

Recombinant Human PRKAA2, GST-tagged

Cat. No. PRKAA2-73H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full-length human AMPK (combination of A2/B2/G3 subunits) was expressed by baculovirus in Sf9 insect cells using the N-terminal GST and C-terminal His tags.
Species	Human
Source	Sf9 Cells
Description	AMPK (A2/B1/G1) plays a key role in insulin signaling pathway and is a major therapeutic target for the treatment of diabetes. AMPK is viewed as a fuel sensor for glucose and lipid metabolism by modulating the activity of the autonomous nervous system in vivo. Short-term overexpression of a constitutively active form of AMPK in the liver leads to mild hypoglycemia and fatty liver due to increased fatty acid utilization.
Form	Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.
Molecular Mass	~92kDa (A2), ~62kDa (B2), and ~108kDa (G3)
Purity	>80% by densitometry.
Applications	Kinase Assay, Western Blot
Storage	Store product at -70oC. For optimal storage, aliquot target into smaller quantities

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after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

Concentration 0.1 µg/µl

GENE INFORMATION

Gene Name PRKAA2 protein kinase, AMP-activated, alpha 2 catalytic subunit [Homo sapiens]

Official Symbol PRKAA2

Synonyms PRKAA2; protein kinase, AMP-activated, alpha 2 catalytic subunit; PRKAA; 5-AMP-activated protein kinase catalytic subunit alpha-2; AMPK; AMPKa2; AMPK-alpha-2 chain; AMPK subunit alpha-2; 5-AMP-activated protein kinase, catalytic alpha-2 chain; AMPK2;

Gene ID 5563

mRNA Refseq NM_006252

Protein Refseq NP_006243

MIM 600497

UniProt ID P54646

Chromosome Location 1p31

Pathway AMPK inhibits chREBP transcriptional activation activity, organism-specific biosystem; AMPK signaling, organism-specific biosystem; Adipocytokine signaling pathway,

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organism-specific biosystem; Adipocytokine signaling pathway, conserved biosystem; Energy Metabolism, organism-specific biosystem; Energy dependent regulation of mTOR by LKB1-AMPK, organism-specific biosystem; Fatty acid, triacylglycerol, and ketone body metabolism, organism-specific biosystem;

Function

AMP-activated protein kinase activity; AMP-activated protein kinase activity; ATP binding; chromatin binding; histone serine kinase activity; metal ion binding; nucleotide binding; protein binding; protein binding, bridging; protein kinase activity; protein serine/threonine kinase activity;

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