Lumiprobe Corporation
201 International Circle, Suite 135
Hunt Valley, Maryland 21030
USA
Phone: +1 888 973 6353
Fax: +1 888 973 6354
Email: order@lumiprobe.com

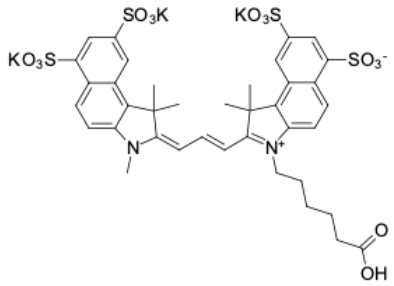
sulfo-Cyanine3.5 carboxylic acid

http://www.lumiprobe.com/p/sulfo-cy35-carboxylic-acid

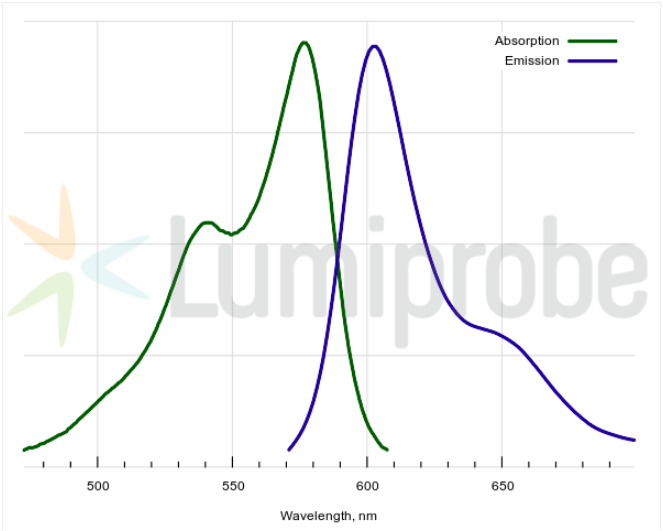
sulfo-Cyanine3.5 is a cyanine fluorophore with fluorescence in the orange spectrum range. Its absorption and emission spectra are between those of Cyanine3 and Cyanine5.

This dye is a sulfonated form of Cyanine3.5 (contains four sulfo groups), so it has good solubility and can be used in reactions without adding organic solvents.

This reagent is a derivative with a free carboxyl group. Because of its inactivity in physiological conditions, sulfo-Cyanine3.5 carboxylic acid derivative can be used as a negative control in experiments with active dye derivatives. The carboxylic acid can be activated with carbodiimides (e. g. EDAC) and react with hydrazines, hydroxylamines, and amines.



Structure of Sulfo-Cyanine3.5 carboxylic acid



Absorption and emission spectra of sulfo-Cyanine3.5

General properties

Appearance:	dark colored solid
Molecular weight:	991.26
Molecular formula:	$C_{38}H_{37}N_2K_3O_{14}S_4$
Solubility:	good in water, DMF, DMSO
Quality control:	NMR ^1H, HPLC-MS (95%)
Storage conditions:	Storage: 24 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:	576
ε, $L \cdot mol^{-1} \cdot cm^{-1}$:	139000
Emission maximum, nm:	603
Fluorescence quantum yield:	0.11
CF_{260}:	0.16
CF_{280}:	0.17