

OriGene Technologies, Inc.

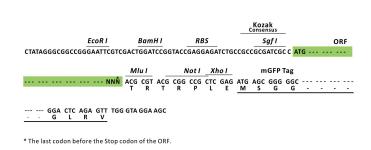
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Product datasheet for RC200508L4

ATP citrate lyase (ACLY) (NM_001096) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP citrate lyase (ACLY) (NM_001096) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	ATP citrate lyase
Synonyms:	ACL; ATPCL; CLATP
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC200508).
Restriction Sites:	Sgfl-Mlul
Cloning Scheme:	
	Cloning sites used for ORF Shuttling:
	Sgf1 ORF Mlu I GCG ATC GC ATG// NNN ACG CGT



ACCN: ORF Size: NM_001096 3303 bp



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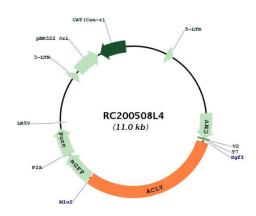
ORIGENE ATP cit	rate lyase (ACLY) (NM_001096) Human Tagged Lenti ORF Clone – RC200508L4
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring 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. <u>More info</u>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	 Centrifuge at 5,000xg for 5min. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. Close the tube and incubate for 10 minutes at room temperature. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM 001096.2</u>
RefSeq Size:	4450 bp
RefSeq ORF:	3306 bp
Locus ID:	47
UniProt ID:	<u>P53396</u>
Cytogenetics:	17q21.2
Domains:	CoA_binding, ligase-CoA
Protein Families:	Druggable Genome
Protein Pathways:	Citrate cycle (TCA cycle), Metabolic pathways
MW:	120.8 kDa
Gene Summary:	ATP citrate lyase is the primary enzyme responsible for the synthesis of cytosolic acetyl-CoA in many tissues. The enzyme is a tetramer (relative molecular weight approximately 440,000) of apparently identical subunits. It catalyzes the formation of acetyl-CoA and oxaloacetate from citrate and CoA with a concomitant hydrolysis of ATP to ADP and phosphate. The product, acetyl-CoA, serves several important biosynthetic pathways, including lipogenesis and cholesterogenesis. In nervous tissue, ATP citrate-lyase may be involved in the biosynthesis of acetylcholine. Multiple transcript variants encoding distinct isoforms have

been identified for this gene. [provided by RefSeq, Dec 2014]

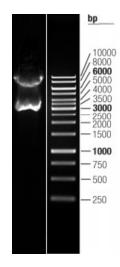
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Product images:



Circular map for RC200508L4



Double digestion of RC200508L4 using Sgfl and Mlul

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