

VPS37B (P-14): sc-109461

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. VPS37B (vacuolar protein sorting 37 homolog B), also known as ESCRT-I complex subunit VPS37B, is a 285 amino acid peripheral membrane protein that is a member of the VPS37 family. Expressed in macrophages and lymphocytes, VPS37B is recruited to the endosomal membrane in a VPS4A-dependent fashion. VPS37B is a component of the ESCRT-I complex, which is known to regulate vesicular trafficking. VPS37B is required for the sorting of endocytic ubiquitinated cargo into multi-vesicular bodies and may be involved in cell growth and differentiation.

REFERENCES

1. Stuchell, M.D., et al. 2004. The human endosomal sorting complex required for transport (ESCRT-I) and its role in HIV-1 budding. *J. Biol. Chem.* 279: 36059-36071.
2. Bache, K.G., et al. 2004. The growth-regulatory protein HCRP1/hVps37A is a subunit of mammalian ESCRT-I and mediates receptor down-regulation. *Mol. Biol. Cell* 15: 4337-4346.
3. Eastman, S.W., et al. 2005. Identification of human VPS37C, a component of endosomal sorting complex required for transport-I important for viral budding. *J. Biol. Chem.* 280: 628-636.
4. Gill, D.J., et al. 2007. Structural studies of phosphoinositide 3-kinase-dependent traffic to multivesicular bodies. *Biochem. Soc. Symp.* 47-57.
5. Morita, E., et al. 2007. Identification of human MVB12 proteins as ESCRT-I subunits that function in HIV budding. *Cell Host Microbe* 2: 41-53.
6. Morita, E., et al. 2007. Human ESCRT and ALIX proteins interact with proteins of the midbody and function in cytokinesis. *EMBO J.* 26: 4215-4227.
7. Silvestri, L.S., et al. 2007. Involvement of vacuolar protein sorting pathway in Ebola virus release independent of TSG101 interaction. *J. Infect. Dis.* 196: S264-S270.

CHROMOSOMAL LOCATION

Genetic locus: VPS37B (human) mapping to 12q24.31; Vps37b (mouse) mapping to 5 F.

SOURCE

VPS37B (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of VPS37B 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-109461 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

VPS37B (P-14) is recommended for detection of VPS37B 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).

Suitable for use as control antibody for VPS37B siRNA (h): sc-95762, VPS37B siRNA (m): sc-155220, VPS37B shRNA Plasmid (h): sc-95762-SH, VPS37B shRNA Plasmid (m): sc-155220-SH, VPS37B shRNA (h) Lentiviral Particles: sc-95762-V and VPS37B shRNA (m) Lentiviral Particles: sc-155220-V.

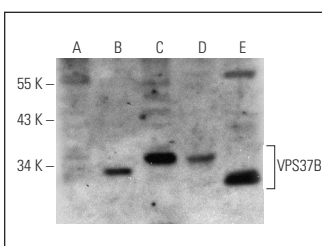
Molecular Weight of VPS37B: 31 kDa.

Positive Controls: VPS37B (m): 293T Lysate: sc-124583, HeLa whole cell lysate: sc-2200 or MIA PaCa-2 cell lysate: sc-2285.

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



VPS37B (P-14): sc-109461. Western blot analysis of VPS37B expression in non-transfected 293T: sc-117752 (A), mouse VPS37B transfected 293T: sc-124583 (B), HeLa (C), MIA PaCa-2 (D) and human PBL (E) whole cell lysates.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **VPS37B (D-4): sc-390144**, our highly recommended monoclonal alternative to VPS37B (P-14).