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

Package: 50 µl
Store at: -20°C

## Summary

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| 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 |

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| 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.<br>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |
| Observed Size | ~ 130 kDa |

## Properties

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| 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. |

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| 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

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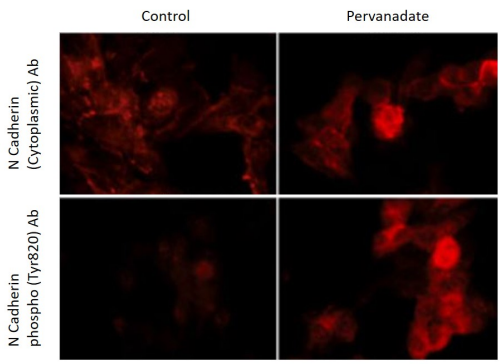
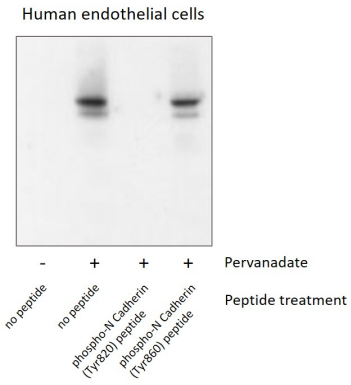
| Gene Symbol | CDH2 |
| Gene Full Name | cadherin 2, type 1, N-cadherin (neuronal) |
| Background | N Cadherin is a classical cadherin and member of the cadherin superfamily. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein is proteolytically 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).<br><br>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.




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)