Recombinant Human Protein Kinase, AMP-Activated, Beta 1 Non-Catalytic Subunit, His-tagged

Cat. No. PRKAB1-4867H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full-length human PRKAB1 (combination of A1/B1/G3 subunits) was expressed by baculovirus in Sf9 insect cells using a C-terminal His tags.
Species	Human
Source	Sf9 Cells
Description	PRKAB1 (A1/B1/G3) is a member of the PRKAB1 family which are heterotrimeric proteins consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. PRKAB1 are an important energy-sensing enzyme group in the cells that monitor energy status particularly in response to stress. PRKAB1 regulate fatty acid and cholesterol synthesis by regulating the key rate-limiting enzymes acetyl-CoA carboxylase and hydroxy beta-methylglutaryl-CoA reductase. The γ subunit is dominantly expressed in skeletal muscle where it may play a key role in the regulation of energy metabolism.
Applications	Kinase Assay; Western Blot
Molecular Weight	68kDa (A1), 38kDa (B1), 51kDa (G3)
Expression System	Sf9 insect cells using baculovirus
Form	Recombinant protein stored in 50mM sodium phosphate, pH 7.0, 300mM NaCl, 150 mM imidazole, 0.1 mM PMSF, 0.25 mM DTT, 25% glycerol.

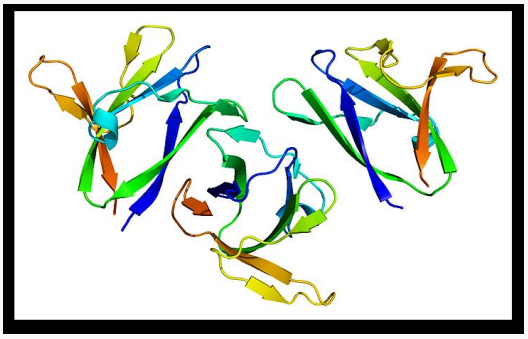
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Specific Activity	185 nmol/min/mg
Purity	> 70 %
Concentration	0.1 ug/ul
Sequences	Full-length
Storage	Store product at –70oC. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
Pathways	AMPK signaling; Adipocytokine signaling pathway; Direct p53 effectors; Energy Metabolism; Energy dependent regulation of mTOR by LKB1-AMPK; Hypertrophic cardiomyopathy (HCM); IRS-mediated signalling; IRS-related events; Insulin receptor signalling cascade; Insulin signaling pathway; PI3K Cascade; PKB-mediated events; Regulation of AMPK activity via LKB1; Regulation of Rheb GTPase activity by AMPK; Signaling by Insulin receptor; mTOR signalling

GENE INFORMATION

Gene Name	PRKAB1 protein kinase, AMP-activated, beta 1 non-catalytic subunit [Homo sapiens]
Official Symbol	PRKAB1
Synonyms	PRKAB1; protein kinase, AMP-activated, beta 1 non-catalytic subunit; AMPK; HAMPKb; MGC17785; 5''-AMP-activated protein kinase subunit beta-1; AMPKb; AMPK beta 1; AMPK beta -1 chain; OTTHUMP00000239813; OTTHUMP00000239814; AMPK subunit beta-1; AMP-activated protein kinase beta subunit; 5''-AMP-activated protein kinase beta-1 subunit; protein kinase, AMP-

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	activated, noncatalytic, beta-1
Gene ID	5564
mRNA Refseq	NM_006253
Protein Refseq	NP_006244
MIM	602740
UniProt ID	Q9Y478
Chromosome Location	12q24.1-q24.3
Function	AMP-activated protein kinase activity; cAMP-dependent protein kinase activity; protein binding; protein kinase binding
PDB rendering based on 1z0m.	

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