

Datasheet for ABIN954298

anti-PRKAA2 antibody (Middle Region, Thr172)[Go to Product page](#)**3** Images

Overview

Quantity:	0.4 mL
Target:	PRKAA2
Binding Specificity:	AA 148-177, Middle Region, Thr172
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PRKAA2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Enzyme Immunoassay (EIA)

Product Details

Immunogen:	KLH conjugated synthetic peptide between 148-177 amino acids from the Central region of human PRKAA2 (Thr172)
Isotype:	Ig Fraction
Specificity:	This antibody reacts to PRKAA2.
Cross-Reactivity (Details):	Species reactivity (tested):Human.
Purification:	Affinity chromatography on Protein A

Target Details

Target:	PRKAA2
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Target Details

Alternative Name:	PRKAA2 (PRKAA2 Products)
Background:	<p>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. Synonyms: 5'-AMP-activated protein kinase catalytic subunit alpha-2, AMPK alpha-2 chain, AMPK2</p>
Molecular Weight:	62320 Da
Gene ID:	5563
NCBI Accession:	NP_006243
Pathways:	AMPK Signaling , Carbohydrate Homeostasis , Chromatin Binding , Regulation of Carbohydrate Metabolic Process , Warburg Effect

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

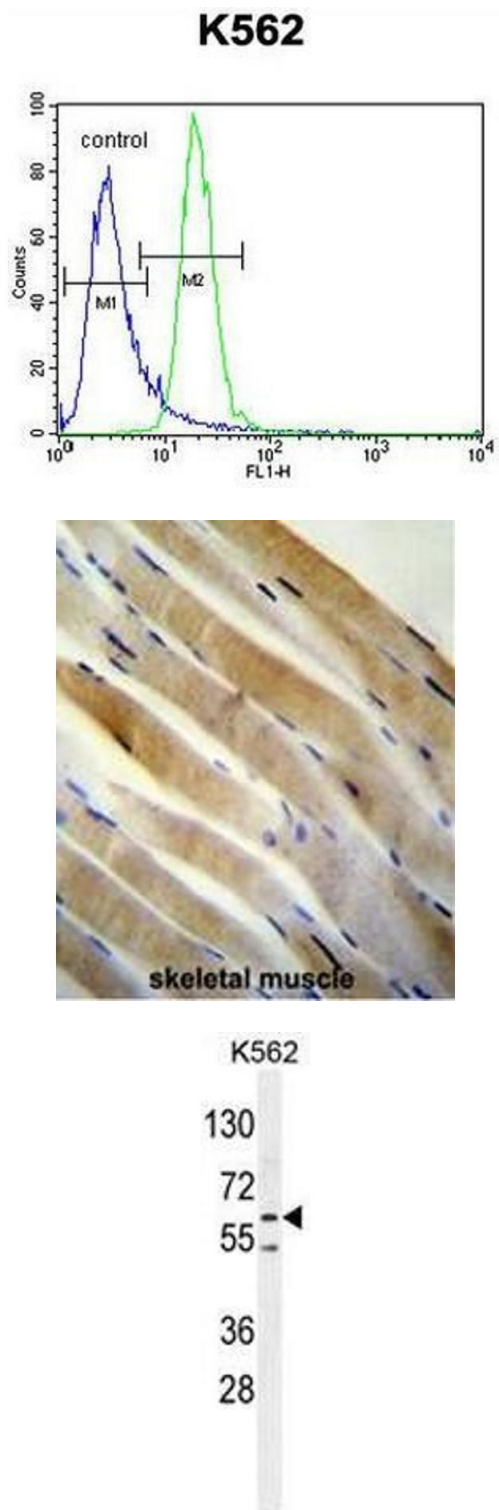
Handling

Format:	Liquid
Concentration:	0.25 mg/mL
Buffer:	PBS, 0.09 % (W/V) sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C

Handling

Storage Comment: Store the antibody undiluted at 2-8 °C for one month or (in aliquots) at -20 °C for longer.

Images



Flow Cytometry

Image 1. PRKAA2 (Thr172) Antibody (Center) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Immunohistochemistry (Paraffin-embedded Sections)

Image 2. PRKAA2 (Thr172) antibody (Center) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of the PRKAA2 (Thr172) antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Western Blotting

Image 3. PRKAA2 (Thr172) Antibody western blot analysis in K562 cell line lysates (35µg/lane).This demonstrates the PRKAA2 antibody detected the PRKAA2 protein (arrow).