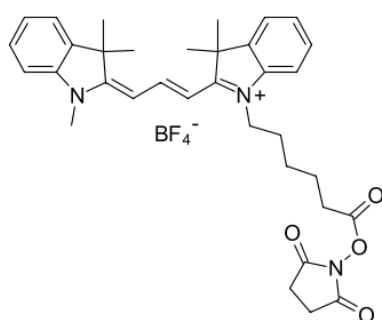


## Cyanine3 NHS ester

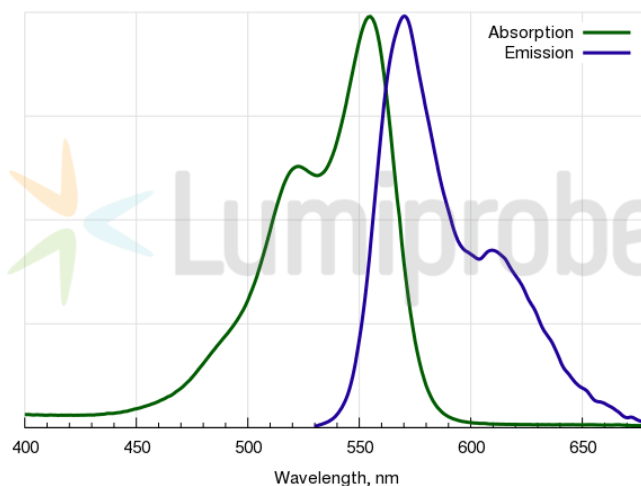
<http://www.lumiprobe.com/p/cy3-nhs-ester>

Cyanine3 NHS ester is a reactive dye for the labeling of amino-groups in biomolecules, an analog of Cy3® NHS ester. This reagent is ideal for the labeling of soluble proteins, peptides, and oligonucleotides/DNA. For delicate proteins consider using water-soluble [sulfo-Cyanine3 NHS ester](#) which does not require use of any co-solvent.

Cyanine3 NHS ester is a replacement for NHS esters of Cy3® and DyLight 549.



**Structure of Cyanine3 NHS ester**



**Absorption and emission spectra of Cyanine3**

### General properties

Appearance:	red powder
Mass spec M+ increment:	439.5
Molecular weight:	641.5
CAS number:	2632339-91-2
Molecular formula:	C <sub>34</sub> H <sub>40</sub> N <sub>3</sub> BF <sub>4</sub> O <sub>4</sub>
IUPAC name:	3H-Indolium, 2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propen-1-yl]-1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-3,3-dimethyl-, tetrafluoroborate
Solubility:	poorly soluble in water (2.3 mM = 1.5 g/L), soluble in organic solvents (DMF, DMSO, dichloromethane)
Quality control:	NMR <sup>1</sup> H and 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:	555
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	150000
Emission maximum, nm:	570
Fluorescence quantum yield:	0.31
CF <sub>260</sub> :	0.04
CF <sub>280</sub> :	0.09

Cy® is a trademark of Cytiva.