

## AATOM™ 425 TCO

Catalog Number: 70216

Unit Size: 1 mg

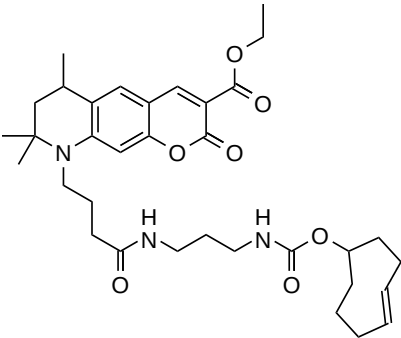
### Product Details

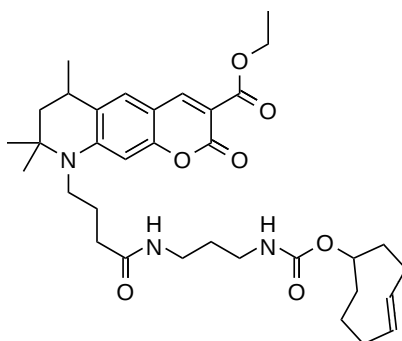
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Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

### Chemical Properties

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Appearance	Solid
Molecular Weight	609.76
Soluble In	DMSO
Chemical Structure	



### Spectral Properties

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Excitation Wavelength	438 nm
Emission Wavelength	484 nm

### Applications

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AATOM™ 425 is a coumarin-based fluorescent dye characterized by its high fluorescence quantum yield, large Stokes shift, excellent photostability, and low molecular weight. The dye exhibits moderate hydrophilicity and has an optimal excitation range of 405-455 nm. AATOM™ 425 is particularly suited for applications in single-molecule detection and high-resolution microscopy techniques, including PALM, dSTORM, and STED microscopy. It is also compatible with flow cytometry (FACS), fluorescence in situ hybridization (FISH), and a range of other biological assays.

AATOM™ 425 TCO is particularly useful for labeling tetrazine-modified biomolecules under copper-free conditions. It reacts with tetrazine-functionalized molecules, forming a stable conjugate via a dihydropyrazine moiety. This click reaction is favored over others due to its extremely fast kinetics and higher yields under mild reaction conditions, making it a popular choice for researchers. This product is manufactured by AAT Bioquest and is not affiliated with ATTO-TEC GmbH.