

## Product datasheet

# Anti-Myosin Light Chain 2 antibody [EPR3741] ab92721

Recombinant RabMAB

★★★★☆ 5 Abreviews 11 References 11 Images

### Overview

<b>Product name</b>	Anti-Myosin Light Chain 2 antibody [EPR3741]
<b>Description</b>	Rabbit monoclonal [EPR3741] to Myosin Light Chain 2
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-Fr, WB, IP, IHC-P <b>Unsuitable for:</b> Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human Myosin Light Chain 2 aa 150-250. The exact sequence is proprietary.
<b>Positive control</b>	WB: Fetal heart, fetal skeletal muscle, Human heart, mouse heart and rat heart lysates IHC-P: Human heart muscle

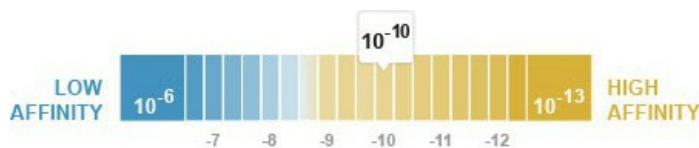
### General notes

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](#)

This product is a recombinant rabbit monoclonal antibody.

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Dissociation constant (K<sub>D</sub>)</b>	K <sub>D</sub> = 2.78 x 10 <sup>-10</sup> M



[Learn more about K<sub>D</sub>](#)

<b>Storage buffer</b>	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 40% Glycerol, 9.85% Tris glycine, 50% Tissue culture supernatant
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<b>Purity</b>	Tissue culture supernatant
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR3741
<b>Isotype</b>	IgG

## Applications

Our [Abpromise guarantee](#) covers the use of **ab92721** 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
IHC-Fr		Use at an assay dependent concentration. PubMed: 23365102
WB	★★★★☆	1/5000. Predicted molecular weight: 19 kDa.
IP		1/50.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. The use of an HRP/AP polymerized secondary antibody is recommended.

**Application notes** Is unsuitable for Flow Cyt.

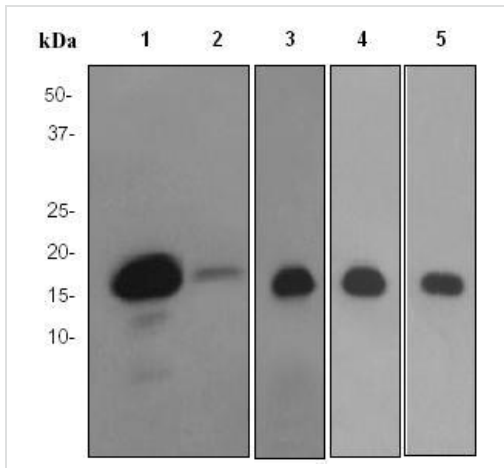
## Target

**Involvement in disease** Defects in MYL2 are the cause of cardiomyopathy familial hypertrophic type 10 (CMH10) [MIM:608758]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant forms with high risk of cardiac failure and sudden cardiac death. Defects in MYL2 are the cause of cardiomyopathy familial hypertrophic with mid-left ventricular chamber type 2 (MVC2) [MIM:608758]. MVC2 is a very rare variant of familial hypertrophic cardiomyopathy, characterized by mid-left ventricular chamber thickening.

**Sequence similarities** Contains 3 EF-hand domains.

**Post-translational modifications** N-terminus is methylated by METTL11A/NTM1.

## Images



Western blot - Anti-Myosin Light Chain 2 antibody [EPR3741] (ab92721)

**All lanes** : Anti-Myosin Light Chain 2 antibody [EPR3741] (ab92721) at 1/10000 dilution

**Lane 1** : Fetal heart lysate

**Lane 2** : Fetal skeletal muscle lysate

**Lane 3** : Human heart lysate

**Lane 4** : Mouse heart lysate

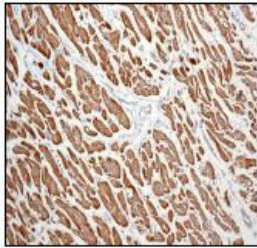
**Lane 5** : Rat heart lysate

Lysates/proteins at 10 µg per lane.

### Secondary

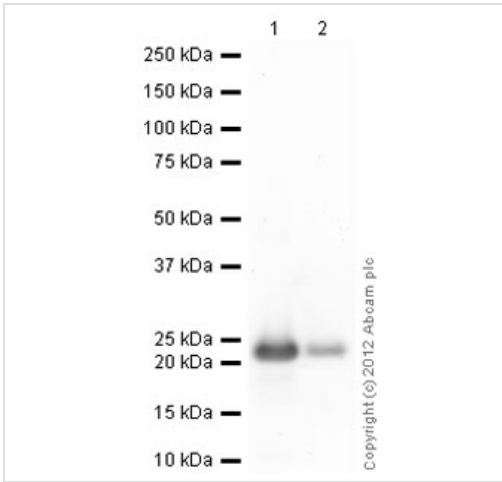
**All lanes** : HRP labelled goat anti-rabbit IgG at 1/2000 dilution

**Predicted band size:** 19 kDa

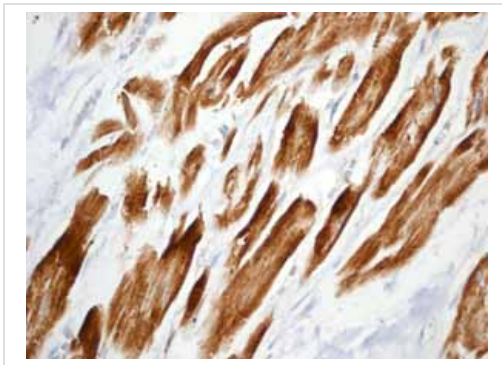


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myosin Light Chain 2 antibody [EPR3741] (ab92721)

ab92721, at a 1/100 dilution, staining Myosin Light Chain 2 in paraffin embedded Human heart muscle by Immunohistochemistry.



Western blot - Anti-Myosin Light Chain 2 antibody [EPR3741] (ab92721)



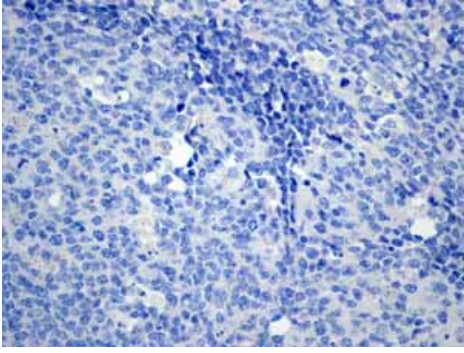
ab92721 showing positive staining in Heart muscle tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myosin Light Chain 2 antibody [EPR3741] (ab92721)



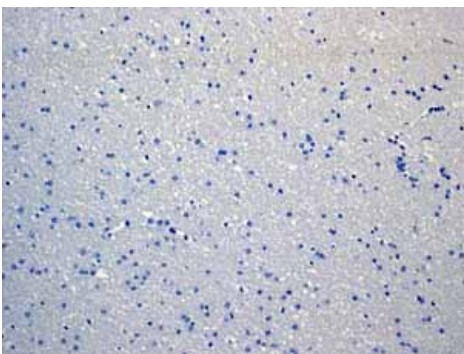
ab92721 showing positive staining in Skeletal muscle tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myosin Light Chain 2 antibody [EPR3741] (ab92721)



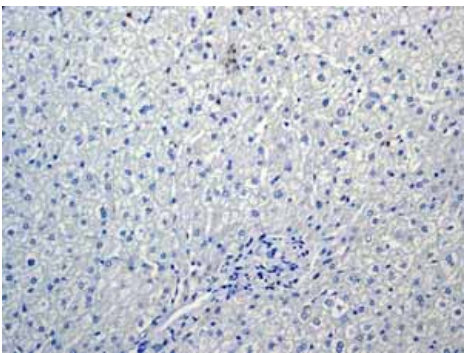
ab92721 showing negative staining in Normal tonsil tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myosin Light Chain 2 antibody [EPR3741] (ab92721)



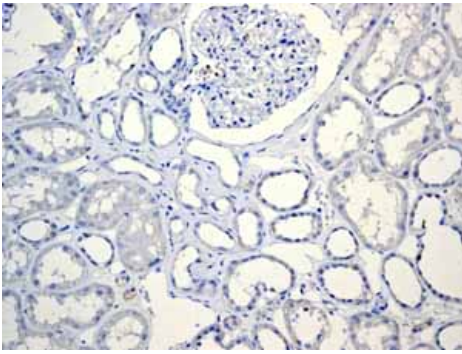
ab92721 showing negative staining in Normal brain tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myosin Light Chain 2 antibody [EPR3741] (ab92721)



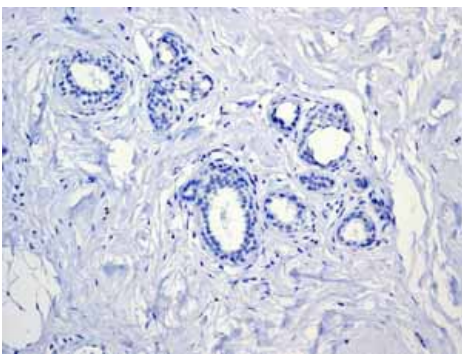
ab92721 showing negative staining in Normal liver tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myosin Light Chain 2 antibody [EPR3741] (ab92721)



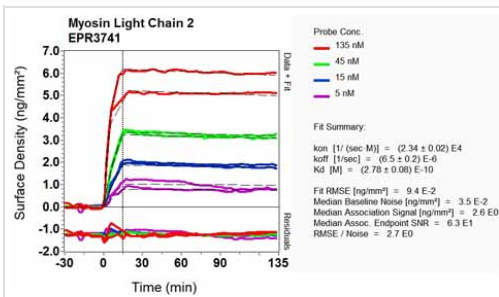
ab92721 showing negative staining in Normal kidney tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myosin Light Chain 2 antibody [EPR3741] (ab92721)



ab92721 showing negative staining in Normal breast tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Myosin Light Chain 2 antibody [EPR3741] (ab92721)



Equilibrium dissociation constant ( $K_D$ )

Learn more about  $K_D$

[Click here to learn more about  \$K\_D\$](#)

Other - Anti-Myosin Light Chain 2 antibody [EPR3741] (ab92721)

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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