

XFD660 azide

Catalog Number: 70094

Unit Size: 1 mg

Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
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Expiration Date	
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Chemical Properties

Appearance	Solid
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Molecular Weight	N/A
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Soluble In	DMSO
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Spectral Properties

Excitation Wavelength	663 nm
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Emission Wavelength	691 nm
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Applications

XFD660, manufactured by AAT Bioquest, is a far-red fluorescent dye structurally similar to Alexa Fluor™ 660 (Thermo Fisher). The dye demonstrates high fluorescence quantum yield, photostability, and aqueous solubility, with pH-independent fluorescence across a broad range (pH 4–11), providing consistent performance across diverse experimental conditions.

XFD660 is optimized for red laser excitation and is compatible with flow cytometers equipped with spectral detection systems. It provides robust and uniform labeling with high signal intensity and reproducibility, making it ideal for fluorescence imaging, flow cytometry, and other analytical techniques. XFD660 demonstrates versatility in labeling a wide range of targets, including cell surface, intracellular, and intranuclear antigens. Its spectral properties position it between XFD647 and XFD700, making it a valuable intermediate fluorophore for constructing complex multicolor panels and enabling precise experimental designs in advanced research workflows.

The azide derivative of XFD660 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.