

#9581 Store at -20°C

β-Catenin Antibody (Amino-terminal Antigen)

100 μl
 (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.

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

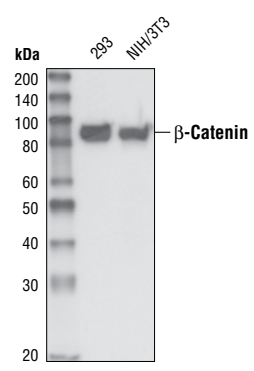
Background: β-catenin is one of the key downstream effectors in the Wnt signaling pathway (1). It is implicated in two major biological processes of vertebrates: early embryonic development (2) and tumorigenesis (3). Casein kinase 1 phosphorylates β-catenin on Ser45. This phosphorylation event primes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

Specificity/Sensitivity: β-Catenin Antibody detects endogenous levels of total β-catenin protein.

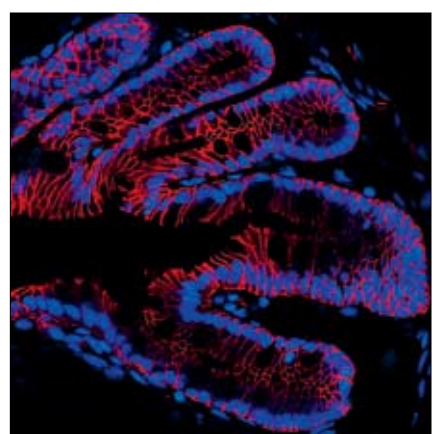
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asp56 of human β-catenin. Antibodies are purified by protein A and peptide affinity chromatography.

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 total cell extracts from 293 and NIH/3T3 cells, using β-Catenin Antibody (Amino-terminal Antigen).



Confocal immunofluorescence image of mouse colon labeled with β-Catenin Antibody (Amino-terminal Antigen) (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

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

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.**

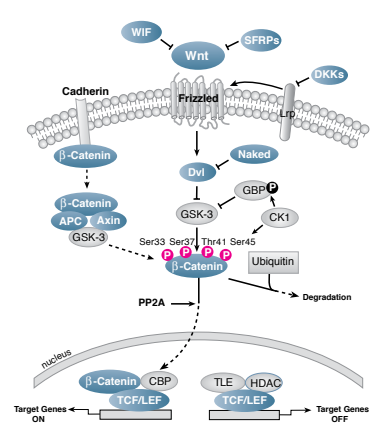
****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:200
Immunofluorescence (IF-F)	1:100

For application 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 companion products.



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IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 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.