

Basic Information

Product Name	Anti-Beta Catenin/CTNNB1 Antibody (Clone#1F6)	
Gene Name	CTNNB1	
Source	Mouse	
Isotype	IgG1	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS , 0.02% NaN ₃ , 1 mg BSA and 50% glycerol.	
Immunogen	E. coli-derived human beta Catenin recombinant protein (Position: A2-K233).	
concentration	500 ug/ml	
Purification	protein G purified.	
Observed MW	95KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunocytochemistry in fixed cells: 1:50-400 Flow cytometry (FCM): 1-3 µg/1x10 ⁶ cells (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

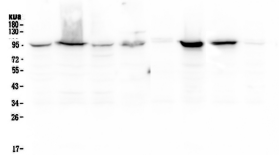
Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Catenins are proteins found in complexes with cadherin cell adhesion molecules of animal cells. The first two catenins that were identified became known as alpha-catenin and beta-catenin. Alpha-catenin can bind to beta-catenin and can also bind actin. Beta-catenin binds the cytoplasmic domain of some cadherins. Beta-catenin is an adherens junction protein. It plays an important role in various aspects of liver biology including liver development (both embryonic and postnatal), liver regeneration following partial hepatectomy. HGF-induced hepatomegaly, liver zonation, and pathogenesis of liver cancer.

Selected Validation Data



①human Hela ②human COLO-320 ③human HepG2 ④human MCF-7
⑤human SW620 ⑥human 22RV1 ⑦human Jurkat

Figure 1. Western blot analysis of beta Catenin using anti-beta Catenin antibody (M00004-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human COLO-320 whole cell lysates,

Lane 3: human HepG2 whole cell lysates,

Lane 4: human MCF-7 whole cell lysates,

Lane 5: human SW620 whole cell lysates,

Lane 6: human 22RV1 whole cell lysates,

Lane 7: human Jurkat whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-beta Catenin antigen affinity purified monoclonal antibody (Catalog # M00004-2) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a Biotin Conjugated goat anti-mouse IgG secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system.

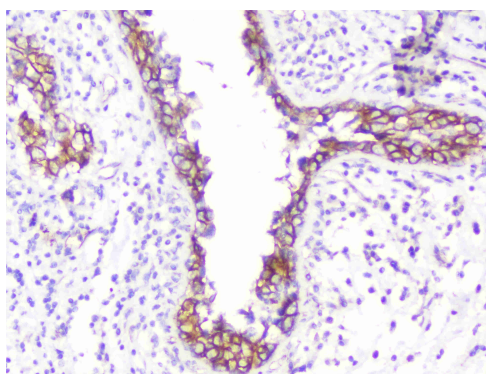


Figure 2. IHC analysis of beta Catenin using anti-beta Catenin antibody (M00004-2).beta Catenin was detected in paraffin-embedded section of human mammary cancer . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml mouse anti-beta Catenin Antibody (M00004-2) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.

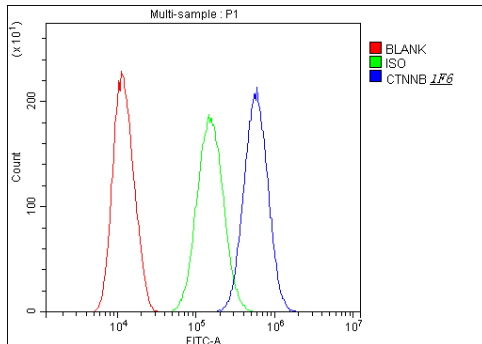


Figure 5. Flow Cytometry analysis of SiHa cells using anti-beta Catenin antibody (M00004-2). Overlay histogram showing SiHa cells stained with M00004-2 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-beta Catenin Antibody (M00004-2, 1 μ g/1 \times 10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 μ g/1 \times 10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 μ g/1 \times 10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

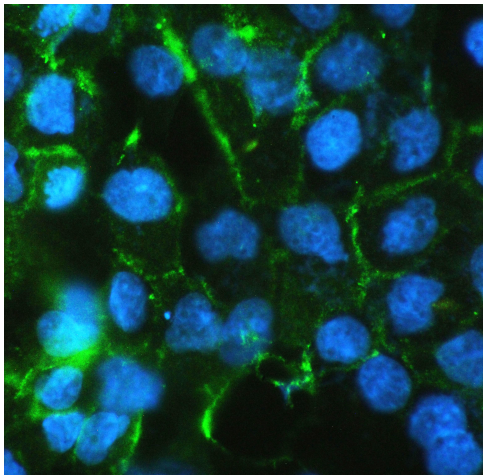


Figure 6. IF analysis of beta Catenin using anti- beta Catenin antibody (M00004-2)
beta Catenin was detected in immunocytochemical section of A431 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 μ g/mL mouse anti- beta Catenin Antibody (M00004-2) overnight at 4°C. DyLight488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.