| Basic Information | Catalog Number: 51067-2-AP | GenBank Accession Number: BC058926 | Purification Method: Antigen affinity purification |
| :---: | :---: | :---: | :---: |
|  | Size: <br> 150ul , Concentration: $500 \mu \mathrm{~g} / \mathrm{ml}$ by | $\begin{aligned} & \text { GeneID (NCBI): } \\ & 1499 \end{aligned}$ | Recommended Dilutions: <br> WB 1:5000-1:50000 |
|  | Nanodrop; | ENSEMBL Gene ID: | IP 0.5-4.0 ug for $1.0-3.0 \mathrm{mg}$ of total |
|  | Source: | ENSG00000168036 | te |
|  | Rabbit | UNIPROT ID: | 1:50-1:500 |
|  | Isotype: | P35222 |  |
|  | $\lg G$ | Full Name: catenin (cadherin-associated protein), beta $1,88 \mathrm{kDa}$ |  |
|  |  | Calculated MW: |  |
|  |  | 781 aa, 86 kDa |  |
|  |  | Observed MW: |  |
|  |  | 92 kDa |  |

## Applications

## Background Information

$\beta$-Catenin, also known as CTNNB1, is an evolutionarily conserved, multifunctional intracellular protein. $\beta$-Catenin is a 92-kDa protein, originally identified in cell adherens junctions (AJs) where it functions to bridge the cytoplasmic domain of cadherins to a-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)

## Notable Publications

Storage
*** 20 ul sizes contain $0.1 \%$ BSA

## Tested Applications:

WB, IP, IF, FC, IHC, ELISA
Cited Applications:
WB, IP, IF, IHC, CoIP, ChIP
Species Specificity:
human, mouse, rat, pig
Cited Species:
human, goat, chicken, rat, sheep, mouse, zebrafish, hamster, pig, canine

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

## Positive Controls

WB : A431 cells, MCF-7 cells, human placenta tissue, mouse lung tissue, HeLa cells, SH-SY5Y cells, HEK-293 cells, NIH/3T3 cells, C6 cells, mouse liver tissue, rat liver tissue

IP: mouse liver tissue,
IHC : human colon cancer tissue, human breast cancer tissue, human liver cancer tissue, mouse colon tissue, mouse liver tissue
IF : MCF-7 cells, T-47D cells, mouse testis tissue, HeLa cells, HepG2 cells
ene

| Author | Pubmed ID | Journal | Application |
| :--- | :--- | :--- | :--- |
| Min Zhou | 36171592 | J Exp Clin Cancer Res | WB |
| Wen-Long Lei | 34580275 | Cell Death Dis | WB,IF |
| Ke-Xin Wang | 34649212 | Phytomedicine | WB,IF |

Storage:
Store at $-20^{\circ} \mathrm{C}$. Stable for one year after shipment.
Storage Buffer:
PBS with $0.02 \%$ sodium azide and $50 \%$ glycerol pH 7.3 .
Aliquoting is unnecessary for $-20^{\circ} \mathrm{C}$ storage

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free E: proteintech@ptglab.com
in USA), or 1(312) 455-8498 (outside USA) W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.


WB result of Beta Catenin antibody (51067-2-AP;
WB result of Beta Catenin antibody (51067-2-AP
1:6000; incubated at room temperature for 1.5
1:6000; incubated at room temperature for 1.5
hours) with sh-Control and sh-Beta Catenin transfected HeLa cells.


Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 51067-2-AP (beta-Catenin antibody) at dilution of 1:2000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).
$1 \times 10^{\wedge} 6 \mathrm{MCF}-7$ cells were intracellularly stained with 0.2 ug Anti-Human Beta Catenin (51067-2-AP) and CoraLite ${ }^{\text {B }} 488$-Conjugated AffiniPure Goat Anti-Rabbit $\operatorname{lgG}(\mathrm{H}+\mathrm{L})$ at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed with 4\% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).


Various lysates were subjected to SDS PAGE followed by western blot with 51067-2-AP (Beta Catenin antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours.


Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 51067-2-AP (beta-Catenin antibody) at dilution of 1:2000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).


Immunofluorescent analysis of ( $-20^{\circ} \mathrm{C}$ Ethanol)
fixed MCF-7 cells using Beta Catenin antibody
(51067-2-AP) at dilution of 1:200 and
CoraLite®488-Conjugated AffiniPure Goat AntiRabbit $\operatorname{lgG}(\mathrm{H}+\mathrm{L})$.


IP result of anti-Beta Catenin (IP:51067-2-AP, 4ug; Detection:51067-2-AP 1:500) with mouse liver tissue lysate 6400ug.

