

AR50390PU-S

Human Kallikrein-3 / PSA / KLK3 (25-261, His-tag) - Purified

Alternate names:

Gamma-seminoprotein, P-30 antigen, Prostate-specific antigen, Semenogelase

Quantity:

0.1 mg

Concentration:

1.0 mg/ml (determined by Bradford assay)

Background:

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 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.

Uniprot ID:

[P07288](#)

NCBI:

[NP_001639.1](#)

GeneID:

[354](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >90% by SDS - PAGE

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% glycerol

Description:

Recombinant human KLK3 protein, fused to His-tag at N-terminus, was expressed in E.coli.

AA Sequence:

MGSSHHHHH SSGLVPRGSH MGSIMIVGGW ECEKHSQPWQ VLVASRGRAV CGGVLVHPQW
VLTAAHCIRN KSVILLGRHS LFHPEDTGQV FQVSHSFPH LYDMSLLKNR FLRPGDDSSH
DLMLRLSEP AELTDAVKVM DLPTQEPALG TTCYASGWGS IEPEEFLLTPK KLQCVDLHVI
SNDVCAQVHP QKVTKFMLCA GRWTGGKSTC SGDSGGPLVC NGVLQGITSW GSEPCALPER
PSLYTKVVHY RKWIKDTIVA NP

Molecular weight: 28.8 kDa (262aa)

Storage:

Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

1. Yang QF, Sakurai T, Shan L, Yu Z, Yoshimura G, Suzuma T, et al. Novel polymorphisms of prostate-specific antigen (PSA) gene associated with PSA mRNA expression in breast cancer. J Hum Genet. 2000;45(6):363-6. PubMed PMID: 11185746.
2. Cramer SD, Chang BL, Rao A, Hawkins GA, Zheng SL, Wade WN, et al. Association between genetic polymorphisms in the prostate-specific antigen gene promoter and serum prostate-specific antigen levels. J Natl Cancer Inst. 2003 Jul 16;95(14):1044-53.

PubMed PMID: 12865450.

Pictures:

