

Lumiprobe Corporation

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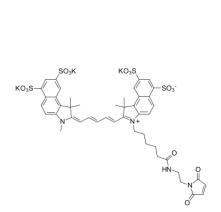
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sulfo-Cyanine 5.5 maleimide

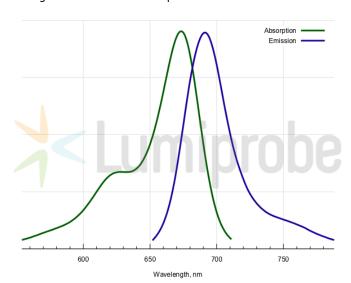
http://www.lumiprobe.com/p/sulfo-cy55-maleimide

sulfo-Cyanine5.5 dye is a water-soluble far-red to NIR emitting dye that is very hydrophilic due to the presence of four sulfo groups. sulfo-Cyanine5.5 derivatives exhibit high water solubility. The dye is perfect for labeling sensitive proteins, nanoparticles, and highly hydrophilic biopolymers.

This maleimide is a thiol-reactive dye that selectively labels cysteine residues. Disulfide bonds of native proteins should be reduced with an appropriate reducing agent, such as TCEP, according to our recommended protocol.



Structure of Sulfo-Cyanine 5.5 maleimide



Absorption and emission spectra of sulfo-Cyanine 5.5

General properties

Appearance: dark colored solid

Mass spec M+ increment: 1024.2
Molecular weight: 1139.43

CAS number: 2183440-58-4 (potassium salt); 2183440-57-3 (inner salt)

Molecular formula: $C_{46}H_{45}K_3N_4O_{15}S_4$

Solubility: good in water, DMSO, DMF Quality control: NMR ¹H, 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.

Legal statement: This Product is offered and sold for research purposes only. It has not been tested for

safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food

or pharmaceutical products, in medical devices or in cosmetic products.

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