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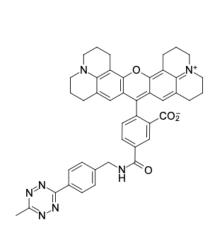
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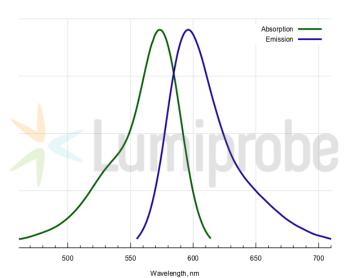
ROX tetrazine, 5-isomer

http://www.lumiprobe.com/p/rox-tetrazine-5

ROX tetrazine is a derivative of ROX (Rhodamine X, Rhodamine 101) dye, a red-emitting fluorophore possessing high brightness and fluorescence quantum yield. This compound contains tetrazine moiety that reacts with trans-cycloalkenes and other strained olefins in inverse electron demand Diels-Alder reaction (IEDDA). The reaction is very quick and specific. This reagent is a pure 5-isomer of ROX.



Structure of ROX tetrazine, 5-isomer



Absorption and emission spectra of ROX

General properties

Appearance: dark colored solid

Molecular weight: 717.83 Molecular formula: $C_{a_3}H_{a_0}N_7O_4$

Solubility: good in DMSO, DMF, methanol, ethanol

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.

Spectral properties

Excitation/absorption maximum, nm: 570 ϵ , L·mol $^{-1}$ ·cm $^{-1}$: 93000 Emission maximum, nm: 591 Fluorescence quantum yield: 1.0 CF_{260} : 0.62 CF_{280} : 0.49