

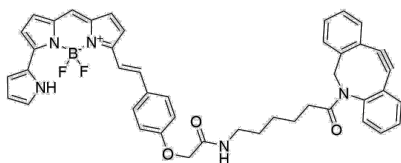
BDP 650/665 DBCO

<http://www.lumiprobe.com/p/bdp-650-665-dbc>

BDP 650/665 is a bright far-red-fluorescent dye that is similar to BODIPY™ 650/665 and Cy™ 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

General properties

Appearance:	dark blue crystals
Molecular weight:	733.61
Molecular formula:	C ₄₄ H ₃₈ N ₅ BF ₂ O ₃
Solubility:	good in DMF, DMSO, dichloromethane
Quality control:	NMR ¹ 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.

Spectral properties

Excitation/absorption maximum, nm:	649
ε, L·mol ⁻¹ ·cm ⁻¹ :	94000
Emission maximum, nm:	667
Fluorescence quantum yield:	0.52
CF ₂₆₀ :	0.04
CF ₂₈₀ :	0.04

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