

# VPS4B (C-13): sc-21466

## BACKGROUND

Class E vacuolar protein sorting (vps) proteins are necessary for appropriate sorting of receptors in the yeast endocytic pathway. The yeast Vps4p is a member of the AAA protein family (ATPases associated with diverse cellular activities) and plays an important role in transporting proteins out of a prevacuolar endosomal compartment. In human, two non-allelic orthologous proteins (VPS4A and VPS4B) of yeast Vps4p are known and can form heteromeric complexes with each other. Both VPS4 (also known as SKD1 in mouse) proteins are class E VPS and are involved in intracellular protein trafficking, similar to Vps4p in yeast. A human CHMP1 protein, which is implicated in multivesicular body formation, physically interacts with VPS4. HIV-1 uses cellular machinery to bud from infected cells and requires VPS4 and TSG101/VPS23 for this budding process. Dominant negative mutant of VPS4 inhibit vacuolar protein sorting and also arrest HIV-1 and MLV budding. Thus, retroviruses normally use the VPS pathway to form multivesicular bodies during the budding process.

## CHROMOSOMAL LOCATION

Genetic locus: VPS4B (human) mapping to 18q21.33; Vps4b (mouse) mapping to 1 E2.1.

## SOURCE

VPS4B (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of VPS4B 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-21466 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

VPS4B (C-13) is recommended for detection of VPS4B 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).

VPS4B (C-13) is also recommended for detection of VPS4B in additional species, including porcine.

Suitable for use as control antibody for VPS4B siRNA (h): sc-41098, VPS4B siRNA (m): sc-41099, VPS4B shRNA Plasmid (h): sc-41098-SH, VPS4B shRNA Plasmid (m): sc-41099-SH, VPS4B shRNA (h) Lentiviral Particles: sc-41098-V and VPS4B shRNA (m) Lentiviral Particles: sc-41099-V.

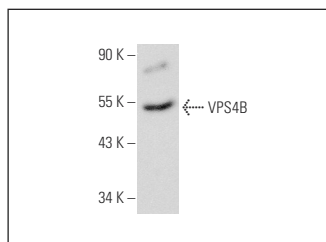
Molecular Weight of VPS4B: 49 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Y79 cell lysate: sc-2240.

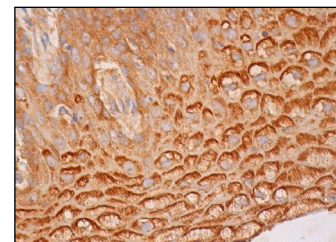
## RECOMMENDED SECONDARY REAGENTS

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



VPS4B (C-13): sc-21466. Western blot analysis of VPS4B expression in Y79 whole cell lysate.



VPS4B (C-13): sc-21466. Immunoperoxidase staining of formalin fixed, paraffin-embedded human vagina tissue showing cytoplasmic staining of squamous epithelial cells.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **VPS4B (A-11): sc-377162**, our highly recommended monoclonal alternative to VPS4B (C-13).