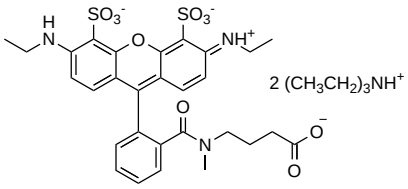
AATOM™ 532 acid

Catalog Number: 2820
Unit Size: 10 mg

Product Details

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

Chemical Properties

Appearance	Solid red
Molecular Weight	848.08
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	531 nm
Emission Wavelength	552 nm

Applications

AATOM™ 532 is a rhodamine-based fluorescent dye characterized by its strong absorption and exceptional fluorescence quantum yield (0.90). It demonstrates good photostability along with excellent water solubility, and features a sufficient Stokes shift (Ex/Em = 531/552). AATOM™ 532 is highly suitable for single-molecule detection and high-resolution microscopy techniques such as SIM and STED. Additionally, it is well-suited for flow cytometry (FACS), fluorescence in situ hybridization (FISH), and a variety of other biological assays, making it a versatile tool in advanced fluorescence-based research. It is optimally excited within the 515-545 nm range, with the 532 nm output of a frequency-doubled Nd:YAG laser serving as an ideal excitation source.

AATOM™ 532 acid is a non-reactive compound that can be employed as a reference standard in studies utilizing AATOM™ 532 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. This product is manufactured by AAT Bioquest and is not affiliated with ATTO-TEC GmbH.