

MYH7 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17633a

Specification

MYH7 Antibody (N-term) - Product Information

Application WB,E **Primary Accession** P12883 Other Accession NP 000248.2 Human, Mouse Reactivity Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Antigen Region 185-211

MYH7 Antibody (N-term) - 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

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.

MYH7 Antibody (N-term) - 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

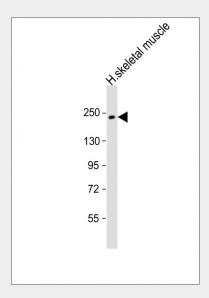
Both wild type and variant Gln-403 are detected in skeletal muscle (at protein level).

MYH7 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

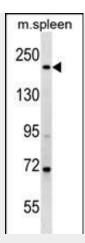
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MYH7 Antibody (N-term) - Images



Anti-MYH7 Antibody (N-term) at 1:1000 dilution + human skeletal muscle lysate Lysates/proteins at 20 μ g 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).

MYH7 Antibody (N-term) - 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.

MYH7 Antibody (N-term) - 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)