

AP0916

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Phospho-PPP1R12A-T853 Rabbit pAb

Catalog No.: AP0916

1 Publications

Basic Information

Observed MW

125kDa

Calculated MW

115kDa

Category

Polyclonal Antibody

Applications

WB, ELISA

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

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID

4659

Swiss Prot

O14974

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

MBS; GUBS; M130; MYPT1; Phospho-PPP1R12A-T853

Contact

 www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

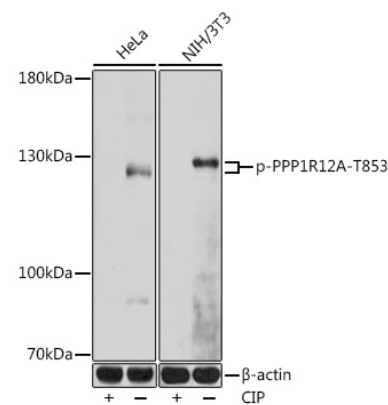
Affinity purification

Storage

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

Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

Validation Data



Western blot analysis of various lysates using Phospho-PPP1R12A-T853 Rabbit pAb (AP0916) at 1:1000 dilution. HeLa cells were treated by CIP(20uL/400ul) at 37°C for 1 hour. NIH/3T3 cells were treated by CIP(20uL/400ul) at 37°C for 1 hour. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% BSA. Detection: ECL Basic Kit (RM00020). Exposure time: 90s.