PCDHGA2 (1A9): sc-81818



The Power to Question

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. PCDHGA2 (protocadherin γ A2) is a 932 amino acid protein that is one of 22 proteins encoded by the protocadherin γ cluster. The protocadherein γ cluster consists of three subfamilies (A, B and C) and PCDHGA2 is a member of the γ subfamily A. PCDHGA2 contains six cadherin motifs, and characteristic of γ protocadherins, PCDHGA2 is a type I transmembrane receptor expressed in the central nervous system and localizes to synapses. Members of the γ cluster of protocadherins are essential for neuronal survival.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PCDHGA2 (human) mapping to 5q31.3; Pcdhga2 (mouse) mapping to 18 B3.

SOURCE

PCDHGA2 (1A9) is a mouse monoclonal antibody raised against recombinant PCDHGA2 of human origin.

PRODUCT

Each vial contains 50 μ g IgG $_{2a}$ kappa light chain in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

PCDHGA2 (1A9) is recommended for detection of PCDHGA2 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PCDHGA2 siRNA (h): sc-106727, PCDHGA2 siRNA (m): sc-152089, PCDHGA2 shRNA Plasmid (h): sc-106727-SH, PCDHGA2 shRNA Plasmid (m): sc-152089-SH, PCDHGA2 shRNA (h) Lentiviral Particles: sc-106727-V and PCDHGA2 shRNA (m) Lentiviral Particles: sc-152089-V.

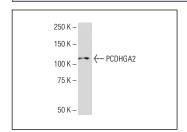
Molecular Weight of PCDHGA2: 101 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker^M 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).

DATA



PCDHGA2 (1A9): sc-81818. Western blot analysis of PCDHGA2 expression in RAW 264.7 whole cell lysate.

STORAGE

Store at 4° C, **D0 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 for detailed protocols and support products.