

## Product datasheet for AM06389SU-N

### OriGene Technologies, Inc.

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## beta Catenin (CTNNB1) Mouse Monoclonal Antibody [Clone ID: 4D5]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: 4D5

**Applications:** ELISA, FC, IF, IHC, WB

Recommended Dilution: Western Blot: 1/500 - 1/2000.

Immunohistochemistry on paraffin sections: 1/200 - 1/1000.

**Immunofluorescence**: 1/200 - 1/1000.

Flow cytometry: 1/200 - 1/400.

**ELISA**: 1/10000.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Purified recombinant fragment of human CTNNB1 expressed in E. Coli.

**Specificity:** This antibody reacts to CTNNB1.

Formulation: State: Ascites

State: Ascitic fluid containing 0.03% sodium azide.

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:** Entrez Gene 1499 Human

P35222

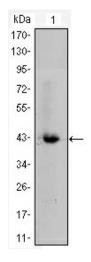


#### Background:

The protein encoded by this gene is part of a complex of proteins that constitute adherens junctions (AJs). AJs are necessary for the creation and maintenance of epithelial cell layers by regulating cell growth and adhesion between cells. The encoded protein also anchors the actin cytoskeleton and may be responsible for transmitting the contact inhibition signal that causes cells to stop dividing once the epithelial sheet is complete. Finally, this protein binds to the product of the APC gene, which is mutated in adenomatous polyposis of the colon. The distinct peripheral cytosolic proteins, alpha, beta and gamma catenin (102, 94 and 86 kDa) are found in many tissues and bind to the conserved cytoplasmic tail domain of the cell adhesion cadherins. Catenins link E cadherin to other integral membrane or cytoplasmic proteins and are modulated by Wnt1 proto oncogene. The central core region of beta catenin is involved in mediation of cadherin catenin complex interaction with EGFR. Beta-Catenin-mediated signalling is involved at several stages of vertebrate neural development.

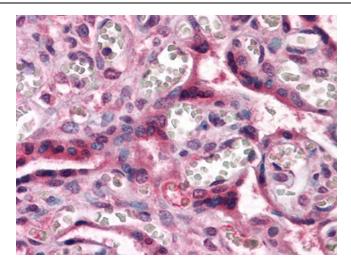
**Synonyms:** CTNNB1, CTNNB, Beta-catenin

# **Product images:**

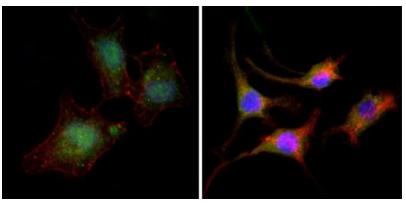


Western blot analysis using CTNNB1 mouse mAb against CTNNB1-hlgGFc transfected HEK293 cell lysate.

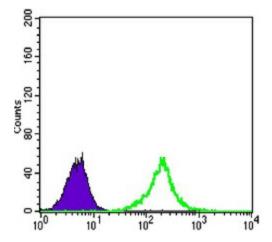




Immunohistochemical analysis of paraffinembedded human Placenta tissues using CTNNB1 mouse mAb



Immunofluorescence analysis of A549 (left) and SK-BR-3 (right) cells using CTNNB1 mouse mAb (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.



Flow cytometric analysis of A549 cells using CTNNB1 mouse mAb (green) and negative control (purple).