Supporting Information

Significant differences in biological activity of mononuclear Cu(II) and Ni(II) complexes with polyquinolinyl ligand

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Fig. S1 Thermogravimetric analysis for complex 2.
**Fig. S2** Emission spectra of EB bound to CT-DNA in the absence (dashed line) and presence (solid lines) of complex 2 (0-80 μM) in (5 mM Tris, 50 mM NaCl pH = 7.2). Inset: the plot of $I_0 / I$ versus the complex concentration.
**Fig. S3** Cleavage of plasmid pBR322 DNA (0.1 μg/μL) at different concentration of complex 2 after 3h incubation at 37 °C; Line 0: DNA control; Line 1: DNA +0.25 mM H₂O₂; Line 2-10: DNA +0.25mM H₂O₂+ complex 2 (5, 20, 35, 50, 55, 60, 65, 70, 75 μM).

**Fig. S4** Cleavage of plasmid pBR322 DNA (0.1 μg/μL) in the presence of 50 μM complex 1 and different inhibitors after 3h incubation at 37 °C; Line 0: DNA control; Line 1: DNA+ complex 1(50 μM); Line 2-7: DNA + complex 1+(10 mM KI, 10 mM NaN₃, 20 u/mL SOD, Methyl Green, SYBR Green, 10 mM EDTA).

**Fig. S5** Cleavage of plasmid pBR322 DNA (0.1 μg/μL) in the presence of 50 μM complex 2 and different inhibitors after 3h incubation at 37 °C; Line 0: DNA control; Line 1: DNA+ 0.25 mM H₂O₂. Line 2: DNA+ 0.25 mM H₂O₂+complex 2(50 μM); Line 3-8: DNA + 0.25mM H₂O₂ +complex 2+(10 mM KI, 10 mM NaN₃, 20 u/mL SOD, Methyl Green, SYBR Green, 10 mM EDTA).
Fig. S6 Fluorescence emission spectra of the BSA (29.4 μM) system in the absence (dashed line) and presence (solid lines) of complex 2 (0-40 μM).
Fig. S7(a-b) Absorption spectra of BSA (15 µM) and BSA with complex 1 and 2 (1 µM).