Complexes of 1,3-diisobutyl thiourea with Copper(I), zinc(II) and mercury(II); their antioxidant and antibacterial evaluation

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NMR chemical shifts of free ligand,

^{1}H-NMR (300 MHz, CDCl3); δ (ppm) = 5.89 (br, 2H, NH), 3.21 (br, 4H, N-CH2), 1.89 (sep. 2H, CH), 0.92 (d, 12H, Me, ^{3}J(1H,1H) = 6.7 Hz); **^{13}C-NMR** (75.8 MHz, CDCl3); δ (ppm) = 181.7 (CS), 51.9 (N-CH2), 28.1 (CH), 20.2 (Me).

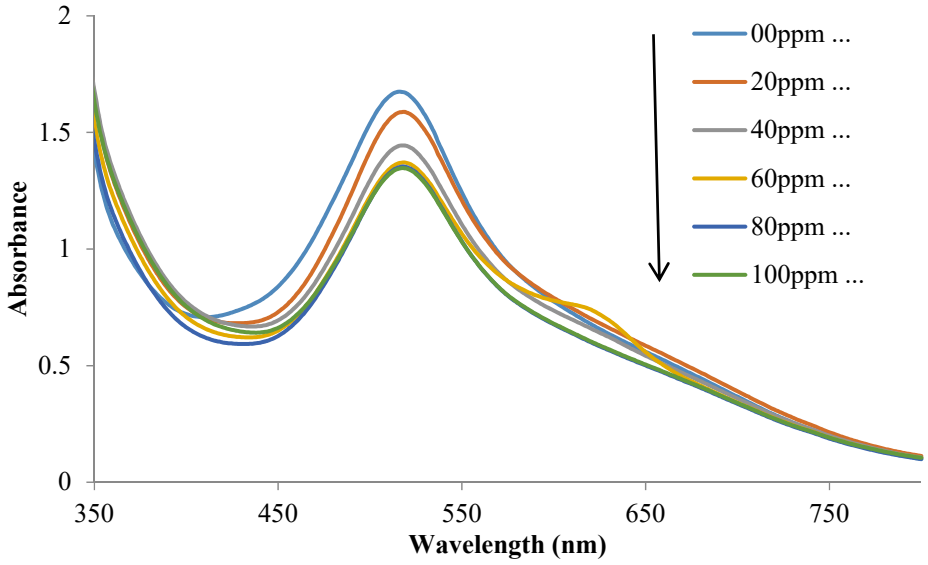

Figure S1. Absorption spectra of DPPH in the absence of compound **2** (Top spectra) and presence of increasing concentration of the compound (20, 40, 60, 80 & 100 ppm). Arrow shows the change in absorption as a function of activity with respect to increasing concentration of compound **2**.

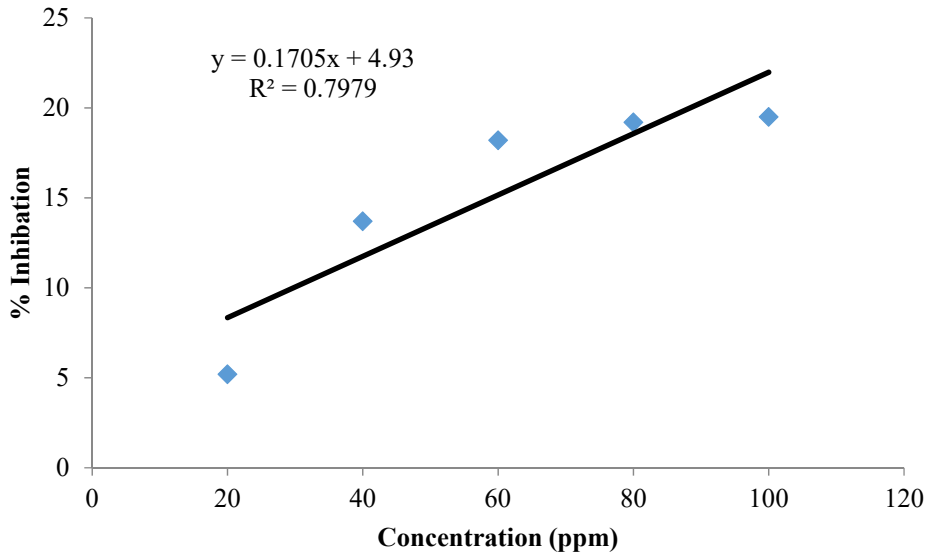

Figure S2. Plot of % Inhibition versus concentration of compound **2** for radical scavenging activity.

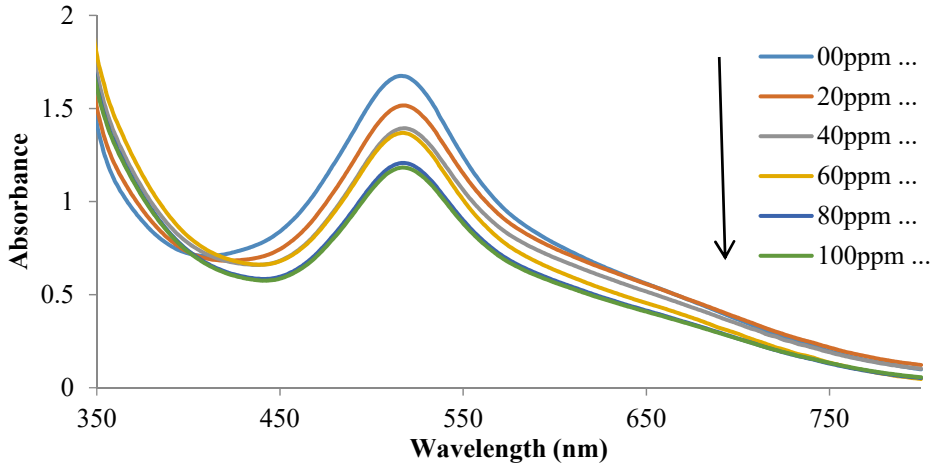

Figure S3. Absorption spectra of pure DPPH, the absorbance decreased when compounds **3** was added, in a dose dependent manner.

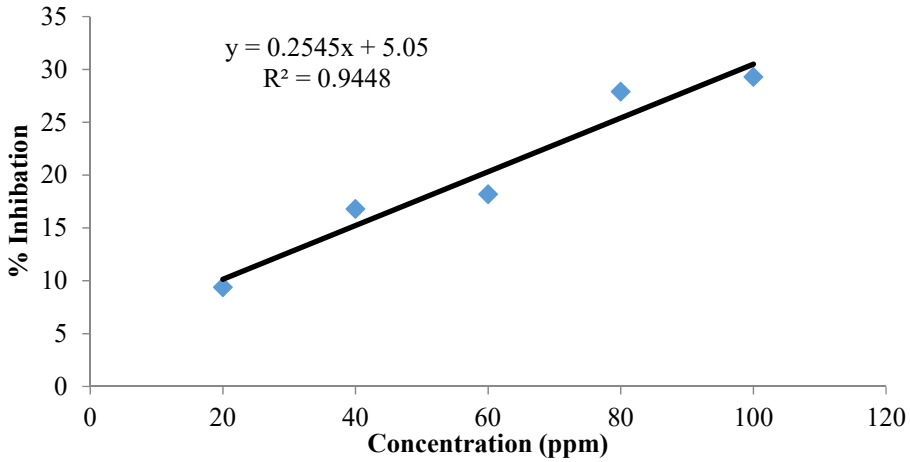

Figure S4. Percent inhibition versus concentration of compound **3** for radical scavenging activity.

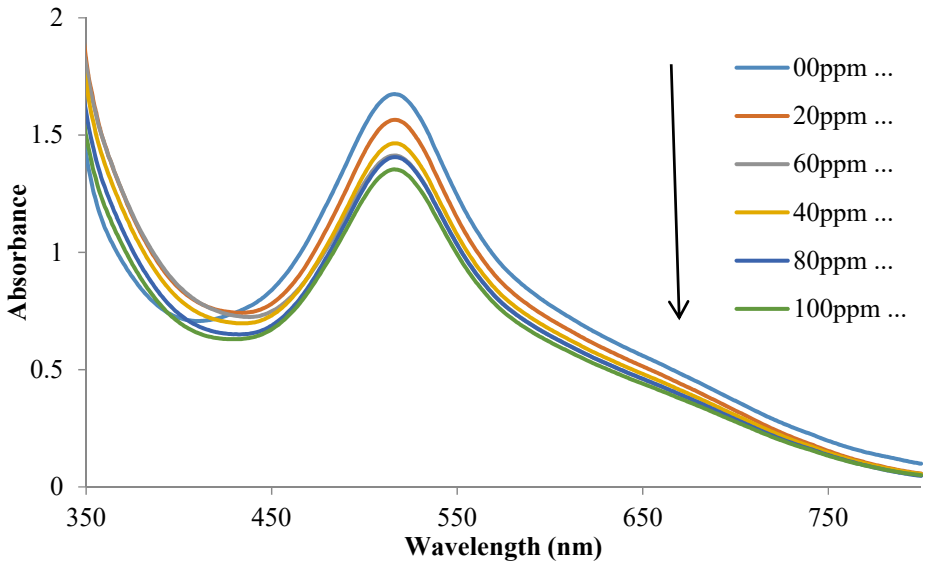

Figure S5. Absorption spectra of free radical (DPPH) in the absence (Top spectra) and presence of increased concentration of the compound **4** (20, 40, 60, 80 & 100 ppm). Arrow show the change in spectra on increasing concentration of compound.

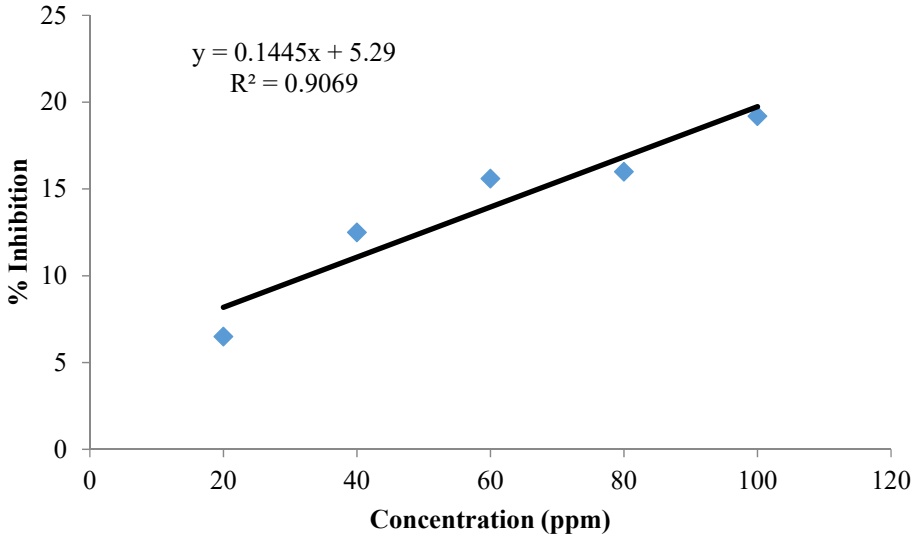

Figure S6. Plot of % Inhibition versus concentration of compound **4** for radical scavenging activity.