SANTA CRUZ BIOTECHNOLOGY, INC.

VPS28 (m): 293T Lysate: sc-124578

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 abberant 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., Banta, L.M., Kohrer, K., McCaffery, J.M. and Emr, S.D. 1996. Multilamellar endosome-like compartment accumulates in the yeast Vps28 vacuolar protein sorting mutant. Mol. Biol. Cell 7: 985-999.
2. 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.
3. Hanson, P.K., Grant, A.M. and Nichols, J.W. 2002. NBD-labeled phosphatidylcholine enters the yeast vacuole via the pre-vacuolar compartment. J. Cell Sci. 115: 2725-2733.
4. Katzmann, D.J., Babst, M. and Emr, S.D. 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.
5. SWISS-PROT/TrEMBL (Q02767). World Wide Web URL: http://www.expasy.ch/sprot/sprot-top.html.

CHROMOSOMAL LOCATION

Genetic locus: Vps28 (mouse) mapping to 15 D3.

PRODUCT

VPS28 (m): 293T Lysate represents a lysate of mouse VPS28 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

VPS28 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive VPS28 antibodies. Recommended use: 10-20 µl per lane.

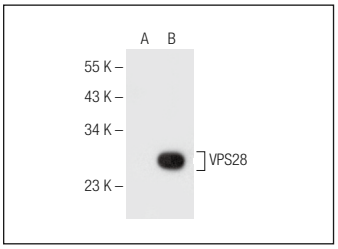
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

VPS28 (B-2): sc-376337 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse VPS28 expression in VPS28 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



VPS28 (B-2): sc-376337. Western blot analysis of VPS28 expression in non-transfected: sc-117752 (**A**) and mouse VPS28 transfected: sc-124578 (**B**) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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