Product datasheet

# Anti-Alpha E-Catenin/CTNNA1 Antibody

**Catalog Number: *PB9137***

BOSTER
antibody and ELISA experts
**BOSTER BIOLOGICAL TECHNOLOGY**
Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,
East Lake High-Tech Development Zone, Wuhan.
***Web:*** www.boster.com ***Phone:*** 027-67845390/1/2 ***Email:*** boster@boster.com

## Basic Information

| | |
|---|---|
| **Product Name** | Anti-Alpha E-Catenin/CTNNA1 Antibody |
| **Gene Name** | CTNNA1 |
| **Source** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Species Reactivity** | human, mouse, rat |
| **Tested Application** | WB, IHC, FCM, ICC/IF |
| **Contents** | 500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol. |
| **Immunogen** | E.coli-derived human CTNNA1 recombinant protein (Position: D143-D292). Human CTNNA1 shares 98% amino acid (aa) sequence identity with mouse CTNNA1. |
| **Concentration** | 500 ug/ml |
| **Purification** | Immunogen affinity purified. |
| **Observed MW** | 100 kDa |
| **Dilution Ratios** | Western blot (WB): 1:500-2000<br>Immunohistochemistry (IHC): 1:50-400<br>Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400<br>Flow Cytometry (Fixed): 1:50-200<br>(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℃ as supplied.

## Background Information

CTNNA1, also known as Catenin alpha-1 or Catenin (cadherin-associated protein), alpha 1, is a protein that in humans is encoded by the CTNNA1 gene. It is mapped to 5q31.2. When surface epithelium CTNNA1 was ablated, hair follicle development was blocked and epidermal morphogenesis was dramatically affected, with defects in adherens junction formation, intercellular adhesion, and epithelial polarity. In vitro, CTNNA1 null keratinocytes were poorly contact inhibited and grew rapidly. These differences were not dependent upon intercellular adhesion and were in marked contrast to keratinocytes conditionally null for another essential intercellular adhesion protein, desmoplakin Knockout keratinocytes exhibited sustained activation of the Ras-MAPK cascade due to aberrations in growth factor responses. It is concluded that features of precancerous lesions often attributed to defects in cell cycle regulatory genes can be generated by compromising the function of CTNNA1.

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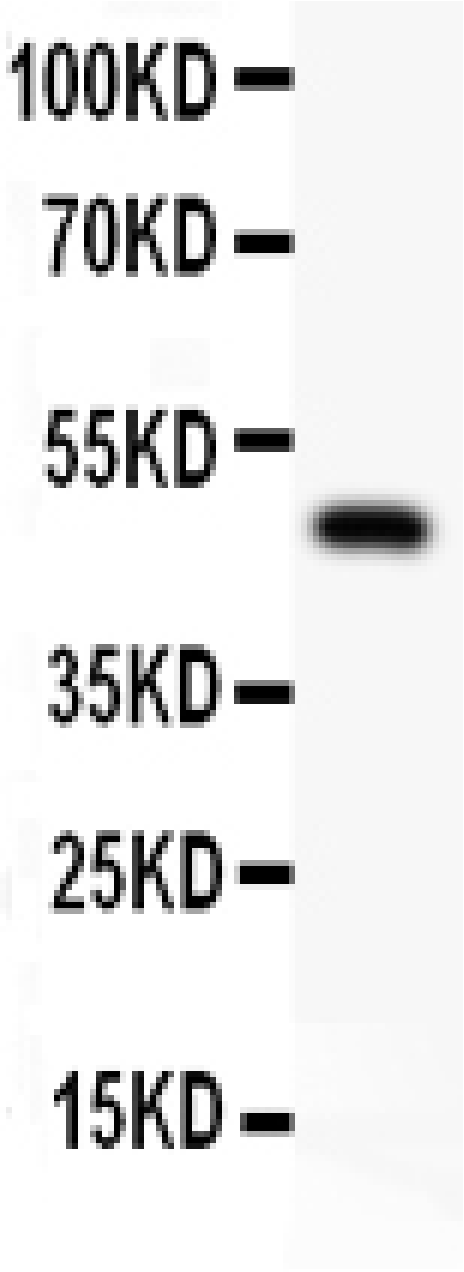
## Selected Validation Data




Western blot analysis of Alpha E-Catenin/CTNNA1 using anti-Alpha E-Catenin/CTNNA1 antibody (PB9137).
Lane 1: recombinant Human CTNNA1 Protein 0.5ng.
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Alpha E-Catenin/CTNNA1 antigen affinity purified polyclonal antibody (PB9137) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Alpha E-Catenin/CTNNA1 at approximately 47 kDa.

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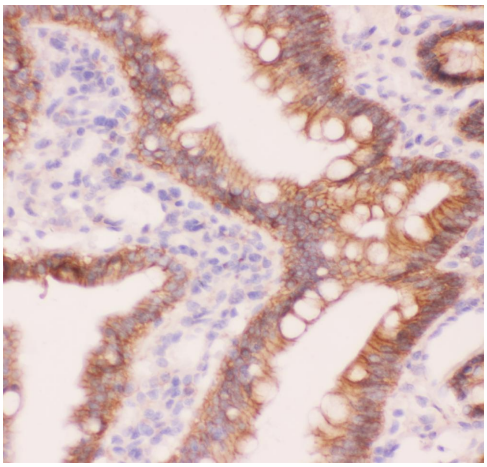
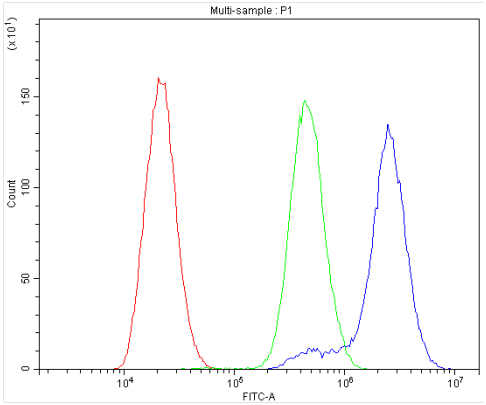
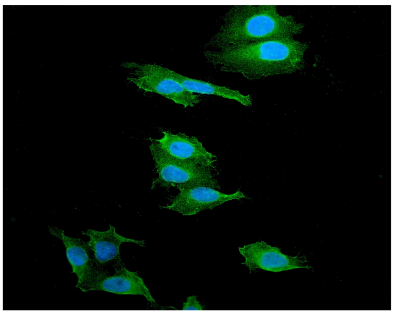


IHC analysis of Alpha E-Catenin/CTNNA1 using anti-Alpha E-Catenin/CTNNA1 antibody (PB9137).
Alpha E-Catenin/CTNNA1 was detected in a paraffin-embedded section of rat intestine tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Alpha E-Catenin/CTNNA1 Antibody (PB9137) at a dilution of 1:200 and developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.




Flow Cytometry analysis of U87 cells using anti-Alpha E-Catenin/CTNNA1 antibody (PB9137).
Overlay histogram showing U87 cells stained with PB9137 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Alpha E-Catenin/CTNNA1 Antibody (PB9137) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



IF analysis of Alpha E-Catenin/CTNNA1 using anti-Alpha E-Catenin/CTNNA1 antibody (PB9137).
Alpha E-Catenin/CTNNA1 was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-Alpha E-Catenin/CTNNA1 Antibody (PB9137) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).