

VE-cadherin-2 (S-17): sc-79820

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-cadherin-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-cadherin-2 may play an important role in cell-cell interactions and may promote homotypic calcium-dependent aggregation and adhesion at intercellular junctions.

CHROMOSOMAL LOCATION

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

SOURCE

VE-cadherin-2 (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of VE-cadherin-2 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-79820 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

VE-cadherin-2 (S-17) 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).

VE-cadherin-2 (S-17) is also recommended for detection of VE-cadherin-2 in additional species, including equine, canine, bovine and porcine.

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.

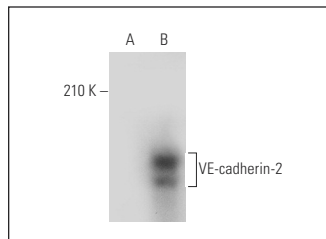
Molecular Weight of VE-cadherin-2: 150 kDa.

Positive Controls: VE-cadherin-2 (m): 293T Lysate: sc-375153 or mouse brain extract: sc-2253.

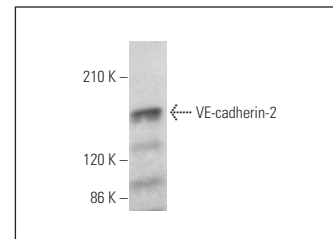
RECOMMENDED SECONDARY REAGENTS

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.

DATA



VE-cadherin-2 (S-17): sc-79820. Western blot analysis of VE-cadherin-2 expression in non-transfected: sc-117752 (A) and mouse VE-cadherin-2 transfected: sc-375153 (B) 293T whole cell lysates.



VE-cadherin-2 (S-17): sc-79820. Western blot analysis of VE-cadherin-2 expression in mouse brain tissue extract.

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.



Try **VE-cadherin-2 (F-4): sc-515467**, our highly recommended monoclonal alternative to VE-cadherin-2 (S-17).