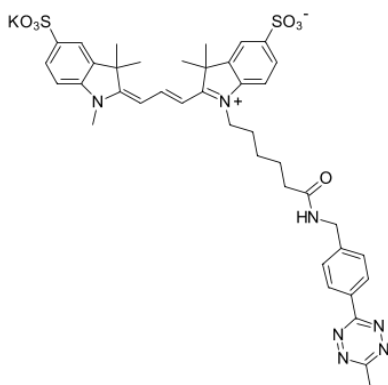


## Sulfo-Cyanine3 tetrazine

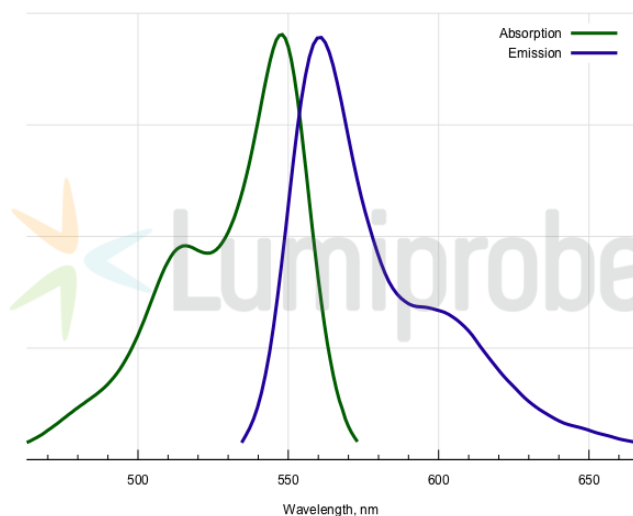
Tetrazine - *trans*-cyclooctene ligation is among the fastest bioconjugation reactions known to date.

This water soluble sulfo-Cyanine3 derivative contains methyltetrazine moiety for the coupling with *trans*-cyclooctenes. Methyltetrazines possess optimal stability at physiological pH, while maintaining extremely high reactivity towards cyclooctenes.

The fluorophore is bright, photostable, and is also very well visible with naked eye.



**Structure of sulfo-Cy3 tetrazine**



**Absorption and emission spectra of sulfo-Cyanine3 fluorophore**

### General properties

Appearance: red powder

Molecular weight: 838.05

Molecular formula:  $C_{40}H_{44}KN_4O_6S_2$

IUPAC name: Potassium (E)-2-[(E)-3-{3,3-Dimethyl-1-[6-({[p-(6-methyl-1,2,4,5-tetrazin-3-yl)phenyl]methyl}amino)-6-oxohexyl]-5-(oxysulfonyl)-3H-indol-2-yl]-2-propenylidene]-1-methyl-3,3-dimethyl-5-indolinesulfonate

Solubility: soluble in water (0.43 M = 36 g/L), DMF, DMSO

Quality control: NMR  $^1H$ , HPLC-MS (95%)

Storage conditions: Storage: 24 months after receipt at  $-20^\circ C$  in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.

TN VED Code: 3204190000

### Spectral properties

Excitation maximum, nm: 548

$\epsilon$ ,  $L \cdot mol^{-1} \cdot cm^{-1}$ : 162000

Emission maximum, nm: 563

Fluorescence quantum yield: 0.1

$CF_{280}$ : 0.03

$CF_{380}$ : 0.06

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