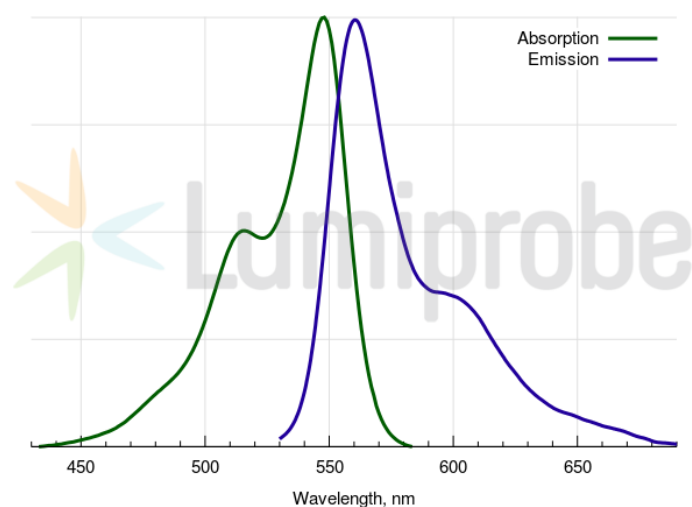


sulfo-Cyanine3-PEG3-biotin

<http://www.lumiprobe.com/p/sulfo-cyanine3-biotin>

This fluorescent conjugate is useful for streptavidin-based fluorescent assays and visualization of the streptavidin/avidin-labeled biomolecules. Streptavidin, a protein with a high affinity to biotin, has four binding centers for biotin. The high stability of biotin/streptavidin complex gives the opportunity to build different kinds of assays. For example, a target molecule with affinity to the surface can be conjugated with biotin and immobilized on a solid surface. After it, streptavidin can be bound to the biotinylated surface and washed. Then, bound streptavidin on the surface can be visualized with the biotin-dye conjugate.

The long and hydrophilic PEG3 linker facilitates binding and decreases nonspecific interactions.



Absorption and emission spectra of sulfo-Cyanine3

General properties

Appearance:	dark colored solid
Molecular weight:	1011.32
Molecular formula:	$C_{46}H_{63}N_6KO_{11}S_3$
Solubility:	good in water, DMF, DMSO
Quality control:	NMR 1H , HPLC-MS (95%)
Storage conditions:	Storage: 24 months after receipt at $-20^\circ C$ 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 , $L \cdot mol^{-1} \cdot cm^{-1}$:	162000
Emission maximum, nm:	563
Fluorescence quantum yield:	0.1
CF_{260} :	0.03
CF_{280} :	0.06