

Anti-heavy chain Myosin/Myh3 Antibody Picoband®

Catalog Number: A02697-1

About Myh3

Myosin-3 is a protein that in humans is encoded by the MYH3 gene. Myosin is a major contractile protein which converts chemical energy into mechanical energy through the hydrolysis of ATP. Myosin is a hexameric protein composed of a pair of myosin heavy chains (MYH) and two pairs of nonidentical light chains. This gene is a member of the MYH family and encodes a protein with an IQ domain and a myosin head-like domain. Mutations in this gene have been associated with two congenital contracture (arthrogryposis) syndromes, Freeman-Sheldon syndrome and Sheldon-Hall syndrome.

Overview

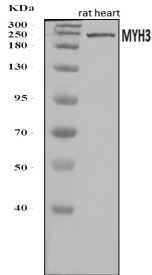
Product Name	Anti-heavy chain Myosin/Myh3 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-heavy chain Myosin/Myh3 Antibody Picoband® catalog # A02697-1. Tested in ELISA, Flow Cytometry, IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	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 freezing and thawing.
Host	Rabbit
Uniprot ID	P12847

Technical Details

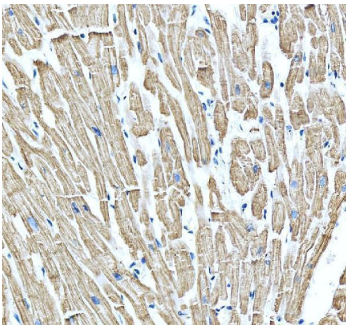
Immunogen	E.coli-derived rat heavy chain Myosin/Myh3 recombinant protein (Position: K44-S119).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
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	Western blot, 0.25-0.5 ug/ml, Rat Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Mouse, Rat Flow Cytometry (Fixed), 1-3 ug/1x10 ⁶ cells, Human, Rat ELISA, 0.1-0.5 ug/ml, Rat

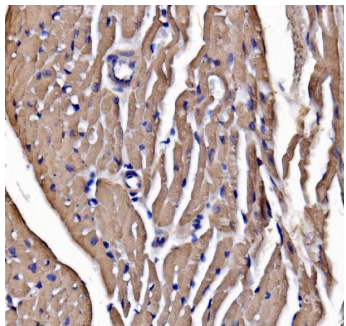
Anti-heavy chain Myosin/Myh3 Antibody Picoband® (A02697-1) Images



Western blot analysis of heavy chain Myosin/Myh3 using anti-heavy chain Myosin/Myh3 antibody (A02697-1). 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 30 ug of sample under reducing conditions. Lane 1: rat heart tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-heavy chain Myosin/Myh3 antigen affinity purified polyclonal antibody (Catalog # A02697-1) at 0.5 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 1:5000 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 heavy chain Myosin/Myh3 at approximately 224 kDa. The expected band size for heavy chain Myosin/Myh3 is at 224 kDa.

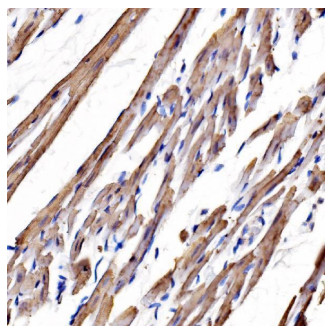


IHC analysis of MYH3 using anti-MYH3 antibody (A02697-1). MYH3 was detected in a paraffin-embedded section of human heart tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-MYH3 Antibody (A02697-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

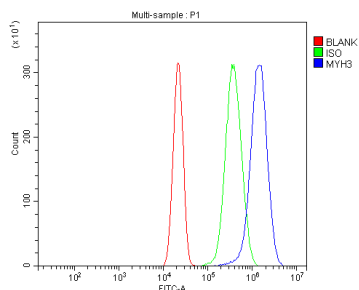


IHC analysis of heavy chain Myosin/Myh3 using anti-heavy chain Myosin/Myh3 antibody (A02697-1). heavy chain Myosin/Myh3 was detected in a paraffin-embedded section of mouse cardiac tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-heavy chain Myosin/Myh3 Antibody (A02697-1) 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.

IHC analysis of heavy chain Myosin/Myh3 using anti-heavy chain Myosin/Myh3 antibody (A02697-1). heavy chain Myosin/Myh3 was detected in a paraffin-embedded section



of rat cardiac tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-heavy chain Myosin/Myh3 Antibody (A02697-1) 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.



Flow Cytometry analysis of U2OS cells using anti-heavy chain Myosin/Myh3 antibody (A02697-1). Overlay histogram showing U2OS cells stained with A02697-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-heavy chain Myosin/Myh3 Antibody (A02697-1, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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Anti-heavy chain Myosin/Myh3 Antibody

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