SANTA CRUZ BIOTECHNOLOGY, INC.

PDIK1L (C-12): sc-138510



BACKGROUND

PDIK1L (PDLIM1 interacting kinase 1 like), also known as CLIK1L, is a 341 amino acid nuclear protein belonging to the protein Ser/Thr protein kinase family and kinase superfamily. Expressed at highest levels in liver, prostate, kidney, pancreas, thymus and spleen, PDIK1L has also been found at lower levels in heart, brain and placenta. Containing one protein kinase domain, PDIL1L is encoded by a gene that consists of four exons, three introns and maps to human chromosome 1p36.11. Chromosome 1 spans 260 million base pairs, contains over 3,000 genes, comprises nearly 8% of the human genome and houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

REFERENCES

- Eudy, J.D., et al. 1998. Mutation of a gene encoding a protein with extracellular matrix motifs in Usher syndrome type IIa. Science 280: 1753-1757.
- Lau, E.K., et al. 1999. Two novel polymorphic sequences in the glucocerebrosidase gene region enhance mutational screening and founder effect studies of patients with Gaucher disease. Hum. Genet. 104: 293-300.
- 3. Guo, L., et al. 2003. Molecular cloning and characterization of a novel human kinase gene, PDIK1L. J. Genet. 82: 27-32.
- Plasilova, M., et al. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. Eur. J. Hum. Genet. 12: 365-371.
- 5. Oliveira, S.A., et al. 2005. Identification of risk and age-at-onset genes on chromosome 1p in Parkinson disease. Am. J. Hum. Genet. 77: 252-264.
- 6. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 610785. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 7. Yurov, Y.B., et al. 2008. The schizophrenia brain exhibits low-level aneuploidy involving chromosome 1. Schizophr. Res. 98: 139-147.
- 8. Yokoi, T., et al. 2009. Analysis of the vitreous membrane in a case of type 1 Stickler syndrome. Graefes Arch. Clin. Exp. Ophthalmol. 247: 715-718.
- 9. Goyal, P., et al. 2009. Identifying and characterizing a novel protein kinase STK35L1 and deciphering its orthologs and close-homologs in vertebrates. PLoS ONE 4: e6981.

CHROMOSOMAL LOCATION

Genetic locus: PDIK1L (human) mapping to 1p36.11; Pdik1I (mouse) mapping to 4 D3.

SOURCE

PDIK1L (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PDIK1L 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 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138510 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PDIK1L (C-12) is recommended for detection of PDIK1L 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).

PDIK1L (C-12) is also recommended for detection of PDIK1L in additional species, including bovine.

Suitable for use as control antibody for PDIK1L siRNA (h): sc-78712, PDIK1L siRNA (m): sc-152137, PDIK1L shRNA Plasmid (h): sc-78712-SH, PDIK1L shRNA Plasmid (m): sc-152137-SH, PDIK1L shRNA (h) Lentiviral Particles: sc-78712-V and PDIK1L shRNA (m) Lentiviral Particles: sc-152137-V.

Molecular Weight of PDIK1L: 38 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) Immunofluo-rescence: use donkey anti-goat IgG-FITC: sc-2783 (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.

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.