

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

Catalog # ABO14950

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.

Additional Information

Gene ID	1001
Other Names	Cadherin-3, Placental cadherin, P-cadherin, CDH3, CDHP
Calculated MW	91418
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.
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Clone Names	Clone: 3C9
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.

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.

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 congenital hypotrichosis with juvenile macular dystrophy.

Images

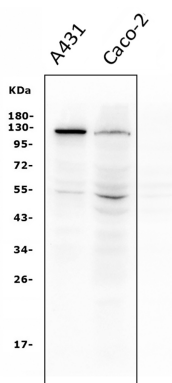


Figure 1. Western blot analysis of P cadherin/CDH3 using anti-P cadherin/CDH3 antibody (M03353).

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.

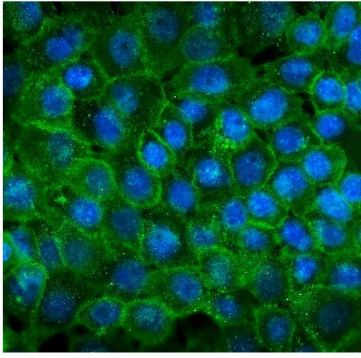
Lane 1: human A431 whole cell lysates;

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.