

DB077: β-catenin (C18)

Background:

The multifunctional β -catenin protein was originally identified through its association with the cadherin class of cell adhesion proteins (1&2). It was later found to be an integral part of signal transduction pathways and the best studied is the Wnt/ β -catenin pathway (3). Wnt signaling inhibits the degradation of β -catenin and as a result β -catenin becomes transcriptionally active (3-5). The deregulation of Wnt signaling leads to the accumulation of β -catenin, allowing it to become transcriptionally active for a number of genes. Many of these genes are associated with cancer, such as colorectal cancer and melanomas (3&4).

Origin:

 β -catenin (C18) is provided as an affinity purified rabbit polyclonal antibody, raised against a peptide mapping to the carboxy terminal domain of human β -catenin.

Product Details:

Each vial contains 200 μ g/ml of affinity purified rabbit IgG, β -catenin (C18) DB077, in 1 ml PBS containing 0.1 % sodium azide and 0.2% gelatin.

Competition Studies:

A blocking peptide is also available, DB077P, for use in competition studies. Each vial contains $100 \mu g$ of peptide in 0.5 ml PBS with 0.1% sodium azide and $100 \mu g$ BSA.

Specificity:

 β -catenin (C18) is recommended to detect mouse, rat and human β -catenin by western blotting, immunoprecipitation, and immunohistochemistry. Recommended western blotting starting dilution 1:400-1:1000.

Storage:

Store this product at 4° C, do not freeze. The product is stable for one year from the date of shipment.

References:

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- Bullions LC, Levine AJ. 1998. The role of β-catenin in cell adhesion, signal transduction, and cancer. Curr Opin Oncol. 10(1):81-87.
- 3. Moon RT, Bowerman B, Boutros M, Perrimon N. 2002. The promise and perils of Wnt signaling through β -catenin. Science 296(5573):1644-1646.
- Li H, Pamukcu R, Thompson WJ. 2002. β-catenin signaling: therapeutic strategies in oncology. Cancer Biol Ther. (6):621-625.
- Hecht A, Kemler R. 2000. Curbing the nuclear activities of β-catenin. Control over Wnt target gene expression. EMBO 1(1):24-28.