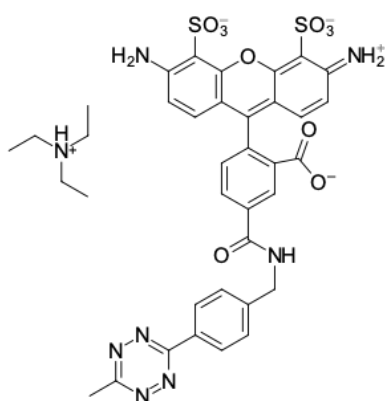


## AF 488 tetrazine, 5-isomer

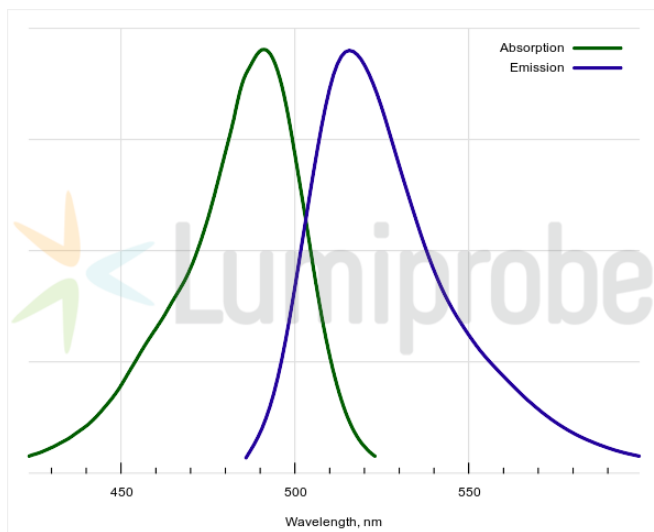
<http://www.lumiprobe.com/p/af-488-tetrazine-5>

AF 488 is a water-soluble green-fluorescent dye with high fluorescence quantum yield and high photostability. The dye is similar to FITC in spectral characteristics (absorption max. at 495 nm, emission max. at 519 nm) and is not sensitive to pH changes within the range from 4 to 10. This reagent is a pure 5-isomer.

This AF 488 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 488 tetrazine, 5-isomer**



**Absorption and emission spectra of AF 488**

### General properties

|                     |  |
|---------------------|--|
| Appearance:         | deep orange powder   |
| Molecular weight:   | 817.88   |
| Molecular formula:  | C <sub>37</sub> H <sub>37</sub> N <sub>8</sub> O <sub>10</sub> S <sub>2</sub> <sup>-</sup>   |
| Solubility:         | good in methanol, DMSO, DMF, and water   |
| 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.   |
| 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:         | 495   |
| ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> : | 71800 |
| Emission maximum, nm:                      | 519   |
| Fluorescence quantum yield:                | 0.91  |
| CF <sub>260</sub> :                        | 0.16  |
| CF <sub>280</sub> :                        | 0.10  |