Human KLK3 / PSA / Kallikrein-3 Protein (His Tag)

Catalog Number: **10771-H08H**

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Biological Solution Specialist

General Information

Gene Name Synonym:

APS; Hk3; KLK2A1; PSA

Protein Construction:

A DNA sequence encoding the human KLK3 (P07288) (Met 1-Pro 261) was fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to cleave the colorimetric peptide substrate, Succinyl-Arg-Pro-Tyr-p-Nitroanilide(Suc-RPY-pNA). The specific activity is >100 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 ℃

Predicted N terminal: Ala 18

Molecular Mass:

The recombinant human KLK3 consists of 255 amino acids and has a predicted molecular mass of 28.3 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rh KLK3 is approximately 35 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:

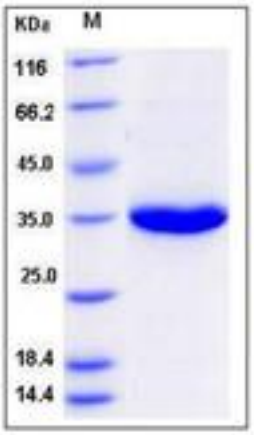
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

KLK3(Kallikrein 3), also known as Prostate Specific Antigen (PSA), kallikrein-related peptidase 3, Gamma-seminoprotein, is a secreted protein of the glandular kallikrein subfamily of serine proteases.KLK3 contains one peptidase S1 domain.KLK3 is a glycoprotein produced almost exclusively by the prostate gland. Growing evidence suggests that many kallikreins are implicated in carcinogenesis and some have potential as novel cancer and other disease biomarkers.

References

1.Koistinen H, *et al.* (2008) Development of peptides specifically modulating the activity of KLK2 and KLK3. Biol Chem. 389(6): 633-42. 2.Yousef GM, *et al.* (2002) Kallikreins, steroid hormones and ovarian cancer: is there a link? Minerva Endocrinol. 27(3): 157-66. 3.Parikh H, *et al.* (2011) Fine mapping the KLK3 locus on chromosome 19q13.33 associated with prostate cancer susceptibility and PSA levels. Hum Genet. 129(6): 675-85.