Dihydroisoquinoline Copper(II) Complexes: Crystal structures, cytotoxicity, and their action mechanism

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Figure S1. HPLC spectra for aqueous solution and complexes 1, 3 in aqueous solution (1 mg/mL) with time 12 h, 24 h, 48h, respectively. Column: reversed-phase C18 column (YMC HPLC COLUMN, 150×4.6mm I. D.). Column temperature: 35°C. Mobile phase: Methol/H₂O (5:95). Flow rate: 1.0 ml/min. Injection volume: 8 µM.

Fig. S2 Melting curves of DNA in the absence and presence of complex 2 and 3.



Figure S3. Fluorescence emission spectra of EB bound with ct-DNA in the absence (dashed line ----) and presence (solid lines —) of MPDQ ligand as competitive agent with increasing [MPDQ]/[EB] ratios of 1:1 to 8:1.

Figure S4. Fluorescence emission spectra of EB bound with ct-DNA in the absence (dashed line ----) and presence (solid lines ---) of complex 2 as competitive agent with increasing [MPDQ]/[EB] ratios of 1:1 to 8:1.

Figure S5. Fluorescence emission spectra of EB bound with ct-DNA in the absence (dashed line ----) and presence (solid lines —) of complex 3 as competitive agent with increasing [MPDQ]/[EB] ratios of 1:1 to 8:1.

Figure S6. Circular dichroism spectra of ct-DNA bound by ligand MPDQ with [DNA]/[MPDQ] ratios =10:1 to 10:7 (DNA alone of 1×10^{-4} M, dashed line; DNA bound by MPDQ, colored solid lines).

Figure S7. Circular dichroism spectra of ct-DNA bound by ligand MPDQ with [DNA]/[complex 2] ratios =10:1 to 10 :7 (DNA alone of 1×10^4 M, dashed line; DNA bound by complex 2, colored solid lines).

Figure S8. Circular dichroism spectra of ct-DNA bound by ligand MPDQ with [DNA]/[complex 3] ratios =10:1 to 10 :7 (DNA alone of 1×10^4 M, dashed line; DNA bound by complex 3,colored solid lines).