## For Research Use Only

# Beta Catenin Monoclonal antibody

Catalog Number:66379-1-lg Featured Product

113 Publications

NM 001904

GeneID (NCBI):

ENSEMBL Gene ID:

ENSG00000168036

GenBank Accession Number:



### **Basic Information**

Catalog Number: 66379-1-lg Concentration: 1500 ug/ml

Source: Mouse Isotype: lgG1

**UNIPROT ID:** P35222 Full Name:

> Calculated MW: 781 aa, 86 kDa Observed MW: 92 kDa

beta 1.88kDa

**Purification Method:** Protein G purification

CloneNo.: 1B8A1

Recommended Dilutions: WB: 1:5000-1:50000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:10000-1:40000 IF-P: 1:200-1:800 catenin (cadherin-associated protein), IF/ICC: 1:750-1:3000

FC (Intra): 0.50 ug per 10<sup>6</sup> cells in a

100 µl suspension

# **Applications**

#### **Tested Applications:**

WB, IHC, IF/ICC, IF-P, FC (Intra), IP, ELISA

**Cited Applications:** WB, IHC, IF, IP, CoIP Species Specificity: human, mouse, rat, pig Cited Species:

human, mouse, rat, pig, sheep

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 breast cancer tissue. human colon tissue, human ovary cancer tissue, human skin cancer tissue, rat colon tissue

IF-P: human colon cancer tissue, human skin cancer tissue

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

FC (Intra): MCF-7 cells,

# **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 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**

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:

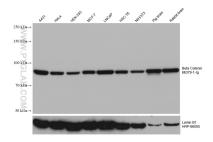
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

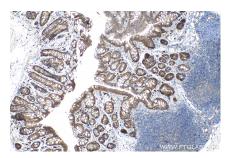
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

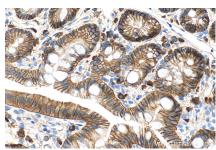
### Selected Validation Data



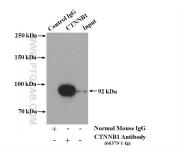
Various lysates were subjected to SDS PAGE followed by western blot with 66379-1-lg (Beta Catenin antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Lamin B1 Monoclonal antibody (HRP-66095) as loading control.



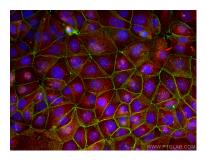
Immunohistochemical analysis of paraffinembedded mouse colon tissue slide using 66379-1- Ig (Beta Catenin antibody) at dilution of 1:20000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



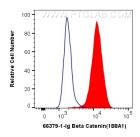
Immunohistochemical analysis of paraffinembedded mouse colon tissue slide using 66379-1-1g (Beta Catenin antibody) at dilution of 1:20000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



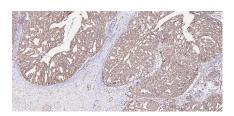
IP result of anti-Beta Catenin (IP:66379-1-Ig, 4ug; Detection:66379-1-Ig 1:2000) with mouse brain tissue lysate 4400 ug.



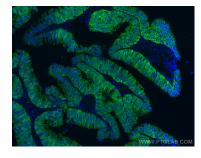
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using Beta Catenin antibody (66379-1-lg, Clone: 188A1) at dilution of 1:1500 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), Alpha Tubulin antibody (11224-1-AP, red).



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).



Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 66379-1-Ig (Beta Catenin antibody) at dilution of 1:40000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human colon cancer tissue using Beta Catenin antibody (66379-1-Ig, Clone: 188A1) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).