SANTA CRUZ BIOTECHNOLOGY, INC.

RP1L1 (S-12): sc-87408

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

RP1L1 (retinitis pigmentosa 1-like 1), also known as DCDC4B, is a 2,480 amino acid retinal-specific protein that contains two doublecortin domains and a large repetitive C-terminal domain. Existing as multiple alternatively spliced isoforms, RP1L1 may play a role in the pathogenesis of retinitis pigmentosa, a group of genetic eye conditions that generally lead to night blindness and tunnel vision. The gene encoding RP1L1 maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that map to chromosome 8.

REFERENCES

1. Sullivan, L.S., et al. 1999. Mutations in a novel retina-specific gene cause autosomal dominant retinitis pigmentosa. Nat. Genet. 22: 255-259.
2. Conte, I., et al. 2003. Identification and characterisation of the retinitis pigmentosa 1-like1 gene (RP1L1): a novel candidate for retinal degenerations. Eur. J. Hum. Genet. 11: 155-162.
3. Bowne, S.J., et al. 2003. Characterization of RP1L1, a highly polymorphic paralog of the retinitis pigmentosa 1 (RP1) gene. Mol. Vis. 9: 129-137.
4. Wang, D.Y., et al. 2005. Gene mutations in retinitis pigmentosa and their clinical implications. Clin. Chim. Acta 351: 5-16.
5. Chiang, S.W., et al. 2006. A novel missense RP1 mutation in retinitis pigmentosa. Eye 20: 602-605.
6. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 608581. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: RP1L1 (human) mapping to 8p23.1.

SOURCE

RP1L1 (S-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of RP1L1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87408 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

RP1L1 (S-12) is recommended for detection of RP1L1 of 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).

Suitable for use as control antibody for RP1L1 siRNA (h): sc-77517, RP1L1 shRNA Plasmid (h): sc-77517-SH and RP1L1 shRNA (h) Lentiviral Particles: sc-77517-V.

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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

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