

## **Lumiprobe Corporation**

201 International Circle, Suite 135 Hunt Valley, Maryland 21030

USA

Phone: +1 888 973 6353 Fax: +1 888 973 6354 Email: order@lumiprobe.com

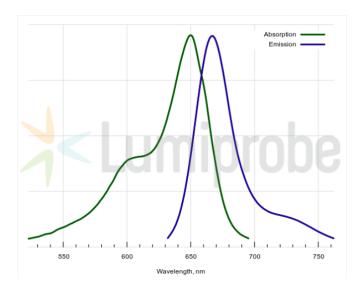
## **BDP 650/665 DBCO**

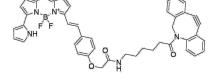
http://www.lumiprobe.com/p/bdp-650-665-dbco

BDP 650/665 is a bright far-red-fluorescent dye that is similar to BODIPY $^{\text{TM}}$  650/665 and Cy $^{\text{TM}}$ 5 by its spectral characteristics. This high quantum yield dye is relatively non-sensitive to solvent polarity and pH changes.

Due to its significant hydrophobic properties, BDP 650/665 can be used for staining membranes, lipids, and other lipophilic compounds.

DBCO, a substituting group introduced in this molecule, is a dibenzocyclooctyne that is commonly used in copper-free click chemistry reactions. BDP 650/665 DBCO can react with various functionalized azides (rapidly and without specialized Cu(I) catalysts) resulting in stable dye-biomolecule conjugates.





Structure of BDP 650/665 DBCO

Absorption and emission spectra of BDP 650/665

## **General properties**

Appearance: dark blue crystals

Molecular weight: 733.61 Molecular formula:  $C_{44}H_{38}N_5BF_2O_3$ 

Solubility: good in DMF, DMSO, dichloromethane

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: 649  $\epsilon$ , L·mol<sup>-1</sup>·cm<sup>-1</sup>: 94000 Emission maximum, nm: 667 Fluorescence quantum yield: 0.52

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