# SANTA CRUZ BIOTECHNOLOGY, INC.

# LNX3 (P-13): sc-99509



# BACKGROUND

The eukaryotic PDZ domain is a multifunctional protein-protein interacting motif that is found in a variety of proteins and is involved in both the clustering of signaling molecules and the organization of protein networks. LNX3 (ligand of Numb protein X 3), also known as PDZRN3 (PDZ domain containing ring finger 3) or SEMCAP3 (semaphorin cytoplasmic domain-associated protein 3), is a 1,066 amino acid protein that contains one TRAF-type zinc finger, one RING-type zinc finger and two PDZ domains. Expressed in a variety of tissues, LNX3 interacts with neuroligin 1 and ephrin-B2 and may exhibit tumor suppressive activity in ovarian serous papillary tumors. Multiple isoforms of LNX3 exist due to alternative splicing events.

#### REFERENCES

- Kikuno, R., Nagase, T., Ishikawa, K., Hirosawa, M., Miyajima, N., Tanaka, A., Kotani, H., Nomura, N. and Ohara, O. 1999. Prediction of the coding sequences of unidentified human genes. XIV. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. DNA Res. 6: 197-205.
- Santin, A.D., Zhan, F., Bellone, S., Palmieri, M., Cane, S., Bignotti, E., Anfossi, S., Gokden, M., Dunn, D., Roman, J.J., O'Brien, T.J., Tian, E., Cannon, M.J., Shaughnessy, J. and Pecorelli, S. 2004. Gene expression profiles in primary ovarian serous papillary tumors and normal ovarian epithelium: identification of candidate molecular markers for ovarian cancer diagnosis and therapy. Int. J. Cancer 112: 14-25.
- 3. Katoh, M. and Katoh, M. 2004. Identification and characterization of PDZRN3 and PDZRN4 genes in silico. Int. J. Mol. Med. 13: 607-613.
- Meyer, G., Varoqueaux, F., Neeb, A., Oschlies, M. and Brose, N. 2004. The complexity of PDZ domain-mediated interactions at glutamatergic synapses: a case study on neuroligin. Neuropharmacology 47: 724-733.
- 5. Online Mendelian Inheritance in Man, OMIM™. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 609729. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Ko, J.A., Kimura, Y., Matsuura, K., Yamamoto, H., Gondo, T. and Inui, M. 2006. PDZRN3 (LNX3, SEMCAP3) is required for the differentiation of C2C12 myoblasts into myotubes. J. Cell Sci. 119: 5106-5113.

#### CHROMOSOMAL LOCATION

Genetic locus: PDZRN3 (human) mapping to 3p13; Pdzrn3 (mouse) mapping to 6 D3.

#### **STORAGE**

Store at 4° C, \*\*D0 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.

## SOURCE

LNX3 (P-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of LNX3 of human origin.

### PRODUCT

Each vial contains 100  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-99509 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

LNX3 (P-13) is recommended for detection of LNX3 of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with LNX1, LNX2 or LNX4.

Suitable for use as control antibody for LNX3 siRNA (h): sc-78265, LNX3 siRNA (m): sc-146770, LNX3 shRNA Plasmid (h): sc-78265-SH, LNX3 shRNA Plasmid (m): sc-146770-SH, LNX3 shRNA (h) Lentiviral Particles: sc-78265-V and LNX3 shRNA (m) Lentiviral Particles: sc-146770-V.

Molecular Weight of LNX3: 120 kDa.

#### **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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: 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<sup>™</sup> Mounting Medium: sc-24941.

# **RESEARCH USE**

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