

XFD532 azide

Catalog Number: 1717

Unit Size: 1 mg

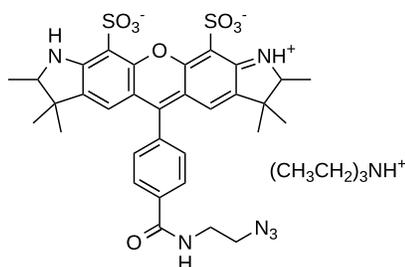
Product Details

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

Chemical Properties

Appearance	Solid dark red
Molecular Weight	795.97
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 azide derivative of XFD532 is widely used for labeling terminal alkynes on peptides, antibodies, and other biomolecules via click chemistry. It participates in copper-catalyzed azide-alkyne cycloaddition (CuAAC) with alkyne-containing molecules and strain-promoted alkyne-azide cycloaddition (SPAAC) with DBCO- or BCN-containing molecules.