



Recombinant Protein Technical Manual

Recombinant Mouse Kallikrein 7/KLK7 Protein (His Tag)(Active)

RPES3839

Product Data:

Product SKU: RPES3839

Size: 10µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: Q91VE3

Protein Information:

Molecular Mass: 26.5 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity: Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH₂ (AnaSpec, Cat#27114). The specific activity is >70 pmoles/min/µg. (Activation description: The proenzyme needs to be activated by Thermolysin for an activated

Purity: > (71.4+26) % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Kallikrein-7; Klk7; Serine protease 6; Stratum corneum chymotryptic enzyme; Thymopsin; kallikrein-related peptidase 7; PRSS6; SCCEkallikrein-7;SCCE

Immunogen Information:

Sequence: Met1-Arg249

Background:

Kallikrein-7, also known as kallikrein-related peptidase 7, Stratum corneum chymotryptic enzyme, Serine protease 6, KLK7, and PRSS6, is a secreted protein which belongs to the peptidase S1 family and Kallikrein subfamily. Members of the Kallikrein family are involved in various malignancies such as prostate (PSA, KLK2, KLK15), ovarian (KLK4, KLK5, KLK6, KLK8, KLK10), and breast cancer (KLK10, KLK13, KLK14). Kallikrein-7 / KLK7 appears to be increased in ovarian cancer and higher KLK7 expression in ovarian cancer tissue is associated with poorer prognosis of ovarian cancer patients. Kallikrein-7 / KLK7 is abundantly expressed in the skin and is expressed by keratinocytes in the epidermis. Kallikrein-7 / KLK7 is up-regulated in ovarian carcinoma, especially late-stage serous carcinoma, compared with normal ovaries and benign adenomas (at the protein level). It was significantly associated with shorter overall survival (OS) and disease-free survival (DFS). Kallikrein-7 / KLK7 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. KLK7 also plays a role in the activation of precursors to inflammatory cytokines.