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AXIN1
Purified Mouse Monoclonal Antibody
Catalog # AO2537a

Specification

AXIN1 - Product Information

Application	**E, WB, ICC**
Primary Accession	O15169
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG2b**
Calculated MW	**95.6kDa KDa**

Immunogen
Purified recombinant fragment of human AXIN1 (AA: 546-752) expressed in E. Coli.

Formulation
Purified antibody in PBS with 0.05% sodium azide

AXIN1 - Additional Information

Gene ID 8312

Other Names
AXIN; PPP1R49

Dilution
E~~ 1/10000
WB~~ 1/500 - 1/2000
ICC~~ 1/50 - 1/250

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
AXIN1 is for research use only and not for use in diagnostic or therapeutic procedures.

AXIN1 - 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, 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 - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

AXIN1 - Images

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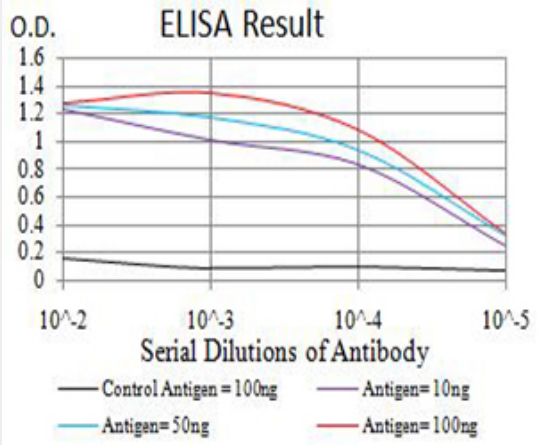

Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

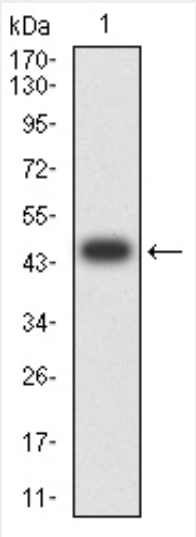

Figure 2:Western blot analysis using AXIN1 mAb against human AXIN1 (AA: 546-752) recombinant protein. (Expected MW is 48.7 kDa)

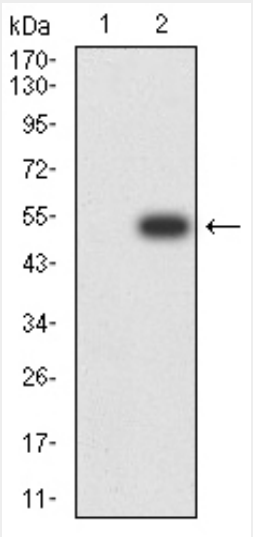

Figure 3:Western blot analysis using AXIN1 mAb against HEK293 (1) and AXIN1 (AA: 546-752)-hIgGFc transfected HEK293 (2) cell lysate.

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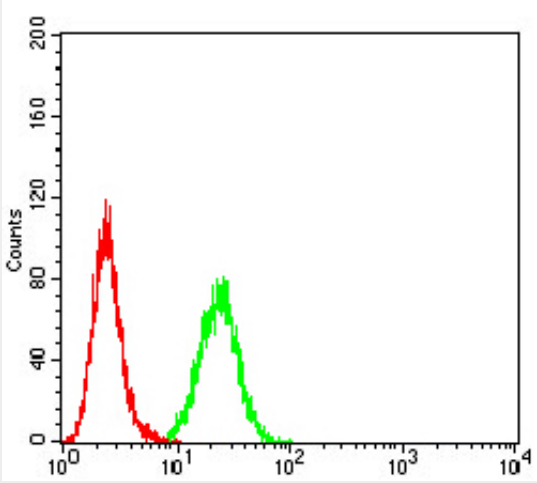

Figure 5:Flow cytometric analysis of Hela cells using AXIN1 mouse mAb (green) and negative control (red).

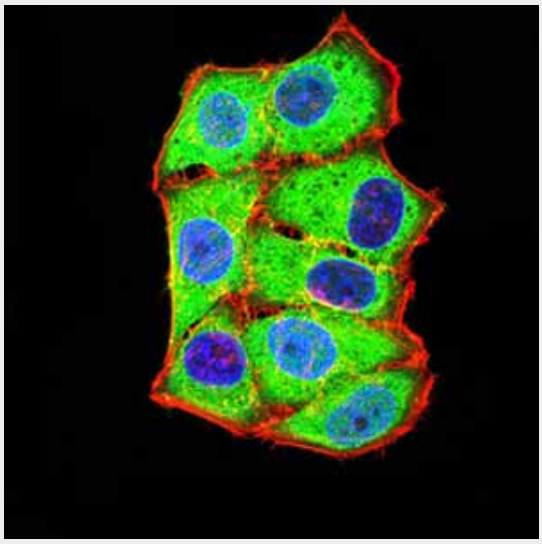

Figure 4:Immunofluorescence analysis of Hela cells using AXIN1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

AXIN1 - References

1.Cancer Lett. 2014 Dec 1;355(1):1-8.2.BMC Cancer. 2013 Aug 2;13:368.