

# PRKAB1 Antibody

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AM8569b

## Product Information

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|--------------------------|------------------------|
| <b>Application</b>       | WB, E                  |
| <b>Primary Accession</b> | <a href="#">Q9Y478</a> |
| <b>Reactivity</b>        | Human, Rat, Mouse      |
| <b>Host</b>              | Mouse                  |
| <b>Clonality</b>         | monoclonal             |
| <b>Isotype</b>           | IgG1, $\kappa$         |
| <b>Clone Names</b>       | 1420CT832.86.25        |
| <b>Calculated MW</b>     | 30382                  |

## Additional Information

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|---------------------------|---|
| <b>Gene ID</b>            | 5564  |
| <b>Other Names</b>        | 5'-AMP-activated protein kinase subunit beta-1, AMPK subunit beta-1, AMPKb, PRKAB1, AMPK  |
| <b>Target/Specificity</b> | This PRKAB1 antibody is generated from a mouse immunized with a recombinant of human PRKAB1.  |
| <b>Dilution</b>           | WB~~1:2000 E~~Use at an assay dependent concentration.  |
| <b>Format</b>             | 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. |
| <b>Storage</b>            | 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.                             |
| <b>Precautions</b>        | PRKAB1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.   |

## Protein Information

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|-----------------|--|
| <b>Name</b>     | PRKAB1   |
| <b>Synonyms</b> | AMPK   |
| <b>Function</b> | 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).

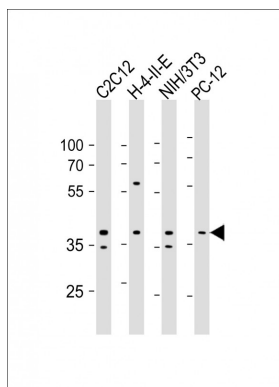
## Background

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).

## 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).

## 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% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.