

Mca-PLAQAV-Dpa-RSSSR-NH2

Catalog number: 13560

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	1638.96
Soluble In	DMSO

Spectral Properties

Excitation Wavelength	322 nm
Emission Wavelength	381 nm

Applications

Mca-PLAQAV-Dpa-RSSSR-NH2 is a fluorogenic peptide substrate for detecting tumor necrosis factor-alpha converting enzyme (TACE or ADAM17) and related enzymes such as ADAM8, ADAM9 and ADAM10. Its N-terminal contains a highly fluorescent 7-methoxycoumarin (MCA) fluorophore that is efficiently quenched by non-fluorescent 2,4-dinitrophenyl group on Dpa via fluorescence resonance energy transfer (dark FRET). It can be used to measure the activities of peptidases that are capable of cleaving an amide bond between the fluorescent group and the quencher group, resulting an increase in fluorescence. The peptide sequence is derived from the pro tumor necrosis factor-alpha (TNF-alpha). The cleavage site by TACE/ADAM17 and ADAM10 is the peptide bond between A (Ala) and V (Val) residues.