

AbboMax, Inc

Innovation at Work

Order Information

Description: Rabbit anti-β-Catenin (pY280)
Catalogue#: 602-040
Lot#: See the label
Size: 100 ug/200 ul
Host: Rabbit
Clone: N/A
Application: ELISA, WB, IHC
Reactivity: Hu, Rt, Ms, Ck, Cn

Rabbit anti Phosph-β-Catenin (Tyr228) Antibody

ANTIGEN PREPARATION

A synthetic peptide corresponding to the epitope DNYGS at the phosphorylation site Tyr228 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.

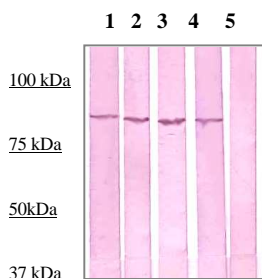
APPLICATIONS/SUGGESTED WORKING DILUTIONS

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

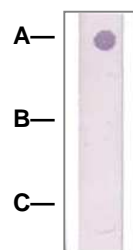
MOLECULAR WEIGHT:	88 kDa
POSITIVE CONTROL:	HELA cell lysate
CELLULAR LOCATION:	N/A

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 (pY228) (Cat#602-040)
2: Rabbit anti-beta-Catenin (paired 228) (Cat#602-050)
3: Rabbit anti-beta-Catenin (pY280) (Cat#602-060)
4: Rabbit anti-beta-Catenin (Paired 280) (Cat#602-070)
5: Negative control.



Dot Blot:
1 µg peptide was blot onto NC membrane
A: Beta-Catenin (pY228)
B: Beta-Catenin (Non-Phospho)
C: Non-related Phosphopeptide
Followed by immunoblotting Rabbit anti-beta-Catenin (pY228) (Cat#602-040) at 1:1000.

REFERENCES

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

FOR RESEARCH USE ONLY.