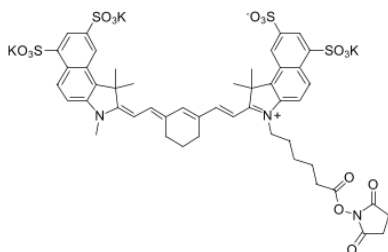


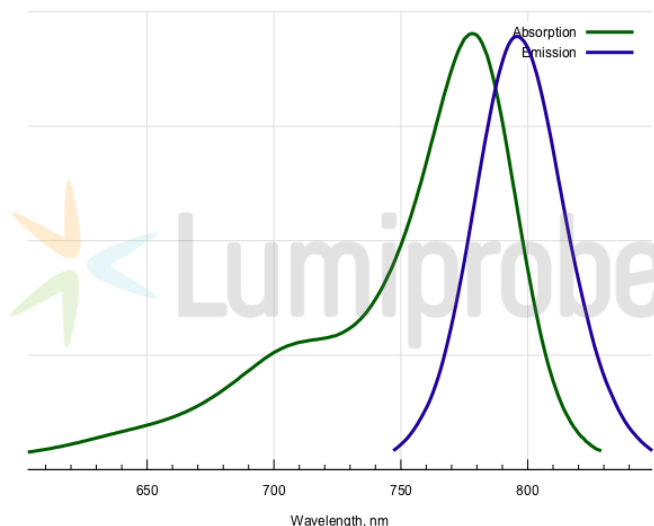
## sulfo-Cyanine7.5 NHS ester

<http://www.lumiprobe.com/p/sulfo-cy75-nhs-ester>

sulfo-Cyanine7.5 is a near-infrared water-soluble and hydrophilic dye for the NIR imaging applications. The structure and spectra of the dye resemble indocyanine green (ICG) which has been approved for use in humans for years. However, unlike ICG, sulfo-Cyanine7.5 contains a trimethylene bridge that increases its quantum yield compared to ICG and has a linker arm for its attachment to proteins, peptides, and other molecules. This derivative is an NHS ester for the modification of amine groups.



**Structure of sulfo-Cyanine7.5 NHS ester**



**Absorption and emission spectra of sulfo-Cyanine7.5**

### General properties

Appearance:	dark green solid
Mass spec M+ increment:	950.2
Molecular weight:	1180.47
Molecular formula:	C <sub>49</sub> H <sub>48</sub> N <sub>3</sub> K <sub>3</sub> O <sub>16</sub> S <sub>4</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:	778
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	222000
Emission maximum, nm:	797
Fluorescence quantum yield:	0.21
CF <sub>260</sub> :	0.09
CF <sub>280</sub> :	0.09