Myosin Vc (S-12): sc-160555



The Power to Question

BACKGROUND

Class V unconventional Myosins, which include Myosin Va, Myosin Vb and Myosin Vc 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 Vc, also known as MYO5C, is a 1,742 amino acid protein that is chiefly expressed in non-neuronal tissues. Abundantly expressed in epithelial and glandular tissues including pancreas, prostate, mammary, stomach, colon and lung, Myosin Vc may be involved in transferrin trafficking and is likely to power actin-based membrane trafficking in many physiologically crucial tissues. Myosin Vc is also thought to participate in apical exocytosis of secretory vesicles. Containing one dilute domain, six IQ domains and a myosin head-like domain, Myosin Vc associates with Rab 8.

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CHROMOSOMAL LOCATION

Genetic locus: MY05C (human) mapping to 15q21.2; Myo5c (mouse) mapping to 9 D.

SOURCE

Myosin Vc (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Myosin Vc 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-160555 P, ($100 \mu g$ peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Myosin Vc (S-12) is recommended for detection of Myosin Vc of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with Myosin Va or Myosin Vb.

Myosin Vc (S-12) is also recommended for detection of Myosin Vc in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Myosin Vc siRNA (h): sc-90210, Myosin Vc siRNA (m): sc-149762, Myosin Vc shRNA Plasmid (h): sc-90210-SH, Myosin Vc shRNA Plasmid (m): sc-149762-SH, Myosin Vc shRNA (h) Lentiviral Particles: sc-90210-V and Myosin Vc shRNA (m) Lentiviral Particles: sc-149762-V.

Molecular Weight of Myosin Vc: 203 kDa.

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) 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.

STORAGE

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

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.

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