

Anti-Beta Catenin Antibody [A6-F8-R] - BSA and Azide free

HA610062



Product Type:	Recombinant Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IF-Cell, FC
Molecular Wt:	Predicted band size: 85.5 kDa
Clone number:	A6-F8-R

Description:	Catenin beta-1, also known as beta-catenin (β -catenin), is a protein that in humans is encoded by the CTNNB1 gene. Beta-catenin is a dual function protein, involved in regulation and coordination of cell-cell adhesion and gene transcription. In humans, the CTNNB1 protein is encoded by the CTNNB1 gene. In Drosophila, the homologous protein is called armadillo. β -catenin is a subunit of the cadherin protein complex and acts as an intracellular signal transducer in the Wnt signaling pathway. It is a member of the catenin protein family and homologous to γ -catenin, also known as plakoglobin. Beta-catenin is widely expressed in many tissues. In cardiac muscle, beta-catenin localizes to adherens junctions in intercalated disc structures, which are critical for electrical and mechanical coupling between adjacent cardiomyocytes. Mutations and overexpression of β -catenin are associated with many cancers, including hepatocellular carcinoma, colorectal carcinoma, lung cancer, malignant breast tumors, ovarian and endometrial cancer. Alterations in the localization and expression levels of beta-catenin have been associated with various forms of heart disease, including dilated cardiomyopathy. β -catenin is regulated and destroyed by the beta-catenin destruction complex, and in particular by the adenomatous polyposis coli (APC) protein, encoded by the tumour-suppressing APC gene. Therefore, genetic mutation of the APC gene is also strongly linked to cancers, and in particular colorectal cancer resulting from familial adenomatous polyposis (FAP).
Immunogen:	Synthetic peptide (KLH-coupled) within human Beta-catenin aa 320-400.
Positive control:	293T cell lysate, A431 cell lysate, NCCIT cell lysate, SW480 cell lysate, HT-29 cell lysate, HCT 116 cell lysate, MCF7.
Subcellular location:	Cytoplasm, Nucleus
Database links:	SwissProt: P35222 Human Q02248 Mouse Q9WU82 Rat
Recommended Dilutions:	
WB	1:1,000
IF-Cell	1:100
FC	1:1,000
Storage Buffer:	PBS (pH7.4).
Storage Instruction:	Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.
Purity:	Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders: 0086-571-88062880

Technical: 0086-571-89986345

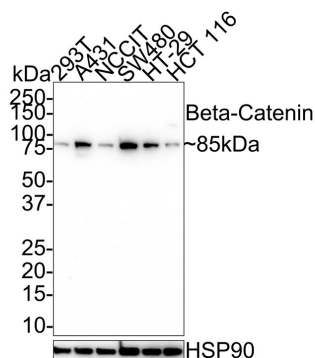
Service mail: support@huabio.cn

 华安生物
HUABIO
www.huabio.cn

Applications: WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

Fig1: Western blot analysis of Beta Catenin on different lysates with Mouse anti-Beta Catenin antibody (HA610062) at 1/1,000 dilution.



Lane 1: 293T cell lysate
 Lane 2: A431 cell lysate
 Lane 3: NCCIT cell lysate
 Lane 4: SW480 cell lysate
 Lane 5: HT-29 cell lysate
 Lane 6: HCT 116 cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 85 kDa

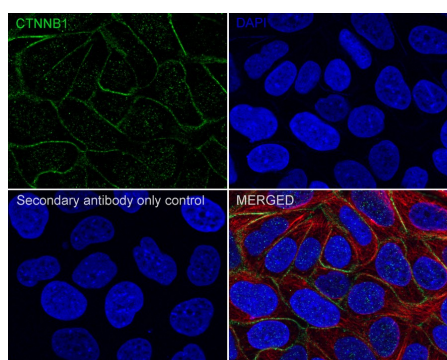
Observed band size: 85 kDa

Exposure time: 5 minutes;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA610062) at 1/1,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.

Fig2: Immunocytochemistry analysis of MCF7 cells labeling Beta Catenin with Mouse anti-Beta Catenin antibody (HA610062) at 1/100 dilution.



Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Mouse anti-Beta Catenin antibody (HA610062) at 1/100 dilution in 1% BSA in PBST overnight at 4 °C. Goat Anti-Mouse IgG H&L (iFluor™ 488, HA1125) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

beta Tubulin (ET1602-4, red) was stained at 1/100 dilution overnight at +4°C. Goat Anti-Rabbit IgG H&L (iFluor™ 594, HA1122) were used as the secondary antibody at 1/1,000 dilution.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
 HUABIO
 www.huabio.cn

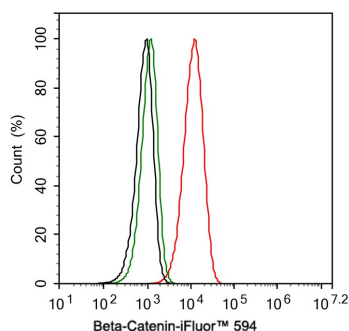


Fig3: Flow cytometric analysis of MCF7 cells labeling Beta Catenin.

Cells were fixed and permeabilized. Then stained with the primary antibody (HA610062, 1 μ g/mL) (red) compared with Mouse IgG1 Isotype Control (green). After incubation of the primary antibody at +4 $^{\circ}$ C for an hour, the cells were stained with a iFluor™ 594 conjugate-Goat anti-Mouse IgG Secondary antibody (HA1126) at 1/1,000 dilution for 30 minutes at +4 $^{\circ}$ C. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”.

Background References

1. Kim J.-S et al. Oncogenic beta-catenin is required for bone morphogenetic protein 4 expression in human cancer cells. *Cancer Res* 62:2744-2748 (2002).
2. Moreno-Bueno G et al. Beta-catenin expression in pilomatrixomas. Relationship with beta-catenin gene mutations and comparison with beta-catenin expression in normal hair follicles. *Br J Dermatol* 145:576-581 (2001).
3. Shibata T et al. EBP50, a beta-catenin-associating protein, enhances Wnt signaling and is over-expressed in hepatocellular carcinoma. *Hepatology* 38:178-186 (2003).

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation