

## Sulfo-Cyanine7 NHS ester

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

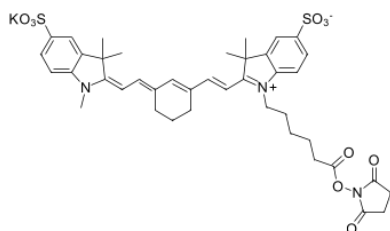
Water soluble near infrared dye sulfo-Cyanine7, an amine-reactive succinimide ester.

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.

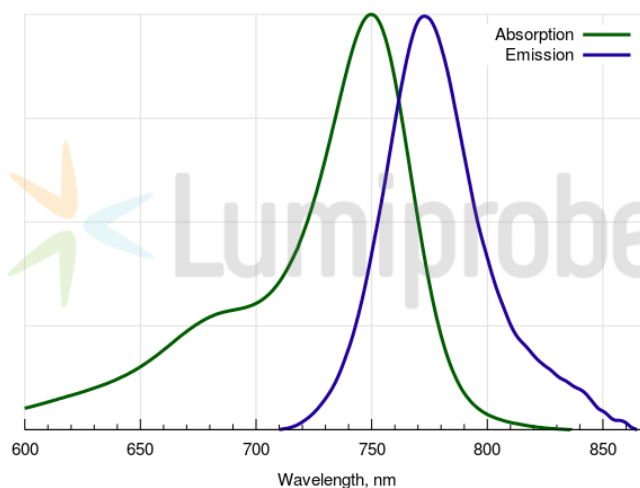
Near infrared fluorescent imaging takes advantage of transparency of biological tissues at particular range of wavelengths. The method is non-destructive, and allows to monitor distribution of various labeled molecules in live organisms.

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 the labeling of delicate proteins, and proteins prone to denaturation. Non-sulfonated [Cyanine7 NHS ester](#) soluble in 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 <sub>41</sub> H <sub>46</sub> N <sub>3</sub> KO <sub>10</sub> S <sub>2</sub>
Solubility:	good in water, DMF, DMSO
Quality control:	NMR <sup>1</sup> H, HPLC-MS (95%)
Storage conditions:	Storage: 12 months after receipt 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·mol <sup>-1</sup> ·cm <sup>-1</sup> :	240600
Emission maximum, nm:	773
CF <sub>260</sub> :	0.04
CF <sub>280</sub> :	0.04