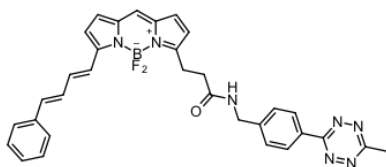


## BDP® 581/591 tetrazine

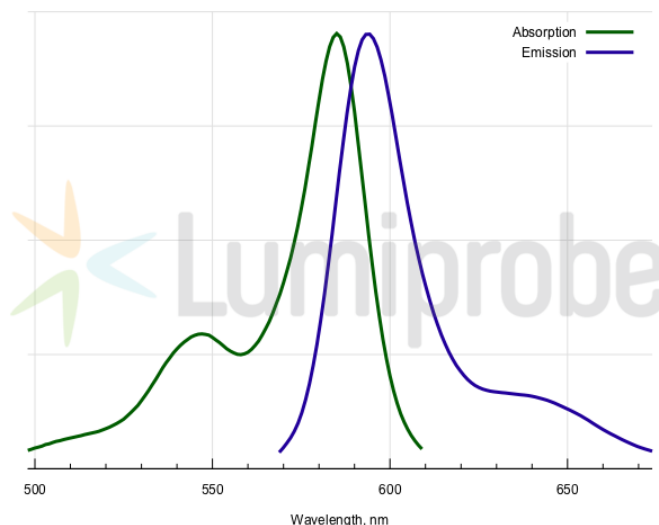
<http://www.lumiprobe.com/p/bdp-581-591-tetrazine>

BDP 581/591 is a borondipyrromethene dye with red emission. The dye exhibits high emission quantum yield and molar extinction coefficient, relatively long fluorescence lifetime, and two-photon cross-section. Additionally, it can be used as an intracellular ROS sensor.

This tetrazine derivative allows to conjugation of the fluorophore with various strained dienophiles like trans-cyclooctenes in a fast reaction called TCO-ligation.



**Structure of BDP 581/591 tetrazine**



**Absorption and emission spectra of BDP 581/591**

### General properties

Appearance:	colorless solid
Mass spec M+ increment:	574.2
Molecular weight:	575.42
Molecular formula:	C <sub>32</sub> H <sub>28</sub> N <sub>7</sub> BF <sub>2</sub> O
Solubility:	well soluble in DMF, DMSO, dichloromethane, toluene
Quality control:	NMR <sup>1</sup> H, HPLC-MS (95%)
Storage conditions:	Storage: 24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. 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:	585
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	104000
Emission maximum, nm:	594
Fluorescence quantum yield:	0.83
CF <sub>260</sub> :	0.06
CF <sub>280</sub> :	0.04