

## OriGene Technologies, Inc.

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## Product datasheet for RC203911L2V

## AMPK beta 1 (PRKAB1) (NM\_006253) Human Tagged ORF Clone Lentiviral Particle

## **Product data:**

Product Type:	Lentiviral Particles
Product Name:	AMPK beta 1 (PRKAB1) (NM_006253) Human Tagged ORF Clone Lentiviral Particle
Symbol:	AMPK beta 1
Synonyms:	АМРК; НАМРКЬ
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
Tag:	mGFP
ACCN:	NM_006253
ORF Size:	810 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC203911).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<u>NM 006253.4</u>
RefSeq Size:	2412 bp
RefSeq ORF:	813 bp
Locus ID:	5564
UniProt ID:	<u>Q9Y478</u>
Cytogenetics:	12q24.23
Domains:	isoamylase_N, AMPKBI
Protein Families:	Druggable Genome



This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US CRIGENE AMPK beta 1 (PRKAB1) (NM\_006253) Human Tagged ORF Clone Lentiviral Particle – RC203911L2V

**Protein Pathways:** Adipocytokine signaling pathway, Hypertrophic cardiomyopathy (HCM), Insulin signaling pathway

MW: 30.4 kDa

Gene Summary: 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]

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