

## KLK7

Catalog # PVGS1610

### Specification

# **KLK7 - Product Information**

Primary Accession Species Mouse

Sequence Gln22-Arg249

Purity > 90% as analyzed by SDS-PAGE

Endotoxin Level < 1 EU/  $\mu$ g of protein by gel clotting method

Expression System CHO

Formulation

Lyophilized from a 0.2  $\mu m$  filtered solution in PBS.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in  $ddH_2O$  or PBS up to 100 µg/ml.

**Q91VE3** 

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

# **KLK7 - Additional Information**

Gene ID 23993

**Other Names** Kallikrein-7, 3.4.21.117, Serine protease 6, Stratum corneum chymotryptic enzyme, Thymopsin, Klk7, Prss6, Scce

#### Target Background

Kallikrein-related peptidase 7 (KLK7) is a serine protease and was initially purified from the epidermis and characterised as stratum corneum chymotryptic enzyme (SCCE). It was later identified as the seventh member of the human kallikrein family. KLK7 is secreted as an inactive zymogen in the stratum granulosum layer of the epidermis and may be activated by KLK5 or matriptase. Once active, KLK7 is able to cleave desmocollin and corneodesmosin, indicating a role for KLK7 in maintaining skin homeostasis.



# **KLK7 - Protein Information**

Name Klk7

Synonyms Prss6, Scce

Function

May catalyze the degradation of intercellular cohesive structures in the cornified layer of the skin in the continuous shedding of cells from the skin surface. Specific for amino acid residues with aromatic side chains in the P1 position. Cleaves insulin A chain at '14-Tyr-|-Gln-15' and insulin B chain at '6-Leu-|-Cys-7', '16-Tyr-|-Leu-17', '25-Phe-|-Tyr-26' and '26-Tyr-|-Thr-27'. Could play a role in the activation of precursors to inflammatory cytokines.

Cellular Location Secreted.

### **Tissue Location**

Expressed in skin and, at lower levels, in lung, kidney, brain, heart and spleen. In skin, expressed in high suprabasal keratinocytes and in the luminal parts of hair follicles. Not detected in liver and skeletal muscle.

## KLK7 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

KLK7 - Images