Supporting Material

Conversion of natural narciclasine to its C-1 and C-6 derivatives and their biological evaluation. Some unusual chemistry of narciclasine.

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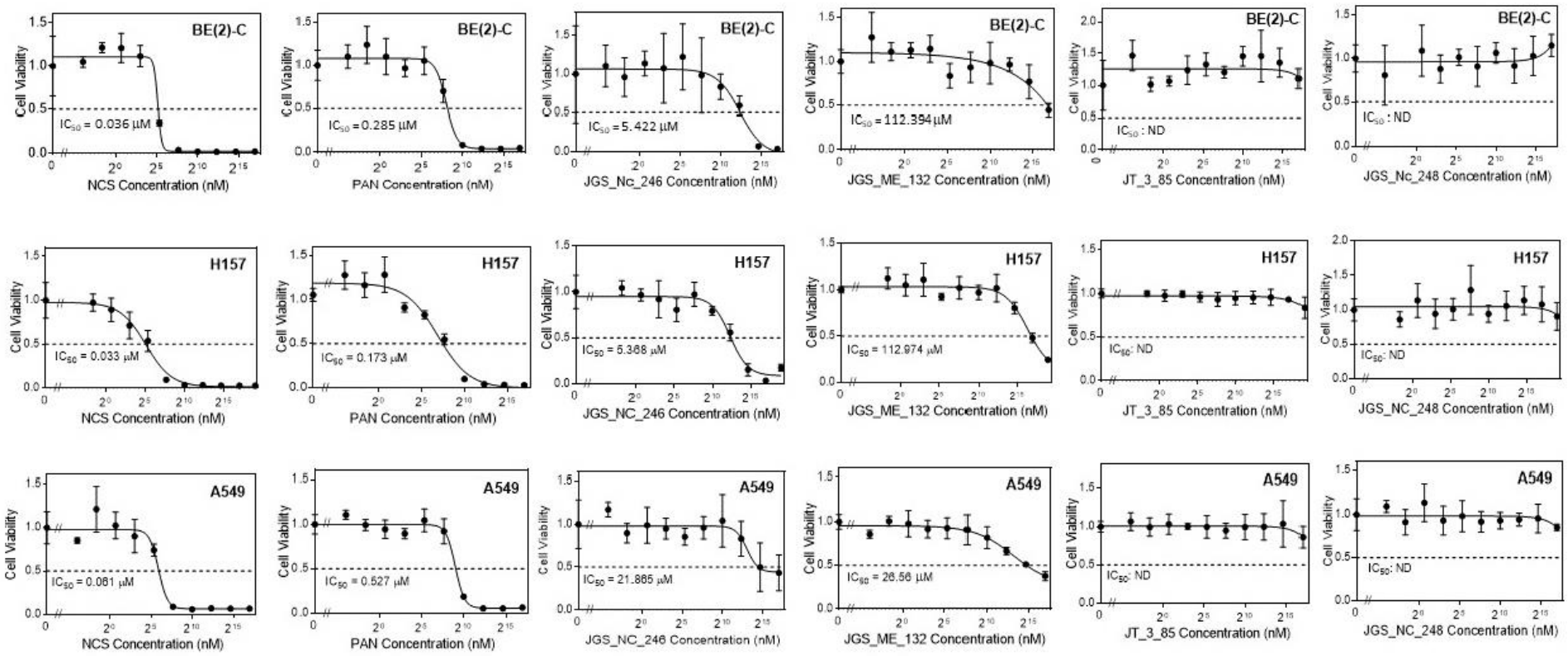
Figure S1. Biological Activity



Suppl. Figure S1. Dose-dependent cytotoxicity of compounds in cancer cell lines. Cells were treated with a serial of dilutions of each compound in three replicates in 96-well plates for 4 days, and cell viability was measured using MTT assay. Shown in each figure is dose-dependent response of the indicated cells to the indicated compound, with the dotted line signifying the IC_{50}. ND, not determined (>500 μM). NCS = **1**, PAN = **2**, JGS_Nc_246 = **29**, JGS_ME_132 = **30**, JT_3_85 = **31**, JGS_Nc_248 = **33**.

Selected Spectra

Figure S2. ^{1}H-NMR of **6**

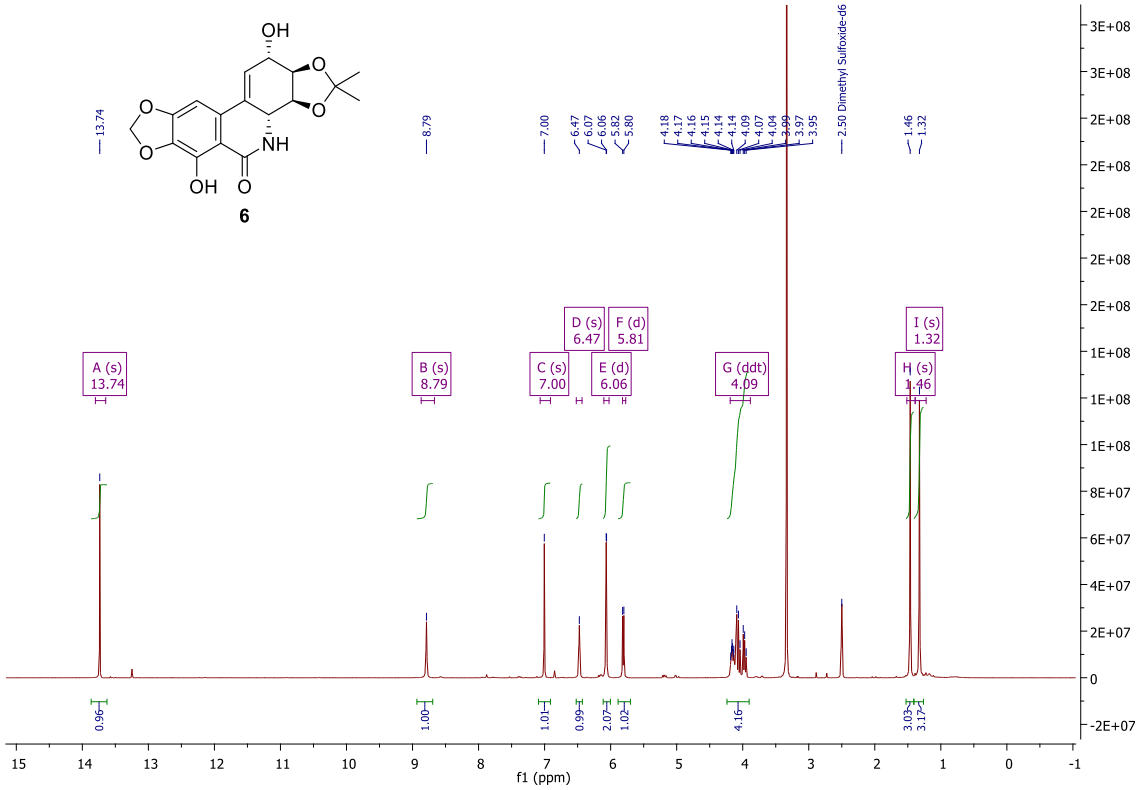


Figure S3. ^{13}C-NMR of **6**

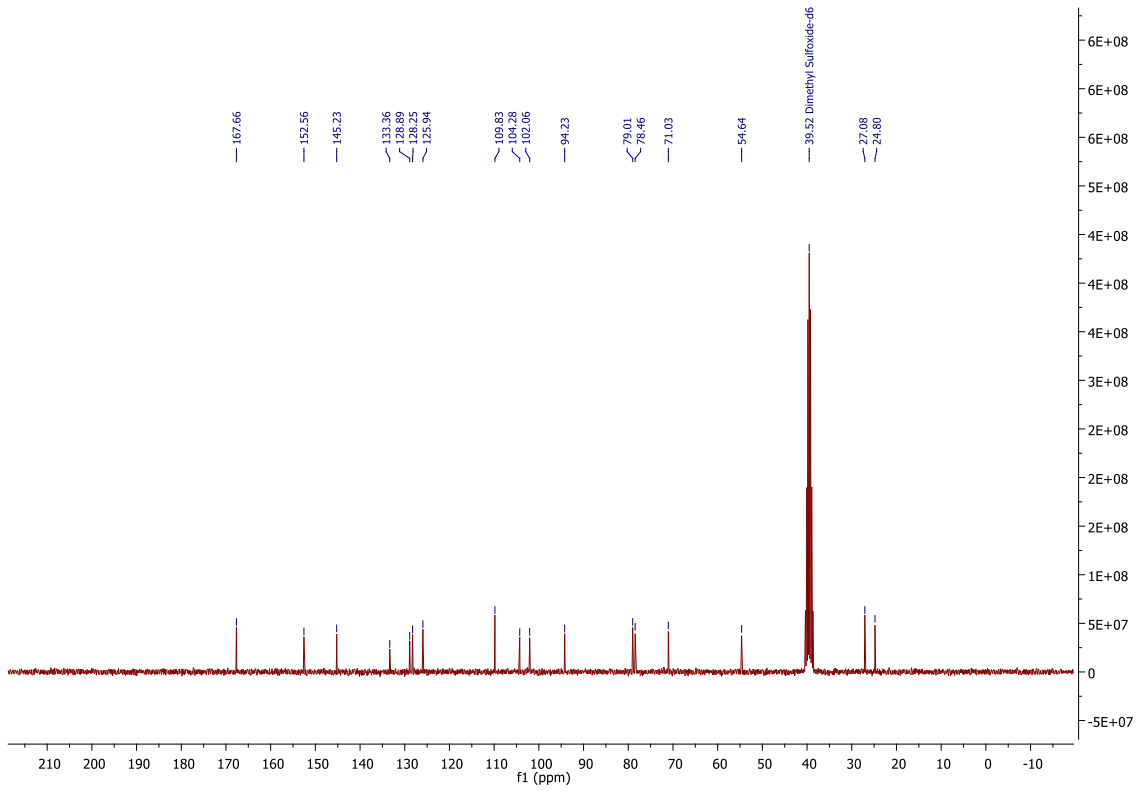


Figure S4. ^{1}H-NMR of **9**

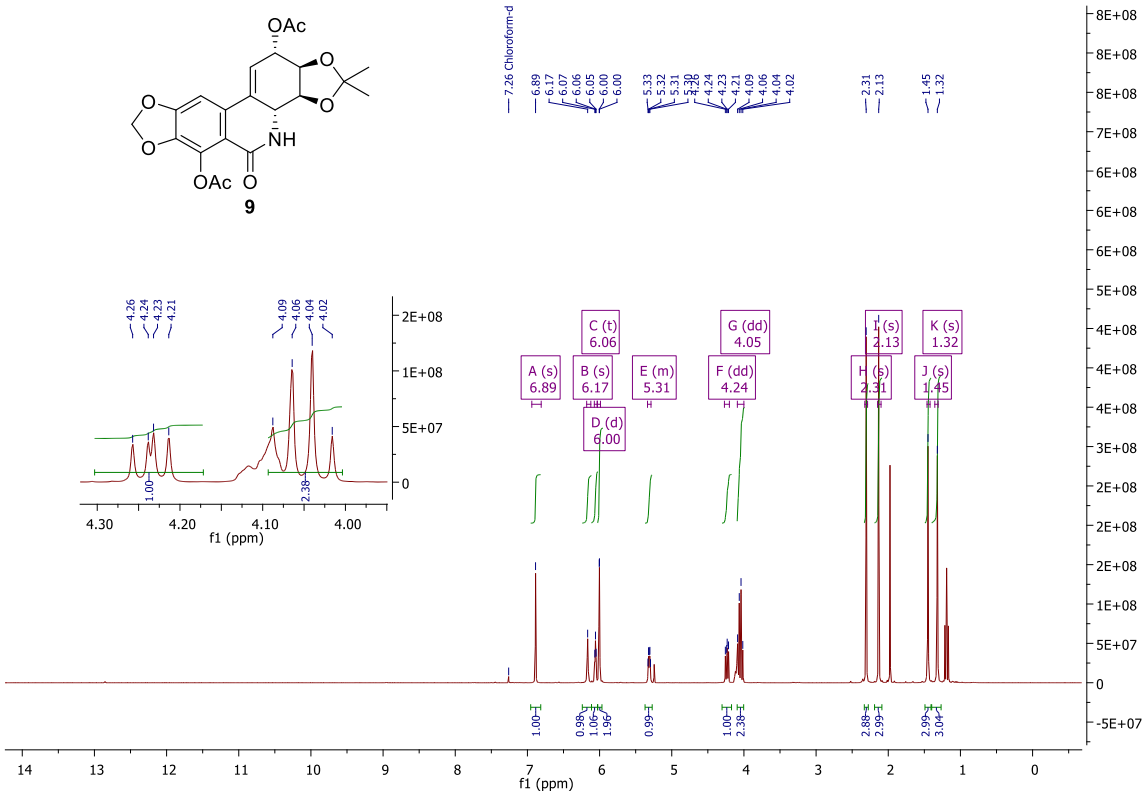


Figure S5. ^{13}C-NMR of **9**

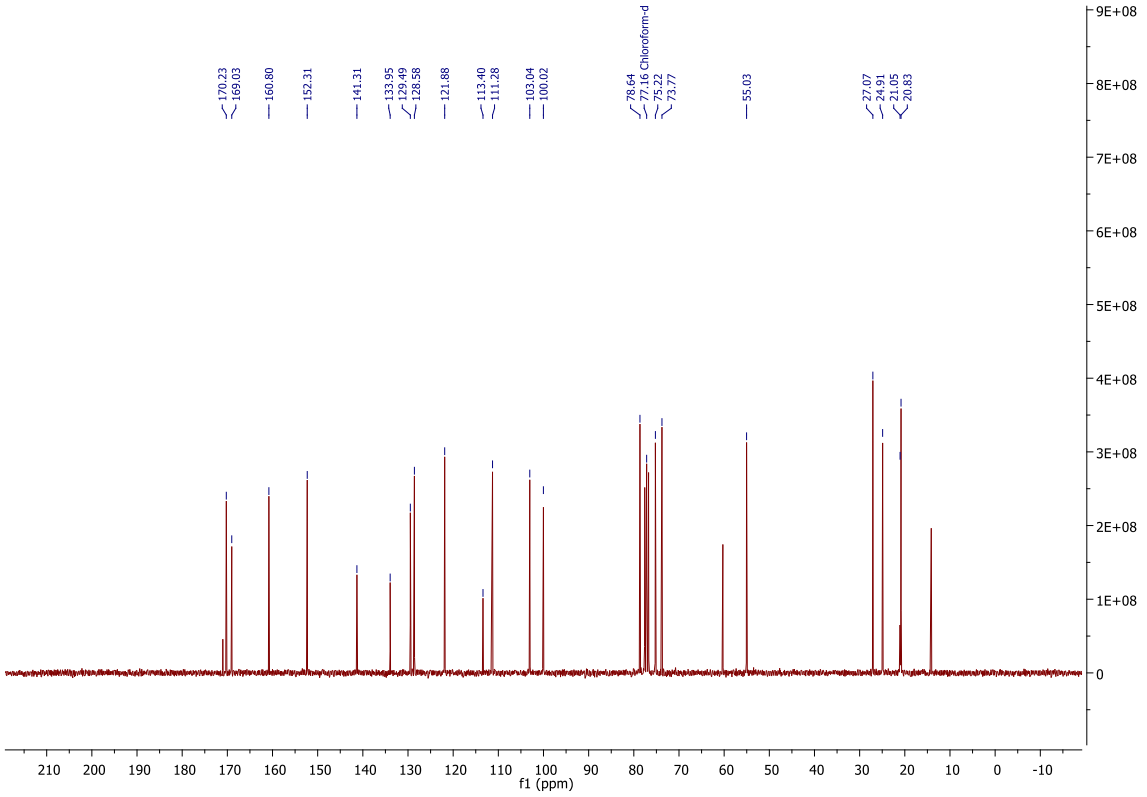


Figure S6. ^{1}H-NMR of **10**

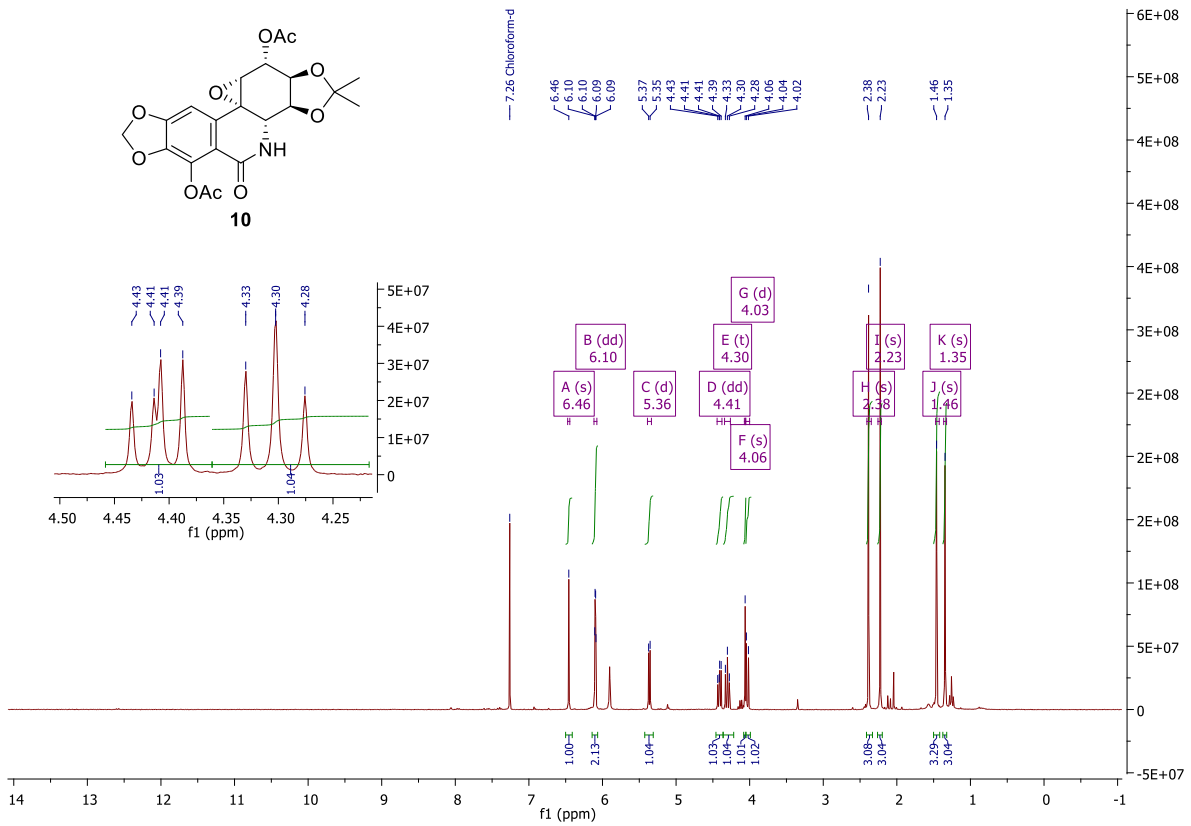


Figure S7. ^{13}C-NMR of **10**

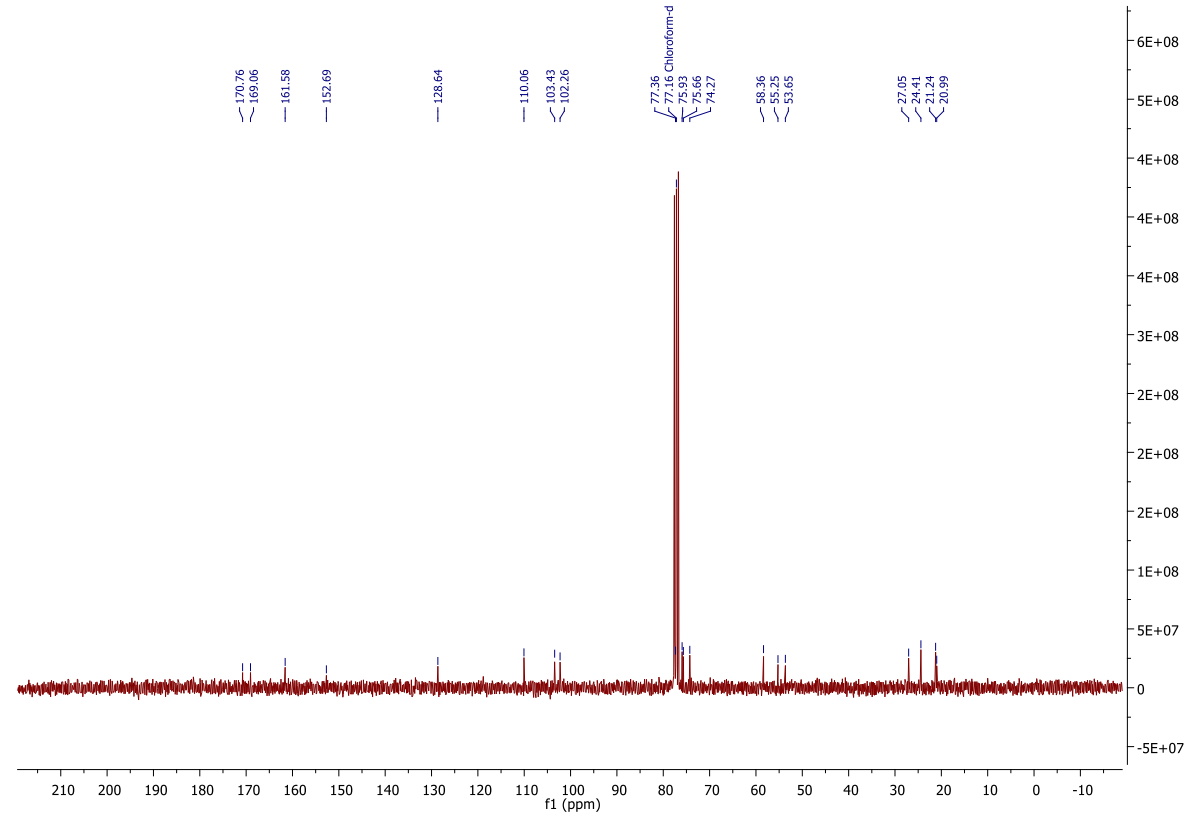


Figure S8. ^{1}H-NMR of **11**

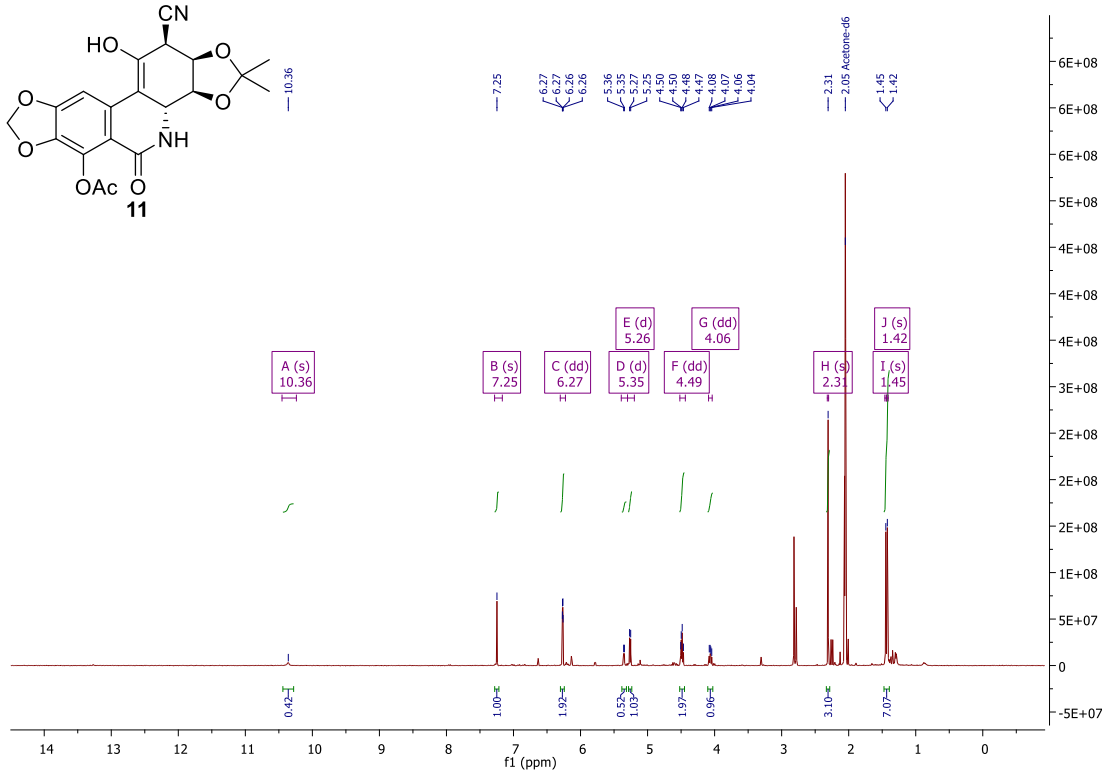


Figure S9. ^{13}C-NMR of **11**

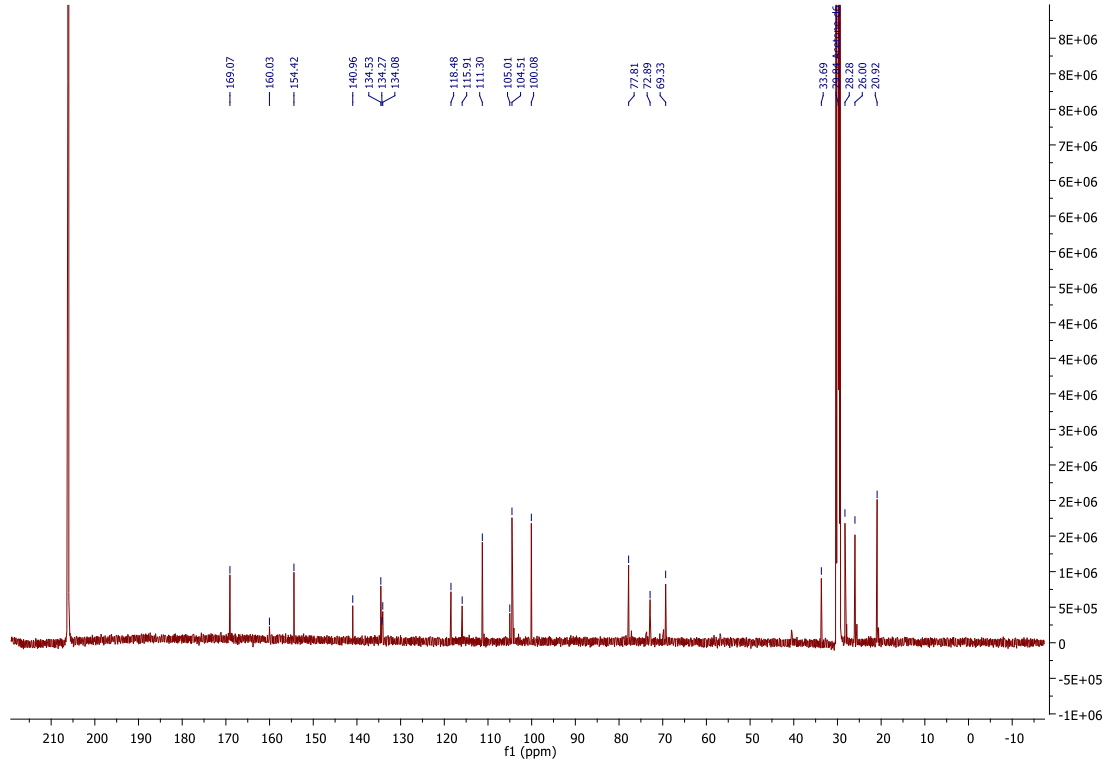


Figure S10. ^{1}H-NMR of **12a**

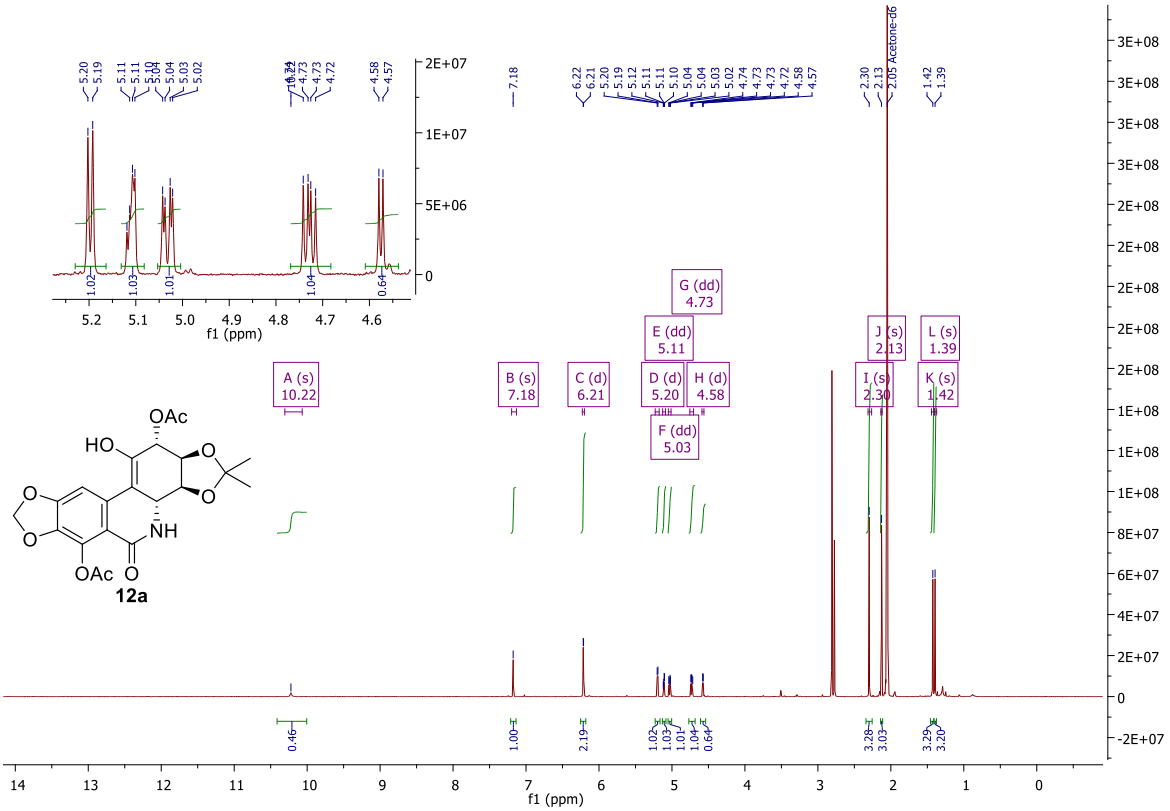


Figure S11. ^{13}C-NMR of **12a**

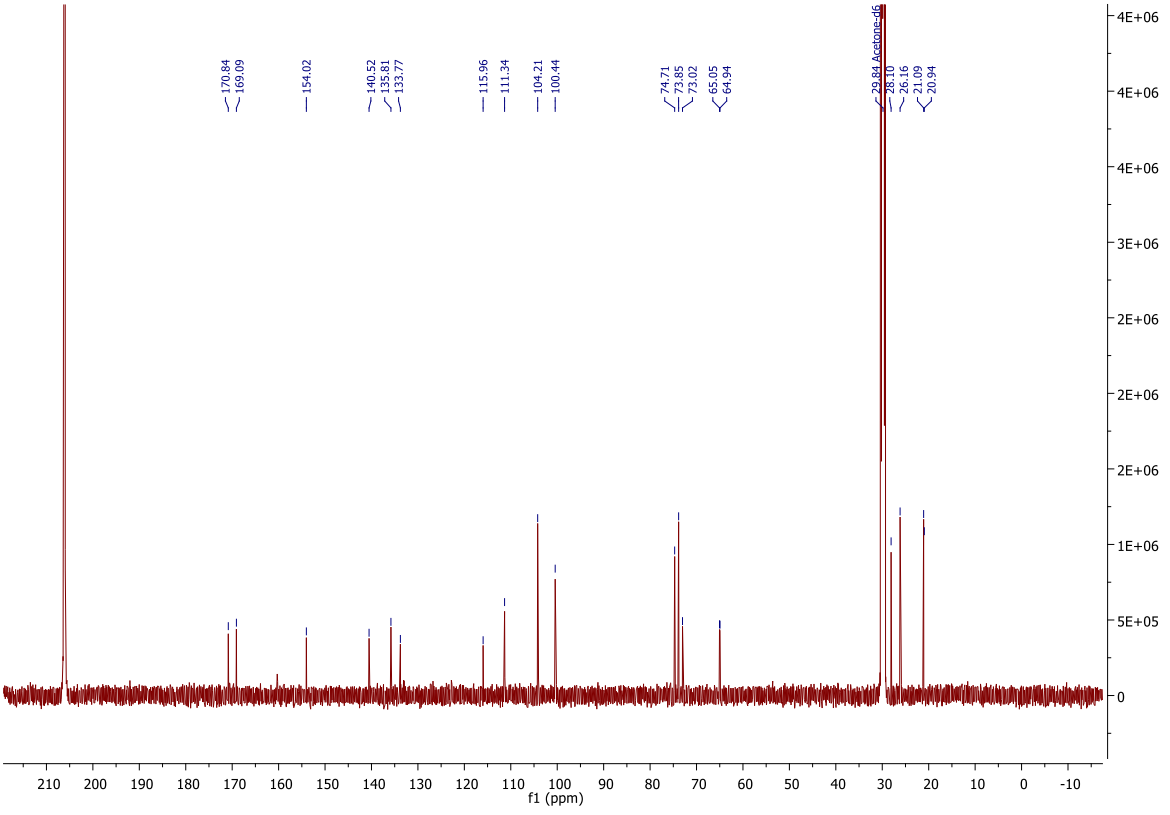


Figure S12. ^{1}H-NMR of **12b**

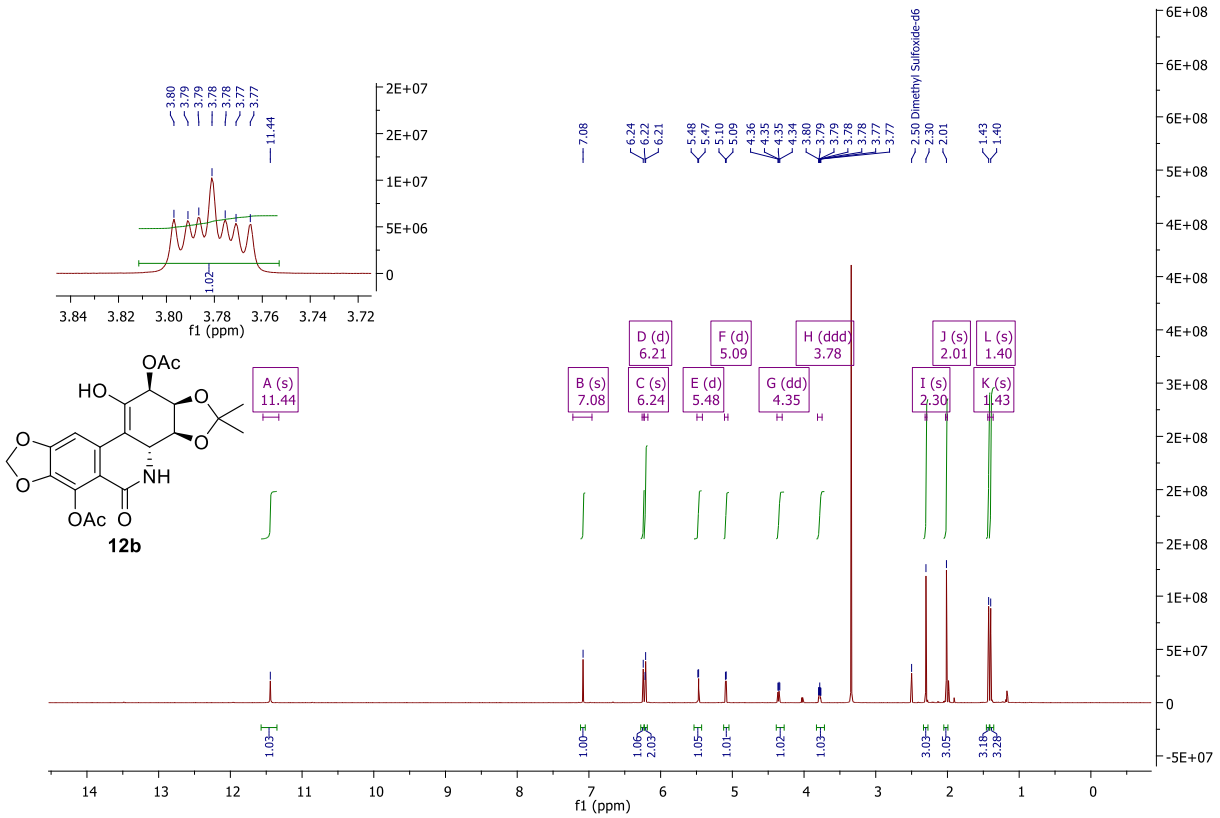


Figure S13. ^{13}C-NMR of **12b**

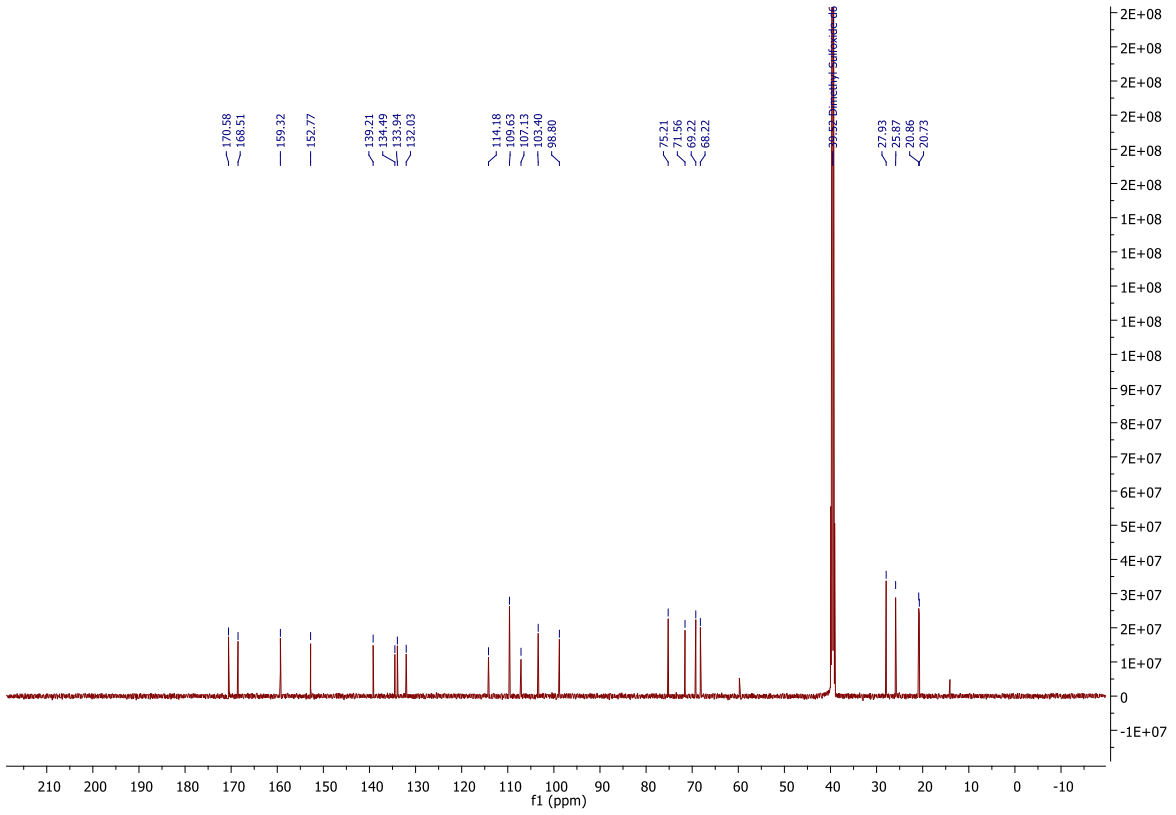


Figure S14. ^{1}H-NMR of **14**

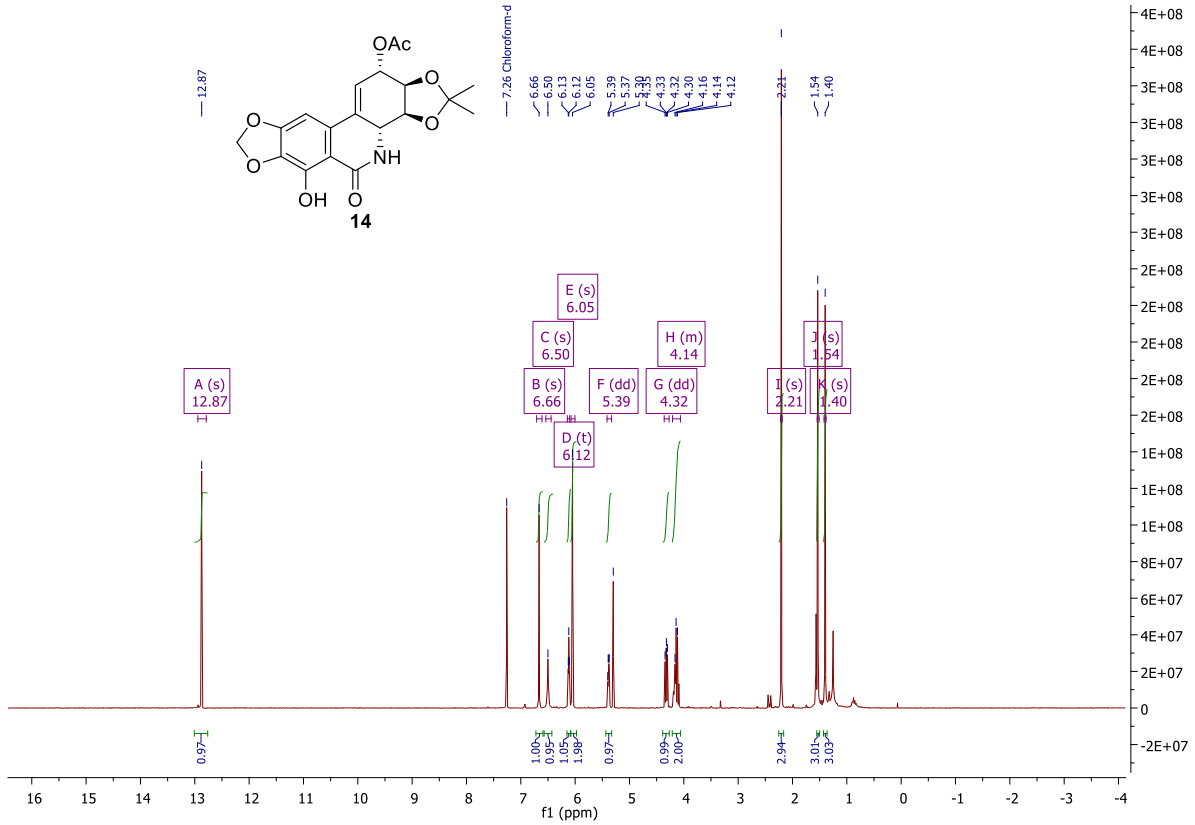


Figure S15. ^{13}C-NMR of **14**

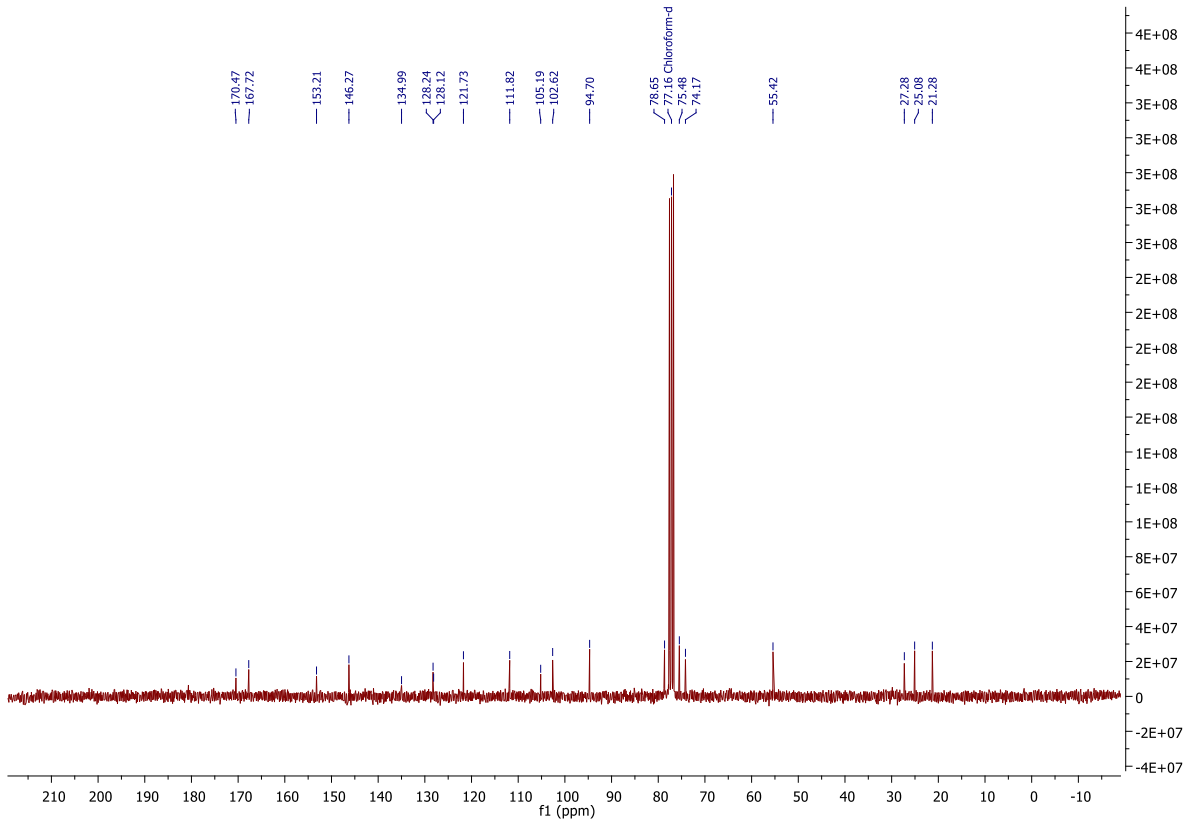
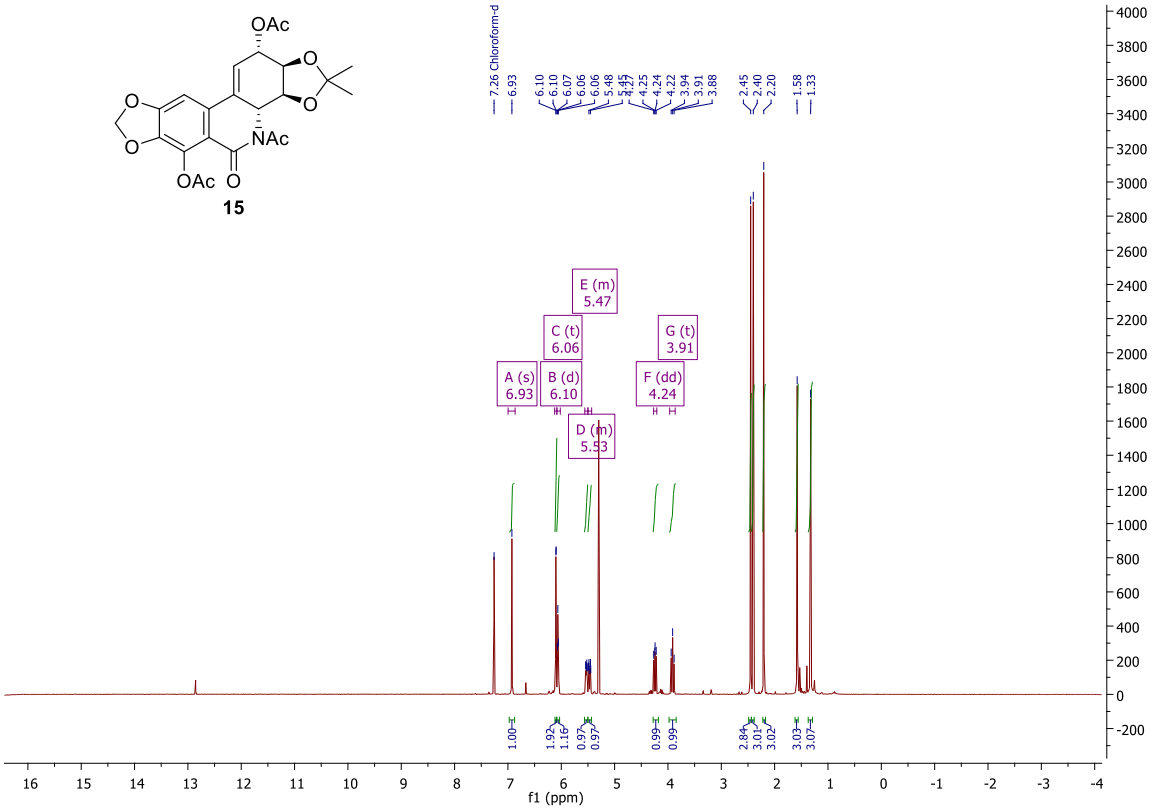


Figure S16. ^{1}H-NMR of **15**



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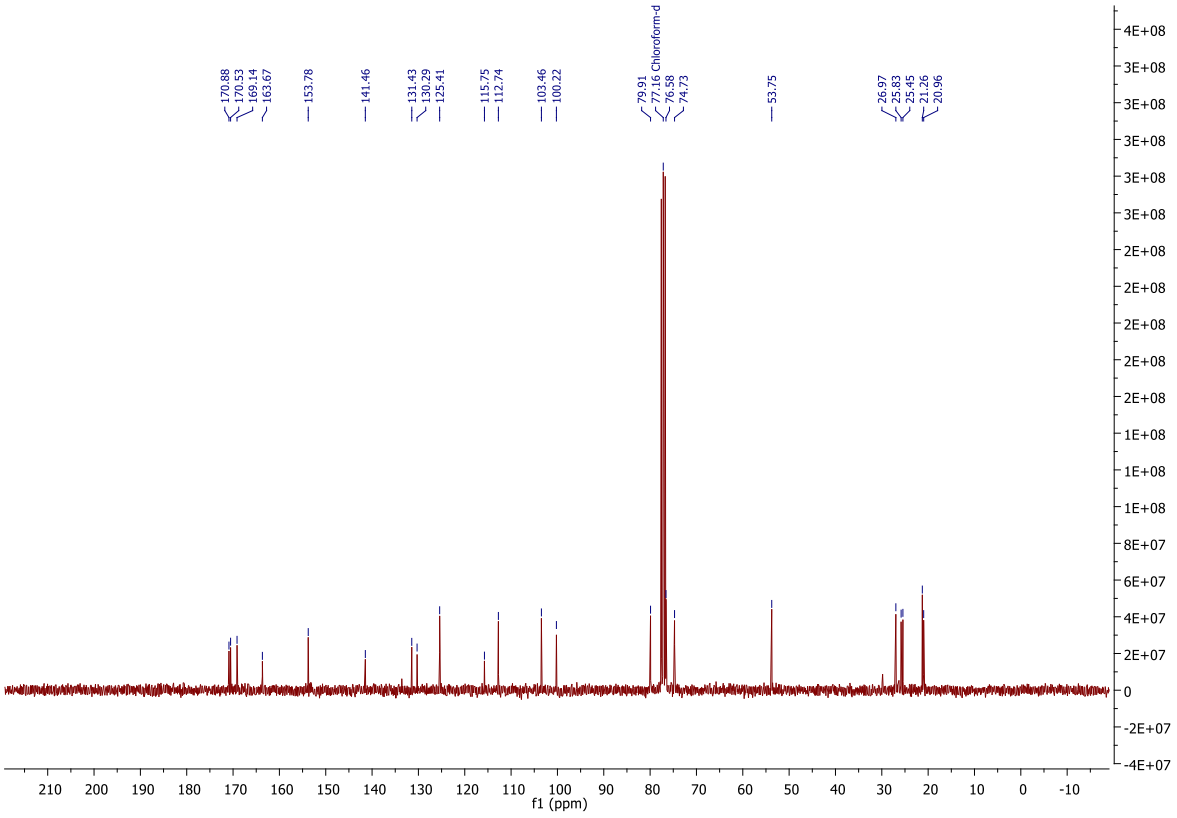

Figure S18. ^{1}H-NMR of **16**

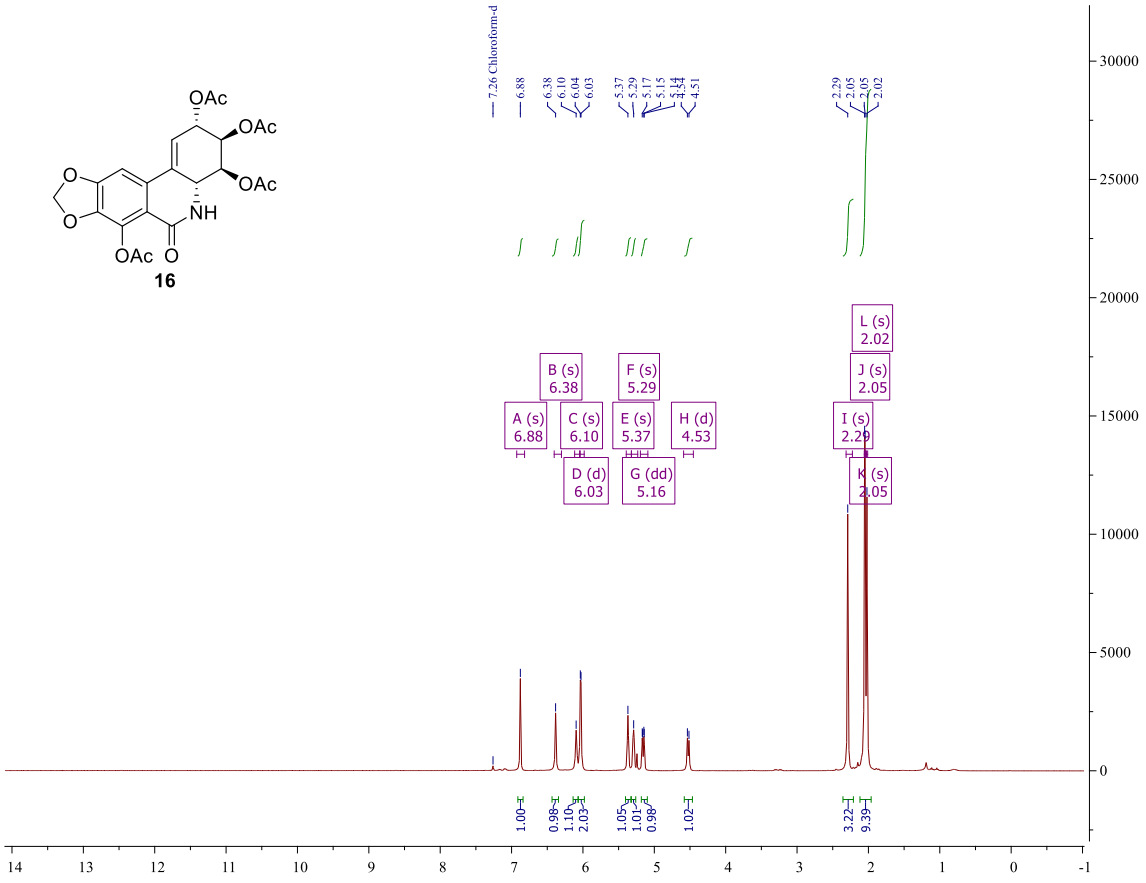

Figure S19. ^{13}C-NMR of **16**

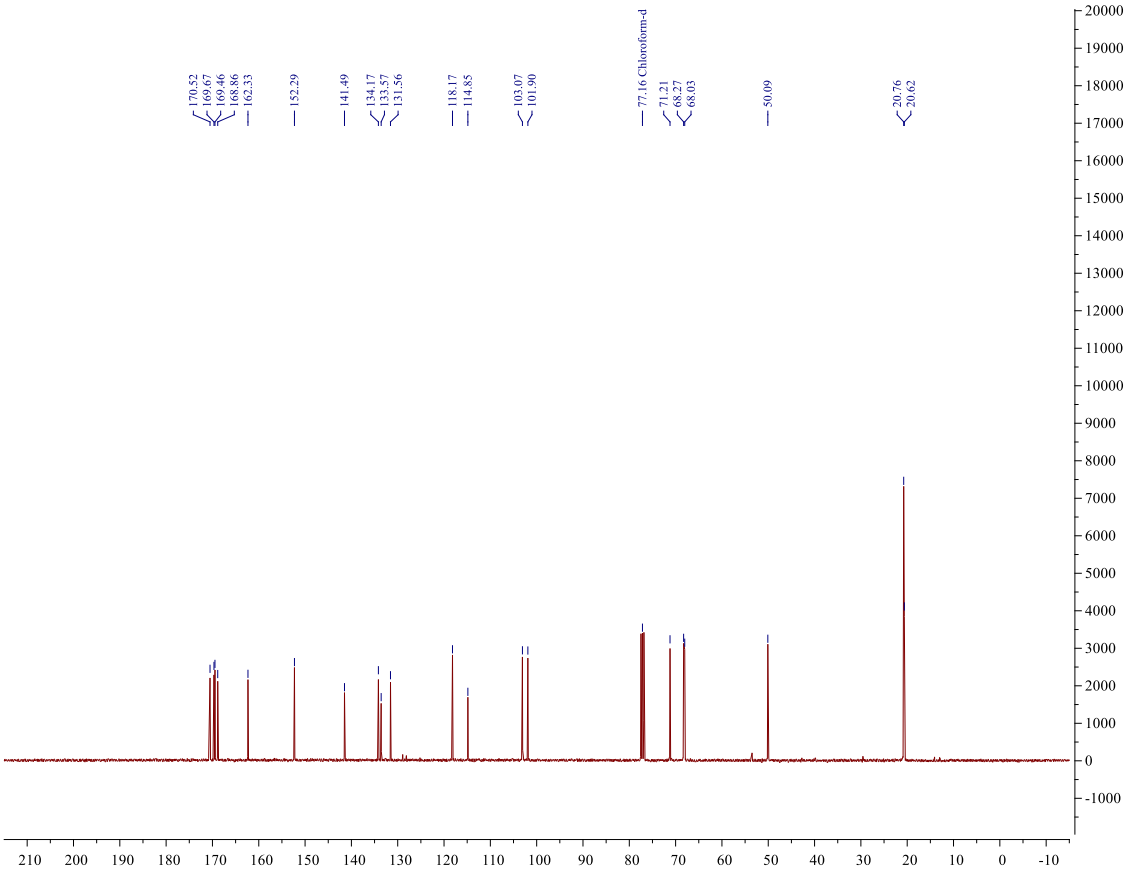

Figure S20. ^{1}H-NMR of **17a**

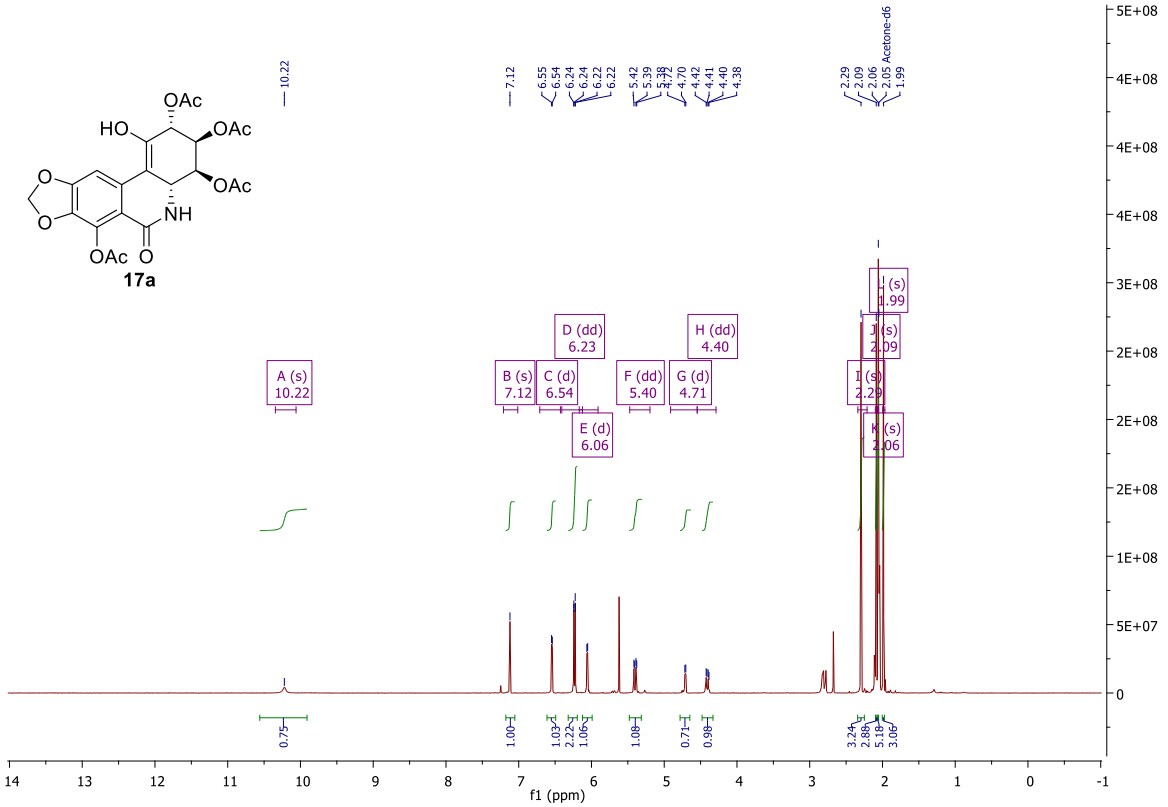

Figure S21. ^{13}C-NMR of **17a**

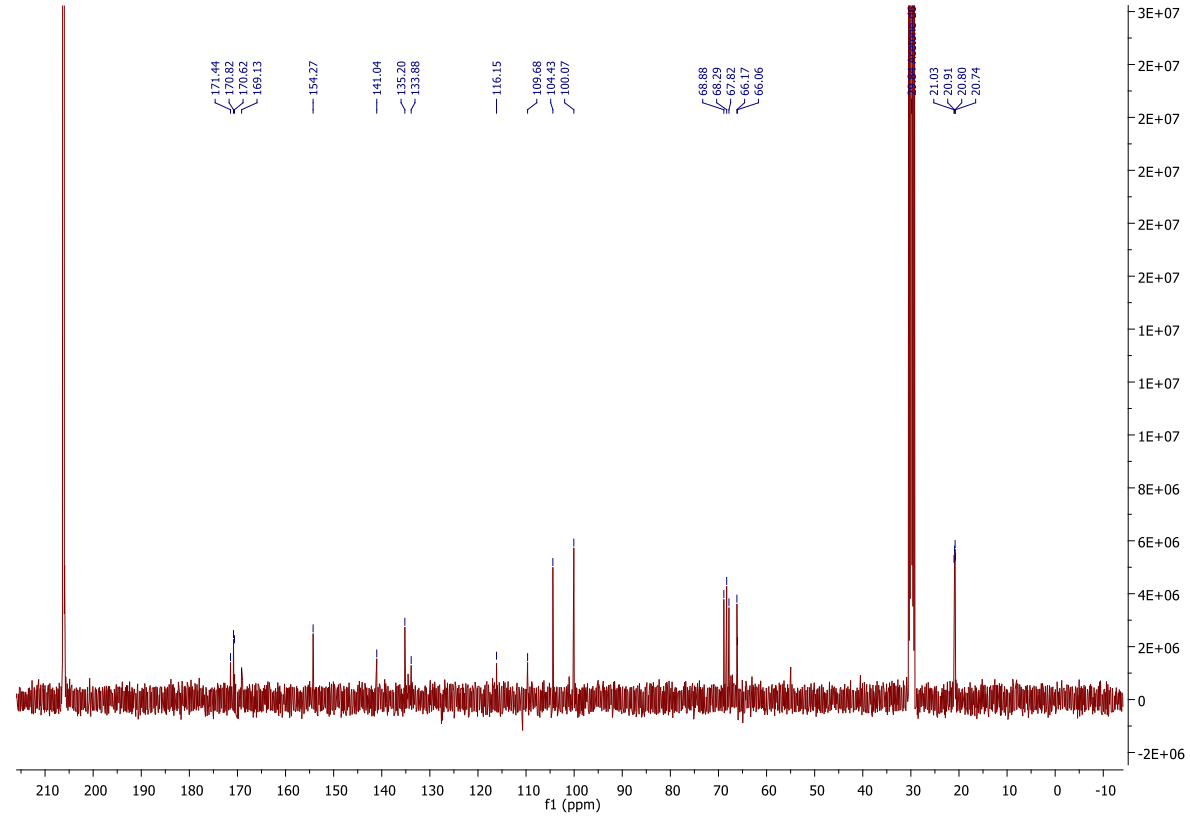

Figure S22. ^{1}H-NMR of **24**

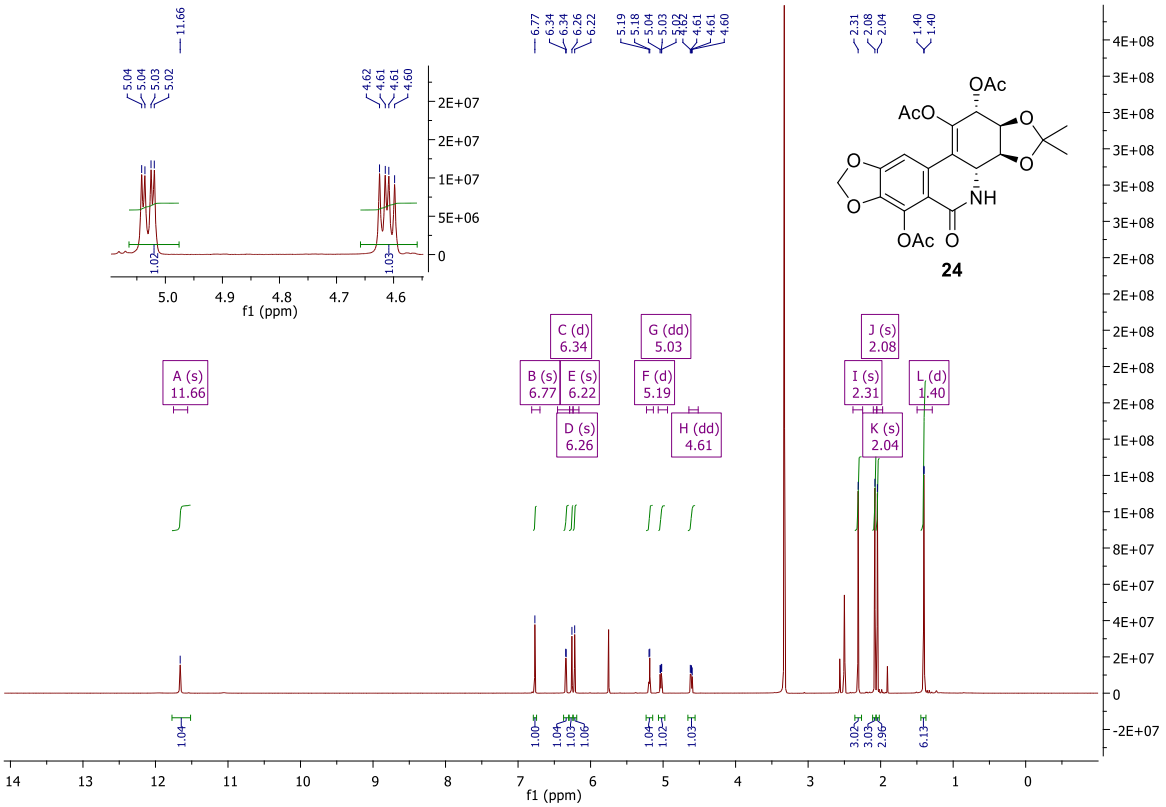

Figure S23. ^{13}C-NMR of **24**

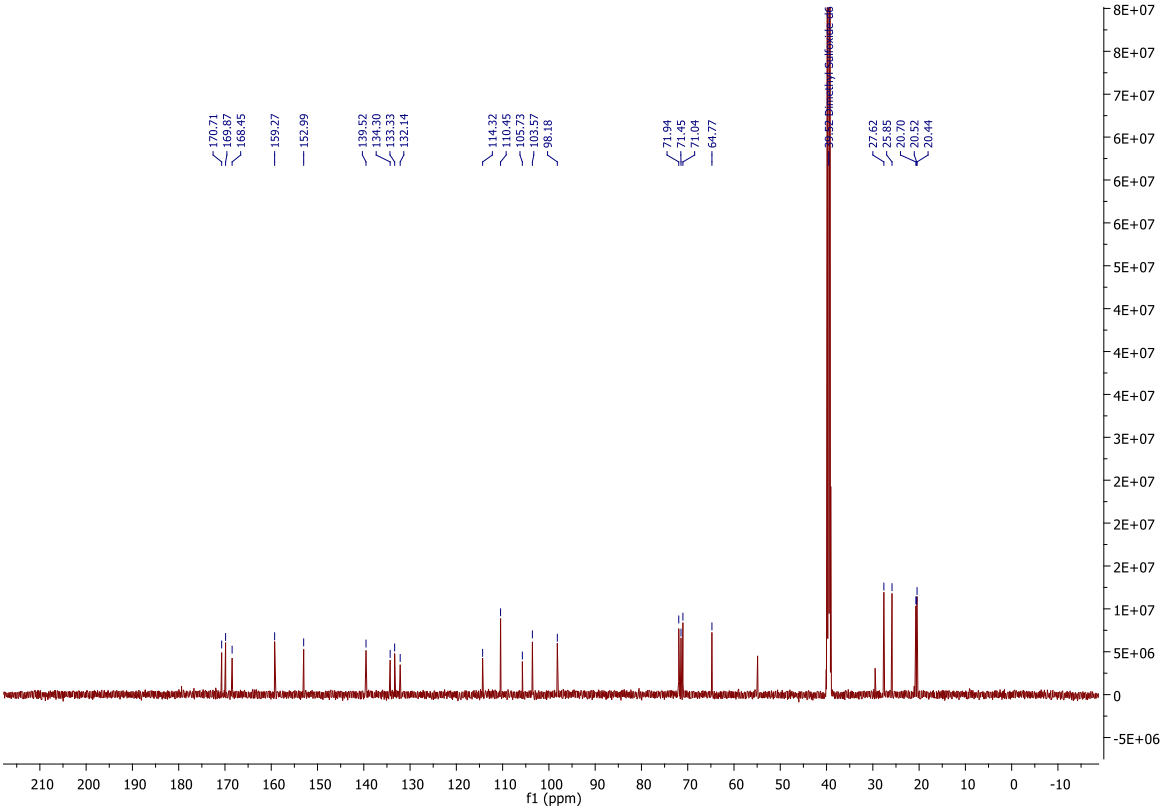

Figure S24. ^{1}H-^{15}N HSQC of **24**

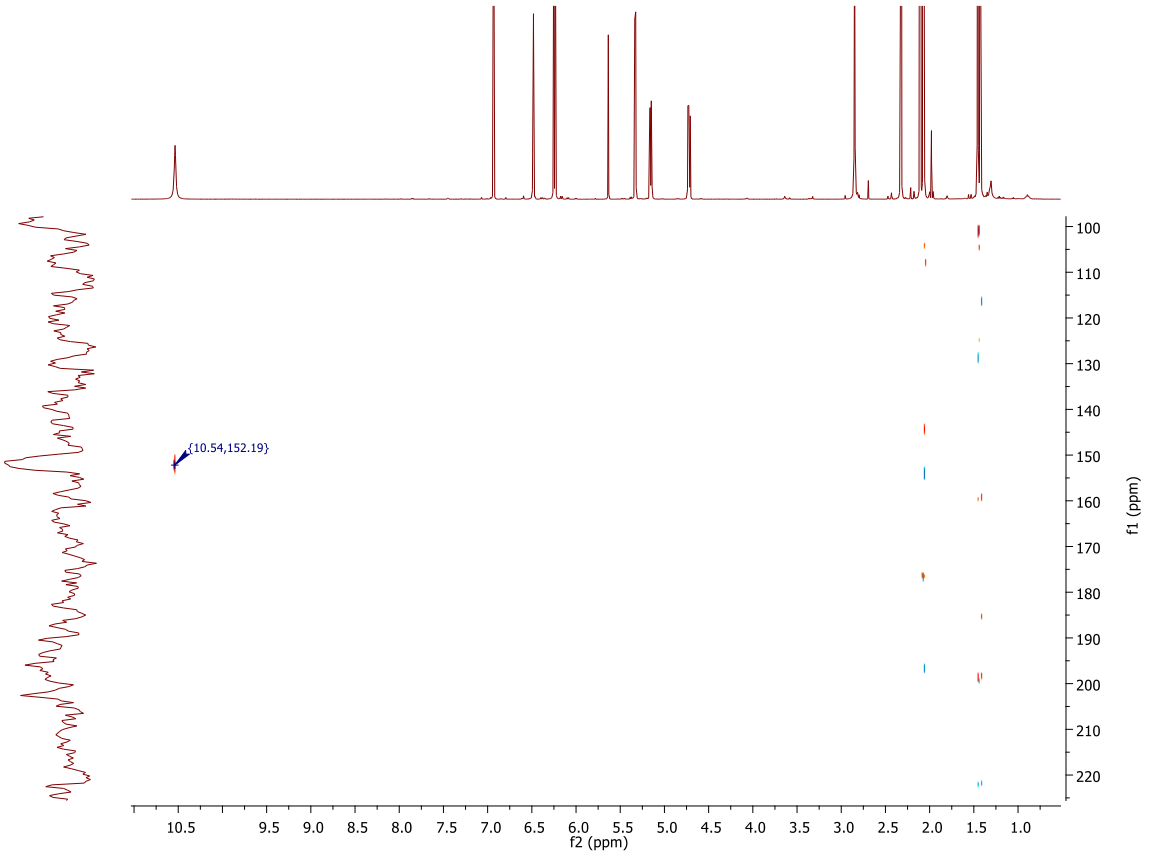

Figure S25. ^{1}H-^{15}N HMBC of **24**

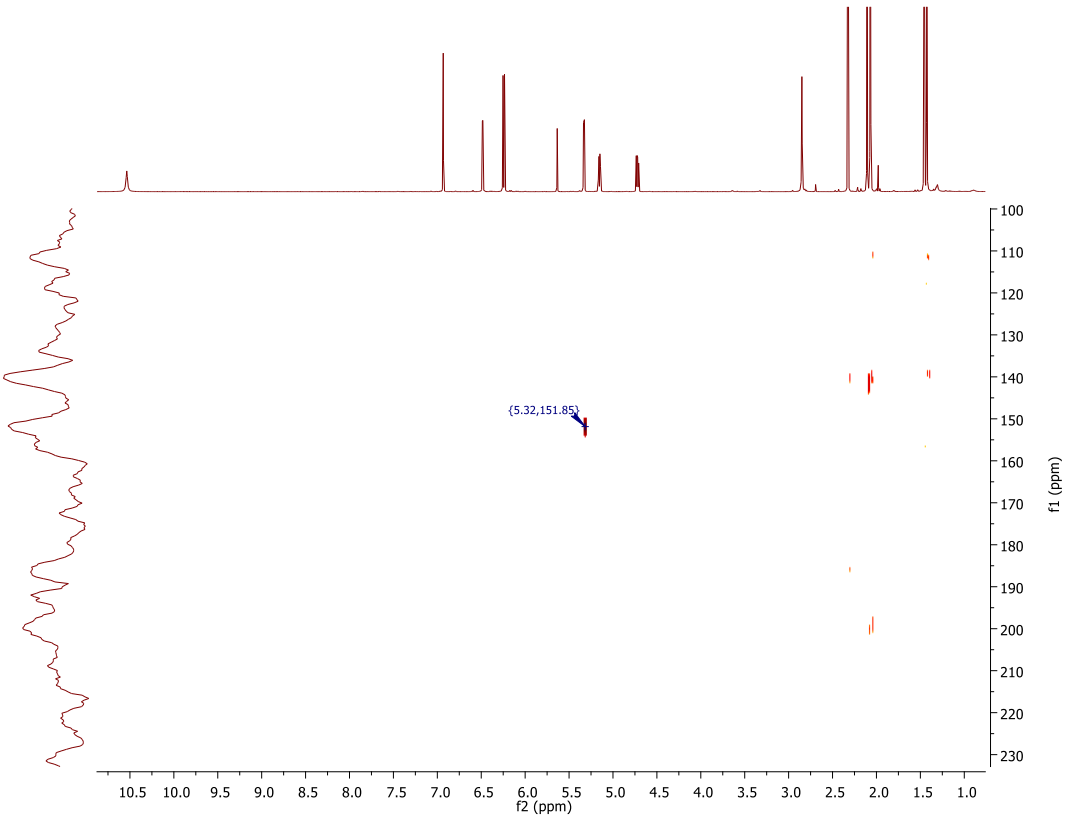

Figure S26. ^{1}H-NMR of **25**

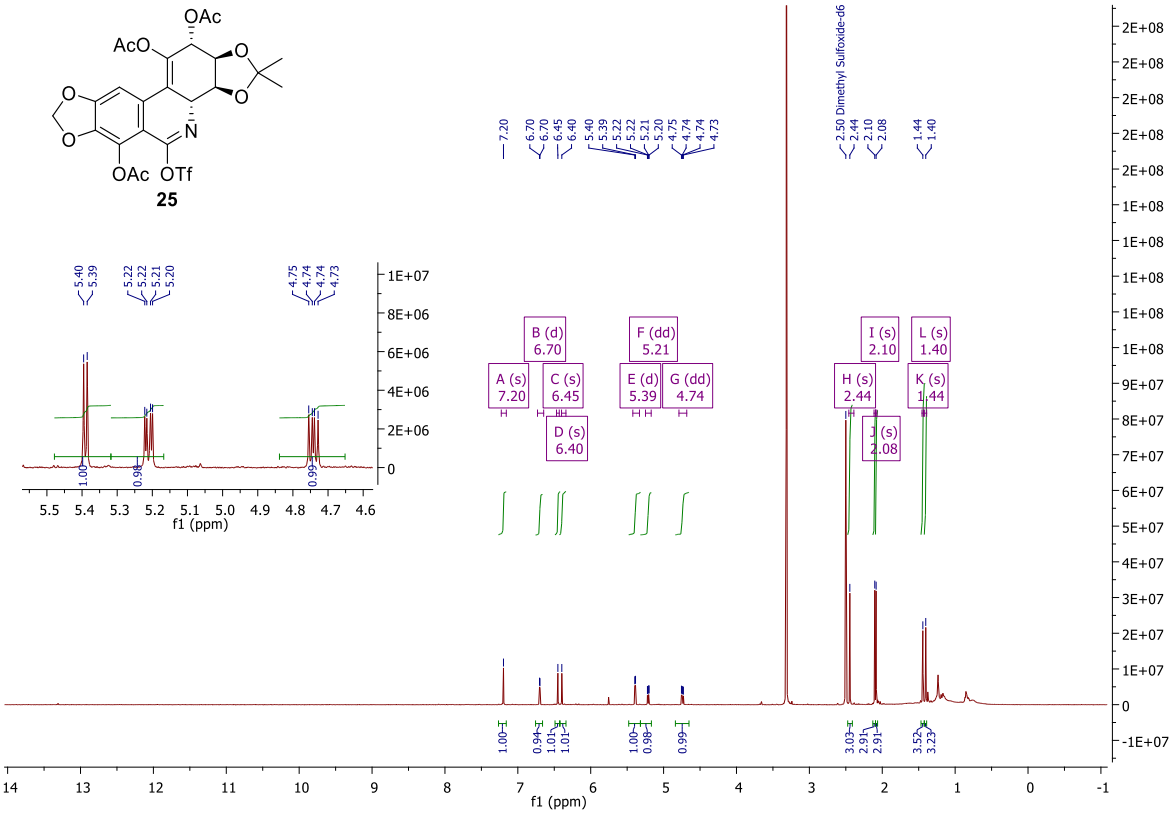

Figure S27. ^{13}C-NMR of **25**

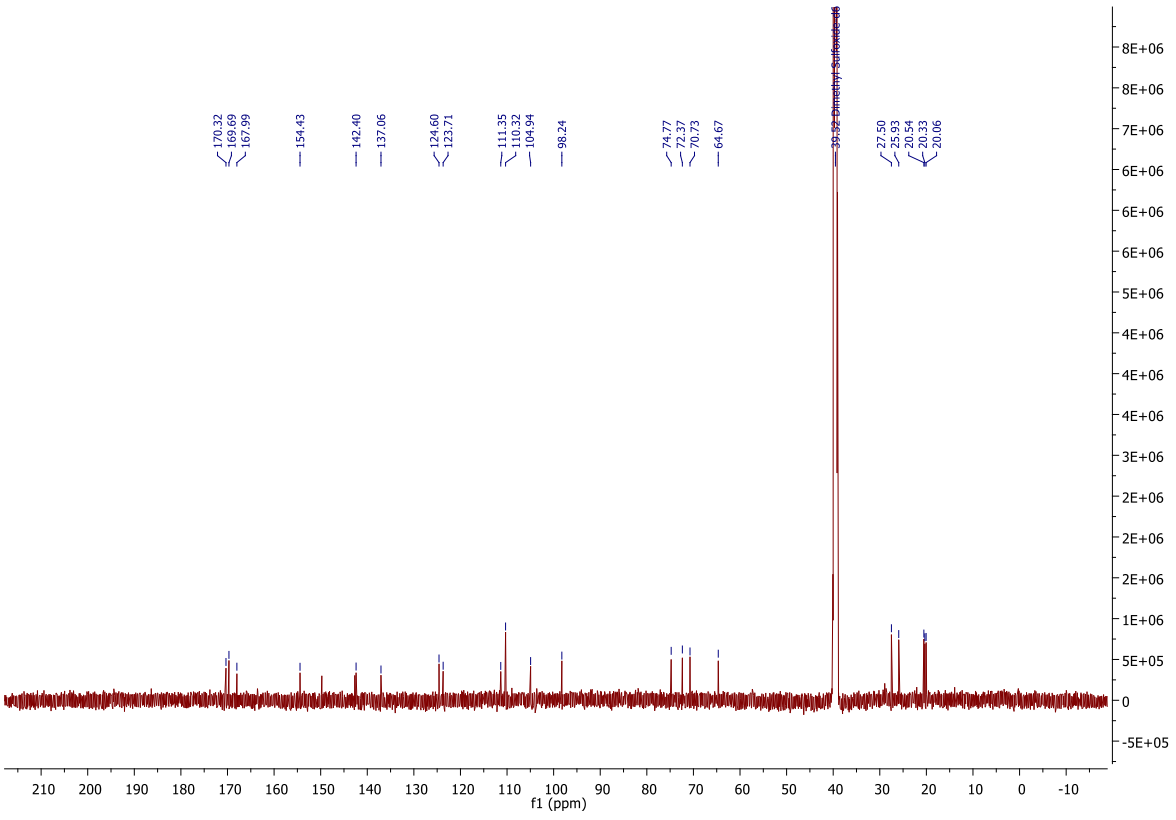

Figure S28. ^{19}F-NMR of **25**

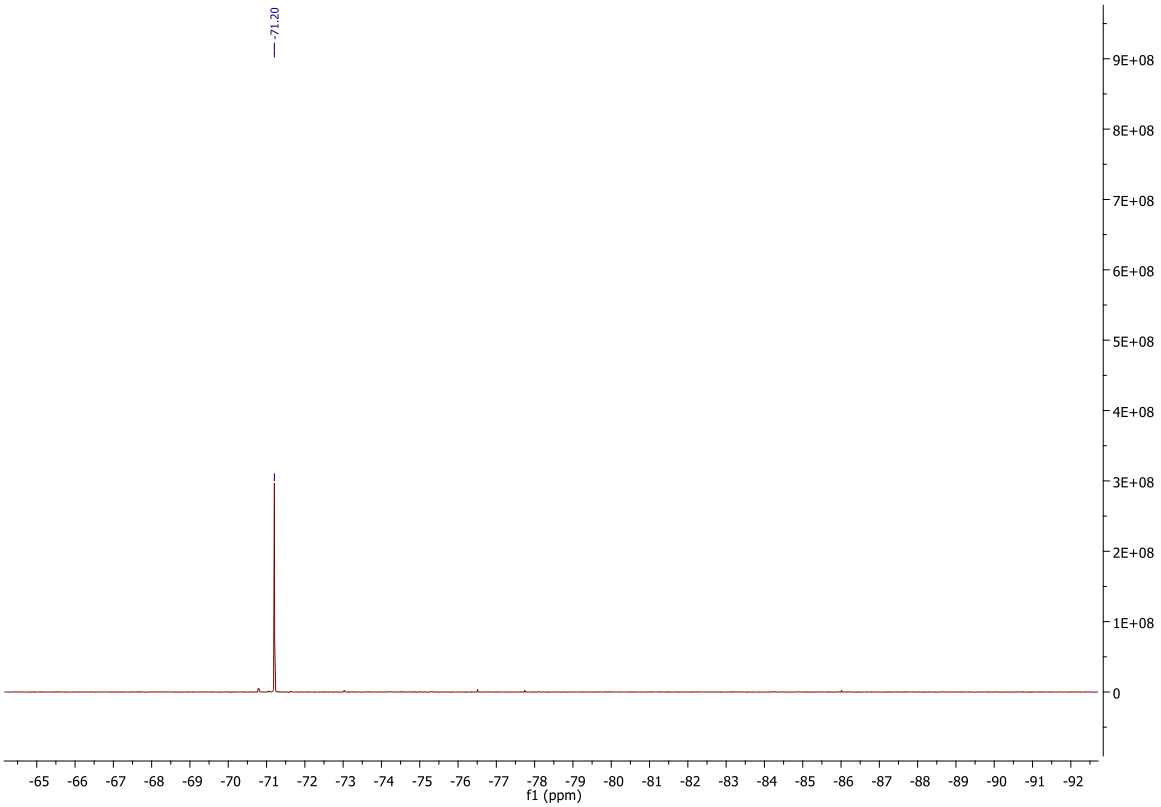

Figure S29. ^{1}H-NMR of **26**

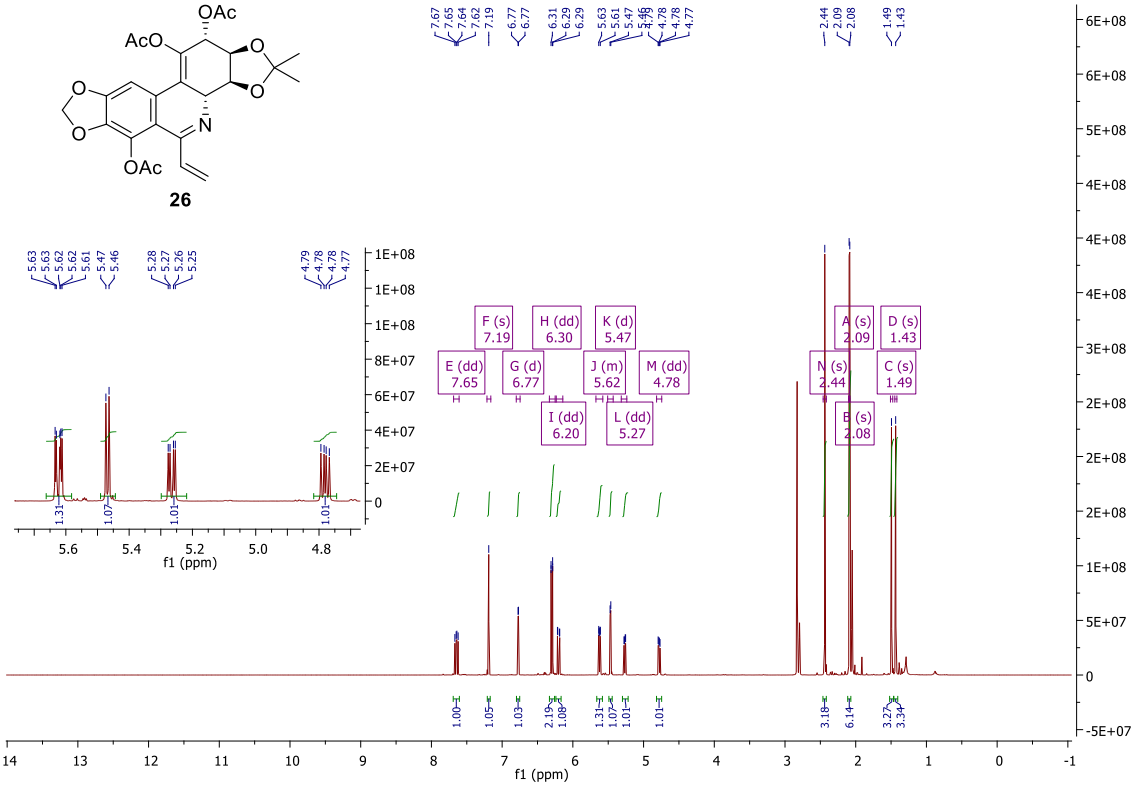

Figure S30. ^{13}C-NMR of **26**

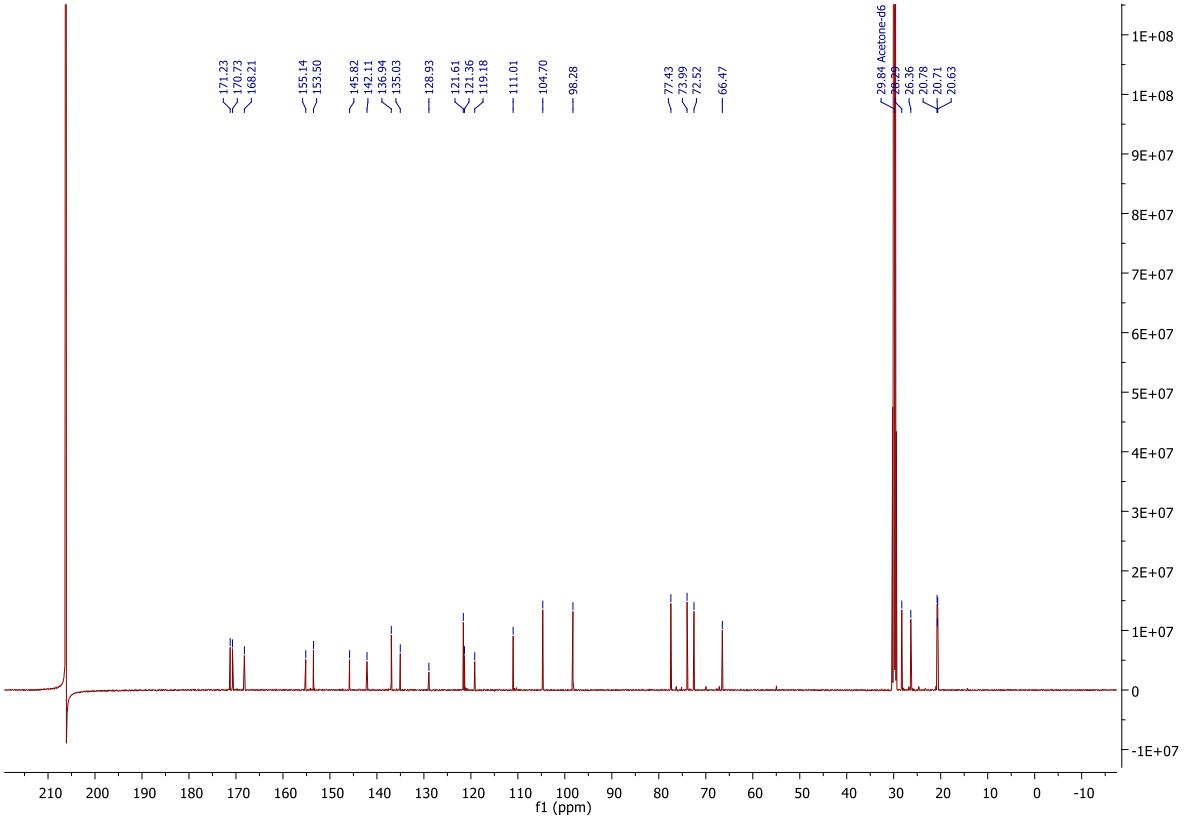

Figure S31. ^{1}H-^{15}N HMBC of **26**

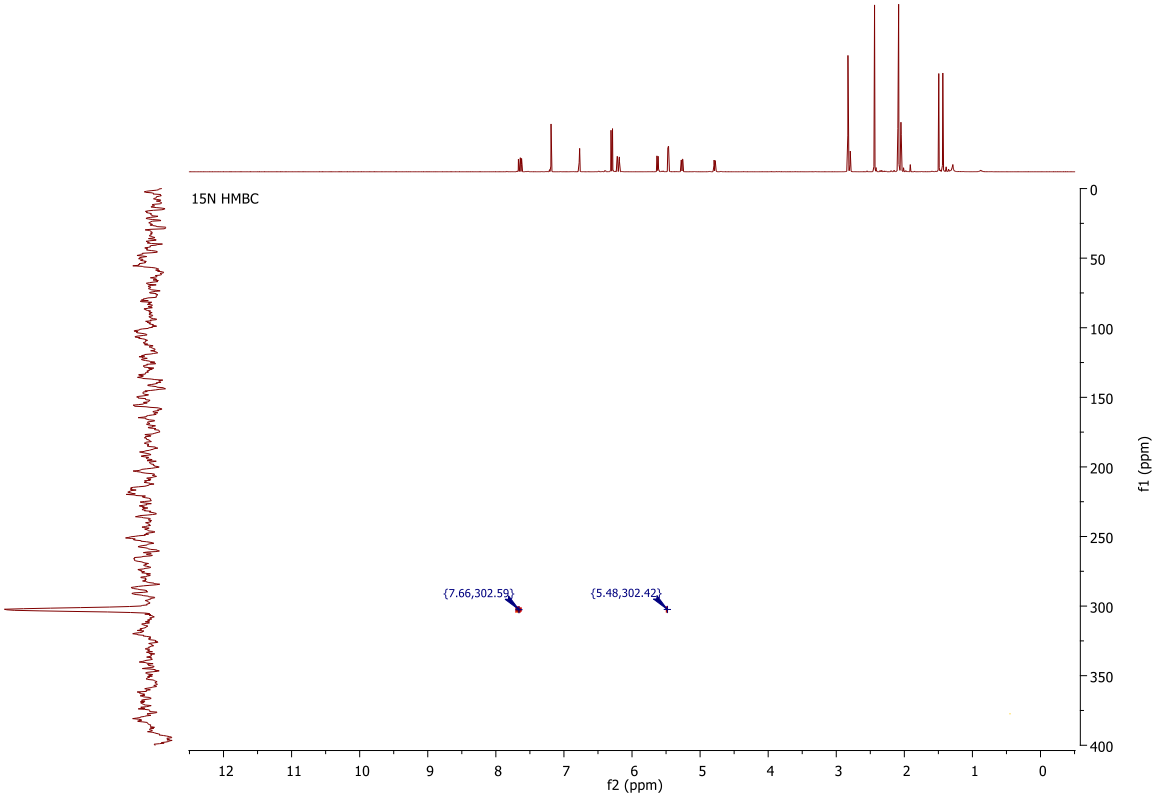

Figure S32. ^{1}H-NMR of **27**

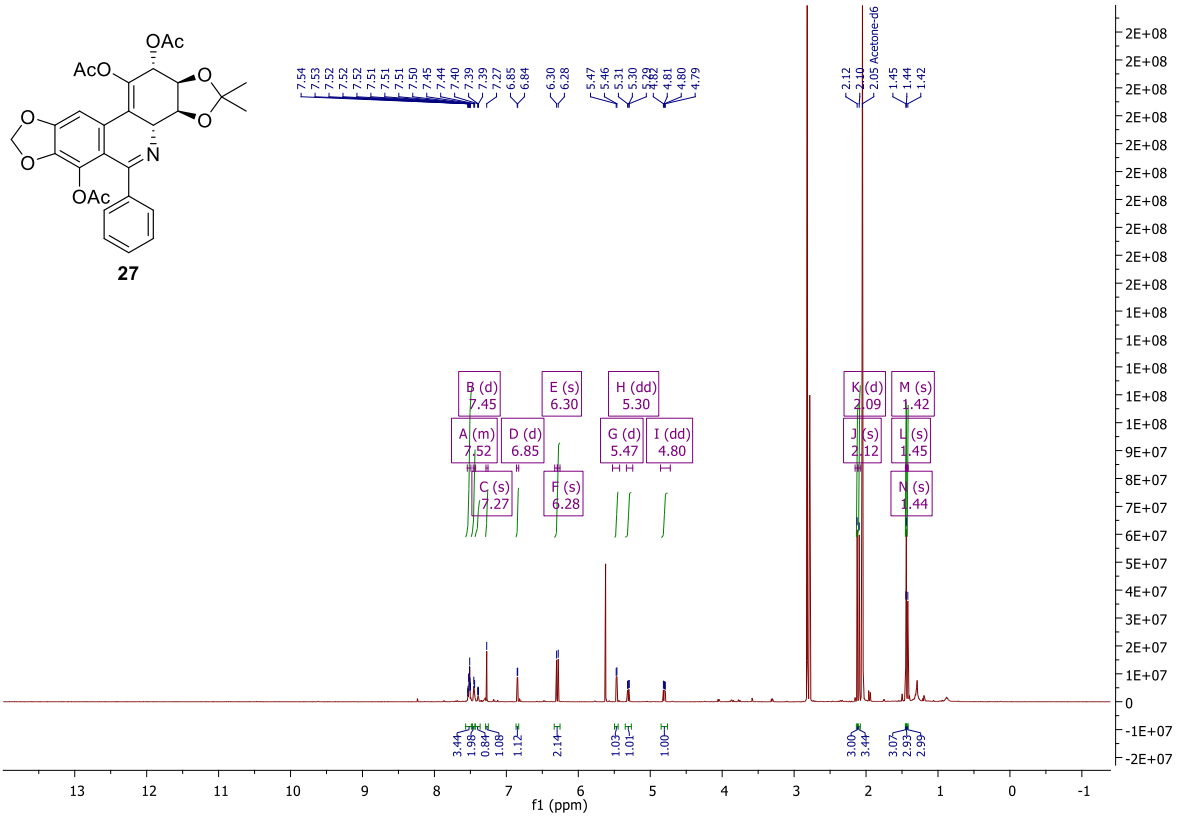

Figure S33. ^{13}C-NMR of **27**

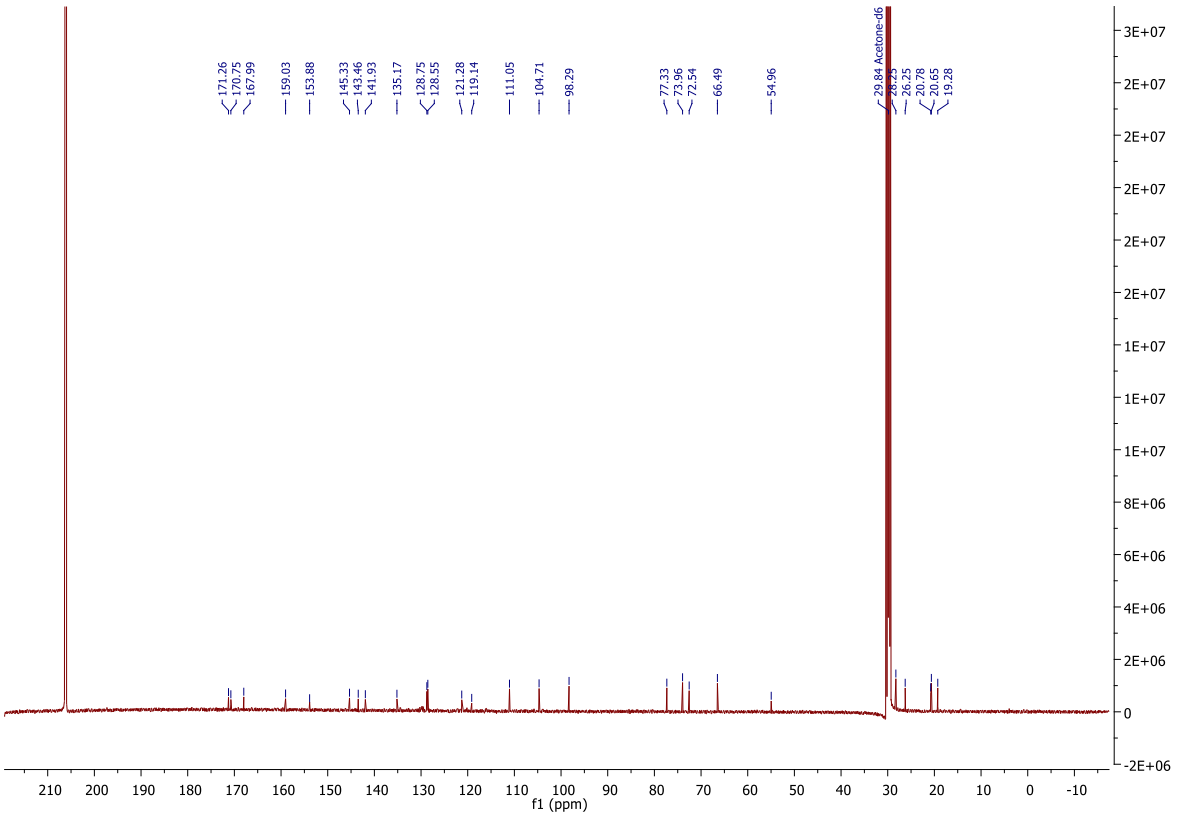

Figure S34. ^{1}H-NMR of **28**

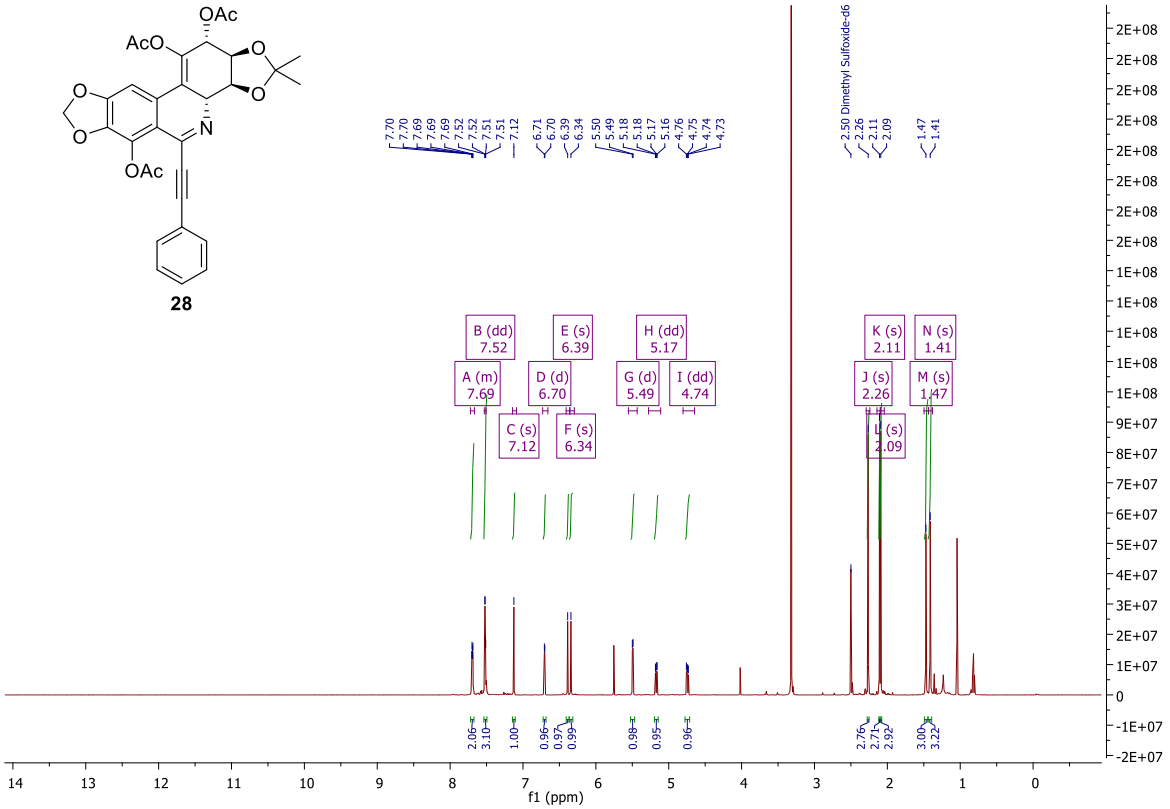

Figure S35. ^{13}C-NMR of **28**

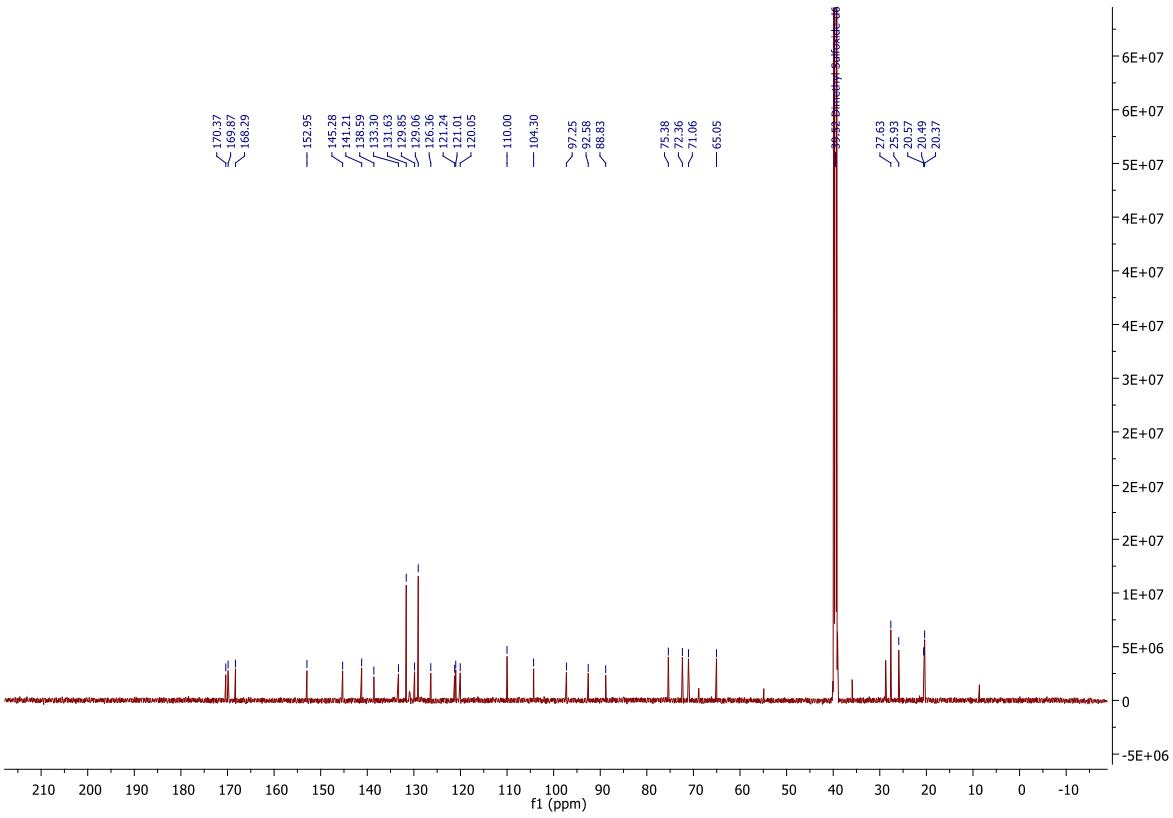

Figure S36. ^{1}H-NMR of **29**

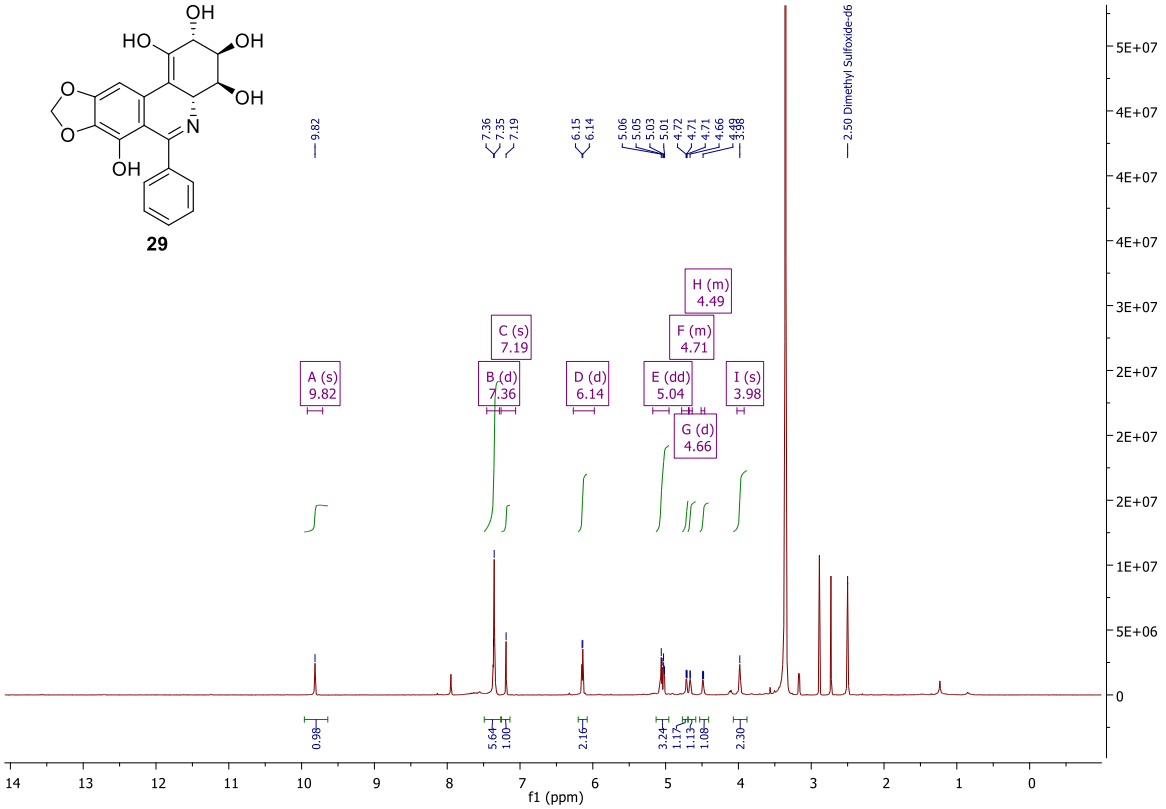

Figure S37. ^{13}C-NMR of **29**

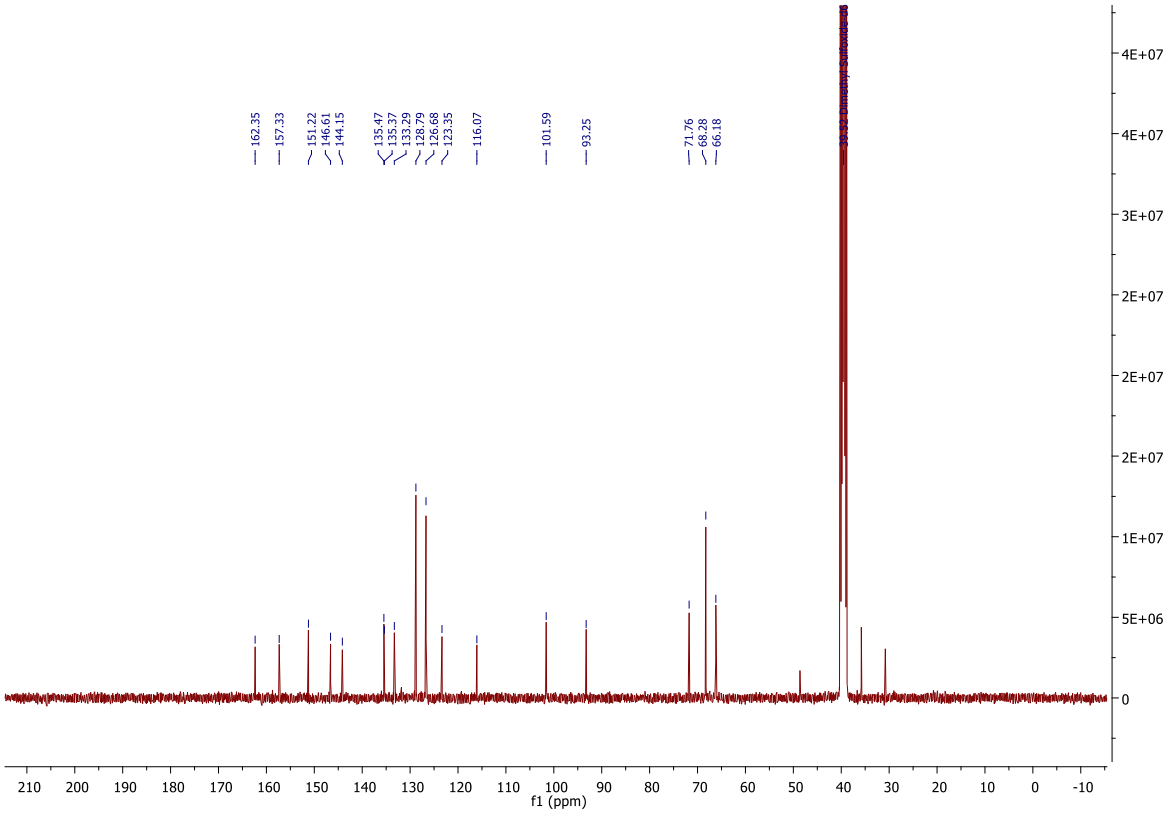

Figure S38. ^{1}H-NMR of **30**

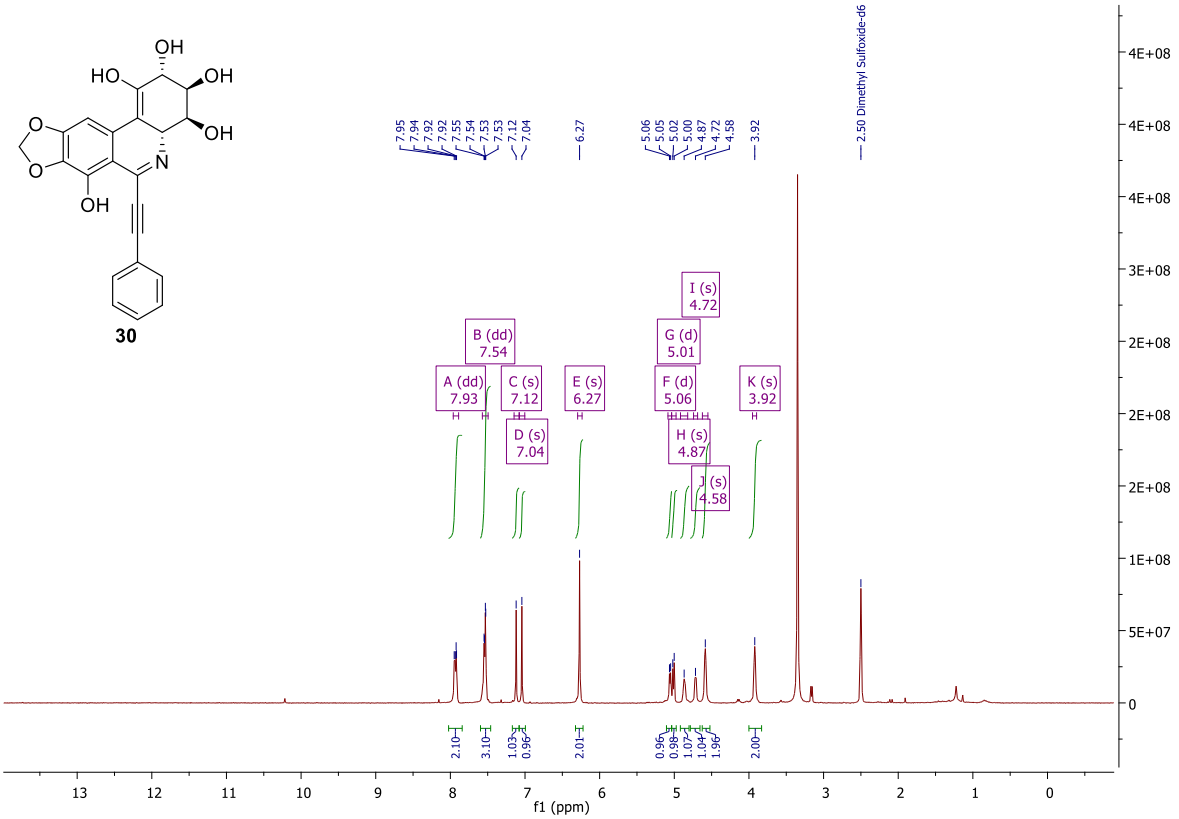

Figure S39. ^{13}C-NMR of **30**

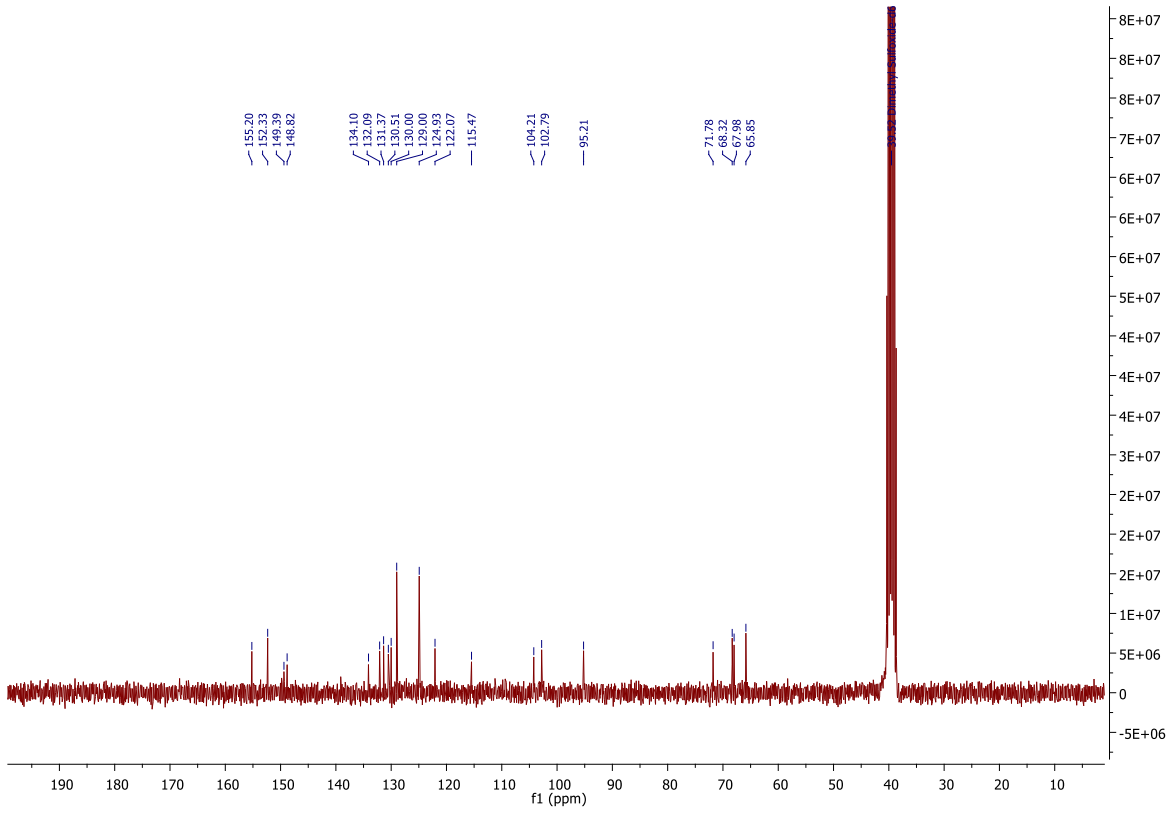

Figure S40. ^{1}H-NMR of **31**

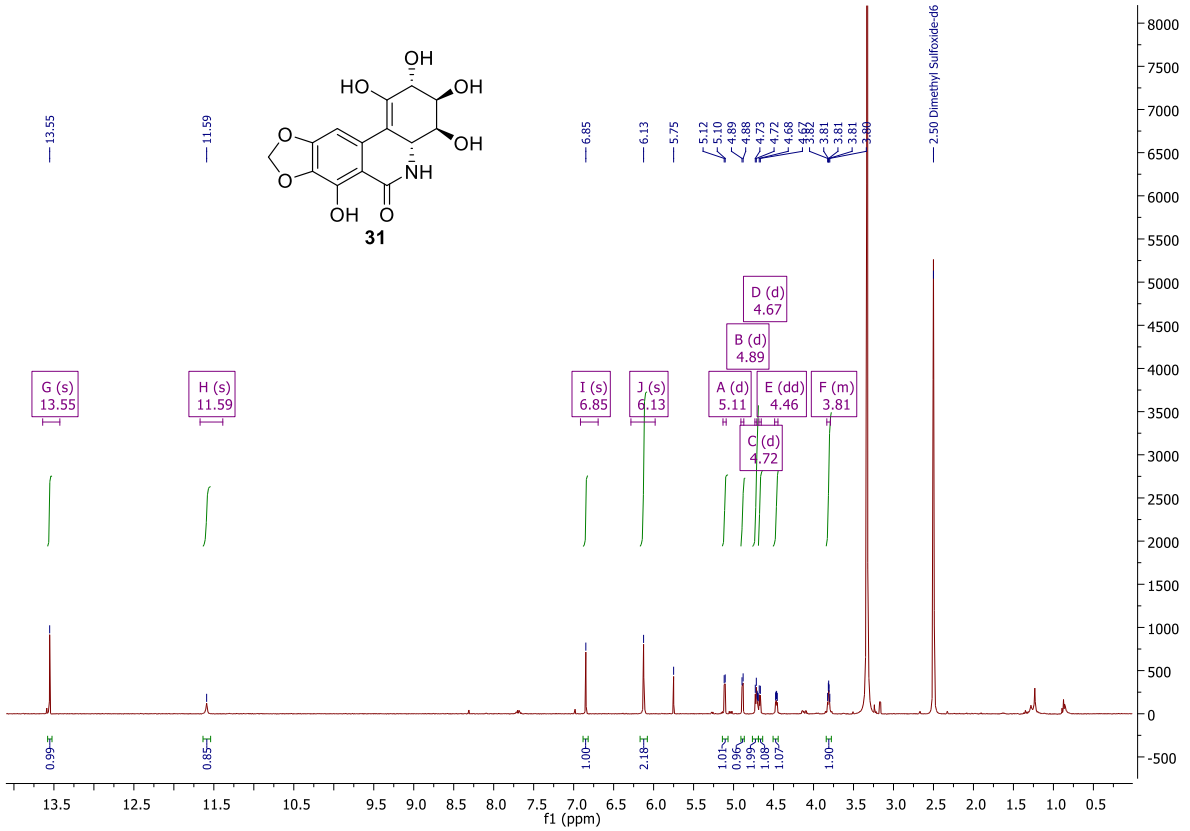

Figure S41. ^{13}C-NMR of **31**

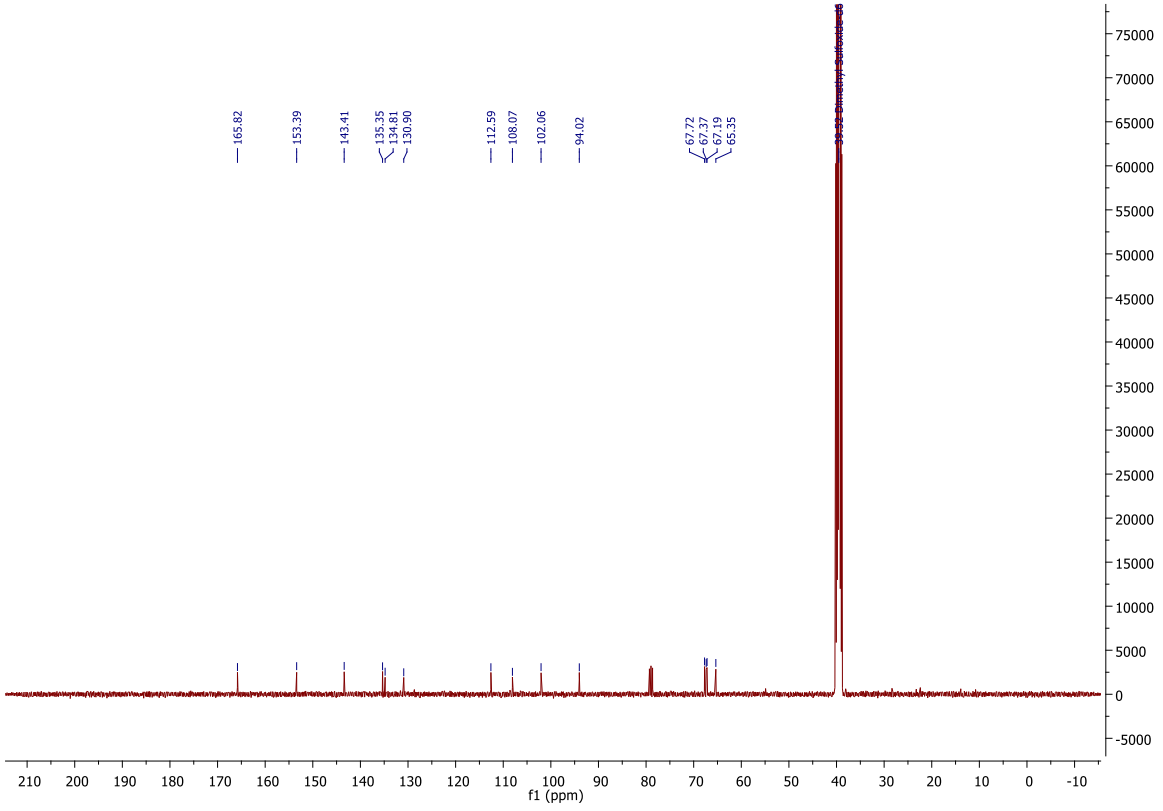

Figure S42. ^{1}H-NMR of **33**

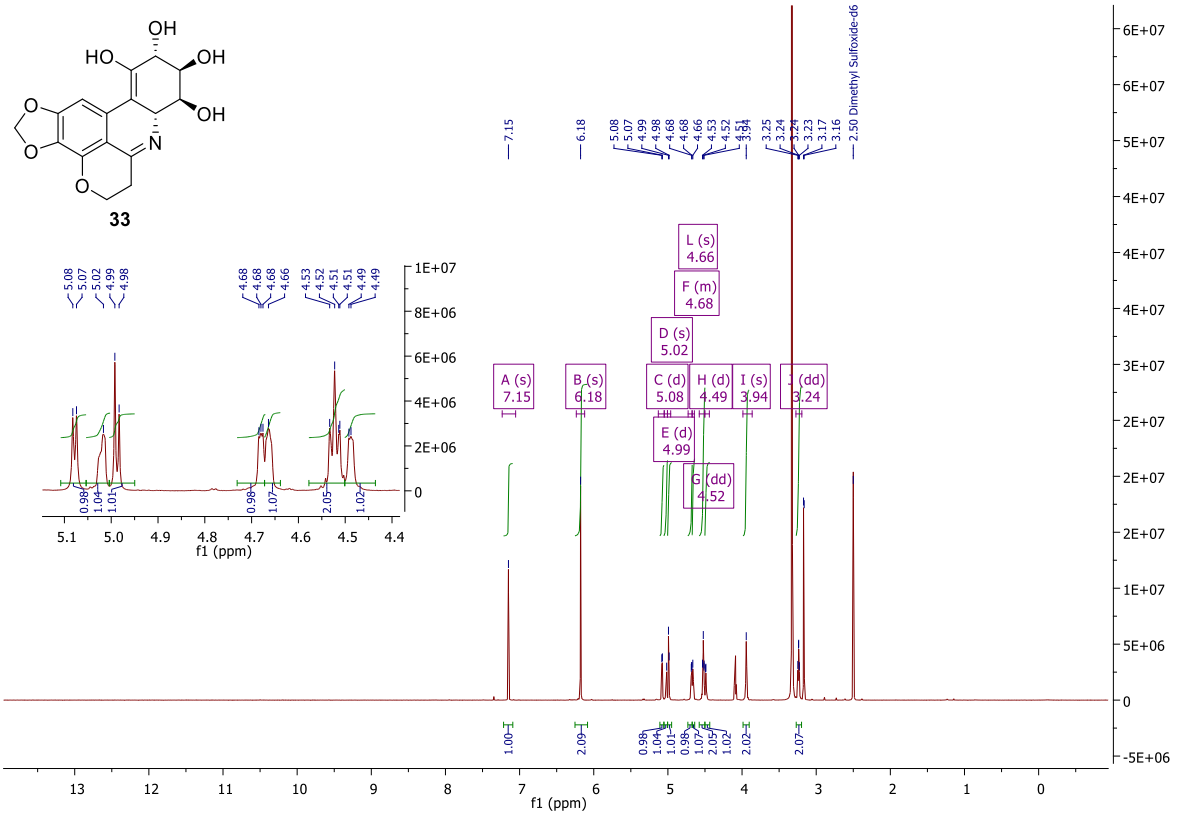

Figure S43. ^{13}C-NMR of **33**