# SANTA CRUZ BIOTECHNOLOGY, INC.

# VPS26B (P-24): sc-134149



## 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. VPS26B (vacuolar protein sorting 26 homolog B), also known as Pep8b, is a 336 amino acid peripheral membrane protein that forms a retromer complex with VPS29 and VPS35. Specifically, the retromer complex is responsible for the retrograde transport of proteins from endosomes to the *trans*-Golgi network. VPS26B is highly similar to VPS26A and both have structural homology to the Arrestin family of proteins involved in endocytosis of activated G protein-coupled receptors (GPCRs) at the plasma membrane. VSP26B may be phosphorylated upon DNA damage by Atm or ATR.

# REFERENCES

- 1. Kerr, M.C., et al. 2005. A novel mammalian retromer component, VSP26B. Traffic 6: 991-1001.
- Shi, H., et al. 2006. The retromer subunit VSP26 has an arrestin fold and binds VPS35 through its C-terminal domain. Nat. Struct. Mol. Biol. 13: 540-548.
- 3. Jaillais, Y., et al. 2007. The retromer protein VPS29 links cell polarity and organ initiation in plants. Cell 130: 1057-1070.
- 4. Hierro, A., et al. 2007. Functional architecture of the retromer cargo-recognition complex. Nature 449: 1063-1067.
- Kim, E., et al. 2008. Identification of novel retromer complexes in the mouse testis. Biochem. Biophys. Res. Commun. 375: 16-21.
- 6. Bonifacino, J.S. and Hurley, J.H. 2008. Retromer. Curr. Opin. Cell Biol. 20: 427-436.
- 7. Collins, B.M., et al. 2008. Structure of VSP26B and mapping of its interaction with the retromer protein complex. Traffic 9: 366-379.
- Collins, B.M. 2008. The structure and function of the retromer protein complex. Traffic 9: 1811-1822.

#### CHROMOSOMAL LOCATION

Genetic locus: VPS26B (human) mapping to 11q25; Vps26b (mouse) mapping to 9 A4.

#### SOURCE

VPS26B (P-24) is an affinity purified rabbit polyclonal antibody raised against synthetic VPS26B peptide of human origin.

# PRODUCT

Each vial contains 50  $>\mu$ g lgG in 500  $>\mu$ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

VPS26B (P-24) is recommended for detection of VPS26B 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for VPS26B siRNA (h): sc-96405, VPS26B siRNA (m): sc-155219, VPS26B shRNA Plasmid (h): sc-96405-SH, VPS26B shRNA Plasmid (m): sc-155219-SH, VPS26B shRNA (h) Lentiviral Particles: sc-96405-V and VPS26B shRNA (m) Lentiviral Particles: sc-155219-V.

Molecular Weight of VPS26B: 39 kDa.

Positive Controls: human platelet extract: sc-363773 or human fetal brain tissue extract.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).





VPS26B (P-24): sc-134149. Western blot analysis of VPS26B expression in human platelet extract.

# VPS26B (P-24): sc-134149. Western blot analysis of VPS26B expression in human fetal brain tissue extract.

#### **RESEARCH USE**

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

#### **PROTOCOLS**

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