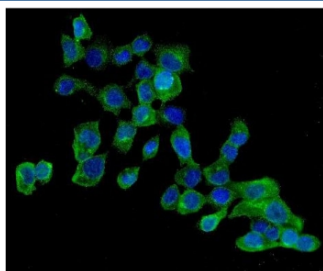


AMPK beta 2 Antibody / PRKAB2 (R31820)

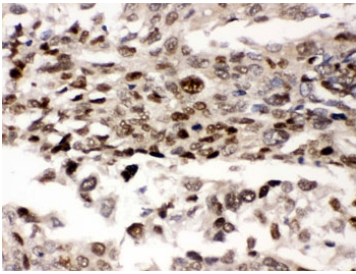
Catalog No.	Formulation	Size
R31820	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

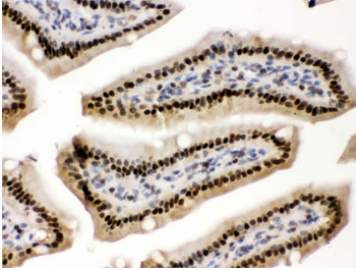
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	O43741
Localization	Cytoplasmic
Applications	Western Blot : 0.1-0.5ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml Flow Cytometry : 1-3ug/10 ⁶ cells Immunofluorescence (FFPE) : 2-4ug/ml
Limitations	This PRKAB2 antibody is available for research use only.



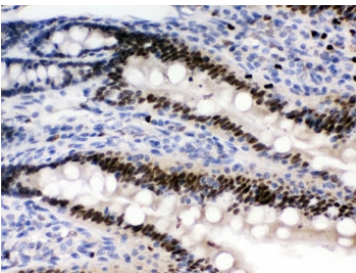
Immunofluorescent staining of FFPE human A431 cells with AMPK beta 2 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



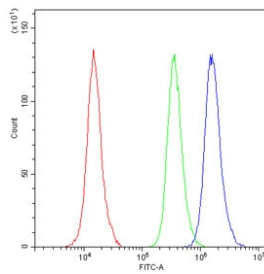
IHC testing of FFPE human lung cancer tissue with PRKAB2 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



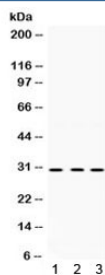
IHC testing of FFPE mouse intestine with PRKAB2 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



IHC testing of FFPE rat intestine with PRKAB2 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



Flow cytometry testing of human A431 cells with AMPK beta 2 antibody at 1ug/10⁶ cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= AMPK beta 2 antibody.



Western blot testing of 1) rat brain, 2) rat skeletal muscle and 3) human PANC lysate with PRKAB2 antibody. Expected molecular weight ~30 kDa.

Description

5'-AMP-activated protein kinase subunit beta-2 is an enzyme that in humans is encoded by the PRKAB2 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. It is highly expressed in skeletal muscle and thus may have tissue-specific roles. Multiple alternatively spliced transcript variants have been found for this gene.

Application Notes

Optimal dilution of the PRKAB2 antibody should be determined by the researcher.

Immunogen

Amino acids DKEFVSWQQDLEDSVKPTQQARPTVIRWSEGGKE of human AMPK beta 2 were used as the immunogen for the PRKAB2 antibody.

Storage

After reconstitution, the PRKAB2 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.