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**Product Data Sheet**


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Product Name: PRKAA1 Human

Cat. No.: GP22604

Batch No.: 1

**Product Data**

Purity &gt;98%

Source E.coli.

Physical  
Appearance solidShipping  
Condition Shipped with Ice Packs.

## Synonyms

5'-AMP-activated protein kinase catalytic subunit alpha-1; Protein Kinase; AMP-Activated; Alpha 1; PRKAA1; AMPK subunit alpha-1; Acetyl-CoA carboxylase kinase; ACACA kinase; Hydroxymethylglutaryl-CoA reductase kinase; HMGCR kinase; Tau-protein kinase PRKAA1; AMPK1; 5-AMP-activated protein kinase catalytic subunit alpha-1 isoform 1; AMPK; AMPKa11.

Amino Acid  
Sequence

MGSSHHHHH SSGLVPRGSH MGSMRRLSSW RKMATAEKQK HDGRVKIGHY  
ILGDTLGVGT FGKVKVGKHE LTGHKVAVKI LNRQKIRSLD VVGKIRREIQ  
NLKLFRRPHI IKLYQVISTP SDIFMVMYEV SGGELFDYIC KNGRLDEKES  
RRLFQQILSG VDYCHRHMVV HRDLKPENVL LDAHMNAKIA DFGLSNMMSD  
GEFLRTSCGS PNYAAPEVIS GRLYAGPEVD IWSSGVILYA LLCGTLPFDD  
DHVPTLFKKI CDGIFYTPQY LNPSVISLLK HMLQVDPMKR ATIKDIREHE WF.

## Formulation

PRKAA1 solution (1mg/ml) contains 20mM Tris-HCl buffer (pH 8.0) and 10% glycerol.

**Introduction**

ProteinKinase, AMP-Activated, Alpha 1 (PRKAA1) is a protein coding gene which is the catalytic subunit of AMPK. AMPK is an energy sensor protein kinase which regulates cellular energy metabolism. AMPK adjusts the activity of various important metabolic enzymes by direct phosphorylation. Among its other features, AMPK protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways.

**Stability**

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1%

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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HSA or BSA). Avoid multiple freeze-thaw cycles.

### Background

PRKAA1 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 302 amino acids (1-279a.a) and having a molecular mass of 34.3kDa. PRKAA1 is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

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