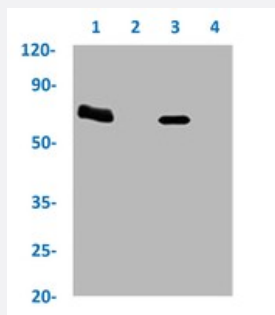


## RecomAb™

# PRKAA2 (phospho Thr172) recombinant monoclonal antibody, clone 4F4

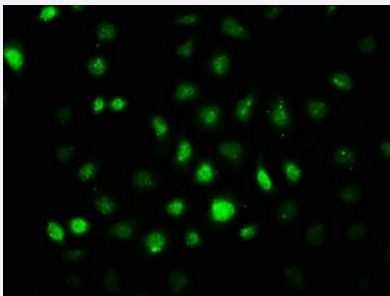
Catalog # RAB04245      Size 100 uL

## Applications



### Western Blot

Western blot analysis of Lane 1: 293 whole cell lysate (treated with Calyculin A 50 nM/60 mins), Lane 2: 293 whole cell lysate (not treated), Lane 3: A549 whole cell lysate (treated with EGF 100 ng/mL/20 mins) and Lane 4: A549 whole cell lysate (not treated) with PRKAA2 (phospho Thr172) recombinant monoclonal antibody, clone 4F4 (Cat # RAB04245).



### Immunofluorescence

Immunofluorescent staining of A549 cells with PRKAA2 (phospho Thr172) recombinant monoclonal antibody, clone 4F4 (Cat # RAB04245) (diluted at 1:100). The secondary antibody was Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Counter-stain DAPI was used (blue).

## Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human PRKAA2.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic phosphopeptide corresponding to residues surrounding Thr172 of human PRKAA2.
Theoretical MW (kDa)	Calculated MW: 62 kD
Reactivity	Human

Form	Liquid
Purification	Affinity chromatography
Isotype	IgG
Recommend Usage	ELISA Immunofluorescence (1:20-1:200) Western Blot (1:500-1:5000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH7.4 (150mM NaCl, 50% glycerol and 0.02% sodium azide)
Storage Instruction	Store at -20 °C or -80 °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 Lane 1: 293 whole cell lysate (treated with Calyculin A 50 nM/60 mins), Lane 2: 293 whole cell lysate (not treated), Lane 3: A549 whole cell lysate (treated with EGF 100 ng/mL/20 mins) and Lane 4: A549 whole cell lysate (not treated) with PRKAA2 (phospho Thr172) recombinant monoclonal antibody, clone 4F4 (Cat # RAB04245).

- Immunofluorescence

Immunofluorescent staining of A549 cells with PRKAA2 (phospho Thr172) recombinant monoclonal antibody, clone 4F4 (Cat # RAB04245) (diluted at 1:100). The secondary antibody was Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Counter-stain DAPI was used (blue).

- Enzyme-linked Immunoabsorbent Assay

## Gene Info — PRKAA2

Entrez GeneID	<a href="#">5563</a>
Protein Accession#	<a href="#">P54646</a>
Gene Name	PRKAA2
Gene Alias	AMPK, AMPK2, PRKAA
Gene Description	protein kinase, AMP-activated, alpha 2 catalytic subunit

Omim ID	<a href="#">600497</a>
Gene Ontology	<a href="#">Hyperlink</a>
Gene Summary	<p>The protein encoded by this gene is a catalytic subunit of the AMP-activated protein kinase (AMP K). 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 (HMG CR), 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]</p>
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](#)