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Anti-Prostate Specific Acid Phosphatase (PSAP) Antibody

Mouse Monoclonal Antibody
Catalog # AH13462

Product Information

Application	IHC-F, IF, FC
Primary Accession	P15309
Other Accession	433060
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1
Clone Names	ACPP/1339
Calculated MW	44566

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	Flow Cytometry (0.5-1ug/million cells); ,Immunofluorescence (0.5-1ug/ml); ,Immunohistology (Frozen only) (0.5-1.0ug/ml for 30 minutes at RT) ,Optimal dilution for a specific application should be determined.
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.

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:10506173, PubMed:15280042, PubMed:20498373,

	PubMed:9584846). Has lipid phosphatase activity and inactivates lysophosphatidic acid in seminal plasma (PubMed:10506173, PubMed:15280042).
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

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.