

# Anti- $\beta$ -Catenin (C-terminal)

## $\gamma$ -Catenin (C-terminal)]

Cat. #	<b>CP1201</b>
Host	<b>Rabbit Polyclonal</b>
Size	<b>100<math>\mu</math>l</b>

### Background:

$\beta$ -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.

### References:

Ozawa, M. et al. (1990) Proc. Natl. Acad. Sci. USA 87:4246.  
Roura, S. et al. (1999) J Biol Chem. 274(51):36734.  
Piedra, J. et al. (2003) Mol. Cell. Biol. 23(7):2287-2297.  
Brembeck, F.H. et al. (2004) Genes Dev. 18(18):2225-2230.

### Immunogen:

A synthetic peptide (coupled to KLH) corresponding to amino acid residues in the C-terminal region of human  $\beta$ -Catenin. This peptide sequence has homology to the C-terminal region of  $\gamma$ -Catenin and is highly conserved in rat and mouse  $\beta$ - and  $\gamma$ -Catenin.

### Buffer and Storage:

Rabbit polyclonal, affinity-purified antibody is supplied in 100 $\mu$ l phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at  $-20^{\circ}\text{C}$ . Do not aliquot. Stable for 1 year.

### Applications:

Western blotting 1:2000 dilution<sup>†</sup>  
ELISA 1:4000 dilution

End user should determine optimal dilution for their particular applications and experiments.

<sup>†</sup>Membrane was incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

### Specificity:

The antibody detects the 92/86 kDa\* proteins corresponding to the molecular mass of  $\beta$ - and  $\gamma$ -Catenin on SDS-PAGE immunoblots of A431 and Hct116 src transformed cells. In addition, this antibody recognizes both  $\beta$ - and  $\gamma$ -Catenin in immunoprecipitations using mouse monoclonal anti- $\beta$ -Catenin and  $\gamma$ -Catenin, respectively.

\*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

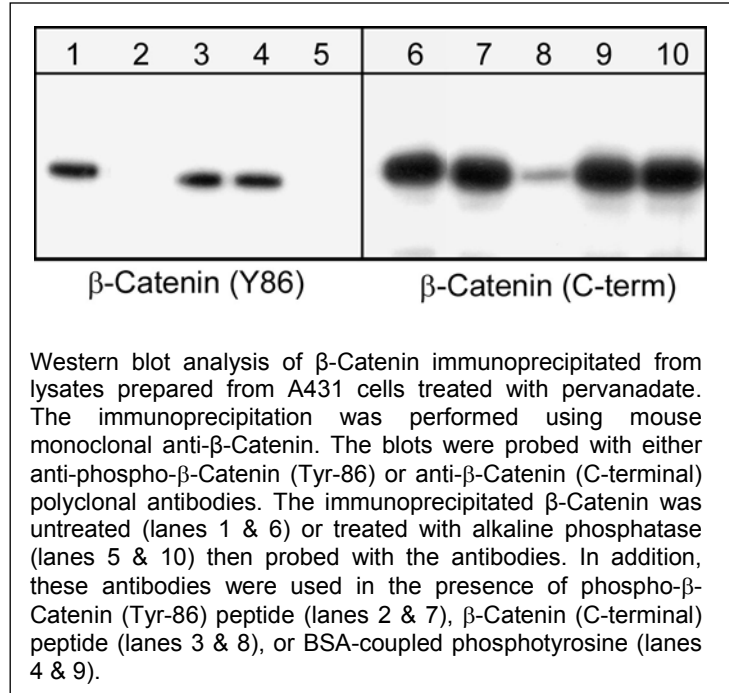
### Related Products:

CP1191  $\beta$ -Catenin (Tyr-86), phospho-specific Rabbit Polyclonal

CP1081  $\beta$ -Catenin (Tyr-142) ( $\gamma$ -Catenin (Tyr-133)), phospho-specific Rabbit Polyclonal

CP1061  $\beta$ -Catenin (N-terminal) Rabbit Polyclonal

CM1181  $\beta$ -Catenin Mouse Monoclonal



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