

**Anti- $\alpha$ 1-Catenin (N-terminal region) Antibody**  
**Catalog # AN1672****Specification**

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**Anti- $\alpha$ 1-Catenin (N-terminal region) Antibody - Product Information**

Primary Accession	<a href="#">P35221</a>
Reactivity	Bovine, Chicken
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	100071

**Anti- $\alpha$ 1-Catenin (N-terminal region) Antibody - Additional Information**Gene ID **1495****Other Names**

alphaE-catenin, catenin alpha1, catenin

**Target/Specificity**

$\alpha$ -catenins are cadherin interacting proteins with homology to vinculin. Three  $\alpha$ -catenin genes have been described including  $\alpha$ 1-catenin ( $\alpha$ E-Catenin),  $\alpha$ 2-catenin ( $\alpha$ N-catenin), and  $\alpha$ 3-catenin ( $\alpha$ T-catenin).  $\alpha$ 1-catenin has 81% homology with  $\alpha$ 2-catenin and 60% homology with  $\alpha$ 3-catenin. These  $\alpha$ -catenin isoforms may have similar roles since each binds cadherins. However, their expression patterns are both overlapping and distinct.  $\alpha$ 1-catenin was identified in epithelial cells, and is expressed in various cell types.  $\alpha$ 2-catenin is enriched in the nervous system, and  $\alpha$ 3-catenin is expressed highest in testis and heart. Phosphorylation may regulate the activity of  $\alpha$ 1-catenin, since tyrosine phosphorylation of Tyr-148 occurs during intercellular adhesion. This site is dephosphorylated by SHP2, which inhibits  $\alpha$ 1-catenin binding to  $\beta$ -catenin and translocation to the plasma membrane. Phosphorylation of  $\alpha$ 1-catenin at Tyr-148 may be important for inhibition of cell transformation, and dephosphorylation of this site may be important during SHP2-mediated cell transformation.

**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- $\alpha$ 1-Catenin (N-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.**Shipping**

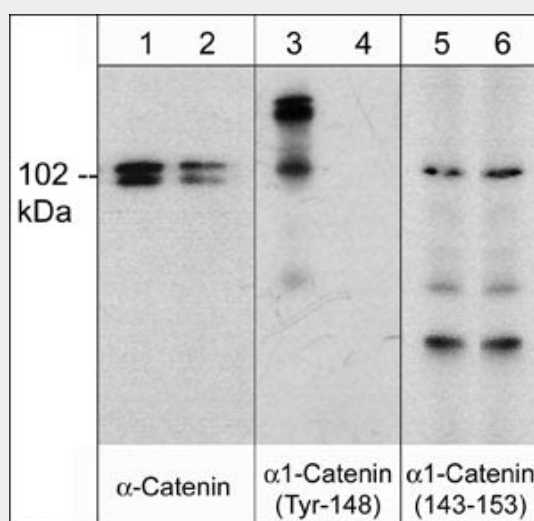
Blue Ice

**Anti- $\alpha$ 1-Catenin (N-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 Cytometry](#)
- [Cell Culture](#)

#### Anti- $\alpha$ 1-Catenin (N-terminal region) Antibody - Images



Western blot analysis of rat PC12 cells treated with pervanadate (1 mM) for 30 min (lanes 1, 3, & 5) then the blot was treated with alkaline phosphatase (lanes 2, 4, & 6). The blot was probed with anti- $\alpha$ -Catenin monoclonal (lanes 1 & 2), anti- $\alpha$ 1-Catenin (Tyr-148) phospho-specific (lanes 3 & 4), or anti- $\alpha$ 1-Catenin (a.a. 143-153) (lanes 5 & 6).

#### Anti- $\alpha$ 1-Catenin (N-terminal region) Antibody - Background

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