

# Rabbit Anti-phospho-gamma Catenin (Tyr550) antibody

# SL5467R

Product Name:	phospho-gamma Catenin (Tyr550)
Chinese Name:	<b>磷酸化</b> γ连环 <b>蛋白抗体</b>
Alias:	gamma Catenin (phospho Y550); gamma Catenin (phospho Tyr550); p-gamma Catenin (phospho Y550); gamma Catenin; ARVD12; Catenin (cadherin associated protein) gamma 80kDa; Catenin (cadherin associated protein), gamma 80kDa; catenin (cadherin-associated protein) gamma (80kD); Catenin gamma 80kDa; Catenin gamma; Desmoplakin 3; Desmoplakin III; Desmoplakin-3; Desmoplakin3; DesmoplakinIII; DP 3; DP III; DP3; DPIII; Gamma catenin; Junction plakoglobin; JUP; PDGB; PKGB; PLAK HUMAN; PLAKOGLOBIN;
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	82kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human JUP around the phosphorylation site of Tyr550:QP(p-Y)TD
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year

#### PubMed:

PubMed

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. [provided by RefSeq].

#### **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.

#### Subunit:

Homodimer. Component of an E-cadherin/ catenin adhesion complex composed of at least E-cadherin/CDH1 and gamma-catenin/JUP, and possibly alpha-catenin/CTNNA1; the complex is located to adherens junctions. The stable association of CTNNA1 is controversial as CTNNA1 was shown not to bind to F-actin when assembled in the complex. Interacts with MUC1. Interacts with CAV1. Interacts with PTPRJ. Interacts with DSC2.

#### Subcellular Location:

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

#### Post-translational modifications:

May be phosphorylated by FER.

#### **DISEASE:**

Defects in JUP are the cause of Naxos disease (NXD) [MIM:601214]. NXD is an autosomal recessive disorder combining diffuse non-epidermolytic palmoplantar keratoderma with arrhythmogenic right ventricular dysplasia/cardiomyopathy and woolly hair. Defects in JUP are the cause of familial arrhythmogenic right ventricular dysplasia type 12 (ARVD12) [MIM:611528]; also called arrhythmogenic right ventricular cardiomyopathy 12 (ARVC12). ARVD is an autosomal dominant disease characterized by partial degeneration of the myocardium of the right ventricle, electrical instability, and sudden death. It is clinically defined by electrocardiographic

# **Product Detail:**

and angiographic criteria; pathologic findings, replacement of ventricular myocardium with fatty and fibrous elements, preferentially involve the right ventricular free wall.

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# Similarity:

Belongs to the beta-catenin family.

Contains 9 ARM repeats.

# **SWISS:**

P14923

#### Gene ID:

3728

#### Database links:

Entrez Gene: 3728Human

Entrez Gene: 16480Mouse

Entrez Gene: 81679Rat

Omim: 173325Human

SwissProt: P14923Human

SwissProt: Q02257Mouse

SwissProt: Q6P0K8Rat

Unigene: 514174Human

Unigene: 299774Mouse

Unigene: 11255Rat

# **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Cytoskeleton的微丝E-cad通过相关蛋白α、β、γ-

cat经羟基端在细胞内与Cytoskeleton的微丝连接形成E-

cad/cat) 复合体,参与细胞粘附、生长、增殖等过程.