

# PCDH21 (H-199): sc-292112

## 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. PCDH21 (protocadherin 21), also known as PRCAD, is an 859 amino acid single-pass membrane protein that localizes to the outer segments of photoreceptor cells and contains 6 cadherin domains. Existing as multiple alternatively spliced isoforms, PCDH21 functions as a calcium-dependent cell adhesion protein that is thought to be required for the structural integrity of photoreceptor cells and may be involved in the formation and maintenance of neuronal networks.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: CDHR1 (human) mapping to 10q23.1; Cdhr1 (mouse) mapping to 14 B.

## SOURCE

PCDH21 (H-199) is a rabbit polyclonal antibody raised against amino acids 329-527 mapping within an internal region of PCDH21 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.

## APPLICATIONS

PCDH21 (H-199) is recommended for detection of PCDH21 of mouse, rat 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).

PCDH21 (H-199) is also recommended for detection of PCDH21 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PCDH21 siRNA (h): sc-90632, Pcdh21 siRNA (m): sc-152061, PCDH21 shRNA Plasmid (h): sc-90632-SH, Pcdh21 shRNA Plasmid (m): sc-152061-SH, PCDH21 shRNA (h) Lentiviral Particles: sc-90632-V and Pcdh21 shRNA (m) Lentiviral Particles: sc-152061-V.

Molecular Weight of PCDH21: 94/82 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™ 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.

## 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.