

# Anti- $\beta$ -Catenin (N-terminal) Antibody

Catalog # AN1675

## Product Information

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<b>Application</b>	WB, IHC, IP
<b>Primary Accession</b>	<a href="#">P35222</a>
<b>Host</b>	Rabbit
<b>Clonality</b>	Rabbit Polyclonal
<b>Isotype</b>	IgG
<b>Calculated MW</b>	85497

## Additional Information

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<b>Gene ID</b>	1499
<b>Other Names</b>	Catenin beta1, CTNNB1, catenin

<b>Target/Specificity</b>	$\beta$ -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 $\beta$ -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 $\alpha$ - and $\beta$ -Catenins. The phosphorylation of tyrosine 142 may act as a switch from the transcriptional to the adhesive role of $\beta$ -Catenin. Src family kinases can also phosphorylate tyrosine 86 and 654 in $\beta$ -Catenin. The Tyr-654 phosphorylation regulates $\beta$ -Catenin binding to E-cadherin. Thus, site-specific tyrosine phosphorylation of $\beta$ -Catenin may regulate protein-protein interactions leading to changes in cell adhesion.
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<b>Dilution</b>	WB~~1:1000 IHC~~1:100~500 IP~~N/A
<b>Format</b>	Antigen Affinity Purified
<b>Storage</b>	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.
<b>Precautions</b>	Anti- $\beta$ -Catenin (N-terminal) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
<b>Shipping</b>	Blue Ice

## Background

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$\beta$ -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  $\beta$ -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  $\alpha$ - and  $\beta$ -Catenins. The phosphorylation of tyrosine 142 may act as a switch from the transcriptional to the adhesive role of  $\beta$ -Catenin. Src family kinases can also phosphorylate tyrosine 86 and 654 in  $\beta$ -Catenin. The Tyr-654 phosphorylation regulates  $\beta$ -Catenin binding to E-cadherin. Thus, site-specific tyrosine phosphorylation of  $\beta$ -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'.