

## **Lumiprobe Corporation**

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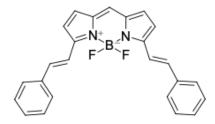
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# (E,E)-3,5-Bis(phenylethenyl)-BDP® lipid stain

http://www.lumiprobe.com/p/bis-phenylethenyl-bdp

(E,E)-3,5-Bis(phenylethenyl)-BDP is a symmetric one of bis(hetero)arylethenyl-substituted boron difluoride dipyrromethene derivatives. The molecule has two phenylethenyl groups in trans configuration of the double bonds, which positively impact to lipophilicity. This non-functionalized derivative of the BDP dye is expected to accumulate in lipid droplets (LDs). BDP dyes exhibit high brightness, and excellent photostability, and can be used as fluorogenic probes for imaging of LDs.

An aromatic, alkenyl or alkynyl substitution is considered to extend the  $\pi$ -conjugation by introducing at the 3,5-positions of the core and thus the red-shifted fluorescence emission wavelength compared to most lipid droplet markers from the classical BDP dye series is observed.



## Structure of (E,E)-3,5-Bis(phenylethenyl)-BDP

### **General properties**

Appearance: gold-green powder

Molecular weight: 396.24

CAS number: 148185-53-9 Molecular formula:  $C_{25}H_{19}N_2BF_2$ 

IUPAC name: 5,5-difluoro-3,7-di((E)-styryl)-5H-4l4,5l4-dipyrrolo[1,2-c:2',1'-f][1,3,2]diazaborinine

Solubility: good in organic solvents (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

Excitation/absorption 627 nm

maximum, nm:

 $\epsilon$ , L·mol<sup>-1</sup>·cm<sup>-1</sup>: 102268 Emission maximum, nm: 640 nm Fluorescence quantum 0.87

yield:

 $CF_{260}$ : 0.11  $CF_{280}$ : 0.08

BDP® is a registered trademark of Lumiprobe