Supplementary Materials

Chemical Constituents and Antidepressant-like Effect in Ovariectomized Mice of the Ethanol Extract of *Alternanthera philoxeroides*

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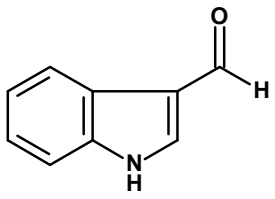
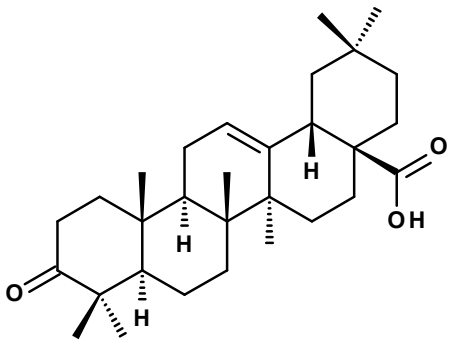
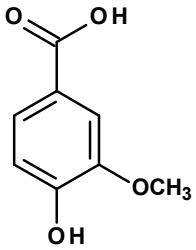
Figure S1. Structures of indole-3-carbaldehyde, oleanonic acid, vanillic acid, *p*-hydroxybenzoic acid isolated from *Althernanthera philoxeroides* (Mart.) Griseb.



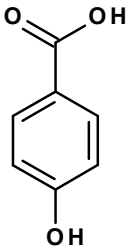
Indole-3-carbaldehyde



Oleanonic acid



Vanillic acid



***p*-Hydroxybenzoic acid**

Figure S2. ^{1}H NMR spectrum of indole-3-carbaldehyde (DMSO-d_6, 500 MHz).

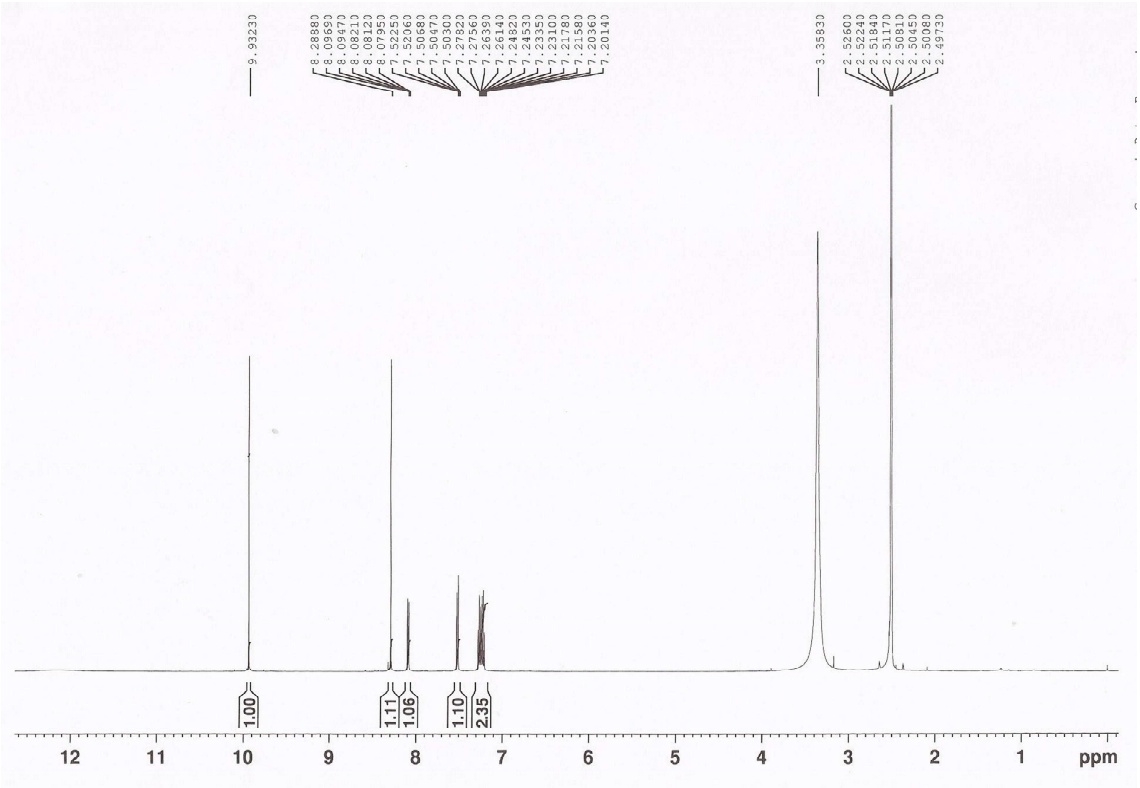


Figure S3. ^{13}C NMR spectrum of indole-3-carbaldehyde (DMSO-d_6, 125 MHz).

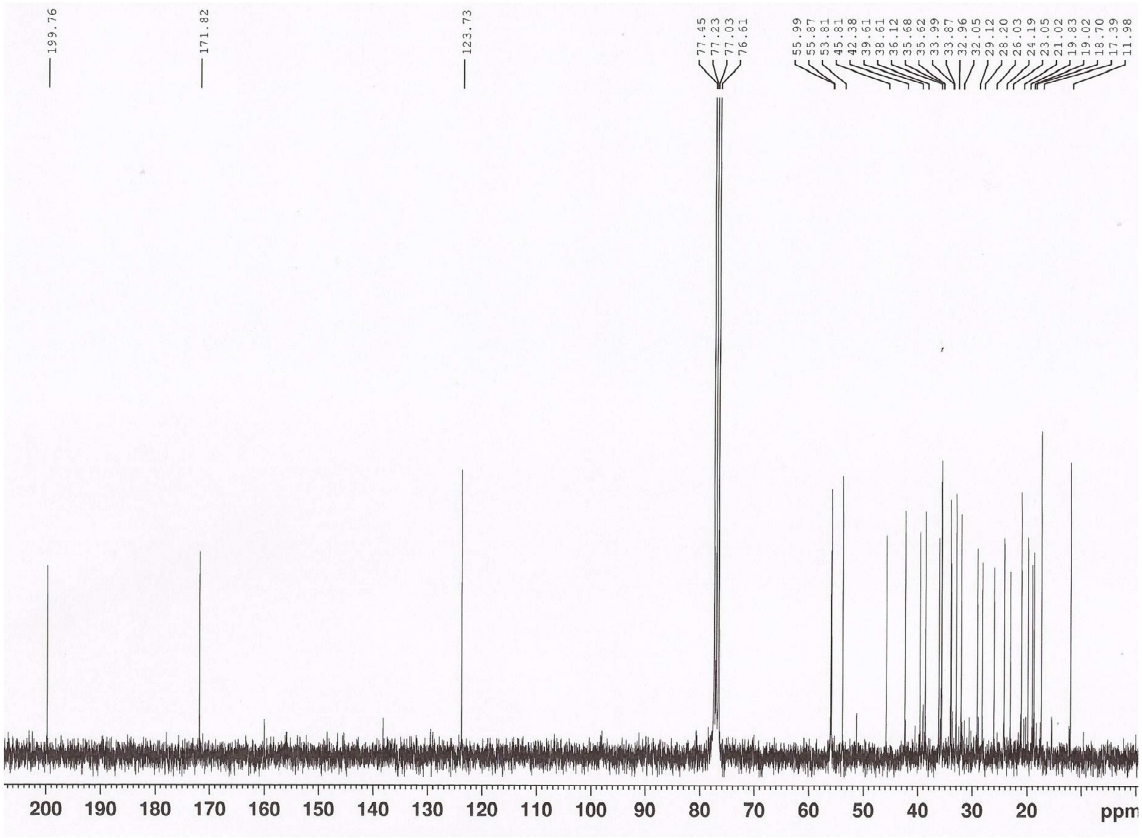


Figure S4. ^{1}H NMR spectrum of oleanonic acid ($CDCl_3$, 500 MHz).

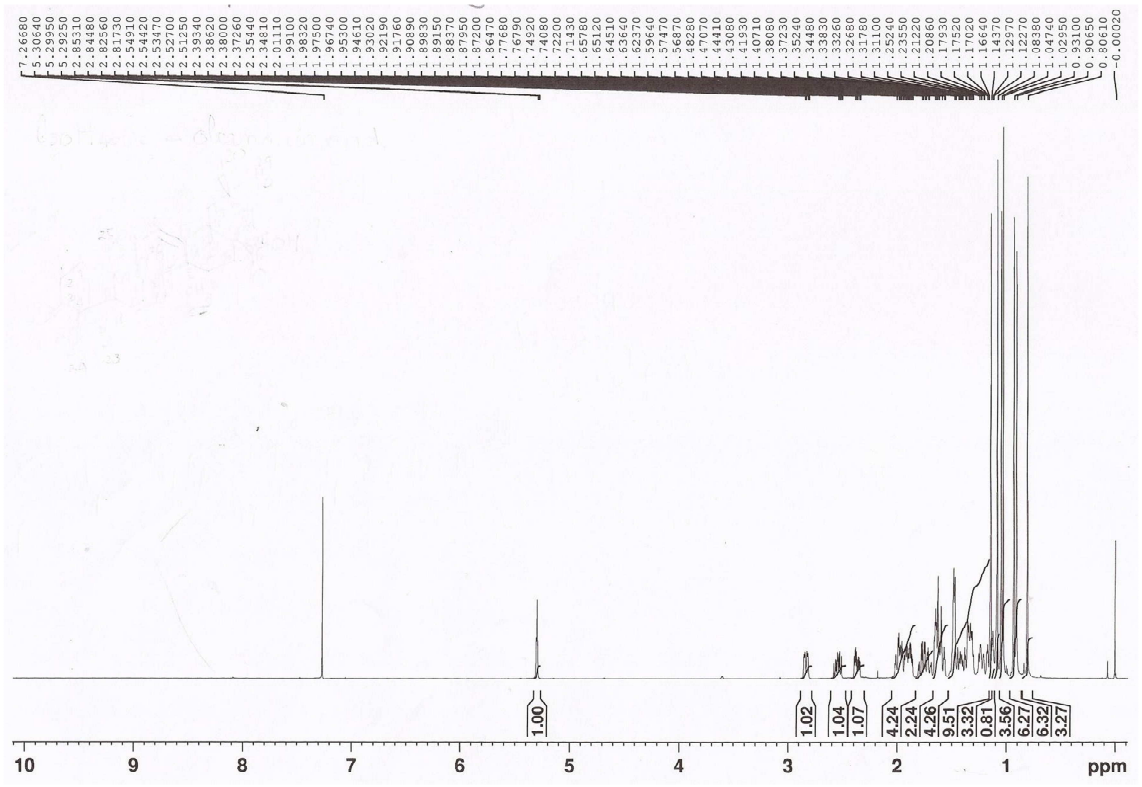


Figure S5. ^{13}C NMR spectrum of oleanonic acid ($CDCl_3$, 125 MHz).

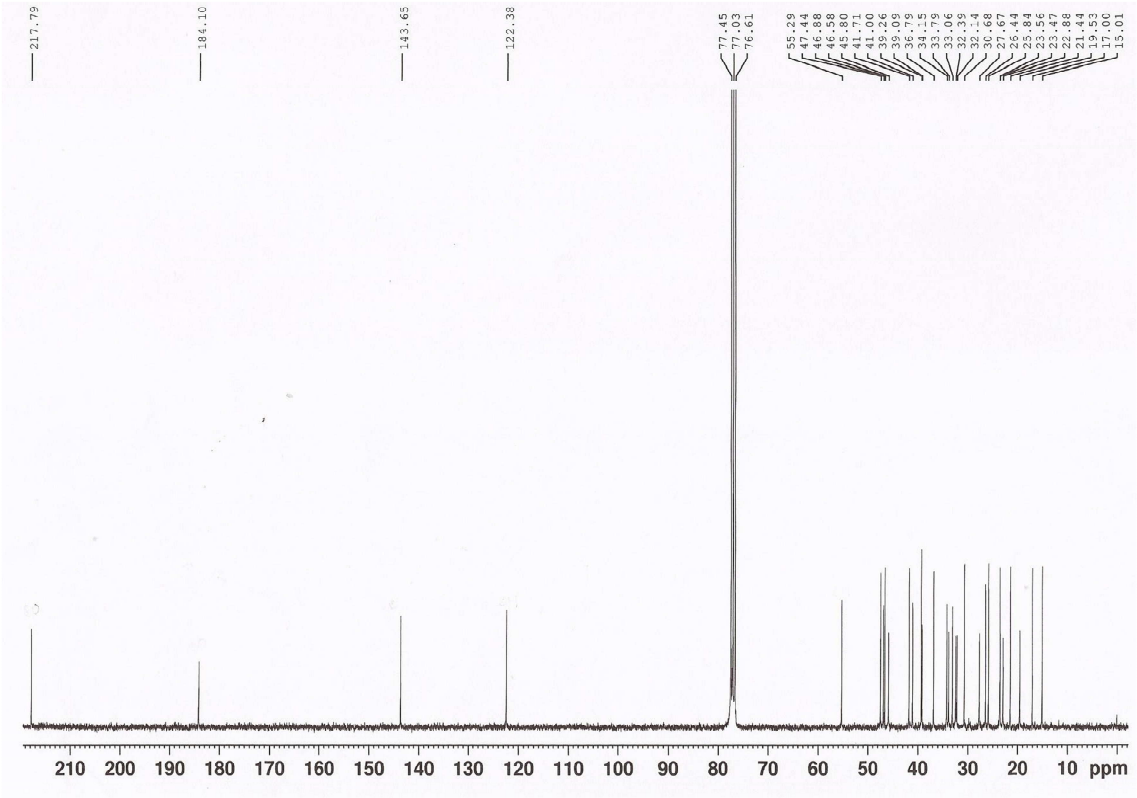


Figure S6. ^{1}H NMR spectrum of vanillic acid (DMSO-*d6*, 500 MHz).

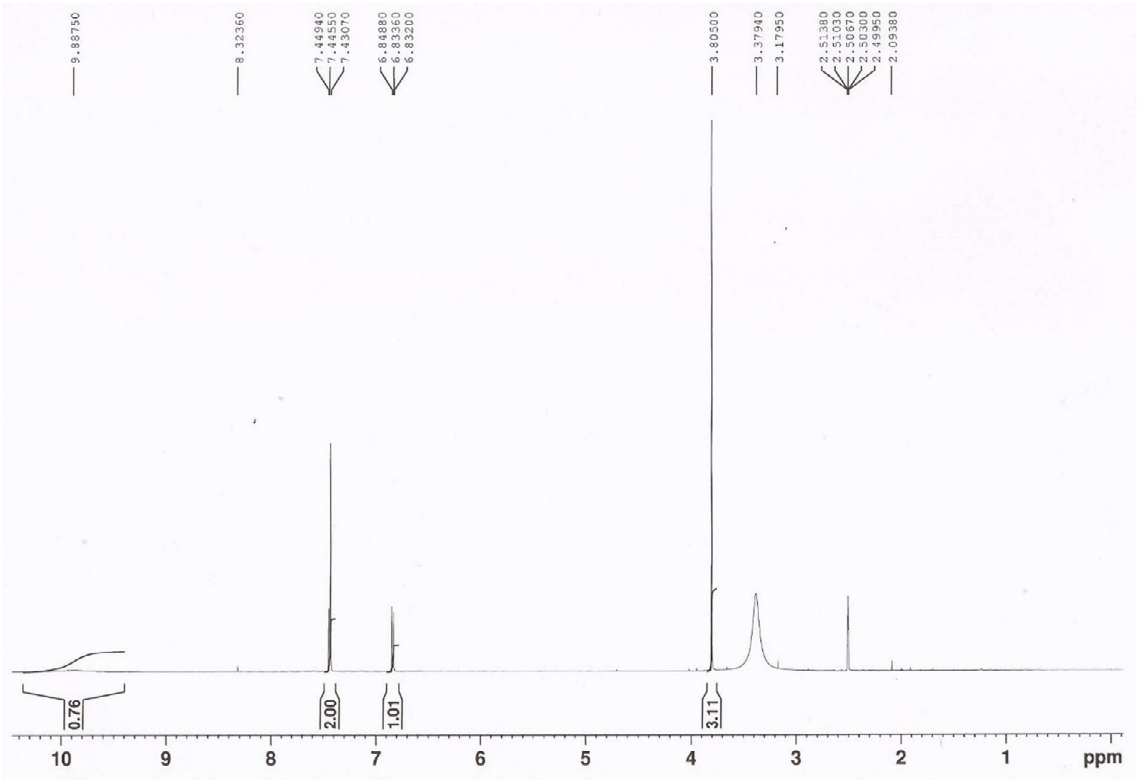


Figure S7. ^{13}C NMR spectrum o (DMSO-*d6*, 125 MHz).

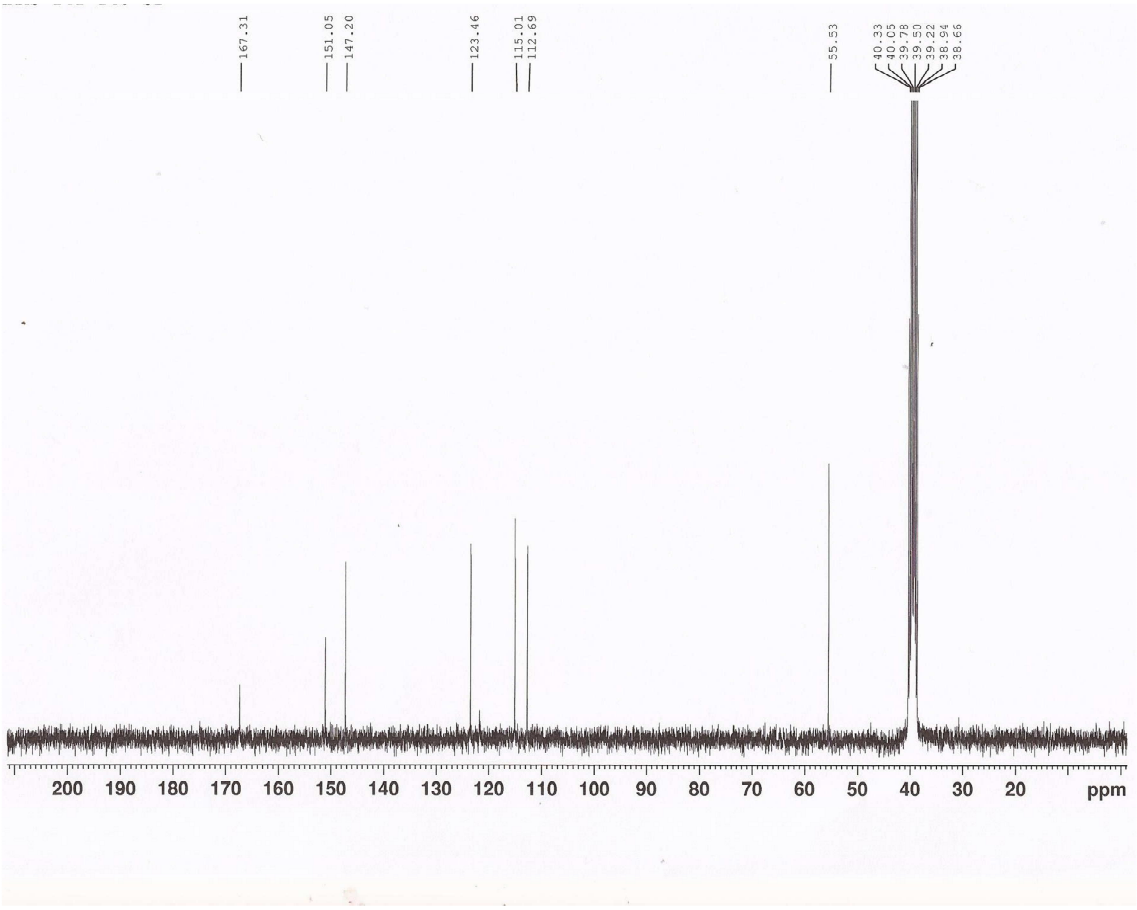


Figure S8. ^{1}H NMR spectrum of *p*-hydroxybenzoic acid (DMSO-*d6*, 500 MHz).

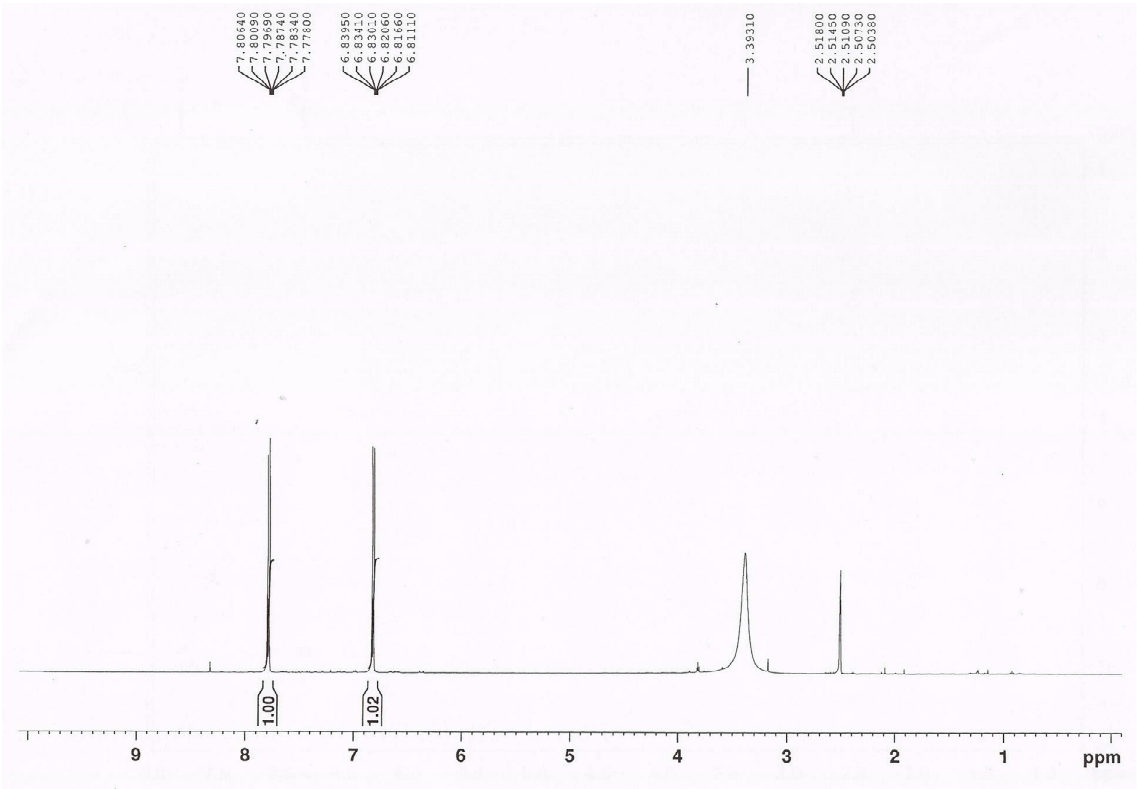


Figure S9. ^{13}C NMR spectrum of *p*-hydroxybenzoic acid (DMSO-*d6*, 125 MHz).

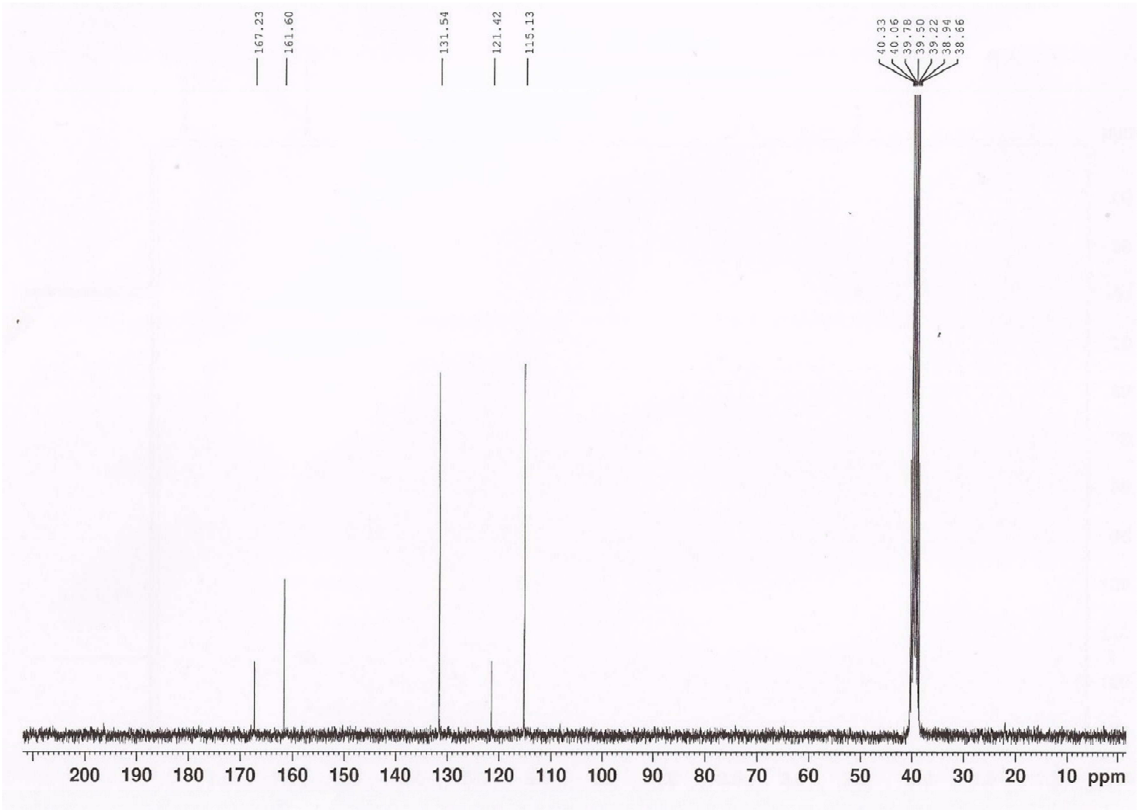


Figure S10. ^{1}H NMR spectrum of **1a** (DMSO-*d6*, 500.13 MHz).

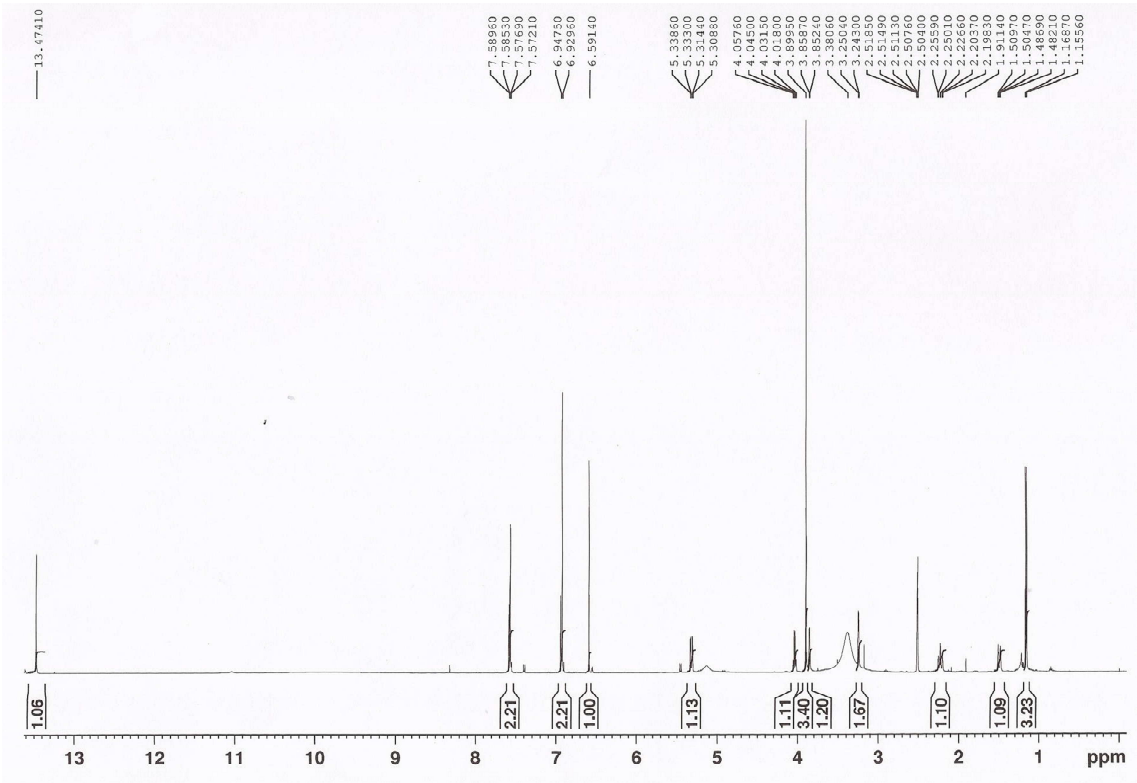


Figure S11. ^{13}C NMR spectrum of **1a**(DMSO-*d6*,, 125.4 MHz).

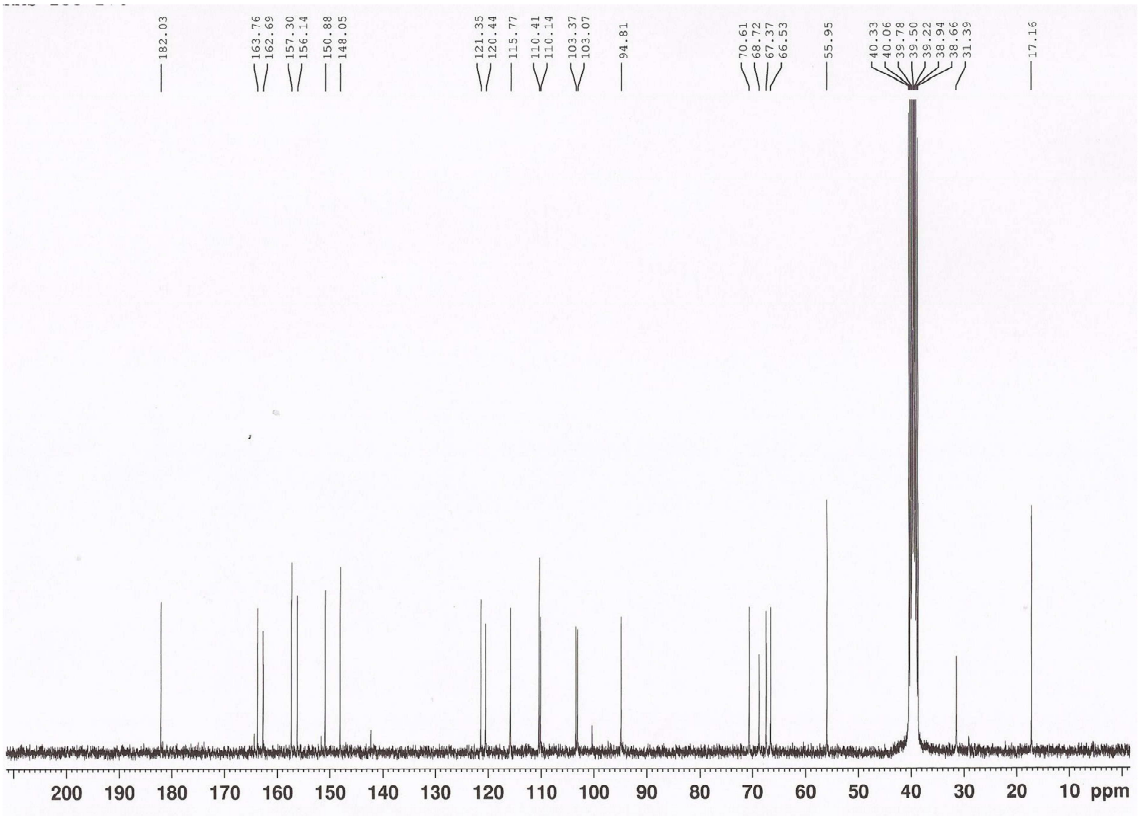


Figure S12. ^{1}H NMR spectrum of **1b** (DMSO-*d6*, 500.13 MHz).

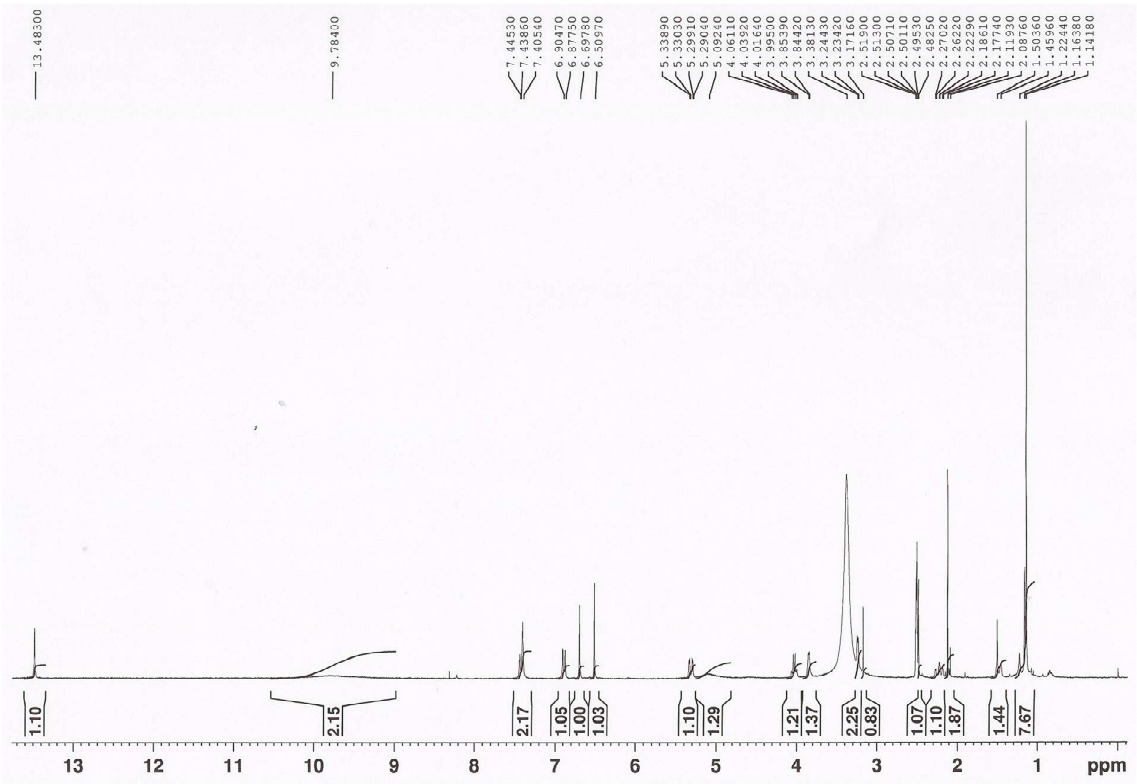


Figure S13. ^{13}C NMR spectrum of **1b** (DMSO, 125 MHz).

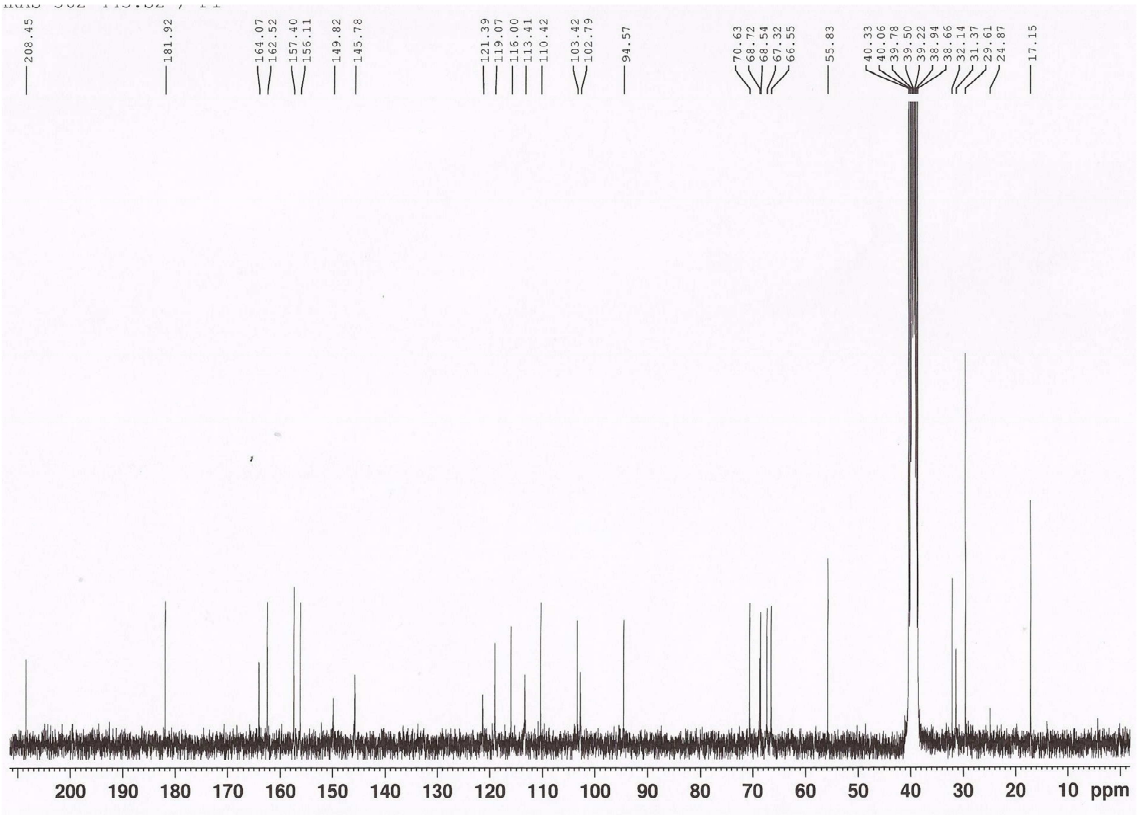


Figure S14. ^{1}H NMR spectrum of **2** (DMSO-*d6*, 500 MHz).

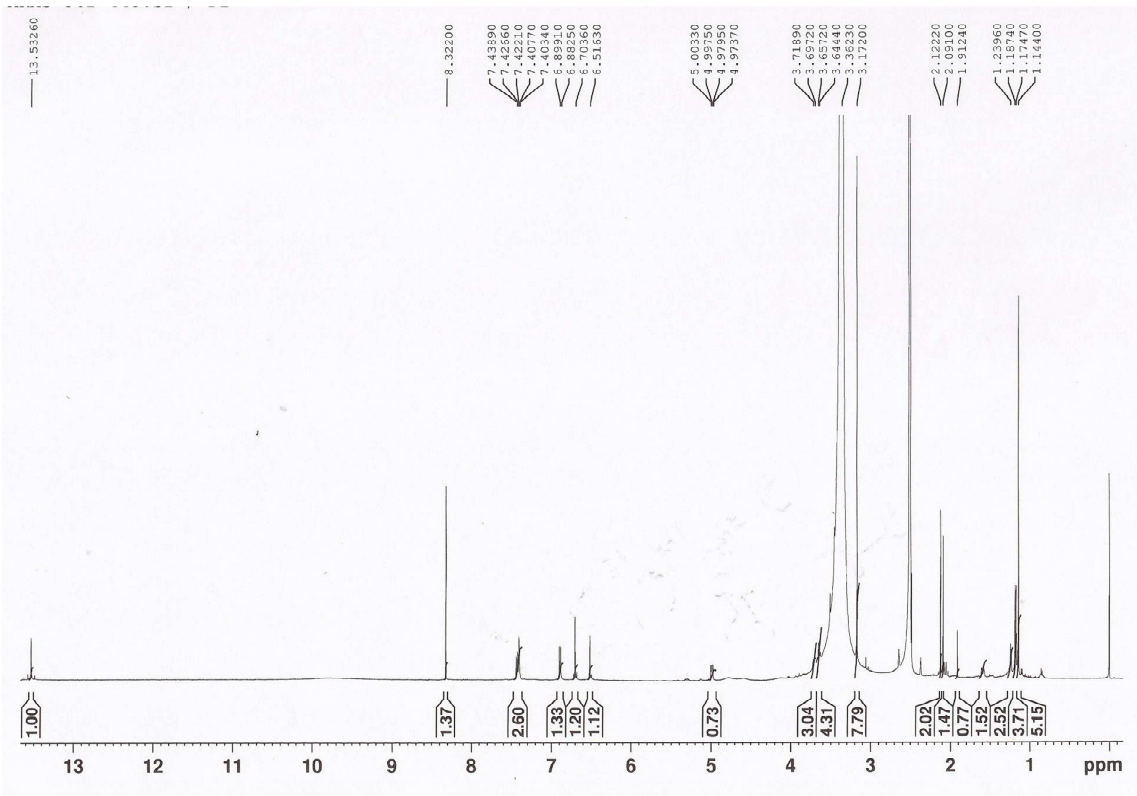


Figure S15. ^{13}C NMR spectrum of **2** (DMSO-*d6*,, 500 MHz).

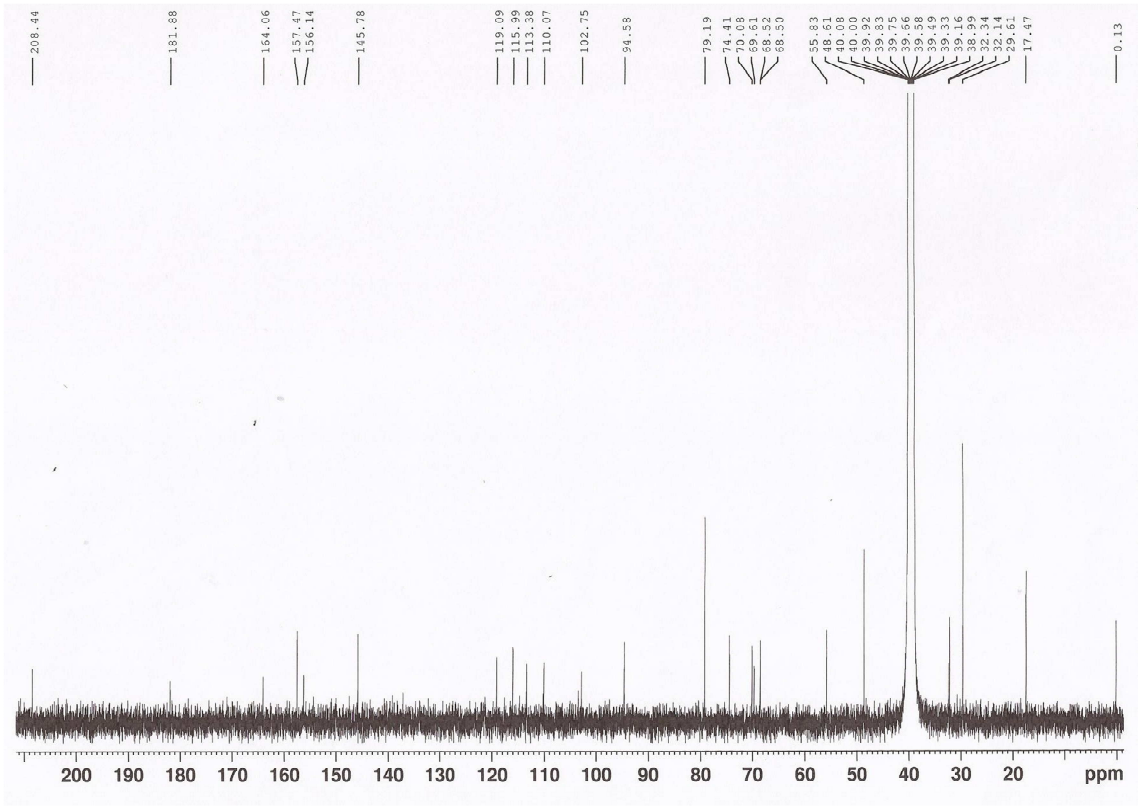


Figure S16. COSY spectrum of **2** (DMSO-*d6*, 500 MHz).

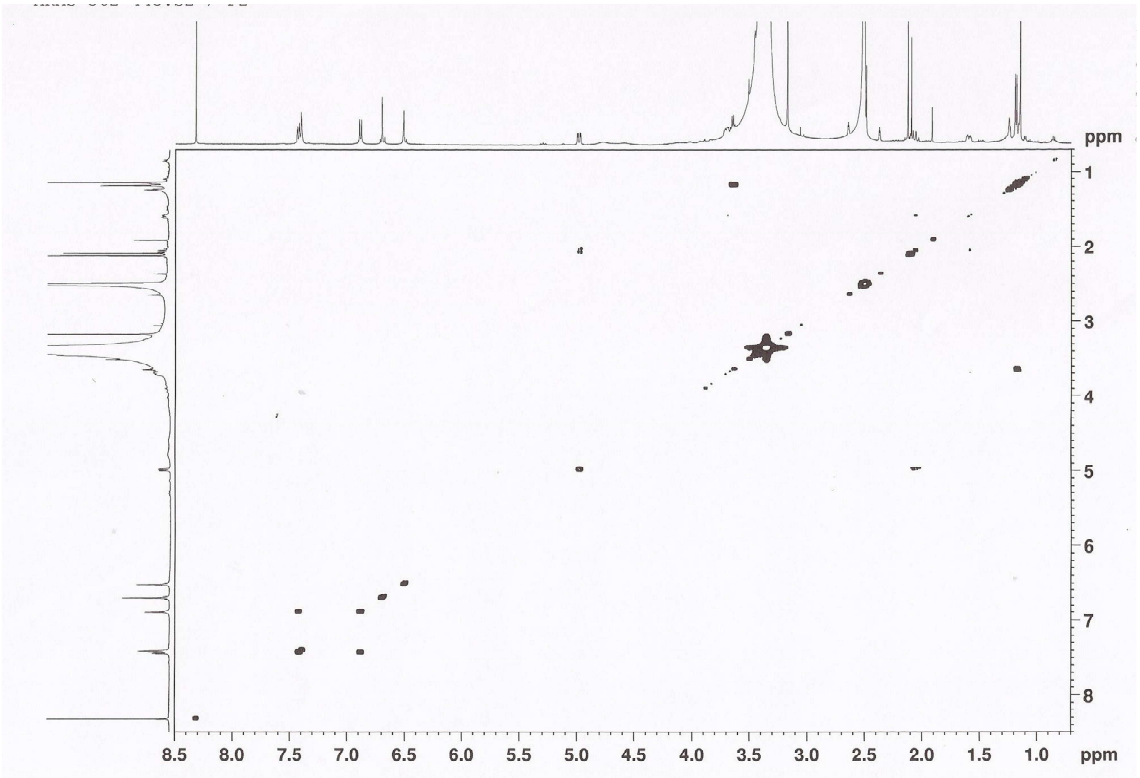


Figure S17. HSQC spectrum of **2** (DMSO-*d6*, 500 MHz).

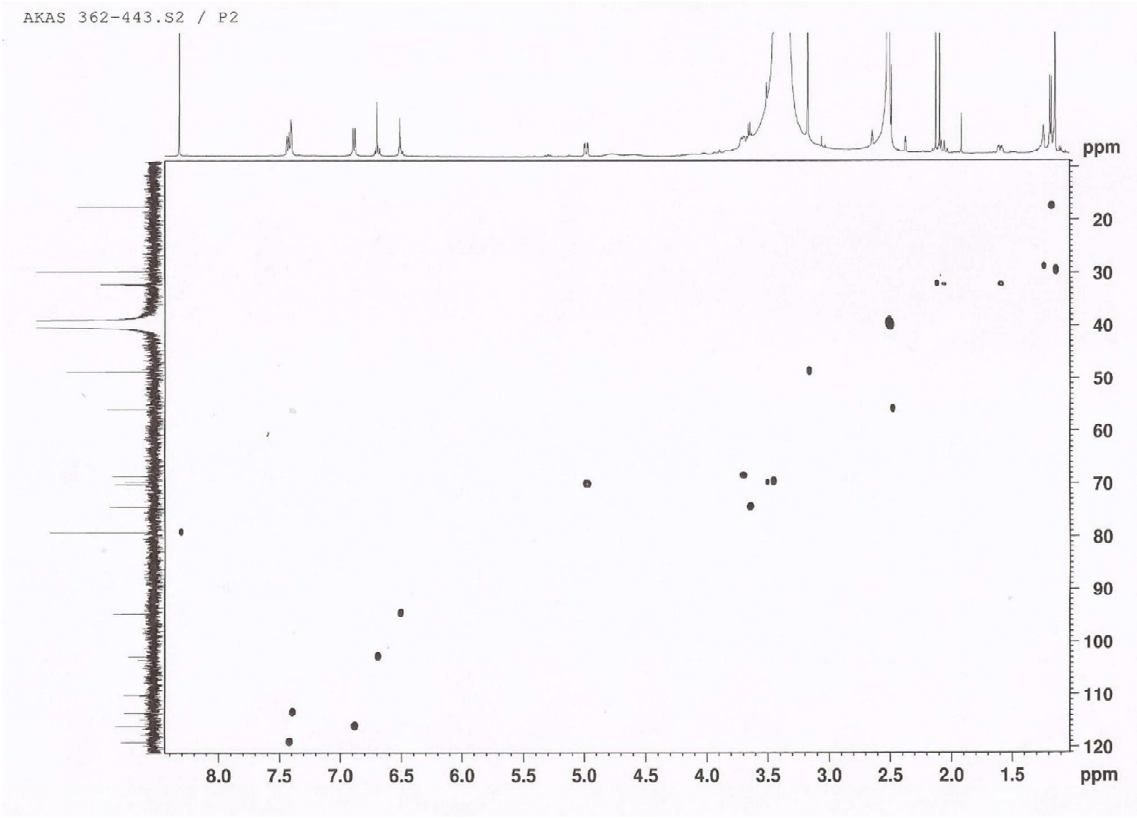


Figure S18. HMBC spectrum of **2** (DMSO-*d6*, 500 MHz).

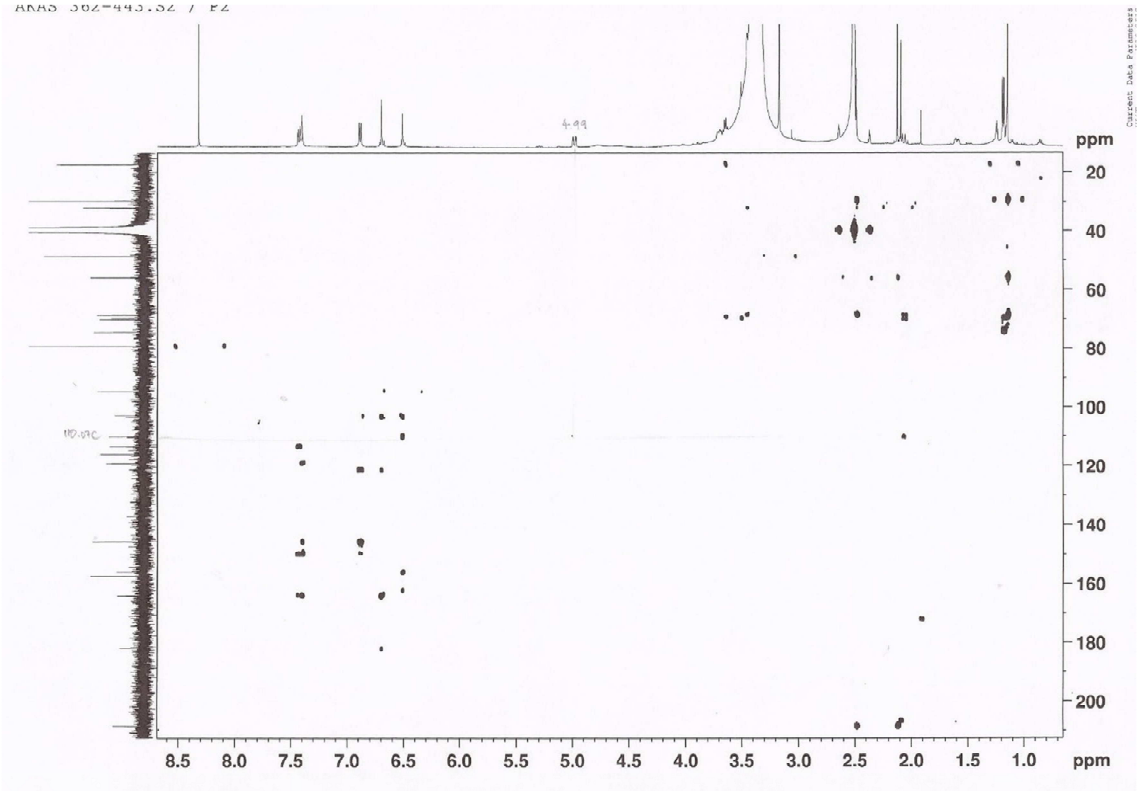


Figure S19. [1]H spectrum of **3a** (DMSO-*d6*, 500 MHz).

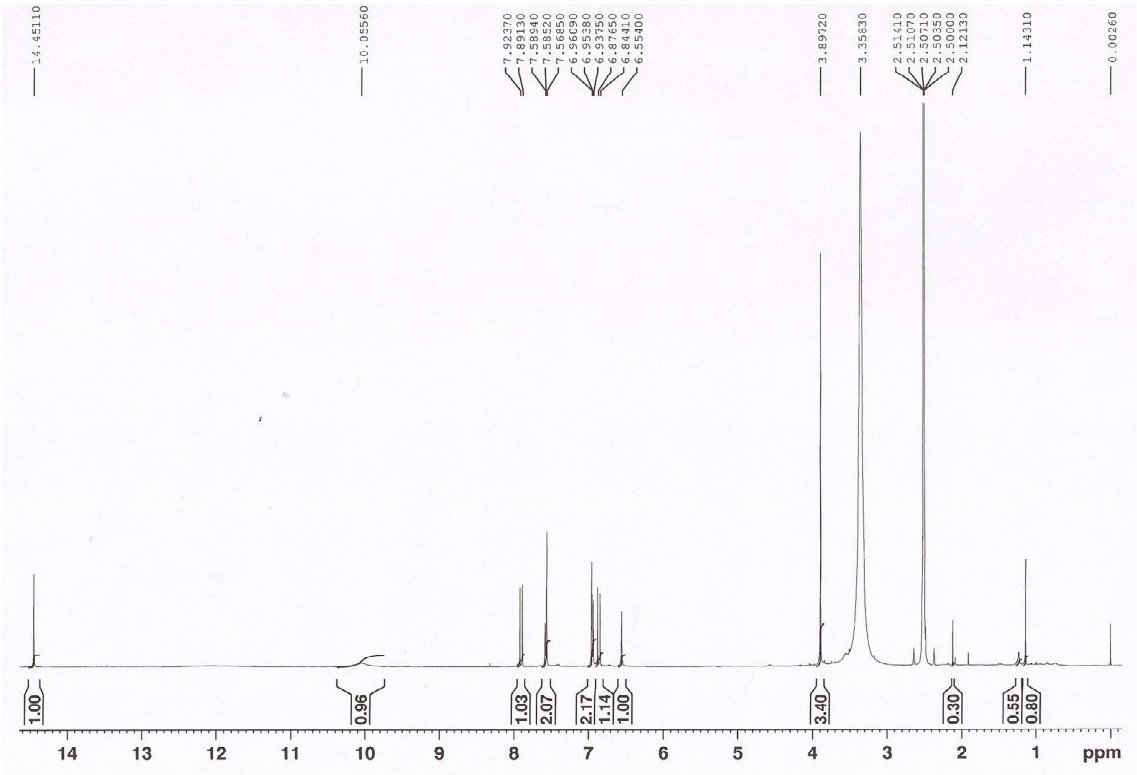


Figure S20. [13]C NMR spectrum of **3a** (DMSO-*d6*, 125 MHz).

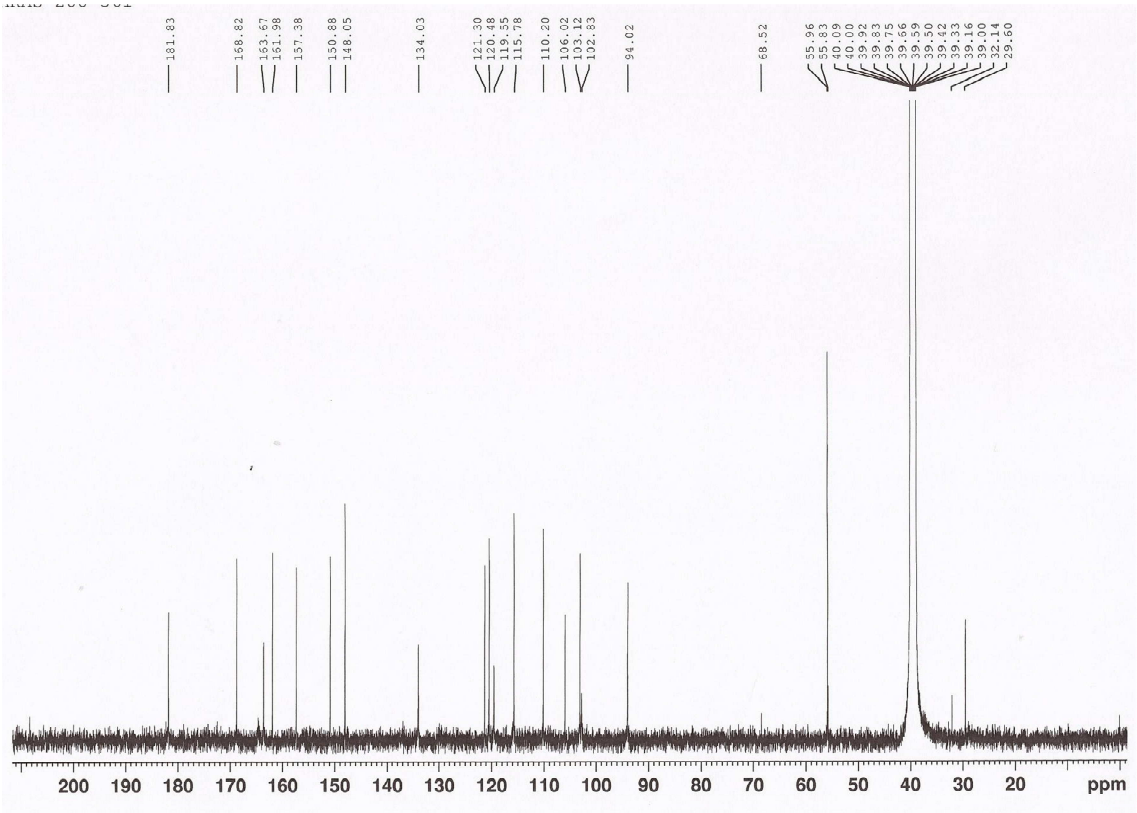


Figure S21. COSY spectrum of **3a** (DMSO-*d6*, 500 MHz).

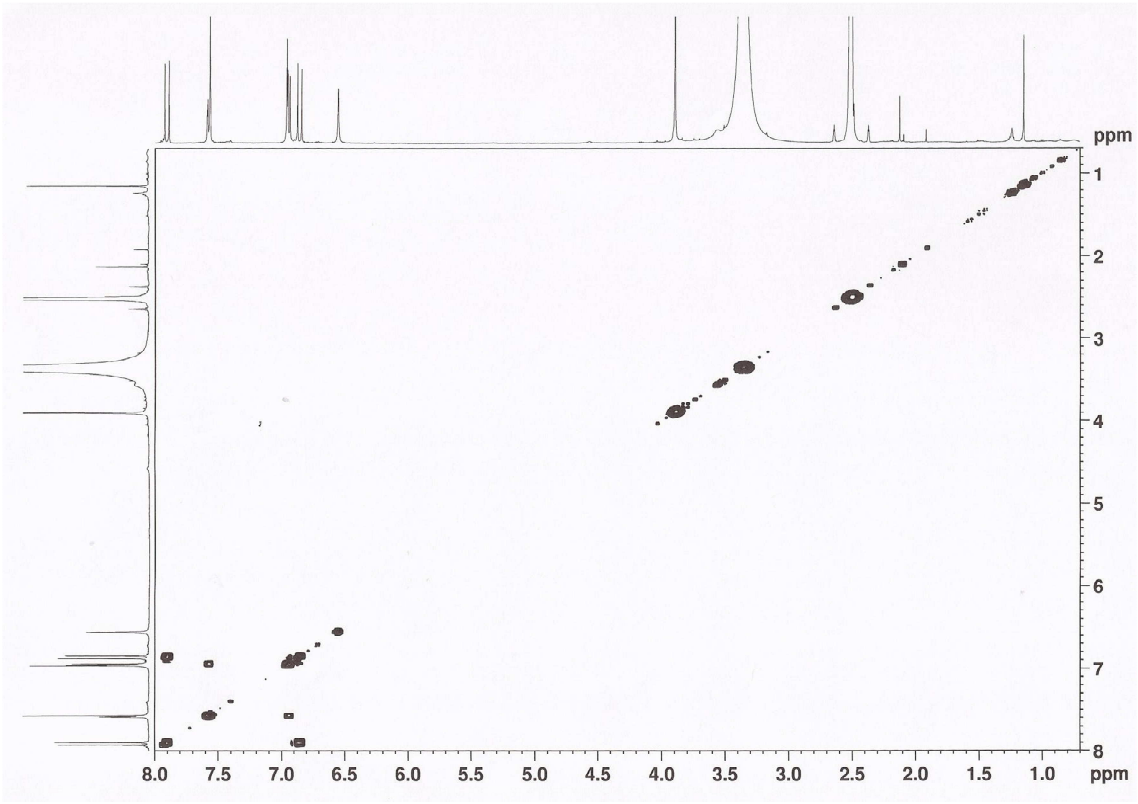


Figure S22. HSQC spectrum of **3a** (DMSO-*d6*, 500 MHz).

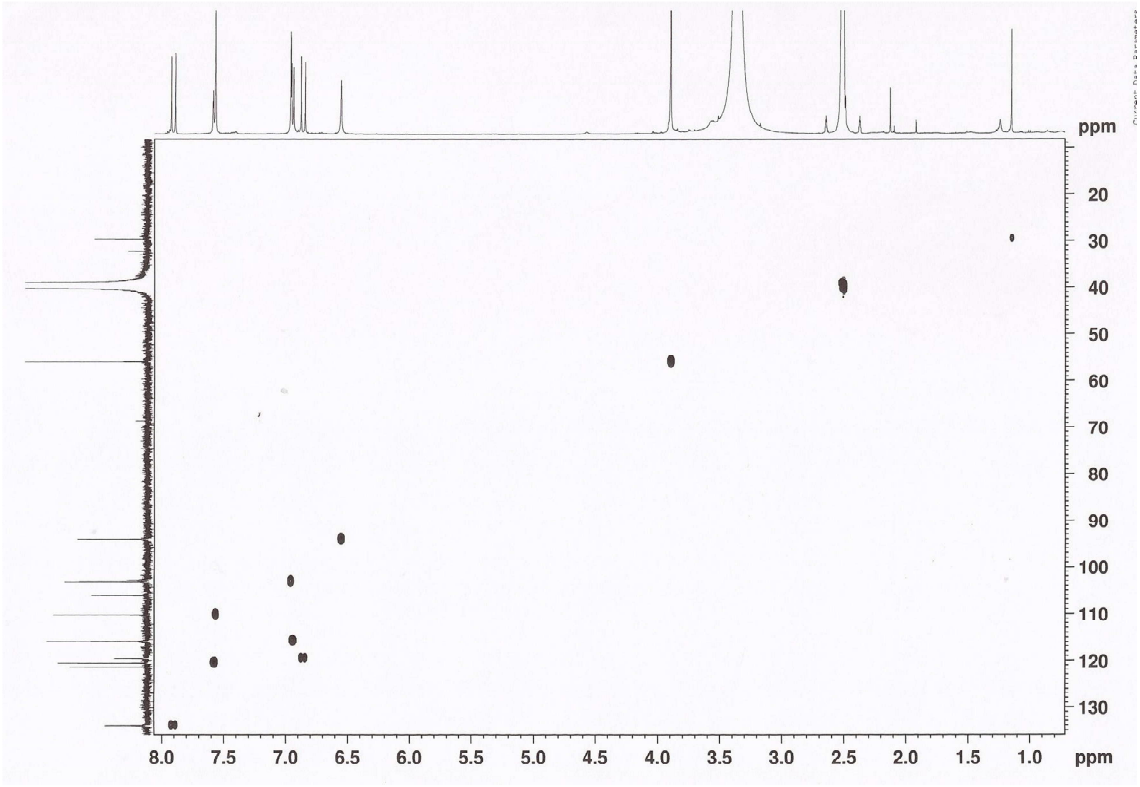


Figure S23. HMBC spectrum of **3a** (DMSO-*d6*, 500 MHz).

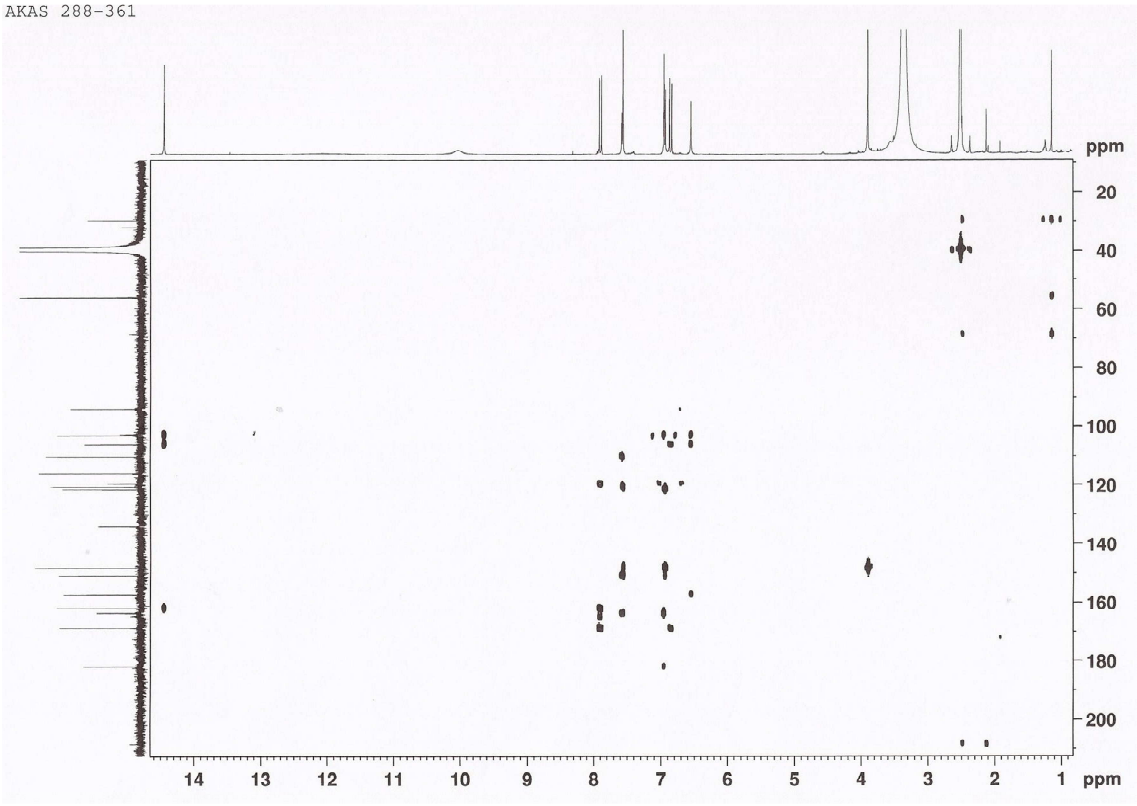


Figure S24. ^{1}H spectrum of **3b** (DMSO-*d6*, 500 MHz).

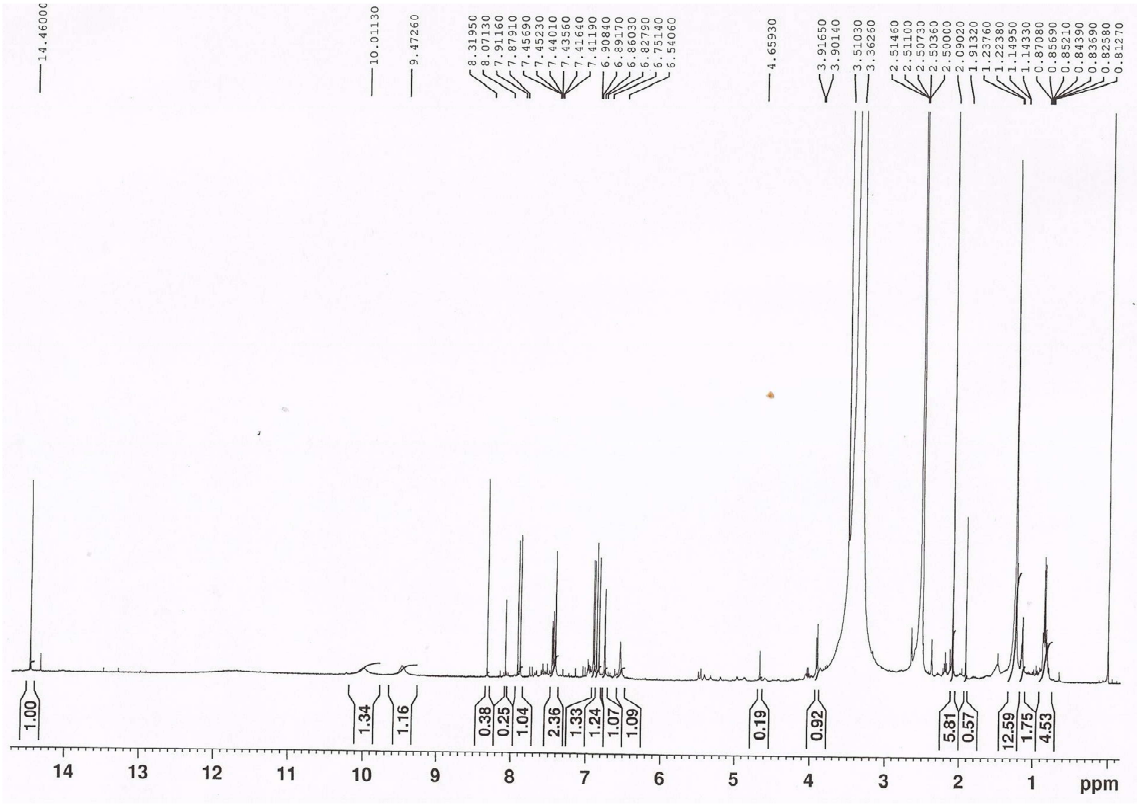


Figure S25. ^{13}C spectrum of **3b** (DMSO-*d6*, 500 MHz).

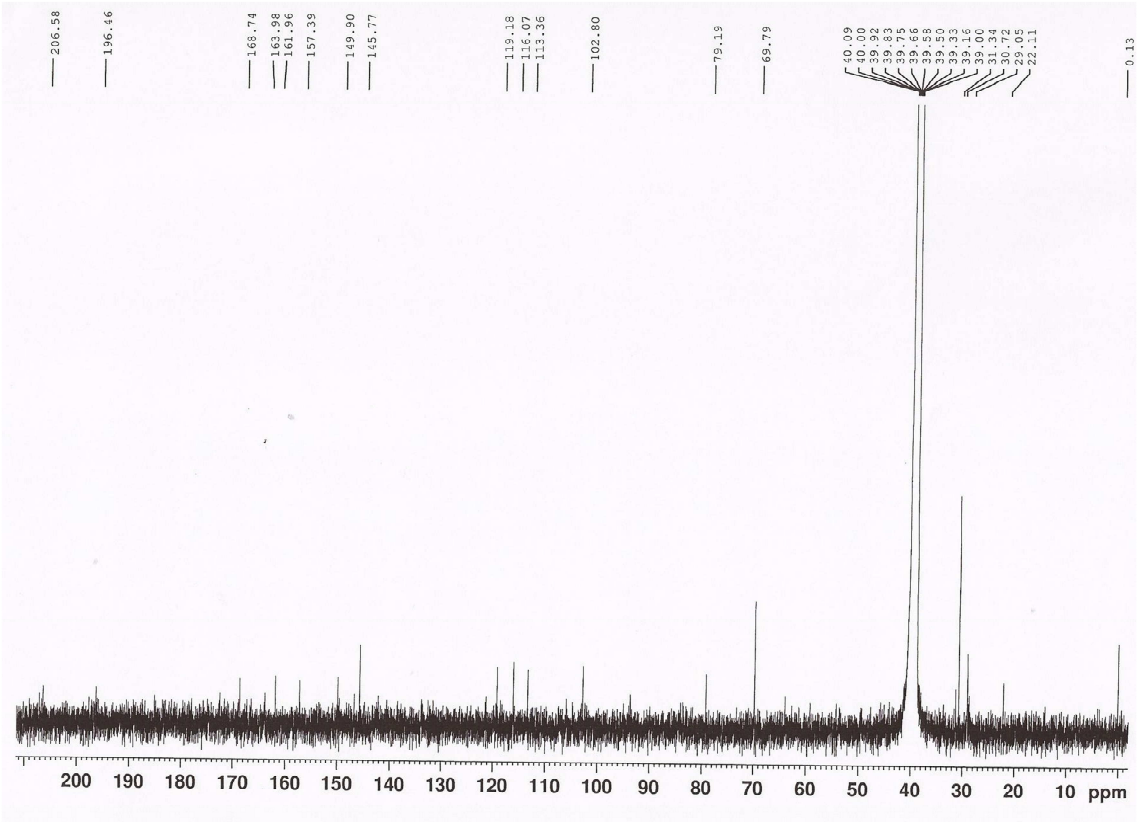


Figure S26. ^{1}H NMR spectrum of **4** (DMSO-*d6*, 500MHz).

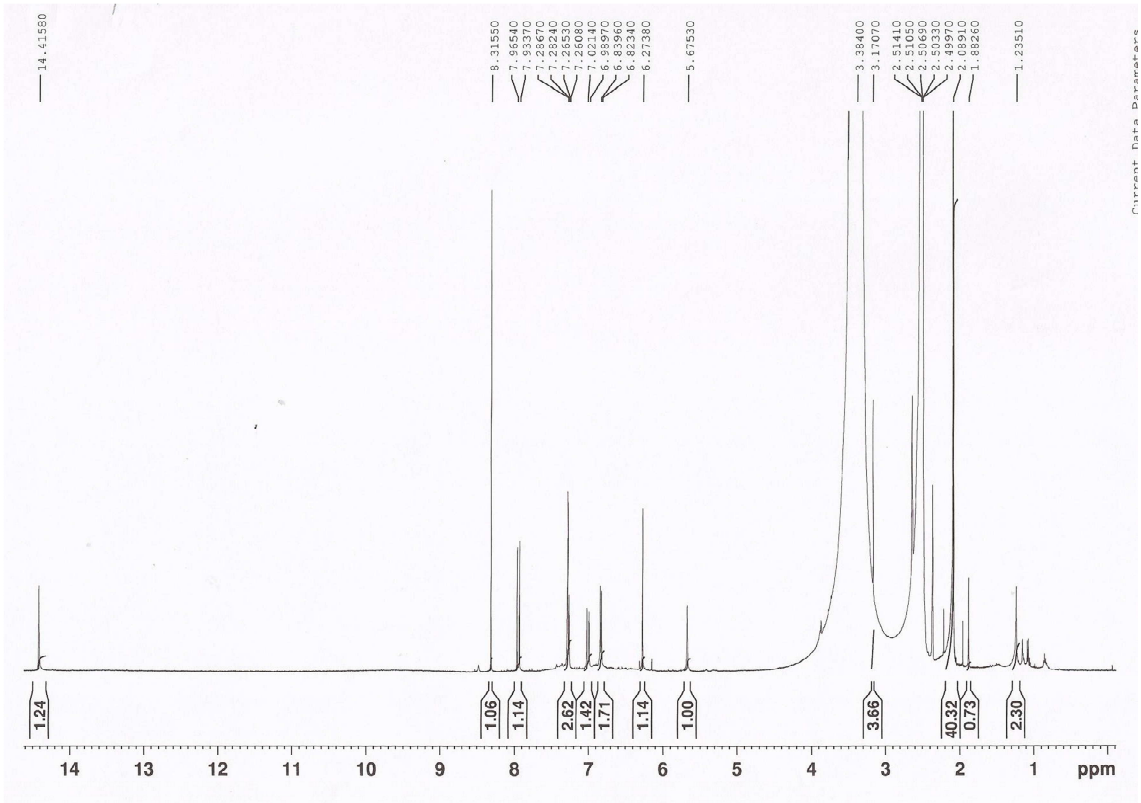


Figure S27. ^{13}C NMR spectrum of **4** (DMSO-*d6*, 125MHz).

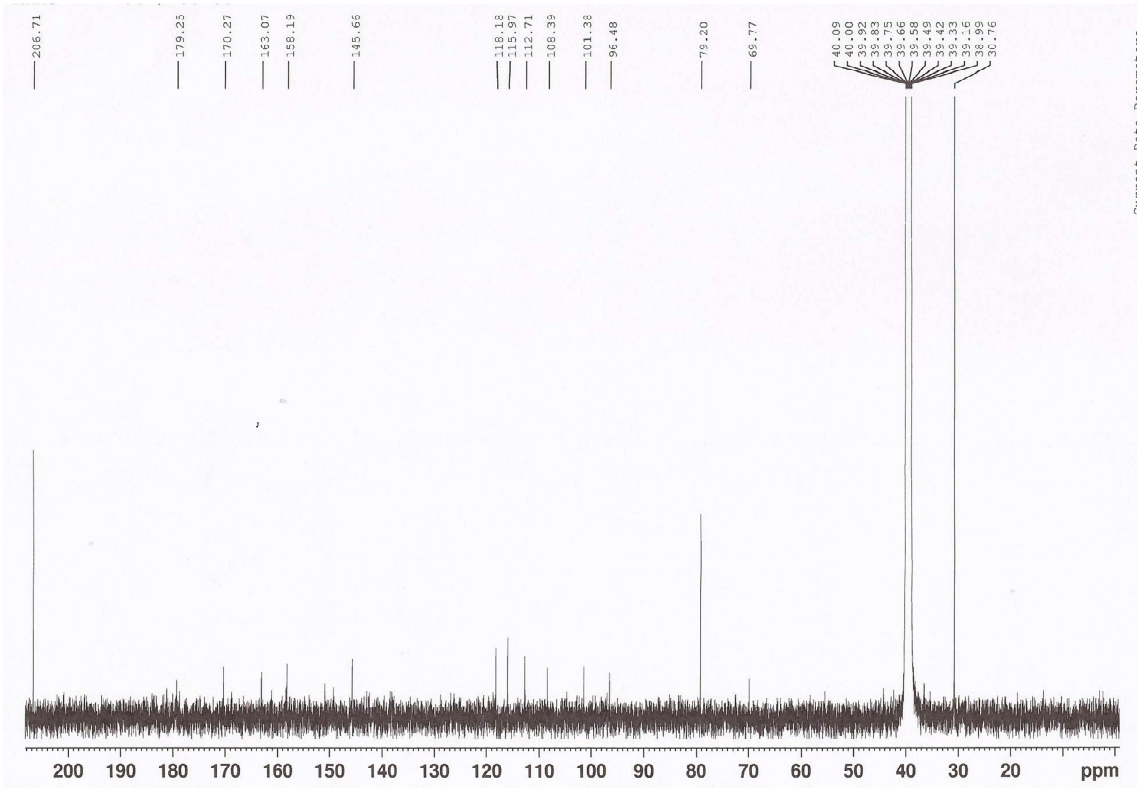


Figure S28. ^{1}H NMR spectrum of **5** (DMSO-*d6*, 300 MHz).

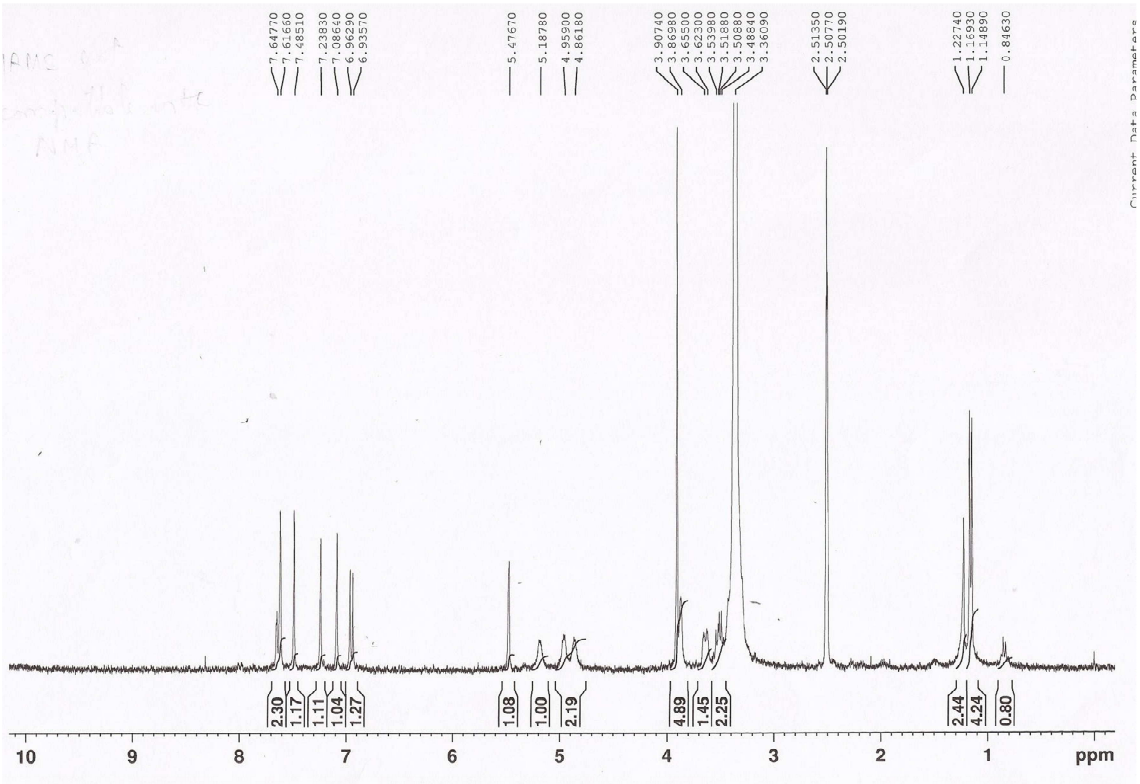


Figure S29. ^{13}C NMR spectrum of **5** (DMSO-*d6*, 75MHz).

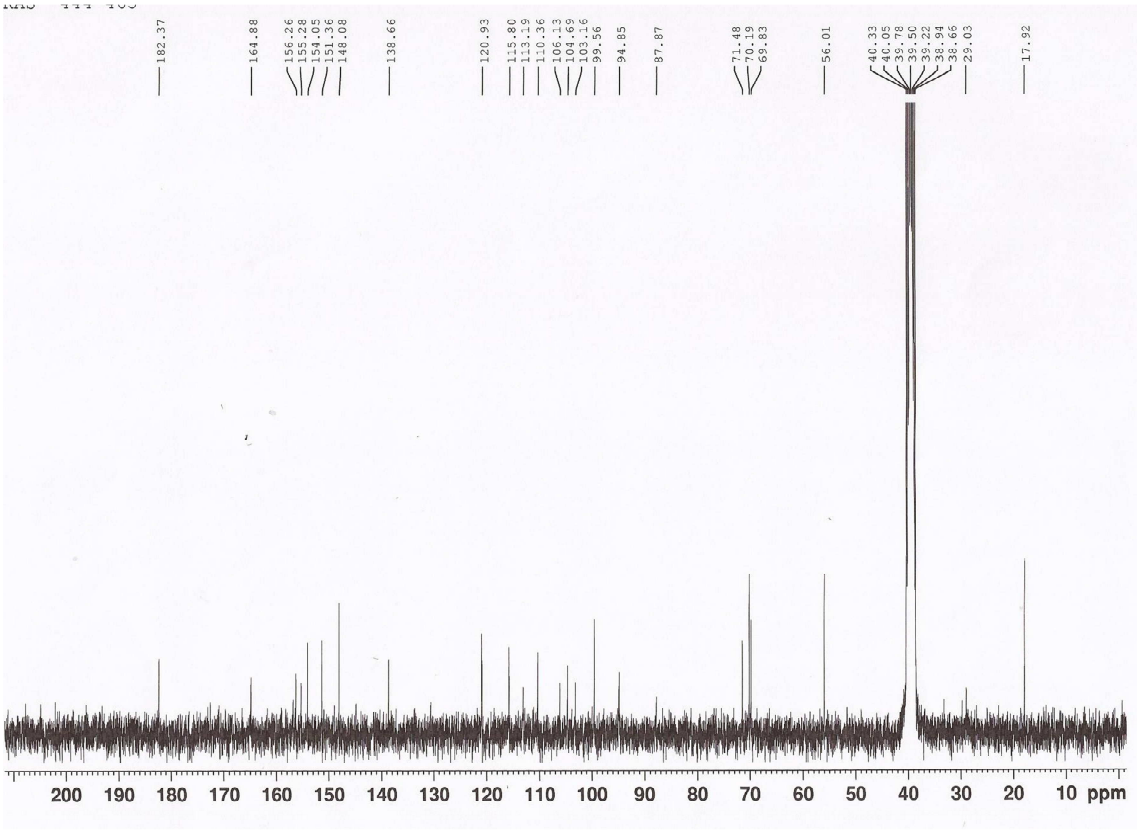


Figure S30. ORTEP view of **1a**.