

PTP4A2 Antibody (Center)

affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6838C

Specification

PTP4A2 Antibody (Center) - Product Information

Application IF, FC, IHC-P, WB,E

Primary Accession <u>Q12974</u>

Other Accession Q6P9X4, Q70274

Reactivity
Predicted
Host
Clonality
Isotype
Antigen Region

Human
Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
32-59

PTP4A2 Antibody (Center) - Additional Information

Gene ID 8073

Other Names

Protein tyrosine phosphatase type IVA 2, HU-PP-1, OV-1, PTP(CAAXII), Protein-tyrosine phosphatase 4a2, Protein-tyrosine phosphatase of regenerating liver 2, PRL-2, PTP4A2, PRL2, PTPCAAX2

Target/Specificity

This PTP4A2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 32-59 amino acids from the Central region of human PTP4A2.

Dilution

IF~~1:10~50 FC~~1:10~50 IHC-P~~1:50~100 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

PTP4A2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PTP4A2 Antibody (Center) - Protein Information





Name PTP4A2

Synonyms PRL2, PTPCAAX2

Function Protein tyrosine phosphatase which stimulates progression from G1 into S phase during mitosis. Promotes tumors. Inhibits geranylgeranyl transferase type II activity by blocking the association between RABGGTA and RABGGTB.

Cellular Location

Cell membrane. Early endosome. Cytoplasm.

Tissue Location

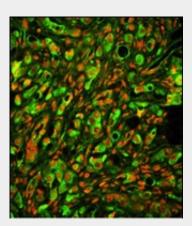
Ubiquitously expressed, with highest levels in skeletal muscle, heart and thymus. Overexpressed in prostate tumor tissue.

PTP4A2 Antibody (Center) - Protocols

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

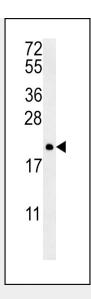
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

PTP4A2 Antibody (Center) - Images

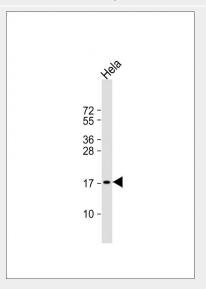


Immunofluorescence analysis of PTP4A2 Antibody (Center) with paraffin-embedded human prostate carcinoma tissue . 0.05 mg/ml primary antibody was followed by FITC-conjugated goat anti-rabbit lgG (whole molecule). FITC emits green fluorescence. Red counterstaining is PI.





PTP4A2 Antibody (Center) (Cat. #AP6838c) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the PTP4A2 antibody detected the PTP4A2 protein (arrow).



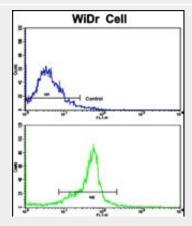
Anti-PTP4A2 Antibody (Center) at 1:1000 dilution + Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 19 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human prostate carcinoma with PTP4A2 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data



demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of widr cells using PTP4A2 Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

PTP4A2 Antibody (Center) - Background

PTP4A2 belongs to a small class of the protein tyrosine phosphatase (PTP) family. PTPs are cell signaling molecules that play regulatory roles in a variety of cellular processes. PTPs in this class contain a protein tyrosine phosphatase catalytic domain and a characteristic C-terminal prenylation motif. This PTP has been shown to primarily associate with plasmic and endosomal membrane through its C-terminal prenylation. This PTP was found to interact with the beta-subunit of Rab geranylgeranyltransferase II (beta GGT II), and thus may function as a regulator of GGT II activity.

PTP4A2 Antibody (Center) - References

Ewing, R.M., et.al., Mol. Syst. Biol. 3, 89 (2007)