

## AMPK $\alpha$ 1, Rabbit pAb

<b>CATALOG #:</b>	3110-100
<b>AMOUNT:</b>	100 $\mu$ g
<b>LOT #:</b>	_____
<b>HOST (ISOTYPE):</b>	Rabbit (Ig)
<b>IMMUNOGEN:</b>	KLH conjugated synthetic peptide selected from the C-terminal region of human AMPK alpha 1.
<b>SPECIES REACTIVITY:</b>	Human, Mouse

**FORMULATION:**

100  $\mu$ g (0.25 mg/ml) purified rabbit Ig polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, eluted with high and low pH buffers and neutralized immediately, 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:**

AMPK is responsible for the regulation of fatty acid synthesis by phosphorylation of acetyl-CoA carboxylase. It also regulates cholesterol synthesis via phosphorylation and inactivation of hormone-sensitive lipase and hydroxymethylglutaryl-CoA reductase. It appears to act as a metabolic stress-sensing protein kinase switching off biosynthetic pathways when cellular ATP levels are depleted and when 5'-AMP rises in response to fuel limitation and/or hypoxia. AMPK alpha1, a member of the Ser/Thr protein kinase family, is a catalytic subunit of AMPK.

**Background References:**

1. Zhang, Q.H., et al., Genome Res. 10(10):1546-1560 (2000).
2. Stapleton, D., et al., J. Biol. Chem. 271(2):611-614 (1996).

**OTHER NAMES:**

5'-AMP-activated protein kinase, catalytic alpha-1 chain; AMPK alpha-1 chain

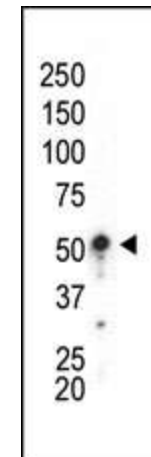
**SPECIFICITY:**

The antibody detects a ~63 kDa band, corresponding to the expected molecular mass of AMPK on immunoblots.

**APPLICATION (suggested concentration):**

The antibody can be used for ELISA (0.25  $\mu$ g/ml), Western blotting (0.5 – 2.5  $\mu$ g/ml).

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

**APPLICATION DATA (Calculated MW = 62793 Da):**

Western blot analysis of anti-AMPK alpha 1 C-term pAb in mouse liver lysate. AMPK alpha 1 (arrow) was detected using purified pAb. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.

**RELATED PRODUCTS:**

## Apoptosis Detection Kits &amp; 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