

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

## BACKGROUND

The cadherins are a family of  $\text{Ca}^{2+}$ -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  $\beta$ -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  $\mu\text{g}$  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  $\mu\text{g}$  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  $\mu\text{g}$  per 100-500  $\mu\text{g}$  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.

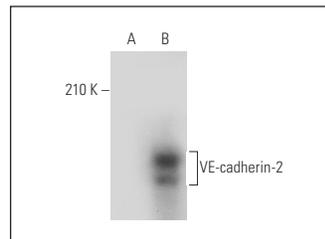
Molecular Weight of VE-cadherin-2: 150 kDa.

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

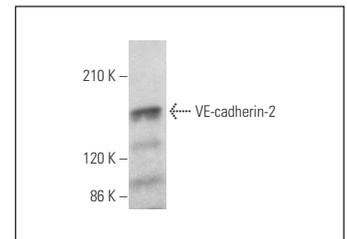
## RECOMMENDED SECONDARY REAGENTS

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](http://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).