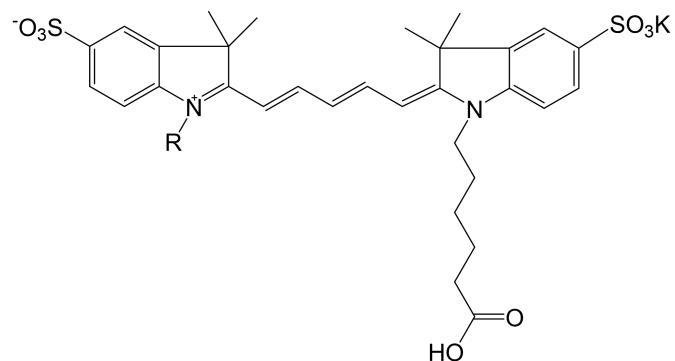
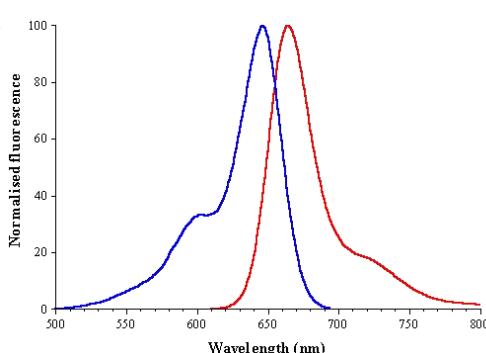


Cy5

## Structure



## Spectra



MW = 694.90

## Excitation and emission spectra of unconjugated Cy5 dye in phosphate buffered saline.

Properties	
Excitation maximum (nm)	646
Emission maximum (nm)	664
Extinction coefficient ( $M^{-1} cm^{-1}$ )	250 000 *
Quantum yield	0.27 *
Fluorescence lifetime (ns)	1.0

\* 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.

Upon attachment to biomolecules (for example oligonucleotides), negligible shifts in excitation and emission wavelength 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.