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Anti-N-Cadherin-2 CDH2 CD325-Antibody

Catalog Number: PA1328

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-2 CDH2 CD325-Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-N-Cadherin-2 CDH2 CD325-Antibody catalog # PA1328. Tested in Flow Cytometry, IF, IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IF, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
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	A synthetic peptide corresponding to a sequence in the middle region of human N Cadherin, identical to the related rat and mouse sequences.
Predicted Reactive Species	Bovine
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	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat, By Heat Immunofluorescence, 5 ug/ml, Human, Rat Flow Cytometry, 1-3ug/1x10^6 cells, Human

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Anti-N-Cadherin-2 CDH2 CD325-Antibody (PA1328) Images

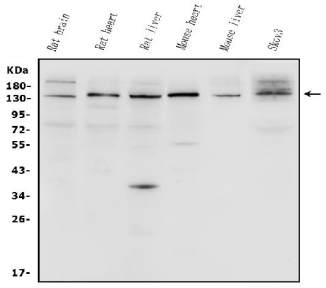

Figure 1. Western blot analysis of CDH2 using anti-CDH2 antibody (PA1328).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: rat brain tissue lysates,
Lane 2: rat heart tissue lysates,
Lane 3: rat liver tissue lysates,
Lane 4: mouse heart tissue lysates,
Lane 5: mouse liver tissue lysates,
Lane 6: human SKOV3 whole cell 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-CDH2 antigen affinity purified polyclonal antibody (Catalog # PA1328) 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 CDH2 at approximately 140KD. The expected band size for CDH2 is at 100KD.

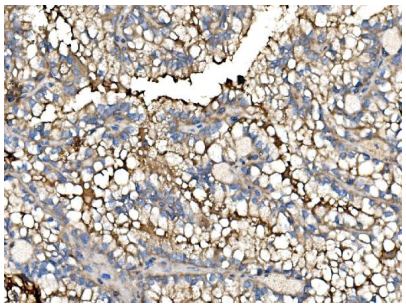

Figure 2. IHC analysis of CDH2 using anti-CDH2 antibody (PA1328).
CDH2 was detected in paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-CDH2 Antibody (PA1328) 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.

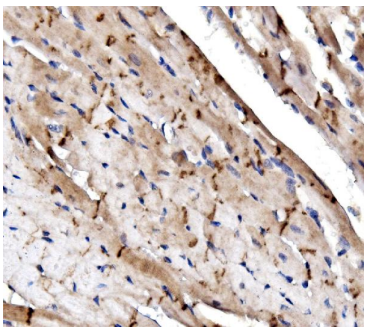

Figure 3. IHC analysis of CDH2 using anti-CDH2 antibody (PA1328).
CDH2 was detected in paraffin-embedded section of mouse cardiac muscle tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-CDH2 Antibody (PA1328) 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.

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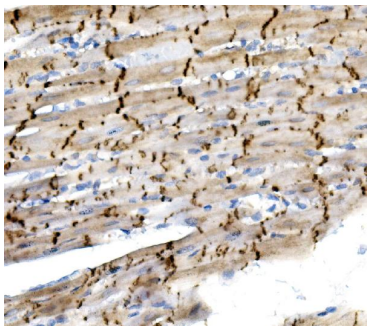

Figure 4. IHC analysis of CDH2 using anti-CDH2 antibody (PA1328).
CDH2 was detected in paraffin-embedded section of rat cardiac muscle tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-CDH2 Antibody (PA1328) 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.

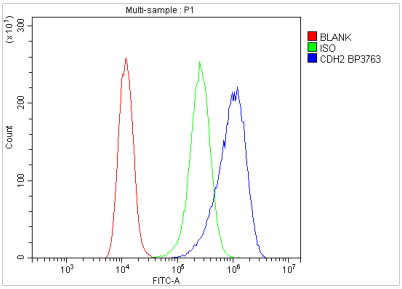

Figure 5. Flow Cytometry analysis of Hela cells using anti-CDH2 antibody (PA1328).
Overlay histogram showing Hela cells stained with PA1328 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CDH2 Antibody (PA1328, 1ug/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

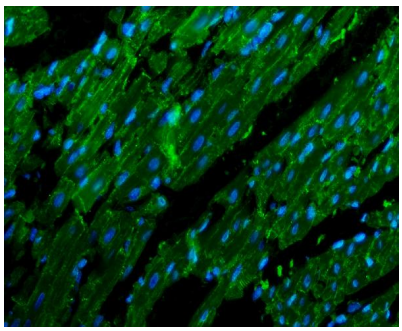

Figure 6. IF analysis of CDH2 using anti-CDH2 antibody (PA1328).
CDH2 was detected in a paraffin-embedded section of rat heart tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5 ug/mL rabbit anti-CDH2 Antibody (PA1328) 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.

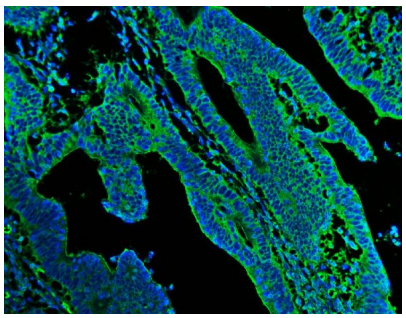

Figure 7. IF analysis of CDH2 using anti-CDH2 antibody (PA1328).
CDH2 was detected in a paraffin-embedded section of human colon cancer. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5 ug/mL rabbit anti-CDH2 Antibody (PA1328) 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.

24 Publications Citing This Product

BOSTER BIOLOGICAL TECHNOLOGY
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1. PubMed ID: 32519176, Piao HY,Guo S,Wang Y,Zhang J.Exosome-transmitted lncRNA PCGEM1 promotes invasive and metastasis in gastric cancer by maintaining the stability of SNAI1.Clin Transl Oncol.2020 Jun 9.doi:10.1007/s12094-020-02412-9.Epub ahead of print.PMID:32519176.

2. PubMed ID: 33069797, Shi R,Liu L,Wang F,He Y,Niu Y,Wang C,Zhang X,Zhang X,Zhang H,Chen M,Wang Y.Downregulation of cytokeratin 18 induces cellular partial EMT and stemness through increasing EpCAM expression in breast cancer.Cell Signal.2020 Dec;76:109810.doi:10.1016/j.cellsig

3. PubMed ID: 32611283, Xu H,Yu B,Shen W,Jin C,Wang L,Xi Y.Over-expression of long non-coding RNA ZEB2-AS1 may predict poor prognosis and promote the migration, invasion, and epithelial-mesenchymal transition of tumor cells in non-small cell lung cancer.Int J Biol Markers.2020 S

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