

AMPK (A1/B2/G1) Recombinant Protein | AMPK recombinant protein

AMPK (A1/B2/G1), Active

CATALOG # AAA73845	HOST Sf9 insect cells
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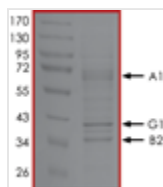
PRODUCT SYNONYMS

AMPK (A1/B2/G1); Active; Subunit A1: Prkaa1; AMPKalpha1; C130083N04Rik Subunit B2: Prkab2; 5730553K21Rik; AW049591; BB124140 Subunit G1: Prkag1; AA571379; BB036179; Prkaac; AMPK recombinant protein

PRODUCT SPECIFICATIONS

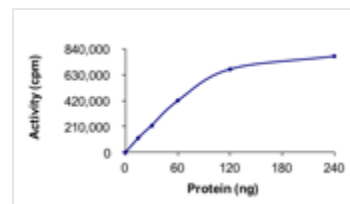
Host	Sf9 insect cells
Purity/Purification	>75%
Form/Format	Recombinant protein stored in 50mM sodium phosphate, pH7.0, 300mM NaCl, 150mM imidazole, 0.1mM PMSF, 0.25mM DTT, 25% glycerol.
Concentration	0.1ug/ul (varies by lot)
Specific Activity	340 nmol/min/mg
Dry Ice Note	The product may be shipped with 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



SDS-PAGE

The purity of AMPK was determined to be >75% by densitometry, approx. MW : 68~72kDa (A1), ~35kDa (B2), and ~40kDa (G1)



Activity

Specific Activity: Sample Kinase Activity Plot.

ADDITIONAL INFORMATION

Related Product Information for AMPK recombinant protein	Recombinant full-length mouse AMPK (combination of A1/B2/G1 subunits) was expressed by baculovirus in Sf9 insect cells using an N-terminal His tag. The gene accession numbers for the three subunits (A1/B2/G1) are, NM_001013367, NM_182997, and NM_016781. AMPK (A1/B2/G1) 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 beta subunit may be a positive regulator of AMPK activity and is highly expressed in skeletal muscle (2).
Product Categories/Family for AMPK recombinant protein	Protein Kinases; Cancer; Cellular Stress; Metabolic Disorder; Ser/Thr 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. Thornton, C. et al: Identification of a novel AMP-activated protein kinase beta subunit isoform that is highly expressed in skeletal muscle. J. Biol. Chem. 273: 12443-12450, 1998.

NCBI AND UNIPROT INFORMATION

NCBI GenBank Nucleotide #

[NM_001013367](#)

Molecular Weight

68~72kDa (A1), ~35kDa (B2), and ~40kDa (G1)

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://www.aaabiotech.com/ampk-a1/b2/g1-recombinant-protein-sf9/73845>