SANTA CRUZ BIOTECHNOLOGY, INC.

K-cadherin (N-19): sc-1503

The Power to Question

BACKGROUND

Cadherins comprise a family of Ca^{2+}-dependent adhesion molecules that function to mediate cell-cell binding critical to the maintenance of tissue structure and morphogenesis. The classical cadherins, E-, N- and P-cadherin, consist of large extracellular domains characterized by a series of five homologous NH_2 terminal repeats. The most distal of these cadherins is thought to be responsible for binding specificity, transmembrane domains and carboxy-terminal intracellular domains. The relatively short intracellular domains interact with a variety of cytoplasmic proteins, such as β-catenin, to regulate cadherin function. Members of this family of adhesion proteins include rat cadherin K (and its human homolog, cadherin-6), R-cadherin, B-cadherin, E/P cadherin and cadherin-5.

REFERENCES

1. Takeichi, M. 1988. The cadherins: cell-cell adhesion molecules controlling animal morphogenesis. Development 102: 639-655.
2. Hatta, M., et al. 1991. Genomic organization and chromosomal mapping of the mouse P-cadherin gene. Nucleic Acids Res. 19: 4437-4441.
3. Koch, P.J., et al. 1994. Desmosomal cadherins: another growing multigene family of adhesion molecules. Curr. Opin. Cell Biol. 6: 682-687.
4. Ranscht, B. 1994. Cadherins and catenins: interactions and functions in embryonic development. Curr. Opin. Cell Biol. 6: 740-746.
6. Hinck, L., et al. 1994. Dynamics of cadherin/catenin complex formation: novel protein interactions and pathways of complex assembly. J. Cell Biol. 125: 1327-1340.
5. Ayalon, O., et al. 1994. Spatial and temporal relationships between cadherins and PECAM-1 in cell-cell junctions of human endothelial cells. J. Cell Biol. 126: 247-258.

SOURCE

K-cadherin (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of K-cadherin 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-1503 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as PE conjugate for flow cytometry, sc-1503 PE, 100 tests.

Available as fluorescein conjugate for flow cytometry, sc-1503 FITC, 100 tests.

STORAGE

Store at 4° C, **DO 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.

APPLICATIONS

K-cadherin (N-19) is recommended for detection of K-cadherin, T1-cadherin and T2-cadherin of mouse, rat, human and Xenopus laevis 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), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

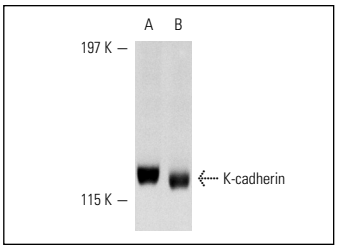
K-cadherin (N-19) is also recommended for detection of K-cadherin, T1-cadherin, and T2-cadherin in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for K-cadherin siRNA (h): sc-29382, K-cadherin siRNA (m): sc-35730, K-cadherin shRNA Plasmid (h): sc-29382-SH, K-cadherin shRNA Plasmid (m): sc-35730-SH, K-cadherin shRNA (h) Lentiviral Particles: sc-29382-V and K-cadherin shRNA (m) Lentiviral Particles: sc-35730-V.

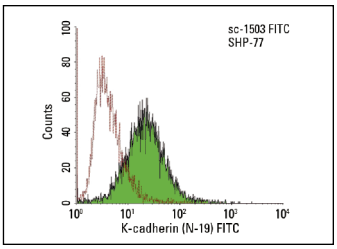
Molecular Weight of N-cadherin: 120/125 kDa

Positive Controls: F9 cell lysate: sc-2245, MDCK cell lysate: sc-2252 or KNRK whole cell lysate: sc-2214.

DATA



K-cadherin (N-19): sc-1503. Western blot analysis of K-cadherin expression in F9 (**A**) and MDCK (**B**) whole cell lysates.



K-cadherin (N-19) FITC sc-1503 FITC, FMC analysis of SHP-77 cells.Black line histogram represents the Isotype control, normal goat IgG sc-3887

SELECT PRODUCT CITATIONS

1. Wanner, I.B., et al. 2002. N-cadherin mediates axon-aligned process growth and cell-cell interaction in rat Schwann cells. J. Neurosci. 22: 4066-4079.
2. Wanner, I.B., et al. 2006. Role of N-cadherin in Schwann cell precursors of growing nerves. Glia 54: 439-459.

RESEARCH USE

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