10320 Camino Santa Fe, Suite A
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Tel: 858.875.1900 Fax: 858.875.1999

Anti-β-Catenin (Tyr-489) [γ-Catenin (Tyr-480)], Phosphospecific Antibody

Catalog # AN1679

Specification

Anti-β-Catenin (Tyr-489) [γ-Catenin (Tyr-480)], Phosphospecific Antibody - Product Information

Application	**WB**
Primary Accession	P35222
Reactivity	**Bovine**
Host	**Rabbit**
Clonality	**Rabbit Polyclonal**
Isotype	**IgG**
Calculated MW	**85497**

Anti-β-Catenin (Tyr-489) [γ-Catenin (Tyr-480)], Phosphospecific Antibody - Additional Information

Gene ID	**1499**

Other Names
Catenin beta1, CTNNB1, catenin

Target/Specificity
β-Catenin is a 92 kDa protein that binds to the cytoplasmic tail of E-Cadherin. The cadherins, transmembrane adhesion molecules, are found with catenins at adherens junctions. Deletions in the cytoplasmic domain of E-Cadherin eliminate catenin binding and result in a loss of cell adhesion. Tyrosine phosphorylation of β-Catenin can regulate its interaction with critical components of adherens junctions. Both Fer and Fyn kinases phosphorylate tyrosine 142 in vitro. Overexpression of these kinases in epithelial cells disrupts interactions between α- and β-Catenins. The phosphorylation of tyrosine 142 may act as a switch from the transcriptional to the adhesive role of β-Catenin. Src family kinases can also phosphorylate tyrosine 86 and 654 in β-Catenin. The Tyr-654 phosphorylation regulates β-Catenin binding to E-cadherin. Thus, site-specific tyrosine phosphorylation of β-Catenin may regulate protein-protein interactions leading to changes in cell adhesion.

Dilution
WB~~1:1000

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-β-Catenin (Tyr-489) [γ-Catenin (Tyr-480)], Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

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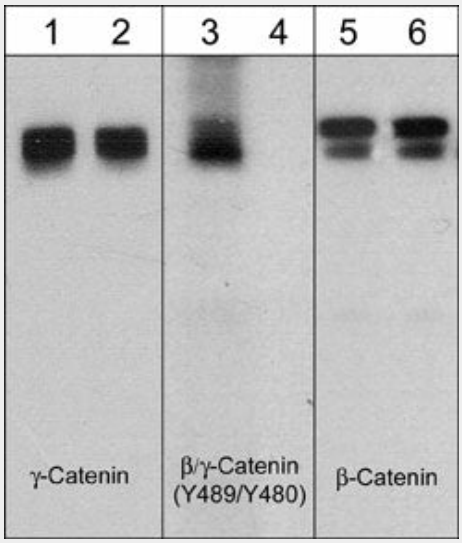
Anti-β-Catenin (Tyr-489) [γ-Catenin (Tyr-480)], Phosphospecific Antibody - Protocols

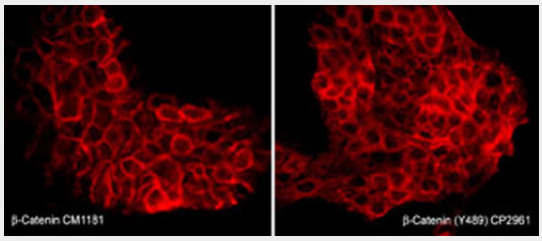
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-β-Catenin (Tyr-489) [γ-Catenin (Tyr-480)], Phosphospecific Antibody - Images



Western blot analysis of A431 cells stimulated with pervanadate (1 mM) for 30 min (lanes 1, 3, & 5) then treated with akaline phosphatase (lanes 2, 4, & 6). The blot was probed with anti-γ-Catenin (CM1111), anti-β-Catenin (Tyr-489) conserved site (CP2961), or anti-β-Catenin (CM1181).



Immunocytochemical labeling of β-Catenin in pervanadate-treated A431 cells. The cells were labeled with mouse monoclonal β-Catenin (CM1181) or rabbit polyclonal β-Catenin (Tyr-489) antibodies, then the antibodies were detected using appropriate secondary antibodies conjugated to Cy3.

Anti-β-Catenin (Tyr-489) [γ-Catenin (Tyr-480)], Phosphospecific Antibody - Background

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the cytoplasmic domain of E-Cadherin eliminate catenin binding and result in a loss of cell adhesion. Tyrosine phosphorylation of β-Catenin can regulate its interaction with critical components of adherens junctions. Both Fer and Fyn kinases phosphorylate tyrosine 142 in vitro. Overexpression of these kinases in epithelial cells disrupts interactions between α- and β-Catenins. The phosphorylation of tyrosine 142 may act as a switch from the transcriptional to the adhesive role of β-Catenin. Src family kinases can also phosphorylate tyrosine 86 and 654 in β-Catenin. The Tyr-654 phosphorylation regulates β-Catenin binding to E-cadherin. Thus, site-specific tyrosine phosphorylation of β-Catenin may regulate protein-protein interactions leading to changes in cell adhesion.