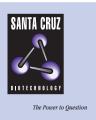
# SANTA CRUZ BIOTECHNOLOGY, INC.

# VPS13D (C-17): sc-104753



# BACKGROUND

The vacuolar protein sorting (VPS) pathway regulates protein sorting and vesicle-mediated intracellular transport. 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. In *Saccharomyces cerevisiae*, mutations in VPS genes result in secretion of proteins normally localized to the vacuole. VPS13C (vacuolar protein sorting 13 homolog C) is a 3,753 amino acid protein that belongs to the VPS family and is expressed in a variety of tissues. VPS13C shares significant similarities with yeast homolog and other VPS13 proteins of human origin. VPS13C exists as four alternatively spliced isoforms and is encoded by a gene located on human chromosome 15, which houses over 700 genes and comprises nearly 3% of the human genome. Angelman syndrome, Prader-Willi syndrome, Tay-Sachs disease and Marfan syndrome are all associated with defects in chromosome 15-localized genes.

### REFERENCES

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- Rampoldi, L., et al. 2001. A conserved sorting-associated protein is mutant in chorea-acanthocytosis. Nat. Genet. 28: 119-120.
- Garrus, J.E., et al. 2001. Tsg101 and the vacuolar protein sorting pathway are essential for HIV-1 budding. Cell 107: 55-65.
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- Velayos-Baeza, A., et al. 2004. Analysis of the human VPS13 gene family. Genomics 84: 536-549.
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### CHROMOSOMAL LOCATION

Genetic locus: VPS13D (human) mapping to 1p36.22; Vps13d (mouse) mapping to 4 E1.

#### SOURCE

VPS13D (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of VPS13D of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-104753 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### APPLICATIONS

VPS13D (C-17) is recommended for detection of VPS13D 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).

Suitable for use as control antibody for VPS13D siRNA (h): sc-88079, VPS13D siRNA (m): sc-106695, VPS13D shRNA Plasmid (h): sc-88079-SH, VPS13D shRNA Plasmid (m): sc-106695-SH, VPS13D shRNA (h) Lentiviral Particles: sc-88079-V and VPS13D shRNA (m) Lentiviral Particles: sc-106695-V.

Molecular Weight of VPS13D: 492 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: 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<sup>™</sup> 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.