**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 modulating 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, results 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. It associates with the cytoplasmic portion of E -cadherin, which is necessary for the 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 (BC-22) is a mouse monoclonal antibody raised against a synthetic peptide corresponding to amino acids 32-45 of β-catenin of human origin.

**PRODUCT**

Each vial contains 100 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**


**DATA**

![Western blot analysis of β-catenin phosphorylation in OVCAR-3 + pervanadate (A), SH-SYSY + calyculin (B) and 293T + calyculin (C) whole cell lysates.](image)

**SELECT PRODUCT CITATIONS**


**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.

**PROTOCOLS**

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