SANTA CRUZ BIOTECHNOLOGY, INC.

# LANPL (O-23): sc-133723

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*The Power to Question*

## BACKGROUND

The Anp32 family consists of 32 evolutionarily-conserved proteins and is included within the superfamily of leucine-rich repeat (LRR) proteins. Leucine-rich acidic nuclear protein-like (LANPL), also called ANP32E or Cpd1, is a member of the Anp32 family. LANPL is located in the cytoplasm of peripheral blood leukocytes, colon, small intestine, prostate, thymus, spleen, skeletal muscle, liver and kidney. It has also been detected in the nucleus, cytoplasm and membrane of multiple brain regions. Upon phosphorylation, LANPL co-localizes and inhibits protein phosphatase 2A (PP2A), but does not inhibit PP1. LANPL modulates cell signalling and transduction of gene expression to regulate the morphology and dynamics of the cytoskeleton, cell adhesion, neural development and cerebellar morphogenesis.

## REFERENCES


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3. Jiang, M., Ma, Y., Ni, X., Cao, G., Ji, C., Cheng, H., Tang, R., Xie, Y. and Mao, Y. 2002. Molecular cloning and characterization of a novel human gene (ANP32E alias LANPL) from human fetal brain. Cytogenet. Genome Res. 97: 68-71.
4. Santa-Coloma,T.A. 2004. Anp32e (Cpd1) and related protein phosphatase 2 inhibitors. Cerebellum 2: 310-320.
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6. Costanzo, R.V., Vilá-Ortíz, G.J., Perandones, C., Carminatti, H., Matilla, A. and Radrizzani, M. 2006. ANP32E/Cpd1 regulates protein phosphatase 2A activity at synapses during synaptogenesis. Eur. J. Neurosci. 23: 309-324.
7. de Chiara, C., Kelly, G., Frenkiel, T.A. and Pastore, A. 2007. NMR assignment of the Leucine-rich repeat domain of LANP/ANP32A. J. Biomol. NMR 38: 177.


## CHROMOSOMAL LOCATION

Genetic locus: ANP32E (human) mapping to 1q21.2.

## SOURCE

LANPL (O-23) is an affinity purified rabbit polyclonal antibody raised against synthetic LANPL peptide of human origin.

## PRODUCT

Each vial contains 50 µg IgG in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## RESEARCH USE

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

## APPLICATIONS

LANPL (O-23) is recommended for detection of LANPL of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 LANPL siRNA (h): sc-75409, LANPL shRNA Plasmid (h): sc-75409-SH and LANPL shRNA (h) Lentiviral Particles: sc-75409-V.

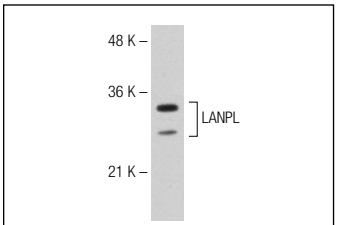
Molecular Weight of LANPL: 34 kDa.

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

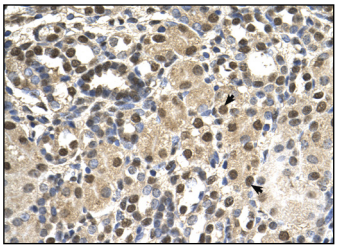
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA




LANPL (O-23): sc-133723. Western blot analysis of LANPL expression in Hep G2 whole cell lysate.



LANPL (O-23): sc-133723. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human kidney tissue showing nuclear and cytoplasmic localization.

## STORAGE

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