10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Anti-N-Cadherin (Y860) [E-Cadherin (Y835)], Phosphospecific Antibody

Catalog # AN1663

Specification

Anti-N-Cadherin (Y860) [E-Cadherin (Y835)], Phosphospecific Antibody - Product Information

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

Anti-N-Cadherin (Y860) [E-Cadherin (Y835)], 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 (Y860) [E-Cadherin (Y835)], Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

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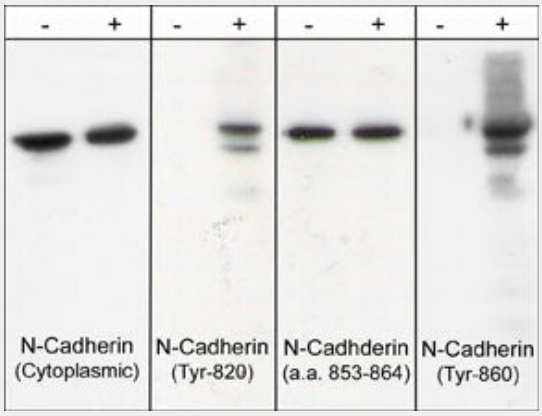
Anti-N-Cadherin (Y860) [E-Cadherin (Y835)], Phosphospecific Antibody - Protocols

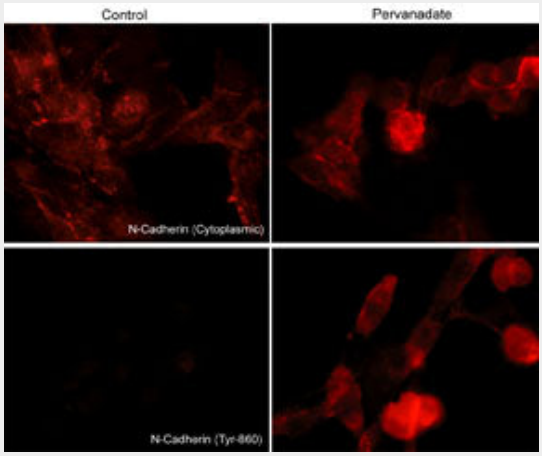
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-N-Cadherin (Y860) [E-Cadherin (Y835)], Phosphospecific Antibody - Images



Western blot image of human endothelial cells untreated or treated with pervanadate (1 mM) for 30 min. Blots were probed with anti-N-Cadherin (Cytoplasmic), anti-N-Cadherin (Tyr-820), anti-N-Cadherin (a.a. 853-864), and anti-N-Cadherin (Tyr-860).



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-860) antibodies, then the antibodies were detected using appropriate secondary antibodies conjugated to Cy3.

Anti-N-Cadherin (Y860) [E-Cadherin (Y835)], 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.