

# PCDHGB5 (L-12): sc-131309

## 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. The protocadherin  $\gamma$  cluster consists of three subfamilies (A, B and C). As a member of the  $\gamma$  subfamily B, PCDHGB5 (Protocadherin  $\gamma$  B5) is a 923 amino acid protein that is one of 22 proteins encoded by the protocadherin  $\gamma$  cluster. Typical of  $\gamma$  protocadherins, PCDHGB5 contains six cadherin motifs and is a type I transmembrane receptor expressed in the central nervous system. With localization to synapses, members of the  $\gamma$  cluster of protocadherins are essential for neuronal survival. There are two isoforms of PCDHGB5 that are produced as a result of alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: *Pcdhgb5* (mouse) mapping to 18 B3.

## SOURCE

PCDHGB5 (L-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PCDHGB5 of mouse 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-131309 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PCDHGB5 (L-12) is recommended for detection of PCDHGB5 of mouse and rat 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); non cross-reactive with other PCDH family members.

Suitable for use as control antibody for *Pcdhgb5* siRNA (m): sc-152099, *Pcdhgb5* shRNA Plasmid (m): sc-152099-SH and *Pcdhgb5* shRNA (m) Lentiviral Particles: sc-152099-V.

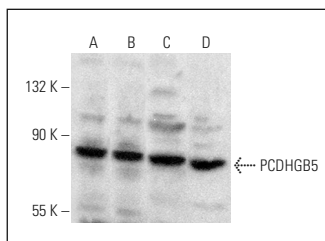
Molecular Weight of PCDHGB5: 100 kDa.

Positive Controls: mouse brain extract: sc-2253, NIH/3T3 whole cell lysate: sc-2210 or F9 cell lysate: sc-2245.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



PCDHGB5 (L-12): sc-131309. Western blot analysis of PCDHGB5 expression in mouse brain tissue extract (A) and NIH/3T3 (B), F9 (C) and c4 (D) whole cell lysates.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.