Electronic Supplementary Material (ESI) for RSC Advances

Supplementary Information

Salphen metal complexes as tunable G-quadruplex binders and optical probes

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1. Emission DNA Titrations.

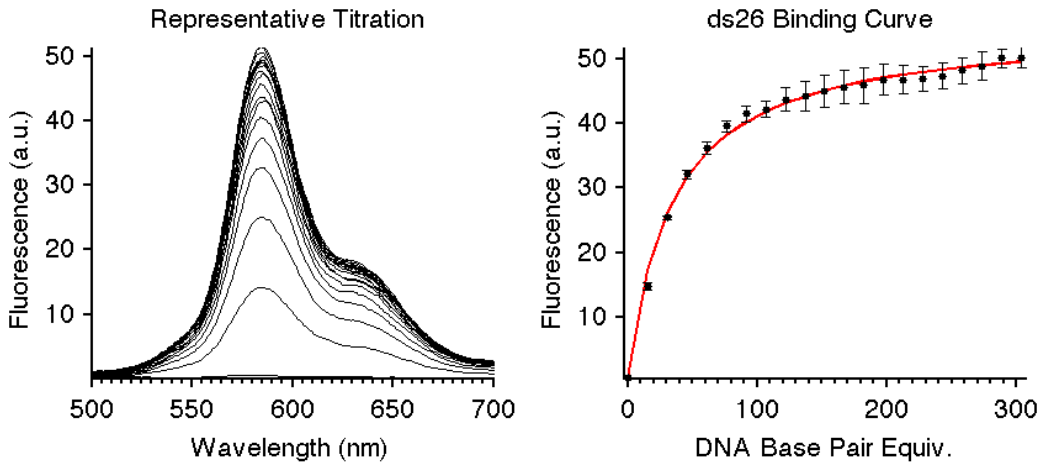

Figure S1. Representative fluorescence spectra upon titration of complex **9** (10 µM) with ds26 and fitting of the data to a 1:1 binding model. Error bars represent two standard deviations and the average fitted curve (red) is shown for clarity.

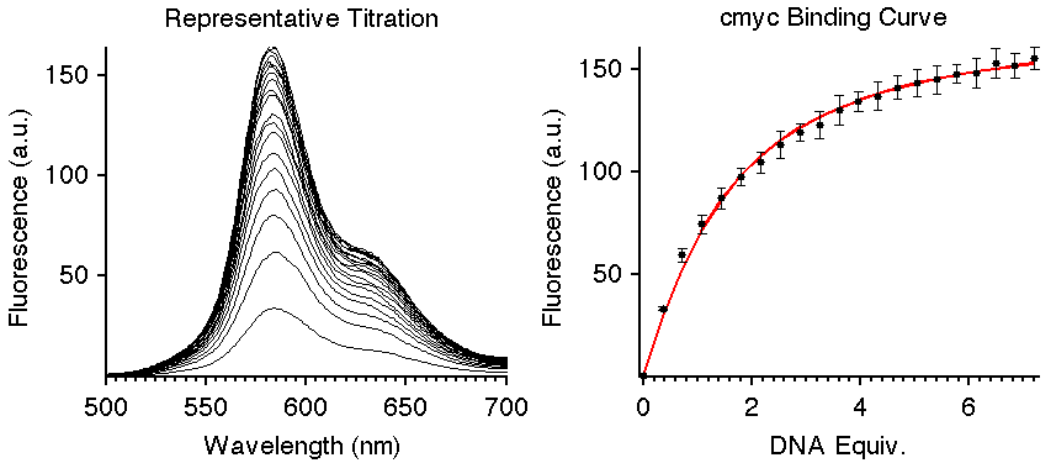

Figure S2. Representative fluorescence spectra upon titration of complex **9** (10 µM) with *c-myc* and fitting of the data to a 1:1 binding model. Error bars represent two standard deviations and the average fitted curve (red) is shown for clarity.

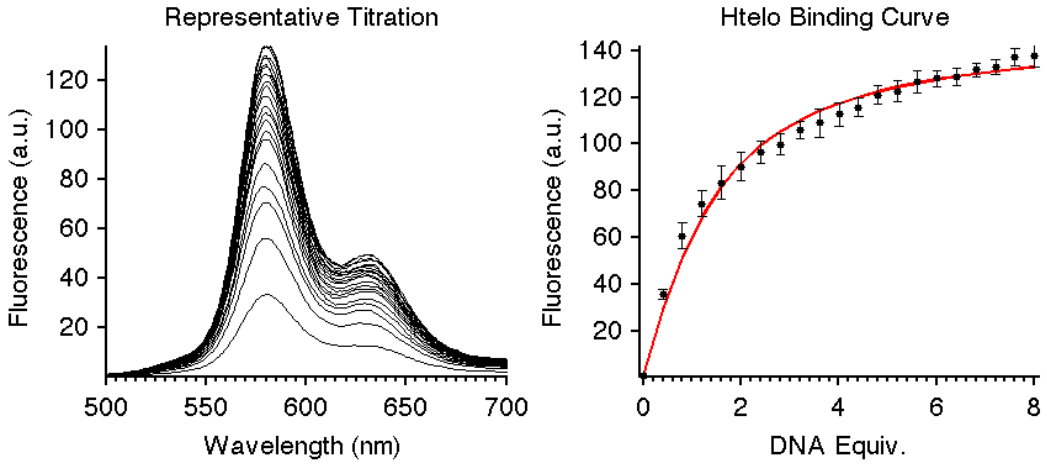

Figure S3. Representative fluorescence spectra upon titration of complex **9** (10 µM) with hTelo and fitting of the data to a 1:1 binding model. Error bars represent two standard deviations and the average fitted curve (red) is shown for clarity.

2. Microscopy

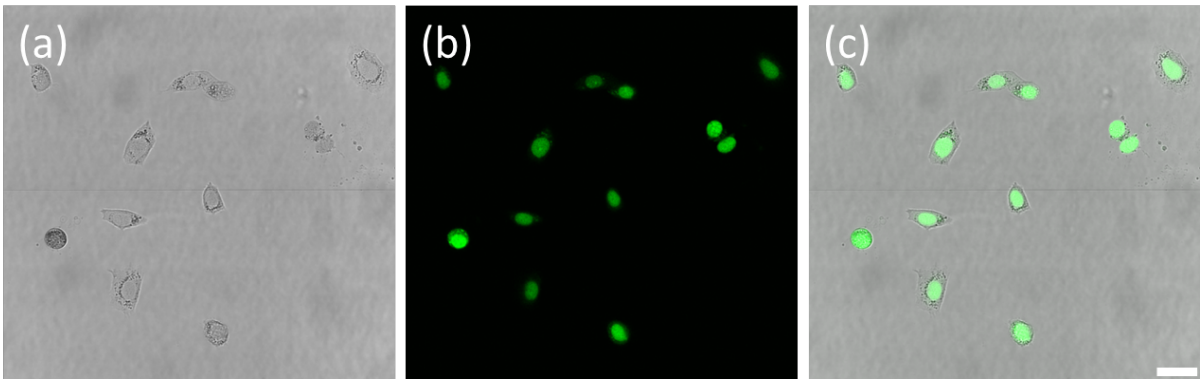

Figure S4. Fluorescence microscopy of live CHO cells stained with complex **5**. Figure (a) shows the transmitted light image, figure (b) is the fluorescence intensity image and figure (c) represents the merge of the two channels. Clear fluorescence is seen in the nucleus of all cells indicating that the dye localises to this region and becomes fluorescent in the prescence of DNA. Scale bar 25 microns.

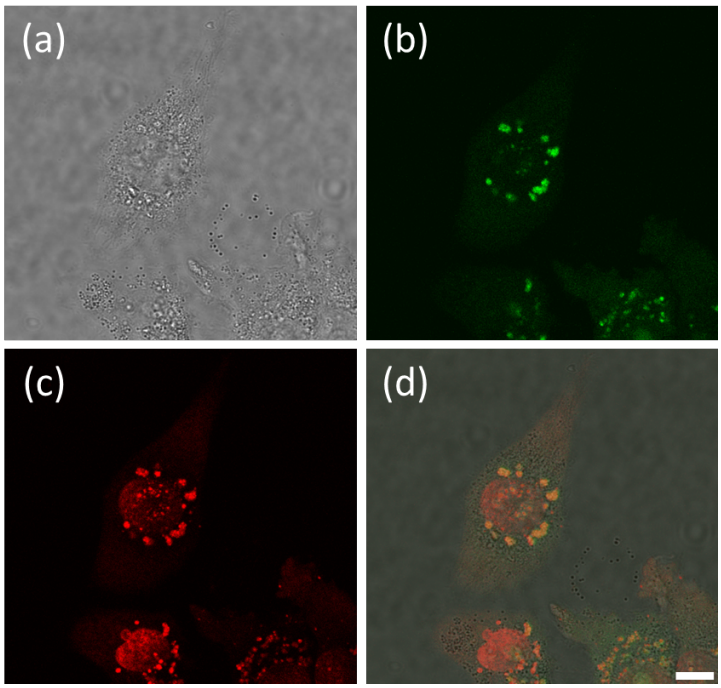

Figure S5. Fluorescence microscopy of live HepG2 cells stained with complex **5** (2 μM, 24 h incubation). Figure (a) shows the transmitted light image, figure (b) is the fluorescence intensity image, figure (c) shows DRAQ5 staining and figure (d) represents the merge of the two channels. Scale bar 10 microns.

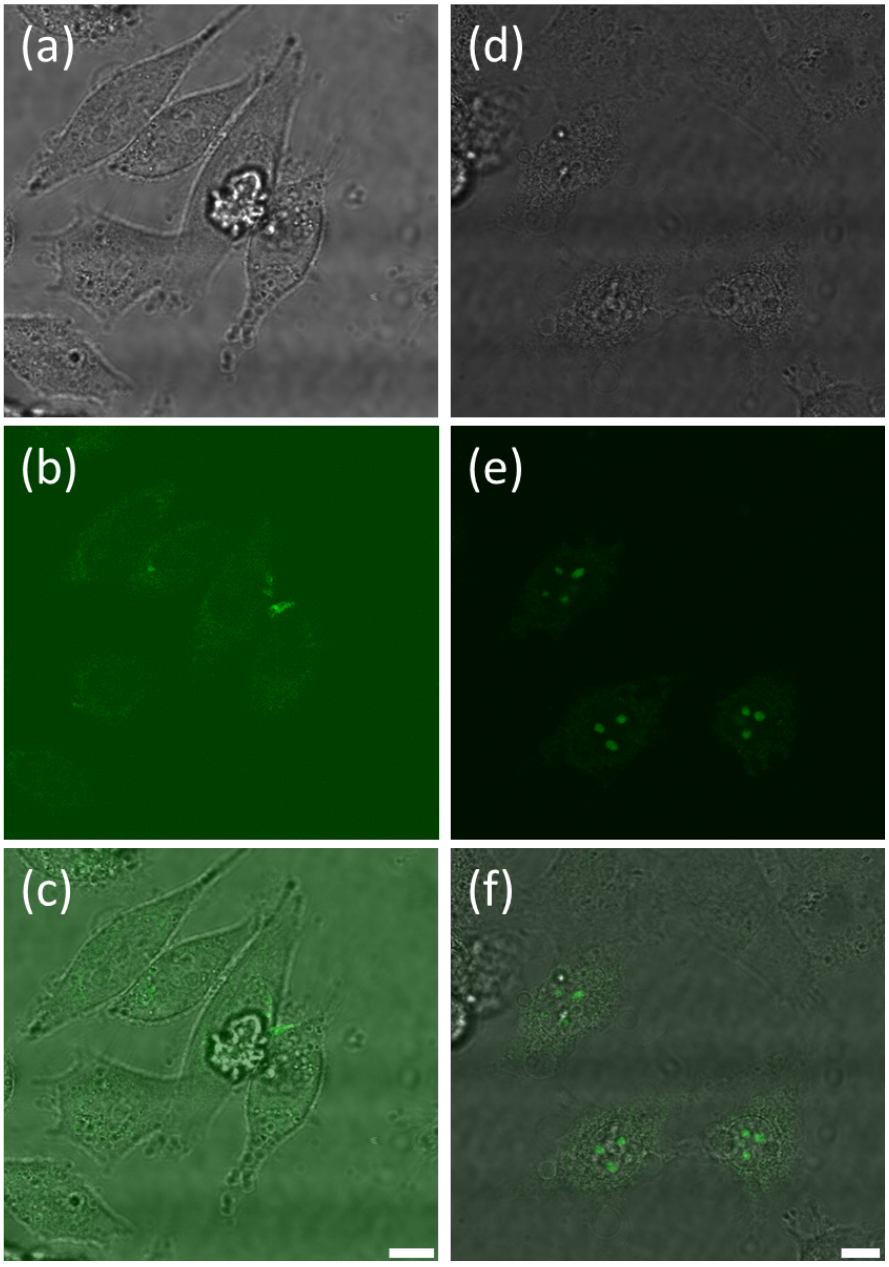

Figure S6. Confocal microscopy images of live HeLa cells stained with complex **9** (10 μM, 24 h incubation), showing transmitted light images (a, d), fluorescence intensity images (b, e) and merged fluorescence and transmission images (c, f). Scale bars 10 microns.

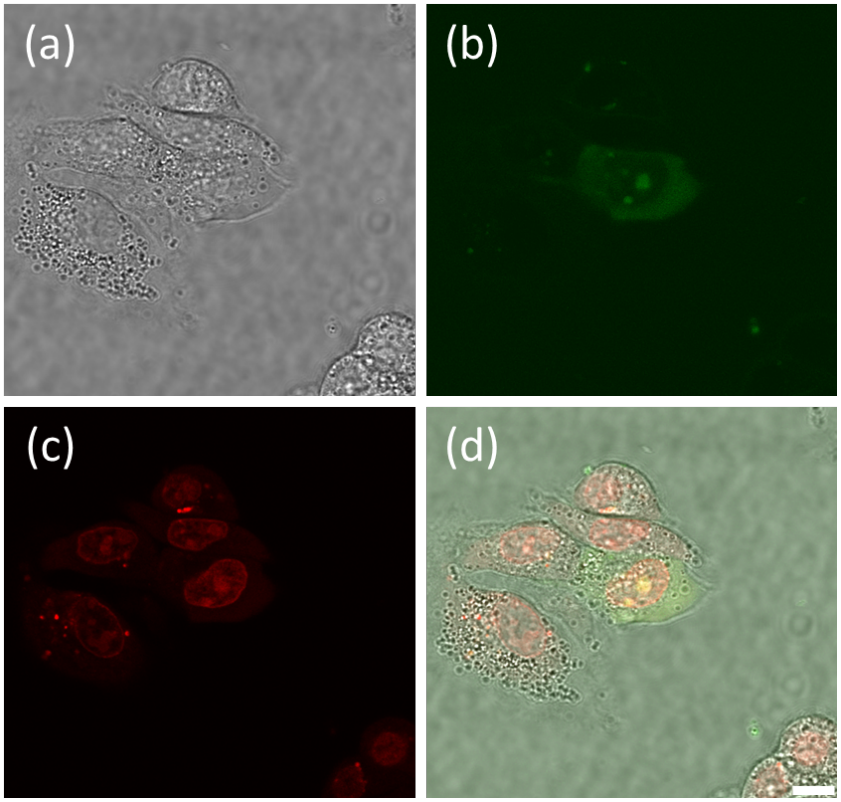

Figure S7. Fluorescence microscopy of live HepG2 cells stained with complex **9** (10 µM, 24 h incubation). Figure (a) shows the transmitted light image, figure (b) is the fluorescence intensity image, figure (c) shows DRAQ5 staining and figure (d) represents the merge of the two channels. Scale bar, 10 microns.