**BACKGROUND**

The catenins, α, β and γ, are proteins that bind to the highly conserved, intracellular cytoplasmic tail of E-cadherin. Together, the catenin/cadherin complexes play critical roles in mediating cellular adhesion. 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 also forms complexes with the tumor suppressor protein APC. Amino acid alterations at residues around Ser 33, one of the targets for phosphorylation of glycogen synthase kinase-3β, result in accumulation of the β-catenin protein in the cytoplasm and nucleus. Pin1 is a novel regulator of β-catenin signaling that directly binds a phosphorylated Ser-Pro motif next to the APC-binding site in β-catenin, inhibiting the interaction with APC and increasing β-catenin translocation into the nucleus. Thus, Pin1 overexpression may contribute to the upregulation of β-catenin in tumors such as breast cancer.

**REFERENCES**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

p-β-catenin (1B11) is a mouse monoclonal antibody raised against a synthetic phosphopeptide of β-catenin of human origin.

**PRODUCT**

Each vial contains 50 µg IgG in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin, PEG and sucrose.

**APPLICATIONS**

p-β-catenin (1B11) is recommended for detection of Tyr 654 phosphorylated β-catenin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].


Molecular Weight of p-β-catenin: 92 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812 or pervanadate treated OVCAR-5 whole cell lysates.

**STORAGE**

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

**DATA**

![Western blot analysis of β-catenin phosphorylation in untreated (A) and pervanadate treated (B) OVCAR-5 whole cell lysates.](image)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**PRODUCTS**

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