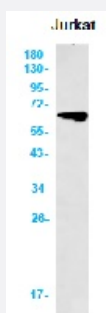


RecomAb™

# PRKAA2 recombinant monoclonal antibody, clone R06-9C7

Catalog # RAB01657      Size 100 uL

## Applications



### Western Blot

Western blot analysis of AMPK alpha 1/2 in Jurkat lysates using human AMPK alpha 2 recombinant monoclonal antibody, clone R06-9C7 (Cat # RAB01657).

## Specification

|                             |                                                                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Description</b>  | Rabbit recombinant monoclonal antibody raised against human AMPK alpha 2.                                                        |
| <b>Antibody Species</b>     | Rabbit                                                                                                                           |
| <b>Immunogen</b>            | Original antibody is raised against recombinant protein corresponding to human AMPK alpha 2                                      |
| <b>Theoretical MW (kDa)</b> | Calculated MW: 62 kD                                                                                                             |
| <b>Reactivity</b>           | Human                                                                                                                            |
| <b>Form</b>                 | Liquid                                                                                                                           |
| <b>Purification</b>         | Affinity purification                                                                                                            |
| <b>Isotype</b>              | IgG                                                                                                                              |
| <b>Recommend Usage</b>      | Immunoprecipitation (1:20)<br>Western Blot (1:500-1:1,000)<br>The optimal working dilution should be determined by the end user. |
| <b>Storage Buffer</b>       | In 50 mM Tris-Glycine, pH 7.4 (0.15 M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA)                                      |

**Storage Instruction**

Store at 4°C for short term. 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

Western blot analysis of AMPK alpha 1/2 in Jurkat lysates using human AMPK alpha 2 recombinant monoclonal antibody, clone R06-9C7 (Cat # RAB01657).

- Immunoprecipitation

## 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 (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. 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

## 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](#)