## **Recombinant Rat AMPK alpha2 Protein (His Tag)**

Catalog Number: PKSR040467



Note: Centrifuge before opening to ensure complete recovery of vial contents.

## **Description**

Synonyms 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 kinase, PRKAA, PRKAA2, Protein kinase AMP activated alpha 2 catalytic subunit, Protein kinase AMP activated catalytic

subunit alpha 2

Species Rat
Expression Host E.coli

SequenceTyr16-Val195AccessionQ09137-1Calculated Molecular Weight20 kDaObserved molecular weight22.3 kDaTagN-His

**Bioactivity** Testing in progress

#### **Properties**

**Purity** > 85 % as determined by reducing SDS-PAGE.

**Endotoxin** Please contact us for more information.

**Storage** 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.

**Shipping** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation** Lyophilized from sterile PBS, pH 7.4., 5% trehalose, 5% mannitol, 0.01% tween-80.

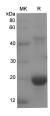
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the print

**Reconstitution** Please refer to the printed manual for detailed information.

#### Data



> 85 % as determined by reducing SDS-PAGE.

## **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

#### For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Web: <u>www.elabscience.com</u> Email: <u>techsupport@elabscience.com</u>

# Recombinant Rat AMPK alpha2 Protein (His Tag)

Catalog Number: PKSR040467



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.

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017 Email: techsupport@elabscience.com

Web: www.elabscience.com