

# Myosin Vb (C-18): sc-98020

## BACKGROUND

Class V unconventional Myosins, which include Myosin Va and Myosin Vb, are nonfilamentous, Actin-binding enzymes that appear to be expressed ubiquitously. Myosin V proteins are regulated by their heavy chain phosphorylation, which occurs at the C-terminal tail domain. Myosin Vb, also known as MYO5B, is a 1,849 amino acid protein that may be involved in intracellular trafficking. Considered a Rab 8A interacting protein, Myosin Vb regulates intracellular trafficking of GluR from recycling endosomes (REs) to synaptic sites during long-term potentiation. Association with REs triggers rapid spine recruitment of endosomes and local exocytosis in spines. It is suggested that Myosin Vb is required for Insulin-induced Glut4 translocation in muscle cells.

## CHROMOSOMAL LOCATION

Genetic locus: MYO5B (human) mapping to 18q21.1; Myo5b (mouse) mapping to 18 E2.

## SOURCE

Myosin Vb (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Myosin VB 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-98020 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

Myosin Vb (C-18) is recommended for detection of Myosin VB 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 Vb (C-18) is also recommended for detection of Myosin VB in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Myosin Vb siRNA (h): sc-75853, Myosin Vb siRNA (m): sc-149761, Myosin Vb shRNA Plasmid (h): sc-75853-SH, Myosin Vb shRNA Plasmid (m): sc-149761-SH, Myosin Vb shRNA (h) Lentiviral Particles: sc-75853-V and Myosin Vb shRNA (m) Lentiviral Particles: sc-149761-V.

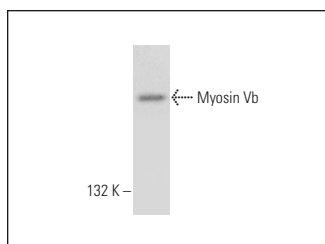
Molecular Weight of Myosin Vb: 214 kDa.

Positive Controls: U-251-MG whole cell lysate: sc-364176.

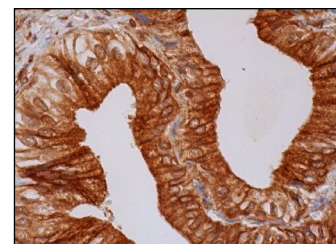
## RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



Myosin Vb (C-18): sc-98020. Western blot analysis of Myosin Vb expression in U-251-MG whole cell lysate.



Myosin Vb (C-18): sc-98020. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic and membrane staining of glandular cells.

## 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.



Try **Myosin Vb (18): sc-135995**, our highly recommended monoclonal alternative to Myosin Vb (C-18).