

Anti-Gamma Catenin Antibody

Catalog # ABO10573

### Specification

# Anti-Gamma Catenin Antibody - Product Information

ApplicationWB, IHCPrimary AccessionP14923HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Junction plakoglobin(JUP) detection. Tested with WB, IHC-P inHuman;Mouse;Rat.Human;Mouse;Rat.

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

### Anti-Gamma Catenin 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** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Rat, Human, Mouse, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse<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 Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

**Immunogen** A synthetic peptide corresponding to a sequence at the N-terminus of human gamma Catenin(8-22aa EQPIKVTEWQQTYTY), identical to the related mouse and rat sequence.

**Purification** Immunogen affinity purified.



**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, 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 Antibody - Protein Information

### Name JUP (<u>HGNC:6207</u>)

#### 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 VEcadherin 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. Membrane; Peripheral membrane protein. Note=Cytoplasmic in a soluble and membrane-associated form

**Tissue Location** Expressed in the heart (at protein level).

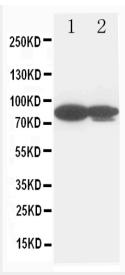
### **Anti-Gamma Catenin Antibody - Protocols**

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

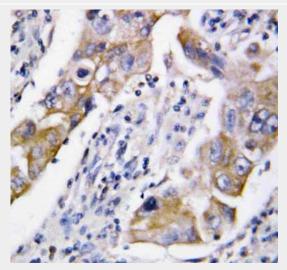
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Anti-Gamma Catenin Antibody - Images





Anti-gamma Catenin antibody, ABO10573, Western blottingLane 1: MCF-7 Cell LysateLane 2: HELA Cell Lysate



Anti-gamma Catenin antibody, ABO10573, IHC(P)IHC(P): Human Mammary Cancer Tissue

# Anti-Gamma Catenin Antibody - Background

Cateningamma, also known as junction plakoglobin(JUP) or plakoglobin(PKGB). Plakoglobin is a major cytoplasmic protein which is the only known constituent common to submembranous plaques of both desmosomes and intermediate junctions. Cateninbeta and cateningamma(plakoglobin), vertebrate homologs of Drosophila armadillo, function in cell adhesion and the Wnt signaling pathway. Cateningamma may have distinct roles in Wnt signaling and cancer via differential effects on downstream target genes.