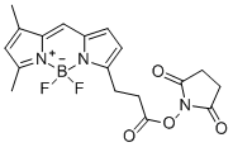
BDP FL NHS ester

BDP FL NHS ester is an advanced dye for 488 nm channel, a replacement for fluorescein, a molecule identical to BODIPY FL® NHS ester. An amino-reactive dye for the labeling of proteins and peptides.

While the absorbance and emission spectra of this molecule stay within FAM excitation and emission channels, this dye provides much better photostability, and outstanding brightness. The fluorescence spectrum of BODIPY-FL is narrower than that of FAM. This provides a better brightness for monochromator based instruments, when emission wavelength can be tuned to dye maximum.

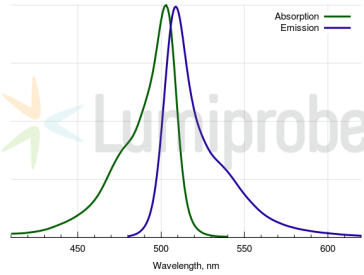
The dye is neutral, possesses low molecular weight, and retains high quantum yield in conjugates.

The dye is a good replacement for fluorescein (FAM), BODIPY-FL, Alexa Fluor 488, DyLight 488, Cy2, and other 488 nm dyes.



Quantity	Cat. #
1 mg	11420
5 mg	21420
25 mg	41420
50 mg	51420
100 mg	61420

Absorption and emission spectra of BDFL fluorophore



General properties

Appearance:	orange solid
Mass spec M+ increment:	274.1
Molecular weight:	389.16
Molecular formula:	$C_{18}H_{18}BF_2N_3O_4$
Solubility:	Good in organic solvents (DMF, DMSO, dichlromethane), limited in water
Quality control:	NMR ^{1}H, HPLC-MS (95+%)
Storage conditions:	Storage: 12 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.

Spectral properties

Excitation maximum, nm:	503
ε, L·mol^{-1}·cm^{-1}:	80000
Emission maximum, nm:	509
Fluorescence quantum yield:	0.9
CF_{260}:	0.015
CF_{280}:	0.027