

XFD430 amine

Catalog Number: 70023 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 545.57

Soluble In DMSO

Chemical Structure

Spectral Properties

Excitation Wavelength 432 nm

Emission Wavelength 540 nm

Applications

XFD430, manufactured by AAT Bioquest, is a green-fluorescent dye that is structurally similar to Alexa Fluor™ 430 (Thermo Fisher). It has excitation and emission maxima of 432 nm and 540 nm, respectively, and is efficiently excited by a 405 nm violet laser. Its large Stokes shift minimizes spectral overlap with blue-emitting fluorophores, significantly improving the signal-to-noise ratio in multiplexed fluorescence assays. XFD430 also exhibits excellent water solubility and remains pH-insensitive across a wide range (pH 4–10), making it well-suited for generating stable, reproducible fluorescence signals in both microscopy and flow cytometry applications.

XFD430 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.