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# PTP4A1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16923b

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | Q93096 |
| **Other Accession** | Q78EG7, Q63739, Q9TSM6, NP_003454.1 |
| **Reactivity** | Human, Mouse |
| **Predicted** | Monkey, Rat, Bovine, Canine, Rabbit, Chicken |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB36258 |
| **Calculated MW** | 19815 |
| **Antigen Region** | 140-168 |

## Additional Information

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| **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

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| **Name** | PTP4A1 |
| **Synonyms** | PRL1, PTPCAAX1 |

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| **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. |

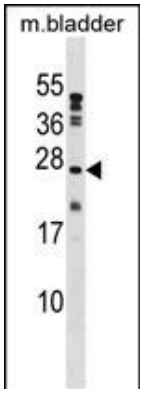
## Background

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].

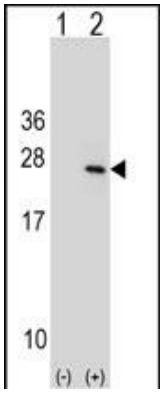
## References


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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'.