

5-FAM BCN

Catalog Number: 70500

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	N/A
Soluble In	DMSO

Spectral Properties

Excitation Wavelength	493 nm
Emission Wavelength	517 nm

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.