**p-β-catenin (1B11): sc-57533**

### 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, kappa light chain 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)].

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 p-β-catenin: 92 kDa.

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

### 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.