

xtraFluor™ Violet 420 Azide

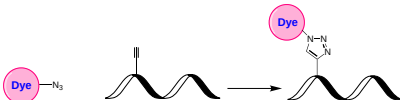
Catalog Number: 70807

Unit Size: 100 ug

Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	1 year upon receiving

Chemical Properties

Appearance	Solid
Molecular Weight	N/A
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	407 nm
Emission Wavelength	424 nm

Applications

xtraFluor™ Violet 420 Azide is a violet laser-excitable fluorescent dye with excitation and emission maxima of 407 nm and 424 nm. The dye contains an azide functional group that enables copper-free click chemistry conjugation through strain-promoted azide-alkyne cycloaddition (SPAAC) reactions with DBCO-modified antibodies, proteins, peptides, and other biomolecules. This bioorthogonal conjugation strategy allows fluorescent labeling under mild reaction conditions without the need for copper catalysts.

XV420 is optimally excited by standard 405 nm violet lasers and exhibits a narrow emission profile that supports clean channel separation and efficient spectral unmixing in multicolor flow cytometry applications. XV420 provides strong fluorescence signal intensity for improved detection of dim or weakly expressing populations in complex samples. The dye is compatible with conventional and spectral flow cytometry workflows using appropriate violet laser detection configurations and can be incorporated into click chemistry-based conjugation workflows requiring flexible fluorescent labeling strategies.