

Product datasheet for RC203911L4V

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

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: AMPK; HAMPKb

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_006253

ORF Size: 810 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC203911).

Sequence:
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. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeg: NM 006253.4

 RefSeq Size:
 2412 bp

 RefSeq ORF:
 813 bp

 Locus ID:
 5564

 UniProt ID:
 Q9Y478

 Cytogenetics:
 12q24.23

Domains: isoamylase_N, AMPKBI

Protein Families: Druggable Genome





AMPK beta 1 (PRKAB1) (NM_006253) Human Tagged ORF Clone Lentiviral Particle - RC203911L4V

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]