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PTP4A2 Antibody (Center)

affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6838C

Product Information

Application	WB, IHC-P, FC, IF, E
Primary Accession	Q12974
Other Accession	Q6P9X4, O70274
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18592
Calculated MW	19127
Antigen Region	32-59

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	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 IF~~1:10~50 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.

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.

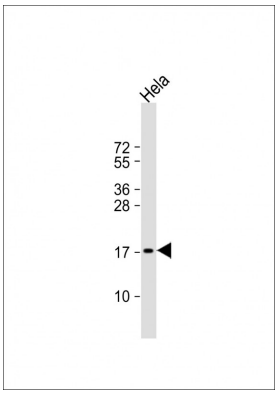
Background

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.

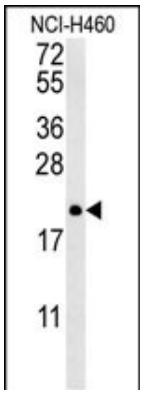
References

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

Images

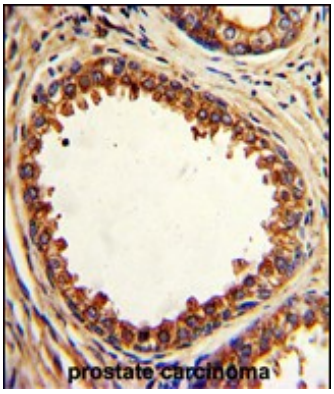


Anti-PTP4A2 Antibody (Center) at 1:1000 dilution + Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 19 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

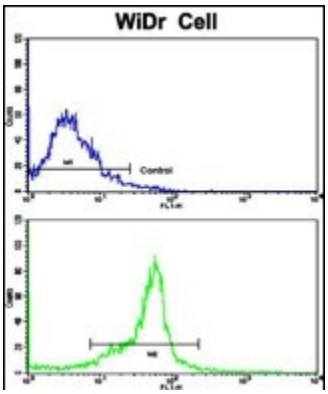


PTP4A2 Antibody (Center) (Cat. #AP6838c) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the PTP4A2 antibody detected the PTP4A2 protein (arrow).

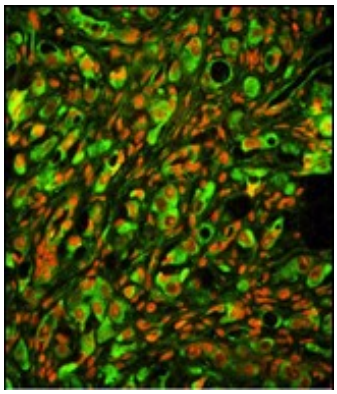
Formalin-fixed and paraffin-embedded human prostate carcinoma with PTP4A2 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical



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.



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.

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