

# Anti-Prostate Specific Acid Phosphatase (PSAP) Antibody

**Mouse Monoclonal Antibody** Catalog # AH13462

### **Specification**

### Anti-Prostate Specific Acid Phosphatase (PSAP) Antibody - Product Information

**Application** IHC-F, IF, FC **Primary Accession** P15309 Other Accession 433060 Reactivity Human Host Mouse Clonality **Monoclonal** Isotype Mouse / IgG1

Calculated MW 44566

### Anti-Prostate Specific Acid Phosphatase (PSAP) Antibody - Additional Information

#### Gene ID 55

### **Other Names**

5'-nucleotidase (5'-NT); Acid phosphatase prostate; ACP3; Ecto-5'-nucleotidase; Prostatic acid phosphatase (PAP); Prostatic acid phosphatase; Thiamine monophosphatase (TMPase)

#### **Application Note**

<span class ="dilution IHC-F">IHC-F~~N/A</span><br \><span class</pre> ="dilution IF">IF $\sim$ 1:50 $\sim$ 200</span><br/><br/>span class ="dilution FC">FC $\sim$ 1:10 $\sim$ 50</span>

# **Format**

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

## **Storage**

Store at 2 to 8°C. Antibody is stable for 24 months.

#### **Precautions**

Anti-Prostate Specific Acid Phosphatase (PSAP) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Anti-Prostate Specific Acid Phosphatase (PSAP) Antibody - Protein Information

# Name ACP3 (HGNC:125)

### **Synonyms** ACPP

# **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 (PubMed: <a href="http://www.uniprot.org/citations/10506173"



 $target="\_blank">10506173</a>, PubMed:<a href="http://www.uniprot.org/citations/15280042" target="\_blank">15280042</a>, PubMed:<a href="http://www.uniprot.org/citations/20498373" target="\_blank">20498373</a>, PubMed:<a href="http://www.uniprot.org/citations/9584846" target="_blank">9584846</a>). Has lipid phosphatase activity and inactivates lysophosphatidic acid in seminal plasma (PubMed:<a href="http://www.uniprot.org/citations/10506173" target="_blank">10506173</a>, PubMed:<a href="http://www.uniprot.org/citations/15280042" target="_blank">15280042</a>).$ 

Cellular Location [Isoform 1]: Secreted

### **Tissue Location**

Highly expressed in the prostate, restricted to glandular and ductal epithelial cells. Also expressed in bladder, kidney, pancreas, lung, cervix, testis and ovary. Weak expression in a subset of pancreatic islet cells, squamous epithelia, the pilosebaceous unit, colonic neuroendocrine cells and skin adnexal structures. Low expression in prostate carcinoma cells and tissues

### Anti-Prostate Specific Acid Phosphatase (PSAP) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Anti-Prostate Specific Acid Phosphatase (PSAP) Antibody - Images

### Anti-Prostate Specific Acid Phosphatase (PSAP) Antibody - Background

Recognizes a protein of 52kDa, identified as prostate specific acid phosphatase (PSAP). This enzyme catalyzes the conversion of orthophosphoric monoester to alcohol and orthophosphate. It is synthesized under androgen regulation and is secreted by the epithelial cells of the prostate gland. PSAP is found in non-neoplastic adult and fetal prostatic glands, primary and metastatic prostatic carcinomas. It shows no staining in granulocytes, osteoclasts, parietal cells of the stomach, liver cells, renal cell or breast carcinomas.