

Product datasheet for RC201845L2V

OriGene Technologies, Inc.

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AMPK gamma 1 (PRKAG1) (NM_002733) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: AMPK gamma 1 (PRKAG1) (NM_002733) Human Tagged ORF Clone Lentiviral Particle

Symbol: AMPK gamma 1

Synonyms: AMPKG

Mammalian Cell None

Selection:

IVOITC

Vector: pLenti-C-mGFP (PS100071)

Tag: mGFP

ACCN: NM_002733

ORF Size: 993 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC201845).

OTI Disclaimer:

Sequence:

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 002733.3

 RefSeq Size:
 1744 bp

 RefSeq ORF:
 996 bp

 Locus ID:
 5571

 UniProt ID:
 P54619

 Cytogenetics:
 12q13.12

Domains: CBS

Protein Families: Druggable Genome





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

pathway

MW: 37.6 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 is one of the gamma regulatory subunits of AMPK. Alternatively spliced transcript variants encoding distinct isoforms have

been observed. [provided by RefSeq, Jul 2008]