

VPS51 (T-16): sc-245123

BACKGROUND

VPS51 (chromosome 11 open reading frame 2), also known as FFR, ANG2 or ANG3, is a 782 amino acid protein belonging to the fat-free family. VPS51 localizes to the Golgi apparatus and is required for both Golgi structure and vesicular trafficking as well as lipid transport. Existing as two alternatively spliced isoforms, VPS51 is encoded by a gene located on human chromosome 11, which consists of approximately 135 million base pairs and 1,400 genes. Chromosome 11 makes up around 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded *Atm* gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. *Atm* mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders Sickle cell anemia and β thalassemia are caused by HBB gene mutations. Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the *WT1* gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11. The VPS51 gene product and its mouse homolog, 1810055G02Rik, have been provisionally designated C11orf2 and 1810055G02Rik, respectively, pending further characterization.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: VPS51 (human) mapping to 11q13.1; 1810055G02Rik (mouse) mapping to 19 A.

RESEARCH USE

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

SOURCE

VPS51 (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of VPS51 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-245123 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

VPS51 (T-16) is recommended for detection of VPS51 of human origin and 1810055G02Rik of mouse 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).

VPS51 (T-16) is also recommended for detection of VPS51 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for VPS51 siRNA (h): sc-96788, VPS51 siRNA (m): VPS51, VPS51 shRNA Plasmid (h): sc-96788-SH, VPS51 shRNA Plasmid (m): sc-108578-SH, VPS51 shRNA (h) Lentiviral Particles: sc-96788-V and VPS51 shRNA (m) Lentiviral Particles: sc-108578-V.

Molecular Weight of VPS51: 86 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: 1:2000-1:5000), 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.

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 or our catalog for detailed protocols and support products.