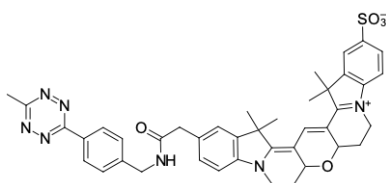


## Cyanine3B tetrazine

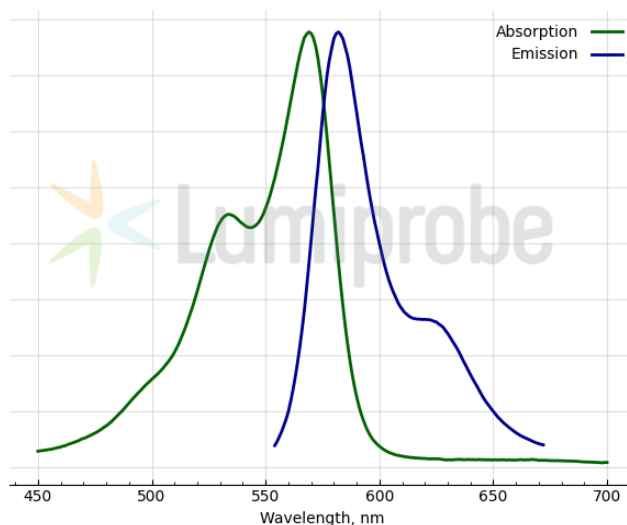
<http://www.lumiprobe.com/p/cy3b-tetrazine>

Cyanine3B methyltetrazine derivative for Inverse electron demand Diels-Alder (IEDDA) conjugation with strained olefins and terminal alkenes. IEDDA is the fastest cycloaddition reaction among click reactions known. Methyltetrazines have optimal physiological pH stability while maintaining extremely high reactivity towards cyclooctenes. Tetrazines also react with some strained cycloalkynes.

Cyanine3B is a yellow-emitting cyanine dye. It is an improved version of the Cyanine3 fluorophore, with significantly higher fluorescence quantum yield and photostability.



**Structure of Cyanine3B tetrazine**



**Absorption and emission spectra of Cyanine3B**

### General properties

Appearance:	red powder
Molecular weight:	743.89
Molecular formula:	C <sub>41</sub> H <sub>41</sub> N <sub>7</sub> O <sub>3</sub> S
Solubility:	good in DCM, DMSO, DMF
Quality control:	NMR <sup>1</sup> H and HPLC-MS (95+%)
Storage conditions:	24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. Avoid prolonged exposure to light.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.

### Spectral properties

Excitation/absorption maximum, nm:	559
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	121000
Emission maximum, nm:	571
Fluorescence quantum yield:	0.68
CF <sub>260</sub> :	0.044
CF <sub>280</sub> :	0.077