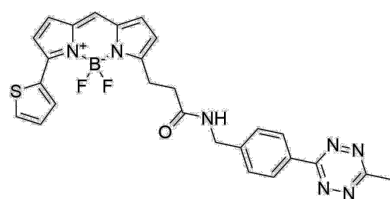


BDP 558/568 tetrazine

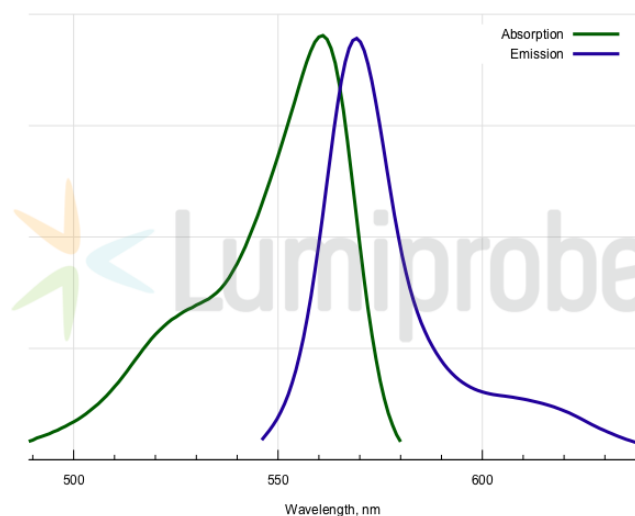
<http://www.lumiprobe.com/p/bdp-558-568-tetrazine>

BDP 558/568 has a high molar extinction coefficient and high quantum yield; this is a bright fluorophore and an alternative to BDP 558/568 and Cy3™ because of similar spectral properties. BDP 558/568 can be used in two-photon microscopy; it has a long excited-state lifetime, so it can be used in fluorescence polarization assay.

BDP 558/568 tetrazine is a convenient reagent for producing fluorescent conjugates of proteins, nucleic acids, and other biomolecules by tetrazine-trans-cyclooctene (TCO) ligation. This cycloaddition reaction runs relatively rapidly without metal catalysts.



Structure of BDP 558/568 tetrazine



Absorption and emission spectra of BDP 558/568

General properties

Appearance:	brown powder
Molecular weight:	529.37
Molecular formula:	C ₂₆ H ₂₂ N ₈ BF ₂ OS
IUPAC name:	3-(5,5-difluoro-7-(thiophen-2-yl)-5H-5i4,6i4-dipyrrolo[1,2-c:2',1'-f][1,3,2]diazaborinin-3-yl)-N-(4-(6-methyl-1,2,4,5-tetrazin-3-yl)benzyl)propanamide
Solubility:	very soluble in DMSO and DMF
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
CF ₂₆₀ :	0.00
CF ₂₈₀ :	0.07

BDP® is a trademark of Lumiprobe. Cy™ is a trademark of Cytiva.