

Polyoxygenated stigmastane-type steroids from *Vernonia kotschyana* Sch. Bip. ex Walp. and their chemophenetic significance[†]

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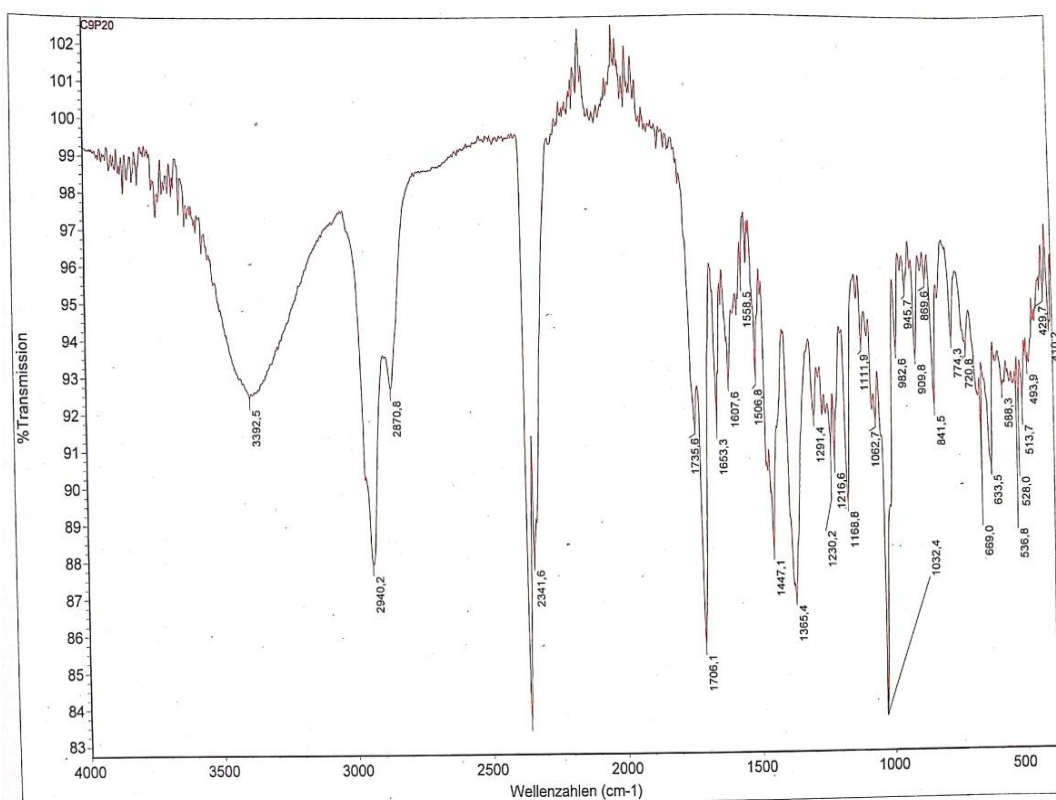


Figure S1: IR spectrum of compound 1

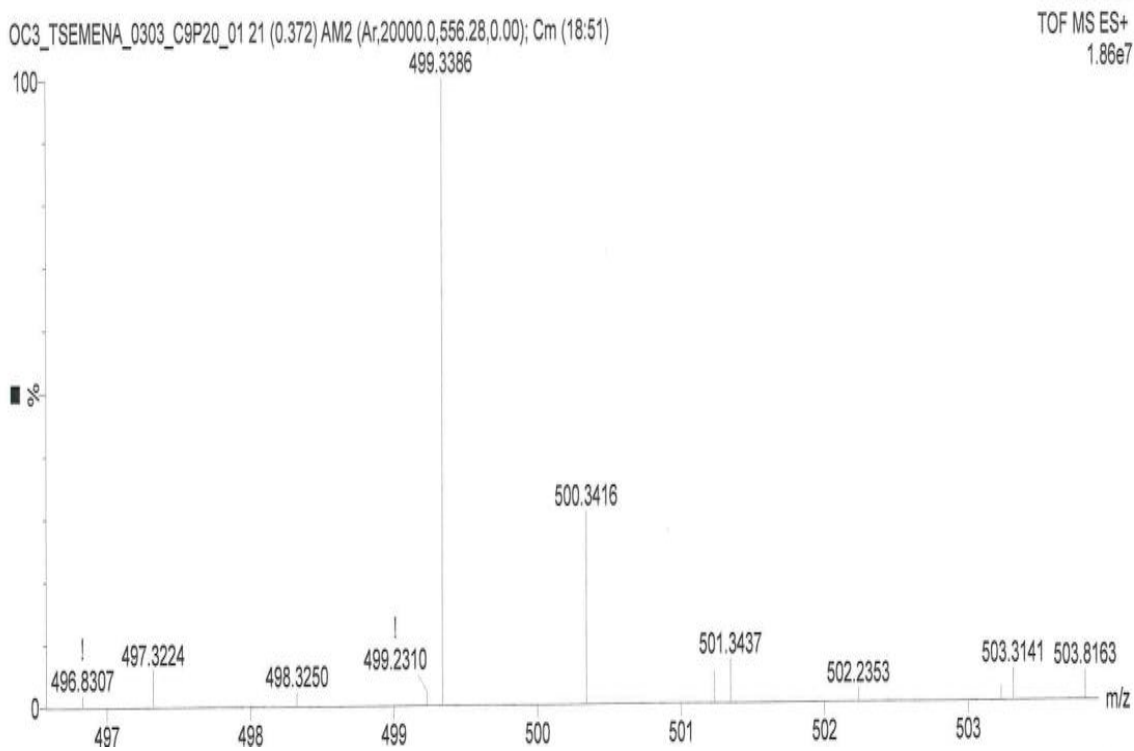


Figure S2: ESI-HR mass spectrum of compound 1

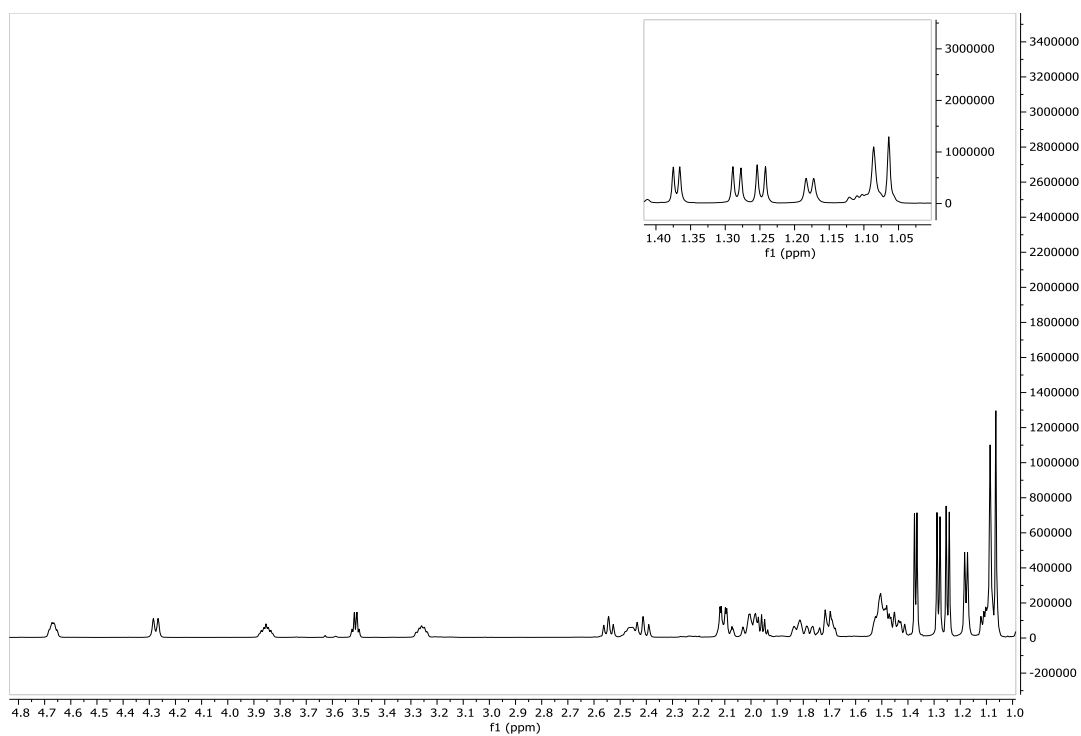


Figure S3: ^1H NMR (CDCl_3 , 500 MHz) spectrum of compound **1**

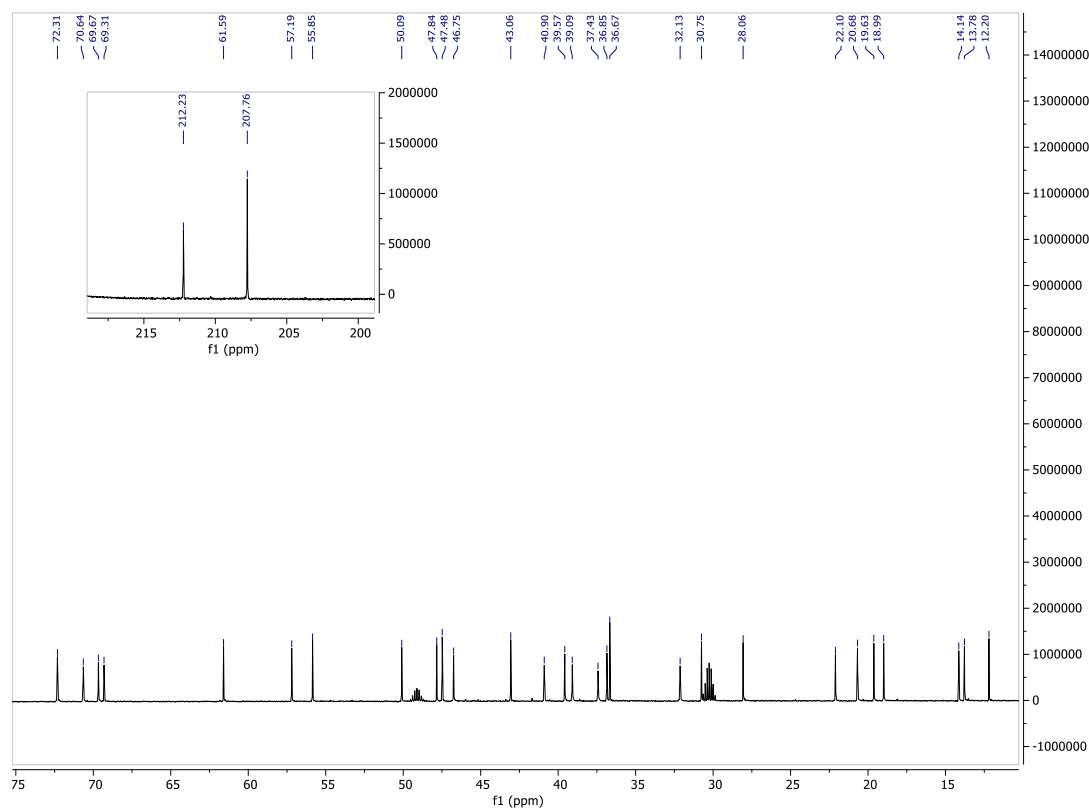


Figure S4: ^{13}C NMR (CDCl_3 , 125 MHz) spectrum of compound **1**

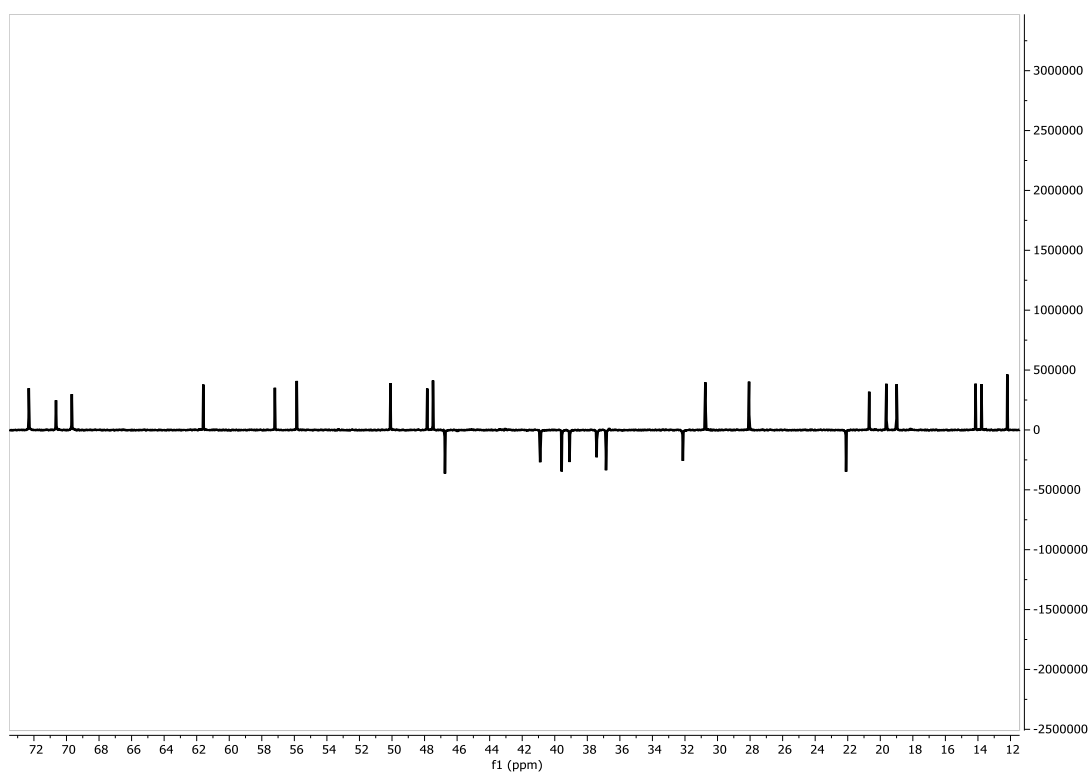


Figure S5: DEPT 135 spectrum of compound **1**

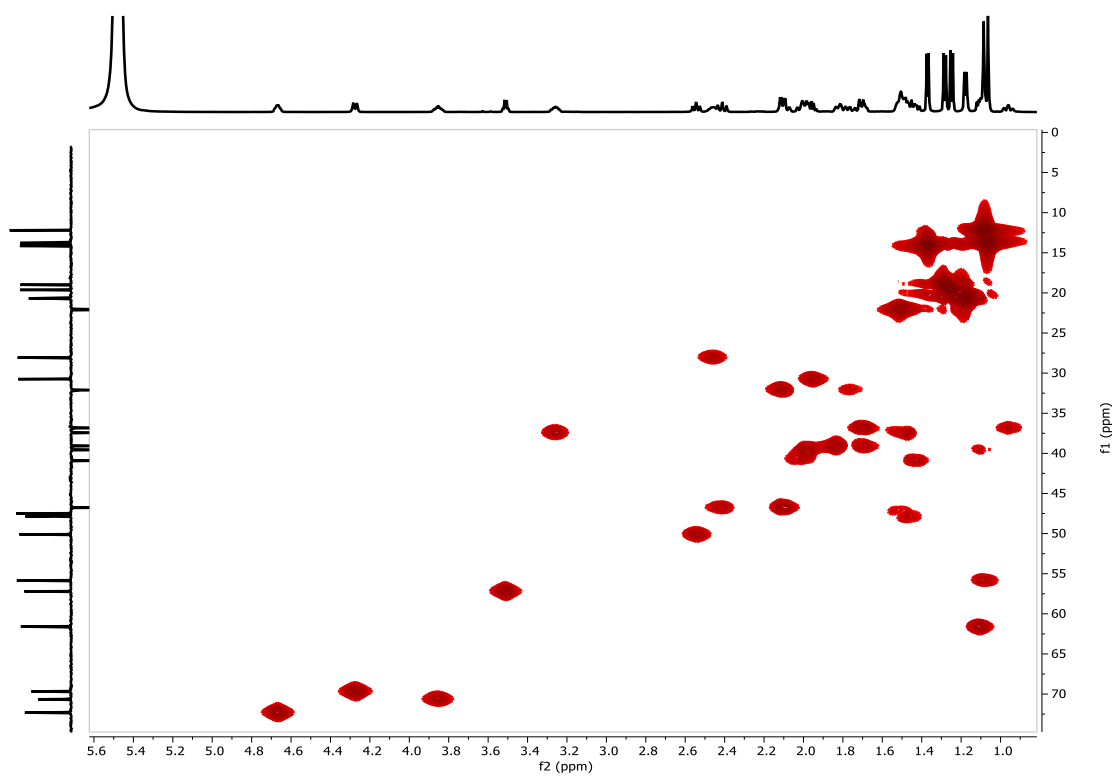


Figure S6: HSQC spectrum of compound **1**

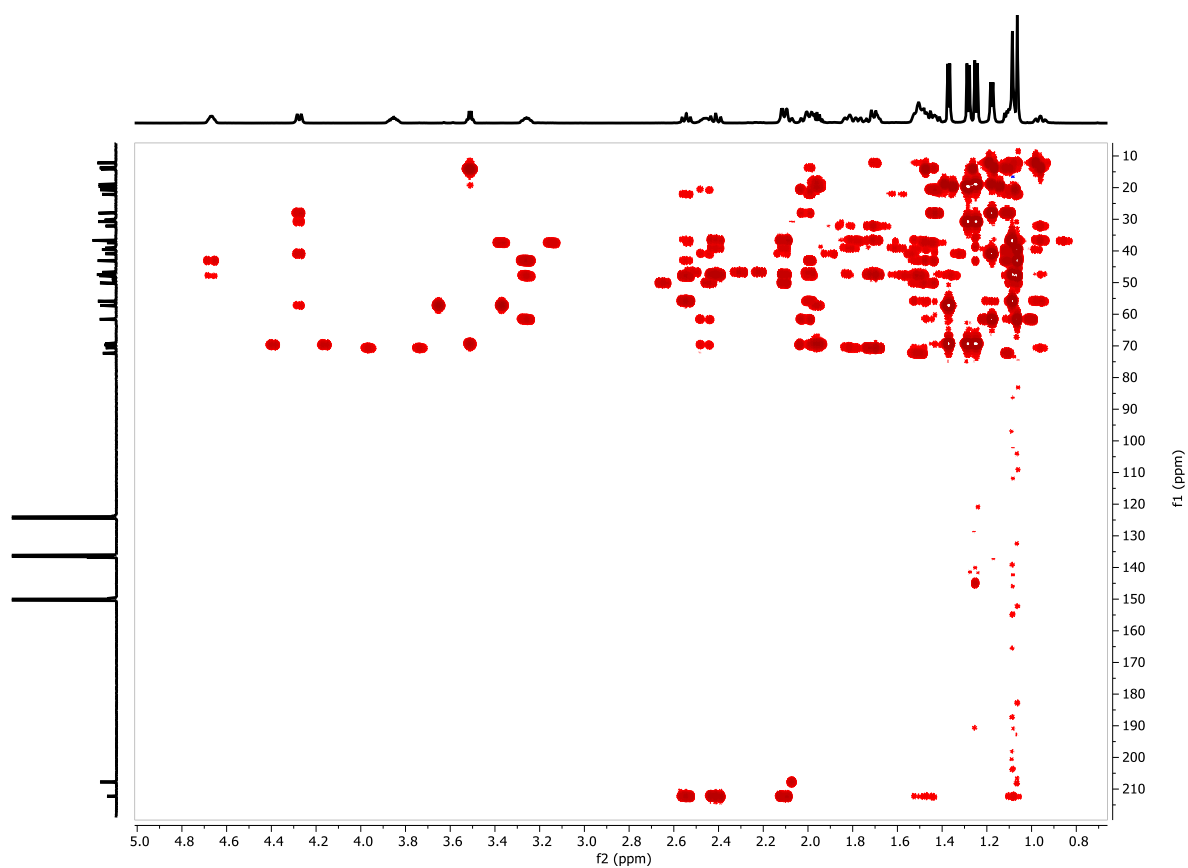


Figure S7: HMBC spectrum of compound 1

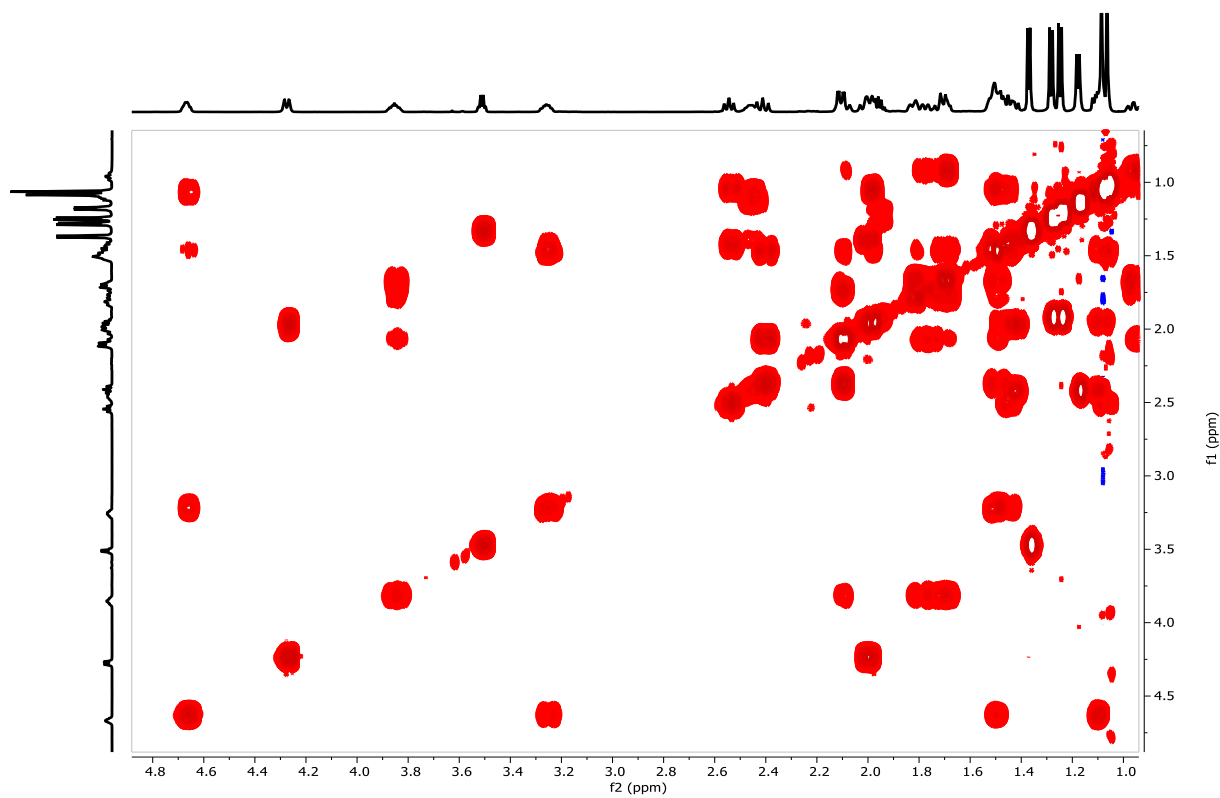


Figure S8: COSY spectrum of compound 1

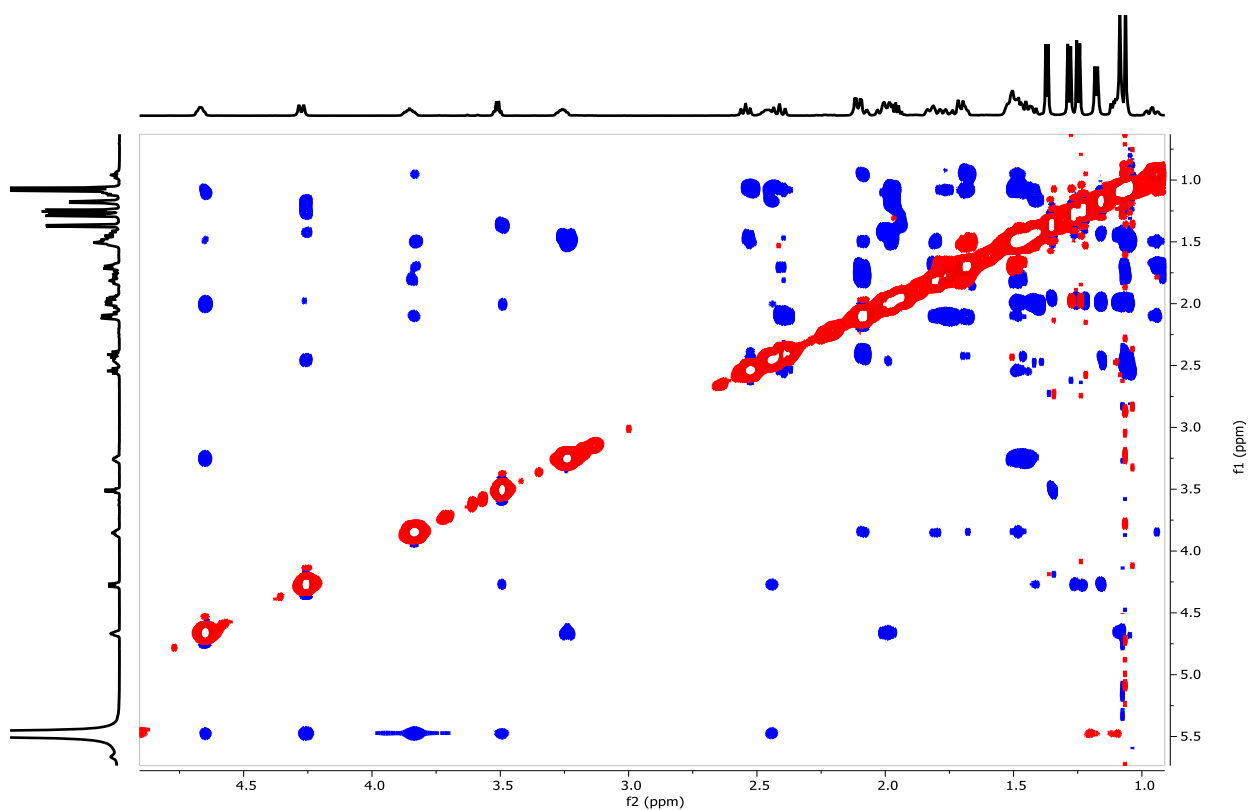


Figure S9: ROESY spectrum of compound 1

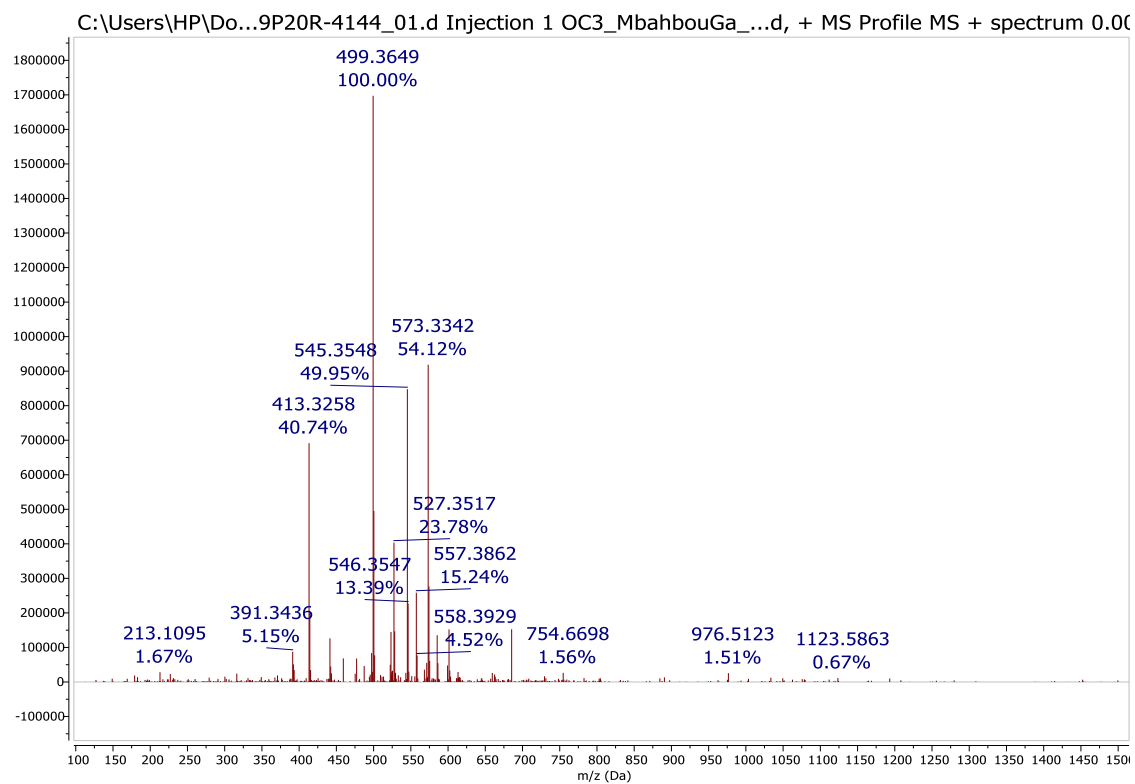


Figure S10: ESI-HR mass spectrum of compound 1a

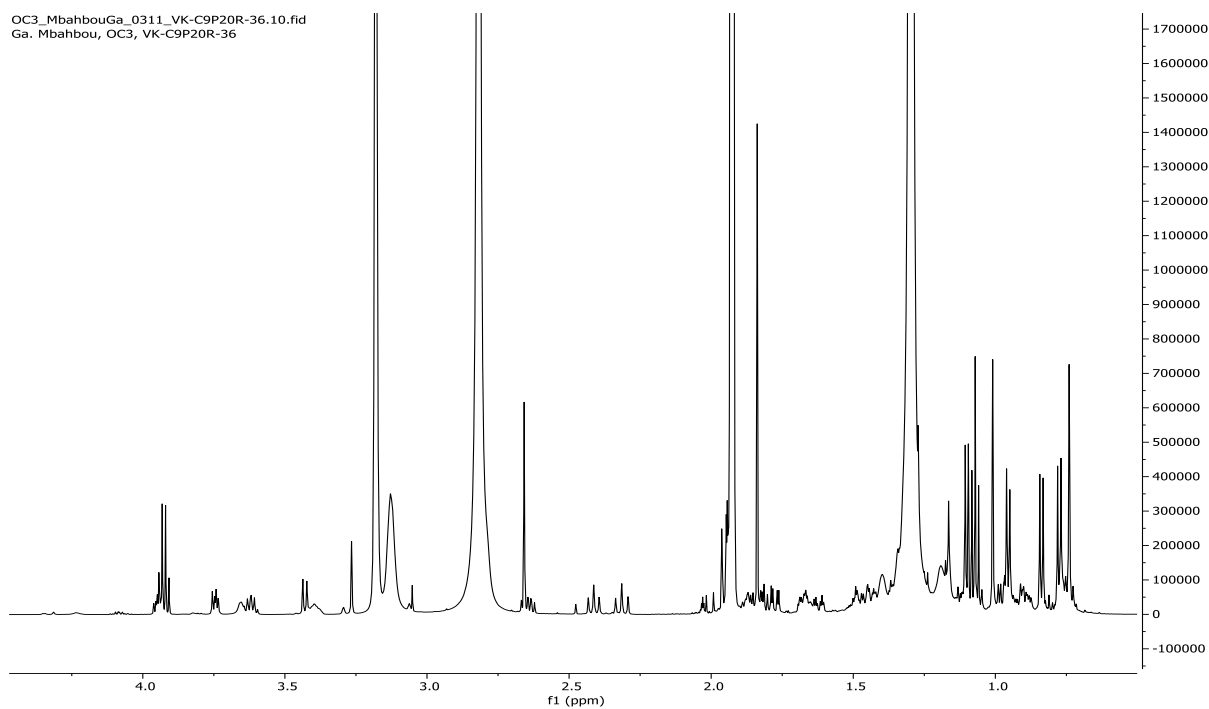


Figure S11: ^1H NMR (acetone- d_6 , 600 MHz) spectrum of compound **1a**

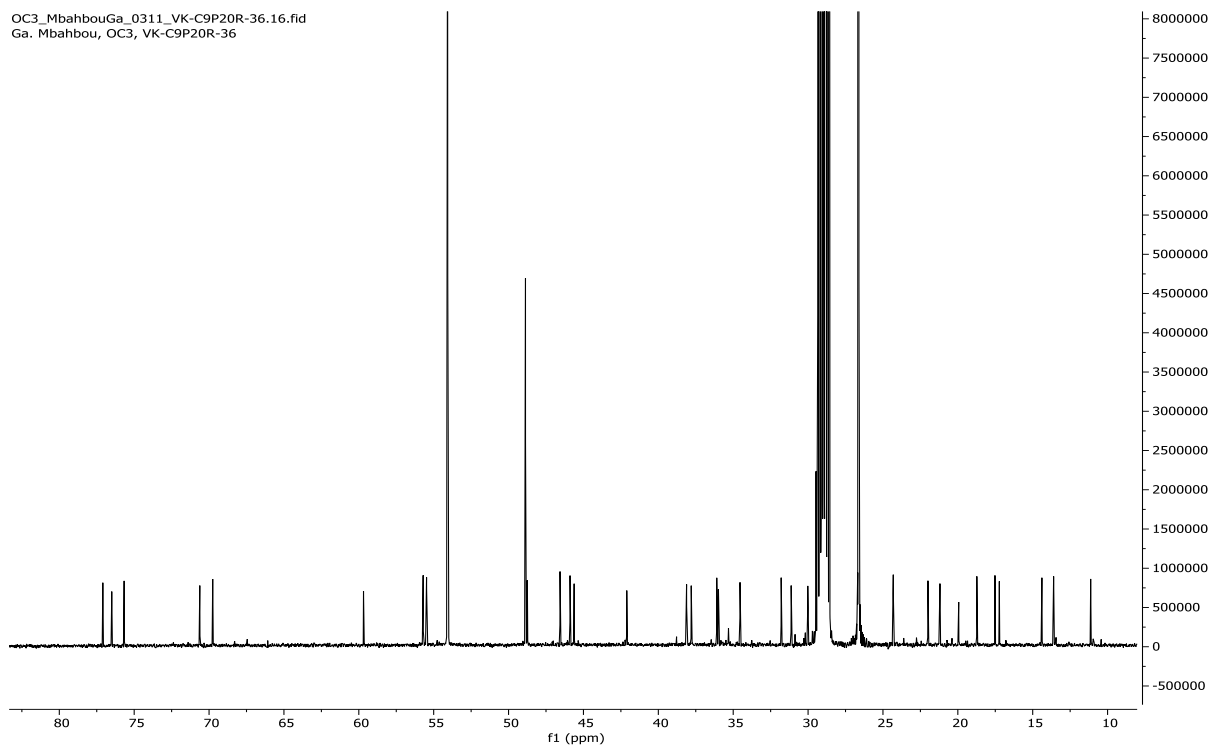


Figure S12: ^{13}C NMR (acetone- d_6 , 150 MHz) spectrum of compound **1a**

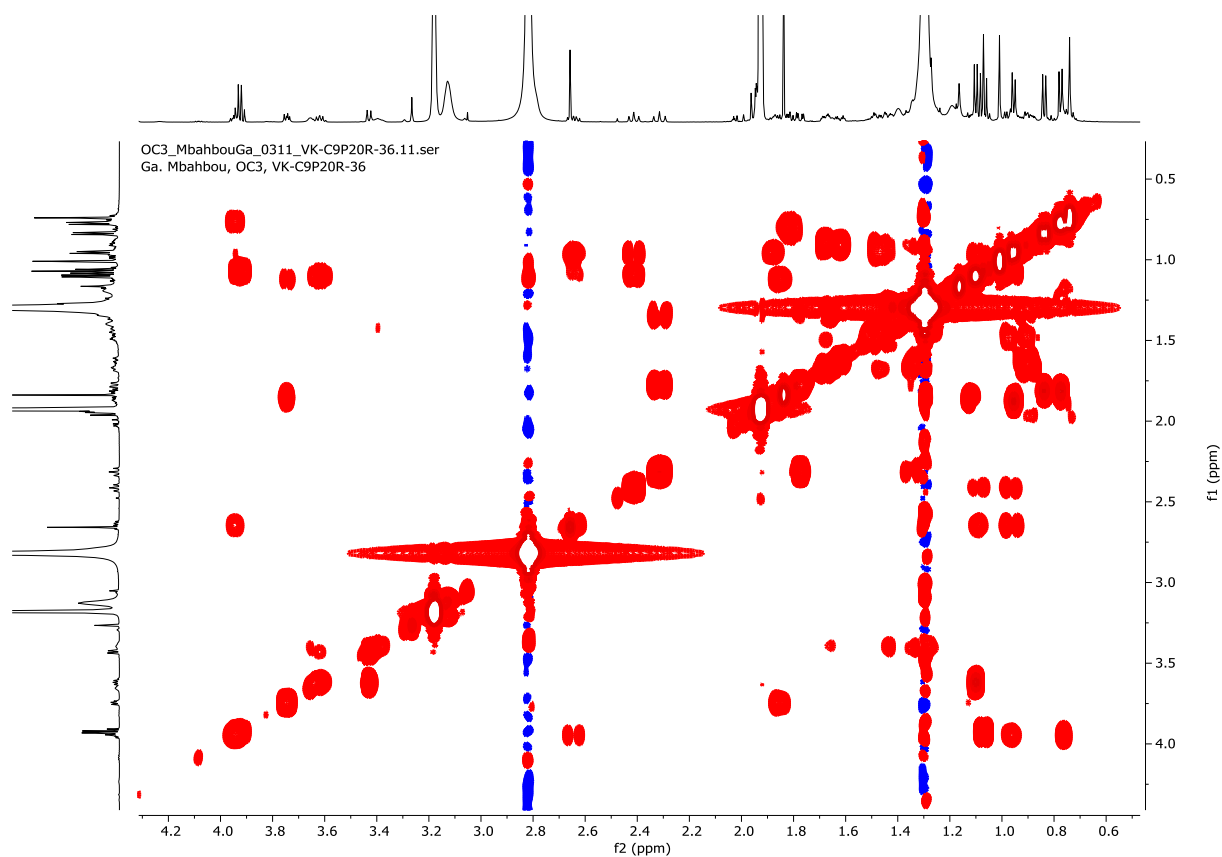


Figure S13: COSY spectrum of compound **1a**

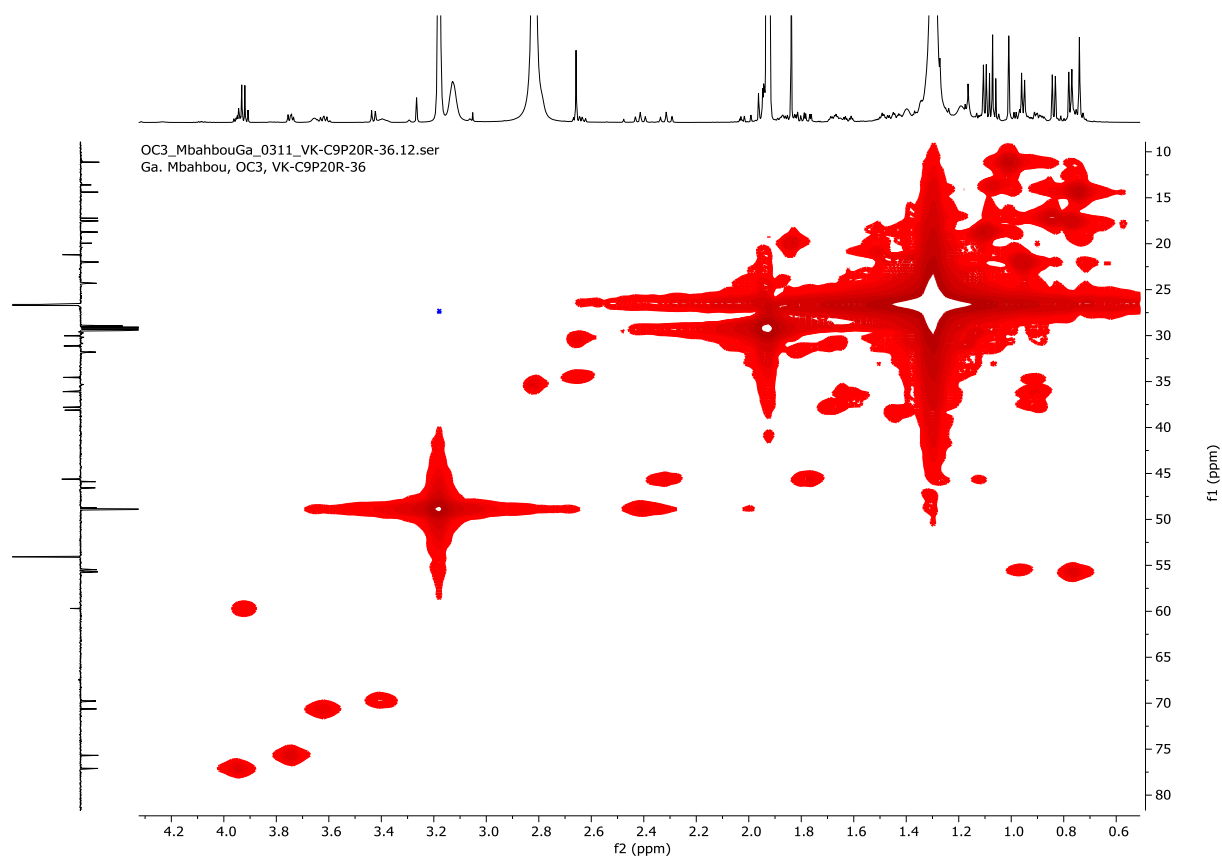


Figure S14: HSQC spectrum of compound **1a**

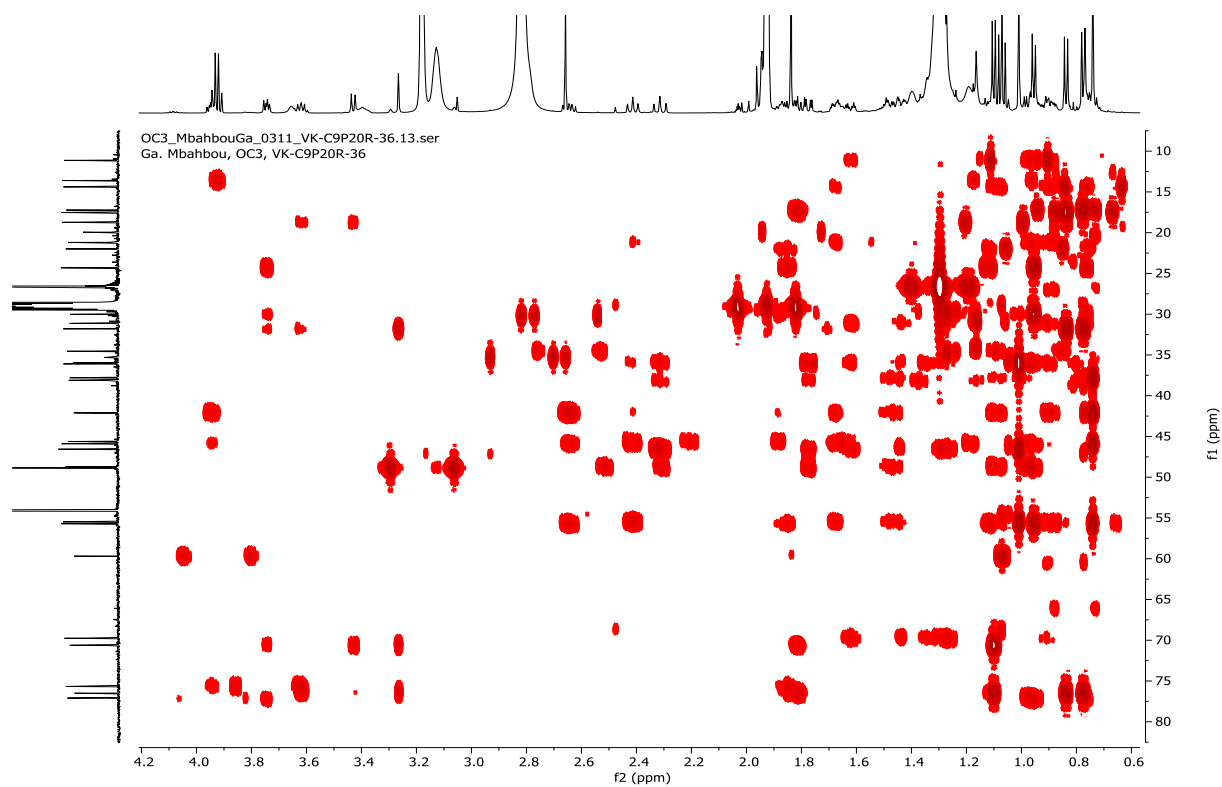


Figure S15: HMBC spectrum of compound **1a**

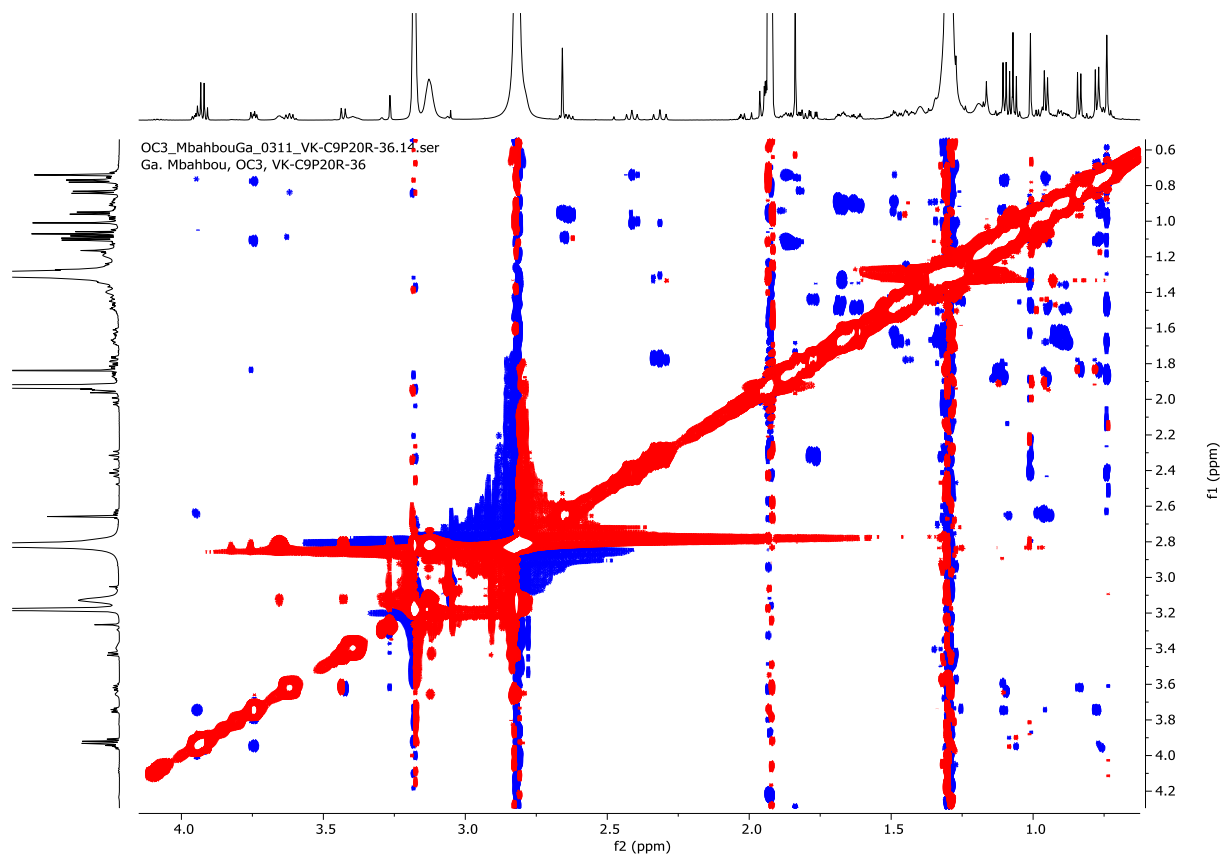


Figure S16: NOESY spectrum of **1a**

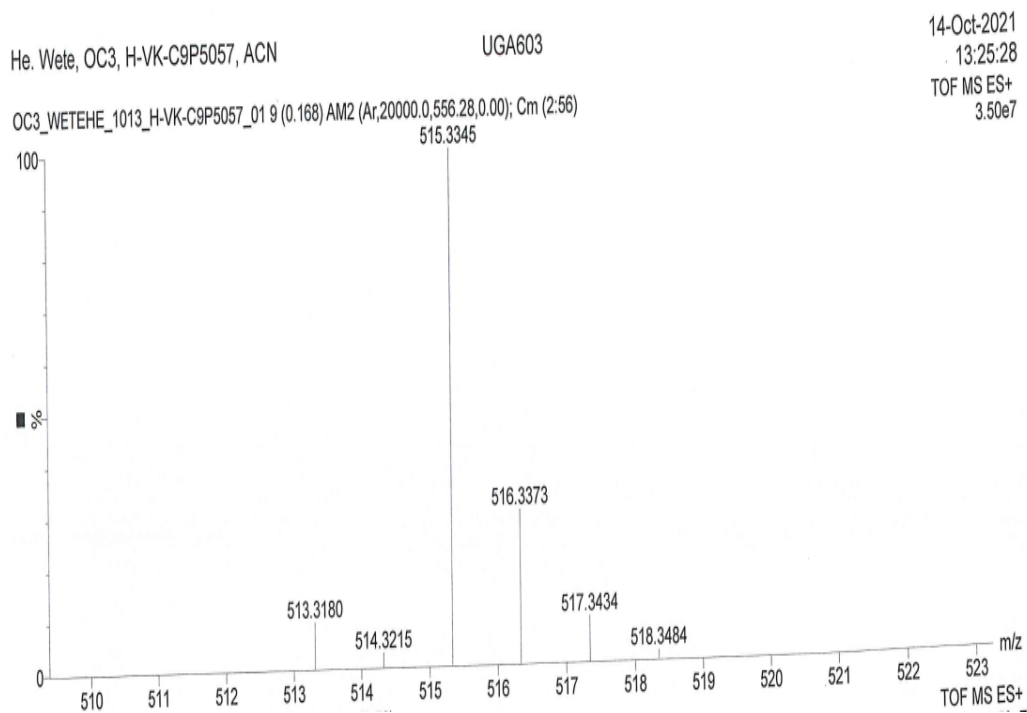


Figure S17: ESI-HR mass spectrum of compound 2

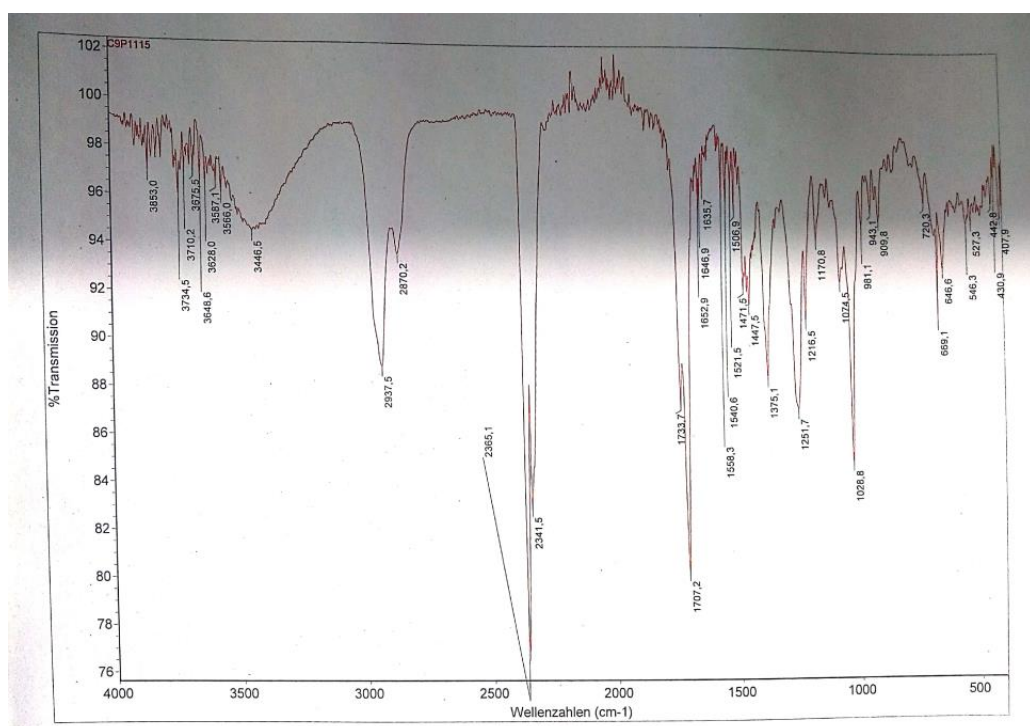


Figure S18: IR spectrum of compound 2

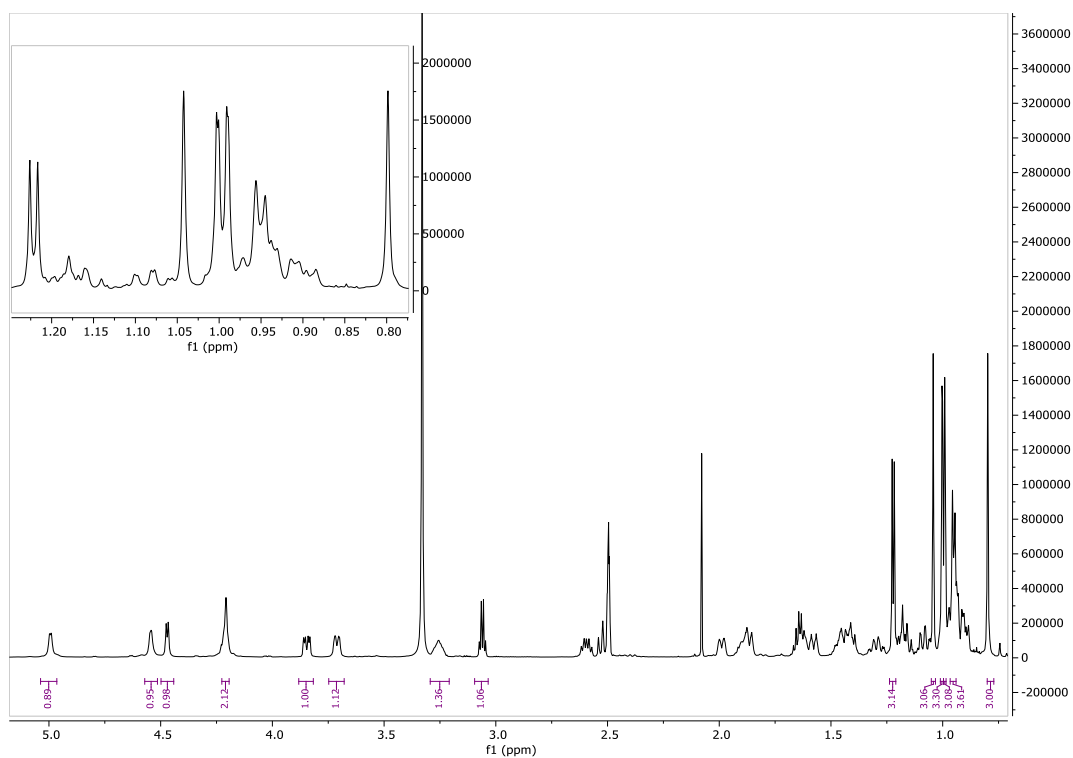


Figure S19: ^1H NMR (CDCl_3 , 500 MHz) spectrum of compound 2

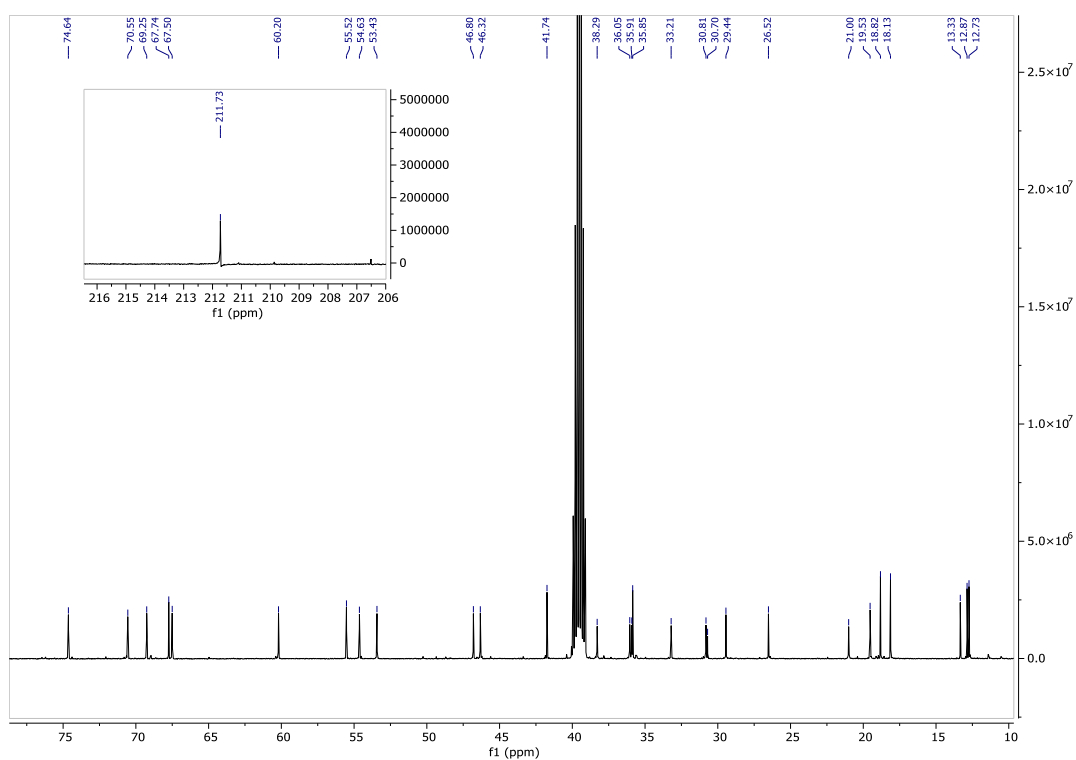


Figure S20: ^{13}C NMR (CDCl_3 , 125 MHz) spectrum of compound 2

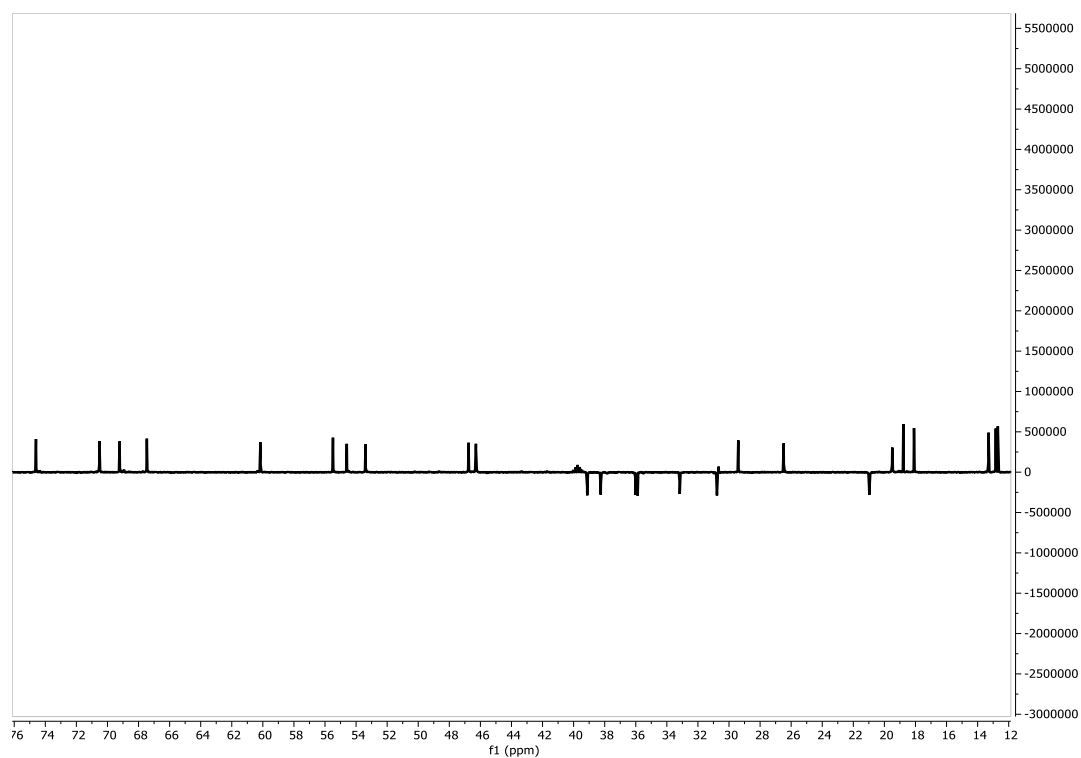


Figure S21: DEPT 135 spectrum of compound 2

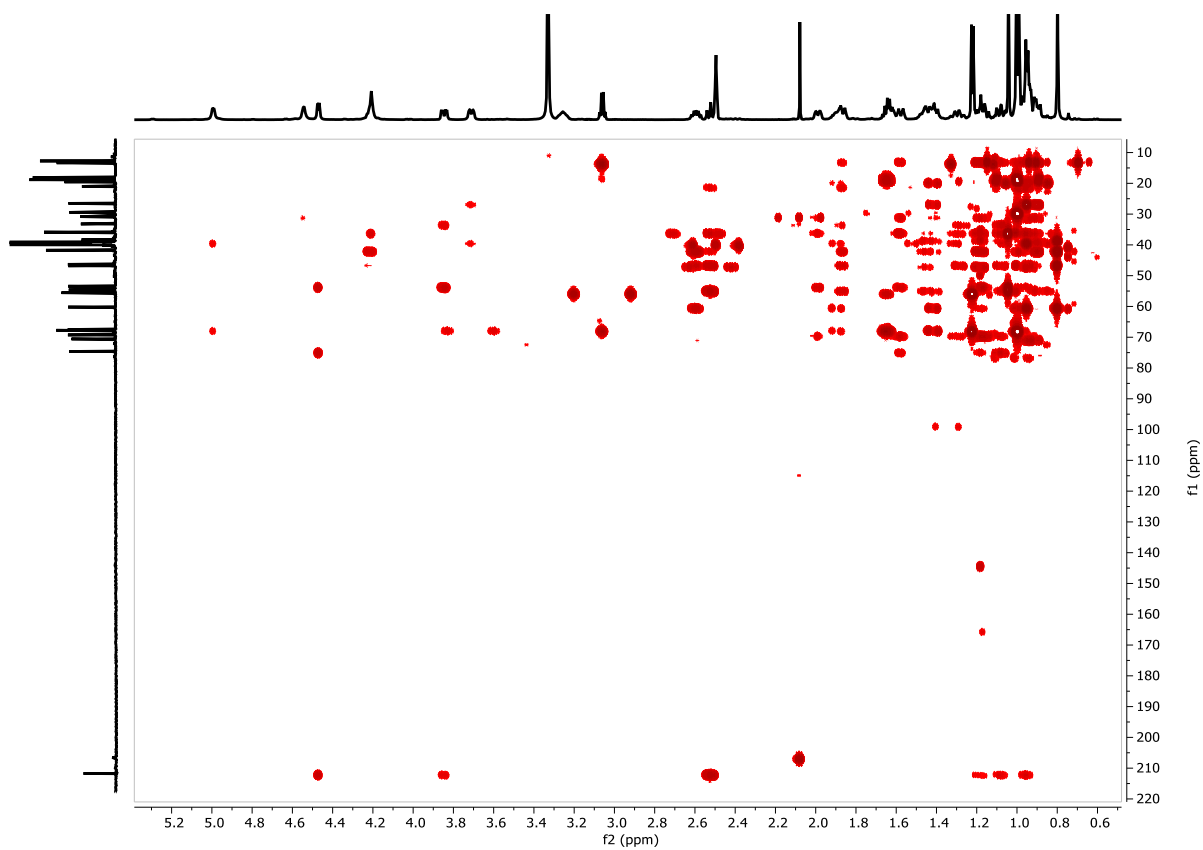


Figure S22: HMBC spectrum of compound 2

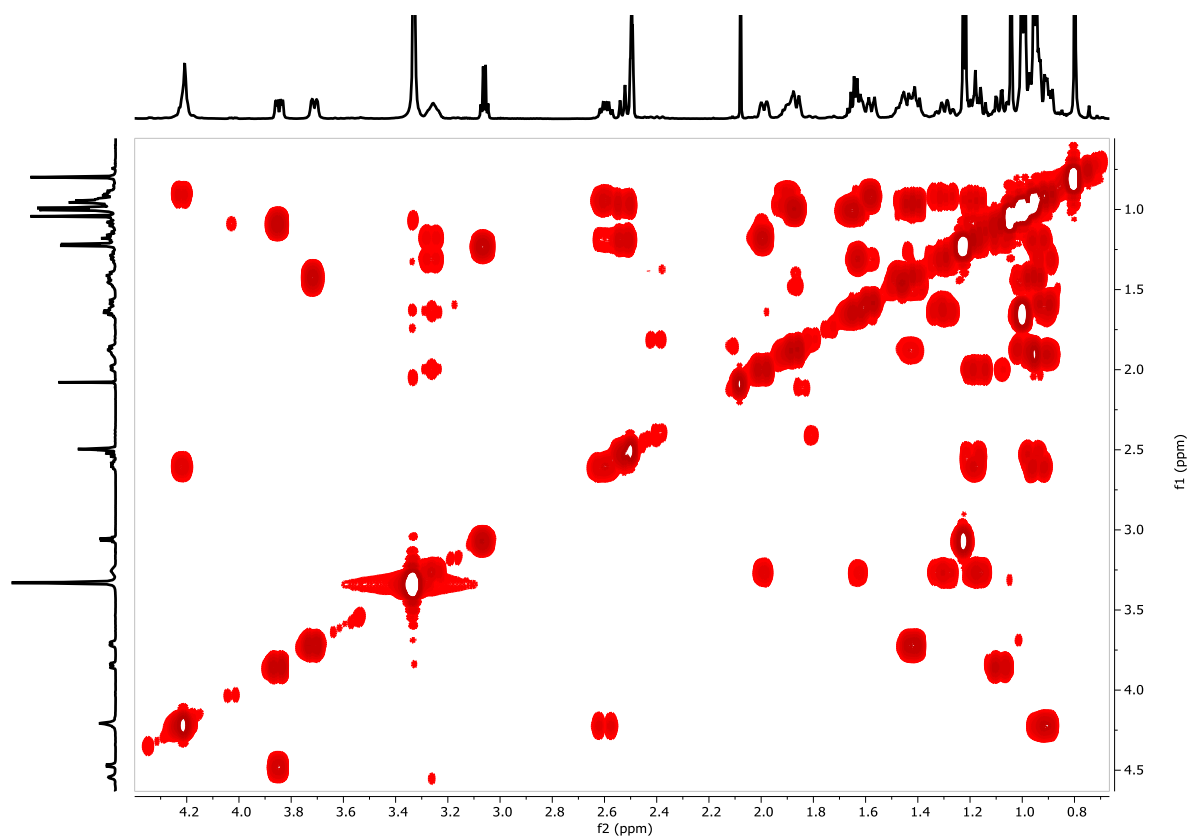


Figure S23: COSY spectrum of compound 2

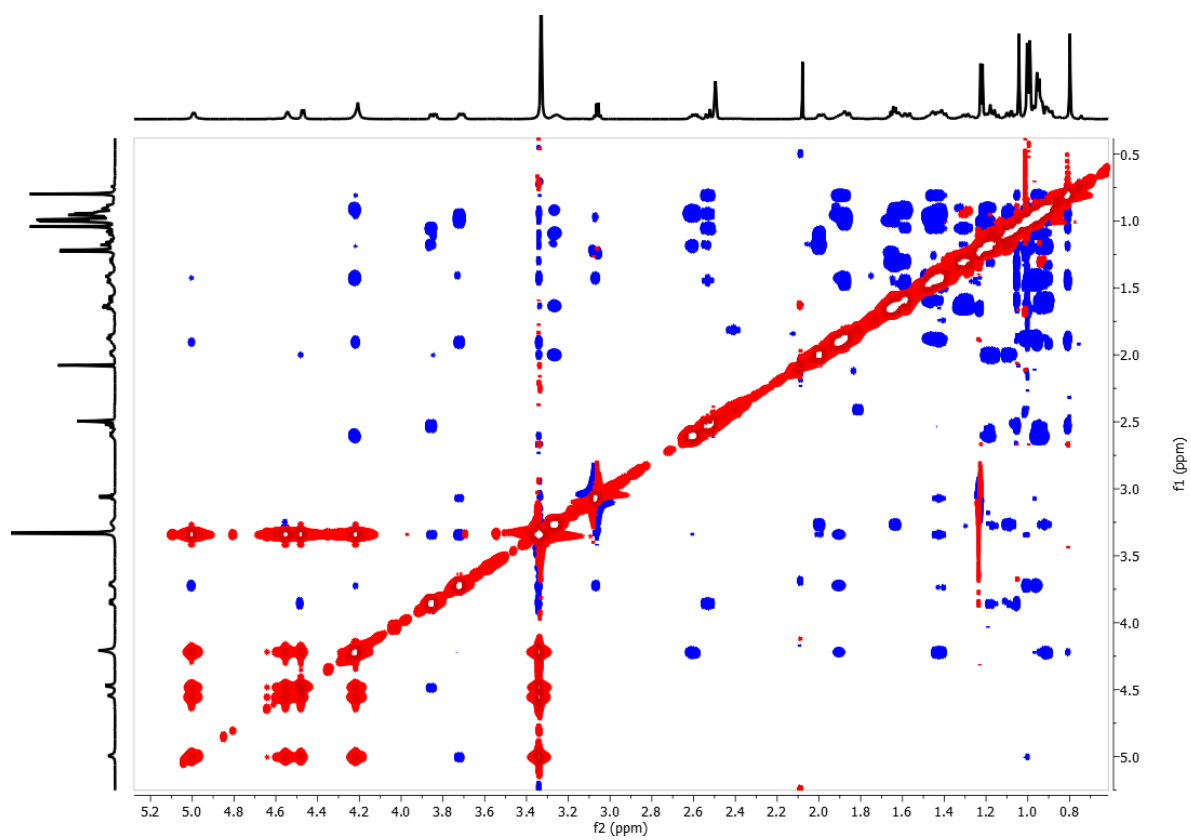


Figure S24: ROESY spectrum of compound 2

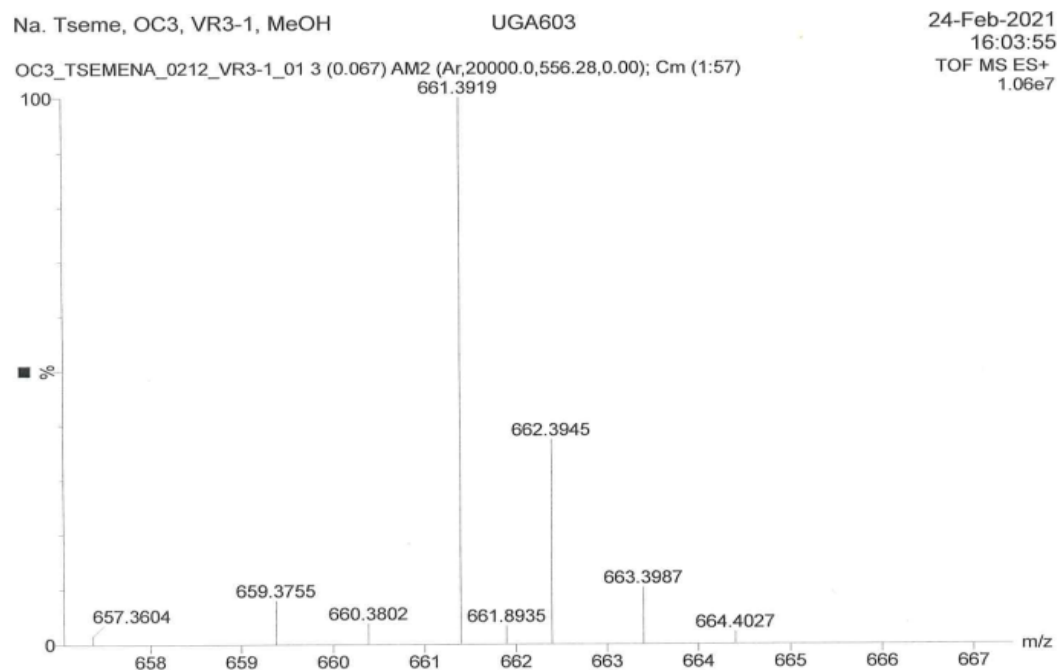


Figure S25: ESI-HR mass spectrum of compound **3**

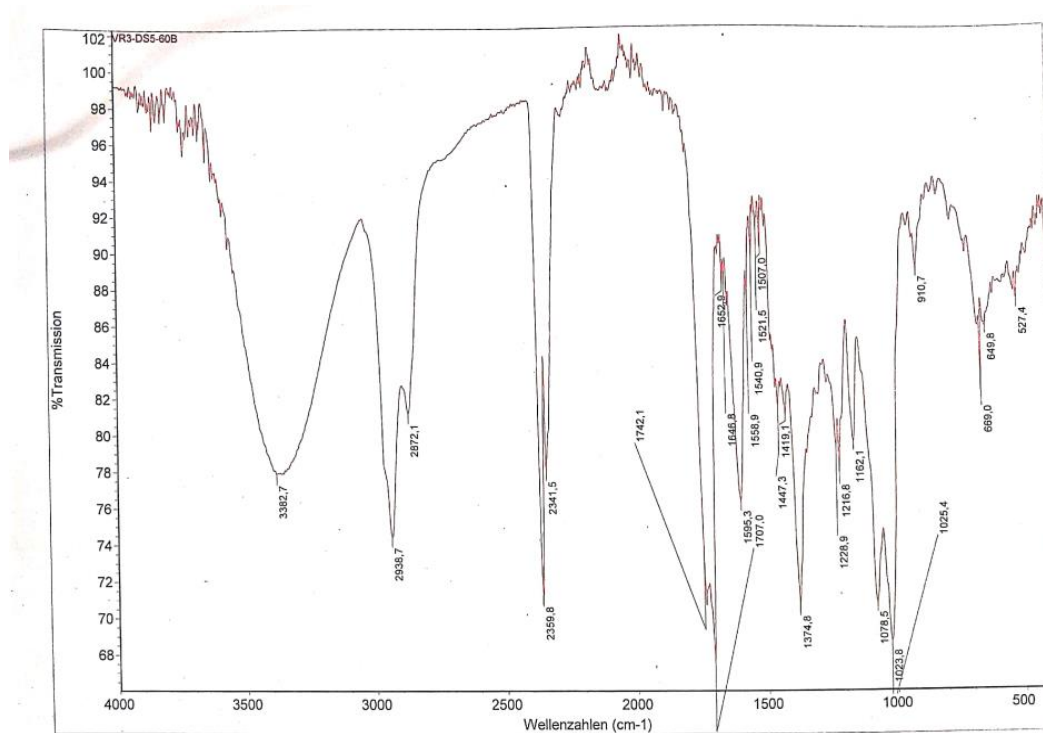


Figure S26: IR spectrum of compound **3**

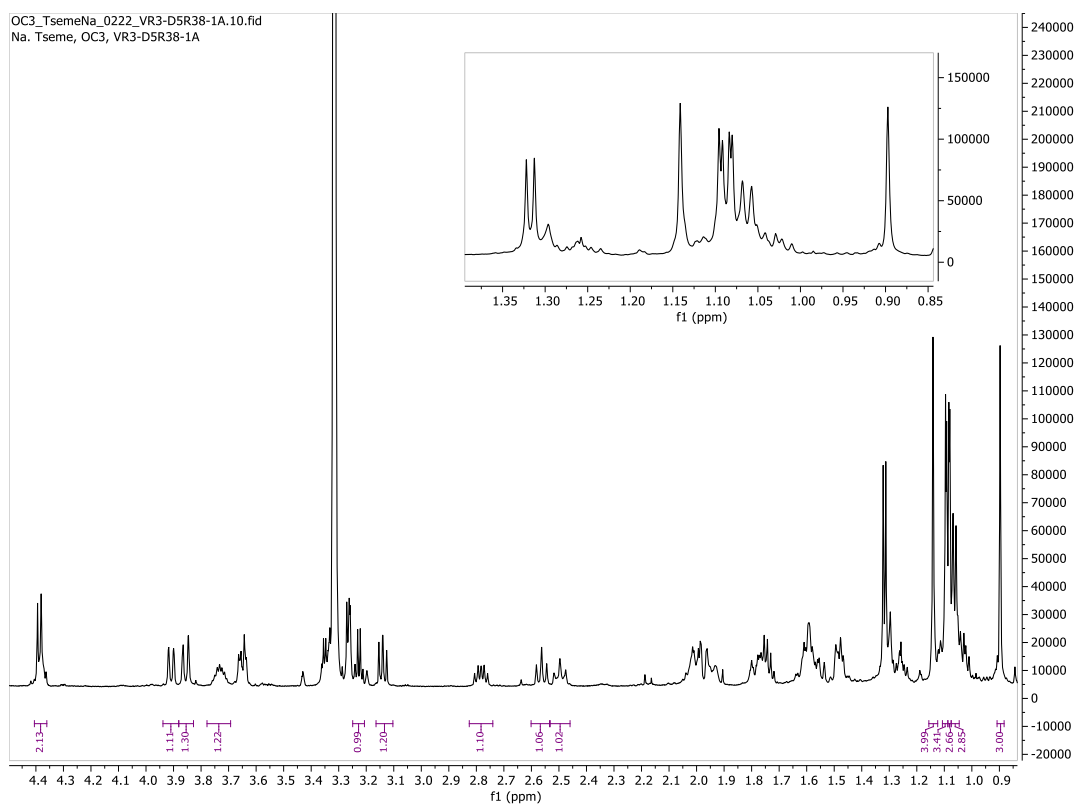


Figure S27: ^1H NMR (CDCl_3 , 600 MHz) spectrum of compound **3**

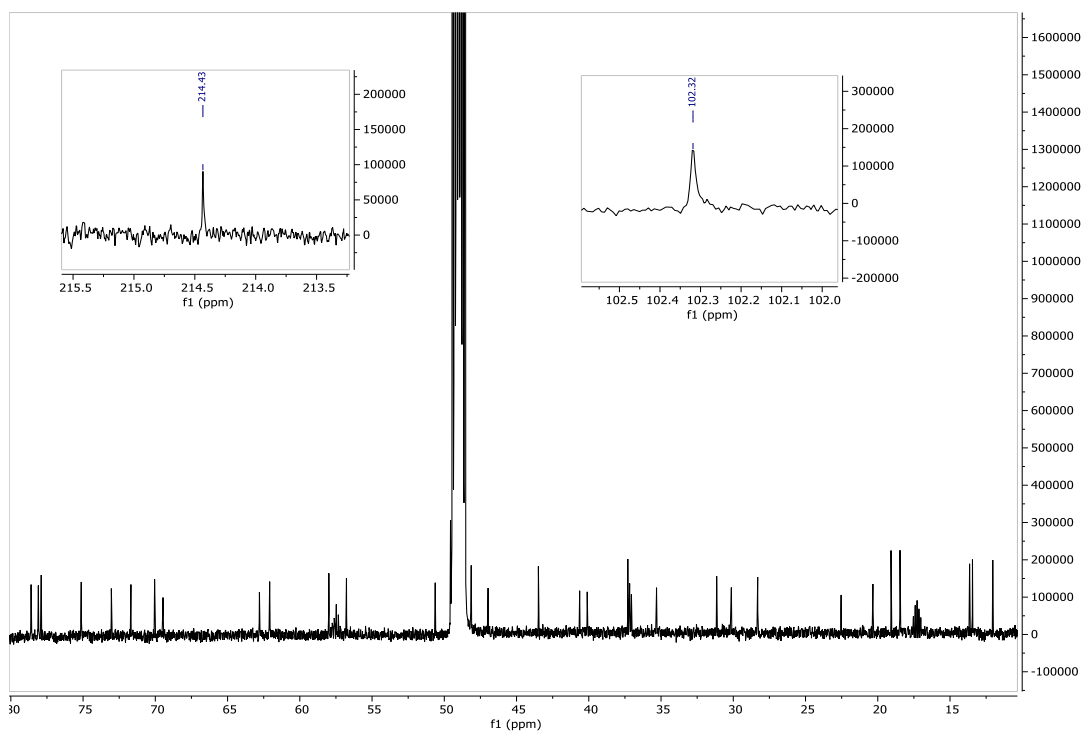


Figure S28: ^{13}C (CDCl_3 , 150 MHz) spectrum of compound **3**

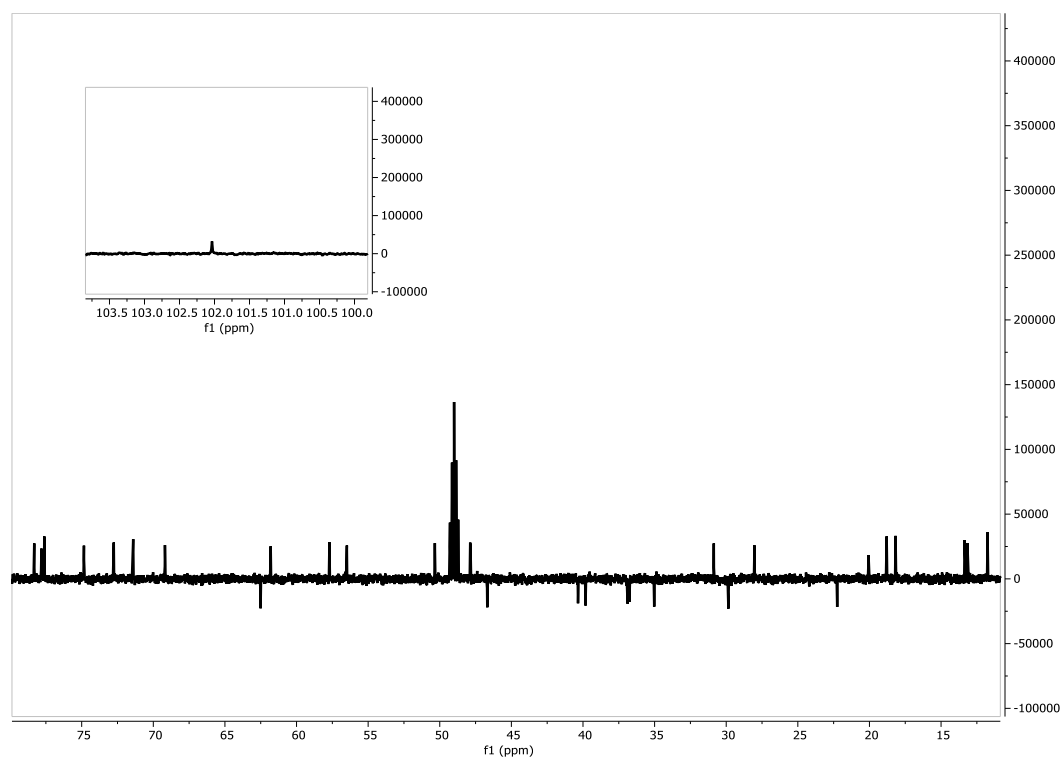


Figure S29: DEPT 135 spectrum of compound 3

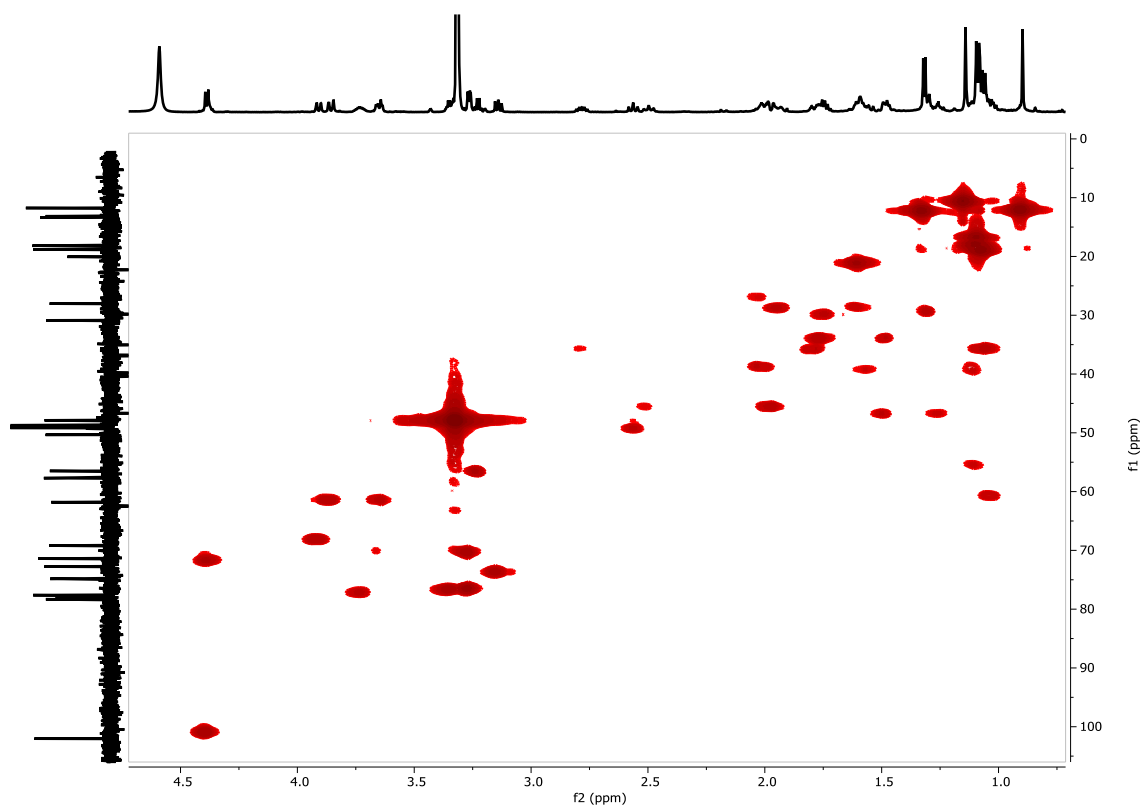


Figure S30: HSQC spectrum of compound 3

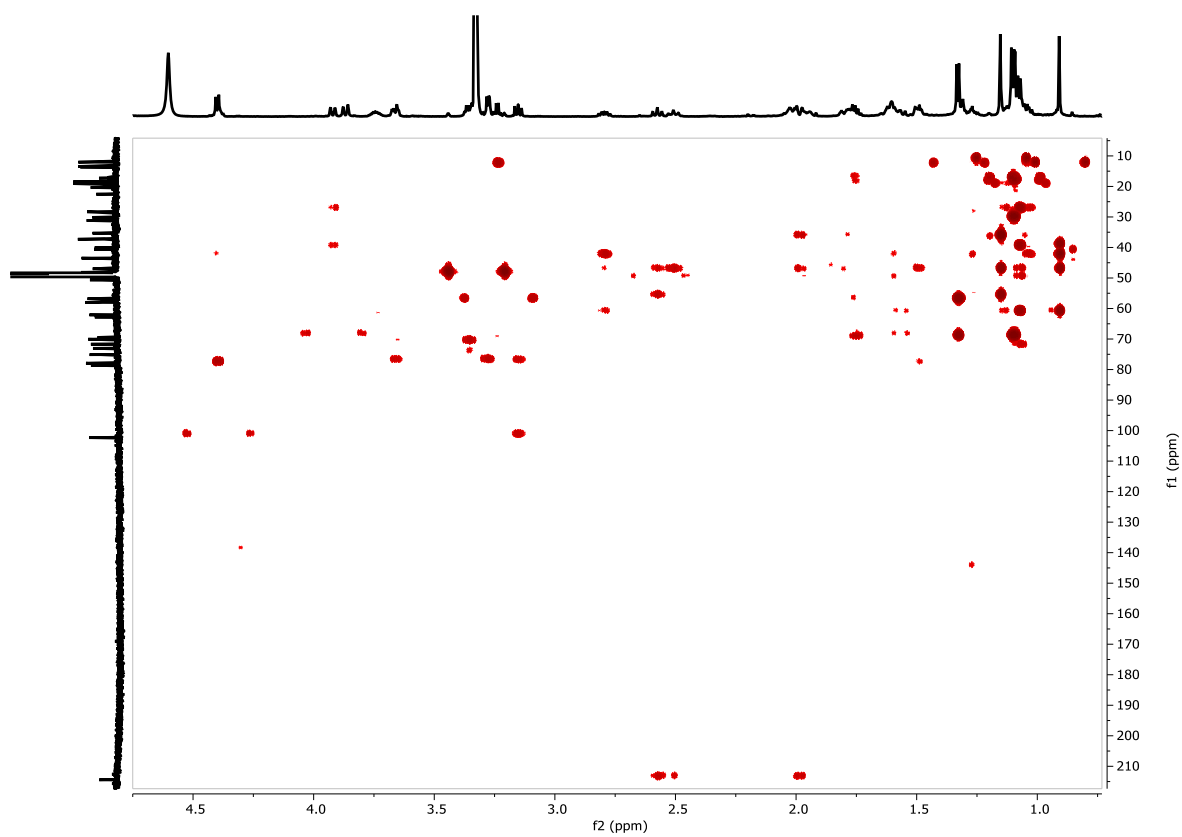


Figure S31: HMBC spectrum of compound 3

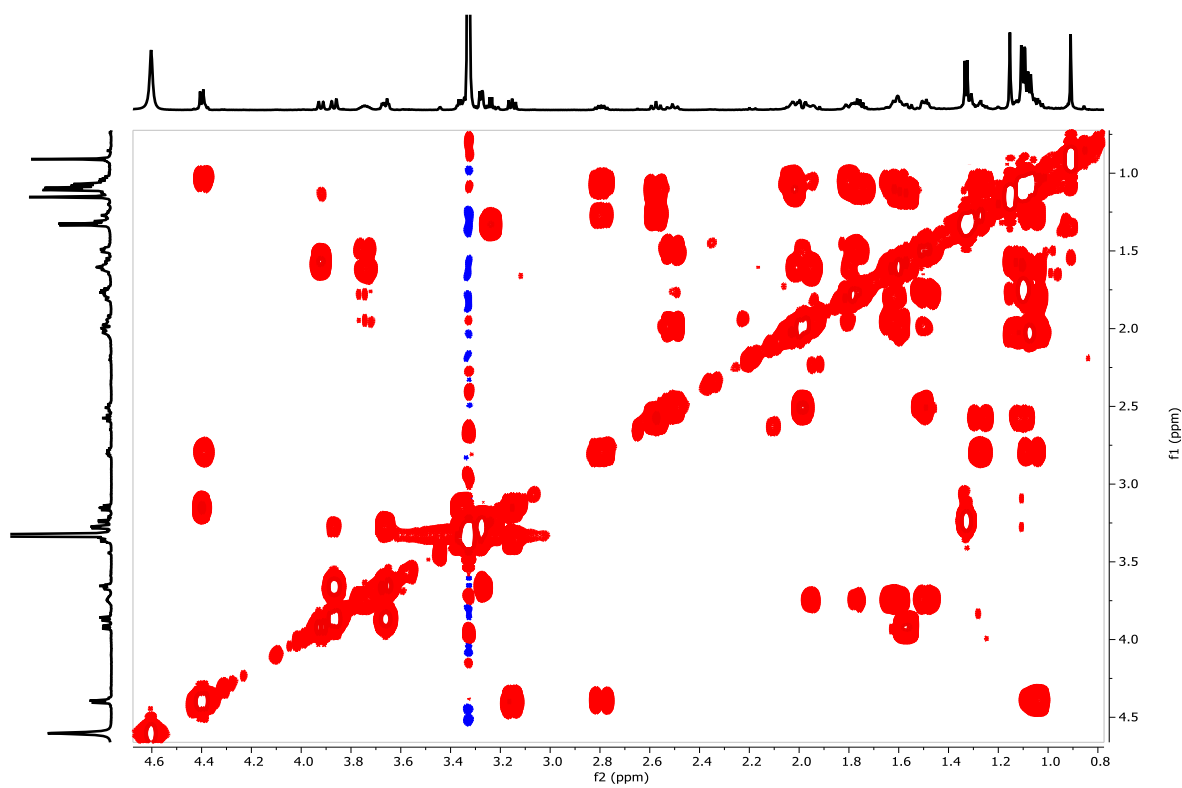


Figure S32: COSY spectrum of compound 3

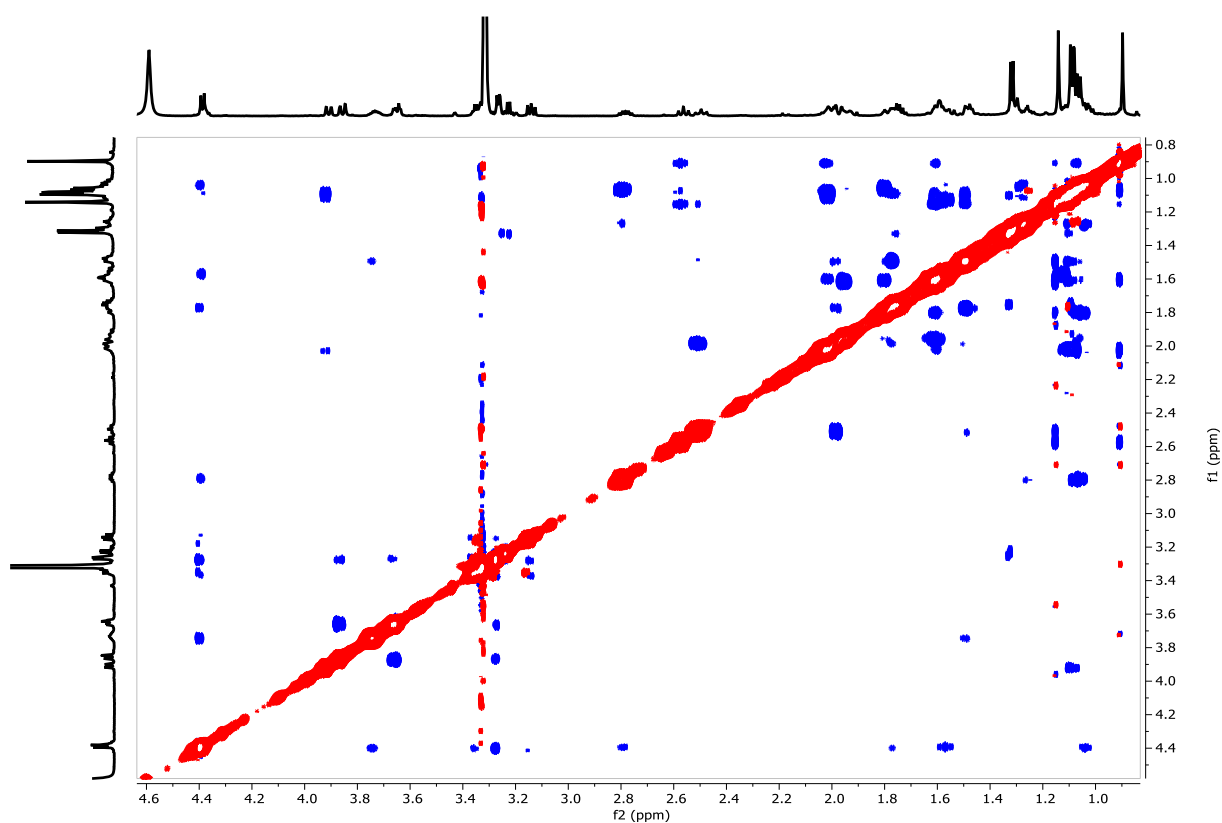


Figure S33: ROESY spectrum of compound 3

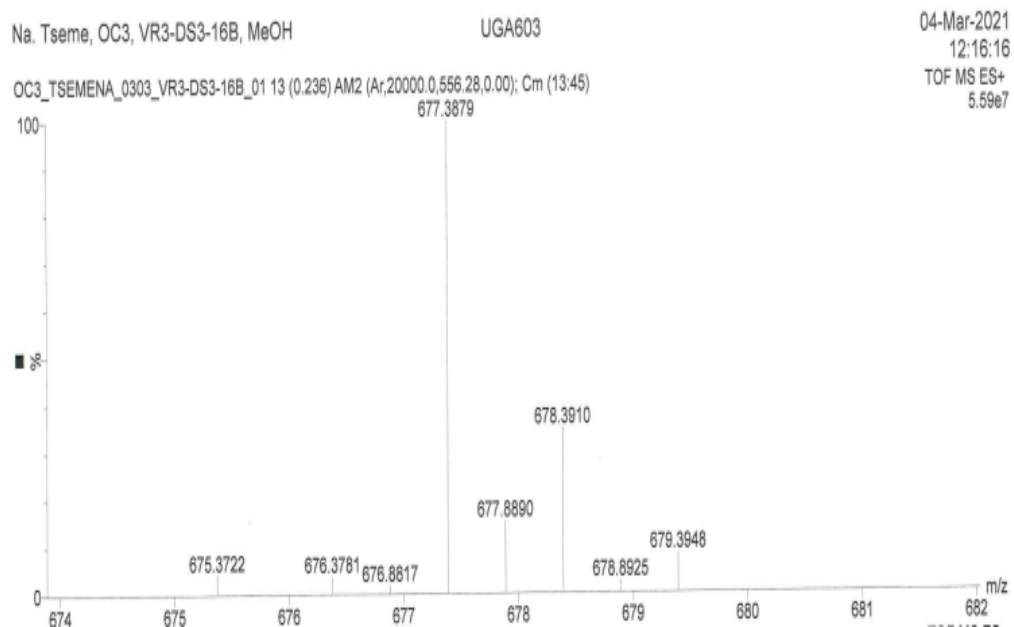


Figure S34: ESI-HR mass spectrum of compound 4

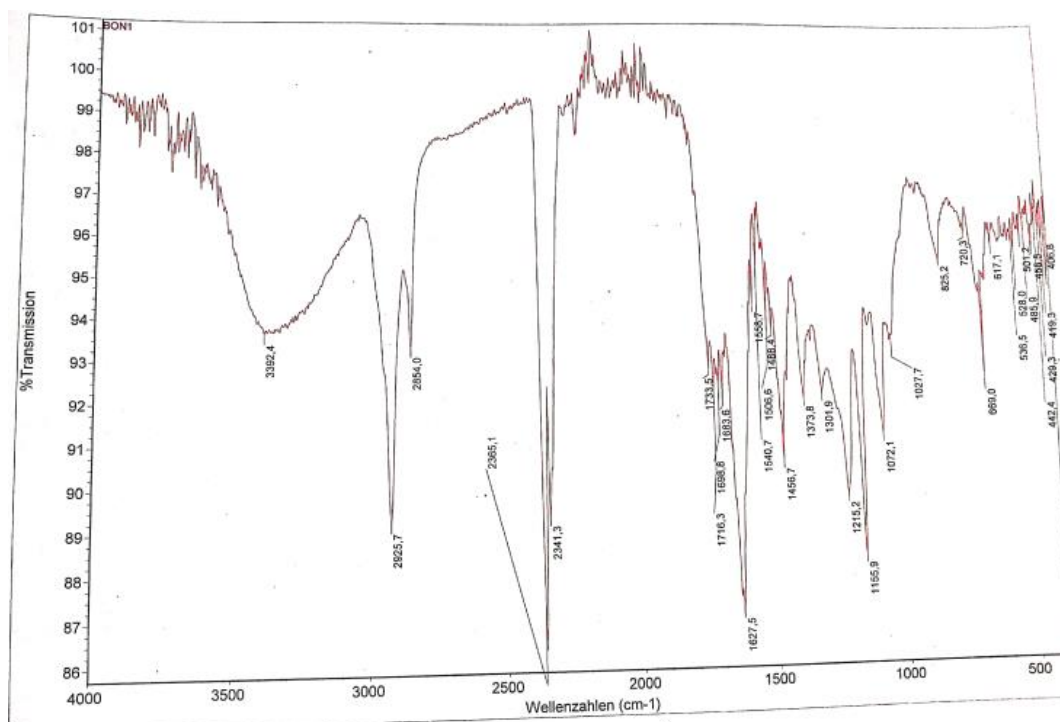


Figure S35: IR spectrum of compound 4

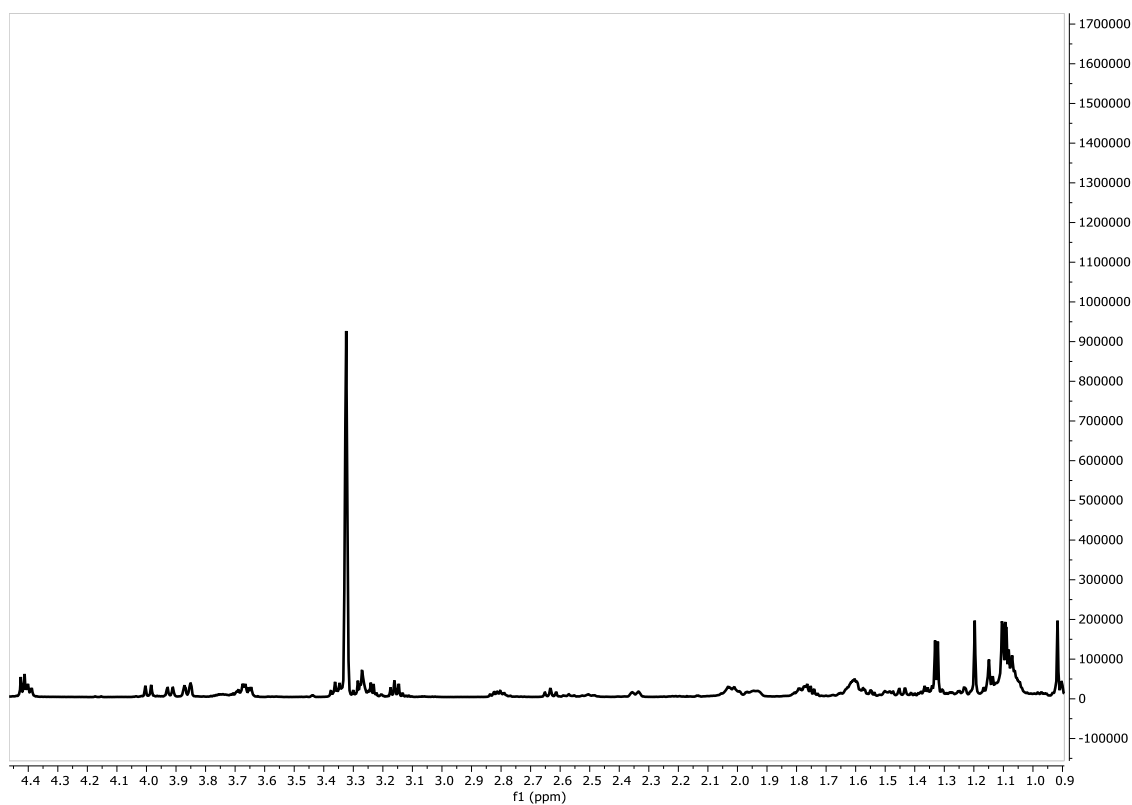


Figure S36: ¹H NMR (CDCl₃, 500 MHz) spectrum of compound 4

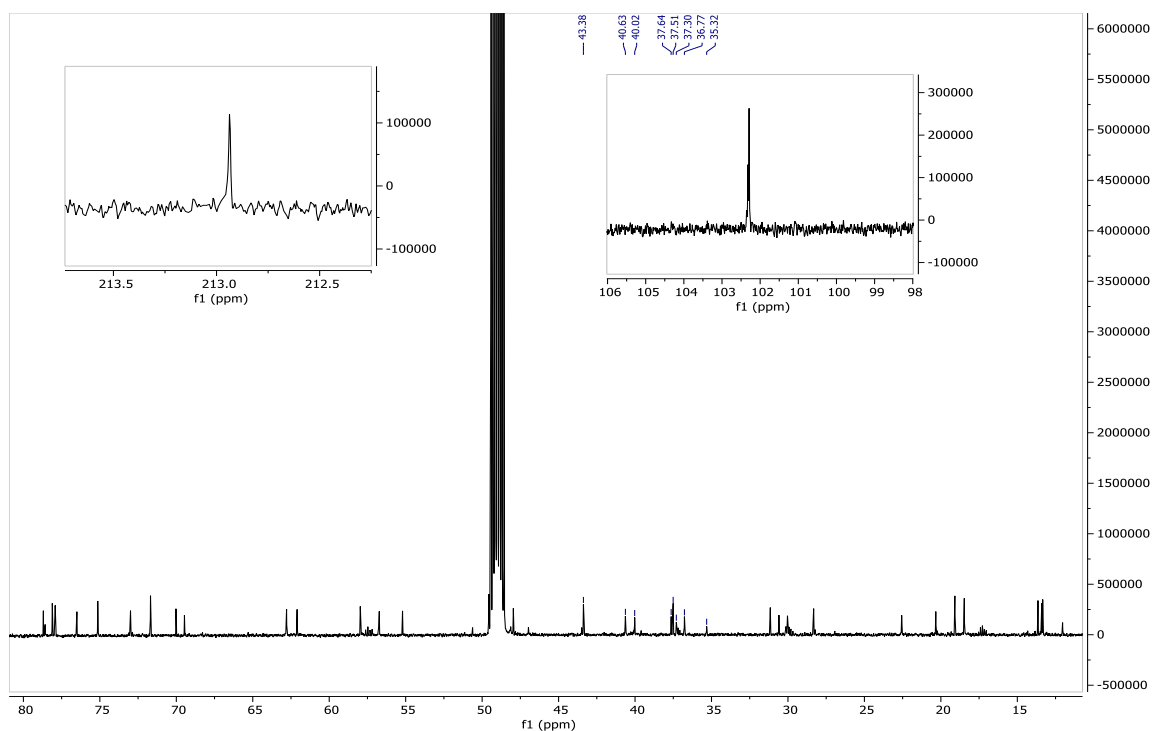


Figure S37: ^{13}C NMR (CDCl_3 , 125 MHz) spectrum of compound **4**

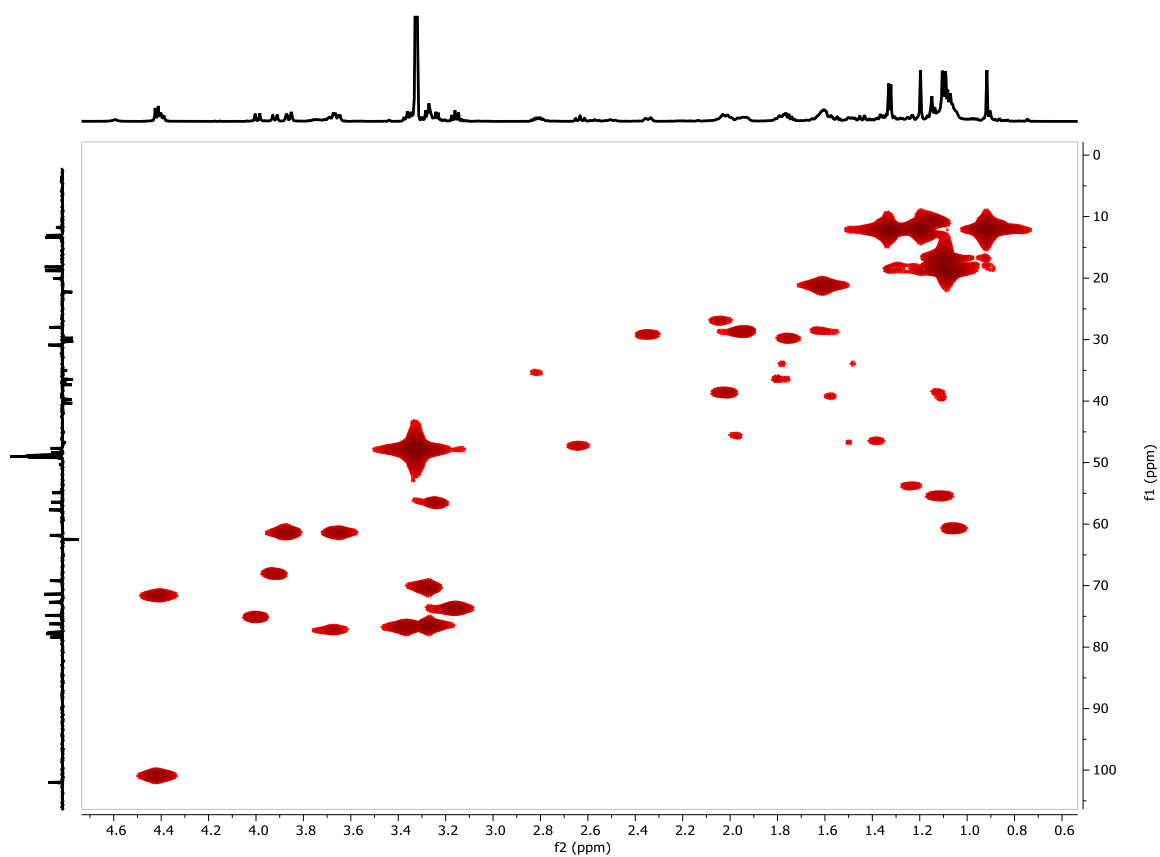


Figure S38: HSQC spectrum of compound **4**

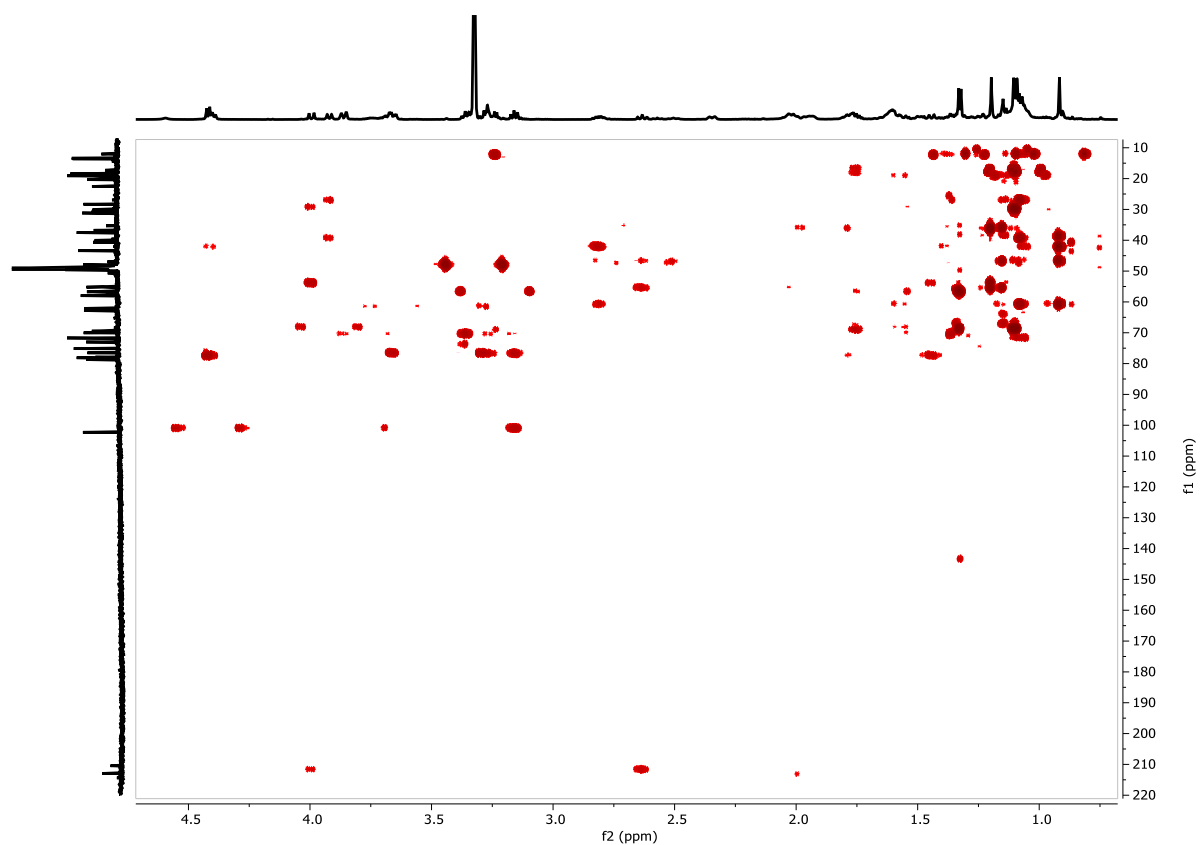


Figure S39: HMBC spectrum of compound 4

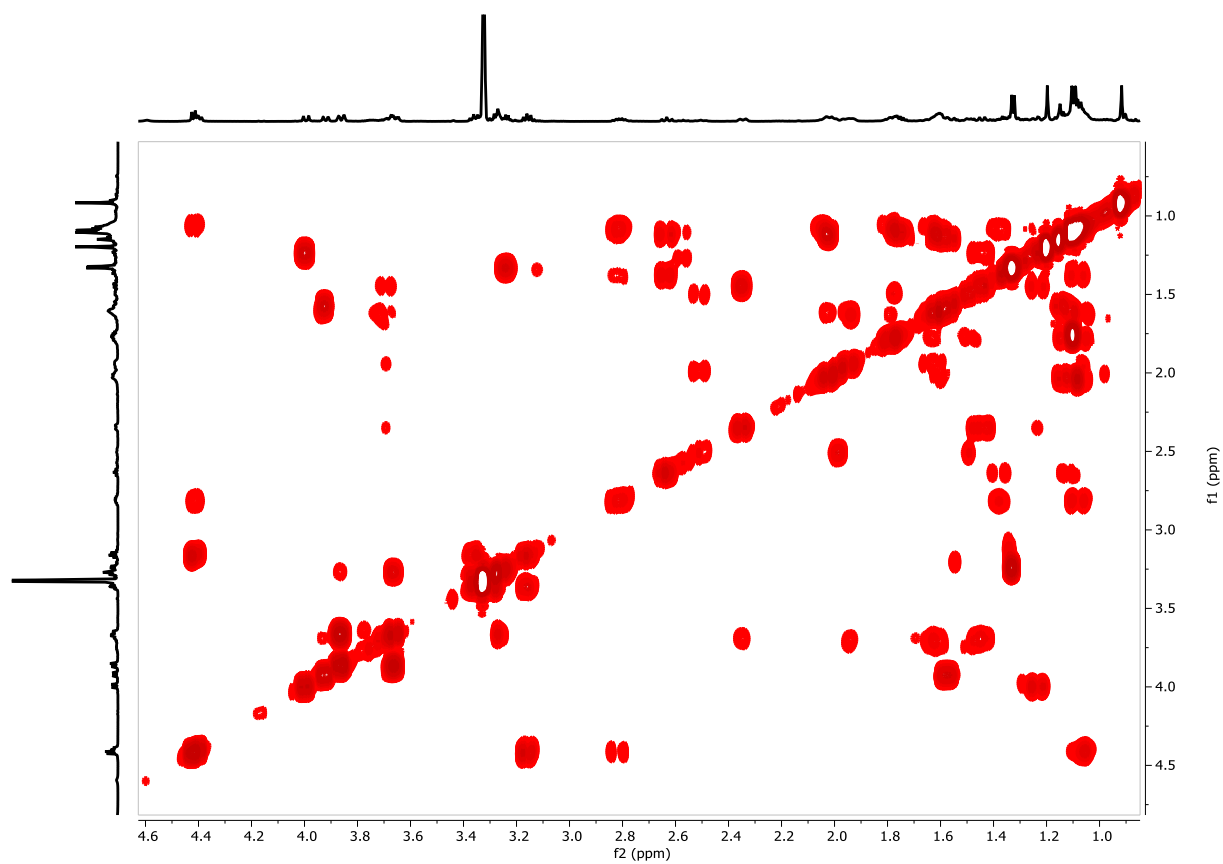


Figure S40: COSY spectrum of compound 4

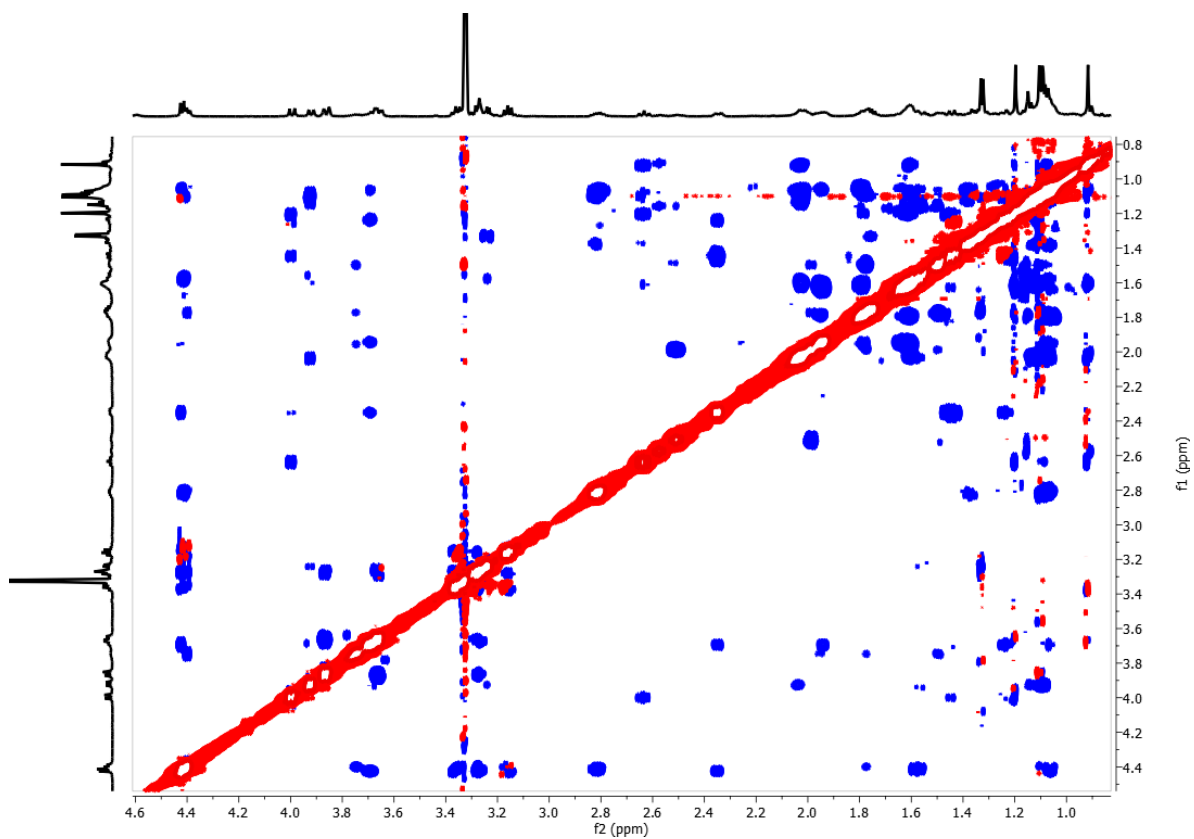


Figure S41: ROESY spectrum of compound 4

DATA FOR KNOWN COMPOUNDS

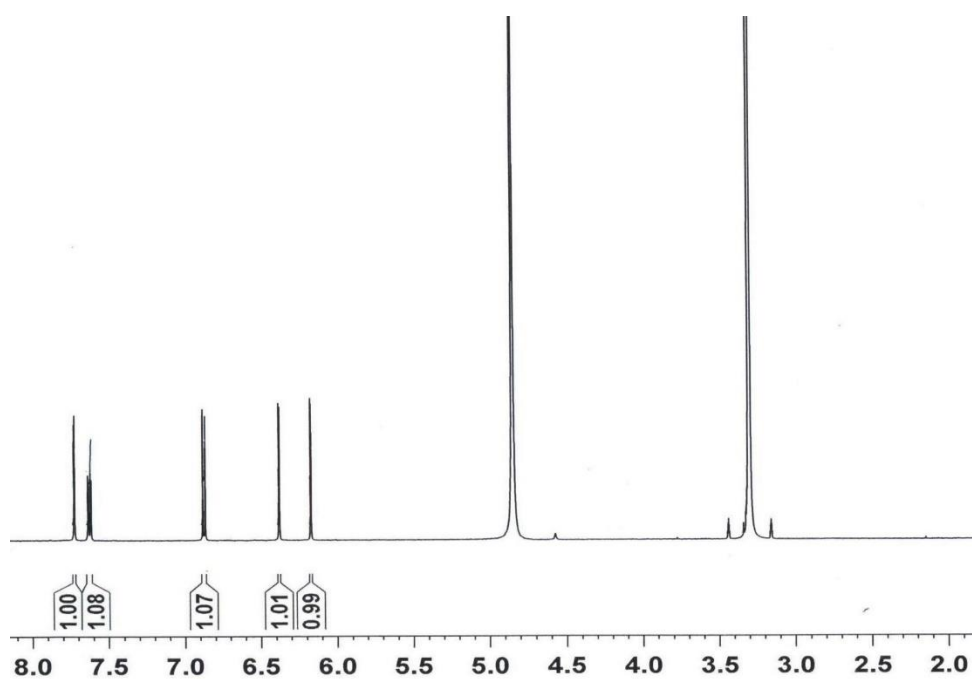


Figure S42: ¹H NMR (CD₃OD, 500 MHz) spectrum of compound 5

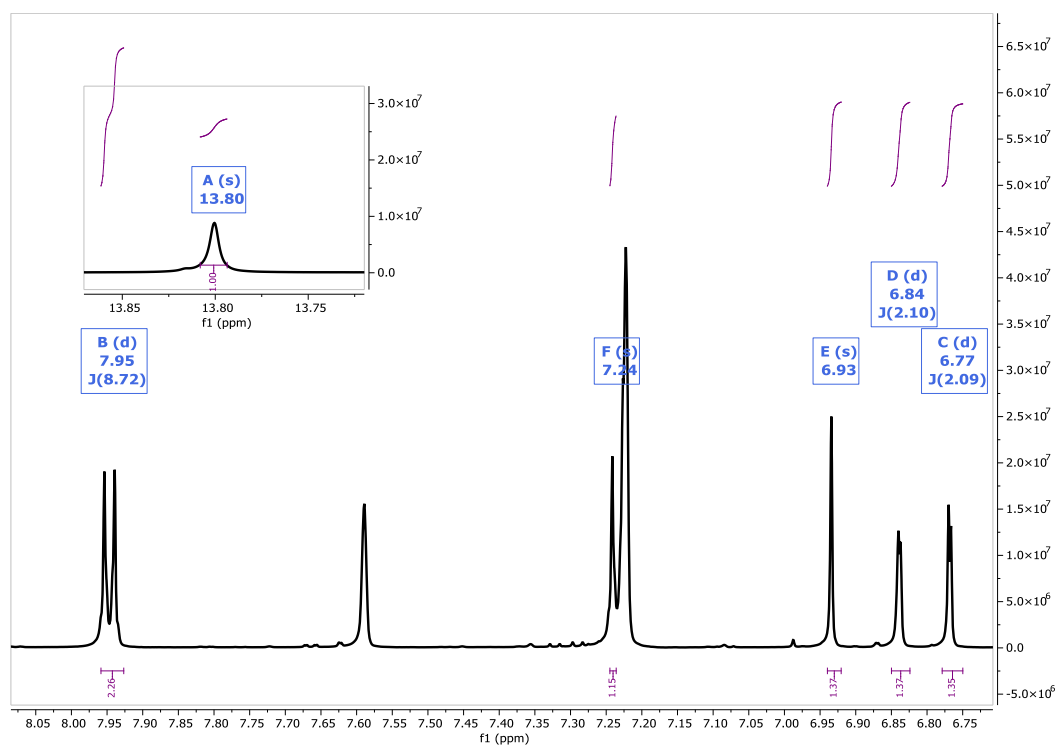


Figure S43: ^1H NMR (CDCl_3 , 500 MHz) spectrum of compound 6

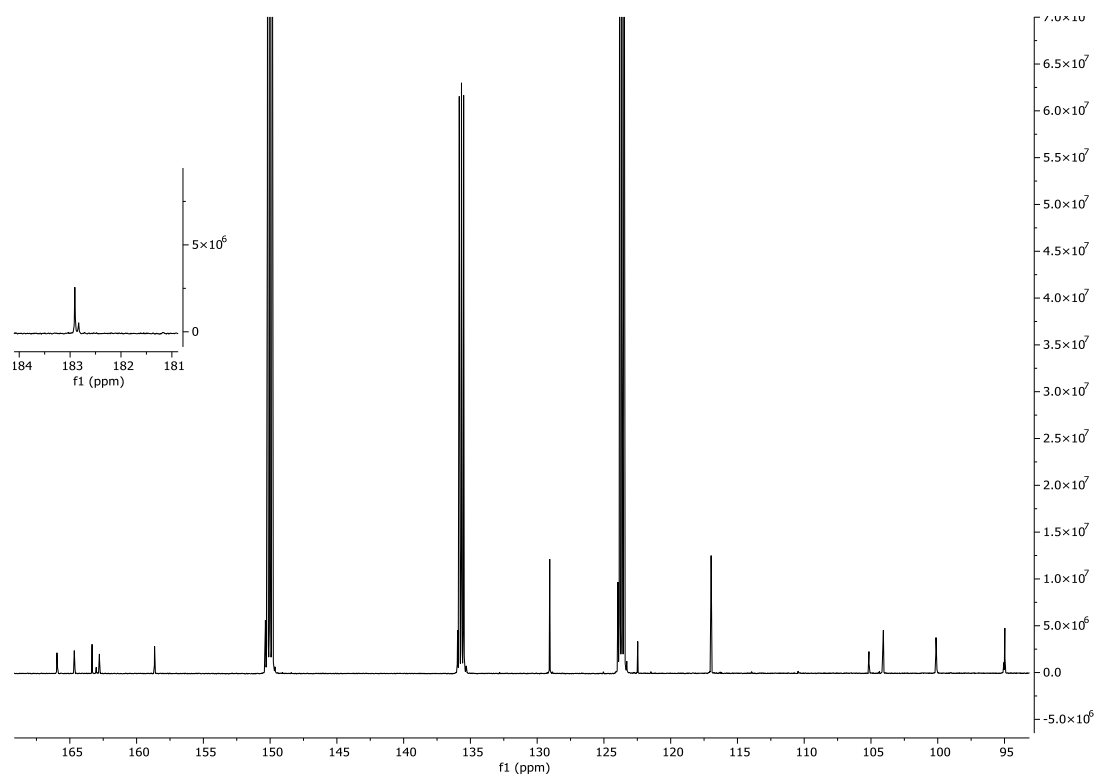


Figure S44: ^{13}C NMR (CDCl_3 , 125 MHz) spectrum of compound 6

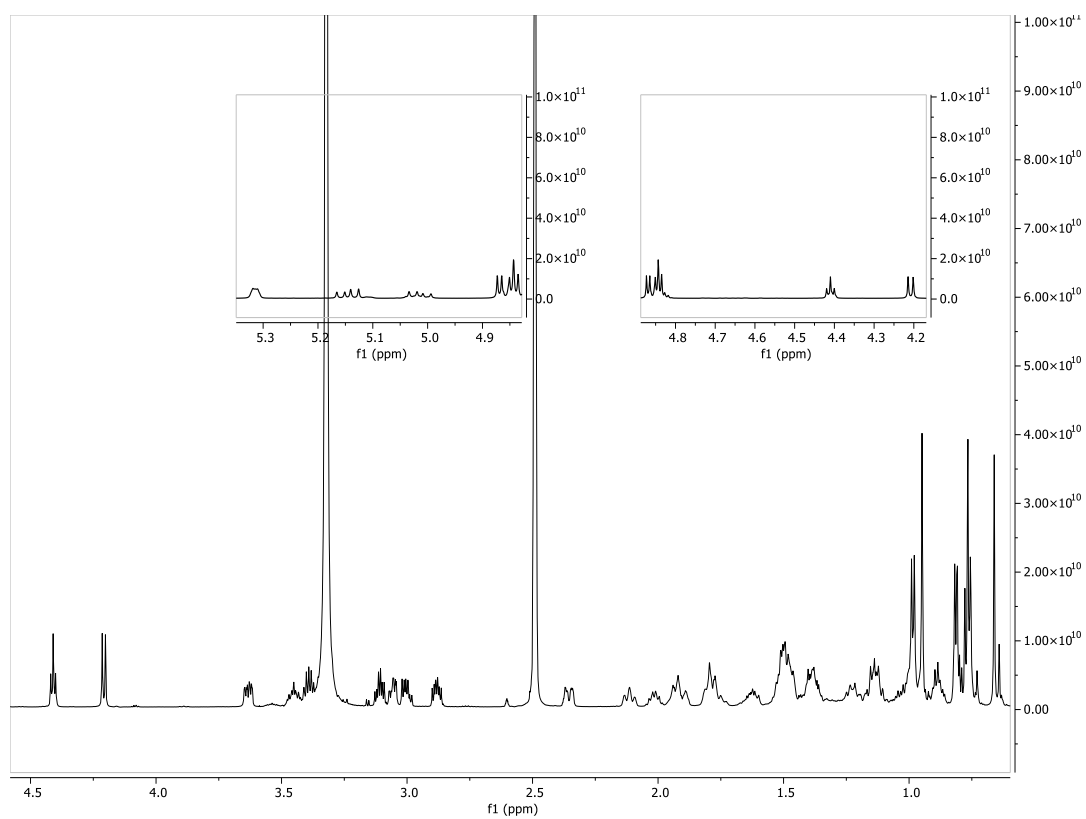


Figure S45: ^1H NMR (CDCl_3 , 500 MHz) spectrum of a mixture of 7 and 8