Beta Catenin Recombinant Antibody - Mouse IgG1 (Chimeric)

HA601676

Product Type:	Recombinant Chimeric, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 85 kDa
Clone number:	SA30-04

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. 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 within human Beta-Catenin aa 30-70.

Positive control: HeLa (Human cervical adenocarcinoma cell) cell lysate, NIH/3T3 (Mouse fibroblast) cell lysate, C6 (Rat glioma cell) cell lysate, Mouse brain tissue lysate, Rat brain tissue lysate.

Subcellular location: Cytoplasm, Nucleus, Cell membrane, Cell junction

Database links: SwissProt: P35222 Human | Q02248 Mouse | Q9WU82 Rat

Recommended Dilutions:

WB	1:5,000
IHC-P	1:200-1:1,000

Storage Buffer: 1*PBS (pH7.4), 0.1% BSA, 40% Glycerol, 0.2% Proclean 950.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

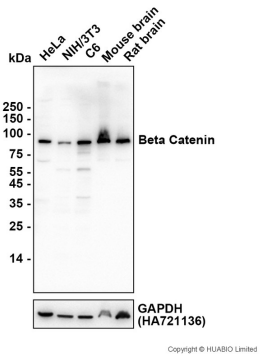


Fig1: Western blot analysis of Beta Catenin on different lysates with Mouse anti-Beta Catenin antibody (HA601676) at 1/5,000 dilution.

Lane 1: HeLa (Human cervical adenocarcinoma cell) cell lysate
Lane 2: NIH/3T3 (Mouse fibroblast) cell lysate
Lane 3: C6 (Rat glioma cell) cell lysate
Lane 4: Mouse brain tissue lysate
Lane 5: Rat brain tissue lysate

Lysates/proteins at 15 µg/Lane.
Exposure time: 16 seconds; ECL: K1801

Blocking: 5% NFDM/TBST, 1 hour at room temperature
Primary antibody: HA601676, 1/5,000 in primary antibody dilution buffer (K1803), overnight at 4 °C
Secondary antibody: Goat anti-Mouse IgG-HRP (HA1006), 1/50,000 in 5% NFDM/TBST, 1 hour at room temperature

Predicted band size: 85 kDa
Observed band size: 85 kDa

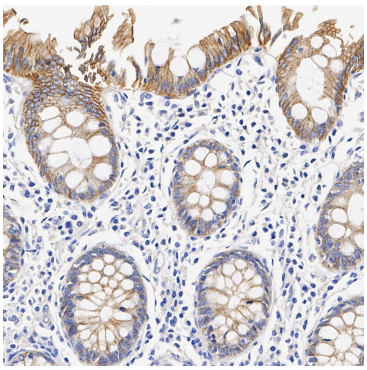


Fig2: Application: Immunohistochemistry (IHC-P)

Species: Human
Tissue: Colon
Sample: Paraffin-embedded section

Antigen retrieval: Heat-mediated, Tris-EDTA buffer (pH 9.0), 20 minutes at 95°C.

Wash buffer: 1× TBST
Endogenous peroxidase blocking: 3% H_2O_2, 10 minutes at room temperature.
Blocking: 1% BSA + 10% normal goat serum, 10 minutes at room temperature.
Primary antibody: HA601676, 1/200, 1 hour at room temperature.
Secondary antibody: HA1120, 20 minutes at room temperature.

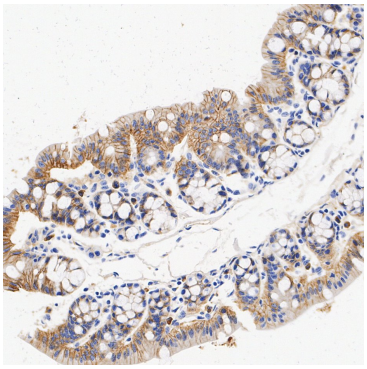


Fig3: Application: Immunohistochemistry (IHC-P)

Species: Mouse
Tissue: Colon
Sample: Paraffin-embedded section

Antigen retrieval: Heat-mediated, Tris-EDTA buffer (pH 9.0), 20 minutes at 95°C.

Wash buffer: 1× TBST
Endogenous peroxidase blocking: 3% H_2O_2, 10 minutes at room temperature.
Blocking: 1% BSA + 10% normal goat serum, 10 minutes at room temperature.
Primary antibody: HA601676, 1/1,000, 1 hour at room temperature.
Secondary antibody: HA1120, 20 minutes at room temperature.

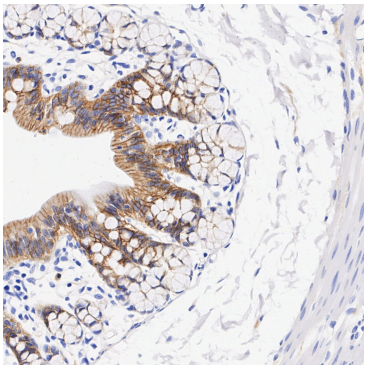


Fig4: Application: Immunohistochemistry (IHC-P)

Species: Rat
Tissue: Colon
Sample: Paraffin-embedded section

Antigen retrieval: Heat-mediated, Tris-EDTA buffer (pH 9.0), 20 minutes at 95°C.

Wash buffer: 1× TBST
Endogenous peroxidase blocking: 3% H_2O_2, 10 minutes at room temperature.
Blocking: 1% BSA + 10% normal goat serum, 10 minutes at room temperature.
Primary antibody: HA601676, 1/1,000, 1 hour at room temperature.
Secondary antibody: HA1120, 20 minutes at room temperature.

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

Background References

1. Liu J et al. Wnt/beta-catenin signalling: function, biological mechanisms, and therapeutic opportunities. Signal Transduct Target Ther. 2022 Jan
2. Yu F et al. Wnt/beta-catenin signaling in cancers and targeted therapies. Signal Transduct Target Ther. 2021 Aug