BACKGROUND

The vacuolar protein sorting (VPS) pathway regulates protein sorting and vesicle-mediated intracellular transport. 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. In *Saccharomyces cerevisiae*, mutations in VPS genes result in secretion of proteins normally localized to the vacuole. VPS13C (vacuolar protein sorting 13 homolog C) is a 3,753 amino acid protein that belongs to the VPS family and is expressed in a variety of tissues. VPS13C shares significant similarities with yeast homolog and other VPS13 proteins of human origin. VPS13C exists as four alternatively spliced isoforms and is encoded by a gene located on human chromosome 15, which houses over 700 genes and comprises nearly 3% of the human genome. Angelman syndrome, Prader-Willi syndrome, Tay-Sachs disease and Marfan syndrome are all associated with defects in chromosome 15-localized genes.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: VPS13C (human) mapping to 15q22.2; Vps13c (mouse) mapping to 9 C.

SOURCE

VPS13C (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of VPS13C 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-104751 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

VPS13C (E-15) is recommended for detection of VPS13C 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).

VPS13C (E-15) is also recommended for detection of VPS13C in additional species, including canine.


Molecular Weight of VPS13C: 420 kDa.

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: 1:2000-1:500), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2233 and Western Blotting Luminol Reagent: sc-204B. 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.

STORAGE

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

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.