
Red-light photosensitized cleavage of DNA by (L-lysine)(phenanthroline base)copper(II) complexes

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Supporting Information

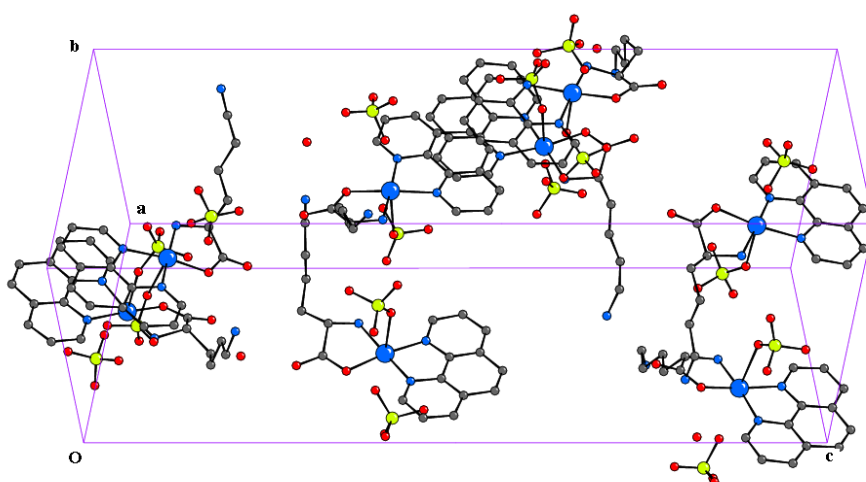


Fig. S1 Unit cell packing diagram of 2·0.5 H₂O

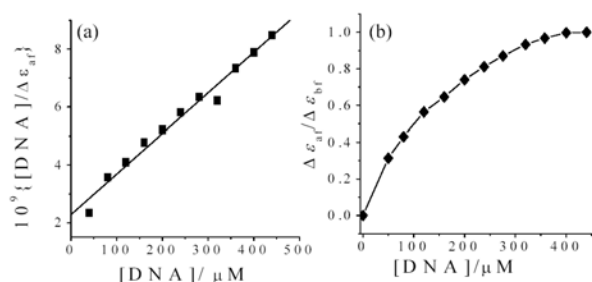


Fig. S2 (a) Plot of $[DNA]/(\Delta\epsilon_{af})$ vs. $[DNA]$, obtained from absorption titration of **2** ($40 \mu\text{M}$) with CT-DNA in Tris-buffer (pH 7.2). (b) Plot of $\Delta\epsilon_{af}/\Delta\epsilon_{bf}$ vs. $[DNA]$, where, $\Delta\epsilon_{af} = (\epsilon_a - \epsilon_f)$ and $\Delta\epsilon_{bf} = (\epsilon_b - \epsilon_f)$.

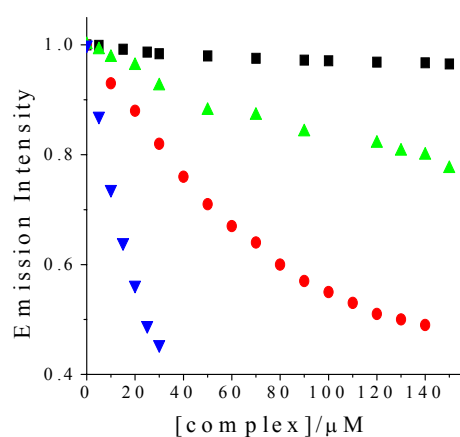


Fig. S3 Effect of addition of $[\text{Cu}(\text{L-lys})\text{B}(\text{ClO}_4)](\text{ClO}_4)$ ($\text{L} = \text{bpy}$, **1**, ■; phen, **2**, ▲; dpq, **3**, ●; and dppz, **4**, ▼) to the emission intensity of the CT-DNA ($300 \mu\text{M}$) bound ethidium bromide ($1.3 \mu\text{M}$) at different complex concentrations in 50 mM Tris-HCl buffer (pH 7.2).

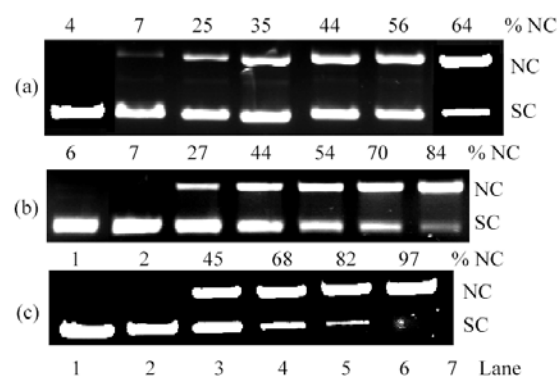


Fig. S4 Gel electrophoresis diagram showing the cleavage of SC DNA ($0.5 \mu\text{g}$) by complexes **2** (a); **3** (b) and **4** (c) on UV-light irradiation (365 nm , 12 W) using $25 \mu\text{M}$ concentration of the complexes: Lane 1, DNA control (60 min); Lane 2, DNA + complex (60 min); Lane 3, DNA + complex (15 min); Lane 4, DNA + complex (30 min); Lane 5, DNA + complex (45 min); Lane 6, DNA + complex (60 min), Lane 7, DNA + complex (90 min).

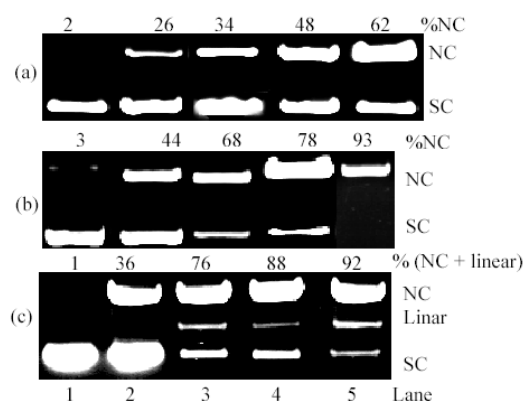


Fig. S5 Gel electrophoresis diagram showing the cleavage of SC DNA ($0.5 \mu\text{g}$) by complexes **2** (a); **3** (b) and **4** (c) on red-light exposure (694 nm , ruby laser) using $50 \mu\text{M}$ concentration of the complexes: Lane 1, DNA control (60 min); Lane 2, DNA + complex (15 min); Lane 3, DNA + complex (30 min); Lane 4, DNA + complex (45 min); Lane 5, DNA + complex (60 min).