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Prostatic acid phosphatase Mouse mAb

Catalog # AP100270

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P15309
Other Accession	P15309
Reactivity	Human
Predicted	Rat, Mouse
Host	Mouse
Clonality	Monoclonal
Calculated MW	44566
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Prostatic Acid Phosphatase
Isotype	IgG2b, Kappa
Purity	affinity purified by Protein A
Buffer	PBS containing 50% Glycerol, 0.5% BSA and 0.02% Proclin300.
SIMILARITY	Belongs to the histidine acid phosphatase family.
SUBUNIT	Homodimer; dimer formation is required for phosphatase activity.
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	55
Other Names	ACPP; 5'-NT; ACP-3; TM-PAP; A030005E02Rik; FRAP; Lap; PAP; Ppal; Acpp11; RNACPP11; PPAP_BOVIN; ACP3; Protein tyrosine phosphatase ACP3; 3.1.3.2; PPAP_HUMAN; 5'-nucleotidase (5'-NT); Acid phosphatase 3; Ecto-5'-nucleotidase; Thiamine monophosphatase (TMPase); PPAP_MOUSE; Fluoride-resistant acid phosphatase (FRAP); PPAP_RAT; acid phosphatase, prostate; prostatic acid phosphatase

Dilution	IHC-P=1:100-500,IF=1:100-500,IHC-F=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

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, PubMed:8132635). 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

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