AMPK2, Rabbit pAb

CATALOG #: 3118 -100

AMOUNT: 100 µg

LOT #: _____

HOST (ISOTYPE): Rabbit (Ig)

IMMUNOGEN: KLH conjugated synthetic peptide selected from the center region of human AMPK2.

SPECIES REACTIVITY: Human

FORMULATION:
100 µg (0.25 mg/ml) purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

STORAGE CONDITIONS:
Maintain refrigerated at 2-8°C for up to 6 months or -20°C for long term storage.

BACKGROUND DESCRIPTION:
AMPK2 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.

BACKGROUND REFERENCES:
1. Wyatt,C.N., J. Biol. Chem. 282 (11), 8092-8098 (2007)
2. Cheung,S.T., Neoplasia 8 (9), 696-701 (2006)
3. Lee-Young,R.S., Am. J. Physiol. Endocrinol. Metab. 291 (3), E566-E573 (2006)
4. Gregory,S.G., Nature 441 (7091), 315-321 (2006)

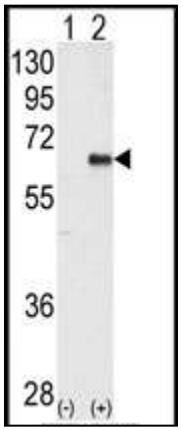
OTHER NAMES:
AMPK alpha-2 chain; 5'-AMP-activated protein kinase, catalytic alpha-2 chain

SPECIFICITY:
The antibody detects a ~ 62 kDa band, corresponding to the expected molecular mass of AMPK2 on immunoblots.

APPLICATION (suggested concentration):

FOR RESEARCH USE ONLY! Not to be used on humans.

APPLICATION DATA (Calculated MW = 62189 Da):



Western blot analysis of AMPK2 (arrow) using pAb (Cat.#3118-100). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PRKAA2 gene (Lane 2) (Origene Technologies).

RELATED PRODUCTS:

Apoptosis Detection Kits & Reagents
- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

Cell Fractionation System
- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System