

Rabbit Anti-Phospho-MYL (Ser19) antibody

SL3295R

Product Name:	Phospho-MYL (Ser19)
Chinese Name:	磷酸化心脏肌球蛋白轻链2抗体
Alias:	Cardiac myosin light chain-2; Cardiac ventricular myosin light chain 2; CMH10; MLC 2v; MLC2; MYL 2; Myosin light chain 2 regulatory cardiac slow; Myosin light polypeptide 2 regulatory cardiac slow; Myosin regulatory light chain 2 ventricular cardiac muscle isoform; Myosin regulatory light chain 2; ventricular/cardiac muscle isoform; Regulatory light chain of myosin; RLC of myosin; Slow cardiac myosin regulatory light chain 2; MLRV HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	18kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human MYL2 around the phosphorylation site of Ser19:VF(p-S)MF
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	<u>PubMed</u>

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]

Subunit:

Myosin is a hexamer of 2 heavy chains and 4 light chains.

Subcellular Location:

Cytoplasm, myofibril, sarcomere, A band

Post-translational modifications:

N-terminus is methylated by METTL11A/NTM1.

Phosphorylated by MYLK3.

DISEASE:

Defects in MYL2 are the cause of familial hypertrophic cardiomyopathy 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.

Product Detail:

Similarity:

Contains 3 EF-hand domains.

SWISS:

P10916

Gene ID:

4633

Database links:

Entrez Gene: 4633Human

Entrez Gene: 17906Mouse

Entrez Gene: 363925Rat

Omim: 160781Human

SwissProt: P10916Human

SwissProt: P51667Mouse

SwissProt: P08733Rat

Unigene: 75535Human

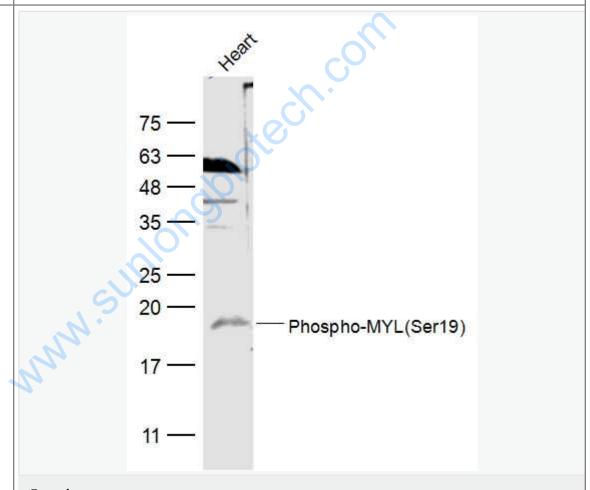
<u>Unigene: 1529</u>Mouse

Unigene: 37176Rat

Unigene: 6534Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Sample:

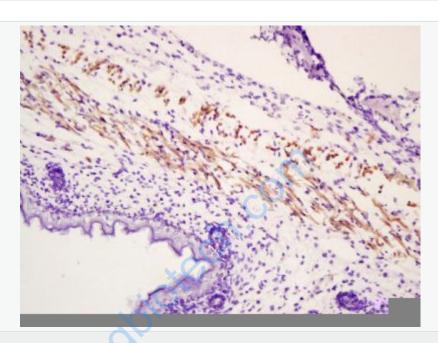
Heart (Rat) Lysate at 40 ug

Primary: Anti-Phospho-MYL(Ser19) (SL3295R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 18 kD

Observed band size: 18 kD



Tissue/cell: smooth muscle of mouse embryo; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-Phospho-MYL(Ser19) Polyclonal Antibody,

Unconjugated(SL3295R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining