

PTP4A2 Polyclonal Antibody | anti-PTP4A2 antibody

Anti-PTP4A2 Antibody

CATALOG #	REACTIVITY	APPLICATIONS
AAA46330	Human, Mouse, Rat	Flow Cytometry, Functional Assay, Immunocytochemistry, Immunohistochemistry, Western Blot

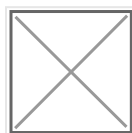
PRODUCT SYNONYMS

PTP4A2; Polyclonal Antibody; Anti-PTP4A2 Antibody; Protein tyrosine phosphatase type IVA 2; BM 008; EC 3.1.3.48; HH 13; HH13; HH7 2; HU PP 1; HUPP 1; HUPP1; OV 1; OV1; phosphatase of regenerating liver 2; PRL 2; PRL2; Protein tyrosine phosphatase 4a2; protein tyrosine phosphatase IVA; protein tyrosine phosphatase IVA2; Protein tyrosine phosphatase of regenerating liver 2; protein tyrosine phosphatase type IVA 2; Protein tyrosine phosphatase type IVA member 2 isoform 1; protein tyrosine phosphatase type IVA; member 2; PTP (CAAXII); ptp IV1a; ptp IV1b; PTP4A; PTPCAAX2; TP4A2_HUMAN; anti-PTP4A2 antibody

PRODUCT SPECIFICATIONS

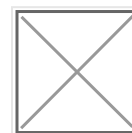
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Specificity	No Cross Reactivity with other proteins.
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized. Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Sequence Length	142
Applicable Applications for anti-PTP4A2 antibody	FCM/FACS (Flow Cytometry), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human PTP4A2 (40-69aa TTLVRVCDATYDKAPVEKEGIHVLDPFDD), identical to the related mouse and rat sequences.
Ig Type	Rabbit IgG
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Relevant detection	AAA Biotech provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit in WB, supported by in IHC (P).
Preparation and Storage	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquoted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of A431 cells using anti-PTP4A2 antibody (AAA46330). Overlay histogram showing A431 cells stained with AAA46330 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PTP4A2 Antibody (AAA46330, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight[®]488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

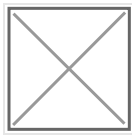


FCM/FACS (Flow Cytometry)

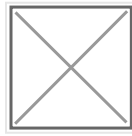
Figure 4. Flow Cytometry analysis of PC-3 cells using anti-PTP4A2 antibody (AAA46330). Overlay histogram showing PC-3 cells stained with AAA46330 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PTP4A2 Antibody (AAA46330, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight[®]488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



FCM/FACS (Flow Cytometry)
Figure 3. Flow Cytometry analysis of U937 cells using anti-PTP4A2 antibody (AAA46330). Overlay histogram showing U937 cells stained with AAA46330 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PTP4A2 Antibody (AAA46330, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight[®]488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)
Figure 2. IHC analysis of PTP4A2 using anti-PTP4A2 antibody (AAA46330). PTP4A2 was detected in paraffin-embedded section of Human Prostatic Cancer Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PTP4A2 Antibody (AAA46330) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)
Figure 1. Western blot analysis of PTP4A2 using anti-PTP4A2 antibody (AAA46330). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: Rat Skeletal Muscle Tissue Lysate, Lane 2: Rat Thymus Tissue Lysate, Lane 3: Mouse Brain Tissue Lysate, Lane 4: Mouse Thymus Tissue Lysate, Lane 5: 22RV1 Whole Cell Lysate, Lane 6: MCF-7 Whole Cell Lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PTP4A2 antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PTP4A2 at approximately 19KD. The expected band size for PTP4A2 is at 19KD.

ADDITIONAL INFORMATION

Related Product Information for anti-PTP4A2 antibody	Description: Rabbit IgG polyclonal antibody for Protein tyrosine phosphatase type IVA 2(PTP4A2) detection. Tested with WB, IHC-P in Human;Mouse;Rat. Background: Protein tyrosine phosphatase type IVA 2 is an enzyme that in humans is encoded by the PTP4A2 gene. The protein encoded by this gene 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. Overexpression of this gene in mammalian cells conferred a transformed phenotype, which suggested its role in tumorigenesis. Alternatively spliced transcript variants have been described. Related pseudogenes exist on chromosomes 11, 12 and 17.
References	1. "Entrez Gene: PTP4A2 protein tyrosine phosphatase type IVA, member 2". 2. Zeng Q, Hong W, Tan YH (Apr 1998). "Mouse PRL-2 and PRL-3, two potentially prenylated protein tyrosine phosphatases homologous to PRL-1". Biochem Biophys Res Commun 244 (2): 421-7. 3. Zhao Z, Lee CC, Monckton DG, Yazdani A, Coolbaugh MI, Li X, Bailey J, Shen Y, Caskey CT (Sep 1996). "Characterization and genomic mapping of genes and pseudogenes of a new human protein tyrosine phosphatase". Genomics 35 (1): 172-81.

NCBI AND UNIPROT INFORMATION

NCBI GI #	304361762
NCBI GeneID	8073
NCBI Accession #	NP_001182029.1
NCBI GenBank Nucleotide #	NM_001195100.1

UniProt Accession #	Q12974 ; O00649 ; Q15197 ; Q15259 ; Q15260 ; Q15261 ; A8K9I8 ; B4DM39 ; D3DPP0 ; E9PGJ6 ; R4GN50
Molecular Weight	16,367 Da
NCBI Official Full Name	protein tyrosine phosphatase type IVA 2 isoform 3
NCBI Official Synonym Full Names	protein tyrosine phosphatase type IVA, member 2
NCBI Official Symbol	PTP4A2
NCBI Official Synonym Symbols	HH13; OV-1; PRL2; HH7-2; PRL-2; PTP4A; HU-PP-1; PTPCAAX2; ptp-IV1a; ptp-IV1b
NCBI Protein Information	protein tyrosine phosphatase type IVA 2
UniProt Protein Name	Protein tyrosine phosphatase type IVA 2
UniProt Gene Name	PTP4A2
UniProt Synonym Gene Names	PRL2; PTPCAAX2; PRL-2
UniProt Entry Name	TP4A2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ptp4a2-antibody-flow-cytometry-immunocytochemistry-immunohistochemistry-western-blot-elisa/46330>