

PCDHGA12 (P-12): sc-109809

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 α , β and γ , all of which contain multiple tandemly arranged genes. The protocadherin γ cluster consists of three subfamilies (A, B and C). As a member of the γ subfamily A, PCDHGA12 (protocadherin γ A12), also known as cadherin-21 and fibroblast cadherin-3, is a 932 amino acid protein that is one of 22 proteins encoded by the protocadherin γ cluster. Typical of γ protocadherins, PCDHGA12 contains six cadherin motifs and is a type I transmembrane receptor expressed in the central nervous system. Ubiquitously expressed with lowest levels in spleen, PCDHGA12 is thought to be involved in cell signaling. There are three isoforms of PCDHGA12 that are produced as a result of alternative splicing events.

REFERENCES

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- Wu, Q., et al. 1999. A striking organization of a large family of human neural cadherin-like cell adhesion genes. *Cell* 97: 779-790.
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CHROMOSOMAL LOCATION

Genetic locus: PCDHGA12 (human) mapping to 5q31.3; Pcdhga12 (mouse) mapping to 18 B3.

SOURCE

PCDHGA12 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of PCDHGA12 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109809 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PCDHGA12 (P-12) is recommended for detection of PCDHGA12 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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 PCDHGA family members.

PCDHGA12 (P-12) is also recommended for detection of PCDHGA12 in additional species, including equine and porcine.

Suitable for use as control antibody for PCDHGA12 siRNA (h): sc-106766, Pcdhga12 siRNA (m): sc-152088, PCDHGA12 shRNA Plasmid (h): sc-106766-SH, Pcdhga12 shRNA Plasmid (m): sc-152088-SH, PCDHGA12 shRNA (h) Lentiviral Particles: sc-106766-V and Pcdhga12 shRNA (m) Lentiviral Particles: sc-152088-V.

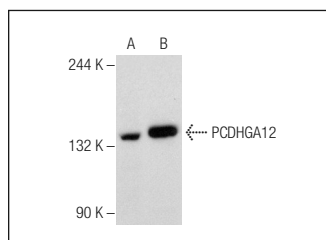
Molecular Weight of PCDHGA12: 101 kDa.

Positive Controls: PBL whole cell lysate or mouse prostate tissue extract.

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 Blotting 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



PCDHGA12 (P-12): sc-109809. Western blot analysis of PCDHGA12 expression in mouse PBL whole cell lysate (A) and mouse prostate tissue extract (B).

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.