

Supporting Information

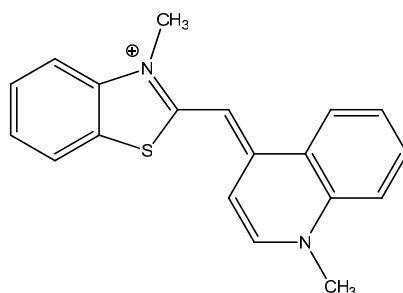


Figure S1. Chemical structure of thiazole orange

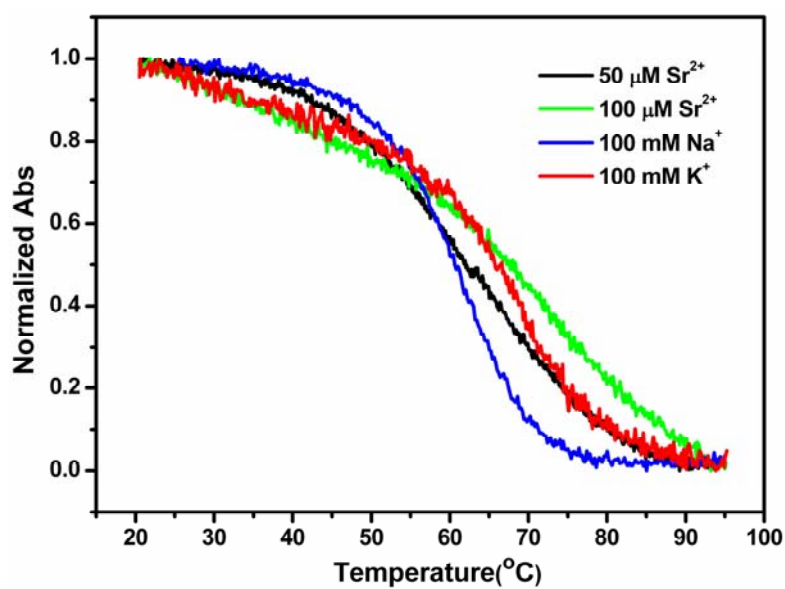


Figure S2. The melting profiles of human telomeric G-quadruplex (1 μM /strand) in the presence of 50 μM Sr^{2+} (black) , 100 μM Sr^{2+} (green), 100 mM Na^+ (blue) and 100 mM K^+ (red), respectively.

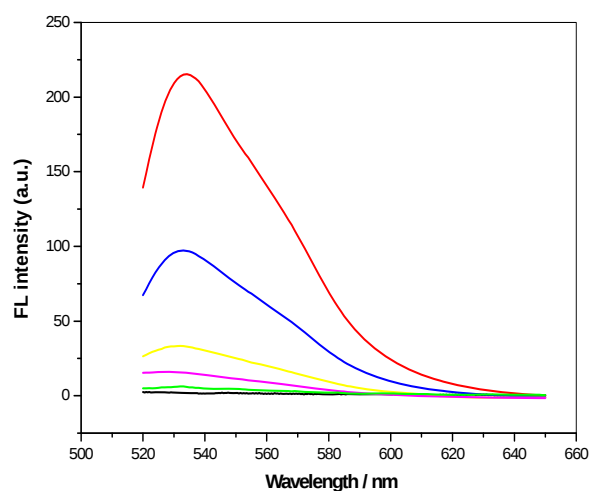


Figure S3. Fluorescence-Quenching of TO binding ssDNA by SWNTs. Fluorescence emission spectra of 1 μM TO (black), 1 μM TO + 0.5 μM AG₃ (red), 1 μM TO + 0.5 μM AG₃ + 1 $\mu\text{g/mL}$ SWNTs (blue), + 2 $\mu\text{g/mL}$ SWNTs (yellow), + 4 $\mu\text{g/mL}$ SWNTs (pink), + 6 $\mu\text{g/mL}$ SWNTs (green) in 10 mM Tris-HCl buffer, pH=7.0 (λ_{ex} = 480 nm).

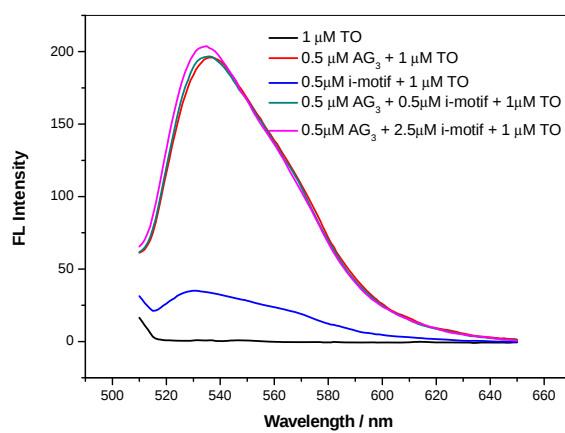


Figure S4. Fluorescence emission spectra of 1 μM TO alone (black), 1 μM TO + 0.5 μM AG₃ (red), 1 μM TO + 0.5 μM i-motif (blue), 1 μM TO + 0.5 μM AG₃ + 0.5 μM i-motif (green), 1 μM TO + 0.5 μM AG₃ + 2.5 μM i-motif (pink), respectively.

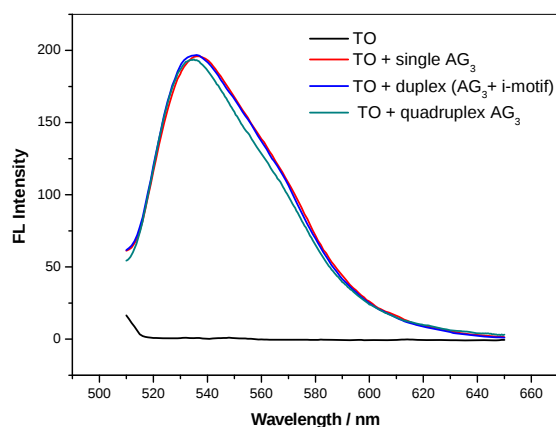


Figure S5. Fluorescence emission spectra of 1 μM TO alone (black), 1 μM TO + 0.5 μM AG₃ (red), 1 μM TO + 0.5 μM AG₃ + 0.5 μM i-motif (blue), 1 μM TO + 0.5 μM AG₃ + 50 μM Sr²⁺ (green), in the absence of SWNTs, respectively.

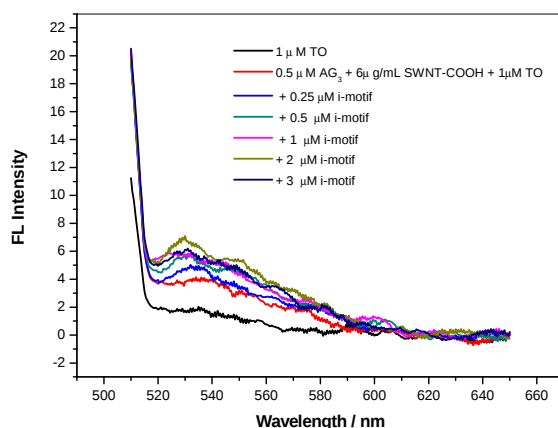


Figure S6. Fluorescence emission spectra of 1 μM TO alone (black), 1 μM TO + 0.5 μM AG₃ (red), 2 + 0.25 μM i-motif (blue), 2 + 0.5 μM i-motif (green), 2 + 0.5 μM i-motif, 2 + 1 μM i-motif, 2 + 2 μM i-motif, 2 + 3 μM i-motif, in the presence of SWNTs, respectively.

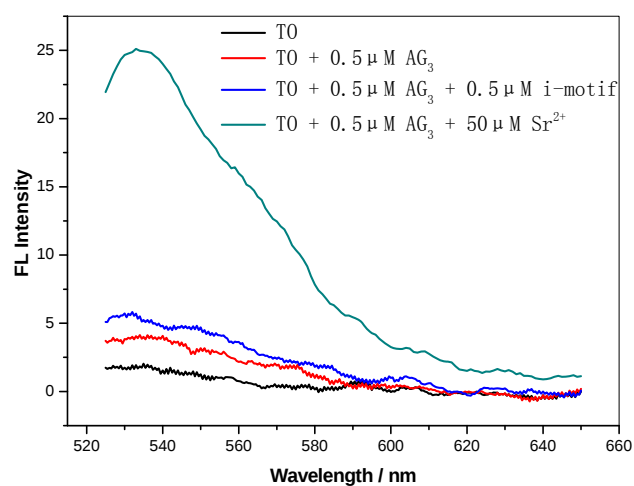


Figure S7. Fluorescence emission spectra of 1 μM TO alone (black), 1 μM TO + 0.5 μM AG₃ (red), 2 + 0.5 μM i-motif (blue), 2 + 50 μM Sr²⁺ (green) in the presence of SWNTs, respectively.