

Myosin XVIIIIB (H-130): sc-134599

BACKGROUND

Myosin XVIIIb (MYO18B) is a 2,567 amino acid, unconventional myosin heavy chain that is expressed mainly in human cardiac and skeletal muscles and, at much lower levels, in the testis. Myosin XVIIIb is located in the cytoplasm of undifferentiated myoblast cells and has an N-terminal head domain functioning as a motor (with an ATP-binding site as well as an actin-binding region), a neck region containing an IQ motif, and a C-terminal tail with a short coiled-coil domain allowing for dimerization to form a two-headed structure. Sug1, a regulator of the 26S Proteasome, binds to the C-terminal tail of Myosin XVIIIb. This Sug1 binding causes an upregulation of Myosin XVIIIb. Myosin XVIIIb is frequently deleted, mutated and/or hypermethylated in lung and ovarian cancers, suggesting its candidacy as a tumor suppressor. Furthermore, the Histones H3 and H4 play a role in the regulation of Myosin XVIIIb expression, so histone deacetylation surrounding the promoter region may be involved in lung and ovarian carcinomas.

CHROMOSOMAL LOCATION

Genetic locus: MYO18B (human) mapping to 22q12.1; Myo18b (mouse) mapping to 5 F.

SOURCE

Myosin XVIIIIB (H-130) is a rabbit polyclonal antibody raised against amino acids 1801-1930 mapping within an internal region of Myosin XVIIIIB 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

Myosin XVIIIIB (H-130) is recommended for detection of Myosin XVIIIIB isoforms 1 and 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Myosin XVIIIIB (H-130) is also recommended for detection of Myosin XVIIIIB isoforms 1 and 2 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for Myosin XVIIIIB siRNA (m): sc-149765, Myosin XVIIIIB shRNA Plasmid (m): sc-149765-SH and Myosin XVIIIIB shRNA (m) Lentiviral Particles: sc-149765-V.

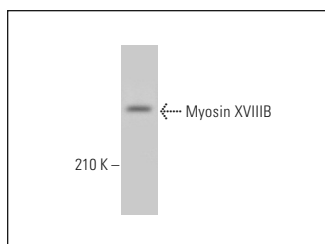
Molecular Weight of Myosin XVIIIIB: 285 kDa.

Positive Controls: BXPC-3 whole cell lysate.

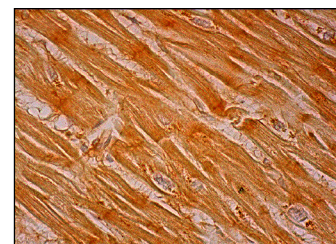
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Myosin XVIIIIB (H-130): sc-134599. Western blot analysis of Myosin XVIIIIB expression in BXPC-3 whole cell lysate.



Myosin XVIIIIB (H-130): sc-134599. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic and nuclear staining of myocytes.

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 **Myosin XVIIIIB (D-11): sc-515011**, our highly recommended monoclonal alternative to Myosin XVIIIIB (H-130).