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Anti-Gamma-catenin Antibody

Catalog # AP59601

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P14923
Reactivity	Human, Mouse, Rat, Rabbit
Host	Rabbit
Clonality	Polyclonal
Calculated MW	81745

Additional Information

Gene ID	3728
Other Names	CTNNG; DP3; Junction plakoglobin; Catenin gamma; Desmoplakin III; Desmoplakin-3
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Gamma-catenin. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

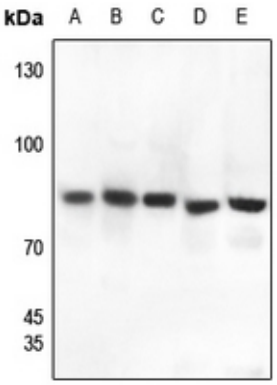
Name	JUP (HGNC:6207)
Function	Common junctional plaque protein. The membrane-associated plaques are architectural elements in an important strategic position to influence the arrangement and function of both the cytoskeleton and the cells within the tissue. The presence of plakoglobin in both the desmosomes 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).

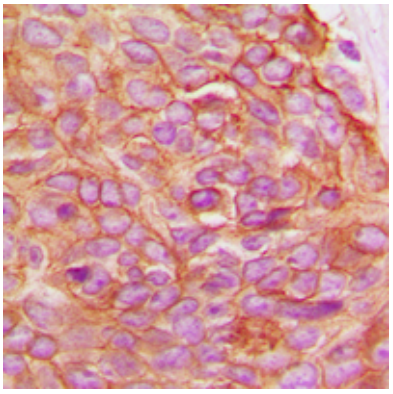
Tissue Location

Expressed in cardiomyocytes in the heart (at protein level). Expressed by keratinocytes in the skin (at protein level) (PubMed:26604139).

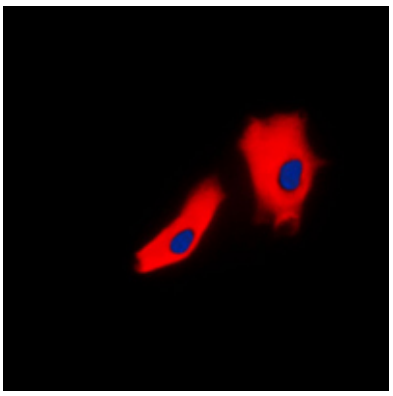
Images



Western blot analysis of Gamma-catenin expression in HEK293T (A), Hela (B), H1688 (C), mouse liver (D), rat liver (E) whole cell lysates. (Predicted band size: 81 kD; Observed band size: 83 kD)

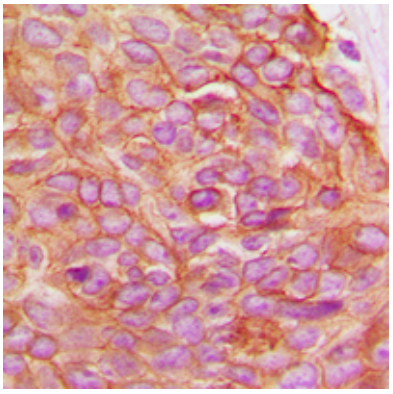


Immunohistochemical analysis of Gamma-catenin staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Gamma-catenin staining in A431 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Immunohistochemical analysis of Gamma-catenin staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used



as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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