

## **Lumiprobe Corporation**

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**USA** 

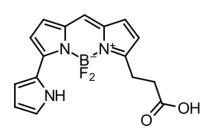
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## BDP 576/589 carboxylic acid

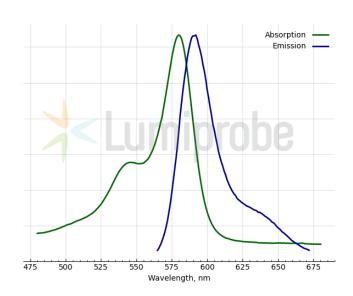
http://www.lumiprobe.com/p/bodipy-576-589-carboxylic-acid

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



BDP 576/589 absorbance and emission spectra

## **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.

## **Spectral properties**

Excitation/absorption maximum, nm: 580  $\epsilon$ , L·mol<sup>-1</sup>·cm<sup>-1</sup>: 98000 Emission maximum, nm: 592 Fluorescence quantum yield: 0.13  $CF_{260}$ : 0.32  $CF_{280}$ : 0.35

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