

Anti-Claudin 2/CLDN2 Antibody Picoband®

Catalog Number: A03033-2

About CLDN2

Claudin-2 is a protein that in humans is encoded by the CLDN2 gene. By genomic sequence analysis, this gene is mapped to chromosome Xq22.3-q23. This gene product belongs to the claudin protein family whose members have been identified as major integral membrane proteins localized exclusively at tight junctions. Claudins are expressed in an organ-specific manner and regulate tissue-specific physiologic properties of tight junctions. By expression in a human intestinal epithelial cell line, it was determined that the intestine-specific homeodomain proteins CDX1 and CDX2 activated a reporter plasmid driven by the CLDN2 promoter.

Overview

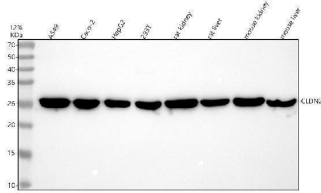
Product Name	Anti-Claudin 2/CLDN2 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Claudin 2/CLDN2 Antibody Picoband® catalog # A03033-2. Tested in Flow Cytometry, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium 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	Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	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 freezing and thawing.
Host	Rabbit
Uniprot ID	P57739

Technical Details

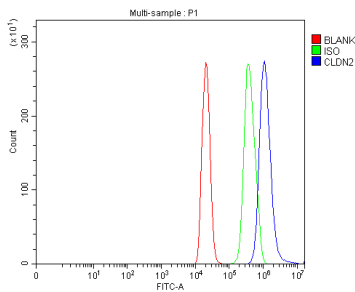
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human Claudin 2/CLDN2, identical to the related mouse sequences.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat Flow Cytometry (Fixed), 1-3 ug/1x10 ⁶ cells, Rat

Anti-Claudin 2/CLDN2 Antibody Picoband® (A03033-2) Images



Western blot analysis of Claudin 2/CLDN2 using anti-Claudin 2/CLDN2 antibody (A03033-2). 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 30 ug of sample under reducing conditions. Lane 1: human A549 whole cell lysates, Lane 2: human Caco-2 whole cell lysates, Lane 3: human HepG2 whole cell lysates, Lane 4: human 293T whole cell lysates, Lane 5: rat kidney tissue lysates, Lane 6: rat liver tissue lysates, Lane 7: mouse kidney tissue lysates, Lane 8: mouse liver tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-Claudin 2/CLDN2 antigen affinity purified polyclonal antibody (Catalog # A03033-2) 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 Claudin 2/CLDN2 at approximately 25 kDa. The expected band size for Claudin 2/CLDN2 is at 25 kDa.



Flow Cytometry analysis of C6 cells using anti-Claudin 2/CLDN2 antibody (A03033-2). Overlay histogram showing C6 cells stained with A03033-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Claudin 2/CLDN2 Antibody (A03033-2, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Claudin 2/CLDN2 Antibody

For Research Use Only. Not for use in diagnostic procedures.