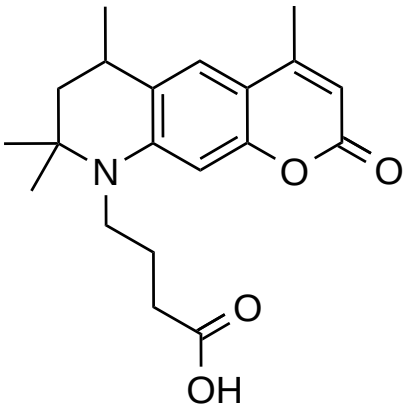
AATOM™ 390 acid

Catalog Number: 70200
Unit Size: 5 mg

Product Details

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

Chemical Properties

Appearance	Solid gray
Molecular Weight	343.42
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	390 nm
Emission Wavelength	475 nm

Applications

AATOM™ 390 is a coumarin-based fluorescent dye characterized by its high fluorescence quantum yield, large Stokes shift, good photostability, and low molecular weight. It exhibits moderate hydrophilicity and is optimally excited within the 360-410 nm range, with a mercury arc lamp (emission lines at 365 nm and 405 nm) serving as an effective excitation source. This dye is well-suited for applications in single-molecule detection and advanced high-resolution microscopy techniques, including PALM, dSTORM, and STED. Additionally, AATOM™ 390 is compatible with flow cytometry (FACS), fluorescence in situ hybridization (FISH), and other diverse biological assays.

AATOM™ 390 acid is a non-reactive compound that can be employed as a reference standard in studies utilizing AATOM™ 390 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.