



Rabbit Anti-Prostatic Acid Phosphatase antibody

SL6293R

Product Name:	Prostatic Acid Phosphatase
Chinese Name:	前列腺酸性磷酸酶抗体
Alias:	Acid phosphatase prostate; ACP 3; ACP3; ACPP; Ecto-5'-nucleotidase; PAP; PPAP_HUMAN; Prostatic acid phosphatase; Thiamine monophosphatase; TMPase; 5'-NT; 5'-nucleotidase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Horse,
Applications:	WB=1:500-2000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	41kDa
Cellular localization:	The cell membraneSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Prostatic Acid Phosphatase:21-120/386
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Prostatic Acid Phosphatase is Belongs to the histidine acid phosphatase family.Cellular localization;Secreted and Lysosome membrane. Predominantly localized in the plasma membrane but also detected in intracellular vesicles.

Function:

A non-specific tyrosine phosphatase that dephosphorylates a diverse number of substrates under acidic conditions (pH 4-6) including alkyl, aryl, and acyl orthophosphate monoesters and phosphorylated proteins. Has lipid phosphatase activity and inactivates lysophosphatidic acid in seminal plasma.

Subunit:

Homodimer; dimer formation is required for phosphatase activity.

Subcellular Location:

Isoform 1: Secreted. Isoform 2: Cell membrane.

Isoform 2: the cellular form also has ecto-5'-nucleotidase activity in dorsal root ganglion (DRG) neurons. Generates adenosine from AMP which acts as a pain suppressor. Acts as a tumor suppressor of prostate cancer through dephosphorylation of ERBB2 and deactivation of MAPK-mediated signaling.

Tissue Specificity:

Highly expressed in the prostate, restricted to glandular and ductal epithelial cells.

Post-translational modifications:

N-glycosylated. High mannose content, partially sialylated and fucosylated biantennary complex. Also fucosylated with partially sialylated triantennary complex oligosaccharides.

Proteolytically cleaved in seminal fluid to produce several peptides. Peptide PAPf39, the most prominent, forms amyloid beta-sheet fibrils, SEVI (semen-derived enhancer of viral infection) which entrap HIV virions, attach them to target cells and enhance infection. SEVI amyloid fibrils are degraded by polyphenol epigallocatechin-3-gallate (EGCG), a constituent of green tea. Target cell attachment and enhancement of HIV infection is inhibited by surfen. Also similarly boosts XMRV (xenotropic murine leukemia virus-related virus) infection.

Similarity:

Belongs to the histidine acid phosphatase family.

SWISS:

P24666

Gene ID:

55

Database links:

[Entrez Gene: 504700](#)Cow

[Entrez Gene: 55](#)Human

[Entrez Gene: 56318](#)Mouse

[Entrez Gene: 56780](#)Rat

[Oimim: 171790](#)Human

[SwissProt: A6H730](#)Cow

[SwissProt: P15309](#)Human

[SwissProt: Q8CE08](#)Mouse

[SwissProt: P20646](#)Rat

[Unigene: 433060](#)Human

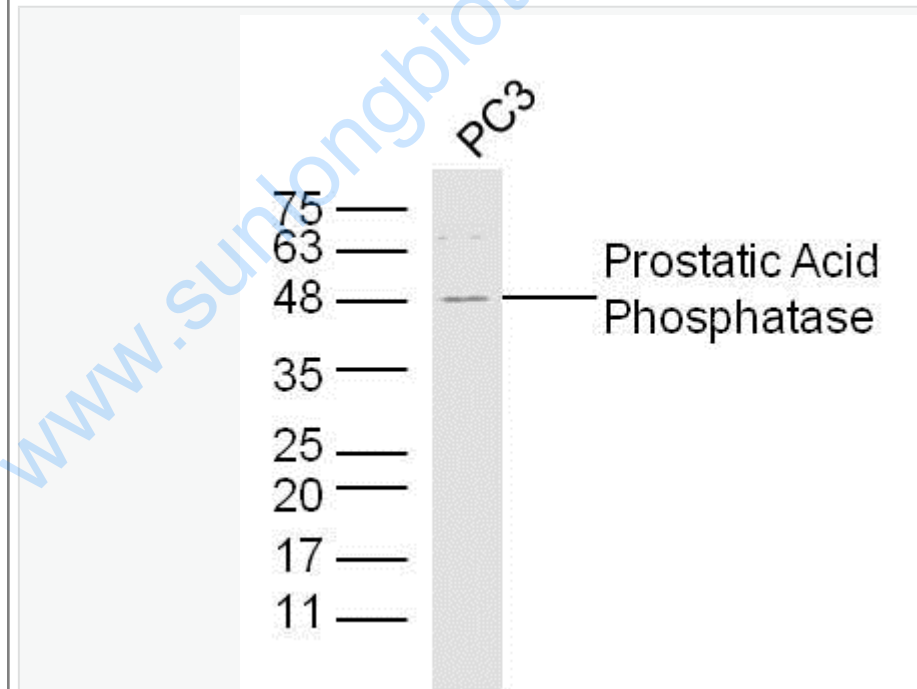
[Unigene: 19941](#)Mouse

[Unigene: 40121](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



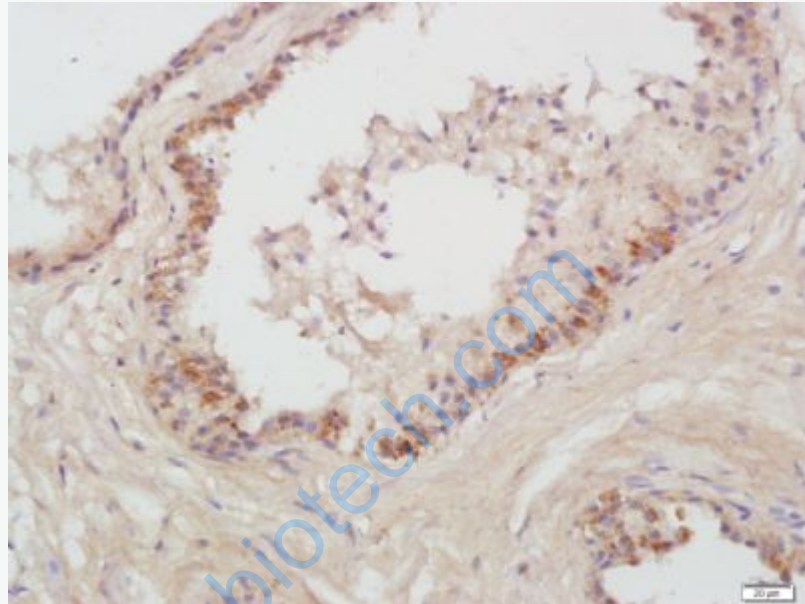
Sample: PC3 Cell (Human) Lysate at 40 ug

Primary: Anti-Prostatic Acid Phosphatase (SL6293R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 41 kD

Observed band size: 48 kD



Paraformaldehyde-fixed, paraffin embedded (Human prostate); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Prostatic Acid Phosphatase) Polyclonal Antibody, Unconjugated (SL6293R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.