

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

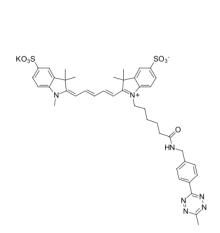
sulfo-Cyanine5 tetrazine

http://www.lumiprobe.com/p/sulfo-cy5-tetrazine

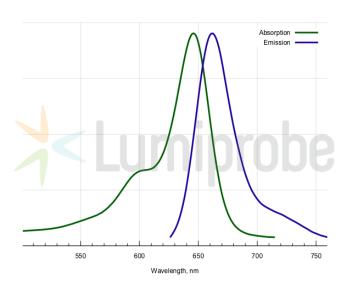
TCO (tetrazine – *trans*-cyclooctene) ligation is one of the fastest reactions used for bioconjugation. It is an inverse electron demand [4+2] cycloaddition that takes place between tetrazine and *trans*-cyclooctene or other strained olefins.

sulfo-Cyanine5 tetrazine is a fluorophore derivative bearing a tetrazine group for the TCO-ligation-based labeling.

This reagent possesses good aqueous solubility and stability in biological environments.



Sulfo-Cyanine5 tetrazine structure



Absorption and emission spectra of Sulfo-Cyanine5

General properties

Appearance: dark blue solid

Molecular weight: 864.09

Molecular formula: $C_{42}H_{46}KN_7O_7S_2$

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: 646 ϵ , L·mol $^{-1}$ ·cm $^{-1}$: 271000 Emission maximum, nm: 662 Fluorescence quantum yield: 0.28 CF_{260} : 0.04 CF_{280} : 0.04