

AMPK recombinant protein

AMPK (A1/B1/G3), Active

CATALOG # AAA73087	HOST Sf9 insect cells using baculovirus	APPLICATIONS Western Blot
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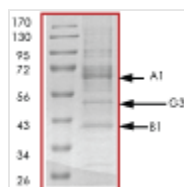
PRODUCT SYNONYMS

AMPK; AMPK (A1/B1/G3); Active; AMPK recombinant protein

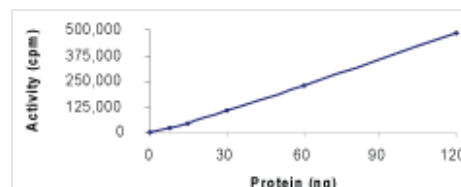
PRODUCT SPECIFICATIONS

Host	Sf9 insect cells using baculovirus
Form/Format	50mM sodium phosphate, pH 7.0, 300mM NaCl, 150mM imidazole, 0.1mM PMSF, 2mM DTT, 25% glycerol.
Sequence Positions	Full Length
Sequence Length	5085
Applicable Applications for AMPK recombinant protein	WB (Western Blot), Kinase Assay
Species	Human
Tag	HIS tag
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 degree 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



Application Data

ADDITIONAL INFORMATION

Related Product Information for AMPK recombinant protein	Description: Recombinant full-length human AMPK (combination of A1/B1/G3 subunits) was expressed by baculovirus in Sf9 insect cells using a C-terminal His tags. Scientific Background: AMPK (A1/B1/G3) is a member of the AMPK family which are heterotrimeric proteins consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. AMPKs are an important energy-sensing enzyme group in the cells that monitor energy status particularly in response to stress (1). AMPKs regulate fatty acid and cholesterol synthesis by regulating the key rate-limiting enzymes acetyl-CoA carboxylase and hydroxy beta-methylglutaryl-CoA reductase. The gamma subunit is dominantly expressed in skeletal muscle where it may play a key role in the regulation of energy metabolism (2).
Product Categories/Family for AMPK recombinant protein	Enzymes; Active Kinases

References	1. Viollet, B. et al: Physiological role of AMP-activated protein kinase (AMPK): insights from knockout mouse models. Biochem. Soc. Trans. 2003; 31; 216 -219. 2. Cheung, P. C. F. et al: Characterization of AMP-activated protein kinase gamma-subunit isoforms and their role in AMP binding. Biochem. J. 346: 659-669, 2000.
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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
Molecular Weight	~68kDa (A1); ~38kDa (B1); ~51kDa (G3)
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.