

VPS28 (N-12): sc-23209

BACKGROUND

Vacuolar protein sorting protein 28 (VPS28) is required for normal endocytic and biosynthetic trafficking to the vacuole. VPS28 mutants accumulate vacuolar endocytic and late Golgi markers in an aberrant endosome-like class E compartment. Class E compartments contain endocytosed markers, as well as precursors of vacuolar hydrolases and markers normally associated with the *trans* Golgi. VPS28 as well as other class E VPS proteins may facilitate the formation of transport intermediates required for efficient transport out of the prevacuolar endosome. Class E proteins appear to be important for sorting material bound for the vacuole away from proteins that cycle through the endocytic system. VPS28 of *Saccharomyces cerevisiae* and its human ortholog localize to the cytoplasm and can be found as subunits of a complex named ESCRT-1, endosomal sorting complex required for transport 1.

REFERENCES

1. Rieder, S.E., et al. 1996. Multilamellar endosome-like compartment accumulates in the yeast VPS28 vacuolar protein sorting mutant. *Mol. Biol. Cell* 7: 985-999.
2. Katzmann, D.J., et al. 2001. Ubiquitin-dependent sorting into the multivesicular body pathway requires the function of a conserved endosomal protein sorting complex, ESCRT-I. *Cell* 106: 145-155.
3. Bishop, N. and Woodman, P. 2001. TSG101/mammalian VPS23 and mammalian VPS28 interact directly and are recruited to VPS4-induced endosomes. *J. Biol. Chem.* 276: 11735-11742.
4. Hanson, P.K., et al. 2002. NBD-labeled phosphatidylcholine enters the yeast vacuole via the pre-vacuolar compartment. *J. Cell. Sci.* 115: 2725-2737.

CHROMOSOMAL LOCATION

Genetic locus: VPS28 (human) mapping to 8q24.3; Vps28 (mouse) mapping to 15 D3.

SOURCE

VPS28 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of VPS28 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-23209 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

VPS28 (N-12) is recommended for detection of VPS28 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).

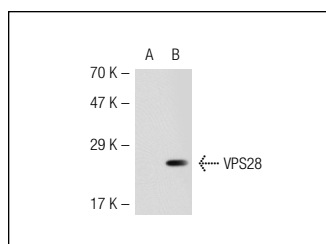
VPS28 (N-12) is also recommended for detection of VPS28 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for VPS28 siRNA (h): sc-41100, VPS28 siRNA (m): sc-41101, VPS28 shRNA Plasmid (h): sc-41100-SH, VPS28 shRNA Plasmid (m): sc-41101-SH, VPS28 shRNA (h) Lentiviral Particles: sc-41100-V and VPS28 shRNA (m) Lentiviral Particles: sc-41101-V.

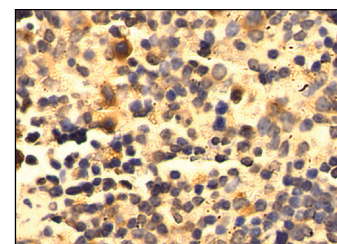
Molecular Weight of VPS28: 28 kDa.

Positive Controls: VPS28 (m): 293T Lysate: sc-124578 or mouse spleen extract: sc-2391.

DATA



VPS28 (N-12): sc-23209. Western blot analysis of VPS28 expression in non-transfected: sc-117752 (A) and mouse VPS28 transfected: sc-124578 (B) 293T whole cell lysates.



VPS28 (N-12): sc-23209. Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse spleen tissue showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Olabisi, O.O., et al. 2006. Bcr interacts with components of the endosomal sorting complex required for transport-I and is required for epidermal growth factor receptor turnover. *Cancer Res.* 66: 6250-6257.
2. Han, S.Y., et al. 2009. CIIA induces the epithelial-mesenchymal transition and cell invasion. *Biochem. Biophys. Res. Commun.* 387: 548-552.

RESEARCH USE

For research use only, not for use in diagnostic procedures.


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Try **VPS28 (E-7): sc-166537** or **VPS28 (B-2): sc-376337**, our highly recommended monoclonal alternatives to VPS28 (N-12).