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CTNNB1 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant CTNNB1.
Catalog # AT1674a

Product Information

Application	WB, IF, E
Primary Accession	P35222
Other Accession	NM_001904
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	1C9
Calculated MW	85497

Additional Information

Gene ID	1499
Other Names	Catenin beta-1, Beta-catenin, CTNNB1, CTNNB
Target/Specificity	CTNNB1 (AAH58926, 682 a.a. ~ 781 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	CTNNB1 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

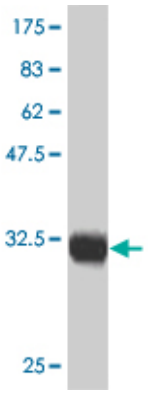
Background

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.

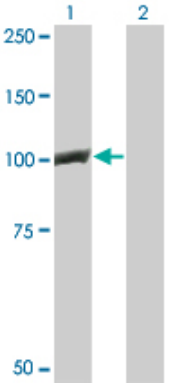
References

[Effect of siRNA-mediated beta-catenin gene on Wnt signal pathway in lung adenocarcinoma A549 cell] Teng Y, et al. Zhonghua Yi Xue Za Zhi, 2010 Apr 13. PMID 20646651.[Role of beta-catenin signaling pathway in EMT of human prostate cancer induced by HIF-1alpha] Luo Y, et al. Zhonghua Yi Xue Za Zhi, 2010 Apr 27. PMID 20646434.A large-scale candidate gene approach identifies SNPs in SOD2 and IL13 as predictive markers of response to preoperative chemoradiation in rectal cancer. Ho-Pun-Cheung A, et al. Pharmacogenomics J, 2010 Jul 20. PMID 20644561.Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891.Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Images

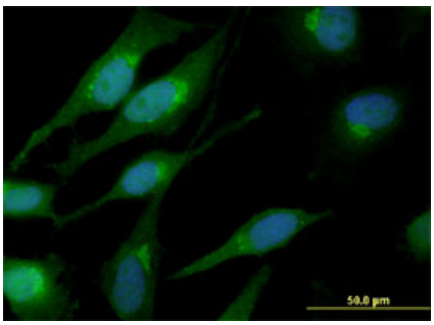


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .

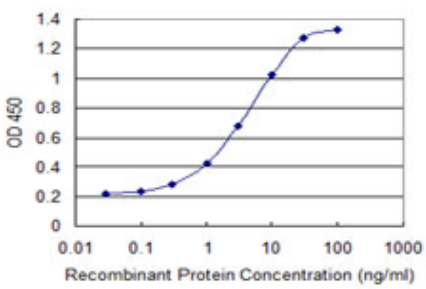


Western Blot analysis of CTNNB1 expression in transfected 293T cell line by CTNNB1 monoclonal antibody (M02), clone 1C9.

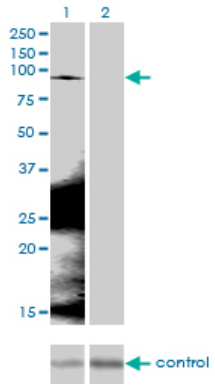
Lane 1: CTNNB1 transfected lysate(85.5 KDa).
Lane 2: Non-transfected lysate.



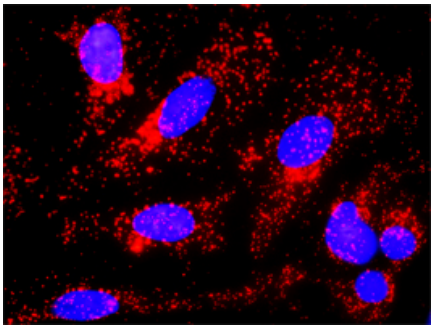
Immunofluorescence of monoclonal antibody to CTNNB1 on HeLa cell. [antibody concentration 10 ug/ml]



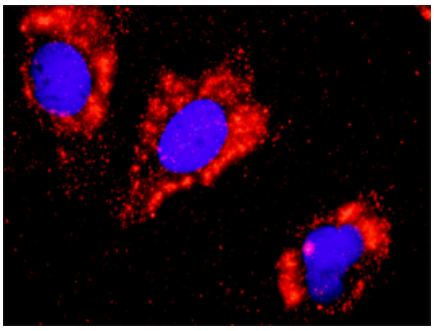
Detection limit for recombinant GST tagged CTNNB1 is 0.1 ng/ml as a capture antibody.



Western blot analysis of CTNNB1 over-expressed 293 cell line, cotransfected with CTNNB1 Validated Chimera RNAi ((Cat # AT1674a)



Proximity Ligation Analysis of protein-protein interactions between GSK3B and CTNNB1. HeLa cells were stained with anti-GSK3B rabbit purified polyclonal 1:1200 and anti-CTNNB1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



Proximity Ligation Analysis of protein-protein interactions between FLT1 and CTNNB1. Huh7 cells were stained with anti-FLT1 rabbit purified polyclonal 1:1200 and anti-CTNNB1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).