Anti-SIN1 Antibody [A6G10]

HA601008

Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human
Applications:	WB
Molecular Wt:	Predicted band size: 59 kDa
Clone number:	A6G10

Description: Subunit of mTORC2, which regulates cell growth and survival in response to hormonal signals. mTORC2 is activated by growth factors, but, in contrast to mTORC1, seems to be nutrient-insensitive. mTORC2 seems to function upstream of Rho GTPases to regulate the actin cytoskeleton, probably by activating one or more Rho-type guanine nucleotide exchange factors. mTORC2 promotes the serum-induced formation of stress-fibers or F-actin. mTORC2 plays a critical role in AKT1 'Ser-473' phosphorylation, which may facilitate the phosphorylation of the activation loop of AKT1 on 'Thr-308' by PDK1 which is a prerequisite for full activation. mTORC2 regulates the phosphorylation of SGK1 at 'Ser-422'. mTORC2 also modulates the phosphorylation of PRKCA on 'Ser-657'. Within mTORC2, MAPKAP1 is required for complex formation and mTORC2 kinase activity. MAPKAP1 inhibits MAP3K2 by preventing its dimerization and autophosphorylation. Inhibits HRAS and KRAS signaling. Enhances osmotic stress-induced phosphorylation of ATF2 and ATF2-mediated transcription. Involved in ciliogenesis, regulates cilia length through its interaction with CCDC28B independently of mTORC2 complex.

Immunogen: Recombinant protein within human SIN1 aa 350-522.

Positive control: HeLa cell lysate, A549 cell lysate, MCF7 cell lysate, U-87 MG cell lysate.

Subcellular location: Nucleus, Cell membrane, Cytoplasmic vesicle.

Database links: SwissProt: Q9BPZ7 Human

Recommended Dilutions:

WB 1:1,000

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

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein G affinity purified.

Images

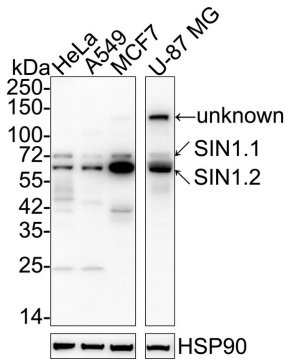

Fig1: Western blot analysis of SIN1 on different lysates with Mouse anti-SIN1 antibody (HA601008) at 1/1,000 dilution.

Lane 1: HeLa cell lysate
Lane 2: A549 cell lysate
Lane 3: MCF7 cell lysate
Lane 4: U-87 MG cell lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 59 kDa
Observed band size: 65/75 kDa

Exposure time: 24 seconds; ECL: K1802;
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 (HA601008) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.

Background References

1. Huang Y. et. al. Sin1 promotes proliferation and invasion of prostate cancer cells by modulating mTORC2-AKT and AR signaling cascades. Life Sci. 2020 May
2. Xu H. et. al. Nitidine Chloride Inhibits SIN1 Expression in Osteosarcoma Cells. Mol Ther Oncolytics. 2019 Feb