## Product Information

Size:
20uL, 50uL, 100uL, 200uL

## Observed MW:

Refer to figures

## 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 T696 of human PPP1R12A.

## Storage:

Store at $-20^{\circ} \mathrm{C}$. Avoid freeze / thaw cycles. Buffer: PBS with $0.02 \%$ sodium azide, 50\% glycerol, pH7.3.

