

# XFD610 acid

Catalog Number: 70060 Unit Size: 10 mg

### **Product Details**

Storage Conditions Freeze (< -15 °C), Minimize light exposure

Expiration Date 12 months upon receiving

## **Chemical Properties**

Appearance Solid

Molecular Weight 885.35

Soluble In DMSO

Chemical Structure

### **Spectral Properties**

Excitation Wavelength 611 nm

Emission Wavelength 629 nm

## **Applications**

XFD610, manufactured by AAT Bioquest, is a red-fluorescent dye that is structurally similar to Alexa Fluor™ 610 (Thermo Fisher). The dye exhibits high photostability and strong fluorescence, making it well-suited for advanced imaging applications and flow cytometry. Its water solubility and pH-independent fluorescence over a broad range (pH 4–10) ensure consistent performance under diverse experimental conditions. XFD610 enables reproducible labeling with high signal intensity, providing reliable results in fluorescence-based assays. Additionally, it serves as a robust alternative to Texas Red™, offering improved optical properties for experiments requiring enhanced fluorescence output.

XFD610 acid is a non-reactive compound that can be employed as a reference standard in studies utilizing XFD610 conjugates. It is also suitable for use as a control in confocal microscopy, immunocytochemistry (ICC), high-content screening (HCS), flow cytometry, and live cell imaging applications. Furthermore, it can be utilized in the synthesis of activated esters and STP and can be coupled to hydrazines, hydroxylamines, or amines in aqueous solutions using water-soluble carbodiimides (e.g., EDAC). This allows for the conjugation of the dye to amino-containing molecules, such as proteins, antibodies, amine-modified oligonucleotides, and peptides.