

# JUP Antibody

Purified Mouse Monoclonal Antibody  
Catalog # AO1620a

## Product Information

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<b>Application</b>	WB, IHC, ICC, E
<b>Primary Accession</b>	<a href="#">P14923</a>
<b>Reactivity</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone Names</b>	4C12
<b>Isotype</b>	IgG1
<b>Calculated MW</b>	81745
<b>Description</b>	This gene encodes a major cytoplasmic protein which is the only known constituent common to submembranous plaques of both desmosomes and intermediate junctions. This protein forms distinct complexes with cadherins and desmosomal cadherins and is a member of the catenin family since it contains a distinct repeating amino acid motif called the armadillo repeat. Mutation in this gene has been associated with Naxos disease. Alternative splicing occurs in this gene; however, not all transcripts have been fully described.
<b>Immunogen</b>	Purified recombinant fragment of human JUP expressed in E. Coli.
<b>Formulation</b>	Ascitic fluid containing 0.03% sodium azide.

## Additional Information

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<b>Gene ID</b>	3728
<b>Other Names</b>	Junction plakoglobin, Catenin gamma, Desmoplakin III, Desmoplakin-3, JUP, CTNNG, DP3
<b>Dilution</b>	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 ICC~~N/A E~~1/10000
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	JUP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	JUP ( <a href="#">HGNC:6207</a> )
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## 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).

## References

1. Cell. 2009 Jul 23;138(2):389-403.
2. Cancer Res. 2009 Jul 15;69(14):5734-42.

## Images

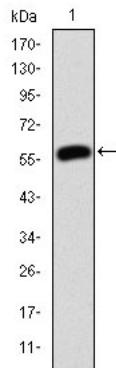


Figure 1: Western blot analysis using JUP mAb against human JUP (AA: 534-740) recombinant protein. (Expected MW is 48.5 kDa)

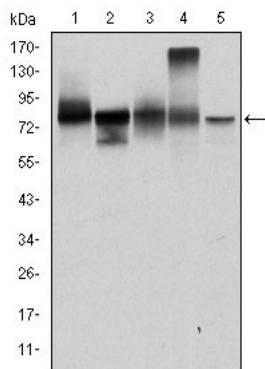


Figure 2: Western blot analysis using JUP mouse mAb against T47D (1), MCF-7 (2), SKBR-3 (3), A431 (4) and HEK293 (5) cell lysate.

Figure 3: Immunohistochemical analysis of paraffin-embedded rectum tissues using JUP mouse mAb with DAB staining.

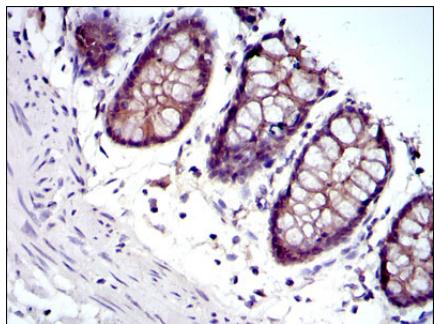


Figure 4: Immunohistochemical analysis of paraffin-embedded stomach cancer tissues using JUP mouse mAb with DAB staining.

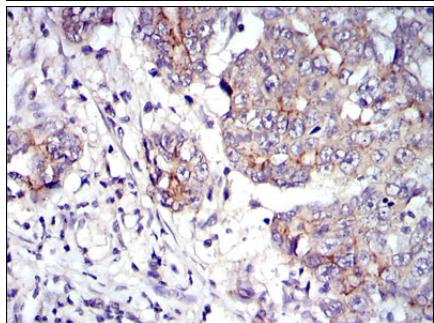
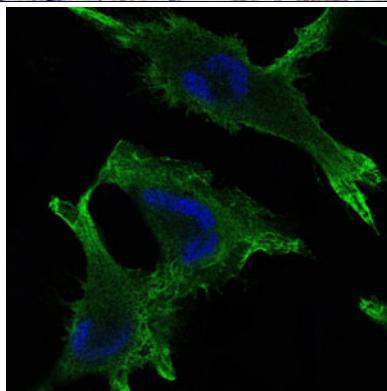


Figure 5: Immunofluorescence analysis of U251 cells using JUP mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.



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