

Recombinant Protein Technical Manual

Recombinant Human KLK-8/Kallikrein-8 Protein (His Tag)(Active) RPES0539

**Product Data:** 

Product SKU: RPES0539	<b>Size:</b> 10µg	

Species: Human

Expression host: HEK293 Cells

**Uniprot:** 060259

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Molecular Mass:	26.4 kDa
AP Molecular Mass:	36 kDa
Tag:	C-His
Bio-activity:	Measured by its ability to cleave the fluorogenic peptide substrate BocVPRAMC. The specific activity is > 400pmoles/min/µg
Purity:	> 98 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ 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-8; hK8; Neuropsin; NP; Ovasin; Serine Protease 19; Serine Protease TADG4; Tumor-Associated Differentially Expressed Gene 14 Protein; KLK8; NRPN; PRSS19; TADG14

## Sequence: Met 1-Gly 260

## Background:

Kallikrein-8, also known as Neuropsin, Serine protease 19, Serine protease TADG4, 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.