SANTA CRUZ BIOTECHNOLOGY, INC.

AVL9 (N-20): sc-241881

BACKGROUND

AVL9, also known as late secretory pathway protein AVL9 homolog, is a 648 amino acid protein that localizes to membrane and functions in late exocytic transport. AVL9 exhibits low expression in brain, lung, testis, liver, heart, skeletal muscle, kidney, pancreas, spleen, ovary, small intestine, colon and peripheral blood leukocytes. AVL9 exists as two alternatively spliced isoforms and is considered a complete proteome. The AVL9 gene is conserved in chimpanzee, canine, bovine, mouse, chicken, zebrafish, fruit fly, mosquito and *C. elegans*, and maps to human chromosome 7p14.3. Chromosome 7 is about 158 milllion bases long, encodes over 1000 genes and makes up about 5% of the human genome. Chromosome 7 has been linked to Osteogenesis imperfecta, Pendred syndrome, lissencephaly, Citrullinemia and Shwachman-Diamond syndrome.

REFERENCES

1. Tsipouras, P., et al. 1983. Restriction fragment length polymorphism associated with the pro α 2(I) gene of human type I procollagen. Application to a family with an autosomal dominant form of osteogenesis imperfecta. J. Clin. Invest. 72: 1262-1267.
2. Scherer, S.W., et al. 2003. Human chromosome 7: DNA sequence and biology. Science 300: 767-772.
3. Reiner, O., et al. 2006. Lissencephaly 1 linking to multiple diseases: mental retardation, neurodegeneration, schizophrenia, male sterility, and more. Neuromolecular Med. 8: 547-565.
4. Shimamura, A. 2006. Shwachman-Diamond syndrome. Semin. Hematol. 43: 178-188.
5. Harsay, E., et al. 2007. Avl9p, a member of a novel protein superfamily, functions in the late secretory pathway. Mol. Biol. Cell 18: 1203-1219.
6. Online Mendelian Inheritance in Man, OMIM™. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 612927. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
7. Zhang, L., et al. 2010. A high-throughput screen for chemical inhibitors of exocytic transport in yeast. Chembiochem 11: 1291-1301.

CHROMOSOMAL LOCATION

Genetic locus: AVL9 (human) mapping to 7p14.3; Avl9 (mouse) mapping to 6 B3.

SOURCE

AVL9 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of AVL9 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-241881 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

AVL9 (N-20) is recommended for detection of AVL9 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).

AVL9 (N-20) is also recommended for detection of AVL9 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for AVL9 siRNA (h): sc-89681, AVL9 siRNA (m): sc-140400, AVL9 shRNA Plasmid (h): sc-89681-SH, AVL9 shRNA Plasmid (m): sc-140400-SH, AVL9 shRNA (h) Lentiviral Particles: sc-89681-V and AVL9 shRNA (m) Lentiviral Particles: sc-140400-V.

Molecular Weight of AVL9: 72 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.