

## **Lumiprobe Corporation**

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USA

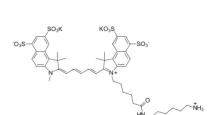
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## sulfo-Cyanine 5.5 amine

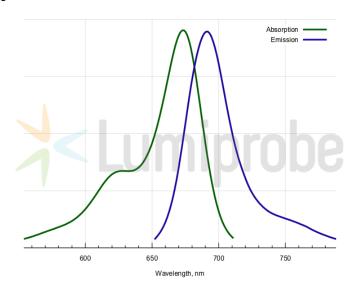
http://www.lumiprobe.com/p/sulfo-cy55-amine

sulfo-Cyanine5.5 is a water-soluble cyanine dye for far red / NIR applications such as in vivo imaging. The dye possesses four sulfonate groups, rendering it highly hydrophilic and water-soluble. As well as other cyanines, sulfo-Cyanine5.5 has an outstanding extinction coefficient that makes it a bright fluorescent label for the far-red region.

This is an amine-containing fluorescent dye. The amine group is separated from the fluorophore by a relatively long linker that facilitates conjugation. The aliphatic primary amine group can be coupled with various electrophiles (activated esters, epoxides, etc.) and used in enzymatic transamination labeling.



Structure of sulfo-Cyanine 5.5 amine



Absorption and emission spectra of sulfo-Cyanine5.5 fluorophore

## neral properties

 $\begin{array}{lll} \mbox{Appearance:} & \mbox{dark blue solid} \\ \mbox{Molecular weight:} & 1077.41 \\ \mbox{CAS number:} & 2183440-46-0 \\ \mbox{Molecular formula:} & C_{44}H_{34}K_2N_4O_{15}S_4 \\ \end{array}$ 

UPAC name: (E)-4([26.46]-5(-5(-6.4minohexylamino)-6-oxohexyl]-3,3-dimethyl-10,12-bis(oxysulfonyl)-5-azatricyclo[7.4.0.02,6]trideca-1,4,6,8,10,12-hexaen-4-yl]-2,4-pentadienylidene]-3,3-dimethyl-5-azatricyclo[7.4.0.02,6]trideca-1,6,8,10,12-pentaene-10,12-disulfonic acid dipotassium salt

Solubility: good in water, DMF, DMSO
Quality control: NMR <sup>2</sup>H, 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