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Recombinant Human PSA/KLK3 Protein

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Catalog No.: RP01540

Recombinant

Sequence Information

Species Gene ID Swiss Prot Human 354 P07288

Tags

C-His

Synonyms

APS; KLK2A1; PSA; hK3;KLK3; APS; prostate-specific antigen;KLK2A1;PSA;hK3

Product Information

Source HEK293 cells Purification > 95% by SDS-

PAGE.

Endotoxin

<0.1EU/µg

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid votex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact



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Background

KLK3 (Kallikrein Related Peptidase 3) is a Protein Coding gene. The gene is one of the fifteen kallikrein subfamily members located in a cluster on chromosome 19. It encodes a single-chain glycoprotein, a protease that is synthesized in the epithelial cells of the prostate gland and is present in seminal plasma. KLK3, 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.

Basic Information

Description

Recombinant Human PSA/KLK3 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Ala18-Pro261) of human PSA/KLK3 (Accession $\#NP_001639.1$) fused with a $6\times His$ tag at the C-terminus.

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 >160 pmol/min/ μ g, as measured under the described conditions.

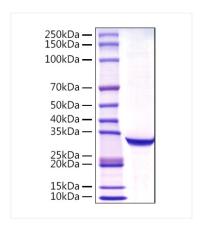
Storage

Store the lyophilized protein at -20°C to -80°C for 12 months.

 After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

Validation Data



Recombinant Human PSA/KLK3 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 30-32kDa.