

Phospho-β-Catenin (Ser33/37/Thr41) Blocking Peptide

✓ 100 µg
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Background: β-catenin is one of the key downstream effectors in the Wnt signaling pathway (1). It is implicated in two major biological processes of vertebrates: early embryonic development (2) and tumorigenesis (3). Casein kinase 1 phosphorylates β-catenin on Ser45. This phosphorylation event primes β-catenin for subsequent phosphorylation by GSK-3 (4-6). GSK-3β destabilizes β-catenin by phosphorylating it at Ser33, 37 and Thr41 (7). Mutations in these phosphorylation sites which result in the stabilization of β-catenin protein levels have been found in many tumor cell lines (8).

Description: This peptide is used to block Phospho-β-Catenin (Ser33/37/Thr41) Antibody # 9561 reactivity.

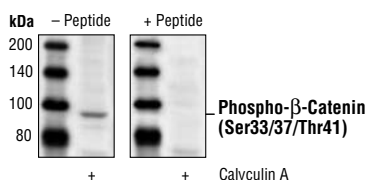
Quality Control: The quality of the peptide was evaluated by reversed-phase HPLC and by mass spectrometry. The peptide blocks Phospho-β-Catenin (Ser33/37/Thr41) Antibody # 9561 by immunohistochemistry.

Applications: Use as a blocking reagent to evaluate the specificity of antibody reactivity in Western immunoblotting.

Directions for Use: For Western immunoblotting, add 10 µl of antibody and 10 µl of blocking peptide to 10 ml of antibody dilution buffer, and incubate at room temperature for 2 hours before allowing to react with the blot.

Background References:

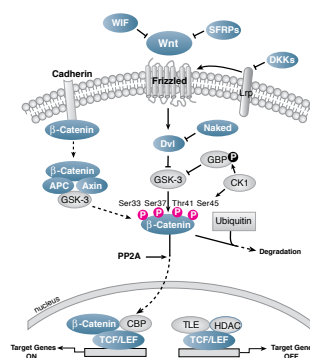
- (1) Cadigan, K.M. and Nusse, R. (1997) *Genes Dev.* 11, 3286–3305.
- (2) Wodarz, A. and Nusse, R. (1998) *Annu. Rev. Cell Dev. Biol.* 14, 59–88.
- (3) Polakis, P. (1999) *Curr. Opin. Genet. Dev.* 9, 15–21.
- (4) Amit, S. et al. (2002) *Genes Dev.* 16, 1066–1076.
- (5) Lin, C. et al. (2002) *Cell* 108, 837–847.
- (6) Yanagawa, S. et al. (2002) *EMBO J.* 21, 1742.
- (7) Yost, C. et al. (1996) *Genes Dev.* 10, 1443–1454.
- (8) Morin, P.J. (1997) *Science* 275, 1787–1790.



Western blot analysis of whole cell lysates from NIH/3T3 cells treated with calyculin A, using Phospho-β-Catenin (Ser33/37/Thr41) Antibody #9561 alone (left) and the same antibody preincubated with Phospho-β-Catenin (Ser33/37/Thr41) Blocking Peptide (right).

Storage: Supplied in 20 mM potassium phosphate (pH 7.0), 50 mM NaCl, 0.1 mM EDTA, 1 mg/ml BSA and 5% glycerol. Store at -20°C.

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IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.