

PRKAB1 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8569b

Specification

PRKAB1 Antibody - Product Information

Application	WB,E
Primary Accession	Q9Y478
Reactivity	Mouse, Rat
Host	Mouse
Clonality	monoclonal
Isotype	IgG1, κ
Calculated MW	30382

PRKAB1 Antibody - Additional Information

Gene ID 5564

Other Names

5'-AMP-activated protein kinase subunit beta-1, AMPK subunit beta-1, AMPKb, PRKAB1, AMPK

Target/Specificity

This PRKAB1 antibody is generated from a mouse immunized with a recombinant of human PRKAB1.

Dilution

WB~~1:2000

E~~Use at an assay dependent concentration.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PRKAB1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PRKAB1 Antibody - Protein Information

Name PRKAB1

Synonyms AMPK

Function Non-catalytic subunit of AMP-activated protein kinase (AMPK), an energy sensor protein kinase that plays a key role in regulating cellular energy metabolism. In response to reduction of

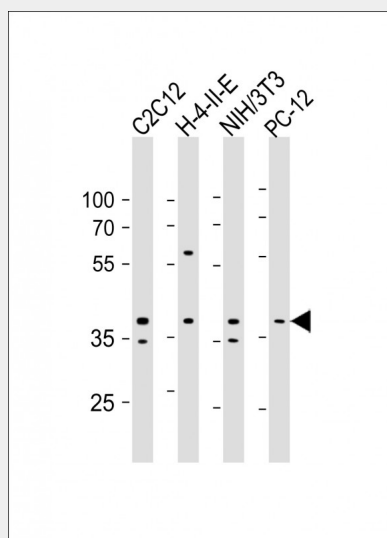
intracellular ATP levels, AMPK activates energy-producing pathways and inhibits energy-consuming processes: inhibits protein, carbohydrate and lipid biosynthesis, as well as cell growth and proliferation. AMPK acts via direct phosphorylation of metabolic enzymes, and by longer-term effects via phosphorylation of transcription regulators. Also acts as a regulator of cellular polarity by remodeling the actin cytoskeleton; probably by indirectly activating myosin. Beta non-catalytic subunit acts as a scaffold on which the AMPK complex assembles, via its C-terminus that bridges alpha (PRKAA1 or PRKAA2) and gamma subunits (PRKAG1, PRKAG2 or PRKAG3).

PRKAB1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PRKAB1 Antibody - Images



All lanes : Anti-PRKAB1 Antibody at 1:2000 dilution Lane 1: C2C12 whole cell lysate Lane 2: H-4-II-E whole cell lysate Lane 3: NIH/3T3 whole cell lysate Lane 4: PC-12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 30 kDa Blocking/Dilution buffer: 5% NFDN/TBST.

PRKAB1 Antibody - Background

Non-catalytic subunit of AMP-activated protein kinase (AMPK), an energy sensor protein kinase that plays a key role in regulating cellular energy metabolism. In response to reduction of intracellular ATP levels, AMPK activates energy-producing pathways and inhibits energy-consuming processes: inhibits protein, carbohydrate and lipid biosynthesis, as well as cell growth and proliferation. AMPK acts via direct phosphorylation of metabolic enzymes, and by longer-term effects via phosphorylation of transcription regulators. Also acts as a regulator of cellular polarity by

remodeling the actin cytoskeleton; probably by indirectly activating myosin. Beta non-catalytic subunit acts as a scaffold on which the AMPK complex assembles, via its C-terminus that bridges alpha (PRKAA1 or PRKAA2) and gamma subunits (PRKAG1, PRKAG2 or PRKAG3).

PRKAB1 Antibody - References

Carling D.,et al.Submitted (FEB-1998) to the EMBL/GenBank/DDBJ databases.

Stapleton D.,et al.FEBS Lett. 409:452-456(1997).

Yamagata K.,et al.Submitted (JAN-1997) to the EMBL/GenBank/DDBJ databases.

Wang X.,et al.Submitted (JAN-1999) to the EMBL/GenBank/DDBJ databases.

Scherer S.E.,et al.Nature 440:346-351(2006).