# XFD635 acid

Catalog Number: 70080
Unit Size: 10 mg

## Product Details

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|---|---|
| Storage Conditions | Freeze (< -15 °C) |
| Expiration Date | 24 months upon receiving |

## Chemical Properties

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|---|---|
| Appearance | Solid |
| Molecular Weight | N/A |
| Soluble In | DMSO |

## Spectral Properties

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| Excitation Wavelength | 633 nm |
| Emission Wavelength | 647 nm |

## Applications

XFD635, manufactured by AAT Bioquest, is a bright far red-fluorescent dye structurally similar to Alexa Fluor™ 635 (Thermo Fisher). It is characterized by its intense brightness, high fluorescence quantum yield and photostability. The dye demonstrates excellent solubility in aqueous solutions and retains pH-independent fluorescence over a broad range (pH 4–11), ensuring consistent performance across diverse experimental conditions. Optimally excited by the 633 nm emission line of He-Ne lasers or the 635 nm diode laser, XFD635 is particularly well-suited for flow cytometry. Its robust and uniform labeling properties yield high signal intensity and reproducibility, making it an ideal choice for advanced fluorescence imaging, flow cytometry, and various fluorescence-based analytical techniques.

XFD635 acid is a non-reactive compound that can be employed as a reference standard in studies utilizing XFD635 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.