

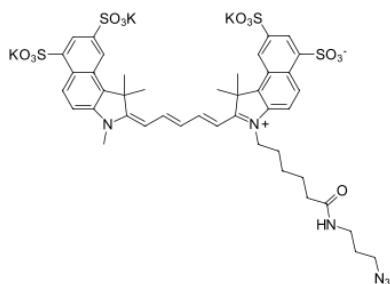
sulfo-Cyanine5.5 azide

<http://www.lumiprobe.com/p/sulfo-cy55-azide>

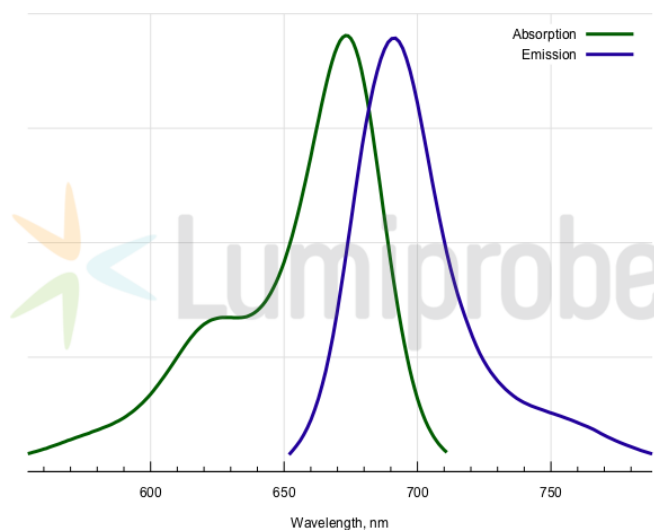
sulfo-Cyanine5.5 is a water-soluble, hydrophilic fluorophore with emission in the far-red area of the spectrum, an analog of Cy5.5®. Like other cyanine dyes, sulfo-Cyanine5.5 has an outstanding molar extinction coefficient, giving rise to its bright fluorescence. The molecule contains four sulfo groups that provide hydrophilicity and negative charge to the fluorophore — this minimizes non-specific binding.

The azide group of Sulfo-Cyanine5.5 azide can be conjugated with terminal alkynes in the presence of copper(I) catalyst or with cycloalkynes in copper-free strain-promoted reaction.

The reagent possesses high hydrophilicity and is recommended for labeling biomolecules in an aqueous environment.



Structure of sulfo-Cyanine5.5 azide



Absorption and emission spectra of sulfo-Cyanine5.5

General properties

Appearance:	dark colored solid
Mass spec M+ increment:	984.2
Molecular weight:	1099.41
CAS number:	2382994-65-0
Molecular formula:	C ₄₃ H ₄₅ K ₃ N ₆ 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. Desiccate.

Spectral properties

Excitation/absorption maximum, nm:	673
ε, L·mol ⁻¹ ·cm ⁻¹ :	211000
Emission maximum, nm:	691
Fluorescence quantum yield:	0.21
CF ₂₆₀ :	0.09
CF ₂₈₀ :	0.11