ESI for **New Journal of Chemistry**

Supplementary Information

Novel styrylpyrazole-glucosides and their dioxolo-bridged doppelgangers: synthesis and cytotoxicity

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1. NMR spectra

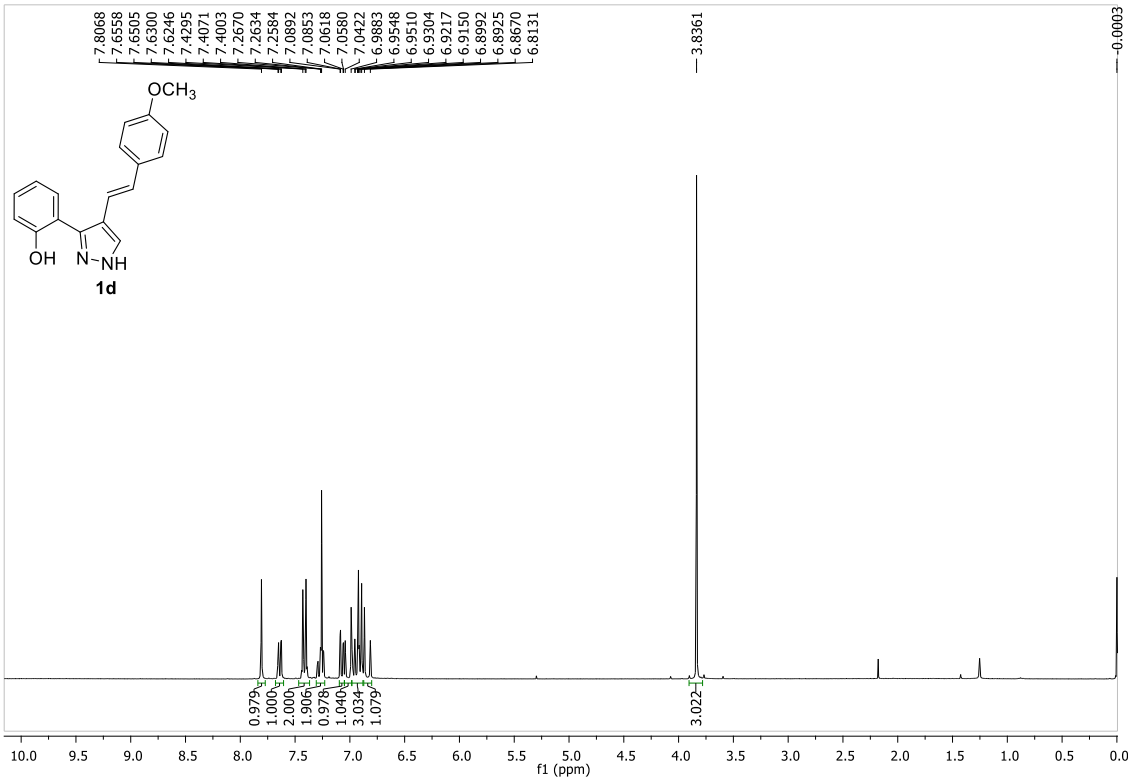

Figure S1. ^{1}H NMR spectrum of compound **1d** ($CDCl_3$, 300.13 MHz).

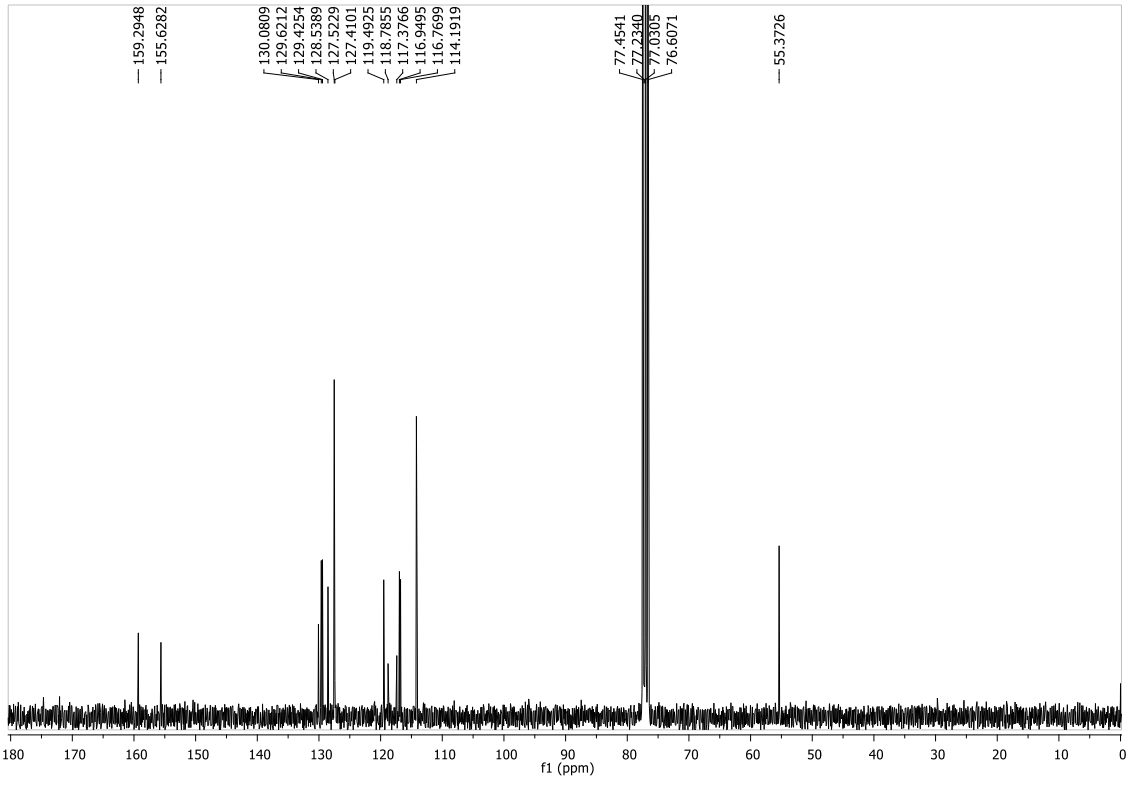

Figure S2. ^{13}C NMR spectrum of compound **1d** ($CDCl_3$, 75.47 MHz).

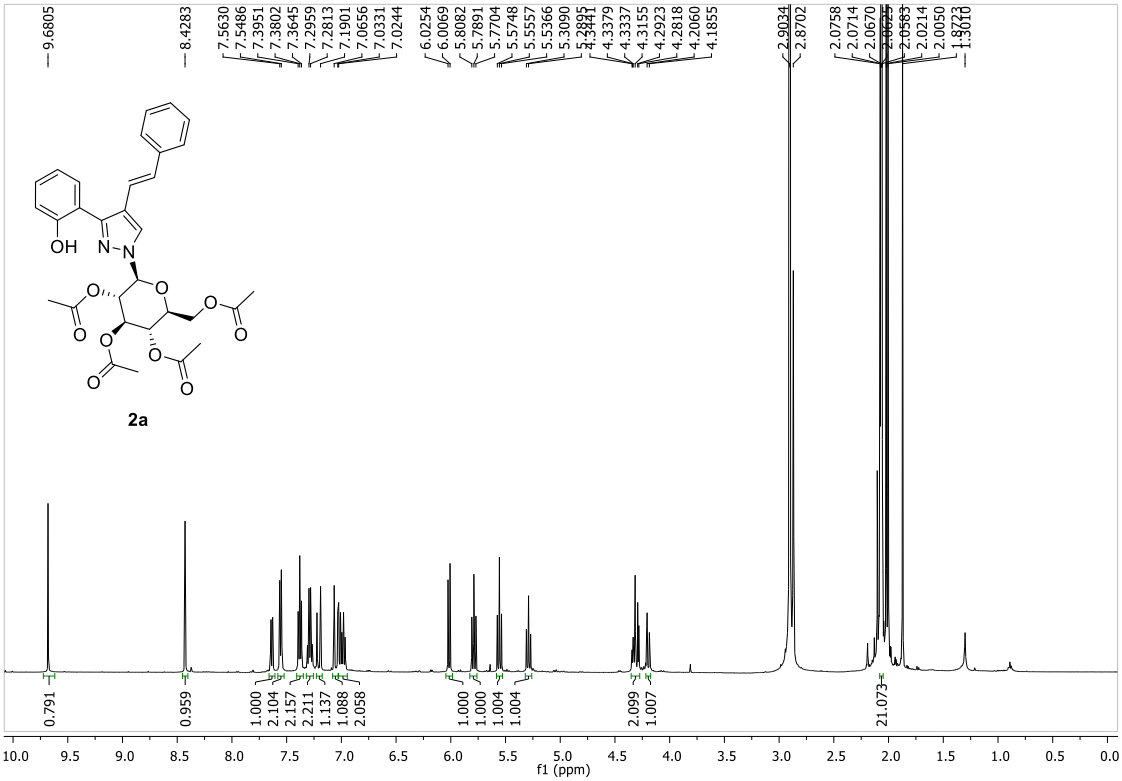

Figure S3. ^{1}H NMR spectrum of compound **2a** [$(CD_3)_2CO$, 500.16 MHz].

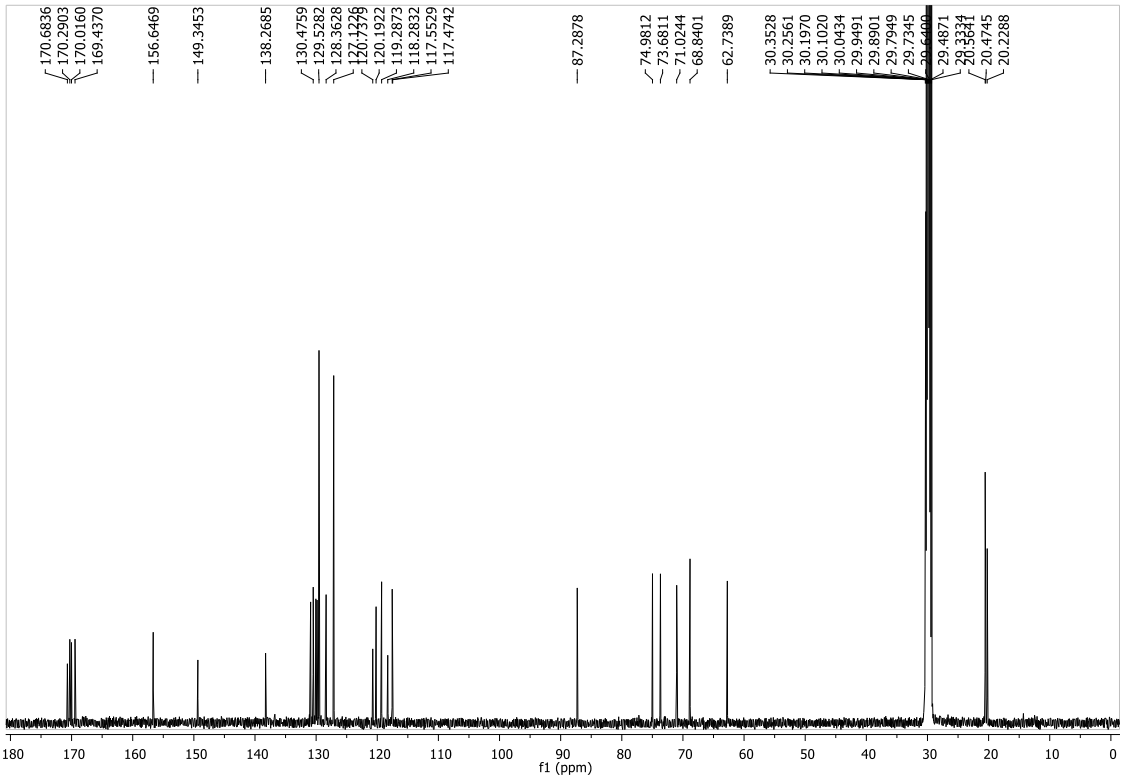

Figure S4. ^{13}C NMR spectrum of compound **2a** [$(CD_3)_2CO$, 125.77 MHz].

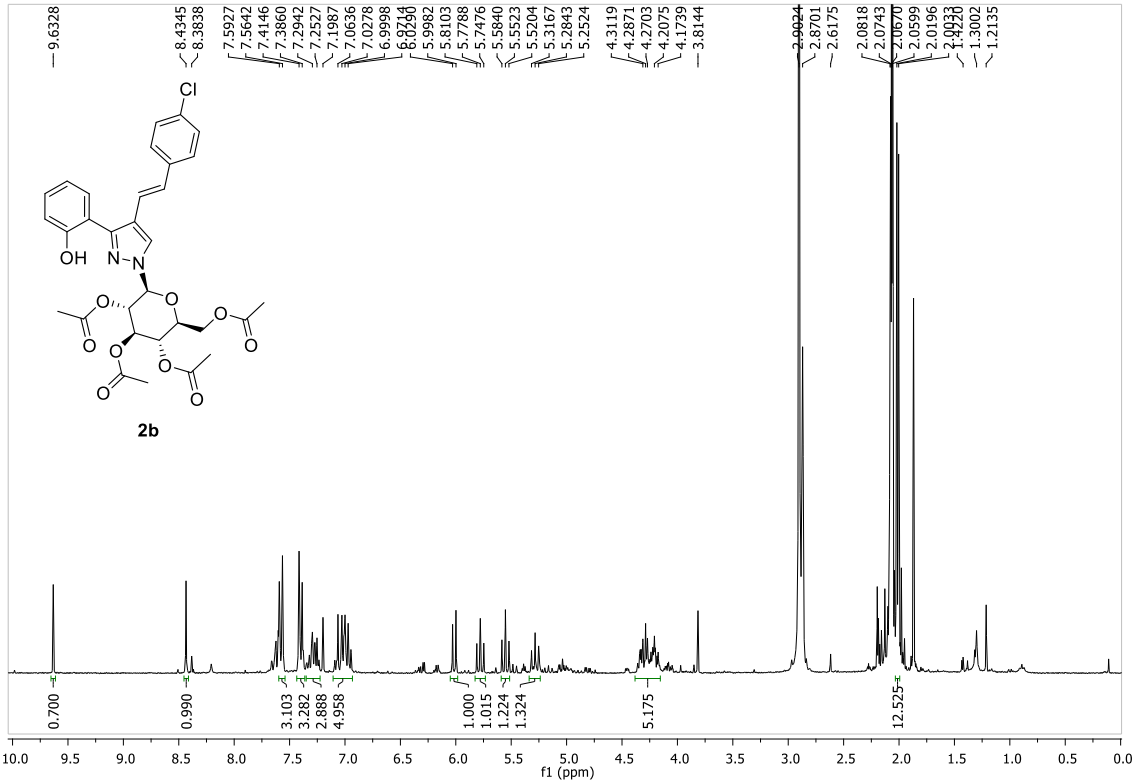

Figure S5. ^{1}H NMR spectrum of compound **2b** [$(CD_3)_2CO$, 300.13 MHz].

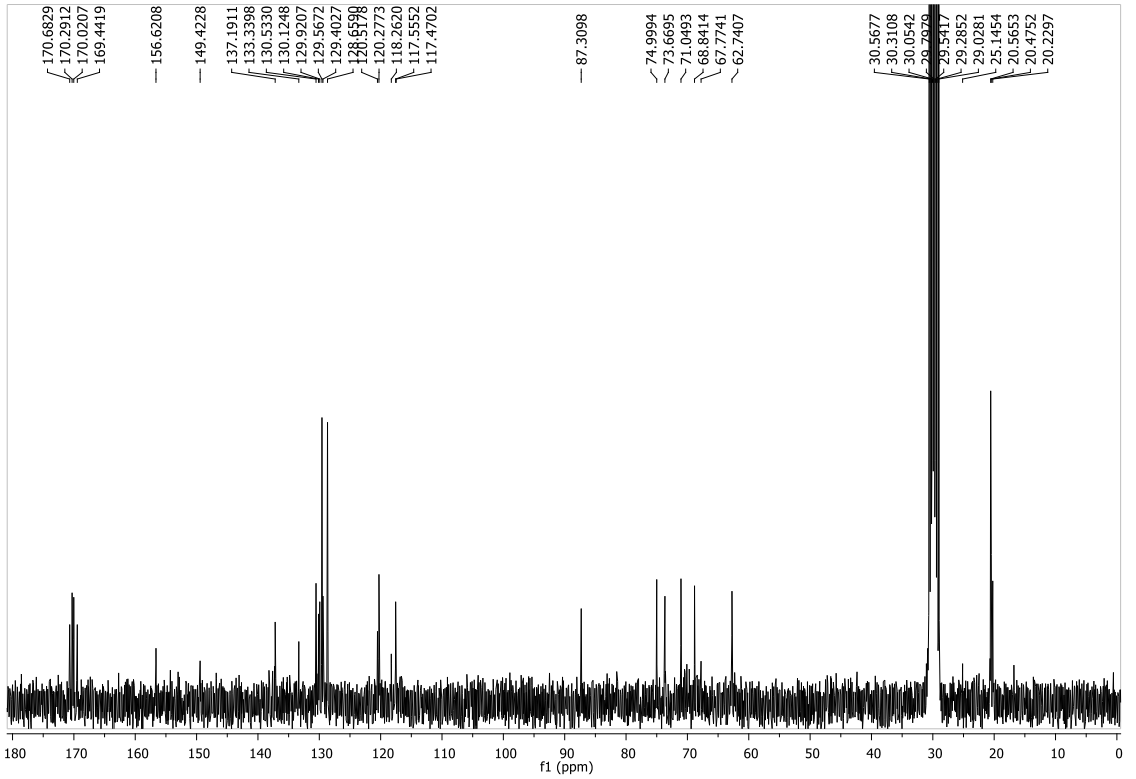

Figure S6. ^{13}C NMR spectrum of compound **2b** [$(CD_3)_2CO$, 75.47 MHz].

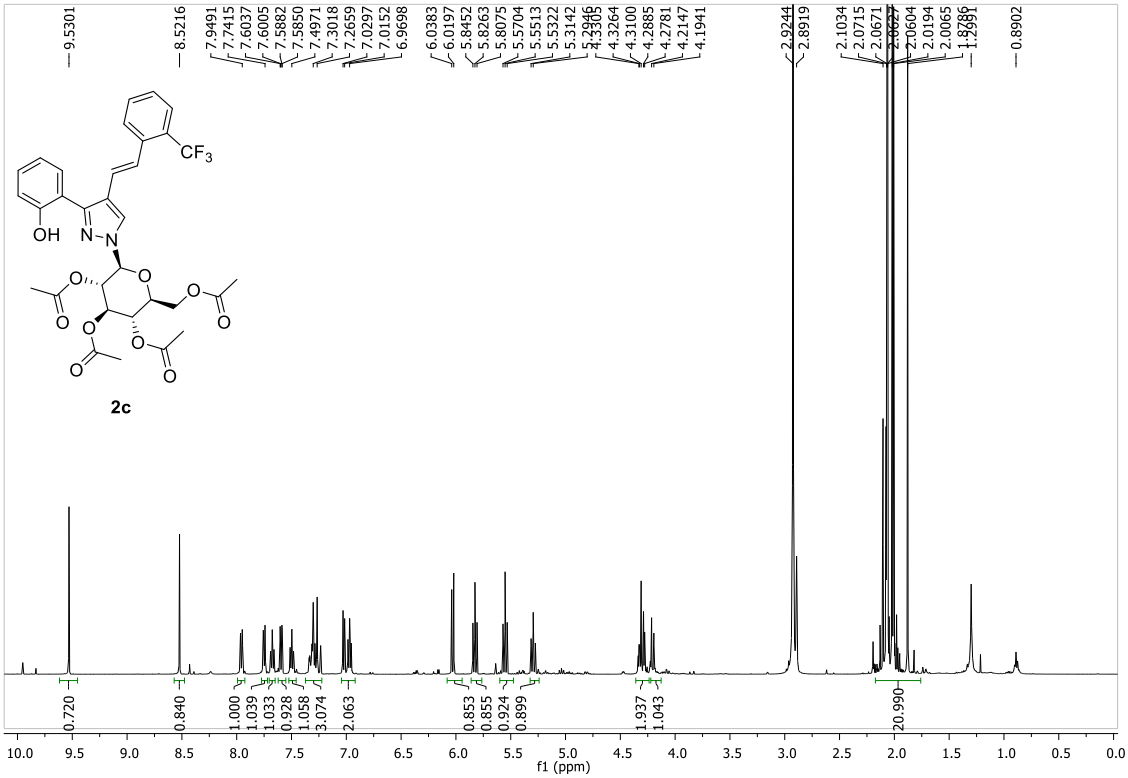

Figure S7. ^{1}H NMR spectrum of compound **2c** [$(CD_3)_2CO$, 500.16 MHz].

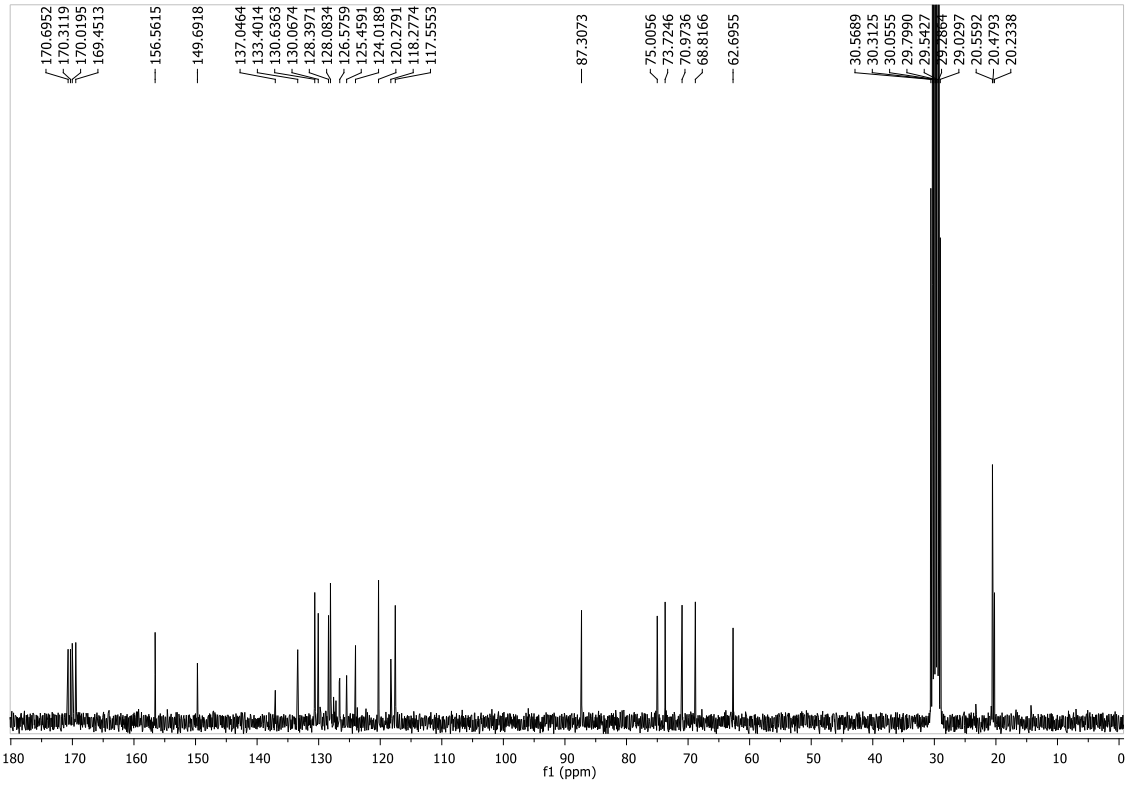

Figure S8. ^{13}C NMR spectrum of compound **2c** [$(CD_3)_2CO$, 75.47 MHz].

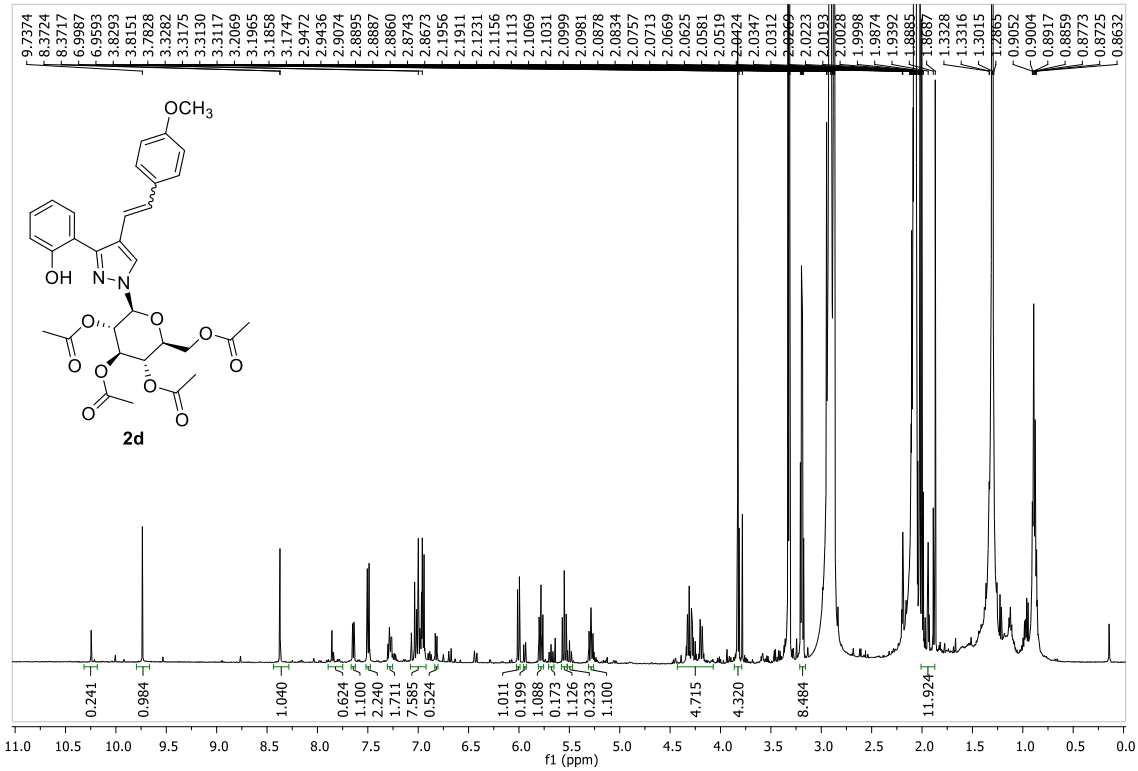

Figure S9. ^{1}H NMR spectrum of the mixture of (*E*)- and (*Z*)-isomers of compound **2d** [$(CD_3)_2CO$, 500.16 MHz].

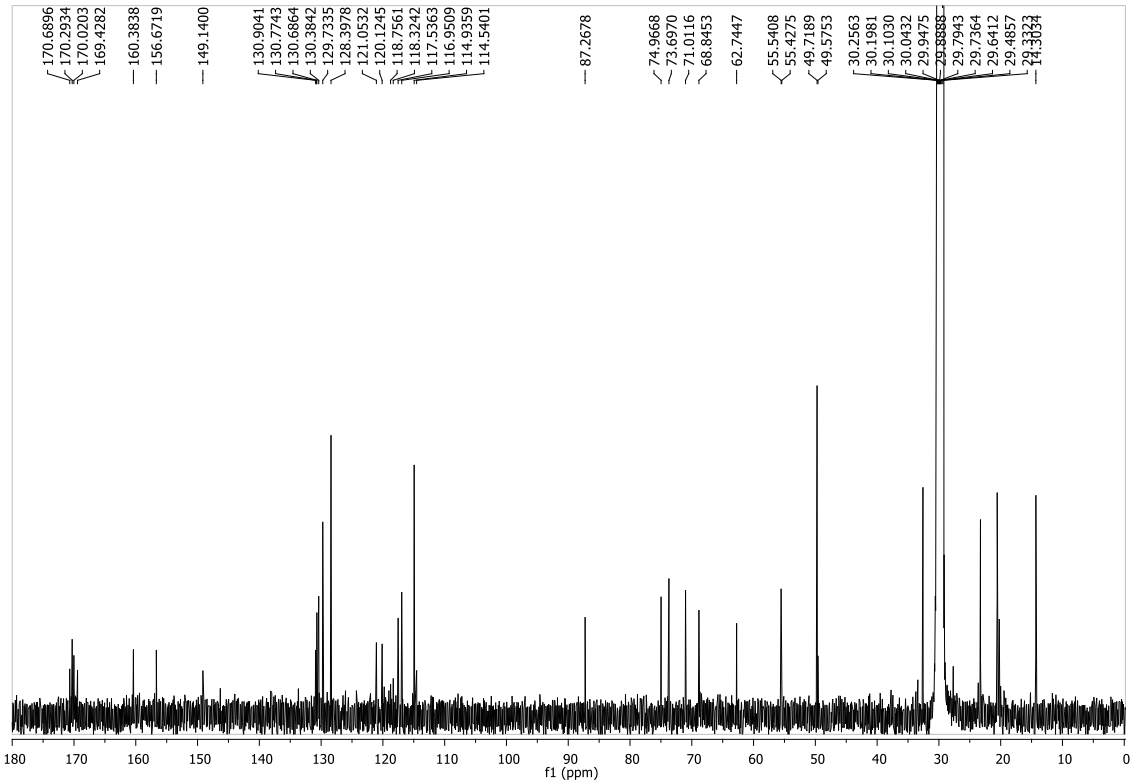

Figure S10. ^{13}C NMR spectrum of the mixture of (*E*)- and (*Z*)-isomers of compound **2d** [$(CD_3)_2CO$, 125.77 MHz].

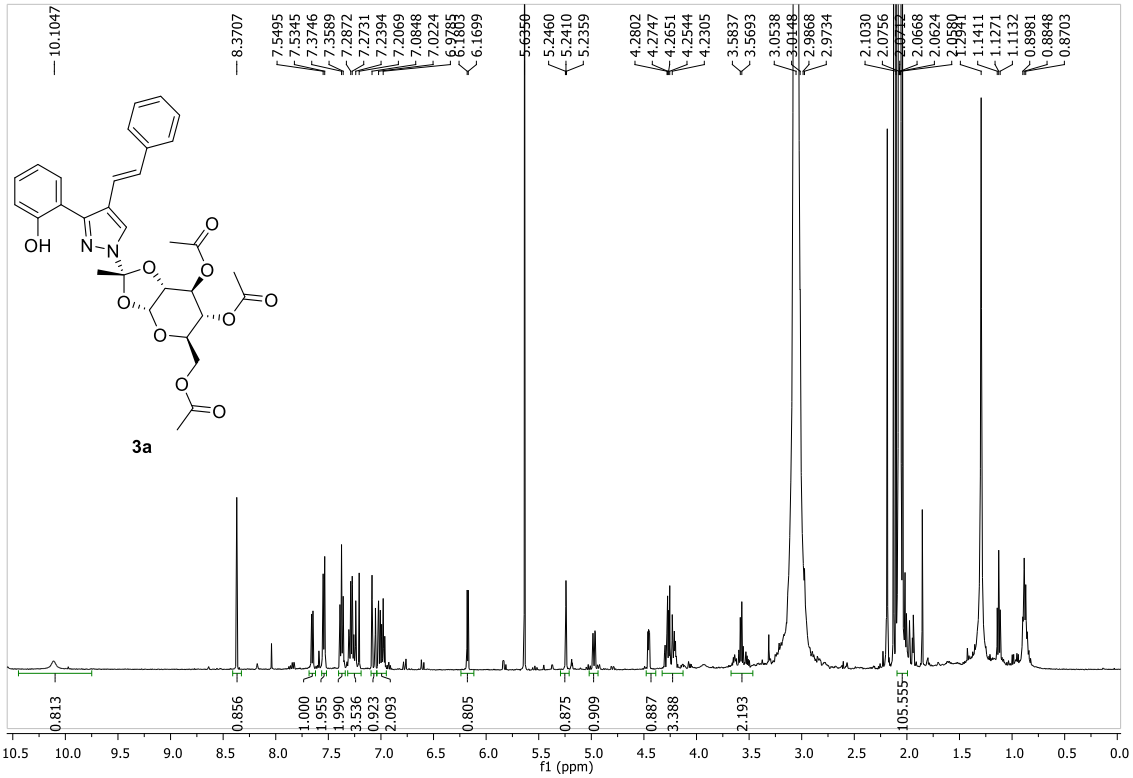

Figure S11. ^{1}H NMR spectrum of compound **3a** [$(CD_3)_2CO$, 500.16 MHz].

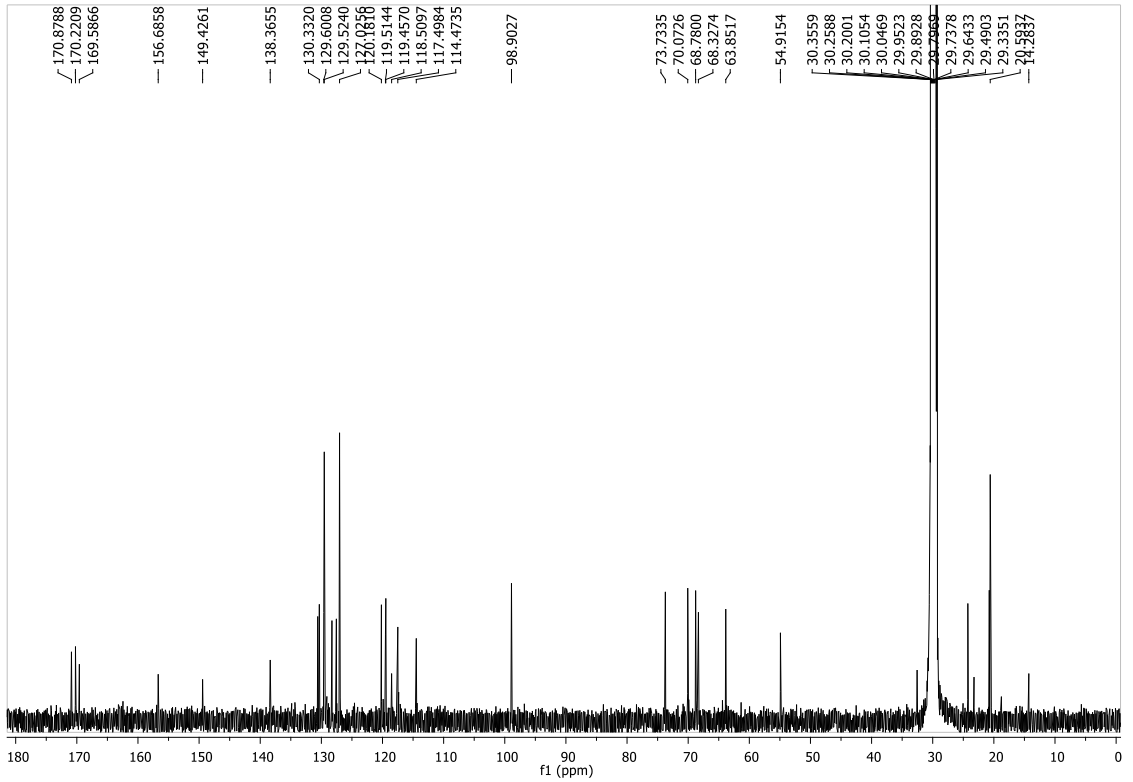

Figure S12. ^{13}C NMR spectrum of compound **3a** [$(CD_3)_2CO$, 125.77 MHz].

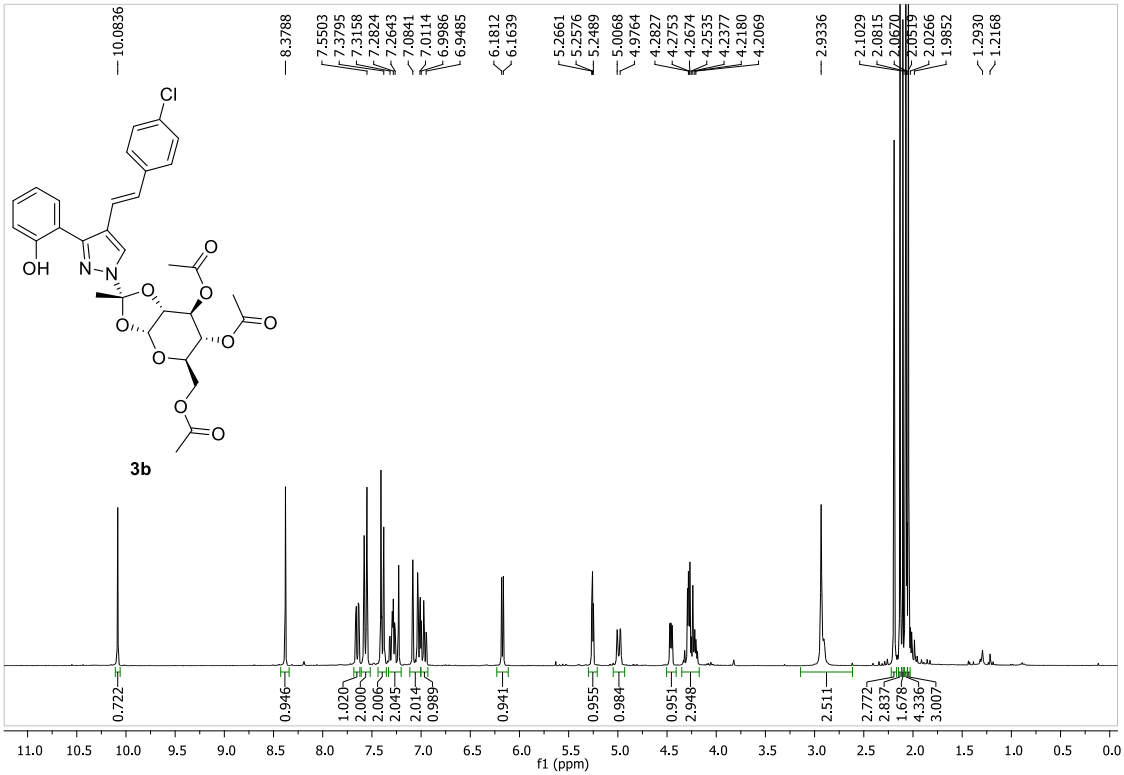

Figure S13. ^{1}H NMR spectrum of compound **3b** [$(CD_3)_2CO$, 300.13 MHz].

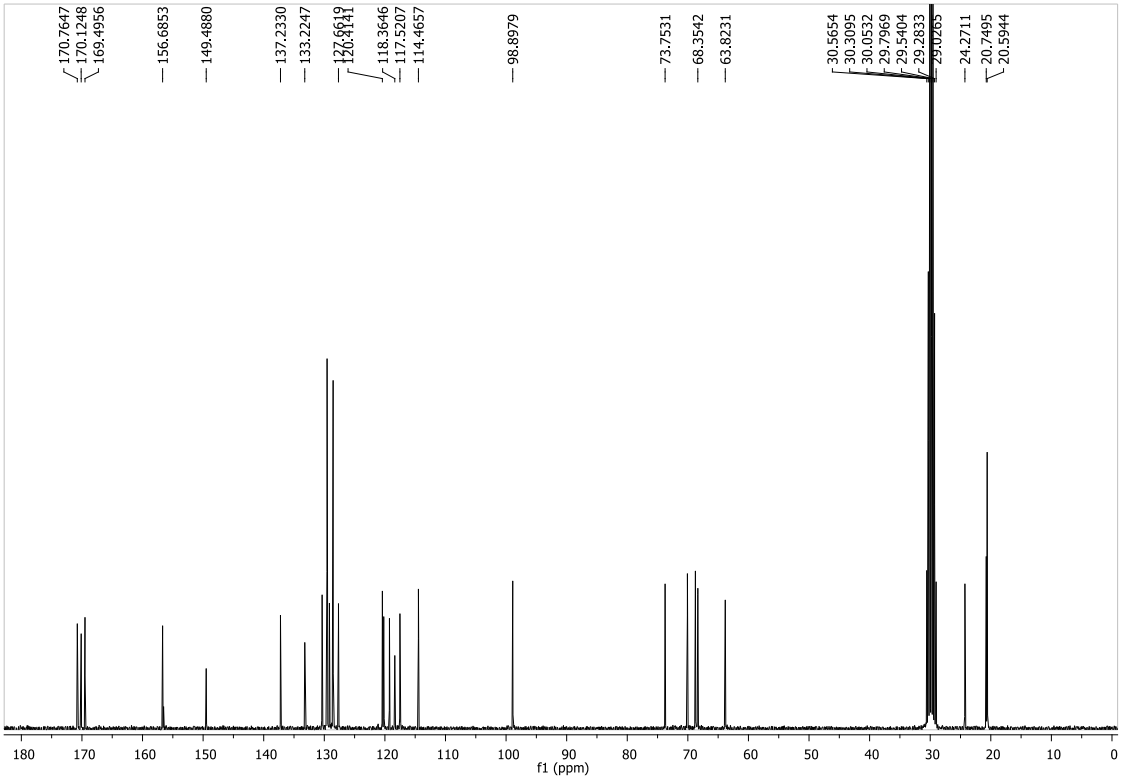

Figure S14. ^{13}C NMR spectrum of compound **3b** [$(CD_3)_2CO$, 75.47 MHz].

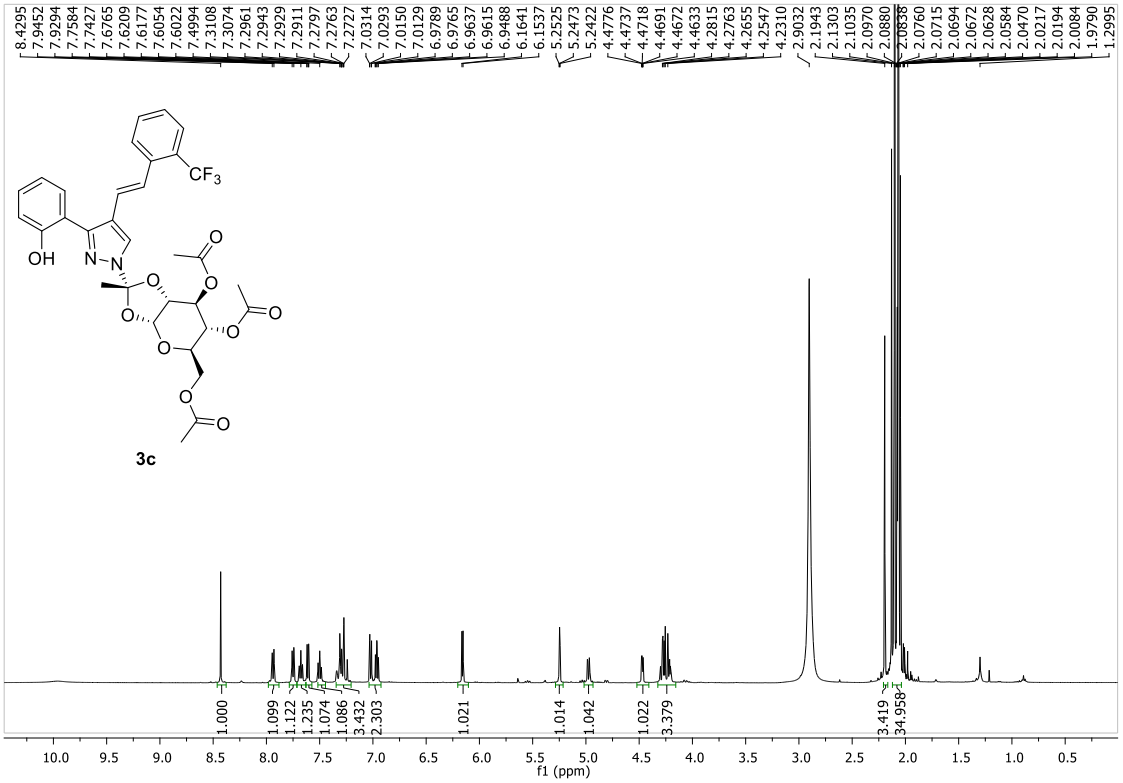

Figure S15. ^{1}H NMR spectrum of compound **3c** [$(CD_3)_2CO$, 500.16 MHz].

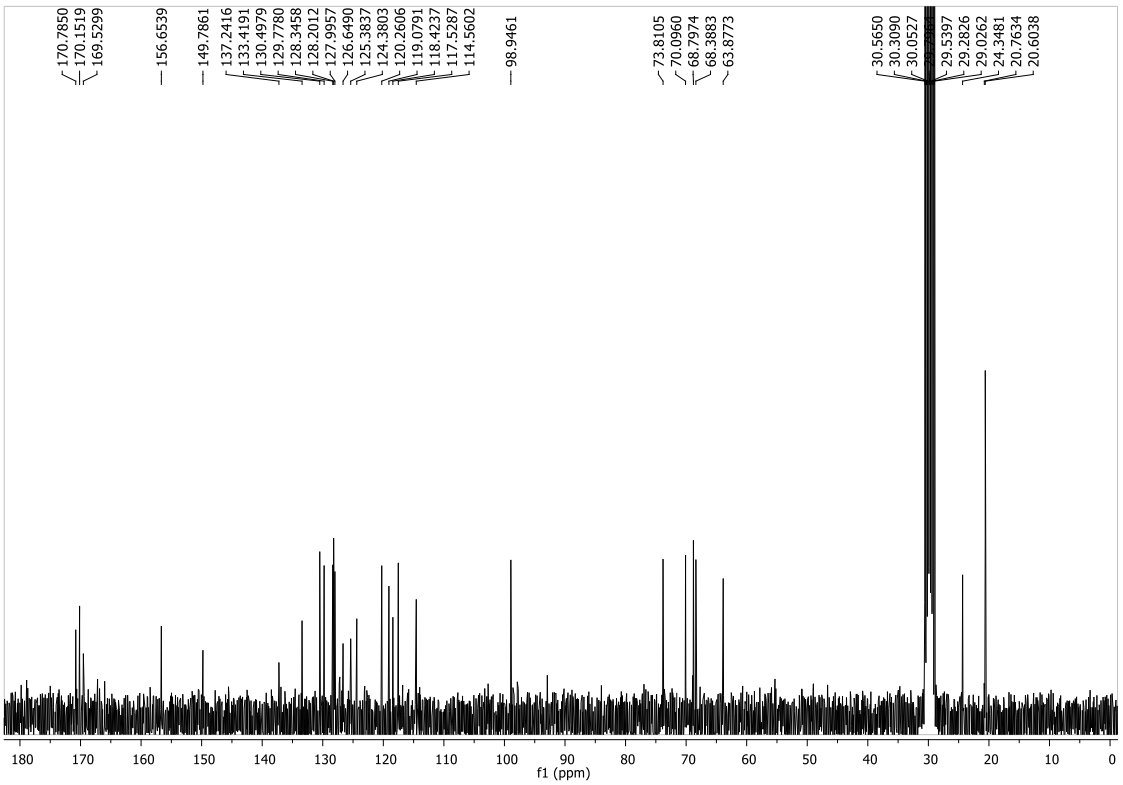

Figure S16. ^{13}C NMR spectrum of compound **3c** [$(CD_3)_2CO$, 75.47 MHz].

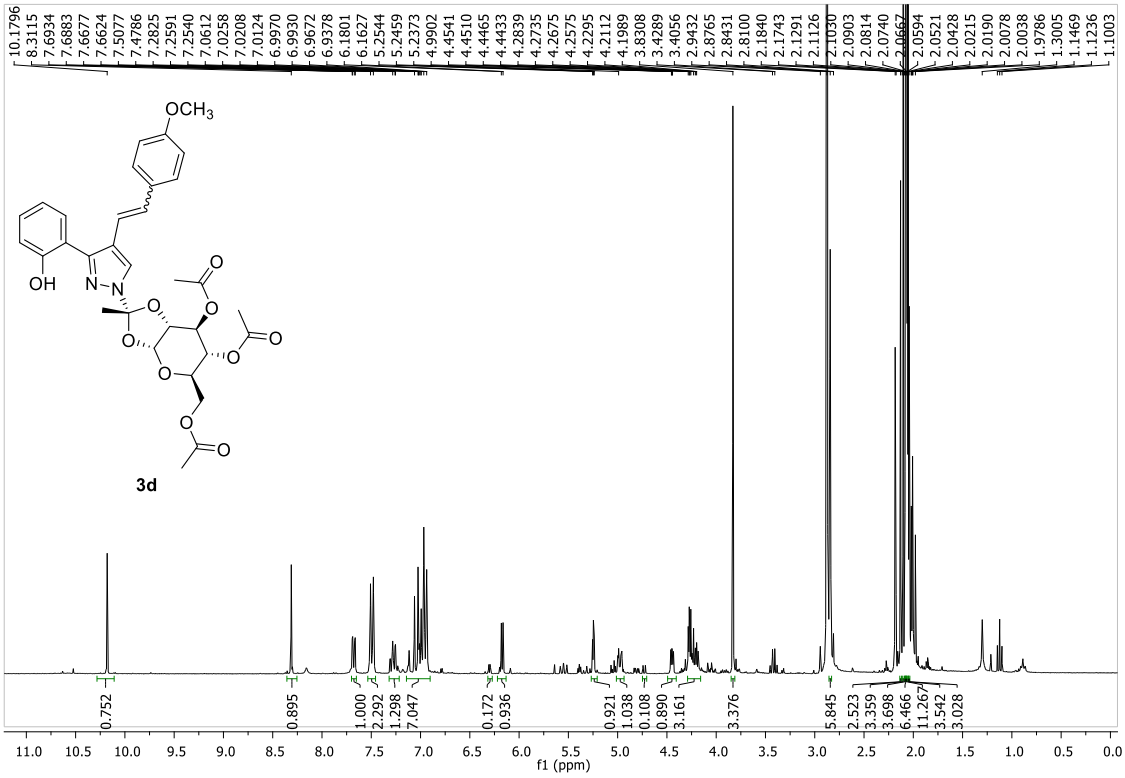

Figure S17. ^{1}H NMR spectrum of the mixture of (*E*)- and (*Z*)-isomers of compound **3d** [$(CD_3)_2CO$, 300.13 MHz].

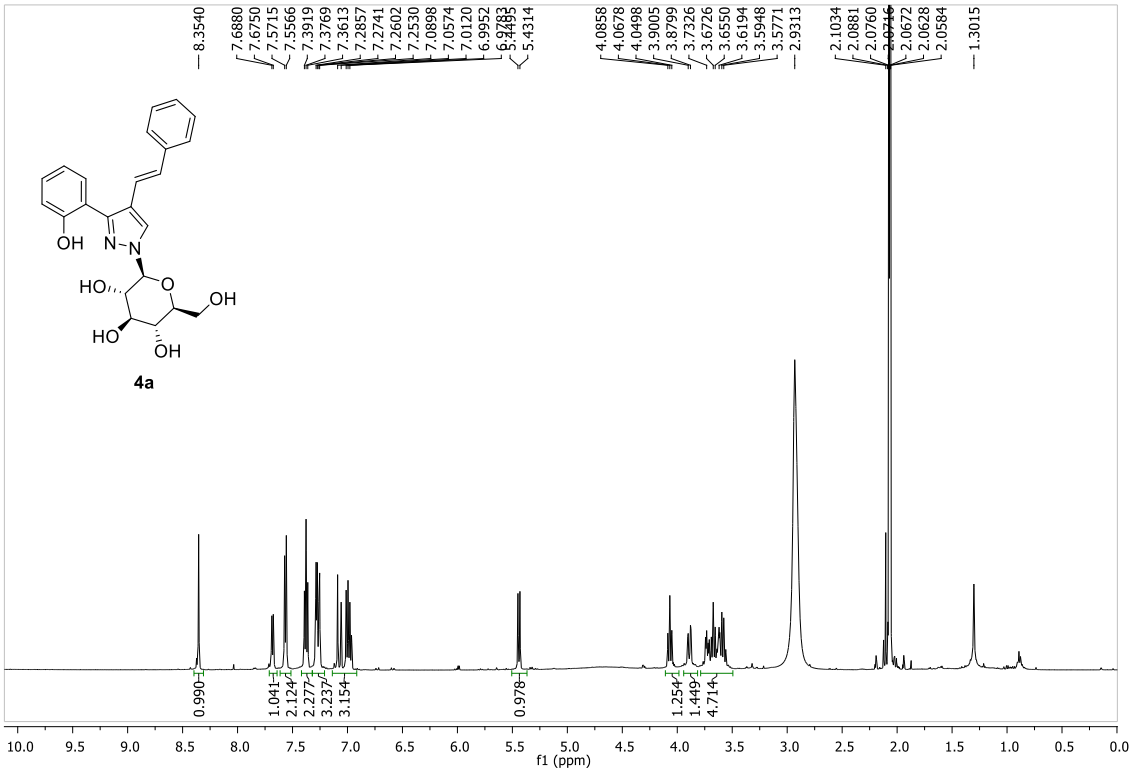

Figure S18. ^{1}H NMR spectrum of compound **4a** [$(CD_3)_2CO$, 500.16 MHz].

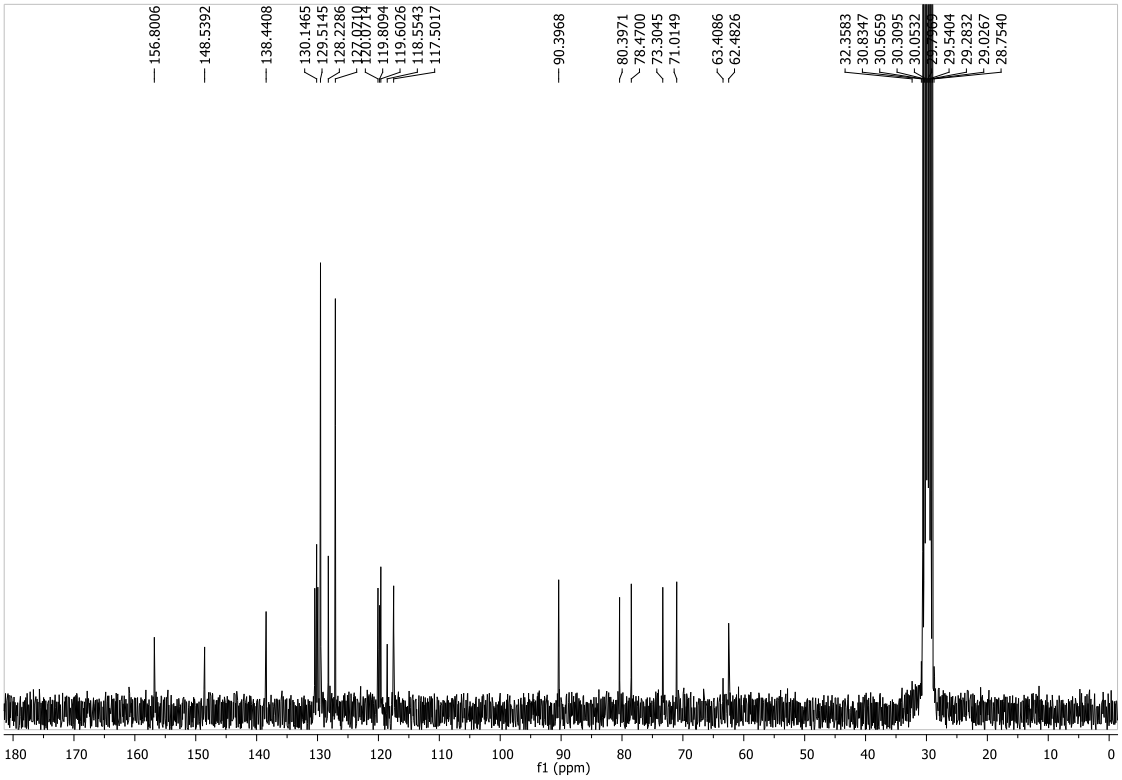

Figure S19. ^{13}C NMR spectrum of compound **4a** [$(CD_3)_2CO$, 75.47 MHz].

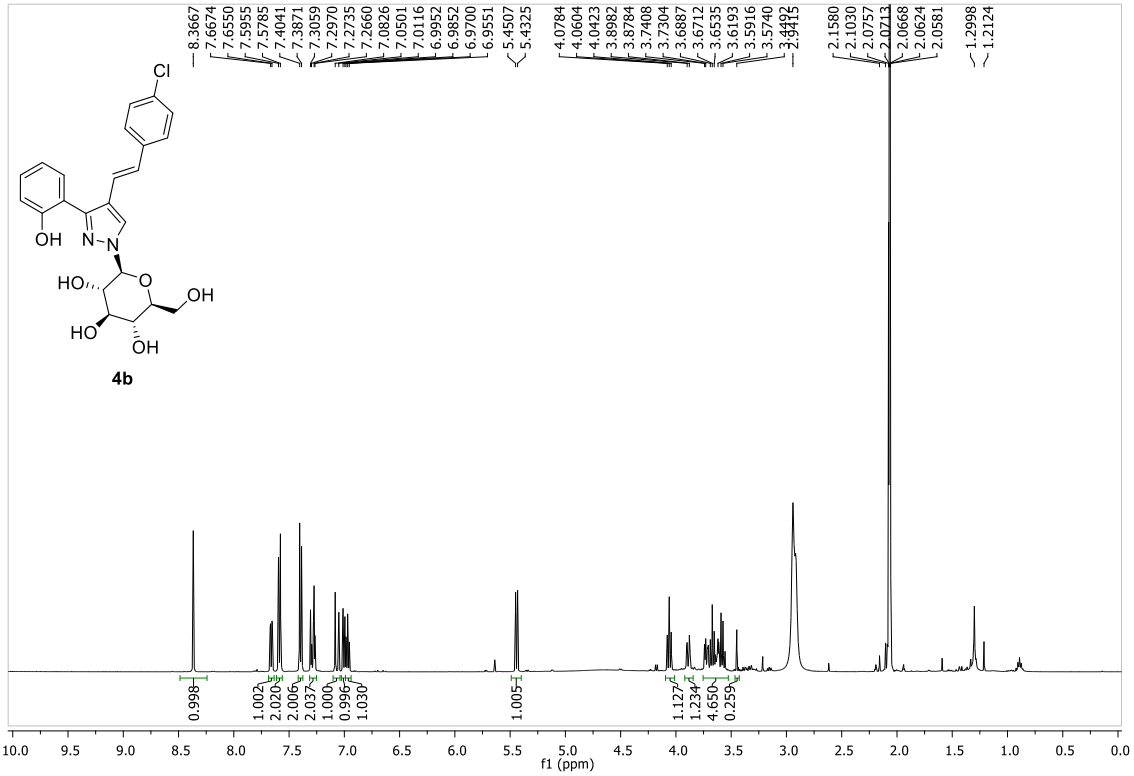

Figure S20. ^{1}H NMR spectrum of compound **4b** [$(CD_3)_2CO$, 500.16 MHz].

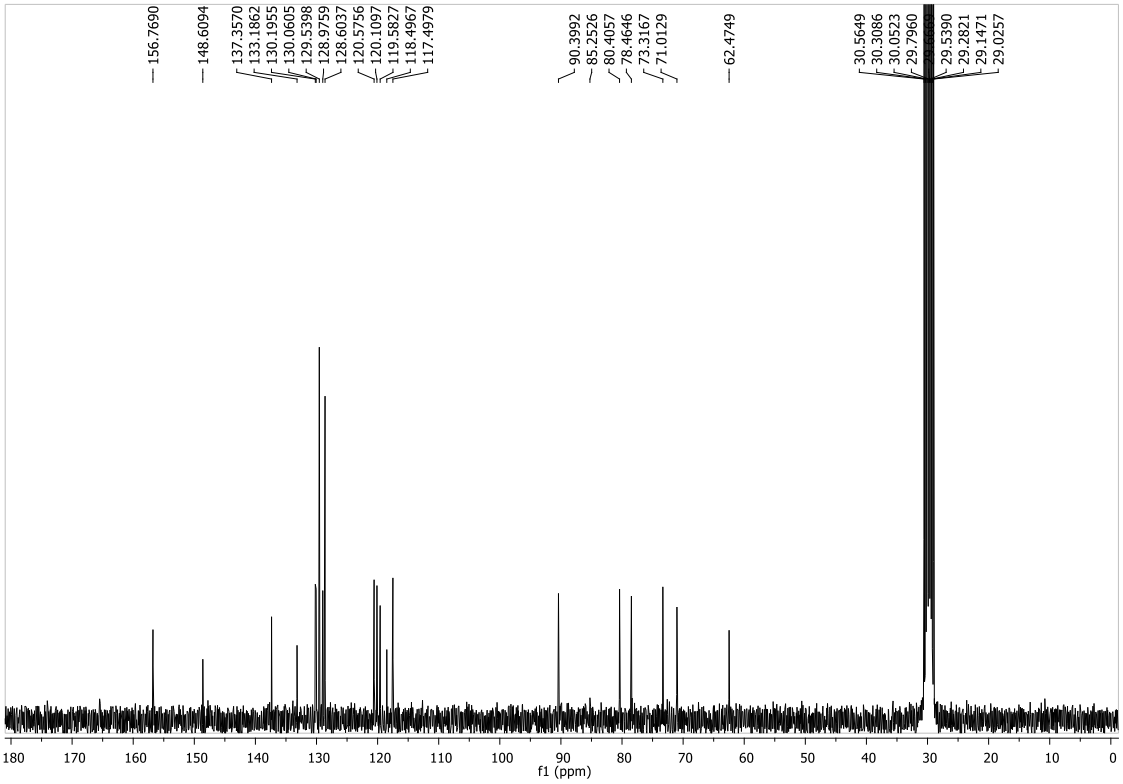

Figure S21. ^{13}C NMR spectrum of compound **4b** [$(CD_3)_2CO$, 75.47 MHz].

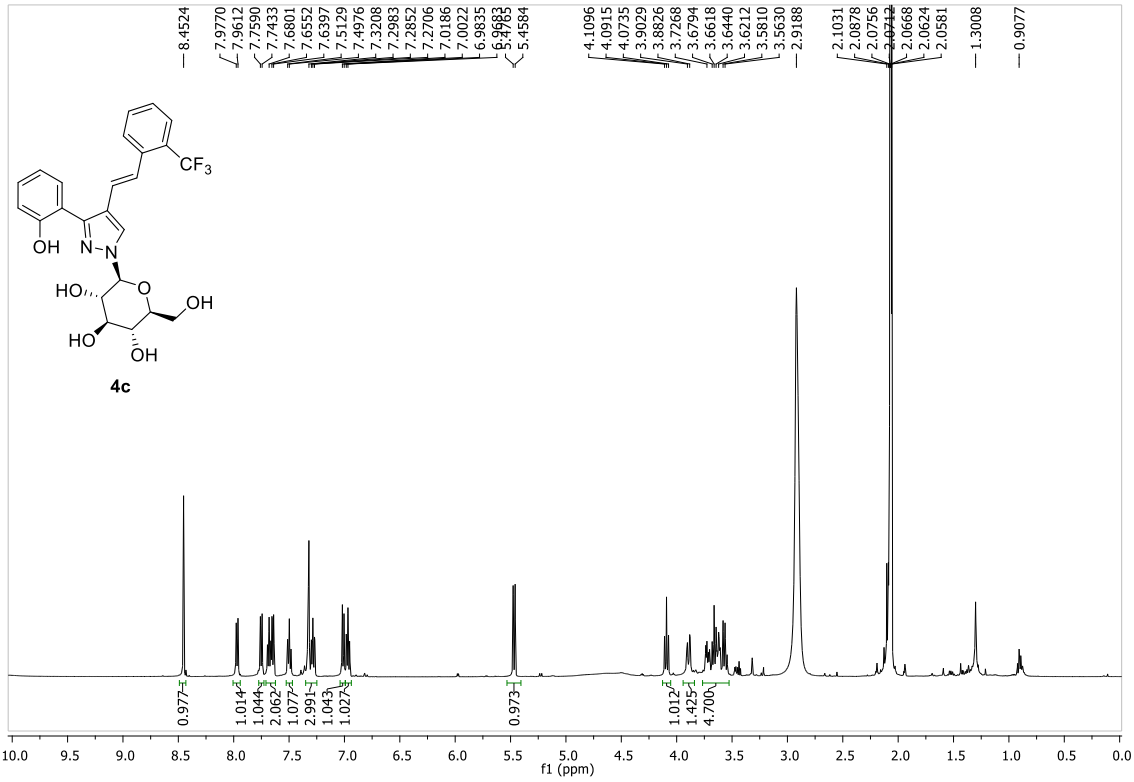

Figure S22. ^{1}H NMR spectrum of compound **4c** [$(CD_3)_2CO$, 500.16 MHz].

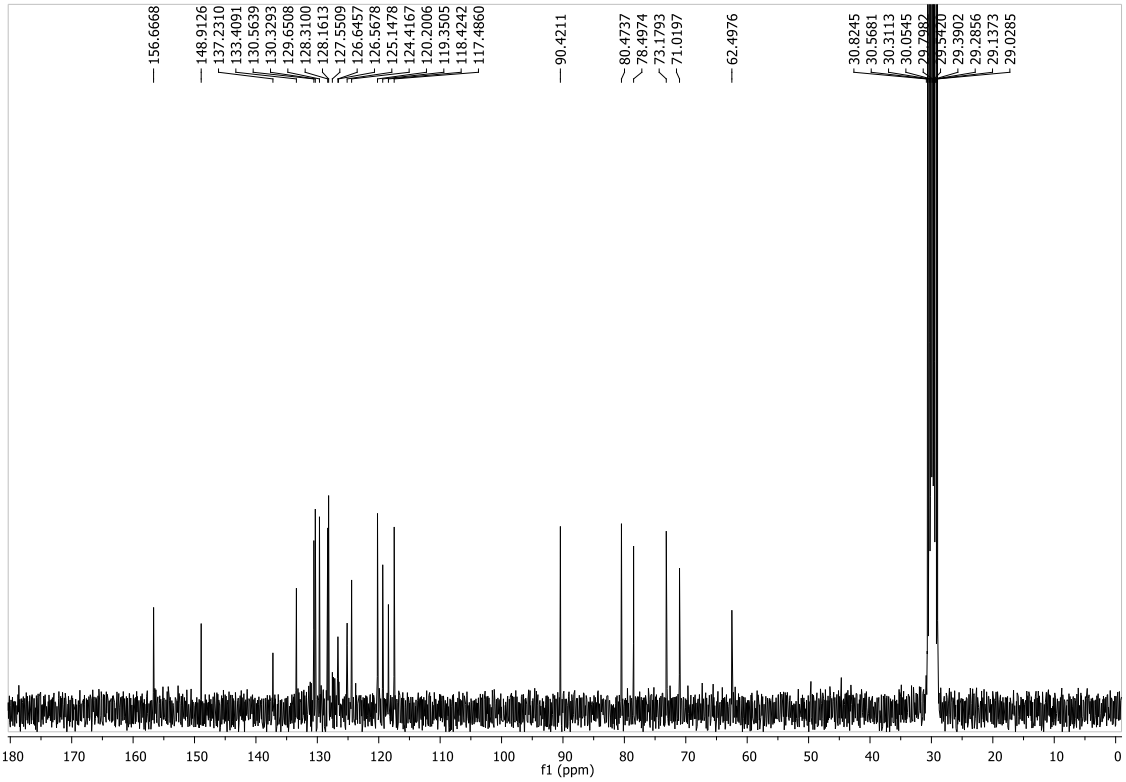

Figure S23. ^{13}C NMR spectrum of compound **4c** [$(CD_3)_2CO$, 75.47 MHz].

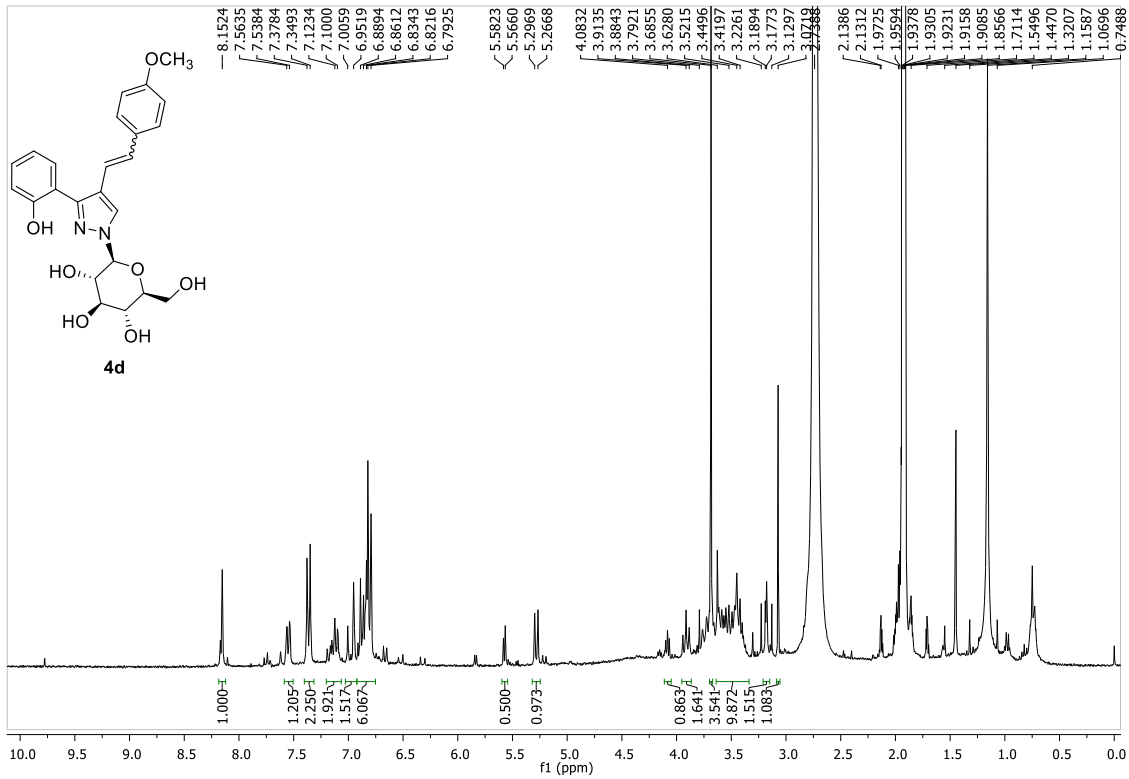

Figure S24. ^{1}H NMR spectrum of the mixture of (*E*)- and (*Z*)-isomers of compound **4d** [$(CD_3)_2CO$, 300.13 MHz].

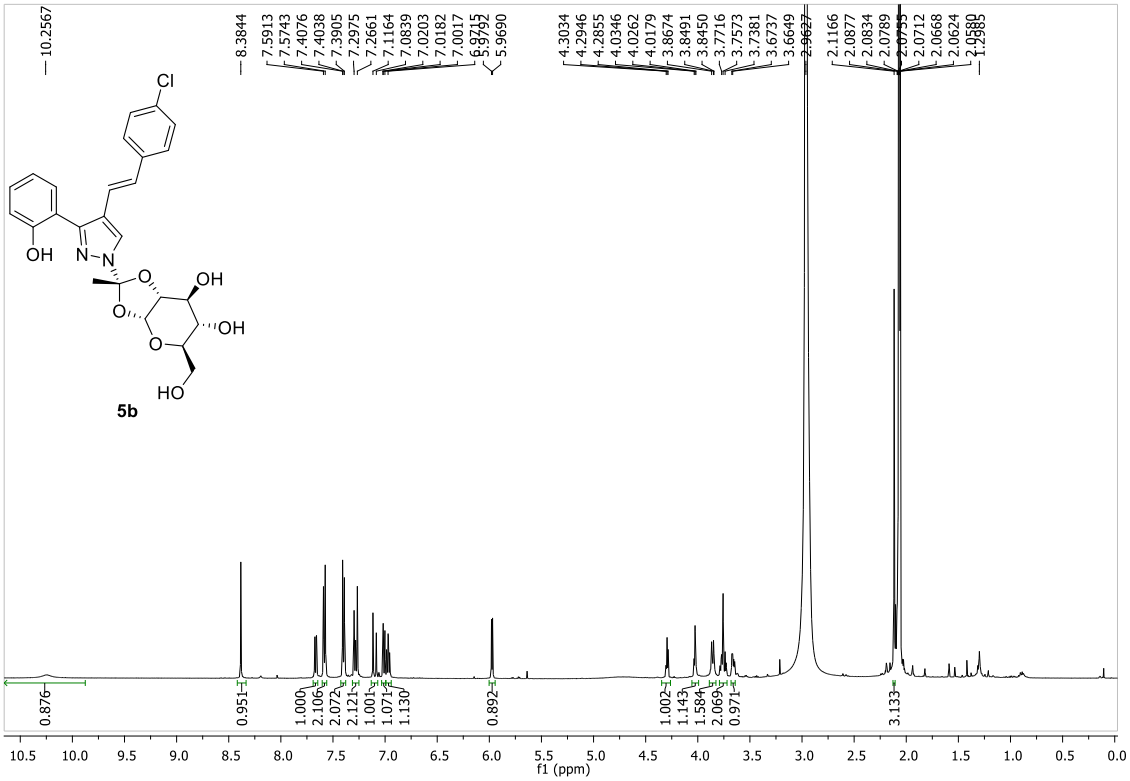

Figure S25. ^{1}H NMR spectrum of compound **5b** [$(CD_3)_2CO$, 500.16 MHz].

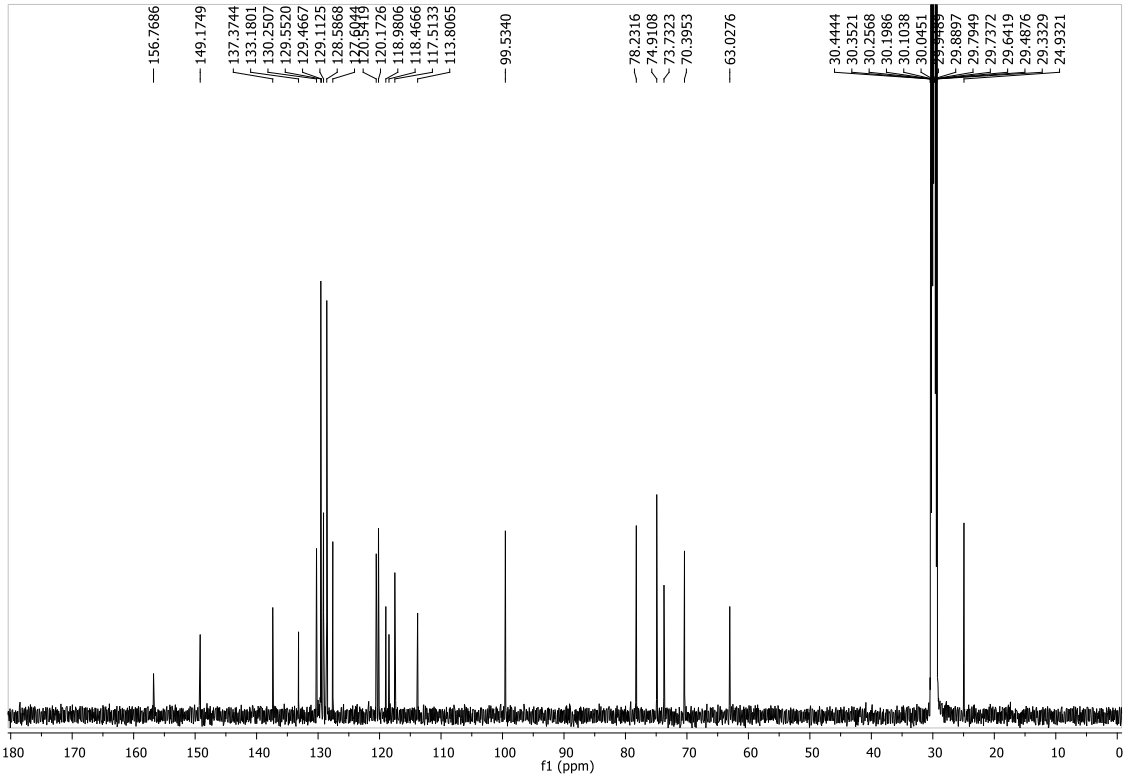

Figure S26. ^{13}C NMR spectrum of compound **5b** [$(CD_3)_2CO$, 75.47 MHz].

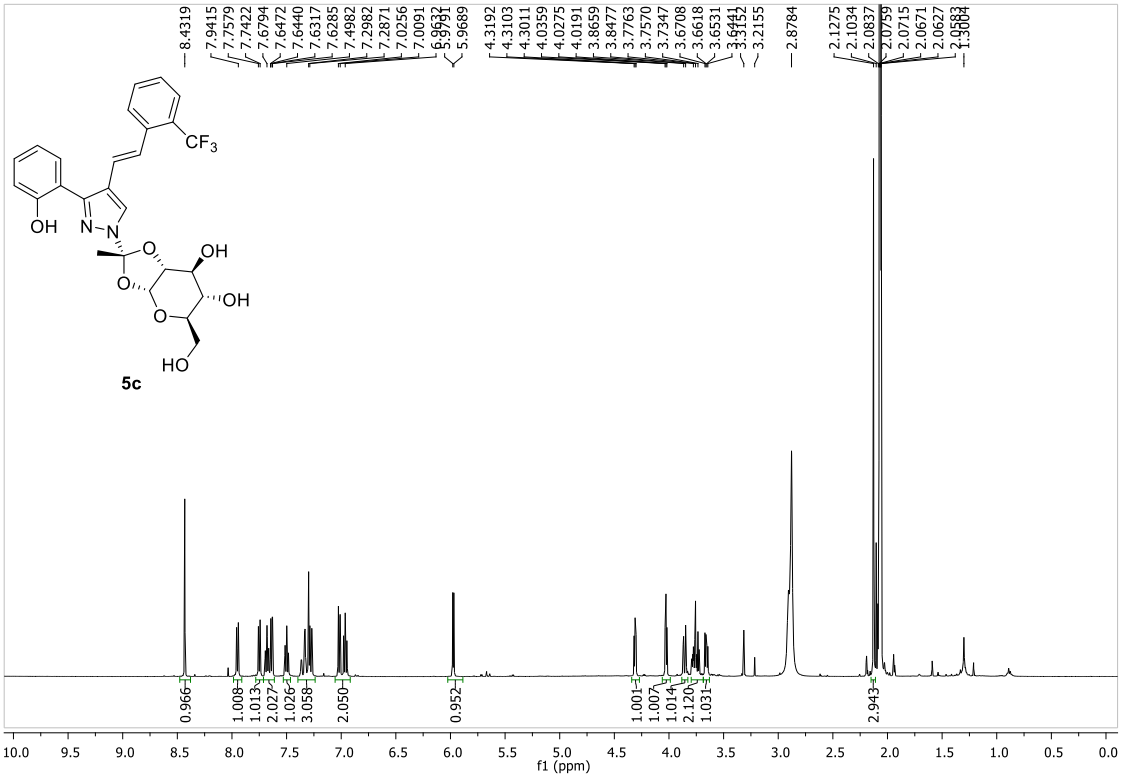

Figure S27. ^{1}H NMR spectrum of compound **5c** [$(CD_3)_2CO$, 500.16 MHz].

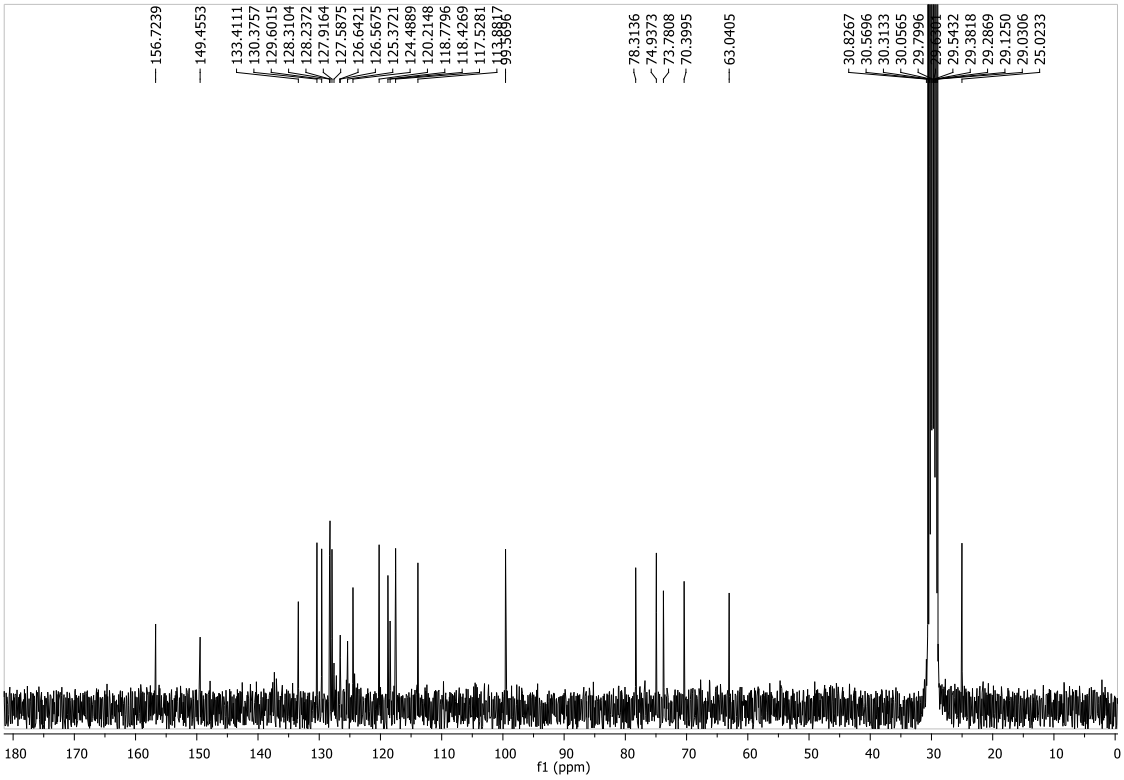

Figure S28. ^{13}C NMR spectrum of compound **5c** [$(CD_3)_2CO$, 75.47 MHz].