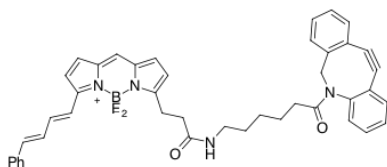


BDP 581/591 DBCO

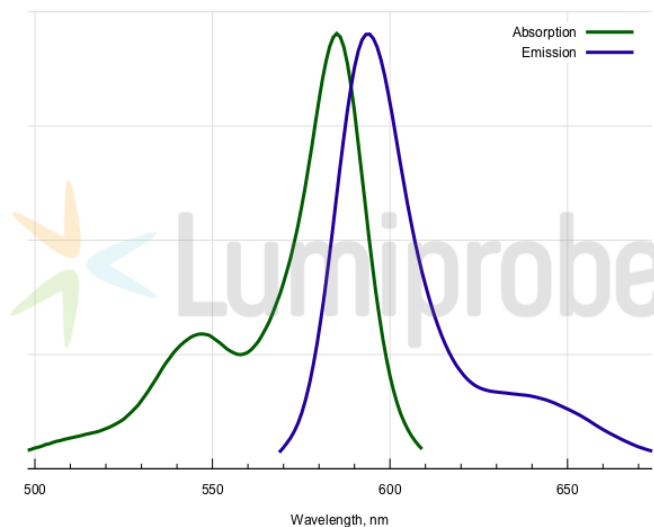
<http://www.lumiprobe.com/p/bdp-581-591-dbco>

BDP 581/591 is a borondipyrromethene dye with a conjugated olefinic system. It can be used either as a regular fluorophore, or as a probe for the detection of reactive oxygen species (ROS); after oxidation, its fluorescence moves to the green part of the spectrum.

This is a version of the dye containing cyclooctyne. The DBCO (azodibenzocyclooctyne) moiety can be conjugated with azides yielding stable triazole conjugates.



Structure of BDP 581/591 DBCO



Absorption and emission spectra of BDP 581/591

General properties

Appearance:	dark purple solid
Mass spec M+ increment:	692.3
Molecular weight:	692.60
Molecular formula:	C ₄₃ H ₃₉ N ₄ BF ₂ O ₂
Solubility:	good in DMF, DMSO, DCM
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. Desiccate.

Spectral properties

Excitation/absorption maximum, nm:	585
ε, L·mol ⁻¹ ·cm ⁻¹ :	104000
Emission maximum, nm:	594
Fluorescence quantum yield:	0.83

BDP® is a trademark of Lumiprobe