

PCDHGA5 (12C1): sc-134417

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 A, PCDHGA5 (protocadherin γ A5) is a 931 amino acid protein that is one of 22 proteins encoded by the protocadherin γ cluster. Typical of γ protocadherins, PCDHGA5 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 PCDHGA5 that are produced as a result of alternative splicing events.

REFERENCES

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5. Frank, M., et al. 2005. Differential expression of individual γ -protocadherins during mouse brain development. *Mol. Cell. Neurosci.* 29: 603-616.
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CHROMOSOMAL LOCATION

Genetic locus: PCDHGA5 (human) mapping to 5q31.3.

SOURCE

PCDHGA5 (12C1) is a mouse monoclonal antibody raised against recombinant PCDHGA5 protein of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

PCDHGA5 (12C1) is recommended for detection of PCDHGA5 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PCDHGA5 siRNA (h): sc-106838, PCDHGA5 shRNA Plasmid (h): sc-106838-SH and PCDHGA5 shRNA (h) Lentiviral Particles: sc-106838-V.

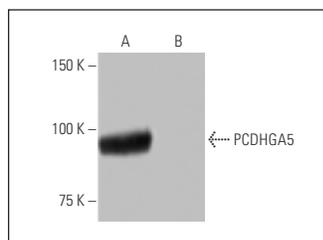
Molecular Weight of PCDHGA5: 101 kDa.

Positive Controls: human PCDHGA5 transfected 293T whole cell lysate.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



PCDHGA5 (12C1): sc-134417. Western blot analysis of PCDHGA5 expression in human PCDHGA5 transfected (A) and non-transfected (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.