

## Product datasheet for **AP20927PU-N**

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

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC
Recommended Dilution:	<b>Immunohistochemistry on paraffin sections</b> 1/50 - 1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of p-beta-catenin protein only when phosphorylated at Thr41/S45.
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography (> 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store 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:	~ 92 kDa
Gene Name:	catenin beta 1
Database Link:	<a href="#">Entrez Gene 12387 Mouse</a> <a href="#">Entrez Gene 84353 Rat</a> <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-3beta, result 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:**

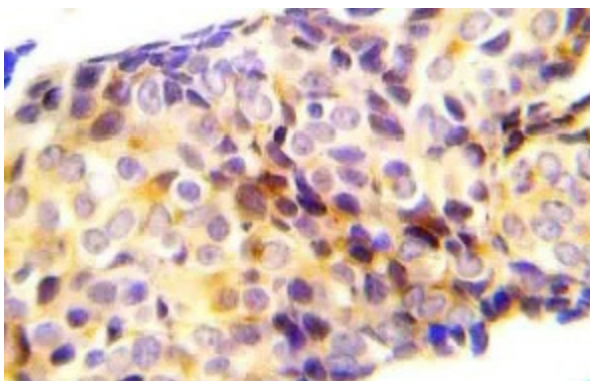
CTNNB1, CTNNB, Beta-catenin

**Protein Families:**

Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors

**Protein Pathways:**

Adherens junction, Arrhythmogenic right ventricular cardiomyopathy (ARVC), Basal cell carcinoma, Colorectal cancer, Endometrial cancer, Focal adhesion, Leukocyte transendothelial migration, Melanogenesis, Pathogenic Escherichia coli infection, Pathways in cancer, Prostate cancer, Thyroid cancer, Tight junction, Wnt signaling pathway

**Product images:**

Immunohistochemistry (IHC) analyses of p-beta-catenin (pThr41/pSer45) antibody (Cat.-No.: AP20927PU-N) in paraffin-embedded human lung adenocarcinoma tissue.