

## Product datasheet for RC208766L2V

## OriGene Technologies, Inc.

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## AMPK beta 2 (PRKAB2) (NM 005399) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** AMPK beta 2 (PRKAB2) (NM 005399) Human Tagged ORF Clone Lentiviral Particle

Symbol: AMPK beta 2

**Mammalian Cell** 

Selection:

None

Vector: pLenti-C-mGFP (PS100071)

mGFP Tag:

ACCN: NM 005399

**ORF Size:** 816 bp

**ORF Nucleotide** 

Sequence:

The ORF insert of this clone is exactly the same as(RC208766).

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.

RefSeq: NM 005399.3

RefSeq Size: 5431 bp RefSeq ORF: 819 bp Locus ID: 5565 **UniProt ID:** <u>043741</u>

**Cytogenetics:** 1q21.1

Domains: **AMPKBI** 

**Protein Families:** Druggable Genome





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

pathway

MW: 30.1 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. It is highly expressed in skeletal muscle and thus may have tissue-specific roles. Multiple alternatively spliced transcript variants have been found for this gene. [provided by

RefSeq, Jul 2013]