

For Research Use Only



# Phospho-Beta Catenin (Ser33) Recombinant antibody, PBS Only

Catalog Number: 80067-1-PBS

## Basic Information

<b>Catalog Number:</b> 80067-1-PBS	<b>GenBank Accession Number:</b> BC058926	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1499	<b>CloneNo.:</b> 3K1
<b>Source:</b> Rabbit	<b>ENSEMBL Gene ID:</b> ENSG00000168036	
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> P35222	
	<b>Full Name:</b> catenin (cadherin-associated protein), beta 1, 88kDa	
	<b>Calculated MW:</b> 781 aa, 86 kDa	
	<b>Observed MW:</b> 90 kDa	

## Applications

**Tested Applications:**  
WB, Indirect ELISA  
**Species Specificity:**  
Human, Mouse, Rat

## Background Information

$\beta$ -Catenin, also known as CTNNB1, is an evolutionarily conserved, multifunctional intracellular protein.  $\beta$ -Catenin was originally identified in cell adherens junctions (AJs) where it functions to bridge the cytoplasmic domain of cadherins to  $\alpha$ -catenin and the actin cytoskeleton. Besides its essential role in the AJs,  $\beta$ -catenin is also a key downstream component of the canonical Wnt pathway that plays diverse and critical roles in embryonic development and adult tissue homeostasis. The Wnt/ $\beta$ -catenin pathway is also involved in the activation of other intracellular messengers such as calcium fluxes, JNK, and SRC kinases. Deregulation of  $\beta$ -catenin activity is associated with multiple diseases including cancers. (PMID: 22617422; 18334222). CK1 phosphorylates  $\beta$ -Catenin at Ser45. This phosphorylation event primes  $\beta$ -Catenin for subsequent phosphorylation by GSK-3 $\beta$ . GSK-3 $\beta$  destabilizes  $\beta$ -catenin by phosphorylating it at Ser33, Ser37, and Thr41. Mutations at these sites result in the stabilization of  $\beta$ -Catenin protein levels and have been found in many tumor cell lines.

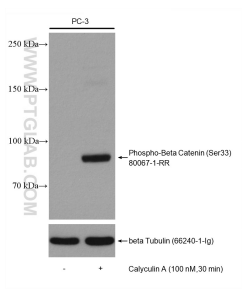
## Storage

**Storage:**  
Store at -80°C.  
**Storage Buffer:**  
PBS Only

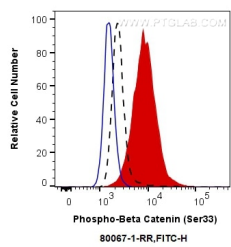
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Selected Validation Data



Non-treated PC-3 and Calyculin A treated PC-3 cells were subjected to SDS PAGE followed by western blot with 80067-1-RR (Phospho-Beta Catenin (Ser33)antibody) at dilution of 1:10000 incubated at 4°Covernight. The membrane was stripped and re-blotted with beta tubulin (66240-1-Ig) antibody as loading control. This data was developed using the same antibody clone with 80067-1-PBS in a different storage buffer formulation.



1X10<sup>6</sup> PC-3 cells untreated (dashed lines) or treated with Calyculin A (red) were intracellularly stained with 0.25 ug Anti-Human Phospho-Beta Catenin (Ser33) (80067-1-RR, Clone:3K1) and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000, or 0.25 ug Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH. This data was developed using the same antibody clone with 80067-1-PBS in a different storage