

Recombinant human Kallikrein 3/PSA protein

Catalog Number: ATGP3926

PRODUCT INFORMATION

Expression system

HEK293

Domain

18-261aa

UniProt No.

P07288

NCBI Accession No.

NP_001639

Alternative Names

KLK3, Prostate-specific antigen, PSA, Gamma-seminoprotein, Seminol, Kallikrein-3, P-30 antigen, Semenogelase, APS, hK3, KLK2A1, kallikrein related peptidase 3, prostate-specific antigen isoform 1

PRODUCT SPECIFICATION

Molecular Weight

27.6 kDa (250aa)

Concentration

0.25mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Specific activity is > 250pmol/min/ug, and is defined as the amount of enzyme cleaves 1pmole of Succinyl-Arg-Pro-Tyr-p-Nitroanilide to Succinyl-Arg-Pro-Tyr and p-Nitroanilide per minute at pH7.5 at 37C.

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

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BACKGROUND

Description

Kallikrein 3, as known as prostate specific antigen (PSA), is a subgroup of serine proteases, enzymes capable of cleaving peptide bonds in proteins. This protein is expressed in the prostate and is thought to be responsible for regulating semen liquefaction through hydrolysis of seminogelin. It is present in small quantities in the serum of men with healthy prostates, but is often elevated in the presence of prostate cancer or other prostate disorders. It is not a unique indicator of prostate cancer, but may also detect prostatitis or benign prostatic hyperplasia. Recombinant human Kallikrein 3 protein, fused to His-tag at C-terminus, was expressed in HEK293 and purified by using conventional chromatography techniques.

Amino acid Sequence

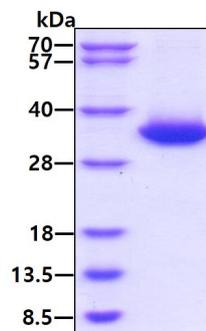
APLILSRIVG GWECEKHSQP WQVLVASRGR AVCGGVLVHP QWVLTAAHCI RNKSVILLGR HSLFHPEDTG QVFQVSHSFP
HPLYDMSLLK NRFLRPGDDS SHDLMLLRLS EPAELTDAVK VMDLPTQEPALGTTTCYASGW GSIEPEEFLT PKKLQCVDLH
VISNDVCAQV HPQKVTKFML CAGRWTGGKS TCSGDSGGPL VCNGVLQGIT SWGSEPCALP ERPSLYTKVV HYRKWIKDTI
VANP<HHHHHH>

General References

Hochmeister MN. et al. (1999) J Forensic Sci. J. 44:1057-1060.
Jain, S. et al. (2002) Postgrad. Med. J. 78:646-650.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain