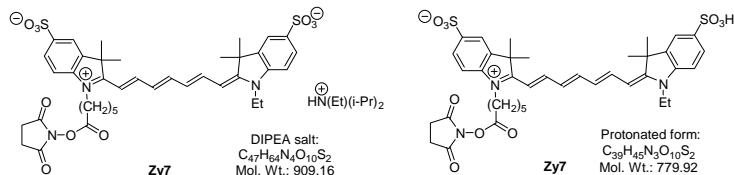


General Data



- Molecular Mass:** 909.16
779.92 (protonated)
664.83 (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 **Cy7TM** (GE).

Applications

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

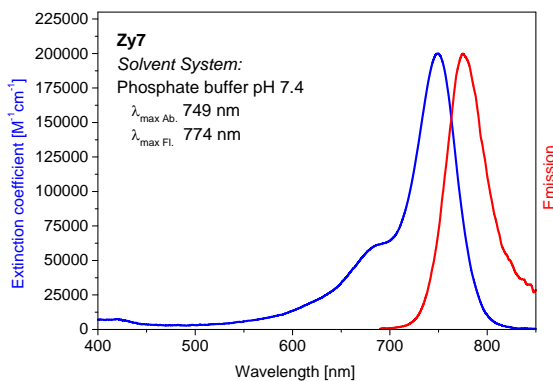
Spectral Data

Solvent system: phosphate buffer, pH 7.4

Sample	Absorption max. [nm]	Extinction Coefficient [M ⁻¹ cm ⁻¹]	Fluorescence max. [nm]	Quantum Yield [%]	Fluorescence Lifetime [ns]
Zy7	749 ^[1]	200,000 ^[2]	774 ^[1]	13 ^[1]	0.57±0.03 ^[1]

[1] Texier I., Goutayer M., Da Silva A., Guyon L., Djaker N., Josserand V., Neumann E., Bibette J., Vinet F. Cyanine-loaded lipid nanoparticles for improved in vivo fluorescence imaging. J. Biomed. Opt. (2009), 14:054005.

[2] 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.



Absorption and emission spectrum of **Zy7** in phosphate buffer (pH 7.4)