

**Anti- $\gamma$ -Catenin (Tyr-550), Phosphospecific Antibody**  
Catalog # AN1682**Specification****Anti- $\gamma$ -Catenin (Tyr-550), Phosphospecific Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P14923</a>
Reactivity	Bovine
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	81745

**Anti- $\gamma$ -Catenin (Tyr-550), Phosphospecific Antibody - Additional Information**

Gene ID 3728

**Other Names**

Plakoglobin, JUP, Desmoplakin III, Desmoplakin-3, catenin gamma1

**Target/Specificity**

Plakoglobin ( $\gamma$ -Catenin) is a catenin family member identified as a component of desmosomes.  $\gamma$ -Catenin has high homology to  $\beta$ -catenin and, like  $\beta$ -catenin, it can associate with the cadherins, E-cadherin and N-cadherin. One molecule of  $\alpha$ -catenin and at least one molecule of  $\beta$ -catenin and  $\gamma$ -Catenin simultaneously bind to a single cadherin molecule. A 19-amino acid sequence of desmoglein was found to be critical for binding of  $\gamma$ -Catenin. Similar catenin-binding domains found in cadherins, suggest a common mechanism for  $\gamma$ -Catenin localization to both adherens junctions and desmosomes. Phosphorylation of tyrosine residues in  $\gamma$ -Catenin can modify its interactions with other proteins. Phosphorylation of tyrosine 644 decreases  $\gamma$ -Catenin association with  $\alpha$ -catenin, but increases binding to desmoplakin. Fer kinase can phosphorylate tyrosine 550, which increases  $\gamma$ -Catenin binding to  $\alpha$ -catenin. Thus, tyrosine phosphorylation may be important for regulation of  $\gamma$ -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- $\gamma$ -Catenin (Tyr-550), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.**Shipping**

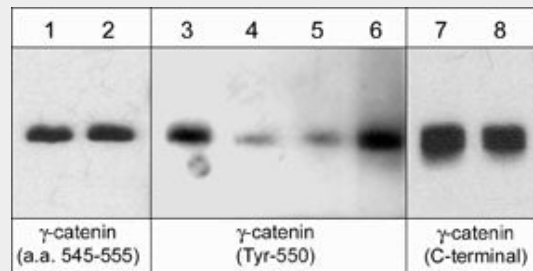
Blue Ice

**Anti- $\gamma$ -Catenin (Tyr-550), Phosphospecific Antibody - Protocols**

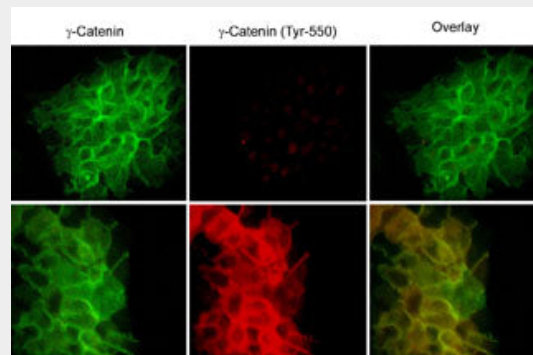
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti- $\gamma$ -Catenin (Tyr-550), Phosphospecific Antibody - Images



Western blot analysis of anti- $\gamma$ -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  $\gamma$ -Catenin (a.a. 545-555),  $\gamma$ -Catenin (Tyr-550) or  $\gamma$ -Catenin (C-terminal) antibodies. The anti- $\gamma$ -Catenin (Tyr-550) was used in the presence of  $\gamma$ -Catenin (Tyr-550) (lane 5) or  $\gamma$ -Catenin (Tyr-644) (lane 6) peptides.



Immunocytochemical labeling of phosphorylated  $\gamma$ -Catenin in control (Top) and pervanadate-treated (Bottom) A431 cells. The cells were co-labeled with mouse monoclonal  $\gamma$ -Catenin (CM1111) or rabbit polyclonal  $\gamma$ -Catenin (Tyr-550) antibodies, then the antibodies were detected using appropriate secondary antibodies conjugated to Cy2 or Cy3.

### Anti- $\gamma$ -Catenin (Tyr-550), Phosphospecific Antibody - Background

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$\gamma$ -Catenin binding to  $\alpha$ -catenin. Thus, tyrosine phosphorylation may be important for regulation of  $\gamma$ -Catenin protein-protein interactions within desmosomal complexes.