

XFD350 TCO

Catalog Number: 70006 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 622.78

Soluble In DMSO

Chemical Structure

(CH₃CH₂)₃NH⁺

Spectral Properties

Excitation Wavelength 343 nm

Emission Wavelength 441 nm

Applications

XFD350, manufactured by AAT Bioquest, is structurally similar to Alexa Fluor® 350 (Thermo Fisher). This blue-fluorescent dye exhibits strong absorption and moderate photostability, with consistent fluorescence across a broad pH range (pH 4-11). XFD350 is effectively excited by the 350 nm line of a UV laser, and its moderate brightness and stability make it particularly advantageous for direct imaging of high-abundance targets in both microscopy and flow cytometry applications.

XFD350 TCO is particularly useful for labeling tetrazine-modified biomolecules under copper-free conditions. It reacts with tetrazine-functionalized molecules, forming a stable conjugate via a dihydropyrazine moiety. This click reaction is favored over others due to its extremely fast kinetics and higher yields under mild reaction conditions, making it a popular choice for researchers.