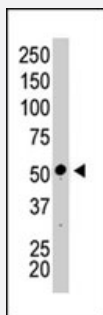


PRKAA1 polyclonal antibody

Catalog # PAB2764

Size 400 uL

Applications



Western Blot (Tissue lysate)

Western blot analysis of PRKAA1 polyclonal antibody (Cat # PAB2764) in mouse liver lysate. PRKAA1 (arrow) was detected using purified polyclonal antibody. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of PRKAA1.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human PRKAA1.
Host	Rabbit
Reactivity	Human, Mouse
Form	Liquid
Purification	Protein G purification
Recommend Usage	Western Blot (1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

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Gene Info — PRKAA1

Entrez GeneID	5562
Protein Accession#	Q13131
Gene Name	PRKAA1
Gene Alias	AMPK, AMPKa1, MGC33776, MGC57364
Gene Description	protein kinase, AMP-activated, alpha 1 catalytic subunit
Omim ID	602739
Gene Ontology	Hyperlink
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]
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

Publication Reference

- [Cloning and functional analysis of cDNAs with open reading frames for 300 previously undefined genes expressed in CD34+ hematopoietic stem/progenitor cells.](#)

Zhang QH, Ye M, Wu XY, Ren SX, Zhao M, Zhao CJ, Fu G, Shen Y, Fan HY, Lu G, Zhong M, Xu XR, Han ZG, Zhang JW, Tao J, Huang QH, Zhou J, Hu GX, Gu J, Chen SJ, Chen Z.

Genome Research 2000 Oct; 10(10):1546.

- [Mammalian AMP-activated protein kinase subfamily.](#)

Stapleton D, Mitchelhill KI, Gao G, Widmer J, Michell BJ, Teh T, House CM, Fernandez CS, Cox T, Witters LA, Kemp BE.

The Journal of Biological Chemistry 1996 Jan; 271(2):611.

Application: IP, WB-Ti, Rat, Hearts, Lungs

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](#)