

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850 UNITED STATES Phone: +1-888-267-4436 Fax: +1-301-340-8606

techsupport@origene.com

## OriGene Technologies GmbH

Schillerstr. 5 32052 Herford GERMANY Phone: +49-5221-34606-0 Fax: +49-5221-34606-11 info-de@origene.com

## AP13880PU-N Polyclonal Antibody to PRKAA2 (C-term) - Purified

Alternate names: 5'-AMP-activated protein kinase catalytic subunit alpha-2, AMPK alpha-2 chain,

AMPK2

Quantity: 0.4 ml

Concentration: lot specific

Background: AMPK2 alpha2 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.

 Uniprot ID:
 P54646

 NCBI:
 9606

 GeneID:
 5563

Host / Isotype: Rabbit / Ig

Immunogen: This antibody is generated from rabbits immunized with a KLH conjugated synthetic

peptide selected from the C-terminal region of human AMPK.

**Format:** State: Liquid Ig fraction

Purification: Protein G column, eluted with high and low pH buffers and neutralized

immediately, followed by dialysis against PBS. **Buffer System:** PBS with 0.09% (W/V) sodium azide

**Applications:** ELISA 1:1,000.

Western blot 1:100 - 1:500.

Flow cytometry.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

**Specificity:** This antibody detects AMPK alpha2 at C-term.

**Species:** Human, Mouse. Other species not tested.

Add. Information: Molecular weight: 62319 Da.

Storage: Store the antibody at 2 - 8 °C up to one month or (in aliquots) at -20 °C for longer.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.



## **Pictures:**

Western blot analysis of anti-AMPK alpha2 C-term Pab (AP13880PU-N) in mouse heart tissue lysate. AMPK alpha2 (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.

