

XFD750 alkyne

Catalog Number: 1739

Unit Size: 1 mg

Product Details

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

Chemical Properties

Appearance	Solid
Molecular Weight	N/A
Soluble In	DMSO

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.

The alkyne derivative of XFD750 is widely used for labeling azides on peptides, antibodies, and other biomolecules via click chemistry. It participates in copper-catalyzed azide-alkyne cycloaddition (CuAAC) with azide-containing molecules.