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

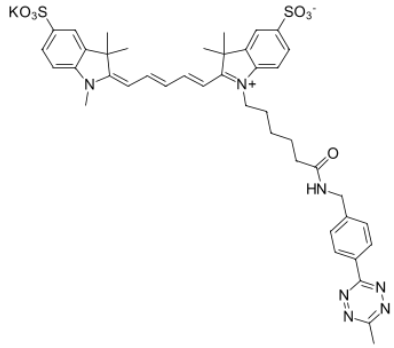
sulfo-Cyanine5 tetrazine

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

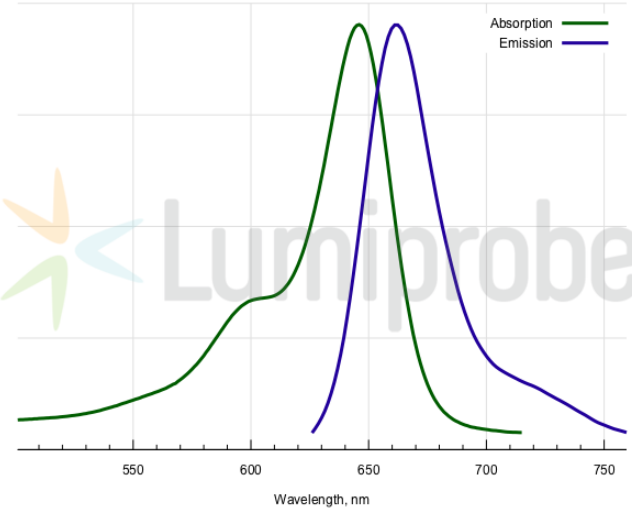
TCO (tetrazine – *trans*-cyclooctene) ligation is one of the fastest reactions used for bioconjugation. It is an inverse electron demand [4+2] cycloaddition that takes place between tetrazine and *trans*-cyclooctene or other strained olefins.

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