

**ARG23871**  
**anti-N Cadherin phospho (Tyr820) antibody**Package: 50 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes N Cadherin phospho (Tyr820)
Tested Reactivity	Hu, Ms
Predict Reactivity	Rat
Tested Application	ICC/IF, WB
Specificity	The antibody was cross-adsorbed to phospho-N Cadherin (Tyr860) and unphosphorylated N Cadherin (Tyr820) peptides before affinity purification using phospho N Cadherin (Tyr820) peptide. The purified antibody detects a ~130 kDa band corresponding to N Cadherin in western blots of serum-starved human endothelial cells treated with pervanadate, but is not detected in untreated cells.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	N Cadherin
Species	Human
Immunogen	Carrier protein coupled phosphospecific peptide around Tyr820 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
	ICC/IF	1:200
	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

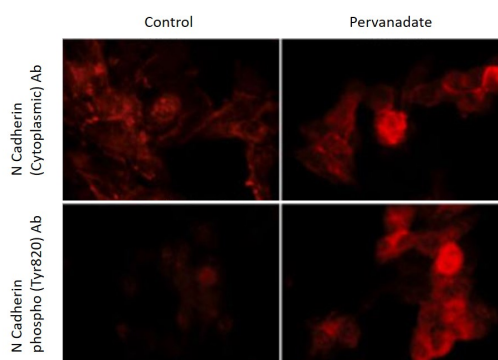
Form	Liquid
Purification	Affinity purification with phospho-specific peptide and the non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Buffer	PBS, 0.05% Sodium azide, 50% Glycerol and 1 mg/ml BSA.
Preservative	0.05% Sodium azide.

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]
Research Area	EMT Study antibody; Mesenchymal Markers antibody
Calculated Mw	100 kDa
PTM	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).  May be phosphorylated by OBSCN. [UniProt]
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]

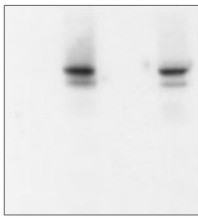
## Images



ARG23871 anti-N Cadherin phospho (Tyr820) antibody ICC/IF image

Immunofluorescence: Control (untreated) or Pervanadate-treated C2C12 cells stained with anti-N Cadherin (Cytoplasmic) antibody and ARG23871 anti-N Cadherin phospho (Tyr820) antibody.

Human endothelial cells



Pervanadate		Peptide treatment	
-	+	-	+
no peptide	no peptide	phospho-N Cadherin (Tyr820) peptide	phospho-N Cadherin (Tyr860) peptide

### ARG23871 anti-N Cadherin phospho (Tyr820) antibody WB image

Western blot: Human endothelial cells untreated (lane 1) or treated with Pervanadate (1 mM) for 30 min (lanes 2, 3 & 4). The blots were stained with ARG23871 anti-N Cadherin phospho (Tyr820) antibody (lane 1-4). The antibody was used in the presence of no peptide (lane 1 & 2), phospho-N Cadherin (Tyr820) peptide (lane 3), or phospho-N Cadherin (Tyr860) peptide (lane 4). (Observed MW: ~130 kDa)