

# PCDH17 (S-20): sc-84556

## 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. PCDH17 (protocadherin 17), also known as PCDH68 or PCH68, is a 1,159 amino acid single-pass type I membrane protein that contains six cadherin domains. Expressed as multiple alternatively spliced isoforms, PCDH17 is thought to function as a calcium-dependent cell adhesion protein that may play a role in establishing cell-cell connections within brain tissue. The gene encoding PCDH17 maps to human chromosome 13, which houses over 400 genes, such as BRCA2 and RB1, and comprises nearly 4% of the human genome.

## REFERENCES

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3. Nollet, F., Kools, P. and van Roy, F. 2000. Phylogenetic analysis of the cadherin superfamily allows identification of six major subfamilies besides several solitary members. *J. Mol. Biol.* 299: 551-572.
4. Wu, Q. and Maniatis, T. 2000. Large exons encoding multiple ectodomains are a characteristic feature of protocadherin genes. *Proc. Natl. Acad. Sci. USA* 97: 3124-3129.
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## CHROMOSOMAL LOCATION

Genetic locus: PCDH17 (human) mapping to 13q21.1; Pcdh17 (mouse) mapping to 14 D3.

## SOURCE

PCDH17 (S-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an extracellular domain of PCDH17 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, ready P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PCDH17 (S-20) is recommended for detection of PCDH17 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.

PCDH17 (S-20) is also recommended for detection of PCDH17 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PCDH17 siRNA (h): sc-76081, Pcdh17 siRNA (m): sc-152057, PCDH17 shRNA Plasmid (h): sc-76081-SH, Pcdh17 shRNA Plasmid (m): sc-152057-SH, PCDH17 shRNA (h) Lentiviral Particles: sc-76081-V and Pcdh17 shRNA (m) Lentiviral Particles: sc-152057-V.

Molecular Weight of PCDH17: 126 kDa.

## 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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) 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<sup>™</sup> 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.