

# cadherin-22 (V-23): sc-133438

## BACKGROUND

The cadherins are a family of  $Ca^{2+}$ -dependent adhesion molecules that function to mediate cell-cell binding critical to the maintenance of structure and morphogenesis. Cadherins each contain a large extracellular domain at the N-terminus, which is characterized by a series of five homologous repeats, the most distal of which is thought to be responsible for binding specificity. Cadherin-22, also known as CDH22 or PB-cadherin (pituitary and brain cadherin), is an 828 amino acid single-pass type I membrane protein that, characteristic of cadherin proteins, contains 5 cadherin domains. Expressed predominately in brain, cadherin-22 functions as a  $Ca^{2+}$ -dependent cell adhesion protein that is thought to play an important role in tissue formation and morphogenesis, specifically in neural cells during the development and maintenance of brain tissue.

## REFERENCES

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2. Kremmidiotis, G., Baker, E., Crawford, J., Eyre, H.J., Nahmias, J. and Callen, D.F. 1998. Localization of human cadherin genes to chromosome regions exhibiting cancer-related loss of heterozygosity. *Genomics* 49: 467-471.
3. Kitajima, K., Koshimizu, U. and Nakamura, T. 1999. Expression of a novel type of classic cadherin, PB-cadherin in developing brain and limb buds. *Dev. Dyn.* 215: 206-214.
4. Wu, J., Jester, W.F., Laslett, A.L., Meinhardt, A. and Orth, J.M. 2003. Expression of a novel factor, short-type PB-cadherin, in Sertoli cells and spermatogenic stem cells of the neonatal rat testis. *J. Endocrinol.* 176: 381-391.
5. Wu, J., Jester, W.F. and Orth, J.M. 2005. Short-type PB-cadherin promotes survival of gonocytes and activates JAK-Stat signalling. *Dev. Biol.* 284: 437-450.
6. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 609920. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: CDH22 (human) mapping to 20q13.12; Cdh22 (mouse) mapping to 2 H3.

## SOURCE

cadherin-22 (V-23) is a Protein A purified rabbit polyclonal antibody raised against synthetic cadherin-22 peptide of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

cadherin-22 (V-23) is recommended for detection of cadherin-22 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for cadherin-22 siRNA (h): sc-72775, cadherin-22 siRNA (m): sc-141973, cadherin-22 shRNA Plasmid (h): sc-72775-SH, cadherin-22 shRNA Plasmid (m): sc-141973-SH, cadherin-22 shRNA (h) Lentiviral Particles: sc-72775-V and cadherin-22 shRNA (m) Lentiviral Particles: sc-141973-V.

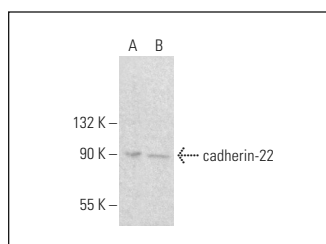
Molecular Weight of cadherin-22: 89 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, HEK293 whole cell lysate: sc-45136 or 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



cadherin-22 (V-23): sc-133438. Western blot analysis of cadherin-22 expression in HEK293 (A) and KNRK (B) 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.

## 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.