SANTA CRUZ BIOTECHNOLOGY, INC.

PCDHA4 (D-12): sc-103773

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Members of the cadherin-related neuronal receptor (CNR) family, including PCDHA4 (also known as CNR1) and PCDHA6 (also known as CNR2), comprise a novel subfamily within the cadherin superfamily of adhesion molecules. The cadherin-related neuronal receptor proteins form a complex with Fyn, a protein tyrosine kinase that is involved in building brain networks and determining patterns of behavior. Cadherin-related neuronal receptor 1 and 2 were discovered during a search for receptor molecules to the Fyn signaling pathway in the mammalian brain. Members of the cadherin superfamily are Ca^{2+}-dependent adhesion molecules that function to mediate cell-cell binding critical to the maintenance of tissue structure and morphogenesis. The PCDHA4 and PCDHA6 extracellular domains contain six cadherin repeats that mediate Ca^{2+}-dependent cell adhesion, while the cytoplasmic domains are not homologous with other cadherins.

REFERENCES

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5. Kai, N., Mishina, M. and Yagi, T. 1997. Molecular cloning of Fyn-associated molecules in the mouse central nervous system. J. Neurosci. Res. 48: 407-424.
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CHROMOSOMAL LOCATION

Genetic locus: PCDHA4 (human) mapping to 5q31.3.

SOURCE

PCDHA4 (D-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of PCDHA4 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-103773 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PCDHA4 (D-12) is recommended for detection of PCDHA4 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for PCDHA4 siRNA (h): sc-106377, PCDHA4 shRNA Plasmid (h): sc-106377-SH and PCDHA4 shRNA (h) Lentiviral Particles: sc-106377-V.

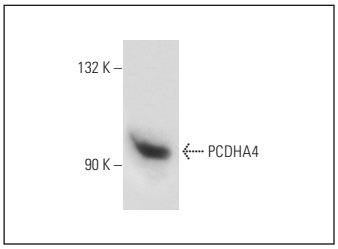
Molecular Weight of PCDHA4: 102 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237.

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



PCDHA4 (D-12): sc-103773. Western blot analysis of PCDHA4 expression in SK-N-MC whole cell lysate.

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.