

MYH3 Antibody

Catalog # ASC11890

Specification

MYH3 Antibody - Product Information

Application WB, IHC-P, E

Primary Accession
Other Accession
Reactivity
P11055
NP_002461, 98986453
Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype IgG

Calculated MW Predicted: 213 kDa

Observed: 240 kDa KDa

Application Notes

MYH3 antibody can be used for detection of MYH3 by Western blot at 1 - 2 µg/ml.

Antibody can also be used for immunohistochemistry starting at 5

μg/mL.

MYH3 Antibody - Additional Information

Gene ID 4621

Target/Specificity

MYH3; MYH3 antibody is human, mouse and rat reactive. MYH3 antibody is predicted to not cross-react with other members of the myosin heavy chain family.

Reconstitution & Storage

MYH3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

MYH3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MYH3 Antibody - Protein Information

Name MYH3

Function

Muscle contraction.

Cellular Location

Cytoplasm, myofibril. Note=Thick filaments of the myofibrils

Tissue Location

Expressed in fetal bone, thymus, placenta, heart, brain, and liver.

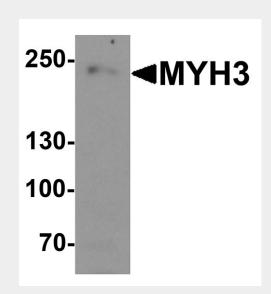


MYH3 Antibody - Protocols

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

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

MYH3 Antibody - Images



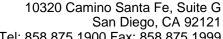
Western blot analysis of MYH3 in Jurkat cell lysate with MYH3 antibody at 1 µg/ml.



Immunohistochemistry of MYH3 in mouse skeletal muscle tissue with MYH3 antibody at 5 µg/ml.

MYH3 Antibody - Background

Myosins are actin-based motor proteins that function in the generation of mechanical force in eukaryotic cells (1). MYH3 (myosin, heavy chain, skeletal muscle, embryonic) plays a significant role in skeletal muscle development (2) and is also essential for the proper morphology and function of





Tel: 858.875.1900 Fax: 858.875.1999

the developing heart (3). Mutations in this gene have been associated with Freeman-Sheldon syndrome and Sheldon-Hall syndrome (4).

MYH3 Antibody - References

Yu H, Waddell JN, Kuang S, et al. Park7 expression influences myotube size and myosin expression in muscle. PLoS One 2014; 9:e92030.

Lagrutta AA, McCarthy JG, Scherczinger CA, et al. Identification and developmental expression of a novel embryonic myosin heavy-chain gene in chicken. DNA 1989; 8:39-50.

Rutland CS, Polo-Parada L, Ehler E, et al. Knockdown of embryonic myosin heavy chain reveals an essential role in the morphology and function of the developing heart. Development 2011; 138:3955-66.

Toydemir RM, Rutherford A, Whitby FG, et al. Mutations in embryonic myosin heavy chain (MYH3) cause Freeman-Sheldon syndrome and Sheldon-Hall syndrome. Nat. Genet. 2006; 38:561-5.