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sulfo-Cyanine7 NHS ester

http://www.lumiprobe.com/p/sulfo-cy7-nhs-ester

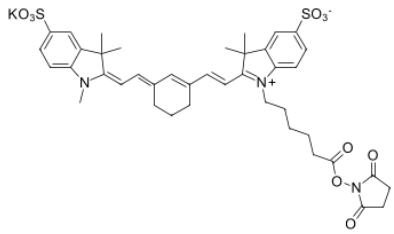
Water-soluble near-infrared dye sulfo-Cyanine7, an amine-reactive succinimide ester.

sulfo-Cyanine7 is an improved analog of Cy7® fluorophore with quantum yield improved by 20%, and higher photostability. This fluorescent dye is especially useful for NIR imaging.

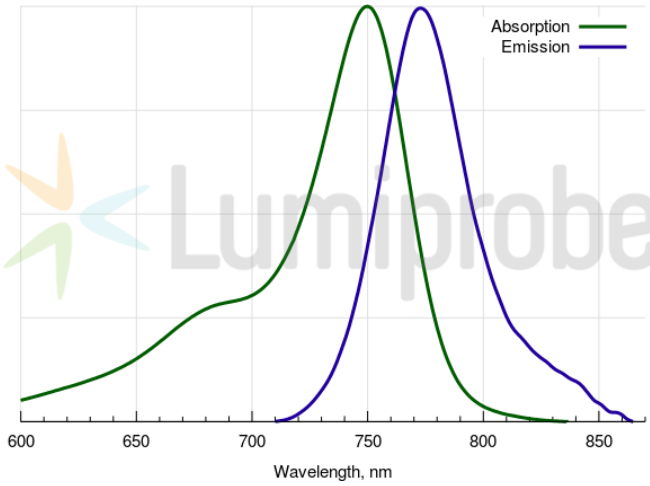
Near-infrared fluorescent imaging takes advantage of the transparency of biological tissues at a particular range of wavelengths. The method is non-destructive and allows to monitor of the distribution of various labeled molecules in live organisms.

sulfo-Cyanine7 NHS ester reagent allows to prepare sulfo-Cyanine7-labeled biomolecules, such as proteins, with ease. Dye-labeled molecules can be subsequently used for various research and drug design-related experiments.

This reagent has high water solubility and is especially useful for labeling delicate proteins and proteins prone to denaturation. Non-sulfonated Cyanine7 NHS ester soluble in the organic phase is also available.



sulfo-Cyanine7 NHS ester structure



sulfo-Cyanine7 absorbance and emission spectra

General properties

Appearance:	dark green powder
Molecular weight:	844.05
CAS number:	1603861-95-5 (potassium salt); 1604244-45-2 (inner salt); 477908-53-5 (N-Ethyl)
Molecular formula:	$C_{41}H_{46}N_3KO_{10}S_2$
Solubility:	good in water, DMF, DMSO
Quality control:	NMR ^1H, HPLC-MS (95%)
Storage conditions:	Storage: 12 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.

Spectral properties

Excitation/absorption maximum, nm:	750
ε, $L \cdot mol^{-1} \cdot cm^{-1}$:	240600
Emission maximum, nm:	773
Fluorescence quantum yield:	0.24
CF_{260}:	0.04
CF_{280}:	0.04