SANTA CRUZ BIOTECHNOLOGY, INC.

LI-cadherin (H-1): sc-393533

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. LI-cadherin (for liver-intestine-cadherin) expression is restricted to liver and intestine tissues and is specifically localized to the basolateral domain of hepatocytes and enterocytes.

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. 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.
4. Berndorff, D., et al. 1994. Liver-intestine cadherin: molecular cloning and characterization of a novel Ca^{2+}-dependent cell adhesion molecule expressed in liver and intestine. J. Cell Biol. 125: 1353-1369.
5. Koch, P.J. and Franke, W.W. 1994. Desmosomal cadherins: another growing multigene family of adhesion molecules. Curr. Opin. Cell Biol. 6: 682-687.
6. Ranscht, B. 1994. Cadherins and catenins: interactions and functions in embryonic development. Curr. Opin. Cell Biol. 6: 740-746.

CHROMOSOMAL LOCATION

Genetic locus: CDH17 (human) mapping to 8q22.1; Cdh17 (mouse) mapping to 4 A1.

SOURCE

LI-cadherin (H-1) is a mouse monoclonal antibody raised against amino acids 666-832 mapping at the C-terminus of LI-cadherin of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

LI-cadherin (H-1) is available conjugated to agarose (sc-393533 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-393533 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393533 PE), fluorescein (sc-393533 FITC), Alexa Fluor® 488 (sc-393533 AF488), Alexa Fluor® 546 (sc-393533 AF546), Alexa Fluor® 594 (sc-393533 AF594) or Alexa Fluor® 647 (sc-393533 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393533 AF680) or Alexa Fluor® 790 (sc-393533 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

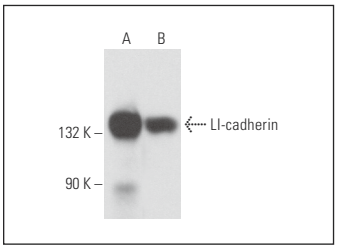
LI-cadherin (H-1) is recommended for detection of LI-cadherin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for LI-cadherin siRNA (h): sc-43013, LI-cadherin siRNA (m): sc-43014, LI-cadherin shRNA Plasmid (h): sc-43013-SH, LI-cadherin shRNA Plasmid (m): sc-43014-SH, LI-cadherin shRNA (h) Lentiviral Particles: sc-43013-V and LI-cadherin shRNA (m) Lentiviral Particles: sc-43014-V.

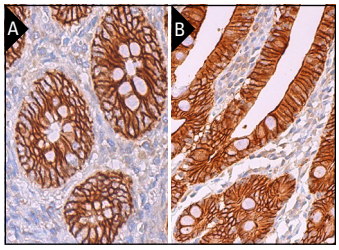
Molecular Weight of LI-cadherin: 120 kDa.

Positive Controls: rat colon tissue extract or human colon extract: sc-363757.

DATA



LI-cadherin (H-1): sc-393533. Western blot analysis of LI-cadherin expression in rat colon (**A**) and human colon (**B**) tissue extracts.



LI-cadherin (H-1): sc-393533. Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing membrane staining of glandular cells (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing membrane and cytoplasmic staining of glandular cells (**B**).

SELECT PRODUCT CITATIONS

1. Feng, Z., et al. 2022. Potent suppression of neuroendocrine tumors and gastrointestinal cancers by CDH17CAR T cells without toxicity to normal tissues. Nat. Cancer 3: 581-594.

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 for detailed protocols and support products.