

Product datasheet for **RG240008**

ATP citrate lyase (ACLY) (NM_001303274) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP citrate lyase (ACLY) (NM_001303274) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ACLY
Synonyms:	ACL; ATPCL; CLATP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG240008 representing NM_001303274. Blue=ORF Red=Cloning site Green=Tag(s)

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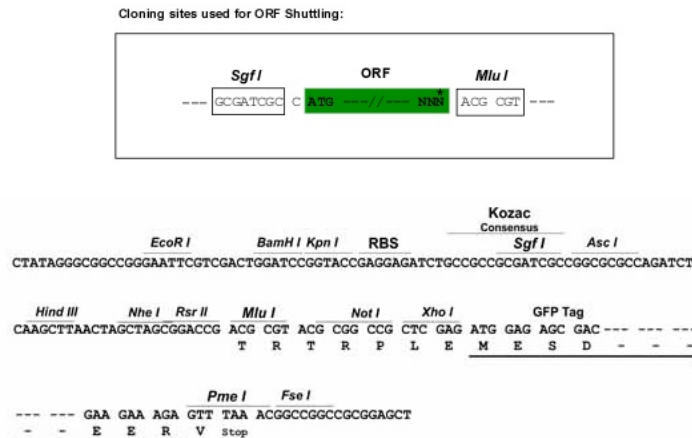
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Protein Sequence: >Peptide sequence encoded by RG240008
 Blue=ORF Red=Cloning site Green=Tag(s)

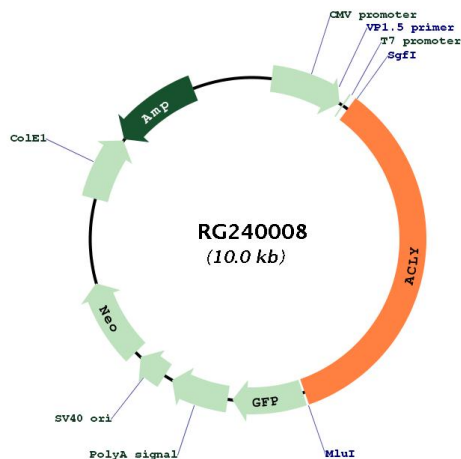
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Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001303274

ORF Size: 3465 bp

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.

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).

RefSeq: [NM_001303274.1](#), [NP_001290203.1](#)

RefSeq Size: 4369 bp

RefSeq ORF: 3468 bp

Locus ID: 47

UniProt ID: [P53396](#)

Cytogenetics: 17q21.2

Protein Families: Druggable Genome

Protein Pathways: Citrate cycle (TCA cycle), Metabolic pathways

MW: 126.7 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 cholesterologenesis. 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]