

Lumiprobe Corporation

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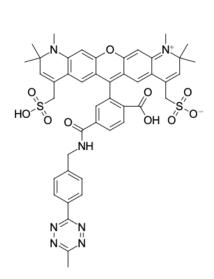
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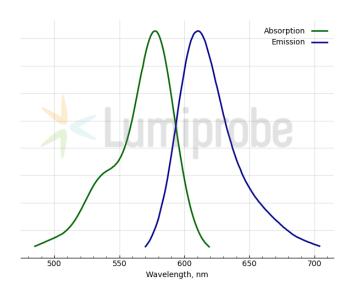
AF 594 tetrazine, 6-isomer

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

 $\begin{array}{ll} \mbox{Molecular weight:} & 906.01 \\ \mbox{Molecular formula:} & C_{_{45}}\mbox{H}_{_{43}}\mbox{N}_{_{7}}\mbox{O}_{_{10}}\mbox{S}_{_{2}} \end{array}$

Solubility: good in methanol, DMSO, DMF, and water

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.

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, in vitro 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·mol $^{-1}$ ·cm $^{-1}$: 105000 Emission maximum, nm: 613 Fluorescence quantum yield: 0.77 CF_{260} : 0.28 CF_{280} : 0.51