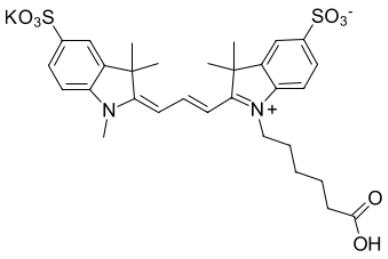
Lumiprobe Corporation
115 Airport Dr Suite 160
Westminster, Maryland 21157
USA
Phone: +1 888 973 6353
Fax: +1 888 973 6354
Email: order@lumiprobe.com

sulfo-Cyanine3 carboxylic acid

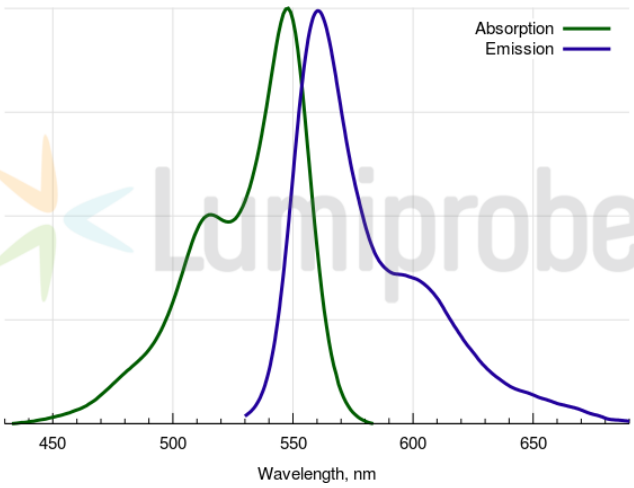
http://www.lumiprobe.com/p/sulfo-cy3-carboxylic-acid

Water soluble sulfo-Cyanine3 dye, free unactivated monofunctional carboxylic acid. This reagent can be used as a reference fluorophore for Cy3® detection channel, as a control in experiments with other sulfo-Cyanine3 labeled products. Carboxylic acid can be also activated with carbodiimides.

Absorbance and emission spectra are identical with Cy3® fluorophore.



sulfo-Cy3 carboxylic acid fluorophore structure



Sulfo-Cyanine3 absorbance and emission spectra

General properties

Appearance:	dark red crystals
Molecular weight:	654.84
CAS number:	1121756-11-3 (inner salt); 1941997-61-0 (sodium salt)
Molecular formula:	$C_{30}H_{35}N_2KO_8S_2$
IUPAC name:	3H-Indolium, 2-[3-[1-(5-carboxypentyl)-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1-propen-1-yl]-1,3,3-trimethyl-5-sulfo-, inner salt, potassium salt
Solubility:	Well soluble in water, DMF, DMSO (0.55 M = 360 g/L). Practically insoluble in non-polar organic solvents.
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.

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