Datasheet for ABIN6146171

anti-PRKAA2 antibody (AA 343-552)

3 Images

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Overview

Quantity:	100 µL
Target:	PRKAA2
Binding Specificity:	AA 343-552
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PRKAA2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 343-552 of human AMPKalpha2 (NP_006243.2).
Sequence:	ASSPPSGSFM DDSAMHIPPG LKPHPERMPP LIADSPKARC PLDALNTTKP KSLAVKKAKW HLGIRSQSKP YDIMAEVYRA MKQLDFEWKV VNAYHLRVRR KNPVTGNYVK MSLQLYLVDN RSYLLDFKSI DDEVVEQRSG SSTPQRSCSA AGLHRPRSSF DSTTAESHSL SGSLTGSLTG STLSSVSPRL GSHTMDFFEM CASLITTLAR
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Characteristics:	Polyclonal Antibodies

Target Details

Target:	PRKAA2
Alternative Name:	PRKAA2 (PRKAA2 Products)
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.,PRKAA2,AMPK,AMPK2,AMPKa2,PRKAA,Epigenetics & Nuclear Signaling,Translation Control,Regulation of eIF4 and p70 S6 Kinase,Cancer,Signal Transduction,Kinase,Serine/threonine kinases,mTOR Signaling Pathway,Cell Biology & Developmental Biology,Autophagy,Endocrine & Metabolism,Mitochondrial metabolism,Lipid Metabolism,AMPK Signaling Pathway,Insulin Receptor Signaling Pathway,Warburg Effect,Cardiovascular,Lipids,Fatty Acids,Regulators,PRKAA2
Molecular Weight:	62 kDa
Gene ID:	5563
UniProt:	P54646
Pathways:	AMPK Signaling, Carbohydrate Homeostasis, Chromatin Binding, Regulation of Carbohydrate Metabolic Process, Warburg Effect

Application Details

Application Notes:	WB,1:500 - 1:2000,IF,1:50 - 1:200
Comment:	HIGH QUALITY
Restrictions:	For Research Use only

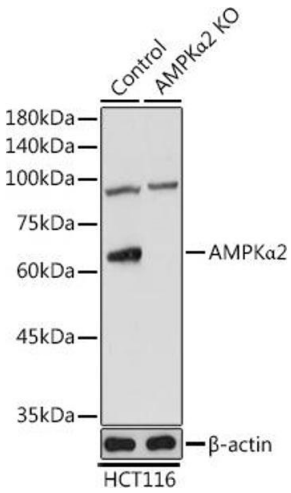
Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.

Handling

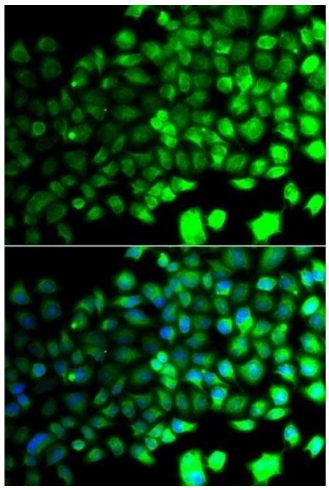
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.

Images



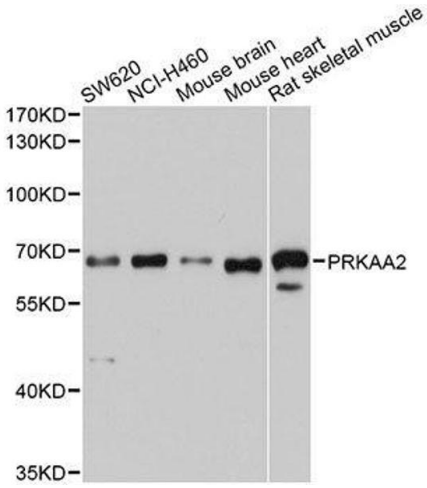
Western Blotting

Image 1. Western blot analysis of extracts from normal (control) and AMPKα2 Rabbit pAb knockout (KO) HCT116 cells, using AMPKα2 Rabbit pAb antibody (ABIN6129904, ABIN6146171, ABIN6146173 and ABIN6223184) at 1:1000 dilution.Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution.Lysates/proteins: 25 µg per lane.Blocking buffer: 3 % nonfat dry milk in TBST.Detection: ECL Basic Kit (RM00020).Exposure time: 60s.



Immunofluorescence

Image 2. Immunofluorescence analysis of A549 cells using PRKAA2 antibody.



Western Blotting

Image 3. Western blot analysis of extracts of various cell lines, using PRKAA2 antibody.