Phospho-PPP1R12A-S507 Rabbit Polyclonal Antibody

CABP0769

Product Information

Size:

20uL, 50uL, 100uL, 200uL

Observed MW:

135kDa

Calculated MW:

105kDa/109kDa/111kDa/115 kDa

Applications:

WB

Reactivity:

Human

Antibody Information

Recommended dilutions:
WB 1:500 - 1:2000

Source:
Rabbit

Isotype:
IgG

Purification:
Affinity purification

Protein 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.

Immunogen information

Gene ID:
4659

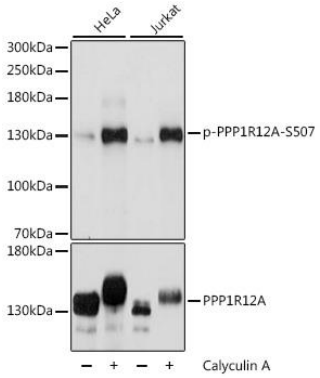
Uniprot
O14974

Synonyms:
PPP1R12A; M130; MBS; MYPT1; MYPT1

Immunogen:
A synthetic phosphorylated peptide around S507 of human PPP1R12A (NP_001137357.1).

Storage:
Store at -20℃. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Product Images



Western blot analysis of extracts of various cell lines, using Phospho-PPP1R12A-S507 antibody (CABP0769) at 1:2000 dilution or PPP1R12A antibody (CAB0587). HeLa cells were treated by Calyculin A (100 nM) at 37'C for 30 minutes after serum-starvation overnight. Jurkat cells were treated by Calyculin A (100 nM) at 37'C for 30 minutes. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% BSA. Detection: ECL Basic Kit (CABM00020). Exposure time: 1s.

