

cadherin-19 (H-67): sc-292145

BACKGROUND

The cadherins are a family of Ca²⁺-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-19, also known as CDH19, CDH7 or CDH7L2, is a 772 amino acid single-pass type I membrane protein that contains 5 cadherin domains. Expressed in a variety of tissues, cadherin-19 functions as a Ca²⁺-dependent cell-cell adhesion glycoprotein that is thought to be involved in the sorting of heterogeneous cell types. The gene encoding cadherin-19 maps to a cadherin cluster on human chromosome 18, a chromosome which houses over 300 protein-coding genes and contains nearly 76 million bases.

REFERENCES

1. Kremmidiotis, G., et al. 1998. Localization of human cadherin genes to chromosome regions exhibiting cancer-related loss of heterozygosity. *Genomics* 49: 467-471.
2. Shimoyama, Y., et al. 2000. Identification of three human type-II classic cadherins and frequent heterophilic interactions between different subclasses of type-II classic cadherins. *Biochem. J.* 349: 159-167.
3. Kools, P., et al. 2000. Characterization of three novel human cadherin genes (CDH7, CDH19, and CDH20) clustered on chromosome 18q22-q23 and with high homology to chicken cadherin-7. *Genomics* 68: 283-295.
4. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 603016. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Hajra, K.M., et al. 2002. Cadherin and catenin alterations in human cancer. *Genes Chromosomes Cancer* 34: 255-268.
6. Takahashi, M., et al. 2005. Identification of a novel type II classical cadherin: rat cadherin19 is expressed in the cranial ganglia and Schwann cell precursors during development. *Dev. Dyn.* 232: 200-208.

CHROMOSOMAL LOCATION

Genetic locus: CDH19 (human) mapping to 18q22.1; Cdh19 (mouse) mapping to 1 E2.1.

SOURCE

cadherin-19 (H-67) is a rabbit polyclonal antibody raised against amino acids 653-719 mapping near the C-terminus of cadherin-19 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.

STORAGE

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

APPLICATIONS

cadherin-19 (H-67) is recommended for detection of cadherin-19 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); non cross-reactive with other cadherin family members.

cadherin-19 (H-67) is also recommended for detection of cadherin-19 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for cadherin-19 siRNA (h): sc-72774, cadherin-19 siRNA (m): sc-141972, cadherin-19 shRNA Plasmid (h): sc-72774-SH, cadherin-19 shRNA Plasmid (m): sc-141972-SH, cadherin-19 shRNA (h) Lentiviral Particles: sc-72774-V and cadherin-19 shRNA (m) Lentiviral Particles: sc-141972-V.

Molecular Weight of cadherin-19: 87 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, MIA PaCa-2 cell lysate: sc-2285 or TE671 cell lysate: sc-2416.

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). 3) 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.

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.


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Try **cadherin-19 (D-1): sc-376990**, our highly recommended monoclonal alternative to cadherin-19 (H-67).