

Product datasheet

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ARG66506 anti-ACPP antibody

Package: 100 μl Store at: -20°C

Summary

Product Description Mouse Monoclonal antibody recognizes ACPP

Tested Reactivity Hu
Tested Application IHC-P

Host Mouse

Clonality Monoclonal Isotype IgG1, kappa

Target Name ACPP

Species Human

Immunogen Synthetic peptide derived from Human ACPP.

Conjugation Un-conjugated

Alternate Names PAP; ACP-3; TMPase; 5'-nucleotidase; ACP3; EC 3.1.3.5; Ecto-5'-nucleotidase; Thiamine

monophosphatase; EC 3.1.3.2; 5'-NT; Prostatic acid phosphatase; PSAP

Application Instructions

Application table	Application	Dilution
	IHC-P	1:100 - 1:500
Application Note	IHC-P: Antigen Retrieval: Tris/EDTA buffer (pH 8.0) was used. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form Liquid

Purification Affinity purification with immunogen.

Buffer PBS, 0.02% Sodium azide, 50% Glycerol and 0.5% BSA.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol and 0.5% BSA

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol

ACPP

Gene Full Name

acid phosphatase, prostate

Background

ACPP is an enzyme that 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. An alternatively spliced transcript variant encoding a longer isoform has been found for this gene. This isoform contains a transmembrane domain and is localized in the plasma membrane-endosomal-lysosomal pathway. [provided by RefSeq, Sep 2008]

Function

ACPP is a non-specific tyrosine phosphatase. It 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.

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. [UniProt]

Calculated Mw

45 kDa

PTM

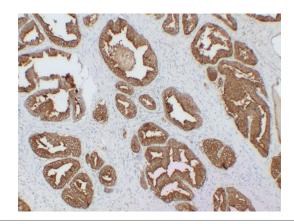
N-glycosylated. High mannose content, partially sialylated and fucosylated biantennary complex. Also fucosylated with partially sialylated triantennary complex oligosaccharides.

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. [UniProt]

Cellular Localization

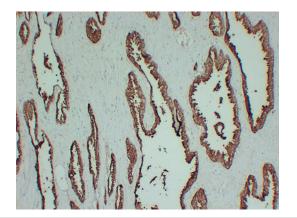
Isoform 1: Secreted. Isoform 2: Cell membrane; Single-pass type I membrane protein. Lysosome membrane; Single-pass type I membrane protein. Note=Appears to shuttle between the cell membrane and intracellular vesicles. Colocalizes with FLOT1 at cell membrane and in intracellular vesicles (PubMed:17638863). Colocalizes with LAMP2 on the lysosome membrane (PubMed:17897319). [UniProt]

Images



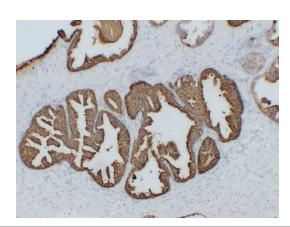
ARG66506 anti-ACPP antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human benign prostatic hyperplasia stained with ARG66506 anti-ACPP antibody at 1:200 (4°C, overnight). Antigen Retrieval: Tris/EDTA buffer (pH 8.0) was used.



ARG66506 anti-ACPP antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human prostate stained with ARG66506 anti-ACPP antibody at 1:200 (4°C, overnight). Antigen Retrieval: Tris/EDTA buffer (pH 8.0) was used.



ARG66506 anti-ACPP antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human prostatic carcinoma stained with ARG66506 anti-ACPP antibody at 1:200 (4°C, overnight). Antigen Retrieval: Tris/EDTA buffer (pH 8.0) was used.