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AXIN1 Antibody (C-term) Blocking peptide

Synthetic peptide
Catalog # BP12033b

Specification

AXIN1 Antibody (C-term) Blocking peptide - Product Information

Primary Accession O15169

AXIN1 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 8312

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

AXIN1 Antibody (C-term) Blocking peptide - 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:<a href="http://www.uniprot.org/citations/17210684"

target="_blank">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 (C-term) Blocking peptide - Protocols

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

- Blocking Peptides

AXIN1 Antibody (C-term) Blocking peptide - Images

AXIN1 Antibody (C-term) Blocking peptide - Background

This gene encodes a cytoplasmic protein which contains aregulation of G-protein signaling (RGS) domain and a dishevelledand axin (DIX) domain. The encoded protein interacts withadenomatosis polyposis coli, catenin beta-1, glycogen synthasekinase 3 beta, protein phosphate 2, and itself. This proteinfunctions as a negative regulator of the wingless-type MMTVintegration site family, member 1 (WNT) signaling pathway and caninduce apoptosis. The crystal structure of a portion of thisprotein, alone and in a complex with other proteins, has beenresolved. Mutations in this gene have been associated withhepatocellular carcinoma, hepatoblastomas, ovarian endometriodadenocarcinomas, and medullablastomas. Two transcript variantsencoding distinct isoforms have been identified for this gene.

AXIN1 Antibody (C-term) Blocking peptide - 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)