



PCDHA6 (E-14): sc-103777

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 Ca²⁺-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 Ca²⁺-dependent cell adhesion, while the cytoplasmic domains are not homologous with other cadherins.

REFERENCES

1. Koch, P.J. and Franke, W.W. 1994. Desmosomal cadherins: another growing multigene family of adhesion molecules. *Curr. Opin. Cell Biol.* 6: 682-687.
2. Ranscht, B. 1994. Cadherins and catenins: interactions and functions in embryonic development. *Curr. Opin. Cell Biol.* 6: 740-746.
3. Ayalon, O., Sabanai, H., Lampugnani, M.G., Dejana, E. and Geiger, B. 1994. Spatial and temporal relationships between cadherins and PECAM-1 in cell-cell junctions of human endothelial cells. *J. Cell Biol.* 126: 247-258.
4. Takeichi, M. 1995. Morphogenetic roles of classic cadherins. *Curr. Opin. Cell Biol.* 7: 619-627.
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.
6. Kohmura, N., Senzaki, K., Hamada, S., Kai, N., Yasuda, R., Watanabe, M., Ishii, H., Yasuda, M., Mishina, M. and Yagi, T. 1998. Diversity revealed by a novel family of cadherins expressed in neurons at a synaptic complex. *Neuron* 20: 1137-1151.
7. Resh, M.D. 1998. Fyn, a Src family tyrosine kinase. *Int. J. Biochem. Cell Biol.* 30: 1159-1162.

CHROMOSOMAL LOCATION

Genetic locus: *Pcdha6* (mouse) mapping to 18 B2-B3.

SOURCE

PCDHA6 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PCDHA6 of mouse origin.

STORAGE

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

PROTOCOLS

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

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-103777 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PCDHA6 (E-14) is recommended for detection of PCDHA6 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 PCDHA6 siRNA (m): sc-106380, PCDHA6 shRNA Plasmid (m): sc-106380-SH and PCDHA6 shRNA (m) Lentiviral Particles: sc-106380-V.

Molecular Weight of PCDHA6: 103 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.

RESEARCH USE

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