SUPPORTING INFORMATION

for

Mixed-ligand ruthenium polypyridyl complexes as apoptosis

inducers in cancer cells, the cellular translocation and the important

role of ROS-mediated signaling

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Disclosure of Potential Conflicts of Interest

No potential conflicts of interest were disclosed.



Figure S1. MS analysis of a series of ruthenium (II) complexes



Figure S2. ¹H NMR spectrum of 1.



Figure S3. ¹H NMR spectrum of 2.



Figure S4. ¹H NMR spectrum of 3.



Figure S5. ¹H NMR spectrum of 4.



Figure S6. UV-Vis absorption spectra of Ru complexes (20 μ M) (A) **1**, (B) **2**, (C) **3**, (D) **4** in PBS buffer during incubation at 25 °C.



Figure S7. Emission spectra recorded on excitation of 20 μ M PBS solutions of 1~4 at 381 nm.



Figure S8. Changes in absorption spectra of Ru complexes (20 μ M) in Tris-HCl/KCl buffer (10 mM Tris-HCl, 100 mM KCl, pH= 7.2) with increasing concentrations of pu 27 DNA. Arrows show spectral changes upon increasing DNA concentrations. In the inset: plot of ($\epsilon a - \epsilon f$)/($\epsilon b - \epsilon f$) vs [DNA]/[Ru] and the non-linear fit of the titration data. (A) **1**, (B) **2**, (C) **3**, (D) **4**.



Figure S9. Changes in emission spectra (λ ex= 380 nm) of Ru complexes (20 μ M) in Tris-HCl/KCl buffer (10 mM Tris-HCl, 100 mM KCl, pH= 7.2) with increasing concentrations of pu 27 DNA. Arrows show spectral changes upon increasing DNA concentrations. In the inset: plot of I/I₀ vs [DNA]/[Ru] and the non-linear fit of the titration data. (A) **1**, (B) **2**, (C) **3**, (D) **4**.