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MYH7 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17633a

Product Information

Application	WB, E
Primary Accession	P12883
Other Accession	NP_000248.2
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB37906
Calculated MW	223097
Antigen Region	185-211

Additional Information

Gene ID	4625
Other Names	Myosin-7, Myosin heavy chain 7, Myosin heavy chain slow isoform, MyHC-slow, Myosin heavy chain, cardiac muscle beta isoform, MyHC-beta, MYH7, MYHCB
Target/Specificity	This MYH7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 185-211 amino acids from the N-terminal region of human MYH7.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MYH7 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MYH7
Synonyms	MYHCB

Function	Myosins are actin-based motor molecules with ATPase activity essential for muscle contraction. Forms regular bipolar thick filaments that, together with actin thin filaments, constitute the fundamental contractile unit of skeletal and cardiac muscle.
Cellular Location	Cytoplasm, myofibril {ECO:0000250|UniProtKB:P02564}. Cytoplasm, myofibril, sarcomere {ECO:0000250|UniProtKB:P02564}. Note=Thick filaments of the myofibrils {ECO:0000250|UniProtKB:P02564}
Tissue Location	Both wild type and variant Gln-403 are detected in skeletal muscle (at protein level).

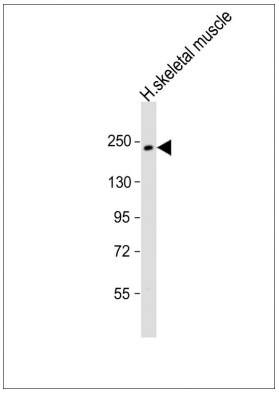
Background

Muscle myosin is a hexameric protein containing 2 heavy chain subunits, 2 alkali light chain subunits, and 2 regulatory light chain subunits. This gene encodes the beta (or slow) heavy chain subunit of cardiac myosin. It is expressed predominantly in normal human ventricle. It is also expressed in skeletal muscle tissues rich in slow-twitch type I muscle fibers. Changes in the relative abundance of this protein and the alpha (or fast) heavy subunit of cardiac myosin correlate with the contractile velocity of cardiac muscle. Its expression is also altered during thyroid hormone depletion and hemodynamic overloading. Mutations in this gene are associated with familial hypertrophic cardiomyopathy, myosin storage myopathy, dilated cardiomyopathy, and Laing early-onset distal myopathy.

References

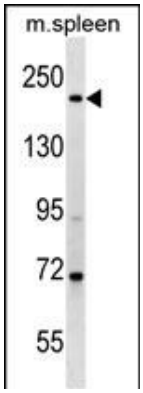
Millat, G., et al. Clin. Chim. Acta 411 (23-24), 1983-1991 (2010) :
Eijgelsheim, M., et al. Hum. Mol. Genet. 19(19):3885-3894(2010)
Millat, G., et al. Eur J Med Genet 53(5):261-267(2010)
Muelas, N., et al. Neurology 75(8):732-741(2010)
Zheng, D.D., et al. J. Int. Med. Res. 38(3):810-820(2010)

Images



Anti-MYH7 Antibody (N-term) at 1:1000 dilution + human skeletal muscle lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 223 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

MYH7 Antibody (N-term) (Cat. #AP17633a) western blot analysis in mouse spleen tissue lysates (35ug/lane).This demonstrates the MYH7 antibody detected the MYH7 protein (arrow).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.