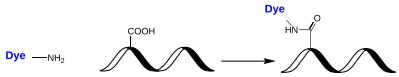
XFD555 amine

Catalog Number: 1707
Unit Size: 1 mg

Product Details

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

Chemical Properties

Appearance	Solid
Molecular Weight	1103.10
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	553 nm
Emission Wavelength	568 nm

Applications

XFD555, manufactured by AAT Bioquest, is structurally similar to Alexa Fluor™ 555 (Thermo Fisher). It is a bright orange-fluorescent dye with an excitation optimized for use with either the 488 nm line of the argon-ion laser or the 532 nm line of the frequency-doubled Nd:YAG laser. The high fluorescence quantum yield and high photostability of XFD555 allow for the detection of low-abundance biological structures with great sensitivity. XFD555 demonstrates good aqueous solubility and pH-insensitivity over a broad pH range (pH 4–10), ensuring stable fluorescence generation under varying experimental conditions. XFD555 dye molecules can be attached to proteins at high molar ratios without significant self-quenching, enabling brighter conjugates and more sensitive detection in imaging and flow cytometry.

XFD555 amine is a carbonyl-reactive building block for modifying carboxylic groups in the presence of activators such as EDC or DCC, or activated esters like NHS esters, through the formation of stable amide bonds. Additionally, it can be used as an amine donor for enzymatic transamination labeling.