

## PRKAA2 monoclonal antibody

Catalog: MB22314

Host: Mouse

Reactivity: Human, Mouse, Rat, Monkey, Rabbit

### Background:

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.

### Product:

Purified antibody in PBS with 0.05% sodium azide

### Molecular Weight:

62.3kDa

### Swiss-Prot:

P54646

### Purification&Purity:

The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

### Applications:

WB:1/500 - 1/2000 IHC:1/100 - 1/500 IF:1/50 - 1/500  
FC:1/200 - 1/400

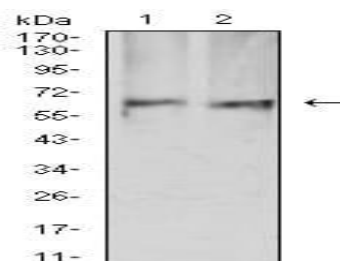
### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

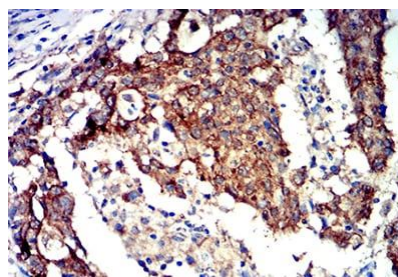
### Isotype:

Mouse IgG1

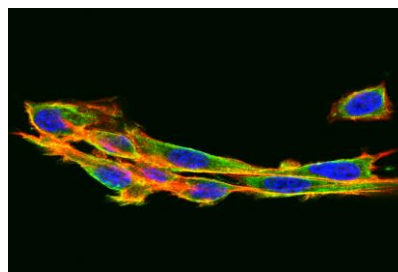
### DATA:



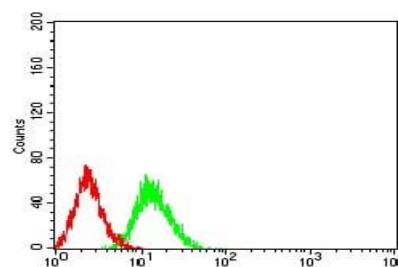
Western blot analysis using PRKAA2 mouse mAb against HEK293 (1) and COS7 (2) cell lysate.



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissues using PRKAA2 mouse mAb with DAB staining.



Immunofluorescence analysis of NIH/3T3 cells using PRKAA2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of Jurkat cells using PRKAA2 mouse mAb

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## PRODUCT DATA SHEET

Bioworld Technology, Inc.

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(green) and negative control (red).

For research use only, not for use in diagnostic procedure.

Note:

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