SANTA CRUZ BIOTECHNOLOGY, INC.

PIK3IP1 (H-180): sc-134880

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

PIK3IP1 (phosphoinositide-3-kinase interacting protein 1), also known as HGFL, is a 263 amino acid single-pass type I membrane protein that contains one kringle domain. Expressed as three alternatively spliced isoforms, PIK3IP1 functions as a negative regulator of PI 3-kinase and is involved in the suppression of PI 3-kinase-associated hepatocellular carcinoma. The gene encoding PIK3IP1 maps to human chromosome 22q12.2, which houses over 500 genes and is the second smallest human chromosome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, neurofibromatosis type 2, autism and schizophrenia. Additionally, translocations between chromosomes 9 and 22 may lead to the formation of the Philadelphia chromosome and the subsequent production of the novel fusion protein Bcr-Abl, a potent cell proliferation activator found in several types of leukemias.

REFERENCES

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3. Tsilchorozidou, T., et al. 2004. Constitutional rearrangements of chromosome 22 as a cause of neurofibromatosis 2. J. Med. Genet. 41: 529-534.
4. Arinami, T. 2006. Analyses of the associations between the genes of 22q11 deletion syndrome and schizophrenia. J. Hum. Genet. 51: 1037-1045.
5. Paylor, R., et al. 2006. Tbx1 haploinsufficiency is linked to behavioral disorders in mice and humans: implications for 22q11 deletion syndrome. Proc. Natl. Acad. Sci. USA 103: 7729-7734.
6. Ahronowitz, I., et al. 2007. Mutational spectrum of the NF2 gene: a meta-analysis of 12 years of research and diagnostic laboratory findings. Hum. Mutat. 28: 1-12.
7. Hay, B.N. 2007. Deletion 22q11: spectrum of associated disorders. Semin. Pediatr. Neurol. 14: 136-139.

CHROMOSOMAL LOCATION

Genetic locus: PIK3IP1 (human) mapping to 22q12.2; Pik3ip1 (mouse) mapping to 11 A1.

SOURCE

PIK3IP1 (H-180) is a rabbit polyclonal antibody raised against amino acids 84-263 mapping at the C-terminus of PIK3IP1 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.

STORAGE

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

APPLICATIONS

PIK3IP1 (H-180) is recommended for detection of PIK3IP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

PIK3IP1 (H-180) is also recommended for detection of PIK3IP1 in additional species, including equine, canine, bovine and porcine.

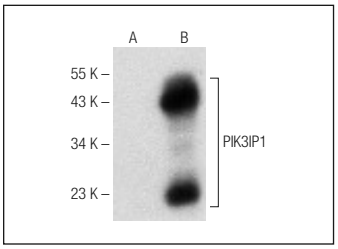
Suitable for use as control antibody for PIK3IP1 siRNA (h): sc-76141, PIK3IP1 siRNA (m): sc-152262, PIK3IP1 shRNA Plasmid (h): sc-76141-SH, PIK3IP1 shRNA Plasmid (m): sc-152262-SH, PIK3IP1 shRNA (h) Lentiviral Particles: sc-76141-V and PIK3IP1 shRNA (m) Lentiviral Particles: sc-152262-V.

Molecular Weight (predicted) of PIK3IP1 isoforms: 28/25/11 kDa.

Molecular Weight (observed) of PIK3IP1: 46 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or human PIK3IP1 transfected HEK293T whole cell lysate.

DATA



PIK3IP1 (H-180): sc-134880. Western blot analysis of PIK3IP1 expression in non-transfected (**A**) and human PIK3IP1 transfected (**B**) HEK293T whole cell lysates.

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.