

XFD350 tetrazine

Catalog Number: 70007

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 496.50

Soluble In DMSO

Chemical Structure

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 tetrazine is particularly useful for labeling TCO-modified biomolecules under copper-free conditions. It reacts with TCO-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.