

β-catenin (H-102): sc-7199

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 PTP μ 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 (H-102) is a rabbit polyclonal antibody raised against amino acids 680-781 mapping at the C-terminus of β -catenin of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

β -catenin (H-102) is recommended for detection of β -catenin of mouse, rat, human, *Xenopus laevis* and zebrafish origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

β -catenin (H-102) is also recommended for detection of β -catenin in additional species, including equine, canine, bovine, porcine and avian.

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

Molecular Weight of β -catenin: 92 kDa.

Positive Controls: SK-BR-3 cell lysate: sc-2218, HeLa whole cell lysate: sc-2200 or A-431 whole cell lysate: sc-2201.

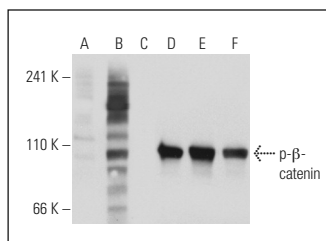
STORAGE

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

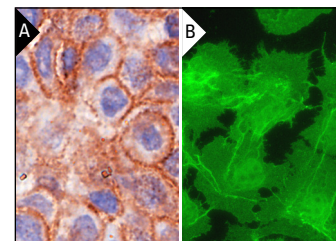
RESEARCH USE

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

DATA



Western blot analysis of β -catenin phosphorylation in untreated (A, D), calyculin A treated (B, E) and calyculin A and lambda protein phosphatase treated (C, F) SH-SY5Y whole cell lysates. Antibodies tested include ρ - β -catenin (Ser 33)-R: sc-16743-R (A, B, C) and β -catenin (H-102): sc-7199 (D, E, F).



β -catenin (H-102): sc-7199. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast tumor (A). Immunofluorescence staining of formalin-fixed Hep G2 cells showing membrane localization (B).

SELECT PRODUCT CITATIONS

- Lemonnier, J., et al. 2001. Role of N-cadherin and protein kinase C in osteoblast gene activation induced by the S252W fibroblast growth factor receptor 2 mutation in Apert craniosynostosis. *J. Bone Miner. Res.* 16: 832-845.
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- Murakami, H., et al. 2011. LATS2 is a tumor suppressor gene of malignant mesothelioma. *Cancer Res.* 71: 873-883.
- Peters, S., et al. 2012. Chronic psychosocial stress increases the risk for inflammation-related colon carcinogenesis in male mice. *Stress* 15: 403-415.
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- Sarkar, D., et al. 2012. BRACHYURY confers cancer stem cell characteristics on colorectal cancer cells. *Int. J. Cancer* 130: 328-337.
- Ochoa-Hernández, A.B., et al. 2012. Peripheral T-lymphocytes express WNT7A and its restoration in leukemia-derived lymphoblasts inhibits cell proliferation. *BMC Cancer* 12: 60.
- Olivier-Van Stichelen, S., et al. 2012. Serum-stimulated cell cycle entry promotes ncOGT synthesis required for cyclin D expression. *Oncogenesis* 12: 1-6.


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Try **β -catenin (E-5): sc-7963** or **β -catenin (12F7): sc-59737**, our highly recommended monoclonal alternatives to β -catenin (H-102). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **β -catenin (E-5): sc-7963**.