

For Research Use Only

Beta Catenin Monoclonal antibody

Catalog Number: 66379-1-Ig

Featured Product

109 Publications



Basic Information

Catalog Number:

66379-1-Ig

Size:

150ul, Concentration: 1500 ug/ml by Nanodrop;

Source:

Mouse

Isotype:

IgG1

GenBank Accession Number:

NM_001904

GeneID (NCBI):

1499

ENSEMBL Gene ID:

ENSG00000168036

UNIPROT ID:

P35222

Full Name:

catenin (cadherin-associated protein), beta 1, 88kDa

Calculated MW:

781 aa, 86 kDa

Observed MW:

92 kDa

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

IF/ICC: 1:750-1:3000

FC (Intra): 0.50 ug per 10⁶ 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

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 α-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/β-catenin pathway is also involved in the activation of other intracellular messengers such as calcium fluxes, JNK, and SRC kinases. Deregulation of β-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

*** 20ul sizes contain 0.1% BSA

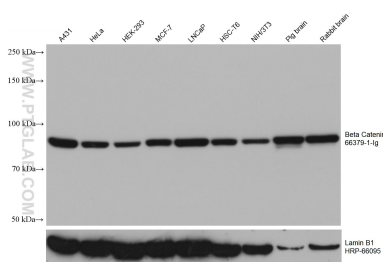
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

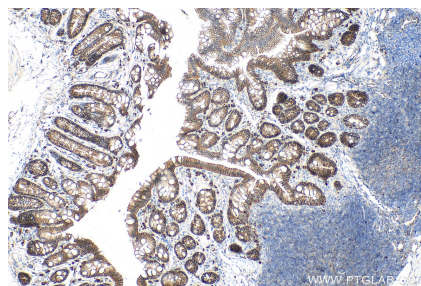
E: proteintech@ptglab.com
W: ptglab.com

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

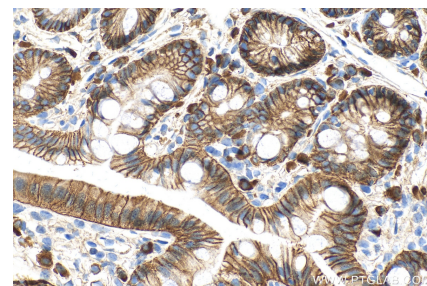
Selected Validation Data



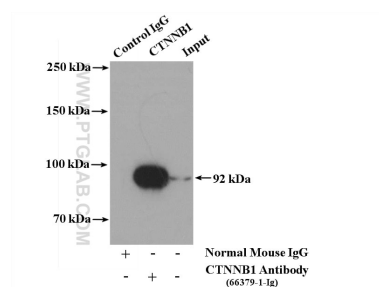
Various lysates were subjected to SDS PAGE followed by western blot with 66379-1-Ig (Beta Catenin antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Lamin B1 Monoclonal antibody (HRP-66095) as loading control.



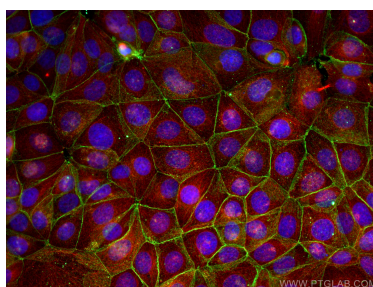
Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 66379-1-Ig (Beta Catenin antibody) at dilution of 1:20000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



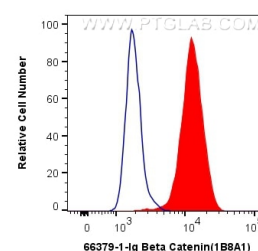
Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 66379-1-Ig (Beta Catenin antibody) at dilution of 1:20000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



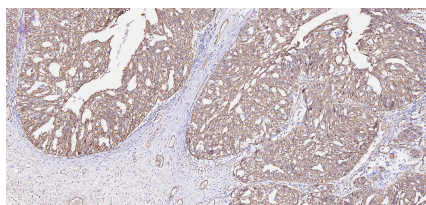
IP result of anti-Beta Catenin (IP:66379-1-Ig, 4ug; Detection:66379-1-Ig 1:2000) with mouse brain tissue lysate 4400 ug.



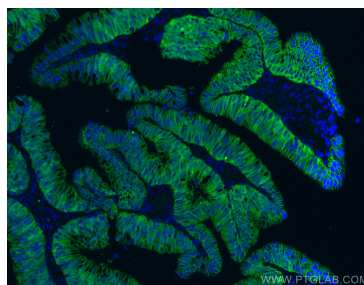
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using Beta Catenin antibody (66379-1-Ig, Clone: 1B8A1) at dilution of 1:1500 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), Alpha Tubulin antibody (11224-1-AP, red).



1X10⁶ MCF-7 cells were intracellularly stained with 0.5 ug Anti-Human Beta Catenin (66379-1-Ig, 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 paraffin-embedded 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: 1B8A1) 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).