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Anti-PPP1R12A Picoband Antibody

Catalog # ABO12423

Specification

Anti-PPP1R12A Picoband Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	O14974
Host	**Rabbit**
Reactivity	**Human, Mouse**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Protein phosphatase 1 regulatory subunit 12A(PPP1R12A) detection. Tested with WB, IHC-P in Human;Mouse.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-PPP1R12A Picoband Antibody - Additional Information

Gene ID 4659

Other Names
Protein phosphatase 1 regulatory subunit 12A, Myosin phosphatase-targeting subunit 1, Myosin phosphatase target subunit 1, Protein phosphatase myosin-binding subunit, PPP1R12A, MBS, MYPT1

Calculated MW
115281 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

Western blot, 0.1-0.5 µg/ml, Human, Mouse

Subcellular Localization
Cytoplasm . Along actomyosin filaments and stress fibers.

Tissue Specificity
Expressed in striated muscles, specifically in type 2a fibers (at protein level). .

Protein Name
Protein phosphatase 1 regulatory subunit 12A

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

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.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C for one year. After r˚Constitution, 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.**

Anti-PPP1R12A Picoband Antibody - Protein Information

Name PPP1R12A (HGNC:7618)

Function
Key regulator of protein phosphatase 1C (PPP1C). Mediates binding to myosin. As part of the PPP1C complex, involved in dephosphorylation of PLK1. Capable of inhibiting HIF1AN-dependent suppression of HIF1A activity.

Cellular Location
Cytoplasm. Cytoplasm, cytoskeleton, stress fiber. Note=Also along actomyosin filaments

Tissue Location
Expressed in striated muscles, specifically in type 2a fibers (at protein level).

Anti-PPP1R12A Picoband Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-PPP1R12A Picoband Antibody - Images

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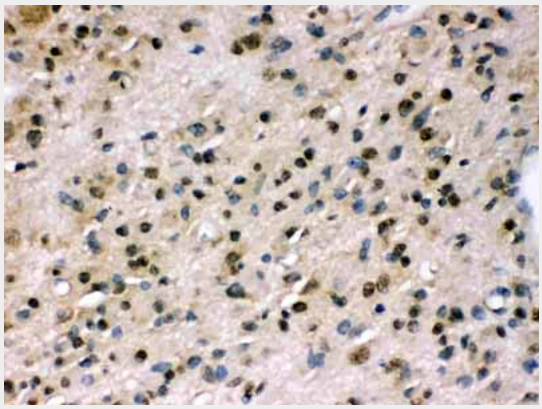
Anti- PPP1R12A Picoband antibody, ABO12423, Western blottingAll lanes: Anti PPP1R12A (ABO12423) at 0.5ug/mlLane 1: Mouse Skeletal Muscle Tissue Lysate at 50ugLane 2: HELA Whole Cell Lysate at 40ugPredicted bind size: 115KDObserved bind size: 150KD



Anti- PPP1R12A Picoband antibody, ABO12423,IHC(P)IHC(P): Human Glioma Tissue

Anti-PPP1R12A Picoband Antibody - 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.