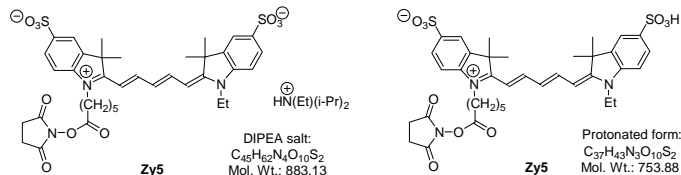


General Data



CAS number: 146368-14-1

Molecular Mass: 883.13

753.88 (protonated)

638.79 (add to biomolecule)

Solubility: Water, Alcohol, DMF, DMSO

Insoluble: Acetone, Chloroform, Toluene

Storage: Store in absence of light, desiccated and refrigerate

Description

- Amine-reactive fluorescent label containing one reactive NHS-ester groups. Structurally identical with **Cy5TM** (GE).

Applications

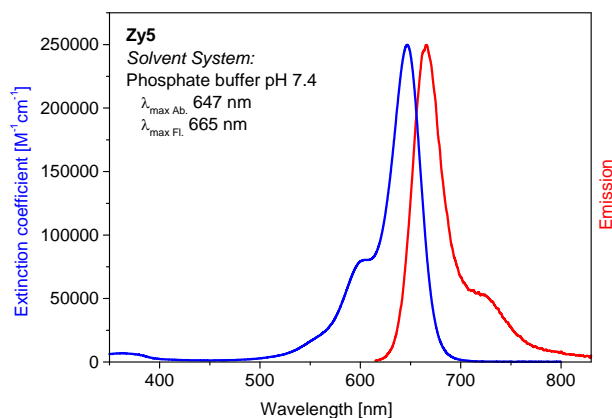
- Covalent labeling of proteins, amino-modified DNA and amino-modified oligonucleotides.

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)