### For Research Use Only

# Beta Catenin Monoclonal antibody

Catalog Number:66379-1-lg Featured Product

**81 Publications** 



**Basic Information** 

Catalog Number: GenBank Accession Number: **Purification Method:** 66379-1-lg NM 001904 Protein A purification

GeneID (NCBI): CloneNo.: 150ul, Concentration: 1500 µg/ml by 1499 1B8A1

Recommended Dilutions:

Source: catenin (cadherin-associated protein), WB 1:5000-1:50000

beta 1,88kDa Mouse IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate Calculated MW:

Isotype: IHC 1:10000-1:40000 781 aa, 86 kDa lgG1 IF 1:750-1:3000 Observed MW:

92 kDa

**Applications** 

**Tested Applications:** 

FC, IF, IHC, IP, WB, ELISA Cited Applications: CoIP, IF, IHC, IP, WB Species Specificity:

human, mouse, rat, pig, rabbit

Cited Species:

human, rat, sheep, mouse, pig

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, pig brain tissue, rat brain tissue, mouse brain tissue, HeLa cells, HEK-293 cells, MCF-7 cells, LNCaP cells, HSC-T6 cells, NIH/3T3 cells, rabbit brain tissue

IP: mouse brain tissue.

IHC: mouse colon tissue, human skin cancer tissue. human liver cancer tissue, rat colon tissue, human breast cancer tissue, human colon tissue

IF: MCF-7 cells, human liver cancer tissue, human skin cancer tissue

## Background Information

β-Catenin, also known as CTNNB1, is an evolutionarily conserved, multifunctional intracellular protein. β-Catenin was 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, β-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**

Author	Pubmed ID	Journal	Application
Panpan Zhang	30272329	Int J Mol Med	WB
Tao Sun	34520626	Kaohsiung J Med Sci	WB,IF
Haifeng Zhang	34428354	FEBS Open Bio	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

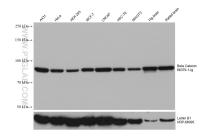
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

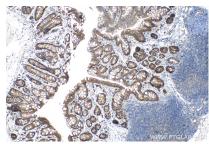
Aliquoting is unnecessary for -20°C storage

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

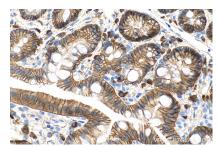
## **Selected Validation Data**



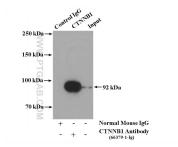
Various lysates were subjected to SDS PAGE followed by western blot with 66379-1-lg (Beta Catenin antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Lamin B1 Monoclonal antibody (HRP-66095) as loading control.



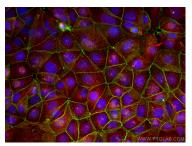
Immunohistochemical analysis of paraffinembedded mouse colon tissue slide using 66379-1-1g (Beta Catenin antibody) at dilution of 1:20000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



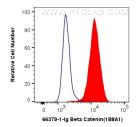
Immunohistochemical analysis of paraffinembedded mouse colon tissue slide using 66379-1-1g (Beta Catenin antibody) at dilution of 1:20000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-beta-Catenin (IP:66379-1-Ig, 4ug; Detection:66379-1-Ig 1:2000) with mouse brain tissue lysate 4400 ug.



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using Beta Catenin antibody (66379-1-Ig, Clone: 188A 1) at dilution of 1:1500 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), Alpha Tubulin antibody (11224-1-AP, red).



1X10^6 MCF-7 cells were intracellularly stained with 0.5 ug Anti-Human Beta Catenin (66379-1-lg, Clone:1B8A1) (red) labeled with FlexAble CoraLite® Plus 555 Antibody Labeling Kit for Mouse IgG1 (KFA022), or 0.5 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).