Recombinant Human PRKAA1 Protein, His-tagged

Cat. No. PRKAA1-147H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human PRKAA1 Protein (Gly198-Lys448) with N-His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Gly198-Lys448
Description	The protein encoded by this gene belongs to the ser/thr protein kinase family. It is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the cellular AMP/ATP ratio. AMPK regulates the activities of a number of key metabolic enzymes through phosphorylation. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways. Alternatively spliced transcript variants encoding distinct isoforms have been observed.
Form	Freeze-dried powder
Molecular Mass	Predicted Molecular Mass: 33.1 kDa Accurate Molecular Mass: 33 kDa
Purity	> 90%

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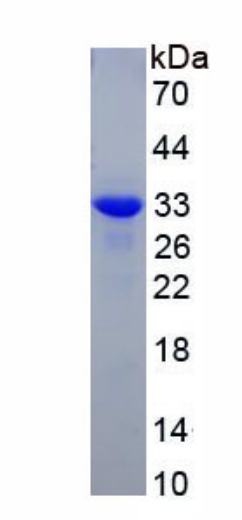
Applications	Positive Control; Immunogen; SDS-PAGE; WB.
Stability	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
Storage Buffer	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Reconstitution	Reconstitute in sterile water to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	PRKAA1 protein kinase AMP-activated catalytic subunit alpha 1 [Homo sapiens (human)]
Official Symbol	PRKAA1
Synonyms	PRKAA1; protein kinase AMP-activated catalytic subunit alpha 1; AMPK; AMPKa1; AMPK alpha 1; 5'-AMP-activated protein kinase catalytic subunit alpha-1; 5'-AMP-activated protein kinase, catalytic alpha-1 chain; ACACA kinase; AMP -activate kinase alpha 1 subunit; AMP-activated protein kinase, catalytic, alpha-1; AMPK subunit alpha-1; AMPK, alpha, 1; HMGCR kinase; acetyl-CoA carboxylase kinase; hydroxymethylglutaryl-CoA reductase kinase; protein kinase, AMP-activated, alpha 1 catalytic subunit; tau-protein kinase PRKAA1; EC 2.7.11.1; EC 2.7.11.26; EC 2.7.11.27; EC 2.7.11.31

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Gene ID	5562
mRNA Refseq	NM_206907
Protein Refseq	NP_996790
MIM	602739
UniProt ID	Q13131



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