

# AMPK $\alpha$ 1 (Phospho Ser485) Rabbit pAb

CatalogNo: YP1259

## Key Features

### Host Species

- Rabbit

### Reactivity

- Human, Mouse, Rat

### Applications

- WB

### MW

- 65kD (Observed)

### Isotype

- IgG

## Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

## Recommended Dilution Ratios

WB 1:1000-2000

## Basic Information

**Clonality** Polyclonal

## Immunogen Information

**Immunogen** Synthesized phospho peptide around human AMPK $\alpha$ 1 (Ser485)

**Specificity** This antibody detects endogenous levels of Human Mouse Rat AMPK $\alpha$ 1 (phospho-Ser485)

## Target Information

**Gene name** PRKAA1 AMPK1

**Protein Name** AMPK $\alpha$ 1 (Ser485)

Organism	Gene ID	UniProt ID
Human	<a href="#">5562</a> ;	<a href="#">Q13131</a> ;
Mouse	<a href="#">105787</a> ;	<a href="#">Q5EG47</a> ;
Rat	<a href="#">65248</a> ;	<a href="#">P54645</a> ;

**Cellular Localization** Cytoplasm . Nucleus . In response to stress, recruited by p53/TP53 to specific promoters. .

**Tissue specificity** Brain,Intestine,Liver,Mammary gland,Platelet,Testis

**Function** Catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,enzyme regulation:Binding of AMP results in allosteric activation, inducing phosphorylation on Thr-174 by STK11 in complex with STE20-related adapter-alpha (STRAD alpha) pseudo kinase and CAB39. Also activated by phosphorylation by CAMKK2 triggered by a rise in intracellular calcium ions, without detectable changes in the AMP/ATP ratio.,Function:Responsible for the regulation of fatty acid synthesis by phosphorylation of acetyl-CoA carboxylase. It also regulates cholesterol synthesis via phosphorylation and inactivation of hormone-sensitive lipase and hydroxymethylglutaryl-CoA reductase. Appears to act as a metabolic stress-sensing protein kinase switching off biosynthetic pathways when cellular ATP levels are depleted and when 5'-AMP rises in response to fuel limitation and/or hypoxia. This is a catalytic subunit.,sequence Caution:Translation N-terminally shortened.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. SNF1 subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Heterotrimer of an alpha catalytic subunit, a beta and a gamma non-catalytic subunits. Interacts with FNIP1 and FNIP2.,

## Validation Data

## Contact information

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