

Product datasheet for **RC218572L1V**

AMPK alpha 1 (PRKAA1) (NM_006251) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	AMPK alpha 1 (PRKAA1) (NM_006251) Human Tagged ORF Clone Lentiviral Particle
Symbol:	AMPK alpha 1
Synonyms:	AMPK; AMPKa1; AMPK alpha 1
Mammalian Cell Selection:	None
Vector:	pLenti-C-Myc-DDK (PS100064)
Tag:	Myc-DDK
ACCN:	NM_006251
ORF Size:	1677 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC218572).
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_006251.5 , NP_006242.5
RefSeq Size:	5085 bp
RefSeq ORF:	1680 bp
Locus ID:	5562
UniProt ID:	Q13131
Cytogenetics:	5p13.1
Domains:	pkinese, TyrKc, S_TKc
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: 63.8 kDa

Gene Summary: The protein encoded by this gene belongs to the ser/thr protein kinase family. It is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the cellular AMP/ATP ratio. AMPK regulates the activities of a number of key metabolic enzymes through phosphorylation. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008]