

Supporting Information

Investigation on New Ruthenium(II) Hydrazone Complexes as Anticancer Agent and Their Interaction with Biomolecules

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Electronic supplementary information (ESI) available: CCDC reference number of the complex is 917920, 917921. For crystallographic data in CIF see DOI:

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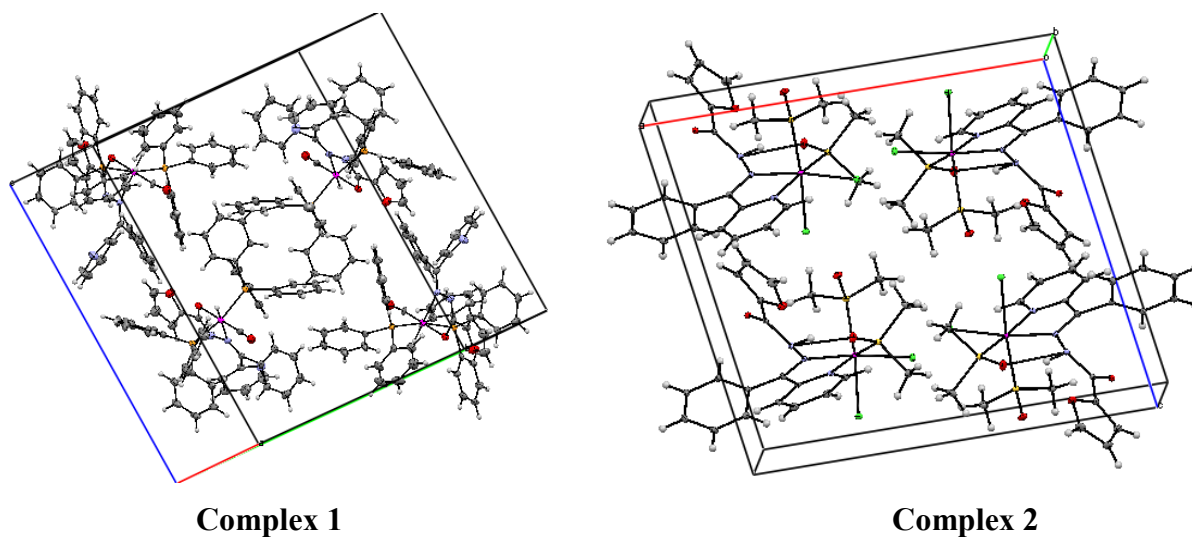


Figure S1 Packing diagram of Ru(II) complex with inter- molecular hydrogen bonding

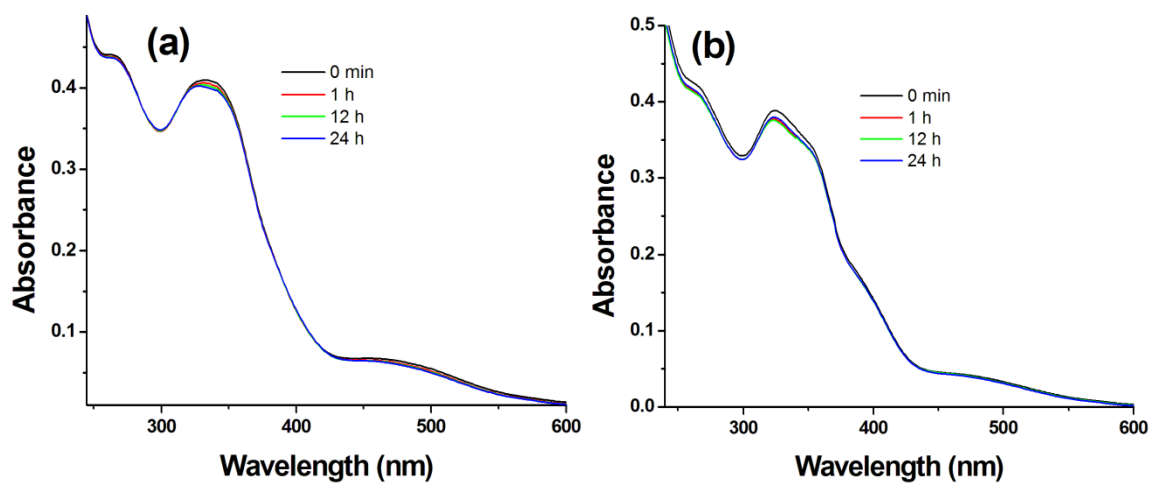


Figure S2 UV-Vis. absorption spectrum of complexes 1 and 2 in aqueous PBS buffer (phosphate buffered saline solution), at pH 7.4, to a final concentration of 1×10^{-3} M recorded after different time intervals.

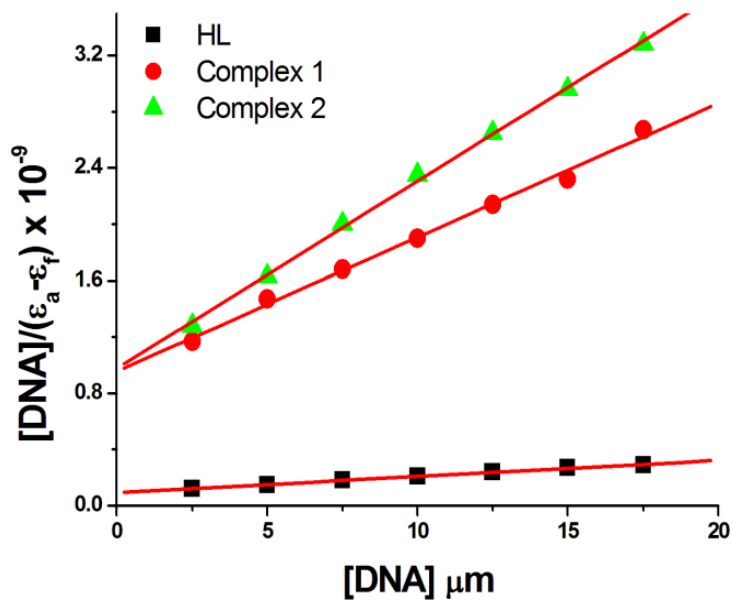


Figure S3 Plots of $[DNA]/(\epsilon_a - \epsilon_f)$ versus $[DNA]$ for the compounds with CT-DNA.

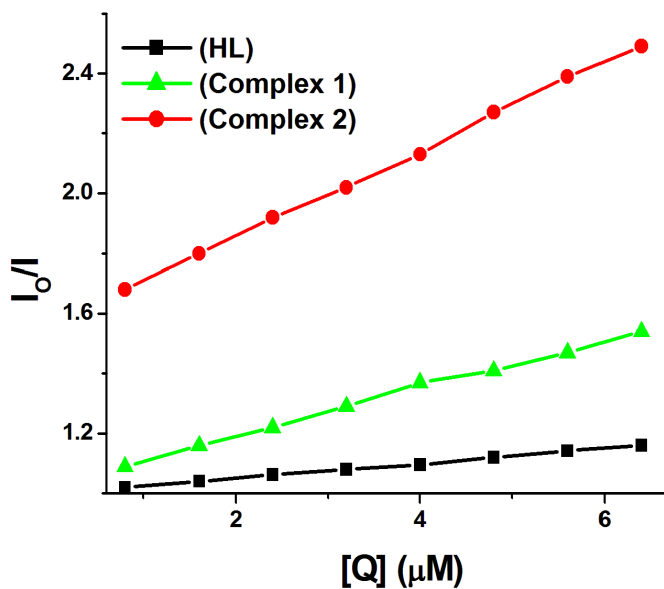


Figure S4 Stern-Volmer plots of the fluorescence titrations of the ligand and the complexes.

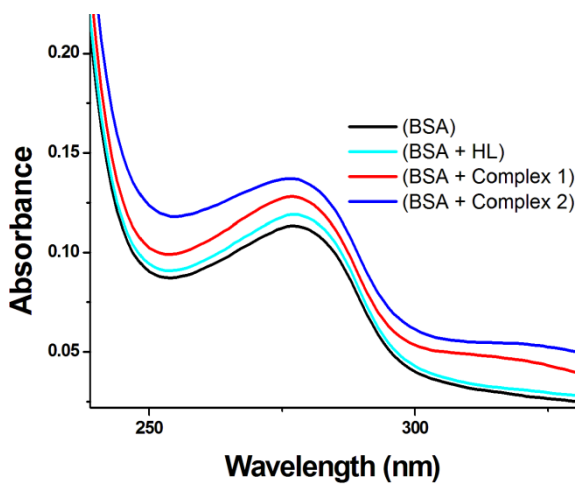


Figure S5 Electronic absorption spectra of BSA (10 μM), with ligand and complexes

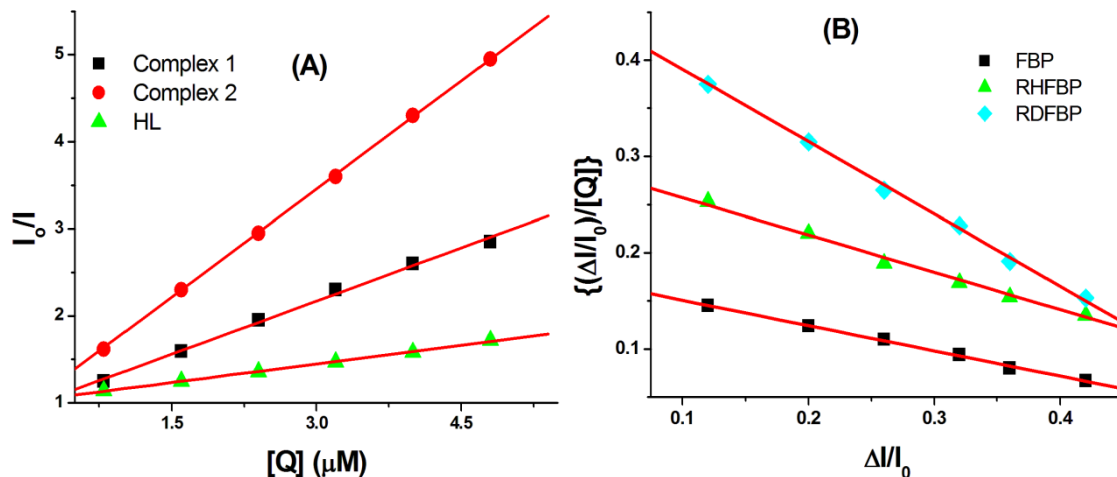


Figure S6 Stern–Volmer plots (A) and Scatchard plots (B) of the fluorescence titration of the ligand and the complexes with BSA.

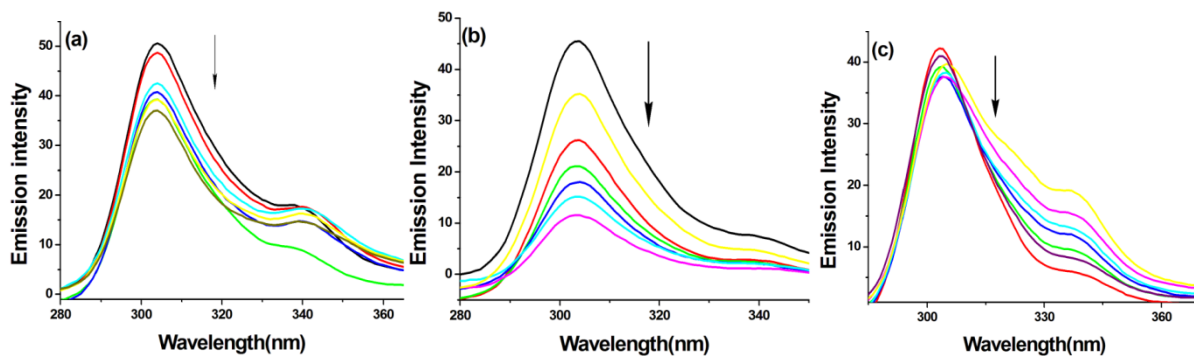


Figure S7 Synchronous spectra of BSA (1 μM) in the presence of increasing amounts of the complexes **1** (a) and **2** (b) and ligand **HL** (c) (0–12 μM) at a wavelength difference of $\Delta\lambda = 15$ nm. The arrow shows the emission intensity decreases upon the increase in concentration of the compounds.

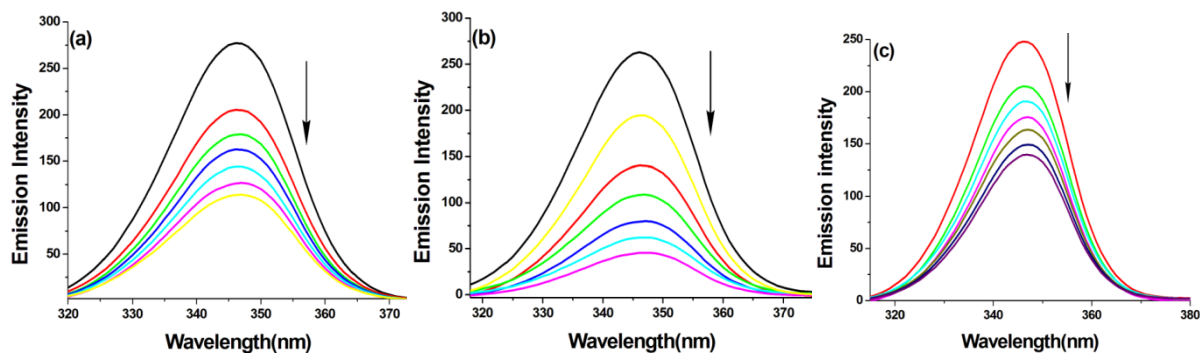


Figure S8 Synchronous spectra of BSA (1 μM) in the presence of increasing amounts of the complexes **1** (a) and **2** (b) and the ligand **HL** (c) (0–12 μM) at a wavelength difference of $\Delta\lambda = 60$ nm. The arrow shows the emission intensity decreases upon the increase in concentration of the compounds.

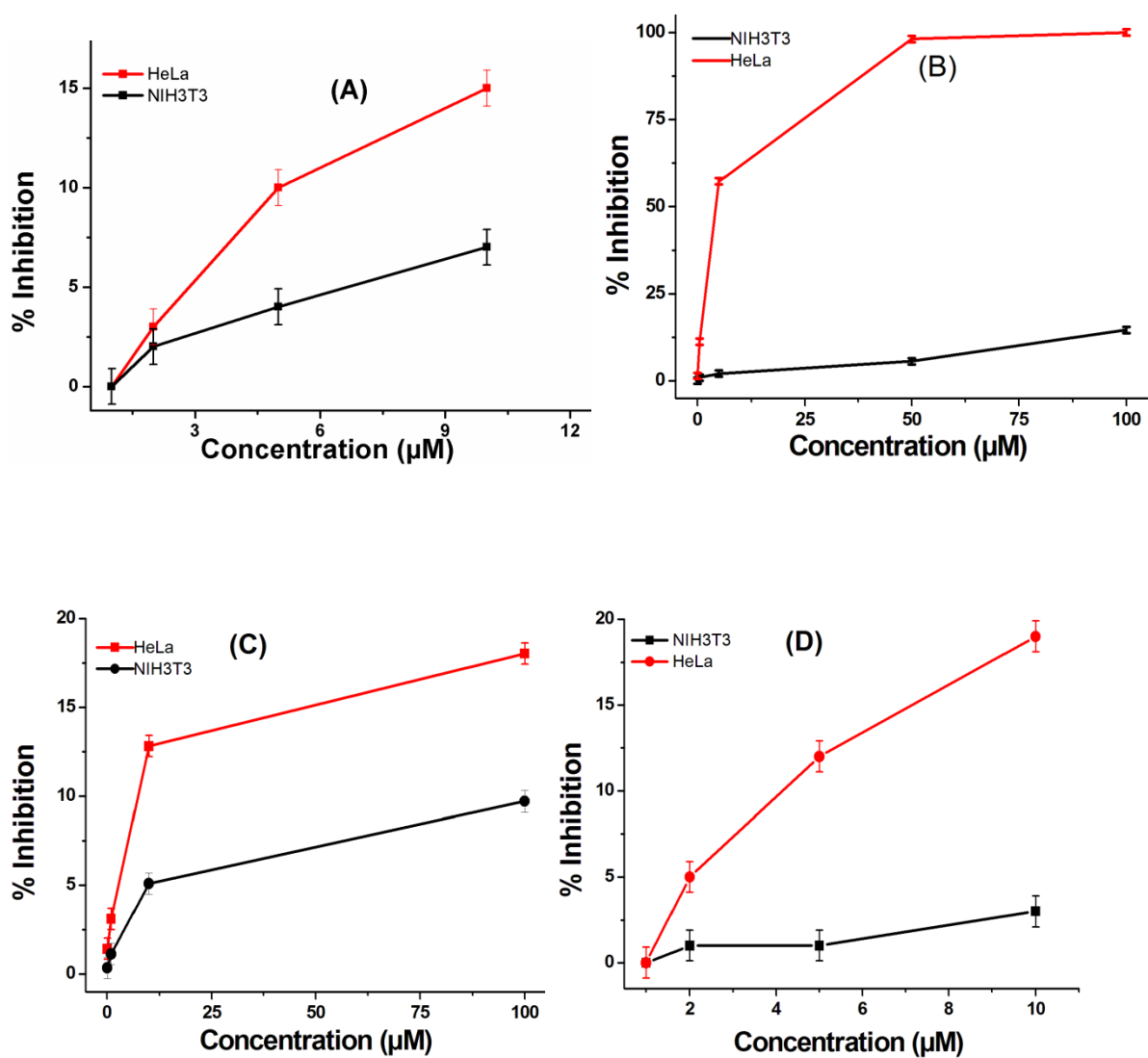


Figure S9 Cytotoxicity of complex 1(A), complex 2 (B), Ligand (C) and *cisplatin* (D), respectively