

Rabbit N-Cadherin Polyclonal Antibody | anti-CDH2 antibody

N-Cadherin (Y860)[E-Cadherin (Y835)], phospho-specific Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71602	Rabbit	Human, Rat, Mouse	Immunocytochemistry, ELISA, Western Blot

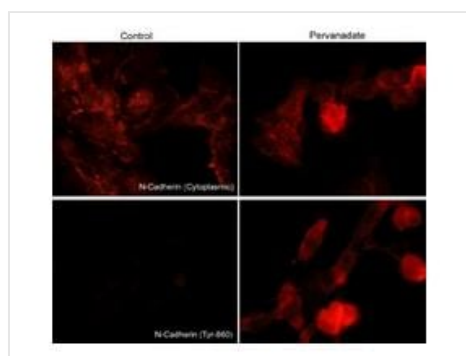
PRODUCT SYNONYMS

N-Cadherin; Polyclonal Antibody; N-Cadherin (Y860)[E-Cadherin (Y835)]; phospho-specific Antibody; phospho-specific; Cadherin N 860; anti-CDH2 antibody

PRODUCT SPECIFICATIONS

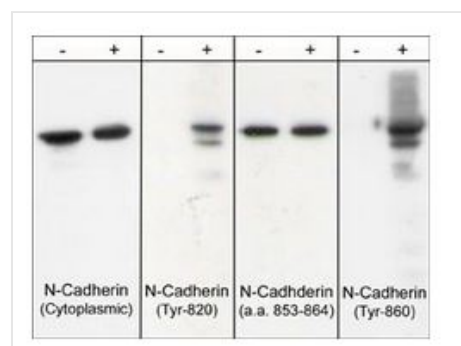
Host	Rabbit
Reactivity	Human, Rat, Mouse
Clonality	Polyclonal
Specificity	This antibody was cross-adsorbed to phospho-N-Cadherin (Tyr-820) and unphosphorylated N-cadherin (Tyr-860) peptides before affinity purification using phospho-N-cadherin (Tyr-860) peptide. In western blots, the antibody detects a 130kDa* band corresponding to N-cadherin (Tyr-860) in human endothelial cells treated with pervanadate and detects a 120kDa band corresponding to E-cadherin (Tyr-835) in human A431 cells treated with pervanadate.
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-CDH2 antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Phospho-N-Cadherin (Tyr-860) synthetic peptide (coupled to carrier protein) corresponding to amino acids surrounding tyrosine 860 in human N-cadherin. This sequence is conserved in human E-cadherin (Tyr-835), P-cadherin (Tyr-782), R-cadherin (Tyr-870), and has significant homology to VE-Cadherin (Tyr-733).
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

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.



WB (Western Blot)

Western blot image of human endothelial cells untreated or treated with pervanadate (1mM) 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).

ADDITIONAL INFORMATION

Related Product Information for anti-CDH2 antibody	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 beta-catenin. Since many of these tyrosine sites are conserved in the cadherin family, phosphorylation of these sites may be critical for cadherin function.
References	Qi, J. et al. (2006) Mol. Biol. Cell 17(3):1261. Xu, Y. & Carpenter, G. (1999) J. Cell. Bioch. 75:264. Xu, Y. et al. (1997) J. Biol. Chem. 272(21):13463.

NCBI AND UNIPROT INFORMATION

NCBI GI #	14589889
NCBI GeneID	1000
NCBI Accession #	NP_001783.2
NCBI GenBank Nucleotide #	NM_001792.3
UniProt Accession #	P19022; Q14923; Q8N173; B0YIY6
Molecular Weight	99,809 Da
NCBI Official Full Name	cadherin-2 preproprotein
NCBI Official Synonym Full Names	cadherin 2, type 1, N-cadherin (neuronal)
NCBI Official Symbol	CDH2
NCBI Official Synonym Symbols	CDHN; NCAD; CD325; CDw325
NCBI Protein Information	cadherin-2; N-cadherin 1; neural cadherin; neural-cadherin; cadherin 2, N-cadherin (neuronal); calcium-dependent adhesion protein, neuronal
UniProt Protein Name	Cadherin-2
UniProt Gene Name	CDH2
UniProt Synonym Gene Names	CDHN; NCAD; N-cadherin
UniProt Entry Name	CADH2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.