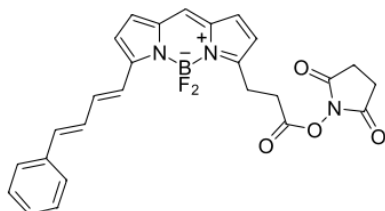


BDP 581/591 NHS ester

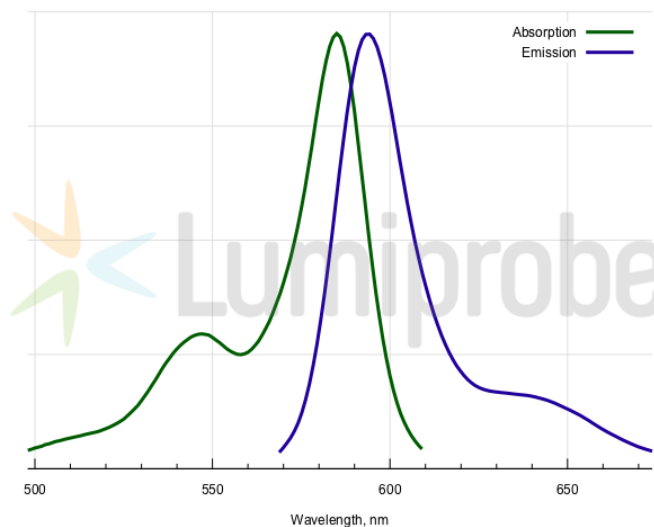
<http://www.lumiprobe.com/p/bodipy-581-591-nhs-ester>

BDP 581/591 is a borondipyrromethene dye that has relatively long fluorescence lifetime and two photon excitation cross section. It is useful for fluorescence polarization assays. Due to the presence of a diene system, it can react with reactive oxygen species (ROS) with a change of fluorescence.

This is the NHS ester derivative for the conjugation with primary and secondary amine groups of proteins, peptides, and other molecules.



Structure of BDP 581/591 NHS ester



Absorption and emission spectra of BDP 581/591

General properties

Appearance:	dark colored solid
Mass spec M+ increment:	374.1
Molecular weight:	489.28
CAS number:	150152-70-8
Molecular formula:	C ₂₆ H ₂₂ N ₃ BF ₂ O ₄
Solubility:	good in DMF, DMSO, DCM
Quality control:	NMR ¹ H, HPLC-MS (95%)
Storage conditions:	Storage: 12 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
CF ₂₆₀ :	0.06
CF ₂₈₀ :	0.04

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