

PCDH18 Antibody

Catalog # ASC10870

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	<u>Q9HCL0</u>
Other Accession	<u>NP_061908, 14589929</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	126149
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	PCDH18 antibody can be used for detection of PCDH18 by Western blot at 2 ᠋g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 ᡅg/mL. For immunofluorescence start at 20 ᡅg/mL.

Additional Information

Gene ID Other Names	54510 Protocadherin-18, PCDH18, KIAA1562
Target/Specificity	PCDH18; At least three isoforms of PCDH18 are known to exist. This antibody is predicted to not cross-react with PCDH12.
Reconstitution & Storage	PCDH18 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	PCDH18 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PCDH18
Synonyms	KIAA1562
Function	Potential calcium-dependent cell-adhesion protein.
Cellular Location	Cell membrane; Single-pass type I membrane protein
Tissue Location	Expressed in all tissues, with highest expression in lung and ovary.

Background

PCDH18 Antibody: Protocadherins comprise the largest group within the cadherin family of calcium-dependent cell-cell adhesion molecules. Protocadherin 18 (PCDH18) was initially identified through screening of human and mouse ESTs using conserved cytoplasmic domain motifs. Tissue screening revealed PCDH18 broad expression in tissues such as brain, liver, heart, kidney, lung, and trachea. PCDH18 expression is also temporally and spatially regulated in the mouse embryonic brain and interacts with Disabled-1, an intracellular adapter protein involved in neuronal migration and cell positioning during mammalian brain development. PCDH18 was also found to be expressed in the developing zebrafish neural tube and central nervous system, lending support to the hypothesis that PCDH18 may play a role during brain development.

References

Frank M and Kemler R. Protocadherins. Curr. Opin. Cell Biol.2002; 14:557-62.

Wolverton T and Lalande M. Identification and characterization of three members of a novel subclass of protocadherins. Genomics2001; 76:66-72.

Homayouni R, Rice DS, and Curran T. Disabled-1 interacts with a novel developmentally regulated protocadherin. Biochem. Biophys. Res. Commun.2001; 289:539-47.

Kubota F, Murakami T, Tajika Y, et al. Expression of protocadherin 18 in the CNS and pharyngeal arches of zebrafish embryos. Int. J. Dev. Biol.2008; 52:397-405.

Images



Western blot analysis of PCDH18 in HepG2 cell lysate with PCDH18 antibody at 1 μ g/mL in (A) the absence and (B) the presence of blocking peptide.





Immunohistochemistry of PCDH18 in mouse brain tissue with PCDH18 antibody at 2.5 $\mu\text{g/mL}.$

Immunofluorescence of PCDH18 in Mouse Brain cells with PCDH18 antibody at 20 $\mu g/mL$.

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