

Basic Information

Product Name	Anti-Beta Catenin/CTNNB1 Antibody	
Gene Name	CTNNB1	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, IHC-F, IF, ICC/IF, FCM, ELISA	
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	Immunogen affinity purified.	
Observed MW	95KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunofluorescence (IF): 1:50-100 Immunohistochemistry in frozen section (IHC-F): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow cytometry (FCM): 1-3 µg/1x10 ⁶ cells (ELISA): 1:100-1000 (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

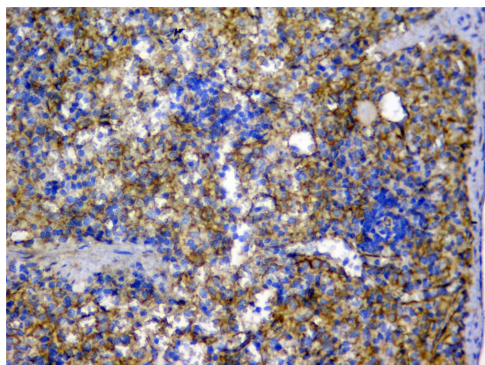


Figure 13. Flow Cytometry analysis of A549 cells using anti-CTNNB1 antibody (A00004). Overlay histogram showing A549 cells stained with A00004 (Blue line).. And then incubated with rabbit anti-CTNNB1 Antibody (A00004, 1 μ g/1 $\times 10^6$ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 μ g/1 $\times 10^6$ cells) was used as secondary antibody Isotype control antibody (Green line) was rabbit IgG (1 μ g/1 $\times 10^6$) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

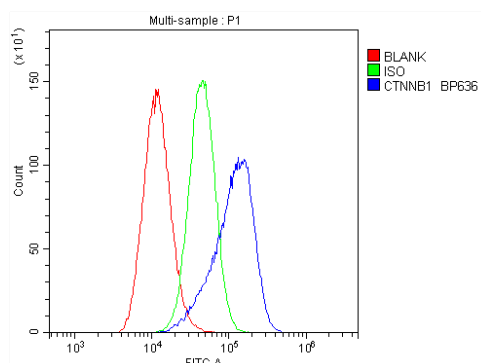


Figure 14. IF analysis of CTNNB1 using anti-CTNNB1 antibody (A00004) CTNNB1 was detected in immunocytochemical section of A431 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 μ g/mL rabbit anti-CTNNB1 Antibody (A00004) overnight at 4°C. DyLight488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

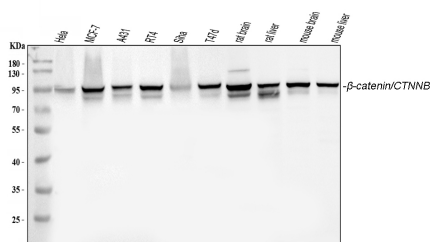


Figure 1. Western blot analysis of anti-Catenin- β antibody (A00004). The sample well of each lane was loaded with 50 μ g of sample under reducing conditions.

Lane 1: HeLa whole cell lysates,
Lane 2: MCF-7 whole cell lysates,
Lane 3: A431 whole cell lysates,
Lane 4: RT4 whole cell lysates,
Lane 5: SIHA whole cell lysates,
Lane 6: T47D whole cell lysates,
Lane 7: rat brain tissue lysates,
Lane 8: rat liver tissue lysates,
Lane 9: mouse brain tissue lysates,
Lane 10: mouse liver tissue lysates.

Use rabbit anti-Catenin- β 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for Catenin- β at approximately 95KD. The expected band size for Catenin- β is at

85KD.

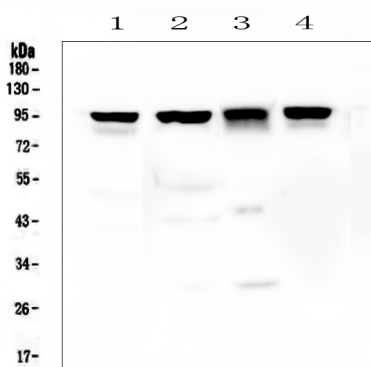


Figure 2. IHC analysis of CTNNB1 using anti-CTNNB1 antibody (A00004).CTNNB1 was detected in paraffin-embedded section of human liver cancer tissue. anti-CTNNB1 Antibody (A00004) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.