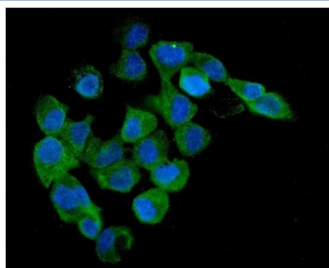


## PRKAB1 Antibody / AMPK beta 1 (R32363)

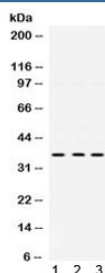
Catalog No.	Formulation	Size
R32363	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Antigen affinity purified
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity
<b>Buffer</b>	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
<b>UniProt</b>	Q9Y478
<b>Applications</b>	Western Blot : 0.1-0.5ug/ml Immunofluorescence (FFPE) : 2-4ug/ml
<b>Limitations</b>	This PRKAB1 antibody is available for research use only.



Immunofluorescent staining of FFPE human A431 cells with PRKAB1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) Jurkat, 2) PANC and 3) K562 cell lysate with PRKAB1 antibody. Expected molecular weight ~30 kDa, observed here at ~38 kDa.

## Description

5'-AMP-activated protein kinase subunit beta-1 is an enzyme that in humans is encoded by the PRKAB1 gene. The protein encoded by this gene is a regulatory 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. It 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. This subunit may be a positive regulator of AMPK activity. The myristoylation and phosphorylation of this subunit have been shown to affect the enzyme activity and cellular localization of AMPK. This subunit may also serve as an adaptor molecule mediating the association of the AMPK complex.

## Application Notes

Optimal dilution of the PRKAB1 antibody should be determined by the researcher.

## Immunogen

Amino acids DRPKILMDSPEDADLFHSEEIKAPEKEEFLAWQHDLE of human AMPK beta 1 were used as the immunogen for the PRKAB1 antibody.

## Storage

After reconstitution, the PRKAB1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.