

XFD514 acid

Catalog Number: 1793

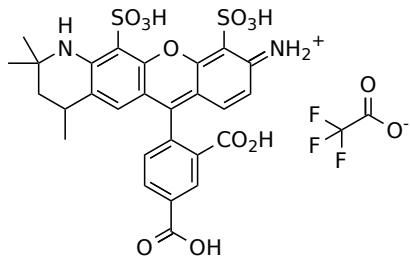
Unit Size: 5 mg

Product Details

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

Chemical Properties

Appearance	Solid red
Molecular Weight	730.64
Soluble In	DMSO
Chemical Structure	



Spectral Properties

Excitation Wavelength	518 nm
Emission Wavelength	543 nm

Applications

XFD514, manufactured by AAT Bioquest, is a bright green-fluorescent dye that is structurally identical to Alexa Fluor® 514 (ThermoFisher). With optimal excitation between 480-535 nm, it is ideally compatible with the 488 nm line of the Argon-Ion laser and the 532 nm line of the frequency-doubled Nd:YAG laser. XFD514 offers excellent water solubility and maintains stability across a broad pH range (pH 4–10), making it an excellent choice for delivering consistent and reliable fluorescence signals in both microscopy and flow cytometry applications. XFD514 acid is a non-reactive compound that can be employed as a reference standard in studies utilizing XFD514 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.