

Anti-Cadherin-2/N-Cadherin Antibody
Catalog # ABO10453**Specification**

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

Application	WB
Primary Accession	Q9Z1Y3
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Format	Lyophilized

Description

Mouse IgG monoclonal antibody for N-Cadherin, cadherin 2, type 1, N-cadherin (neuronal) (CDH2) detection. Tested with WB, IHC-F in Human;mouse;rat;rabbit;chicken. No cross reactivity with other proteins.

Reconstitution

Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

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

Gene ID 83501

Other Names

Cadherin-2, Neural cadherin, N-cadherin, CD325, Cdh2

Calculated MW

99686 MW KDa

Application Details

Immunohistochemistry(Frozen Section), 4 µg/ml, Human, mouse, rat, rabbit, chicken,
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Western blot, 2 µg/ml, Human, mouse, rat, rabbit, chicken

Subcellular Localization

Cell membrane ; Single-pass type I membrane protein .

Tissue Specificity

In testis, expressed in Sertoli and germ cells. .

Protein Name

Cadherin-2

Contents

Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN3 as preservative.

Immunogen

Affinity purified chicken heart A-CAM.

Purification

Ascites

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**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 {ECO:0000250|UniProtKB:P15116}. Cell surface {ECO:0000250|UniProtKB:P15116}. Cell junction, desmosome. Cell junction, adherens junction {ECO:0000250|UniProtKB:P15116}. Note=Colocalizes with TMEM65 at the intercalated disk in cardiomyocytes (By similarity). Colocalizes with OBSCN at the intercalated disk and sarcolemma in cardiomyocytes (By similarity). {ECO:0000250|UniProtKB:P15116}

Tissue Location

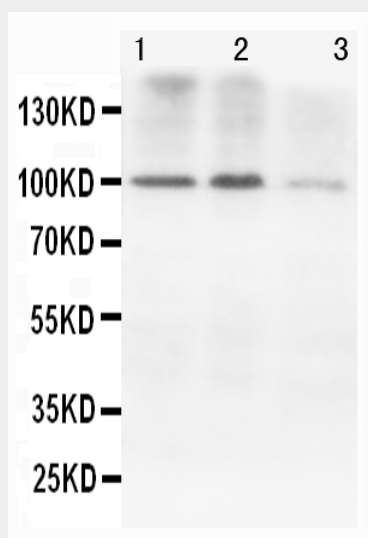
In testis, expressed in Sertoli and germ cells.

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 (monoclonal), ABO10453, Western blotting
Lane 1: Rat Brain Tissue Lysate
Lane 2: Rat Brain Tissue Lysate
Lane 3: Rat Medulla Oblongata Tissue Lysate

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.