

# VPS37D (C-12): sc-103931

## 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. VPS37D (vacuolar protein sorting-associated protein 37D), also known as ESCRT-I complex subunit VPS37D or WBSCR24 (Williams-Beuren syndrome chromosomal region 24 protein), is a 251 amino acid peripheral membrane protein that belongs to the VPS37 family. VPS37D functions as a component of the multi-protein ESCRT-I (endosomal sorting complex required for transport I) complex and plays a role in vesicular trafficking and protein sorting, as well as cell growth and differentiation. The gene encoding VPS37D maps to human chromosome 7, which houses over 1,000 genes, comprises nearly 5% of the human genome and has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome.

## REFERENCES

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2. Pevsner, J., et al. 1996. Mammalian homologues of yeast vacuolar protein sorting (vps) genes implicated in Golgi-to-lysosome trafficking. *Gene* 183: 7-14.
3. Iwasaki, S., et al. 2001. Long-term audiological feature in Pendred syndrome caused by PDS mutation. *Arch. Otolaryngol. Head Neck Surg.* 127: 705-708.
4. 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.
5. Reiner, O., et al. 2006. Lissencephaly 1 linking to multiple diseases: mental retardation, neurodegeneration, schizophrenia, male sterility, and more. *Neuromolecular Med.* 8: 547-565.
6. 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.
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## CHROMOSOMAL LOCATION

Genetic locus: VPS37D (human) mapping to 7q11.23; Vps37d (mouse) mapping to 5 G2.

## SOURCE

VPS37D (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of VPS37D of human origin.

## STORAGE

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

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103931 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

VPS37D (C-12) is recommended for detection of VPS37D of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other VPS family members.

Suitable for use as control antibody for VPS37D siRNA (h): sc-106697, VPS37D siRNA (m): sc-106698, VPS37D shRNA Plasmid (h): sc-106697-SH, VPS37D shRNA Plasmid (m): sc-106698-SH, VPS37D shRNA (h) Lentiviral Particles: sc-106697-V and VPS37D shRNA (m) Lentiviral Particles: sc-106698-V.

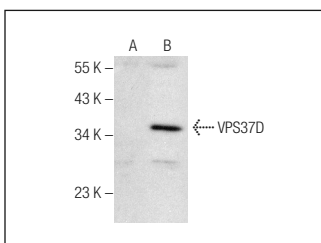
Molecular Weight of VPS37D: 28 kDa.

Positive Controls: VPS37D (h): 293T Lysate: sc-371934.

## 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) 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



VPS37D (C-12): sc-103931. Western blot analysis of VPS37D expression in non-transfected: sc-117752 (A) and human VPS37D transfected: sc-371934 (B) 293T whole cell lysates.

## RESEARCH USE

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