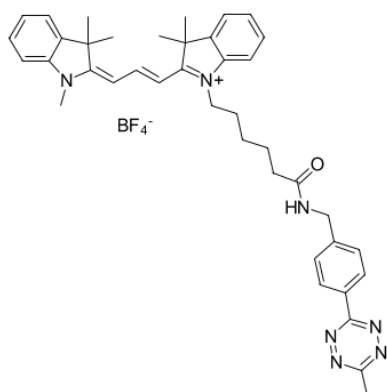


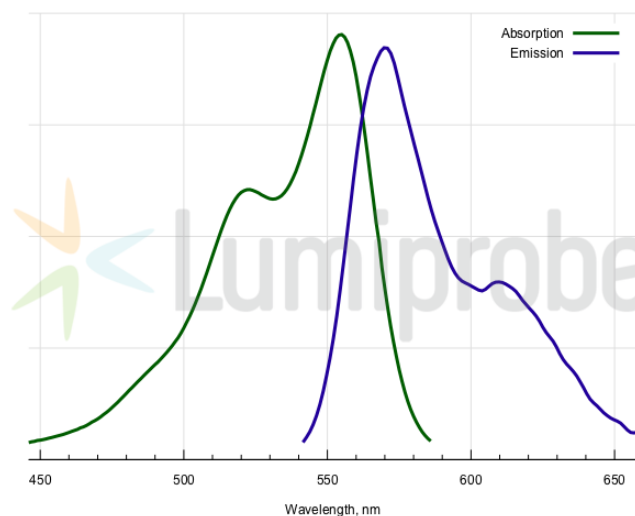
Cyanine3 tetrazine

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 (methyl)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 [sulfonated version](#) 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
Molecular formula:	C ₄₀ H ₄₆ N ₇ BF ₄ O
Solubility:	good in DCM, DMSO, DMF
Quality control:	NMR ¹ H, HPLC-MS (95%)
Storage conditions:	Storage: 24 months after receipt at -20°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:	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