Anti-ZIP Kinase Antibody [PSH02-18]

HA721777

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB
Molecular Wt:	Predicted band size: 53 kDa
Clone number:	PSH02-18

Description: ZIP Kinase is a serine/threonine kinase, which is involved in the regulation of apoptosis, autophagy, transcription, translation and actin cytoskeleton reorganization. Involved in the regulation of smooth muscle contraction. Regulates both type I (caspase-dependent) apoptotic and type II (caspase-independent) autophagic cell deaths signal, depending on the cellular setting. Involved in regulation of starvation-induced autophagy. Regulates myosin phosphorylation in both smooth muscle and non-muscle cells. In smooth muscle, regulates myosin either directly by phosphorylating MYL12B and MYL9 or through inhibition of smooth muscle myosin phosphatase (SMPP1M) via phosphorylation of PPP1R12A; the inhibition of SMPP1M functions to enhance muscle responsiveness to Ca(2+) and promote a contractile state. Phosphorylates MYL12B in non-muscle cells leading to reorganization of actin cytoskeleton. Isoform 2 can phosphorylate myosin, PPP1R12A and MYL12B. Overexpression leads to condensation of actin stress fibers into thick bundles. Involved in actin filament focal adhesion dynamics. The function in both reorganization of actin cytoskeleton and focal adhesion dissolution is modulated by RhoD. Positively regulates canonical Wnt/beta-catenin signaling through interaction with NLK and TCF7L2. Phosphorylates RPL13A on 'Ser-77' upon interferon-gamma activation which is causing RPL13A release from the ribosome, RPL13A association with the GAIT complex and its subsequent involvement in transcript-selective translation inhibition. Enhances transcription from AR-responsive promoters in a hormone- and kinase-dependent manner. Involved in regulation of cell cycle progression and cell proliferation. May be a tumor suppressor.

Immunogen:	Recombinant protein within Human ZIP Kinase aa 250-454 (O43293).
Positive control:	A431 cell lysate, A549 cell lysate, 293T cell lysate, SiHa cell lysate, HepG2 cell lysate, Hela cell lysate, Jurkat cell lysate, Caco-2 cell lysate, K-562 cell lysate, MCF7 cell lysate, U-2 OS cell lysate, human kidney tissue lysate.
Subcellular location:	Nucleus, Cytoplasm
Database links:	SwissProt: O43293 Human
Recommended Dilutions:	
WB	1:1,000-1:2,000
Storage Buffer:	PBS (pH7.4), 0.1% 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 A affinity purified.

Images

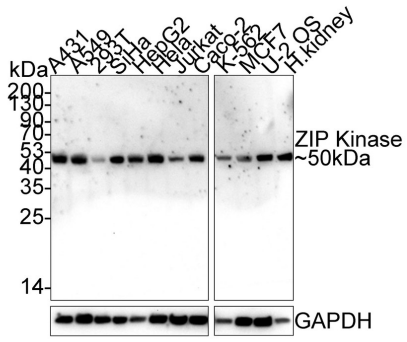

Fig1: Western blot analysis of ZIP Kinase on different lysates with Rabbit anti-ZIP Kinase antibody (HA721777) at 1/1,000 dilution.

Lane 1: A431 cell lysate
Lane 2: A549 cell lysate
Lane 3: 293T cell lysate
Lane 4: SiHa cell lysate
Lane 5: HepG2 cell lysate
Lane 6: Hela cell lysate
Lane 7: Jurkat cell lysate
Lane 8: Caco-2 cell lysate
Lane 9: K-562 cell lysate
Lane 10: MCF7 cell lysate
Lane 11: U-2 OS cell lysate
Lane 12: Human kidney tissue lysate

Lysates/proteins at 40 µg/Lane.

Predicted band size: 53 kDa
Observed band size: 50 kDa

Exposure time: 5 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 (HA721777) at 1/1,000 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.

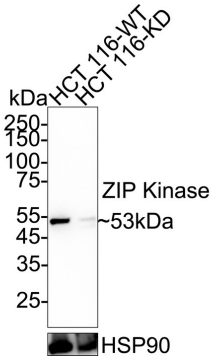

Fig2: Western blot analysis of ZIP Kinase on different lysates with Rabbit anti-ZIP Kinase antibody (HA721777) at 1/2,000 dilution.

Lane 1: HCT 116-si NT cell lysate
Lane 2: HCT 116-si ZIP Kinase cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 53 kDa
Observed band size: 53 kDa

Exposure time: 30 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 (HA721777) 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.

Background References

1. Kocher BA et al. DAPK3 suppresses acini morphogenesis and is required for mouse development. Mol Cancer Res 13:358-67 (2015).
2. Marina O et al. Serologic markers of effective tumor immunity against chronic lymphocytic leukemia include nonmutated B-cell antigens. Cancer Res 70:1344-55 (2010).