# abcam

## Product datasheet

# Anti-MYH6 + Slow Skeletal Myosin Heavy chain antibody [EPR10891(2)] ab185967

Recombinant RabMAb

## 7 References 6 Images

Overview

Product name Anti-MYH6 + Slow Skeletal Myosin Heavy chain antibody [EPR10891(2)]

**Description** Rabbit monoclonal [EPR10891(2)] to MYH6 + Slow Skeletal Myosin Heavy chain

Host species Rabbit

**Specificity** The immunogen used for this product shares 78%,76%,76%,76%,72%homology with Myosin 2 1

3 8 4, respectively. Cross-reactivity with these proteins has not been confirmed experimentally.

**Tested applications** Suitable for: mIHC, WB, IHC-P

Unsuitable for: Flow Cyt,ICC/IF or IHC-Fr

**Species reactivity** Reacts with: Mouse, Rat, Human

**Immunogen** Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: His tagged recombinant Human Myosin-7 and 6 protein, mouse and rat heart lysates. IHC:

Human skeletal muscle mIHC: Human skeletal muscle tissue.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

#### **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 long

term. Avoid freeze / thaw cycle.

**Storage buffer** pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

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Purity Protein A purified

Clonality Monoclonal
Clone number EPR10891(2)

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab185967 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
mIHC		Use at an assay dependent concentration.
WB		1/500. Detects a band of approximately 220 kDa (predicted molecular weight: 224 kDa).
IHC-P		1/1000 - 1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

**Application notes** 

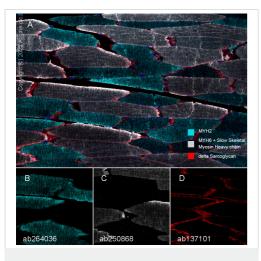
Is unsuitable for Flow Cyt,ICC/IF or IHC-Fr.

#### **Target**

**Cellular localization** 

MYH6: Cytoplasm > myofibril. Thick filaments of the myofibrils. Slow Skeletal Myosin Heavy chain: Cytoplasm > myofibril. Thick filaments of the myofibrils.

#### **Images**



Multiplex immunohistochemistry - Anti-MYH6 + Slow Skeletal Myosin Heavy chain antibody [EPR10891(2)] (ab185967)

Fluorescence multiplex immunohistochemical analysis of the human skeletal muscle (Formalin/PFA-fixed paraffin-embedded sections).

Panel A: merged staining of anti-delta Sarcoglycan (ab137101, red; Opal™690), anti-MYH2 (ab264036, cyan; Opal™520) and anti-MYH6 + Slow Skeletal Myosin Heavy chain (ab250868, gray; Opal™570) on human skeletal muscle. Panel B: anti-MYH2 stained on the fast twitch type 2A fibers. Panel C: anti-MYH6 + Slow Skeletal Myosin Heavy chain stained on skeletal muscle fiber subtypes. Panel D: anti-delta Sarcoglycan stained on membrane of skeletal muscle. Opal Polymer HRP Ms + Rb was used as a secondary antibody.

The section was incubated in three rounds of staining: in the order of <u>ab137101</u> at 1/1000 dilution (1.043  $\mu$ g/ml), <u>ab264036</u> at 1/1000 dilution (1.116  $\mu$ g/ml) and <u>ab250868</u> 1/5000 dilution (0.209  $\mu$ g/ml) for 30 mins at room temperature. Each round was followed by a

separate fluorescent tyramide signal amplification system. DAPI (blue) was used as a nuclear counter stain.

The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument with an Opal<sup>™</sup> 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

This data was developed using the same antibody clone in a different buffer formulation (ab250868).

**Lane 1 :** Anti-MYH6 + Slow Skeletal Myosin Heavy chain antibody [EPR10891(2)] (ab185967) at 1/1000 dilution

**Lane 2**: Anti-6X His tag® antibody [EPR20547] - ChIP Grade (ab213204) at 1/1000 dilution

**All lanes :** His tagged recombinant Human Myosin-6 protein(aa 1193-1337)

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 (Goat Anti-Rabbit IgG,(H+L), Peroxidase conjugated)

Predicted band size: 224 kDa

ab 185967 could recognize both Myosin 6 and 7 protein



Western blot - Anti-MYH6 + Slow Skeletal Myosin Heavy chain antibody [EPR10891(2)] (ab185967)



Western blot - Anti-MYH6 + Slow Skeletal Myosin Heavy chain antibody [EPR10891(2)] (ab185967)



**Lane 2**: Anti-6X His tag® antibody [EPR20547] - ChIP Grade (ab213204) at 1/1000 dilution (His Tag)

**All lanes :** His tagged recombinant Human Myosin-7 protein(aa 1191-1335)

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 (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 224 kDa

1 2 3

460 kDa —

238 kDa —

71 kDa —

71 kDa —

55 kDa —

41 kDa —

31 kDa —

31 kDa —

Western blot - Anti-Slow Skeletal Myosin Heavy chain antibody [EPR10891(2)] (ab185967)

ab185967 could recognize both Myosin 6 and 7 protein

**All lanes :** Anti-MYH6 + Slow Skeletal Myosin Heavy chain antibody [EPR10891(2)] (ab185967) at 1/500 dilution

Lane 1: Human adult heart lysate

Lane 2: Mouse heart lysate

Lane 3: Rat heart lysate

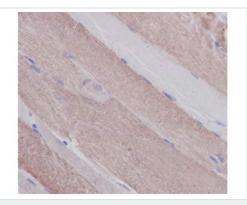
Lysates/proteins at 20 µg per lane.

#### Secondary

All lanes: Goat anti Rabbit IR680 at 1/10000 dilution

Predicted band size: 224 kDa

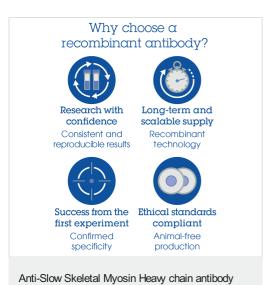
This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using Licor blocking buffer before being incubated with ab185967 overnight at 4°C. Antibody binding was detected using Goat anti Rabbit IR680 at a 1:10,000 dilution for 1hr at room temperature and then imaged using the Licor Odyssey CLx.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Slow Skeletal Myosin
Heavy chain antibody [EPR10891(2)] (ab185967)

Immunohistochemical analysis of paraffin embedded Human skeletal muscle tissue labeling Slow Skeletal Myosin Heavy chain with ab185967 at 1/2000 dilution. Counterstained with Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



[EPR10891(2)] (ab185967)

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