

AATOM™ 390 Biotin Conjugate

Catalog Number: 3300

Unit Size: 1 mg

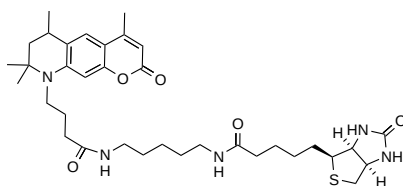
Product Details

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

Chemical Properties

Appearance	Solid light yellow
Molecular Weight	653.88
Soluble In	DMSO

Chemical Structure



Spectral Properties

Excitation Wavelength	390 nm
Emission Wavelength	476 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, making it a valuable tool in various scientific applications. The dye exhibits moderate hydrophilicity and has an optimal excitation range of 360–410 nm, aligning well with the emission lines of mercury arc lamps at 365 nm and 405 nm. AATOM™ 390 is particularly suited for single-molecule detection and high-resolution microscopy techniques, including PALM, dSTORM, and STED. It is also compatible with flow cytometry (FACS), fluorescence in situ hybridization (FISH), and a range of other biological assays.

AATOM™ 390 Biotin conjugates are utilized in diverse applications such as ELISA, immunohistochemistry, in situ hybridization, and flow cytometry for the detection of streptavidin, avidin, or extravidin-conjugates. In biotechnology, biotin is a critical reagent for protein detection, purification, and immobilization due to its strong binding affinity to streptavidin and avidin. The minimal size of the biotin moiety generally preserves the functional integrity of biotinylated proteins. AATOM™ 390 biotin consists of a biotinyl group, a spacer arm, and an AATOM™ 390 dye. This product is manufactured by AAT Bioquest and is not affiliated with ATTO-TEC GmbH.