SANTA CRUZ BIOTECHNOLOGY, INC.

PCDHGA2 (G-13): sc-109385

SANTA CRUZ BIOTECHNOLOGY

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 α, β and γ, 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 (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of PCDHGA2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-109385 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PCDHGA2 (G-13) 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), 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.

PCDHGA2 (G-13) is also recommended for detection of PCDHGA2 in additional species, including equine, canine, bovine and porcine.

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 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) 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.

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.

PROTOCOLS

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