

# Anti-Catenin, gamma Antibody

Mouse Monoclonal Antibody Catalog # AH13339

## **Product Information**

**Application** WB, IHC-P, IF, FC

Primary Accession P14923
Other Accession 514174
Reactivity Human
Host Mouse
Clonality Monoclonal

**Isotype** Mouse / IgG1, kappa

Clone Names CTNG/1483 Calculated MW 81745

## **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** Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (1-2ug/ml);

,Western Blotting (0.5-1.0ug/ml);,Immunohistology (Formalin-fixed) (0.1-0.2ug/ml for 30 min at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific

application should be determined.

**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.

#### **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)

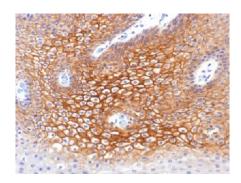
**Tissue Location** 

Expressed in the heart (at protein level).

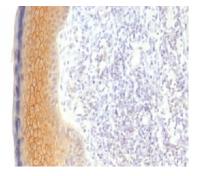
# **Background**

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.

# **Images**



Formalin-fixed, paraffin-embedded human Cervical Carcinoma stained with Catenin, gamma Monoclonal Antibody (CTNG/1483)



Formalin-fixed, paraffin-embedded human Skin stained with Catenin, gamma Monoclonal Antibody (CTNG/1483)

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