

## sulfo-Cyanine3 NHS ester

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

Water soluble, amino-reactive sulfo-Cyanine3 NHS ester that efficiently labels proteins and peptides in purely aqueous solution without needing organic co-solvent. Ideal for proteins with low solubility and proteins prone to denaturation.

This is the sulfonated, hydrophilic, and water-soluble dye. Non-sulfonated Cyanine3 NHS ester is also available.

This product is an analog of Cy3® NHS ester. sulfo-Cyanine3 NHS ester replaces Cy3® and DyLight 549 for all applications.





sulfo-Cyanine3 NHS ester structure

sulfo-Cyanine3 absorbance and emission spectra

General properties	
Appearance:	dark red crystals
Molecular weight:	751.91
CAS number:	1424150-38-8 (sodium salt); 1424433-17-9, 1518643-34-9 (inner salt)
Molecular formula:	$C_{34}H_{38}N_3KO_{10}S_2$
IUPAC name:	3H-Indolium, 2-[3-(1,3-dihydro-1,3,3-trimethyl-5-sulfo-2H-indol-2-ylidene)-1-propen-1- yl]-1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-3,3-dimethyl-5-sulfo-, inner salt, sodium salt
Solubility:	soluble in water (0.62 M = 47 g/L), in polar organic solvents (DMF, DMSO)
Quality control:	NMR <sup>1</sup> H, 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.

## **Spectral properties**

Excitation/absorption maximum, nm: 548		
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	162000	
Emission maximum, nm:	563	
Fluorescence quantum yield:	0.1	
CF <sub>260</sub> :	0.03	
CF <sub>280</sub> :	0.06	

Cy® is a trademark of Cytiva.