

# N-cadherin Polyclonal Antibody

Catalog # AP71171

#### **Product Information**

**Application** WB, IHC-P, IF **Primary Accession** P19022

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW99809

#### **Additional Information**

**Gene ID** 1000

Other Names CDH2; CDHN; NCAD; Cadherin-2; CDw325; Neural cadherin; N-cadherin; CD

antigen CD325

**Dilution** WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.

Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other

applications. IHC-P~~N/A IF~~1:50~200

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

#### **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.

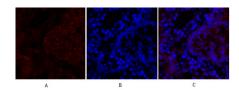
**Cellular Location** Cell membrane; Single-pass type I membrane protein. Cell membrane,

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}

## **Background**

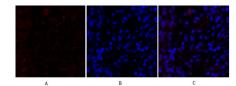
Calcium-dependent cell adhesion protein; preferentially mediates homotypic cell-cell adhesion by dimerization with a CDH2 chain from another cell. Cadherins may thus contribute to the sorting of heterogeneous cell types. Acts as a regulator of neural stem cells quiescence by mediating anchorage of neural 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. CDH2 may be involved in neuronal recognition mechanism. In hippocampal neurons, may regulate dendritic spine density.

### **Images**



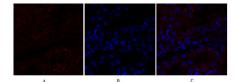
Immunofluorescence analysis of rat-lung tissue.

1,N-cadherin Polyclonal Antibody(red) was diluted at
1:200(4°C,overnight). 2, Cy3 labled Secondary antibody
was diluted at 1:300(room temperature, 50min).3, Picture
B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI.
Picture C: merge of A+B

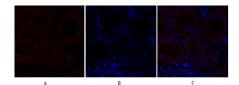


Immunofluorescence analysis of rat-lung tissue.

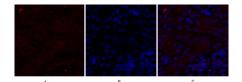
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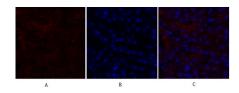
Immunofluorescence analysis of rat-kidney tissue. 1,N-cadherin Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



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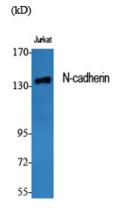


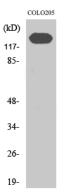
Immunofluorescence analysis of mouse-kidney tissue. 1,N-cadherin Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B











Immunofluorescence analysis of mouse-kidney tissue. 1,N-cadherin Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

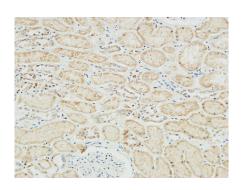
Immunohistochemical analysis of paraffin-embedded Human-Tonsil tissue. 1,N-cadherin Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

Immunohistochemical analysis of paraffin-embedded Human-liver tissue. 1,N-cadherin Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

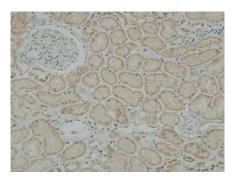
Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,N-cadherin Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

Western Blot analysis of various cells using N-cadherin Polyclonal Antibody diluted at 1:1000

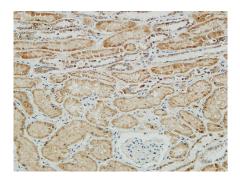
Western Blot analysis of K562 cells using N-cadherin Polyclonal Antibody diluted at 1:1000



Immunohistochemical analysis of paraffin-embedded Human kidney. 1, Antibody was diluted at 1:200(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunohistochemical analysis of paraffin-embedded Human kidney. 1, Antibody was diluted at 1:200(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



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