

# JUP/CTNNG/Junction Plakoglobin Antibody (clone 2G9)

Mouse Monoclonal Antibody Catalog # ALS13349

### **Specification**

# JUP/CTNNG/Junction Plakoglobin Antibody (clone 2G9) - Product Information

Application IF, IHC
Primary Accession P14923
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 82kDa KDa

### JUP/CTNNG/Junction Plakoglobin Antibody (clone 2G9) - Additional Information

**Gene ID 3728** 

#### **Other Names**

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

### **Reconstitution & Storage**

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

#### **Precautions**

JUP/CTNNG/Junction Plakoglobin Antibody (clone 2G9) is for research use only and not for use in diagnostic or therapeutic procedures.

# JUP/CTNNG/Junction Plakoglobin Antibody (clone 2G9) - 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).

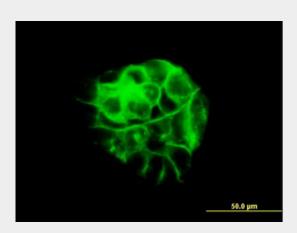


# JUP/CTNNG/Junction Plakoglobin Antibody (clone 2G9) - Protocols

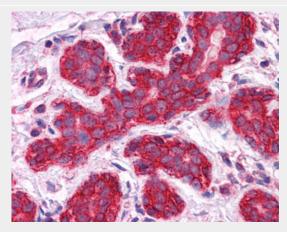
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## JUP/CTNNG/Junction Plakoglobin Antibody (clone 2G9) - Images

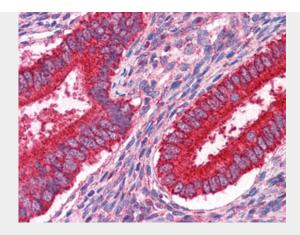


Immunofluorescence of monoclonal antibody to JUP on A-431 cell (antibody concentration 10 ug/ml).



Anti-Gamma Catenin antibody IHC of human breast.





Anti-Gamma Catenin antibody IHC of human uterus.

# JUP/CTNNG/Junction Plakoglobin Antibody (clone 2G9) - Background

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).

## JUP/CTNNG/Junction Plakoglobin Antibody (clone 2G9) - References

Franke W.W.,et al.Proc. Natl. Acad. Sci. U.S.A. 86:4027-4031(1989). Zimbelmann R.,et al.Submitted (DEC-1995) to the EMBL/GenBank/DDBJ databases. Whittock N.V.,et al.Exp. Dermatol. 9:323-326(2000). Liang X.-J.,et al.Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases. Zody M.C.,et al.Nature 440:1045-1049(2006).