

CTNNB1 Antibody(C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19562b

Specification

CTNNB1 Antibody(C-term) - Product Information

Application	WB,E
Primary Accession	P35222
Other Accession	Q9WU82 , Q02248 , Q0VCX4 , NP_001091679.1
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	85497
Antigen Region	723-751

CTNNB1 Antibody(C-term) - Additional Information

Gene ID 1499

Other Names

Catenin beta-1, Beta-catenin, CTNNB1, CTNNB

Target/Specificity

This CTNNB1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 723-751 amino acids from the C-terminal region of human CTNNB1.

Dilution

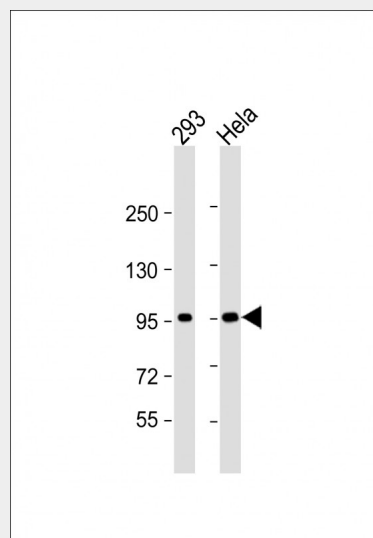
WB~~1:1000

Format

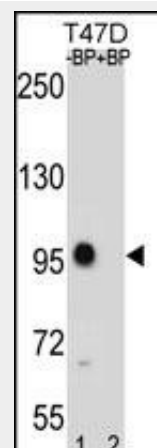
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.



All lanes : Anti-CTNNB1 Antibody (C-term) at 1:1000 dilution
Lane 1: 293 whole cell lysate
Lane 2: HeLa whole cell lysate
Lysates/proteins at 20 µg per lane.
Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution.
Predicted band size : 85 kDa
Blocking/Dilution buffer: 5% NFDM/TBST.



CTNNB1 Antibody (C-term) (Cat. #AP19562b) western blot analysis in T47D cell line lysates (35ug/lane). This demonstrates the CTNNB1 antibody detected the CTNNB1 protein (arrow).

Precautions

CTNNB1 Antibody(C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CTNNB1 Antibody(C-term) - Protein Information

Name CTNNB1

Synonyms CTNNB

Function

Key downstream component of the canonical Wnt signaling pathway (PubMed:<a href="http://www.uniprot.org/citations/17524503"

target="_blank">17524503,&br/>PubMed:<a href="http://www.uniprot.org/citations/18077326"

target="_blank">18077326,&br/>PubMed:<a href="http://www.uniprot.org/citations/18086858"

target="_blank">18086858,&br/>PubMed:<a href="http://www.uniprot.org/citations/18957423"

target="_blank">18957423,&br/>PubMed:<a href="http://www.uniprot.org/citations/21262353"

target="_blank">21262353,&br/>PubMed:<a href="http://www.uniprot.org/citations/22155184"

target="_blank">22155184,&br/>PubMed:<a href="http://www.uniprot.org/citations/22647378"

target="_blank">22647378,&br/>PubMed:<a href="http://www.uniprot.org/citations/22699938"

target="_blank">22699938). In the

absence of Wnt, forms a complex with AXIN1, AXIN2, APC, CSNK1A1 and GSK3B that promotes phosphorylation on N-terminal Ser and Thr residues and ubiquitination of CTNNB1 via BTRC and its subsequent degradation by the proteasome (PubMed:<a href="http://www.uniprot.org/citations/17524503"

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CTNNB1 Antibody(C-term) - Background

The protein encoded by this gene is part of a complex of proteins that constitute adherens junctions (AJs). AJs are necessary for the creation and maintenance of epithelial cell layers by regulating cell growth and adhesion between cells. The encoded protein also anchors the actin cytoskeleton and may be responsible for transmitting the contact inhibition signal that causes cells to stop dividing once the epithelial sheet is complete. Finally, this protein binds to the product of the APC gene, which is mutated in adenomatous polyposis of the colon. Mutations in this gene are a cause of colorectal cancer (CRC), pilomatrixoma (PTR), medulloblastoma (MDB), and ovarian cancer. Three transcript variants encoding the same protein have been found for this gene.

CTNNB1 Antibody(C-term) - References

Huang, W., et al. Mol. Cell. Biol. 30(19):4575-4594(2010)
Chairoungdua, A., et al. J. Cell Biol. 190(6):1079-1091(2010)
Mirza, M.K., et al. J. Exp. Med. 207(8):1675-1685(2010)
Guo, Q., et al. Acta Biochim. Biophys. Sin. (Shanghai) 42(7):450-456(2010)
Teng, Y., et al. Zhonghua Yi Xue Za Zhi 90(14):988-992(2010)

PubMed:21262353, PubMed:22155184, PubMed:22647378, PubMed:22699938). In the presence of Wnt ligand, CTNNB1 is not ubiquitinated and accumulates in the nucleus, where it acts as a coactivator for transcription factors of the TCF/LEF family, leading to activate Wnt responsive genes (PubMed:17524503, PubMed:18077326, PubMed:18086858, PubMed:18957423, PubMed:21262353, PubMed:22155184, PubMed:22647378, PubMed:22699938). Involved in the regulation of cell adhesion, as component of an E-cadherin:catenin adhesion complex (By similarity). Acts as a negative regulator of centrosome cohesion (PubMed:18086858). Involved in the CDK2/PTPN6/CTNNB1/CEACAM1 pathway of insulin internalization (PubMed:21262353). Blocks anoikis of malignant kidney and intestinal epithelial cells and promotes their anchorage-independent growth by down-regulating DAPK2 (PubMed:<a href="

<http://www.uniprot.org/citations/18957423>"
target="_blank">18957423). Disrupts
PML function and PML- NB formation by
inhibiting RANBP2-mediated sumoylation of
PML (PubMed:<a href="http://www.uniprot.
org/citations/22155184"
target="_blank">22155184).
Promotes neurogenesis by maintaining
sympathetic neuroblasts within the cell
cycle (By similarity). Involved in
chondrocyte differentiation via interaction
with SOX9: SOX9-binding competes with the
binding sites of TCF/LEF within CTNNB1,
thereby inhibiting the Wnt signaling (By
similarity).

Cellular Location

Cytoplasm. Nucleus. Cytoplasm,
cytoskeleton
{ECO:0000250|UniProtKB:B6V8E6}. Cell
junction, adherens junction
{ECO:0000250|UniProtKB:Q02248}. Cell
junction
{ECO:0000250|UniProtKB:B6V8E6}. Cell
membrane. Cytoplasm, cytoskeleton,
microtubule organizing center, centrosome.
Cytoplasm, cytoskeleton, spindle pole Cell
junction, synapse
{ECO:0000250|UniProtKB:Q02248}.
Cytoplasm, cytoskeleton, cilium basal body
{ECO:0000250|UniProtKB:Q02248}
Note=Colocalized with RAPGEF2 and TJP1 at
cell-cell contacts (By similarity).
Cytoplasmic when it is unstabilized (high
level of phosphorylation) or bound to CDH1.
Translocates to the nucleus when it is
stabilized (low level of phosphorylation).
Interaction with GLIS2 and MUC1 promotes
nuclear translocation. Interaction with EMD
inhibits nuclear localization. The majority of
beta-catenin is localized to the cell
membrane. In interphase, colocalizes with
CROCC between CEP250 puncta at the
proximal end of centrioles, and this
localization is dependent on CROCC and
CEP250. In mitosis, when NEK2 activity
increases, it localizes to centrosomes at
spindle poles independent of CROCC.
Colocalizes with CDK5 in the cell-cell
contacts and plasma membrane of
undifferentiated and differentiated
neuroblastoma cells Interaction with
FAM53B promotes translocation to the
nucleus (PubMed:25183871).
{ECO:0000250|UniProtKB:B6V8E6,
ECO:0000269|PubMed:25183871}

Tissue Location

Expressed in several hair follicle cell types: basal and peripheral matrix cells, and cells of the outer and inner root sheaths.

Expressed in colon. Present in cortical neurons (at protein level). Expressed in breast cancer tissues (at protein level) (PubMed:29367600).

CTNNB1 Antibody(C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)