**BACKGROUND** 

# β -Catenin (44C6) Mouse mAb



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□ 100 µl (10 Western mini-blots)

The catenins,  $\alpha$ ,  $\beta$  and  $\gamma$ , are proteins which bind to the highly conserved, intracellular cytoplasmic tail of E-cadherin. Together, the catenin/cadherin complexes play an important role mediating cellular adhesion.  $\alpha$ -catenin was initially described as an E-cadherin associated protein, and since has been shown to associate with other members of the cadherin family, such as N-cadherin and P-cadherin.  $\beta$ -catenin associates with the cytoplasmic portion of E-cadherin, which is necessary for the function of E-cadherin as an adhesion molecule.  $\beta$ -catenin has also been found in complexes with the tumor suppressor protein APC.  $\gamma$ -catenin, also known as plakoglobin, is a protein that binds with  $\alpha$ -catenin and N-cadherin. It has been shown that the transmembrane phosphatase PTP $\mu$  associates with catenin/cadherin complexes and may regulate complex signaling.

## **REFERENCES**

- 1. Edelman, G.M. and Crossin, K.L. 1991. Cell adhesion molecules: implications for a molecular histology. Annu. Rev. Biochem. 60: 155-190.
- 2. Takeichi, M. 1991. Cadherin cell adhesion receptors as a morphogenetic regulator. Science 251: 1451-1455.
- Tsukita, S., Itoh, M., Nagafuchi, A., Yonemura, S. and Tsukita, S. 1993. Submembranous junctional plaque proteins include potential tumor suppressor molecules. J. Cell Biol. 123: 1049-1053.
- 4. Johnson, K.R., Lewis, J.E., Li, D., Wahl, J., Soler, A.P., Knudsen, K.A. and Wheelock, M.J. 1993. P- and E-cadherin are in separate complexes in cells expressing both cadherins. Exp. Cell. Res. 207: 252-260.
- 5. Reynolds, A.B., Daniel, J., McCrea, P., Wheelock, M.J., Wu, J. and Zhang, Z. 1994. Identification of a new catenin: the tyrosine kinase substrate p120cas associates with E-cadherin complexes. Mol. Cell. Biol. 14: 8333-8342.

## SOURCE

This Abmart monoclonal antibody is produced by immunizing mice with a synthetic peptide (KLH-coupled) corresponding to carboxy-terminal residues of human  $\beta$ -catenin.

## **SPECIFICITY**

 $\beta\text{-}Catenin$  (44C6) Mouse mAb detects endogenous levels of total  $\beta\text{-}catenin$  protein.

## **STORAGE**

Lyophilized antibody store at Room Temperature; Store at -20°C after dissolved in 100  $\mu$ l Antibody Dilution Buffer. Stable for one year from the date of shipment.

## REACTIVITY

Human, Mouse, Rat

## **ISOTYPE**

Mouse IgG1

## **MOLECULAR WEIGHT**

92 kDa

## **IMPORTANT**

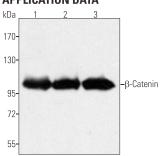
- 1. Centrifuge to settle the lyophilized antibody to the bottom of the vial. Reconstitute using 100 µl Antibody Dilution Buffer.
- 2. Use an anti-MOUSE secondary antibody to detect the 44C6 antibody.

## **RECOMMENDED ANTIBODY DILUTIONS**

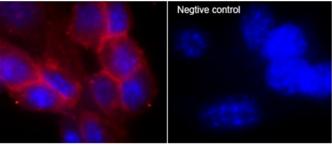
Western blotting 1:1000 Immunofluorescence 1:200 Immunohistochemistry 1:200

\* For Western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1× TBS, 0.05% Tween-20 at 4°C with gentle shaking, overnight.

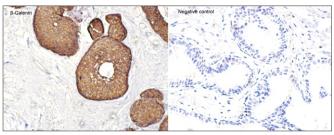
## **APPLICATION DATA**



Western Blot analysis of extracts from 293T, PC12 and NIH/3T3 whole cell lysate (20  $\mu$ g) using  $\beta$ -Catenin (44C6) Mouse mAb (1:1000).



IF analysis of NIH/3T3 cell using  $\beta$ -Catenin (44C6) Mouse mAb (1:200).



Immunohistochemical analysis of Paraffin-embedded human breast carcinoma using  $\beta$ -Catenin (44C6) Mouse mAb (1:200).

## **COMPANION PRODUCTS**

#M21001 Goat Anti-Mouse IgG-HRP