

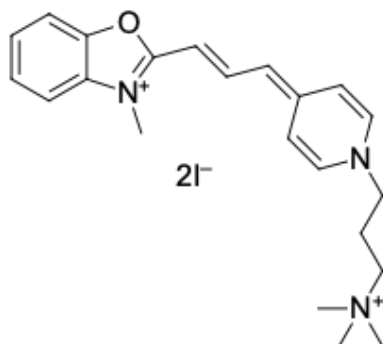
## PO-TAP-3, yellow fluorescent nucleic acid stain

<http://www.lumiprobe.com/p/po-pro-3-nucleic-acid-stain>

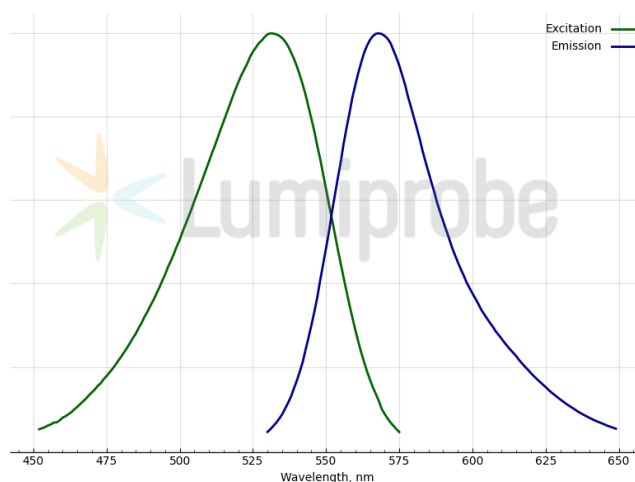
PO-TAP-3 (Oxazole Orange Monomer, also known as PO-PRO<sup>®</sup>-3) is a yellow fluorescent carbocyanine monomeric dye. PO-TAP-3 is a cell-impermeant nucleic acid stain that is nonfluorescent in the absence of nucleic acids but exhibits a multiple fluorescence enhancement upon binding to dsDNA.

The bright fluorescence signal and low background make PO-TAP-3 ideal for staining nucleic acids on microarrays, as well as for nuclear and chromosome counterstaining in multicolor fluorescence labeling experiments.

The dye is used to image cell nuclei and cytoplasm, label bacteria and sperms, count reticulocytes, perform nucleic acid amplification and hybridization, and as a temperature sensor.



**Structure of PO-TAP-3**



**Excitation and emission spectra of PO-TAP-3 (DNA-dye complex)**

### General properties

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appearance:         | red solution                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Molecular weight:   | 605.30                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CAS number:         | 161016-55-3                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Molecular formula:  | C <sub>22</sub> H <sub>29</sub> I <sub>2</sub> N <sub>3</sub> O                                                                                                                                                                                                                                                                                                                                                                |
| IUPAC name:         | Benzoxazolium, 3-methyl-2-[3-[1-[3-(trimethylammonio)-propyl]-4(1H)-pyridinylidene]-1-propenyl]-, diiodide                                                                                                                                                                                                                                                                                                                     |
| Solubility:         | DMSO                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 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.                                                                                                                                                                                                                                                                                                                |
| 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: | 531 (complex) |
| Emission maximum, nm:              | 568 (complex) |