# PCDH18 (S-19): sc-104574



The Power to Question

## **BACKGROUND**

Protocadherins are a large family of cadherin-like cell adhesion proteins that are involved in the establishment and maintenance of neuronal connections in the brain. There are three protocadherin gene clusters, designated  $\alpha,\,\beta$  and  $\gamma,$  all of which contain multiple tandemly arranged genes. PCDH18 (protocadherin 18), also known as PCDH68L, is a 1,135 amino acid single-pass type I cell membrane protein that contains 6 cadherin domains and a cytoplasmic tail that differs from classical cadherins. Expressed ubiquitously with highest expression in ovary and lung, PCDH18 interacts with Dab1 and functions as a potential calcium-dependent adhesion protein that may be involved in the establishment of cell-cell connections in the brain. Multiple isoforms of PCDH18 exist due to alternative splicing events.

## **REFERENCES**

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- 7. Wolverton, T. and Lalande, M. 2001. Identification and characterization of three members of a novel subclass of protocadherins. Genomics 76: 66-72.
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# **CHROMOSOMAL LOCATION**

Genetic locus: PCDH18 (human) mapping to 4q28.3; Pcdh18 (mouse) mapping to 3 C.

#### SOURCE

PCDH18 (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of PCDH18 of human origin.

## **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **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-104574 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

PCDH18 (S-19) is recommended for detection of PCDH18 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.

PCDH18 (S-19) is also recommended for detection of PCDH18 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for PCDH18 siRNA (h): sc-88876, Pcdh18 siRNA (m): sc-152058, PCDH18 shRNA Plasmid (h): sc-88876-SH, Pcdh18 shRNA Plasmid (m): sc-152058-SH, PCDH18 shRNA (h) Lentiviral Particles: sc-88876-V and Pcdh18 shRNA (m) Lentiviral Particles: sc-152058-V.

Molecular Weight of PCDH18: 125 kDa.

## **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.

## **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.

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