Recombinant human Kallikrein 3/PSA protein

Catalog Number: ATGP1566

PRODUCT INFORMATION

Expression system
E.coli

Domain
25-261aa

UniProt No.
P07288

NCBI Accession No.
NP_001639.1

Alternative Names
KLK3, Prostate-specific antigen, PSA, Gamma-seminoprotein, Seminin, Kallikrein-3, P-30 antigen, Semenogelase, APS, hK3, KLK2A1, Kallikrein related peptidase 3, Prostate-specific antigen isoform 1

PRODUCT SPECIFICATION

Molecular Weight
28.8 kDa (262aa)

Concentration
1mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% glycerol

Purity
> 85% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE, Denatured

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.

BACKGROUND

Description
Prostate-specific antigen (PSA), also known as gamma-seminoprotein or kallikrein-3 (KLK3), is a member of the kallikrein-related peptidase family. 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. This protein is one of the fifteen kallikrein subfamily members located in a cluster on chromosome 19 and is a protease present in seminal plasma. It is thought to

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function normally in the liquefaction of seminal coagulum, presumably by hydrolysis of the high molecular mass seminal vesicle protein. Serum level of this protein, called PSA in the clinical setting, is useful in the diagnosis and monitoring of prostatic carcinoma. Recombinant human KLK3 protein, fused to His-tag at N-terminus, was expressed in E. coli.

Amino acid Sequence

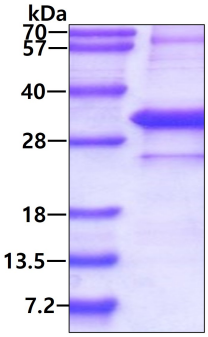
<MGSSHHHHHH SSGLVPRGSH MGSHM>IVGGW ECEKHSQPWQ VLVASRGRAV CGGVLVHPQW VLTAAHCIRN KSVILLGRHS LFHPEDTGQV FQVSHSFPHP LYDMSLLKNR FLRPGDDSSH DLMLLRLSEP AELTDAVKVM DLPTQEPALG TTCYASGWGS IEPEEFLTPK KLQCVDLHVI SNDVCAQVHP QKVTKFMLCA GRWTGGKSTC SGDSGGPLVC NGVLQGITSW GSEPCALPER PSLYTKVVHY RKWIKDTIVA NP

General References

Yang Q.F., et al. (2000) J. Hum. Genet. 45:363-366
Cramer S.D., et al. (2003) J. Natl. Cancer Inst. 95:1044-1053

DATA

SDS-PAGE



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