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Product datasheet for RC210226L4V

AMPK alpha 2 (PRKAA2) (NM_006252) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	AMPK alpha 2 (PRKAA2) (NM_006252) Human Tagged ORF Clone Lentiviral Particle
Symbol:	AMPK alpha 2
Synonyms:	AMPK; AMPK2; AMPKa2; PRKAA
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_006252
ORF Size:	1656 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC210226).
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_006252.2
RefSeq Size:	2435 bp
RefSeq ORF:	1659 bp
Locus ID:	5563
UniProt ID:	P54646
Cytogenetics:	1p32.2
Protein Families:	Druggable Genome, Protein Kinase

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Protein Pathways:	Adipocytokine signaling pathway, Hypertrophic cardiomyopathy (HCM), Insulin signaling pathway, mTOR signaling pathway, Regulation of autophagy
MW:	62.1 kDa
Gene Summary:	The protein encoded by this gene is a catalytic 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. Studies of the mouse counterpart suggest that this catalytic subunit may control whole-body insulin sensitivity and is necessary for maintaining myocardial energy homeostasis during ischemia. [provided by RefSeq, Jul 2008]