

Basic Information

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|---------------------------|---|--|
| Product Name | Anti-Alpha E-Catenin/CTNNA1 Antibody (Clone#10I2) | |
| Gene Name | CTNNA1 | |
| Source | Mouse | |
| Clonality | Monoclonal | |
| Isotype | IgG1 | |
| Species Reactivity | human, mouse, rat | |
| Tested Application | WB, IHC, FCM | |
| Contents | 500 ug/ml antibody with PBS, 0.02% NaN ₃ , 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 | protein G purified. | |
| Observed MW | 100 kDa | |
| Dilution Ratios | Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (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.

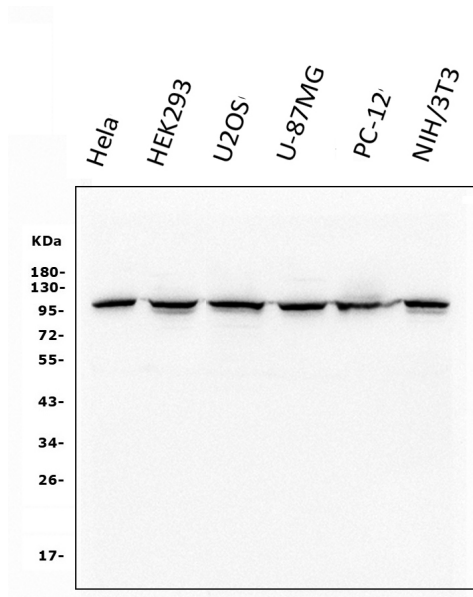
Background Information

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.

Reference

Anti-Alpha E-Catenin/CTNNA1 Antibody (Clone#10I2)被引用在1文献中。

Selected Validation Data



Western blot analysis of Alpha E-Catenin/CTNNA1 using anti-Alpha E-Catenin/CTNNA1 antibody (M01617-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: HeLa whole cell lysates,

Lane 2: HEK293 whole cell lysates,

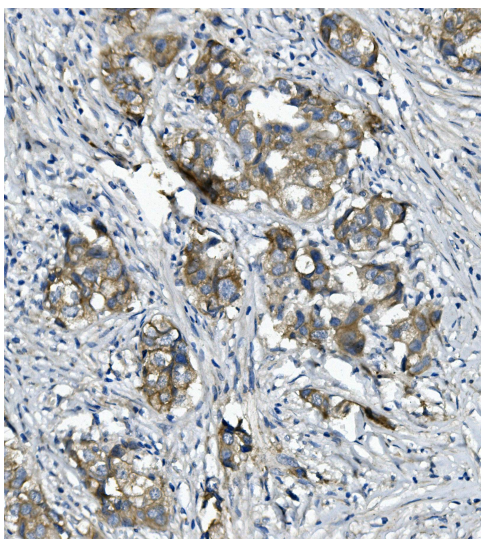
Lane 3: U2OS whole cell lysates,

Lane 4: U-87MG whole cell lysates,

Lane 5: PC-12 whole cell lysates,

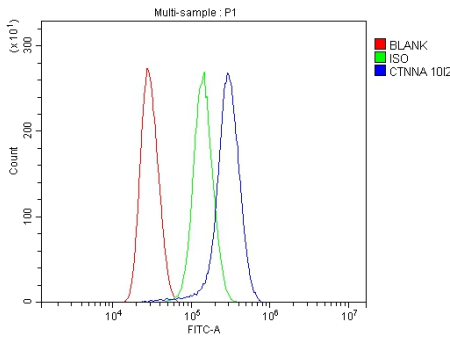
Lane 6: NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-Alpha E-Catenin/CTNNA1 antigen affinity purified monoclonal antibody (M01617-1) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Alpha E-Catenin/CTNNA1 at approximately 100 kDa. The expected band size for Alpha E-Catenin/CTNNA1 is at 100 kDa.



IHC analysis of Alpha E-Catenin/CTNNA1 using anti-Alpha E-Catenin/CTNNA1 antibody (M01617-1).

Alpha E-Catenin/CTNNA1 was detected in a paraffin-embedded section of human mammary cancer tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was incubated with mouse anti-Alpha E-Catenin/CTNNA1 Antibody (M01617-1) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of Jurkat cells using anti-Alpha E-Catenin/CTNNA1 antibody (M01617-1).

Overlay histogram showing Jurkat cells stained with M01617-1 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with mouse anti-Alpha E-Catenin/CTNNA1 Antibody (M01617-1) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse 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.