# myomesin-1 (C-16): sc-30390



The Power to Question

## **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. The gene encoding human myomesin-1 maps to chromosome 18p11.31.

# **REFERENCES**

- Grove, B.K., Kurer, V., Lehner, C., Doetschman, T.C., Perriard, J.C. and Eppenberger, H.M. 1984. A new 185 kDa skeletal muscle protein detected by monoclonal antibodies. J. Cell Biol. 98: 518-524.
- Vinkemeier, U., Obermann, W., Weber, K. and Furst, D.O. 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.

# CHROMOSOMAL LOCATION

Genetic locus: MYOM1 (human) mapping to 18p11.31; Myom1 (mouse) mapping to 17 E1.3.

# **SOURCE**

myomesin-1 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of myomesin-1 of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-30390 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

myomesin-1 (C-16) is recommended for detection of myomesin-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

myomesin-1 (C-16) is also recommended for detection of myomesin-1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for myomesin-1 siRNA (h): sc-45889, myomesin-1 siRNA (m): sc-45890, myomesin-1 shRNA Plasmid (h): sc-45889-SH, myomesin-1 shRNA Plasmid (m): sc-45890-SH, myomesin-1 shRNA (h) Lentiviral Particles: sc-45890-V and myomesin-1 shRNA (m) Lentiviral Particles: sc-45890-V.

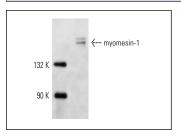
Molecualr Weight of myomesin-1: 190 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or rat skeletal muscle extract: sc-364810.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

# **DATA**



myomesin-1 (C-16): sc-30390. Western blot analysis of myomesin-1 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.



Try **myomesin-1 (4F5):** sc-293303, our highly recommended monoclonal alternative to myomesin-1 (C-16).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com