

# PTP4A1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16923b

#### **Product Information**

Application WB, E Primary Accession Q93096

Other Accession <u>Q78EG7</u>, <u>Q63739</u>, <u>Q9TSM6</u>, <u>NP\_003454.1</u>

Reactivity Human, Mouse **Predicted** Monkey, Rat Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB36258 **Calculated MW** 19815 140-168 **Antigen Region** 

#### **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.

#### **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.

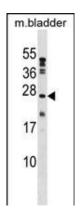
## **Background**

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].

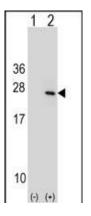
#### References

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)

### **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.

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