

# AXIN2 Antibody

Catalog # ASC11272

# **Product Information**

Application	WB, IF, E, IHC-P
Primary Accession	<u>Q9Y2T1</u>
Other Accession	<u>AAF22799, 195927059</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	93568
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	AXIN2 antibody can be used for detection of AXIN2 by Western blot at 1 [g/mL. Antibody can also be used for immunohistochemistry starting at 5 [g/mL. For immunofluorescence start at 20 [g/mL.

### **Additional Information**

Gene ID Other Names	8313 Axin-2, Axin-like protein, Axil, Axis inhibition protein 2, Conductin, AXIN2
Target/Specificity	AXIN2; AXIN2 antibody is predicted to not cross-react with AXIN1. At least four isoforms of AXIN2 are known to exist; this antibody will recognize all four.
Reconstitution & Storage	AXIN2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	AXIN2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **Protein Information**

Name	AXIN2
Function	Inhibitor of the Wnt signaling pathway. Down-regulates beta- catenin. Probably facilitate the phosphorylation of beta-catenin and APC by GSK3B.
Cellular Location	Cytoplasm.
Tissue Location	Expressed in brain and lymphoblast.

# Background

AXIN2 Antibody: Like the related protein AXIN1, AXIN2 is thought to play an important role in the regulation of the stability of beta-catenin in the Wnt signaling pathway. In mouse, AXIN2 organizes a multiprotein complex of APC (adenomatous polyposis of the colon), beta-catenin, glycogen synthase kinase 3-beta, and AXIN2, which leads to the degradation of beta-catenin, which is thought to be an important event in the genesis of a number of malignancies. The AXIN2 gene has been mapped to 17q23-q24, a region that shows frequent loss of heterozygosity in breast cancer, neuroblastoma, and other tumors. Mutations in this gene have been associated with colorectal cancer with defective mismatch repair.

### References

Katoh M and Katoh M. WNT signaling pathway and stem cell signaling network. Clin. Cancer Res.2007; 13:4042-5.

Behrens J, Jerchow BA, Wurtele M, et al. Functional interaction of an axin homolog, conductin, with beta-catenin, APC, and GSK3beta. Science1998; 280:596-9.

Hadjihannas MV and Behrens J. CIN by WNT: growth pathways, mitotic control and chromosome instability in cancer. Cell Cycle2006; 5:2077-81.

Mai M, Qian C, Yokomizo A, et al. Cloning of the human homolog of conductin (AXIN2), a gene mapping to chromosome 17q23-q24. Genomics1999; 55:341-4.

### Images



Western blot analysis of AXIN2 in mouse lung lysate with AXIN2 antibody at 1  $\mu$ g/mL.



Immunohistochemistry of AXIN2 in rat lung tissue with AXIN2 antibody at 5  $\mu$ g/mL.

Immunofluorescence of AXIN2 in Rat Lung cells with AXIN2 antibody at 20  $\mu g/mL$ 



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