

Cy5 aldehyde

Catalog number: 9011
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	651 nm
Emission Wavelength	670 nm

Applications

Cy5 aldehyde is a reactive red fluorescent dye that can react with an amine, hydrazine or hydroxylamine. 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 Cy5 dye can be easily detected by a common fluorescence instrument under Cy5 channel.