

Ubiquitin-AMC Substrate

Catalog Number: 12900

Unit Size: 50 ug

Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	24 months upon receiving

Chemical Properties

Appearance	Solid
Molecular Weight	8765.4
Soluble In	DMSO

Spectral Properties

Excitation Wavelength	341 nm
Emission Wavelength	441 nm

Applications

Ubiquitin-AMC Substrate consists of full-length ubiquitin conjugated to 7-amido-4-methylcoumarin (AMC). In its intact form, the substrate exhibits minimal fluorescence. Upon cleavage of the ubiquitin-AMC substrate by deubiquitinating enzymes (DUBs), free AMC is released, generating a measurable blue fluorescent signal with excitation and emission maxima of approximately 340 nm and 440 nm. This reaction enables real-time monitoring of DUB activity under standard in vitro assay conditions.

Ubiquitin-AMC is commonly used for biochemical characterization of DUBs, determination of kinetic parameters, and screening of enzyme modulators. The fluorescence-based format is compatible with standard microplate readers and supports continuous measurement of enzymatic activity.