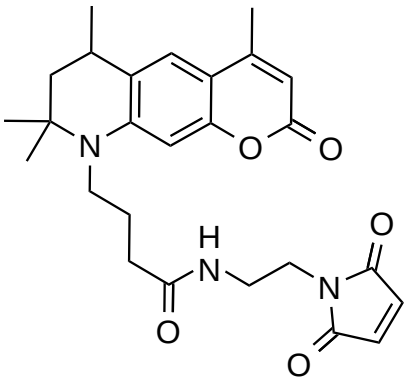
AATOM™ 390 maleimide

Catalog Number: 70202
Unit Size: 1 mg

Product Details

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

Chemical Properties

Appearance	Solid light yellow
Molecular Weight	465.55
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	390 nm
Emission Wavelength	475 nm

Applications

AATOM™ 390 is a coumarin-based fluorescent dye characterized by its high fluorescence quantum yield, large Stokes shift, good photostability, and low molecular weight. It exhibits moderate hydrophilicity and is optimally excited within the 360-410 nm range, with a mercury arc lamp (emission lines at 365 nm and 405 nm) serving as an effective excitation source. This dye is well-suited for applications in single-molecule detection and advanced high-resolution microscopy techniques, including PALM, dSTORM, and STED. Additionally, AATOM™ 390 is compatible with flow cytometry (FACS), fluorescence in situ hybridization (FISH), and other diverse biological assays.

The maleimide derivative of AATOM™ 390 is widely used for labeling biomolecules with free thiol (SH) groups, including antibodies, proteins, thiol-modified oligonucleotides, and low molecular weight ligands. Maleimides react readily with sulfhydryl groups, forming stable thio-ether bonds between the dye and the biomolecule, facilitating robust and reliable labeling for diverse experimental applications. This product is manufactured by AAT Bioquest and is not affiliated with ATTO-TEC GmbH.