# β-catenin (7A7): sc-65484



The Power to Question

#### **BACKGROUND**

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, 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**

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# CHROMOSOMAL LOCATION

Genetic locus: CTNNB1 (human) mapping to 3p21; Ctnnb1 (mouse) mapping to 9 F4.

# SOURCE

 $\beta$ -catenin (7A7) is a mouse monoclonal antibody raised against amino acids 35-50 of  $\beta$ -catenin of human origin.

#### **PRODUCT**

Each vial contains 50  $\mu g$   $IgG_1$  in 500  $\mu I$  of PBS with < 0.1% sodium azide, 1% gelatin, PEG and sucrose.

#### **APPLICATIONS**

 $\beta$ -catenin (7A7) is recommended for detection of  $\beta$ -catenin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)]; also recommended for detection of phosphorylated  $\beta$ -catenin ( $\rho$ S33,  $\rho$ S37,  $\rho$ S41).

Suitable for use as control antibody for  $\beta$ -catenin siRNA (h): sc-29209,  $\beta$ -catenin siRNA (m): sc-29210,  $\beta$ -catenin shRNA Plasmid (h): sc-29209-SH,  $\beta$ -catenin shRNA Plasmid (m): sc-29210-SH,  $\beta$ -catenin shRNA (h) Lentiviral Particles: sc-29209-V,  $\beta$ -catenin shRNA (m) Lentiviral Particles: sc-29210-V.

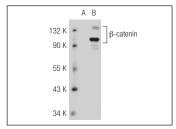
Molecular Weight of β-catenin: 92 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or MCF7 whole cell lysate: sc-2206.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



 $\beta\text{-catenin}$  (7A7): sc-65484. Western blot analysis of  $\beta\text{-catenin}$  expression in non-transfected: sc-117752 (**A**) and human  $\beta\text{-catenin}$  transfected: sc-116622 (**B**) 293T whole cell lysates.

## **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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