SANTA CRUZ BIOTECHNOLOGY, INC.

R-cadherin (m): 293 Lysate: sc-179392

BACKGROUND

The cadherins are a family of Ca^{2+}-dependent adhesion molecules that function to mediate cell-cell binding critical to the maintenance of tissue structure and morphogenesis. Cadherins each contain a large extracellular domain at the amino terminus, which is characterized by a series of five homologous repeats, the most distal of which is thought to be responsible for binding specificity. The relatively short carboxy terminal, intracellular domain interacts with a variety of cytoplasmic proteins, including catenin β, to regulate cadherin function. R-cadherin (for retinal-cadherin, also designated cadherin-4), which was first identified in the retina of chicken, has been shown to be involved in the development of striated muscle and potentially epithelia in addition to its involvement in retinal development.

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. and Franke, W.W. 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.
5. 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.
6. 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.
7. Takeichi, M. 1995. Morphogenetic roles of classic cadherins. Curr. Opin. Cell Biol. 7: 619-627.
8. Rosenberg, P., et al. 1997. A potential role of R-cadherin in striated muscle formation. Dev. Biol. 187: 55-70.

CHROMOSOMAL LOCATION

Genetic locus: Cdh4 (mouse) mapping to 2 H4.

PRODUCT

R-cadherin (m): 293 Lysate represents a lysate of mouse R-cadherin transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

R-cadherin (m): 293 Lysate is suitable as a Western Blotting positive control for mouse reactive R-cadherin antibodies. Recommended use: 10-20 µl per lane.

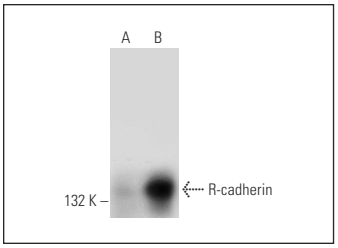
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

R-cadherin (D-9): sc-398306 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse R-cadherin expression in R-cadherin transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

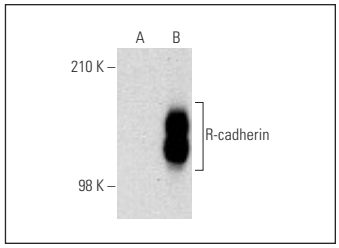
RECOMMENDED SECONDARY REAGENTS

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.

DATA



R-cadherin (D-9): sc-398306. Western blot analysis of R-cadherin expression in non-transfected: sc-110760 (**A**) and mouse R-cadherin transfected: sc-179392 (**B**) 293 whole cell lysates



R-cadherin (48): sc-136048. Western blot analysis of R-cadherin expression in non-transfected: sc-110760 (**A**) and mouse R-cadherin transfected: sc-179392 (**B**) 293 whole cell lysates.

RESEARCH USE

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