

**Goat Anti-AXIN1 Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1130a

## Specification

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### Goat Anti-AXIN1 Antibody - Product Information

Application	IHC
Primary Accession	<a href="#">O15169</a>
Other Accession	<a href="#">NP_851393</a> , <a href="#">8312</a> , <a href="#">12005 (mouse)</a> , <a href="#">79257 (rat)</a>
Reactivity	Human
Predicted	Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	95635

### Goat Anti-AXIN1 Antibody - Additional Information

**Gene ID** 8312

#### Other Names

Axin-1, Axis inhibition protein 1, hAxin, AXIN1, AXIN

#### Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

Goat Anti-AXIN1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-AXIN1 Antibody - Protein Information

**Name** AXIN1

**Synonyms** AXIN

#### Function

Component of the beta-catenin destruction complex required for regulating CTNNB1 levels through phosphorylation and ubiquitination, and modulating Wnt-signaling (PubMed:<a href="http://www.uniprot.org/citations/12192039" target="\_blank">12192039</a>, PubMed:<a href="http://www.uniprot.org/citations/27098453" target="\_blank">27098453</a>, PubMed:<a href="http://www.uniprot.org/citations/27098453" target="\_blank">27098453</a>, PubMed:<a href="http://www.uniprot.org/citations/27098453" target="\_blank">27098453</a>)

<http://www.uniprot.org/citations/28829046> target="\_blank">28829046</a>). Controls dorsoventral patterning via two opposing effects; down-regulates CTNNB1 to inhibit the Wnt signaling pathway and ventralize embryos, but also dorsalizes embryos by activating a Wnt-independent JNK signaling pathway (PubMed:<a href="http://www.uniprot.org/citations/12192039">http://www.uniprot.org/citations/12192039 target="\_blank">12192039</a>). In Wnt signaling, probably facilitates the phosphorylation of CTNNB1 and APC by GSK3B (PubMed:<a href="http://www.uniprot.org/citations/12192039">http://www.uniprot.org/citations/12192039 target="\_blank">12192039</a>). Likely to function as a tumor suppressor. Enhances TGF-beta signaling by recruiting the RNF111 E3 ubiquitin ligase and promoting the degradation of inhibitory SMAD7 (PubMed:<a href="http://www.uniprot.org/citations/16601693">http://www.uniprot.org/citations/16601693 target="\_blank">16601693</a>). Also a component of the AXIN1- HIPK2-TP53 complex which controls cell growth, apoptosis and development (PubMed:<a href="http://www.uniprot.org/citations/17210684">http://www.uniprot.org/citations/17210684 target="\_blank">17210684</a>). Facilitates the phosphorylation of TP53 by HIPK2 upon ultraviolet irradiation (PubMed:<a href="http://www.uniprot.org/citations/17210684">http://www.uniprot.org/citations/17210684 target="\_blank">17210684</a>).

#### Cellular Location

Cytoplasm. Nucleus. Membrane {ECO:0000250|UniProtKB:O35625} Cell membrane {ECO:0000250|UniProtKB:O35625}. Note=MACF1 is required for its translocation to cell membrane (By similarity). On UV irradiation, translocates to the nucleus and colocalizes with DAAX (PubMed:17210684). {ECO:0000250|UniProtKB:O35625, ECO:0000269|PubMed:17210684}

#### Tissue Location

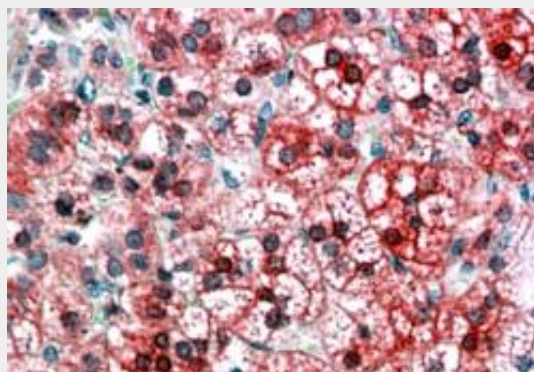
Ubiquitously expressed.

#### Goat Anti-AXIN1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Goat Anti-AXIN1 Antibody - Images



AF1130a (3.8 µg/ml) staining of paraffin embedded Human Adrenal Cortex. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

## Goat Anti-AXIN1 Antibody - Background

This gene encodes a cytoplasmic protein which contains a regulation of G-protein signaling (RGS) domain and a dishevelled and axin (DIX) domain. The encoded protein interacts with adenomatous polyposis coli, catenin (cadherin-associated protein), beta 1, 88kDa, glycogen synthase kinase 3 beta, protein phosphatase 2, and itself. This protein functions as a negative regulator of the wingless-type MMTV integration site family, member 1 (WNT) signaling pathway and can induce apoptosis. The crystal structure of a portion of this protein, alone and in a complex with other proteins, has been resolved. Mutations in this gene have been associated with hepatocellular carcinoma, hepatoblastomas, ovarian endometrioid adenocarcinomas, and medullablastomas. Two transcript variants encoding distinct isoforms have been identified for this gene.

## Goat Anti-AXIN1 Antibody - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolidinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. *Diabetes Care*, 2010 Jul 13. PMID 20628086. Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. *Mol Med*, 2010 Jul-Aug. PMID 20379614. MAP3K1 functionally interacts with Axin1 in the canonical Wnt signalling pathway. Sue Ng S, et al. *Biol Chem*, 2010 Feb-Mar. PMID 20128690. Axin downregulates TCF-4 transcription via beta-catenin, but not p53, and inhibits the proliferation and invasion of lung cancer cells. Yang LH, et al. *Mol Cancer*, 2010 Feb 2. PMID 20122174. Application of gene network analysis techniques identifies AXIN1/PDIA2 and endoglin haplotypes associated with bicuspid aortic valve. Wooten EC, et al. *PLoS One*, 2010 Jan 21. PMID 20098615.