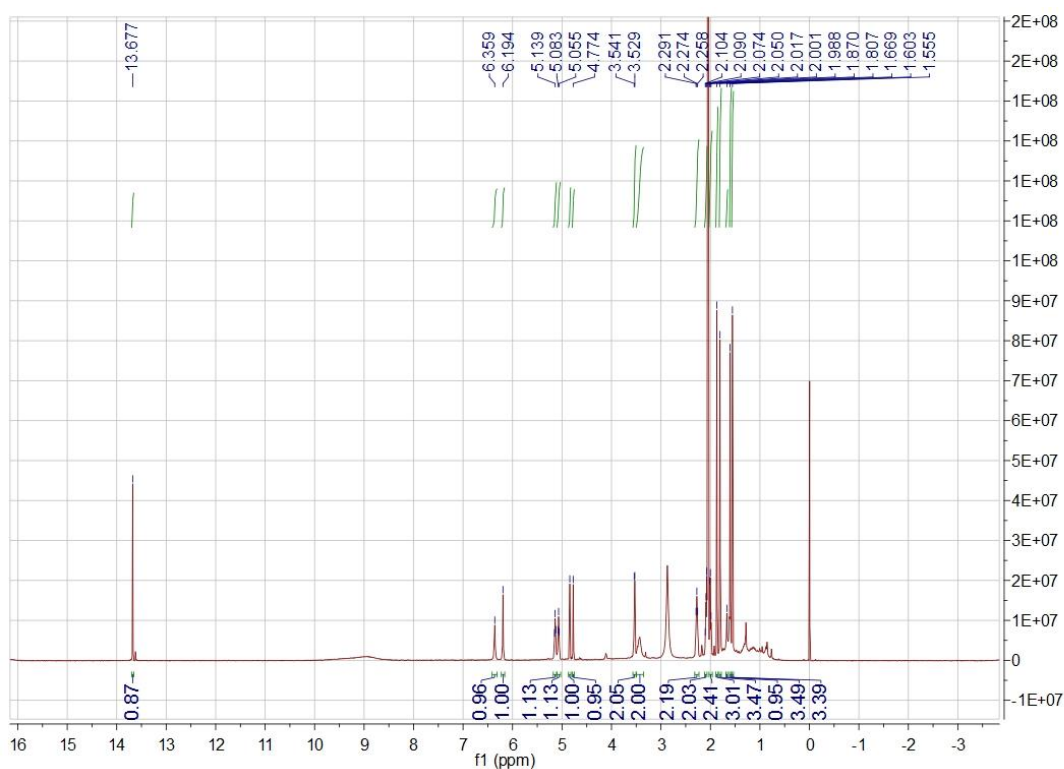


Figure S1. ¹H-NMR spectrum of compound 1.

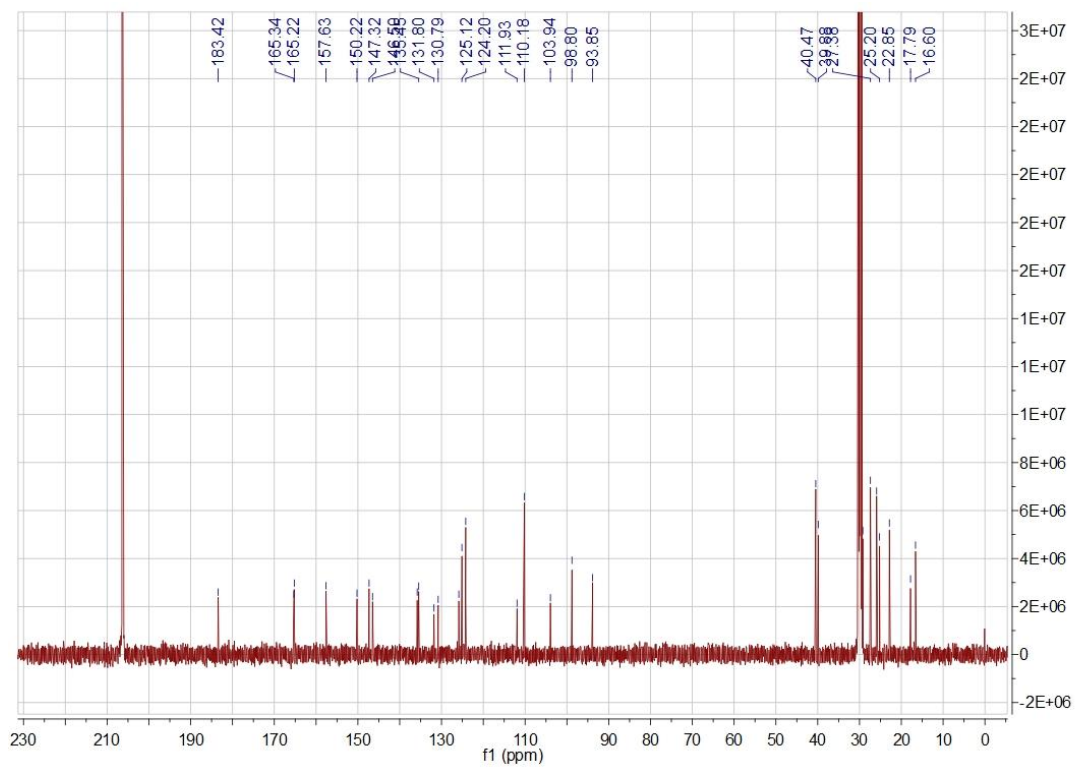


Figure S2. ^{13}C -NMR spectrum of compound 1.

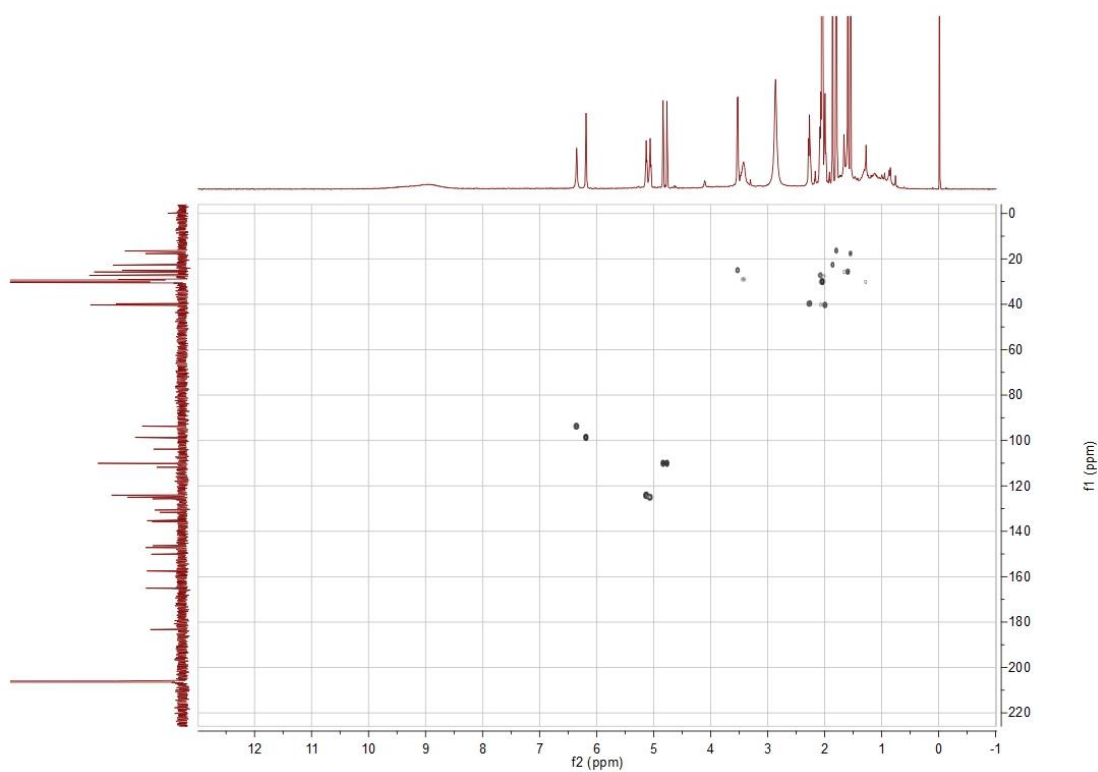


Figure S3. HSQC spectrum of compound 1.

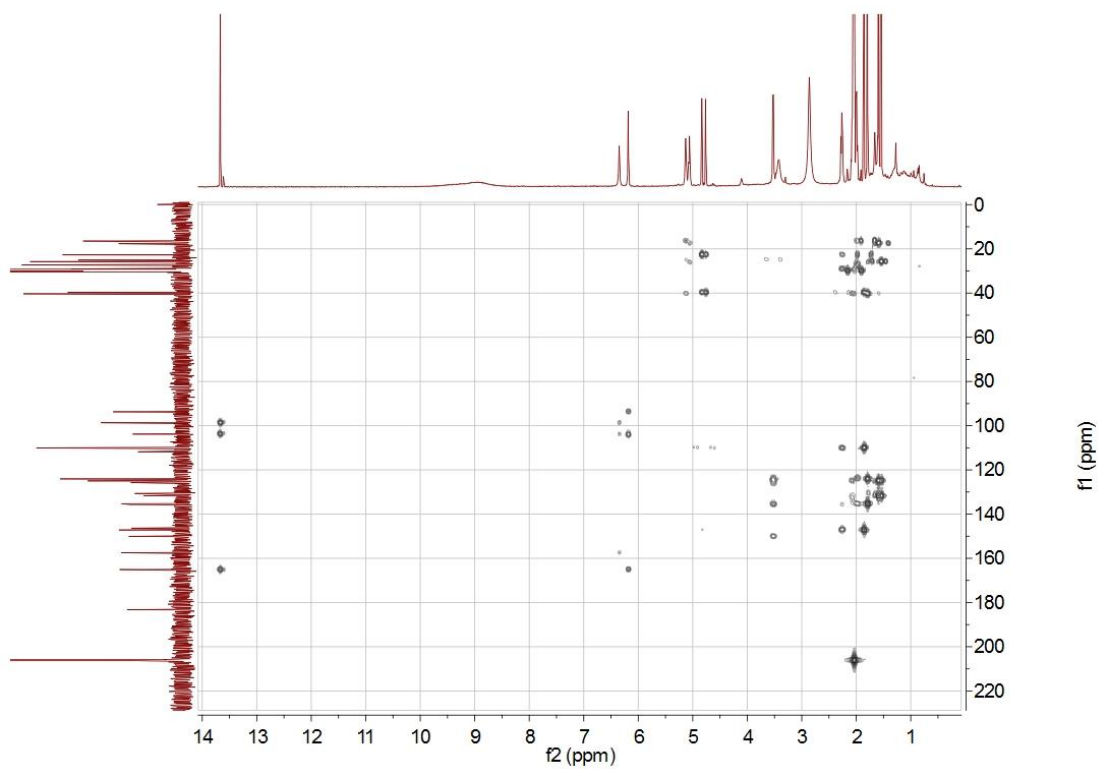


Figure S4. HMBC spectrum of compound 1.

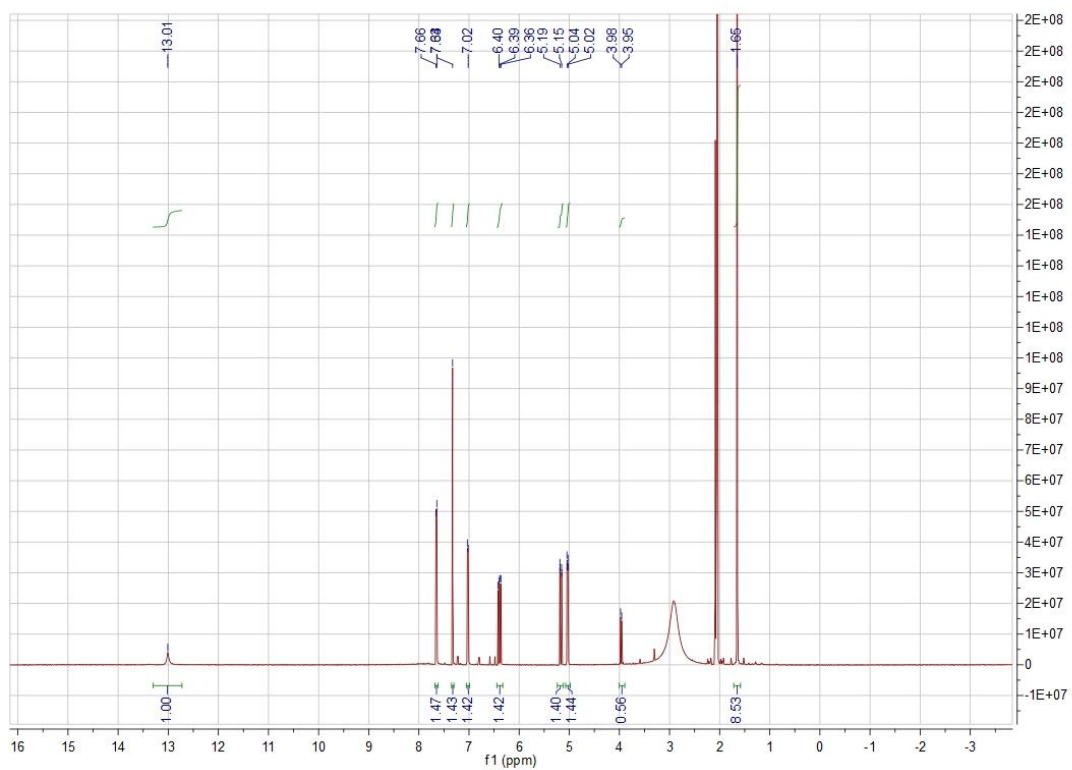


Figure S5. ^1H -NMR spectrum of compound 2.

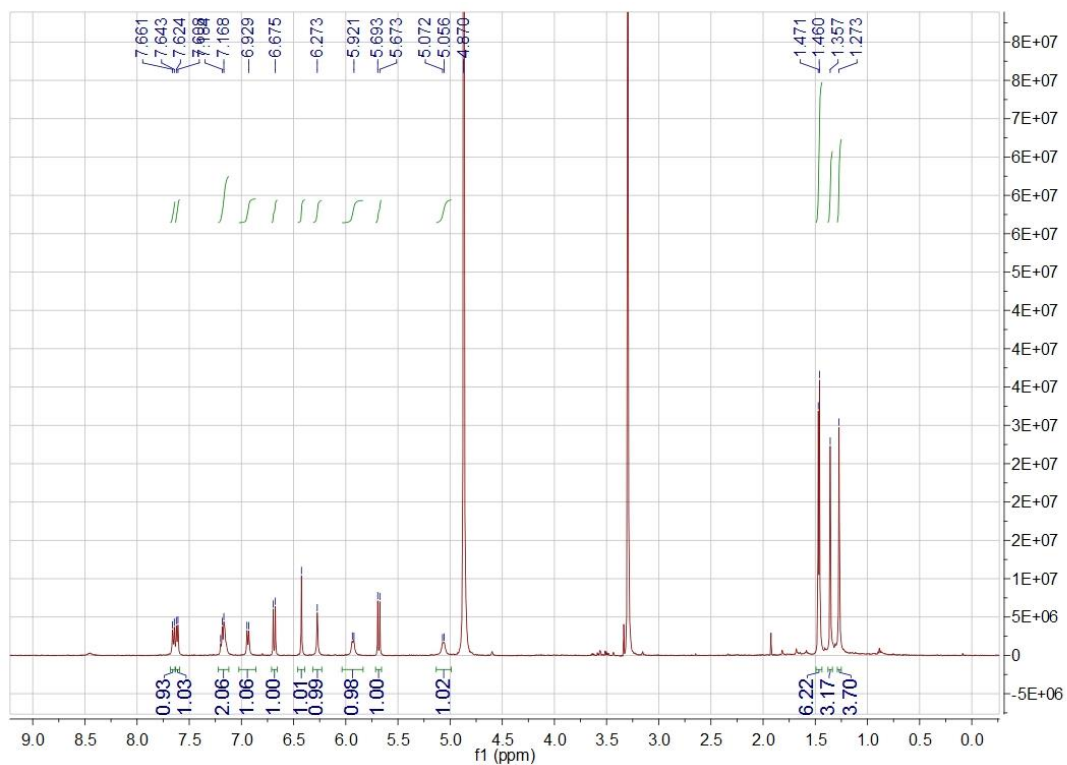


Figure S6. $^1\text{H-NMR}$ spectrum of compound 3.

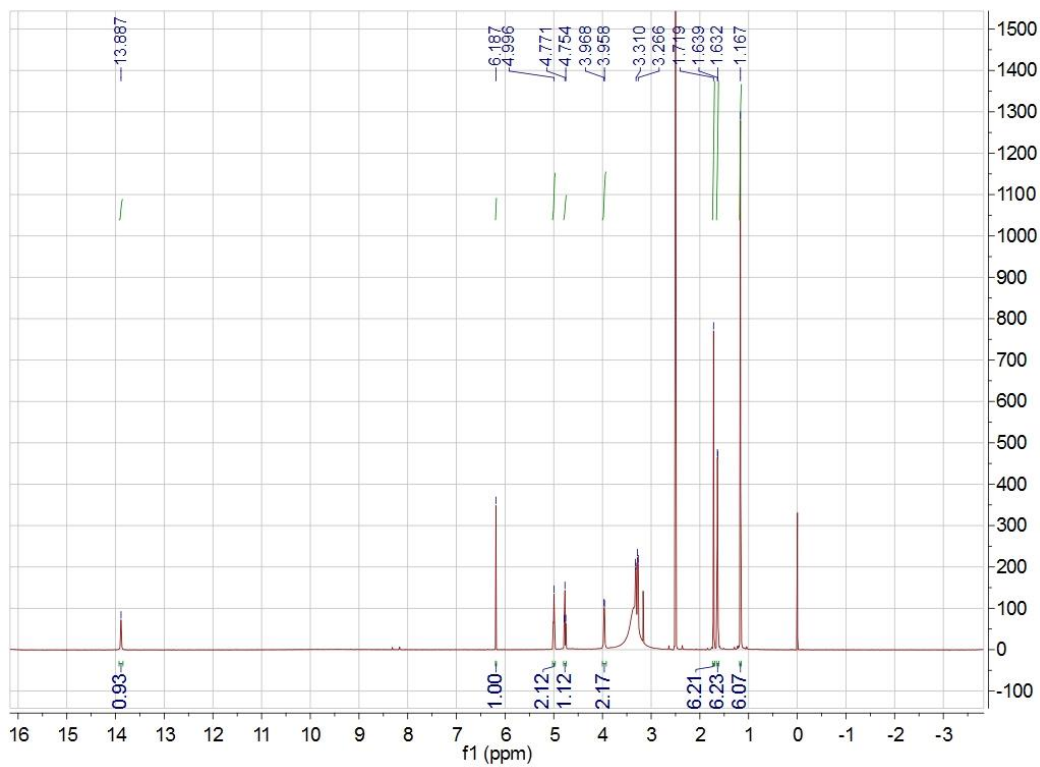


Figure S7. $^1\text{H-NMR}$ spectrum of compound 4.

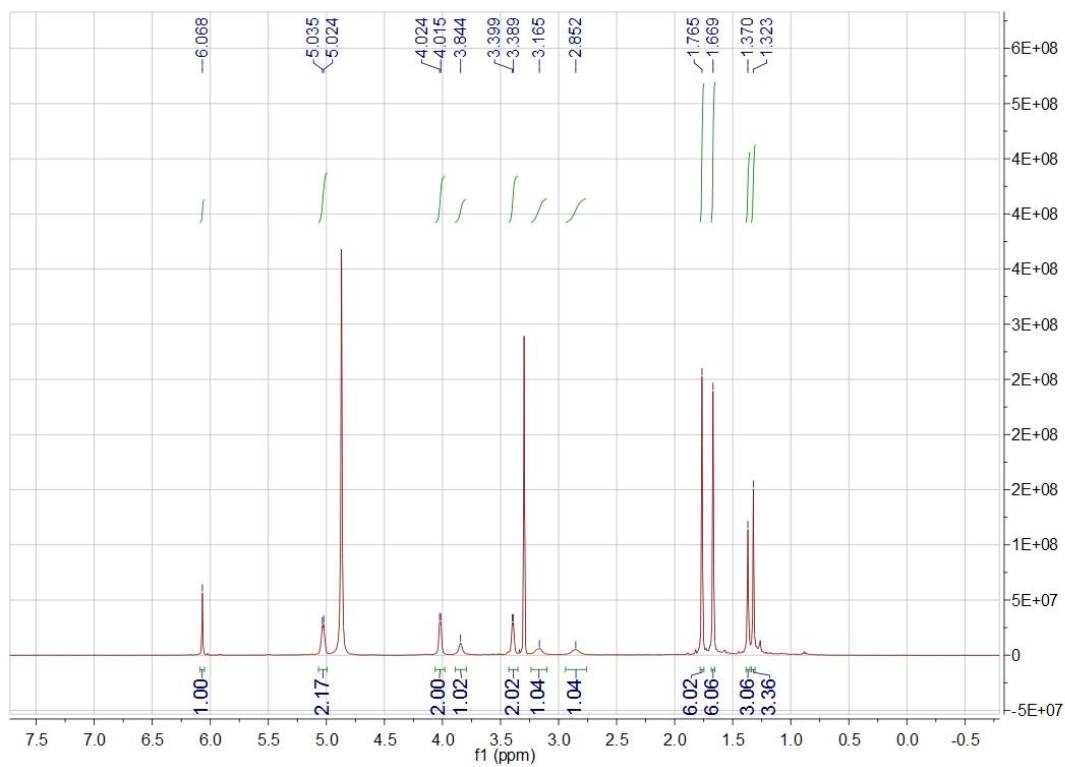


Figure S8. ¹H-NMR spectrum of compound 5.

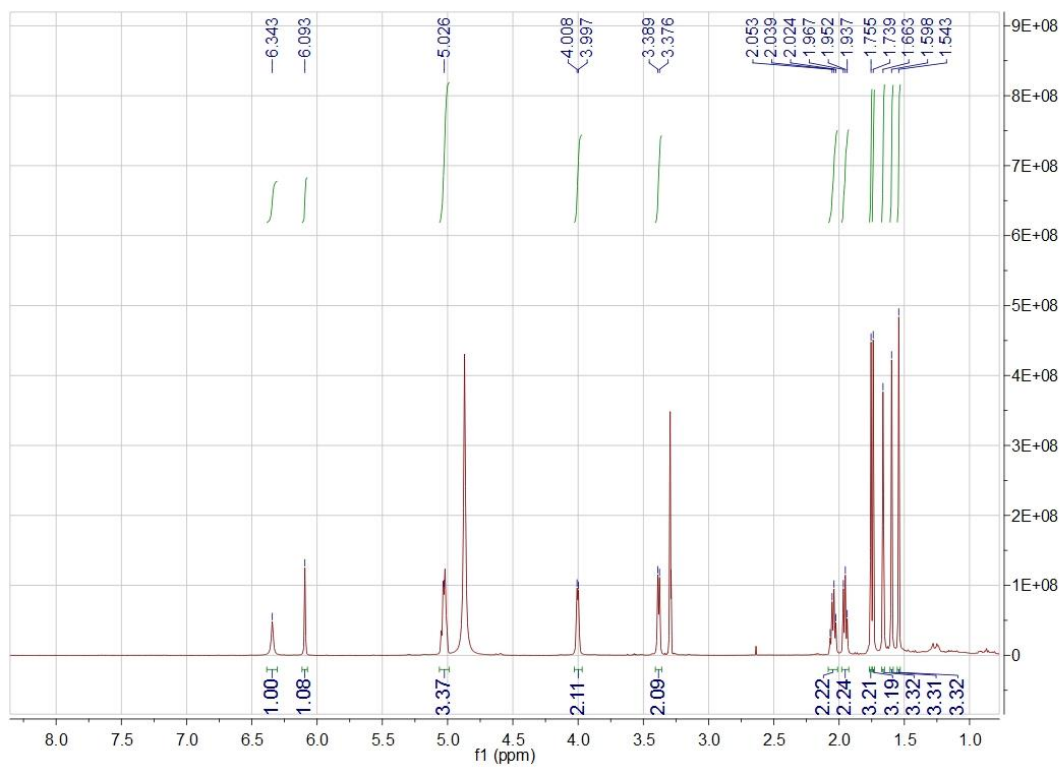


Figure S9. ¹H-NMR spectrum of compound 6.

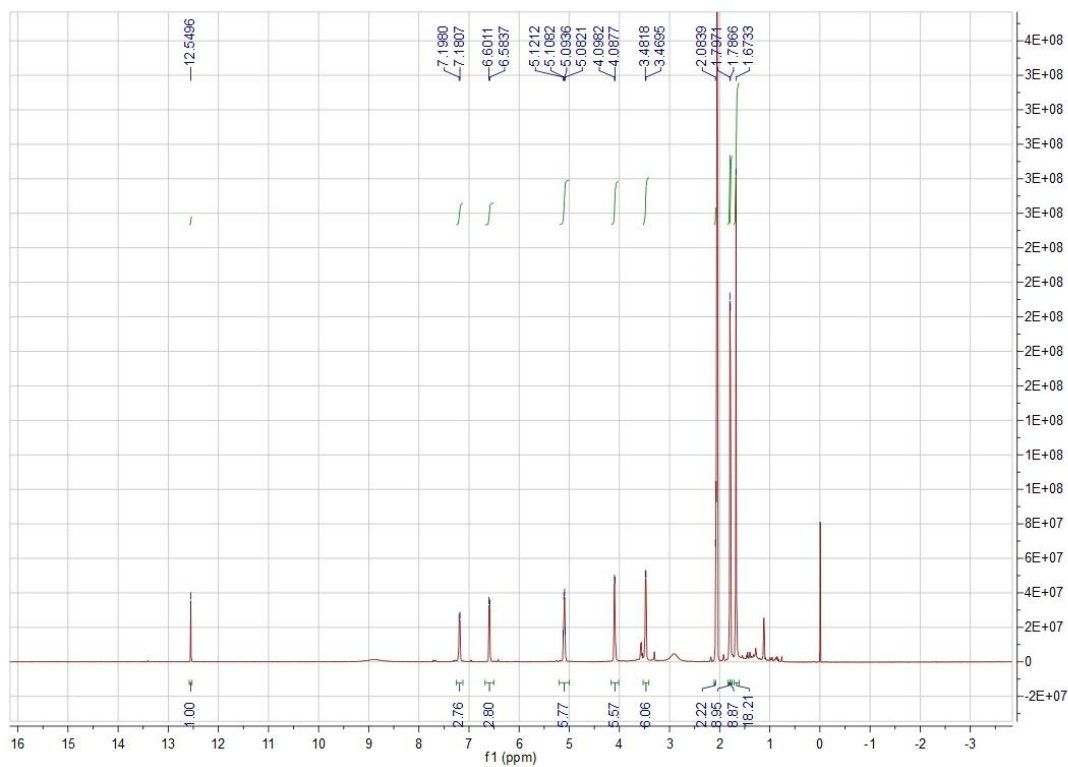


Figure S10. ¹H-NMR spectrum of compound 7.

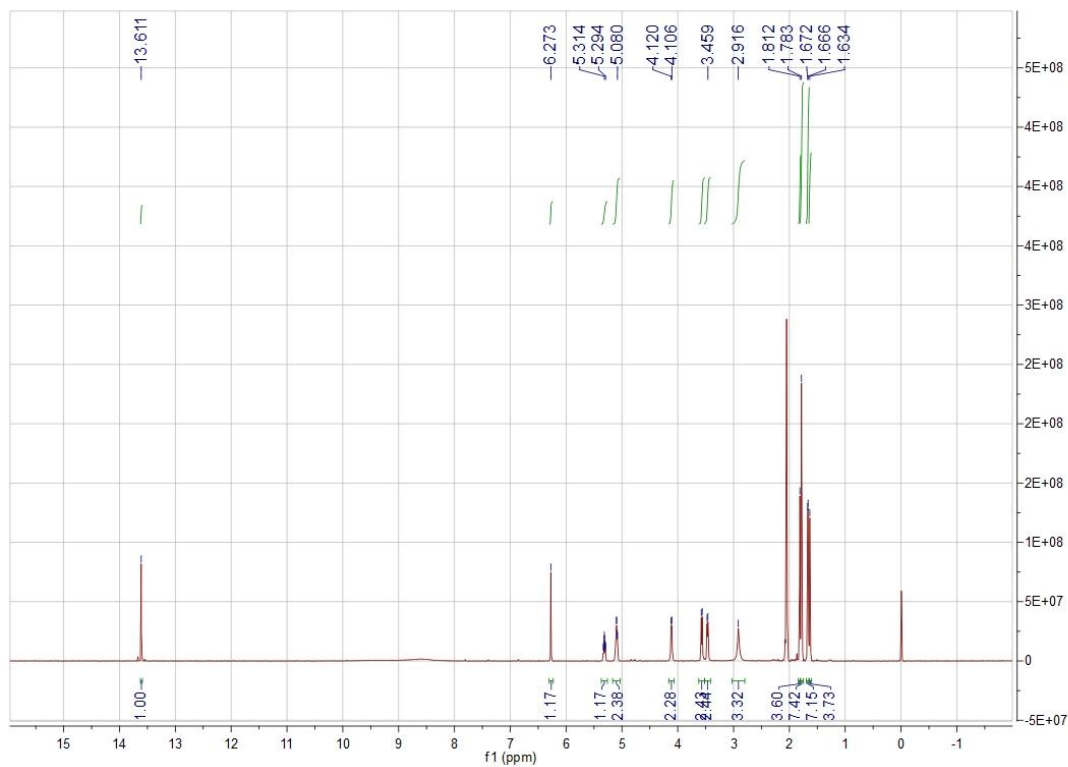


Figure S11. ¹H-NMR spectrum of compound 8.

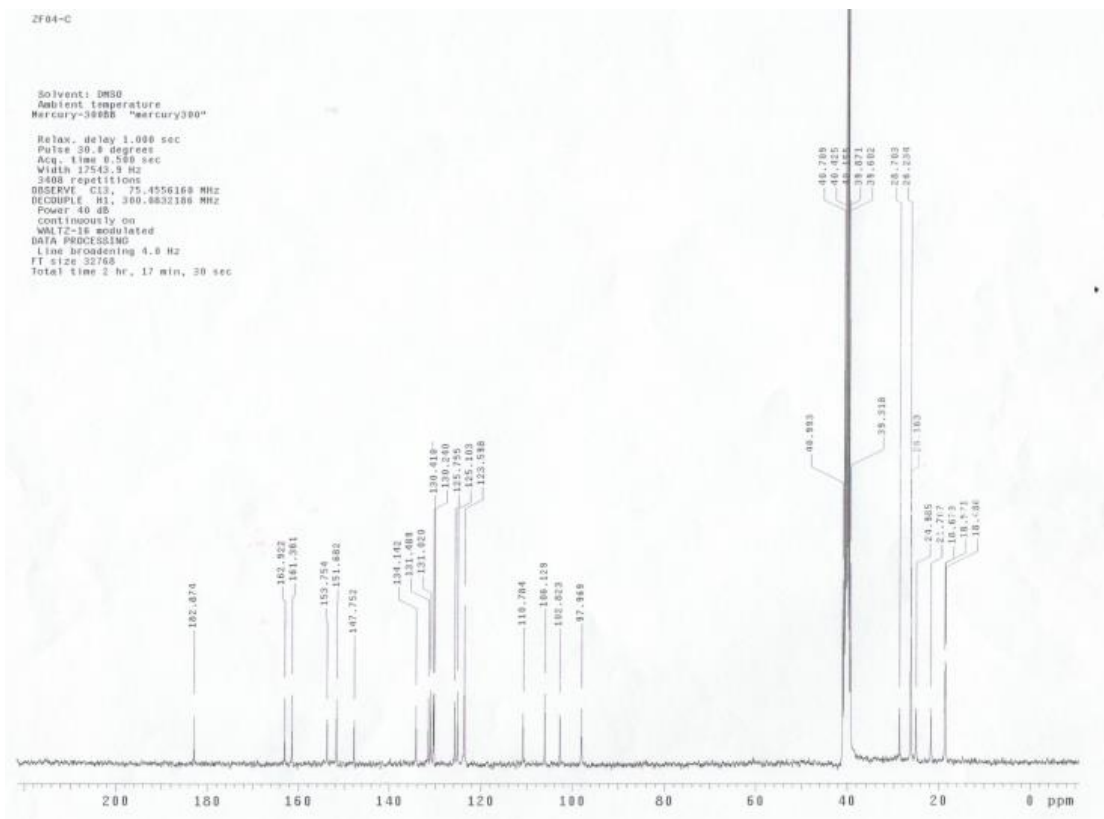


Figure S12. ^{13}C -NMR spectrum of compound 8.

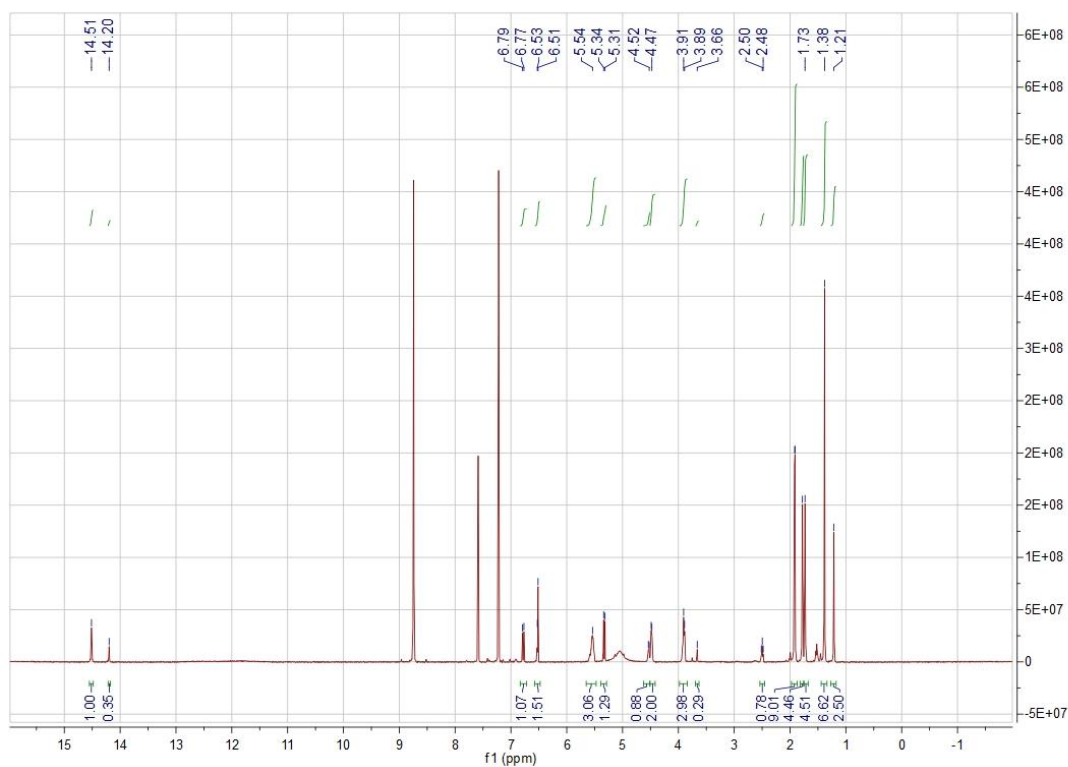


Figure S13. ^1H -NMR spectrum of compound 9.

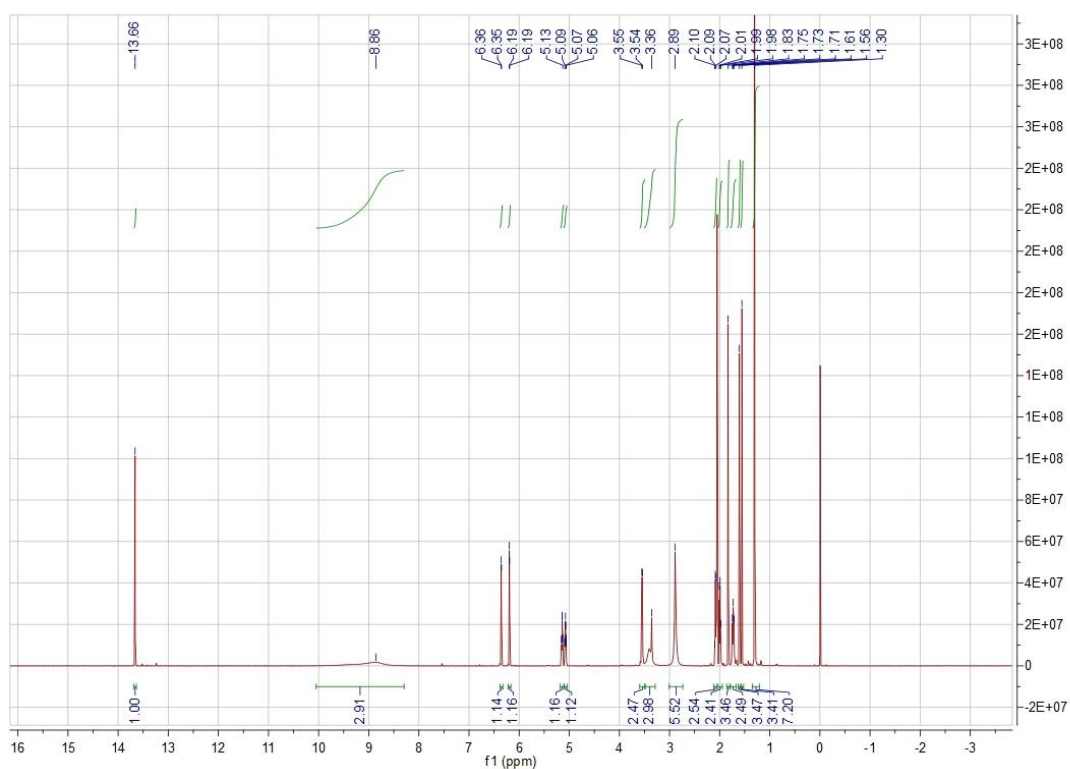


Figure S14. ¹H-NMR spectrum of compound 10.

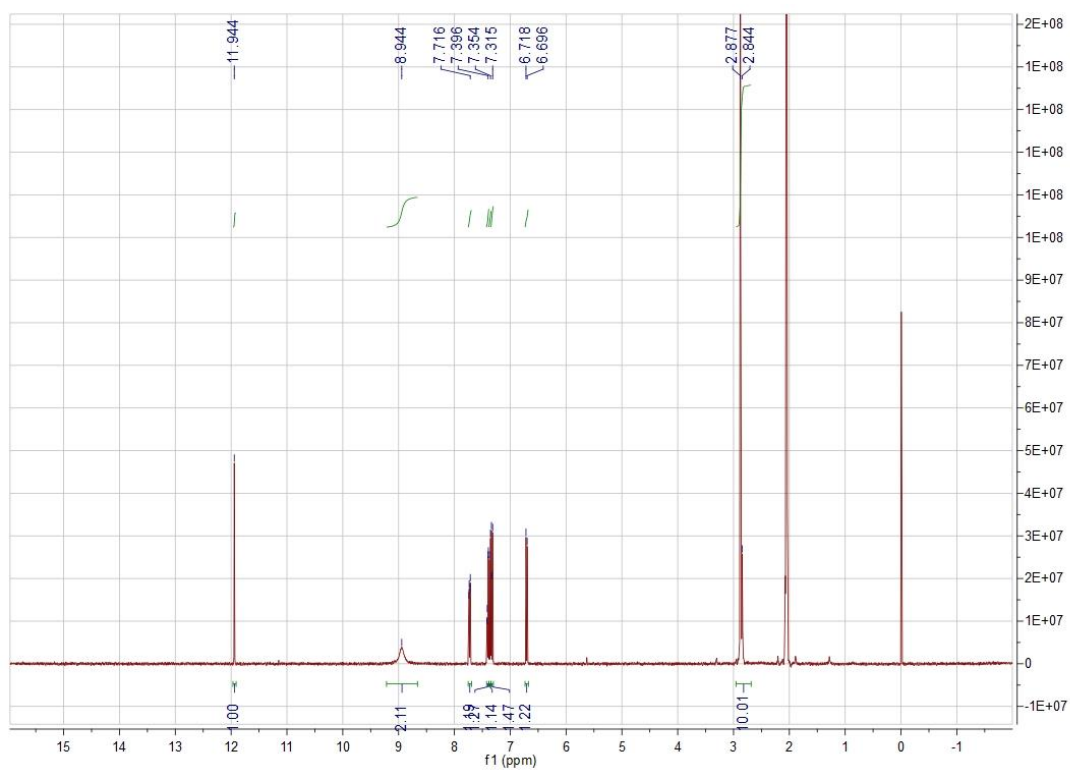


Figure S15. ¹H-NMR spectrum of compound 11.

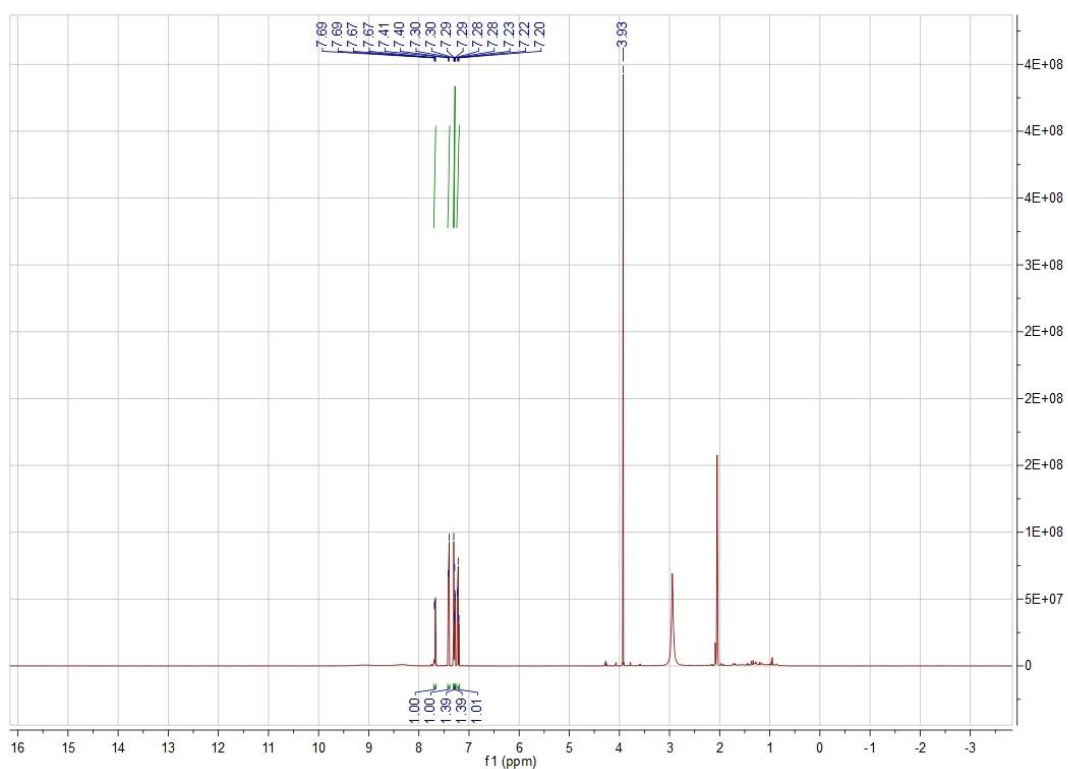


Figure S16. $^1\text{H-NMR}$ spectrum of compound 12.

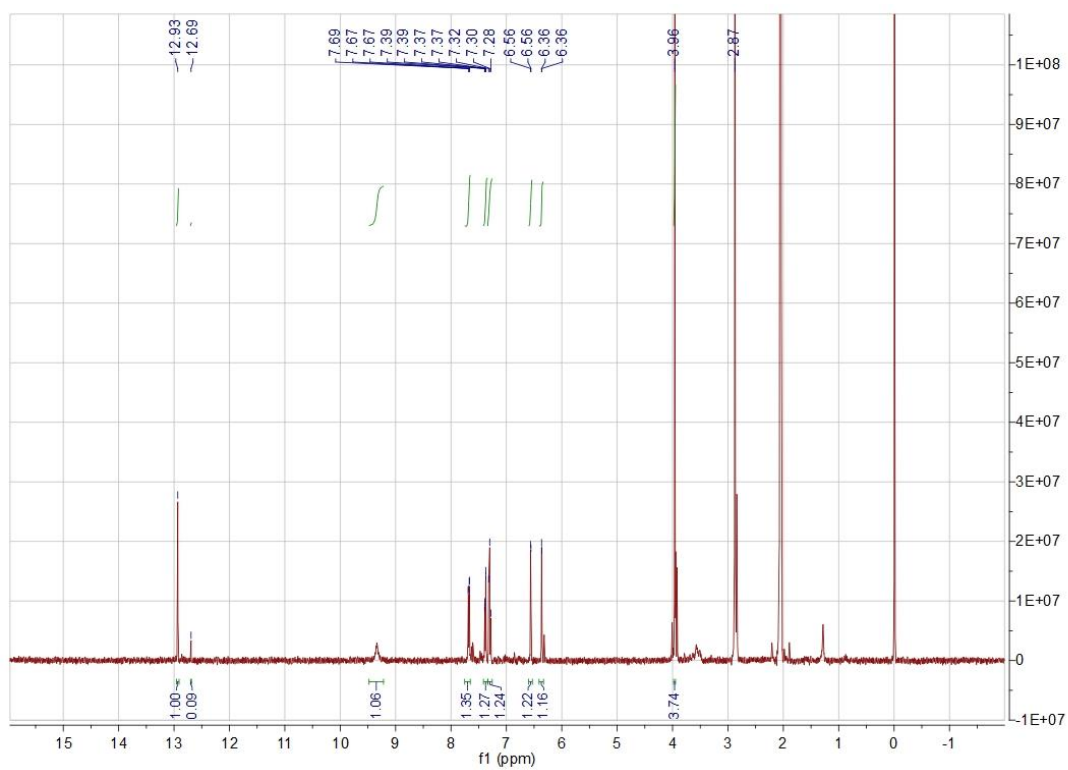


Figure S17. $^1\text{H-NMR}$ spectrum of compound 13.

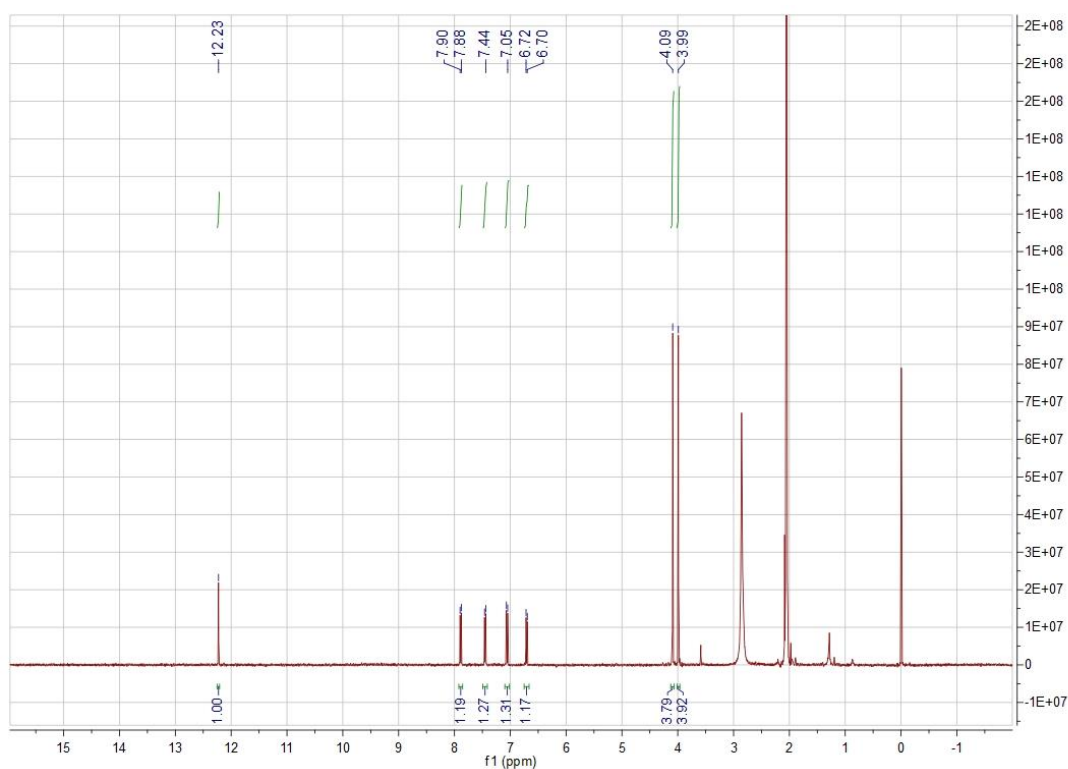


Figure S18. ¹H-NMR spectrum of compound 14.

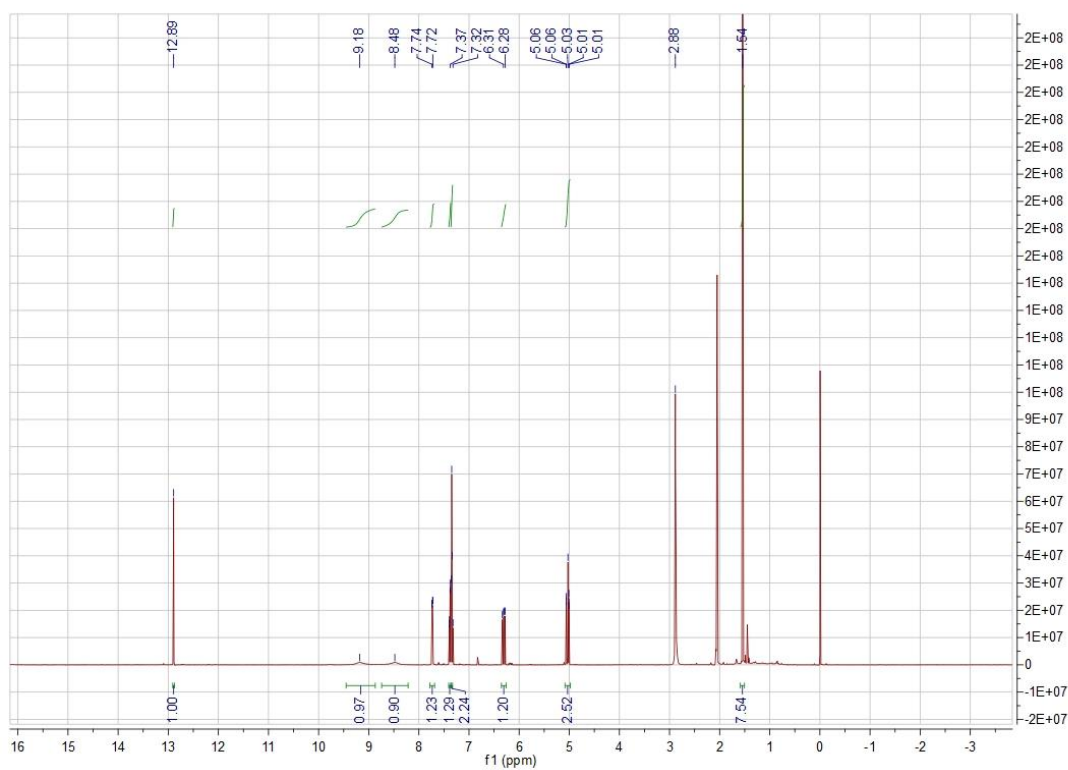


Figure S19. ¹H-NMR spectrum of compound 15.

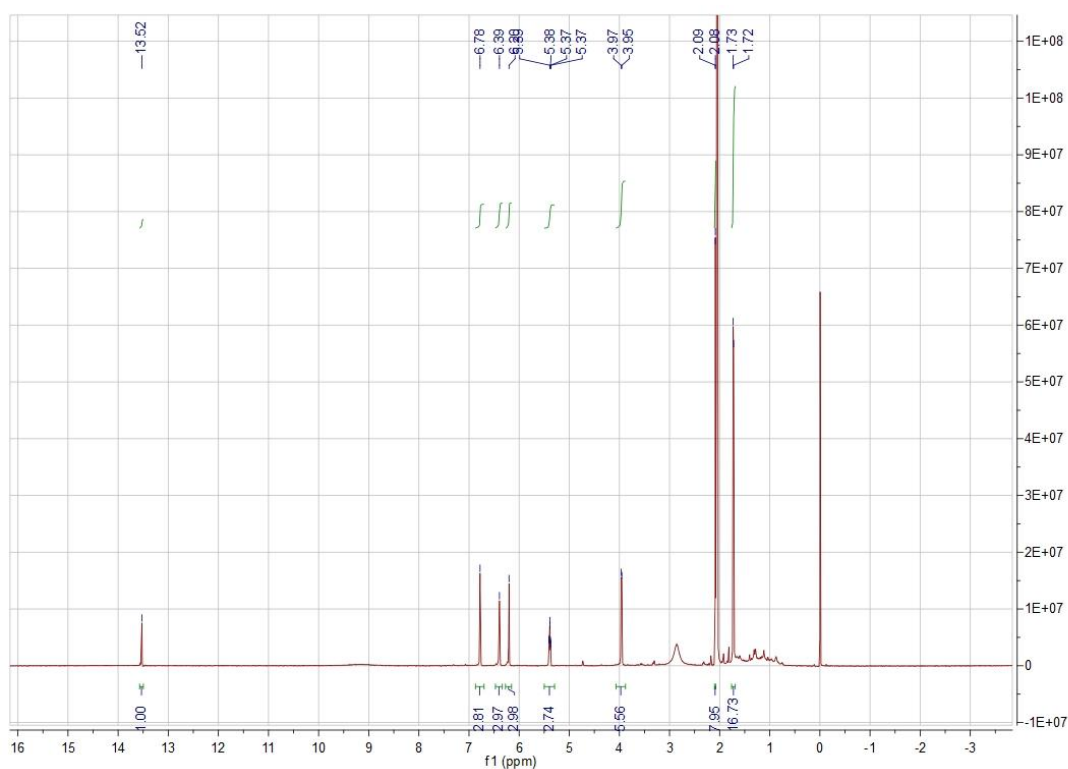


Figure S20. ^1H -NMR spectrum of compound 16.

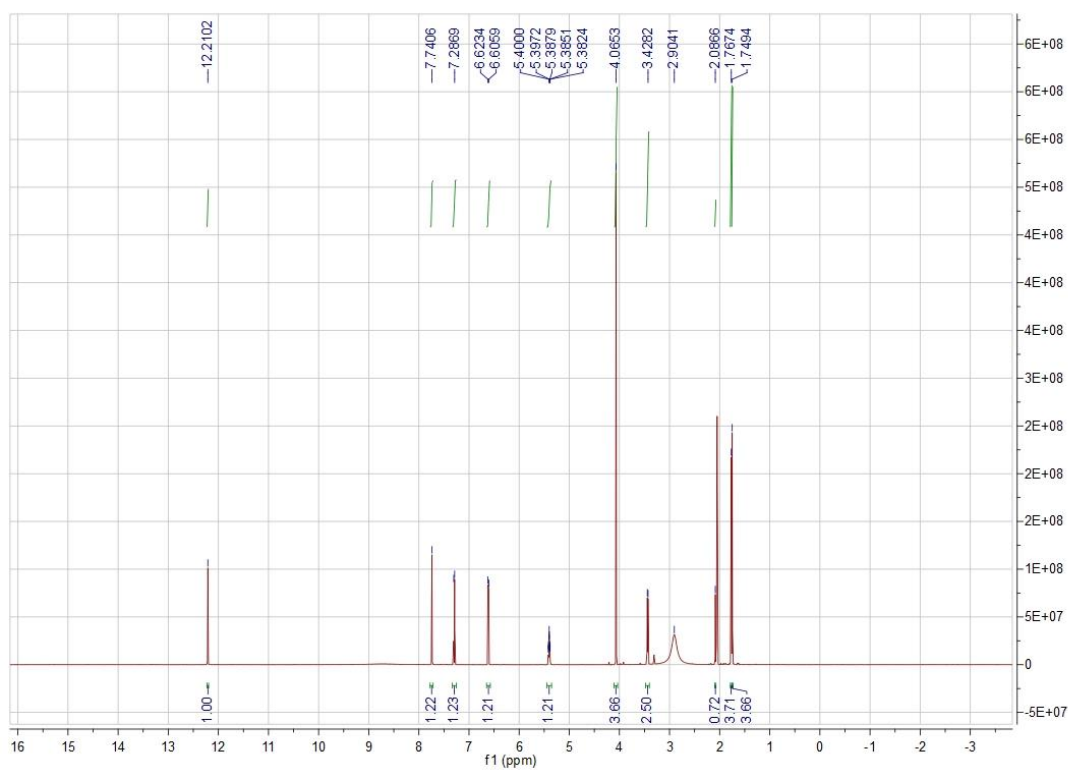


Figure S21. ^1H -NMR spectrum of compound 17.

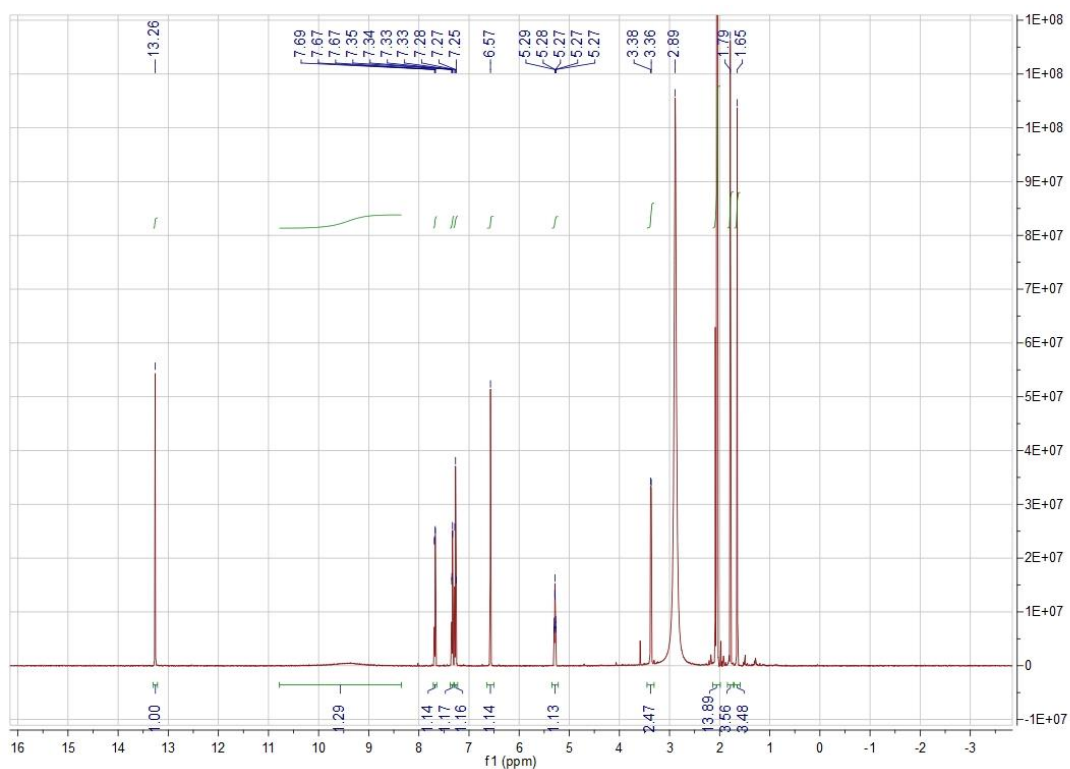


Figure S22. $^1\text{H-NMR}$ spectrum of compound 18.

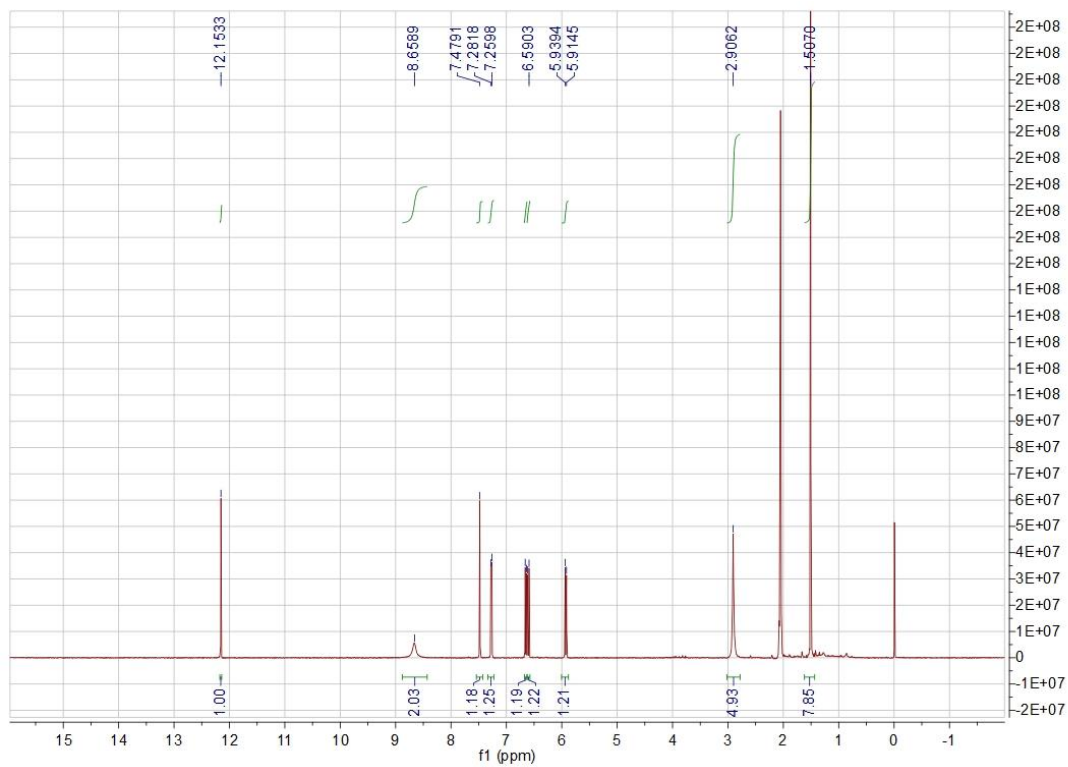


Figure S23. $^1\text{H-NMR}$ spectrum of compound 19.

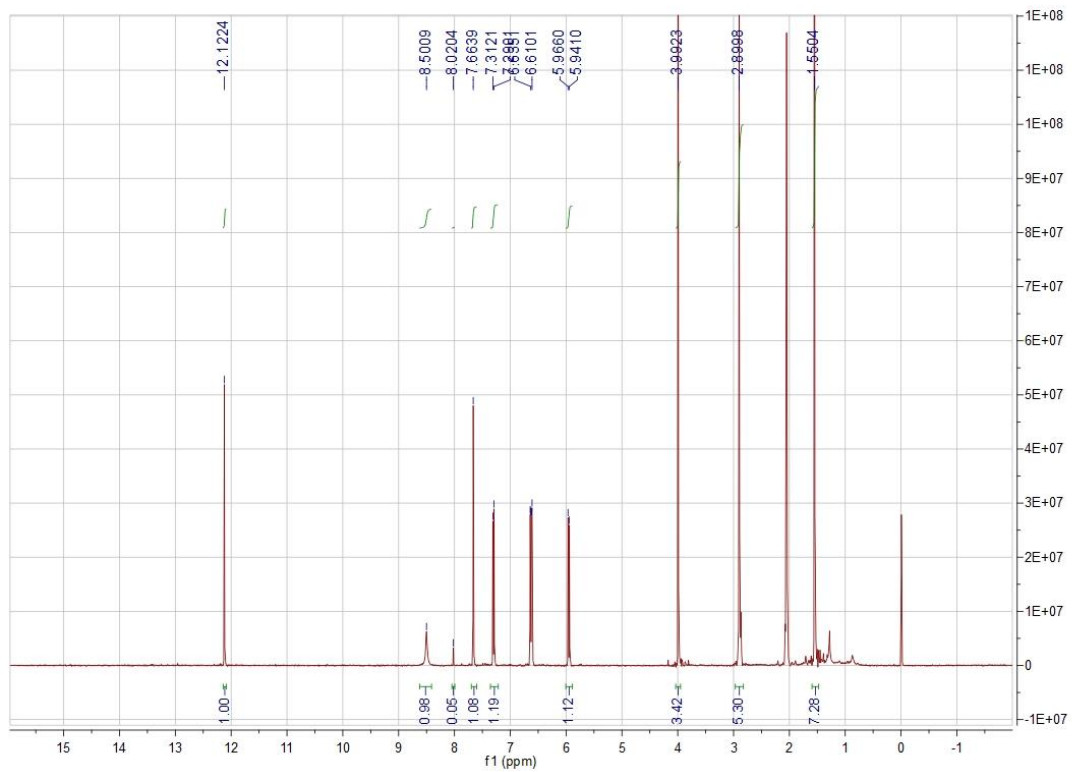


Figure S24. ¹H-NMR spectrum of compound 20.

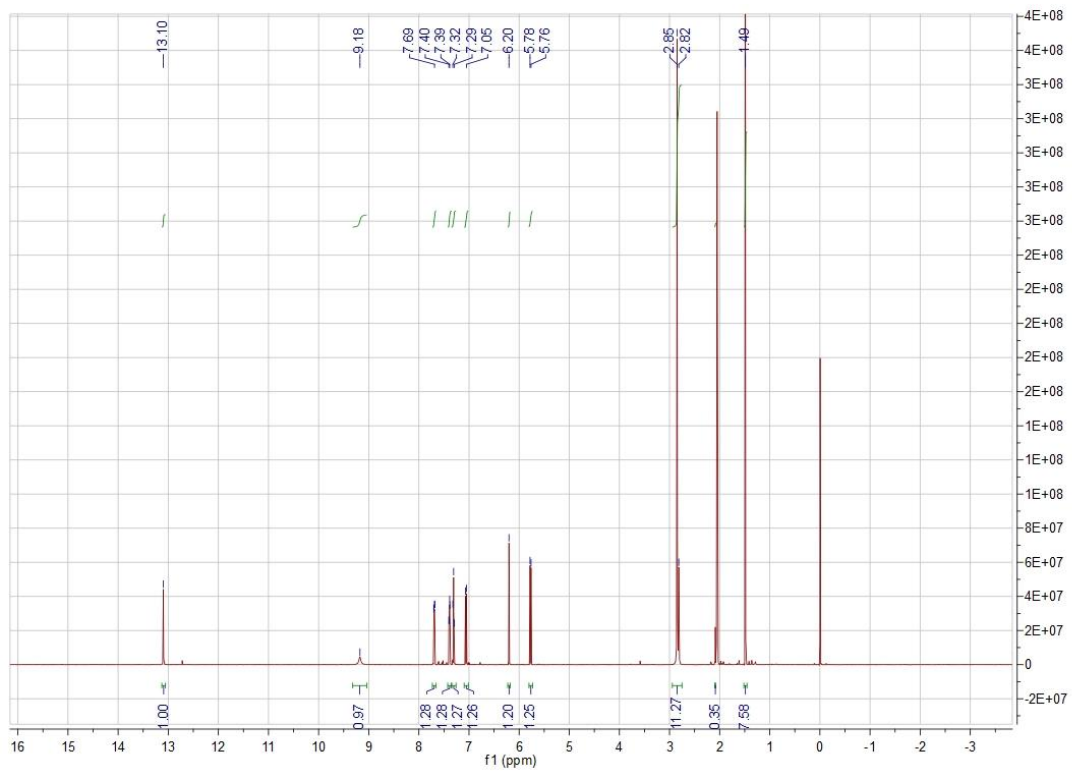


Figure S25. ¹H-NMR spectrum of compound 21.

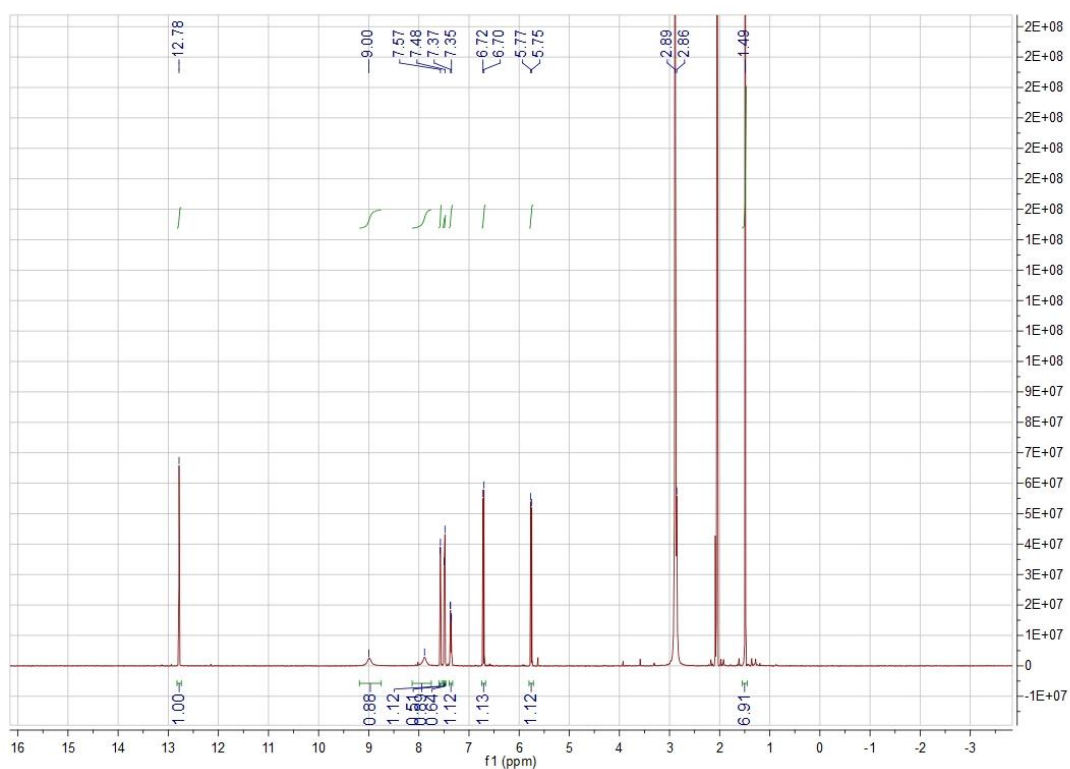


Figure S26. $^1\text{H-NMR}$ spectrum of compound 22.

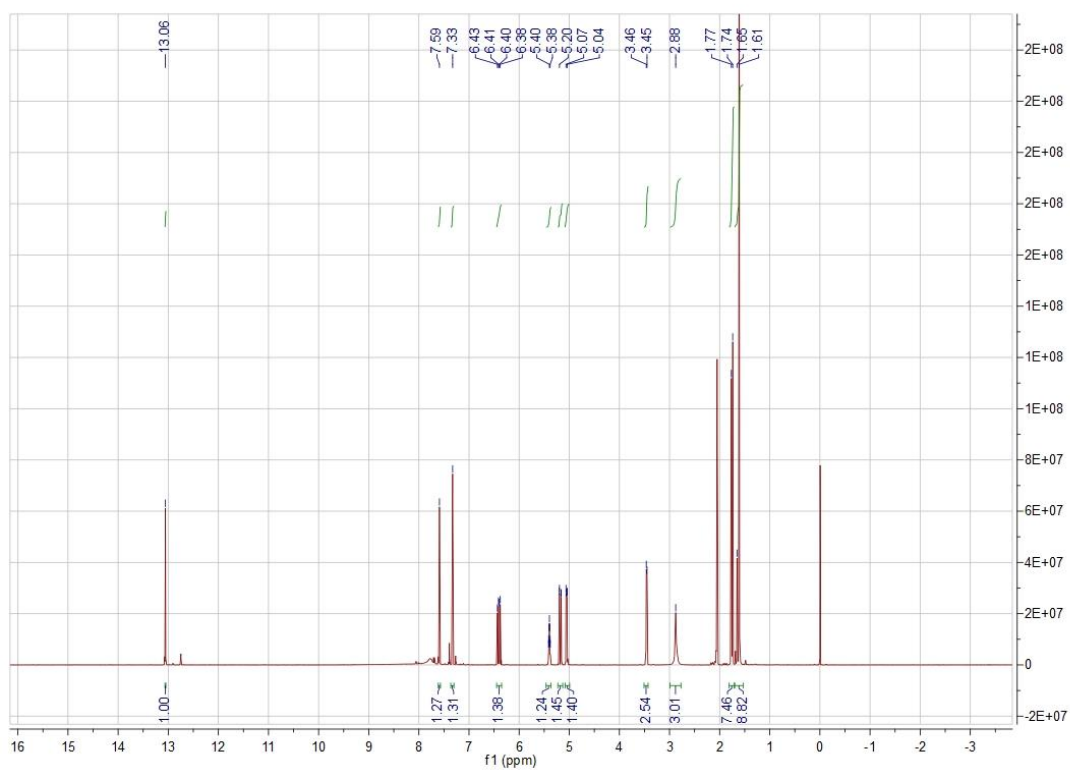


Figure S27. $^1\text{H-NMR}$ spectrum of compound 23.

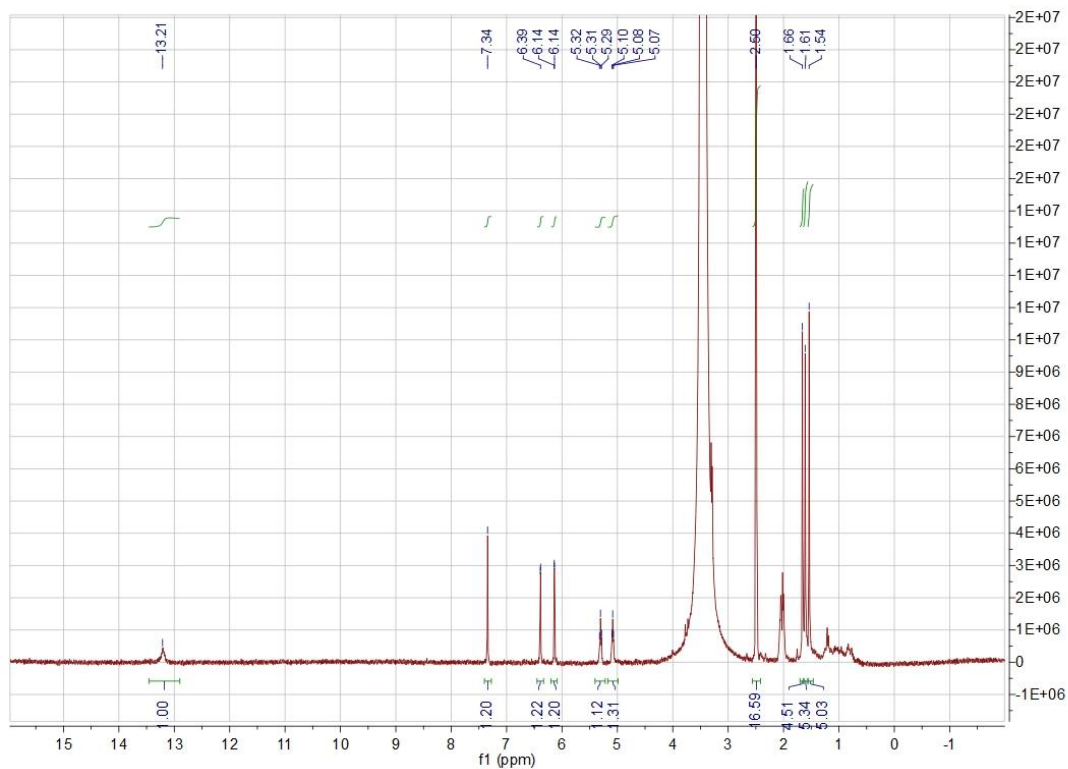


Figure S28. $^1\text{H-NMR}$ spectrum of compound 24.

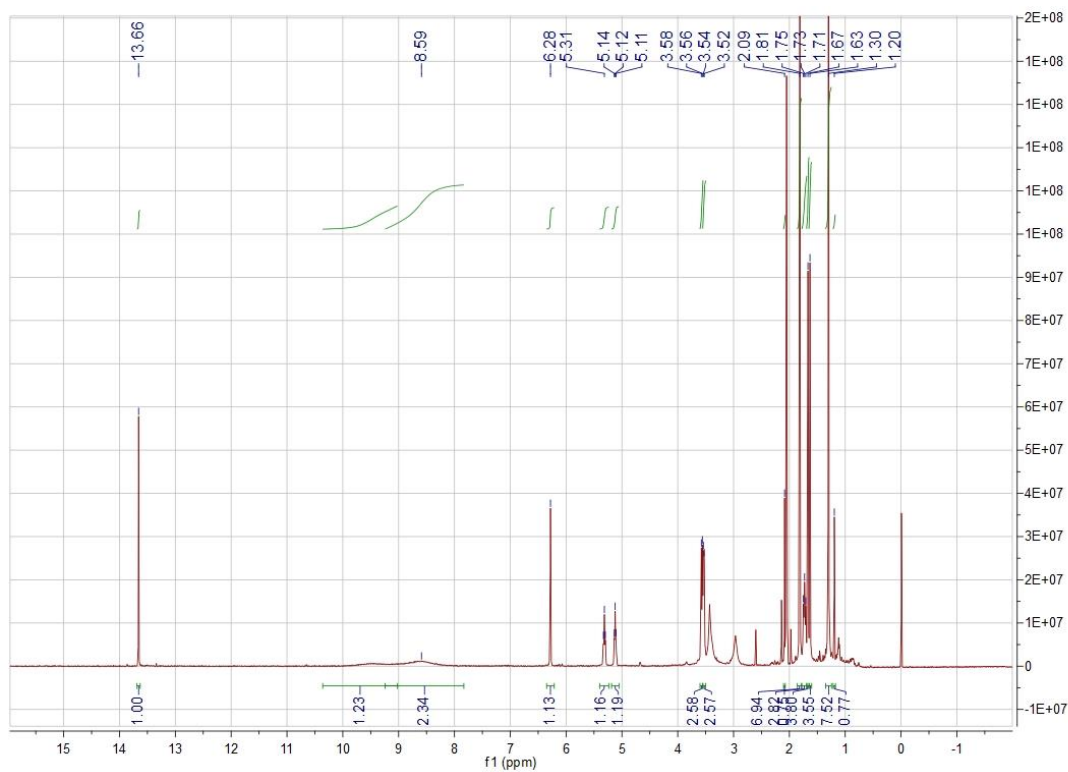


Figure S29. $^1\text{H-NMR}$ spectrum of compound 25.

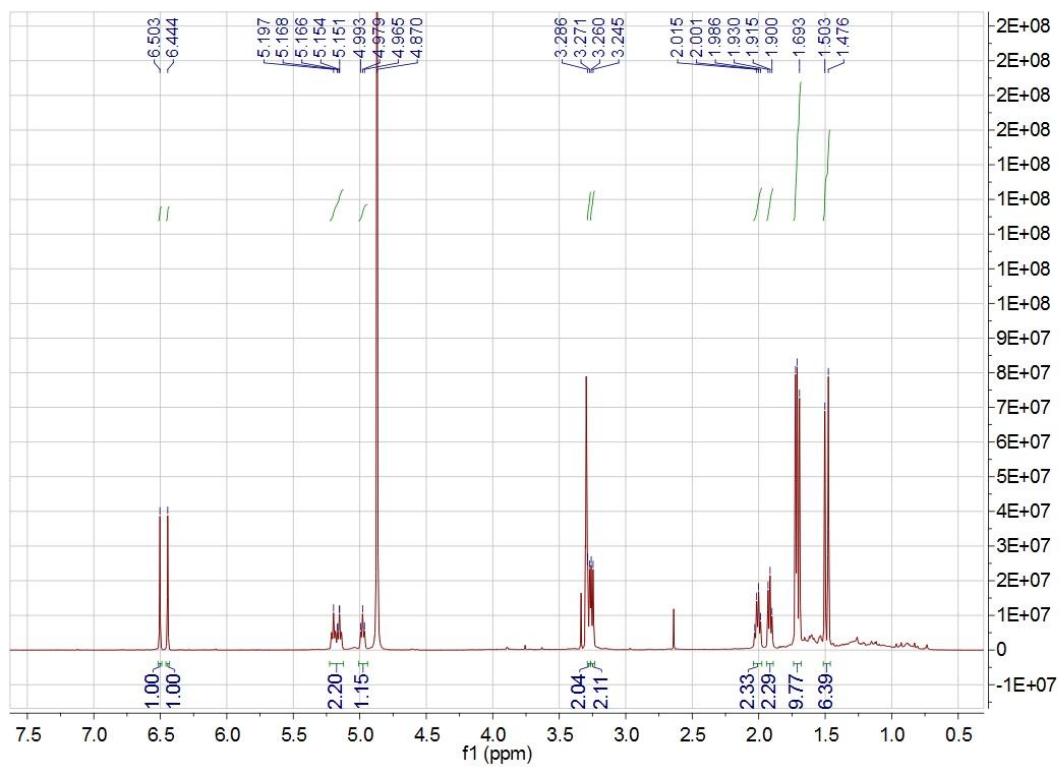


Figure S30. ¹H-NMR spectrum of compound 26.

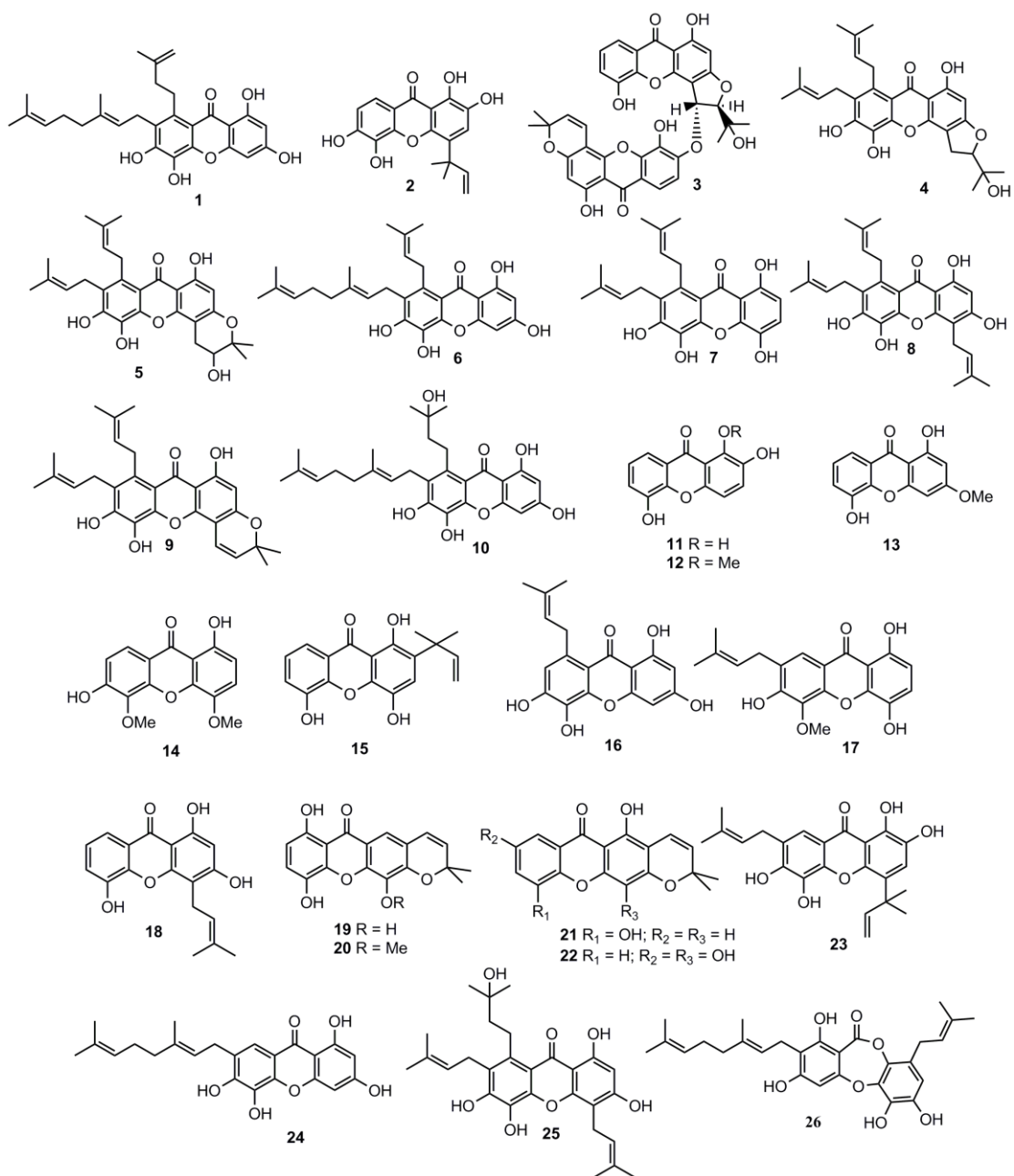


Figure S31. Structures of compounds 1-26.