

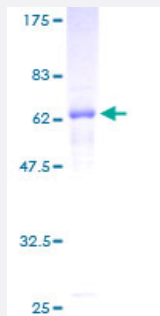
Full-Length

PRKAB1 (Human) Recombinant Protein (P01)

Catalog # H00005564-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human PRKAB1 full-length ORF (AAH01007, 1 a.a. - 270 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MGNTSSERAALERHGGHKTPRRDSSGGTKDGRPKILMDSPEDADLFHSEEIKAPEKEEFLAW
QHDLEVNDKAPAQARPTVFRWTGGGKEVYLSGSFNNWSKLPLTRSHNNFVAILDLPEGEHQYKF
FVDGQWTHDPSEPMTSQLGTVNNIQVKKTDFEVFDALMVDSQKCSVDSELSSPPGPYHQEPY
VCKPEERFRAPPILPPHLLQVILNKDTGISCDPALLPEPNHVMLNHLIALSIKDGVMVLSATHRYKK
KYVTLLYKPI

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

55.44

Interspecies Antigen Sequence

Mouse (97)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — PRKAB1

Entrez GeneID[5564](#)**GeneBank Accession#**[BC001007](#)**Protein Accession#**[AAH01007](#)**Gene Name**

PRKAB1

Gene Alias

AMPK, HAMPKb, MGC17785

Gene Description

protein kinase, AMP-activated, beta 1 non-catalytic subunit

Omim ID[602740](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

The protein encoded by this gene is a regulatory 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. This subunit may be a positive regulator of AMPK activity. The myristoylation and phosphorylation of this subunit have been shown to affect the enzyme activity and cellular localization of AMPK. This subunit may also serve as an adaptor molecule mediating the association of the AMPK complex. [provided by RefSeq]

Other Designations

5'-AMP-activated protein kinase beta-1 subunit|AMP-activated protein kinase beta 1 non-catalytic subunit|AMP-activated protein kinase beta subunit|AMPK beta -1 chain|AMPK beta 1|protein kinase, AMP-activated, noncatalytic, beta-1

Pathway

- [Adipocytokine signaling pathway](#)
- [Hypertrophic cardiomyopathy \(HCM\)](#)
- [Insulin signaling pathway](#)

Disease

- [Alzheimer disease](#)
- [Atherosclerosis](#)
- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Coronary Artery Disease](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Drug Toxicity](#)
- [Edema](#)
- [Metabolic Syndrome X](#)
- [Neoplasms](#)
- [Osteoporosis](#)