

β-catenin (6F9): sc-53484

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 (6F9) is a mouse monoclonal antibody raised against full length β -catenin of chicken origin.

PRODUCT

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

APPLICATIONS

β -catenin (6F9) is recommended for detection of β -catenin of human, mouse, rat, avian, bovine and canine 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); non cross-reactive with plakoglobin.

Suitable for use as control antibody for β -catenin siRNA (h): sc-29209, β -catenin siRNA (m): sc-29210, β -catenin siRNA (r): sc-270011, β -catenin shRNA Plasmid (h): sc-29209-SH, β -catenin shRNA Plasmid (m): sc-29210-SH, β -catenin shRNA Plasmid (r): sc-270011-SH, β -catenin shRNA (h) Lentiviral Particles: sc-29209-V, β -catenin shRNA (m) Lentiviral Particles: sc-29210-V and β -catenin shRNA (r) Lentiviral Particles: sc-270011-V.

Molecular Weight of β -catenin: 92 kDa.

Positive Controls: β -catenin (h): 293T Lysate: sc-116622, A-431 whole cell lysate: sc-2201 or MCF7 whole cell lysate: sc-2206.

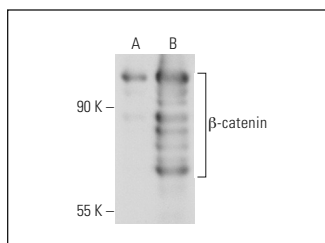
STORAGE

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

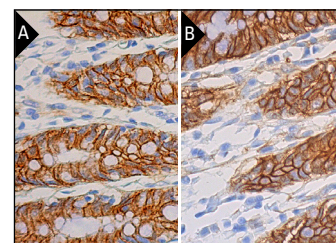
RESEARCH USE

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

DATA



β -catenin (6F9): sc-53484. Western blot analysis of β -catenin expression in non-transfected: sc-117752 (A) and human β -catenin transfected: sc-116622 (B) 293T whole cell lysates.



β -catenin (6F9): sc-53484. Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing membrane staining of glandular cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing membrane and cytoplasmic staining of glandular cells (B).

SELECT PRODUCT CITATIONS

- Hu, Z. and Xie, L. 2015. LHX6 inhibits breast cancer cell proliferation and invasion via repression of the Wnt/ β -catenin signaling pathway. *Mol. Med. Rep.* 12: 4634-4639.
- Zhou, J., et al. 2016. DKK1 inhibits proliferation and migration in human retinal pigment epithelial cells via the Wnt/ β -catenin signaling pathway. *Exp. Ther. Med.* 12: 859-863.
- Xu, W., et al. 2016. Dickkopf 2 promotes proliferation and invasion via Wnt signaling in prostate cancer. *Mol. Med. Rep.* 14: 2283-2288.
- Gao, S.S., et al. 2016. Inhibitory effects of B-cell translocation gene 2 on skin cancer cells via the Wnt/ β -catenin signaling pathway. *Mol. Med. Rep.* 14: 3464-3468.
- Fan, Y., et al. 2018. Honokiol eliminates glioma/glioblastoma stem cell-like cells via JAK-STAT3 signaling and inhibits tumor progression by targeting epidermal growth factor receptor. *Cancers* 11 pii: E22.

PROTOCOLS

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



See **β -catenin (E-5): sc-7963** for β -catenin antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.