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antibody and ELISA experts

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Anti-N Cadherin/CDH2 Antibody Picoband®

Catalog Number: A01577-3-carrier-free

About CDH2

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.

Overview

Product Name	Anti-N Cadherin/CDH2 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-N Cadherin/CDH2 Antibody Picoband® catalog # A01577-3. Tested in ELISA, Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Storage Instructions	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P19022

Technical Details

Immunogen	E.coli-derived human N Cadherin/CDH2 recombinant protein (Position: E170-E266).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

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Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Immunofluorescence, 5 ug/ml, Human Flow Cytometry (Fixed), 1-3ug/1x10^6 cells, Human ELISA, 0.1-0.5ug/ml, -

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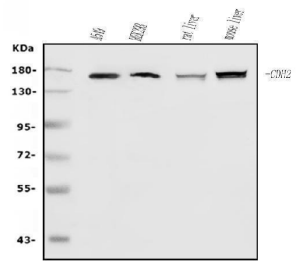
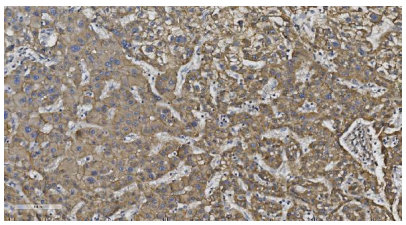
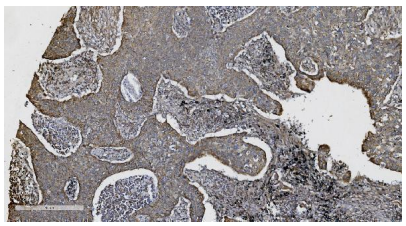
Anti-N Cadherin/CDH2 Antibody Picoband® (A01577-3-carrier-free) Images



Western blot analysis of N Cadherin/CDH2 using anti-N Cadherin/CDH2 antibody (A01577-3). 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 50ug 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 # A01577-3) at 0.5 ug/mL overnight at 4°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 (Catalog # EK1002) 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.



IHC analysis of N Cadherin/CDH2 using anti-N Cadherin/CDH2 antibody (A01577-3). 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 2ug/ml rabbit anti-N Cadherin/CDH2 Antibody (A01577-3) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



IHC analysis of N Cadherin/CDH2 using anti-N Cadherin/CDH2 antibody (A01577-3). 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 2ug/ml rabbit anti-N Cadherin/CDH2 Antibody (A01577-3) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

IHC analysis of N Cadherin/CDH2 using anti-N Cadherin/CDH2 antibody (A01577-3). N Cadherin/CDH2 was detected in paraffin-embedded section of human pancreatic

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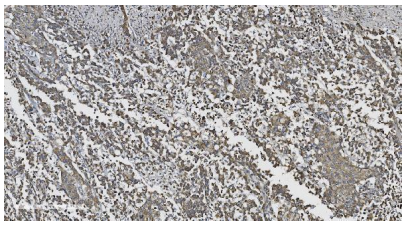
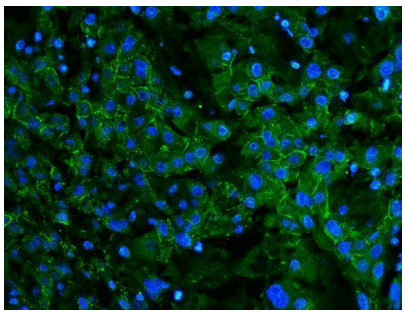
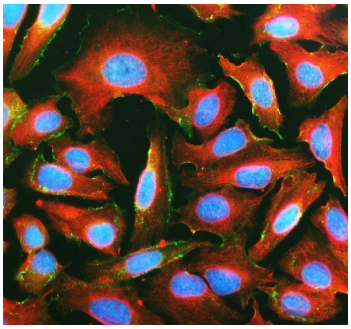


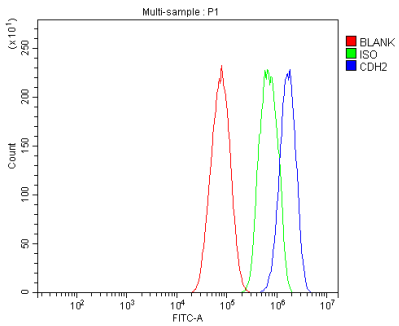
cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-N Cadherin/CDH2 Antibody (A01577-3) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



IF analysis of N Cadherin/CDH2 using anti-N Cadherin/CDH2 antibody (A01577-3). N Cadherin/CDH2 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5 ug/mL rabbit anti-N Cadherin/CDH2 Antibody (A01577-3) overnight at 4°C. Biotin conjugated goat anti-rabbit IgG (BA1003) was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using DyLight®488 Conjugated Avidin (BA1128). The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IF analysis of N Cadherin/CDH2 using anti-N Cadherin/CDH2 antibody (A01577-3) and anti-Tubulin Alpha antibody (M03989-3). N Cadherin/CDH2 was detected in immunocytochemical section of Hela cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-N Cadherin/CDH2 Antibody (A01577-3) and mouse anti-Tubulin Alpha antibody (M03989-3) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) and Cy3 Conjugated Goat Anti-Mouse IgG (BA1031) were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of HEPG2 cells using anti-N Cadherin/CDH2 antibody (A01577-3). Overlay histogram showing HEPG2 cells stained with A01577-3 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-N Cadherin/CDH2 Antibody (A01577-3, 1ug/1x106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Western blot analysis of N Cadherin/CDH2 using anti-N Cadherin/CDH2 antibody (A01577-3). Electrophoresis was

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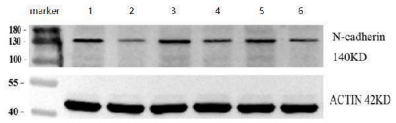
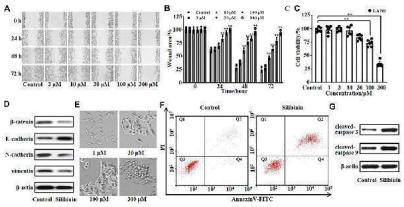


performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human cervical cancer tissue lysates, Lane 2: human cervical cancer adjacent tissue lysates, Lane 3: human cervical cancer tissue lysates, Lane 4: human cervical cancer adjacent tissue lysates. Lane 5: human cervical cancer tissue lysates, Lane 6: human cervical cancer adjacent 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 # A01577-3) at 1:1000 overnight at 4°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 (Catalog # EK1002) with ChemiDoc MP system. A specific band was detected for N Cadherin/CDH2 at approximately 140KD. The expected band size for N Cadherin/CDH2 is at 150KD.



Silibinin inhibited the growth and promoted the apoptosis of LA795 cells. (A) . Migration of LA795 cells in the presence of 0, 3, 10, 30, 100, and 300 uM silibinin assessed by wound healing assay (n = 4). (B) . Statistical results of the percentage of wound area in (A) (n = 4) (C) . Statistical results of LA795 cells viability incubated with different concentrations of silibinin (n = 6). (D) . Expression of beta -catenin, E-cadherin, N-cadherin, and vimentin of LA795 cells after treated with 200 uM silibinin for 24 h (n = 3). (E) . Representative real-time images of LA795 cells incubated with different concentrations of silibinin (n = 6). (F) . Representative images of apoptotic cells after 200 uM silibinin treatment for 24 h detected by annexin V apoptosis assay (n = 3). (G) . Expression of cleaved-caspase 3 and cleaved-caspase 9 of LA795 cells after 200 uM silibinin treatment for 24 h (n = 3).Index in PubMed under a CC BY license. PMID: 33935737

10 Publications Citing This Product

1. PubMed ID: PMID:26617787, RAC1 overexpression promotes the proliferation, migration and epithelial-mesenchymal transition of lens epithelial cells

2. PubMed ID: PMID:26722422, Wnt/beta-catenin pathway is required for epithelial to mesenchymal transition in CXCL12 over expressed breast cancer cells

3. PubMed ID: 10.3389/fphar.2021.643489, Inhibition of TMEM16A by Natural Product Silibinin: Potential Lead Compounds for Treatment of Lung Adenocarcinoma

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Anti-N Cadherin/CDH2 Antibody

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