Human KLK6 / Kallikrein 6 / Neurosin Protein

Catalog Number: **12142-HCCH**

General Information

Gene Name Synonym:

Bssp; hK6; Klk7; PRSS18; PRSS9; SP59

Protein Construction:

A DNA sequence encoding the human KLK6 (NP_002765.1) (Met1-Lys244) was expressed with six amino acids (LEVLFQ) at the C- terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > (61.6 +34.0) % as determined by SDS-PAGE.

Endotoxin:

< 1.0 EU per μg protein as determined by the LAL method.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Glu 17

Molecular Mass:

The recombinant human KLK6 consists 235 amino acids and predicts a molecular mass of 25.9 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

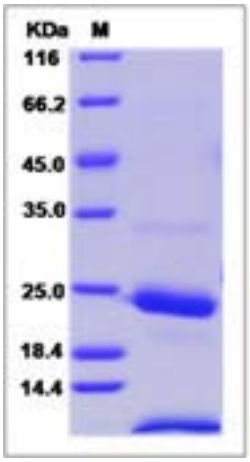
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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.

References

1.Krenzer S, *et al.* (2011) Expression and function of the kallikrein-related peptidase 6 in the human melanoma microenvironment. J Invest Dermatol. 131(11):2281-8. 2.Nathalie HV, *et al.* (2009) High kallikrein-related peptidase 6 in non-small cell lung cancer cells: an indicator of tumour proliferation and poor prognosis. J Cell Mol Med. 13(9B):4014-22. 3.Kim JT, *et al.* (2011) Up-regulation and clinical significance of serine protease kallikrein 6 in colon cancer. Cancer. 117(12):2608-19.