

Rabbit Anti-heavy chain cardiac Myosin/AF350 Conjugated antibody

SL15444R-AF350

Product Name	Anti-heavy chain cardiac Myosin/AF350
Chinese Name	AF350 标记的心肌肌球蛋白重链抗体
Alias	MYH6 + MYH7; MYH6 / MYH7; Alpha MHC; ASD3; CMD1S; CMH1; MGC138376; MGC138378; MPD1; MYH 6; MYH 7; MYH6; MYH7; MYHC A; MYHC; MYHC B; MyHC-alpha; MyHC-beta; MYHCA; MYHCB; Myosin heavy chain cardiac muscle alpha isoform; Myosin heavy chain cardiac muscle beta isoform; Myosin heavy polypeptide 7 cardiac muscle beta; MYH6_HUMAN; MYH7_HUMAN; heavy chain cardiac Myosin.
Research Area	Cardiovascular Cell biology immunology Signal transduction
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human(predicted:Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Sheep) ICC/IF=1:50-200,IF=1:100-500
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	224kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human MYH6 / MYH7
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	background:

Cardiac muscle myosin is a hexamer consisting of two heavy chain subunits, two light chain subunits, and two regulatory subunits. This gene encodes the alpha heavy chain subunit of cardiac myosin. The gene is located 4kb downstream of the gene encoding the beta heavy chain subunit of cardiac myosin. Mutations in this gene cause familial hypertrophic cardiomyopathy and atrial septal defect 3. [provided by RefSeq, Mar 2010].

Function:

Muscle contraction.

Subunit:

Muscle myosin is a hexameric protein that consists of 2 heavy chain subunits (MHC), 2 alkali light chain subunits (MLC) and 2 regulatory light chain subunits (MLC-2).

Subcellular Location:

Cytoplasm, myofibril. Note=Thick filaments of the myofibrils.

DISEASE:

Atrial septal defect 3 (ASD3) [MIM:614089]: A congenital heart malformation characterized by incomplete closure of the wall between the atria resulting in blood flow from the left to the right atria. Note=The disease is caused by mutations affecting the gene represented in this entry.

Cardiomyopathy, familial hypertrophic 14 (CMH14) [MIM:613251]: 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. Note=The disease is caused by mutations affecting the gene represented in this entry.

Cardiomyopathy, dilated 1EE (CMD1EE) [MIM:613252]: A disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death. Note=The disease is caused by mutations affecting the gene represented in this entry.

Sick sinus syndrome 3 (SSS3) [MIM:614090]: The term 'sick sinus syndrome' encompasses a variety of conditions caused by sinus node dysfunction. The most common clinical manifestations are syncope, presyncope, dizziness, and fatigue. Electrocardiogram typically shows sinus bradycardia, sinus arrest, and/or sinoatrial block. Episodes of atrial tachycardias coexisting with sinus bradycardia ('tachycardia-bradycardia syndrome') are also common in this disorder. SSS occurs most often in the elderly associated with underlying heart disease or previous cardiac surgery, but can also occur in the fetus, infant, or

child without heart disease or other contributing factors. Note=Disease susceptibility is associated with variations affecting the gene represented in this entry (PubMed:21378987). The lifetime risk of being diagnosed with sick sinus syndrome is higher for carriers of variant p.Arg721Trp than for non-carriers (PubMed:21378987).

Similarity:

Contains 1 IQ domain.

Contains 1 myosin head-like domain.

Database links:

[Entrez Gene: 4624](#) Human

[Entrez Gene: 4625](#) Human

[Entrez Gene: 140781](#) Mouse

[Entrez Gene: 17888](#) Mouse

[Entrez Gene: 29556](#) Rat

[Entrez Gene: 29557](#) Rat

[Entrez Gene: 282714](#) Cow

[Omim: 160710](#) Human

[SwissProt: P12883](#) Human

[SwissProt: P13533](#) Human

[SwissProt: Q02566](#) Mouse

[SwissProt: Q91Z83](#) Mouse

[SwissProt: P02563](#) Rat

[SwissProt: P02564](#) Rat

[Unigene: 929](#) Human

[Unigene: 319176](#) Mouse

[Unigene: 127778](#) Rat

Important Note:

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