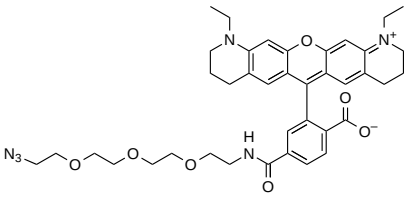
AATOM™ 565 azide

Catalog Number: 2871
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	710.82
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	562 nm
Emission Wavelength	589 nm

Applications

AATOM™ 565 is a rhodamine-based fluorescent dye characterized by its strong absorption, high fluorescence quantum yield, and excellent thermal and photostability. It is optimally excited within the 545-575 nm wavelength range and emits in the orange-red region of the visible spectrum. This dye is particularly suited for advanced applications in single-molecule detection and high-resolution microscopy techniques such as PALM, dSTORM, and STED microscopy. It is also compatible with flow cytometry (FACS), fluorescence in situ hybridization (FISH), FRET, and various other biological assays. However, due to its limited water solubility, AATOM™ 565 may be less ideal for aqueous-based applications. For these contexts, iFluor® 568 offers a viable alternative, providing similar spectral profiles with brighter fluorescence and improved aqueous compatibility.

The azide derivative of AATOM™ 565 is widely used for labeling terminal alkynes on peptides, antibodies, and other biomolecules via click chemistry. It participates in copper-catalyzed azide-alkyne cycloaddition (CuAAC) with alkyne-containing molecules and strain-promoted alkyne-azide cycloaddition (SPAAC) with DBCO- or BCN-containing molecules.
This product is manufactured by AAT Bioquest and is not affiliated with ATTO-TEC GmbH.