ATTO 488 acid

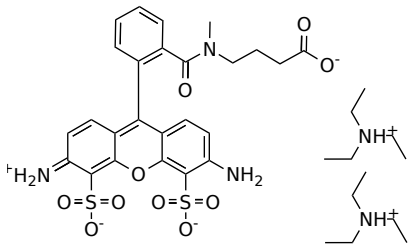
Catalog Number: 2813
Unit Size: 10 mg

Product Details

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

Chemical Properties

Appearance	Solid orange
Molecular Weight	791.98
Soluble In	DMSO
Chemical Structure	



Spectral Properties

Excitation Wavelength	499 nm
Emission Wavelength	520 nm

Applications

ATTO 488 is a hydrophilic, rhodamine-based fluorescent dye with exceptional water solubility. It is characterized by strong absorption, a high fluorescence quantum yield, and exceptional photostability, making it highly suitable for advanced fluorescence imaging techniques. The dye exhibits optimal excitation within the 480-515 nm wavelength range, aligning precisely with the 488 nm emission line of the Argon-Ion laser. ATTO 488 is particularly effective for single-molecule detection and super-resolution microscopy methods such as PALM, dSTORM, and STED. Moreover, it is well-suited for flow cytometry (FACS), fluorescence in situ hybridization (FISH), and other bioanalytical applications. ATTO 488 acid is a non-reactive compound that can be employed as a reference standard in studies utilizing ATTO 488 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.