


Product datasheet

Anti-Myosin Phosphatase (phospho T853) antibody ab59203

★☆☆☆☆ [1 Abreviews](#) [6 References](#) [2 Images](#)

Overview

Product name	Anti-Myosin Phosphatase (phospho T853) antibody
Description	Rabbit polyclonal to Myosin Phosphatase (phospho T853)
Host species	Rabbit
Specificity	Detects human Myosin Phosphatase only when phosphorylated at threonine 853 (threonine 852 for mouse and threonine 855 for rat)
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat 
Immunogen	Synthetic peptide corresponding to Human Myosin Phosphatase (phospho T853). (RSTPGV)
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. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	<p>pH: 7</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride</p> <p>Without Mg+2 and Ca+2</p>
Purity	Immunogen affinity purified
Purification notes	Affinity purified from rabbit antiserum by affinity chromatography using epitope specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography

using non-phosphopeptide corresponding to the phosphorylation site.

Clonality

Polyclonal

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab59203 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	★☆☆☆☆ (1)	1/500 - 1/1000. Detects a band of approximately 130 kDa (predicted molecular weight: 115 kDa).
IHC-P		Use at an assay dependent concentration.

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.

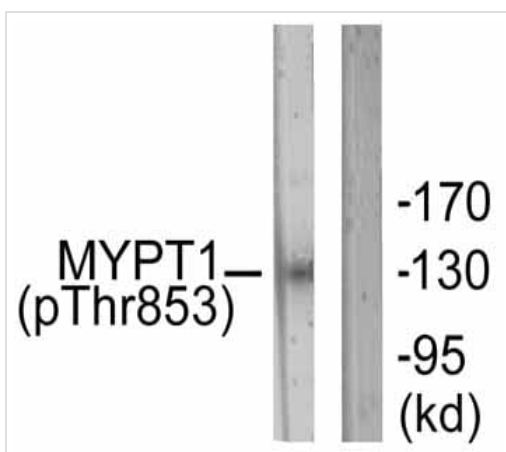
Post-translational modifications

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



Western blot - Anti-Myosin Phosphatase (phospho T853) antibody (ab59203)

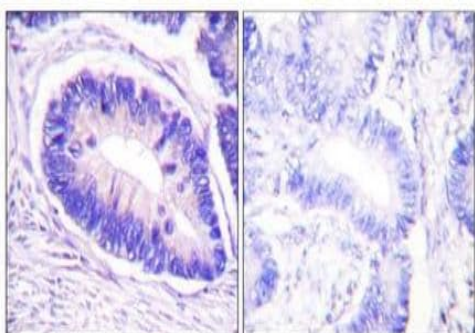
All lanes : Anti-Myosin Phosphatase (phospho T853) antibody (ab59203) at 1/500 dilution

Lane 1 : NIH/3T3 cell extract

Lane 2 : NIH/3T3 cell extract with immunizing phosphopeptide

Predicted band size: 115 kDa

Observed band size: 130 kDa



P-peptide - +

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myosin Phosphatase (phospho T853) antibody (ab59203)

Immunohistochemical analysis of paraffin embedded human colon carcinoma tissue using ab59203 at 1/50 dilution. Samples were treated +/- phosphopeptide.

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

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