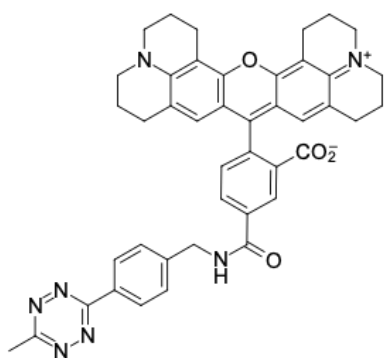


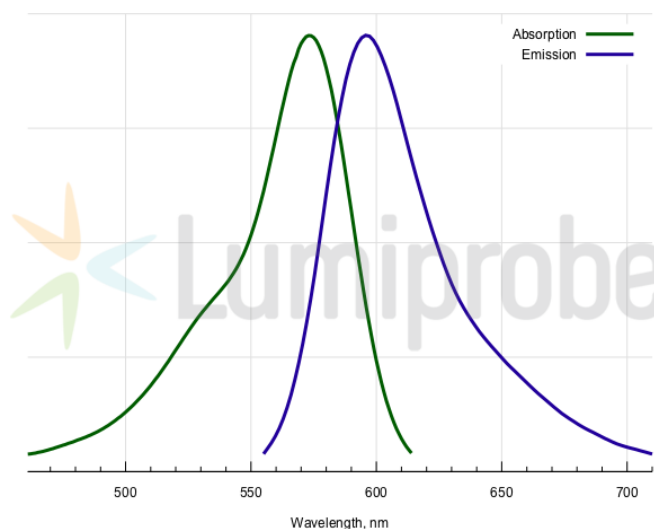
ROX tetrazine, 5-isomer

<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 ₄₃ H ₃₉ N ₇ O ₄
Solubility:	good in DMSO, DMF, methanol, ethanol
Quality control:	NMR ¹ H and HPLC-MS (95+%)
Storage conditions:	24 months after receipt 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