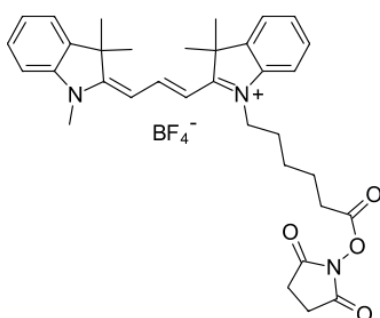


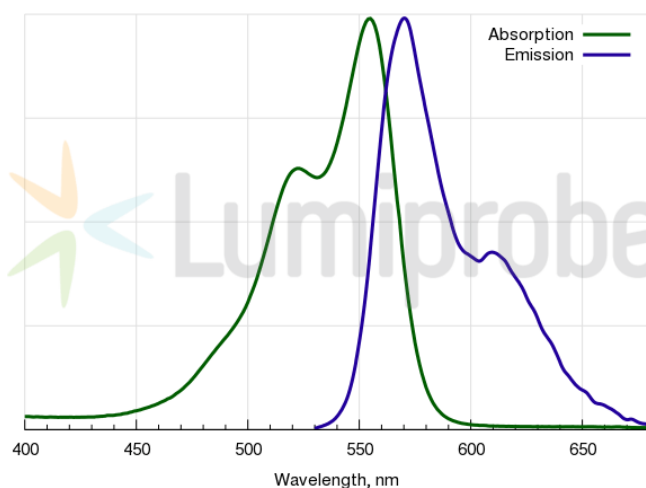
Cyanine3 NHS ester

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®, Alexa Fluor 546, and DyLight 549.



Structure of Cyanine3 NHS ester



Absorption and emission spectra of Cyanine3 fluorophore

General properties

Appearance:	red powder
Mass spec M+ increment:	474.2
Molecular weight:	641.5
CAS number:	1393427-85-4 (without anion), 1393363-07-9 (chloride)
Molecular formula:	C ₃₄ H ₄₀ N ₃ BF ₄ O ₄
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-pyrrolidinyloxy]-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 ¹ 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.
TN VED Code:	3204190000

Spectral properties

Excitation maximum, nm:	555
ε, L·mol ⁻¹ ·cm ⁻¹ :	150000
Emission maximum, nm:	570
Fluorescence quantum yield:	0.31
CF ₂₆₀ :	0.04
CF ₂₈₀ :	0.09

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