

Anti-non-muscle Myosin IIB/MYH10 antibody [EPR22564-23] - BSA and Azide free ab254472

Recombinant RabMAb

11 Images

Overview

Product name	Anti-non-muscle Myosin IIB/MYH10 antibody [EPR22564-23] - BSA and Azide free
Description	Rabbit monoclonal [EPR22564-23] to non-muscle Myosin IIB/MYH10 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, 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: NIH/3T3, HEK-293T, HeLa and A549 whole cell lysates; human liver tissue lysate; rat liver, brain and lung tissue lysates; mouse brain tissue lysate. IP: HEK-293T whole cell lysate. IHC-P: Human cerebellum and kidney tissue; mouse cerebellum tissue; rat cerebellum and kidney tissue. ICC/IF: HeLa and NIH/3T3 cells. Flow Cyt (intra): HEK-293T and NIH/3T3 cells.
General notes	<p>ab254472 is the carrier-free version of ab230823.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit</p>

monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR22564-23
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab254472 in the following tested applications.

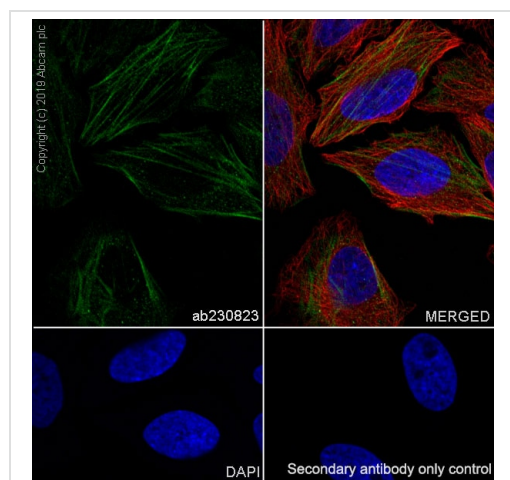
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 230 kDa (predicted molecular weight: 229 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.

Target

Function	Cellular myosin that appears to play a role in cytokinesis, cell shape, and specialized functions such as secretion and capping. Involved with LARP6 in the stabilization of type I collagen mRNAs for CO1A1 and CO1A2.
Tissue specificity	Isoform 1 is expressed in cerebellum and spinal chord. Isoform 2 is expressed in cerebrum and retina. Isoform 3 is expressed in the cerebrum and to a much lower extent in cerebellum.
Sequence similarities	Contains 1 IQ domain. Contains 1 myosin head-like domain.
Domain	The rodlike tail sequence is highly repetitive, showing cycles of a 28-residue repeat pattern composed of 4 heptapeptides, characteristic for alpha-helical coiled coils.

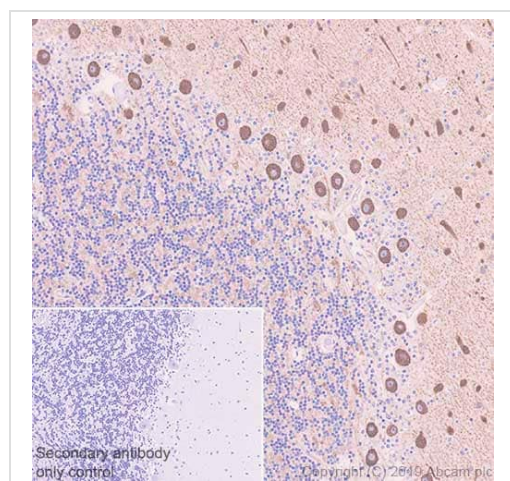
Images



Immunocytochemistry/ Immunofluorescence - Anti-non-muscle Myosin IIB/MYH10 antibody [EPR22564-23] - BSA and Azide free (ab254472)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human epithelial cell line from cervix adenocarcinoma) cells labeling non-muscle Myosin IIB/MYH10 with **ab230823** at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining in HeLa cells. The nuclear counterstain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) (**ab195889**) at 1/200 dilution (red). Secondary antibody only control: Used PBS instead of primary antibody, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (**ab150077**) secondary antibody at 1/1000 dilution.

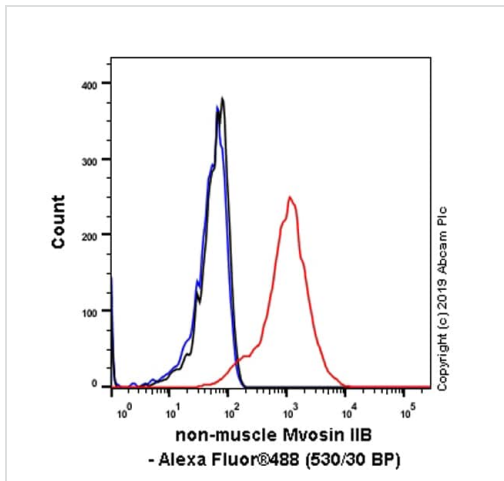
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab230823**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-non-muscle Myosin IIB/MYH10 antibody [EPR22564-23] - BSA and Azide free (ab254472)

Immunohistochemical analysis of paraffin-embedded human cerebellum tissue labeling non-muscle Myosin IIB/MYH10 with **ab230823** at 1/2000 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Strong positive staining on Purkinje cells of human cerebellum (PMID: 29330091) is observed. Counterstained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). The section was incubated with **ab230823** for 30 mins at RT. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins.

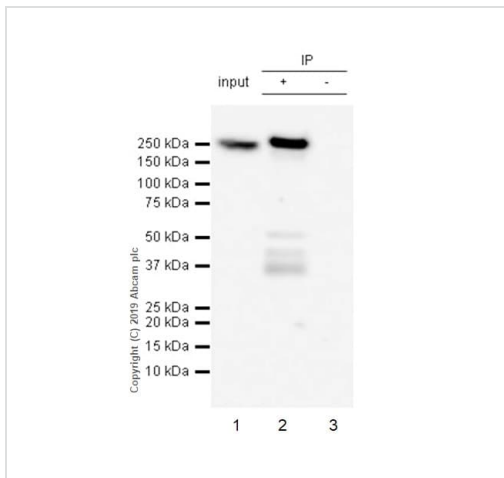
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Flow Cytometry (Intracellular) - Anti-non-muscle Myosin IIB/MYH10 antibody [EPR22564-23] - BSA and Azide free (ab254472)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized NIH/3T3 (mouse embryo fibroblast cell line) cells labeling non-muscle Myosin IIB/MYH10 with **ab230823** at 1/600 (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**), at 1/2000 dilution was used as the secondary antibody.

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Immunoprecipitation - Anti-non-muscle Myosin IIB/MYH10 antibody [EPR22564-23] - BSA and Azide free (ab254472)

non-muscle Myosin IIB/MYH10 was immunoprecipitated from 0.35 mg of HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate with **ab230823** at 1/30 dilution. Western blot was performed from the immunoprecipitate using **ab230823** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used as secondary antibody at 1/5000 dilution.

Lane 1: HEK-293T whole cell lysate 10 µg (Input).

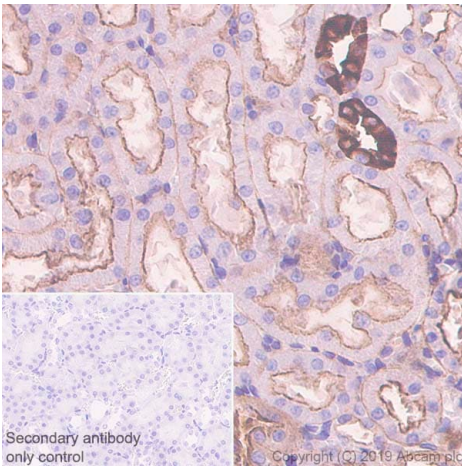
Lane 2: **ab230823** IP in HEK-293T whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab230823** in HEK-293T whole cell lysate.

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: 3 secs.

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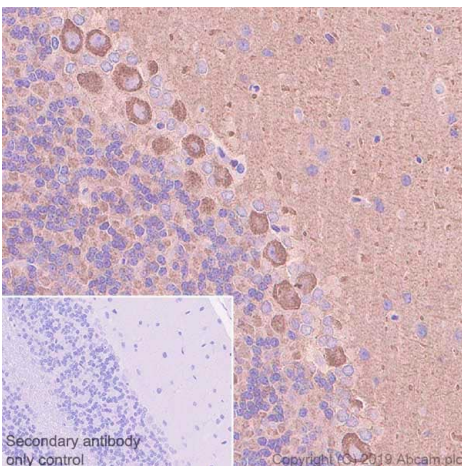


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-non-muscle Myosin IIB/MYH10 antibody [EPR22564-23] - BSA and Azide free (ab254472)

Immunohistochemical analysis of paraffin-embedded rat kidney tissue labeling non-muscle Myosin IIB/MYH10 with **ab230823** at 1/2000 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on rat renal tubules (PMID: 29208685) is observed. Counterstained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). The section was incubated with **ab230823** for 30 mins at RT. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20mins.

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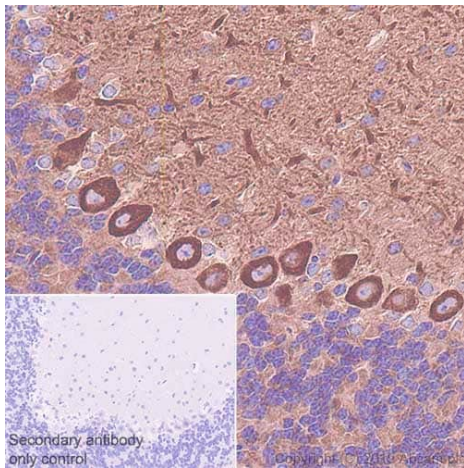


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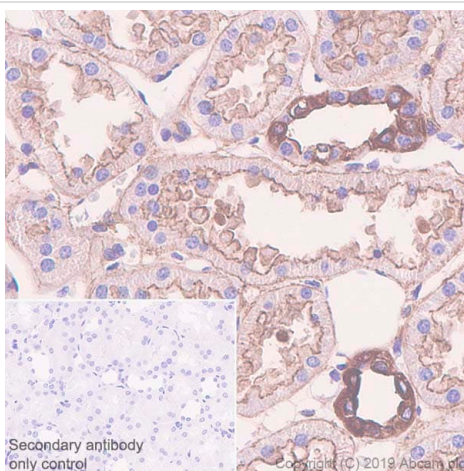


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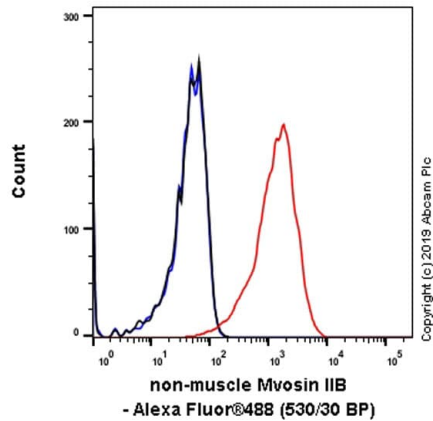
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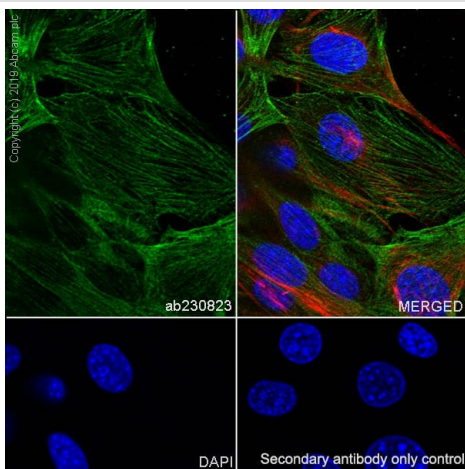
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Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-non-muscle Myosin IIB/MYH10 antibody
[EPR22564-23] - BSA and Azide free (ab254472)

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

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