

#2087 Store at -20°C

Axin1 (C76H11) Rabbit mAb



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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.	Isotype
W, IP, IHC-P Endogenous	H, M	110 kDa	Rabbit IgG**

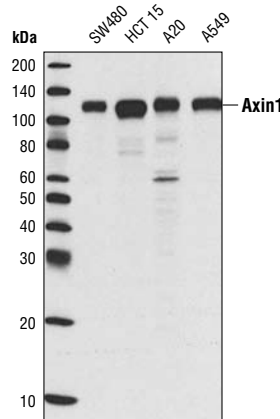
Background: Axin1 (Axis inhibition protein 1) and Axin2 are multidomain scaffold proteins that negatively regulate Wnt signaling. Axin1 complexes with APC, GSK-3 β , Dvl and β -catenin and promotes the GSK-3 β -mediated phosphorylation and subsequent degradation of β -catenin (1,2). Upon stimulation of cells with Wnt, Axin1 is recruited to the membrane by phosphorylated LRP5/6, a process that is believed to be crucial for activation of Wnt signaling (3,4). In addition to its role in the Wnt signaling pathway, Axin1 complexes with MEKK1 and causes the activation of c-Jun amino-terminal kinase (JNK/SAPK) (5). Axin2 (also known as Conductin or Axil) can functionally substitute for Axin1 in mice (6). Axin2 itself is a direct target of the Wnt signaling pathway and therefore serves to control the duration and/or intensity of Wnt signaling through a negative feedback loop (7-9).

Specificity/Sensitivity: Axin1 (C76H11) Rabbit mAb detects endogenous levels of total Axin1 protein.

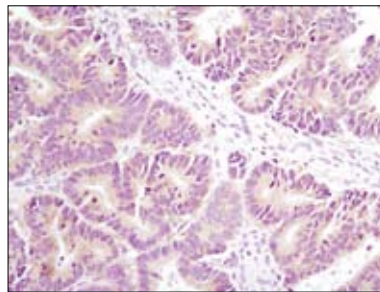
Source/Purification: Monoclonal antibody is produced by immunizing animals with recombinant human Axin1.

Background References:

- (1) Luo, W. and Lin, S.C. *Neurosignals* 13, 99–113.
- (2) Salahshor, S. and Woodgett, J.R. (2005) *J. Clin. Pathol.* 58, 225–236.
- (3) Zeng, X. et al. (2005) *Nature* 438, 873–877.
- (4) Davidson, G. et al. (2005) *Nature* 438, 867–872.
- (5) Zhang, Y. et al. (1999) *J. Biol. Chem.* 274, 35247–35254.
- (6) Chia, I.V. and Costantini, F. (2005) *Mol. Cell Biol.* 25, 4371–4376.
- (7) Jho, E.H. et al. (2002) *Mol. Cell Biol.* 22, 1172–1183.
- (8) Lustig, B. et al. (2002) *Mol. Cell Biol.* 22, 1184–1193.
- (9) Leung, J.Y. et al. (2002) *J. Biol. Chem.* 277, 21657–21665.



Western blot analysis of extracts from various cell lines using Axin1 (C76H11) Rabbit mAb.



Immunohistochemical analysis of paraffin-embedded human colon carcinoma using Axin1 (C76H11) Rabbit mAb.

Entrez-Gene ID #8312
Swiss-Prot Acc. #O15169

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

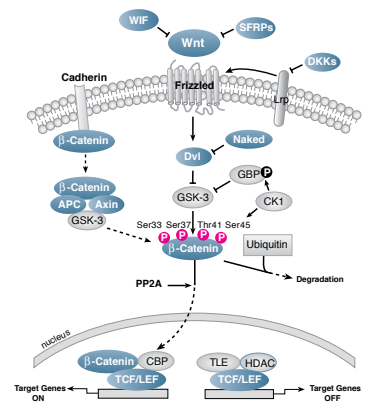
**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:50
Immunohistochemistry (Paraffin)	1:50
Unmasking buffer:	Citrate
Antibody diluent:	SignalStain® Antibody Diluent #8112

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.

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