

## Product datasheet for **RC201845L4V**

### 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 Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_002733
ORF Size:	993 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC201845).
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. <a href="#">More info</a>
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:	<a href="#">NM_002733.3</a>
RefSeq Size:	1744 bp
RefSeq ORF:	996 bp
Locus ID:	5571
UniProt ID:	<a href="#">P54619</a>
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]