

ACPT Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP58412

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9BZG2
Reactivity	Rat, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46090
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ACPT
Epitope Specificity	65-160/437
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Single-pass type II membrane protein (Potential).
SIMILARITY	Belongs to the peptidase S1 family.Contains 1 LDL-receptor class A domain.Contains 1 peptidase S1 domain.Contains 1 SRCR domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Acid phosphatases are enzymes capable of hydrolyzing orthophosphoric acid esters in an acid medium. This gene is upregulated by androgens and is down-regulated by estrogens in the prostate cancer cell line. ACPT dephosphorylates receptor tyrosine-protein kinase erbB-4 and inhibits the ligand-induced proteolytic cleavage. ACPT is predominantly expressed in testis but exhibits a lower level of expression in testicular cancer tissues than in normal tissues. ACPT has structural similarity to prostatic and lysosomal acid phosphatases. Alternatively spliced transcript variants have been described, but their biological validity has not been determined.

Additional Information

Gene ID	93650
Other Names	Testicular acid phosphatase, 3.1.3.2, Acid phosphatase 4 {ECO:0000312 HGNC:HGNC:14376}, ACP4 (HGNC:14376)
Target/Specificity	High levels in pancreatic, gastric, colorectal and ampullary cancer. Very weak expression in normal gastrointestinal and urogenital tract.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=0.2 ug/test,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

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

ACP4 ([HGNC:14376](#))

Function

May dephosphorylate receptor tyrosine-protein kinase ERBB4 and inhibits its ligand-induced proteolytic cleavage (PubMed:[15219672](#)). May play a role in odontogenesis (PubMed:[27843125](#)).

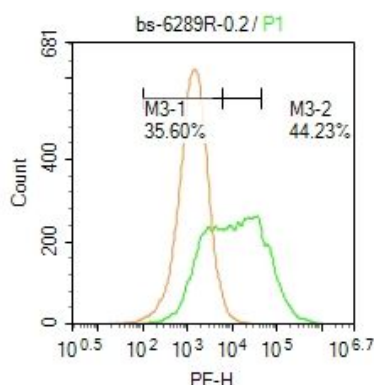
Cellular Location

Membrane; Single-pass type I membrane protein

Tissue Location

Expressed mainly in the testis. Also expressed in the brain where they are enriched at the postsynaptic sites. Expressed at lower levels in the trachea, prostate, bone marrow, spinal cord, colon, fetal brain, heart, thymus, fetal liver, spleen, leukocytes, ovary, small intestine, pancreas and skeletal muscle. Expression is significantly lower in testicular cancer tissues than in normal testicular tissues. Isoform 3 is expressed in the testis, trachea, prostate and bone marrow.

Images



Blank control: Hela.

Primary Antibody (green line): Rabbit Anti-ACPT antibody (AP58412)

Dilution: 1 µg /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution: 0.2 µg /test.

Protocol

The cells were incubated in 5 %BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.