

Anti-Cadherin-2/N-Cadherin Antibody
Catalog # ABO10654**Specification**

Anti-Cadherin-2/N-Cadherin Antibody - Product Information

Application	WB, IHC
Primary Accession	P19022
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Cadherin-2(CDH2) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Cadherin-2/N-Cadherin Antibody - Additional Information

Gene ID 1000

Other Names

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

Calculated MW

99809 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization

Cell membrane; Single-pass type I membrane protein.

Protein Name

Cadherin-2

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human N Cadherin(701-714aa CQCDSNGDCTDVDR), identical to the related rat and mouse sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-Cadherin-2/N-Cadherin 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

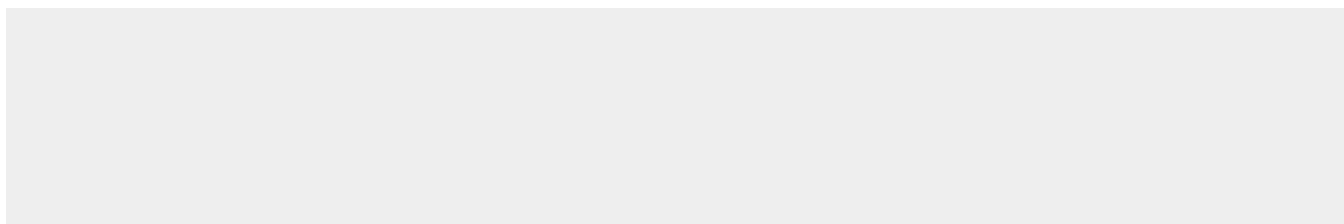
Cell membrane; Single-pass type I membrane protein. Cell membrane, sarcolemma {ECO:0000250|UniProtKB:P15116}. Cell junction. Cell surface {ECO:0000250|UniProtKB:P15116}. Cell junction, desmosome {ECO:0000250|UniProtKB:P15116}. Cell junction, adherens junction {ECO:0000250|UniProtKB:P15116}. Note=Colocalizes with TMEM65 at the intercalated disk in cardiomyocytes. Colocalizes with OBSCN at the intercalated disk and at sarcolemma in cardiomyocytes {ECO:0000250|UniProtKB:P15116}

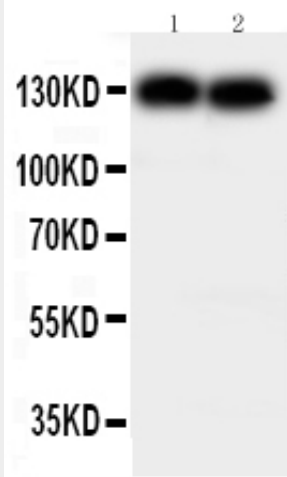
Anti-Cadherin-2/N-Cadherin Antibody - Protocols

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

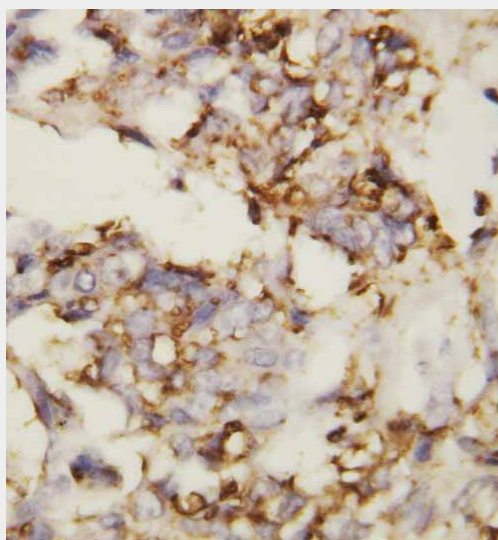
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Cadherin-2/N-Cadherin Antibody - Images





Anti-N Cadherin antibody, ABO10654, Western blotting Lane 1: MCF-7 Cell Lysate Lane 2: HELA Cell Lysate



Anti-N Cadherin antibody, ABO10654, IHC(P) IHC(P): Human Ovary Cancer Tissue

Anti-Cadherin-2/N-Cadherin Antibody - Background

N-cadherin(NCAD) is a member of the cadherin cell-cell adhesion receptor family that includes P-, E-, and R-cadherin and liver cell adhesion molecule(L-CAM). N-Cadherin,, also known as Cadherin-2, encodes a 907-amino acid protein that includes a 159-amino acid signal sequence. Human and mouse nucleotide sequences are 96% identical. Mouse Ncad gene consists of 16 exons dispersed over more than 200 kb of genomic DNA. Human N-cadherin gene contains 16 exons and its sequence is highly similar to both the mouse NCAD gene(including the large first and second introns) and other cadherin genes. N-cadherin is mapped to 18q11.2. Cadherin regulates dendritic spine morphogenesis.