

PRL3 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8438a

Specification

PRL3 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC-P,E O75365 NP_116000 Human, Mouse Rabbit Polyclonal Rabbit IgG 19535

PRL3 Antibody - Additional Information

Gene ID 11156

Other Names

Protein tyrosine phosphatase type IVA 3, PRL-R, Protein-tyrosine phosphatase 4a3, Protein-tyrosine phosphatase of regenerating liver 3, PRL-3, PTP4A3, PRL3

Target/Specificity

This PRL3 antibody is generated from rabbits immunized with a recombinant protein encoding full length of human PRL3.

Dilution WB~~1:1000 IHC-P~~1:100

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

PRL3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PRL3 Antibody - Protein Information

Name PTP4A3

Synonyms PRL3



Function Protein tyrosine phosphatase which stimulates progression from G1 into S phase during mitosis. Enhances cell proliferation, cell motility and invasive activity, and promotes cancer metastasis. May be involved in the progression of cardiac hypertrophy by inhibiting intracellular calcium mobilization in response to angiotensin II.

Cellular Location

Cell membrane. Early endosome

Tissue Location

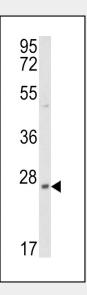
Mainly expressed in cardiomyocytes and skeletal muscle; also found in pancreas. Consistently overexpressed in colon cancer metastasis.

PRL3 Antibody - Protocols

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

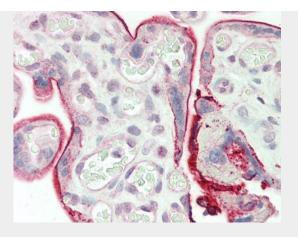
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PRL3 Antibody - Images



Western blot analysis of PRL3 Antibody (Cat. #AP8438a) in mouse heart tissue lysates (35ug/lane). PRL3 (arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded H.placenta tissue reacted with PRL3 Antibody (Cat#AP8438a).

PRL3 Antibody - Background

The protein encoded by this gene belongs to a small class of prenylated protein tyrosine phosphatases (PTPs). PTPs are cell signaling molecules that play regulatory roles in a variety of cellular processes. This class of PTPs contain a PTP domain and a characteristic C-terminal prenylation motif. Studies of this class of PTPs in mice demonstrated that they were prenylated proteins in vivo, which suggested their association with cell plasma membrane. Overexpression of this gene in mammalian cells was reported to inhibit angiotensin-II induced cell calcium mobilization and promote cell growth. Two alternatively spliced variants exist. PRL-3 expression was found to be up-regulated in human liver carcinoma compared with normal liver. Its expression in colorectal cancers may contribute to the establishment of liver metastasis. In a different study, PRL-3 is found to be expressed in tumor metastasis and vasculature, regardless of the tumor source.

PRL3 Antibody - References

Kato,H., et al. Clin. Cancer Res. 10 (21), 7318-7328 (2004) Wu,X., et al. Am. J. Pathol. 164 (6), 2039-2054 (2004) Kim,K.A., et al. FEBS Lett. 565 (1-3), 181-187 (2004) Kozlov,G., et al. J. Biol. Chem. 279 (12), 11882-11889 (2004) Bardelli,A., eta l. Clin. Cancer Res. 9 (15), 5607-5615 (2003) Saha,S., et al. Science 294 (5545), 1343-1346 (2001) Matter,W.F., et al. Biochem. Biophys. Res. Commun. 283 (5), 1061-1068 (2001) Zeng,Q., et al. J. Biol. Chem. 275 (28), 21444-21452 (2000) Zeng,Q., et al. Biochem. Biophys. Res. Commun. 244 (2), 421-427 (1998)