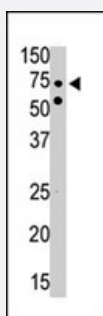


PRKAA2 polyclonal antibody

Catalog # PAB2767

Size 400 uL

Applications



Western Blot (Tissue lysate)

Western blot analysis of PRKAA2 polyclonal antibody (Cat # PAB2767) in mouse heart tissue lysate. PRKAA2 (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 PRKAA2.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human PRKAA2.
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

- Western Blot (Tissue lysate)

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Gene Info — PRKAA2

Entrez GeneID	5563
Protein Accession#	P54646
Gene Name	PRKAA2
Gene Alias	AMPK, AMPK2, PRKAA
Gene Description	protein kinase, AMP-activated, alpha 2 catalytic subunit
Omim ID	600497
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a catalytic subunit of the AMP-activated protein kinase (AMP K). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and inactivates acetyl-CoA carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMG CR), key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. Studies of the mouse counterpart suggest that this catalytic subunit may control whole-body insulin sensitivity and is necessary for maintaining myocardial energy homeostasis during ischemia. [provided by RefSeq]
Other Designations	5'-AMP-activated protein kinase, catalytic alpha-2 chain AMP-activated protein kinase alpha 2 catalytic subunit AMPK-alpha-2 chain OTTHUMP00000009993

Publication Reference

- [AMP-kinase regulates food intake by responding to hormonal and nutrient signals in the hypothalamus.](#)

Minokoshi Y, Alquier T, Furukawa N, Kim YB, Lee A, Xue B, Mu J, Fougelle F, Ferre P, Birnbaum MJ, Stuck BJ, Kahn BB. Nature 2004 Apr; 428(6982):569.

- [AMP-activated protein kinase plays a role in the control of food intake.](#)

Andersson U, Filipsson K, Abbott CR, Woods A, Smith K, Bloom SR, Carling D, Small CJ.

The Journal of Biological Chemistry 2004 Mar; 279(13):12005.

- [Stimulation of the AMP-activated protein kinase leads to activation of eukaryotic elongation factor 2 kinase and to its phosphorylation at a novel site, serine 398.](#)

Browne GJ, Finn SG, Proud CG.

The Journal of Biological Chemistry 2004 Mar; 279(13):12220.

Application: IP, WB-Ce, Human, Rat, Adult rat ventricular cardiomyocytes, KB cells

Pathway

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

Disease

- [Atherosclerosis](#)
- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Coronary Artery Disease](#)
- [Diabetes Mellitus](#)
- [Drug Toxicity](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Hypercholesterolemia](#)
- [Insulin Resistance](#)