

# Rabbit anti Catenin-beta (pS37) Polyclonal Antibody

Alternative Name(s): CTNNB1

## **Order Information**

• Description: Catenin-beta (pS37)

Catalogue: 602-600Lot: See labelSize: 100ug/200ulHost: RabbitClone: nan

• Application: IHC(P), WB • Reactivity: Hu, Ms, Rt

## **ANTIGEN PREPARATION**

A synthetic peptide corresponding to the epitope SGIHS with a single phosphorylation site Ser37 of human  $\Box$ -catenin.

## **BACKGROUND**

Beta-catenin is a cytosolic, 88 kDa, 781 amino acid protein belongs to the  $\beta$ -catenin family. The N-terminus domain, containing the binding site and the phosphorylation sites. Beta-Catenin serves as a link between cytoskeleton actin and transmembrane cadherin(s). It is believed to contribute to tight cell-to-cell adhesion. It can enter the nucleus and interact with the TCF/LEF family of transcription factors, initiating gene expression. Normally,  $\beta$ -catenin transcriptional activity is suppressed by a Ser/Thr kinase termed GSK3 $\beta$  and/or Casein Kinase I (CK1). Kinases are constitutively active and phosphorylates  $\beta$ -catenin at multiple sites, including S33 and S37, Y96, Y228, Y280 etc. Phosphorylation of  $\beta$ -catenin targets the molecule for degradation via a ubiquination-mediated pathway. GSK3 $\beta$  activity can be blocked by upstream signaling events such as Wnt-Frizzled interaction. This inhibits GSK3 $\beta$ , allowing unphosphorylated  $\beta$ -catenin to enter the nucleus and initiate gene activation. The phosphorylation of beta-catenin might contribute to tumorigenesis.

## **PURIFICATION**

The Rabbit IgG is purified by site-modified Epitope Affinity Purification.

## **FORMULATION**

This affinity purified antibody is supplied in sterile Tris-buffered saline (pH7.2) containing antibody stabilizer

#### **SPECIFICITY**

This antibody recognizes ~88 kDa of human beta-Catenin protein. It also reacts with mouse and rat. The other species are not tested.

## **STORAGE**

The antibodies are stable for 24 months from date of receipt when stored at -20oC to -70oC. The antibodies can be stored at 2oC-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

# **APPLICATIONS/SUGGESTED WORKING DILUTIONS\***

Western Blot: 0.1-1 μg/ml

• ELISA: 0.01-0.1 μg/ml

• Immunoprecipitation: 2-5 µg/ml

• IHC: 2-10 µg/ml

• Flow cytometry: Not tested

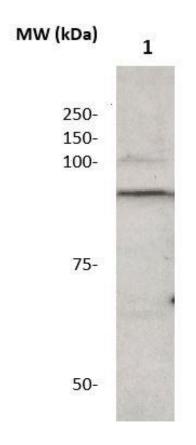
• Molecular Weight: 100.0

Positive Control: Kidney Tissue
Cellular Location: Cell Membrane



\*Optimal dilutions should be determined by researchers for the specific applications.





Western Blot: The whole lysate derived from Hela (20 ug/lane) immunoblotted by Rabbit anti – Catenin-beta (pS37) (Cat# 602-600) at 1:500. Observed a major immunoreactive band at molecular weight ~88kDa.

# **REFERENCES**