

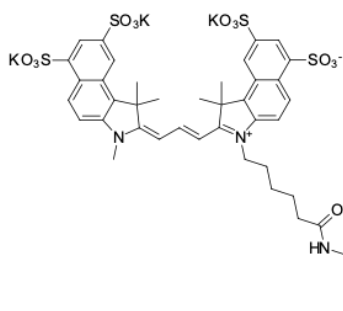
sulfo-Cyanine3.5 azide

<http://www.lumiprobe.com/p/sulfo-cy35-azide>

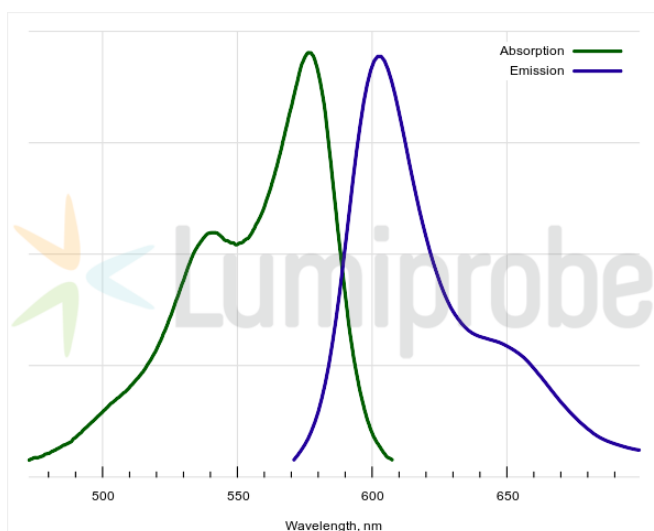
sulfo-Cyanine3.5 is a fluorescent dye with absorption and emission spectra between those of Cyanine3 and Cyanine5. Because of its spectral characteristics, this fluorophore is widely used in BRET and FRET experiments both as a pair donor and acceptor.

sulfo-Cyanine3.5 is a sulfonated derivative of Cyanine3.5 dye because it contains four additional sulfo groups, which ensures high water solubility of the dye and its conjugates. This allows working with this reagent in aqueous solutions without adding organic solvents.

This reagent is an azide derivative of sulfo-Cyanine3.5 dye for click chemistry reactions. The azide group allows conjugating the fluorophore with molecules containing alkyne or cycloalkyne groups, including various biomolecules, small molecules, and polymers, using copper-catalyzed click chemistry and copper-free SPAAC reaction.



Structure of sulfo-Cyanine3.5 azide



Absorption and emission spectra of sulfo-Cyanine3.5

General properties

Appearance:	dark colored solid
Mass spec M+ increment:	959.2
Molecular weight:	1073.37
Molecular formula:	C ₄₁ H ₄₃ N ₆ K ₃ O ₁₃ S ₄
Solubility:	good in water, DMF, DMSO
Quality control:	NMR ¹ H, HPLC-MS (95%)
Storage conditions:	Storage: 24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light.

Spectral properties

Excitation/absorption maximum, nm:	576
ε, L·mol ⁻¹ ·cm ⁻¹ :	139000
Emission maximum, nm:	603
Fluorescence quantum yield:	0.11
CF ₂₆₀ :	0.16
CF ₂₈₀ :	0.17