myomesin-1 (4F5): sc-293303

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

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

SOURCE
myomesin-1 (4F5) is a mouse monoclonal antibody raised against amino acids 1586-1684 of myomesin-1 of human origin.

PRODUCT
Each vial contains 100 µg IgG kappa light chain 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-1 (4F5) 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)) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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: human skeletal muscle extract: sc-363776 or mouse skeletal muscle extract: sc-364250.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG or m-IgG kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). Molecular Weight Standards: sc-2035, UltraCruz® Markers: sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 3) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA
myomesin-1 (4F5): sc-293303. Western blot analysis of myomesin-1 expression in human skeletal muscle (A) and mouse skeletal muscle (B) tissue extracts.

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

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