

CD325 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51066

Product Information

Application WB Primary Accession P19022

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 99809

Additional Information

Gene ID 1000

Other Names Cadherin-2, CDw325, Neural cadherin, N-cadherin, CD325, CDH2, CDHN,

NCAD

Dilution WB~~1:1000

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name CDH2

Synonyms CDHN, NCAD

Function Calcium-dependent cell adhesion protein; preferentially mediates homotypic

cell-cell adhesion by dimerization with a CDH2 chain from another cell. Cadherins may thus contribute to the sorting of heterogeneous cell types. Acts as a regulator of neural stem cells quiescence by mediating anchorage of neural stem cells to ependymocytes in the adult subependymal zone: upon cleavage by MMP24, CDH2-mediated anchorage is affected, leading to modulate neural stem cell quiescence. Plays a role in cell-to-cell junction formation between pancreatic beta cells and neural crest stem (NCS) cells, promoting the formation of processes by NCS cells (By similarity). Required for proper neurite branching. Required for pre- and postsynaptic organization (By similarity). CDH2 may be involved in neuronal recognition mechanism. In hippocampal neurons, may regulate dendritic spine density.

Cellular Location Cell membrane; Single-pass type I membrane protein. Cell membrane,

sarcolemma {ECO:0000250|UniProtKB:P15116}. Cell junction. Cell surface

{ECO:0000250|UniProtKB:P15116}. Cell junction, desmosome

{ECO:0000250 | UniProtKB:P15116}. Cell junction, adherens junction {ECO:0000250 | UniProtKB:P15116}. Note=Colocalizes with TMEM65 at the intercalated disk in cardiomyocytes. Colocalizes with OBSCN at the intercalated disk and at sarcolemma in cardiomyocytes {ECO:0000250 | UniProtKB:P15116}

Background

Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. CDH2 may be involved in neuronal recognition mechanism. In hippocampal neurons, may regulate dendritic spine density (By similarity).

References

Reid R.A.,et al.Nucleic Acids Res. 18:5896-5896(1990). Reid R.A.,et al.Submitted (NOV-1990) to the EMBL/GenBank/DDBJ databases. Salomon D.,et al.J. Cell Sci. 102:7-17(1992). Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Walsh F.S.,et al.J. Neurochem. 55:805-812(1990).

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