Supplementary Materials: DNA Cleavage and Condensation Activities of Mono- and Bi-Nuclear Hybrid Complexes and Regulation by Graphene Oxide

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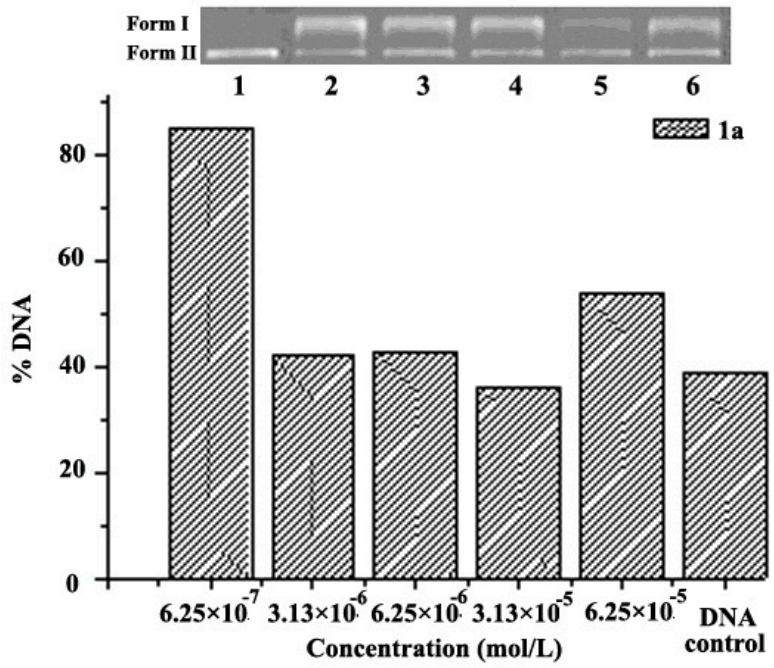

Figure S1. Histograms and electropherograms representing cleavage of pUC19 plasmid DNA (0.008 μg/μL) by different concentrations of **1a** (pH = 8.0) in buffer (5 mM Tris-HCl/10 mM NaCl) at 37 °C for 6 h. Complex **1a** and Lanes 1–5: complex **1a** and Lanes 1–5: 6.25×10^{-7}, 3.13×10^{-6}, 6.25×10^{-6}, 3.13×10^{-5}, 6.25×10^{-5} mol/L, and Lane 6 was DNA control respectively.

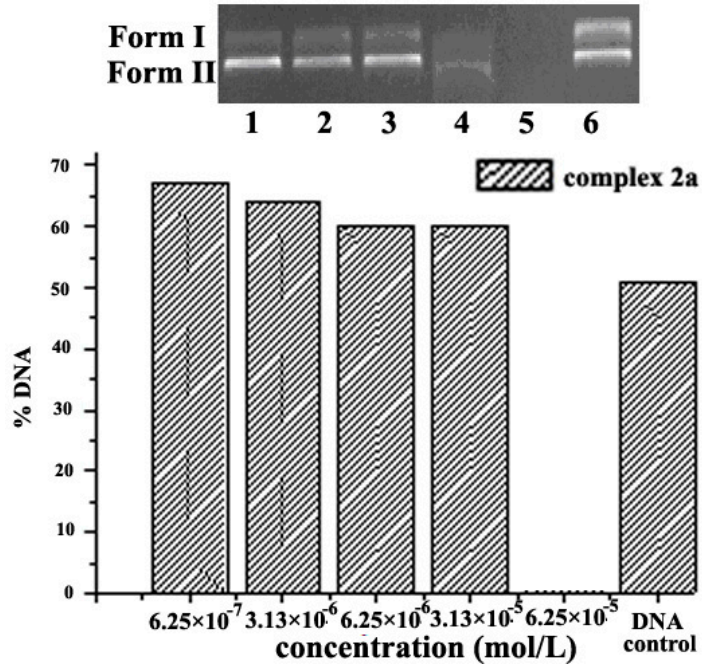

Figure S2. Histograms and electropherograms representing cleavage of pUC19 plasmid DNA (0.008 μg/μL) by different concentrations of **2a** (pH = 7.4) in buffer (5 mM Tris-HCl/10 mM NaCl) at 37 °C for 6 h. Complex **2a** and Lanes 1–5: 6.25×10^{-7}, 3.13×10^{-6}, 6.25×10^{-6}, 3.13×10^{-5}, 6.25×10^{-5} mol/L, and Lane 6 was DNA control respectively.

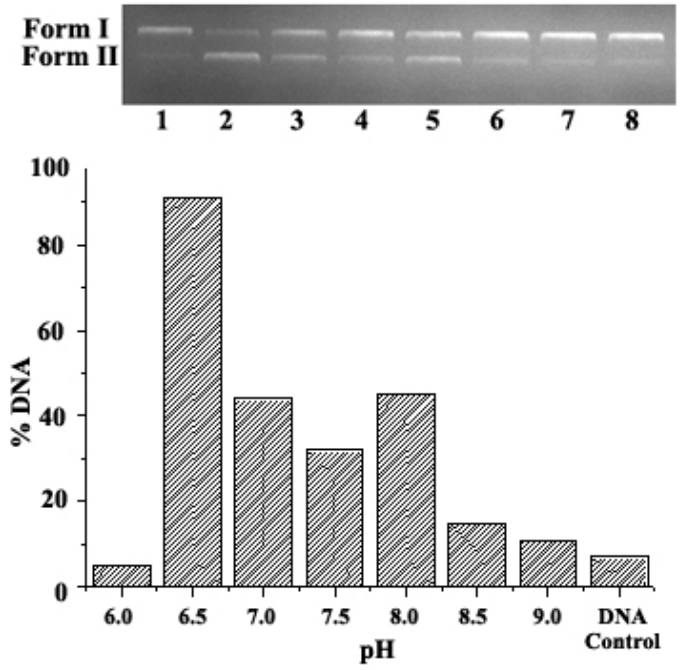

Figure S3. Histograms and electropherograms representing cleavage of pUC19 plasmid DNA (0.008 μg/μL) in different pH buffer of **2c** (6.25×10^{-7} mol/L) (5 mM Tris-HCl/10 mM NaCl) at 37 °C for 6 h. Lanes 2–8: pH = 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, and Lane 1 was DNA control respectively.

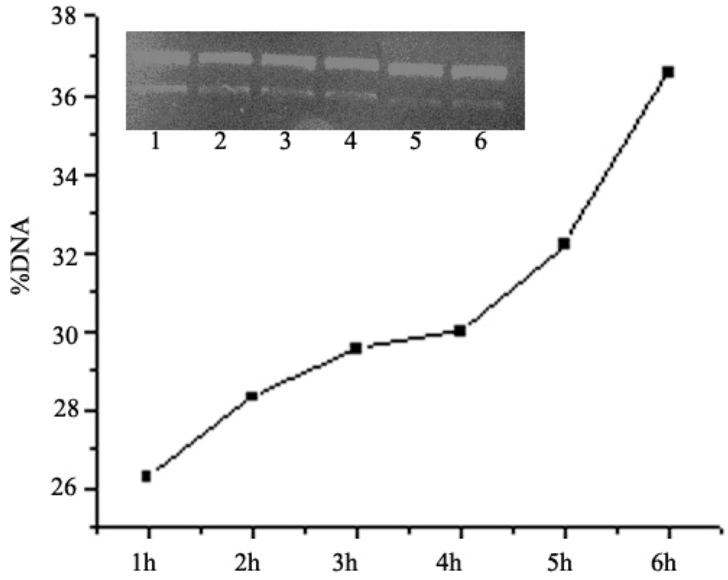

Figure S4. Time course of pUC19 DNA (0.008 μg/μL) cleavage promoted by **2b** (3.13×10^{-7} mol/L) in pH = 7.4 buffers (5 mM Tris-HCl/10 mM NaCl) at 37 °C. Lanes 1–6, reaction time 6, 5, 4, 3, 2, 1 h, respectively.

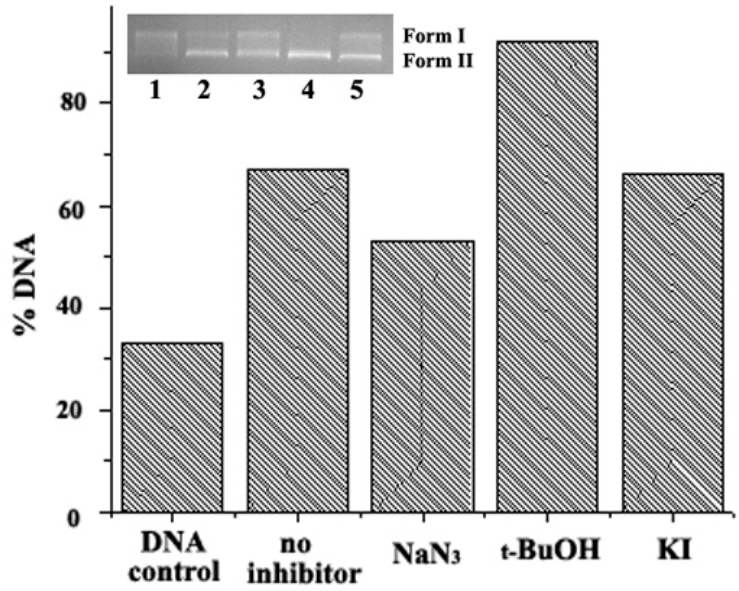

Figure S5. Histograms representing cleavage of pUC19 plasmid DNA (0.008 μg/μL) by compound **2b** typical radical scavengers (3.13×10^{-7} mol/L, pH = 7.4). Lane 1: DNA control, Lane 2: no inhibitor, Lane 3: NaN_3, Lane 4: *t*-BuOH, Lane 5: KI.

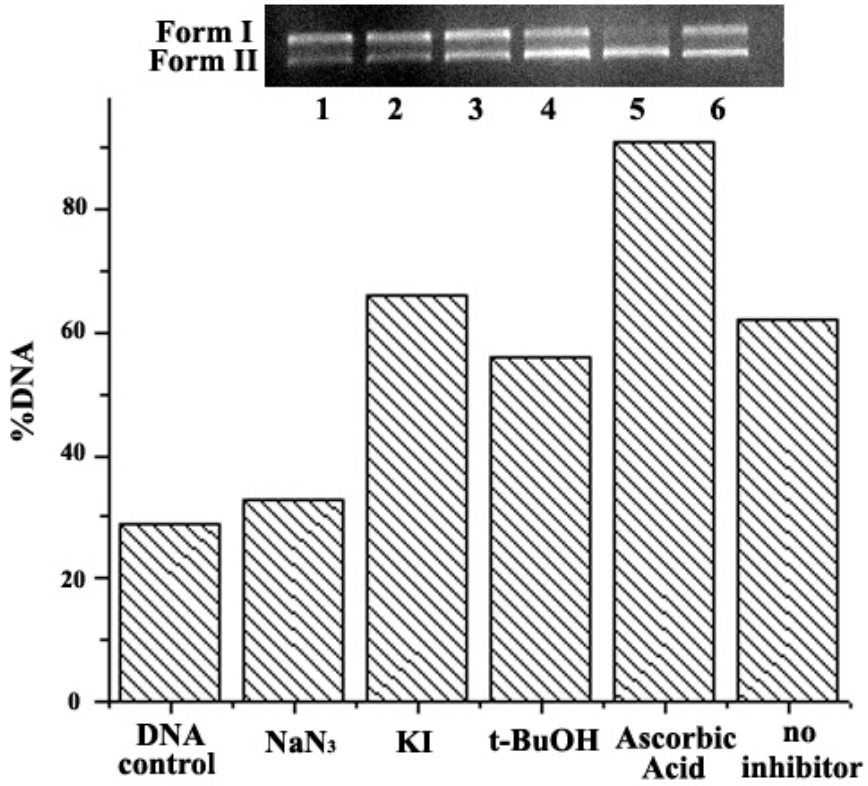

Figure S6. Histograms representing cleavage of pUC19 plasmid DNA (0.008 μg/μL) by compound **1c** typical radical scavengers (6.25×10^{-7} mol/L, pH = 7.4), Lane 1: DNA control, Lane 2: NaN_3, Lane 3: KI, Lane 4: *t*-BuOH, Lane 5: ascorbic, Lane 6: no inhibitor.