

PRODUCT: Mca-RPPGFSAFK(Dnp)

ALTERNATE NAME:	Protease substrate; Mca - RPPGFSAF - K(Dnp)
CATALOG #:	B1132-500, 1000
AMOUNT:	500 µg, 1 mg
PEPTIDE SEQUENCE:	Mca-Arg-Pro-Pro-Gly-Phe-Ser-Ala-Phe-Lys(Dnp)-OH[Mca=(7-methoxycoumarin-4-yl)acetyl;Dnp=2,4-dinitrophenyl]
MOLECULAR FORMULA:	C ₆₆ H ₈₁ N ₁₅ O ₁₉
MOLECULAR WEIGHT:	1388.46
APPEARANCE:	Pale yellow to yellow solid
SOLUBILITY:	DMSO (>10 mg/ml)
PURITY:	≥95% by HPLC
STORAGE:	Store at -20 °C. Protect from light
DESCRIPTION:	A useful fluorescence resonance energy transfer (FRET) substrate for assaying ECE-1 and ECE-2, ACE1 and ACE2, neprilysin, thermolysin (TLN), MMP-2 and MMP9, thimet oligopeptidase, cathepsin A, cathepsin X/Z, BACE, and insulinase, but not MMP1. Fluorescence of Mca (donor) is quenched by Dnp (quencher) in the intact peptide. Proteolytic cleavage of the FRET peptide separates the donor and the quencher, recovering the quenched fluorescence of Mca that is directly related to the enzyme activities and can be monitored at Ex/Em: 328 nm/393 nm.
REFERENCE:	Jullien, N., <i>et al.</i> (2010). <i>J. Med. Chem.</i> 53 , 208-220

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

RELATED PRODUCTS:

Angiotensin I Converting Enzyme 1 (ACE1) Inhibitor Screening Kit (**K228**)
Angiotensin I Converting Enzyme 1 (ACE1) Activity Assay Kit (**K227**)
Angiotensin II, Human (**4917**)
ACE Antibody (CT) (**6703**)
MMP-9 Inhibitor Screening Kit, Fluorogenic (**K844**)

USAGE: **FOR RESEARCH USE ONLY! Not to be used in humans**