

**FRET-templated by G-Quadruplex DNA:
A specific ternary interaction using an original pair of donor/acceptor.**

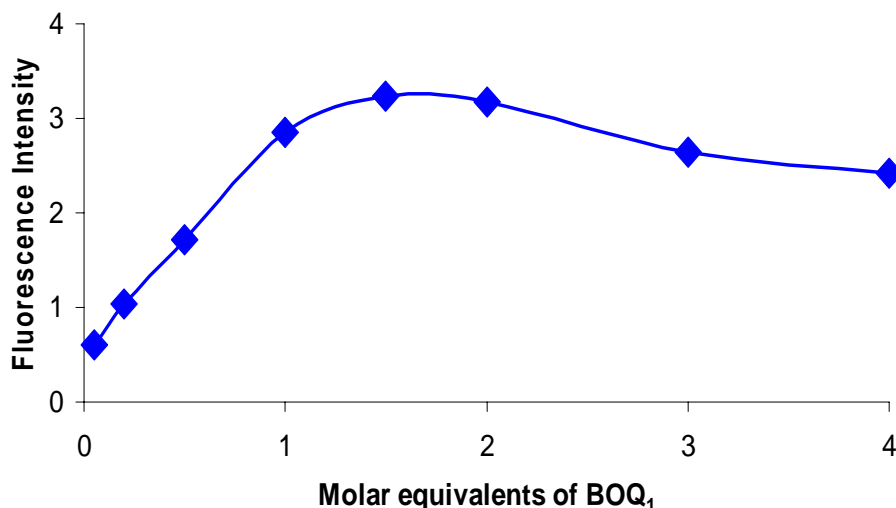
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Supporting informations :

UV-VIS & FLUORESCENCE EXPERIMENTS:

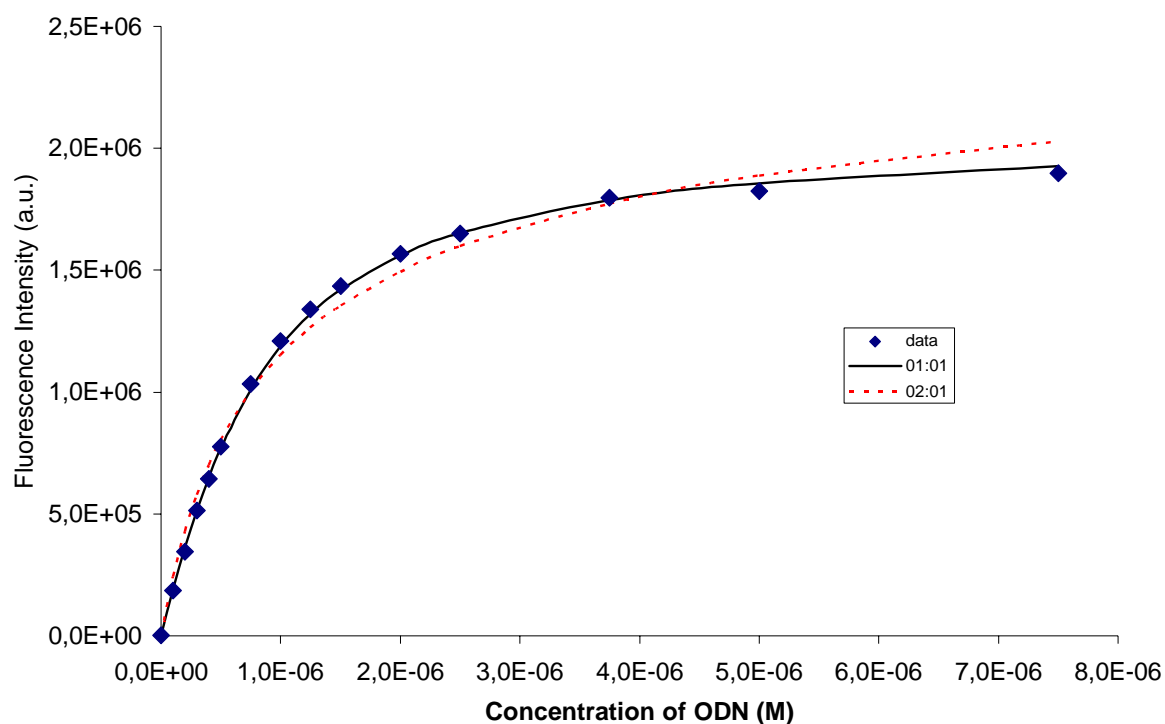
Fluorescence measurements are performed on a FluoroMax-3 spectrofluorimeter (Jobin-Yvon). A temperature of 20°C is kept constant with thermostated cell holders. Each experiment is performed in a 3mL-cell, in 3mL of 10mM sodium cacodylate buffer (pH 7.3) with 100mM KCl. A fluorescence emission spectrum is recorded at 0 and 5 min after each addition of DNA (only spectra recorded after 5 min are presented) at the excitation wavelengths 501nm. UV-Vis measurements are performed on a Uvikon XL Secomam spectrophotometer.

Figure S1 – Titration Curves BOQ₁/TO/22AG (328nm)



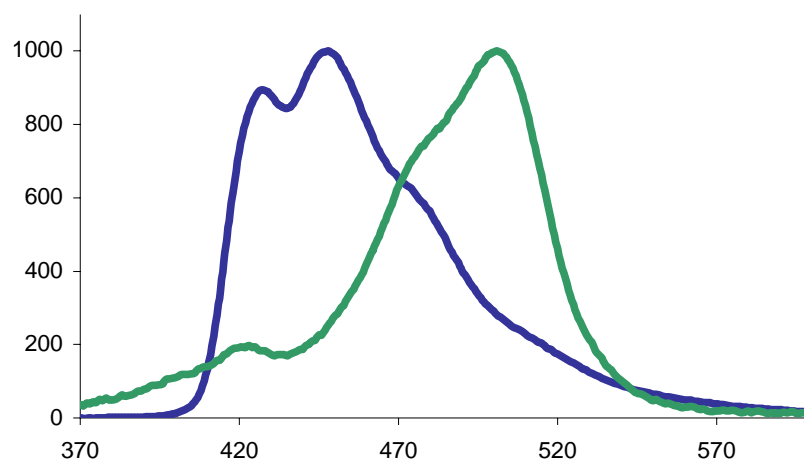
FRET-mediated excitation ($\lambda_{\text{ex}} = 328\text{nm}$, $\lambda_{\text{em}} = 539\text{nm}$) of TO (0.5 μM) in presence of 22AG (0.25 μM) and increasing amounts of BOQ₁ in a 10mM sodium cacodylate buffer pH 7.3 100mM KCl.

Figure S2 – Titration Curves TO/TBA (501nm)



Fluorescence intensity ($\lambda_{\text{ex}} = 501\text{nm}$) of TO ($1\mu\text{M}$) under addition of increasing amounts of TBA in a 10mM sodium cacodylate buffer pH 7.3 100mM KCl. Experimental (black diamonds) and calculated (Specfit32 version 3.0, *Spectrum Software Associates*, Marlborough, MA, U.S.A.) titration curves (plain black line for 1:1 fit and red dashed line for 2:1 fit respectively).

Figure S3 – Spectral characteristics of MMQ₁ and TO



Spectral overlap between fluorescence emission ($\lambda_{\text{ex}} = 328\text{nm}$) of MMQ₁ (0.5 μM , 10mM sodium cacodylate buffer pH 7.3 100mM KCl, blue) and UV-Vis absorption of TO (2.5 μM , 10mM sodium cacodylate buffer pH 7.3 100mM KCl, green).