

VPS16 (2F10): sc-293327

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. The VPS proteins are highly conserved in mammal, yeast and *Drosophila*. VPS16 (vacuolar protein sorting 16) is a 839 amino acid protein that localizes to the cytoplasmic side of membranes and is ubiquitously expressed. Existing as a component of the Class C VPS protein complex along with VPS11, VPS18 and VPS33, VPS16 is thought to play a role in membrane docking/fusion reactions of late endosomes/lysosomes and may also participate in vesicle-mediated protein trafficking to lysosomal compartments. Mutations in the gene encoding VPS16 may disrupt trafficking to lysosomes and lysosome-related organelles that can potentially cause multiple diseases, including Hermansky-Pudlak syndrome.

REFERENCES

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6. Pulipparacharuvil, S., Akbar, M.A., Ray, S., Sevioukov, E.A., Haberman, A.S., Rohrer, J. and Krämer, H. 2005. *Drosophila* Vps16A is required for trafficking to lysosomes and biogenesis of pigment granules. *J. Cell Sci.* 118: 3663-3673.

CHROMOSOMAL LOCATION

Genetic locus: VPS16 (human) mapping to 20p13.

SOURCE

VPS16 (2F10) is a mouse monoclonal antibody raised against amino acids 754-839 of VPS16 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

VPS16 (2F10) is recommended for detection of VPS16 of 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).

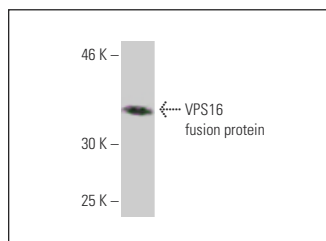
Suitable for use as control antibody for VPS16 siRNA (h): sc-76902, VPS16 shRNA Plasmid (h): sc-76902-SH and VPS16 shRNA (h) Lentiviral Particles: sc-76902-V.

Molecular Weight of VPS16 isoform 1/2: 95/78 kDa.

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



VPS16 (2F10): sc-293327. Western blot analysis of human recombinant VPS16 fusion protein.

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 for detailed protocols and support products.