# abcam

### Product datasheet

## Anti-Myosin Phosphatase + Myosin Phosphatase 2 antibody [YE336] ab32519

RabMAb

★★★★★ 3 Abreviews 9 References 9 Images

#### Overview

**Product name** Anti-Myosin Phosphatase + Myosin Phosphatase 2 antibody [YE336]

**Description** Rabbit monoclonal [YE336] to Myosin Phosphatase + Myosin Phosphatase 2

**Host species** Rabbit

Specificity This antibody is specific for human Myosin Phosphatase 1 and Myosin Phosphatase 2.

**Tested applications** Suitable for: Flow Cyt (Intra), WB, ICC/IF, IP

Species reactivity Reacts with: Mouse, Rat, Human

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HeLa, Jurkat, 293T, MCF-7, NIH/3T3 and C6 whole cell lysate. ICC/IF: HEK293 and NIH/3T3

cells Flow Cyt (intra): HEK293 and HeLa cells,

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit **General notes** 

monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

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.

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

#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.21% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number YE336

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab32519 in the following tested applications.

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

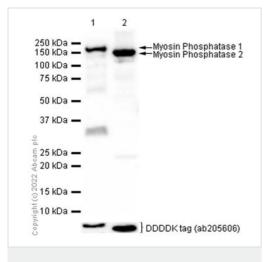
Application	Abreviews	Notes
Flow Cyt (Intra)		1/40 - 1/100. <b>ab172730</b> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB	***** (1)	1/1000 - 1/2000. Predicted molecular weight: 110 kDa. For unpurified use at 1/5000.
ICC/IF	<b>★★★★</b> <u>(1)</u>	1/100.
IP		1/30. For unpurified use at 1/80.

#### **Target**

**Cellular localization** Myosin Phosphatase: Cytoplasm. Along actomyosin filaments and stress fibers. Myosin

Phosphatase 2: Cytoplasmic

#### **Images**



Western blot - Anti-Myosin Phosphatase + Myosin Phosphatase 2 antibody [YE336] (ab32519)

**All lanes :** Anti-Myosin Phosphatase + Myosin Phosphatase 2 antibody [YE336] (ab32519) at 1/1000 dilution

**Lane 1 :** Human Myosin Phosphatase 1 full-length recombinant protein with DDDDK tag

**Lane 2 :** Human Myosin Phosphatase 2 full-length recombinant protein with DDDDK tag

Lysates/proteins at 0.01 µg per lane.

#### **Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 110 kDa

Observed band size: 150 kDa

Exposure time: 5 seconds

Blocking and diluting buffer: 5% NFDM/TBST

**All lanes :** Anti-Myosin Phosphatase + Myosin Phosphatase 2 antibody [YE336] (ab32519) at 1/2000 dilution

Lane 1 : HeLa whole cell lysate
Lane 2 : Jurkat whole cell lysate
Lane 3 : 293T whole cell lysate
Lane 4 : MCF-7 whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes: Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000

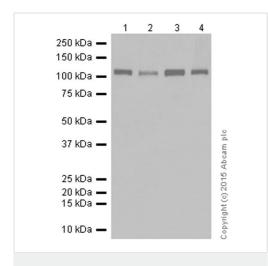
dilution

**Predicted band size:** 110 kDa **Observed band size:** 110 kDa

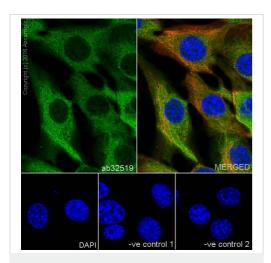
Blocking and Diluting buffer 5% NFDM/TBST

Immunocytochemistry/Immunofluorescence analysis of NIH/3T3 cells labelling Myosin Phosphatase 1+Myosin Phosphatase 2 with purified ab32519 at 1/100. Cells were fixed with 4% Paraformaldehyde and permeabilised with 0.1% Triton X-100. ab150077, Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. Cells were counterstained with ab7291 anti-Tubulin (mouse mAb) followed by ab150120, AlexaFluor®594 goat anti-mouse secondary both at 1/1000. Nuclei were counterstained with DAPI (blue).

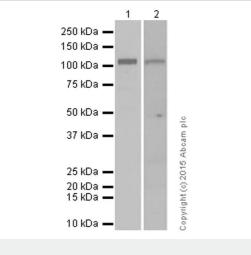
For negative control 1, rabbit primary antibody was used followed by anti-mouse secondary antibody (<u>ab150120</u>). For negative control 2, <u>ab7291</u> (mouse primary antibody) was used followed by anti-rabbit secondary antibody (<u>ab150077</u>).



Western blot - Anti-Myosin Phosphatase + Myosin Phosphatase 2 antibody [YE336] (ab32519)



Immunocytochemistry/ Immunofluorescence - Anti-Myosin Phosphatase + Myosin Phosphatase 2 antibody [YE336] (ab32519)



Western blot - Anti-Myosin Phosphatase + Myosin Phosphatase 2 antibody [YE336] (ab32519)

**All lanes :** Anti-Myosin Phosphatase + Myosin Phosphatase 2 antibody [YE336] (ab32519) at 1/2000 dilution

Lane 1: NIH/3T3 whole cell lysate

Lane 2: C6 whole cell lysate

Lysates/proteins at 20 µg per lane.

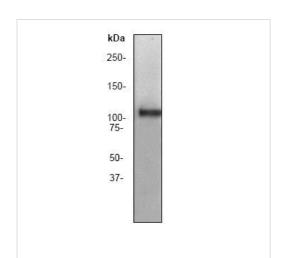
#### **Secondary**

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000

dilution

**Predicted band size:** 110 kDa **Observed band size:** 110 kDa

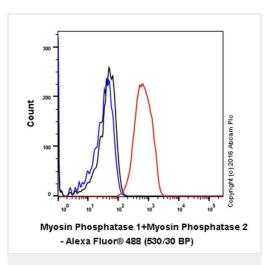
Blocking and Diluting buffer 5% NFDM/TBST



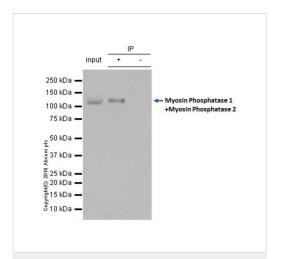
Western blot - Anti-Myosin Phosphatase + Myosin Phosphatase 2 antibody [YE336] (ab32519)

Anti-Myosin Phosphatase + Myosin Phosphatase 2 antibody [YE336] (ab32519) at 1/5000 dilution (unpurified) + 293T cell lysate.

**Predicted band size:** 110 kDa **Observed band size:** 110 kDa



Flow Cytometry (Intracellular) - Anti-Myosin Phosphatase + Myosin Phosphatase 2 antibody [YE336] (ab32519) Intracellular Flow Cytometry analysis of HeLa cells labelling Myosin Phosphatase 1+Myosin Phosphatase 2 (red) with purified ab32519 at dilution of 1/40. The secondary antibody used was goat anti rabbit lgG (FITC) at 1/500. Cells were fixed with 4% paraformaldehyde. Isotype control antibody was Rabbit monoclonal lgG (black). The blue line shows cells without incubation with primary antibody and secondary antibody.



Immunoprecipitation - Anti-Myosin Phosphatase +
Myosin Phosphatase 2 antibody [YE336] (ab32519)

ab32519 at 1/30 dilution immunoprecipitating Myosin Phosphatase 1+Myosin Phosphatase 2 in HeLa whole cell lysate observed at 110 KDa (lanes 1 and 2).

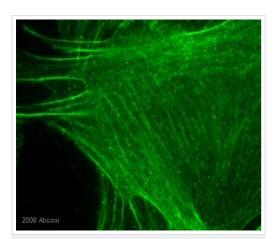
Lane 1 (input): HeLa whole cell lysate 10ug

Lane 2 (+): ab32519 + HeLa whole cell lysate

Lane 3 (-): Rabbit monoclonal lgG ( $\underline{ab172730}$ ) instead of ab32519 in HeLa whole cell lysate

For western blotting, ab32519 was used followed by VeriBlot for IP Detection Reagent (HRP) (ab131366) for detection at a dilution of 1/10,000.

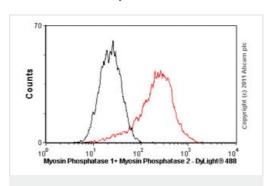
Blocking and Diluting buffer and concentration: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-Myosin Phosphatase + Myosin Phosphatase 2 antibody [YE336] (ab32519)

This image is courtesy of an anonymous Abreview

ab32519 staining mouse fibroblast cells by ICC/IF. Cells were PFA fixed, permeabilized in Triton X-100 and blocked in 1% BSA for 30 minutes at 25°C. The primary antibody was diluted 1/200 and incubated with sample for 4 hours at 25°C. An Alexa Fluor® 488 conjugated goat monoclonal to rabbit, diluted 1/500 was used as the secondary.



Flow Cytometry (Intracellular) - Anti-Myosin Phosphatase + Myosin Phosphatase 2 antibody [YE336] (ab32519)

Overlay histogram showing HEK293 cells stained with unpurified ab32519 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab32519, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit lgG (H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit lgG (monoclonal) (1µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in

HEK293 cells fixed with 100% methanol (5 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.

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