# AATOM™ 488 alkyne

Catalog Number: 2818
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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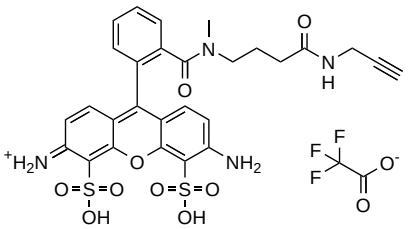
|---|---|
| Appearance | Solid red |
| Molecular Weight | 626.66 |
| Soluble In | DMSO |
| Chemical Structure |  |

## Spectral Properties

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|---|---|
| Excitation Wavelength | 499 nm |
| Emission Wavelength | 520 nm |

## Applications

AATOM™ 488 is a hydrophilic, rhodamine-based fluorescent dye with exceptional water solubility. It is characterized by strong absorption, a high fluorescence quantum yield, and exceptional photostability, making it highly suitable for advanced fluorescence imaging techniques. The dye exhibits optimal excitation within the 480-515 nm wavelength range, aligning precisely with the 488 nm emission line of the Argon-Ion laser. AATOM™ 488 is particularly effective for single-molecule detection and super-resolution microscopy methods such as PALM, dSTORM, and STED. Moreover, it is well-suited for flow cytometry (FACS), fluorescence in situ hybridization (FISH), and other bioanalytical applications.

The alkyne derivative of AATOM™ 488 is widely used for labeling azides on peptides, antibodies, and other biomolecules via click chemistry. It participates in copper-catalyzed azide-alkyne cycloaddition (CuAAC) with azide-containing molecules. This product is manufactured by AAT Bioquest and is not affiliated with ATTO-TEC GmbH.