

Supplementary Materials

Figure S1. Absorption titration of derivative 4 (50 μM) with increasing concentrations of ctDNA. $[\text{DNA}] = 0$ (black), 10 (red), 20 (green), 40 (yellow), 60 (blue), 80 (pink), 100 (light blue) e 120 (gray) μM . Arrows (\downarrow) refer to hypochromic effects. Inset: corresponding to the plot of $[\text{DNA}]/(\epsilon_a - \epsilon_f)$ as function of DNA concentration as determined from the absorption spectral data.

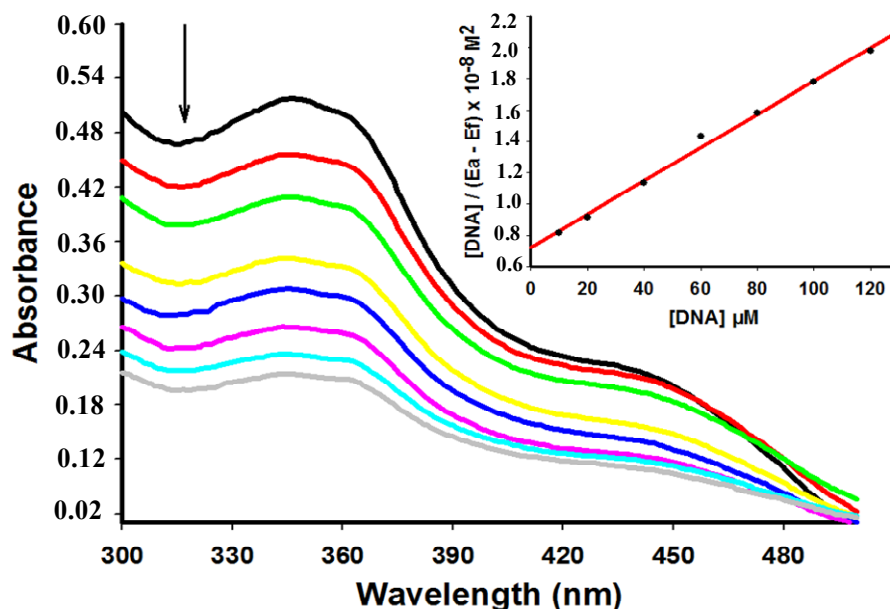


Figure S2. Absorption titration of derivative 7 (25 μM) with increasing concentrations of ctDNA. $[\text{DNA}] = 0$ (black), 20 (red), 40 (blue), 60 (yellow), 100 (green) e 120 (pink) μM . Arrows (\downarrow) refer to hypochromic effects. Inset: corresponding to the plot of $[\text{DNA}]/(\epsilon_a - \epsilon_f)$ as function of DNA concentration as determined from the absorption spectral data.

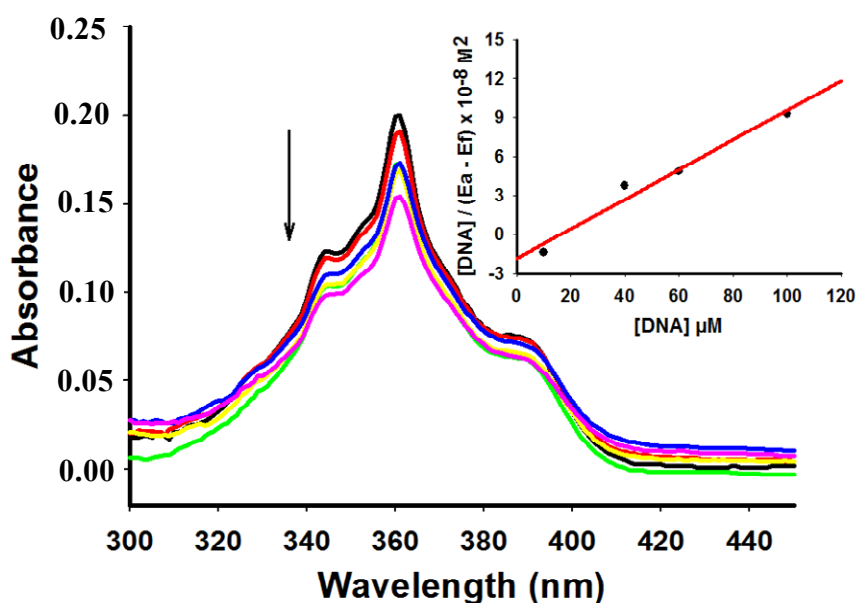


Figure S3. Fluorescence changes of derivative 4 (10 μM) with increasing concentrations of ctDNA. [DNA] = 0 (black), 20 (red), 40 (green), 80 (blue) e 120 (pink) μM . Insert: corresponding the fluorescence intensity of bound derivative to ctDNA (I) / fluorescence intensity of free derivative (I_0).

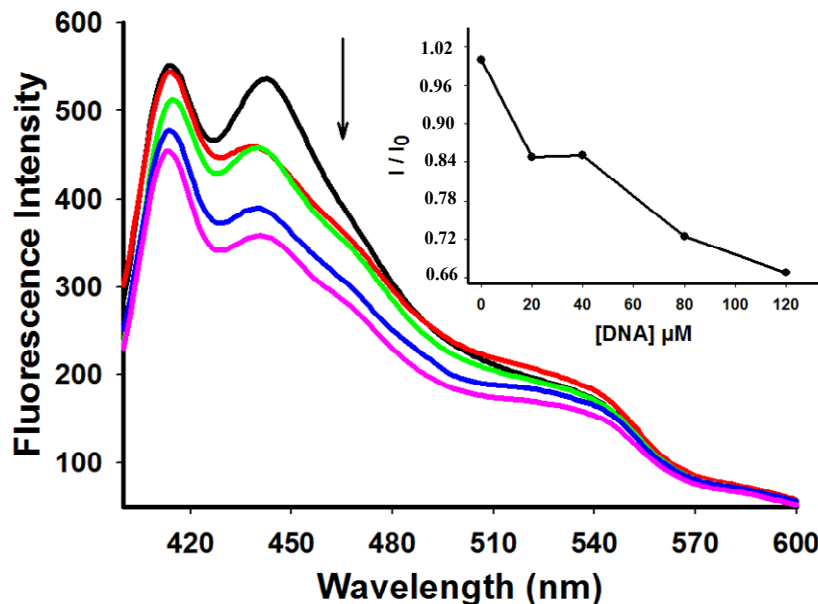


Figure S4. Fluorescence spectra of derivative 6 (10 μM) with increasing concentrations of ctDNA. [DNA] = 0 (black), 20 (red), 40 (green), 80 (yellow) e 120 (blue) μM . Insert: corresponding the fluorescence intensity of bound derivative to ctDNA (I) / fluorescence intensity of free derivative (I_0).

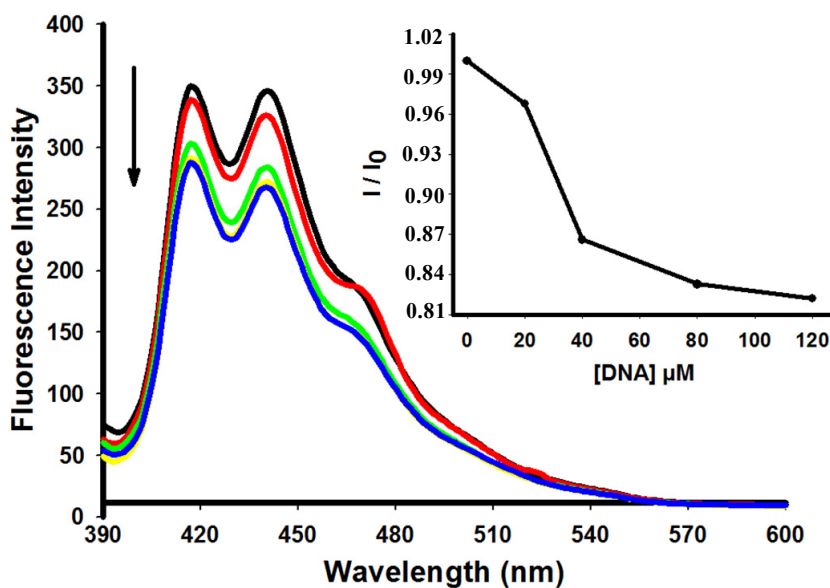


Figure S5. Fluorescence changes of derivative 7 (10 μM) with increasing concentrations of ctDNA. [DNA] = 0 (black), 20 (red), 40 (green), 80 (yellow) e 120 (blue) μM . Insert: corresponding the fluorescence intensity of bound derivative to ctDNA (I) / fluorescence intensity of free derivative (I_0).

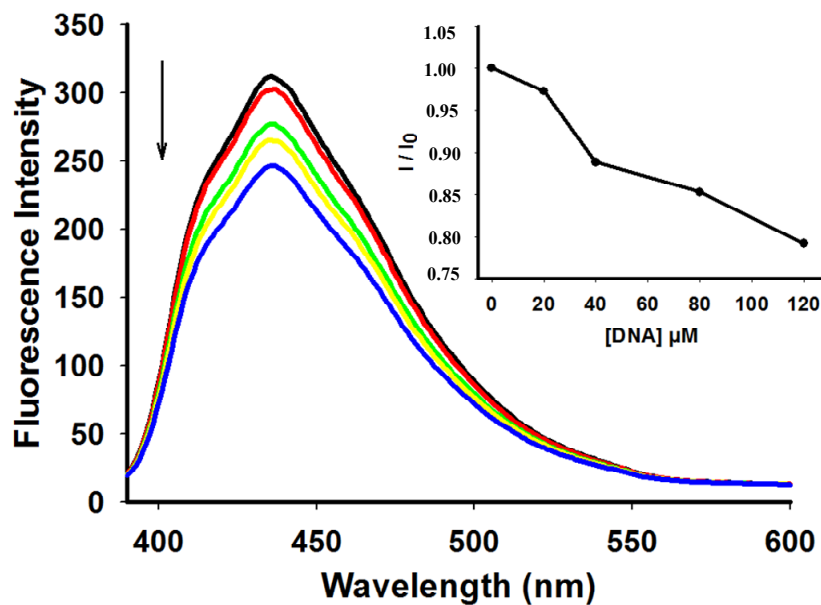


Figure S6. Absorption (blue), excitation (black), emission (red) spectra of derivative 4, at concentrations 50, 10 and 10 μM , respectively, in Tris-HCl buffer. Excitation at 360 nm and emission at 415 nm.

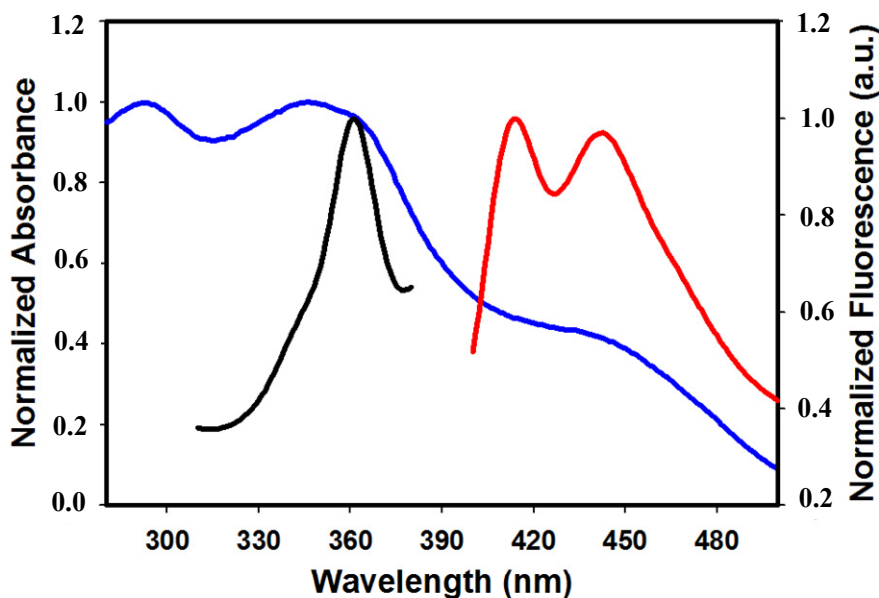


Figure S7. Absorption (blue), excitation (black), emission (red) spectra of derivative **5**, at concentrations 50, 10 and 10 μM , respectively, in Tris-HCl buffer. Excitation at 356 nm and emission at 440 nm.

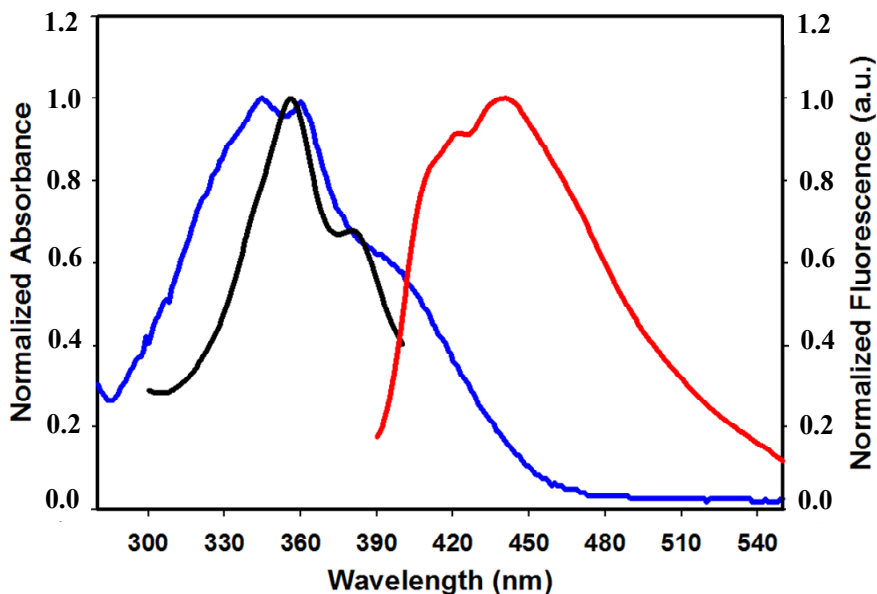


Figure S8. Absorption (blue), excitation (black), emission (red) spectra of derivative **5**, at concentrations 25, 10 and 10 μM , respectively, in Tris-HCl buffer. Excitation at 364 nm and emission at 418 nm.

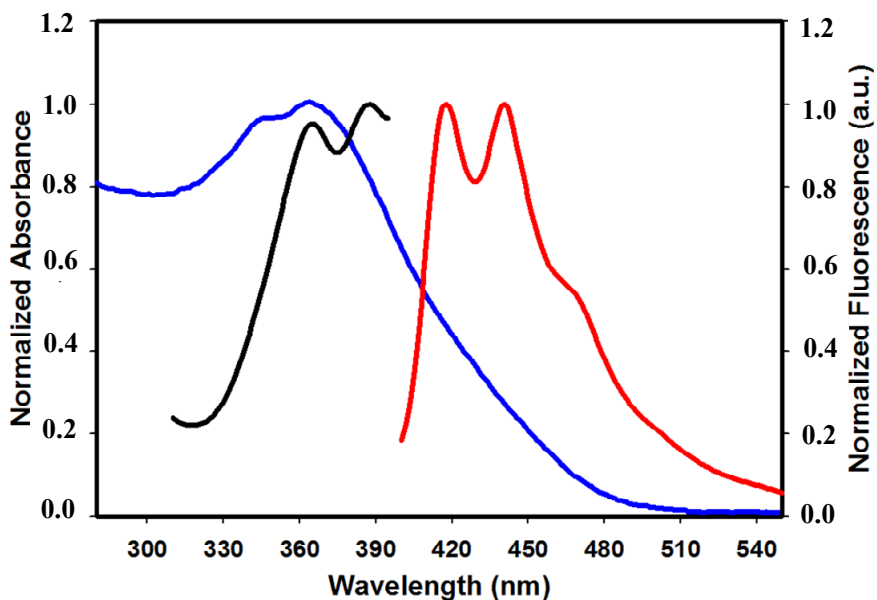


Figure S9. Absorption (blue), excitation (black), emission (red) spectra of derivative **5**, at concentrations 25, 10 and 10 μM , respectively, in Tris-HCl buffer. Excitation at 360 nm and emission at 435 nm.

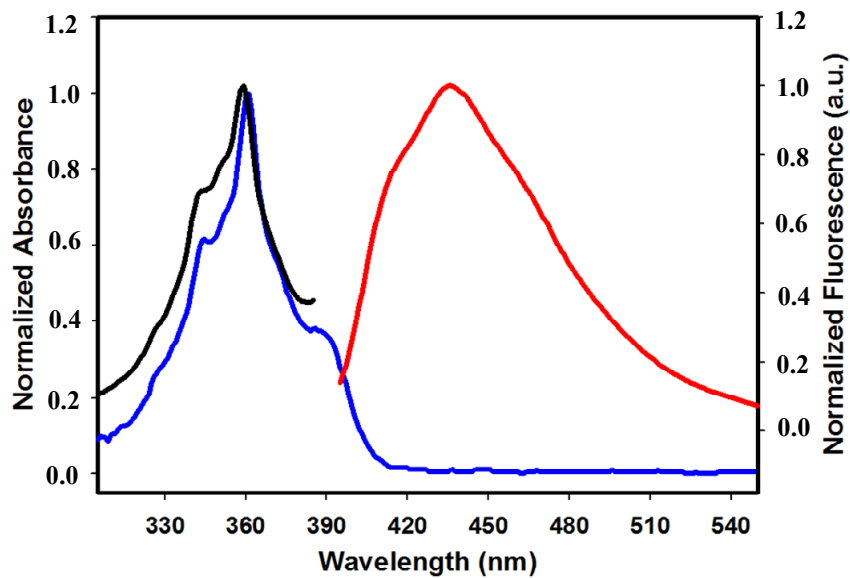


Figure S10. ^{13}C -NMR spectrum (DMSO) of derivative **4**.

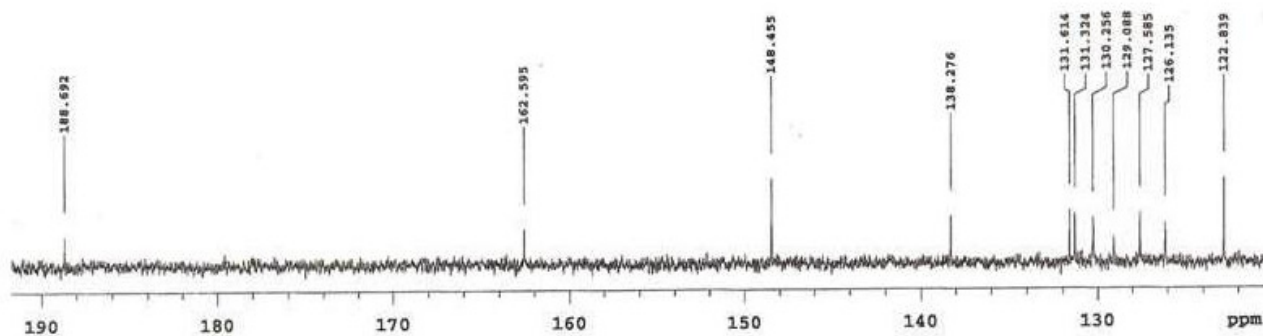


Figure S11. ^1H -NMR spectrum (DMSO) of derivative **4**.

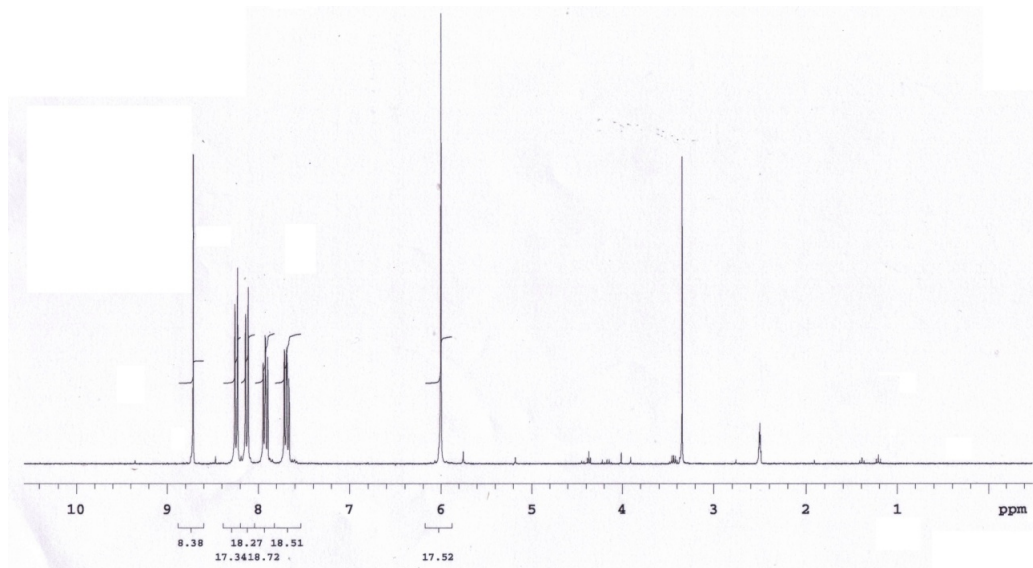


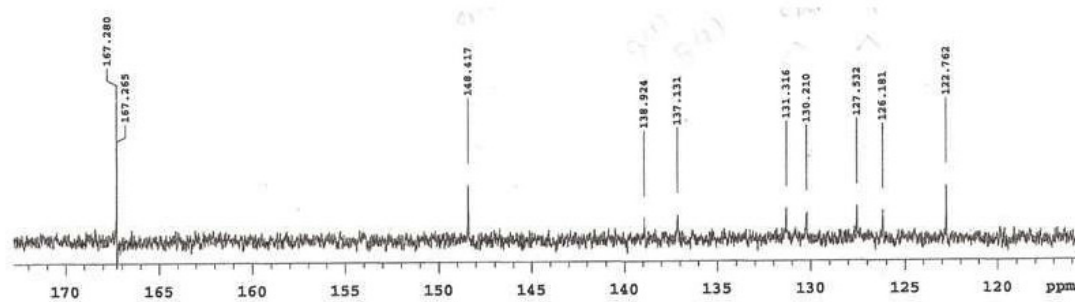
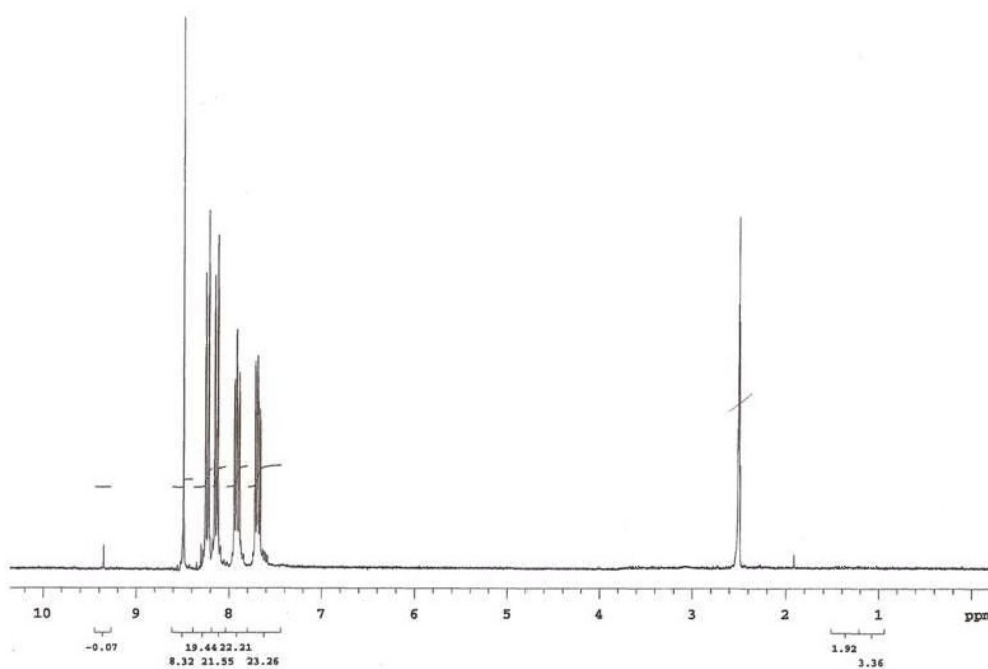
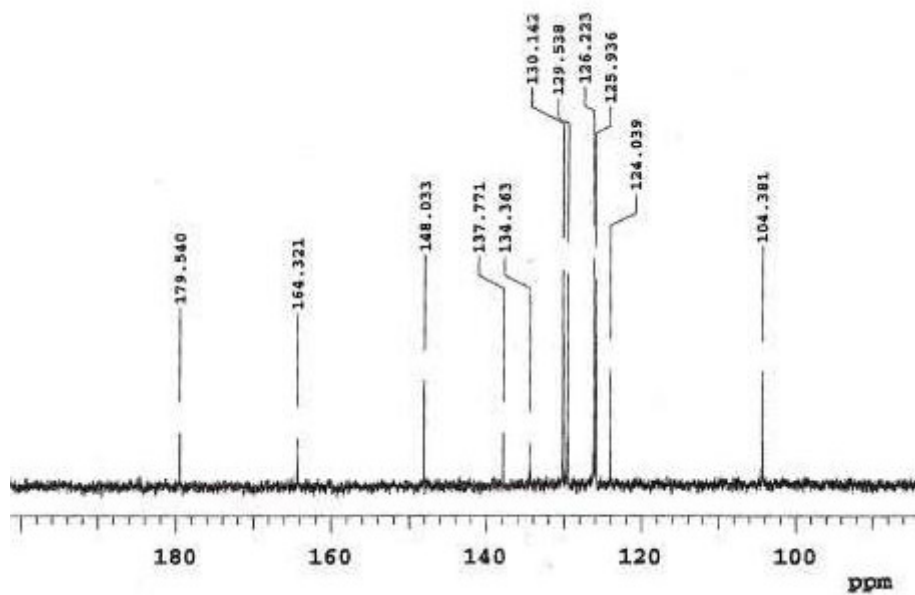
Figure S12. ^{13}C -NMR spectrum (DMSO) of derivative 5.**Figure S13.** ^1H -NMR spectrum (DMSO) of derivative 5.**Figure S14.** ^{13}C -NMR spectrum (DMSO) of derivative 6.

Figure S15. ^1H -NMR spectrum (DMSO) of derivative **6**.