

Fluorescein aldehyde [5-FAM aldehyde]Catalog number: 9000
Unit size: 5 mg**Product Details**

Storage Conditions	Freeze (<-15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

Chemical Properties

Appearance	Solid
Soluble In	DMSO

Spectral Properties

Excitation Wavelength	493 nm
Emission Wavelength	517 nm

Applications

Fluorescein aldehyde is a reactive fluorescent dye that can react with an amine, hydrazine or hydroxylamine. Fluorescein is the most widely used green fluorescent dye. Aldehyde group is reactive toward amines, hydrazide or hydroxylamine groups from pH 5-9. Unlike amine reactive succinimidyl ester group (NHS), aldehyde can react with N-terminal amine groups at acidic pH, a condition sometimes required for certain bioconjugation reactions. Aldehyde reacts with amine group to form an intermediate Schiff bond. Further reduction with hydride will form a stable C-N bond. Reaction between aldehyde and other groups allows site-specific conjugation and labeling of fluorescein dyes to desired position on targeted molecules. Conjugated fluorescein dye can be easily detected by a common fluorescence instrument under FITC channel.