

Product datasheet for **RC218293L1V**

ACAT1 (ACACA) (NM_198834) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	ACAT1 (ACACA) (NM_198834) Human Tagged ORF Clone Lentiviral Particle
Symbol:	ACAT1
Synonyms:	ACAC; ACACAD; ACC; ACC1; ACCA
Mammalian Cell Selection:	None
Vector:	pLenti-C-Myc-DDK (PS100064)
Tag:	Myc-DDK
ACCN:	NM_198834
ORF Size:	7149 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC218293).
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_198834.1 , NP_942131.1
RefSeq Size:	10018 bp
RefSeq ORF:	7152 bp
Locus ID:	31
UniProt ID:	Q13085
Cytogenetics:	17q12
Protein Families:	Druggable Genome



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Protein Pathways: Fatty acid biosynthesis, Insulin signaling pathway, Metabolic pathways, Propanoate metabolism, Pyruvate metabolism

MW: 269.8 kDa

Gene Summary: Acetyl-CoA carboxylase (ACC) is a complex multifunctional enzyme system. ACC is a biotin-containing enzyme which catalyzes the carboxylation of acetyl-CoA to malonyl-CoA, the rate-limiting step in fatty acid synthesis. There are two ACC forms, alpha and beta, encoded by two different genes. ACC-alpha is highly enriched in lipogenic tissues. The enzyme is under long term control at the transcriptional and translational levels and under short term regulation by the phosphorylation/dephosphorylation of targeted serine residues and by allosteric transformation by citrate or palmitoyl-CoA. Multiple alternatively spliced transcript variants divergent in the 5' sequence and encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008]