

PNLDC1 (P-16): sc-243835

BACKGROUND

PNLDC1 (poly(A)-specific ribonuclease (PARN)-like domain containing 1) is a 520 amino acid single-pass type IV membrane protein that belongs to the CAF1 family. Conserved in chimpanzee, canine, bovine, mouse, chicken and *Caenorhabditis elegans*, PNLDC1 participates in nucleic acid binding and exists as two alternatively spliced isoforms. PNLDC1 is encoded by a gene that maps to human chromosome 6q25.3, which is part of a candidate susceptibility locus for lung cancer at 6q25.3. PNLDC1 exhibits a high prevalence for methylation in lung cancer cell lines (83.3%), and is also methylated in normal human bronchial epithelial cells (HBEC) and peripheral blood mononuclear cells (PBMC). PNLDC1 is also a candidate breast-cancer-related gene based on DNA copy number loss in various breast cancer cell lines.

REFERENCES

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3. Tessema, M., et al. 2008. Promoter methylation of genes in and around the candidate lung cancer susceptibility locus 6q23-25. *Cancer Res.* 68: 1707-1714.
4. Saito, S., et al. 2009. High frequency of common DNA copy number abnormalities detected by bacterial artificial chromosome array comparative genomic hybridization in 24 breast cancer cell lines. *Hum. Cell* 22: 1-10.
5. Yoshida, T., et al. 2009. Association of gene polymorphisms with chronic kidney disease in Japanese individuals. *Int. J. Mol. Med.* 24: 539-547.
6. Oguri, M., et al. 2010. Assessment of a polymorphism of SDK1 with hypertension in Japanese Individuals. *Am. J. Hypertens.* 23: 70-77.
7. Yoshida, T., Ket al. 2010. Association of genetic variants with hemorrhagic stroke in Japanese individuals. *Int. J. Mol. Med.* 25: 649-656.

CHROMOSOMAL LOCATION

Genetic locus: PNLDC1 (human) mapping to 6q25.3; Pnlcd1 (mouse) mapping to 17 A1.

SOURCE

PNLDC1 (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of PNLDC1 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-243835 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.

APPLICATIONS

PNLDC1 (P-16) is recommended for detection of PNLDC1 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).

PNLDC1 (P-16) is also recommended for detection of PNLDC1 in additional species, including canine.

Suitable for use as control antibody for PNLDC1 siRNA (h): sc-95300, PNLDC1 siRNA (m): sc-152354, PNLDC1 shRNA Plasmid (h): sc-95300-SH, PNLDC1 shRNA Plasmid (m): sc-152354-SH, PNLDC1 shRNA (h) Lentiviral Particles: sc-95300-V and PNLDC1 shRNA (m) Lentiviral Particles: sc-152354-V.

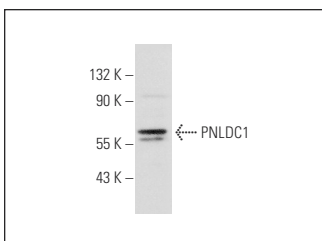
Molecular Weight of PNLDC1 isoforms: 60/61 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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



PNLDC1 (P-16): sc-243835. Western blot analysis of PNLDC1 expression in Hep G2 whole cell lysate.

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.