

AMPK recombinant protein

AMPK (A1/B1/G1), Active

CATALOG #
AAA73076

HOST
Sf9 insect cells using baculovirus

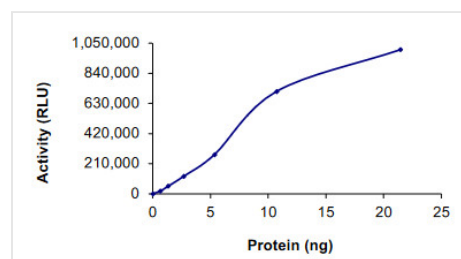
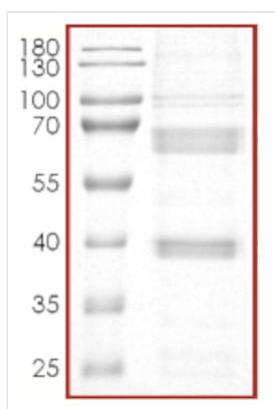
PRODUCT SYNONYMS

AMPK; AMPK (A1/B1/G1); Active; AMPK recombinant protein

PRODUCT SPECIFICATIONS

Host	Sf9 insect cells using baculovirus
Form/Format	Recombinant protein stored in 50mM sodium phosphate, pH 7.0, 300mM NaCl, 150mM imidazole, 0.1mM PMSF, 0.25mM DTT, 25% glycerol.
Concentration	0.1 µg/µl (varies by lot)
Sequence Positions	Full Length
Sequence Length	5085
Species	Human
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Store product at -70°C . For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

IMAGES



Application Data

The specific activity of AMPK was determined to be 124 nmol/min/mg as per activity assay protocol and was equivalent to 745 nmol/min/mg as per radiometric assay.

Application Data

The purity of AMPK was determined to be >85% by densitometry. A1 approx. MW 68-75kDa B1 approx. MW 38kDa G1 approx. MW 40kDa

ADDITIONAL INFORMATION

Related Product Information for AMPK recombinant protein	Description: Recombinant full-length human AMPK (combination of A1/B1/G1 subunits) was expressed by baculovirus in Sf9 insect cells using a C-terminal His tag. The gene accession numbers for the three subunits (A1/B1/G1) are NM_006251, NM_006253, and NM_002733 Background: AMPK is a heterotrimer protein kinase consisting of a catalytic subunit, and non-catalytic b and g subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status (1). In response to cellular metabolic stresses, AMPK is activated and phosphorylates and inactivates acetyl-CoA carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMGCR), key enzymes involved in regulating biosynthesis of fatty acid and cholesterol (2).
Product Categories/Family for AMPK recombinant protein	Enzymes; Active Kinases
References	1. Minokoshi, Y. et al:AMP-kinase regulates food intake by responding to hormonal and nutrient signals in the hypothalamus. Nature 428: 569-574, 2004. 2. Hardie, D G. et al: The AMP-activated protein kinase--fuel gauge of the mammalian cell Eur J Biochem. 1997 Jun 1;246 (2):259-73.

NCBI AND UNIPROT INFORMATION

NCBI GI #	94557300
NCBI GeneID	5562
NCBI Accession #	NM_006251.5
NCBI GenBank Nucleotide #	NM_006251
UniProt Accession #	Q13131; O00286; Q5D0E1; Q86VS1; Q9UNQ4; A8MTQ6; B2R7E1
NCBI Official Full Name	Homo sapiens protein kinase AMP-activated catalytic subunit alpha 1 (PRKAA1), transcript variant 1, mRNA
NCBI Official Synonym Full Names	protein kinase AMP-activated catalytic subunit alpha 1
NCBI Official Symbol	PRKAA1
NCBI Official Synonym Symbols	AMPK; AMPKa1
NCBI Protein Information	5'-AMP-activated protein kinase catalytic subunit alpha-1
UniProt Protein Name	5'-AMP-activated protein kinase catalytic subunit alpha-1
UniProt Gene Name	PRKAA1
UniProt Synonym Gene Names	AMPK1; HMGCR kinase

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/prkaa1-recombinant-protein-sf9-insect-cells-using-baculovirus/73076>