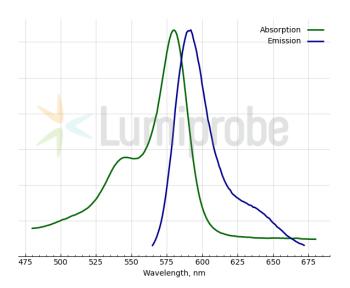


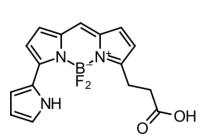
## **BDP® 576/589 carboxylic acid**

http://www.lumiprobe.com/p/bdp-576-589-carboxylic-acid

BDP 576/589, a boron dipyrromethene dye. This hydrophobic dye with emission in the orange spectrum range has high quantum yield and high molar extinction coefficient. It is suitable for experiments measuring fluorescence lifetime and fluorescence polarization. This fluorophore can be used whether in wide-field and confocal microscopy or in multiphoton microscopy because of its high two-photon absorption cross-section.

This derivative is a carboxylic acid (contains a free COOH-group). It can be used as a reference control and for conjugation with an amino group after activation with carbodiimides.





## Structure of BDP 576/589 carboxylic acid



| General properties  |  |
|---------------------|--|
| Appearance:         | dark colored solid   |
| Molecular weight:   | 329.11   |
| CAS number:         | 150173-78-7  |
| Molecular formula:  | $C_{16}H_{14}N_3BF_2O_2$   |
| Solubility:         | good in DMF, DMSO  |
| Quality control:    | NMR <sup>1</sup> H, HPLC-MS (95%)  |
| Storage conditions: | Storage: 24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. 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**

General properties

| Excitation/absorption maximum, nm:         | 580   |
|--|-------|
| ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> : | 98000 |
| Emission maximum, nm:                      | 592   |
| Fluorescence quantum yield:                | 0.13  |
| CF <sub>260</sub> :                        | 0.32  |
| CF <sub>280</sub> :                        | 0.35  |

BDP<sup>®</sup> is a trademark of Lumiprobe