

MYL2 Polyclonal Antibody

Catalog # AP74276

Product Information

Application WB Primary Accession P10916

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW18789

Additional Information

Gene ID 4633

Other Names Myosin regulatory light chain 2, ventricular/cardiac muscle isoform (MLC-2)

(MLC-2v)

Dilution WB~~WB 1:500-2000, ELISA 1:10000-20000

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

Protein Information

Name MYL2 (HGNC:7583)

Function Contractile protein that plays a role in heart development and function

(PubMed:23365102, PubMed:32453731). Following phosphorylation, plays a role in cross-bridge cycling kinetics and cardiac muscle contraction by increasing myosin lever arm stiffness and promoting myosin head diffusion; as a consequence of the increase in maximum contraction force and calcium sensitivity of contraction force. These events altogether slow down myosin kinetics and prolong duty cycle resulting in accumulated myosins being cooperatively recruited to actin binding sites to sustain thin filament activation as a means to fine-tune myofilament calcium sensitivity to force (By similarity). During cardiogenesis plays an early role in cardiac contractility by

promoting cardiac myofibril assembly (By similarity).

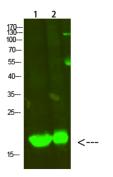
Cytoplasm, myofibril, sarcomere, A band {ECO:0000250 | UniProtKB:P08733}

Tissue Location Highly expressed in type I muscle fibers.

Background

Contractile protein that plays a role in heart development and function (By similarity). Following phosphorylation, plays a role in cross-bridge cycling kinetics and cardiac muscle contraction by increasing myosin lever arm stiffness and promoting myosin head diffusion; as a consequence of the increase in maximum contraction force and calcium sensitivity of contraction force. These events altogether slow down myosin kinetics and prolong duty cycle resulting in accumulated myosins being cooperatively recruited to actin binding sites to sustain thin filament activation as a means to fine-tune myofilament calcium sensitivity to force (By similarity). During cardiogenesis plays an early role in cardiac contractility by promoting cardiac myofibril assembly (By similarity).

Images



Western Blot analysis of 1,mouse-heart 2,Hela cells using primary antibody diluted at 1:500(4°C overnight). Secondary antibody: Goat Anti-rabbit IgG IRDye 800(diluted at 1:5000, 25°C, 1 hour)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.