

BDP 558/568 DBCO

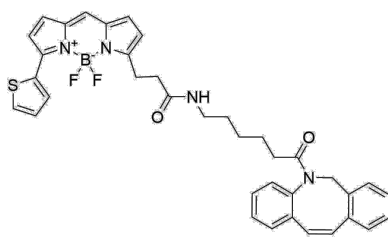
<http://www.lumiprobe.com/p/bdp-558-568-dbc>

BDP 558/568 fluorescence maximum is in the yellow spectrum range (569 nm). This dye is an analog of such fluorophore as Cy3™ by its spectral characteristics. It is soluble in polar organic solvents and has good photostability and high quantum yield.

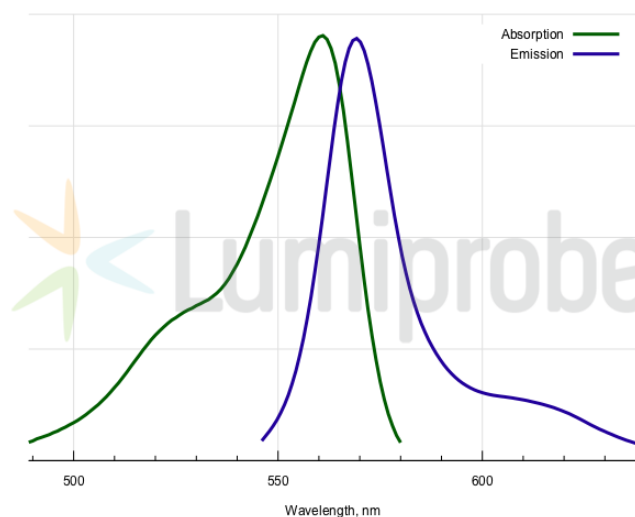
BDP 558/568 has hydrophobic properties and can be used for staining lipids, membranes, and other lipophilic compounds.

Introduced in the BDP 558/568 molecule, the cyclooctyne functional group allows entering into reactions of 1,3-dipolar cycloaddition with various substituted azides. Such reactions are promoted by ring strain and do not require copper catalysis. Thus, this method can be used for investigating various processes in living cells.

BDP 558/568 DBCO can be used for the detection of target molecules, proteins, or nucleic acids that contain azide groups by microscopy and flow cytometry.



Structure of BDP 558/568 DBCO



Absorption and emission spectra of BDP 558/568

General properties

Appearance:	brown powder with luster
Molecular weight:	646.56
Molecular formula:	C ₃₇ H ₃₃ N ₄ BF ₂ O ₂ S
Solubility:	very soluble 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:	561
ε, L·mol ⁻¹ ·cm ⁻¹ :	84400
Emission maximum, nm:	569
Fluorescence quantum yield:	0.68

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