

Anti-β-Catenin (Tyr-142) [γ-Catenin (Tyr-133)], Phosphospecific Antibody

Catalog # AN1677

Product Information

Application WB, ICC
Primary Accession P35222
Host Rabbit

Clonality Rabbit Polyclonal

Isotype IgG **Calculated MW** 85497

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 ICC~~N/A

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-142) [y-Catenin (Tyr-133)], Phosphospecific Antibody is for

research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.