

Anti-N-Cadherin / Cadherin-2 / CD325 (NCAD) Antibody
Mouse Monoclonal Antibody
Catalog # AH13071**Specification**

Anti-N-Cadherin / Cadherin-2 / CD325 (NCAD) Antibody - Product Information

Application	WB, IHC-P, IF, FC
Primary Accession	P19022
Other Accession	464829
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Calculated MW	99809

Anti-N-Cadherin / Cadherin-2 / CD325 (NCAD) Antibody - Additional Information**Gene ID** 1000**Other Names**

Cadherin-2 N cadherin neuronal; Cadherin-2 type 1; Cadherin-2; Calcium dependent adhesion protein neuronal; CD325; CDH2; CDHN; CDw325; N-Cadherin; NCAD

Application Note

WB~~1:1000
IHC-P~~N/A
IF~~1:50~200
FC~~1:10~50

Format

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

Precautions

Anti-N-Cadherin / Cadherin-2 / CD325 (NCAD) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-N-Cadherin / Cadherin-2 / CD325 (NCAD) Antibody - 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}

Anti-N-Cadherin / Cadherin-2 / CD325 (NCAD) Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-N-Cadherin / Cadherin-2 / CD325 (NCAD) Antibody - Images

Anti-N-Cadherin / Cadherin-2 / CD325 (NCAD) Antibody - Background

Recognizes a protein of ~140kDa, identified as N-Cadherin (NCAD), also known as CD325. NCAD is a member of the Cadherin superfamily, and consists of five extracellular repeats, a transmembrane domain and a cytoplasmic domain. CD325 deficient mice die at day 10 of gestation and embryos display major heart defects and malformed neural tubes and somites. Consistent with this, CD325 has been implicated in several aspects of cardiac development including the precardiac mesoderm, establishment of left-right symmetry and cardiac looping morphogenesis. Furthermore, CD325 is normally involved in inducing cell cycle arrest and its expression is frequently deregulated in cancer cells. Studies have linked N-cadherin to cancer metastasis by showing the aggressive tumor cells had preferentially turned on N-cadherin as opposed to E- or P-cadherin.