

PTP4A1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16923b

Specification

PTP4A1 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O93096</u> <u>O78EG7</u>, <u>O63739</u>, <u>O9TSM6</u>, <u>NP_003454.1</u> Human, Mouse Monkey, Rat Rabbit Polyclonal Rabbit IgG 19815 140-168

PTP4A1 Antibody (C-term) - Additional Information

Gene ID 7803

Other Names Protein tyrosine phosphatase type IVA 1, PTP(CAAXI), Protein-tyrosine phosphatase 4a1, Protein-tyrosine phosphatase of regenerating liver 1, PRL-1, PTP4A1, PRL1, PTPCAAX1

Target/Specificity

This PTP4A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 140-168 amino acids from the C-terminal region of human PTP4A1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PTP4A1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PTP4A1 Antibody (C-term) - Protein Information

Name PTP4A1



Synonyms PRL1, PTPCAAX1

Function Protein tyrosine phosphatase which stimulates progression from G1 into S phase during mitosis. May play a role in the development and maintenance of differentiating epithelial tissues. Enhances cell proliferation, cell motility and invasive activity, and promotes cancer metastasis.

Cellular Location Cell membrane; Lipid-anchor. Early endosome. Endoplasmic reticulum. Cytoplasm Cytoplasm, cytoskeleton, spindle. Nucleus {ECO:0000250|UniProtKB:Q78EG7}. Note=And mitotic spindle

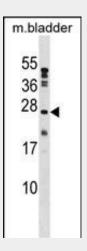
Tissue Location Expressed in bone marrow, lymph nodes, T lymphocytes, spleen, thymus and tonsil. Overexpressed in tumor cell lines.

PTP4A1 Antibody (C-term) - Protocols

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

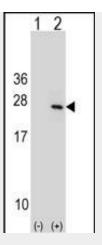
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PTP4A1 Antibody (C-term) - Images



PTP4A1 Antibody (C-term) (Cat. #AP16923b) western blot analysis in mouse bladder tissue lysates (35ug/lane). This demonstrates the PTP4A1 antibody detected the PTP4A1 protein (arrow).





Western blot analysis of PTP4A1 (arrow) using rabbit polyclonal PTP4A1 Antibody (C-term) (Cat. #AP16923b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PTP4A1 gene.

PTP4A1 Antibody (C-term) - Background

The protein encoded by this gene belongs to a small class of prenylated protein tyrosine phosphatases (PTPs), which contains a PTP domain and a characteristic C-terminal prenylation motif. PTPs are cell signaling molecules that play regulatory roles in a variety of cellular processes. This tyrosine phosphatase is a nuclear protein, but may primarily associate with plasma membrane. The surface membrane association of this protein depends on its C-terminal prenylation. Overexpression of this gene in mammalian cells conferred a transformed phenotype, which implicated its role in the tumorigenesis. Studies in rat suggested that this gene may be an immediate-early gene in mitogen-stimulated cells. [provided by RefSeq].

PTP4A1 Antibody (C-term) - References

Johnatty, S.E., et al. PLoS Genet. 6 (7), E1001016 (2010) : Skinner, A.L., et al. Biochemistry 48(20):4262-4272(2009) Luo, Y., et al. Biochemistry 48(8):1838-1846(2009) Min, S.H., et al. Oncogene 28(4):545-554(2009) Liu, Y.Q., et al. Arch. Pathol. Lab. Med. 132(8):1307-1312(2008)