

myomesin-2 (F-3): sc-376353

BACKGROUND

Myomesin-1 and myomesin-2 are components of the vertebrate myofibrillar M band and are associated with Titin, Myosin and Connectin. The myomesin proteins are responsible for the formation of a head structure on one end of the Titin string that connects the Z and M bands of the sarcomere. Myomesin-1 and -2 have unique N-terminal domains and are expressed mainly in skeletal muscle.

REFERENCES

1. Grove, B.K., et al. 1984. A new 185,000-dalton skeletal muscle protein detected by monoclonal antibodies. *J. Cell Biol.* 98: 518-524.
2. Vinkemeier, U., et al. 1993. The globular head domain of titin extends into the center of the sarcomeric M band. cDNA cloning, epitope mapping and immunoelectron microscopy of two titin-associated proteins. *J. Cell Sci.* 106: 319-330.
3. Speel, E.J., et al. 1998. Assignment of the human gene for the sarcomeric M-band protein myomesin (MYOM1) to 18p11.31-p11.32. *Genomics* 54: 184-186.
4. Agarkova, I., et al. 2000. A novel marker for vertebrate embryonic heart, the EH-myomesin isoform. *J. Biol. Chem.* 275: 10256-10264.
5. Porter, J.D., et al. 2003. Postnatal suppression of myomesin, muscle creatine kinase and the M-line in rat extraocular muscle. *J. Exp. Biol.* 206: 3101-3112.

CHROMOSOMAL LOCATION

Genetic locus: MYOM2 (human) mapping to 8p23.3.

SOURCE

myomesin-2 (F-3) is a mouse monoclonal antibody raised against amino acids 913-977 mapping within an internal region of myomesin-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

myomesin-2 (F-3) is recommended for detection of myomesin-2 of human and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for myomesin-2 siRNA (h): sc-60020, myomesin-2 shRNA Plasmid (h): sc-60020-SH and myomesin-2 shRNA (h) Lentiviral Particles: sc-60020-V.

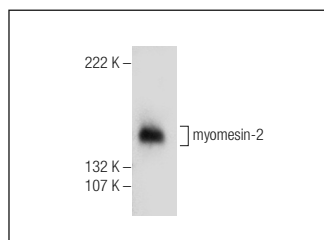
Molecular Weight of myomesin-2: 165 kDa.

Positive Controls: rat skeletal muscle extract.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



myomesin-2 (F-3): sc-376353. Western blot analysis of myomesin-2 expression in rat skeletal muscle tissue extract.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.