Supporting information

Synthesis, characterization, DNA binding, cleavage and cytotoxicity of copper(II) complexes


Figure S1. Measured (above) and calculated (below) isotope pattern of ligand
**Figure S2.** Measured (above) and calculated (below) isotope pattern of complex 1

**Figure S3.** Measured (above) and calculated (below) isotope pattern of complex 2
Figure S4. Measured (above) and calculated (below) isotope pattern of complex 4

Figure S5. Cyclic voltammograms of the complexes 2 (a) and 3 (b) in DMF (0.1 M Bu$_4$N PF$_6$) on a GC working electrode. Scan rate: 0.1 V s$^{-1}$
**Figure S6.** L, complexes 1 and 2 intercalated into supercoiled plasmid DNA. Lane 1, SC plasmid DNA without any treatment; lanes 2-9, SC plasmid DNA incubated with increasing concentration of L, 1 or 2 (from 0 to 400 μM).

**Figure S7.** (a) Ethidium bromide stained agarose gel (1.0%) of pBR322 plasmid DNA (100 ng/μL) in the presence of complex L after 30 minutes of incubation: lane 1, DNA control; lane 2, DNA + L (5 μM); lane 3, DNA + L (10 μM); lane 4, DNA + L (15 μM); lane 5, DNA + L (20 μM); lane 6, DNA + L (25 μM); lane 7, DNA + L (30 μM); lane 8, DNA + L (35 μM); lane 9, DNA + L (40 μM); lane 10, DNA + L (45 μM).

(b) Ethidium bromide stained agarose gel (1.0%) of pBR322 plasmid DNA (100 ng/μL) in the presence of complex 1 after 30 minutes of incubation: lane 1, DNA control; lane 2, DNA + 1 (1 μM); lane 3, DNA + 1 (2.5 μM); lane 4, DNA + 1 (5 μM); lane 5, DNA + 1 (7.5 μM); lane 6, DNA + 1 (10 μM); lane 7, DNA + 1 (12.5 μM); lane 8, DNA + 1 (15 μM); lane 9, DNA + 1 (17.5 μM); lane 10, DNA + 1 (20 μM).

(c) Ethidium bromide stained agarose gel (1.0%) of pBR322 plasmid DNA (100 ng/μL) in the presence of complex 2 after 30 minutes of incubation: lane 1, DNA control; lane 2, DNA + 2 (5 μM); lane 3, DNA + 2 (10 μM); lane 4, DNA + 2 (15 μM); lane 5, DNA + 2 (20 μM); lane 6, DNA + 2 (25 μM); lane 7, DNA + 2 (30 μM); lane 8, DNA + 2 (35 μM); lane 9, DNA + 2 (40 μM); lane 10, DNA + 2 (45 μM).

(d) Ethidium bromide stained agarose gel (1.0%) of pBR322 plasmid DNA (100 ng/μL) in the presence of complex 3 after 30 minutes of incubation: lane 1, DNA control; lane 2, DNA + 3 (1 μM); lane 3, DNA + 3 (2.5 μM); lane 4, DNA + 3 (5 μM); lane 5, DNA + 3 (7.5 μM); lane 6, DNA + 3 (10 μM); lane 7, DNA + 3 (12.5 μM); lane 8, DNA + 3 (15 μM); lane 9, DNA + 3 (17.5 μM); lane 10, DNA + 3 (20 μM).