

VPS25 (L-18): sc-49782

BACKGROUND

Vacuolar sorting proteins (VPSs) are required for trafficking normal endocytic and biosynthetic proteins to the vacuole and also play an important role in the budding process of cells. VPS25 is a highly conserved and widely expressed eukaryotic protein, with single orthologs in chromalveolate, excavate, amoebozoan, plant, fungal and metazoan species. VPS25, along with VPS22p and VPS36p, functions as a subunit of ESCRT-II, an endosomal sorting complex required for protein transport. This complex is essential for the sorting of ubiquitinated biosynthetic and endosomal proteins into endosomes. ESCRT-II transiently associates with the endosomal membrane, thereby initiating the formation of ESCRT-III, a membrane-associated protein complex that functions immediately downstream of ESCRT-II during sorting of multivesicular body cargo.

REFERENCES

- Hierro, A., Sun, J., Rusnak, A.S., Kim, J., Prag, G., Emr, S.D. and Hurley, J.H. 2004. Structure of the ESCRT-II endosomal trafficking complex. *Nature* 431: 221-225.
- Markovich, S., Yekutieli, A., Shalit, I., Shadkchan, Y. and Osherov, N. 2004. Genomic approach to identification of mutations affecting caspofungin susceptibility in *Saccharomyces cerevisiae*. *Antimicrob. Agents Chemother.* 48: 3871-3876.
- Slagsvold, T. and Stenmark, H. 2004. The structure of an endosomal protein sorter. *Dev. Cell* 7: 457-458.
- Wernimont, A.K. and Weissenhorn, W. 2004. Crystal structure of subunit VPS25 of the endosomal trafficking complex ESCRT-II. *BMC Struct. Biol.* 4: 10.
- Thompson, B.J., Mathieu, J., Sung, H.H., Loeser, E., Rorth, P. and Cohen, S.M. 2005. Tumor suppressor properties of the ESCRT-II complex component VPS25 in *Drosophila*. *Dev. Cell* 9: 711-720.

CHROMOSOMAL LOCATION

Genetic locus: VPS25 (human) mapping to 17q21.31; Vps25 (mouse) mapping to 11 D.

SOURCE

VPS25 (L-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of VPS25 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-49782 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.

APPLICATIONS

VPS25 (L-18) is recommended for detection of VPS25 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

VPS25 (L-18) is also recommended for detection of VPS25 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for VPS25 siRNA (h): sc-61794, VPS25 siRNA (m): sc-61795, VPS25 shRNA Plasmid (h): sc-61794-SH, VPS25 shRNA Plasmid (m): sc-61795-SH, VPS25 shRNA (h) Lentiviral Particles: sc-61794-V and VPS25 shRNA (m) Lentiviral Particles: sc-61795-V.

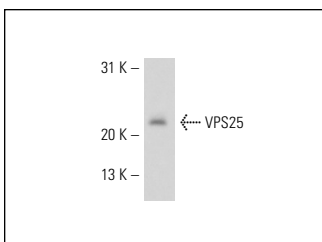
Molecular Weight of VPS25: 21 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210 or HeLa nuclear extract: sc-2120.

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



VPS25 (L-18): sc-49782. Western blot analysis of VPS25 expression in NIH/3T3 whole cell lysate.

RESEARCH USE

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

MONOS
Satisfaction
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Try **VPS25 (B-4): sc-271648** or **VPS25 (D-6): sc-271647**, our highly recommended monoclonal alternatives to VPS25 (L-18).