Supplementary Materials

Condensation of Benzyl Carbamate with Glyoxal in Polar Protic and Aprotic Solvents

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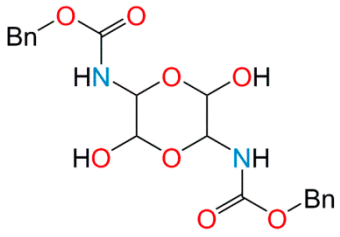


N,N′-bis(carbobenzoxy)-3,6-diamino-1,4-dioxane-2,5-diol (**2**)

^{1}H (400 MHz) NMR (DMSO-D6, 24°C)

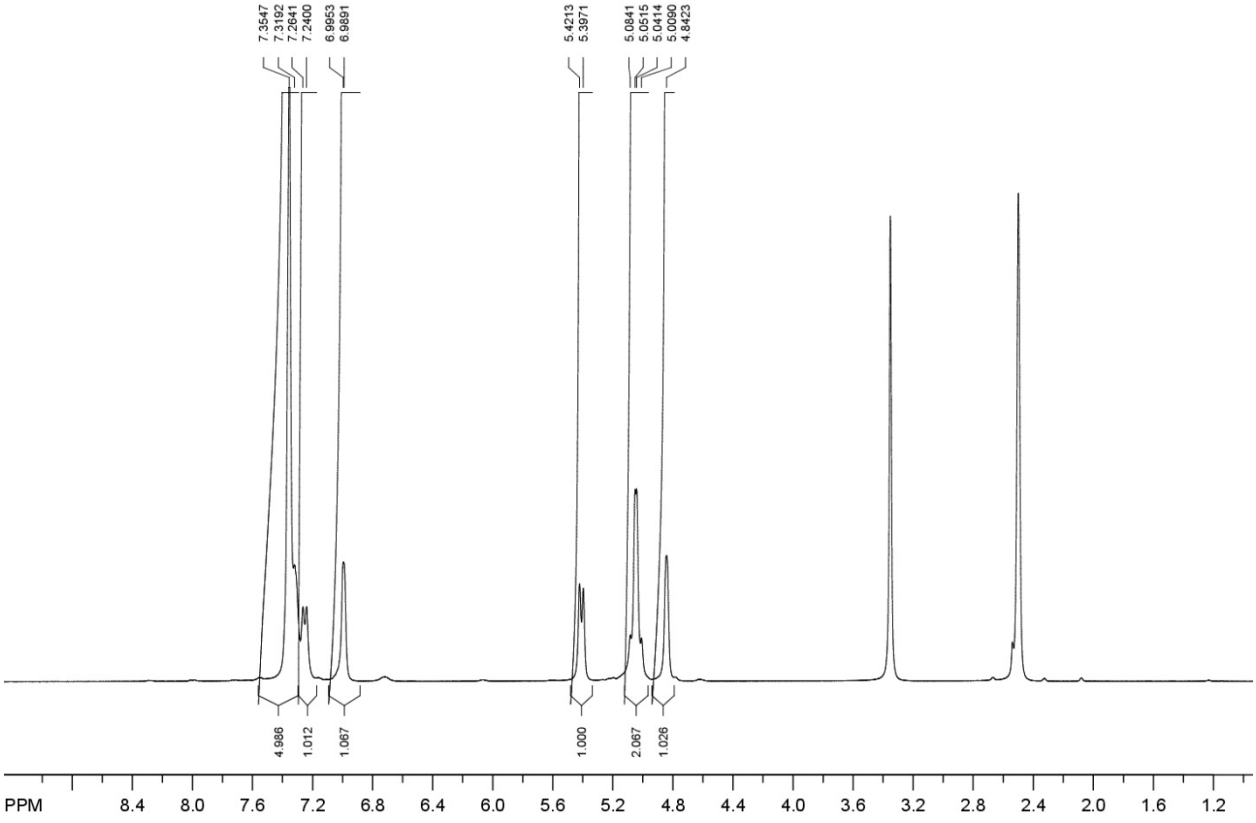


Figure S1. ^{1}H NMR (DMSO-D6) spectrum of compound **2**.

^{13}C (100 MHz) NMR (DMSO-D6, 24^{o}C)

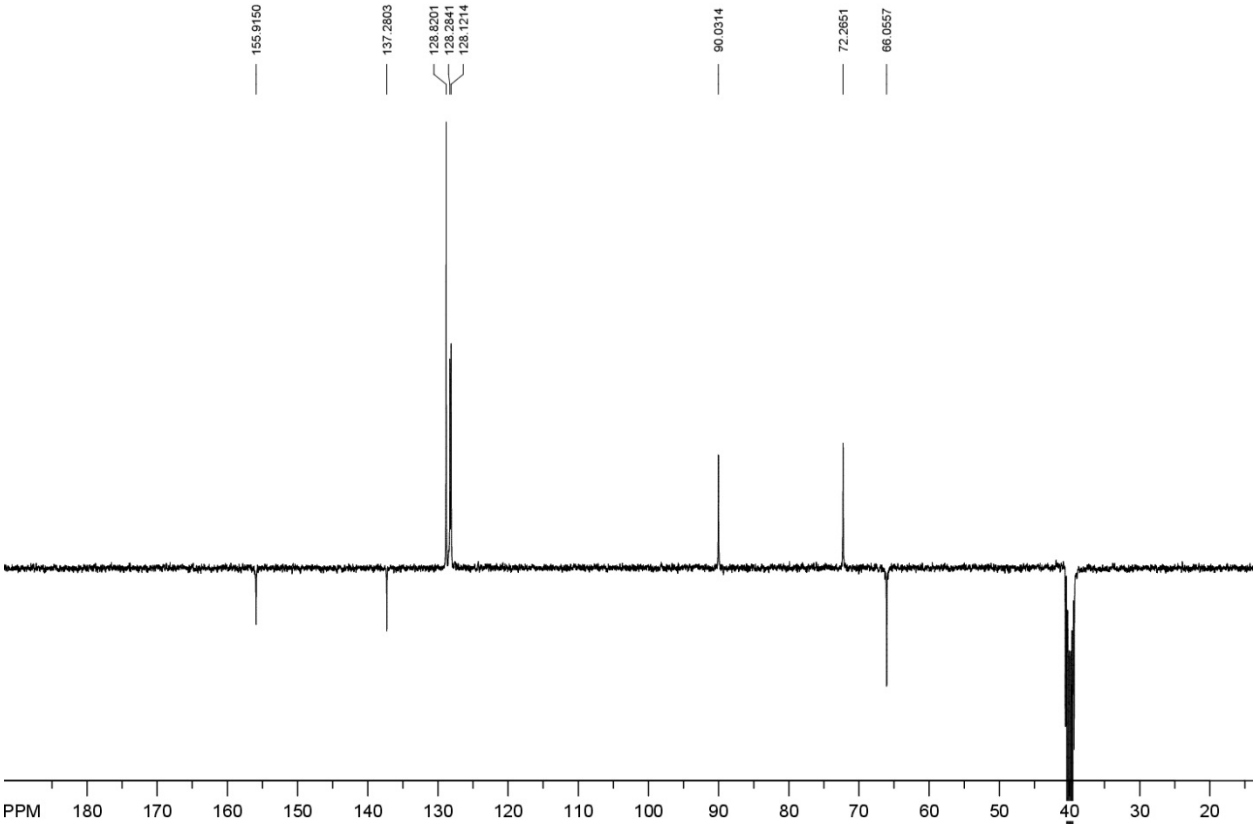
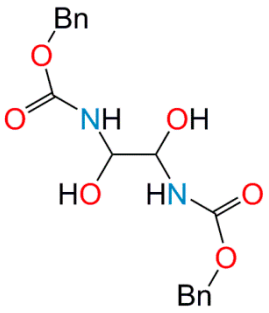


Figure S2. ^{13}C NMR (DMSO-D6) spectrum of compound **2**.



N,N′-bis(carbobenzoxy)ethan-1,2-diol (**3**)

^{1}H (400 MHz) NMR (DMSO-D6, 24°C)

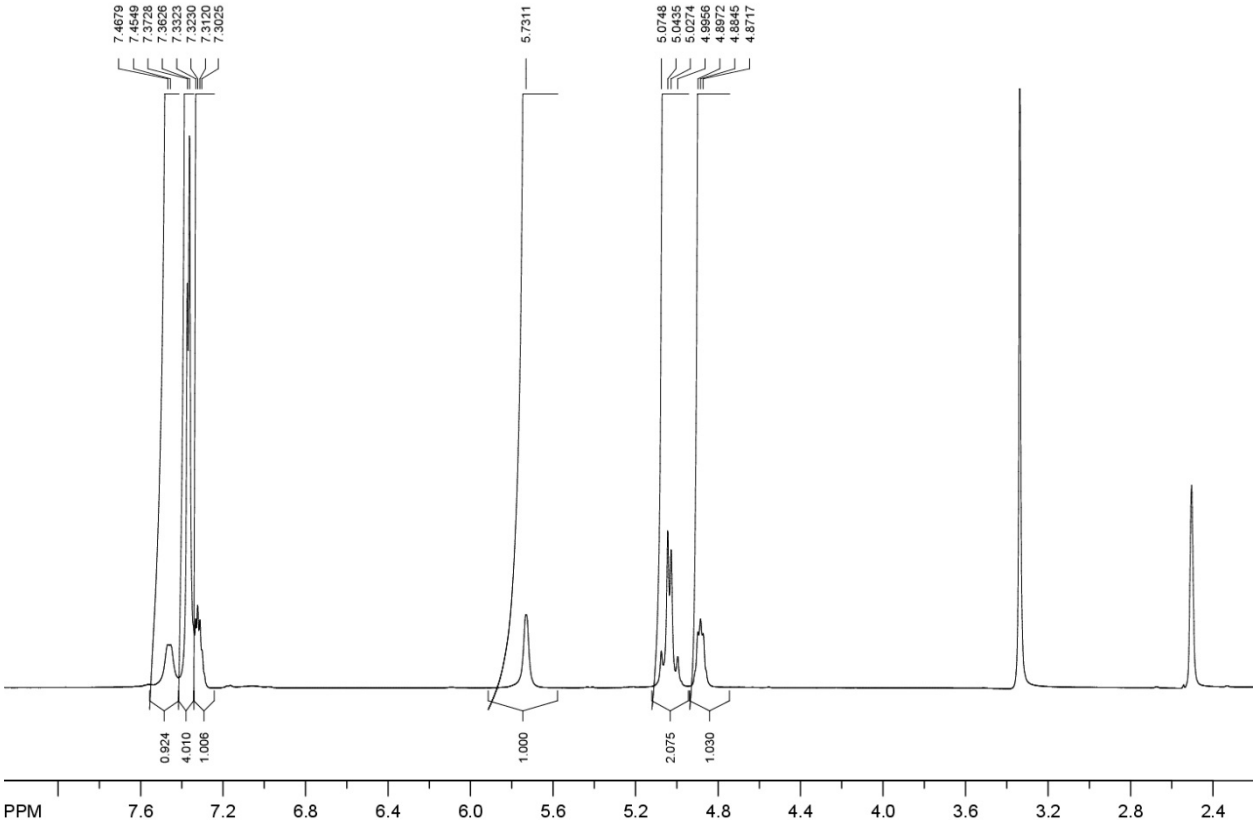


Figure S3. ^{1}H NMR (DMSO-D6) spectrum of compound **3**.

^{13}C (100 MHz) NMR (DMSO-D6, 24^{o}C)

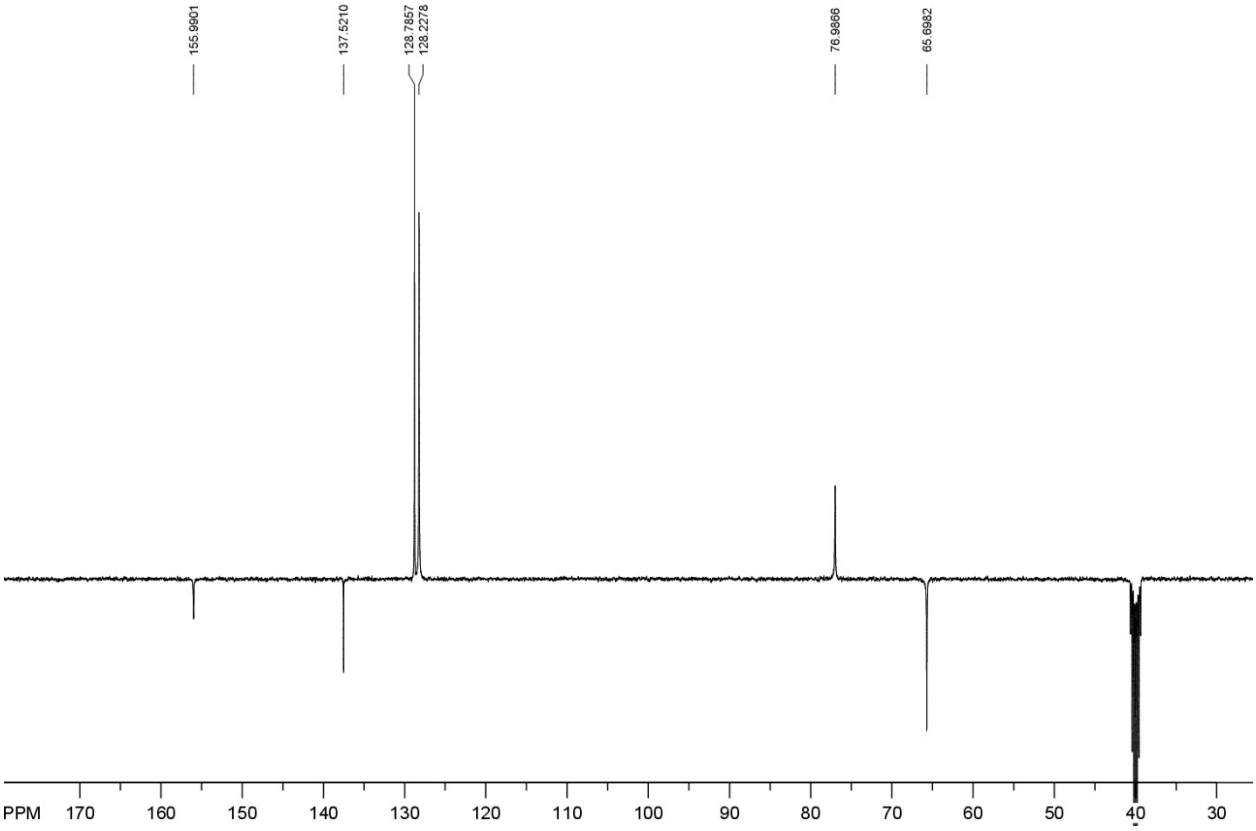
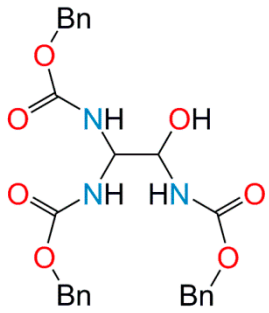


Figure S4. ^{13}C NMR (DMSO-D6) spectrum of compound **3**.



N,N′,N′′-tris(carbobenzoxy)ethanol (**4**)

^{1}H (400 MHz) NMR (DMSO-D6, 24°C)

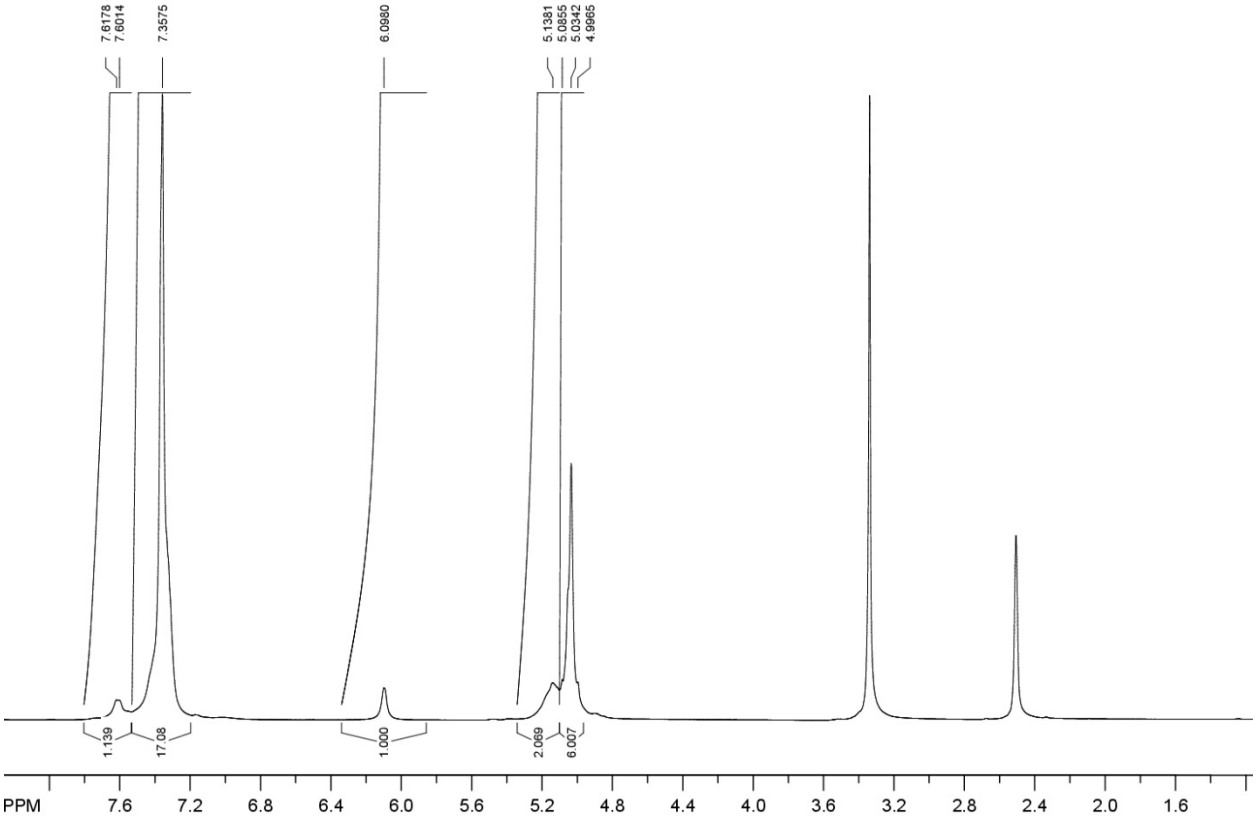


Figure S5. ^{1}H NMR (DMSO-D6) spectrum of compound **4**.

^{13}C (100 MHz) NMR (DMSO-D6, 24^{o}C)

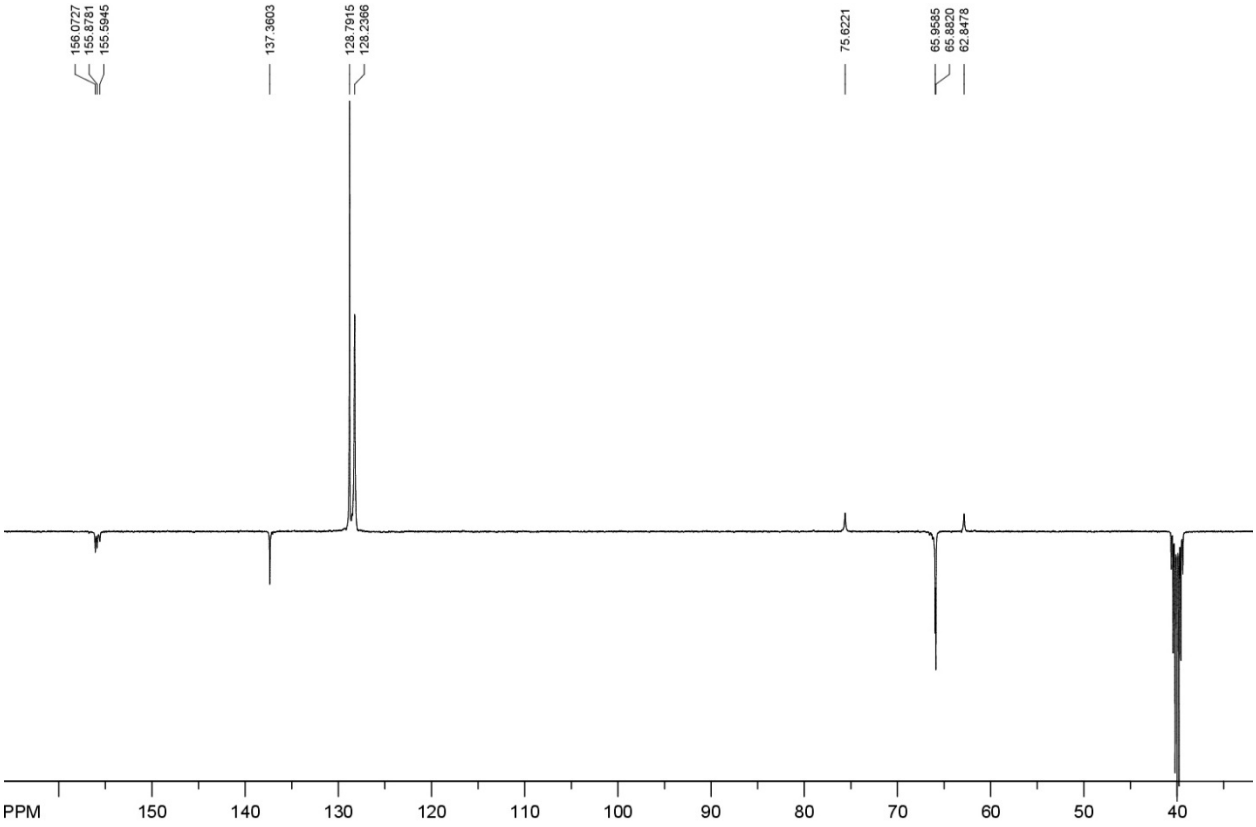
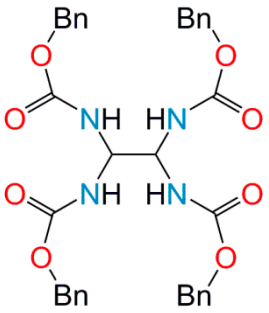


Figure S6. ^{13}C NMR (DMSO-D6) spectrum of compound **4**.



N,N′,N′′,N′′′-tetrakis(carbobenzoxy)ethan (**5**)

^{1}H (400 MHz) NMR (DMSO-D6, 24°C)

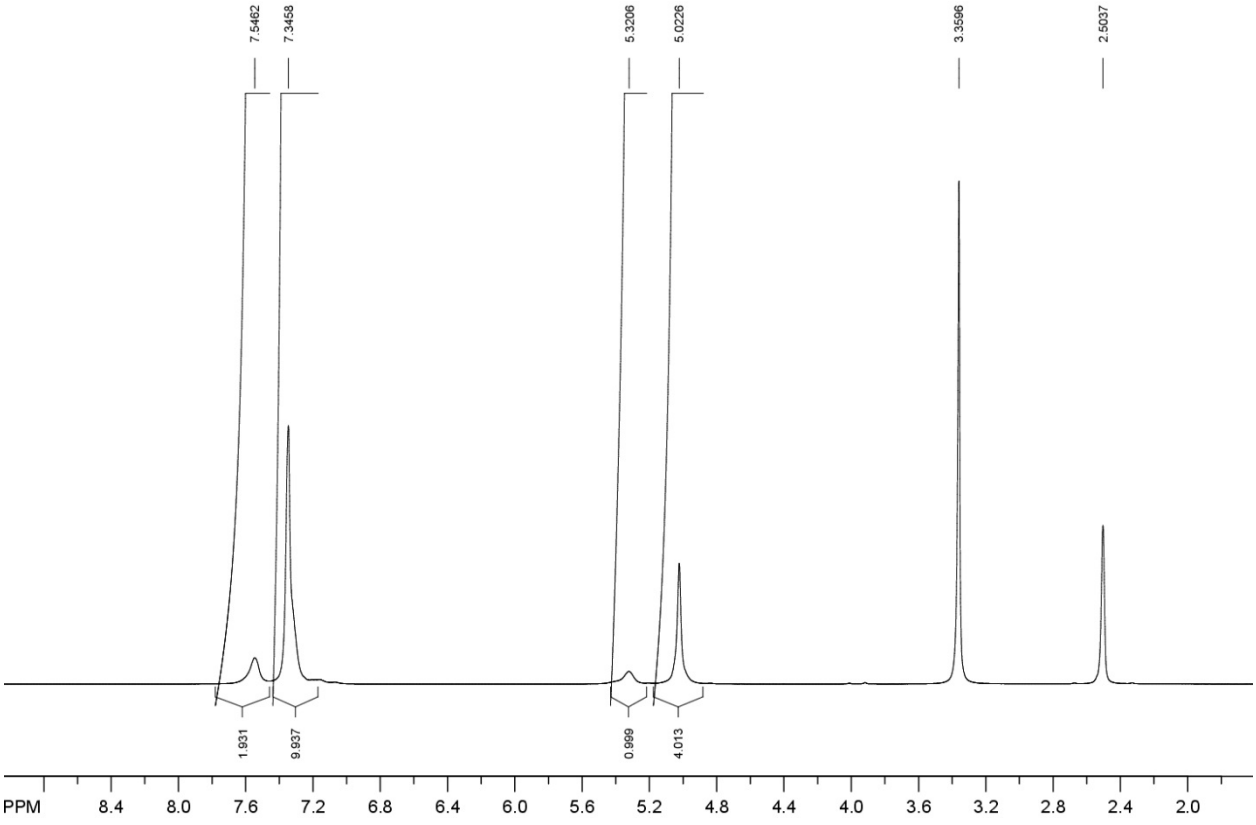


Figure S7. ^{1}H NMR (DMSO-D6) spectrum of compound **5**.

^{13}C (100 MHz) NMR (DMSO-D6, 24^{o}C)

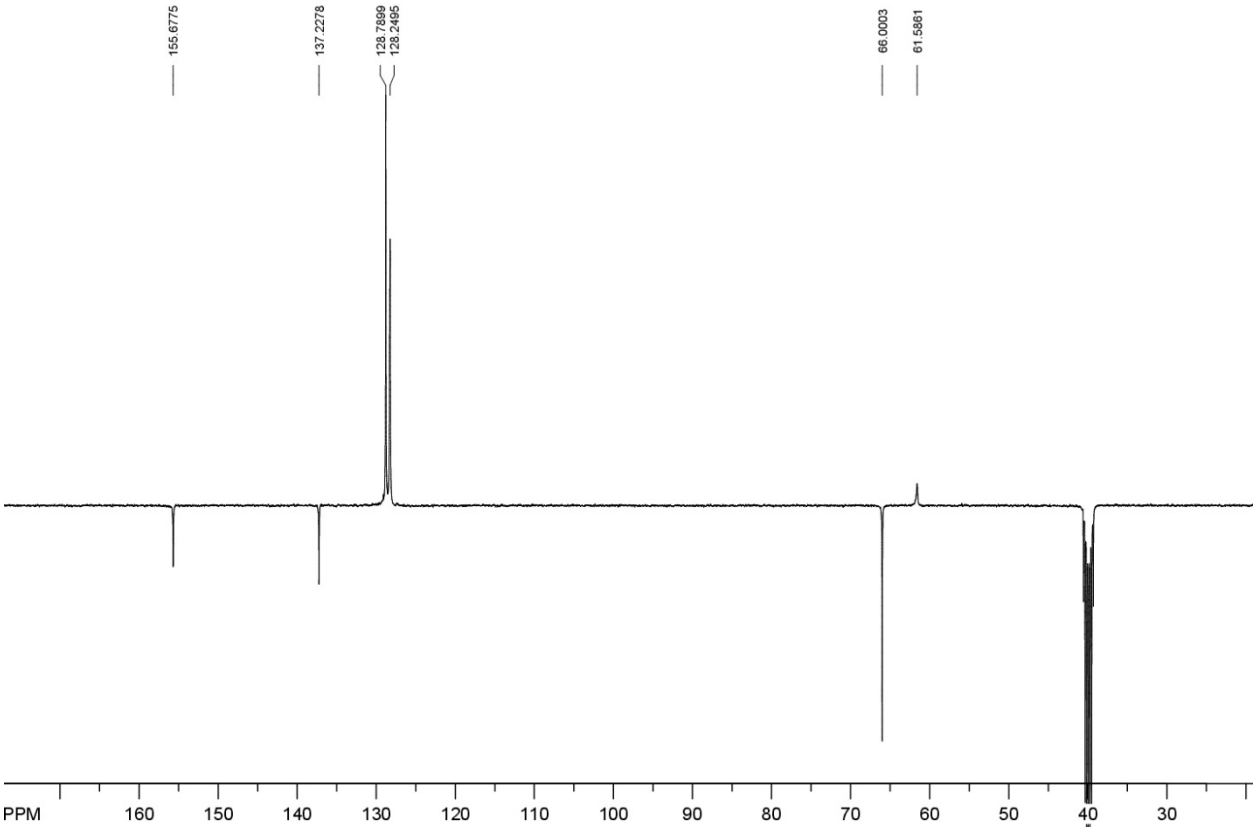
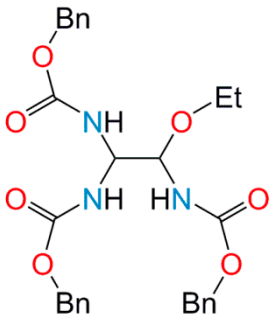


Figure S8. ^{13}C NMR (DMSO-D6) spectrum of compound **5**.



N,N′,N′′-tris(carbobenzoxy)-2-ethoxyethan (**7**)

^{1}H (400 MHz) NMR (DMSO-D6, 24°C); the CH_2 signal overlapped with H_2O.

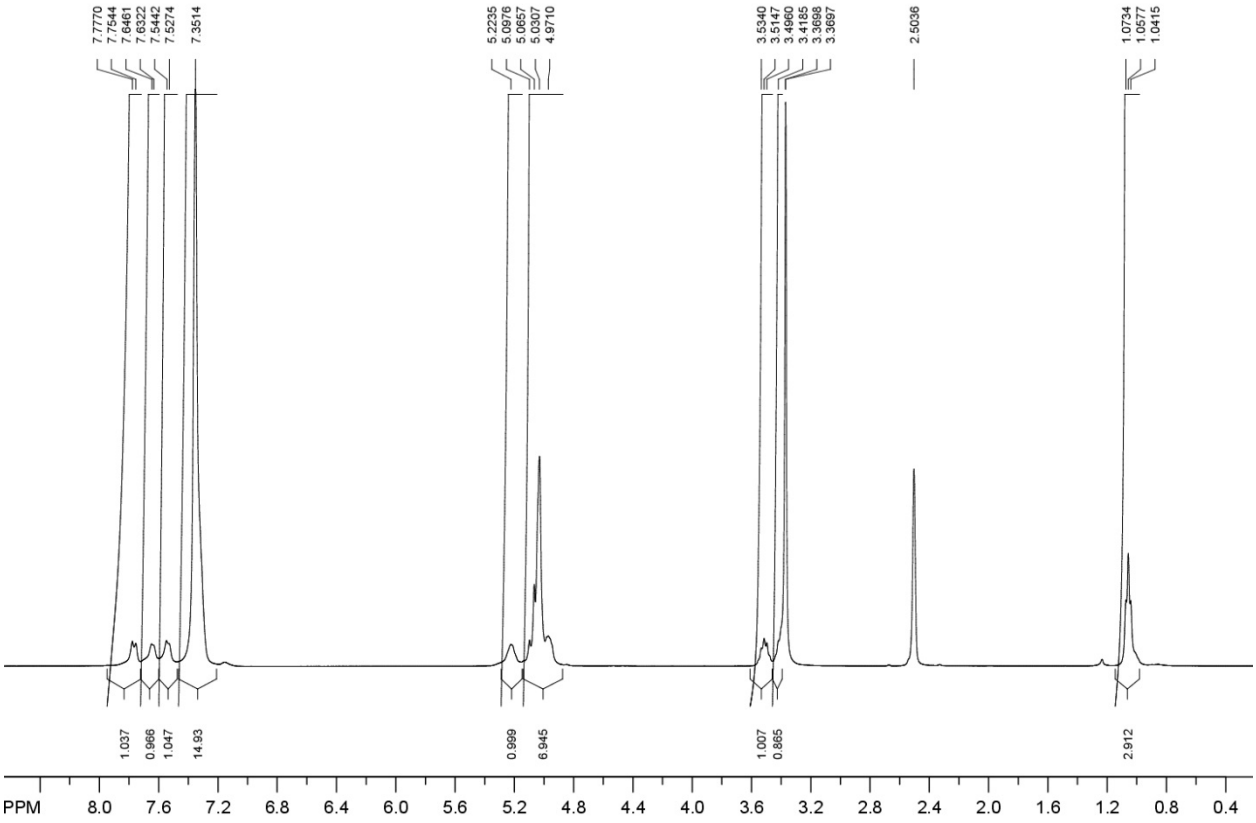


Figure S9. ^{1}H NMR (DMSO-D6) spectrum of compound **7**.

^{1}H (400 MHz) NMR (acetone-D6, 24^{o}C); the compound is much worse soluble in acetone-D6 than in DMSO-D6.

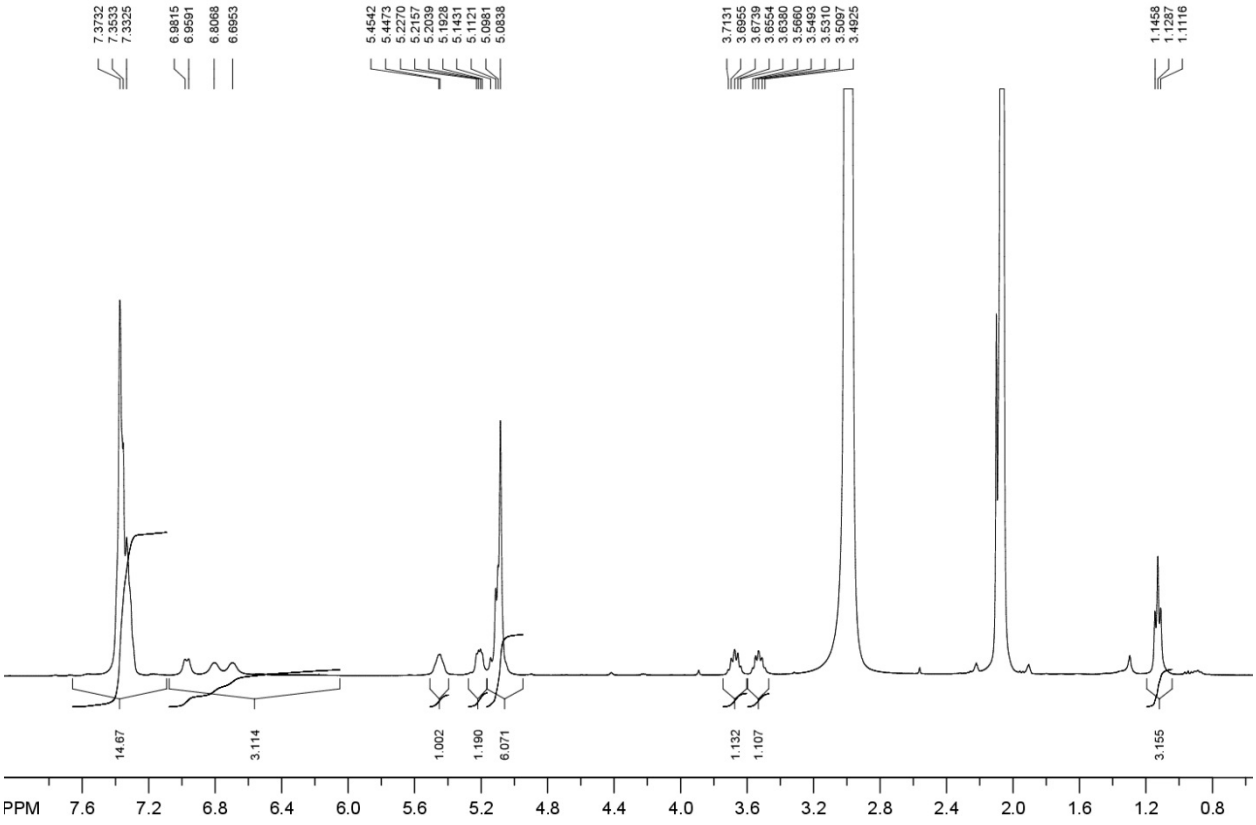


Figure S10. ^{1}H NMR (acetone-D6) spectrum of compound **7**.

^{13}C (100 MHz) NMR (DMSO-D6, 24^{o}C)

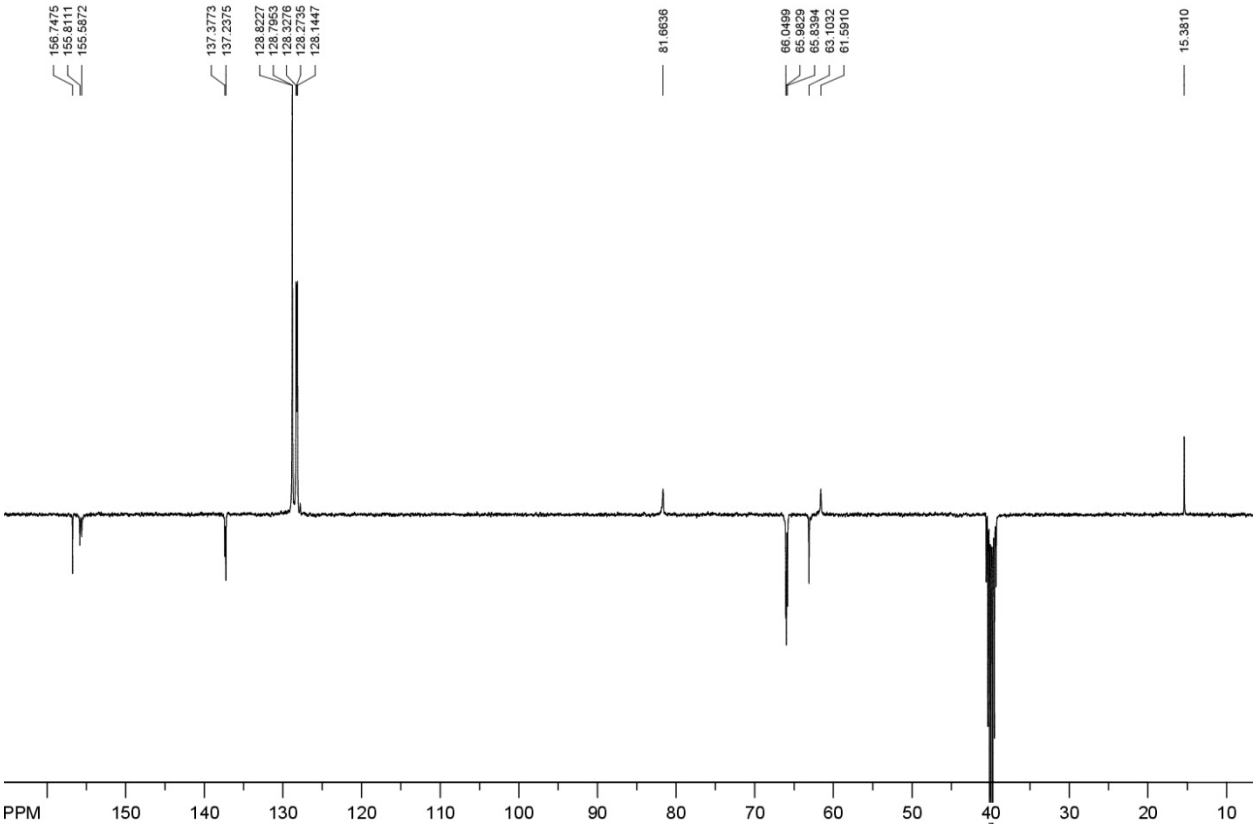
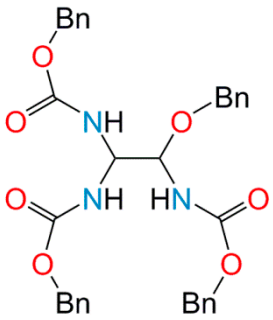


Figure S11. ^{13}C NMR (DMSO-D6) spectrum of compound **7**.



N,N′,N′′-tris(carbobenzoxy)-2-benzoxyethan (**8**)

^{1}H (400 MHz) NMR (DMSO-D6, 24°C)

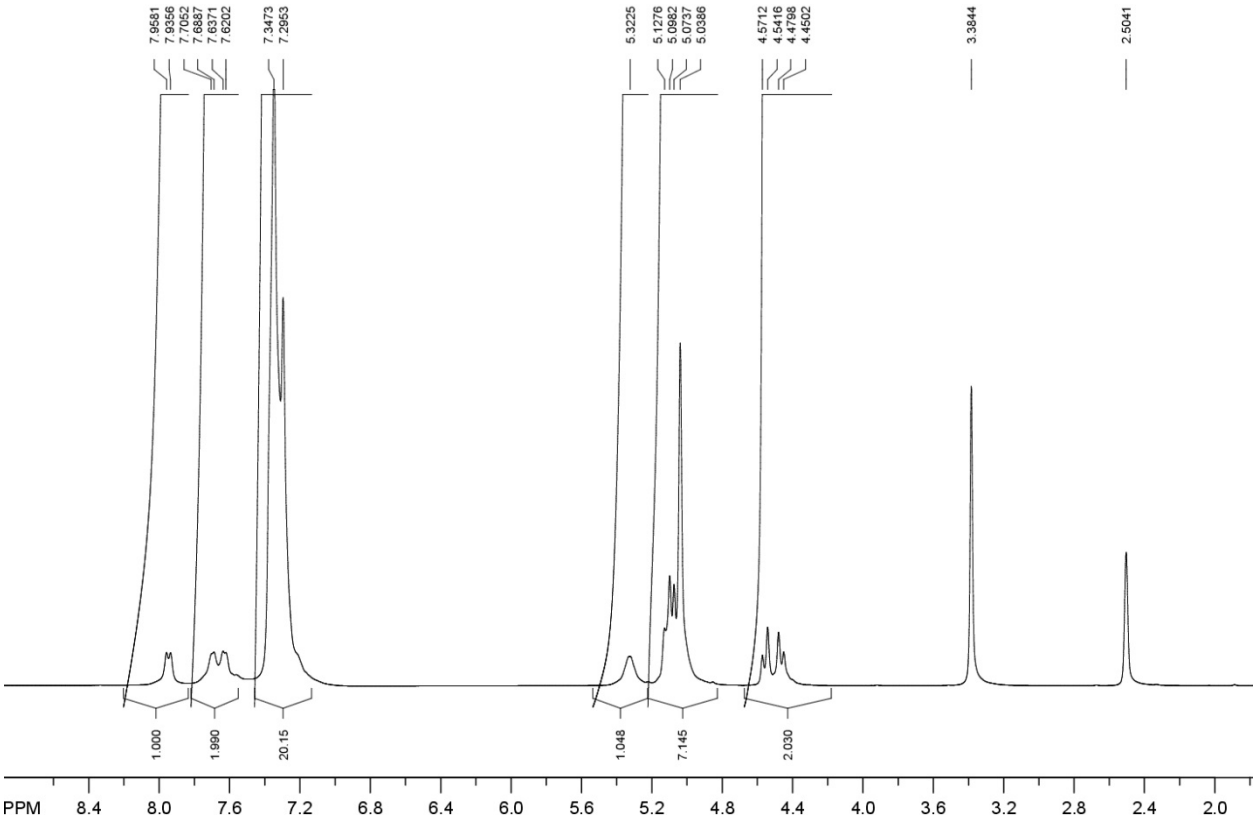


Figure S12. ^{1}H NMR (DMSO-D6) spectrum of compound **8**.

^{13}C (100 MHz) NMR (DMSO-D6, 24^{o}C)

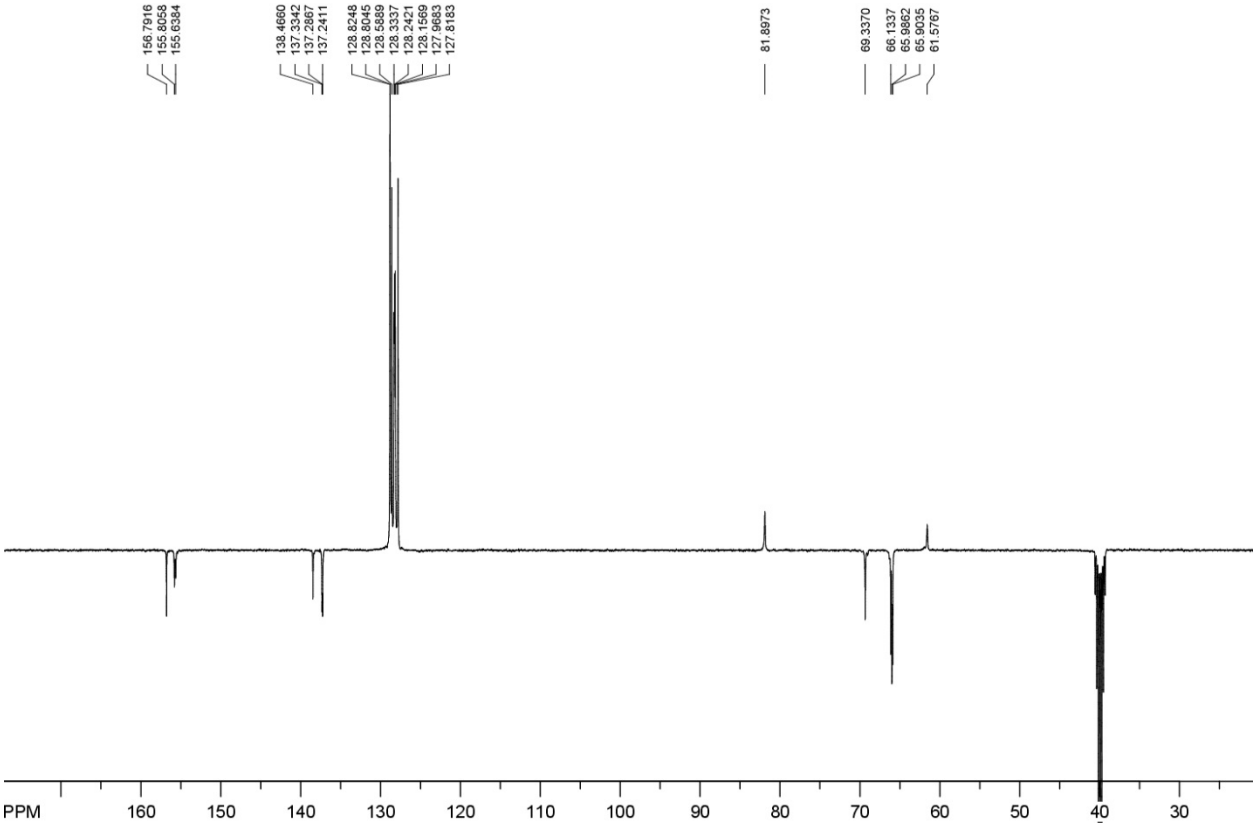


Figure S13. ^{13}C NMR (DMSO-D6) spectrum of compound **8**.