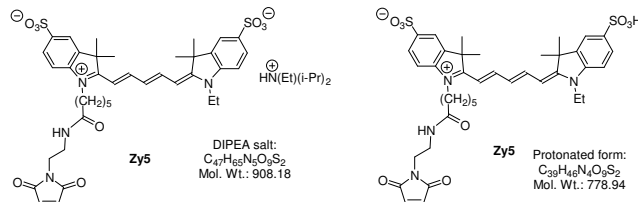


## General Data



**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 **Cy5<sup>TM</sup>** (GE).

## Applications

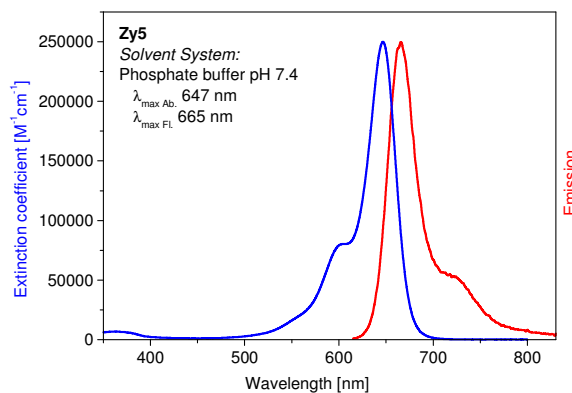
- Covalent labeling of thiol-modified biomolecules.

## 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]
<b>Zy5</b>	647	250,000 <sup>[1]</sup>	665	27 <sup>[1]</sup> ; 28 <sup>[2]</sup>	1.0 <sup>[2]</sup>

[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)