# cadherin-20 (H-40): sc-68423



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 structure and morphogenesis. Cadherins each contain a large extracellular domain at the N-terminus which is characterized by a series of five homologous repeats, the most distal of which is thought to be responsible for binding specificity. cadherin-20, also known as protocadherin  $\gamma$  B4, is a member of the protocadherin  $\gamma$  gene cluster. Expressed primarily in fibroblasts, cadherin-20 plays a critical role in neuronal cell-cell connections in the brain. Through its ability to mediate cell-cell adhesion, cadherin-20 is thought to help the body respond to injury by regulating post-traumatic wound healing.

## **REFERENCES**

- 1. Kools, P., et al. 2000. Characterization of three novel human cadherin genes (CDH7, CDH19, and CDH20) clustered on chromosome 18q22-q23 and with high homology to chicken cadherin-7. Genomics 68: 283-295.
- 2. Wang, X., et al. 2002. Molecular mechanisms governing Pcdh-γ gene expression: evidence for a multiple promoter and *cis*-alternative splicing model. Genes Dev. 16: 1890-1905.

#### CHROMOSOMAL LOCATION

Genetic locus: PCDHGB4 (human) mapping to 5q31.3; Pcdhgb4 (mouse) mapping to 18 B3.

### SOURCE

cadherin-20 (H-40) is a rabbit polyclonal antibody raised against amino acids 341-380 mapping within an extracellular domain of cadherin-20 of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### **APPLICATIONS**

cadherin-20 (H-40) is recommended for detection of cadherin-20 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

cadherin-20 (H-40) is also recommended for detection of cadherin-20 in additional species, including porcine.

Suitable for use as control antibody for cadherin-20 siRNA (h): sc-62052, cadherin-20 siRNA (m): sc-62053, cadherin-20 shRNA Plasmid (h): sc-62052-SH, cadherin-20 shRNA Plasmid (m): sc-62053-SH, cadherin-20 shRNA (h) Lentiviral Particles: sc-62052-V and cadherin-20 shRNA (m) Lentiviral Particles: sc-62053-V.

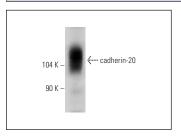
Molecular Weight of cadherin-20: 100 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

#### **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**



cadherin-20 (H-40): sc-68423. Western blot analysis of cadherin-20 expression in HeLa 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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com