

# Pecanex (N-15): sc-67739

## BACKGROUND

Human Pecanex proteins are homologs of the *Drosophila* pecanex protein, a maternal-effect neurogenic protein that is involved in normal development of the fly nervous system. There are three human Pecanex homologs, designated Pecanex (also known as PCNX or PCNXL1), Pecanex 2 (also known as PCNXL2) and PCNXL3. Pecanex is a 2,341 amino acid multi-pass membrane protein that is believed to play a regulatory role in the testis during spermatogenesis. Heavily expressed during meiotic prophase, Pecanex exists as three isoforms produced by alternative splicing events.

## REFERENCES

1. Perrimon, N., Engstrom, L. and Mahowald, A.P. 1984. Developmental genetics of the 2E-F region of the *Drosophila* X chromosome: a region rich in "developmentally important" genes. *Genetics* 108: 559-572.
2. LaBonne, S.G. and Mahowald, A.P. 1985. Partial rescue of embryos from two maternal-effect neurogenic mutants by transplantation of wild-type ooplasm. *Dev. Biol.* 110: 264-267.
3. LaBonne, S.G., Sunitha, I. and Mahowald, A.P. 1989. Molecular genetics of pecanex, a maternal-effect neurogenic locus of *Drosophila melanogaster* that potentially encodes a large transmembrane protein. *Dev. Biol.* 136: 1-16.
4. LaBonne, S.G. and Furst, A. 1989. Differentiation *in vitro* of neural precursor cells from normal and Pecanex mutant *Drosophila* embryos. *J. Neurogenet.* 5: 99-104.
5. Gilbert, T.L., Haldeman, B.A., Mulvihill, E. and O'Hara, P.J. 1992. A mammalian homologue of a transcript from the *Drosophila* Pecanex locus. *J. Neurogenet.* 8: 181-187.
6. Geisinger, A., Alsheimer, M., Baier, A., Benavente, R. and Wettstein, R. 2005. The mammalian gene pecanex 1 is differentially expressed during spermatogenesis. *Biochim. Biophys. Acta* 1728: 34-43.

## CHROMOSOMAL LOCATION

Genetic locus: PCNX (human) mapping to 14q24.2; Pcnx (mouse) mapping to 12 D1.

## SOURCE

Pecanex (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Pecanex 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-67739 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

Pecanex (N-15) is recommended for detection of Pecanex-like protein 1 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).

Pecanex (N-15) is also recommended for detection of Pecanex-like protein 1 in additional species, including equine, canine and avian.

Suitable for use as control antibody for Pecanex siRNA (h): sc-62771, Pecanex siRNA (m): sc-62772, Pecanex shRNA Plasmid (h): sc-62771-SH, Pecanex shRNA Plasmid (m): sc-62772-SH, Pecanex shRNA (h) Lentiviral Particles: sc-62771-V and Pecanex shRNA (m) Lentiviral Particles: sc-62772-V.

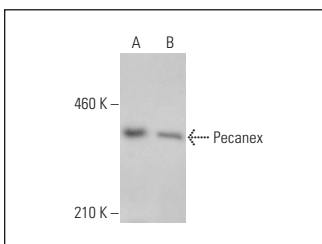
Molecular Weight of Pecanex: 259 kDa.

Positive Controls: Neuro-2A whole cell lysate: sc-364185 or HeLa whole cell lysate: sc-2200.

## 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



Pecanex (N-15): sc-67739. Western blot analysis of Pecanex expression in Neuro-2A (A) and HeLa (B) whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.