

Lumiprobe Corporation

115 Airport Dr Suite 160 Westminster, Maryland 21157

USA

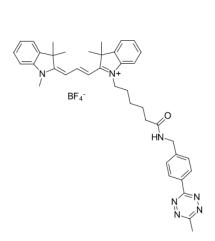
Phone: +1 888 973 6353 Fax: +1 888 973 6354 Email: order@lumiprobe.com

Cyanine3 tetrazine

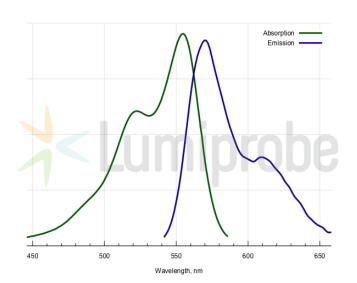
http://www.lumiprobe.com/p/cy3-tetrazine

Cyanine3 tetrazine is a fluorescent dye with tetrazine moiety for a conjugation reaction called TCO (trans-cyclooctene) ligation. Actually, tetrazines react not only with trans-cyclooctenes, but also with cyclopropenes and strained non-benzo-fused cycloalkynes.

Cyanine3 is a moderately hydrophobic dye, enabling labeling in non-aqueous environment as well as in aqueous media containing some organic co-solvent like acetonitrile or DMSO. For reactions in purely aqueous media, a <u>sulfonated version</u> of this reagent is available.



Structure of Cyanine3 tetrazine



Absorption and emission spectra of Cyanine3

General properties

Appearance: dark red solid

Mass spec M+ increment: 611.4
Molecular weight: 727.64

CAS number: 2183473-57-4 Molecular formula: $C_{40}H_{46}N_7BF_4O$

Solubility: good in DCM, DMSO, DMF

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: 555 ϵ , L·mol $^{-1}$ ·cm $^{-1}$: 150000 Emission maximum, nm: 570 Fluorescence quantum yield: 0.31 CF_{260} : 0.04 CF_{280} : 0.09