



# AMPK $\alpha$ 2 rabbit pAb

Cat No.:ES20835

For research use only

## Overview

<b>Product Name</b>	AMPK $\alpha$ 2 rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	WB: 1:1000-2000
<b>Immunogen</b>	Recombinant Protein of AMPK $\alpha$ 2
<b>Specificity</b>	The antibody detects endogenous AMPK $\alpha$ 2 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	5'-AMP-activated protein kinase catalytic subunit alpha-2
<b>Gene Name</b>	PRKAA2
<b>Cellular localization</b>	Cytoplasm . Nucleus . In response to stress, recruited by p53/TP53 to specific promoters. .
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal
<b>Concentration</b>	
<b>Observed band</b>	62kD
<b>Human Gene ID</b>	5563
<b>Human Swiss-Prot Number</b>	P54646
<b>Alternative Names</b>	PRKAA2; AMPK; AMPK2; 5'-AMP-activated protein kinase catalytic subunit alpha-2; AMPK subunit alpha-2; Acetyl-CoA carboxylase kinase; ACACA kinase; Hydroxymethylglutaryl-CoA reductase kinase; HMGCR kinase
<b>Background</b>	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. [provided by RefSeq, Jul 2008],

Western blot analysis of 1) HeLa, 2) 293T, 3) C2C12, 4) 3T3, 5) Rat Heart, 6) Rat Brain using AMPK $\alpha$ 2 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000

