SANTA CRUZ BIOTECHNOLOGY, INC.

VPS11 (K-20): sc-79346



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. VPS11 (vacuolar protein sorting 11), also known as END1, PEP5, RNF108 or PP3476, localizes to the membrane of both the endosome and the lysosome and is the human homolog of yeast Vsp11. Expressed ubiquitously with highest expression in heart, VPS11 is thought to play a role in vesicle-mediated protein trafficking, as well as fusion/docking reactions in late endosomes and lysosomes. VPS11 contains one Clathrin repeat and one RING-type zinc finger and shares 24% amino acid identity with its yeast counterpart.

REFERENCES

- Wurmser, A.E., Sato, T.K. and Emr, S.D. 2000. New component of the vacuolar class C-Vps complex couples nucleotide exchange on the Ypt7 GTPase to SNARE-dependent docking and fusion. J. Cell Biol. 151: 551-562.
- Sato, T.K., Rehling, P., Peterson, M.R. and Emr, S.D. 2000. Class C Vps protein complex regulates vacuolar SNARE pairing and is required for vesicle docking/fusion. Mol. Cell 6: 661-671.
- Kim, B.Y., Krämer, H., Yamamoto, A., Kominami, E., Kohsaka, S. and Akazawa, C. 2001. Molecular characterization of mammalian homologues of class C Vps proteins that interact with Syntaxin 7. J. Biol. Chem. 276: 29393-29402.
- Peterson, M.R. and Emr, S.D. 2001. The class C Vps complex functions at multiple stages of the vacuolar transport pathway. Traffic 2: 476-486.
- Huizing, M., Didier, A., Walenta, J., Anikster, Y., Gahl, W.A. and Krämer, H. 2001. Molecular cloning and characterization of human VPS18, VPS11, VPS16, and VPS33. Gene 264: 241-247.
- Kim, B.Y., Ueda, M., Kominami, E., Akagawa, K., Kohsaka, S. and Akazawa, C. 2003. Identification of mouse Vps16 and biochemical characterization of mammalian class C Vps complex. Biochem. Biophys. Res. Commun. 311: 577-582.
- 7. Palmer, G.E., Cashmore, A. and Sturtevant, J. 2003. *Candida albicans* VPS11 is required for vacuole biogenesis and germ tube formation. Eukaryotic Cell. 2: 411-421.
- 8. Yu, J.F., Fukamachi, S., Mitani, H., Hori, H. and Kanamori, A. 2006. Reduced expression of VPS11 causes less pigmentation in medaka, *Oryzias latipes*. Pigment Cell Res. 19: 628-634.

CHROMOSOMAL LOCATION

Genetic locus: VPS11 (human) mapping to 11q23.3; Vps11 (mouse) mapping to 9 A5.2.

SOURCE

VPS11 (K-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of VPS11 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-79346 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

VPS11 (K-20) is recommended for detection of VPS11 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).

VPS11 (K-20) is also recommended for detection of VPS11 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for VPS11 siRNA (h): sc-76900, VPS11 siRNA (m): sc-76901, VPS11 shRNA Plasmid (h): sc-76900-SH, VPS11 shRNA Plasmid (m): sc-76901-SH, VPS11 shRNA (h) Lentiviral Particles: sc-76900-V and VPS11 shRNA (m) Lentiviral Particles: sc-76901-V.

Molecular Weight of VPS11: 108 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or K-562 whole cell lysate: sc-2203.

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) 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™ 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.