

PPP1R12A Rabbit pAb

Catalog No.: A6700 **1 Publications**

Basic Information

Observed MW

130kDa

Calculated MW

115kDa

Category

Primary antibody

Applications

ELISA, WB, IHC-P

Cross-Reactivity

Human, Mouse, Rat

Background

Myosin phosphatase target subunit 1, which is also called the myosin-binding subunit of myosin phosphatase, is one of the subunits of myosin phosphatase. Myosin phosphatase regulates the interaction of actin and myosin downstream of the guanosine triphosphatase Rho. The small guanosine triphosphatase Rho is implicated in myosin light chain (MLC) phosphorylation, which results in contraction of smooth muscle and interaction of actin and myosin in nonmuscle cells. The guanosine triphosphate (GTP)-bound, active form of RhoA (GTP.RhoA) specifically interacted with the myosin-binding subunit (MBS) of myosin phosphatase, which regulates the extent of phosphorylation of MLC. Rho-associated kinase (Rho-kinase), which is activated by GTP. RhoA, phosphorylated MBS and consequently inactivated myosin phosphatase. Overexpression of RhoA or activated RhoA in NIH 3T3 cells increased phosphorylation of MBS and MLC. Thus, Rho appears to inhibit myosin phosphatase through the action of Rho-kinase. Several transcript variants encoding different isoforms have been found for this gene.

Recommended Dilutions

WB 1:500 - 1:2000**IHC-P** 1:50 - 1:200

Immunogen Information

Gene ID

4659

Swiss Prot

O14974

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 710-970 of human PPP1R12A (NP_002471.1).

Synonyms

MBS; GUBS; M130; MYPT1; PPP1R12A

Contact

 | 400-999-6126 | cn.market@abclonal.com.cn | www.abclonal.com.cn

Product Information

Source

Rabbit

Isotype

IgG

Purification

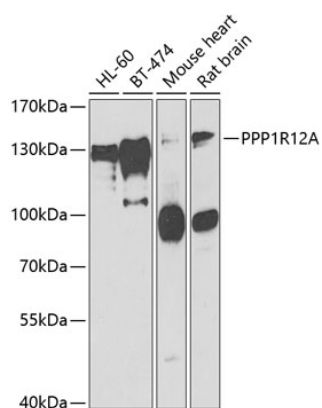
Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Validation Data



Western blot analysis of extracts of various cell lines, using PPP1R12A antibody (A6700) at 1:1000 dilution.

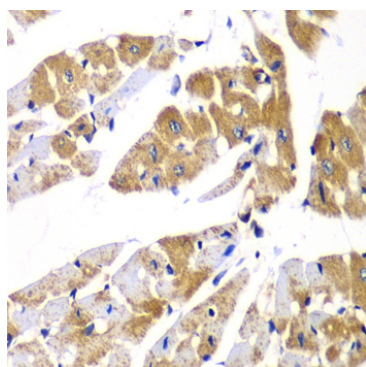
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 90s.



Immunohistochemistry analysis of paraffin-embedded mouse heart using PPP1R12A Antibody (A6700) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.