

# PIK3IP1 (B-1): sc-365777

## 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 22, 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.

## CHROMOSOMAL LOCATION

Genetic locus: PIK3IP1 (human) mapping to 22q12.2.

## SOURCE

PIK3IP1 (B-1) is a mouse monoclonal antibody raised against amino acids 84-263 mapping at the C-terminus of PIK3IP1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PIK3IP1 (B-1) is available conjugated to agarose (sc-365777 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365777 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365777 PE), fluorescein (sc-365777 FITC), Alexa Fluor<sup>®</sup> 488 (sc-365777 AF488), Alexa Fluor<sup>®</sup> 546 (sc-365777 AF546), Alexa Fluor<sup>®</sup> 594 (sc-365777 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-365777 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-365777 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-365777 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

PIK3IP1 (B-1) is recommended for detection of PIK3IP1 of human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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 PIK3IP1 siRNA (h): sc-76141, PIK3IP1 shRNA Plasmid (h): sc-76141-SH and PIK3IP1 shRNA (h) Lentiviral Particles: sc-76141-V.

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

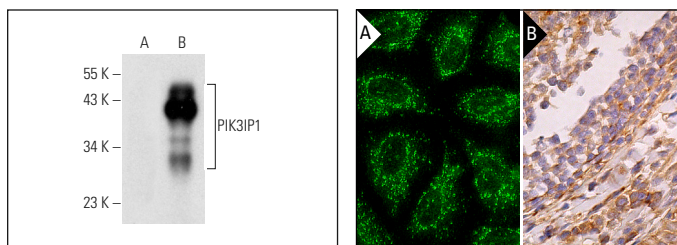
Molecular Weight (observed) of PIK3IP1: 46 kDa.

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

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



PIK3IP1 (B-1): sc-365777. Western blot analysis of PIK3IP1 expression in non transfected (A) and human PIK3IP1 transfected (B) HEK293T whole cell lysates.

PIK3IP1 (B-1): sc-365777. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing cytoplasmic staining of cells in germinal and non germinal centers and squamous epithelial cells (B).

## SELECT PRODUCT CITATIONS

- Sun, H.X., et al. 2020. MicroRNA-19a-3p regulates cell growth through modulation of the PIK3IP1-Akt pathway in hepatocellular carcinoma. *J. Cancer* 11: 2476-2484.
- Zhang, D., et al. 2020. RiPerC attenuates cerebral ischemia injury through regulation of miR-98/PIK3IP1/PI3K/Akt signaling pathway. *Oxid. Med. Cell. Longev.* 2020: 6454281.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

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