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sulfo-Cyanine7 NHS ester

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

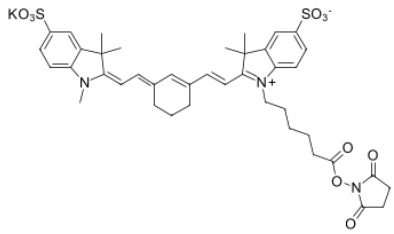
Water-soluble near-infrared dye sulfo-Cyanine7, an amine-reactive succinimide ester.

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.

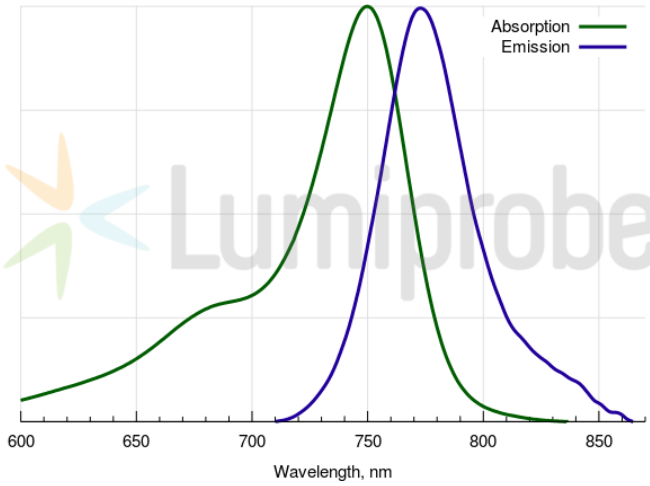
Near-infrared fluorescent imaging takes advantage of the transparency of biological tissues at a particular range of wavelengths. The method is non-destructive and allows to monitor of the distribution of various labeled molecules in live organisms.

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



Absorption and emission spectra of sulfo-Cyanine7

General properties

Appearance:	dark green powder
Molecular weight:	844.05
CAS number:	1603861-95-5 (potassium salt); 1604244-45-2 (inner salt)
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.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.

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