

Anti-N-Cadherin (Tyr-820), Phosphospecific Antibody
Catalog # AN1660**Specification****Anti-N-Cadherin (Tyr-820), Phosphospecific Antibody - Product Information**

Application	WB
Primary Accession	P19022
Reactivity	Bovine
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	99809

Anti-N-Cadherin (Tyr-820), Phosphospecific Antibody - Additional Information

Gene ID 1000

Other Names

Cadherin-2, Neural-Cadherin, CD325

Target/Specificity

Cadherins are transmembrane glycoproteins vital in calcium-dependent cell-cell adhesion during tissue differentiation. Cadherins cluster to form foci of homophilic binding units. A key determinant to the strength of the cadherin-mediated adhesion may be by the juxtamembrane region in cadherins. This region induces clustering and also binds to the protein p120 catenin. The cytoplasmic region is highly conserved in sequence and has been shown experimentally to regulate the cell-cell binding function of the extracellular domain of E-cadherin, possibly through interaction with the cytoskeleton. Many cadherins are regulated by phosphorylation, including N-cadherin and E-cadherin. N-cadherin is phosphorylated by c-Src at Tyr-820, Tyr-853, Tyr-860, Tyr-884, and Tyr-886. Phosphorylation of Tyr-860 can disrupt cadherin binding to β -catenin. Since many of these tyrosine sites are conserved in the cadherin family, phosphorylation of these sites may be critical for cadherin function.

Dilution

WB~~1:1000

Format

Antigen Affinity Purified

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-N-Cadherin (Tyr-820), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

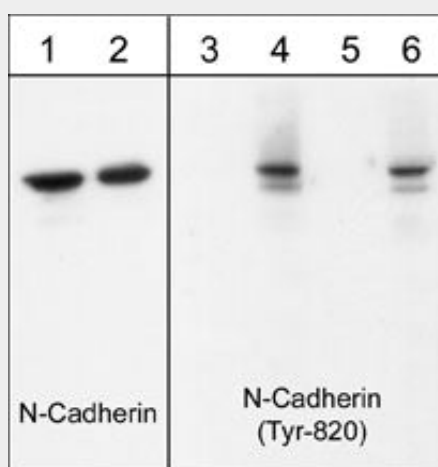
Blue Ice

Anti-N-Cadherin (Tyr-820), Phosphospecific Antibody - Protocols

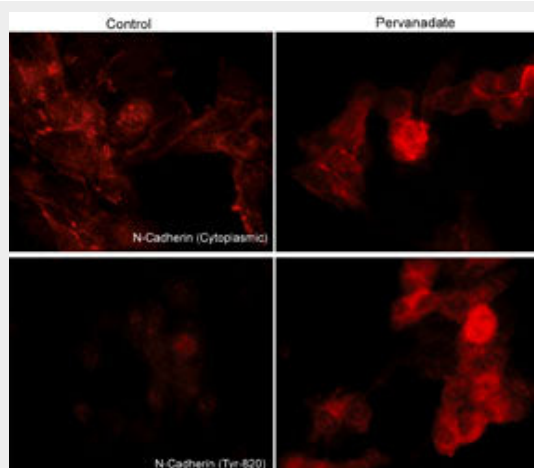
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-N-Cadherin (Tyr-820), Phosphospecific Antibody - Images



Western blot image of human endothelial cells untreated (lanes 1 & 3) or treated with pervanadate (1 mM) for 30 min (lanes 2, 4, 5 & 6). The blots were probed with anti-N-Cadherin (Cytoplasmic) (lanes 1 & 2) and anti-N-cadherin (Tyr-820) (lanes 3-6). The latter antibody was used in the presence of no peptide (lane 4), phospho-N-cadherin (Tyr-820) peptide (lane 5), or phospho-N-cadherin (Tyr-860) peptide (lane 6).



Immunocytochemical labeling of phosphorylated N-Cadherin in pervanadate-treated mouse C2C12. The cells were labeled with mouse monoclonal N-Cadherin (Cytoplasmic) and rabbit polyclonal N-Cadherin(Tyr-820) antibodies, then the antibodies were detected using appropriate secondary antibodies conjugated to Cy3.

Anti-N-Cadherin (Tyr-820), Phosphospecific Antibody - Background

Cadherins are transmembrane glycoproteins vital in calcium-dependent cell-cell adhesion during tissue differentiation. Cadherins cluster to form foci of homophilic binding units. A key determinant to the strength of the cadherin-mediated adhesion may be by the juxtamembrane region in cadherins. This region induces clustering and also binds to the protein p120 catenin. The cytoplasmic region is highly conserved in sequence and has been shown experimentally to regulate the cell-cell binding function of the extracellular domain of E-cadherin, possibly through interaction with the cytoskeleton. Many cadherins are regulated by phosphorylation, including N-cadherin and E-cadherin. N-cadherin is phosphorylated by c-Src at Tyr-820, Tyr-853, Tyr-860, Tyr-884, and Tyr-886. Phosphorylation of Tyr-860 can disrupt cadherin binding to β -catenin. Since many of these tyrosine sites are conserved in the cadherin family, phosphorylation of these sites may be critical for cadherin function.