Anti-Axin1 Antibody [PSH03-00]

HA721919

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 95.6 kDa
Clone number:	PSH03-00

Description: Axin1 (Axis inhibition protein 1) and Axin2 are multidomain scaffold proteins that negatively regulate Wnt signaling. Axin1 interacts with APC, GSK-3β, Dvl, and β-catenin and promotes the GSK-3β-mediated phosphorylation and subsequent degradation of β-catenin . Upon stimulation of cells with Wnt, Axin1 is recruited to the membrane by phosphorylated LRP5/6, a process that is believed to be crucial for activation of Wnt signaling . In addition to its role in the Wnt signaling pathway, Axin1 forms a complex with MEKK1 and activates c-Jun amino-terminal kinase (JNK/SAPK) . Axin2 (also known as Conductin or Axil) can functionally substitute for Axin1 in mice . Axin2 itself is a direct target of the Wnt signaling pathway and therefore serves to control the duration and/or intensity of Wnt signaling through a negative feedback loop .

Immunogen: Synthetic peptide within Human Axin1 aa 1-400 / 862.

Positive control: SW480 cell lysate, HeLa cell lysate, 293T cell lysate, K-562 cell lysate, Huh7 cell lysate, human colon cancer tissue.

Subcellular location: Cytoplasm. Nucleus. Membrane. Cell membrane.

Database links: SwissProt: O15169 Human

Recommended Dilutions:

WB	1:2,000
IHC-P	1:500-1:2,000

Storage Buffer: PBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

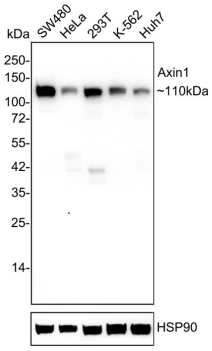

Fig1: Western blot analysis of Axin1 on different lysates with Rabbit anti-Axin1 antibody (HA721919) at 1/2,000 dilution.

Lane 1: SW480 cell lysate (10 µg/Lane)
Lane 2: HeLa cell lysate (10 µg/Lane)
Lane 3: 293T cell lysate (10 µg/Lane)
Lane 4: K-562 cell lysate (10 µg/Lane)
Lane 5: Huh7 cell lysate (10 µg/Lane)

Predicted band size: 96 kDa
Observed band size: 110 kDa

Exposure time: 3 minutes;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721919) at 1/2,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

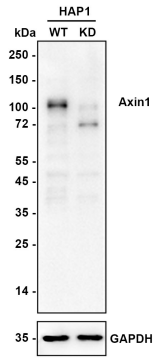

Fig2: Western blot analysis of Axin1 on different lysates with Rabbit anti-Axin1 antibody (HA721919) at 1/2,000 dilution.

Lane 1: HAP1-parental cell lysate
Lane 2: HAP1-Axin1 KD cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 96 kDa
Observed band size: 110 kDa

Exposure time: 140 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721919) at 1/2,000 dilution was used in K1803 at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

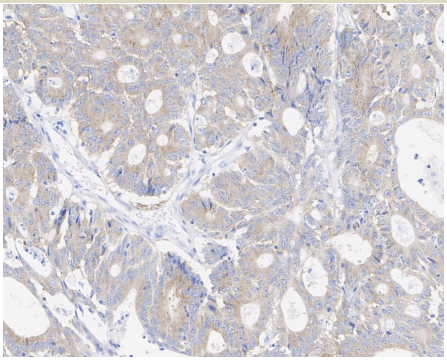

Fig3: Immunohistochemical analysis of paraffin-embedded human colon cancer tissue with Rabbit anti-Axin1 antibody (HA721919) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA721919) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Luo W, Lin SC. Axin: a master scaffold for multiple signaling pathways. Neurosignals. 2004 May-Jun;13(3):99-113.
2. Salahshor S, Woodgett JR. The links between axin and carcinogenesis. J Clin Pathol. 2005 Mar;58(3):225-36.
3. Mallick A, Gupta BP. AXIN-AMPK signaling: Implications for healthy aging. F1000Res. 2021 Dec 8;10:1259.