

Recombinant Human KLK-8/Kallikrein-8 Protein (His Tag)

Catalog No. PKSH030307

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

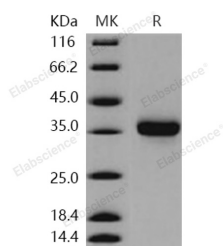
Description

Synonyms	Kallikrein-8;hK8;Neuropsin;NP;Ovasin;Serine Protease 19;Serine Protease TADG-14;Tumor-Associated Differentially Expressed Gene 14 Protein;KLK8;NRPN;PRSS19;TADG14
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Gly 260
Accession	O60259-1
Calculated Molecular Weight	26.4 kDa
Observed molecular weight	36 kDa
Tag	C-His
Bioactivity	Measured by its ability to cleave the fluorogenic peptide substrate BocVPRAMC. The specific activity is > 400pmoles/min/μg

Properties

Purity	> 98 % 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



> 98 % as determined by reducing SDS-PAGE.

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Background

Kallikrein-8, also known as Neuropsin, Serine protease 19, Serine protease TADG-14, Tumor-associated differentially expressed gene 14 protein and KLK8, is a secreted protein which belongs to the peptidase S1 family and Kallikrein subfamily. It is a serine protease which is capable of degrading a number of proteins such as casein, fibrinogen, kininogen, fibronectin and collagen type IV. Kallikrein-8 / KLK8 plays a role in the formation and maturation of orphan and small synaptic boutons in the Schaffer-collateral pathway. It regulates Schaffer-collateral long-term potentiation in the hippocampus and is required for memory acquisition and synaptic plasticity. It is involved in skin desquamation and keratinocyte proliferation and plays a role in the secondary phase of pathogenesis following spinal cord injury. It also cleaves L1CAM in response to increased neural activity. It induces neurite outgrowth and fasciculation of cultured hippocampal neurons. Kallikrein-8 / KLK8 is expressed at high levels in serum, ascites fluid and tumor cytosol of advanced stage ovarian cancer patients and may serve as a marker of ovarian cancer. Kallikrein-8 / KLK8 may have potential clinical value for disease diagnosis or prognosis and it may also be a useful therapeutic target.

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