

# Anti-Catenin, gamma Antibody

Mouse Monoclonal Antibody Catalog # AH13335

### **Specification**

# Anti-Catenin, gamma Antibody - Product Information

Application WB, IF, FC
Primary Accession P14923
Other Accession 514174

Reactivity Human, Mouse Host Mouse

Host Mouse Clonality Monoclonal

Isotype Mouse / IgG1, kappa

Calculated MW 81745

# Anti-Catenin, gamma Antibody - Additional Information

#### **Gene ID 3728**

### **Other Names**

ARVD12; Catenin (cadherin-associated protein), gamma 80kDa; Catenin gamma; CTNNG; Desmoplakin III; Desmoplakin-3; DP3; DPIII; Junction Plakoglobin; PDGB; PKGB

#### **Application Note**

<span class ="dilution\_WB">WB~~1:1000</span><br \> <span class = "dilution\_IF">IF~~1:50~200</span><br \> <span class = "dilution\_FC">FC~~1:10~50</span>

# **Format**

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

# **Storage**

Store at 2 to 8°C. Antibody is stable for 24 months.

### **Precautions**

Anti-Catenin, gamma Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Anti-Catenin, gamma 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-Catenin, gamma 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 Cytomety
- Cell Culture

#### Anti-Catenin, gamma Antibody - Images

### Anti-Catenin, gamma Antibody - Background

It recognizes a protein of 80-87kDa, identified as gamma-catenin. The catenins ( $\alpha$ ,  $\beta$ ,  $\gamma$  and  $\delta$ ) are ubiquitously expressed, cytoplasmic proteins that associate with E-cadherin at cellular junctions. Catenin/cadherin complexes play an important role in mediating cellular adhesion.  $\alpha$  T-catenin, also referred to as VR22, is a 895-amino acid protein that is most abundantly expressed in cardio-myocytes and in the peritubular myoid cells of the testis.  $\alpha$  T-catenin binds to  $\alpha$  E-catenin as well as to  $\beta$ -catenin, and it functions to inhibit Wnt signaling. CTNNA3, the gene that encodes for  $\alpha$ -T-catenin, is located on chromosome 10, and mutations in this gene show a strong correlation to late-onset Alzheimer's disease (LOAD) as well as to dilated cardiomyopathy.