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Anti-γ-Catenin (Tyr-550), Phosphospecific Antibody

Catalog # AN1682

Product Information

Application	WB, ICC
Primary Accession	P14923
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	81745

Additional Information

Gene ID	3728
Other Names	Plakoglobin, JUP, Desmoplakin III, Desmoplakin-3, catenin gamma1
Target/Specificity	Plakoglobin (γ-Catenin) is a catenin family member identified as a component of desmosomes. γ-Catenin has high homology to β-catenin and, like β-catenin, it can associate with the cadherins, E-cadherin and N-cadherin. One molecule of α-catenin and at least one molecule of β-catenin and γ-Catenin simultaneously bind to a single cadherin molecule. A 19-amino acid sequence of desmoglein was found to be critical for binding of γ-Catenin. Similar catenin-binding domains found in cadherins, suggest a common mechanism for γ-Catenin localization to both adherens junctions and desmosomes. Phosphorylation of tyrosine residues in γ-Catenin can modify its interactions with other proteins. Phosphorylation of tyrosine 644 decreases γ-Catenin association with α-catenin, but increases binding to desmoplakin. Fer kinase can phosphorylate tyrosine 550, which increases γ-Catenin binding to α-catenin. Thus, tyrosine phosphorylation may be important for regulation of γ-Catenin protein-protein interactions within desmosomal complexes.
Dilution	WB~~1:1000 ICC~~N/A
Format	Antigen Affinity Purified
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	Anti-γ-Catenin (Tyr-550), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

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bind to a single cadherin molecule. A 19-amino acid sequence of desmoglein was found to be critical for binding of γ-Catenin. Similar catenin-binding domains found in cadherins, suggest a common mechanism for γ-Catenin localization to both adherens junctions and desmosomes. Phosphorylation of tyrosine residues in γ-Catenin can modify its interactions with other proteins. Phosphorylation of tyrosine 644 decreases γ-Catenin association with α-catenin, but increases binding to desmoplakin. Fer kinase can phosphorylate tyrosine 550, which increases γ-Catenin binding to α-catenin. Thus, tyrosine phosphorylation may be important for regulation of γ-Catenin protein-protein interactions within desmosomal complexes.