Recombinant Human Kallikrein 6/KLK6 Protein (His Tag)

Catalog No. PKSH030894

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

Description	
Synonyms	Kallikrein-6;Neurosin;Protease M;SP59;Serine Protease 18;Serine Protease 9;Zyme;KLK6;PRSS18;PRSS9
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Lys 244
Accession	Q92876-1
Calculated Molecular Weight	26.6 kDa
Tag	C-His
Bioactivity	Measured by its ability to cleave the fluorogenic peptide substrate Boc-QARAMC, R&D Systems, Catalog # ES014.The specific activity is > 250 pmols/min/µg. (Activation description: The proenzyme needs to be activated by Lysyl- Endopeptidase for an activated form)
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μ g 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.

KDa MK R 116 66.2 45.0 35.0 25.0 18.4 14.4

> 95 % as determined by reducing SDS-PAGE.

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Background

KLK6 (kallikrein-related peptidase 6), also known as Klk7, belongs to the peptidase S1 family, Kallikrein subfamily. Kallikreins are a subgroup of serine proteases having diverse physiological functions. Growing evidence suggests that many kallikreins are implicated in carcinogenesis and some have potential as novel cancer and other disease biomarkers. KLK6 is a serine protease which exhibits a preference for Arg over Lys in the substrate P1 position and for Ser or Pro in the P2 position. Klk7 shows activity against amyloid precursor protein, myelin basic protein, gelatin, casein and extracellular matrix proteins such as fibronectin, laminin, vitronectin and collagen. KLK6 degrades alpha-synuclein and prevents its polymerization, indicating that KLK6 may be involved in the pathogenesis of Parkinson disease and other synucleinopathies. Klk7 may be involved in regulation of axon outgrowth following spinal cord injury. Tumor cells treated with a neutralizing KLK6 antibody migrate less than control cells, suggesting a role in invasion and metastasis.

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