For Research Use Only

Beta Catenin Monoclonal antibody

Catalog Number:66379-1-Ig Featured Product 108 Publications

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Basic Information

Catalog Number:
66379-1-Ig

Concentration:
1500 ug/ml

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 10^6 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 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/ 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

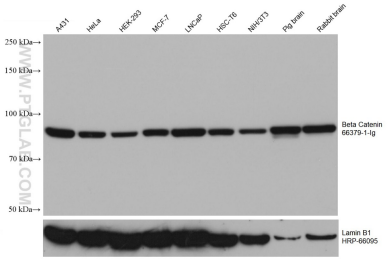
Author	Pubmed ID	Journal	Application
Panpan Zhang	30272329	Int J Mol Med	WB
Tao Sun	34520626	Kaohsiung J Med Sci	WB,IF
Haifeng Zhang	34428354	FEBS Open Bio	WB

Storage

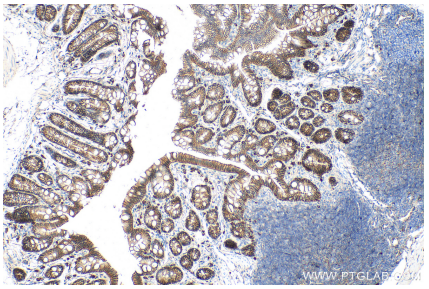
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

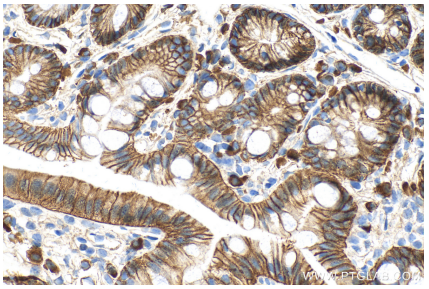
Selected Validation Data



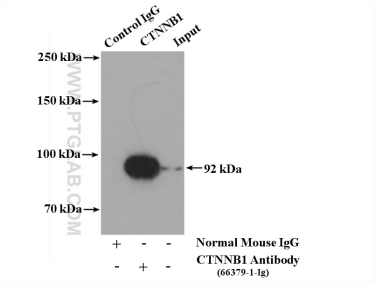
Various lysates were subjected to SDS PAGE followed by western blot with 66379-1-Ig (Beta Catenin antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Lamin B1 Monoclonal antibody (HRP-66095) as loading control.



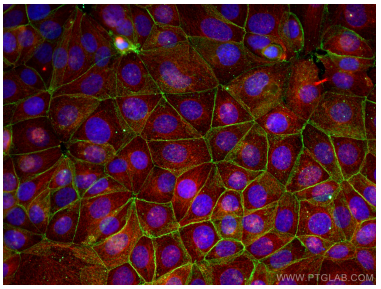
Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 66379-1-Ig (Beta Catenin antibody) at dilution of 1:20000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



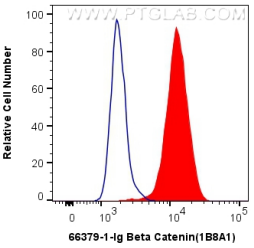
Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 66379-1-Ig (Beta Catenin antibody) at dilution of 1:20000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



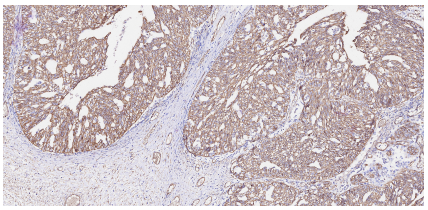
IP result of anti-Beta Catenin (IP:66379-1-Ig, 4ug; Detection:66379-1-Ig 1:2000) with mouse brain tissue lysate 4400 ug.



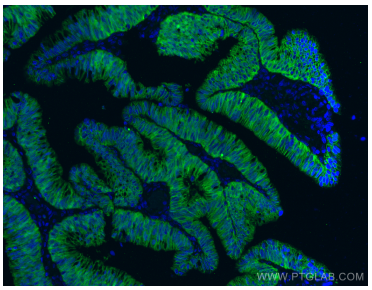
Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using Beta Catenin antibody (66379-1-Ig, Clone: 1B8A1) at dilution of 1:1500 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), Alpha Tubulin antibody (11224-1-AP, red).



1X10^6 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).