Datasheet for ABIN7505470

PRKAA2 Protein (AA 16-195) (His tag)

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Overview

Quantity:	100 µg
Target:	PRKAA2
Protein Characteristics:	AA 16-195
Origin:	Rat
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PRKAA2 protein is labelled with His tag.

Product Details

Sequence:	Tyr16-Val195
Characteristics:	A DNA sequence encoding the Rat AMPK alpha2 (Q09137-1) (Tyr16-Val195) was expressed with a polyhistidine tag at the N-terminus.
Purity:	> 85 % as determined by reducing SDS-PAGE.

Target Details

Target:	PRKAA2
Alternative Name:	AMPK alpha2 (PRKAA2 Products)
Background:	Abbreviation: AMPK alpha2 Target Synonym: 5'-AMP-activated protein kinase catalytic subunit alpha-2,AAPK2,ACACA kinase,Acetyl-CoA carboxylase kinase,AMPK alpha 2 chain,AMPK subunit alpha-2,AMPK2,AMPKa2,AMPKalpha2,HMGCR kinase,Hydroxymethylglutaryl-CoA reductase

Target Details

	kinase,PRKAA,PRKAA2,Protein kinase AMP activated alpha 2 catalytic subunit,Protein kinase AMP activated catalytic subunit alpha 2 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.
Molecular Weight:	Calculated MW: 20 kDa Observed MW: 22.3 kDa
UniProt:	Q09137-1
Pathways:	AMPK Signaling, Carbohydrate Homeostasis, Chromatin Binding, Regulation of Carbohydrate Metabolic Process, Warburg Effect

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	Lyophilized from sterile PBS, pH 7.4., 5 % trehalose, 5 % mannitol, 0.01 % tween-80. Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization.
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Expiry Date:	12 months