

anti-Human, Mouse PPP1R12A Polyclonal Antibody | anti-PPP1R12A antibody

Anti-PPP1R12A Antibody

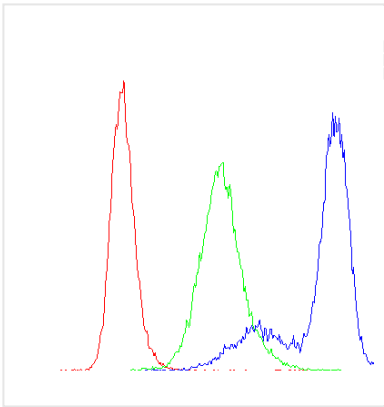
CATALOG # AAA46314	REACTIVITY Human, Mouse	APPLICATIONS Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

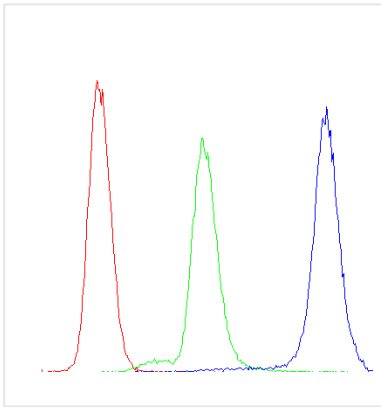
PPP1R12A; Polyclonal Antibody; Anti-PPP1R12A Antibody; Protein phosphatase 1 regulatory subunit 12A; M130; MBS; MGC133042; Myosin binding subunit; Myosin phosphatase target subunit 1; Myosin phosphatase targeting subunit 1; Myosin phosphatase-targeting subunit 1; MYPT 1; MYPT1; MYPT1_HUMAN; Protein phosphatase 1 regulatory inhibitor subunit 12A; Protein phosphatase 1; regulatory (inhibitor) subunit 12A; Protein phosphatase myosin binding subunit; Protein phosphatase myosin-binding subunit antibody; protein phosphatase 1; regulatory subunit 12A; anti-PPP1R12A antibody

PRODUCT SPECIFICATIONS

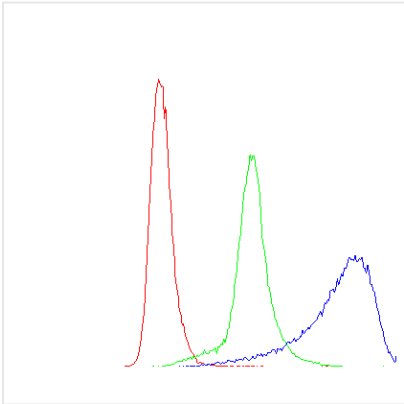
Reactivity	Human, Mouse
Clonality	Polyclonal
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized. Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Na ₃ N.
Sequence Length	1030
Applicable Applications for anti-PPP1R12A antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human PPP1R12A (1-40aa MKMADAKQKRNEQLKRWIGSETDLEPPVVKRQKTKVKFDD), 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.
Preparation and Storage	At -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquoted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



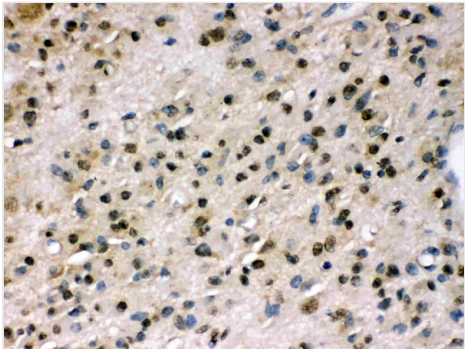
FCM/FACS (Flow Cytometry)
Figure 5. Flow Cytometry analysis of U251 cells using anti-PPP1R12A antibody (AAA46314).Overlay histogram showing U251 cells stained with AAA46314 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PPP1R12A Antibody (AAA46314,1ug/1x10⁶ 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.



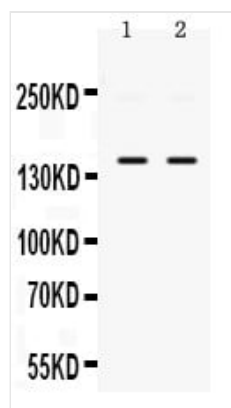
FCM/FACS (Flow Cytometry)
Figure 4. Flow Cytometry analysis of SiHa cells using anti-PPP1R12A antibody (AAA46314).Overlay histogram showing SiHa cells stained with AAA46314 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PPP1R12A Antibody (AAA46314,1ug/1x10⁶ 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 Hela cells using anti-PPP1R12A antibody (AAA46314).Overlay histogram showing Hela cells stained with AAA46314 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PPP1R12A Antibody (AAA46314,1ug/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 (Immunohiostchemistry)
Figure 2. IHC analysis of PPP1R12A using anti-PPP1R12A antibody (AAA46314).PPP1R12A was detected in paraffin-embedded section of Human Glioma 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-PPP1R12A Antibody (AAA46314) 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 PPP1R12A using anti-PPP1R12A antibody (AAA46314). 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: Mouse Skeletal Muscle Tissue Lysate, Lane 2: HELA 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-PPP1R12A 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 PPP1R12A at approximately 150KD. The expected band size for PPP1R12A is at 115KD.

ADDITIONAL INFORMATION

Related Product Information for anti-PPP1R12A antibody	Description: Rabbit IgG polyclonal antibody for Protein phosphatase 1 regulatory subunit 12A(PPP1R12A) detection. Tested with WB, IHC-P in Human;Mouse.
	Background: PPP1R12A (Protein phosphatase 1 regulatory subunit 12A), also called MYPT1 (Myosin phosphatase target subunit 1), is an enzyme that in humans is encoded by the PPP1R12A gene. PPP1R12A is one of the subunits of myosin phosphatase. Sequencing analysis showed that human PPP1R12A contains 1,030 amino acids with a calculated molecular mass of approximately 115 kD. The PPP1R12A gene is mapped on 12q21.2-q21.3. PPP1R12A is the protein that regulates PP1 function in smooth muscle relaxation. The cellular MYPT1-PP1-delta -specific inhibitor CPI17 caused a loss of merlin function characterized by merlin phosphorylation, Ras activation, and transformation. Jin et al. concluded that PPP1R12A and its substrate merlin are part of a previously undescribed tumor suppressor cascade that can be hindered in two ways, by mutation of the NF2 gene and by upregulation of the oncoprotein CPI17.
References	1. Kimura, K., Ito, M., Amano, M., Chihara, K., Fukata, Y., Nakafuku, M., Yamamori, B., Feng, J., Nakano, T., Okawa, K., Iwamatsu, A., Kaibuchi, K. Regulation of myosin phosphatase by Rho and Rho-associated kinase (Rho-kinase). Science 273: 245-248, 1996. 2. Takahashi, N., Ito, M., Tanaka, J., Nakano, T., Kaibuchi, K., Odai, H., Takemura, K. Localization of the gene coding for myosin phosphatase, target subunit 1 (MYPT1) to human chromosome 12q15-q21. Genomics 44: 150-152, 1997.

NCBI AND UNIPROT INFORMATION

NCBI GI #	219842212
NCBI GeneID	4659
NCBI Accession #	NP_001137357.1
NCBI GenBank Nucleotide #	NM_001143885.1
UniProt Accession #	O14974 ; Q2NKL4 ; Q569H0 ; Q86WU3 ; Q8NFR6 ; Q9BYH0 ; B4DZ09 ; F8VWB4
Molecular Weight	105,641 Da
NCBI Official Full Name	protein phosphatase 1 regulatory subunit 12A isoform a

NCBI Official Synonym Full Names	protein phosphatase 1 regulatory subunit 12A
NCBI Official Symbol	PPP1R12A
NCBI Official Synonym Symbols	MBS; M130; MYPT1
NCBI Protein Information	protein phosphatase 1 regulatory subunit 12A
UniProt Protein Name	Protein phosphatase 1 regulatory subunit 12A
UniProt Gene Name	PPP1R12A
UniProt Synonym Gene Names	MBS; MYPT1; Myosin phosphatase target subunit 1
UniProt Entry Name	MYPT1_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://www.aaabiotech.com/polyclonal/ppp1r12a-antibody-immunohistochemistry-western-blot-elisa/46314>