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Anti-Catenin, gamma Antibody

Mouse Monoclonal Antibody
Catalog # AH13335

Product Information

Application	WB, IF, FC
Primary Accession	P14923
Other Accession	514174
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	11 E4
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);,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). May promote axon outgrowth and motor fiber repair via DSP-mediated recruitment to outgrowth tips (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} Cell projection, axon {ECO:0000250|UniProtKB:Q02257}. Note=Cytoplasmic in a soluble and membrane-associated form. Colocalizes with DSG4 at desmosomes (PubMed:21495994).
Tissue Location	Expressed in cardiomyocytes in the heart (at protein level).

Background

It recognizes a protein of 80-87kDa, identified as gamma-catenin. The catenins (α, β, γ and δ) are ubiquitously expressed, cytoplasmic proteins that associate with E-cadherin at cellular junctions. Catenin/cadherin complexes play an important role in mediating cellular adhesion. α 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. α T-catenin binds to α E-catenin as well as to β-catenin, and it functions to inhibit Wnt signaling. CTNNA3, the gene that encodes for α-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.