

# Human Kallikrein 3/PSA antibody

Catalog Number: ATGA0228

## PRODUCT INFORMATION

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**Catalog number**

ATGA0228

**Clone No.**

AT1D10

**Product type**

Monoclonal Antibody

**UnitProt 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

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**Antibody Host**

Mouse

**Reacts With**

Human

**Concentration**

1mg/ml (determined by BCA assay)

**Formulation**

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

**Immunogen**

Recombinant human KLK3(25-261aa) purified from E. coli

**Isotype**

IgG1 kappa

**Purification Note**

By protein-G affinity chromatography

**Application**

ELISA, WB, ICC/IF, FACS

**Usage**

The antibody has been tested by ELISA, Western blot, ICC/IF and FACS analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

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## Storage

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 and is secreted by the epithelial cells of the prostate gland. PSA 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. PSA is now used to indicate the presence of semen in forensic serology. The semen of adult males has PSA levels far in excess of those found in other tissues; therefore, a high level of PSA found in a sample is an indicator that semen may be present. Because PSA is a biomarker that is expressed independently of spermatozoa, it remains useful in identifying semen from vasectomized and azoospermic males.

### General References

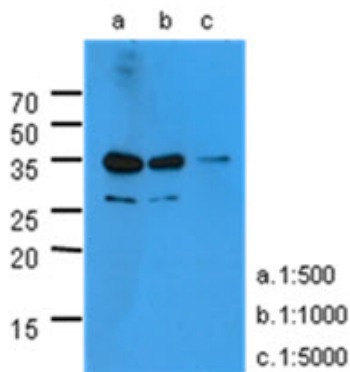
Balk SP, Ko YJ, Bubley GJ (January 2003). *J. Clin. Oncol.* 21 (2): 383-91.

Lilja H (November 2003). *Urology* 62 (5 Suppl 1): 27-33.

Rao AR, Motiwala HG, Karim OM (January 2008). *BJU Int.* 101 (1): 5-10.

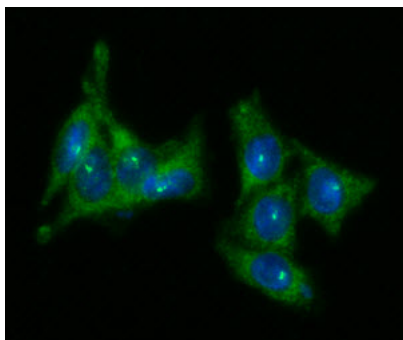
## DATA

### Western blot analysis (WB)



The extracts of PC-3(40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human KLK3 antibody (1:500 ~ 1:5000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

### Immunocytochemistry/Immunofluorescence (ICC/IF)

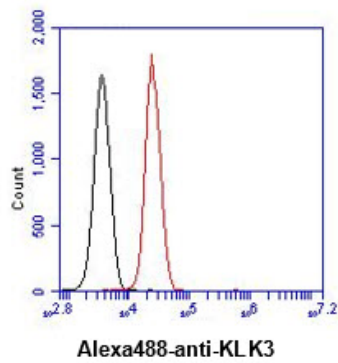


ICC/IF analysis of KLK3 in LNCap cells. The cell was stained with ATGA0228 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

### Flow cytometry (FACS)

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Flow cytometry analysis of KLK3 in LNCaP cell line, staining at 2-5ug for  $1 \times 10^6$  cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).