

Recombinant Human KLK6, His-tagged

Cat. No. klk6-3928H **Lot. No.** (See product label)

SPECIFICATION

Product Overview Recombinant Human KLK6(Glu17-Lys244) fused with His tag at C-terminal was expressed in HEK293 cells.

Species Human

Source HEK293

ProteinLength Glu17-Lys244

Description

Kallikreins are a subgroup of serine proteases, enzymes capable of cleaving peptide bonds in proteins. In humans, tissue kallikrein-related peptidases (KLKs) encode a family of fifteen closely related serine proteases. Kallikreins are responsible for the co-ordination of various physiological functions including blood pressure, semen liquefaction and skin desquamation. Serine protease which exhibits a preference for Arg over Lys in the substrate P1 position and for Ser or Pro in the P2 position. Shows activity against amyloid precursor protein, myelin basic protein, gelatin, casein and extracellular matrix proteins such as fibronectin, laminin, vitronectin and collagen. Kallikrein-6 (KLK6) also known as Bssp, Kik7, MGC9355, PRSS18, PRSS9, SP59 and hK6. KLK6 is one of the fifteen kallikrein subfamily members, and is regulated by steroid hormones. In tissue culture, KLK6 has been found to generate amyloidogenic fragments from the amyloid precursor protein, suggesting a potential for involvement in Alzheimer's disease. The prior studies indicate KLK6 is elevated at sites of central nervous system (CNS) inflammation and which shows regulated expression with T cell activation. Notably, KLK6 is also elevated in the serum of

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multiple sclerosis (MS) patients. KLK6 promotes lymphocyte survival by a mechanism that depends in part on activation of PAR1. KLK6 are also associated with neuronal plasticity in the central nervous system.

Predicted N Terminal Glu17 or Ser 81

Form Bulk protein in a 0.22 µm filtered solution of PBS, pH 7.4 and delivered as liquid formulation or lyophilized powder. Normally 5-8% trehalose and mannitol are added as protectants before lyophilization.

Molecular Mass Has a calculated MW of 18 kDa (mature form) or 26 kDa (pro form) expressed, Protein migrates as 23 kDa or 33 kDa in reduced SDS-PAGE resulting from autolysis and glycosylation.

Endotoxin Less than 1.0 EU per 1 µg by the LAL method.

Purity >95% as determined by SDS-PAGE. All lots are greater than 95% pure.

Storage Avoid repeated freeze-thaw cycles. No activity loss was observed after storage at: In lyophilized state for 1 year (4 centigrade-8 centigrade); After reconstitution under sterile conditions for 1 month (4 centigrade-8 centigrade) or 3 months (-20 centigrade to -70 centigrade).

GENE INFORMATION

Gene Name [KLK6 kallikrein-related peptidase 6 \[Homo sapiens \]](#)

Official Symbol KLK6

Synonyms KLK6; kallikrein-related peptidase 6; kallikrein 6 (neurosin, zyme) , protease, serine, 18 , PRSS9, PRSS18; kallikrein-6; Bssp; Klk7; neurosin; zyme; protease M; serine

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protease 9; serine protease 18; hK6; SP59; PRSS9; PRSS18; MGC9355;

Gene ID

5653

mRNA Refseq

NM_001012964

Protein Refseq

NP_001012982

MIM

602652

UniProt ID

Q92876

**Chromosome
Location**



19q13.3

Pathway

Alpha-synuclein signaling, organism-specific biosystem;

Function

peptidase activity; protein binding; serine-type endopeptidase activity; serine-type endopeptidase activity;

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