

Anti-Gamma Catenin Picoband Antibody

Catalog # ABO11877

Specification

Anti-Gamma Catenin Picoband Antibody - Product Information

ApplicationWB, IHCPrimary AccessionP14923HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Junction plakoglobin(JUP) detection. Tested with WB, IHC-P, IHC-F, ICC in Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Gamma Catenin Picoband Antibody - Additional Information

Gene ID 3728

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

Calculated MW 81745 MW KDa

Application Details Immunocytochemistry , 0.5-1 μg/ml, Human, -
Immunohistochemistry(Frozen Section), 0.5-1 μg/ml, Rat, Human
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, Mouse, Rat, By Heat
br>Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

Subcellular Localization

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

Protein Name Junction plakoglobin

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

E.coli-derived human gamma Catenin recombinant protein (Position: M556-A745). Human gamma Catenin shares 98% amino acid (aa) sequence identity with both mouse and rat gamma Catenin.

Purification

Immunogen affinity purified.



Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the beta-catenin family.

Anti-Gamma Catenin Picoband Antibody - Protein Information

Name JUP (<u>HGNC:6207</u>)

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 VEcadherin 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).

Anti-Gamma Catenin Picoband Antibody - Protocols

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

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

Anti-Gamma Catenin Picoband Antibody - Images

100KD — 70KD — 55KD — ____ 35KD — 25KD — 15KD —

Anti- gamma Catenin Picoband antibody, ABO11877, Western blottingAll lanes: Anti gamma Catenin(ABO11877) at 0.5ug/mlWB: Recombinant Human gamma Catenin Protein 0.5ngPredicted bind size: 47KDObserved bind size: 47KD



Anti- gamma Catenin Picoband antibody, ABO11877, Western blottingAll lanes: Anti gamma Catenin (ABO11877) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Rat Cardiac Muscle Tissue Lysate at 50ugLane 3: Rat Thymus Tissue Lysate at 50ugLane 4: RH35 Whole Cell Lysate at 40ugLane 5: Hela Whole Cell Lysate at 40ugLane 6: Colo320 Whole Cell Lysate at 40ugLane 7: HepG2 Whole Cell Lysate at 40ugLane 8: HepA Whole Cell Lysate at 40ugLane 9: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 81KD Observed bind size: 81KD



Anti- gamma Catenin Picoband antibody, ABO11877, IHC(P)IHC(P): Human Intestinal Cancer Tissue





Anti- gamma Catenin Picoband antibody, ABO11877, IHC(P)IHC(P): Mouse Intestine Tissue



Anti- gamma Catenin Picoband antibody, ABO11877, IHC(P)IHC(P): Rat Intestine Tissue



Anti- gamma Catenin Picoband antibody, ABO11877, IHC(F)IHC(F): Rat Intestine Tissue

Anti-Gamma Catenin Picoband Antibody - Background

Junction plakoglobin(JUP), also known as gamma-catenin, is a protein that in humans is encoded by the JUP gene. It is a member of the catenin protein family and homologous to Î²-catenin, and it is mapped to 17q21.2. This gene encodes a major cytoplasmic protein that 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. Meanwhile, JUP may have distinct roles in Wnt signaling and cancer via differential effects on downstream target genes.