PRODUCT DATA SHEET

Catenin-β Monoclonal Antibody

Catalog No.	IMB0085
Reactivity	Human
Applications	WB; IHC-p; IF/ICC; FCM; ELISA
Gene Name	CTNNB1
Protein Name	Catenin beta-1
Human Gene Id	1499
Swiss-Prot	P35222
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Dilution	WB: 1:500-1:2000 IHC: 1:200-1:1000 IF: 1:200-1:1000 FCM: 1:200-1:400 ELISA: 1:10000
PurIF:ication	Affinity purIF:ication
Concentration	-
Storage&Stability	-20°C/1 year
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. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2016],
Subcellular Location.	Cytoplasm. Nucleus. Cytoplasm, cytoskeleton. Cell junction, adherens junction. Cell junction. Cell membrane. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle pole. Cell junction, synapse. Cytoplasm, cytoskeleton, cilium basal body. 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 undIF:ferentiated and dIF:ferentiated neuroblastoma

	cells. Interaction with FAM53B promotes translocation to the nucleus.
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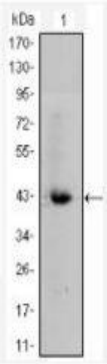
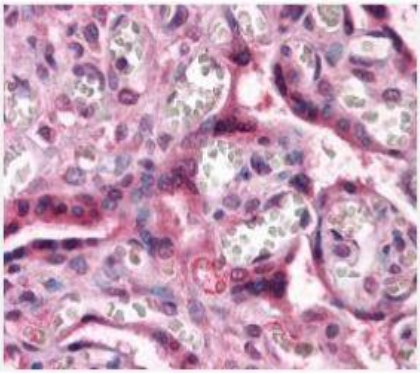
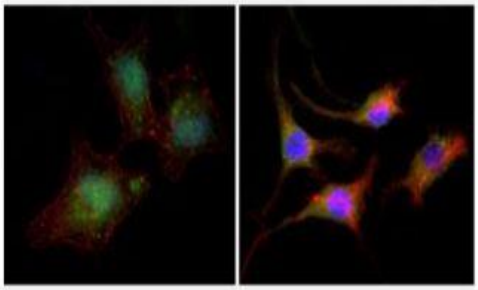
Products Images:



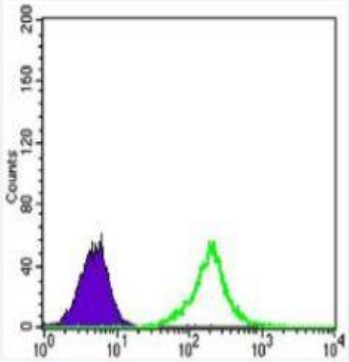
Western Blot analysis using Catenin-β Monoclonal Antibody against CTNNB1-hIgGFc transfected HEK293 cell lysate.



Immunohistochemistry analysis of paraffin-embedded human Placenta tissues with AEC staining using Catenin-β Monoclonal Antibody.



Immunofluorescence analysis of A549 (left) and SK-BR-3 (right) cells using Catenin-β Monoclonal Antibody (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.



Flow cytometric analysis of A549 cells using Catenin-β Monoclonal Antibody (green) and negative control (purple).