


Product datasheet

Anti-Myosin Phosphatase antibody ab70809

★★★★★ [3 Abreviews](#) [3 References](#) [2 Images](#)

Overview

Product name	Anti-Myosin Phosphatase antibody
Description	Rabbit polyclonal to Myosin Phosphatase
Host species	Rabbit
Tested applications	Suitable for: WB, IP
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Horse, Guinea pig, Cow, Dog, Pig, Chimpanzee, Gorilla, Orangutan 
Immunogen	Synthetic peptide corresponding to a region between residue 800 and the C-terminus (residue 842) of human Myosin Phosphatase (NP_002471.1)
Positive control	Whole cell lysate from HeLa or 293T cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 6.8 Preservative: 0.09% Sodium azide Constituents: 0.1% BSA, Tris buffered saline
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab70809 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (2)	1/2000 - 1/10000. Detects a band of approximately 140 kDa (predicted molecular weight: 115 kDa).
IP	★★★★★ (1)	Use at 2-5 µg/mg of lysate.

Target

Function

Regulates myosin phosphatase activity.

Tissue specificity

Expressed in striated muscles, specifically in type 2a fibers (at protein level).

Sequence similarities

Contains 6 ANK repeats.

Developmental stage

Induced by 2-fold during pregnancy, including in abdominus rectus muscle.

Domain

Heterotetramerization is mediated by the interaction between a coiled-coil of PRKG1 and the leucine/isoleucine zipper of PPP1R12A/MBS, the myosin-binding subunit of the myosin phosphatase.

Post-translational modifications

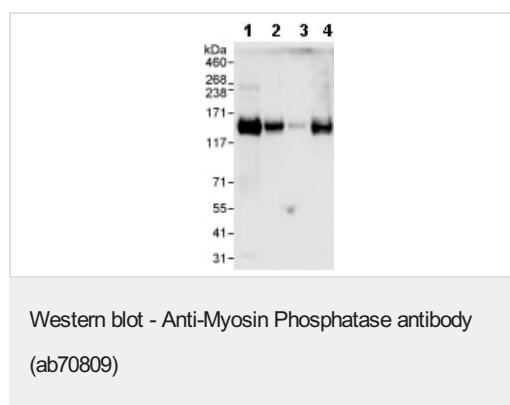
Phosphorylated by CIT (Rho-associated kinase) (By similarity). Phosphorylated cooperatively by ROCK1 and CDC42BP on Thr-696. Phosphorylated on upon DNA damage, probably by ATM or ATR.

In vitro, phosphorylation of Ser-695 by PKA and PKG appears to prevent phosphorylation of the inhibitory site Thr-696, probably mediated by PRKG1.

Cellular localization

Cytoplasm. Along actomyosin filaments and stress fibers.

Images



All lanes : Anti-Myosin Phosphatase antibody (ab70809) at 0.04 µg/ml

Lane 1 : HeLa whole cell lysate at 50 µg

Lane 2 : HeLa whole cell lysate at 15 µg

Lane 3 : HeLa whole cell lysate at 5 µg

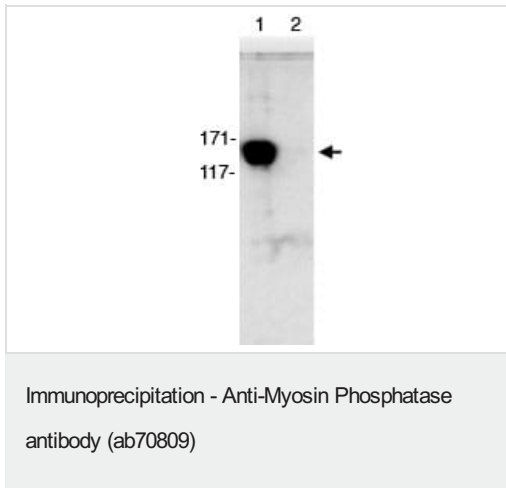
Lane 4 : 293T whole cell lysate at 50 µg

Developed using the ECL technique.

Predicted band size: 115 kDa

Observed band size: 140 kDa

Exposure time: 30 seconds



1mg whole lysate from HeLa cells was immunoprecipitated using ab70809 at 3ug/mg of lysate (lane 1) or a control rabbit Ig (lane 2). For the subsequent western blot, 20% of the immunoprecipitate was loaded per lane, and probed with ab70809 at 1ug/ml. Detection: chemiluminescence with exposure time of 10 seconds.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Response to your inquiry within 24 hours
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