

Anti-Prostate Specific Antigen/KLK3 Antibody Picoband®

Catalog Number: A01505-3

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

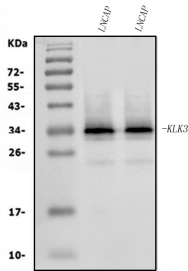
Product Name	Anti-Prostate Specific Antigen/KLK3 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-Prostate Specific Antigen/KLK3 Antibody Picoband® catalog # A01505-3. Tested in ELISA, IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium 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	ELISA, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na ₂ HPO ₄ .
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

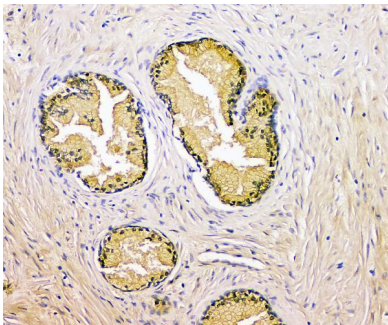
Immunogen	E.coli-derived human Prostate Specific Antigen/KLK3 recombinant protein (Position: A64-D255).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for 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, 0.25-0.5ug/ml, Human Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human ELISA, 0.1-0.5ug/ml, -

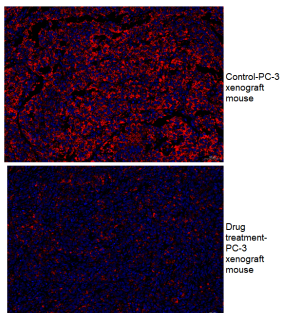
Anti-Prostate Specific Antigen/KLK3 Antibody Picoband® (A01505-3) Images



Western blot analysis of Prostate Specific Antigen/KLK3 using anti-Prostate Specific Antigen/KLK3 antibody (A01505-3). 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 30ug of sample under reducing conditions. Lane 1: human LNCAP whole cell lysates, Lane 2: human LNCAP whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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-Prostate Specific Antigen/KLK3 antigen affinity purified polyclonal antibody (Catalog # A01505-3) 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 Prostate Specific Antigen/KLK3 at approximately 34KD. The expected band size for Prostate Specific Antigen/KLK3 is at 34KD.

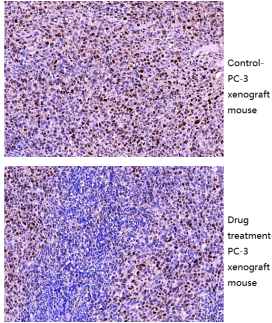


IHC analysis of Prostate Specific Antigen/KLK3 using anti-Prostate Specific Antigen/KLK3 antibody (A01505-3). Prostate Specific Antigen/KLK3 was detected in paraffin-embedded section of human prostatic cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Prostate Specific Antigen/KLK3 Antibody (A01505-3) 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.



IF analysis of Prostate Specific Antigen/KLK3 using anti-Prostate Specific Antigen/KLK3 antibody (A01505-3). Paraffin-embedded tumor sections were used to detect Prostate Specific Antigen (PSA/KLK3). PC-3 cells were inoculated into nude mouse to establish tumors. Tumor-bearing mice were subsequently treated with docetaxel, while control mouse remained untreated. 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 1:500 rabbit anti-Prostate Specific Antigen/KLK3 Antibody (A01505-3) overnight at 4°C. DyLight®594 Conjugated Goat Anti-Rabbit IgG (H+L) (BA1142) was used as secondary antibody at 1:500 dilution and incubated for 45 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate

for the label used.



IHC analysis of Prostate Specific Antigen/KLK3 using anti-Prostate Specific Antigen/KLK3 antibody (A01505-3). Paraffin-embedded tumor sections were used to detect Prostate Specific Antigen (PSA/KLK3). PC-3 cells were inoculated into nude mouse to establish tumors. Tumor-bearing mice were subsequently treated with docetaxel, while control mouse remained untreated. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:500 rabbit anti-Prostate Specific Antigen/KLK3 Antibody (A01505-3) overnight at 4°C. Two-step IHC Detection Kit (Rabbit IgG) was used as secondary antibody and incubated for 45 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

1 Publications Citing This Product

1. PubMed ID: , A disposable electrochemical immunosensor based on carbon screen-printed electrodes for the detection of prostate specific antigen

Visit bosterbio.com/anti-prostate-specific-antigen-klk3-picoband-trade-antibody-a01505-3-boster.html to see all 1 publications.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Prostate Specific Antigen/KLK3 Antibody

For Research Use Only. Not for use in diagnostic procedures.