

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product datasheet for TA336779

N Cadherin (CDH2) Mouse Monoclonal Antibody [Clone ID: 13A9]

Product data:

Product Type: Primary Antibodies

Clone Name: 13A9

Applications: IF, IHC, WB

Recommend Dilution: WB: 0.5 ug/ml, IF: 1:100, IHC: 1:50-1:200, IHC-P: 1:50-1:100, IP: 1:10-1:500

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Cytoplasmic domain of human N Cadherin [Swiss-Prot# P19022]

Formulation: PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -

20C long term. Avoid freeze-thaw cycles.

Concentration: 1 mg/ml

Purification: Protein G purified

Predicted Protein Size: 140 kDa **Gene Name:** cadherin 2

Database Link: NP 001783 Entrez Gene 12558 MouseEntrez Gene 83501 RatEntrez Gene 1000 Human





Background:

N-cadherin (neuronal cadherin; or CDH2/cadherin 2) is a calcium-binding, single pass transmembrane cell adhesion molecule (CAM) that was originally believed to be expressed only by neural cells, but subsequently demonstrated in endothelial cells and pericytes of microvessels, as well as in a variety of poorly differentiated carcinomas. N-cadherin is found in many different types of intercellular junctions, such as adherens junctions and pericyte-endothelial cell junctions, as well as being distributed on the cell surface in non-junctional complexes. It interacts with CDCP1 and forms a part of complex containing FGFR4, NCAM1, CDH2, PLCG1, FRS2, SRC, SHC1, GAP43 and CTTN. It also Interact with PCDH8 and TAOK2, and the interaction with PCDH8 leads to internalization through TAOK2/p38 MAPK pathway. N-cadherin promotes the formation of stable intercellular junctions and in addition to mediating cell adhesion, it has several other functions such as activation of FGFR, promotion of vascular smooth muscle and cancer cell migration as well as neurite outgrowth on astrocytes, and contrastingly, inhibits Schwann cell migration on astrocytes. Alongwith vimentin, N-cadherin has emerged as an important marker of EMT in embryonic development and carcinogenic progression.

Synonyms: CD325; CDHN; CDw325; NCAD

Note: This N Cadherin (13A9) antibody is useful for Immunofluorescence/Immunocytochemistry,

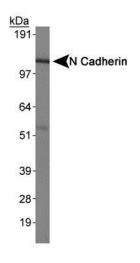
Immunoprecipitation, Immunohistochemistry on paraffin-embedded sections and Western

Blot, where a band is observed at ~140 kDa.

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

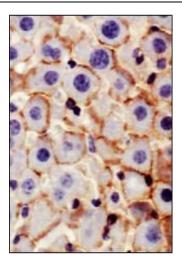
Protein Pathways: Arrhythmogenic right ventricular cardiomyopathy (ARVC), Cell adhesion molecules (CAMs)

Product images:

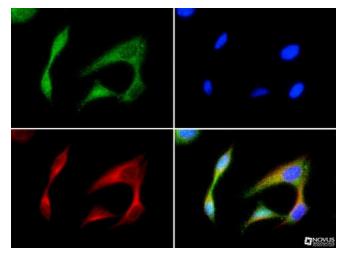


Western Blot: N Cadherin Antibody (13A9) TA336779 - Analysis of N Cadherin expression in HeLa whole cell lysate.





Immunohistochemistry: N Cadherin Antibody (13A9) TA336779 - IHC analysis of N Cadherin in mouse liver using DAB with hematoxylin counterstain.



Immunocytochemistry/Immunofluorescence: N Cadherin Antibody (13A9) TA336779 - N Cadherin antibody was tested in HeLa cells with FITC (green). Nuclei and alpha-tubulin were counterstained with Dapi (blue) and Dylight 550 (red).