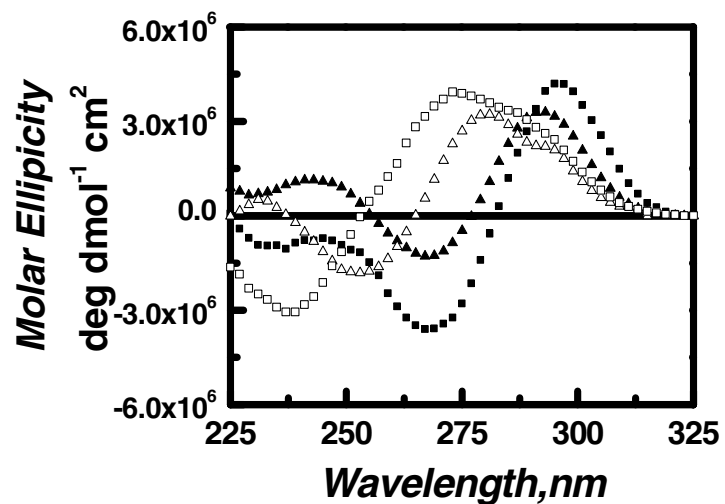


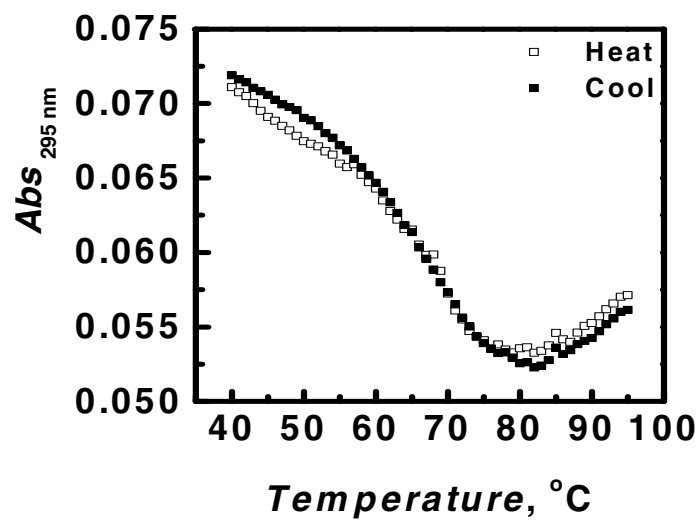
**SUPPLEMENTARY MATERIAL**

**The Effect of Osmolytes and Small molecule on Quadruplex-Watson Crick Duplex  
Equilibrium - a Fluorescence Resonance Energy Transfer Study.**

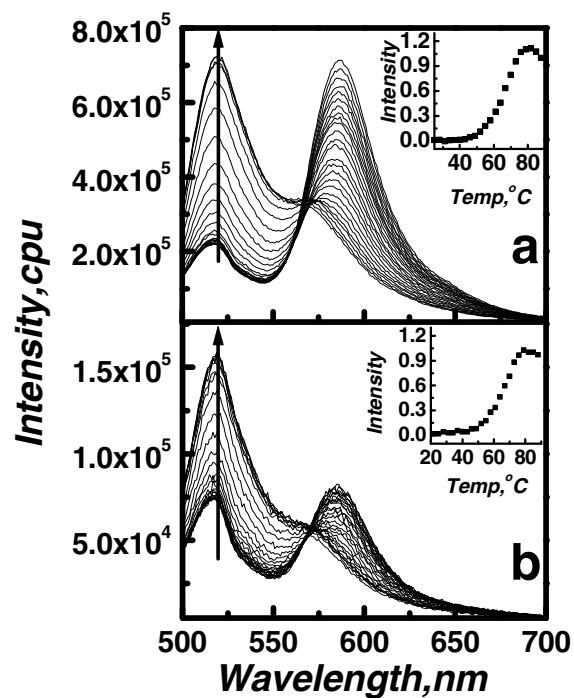
**Niti Kumar and Souvik Maiti\***



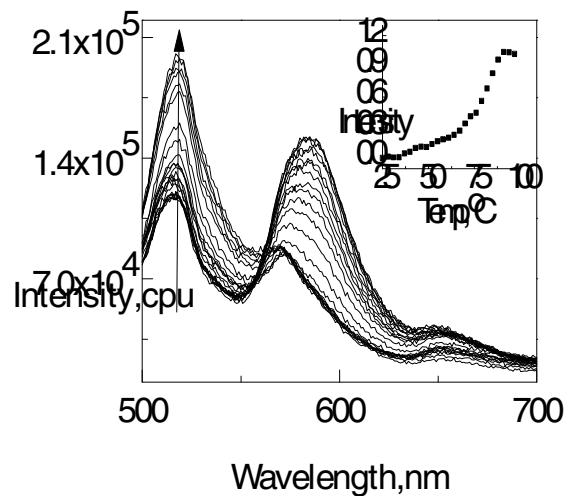
**FigureS1:** CD spectra of d(GGG TTA GGG TTA GGG TTA GGG) in 50 mM MES buffer pH 7 with 100 mM KCl in absence(▲) and presence (■) of 10% (wt/vol) ethylene glycol. CD spectra of equimolar mixture of d(GGG TTA GGG TTA GGG TTA GGG) and d(CCC TAA CCC TAA CCC TAA CCC) in 50 mM MES buffer pH 7 with 100 mM KCl in absence(△) and presence (□) of 10%(wt/vol) of ethylene glycol. All the spectra were recorded at 15°C and with total strands concentration of 10 μM.



**Figure S2:** UV melting of unlabeled d(G<sub>3</sub>TTA)<sub>3</sub>G<sub>3</sub> (2 μM) in 50 mM MES buffer, pH 7 with 100 mM KCl. The plot shows the absorbance monitored at 295 nm as function of temperature for heat (□) and cool (■) cycle giving  $T_m$  as 67.8°C and 67.5°C respectively.



**Figure S3:** Fluorescence emission spectra of dual labeled d(GGG TTA GGG TTA GGG TTA GGG) in 50 mM MES buffer pH 7 with 100 mM KCl at different temperatures in (a) 10% (wt/vol) ethylene glycol, (b) 10% (wt/vol) glycerol. The temperature was increased from 20°C to 100°C. Arrow headed line indicates the temperature increment direction. Quadruplex concentration was 30 nM. Inset shows intensity at 520 nm vs temperature plot.



**Figure S4:** Fluorescence emission spectra of dual labeled d(GGG TTA GGG TTA GGG TTA GGG) in 50 mM MES buffer pH 7 with 100 mM KCl at different temperatures in presence of 150 nM of TMPyP4. The temperature was increased from 25°C to 100°C. Arrow headed line indicates the temperature increment direction. Quadruplex concentration was 30 nM. Inset shows intensity at 520 nm vs temperature plot.