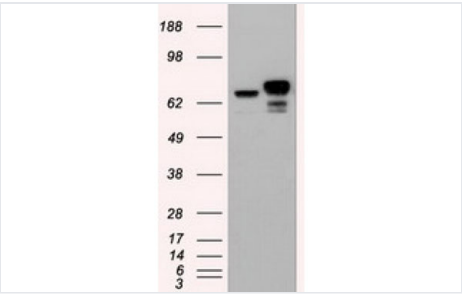
CTNNB1 Antibody – Mouse Monoclonal

PRODUCT OVERVIEW

Product Name	CTNNB1, Monoclonal Antibody
Full Product Name	CTNNB1 antibody
Product Gene Name	anti-CTNNB1 antibody
Product Synonym Names	Monoclonal CTNNB1; Anti-CTNNB1; Catenin beta 1; CTNNB; DKFZp686D02253; Beta catenin; CTNNB1; CTNNB 1; CTNNB-1
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	1F3
Host	Mouse
Form/Format	Supplied in PBS buffer, pH 7.3, containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Purity/Purification	CTNNB1 antibody was purified by affinity chromatography.
Concentration	500 ug-1 mg/ml (lot specific)
Preparation and Storage	Store at 4 degree C for short term storage. Aliquot and store at -20 degree C for long term storage. Avoid repeated freeze/thaw cycles.
Molecular Weight	9,501 Da
OMIM	114500
3D Structure	ModBase 3D Structure for P35222
Cross-Reactivity	Human, Dog, Monkey
Immunogen	CTNNB1 antibody was raised in mouse using a human recombinant protein fragment corresponding to amino acids 531-781 of human beta-catenin (NP_001895) produced in E Coli as the immunogen.
Product Categories/Family for anti-CTNNB1 antibody	Cell Biology
Applications Tested/Suitable for anti-CTNNB1 antibody	Immunohistochemistry (IHC), Western Blot (WB)
Application Notes for anti-CTNNB1 antibody	IHC: 1:50 WB: 1:1000-2000
Related Product Information for anti-CTNNB1 antibody	MBS831756 is an antibody targeting CTNNB1. Also known as CTNNB1 antibody. Host: Mouse. Mouse monoclonal CTNNB1 antibody
Other Notes	Small volumes of anti-CTNNB1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Western Blot (WB) of anti-CTNNB1 antibody
Western Blot analysis of HEK293T cell lysates (5 ug) transfected with either recombinant CTNNB1 protein (Right) or empty vector (Left) detected with CTNNB1 antibody

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CTNNB1. It may not necessarily be applicable to this product.

NCBI GI #	4503131
NCBI GeneID	1499
NCBI Accession #	NP_001895
UniProt Primary Accession #	P35222
UniProt Secondary Accession #	Q8NEW9; Q8NI94; Q9H391; A8K1L7
UniProt Related Accession #	P35222
GenBank Nucleotide #	NM_001904.3
NCBI Official Full Name	catenin beta-1
NCBI Official Synonym Full Names	catenin (cadherin-associated protein), beta 1, 88kDa
NCBI Official Symbol	CTNNB1
NCBI Official Synonym Symbols	CTNNB; MRD19; armadillo
UniProt Protein Name	Catenin beta-1
UniProt Synonym Protein Names	Beta-catenin
Protein Family	Catenin
UniProt Gene Name	CTNNB1
UniProt Synonym Gene Names	CTNNB
UniProt Entry Name	CTNB1_HUMAN
NCBI Protein Information	catenin beta-1
NCBI Summary for CTNNB1	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.[provided by RefSeq, Oct 2009]

UniProt Comments for CTNNB1	CTNNB1: a regulator of cell adhesion and a key downstream effector in the Wnt signaling pathway. Implicated early embryonic development and tumorigenesis. Phosphorylated and destabilized by CK1 and GSK-3beta. Stabilized cytoplasmic beta-catenin is a hallmark of a variety of cancers. Stabilized beta-catenin translocates to the nucleus, where it acts as a transcriptional activator of T-cell factor (TCF)-regulated genes. Interacts with the PDZ domain of TAX1BP3, inhibiting its transcriptional activity. Two alternatively spliced human isoforms have been described. Protein type: Motility/polarity/chemotaxis; Actin-binding; Transcription factor; Nuclear receptor co-regulator; Oncoprotein; Cell adhesion Chromosomal Location of Human Ortholog: 3p21 Cellular Component: centrosome; basolateral plasma membrane; intercellular junction; fascia adherens; beta-catenin destruction complex; cytosol; transcription factor complex; cell-cell adherens junction; membrane; lamellipodium; perinuclear region of cytoplasm; cytoplasm; synapse; dendritic shaft; lateral plasma membrane; spindle pole; tight junction; focal adhesion; cell cortex; catenin complex; Z disc; nucleoplasm; adherens junction; microvillus membrane; apical part of cell; plasma membrane; cell junction; nucleus Molecular Function: protein C-terminus binding; transcription coactivator activity; protein phosphatase binding; transcription factor binding; ionotropic glutamate receptor binding; protein binding; signal transducer activity; enzyme binding; androgen receptor binding; cadherin binding; double-stranded DNA binding; protein complex binding; estrogen receptor binding; nitric-oxide synthase binding; SMAD binding; kinase binding; transcription factor activity; alpha-catenin binding; nuclear hormone receptor binding Biological Process: regulation of myelination; regulation of centriole-centriole cohesion; protein heterooligomerization; positive regulation of apoptosis; regulation of fibroblast proliferation; positive regulation of transcription, DNA-dependent; cell maturation; negative regulation of chondrocyte differentiation; T cell differentiation in the thymus; positive regulation of fibroblast growth factor receptor signaling pathway; Wnt receptor signaling pathway through beta-catenin; osteoclast differentiation; cell-cell adhesion; positive regulation of endothelial cell differentiation; embryonic foregut morphogenesis; positive regulation of mesenchymal cell proliferation; regulation of cell fate specification; male genitalia development; synapse organization and biogenesis; ectoderm development; cell adhesion; bone resorption; response to drug; positive regulation of neuroblast proliferation; positive regulation of I-kappaB kinase/NF-kappaB cascade; transcription, DNA-dependent; regulation of smooth muscle cell proliferation; hair cell differentiation; negative regulation of protein sumoylation; genitalia morphogenesis; patterning of blood vessels; muscle cell differentiation; midgut development; smooth muscle cell differentiation; positive regulation of transcription from RNA polymerase II promoter; embryonic digit morphogenesis; negative regulation of transcription, DNA-dependent; oocyte development; embryonic forelimb morphogenesis; negative regulation of osteoclast differentiation; glial cell fate determination; endodermal cell fate commitment; apoptosis; cell-matrix adhesion; neuron migration; cell fate specification; dorsal/ventral axis specification; positive regulation of histone H3-K4 methylation; negative regulation of transcription from RNA polymerase II promoter; embryonic hindlimb morphogenesis; response to estradiol stimulus; negative regulation of cell proliferation; central nervous system vasculogenesis; positive regulation of MAPKKK cascade; pancreas development; positive regulation of interferon type I production; fallopian tube development; proximal/distal pattern formation; layer formation in the cerebral cortex; negative regulation of mitotic cell cycle, embryonic; cell structure disassembly during apoptosis; Wnt receptor signaling pathway; hair follicle morphogenesis; thymus development; in utero embryonic development; embryonic axis specification; neural plate development; regulation of T cell proliferation; stem cell maintenance; synaptic vesicle transport; gastrulation with mouth forming second; liver development; regulation of angiogenesis; odontogenesis of dentine-containing teeth; negative regulation of oligodendrocyte differentiation; myoblast differentiation; Schwann cell proliferation; positive regulation of osteoblast differentiation; response to cadmium ion; ureteric bud branching; response to cytokine stimulus; androgen receptor signaling pathway; positive regulation of muscle cell differentiation; epithelial to mesenchymal transition; innate immune response; embryonic heart tube development; lens morphogenesis in camera-type eye; anterior/posterior axis specification Disease: Pilomatrixoma; Mental Retardation, Autosomal Dominant 19; Ovarian Cancer; Colorectal Cancer; Hepatocellular Carcinoma
Research Articles on CTNNB1	**1.** Our findings highlight the important role of miR-29c in regulating CRC EMT via GSK-3b/b-catenin signaling by targeting GNA13 and PTP4A and provide new insights into the metastatic basis of colorectal cancer
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