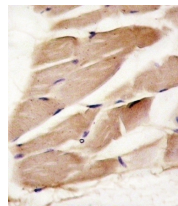
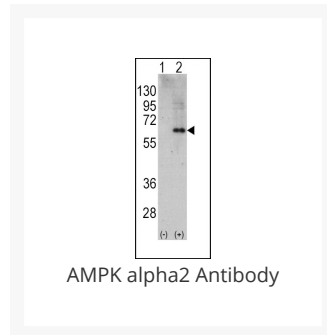




AMPK alpha2 Antibody

Cat. No.: 62-889



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

Ψ Specifications

HOST SPECIES:	Rabbit
SPECIES REACTIVITY:	Human
HOMOLOGY:	Predicted species reactivity based on immunogen sequence: Mouse, Rat
IMMUNOGEN:	This AMPK alpha2 (PRKAA2) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 453-483 amino acids from the C-terminal region of human AMPK alpha2 (PRKAA2).
TESTED APPLICATIONS:	IHC-P, WB
APPLICATIONS:	For WB starting dilution is: 1:1000 For IHC-P starting dilution is: 1:10~50

PREDICTED MOLECULAR WEIGHT:	62 kDa
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Ψ Properties

PURIFICATION:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis
CLONALITY:	Polyclonal
ISOTYPE:	Rabbit Ig
CONJUGATE:	Unconjugated
PHYSICAL STATE:	Liquid
BUFFER:	Supplied in PBS with 0.09% (W/V) sodium azide.
CONCENTRATION:	batch dependent
STORAGE CONDITIONS:	Store at 4 °C for three months and -20 °C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Ψ Additional Info

OFFICIAL SYMBOL:	PRKAA2
ALTERNATE NAMES:	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, PRKAA2, AMPK, AMPK2
ACCESSION NO.:	P54646
PROTEIN GI NO.:	20178276
GENE ID:	5563
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.

Ψ Background and References

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.
REFERENCES:	1) Wyatt,C.N., J. Biol. Chem. 282 (11), 8092-8098 (2007)

	2) Cheung,S.T., Neoplasia(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)

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