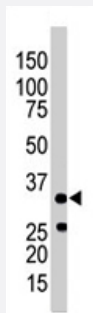


PRKAB1 polyclonal antibody

Catalog # PAB4575

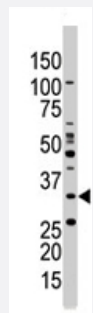
Size 400 uL

Applications



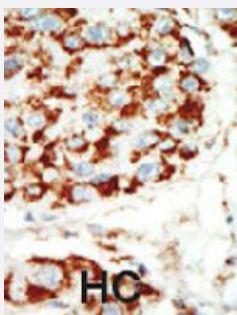
Western Blot (Tissue lysate)

The PRKAB1 polyclonal antibody (Cat # PAB4575) is used in Western blot to detect PRKAB1 in mouse spleen tissue lysate .



Western Blot (Cell lysate)

The PRKAB1 polyclonal antibody (Cat # PAB4575) is used in Western blot to detect PRKAB1 in Jurkat cell lysate .



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma tissue reacted with PRKAB1 polyclonal antibody (Cat # PAB4575) , which was peroxidase-conjugated to the secondary antibody, followed by AEC staining . This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated . HC = hepatocarcinoma .

Specification

Product Description

Rabbit polyclonal antibody raised against synthetic peptide of PRKAB1.

Immunogen

A synthetic peptide (conjugated with KLH) corresponding to N-terminus of human PRKAB1.

Host	Rabbit
Reactivity	Human, Mouse
Form	Liquid
Purification	Protein G purification
Recommend Usage	ELISA (1:1000) Western Blot (1:100-500) Immunohistochemistry (1:50-100) 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)

The PRKAB1 polyclonal antibody (Cat # PAB4575) is used in Western blot to detect PRKAB1 in mouse spleen tissue lysate .

- Western Blot (Cell lysate)

The PRKAB1 polyclonal antibody (Cat # PAB4575) is used in Western blot to detect PRKAB1 in Jurkat cell lysate .

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma tissue reacted with PRKAB1 polyclonal antibody (Cat # PAB4575) , which was peroxidase-conjugated to the secondary antibody, followed by AEC staining . This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated . HC = hepatocarcinoma .

- Enzyme-linked Immunoabsorbent Assay

Gene Info — PRKAB1

Entrez GeneID	5564
Protein Accession#	AAKB_HUMAN
Gene Name	PRKAB1

Gene Alias	AMPK, HAMPKb, MGC17785
Gene Description	protein kinase, AMP-activated, beta 1 non-catalytic subunit
Omim ID	602740
Gene Ontology	Hyperlink
Gene Summary	<p>The protein encoded by this gene is a regulatory subunit of the AMP-activated protein kinase (AMPK). 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 (HMGCR), key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. This subunit may be a positive regulator of AMPK activity. The myristoylation and phosphorylation of this subunit have been shown to affect the enzyme activity and cellular localization of AMPK. This subunit may also serve as an adaptor molecule mediating the association of the AMPK complex. [provided by RefSeq]</p>
Other Designations	5'-AMP-activated protein kinase beta-1 subunit AMP-activated protein kinase beta 1 non-catalytic subunit AMP-activated protein kinase beta subunit AMPK beta -1 chain AMPK beta 1 protein kinase, AMP-activated, noncatalytic, beta-1

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, Foulle 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.

Application: WB-Ti, Rat, Hypothalamus

- [C75, a fatty acid synthase inhibitor, modulates AMP-activated protein kinase to alter neuronal energy metabolism.](#)

Landree LE, Hanlon AL, Strong DW, Rumbaugh G, Miller IM, Thupari JN, Connolly EC, Haganir RL, Richardson C, Witters LA, Kuhajda FP, Ronnett GV.

The Journal of Biological Chemistry 2003 Nov; 279(5):3817.

Pathway

- [Adipocytokine signaling pathway](#)
- [Hypertrophic cardiomyopathy \(HCM\)](#)
- [Insulin signaling pathway](#)

Disease

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