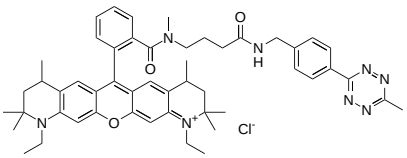
AATOM™ Rho12 Tetrazine

Catalog Number: 70377
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	869.53
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	575 nm
Emission Wavelength	600 nm

Applications

AATOM™ Rho12 is a rhodamine-based fluorescent dye known for its strong absorption, bright fluorescence, 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 advanced fluorescence imaging applications including single-molecule detection and super-resolution microscopy techniques such as PALM, dSTORM, and STED. It is also compatible with flow cytometry, fluorescence imaging, and other fluorescence-based biological assays.

AATOM™ Rho12 Tetrazine is particularly useful for labeling TCO-modified biomolecules under copper-free conditions. The tetrazine group reacts rapidly and selectively with trans-cyclooctene (TCO)-functionalized molecules, forming stable covalent conjugates under mild reaction conditions. This bioorthogonal reaction is widely used for fluorescence labeling applications requiring fast reaction kinetics and efficient conjugation. This product is manufactured by AAT Bioquest and is not affiliated with ATTO-TEC GmbH.