

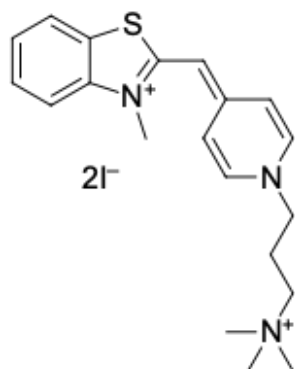
## BO-TAP-1, cyan fluorescent nucleic acid stain

<http://www.lumiprobe.com/p/bo-pro-1-nucleic-acid-stain>

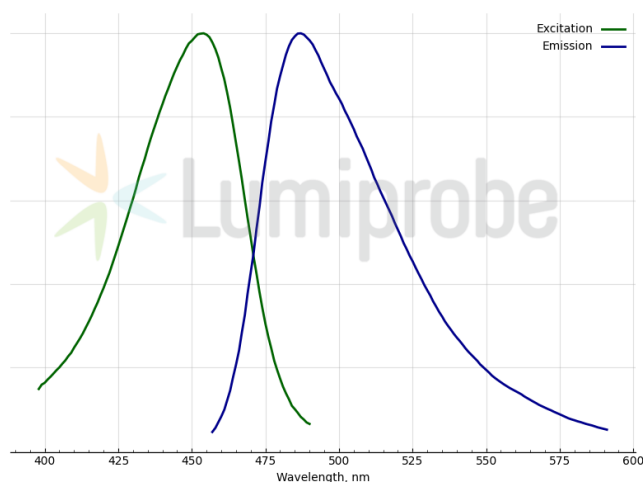
BO-TAP-1 (also known as BO-PRO<sup>®</sup>-1) is a cyan fluorescent carbocyanine monomeric dye. BO-TAP-1 is a cell-impermeant nucleic acid stain that is nonfluorescent in the absence of nucleic acids but exhibits a multiple fluorescence enhancement upon binding to dsDNA.

The bright fluorescence signal and low background make BO-TAP-1 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 detect and count cells (megakaryocyte, erythroblasts, sperms, microorganisms, etc.) and bacteria, perform nucleic acid detection, sequencing, and amplification and as a temperature sensor.



**Structure of BO-TAP-1**



**Excitation and emission spectra of BO-TAP-1 (DNA-dye complex)**

### General properties

Appearance:	yellow solution
Molecular weight:	595.33
CAS number:	157199-57-0
Molecular formula:	C <sub>20</sub> H <sub>27</sub> I <sub>2</sub> N <sub>3</sub> S
IUPAC name:	trimethyl-[3-[4-[(Z)-(3-methyl-1,3-benzothiazol-2-ylidene)methyl]pyridin-1-ium-1-yl]propyl]azanium;diiodide
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:	454 (complex)
Emission maximum, nm:	487 (complex)

BO-PRO<sup>®</sup> is the trademark of Molecular Probes.