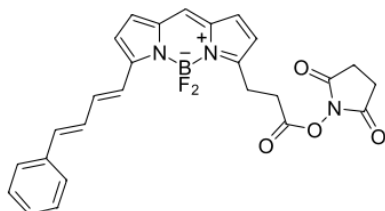


## BDP® 581/591 NHS ester

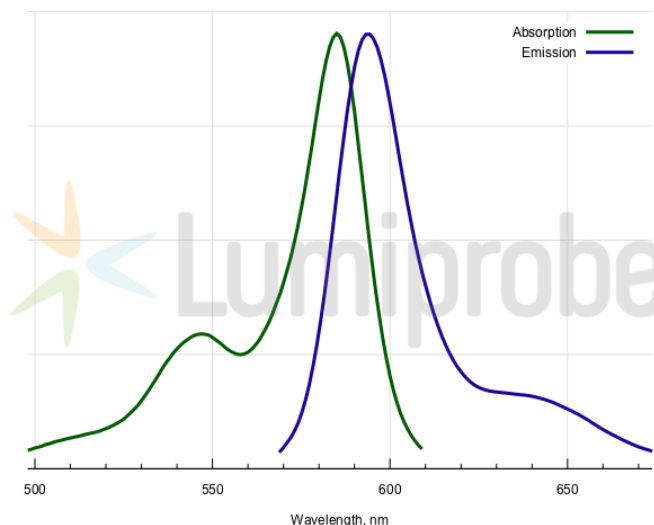
<http://www.lumiprobe.com/p/bdp-581-591-nhs-ester>

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 <sub>26</sub> H <sub>22</sub> N <sub>3</sub> BF <sub>2</sub> O <sub>4</sub>
Solubility:	good in DMF, DMSO, DCM
Quality control:	NMR <sup>1</sup> 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.
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:	585
ε, L·mol <sup>-1</sup> ·cm <sup>-1</sup> :	104000
Emission maximum, nm:	594
Fluorescence quantum yield:	0.83
CF <sub>260</sub> :	0.06
CF <sub>280</sub> :	0.04