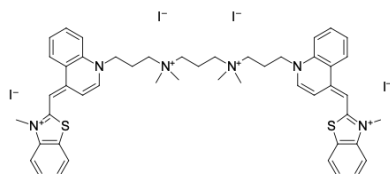


## TODi-1, green fluorescent nucleic acid stain

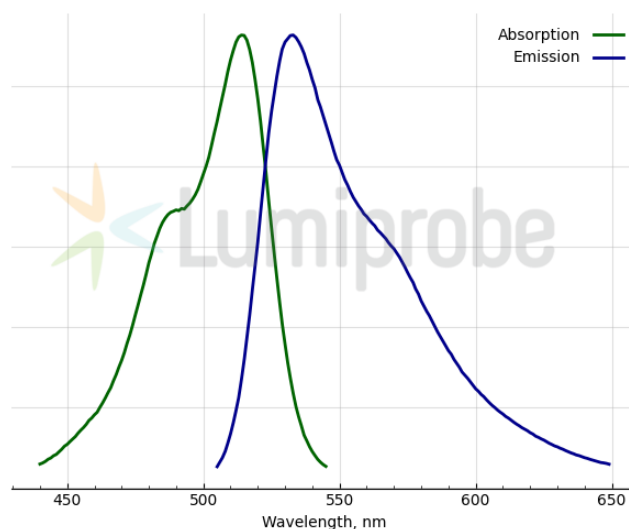
<http://www.lumiprobe.com/p/todi-1-nucleic-acid-stain-toto-1>

TODi-1 (Thiazole Orange Homodimer, also known as TOTO<sup>®</sup>-1) is a green fluorescent carbocyanine dimeric dye. TODi-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 TODi-1 ideal for staining nucleic acids on microarrays, as well as for nuclear and chromosome counterstaining in multicolor fluorescence labeling experiments. TODi-1 is non-cytotoxic and may be used for long-term monitoring of cell viability and dead cell detection in culture.



**Structure of TODi-1**



**Absorption and emission spectra of TODi-1 (DNA-dye complex)**

### General properties

|                     |   |
|---------------------|---|
| Appearance:         | orange solution   |
| Molecular weight:   | 1302.80   |
| CAS number:         | 143413-84-7   |
| Molecular formula:  | C <sub>49</sub> H <sub>58.4</sub> I <sub>2</sub> N <sub>6</sub> S <sub>2</sub>  |
| 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:    | Product is offered and sold for research purposes only. Product is not tested for safety and efficacy in food, drug, medical device, cosmetic, no express or implied authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, for humans or animals or for commercial purposes. |

### Spectral properties

|                                    |     |
|------------------------------------|-----|
| Excitation/absorption maximum, nm: | 514 |
| Emission maximum, nm:              | 532 |

TOTO<sup>®</sup> is the trademark of Invitrogen.