# PCDH1 (N-12): sc-132025



The Power to Question

## **BACKGROUND**

Protocadherins are a subfamily of cadherins, a large group of related glycoproteins that mediate calcium-dependent cell-to-cell adhesion via a homophilic mechanism. Involved in a variety of functions, protocadherins help to regulate neural development and synapse formation. PCDH1 (protocadherin 1), also known as PC42 or PCDH42, is a 1,026 amino acid single-pass type I membrane protein that contains 7 cadherin domains and is a member of the protocadherin family. Localized to cell-cell and cell-matrix boundaries and expressed at high levels in brain and neuro-glial cells, PCDH1 is thought to be involved in cell adhesion and cell-cell interactions and may play a role in neuronal development. PCDH1 contains a C-terminal cytoplasmic region, an extracellular region and a transmembrane region, and is expressed as two isoforms due to alternative splicing events.

## **REFERENCES**

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## **CHROMOSOMAL LOCATION**

Genetic locus: PCDH1 (human) mapping to 5q31.3; Pcdh1 (mouse) mapping to 18 B3.

# SOURCE

PCDH1 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of PCDH1 of human origin.

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-132025 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

PCDH1 (N-12) is recommended for detection of PCDH1 isoforms 1 and 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other PCDH family members.

PCDH1 (N-12) is also recommended for detection of PCDH1 isoforms 1 and 2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PCDH1 siRNA (h): sc-91705, Pcdh1 siRNA (m): sc-152054, PCDH1 shRNA Plasmid (h): sc-91705-SH, Pcdh1 shRNA Plasmid (m): sc-152054-SH, PCDH1 shRNA (h) Lentiviral Particles: sc-91705-V and Pcdh1 shRNA (m) Lentiviral Particles: sc-152054-V.

Molecular Weight of PCDH1: 111 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201.

## **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) 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.

#### **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.



Try PCDH1 (B-11): sc-398263 or PCDH1 (S-6): sc-81816, our highly recommended monoclonal alternatives to PCDH1 (N-12).

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