

Lumiprobe Corporation

201 International Circle, Suite 135 Hunt Valley, Maryland 21030

USA

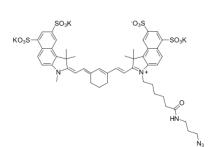
Phone: +1 888 973 6353 Fax: +1 888 973 6354 Email: order@lumiprobe.com

sulfo-Cyanine7.5 azide

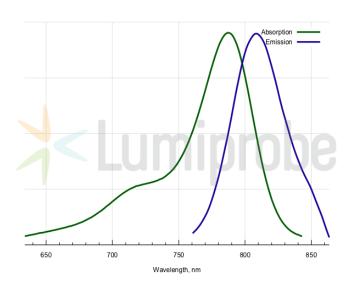
http://www.lumiprobe.com/p/sulfo-cy75-azide

sulfo-Cyanine7.5 is a heptamethyne cyanine dye for the near-infrared region of the spectrum, which is very hydrophilic and water-soluble. The fluorophore resembles ICG (Indocyanine Green), has a long history of *in vivo* use, and is even approved for human angiography. However, compared to ICG, sulfo-Cyanine7.5 has a significantly improved fluorescence quantum yield due to the rugged polymethine chain reinforced with a trimethylene bridge.

sulfo-Cyanine7.5 is available as a number of reactive derivatives. This azide can be used for the easy labeling of various biomolecules by copper-catalyzed or copper-free click chemistry.



Structure of Sulfo-Cyanine 7.5 azide



Absorption and emission spectra of sulfo-Cyanine7.5 fluorophore

General properties

Appearance: dark colored solid

Mass spec M+ increment: 1050.3 Molecular weight: 1165.51

Molecular formula: $C_{48}H_{51}N_6K_3O_{13}S_4$

Solubility: good in water, DMSO, DMF 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: 778 ϵ , L·mol $^{-1}$ ·cm $^{-1}$: 222000 Emission maximum, nm: 797 Fluorescence quantum yield: 0.21 CF_{260} : 0.09 CF_{280} : 0.09