Luminescent Zinc salophen derivatives: cytotoxicity assessment and action mechanism studies

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Supporting Information

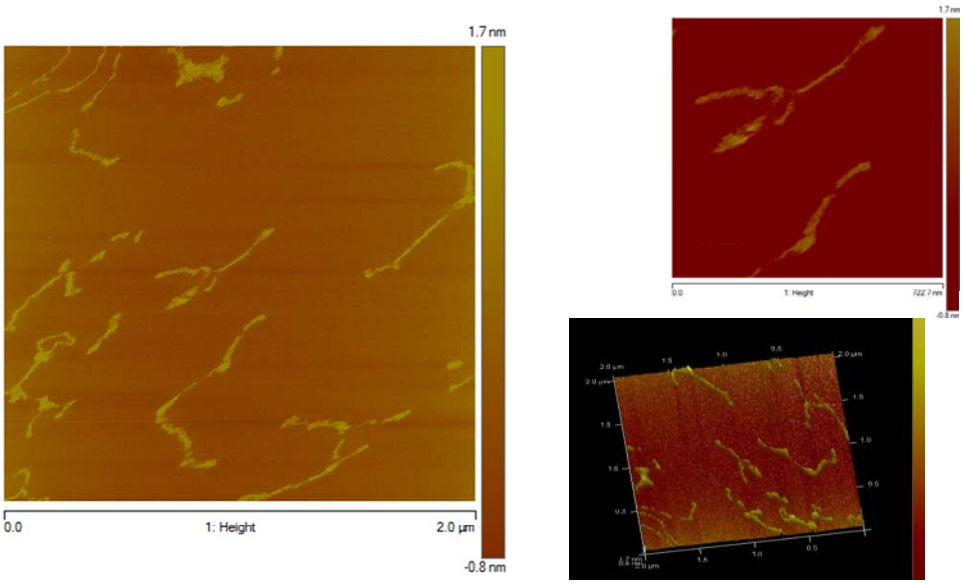

Figure S1. AFM images of pBR322 plasmid DNA (0.10 µM) incubated with **1** (0.33 µM) during 24 h.

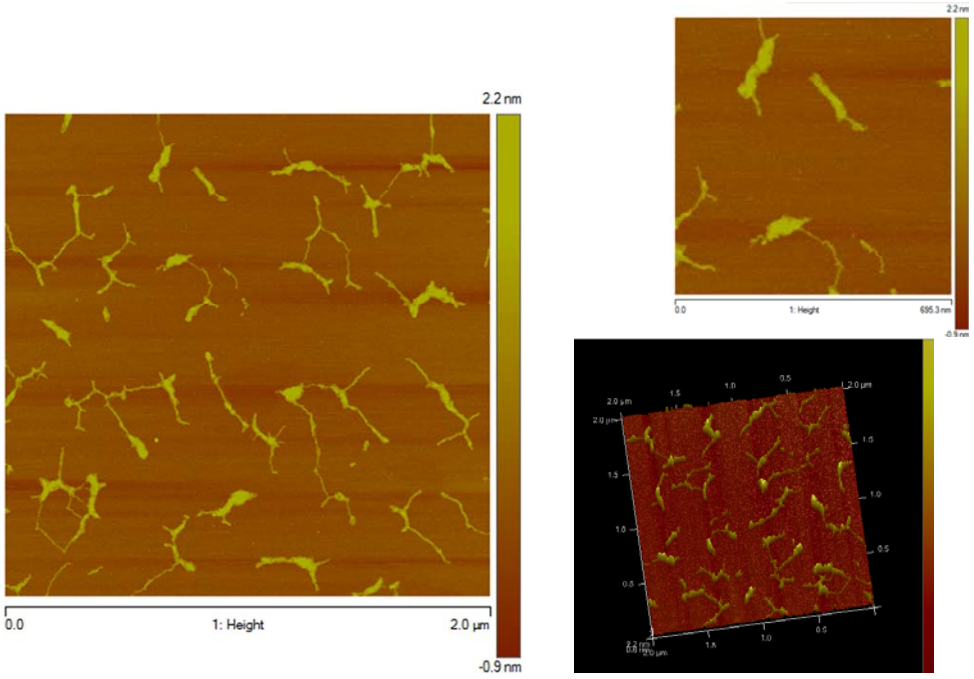

Figure S2. AFM images of pBR322 plasmid DNA (0.10 µM) incubated with **2** (0.15 µM) during 24 h.

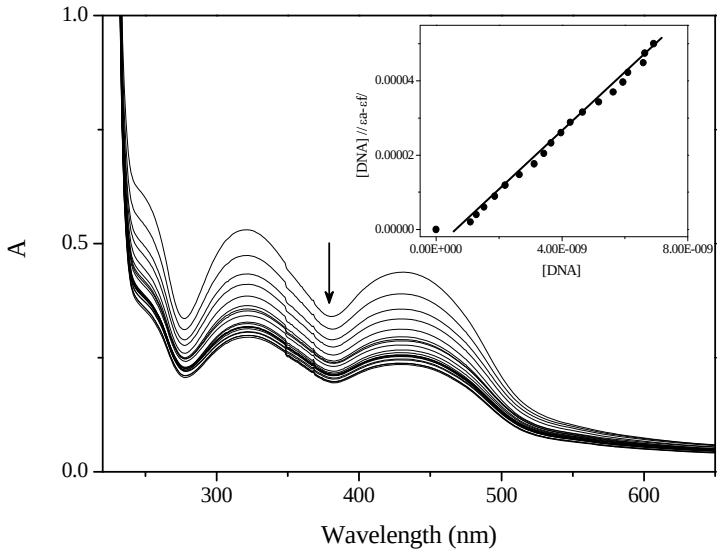

Figure S3. Electronic absorption spectra of complex **2** in the absence and presence of increasing amounts of ct-DNA. Inset: Plot of [DNA] *vs.* [DNA]/(ε_a-ε_f)).

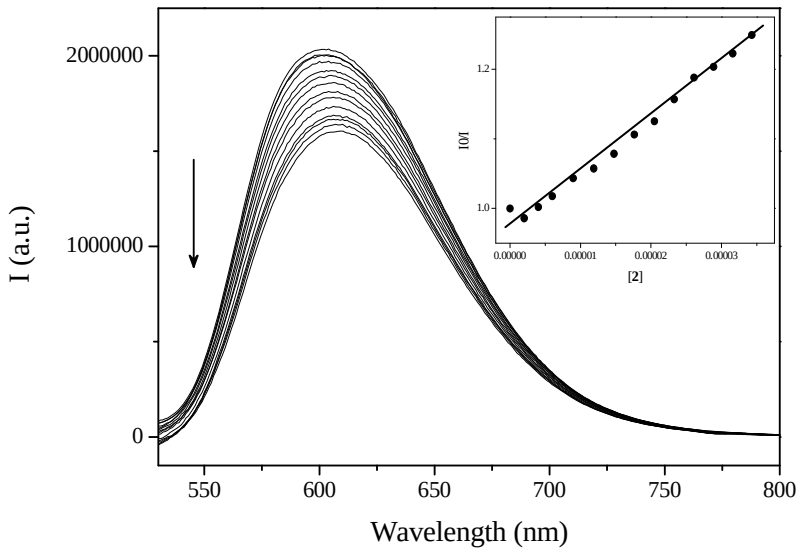

Figure S4. Emission spectra of ethidium bromide (EB) bound to DNA in the absence and presence of increasing amounts of **2**. Inset: Stern-Volmer plot: I_0/I vs [**2**].

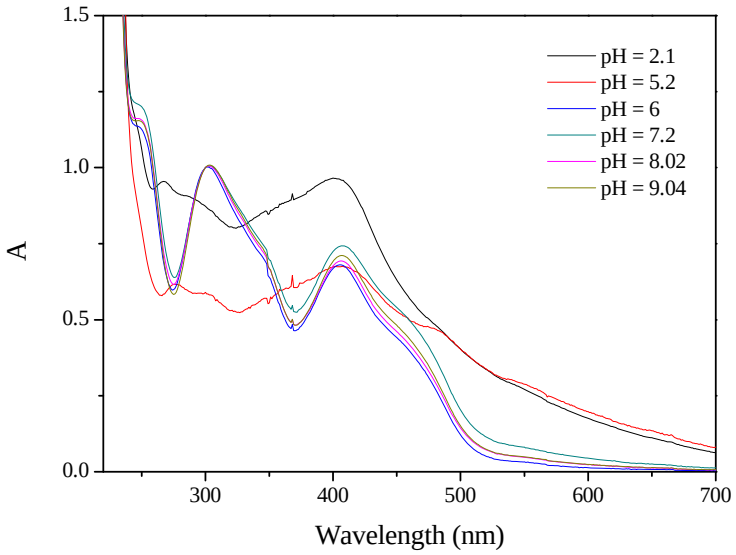

Figure S5. Normalized absorption spectra of **1** recorded at different pH values.

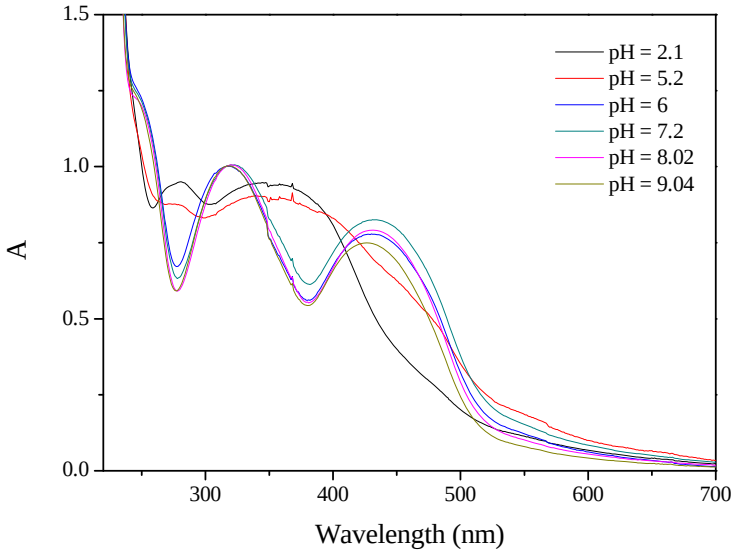

Figure S6. Normalized absorption spectra of **2** recorded at different pH values.

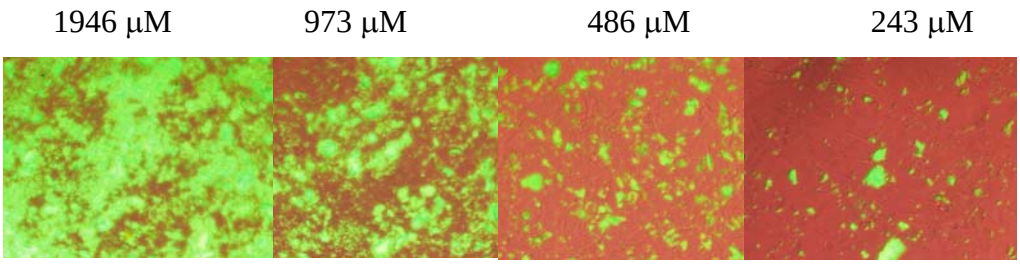

Figure S7. Microscopy images of 3T3 cells incubated for 24 h with concentrations of compound **2** above 70 μM. White light is used for co-localize cells. Green area represents fluorescent compound **2**.

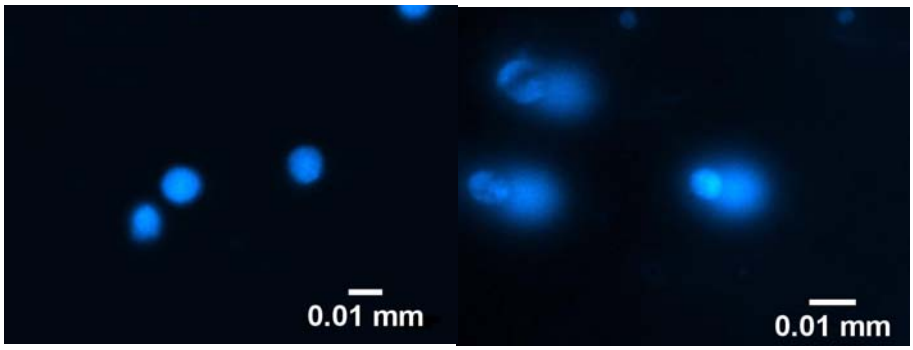

Figure S8. 20x microscopy image of cells in DAPI-staining solution, using a UV2A fluorescence filter. Image of the negative effect on nucleotide in the presence of compound **2** (concentration of 50 μg/mL, left) compared to positive control with MMS (right).

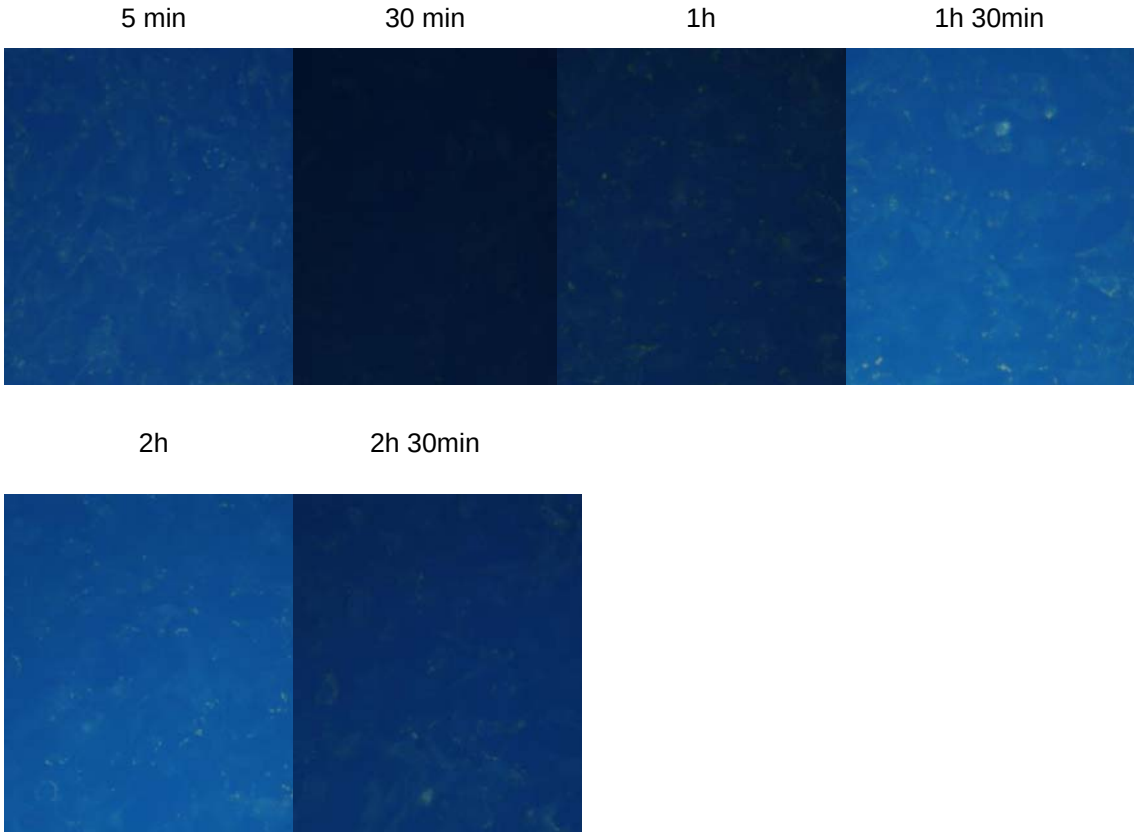

Figure S9. Binding-time studies of **1** (70 μM concentration) with 3T3 cells. The pictures were taken with a fluorescence microscope equipped with a UV2A filter.

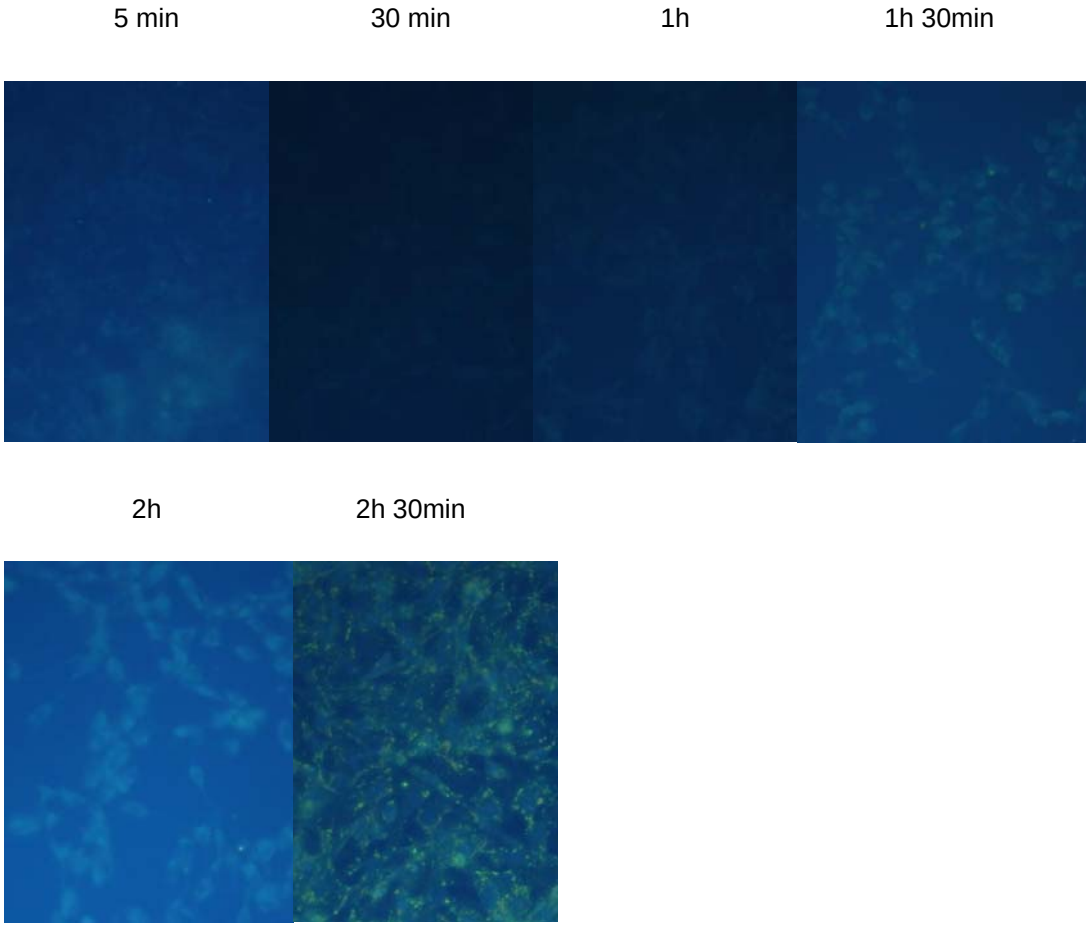

Figure S10. Binding-time studies of **2** (70 μM concentration) with 3T3 cells. The pictures were taken with a fluorescence microscope equipped with a UV2A filter.

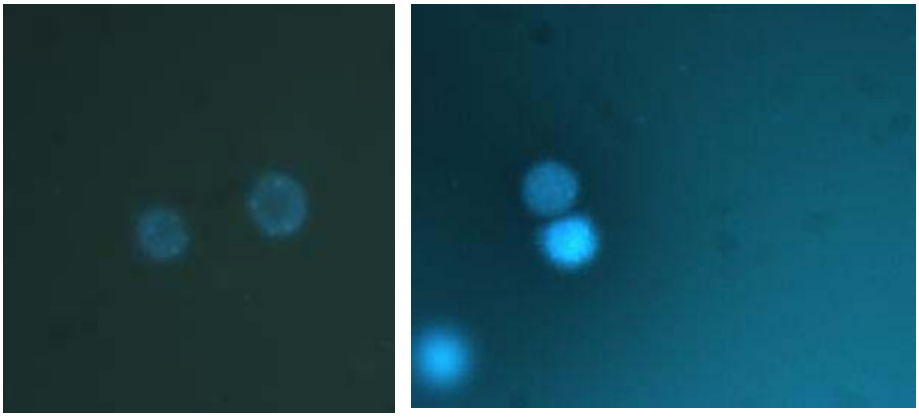

Figure S11. 20x Fluorescence microscopy image of nucleoids incubated with **1** (concentration of 50 μg/mL) in the absence (left) and in the presence of 10% DAPI (right).

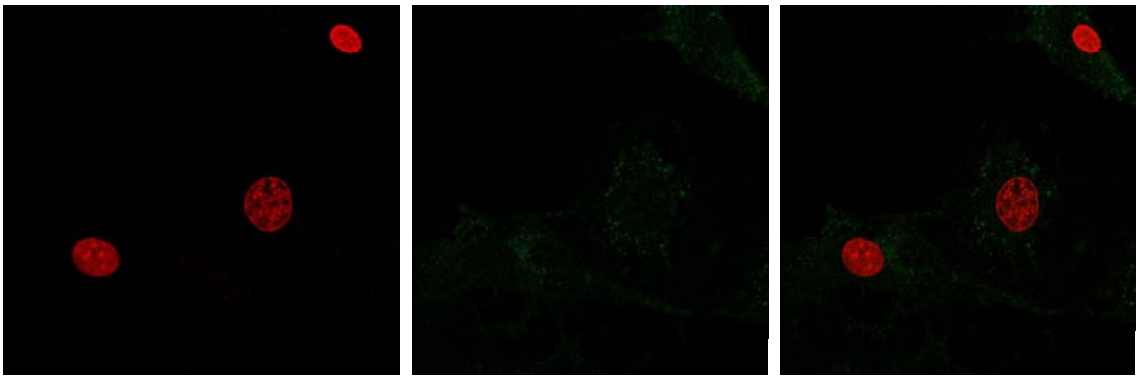

Figure S12. Fluorescence confocal microscopy image of 3T3 incubated cells with Draq5 (left), salophen complex **2** (middle) and superimposed images (right).