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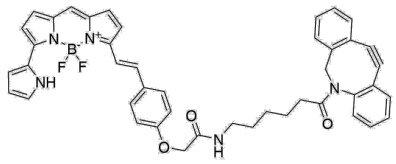
BDP® 650/665 DBCO

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

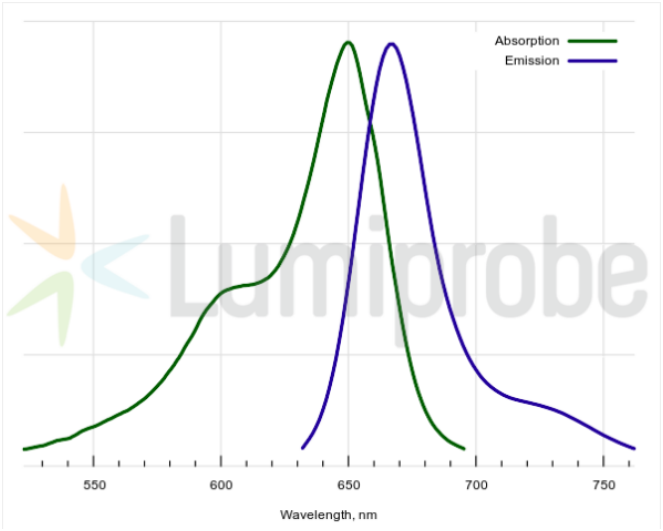
BDP 650/665 is a bright far-red-fluorescent dye that is similar to Cy™5 by its spectral characteristics. This high quantum yield dye is relatively non-sensitive to solvent polarity and pH changes.

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



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 ^1H, 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 maximum, nm:	649
ε, $L \cdot mol^{-1} \cdot cm^{-1}$:	94000
Emission maximum, nm:	667
Fluorescence quantum yield:	0.52