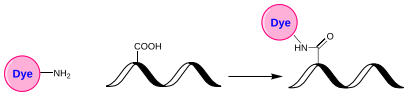
XFD750 amine

Catalog Number: 1710
Unit Size: 1 mg

Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

Chemical Properties

Appearance	Solid dark green
Molecular Weight	1155.17
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	752 nm
Emission Wavelength	776 nm

Applications

XFD750, manufactured by AAT Bioquest, is a bright near-infrared fluorescent dye structurally similar to Alexa Fluor™ 750 (Thermo Fisher). It is efficiently excited by the 633 nm laser line and is compatible with the Cy7 filter set, making it well-suited for applications such as fluorescence microscopy and flow cytometry. The dye demonstrates excellent aqueous solubility and maintains pH stability across a broad range (pH 4–10), ensuring reliable and reproducible fluorescence signals under diverse experimental conditions. Its long-wavelength emission effectively reduces background autofluorescence, enhancing signal-to-noise ratios in complex biological samples, particularly in tissue imaging. Furthermore, XFD750 is widely utilized in stochastic optical reconstruction microscopy (STORM), providing exceptional performance in both dSTORM and nSTORM super-resolution imaging techniques.

XFD750 amine is a carbonyl-reactive building block for modifying carboxylic groups in the presence of activators such as EDC or DCC, or activated esters like NHS esters, through the formation of stable amide bonds. Additionally, it can be used as an amine donor for enzymatic transamination labeling.