10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Goat Anti-Plakoglobin / Gamma-catenin Antibody
Peptide-affinity purified goat antibody
Catalog # AF1838a

Specification

Goat Anti-Plakoglobin / Gamma-catenin Antibody - Product Information

Application	**WB, E, EIA**
Primary Accession	P14923
Other Accession	NP_068831, 3728, 16480 (mouse)
Reactivity	**Human, Rat**
Predicted	**Mouse, Pig, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**81745**

Goat Anti-Plakoglobin / Gamma-catenin Antibody - Additional Information

Gene ID 3728

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

Dilution
WB~~1:1000
E~~N/A
EIA~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

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
Goat Anti-Plakoglobin / Gamma-catenin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Plakoglobin / Gamma-catenin 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. Cell membrane; Peripheral membrane protein. Cytoplasm {ECO:0000250|UniProtKB:Q9PVF7}. Cell junction {ECO:0000250|UniProtKB:Q9PVF7}. Nucleus {ECO:0000250|UniProtKB:Q9PVF7} Note=Cytoplasmic in a soluble and membrane-associated form. Colocalizes with DSG4 at desmosomes (PubMed:21495994)

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

Goat Anti-Plakoglobin / Gamma-catenin 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

Goat Anti-Plakoglobin / Gamma-catenin Antibody - Images

AF1838a staining (0.03 µg/ml) of A431 lysate (RIPA buffer, 35 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

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AF1838a staining (1 µg/ml) of Rat Eye lysate (RIPA buffer, 35 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

Goat Anti-Plakoglobin / Gamma-catenin Antibody - Background

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.

Goat Anti-Plakoglobin / Gamma-catenin Antibody - References

Expression of the E-cadherin-catenin complex in patients with pancreatic ductal adenocarcinoma. Pryczynicz A, et al. Folia Histochem Cytobiol, 2010 Jan 1. PMID 20529828.
The expression of E-cadherin-catenin complex in patients with advanced gastric cancer: role in formation of metastasis. Czyzewska J, et al. Folia Histochem Cytobiol, 2010 Jan 1. PMID 20529814.
Desmosomal gene analysis in arrhythmogenic right ventricular dysplasia/cardiomyopathy: spectrum of mutations and clinical impact in practice. Fressart V, et al. Europace, 2010 Jun. PMID 20400443.
Homozygous mutations in the 5' region of the JUP gene result in cutaneous disease but normal heart development in children. Cabral RM, et al. J Invest Dermatol, 2010 Jun. PMID 20130592.
Plakoglobin interacts with and increases the protein levels of metastasis suppressor Nm23-H2 and regulates the expression of Nm23-H1. Aktary Z, et al. Oncogene, 2010 Apr 8. PMID 20101217.