

Basic Information

Product Name	Anti-Alpha E-Catenin/CTNNA1 Antibody
Gene Name	CTNNA1
Source	Rabbit
Isotype	IgG
Species Reactivity	human, mouse, rabbit, rat
Tested Application	WB, IHC
Contents	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg 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	100KD
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 (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

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.

Selected Validation Data

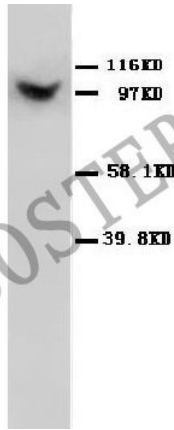


Figure 1. Western blot analysis of Anti-CTNNA1 antibody (BA0425). The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: MCF-7 whole cell lysates, Use rabbit Anti-CTNNA1 1:1000, probed with a goat Anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for CTNNA1 at approximately 100KD. The expected band size for CTNNA1 is at 100KD.

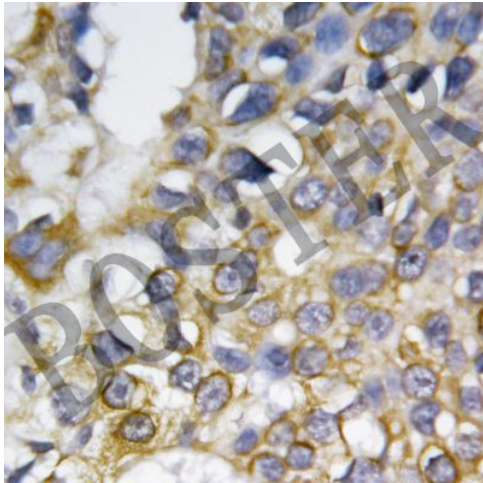


Figure 2. IHC analysis using Anti-CTNNA1 antibody (BA0425) detected in paraffin-embedded section of mammary cancer tissue. Biotinylated goat Anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.