BDP 630/650 amine

http://www.lumiprobe.com/p/bodipy-630-650-amine

BDP 630/650 is a far red emitting, borondipyrromethene based fluorophore. The dye is tuned to match the standard Cy5 channel, and can be used as an alternative to Cyanine5 and sulfo-Cyanine5. Compared to cyanines, BDP 630/650 possesses a longer fluorescence lifetime which is important for fluorescence anisotropy measurements.

BDP 630/650 has a brightness similar to cyanines, and an exceptional photostability.

This amine derivative is useful for the reaction with electrophiles, and for enzymatic transamination labeling.

Structure of BDP 630/650 amine

Absorption and emission spectra of BDP 630/650

General properties

Appearance: dark violet solid
Molecular weight: 584.92
Molecular formula: C_{29}H_{32}N_{4}BClF_{2}O_{2}S
Solubility: moderately soluble in water (81 mM = 47.2 mg/mL), well soluble in DMF, DMSO, alcohols
Quality control: NMR ^1H, HPLC-MS (95%)
Storage conditions: Storage: 24 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/absorption maximum, nm: 628
ε, L⋅mol^{-1}⋅cm^{-1}: 97000
Emission maximum, nm: 642
Fluorescence quantum yield: 0.91
CF_{260}: 0.029
CF_{380}: 0.035

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