SANTA CRUZ BIOTECHNOLOGY, INC.

VPS16 (C-17): sc-86939



BACKGROUND

Vacuolar sorting proteins (VPSs) are required for proper trafficking of endocytic and biosynthetic proteins to the vacuole and play an important role in the budding process of cells. The VPS proteins are highly conserved in mammal, yeast and *Drosophila*. VPS16 (vacuolar protein sorting 16) is a 839 amino acid protein that localizes to the cytoplasmic side of membranes and is ubiquitously expressed. Existing as a component of the Class C VPS protein complex along with VPS11, VPS18 and VPS33, VPS16 is thought to play a role in membrane docking/fusion reactions of late endosomes/lysosomes and may also participate in vesicle-mediated protein trafficking to lysosomal compartments. Mutations in the gene encoding VPS16 may disrupt trafficking to lysosomes and lysosome-related organelles that can potentially cause multiple diseases, including Hermansky-Pudlak syndrome.

CHROMOSOMAL LOCATION

Genetic locus: VPS16 (human) mapping to 20p13; Vps16 (mouse) mapping to 2 F1.

SOURCE

VPS16 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of VPS16 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86939 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

VPS16 (C-17) is recommended for detection of VPS16 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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); non cross-reactive with other VPS family members.

VPS16 (C-17) is also recommended for detection of VPS16 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for VPS16 siRNA (h): sc-76902, VPS16 siRNA (m): sc-155218, VPS16 shRNA Plasmid (h): sc-76902-SH, VPS16 shRNA Plasmid (m): sc-155218-SH, VPS16 shRNA (h) Lentiviral Particles: sc-76902-V and VPS16 shRNA (m) Lentiviral Particles: sc-155218-V.

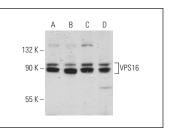
Molecular Weight of VPS16: 95/78 kDa.

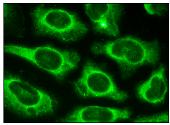
Positive Controls: Jurkat whole cell lysate: sc-2204, HuT 78 whole cell lysate: sc-2208 or MDA-MB-231 cell lysate: sc-2232.

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





VPS16 (C-17): sc-86939. Western blot analysis of VPS16 expression in Jurkat (**A**), HuT 78 (**B**), AML-193 (**C**) and MDA-MB-231 (**D**) whole cell lysates.

VPS16 (C-17): sc-86939. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

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 **VPS16 (2F10): sc-293327**, our highly recommended monoclonal alternative to VPS16 (C-17).