

**Anti-Gamma Catenin Picoband Antibody**  
Catalog # ABO11877**Specification****Anti-Gamma Catenin Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P14923</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Junction plakoglobin(JUP) detection. Tested with WB, IHC-P, IHC-F, ICC in Human;Mouse;Rat.

**Reconstitution**

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

**Anti-Gamma Catenin Picoband Antibody - Additional Information**

**Gene ID** 3728

**Other Names**

Junction plakoglobin, Catenin gamma, Desmoplakin III, Desmoplakin-3, JUP, CTNNG, DP3

**Calculated MW**

81745 MW KDa

**Application Details**

Immunocytochemistry , 0.5-1 µg/ml, Human, -<br>Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Rat, Human<br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Subcellular Localization**

Cell junction, adherens junction . Cell junction, desmosome . Cytoplasm, cytoskeleton . Membrane ; Peripheral membrane protein . Cytoplasmic in a soluble and membrane-associated form.

**Protein Name**

Junction plakoglobin

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

E.coli-derived human gamma Catenin recombinant protein (Position: M556-A745). Human gamma Catenin shares 98% amino acid (aa) sequence identity with both mouse and rat gamma Catenin.

**Purification**

Immunogen affinity purified.

### Cross Reactivity

No cross reactivity with other proteins

### Storage

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

### Sequence Similarities

Belongs to the beta-catenin family.

## Anti-Gamma Catenin Picoband Antibody - Protein Information

Name JUP ([HGNC:6207](#))

### Function

Common junctional plaque protein. The membrane-associated plaques are architectural elements in an important strategic position to influence the arrangement and function of both the cytoskeleton and the cells within the tissue. The presence of plakoglobin in both the desmosomes and in the intermediate junctions suggests that it plays a central role in the structure and function of submembranous plaques. Acts as a substrate for VE-PTP and is required by it to stimulate VE-cadherin function in endothelial cells. Can replace beta-catenin in E-cadherin/catenin adhesion complexes which are proposed to couple cadherins to the actin cytoskeleton (By similarity).

### Cellular Location

Cell junction, adherens junction. Cell junction, desmosome. Cytoplasm, cytoskeleton. Cell membrane; Peripheral membrane protein. Cytoplasm {ECO:0000250|UniProtKB:Q9PVF7}. Cell junction {ECO:0000250|UniProtKB:Q9PVF7}. Nucleus {ECO:0000250|UniProtKB:Q9PVF7} Note=Cytoplasmic in a soluble and membrane-associated form. Colocalizes with DSG4 at desmosomes (PubMed:21495994)

### Tissue Location

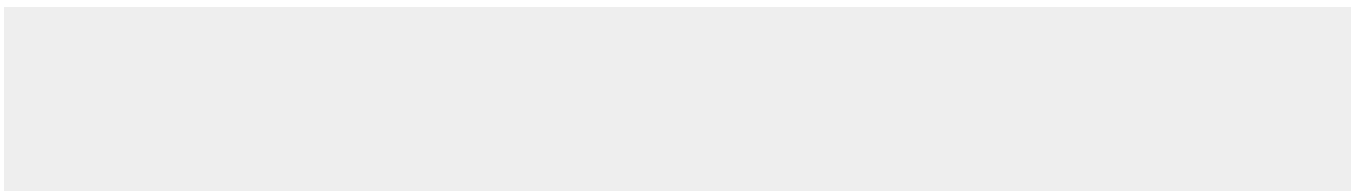
Expressed in the heart (at protein level).

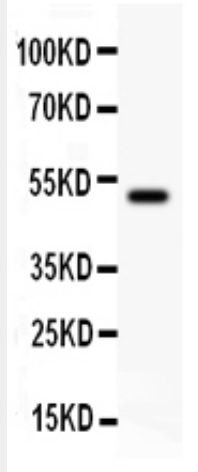
## Anti-Gamma Catenin Picoband Antibody - Protocols

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

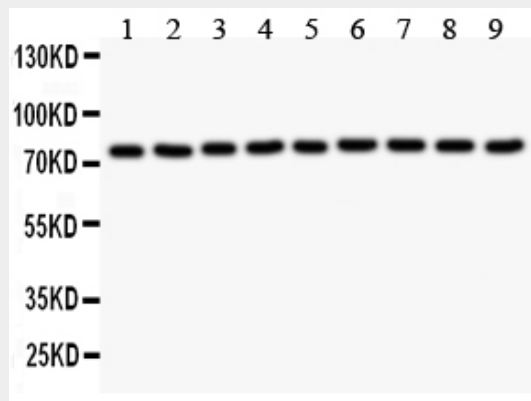
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-Gamma Catenin Picoband Antibody - Images

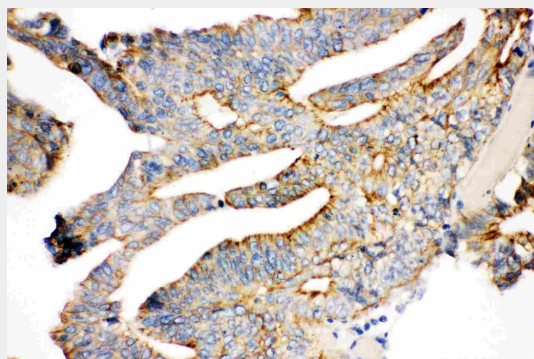




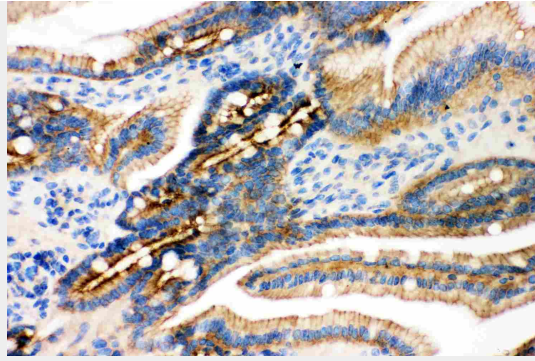
Anti- gamma Catenin Picoband antibody, ABO11877, Western blotting All lanes: Anti gamma Catenin (ABO11877) at 0.5ug/ml WB: Recombinant Human gamma Catenin Protein 0.5ng Predicted bind size: 47KD Observed bind size: 47KD



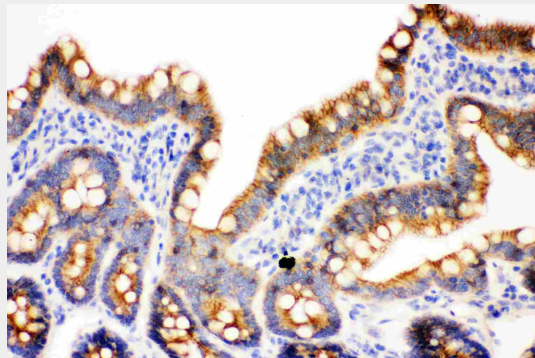
Anti- gamma Catenin Picoband antibody, ABO11877, Western blotting All lanes: Anti gamma Catenin (ABO11877) at 0.5ug/ml Lane 1: Rat Brain Tissue Lysate at 50ug Lane 2: Rat Cardiac Muscle Tissue Lysate at 50ug Lane 3: Rat Thymus Tissue Lysate at 50ug Lane 4: RH35 Whole Cell Lysate at 40ug Lane 5: Hela Whole Cell Lysate at 40ug Lane 6: Colo320 Whole Cell Lysate at 40ug Lane 7: HepG2 Whole Cell Lysate at 40ug Lane 8: HepA Whole Cell Lysate at 40ug Lane 9: MCF-7 Whole Cell Lysate at 40ug Predicted bind size: 81KD Observed bind size: 81KD



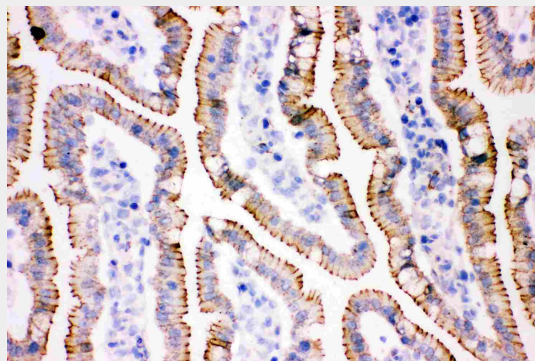
Anti- gamma Catenin Picoband antibody, ABO11877, IHC(P) IHC(P): Human Intestinal Cancer Tissue



Anti- gamma Catenin Picoband antibody, ABO11877, IHC(P)IHC(P): Mouse Intestine Tissue



Anti- gamma Catenin Picoband antibody, ABO11877, IHC(P)IHC(P): Rat Intestine Tissue



Anti- gamma Catenin Picoband antibody, ABO11877, IHC(F)IHC(F): Rat Intestine Tissue

### **Anti-Gamma Catenin Picoband Antibody - Background**

Junction plakoglobin(JUP), also known as gamma-catenin, is a protein that in humans is encoded by the JUP gene. It is a member of the catenin protein family and homologous to  $\beta$ -catenin, and it is mapped to 17q21.2. This gene encodes a major cytoplasmic protein that is the only known constituent common to submembranous plaques of both desmosomes and intermediate junctions. This protein forms distinct complexes with cadherins and desmosomal cadherins. Meanwhile, JUP may have distinct roles in Wnt signaling and cancer via differential effects on downstream target genes.