

XFD532 alkyne

Catalog Number: 1718 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 764.96

Soluble In DMSO

Chemical Structure

Spectral Properties

Excitation Wavelength 534 nm

Emission Wavelength 553 nm

Applications

XFD532, manufactured by AAT Bioquest, is structurally similar to Alexa Fluor™ 532 (Thermo Fisher). It is a bright yellow-fluorescent dye with an excitation optimized for use with the 532 nm line of the frequency-doubled Nd:YAG laser. XFD532 demonstrates good aqueous solubility and pH-insensitivity over a broad pH range (pH 4–10), ensuring stable fluorescence generation under varying experimental conditions. This dye is particularly suited for multicolor fluorescence microscopy and flow cytometry, as well as advanced applications in super-resolution imaging techniques such as dSTORM.

The alkyne derivative of XFD532 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.