#9562 Store at –20°C

β-Catenin Antibody

☐ Small 100 µl (10 western blots)

☐ Large 300 µl (30 western blots)

rev. 03/26/13

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not For Use In Diagnostic Procedures.

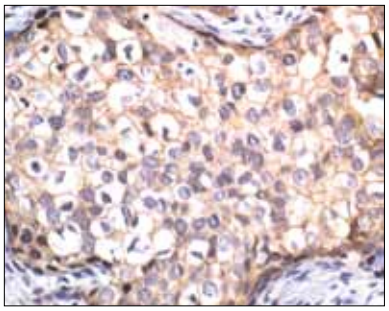
Entrez-Gene ID #1499
Swiss-Prot Acc. #P35222

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP, IHC-P Endogenous	H, M, R, Mk, Z	92 kDa	Rabbit**

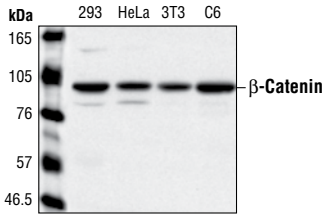
Background: β-catenin is a key downstream effector in the Wnt signaling pathway. (1). It is implicated in two major biological processes of vertebrates: early embryonic development (2) and tumorigenesis (3). CK1 phosphorylates β-catenin on Ser45. This phosphorylation event primes β-catenin for subsequent 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).

Specificity/Sensitivity: β-Catenin Antibody detects endogenous levels total of β-catenin. This antibody does cross-react with endogenous levels of γ-catenin.

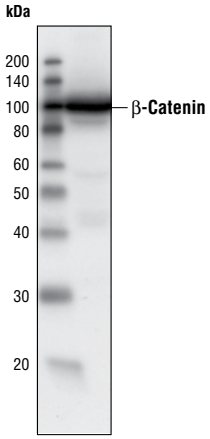
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues around Ser37 of human β-catenin. Antibodies are purified by protein A and peptide affinity chromatography.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma using β-Catenin Antibody.



Western blot analysis of extracts from 293, HeLa, NIH/3T3 and C6 cells using β-Catenin Antibody.



Western blot analysis of extracts from SW480 cells using β-Catenin Antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. *Do not aliquot the antibody.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:100
Immunohistochemistry (Paraffin)	1:1800†
Unmasking buffer:	Citrate
Antibody diluent:	TBST-5% NGS
Detection reagent:	SignalStain® Boost (HRP, Rabbit) #8114

†Optimal IHC dilutions determined using SignalStain® Boost IHC Detection Reagent.

For product specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended complementary products.

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.

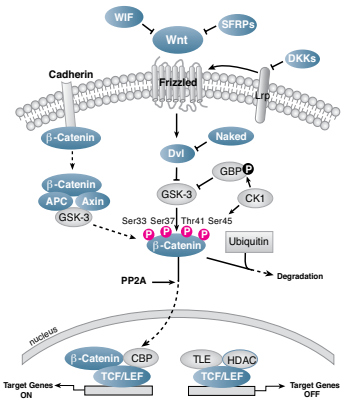
(4) Amit, S. et al. (2002) *Genes Dev.* 16, 1066–1076.

(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.



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.

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