

# PCDHGC4 (H-65): sc-292759

## 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. PCDHGC4 (protocadherin  $\gamma$  subfamily C, 4) is a 938 amino acid single-pass type I membrane protein that localizes to the cell membrane and contains six cadherin domains. Expressed as two alternatively spliced isoforms, PCDHGC4 functions as a potential calcium-dependent cell adhesion protein that is thought to be involved in the establishment and maintenance of neuronal connections within the brain. The gene encoding PCDHGC4 maps to a protocadherin  $\gamma$  gene cluster which is localized to chromosome 5 and contains over 22 protocadherin genes.

## REFERENCES

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5. Wu, Q., Zhang, T., Cheng, J.F., Kim, Y., Grimwood, J., Schmutz, J., Dickson, M., Noonan, J.P., Zhang, M.Q., Myers, R.M. and Maniatis, T. 2001. Comparative DNA sequence analysis of mouse and human protocadherin gene clusters. *Genome Res.* 11: 389-404.
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## CHROMOSOMAL LOCATION

Genetic locus: PCDHGC4 (human) mapping to 5q31.3; Pcdhgc4 (mouse) mapping to 18 B3.

## SOURCE

PCDHGC4 (H-65) is a rabbit polyclonal antibody raised against amino acids 350-414 mapping within an internal region of PCDHGC4 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

PCDHGC4 (H-65) is recommended for detection of PCDHGC4 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).

PCDHGC4 (H-65) is also recommended for detection of PCDHGC4 in additional species, including equine and canine.

Suitable for use as control antibody for PCDHGC4 siRNA (h): sc-106954, Pcdhgc4 siRNA (m): sc-152103, PCDHGC4 shRNA Plasmid (h): sc-106954-SH, Pcdhgc4 shRNA Plasmid (m): sc-152103-SH, PCDHGC4 shRNA (h) Lentiviral Particles: sc-106954-V and Pcdhgc4 shRNA (m) Lentiviral Particles: sc-152103-V.

Molecular Weight of PCDHGC4: 101 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.