Decanoyl-RVKR-CMK

#78713

Product Information

Description: Decanoyl-Arg-Val-Lys-Arg-chlororomethylketone, also called Subtilisin/Kex2p-like proprotein convertase inhibitor, is a small, synthetic, irreversible and cell-permeable modified RVKR peptide that inhibits the seven pro-protein convertases: furin and PC1, PC2, PC4, PACE4, PC5, PC7. Proprotein convertases cleave proproteins to generate bioactive peptides or to activate enzymes and growth factors, thus regulating critical biological processes and playing a role in pathologies such as cancer or viral infection. Therefore, they represent potential therapeutic targets in a number of diseases.
As an inhibitor of furin, Decanoyl-RVKR-CMK blocks the fusion of flavaviruses and coronaviruses, including SARS-CoV-2, with the membrane of human host cells. It also inhibits the processing of proET-1 in endothelial cells and the secretion of VGF in PC12 cells.

Molecular Formula: $C_{34}H_{66}ClN_{11}O_5$

Amount: 500 µg (#78713-1) or 1 mg (#78713-2) or 5 mg (#78713-3)

PubChem ID: 9962075

Supplied As: A crystalline solid

Solubility: Soluble in water. For obtaining a higher solubility, warm the tube at 37°C and shake it in the ultrasonic bath for a while.

Stability: At least 6 months at -20°C. Avoid freeze/thaw cycles.

Storage: -20°C

MW: 744.42

Cas No. 150113-99-8

Purity: ≥95% determined by HPLC

Applications: Inhibition of furin and related endoprotease/proprotein convertase (PC1, PC2, PC4, PACE4, PC5, PC7)
Useful as control inhibitor when using the Furin Protease Assay Kit BPS Bioscience #78040).
Useful when studying the role of Furin in viral fusion with BPS Bioscience Spike pseudoviruses or ACE2-HEK cell lines.

Chemical Structure