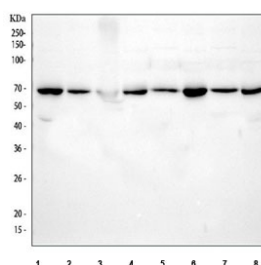


## AMPK alpha 1 Antibody / PRKAA1 (RQ4362)

Catalog No.	Formulation	Size
RQ4362	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Format</b>	Antigen affinity purified
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity purified
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose
<b>UniProt</b>	Q13131
<b>Localization</b>	Cytoplasmic
<b>Applications</b>	Western Blot : 0.5-1ug/ml Direct ELISA : 0.1-0.5ug/ml
<b>Limitations</b>	This AMPK alpha 1 antibody is available for research use only.



Western blot testing of 1) human SiHa, 2) human HeLa, 3) human RT4, 4) human A549, 5) rat brain, 6) rat PC-12, 7) mouse brain and 8) mouse NIH 3T3 cell lysate with AMPK alpha 1 antibody. Predicted molecular weight ~63 kDa.

## Description

5'-AMP-activated protein kinase catalytic subunit alpha-1 is an enzyme that in humans is encoded by the PRKAA1 gene. The protein encoded by this gene belongs to the ser/thr protein kinase family. It is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the cellular AMP/ATP ratio. AMPK regulates the activities of a number of key metabolic enzymes through phosphorylation. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways.

## Application Notes

Optimal dilution of the AMPK alpha 1 antibody should be determined by the researcher.

## Immunogen

A recombinant human protein corresponding to amino acids F377-R446 was used as the immunogen for the AMPK alpha 1 antibody.

## Storage

After reconstitution, the AMPK alpha 1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.