SANTA CRUZ BIOTECHNOLOGY, INC.

myomesin-2 (H-65): sc-50435

SANTA CRUZ BIOTECHNOLOGY

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.

REFERENCES

1. Grove, B.K., et al. 1984. A new 185 kDa 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.

CHROMOSOMAL LOCATION

Genetic locus: MYOM2 (human) mapping to 8p23.3; Myom2 (mouse) mapping to 8 A1.1.

SOURCE

myomesin-2 (H-65) is a rabbit polyclonal 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 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

myomesin-2 (H-65) is recommended for detection of myomesin-2 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-2 (H-65) is also recommended for detection of myomesin-2 in additional species, including equine and porcine.

Suitable for use as control antibody for myomesin-2 siRNA (h): sc-60020, myomesin-2 siRNA (m): sc-60021, myomesin-2 shRNA Plasmid (h): sc-60020-SH, myomesin-2 shRNA Plasmid (m): sc-60021-SH, myomesin-2 shRNA (h) Lentiviral Particles: sc-60020-V and myomesin-2 shRNA (m) Lentiviral Particles: sc-60021-V.

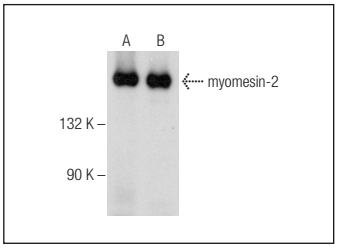
Molecular Weight of myomesin-2: 165 kDa.

Positive Controls: rat skeletal muscle extract: sc-364810 or human heart extract: sc-363763.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



myomesin-2 (H-65): sc-50435. Western blot analysis of myomesin-2 expression in rat skeletal muscle (**A**) and human heart (**B**) tissue extracts.

SELECT PRODUCT CITATIONS

1. Pillai, J.B., et al. 2008. Activation of SIRT1, a class III histone deacetylase, contributes to fructose feeding-mediated induction of the α-myosin heavy chain expression. Am. J. Physiol. Heart Circ. Physiol. 294: H1388-H1397.

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.