

Lumiprobe Corporation

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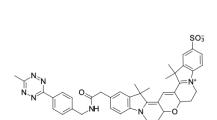
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Cyanine3B tetrazine

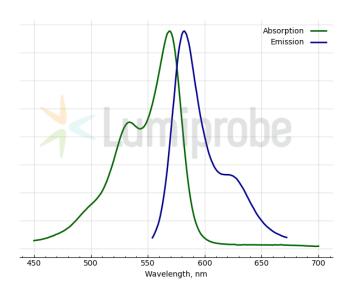
http://www.lumiprobe.com/p/cy3b-tetrazine

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 cycloactenes. 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: $C_{41}H_{41}N_7O_5S$

Solubility: good in DCM, DMSO, DMF

Quality control: NMR ¹H and HPLC-MS (95+%)

Storage conditions: 24 months after receival 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 $^{-1}$ ·cm $^{-1}$: 121000 Emission maximum, nm: 571 Fluorescence quantum yield: 0.68 CF_{260} : 0.044 CF_{280} : 0.077