

Human KLK11 / Kallikrein-11 Protein (His Tag)

Catalog Number: 10767-H08H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

PRSS20; TLSP

Protein Construction:

A DNA sequence encoding the human KLK11 isoform 1 (NP_006844.1) (Met 1-Asn 250) with a C-terminal polyhistidine tag was expressed.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to cleave a colorimetric peptide substrate D-Val-Leu-Lys-ThioBenzyl ester (VLK-SBzl), in the presence of 5,5'Dithio-bis (2-nitrobenzoic acid) (DTNB) (Edwards, K.M. et al.,1999, J. Biol. Chem. 274: 30468) . The specific activity is >200 pmoles/min/μg. (Activation description: The proenzyme needs to be activated by Thermolysin for an activated form)

Endotoxin:

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

Stability:

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

Predicted N terminal: Glu 19

Molecular Mass:

The secreted recombinant human KLK11 comprises 243 amino acids with a predicted molecular mass of 27 kDa. As a result of glycosylation, rhKLK11 migrates as an approximately 40 kDa band in SDS-PAGE under reducing conditions.

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:

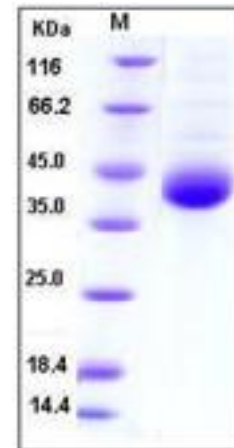
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

kallikrein-related peptidase 11 (KLK11), also known as hippostasin, trypsin-like serine protease and PRSS20, is a member of human tissue kallikrein family. It is a subgroup of serine proteases with diverse physiological functions, which is implicated in carcinogenesis and some with potential that serving as novel biomarkers for ovarian and prostate cancer and other diseases. The KLK11 gene is one of the fifteen kallikrein subfamily members located in a cluster on chromosome 19. Two alternatively spliced forms exist, resulting in 250 (isoform 1) and 282 (isoform 2) amino acid sequences. Isoform 2 is identical to isoform 1, except for an inserted 32 amino acid segment. Isoform 1 is predominantly expressed in brain whereas isoform 2 is preferentially expressed in prostate.

References

1.Yoshida S., *et al.*,(1998), cDNA cloning and expression of a novel serine protease, TLSP. *Biochim. Biophys. Acta* 1399:225-228. 2.Mitsui S., *et al.*, (2000), A novel isoform of a kallikrein-like protease, TLSP/hippostasin, (PRSS20), is expressed in the human brain and prostate.*Biochem. Biophys. Res. Commun.* 272:205-211. 3.Yousef G.M., *et al.*,(2000), Genomic organization, mapping, tissue expression, and hormonal regulation of trypsin-like serine protease (TLSP PRSS20), a new member of the human kallikrein gene family.*Genomics* 63:88-96.

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