

Sulfo-Cyanine3 NHS ester

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

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

This is 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.



Water soluble sulfo-Cy3 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 ₃ KO 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 ¹ 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:	548
ε, L·mol ⁻¹ ·cm ⁻¹ :	162000
Emission maximum, nm:	563
Fluorescence quantum yield:	0.1
CF ₂₆₀ :	0.03
CF ₂₈₀ :	0.06

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