

Anti-non-muscle Myosin IIB/MYH10 Antibody Picoband™

Catalog Number: A02681-1

About MYH10

This gene encodes a member of the myosin superfamily. The protein represents a conventional non-muscle myosin; it should not be confused with the unconventional myosin-10 (MYO10). Myosins are actin-dependent motor proteins with diverse functions including regulation of cytokinesis, cell motility, and cell polarity. Mutations in this gene have been associated with May-Hegglin anomaly and developmental defects in brain and heart. Multiple transcript variants encoding different isoforms have been found for this gene.

Overview

Product Name	Anti-non-muscle Myosin IIB/MYH10 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-non-muscle Myosin IIB/MYH10 Antibody Picoband™ catalog # A02681-1. Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P35580

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human non-muscle Myosin IIB/MYH10, identical to the related mouse and rat sequences.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.

Suggested Dilutions

Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.

If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

Western blot, 0.1-0.25ug/ml, Human, Mouse, Rat

Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Rat

Immunocytochemistry/Immunofluorescence, 4ug/ml, Human

Flow Cytometry, 1-3ug/1x10⁶ cells, Human, Mouse, Rat

Anti-non-muscle Myosin IIB/MYH10 Antibody Picoband™ (A02681-1) Images

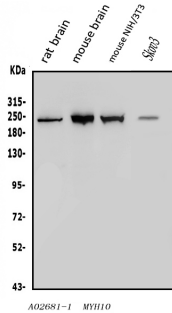


Figure 1. Western blot analysis of non-muscle Myosin IIB/MYH10 using anti-non-muscle Myosin IIB/MYH10 antibody (A02681-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates,

Lane 2: mouse brain tissue lysates,

Lane 3: mouse NIH/3T3 whole cell lysates,

Lane 4: human SKOV3 whole cell lysate.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-non-muscle Myosin IIB/MYH10 antigen affinity purified polyclonal antibody (Catalog # A02681-1) at 0.25 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for non-muscle Myosin IIB/MYH10 at approximately 229KD. The expected band size for non-muscle Myosin IIB/MYH10 is at 229KD.

Figure 2. IHC analysis of non-muscle Myosin IIB/MYH10 using anti-non-muscle Myosin IIB/MYH10 antibody (A02681-1).

non-muscle Myosin IIB/MYH10 was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-non-muscle Myosin IIB/MYH10 Antibody (A02681-1) overnight at 4°C.

Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

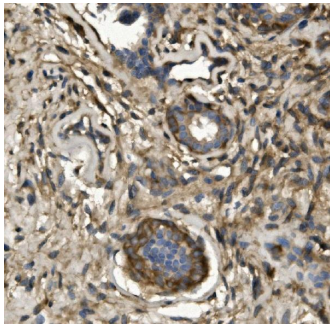
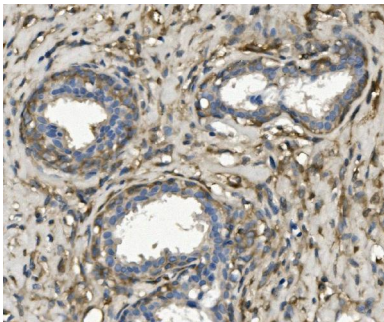


Figure 3. IHC analysis of non-muscle Myosin IIB/MYH10 using anti-non-muscle Myosin IIB/MYH10 antibody (A02681-1).

non-muscle Myosin IIB/MYH10 was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-non-muscle Myosin IIB/MYH10 Antibody (A02681-1) overnight at 4°C.

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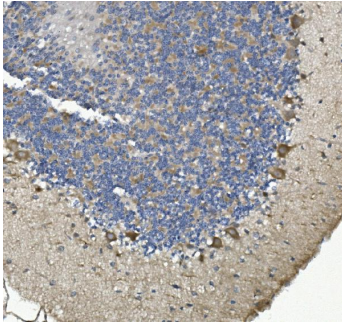


Figure 4. IHC analysis of non-muscle Myosin IIB/MYH10 using anti-non-muscle Myosin IIB/MYH10 antibody (A02681-1). non-muscle Myosin IIB/MYH10 was detected in paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-non-muscle Myosin IIB/MYH10 Antibody (A02681-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

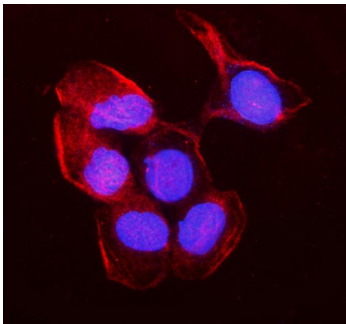


Figure 5. IF analysis of non-muscle Myosin IIB/MYH10 using anti-non-muscle Myosin IIB/MYH10 antibody (A02681-1). non-muscle Myosin IIB/MYH10 was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 4ug/mL rabbit anti-non-muscle Myosin IIB/MYH10 Antibody (A02681-1) overnight at 4°C. DyLight®594 Conjugated Goat Anti-Rabbit IgG (BA1142) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

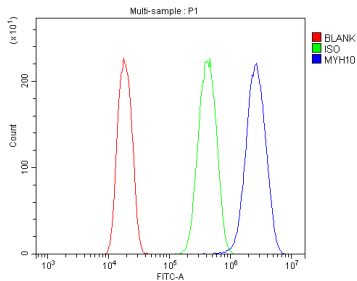


Figure 6. Flow Cytometry analysis of A431 cells using anti-non-muscle Myosin IIB/MYH10 antibody (A02681-1). Overlay histogram showing A431 cells stained with A02681-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-non-muscle Myosin IIB/MYH10 Antibody (A02681-1, 1ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

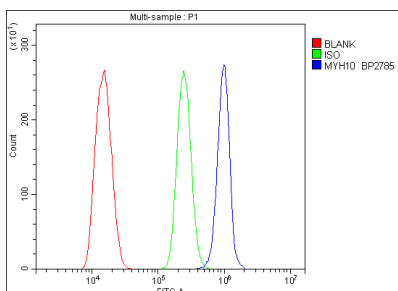


Figure 7. Flow Cytometry analysis of ANA-1 cells using anti-non-muscle Myosin IIB/MYH10 antibody (A02681-1). Overlay histogram showing ANA-1 cells stained with A02681-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-non-muscle Myosin IIB/MYH10 Antibody (A02681-1, 1ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

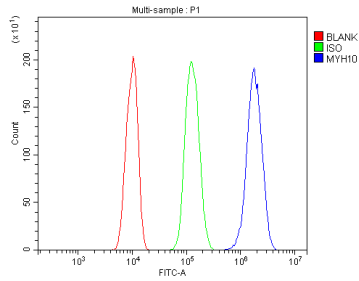


Figure 8. Flow Cytometry analysis of C6 cells using anti-non-muscle Myosin IIB/MYH10 antibody (A02681-1). Overlay histogram showing C6 cells stained with A02681-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-non-muscle Myosin IIB/MYH10 Antibody (A02681-1, 1 μ g/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 μ g/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 μ g/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

1 Publications Citing This Product

1. PubMed ID: 10.3390/ijms221810034, Extracellular Calcium Ion Concentration Regulates Chondrocyte Elastic Modulus and Adhesion Behavior

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