

PCDH8 (JK-19): sc-81817

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. PCDH8 (protocadherin-8), also known as Arcadlin or PAPC, is a 1,070 amino acid single-pass type I membrane protein that contains 6 cadherin domains and belongs to the protocadherin family. Localized to the cell membrane and expressed specifically in fetal and adult brain, PCDH8 is thought to play a role in cell adhesion events in the central nervous system (CNS). PCDH8 is inactivated or silenced in breast cancer, suggesting a possible role in tumor suppression. Two isoforms of PCDH8 that differ in their cytoplasmic tails are expressed due to alternative splicing events.

REFERENCES

1. Strehl, S., et al. 1998. Characterization of two novel protocadherins (PCDH8 and PCDH9) localized on human chromosome 13 and mouse chromosome 14. *Genomics* 53: 81-89.
2. Yamagata, K., et al. 1999. Arcadlin is a neural activity-regulated cadherin involved in long term potentiation. *J. Biol. Chem.* 274: 19473-11979.
3. Yagi, T. and Takeichi, M. 2000. Cadherin superfamily genes: functions, genomic organization and neurologic diversity. *Genes Dev.* 14: 1169-1180.

CHROMOSOMAL LOCATION

Genetic locus: PCDH8 (human) mapping to 13q14.3.

SOURCE

PCDH8 (JK-19) is a mouse monoclonal antibody raised against recombinant PCDH8 of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

PCDH8 (JK-19) is recommended for detection of protocadherin 8 of 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 PCDH8 siRNA (h): sc-76085, PCDH8 shRNA Plasmid (h): sc-76085-SH and PCDH8 shRNA (h) Lentiviral Particles: sc-76085-V.

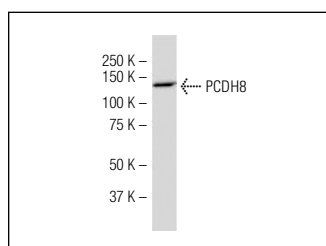
Molecular Weight of PCDH8: 110 kDa.

Positive Controls: COLO 320 HSR whole cell lysate or IMR-32 cell lysate: sc-2409.

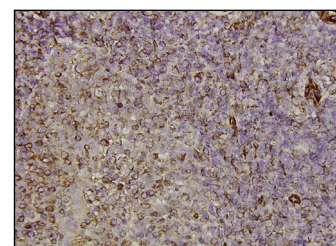
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



PCDH8 (JK-19): sc-81817. Western blot analysis of PCDH8 expression in COLO 320 HSR whole cell lysate.



PCDH8 (JK-19): sc-81817. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human tonsil tissue showing membrane localization.

SELECT PRODUCT CITATIONS

1. Zhang, D., et al. 2012. Frequent silencing of protocadherin 8 by promoter methylation, a candidate tumor suppressor for human gastric cancer. *Oncol. Rep.* 28: 1785-1791.

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 for detailed protocols and support products.