

**Mouse Anti-Cadherin-N/CDH2/CD325 [MD286]: MC0564, MC0564RTU7**

**Intended Use:** For Research Use Only

**Description:** Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; 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, Cadherin-N-mediated anchorage is affected, leading to modulate neural stem cell quiescence. Cadherin-N is a 140 kDa protein belonging to a family of transmembrane molecules that mediate calcium-dependent intercellular adhesion. Cadherin-N may be involved in neuronal recognition mechanism. In hippocampal neurons, may regulate dendritic spine density. Cadherins are involved in controlling morphogenetic movements during development and regulate cell surface adhesion through homotypic adhesion with the same cadherin species. N-cadherin's function is dependent on its association with the actin-cytoskeleton and is mediated through interactions between the C-terminal region of N-cadherin and the cytoplasmic catenin proteins. The stability of this association is regulated by phosphorylation and dephosphorylation of beta-catenin.

**Specifications:**

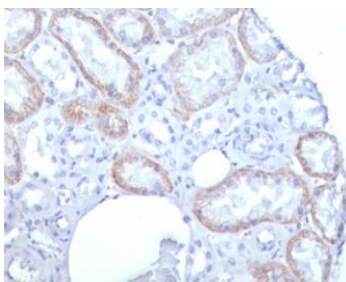
Clone: MD286  
 Source: Mouse  
 Isotype: IgG1k  
 Reactivity: Human  
 Immunogen: Recombinant fragment aa605-905 of human CDH2 protein  
 Localization: Membrane  
 Formulation: Purified antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC  
 Package:

Description	Catalog No.	Size
Cadherin-N/CDH2/CD325 Concentrated	MC0564	1 ml
Cadherin-N/CDH2/CD325 Prediluted	MC0564RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Colon cancer, lung cancer  
 Concentrated Dilution: 50-200  
 Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human kidney stained with anti-Cadherin-N using DAB

**References:**

1. Prognostic Prediction of Oral Squamous Cell Carcinoma by E-Cadherin and N-Cadherin Expression in Overall Cells in Tumor Nests or Tumor Cells at the Invasive Front. Ozaki-Honda Y, et al. Cancer Microenviron 10:87-94, 2017.
2. Targeted silencing of CXCR4 inhibits epithelial-mesenchymal transition in oral squamous cell carcinoma. Duan Y, et al. Oncol Lett 12:2055-2061, 2016.

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