

PNLDC1 (N-16): sc-243834

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 6q23-25. 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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- 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.
- Yoshida, T., et al. 2009. Association of gene polymorphisms with chronic kidney disease in Japanese individuals. *Int. J. Mol. Med.* 24: 539-547.
- Oguri, M., et al. 2010. Assessment of a polymorphism of SDK1 with hypertension in Japanese Individuals. *Am. J. Hypertens.* 23: 70-77.
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CHROMOSOMAL LOCATION

Genetic locus: PNLDC1 (human) mapping to 6q25.3; PnlDC1 (mouse) mapping to 17 A1.

SOURCE

PNLDC1 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal 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-243834 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

PNLDC1 (N-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 (N-16) is also recommended for detection of PNLDC1 in additional species, including canine, bovine and porcine.

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.

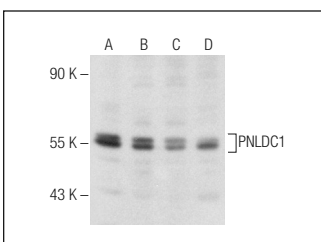
Molecular Weight of PNLDC1 isoforms: 60/61 kDa.

Positive Controls: LNCaP cell lysate: sc-2231, HeLa whole cell lysate: sc-2200 or Raji whole cell lysate.

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 (N-16): sc-243834. Western blot analysis of PNLDC1 expression in LNCaP (A), Ramos (B), Raji (C) and HeLa (D) whole cell lysates.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.