

**XFD488 aldehyde *Same Structure to Alexa
Fluor™ 488 aldehyde***Catalog number: 9015
Unit size: 5 mg**Product Details**

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

Chemical Properties

Appearance	Solid
Molecular Weight	639.02
Soluble In	DMSO

Spectral Properties

Excitation Wavelength	499 nm
Emission Wavelength	520 nm

Applications

XFD488 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 488 (Alexa Fluor® is the trademark of ThermoFisher). XFD488 aldehyde contains the fluorophore of XFD488. It is a reactive green 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 XFD488 dye can be easily detected by a common fluorescence instrument under FITC channel.