

## Datasheet for ABIN3043902 anti-PPP1R12A antibody (N-Term)



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7 Images

1 Publication

### Overview

Quantity:	100 µg
Target:	PPP1R12A
Binding Specificity:	AA 1-40, N-Term
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PPP1R12A antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

### Product Details

Purpose:	Rabbit IgG polyclonal antibody for Protein phosphatase 1 regulatory subunit 12A(PPP1R12A) detection. Tested with WB, IHC-P in Human,Mouse.
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.
Sequence:	MKMADAKQKR NEQLKRWIGS ETDLEPPVVK RQKTKVKFDD
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Protein phosphatase 1 regulatory subunit 12A(PPP1R12A) detection. Tested with WB, IHC-P in Human,Mouse. Gene Name: protein phosphatase 1, regulatory subunit 12A

## Product Details

Protein Name: Protein phosphatase 1 regulatory subunit 12A

Purification: Immunogen affinity purified.

## Target Details

Target: PPP1R12A

Alternative Name: PPP1R12A ([PPP1R12A Products](#))

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.

Synonyms: M130 antibody|MBS antibody|MGC133042 antibody|Myosin binding subunit antibody|Myosin phosphatase target subunit 1 antibody|Myosin phosphatase targeting subunit 1 antibody| Myosin phosphatase-targeting subunit 1 antibody|MYPT 1 antibody|MYPT1 antibody|MYPT1\_HUMAN antibody|PPP1R12A antibody|Protein phosphatase 1 regulatory inhibitor subunit 12A antibody| Protein phosphatase 1 regulatory subunit 12A antibody|Protein phosphatase 1, regulatory (inhibitor) subunit 12A antibody|Protein phosphatase myosin binding subunit antibody| Protein phosphatase myosin-binding subunit antibody

Gene ID: 4659

UniProt: [O14974](#)

Pathways: [M Phase](#)

## Application Details

Application Notes: WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Mouse  
IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of

## Application Details

formalin/paraffin sections.

Notes: Tested Species: Species with positive results. Other applications have not been tested.

Optimal dilutions should be determined by end users.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).

Restrictions: For Research Use only

## Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05 mg Sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

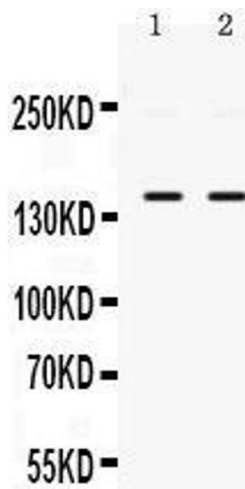
Handling Advice: Avoid repeated freezing and thawing.

Storage: 4 °C/-20 °C

Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.  
It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

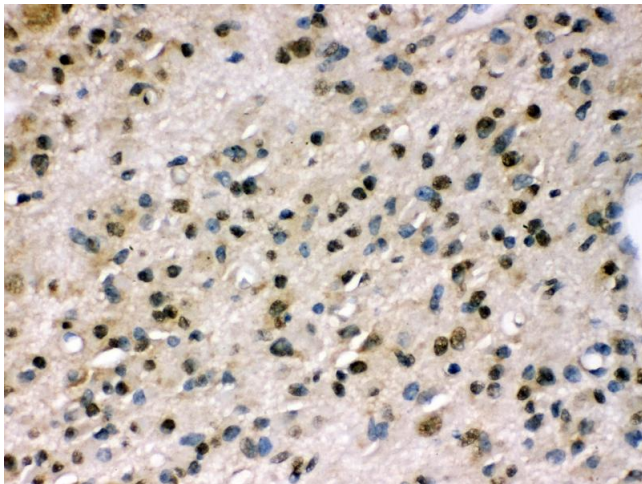
## Publications

Product cited in: Li, Zhao, Qi, Wang, Zhang, Li, Qin: "lncRNA Ftx promotes aerobic glycolysis and tumor progression through the PPAR $\gamma$  pathway in hepatocellular carcinoma." in: **International journal of oncology**, Vol. 53, Issue 2, pp. 551-566, (2018) ([PubMed](#)).



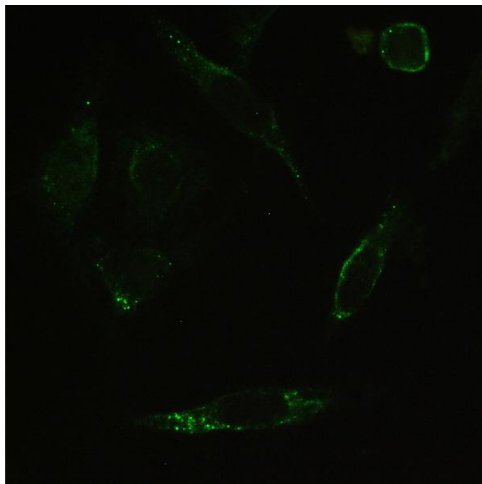
#### Western Blotting

**Image 1.** Observed bind size: 150KD



#### Immunohistochemistry

**Image 2.** Anti- PPP1R12A Picoband antibody,IHC(P) IHC(P):  
Human Glioma Tissue



#### Immunohistochemistry

**Image 3.** IHC analysis of PPP1R12A using anti-PPP1R12A antibody . PPP1R12A was detected in immunocytochemical section of SiHa cell. 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 2µg/ml rabbit anti-PPP1R12A Antibody overnight at 4°C. DyLight®488 Conjugated Avidin was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1094) with DAB as the chromogen.

Please check the [product details page](#) for more images. Overall 7 images are available for ABIN3043902.