

# myomesin-1 (N-14): sc-30388

## 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-p11.32.

## REFERENCES

1. 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.
2. 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 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of myomesin-1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-30388 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

myomesin-1 (N-14) 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 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).

myomesin-1 (N-14) is also recommended for detection of myomesin-1 in additional species, including 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-45889-V and myomesin-1 shRNA (m) Lentiviral Particles: sc-45890-V.

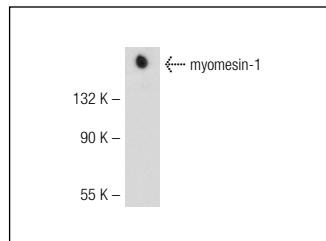
Molecular Weight of myomesin-1: 190 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

## 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 (N-14): sc-30388. Western blot analysis of myomesin-1 expression in HeLa whole cell lysate.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **myomesin-1 (4F5): sc-293303**, our highly recommended monoclonal alternative to myomesin-1 (N-14).