

Rabbit N Cadherin/CDH2 Polyclonal Antibody | anti-CDH2 antibody

Anti-N Cadherin/CDH2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125611	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

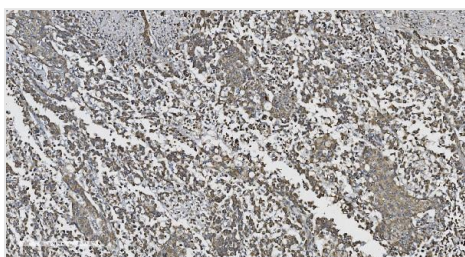
PRODUCT SYNONYMS

N Cadherin/CDH2; Polyclonal Antibody; Anti-N Cadherin/CDH2 Antibody; CDH2; CDHN; NCAD; Cadherin-2; CDw325; Neural cadherin; N-cadherin; CD antigen CD325; cadherin 2; anti-CDH2 antibody

PRODUCT SPECIFICATIONS

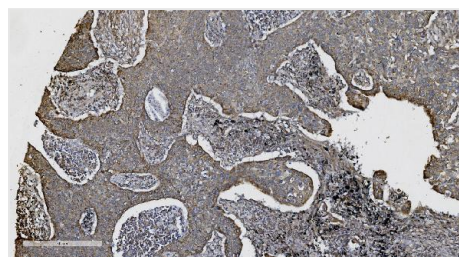
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for N Cadherin/CDH2 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na ₂ HPO ₄ .
Applicable Applications for anti-CDH2 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human N Cadherin/CDH2 recombinant protein (Position: E170-E266).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



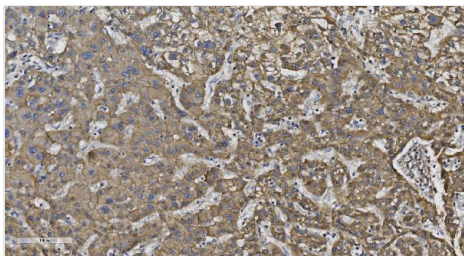
IHC (Immunohistochemistry)

Figure 5. IHC analysis of N Cadherin/CDH2 using anti-N Cadherin/CDH2 antibody (AAA125611). N Cadherin/CDH2 was detected in paraffin-embedded section of human pancreatic cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-N Cadherin/CDH2 Antibody (AAA125611) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



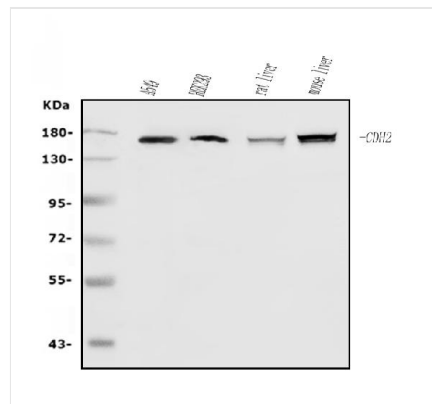
IHC (Immunohistochemistry)

Figure 4. IHC analysis of N Cadherin/CDH2 using anti-N Cadherin/CDH2 antibody (AAA125611). N Cadherin/CDH2 was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-N Cadherin/CDH2 Antibody (AAA125611) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



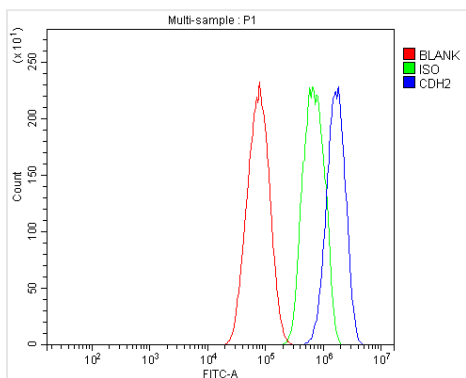
IHC (Immunohistochemistry)

Figure 3. IHC analysis of N Cadherin/CDH2 using anti-N Cadherin/CDH2 antibody (AAA125611). N Cadherin/CDH2 was detected in paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 μ g/ml rabbit anti-N Cadherin/CDH2 Antibody (AAA125611) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of N Cadherin/CDH2 using anti-N Cadherin/CDH2 antibody (AAA125611). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50 μ g of sample under reducing conditions. Lane 1: human A549 whole cell lysates Lane 2: human HEK293 whole cell lysates Lane 3: rat liver tissue lysates Lane 4: mouse liver tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-N Cadherin/CDH2 antigen affinity purified polyclonal antibody (Catalog # AAA125611) at 0.5 μ g/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for N Cadherin/CDH2 at approximately 150KD. The expected band size for N Cadherin/CDH2 is at 150KD.



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of HEPG2 cells using anti-N Cadherin/CDH2 antibody (AAA125611). Overlay histogram showing HEPG2 cells stained with AAA125611 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-N Cadherin/CDH2 Antibody (AAA125611, 1 μ g/1x10⁶ cells) for 30 min at 20 degree C. DyLight[®]488 conjugated goat anti-rabbit IgG (5-10 μ g/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 μ g/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

ADDITIONAL INFORMATION

Related Product Information for anti-CDH2 antibody

N-cadherin (NCAD) is a member of the cadherin cell-cell adhesion receptor family that includes P-, E-, and R-cadherin and liver cell adhesion molecule (L-CAM). N-Cadherin, also known as Cadherin-2, encodes a 907-amino acid protein that includes a 159-amino acid signal sequence. Human and mouse nucleotide sequences are 96% identical. Mouse Ncad gene consists of 16 exons dispersed over more than 200 kb of genomic DNA. Human N-cadherin gene contains 16 exons and its sequence is highly similar to both the mouse NCAD gene (including the large first and second introns) and other cadherin genes. N-cadherin is mapped to 18q11.2. Cadherin regulates dendritic spine morphogenesis.

References	1. Miyatani, S.; Copeland, N. G.; Gilbert, D. J.; Jenkins, N. A.; Takeichi, M. : Genomic structure and chromosomal mapping of the mouse N-cadherin gene. Proc. Nat. Acad. Sci. 89: 8443-8447, 1992. 2. Walsh, F. S.; Barton, C. H.; Putt, W.; Moore, S. E.; Kelsell, D.; Spurr, N.; Goodfellow, P. N. : N-cadherin gene maps to human chromosome 18 and is not linked to the E-cadherin gene. J. Neurochem. 55: 805-812, 1990. 3. Togashi, H.; Abe, K.; Mizoguchi, A.; Takaoka, K.; Chisaka, O.; Takeichi, M. : Cadherin regulates dendritic spine morphogenesis. Neuron 35: 77-89, 2002.
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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.