

Recombinant Human protein kinase, AMP-activated, beta 2 non-catalytic subunit, His-tagged

Cat. No. PRKAB2-378H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	PRKAB2, 1-272aa, Human, His tag, E.coli
Species	Human
Source	E.coli
ProteinLength	1-272 a.a.
Description	PRKAB2 is a regulatory subunit of the AMP-activated protein kinase (AMPK). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and inactivates acetyl-CoA carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMGCR), key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. PRKAB2 may be a positive regulator of AMPK activity. It is highly expressed in skeletal muscle and thus may have tissue-specific roles. Recombinant human PRKAB2 protein, fused to His-tag at N-terminus, was expressed in E.coli.
Form	Liquid. 20mM Tris-HCl buffer (pH8.0) containing 10% glycerol 2M Urea
Molecular Mass	32.8 kDa(296aa)
AA Sequence	MGSSHHHHHH SSGLVPRGSH MGSHMGNTTS DRVSGERHGA KAARSEGAGG

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HAPGKEHKIM VGSTDDPSVF SLPDSKLP GD KEFVSWQQDL EDSVKPTQQA
 RPTVIRWSEG GKEVFISGSF NNWSTKIPLI KSHNDFVAIL DLPEGEHQYK
 FFVDGQWVHD PSEPVTSQL GTINNLHVK KSDFEVFDAL KLDSMESSET
 SCRDLS SSP GPYQGEMYAF RSEERFKSPP ILPPHLLQVI LNKDTNISCD
 PALLPEPNHV MLNHLYALSI KDSVMVLSAT HRYKKKYVTT LLYKPI

Purity >90% by SDS - PAGE

Storage Can be stored at +4C short term (1-2 weeks). For long term storage, aliquot and store at -20C or -70C. Avoid repeated freezing and thawing cycles.

Concentration 1.0 mg/ml (determined by Bradford assay)

GENE INFORMATION

Gene Name [PRKAB2 protein kinase, AMP-activated, beta 2 non-catalytic subunit \[Homo sapiens \]](#)

Official Symbol PRKAB2

Synonyms PRKAB2; protein kinase, AMP-activated, beta 2 non-catalytic subunit; 5-AMP-activated protein kinase subunit beta-2; AMPK beta 2; AMPK beta-2 chain; AMPK subunit beta-2; 5-AMP-activated protein kinase, beta-2 subunit; MGC61468;

Gene ID [5565](#)

mRNA Refseq [NM_005399](#)

Protein Refseq [NP_005390](#)

MIM [602741](#)

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UniProt ID	O43741
Chromosome Location	1q21.2
Pathway	AMPK inhibits chREBP transcriptional activation activity, organism-specific biosystem; AMPK signaling, organism-specific biosystem; Adipocytokine signaling pathway, 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	contributes_to AMP-activated protein kinase activity; AMP-activated protein kinase activity; identical protein binding; protein binding; protein kinase binding;

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