

AXIN1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17201c

Specification

AXIN1 Antibody (Center) - Product Information

Application WB,E
Primary Accession 015169

Other Accession <u>070239</u>, <u>035625</u>, <u>NP 003493.1</u>, <u>NP 851393.1</u>

Reactivity
Predicted
Mouse, Rat
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Mouse, Rat
Rabbit
Rabbit
Polyclonal
Rabbit IgG
330-359

AXIN1 Antibody (Center) - Additional Information

Gene ID 8312

Other Names

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

Target/Specificity

This AXIN1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 330-359 amino acids from the Central region of human AXIN1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

AXIN1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

AXIN1 Antibody (Center) - 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:12192039, PubMed:27098453, PubMed:28829046). 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:12192039). In Wnt signaling, probably facilitates the phosphorylation of CTNNB1 and APC by GSK3B (PubMed:12192039). 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:16601693). Also a component of the AXIN1- HIPK2-TP53 complex which controls cell growth, apoptosis and development (PubMed:17210684). Facilitates the phosphorylation of TP53 by HIPK2 upon ultraviolet irradiation (PubMed:17210684).

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

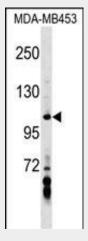
Ubiquitously expressed.

AXIN1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

AXIN1 Antibody (Center) - Images



AXIN1 Antibody (Center) (Cat. #AP17201c) western blot analysis in MDA-MB453 cell line lysates (35ug/lane). This demonstrates the AXIN1 antibody detected the AXIN1 protein (arrow).



AXIN1 Antibody (Center) - 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 adenomatosis polyposis coli, catenin beta-1, glycogen synthase kinase 3 beta, protein phosphate 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 endometriod adenocarcinomas, and medullablastomas. Two transcript variants encoding distinct isoforms have been identified for this gene.

AXIN1 Antibody (Center) - References

Sue Ng, S., et al. Biol. Chem. 391 (2-3), 171-180 (2010): Yang, L.H., et al. Mol. Cancer 9, 25 (2010): Wooten, E.C., et al. PLoS ONE 5 (1), E8830 (2010): Kameoka, M., et al. AIDS Res. Hum. Retroviruses 25(10):1005-1011(2009) Li, Q., et al. Nat. Cell Biol. 11(9):1128-1134(2009)