

T-cadherin (h): 293T Lysate: sc-159294

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. Cadherins each contain a large extracellular domain characterized by a series of five homologous repeats, the most distal of which is thought to be responsible for binding specificity. The relatively short intracellular domains interact with a variety of cytoplasmic proteins, such as β -catenin, to regulate cadherin function. T-cadherin (for truncated-cadherin), also designated heart-cadherin or cadherin-13) expression levels have been shown to be reduced in human breast cancers and carcinoma cell lines. Evidence suggests that decreased levels of T-cadherin indicate a progression in breast malignancies.

REFERENCES

1. Takeichi, M. 1988. The cadherins: cell-cell adhesion molecules controlling animal morphogenesis. *Development* 102: 639-655.
2. Hatta, M., Miyatani, S., Copeland, N.G., Gilbert, D.J., Jenkins, N.A. and Takeichi, M. 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., Nathke, I.S., Papkoff, J. and Nelson, W.J. 1994. Dynamics of cadherin/catenin complex formation: novel protein interactions and pathways of complex assembly. *J. Cell Biol.* 125: 1327-1340.
6. Ayalon, O., Sabanai, H., Lampugnani, M.G., Dejana, E. and Geiger, B. 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. Lee, S.W. 1996. H-cadherin, a novel cadherin with growth inhibitory functions and diminished expression in human breast cancer. *Nat. Med.* 2: 776-782.

CHROMOSOMAL LOCATION

Genetic locus: CDH13 (human) mapping to 16q23.3.

PRODUCT

T-cadherin (h): 293T Lysate represents a lysate of human T-cadherin transfected 293T 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.

RESEARCH USE

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

APPLICATIONS

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

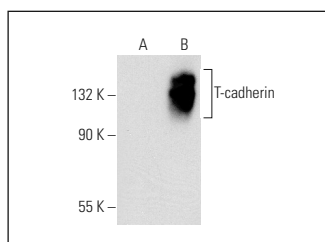
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

T-cadherin (E-9): sc-166875 is recommended as a positive control antibody for Western Blot analysis of enhanced human T-cadherin expression in T-cadherin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



T-cadherin (E-9): sc-166875. Western blot analysis of T-cadherin expression in non-transfected: sc-117752 (A) and human T-cadherin transfected: sc-159294 (B) 293T whole cell lysates.

PROTOCOLS

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