

Anti-y-Catenin (C-terminal region) Antibody

Catalog # AN1681

Specification

Anti-γ-Catenin (C-terminal region) Antibody - Product Information

Primary Accession
Reactivity
Bovine
Host
Rabbit

Clonality Rabbit Polyclonal

Isotype IgG
Calculated MW 81745

Anti-γ-Catenin (C-terminal region) Antibody - 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.

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 (C-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

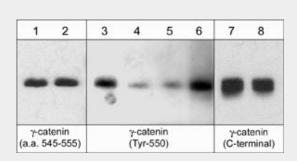
Anti-y-Catenin (C-terminal region) Antibody - Protocols

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

Anti-y-Catenin (C-terminal region) Antibody - Images



Western blot analysis of anti- γ -Catenin (C-terminal) immunoprecipitates from pervanadate-treated A431. The immunoprecipitates were untreated (lanes 1,3,7) or treated with alkaline phosphatase (lanes 2,4,8). The blots were probed with γ -Catenin (a.a. 545-555), γ -Catenin (Tyr-550) or γ -Catenin (C-terminal) antibodies. The anti- γ -Catenin (Tyr-550) was used in the presence of γ -Catenin (Tyr-550) (lane 5) or γ -Catenin (Tyr-644) (lane 6) peptides.

Anti-γ-Catenin (C-terminal region) Antibody - Background

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.