



Human PRKAB1 peptide (DAG-P0156)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description

The protein encoded by this gene 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. This subunit may be a positive regulator of AMPK activity. The myristoylation and phosphorylation of this subunit have been shown to affect the enzyme activity and cellular localization of AMPK. This subunit may also serve as an adaptor molecule mediating the association of the AMPK complex. [provided by RefSeq, Jul 2008]

Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the 5-AMP-activated protein kinase beta subunit family.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	PRKAB1 protein kinase, AMP-activated, beta 1 non-catalytic subunit [Homo sapiens (human)]
Official Symbol	PRKAB1
Synonyms	PRKAB1; protein kinase, AMP-activated, beta 1 non-catalytic subunit; AMPK; HAMPKb; 5-

AMP-activated protein kinase subunit beta-1; AMPKb; AMPK beta 1; AMPK beta -1 chain; AMPK subunit beta-1; AMP-activated protein kinase beta subunit; 5-AMP-activated protein kinase beta-1 subunit; protein kinase, AMP-activated, noncatalytic, beta-1;

Entrez Gene ID	5564
mRNA Refseq	NM_006253.4
Protein Refseq	NP_006244.2
UniProt ID	Q9Y478
Chromosome Location	12q24.1-q24.3
Pathway	AMPK signaling, organism-specific biosystem; Adipocytokine signaling pathway, organism-specific biosystem; Adipocytokine signaling pathway, conserved biosystem; Circadian rhythm, organism-specific biosystem; Circadian rhythm, conserved biosystem; Direct p53 effectors, organism-specific biosystem; Energy Metabolism, organism-specific biosystem; Energy dependent regulation of mTOR by LKB1-AMPK, organism-specific biosystem; FoxO signaling pathway, organism-specific biosystem; Hypertrophic cardiomyo
Function	protein binding; protein kinase activity; protein kinase binding;