

## Product datasheet for **AP01543PU-N**

### beta Catenin (CTNNB1) pThr41/pSer45 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	<b>Western Blot:</b> 1/500-1/1000.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	p-Catenin- $\beta$ (pThr41+S45) antibody detects endogenous levels of p-Catenin- $\beta$ protein.
Formulation:	Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 85 kDa
Gene Name:	catenin beta 1
Database Link:	<a href="#">Entrez Gene 1499 Human P35222</a>



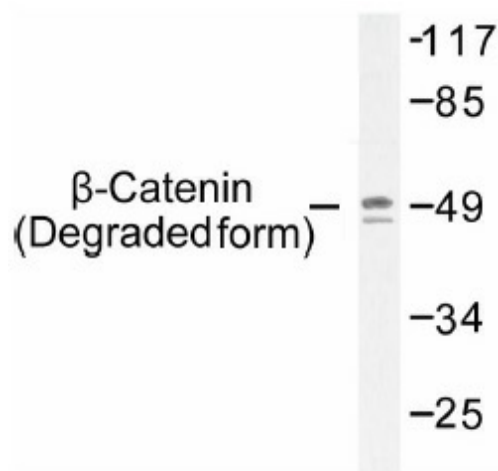
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**Background:**

The catenins,  $\alpha$ ,  $\beta$  and  $\gamma$ , 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.  $\beta$ -catenin associates with the cytoplasmic portion of E-cadherin, which is necessary for the function of E-cadherin as an adhesion molecule.  $\beta$ -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-3 $\beta$ , results in accumulation of the  $\beta$ -catenin protein in the cytoplasm and nucleus. Pin1 is a novel regulator of  $\beta$ -catenin signaling that directly binds a phosphorylated Ser-Pro motif next to the APC-binding site in  $\beta$ -catenin, inhibiting the interaction with APC, and increasing  $\beta$ -catenin translocation into the nucleus. Thus, Pin1 overexpression may contribute to the upregulation of  $\beta$ -catenin in tumors such as breast cancer.

**Synonyms:**

CTNNB1, CTNNB, Beta-catenin

**Product images:**

Western blot (WB) analysis of p-Catenin- $\beta$  (pThr41+S45) antibody Cat.-No.: AP01543PU-N in extracts from sw626 cells.