Supplementary information

Structure, tautomerism, and radical scavenging activity of Schiff bases and hydrazones of gossypol

Oleksii M. Dykun*, Viktor M. Anishchenko, Andrii M. Redko, Volodymyr I. Rybachenko

L.M. Litvinenko Institute of Physical-Organic Chemistry and Coal Chemistry of NAS of Ukraine, Kyiv, 02155, Ukraine

*Corresponding Author:
E-mail: amdykun@gmail.com

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NMR spectra

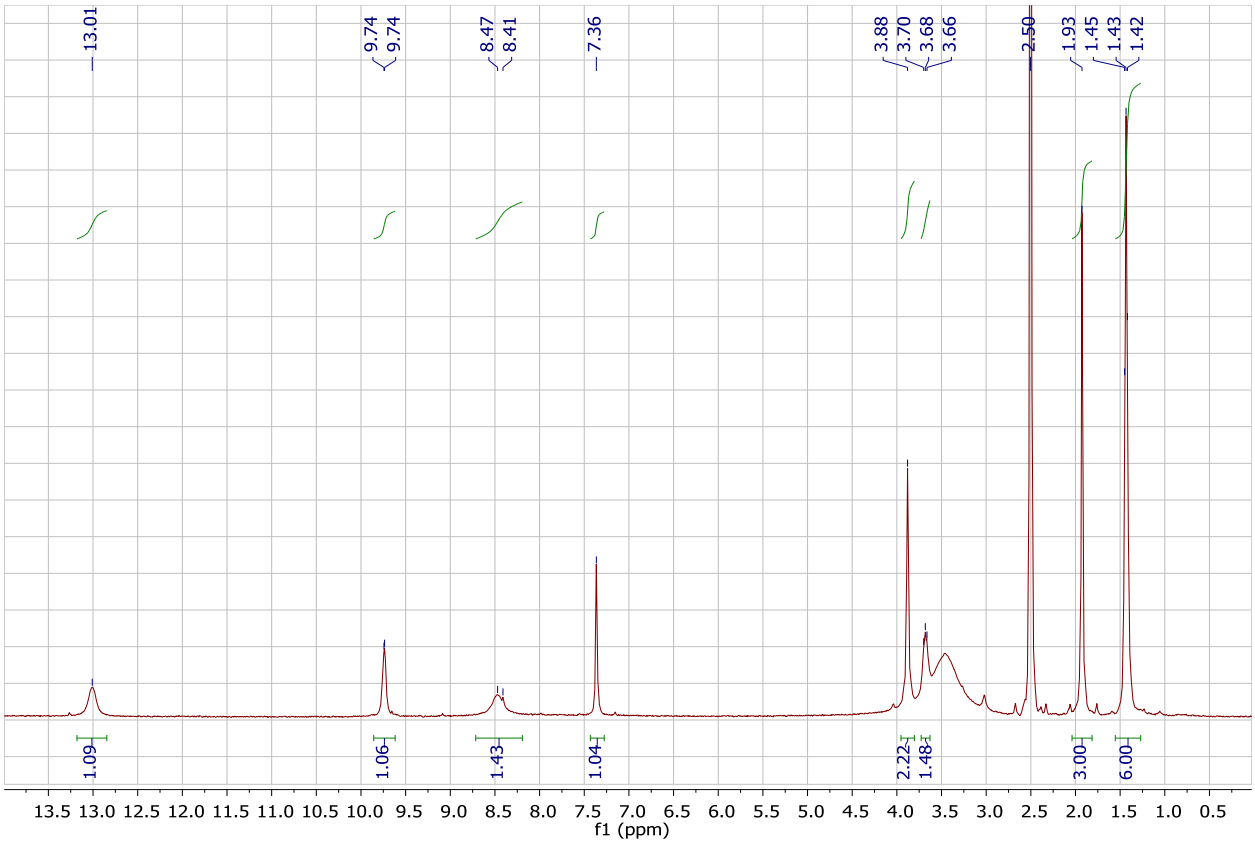

Fig. S1. ^{1}H NMR spectrum of compound **1** in DMSO-d6.

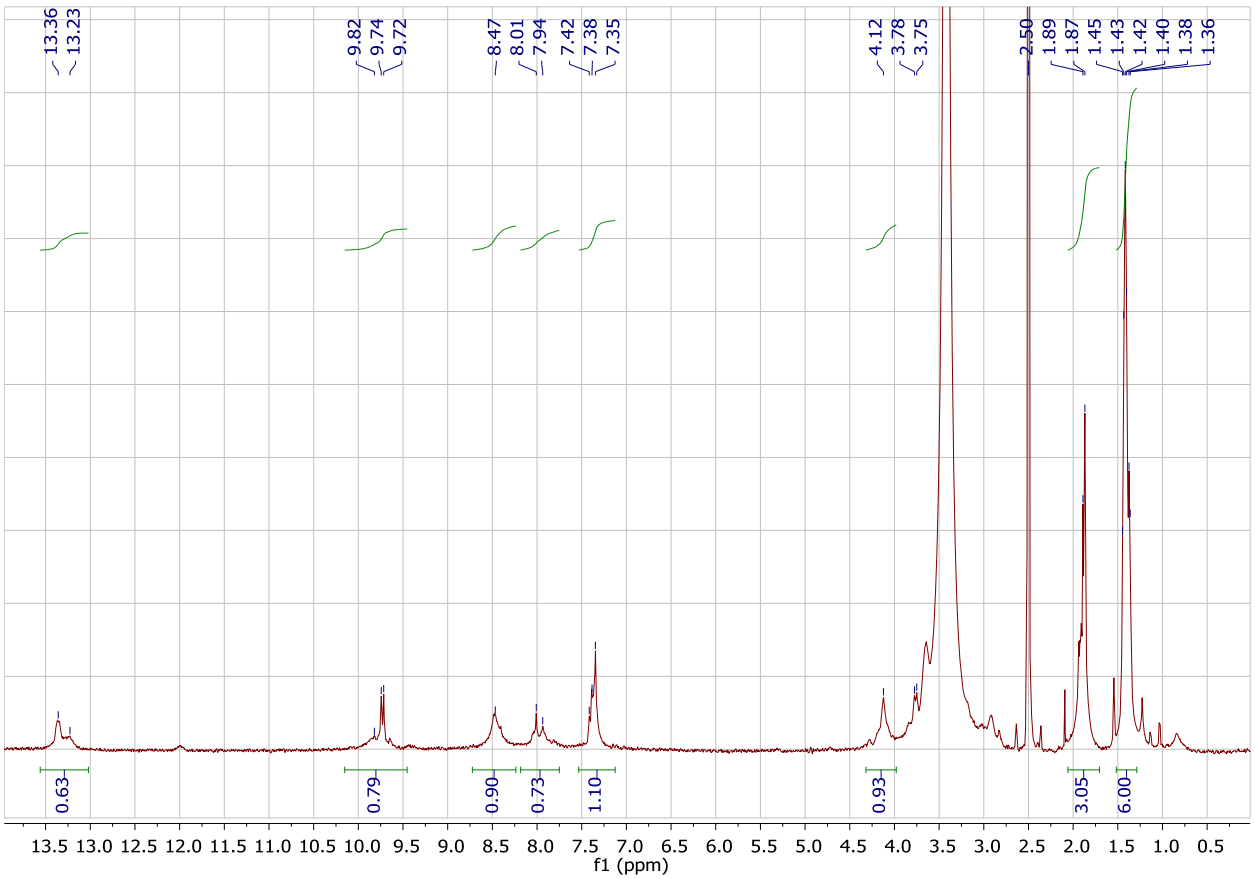

Fig. S2. ^{1}H NMR spectrum of compound **2** in DMSO-d6.

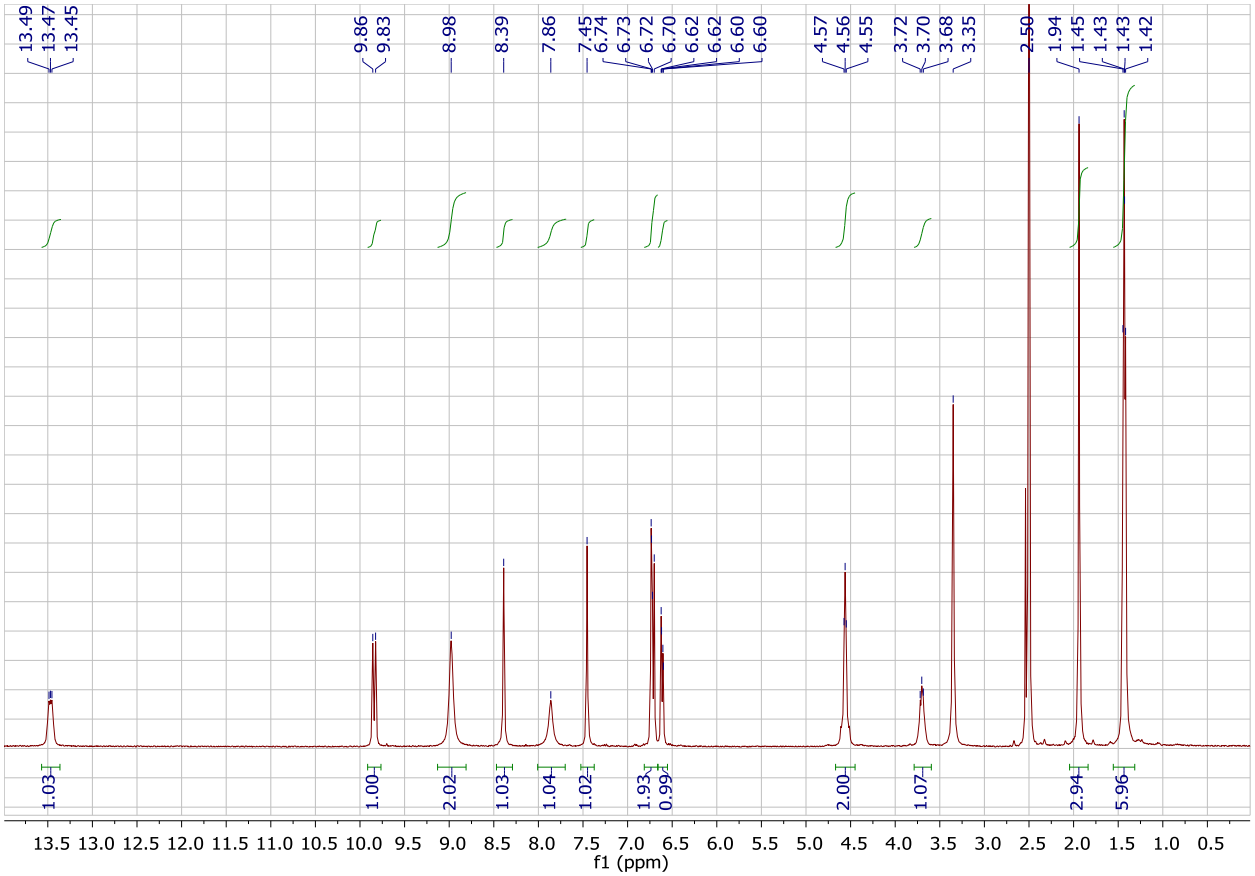

Fig. S3. ^{1}H NMR spectrum of compound **3** in DMSO-d6.

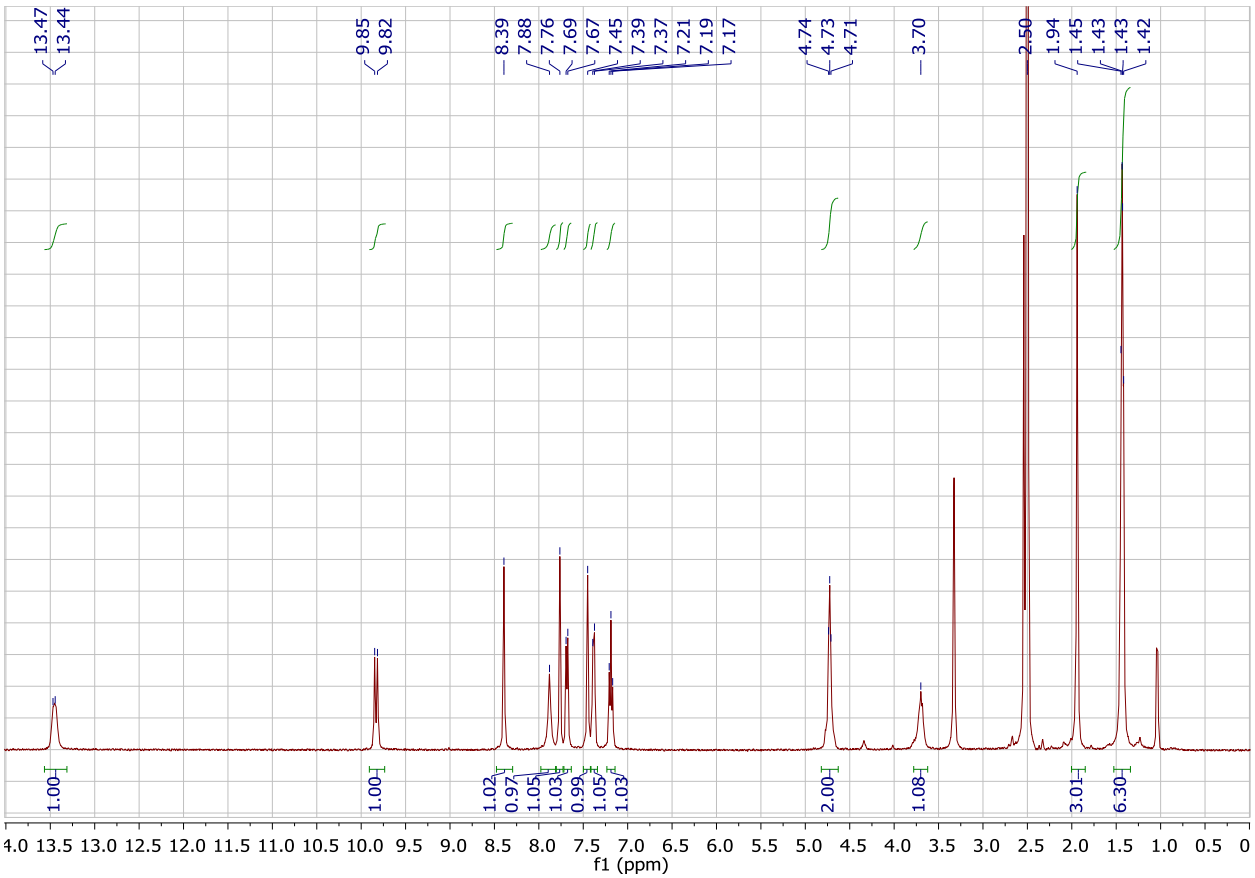

Fig. S4. ^{1}H NMR spectrum of compound **4** in DMSO-d6.

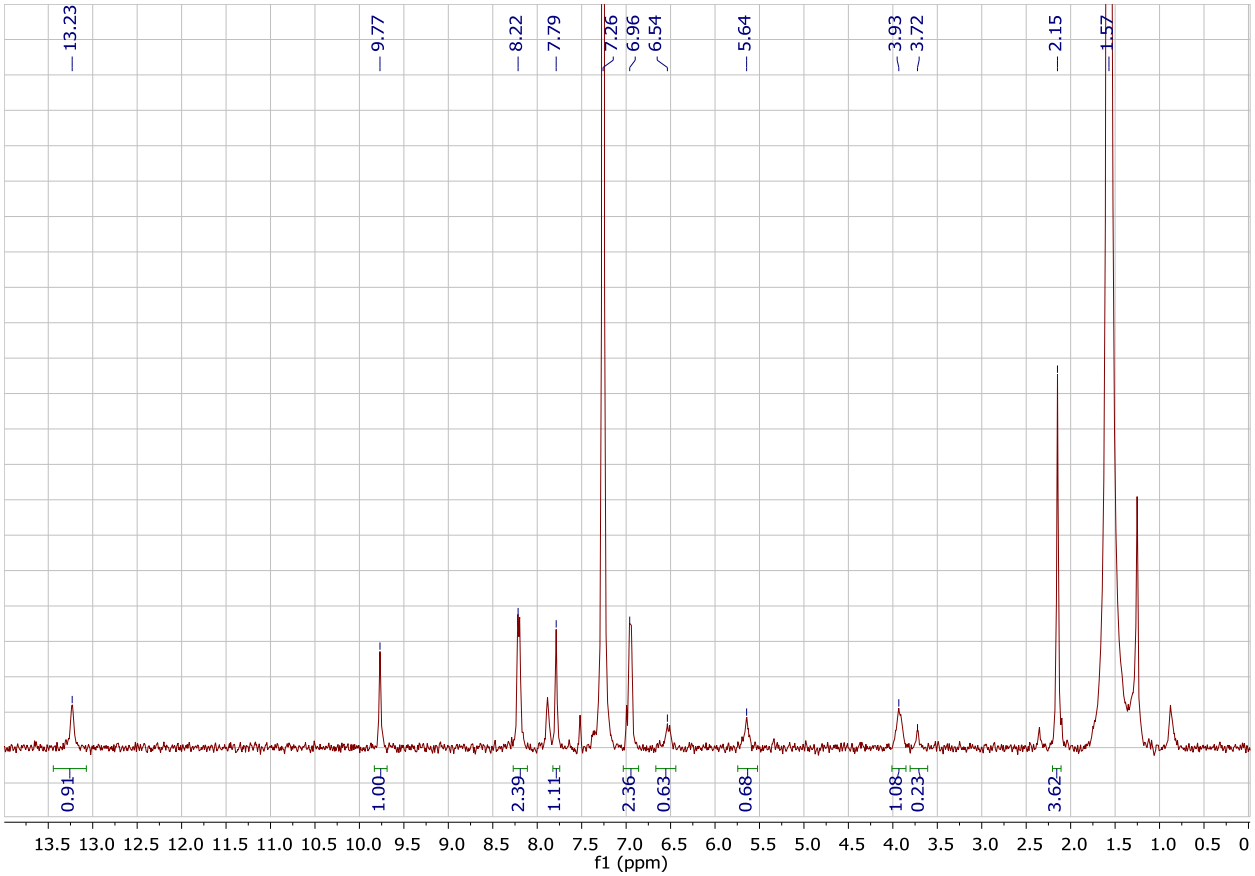

Fig. S5. ^{1}H NMR spectrum of compound **5** in $CDCl_3$.

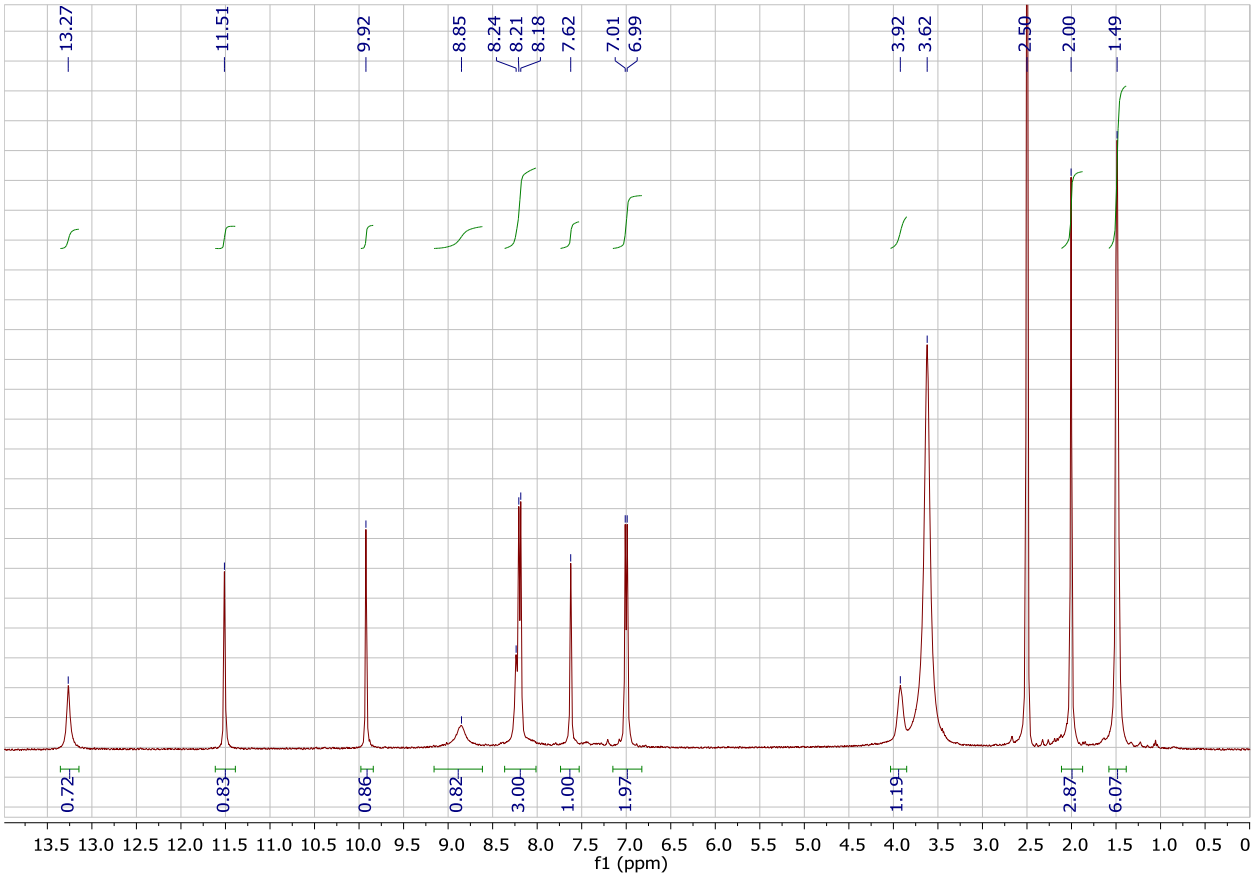

Fig. S6. ^{1}H NMR spectrum of compound **5** in DMSO-d6.

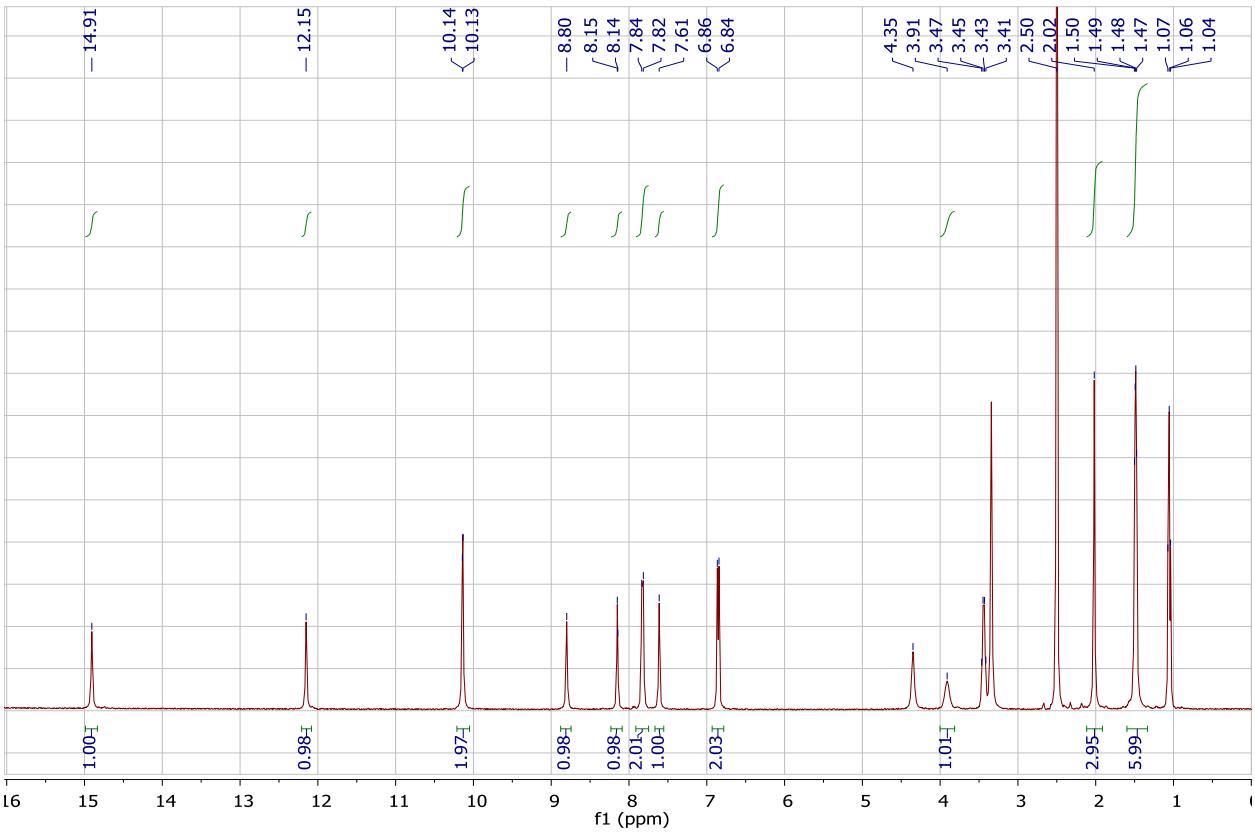

Fig. S7. ^{1}H NMR spectrum of compound **6** in DMSO-d6. (The chemical shifts at δ=1.06 ppm, δ=3.45 ppm, and δ=4.35 ppm are assigned to residual signals of ethanol. The compound was subjected to additional drying before further studies).

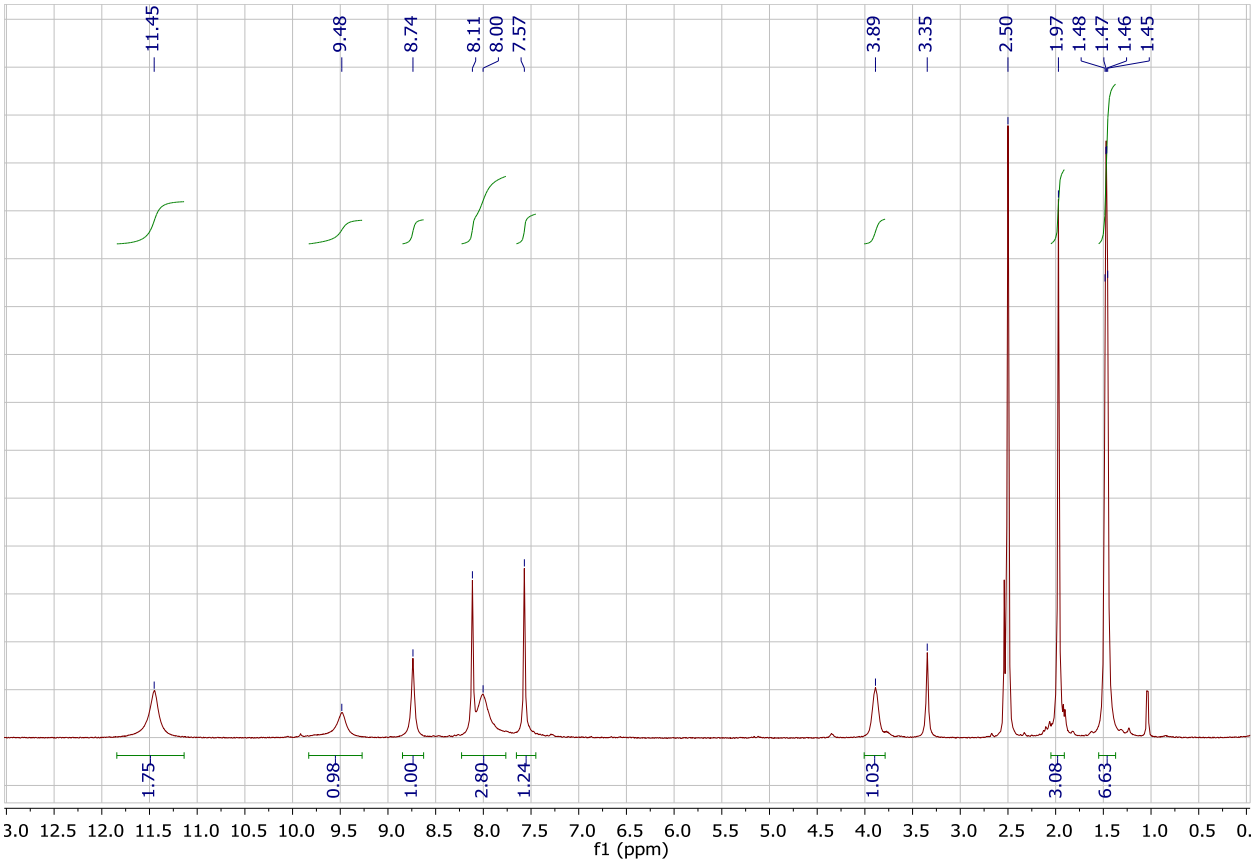

Fig. S8. ^{1}H NMR spectrum of compound **7** in DMSO-d6.

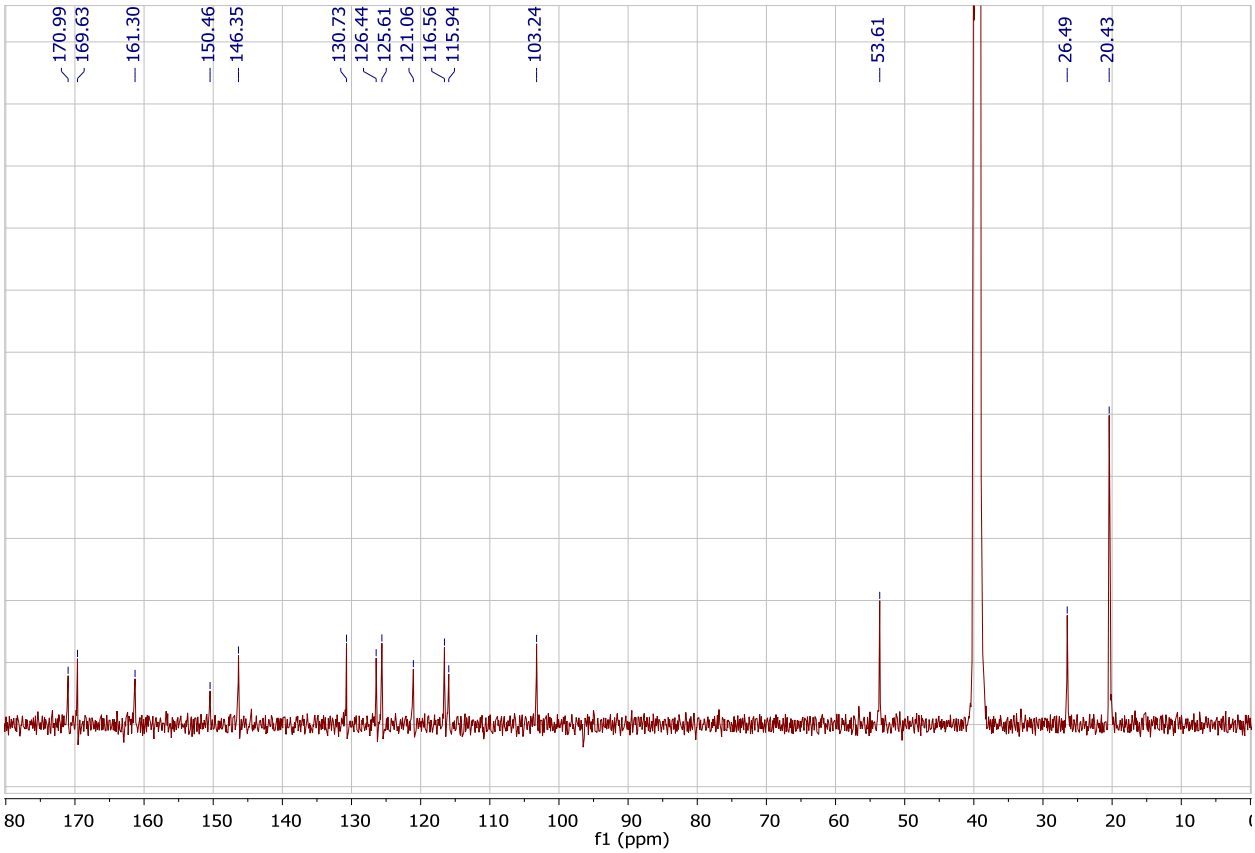

Fig. S9. ^{13}C NMR spectrum of compound **1** in DMSO-d6.

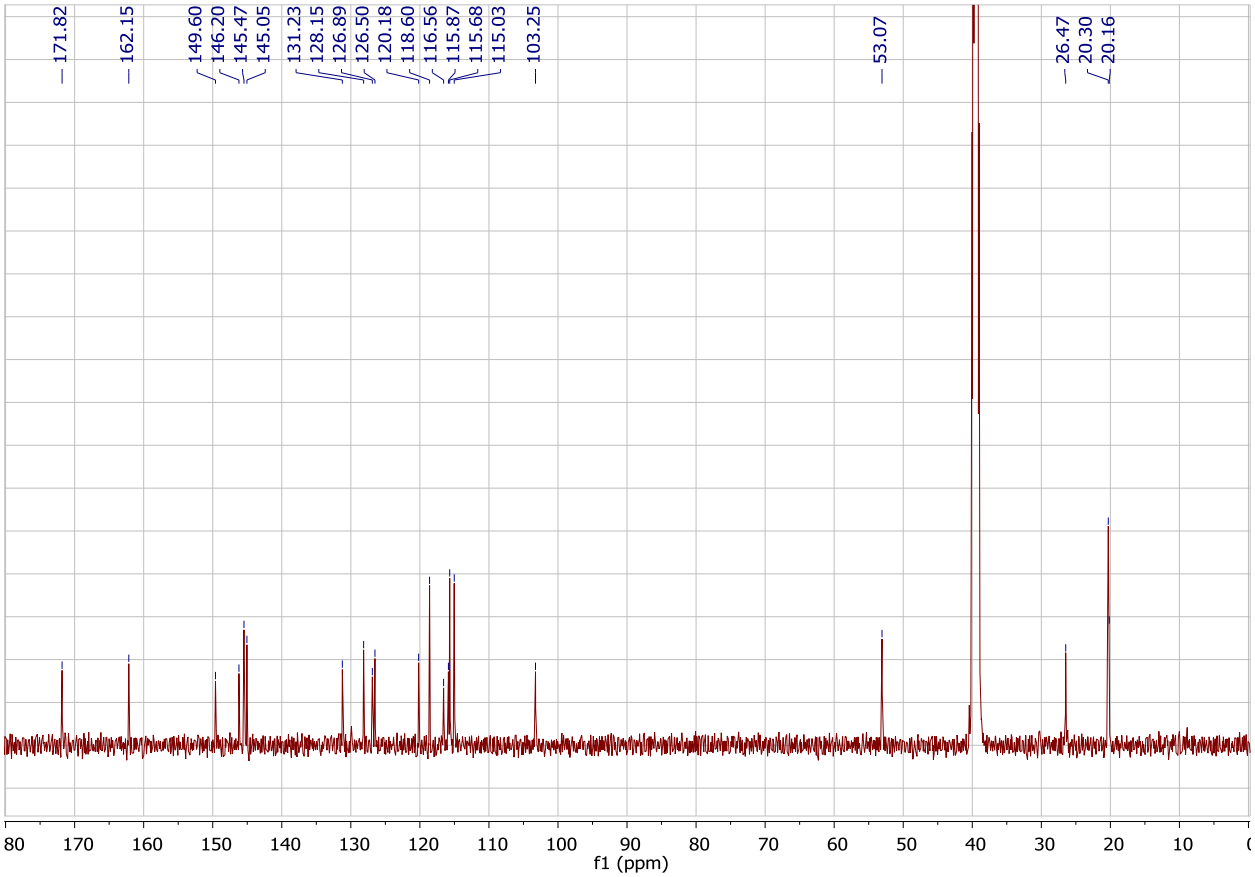

Fig. S10. ^{13}C NMR spectrum of compound **3** in DMSO-d6.

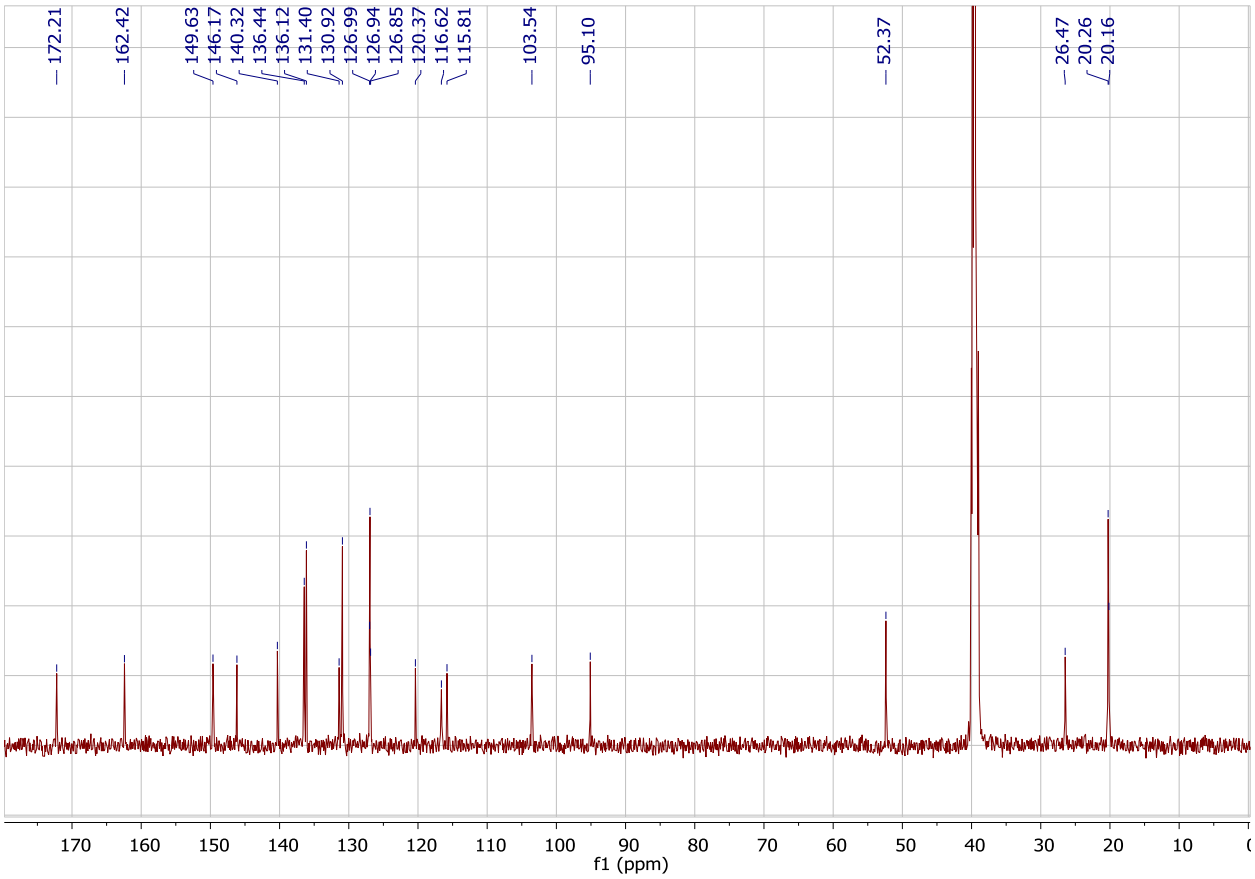

Fig. S11. ^{13}C NMR spectrum of compound **4** in DMSO-d6.

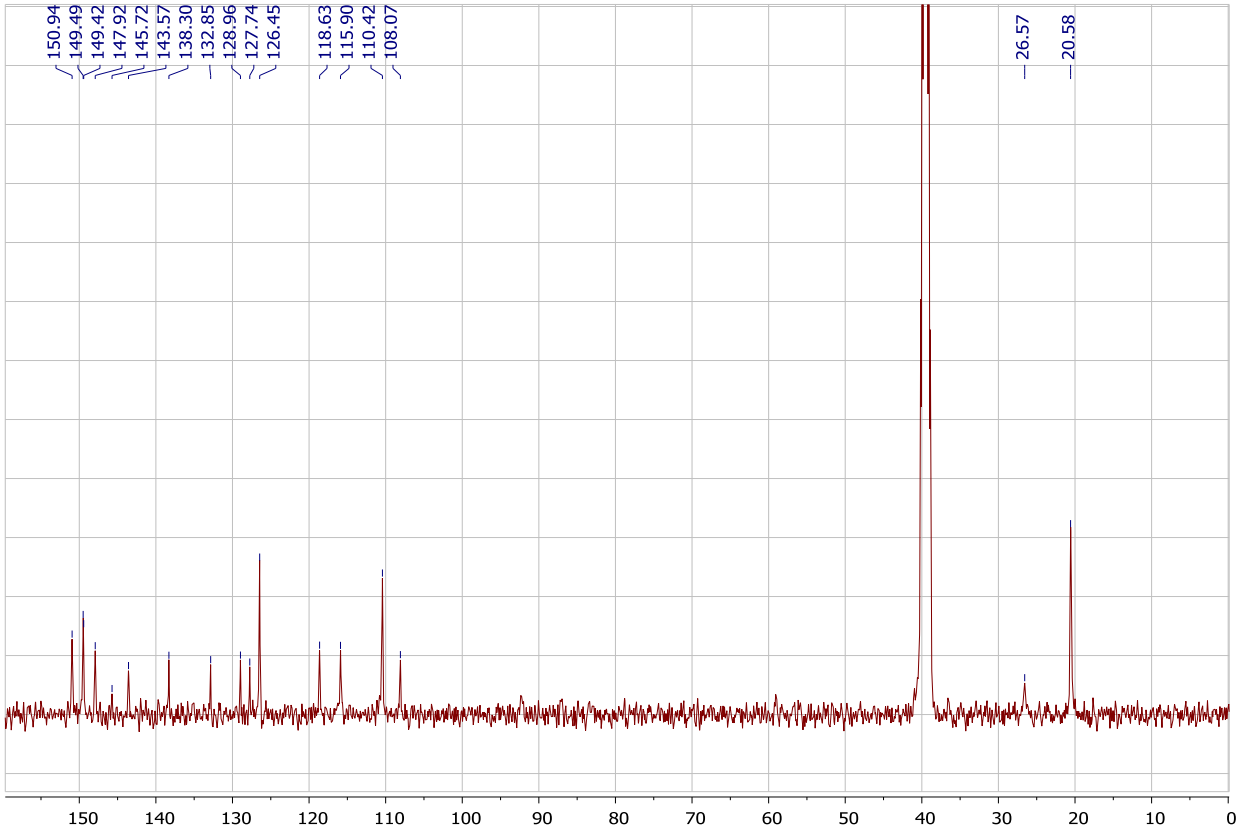

Fig. S12. ^{13}C NMR spectrum of compound **5** in DMSO-d6.

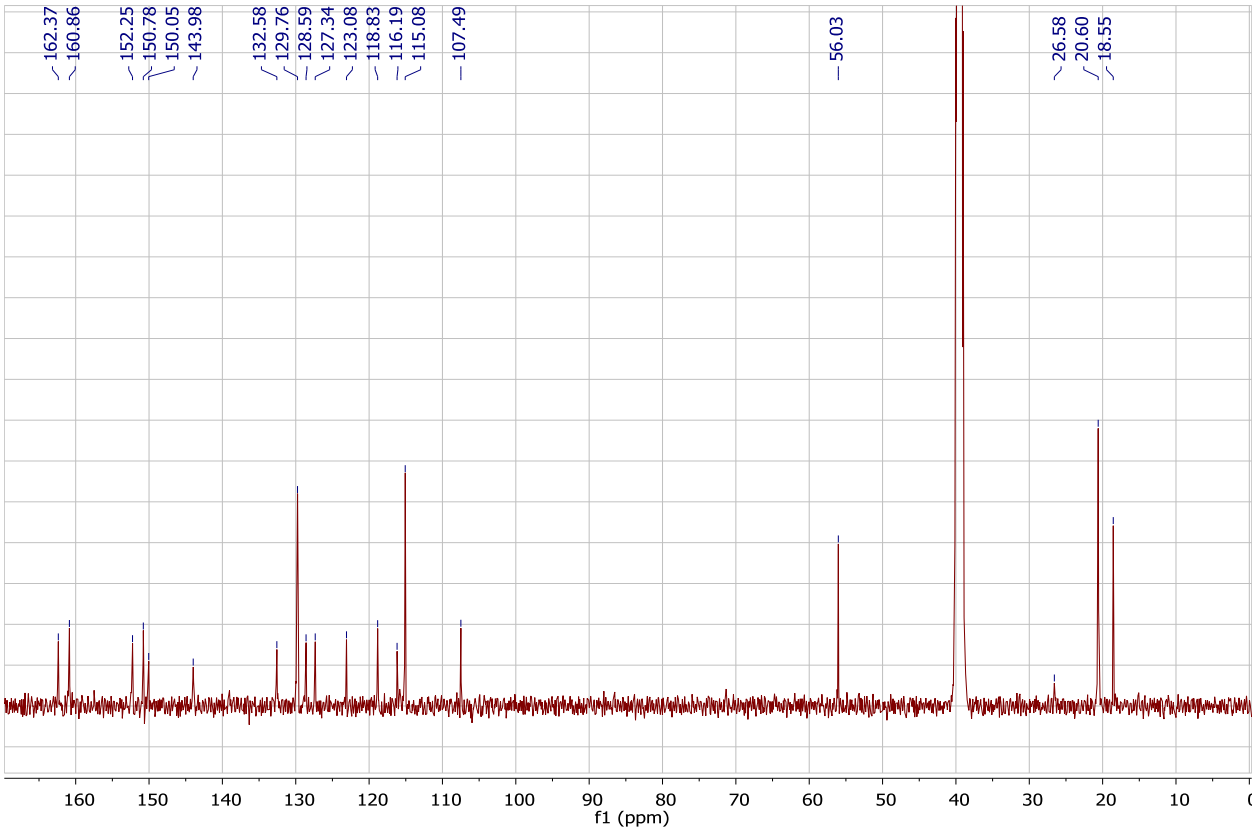

Fig. S13. ^{13}C NMR spectrum of compound **6** in DMSO-d6. (The chemical shifts at δ=18.55 ppm and δ=56.03 ppm are assigned to residual signals of ethanol. The compound was subjected to additional drying before further studies).

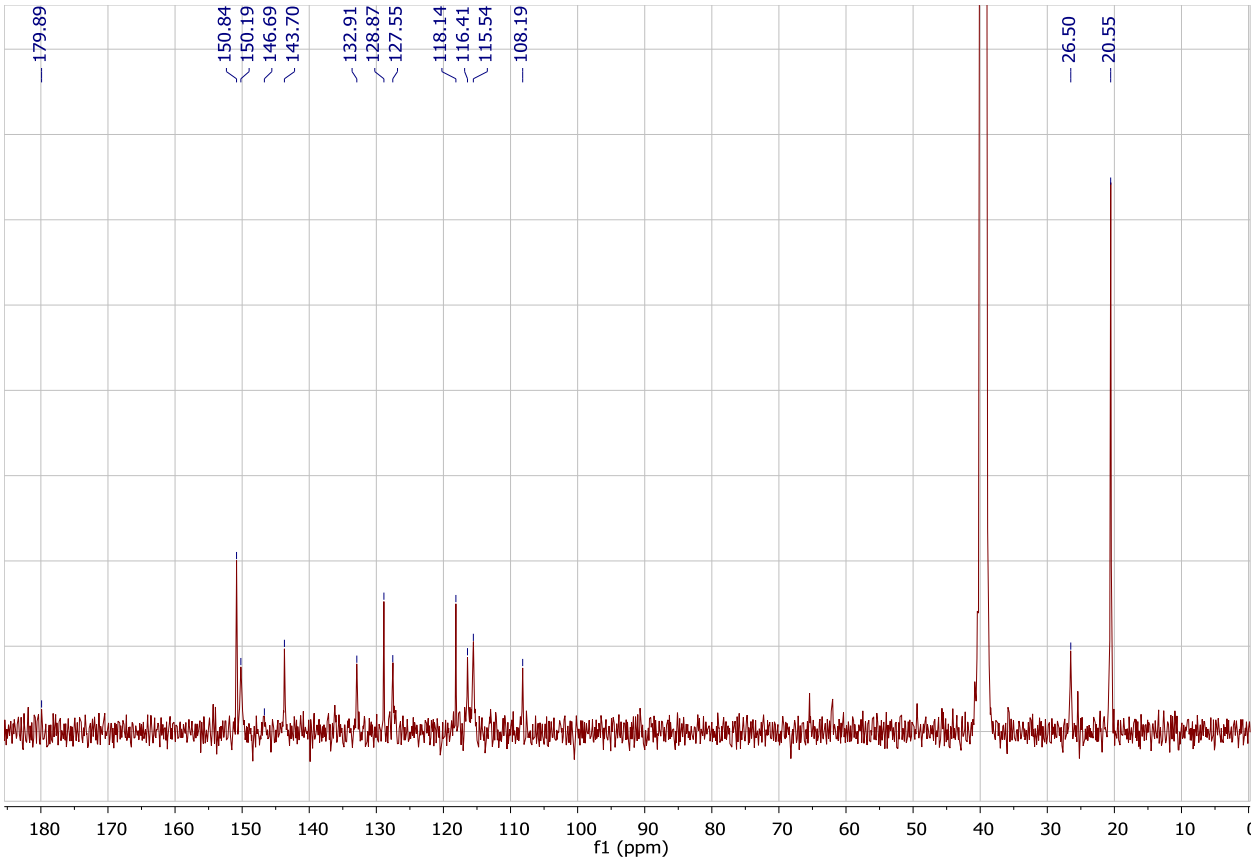

Fig. S14. ^{13}C NMR spectrum of compound **7** in DMSO-d6.

FT-IR spectra

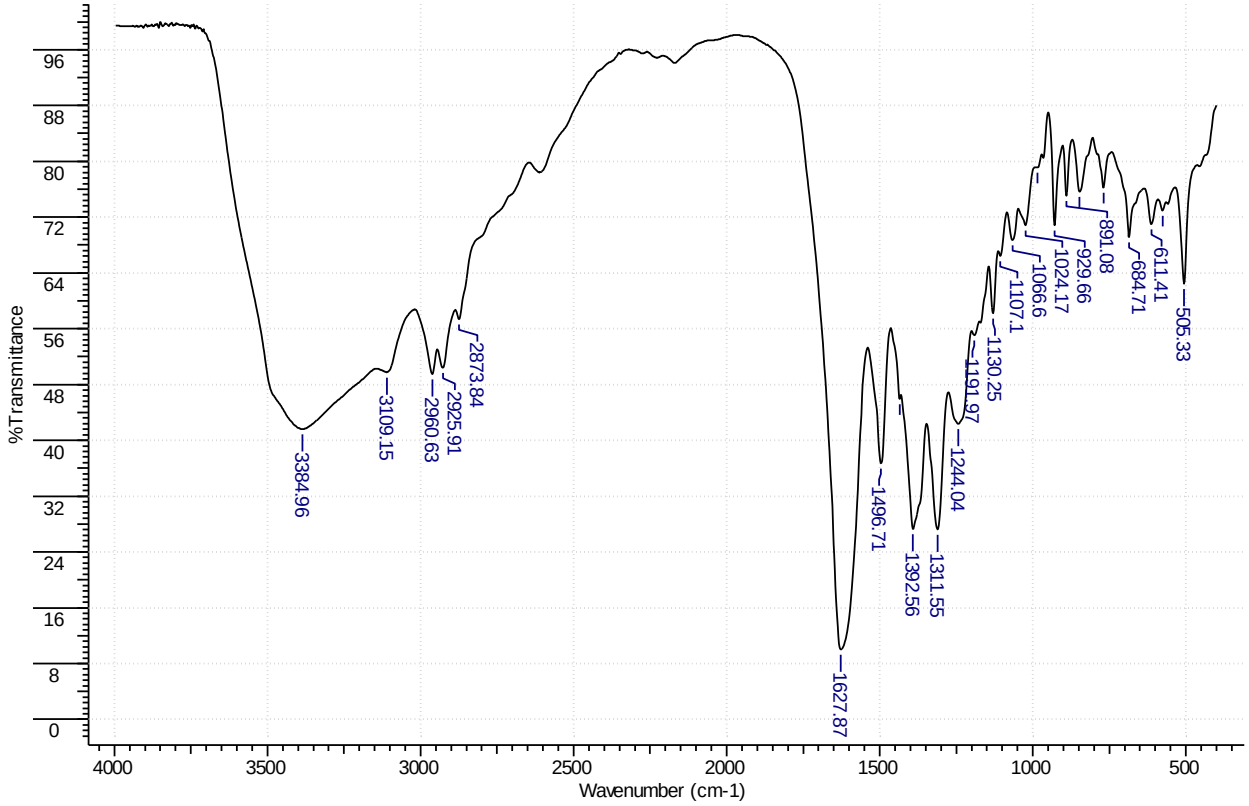

Fig. S15. FT-IR spectrum of compound **1** in KBr.

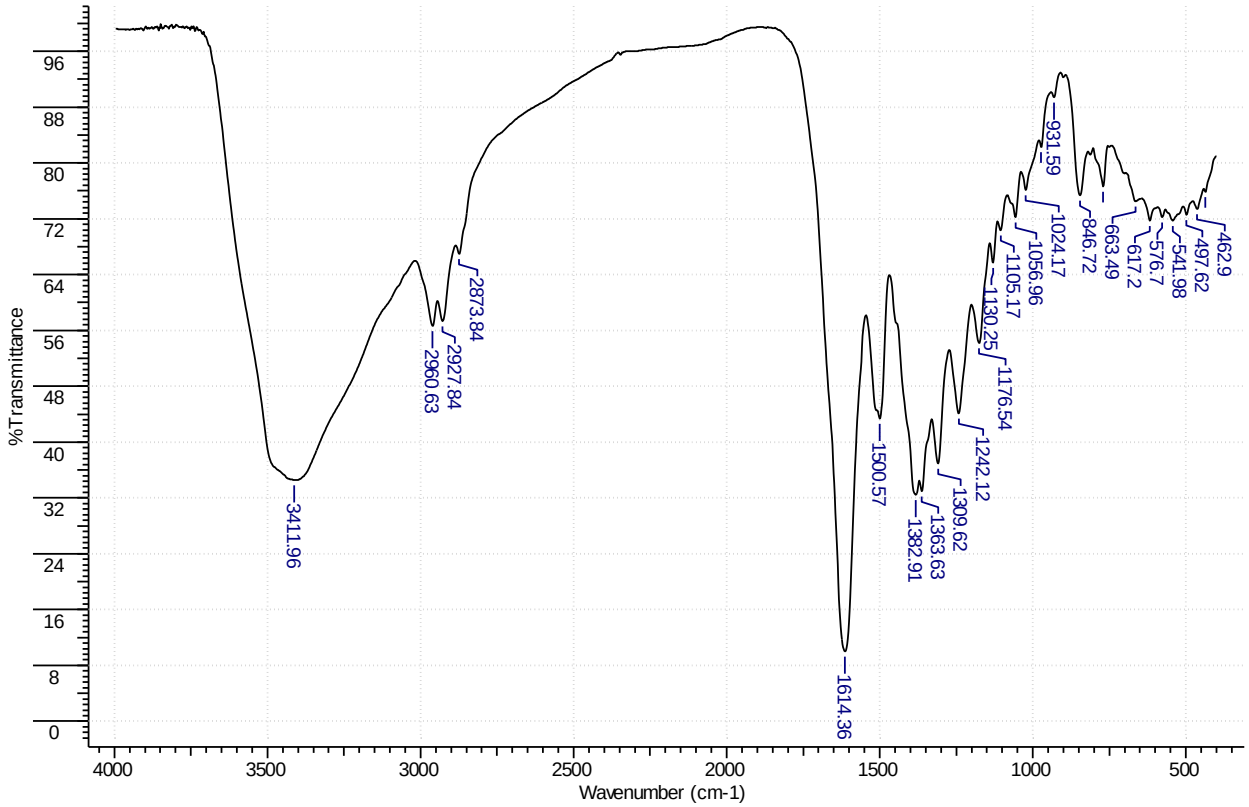

Fig. S16. FT-IR spectrum of compound **2** in KBr.

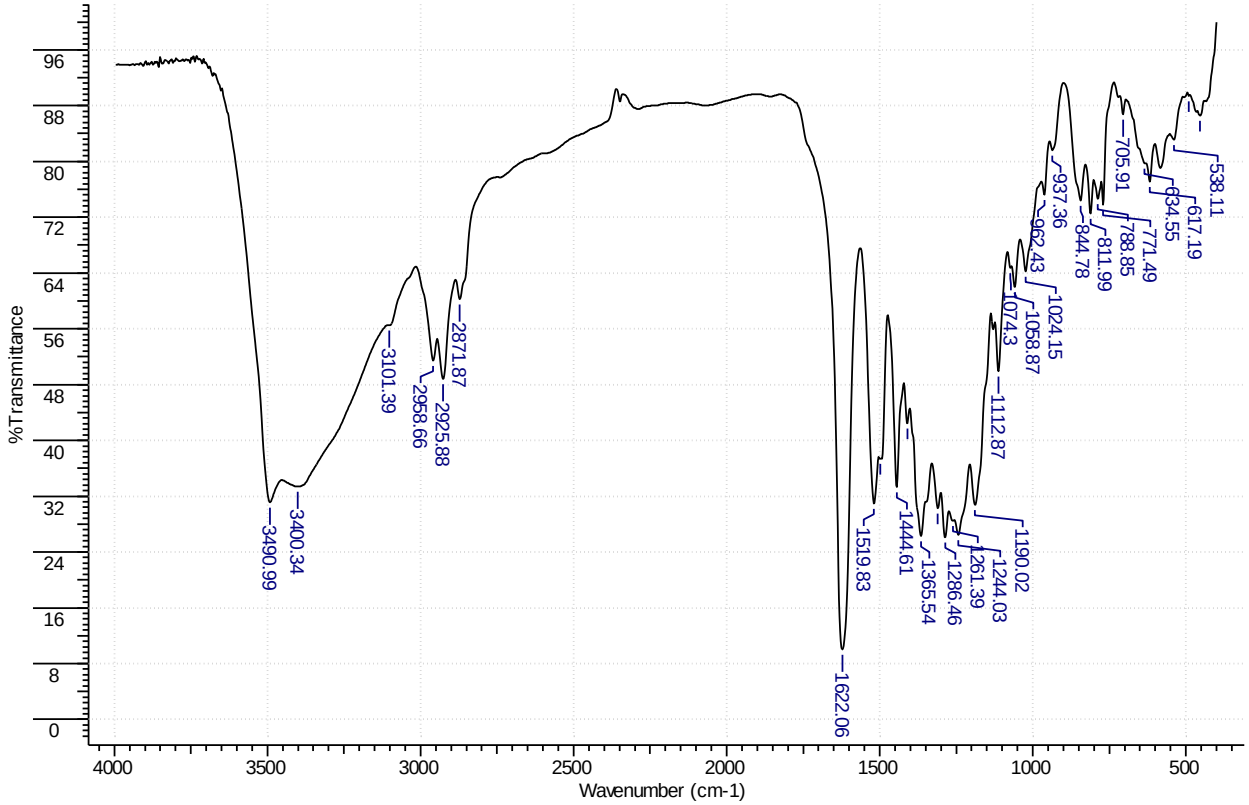

Fig. S17. FT-IR spectrum of compound **3** in KBr.

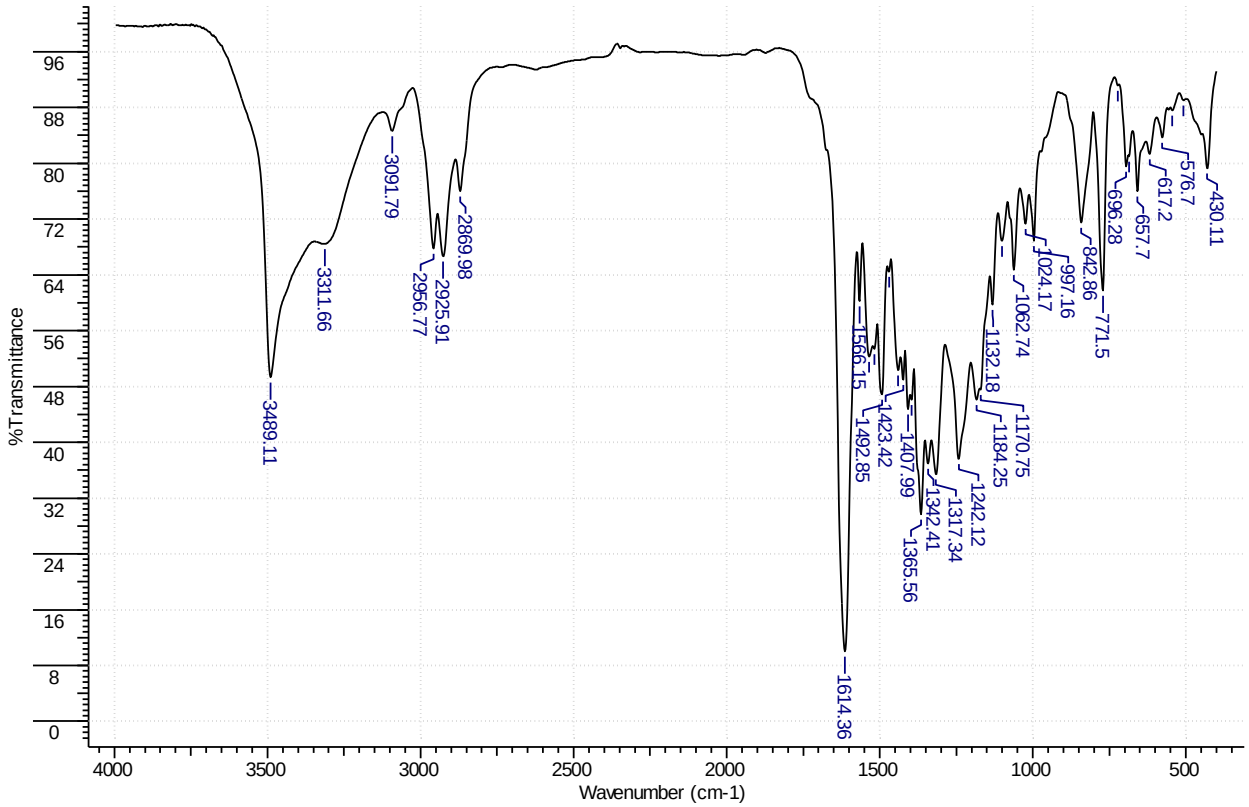

Fig. S18. FT-IR spectrum of compound **4** in KBr.

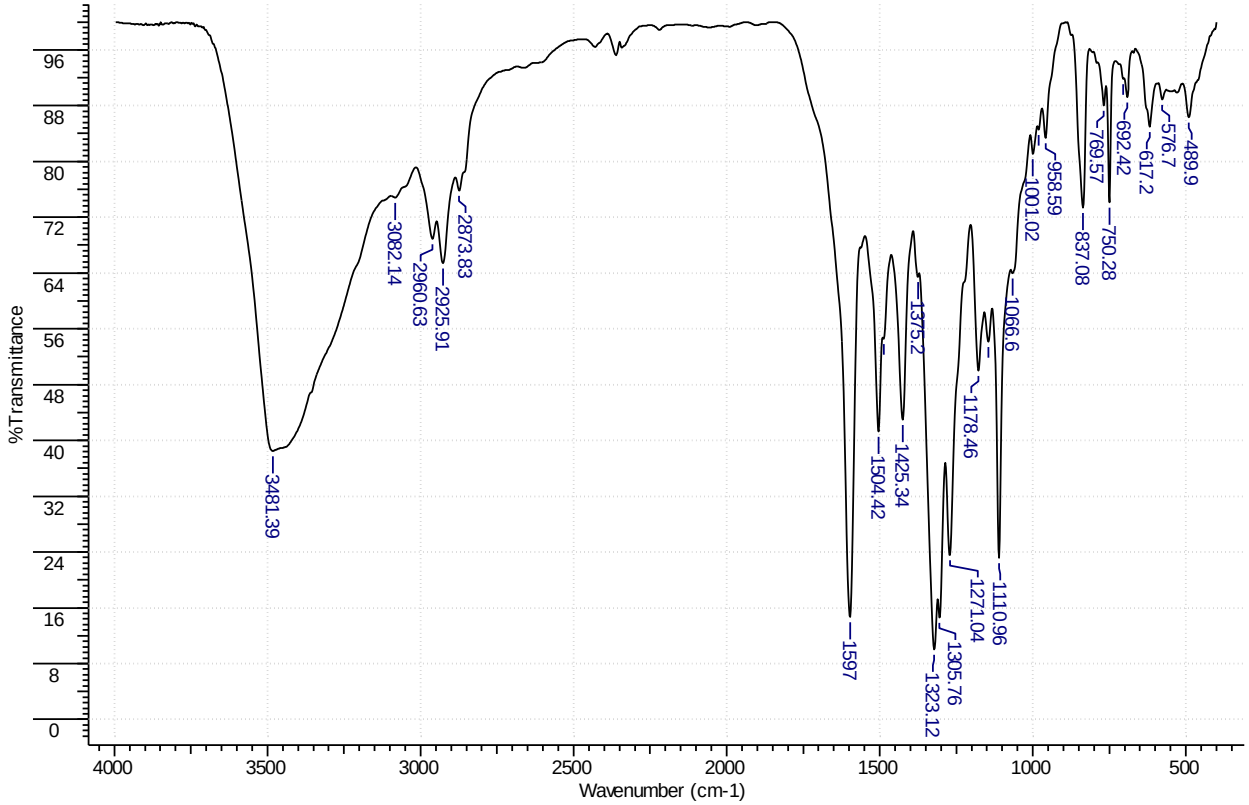

Fig. S19. FT-IR spectrum of compound **5** in KBr.

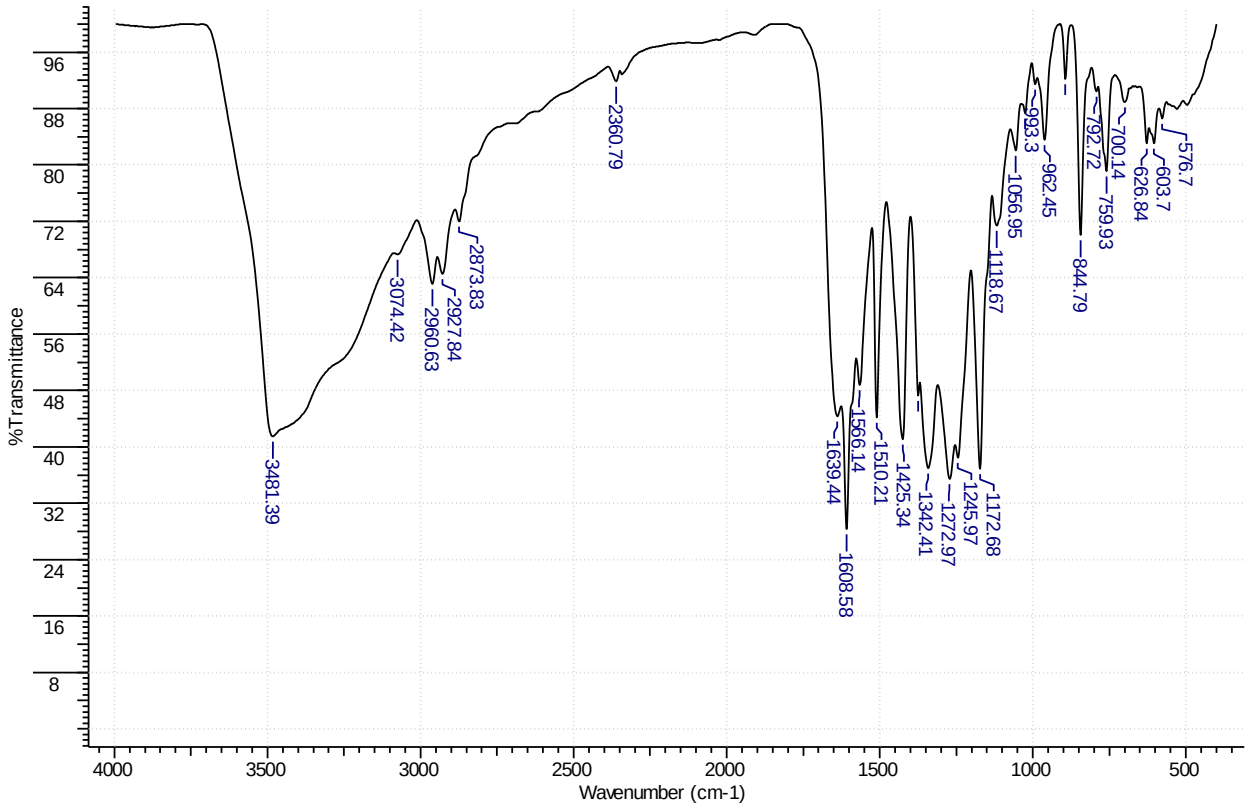

Fig. S20. FT-IR spectrum of compound **6** in KBr.

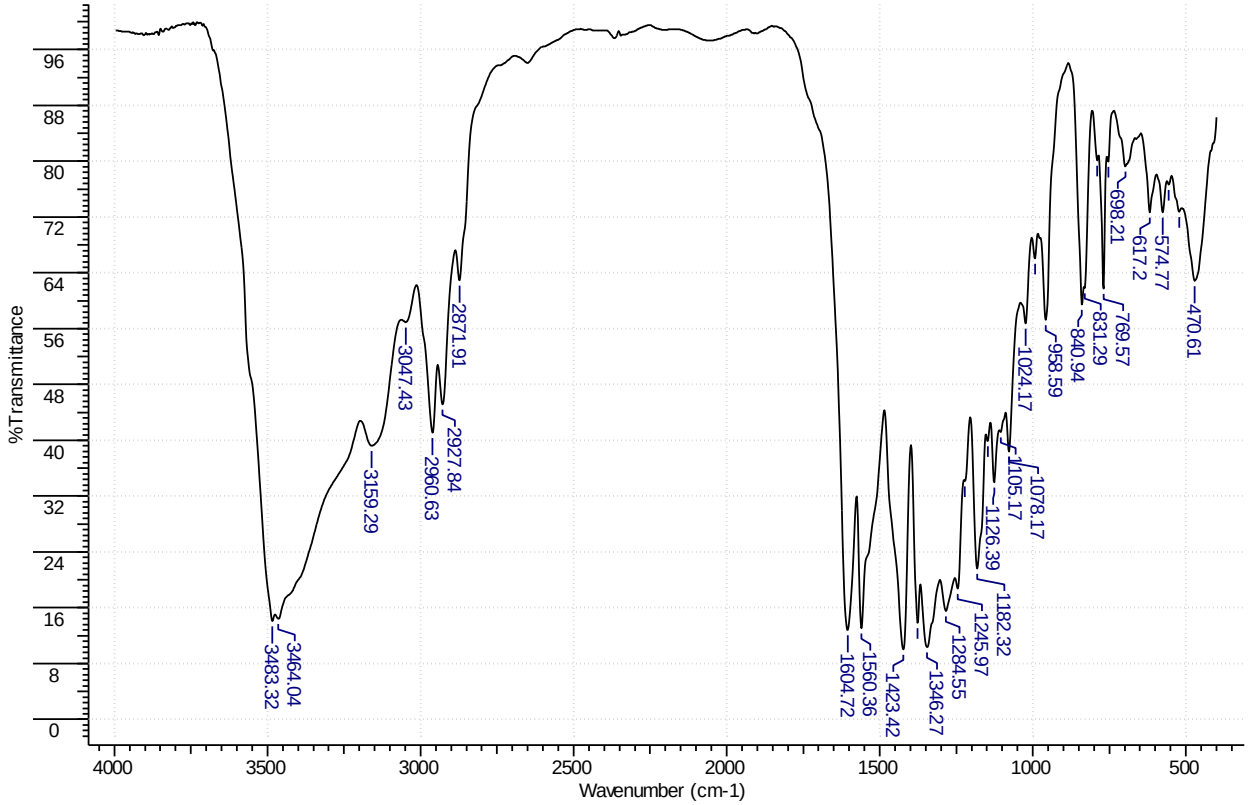

Fig. S21. FT-IR spectrum of compound **7** in KBr.

Reactions with DPPH

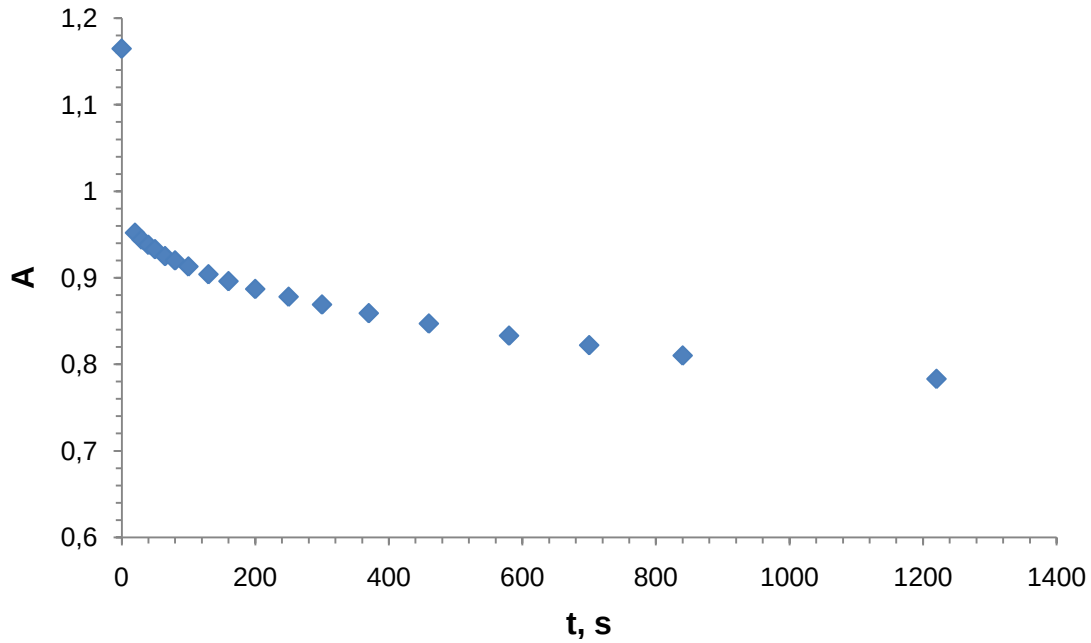

Fig. S22. Decay of the visible absorbance of DPPH solution (1.03×10^{-4} M) at 518 nm in ethanol after compound **1** (1.02×10^{-5} M) addition.

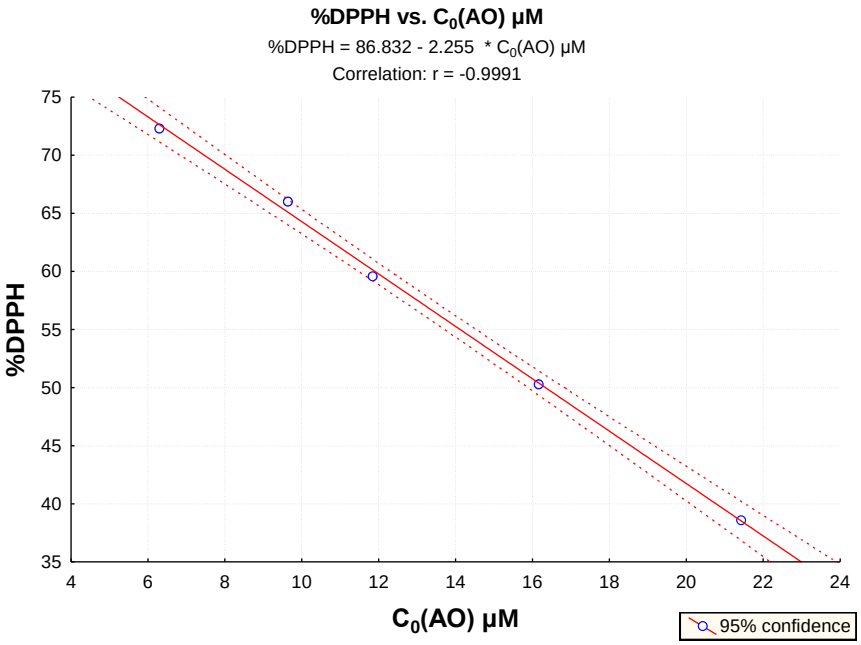

Fig. S23. The percentage of DPPH remaining (%) after 1200 s vs compound **1** initial concentration (C_0(AO)).

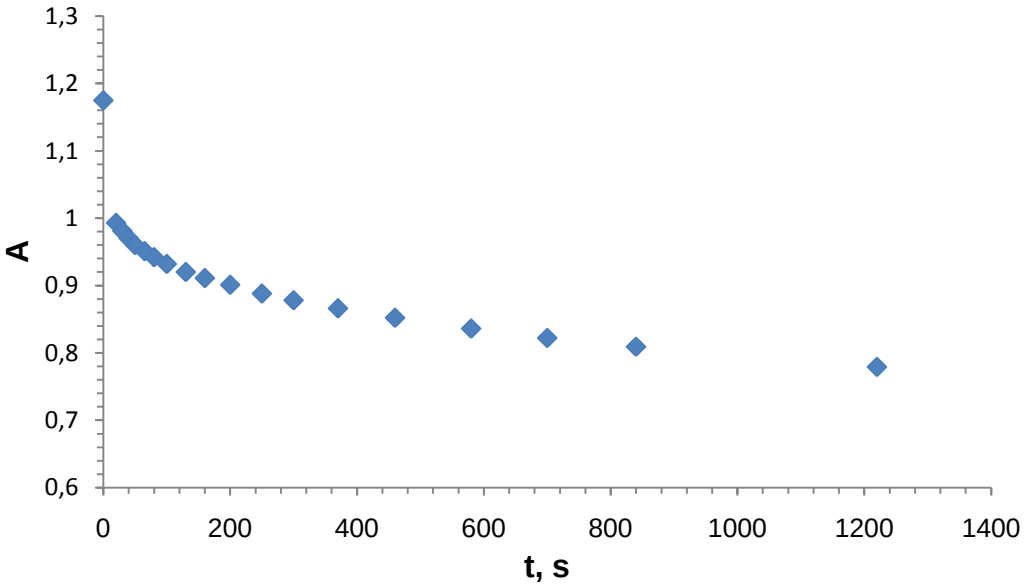

Fig. S24. Decay of the visible absorbance of DPPH solution (1.04×10^{-4} M) at 518 nm in ethanol after compound **2** (1.01×10^{-5} M) addition.

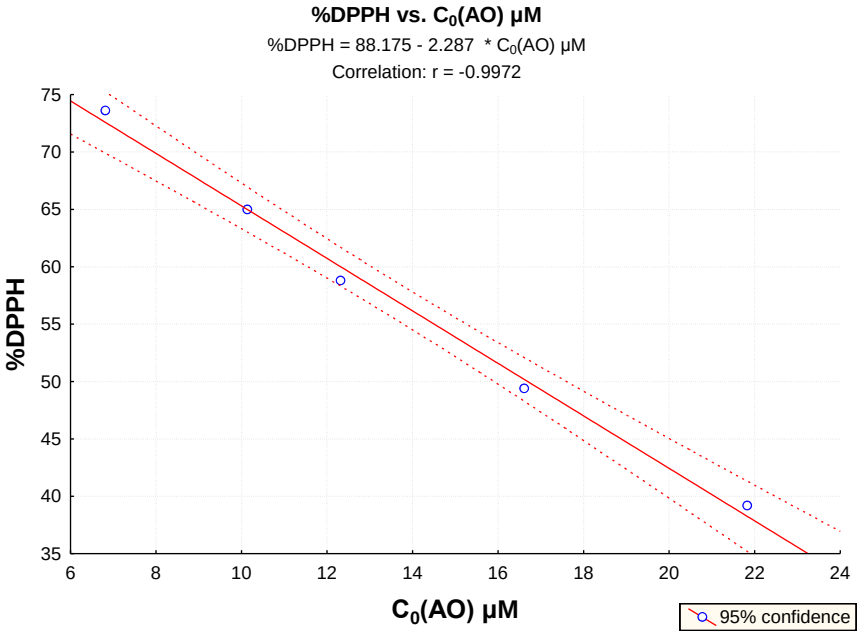

Fig. S25. The percentage of DPPH remaining (%) after 1200 s vs compound **2** initial concentration (C_0(AO)).

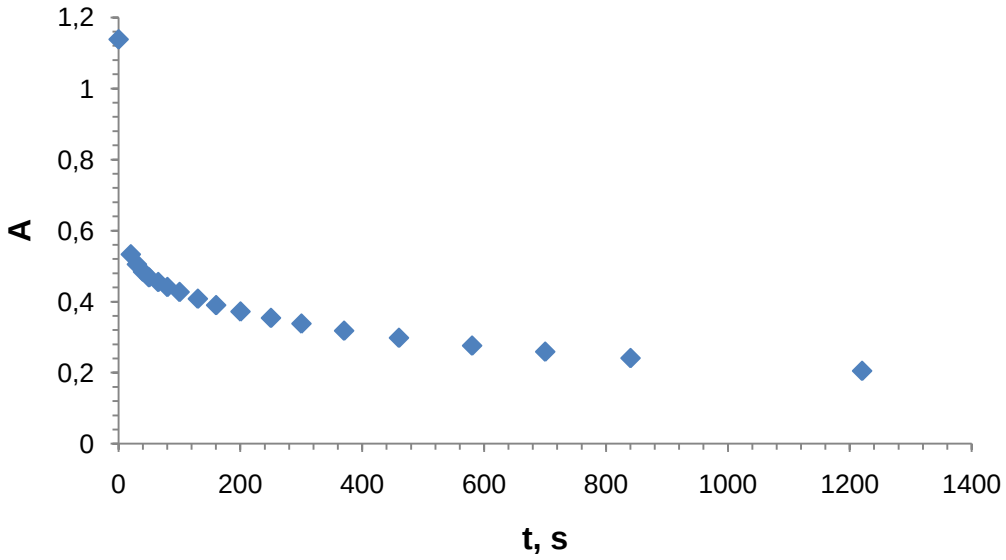

Fig. S26. Decay of the visible absorbance of DPPH solution (1.01×10^{-4} M) at 518 nm in ethanol after compound **3** (1.01×10^{-5} M) addition.

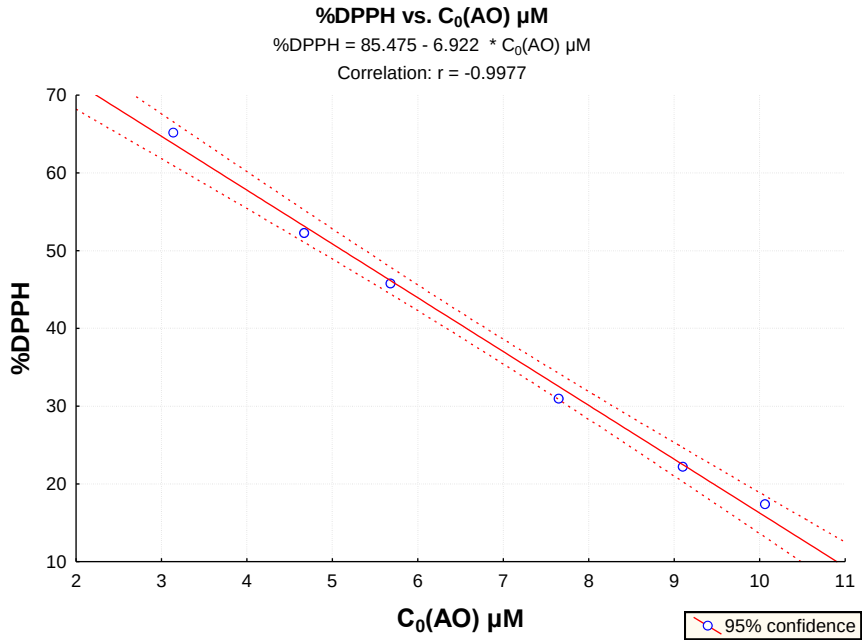

Fig. S27. The percentage of DPPH remaining (%) after 1200 s vs compound **3** initial concentration (C_0(AO)).

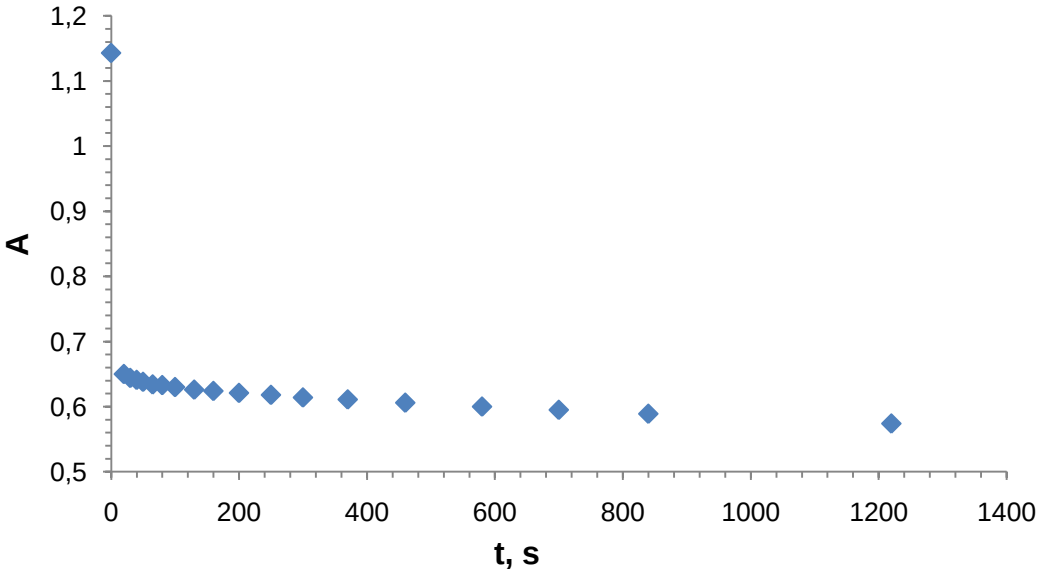

Fig. S28. Decay of the visible absorbance of DPPH solution (1.01×10^{-4} M) at 518 nm in ethanol after compound **4** (1.03×10^{-5} M) addition.

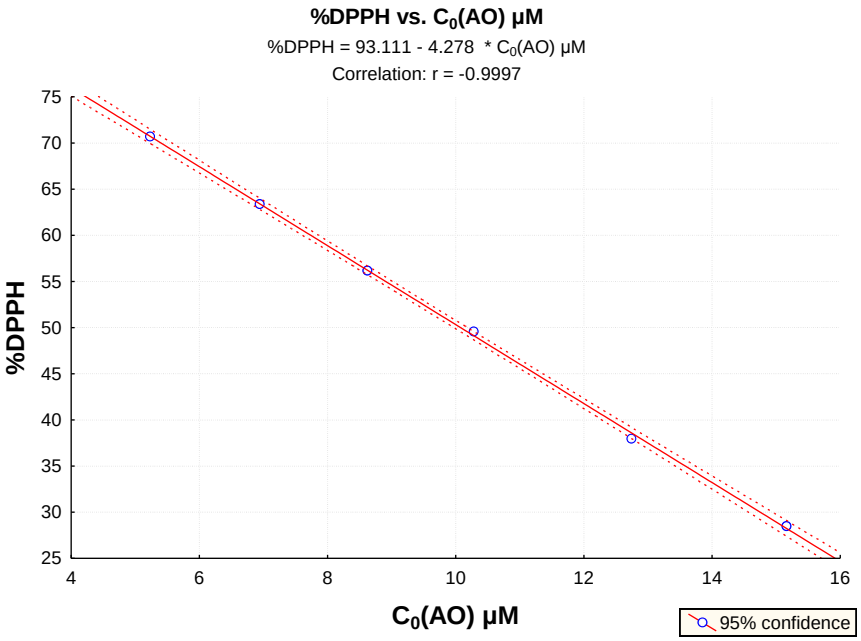

Fig. S29. The percentage of DPPH remaining (%) after 1200 s vs compound **4** initial concentration (C_0(AO)).

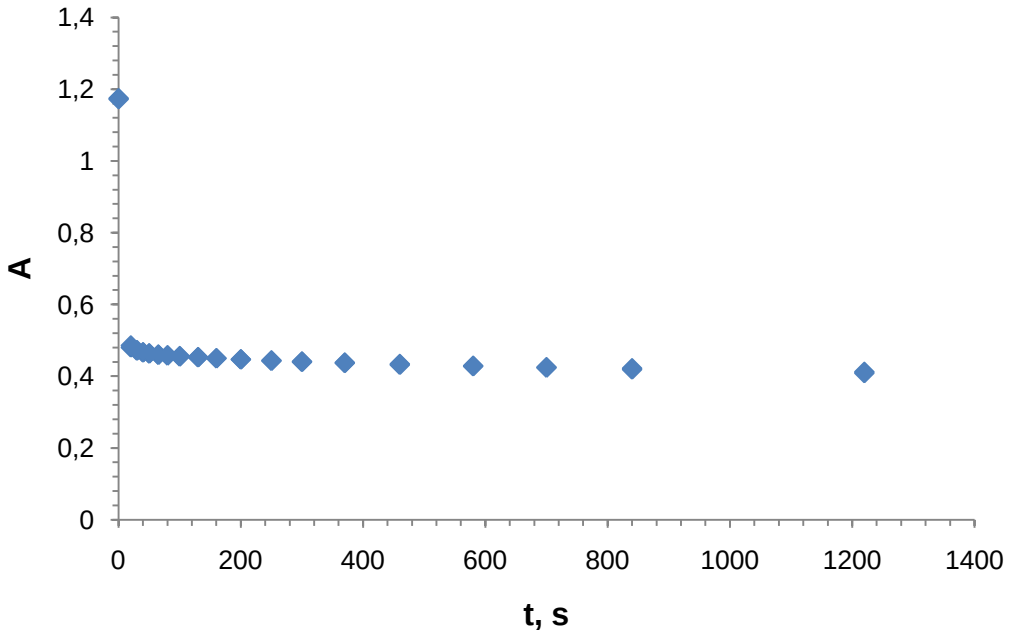

Fig. S30. Decay of the visible absorbance of DPPH solution (1.04×10^{-4} M) at 518 nm in ethanol after compound **5** (1.02×10^{-5} M) addition.

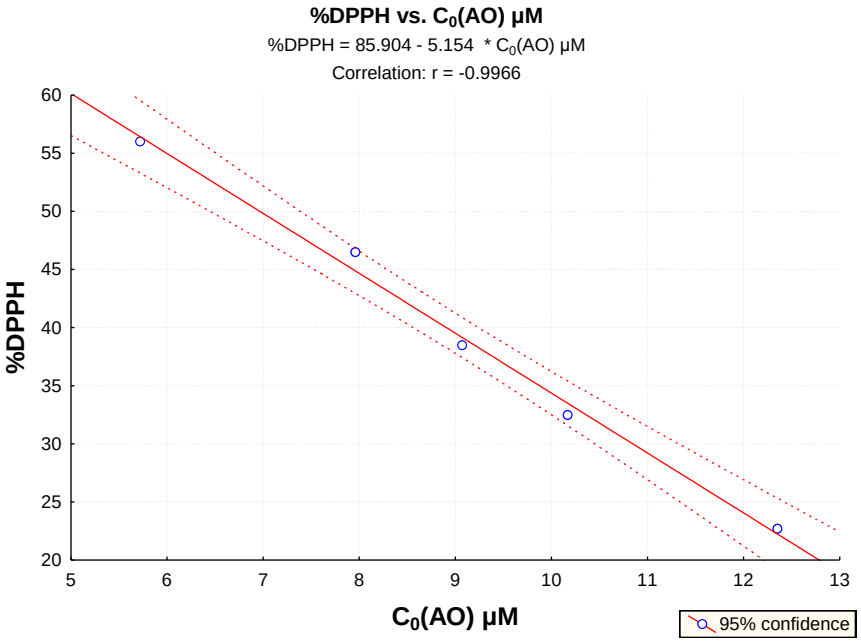

Fig. S31. The percentage of DPPH remaining (%) after 1200 s vs compound **5** initial concentration (C_0(AO)).

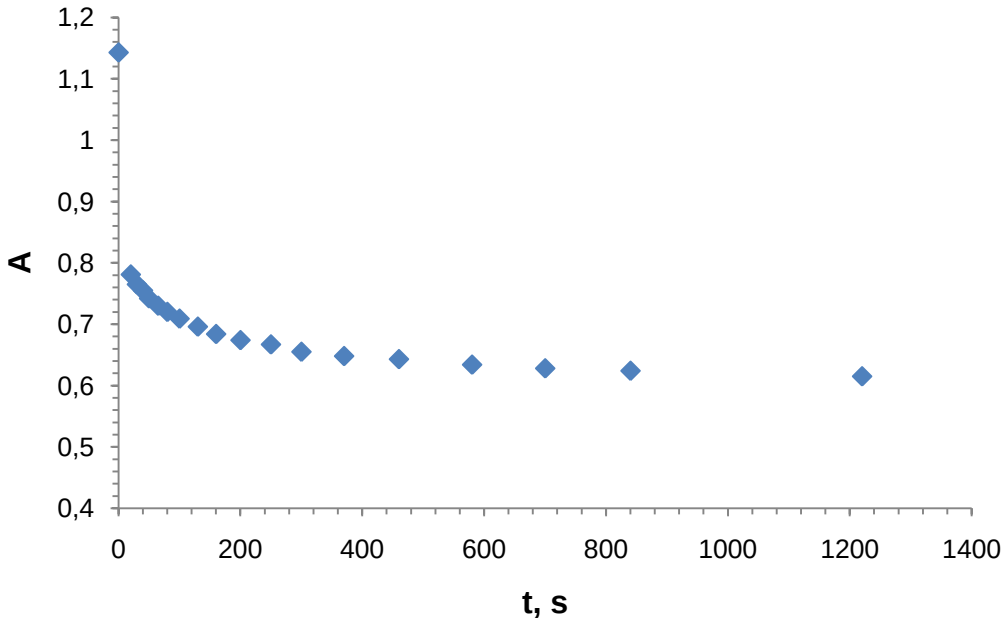

Fig. S32. Decay of the visible absorbance of DPPH solution (1.01×10^{-4} M) at 518 nm in ethanol after compound **6** (1.01×10^{-5} M) addition.

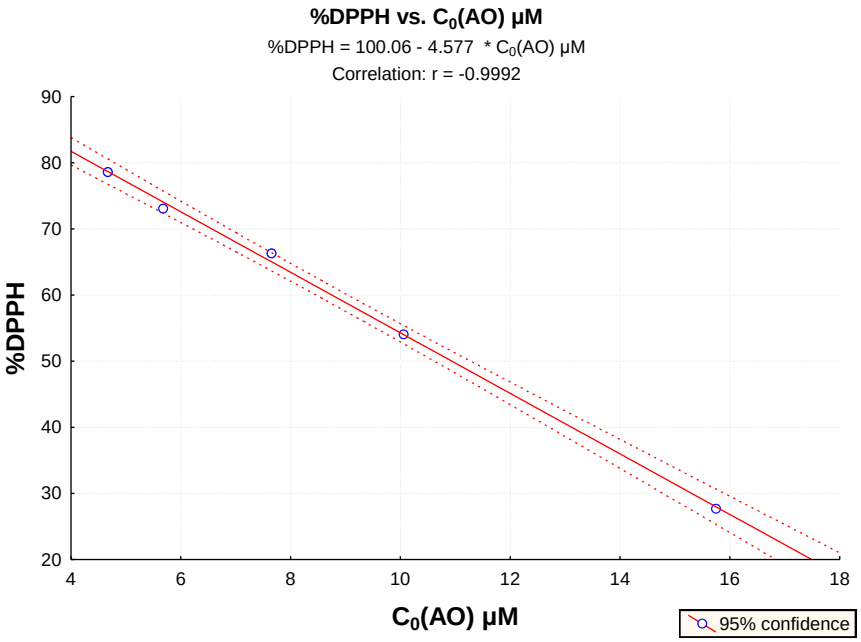

Fig. S33. The percentage of DPPH remaining (%) after 1200 s vs compound **6** initial concentration (C_0(AO)).

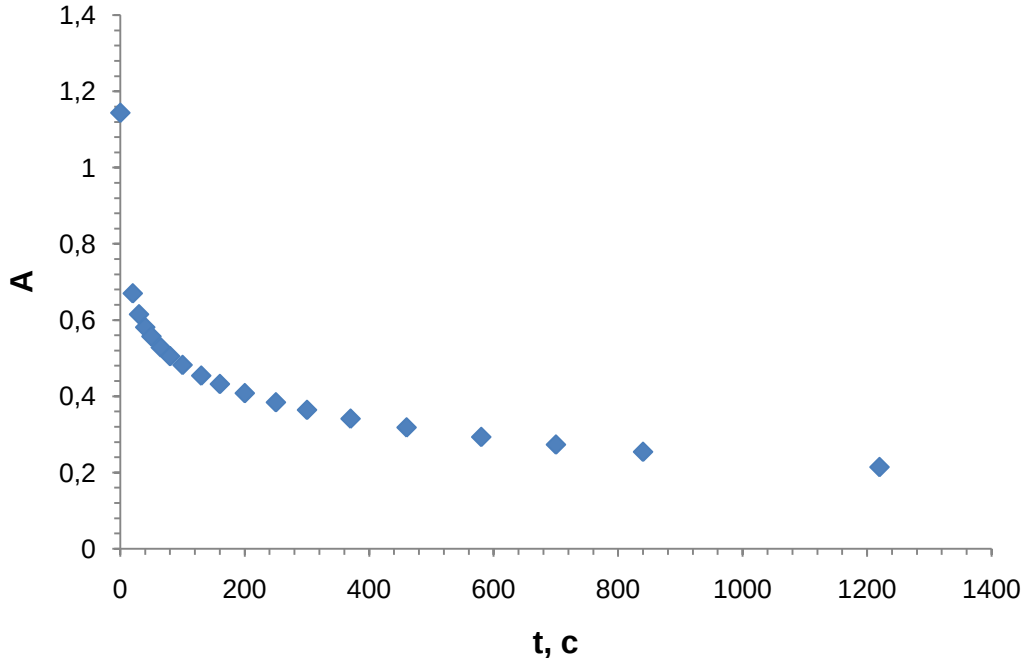

Fig. S34. Decay of the visible absorbance of DPPH solution (1.01×10^{-4} M) at 518 nm in ethanol after compound **7** (1.02×10^{-5} M) addition.

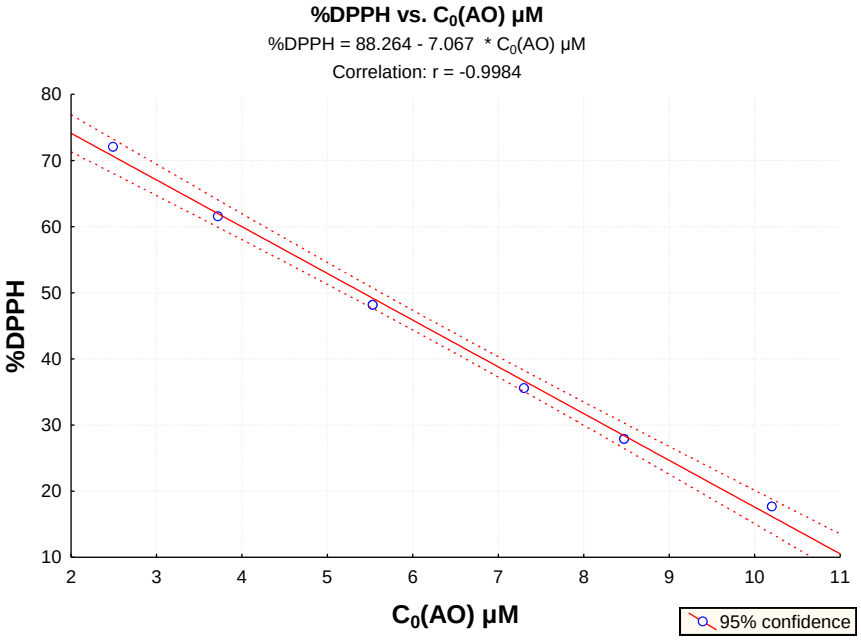

Fig. S35. The percentage of DPPH remaining (%) after 1200 s vs compound **7** initial concentration (C_0(AO)).

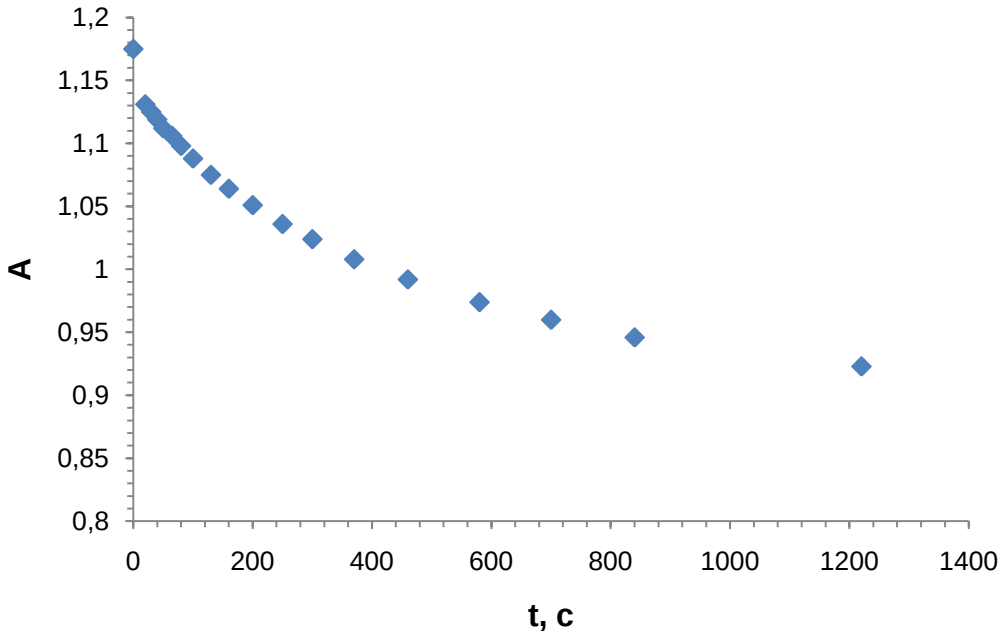

Fig. S36. Decay of the visible absorbance of DPPH solution (1.04×10^{-4} M) at 518 nm in ethanol after caffeic acid (1.04×10^{-5} M) addition.

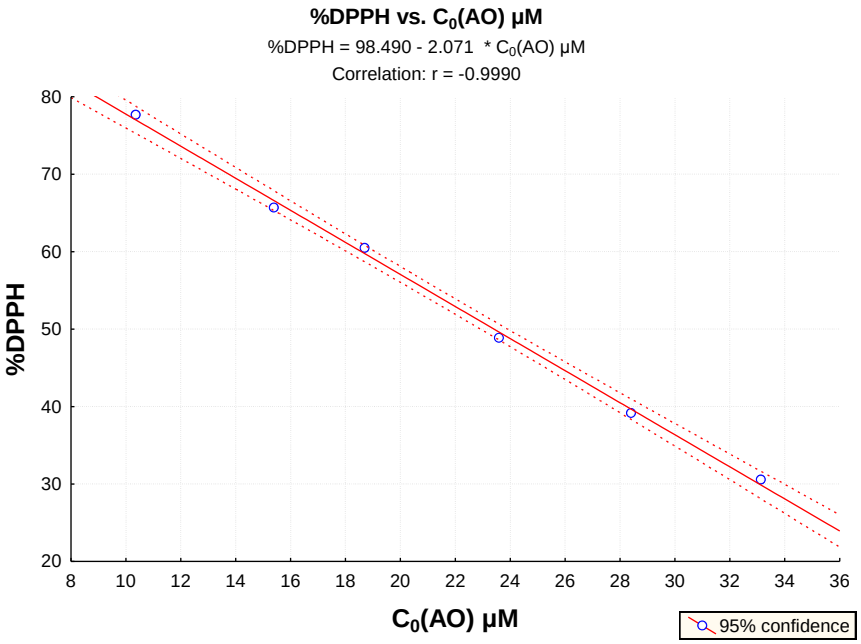

Fig. S37. The percentage of DPPH remaining (%) after 1200 s vs caffeic acid initial concentration (C_0(AO)).