Recombinant Human PRKAA1 protein, His & T7-tagged

Cat. No. PRKAA1-775H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human PRKAA1 aa. (Gly198~Lys448 (Accession # Q13131)) fused with N-terminal His & T7 tag was produced in E. coli cells.
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: 33.2kDa
Endotoxin	<1.0EU per 1μg (determined by the LAL method)
Purity	>95%

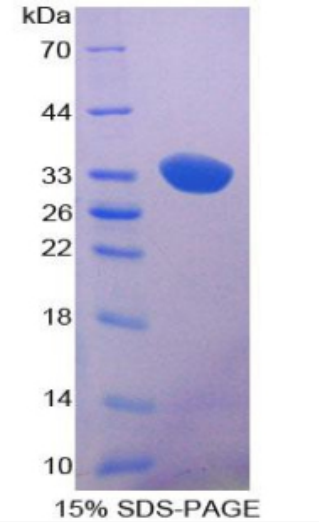
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Characteristic	The isoelectric point is 6.8.
Applications	SDS-PAGE; WB; ELISA; IP.
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°C 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°C for one month. Aliquot and store at -80°C for 12 months.
Storage buffer	Supplied as lyophilized form in PBS, pH7.4, containing 5% trehalose, 0.01% sarcosyl.
Reconstitution	Reconstitute in sterile PBS, pH7.2-pH7.4.

GENE INFORMATION

Gene Name	PRKAA1 protein kinase AMP-activated catalytic subunit alpha 1 [Homo sapiens (human)]
Official Symbol	PRKAA1
Synonyms	AMPK; AMPKa1; 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 alpha 1; AMPK subunit alpha-1; HMGCR kinase; acetyl-CoA carboxylase kinase; hydroxymethylglutaryl-CoA reductase kinase; protein kinase, AMP-activated, alpha 1 catalytic subunit; tau-protein kinase PRKAA1; 5'-AMP-activated protein kinase catalytic subunit alpha-1
Gene ID	5562

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

mRNA Refseq	NM_006251.5
Protein Refseq	NP_006242.5
UniProt ID	Q13131
SDS-PAGE	 15% SDS-PAGE

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA