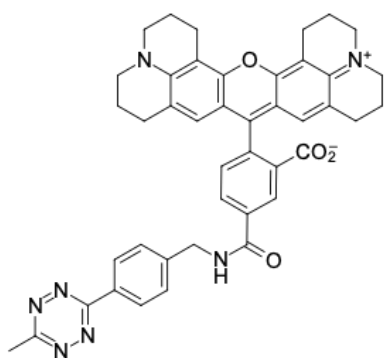


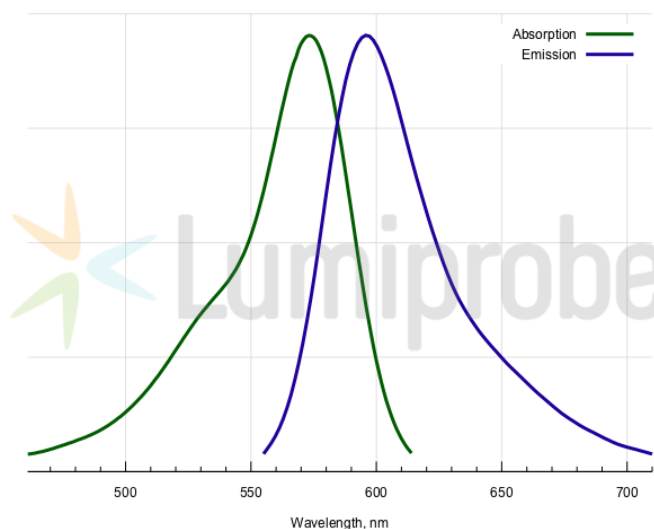
## ROX tetrazine, 5-isomer

<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 <sub>43</sub> H <sub>39</sub> N <sub>7</sub> O <sub>4</sub>
Solubility:	good in DMSO, DMF, methanol, ethanol
Quality control:	NMR <sup>1</sup> 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 <sup>-1</sup> ·cm <sup>-1</sup> :	93000
Emission maximum, nm:	591
Fluorescence quantum yield:	1.0
CF <sub>260</sub> :	0.62
CF <sub>280</sub> :	0.49