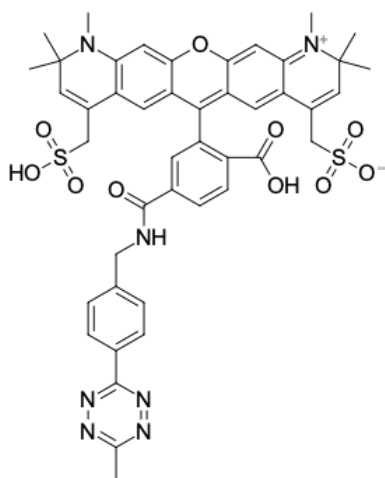


AF 594 tetrazine, 6-isomer

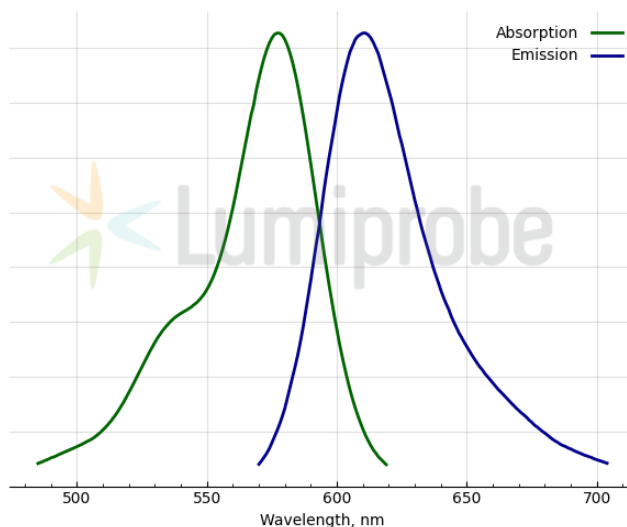
<http://www.lumiprobe.com/p/af-594-tetrazine-6>

AF 594 is a water-soluble red-fluorescent dye with high fluorescence quantum yield and high photostability. The dye is similar to Texas Red in spectral characteristics (absorption max. at 586 nm, emission max. at 613 nm) and is not sensitive to pH changes within the range from 4 to 10. This reagent is a pure 6-isomer.

This AF 594 derivative 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, specific and suitable for *in vitro* cell labeling.



Structure of AF 594 tetrazine, 6-isomer



Absorption and emission spectra of AF 594

General properties

Appearance:	dark violet crystals
Molecular weight:	906.01
Molecular formula:	$C_{45}H_{43}N_7O_{10}S_2$
Solubility:	good in methanol, DMSO, DMF, and water
Quality control:	NMR 1H and HPLC-MS (95+%)
Storage conditions:	24 months after receipt at $-20^\circ C$ in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. Avoid prolonged exposure to light.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, <i>in vitro</i> diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.

Spectral properties

Excitation/absorption maximum, nm:	586
ϵ , $L \cdot mol^{-1} \cdot cm^{-1}$:	105000
Emission maximum, nm:	613
Fluorescence quantum yield:	0.77
CF_{260} :	0.28
CF_{280} :	0.51