β-catenin (E-5): sc-7963

**BACKGROUND**

The catenins, α, β and γ, 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. α-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. β-catenin associates with the cytoplasmic portion of E-cadherin, which is necessary for the function of E-cadherin as an adhesion molecule. β-catenin has also been found in complexes with the tumor suppressor protein APC. γ-catenin, also known as plakoglobin, binds with α-catenin and N-cadherin. It has been shown that the transmembrane phosphatase PTPα associates with catenin/cadherin complexes and may regulate complex signaling.

**CHROMOSOMAL LOCATION**

Genetic locus: CTNNB1 (human) mapping to 3p22.1; Ctnnb1 (mouse) mapping to 9 F4.

**SOURCE**

β-catenin (E-5) is a mouse monoclonal antibody raised against amino acids 680-781 mapping at the C-terminus of β-catenin of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

β-catenin (E-5) is available conjugated to agarose (sc-7963 AC), 500 µg/0.25 ml agarose in 1 ml, for WB, IHCP and ELISA; to either phycoerythrin (sc-7963 PE), fluorescein (sc-7963 FITC), Alexa Fluor® 488 (sc-7963 AF488), Alexa Fluor® 546 (sc-7963 AF546), Alexa Fluor® 594 (sc-7963 AF594) or Alexa Fluor® 647 (sc-7963 AF647), 200 µg/ml, for WB (RGB), IF, IHCP and FCM; and to either Alexa Fluor® 680 (sc-7963 AF680) or Alexa Fluor® 790 (sc-7963 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

β-catenin (E-5) is recommended for detection of β-catenin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of β-catenin: 92 kDa.

Positive Controls: PC-12 cell lysate: sc-2250.

**STORAGE**

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

**DATA**

β-catenin (E-5): sc-7963. Western blot analysis of β-catenin expression in NIH/3T3 (A), C3H/10T1/2 (B), PC-12 (C) and C6 (D) whole cell lysates and rat brain tissue extract (E).


**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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