SANTA CRUZ BIOTECHNOLOGY, INC.

β-catenin (10H8): sc-65480



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.

REFERENCES

- 1. Brady-Kalnay, S.M., et al. 1995. Receptor protein tyrosine phosphatase PTPm associates with cadherins and catenins *in vivo*. J. Cell Biol. 130: 977-986.
- Ozawa, M., et al. 1995. Cloning of an alternative form of plakoglobin (γ-catenin) lacking the fourth armadillo repeat. J. Biochem. 118: 836-840.

CHROMOSOMAL LOCATION

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

SOURCE

 β -catenin (10H8) is a mouse monoclonal antibody raised against amino acids 769-781 of β -catenin of human origin.

PRODUCT

Each vial contains 50 μg IgG_{2a} in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin, PEG and sucrose.

APPLICATIONS

 β -catenin (10H8) is recommended for detection of the C terminus 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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

RESEARCH USE

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

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 (10H8): sc-65480. 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.

 $\beta\text{-}catenin$ (10H8): sc-65480. Western blot analysis of $\beta\text{-}catenin$ expression in MCF7 whole cell lysate.

SELECT PRODUCT CITATIONS

- Huang, Y., et al. 2008. Midkine induces epithelial-mesenchymal transition through Notch2/Jak2-Stat3 signaling in human keratinocytes. Cell Cycle 7: 1613-1622.
- Yin, S., et al. 2011. Cisplatin and TRAIL enhance breast cancer stem cell death. Int. J. Oncol. 39: 891-898.
- Bajenova, O., et al. 2014. Carcinoembryonic antigen promotes colorectal cancer progression by targeting adherens junction complexes. Exp. Cell Res. 324: 115-123.
- Yang, M., et al. 2016. SALL4 is a marker of poor prognosis in serous ovarian carcinoma promoting invasion and metastasis. Oncol. Rep. 35: 1796-1806.
- 5. Li, P., et al. 2017. Clinical significance and biological role of Wnt10a in ovarian cancer. Oncol. Lett. 14: 6611-6617.
- Liu, X.F., et al. 2018. DAX1 promotes cervical cancer cell growth and tumorigenicity through activation of Wnt/β-catenin pathway via GSK3β. Cell Death Dis. 9: 339.
- 7. Zhou, A., et al. 2019. Inhibitory effects of miR-26b-5p on thyroid cancer. Mol. Med. Rep. 20: 1196-1202.
- Wu, J., et al. 2019. Novel compound cedrelone inhibits hepatocellular carcinoma progression via PBLD and Ras/Rap1. Exp. Ther. Med. 18: 4209-4220.
- Song, C., et al. 2020. PRMT1 promotes pancreatic cancer growth and predicts poor prognosis. Cell. Oncol. 43: 51-62.



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.