

**PC7**

Proprotein Convertase Subtilisin/Kexin Type 7 (PCSK7)
human, recombinant, human cell line HEK293S

Cat. No.	Amount
PR-969S	2.000 U
PR-969L	5 x 2.000 U

Unit Definition: The activity is defined by the amount of PC7 (μg) that releases 1 pmol AMC from Pyr-Arg-Thr-Lys-Arg-AMC in 1 minute (in 100 mM Hepes/NaOH pH 7.0, 2 mM, 0.2% Triton-X-100 at 37° C with 200 μM Pyr-Arg-Thr-Lys-Arg-AMC).

For general laboratory use.

Shipping: shipped on dry ice

Storage Conditions: store at -80 °C

Additional Storage Conditions: avoid freeze/thaw cycles

Shelf Life: 12 months

Molecular Weight: 58.8 kDa

Accession number: Q16549

Purity: > 90 % (SDS-PAGE)

Form: liquid (supplied in 100 mM Hepes/NaOH pH 7.0, 2mM CaCl₂, 0.2 % Triton-X-100)

Description:

PC7 (proprotein convertase subtilisin/kexin type 7, PCSK7, LPC) is a ubiquitously expressed proprotein convertase involved in the proteolytic maturation of many secreted proteins, such as growth factors, growth factor receptors, serum proteins, coagulation factors and prohormones. PCs also activate proteins of bacterial and viral pathogens and are associated with pathologies like cancer and autoimmune diseases. Recombinant PC7 is expressed in the human HEK293S cell line facilitating homogenous glycosylation of the protein. Ca²⁺ is crucial for activity; avoid calcium chelators like citrate, EDTA or EGTA in buffers.

For dilution in enzymatic assays, include detergents (e.g. 0.2% Triton-X-100) or BSA (e.g. 1mg/ml) in buffers.

Selected References:

Dahms et al. (2021) OFF-State-Specific Inhibition of the Proprotein Convertase Furin. *ACS Chem. Biol.* **10.1021** acschembio.1c00411
 Dahms et al. (2022) Dichlorophenylpyridine-Based Molecules Inhibit Furin through an Induced-Fit Mechanism. *ACS Chem. Biol.* **10.1021** acschembio.2c00103