

AATOM™ Rho12 TCO

Catalog Number: 70376

Unit Size: 1 mg

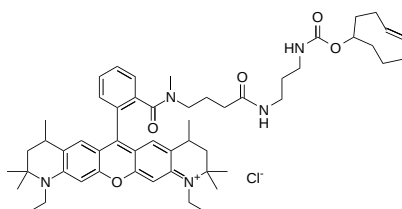
Product Details

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

Chemical Properties

Appearance	Solid
Molecular Weight	894.62
Soluble In	DMSO

Chemical Structure



Spectral Properties

Excitation Wavelength	575 nm
Emission Wavelength	600 nm

Applications

AATOM™ Rho12 is a rhodamine-based fluorescent dye characterized by its bright fluorescence, strong absorption, and good photostability. It exhibits excitation and emission maxima of 575/600 nm and can be efficiently excited using commonly available yellow-green excitation sources. AATOM™ Rho12 is suitable for fluorescence imaging, super-resolution microscopy techniques including PALM, dSTORM, and STED, as well as flow cytometry and other fluorescence-based biological applications.

AATOM™ Rho12 TCO is particularly useful for labeling tetrazine-functionalized biomolecules under copper-free conditions. The trans-cyclooctene (TCO) group reacts rapidly and selectively with tetrazines, forming stable covalent conjugates under mild reaction conditions. This bioorthogonal reaction is widely used for fluorescence labeling of biomolecules in microscopy, flow cytometry, immunocytochemistry (ICC), high-content screening (HCS), and related fluorescence-based applications. This product is manufactured by AAT Bioquest and is not affiliated with ATTO-TEC GmbH.