10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

myosin light chain 3 Recombinant Rabbit mAb

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Catalog # AP94633

Product Information

Application	WB, IHC-P, IHC-F, IF
Host	Rabbit
Clonality	Recombinant
Physical State	Liquid
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 3 EF-hand domains.
SUBUNIT	Myosin is a hexamer of 2 heavy chains and 4 light chains.
Post-translational modifications	The N-terminus is blocked. N-terminus is methylated by METTL11A/NTM1.
DISEASE	Cardiomyopathy, familial hypertrophic 8 (CMH8)[MIM:608751]: 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. Rarely, patients present a variant of familial hypertrophic cardiomyopathy, characterized by mid-left ventricular chamber thickening. Note=The disease is caused by mutations affecting the gene represented in this entry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Myosin is the major component of thick muscle filaments, and is a long asymmetric molecule containing a globular head and a long tail. The molecule consists of two heavy chains each ~200,000 daltons, and four light chains each ~16,000 - 21,000 daltons. Activation of smooth and cardiac muscle primarily involves pathways which increase calcium and myosin phosphorylation resulting in contraction. Myosin light chain phosphatase acts to regulate muscle contraction by dephosphorylating activated myosin light chain. Human myosin light chain has clinical application as a cardiac marker.

Additional Information

Dilution	WB=1:500-1:2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=0,Flow-Cyt=1:50-1:100
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Background

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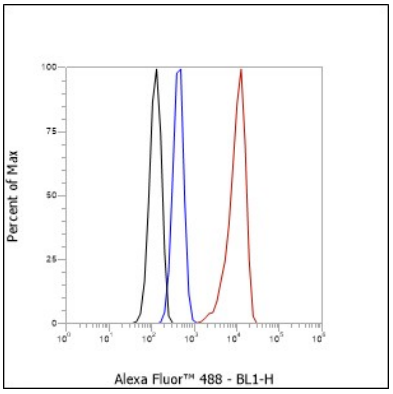
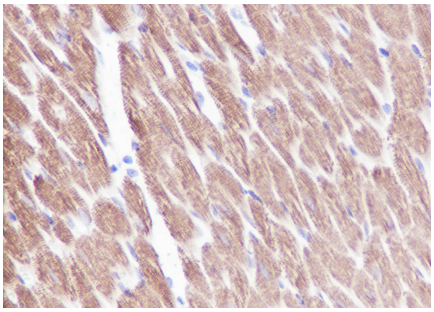
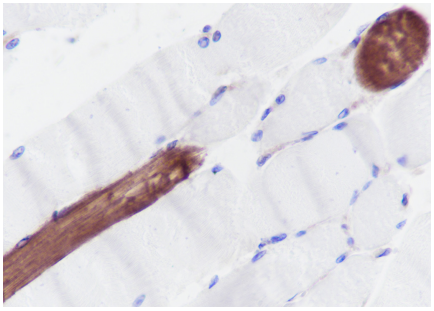
Images



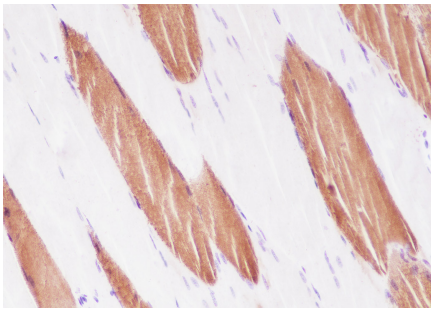
Cell line: U-2 OS Fixative: 4% Paraformaldehyde Permeabilization: 90% methanol Primary ab dilution: 1:100 Secondary ab: Goat anti Rabbit IgG Unlabelled control: The cell without incubation with primary antibody and secondary antibody (Black line). Isotype control: Rabbit monoclonal IgG (Blue line). Comment: Line red is the positive signal for AP94633



Tissue: Rat cardiac muscle Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:1000 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Rabbit) (sp-0023) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for AP94633

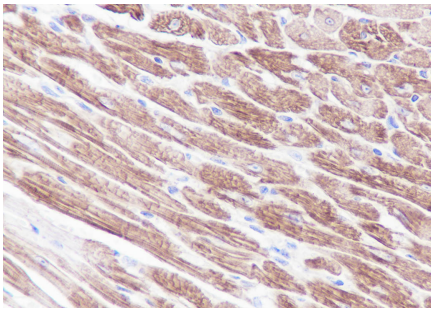


Tissue: Mouse skeletal muscle Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:1000 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Rabbit) (sp-0023) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for AP94633



Tissue: Human skeletal muscle Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:1000 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Rabbit) (sp-0023) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for AP94633

Tissue: Mouse cardiac muscle Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:1000 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Rabbit) (sp-0023)



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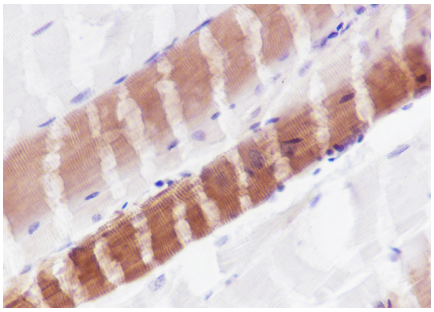

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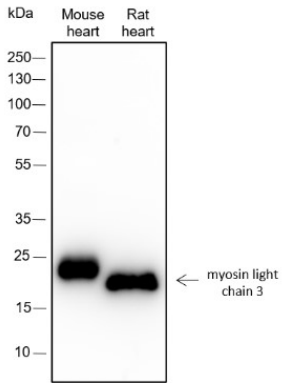

Blocking buffer: 5% NFDM/TBST Primary ab dilution: 1:2000 Primary ab incubation condition: 2 hours at room temperature Secondary ab: Goat Anti-Rabbit IgG H&L (HRP) Lysate: Mouse heart, Rat heart Protein loading quantity: 20 µg Exposure time: 10 s Predicted MW: 22 kDa Observed MW: 22 kDa