abcam

Product datasheet

Anti-Myosin Light Chain 2 antibody [EPR3741] ab92721

ועלשעבע RabMAb

★★★★★ 5 Abreviews 32 References 画像数8

製品の概要

製品名 Anti-Myosin Light Chain 2 antibody [EPR3741]

製品の詳細 Rabbit monoclonal [EPR3741] to Myosin Light Chain 2

由来種 Rabbit

アプリケーション 適用あり: WB. IHC-P

適用なし: Flow Cyt

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: human heart, human skeletal muscle, mouse heart, rat heart lysates IHC: human cardiac

muscle, mouse cardiac muscle, rat cardiac muscle

特記事項 We are constantly working hard to ensure we provide our customers with best in class antibodies.

> As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support

team.

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.

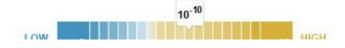
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

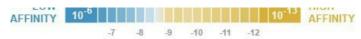
製品の特件

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

 $K_D = 2.78 \times 10^{-10} M$ 解離定数(KD値)





Learn more about K_D

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

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

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 EPR3741

アイソタイプ lgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab92721の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	★★★★ (4)	1/10000. Predicted molecular weight: 19 kDa.
IHC-P		1/600. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. The use of an HRP/AP polymerized secondary antibody is recommended.

追加情報 Is unsuitable for Flow Cyt.

ターゲット情報

関連疾患 Defects in MYL2 are the cause of cardiomyopathy familial hypertrophic type 10 (CMH10)

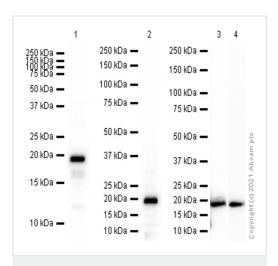
[MIM:608758]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked 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.

配列類似性 Contains 3 EF-hand domains.

翻訳後修飾 N-terminus is methylated by METTL11A/NTM1.

画像



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

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

Lane 1: Human heart lysate

Lane 2: Human skeletal muscle lysate

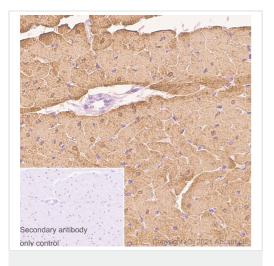
Lane 3: Mouse heart lysate

Lane 4: Rat heart lysate

Secondary

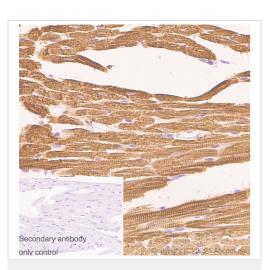
All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 19 kDa **Observed band size:** 19 kDa



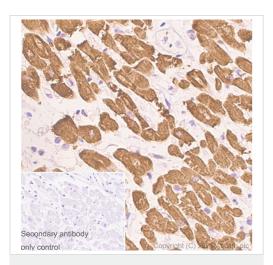
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myosin Light Chain 2 antibody [EPR3741] (ab92721)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat cardiac muscle tissue sections labeling Myosin Light Chain 2 with Purified ab92721 at 1/600 dilution (0.16 µg/mL). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) secondary antibody was used at 1/0 dilution. PBS instead of the primary antibody was used as the negative control. M3



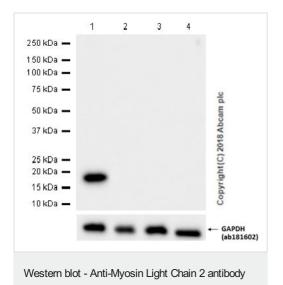
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Myosin Light Chain 2 antibody [EPR3741] (ab92721)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse cardiac muscle tissue sections labeling Myosin Light Chain 2 with Purified ab92721 at 1/600 dilution (0.16 µg/mL). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) secondary antibody was used at 1/0 dilution. PBS instead of the primary antibody was used as the negative control. M3



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

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cardiac muscle tissue sections labeling Myosin Light Chain 2 with Purified ab92721 at 1/600 dilution (0.16 µg/mL). Heat mediated antigen retrieval was performed using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) secondary antibody was used at 1/0 dilution. PBS instead of the primary antibody was used as the negative control. M3



[EPR3741] (ab92721)

All lanes : Anti-Myosin Light Chain 2 antibody [EPR3741] (ab92721) at 1/1000 dilution

Lane 1: Human fetal heart tissue lysate

Lane 2 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 3: 293T (Human embryonic kidney epithelial cell), whole cell

Lane 4 : MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 19 kDa Observed band size: 19 kDa

Exposure time: 10 seconds

Blocking/Diluting buffer and concentration 5% NFDM/TBST

Myosin light chain-2 (MYL2, also called MLC-2) is an ~19kDa
sarcomeric protein that belongs to the EF-hand calcium binding
protein superfamily and exists as three major isoforms encoded by
three distinct genes in mammalian striated muscle (PMID:
26074085). Although some cell lines are reported to be MYL2
positive, such as HeLa, 293T and MCF7 (PMID: 21487036,
21487036, 23093227), ab92721 only works in muscle and heart
tissues according to our internal testing.



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



Lane 1 : Recombinant Human Myosin Light Chain 2 protein (ab79185) at 0.1 μg

Lane 2 : Recombinant Human Myosin Light Chain 2 protein (ab79185) at 0.01 μg

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 19 kDa

Exposure time: 4 minutes



Lane 1 : Recombinant Human Myosin Light Chain 2 protein (ab79185) at 0.1 μ g

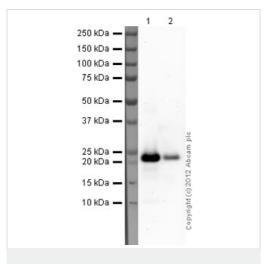
Lane 2 : Recombinant Human Myosin Light Chain 2 protein (ab79185) at 0.01 μg



All lanes : Goat Anti-Rabbit lgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

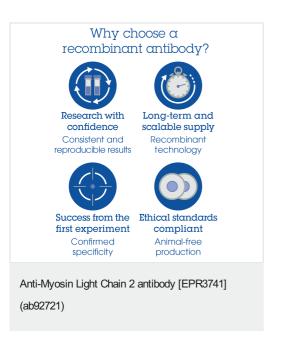
Performed under reducing conditions.



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

Predicted band size: 19 kDa

Exposure time: 8 minutes



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