

CDH2 / N Cadherin Antibody (clone 5D5)

Mouse Monoclonal Antibody Catalog # ALS13206

Specification

CDH2 / N Cadherin Antibody (clone 5D5) - Product Information

Application IF, IHC Primary Accession P19022

Reactivity Human, Mouse, Rat

Host Mouse
Clonality Monoclonal
Calculated MW 100kDa KDa

CDH2 / N Cadherin Antibody (clone 5D5) - Additional Information

Gene ID 1000

Other Names

Cadherin-2, CDw325, Neural cadherin, N-cadherin, CD325, CDH2, CDHN, NCAD

Target/Specificity

Human CDH2

Reconstitution & Storage

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

CDH2 / N Cadherin Antibody (clone 5D5) is for research use only and not for use in diagnostic or therapeutic procedures.

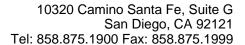
CDH2 / N Cadherin Antibody (clone 5D5) - Protein Information

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 {ECO:0000250|UniProtKB:P15116}; 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}

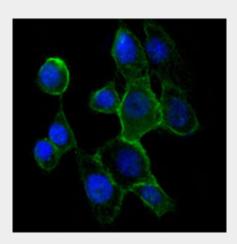
Volume 50 µl

CDH2 / N Cadherin Antibody (clone 5D5) - Protocols

Provided below are standard protocols that you may find useful for product applications.

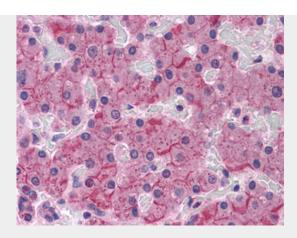
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

CDH2 / N Cadherin Antibody (clone 5D5) - Images



Immunofluorescence of A431 cells using CDH2 mouse monoclonal antibody (green).





Anti-CDH2 / N Cadherin antibody IHC of human liver.

CDH2 / N Cadherin Antibody (clone 5D5) - 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. 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. CDH2 may be involved in neuronal recognition mechanism. In hippocampal neurons, may regulate dendritic spine density (By similarity).

CDH2 / N Cadherin Antibody (clone 5D5) - 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). Ota T., et al. Nat. Genet. 36:40-45(2004). Nusbaum C., et al. Nature 437:551-555(2005).