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JUP Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1620a

Specification

JUP Antibody - Product Information

Application	**E, WB, IHC, IF**
Primary Accession	P14923
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**82kDa KDa**

Description
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.

Immunogen
Purified recombinant fragment of human JUP expressed in E. Coli.

Formulation
Ascitic fluid containing 0.03% sodium azide.

JUP Antibody - Additional Information

Gene ID 3728

Other Names
Junction plakoglobin, Catenin gamma, Desmoplakin III, Desmoplakin-3, JUP, CTNNG, DP3

Dilution
E~~1/10000
WB~~1/500 - 1/2000
IHC~~1/200 - 1/1000
IF~~1/200 - 1/1000

Storage
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.

Precautions
JUP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

JUP 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).

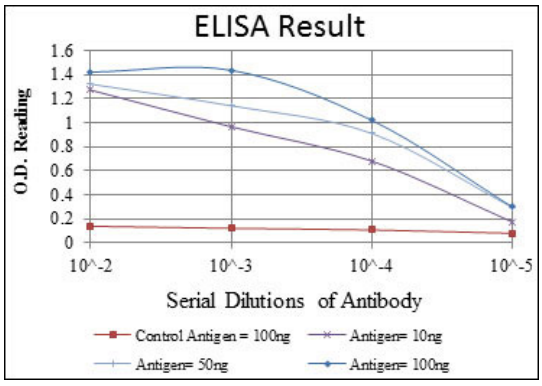
Cellular Location
Cell junction, adherens junction. Cell junction, desmosome. Cytoplasm, cytoskeleton. Membrane; Peripheral membrane protein. Note=Cytoplasmic in a soluble and membrane-associated form

Tissue Location
Expressed in the heart (at protein level).

JUP 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



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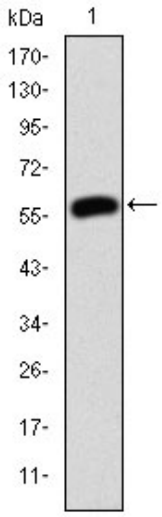


Figure 1: Western blot analysis using JUP mAb against human JUP (AA: 534-740) recombinant protein. (Expected MW is 48.5 kDa)

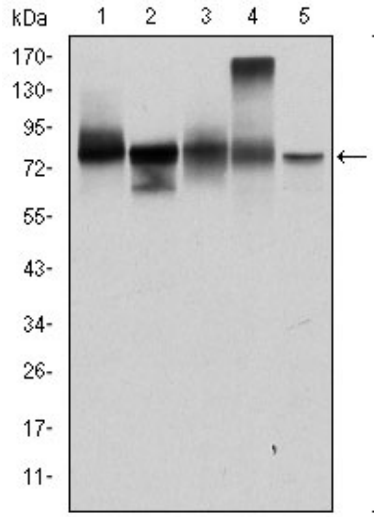


Figure 2: Western blot analysis using JUP mouse mAb against T47D (1), MCF-7 (2), SKBR-3 (3), A431 (4) and HEK293 (5) cell lysate.

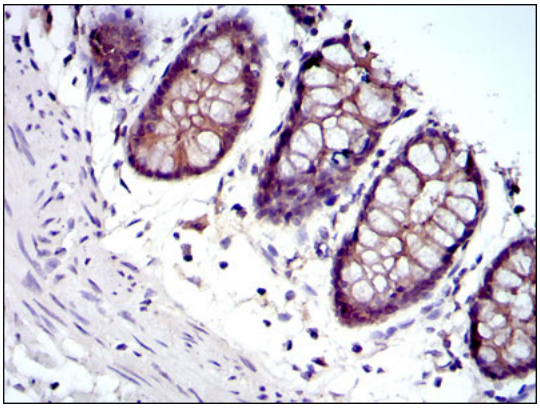


Figure 3: Immunohistochemical analysis of paraffin-embedded rectum tissues using JUP mouse mAb with DAB staining.

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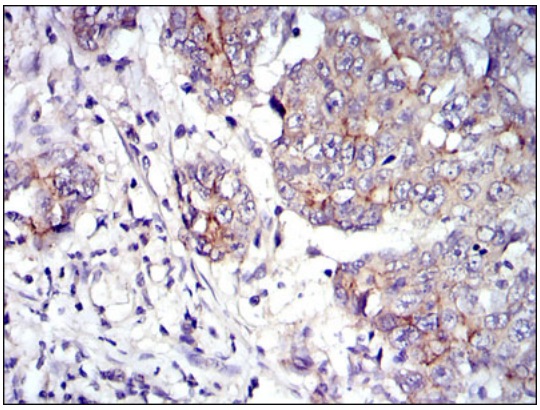


Figure 4: Immunohistochemical analysis of paraffin-embedded stomach cancer tissues using JUP mouse mAb with DAB staining.

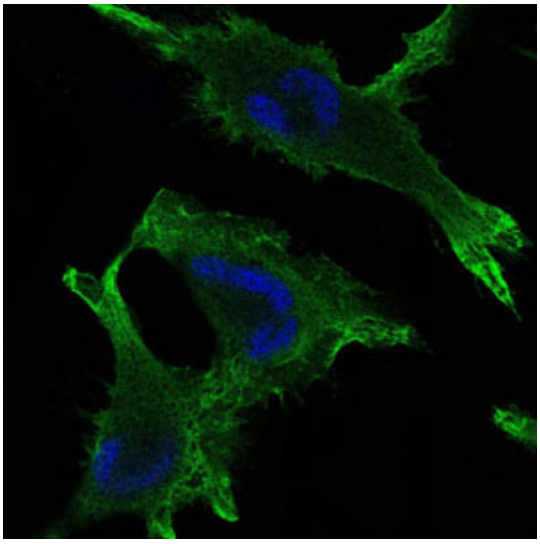


Figure 5: Immunofluorescence analysis of U251 cells using JUP mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

JUP Antibody - References

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