

Anti- β -Catenin (Tyr-333) [γ -Catenin (Tyr-324)], Phosphospecific Antibody Catalog # AN1678

Specification

Anti- β -Catenin (Tyr-333) [γ -Catenin (Tyr-324)], Phosphospecific Antibody - Product Information

Primary Accession <u>P35222</u>

Reactivity Bovine, Chicken, Drosophila, C.Elegans

Host Rabbit

Clonality Rabbit Polyclonal

Isotype IgG
Calculated MW 85497

Anti- β -Catenin (Tyr-333) [γ -Catenin (Tyr-324)], 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.

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-333) [γ -Catenin (Tyr-324)], Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

Anti-β-Catenin (Tyr-333) [y-Catenin (Tyr-324)], Phosphospecific Antibody - Protocols

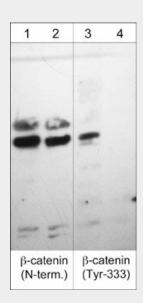




Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-β-Catenin (Tyr-333) [γ-Catenin (Tyr-324)], Phosphospecific Antibody - Images



Western blot analysis of A431 cells stimulated with pervanadate (1 mM) for 30 min (lanes 1 & 3) then treated with akaline phosphatase (lanes 2 & 4). The blot was probed with CP1061 anti- β -Catenin (CP1061) (lanes 1 & 2) and CP3051 anti- β -Catenin (Tyr-333) (lanes 3 & 4).

Anti-β-Catenin (Tyr-333) [γ-Catenin (Tyr-324)], Phosphospecific Antibody - Background

 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.