

Lumiprobe Corporation

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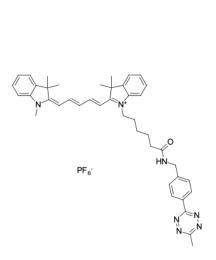
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Cyanine5 tetrazine

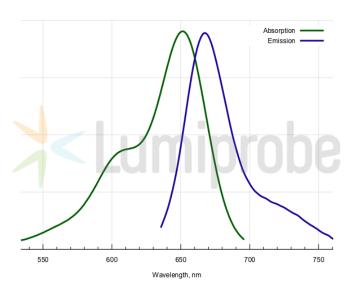
http://www.lumiprobe.com/p/cyanine5-tetrazine

Tetrazine-cyclooctene (TCO) ligation is one of the fastest bioconjugation reactions known to date. In order to use it for fluorescent labeling, a fluorescent reporter molecule bearing one of the reacting groups is necessary.

Cyanine5 tetrazine is a molecule bearing Cyanine5 fluorophore, and tetrazine moiety. Cyanine5 is a very popular fluorophore compatible with numerous instruments.



Structure of Cyanine5 tetrazine



Absorption and emission spectra of Cyanine5

General properties

Appearance: dark blue solid

Mass spec M+ increment: 637.4 Molecular weight: 811.84 Molecular formula: $C_{42}H_{48}N_7F_6OP$

Solubility: good in DMF, DMSO, DCM

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 $^{-1}$: 250000 Emission maximum, nm: 662 Fluorescence quantum yield: 0.2 CF_{260} : 0.03 CF_{280} : 0.04