

Anti-R-Cadherin-4 CDH4-Antibody Picoband™

Catalog Number: A07632-2

About CDH4

Cadherin-4 is a protein that in humans is encoded by the CDH4 gene. It is mapped to 20q13.33. This gene is a classical cadherin from the cadherin superfamily. The encoded protein is a calcium-dependent cell-cell adhesion glycoprotein comprised of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. Based on studies in chicken and mouse, this cadherin is thought to play an important role during brain segmentation and neuronal outgrowth. In addition, a role in kidney and muscle development is indicated. Of particular interest are studies showing stable cis-heterodimers of cadherins 2 and 4 in cotransfected cell lines. Previously thought to interact in an exclusively homophilic manner, this is the first evidence of cadherin heterodimerization. Three transcript variants encoding different isoforms have been found for this gene.

Overview

Product Name	Anti-R-Cadherin-4 CDH4-Antibody Picoband™
Reactive Species	Human
Description	Boster Bio Anti-R-Cadherin-4 CDH4-Antibody Picoband™ catalog # A07632-2. Tested in ELISA, Flow Cytometry, IHC, WB applications. This antibody reacts with Human.
Application	ELISA, Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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	P55283

Technical Details

Immunogen	E.coli-derived human R Cadherin/CDH4 recombinant protein (Position: K458-D641).
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 µg/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used Western blot, 0.1-0.5μg/ml</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1μg/ml</p> <p>Flow Cytometry, 1-3μg/1x10⁶ cells</p> <p>Direct ELISA, 0.1-0.5μg/ml</p> <p>For protocols, please visit https://www.bosterbio.com/protocol-and-troubleshooting/</p>

Anti-R-Cadherin-4 CDH4-Antibody Picoband™ (A07632-2) Images

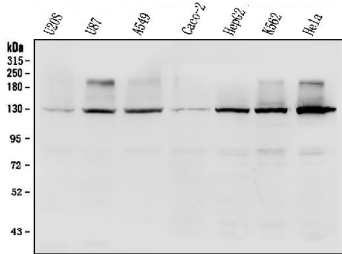


Figure 1. Western blot analysis of R Cadherin/CDH4 using anti-R Cadherin/CDH4 antibody (A07632-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human U20S whole cell lysates,
Lane 2: human U87 whole cell lysates,
Lane 3: human A549 whole cell lysates,
Lane 4: human CACO-2 whole cell lysates,
Lane 5: human HepG2 whole cell lysates,
Lane 6: human K562 whole cell lysates,
Lane 7: human HELA 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-R Cadherin/CDH4 antigen affinity purified polyclonal antibody (Catalog # A07632-2) 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 R Cadherin/CDH4 at approximately 125KD. The expected band size for R Cadherin/CDH4 is at 125KD.

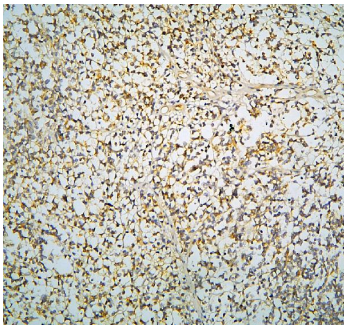


Figure 2. IHC analysis of R Cadherin/CDH4 using anti-R Cadherin/CDH4 antibody (A07632-2).

R Cadherin/CDH4 was detected in paraffin-embedded section of human glioma 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-R Cadherin/CDH4 Antibody (A07632-2) 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 Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

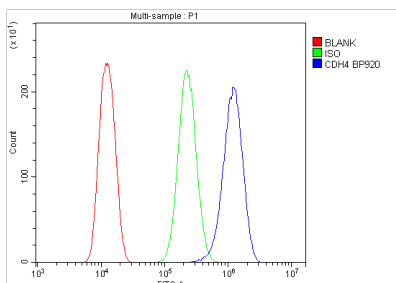


Figure 3. Flow Cytometry analysis of U20S cells using anti-R Cadherin/CDH4 antibody (A07632-2).

Overlay histogram showing U20S cells stained with A07632-2 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-R Cadherin/CDH4 Antibody (A07632-2, 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 (Red line) was also used

as a control.

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