



Excitation and emission spectra of unconjugated Cy3 dye in phosphate buffered saline.

Properties	
Excitation maximum (nm)	548
Emission maximum (nm)	562
Extinction coefficient (M ⁻¹ cm ⁻¹)	150 000 *
Quantum yield	0.04*
Fluorescence lifetime (ns)	< 0.3

* Measured in phosphate-buffered saline, Mujumdar, R. B., Ernst, L. A., Mujumdar, S. R., Lewis, C. J., and Waggoner, A. S. (1993) Bioconjugate Chem. 4, 105-111.

(Note: The quantum yield of Cy3 is significantly increased when in a rigid microenvironment, for example in highly viscous solvents, or when conjugated to biomolecules).

Upon attachment to biomolecules (for example oligonucleotides), negligible shifts in excitation and emission wave length have been observed. In addition no effects on these spectral characteristics have been observed in the presence of 10% DMSO or under a range of pH conditions.