Anti-Phospho-AMPK alpha 1 (T183) +AMPK alpha 2 (T172) Antibody [PSH20-31]

HA724142

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB
Molecular Wt:	Predicted band size: 64 kDa
Clone number:	PSH20-31

Description: Catalytic subunit of AMP-activated protein kinase (AMPK), an energy sensor protein kinase that plays a key role in regulating cellular energy metabolism. In response to reduction of intracellular ATP levels, AMPK activates energy-producing pathways and inhibits energy-consuming processes: inhibits protein, carbohydrate and lipid biosynthesis, as well as cell growth and proliferation. AMPK acts via direct phosphorylation of metabolic enzymes, and by longer-term effects via phosphorylation of transcription regulators

Positive control: HEK-293 treated with 200nM Calyculin A for 1 hour cell lysate.

Subcellular location: Cytoplasm, Nucleus.

Database links: SwissProt: Q13131 Human | P54646 Human

Recommended Dilutions:

WB	1:2,000

Storage Buffer: 1*PBS (pH7.4), 0.1% BSA, 40% Glycerol, 0.2% Proclean 950.

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

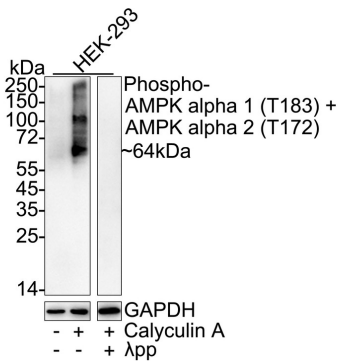

Fig1: Western blot analysis of Phospho-AMPK alpha 1 (T183) +AMPK alpha 2 (T172) on different lysates with Rabbit anti-Phospho-AMPK alpha 1 (T183) +AMPK alpha 2 (T172) antibody (HA724142) at 1/2,000 dilution.

Lane 1: HEK-293 cell lysate
Lane 2: HEK-293 treated with 200nM Calyculin A for 1 hour cell lysate
Lane 3: HEK-293 treated with 200nM Calyculin A for 1 hour cell lysate, then the membrane treated with λpp for 1 hour

Lysates/proteins at 20 µg/Lane.

Predicted band size: 64 kDa
Observed band size: 64 kDa

Exposure time: 2 minutes; 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 (HA724142) at 1/2,000 dilution was used in primary antibody dilution (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.

Background References

1. Albayrak G et al. Memantine shifts cancer cell metabolism via AMPK1/2 mediated energetic switch in A549 lung cancer cells. EXCLI J. 2021 Feb
2. Lin FC et al.Protective Effects of Kirenol against Lipopolysaccharide-Induced Acute Lung Injury through the Modulation of the Proinflammatory NFkappaB Pathway and the AMPK2-/Nrf2-Mediated HO-1/AOE Pathway. Antioxidants (Basel). 2021 Jan