

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, Klk7, 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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	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;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA