SANTA CRUZ BIOTECHNOLOGY, INC.

Myotilin (C-20): sc-15237

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Myotilin, a sarcomeric protein that is encoded by the gene mapping to human chromosome 5q31.2, binds to α-actinin and is localized in the Z-line of myofibrils. Myotilin is expressed in skeletal and cardiac muscle, and it co-localizes with α-actinin in the sarcomeric I-bands where it directly interacts with α-actinin. Defects in the myotilin gene are reported to cause a form of autosomal dominant limb-girdle muscular dystrophy (LGMD). Symptoms of adult onset LGMD are progressive weakness of the hip and shoulder girdles as well as a distinctive dysarthric pattern of speech. The muscle of affected individuals with LGMD shows degeneration of myofibers, variations in fiber size, fiber splitting, centrally located myonuclei and an enhanced number of autophagic vesicles.

CHROMOSOMAL LOCATION

Genetic locus: TTID (human) mapping to 5q31.2; Ttid (mouse) mapping to 18 B3.

SOURCE

Myotilin (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Myotilin 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-15237 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Myotilin (C-20) is recommended for detection of Myotilin 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).

Myotilin (C-20) is also recommended for detection of Myotilin in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Myotilin siRNA (h): sc-43408, Myotilin siRNA (m): sc-43409, Myotilin shRNA Plasmid (h): sc-43408-SH, Myotilin shRNA Plasmid (m): sc-43409-SH, Myotilin shRNA (h) Lentiviral Particles: sc-43408-V and Myotilin shRNA (m) Lentiviral Particles: sc-43409-V.

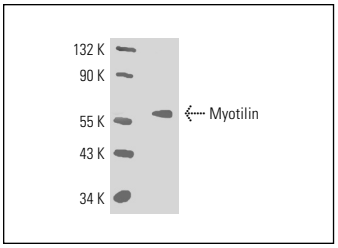
Molecular Weight of Myotilin: 57 kDa.

Positive Controls: 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



Myotilin (C-20): sc-15237. Western blot analysis of Myotilin expression in rat skeletal muscle tissue extract.

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.

MONOS Satisfaction Guaranteed

Try **Myotilin (B-3): sc-393958** or **Myotilin (E-10): sc-393957**, our highly recommended monoclonal alternatives to Myotilin (C-20).