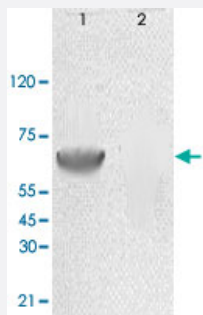


PRKAA1 (phospho T172) polyclonal antibody

Catalog # PAB12602 Size 100 ug

Applications



Western Blot (Cell lysate)

The whole cell lysate derived from serum starved HEK 293 was immunoblotted by PRKAA1 (phospho T172) polyclonal antibody (Cat # PAB12602) at 1 : 500 (lane 1). BSA was loaded as a negative control (Lane 2).

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of PRKAA1.
Immunogen	Synthetic phosphopeptide corresponding to residues surrounding T172 of human PRKAA1.
Host	Rabbit
Reactivity	Bovine, Chicken, Dog, Human, insect, Mouse, Rat
Specificity	This antibody recognizes PRKAA1 with a phosphorylated site of Thr 172. It does not cross-react with non-phosphospecific peptide.
Form	Liquid
Purification	Affinity purification
Isotype	IgG
Recommend Usage	Western Blot (0.1-1 ug/mL) ELISA (0.01-0.1 ug/mL) Immunoprecipitation (2-5 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In TBS, pH 7.2 (BSA, 10% Proclin300)

Storage Instruction

Store at 4°C. For long term storage store at -20°C or -80°C.
Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

The whole cell lysate derived from serum starved HEK 293 was immunoblotted by PRKAA1 (phospho T172) polyclonal antibody (Cat # PAB12602) at 1 : 500 (lane 1). BSA was loaded as a negative control (Lane 2).

- Immunohistochemistry

- Immunoprecipitation

- Enzyme-linked Immunoabsorbent Assay

Gene Info — PRKAA1

Entrez GeneID	5562
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Gene Name	PRKAA1
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Gene Alias	AMPK, AMPKa1, MGC33776, MGC57364
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Gene Description	protein kinase, AMP-activated, alpha 1 catalytic subunit
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Omim ID	602739
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Gene Ontology	Hyperlink
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Gene Summary	The protein encoded by this gene belongs to the ser/thr protein kinase family. It is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the cellular AMP/ATP ratio. AMPK regulates the activities of a number of key metabolic enzymes through phosphorylation. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq]
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Other Designations	5'-AMP-activated protein kinase, catalytic alpha-1 chain AMP -activate kinase alpha 1 subunit AMP-activated protein kinase, catalytic, alpha-1 AMPK alpha 1
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Publication Reference

- [Acetyl-11-Keto-Beta-Boswellic Acid Has Therapeutic Benefits for NAFLD Rat Models That Were Given a High Fructose Diet by Ameliorating Hepatic Inflammation and Lipid Metabolism.](#)

Reza Ataei Kachouei, Alireza Doagoo, Maral Jalilzadeh, Seyyed Hossein Khatami, Shima Rajaei, Ali Jahanbazi Jahan-Abad, Farzaneh Salmani, Roya Pakrad, Somayeh Mahmoodi Baram, Mitra Nourbakhsh, Mohammad-Amin Abdollahifar, Hojjat Allah Abbaszadeh, Shokoofeh Noori, Mitra Rezaei, Meisam Mahdavi, Mohammad Reza Shahmohammadi, Saeed Karima.

Inflammation 2023 Jun; [Epub]:0.

Application: WB-Ti, Rat, Rat liver

- [circPTPN4 regulates myogenesis via the miR-499-3p/NAMPT axis.](#)

Bolin Cai, Manting Ma, Zhen Zhou, Shaofen Kong, Jing Zhang, Xiquan Zhang, and Qinghua Nie.

Journal of Animal Science and Biotechnology 2022 Feb; 13(1):2.

Application: WB, Chicken, Primary myoblast

- [LncEDCH1 improves mitochondrial function to reduce muscle atrophy by interacting with SERCA2.](#)

Bolin Cai, Manting Ma, Jing Zhang, Zhijun Wang, Shaofen Kong, Zhen Zhou, Ling Lian, Jiannan Zhang, Juan Li, Yajun Wang, Hongmei Li, Xiquan Zhang, Qinghua Nie.

Molecular Therapy. Nucleic Acids 2022 Mar; 27:319.

Application: WB-Tr, Chicken, Chicken leg muscles

- [AMPK regulation of mouse oocyte meiotic resumption in vitro.](#)

Chen J, Hudson E, Chi MM, Chang AS, Moley KH, Hardie DG, Downs SM.

Developmental Biology 2006 Mar; 291(2):227.

Application: WB-Ce, Mouse, Mouse Oocyte

Pathway

- [Adipocytokine signaling pathway](#)
- [Hypertrophic cardiomyopathy \(HCM\)](#)
- [Insulin signaling pathway](#)
- [mTOR signaling pathway](#)
- [Regulation of autophagy](#)

Disease

- [Alzheimer disease](#)

- [Atherosclerosis](#)
- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Colonic Neoplasms](#)
- [Coronary Artery Disease](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Drug Toxicity](#)
- [Edema](#)
- [Hypercholesterolemia](#)
- [Metabolic Syndrome X](#)
- [Neoplasms](#)
- [Osteoporosis](#)
- [Rectal Neoplasms](#)