SANTA CRUZ BIOTECHNOLOGY, INC.

# PHLDB3 (N-20): sc-248246

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

PHLDB3 (pleckstrin homology-like domain, family B, member 3) is a 640 amino acid coiled-coil protein that exists as 2 alternatively spliced isoforms. Containing one PH domain, PHLDB3 mediates phosphoinositide binding. PHLDB3 is up-regulated in hepatitis C-related infections, a major cause of hepatocellular carcinoma. The gene that encodes PHLDB3 maps to human chromosome 19, which consists of approximately 63 million bases and makes up over 2% of human genomic DNA. Chromosome 19 contains the greatest gene density of the human chromosomes and is the genetic home for a number of immunoglobulin superfamily members, including killer cell and leukocyte Ig-like receptors, ICAMs, the CEACAM and PSG families, and Fc$\alpha$ receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and insulin-dependent diabetes are also linked to chromosome 19.

## REFERENCES


1. LaPoint, S.F., Patel, U. and Rubio, A. 2000. Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). Adv. Anat. Pathol. 7: 307-321.
2. Buchet-Poyau, K., Mehenni, H., Radhakrishna, U. and Antonarakis, S.E. 2002. Search for the second Peutz-Jeghers syndrome locus: exclusion of the STK13, PRKCG, KLK10, and PSCD2 genes on chromosome 19 and the STK11IP gene on chromosome 2. Cytogenet. Genome Res. 97: 171-178.
3. Grimwood, J., Gordon, L.A., Olsen, A., Terry, A., Schmutz, J., Lamerdin, J., Hellsten, U., Goodstein, D., Couronne, O., Tran-Gyamfi, M., Aerts, A., Altherr, M., Ashworth, L., Bajorek, E., Black, S., Branscomb, E., et al. 2004. The DNA sequence and biology of human chromosome 19. Nature 428: 529-535.
4. Parham, P. 2005. Immunogenetics of killer cell immunoglobulin-like receptors. Mol. Immunol. 42: 459-462.
5. Vikelis, M., Papatriantafyllou, J. and Karageorgiou, C.E. 2007. A novel CADASIL-causing mutation in a stroke patient. Swiss Med. Wkly. 137: 323-325.


## CHROMOSOMAL LOCATION

Genetic locus: PHLDB3 (human) mapping to 19q13.31.

## SOURCE

PHLDB3 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PHLDB3 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-248246 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PHLDB3 (N-20) is recommended for detection of PHLDB3 of 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); non cross-reactive with PHLDB1 or PHLDB2.

Suitable for use as control antibody for PHLDB3 siRNA (h): sc-97169, PHLDB3 shRNA Plasmid (h): sc-97169-SH and PHLDB3 shRNA (h) Lentiviral Particles: sc-97169-V.

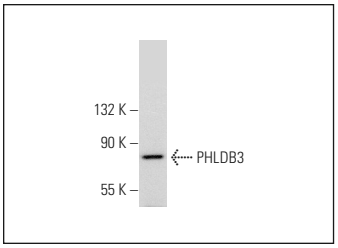
Molecular Weight of PHLDB3 isoforms: 72/32 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or human testis extract: sc-363781.

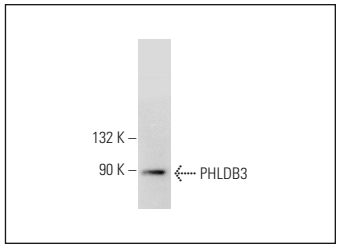
## RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA




PHLDB3 (N-20): sc-248246. Western blot analysis of PHLDB3 expression in Jurkat whole cell lysate.




PHLDB3 (N-20): sc-248246. Western blot analysis of PHLDB3 expression in human testis tissue extract.

## 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 or our catalog for detailed protocols and support products.