

Product datasheet for AP20827PU-N

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

beta Catenin (CTNNB1) pSer37 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IF, IHC, WB

Recommended Dilution: Western blot: 1/500 - 1/1000.

Immunohistochemistry on paraffin sections: 1/50 - 1/200.

Immunofluorescence: 1/50 - 1/200.

Reactivity: Human, Mouse, Rat

Host: Rabbit

Clonality: Polyclonal

Specificity: This antibody detects endogenous levels of Catenin-beta protein only when phosphorylated

at Ser37.

Formulation: Phosphate buffered saline (PBS), pH 7.2.

State: Aff - Purified

State: Liquid purified lg 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: Entrez Gene 12387 MouseEntrez Gene 84353 RatEntrez Gene 1499 Human

P35222



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

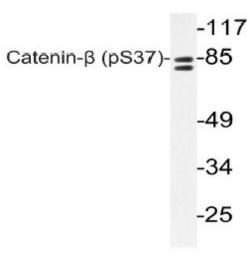
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors

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

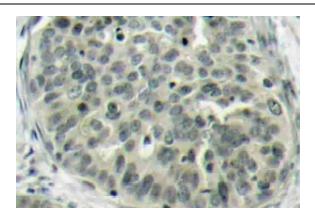
cancer, Thyroid cancer, Tight junction, Wnt signaling pathway

Product images:



Western blot (WB) analyzes of p-Catenin-beta antibody (Cat.-No.: AP20827PU-N) in extracts from 293 cells.





Immunohistochemistry (IHC) analyzes of p-Catenin-beta antibody (Cat.-No.: AP20827PU-N) in paraffin-embedded human breast carcinoma