

PCDHA3 (D-14): sc-103767

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 (PCDH) gene clusters, designated α , β and γ , all of which contain multiple tandemly arranged genes. The protein products of PCDH- α genes interact with Integrin β 1 to promote cell adhesion and form oligomers with PCDH- γ proteins at specific membrane sites. PCDHA3 (protocadherin α -3) is a 950 amino acid single-pass transmembrane protein that contains six cadherin domains. PCDHA3 is a unique cadherin in that it likely functions in spermatogenesis and may also have a role in organizing germ cell-specific structures, such as the flagellum, acrosome and intercellular bridge. There are two isoforms of PCDHA13 that are produced as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Pcdha3 (mouse) mapping to 18; Pcdha3 (rat) mapping to 18p11.

SOURCE

PCDHA3 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PCDHA3 of mouse 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-103767 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PCDHA3 (D-14) is recommended for detection of PCDHA3 of mouse and rat 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).

Suitable for use as control antibody for PCDHA3 siRNA (m): sc-106376, PCDHA3 shRNA Plasmid (m): sc-106376-SH and PCDHA3 shRNA (m) Lentiviral Particles: sc-106376-V.

Molecular Weight of PCDHA3: 102 kDa.

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.