

Anti-N-Cadherin-2 CDH2 CD325-Rabbit Monoclonal Antibody

Catalog # ABO14018

Product Information

Application	WB, IHC
Primary Accession	P19022
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-N-Cadherin-2 CDH2 CD325-Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	1000
Other Names	Cadherin-2, CDw325, Neural cadherin, N-cadherin, CD325, CDH2, CDHN, NCAD
Calculated MW	99809
Application Details	WB 1:500-1:2000 IHC 1:50-1:200
Subcellular Localization	Cell membrane; Single-pass type I membrane protein.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: FI-3
Immunogen	A synthesized peptide derived from human N Cadherin
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	CDH2
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Synonyms

CDHN, NCAD

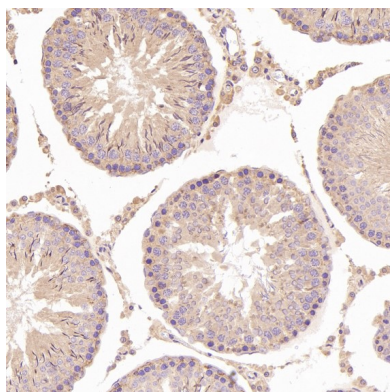
Function

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. May promote axon outgrowth and motor fiber repair via DSP-mediated recruitment to outgrowth tips (By similarity).

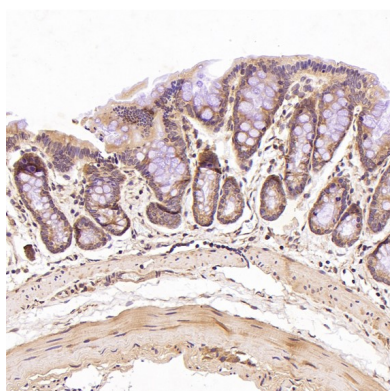
Cellular Location

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}. Cell projection, axon {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}

Images

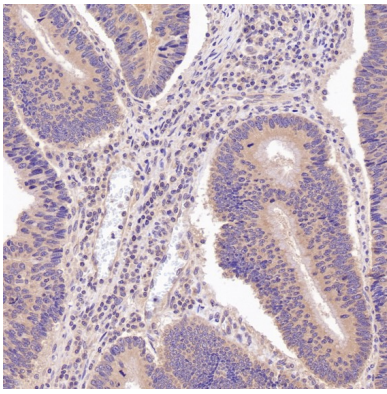


Immunohistochemical analysis of paraffin-embedded Rat testis, using the Antibody at 1:100 dilution.

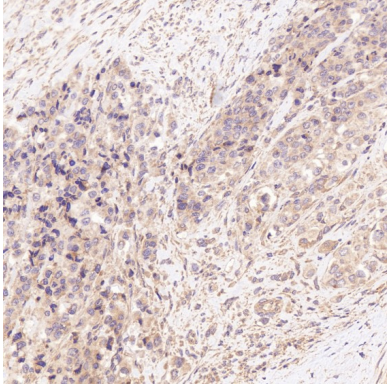


Immunohistochemical analysis of paraffin-embedded Rat stomach, using the Antibody at 1:100 dilution.

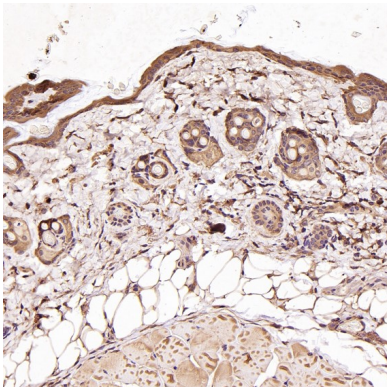
Immunohistochemical analysis of paraffin-embedded Human colon cancer, using the Antibody at 1:100 dilution.



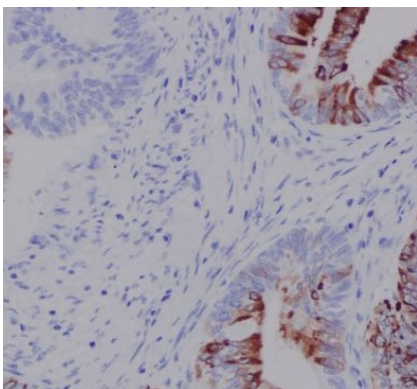
Immunohistochemical analysis of paraffin-embedded Human prostate cancer, using the Antibody at 1:100 dilution.



Immunohistochemical analysis of paraffin-embedded Mouse skin, using the Antibody at 1:100 dilution.



Immunohistochemical analysis of paraffin-embedded human colon, using N Cadherin Antibody.



Immunofluorescent analysis using the Antibody at 1:50 dilution.

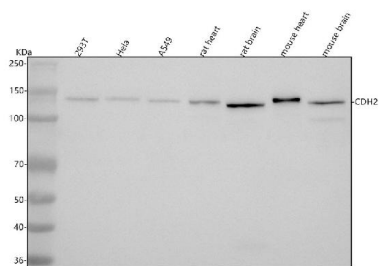
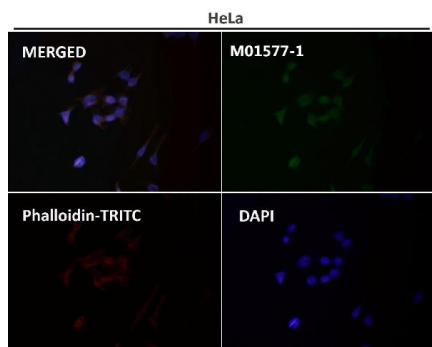


Figure 1. Western blot analysis of CDH2 using anti-CDH2 antibody (M01577-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours.

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human 293T whole cell lysates,

Lane 2: human Hela whole cell lysates,

Lane 3: human A549 whole cell lysates,

Lane 4: rat heart tissue lysates,

Lane 5: rat brain tissue lysates,

Lane 6: mouse heart tissue lysates,

Lane 7: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CDH2 antigen affinity purified monoclonal antibody (Catalog # M01577-1) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CDH2 at approximately 140 kDa. The expected band size for CDH2 is at 100 kDa.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.