

Recombinant Human Kallikrein 7/KLK7 Protein (His Tag)

Catalog No. PKSH031619

Note: Centrifuge before opening to ensure complete recovery of vial contents.

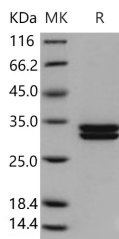
Description

Synonyms	Kallikrein-7;hK7;Serine Protease 6;Stratum Corneum Chymotryptic Enzyme;hSCCE;KLK7;PRSS6;SCCE
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Arg 253
Accession	NP_005037.1
Calculated Molecular Weight	26.7 kDa
Tag	C-His
Bioactivity	Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK (Dnp) NH ₂ , R&D Systems, Catalog # ES002. The specific activity is > 150 pmoles/min/μg. (Activation description: The proenzyme needs to be activated by Thermolysin for an activated form)

Properties

Purity	> 97 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, 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 Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 97 % as determined by reducing SDS-PAGE.

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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.

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