



Rabbit Anti-MYH7B antibody

SL9862R

Product Name:	MYH7B
Chinese Name:	肌球蛋白重链7抗体
Alias:	adult 1; Beta myosin heavy chain; cardiac muscle beta isoform; CMD1S; CMH1; MPD1; MYH1; MYH1_HUMAN; MYH7; MYH7_HUMAN; Myhc slow; MyHC-2x; MyHC-beta; MyHC-IIx/d; MyHC-slow; MYHCB; Myopathy, distal 1; Myosin heavy chain (AA 1-96); Myosin heavy chain 1; Myosin heavy chain 2x; Myosin heavy chain 7; Myosin heavy chain; Myosin heavy chain IIx/d; Myosin heavy chain slow isoform; Myosin heavy chain, cardiac muscle beta isoform; Myosin, heavy chain 7, cardiac muscle, beta; Myosin, heavy polypeptide 7, cardiac muscle, beta; Myosin-1; Myosin-7; Rhabdomyosarcoma antigen MU RMS 40.7A; skeletal muscle; SPMD.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	213kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MYH7:1301-1500/1935
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:	PubMed

Myosin heavy chains are ubiquitous Actin-based motor proteins that convert the chemical energy derived from ATP hydrolysis into the mechanical energy that drives diverse motile processes in eukaryotic cells, including cytokinesis, vesicular transport and cellular locomotion. Muscle myosin is a heterohexamer consisting of two myosin heavy chains and two associated nonidentical pairs of myosin light chains. The seven myosin heavy chain isoforms that predominate in mammalian skeletal muscles include two developmental isoforms, MHC-embryonic (MYH3) and MHC-perinatal (MYH8); three adult skeletal muscle isoforms, MHC IIa (MYH2), MHC IIb (MYH4) and MHC IIx/d (MYH1); and MHC- β /slow (MYH7 or MHC- β), which is also expressed in cardiac muscle. Research indicates that mutations of the MYH7 gene causes hypertrophic cardiomyopathy.

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:

Defects in MYH7 are the cause of cardiomyopathy familial hypertrophic type 1 (CMH1) [MIM:192600]. 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.

Defects in MYH7 are the cause of myopathy myosin storage (MYOMS) [MIM:608358]. In this disorder, muscle biopsy shows type 1 fiber predominance and increased interstitial fat and connective tissue. Inclusion bodies consisting of the beta cardiac myosin heavy chain are present in the majority of type 1 fibers, but not in type 2 fibers.

Similarity:

Contains 1 IQ domain.

Contains 1 myosin head-like domain.

SWISS:

P12883

Gene ID:

58498

Product Detail:

Database links:

[Entrez Gene: 58498](#)Human

[Oimim: 612147](#)Human

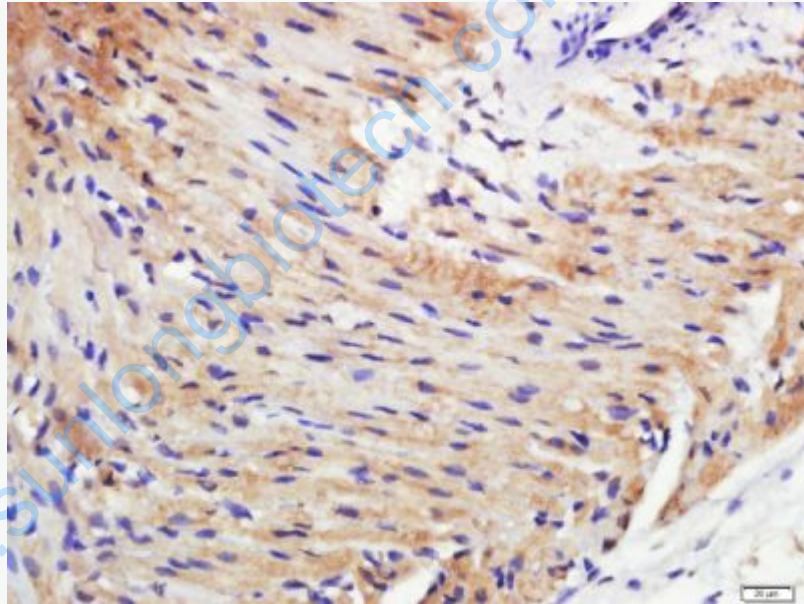
[SwissProt: Q01449](#)Human

[Unigene: 75636](#)Human

Important Note:

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

Picture:



Paraformaldehyde-fixed, paraffin embedded (rat heart); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MYH7B) Polyclonal Antibody, Unconjugated (SL9862R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.