

Supporting Information

Interaction of Thionine with Triple, Double and Single stranded RNAs

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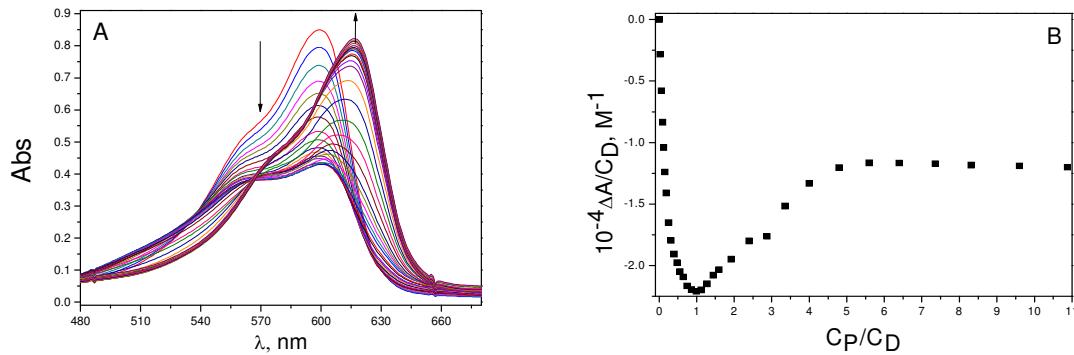


Figure 1SI. A) Spectra and B) Binding isotherm for the titration of thionine with poly(rA)·poly(rU) (duplex), $C_P=6.00 \cdot 10^{-4} M$. $\lambda=600$ nm, $I=0.01 M$ (NaCl), $pH=7.0$ and $T=25^\circ C$.

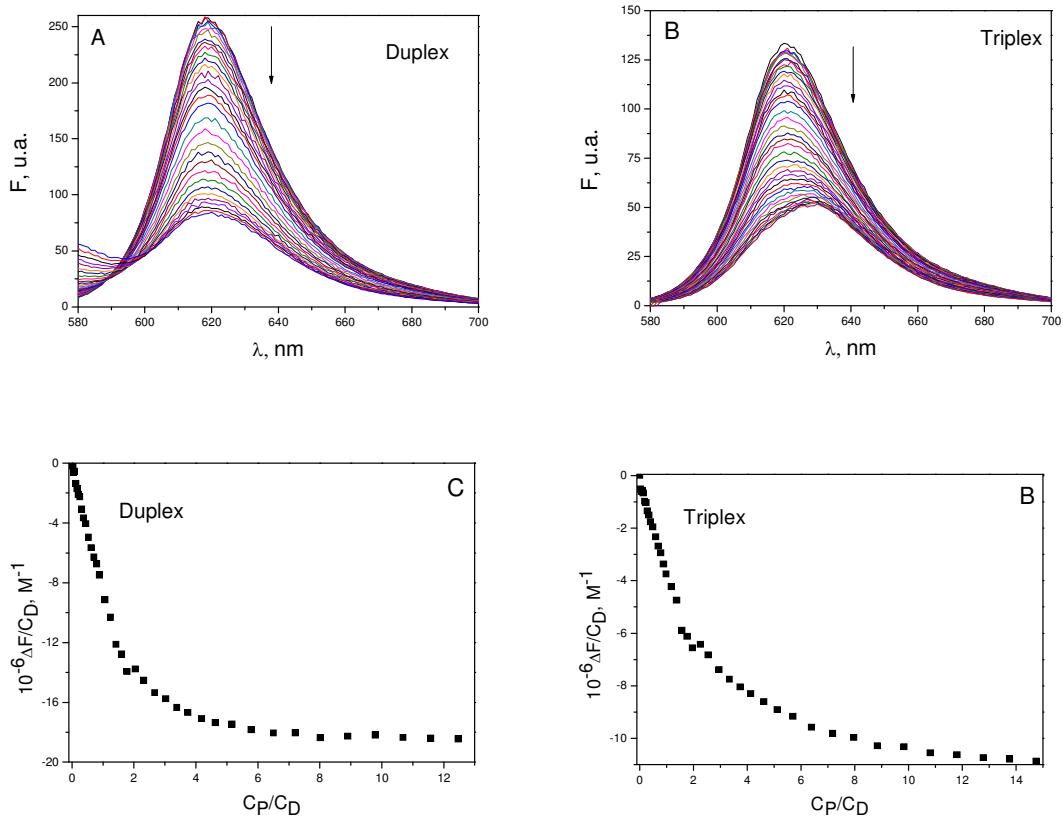


Figure 2SI. Spectrograms of A) thionine-duplex obtained from fluorescence measurements $C_P=1.63 \cdot 10^{-4} M$ B) thionine-triplex, $C_P=1.50 \cdot 10^{-4} M$ and Fluorescence binding isotherms of C) thionine-duplex and D) thionine-triplex. $\lambda_{exc}=565nm$, $I=0.1 M$ (NaCl), $pH=7.0$ and $T=25^\circ C$.

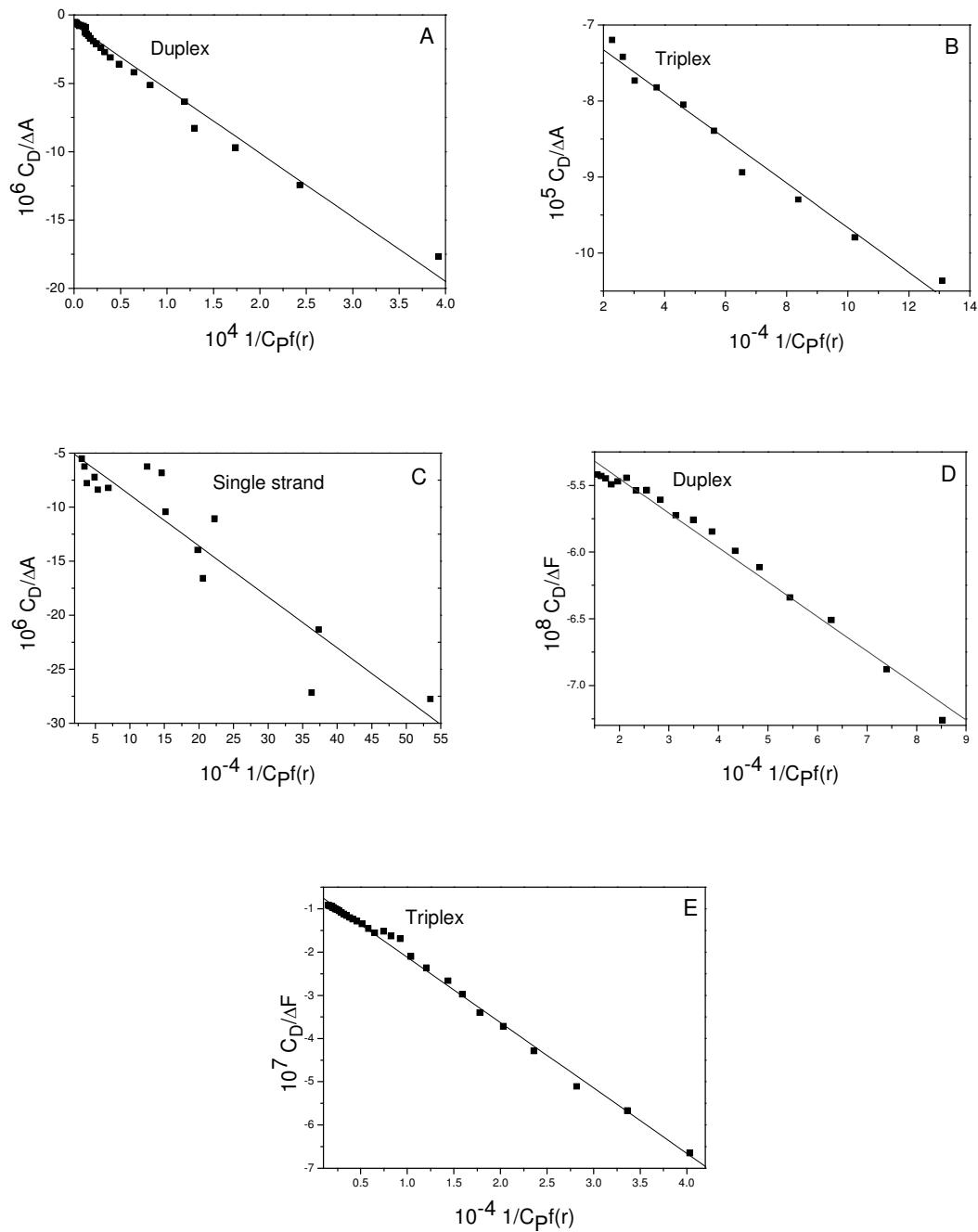


Figure 3SI. Absorbance (A,B,C) and fluorescence (D,E) titration analyses carried out with eq 2: (A,D) thionine-duplex (B,E) thionine-triplex and (C) thionine-ss. I=0.1M (NaCl), pH=7.0 and $T=25^\circ\text{C}$

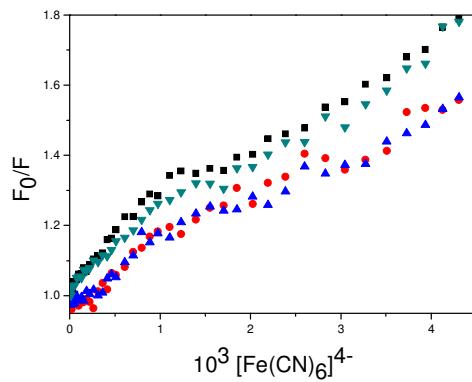


Figure 4SI. Stern-Volmer plot for free thionine (■), thionine-ss (▼), thionine-duplex (●) and thionine-triplex. (▲). $C_D/C_P=0.1$, $C_D=9 \mu\text{M}$, $\lambda_{\text{exc}}=565\text{ nm}$, $\lambda_{\text{exc}}=625\text{ nm}$, $I=0.1\text{ M}$ (NaCl), pH=7.0 and $T=25^\circ\text{C}$.

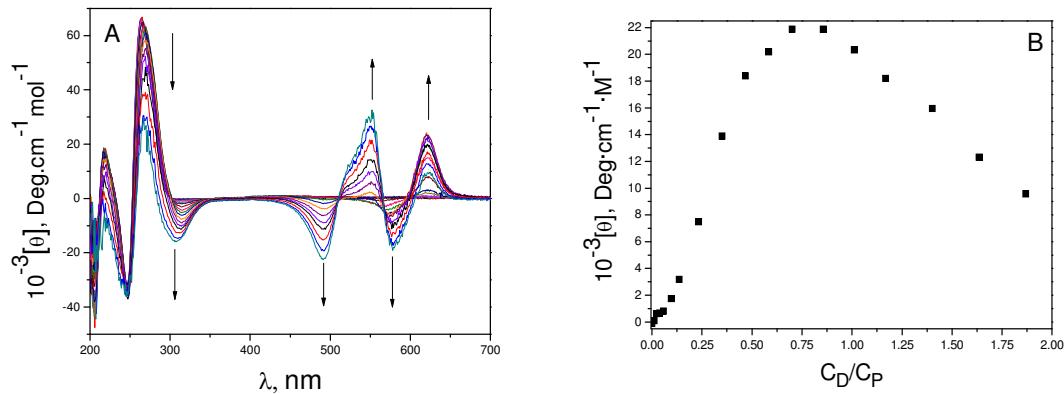


Figure 5SI. Circular dichroism spectrogram and $[\theta]$ vs C_D/C_P plot for thionine-duplex at $C_P^0=1.21\cdot10^{-4}\text{M}$, $C_D=9.00\cdot10^{-4}$, $\lambda=625\text{nm}$ $I=0.01\text{M}$ (NaCl), pH=7.0 and $T=25^\circ\text{C}$.