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Anti-N-Cadherin / Cadherin-2 / CD325 (NCAD) Antibody
Mouse Monoclonal Antibody
Catalog # AH13073

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<br \>IHC-P~~N/A<br \>IF~~1:50~200<br \>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.

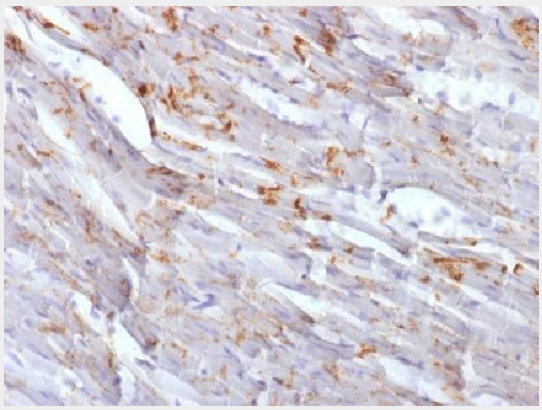
Cellular Location
Cell membrane; Single-pass type I membrane protein. Cell membrane, sarcolemma {ECO:0000250|UniProtKB:P15116}. Cell junction. Cell surface {ECO:0000250|UniProtKB:P15116}. Cell junction, desmosome {ECO:0000250|UniProtKB:P15116}. Cell junction, adherens junction {ECO:0000250|UniProtKB:P15116}. 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 Cytomety
- Cell Culture

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



Formalin-fixed, paraffin-embedded Mouse Heart stained with N-Cadherin Monoclonal Antibody (CDH2/1573).

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

Recognizes a protein of ~140kDa, identified as N-Cadherin (NCAD), also known as CD325. N-cadherin is a 140 kDa protein belonging to a family of transmembrane molecules that mediate calcium-dependent intercellular adhesion. Cadherins are involved in controlling morphogenetic movements during development and regulate cell surface adhesion through homotypic adhesion with the same cadherin species. Expression of N-cadherin has been reported on a variety of normal

tissues including neuronal, endothelial and muscle cells, and a subpopulation of early hematopoietic progenitor cells. Results aid in the classification of malignant non-carcinomatous neoplasms including mesotheliomas, chordomas, synovial sarcomas, malignant melanomas, epithelioid sarcomas, epithelioid angiosarcomas, clear cell sarcomas as well as serous and endometrioid tumors of the ovary have been demonstrated to be N-cadherin positive, whereas mucinous tumors are negative. Other N-cadherin-positive neoplasms include renal cell carcinomas and some variant breast tumors, including medullary breast carcinomas and sarcomatoid metaplastic breast carcinomas.