

## Anti-Prostate Specific Antigen/KLK3 Antibody Picoband®

Catalog Number: PB9259

### About KLK3

Prostate-specific antigen (PSA), also known as gamma-seminoprotein or kallikrein-3 (KLK3), is a glycoprotein enzyme encoded in humans by the KLK3 gene. KLK3 is a member of the kallikrein-related peptidase family and is secreted by the epithelial cells of the prostate gland. This gene is mapped to 19q13.33. KLK3 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. KLK3 is produced for the ejaculate where it liquifies the semen in the seminal coagulum and allows sperm to swim freely. It is also believed to be instrumental in dissolving the cervical mucous cap, allowing the entry of sperm. It is not a unique indicator of prostate cancer, but may also detect prostatitis or benign prostatic hyperplasia.

### Overview

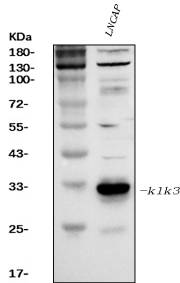
Product Name	Anti-Prostate Specific Antigen/KLK3 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-Prostate Specific Antigen/KLK3 Antibody Picoband® catalog # PB9259. Tested in IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na <sub>2</sub> HPO <sub>4</sub> .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P07288

### Technical Details

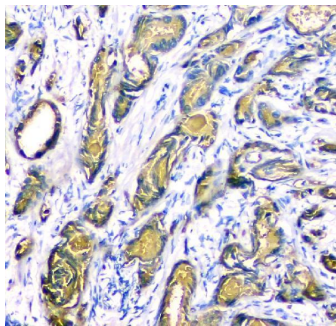
Immunogen	E.coli-derived human PSA recombinant protein (Position: I25-P261). Human PSA shares 54% amino acid (aa) sequence identity with rat PSA.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG

Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human Immunohistochemistry(Paraffin-embedded Section), 1-2 ug/ml, Human

## Anti-Prostate Specific Antigen/KLK3 Antibody Picoband® (PB9259) Images



Western blot analysis of KLK3 using anti-KLK3 antibody (PB9259). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human LNCAP whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-KLK3 antigen affinity purified polyclonal antibody (Catalog # PB9259) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for KLK3 at approximately 29 kDa. The expected band size for KLK3 is at 29 kDa.



IHC analysis of KLK3 using anti-KLK3 antibody (PB9259). KLK3 was detected in a paraffin-embedded section of human prostatic cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-KLK3 Antibody (PB9259) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

## 5 Publications Citing This Product

1. PubMed ID: 10.3390/nu11092203, 6-Sialyllactose Ameliorates In Vivo and In Vitro Benign Prostatic Hyperplasia by Regulating the E2F1/pRb-AR Pathway
2. PubMed ID: 10.18632/aging.102731, Baicalin alleviates benign prostate hyperplasia through androgen-dependent apoptosis
3. PubMed ID: 10.3390/ijms21249567, Anti-Proliferative Effects of Standardized Cornus officinalis on Benign Prostatic Epithelial Cells via the PCNA/E2F1-Dependent Cell Cycle Pathway

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