

Product datasheet for **TA319264**

beta Catenin (CTNNB1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	ELISA: 1:25,000, WB: 1:500
Reactivity:	Human, Rat, Mouse, Bovine, Xenopus, Zebrafish
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	beta catenin antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to catenin beta-1 C-terminus.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	catenin beta 1
Database Link:	NP_001091679 Entrez Gene 12387 Mouse Entrez Gene 84353 Rat Entrez Gene 1499 Human P35222
Synonyms:	armadillo; CTNNB; MRD19



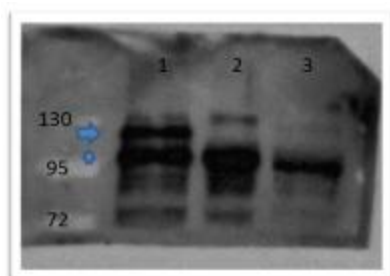
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Note: Beta-catenin 1 (or β -catenin 1) is a protein that is encoded by the CTNNB1 gene. β -catenin 1 is a subunit of the cadherin protein complex and has been implicated as an integral component in the Wnt signaling pathway. This pathway plays a key role in the regulation of cellular processes involved in development, differentiation, and adult tissue homeostasis. In the presence of Wnt ligand, β -catenin 1 is not ubiquitinated and accumulates in the nucleus, where it associates with T-cell factor (TCF) family members to regulate target gene expression in many developmental and adult tissues. Recruitment of β -catenin 1 to Wnt response element (WRE) chromatin converts TCFs from transcriptional repressors to activators. β -catenin 1 is also involved in the regulation of cell adhesion. It acts as a negative regulator of centrosome cohesion. Aberrant Wnt/ β -catenin signaling is widely implicated in cancer, bone disorders, kidney and intestinal cell disorders and other disease states. β -catenin 1 is located in the cytoplasm when it is unstabilized or bound to CDH1. Interaction with GLIS2 and MUC1 promotes nuclear translocation. Interaction with EMD inhibits nuclear localization. The majority of β -catenin 1 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. It further co-localizes with CDK5 in the cell-cell contacts and plasma membrane of undifferentiated and differentiated neuroblastoma cells.

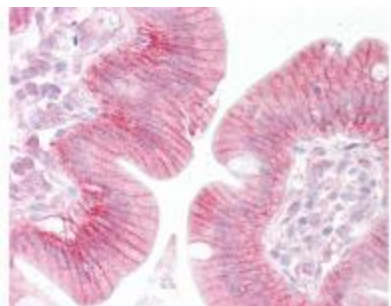
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors

Protein Pathways: Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Basal cell carcinoma, Colorectal cancer, Endometrial cancer, Focal adhesion, Leukocyte transendothelial migration, Melanogenesis, Pathogenic Escherichia coli infection, Pathways in cancer, Prostate cancer, Thyroid cancer, Tight junction, Wnt signaling pathway

Product images:



Western Blot of Rabbit anti-catenin β -1 antibody
 Lane 1: zebrafish embryos injected with myc tagged catenin β 1 mRNA Lane 2: zebrafish embryos injected with myc tagged catenin β 2 mRNA Lane 3: zebrafish embryos un-injected
 Primary antibody: catenin β -1 antibody at 1:500 overnight at 4°C Secondary antibody: goat anti-rabbit HRP at 1:10,000 for 1 hour at RT
 Predicted/Observed size: 85.5kDa/ ~125kDa (arrow) endogenous catenin β -1 Other band (s): ~110kDa (star) co-migrating catenin β -1 and β -2.



Immunohistochemistry of Rabbit anti-beta Catenin antibody. Tissue: human small intestine epithelium. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: beta Catenin antibody at 5-10 ug/mL for 1 h at RT. Secondary antibody: Peroxidase goat anti-rabbit at 1:10,000 for 45 min at RT. Localization: Strong membranous staining in a variety of epithelial tissues. Staining: antibody as precipitated red signal with a hematoxylin purple nuclear counterstain.