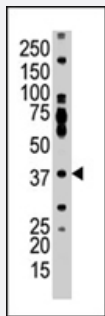


PRKAG1 polyclonal antibody

Catalog # PAB4579

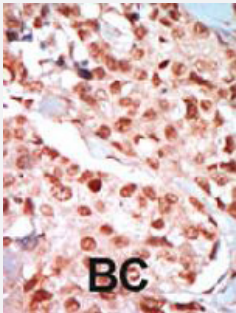
Size 400 uL

Applications



Western Blot (Tissue lysate)

The PRKAG1 polyclonal antibody (Cat # PAB4579) is used in Western blot to detect PRKAG1 in mouse liver tissue lysate .



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

Formalin-fixed and paraffin-embedded human cancer tissue reacted with PRKAG1 polyclonal antibody (Cat # PAB4579) , which was peroxidase-conjugated to the secondary antibody, followed by DAB staining . This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated . BC = breast carcinoma .

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of PRKAG1.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to internal region of human PRKAG1.
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 PRKAG1 polyclonal antibody (Cat # PAB4579) is used in Western blot to detect PRKAG1 in mouse liver tissue lysate .

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

Formalin-fixed and paraffin-embedded human cancer tissue reacted with PRKAG1 polyclonal antibody (Cat # PAB4579) , which was peroxidase-conjugated to the secondary antibody, followed by DAB staining . This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated . BC = breast carcinoma .

- Enzyme-linked Immunoabsorbent Assay

Gene Info — PRKAG1

Entrez GeneID	5571
Protein Accession#	AAKG_HUMAN
Gene Name	PRKAG1
Gene Alias	AMPKG, MGC8666
Gene Description	protein kinase, AMP-activated, gamma 1 non-catalytic subunit
Omim ID	602742
Gene Ontology	Hyperlink

Gene Summary

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 is one of the gamma regulatory subunits of AMPK. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq]

Other Designations

5'-AMP-activated protein kinase, gamma-1 subunit|AMP-activated protein kinase, noncatalytic gamma-1 subunit|AMPK gamma-1 chain

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, Fufelle F, Ferre P, Birnbaum MJ, Stuck BJ, Kahn BB. Nature 2004 Apr; 428(6982):569.

- [An activating mutation in the gamma1 subunit of the AMP-activated protein kinase.](#)

Hamilton SR, Stapleton D, O'Donnell JB Jr, Kung JT, Dalal SR, Kemp BE, Witters LA. FEBS Letters 2001 Jul; 500(3):163.

Application: WB-Tr, Human, COS-7, PS120 cells

- [Human immunodeficiency virus Tat protein induces interleukin 6 mRNA expression in human brain endothelial cells via protein kinase C- and cAMP-dependent protein kinase pathways.](#)

Zidovetzki R, Wang JL, Chen P, Jeyaseelan R, Hofman F. AIDS Research and Human Retroviruses 1998 Jul; 14(10):825.

Pathway

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

Disease

- [Atherosclerosis](#)

- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Coronary Artery Disease](#)
- [Diabetes Mellitus](#)
- [Drug Toxicity](#)
- [Edema](#)
- [Hypercholesterolemia](#)