

MYL2 Polyclonal Antibody
Catalog # AP74276**Specification****MYL2 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	P10916
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

MYL2 Polyclonal Antibody - 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

MYL2 Polyclonal Antibody - 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).

Cellular Location

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

Tissue Location

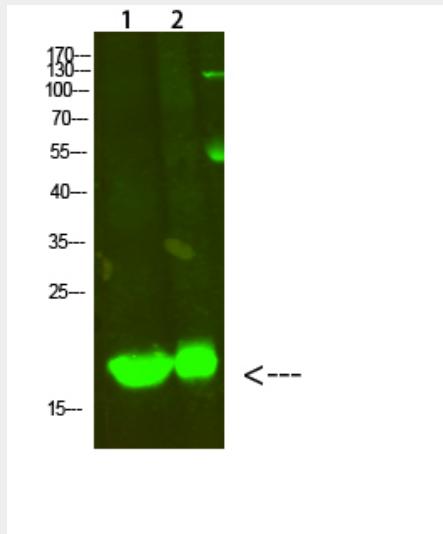
Highly expressed in type I muscle fibers.

MYL2 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

MYL2 Polyclonal Antibody - 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)

MYL2 Polyclonal Antibody - 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).