

## **MYL2 Monoclonal Antibody**

Catalog No: YM0458

Reactivity: Human

**Applications:** WB;ELISA

Target: MYL2

**Fields:** >> Cardiac muscle contraction;>> Adrenergic signaling in

cardiomyocytes;>>Apelin signaling pathway;>>Focal adhesion;>>Tight junction;>>Leukocyte transendothelial migration;>>Regulation of actin cytoskeleton;>>Shigellosis;>>Salmonella infection;>>Hypertrophic

cardiomyopathy;>>Dilated cardiomyopathy

Gene Name: MYL2

**Protein Name:** Myosin regulatory light chain 2 ventricular/cardiac muscle isoform

Human Gene Id: 4633

**Human Swiss Prot** 

No:

Mouse Swiss Prot

No:

Immunogen: Purified recombinant fragment of MYL2 expressed in E. Coli.

**Specificity:** MYL2 Monoclonal Antibody detects endogenous levels of MYL2 protein.

**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

P10916

P51667

**Dilution:** WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.

**Purification :** Affinity purification

**Storage Stability:** -15°C to -25°C/1 year(Do not lower than -25°C)

1/2

Molecularweight: 19kD

**Cell Pathway:** Cardiac muscle contraction; Focal adhesion; Tight junction; Leukocyte

transendothelial migration;Regulates Actin and Cytoskeleton;Hypertrophic

cardiomyopathy (HCM); Dilated cardiomyopathy;

**P References:** 1. DNA Seq. 2003 Oct;14(5):339-50.

2. Oncogene. 2002 Aug 29;21(38):5852-60.

**Background:** 

Thus gene encodes the regulatory light chain associated with cardiac myosin beta (or slow) heavy chain. Ca+ triggers the phosphorylation of regulatory light chain that in turn triggers contraction. Mutations in this gene are associated with mid-left ventricular chamber type hypertrophic cardiomyopathy. [provided by RefSeq, Jul 2008],

**Function:** 

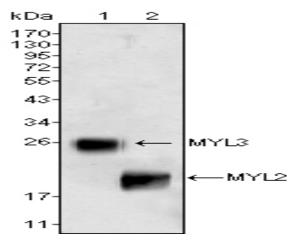
disease:Defects in MYL2 are the cause of cardiomyopathy familial hypertrophic type 10 (CMH10) [MIM:608758]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms 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.,disease:Defects in MYL2 are the cause of cardiomyopathy 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.,miscellaneous:This chain binds calcium.,similarity:Contains 3 EF-hand doma

Subcellular Location : Cytoplasm, myofibril, sarcomere, A band.

**Expression:** 

Highly expressed in type I muscle fibers.

## **Products Images**



Western Blot analysis using MYL2 Monoclonal Antibody against rat fetal heart tissue lysate.