

**PRL1 Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8439A**

**Specification**

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**PRL1 Antibody - Product Information**

Application	WB,E
Primary Accession	<a href="#">O93096</a>
Other Accession	<a href="#">NP_003454</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	19815

**PRL1 Antibody - 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 PRL1 antibody is generated from rabbits immunized with a recombinant protein encoding full length of human PRL1.

**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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**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**

PRL1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**PRL1 Antibody - 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**

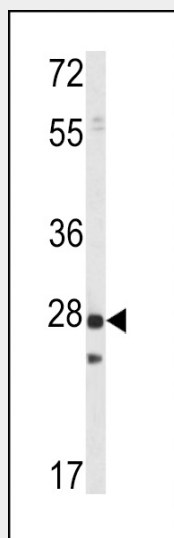
Expressed in bone marrow, lymph nodes, T lymphocytes, spleen, thymus and tonsil. Overexpressed in tumor cell lines.

**PRL1 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**PRL1 Antibody - Images**



Western blot analysis of PRL1 (Cat. #AP8439a) in mouse spleen tissue lysates (35ug/lane). PRL1 Antibody (arrow) was detected using the purified Pab.

**PRL1 Antibody - 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. PRL phosphatases increase cell proliferation by stimulating progression from G1 into S phase. PRL-1 function is regulated in a cell cycle-dependent manner and implicate PRL-1 in regulating progression through mitosis, possibly by modulating spindle dynamics.

#### **PRL1 Antibody - References**

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Werner,S.R., et al. Cancer Lett. 202 (2), 201-211 (2003)  
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Nicolas,G., et al. Mol. Cell. Biol. 22 (10), 3527-3536 (2002)  
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