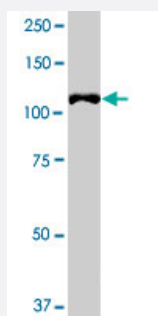


MBS (phospho T853) polyclonal antibody

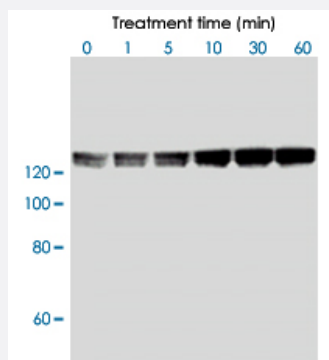
Catalog # PAB0009 Size 50 ug

Applications



Western Blot (Cell lysate)

MBS (phospho T853) polyclonal antibody (Cat # PAB0009). Western blot analysis of MBS in HeLa S3 NE.



Western Blot (Recombinant protein)

Phosphorylation of recombinant MBS on threonine-853 residue by recombinant Rho-kinase 2 in vitro. Western blotting using MBS (phospho T853) polyclonal antibody (Cat # PAB0009).

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of MBS/MYPT1.
Immunogen	Synthetic phosphopeptide (conjugated with KLH) corresponding to residues surrounding T853 of human MBS/MYPT1.
Host	Rabbit
Reactivity	Chicken, Human, Mouse, Rat
Form	Liquid

Quality Control Testing

Phospho-MBS/MYPT1 Thr853 Antibody detects endogenous MBS/MYPT1 only when phosphorylated at threonine853. The antibody does not recognize other myosin phosphatase regulatory subunit.

Recommend Usage

Western Blot (0.4-1 ug/mL)
ELISA (0.5-1 ug/mL)
The optimal working dilution should be determined by the end user.

Storage Buffer

In 10 mM HEPES/KOH, 150 mM NaCl, pH 7.5 (50% glycerol)

Storage Instruction

Store at -20°C.
Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

MBS (phospho T853) polyclonal antibody (Cat # PAB0009). Western blot analysis of MBS in HeLa S3 NE.

[Protocol Download](#)

- Western Blot (Recombinant protein)

Phosphorylation of recombinant MBS on threonine-853 residue by recombinant Rho-kinase 2 in vitro. Western blotting using MBS (phospho T853) polyclonal antibody (Cat # PAB0009).

- Enzyme-linked Immunoabsorbent Assay

Gene Info — PPP1R12A

Entrez GeneID

[4659](#)

GeneBank Accession#

[D87930](#)

Protein Accession#

[BAA22378](#)

Gene Name

PPP1R12A

Gene Alias

MBS, MGC133042, MYPT1

Gene Description

protein phosphatase 1, regulatory (inhibitor) subunit 12A

Omim ID

[602021](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

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. [provided by RefSeq]

Other Designations

myosin phosphatase, target subunit 1

Publication Reference

- [Chlamydia trachomatis Inclusion Membrane Protein CT228 Recruits Elements of the Myosin Phosphatase Pathway to Regulate Release Mechanisms.](#)

Lutter EI, Barger AC, Nair V, Hackstadt T.

Cell Reports 2013 Jun; 3(6):1921.

Application: IF, Human, HeLa cells

Pathway

- [Focal adhesion](#)
- [Long-term potentiation](#)
- [Regulation of actin cytoskeleton](#)
- [Vascular smooth muscle contraction](#)

Disease

- [Genetic Predisposition to Disease](#)
- [Lung Neoplasms](#)
- [Tobacco Use Disorder](#)