

PCDHGB1 (S-13): sc-131298

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 sub-family B, PCDHGB1 (protocadherin γ B1) is a 927 amino acid protein that is one of 22 proteins encoded by the protocadherin γ cluster. Typical of γ protocadherins, PCDHGB1 contains six cadherin motifs and is a type I transmembrane receptor expressed in the central nervous system. With localization to synapses, members of the γ cluster of protocadherins are essential for neuronal survival. There are two isoforms of PCDHGB1 that are produced as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PCDHGB1 (human) mapping to 5q31.3; Pcdhgb1 (mouse) mapping to 18 B3.

SOURCE

PCDHGB1 (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of PCDHGB1 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-131298 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PCDHGB1 (S-13) is recommended for detection of PCDHGB1 isoforms 1 and 2 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 PCDH family members.

PCDHGB1 (S-13) is also recommended for detection of PCDHGB1 in additional species, including equine.

Suitable for use as control antibody for PCDHGB1 siRNA (h): sc-106888, Pcdhgb1 siRNA (m): sc-152097, PCDHGB1 shRNA Plasmid (h): sc-106888-SH, Pcdhgb1 shRNA Plasmid (m): sc-152097-SH, PCDHGB1 shRNA (h) Lentiviral Particles: sc-106888-V and Pcdhgb1 shRNA (m) Lentiviral Particles: sc-152097-V.

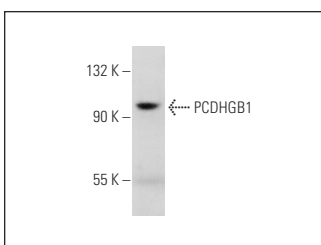
Molecular Weight of PCDHGB1: 100 kDa.

Positive Controls: mouse lung extract: sc-2390, RAW 264.7 whole cell lysate: sc-2211 or NIH/3T3 whole cell lysate: sc-2210.

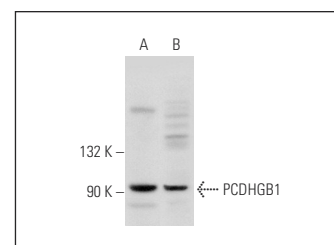
RECOMMENDED SECONDARY REAGENTS

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



PCDHGB1 (S-13): sc-131298. Western blot analysis of PCDHGB1 expression in mouse lung tissue extract.



PCDHGB1 (S-13): sc-131298. Western blot analysis of PCDHGB1 expression in RAW 264.7 (A) and NIH/3T3 (B) whole cell lysates.

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.