

APC Antibody

100 µl
(10 western blots)

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com
Support ■ 877-678-TECH (8324)
info@cellsignal.com
Web ■ www.cellsignal.com

rev. 03/01/10

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 Endogenous	H, (M, R, Mk)	160 kDa truncated APC in SW480 cells 310 kDa full-length APC	Rabbit**

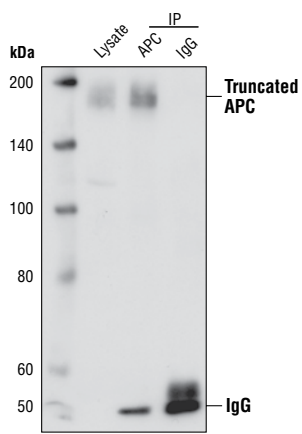
Background: The Adenomatous Polyposis Coli (APC) tumor suppressor gene is mutated in most familial and sporadic colorectal cancers, and encodes a large cytoplasmic protein, which is implicated in cell migration, cell adhesion, and proliferation (1). APC binds directly to microtubules, and lack of APC leads to defective mitotic spindles and aneuploidy due to mis-segregation of chromosomes (2). APC is well characterized as a scaffolding protein, binds to beta-catenin and is involved in the regulation of its intracellular concentration: in the absence of a Wnt signal, GSK3beta phosphorylates all three members of the APC-beta-catenin-axin complex and this phosphorylation of beta-catenin creates a recognition site for ubiquitin, the signal for proteasome mediated degradation. In the presence of a Wnt signal, dishevelled inactivates GSK3beta and beta-catenin can now coordinate gene transcription of proteins important for the control of cell cycle progression and proliferations such as cyclin D1 and c-myc (3).

Specificity/Sensitivity: APC Antibody detects endogenous levels of total APC protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence of human APC. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

- (1) Shih, I. M. et al. (2000) *Cancer Res.* 60, 1671-1676.
- (2) Kaplan, K. B. et al. (2001) *Nat Cell Biol.* 3, 429-432.
- (3) Fodde, R. (2002) *Eur J Cancer.* 38, 86-871.



Western blot analysis (lane 1) and Immunoprecipitation (lanes 2-3) of extracts from SW480 cells. APC was immunoprecipitated with APC Antibody (lane 2) or with rabbit IgG (lane 3) to confirm specificity. Western blot was detection was performed using APC Antibody.

Entrez-Gene ID #324
Swiss-Prot Acc. #P25054

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	1:50

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.

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.