SANTA CRUZ BIOTECHNOLOGY, INC.

LI-cadherin (C-17): sc-6978

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.

CHROMOSOMAL LOCATION

Genetic locus: CDH17 (human) mapping to 8q22.1.

SOURCE

LI-cadherin (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of LI-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-6978 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

LI-cadherin (C-17) is recommended for detection of LI-cadherin of 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), 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).

LI-cadherin (C-17) is also recommended for detection of LI-cadherin in additional species, including equine.

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

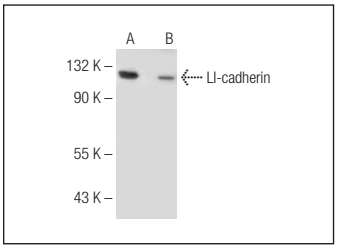
Molecular Weight of LI-cadherin: 120 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or COLO 205 whole cell lysate: sc-364177.

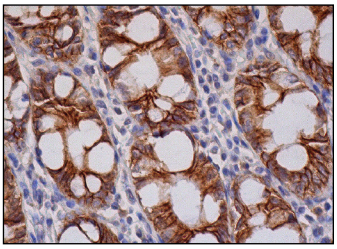
RECOMMENDED SECONDARY REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



LI-cadherin (C-17): sc-6978. Western blot analysis of LI-cadherin expression in Jurkat (**A**) and COLO 205 (**B**) whole cell lysates.



LI-cadherin (C-17): sc-6978. Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing membrane and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Takamura, M., et al. 2003. Expression of liver-intestine cadherin and its possible interaction with galectin-3 in ductal adenocarcinoma of the pancreas. Cancer Sci. 94: 425-430.
2. Ito, R., et al. 2005. Clinicopathological significant and prognostic influence of cadherin-17 expression in gastric cancer. Virchows Arch. 447: 717-722.
3. Motoshita, J., et al. 2006. Molecular characteristics of differentiated-type gastric carcinoma with distinct mucin phenotype: LI-cadherin is associated with intestinal phenotype. Pathol. Int. 56: 200-205.
4. Ezaki, T., et al. 2007. The homeodomain transcription factors Cdx1 and Cdx2 induce E-cadherin adhesion activity by reducing β- and p120-catenin tyrosine phosphorylation. Am. J. Physiol. Gastrointest. Liver Physiol. 293: 54-65.
5. Ge, J., et al. 2008. A clinicopathological study on the expression of cadherin-17 and caudal-related homeobox transcription factor (CDX2) in human gastric carcinoma. Clin. Oncol. 20: 275-283.