

N-Cadherin (a.a. 853-864)

[Conserved site: E-Cadherin (a.a. 828-839)]

Cat. #	CP1901
Host	Rabbit Polyclonal
Size	100 µl

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.

References

- Xu, Y. et al. (1997) J. Biol. Chem. 272(21):13463
Xu, Y. & Carpenter, G. (1999) J. Cell. Bioch. 75:264
Qi, J. et al. (2006) Mol. Biol. Cell 17(3):1261

Immunogen:

N-Cadherin synthetic peptide (coupled to carrier protein) corresponding to amino acids 853 to 864 in human N-cadherin. This sequence is conserved in rat and mouse N-cadherin, as well as in E-, P-, and R-cadherin from human, rat, and mouse.

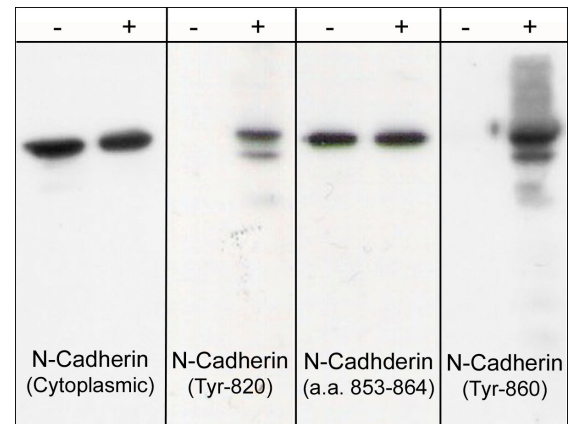
Applications:

WB 1:1000
ELISA 1:2000

End user should determine optimal dilution for their particular applications and experiments. Western blot membranes were incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

Related Products:

- CP1801 N-Cadherin (Tyr-820), phospho-specific Rabbit Polyclonal
CP1751 N-Cadherin (a.a. 811-824) Rabbit Polyclonal
CM1701 N-Cadherin (Cytoplasmic) Mouse Monoclonal
CP1851 Unphosphorylated N-Cadherin (Tyr-820) Rabbit Polyclonal
CP1951 N-Cadherin (Tyr-860), phospho-specific [Conserved site] Rabbit
CM1681 E-Cadherin (Cytoplasmic) Mouse Monoclonal



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).

Buffer and Storage:

Rabbit polyclonal, affinity-purified antibody is supplied in 100 µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Do not aliquot. Stable for 1 year.

Specificity:

This antibody was affinity purified using N-cadherin (a.a. 853-864) peptide. In western blots, the antibody detects a 130 kDa* band corresponding to N-cadherin in human endothelial cells and detects a 120 kDa band corresponding to E-cadherin in human A431 cells.

*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

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