

# AbboMax, Inc

Innovation at Work

## Order Information

Description: Rabbit anti-β-Catenin (pS37)  
Catalogue#: 602-600  
Lot#: See the label  
Size: 100 ug/200 ul  
Host: Rabbit  
Clone: N/A  
Application: ELISA, WB, IHC  
Reactivity: Hu, Rt, Ms

## Rabbit anti Phospho- β-Catenin (S37) Antibody

### ANTIGEN PREPARATION

A synthetic peptide corresponding to the epitope SGHS with a single phosphorylation site Ser37 of human β-catenin.

### BACKGROUND

Beta-catenin is a cytosolic, 88 kDa, 781 amino acid protein belongs to the β-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, β-catenin transcriptional activity is suppressed by a Ser/Thr kinase termed GSK3β and/or Casein Kinase I (CK1). Kinases are constitutively active and phosphorylates β-catenin at multiple sites, including S33 and S37, Y96, Y228, Y280 etc. Phosphorylation of β-catenin targets the molecule for degradation via a ubiquitination-mediated pathway. GSK3β activity can be blocked by upstream signaling events such as Wnt-Frizzled interaction. This inhibits GSK3β, allowing unphosphorylated β-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-specific Epitope Affinity Purification.

### SPECIFICITY

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

### FORMULATION

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

### STORAGE

The antibodies are stable for 12 months from date of receipt when stored at -20°C to -70°C. The antibodies can be stored at 2°C-8°C for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

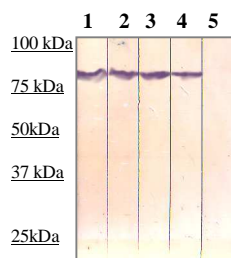
### APPLICATIONS/SUGGESTED WORKING DILUTIONS

Western Blot	0.1-1 µg/ml
ELISA	0.01-0.1 µg/ml
Immunoprecipitation	2-5 µg/ml
IHC	2-5 µg/ml
Flow cytometry	Not tested

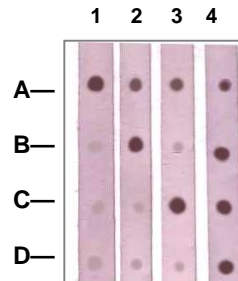
<b>MOLECULAR WEIGHT:</b>	88 kDa
<b>POSITIVE CONTROL:</b>	HELA cell lysate
<b>CELLULAR LOCATION:</b>	N/A

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

### DATA ATTACHMENTS



**Western Blot:** The cell lysate derived from HELA was immunoprobed at a dilution of 1:500 by the following antibodies:  
1: Rabbit anti-beta-Catenin (pS33/S37) (Cat#601-990)  
2: Rabbit anti-beta-Catenin (pS33) (Cat#601-980)  
3: Rabbit anti-beta-Catenin (pS37) (Cat#602-600)  
4: Rabbit anti-beta-Catenin (Non-phospho) (Cat#602-590)  
5: Negative control.



### Dot Blot:

1 µg peptide was blot onto NC membrane  
A: Beta-Catenin (pS33/S37)  
B: Beta-Catenin (pS33)  
C: Beta-Catenin (pS37)  
D: Beta-Catenin (Nonphospho);  
E: Non-related Phosphopeptide  
were blotted at a 1:1000 dilution by:  
1: Rabbit anti-beta-Catenin (pS33/S37) (Cat#601-990)  
2: Rabbit anti-beta-Catenin (pS33) (Cat#601-980)  
3: Rabbit anti-beta-Catenin (pS37) (Cat#602-600)  
4: Rabbit anti-beta-Catenin (Non-phospho) (Cat#602-590)

### REFERENCES

Park, C.S. *et al.* (2004) J. Biol. Chem. **279**:19592.

**FOR RESEARCH USE ONLY.**