

ARG23870 anti-N Cadherin antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes N Cadherin
Tested Reactivity	Hu, Ms, Rat, Sheep
Predict Reactivity	Chimp, Chk
Tested Application	ELISA, FACS, ICC/IF, IHC-P, IP, WB
Specificity	The antibody detects a band at ~ 130 kDa in western blots of Human endothelial cells and Mouse brain tissue, and does not cross-react with E Cadherin.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	N Cadherin
Species	Human
Immunogen	Carrier protein coupled synthetic peptide corresponding to aa. 811-824 of Human N Cadherin.
Conjugation	Un-conjugated
Alternate Names	Neural cadherin; N-cadherin; CDw325; CDHN; CD antigen CD325; NCAD; Cadherin-2; CD325

Application Instructions

Application table	Application	Dilution
	ELISA	1:2000
	FACS	1:100
	ICC/IF	1:200
	IHC-P	1 µg/ml
	IP	1:100
	WB	1:1000
Application Note	WB: Antibody is suggested to be diluted in 5% skimmed milk/Tris buffer with 0.04% Tween20 and incubated for 1 hour at room temperature. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 130 kDa	

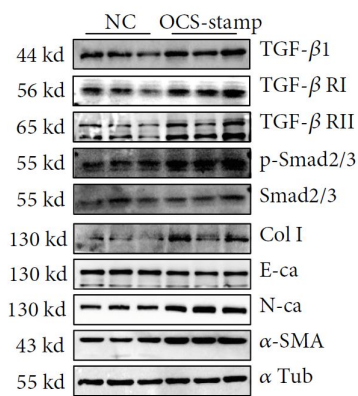
Properties

Form	Liquid
Purification	Affinity purification with immunogen.

Buffer	PBS, 0.05% Sodium azide, 50% Glycerol and 1 mg/ml BSA.
Preservative	0.05% Sodium azide.
Stabilizer	50% Glycerol and 1 mg/ml BSA
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

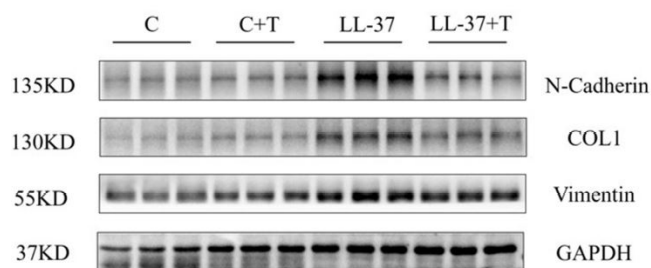
Gene Symbol	CDH2
Gene Full Name	cadherin 2, type 1, N-cadherin (neuronal)
Background	N Cadherin is a classical cadherin and member of the cadherin superfamily. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein is proteolytically processed to generate a calcium-dependent cell adhesion molecule and glycoprotein. This protein plays a role in the establishment of left-right asymmetry, development of the nervous system and the formation of cartilage and bone. [provided by RefSeq, Nov 2015]
Function	N Cadherin is a 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. [UniProt]
Highlight	<p>Related Antibody Duos and Panels: ARG30320 EMT Marker Antibody Panel</p> <p>Related products: N Cadherin antibodies; N Cadherin ELISA Kits; N Cadherin Duos / Panels; Anti-Rabbit IgG secondary antibodies;</p> <p>Related news: New EMT antibody panel is released</p>
Research Area	EMT Study antibody; Mesenchymal Markers antibody
Calculated Mw	100 kDa
PTM	<p>Cleaved by MMP24. Ectodomain cleavage leads to the generation of a soluble 90 kDa amino-terminal soluble fragment and a 45 kDa membrane-bound carboxy-terminal fragment 1 (CTF1), which is further cleaved by gamma-secretase into a 35 kDa. Cleavage in neural stem cells by MMP24 affects CDH2-mediated anchorage of neural stem cells to ependymocytes in the adult subependymal zone, leading to modulate neural stem cell quiescence (By similarity).</p> <p>May be phosphorylated by OBSCN. [UniProt]</p>
Cellular Localization	Cell membrane; Single-pass type I membrane protein. Cell membrane, sarcolemma. Cell junction. Cell surface. Note=Colocalizes with TMEM65 at the intercalated disk in cardiomyocytes. Colocalizes with OBSCN at the intercalated disk and at sarcolemma in cardiomyocytes. [UniProt]



ARG23870 anti-N Cadherin antibody WB image

Western blot: MLE-12 stained with ARG23870 anti-N Cadherin antibody.

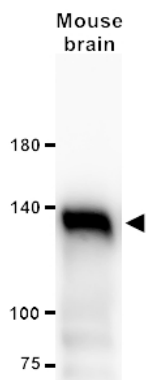
From Li T et al. Oxidative Medicine and Cellular Longevity- (2021), doi: [10.1155/2021/4158495](https://doi.org/10.1155/2021/4158495), Fig. 2B.



ARG23870 anti-N Cadherin antibody WB image

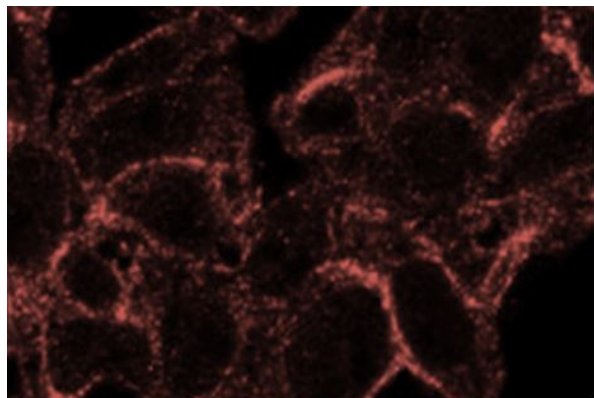
Western blot: Mouse skin stained with ARG23870 anti-N Cadherin antibody.

From Kang Y et al. Drug Design, Development and Therapy (2022), doi: [10.2147/DDDT.S393122](https://doi.org/10.2147/DDDT.S393122), Fig. 8.



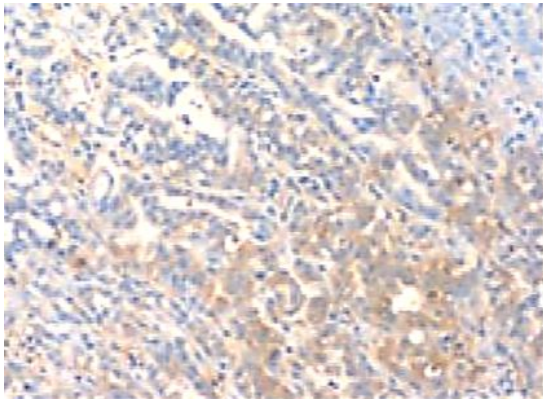
ARG23870 anti-N Cadherin antibody WB image

Western blot: 20 μ g of mouse brain stained with ARG23870 anti-N Cadherin antibody at 1:1000 dilution. (Observed MW: \sim 130 kDa)



ARG23870 anti-N Cadherin antibody ICC/IF image

Immunofluorescence: MCF7-ADR cells stained with ARG23870 anti-N Cadherin antibody.



ARG23870 anti-N Cadherin antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded human pancreatic adenocarcinoma stained with ARG23870 anti-N Cadherin antibody.

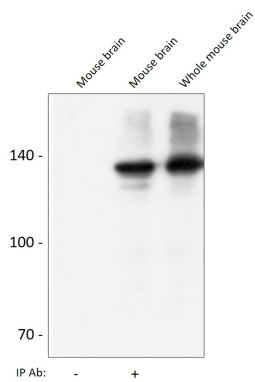
Human endothelial cells



- + Pervanadate

ARG23870 anti-N Cadherin antibody WB image

Western blot: Human endothelial cells untreated (left) or treated with Pervanadate (1 mM) for 30 min (right). The blots were stained with ARG23870 anti-N Cadherin antibody. (Observed MW: ~130 kDa)



ARG23870 anti-N Cadherin antibody IP image

Immunoprecipitation: Mouse brain lysate immunoprecipitated with no antibody (lane 1), ARG23870 anti-N Cadherin antibody (lane 2) and whole mouse brain lysate (lane 3). The blot was stained with anti-N Cadherin (Cytoplasmic) Mouse monoclonal antibody (lanes 1-3).