SANTA CRUZ BIOTECHNOLOGY, INC.

VE-cadherin-2 (M-142): sc-292330

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 β-catenin, to regulate cadherin function. VE-caderhin-2, also known as PCDH12 (protocadherin 12), VECAD2 or PCDH12, is a 1,184 amino acid single-pass type I membrane protein that is highly expressed in vascularized tissues, including heart and placenta. VE-caderhin-2 may play an important role in cell-cell interactions and may promote homotypic calcium-dependent aggregation and adhesion at intercellular junctions.

REFERENCES

1. Telo, P., Breviario, F., Huber, P., Panzeri, C. and Dejana, E. 1998. Identification of a novel cadherin (vascular endothelial cadherin-2) located at intercellular junctions in endothelial cells. J. Biol. Chem. 273: 17565-17572.

2. Ludwig, D., Lorenz, J., Dejana, E., Bohlen, P., Hicklin, D.J., Witte, L. and Pytowski, B. 2000. cDNA cloning, chromosomal mapping, and expression analysis of human VE-Cadherin-2. Mamm. Genome 11: 1030-1033.

CHROMOSOMAL LOCATION

Genetic locus: PCDH12 (human) mapping to 5q31.3; Pcdh12 (mouse) mapping to 18 B3.

SOURCE

VE-cadherin-2 (M-142) is a rabbit polyclonal antibody raised against amino acids 452-593 mapping within an internal region of VE-cadherin-2 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

VE-cadherin-2 (M-142) is recommended for detection of VE-cadherin-2 of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for VE-cadherin-2 siRNA (h): sc-76896, VE-cadherin-2 siRNA (m): sc-76897, VE-cadherin-2 shRNA Plasmid (h): sc-76896-SH, VE-cadherin-2 shRNA Plasmid (m): sc-76897-SH, VE-cadherin-2 shRNA (h) Lentiviral Particles: sc-76896-V and VE-cadherin-2 shRNA (m) Lentiviral Particles: sc-76897-V.

Molecular Weight of VE-cadherin-2: 150 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA

210 K —

120 K —
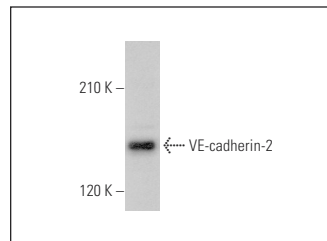
←···· VE-cadherin-2

VE-cadherin-2 (M-142): sc-292330. Western blot analysis of VE-cadherin-2 expression in MCF7 whole cell lysate.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **VE-cadherin-2 (F-4): sc-515467**, our highly recommended monoclonal alternative to VE-cadherin-2 (M-142).