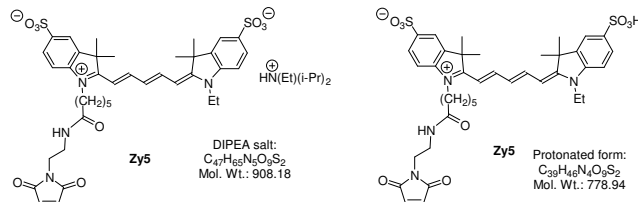


General Data



Molecular Mass: 908.18 (with counter ions)
778.94 (protonated form)
778.94 (attached to biomolecules)

Solubility: water, alcohol, DMF, DMSO

Insoluble: acetone, chloroform, toluene

Storage: Store in absence of light, desiccated and refrigerate

Description

- Thiol-reactive fluorescent label containing one reactive maleimide group. Structurally identical with **Cy5TM** (GE).

Applications

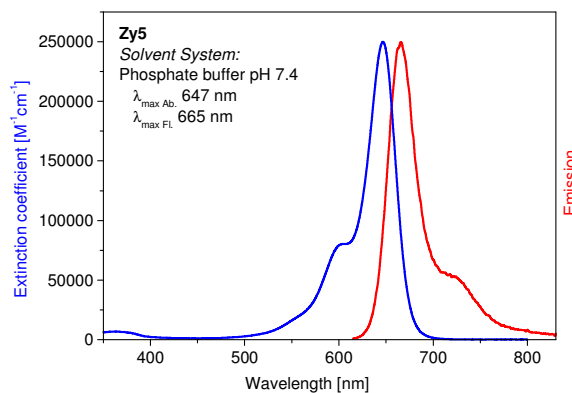
- Covalent labeling of thiol-modified biomolecules.

Spectral Data

Solvent system: phosphate buffer, pH 7.4

Sample	Absorption max. [nm]	Extinction Coefficient [$M^{-1}\cdot cm^{-1}$]	Fluorescence max. [nm]	Quantum Yield [%]	Fluorescence Lifetime [ns]
Zy5	647	250,000 ^[1]	665	27 ^[1] ; 28 ^[2]	1.0 ^[2]

[1] R.B. Mujumdar, L.A. Ernst, S.R. Mujumdar, C.J. Lewis, A.S. Waggoner. Cyanine dye labeling reagents: sulfoindocyanine succinimidyl esters. *Bioconj. Chem.* (1993), 4, 105–111. [2] Texier I., Goutayer M., Da Silva A., Guyon L., Djaker N., Jossierand V., Neumann E., Bibette J., Vinet F. Cyanine-loaded lipid nanoparticles for improved in vivo fluorescence imaging. *J. Biomed. Opt.* (2009), 14:054005.



Absorption and emission spectrum of **Zy5** in phosphate buffer (pH 7.4)