OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
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:	FC, ICC, ICC/IF, IHC, IP, Simple Western, WB
Recommended Dilution:	Immunocytochemistry/ Immunofluorescence: 1:100, Simple Western: 1:50, Western Blot: 0.5 ug/ml, Immunohistochemistry: 1:50-1:200, Immunohistochemistry-Paraffin: 1:50-1:100, Immunoprecipitation: 1:10-1:500, Flow (Intracellular), Flow Cytometry, Immunocytochemistry
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:	lot specific
Purification:	Protein G purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	140 kDa
Gene Name:	cadherin 2
Database Link:	NP_001783 Entrez Gene 12558 MouseEntrez Gene 83501 RatEntrez Gene 1000 Human P19022

View online »

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.

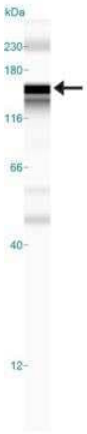
Synonyms: CD325; CDHN; CDw325; NCAD

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.

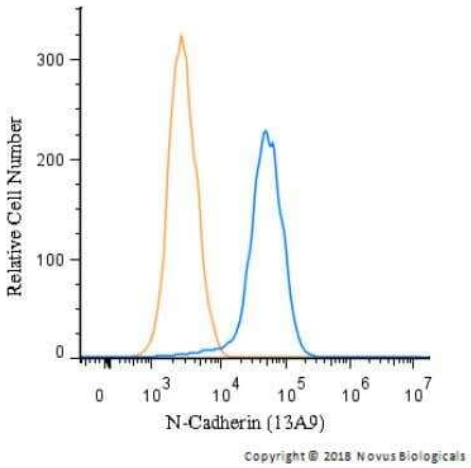
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

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

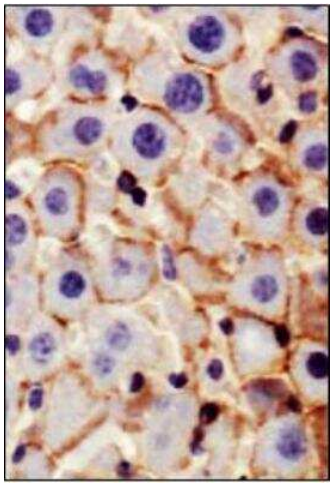
Product images:



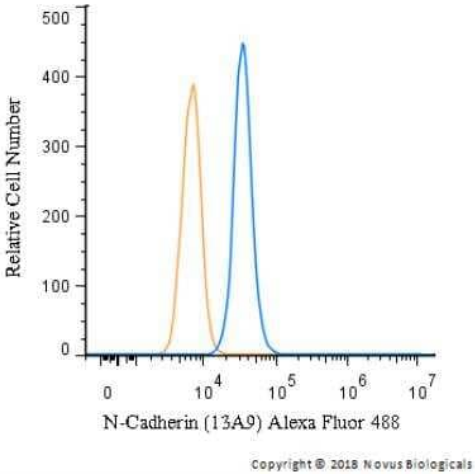
Simple Western: N-Cadherin Antibody (13A9) TA336779 - Simple Western lane view shows a specific band for N Cadherin in 1.0 mg/mL of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



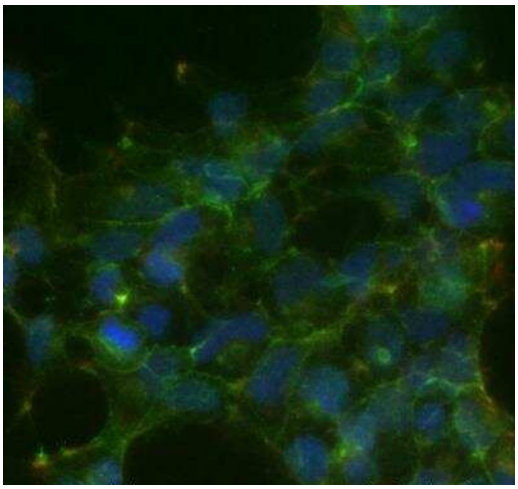
Flow (Intracellular): N-Cadherin Antibody (13A9) TA336779 - An intracellular stain was performed on HeLa with TA336779 and a matched isotype control. Cells were fixed with 4% PFA and then permeablized with 0.1% saponin. Cells were incubated in an antibody dilution of 1 ug/mL for 30 minutes at room temperature, followed by Mouse F(ab)2 IgG (H+L) PE-conjugated Antibody.



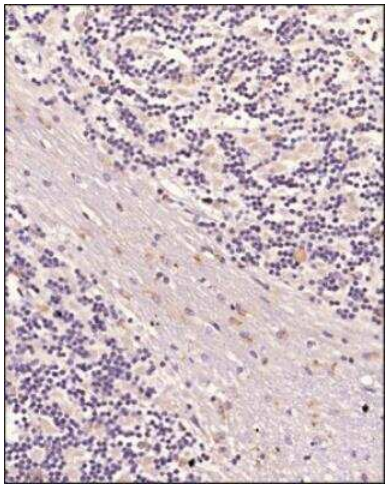
Immunohistochemistry: N-Cadherin Antibody (13A9) TA336779 - IHC analysis of N Cadherin in mouse liver using DAB with hematoxylin counterstain.



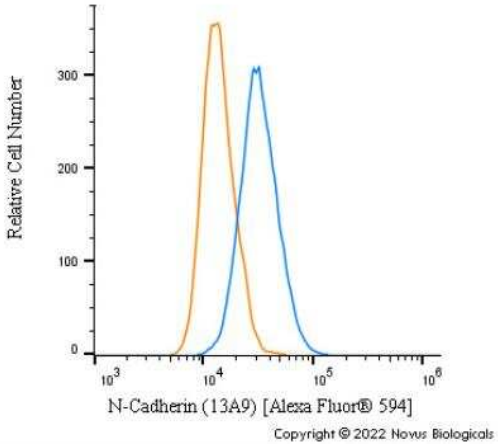
Flow Cytometry: N-Cadherin Antibody (13A9) TA336779 - An intracellular stain was performed on HeLa cells with TA336779AF488 and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 10 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 488.



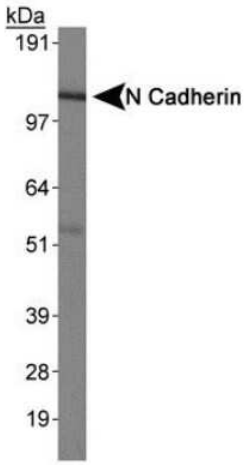
Immunocytochemistry/Immunofluorescence: N-Cadherin Antibody (13A9) TA336779 - HEK 293 cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.5% Triton X-100. The cells were incubated with anti- at 5 ug/mL overnight at 4C and detected with an anti-mouse DyLight 488 (Green) at a 1:500 dilution. Actin was detected with Phalloidin 568 (Red) at a 1:200 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



Immunohistochemistry-Paraffin: N-Cadherin Antibody (13A9) TA336779 - Analysis of a FFPE tissue section of human brain using 1:200 dilution of N-Cadherin antibody. The staining was developed using HRP labeled anti-mouse secondary antibody and DAB reagent, and nuclei of cells were counter-stained with hematoxylin.



Flow Cytometry: N-Cadherin Antibody (13A9) TA336779 - An intracellular stain was performed on U-251 MG cells with N-Cadherin Antibody (13A9) TA336779AF594 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 594.



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