SANTA CRUZ BIOTECHNOLOGY, INC.

Pecanex (S-20): sc-67740

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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-67740 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 (S-20) 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), 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 (S-20) is also recommended for detection of Pecanex-like protein 1 in additional species, including equine, canine, bovine and porcine.

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.

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) 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.

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.