

5-FAM BCN

Catalog Number: 70500

Unit Size: 1 mg

Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
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Expiration Date	24 months upon receiving
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Chemical Properties

Appearance	Solid orange
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Molecular Weight	770.83
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Soluble In	DMSO
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Spectral Properties

Excitation Wavelength	493 nm
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Emission Wavelength	517 nm
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Applications

5-FAM BCN is a clickable derivative of 5-FAM that is widely used in labeling biomolecules such as peptides. FAM is one of the most popular green, fluorescent dyes. It contains a PEG spacer to minimize the potential interference from the binding site of the resulted conjugate. The BCN moiety can readily react with azido molecules to form stable triazoles in the absence of catalysts. Unlike DBCO, BCN also reacts with a tetrazine. The tetrazine BCN click reaction is a rapid, bioorthogonal, and metal-free ligation that uses an inverse electron-demand Diels-Alder (IEDDA) reaction between an electron-deficient tetrazine and the strained alkyne, BCN. This reaction is valuable for labeling biomolecules in living systems because it occurs quickly and does not interfere with native biological processes.