

## Product datasheet for **AP14053PU-N**

### AMPK alpha 2 (PRKAA2) (C-term) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	ELISA: 1/1,000. Western Blotting: 1/50 - 1/100. Immunohistochemistry: 1/10 - 1/50.
Reactivity:	Human
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the C-terminal region of human PRKAA2.
Specificity:	This antibody reacts to AMPK alpha 2 (PRKAA2).
Formulation:	PBS with 0.09% (W/V) sodium azide State: Purified State: Liquid purified Ig
Concentration:	lot specific
Purification:	Protein A column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	protein kinase AMP-activated catalytic subunit alpha 2
Database Link:	<a href="#">Entrez Gene 5563 Human P54646</a>



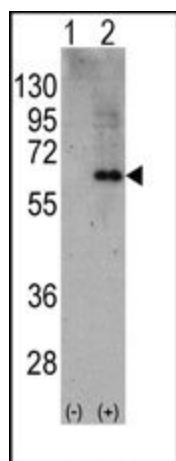
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**Background:**

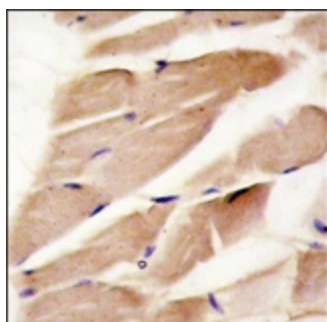
The protein encoded by this gene is a catalytic subunit of the AMP-activated protein kinase (AMPK). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response 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.

**Synonyms:**

AMPK2, AMPK alpha-2 chain

**Product images:**

Western blot analysis of PRKAA2 (arrow) using rabbit polyclonal PRKAA2 Antibody (C-term). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PRKAA2 gene (Lane 2)



Formalin-fixed and paraffin-embedded human skeletal muscle reacted with PRKAA2 antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining.