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Anti-P-Cadherin-3 CDH3-Antibody Picoband™ (monoclonal, 3C9)

Catalog # ABO14950

Specification

Anti-P-Cadherin-3 CDH3-Antibody Picoband™ (monoclonal, 3C9) - Product Information

Application	**WB, IF, ICC**
Primary Accession	P22223
Host	**Mouse**
Isotype	**Mouse IgG2b**
Reactivity	**Human**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Anti-P-Cadherin-3 CDH3-Antibody Picoband™ (monoclonal, 3C9) . Tested in IF, ICC, WB applications. This antibody reacts with Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-P-Cadherin-3 CDH3-Antibody Picoband™ (monoclonal, 3C9) - Additional Information

Gene ID 1001

Other Names
Cadherin-3, Placental cadherin, P-cadherin, CDH3, CDHP

Calculated MW
120 kDa KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human
 Immunocytochemistry/Immunofluorescence, 2 µg/ml, Human

Subcellular Localization
Cell membrane. Single-pass type I membrane protein.

Tissue Specificity
Expressed in some normal epithelial tissues and in some carcinoma cell lines.

Contents
Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen
E. coli-derived human P cadherin recombinant protein (Position: Q126-H336).

Purification
Immunogen affinity purified.

Cross Reactivity
No cross-reactivity with other proteins.

Storage	**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.**

Anti-P-Cadherin-3 CDH3-Antibody Picoband™ (monoclonal, 3C9) - Protein Information

Name CDH3

Synonyms CDHP

Function
Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types.

Cellular Location
Cell membrane; Single-pass type I membrane protein

Tissue Location
Expressed in some normal epithelial tissues and in some carcinoma cell lines.

Anti-P-Cadherin-3 CDH3-Antibody Picoband™ (monoclonal, 3C9) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-P-Cadherin-3 CDH3-Antibody Picoband™ (monoclonal, 3C9) - Images

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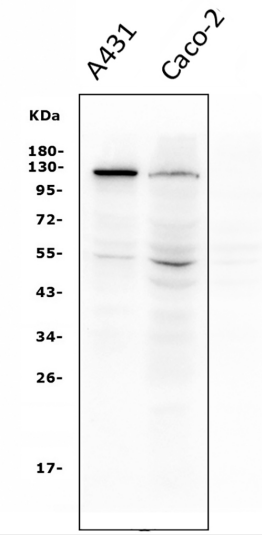

Figure 1. Western blot analysis of P cadherin/CDH3 using anti-P cadherin/CDH3 antibody (M03353).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: human A431 whole cell lysates;
Lane 2: human Caco-2 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 mouse anti-P cadherin/CDH3 antigen affinity purified monoclonal antibody (Catalog # M03353) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for P cadherin/CDH3 at approximately 120KD. The expected band size for P cadherin/CDH3 is at 91KD.

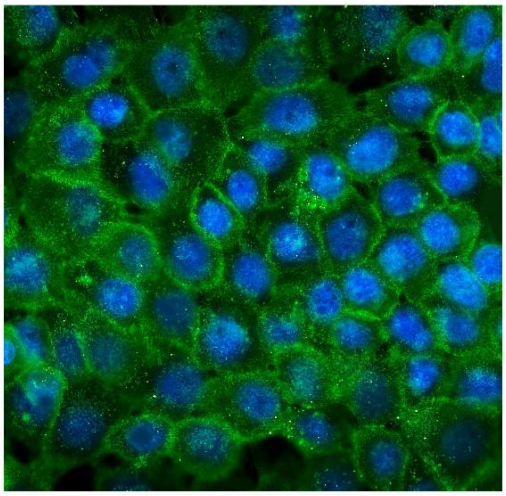

Figure 2. IF analysis of P cadherin using anti-P cadherin antibody (M03353).
P cadherin was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2 µg/mL mouse anti-P cadherin Antibody (M03353) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as

secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

Anti-P-Cadherin-3 CDH3-Antibody Picoband™ (monoclonal, 3C9) - Background

Cadherins, such as CDH3, are integral membrane glycoproteins responsible for calcium-dependent cell-cell adhesion. Cadherin-3 is a protein that in humans is encoded by the CDH3 gene. This gene is a classical cadherin from the cadherin superfamily. The encoded protein is a calcium-dependent cell-cell adhesion glycoprotein composed of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. This gene is located in a six-cadherin cluster in a region on the long arm of chromosome 16 that is involved in loss of heterozygosity events in breast and prostate cancer. In addition, aberrant expression of this protein is observed in cervical adenocarcinomas. Mutations in this gene have been associated with congential hypotrichosis with juvenile macular dystrophy.